

**ENGLISH HARBOUR ASSET MANAGEMENT, LLC**  
**1712 Pioneer Avenue , Suite 1939**  
**Cheyenne, Wyoming 82001**  
**(307) 256-7229**

December 9, 2021

Via Email:

Wendy Brown Arnold  
Ledge Light Health District  
216 Broad Street  
New London, CT 06320

Re: Nottingham Hills Subdivision Phase 5

Dear Wendy,

J.P. Mereen is forwarding you revised plans that address your plan review dated 5 November 2021, Ex. A. We have made the following changes to the plans;

- 1) We have reduced the width of the leaching trenches to 62" per the Geomatrix GST System specifications which I have attached as Ex. B.
- 2) With regard to Lot 52 by using the GST trench sizing we have established more than 25' of separation from the proposed foundation to the leaching trench.
- 3) With regard to Lot 53 we have provided in excess of 25' of setback from the down gradient property line and increased the trench size to 62' to address MLSS.
- 4) With regard to lot 54 we have plotted the existing septic system area on Lot 55 to demonstrate that there is no well conflict.
- 5) With regard to lot 55 we have plotted the existing well and septic locations.
- 6) With regard to lot 56 we have added the test hole results for Test Hole 9-3 and have increased the trench size to 62' to address MLSS.
- 7) With regard to lot 58 we have relocated the house location and the leaching trenches to provide in excess of 25' of separation from the down gradient property line. Additionally, we have increased the trench sizes to 62' to address MLSS.

While we believe the increased trench 62' size adequately address's feasibility for 4-BR homes on the lots with MLSS conditions (Lots 53, 58 and possibly 56) given the time constraints we are willing to accept review as 3-BR homes for these lots at this juncture.

Thank you for your assistance with this application.

Sincerely,

A handwritten signature in black ink that reads "Kristen Clarke". The signature is written in a cursive style with a large initial "K".

Kristen T. Clarke PE

Cc. Paul Geraghty Esq.

J.P. Merein LS

Gary Goeschel

Jen Lindo

# EXHIBIT A

Date: 5 November 2021  
To: Kristen Clarke, PE; John Paul Mereen, LS  
Subject Property: 121 Upper Pattagansett Rd. E. Lyme

Plan Designed by: John Paul Mereen, LS Plan Date: **August 3, 2021** Last Revision Date: **9-27-2021**  
Date Paid: 10-26-2021

The plan and associated information submitted to our office on 10-26-2021 for a proposed **8** lot subdivision/commission review. Lots range from 1.08ac to 3.58ac and are to be served by **private well water and private septic systems**, in the **Town of East Lyme**.

**The Ledge Light Health District (LLHD) does not issue approvals for Subdivision or Commission reviews, but our recommendation for suitability of the previously stated plan/lots to accommodate the LLHD Subdivision Submission Requirements and Connecticut Public Health Code Section 19-13-B103e are as follows:**

- Lots 50, 51, and 57 are recommended suitable in their current condition**
- Lot 52 is recommended suitable in its current condition IF no foundation drain is required (primary leaching area shown less than 25ft to house foundation).**
- Lot 54 is recommended suitable IF there is no well conflict with Lot 55.**
- Lots 53, 56, and 58 are not recommended suitable in their current condition and the following issues are to be addressed:**  
**Lots 53 and 58: MLSS applies and proposed leaching is shown less than 25ft from down gradient property line.**  
**Lot 56: No data provided for TP9-3 in primary leaching area.**

#### **"Additional Suitability Issues"**

1. Lot 55 has an existing septic system and well and is being reviewed for compliance with 19-13-B100a. Soil testing conducted on the lot is presented, however a scaled site plan showing the dwelling, the well, and a code-complying septic area was not provided. The existing system must be shown on the site plan to demonstrate that the lot line changes do not reduce separation distances to property lines beyond what is allowed by code. Soil testing conducted on Lot 55 indicates that soils are suitable for sewage disposal, and it is likely that a code complying area for the existing dwelling can be demonstrated on the lot.
2. It is strongly recommended that all proposed well arcs be kept on the property they serve (to allow neighbors full use of their properties) and all well casings should be located at least 10' from driving surfaces and/or structures to prevent future damage and allow for future maintenance of the wells.

