Permit/F	ile #:
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ROY COOPER • Governor KODY H. KINSLEY • Secretary MARK BENTON • Chief Deputy Secretary for Health SUSAN KANSAGRA • Assistant Secretary for Public Health	
Division of Public Health	
Submittal Includes: (a2) Improvement Permit (a2) Construction Authorization Fee \$	
IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)	
County:	
PIN/Lot Identifier:	
Issued To:	
Property Location:	
Subdivision (if applicable) Lot #: Block: Section:	
LSS Report Provided: Yes 🗌 No 🗌	
If yes, name and license number of LSS:	
New Expansion System Relocation Change of Use	
Facility Type:	
Number of bedrooms: Number of Occupants: Other:	
Design Wastewater Strength: Domestic High Strength Industrial Process Wastewater	
Proposed Design Daily Flow:      GPD       Proposed LTAR (Initial):       Proposed LTAR (Repair):	-
Proposed Wastewater System Type*: (Initial) Pump Required: 🗌 Yes 🗌 No 🗌 May be red	quired
Proposed Wastewater System Type*: (Repair) Pump Required: 🗌 Yes 🗌 No 🗋 May be rec	quired
*Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII	
Effluent Standard: 🗌 DSE 🔄 HSE 🔄 NSF/ANSI 40 📄 TS-I 📄 TS-II 📄 RCW	
Saprolite System (Initial): 🗌 Yes 📄 No 🛛 Saprolite System (Repair): 🗌 Yes 📄 No	
Fill System (Initial): 🗌 Yes 📄 No If yes, specify: 📄 New 📄 Existing (when adding more than 6 inches of fill to system area provide a	fill plan)
Fill System (Repair): 🗌 Yes 📄 No If yes, specify: 📄 New 📄 Existing (when adding more than 6 inches of fill to system area provide a	a fill plan)
Usable Depth to LC (Initial) <sup>x</sup> : Usable Depth to LC (Repair) <sup>x</sup> : <i>* Limiting Condition</i>	
Max. Trench Depth (Initial) <sup>‡</sup> : Max. Trench Depth (Repair) <sup>‡</sup> : <i>* Measured on the downhill side of the</i>	trench
Artificial Drainage Required: 🗌 Yes 🗌 No If yes, please specify details:	
Type of Water Supply: 🗌 Private well 📄 Public well 📄 Shared well 📄 Municipal Supply 📄 Spring 📄 Other:	
Drainfield location meets requirements of Rule .0508: Yes 🗌 No 🗌 Drainfield location meets requirements of Rule .0601: Yes 🗌	No 🗌
Permit valid for: 🗌 Five years [site plan submitted pursuant to GS 130A-334(13a)] 🔲 No expiration [plat submitted pursuant to GS 130A	334(7a)]
Permit conditions:	
Licensed Soil Scientist Print Name:	
Licensed Soil Scientist Signature: Alex Adamo Date: Date:	
The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2). *See attached site sketch*	

Permit/File #: \_\_



## This Section for Local Health Department Use Only

Initial submittal received: \_\_\_\_\_\_ by \_\_\_\_\_ Date Initials

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Incomplete (If box is checked, information in this section is required.)							
The following items are missing:							
		120					
Copies of this were sent to the LSS and the Applicant on	Date						
State Authorized Agent:		Date:	_				
Complete							
State Authorized Agent:		Date:	_				

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. <u>This permit is subject to revocation if the site plan, plat, or the intended use changes</u>. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: \_\_\_\_\_

\*See attached site sketch\*



Permit/File #: \_\_\_\_\_

## **Re-submittal of Improvement Permit**

LHD USE ONLY: This IP resubmittal received:		by	
	Date	Initials	

The following items are being resubmitted pursuant to G.S. 130A-335(a3) for issuance of the Improvement Permit:

I, \_\_\_\_\_\_\_hereby attest that the information required to be included with this re-submittal Licensed Soil Scientist (Print Name) is accurate and complete to the best of my knowledge and that the proposed Improvement Permit meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Licensed Soil Scientist

Date

The section below is for Local Health Department use after submittal of items noted as missing above.

### LHD Follow-up Completeness Review of Improvement Permit

The review for completeness of this Improvement Permit re-submittal was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Date

Incomplete (If box is checked, information in this section is required.)

