

REQUEST FOR COMMITTEE ACTION

HENDERSON COUNTY TECHINICAL REVIEW COMMITTEE

MEETING DATE: August 17, 2021

SUBJECT: Revised Combined Master and Phase III Development Plan for Couch Mountain (Formerly Luna Ridge) Major Subdivision (2019 – M03)

STAFF CONTACT: Matt Champion, Zoning Administrator

ATTACHMENTS: 1. Staff Report
2. Combined Revised Master & Phase III Development Plan
3. Original Phase III Development Plan

SUMMARY OF REQUEST:

A subdivision application was submitted on behalf of property owners Luna Ridge, LLC on August 3, 2021. The application is for a Combined Revised Master and Phase III Development Plan for Couch Mountain Major Subdivision, consisting of a total of 81 lots for single family dwellings and an additional 3,152 linear feet of new private roadway. The subject area is located off Hutch Mountain Rd. (SR 1556) and contains 394.2 acres. Phase III is approximately 58.8 acres on PIN: 9661-97-6534.

TECHNICAL REVIEW COMMITTEE ACTION REQUESTED:

Staff has found that the Revised Master and Phase III Development Plan meet the standards of the subdivision regulations of Chapter 42, Henderson County Land Development Code (LDC). Staff recommends the Master Plan and Phase III Development Plan be subject to the developer addressing any issues raised by the TRC and addressing the comments listed in the Staff Report.

Suggested Motion:

I move that the TRC forward the Combined Revised Master and Phase III Development Plan on to the Planning Board for further review as long as they meet all technical requirements based on the Henderson County Land Development Code and recommendations of the Henderson County Comprehensive Plan and any conditions in the staff report or as discussed by the TRC.

Henderson County Planning Department Staff Report

**Combined Revised Master and Phase III Development Plan
Couch Mountain Major Residential Subdivision (2019-M03)**

Property Owner(s): Luna Ridge, LLC
Applicant: Andy Baker, Managing Member of Luna Ridge, LLC
PIN: 9661-97-8633 (Phase III)

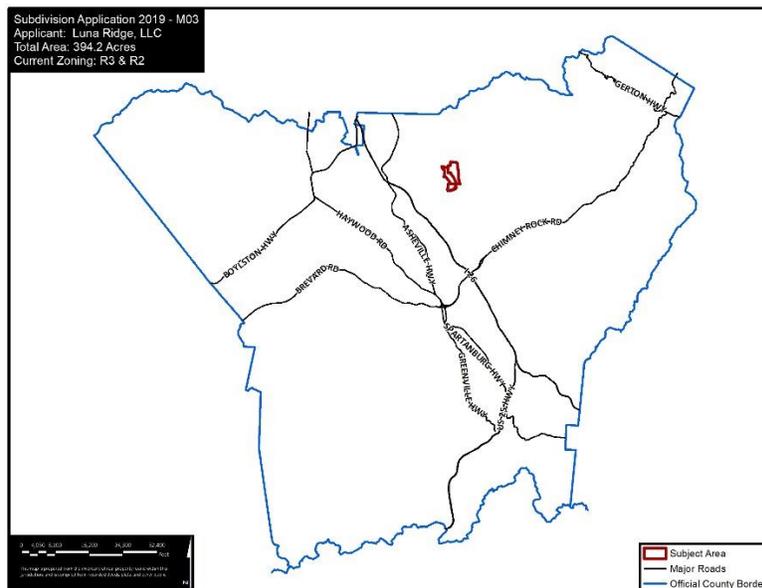
Master & Development Plan Comments:

According to Chapter 42, Henderson County Land Development Code (LDC) §42-341), the purpose of a Master Plan is to provide general information about the proposed development to allow for an assessment of its impact on the orderly growth and development of the County, environmental quality, land values, natural features identified on the site analysis sketch and the County’s roads and governmental services. During the review of the Combined the Master and Development Plan, the Technical Review Committee should take into consideration: applicable recommendations of the *Henderson County Comprehensive Plan*, the potential use of the land to be subdivided, and the impact of the subdivision and proposed use whether residential, commercial, or industrial.

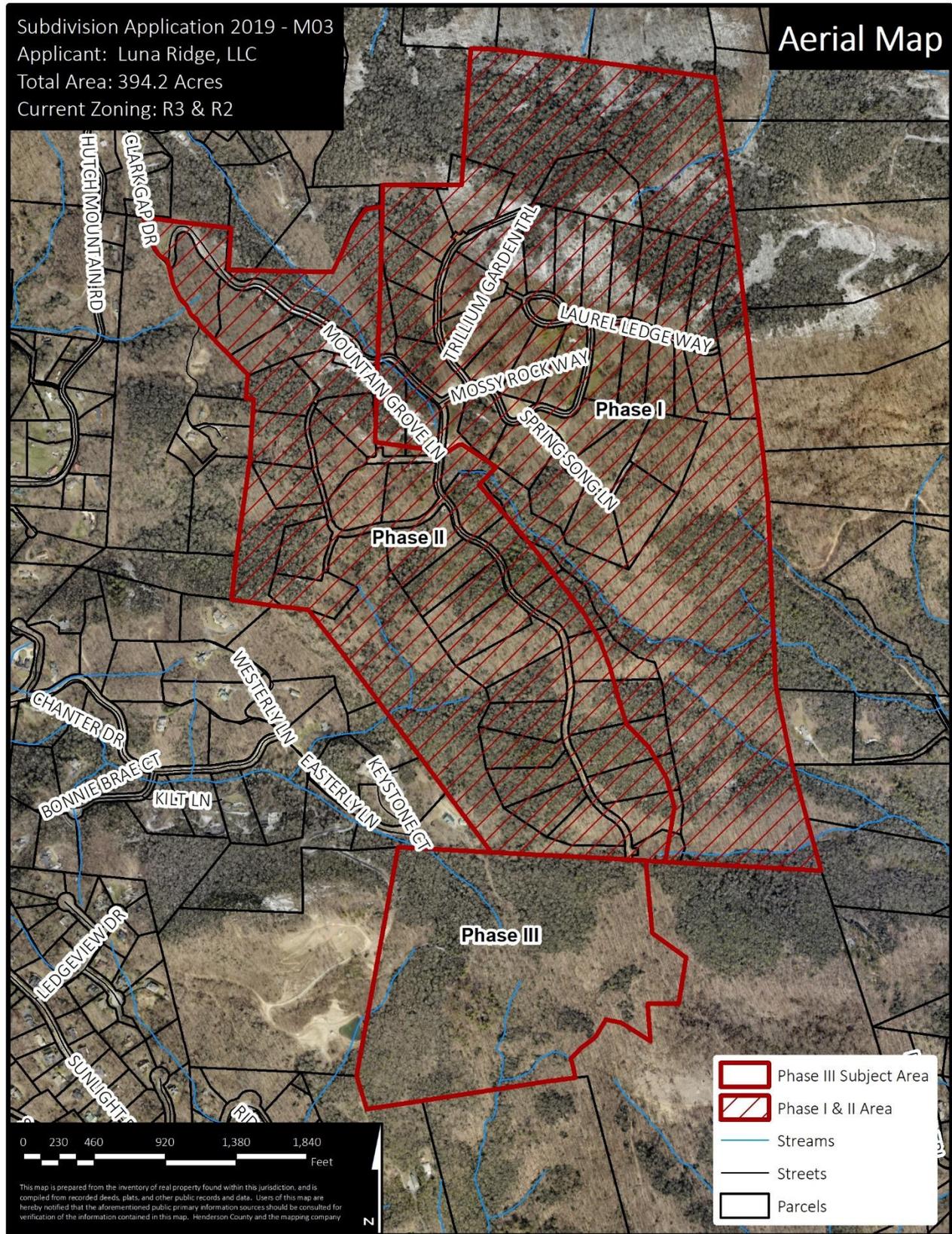
When reviewing the Combined Master and Development Plan it is important to consider that, due to severe topographic conditions, inadequate road access, distance from services, unique natural areas, soils that do not easily support soil drainage systems and/or the proximity to existing and incompatible land uses/zoning, all land may not be suitable to be subdivided for the purpose of dense development (LDC §42-75).

Staff has reviewed the submitted revised Combined Master and Phase III Development Plan for the Couch Mountain Major Subdivision, taking into consideration the recommendations of the *Henderson County Comprehensive Plan* and reviewing the plan for conformance with Henderson County Land Development Code. Staff offers the following comments:

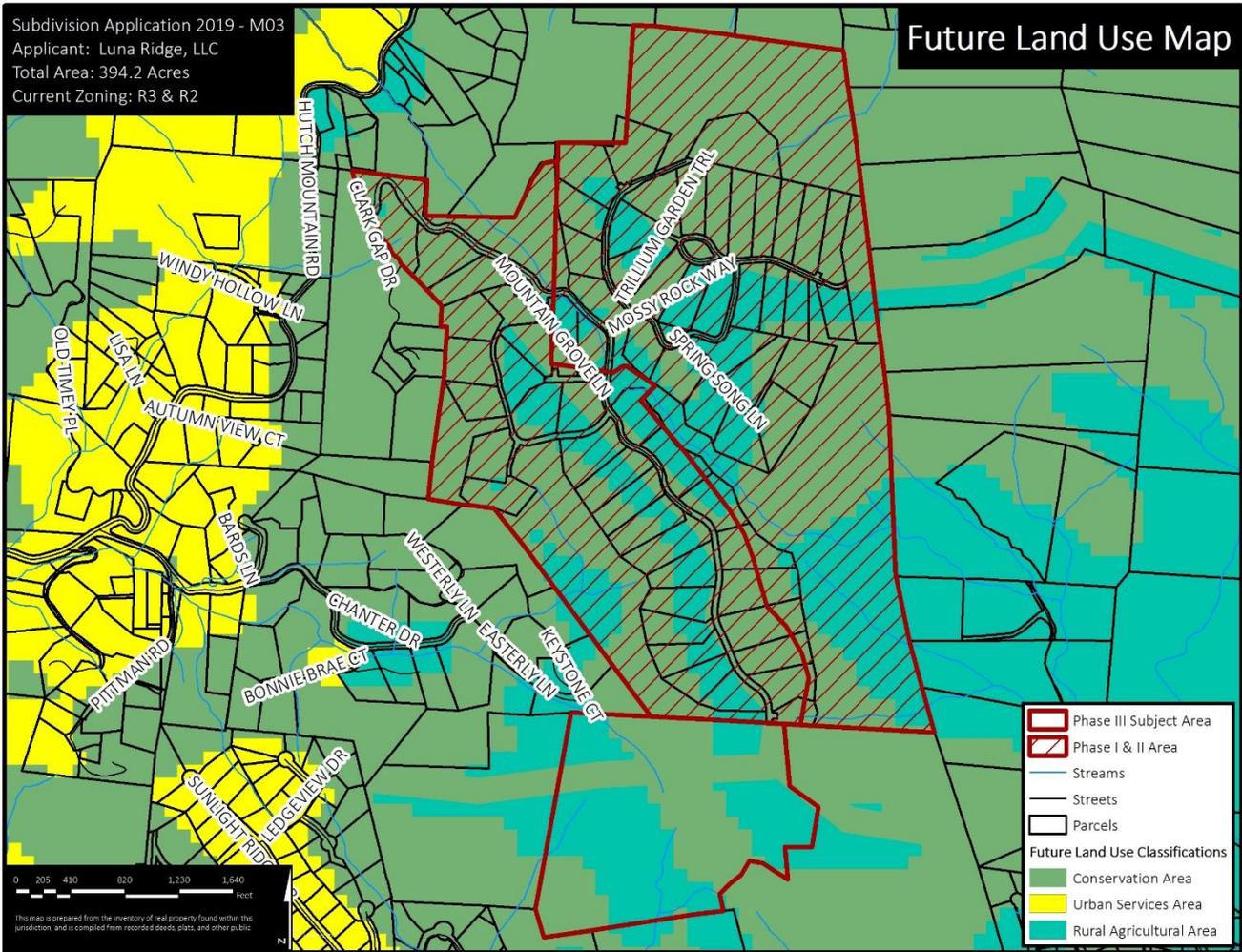
Map A: County Context



Map B: Aerial Imagery

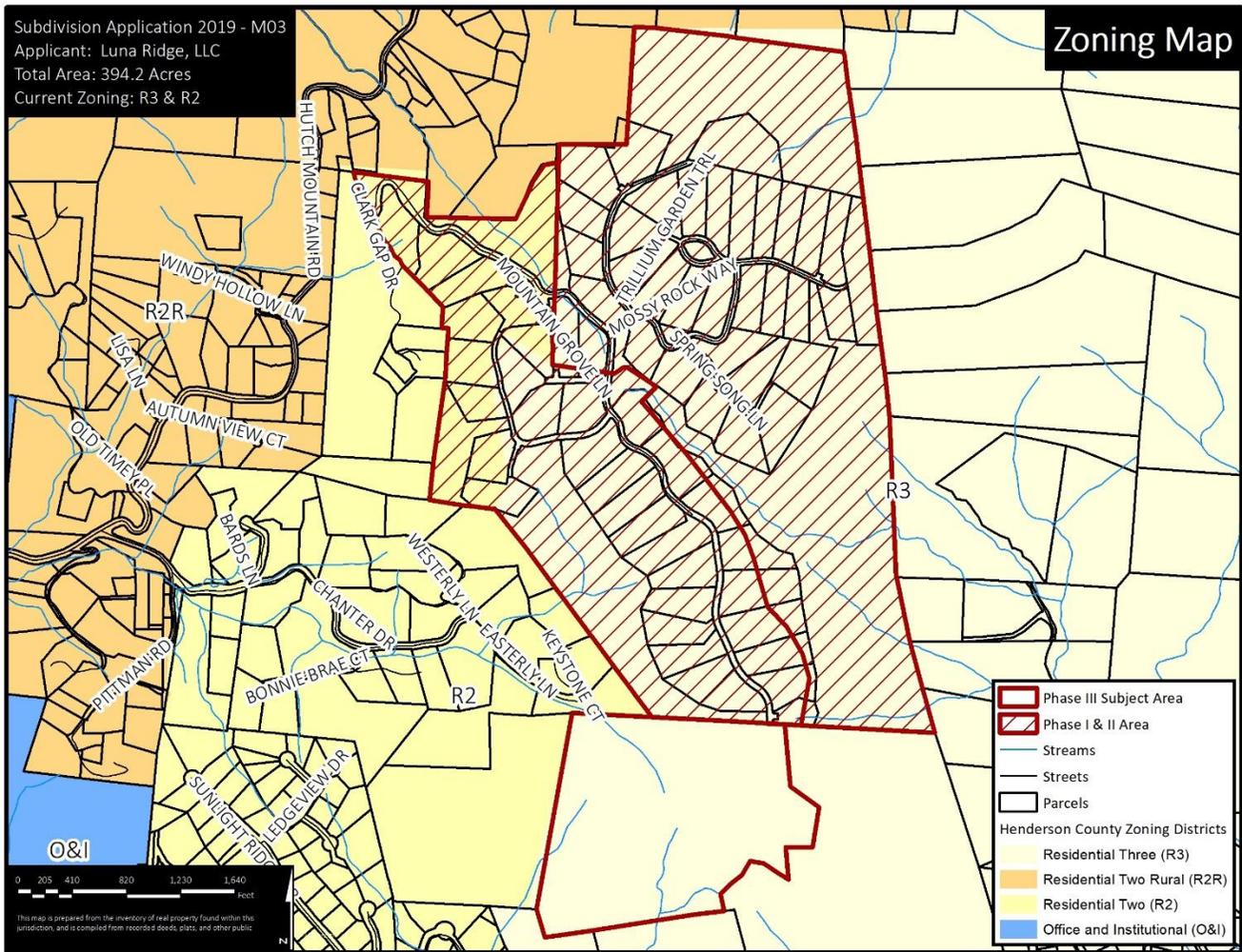


Map C: County Comprehensive Plan Future Land Use Map



1. **Henderson County Comprehensive Plan (CCP).** The Future Land Use Map of the CCP shows the Subject Area as being located within an area of Conservation with some Rural Agriculture Area within it.
 - a. **Conservation Area:** “This category includes land areas that are intended to remain largely in their natural state, with only limited development. Such areas should be targeted for protection through regulations and incentives.”
 - b. **Rural Agriculture Area:** “The RAA covers those portions of the county that are predominantly rural and are characterized by low-density residential development with substantial land areas devoted to agriculture and undeveloped lands. Land use policies will seek to retain that character.”

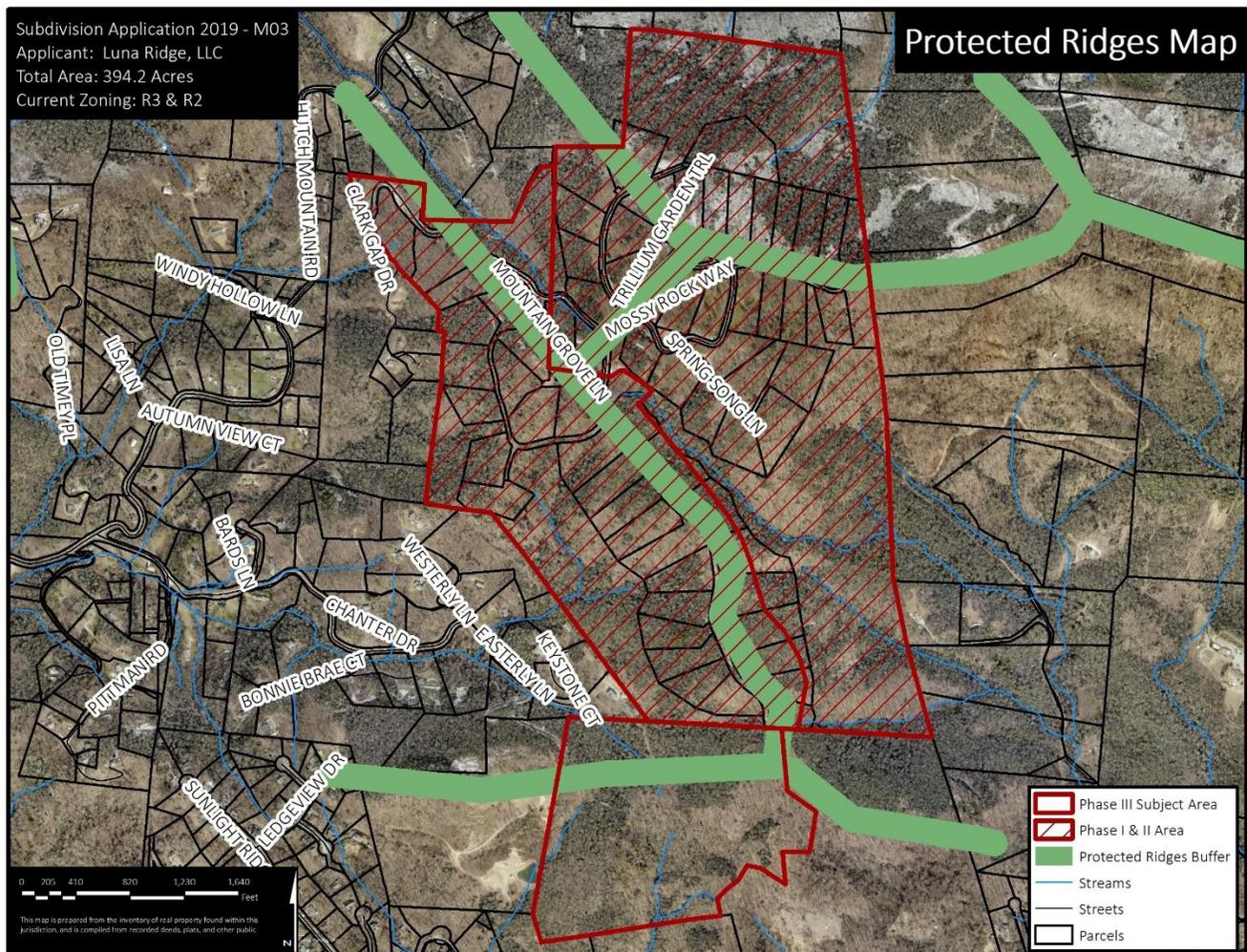
Map D: Official Zoning Map



2. **Chapter 42, Henderson County Land Development Code (LDC).** According to Chapter 42, Henderson County Land Development Code (LDC) and its Official Zoning Map adopted September 19, 2007 (as amended), the proposed project site is located within the Residential Three (R3) Zoning District and Residential Two (R2) Zoning District.
 - a. **Residential Three (R3):** “The purpose of Residential District Three (R3) is to foster orderly growth where the *principal use* of land is low density residential. The intent of this district is to allow for *residential development* consistent with the recommendations of the *Comprehensive Plan*. This general *use district* is typically meant to be utilized in areas designated as Rural (RAA) in the *Comprehensive Plan*.
 - i. R3 allows for a standard density of 0.66 units per acre. The overall density for the proposed Couch Mountain Subdivision is 0.21 units per acre.
 - b. **Residential Two (R2):** “The purpose of Residential District Two (R2) is to foster orderly growth where the principal use of land is residential. The intent of this district is to allow for low to medium density residential development consistent with the recommendations of the *Comprehensive Plan*. This general use district is typically meant to be utilized in areas designated as Transitional (RTA) in the *Comprehensive Plan*.”

- i. R2 allows for a standard density of 1 unit per acre. As stated previously, the overall density for Couch Mountain is 0.21 units per acre.
3. **Water and Sewer Availability.** The applicant proposes the use of individual water and septic systems for each lot in the subdivision. Applicant has presented a Report of Findings from Land Resource Management for a preliminary soil investigation as well as a well permit and well construction record from AAA Sweetwater Well & Pump, Inc.
 4. **Road System:** The subdivision will be served by private roads built in accordance with the Subdivision Local Road standards required in the LDC. The total of new roads proposed in the original Phase III approval was 3,899 linear feet. The revised Phase III shows a new total of 3,152 linear feet. Road profiles on the attached plan specify that the maximum grade does not exceed 18% on any of the proposed roads. There is a combination of 14', 16' and 18' road widths proposed, with 3' and 4' shoulders. The applicant will be required to submit a list of proposed road names to the Property Addressing Coordinator for all proposed new roads. The entrance road, Clark Gap Rd., is a private road within a 50'-60' wide right of way. Applicant has re-graded and paved Clark Gap Rd. to its intersection with Hutch Mountain Rd. (SR 1556) to accommodate the additional lots.

Map E: Protected Ridges



5. **Protected Ridges:** The project site is partially encumbered by the protected ridges buffer. Section §42-252 of the LDC regulates the construction and permitting of “tall buildings” within the protected ridge buffer.
- a. “Tall buildings or structures” include any building, structure or unit within a multiunit building with a vertical height of more than 40 feet measured from the top of the foundation of said building, structure or unit and the uppermost point of said building, structure or unit; provided, however, that where such foundation measured from the natural finished grade of the crest or the natural finished grade of the high side of the slope of a ridge exceeds 3 feet, then such measurement in excess of 3 feet shall be included in the 40-foot limitation described herein; provided, further, that no such building, structure or unit shall protrude at its uppermost point above the crest of the ridge by more than 35 feet.
6. **Total Project Proposal Summary:**
- 81 single-family lots (34 Lots in Phase I, 33 Lots in Phase II, & 14 Lots in Phase III)
 - Overall density of 0.21 units/acre (0.17 units/acre in Phase I, 0.24 units/acre in Phase II, & 0.24 units/acre in Phase III)
 - Smallest lot in Phase I is 2.09 acres, Phase II is 2.17 acres, & Phase III is 2.21 acres
 - 33.0% Open Space (98.3 acres in Phase I, 29.85 acres in Phase II, & 1.77 acres in Phase III)
 - 12,732LF of private roads (5,809LF in Phase I, 3,771LF in Phase II & 3,152LF in Phase III)
 - Individual well and septic systems
 - Gated Entrance

Master & Development Plan Comments:

1. **Soil Erosion and Sedimentation Control Plan.** The Applicant shall submit written notice from the appropriate local agencies verifying that an Erosion and Sedimentation Control Plan has been received or a written notice from a professional land surveyor, engineer, landscape architect, architect, or professional planner certifying that no plan is required (LDC §42-95B).
2. **Water Quality.** The Applicant shall submit written notice from the appropriate local agencies verifying that a Stormwater Management Permit has been received (LDC §42-95E).
3. **Private Roads.** Private roads shall be constructed in accordance with the Private Subdivision Local Road standards stated in Chapter 42 (LDC§42-109). Additionally, subdivisions of 35 or more lots shall provide a minimum of two entrance roads. The second entrance road may be specifically waived by the approving authority where unique circumstances exist (LDC §42-95A (1)).
4. **Shoulder Stabilization.** All areas disturbed by the construction of a public road, including cut and fill slopes, shoulders and ditch banks, shall be seeded to stabilize the soil and prevent erosion. Seeding should be done as soon as feasible after road construction (LDC §42-102).
5. **Road Drainage, Culverts and Shoulder Stabilization.** Road or drainage structures shall be constructed in accordance with state roads standards. Road drainage side ditches shall be constructed with sufficient depth and width to carry the expected volume of storm water runoff (LDC §42-100). All areas disturbed by the construction of a public road, including cut and fill

slopes, shoulders and ditch banks, shall be seeded to stabilize the soil and prevent erosion. Seeding should be done as soon as feasible after road construction (LDC §42-105).

6. **Road Name Approval.** Proposed road names for a private and/or public road shall be preapproved by Henderson County in accordance with Chapter 42 of the Henderson County Code, Property Addressing (LDC §42-103). The names of the proposed roads and easements should be confirmed with the development plan approval.
7. **Road Name Signs and Regulatory Signs.** Road name signs and regulatory signs shall be provided in accordance with Chapter 142 of the Henderson County Code. Road name signs and regulatory signs must be acquired and installed prior to final plat approval (LDC §42-104).
8. **Street Tree Requirements.** According to the street tree requirements of Chapter 42 (LDC §42-95H) the applicant must provide one tree per 50 linear feet of property abutting an internal road. Trees may be placed in groups with a minimum spacing of no less than 15 feet and a maximum spacing of no more than 65 feet. The trees may be placed within the right-of-way or within 20 feet of the edge of the right-of-way. The applicant may use existing trees in accordance with LDC §42-185 instead of planting new trees. These existing trees must also be located within the right-of-way or 20 feet off the edge of the right-of-way as required by LDC §42-185.
9. **Perennial and Intermittent Surface Water Buffer.** All built-upon area shall be a minimum of 30 feet landward of all perennial and intermittent surface water, as defined in LDC §42-251.
10. **Miscellaneous Advisory Provisions.** The Applicant should become familiar with the Miscellaneous Advisory Provisions of Chapter 42 (LDC §42-87).
11. **Final Plat Requirements.** The Final Plat(s) must meet the requirements provided by the Planning Department whenever a subdivision of land occurs (LDC §42-343).



