

## NPDES GENERAL PERMIT NCG 010000

- 1. THE INTENT OF THIS PERMIT IS TO COVER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE OR FROM CONSTRUCTION ACTIVITIES INVOLVING LESS THAT ONE (1) ACRE AND WHICH ARE APART OF A COMMON PLAN OF DEVELOPMENT OR SALE EQUAL TO OR GREATER THAN ONE (1) ACRE.
- 2. YOU MUST IMPLEMENT THE EROSION AND SEDIMENT CONTROL PLAN APPROVED FOR YOUR PROJECT BY THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OR BY AN APPROVED LOCAL PROGRAM
- 3. WHEN-EVER LAND DISTURBING ACTIVITY THAT WILL DISTURB MORE THAN ONE ACRE IS UNDERTAKEN ON A TRACT, THE PERSON CONDUCTING THE LAND-DISTURBING ACTIVITY SHALL INSTALL EROSION AND SEDIMENT CONTROL DEVICES AND PRACTICES THAT ARE SUFFICIENT TO RETAIN THE SEDIMENT GENERATED BY THE LAND-DISTURBING ACTIVITY WITHIN THE BOUNDARY OF THE TRACT DURING CONSTRUCTION UPON AND DEVELOPMENT OF THE TRACT, AND SHALL PLANT OR OTHERWISE PROVIDE PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION AFTER COMPLETION OF CONSTRUCTION OR DEVELOPMENT WITHIN A TIME PERIOD TO BE SPECIFIED BY RULE OF THE COMMISSION.
- 4. YOU MUST KEEP RAIN GAUGE ON SITE.
- 5. YOU MUST INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN A HALF INCH (DURING 24 HOUR PERIOD). YOU MUST TAKE IMMEDIATE CORRECTIVE ACTION FOR ANY DEVICE FAILURE.
- 6. YOU MUST INSPECT ALL OUTLETS WHERE STORMWATER RUNOFF LEAVES YOUR SITE AND EVALUATE THE EFFECT ON NEARBY STREAMS OR WETLANDS. CORRECTIVE ACTION MUST BE TAKEN IF SEDIMENT IS DEPOSITED OFF SITE OR INTO A STREAM OR WETLAND, OR CAUSES A VISIBLE INCREASE IN TURBIDITY OF ANY WATERBODY.
- 7. NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS. DEDICATED AREA FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STEAMS UNLESS NO REASONABLE ALTERNATIVE IS AVAILABLE. EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STEAMS UNLESS NO REASONABLE ALTERVATIVE IS AVAILABLE. CONCRETE MATERIAL MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.
- 8. YOU MUST KEEP RECORDS OF THESE INSPECTIONS AND ANY CORRECTIVE ACTIONS TAKEN.

## **EROSION CONTROL SELF INSPECTION**

- 1. THE PURPOSE OF SELF INSPECTION IS TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED, INCLUDING THE INSTALLATION AND MAINTENANCE OF MEASURES, AND THE PROVISION OF GROUND COVER IN A TIMELY
- 2. ALL OF THE EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING SEDIMENTATION CONTROL BASINS, SEDIMENTATION TRAPS, SEDIMENTATION PONDS, ROCK DAMS, TEMPORARY DIVERSIONS, TEMPORARY SLOPE DRAINS, ROCK CHECK DAMS, SEDIMENT FENCE OR BARRIERS, ALL FORMS OF INLET PROTECTION, STORM DRAINAGE FACILITIES, ENERGY DISSIPATERS, AND STABILIZATION METHODS OF OPEN CHANNELS MUST BE INSPECTED.
- 3. A "SELF-INSPECTION REPORT FOR LAND DISTURBING ACTIVITY AS REQUIRED BY NCGS 113A-54.1" MUST BE COMPLETED. AN ALTERNATIVE IS TO MAKE NOTATIONS ON THE COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN THAT IS KEPT ON THE PROJECT SITE.
- THE SELF-INSPECTION REPORT FOR LAND-DISTURBING ACTIVITY IS TO BE COMPLETED AFTER EACH PHASE OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS COMPLETE. THESE PHASES MAY INCLUDE:
  INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL MEASURES;
  CLEARING AND GRUBBING OF EXISTING GROUND COVER;
  COMPLETION OF ANY PHASE OF GRADING OF SLOPES OR FILLS;
  INSTALLATION OF STORM DRAINAGE FACILITIES;
  COMPLETION OF CONSTRUCTION OR DEVELOPMENT;
  ESTABLISHMENT OF PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION.
- 5. THE RECORDS MUST BE MADE AVAILABLE TO THE EROSION CONTROL INSPECTOR AT THE SITE. ANY DOCUMENTATION OF INSPECTIONS THAT OCCUR ON A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN SHALL OCCUR ON A SINGLE COPY OF THE PLAN AND THAT PLAN SHALL BE MADE AVAILABLE ON THE SITE. ANY INSPECTION REPORTS SHALL ALSO BE MADE AVAILABLE ON THE SITE.

CONSTRUCTION
PLANS FOR
FLOWERS
SOLAR LLC

3188 BAILEYS XRDS ROAD BENSON, NC 27504



1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407



Ī	Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
•	Perimeter dikes, swales, ditches and slopes	7 days	None
•	High Quality Water (HQW) Zones	7 days	None
•	Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
•	Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50 feet in length
•	All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

\* "Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable." (Section II.B(2)(b))

SHEET DESCRIPTION
C-1 COVER
C-2 EXISTING CONDITIONS PLAN
C-3 SITE PLAN
C-4-5 EROSION CONTROL PLAN
C-6 FINAL GRADING AND SITE PLAN
C-7-11 DETAILS

AS THE OWNER OF RECORD, I HEREBY FORMALLY
CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON
THIS SITE PLAN AND ALL REGULATIONS AND
REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES

THIS SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES

DATE

OWNER SIGNATURE

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CALL 48 HOURS BEFORE YOU DIG



NORTH CAROLINA ONE-CALL CENTER 1-800-632-4949



3200 Gateway Centre Blvd., Suite 10 Morrisville, NC 27560 Phone: 919-755-5011 www.kleinfelder.com NC License # F-1143



|     | REVISIONS                             |     |     |            |
|-----|---------------------------------------|-----|-----|------------|
| REV | DESCRIPTION                           | DSN | СНК | DATE       |
| KEV | DESCRIPTION                           | DWN | APP | DATE       |
| 1   | NCDEQ COMMENTS PER                    | MDD | MDI | 10/16/2017 |
| -   | EXPRESS REVIEW 10-13-17               | MDD | MDI | 10/10/2017 |
| 2   | SOUTHERN CURRENT                      | MDD | MDI | 10/16/2017 |
| 2   | FENCE ADJUSTMENT                      | MDD | MDI | 10/10/2017 |
| 3   | HARNETT COUNTY CONDITIONAL USE PERMIT | MDI | CGO | 10/18/2017 |
| 3   | LANDSCAPING COMMENTS                  | MDI | CGO | 10/10/2017 |
| 4   | NCDEMLR COMMENTS                      |     | CGO | 12/1/2017  |
| 4   | NODEWILK COMMENTS                     | MDI | CGO | 12/1/2017  |
| 5   | SOUTHERN CURRENT FENCE                | MDI | CGO | 12/19/2017 |
| 5   | AND DITCH ADJUSTMENT, ZONING COMMENTS |     | CGO | 12/19/2017 |
| 6   | ZONING COMMENTS                       | MDI | CGO | 1/8/2018   |
| 0   | ZONING COMMENTS                       | MDI | CGO | 1/0/2016   |
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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH
ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS
SHEET ADJUST YOUR
SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

