LINENE WOODS TRIBUTARY
DRAINAGE IMPROVEMENTS AT JOHN HANCOCK DR.

LEON COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

2280 MICCOSUKEE ROAD
TALLAHASSEE, FLORIDA

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7 CONSTRUCTION SEQUENCE AND DRAINAGE DETAILS
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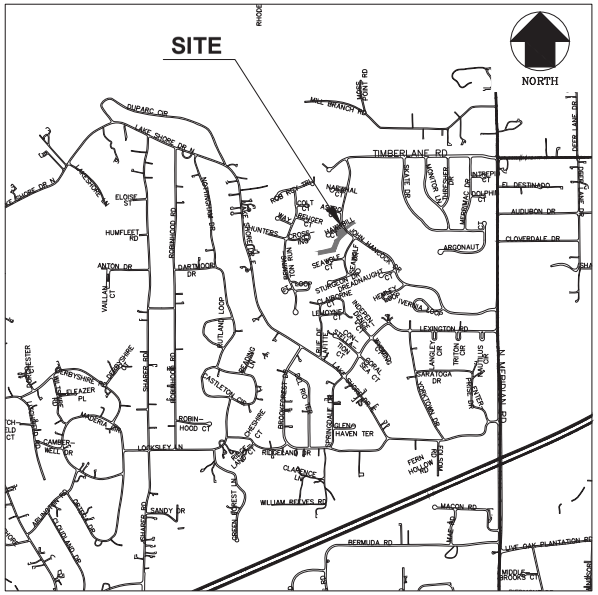
9 LANDSCAPE PLAN
10 LANDSCAPE NOTES AND DETAILS

INCLUDED IN PLANS BY REFERENCE:

FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS (2016 EDITION)

FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2016 EDITION)



LOCATION MAP

N.T.S.

THERESA HEIKER, P.E., LEON COUNTY PROJECT MANAGER

COMMISSIONERS:

WILLIAM C. PROCTOR, JR.
DISTRICT 1

JIMBO JACKSON
DISTRICT 2

RICK MINOR
DISTRICT 3

BRYAN DESLOGE
DISTRICT 4

KRISTIN DOZIER
DISTRICT 5

MARY ANN LINDLEY
AT LARGE

NICK MADDOX
AT LARGE

VINCENT LONG
COUNTY ADMINISTRATOR

TONY PARK
PUBLIC WORKS DIRECTOR

PREPARED BY:

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY David W Hutcheson. Digitally signed by David W Hutcheson. Date: 2019.04.23 16:09:36 -04'00' ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

David W. Hutcheson, P.E.
License Number: 38670
DATE: 04/23/2019

LINENE WOODS TRIBUTARY DRAINAGE IMPROVEMENTS AT JOHN HANCOCK DR. LCP5-003
BID PLANS - 04/23/2019

April 23, 2019 (16:46:16 EST)
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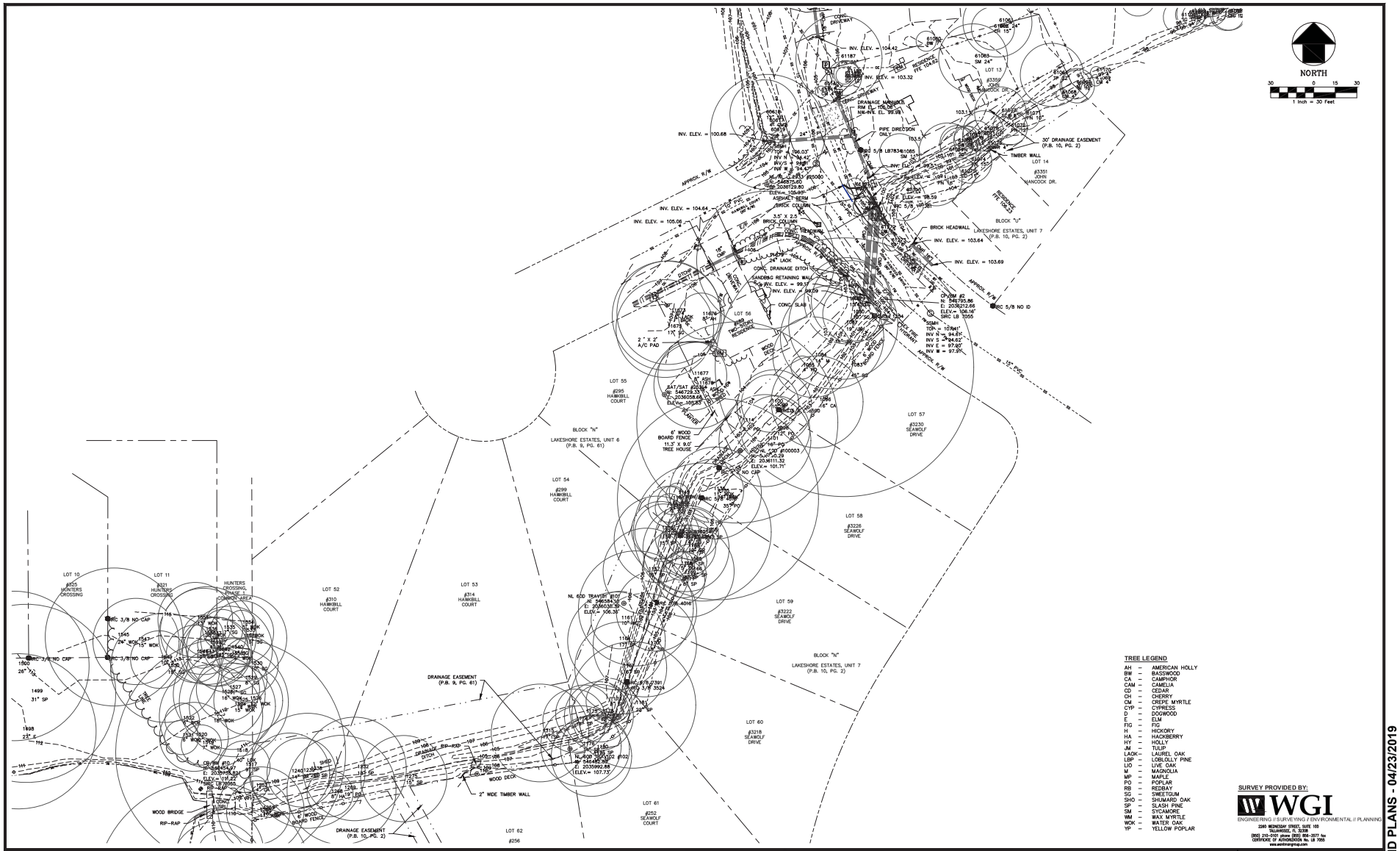
Attachment A



TREE LEGEND

AH	–	AMERICAN HOLLY
BW	–	BASSWOOD
CA	–	CAMPHOR
CAM	–	CAMELIA
CD	–	CEDAR
CH	–	CHERRY
CM	–	CREPE MYRTLE
CYP	–	CYPRESS
D	–	DOGWOOD
E	–	ELM
FIG	–	FIG
H	–	HICKORY
HA	–	HACKBERRY
HY	–	HOLLY
JM	–	TULIP
LAOK	–	LAUREL OAK
LBP	–	LOBLOLLY PINE
LIO	–	LIVE OAK
M	–	MAGNOLIA
MP	–	MAPLE
PO	–	POPLAR
RB	–	REDBAY
SG	–	SWEETGUM
SHO	–	SHUMARD OAK
SP	–	SLASH PINE
SM	–	SYCAMORE
WM	–	WAX MYRTLE
WOK	–	WATER OAK
YP	–	YELLOW POPLAR

SURVEY PROVIDED BY:

WGI
ENGINEERING // SURVEYING // ENVIRONMENTAL // PLANNING
2280 MONCHAM STREET, SUITE 100
TALLAHASSEE, FL 32308
(850) 210-0101 phone (850) 656-3577 fax
CERTIFICATE OF AUTHORIZATION No. LB 7055
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NO.	DATE	DESCRIPTION	REVISIONS

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CHECKED BY: D.W.H.
SCALE: 1" = 30'

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PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
EXISTING CONDITIONS MAP

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER: LCP5-003
DATE: 02/13/2018
SHEET NUMBER: 2

April 23, 2019 (16:46:16 EST)
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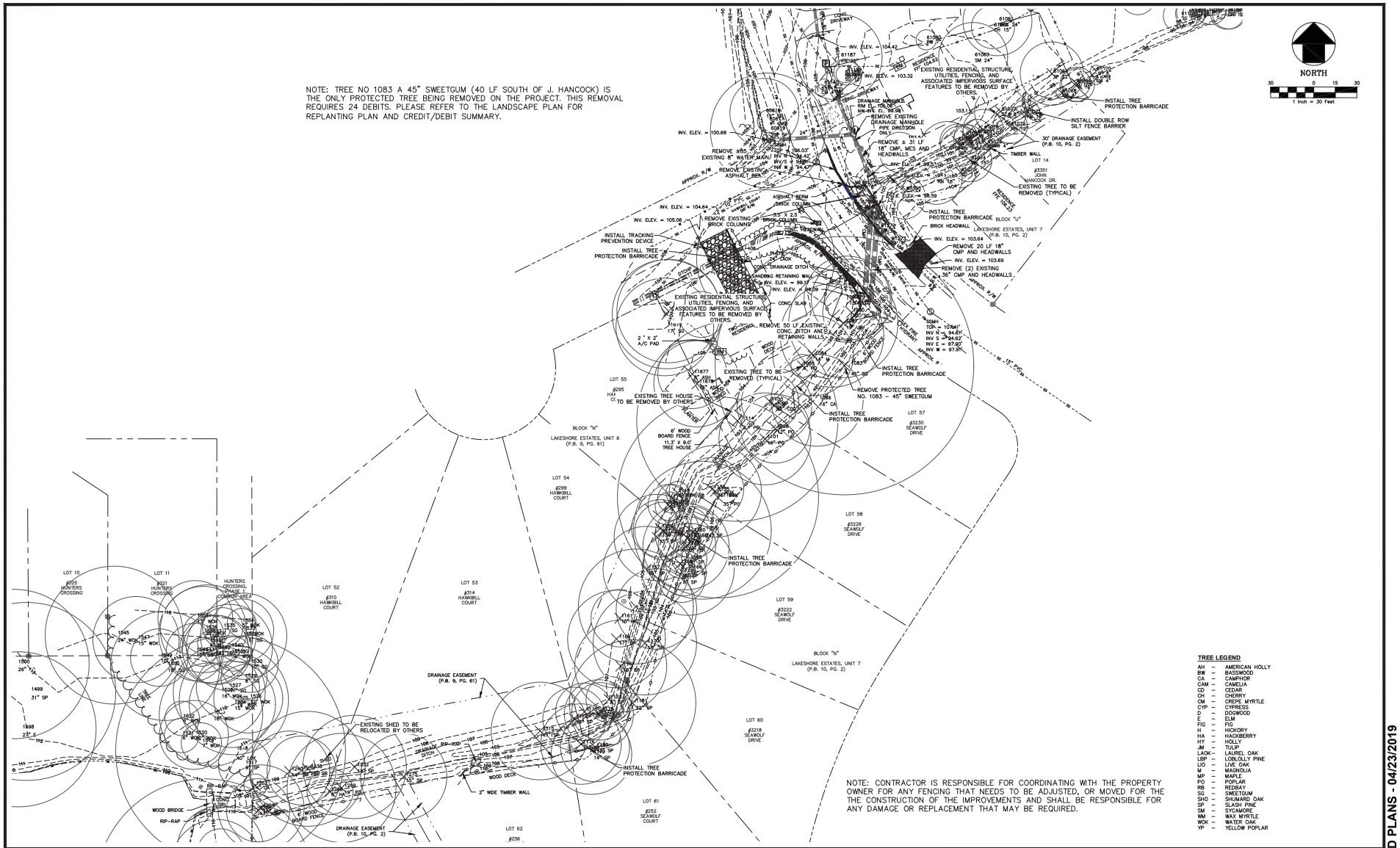
BID PLANS - 04/23/2019

Attachment A

NOTE: TREE NO 1083 A 45" SWEETGUM (40 LF SOUTH OF J. HANCOCK) IS THE ONLY PROTECTED TREE BEING REMOVED ON THE PROJECT. THIS REMOVAL REQUIRES 24 DEBITS. PLEASE REFER TO THE LANDSCAPE PLAN FOR REPLANTING PLAN AND CREDIT/DEBIT SUMMARY.



NOTE: CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE PROPERTY OWNER FOR ANY FENCING THAT NEEDS TO BE ADJUSTED, OR MOVED FOR THE THE CONSTRUCTION OF THE IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR ANY DAMAGE OR REPLACEMENT THAT MAY BE REQUIRED.

