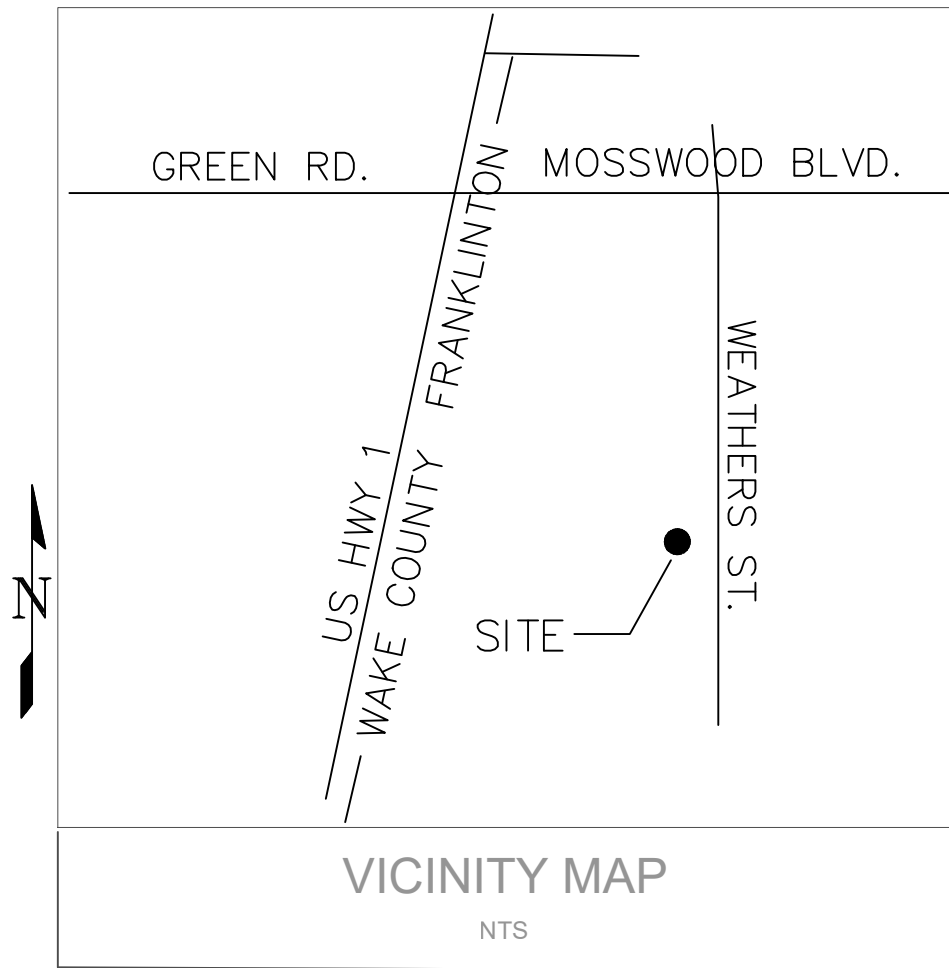


CAD FILE: D:\CIS9\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Cover



# SITE PLANS FOR COOL WICK WAREHOUSE 80 WEATHERS STREET YOUNGSVILLE, NORTH CAROLINA

PREPARED FOR:  
COOLWICK, LLC  
186 WIND CHIME COURT # 200  
RALEIGH, NORTH CAROLINA 27615

PREPARED BY:  
**CRUMPLER**  
*Consulting Services, PLLC*

2308 Ridge Road  
Raleigh, North Carolina 27612  
Ph. 919-413-1704  
P-1533

**RECEIVED**  
By Erin Klinger at 9:53 am, Mar 31, 2020

| SHEET | DESCRIPTION                 |
|-------|-----------------------------|
| C-1   | COVER                       |
| C-2   | EXISTING CONDITIONS         |
| C-3   | SITE PLAN                   |
| C-4   | GRADING AND STORMWATER PLAN |
| C-5   | EROSION CONTROL PLAN        |
| C-6   | UTILITY PLAN                |
| D-1   | DETAILS                     |
| D-2   | DETAILS                     |

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL  
TOWN OF YOUNGSVILLE, NCDEQ, AND NCDOT  
STANDARDS AND SPECIFICATIONS.

CALL 48 HOURS  
BEFORE YOU DIG



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

ISSUED FOR  
PERMITTING

| REV. | DESCRIPTION | DATE |
|------|-------------|------|
|      |             |      |
|      |             |      |
|      |             |      |
|      |             |      |

COVER  
COOLWICK, LLC  
80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

|              |          |
|--------------|----------|
| PROJECT NO.: | 19024    |
| DRAWN BY:    | JAC      |
| CHECKED BY:  | JAC      |
| DATE:        | 10/10/19 |
| SCALE:       | 1" = 30' |

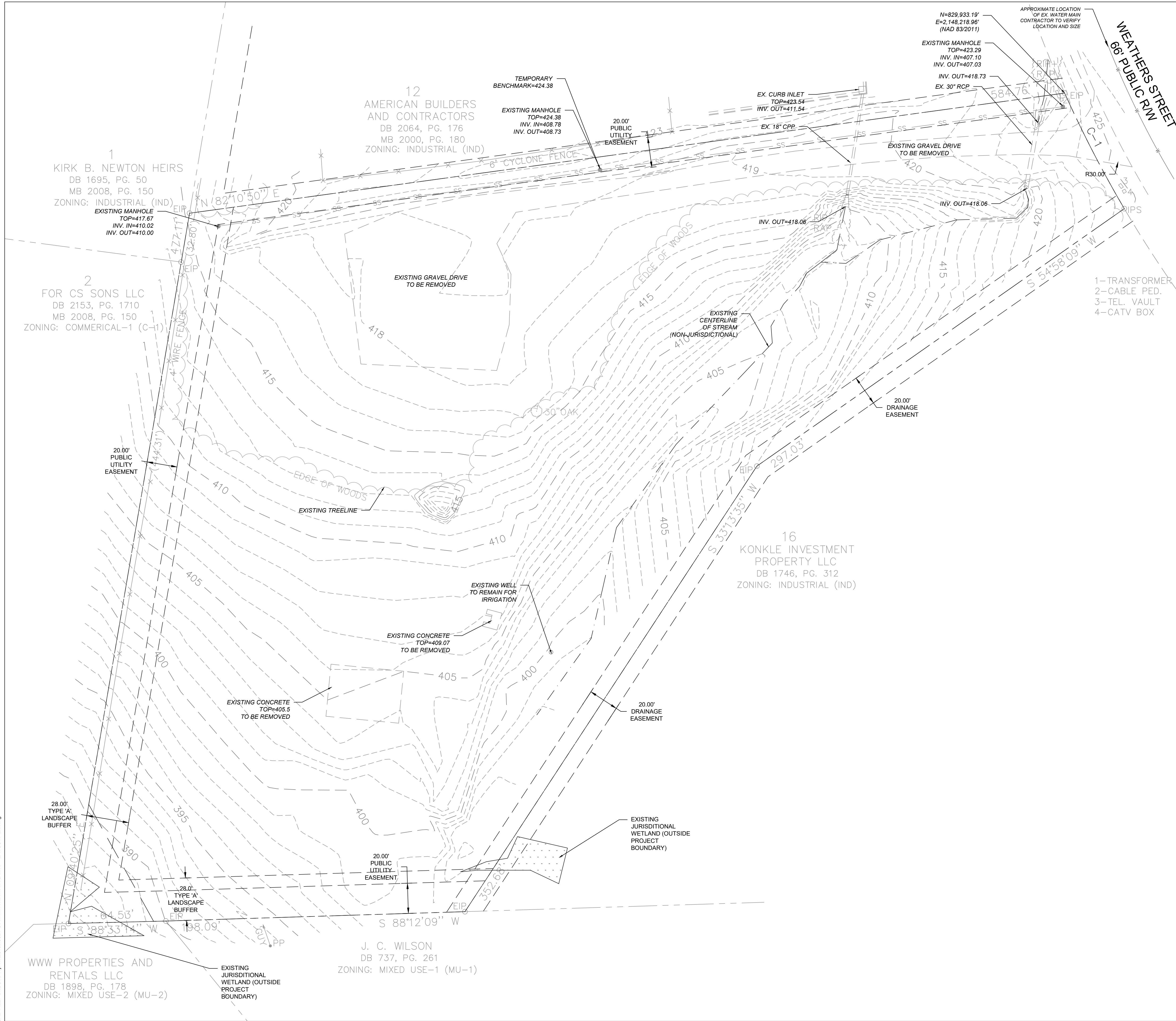
C-1

1 of 8

**CRUMPLER**  
Consulting Services, PLLC  
2308 Ridge Road  
Raleigh, North Carolina 27612  
Ph. 919-413-1704  
P-1533



CAD FILE: D:\CSD\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Existing



| LEGEND |                                 |
|--------|---------------------------------|
|        | EXISTING PROPERTY LINE          |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING RIGHT-OF-WAY           |
|        | EXISTING OVERHEAD POWER LINE    |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING EDGE OF PAVEMENT       |
|        | EXISTING SANITARY SEWER         |
|        | EXISTING WATER LINE             |
|        | EXISTING FENCE                  |
|        | EXISTING CONTOUR MAJOR          |
|        | EXISTING CONTOUR MINOR          |
|        | EXISTING WETLANDS               |

- NOTES
- BOUNDARY AND EXISTING CONDITIONS SURVEY PROVIDED BY B.L. SCOTT LAND SURVEYING DATED 08-08-19.
  - A PORTION OF THE PROPERTY IS LOCATED IN ZONE X THAT IS LOCATED WITHIN THE 0.2% ANNUAL CHANCE ZONE. THE REMAINING PORTIONS OF THE PROPERTY IS LOCATED IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE 1% ANNUAL CHANCE FLOODPLAIN) BASED ON THE FEMA MAP NUMBER 3720184200L DATED APRIL, 2013.
  - ONSITE WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT OR PARCEL AS SHOWN. WETLANDS INVESTIGATION PERFORMED BY CAROLINA ECOSYSTEMS IN SEPTEMBER 2019.
  - THIS DRAWING IS NOT FOR RECORDATION.