COVER

FLOWERS SOLAR LLC 3188 BAILEYS XRDs ROAD BENSON, NC 27504

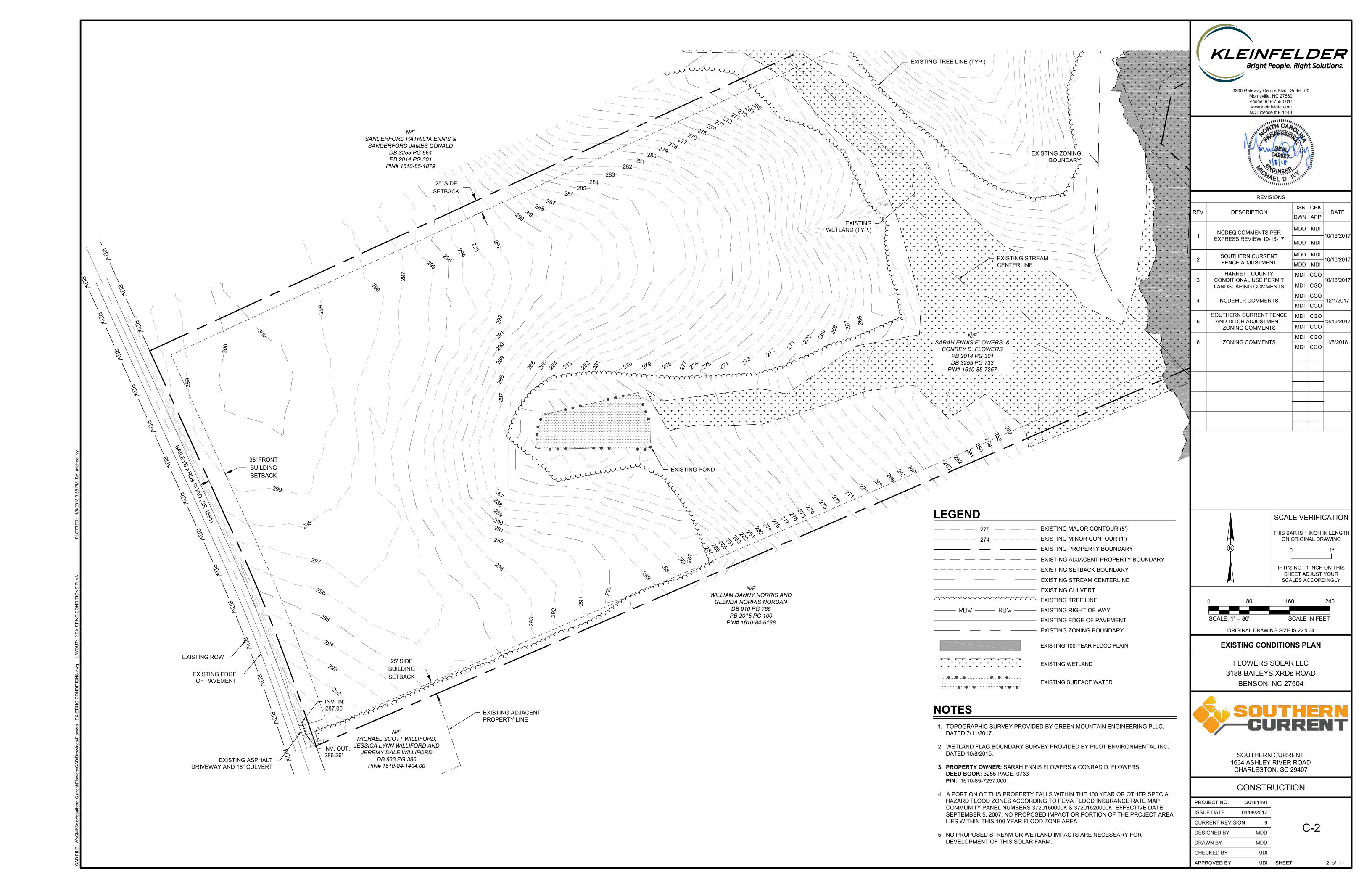


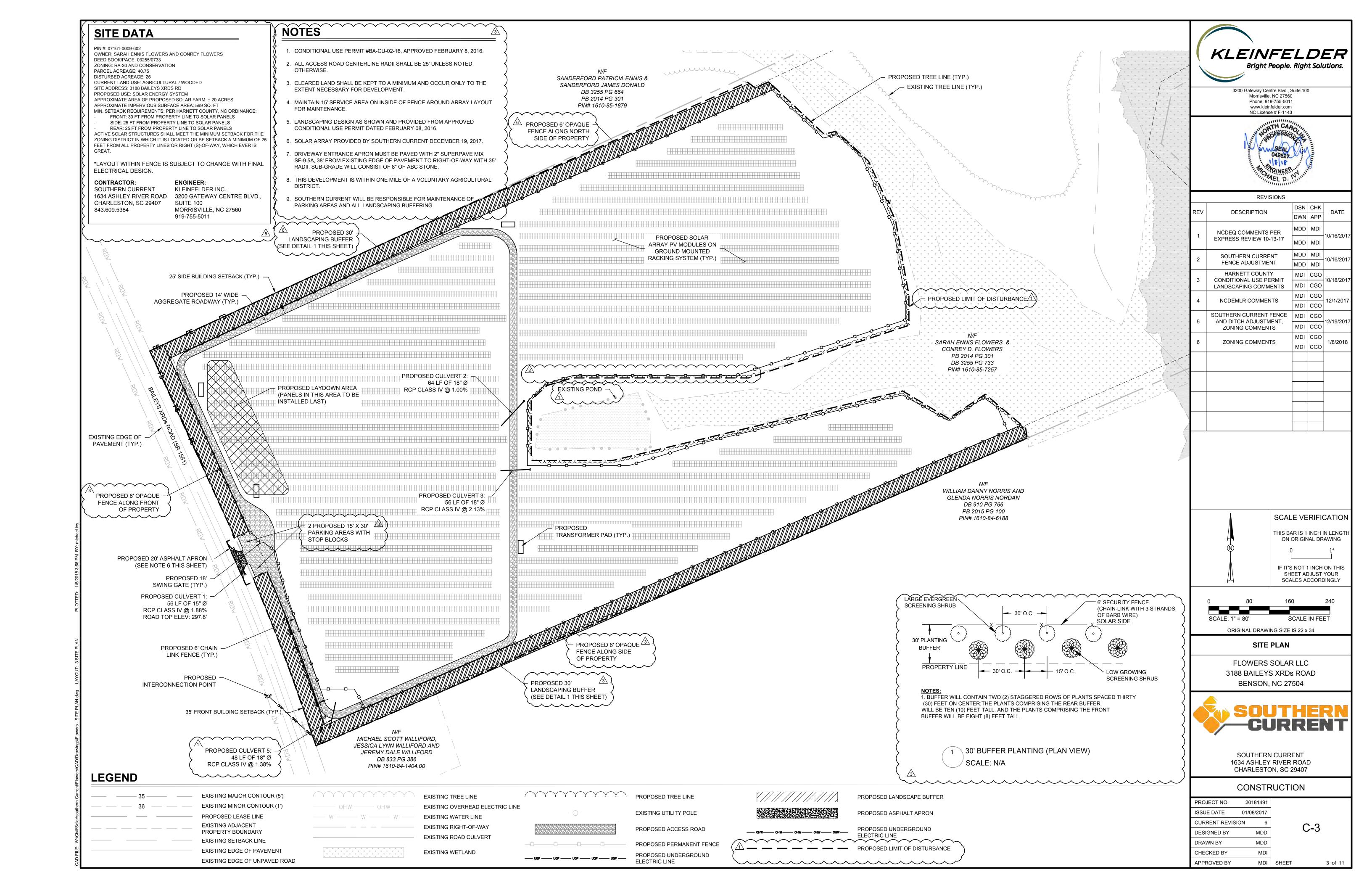
SOUTHERN CURRENT 1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407