TREE LEGEND

AH	–	AMERICAN HOLLY
BW	–	BASSWOOD
CA	–	CAMPHOR
CAM	–	CAMELIA
CD	–	CEDAR
CH	–	CHERRY
CM	–	CREPE MYRTLE
CYP	–	CYPRESS
D	–	DOGWOOD
E	–	ELM
FIG	–	FIG
H	–	HICKORY
HA	–	HACKBERRY
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M	–	MAGNOLIA
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RB	–	REDBAY
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SHO	–	SHUMARD OAK
SP	–	SLASH PINE
SM	–	SYCAMORE
WM	–	WAX MYRTLE
WOK	–	WATER OAK
YP	–	YELLOW POPLAR

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PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
DEMOLITION AND SWPPP

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER LCP5-003
DATE 02/13/2018
SHEET NUMBER 3

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Attachment A

STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

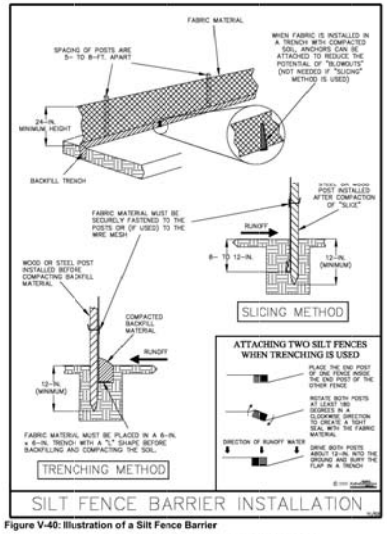

Figure V-40: Illustration of a Silt Fence Barrier

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STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

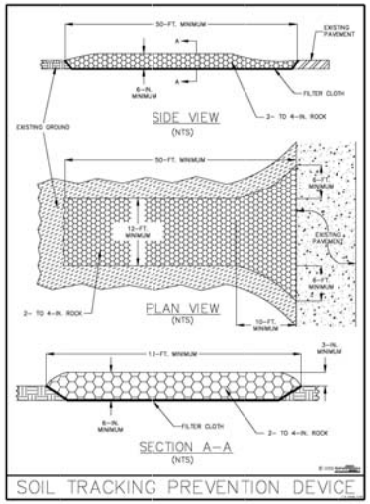

Figure V-52: Illustration of a Soil Tracking Prevention Device

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STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

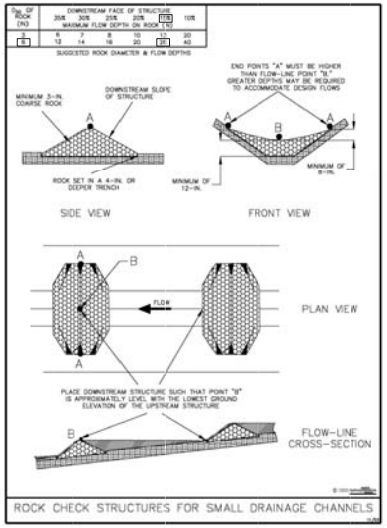

Figure III-11: Rock Check Structures in Small Drainage Channels

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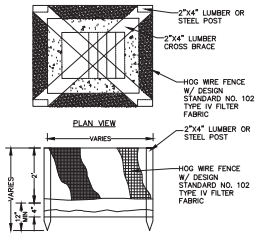
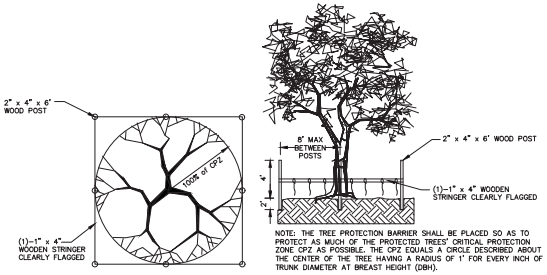


PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

N.T.S.



NOTE: THE TREE PROTECTION BARRIER SHALL BE PLACED SO AS TO PROTECT AS MUCH OF THE PROTECTED TREES' CRITICAL PROTECTION ZONE CPZ AS POSSIBLE. THE CPZ EQUALS A CIRCLE DESCRIBED ABOUT THE CENTER OF THE TREE HAVING A RADIUS OF 1' FOR EVERY INCH OF TRUNK DIAMETER AT BREAST HEIGHT (DBH).

TREE PROTECTION BARRICADE

N.T.S.

GENERAL NOTES:

1. ANY PROPOSED CONSTRUCTION WITHIN THE CPZ OF ANY TREE SHALL IN EFFECT CAUSE THE TREE TO BE REMOVED UNLESS A CERTIFIED ARBORIST CAN RECOMMEND ANY MITIGATION TO SAVE THE IMPACTED TREE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TREE REPLACEMENT AS PER THE LEON COUNTY ENVIRONMENTAL ORDINANCE, TREE PROTECTION AND REMOVAL STANDARDS FOR ANY TREE DEEMED TO BE REMOVED.
2. ANY IMPACTED TREE THAT HAS BEEN RECOMMENDED TO BE SAVED BY A CERTIFIED ARBORIST SHALL BE MITIGATED IN ACCORDANCE WITH THE LEON COUNTY ENVIRONMENTAL ORDINANCE, ARBORICULTURAL MITIGATION.
3. ALL EXISTING SURFACE FEATURES WITHIN THE LIMITS OF CONSTRUCTION TO REMAIN UNLESS OTHERWISE NOTED.
4. GENESIS GROUP HAS NOT VERIFIED THE ACCURACY OF THE EXISTING SURFACE FEATURES OR UNDERGROUND UTILITIES. THE CONTRACTOR IS TO FIELD VERIFY LOCATIONS AND SIZES OF ALL SURFACE FEATURES AND UNDERGROUND UTILITIES PRIOR TO DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD WITH ANY DISCREPANCIES PRIOR TO COMMENCING WITH CONSTRUCTION.

NO.	DATE	DESCRIPTION	REVISIONS

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DRAWN BY: S.R.W.
CHECKED BY: D.W.H.
SCALE: 1" = 30'

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PREPARED FOR: LEON COUNTY PUBLIC WORKS

PROJECT NAME: LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE: SWPPP AND TREE PROTECTION DETAILS

SEAL: David W. Hutcheson, P.E. License Number 38670

PROJECT NUMBER: LCP5-003
DATE: 02/13/2018
SHEET NUMBER: 4

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BID PLANS - 04/23/2019

Attachment A

PROJECT OVERVIEW

THE LINENE WOODS TRIBUTARY FLOOD RELIEF PROJECT CONSISTS OF THE CONSTRUCTION OF A STORMWATER MANAGEMENT FACILITY AND IMPROVED CONVEYANCE MEASURES WITHIN THE TRIBUTARY TO IMPROVE PERIODIC FLOODING CONDITIONS WITHIN THE STUDY AREA. THE TRIBUTARY LIES WITHIN THE FORDS ARM WATERSHED, IN THE LAKE JACKSON BASIN, EXTENDING FROM THE FORDS ARM TRIBUTARY NEAR THE INTERSECTION OF JOHN HANCOCK DRIVE AND HAWKBILL COURT UPSTREAM THROUGH A SERIES OF CHANNELS STORMWATER MANAGEMENT FACILITIES AND CLOSED CONDUITS TO THE SITE OF THE PROPOSED STORMWATER MANAGEMENT FACILITY AT 3491 LAKESHORE DRIVE. THE PROJECT WILL CONSIST OF THE CONSTRUCTION OF A STORMWATER MANAGEMENT FACILITY, STORM DRAIN CONDUIT, AND DRAINAGE CHANNELS, LANDSCAPING, FENCING, AND EROSION CONTROL. LAND DISTURBANCE OF 3.25 ACRES (AC.) IS EXPECTED TO OCCUR.

THE SITE SLOPES GENERALLY FROM WEST TO EAST, DISCHARGING INTO THE FORDS ARM TRIBUTARY AT THE EASTERN EXTENT OF THE PROJECT AREA. ELEVATIONS ON THE SITE RANGE FROM 110 FT. NAVD TO 98 FT. NAVD.

EXISTING WETLANDS AND WATERWAYS WILL BE IMPACTED WITHIN THE PROJECT AREA.

PROJECT DESCRIPTION

CONSTRUCTION ACTIVITIES FOR THE PROJECT INCLUDE BUT ARE NOT LIMITED TO TREE REMOVAL, CLEARING AND GRUBBING, CONSTRUCTION OF REINFORCED CONCRETE BOX CULVERTS, CONSTRUCTION OF STORMWATER CONVEYANCE CHANNELS OF THE SITE, CONSTRUCTION OF REINFORCED CONCRETE DRAINAGE PIPE, REMOVAL OF EXCAVATED SOILS FROM THE SITE AND LANDSCAPING.

THE SITE LIES AT APPROXIMATELY LATITUDE 30.503311, LONGITUDE −84.285186. THE SITE IS WITHIN THE FORDS ARM WATERSHED IN THE LAKE JACKSON BASIN. THE TOTAL DRAINAGE AREA CONTRIBUTING TO THE SITE IS 87.10 ACRES.

ACCORDING TO THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) SOILS WITHIN THE PROJECT SITE ARE PRIMARILY NORFOLK LOAMY FINE SAND 5 TO 8 PERCENT SLOPES (SOIL NUMBER 30) AND PLUMMER FINE SAND (SOIL NUMBER 41). THE NORFOLK SOILS ARE WELL DRAINED, WHILE PLUMMER SANDS ARE CONSIDERED POORLY DRAINED.

RECORD KEEPING

CONTRACTOR SHALL COMPLETE THE NECESSARY RECORD KEEPING TASKS IN A REGULAR AND EXPEDIENT MANNER WHILE CONSTRUCTION ACTIVITIES ARE OCCURRING.

1. CONTRACTOR SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOTICE OF TERMINATION IS SUBMITTED TO FDEP:
   a) A COPY OF THE NOTICE OF INTENT SUBMITTED TO FDEP;
   b) A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN
   c) A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
   d) A COPY OF ALL INSPECTION REPORTS GENERATED AS REQUIRED BY THE FDEP NPDES GENERAL PERMIT;
   e) A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED DURING THE COURSE OF THE PROJECT
   f) DAILY RAINFALL INFORMATION COLLECTED.
2. CONTRACTOR SHALL RECORD THE FOLLOWING DATES:
   a) WHEN MAJOR GRADING ACTIVITIES OCCUR
   b) WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE
   c) WHEN STABILIZATION (I.E. EROSION CONTROL) MEASURES BEGIN
3. CONTRACTOR IS TO PROVIDE QUALIFIED INSPECTORS WHO HAVE KNOWLEDGE AND EXPERIENCE IN THE PRINCIPLES AND PRACTICE OF SEDIMENT AND EROSION CONTROL AND CAN COMPLETE PROJECT SITE INSPECTIONS:
   a) AT LEAST ONCE EVERY SEVEN (7) DAYS
   b) WITHIN 24 HOURS AFTER THE END OF A STORM EVENT OF 0.50 INCHES (IN.) OR MORE
   c) CONTRACTOR SHALL PROVIDE A FOREMAN OR SUPERINTENDENT WHO HAS BEEN CERTIFIED UNDER THE FLORIDA STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM. SAID FOREMAN OR SUPERINTENDENT SHALL BE AVAILABLE IN PERSON OR BY TELEPHONE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
4. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, MONITORING REPORTS, MONITORING INFORMATION, INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE REPORTS AND ALL OTHER RECORDS RESULTING FROM THE NPDES GENERAL PERMIT SHALL BE RETAINED BY THE CONTRACTOR WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THAT THE NOTICE OF TERMINATION IS SUBMITTED. THESE RECORDS SHALL BE MAINTAINED AT THE CONTRACTORS PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE SITE.
5. CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP RECORDS TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE BY THE 10TH DAY OF EACH MONTH FOR THE IMMEDIATELY PRECEDING MONTH.

CRITICAL AREAS

THERE ARE NO KNOWN CRITICAL AREAS WITHIN THE PROJECT LIMITS.