The following items are missing:

Copies of this were sent to the LSS and the Applicant on \_\_\_\_\_

State Authorized Agent: \_\_\_\_\_

Complete

State Authorized Agent: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



Permit/File #: \_\_\_\_\_

### CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:	Pre-Construction Conference Required: Yes No
PIN/Lot Identifier:	
Issued To:	
Property Location	:
AOWE/PE Plans/E	valuations Provided: Yes 🗌 No 🗌 If yes, name and license number of AOWE/PE:
Facility Type:	
Number of bedroo	oms: Number of Occupants: Other:
New	Expansion Repair System Relocation Change of Use
Basement?	Yes No Basement Fixtures? Yes No
Crawl Space?	Yes No Slab Foundation? Yes No
Type of Wastewat	er System* (Initial) (Repair)
*Please include sy	stem classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII
Design Daily Flow:	GPD Wastewater Strength: Domestic High Strength Industrial Process WW
	120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? [] Yes [] No vide engineering documentation)
Effluent Standard:	🗌 DSE 🔄 HSE 🔄 NSF/ANSI 40 🗌 TS-I 🗌 TS-II 📄 RCW
Type of Water Sup	pply:  Private well  Public well  Shared well  Municipal Supply  Spring  Other:
Installation Requi	rements/Conditions
Septic Tank Size: _	gallons Total Trench/Bed Length:feet Trench/Bed Spacing:feet on center
Trench/Bed Width	a: inches LTAR: gpd/ft <sup>2</sup> Usable Depth to LC (Initial) <sup>x</sup> : <sup>x</sup> Limiting condition
Soil Cover:	inches Slope Corrected Maximum Trench/Bed Depth <sup>‡</sup> : inches <sup>‡</sup> Measured on the downhill side of the trench
Pump Tank Size (if	applicable):gallons Requires more than 1 pump? 🗌 Yes 🗌 No
Pump Requiremen	nts: ft. TDH vs GPM Grease Trap Size (if applicable): gallons
Distribution Meth	od: 🗌 Serial 🔄 D-Box or Parallel 🔄 Pressure Manifold(s) 🔛 LPP 🔄 Other:
Artificial Drainage	Required: Yes 🗌 No 🗌 If yes, please specify details:
Legal Agreements	(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agree	ment Required [.0204(g)]: Yes No Declaration of Restrictive Covenants: Yes No
Easement, Right-o	f-Way, or Encroachment Agreement Required [.0301(b)]: 🗌 Yes 🔲 No
Management Enti	ty Required: 🗌 Yes 🗌 No Minimum O&M Requirements:
Permit conditio	ns:

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. <u>This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.</u> The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name:			
AOWE/PE Signature:	Alex Adamo	Date:	
	This AOWE/PE submittal is pursuant to ar	nd meets the requirements of G.S. 130A-335(a2) and (a5).	

### \*See attached site sketch\*



## This Section for Local Health Department Use Only

Initial submittal received: \_\_\_\_\_\_ by \_\_\_\_\_ by \_\_\_\_\_

Date

Initials

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This

Construction Authorization is determined to be:

Incomplete	(If box is checked,	information in this section	is required.)
------------	---------------------	-----------------------------	---------------

The following items are missing:

Complete

State Authorized Agent: \_\_\_\_

Date of Issuance:

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: \_\_\_\_\_\_

\*See attached site sketch\*



# **Re-submittal of Construction Authorization**

	LHD USE ONLY: This CA resubmittal received:	Date	by Initials	-
The following i	L	5(a5) for issuance	of the Construction Author	ization:
		-1222		
	THE ST			
is accurate and	nereby attest that Insite Wastewater Evaluator (Print Name) I complete to the best of my knowledge and that the p and local laws, regulations, rules, and ordinances.		required to be included wit	
Signatu	re of Authorized On-Site Wastewater Evaluator		Date	
	The section below is for Local Health Department use	after submittal of i	items noted as missing above	•
LHD Follow-	up Completeness Review of Construction Au	uthorization		
	completeness of this Construction Authorization re-su on Authorization is determined to be:	ubmittal was cond	lucted in accordance with (	G.S. 130A-335(a5).
Incomplete	(If box is checked, information in this section is requir	ed.)		
The following it	tems are missing:			
	QUAN	N VIDERO	19	
Copies of this w	vere sent to the AOWE/PE and the Applicant on	Date	_	
State Authorize	ed Agent:		Date:	
Complete				



Permit/File #: \_\_\_\_\_

## ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County:
PIN/Lot Identifier:
Issued To:
Additional Improvement Permit Conditions:
CT ATA
ANE SIME OF SE
Additional Construction Authorization Conditions:
1PRIL 12 VTI6
10330 T 19300 T 1923 T 11
- QUAM VIP

## Adams Soil Consulting, PLLC 1676 Mitchell Road Angier, NC 27501 919-414-6761 alexadams@bcsoil.com

June 16, 2025 Project #1769

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335 (a2), (a5), and (a6)"

RE: 659 Beacon Hill Rd – Lillington, NC (Harnett County) -Lot #37 – Duncan's Creek Subdivision for New Home Inc., LLC (PIN# 0630-22-9072)

To whom it may concern:

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, State Subsurface Rules, 15ANCAC 18E. From this evaluation, ASC is providing the attached 4-bedroom (360 gallon/day) septic design.