ISSUED FOR PERMITTING

| DATE | DESCRIPTION | REV. |
|------|-------------|------|
|      |             |      |
|      |             |      |
|      |             |      |
|      |             |      |

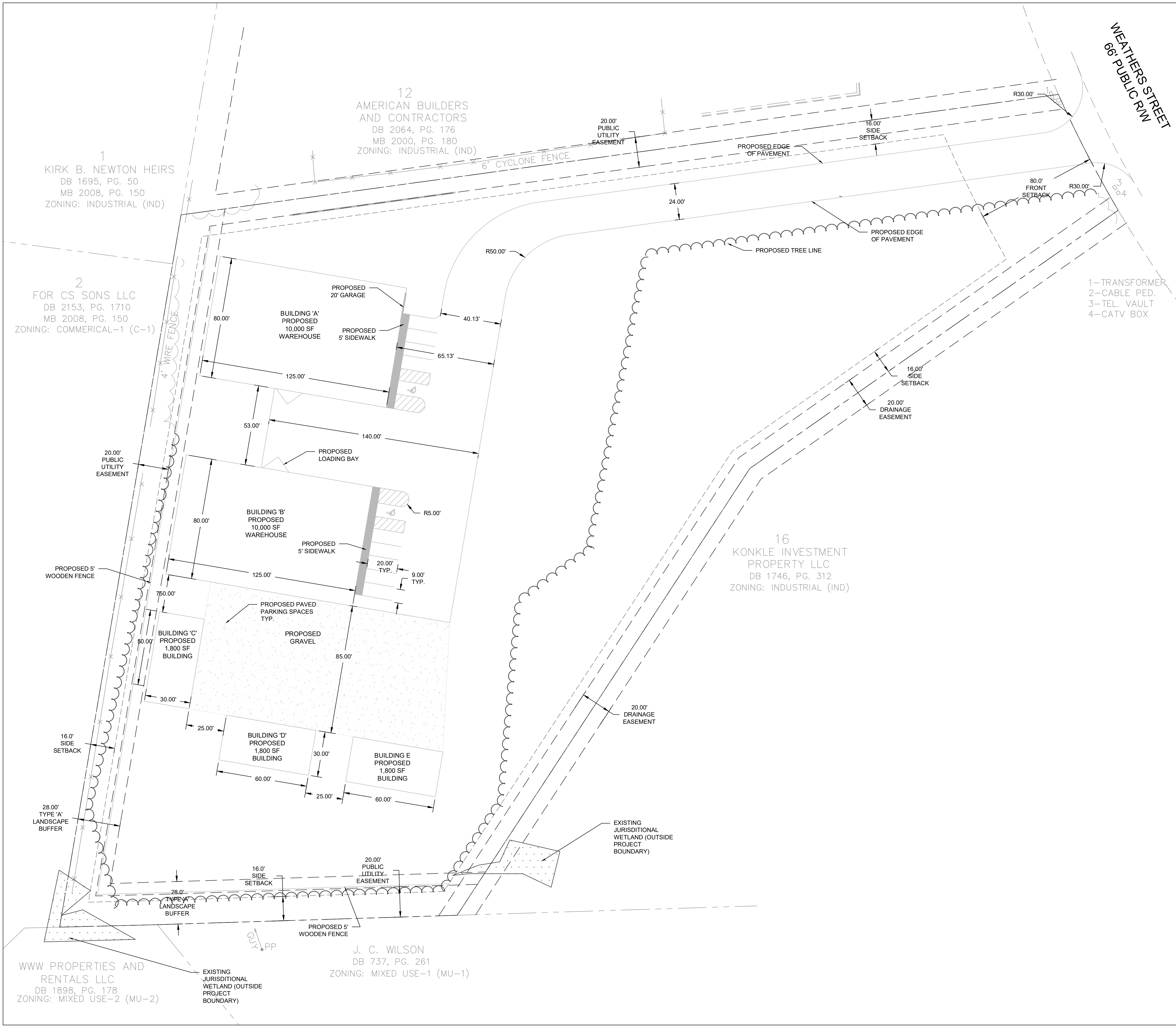
EXISTING CONDITIONS  
COOLWICK, LLC  
80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

|              |          |
|--------------|----------|
| PROJECT NO.: | 19024    |
| DRAWN BY:    | JAC      |
| CHECKED BY:  | JAC      |
| DATE:        | 10/10/19 |
| SCALE:       | 1" = 30' |

C-2



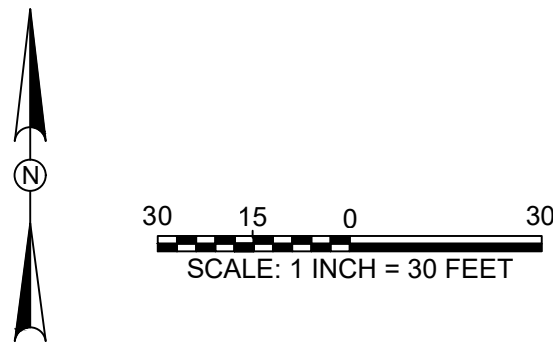
CAD FILE: D:\CSP\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Site



| LEGEND |                                 |
|--------|---------------------------------|
|        | EXISTING PROPERTY LINE          |
|        | EXISTING EASEMENT               |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING RIGHT-OF-WAY           |
|        | EXISTING OVERHEAD POWER LINE    |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING EDGE OF PAVEMENT       |
|        | EXISTING CENTERLINE OF STREAM   |
|        | EXISTING TOP OF STREAM BANK     |
|        | EXISTING 50' RIPARIAN BUFFER    |
|        | PROPOSED SIDEWALK               |
|        | PROPOSED ROADWAY                |
|        | EXISTING WETLANDS               |

| SUMMARY INFORMATION   |  |
|---|--|
| DEVELOPMENT NAME: COOLWICK WAREHOUSE  |  |
| SITE ADDRESS: 80 WEATHERS STREET<br>YOUNGSVILLE, NORTH CAROLINA   |  |
| PIN NUMBER: 1842-79-8720  |  |
| JURISDICTION: TOWN OF YOUNGSVILLE<br>CURRENT ZONING DISTRICT: IND (INDUSTRIAL)  |  |
| TOTAL ACREAGE: 4.80 ACRES (209,089.61 SF)   |  |
| BUILDING SETBACKS:<br>FRONT-80'<br>SIDE-16'<br>REAR-16'   |  |
| BUILDING FLOOR AREA:<br>BUILDING 'A': 9,000SF WAREHOUSE, 1,000SF OFFICE SPACE<br>MAX. EMPLOYEES ONSITE=10<br>BUILDING 'B': 9,000SF WAREHOUSE, 1,000SF OFFICE SPACE<br>MAX EMPLOYEES ONSITE=10<br>BUILDING 'C': 1,200SF WAREHOUSE, 600SF OFFICE SPACE<br>MAX EMPLOYEES ONSITE=4<br>BUILDING 'D': 1,200SF WAREHOUSE, 600SF OFFICE SPACE<br>MAX EMPLOYEES ONSITE=4<br>BUILDING 'E': 1,200SF WAREHOUSE, 600SF OFFICE SPACE<br>MAX EMPLOYEES ONSITE=4  |  |
| PARKING CALCULATIONS:<br>REQUIRED PARKING: 1 SPACE PER 2 EMPLOYEES PLUS 1 PER<br>350SF OF SPACE OPEN TO THE PUBLIC<br>BUILDING 'A': EMPLOYEES ONSITE=10<br>SPACES REQUIRED=5<br>BUILDING 'B': EMPLOYEES ONSITE=10<br>SPACES REQUIRED=5<br>BUILDING 'C': EMPLOYEES ONSITE=0<br>SPACES REQUIRED=0<br>BUILDING 'D': EMPLOYEES ONSITE=0<br>SPACES REQUIRED=0<br>BUILDING 'E': EMPLOYEES ONSITE=0<br>SPACES REQUIRED=0<br>TOTAL REQUIRED PARKING SPACES: 10 SPACES<br>TOTAL PROVIDED PARKING SPACES: 11 SPACES<br>(2 ADA ACCESSIBLE) |  |
| OWNER/DEVELOPER:<br>COOLWICK, LLC<br>186 WIND CHIME COURT # 200<br>RALEIGH, NORTH CAROLINA 27615  |  |
| ENGINEER:<br>CRUMPLER CONSULTING SERVICES, PLLC<br>CONTACT: JOSH CRUMPLER, PE<br>2308 RIDGE ROAD<br>RALEIGH, NC 27612<br>(919) 413-1704   |  |

- NOTES
- BOUNDARY AND EXISTING CONDITIONS SURVEY PROVIDED BY B.L. SCOTT LAND SURVEYING DATED 08-08-19.
  - A PORTION OF THE PROPERTY IS LOCATED IN ZONE X THAT IS LOCATED WITHIN THE 0.2% ANNUAL CHANCE FLOOD PLAIN. THE REMAINING PORTIONS OF THE PROPERTY IS LOCATED IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE 1% ANNUAL CHANCE FLOODPLAIN) BASED ON THE FEMA MAP NUMBER 3720184200L DATED APRIL , 2013.
  - ONSITE WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT OR PARCEL AS SHOWN. WETLANDS INVESTIGATION PERFORMED BY CAROLINA ECOSYSTEMS IN SEPTEMBER 2019.
  - THIS DRAWING IS NOT FOR RECORDATION.



