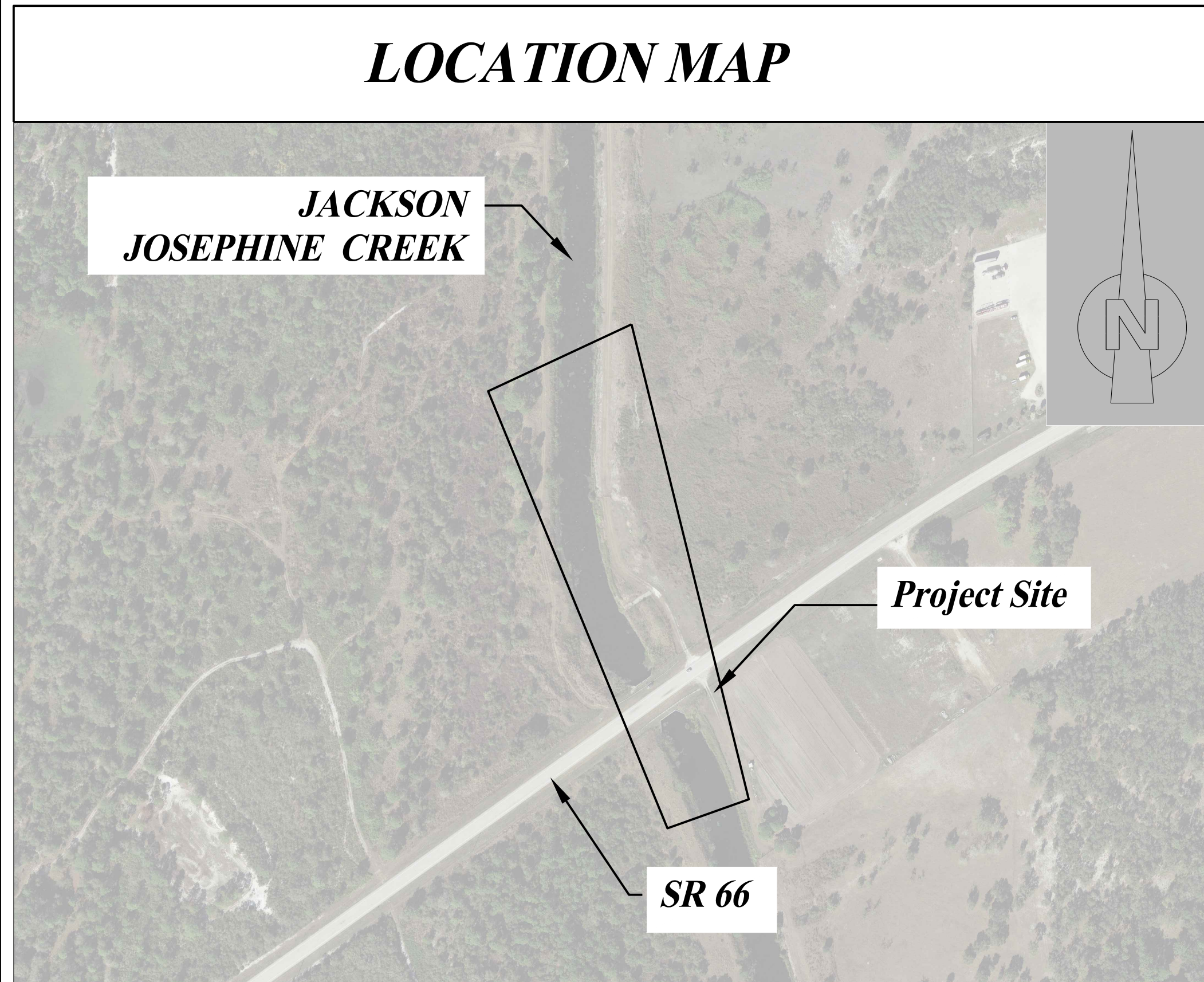


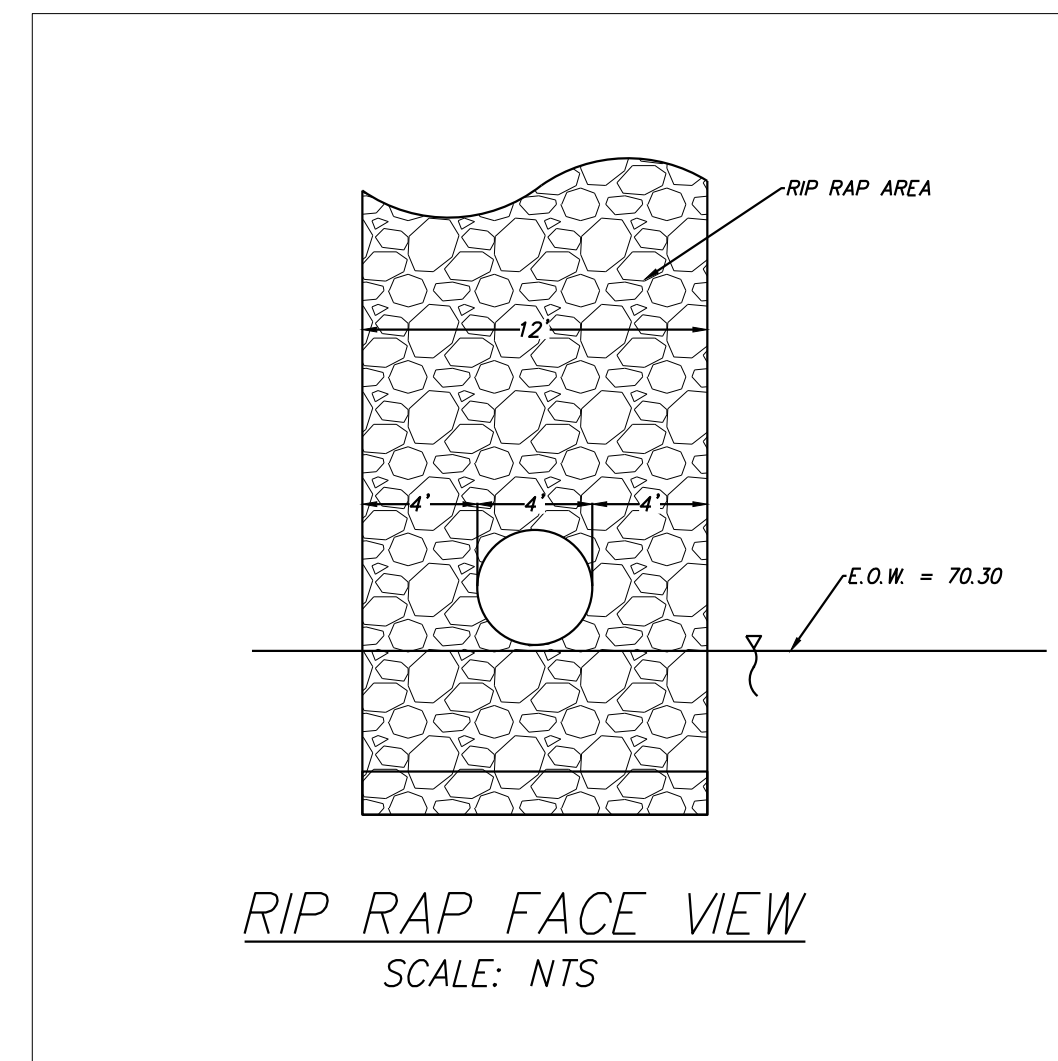
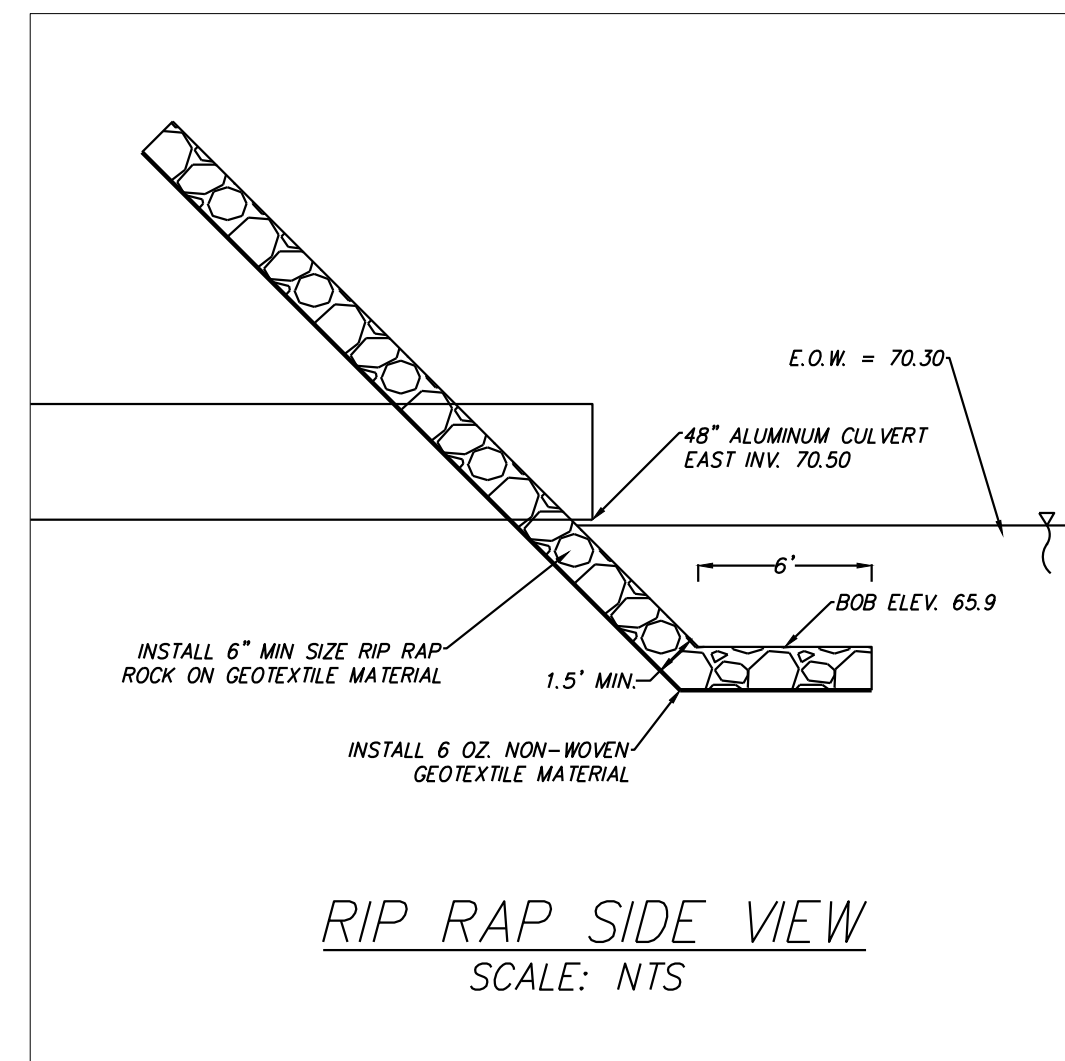
JACKSON JOSEPHINE CREEK WASHOUT