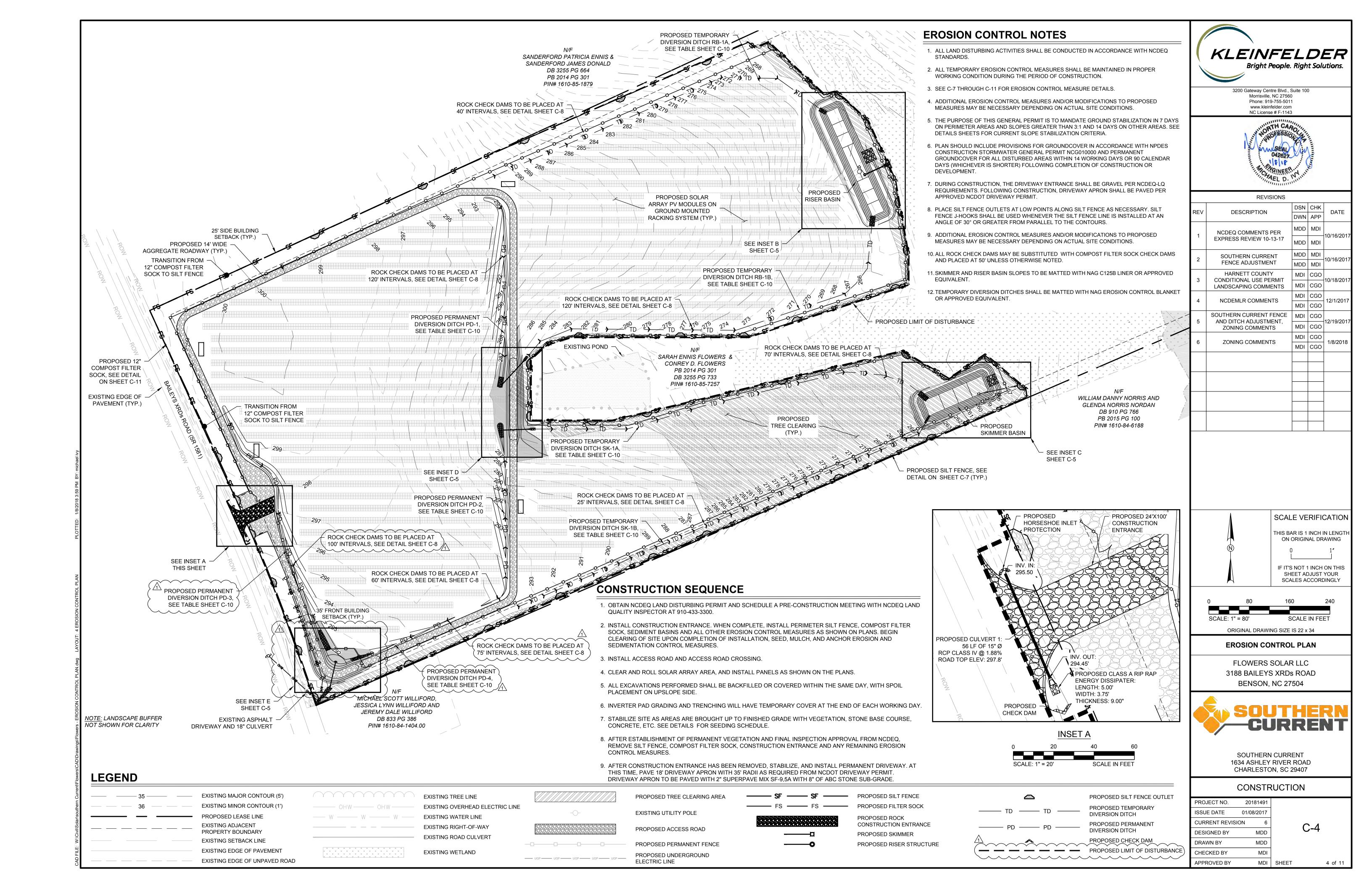
## CONSTRUCTION

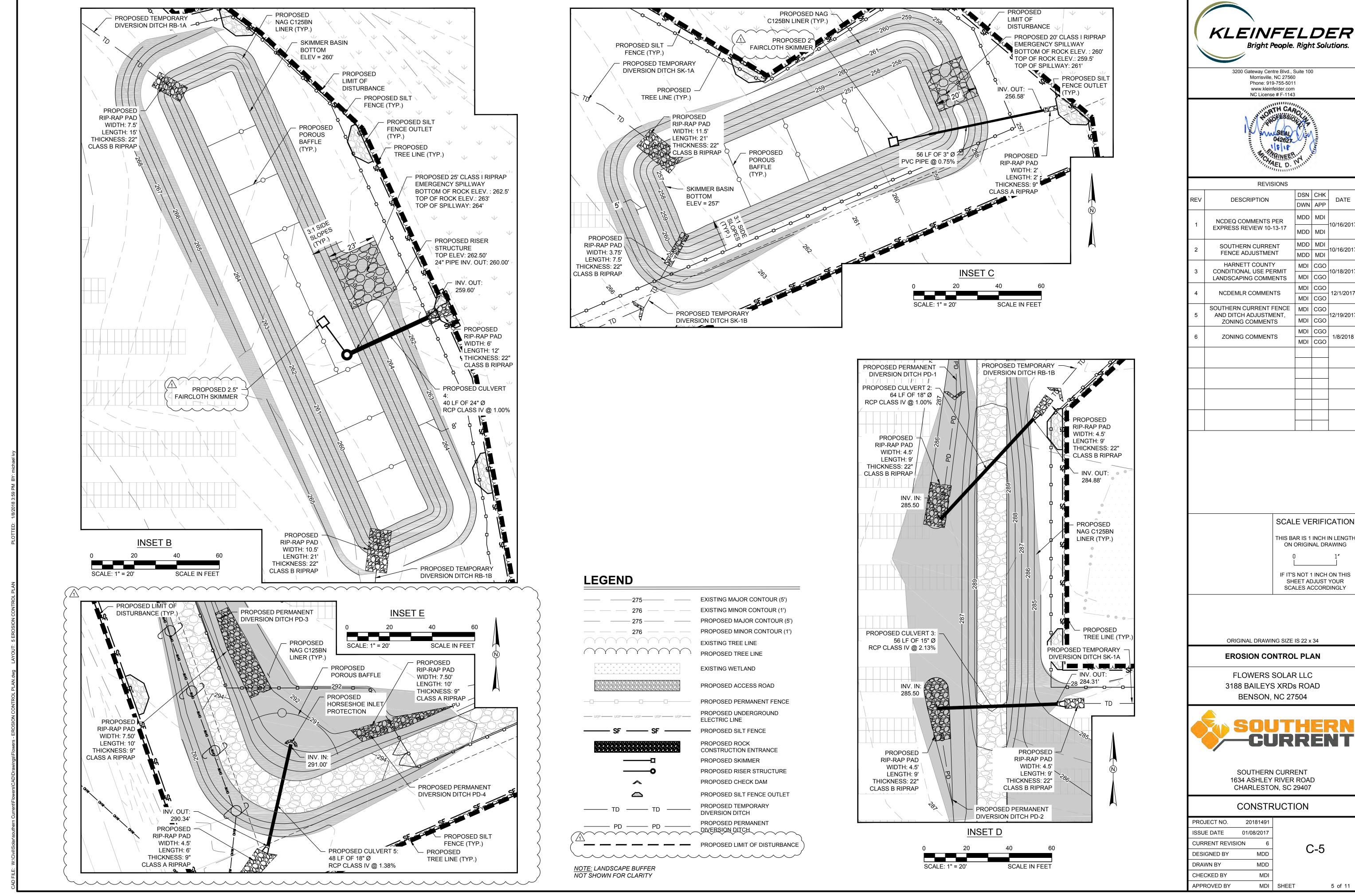
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| HECKED BY     |      | MDI    |       |     |   |
| PPROVED BY    |      | MDI    | SHEET |     | 1 |

ALL CONSTRUCTION SHALL BE IN
ACCORDANCE WITH ALL HARNETT COUNTY,
NCDEQ, AND NCDOT
STANDARDS AND SPECIFICATIONS







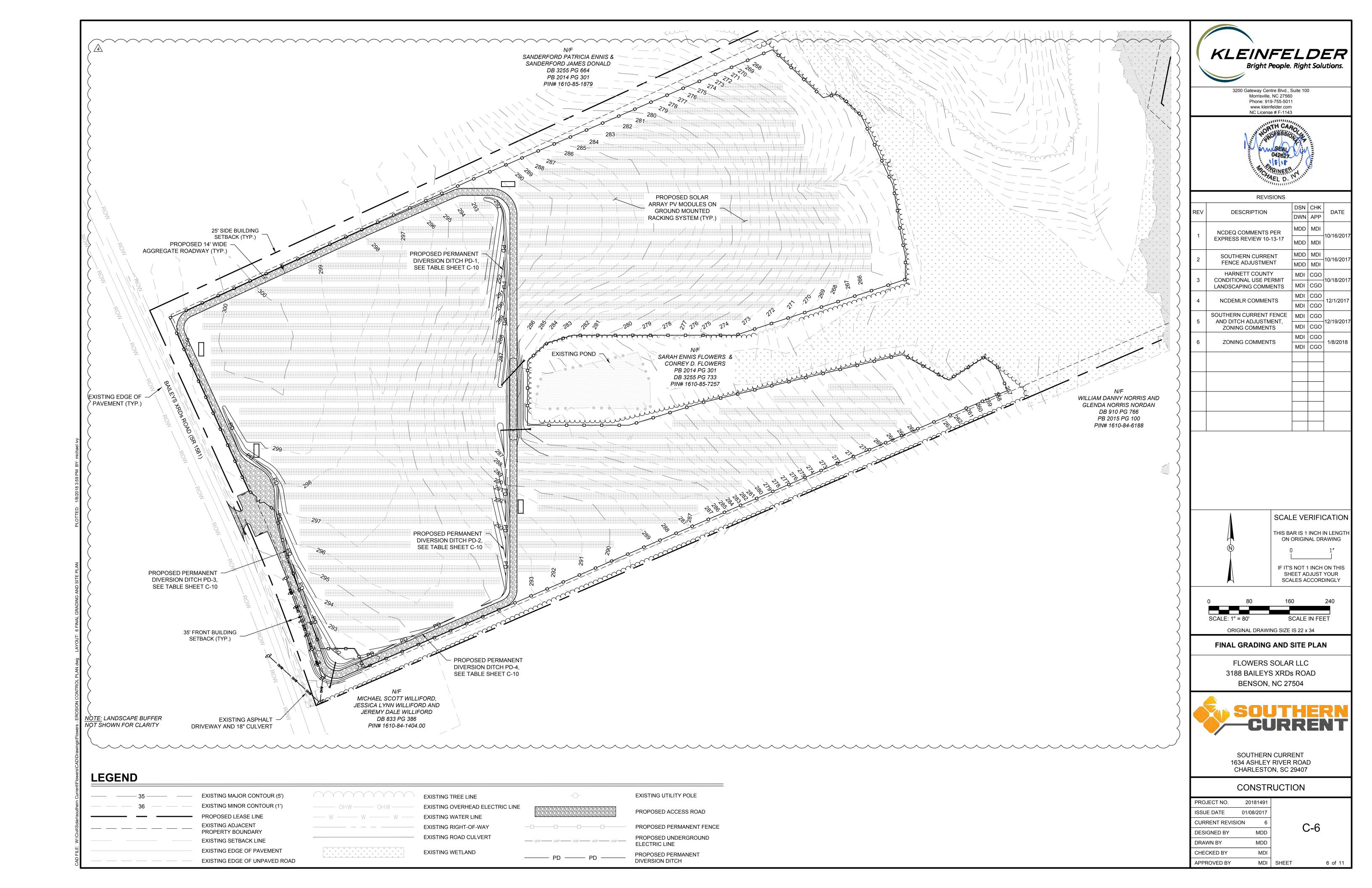


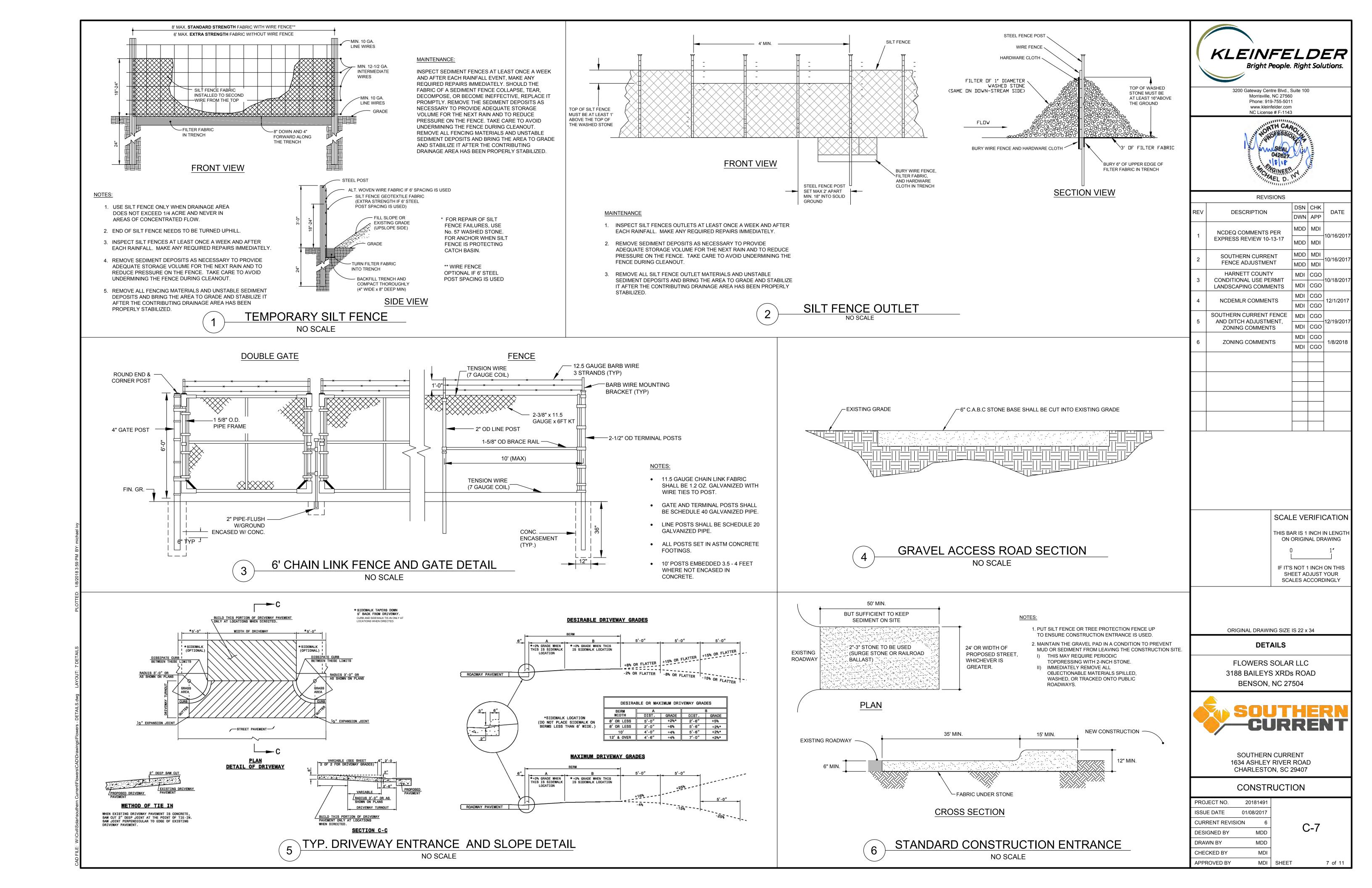
KLEINFELDER Bright People. Right Solutions.