ISSUED FOR PERMITTING

| DATE        |  |  |  |  |
|-------------|--|--|--|--|
| DESCRIPTION |  |  |  |  |
| REV.        |  |  |  |  |

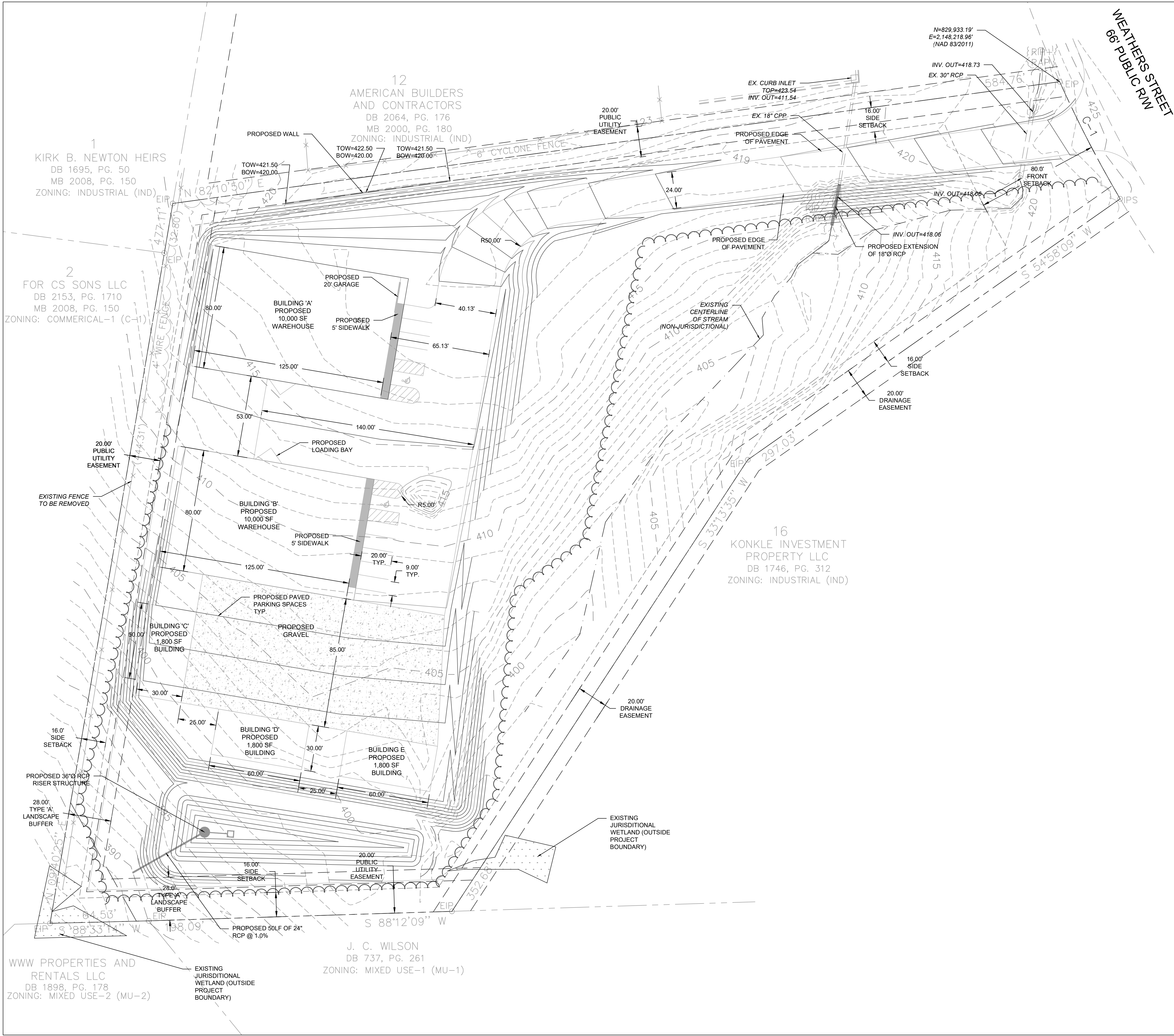
SITE PLAN  
COOLWICK, LLC  
80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

|              |          |
|--------------|----------|
| PROJECT NO.: | 19024    |
| DRAWN BY:    | JAC      |
| CHECKED BY:  | JAC      |
| DATE:        | 12/13/19 |
| SCALE:       | 1" = 30' |

C-3



CAD FILE: D:\CSP\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Grading Plan



| LEGEND |                                 |
|--------|---------------------------------|
|        | EXISTING PROPERTY LINE          |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING RIGHT-OF-WAY           |
|        | EXISTING OVERHEAD POWER LINE    |
|        | EXISTING ABUTTING PROPERTY LINE |
|        | EXISTING BUILDING SETBACK LINE  |
|        | EXISTING PARKING SETBACK LINE   |
|        | EXISTING EDGE OF PAVEMENT       |
|        | EXISTING CONTOUR MAJOR          |
|        | EXISTING CONTOUR MINOR          |
|        | EXISTING WETLANDS               |
|        | PROPOSED CONTOUR MAJOR          |
|        | PROPOSED CONTOUR MINOR          |
|        | PROPOSED SIDEWALK               |
|        | PROPOSED ROADWAY                |

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, DWQ AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSED AT: [HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION](http://portal.ncdenr.org/web/lr/erosion)

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CONTACT THE WASHINGTON REGIONAL OFFICE AT (252)946-6481.

ADA NOTES

- PROPOSED ADA PARKING AND STALL STRIPING SHALL HAVE SLOPES NO STEEPER THAN 1:48 (2%).
- PROPOSED ACCESSIBLE ROUTE TO RIGHT-OF-WAY AND PROPOSED SIDEWALKS SHALL HAVE A RUNNING SLOPE NO STEEPER THAN 1:20 (5%) AND CROSS SLOPES NO STEEPER THAN 1:48 (2%).
- RAMPS SHALL COMPLY WITH THE REQUIREMENTS OF 2012 NCSBC SECTION 1010.
- HANDRAILS SHALL COMPLY WITH THE REQUIREMENTS OF 2012 NCSBC SECTION 1012.

NOTES

- BOUNDARY AND EXISTING CONDITIONS SURVEY PROVIDED BY B.L. SCOTT LAND SURVEYING DATED 08-08-19.
- A PORTION OF THE PROPERTY IS LOCATED IN ZONE X THAT IS LOCATED WITHIN THE 0.2% ANNUAL CHANCE ZONE. THE REMAINING PORTIONS OF THE PROPERTY IS LOCATED IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE 1% ANNUAL CHANCE FLOODPLAIN) BASED ON THE FEMA MAP NUMBER 3720184200L DATED APRIL , 2013.
- ONSITE WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT OR PARCEL AS SHOWN. WETLANDS INVESTIGATION PERFORMED BY CAROLINA ECOSYSTEMS IN SEPTEMBER 2019.
- THIS DRAWING IS NOT FOR RECORDATION.

**CRUMPLER**  
Consulting Services, PLLC

2308 Ridge Road  
Raleigh, North Carolina 27612  
919-411-1704  
P-1533

ISSUED FOR PERMITTING

| REV. | DESCRIPTION |  |  |  | DATE |
|------|-------------|--|--|--|------|
|      |             |  |  |  |      |
|      |             |  |  |  |      |
|      |             |  |  |  |      |
|      |             |  |  |  |      |
|      |             |  |  |  |      |

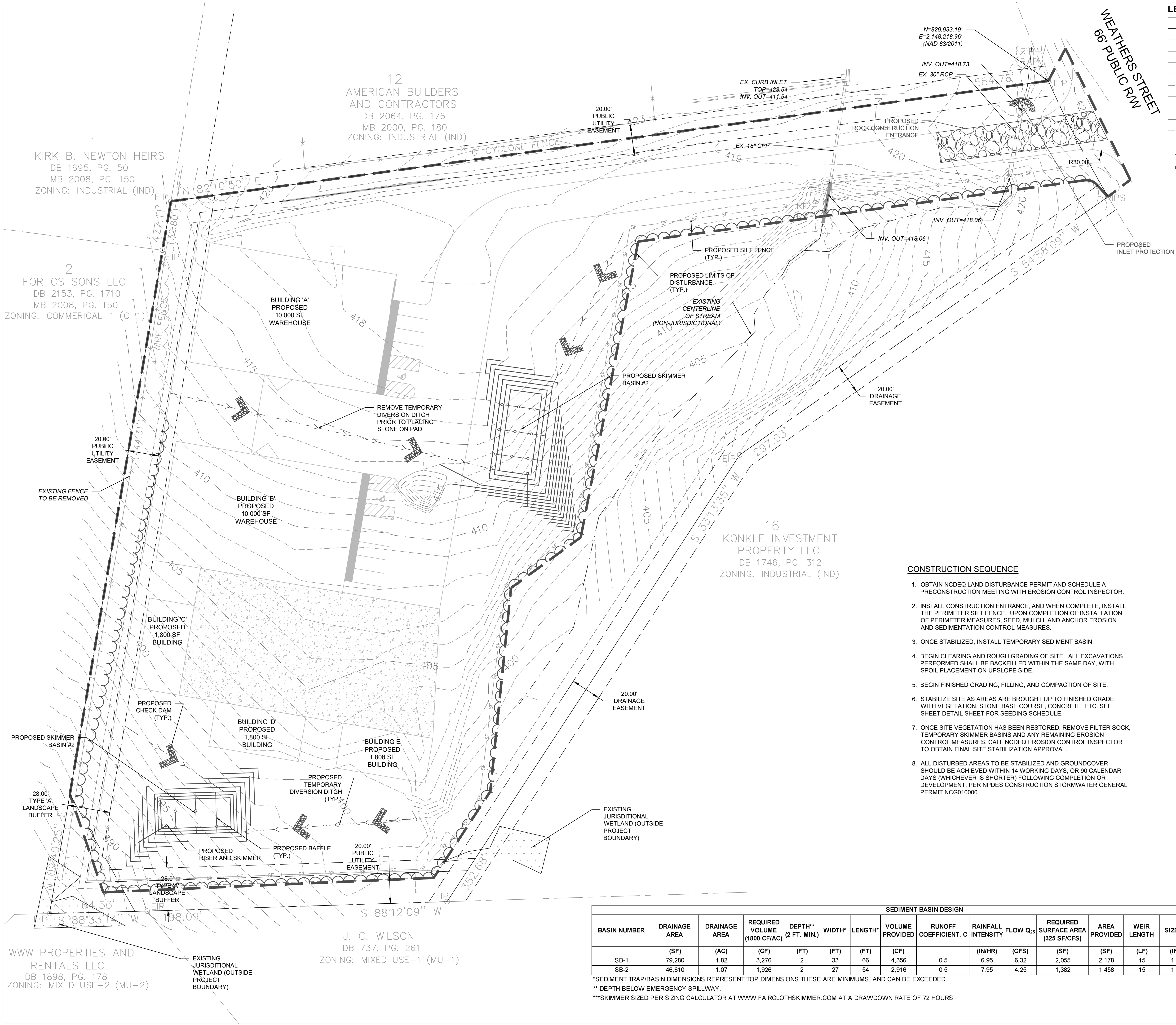
GRADING PLAN  
**COOLWICK, LLC**  
80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

|              |          |
|--------------|----------|
| PROJECT NO.: | 19024    |
| DRAWN BY:    | JAC      |
| CHECKED BY:  | JAC      |
| DATE:        | 10/10/19 |
| SCALE:       | 1" = 30' |

C-4



CAD FILE: D:\C59\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Erosion Control



LEGEND

- EXISTING PROPERTY LINE
- EXISTING ABUTTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING OVERHEAD POWER LINE
- EXISTING ABUTTING PROPERTY LINE
- EXISTING BUILDING SETBACK LINE
- EXISTING PARKING SETBACK LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED SILT FENCE
- PROPOSED TEMPORARY DIVERSION
- PROPOSED LIMITS OF DISTURBANCE
- EXISTING WETLANDS
- PROPOSED BAFFLE
- PROPOSED RISER AND SKIMMER
- PROPOSED HORSESHOE INLET PROTECTION
- PROPOSED RIP RAP ENERGY DISSIPATER

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, DWQ AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSED AT: [HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION](http://portal.ncdenr.org/web/lr/erosion)

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CONTACT THE WASHINGTON REGIONAL OFFICE AT (252)946-6481.

ADA NOTES

- PROPOSED ADA PARKING AND STALL STRIPING SHALL HAVE SLOPES NO STEEPER THAN 1:48 (2%).
- PROPOSED ACCESSIBLE ROUTE TO RIGHT-OF-WAY AND PROPOSED SIDEWALKS SHALL HAVE A RUNNING SLOPE NO STEEPER THAN 1:20 (5%) AND CROSS SLOPES NO STEEPER THAN 1:48 (2%).
- RAMPS SHALL COMPLY WITH THE REQUIREMENTS OF 2012 NCSBC SECTION 1010.
- HANDRAILS SHALL COMPLY WITH THE REQUIREMENTS OF 2012 NCSBC SECTION 1012.