SR 66, SEBRING, FL 33875

PROJECT
HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
JACKSON JOSEPHINE CREEK WASHOUT
SR 66
SEBRING, FL 33875



CIVIL		
SHEET 1 OF 5	COVER SHEET	C-1
SHEET 2 OF 5	SURVEY	
SHEET 3 OF 5	SITE PLAN	C-2
SHEET 4 OF 5	NOTES	C-3
SHEET 5 OF 5	OFFSITE BASIN MAP	C-4



- Notes**
- 1.) Property Owner:
Highlands County
 - 2.) Consultant:
Cool and Cobb Engineering Co.
203 West Main Street
Avon Park, FL 33825
(863) 657-2323 Office
(863) 657-2324 Fax
 - 3.) Surveyor:
Sherco, Inc.
16 North Lake Avenue
Avon Park, FL 33825
(863) 453-4113
 - 4.) Call 48 hours before you dig 811 (Local No. 1-800-432-4770)
 - 5.) Dimensions and Elevations taken from survey dated 04/01/2019 of:
Sherco, Inc.
Robert Phillip Schuler, P.L.S. - # LS 2930
Certificate of Authorization - # LB 7827
Datum: NAVD88
 - 6.) Testing Laboratory:
Universal Engineering Sciences
5971 Countryside Lakes Drive
Phone # (239) 995-1997
 - 7.) All disturbed areas above water line to be sodded with bahia sod and watered to ensure plant survival.
 - 8.) Sod Areas With 1:1 Slopes To Have Sod Staked As Noted In Detail.

SEAL
Carl Cool, P.E.
Friday, June 28, 2019

ENGINEERS
Florida License Numbers:
Carl E. Cool, P.E. - 16921
James "Mason" Cobb, P.E. - 78600
carl@coolandcobb.com
mason@coolandcobb.com

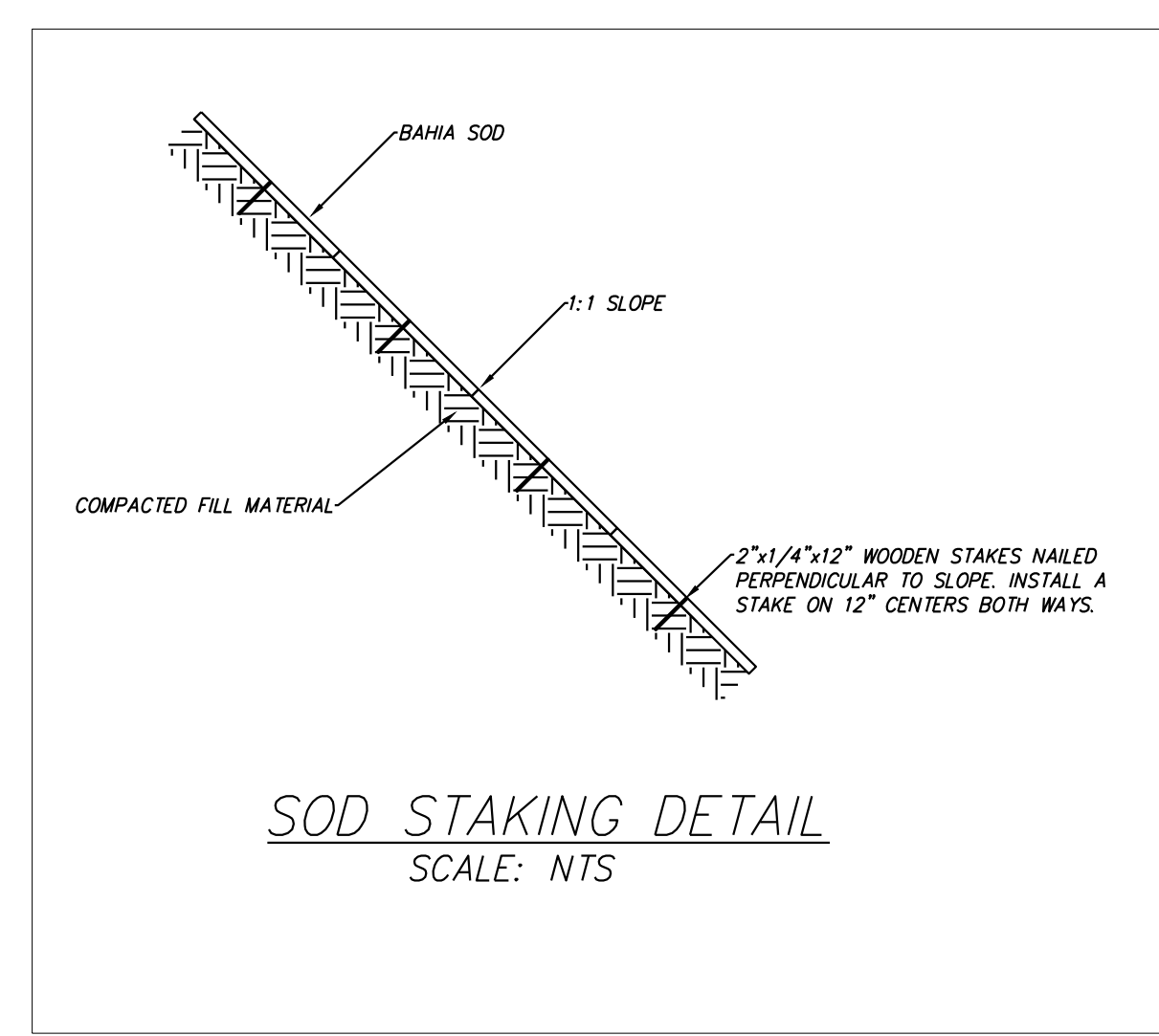
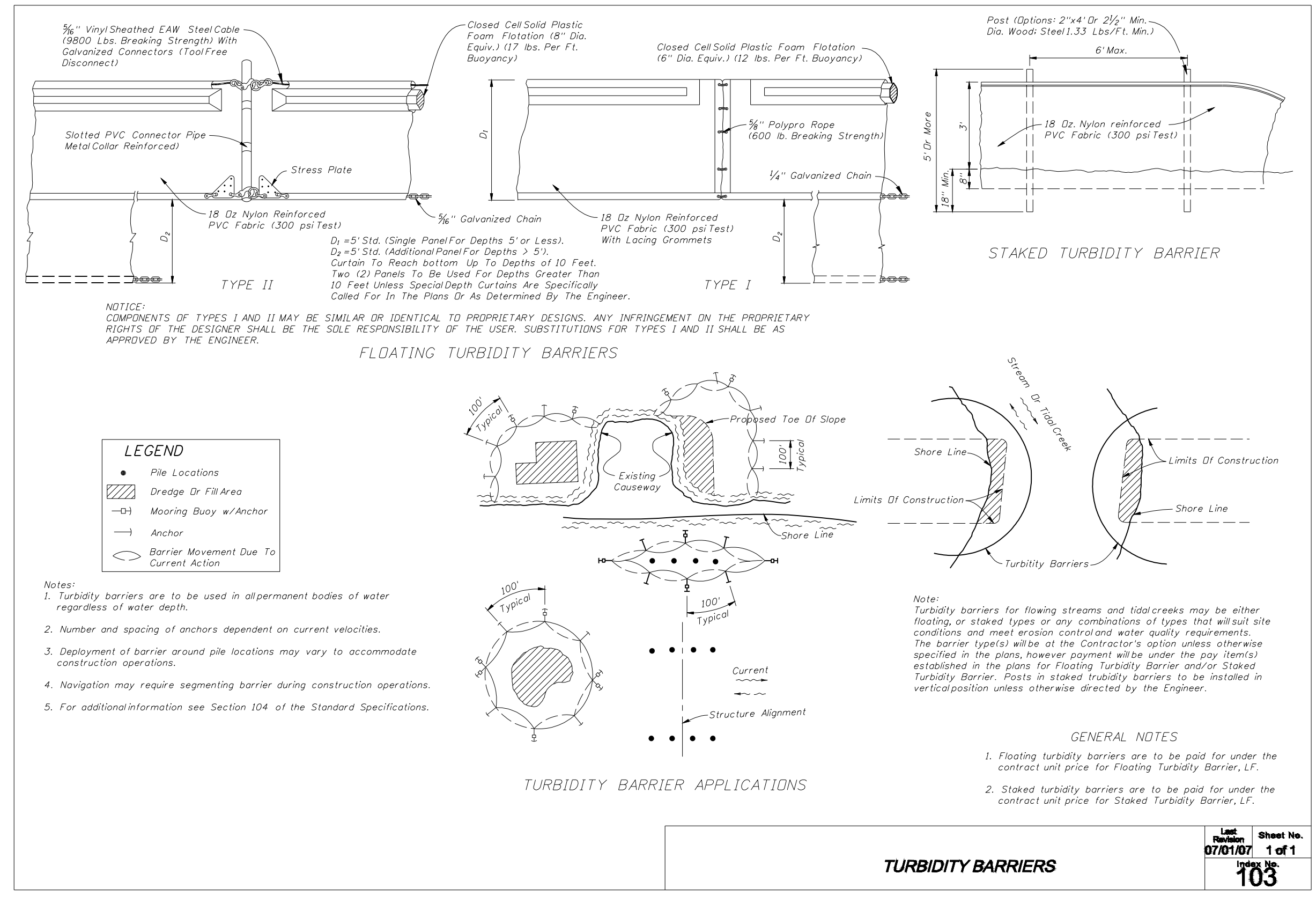
ENGINEERING FIRM
Cool and Cobb Engineering Company
Cert of Authorization #29713
203 West Main Street
Avon Park, FL 33825
(863) 657-2323 Office
(863) 657-2324 Fax