The suitable soils found on the subject property were relatively consistent in the initial and repair areas. The area designated for the initial/primary septic system (see attached septic plan) was found to contain soils with greater than 24 inches in depth before a restrictive horizon was encountered.

Please find the attached wastewater soil/site evaluation forms for specific soil properties found in the initial and repair areas as well as assigned soil long term acceptance rate (LTAR). Numerous soil borings were made throughout the property and representative soil profile descriptions for the primary septic field and repair area are provided. A location sketch for profile descriptions is also attached. The initial and primary septic fields were sized based on a flow rate of 480 gallons/day and utilizing an Accepted Status or PPBPS system. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the primary and repair (if needed) system on contour, see attached site plan for the primary system and repair locations. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and local county regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 919-414-6761.

This report discusses the location of provisionally suitable soils identified on the property and does not guarantee the future function of any waste water disposal system installed.

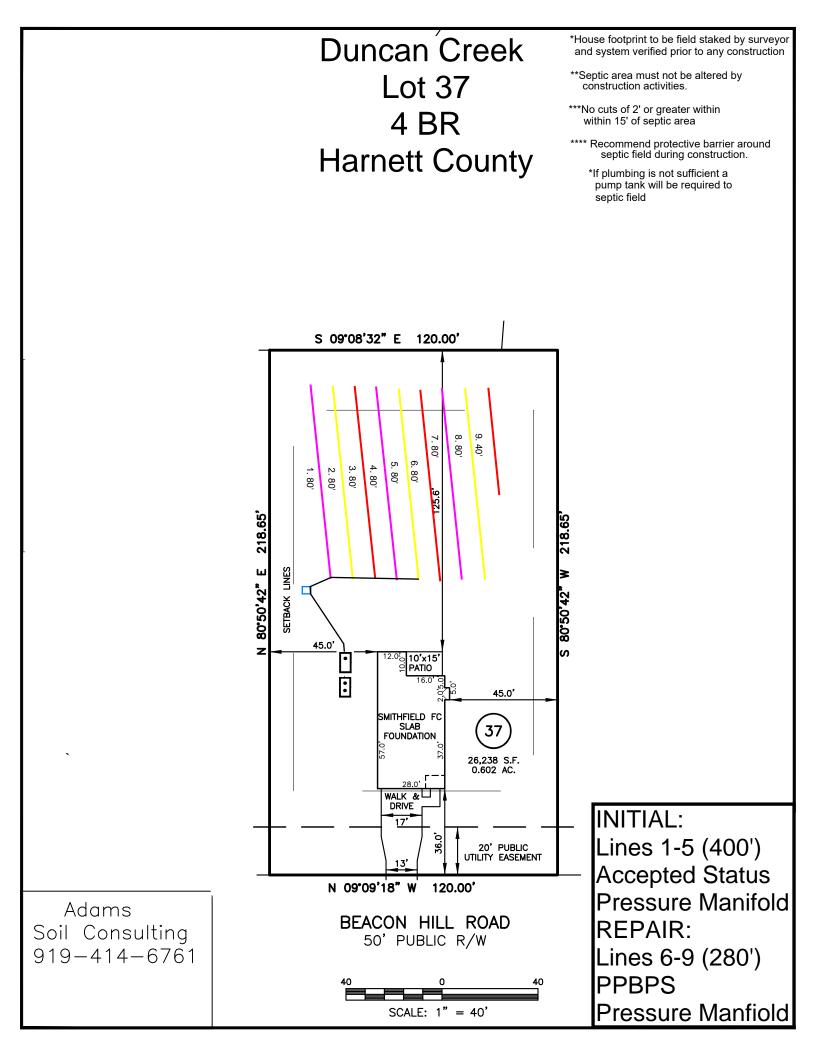
If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime.