\*Please note that soils testing indicated on this plan are representative of actual soils conditions and additional deep test pits and percolation tests may be required by the Ledge Light Health District if the building or system location is altered and/or the suitable septic area is limited. Applicant should be aware that subdivision approval IS NOT sufficient for individual lot approval.



Promoting  
healthy  
communities

Each lot must be reviewed by the Ledge Light Health District at the time of building permit application in order to obtain lot approval and issue a septic/well permit.

Please call me at 860-448-4882 x 1355 with any questions regarding this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Wendy K. Brown-Arnold'.

Wendy K. Brown-Arnold, RS, REHS  
Supervisor, Land Use Activities

cc: Town of E. Lyme Planning, Zoning  
Paul Geraghty

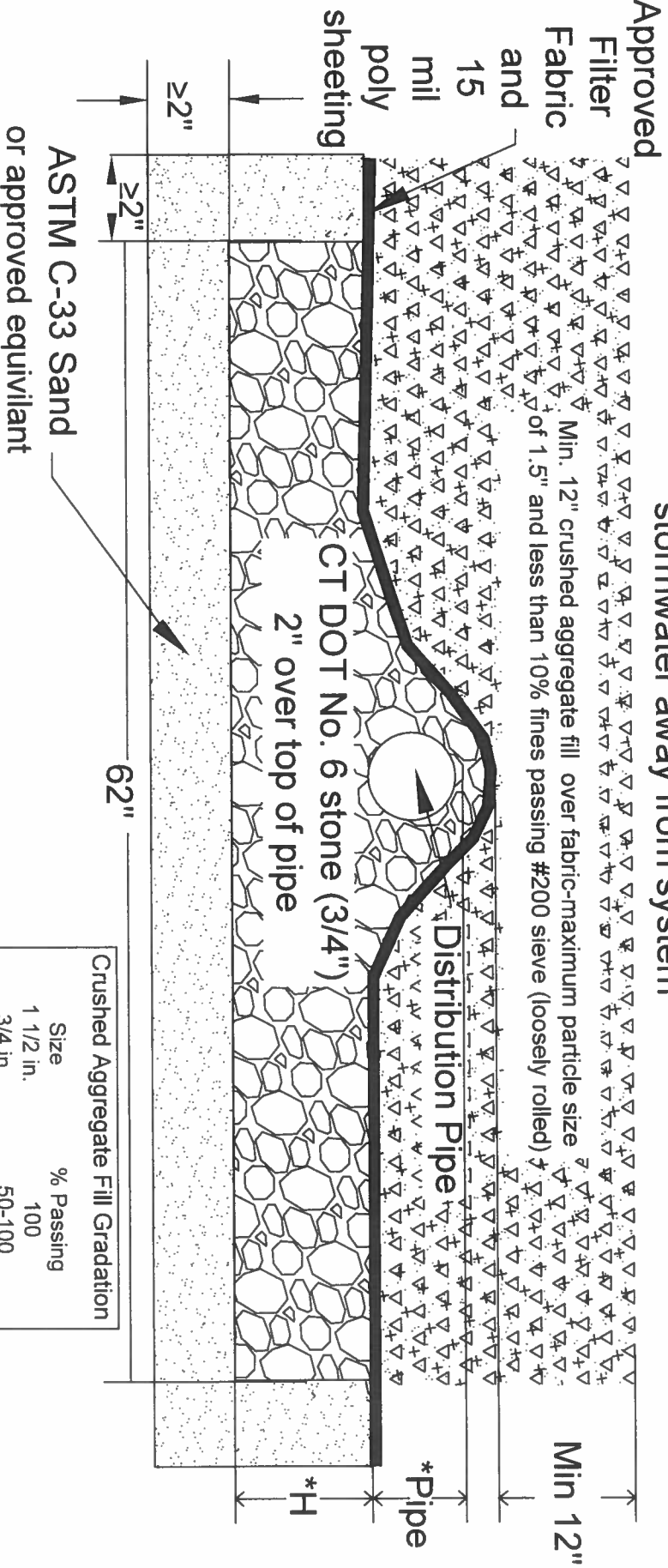
# EXHIBIT B

# GST™ 62" LEACHING SYSTEM

H-20

CTDPH  
Approved

Finished Grade shall be pitched to sheet flow  
stormwater away from system



Filter Fabric and

Min. 12" crushed aggregate fill over fabric-maximum particle size of 1.5" and less than 10% fines passing #200 sieve (loosely rolled)