REVISIONS:
06/26/2019 CB
PROJECT #19-140-1126
C-1
SHEET 1 of 5

CALL before you dig 811
811 or 1-800-432-4770
or visit www.callsunshine.com

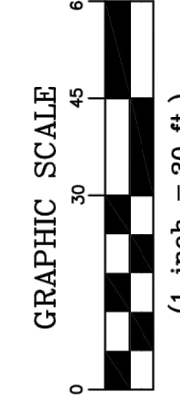
Design Ticket #: 00000000 Date: 00/00/0000
State law requires excavators to call 811 before digging per the "Underground Facility Damage Prevention and Safety Act" Chapter 56, Florida Statutes. Failure to call can result in fines from \$250 to \$5,000.

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED BY
CARL E. COOL, PE
ON 6/28/2019
USING A DIGITAL SIGNATURE
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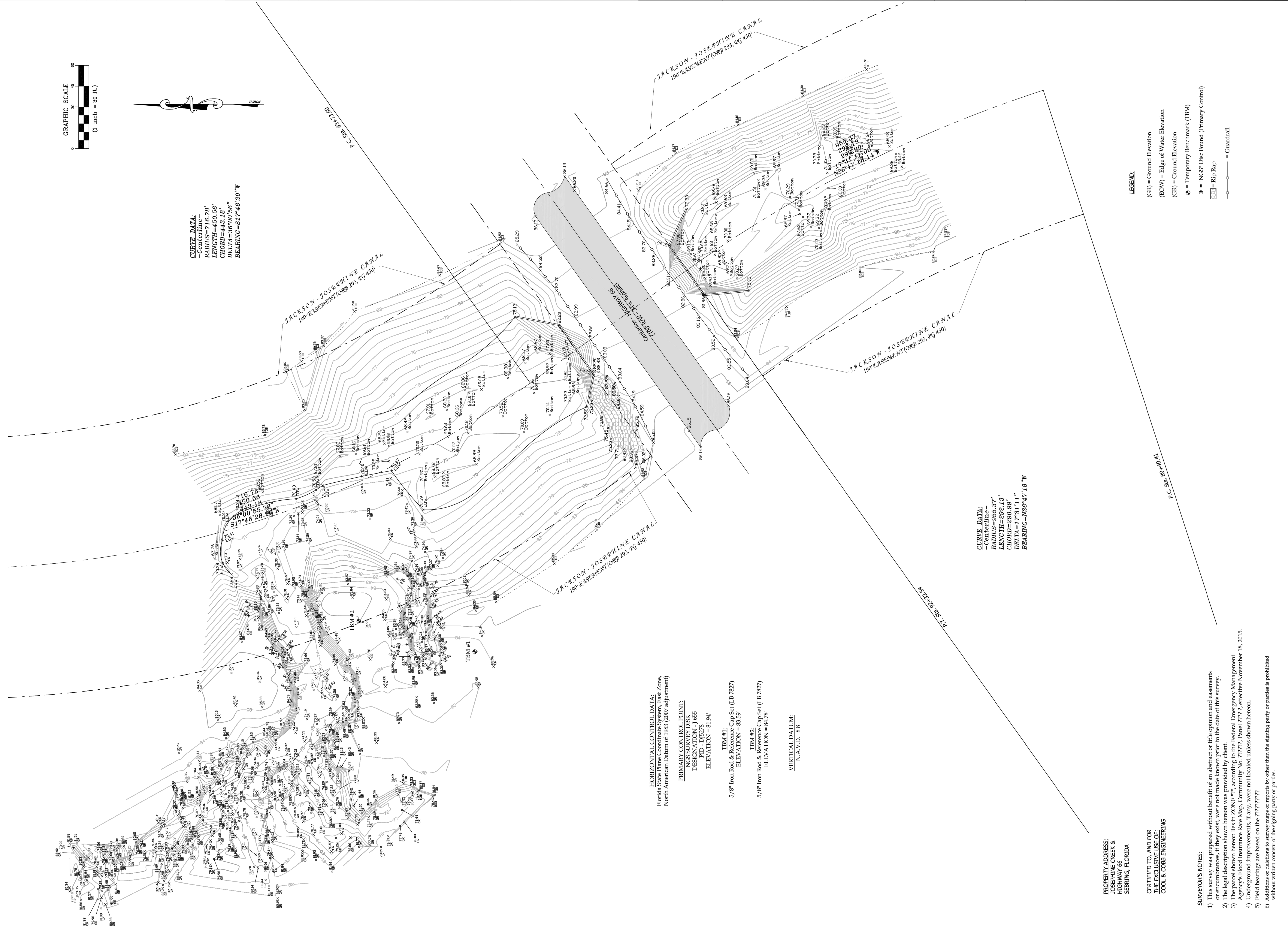


FINAL

SPECIFIC PURPOSE SURVEY



CURVE DATA:
 Centerline = 70'
 Radius = 716.78'
 Length = 43.56'
 Chord = 43.19'
 Delta = 36°01'56"
 Bearing = S17°46'29" W



CURVE DATA:
 Centerline = 99'
 Radius = 2932.13'
 Chord = 200.60'
 Delta = 17°31'11"
 Bearing = N26°47'18" W

- LEGEND:**
- (GR) = Ground Elevation
 - (EOW) = Edge of Water Elevation
 - (GR) = Ground Elevation
 - ◆ = Temporary Benchmark (TBM)
 - = "NGS" Disc Found (Primary Control)
 - = Rip Rap
 - = Guardrail

PROPERTY ADDRESS:
 JOSEPHINE CREEK &
 HIGHWAY 66
 SEBING, FLORIDA

CERTIFIED TO, AND FOR
 THE EXCLUSIVE USE OF:
 COOL & COBB ENGINEERING

SURVEYOR'S NOTES:

- 1) This survey was prepared without benefit of an abstract or title opinion and easements or encumbrances. If they exist, were not made known prior to the date of this survey.
- 2) The legal description shown hereon was provided by client.
- 3) The parcel shown hereon lies in ZONE 7?, according to the Federal Emergency Management Agency's Flood Insurance Rate Map, Community No. 777777?, Panel 7777?, effective November 18, 2015.
- 4) Underground improvements, if any, were not located unless shown hereon.
- 5) Field bearings are based on the 777777777?
- 6) Additions or deletions to every map or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.