NOTES

- BOUNDARY AND EXISTING CONDITIONS SURVEY PROVIDED BY B.L. SCOTT LAND SURVEYING DATED 08-08-19.
- A PORTION OF THE PROPERTY IS LOCATED IN ZONE X THAT IS LOCATED WITHIN THE 0.2% ANNUAL CHANCE ZONE. THE REMAINING PORTIONS OF THE PROPERTY IS LOCATED IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE 1% ANNUAL CHANCE FLOODPLAIN) BASED ON THE FEMA MAP NUMBER 3720184200L DATED APRIL, 2013.
- ONSITE WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT OR PARCEL AS SHOWN. WETLANDS INVESTIGATION PERFORMED BY CAROLINA ECOSYSTEMS IN SEPTEMBER 2019.
- THIS DRAWING IS NOT FOR RECORDATION.

EROSION CONTROL NOTES

- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH JOHNSTON COUNTY EROSION CONTROL STANDARDS.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION.
- ADDITIONAL EROSION CONTROL MEASURES AND/OR MODIFICATIONS TO PROPOSED MEASURES MAY BE NECESSARY DEPENDING ON ACTUAL SITE CONDITIONS.
- THE TOTAL DISTURBED AREA IS 2.860 ACRES.
- SEE DETAIL SHEETS FOR EROSION CONTROL MEASURE DETAILS.
- ALL SLOPES ON TEMPORARY SKIMMER BASINS SHALL BE BLANKET WITH NAG C125BN EROSION CONTROL BLANKET OR APPROVED EQUAL.

CONSTRUCTION SEQUENCE

- OBTAIN NCDEQ LAND DISTURBANCE PERMIT AND SCHEDULE A PRECONSTRUCTION MEETING WITH EROSION CONTROL INSPECTOR.
- INSTALL CONSTRUCTION ENTRANCE, AND WHEN COMPLETE, INSTALL THE PERIMETER SILT FENCE. UPON COMPLETION OF INSTALLATION OF PERIMETER MEASURES, SEED, MULCH, AND ANCHOR EROSION AND SEDIMENTATION CONTROL MEASURES.
- ONCE STABILIZED, INSTALL TEMPORARY SEDIMENT BASIN.
- BEGIN CLEARING AND ROUGH GRADING OF SITE. ALL EXCAVATIONS PERFORMED SHALL BE BACKFILLED WITHIN THE SAME DAY, WITH SPOIL PLACEMENT ON UPSLOPE SIDE.
- BEGIN FINISHED GRADING, FILLING, AND COMPACTION OF SITE.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISHED GRADE WITH VEGETATION, STONE BASE COURSE, CONCRETE, ETC. SEE SHEET DETAIL SHEET FOR SEEDING SCHEDULE.
- ONCE SITE VEGETATION HAS BEEN RESTORED, REMOVE FILTER SOCK, TEMPORARY SKIMMER BASINS AND ANY REMAINING EROSION CONTROL MEASURES. CALL NCDEQ EROSION CONTROL INSPECTOR TO OBTAIN FINAL SITE STABILIZATION APPROVAL.
- ALL DISTURBED AREAS TO BE STABILIZED AND GROUND COVER SHOULD BE ACHIEVED WITHIN 14 WORKING DAYS, OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OR DEVELOPMENT. PER NPDES CONSTRUCTION STORMWATER GENERAL PERMIT NCG010000.

SEDIMENT BASIN DESIGN

| BASIN NUMBER | DRAINAGE AREA | DRAINAGE AREA | REQUIRED VOLUME (1800 CF/AC) | DEPTH** (2 FT. MIN.) | WIDTH* | LENGTH* | VOLUME PROVIDED | RUNOFF COEFFICIENT, C | RAINFALL INTENSITY (IN/HR) | FLOW Q <sub>25</sub> (CFS) | REQUIRED SURFACE AREA (325 SF/CF) | AREA PROVIDED | WEIR LENGTH | SIZE*** | ORIFICE RADIUS | ORIFICE DIAMETER |
|--------------|---------------|---------------|------------------------------|----------------------|--------|---------|-----------------|-----------------------|----------------------------|----------------------------|-----------------------------------|---------------|-------------|---------|----------------|------------------|
|              | (SF)          | (AC)          | (CF)                         | (FT)                 | (FT)   | (FT)    | (CF)            |                       |                            |                            | (SF)                              | (SF)          | (LF)        | (IN)    | (IN)           | (IN)             |
| SB-1         | 79,280        | 1.82          | 3,276                        | 2                    | 33     | 66      | 4,356           | 0.5                   | 6.95                       | 6.32                       | 2,055                             | 2,178         | 15          | 1.5     | 0.7            | 1.4              |
| SB-2         | 46,610        | 1.07          | 1,926                        | 2                    | 27     | 54      | 2,916           | 0.5                   | 7.95                       | 4.25                       | 1,382                             | 1,458         | 15          | 1.5     | 0.6            | 1.1              |

\*SEDIMENT TRAP/BASIN DIMENSIONS REPRESENT TOP DIMENSIONS. THESE ARE MINIMUMS, AND CAN BE EXCEEDED.

\*\* DEPTH BELOW EMERGENCY SPILLWAY.

\*\*\*SKIMMER SIZED PER SIZING CALCULATOR AT WWW.FAIRCLOTHSKIMMER.COM AT A DRAWDOWN RATE OF 72 HOURS

CRUMPLER  
Consulting Services, PLLC

2308 Ridge Road  
Raleigh, North Carolina 27612  
Ph. 919-413-1704  
F-1553

ISSUED FOR PERMITTING

DATE

DESCRIPTION

REV.

EROSION CONTROL PLAN

COOLWICK, LLC

80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

PROJECT NO.: 19024

DRAWN BY: JAC

CHECKED BY: JAC

DATE: 10/10/19

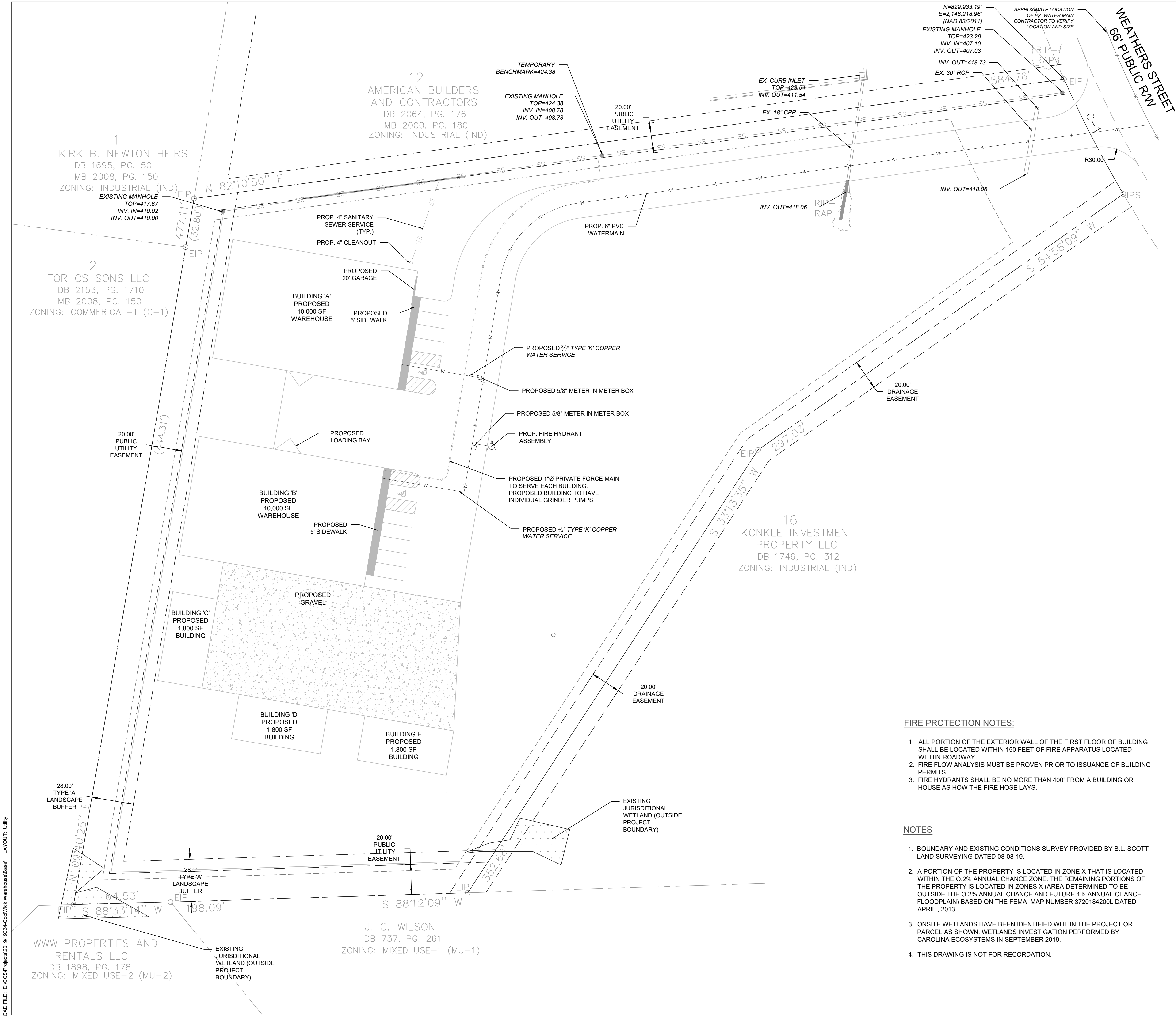
SCALE: 1" = 30'