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR FILING AN NPDES NOTICE OF INTENT WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION PRIOR TO CONSTRUCTION ACTIVITIES AND FOR COMPLIANCE WITH ALL STATE, LOCAL, AND FEDERAL PERMITS RELATED TO THIS PROJECT.
2. THE EROSION CONTROL MEASURES SET FORTH IN THESE PLANS ARE INTENDED AS MINIMUM STANDARDS. ALL EROSION CONTROL REQUIRED SHALL BE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXPOSED AREAS, COST OF WHICH SHALL BE INCIDENTAL TO THE PROJECT.
3. A STORMWATER CONTROL OFFICER WILL BE DESIGNATED IN WRITING BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. A 24-HOUR CONTACT NUMBER IS REQUIRED FOR THE STORMWATER CONTROL OFFICER. PRIOR TO THE REQUIRED PRE-CONSTRUCTION MEETING, CONTRACTOR SHALL PROVIDE IN WRITING THE NAME AND TELEPHONE NUMBER OF THE STORMWATER CONTROL OFFICER TO LEON COUNTY DEVELOPMENT SUPPORT AND ENVIRONMENTAL MANAGEMENT AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT.
4. THE STORMWATER CONTROL OFFICER SHALL BE RESPONSIBLE FOR CONTINUALLY MONITORING WEATHER CONDITIONS AND EVALUATING THE EFFECTIVENESS OF THE CONTROL MEASURES THROUGHOUT ALL PHASES OF CONSTRUCTION.
5. AS CONSTRUCTION PROGRESSES, THE STORMWATER CONTROL OFFICER SHALL MAKE ADJUSTMENTS AND/OR INSTALL ADDITIONAL MEASURES TO PREVENT DIRECT FLOW OR TRACKING OF SEDIMENTS ONTO ADJACENT PROPERTY, CONSERVATION AREAS, PUBLIC STREETS OR DRAINAGE SYSTEMS.
6. ANY SEDIMENTS, GRAVEL OR MUD SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ADJACENT PROPERTY, ROADWAYS OR INTO STORM DRAINAGE SYSTEMS SHALL BE RECOVERED AND DISPOSED OF PROPERLY.
7. TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PLACED ADJACENT TO ANY WATERWAY OR DRAINAGE FEATURE PRIOR TO CONSTRUCTION AND REMAIN IN PLACE UNTIL CONSTRUCTION OF THE FEATURE IS COMPLETE AND ALL AREAS ARE SUITABLY STABILIZED.
8. CONTRACTOR SHALL REVISE THE SWPPP WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING AN INSPECTION WHEN ADDITIONS AND/OR MODIFICATIONS TO BEST MANAGEMENT PRACTICES (BMPS) ARE NECESSARY TO CORRECT OBSERVED PROBLEMS. REVISIONS SHALL OCCUR WHENEVER:
   a) A CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE AT THE CONSTRUCTION SITE HAS A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE UNITED STATES NOT PREVIOUSLY ADDRESSED IN THE DOCUMENT.
   b) DISCHARGES ARE CAUSING WATER QUALITY EXCEEDS, AS DEFINED BY THE EPA, OR THE BMPS ARE INEFFECTIVE IN MINIMIZING POLLUTANTS IN STORMWATER DISCHARGING FROM THE CONSTRUCTION SITE.
9. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AT LOCATIONS SHOWN IN THE PLANS OR AS REQUIRED UNTIL CONSTRUCTION IS COMPLETED, SOILS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. ALL EROSION CONTROL MEASURES ARE THEN TO BE REMOVED UPON APPROVAL BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
10. EROSION CONTROL ITEMS ARE ESTIMATED FOR PREVENTION, CONTROL, ABATEMENT OF EROSION, SEDIMENTATION AND WATER POLLUTION. THESE ITEMS ARE TO BE USED AT LOCATIONS DESCRIBED IN THE APPROVED SWPPP OR AS DIRECTED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
11. SWEEPING THE PERIMETER ROADS SHALL BE REQUIRED AS NEEDED TO REMOVE ANY DEBRIS OR SEDIMENT AS A RESULT OF PROJECT ACTIVITIES OR AS PER THE LEON COUNTY ENVIRONMENTAL INSPECTOR.
12. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED DURING ANY PHASE OF DEVELOPMENT AT THE DISCRETION OF THE LEON COUNTY ENVIRONMENTAL INSPECTOR.
13. CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, CONTRACTOR SHALL REQUEST, IN WRITING, WRITTEN PERMISSION FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE. CONTRACTOR SHALL PROVIDE THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. SINCE STATE LAW DOES NOT TREAT PETROLEUM PRODUCTS THAT ARE PROPERLY CONTAINERIZED AND INTENDED FOR EQUIPMENT USE AS A HAZARDOUS MATERIAL, SUCH PRODUCTS DO NOT NEED THE MSDS SUBMITTAL. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE AND WHO SHALL PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE; HOWEVER, CONTRACTOR SHALL RE-LOCATE CONSTRUCTION ACTIVITIES TO ANOTHER AREA OF THE PROJECT UNTIL SUCH APPROVAL IS PROVIDED.
14. ALL SOD MATERIALS SHALL BE SUBJECT TO INSPECTION PRIOR TO PLACEMENT. ANY SOD WITH NOXIOUS WEEDS AND GRASSES SHALL BE REJECTED FOR USE ON THE PROJECT. CONTRACTOR SHALL FURNISH THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE, PRIOR TO INCORPORATION INTO THE PROJECT, A CERTIFICATION FROM THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICE DIVISION OF PLANT INDUSTRY, STATING THAT THE SOD, HAY, STRAW, AND MULCH MATERIALS ARE FREE OF NOXIOUS WEEDS.
15. EQUIPMENT MAINTENANCE AND REPAIR SHALL BE LIMITED TO ONE AREA OF THE PROJECT. AN ADEQUATE NUMBER OF WASTE DISPOSAL RECEPTACLES FOR LIQUID AND SOLID WASTE SHALL BE PROVIDED. WASTE SHALL BE DISPOSED OF PROPERLY OFF-SITE. THE MAINTENANCE AREAS SHALL BE INSPECTED AND CLEANED DAILY. CARE SHALL BE TAKEN THAT ANY OILS, GASOLINE, GREASE, SOLVENTS, AND OTHER POTENTIAL POLLUTANTS SHALL NOT BE WASHED DIRECTLY INTO THE EXISTING STORMWATER CONVEYANCE AND COLLECTION SYSTEM, EITHER DIRECTLY OR INDIRECTLY THROUGH THE STORMWATER CONVEYANCE SYSTEM.
16. A SUFFICIENT NUMBER OF WASTE AND TRASH RECEPTACLES SHALL BE PROVIDED AT ALL TIMES. RECEPTACLES AND OTHER WASTE COLLECTION AREAS SHALL BE KEPT NEAT AND ORDERLY. TRASH CANS AND DUMPSTERS SHALL HAVE COVERS TO PREVENT THE ENTRANCE OF RAINFALL. ALL WASTE MATERIALS SHALL BE COLLECTED WEEKLY AT A MINIMUM AND DISPOSED AT A SUITABLE LANDFILL. TRASH COLLECTION POINTS SHALL BE LOCATED WHERE THEY WILL BE LEAST IMPACTED BY CONCENTRATED STORMWATER RUNOFF.
17. DUST CONTROL TECHNIQUES SHALL BE USED DURING DEMOLITION WHERE LARGE AMOUNTS OF DUST ARE GENERATED. IF WATER OR SLURRY IS USED TO CONTROL DUST, IT SHALL BE RETAINED ON THE SITE AND NOT BE ALLOWED TO ENTER THE STORMWATER CONVEYANCE OR COLLECTION SYSTEM.
18. DUMP TRUCKS, CONCRETE TRUCKS AND OTHER CONSTRUCTION EQUIPMENT SHALL NOT BE WASHED AT LOCATIONS WHERE RUNOFF WILL FLOW DIRECTLY INTO THE STORMWATER CONVEYANCE SYSTEM. AN AREA SHALL BE DESIGNATED BY THE CONTRACTOR FOR WASHING VEHICLES AND WILL BE LOCATED WHERE THE WASH WATER WILL SPREAD OUT AND EVAPORATE OR INFILTRATE DIRECTLY INTO THE GROUND OR WHERE THE RUNOFF CAN BE COLLECTED IN A TEMPORARY HOLDING OR SEEPAGE BASIN. WASH AREAS SHALL HAVE GRAVEL BASES TO MINIMIZE MUD GENERATION.
19. AN ISOLATED AREA SHALL BE DESIGNATED TO STORE CHEMICALS, CEMENTS, SOLVENTS, PAINTS, OR OTHER POTENTIAL WATER POLLUTANTS. THE AREA SHALL BE SO LOCATED AS TO ELIMINATE RUNOFF POLLUTION. TOXIC CHEMICALS AND MATERIALS, SUCH AS PESTICIDES, PAINTS, AND ACIDS SHALL BE STORED ACCORDING TO THE MANUFACTURER'S GUIDELINES. CARE SHALL BE TAKEN IN THE USE OF THESE MATERIALS TO AVOID ACCIDENTAL SPILLS. CONTAINERS OF CONSTRUCTION MATERIALS SHALL NOT BE WASHED IN OR NEAR ADJACENT ROADWAYS OR THE EXISTING STORMWATER CONVEYANCE AND COLLECTION SYSTEM. GROUNDWATER RESOURCES SHALL BE PROTECTED BY THE USE OF PLASTIC MATS, TAR PAPER OR OTHER IMPERVIOUS MATERIALS ON ANY GROUND SURFACE WHERE TOXIC LIQUIDS ARE TO BE OPENED AND STORED.
20. SANITARY FACILITIES – ADEQUATE SANITARY FACILITIES SHALL BE PROVIDED DURING ALL CONSTRUCTION PHASES FOR WORKERS ACCORDING TO APPLICABLE HEALTH AND SAFETY PRACTICES AND REGULATIONS. SANITARY FACILITIES SHALL BE LOCATED AWAY SO AS TO AVOID ACCIDENTAL SPILLS INTO THE STORMWATER SYSTEM.
21. THE CONTRACTOR SHALL FILE A ROAD CLOSURE APPLICATION PRIOR TO BEGINNING WORK.

CONSTRUCTION SCHEDULE

THE PROJECT WILL BE CONSTRUCTED IN A SINGLE PHASE, WITH A CONSTRUCTION START OF MAY 2019, WITH AN EXPECTED COMPLETION DATE OF OCTOBER 2019. THE PROJECT SHALL HAVE A DURATION OF 6 MONTHS.

BEST MANAGEMENT PRACTICES

THE FOLLOWING BMPS SHALL BE USED TO CONTROL AND MEASURE SEDIMENTATION AND EROSION DURING THE PROJECT:

1. CONSTRUCTION ENTRANCE WILL BE USED FOR THE DURATION OF THE PROJECT TO MINIMIZE THE TRACKING OF SEDIMENTS FROM EITHER THE BORROW OR FILL SITES. CONSTRUCTION ENTRANCES WILL BE PLACED PRIOR TO THE START OF CONSTRUCTION.
2. CROSS DRAIN END SECTION PROTECTION WILL BE USED THROUGHOUT THE PROJECT WHEREVER THERE ARE EXISTING CROSS DRAINS.
3. VEGETATIVE COVERS, BOTH TEMPORARY AND PERMANENT SHALL BE USED TO STABILIZE DISTURBED SOIL THROUGHOUT THE PROJECT.
4. SILT FENCE SHALL BE USED TO DETER MIGRATION OF SEDIMENTS INTO THE ADJACENT ROADWAYS AND THE STORMWATER MANAGEMENT FACILITY.

SPECIFICATIONS

1. SILT FENCE SHALL NOT BE INSTALLED WITHIN THE CPZ OF ANY PROTECTED TREES.
2. EROSION CONTROL DEVICES SHALL BE CONSTRUCTED PRIOR TO CLEARING AND GRUBBING OF ANY AREA NEEDED FOR CONSTRUCTION OF THE PROJECT.
3. VEGETATIVE COVERS SHALL BE USED SO THAT DISTURBED AREAS WILL NOT BE DESTABILIZED FOR MORE THAN SEVEN (7) DAYS. SHOULD AREAS REMAIN DISTURBED FOR MORE THAN SEVEN (7) DAYS, THE AREA SHALL BE TEMPORARILY STABILIZED WITH RYE GRASS, APPLIED AT THE MANUFACTURER'S RECOMMENDATION. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 4,000 POUNDS (LB.) OF STRAW PER AC. IF EXPOSED SLOPES ARE GREATER THAN OR EQUAL TO 5%, THEN AN EROSION BLANKET SUCH AS NORTH AMERICAN GREEN BIONET S75BN SHALL BE UTILIZED UNTIL THE AREA ACHIEVES FINAL STABILIZATION. HYDROMULCH MAY BE USED AS AN ALTERNATIVE.
4. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR ARE TO BE LEFT IDLE FOR MORE THAN 14 DAYS, SHALL BE STABILIZED WITH PERMANENT SEED, SOD OR OTHER PERMANENT STABILIZATION METHODS.

CONSTRUCTION ENTRANCE

1. THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
2. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED SO AS TO INTERCEPT SEDIMENT BEFORE IT IS CARRIED OFF-SITE INTO THE STORMWATER CONVEYANCE OR COLLECTION SYSTEM.
4. IF WASH RACKS ARE USED, THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
5. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF THE SEDIMENT, THEN THE TIRES SHALL BE WASHED BEFORE THE VEHICLE ENTERS A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS SHALL BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE, INTO THE STORMWATER CONVEYANCE OR COLLECTION SYSTEM.

SILT FENCE

1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

FILTERING EFFICIENCY:	(VTM-51) 75% (MIN.)
TENSILE STRENGTH AT 20% MAX. ELONGATION:	(VTM-52)
EXTRA STRENGTH	50 LB./LIN. IN. (MIN.)
STANDARD STRENGTH	30 LB./LIN. IN. (MIN.)
FLOW RATE:	(VTM-51) 0.3 GAL./SQ. FT./MIN. (MIN.)

SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0° F TO 120° F.

2. POSTS FOR SILT FENCES SHALL BE EITHER 2 X 4 IN. SQUARE OR 3 IN. DIAMETER WOOD OR 1.33 LB./ LINEAR FT. STEEL WITH A MINIMUM LENGTH OF 5 FT. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
3. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 36 IN. IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 IN.
4. WIRE MESH SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 IN. LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 IN.
5. THE FILTER MATERIAL SHALL BE STAPLED TO THE WOODEN STAKES, AND 8 IN. OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. HEAVY DUTY WIRE STAPLES AT LEAST ½ IN. LONG SHALL BE USED. FILTER MATERIAL SHALL NOT BE STAPLED TO EXISTING TREES.
6. A 4 IN. WIDE TRENCH SHALL BE EXCAVATED AT THE BASE OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 IN. THE FILTER FABRIC SHALL BE LAID THE FULL WIDTH AND DEPTH OF THE TRENCH AND THE EXCAVATED SOIL BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHALL BE BUILT UP TO 4 IN. AGAINST THE UPHILL SIDE OF THE BARRIER.
7. IF A BARRIER IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, THE BARRIER SHALL BE OF SUFFICIENT LENGTH TO ELIMINATE END FLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE WITH THE ENDS ORIENTED UPSLOPE.
8. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 IN.
9. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 IN. OVERLAP, AND SECURELY SEALED.
10. POSTS SHALL BE SPACED A MAXIMUM OF 10 FT. APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 IN.).

TEMPORARY SEEDING

1. TEMPORARY SEEDING MIXTURE SHALL BE A MIXTURE OF ANNUAL AND PERENNIAL PLANT SPECIES AS OUTLINED BELOW. SEEDING RATES QUOTED ARE BASED ON PURE LIVE SEED.
2. COOL SEASON PLANTINGS SHALL CONTAIN 1.4 LB./1000 SF OF PENSACOLA BAHIA AND 0.9 LB./1000 SF OF RYEGRASS.
3. WARM SEASON PLANTINGS SHALL CONTAIN 1.4 LB./1000 SF OF PENSACOLA BAHIA AND 0.9 LB./1000 SF OF BROWNTOP MILLET.
4. VEGETATION SHALL NOT BE ESTABLISHED ON SLOPES THAT ARE UNSUITABLE DUE TO INAPPROPRIATE SOIL TEXTURE, POOR INTERNAL STRUCTURE OR INTERNAL DRAINAGE, VOLUME OF OVERLAND FLOW, OR EXCESSIVE STEEPNESS, UNTIL MEASURES HAVE BEEN TAKEN TO CORRECT THESE PROBLEMS.
5. IF THE AREA HAS BEEN RECENTLY LOOSENED OR DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISCING, RAKING, HARROWING, OR OTHER ACCEPTABLE MEANS.
6. WHERE SOILS ARE KNOWN TO BE HIGHLY ACID (PH 5.5 AND LOWER), LIME SHALL BE APPLIED AT THE RATE OF TWO TONS OF PULVERIZED AGRICULTURAL LIMESTONE PER AC.
7. FERTILIZER SHALL BE APPLIED AS 220 LB./AC. OF 10-10-10 (5 LB./1,000 SF) OR EQUIVALENT. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 IN. OF THE SOIL.
8. CERTIFIED SEED SHALL BE USED FOR ALL TEMPORARY SEEDING.
9. APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE ¼ IN.
10. WHEN HYDROSEEDING, IF A MACHINERY BREAKDOWN OF 30 MINUTES TO 2 HOURS OCCURS, 50% MORE SEED SHALL BE ADDED TO THE TANK, BASED ON THE PROPORTION OF THE SLURRY REMAINING IN THE TANK. BEYOND 2 HOURS, A FULL RATE OF NEW SEED SHALL BE NECESSARY.
11. ALL TEMPORARY SEEDING MUST BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION.
12. NEW SEEDLINGS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY LATE IN THE SEASON, IN ABNORMALLY HOT OR DRY WEATHER, OR ON ADVERSE SITES. WATER APPLICATION RATES SHALL BE CONTROLLED TO PREVENT RUNOFF.
13. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.
14. IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVER-SEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS.
15. SEEDLINGS SHALL BE FERTILIZED ONE YEAR AFTER PLANTING TO INSURE PROPER STAND DENSITY.