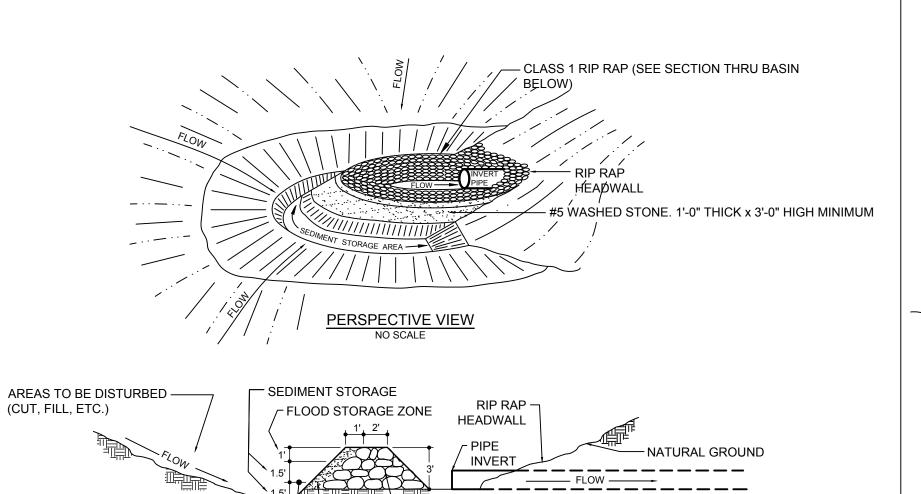
|          | REVISIONS                             | _   |     |            |
|----------|---------------------------------------|-----|-----|------------|
| RFV      | DESCRIPTION                           | DSN | CHK | DATE       |
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| 4        |                                       |     | CGO | 12/1/2017  |
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| b        | ZONING COMMENTS                       | MDI | CGO | 1/0/2010   |
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(CLEAN OUT POINT) SECTION THRU CATCH BASIN, FILTER AND CULVERT PIPE NO SCALE

-#5 WASHED STONE

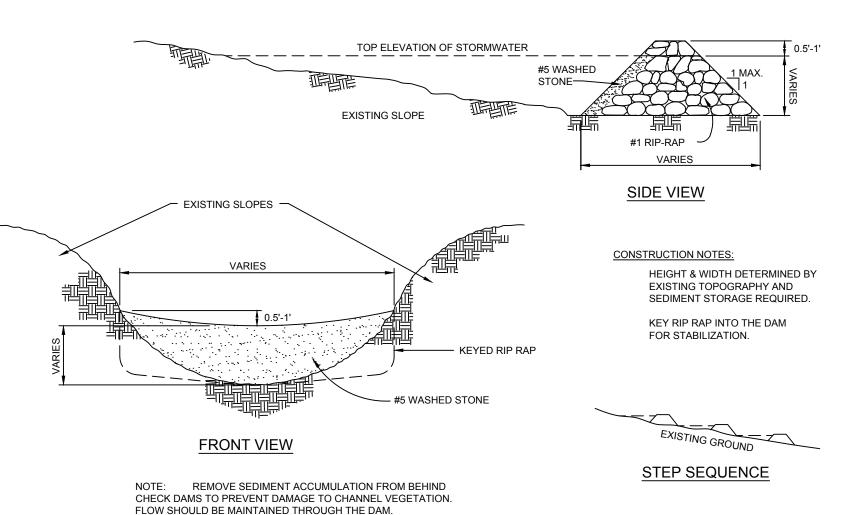
### MAINTENANCE:

MAXIMUM SEDIMENT DEPTH-

INSPECT PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO IT ORIGINAL DIMENSIONS. CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER.

## STANDARD HORSESHOE INLET PROTECTION

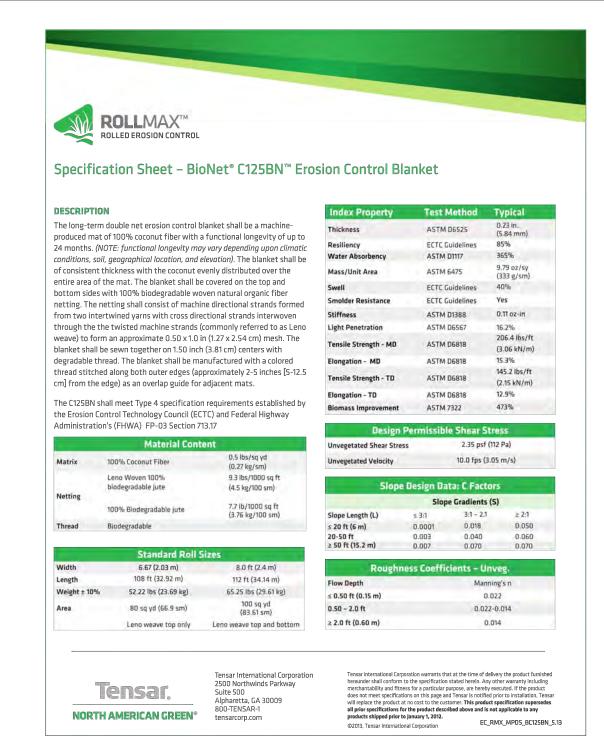
**NO SCALE** 



### MAINTENANCE:

INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.





SLOPE INSTALLATION

STAPLING PATTERNS

В

- INSPECT ROLLED EROSION CONTROL PRODUCTS (RECP) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL
- EVENT AND REPAIR IMMEDIATELY.
- GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE RECP.
- ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. • IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.
- MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

(5 CM-12.5 CM)

# NAG C125BN EROSION CONTROL BLANKET

NO SCALE

## SEEDBED PREPARATION

- 1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
- 2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
- 3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- 4. APPLY AGRICULTURAL LIME, FERTILIZER AN SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (\*SEE BELOW).
- 5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
- 6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
- 7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
- 8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- a. AGRICULTURAL LIMESTONE
- LIGHT TEXTURED, SANDY SOILS: 1 1.5 TONS/ACRE, OR PER SOIL TEST a.b. HEAVY TEXTURED, CLAYEY SOILS: 2 - 3 TONS/ACRE, OR PER SOIL TEST
- b. FERTILIZER 10-10-10 ANALYSIS @ 900 LBS/ACRE c. SUPERPHOSPHATE 500 LBS/ACRE OF 20% ANALYSIS
- MULCH 2 TONS (+/- 80 BALES) STRAW/ACRE e. ANCHOR - USE LIQUID ASPHALT @ 400 GALS/ACRF
- OR EMULSIFIED ASPHALT @ 300 GALS/ACRE
- OR WOOD & PAPER FIBER HYDROMULCHES @ 125-175 LBS/ACRE OR GUAR AND STARCH BASED TACKIFIERS @ 100-200 LBS/ACRE OR CRIMPING/PUNCHING W/ BLADES SPACES @ MAXIMUM 8"

## GROUND STABILIZATION (DWQ)

| <u>OITOOND</u>                                     | OTABILIZA                   | HON (DVQ)                                                                                   |
|----------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------|
| SITE AREA<br>DESCRIPTION                           | STABILIZATION<br>TIME FRAME | EXCEPTIONS                                                                                  |
| PERIMETER DIKES<br>SWALES, DITCHES,<br>AND SLOPES  | 7 DAYS                      | NONE                                                                                        |
| HIGH QUALITY<br>WATER (HQW)<br>ZONES               | 7 DAYS                      | NONE                                                                                        |
| SLOPES STEEPER<br>THAN 3:1                         | 7 DAYS                      | IF SLOPES ARE 10' OR<br>LESS IN LENGTH AND A<br>NO STEEPER THAN 2:1,<br>14 DAYS ARE ALLOWED |
| SLOPES 3:1 OR<br>FLATTER                           | 14 DAYS                     | 7 DAYS FOR SLOPES<br>GREATER THAN 50'<br>IN LENGTH                                          |
| ALL OTHER AREAS<br>WITH SLOPES<br>FLATTER THAN 4:1 | 14 DAYS                     | NONE (EXCEPT<br>FOR PERIMETERS<br>AND HQW ZONES)                                            |

## PERMANENT SEEDING

| Seeding mixture<br>Species¹ | Rate (lb/acre |
|-----------------------------|---------------|
| Tall fescue                 | 80            |
| Sericea lespedeza           | 20            |
| Kobe lespedeza              | 10            |

1. After Aug. 15, use unscarified sericea seed. 2. Where periodic mowing is planned or a neat appearance is desired, omit sericea and increase Kobe lespedeza to 40 lb/acre. 3. To extend spring seeding dates into June, add 15 lb/acre hulled Bermudagrass. However, after mid-Apr. it is preferable to seed temporary cover.

Between May 1 and Aug. 15, add 10 lb/acre German millet or 15 lb/ acre Sudangrass. Prior to May 1 or after Aug. 15, add 40 lb/acre rye

Seeding dates

Aug. 25 - Sept. 15 Aug. 20 - Oct. 25 Late Winter: Feb. 15 - Mar. 21 Feb. 1 - Apr. 15

Fall is best for tall fescue and late winter for lespedezas. Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.

Apply lime and fertilizer according to soil tests, or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

Apply 4.000 lb/acre grain straw or equivalent cover of another suitable mulch. Anchor straw by tacking with asphalt, netting, or roving or by

fertilize, and mulch damaged areas immediately.

crimping with a mulch anchoring tool. A disk with blades set nearly Refertilize in the second year unless growth is fully adequate. May be mowed once or twice a year, but mowing is not necessary. Reseed,

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE, \*NURSE CROP/TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO

NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT

BEFORE MOWING. OTHERWISE FESCUE MAY BE SHADED OUT

## TEMPORARY SEEDING

LATE WINTER & EARLY SPRING Seeding mixture Rye (grain)

Mountains—Above 2500 feet: Feb. 15 - May 15 Below 2500 feet: Feb. 1- May 1

immediately following erosion or other damage.