Sincerely,

Alex Adams NC Licensed Soil Scientist #1247 AOWE Certification: 10021E







### **RESIDENTIAL PRESSURE MANIFOLD DESIGN**

Permit # <u>I</u>	<u>Duncan Creel</u>	<u>&lt; Lot 37</u>						
# of BDR: <u>4</u>	Daily Flow	<u>480</u>	gal/day	L.T.A.R.:	<u>0.3500</u>	gal/day/sq.ft		
Septic Tank: 1200	gals	Pump Tank:	<u>1200</u>	gals s	Sq. Foot:	<u>1200</u>	System Type:	Accepted
Number of Taps:	<u>5</u>	Length o	of Trenches	: <u>400</u> f	ft(See Ta	p Chart for Det	ails)	
Depth of Trenches:	<u>20</u>	in	Ма	nifold Length:	<u>48</u>	in		
Manifold Diameter:	<u>4in sch 80p</u>	VC	Tap Confi	guration: 6 in sp	bacing	<u>1</u>	side(s) of man	ifold
Supply Line: length:	<u>50</u>	ft		Diameter:	<u>2</u>	in sch 40pvc		
Friction Loss + Fitting L	.oss:	<u>3.43</u>	ft(supply I	ine length + 70'	for fitting	gs in pump tan	k)	
Design Head:	<u>2</u>	ft	Elevation	Head:	<u>6.00</u>	ft		
Total Head:	<u>11.43</u>	ft	Ρι	Imp to Deliver:	<u>35.55</u>	gals/min at	<u>11.43</u>	ft head
Dosing Volume:	<u>195</u>	gals,						
Drawdown: 195	_gals divide	d by	<u>20</u>	gals/in =	<u>9.8</u>	inches		

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

TAP CHART										
Benchmark		is = 100.00	set at				Design Head:	2		
Pump tank elev.			100.00	Pump elev.	95.00		Manifold elev.	101.00		
										# of Panels
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	(PPBPS)
1	Pink		100.00	80	1/2in SCH 40	7.11	96.00	240	0.4000	
2	Yellow		100.00	80	1/2in SCH 40	7.11	96.00	240	0.4000	
3	Red		100.00	80	1/2in SCH 40	7.11	96.00	240	0.4000	
4	Pink		100.00	80	1/2in SCH 40	7.11	96.00	240	0.4000	
5	Yellow		100.00	80	1/2in SCH 40	7.11	96.00	240	0.4000	
			100.00			0	0.00	0	#DIV/0!	
			100.00			0	0.00	0	#DIV/0!	
			100.00			0	0.00	0	#DIV/0!	
			100.00			0	0.00	0	#DIV/0!	
			100.00			0	0.00	0	#DIV/0!	
			Total Feet =	400	gal/min =	35.55		LTAR =	0.3500	
			Feet Required =	343	Velocity =	3.40		(Itar + 5%)	0.3675	
Total # of Panels (P	PBPS)			Des. Flow	480			(Itar w/25% red)	0.4667	
% of Dose Vol.		75		Pump Run=	13.50			(Itar + 5%)	0.4900	
Dose Volume		195		Tank Gal/IN	20					
Dose Pump Time		5.49		Elev. Head	6.00					
Drawdown in Inche	S	9.8								
Comments:										

#### SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM (Complete all fields in full)

	DWNER: <u>Duncan Creek Development Group.</u> DATE EVALUATED: <u>6/10/2025</u>									
PRO	PROPOSED FACILITY: Single Family 4 BR PROPOSED DESIGN FLOW (.0400): 480 gpd PROPERTY SIZE:									
	-			Shared Well	Spring Oth					
	LUATION METH				PE OF WASTE					
P R O F I			SOIL MO	RPHOLOGY	OTHEI	R PROFII	LE FACT(	DRS		
L E #	.0502 LANDSCAPE	HORIZON DEPTH (IN.)	.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRE CTION
		0-32	GR SL	VFR,SEXP,NS						
	Linear	32-40	SBK SCL	FR,SEXP,SS				N.O	P.S .4	1"
1	2%				N.O 40"	40"	N.O			
		0-24	GR SL	VFR,SEXP,NS			N.O	N.O	P.S .35	
	Lincor	24-36	SBK SCL	FR,SEXP,SS	N.O	36"				1"
2	Linear 2%									
		0-28	GR SL	VFR,SEXP,NS			N.O			
	Linear	28-36	SBK SCL	FR,SEXP,SS		36"		N.O	P.S	1"
3	2%				N.O	30			.4	
		0-33	GR SL	VFR,SEXP,NS						
	Linear	33-36	SBK SCL	FR,SEXP,SS	N.O	36"	N.O	N.O	P.S	1"
4									.4	

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	
Available Space (.0508)	S	S	SITE CLASSIFICATION (.0509): P.S EVALUATED BY: Bobby Weaver/Alex Adams OTHER(S) PRESENT:
System Type(s)	III B	III B	
Site LTAR	.35	.35	
Maximum Trench Depth	20"	20"	
Comments:			