HORIZONTAL CONTROL DATA:
 Florida State Plane Coordinate System, East Zone,
 North American Datum of 1983 (2007 adjustment)

PRIMARY CONTROL POINT:
 NGS SURVEY DISK
 DESIGNATION = J 655
 PID = DJE278
 ELEVATION = 81.94'

TBM #1:
 5/8" Iron Rod & Reference Cap Set (LB 7827)
 ELEVATION = 83.59'

TBM #2:
 5/8" Iron Rod & Reference Cap Set (LB 7827)
 ELEVATION = 84.78'

VERTICAL DATUM:
 N.A.S.D. 88

I hereby certify that I am a Florida Registered Professional Land Surveyor and that the map or plat shown hereon is a graphic representation of the described lands recently surveyed under my direction and meets or exceeds the "Standards of Practice" as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J.17 of the Florida Administrative Code, Pursuant to Section 472.027 of the Florida Statutes.

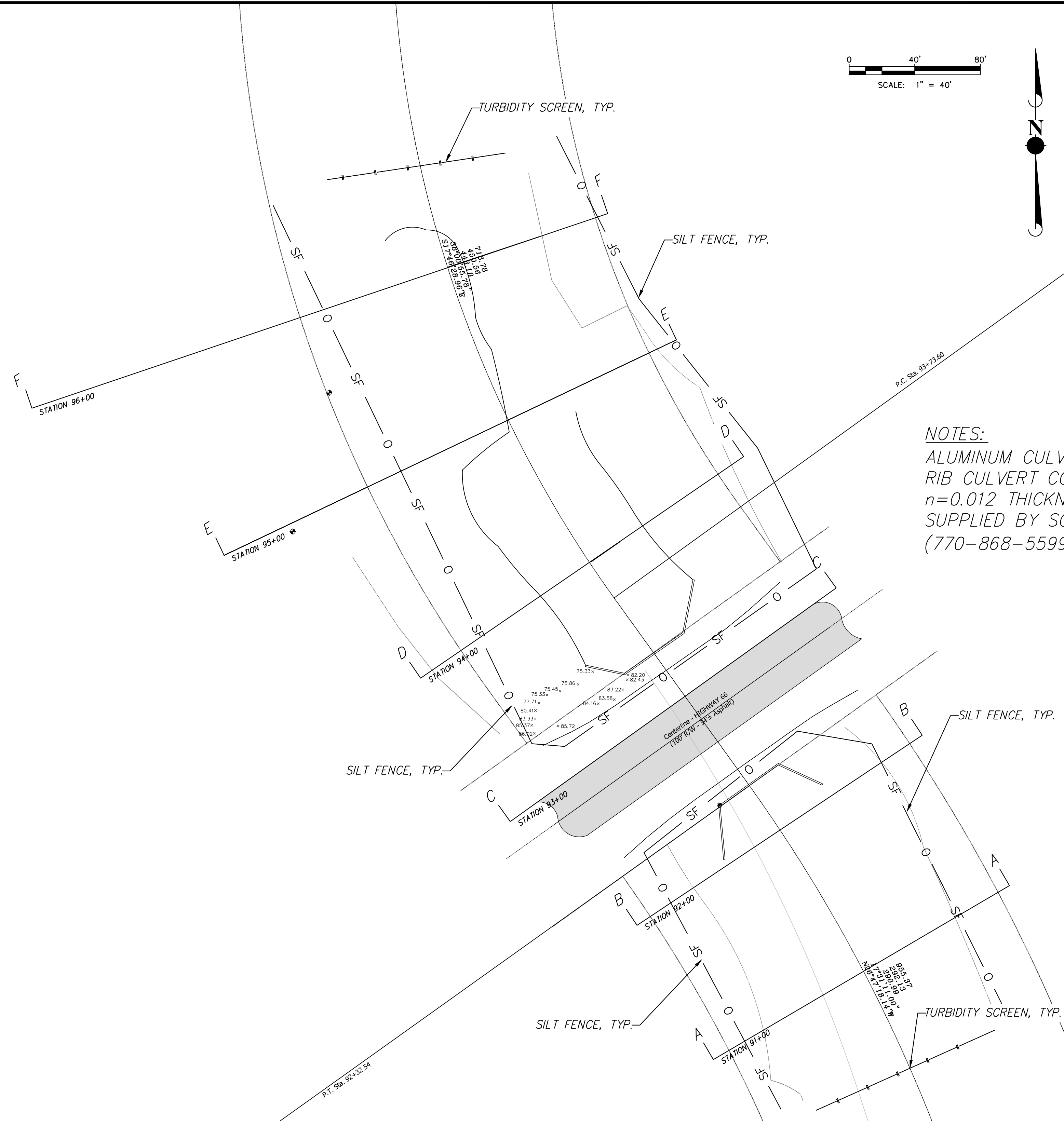


Sherco, Inc.
 SURVEYING SERVICES
 16 North Lake Avenue
 Avon Park, Florida 33925
 Okc (863) 453-4113 Fax: (863) 453-4122

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

COOL & COBB ENGINEERING
 Josephine Creek Control Canal
SPECIFIC PURPOSE SURVEY

PROJECT NO.: 21352903
 Field Survey Completed: 4/7/19
 Drawn: JEK
 Checked: RJS
 F.E.: S-99 FCS-10 & 11
 Revised:

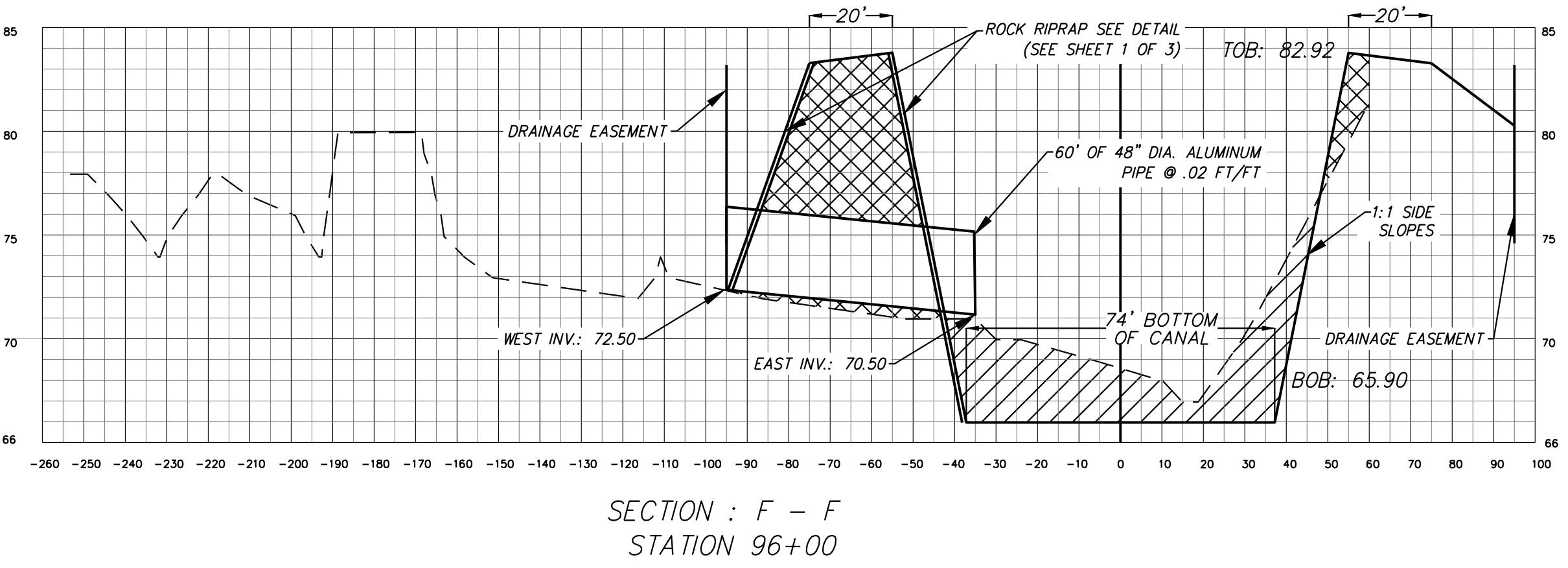
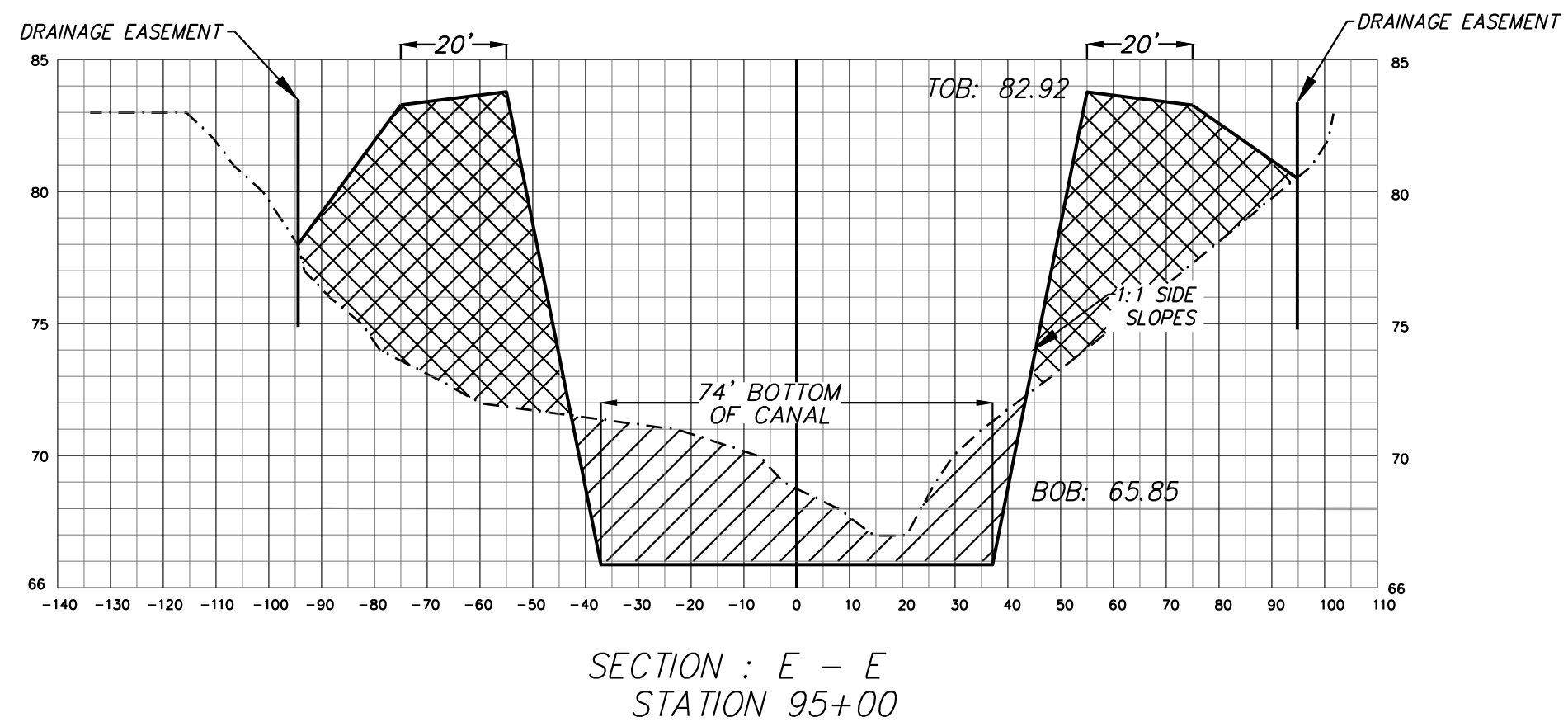
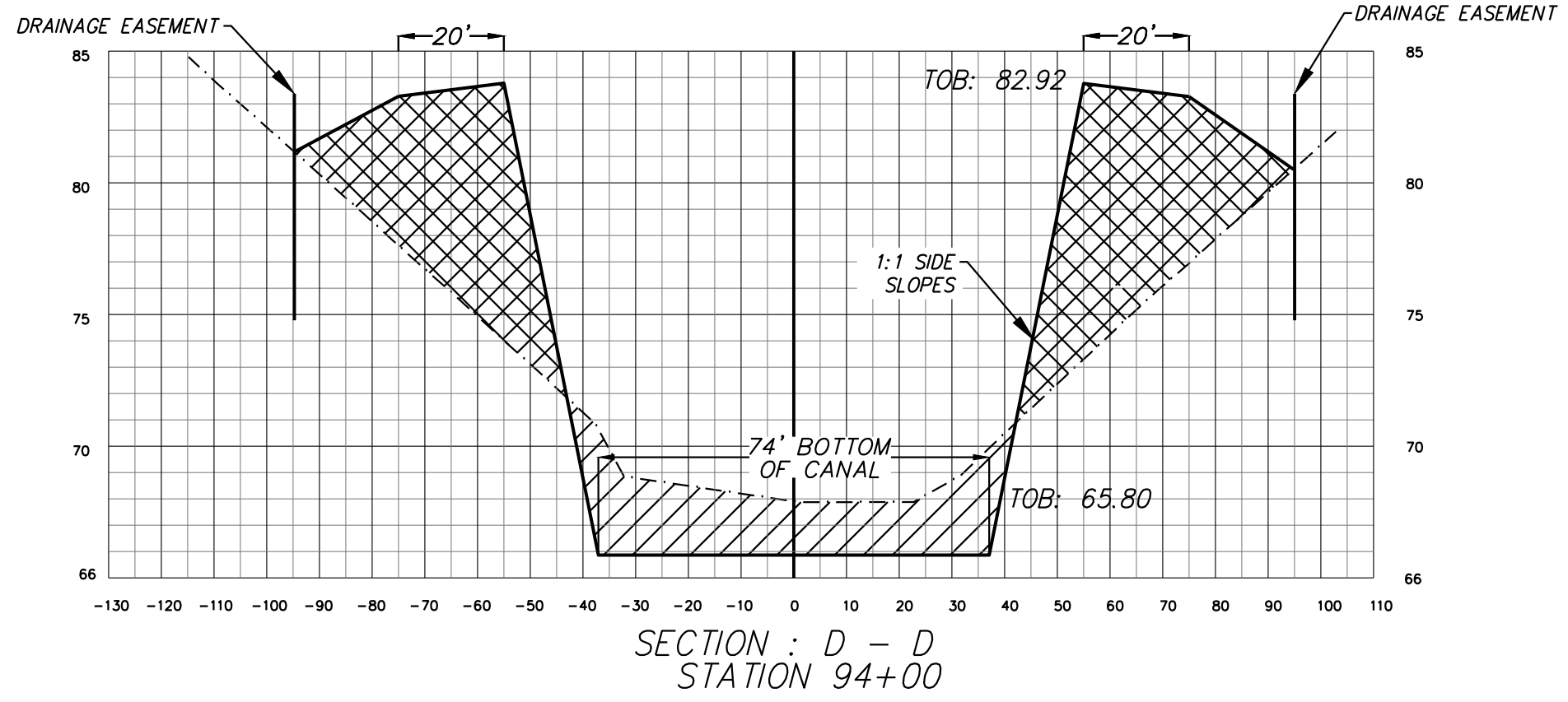
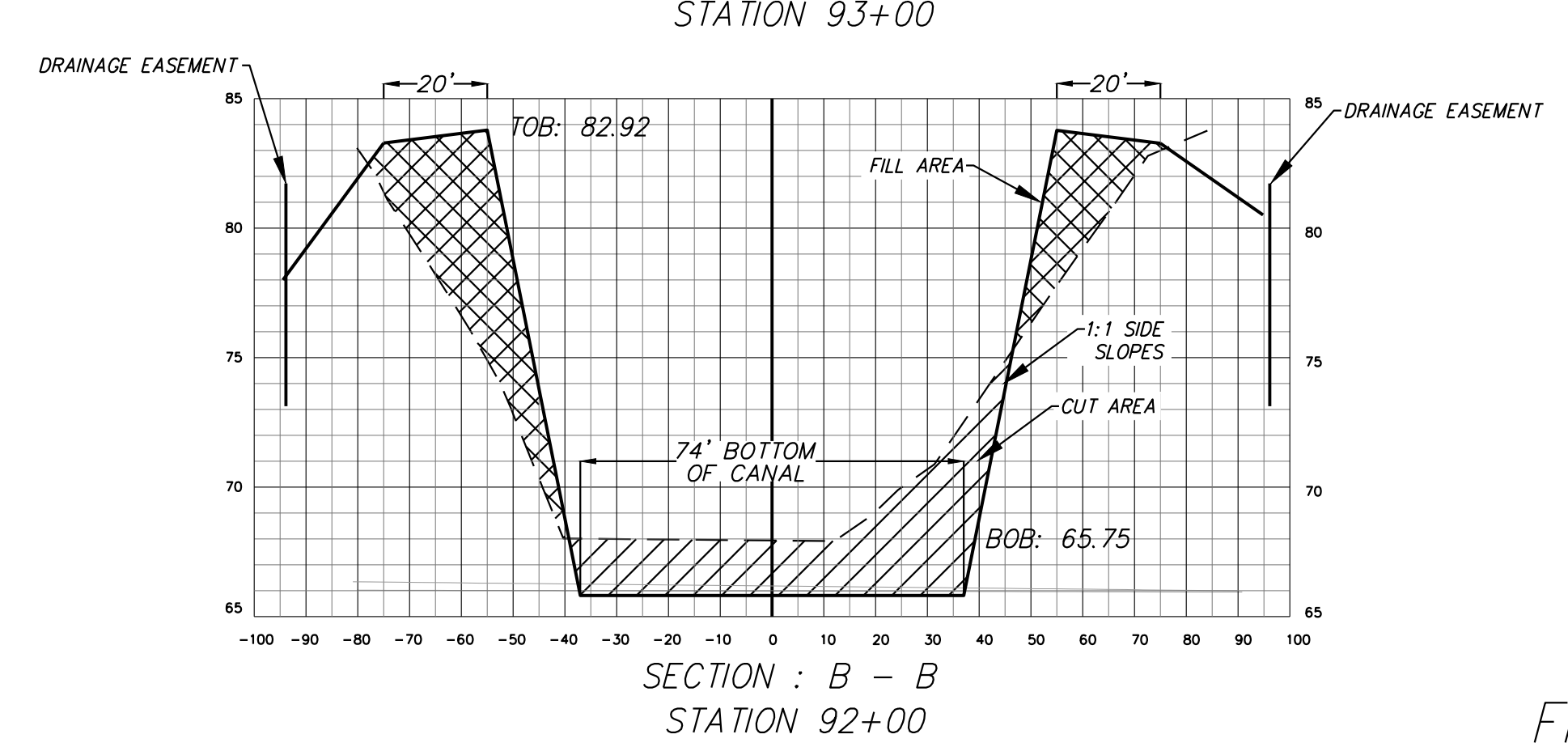
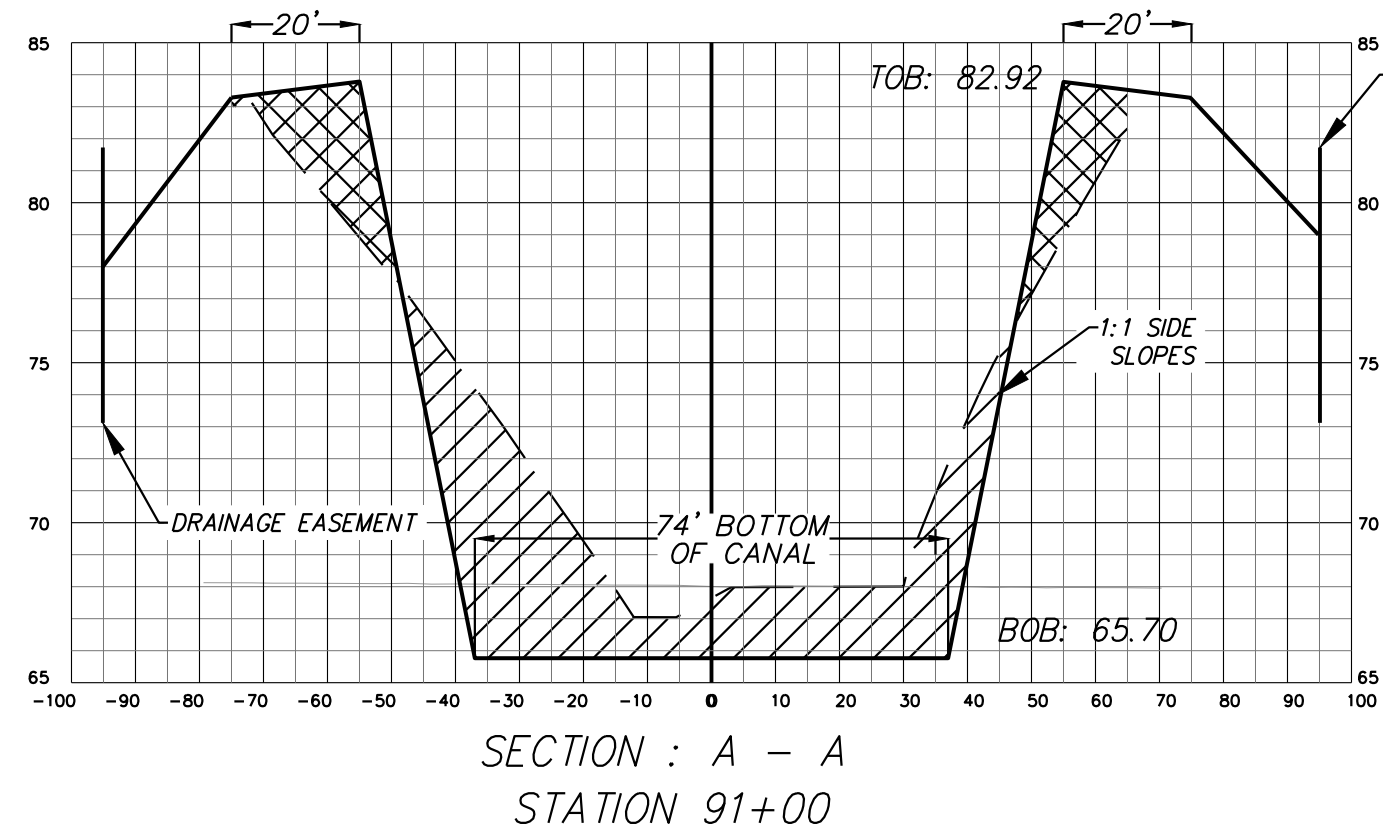