SUMMER Seeding mixture

substituted at a rate of 50 lb/acre. Seeding dates Mountains—May 15 - Aug. 15

Soil amendments Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Seeding mixture

Seeding dates Mountains-Aug. 15 - Dec. 15

Follow soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extent temporary Coastal Plain) or Korean (Mountains) lespedeza in late February or



extend beyond June. Seeding dates

Coastal Plain-Dec. 1 - Apr. 15

Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Refertilize if growth is not fully adequate. Reseed, refertilize and mulch

Rate (lb/acre)

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting,

Refertilize if growth is not fully adequate. Reseed, refertilize and mulch

Rye (grain)

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting,



Piedmont and Coastal Plain, Korean in Mountains)

Omit annual lespedeza when duration of temporary cover is not to

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

German millet

In the Piedmont and Mountains, a small-stemmed Sudangrass may be

Piedmont-May 1 - Aug. 15 Coastal Plain-Apr. 15 - Aug. 15

immediately following erosion or other damage.

Rate (lb/acre)

Soil amendments

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) 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" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL SECURE BLANKET OVER COMPACTED. SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.

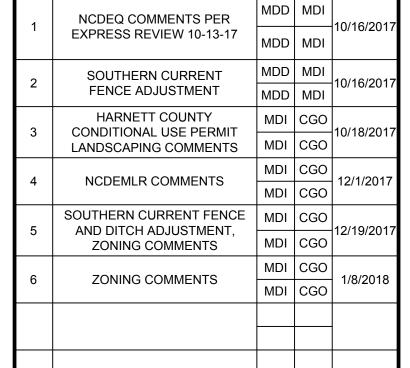
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT 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" (5 CM -12.5 CM) OVERLAP DEPENDING ON BLANKET

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

DETAIL AND LANGUAGE PROVIDED BY NORTH AMERICAN GREEN REV. 1/2004

11 EROSION CONTROL BLANKET INSTALLATION



KLEINFELDER

3200 Gateway Centre Blvd., Suite 100

Morrisville, NC 27560

Phone: 919-755-5011

NC License # F-1143

**REVISIONS** 

DESCRIPTION

DSN CHK

DWN APP

www.kleinfelder.com

Bright People. Right Solutions.

SCALE VERIFICATION

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ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS

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**DETAILS** 

FLOWERS SOLAR LLC 3188 BAILEYS XRDs ROAD BENSON, NC 27504



SOUTHERN CURRENT 1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407

## CONSTRUCTION

| PROJECT NO.     | 20181491   |       |     |      |
|-----------------|------------|-------|-----|------|
| ISSUE DATE      | 01/08/2017 |       |     |      |
| CURRENT REVISIO | N 6        |       | C-8 |      |
| DESIGNED BY     | MDD        |       | C-0 |      |
| DRAWN BY        | MDD        |       |     |      |
| CHECKED BY      | MDI        |       |     |      |
| APPROVED BY     | MDI        | SHEET |     | 8 of |

SEEDING SCHEDULE

### MAINTENANCE:

INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

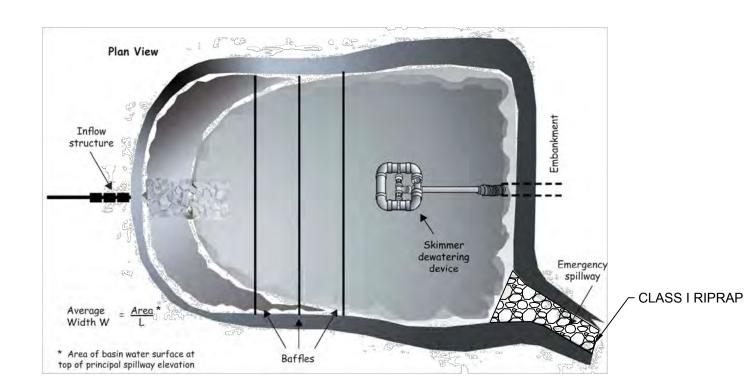
REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

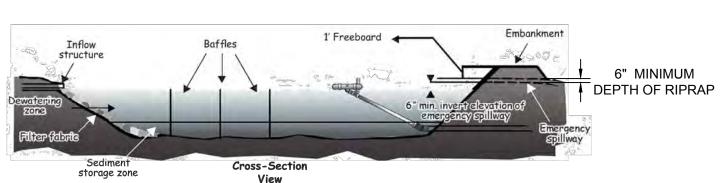
IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL WAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE CLOGGED DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBERS SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

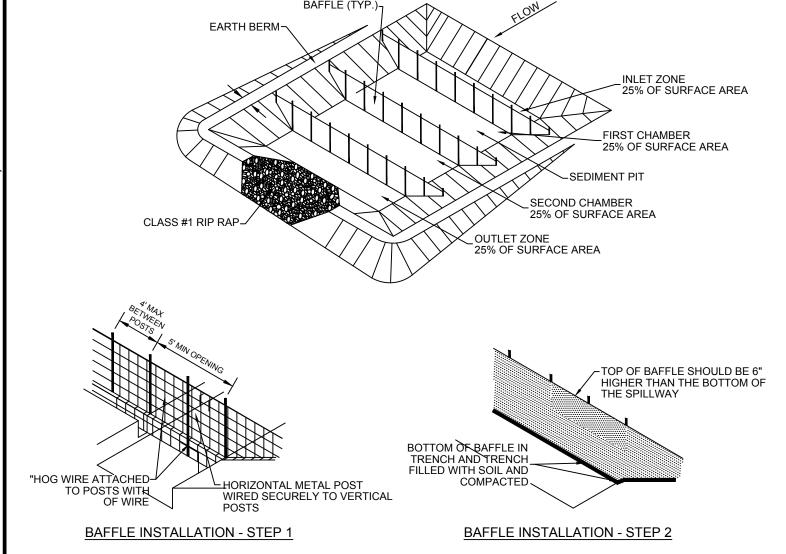
CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATLEY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

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.





# 12 SKIMMER SEDIMENT BASIN DETAIL NO SCALE



## NOTES:

 DRIVE STEEL FENCE POST AT LEAST 18" INTO SOLID GROUND

- SOLID GROUND
  2. WOOD POSTS ARE NOT ACCEPTABLE
- 3. USE STAPLES 1' APART TO ATTACH FABRIC
- TO "HOG WIRE"

  4. BAFFLE SPACED AS PER APPROVED PLAN.

## POROUS BAFFLE NOTES:

1. POROUS BAFFLES IMPROVE THE RATE OF SEDIMENT RETENTION BY DISTRIBUTING THE FLOW AND REDUCING TURBULENCE.

2. MATERIALS SUCH AS 700 G/M2 COIR EROSION BLANKET, COIR MESH, TREE PROTECTION FENCE FOLDED OVER TO REDUCE PORE SIZE, OR OTHER SIMILAR MATERIALS SHOULD BE USED.

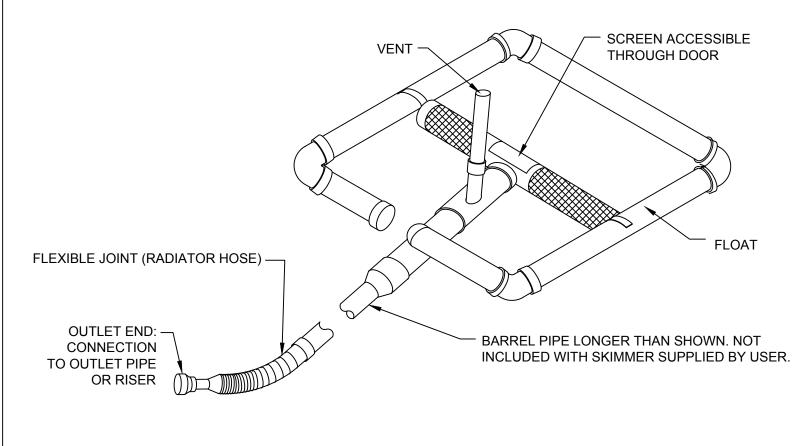
13 POROUS BAFFLE DETAIL NO SCALE

## MAINTENANCE:

INSPECT SKIMMERS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.

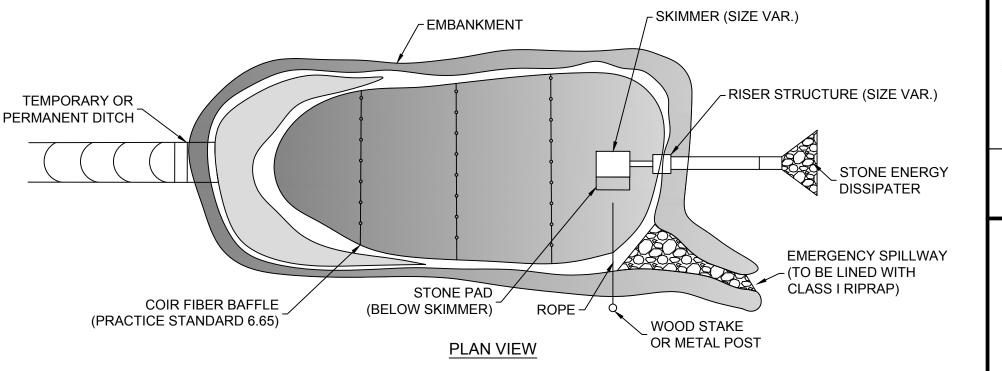
IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL WAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE CLOGGED DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

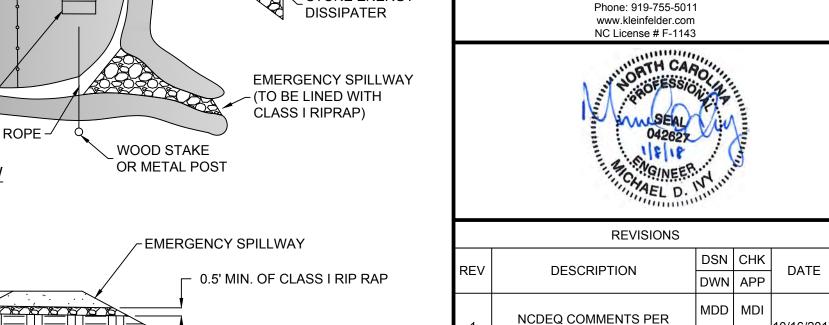
IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBERS SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.



NOTE: SKIMMER IS TO BE A SURFACE DEWATERING DEVICE SUCH AS BMP SKIMMER OR APPROVED DEVICE.