C-5

5 of 8



CAD FILE: D:\CS9\Projects\2019\19024-CoolWick Warehouse\Bases\ LAYOUT: Utility



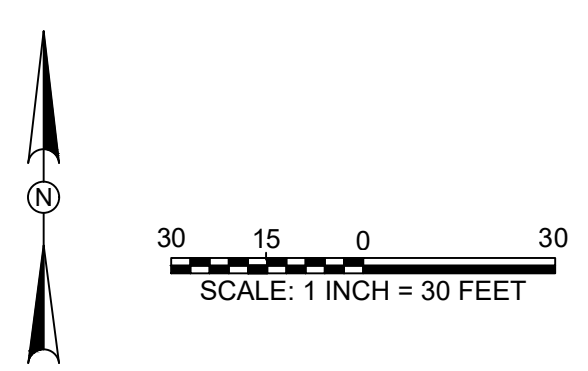
**LEGEND**

|           |                                 |
|-----------|---------------------------------|
| ---       | EXISTING PROPERTY LINE          |
| ---       | EXISTING ABUTTING PROPERTY LINE |
| ---       | EXISTING RIGHT-OF-WAY           |
| OHW OHW   | EXISTING OVERHEAD POWER LINE    |
| ---       | EXISTING ABUTTING PROPERTY LINE |
| ---       | EXISTING BUILDING SETBACK LINE  |
| ---       | EXISTING PARKING SETBACK LINE   |
| ---       | EXISTING EDGE OF PAVEMENT       |
| SS SS     | EXISTING SANITARY SEWER         |
| W W       | EXISTING WATER LINE             |
| ---       | PROPOSED SIDEWALK               |
| ---       | PROPOSED ROADWAY                |
| W W       | PROPOSED WATERLINE              |
| SS SS     | PROPOSED SEWER SERVICE          |
| [Pattern] | EXISTING WETLANDS               |

- FRANKLIN COUNTY UTILITY NOTES**
- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH FRANKLIN COUNTY DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
  - UTILITY SEPARATION REQUIREMENTS:
    - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
    - WHEN INSTALLING WATER & OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
    - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSINGS MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
    - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
    - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS. MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49)
    - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
  - ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE FRANKLIN COUNTY PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE FRANKLIN COUNTY PUBLIC UTILITIES DEPARTMENT.
  - 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
  - ABANDON AND REMOVE EXISTING WATER AND SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF SITE AS DIRECTED BY THE FRANKLIN COUNTY PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
  - INSTALL 3/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
  - INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
  - PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
  - ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
  - NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.

- FIRE PROTECTION NOTES:**
- ALL PORTION OF THE EXTERIOR WALL OF THE FIRST FLOOR OF BUILDING SHALL BE LOCATED WITHIN 150 FEET OF FIRE APPARATUS LOCATED WITHIN ROADWAY.
  - FIRE FLOW ANALYSIS MUST BE PROVEN PRIOR TO ISSUANCE OF BUILDING PERMITS.
  - FIRE HYDRANTS SHALL BE NO MORE THAN 400' FROM A BUILDING OR HOUSE AS HOW THE FIRE HOSE LAYS.

- NOTES**
- BOUNDARY AND EXISTING CONDITIONS SURVEY PROVIDED BY B.L. SCOTT LAND SURVEYING DATED 08-08-19.
  - A PORTION OF THE PROPERTY IS LOCATED IN ZONE X THAT IS LOCATED WITHIN THE 0.2% ANNUAL CHANCE ZONE. THE REMAINING PORTIONS OF THE PROPERTY IS LOCATED IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE 1% ANNUAL CHANCE FLOODPLAIN) BASED ON THE FEMA MAP NUMBER 3720184200L DATED APRIL , 2013.
  - ONSITE WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT OR PARCEL AS SHOWN. WETLANDS INVESTIGATION PERFORMED BY CAROLINA ECOSYSTEMS IN SEPTEMBER 2019.
  - THIS DRAWING IS NOT FOR RECORDATION.



**CRUMPLER**  
Consulting Services, PLLC

2308 Ridge Road  
Raleigh, North Carolina 27612  
Ph. 919-411-1704  
F-15533

| ISSUED FOR PERMITTING |  |  |  |  |
|-----------------------|--|--|--|--|
| DATE                  |  |  |  |  |
|                       |  |  |  |  |

| REV. | DESCRIPTION | UTILITY PLAN   |  |  |  |  |
|------|-------------|--|--|--|--|--|
|      |             | COOLWICK, LLC<br>80 WEATHERS STREET<br>YOUNGSVILLE, NORTH CAROLINA |  |  |  |  |
|      |             |  |  |  |  |  |

|              |          |
|--------------|----------|
| PROJECT NO.: | 19024    |
| DRAWN BY:    | JAC      |
| CHECKED BY:  | JAC      |
| DATE:        | 10/10/19 |
| SCALE:       | 1" = 30' |

**C-6**

6 of 8

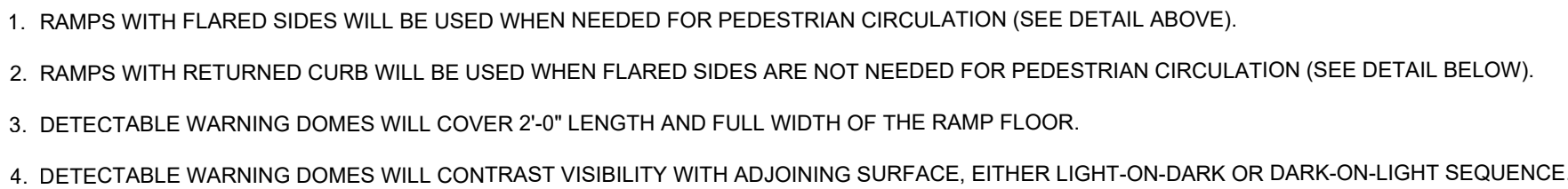




1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET.
2. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED AT LOCATIONS OF DRIVEWAY CROSSINGS, AT STREET INTERSECTIONS (ALONG THE LENGTH OF RADIUS CURB RETURNS), AND IN THE HANDICAP RAMPS.

# CONCRETE SIDEWALK

NO SCALE



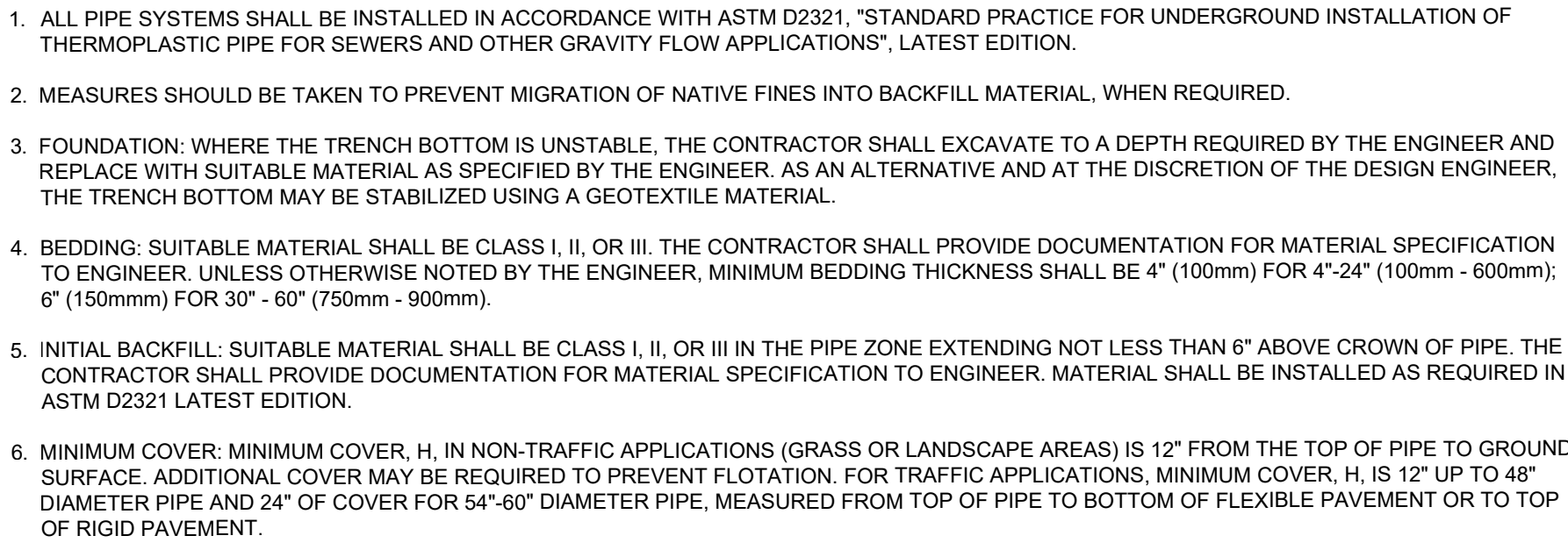
**CURB RAMP**  
NO SCALE

REV.

## DETAILS

COOLWICK, LLC  
80 WEATHERS STREET  
YOUNGSVILLE, NORTH CAROLINA

7 of 8



# TYPICAL PIPE TRENCH

NO SCALE

| MIN. RECOMMENDED COVER BASED ON<br>VEHICLE LOADING CONDITIONS |                                |  |
|---|--------------------------------|--|
|   | SURFACE LIVE LOADING CONDITION |  |
| PIPE DIA.   | H-25                           | HEAVY CONSTRUCTION<br>(75T AXLE LOAD)* |
| 12" - 48"   | 12"                            | 48"                                    |
| 54" - 60"   | 24"                            | 60"                                    |

\*VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER



AND BROWNTOP MILLET \*(NURSE CROP)  
OR SORGHUM-SUDAN HYBRIDS \*(NURSE CROP)

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE  
ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION  
OF DENUED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH CAN BE  
UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

\*NURSE CROP/TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR  
PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OUT  
IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

| SITE AREA DESCRIPTION                        | STABILIZATION TIME FRAME | EXCEPTIONS  |
|--|--------------------------|---|
| PERMETER DRAKES, SWALES, DITCHES, AND SLOPES | 7 DAYS                   | NONE  |
| HIGH QUALITY WATER (HOW) ZONES               | 7 DAYS                   | NONE  |
| SLOPES STEEPER THAN 3:1                      | 7 DAYS                   | IF SLOPES ARE 10' OR LESS IN LENGTH AND NO STEEPER THAN 2:1 14 DAYS ARE ALLOWED |
| SLOPES 3:1 OR FLATTER                        | 14 DAYS                  | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH                                    |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS                  | NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)                                      |