No.	REVISIONS/SUBMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
2	STORM AND EGC PLANS	04/02/21
3	STORM AND EGC RESUBMISSION	08/02/21

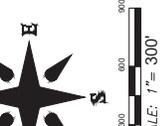
PERMIT SET

Brooks Engineering & Surveying
 17 Arlington Street
 Asheville, N.C. 28801
 Phone: 1-828-232-1331
 Fax: 1-828-232-1331
 www.brooks.com

BROOKS
 ENGINEERING ARCHITECTS
 Planning • Engineering • Surveying
 • Environmental Services •

Project No: 486519
 Drawing Title: MASTER PLAN
 DEVELOPMENT PLAN
 COUCH MOUNTAIN SUBDIVISION (PHASE 3)
 HENDERSON COUNTY
 NORTH CAROLINA

- SITE PLAN LEGEND**
- EXIST BOUNDARY
 - EXIST ADJACENT
 - EXIST DRIVEWAY
 - EXIST STREAM BUFFER
 - EXIST STREAM
 - EXIST EDGE OF GRAVEL
 - EXIST SEWER EASEMENT
 - EXIST OVERHEAD UTILITIES
 - NEW PROPERTY LINES
 - NEW DRIVEWAY EASEMENT
 - BUILDING SETBACKLINE
 - NEW PAVEMENT

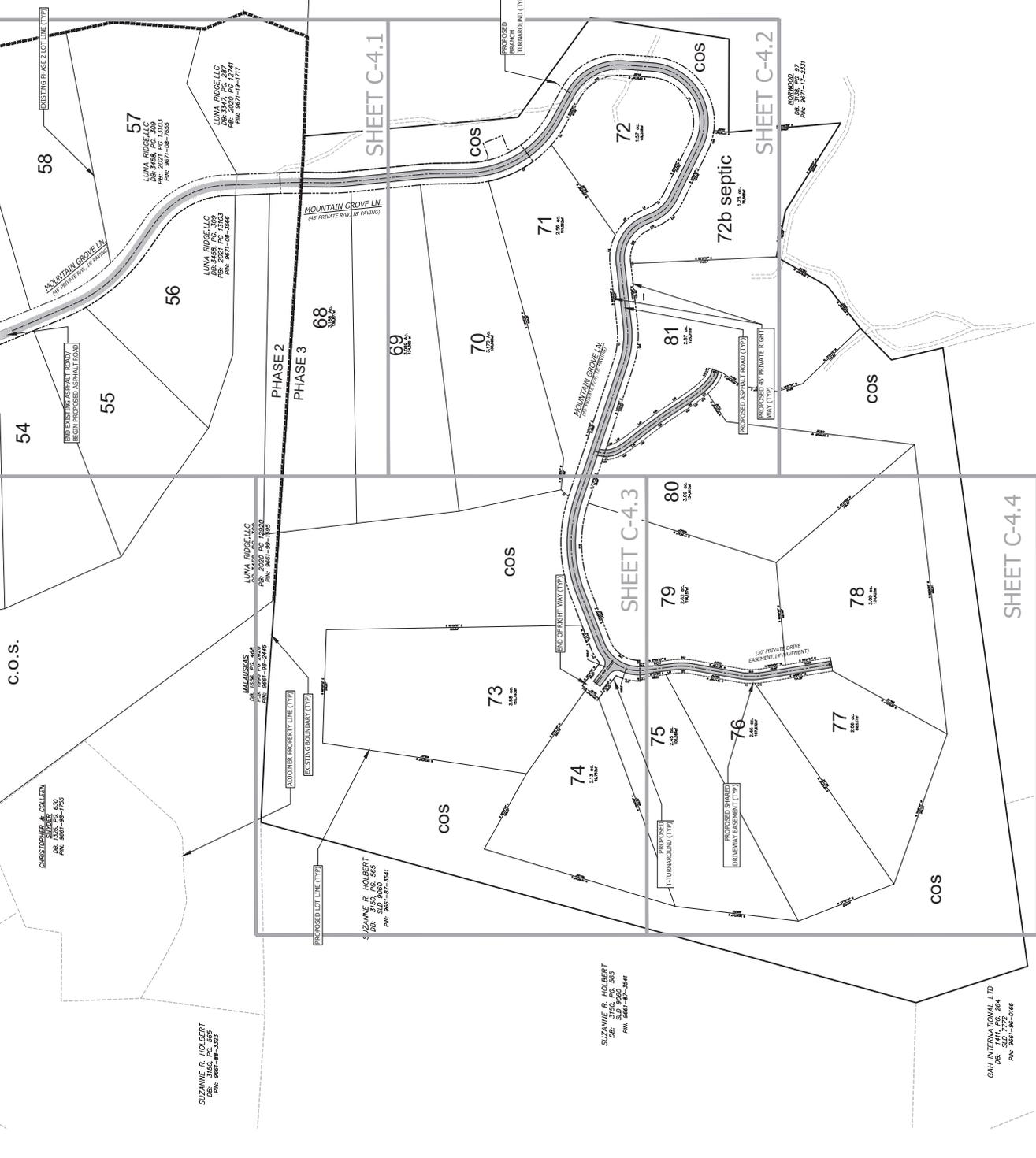


SITE AND ZONING NOTES

PROPERTY ZONING: R3
 PROPERTY SIZE: 58.1 (PH. 3)
 PROPERTY STEEPER THAN 6%: 0.51 AC (0.87%)
 MINIMUM LOT SIZE: 1.5 ACRES
 MINIMUM LOT WIDTH: 30' @ 60' @ 90'
 MAXIMUM BUILDING HEIGHT: 40'
 SETBACKS:
 FRONT: 10' (LOCAL)
 SIDE: 10'
 COMMON OPEN SPACE: 1.77 AC - 3.0 AC (PH. 3)
 PROVIDED: 1.77 AC - 3.0 AC (TOTAL)
 1.77 AC - 3.0 AC (TOTAL)
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DEVELOPMENT ORDINANCES OF HENDERSON CO.

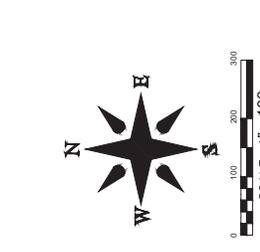
DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PARCELS: 36 (PH. 3), 31, 194.2 AC (TOTAL)
 ZONING REVIEW: HENDERSON COUNTY
 STORAGE REVIEW: HENDERSON COUNTY
 STORMWATER REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: R3
 PROPOSED DENSITY: 0.24 (PH. 3) @ 1.01 AC (TOTAL) PARCELS
 PROPOSED LINEAR FEET OF ROAD: 2,158 (PH. 3)
 PUBLIC WATER AND SEWER SYSTEMS ARE PROVIDED BY INDIVIDUAL WELLS AND SEPTIC SYSTEMS.
 PROPERTY OWNER: 3 MILES FROM THE SITE.
 ADDRESS: 120 HIGH COUNTRY TRAIL
 ADDRESS: 120 HIGH COUNTRY TRAIL
 CONTACT: ANDY BAKER
 ADDRESS: 320 HILLSIDE COUNTRY TRAIL
 ADDRESS: 320 HILLSIDE COUNTRY TRAIL
 EMAIL: ANDY@BROOKSENGINEERING.COM
 ENGINEER: BROOKS ENGINEERING
 CONTACT: JONATHAN BARRING
 ADDRESS: 17 ASHEVILLE, NC 28801
 PHONE: 828.232.1331



SITE PLAN LEGEND

---	EXIST BOUNDARY
---	EXIST ADJACENT
---	EXIST STREAM
---	EXIST STREAM BUFFER
---	EXIST EDGE OF GRAVEL
---	EXIST SEWER EASEMENT
---	EXIST OVERHEAD UTILITIES
---	EXIST UNDERGROUND UTILITIES
---	NEW PROPERTY LINES
---	NEW DRIVEWAY EASEMENT
---	BUILDING SETBACK LINE
---	NEW PAVEMENT



SITE AND ZONING NOTES

PROPERTY ZONING: ES
 PROPERTY ADDRESS: 101 LAC (0.07N)
 PROPERTY STEEPER SLOPES: 0.5 LAC (0.07N)
 MINIMUM LOT SIZE: 1.5 ACRES
 SMALLEST PROPOSED LOT: 2.1 ACRES
 MINIMUM LOT WIDTH: 37.0 FEET
 SETBACKS: INCLUDING HEIGHT: 5 FT
 (FEAR 19 LOCAL)
 CORNER OPEN SPACE: 1.7 AC - 3.1 AC (0.3)
 PROVIDED: 132.2 AC - 333.3 AC (TOTAL)
 ALL DIMENSIONS ARE FROM EDGE OF ASPHALT FACE OF CURB FACE OF WALL.
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ASHEVILLE SPECIFICATIONS AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PARCEL NUMBER: 061376521
 ZONING REVIEW: HENDERSON COUNTY
 STORM WATER REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: ES
 PROPOSED DENSITY: 0.28 (PER 31.02) (TOTAL LOTS ARE 14 LOTS @ 1.61 TOTAL)
 PROPOSED LINEAR FEET OF ROAD: 3,152.1 (L.P. 3)
 WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL PUBLIC WATER AND SEWER SYSTEMS ARE 0.5 MILES FROM THE SITE.
 PROPERTY OWNER: SUZANNE R. HOLBERT
 CONTACT: SUZANNE R. HOLBERT
 ADDRESS: 101 LAC, 264
 ADDRESS 2: ASHEVILLE, NC 28801
 PHONE: 828-232-0166

DEVELOPMENT DATA

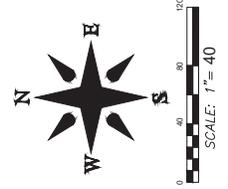
PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PARCEL NUMBER: 061376521
 ZONING REVIEW: HENDERSON COUNTY
 STORM WATER REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: ES
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 CONTACT: SUZANNE R. HOLBERT
 ADDRESS: 101 LAC, 264
 ADDRESS 2: ASHEVILLE, NC 28801
 PHONE: 828-232-0166

SITE PLAN LEGEND

---	EAST BOUNDARY
---	EAST DRIVEWAY
---	EAST ADJUT DRIVEWAY
---	EAST STREAM
---	EAST WATERFASMENT
---	EAST OVERHEAD UTILITIES
---	NEW PROOT FOOT PAVES
---	NEW DRIVEWAY EASERMENT
---	BUILDING SETBACK LINE
---	NET PARCEMENT



SITE AND ZONING NOTES

PROPERTY ZONING: R3
 PROPERTY SIZE: 26.6 (A.C.)
 PROPERTY STEEPER THAN 10%: 191.7 (A.C. @ 10%)
 MINIMUM LOT SIZE: 1.5 ACRES
 MINIMUM LOT AREA: 20,903 S.F.
 MINIMUM LOT WIDTH: 30.0 (F.T.)
 MAXIMUM BUILDING HEIGHT: 4' 0"
 SET FRONT: 15' (LOCAL)
 SIDE: 10'
 COMMON OPEN SPACE: 177 (A.C. - 33.3% (PH.3))
 PROVIDED: 1397 (A.C. @ 10% (TOTAL))
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACCORDANCE WITH THE LATEST EDITION OF DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PIN NUMBER: 9661924534
 ZONING REVIEW: HENDERSON COUNTY
 EROSION CONTROL REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: R3
 PROPOSED NUMBER OF UNITS: 16 (PH.1/81 (TOTAL))
 PORTION OF LOTS SUBMITTED ARE WITHIN TRACT
 WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL
 PUBLIC WATER AND SEWER SYSTEMS ARE
 PROPERTY COUNTRY: 1.5 MILES FROM THE SITE
 CONTACT: ANNY BAKER
 ADDRESS 1: 177 ARKINGTON ST
 ADDRESS 2: SUWANNOOKA, KY 42228
 DEVELOPER: LUNA RIDGE, LLC
 ADDRESS: 20118 THE CORY TRAIL
 PHONE: 926-462-5815
 ENGINEER: ZYAN KANNINGS
 ADDRESS: 177 ARKINGTON ST
 PHONE: 926-282-0200

MATCH LINE - SEE SHEET C-4.3

PHASE 2
 PHASE 3

68
 3,188 A.C.
 138.877/sf

69 MATCH LINE - SEE SHEET C-4.2

54

55

56

58

57

LUNA RIDGE, LLC
 DB: 3458, PG. 309
 PB: 2021 PG 13103
 PIN: 9671-08-7655

LUNA RIDGE, LLC
 DB: 3458, PG. 309
 PB: 2021 PG 13103
 PIN: 9671-08-3566

LUNA RIDGE, LLC
 DB: 3347, PG. 287
 PB: 2020 PG 12741
 PIN: 9671-19-1717

PERMIT SET		REVISIONS/SUBMISSIONS		DATE	
1 SUBMITTAL TO HENDERSON COUNTY		03/24/21		03/24/21	
2 STORM AND ESC PLANS		04/06/21		04/06/21	
3 STORM AND ESC RESUBMISSION		08/02/21		08/02/21	
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97		08/02/21		08/02/21	
98		08/02/21		08/02/21	
99		08/02/21		08/02/21	
100		08/02/21		08/02/21	

486519
 C-4.1
 SITE PLAN

COUCH MOUNTAIN SUBDIVISION (PHASE 3)
 DEVELOPMENT PLAN
 NORTH CAROLINA
 HENDERSON COUNTY

BROOKS
 ENGINEERING ARCHITECTS
 Planning • Engineering • Surveying
 • Environmental Services •

