



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

April 1, 2021

LEE COUNTY

Mr. Ben Catt
Pine Gate Renewables, LLC
130 Roberts Street
Asheville, NC 28801

**SUBJECT: DRIVEWAY PERMIT- Access to NC Hwy. 42 (Broadway Rd.)
Commercial
Permit # 53-82834**

Dear Mr. Catt,


Attached for your information and file is an approved copy of the Driveway Permit listed for the above location. In addition, this permit is valid only if the below items are followed completely:

1. Driveway Special Provisions, attached.
2. Plans by "Civil Design Concepts, PA titled Broadway Road Solar, LLC, 0 Broadway Rd Sanford, NC", attached.
3. Driveway Connection and Slope and Grade details, attached. **Driveways shall be constructed and maintained to ensure that driveway runoff does not enter onto roadway pavement at any time.**
4. **Driveways shall be constructed to tie-in flush with existing roadway pavement.**
5. **Driveways shall be constructed to tie-in flush with existing roadway pavement.**
6. **This permit is only to grant access to the property. If the land use for this property changes another driveway permit will have to be reviewed and approved by this office.**

Prior to commencing any work in the State right-of-way, please contact Mr. Josh Brooks, County Maintenance Engineer, at (919) 775-3122 to schedule inspection.

If this office can be of further assistance, please advise.

Sincerely,

DocuSigned by:

DE44C69F74BC74D8
Matthew W. Kitchen, P.E.
District Engineer

MWK: ram
Attachments

CC: Brandon H. Jones, P.E.
Josh Brooks, P.E.
Mary Helms
File

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION 8 – DISTRICT 2
902 N. SANDHILLS BLVD.
ABERDEEN, NC 28315

Telephone: (910) 944-7621
Fax: (910) 944-5623
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
902 N. SANDHILLS BLVD.
ABERDEEN, NC 28315

DRIVEWAY SPECIAL PROVISIONS
Permit # 53-82834

- A. A copy of this permit shall be on site at all times during construction within State Right of Way.
- B. This permit is for one year from date on coverletter. With a request in writing the permit may be extended once for 90 days. Applicant must provide written notification when construction starts and when it is completed. Final approval by the District Engineer is required prior to opening the access for public use.
- C. The entrance on to NC Hwy. 42 is to be constructed in accordance with the attached detail sheets. At no time shall run-off enter the travel lanes of NC Hwy. 42.
- D. The traveling public shall be warned of construction with complete and proper signing and traffic control devices in accordance with the current **Manual on Uniform Traffic Control Devices (MUTCD)**. No work shall be performed in the Right of Way unless this requirement is satisfied. NCDOT reserves the right to require a written traffic control plan for encroachment operations. Traffic control devices and operations shall include, but are not limited to the following:
- Adequate and appropriate advance warning signs for any and all work zones closed or obstructed areas.
 - “End Construction” signage beyond the end of all work zones.
 - Adequate and appropriate delineation and control devices for all work zone areas including but not limited to lane closures, disturbed areas, and active work sites.
 - Properly trained and equipped flagmen.
 - Proper maintenance of all traffic control devices, including but not limited to proper signage and controls during periods of inactivity and removal of inappropriate traffic control signage and/or devices.
- E. All soil areas in the right-of-way on NC Hwy. 42 and any other soil areas disturbed during construction shall be seeded and mulched immediately upon completion of driveway construction.
- F. No parking or outdoor advertising signs shall be allowed inside the right-of-way.
- G. Erosion control devices must be in place and functioning during the construction phase.
- H. The Driveway entrance shall require improvements as shown on the approved plans/details. The improvements are to be installed by the owner and inspected by the Department of Transportation at a set rate of \$50.00.
- I. This permit is for access to NC Hwy. 42 only. It is not Certification of Subdivision Plats as stated in General Statute 136-102.6.
- J. It is agreed that the Department of Transportation grants to the owner/applicant the right and privilege to make this driveway connection as shown on attached plan sheets, specifications, and special provisions A. to K. which are made a part hereof.

- K. Please contact Mr. Josh Brooks, County Maintenance Engineer, at (919) 775-3122 and Mr. Richard Mabry, Division 8, District 2, at (910) 944-7621 prior to starting construction within the right-of-way and upon completion of the driveway.

APPLICATION IDENTIFICATION		N.C. DEPARTMENT OF TRANSPORTATION STREET AND DRIVEWAY ACCESS PERMIT APPLICATION
Driveway Permit No. 53-82834	Date of Application 1/4/21	
County: LEE		
Development Name: BROADWAY ROAD SOLAR, LLC		

LOCATION OF PROPERTY:

Route/Road: 1579						
Exact Distance 1.27	<input checked="" type="checkbox"/> Miles	N	S	E	W	
	<input type="checkbox"/> Feet	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
From the Intersection of Route No. SR1579	and Route No. US 421		Toward SEMINOLE			
Property Will Be Used For:	<input type="checkbox"/> Residential /Subdivision	<input checked="" type="checkbox"/> Commercial	<input type="checkbox"/> Educational Facilities	<input type="checkbox"/> TND	<input type="checkbox"/> Emergency Services	<input type="checkbox"/> Other
Property:	<input checked="" type="checkbox"/> is	<input type="checkbox"/> is not	within SANFORD		City Zoning Area.	

AGREEMENT

- I, the undersigned property owner, request access and permission to construct driveway(s) or street(s) on public right-of-way at the above location.
- I agree to construct and maintain driveway(s) or street entrance(s) in absolute conformance with the current "Policy on Street and Driveway Access to North Carolina Highways" as adopted by the North Carolina Department of Transportation.
- I agree that no signs or objects will be placed on or over the public right-of-way other than those approved by NCDOT.
- I agree that the driveway(s) or street(s) will be constructed as shown on the attached plans.
- I agree that that driveway(s) or street(s) as used in this agreement include any approach tapers, storage lanes or speed change lanes as deemed necessary.
- I agree that if any future improvements to the roadway become necessary, the portion of driveway(s) or street(s) located on public right-of-way will be considered the property of the North Carolina Department of Transportation, and I will not be entitled to reimbursement or have any claim for present expenditures for driveway or street construction.
- I agree that this permit becomes void if construction of driveway(s) or street(s) is not completed within the time specified by the "Policy on Street and Driveway Access to North Carolina Highways".
- I agree to pay a \$50 construction inspection fee. Make checks payable to NCDOT. This fee will be reimbursed if application is denied.
- I agree to construct and maintain the driveway(s) or street(s) in a safe manner so as not to interfere with or endanger the public travel.
- I agree to provide during and following construction proper signs, signal lights, flaggers and other warning devices for the protection of traffic in conformance with the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the District Engineer.
- I agree to indemnify and save harmless the North Carolina Department of Transportation from all damages and claims for damage that may arise by reason of this construction.
- I agree that the North Carolina Department of Transportation will assume no responsibility for any damages that may be caused to such facilities, within the highway right-of-way limits, in carrying out its construction.
- I agree to provide a Performance and Indemnity Bond in the amount specified by the Division of Highways for any construction proposed on the State Highway system.
- The granting of this permit is subject to the regulatory powers of the NC Department of Transportation as provided by law and as set forth in the N.C. Policy on Driveways and shall not be construed as a contract access point.
- I agree that the entire cost of constructing and maintaining an approved private street or driveway access connection and conditions of this permit will be borne by the property owner, the applicant, and their grantees, successors, and assignees.
- **I AGREE TO NOTIFY THE DISTRICT ENGINEER WHEN THE PROPOSED WORK BEGINS AND WHEN IT IS COMPLETED.**

SIGNATURES OF APPLICANT

PROPERTY OWNER (APPLICANT)		WITNESS	
COMPANY	<u>PINE GATE RENEWABLES, LLC</u>	NAME	<u>Hannah Novak</u>
SIGNATURE	<u></u>	SIGNATURE	<u>Hannah Novak</u>
ADDRESS	<u>130 ROBERTS STREET</u>	ADDRESS	<u>130 Roberts St.</u>
	<u>ASHEVILLE, NC 28801</u> Phone No. <u>828-777-6152</u>		<u>Asheville, NC 28801</u>

AUTHORIZED AGENT		WITNESS	
COMPANY	<u>CIVIL DESIGN CONCEPTS, PA</u>	NAME	<u>ETHAN LINER</u>
SIGNATURE	<u></u>	SIGNATURE	<u></u>
ADDRESS	<u>168 PATTON AVE</u>	ADDRESS	<u>35 HAMBURG DR. APT. 2</u>
	<u>ASHEVILLE, NC 28801</u> Phone No. <u>828-252-5388</u>		<u>WEAVERVILLE, NC 28787</u>

APPROVALS

APPLICATION RECEIVED BY DISTRICT ENGINEER

DocuSigned by:
Matthew Kitchen, P.E. 1/4/21
 SIGNATURE BC74D9... DATE

APPLICATION APPROVED BY LOCAL GOVERNMENTAL AUTHORITY (when required)

DocuSigned by:
Mary Depina 3/31/2021
 SIGNATURE 22DC4EB... DATE
 TITLE Civil Engineer II

APPLICATION APPROVED BY NCDOT

DocuSigned by:
Matthew Kitchen, P.E. 4/1/2021
 SIGNATURE BC74D9... DATE
 TITLE

INSPECTION BY NCDOT

SIGNATURE DATE
 TITLE

COMMENTS:

OFFICIAL COPY Sep 26 2022

SP-5474 Sub 0

BROADWAY ROAD SOLAR, LLC 0 BROADWAY RD SANFORD, NC

CITY OF SANFORD, NC, NORTH CAROLINA

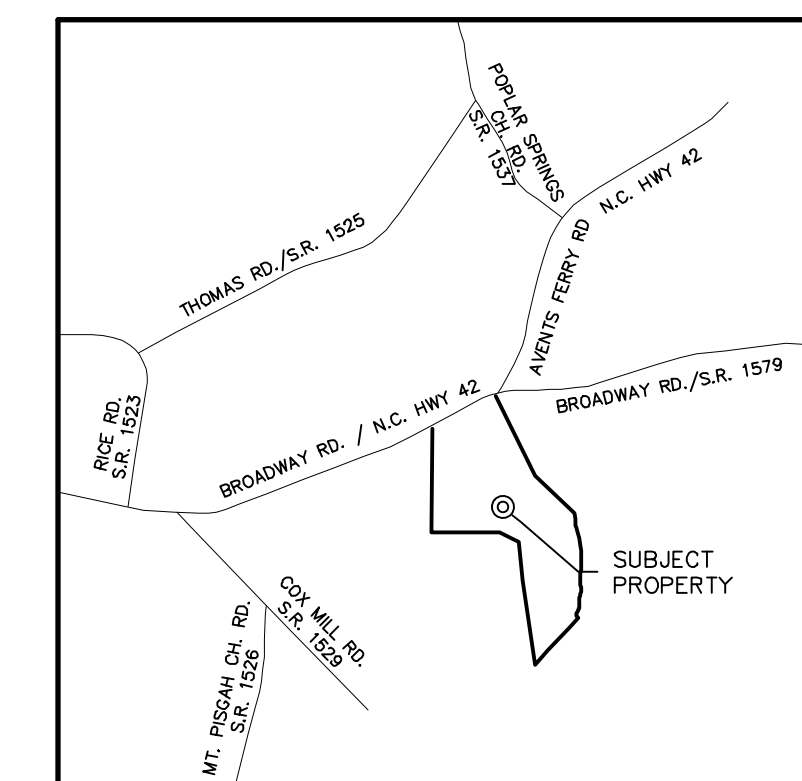
PREPARED FOR:
PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
BEN CATT
(828) 777-6152

INDEX OF SHEETS	
Sheet No.	Title
C000	COVER
--	SURVEY
C100	EXISTING CONDITIONS & DEMOLITION PLAN
C200	MASTER SITE PLAN
C201	SITE PLAN
C202	SITE PLAN
C300	MASTER EROSION CONTROL PLAN
C301	EROSION CONTROL PLAN
C302	EROSION CONTROL PLAN
C400	MASTER GRADING PLAN
C401	GRADING PLAN
C402	GRADING PLAN
C931	EROSION CONTROL DETAILS
C921	SITE DETAILS
C932	EROSION CONTROL DETAILS
C933	EROSION CONTROL DETAILS
C934	EROSION CONTROL DETAILS
C935	EROSION CONTROL DETAILS
C998	NC601

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
CONTACT: BEN CATT
(828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
CONTACT: GREG HOFFMAN, P.E.
(828) 252-5388



VICINITY MAP
(NOT TO SCALE)



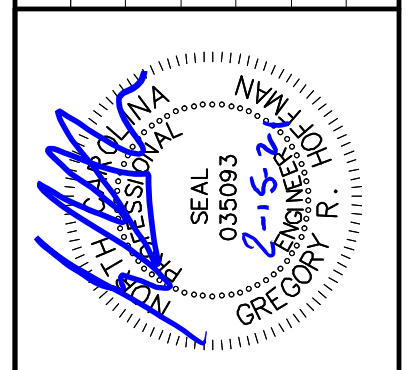
Know what's below.
Call before you dig.

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 252-5388
FAX (828) 252-5388

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 482-4410
FAX (828) 426-5858

CDC Civil Design Concepts, PA
www.civildesignconcepts.com
NCBELS LICENSE #: C-2164

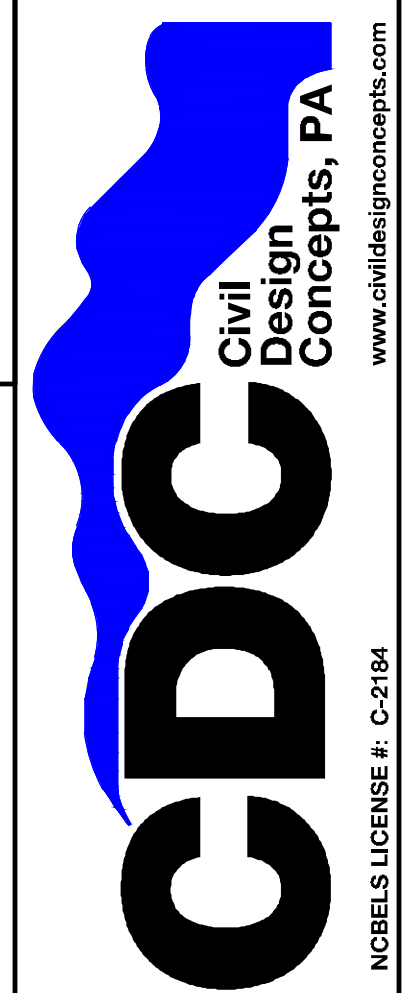
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1	12/17/20	ISSUED FOR PERMITS	EDL
2	12/21/20	NCDEQ REVISIONS	EDL
3	12/22/20	DEED BOOK/PAGE REVISION	EDL
4	01/13/21	SCALE REVISION	EDL
5	02/15/21	DRIVEWAY REVISION	JAA



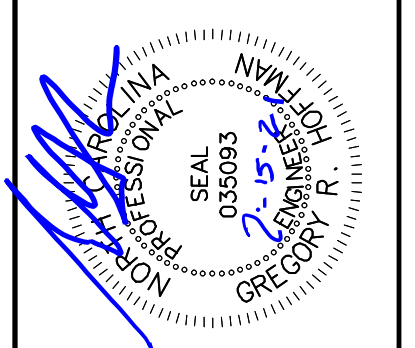
COVER FOR:
**BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC**
PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

SHEET
C000



EDL	EDL	JAR	BY
ISSUED FOR PERMITS	DEED BOOK/PAGE REVISION	DRIVEWAY REVISION	DESCRIPTION
1	12/17/20		
3	12/22/20		
5	02/15/21		
			DATE
			NO.



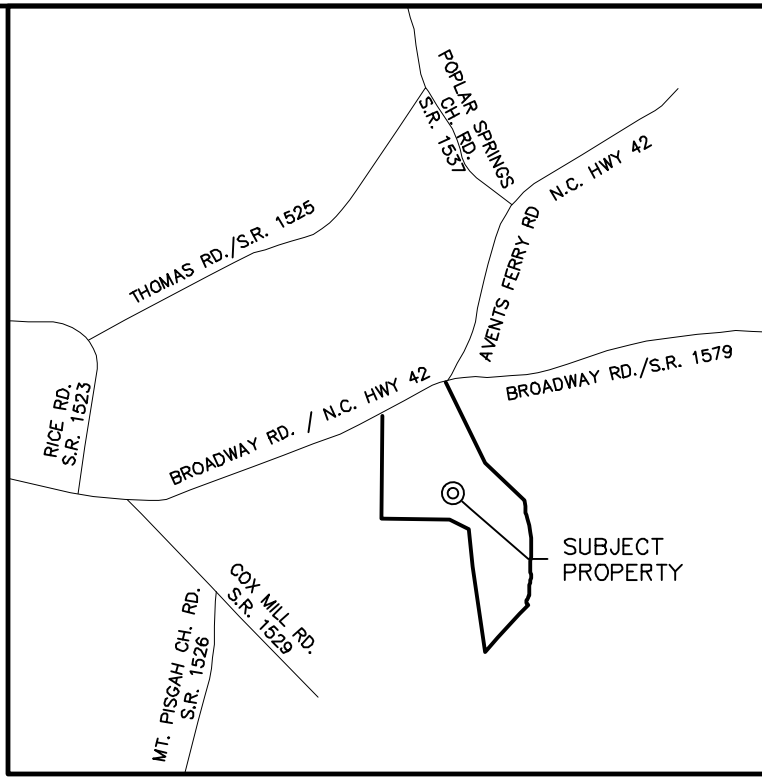
EXISTING CONDITIONS & DEMOLITION PLAN FOR:

BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
 CDC PROJECT NO.: 12088
 XXX PERMIT NO.: xxx

SHEET
C100



DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
 130 ROBERTS STREET
 ASHEVILLE, NC 28801
 CONTACT: BEN CATT
 (828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
 168 PATTON AVENUE
 ASHEVILLE, NC 28801
 CONTACT: GREG HOFFMAN, P.E.
 (828) 252-5388

SURVEYOR: STEWART-PROCTOR, PLLC
 319 CHAPANOKE ROAD SUITE 106
 RALEIGH, NC 27603
 (919) 779-1855

PROJECT DATA

PIN: 8672-12-4540
 ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
 DEED BOOK/PAGE: 01586/0390-0392
 SITE ACREAGE: 75.6 ACRES
 ZONING: R-20
 SETBACKS:
 FRONT: 100'
 SIDES: 50'
 REAR: 50'

DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

	IMPERVIOUS	PERVIOUS
PRE-DEVELOPMENT:	0.00 ACRES (00%)	75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:
 SOIL TYPE: CID DuB FuB PoF
 HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
 STREAM INDEX: 18-20-9
 STREAM NAME: PATCHETT CREEK (PATCH CREEK)
 DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
 CLASSIFICATION: C
 RIVER BASIN: CAPE FEAR

- NOTES**
- ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
 - CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED GRADING/LAND DISTURBANCE AND DRIVEWAY PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
 - ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
 - TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.
 - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES CALLED OUT TO REMAIN DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULCOO AT 1-800-632-4349 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
 - EROSION CONTROL IS FIELD PERFORMANCE BASED AND CONTRACTOR SHALL INSTALL AND MAINTAIN ANY EROSION CONTROL MEASURES NECESSARY TO ASSURE MAXIMUM PROTECTION OF THE SITE DURING DEMOLITION AND CLEARING.
 - CONTRACTOR TO COORDINATE TIMING OF DEMOLITION AND CONSTRUCTION WITH OWNER TO ENSURE EXISTING FACILITIES REMAIN ACCESSIBLE.
 - ALL DEBRIS, STRUCTURES AND UTILITIES TO BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE ARE NOT SHOWN ON THIS PLAN. ANY ADDITIONAL DEBRIS, STRUCTURES AND UTILITIES ENCOUNTERED DURING CONSTRUCTION, WHICH IN THE OPINION OF THE ENGINEER SHOULD BE DEMOLISHED AND REMOVED, SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS.
 - INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY AREAS REQUIRED TO INSTALL ALL EROSION CONTROL MEASURES.

SP-5474 Sub 0

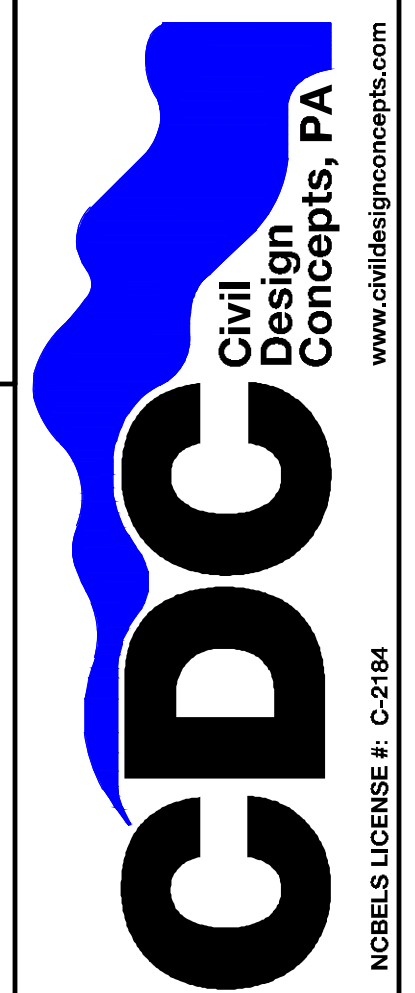


811
 Know what's below.
 Call before you dig.

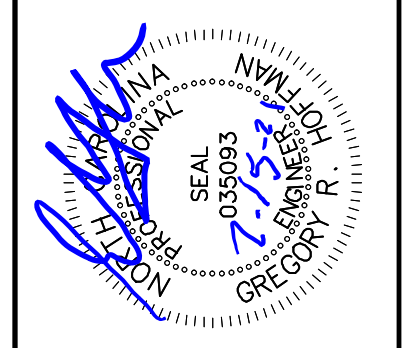
NORTH

EXISTING CONDITIONS & DEMOLITION PLAN
 GRAPHIC SCALE

(IN FEET)
 1 inch = 150 ft.



EDL	EDL	EDL	EDL	JAK	BY
ISSUED FOR PERMITS	12/17/20	1			
NEEDED REVISIONS	12/21/20	2			
DEED BOOK/PAGE REVISION	12/22/20	3			
SCALE REVISION	01/17/21	4			
DRIVEWAY REVISION	02/15/21	5			
DESCRIPTION	DATE	NO.			



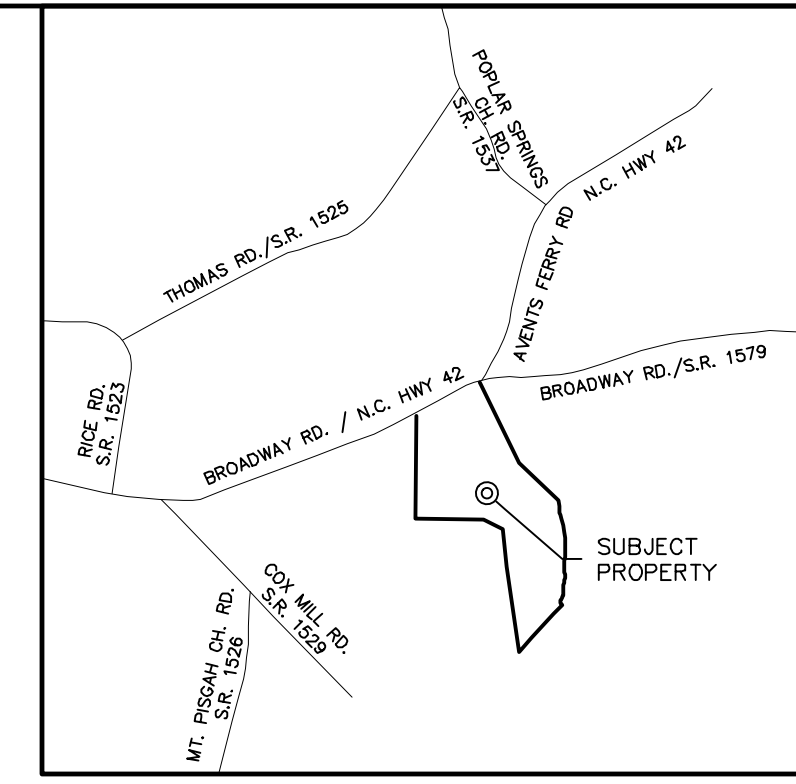
MASTER SITE PLAN FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
 PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNX
 CDC PROJECT NO.: 12088
 XXX PERMIT NO. xxx

SHEET
C200

SP-5474 Sub 0

- NOTES**
- ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
 - SINGLE-PHASE CONSTRUCTION.
 - ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
 - TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS' INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.
 - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES (SHOWN TO REMAIN) AND NEWLY COMPLETED WORK DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULDCO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
 - CURB END TREATMENT TO BE APPLIED TO ALL CURB ENDS. REFER TO CURB END TREATMENT DETAIL.
 - PROPOSED ROADS TO BE PRIVATE. NCDOT IS NOT RESPONSIBLE FOR ANY ROAD MAINTENANCE.
- LANDSCAPE BUFFER**
- TYPE "C", 20' WIDE LANDSCAPE BUFFER YARD
 PLANT MATERIAL SHALL CONSIST OF ONLY EVERGREEN PLANT MATERIAL THAT HAS A GROWTH HABIT WHICH WILL SCREEN THE DEVELOPMENT AND SHALL BE INSTALLED AROUND THE PERIMETER OF THE FACILITY.
- SMALL TREES SHALL MEASURE A MINIMUM OF 1.5 TO 2 INCHES IN CALIPER FOR SINGLE STEM TREES AND AT LEAST 6 TO 8 FEET IN HEIGHT AT THE TIME OF PLANTING.
 - LARGE TREES SHALL MEASURE A MINIMUM OF 1.5 TO 2 INCHES IN CALIPER AND 8 TO 10 FEET IN HEIGHT AT TIME OF PLANTING. THIS LANDSCAPE BUFFER SHALL COMPLY WITH ARTICLE 7, LANDSCAPING & BUFFERING STANDARDS AND APPENDIX C ACCEPTABLE PLANT SPECIES OF THE UDO AND SHALL BE LOCATED ON THE OUTSIDE OF THE FENCED AREA.



