

Permit #: \_\_\_\_\_



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**

ROY COOPER • Governor

KODY H. KINSLEY • Secretary

MARK BENTON • 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 ☐

Proposed Structure: \_\_\_\_\_

Number of bedrooms: \_\_\_\_\_ Number of Occupants: \_\_\_\_\_ Other: \_\_\_\_\_

Design Wastewater Strength: ☐ domestic ☐ high strength ☐ industrial process

Proposed Design Daily Flow: \_\_\_\_\_ GPD Proposed LTAR (Initial): \_\_\_\_\_ Proposed LTAR (Repair): \_\_\_\_\_

Proposed Wastewater System Type\*: \_\_\_\_\_ (Initial) Pump Required: ☐ Yes ☐ No ☐ May be required

Proposed Wastewater System Type\*: \_\_\_\_\_ (Repair) Pump Required: ☐ Yes ☐ No ☐ May be required

*\*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)*

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 fill plan)

Usable Soil Depth (Initial): \_\_\_\_\_ Usable Soil Depth (Repair): \_\_\_\_\_

Max. Trench Depth (Initial)\*: \_\_\_\_\_ Max. Trench Depth (Repair)\*: \_\_\_\_\_ *\* Measured on the downhill side of the 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 .1945: Yes ☐ No ☐ Drainfield location meets requirements of Rule .1950: 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 Adams Date: \_\_\_\_\_

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

**\*See attached site sketch\***

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609

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AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

***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:

\_\_\_\_\_  
\_\_\_\_\_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 by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This permit is subject to revocation if the site plan, plat, or the intended use changes. 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 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 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\***

**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:

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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:

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

The following items are missing:

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

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

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

☐ Complete

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

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

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

County: \_\_\_\_\_

PIN/Lot Identifier: \_\_\_\_\_

Issued To: \_\_\_\_\_

Property Location: \_\_\_\_\_

AOWE/PE Plans/Evaluations Provided: Yes ☐ No ☐ If yes, name and license number of AOWE/PE: \_\_\_\_\_

Facility Type: \_\_\_\_\_

☐ New      ☐ Expansion      ☐ Repair      ☐ System Relocation      ☐ Change of Use

Basement?      ☐ Yes      ☐ No      Basement Fixtures?      ☐ Yes      ☐ No

Type of Wastewater System\* \_\_\_\_\_ (Initial) \_\_\_\_\_ (Repair)

*\*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)*

Design Daily Flow: \_\_\_\_\_ GPD      Wastewater Strength: ☐ domestic      ☐ high strength      ☐ industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes      ☐ No  
*(if yes, please provide engineering documentation)*

### Installation Requirements/Conditions

Septic Tank Size: \_\_\_\_\_ gallons      Total Trench/Bed Length: \_\_\_\_\_ feet      Trench/Bed Spacing: \_\_\_\_\_ feet on center

Trench/Bed Width: \_\_\_\_\_ inches      LTAR: \_\_\_\_\_ gpd/ft<sup>2</sup>

Soil Cover: \_\_\_\_\_ inches      Slope Corrected Maximum Trench/Bed Depth<sup>†</sup>: \_\_\_\_\_ inches      *\* Measured on the downhill side of the trench*

Aggregate Depth: \_\_\_\_\_ inches above pipe      \_\_\_\_\_ inches below pipe      \_\_\_\_\_ inches total

Pump Tank Size (if applicable): \_\_\_\_\_ gallons      Requires more than 1 pump? ☐ Yes      ☐ No

Pump Requirements: \_\_\_\_\_ ft. TDH vs. \_\_\_\_\_ GPM      Grease Trap Size (if applicable): \_\_\_\_\_ gallons

Distribution Method: ☐ 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 Agreement Required [.1937(h)]: ☐ Yes      ☐ No

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes      ☐ No

Declaration of Restrictive Covenants: ☐ Yes      ☐ No

Pre-Construction Conference Required: Yes ☐ No ☐

Conditions: \_\_\_\_\_

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: \_\_\_\_\_      Expiration Date: \_\_\_\_\_

AOWE/PE Signature: Alex Adams      Date: \_\_\_\_\_

**This AOWE/PE submittal is pursuant to and 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 \_\_\_\_\_  
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: \_\_\_\_\_  
\_\_\_\_\_Copies of this were sent to the AOWE/PE and the Applicant on \_\_\_\_\_  
Date