NOTES:
 ALUMINUM CULVERT TO BE 48" SPIRAL RIB RIB CULVERT CORRUGATED CULVERT
 n=0.012 THICKNESS TO BE 12 GAGE AS SUPPLIED BY SOUTHEAST CULVERT INC. (770-868-5599)

LEGEND

PROPOSED ELEVATIONS:	—
EXISTING ELEVATIONS:	- - -
AREA TO BE CUT:	
AREA TO BE FILLED:	

**ELEVATIONS ARE SHOWN IN NAVD 88 SURVEY DATUM, THE CONVERSION FOR THE ORIGINALLY DESIGNED PLANS (SHOT IN NGVD 29) IS 1.079' 80' NGVD 29 = 78.92' NAVD 88



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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
 JACKSON JOSEPHINE CREEK WASHOUT
 SEBRING, FL 33875

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED BY CARL E. COOL, P.E. ON 6/28/2019 USING A DIGITAL SIGNATURE

SEAL
 Carl Cool, P.E.
 Friday, June 28, 2019

ENGINEERS
 Florida License Numbers:
 Carl E. Cool, P.E. - 16921
 James "Mason" Cobb, P.E. - 78600
 carl@coolandcobb.com
 mason@coolandcobb.com

ENGINEERING FIRM
Cool and Cobb Engineering Company
 Cert of Authorization #29713
 203 West Main Street
 Avon Park, FL 33825
 (863) 657-2324 Office
 (863) 657-2324 Fax

REVISIONS:

06/26/2019 CB	

PROJECT #19-140-1126
C-2
SHEET 3 of 5

FINAL

TECHNICAL SPECIFICATIONS

Sec. 02.200 General. The Specifications and Drawings are an integrated part of the Contract Documents and as such will not stand alone if used independently as individual parts, paragraphs, or drawing sheets. The Drawings and Specifications establish minimum standards of quality for a project. They do not purport to cover all details entering into its design and construction or of all material and equipment required to complete the work.

Sec. 02.201 Maintenance of Traffic:

- A. **Control Devices:** The Contractor shall be required to keep the entire work site in full compliance with the Florida Department of Transportation Roadway and Traffic Design Standards, current edition and the USDOT, FHWA Manual on Uniform Traffic Control Devices, current edition.
- B. **Detours:** Detours shall be required approval by the County Engineer. Any detours approved as a part of the traffic circulation plan, shall be required to be properly posted and a minimum of 48-hours advance notice shall be given to the County Engineer's Office, Law Enforcement agencies, Fire Department, School Board and Emergency Services. Advance notice shall also be placed at the last intersection before the detour.
- C. **Driveways Kept Open:** No business will have vehicular access totally blocked at any time. Driveway access to property will not be blocked for more than 8 hours on any day Property owners will be notified in written form by the Contractor 24 hours prior to the blocking of any driveway, business, or property access. Blocking of driveways will require advance approval by the County Engineer.
- D. **Maintenance of Traffic Violations:** The County will report any known violation of the required maintenance of traffic to the Owner, Project Engineer, or Contractor. The Contractor will have 4 hours of regularly scheduled work time to bring the site into full compliance. If this is not done, the County will have the option to take any corrective measures it feels necessary and to bill the Owner for the cost of these measures.
- E. **Traffic Control Plan Approval:** Prior to the commencement of work at the job site, the Project Engineer shall receive approval of his traffic control plan from the County Engineer. Access for local traffic shall be maintained throughout the construction period of the project.

Sec. 02.202 Driveway Ingress and Egress Maintenance: The specification shall only apply where residences, businesses, and other types of property front on the road to be constructed or reconstructed, and driveway connections are to be disturbed.

- A. Contractor will be required to place commercial base material in driveways and/or access points affected by the project, where considered necessary by the Project Engineer to provide safe, stable and reasonable access to residence, businesses, and property.
- B. The materials to be used for the driveway maintenance shall be lime rock, stone or oyster shell. The grade and quality of the material shall be that offered for commercial supply in the area. Commercial materials used in locations which have inadequate drainage or are prone to be wet, shall be of a stable character, unaffected by wet conditions.
- C. The material shall be placed in the driveway as directed by the Project Engineer. The material shall be leveled, manipulated, compacted, to the extent appropriate we for the intended use of the particular driveway.
- D. As permanent driveway construction is accomplished at a particular location, previously placed commercial materials which are suitable for reuse may be salvaged and reused on other driveways as directed.