PERMANENT SEEDING

1. VEGETATION SHALL NOT BE ESTABLISHED ON SLOPES THAT ARE UNSUITABLE DUE TO INAPPROPRIATE SOIL, TEXTURE, POOR INTERNAL STRUCTURE OR INTERNAL DRAINAGE, VOLUME OF OVERLAND FLOW, OR EXCESSIVE STEEPNESS, UNTIL MEASURES HAVE BEEN TAKEN TO CORRECT THESE PROBLEMS.
2. IF THE AREA HAS BEEN RECENTLY LOOSENED OR DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISCING, RAKING, HARROWING, OR OTHER ACCEPTABLE MEANS.
3. LIMING AND FERTILIZATION SHALL BE AS DIRECTED FOR TEMPORARY SEEDING. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 4-6 INCHES OF THE SOIL BY DISCING OR OTHER MEANS. WHEN APPLYING LIME AND FERTILIZER WITH A HYDROSEEDER, APPLY TO A ROUGH, LOOSE SURFACE.
4. CERTIFIED SEED SHALL BE USED FOR ALL PERMANENT SEEDING.
5. APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.
6. WHEN HYDROSEEDING, IF A MACHINERY BREAKDOWN OF 30 MINUTES TO 2 HOURS OCCURS, 50% MORE SEED SHALL BE ADDED TO THE TANK, BASED ON THE PROPORTION OF THE SLURRY REMAINING IN THE TANK. BEYOND 2 HOURS, A FULL RATE OF NEW SEED SHALL BE NECESSARY.
7. ALL PERMANENT SEEDING MUST BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION.
8. NEW SEEDLINGS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY LATE IN THE SEASON, IN ABNORMALLY HOT OR DRY WEATHER, OR ON ADVERSE SITES. WATER APPLICATION RATES SHALL BE CONTROLLED TO PREVENT RUNOFF.
9. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.
10. IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVERSEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS.
11. SEEDLINGS SHALL BE FERTILIZED ONE YEAR AFTER PLANTING TO INSURE PROPER STAND DENSITY.

SODDING

1. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVAL PLAN. THESE OPERATIONS SHALL LEAVE AS MUCH TOPSOIL AS POSSIBLE OR REPLACE THE TOPSOIL TO A DEPTH OF 4 IN.
2. SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. THESE AMENDMENTS SHALL BE SPREAD EVENLY OVER THE AREA TO BE SODDED, AND INCORPORATED INTO THE TOP 3 TO 6 IN. OF THE SOIL BY DISCING, HARROWING, OR OTHER ACCEPTABLE MEANS.
3. PRIOR TO LAYING SOD, THE SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS, ROOTS, BRANCHES, STONES AND CLODS IN EXCESS OF 2 IN. IN LENGTH OR DIAMETER. SOD SHALL NOT BE APPLIED TO GRAVEL OR OTHER NON-SOIL SURFACES.
4. ANY IRREGULARITIES IN THE SOIL SURFACE RESULTING FROM TOPSOIL OR OTHER OPERATIONS SHALL BE FILLED OR LEVELED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
5. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 IN., PLUS OR MINUS 1/4 IN., AT THE TIME OF CUTTING. THIS THICKNESS SHALL EXCLUDE SHOOT GROWTH AND THATCH.
6. PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. TORN OR UNEVEN PADS SHALL NOT BE ACCEPTABLE.
7. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.
8. SOD SHALL BE NOT CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER.
9. SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
10. IRRIGATE AREAS TO BE SODDED WITH A MINIMUM OF ½ IN. OF WATER UNLESS RECENT RAINS HAVE PROVIDED EQUIVALENT MOISTURE.
11. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHALL BE EXERCISED TO INSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS.
12. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHALL BE LAID WITH STAGGERED JOINTS AND SECURED BY PEGGING OR OTHER APPROVED METHODS. SOD SHALL BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON THE CONTOUR). BEGIN LAYING SOD AT THE BOTTOM OF THE SLOPE AND WORK UPHILL.
13. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHALL BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.
14. AFTER ROLLING, SOD SHALL BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 IN. BELOW THE SOD IS THOROUGHLY WET.

MAINTENANCE AND INSPECTION

ALL BMPS SHALL BE INSPECTED WEEKLY AT A MINIMUM AND AFTER EVERY RAINFALL EVENT EXCEEDING 1/2 IN. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY UPON COMPLETION OF THE INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF ANY SEDIMENT FILTER OR BARRIER. SUCH DEPOSITS SHALL BE DISPOSED OF IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

CONSTRUCTION ENTRANCE

1. THE ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY.
2. TOP DRESS THE ENTRANCE PERIODICALLY WITH 2-INCH STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT WHEN VOID SPACES ARE FULL OF SEDIMENT.
3. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
4. SWEEP THE PAVED ROAD DAILY FOR SEDIMENTS AND STONES.

SILT FENCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL EVENT OF 1/2 IN. OR GREATER AND AT LEAST DAILY DURING PROLONGED RAINFALL EVENTS. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED OR SODDED. INLET PROTECTION SHALL BE INSPECTED AND GEO-TEXTILE FABRIC SHALL BE CHANGED AS NEEDED TO ALLOW POSITIVE FLOW.
3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

VEGETATIVE COVERS

1. INSPECT THE VEGETATED AREAS WEEKLY FOR SIGNS OF POOR OR NO GERMINATION AND INDICATIONS OF EROSION.
2. AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATELY TO PREVENT RILL EROSION SHALL BE FILLED IN WITH PROPER TOPSOIL AND RE-SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.
3. AREAS WHERE SEEDING AND SODDING HAS BEEN ESTABLISHED SHALL BE MOWED A MINIMUM OF EVERY TWO WEEKS.

DESIGN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

____________________ __________
David W. Hutcheson, P.E. DATE
GENESIS

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS SWPPP PREPARED THERE UNDER.

____________________ __________
CONTRACTOR DATE

CONTRACTOR SHALL CONTROL EROSION WITHIN THE PROJECT LIMITS SUCH THAT THERE ARE NO NEGATIVE IMPACTS DOWNSTREAM OF THE PROJECT DUE TO UNCONTROLLED EROSION OR SEDIMENTATION.

SHOULD ADDITIONAL BMPS BE REQUIRED TO CONTROL EROSION AND SEDIMENTATION FROM THE SITES, THE CONTRACTOR SHALL PROVIDE THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE WITH A SUPPLEMENTARY STORMWATER POLLUTION PROTECTION PLAN WITH APPROPRIATE BMPS PLACED AS NEEDED.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESCAPE OF SEDIMENT FROM THE SITE AND SHALL BE HELD RESPONSIBLE FOR ANY AND ALL IMPACTS RESULTING FROM SUCH EVENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF DOWNSTREAM IMPACTS DUE TO THE RELEASE OF SEDIMENTS FROM THE SITE INCLUDING BUT NOT LIMITED TO SEDIMENTATION AND EROSION THAT MAY RESULT FROM THE BUILDUP OF SUCH SEDIMENTS DOWNSTREAM OF THE PROJECT. CONTRACTOR SHALL FULLY BEAR THE FINANCIAL COST OF ANY PENALTIES OR FINES RESULTING FROM SUCH EVENTS.

GENERAL CONSTRUCTION NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
2. THE CONTRACTOR SHALL, PRIOR TO ANY CONSTRUCTION ACTIVITY, HOLD A PRE-CONSTRUCTION MEETING WITH ALL PERMITTING AGENCIES INVOLVED, INCLUDING LEON COUNTY, AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT.
3. IN ORDER TO LIMIT DISTURBANCE TO THE SURROUNDING NEIGHBORHOODS, CONTRACTOR SHALL BE LIMITED TO CONSTRUCTION BETWEEN THE HOURS OF 9:00 A.M. TO 4:00 P.M. WITHOUT PRIOR CONSENT FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
4. THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE OF ANY CONFLICTS BEFORE PERFORMING WORK IN THE AFFECTED AREA.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, WHICH MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT. SEE FDOT SPECIFICATION 455-1.1 FOR ADDITIONAL INFORMATION REGARDING PROTECTION OF EXISTING STRUCTURES.
6. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT", CHAPTER 553.60 – 553.64, FLORIDA STATUTES. THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATION.
7. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST MATERIALS AND MANUFACTURED ITEMS TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE FOLLOWING IN THE FIELD: RIGHT OF WAY LINES, BENCHMARKS (ELEVATIONS), COORDINATES, CENTER LINES AND STATIONING AS MAY BE REQUIRED TO CONSTRUCT THE PROJECT.
9. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF – SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.
10. CONTRACTOR MAY STOCKPILE MATERIALS WITHIN THE LIMITS OF THE CURRENT CONSTRUCTION PHASE. IF STOCKPILING IS NECESSARY, CONTRACTOR SHALL SITE THE LOCATION AT HIS DISCRETION, USING THE APPROPRIATE EROSION AND SEDIMENTATION CONTROL BMPS.
11. ALL BASIN SIDE SLOPES AND BOTTOM AREAS MUST BE FULLY VEGETATED AS THE PROJECT SITE IS LOCATED WITHIN A SENSITIVE KARST AREA.
12. IF PREHISTORIC OR HISTORIC ARTIFACTS, SUCH AS POTTERY OR CERAMICS, STONE TOOLS, METAL IMPLEMENTS, DUGOUT CANOES OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME WITHIN THE PROJECT SITE AREA, THE PERMITTED PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE PERMITTEE OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, REVIEW AND COMPLIANCE SECTION, AT (850) 245-6333 OR (800) 847-7278, AS WELL AS THE APPROPRIATE PERMITTING AGENCY OFFICE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK SHALL STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH SECTION 872.05, FLORIDA STATUTES

SURVEY NOTES:

1. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. HORIZONTAL DATUM REFERS TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
3. GRADES SHOWN ARE FINISHED GRADES.
4. ANY PUBLIC LAND CORNER OR BENCH MARK WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE IMMEDIATELY. ANY MONUMENT OTHERWISE DESTROYED BY THE CONTRACTOR SHALL BE RESET BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AT THE CONTRACTOR'S EXPENSE.
5. IF ANY GEODETIC MONUMENT WITHIN THE LIMITS OF CONSTRUCTION ARE DISTURBED, THE CONTRACTOR SHALL NOTIFY:
   MR. DENIS RIORDAN
   GEODETIC REGIONAL ADVISOR
   NATIONAL OCEAN SERVICE
   JACKSON, MS
   (240) 678-2107
   DENIS.RIORDAN@NOAA.GOV
6. THE CONTRACTOR SHALL PROVIDE SIX (6) COPIES OF SIGNED AND SEALED AS-BUILT SURVEYS TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE FOR FINAL CERTIFICATION OF THE ENVIRONMENTAL PERMITS. THE AS-BUILT SURVEY SHALL BE PREPARED AND CERTIFIED BY A PROFESSIONAL SURVEYOR AND MAPPER LICENSED IN FLORIDA PURSUANT TO CHAPTER 472 F.S.

SITEWORK NOTES:

1. CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL WITHIN ONE WEEK FOLLOWING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.
3. THE CONTRACTOR SHALL SURVEY AND STAKE THE CLEARING LIMITS AS INDICATED BY THE PLANS AND RECEIVE APPROVAL FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO COMMENCING WITH THE CLEARING AND GRUBBING OPERATION. (REFER TO TREE PROTECTION DETAILS AND NOTES.)
4. BURNING OF MATERIALS AND/OR DEBRIS AS A MEANS OF DISPOSAL IS PROHIBITED WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL DISPOSE OF ALL CLEARED AND GRUBBED MATERIAL OFF-SITE.
5. IF A MONITORING WELL IS ENCOUNTERED WITHIN OR ADJACENT TO THE PROJECT CORRIDOR, AND IS NOT SHOWN IN THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL AND STATE REGULATIONS CONCERNING SITE SAFETY AND HANDLING AND DISPOSAL OF CONTAMINATED SOILS.
7. GEOTECHNICAL ENGINEERING SERVICES INCLUDING SOIL BORINGS HAVE BEEN PROVIDED BY ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC. THE CONTRACTOR CAN OBTAIN A COPY OF THE REPORTS FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE. THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS OR ACCURACY OF THE GEOTECHNICAL DATA PROVIDED BY ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.
8. CLEARING AND GRUBBING INCLUDES THE REMOVAL OF ALL INCIDENTAL ITEMS INCLUDING BUT NOT LIMITED TO STRUCTURES, CONCRETE, ASPHALT, GRAVEL, FENCING AND ANY OTHER IMPROVEMENTS TO BE REMOVED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF SUCH ITEMS OFF SITE.
9. ALL ROCKS OR STONES LARGER THAN 6" IN DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN 1-FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN 2" IN DIAMETER.
10. ANY DAMAGE TO EXISTING TOPOGRAPHIC FEATURES NOT SPECIFICALLY RELATED TO THE SCOPE OF WORK, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR VIDEO INSPECTION OF ALL STORMWATER PIPES AND STRUCTURES PER LEON COUNTY PUBLIC WORKS STANDARDS PRIOR TO THE START OF CONSTRUCTION. A COPY OF THE VIDEO INSPECTION REPORT INCLUDING THE VIDEO INSPECTION SHALL BE PROVIDED TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
12. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STORMWATER SYSTEM UNTIL ACCEPTED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.