\*Pipe

\*H= 6" (GST6206)

\*Distribution Pipe:

- 12" (GST6212)
- 18" (GST6218)
- 24" (GST6224)
- 30" (GST6230)
- 36" (GST6236)

SDR 35 or Schd. 40, ASTM D-1785 PVC pipe for gravity applications  
Schd. 40, ASTM D-1785 PVC pipe for pressure applications

Size	% Passing
1 1/2 in.	100
3/4 in.	50-100
#4	25-50
#40	10-20
#100	5-15
#200	less than 10

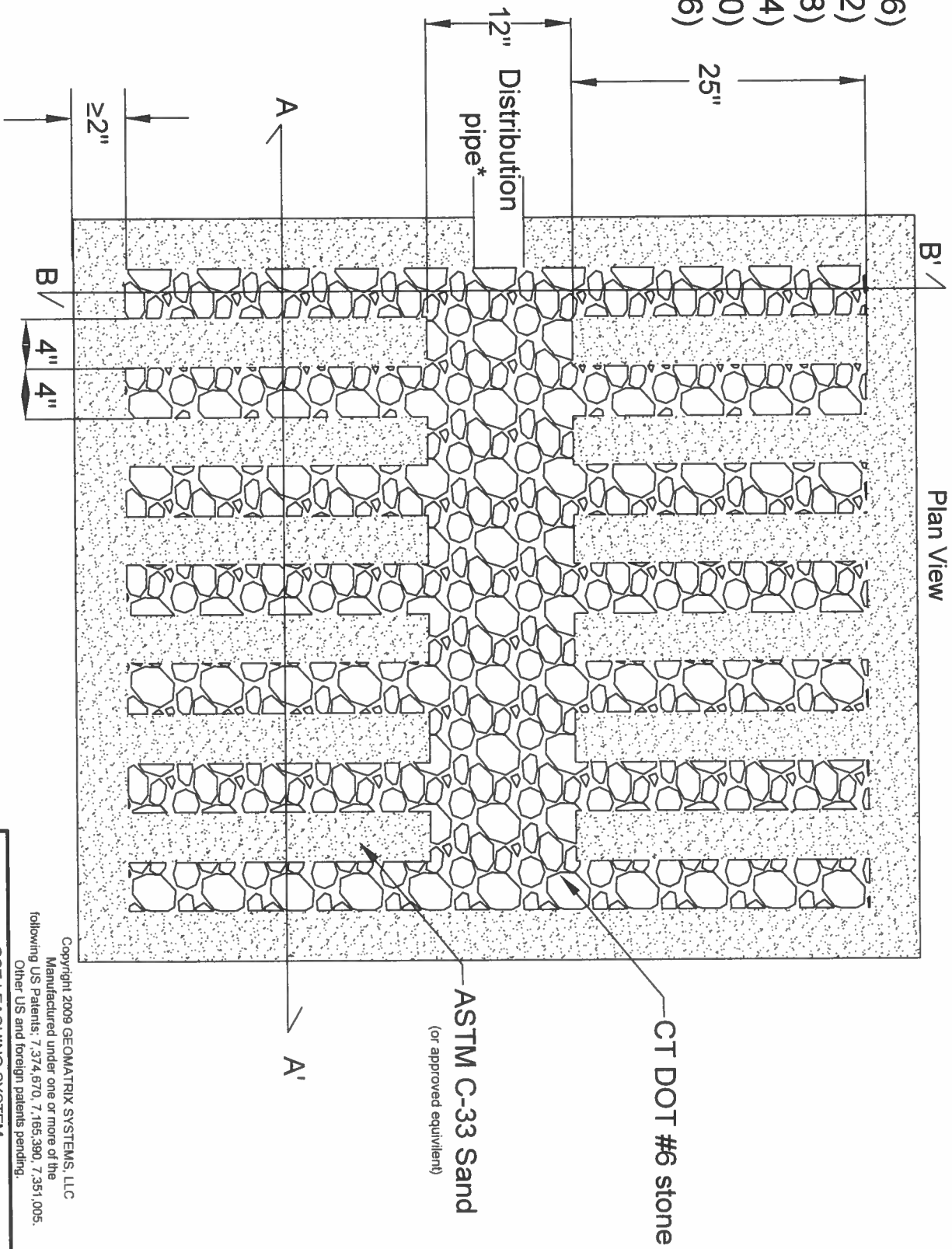
Copyright 2010 Geomatrix Systems, LLC  
Manufactured under one or more of the following  
US Patent Number 7,374,670, 7,465,390, 7,351,005  
Other patents pending