14 SKIMMER DETAIL NO SCALE





KLEINFELDER

3200 Gateway Centre Blvd., Suite 100 Morrisville, NC 27560

EXPRESS REVIEW 10-13-17

SOUTHERN CURRENT

FENCE ADJUSTMENT

HARNETT COUNTY

CONDITIONAL USE PERMIT

LANDSCAPING COMMENTS

NCDEMLR COMMENTS

SOUTHERN CURRENT FENCE

AND DITCH ADJUSTMENT.

ZONING COMMENTS

ZONING COMMENTS

Bright People. Right Solutions.

| MDD | MDI |

| MDD | MDI

MDD MDI

MDI CGO

| MDI | CGO |

MDI CGO

| MDI | CGO |

MDI CGO

MDI CGO

MDI CGO

MDI CGO

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTI

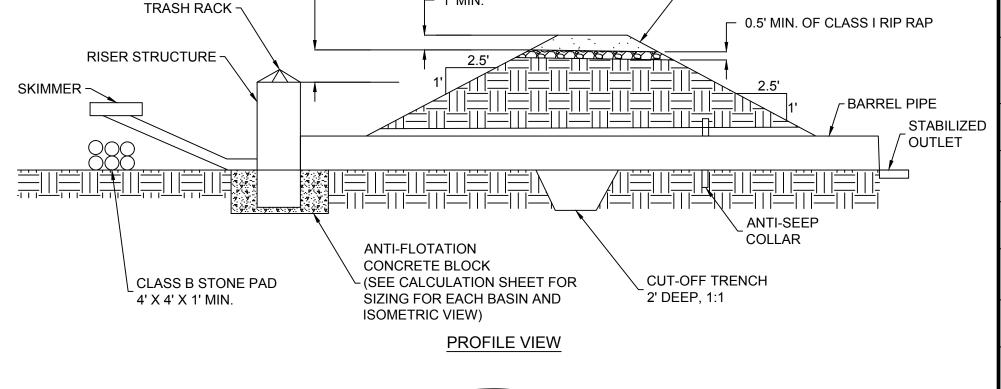
ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS

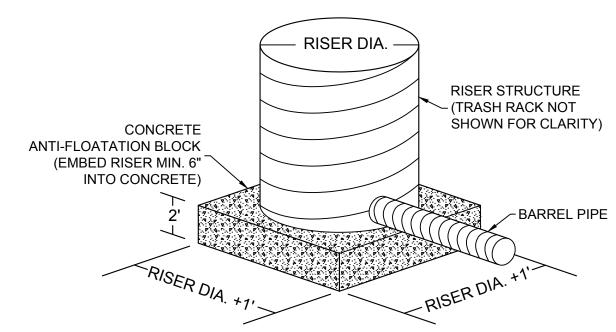
SHEET ADJUST YOUR SCALES ACCORDINGLY

— 12/1/201<sup>°</sup>

1/8/2018



FREEBOARD 1' MIN.



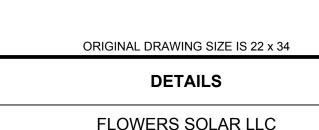
ANTI-FLOATATION BLOCK (ISOMETRIC VIEW)

MAINTENANCE:

INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED THE SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.

CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIR IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA





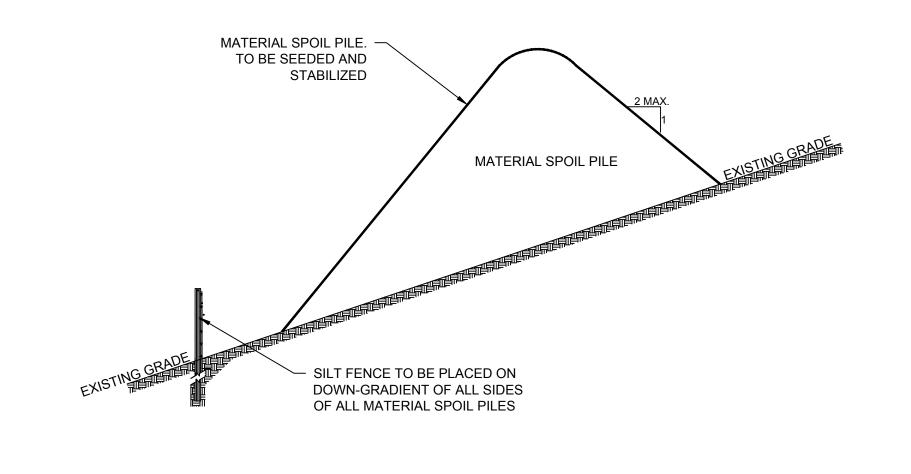
FLOWERS SOLAR LLC 3188 BAILEYS XRDs ROAD BENSON, NC 27504



SOUTHERN CURRENT 1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407

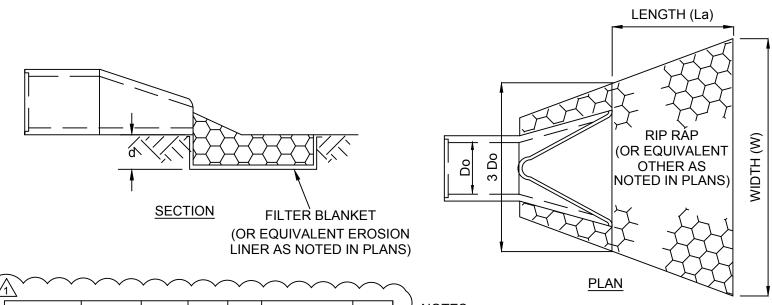
## CONSTRUCTION

| PROJECT NO.    | 20181491   |       |     |      |
|----------------|------------|-------|-----|------|
| ISSUE DATE     | 01/08/2017 |       |     |      |
| CURRENT REVISI | ON 6       |       | C-9 |      |
| DESIGNED BY    | MDD        |       | U-9 |      |
| DRAWN BY       | MDD        |       |     |      |
| CHECKED BY     | MDI        |       |     |      |
| APPROVED BY    | MDI        | SHEET |     | 9 of |



MATERIAL SPOIL DETAIL

NO SCALE



OUTLET ID Do 3Do La W RIP RAP CULVERT 1 15" 3.75' CLASS A CULVERT 2 18" 4.5' CLASS B CULVERT 3 18" 4.5' CLASS B CULVERT 4 24" 12' 6' 6' CLASS B CULVERT 5 18" CLASS B 22" PD-1 42" 10.5' 21' 10.5' CLASS B PD-2 30" 7.5' 15' 7.5' CLASS B 7.5' 10' | 7.5' | 30" CLASS A PD-4 30" 7.5' 10' 7.5' CLASS A RB-1A 30" 7.5' 15' | 7.5' | CLASS B 22" 42" | 10.5' | 21' | 10.5' | CLASS B | 22'

SK-1B

5

(10-15cm)

10.5' 21' 10.5' CLASS B 22"

15" | 3.75' | 26' |3.75' | CLASS B | 22"

- FOR RIPRAP LOCATED AT DIVERSION DITCH OUTLETS: 1.1. "Do" REPRESENTS THE THEORETICAL PIPE DIAMETER
- USED TO SIZE THE RIPRAP. 1.2. "3Do" REPRESENTS THE WIDTH OF THE RIPRAP WITHIN THE DITCH CROSS SECTION. BOTH SLOPES OF THE DITCH SHOULD BE COMPLETELY COVERED WITH
- 1.3. "L" REPRESENTS THE LENGTH OF RIPRAP MEASURED FROM THE TOE SLOPE OF THE ASSOCIATED BASIN, UP INTO THE DITCH.
- 1.4. "W" REPRESENTS THE WIDTH OF THE RIPRAP AT THE TOE SLOPE OF THE ASSOCIATED BASIN

FLARED END SECTION WITH

**ENERGY DISSIPATER** 

NO SCALE

INSPECT PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF THE STONES HAVE BEEN DISLODGED.

> CRITICAL POINTS A. Overlaps and Seams

B. Projected Water Line

C. Channel Bottom/Side Slope Vertices

Horizontal staple spacing should be

altered if necessary to allow staples to

secure the critical points along the channel

\*\*In loose soil conditions, the use of staple

or stake lengths greater than 6"(15cm) may

be necessary to properly secure the

IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT **FURTHER DAMAGE** 

## MAINTENANCE:

- INSPECT ROLLED EROSION CONTROL PRODUCTS (RECP) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.
- GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE
- ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
- IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.
- MONITOR AND REPAIR THE RECP AS **NECESSARY UNTIL GROUND COVER** IS ESTABLISHED.