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

☐ 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: \_\_\_\_\_ by \_\_\_\_\_  
Date Initials

The following items are being resubmitted pursuant to G.S. 130A-335(a5) for issuance of the Construction Authorization:

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I, \_\_\_\_\_ hereby attest that the information required to be included with this re-submittal  
*Authorized Onsite Wastewater Evaluator (Print Name)*  
is accurate and complete to the best of my knowledge and that the proposed Construction Authorization meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

\_\_\_\_\_  
*Signature of Authorized On-Site Wastewater Evaluator*

\_\_\_\_\_  
*Date*

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

**LHD Follow-up Completeness Review of Construction Authorization**

The review for completeness of this Construction Authorization re-submittal 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:

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Copies of this were sent to the AOWE/PE and the Applicant on \_\_\_\_\_  
Date

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

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

☐ Complete

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

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

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

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June 19, 2025  
Project #1623

*“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: Wellers Knoll - Lot #83 (173 Old Fashioned Way) Subdivision NC (Harnett County) for Davidson Homes (PIN# 0529-98-0672)

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, 15ANCAC 18E. From this evaluation, ASC is providing the attached 480 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 Accepted Status. 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

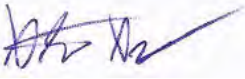


placed into the initial or repair septic areas. Installation must meet all state and Harnett County regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 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





# Wellers Knoll - Lot #83

480 gallon/day Septic Design

173 Old Fashioned Way - Lillington, NC

Davidson Homes

Harnett County PIN: 0529-98-2413

\*Not a Survey

Sketched from a plot plan supplied by owner

\*System to be flagged following lot clearing and prior to septic system installation.

System: Gravity to D-Box

Lines: 1-4 (360')

0.35 LTAR

20" Max Trench Bottom

Accepted Status System

Repair: Pressure Manifold

Lines: 5-7 (270')

0.35 LTAR

18" Max Trench Bottom

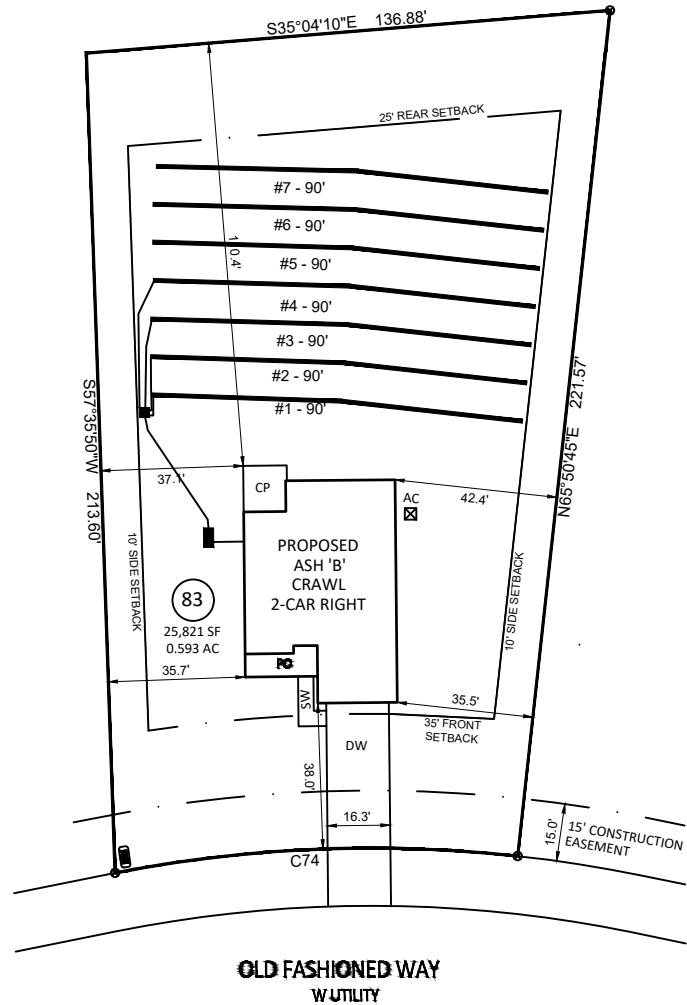
PPBPS - 50% Reduction System

**\*\*1000 Gallon Septic and Pump Tanks**  
Tank and trenches to be located minimum of 10' from any property line and minimum of 5' from any building foundation.