17 Arlington Street
 Asheville, N.C. 28801
 Phone: 1-828-232-4700
 Fax: 1-828-232-1311
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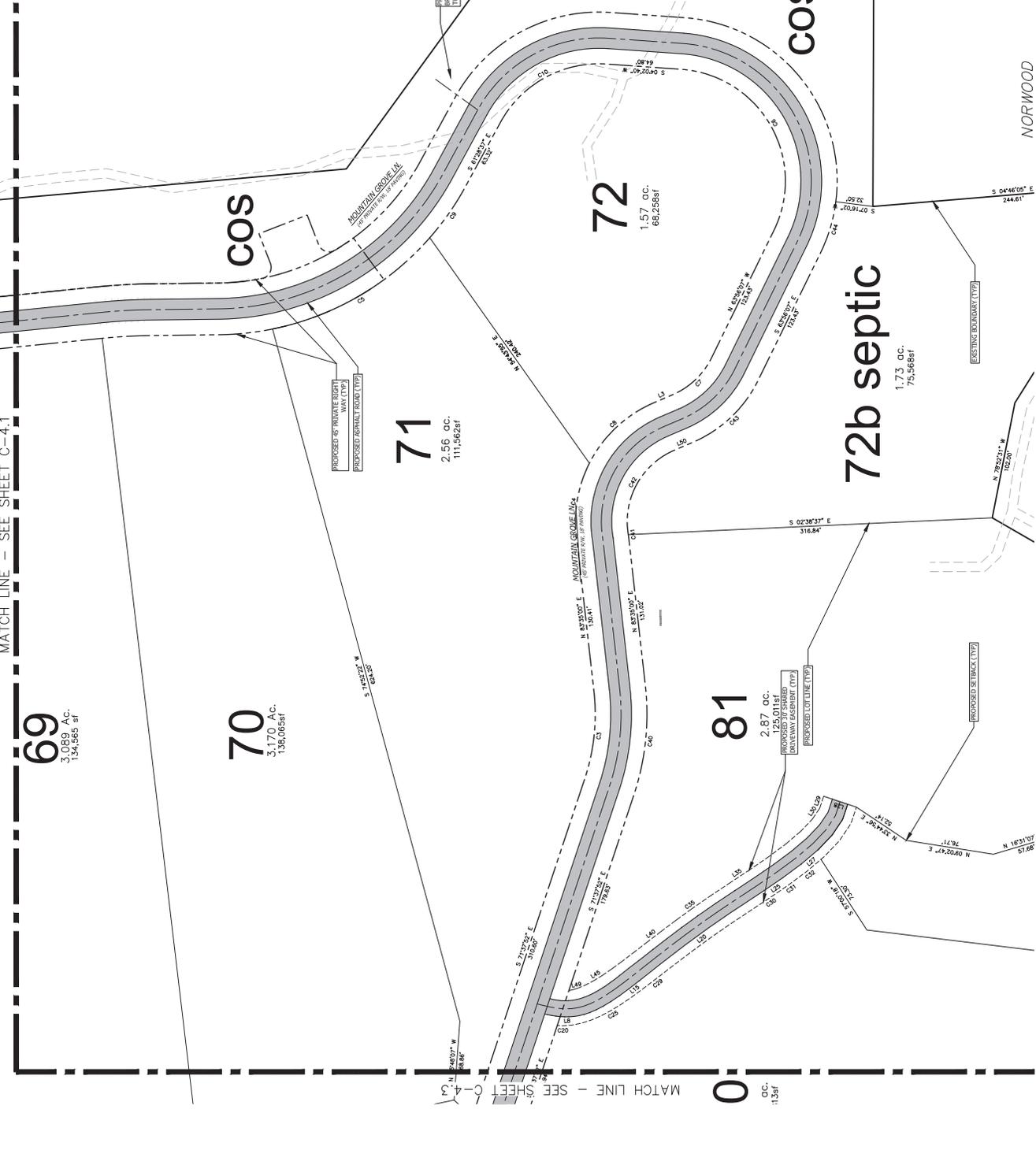
DATE: 08/03/2021
 DRAWN: MCB
 SCALE: AS NOTED
 CHECKED: JHM

Project No: 486519
 Drawing Title: C-4.1
 SITE PLAN

PERMIT SET
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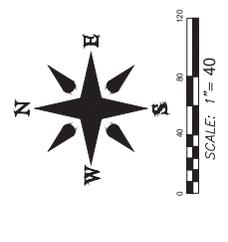
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SITE PLAN LEGEND

- EXIST. BOUNDARY
- EXIST. DRIVEWAY
- EXIST. ADJACENT WAY
- EXIST. STREAM
- EXIST. BUFFER
- EXIST. WETLAND
- EXIST. WETLAND
- EXIST. WATER EASEMENT
- EXIST. OVERHEAD UTILITIES
- EXIST. OVERHEAD UTILITIES
- EXIST. PROPOSED UTILITIES
- NEW DRIVEWAY EASEMENT
- BUILDING SETBACK LINE
- NEW PARCELS



SITE AND ZONING NOTES

PROPERTY SIZE: 58.6 (PH.3)
 PROPERTY STEEPER THAN 60%: 0.1 AC. (0.8%)
 MINIMUM LOT SIZE: 1.5 ACRES
 SMALLEST PROPOSED LOT: 2.2 ACRES
 MAXIMUM BUILDING HEIGHT: 40'
 SETBACK: 15' (LOCAL)
 REAR: 15'
 COMMON OPEN SPACE: 1.77 AC. (30% (PH.3))
 PROVIDED: 13.2 AC. (30.3% (TOTAL))

*ALL DIMENSIONS ARE FROM EDGE OF LOT OR FACE OF BUILDING UNLESS OTHERWISE NOTED.

CONSTRUCTION SHALL BE ACCORDING TO THE LATEST EDITION OF ACCURATE SPECIFICATIONS AND OTHER DETAILS, SPECIFICATIONS AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVELAKE
 28012 AC
 PROPERTY SIZE: 58.6 AC (TOTAL)
 ZONING REVIEW: HENDERSON COUNTY PERMITS
 STORMWATER REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: R-2
 PROPOSED DENSITY: 0.24 (PH.3) 0.21 (TOTAL) 14.6 (PH.3) 1.84 (TOTAL)
 PROPOSED LINEAR FEET OF ROAD: 3,352 (PH.3)
 *ALL DIMENSIONS ARE FROM THE SITE

PUBLIC WATER AND SEWER SYSTEMS ARE PROVIDED BY THE DISTRICT OF A PARLAWD PRESERVATION DISTRICT.

WELLS AND SEPTIC SYSTEMS ARE PROVIDED BY INDIVIDUAL PROPERTY OWNERS.

PROPERTY OWNER: SUZANNAH COLE
 ADDRESS 1: 101 LEGACYPARK TRAIL
 ADDRESS 2: SUZANNAH, NC 28778

DEVELOPER: ANNY BAKER
 ADDRESS 1: 101 LEGACYPARK TRAIL
 ADDRESS 2: SUZANNAH, NC 28778

ENGINEER: BROOKS ENGINEERS
 CONTACT: ZACH KENNEDY
 ADDRESS 1: ASHEVILLE, NC 28801
 ADDRESS 2: 232.232.1311
 PHONE: 232.232.1311

PERMIT SET

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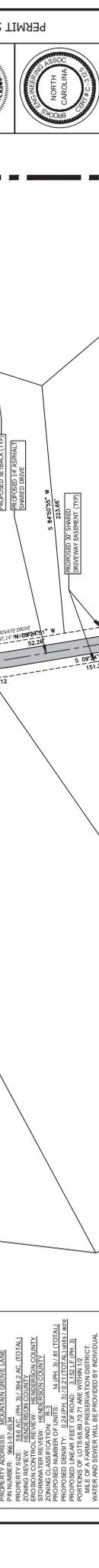
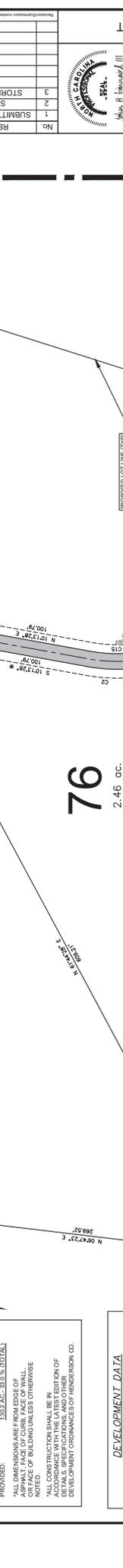
BROOKS
 ENGINEERING ARCHITECTS

DATE: 08/03/2021
 DRAWN BY: JMH
 CHECKED BY: JMH
 AS NOTED
 SCALE: MCB
 PROJECT: 486519

NO. REVISIONS/SUBMISSIONS
 DATE

1 SUBMITTAL TO HENDERSON COUNTY 03/24/21
 2 STORM AND ESC PLANS 04/02/21
 3 STORM AND ESC REVISIONS 08/02/21

Production/Construction notes with a separate tab sheet complete on this sheet



SITE AND ZONING NOTES

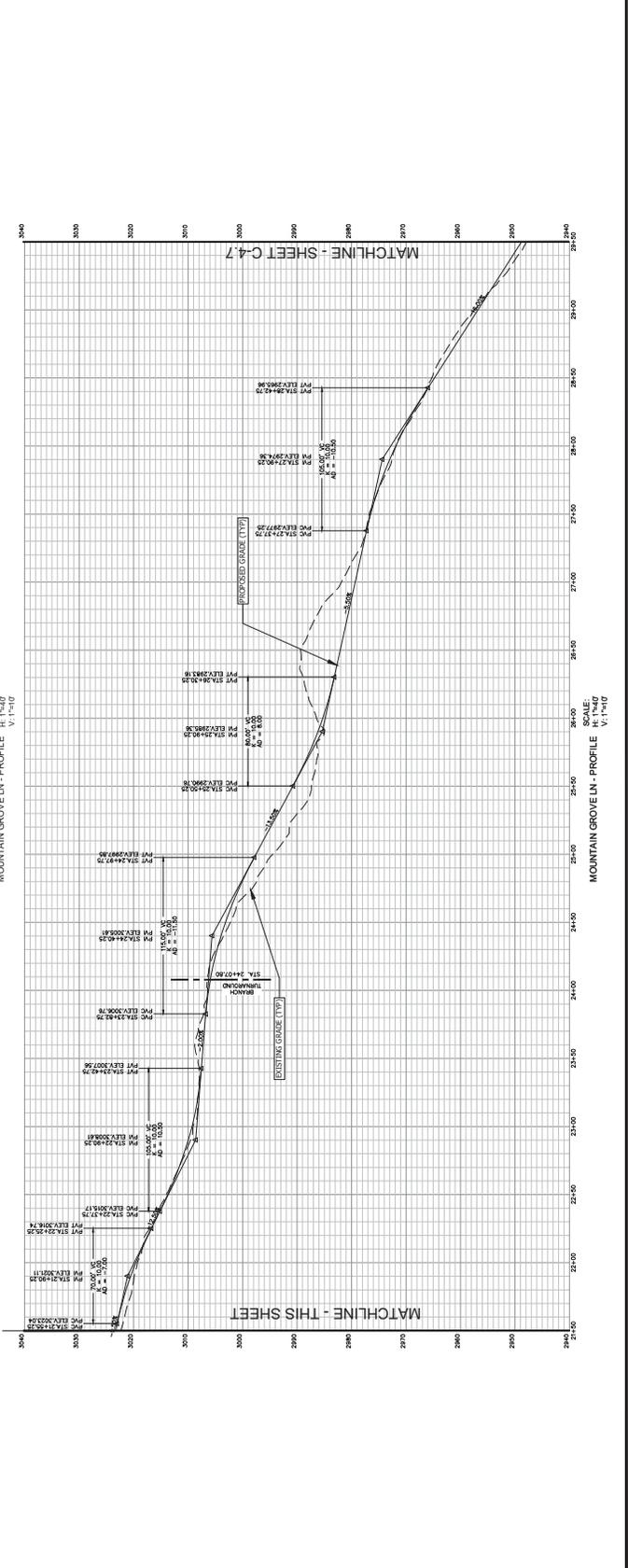
PROPERTY ZONING: B3
 PROPERTY ZONING MAP: 01/14/19
 PROPERTY STEEPER THAN 6%: 0.51 AC (0.87%)
 MINIMUM LOT SIZE: 1.6 ACRES
 SMALLEST PROPOSED LOT: 2.21 ACRES
 MINIMUM LOT WIDTH @ 100' W: 110.00 FT
 MINIMUM LOT HEIGHT @ 100' W: 110.00 FT
 SETBACKS: 10' (LOCAL)
 REAR: 15' (LOCAL)
 SIDE: 15'
 COVERED OPEN SPACE: 1.17 AC - 3.03% (MIN. 3)
 10.22 AC - 33.03% (TOTAL)
 *ALL DIMENSIONS ARE FROM EDGE OF ASPHALT FACE OF CURB, FACE OF WALL, FACE OF SIDEWALK, OR FACE OF LOT OF BUILDING UNLESS OTHERWISE NOTED.
 *ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DETAILS, SPECIFICATIONS, AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PIN NUMBER: 0601274623
 ZONING REVIEW: HENDERSON COUNTY
 EROSION CONTROL REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: B3
 PROPOSED PROPERTY LINE (PL) 1: 112.00 FT (TOTAL)
 PROPOSED ANEAR FEET OF ROAD: 115.12 FT (PL 3)
 PROPOSED ANEAR FEET OF ROAD: 115.12 FT (PL 3)
 MILE OF A FARM AND PRESERVATION DISTRICT
 WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL PUBLIC WATER AND SEWER SYSTEMS ARE 15 MILES FROM THIS SITE
 PROPERTY OWNER:
 CONTACT: ANDY BAKER
 ADDRESS 1: 222.86' W
 ADDRESS 2: 222.86' W
 DEVELOPER: LUNA RESIDE LLC
 ADDRESS: 124 HIGH COUNTRY TRAIL
 ADDRESS: 124 HIGH COUNTRY TRAIL
 ADDRESS: 124 HIGH COUNTRY TRAIL
 PHONE: 328-245-5215
 CONTACT: JOHN KIMMARD
 ADDRESS: 77 ASTORVILLE LN, 28801
 PHONE: 328-242-4201

TIONAL LTD
 PG. 264
 772
 96-0166

ROAD PROFILES Drawing Title HENDERSON COUNTY NORTH CAROLINA		Planning • Engineering • Surveying Environmental Services • BROOKS ENGINEERING ARCHITECTS	
Project No: 486519		C-4.6 DEVELOPMENT PLAN	
COUCH MOUNTAIN SUBDIVISION (PHASE 3)		PERMIT SET  	
17 Arlington Street Asheville, N.C. 28801 Phone: 1-828-232-4700 Fax: 1-828-232-1331 www.brooks.com		Date: 08/03/2021 Scale: AS NOTED MCB JHB	
No. REVISIONS/SUBMISSIONS Date		1 SUBMITTAL TO HENDERSON COUNTY 03/24/21 2 STORM AND ESC REVISIONS 04/06/21 3 STORM AND ESC REVISIONS 08/02/21	