DEVELOPMENT DATA

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 130 ROBERTS STREET
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SURVEYOR: STEWART-PROCTOR, PLLC
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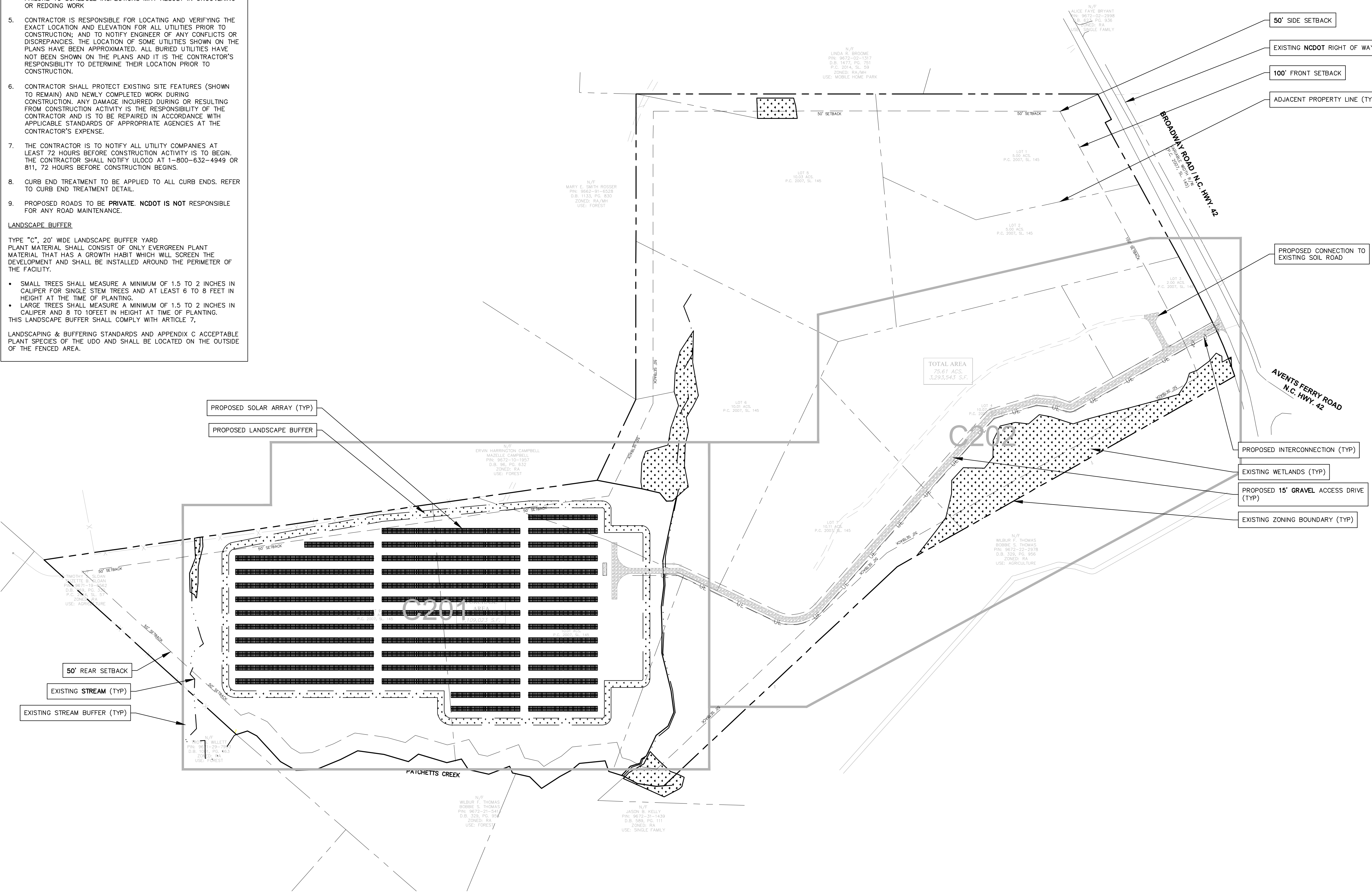
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 ZONING: R-20
 SETBACKS: FRONT: 100', SIDES: 50', REAR: 50'
 DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

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POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:
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 HYDROLOGIC SOIL GROUP: A C B B

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 DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
 CLASSIFICATION: C
 RIVER BASIN: CAPE FEAR



CDC INSPECTIONS HOTLINE:
 828-771-4755 OR INSPECTION@CDCGO.COM

811
 Know what's below.
 Call before you dig.

NORTH

MASTER SITE PLAN

GRAPHIC SCALE

150 0 75 150 300 600
 (IN FEET)
 1 inch = 150 ft.

NOTES

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LANDSCAPE BUFFER

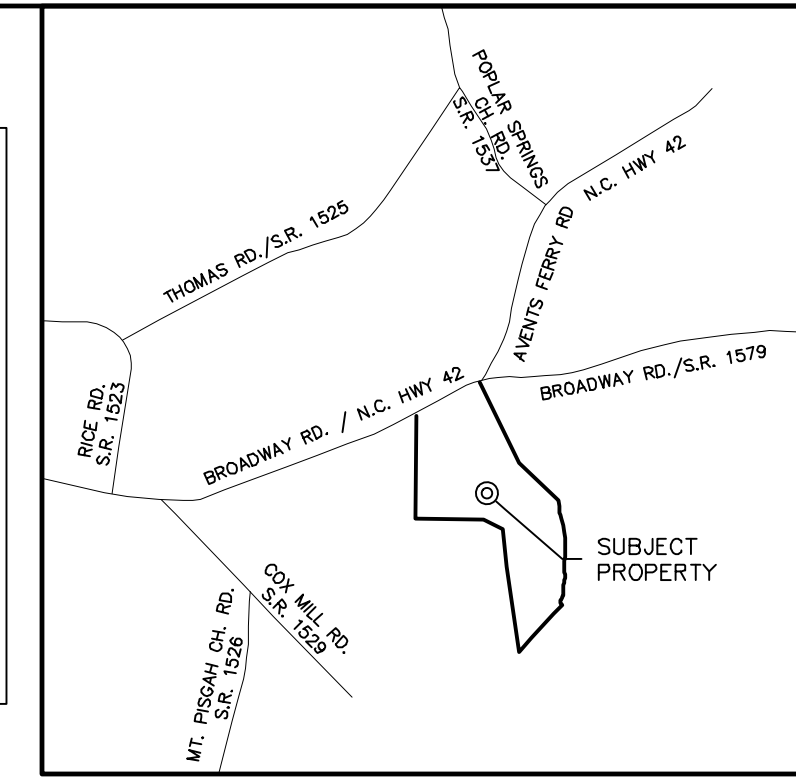
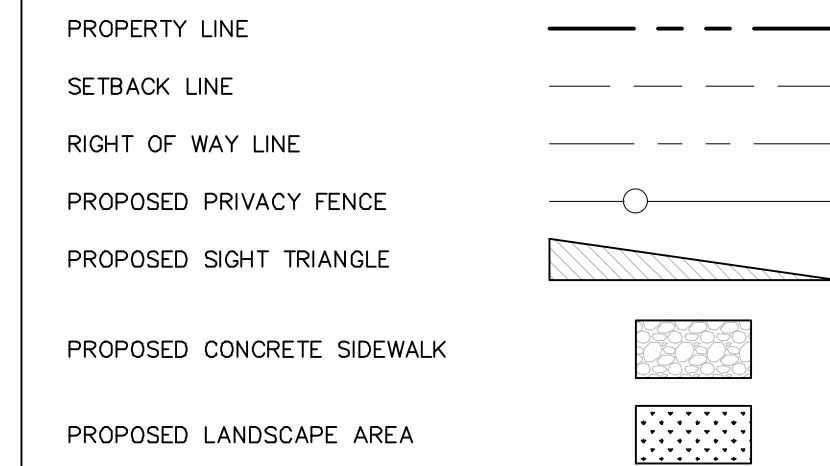
TYPE "C", 20' WIDE LANDSCAPE BUFFER YARD PLANT MATERIAL SHALL CONSIST OF ONLY EVERGREEN PLANT MATERIAL THAT HAS A GROWTH HABIT WHICH WILL SCREEN THE DEVELOPMENT AND SHALL BE INSTALLED AROUND THE PERIMETER OF THE FACILITY.

- SMALL TREES SHALL MEASURE A MINIMUM OF 1.5 TO 2 INCHES IN CALIPER FOR SINGLE STEM TREES AND AT LEAST 6 TO 8 FEET IN HEIGHT AT THE TIME OF PLANTING.
- LARGE TREES SHALL MEASURE A MINIMUM OF 1.5 TO 2 INCHES IN CALIPER AND 8 TO 10 FEET IN HEIGHT AT TIME OF PLANTING. THIS LANDSCAPE BUFFER SHALL COMPLY WITH ARTICLE 7.

LANDSCAPING & BUFFERING STANDARDS AND APPENDIX C ACCEPTABLE PLANT SPECIES OF THE UDO AND SHALL BE LOCATED ON THE OUTSIDE OF THE FENCED AREA.

SP-5474 Sub 0

SITE LEGEND



VICINITY MAP
(NOT TO SCALE)

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
(828) 777-6152

CONTACT: BEN CATT

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
GREG HOFFMAN, P.E.
(828) 252-5388

CONTACT: GREG HOFFMAN, P.E.

SURVEYOR: STEWART-PROCTOR, PLLC
319 CHAPANOKE ROAD SUITE 106
RALEIGH, NC 27663
(919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
DEED BOOK/PAGE: 01586/0390-0392
SITE ACREAGE: 75.6 ACRES
ZONING: R-20
SETBACKS:
FRONT: 100'
SIDES: 50'
REAR: 50'

DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

	IMPERVIOUS	PERVIOUS
PRE-DEVELOPMENT:	0.00 ACRES (00%)	75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:

SOIL TYPE: C1D DuB FuB PoF
HYDROLOGIC SOIL GROUP: A C B PoF

STREAM DATA:
STREAM INDEX: 18-20-9
STREAM NAME: PATCHET CREEK (PATCHET CREEK)
DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
CLASSIFICATION: C
RIVER BASIN: CAPE FEAR

CDC Civil Design Concepts, PA
www.civildesignconcepts.com
168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 402-4410
FAX (828) 402-5388

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 402-4410
FAX (828) 402-5388

NCELS LICENSE #: C-2164

ISSUED FOR PERMITS	EDL	NO. DATE	DESCRIPTION
1	12/17/20		
2	12/21/20		
3	12/22/20		



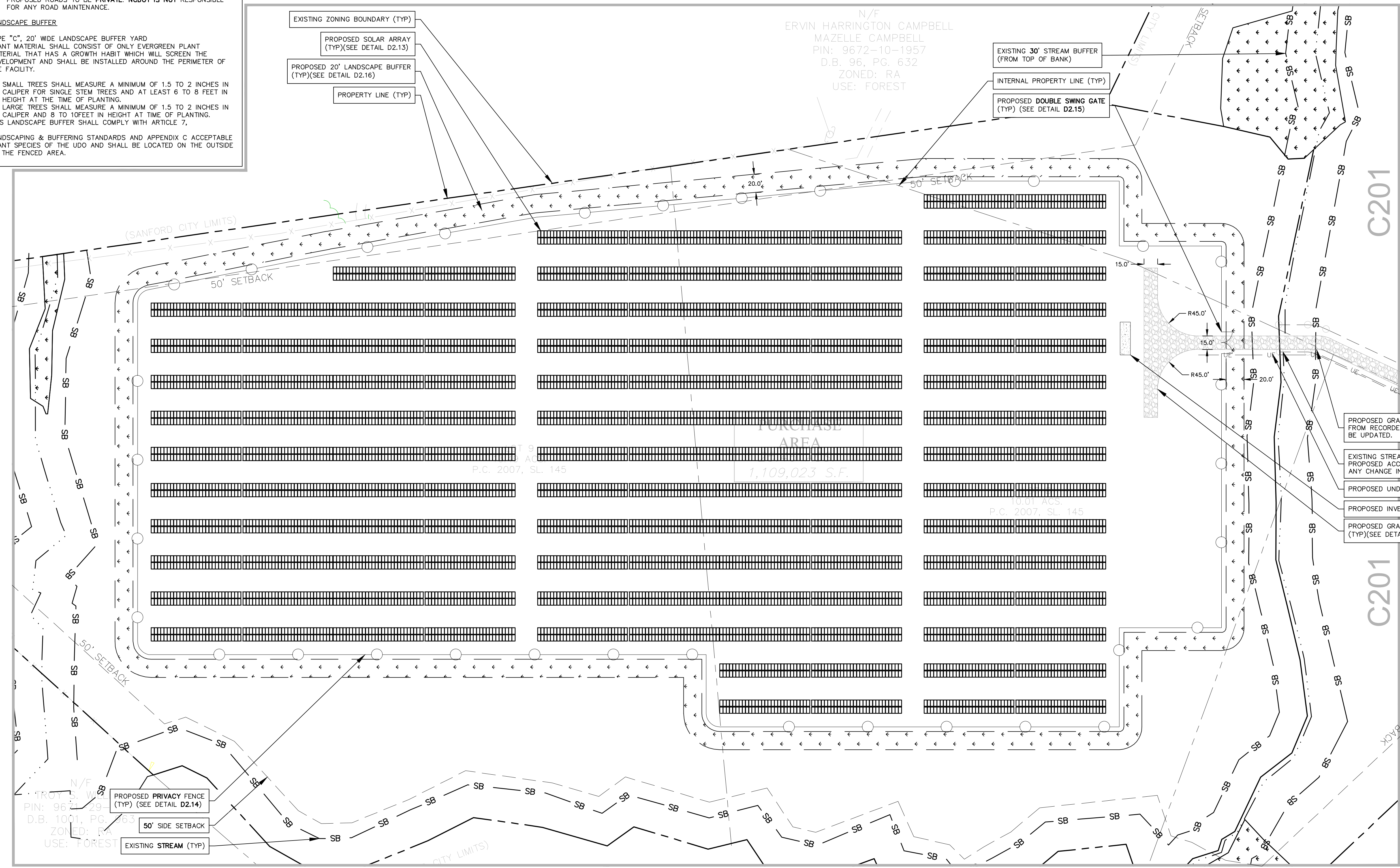
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

811 Know what's below. Call before you dig.

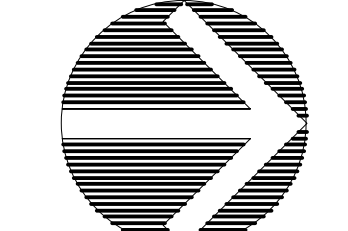
SITE PLAN FOR:

SHEET
C201



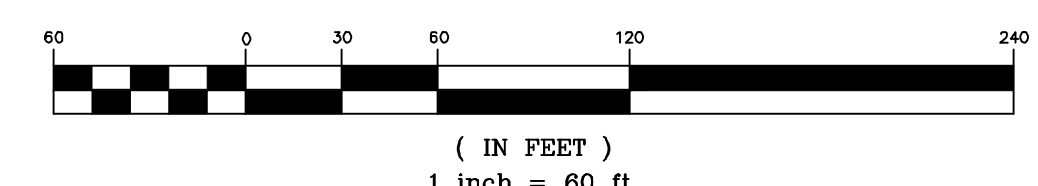
- PROPOSED GRAVEL ACCESS DRIVE DIVERGES FROM RECORDED EASEMENT. EASEMENT SHALL BE UPDATED.
- EXISTING STREAM CROSSING TO REMAIN. PROPOSED ACCESS DRIVE WILL NOT CAUSE ANY CHANGE IN GRADES AT STREAM CROSSING.
- PROPOSED UNDERGROUND UTILITY LINE (TYP)
- PROPOSED INVERTER PAD (TYP)
- PROPOSED GRAVEL ACCESS DRIVE (TYP)(SEE DETAIL D2.11)

CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



SITE PLAN

GRAPHIC SCALE



NOTES

1. ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
2. SINGLE-PHASE CONSTRUCTION.
3. ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
4. TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS' INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.
5. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES (SHOWN TO REMAIN) AND NEWLY COMPLETED WORK DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULDCO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
8. CURB END TREATMENT TO BE APPLIED TO ALL CURB ENDS. REFER TO CURB END TREATMENT DETAIL.
9. PROPOSED ROADS TO BE PRIVATE. NCDOT IS NOT RESPONSIBLE FOR ANY ROAD MAINTENANCE.

LANDSCAPE BUFFER

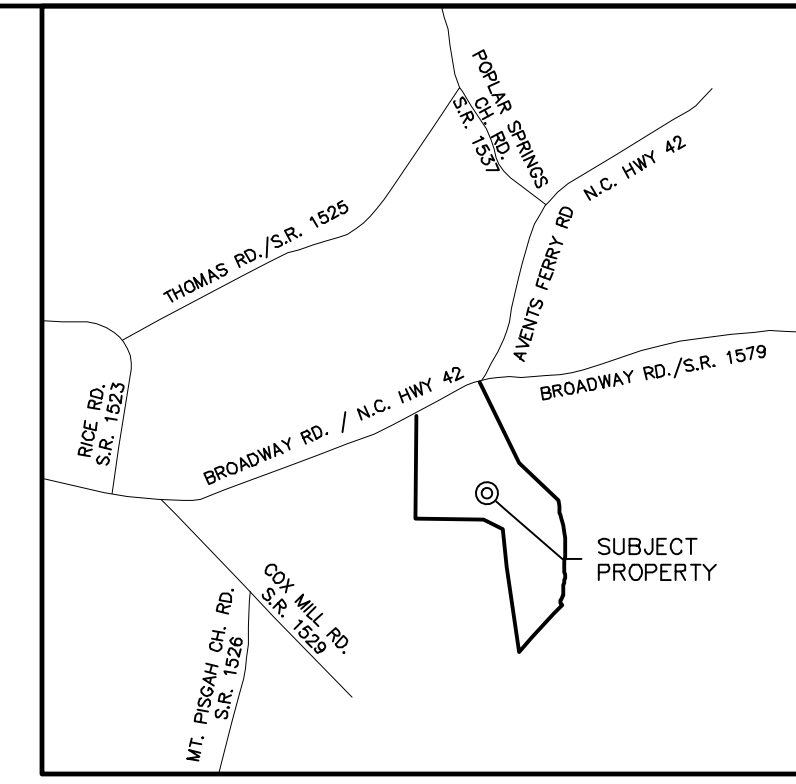
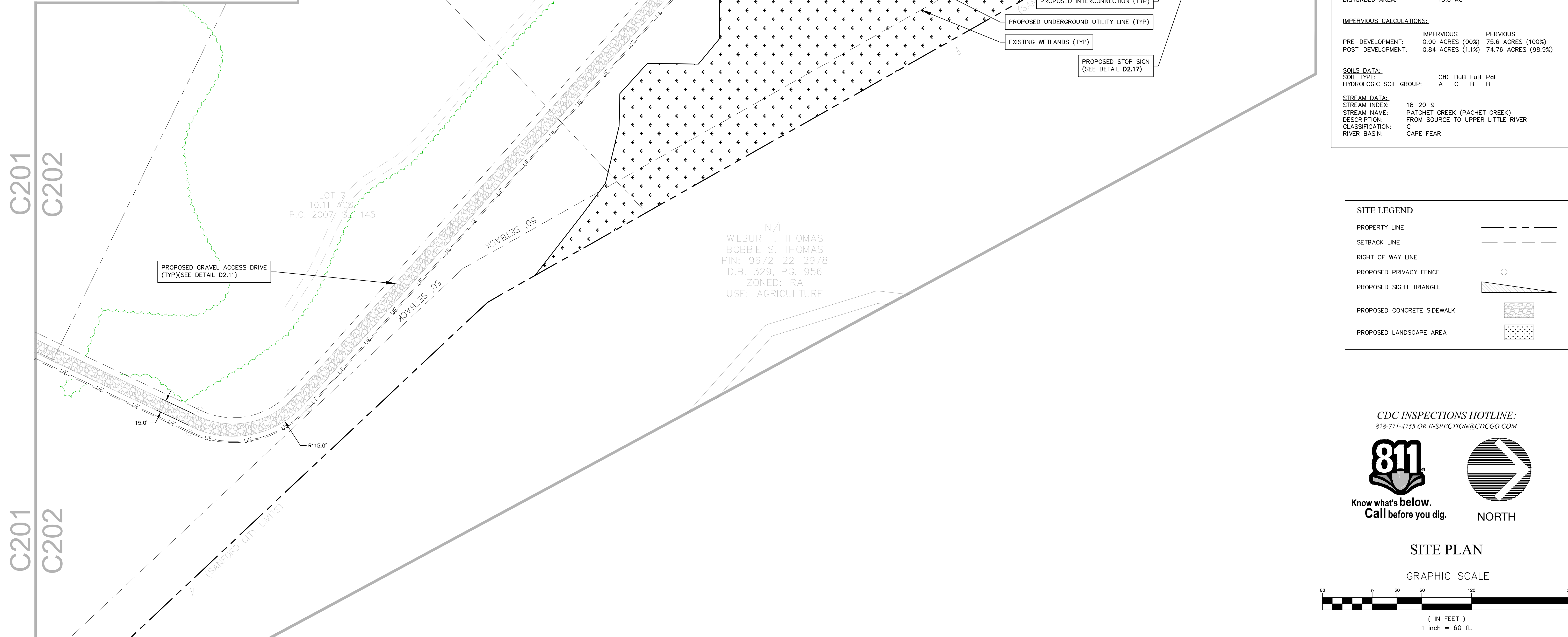
TYPE "C", 20' WIDE LANDSCAPE BUFFER YARD
 PLANT MATERIAL SHALL CONSIST OF ONLY EVERGREEN PLANT MATERIAL THAT HAS A GROWTH HABIT WHICH WILL SCREEN THE DEVELOPMENT AND SHALL BE INSTALLED AROUND THE PERIMETER OF THE FACILITY.

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LANDSCAPING & BUFFERING STANDARDS AND APPENDIX C ACCEPTABLE PLANT SPECIES OF THE UDO AND SHALL BE LOCATED ON THE OUTSIDE OF THE FENCED AREA.

SP-5474 Sub 0

TOTAL AREA
 75.61 ACS.
 3,293,543 S.F.



DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
 130 ROBERTS STREET
 ASHEVILLE, NC 28801
 CONTACT: BEN CATT (828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
 168 PATTON AVENUE
 ASHEVILLE, NC 28801
 CONTACT: GREG HOFFMAN, P.E. (828) 252-5388

SURVEYOR: STEWART-PROCTOR, PLLC
 319 CHAPANOKE ROAD SUITE 106
 RALEIGH, NC 27663
 (919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
 ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
 DEED BOOK/PAGE: 01586/0390-0392
 SITE ACREAGE: 75.6 ACRES
 ZONING: R-20
 SETBACKS: FRONT: 100', SIDES: 50', REAR: 50'
 DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

PRE-DEVELOPMENT:	0.00 ACRES (00%)	PERVIOUS	75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	IMPERVIOUS	74.76 ACRES (98.9%)

SOILS DATA:
 SOIL TYPE: C1D DuB FuB PoF
 HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
 STREAM INDEX: 18-20-9
 STREAM NAME: PATCHET CREEK (PATCHET CREEK)
 DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
 CLASSIFICATION: C
 RIVER BASIN: CAPE FEAR

SITE LEGEND

PROPERTY LINE	---
SETBACK LINE	---
RIGHT OF WAY LINE	---
PROPOSED PRIVACY FENCE	○
PROPOSED SIGHT TRIANGLE	▲
PROPOSED CONCRETE SIDEWALK	▨
PROPOSED LANDSCAPE AREA	▤

811
 Know what's below.
 Call before you dig.

NORTH

SITE PLAN

GRAPHIC SCALE

(IN FEET)
 1 inch = 60 ft.

168 PATTON AVENUE
 ASHEVILLE, NC 28801
 PHONE (828) 402-4410
 FAX (828) 252-5388

52 WALNUT STREET - SUITE 9
 WAYNESVILLE, NC 28786
 PHONE (828) 402-4410
 FAX (828) 252-5388

CDC Civil Design Concepts, PA
 www.civildesignconcepts.com
 NCBELS LICENSE # C-2164

ISSUED FOR PERMITS	EDL	NO.	DATE	DESCRIPTION
12/17/20	EDL	1		
12/21/20	EDL	2		
12/22/20	EDL	3		
01/13/21	EDL	4		
02/15/21	JAK	5		

BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

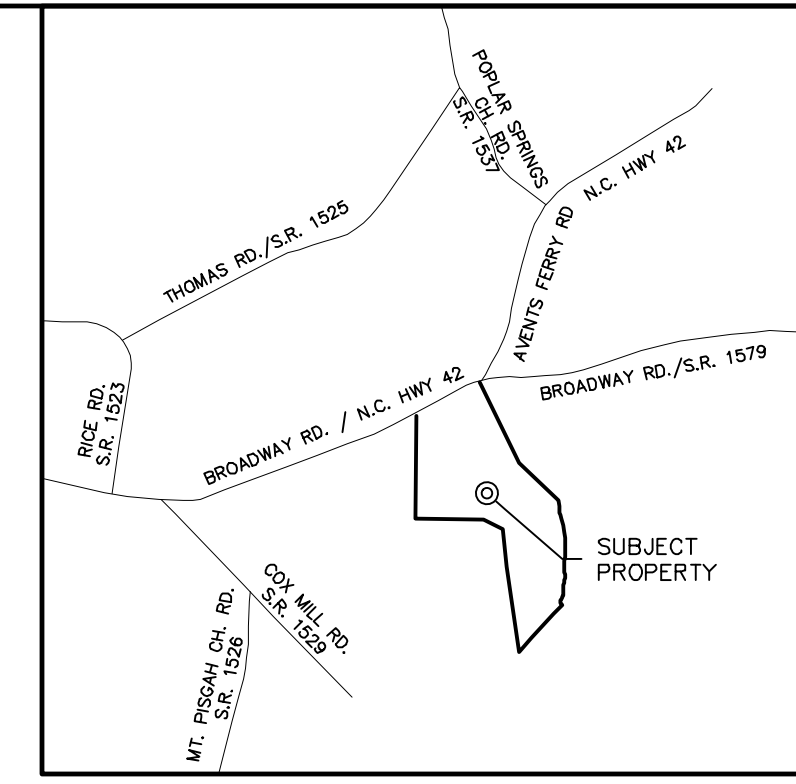
DRAWN BY: DNX
 CDC PROJECT NO.: 12088
 XXX PERMIT NO.: xxx

SHEET
C202

NOTES

1. SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES, CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
2. NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
3. TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.

SP-5474 Sub 0



VICINITY MAP
(NOT TO SCALE)

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
CONTACT: BEN CATT
(828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
CONTACT: GREG HOFFMAN, P.E.
(828) 252-5388

SURVEYOR: STEWART-PROCTOR, PLLC
319 CHAPANOKE ROAD SUITE 106
RALEIGH, NC 27603
(919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
DEED BOOK/PAGE: 01586/0390-0392
SITE ACREAGE: 75.6 ACRES
ZONING: R-20
SETBACKS:
FRONT: 100'
SIDES: 50'
REAR: 50'

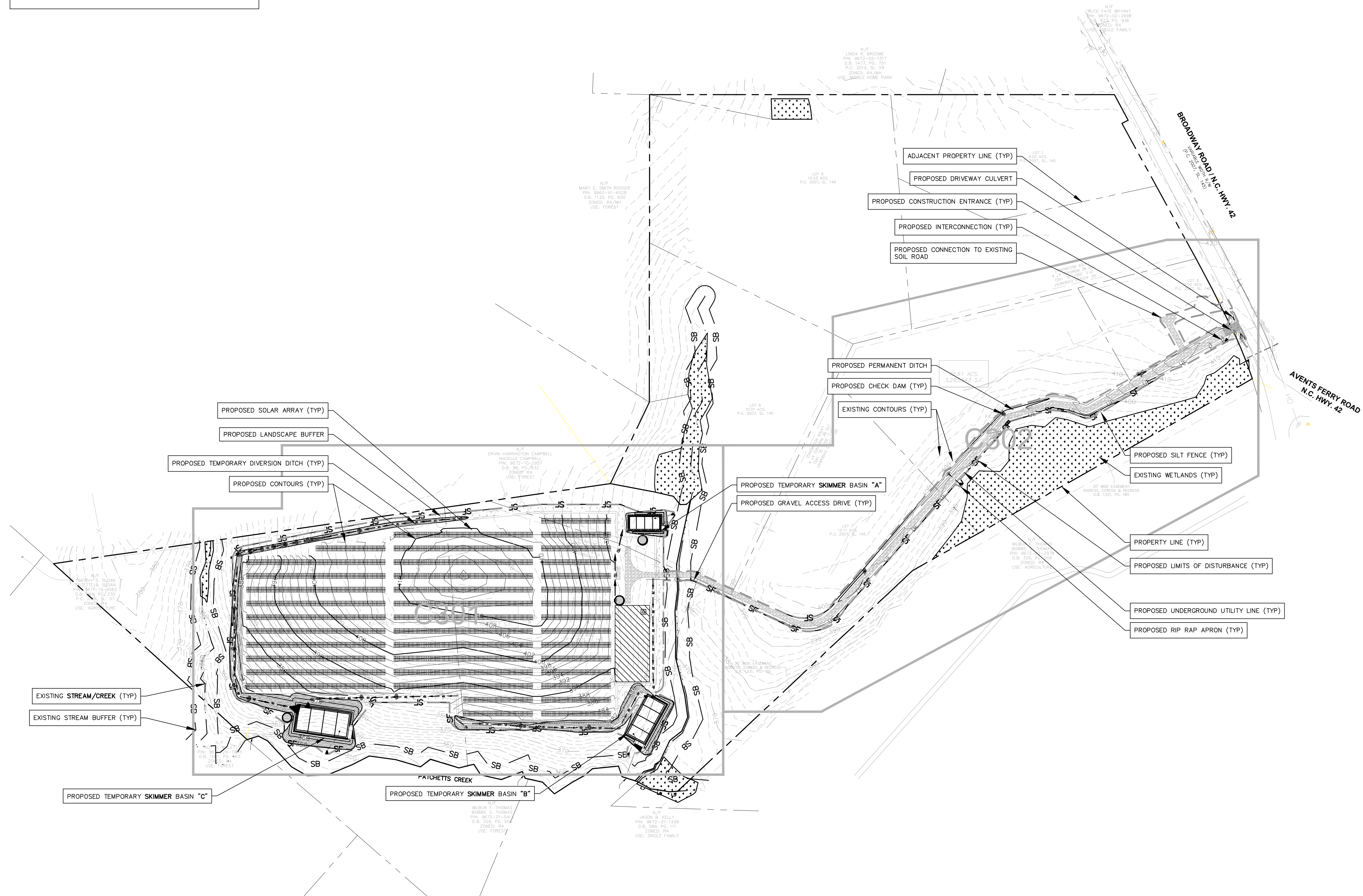
DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

	IMPERVIOUS	PERVIOUS
PRE-DEVELOPMENT:	0.00 ACRES (00%)	75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:
SOIL TYPE: C1D DuB FuB PoF
HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
STREAM INDEX: 18-20-9
STREAM NAME: PATCHETTS CREEK (PATCH CREEK)
DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
CLASSIFICATION: C
RIVER BASIN: CAPE FEAR



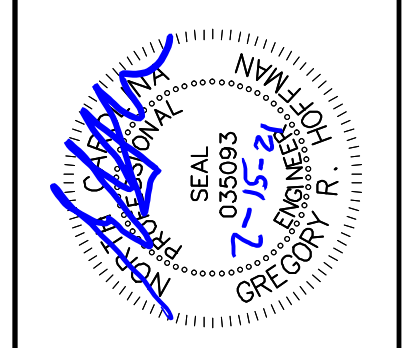
168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 252-5388
FAX (828) 252-5388

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 402-4410
FAX (828) 402-6655

CDC Civil Design Concepts, PA
www.civildesignconcepts.com

NCBELS LICENSE # C-2164

ISSUED FOR PERMITS	EDL	BY	DESCRIPTION
12/17/20	EDL		
12/21/20	EDL		
12/22/20	EDL		
01/13/21	EDL		
02/15/21	JAR		

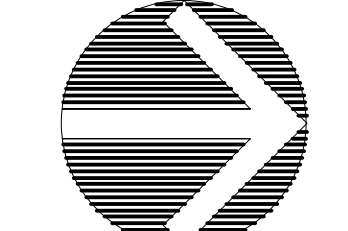


MASTER EROSION CONTROL PLAN FOR:

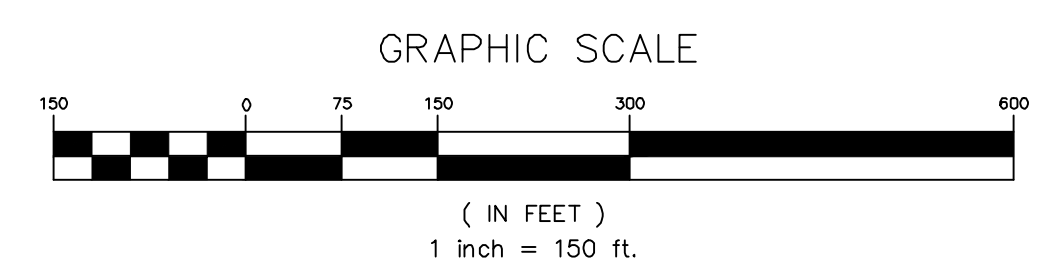
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



MASTER EROSION CONTROL PLAN



DRAWN BY: DNX
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

SHEET
C300

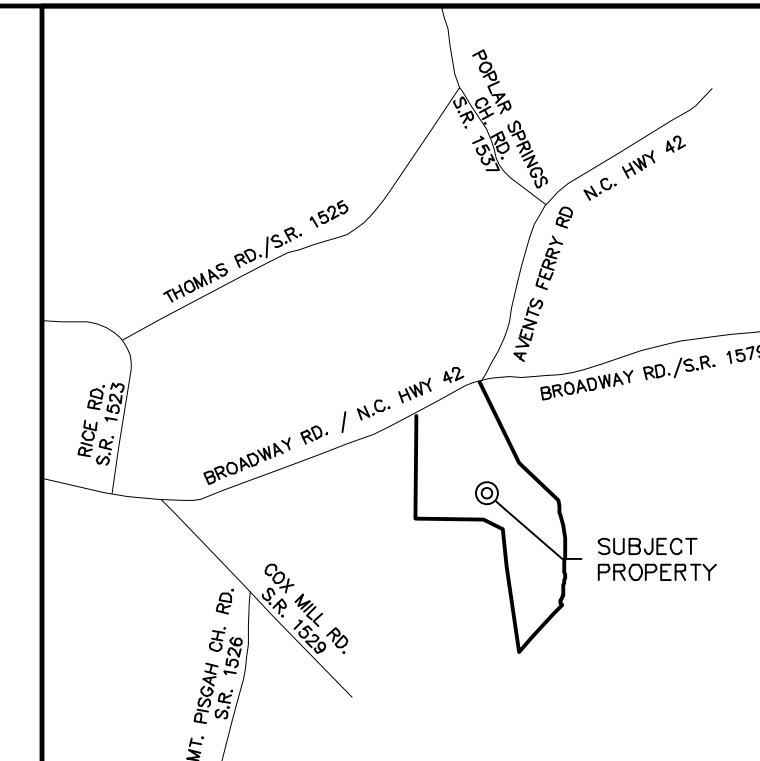
NOTES

- SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES, CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
- NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
- TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.

SP-5474 Sub 0

ROUGH GRADING & EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	
SILT FENCE	
CONCENTRATED FLOW OUTLET	
SKIMMER & CONTROL STRUCTURE	
TEMPORARY PIPE	
EXISTING CONTOURS	
PROPOSED CONTOURS	
TEMPORARY DIVERSION DITCH	
CHECK DAM	
SLOPE STABILIZATION	
EXISTING WETLANDS	
PROPOSED CULVERT	
PROPOSED STONE INLET PROTECTION	



VICINITY MAP
(NOT TO SCALE)

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
 130 ROBERTS STREET
 ASHEVILLE, NC 28801
 CONTACT: BEN CATT
 (828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
 168 PATTON AVENUE
 ASHEVILLE, NC 28801
 GREG HOFFMAN, P.E.
 (828) 252-5388

CONTACT: STEWART-PROCTOR, PLLC
 319 CHAPANOKE ROAD SUITE 106
 RALEIGH, NC 27603
 (919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
 ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
 DEED BOOK/PAGE: 01586/0390-0392
 SITE ACREAGE: 75.6 ACRES
 ZONING: R-20
 SETBACKS:
 FRONT: 100'
 SIDES: 50'
 REAR: 50'

DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

PRE-DEVELOPMENT:	IMPERVIOUS: 0.00 ACRES (00%)	PERVIOUS: 75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:

SOIL TYPE: CTD DuB FuB PoF
 HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
 STREAM INDEX: 18-20-9
 STREAM NAME: PATCHET CREEK (PATCH CREEK)
 DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
 CLASSIFICATION: C
 RIVER BASIN: CAPE FEAR

168 PATTON AVENUE
 ASHEVILLE, NC 28801
 PHONE (828) 492-4410
 FAX (828) 252-5388

52 WALNUT STREET - SUITE 9
 WAYNESVILLE, NC 28786
 PHONE (828) 492-4410
 FAX (828) 492-5388

CDC Civil Design Concepts, PA
 www.civildesignconcepts.com

NCBELS LICENSE #: C-2164

ISSUED FOR PERMITS	EDL	NO. OF REVISIONS	EDL	NO. OF REVISIONS	EDL	NO. OF REVISIONS	EDL	NO. OF REVISIONS	EDL	NO. OF REVISIONS	EDL	NO. OF REVISIONS
1	12/17/20		2	12/21/20		3	12/22/20					

BROADWAY ROAD SOLAR, LLC
 0 BROADWAY RD SANFORD, NC

SEAL OF THE CITY OF SANFORD, NORTH CAROLINA
 12/22/20
 GREGORY

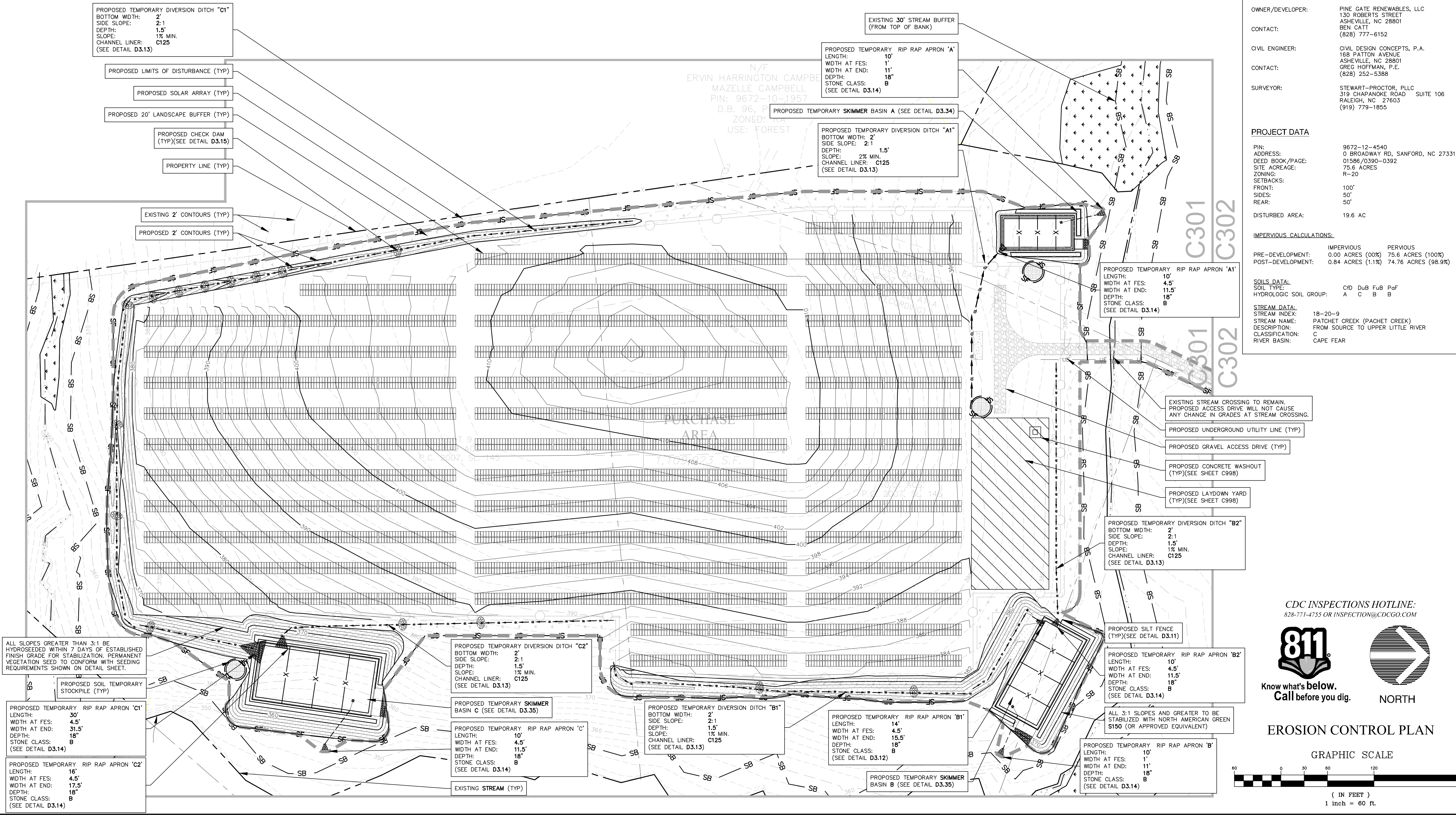
EROSION CONTROL PLAN FOR:
BROADWAY ROAD SOLAR, LLC
 0 BROADWAY RD SANFORD, NC

EROSION CONTROL PLAN FOR:
 PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

EROSION CONTROL PLAN FOR:
 PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
 CDC PROJECT NO.: 1208B
 XXX PERMIT NO. xxx

SHEET
C301



CDC INSPECTIONS HOTLINE:
 828-771-4755 OR INSPECTION@CDCGO.COM

811
 Know what's below.
 Call before you dig.

EROSION CONTROL PLAN

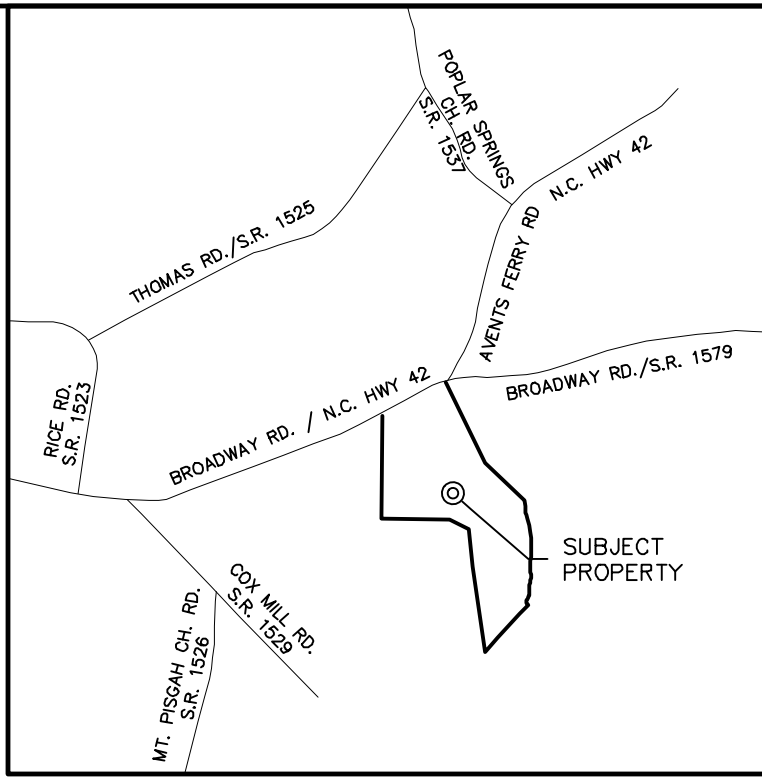
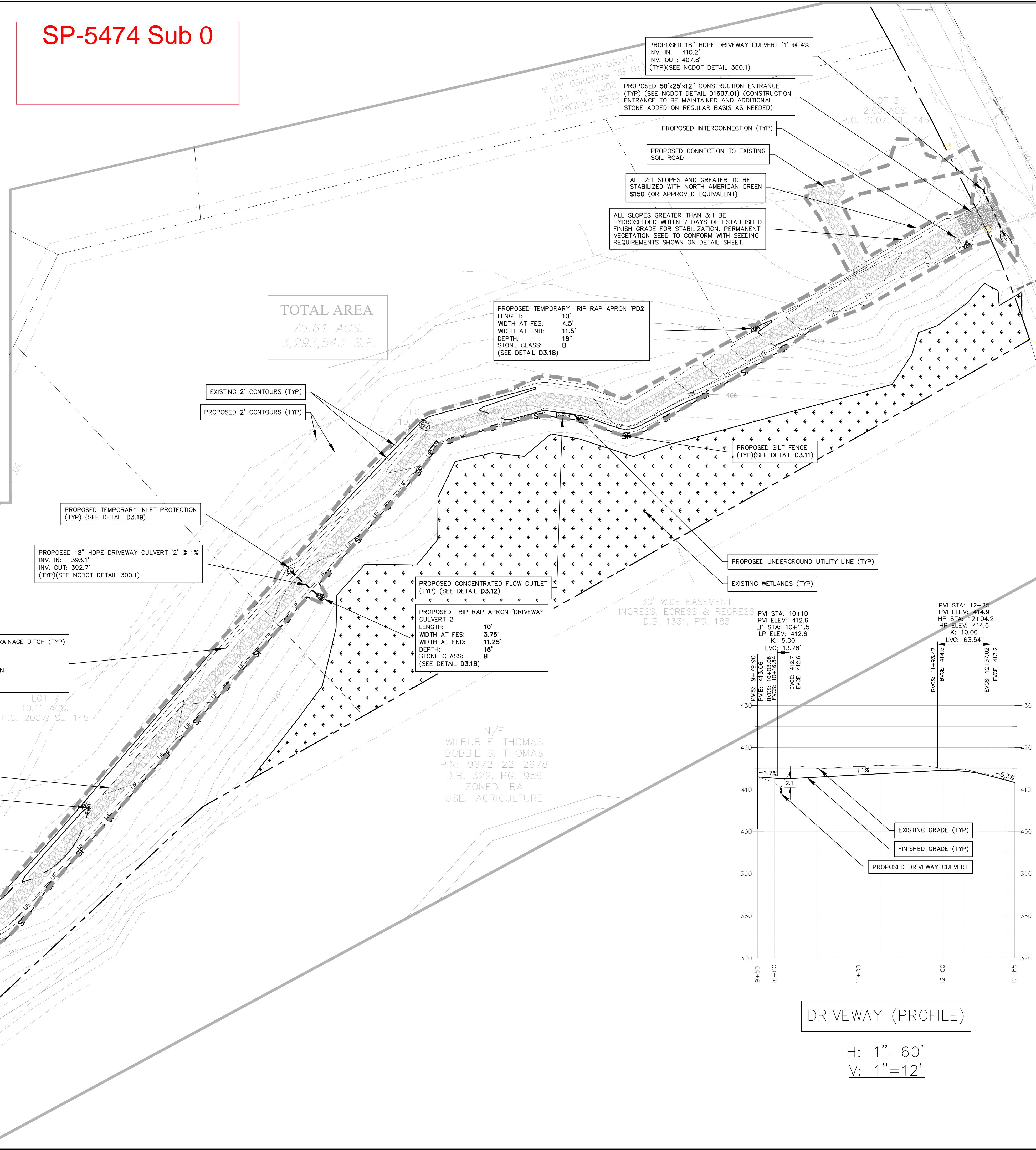
GRAPHIC SCALE
 (IN FEET)
 1 inch = 60 ft.