|                                        | OLLMA<br>LLED EROSION          |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                           |  |
|----------------------------------------|--------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|
| specification                          | on Sheet                       | – EroNe                                   | et™ P300° Perm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | nanent Erosion                                                                                                     | Control Bla                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | nket                                                                                                                                      |  |
| ESCRIPTION                             |                                |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                           |  |
|                                        |                                |                                           | machine-produced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Index Property                                                                                                     | V Test Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Typical                                                                                                                                   |  |
|                                        |                                |                                           | matting shall be of<br>venly distributed over                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Thickness                                                                                                          | ASTM D6525                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.47 in.                                                                                                                                  |  |
|                                        |                                |                                           | covered on the top                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Resiliency                                                                                                         | ASTM D6524                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | (11.94 mm)<br>91.5%                                                                                                                       |  |
| de with black heav                     | . –                            |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Density                                                                                                            | ASTM D6524<br>ASTM D792                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.916 g/cm <sup>3</sup>                                                                                                                   |  |
| _                                      |                                |                                           | and an approximate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 13.03 oz/sy                                                                                                                               |  |
|                                        |                                |                                           | m net shall also be UV-<br>(1.57 x 1.57 cm) mesh                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mass/Unit Area                                                                                                     | ASTM 6566                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (443 g/m2)                                                                                                                                |  |
|                                        |                                |                                           | nch (3.81 cm) centers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | UV Stability                                                                                                       | ASTM D4355/<br>1000 hr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90%<br>95.89%<br>0.94 in-1b<br>(1085378 mg-cm)                                                                                            |  |
| _                                      |                                |                                           | anufactured with a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Porosity                                                                                                           | ECTC Guidelines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                           |  |
| djacent mats. The                      | P300 shall mee                 | t Type 5A, 5E                             | •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Stiffness                                                                                                          | ASTM D1388                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                           |  |
| equirements estab<br>ECTC) and Federal |                                |                                           | Technology Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Light Penetration                                                                                                  | ASTM D6567                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 17.9%                                                                                                                                     |  |
| ection 713.18                          | riigiiway Auriiii              | 13 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Tensile Strength - MD                                                                                              | ASTM D6818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 438 lbs/ft<br>(6.49 kN/m)                                                                                                                 |  |
|                                        | Material                       | Content                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Elongation - MD                                                                                                    | ASTM D6818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 28.1%                                                                                                                                     |  |
| Matrix Poly                            | 6 UV stable<br>propylene Fiber |                                           | 0.7 lbs/sq yd<br>(0.38 kg/sm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tensile Strength - TD                                                                                              | ASTM D6818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 291.9 lbs/ft<br>(4.32 kN/m)                                                                                                               |  |
| Top:                                   | UV-stabilized Pol              | ypropylene                                | 5 lbs/1000 sq ft<br>(24.4 g/sm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Elongation - TD                                                                                                    | ASTM D6818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 26.7%                                                                                                                                     |  |
| Netting Bott                           | om: UV-stabilized              | Polypropylene                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Biomass Improvement                                                                                                | ASTM D7322                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 497%                                                                                                                                      |  |
|                                        |                                |                                           | (14.7 g/sm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Design                                                                                                             | Permissible Shear                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Stress                                                                                                                                    |  |
| hread Poly                             | propylene, UV stal             | ole                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Short Duration Long Duration                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                           |  |
| _                                      | Standard                       | Roll Sizes                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Phase 1: Unvegetated                                                                                               | 3.0 psf (144 Pa)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.0 psf (96 Pa)                                                                                                                           |  |
| Width                                  | 6.5 ft (2.1                    |                                           | 8 ft (2.44 m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Phase 2: Partially Veg.                                                                                            | 8.0 psf (383 Pa)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8.0 psf (383 Pa)                                                                                                                          |  |
| Length                                 | 108 ft (3                      | 2.92 m)                                   | 112 ft (35.14 m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                           |  |
| Veight ± 10%                           | 61 lbs (2)                     |                                           | 76.25 lbs (34.59 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Phase 3: Fully Veg.                                                                                                | 8.0 psf (383 Pa)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8.0 PSF (383 Pa)                                                                                                                          |  |
| Area                                   | 80 sq yd                       | (66.0 sm)                                 | 100 sq yd (83.61 sm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Unvegetated Velocity                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (2.7 m/s)                                                                                                                                 |  |
| 10                                     | lope Design I                  | Data: C Fac                               | tors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Vegetaged Velocity                                                                                                 | 16 fps (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4.9 m/s)                                                                                                                                  |  |
|                                        |                                | Slope Gradie                              | and the same of th | Poughe                                                                                                             | ess Coefficients -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Hover                                                                                                                                     |  |
| Slope Length (L)                       | ≤ 3:1                          | 3:1 - 2.1                                 | ≥ 2:1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Flow Depth                                                                                                         | A COLUMN COLUMN TO A COLUMN TO | lanning's n                                                                                                                               |  |
| 20 ft (6 m)                            | 0.001                          | 0.029                                     | 0.082                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ≤ 0.50 ft (0.15 m)                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.034                                                                                                                                     |  |
| 20-50 ft                               | 0.036                          | 0.060                                     | 0.086                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.50 - 2.0 ft                                                                                                      | 0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | .034-0.020                                                                                                                                |  |
| ≥ 50 ft (15.2 m)                       | 0.070                          | 0.090                                     | 0.110                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ≥ 2.0 ft (0.60 m)                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.020                                                                                                                                     |  |
|                                        | <b>ISAL</b> .<br>RICAN GREE    | 2500<br>Suite<br>— Alpha                  | r International Corporation<br>Northwinds Parkway<br>500<br>retta, GA 30009<br>ENSAR-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | hereunder shall conform t<br>merchantability and fitne<br>does not meet specificati<br>will replace the product at | oration warrants that at the time<br>to the specification stated herein<br>ss for a particular purpose, are he<br>ons on this page and Tensar is no<br>r no cost to the customer. This pr<br>the product described above an                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | . Any other warranty including<br>ereby executed. If the product<br>tified prior to installation, Tensi<br>oduct specification supersedes |  |



TEMPORARY SKIMMER

OR RISER BASIN DITCH

WITH PROPOSED LINER

TRANSITION OF -

**CUT SLOPE** 

TEMPORARY DITCH TO

TEMPORARY SKIMMER

BASIN OR RISER BASIN

TEMPORARY SKIMMER OR RISER BASIN

DITCH CROSS-SECTION TO CONTINUE

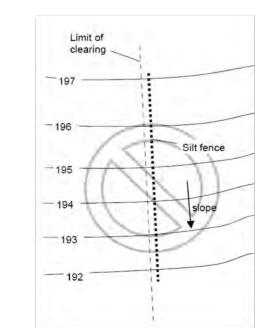
LINED WITH SPECIFIED RIP RAP.

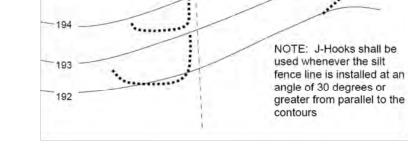
DOWN CUT SLOPE OF BASIN AND END AT

THE BOTTOM OF THE BASIN. DITCH TO BE

# DITCH TO BASIN

TRANSITION DETAIL NO SCALE





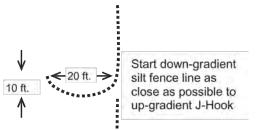
## **INCORRECT** Silt fence installed parallel to slope (perpendicular to contour) in one, long run

#### CORRECT Silt fence installed in shorter runs with "J-Hooks" to avoid concentration of flows at one location by trapping runoff at multiple points along a slope.

## Purpose:

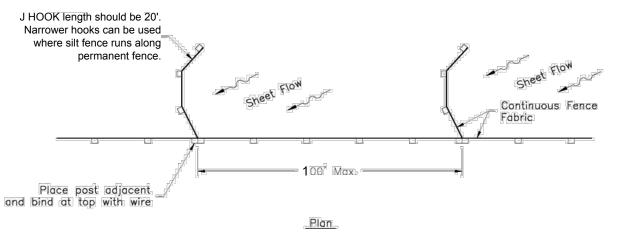
The proper operation of silt fence depends on the ability to temporarily pond runoff behind the fence, allowing time for sediments to settle. Silt fence is **not** a filter. If water flows around the end(s), the silt fence fails to function. It must be placed where it will store water - often times along a slope a 'smile' or J-Hook shape is required to create a storage area. Long runs should be avoided, and broken up into smaller segments.

| Slope Steepness      | Maximum Space between silt fence rows or J-hooks (ft.) |  |  |
|----------------------|--------------------------------------------------------|--|--|
| 2:1 (50%)            | 25                                                     |  |  |
| 3:1 (33%)            | 50                                                     |  |  |
| 4:1 (25%)            | 75                                                     |  |  |
| 5:1 or flatter (20%) | 100                                                    |  |  |



SKIMMER OR RISER BASIN BOTTOM

Typical J-Hook Dimensions Minimum width of J-Hook recommended at 20 ft with a depth of 10 ft. Where space is limited (e.g., along permanent fence line), narrower hooks can be used with a higher spacing frequency.

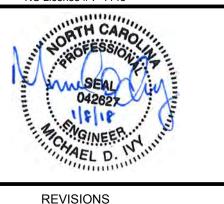


J-HOOK

SILT FENCE J HOOK DETAIL NO SCALE



NC License # F-1143



| REV   | DESCRIPTION                                   |     | CHK | DATE       |
|-------|-----------------------------------------------|-----|-----|------------|
| INL V | DESCRIPTION                                   | DWN | APP | DATE       |
| 1     | NCDEQ COMMENTS PER<br>EXPRESS REVIEW 10-13-17 |     | MDI | 10/16/2017 |
| '     |                                               |     | MDI | 10/10/2017 |
| 2     | SOUTHERN CURRENT                              | MDD | MDI | 10/16/2017 |
|       | FENCE ADJUSTMENT                              | MDD | MDI | 10/10/2017 |
| 3     | HARNETT COUNTY CONDITIONAL USE PERMIT         | MDI | CGO | 10/18/2017 |
| 3     | LANDSCAPING COMMENTS                          | MDI | CGO | 10/10/2017 |
| 4     | NODEMI D COMMENTO                             |     | CGO | 12/1/2017  |
| 4     | NCDEMLR COMMENTS                              | MDI | CGO | 12/1/2017  |
| 5     | SOUTHERN CURRENT FENCE                        | MDI | CGO | 12/19/2017 |
| 5     | AND DITCH ADJUSTMENT, ZONING COMMENTS         | MDI | CGO | 12/19/2017 |
| 6     | ZONING COMMENTS                               | MDI | CGO | 1/8/2018   |
|       | ZONING COMMENTS                               | MDI | CGO | 1/0/2010   |
|       |                                               |     |     |            |
|       |                                               |     |     |            |
|       |                                               |     |     |            |
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## SCALE VERIFICATION THIS BAR IS 1 INCH IN LENGTI ON ORIGINAL DRAWING IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

## **DETAILS**

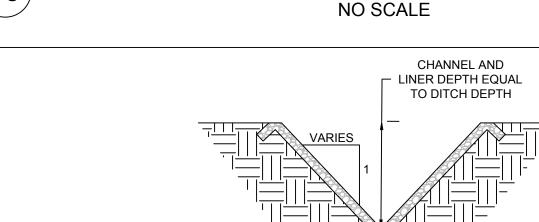
FLOWERS SOLAR LLC 3188 BAILEYS XRDs ROAD BENSON, NC 27504



SOUTHERN CURRENT 1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407

## CONSTRUCTION

| PROJECT NO.   | 2   | 0181491  |       |       |
|---------------|-----|----------|-------|-------|
| ISSUE DATE    | 01/ | /08/2017 |       |       |
| CURRENT REVIS | ION | 6        |       | C-10  |
| DESIGNED BY   |     | MDD      |       | C-10  |
| DRAWN BY      |     | MDD      |       |       |
| CHECKED BY    |     | MDI      |       |       |
| APPROVED BY   |     | MDI      | SHEET | 10 of |