GST LEACHING SYSTEM	
H-20	
Geomatrix Systems, LLC., Old Saybrook, CT	
SCALE	NONE
DATE	11/16/2010
DRAWN BY:	ERP
REV.	B
ACAD NO.	GST H-20.DWG
SHEET	1 OF 1

# GST™ LEACHING SYSTEM

Plan View

- 6" (GST6206)
- 12" (GST6212)
- 18" (GST6218)
- 24" (GST6224)
- 30" (GST6230)
- 36" (GST6236)



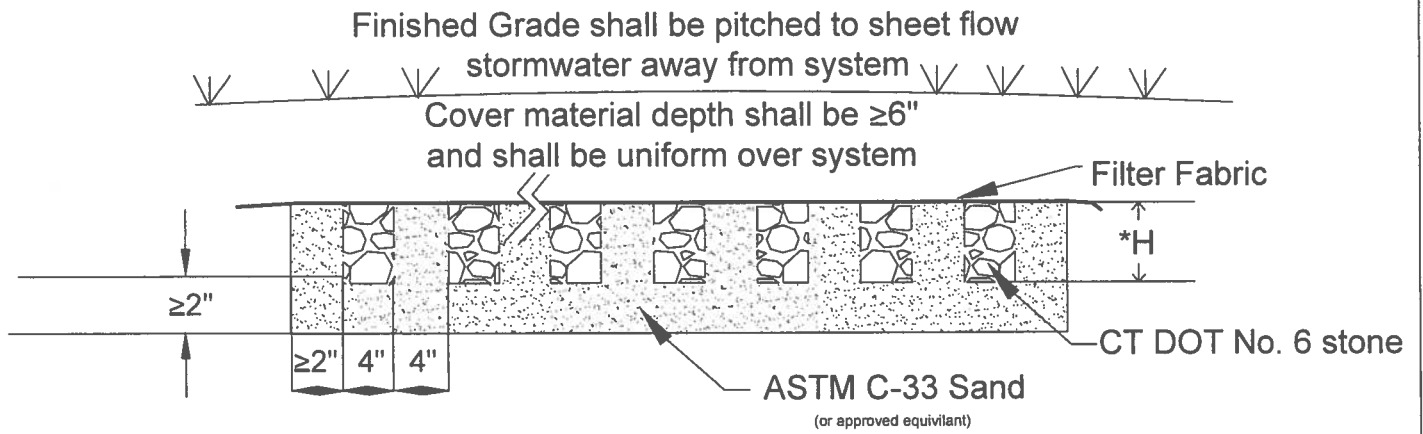
\*3" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications  
 0.75" min. I.D., ASTM D-2665, SCH 40 PVC pipe for pressure applications

Copyright 2009 GEOMATRIX SYSTEMS, LLC  
 Manufactured under one or more of the  
 following US Patents: 7,374,670, 7,165,390, 7,351,005.  
 Other US and foreign patents pending.

GST LEACHING SYSTEM		Plan View	
Geomatrix Systems, LLC., Old Saybrook, CT			
860-510-0730			
SCALE	NONE	REV.	C-04/28/09
DATE	6/28/2007	ACAD NO.	QEO ST LS PLAN VIEW.DWG
DRAWN BY:	ERP	SHEET	1 OF 3



**GEOMATRIX GST™ LEACHING SYSTEM**  
A-A' CROSS SECTION



- \*H= 6" (GST6206)
- 12" (GST6212)
- 18" (GST6218)
- 24" (GST6224)
- 30" (GST6230)
- 36" (GST6236)