SEEDING SCHEDULE

NO SCALE

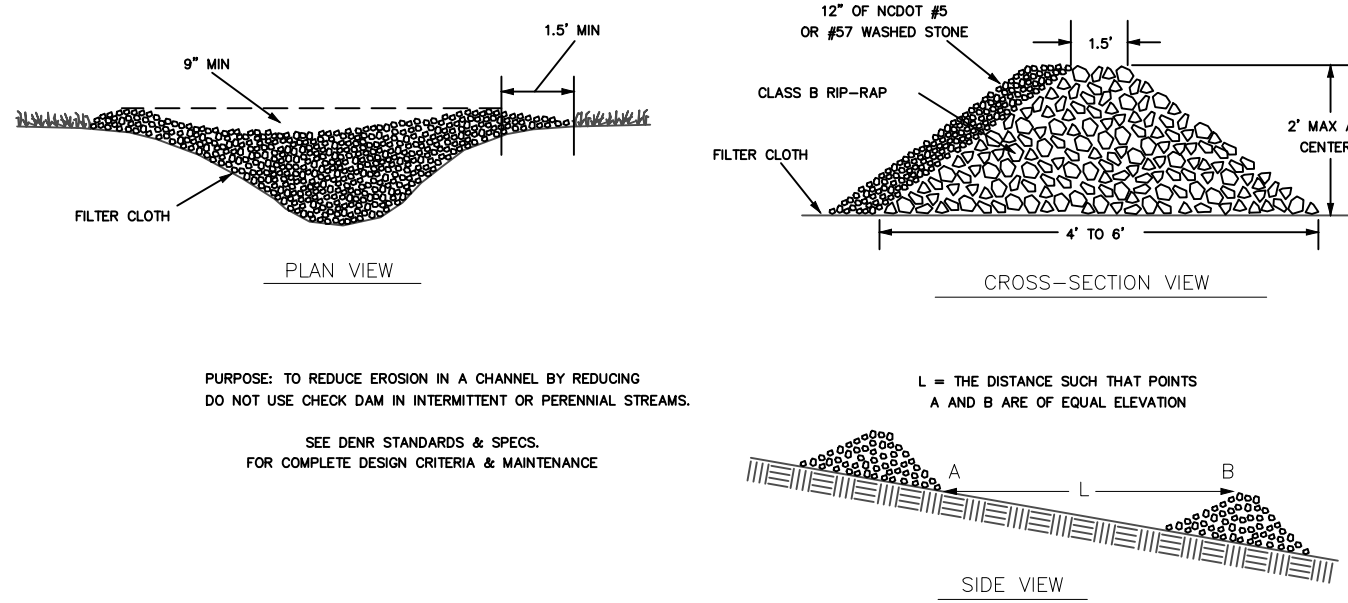


DESIGN CRITERIA

THE DRAINAGE AREA IS LIMITED TO ONE HALF ACRE.  
KEEP A MAXIMUM HEIGHT OF 2 FEET AT THE CENTER OF THE DAM.  
KEEP THE CENTER OF THE CHECK DAM AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES AT NATURAL GROUND ELEVATION.  
KEEP THE SIDE SLOPES OF THE DAM AT 2:1 OR FLATTER.  
ENSURE THAT THE MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.  
STABILIZE OUTFLOW AREAS ALONG THE CHANNEL TO RESIST EROSION.  
USE NOCOT #8 OR #57 STONE.  
KEY THE STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 1.5 FEET TO AVOID WASHOUT FROM OVERFLOW AROUND THE DAM.

NOTES

1. PLACE STONE TO THE LINE AND DIMENSION SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL.
3. WHERE THE DAM ABUTS THE CHANNEL BANKS, EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
5. PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM IS STABLE.
7. ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.



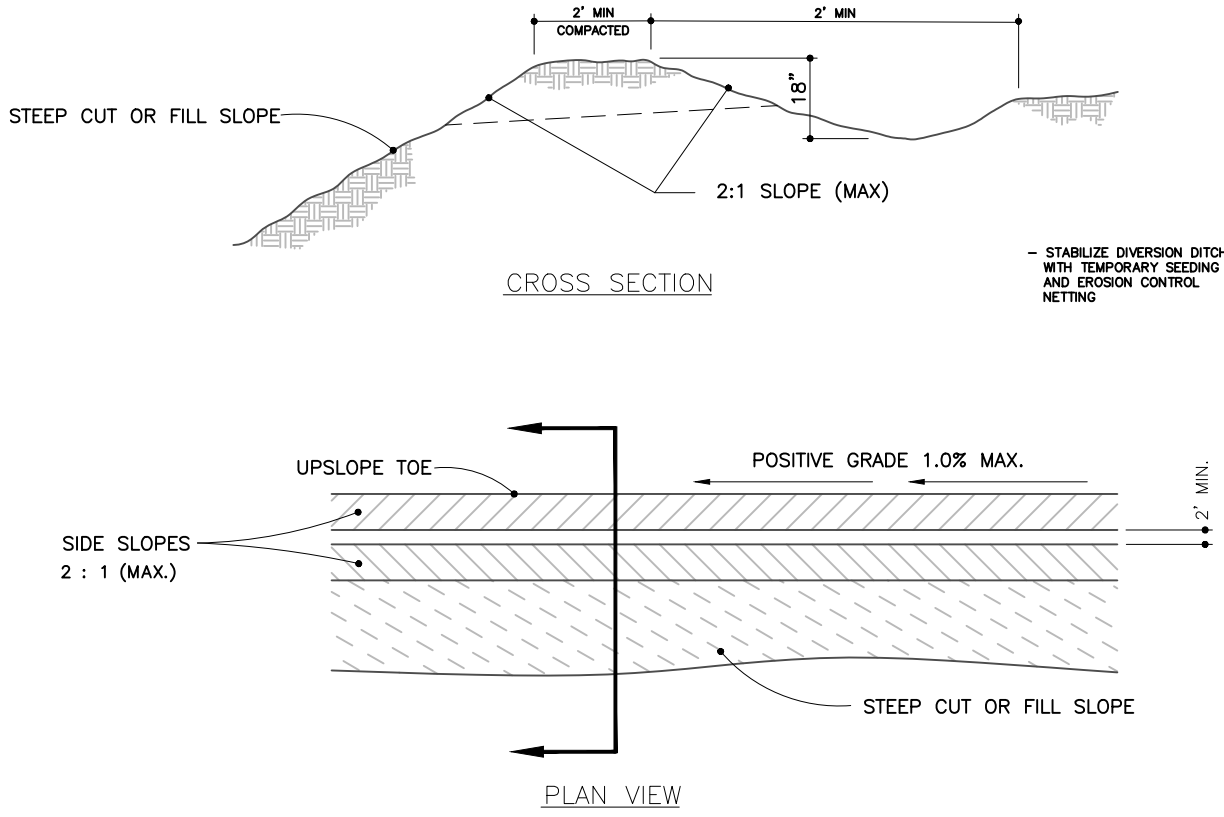
PURPOSE: TO REDUCE EROSION IN A CHANNEL BY REDUCING DO NOT USE CHECK DAM IN INTERMITTENT OR PERENNIAL STREAMS.

SEE DENR STANDARDS & SPECS FOR COMPLETE DESIGN CRITERIA & MAINTENANCE

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

CHECK DAM  
NO SCALE

CROSS SECTION



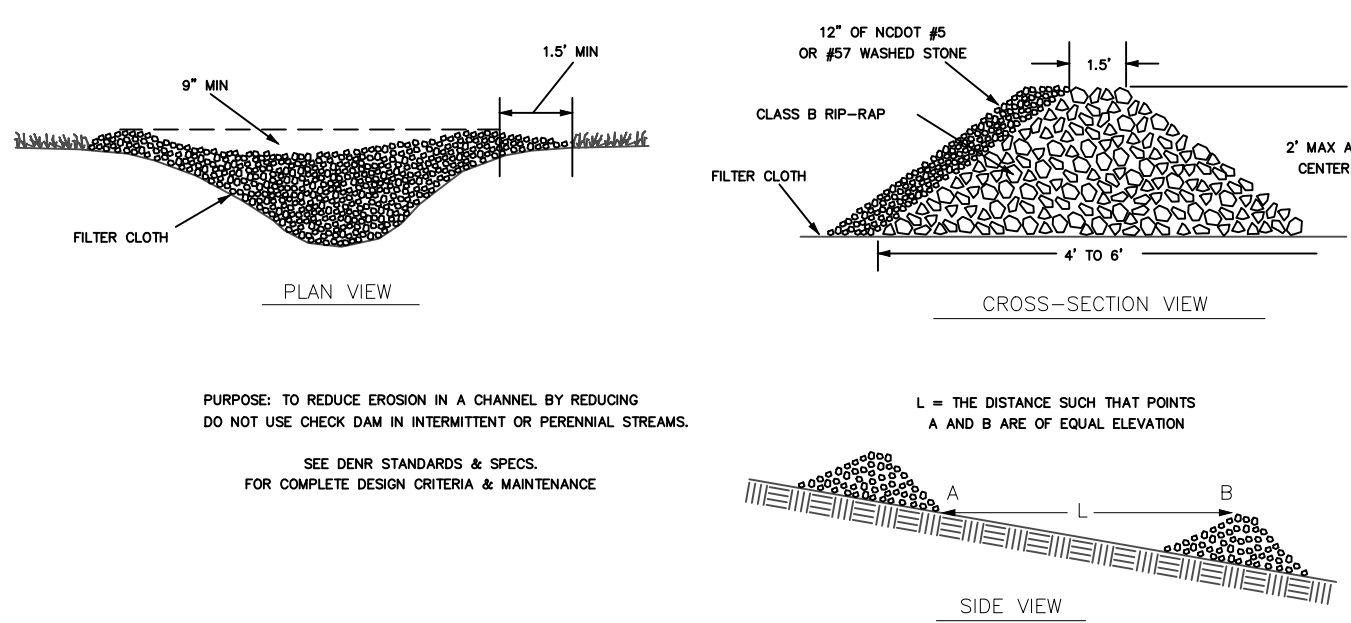
DIVERSION DITCH  
NO SCALE

DESIGN CRITERIA

THE DRAINAGE AREA IS LIMITED TO ONE HALF ACRE.  
KEEP A MAXIMUM HEIGHT OF 2 FEET AT THE CENTER OF THE DAM.  
KEEP THE CENTER OF THE CHECK DAM AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES AT NATURAL GROUND ELEVATION.  
KEEP THE SIDE SLOPES OF THE DAM AT 2:1 OR FLATTER.  
ENSURE THAT THE MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.  
STABILIZE OUTFLOW AREAS ALONG THE CHANNEL TO RESIST EROSION.  
USE NOCOT CLASS B STONE AND LINE THE UPSTREAM SIDE OF THE DAM WITH NOCOT #8 OR #57 STONE.  
KEY THE STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 1.5 FEET TO AVOID WASHOUT FROM OVERFLOW AROUND THE DAM.

NOTES

1. PLACE STONE TO THE LINE AND DIMENSION SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL.
3. WHERE THE DAM ABUTS THE CHANNEL BANKS, EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
5. PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM IS STABLE.
7. ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.



PURPOSE: TO REDUCE EROSION IN A CHANNEL BY REDUCING DO NOT USE CHECK DAM IN INTERMITTENT OR PERENNIAL STREAMS.