TREE PROTECTION NOTES:

1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LEON COUNTY TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT APPROVAL FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
2. PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL PROTECTED TREES PRIOR TO SITE CLEARING, AND SHALL REMAIN IN PLACE UNTIL LAND ALTERATION, SITE CLEARING AND CONSTRUCTION ACTIVITIES ARE COMPLETE. THE BARRICADE SHALL BE CONSTRUCTED TO PREVENT THE ENCROACHMENT OF EQUIPMENT OR VEHICLES, THE REMOVAL OF EXISTING GROUNDCOVER, THE DISTURBANCE OR COMPACTION OF SOIL, OR THE SCARRING OF ROOTS WITHIN THE CRITICAL PROTECTION ZONE (CPZ). THERE SHALL BE NO STORAGE OF MATERIALS OR EQUIPMENT OF ANY KIND WITHIN THIS ZONE.
3. REQUIRED TREE BARRICADES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN TREE BARRICADES WILL RESULT IN ENFORCEMENT ACTION.
4. THE CONTRACTOR IS REQUIRED TO PREVENT DAMAGE TO TREES WHICH ARE TO REMAIN. DAMAGE TO PROTECTED TREES WILL NOT BE TOLERATED. THE CONTRACTOR SHALL BE LIABLE FOR ALL DAMAGE TO TREES THAT ARE DESIGNATED TO BE SAVED DURING CONSTRUCTION.
5. SHOULD TRIMMING OF PROTECTED TREES BE NECESSARY, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A CERTIFIED ARBORIST. ALL TRIMMING OF PROTECTED TREES SHALL BE DONE BY A QUALIFIED, LICENSED ARBORIST AND SHALL BE PRUNED IN ACCORDANCE WITH THE NATIONAL ARBORIST ASSOCIATION (NAA) PRUNING STANDARDS.
6. ALL FINES AND MITIGATION ASSOCIATED WITH ANY VIOLATION NOT ADHERING TO THE TREE PROTECTION PLAN AS INDICATED IN THE LEON COUNTY ENVIRONMENTAL MANAGEMENT PERMIT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. PER THE LEON COUNTY LAND DEVELOPMENT CODE, IF PROTECTED TREES ARE REMOVED WITHOUT A PERMIT OR OTHERWISE IN VIOLATION OF THE PERMITTED REQUIREMENTS, THE NUMBER OF REPLACEMENT TREES SHALL BE UP TO FIVE TIMES THE AMOUNT WHICH WOULD HAVE BEEN REQUIRED FOR REMOVAL, AND THE CONTRACTOR SHALL BE CHARGED TWICE THE NORMAL APPLICATION FEE.
8. ALL INVASIVE EXOTIC TREE SPECIES OF ANY SIZE SHALL BE GRUBBED AND REMOVED FROM THE PROJECT SITE. OFF-SITE INCINERATION OR OTHER MEANS TO DESTROY THE REMOVED TREES AND SEEDS IS RECOMMENDED. CHIPPING OF THE REMOVED INVASIVE SPECIES IS FORBIDDEN DUE TO THE PROPAGATION POTENTIAL FROM THE CHIPPED PRODUCT.

TREE MITIGATION

1. PRUNING SHALL ONLY BE DONE UNDER THE DIRECTION OF A CERTIFIED ARBORIST TO PROVIDE ADEQUATE CLEARANCE FOR EQUIPMENT INGRESS, EGRESS AND/OR CONSTRUCTION.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL EXERCISE GREAT CARE WHILE EQUIPMENT AND VEHICLES ENTER AND EXIT THE WORK AREA. THE CONTRACTOR SHALL UTILIZE ALL RESOURCES AVAILABLE TO ENSURE EQUIPMENT, VEHICLES, MATERIALS AND SUPPLIES ARE KEPT AS FAR AWAY AS POSSIBLE FROM THE BASES OF EXISTING TREES TO REMAIN AND AWAY FROM EXPOSED OR 'SCAFFOLD' ROOTS. EQUIPMENT, VEHICLES, SUPPLIES, MATERIALS AND PERSONNEL SHALL BE KEPT AWAY FROM AND OFF OF THE ROOT FLARE OF EXISTING TREES TO REMAIN AT ALL TIMES.
3. NO MECHANICAL TRENCHING OF ANY KIND WILL TAKE PLACE WITHIN THE CPZ / DRIP-LINE OF TREES THAT ARE TO REMAIN.
4. THE CONTRACTOR SHALL NOT STORE EQUIPMENT, VEHICLES, AND SUPPLIES OR STOCKPILE ANY MATERIALS WITHIN THE CPZ / DRIP-LINE OF EXISTING TREES TO REMAIN. INGRESS OR EGRESS AREAS SHALL NOT ENCROACH UPON THE CPZ / DRIPLINE OF EXISTING TREES TO REMAIN AT ANY TIME, FOR THE DURATION OF THE PROJECT.
5. ALL WORK ASSOCIATED WITH TREE PRESERVATION ACTIVITIES ON THE SITE AND FOR THE DURATION OF THE PROJECT SHALL INCLUDE SAFETY STANDARDS AS OUTLINED IN ANSI Z133, "SAFETY REQUIREMENTS FOR TREE CARE OPERATORS". SAFE WORKING CONDITIONS AND THE SAFETY OF THE PUBLIC AND VISITORS TO THE PARK ARE OF THE UTMOST IMPORTANCE. UNSAFE WORK PRACTICES SHALL NOT BE TOLERATED ON THE JOB SITE.

MAINTENANCE OF TRAFFIC GENERAL NOTES:

1. THE CONTRACTOR MUST FILE A MAINTENANCE OF TRAFFIC PLAN WITH LEON COUNTY TRAFFIC MOBILITY MANAGEMENT. PRIOR TO COMMENCEMENT OF WORK WITHIN THE RIGHT OF WAY.
2. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE TRAFFIC SIGNS PLACED AT APPROPRIATE INTERVALS TO NOTIFY NON-CONSTRUCTION TRAFFIC OF MACHINERY (TRUCKS ENTERING HIGHWAY SIGNS, ETC.). ADDITIONALLY, FLAGMEN SHOULD BE STATIONED TO HELP AID IN TRAFFIC CONTROL MEASURES. COORDINATE WITH LEON COUNTY TRAFFIC MOBILITY MANAGEMENT.
3. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FDOT DESIGN STANDARDS, INDEX 600 SERIES AND THE FHWA "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES."
4. TEMPORARY LANE CLOSURES, IF NEEDED, WILL NOT BE ALLOWED BETWEEN THE HOURS OF 6:30 AM AND 9:00 AM AND BETWEEN THE HOURS OF 4:00 PM AND 6:00 PM. LANE CLOSURES WILL NOT BE ALLOWED FRIDAY THROUGH SUNDAY DURING FSU AND FAMU HOME FOOTBALL GAME WEEKENDS. THE CONTRACTOR SHALL REQUEST FROM THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE, A STREET, LANE OR SIDEWALK CLOSURE 24 HOURS IN ADVANCE OF SUCH CLOSURE.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CLEAR ZONE REQUIREMENTS FOR EQUIPMENT AND MATERIALS STORAGE AND WORK ZONE PROTECTION AS SPECIFIED IN FDOT STANDARD INDEX 600.
6. THE CONTRACTOR MUST PROVIDE A QUALIFIED MAINTENANCE OF TRAFFIC SUPERVISOR TO BE ON SITE WHEN WORK IS TAKING PLACE AND SHALL BE ON CALL FOR EMERGENCIES WHEN THE CONTRACTOR IS NOT AVAILABLE. THIS SUPERVISOR IS RESPONSIBLE FOR OVERSIGHT OF THE TRAFFIC CONTROL PLAN AND WILL BE REQUIRED TO SUBMIT WRITTEN INSPECTION REPORTING VERIFYING COMPLIANCE WITH THE TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL PROVIDE THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE A 24-HOUR ON-CALL TELEPHONE NUMBER FOR THE SUPERVISOR.
7. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL OFFICER DURING ALL LANE CLOSURE OPERATIONS.
8. UNLESS OTHERWISE NOTED IN THE PLANS, THE EXISTING SPEED LIMITS ON ALL ROADWAYS SHALL BE MAINTAINED DURING CONSTRUCTION.
9. STREETS USED AS TEMPORARY DETOUR ROUTES AND HAUL ROUTES WILL BE MAINTAINED IN GOOD CONDITION AND BE KEPT FREE OF SILT AND DEBRIS BY THE CONTRACTOR AS DIRECTED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
10. THE CONTRACTOR SHALL ADD MAINTENANCE OF TRAFFIC DEVICES AS NEEDED TO PROVIDE ACCESS TO THE INTERIOR OF THE SITE. DEVICES SHALL BE PLACED SUCH THAT THE SAFETY OF THE PUBLIC AND CONSTRUCTION PERSONNEL ARE PROTECTED AT ALL TIMES.
11. THE HAUL ROUTE FOR ALL CONSTRUCTION RELATED TRAFFIC SHALL BE JOHN HANCOCK DRIVE FROM HAWKBILL COURT TO MERIDIAN ROAD ONLY. NO CONSTRUCTION RELATED TRAFFIC SHALL BE ROUTED VIA SURROUNDING NEIGHBORHOOD STREETS.

UTILITY NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO UTILITIES TO REMAIN SHALL BE PAID FOR BY THE CONTRACTOR AT THEIR EXPENSE.
2. EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN, UNLESS OTHERWISE NOTED.

NO.	DATE	DESCRIPTION
		REVISIONS

DESIGNED BY:	D.W.H.
DRAWN BY:	S.R.W.
CHECKED BY:	D.W.H.
SCALE:	1" = 30'

GENESIS
FROM VISION TO REALITY
GGI, LLC dba GENESIS GROUP
2507 CALLAWAY ROAD, SUITE 100
TALLAHASSEE, FLORIDA 32303
FL CA 00009660
FL LB 0006816
FL LC 26000202
(850) 224-4400 (850) 681-3600 FAX
www.GenesisGroup.com

PREPARED FOR
LEON COUNTY
PUBLIC WORKS

PROJECT NAME
LINENE WOODS
DRAINAGE IMPROVEMENTS

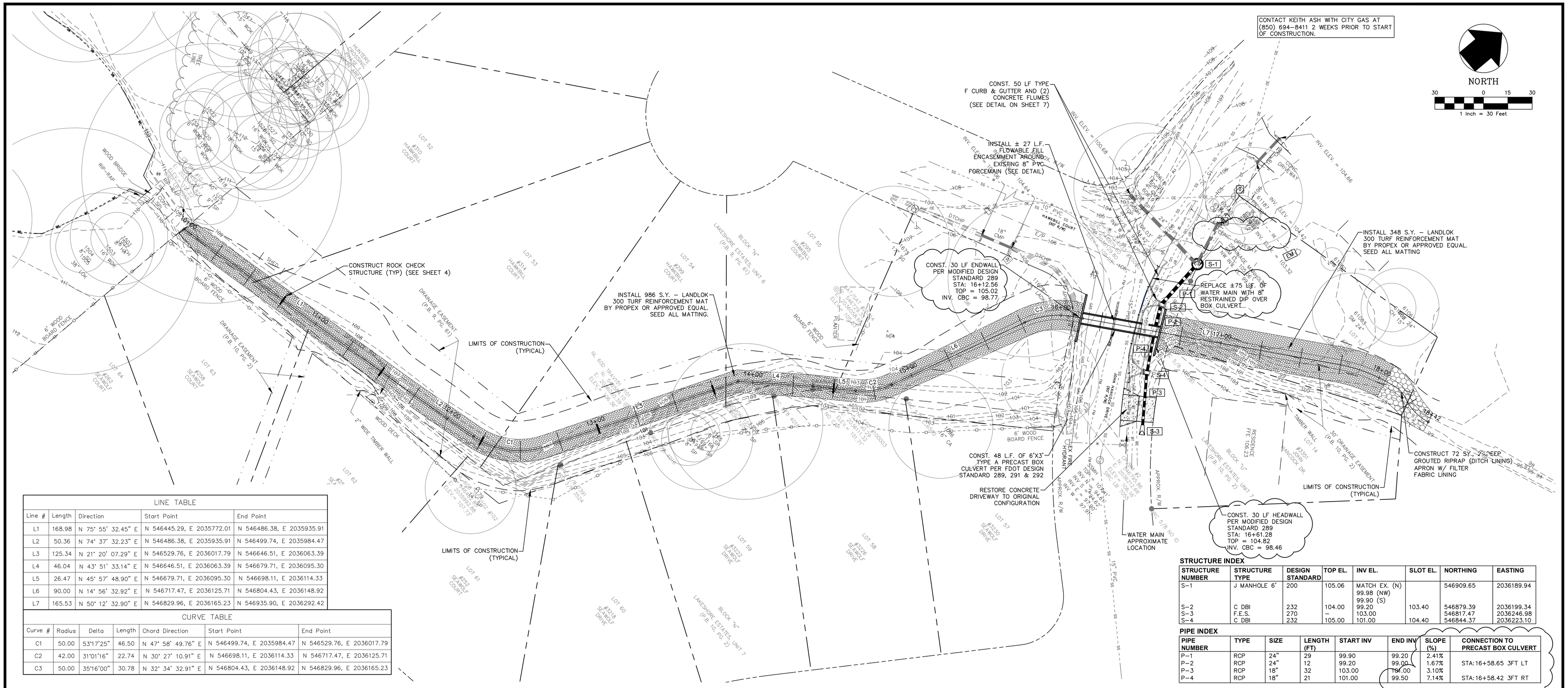
SHEET TITLE
SWPPP AND GENERAL NOTES

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER LCP5-003
DATE 02/13/2018
SHEET NUMBER 5

BID PLANS - 04/23/2019

Attachment A



LINE TABLE				
Line #	Length	Direction	Start Point	End Point
L1	168.98	N 75° 55' 32.45" E	N 546445.29, E 2035772.01	N 546486.38, E 2035935.91
L2	50.36	N 74° 37' 32.23" E	N 546486.38, E 2035935.91	N 546499.74, E 2035984.47
L3	125.34	N 21° 20' 07.29" E	N 546529.76, E 2036017.79	N 546646.51, E 2036063.39
L4	46.04	N 43° 51' 33.14" E	N 546646.51, E 2036063.39	N 546679.71, E 2036095.30
L5	26.47	N 45° 57' 48.90" E	N 546679.71, E 2036095.30	N 546698.11, E 2036114.33
L6	90.00	N 14° 56' 32.92" E	N 546717.47, E 2036125.71	N 546804.43, E 2036148.92
L7	165.53	N 50° 12' 32.90" E	N 546829.96, E 2036165.23	N 546935.90, E 2036292.42