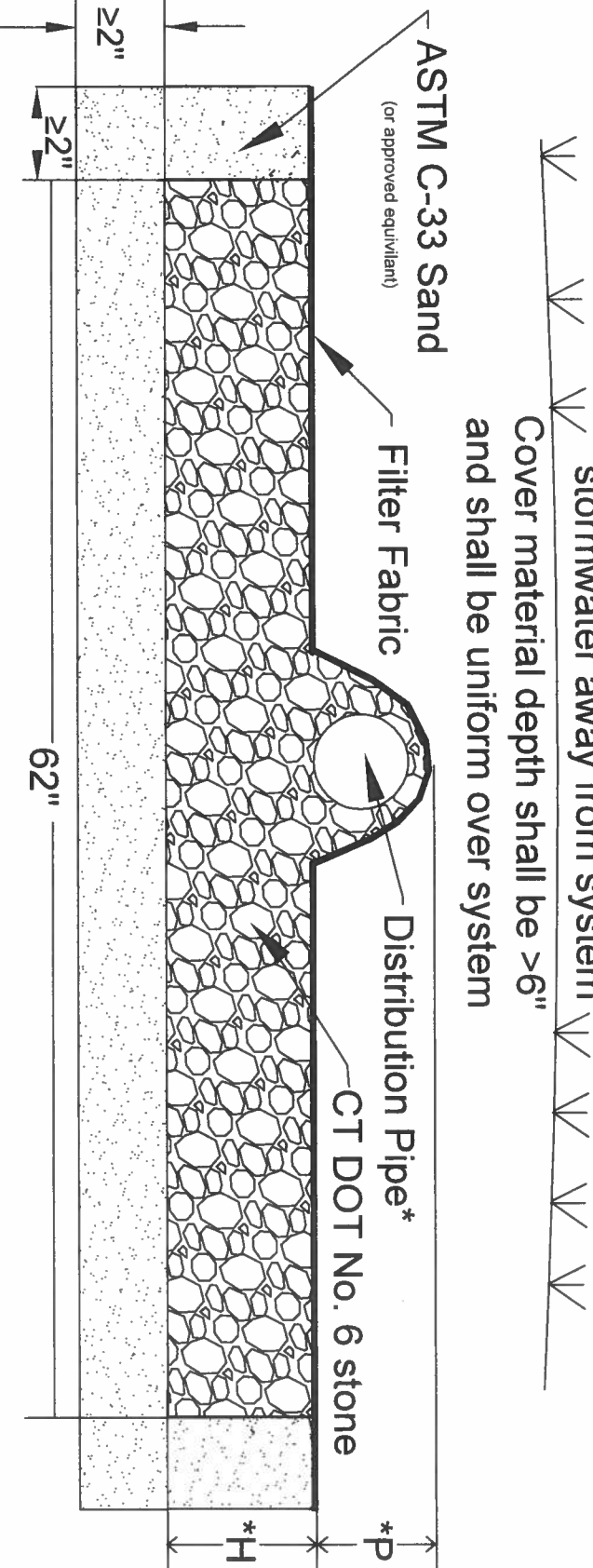
Copyright 2009 GEOMATRIX SYSTEMS, LLC  
Patents Pending

<b>GEOMATRIX GST LEACHING SYSTEM</b> A-A' Cross Section Geomatrix Systems, LLC., Old Saybrook, CT 860-510-0730			
SCALE	NONE	REV.	C-04/28/09
DATE	6/28/2007	ACAD No.	GEO ST LS PLAN VIEW DWG
DRAWN BY:	ERP	SHEET	2 OF 3

# GST™ LEACHING SYSTEM

## B-B' CROSS SECTION

Finished Grade shall be pitched to sheet flow  
 stormwater away from system  
 Cover material depth shall be >6"  
 and shall be uniform over system