- NOTES**
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SP-5474 Sub 0

ROUGH GRADING & EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	---
SILT FENCE	— SF —
CONCENTRATED FLOW OUTLET	— SF —
SKIMMER & CONTROL STRUCTURE	— SF —
TEMPORARY PIPE	---
EXISTING CONTOURS	---
PROPOSED CONTOURS	---
TEMPORARY DIVERSION DITCH	---
CHECK DAM	— SF —
SLOPE STABILIZATION	— SF —
EXISTING WETLANDS	---
PROPOSED CULVERT	---
PROPOSED STONE INLET PROTECTION	---



DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
CONTACT: BEN CATT (828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
CONTACT: GREG HOFFMAN, P.E. (828) 252-5388

SURVEYOR: STEWART-PROCTOR, PLLC
319 CHAPANOKE ROAD SUITE 106
RALEIGH, NC 27603
(919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
DEED BOOK/PAGE: 01586/0390-0392
SITE ACREAGE: 75.6 ACRES
ZONING: R-20
SETBACKS: FRONT: 100', SIDES: 50', REAR: 50'
DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

PRE-DEVELOPMENT:	IMPERVIOUS: 0.00 ACRES (00%)	PERVIOUS: 75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:
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HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
STREAM INDEX: 18-20-9
STREAM NAME: PATCHET CREEK (PATCH CREEK)
DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
CLASSIFICATION: C
RIVER BASIN: CAPE FEAR

CDC Civil Design Concepts, PA

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 402-4410
FAX (828) 402-5388

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 402-4410
FAX (828) 402-5388

NCBELS LICENSE #: C-2164

EDL	EDL	EDL	EDL	JAR	BY
ISSUED FOR PERMITS	12/17/20				
NEEDED REVISIONS	12/21/20				
DEED BOOK/PAGE REVISION	12/22/20				
SCALE REVISION	01/13/21				
DRIVEWAY REVISION	02/15/21				
NO.	DATE	DESCRIPTION			
1	12/17/20				
2	12/21/20				
3	12/22/20				
4	01/13/21				
5	02/15/21				

BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

EROSION CONTROL PLAN FOR:

811 Know what's below. Call before you dig.

EROSION CONTROL PLAN

GRAPHIC SCALE
(IN FEET)
1 inch = 60 ft.

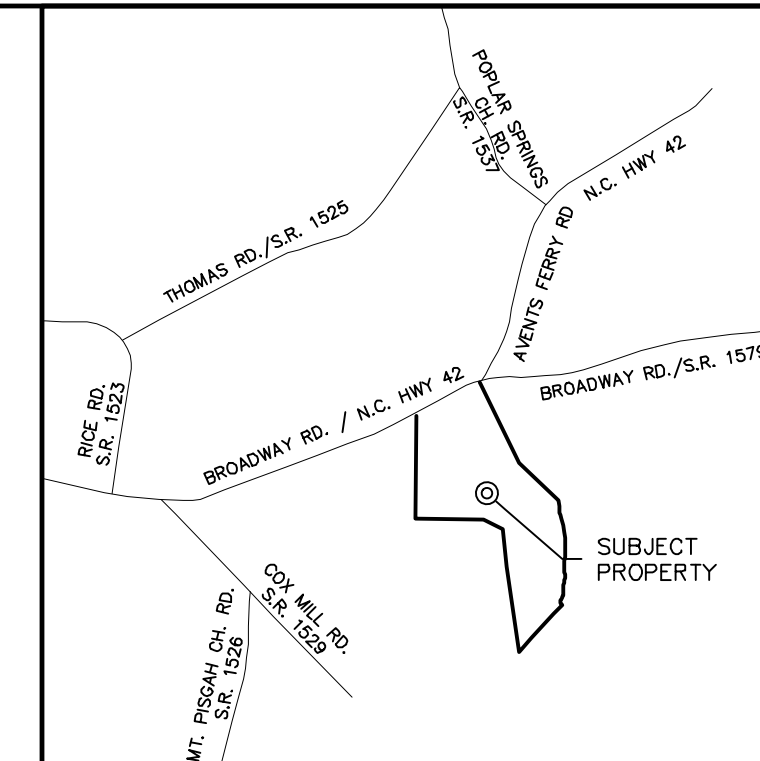
SHEET
C302

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO. xxx

NOTES

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SP-5474 Sub 0



VICINITY MAP
(NOT TO SCALE)

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
PHONE (828) 492-5386
FAX (828) 282-5386

CONTACT: BEN CATT
(828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
GREG HOFFMAN, P.E.
(828) 252-5388

CONTACT: GREG HOFFMAN, P.E.
(828) 252-5388

SURVEYOR: STEWART-PROCTOR, PLLC
319 CHAPANOKE ROAD SUITE 106
RALEIGH, NC 27603
(919) 779-1855

PROJECT DATA

PIN: 8672-12-4540
ADDRESS: 0 BROADWAY RD, SANFORD, NC 27331
DEED BOOK/PAGE: 01586/0390-0392
SITE ACREAGE: 75.6 ACRES
ZONING: R-20
SETBACKS:
FRONT: 100'
SIDES: 50'
REAR: 50'

DISTURBED AREA: 19.6 AC

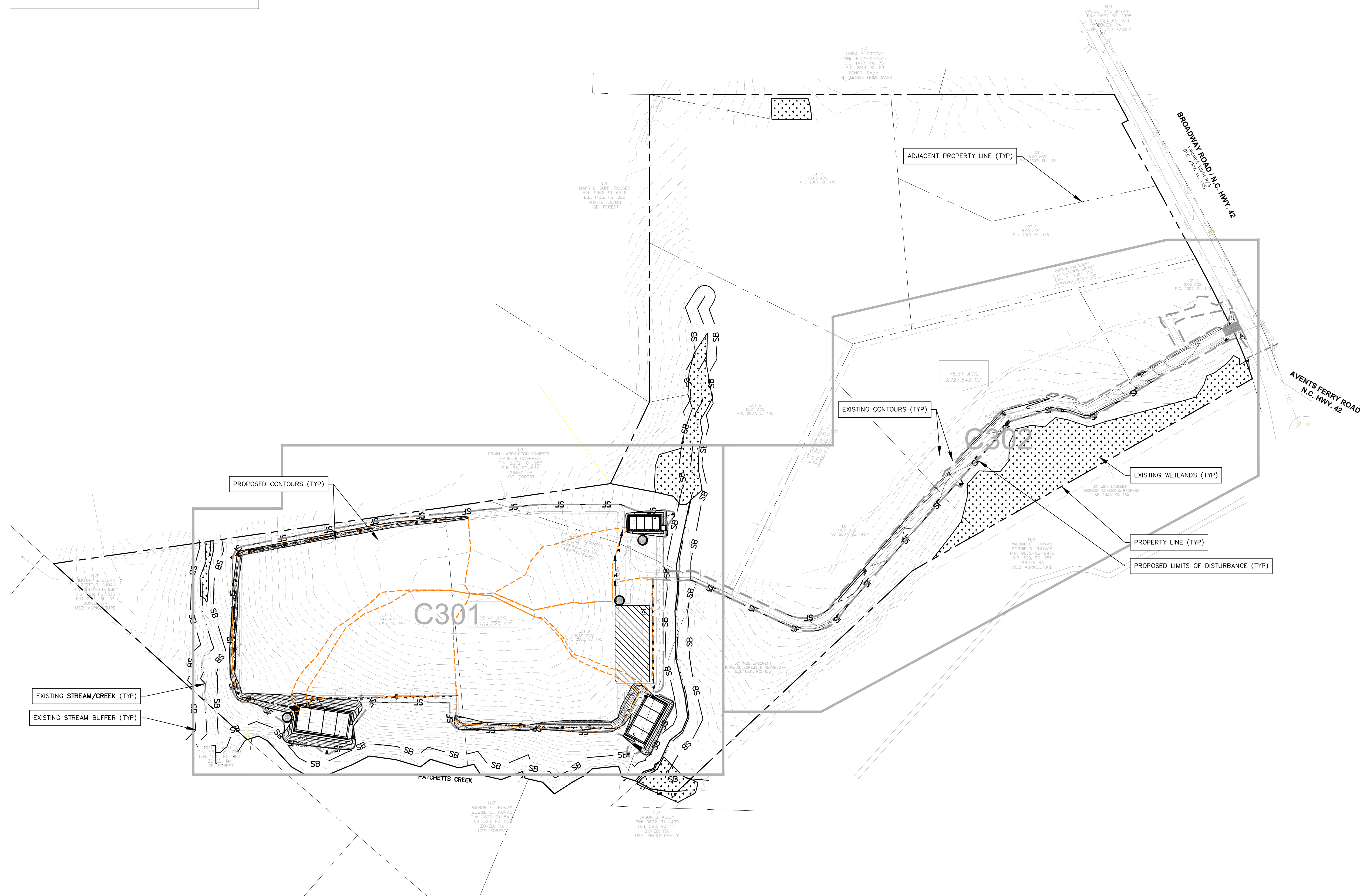
IMPERVIOUS CALCULATIONS:

	IMPERVIOUS	PERVIOUS
PRE-DEVELOPMENT:	0.00 ACRES (00%)	75.6 ACRES (100%)
POST-DEVELOPMENT:	0.84 ACRES (1.1%)	74.76 ACRES (98.9%)

SOILS DATA:

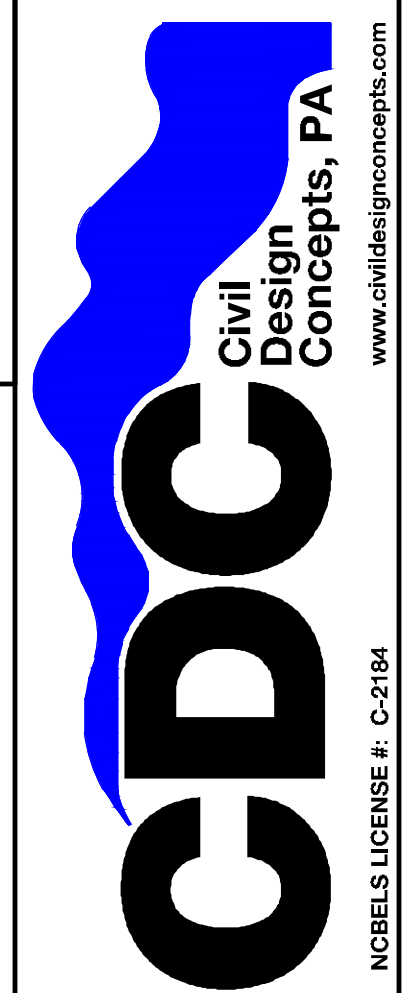
SOIL TYPE: C1D DuB FuB PoF
HYDROLOGIC SOIL GROUP: A C B B

STREAM DATA:
STREAM INDEX: 18-20-9
STREAM NAME: PATCHETTS CREEK (PATCH CREEK)
DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
CLASSIFICATION: C
RIVER BASIN: CAPE FEAR



168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 492-5386
FAX (828) 282-5386

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 492-4410
FAX (828) 492-5656



ISSUED FOR PERMITS	EDL	BY	DESCRIPTION
12/21/20	EDL		
12/22/20	EDL		
01/13/21	EDL		
02/15/21	JAA		

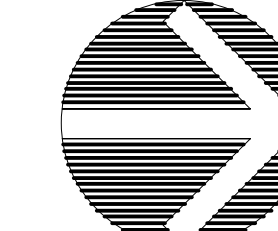


MASTER GRADING PLAN FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



Know what's below.
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NORTH

MASTER GRADING PLAN

GRAPHIC SCALE



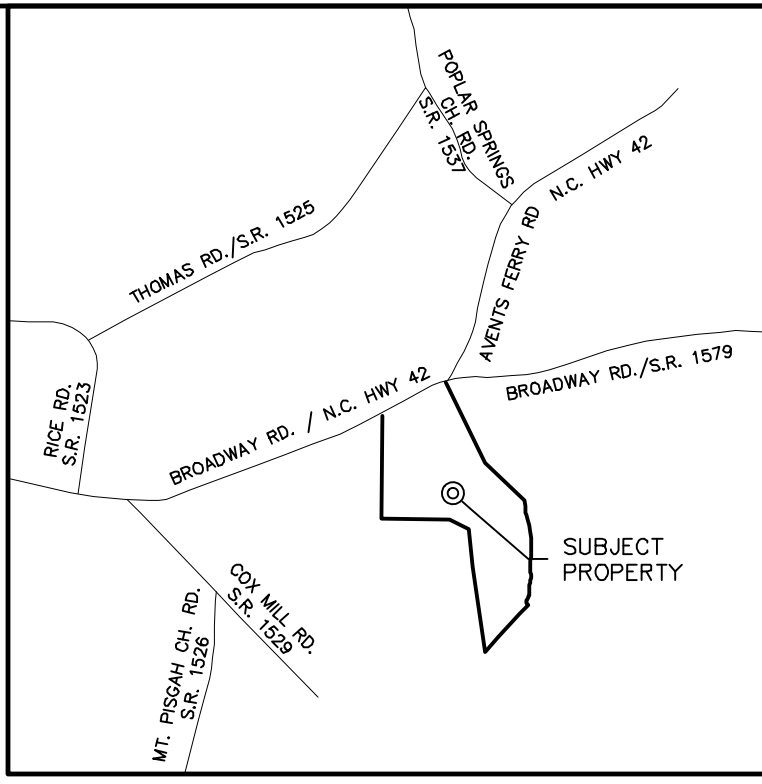
(IN FEET)
1 inch = 150 ft.

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

SHEET
C400

- NOTES**
- SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES, CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
 - NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
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SP-5474 Sub 0



168 PATTON AVENUE
ASHEVILLE, NC 28801
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FAX (828) 252-5386

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PHONE (828) 492-4410
FAX (828) 492-5386

CDC Civil Design Concepts, PA
www.civildesignconcepts.com
NCBELS LICENSE #: C-2164

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
130 ROBERTS STREET
ASHEVILLE, NC 28801
BEN CATT
(828) 777-6152

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
168 PATTON AVENUE
ASHEVILLE, NC 28801
GREG HOFFMAN, P.E.
(828) 252-5386

CONTACT:

SURVEYOR: STEWART-PROCTOR, PLLC
319 CHAPANOKE ROAD SUITE 106
RALEIGH, NC 27603
(919) 779-1855

PROJECT DATA

PIN: 9672-12-4540
ADDRESS: 0 BROADWAY RD., SANFORD, NC 27331
DEED BOOK/PAGE: 01586/0390-0392
SITE ACREAGE: 75.6 ACRES
ZONING: R-20
SETBACKS:
FRONT: 100'
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DISTURBED AREA: 19.6 AC

IMPERVIOUS CALCULATIONS:

PRE-DEVELOPMENT:	IMPERVIOUS: 0.00 ACRES (00%)	PERVIOUS: 75.6 ACRES (100%)
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SOIL TYPE: C1D DuB FuB PoF
HYDROLOGIC SOIL GROUP: A C B B

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STREAM INDEX: 18-20-9
STREAM NAME: PATCHET CREEK (PATCH CREEK)
DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
CLASSIFICATION: C
RIVER BASIN: CAPE FEAR

ISSUED FOR PERMITS	EDL	NO.	DATE	DESCRIPTION	BY
1	12/17/20				
2	12/21/20				
3	12/22/20				

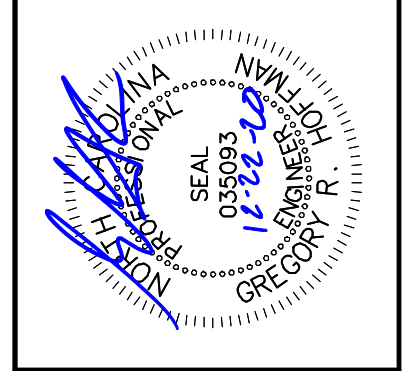


EXISTING STREAM CROSSING TO REMAIN.
PROPOSED ACCESS DRIVE WILL NOT CAUSE
ANY CHANGE IN GRADES AT STREAM CROSSING.

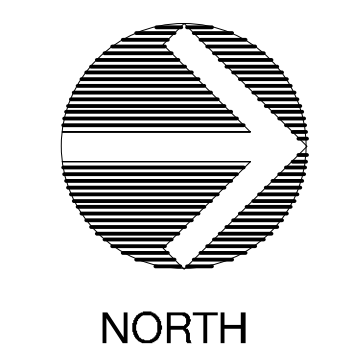
PROPOSED UNDERGROUND UTILITY LINE (TYP)

PROPOSED GRAVEL ACCESS DRIVE (TYP)

ISSUED FOR PERMITS	EDL	NO.	DATE	DESCRIPTION	BY
1	12/17/20				
2	12/21/20				
3	12/22/20				

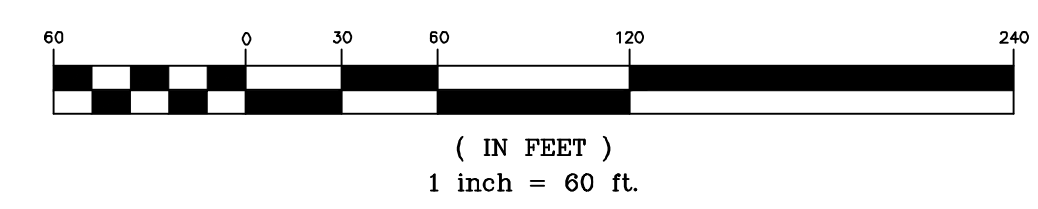


CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



GRADING PLAN

GRAPHIC SCALE



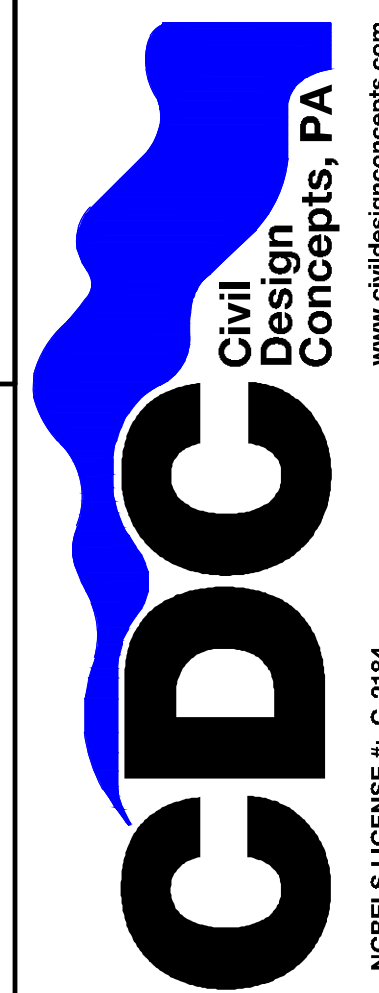
GRADING PLAN FOR:

BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

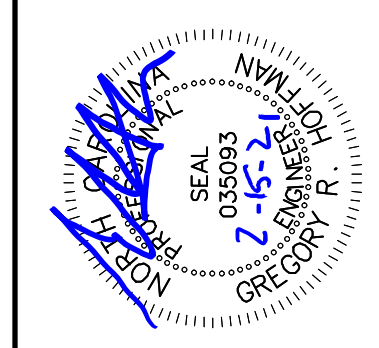
PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

SHEET
C401



NO.	DATE	DESCRIPTION	BY
1	12/17/20	ISSUED FOR PERMITS	EDL
2	12/21/20	INDEXED REVISIONS	EDL
3	12/22/20	DEED BOOK/PAGE REVISION	EDL
4	01/17/21	SCALE REVISION	EDL
5	02/15/21	DRIVEWAY REVISION	JAA



GRADING PLAN FOR
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

811
 Know what's below.
 Call before you dig.

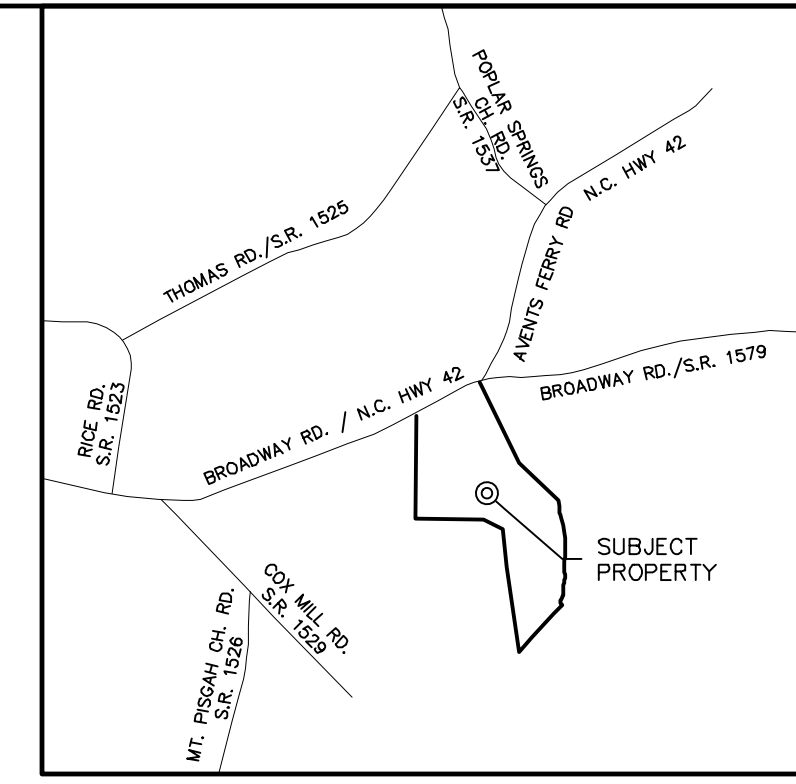
NORTH

GRADING PLAN

GRAPHIC SCALE
 (IN FEET)
 1 inch = 60 ft.