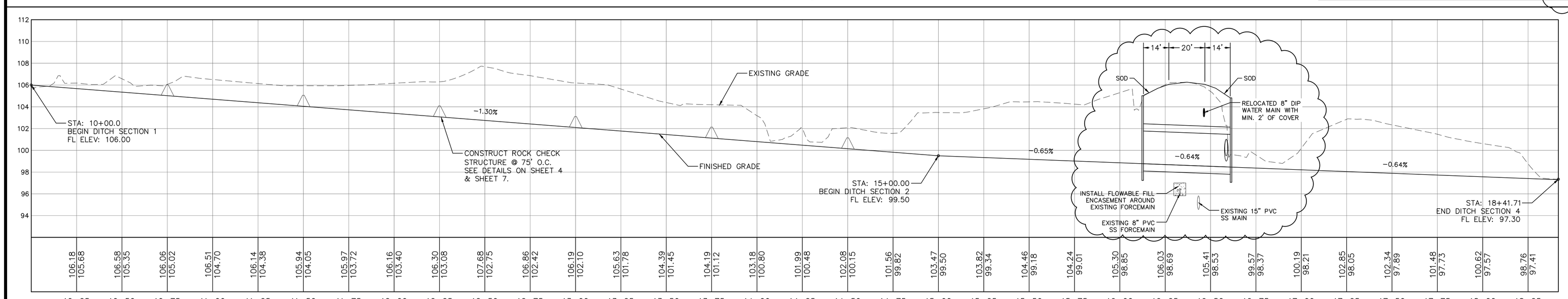
CURVE TABLE						
Curve #	Radius	Delta	Length	Chord Direction	Start Point	End Point
C1	50.00	53°17'25"	46.50	N 47° 58' 49.76" E	N 546499.74, E 2035984.47	N 546529.76, E 2036017.79
C2	42.00	31°01'16"	22.74	N 30° 27' 10.91" E	N 546698.11, E 2036114.33	N 546717.47, E 2036125.71
C3	50.00	35°16'00"	30.78	N 32° 34' 32.91" E	N 546804.43, E 2036148.92	N 546829.96, E 2036165.23

STRUCTURE INDEX

STRUCTURE NUMBER	STRUCTURE TYPE	DESIGN STANDARD	TOP EL.	INV EL.	SLOT EL.	NORTHING	EASTING
S-1	J MANHOLE 6'	200	105.06	MATCH EX. (N) 99.98 (NW) 99.90 (S)		546909.65	2036189.94
S-2	C DBI	232	104.00	99.20	103.40	546879.39	2036199.34
S-3	F.E.S.	270	–	103.00		546817.47	2036246.98
S-4	C DBI	232	105.00	101.00	104.40	546844.37	2036223.10

PIPE INDEX

PIPE NUMBER	TYPE	SIZE	LENGTH (FT)	START INV	END INV	SLOPE (%)	CONNECTION TO PRECAST BOX CULVERT
P-1	RCP	24"	29	99.90	99.20	2.41%	
P-2	RCP	24"	12	99.20	99.00	1.67%	STA:16+58.65 3FT LT
P-3	RCP	18"	32	103.00	101.00	3.10%	
P-4	RCP	18"	21	101.00	99.50	7.14%	STA:16+58.42 3FT RT



NO.	DATE	DESCRIPTION
1	05/09/19	BOX CULVERT, HEADWALL, AND PIPE CONNECTION REVISIONS

REVISIONS

DESIGNED BY: D.W.H.
DRAWN BY: S.R.W.
CHECKED BY: D.W.H.
SCALE: 1" = 30'

GENESIS FROM VISION TO REALITY
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FL LB 0006816
FL LC 26000202

PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
DRAINAGE PLAN AND PROFILE

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER LCP5-003
DATE 02/13/2018
SHEET NUMBER 6

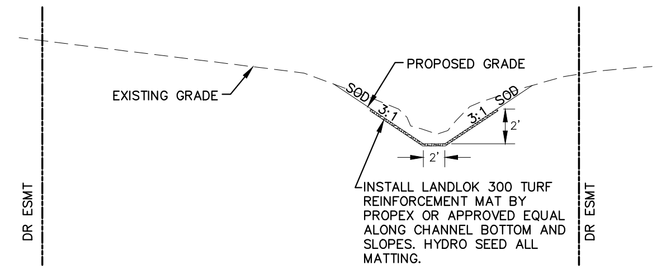
BID PLANS - 04/23/2019

May 10, 2019 (11:37:22 EST)
C:\USERS\SWATSON\APPDATA\LOCAL\TEMP\ACPUBLISH_9656\LCP5-003 EMP LAYOUT_JHANCOCK.DWG

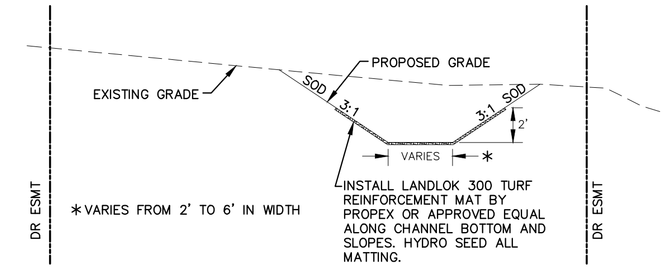
Attachment A

CONSTRUCTION SEQUENCE

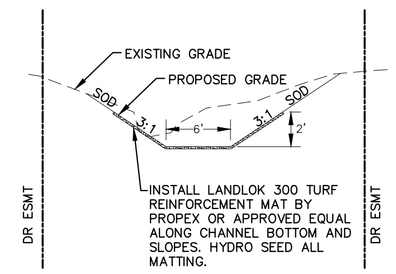
1. 24 HOURS NOTICE MUST BE GIVEN PRIOR TO ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REQUEST AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH ARCHITECT, ENGINEER OF RECORD, LEON COUNTY ENVIRONMENTAL INSPECTOR AND THE NORTHWEST WATER MANAGEMENT DISTRICT. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. POST ALL APPLICABLE PERMIT PLACARDS. THE PERMIT PLACARDS SHALL NOT BE NAILED TO TREES.
3. FLAG OR STAKE THE PROPOSED LIMITS OF CLEARING.
4. CONSTRUCT SEDIMENTATION CONTROL DEVICES.
5. THE ENVIRONMENTAL INSPECTOR MUST APPROVE THE INSTALLATION OF EROSION CONTROLS AND STAKED LIMITS OF CONSTRUCTION PRIOR TO DISTURBANCE ACTIVITIES.
6. CLEAR & GRUB AREAS WITHIN THE LIMITS OF CONSTRUCTION.
7. REMOVE A MINIMUM OF SIX (6) INCHES OF TOPSOIL FROM ALL AREAS OF THE SITE WHERE IMPROVEMENTS ARE TO BE CONSTRUCTED. STOCKPILE AND STABILIZE ONSITE FOR REDISTRIBUTION ON SLOPES AND SHOULDERS. INSTALL EROSION CONTROL DEVICES AS MAY BE REQUIRED BY THE LEON COUNTY ENVIRONMENTAL INSPECTOR.
8. DEMOLISH EXISTING ROAD AS REQUIRED TO INSTALL NEW BOX CULVERT AT THE DESIGNED ELEVATIONS. (ROAD CLOSURES, EXISTING ROAD DEMOLITION AND NEW CULVERT INSTALLATION CANNOT START UNTIL JUNE 2, 2019 AND MUST BE COMPLETE BY JULY 31, 2019.)
9. GRADE THE CONVEYANCE SYSTEM WEST OF THE NEW CONCRETE CULVERT AND INSTALL STABILIZATION MATS, TEMPORARY ROCK CHECK DAMS, AND HYDROSEED ALL DISTURBED AREAS.
10. PLACE SELECT FILL MATERIAL WHERE REQUIRED IN 8 INCH MAXIMUM LAYERS (SANDY CLAY), 12 INCH MAXIMUM LAYERS (SAND) TO 100% COMPACTED STANDARD PROCTOR DENSITY. WHERE ON-SITE MATERIAL IS TO BE CUT FROM ONE SOURCE AND PLACED IN ANOTHER, THIS MATERIAL MUST BE OF SATISFACTORY GRADE AT THE ENGINEER'S DIRECTION.
11. ONCE THE CONVEYANCE SYSTEM IS STABILIZED BEGIN INSTALLATION OF THE TURF REINFORCEMENT MAT STABILIZATION SYSTEM AND REMOVE THE TEMPORARY ROCK DAMS AS THE CONSTRUCTION PROGRESSES.
12. INSTALL ALL UNDERGROUND UTILITIES AND STORM DRAINAGE PIPES AS REQUIRED. PROTECT ALL STORM DRAIN INLETS WITH INLET PROTECTION UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
13. CONSTRUCT ALL REMAINING IMPROVEMENTS AS INDICATED IN THE PLANS AND SPECIFICATIONS.
14. REMOVE ALL STOCKPILE FROM SITE, INSTALL LANDSCAPING.
15. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS OF ALL FINISHED IMPROVEMENTS INCLUDING STORMWATER AND LANDSCAPE IMPROVEMENTS. AS-BUILT DRAWINGS WILL BE SUBMITTED PRIOR TO FINAL INSPECTION.
16. FIELD INSPECTION AND CLEAN UP.



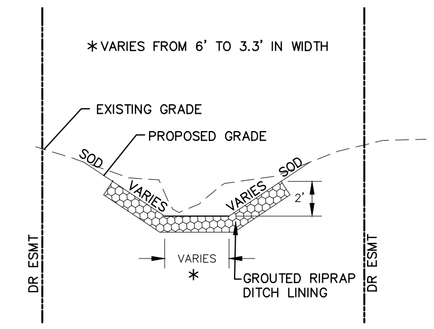
TYPICAL SECTION (1) STA: 10+00.00 - 14+59.02



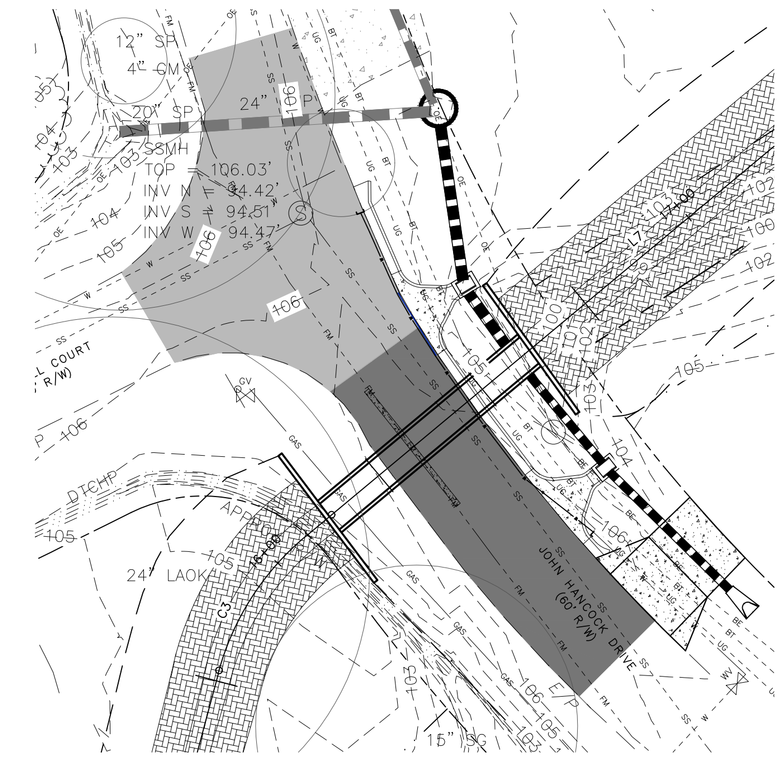
TYPICAL SECTION (2) STA: 14+59.02 - 16+00.00



TYPICAL SECTION (3) STA: 16+00.00 - 16+12.56
& STA: 16+61.56 - 18+04.50



TYPICAL SECTION (4) STA: 18+04.50 - 18+41.71

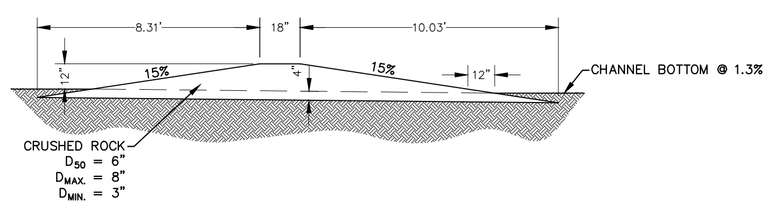


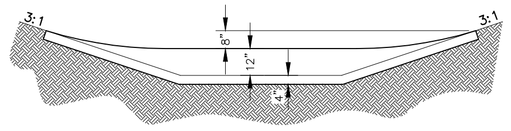
LEGEND

DENOTES AREA TO ROADWAY RESTORATION PER DESIGN STANDARD 307 (159 SQ. YDS.)

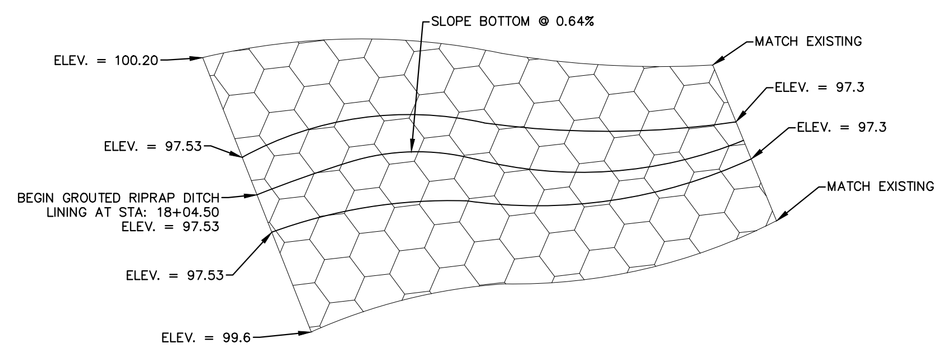
DENOTES AREA TO MILL AND RESURFACE (230 SQ. YDS.)

PAVEMENT REPAIR PLAN
1" = 20'

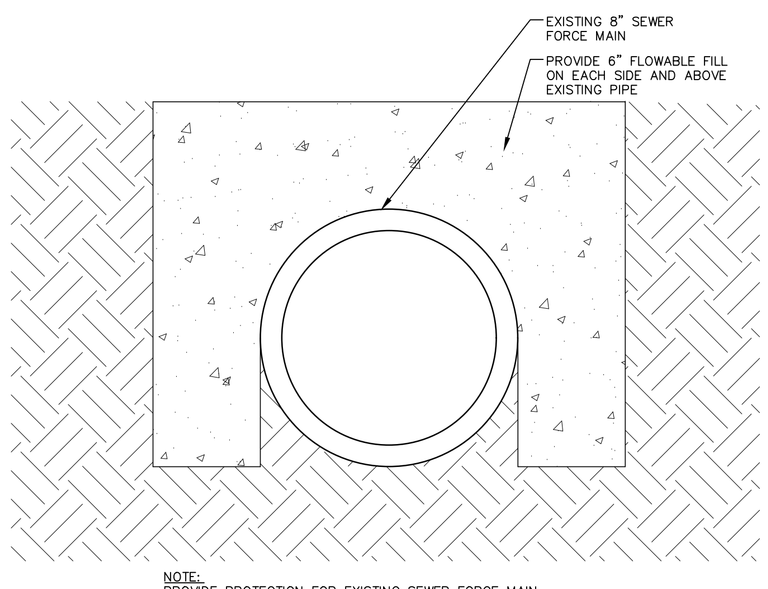




TEMPORARY ROCK CHECK STRUCTURE DETAIL
N.T.S.