NAG P300 EROSION CONTROL MATTING

## PERMANENT DIVERSION DITCHES

| NAME                 | LENGTH<br>(FT) | LEFT<br>SIDESLOPE<br>(Z:1) | RIGHT<br>SIDESLOPE<br>(Z:1) | DEPTH<br>(FT) | SLOPE<br>(%) | SPECIFIED EROSION CONTROL BLANKET |
|----------------------|----------------|----------------------------|-----------------------------|---------------|--------------|-----------------------------------|
| DIVERSION DITCH PD-1 | 423            | 8                          | 3                           | 1.00          | 1.70%        | NORTH AMERICAN GREEN P300         |
| DIVERSION DITCH PD-2 | 363            | 3                          | 8                           | 1.00          | 2.60%        | NORTH AMERICAN GREEN P300         |
| DIVERSION DITCH PD-3 | 572            | 8                          | 3                           | 1.00          | 1.50%        | NORTH AMERICAN GREEN P300         |
| DIVERSON DITCH PD-4  | 250            | 3                          | 8                           | 1.00          | 2.00%        | NORTH AMERICAN GREEN P300         |

## **TEMPORARY DIVERSION DITCHES**

| NAME                  | LENGTH<br>(FT) | LEFT<br>SIDESLOPE<br>(Z:1) | RIGHT<br>SIDESLOPE<br>(Z:1) | DEPTH<br>(FT) | SLOPE<br>(%) | SPECIFIED EROSION CONTROL BLANKET |
|-----------------------|----------------|----------------------------|-----------------------------|---------------|--------------|-----------------------------------|
| DIVERSION DITCH RB-1A | 743            | 8                          | 8                           | 1.00          | 3.84%        | NORTH AMERICAN GREEN C125BN       |
| DIVERSION DITCH RB-1B | 863            | 8                          | 8                           | 1.00          | 2.42%        | NORTH AMERICAN GREEN C125BN       |
| DIVERSION DITCH SK-1A | 817            | 6                          | 6                           | 1.00          | 2.85%        | NORTH AMERICAN GREEN C125BN       |
| DIVERSION DITCH SK-1B | 892            | 6                          | 6                           | 1.00          | 3.72%        | NORTH AMERICAN GREEN C125BN       |

## -^-^-\NOTES:-^-^-

- 1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
- 2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
- 3. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.

## MAINTENANCE:

 $\sqrt{1}\sqrt{4}\sqrt{5}$ 

INSPECT TEMPORARY DIVERSIONS AT LEAST WEEKLY AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION DITCH. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

> PERMANENT AND TEMPORARY **DIVERSION DITCH DETAILS**

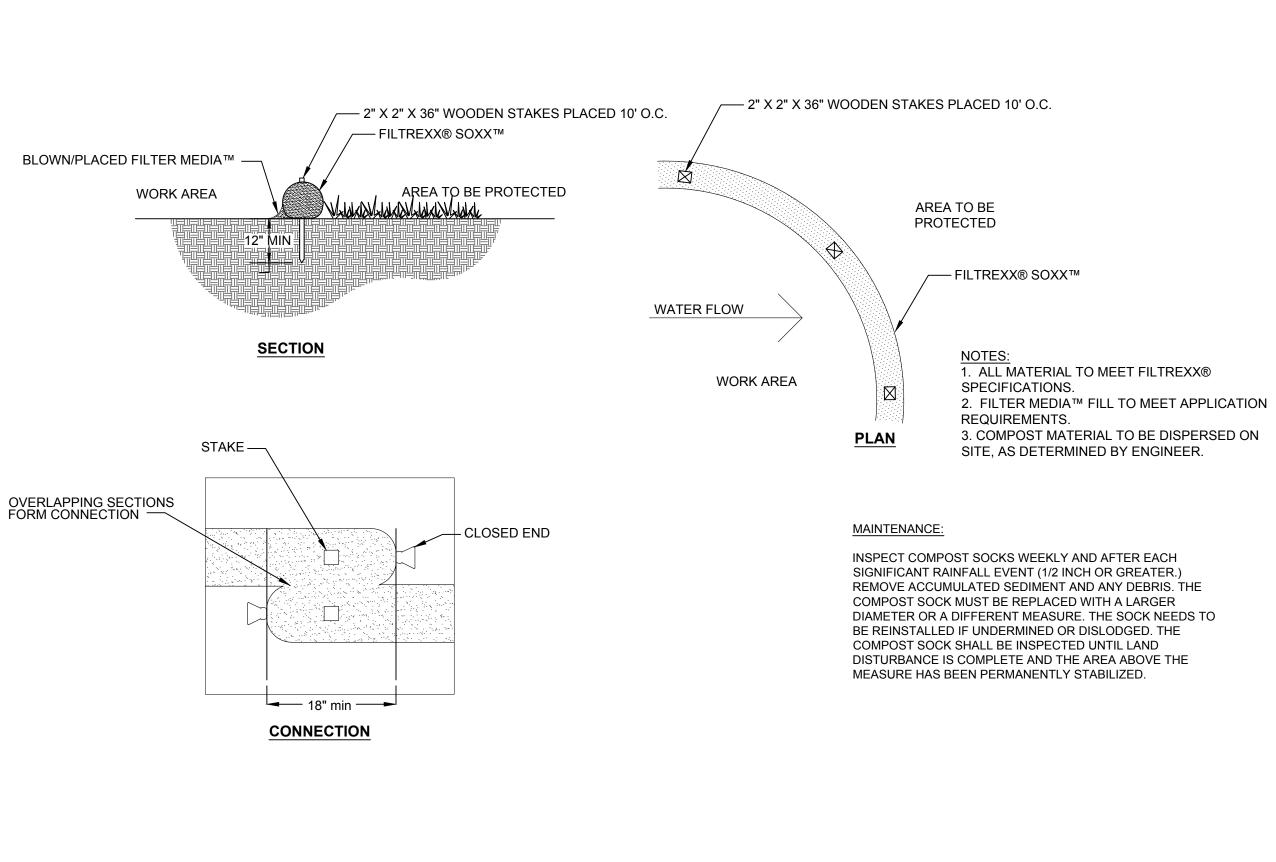
## 1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. 2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12"(30CM) OF

- RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE RECPS 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 THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
- 3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN
- 4. PLACE CONSECUTIVE RECPS END-OVER-END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECPS.
- 5. FULL LENGTH EDGE OF RECPS 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 RECPS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5-12.5CM) (DEPENDING ON RECPS TYPE) AND STAPLED.

7. IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 -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 RECPS 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.

CHANNEL MATTING INSTALLATION 20 NO SCALE



## Table 6.66c – Compost Sock Initial Flow Rates

| Compost Sock    | 8 inch     | 12 inch     | 18 inch     | 24 inch     | 32 inch     |
|-----------------|------------|-------------|-------------|-------------|-------------|
| Design Diameter | (200mm)    | (300mm)     | (450mm)     | (600mm)     | (800mm)     |
| Maximum Slope   | 600 ft     | 750 ft      | 1,000 ft    | 1,300 ft    | 1,650 ft    |
| Length (<2%)    | (183m)     | (229m)      | (305m)      | (396m)      | (500m)      |
| Hydraulic Flow  | 7.5 gpm/ft | 11.3 gpm/ft | 15.0 gpm/ft | 22.5gpm/ft  | 30.0 gpm/ft |
| Through Rate    | (94 l/m/m) | (141 l/m/m) | (188 l/m/m) | (281 l/m/m) | (374 l/m/m) |

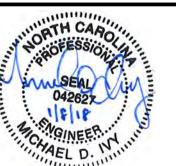
Source: B. Faucette-2010

|                     |     |                           |                             |           |                       | 1                                        |               |                                          |
|---------------------|-----|---------------------------|-----------------------------|-----------|-----------------------|------------------------------------------|---------------|------------------------------------------|
| FILT<br>SOO<br>SECT | CK  | MANNINGS<br>NUMBER<br>(N) | 10-YR, 24-HR<br>DEPTH (IN.) | SLOPE (%) | WIDTH OF<br>FLOW (FT) | LENGTH OF<br>FILTER SOCK<br>SECTION (FT) | Q<br>(GPM/FT) | FILTER SOCK<br>SIZE (PER TABLE<br>6.66c) |
| DA                  | A-1 | 0.3                       | 5.48                        | 1.58      | 250                   | 429                                      | 6.20          | 12"                                      |

23 COMPOST FILTER SOCK
NO SCALE



3200 Gateway Centre Blvd., Suite 100 Morrisville, NC 27560 Phone: 919-755-5011 www.kleinfelder.com NC License # F-1143



|     | REVISIONS                                   |     |     |                       |
|-----|---------------------------------------------|-----|-----|-----------------------|
| REV | DESCRIPTION                                 | DSN | CHK | DATE                  |
| KEV | DESCRIPTION                                 | DWN | APP | DATE                  |
| 1   | NCDEQ COMMENTS PER                          | MDD | MDI | 10/16/2017            |
| '   | EXPRESS REVIEW 10-13-17                     | MDD | MDI | 10/10/2017            |
| 2   | SOUTHERN CURRENT<br>FENCE ADJUSTMENT        | MDD | MDI | <br> -<br> 10/16/2017 |
|     |                                             | MDD | MDI | 10/10/2017            |
|     | HARNETT COUNTY                              | MDI | CGO | 40/49/2017            |
| 3   | CONDITIONAL USE PERMIT LANDSCAPING COMMENTS | MDI | CGO | 10/18/2017            |
| _   | NCDEMLR COMMENTS                            | MDI | CGO | 40/4/2017             |
| 4   |                                             | MDI | CGO | 12/1/2017             |
| _   | SOUTHERN CURRENT FENCE                      | MDI | CGO | 10/10/2017            |
| 5   | AND DITCH ADJUSTMENT, ZONING COMMENTS       | MDI | CGO | 12/19/2017            |
| 6   | ZONINO COMMENTO                             | MDI | CGO | 1/8/2018              |
| 0   | ZONING COMMENTS                             | MDI | CGO | 1/8/2018              |
|     |                                             |     |     |                       |
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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

**DETAILS** 

FLOWERS SOLAR LLC 3188 BAILEYS XRDs ROAD BENSON, NC 27504



SOUTHERN CURRENT 1634 ASHLEY RIVER ROAD CHARLESTON, SC 29407

## CONSTRUCTION

| PROJECT NO.      | 20181491   |    |
|------------------|------------|----|
| ISSUE DATE (     | )1/08/2017 |    |
| CURRENT REVISION | ۱ 6        |    |
| DESIGNED BY      | MDD        |    |
| DRAWN BY         | MDD        |    |
| CHECKED BY       | MDI        |    |
| APPROVED BY      | MDI        | Sŀ |
|                  |            |    |

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11 of 11

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