DRAWN BY: DNR
 CDC PROJECT NO.: 12088
 XXX PERMIT NO.: xxx

SHEET
C402



VICINITY MAP
(NOT TO SCALE)

DEVELOPMENT DATA

OWNER/DEVELOPER: PINE GATE RENEWABLES, LLC
 130 ROBERTS STREET
 ASHEVILLE, NC 28801
 CONTACT: BEN CATT
 (828) 777-6152

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.
 168 PATTON AVENUE
 ASHEVILLE, NC 28801
 CONTACT: GREG HOFFMAN, P.E.
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SURVEYOR: STEWART-PROCTOR, PLLC
 319 CHAPANOKE ROAD SUITE 106
 RALEIGH, NC 27603
 (919) 779-1855

PROJECT DATA

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DISTURBED AREA: 19.6 AC

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SOILS DATA:

SOIL TYPE: C1D DuB FuB PoF
 HYDROLOGIC SOIL GROUP: A C B P

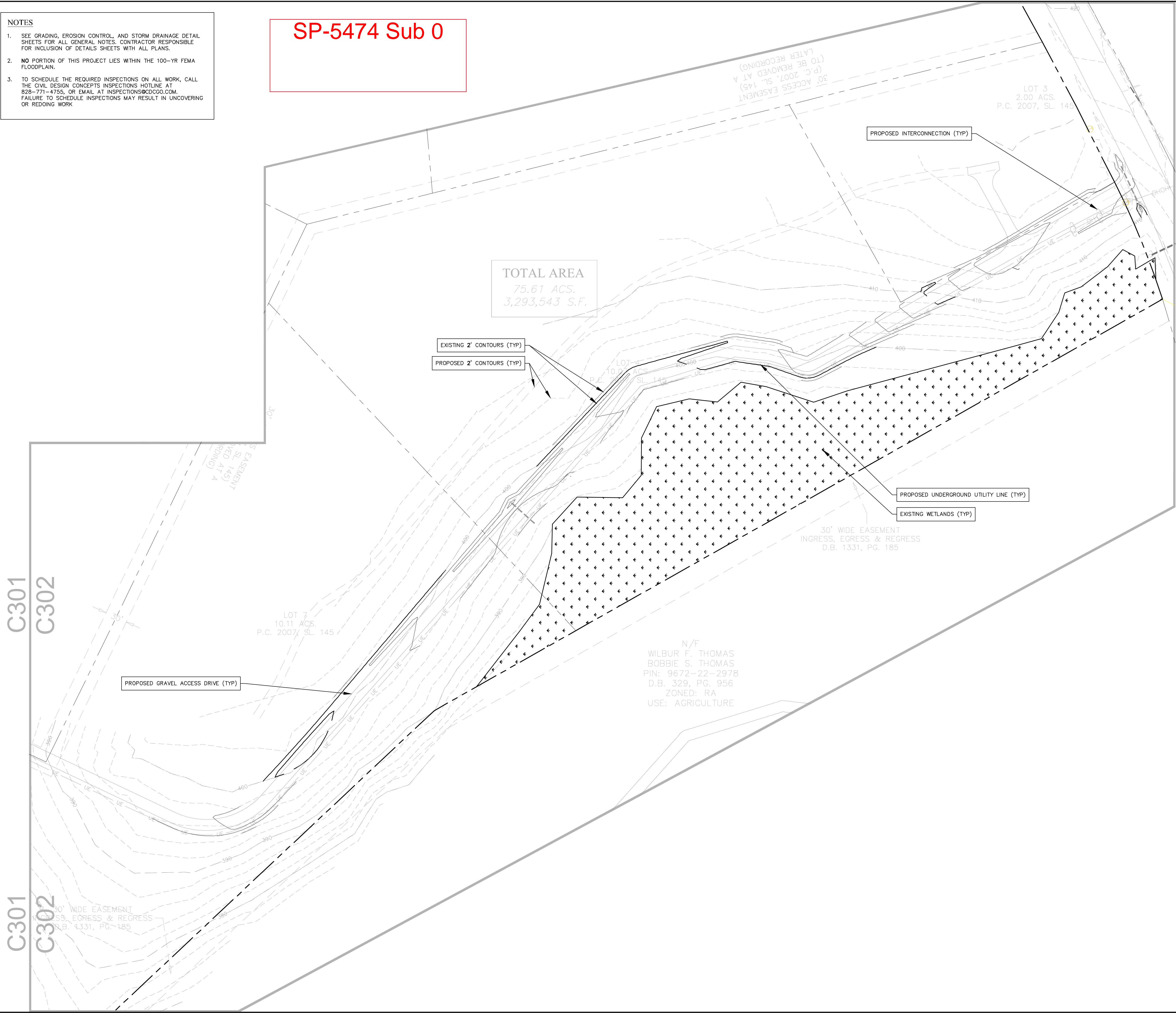
STREAM DATA:

STREAM INDEX: 18-20-9
 STREAM NAME: PATCHET CREEK (PATCH CREEK)
 DESCRIPTION: FROM SOURCE TO UPPER LITTLE RIVER
 CLASSIFICATION: C
 RIVER BASIN: CAPE FEAR

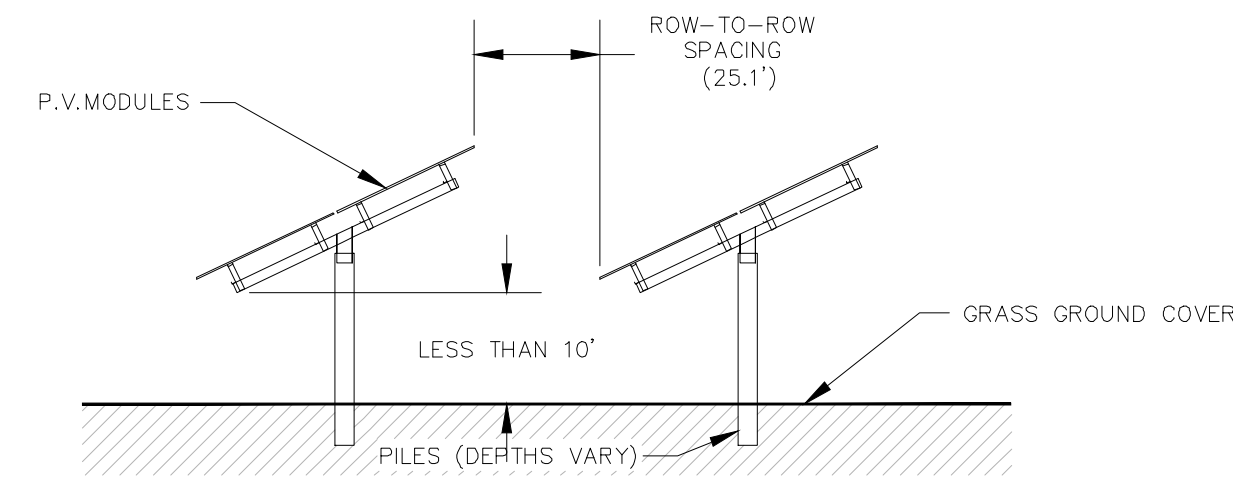
- NOTES**
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SP-5474 Sub 0

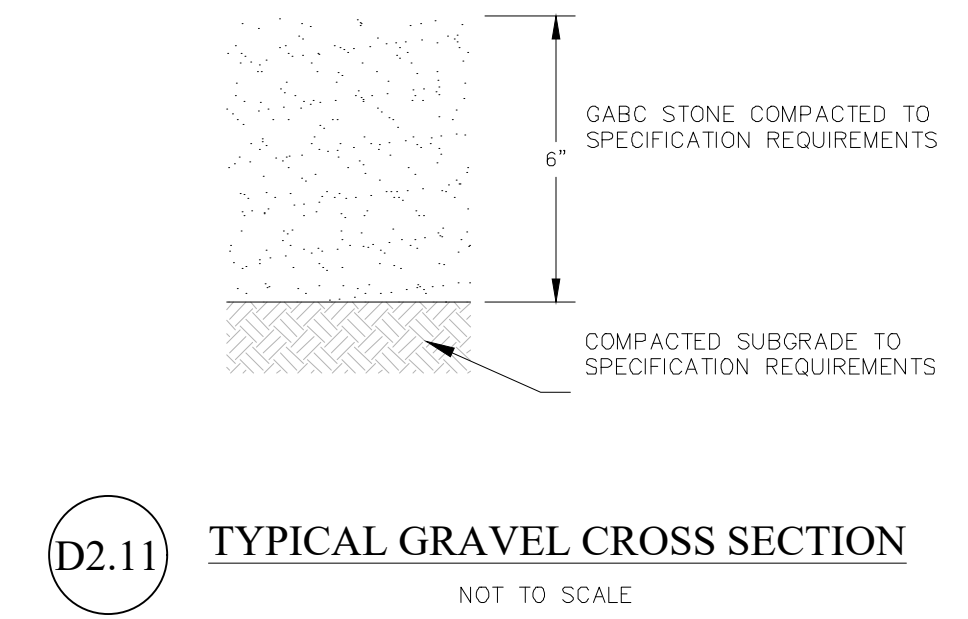
TOTAL AREA
 75.61 ACS.
 3,293,543 S.F.



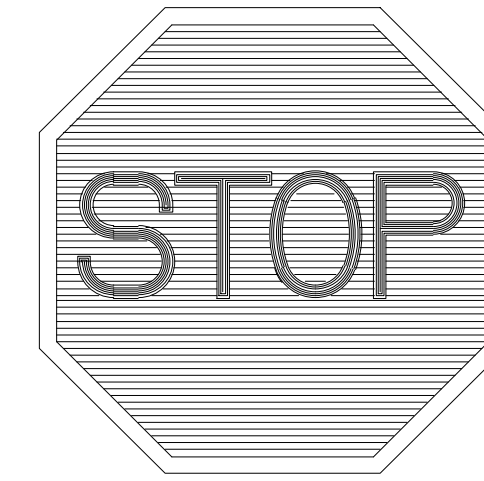
GRADING PLAN FOR:



D2.13 SOLAR RACKING (ELEVATION VIEW)
NOT TO SCALE

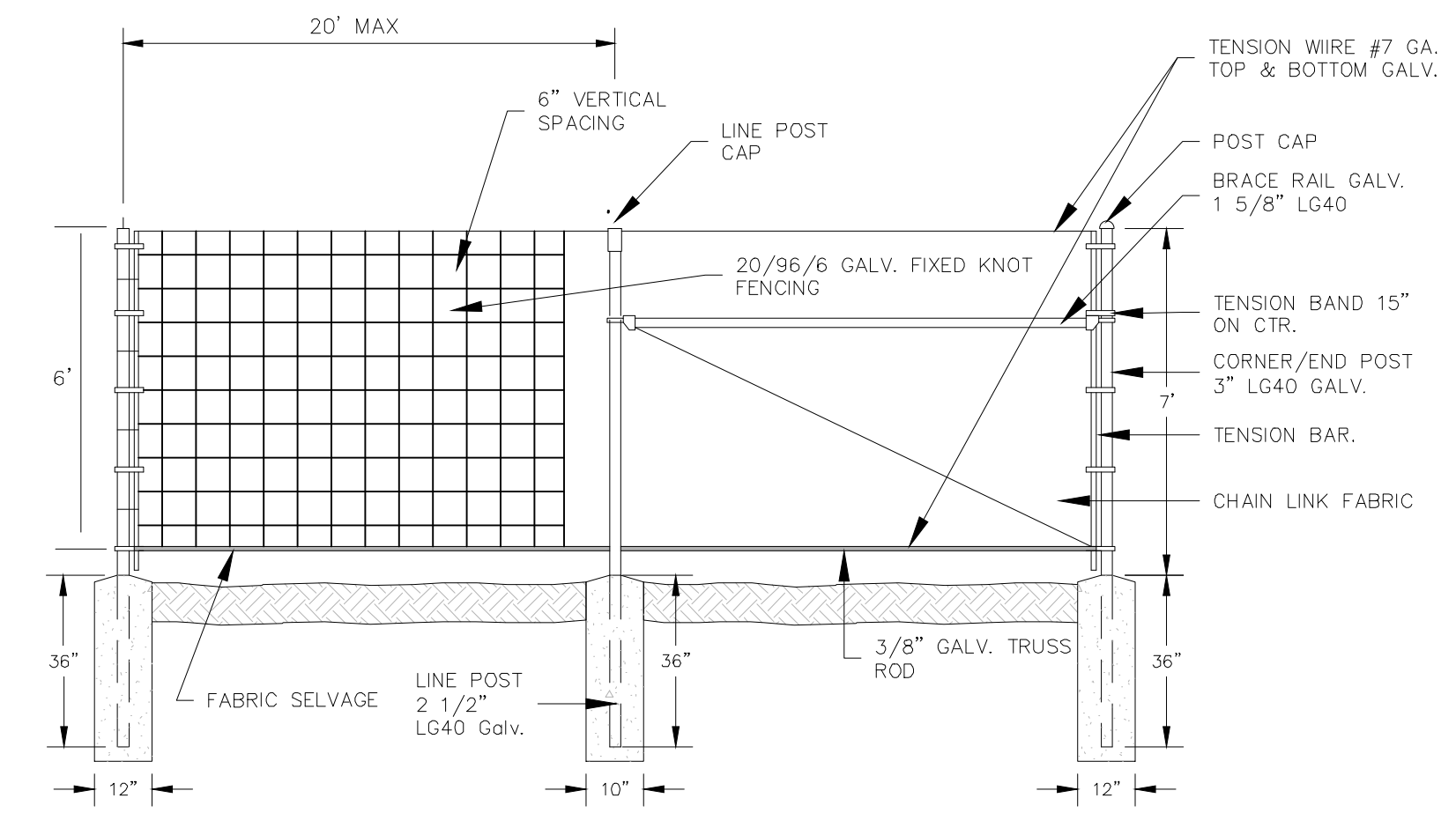


D2.11 TYPICAL GRAVEL CROSS SECTION
NOT TO SCALE



- NOTES:
- SIGN SHALL HAVE WHITE LETTERS ON A RED REFLECTIVE BACKGROUND.
 - ALL SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

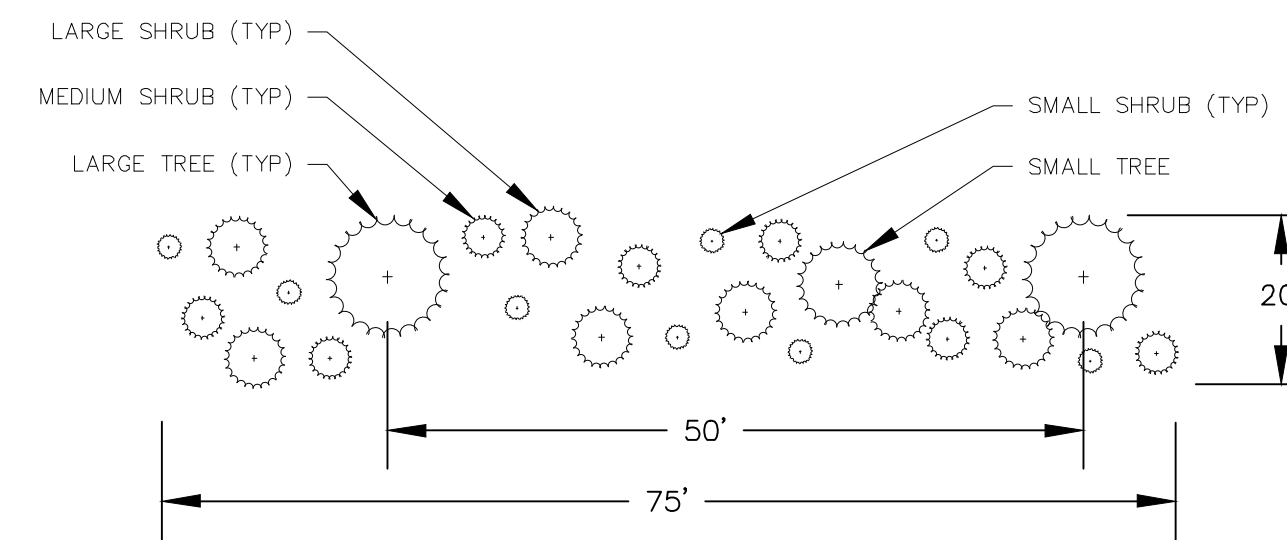
D2.17 STOP SIGN DETAIL
NOT TO SCALE



FABRIC	HEIGHT	MESH	GAGE	SELVAGE	FINISH
FRAMEWORK	8"	F.K.	WALL	WT. PER FT.	GALV
END/CORNER POST	3"		0.160	4.64	11'
LINE POST	2 1/2"		0.130	3.12	10.5'
RAILS	1 5/8"		0.111	1.84	21'
GATE FRAME	1 5/8"		0.111	1.84	VARIES
GATE POST	4"		0.160	6.56	11'

NOTES

D2.14 FIXED KNOT FENCE DETAIL
NOT TO SCALE



TYPE A BUFFER YARD

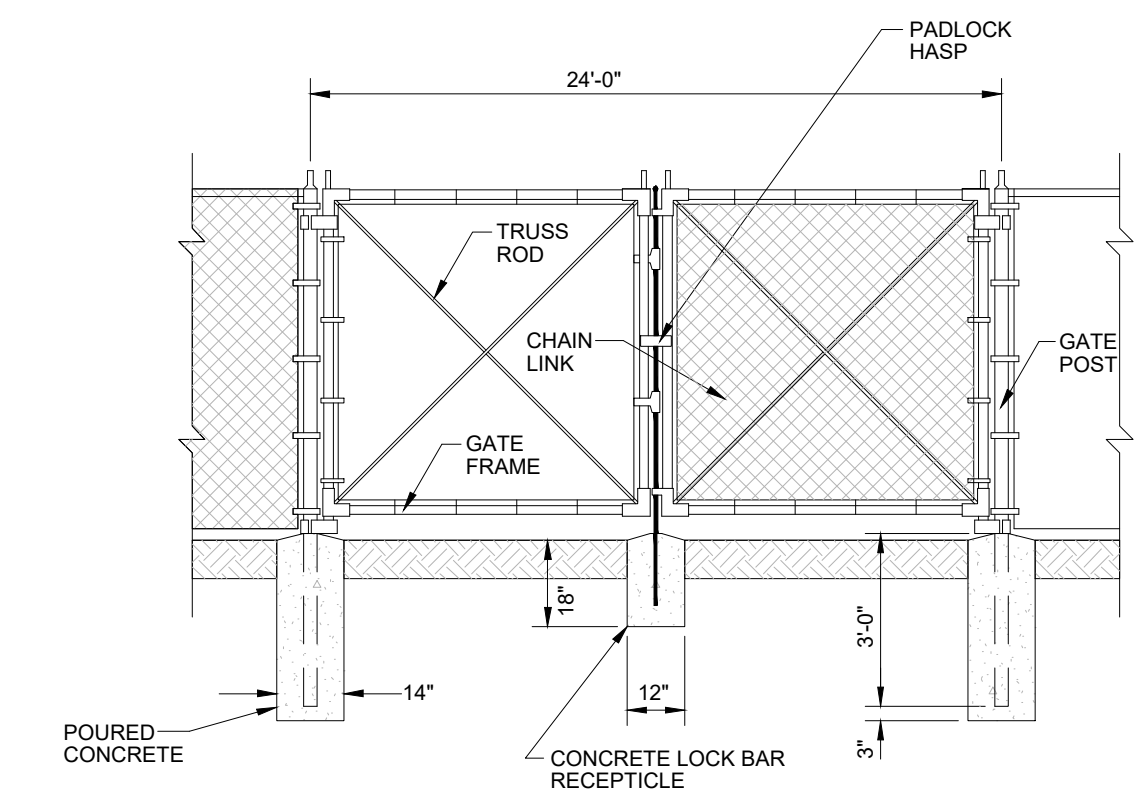
- 1 LARGE TREE(S) REQUIRED PER 50 LINEAR FEET
- 2 SMALL TREE(S) REQUIRED PER 75 LINEAR FEET
- 1 POINT REQUIRED PER LINEAR FEET:

POINTS FOR INDIVIDUAL PLANT TYPES

TYPE OF PLANT	POINTS PER PLANT	QTY
LARGE TREE	12	2 (MIN)
SMALL TREE	6	1 (MIN)
LARGE SHRUB	3	7
MEDIUM SHRUB	2	8
SMALL SHRUB	1	8

ALTERNATIVE QUANTITIES OF PLANTS MAY BE USED PROVIDED THE SUM OF THE POINTS ACHIEVED BY THE QUANTITIES EQUALS OR EXCEEDS THE MINIMUM REQUIRED RATE OF POINTS PER LINEAR FEET FOR THE TYPE C LANDSCAPE BUFFER.

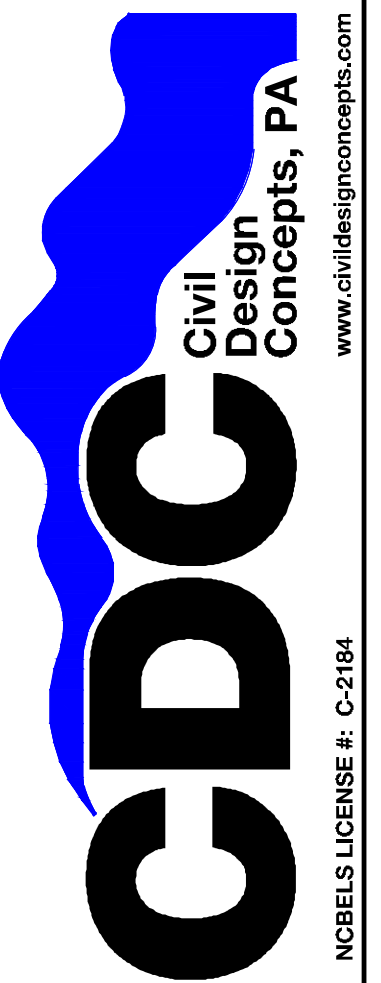
D2.16 TYPE C LANDSCAPE BUFFER
NOT TO SCALE



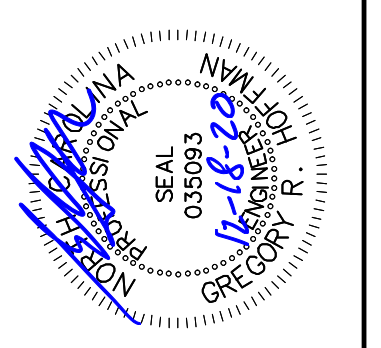
D2.15 DOUBLE CHAIN LINK SWING GATE
NOT TO SCALE

SITE DETAILS

186 PATTON AVENUE
WAYNESVILLE, NC 28801
PHONE (828) 292-5886
FAX (828) 292-5886

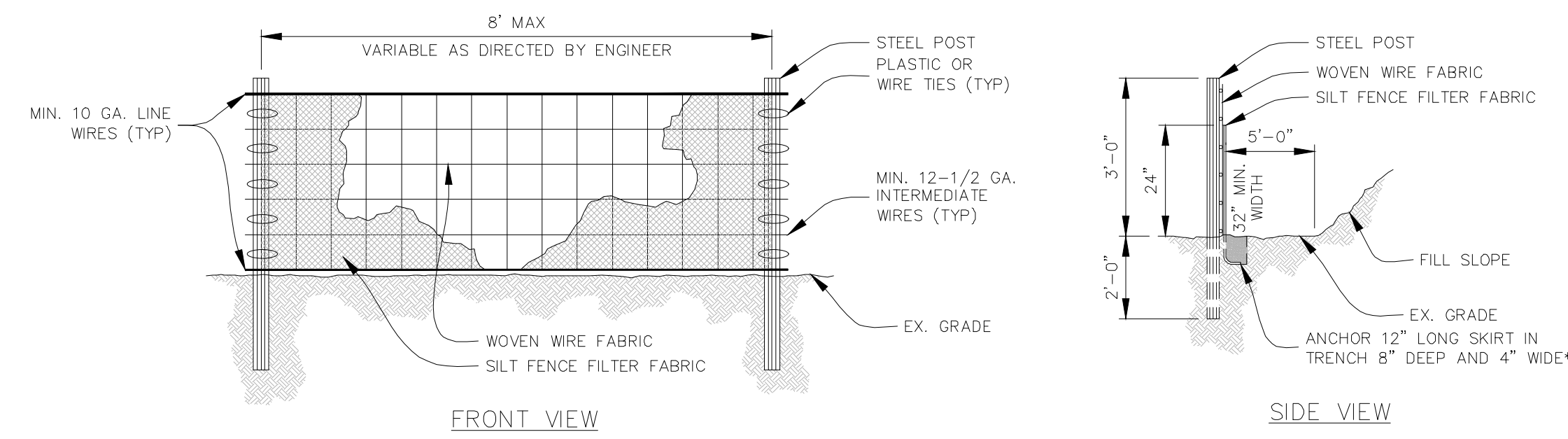


EDU.	ISSUED FOR PERMITS	NO.	DATE	DESCRIPTION	BY
		1	12/17/20		



SITE DETAILS FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO. xxx



CONSTRUCTION NOTES:

- CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
- ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24" ABOVE THE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.)
- CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL OUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4" MIN. OVERLAP TO THE NEXT POST.
- SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN THE FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC TIES SHOULD HAVE A MIN. 50 LB TENSILE STRENGTH.
- EXCAVATE A TRENCH APPROXIMATELY 4" WIDE AND 8" DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
- PLACE 12" OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
- DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