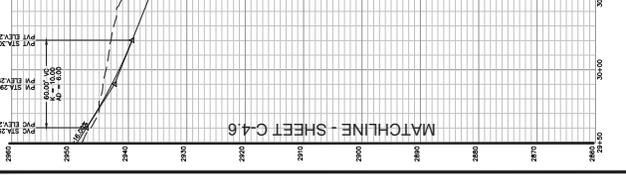
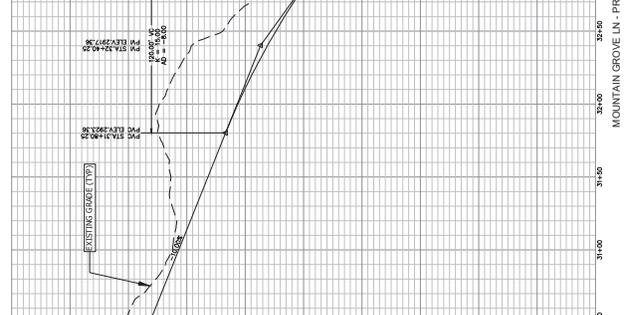
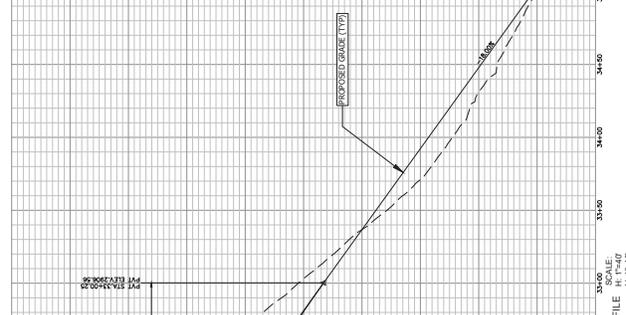
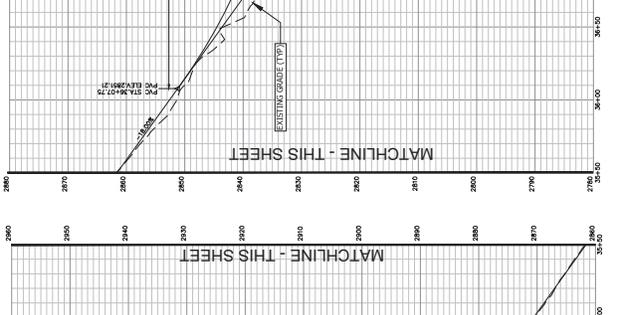
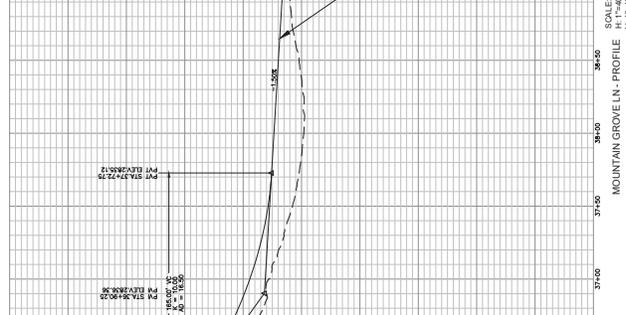
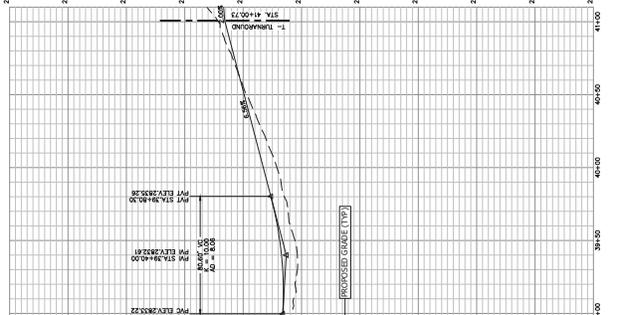


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Prepared	MCB
Checked	AS NOTED
Drawn	AS NOTED
Scale	AS NOTED
Date	08/03/2021

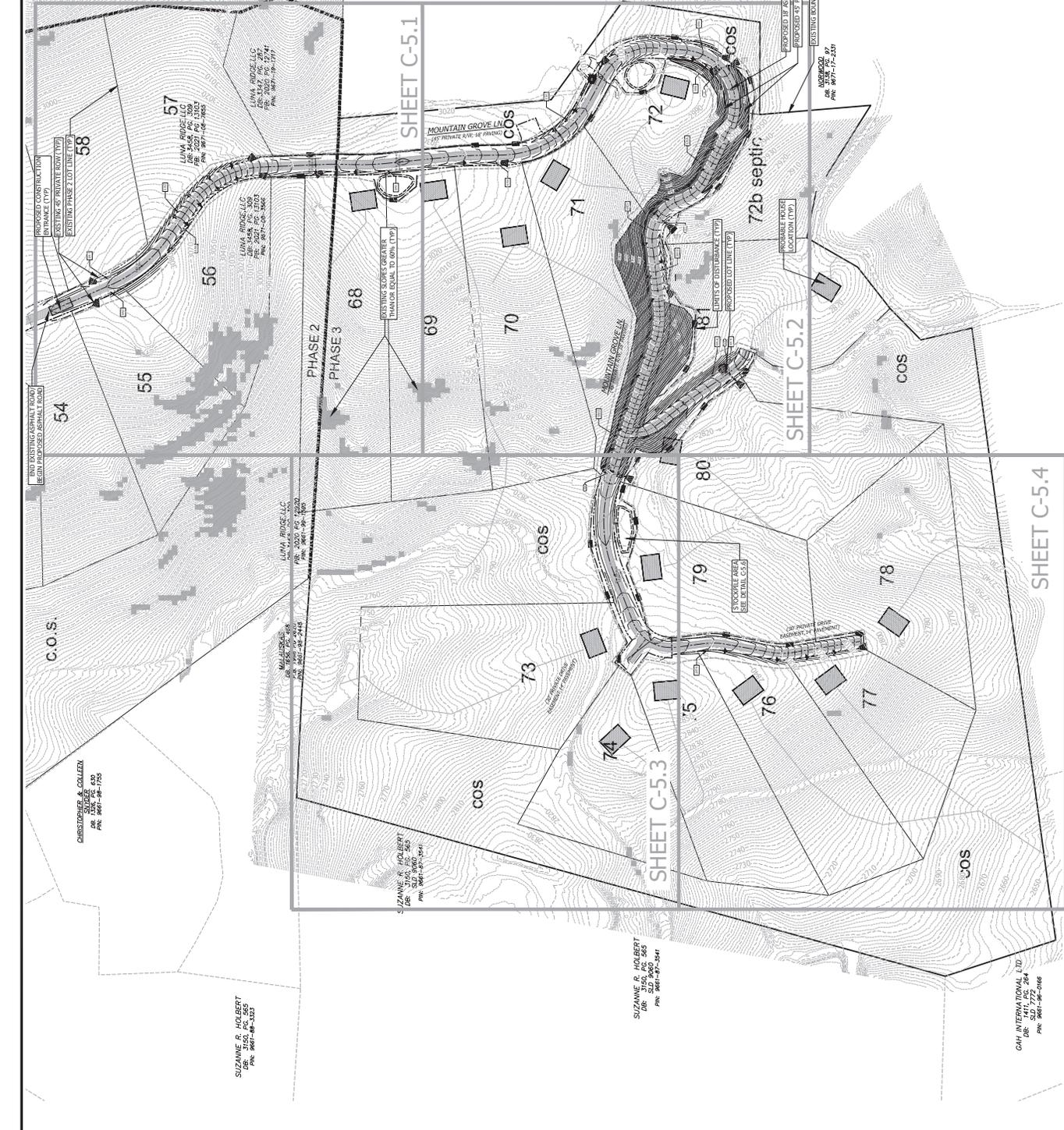
PERMIT SET

No.	1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
	2	STORM AND ESC RESUBMISSION	04/06/21
	3	STORM AND ESC RESUBMISSION	08/02/21
Revisions/Comments appear with a unique color and change mark on this sheet.			



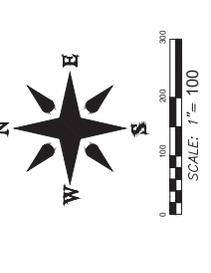
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 Planning • Engineering • Surveying • Environmental Services •
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 Fax: 1-828-232-1311
 www.brooks.com
 License: 080302021
 MCB, AS NOTED, BMT, CHANGING, LHM

No.	REVISIONS/PERMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/21/21
2	STORM AND ESC PLANS	04/02/21
3	STORM AND ESC RESUBMISSION	08/02/21



GRADING AND STORMWATER LEGEND

---	EXIST BOUNDARY
---	EXIST ADJOINER WAY
---	EXIST STREAM
---	EXIST STREAM BUFFER
---	EXIST OVERHEAD UTILITIES
---	EXIST UNDERGROUND UTILITIES
---	EXIST STORM DRAIN
---	PROP. LOT LINE
---	NEW OUTLET PROTECTION
---	PROPOSED STORM PIPE
---	PERMANENT DIMENSION SWALE
---	PERMANENT TERRAP SWALE



STORM AND EROSION NOTES

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PROPERTY SIZE: 28.6 AC (RN 31, 28.6 AC TOTAL)
 PROJECT DENSITY: 0.24 UPH/31.02 AC TOTAL UNITS/ACRE
 IMPROVEMENTS: 1.06 ACRES
 HOUSES & GARAGES: 110.00 SF / 1.01 ACRES

EROSION CONTROL NOTES:

- SEE SHEET C-5.0 FOR STABILIZATION TIME
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FALL NOT PROVIDE FOR EFFECTIVE EROSION CONTROL. ADDITIONAL EROSION AND SEDIMENT CONTROL TO CONTROL OR TREAT THE SEDIMENT SOURCE APPROVED SHOWING MUST BE EROSION CONTROL DEVICES.

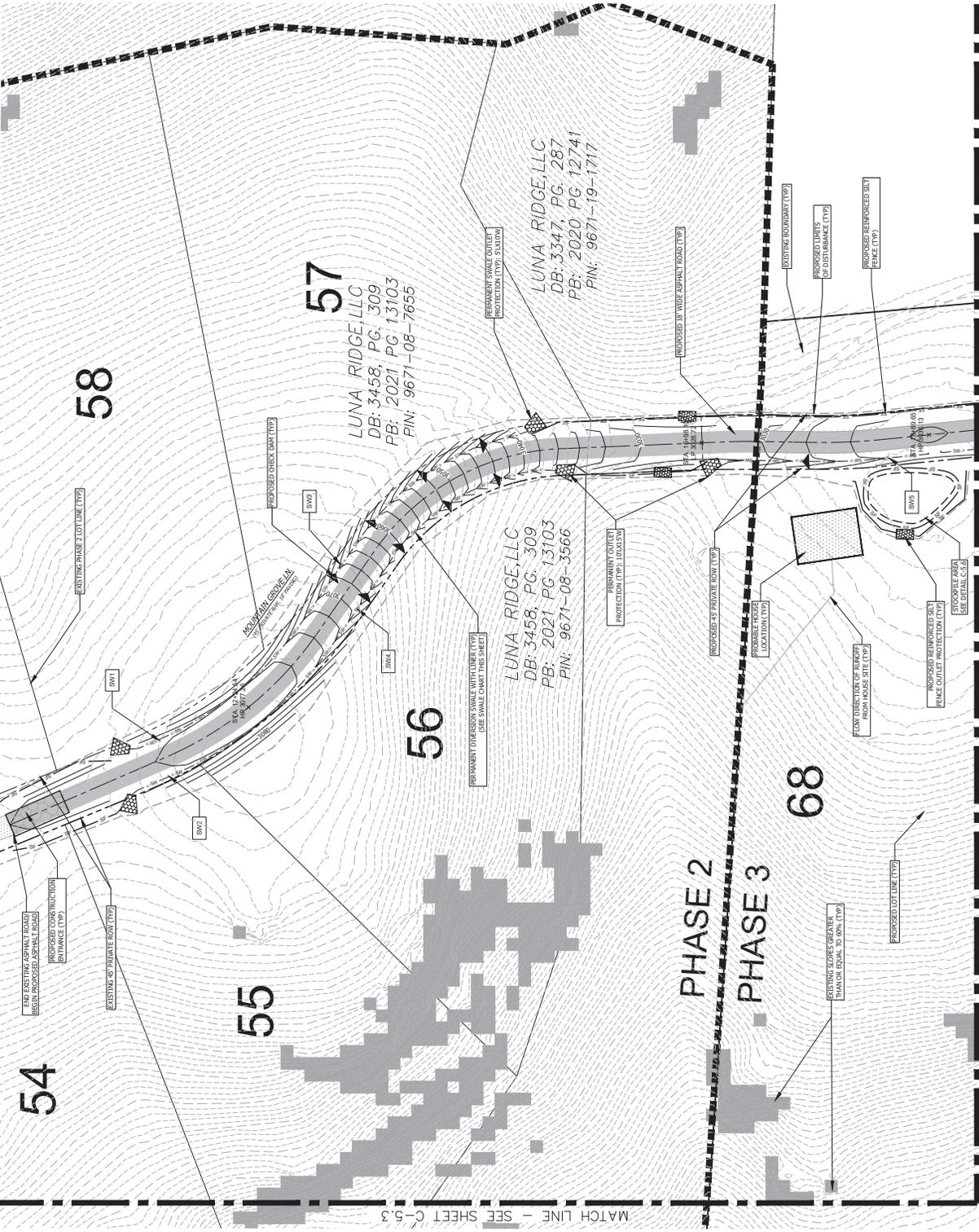
STORMWATER NOTES:

- ALL STREETS AND DRIVEWAYS SHALL HAVE A 3% SETBACK FOR ALL PAVEMENT SURFACES.
- ALL PAVEMENT SHALL BE DOUBLE WALL HOPE WITH MINIMUM COVER OF 9" AND SHALL HAVE A DRAINAGE DITCH OR DRAINAGE CURB AND GUTTER.
- ALL FILL SCOPES SHALL BE COMPACTED FULL DENSITY (STANDARD PROCTOR) SHALL BE 95% AND DRAINERS, GREATER THAN 3" AND FASTER THAN 18" FEET SHALL BE SEDED AND COVERED WITH APPROVED MULCH OR GRASS SEED.
- ALL PAVEMENT SHALL BE SEDED AND COVERED WITH APPROVED MULCH OR GRASS SEED.
- ANY BORROW OR WASTE SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE HANDBOOK OF EROSION CONTROL MEASURES AND OTHER DETAILS, SPECIFICATIONS, AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PIN NUMBER: 965.02.628X
 PROPERTY SIZE: 28.6 AC (RN 31, 28.6 AC TOTAL)
 EROSION CONTROL: NEW HENDERSON COUNTY
 ZONING CLASSIFICATION: R-3
 PROPOSED NUMBER OF UNITS: 6.96 (RN 31, 6.96 TOTAL)
 PROPOSED LINEAR FEET OF ROAD: 3,182.14 (RN 31)
 PORTIONS OF LOTS 80-97 ARE WITHIN 1/2 MILE OF THE PROPOSED ROAD.
 WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL PUBLIC WATER AND SEWER SYSTEMS ARE APPROXIMATELY 1.5 MILES FROM THE SITE.
 PROPOSED CONTACT: ABEY BAKER
 ADDRESS: 2222 W. WYOMING AVE
 ADDRESS: SWANNANOA, NC 28778
 DEVELOPER: LUNA RIDGE LLC
 ADDRESS: 120 HIGH HICKORY TRAIL
 ADDRESS: SWANNANOA, NC 28778
 PHONE: 828-685-8333
 ENGINEER: JOHN KENNARD
 ADDRESS: 17 ARRLINGTON ST
 ADDRESS: ASHEVILLE, NC 28801
 EMAIL: JKENNARD@BROOKS-ENR.COM
 PHONE: 828-232-4700



SWALE CHART

Swale	Up	Down	Swale	Side	Swale	Flow	Velocity	Base	Reinforcement
	Swale	Swale		Swale	Swale	Depth	ft/sec	ft/sec	
SW1	3075.0'	3075.0'	3.0	0.5'	1.6'	1.4 fps	0.1 m/s	0.1 m/s	MAG SCI 505BN (Temporary)
SW2	3076.0'	3074.3'	3.0	0.5'	1.6'	1.7 fps	0.2 m/s	0.2 m/s	MAG SCI 505BN (Temporary)
SW3	3076.0'	3038.0'	3.0	0.5'	1.6'	1.9 m	4.7 fps	1.2 m/s	MAG SCI 505BN (Temporary)
SW4	3076.0'	3035.6'	3.0	0.5'	1.6'	1.9 m	4.7 fps	1.2 m/s	MAG SCI 505BN (Temporary)
SW5	3035.0'	3028.0'	3.0	0.5'	1.6'	1.8 m	2.8 fps	0.4 m/s	MAG SCI 505BN (Temporary)

SWALE CALCULATIONS

RESULTS

Flow Depth: 1.4 fps, 1.7 fps, 1.9 m, 1.9 m, 1.8 m

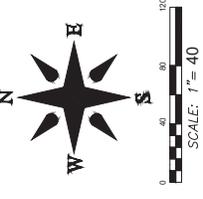
Velocity: 0.1 m/s, 0.2 m/s, 4.7 fps, 4.7 fps, 2.8 fps

Base: 0.1 m/s, 0.2 m/s, 1.2 m/s, 1.2 m/s, 0.4 m/s

Reinforcement: MAG SCI 505BN (Temporary), MAG SCI 505BN (Temporary), MAG SCI 505BN (Temporary), MAG SCI 505BN (Temporary), MAG SCI 505BN (Temporary)

GRADING AND STORMWATER LEGEND

- EXIST BOUNDARY
- EXIST ADJOINER
- EXIST STREAM
- EXIST STREAM BUFFER
- EXIST OVERHEAD UTILITIES
- EXIST UNDERGROUND UTILITIES
- EXIST STORM DRAIN
- PROP. LOT LINE
- PROP. PAVED ROAD
- PROP. LOT LINE
- NEW OUTLET PROTECTION
- PROPOSED STORM PIPE
- PERMANENT DIMENSION SWALE
- PERMANENT BIRAP SWALE



STORM AND EROSION NOTES

PROPERTY STEEPER THAN 15% SHALL BE CONSIDERED AS A 15% SLOPE UNLESS OTHERWISE NOTED.

PROJECT DENSITY: 0.24 UPG/AC (TOTAL) 0.10 UPG/AC (RESIDENTIAL)

IMPERVIOUS COVER: 0.24 (TOTAL) 0.10 (RESIDENTIAL)

ROADS: 10% GRASS

HOUSES & GARAGES: 15% GRASS

EROSION CONTROL NOTES:

- SEE SHEET C-4.0 FOR STABILIZATION TIME
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FALL NOT PROVIDED FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED TO CONTROL OR TREAT THE SEDIMENT SOURCE TO PREVENT SEDIMENTATION AND APPROVED SHOWING MODIFIED EROSION CONTROL DEVICES.

STORMWATER NOTES:

- ALL STORMWATER SHALL HAVE A 30' SETBACK FOR ALL STREETS AND SHALL HAVE A MINIMUM COVER OF 30"
- ALL PIPE SHALL BE DOUBLE WALL HOPE WITH MINIMUM COVER OF 30"
- ALL FILL SLOPES SHALL BE COMPACTED FULL DENSITY (STANDARD PROCTOR) SHALL BE 95% AND SHALL BE PROPERLY BENTON AND DRAINERS, GREATER THAN 3' AND FASTER THAN 10 FEET SHALL BE SEEDED AND COVERED WITH GRASS
- ANY SWALES SHOWN IN THESE PLANS, SHALL BE CONSTRUCTED AND COVERED FOR ANY BORROW OR WASTE SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DETAILS, SPECIFICATIONS, AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE

PIN NUMBER: 966127-02X

PROJECT SIZE: 26.6 AC (PL 30.7 AC, TOTAL)

PROPOSED LOTS: 10

EROSION CONTROL: SEE SHEET C-4.0, HENDERSON COUNTY ZONING CLASSIFICATION: R-3

PROPOSED NUMBER OF UNITS: 31 (RESIDENTIAL)

PROPOSED LINEAR FEET OF ROAD: 3,152.1 (TOTAL)

PORTIONS OF LOTS 88.09 70.71 ARE WITHIN 10' BUFFER OF MOUNTAIN GROVE LANE

WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL HOMEOWNERS

PUBLIC WATER AND SEWER SYSTEMS ARE APPROXIMATELY 1.5 MILES FROM THE SITE

PROPOSED CONSTRUCTION PERMITS:

CONTACT: ABEY BAKER

ADDRESS: 17 ARLINGTON STREET

ASHEVILLE, NC 28801

DEV. OWNER: LUNA RIDGE, LLC

ADDRESS: 124 HIGH HICKORY TRAIL

ASHEVILLE, NC 28712

PHONE: 828.232.1331

ENGINEER: JOHN KENNEDY

ADDRESS: 17 ARLINGTON ST

ASHEVILLE, NC 28801

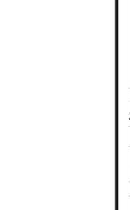
EMAIL: JKENNEDY@BROOKSARCH.COM

PHONE: 828.232.1201

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 www.brooks.com

DATE: MCB
 DRAWN: AS NOTED
 CHECKED: 08/03/2021
 INCH: 1/8"



PERMIT SET

No.	REVISIONS/SUBMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
2	STORM AND EROSION PLANS	04/02/21
3	STORM AND EROSION PLANS	08/02/21



Station	Name	Elevation	Invert	Invert	Size	Material	Length	Slope	Flow depth	Velocity	450 Stone Size	Apron Thickness	Pool Length	Pool Width
2+00	A.1	3006.2'	3003.0'	3003.0'	18.0"	HDPE	55.1'	1.5%	3.5'	3.5'	6"	6"	10'	15'
27+03	A.2	2976.7'	2976.7'	2974.1'	18.0"	HDPE	43.1'	6.0%	2.6'	2.6'	6"	6"	10'	15'
31+02	A.3	2931.1'	2926.6'	2924.0'	18.0"	HDPE	44.1'	10.0%	4.3'	4.3'	6"	6"	10'	15'
34+95	A.4	2830.0'	2827.5'	2825.0'	18.0"	HDPE	42.1'	2.6%	2.0'	2.0'	6"	6"	10'	15'

RESULTS

Swale Name	Type	Invert	Down	Side	Slope - Z	Swal Width	Length	Slope	Flow depth	Velocity	Shear Stress	Reinforcement
SW6	GRASS	3025.0'	3025.0'	3.0	0.5%	205.1'	4.9%	1.8	2.2 fps	0.5 psf	MAG SC150BN (Temporary)	
SW7	GRASS	3005.0'	3005.0'	3.0	0.5%	190.1'	7.5%	2.5	4.5 fps	1.0 psf	MAG SC150BN (Temporary)	
SW8	GRASS	2986.0'	2978.2'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW9	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW10	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW11	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW12	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW13	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW14	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW15	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	

RESULTS

Swale Name	Type	Invert	Down	Side	Slope - Z	Swal Width	Length	Slope	Flow depth	Velocity	Shear Stress	Reinforcement
SW6	GRASS	3025.0'	3025.0'	3.0	0.5%	205.1'	4.9%	1.8	2.2 fps	0.5 psf	MAG SC150BN (Temporary)	
SW7	GRASS	3005.0'	3005.0'	3.0	0.5%	190.1'	7.5%	2.5	4.5 fps	1.0 psf	MAG SC150BN (Temporary)	
SW8	GRASS	2986.0'	2978.2'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW9	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW10	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW11	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW12	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW13	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
SW14	GRASS	2978.7'	2978.7'	3.0	0.5%	104.1'	7.5%	2.8	4.5 fps	1.1 psf	MAG SC150BN (Temporary)	
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BROOKS
 ENGINEERING ARCHITECTS
 Planning • Engineering • Surveying • Environmental Services •

17 Arington Street
 Asheville, N.C. 28801
 Phone: 1-828-232-4700
 Fax: 1-828-232-1331
 www.brooks.com

DATE: 08/03/2021
 DRAWN BY: AS NOTED
 CHECKED BY: MCB
 PROJECT: 486519

PERMIT SET

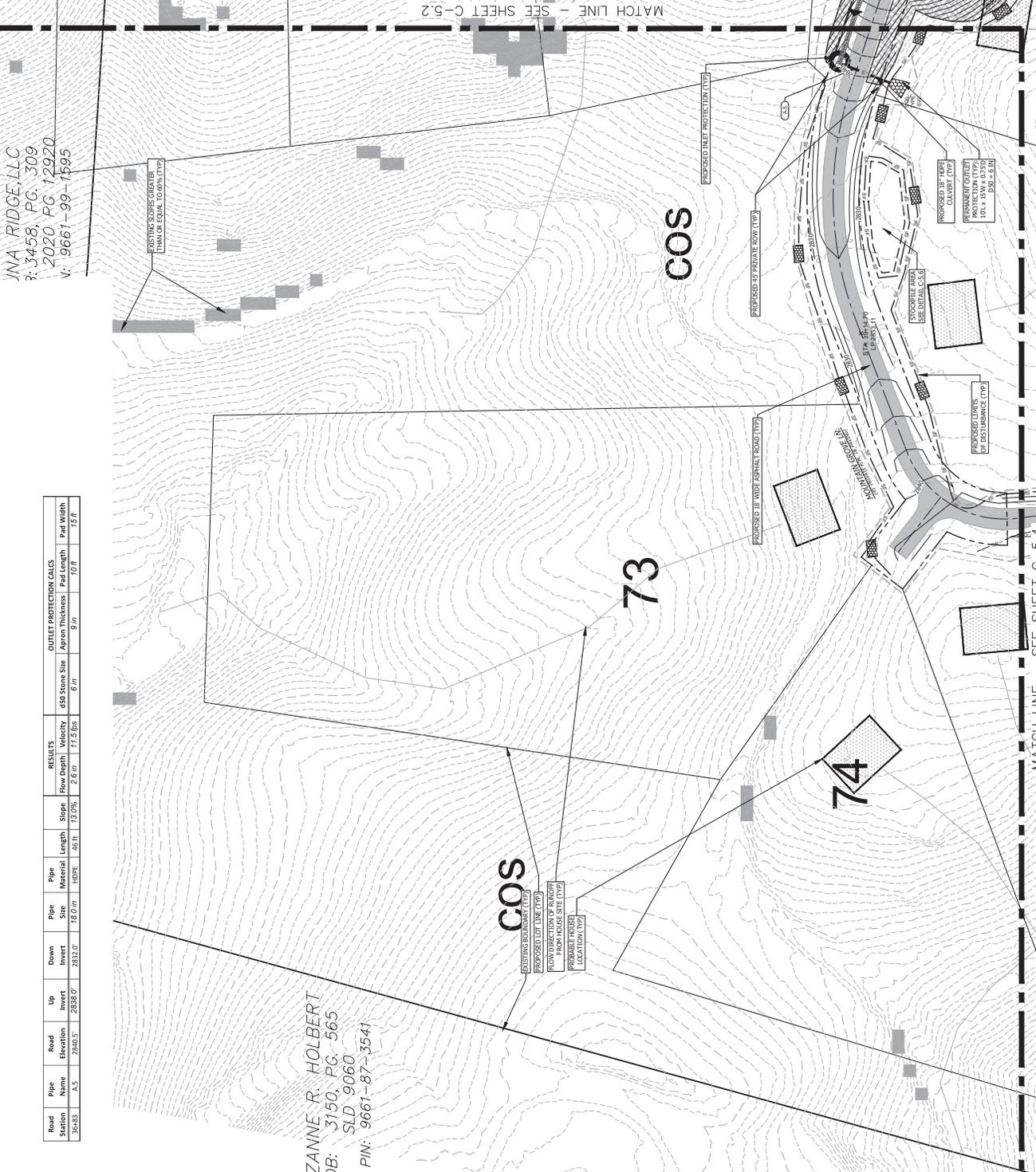
No.	REVISIONS/SUBMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
2	STORM AND ESC PLANS	04/06/21
3	STORM AND ESC RESUBMISSION	08/02/21