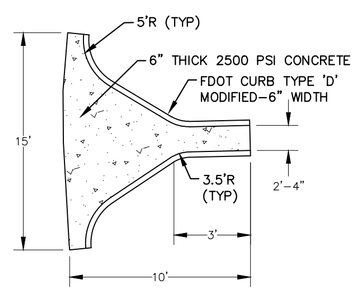


GROUTED RIPRAP DITCH LINING PAD DETAIL
N.T.S.

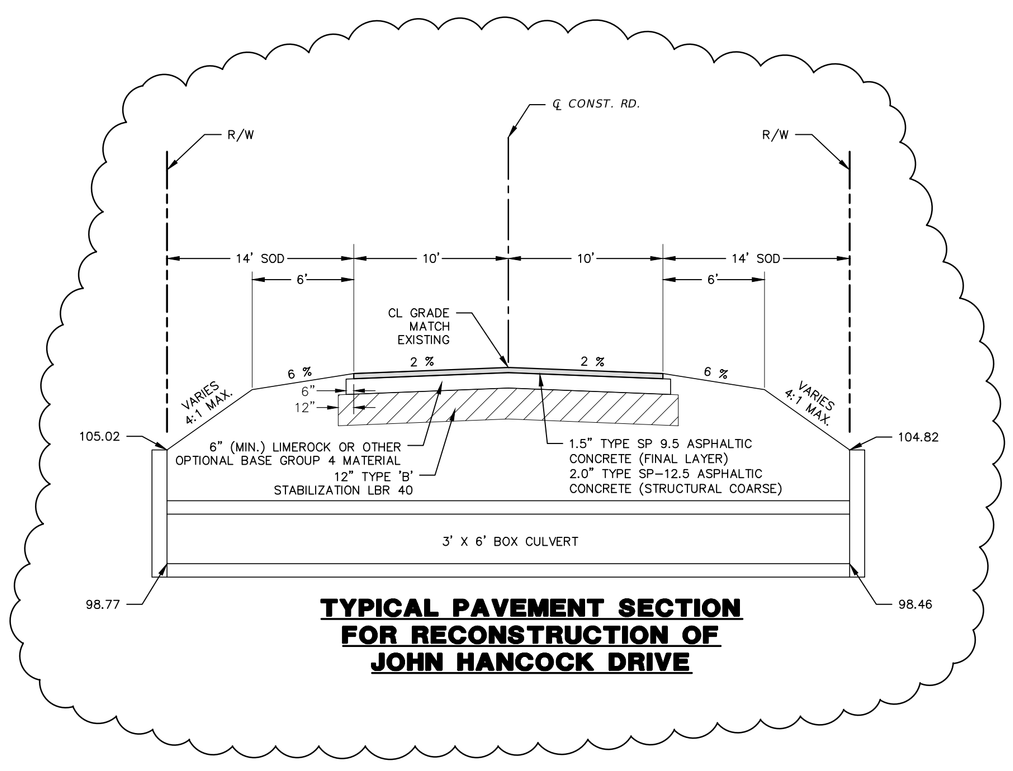


NOTE:
PROVIDE PROTECTION FOR EXISTING SEWER FORCE MAIN PIPE UNDER PROPOSED BOX CULVERT IF LESS THAN 19" OF VERTICAL SEPARATION. EXTEND PROTECTION 5 LF BEYOND EITHER SIDE OF CULVERT.

SEWER PIPE PROTECTION
N.T.S.



CONCRETE FLUME DETAIL
N.T.S.



TYPICAL PAVEMENT SECTION FOR RECONSTRUCTION OF JOHN HANCOCK DRIVE

NO.	DATE	DESCRIPTION
1	05/09/19	PROVIDED ADDITIONAL PAVEMENT SECTION DETAIL

REVISIONS

DESIGNED BY: D.W.H.
DRAWN BY: S.R.W.
CHECKED BY: D.W.H.
SCALE: 1" = 30'

GENESIS FROM VISION TO REALITY
GGI, LLC dba GENESIS GROUP
2507 CALLAWAY ROAD, SUITE 100
TALLAHASSEE, FLORIDA 32303
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FL LB 0006816
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(850) 224-4400 (850) 681-3600 FAX
www.GenesisGroup.com

PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
CONSTRUCTION SEQUENCE AND DRAINAGE DETAILS

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER: LCP5-003
DATE: 02/13/2018
SHEET NUMBER: 7

BID PLANS - 04/23/2019

May 10, 2019 (11:37:22 EST)
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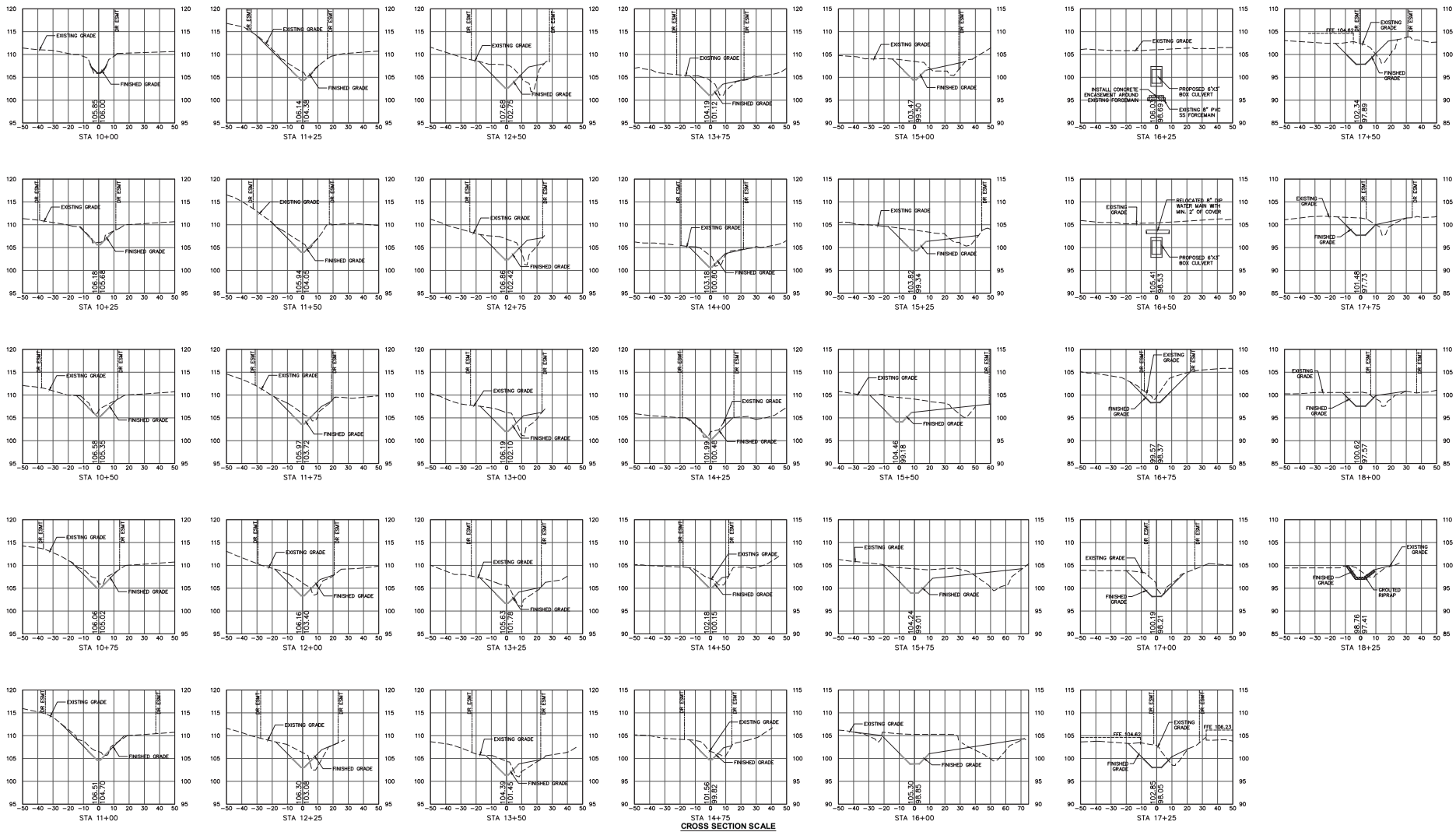
Attachment A



CROSS SECTION SCALE

HORIZONTAL 1" = 30'
VERTICAL 1" = 10

NO.	DATE	DESCRIPTION	REVISIONS

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PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
DRAINAGE CHANNEL CROSS SECTIONS

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER: LCP5-003
DATE: 02/13/2018
SHEET NUMBER: 8

April 23, 2019 (16:46:16 EST)
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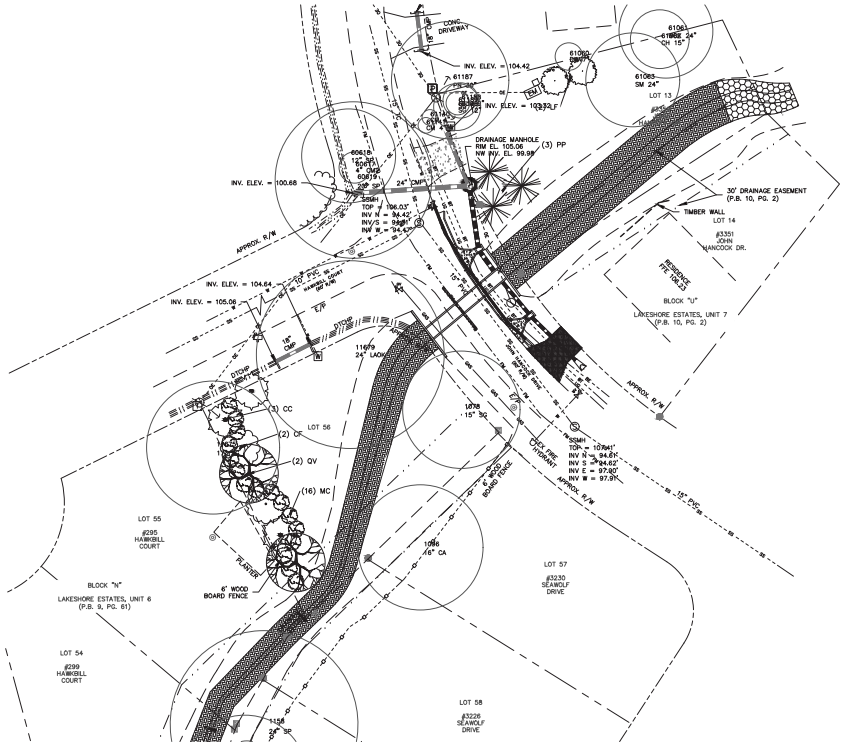
BID PLANS - 04/23/2019

Attachment A



PRESERVED TREES			
TREE #	SIZE	COMMON NAME	CREDIT
61063	24"	Sycamore	8
61188	9"	Elm	4
61190	12"	Sweetgum	4
61062	15"	Cherry	6
TOTAL			**22**

PLANTING CREDITS

(12) 3" CALIPER TREES AT 2 CREDIT EACH = 24 CREDITS

= 24 TOTAL PLANTING CREDITS

CREDIT/DEBIT SUMMARY

PRESERVATION CREDITS = 22 TOTAL CREDITS
PLANTING CREDITS = 24 TOTAL CREDITS
= 46 TOTAL CREDITS

REMOVAL DEBITS = 24 TOTAL DEBITS

TOTAL PROJECT AREA = 1.14 AC.

REQUIRED TREE REFORESTATION CREDIT RATIO = 40.00 CREDITS/AC.
PROVIDED TREE REFORESTATION CREDIT RATIO = 40.35 CREDITS/AC.

PLANTING SCHEDULE

	QUANTITY	COMMON NAME	BOTANICAL NOMENCLATURE	SPECIFICATIONS
TREES				
	2	LIVE OAK	Quercus virginiana	3" cal., 12'–14' ht., 6–7' spr., locate as shown.
	2	FLOWERING DOGWOOD	Cornus florida	3" cal., 8'–10' ht., 3–4' spr., locate as shown.
	3	REDBUD	Cercis canadensis	3" cal., 15'–16' ht., 8–9' spr., locate as shown.
	2	MUSKOGEE CRAPE MYRTLE	Lagerstroemia x faurei 'Muskogee'	3" cal., 11'–12' ht., 4–5' spr., locate as shown.
	3	LONGLEAF PINE	Pinus palustris	3" cal., 15'–16' ht., 8–9' spr., locate as shown.
SHRUBS				
	16	WAX MYRTLE	Myrica cerifera	30" min. ht., 24" min. sprd., min. 3' o.c.
GROUNDCOVER				
SOD	4,295 SY	CENTIPEDE	Eremochloa ophiuroides	solid sod where shown

PLANTING SYMBOL LEGEND

QV – LIVE OAK (Quercus virginiana)

CF – FLOWERING DOGWOOD (Cornus florida)

CC – REDBUD (Cercis canadensis)

LF – MUSKOGEE CRAPE MYRTLE (Lagerstroemia x faurei 'Muskogee')

PP – LONGLEAF PINE (Pinus palustris)

MC – WAX MYRTLE (Myrica cerifera)

IRRIGATION NOTES:
1. THE CONTRACTOR SHALL DESIGN AND INSTALL AN AUTOMATIC IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE OF NEW PLANT MATERIAL.
2. THE IRRIGATION SYSTEM SHALL BE INSTALLED AS NOT TO IMPACT THE CRITICAL PROTECTION ZONE (CPZ) OF EXISTING TREES.
3. CONTRACTOR SHALL UTILIZE EXISTING WATER SERVICE AT NORTHWEST PROPERTY CORNER FOR IRRIGATION

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PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
LANDSCAPE PLAN

SEAL
David W. Hutcheson, P.E.
License Number 38670

PROJECT NUMBER LCP5-003
DATE 02/13/2018
SHEET NUMBER 9

April 23, 2019 (16:46:16 EST)
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BID PLANS - 04/23/2019

Attachment A

BID PLANS - 04/23/2019

LANDSCAPE SPECIFICATIONS

MATERIALS:

1. PLANTING SOIL BACKFILL MIX: TREE PITS, SHRUBS AND GROUNDCOVERS: MIX 50% EXISTING TOPSOIL TO 50% SOIL ADMIXTURE COMPRISED OF 1/3 PARTS DECOMPOSED PINE BARK OR PEAT MOSS, 1/3 PARTS COW MANURE, AND 1/3 PARTS IMPORTED TOPSOIL AND SOIL AMENDMENTS AS REQUIRED TO BRING THE pH TO BETWEEN 5.5 TO 6.5. ALTERNATE PLANTING SOIL BACKFILL MIXTURE: MIX 50% EXISTING TOPSOIL AND 50% 'FLORIDA MUCK' AND SOIL AMENDMENT AS REQUIRED TO BRING pH TO BETWEEN 5.5 AND 6.5.
2. TOP SOIL SHALL BE DEFINED AS THE UPPER 4" TO 6" OF NATURALLY OCCURRING SOILS SUITABLE FOR AGRICULTURAL PRODUCTION AND ARE WITHOUT DRAINAGE LIMITATIONS. IMPORT TOPSOIL FROM OFF-SITE SOURCES, IF REQUIRED. OBTAIN TOPSOIL FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. UNDER NO CIRCUMSTANCES SHOULD TOPSOIL BE OBTAINED FROM BOGS OR MARSHES.
3. PLANTING BED AND TREE MULCH: PINE STRAW, CLEAN AND BRIGHT, FREE OF WEEDS, STICKS, AND OTHER DEBRIS. PROVIDE FOR 2-1/2" LAYER, AFTER SETTLING.
4. SOD: (CENTIPEDE)
5. FERTILIZER: FOR PLANT BEDS USE 8-8-8 RATIO, AND FOR LAWN AREAS USE 16-4-8 RATIO, EACH WITH AT LEAST 25% OF THE NITROGEN IN A WATER INSOLUBLE ORGANIC FORM.
6. TREE GUYING: STRAPS SHALL BE MINIMUM 1" WIDE NYLON OR POLYPROPYLENE. ALL WOOD STAKES SHALL BE LOCATED BEYOND THE EDGE OF THE ROOT BALL.