Sec. 02.203 Clearing and Grubbing:

- A. Clearing and Grubbing shall consist of the complete removal and disposal of all timber, brush, vegetation, stumps, roots, boulders, pavement, rubbish and debris and all other materials and obstructions resting on or protruding through the surface of the existing ground and the surface of work areas. Material resulting from clearing and grubbing shall be disposed of by the Contractor in a proper place.
- B. As an exception to the above provisions, where so directed by the Project Engineer and approved by the County Engineer, desirable trees within the roadway shall be trimmed, protected and left standing. Branches of trees extending over the area occupied by the roadway shall be trimmed as directed, to give a clear height of 16 feet above the roadway.
- C. Within the right-of-way and within all swales and ditches, all stumps, roots, etc., protruding through or appearing on the surface of the completed excavation shall be removed or cut off below the finished excavation surface. Within all other areas where Clearing and Grubbing is to be done, roots and other debris, projecting through or appearing on the surface of the original ground, shall be removed to a depth of one foot below the bottom of the subgrade.
- D. Burning of such materials will only be allowed when proper burn permit can be obtained and all such burning shall be subject to applicable laws, ordinances and regulations and shall be done at locations where trees and shrubs adjacent to the cleared area will not be harmed. Burning may be required to cease immediately if complaints are received by the Project Engineer or the City Engineer.

Sec. 02.204 Earthwork: All materials shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and all activities performed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.205 Rigid Ditch Checks: All materials shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and constructed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.206 Riprap (Sand-Cement): All materials shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and constructed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.207 Inspections, Field Measurements and Laboratory Tests:

- A. **General:** The Contractor shall notify the Project Engineer in advance of the time and date when any tests can be conducted, so that the Project Engineer may schedule the required testing with the independent testing laboratory. The test samples shall be taken by either an employee of the independent testing laboratory or the Project Engineer or his representative. In no case shall the Contractor take the samples or transport the samples to the laboratory. The Project Engineer shall inspect all construction and is authorized to call to the attention of the Contractor any failure of work or materials to conform with the plans and specifications. The following laboratory tests or field measurements and frequency of such shall be made in accordance with the Project Engineer's direction by the independent testing laboratory, at the Project expense, and in keeping with good engineering practices.

The Contractor is required to conduct and/or stop his work so that the appropriate tests, samples and measurements can be made in a safe manner. The Contractor shall receive copies of the test reports from the Project Engineer. The independent testing laboratory shall mail or hand deliver copies of all tests directly to the office of the County Engineer.

- B. **Trenches for Underground Pipes or Structures:** The following tests shall be made:
 1. **Proctor:** one per mile of trench unless the material changes; if material changes one per each different soil material allowed for backfill.
 2. **Density:** every 200 feet outside areas of vehicular traffic and every 10 feet where the trench crosses an area of vehicular travel, including driveways. Frequency of testing will be the same for each lift. Each compacted one foot depth of backfill is a lift. Testing of density will start when backfill is 12 inches over the top of the pipe. Tests will be done within the width of the trench as indicated by the Project Engineer.
 3. **Density Requirements:** The density requirements are that:
 - a. In areas of proposed or existing pavement or vehicular traffic all backfill, sub-base, and base material shall be compacted to 98% of maximum density as per AASHTO T-180; and
 - b. In other areas not under proposed or existing paving or in areas not subject to vehicular traffic, the backfill shall be compacted to 90% density as per AASHTO T-180.

Sec. 02.208 Tolerances: The required thickness and widths shall be the absolute minimum allowable. No allowance shall be made for failure in a width or depth dimension. Florida Bearing Value and density requirements shown on the plans and specifications are the absolute minimum allowable and no values less than those specified will be accepted. Grades on roadway centerline and ditch inverts shall be plus or minus 0.05 of a foot from plan dimensions.

Sec. 02.214 Culverts/Storm Sewers: All materials shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and constructed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.215 Grassing: All materials and installation procedures shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition. The areas on which the sod is to be placed shall contain sufficient moisture for optimum results after being placed. The sod shall be watered and kept in a moist condition for no less than two weeks (minimum) or until the entire project is accepted by the Project Engineer and the County Engineer. The moistened condition shall extend at least to the full depth of the rooting zone. Water shall not be applied, however, when there is danger of a freezing condition.

Sec. 02.216 Staked Silt Fences: All materials and installation procedures shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.217 Temporary Prevention, Control, and Abatement of Erosion and Water Pollution: All materials and installations shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition, and constructed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.220 Concrete: All materials shall be in accordance with the Florida Department Standard Specifications for Road and Bridge Construction, current edition, and constructed in accordance with the State of Florida Department of Transportation Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, current edition.

Sec. 02.221 Field Engineering, Surveying and Right-of-Way Staking:

- A. Field engineering and surveying services shall include survey work to establish right-of-way lines and levels and to locate and lay out site improvements, structures, and controlling lines and levels required for the construction of the work. Also included are such Engineering services as are specified or required to execute Contractor's construction methods. Engineers and Surveyors shall be licensed professionals in the State of Florida.
- B. Existing basic horizontal and vertical control points for the project are those designated on the Drawings. Contractor shall locate and protect control points prior to starting site work and shall preserve all permanent reference points during construction. In working near any permanent property corners or reference markers, Contractor shall use care not to remove or disturb any such markers. In the event that markers must be removed or are disturbed due to proximity of the construction work, Contractor shall have them referenced and reset by a Land Surveyor qualified under the laws of the State of Florida.
- C. Contractor shall lay out the work at the location and to the lines and grades shown on the Drawings. Survey notes indicating the information and measurements used in establishing locations and grades shall be kept in notebooks and copies furnished to Project Engineer. As a minimum the following items will be staked:
 1. Right-of-way, staked at each station or wherever the right-of-way changes width or direction, at any offset desired;
 2. Cut or fill to centerline grade and swale grade at each station or wherever changes occur at points of vertical intersection; and
 3. Set proposed centerline elevation of all intersecting roads one time and noted those elevations in field book; compare those elevations and bring any discrepancies to the attention of the Project Engineer.

All the above mentioned survey work will be done by a Surveyor licensed to practice in the State of Florida.

Sec. 02.223 Shop Drawing Submittals: The following information and/or drawings shall be submitted to the Project Engineer prior to beginning work:

- A. Information on the pipe and culverts, indicating the type, class, size, and other relevant information;
- B. Asphalt mix design;
- C. Documentation on all other materials used including, but not limited to, filter fabric, guardrails, concrete, steel posts, curing compound, and joint material;
- D. Sample of tag for written notification of owners; and
- E. Traffic plan (a drawing to scale of each phase showing all barricades, signs and flag men is required).

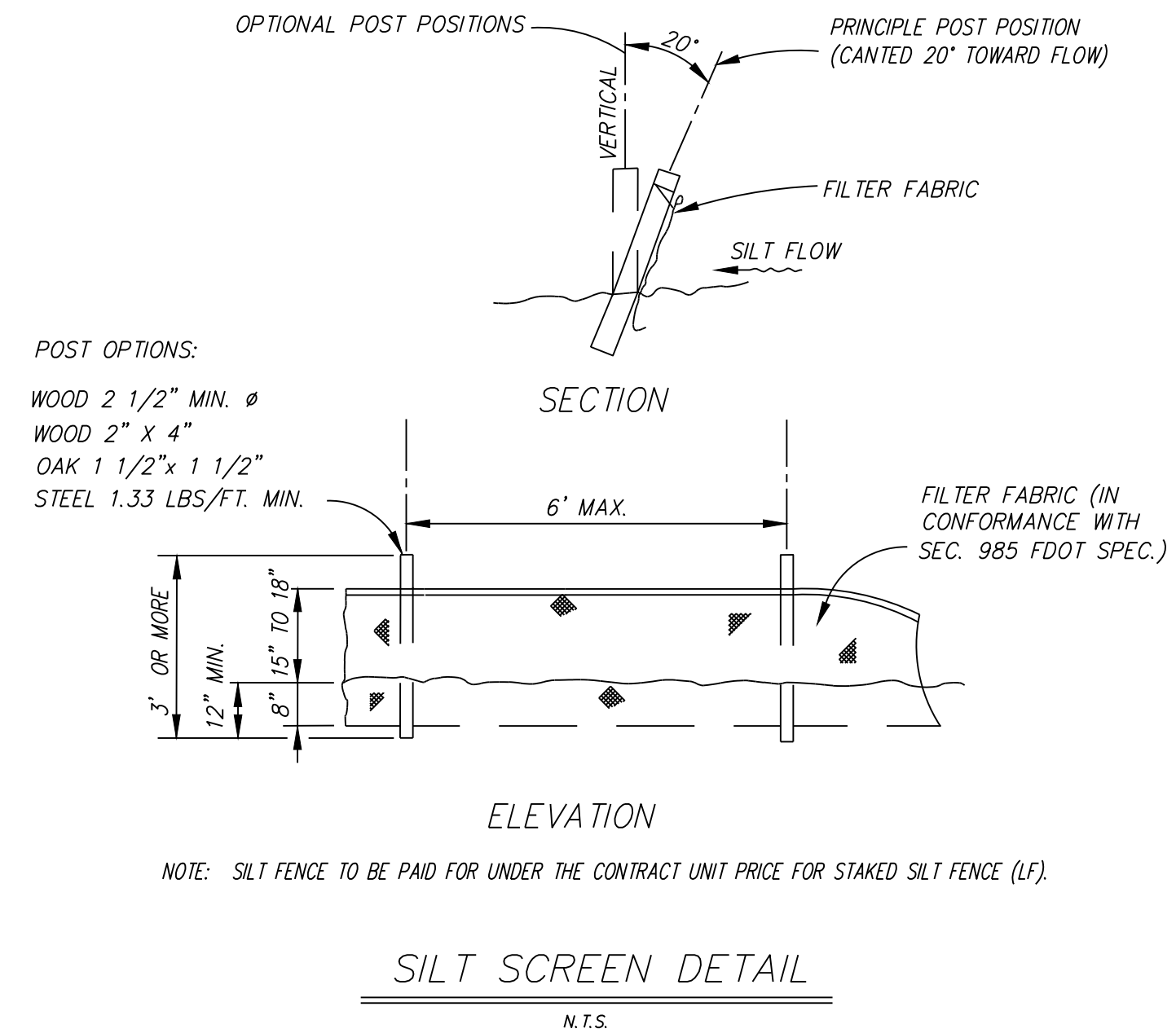
Contractor shall install all silt fences and other temporary erosion control items called for in the plans prior to starting work on the site.