JINA RIDGE, LLC
 31458 PG 309
 2020 PG 12020
 V: 9661-99-1595

Station	Pipe Name	Pipe Size	Road Elevation	Up Invert	Down Invert	Pipe Slope	Pipe Material	Length	Slope	Flow Depth	Velocity	450 Stone Size	Alum Thickness	Per Length	Per Width
30+33	A.5	18.00"	2540.5	2552.0	2537.0	12.0%	HDPE	46.0'	12.0%	2.0'	17.3 FPS	0"	9.0"	70.0'	1.3'

SUZANNE R. HOLBERT
 DB: 3150, PG: 565
 SLD 9060
 PIN: 9661-87-3541

MATCH LINE - SEE SHEET C-5.2



EXISTING BOUNDARY (TYP)
 PROPOSED LOT LINE (TYP)
 PROPOSED BY PRIVATE ROW (TYP)
 PROPOSED BY WIDE CAPITAL ROAD (TYP)
 PROPOSED INLET PROTECTION (TYP)
 PROPOSED BY TYPICAL CULVERT (TYP)
 PROPOSED PERMANENT OUTLET (TYP)
 PROPOSED TYPICAL 10' x 15' x 4' STORM PIPES SEE DETAIL C-5.9
 PROPOSED TYPICAL 10' x 15' x 4' STORM PIPES OF DISTURBANCE (TYP)

MATCH LINE - SEE SHEET C-5.4

GRADING AND STORMWATER LEGEND

- EXIST BOUNDARY
- EXIST ADJACENT
- EXIST STREAM
- EXIST STREAM BUFFER
- EXIST OVERHEAD UTILITIES
- EXIST MANHOLE UTILITIES
- EXIST STORM DRAIN
- PROP. LOT LINE
- PROP. R.O.W.
- NEW OUTLET PROTECTION
- PROPOSED STORM PIPE
- PERMANENT DIMENSION SWALE
- PERMANENT TERRAP SWALE



STORM AND EROSION NOTES

PROPERTY STEEPER THAN 1:1 (3% TO 6% TOTAL)
 PROJECT DENSITY: 0.24 UPH/3.1221 TOTAL UNITS/ACRE
 IMPERVIOUS COVER: 10% (ACRES)
 ROADS: 1.0% (ACRES)

EROSION CONTROL NOTES:

- SEE SHEET C-4.0 FOR STABILIZATION TIME
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL NOT PROVIDED FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED TO CONTROL OR TREAT THE SEDIMENT SOURCE TO PREVENT EROSION AND SEDIMENT APPROVED SHOWING MODIFIED EROSION CONTROL DEVICES.

STORMWATER NOTES:

- ALL STORMWATER SHALL HAVE A 30' SETBACK FOR ALL STREETS AND SHALL HAVE A MINIMUM COVER OF 30"
- ALL PIPES SHALL BE DOUBLE WALL HOPE WITH MINIMUM COVER OF 30"
- ALL FILL SLOPES SHALL BE COMPACTED FULL DENSITY (STANDARD PROCTOR) SHALL BE 95% AND SHALL BE PROPERLY BENCH AND DRAINER, GREATER THAN 3:1 AND FASTER THAN 1:1. 10 FEET SHALL BE SEEDED AND COVERED WITH MULCH AND SOIL.
- ANY TRENCHES SHOWN IN THESE PLANS, REQUIRED FOR ANY BORROW OR WASTE SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DETAILS, SPECIFICATIONS, AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PIN NUMBER: 9661-87-3541
 PROPERTY SIZE: 28.0 AC (TOTAL)
 EROSION CONTROL: THE NEW HENDERSON COUNTY ZONING CLASSIFICATION: R-3
 PROPOSED NUMBER OF UNITS: 31 (31.0 UPH TOTAL)
 PROPOSED LINEAR FEET OF ROAD: 3,152.1 (PH. 3)
 PORTIONS OF LOTS 88-89 70-71 ARE WITHIN 1/2 MILE OF A PUBLIC WATER AND SEWER SYSTEMS ARE APPROXIMATELY 1.5 MILES FROM THE SITE
 PIN CONTACT: ANBY BAKER
 ADDRESS: 2700 WYOMING AVE
 ADDRESS: SWANANNOVA, NC 28774
 DEVELOPER: JINA RIDGE, LLC
 ADDRESS: 321 HIGH HICKORY TRAIL
 ADDRESS: SWANANNOVA, NC 28774
 PHONE: 828-562-5833
 CONTACT: JOHN HANNAH
 ADDRESS: 17 ARINGTON ST
 ADDRESS: ASHEVILLE, NC 28801
 EMAIL: JHANNAH@BROOKS.COM
 PHONE: 828-232-4700

PERMITS AND SUBMISSIONS

1. SUBMITTAL TO HENDERSON COUNTY
 2. STORM AND ESC PLANS
 3. STORM AND ESC RESUBMISSION

PERMITS AND SUBMISSIONS

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486519 **C-5.5** **COUCH MOUNTAIN SUBDIVISION (PHASE 3)** **DEVELOPMENT PLAN** **HENDERSON COUNTY** **NORTH CAROLINA**

Drawing Title: **EROSION CONTROL DETAILS**

Project No: **486519**

Scale: **AS NOTED**

Sheet: **MCB**

Date: **08/03/2021**

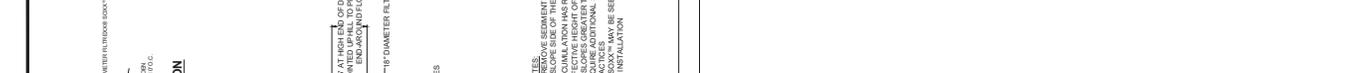
Author: **ASHLEY, N.C. 28801**

Phone: **1-828-232-1311**

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BROOKS **ENGINEERING ARCHITECTS** **PLANNING • ENGINEERING • SURVEYING • ENVIRONMENTAL SERVICES**

No.	REVISIONS/SUBMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
2	STORM AND ESC PLANS	04/02/21
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PLAN VIEW

D TEMPORARY COMPOSITE SOCK DIVERSION

NOTES:
 1. REMOVE EXISTING CHANNELS UPSTREAM OF THE SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF SOCK'S WIDTH.
 2. SLOPES GREATER THAN 3:1 MAY REQUIRE ADDITIONAL STABILIZATION OF INSTALLATION.
 3. SOCKS MAY BE SEEDED AT THE TIME OF INSTALLATION.

INLET PROTECTION
 Inspect inlets at least weekly and after each significant (1/2 inch or greater) rainfall event. Clear the mesh wire of any debris or other objects to provide adequate flow for subsequent rains. Take care not to damage or undercut the wire mesh during sediment removal. Replace stones as needed.

TEMPORARY CONSTRUCTION ENTRANCE
 Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone. After each rainfall, inspect any erosion control measures for damage. Repair or replace damaged measures. Remove all objectionable materials spilled, washed, or tracked onto public roadways.

SILT FENCE
 Inspect silt fences at least once a week and after each rainfall. Make any required repairs immediately. Stop the fabric of a silt fence if it becomes damaged or ineffective. Replace it promptly. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the fence. Take care to avoid undermining the fence during cleanup. Remove all fencing materials and unstable sediment immediately. Repair any erosion control measures that have become damaged. Repair any that have been properly stabilized.

OUTLET PROTECTION
 Inspect riprap outlets immediately weekly and after significant (1/2 inch or greater) rainfall events. Repair any riprap outlets that are damaged or displaced. Immediately make all needed repairs to prevent further damage.

CHECK DAM
 Inspect check dams and channels at least weekly and after each significant (1/2 inch or greater) rainfall event and repair immediately. Clean out sediment, straw, limbs, or other debris that could clog the channel when needed. Immediately make all needed repairs to prevent further damage.

Anticipate subsidence and deposition above the check dam and erosion from high flows around the edges of the dam. Correct all damage immediately. If significant erosion occurs near the portion of the channel (Practice 6.3.1, Riprap-line and Paved Channels).

Remove sediment accumulated behind the dams as needed to prevent damage to channel from carrying sediment over the dam. Add stones to dams as needed to maintain design height and cross section.

DITCH
 Inspect temporary diversions once a week and after every rainfall. Immediately remove sediment from the flow area and repair the diversion ridge. Carefully check outlets and make timely repairs as needed. When the area protected is permanently stabilized, remove the ridge and the channel to blend with the natural ground level and appropriately stabilize it.

TEMPORARY SEEDING

General Notes:
 All seeding to be in accordance with NCDQS STD #6.10

Species	Rate (lb/acre)	Season	Seeding Dates
Eye Grass	20	Winter/Spring/Fall	1/15 - 2/15/15-12/30
Annual Ryegrass (Kobe)	50	Winter/Spring	5/1 - 8/15
German Millet	40	Summer	5/1 - 8/15

One annual lespedeza when duration of temporary cover is not to exceed beyond June. A small-stemmed Sudangrass may be substituted for German millet at a rate of 50 lb/acre.

Soil Amendments:
 Applications of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

For fill seeding, use 1000 lb/acre 10-10-10 fertilizer

MULCH:
 1000 lbs/acre straw. Anchor straw by tacking with asphalt, netting, or a much anchoring tool.

Maintenance:
 Refertilize if growth is not fully adequate. Reseed, referfertilize and mulch immediately following erosion or other damage.

For fill, repair and referfertilize damaged areas immediately. Topdress with cover beyond June 15, overseeded with 50 lb/acre Kobe lespedeza in late February or early March

WETLAND SEEDING

Recommended application rate: 20-25 lb/acre

Species	Common Name	Percent
Carex vulpinoidea	Shoody Ice	7
Dichanthium clandestinum	Dove-tails	12
Elymus riparius	Riverbank	20
Pharus dictyocarpum	Soft rush	4
Panicum rigidulum	Red-top	4
Panicum virgatum	Switchgrass	23
Spartanum americanum	Pennsylvania Broomrape	2
	TOTAL	100

TEMPORARY & WETLAND SEEDING

B TEMPORARY & WETLAND SEEDING

CONSTRUCTION SEQUENCE

1. Obtain a Land Use Permit from Henderson County.
2. Install tree protection fence as shown on the plans.
3. Install all temporary erosion control measures and schedule preconstruction meeting at least 48 hours prior to project activation.
4. Install rain gauge on site.
5. Install all perimeter devices such as silt fence, silt socks, straw wattles, etc.
6. Install all temporary sediment traps and basins.
7. Install all temporary diversion systems including stabilized streambanks, channels, and areas immediately with stone or temporary seeding.
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14. During mass grading, begin to install permanent runoff conveyance systems such as storm drains, inlets, ditches, and permanent diversions.
15. Stabilize site as areas are brought to finished grade or work is delayed. Provide permanent or temporary vegetation in accordance with the schedule provided on the plans.
16. Construct buildings (if applicable) and install utilities and paving. Additional Erosion Control measures shall be installed as required on the remainder of the site upon completion of construction activities.
17. Construction activities shall be completed and the remainder of the site upon completion of construction activities shall be stabilized with permanent vegetation.
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20. Remove all temporary measures upon site stabilization and call for final inspection.

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A PERMANENT SEEDING

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6.06

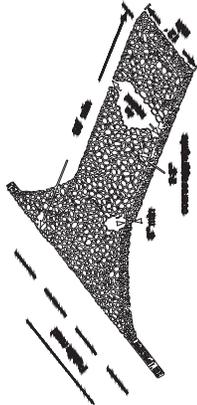
TEMPORARY SAWEL CONSTRUCTION ENTRANCE EXIT

Definition: A sawel used to control sediment from exiting a construction site.

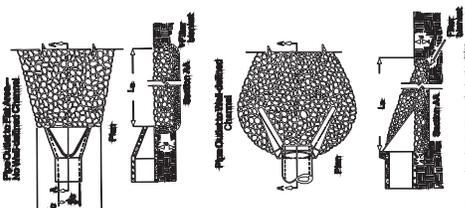
Purpose: To prevent sediment from exiting a construction site.

Construction Specifications: Design Criteria Aggregate Size—Use 2-3 inch washed stone.
Width: 12.0m minimum or full width at all parts of the vehicular entrance and exit area, whichever is greater.
Length: 30-foot minimum.
Location—Locate construction entrances and exits to limit sediment from exiting the site.
(Figure 6.06a). Avoid steep grades at entrances at curves in public roads.

Maintenance: Maintain the gravel pad in a condition to prevent mud or sediment from leaving the site.
After each rainfall, inspect any structure used to trap sediment and clean it out as necessary. Immediately remove all objectionable materials (logs, sticks, rocks, etc.) from the gravel pad.



A CONSTRUCTION ENTRANCE/EXIT



Maintenance: Maintain the sawel with a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone. After each rainfall, inspect any structure used to trap sediment and clean it out as necessary. Immediately remove all objectionable materials (logs, sticks, rocks, etc.) from the gravel pad.

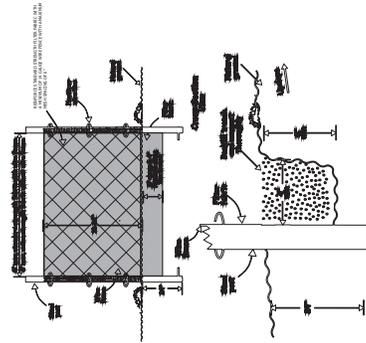
D OUTLET PROTECTION

6.02

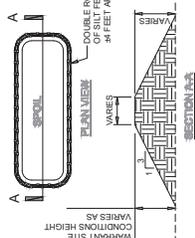
SOIL STORAGE BERM

Definition: A temporary sediment control measure consisting of a double row of wavy berms, installed and supported by posts.

Purpose: To retain sediment from wind disturbed areas by reducing the velocity of sheet erosion to better sediment deposits.