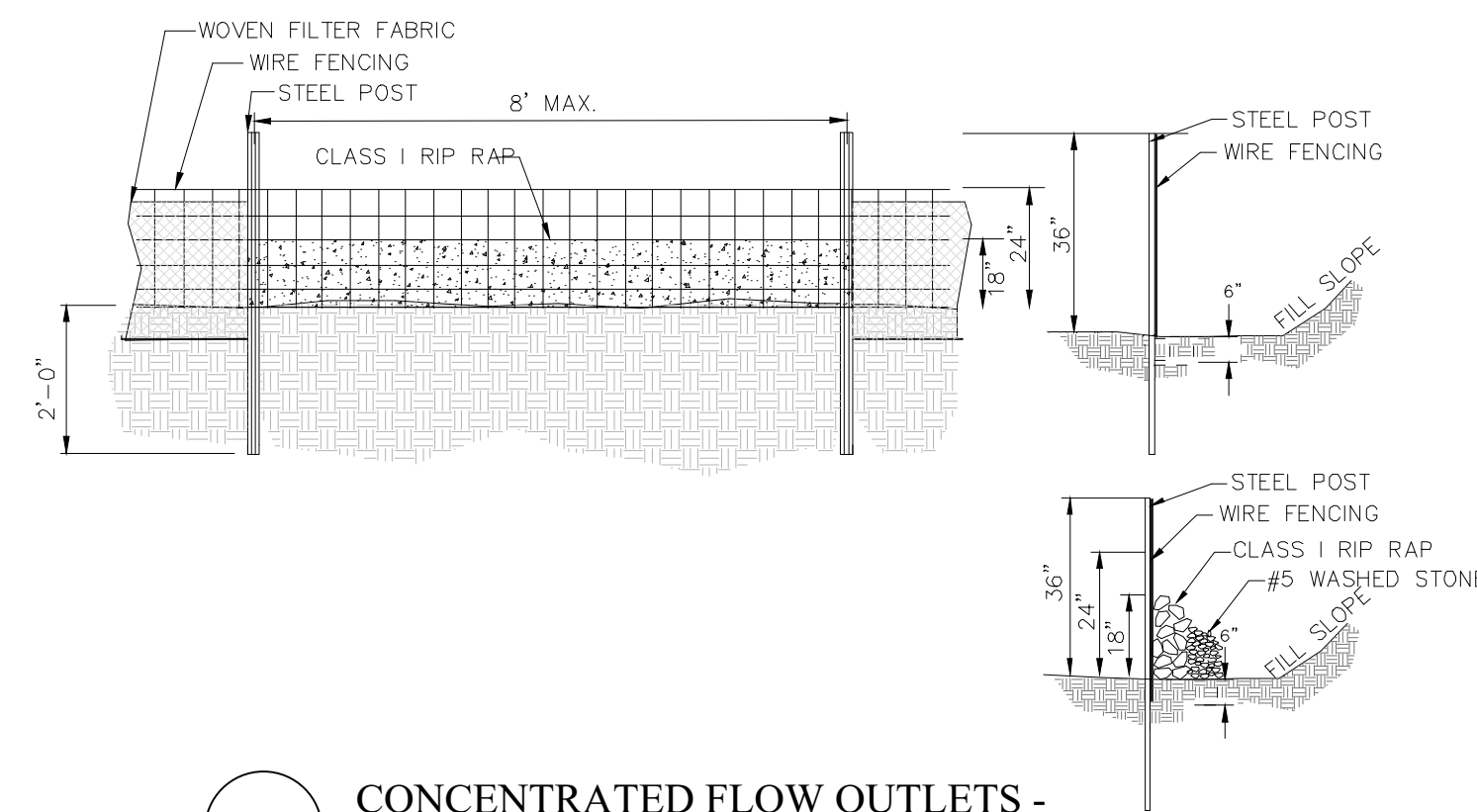
MATERIALS NOTES:

- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.6.2a OF THE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120°F.
- ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
- FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

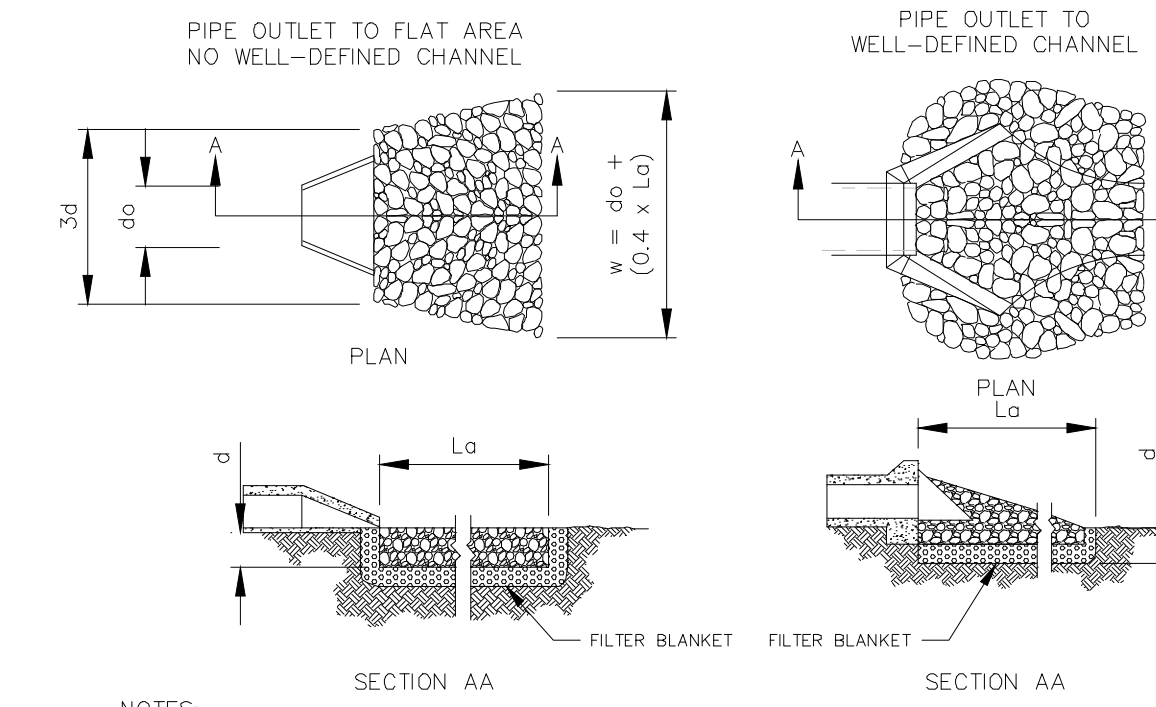
NOTES:

- USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW
- FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED STONE, AS AN ANCHOR WHEN SILT FENCE IS PROTECTING CATCH BASIN.

D2.11 SILT FENCE
NOT TO SCALE



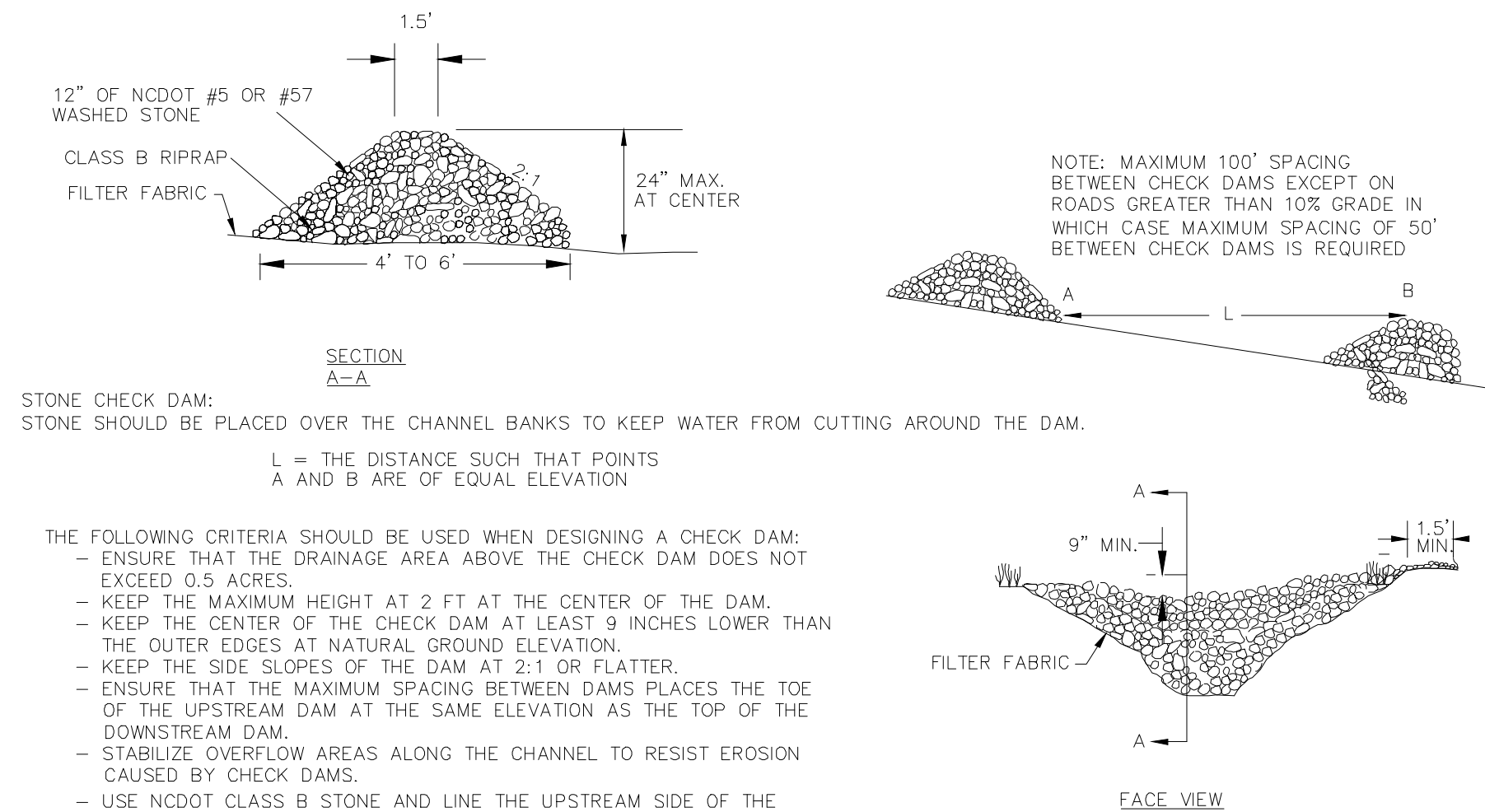
D2.12 CONCENTRATED FLOW OUTLETS - SILT FENCE
NOT TO SCALE



NOTES:

- L_p IS THE LENGTH OF THE RIP RAP APRON.
- $d = 1.5$ TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (MINIMUM IS 24" DEEP IF STONE IS CLASS II)
- IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
- A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
- COMPACT ANY REQUIRED FILL TO DENSITY OF SURROUNDING UNDISTURBED MATERIAL.
- RIP RAP MAY BE FIELDSTONE OR ROUGH QUARRY STONE AND SHALL BE HARD, ANGULAR AND WELL-GRADED.
- CONSTRUCT APRON AT ZERO GRADE. TOP OF RIP RAP SHALL BE LEVEL WITH THE RECEIVING CHANNEL OR SLIGHTLY LOWER.
- ALIGN APRON WITH RECEIVING CHANNEL OR STREAM. ASSURE APRON IS STRAIGHT THROUGHOUT ITS LENGTH.
- END WIDTH OF APRON TO BE EQUAL TO WIDTH OF RECEIVING CHANNEL.

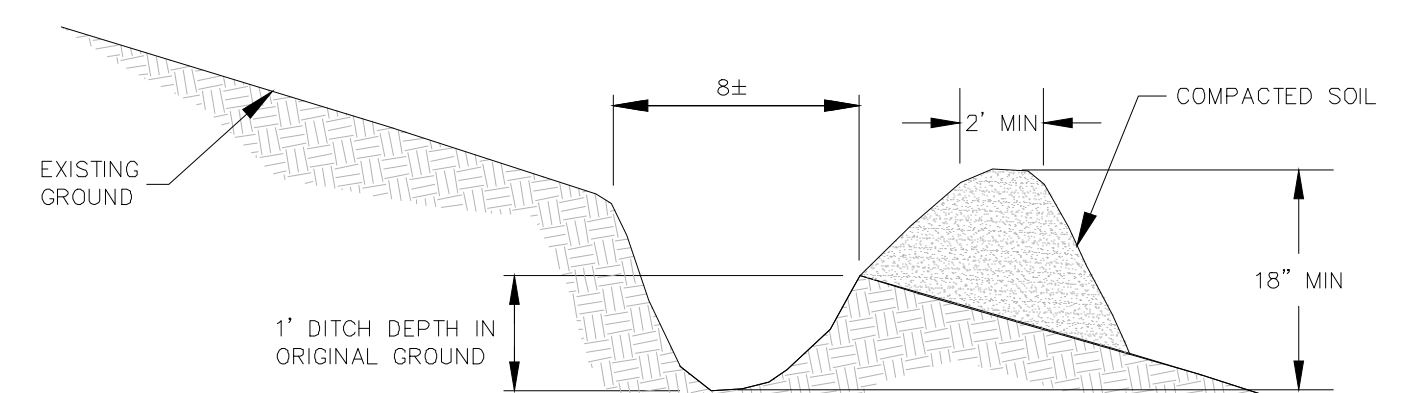
D2.14 RIP-RAP APRON
NOT TO SCALE



STONE CHECK DAM:
STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO KEEP WATER FROM CUTTING AROUND THE DAM.
 L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

- THE FOLLOWING CRITERIA SHOULD BE USED WHEN DESIGNING A CHECK DAM:
- ENSURE THAT THE DRAINAGE AREA ABOVE THE CHECK DAM DOES NOT EXCEED 0.5 ACRES.
 - KEEP THE MAXIMUM HEIGHT AT 2 FT AT THE CENTER OF THE DAM.
 - KEEP THE CENTER OF THE CHECK DAM AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES AT NATURAL GROUND ELEVATION.
 - KEEP THE SIDE SLOPES OF THE DAM AT 2:1 OR FLATTER.
 - ENSURE THAT THE MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
 - STABILIZE OVERFLOW AREAS ALONG THE CHANNEL TO RESIST EROSION CAUSED BY CHECK DAMS.
 - USE NCDOT CLASS B STONE AND LINE THE UPSTREAM SIDE OF THE DAM WITH NCDOT #5 OR #57 STONE.
 - KEY THE STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 1.5 FEET TO AVOID WASHOUTS FROM OVERFLOW AROUND THE DAM.

D2.15 STONE CHECK DAM
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

- REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
- ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
- ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
- PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE RE-GRADING AND CLEAN OUT.
- CONSTRUCT ALL TEMPORARY DIVERSION DITCHES WITH A MINIMUM 2X SLOPE.
- VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

D2.13 TEMPORARY DIVERSION DITCH
NOT TO SCALE

EROSION CONTROL DETAILS

168 PATTON AVENUE
WAYNESVILLE, NC 28801
PHONE (828) 292-5886
FAX (828) 292-5886

82 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 482-4410
FAX (828) 482-4410

CDC Civil Design Concepts, PA
www.civildesignconcepts.com

NCBELS LICENSE #: C-2184

NO.	DATE	DESCRIPTION	ISSUED FOR PERMITS	BY
1	12/17/20			

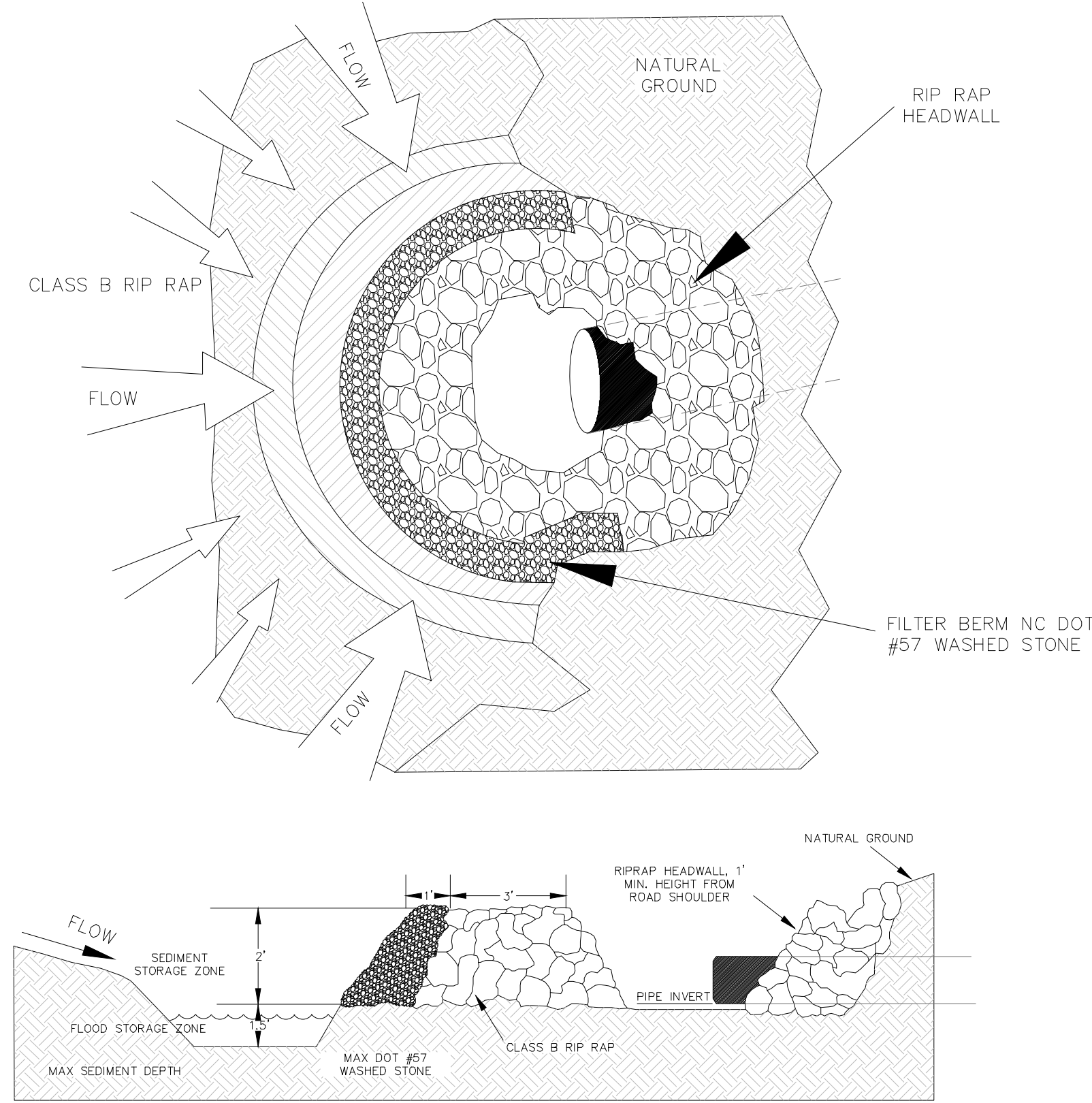
EROSION CONTROL DETAILS FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEVABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

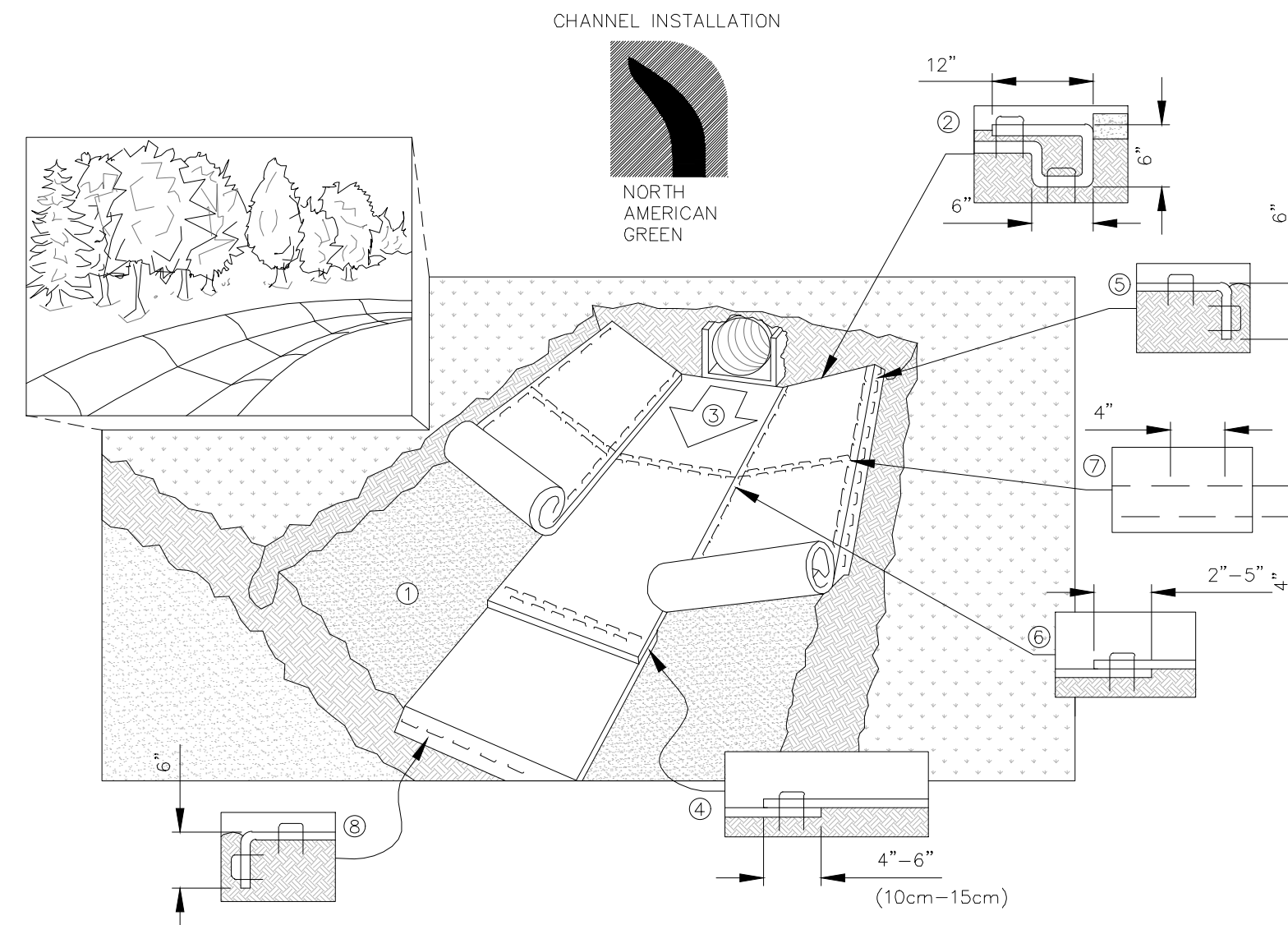
DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO. xxx

SHEET
C931

REFERENCE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL SECTION 6.55 ROCK PIPE INLET PROTECTION

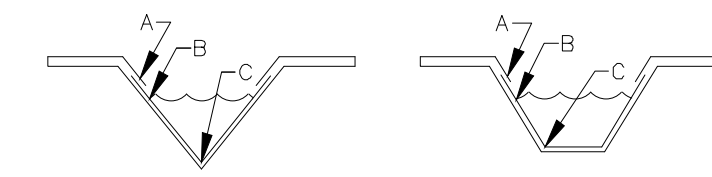


D2.19 ROCK PIPE INLET PROTECTION
NOT TO SCALE



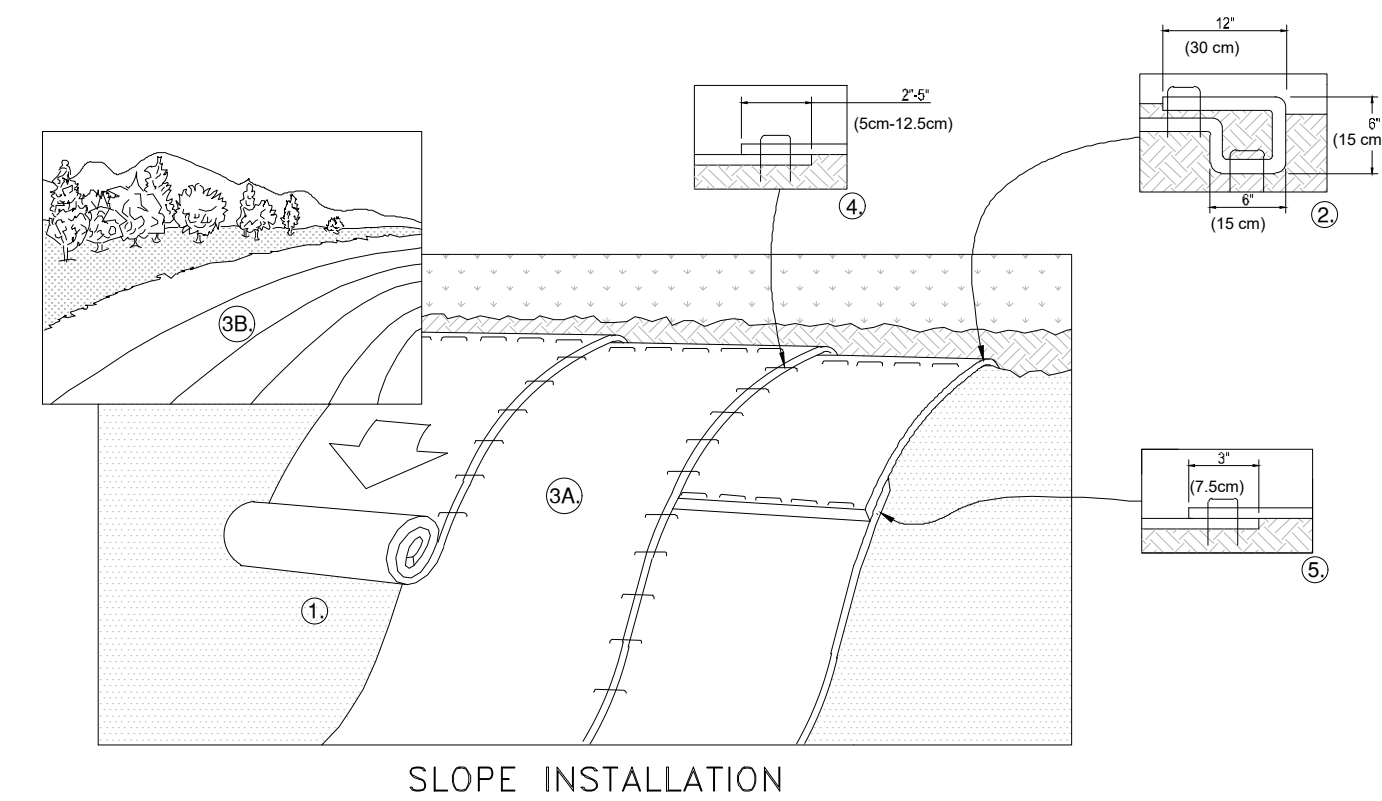
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5cm-12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES



NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

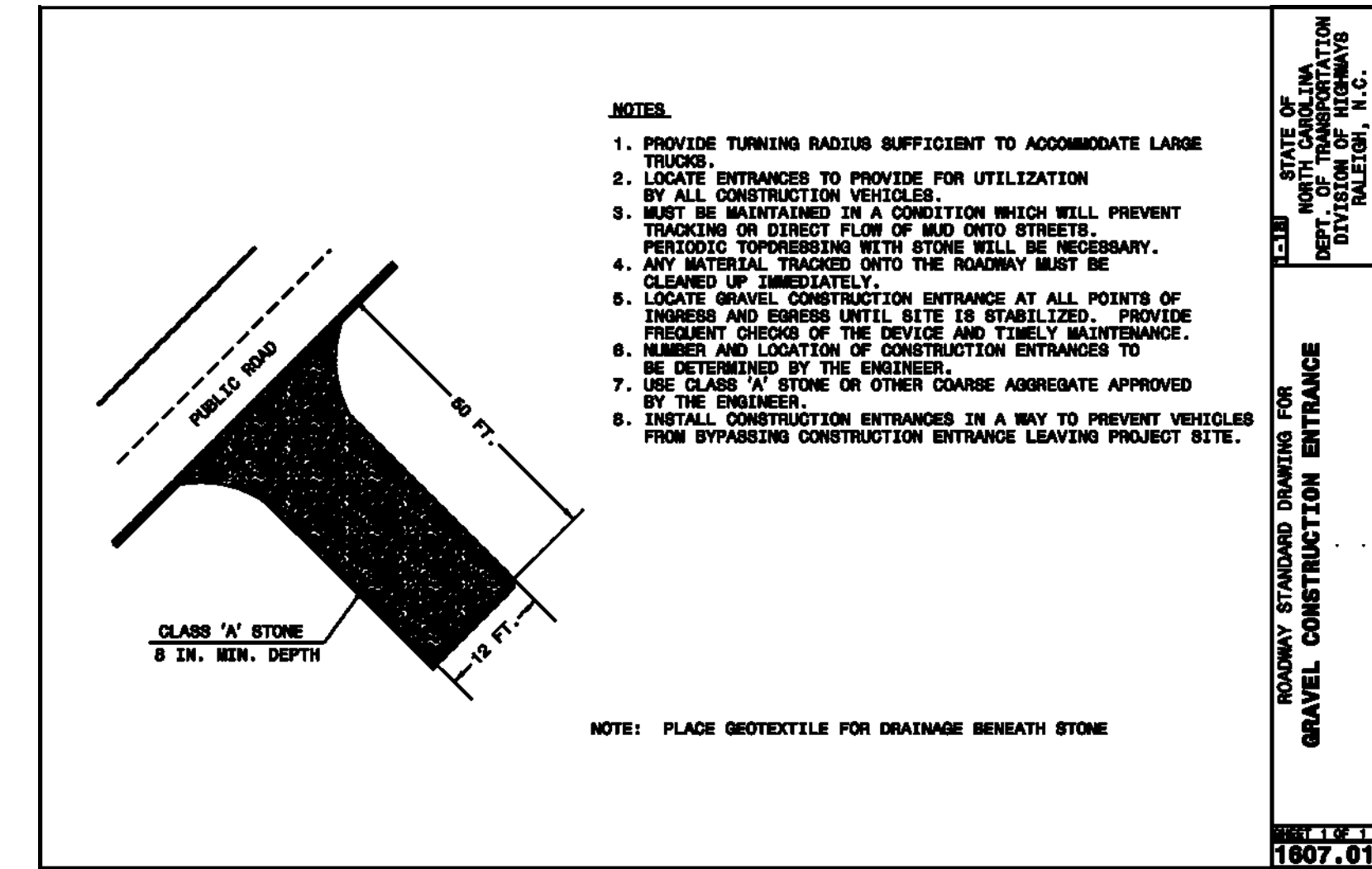
D2.16 CHANNEL LINER INSTALLATION
NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 4" (10cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

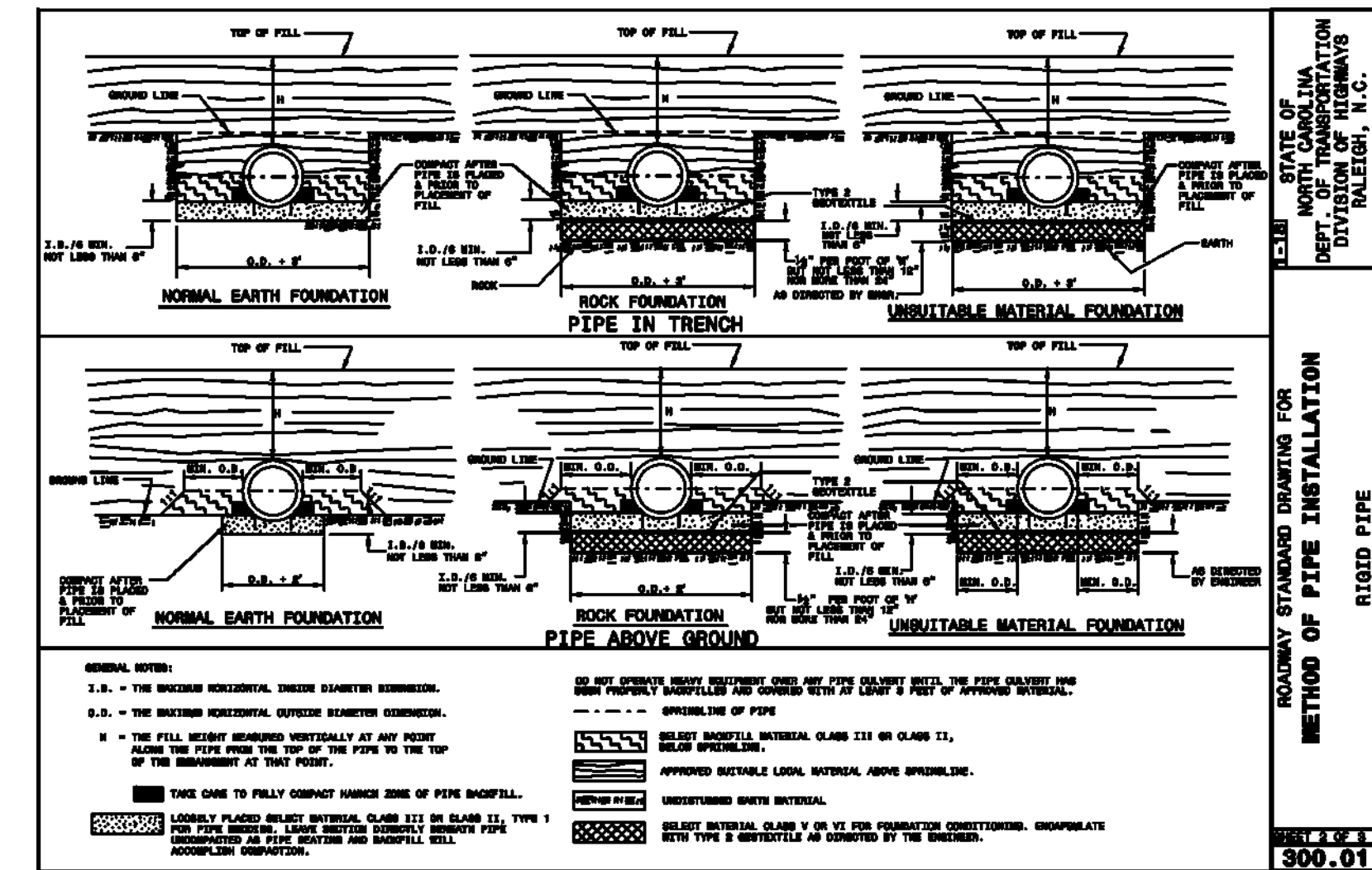
NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

D2.17 EROSION CONTROL SLOPE MATTING INSTALLATION
NOT TO SCALE

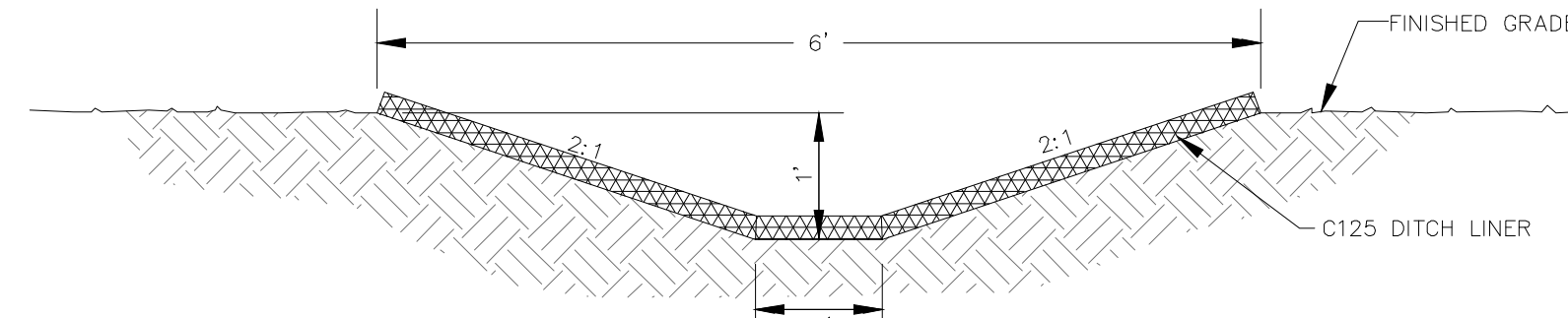


- NOTES:
1. PROVIDE TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS.
 2. LOCATE ENTRANCES TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
 3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
 4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
 5. LOCATE GRAVEL CONSTRUCTION ENTRANCE AT ALL POINTS OF IMPASS AND EGRESS UNTIL SITE IS STABILIZED. PROVIDE FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE.
 6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER.
 7. USE CLASS 'A' STONE OR OTHER COARSE AGGREGATE APPROVED BY THE ENGINEER.
 8. INSTALL CONSTRUCTION ENTRANCES IN A WAY TO PREVENT VEHICLES FROM BYPASSING CONSTRUCTION ENTRANCE LEAVING PROJECT SITE.

NOTE: PLACE GEOTEXTILE FOR DRAINAGE BENEATH STONE



- GENERAL NOTES:
1. A. - THE MAXIMUM HORIZONTAL SLOPE DIAMETER CONNECTION.
 2. A. - THE MAXIMUM HORIZONTAL SLOPE DIAMETER CONNECTION.
 3. - THE FULL LENGTH BLANKETS MUST BE INSTALLED AT THE TOP OF THE PIPE AND THE TOP OF THE PIPE TO THE TOP OF THE FOUNDATION OF THE PIPE.
- DO NOT REMOVE THESE NOTES UNLESS THEY ARE FULLY UNDERSTOOD. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE CORRECTNESS OF THE INFORMATION PROVIDED. APPROVED BY THE ENGINEER. APPROVED BY THE LOCAL AGENCY. APPROVED BY THE LOCAL AGENCY. APPROVED BY THE LOCAL AGENCY.



D2.18 PERMANENT DIVERSION DITCH
NOT TO SCALE

EROSION CONTROL DETAILS

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 252-2886
FAX (828) 252-2886

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 482-4410
FAX (828) 482-4450

CDC Civil Design Concepts, PA
www.civildesignconcepts.com

NCBELS LICENSE #: C-2184

NO.	DATE	DESCRIPTION	BY
1	12/17/20	ISSUED FOR PERMITS	EDL

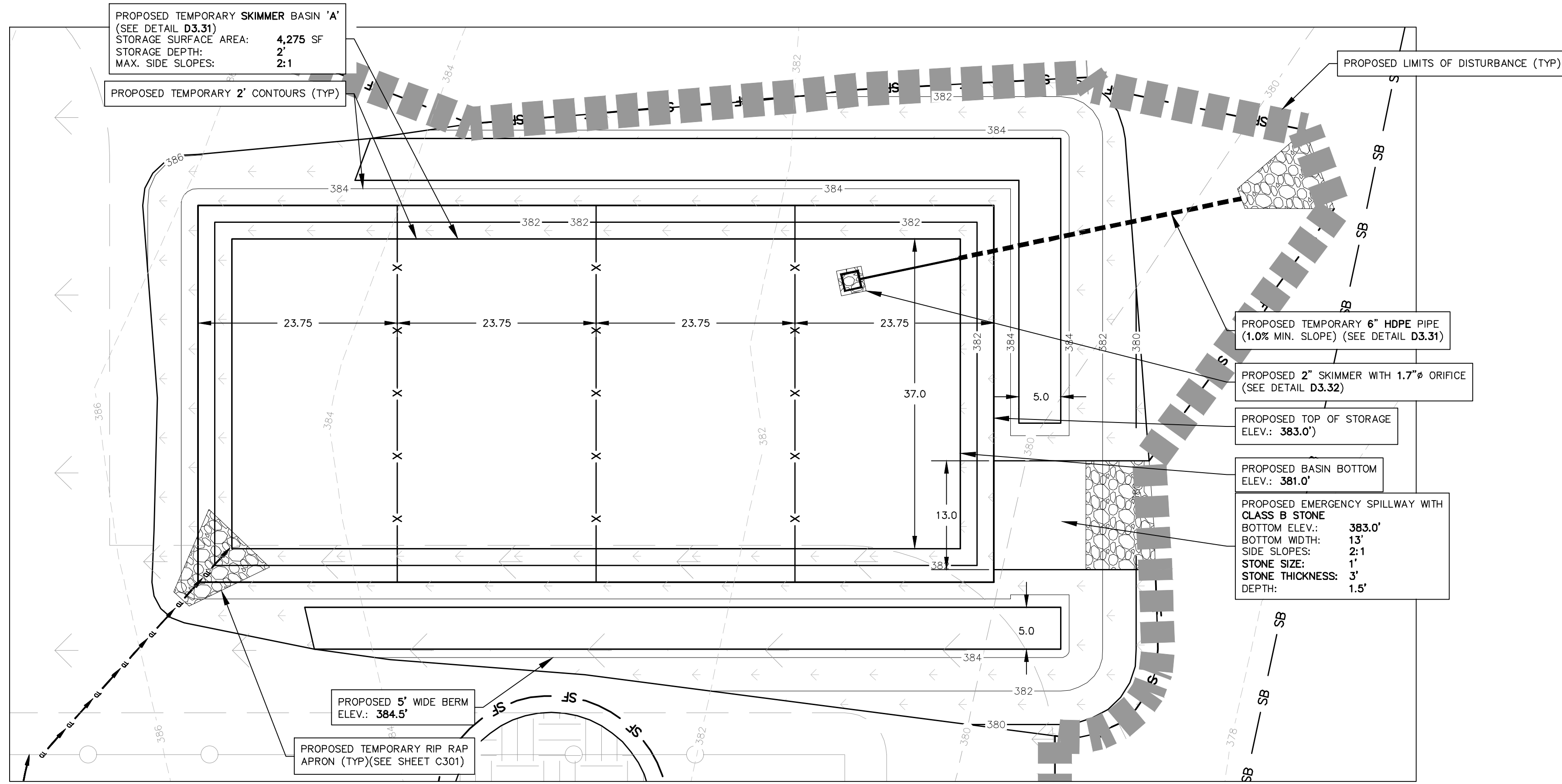
EROSION CONTROL DETAILS FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC

PINE GATE RENEVABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

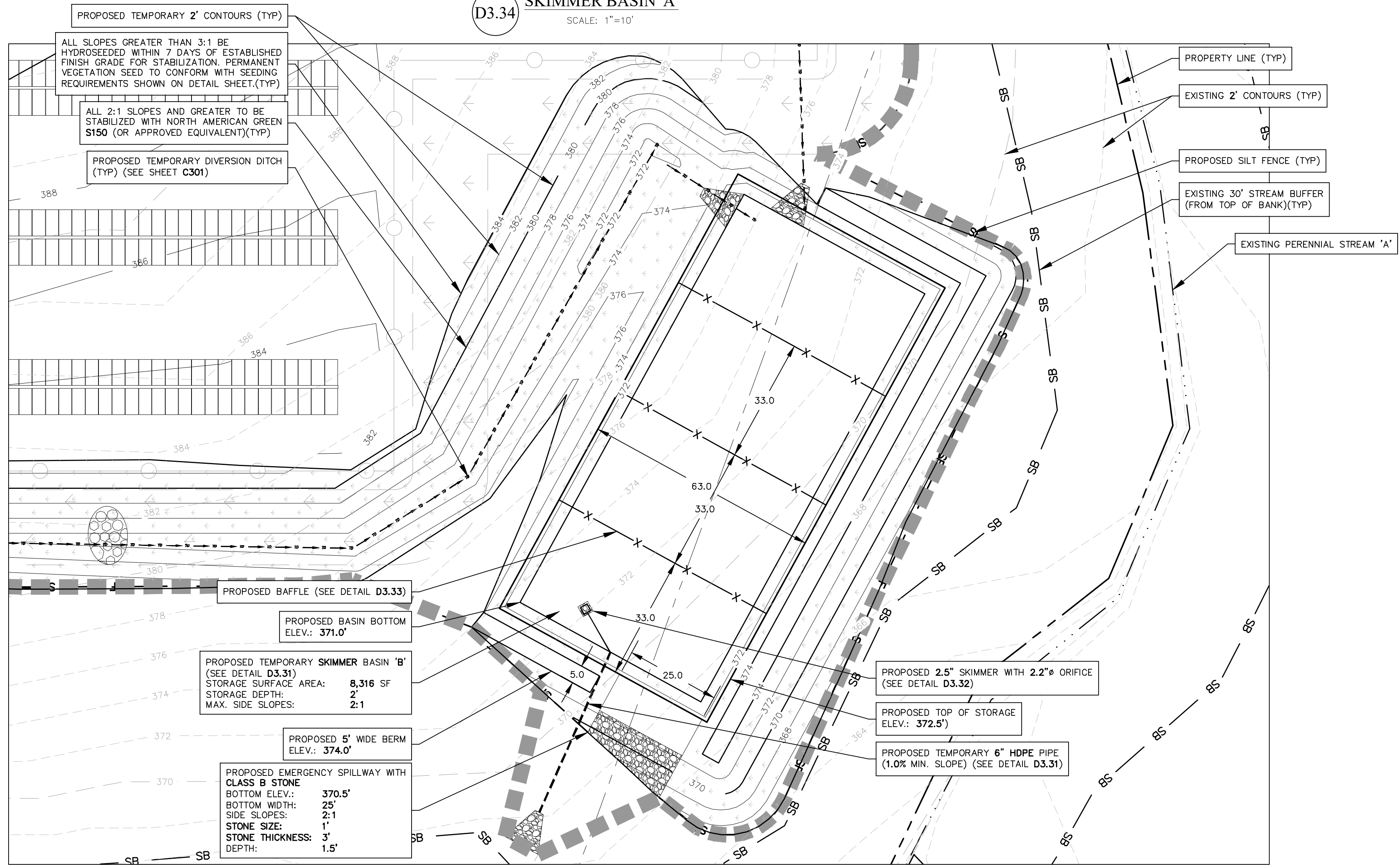
DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

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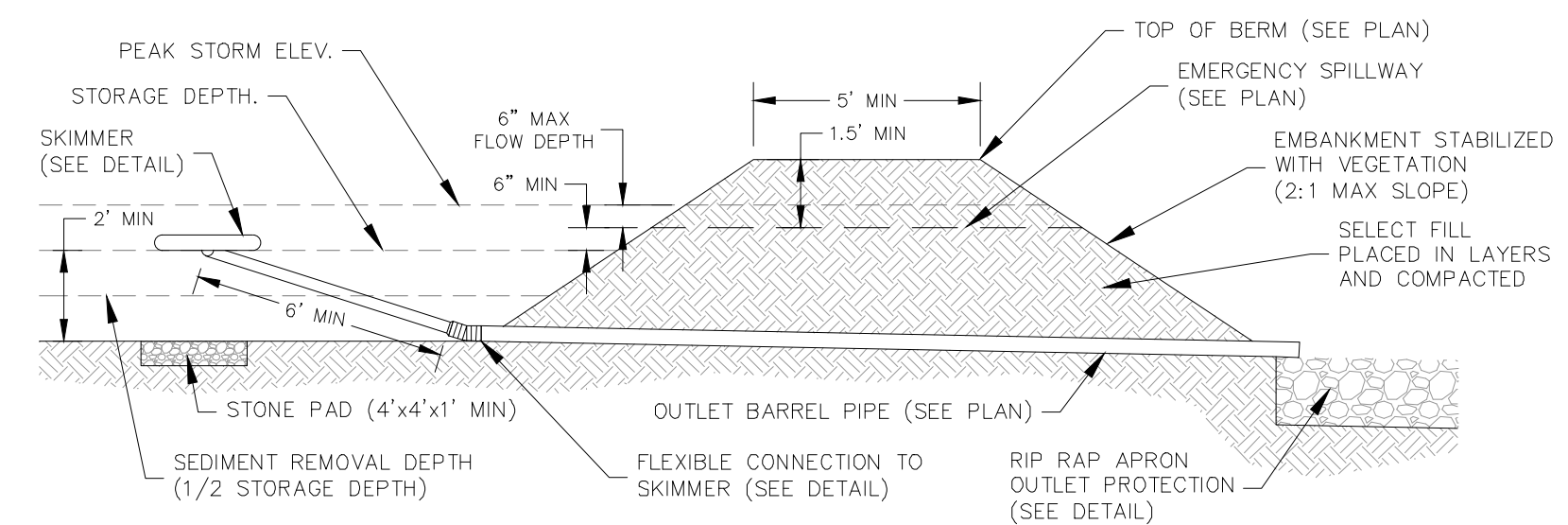
OFFICIAL COPY
Sep 26 2022



D3.34 SKIMMER BASIN 'A'
SCALE: 1"=10'