Contractor shall provide SWPPP plan and NPDES notice of intent.

All underground utilities within the roadway are to be installed prior to the placement of base.

All disturbed areas to be sodded with Argentina Bahia Sod and watered until the sod is established.

All sod areas on 1:1 slope to be staked to prevent sod slippage.



NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
 JACKSON JOSEPHINE CREEK WASHOUT
 FL 66
 SEBRING, FL 33875

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED BY
 CARL E. COOL, P.E.
 ON 6/28/2019
 USING A DIGITAL SIGNATURE

SEAL
 Carl Cool, P.E.
 Friday, June 28, 2019

ENGINEERS
 Florida License Numbers:
 Carl E. Cool, P.E. - 16921
 James "Mason" Cobb, P.E. - 78600
 carl@coolandcobb.com
 mason@coolandcobb.com

ENGINEERING FIRM
Cool and Cobb
 Engineering Company
 Cert of Authorization #29713
 203 West Main Street
 Avon Park, FL 33825
 (863) 657-2325 Office
 (863) 657-2324 Fax

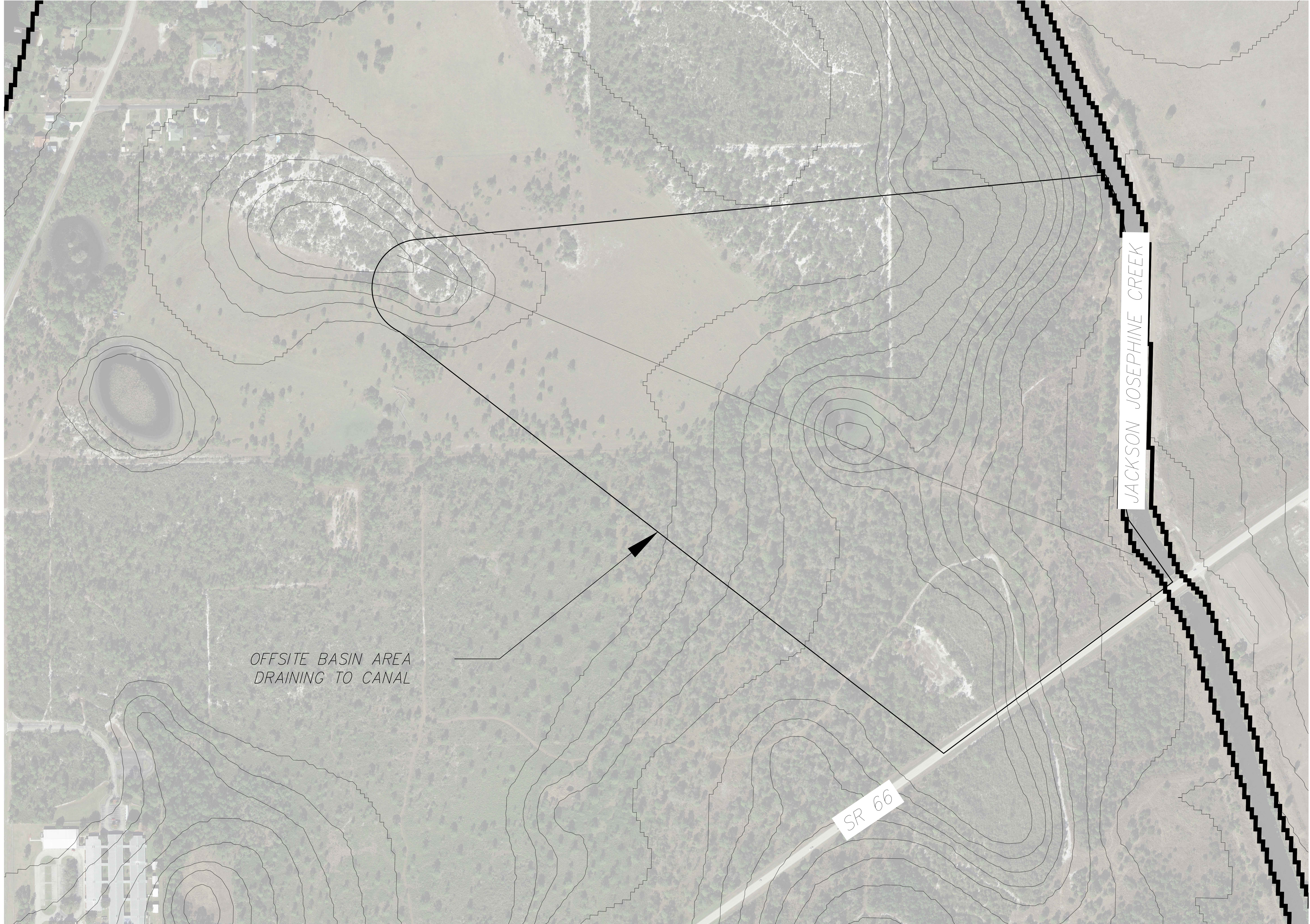
REVISIONS:

06/26/2019 CB	

PROJECT #19-140-1126
C-3
SHEET 4 of 5

FINAL

S:\Project Files\2019 Projects\2019 Approved Projects\19-140-1126 - 0504 - Green Project\Drawings\0203\0203_Venue_Creek_Washout_Creek.dwg Jun 28, 2019 2:30pm By: Carl Cool



OFFSITE BASIN AREA
DRAINING TO CANAL

SR 66

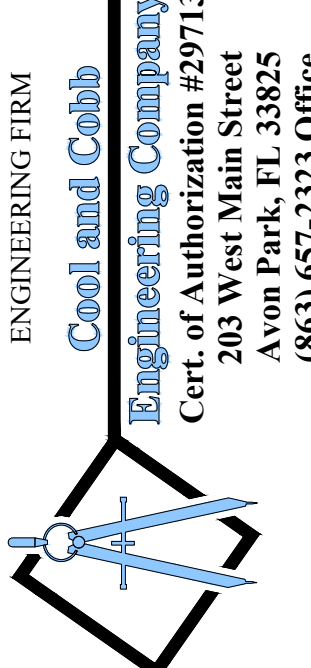
JACKSON JOSEPHINE CREEK

REVISIONS:	
06/26/2019	CB

PROJECT #19-140-1126

C-4

SHEET 5 of 5

ENGINEERING FIRM

Cool and Cobb
 Engineering Company
 Cert of Authorization #29713
 203 West Main Street
 Avon Park, FL 33825
 (863) 657-2325 Office
 (863) 657-2324 Fax

ENGINEERS
 Florida License Numbers:
 Carl E. Cool, P.E. -16921
 James "Mason" Cobb, P.E. - 78600
 carl@coolandcobb.com
 mason@coolandcobb.com

SEAL
 Carl Cool, P.E.
 Friday, June 28, 2019

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 ELECTRONICALLY SIGNED BY
 CARL E. COOL, PE
 ON 6/28/2019
 USING A DIGITAL SIGNATURE

**HIGHLANDS COUNTY BOARD
 OF COUNTY COMMISSIONERS**
 JACKSON JOSEPHINE CREEK WASHOUT
 FL 66
 SEBRING, FL 33875

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