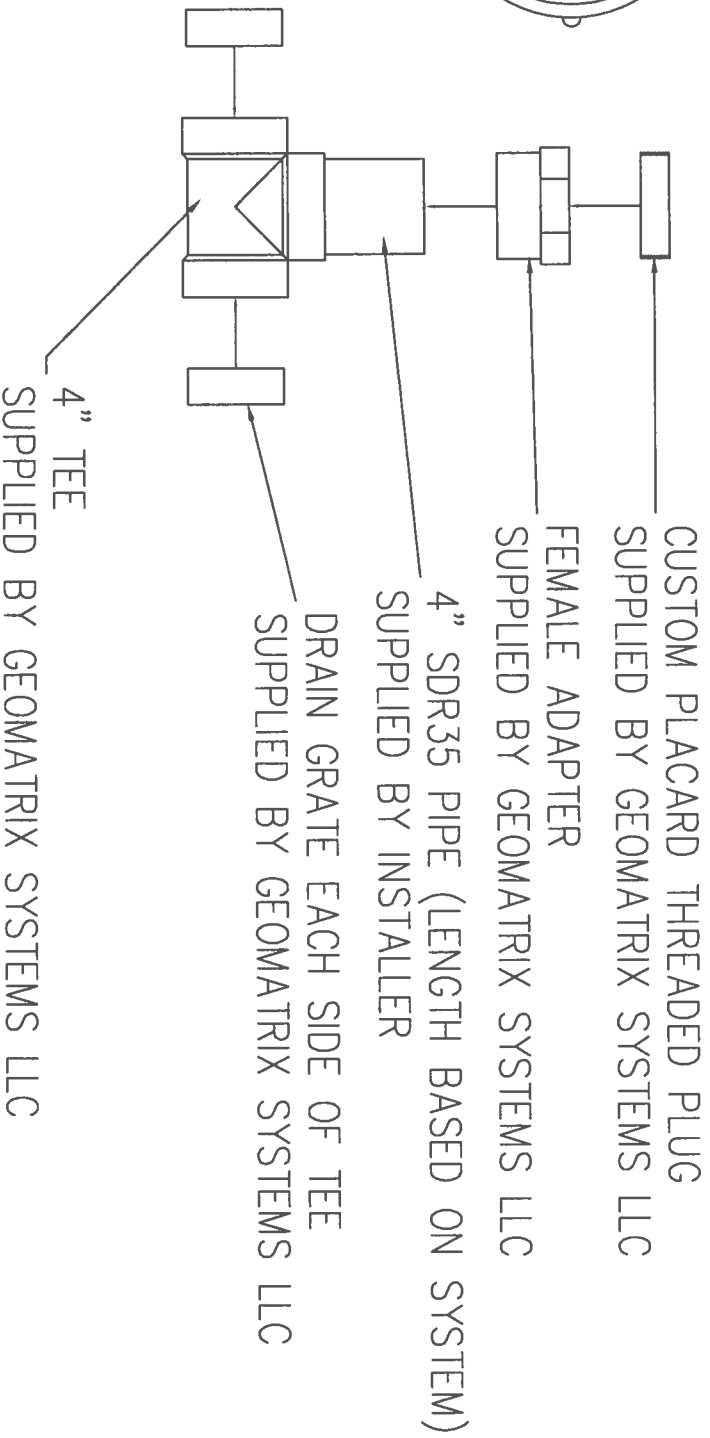
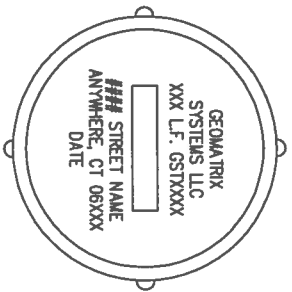
- \*H = 6" (GST6206)**  
 12" (GST6212)  
 18" (GST6218)  
 24" (GST6224)  
 30" (GST6230)  
 36" (GST6236)

- \*P = 2" - 5.5"**  
 \*3" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications  
 0.75" min. I.D., ASTM D-2665, SCH 40 PVC pipe for pressure applications

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 following US Patents: 7,374,670, 7,165,390, 7,351,005.  
 Other US and foreign patents pending.

<b>GST LEACHING SYSTEM</b>	
B-B' Cross Section	
Geomatrix Systems, LLC., Old Saybrook, CT	
860-510-0730	
SCALE	NONE
DATE	6/28/2007
DRAWN BY:	ERP
REV.	C-0/L/28/09
ACAD No.	Geo 61's B-B'.DWG
SHEET	3 OF 3

INSPECTION PORT 1 DETAIL



GST LEACHING SYSTEM		REV.	
Inspection Port Detail		A	
Geomatrix Systems, LLC., Old Saybrook, CT		ACAD No. GSTIP.DWG	
860-510-0730		SHEET 1 OF 1	
SCALE	NONE	DATE	6/2/2015
DRAWN BY: ERP			