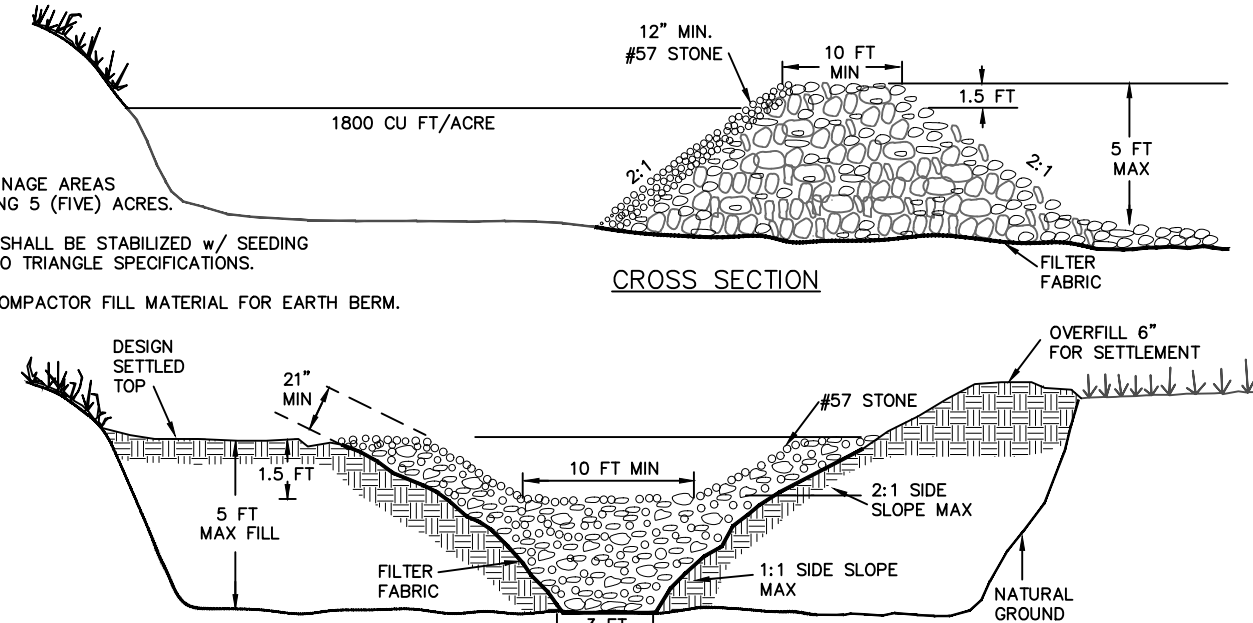
SEE DENR STANDARDS & SPECS FOR COMPLETE DESIGN CRITERIA & MAINTENANCE

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

CHECK DAM  
NO SCALE

NOTES

1. USE FOR DRAINAGE AREAS NOT EXCEEDING 5 (FIVE) ACRES.
2. EARTH BERM SHALL BE STABILIZED w/ SEEDING ACCORDING TO TRIANGLE SPECIFICATIONS.
3. USE CLEAN COMPACTOR FILL MATERIAL FOR EARTH BERM.



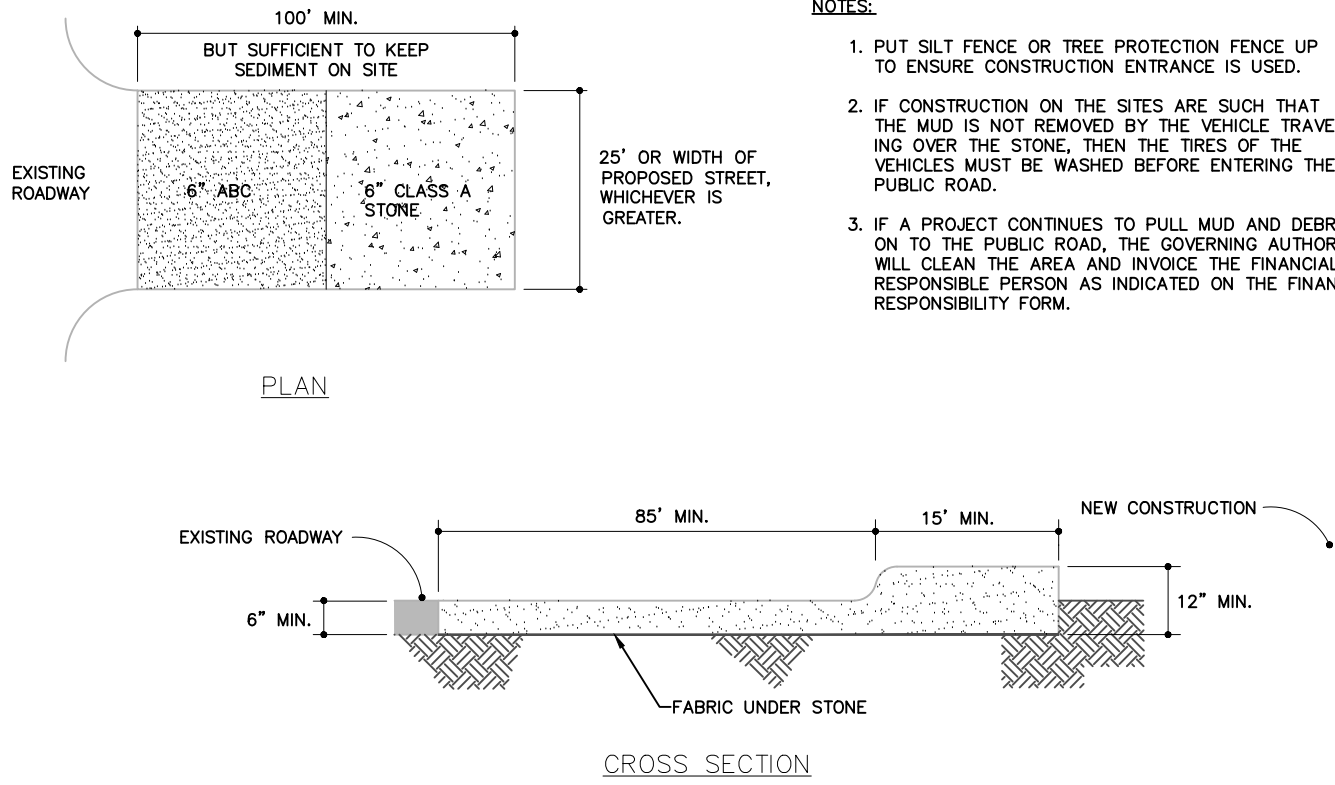
MAINTENANCE

INSPECT TEMPORARY SEDIMENT TRAPS AFTER EACH PERIOD OF SIGNIFICANT RAINFALL. REMOVE SEDIMENT AND RESTORE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN A DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.  
CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PILING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FT BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE DESIGN GRADE. ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.  
STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS ABOVE THE SEDIMENT POOL AND DOWNSTREAM FROM THE TRAP IMMEDIATELY AFTER CONSTRUCTION WITH SEEDING.

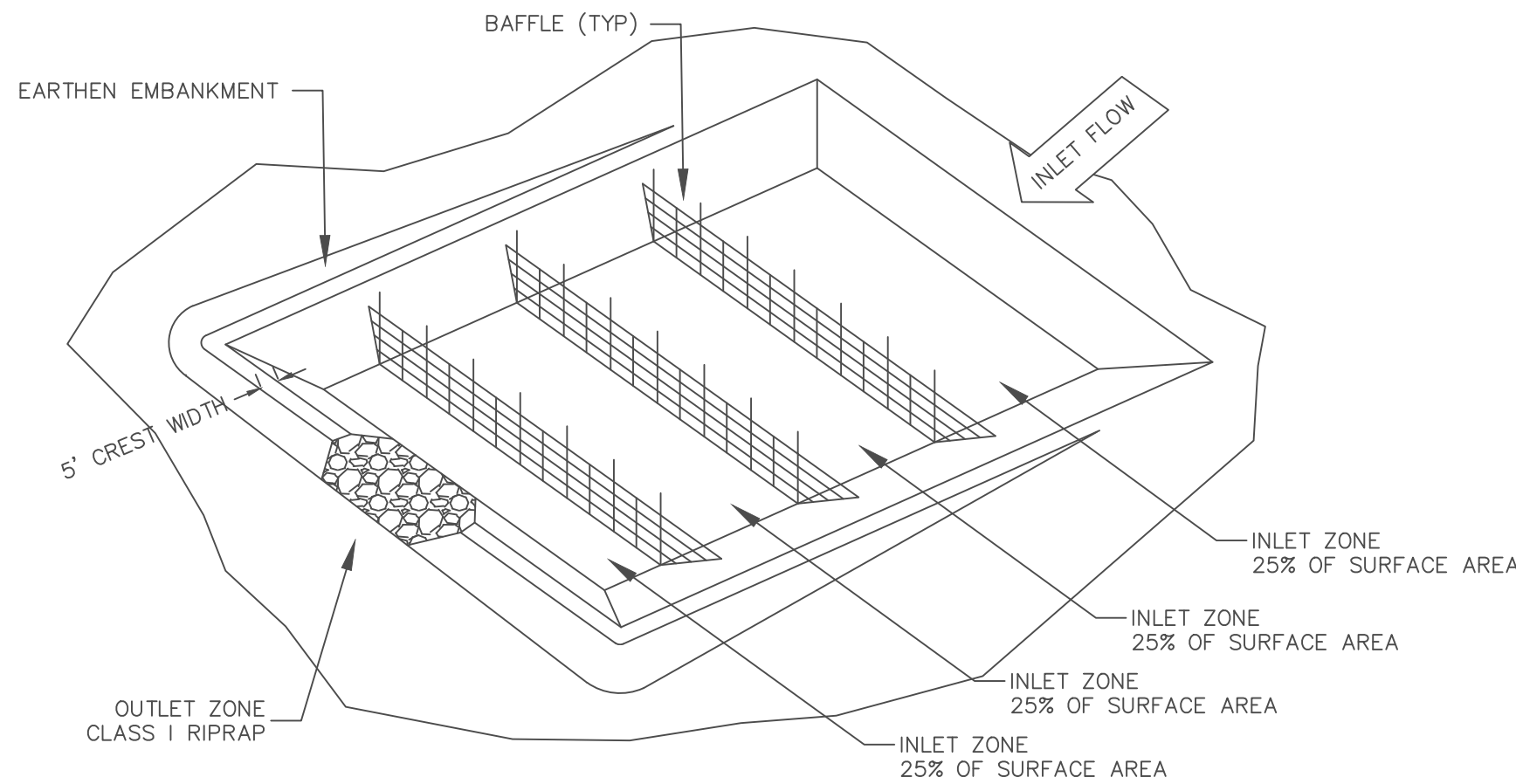
GRAVEL & RIP RAP BASIN/OUTLET  
NO SCALE