\*Do Not Cut, Fill, or Alter Drainfield or Repair Area

\*Comply with all setbacks

\*Contact local health dept. and/or Alex Adams prior to or during installation with any questions or concerns.



GRAPHIC SCALE

1" = 50'



Adams  
Soil Consulting  
919-414-6761  
Job #1623  
6-20-25

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

OWNER: Davidson Homes  
ADDRESS: 173 Old Fashioned Way- Lillington, NC  
PROPOSED FACILITY: Single Family, 4-bedroom PROPOSED DESIGN FLOW (.1949): 480gpd  
LOCATION OF SITE 173 Old Fashioned Way -Lillington NC 27546  
WATER SUPPLY: Public Water  
EVALUATION METHOD: Auger Boring

APPLICATION DATE:  
DATE EVALUATED 6-18-25  
PROPERTY SIZE: .59 Acres

TYPE OF WASTEWATER: Sewage

| P<br>R<br>O<br>F<br>I<br>L<br>E<br># | .1940<br>LANDSCAPE<br>POSITION/<br>SLOPE % | HORIZON<br>DEPTH<br>(IN.) | SOIL<br>MORPHOLOGY<br>(.1941)  |                                     | OTHER PROFILE<br>FACTORS           |                        |                         |                         | PROFILE<br>CLASS<br>& LTAR |
|--------------------------------------|--------------------------------------------|---------------------------|--------------------------------|-------------------------------------|------------------------------------|------------------------|-------------------------|-------------------------|----------------------------|
|                                      |                                            |                           | .1941<br>STRUCTURE/<br>TEXTURE | .1941<br>CONSISTENCE/<br>MINERALOGY | .1942<br>SOIL<br>WETNESS/<br>COLOR | .1943<br>SOIL<br>DEPTH | .1956<br>SAPRO<br>CLASS | .1944<br>RESTR<br>HORIZ |                            |
| 1                                    | Linear<br>Slope/4%                         | 0-20                      | GR/SL                          | VFR/SEXP/NS                         | N/A                                | N/A                    | N.O                     | N.O                     | PS/.4                      |
|                                      |                                            | 20-40                     | SBK/SCL                        | FI/SEXP/SS                          |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
| 2                                    | Linear<br>Slope/4%                         | 0-16                      | GR/LS                          | VFR/SEXP/NS                         | 38"                                | N/A                    | N.O                     | N.O                     | U/PS/.35                   |
|                                      |                                            | 16-38                     | GR/SCL                         | FI/SEXP/NS                          |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
| 3                                    | Linear<br>Slope/4%                         | 0-18                      | GR/LS                          | VFR/SEXP/NS                         | N/A                                | N/A                    | N.O                     | N.O                     | U/PS/.4                    |
|                                      |                                            | 18-36                     | GR/SCL                         | FI/SEXP/NS                          |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
| 4                                    | Linear<br>Slope/4%                         | 0-21                      | GR/LS                          | VFR/SEXP/NS                         | 35"                                | N/A                    | N.O                     | N.O                     | U/PS/.35                   |
|                                      |                                            | 21-35                     | GR/SCL                         | FI/SEXP/NS                          |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |
|                                      |                                            |                           |                                |                                     |                                    |                        |                         |                         |                            |

| DESCRIPTION             | INITIAL SYSTEM | REPAIR SYSTEM | OTHER FACTORS (.1946): _____<br>SITE CLASSIFICATION (.1948): U/PS<br><br>EVALUATED BY: A. Adams<br>OTHER(S) PRESENT: |
|-------------------------|----------------|---------------|----------------------------------------------------------------------------------------------------------------------|
| Available Space (.1945) | S              | S             |                                                                                                                      |
| System Type(s)          | Type III G     | Type III B    |                                                                                                                      |
| Site LTAR               | 0.35           | 0.35          |                                                                                                                      |

COMMENTS: \_\_\_\_\_

Adams  
Soil Consulting  
919-414-6761  
Job #1623  
6-20-25