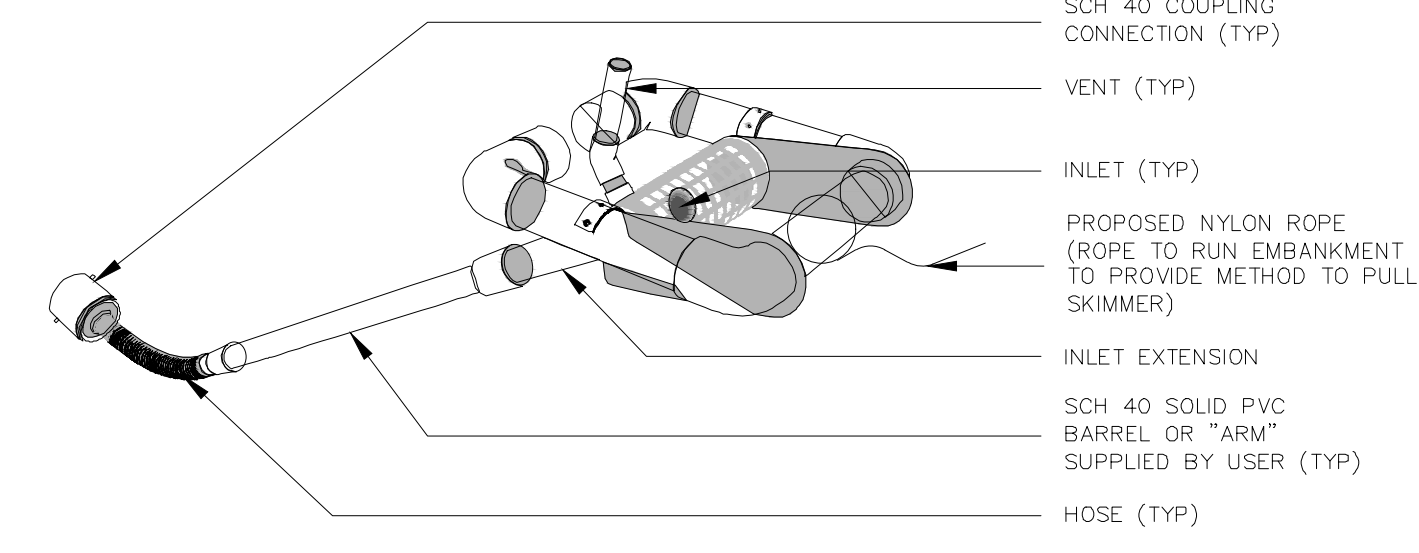


D3.35 SKIMMER BASIN 'B'
SCALE: 1"=20'



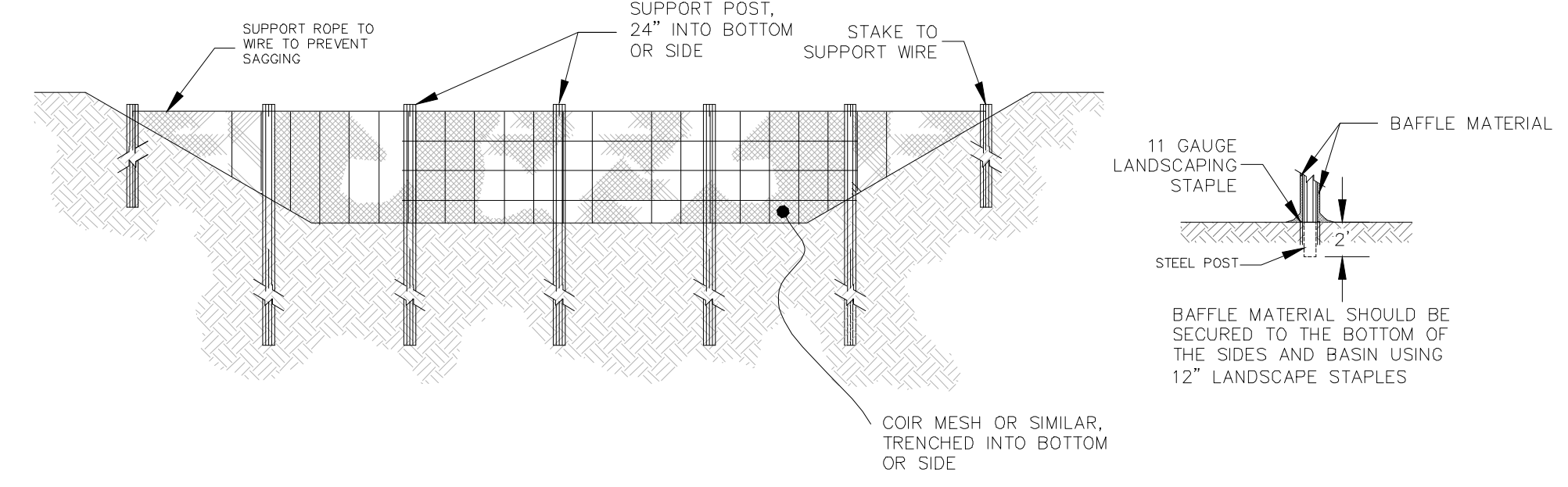
- MAINTENANCE:**
1. INSTALL EROSION CONTROL MEASURES ON ENTIRE BASIN (EXCEPT LOWER HALF OF SEDIMENT POOL) IMMEDIATELY AFTER COMPLETING THE BASIN.
 2. INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT ($\geq 1/2"$) AND MAKE ALL NECESSARY REPAIRS IMMEDIATELY.
 3. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN.
 4. REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.
 5. MAKE SURE THE SKIMMER IS NOT CLOGGED WITH DEBRIS. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER BASIN.
 6. CHECK THE SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS. FABRIC MUST SPAN THE FULL WIDTH.
 7. CHECK THE EMBANKMENT, SPILLWAYS, & OUTLET FOR EROSION DAMAGE. INSPECT EMBANKMENT FOR PIPING AND SETTLEMENT.
 8. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.
 9. FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

D3.31 SKIMMER SEDIMENT BASIN SECTION
NOT TO SCALE



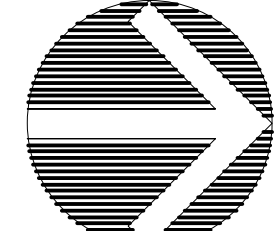
- NOTES:**
1. SKIMMER SHOWN IN FLOATING POSITION
 2. FAIRCLOTH SKIMMER OR APPROVED EQUIVALENT
 3. SKIMMER TO BE REMOVED UPON REMOVAL OF SEDIMENT TRAP
 4. COUPLING CONNECTION INTO PROPOSED OUTLET STRUCTURES MUST BE SEALED UPON REMOVAL OF SKIMMER

D3.32 POND SKIMMER DETAIL
NOT TO SCALE



D3.33 BAFFLE DETAIL
NOT TO SCALE

CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



Know what's below.
Call before you dig.

NORTH

EROSION CONTROL DETAILS

SP-5474 Sub 0

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 292-5886
FAX (828) 292-5886

82 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 27786
PHONE (828) 492-4410
FAX (828) 492-4455

CDC Civil Design Concepts, PA
www.civildesignconcepts.com

NCBELS LICENSE #: C-2184

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1	12/17/20	ISSUED FOR PERMITS	

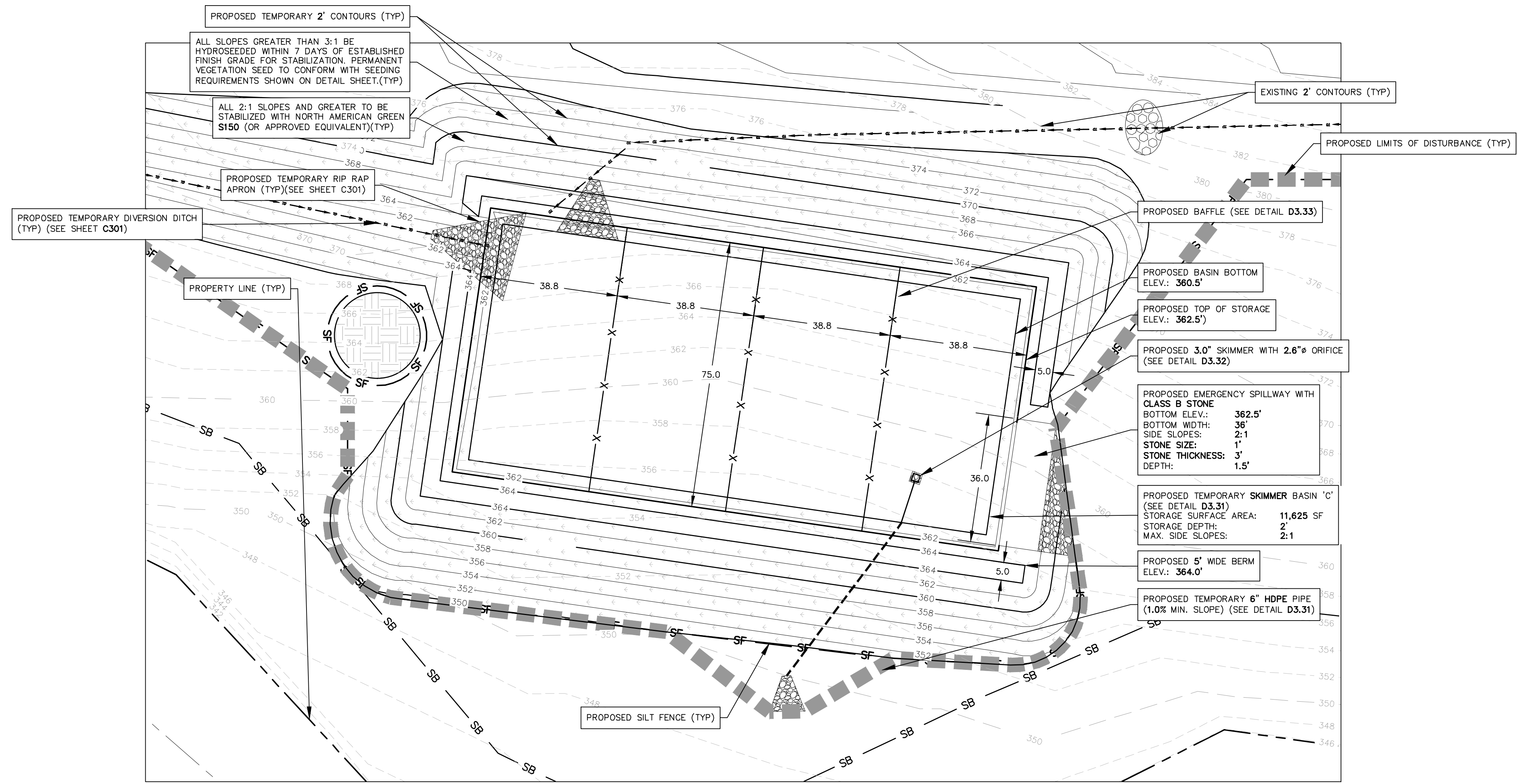
EROSION CONTROL DETAILS FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
PINE GATE RENEVABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

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EROSION CONTROL DETAILS FOR:
BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
PINE GATE RENEVABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

SP-5474 Sub 0

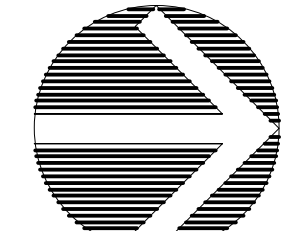


D3.41 SKIMMER BASIN 'C'
SCALE: 1"=20'

CDC INSPECTIONS HOTLINE:
828-771-4755 OR INSPECTION@CDCGO.COM



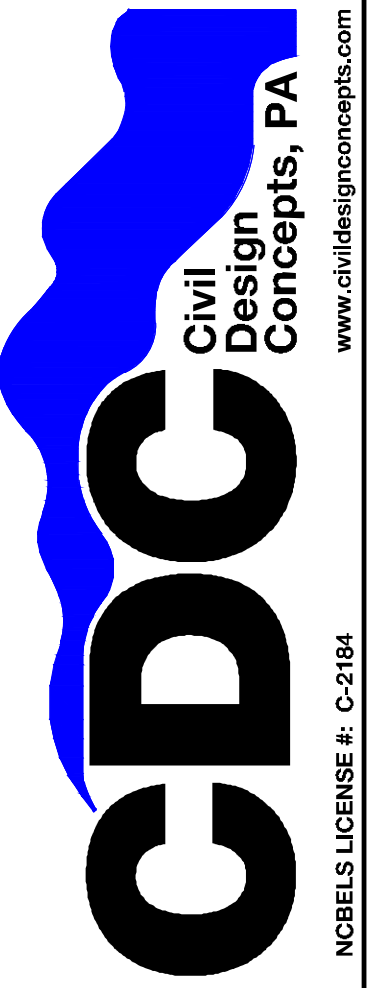
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Call before you dig.



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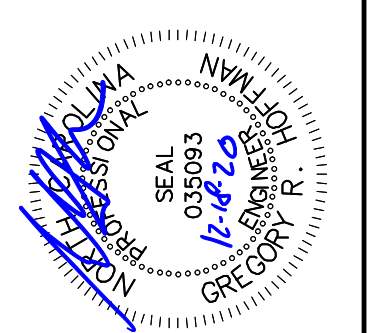
EROSION CONTROL DETAILS

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 252-5886
FAX (828) 252-5886



62 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 452-4410
FAX (828) 452-5455

NO.	DATE	DESCRIPTION	BY
1	12/17/20	ISSUED FOR PERMITS	



BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC
PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 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 NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan 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

Required 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 -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
(d) Slopes 3:1 to 4:1	14	-10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -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 Hydroseeding Roller 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 straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Roller 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.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when 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

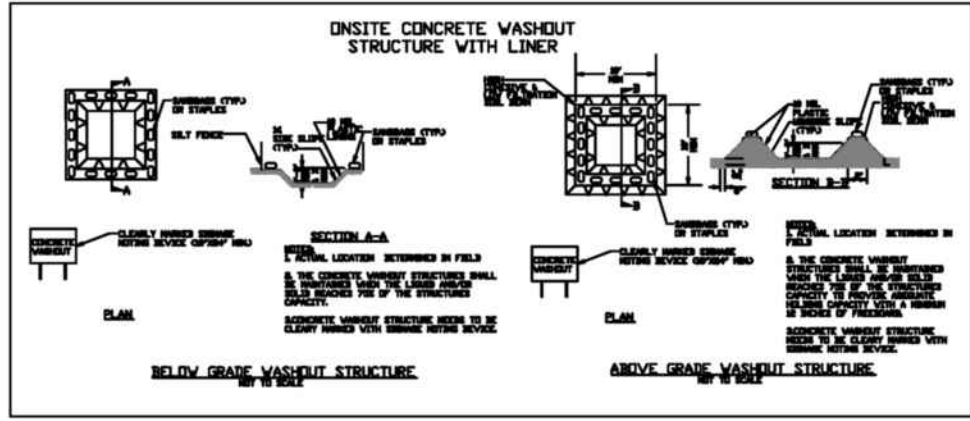
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized 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 approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques 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.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where 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. Stormwater accumulated within the washout may not be pumped into or discharged to the 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 in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. 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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual daily rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Location of the area performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measure. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediments leaving the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits. 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of this required reports to the appropriate Division Regional Office per Part II, Section C, Item (1)(c) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site
In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The employee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

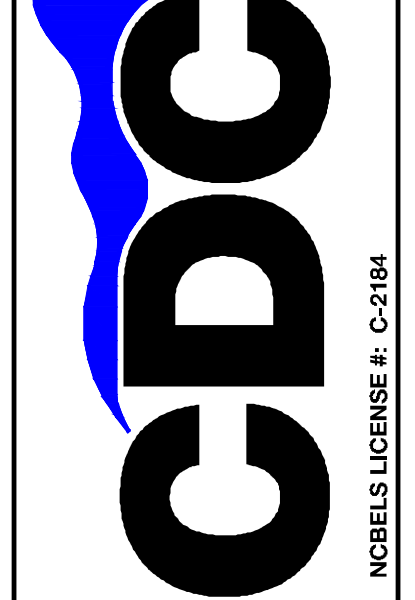
- The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19

168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 252-5886
FAX (828) 252-5886

52 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 27676
PHONE (828) 462-4410
FAX (828) 466-6455



ISSUED FOR PERMITS	EDU	NO.	DATE	DESCRIPTION	BY
1	12/17/20				



**BROADWAY ROAD SOLAR, LLC
0 BROADWAY RD SANFORD, NC**

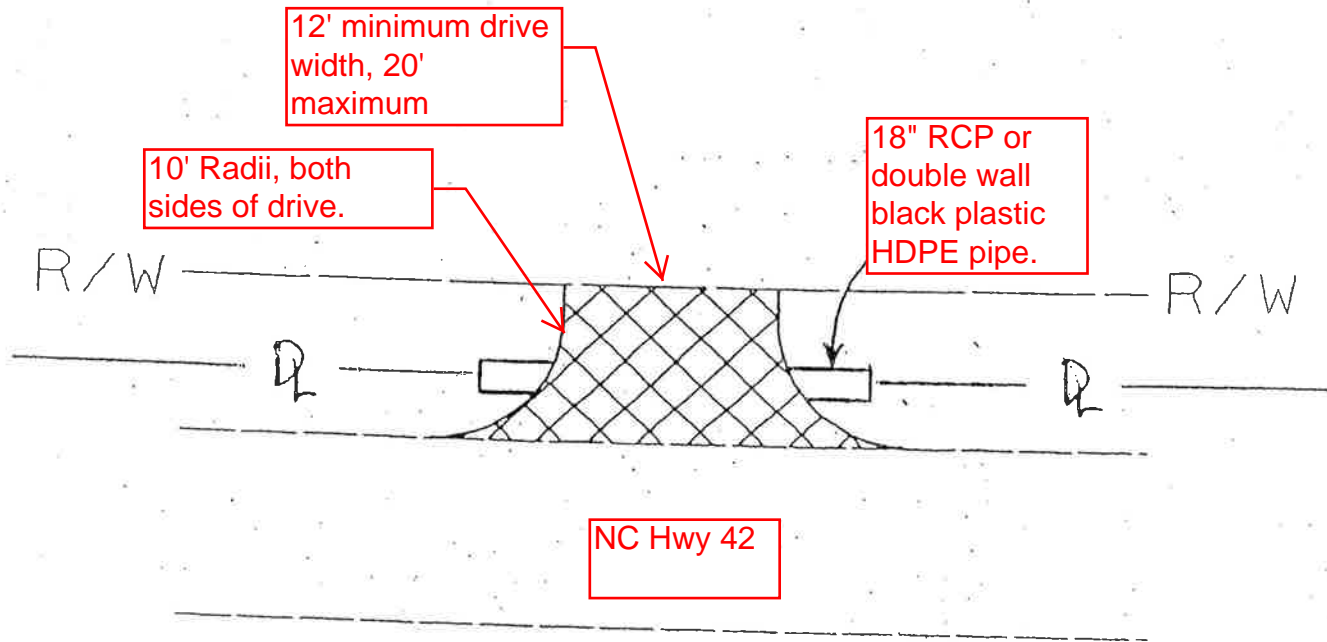
NGC01 FOR: PINE GATE RENEWABLES, LLC - CITY OF SANFORD, NC, NORTH CAROLINA

DRAWN BY: DNR
CDC PROJECT NO.: 12088
XXX PERMIT NO.: xxx

SHEET
C998

SP-5474 Sub 0

STREET TYPE DRIVEWAY CONNECTION



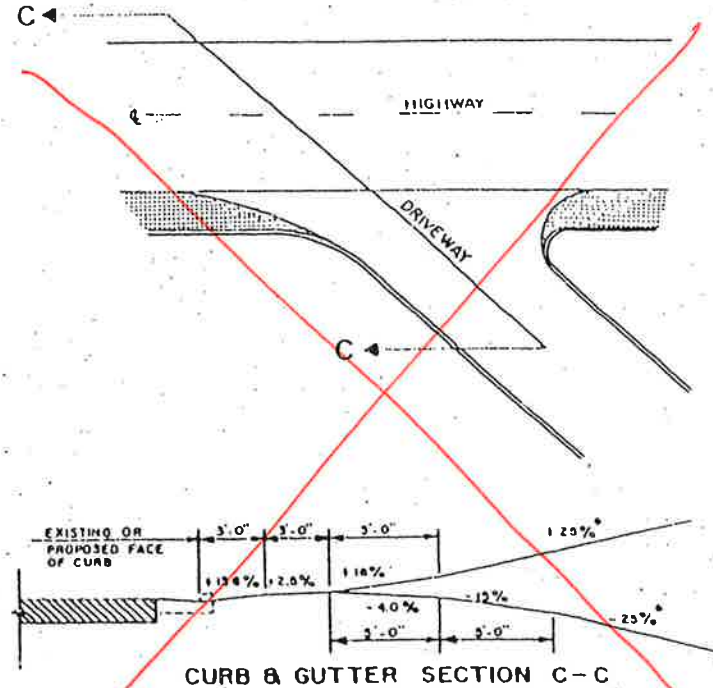
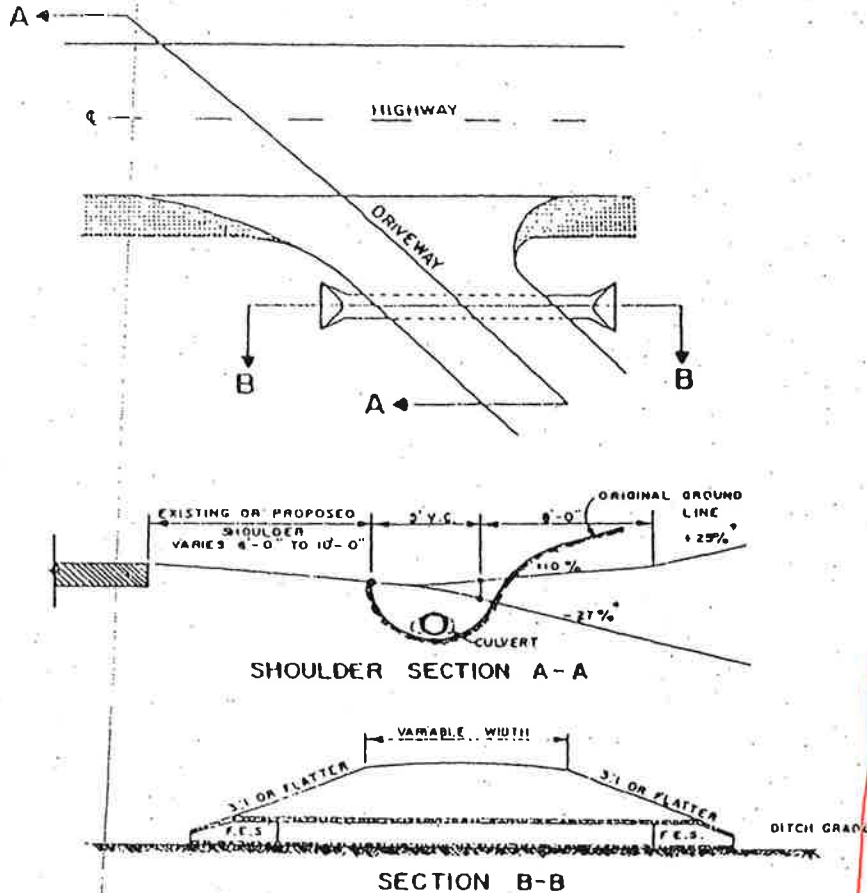
DL = DITCHLINE



= AREA TO BE PAVED

with compacted ABC

NOT TO SCALE



* MAXIMUM LIMIT FOR VEHICULAR CLEARANCE, ±15% DESIRABLE MAXIMUM.

LEGEND

V.C. = VERTICAL CURVE

$$\text{SLOPE (\%)} = \frac{\text{CHANGE IN ELEVATION}}{\text{HORIZONTAL DISTANCE}} \times 100$$

SLOPE AND DRAINAGE REQUIREMENTS

FIGURE 16

Driveway Pipes

Driveway pipes must be laid properly to provide positive drainage. If the pipe is installed incorrectly then water will accumulate and not fall to its natural discharge. The inverts should be placed at the flow line of the ditch and should be an adequate size (minimum 15 inch) to convey drainage from upstream pipes including crosslines. When connected to pipe frontage material changes should be done within a NCDOT approved structure.

Driveway Material	Min. Cover over RCP	Min. Cover over HDPE or CMP
Typ. 4 Inch Concrete	0 in.	4 in.
Asphalt or Non-paved	8 in.	12 in.

Minimum cover required for the type of pipe and driveway material.

Driveway pipes should not be blocked more than 20% of the opening. (i.e. 15 inch pipe could be blocked up to 3 inches on the inlet and outlet.) Any blockage has the potential to put excess strain on the pipe and result in failure. Damaged pipes should be assessed and if structurally deficient should be replaced prior to addition.



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

April 1, 2021

COUNTY: LEE COUNTY

MEMORANDUM TO: Mr. David Tyeryar, Fiscal Section – NCDOT, Raleigh, NC

FROM: Matthew W. Kitchen, P.E.
District Engineer

DS
Mk

SUBJECT: DRIVEWAY PERMIT – Commercial

Attached herewith is a check in the amount of \$50.00 to cover the construction inspection fee for the Driveway Permit #53-82834 in Lee County (Access to NC Hwy 42). Fund # 150362-47900024-8.105311-2716.

If this office can be of further assistance, please advise.

MWK/ram

Cc: Mr. Josh Brooks, P.E.
File

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION 8 – DISTRICT 2
902 N. SANDHILLS BLVD.
ABERDEEN, NC 28315

Telephone: (910) 944-7621
Fax: (910) 944-5623
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
902 N. SANDHILLS BLVD.
ABERDEEN, NC 28315