NOTES

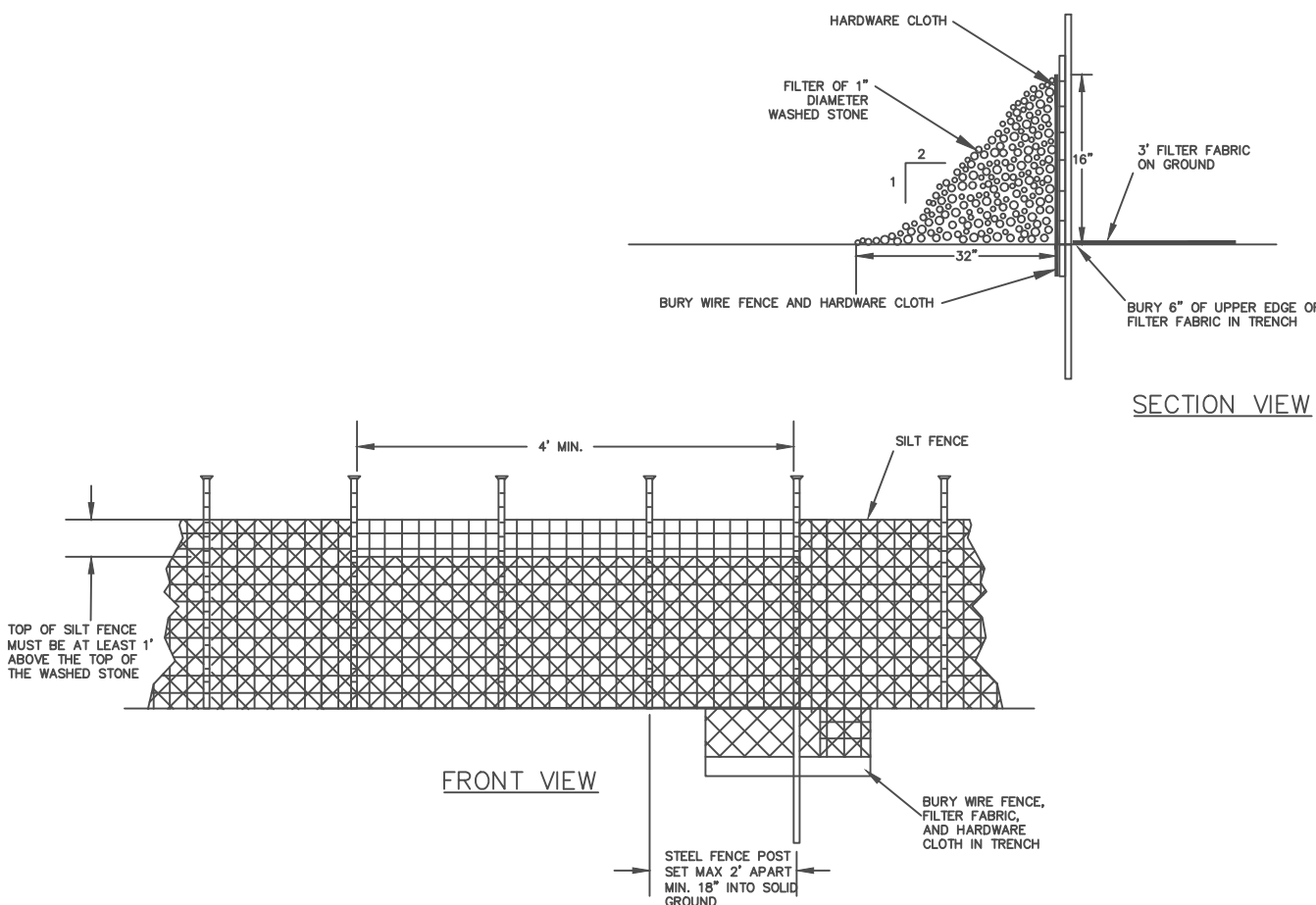
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
3. IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.



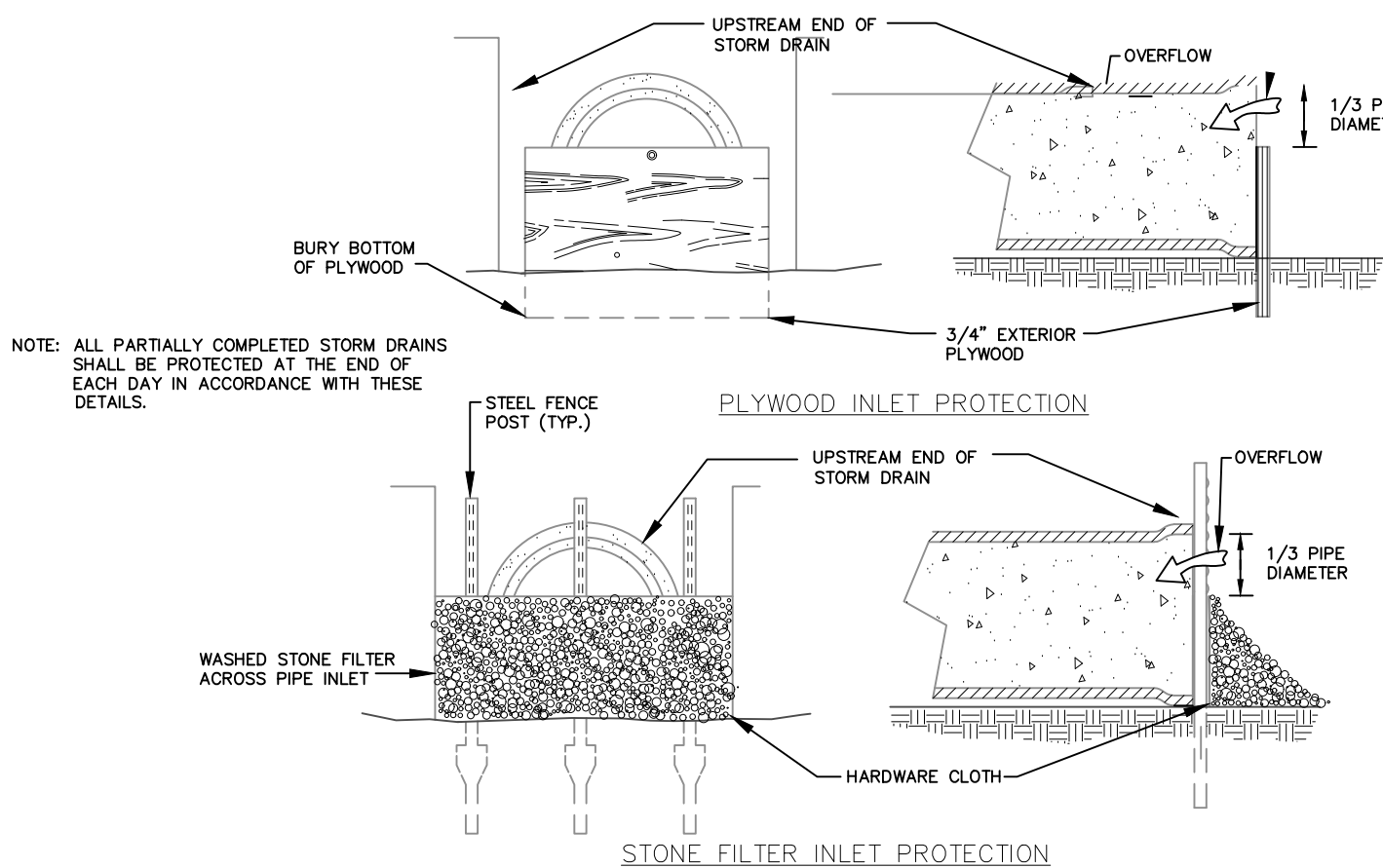
CONSTRUCTION ENTRANCE  
NO SCALE



TEMPORARY SEDIMENT BASIN WITH BAFFLES  
NO SCALE

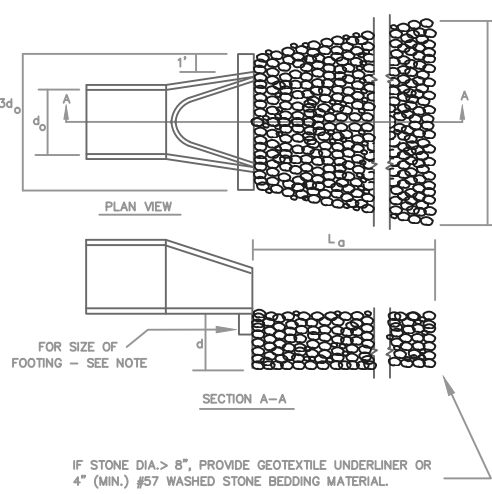


SILT FENCE OUTLET  
NO SCALE



PIPE INLET PROTECTION (PLYWOOD AND STONE)  
NO SCALE

TYPE A  
PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

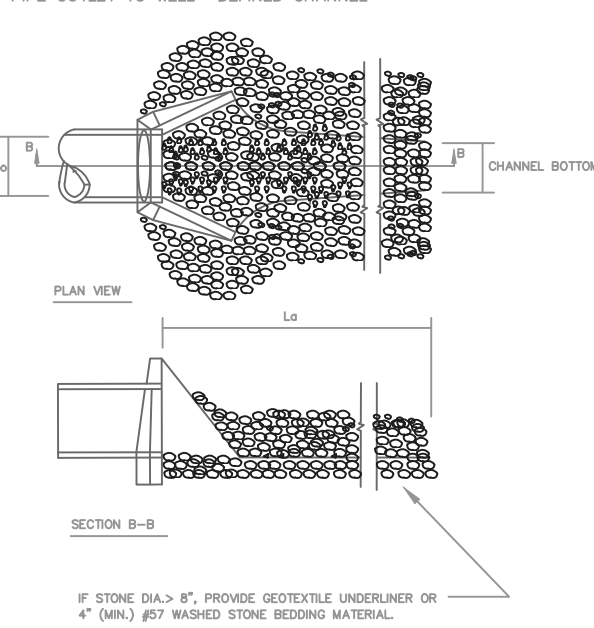


- NOTES:
- (1) d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.
  - (2) d ≤ 1' ABOVE MAXIMUM TAILWATER OR TOP OF CHANNEL BANK (WHICHEVER IS LESS)
  - (3) Ld = LENGTH OF RIPRAP APRON.

NOTES: FOOTING SIZE

| PIPE SIZE | WIDTH | DEPTH |
|-----------|-------|-------|
| 12\"      | 34\"  | 18\"  |
| 24\"      | 34\"  | 18\"  |
| 36\"      | 54\"  | 36\"  |

TYPE B  
PIPE OUTLET TO WELL- DEFINED CHANNEL



IF STONE (D) > 8\", PROVIDE GEOTEXTILE UNDERLINER OR 4\" (D) #57 WASHED STONE BEDDING MATERIAL.

STANDARD DISSIPATOR PAD  
NO SCALE

| DATE        |  |  |  |  |
|-------------|--|--|--|--|
| DESCRIPTION |  |  |  |  |
| REV.        |  |  |  |  |