B SILT FENCE



NOTE: CONTRACTOR SHALL LOCATE STOCKPILES AS NEEDED FOR MATERIALS TO BE STORED ON SITE. STOCKPILES SHALL BE PLACED AT LEAST 10 FEET FROM THE PERMITS BOUNDARY LINE OR IN ANY OTHER AREA THAT MAY INCREASE POTENTIAL FOR EROSION OR NEGATIVELY IMPACT THE SITE.

E SPOIL STORAGE BERM

6.03

PERMIT SET

Definition: A set of drawings and specifications for a permit set.

Purpose: To provide a set of drawings and specifications for a permit set.

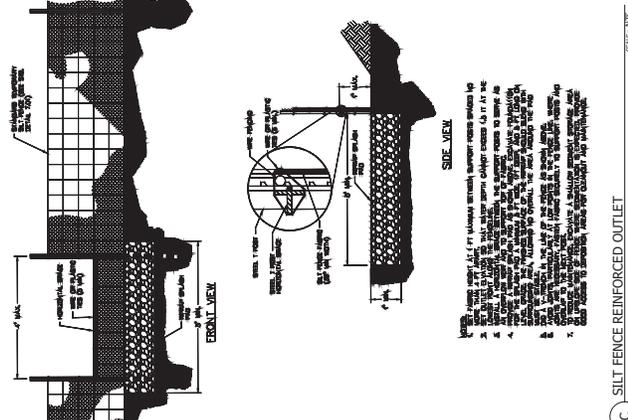
No.	REVISIONS/SUBMISSIONS	Date
1	SUBMITTAL TO HENDERSON COUNTY	03/24/21
2	STORM AND ESC RESUBMISSION	04/06/21
3	STORM AND ESC RESUBMISSION	08/02/21

MATERIALS: The contractor shall use the materials specified in the permit set.

Construction Specifications: The contractor shall follow the construction specifications in the permit set.

Maintenance: The contractor shall maintain the permit set in accordance with the specifications.

C SILT FENCE REINFORCED OUTLET



F SILT FENCE REINFORCED OUTLET

Project No: 486519 COUCH MOUNTAIN SUBDIVISION (PHASE 3) DEVELOPMENT PLAN	Drawing Title: HENDERSON COUNTY NORTH CAROLINA	Planning • Engineering • Surveying Environmental Services • BROOKS ENGINEERING ARCHITECTS	Permit Set
			PERMIT SET
Date: 03/24/21 04/06/21 08/02/21	No. 1 2 3	17 Arlington Street Asheville, N.C. 28801 Phone: 1-828-232-4700 Fax: 1-828-232-1311 www.brooks.com	Scale: AS NOTED Date: 08/03/2021 Drawn: MCB Checked: BMT Inset: JMK

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCGO1 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCGO1 Construction General Permit (Sections E and F, respectively). The permittee shall comply with all construction activity conditions approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Requirements for Ground Stabilization Timeframes:

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones
(e) Areas with slopes flatter than 4:1	14	-7 days for Falls Lake Watershed -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Rigid erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with mulch and tackifiers Geotextile fabrics such as permanent soil reinforcement, matting Hydroseeding Shrubs or other permanent plantings Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt, or retaining walls Erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project site to contain construction and domestic wastes.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (where possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

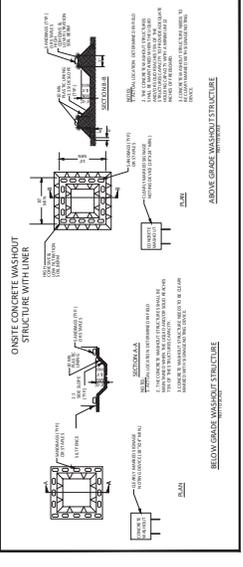
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sited and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the applicable plan and any additional requirements. Soil stabilization is defined as vegetative application or other measures that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Stormwater accumulated within the washout may not be pumped into or discharged to the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, when applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Manage washout from mortar mixers in accordance with the above item and in addition place storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad.
- Install at least one diverting concrete curb to be approved by the approving authority.
- Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

498519 C-6.0 DEVELOPMENT PLAN COUCH MOUNTAIN SUBDIVISION (PHASE 3) NORTH CAROLINA

PERMITS SET

REVISIONS/SUBMISSIONS

DATE

1 SUBMITTAL TO HENDERSON COUNTY 08/24/21

2 STORM AND ESC PLANS 08/02/21

3 STORM AND ESC RESUBMISSION 08/02/21

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498519 C-6.0 DEVELOPMENT PLAN COUCH MOUNTAIN SUBDIVISION (PHASE 3) NORTH CAROLINA

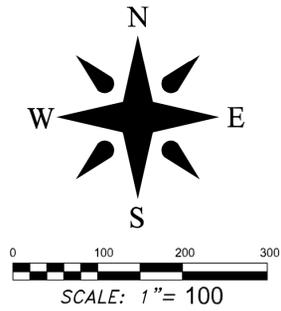
PERMITS SET

REVISIONS/SUBMISSIONS

DATE

SITE PLAN LEGEND

	EXIST. BOUNDARY
	EXIST. ADJOINER
	EXIST. RIGHT OF WAY
	EXIST. STREAM
	EXIST. STREAM BUFFER
	EXIST. WETLAND
	EXIST. EDGE OF GRAVEL
	EXIST. SEWER EASEMENT
	EXIST. WATER EASEMENT
	EXIST. OVERHEAD UTILITIES
	NEW PROPERTY LINES
	NEW RIGHT OF WAY
	NEW DRIVEWAY EASEMENT
	BUILDING SETBACK LINE
	NEW PAVEMENT



SITE AND ZONING NOTES

PROPERTY ZONING: R3
 PROPERTY SIZE: 58.8 (PH. 3)
 PROPERTY STEEPER THAN 60%: 0.51 AC (0.87%)

MINIMUM LOT SIZE: 1.5 ACRES
 SMALLEST PROPOSED LOT: 2.21 ACRES
 MINIMUM LOT WIDTH: 30' @ R.O.W.
 MAXIMUM BUILDING HEIGHT: 40'
 SETBACKS:
 FRONT: 15' (LOCAL)
 REAR: 15'
 SIDE: 15'
 COMMON OPEN SPACE PROVIDED: 1.95 ACRES (PH. 3)

*ALL DIMENSIONS ARE FROM EDGE OF ASPHALT, FACE OF CURB, FACE OF WALL, OR FACE OF BUILDING UNLESS OTHERWISE NOTED.

*ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DETAILS, SPECIFICATIONS, AND OTHER DEVELOPMENT ORDINANCES OF HENDERSON CO.

DEVELOPMENT DATA

PROPERTY ADDRESS: MOUNTAIN GROVE LANE
 PIN NUMBER: 9661-97-6534
 PROPERTY SIZE: 58.8 AC. (PH. 3) / 394.2 AC. (TOTAL)
 ZONING REVIEW: HENDERSON COUNTY
 EROSION CONTROL REVIEW: HENDERSON COUNTY
 STORMWATER REVIEW: HENDERSON COUNTY
 ZONING CLASSIFICATION: R-3
 PROPOSED NUMBER OF UNITS: 14 (PH. 3) / 81 (TOTAL)
 PROPOSED DENSITY: 0.24 (PH. 3) / 0.21 (TOTAL) units / acre
 PROPOSED LINEAR FEET OF ROAD: 3,899 LF (PH. 3)
 PORTIONS OF LOTS 68, 69, 70, 71 ARE WITHIN 1/2 MILE OF A FARMLAND PRESERVATION DISTRICT.
 WATER AND SEWER WILL BE PROVIDED BY INDIVIDUAL WELLS AND SEPTIC SYSTEMS.
 PUBLIC WATER AND SEWER SYSTEMS ARE APPROXIMATELY 1.5 MILES FROM THE SITE.
 PROPERTY OWNER:
 CONTACT: JAMES NERING
 ADDRESS: 3325 PIEDMONT RD NE
 ADDRESS 2: ATLANTA, GA 30305
 DEVELOPER: LUNA RIDGE, LLC
 CONTACT: ANDY BAKER
 ADDRESS: 120 HIGH HICKORY TRAIL
 ADDRESS 2: SWANNANOVA, NC 28778
 EMAIL: ANDY@TFMNCAROLINA.COM
 PHONE: 828-645-8815
 ENGINEER: BROOKS ENGINEERING
 CONTACT: JOHN KINNAIRD
 ADDRESS: 17 ARLINGTON ST
 ADDRESS 2: ASHEVILLE, NC 28801
 EMAIL: JKINNAIRD@BROOKSEA.COM
 PHONE: 828-232-4700

SUZANNE R. HOLBERT
 DB: 3150, PG. 565
 PIN: 9661-88-3323

CHRISTOPHER & COLLEEN SNYDER
 DB: 1328, PG. 630
 PIN: 9661-98-1755

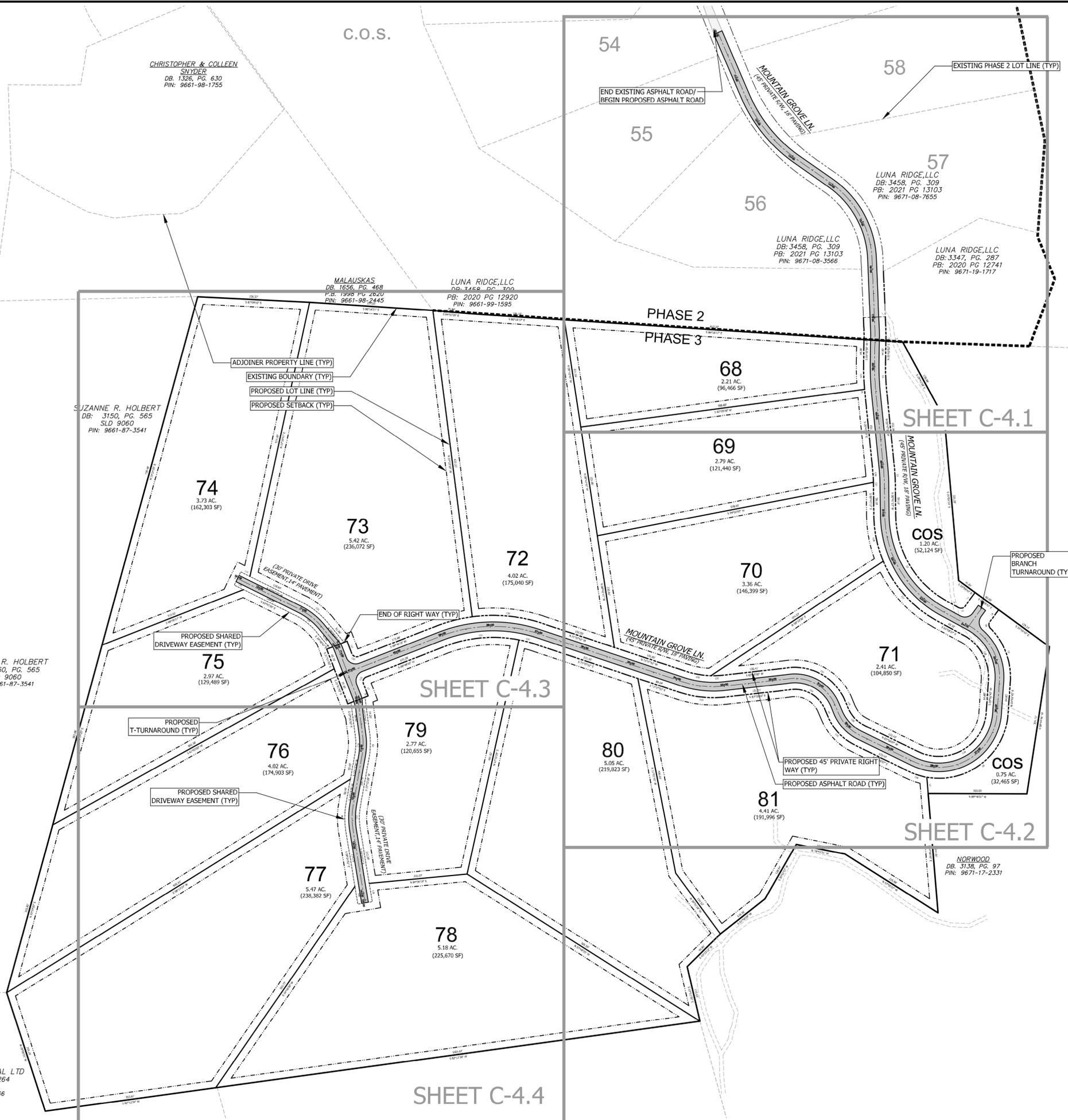
MALASKAS
 DB: 1656, PG. 468
 P.B. 1998 PG. 2620
 PIN: 9661-98-2445

LUNA RIDGE, LLC
 DB: 3458, PG. 309
 PB: 2020 PG 12920
 PIN: 9661-99-1595

SUZANNE R. HOLBERT
 DB: 3150, PG. 565
 SLD 9060
 PIN: 9661-87-3541

SUZANNE R. HOLBERT
 DB: 3150, PG. 565
 SLD 9060
 PIN: 9661-87-3541

GAH INTERNATIONAL LTD
 DB: 1411, PG. 264
 SLD 7772
 PIN: 9661-96-0166



Project No: 486519	COUCH MOUNTAIN SUBDIVISION (PHASE 3)		Date 03/24/21
	DEVELOPMENT PLAN		
Drawing Title: OVERALL SITE PLAN	HENDERSON COUNTY		REVISIONS/SUBMISSIONS
	NORTH CAROLINA		
Reviewed: MCB Scale: AS NOTED Drawn: JHK Checked: JHK		17 Arlington Street Asheville, N.C. 28801 Phone: 1-828-232-4700 Fax: 1-828-232-1331 www.brooksea.com	
No. 1 SUBMITTAL TO HENDERSON COUNTY			

File Location: L:\2019 Projects\486519 ITM_Huch Mountain\DWG\486519-COUCH MTN-CVIL-BASE Phase3.dwg