SUBMITTALS:

1. SOD CERTIFICATE FROM GROWER.
2. SAMPLE OF PREPARED SOIL BACKFILL MIX (1/2 CU. FOOT).
3. SOIL TEST REPORT FOR pH WITH RECOMMENDATIONS FOR pH ADJUSTMENT (ALL LANDSCAPE PLANTING AREAS AND PLANTING BACKFILL MIX)
4. WRITTEN PLANT GUARANTEE.

EXECUTION:

1. PERFORM ALL WORK AS SHOWN AND IN STRICT ACCORDANCE WITH SOUND HORTICULTURAL PRACTICE.
2. PLANTING PREPARATION:
a. INCORPORATE BACKFILL MIX AS SPECIFIED AND AS SHOWN ON DETAILS AND DRAWINGS.
b. ADJUST SOIL AND BACKFILL pH TO 5.5 AND 6.5.
c. ADJUST SOIL pH TO 5.5-6.5 AS RECOMMENDED BY THE SOIL TEST. USE ALUMINUM SULFATE OR IRON SULFATE TO LOWER THE pH AND USE HYDRATED LIME OR DOLOMITE TO RAISE THE pH.
3. PLACE ALL PLANT MATERIALS WHERE SHOWN ON DESIGN PLANS.
4. AFTER PLANTS ARE INSTALLED EACH TREE SHALL HAVE 1/4 LBS. OF 8-8-8 FERTILIZER APPLIED PER CALIPER INCH.
5. ALL TREES SHALL BE STAKED AND GUYED AS SHOWN TO MAINTAIN VERTICAL ALIGNMENT.
6. APPLY 2-1/2 INCHES OF MULCH (AFTER SETTLING) TO ALL TREES, SHRUB AND GROUNDCOVER BEDS.

GRASSING:

1. SOIL PREPARATION:
a. REMOVE STONES OVER 1-1/2" IN DIAMETER, STICKS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATTER FROM ALL LAWN AREAS.
b. ADJUST SOIL pH AS RECOMMENDED BY THE SOIL TEST FOR GRASS SPECIFIED.
c. ROTO-TILL SOIL 4" DEEP AND RAKE LAWN AREAS TO A SMOOTH EVEN SURFACE. IN AREAS TO BE SODDED, ALLOW FOR SOD THICKNESS, PROVIDING A FINISH GRADE 2" BELOW ADJACENT PAVEMENTS.
d. MOISTEN PREPARED LAWN AREAS PRIOR TO PLANTING IF DRY.
2. SODDING:
a. INSTALL SOD WHERE SHOWN ON DESIGN PLANS.
b. APPLY FERTILIZER OVER PREPARED SOIL IN ALL AREAS TO BE SODDED, EXCEPT SLOPES ADJACENT TO WATER'S EDGE. APPLY MATERIAL AT A RATE OF 6 LBS. PER 1,000 SQUARE FEET. SECOND APPLICATION-AS SPECIFIED UNDER LAWN MAINTENANCE AND WARRANTY.
c. LAY SOD WITHIN 36 HOURS OF HARVESTING TIME.
d. LAY SOD IN STRAIGHT, (NOT CURVED) PARALLEL ROWS TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, WITHOUT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS. WORK TOPSOIL INTO MINOR CRACKS.
e. ROLL ENTIRE SODDED AREA WITH A 200 LB. ROLLER.
f. WATER SOD IMMEDIATELY AFTER ROLLING, THEREAFTER WATER SUFFICIENTLY TO KEEP SOIL MOIST TO A DEPTH OF 4" UNTIL ESTABLISHED.

CLEANUP:

1. AT THE END OF EACH WORK DAY, REMOVE ALL DEBRIS RESULTING FROM THE WORK, CLEAN PAVED SURFACES AND BARRICADE ALL HAZARDS.
2. RESTORE ANY DAMAGED AREAS CAUSED BY THE WORK.

INITIAL INSPECTION AND ACCEPTANCE:

1. THE WARRANTY SHALL BEGIN AFTER INITIAL LANDSCAPE INSPECTION AND ACCEPTANCE.
2. INSPECTION SHALL BE MADE BY THE OWNER OR OWNER'S REPRESENTATIVE WITHIN ONE WEEK OF WRITTEN NOTIFICATION FROM THE LANDSCAPE CONTRACTOR THAT INSTALLATION IS COMPLETE. PLANTS ARE SUBJECT TO INSPECTION AT ANY TIME.

PLANT GUARANTEE:

1. ALL TREES, SHRUBS AND GROUNDCOVERS SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR TO BE HEALTHY, AND IN FLOURISHING CONDITION OF ACTIVE GROWTH FOR A PERIOD OF (1) ONE YEAR FROM INITIAL INSPECTION AND ACCEPTANCE. SOD SHALL BE GUARANTEED TO BE HEALTHY, FREE OF NOXIOUS WEEDS, DISEASE AND INSECT INFESTATION FOR A PERIOD OF SIXTY (60) DAYS FROM THE DATE OF INITIAL ACCEPTANCE.

MAINTENANCE AND WARRANTY:

1. BEGIN MAINTENANCE OF LANDSCAPE WORK IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE FOR THE MAINTENANCE PERIOD SPECIFIED.
2. PLANT MAINTENANCE AND WARRANTY:
a. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING PLANT MATERIAL FOR THE DURATION OF THE ESTABLISHMENT PERIOD.
b. THE ESTABLISHMENT PERIOD FOR PLANT MAINTENANCE AND WARRANTY SHALL BE 365 DAYS AFTER INITIAL ACCEPTANCE.
c. INSPECTIONS WILL BE CONDUCTED ON 90 DAY INTERVALS THROUGHOUT THE ESTABLISHMENT PERIOD TO ASSURE ALL PLANTINGS ARE BEING MAINTAINED IN A CONDITION OF GOOD HEALTH AND ACTIVE GROWTH. ANY DEAD OR DYING PLANTS SHALL BE PROMPTLY REMOVED AND REPLACED WITHIN 2 WEEKS FOLLOWING THE DATE OF INSPECTION. RESET SETTLED PLANTS TO PROPER GRADE AND POSITION AND TIGHTEN OR REPAIR GUYS AND STAKES AS NECESSARY. RE-MULCH TREES, SHRUBS AND GROUNDCOVER BEDS AS NECESSARY TO MAINTAIN THE SPECIFIED MULCH LAYER THROUGHOUT THE ESTABLISHMENT PERIOD.
d. ONE MONTH PRIOR TO THE END OF THE 365 DAY ESTABLISHMENT PERIOD, THE CONTRACTOR SHALL NOTIFY THE OWNER TO COORDINATE A DATE FOR FINAL INSPECTION OF ALL PLANTINGS AS BASIS FOR FINAL ACCEPTANCE.
3. LAWN MAINTENANCE AND WARRANTY:
a. MAINTAIN LAWNS FOR A MINIMUM PERIOD OF 60 DAYS AFTER INITIAL ACCEPTANCE.
b. WATER LAWN SUFFICIENTLY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES UNTIL FINAL ACCEPTANCE.
c. MOW LAWNS WHEN SOD IS FIRMLY ROOTED AND TOP GROWTH EXCEEDS 4 INCHES. MOW TO A HEIGHT OF NO LESS THAN 2-1/2 INCHES.
d. FERTILIZE LAWNS 6 WEEKS AFTER PLANTING WITH 16-4-8 AT A RATE OF 6 LBS. PER 1000 SQUARE FEET.

REPLACEMENTS AND CONDITIONS:

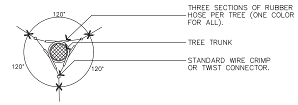
1. REPLACEMENTS FOR TREES, SHRUBS, AND GROUNDCOVERS SHALL BE MADE WITHIN 2 WEEKS FOLLOWING EACH 90 DAY ESTABLISHMENT PERIOD INSPECTION, INCLUDING THE FINAL INSPECTION.
2. A REPLACEMENT WILL BE OF THE SAME SIZE AS THE ORIGINAL WITH NO ADDITIONAL SOIL ADDITIVES TO BE USED.
3. AFTER INITIAL INSPECTION THE LANDSCAPE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, THEFT, RELOCATION OR OTHER ACTIVITIES BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL.
4. THE LANDSCAPE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT LOSSES DUE TO ABNORMAL WEATHER CONDITIONS SUCH AS FLOODS, EXCESSIVE WIND DAMAGE OR SEVERE FREEZING.

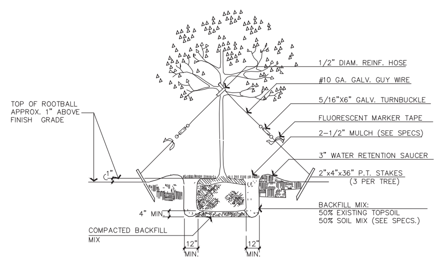
FINAL INSPECTION AND ACCEPTANCE:

1. FINAL INSPECTION: THE LANDSCAPE CONTRACTOR WILL CONDUCT A FINAL INSPECTION WITH THE OWNER OR OWNER'S REPRESENTATIVE AT THE END OF THE ESTABLISHMENT PERIOD FOR LAWNS AND PLANT MATERIALS.
2. PLANT MATERIALS:
e. REPLACE ANY MATERIAL NOT IN HEALTHY CONDITION OR WHICH FAILS TO MEET SPECIFICATIONS.
f. DECIDUOUS MATERIAL WILL BE GUARANTEED TO BREAK DORMANCY IF PLANTED IN DORMANT SEASON.
3. LAWNS:
a. AT THE TIME OF FINAL INSPECTION, SODDED LAWNS WILL BE ACCEPTABLE PROVIDED A HEALTHY, WELL-ROOTED, EVEN-COLORED, LAWN IS ESTABLISHED, FREE OF WEEDS, DISEASE AND INSECT INFESTATION. THERE SHALL BE NO OPEN JOINTS OR BARE AREAS.
b. SEEDED AREAS SHALL EXHIBIT NO LESS THAN 85% COVERAGE, UNIFORMLY THROUGHOUT. GRASS STANDS SHALL BE WELL ROOTED, EVEN-COLORED AND FREE OF WEEDS, DISEASE AND INSECT INFESTATION.

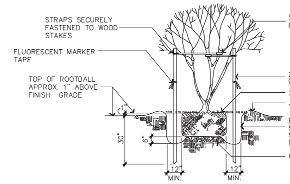
PLANT INSTALLATION NOTES

1. CONTRACTOR SHALL NOT PLANT TREES OR SHRUBBERY PRIOR TO FEBRUARY 1, 2016.
2. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES, EXISTING TREES AND VEGETATION PRIOR TO COMMENCEMENT OF THE PLANT INSTALLATION.
3. CONTRACTOR SHALL ANTICIPATE THE POSSIBILITY OF THE ENGINEER OF RECORD ADJUSTING THE LOCATIONS OF CERTAIN PLANTS AND TREES IN THE FIELD.
4. ALL TREES AND SHRUBS SHALL BE OF THE SIZES AS CALLED FOR IN THE PLANT MATERIALS SCHEDULE. ANY PLANT MATERIALS AS DETERMINED BY THE LANDSCAPE ARCHITECT AS NOT MEETING THE SIZES AND QUALITY AS CALLED FOR SHALL BE REMOVED FROM THE SITE.
5. ALL PLANT MATERIALS SHALL BE EQUIVALENT TO FLORIDA #1 OR BETTER AS OUTLINED BY GRADES AND STANDARDS FOR NURSERY PLANTS, DIVISION OF PLANT INDUSTRY, FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES.
6. IF QUANTITIES DIFFER BETWEEN THE PLAN AND SCHEDULE, THOSE ON THE SCHEDULE SHALL GOVERN. THE CONTRACTOR SHALL VERIFY THAT THE QUANTITIES INDICATED WILL PROVIDE THE COVERAGE AS SPECIFIED AND REPORT ANY DISCREPANCIES AT THE TIME OF BIDDING TO THE ENGINEER OF RECORD.
7. ALL SHRUB MATERIAL SHALL BE PLANTED IN STAGGERED ROWS, SPACED ON CENTER (O.C.) AS SPECIFIED, UNLESS OTHERWISE SHOWN ON DESIGN PLANS.
8. SHRUBS SHALL NOT BE PLANTED CLOSER THAN THREE FEET FROM THE EDGE OF ANY IMPERVIOUS AREA.
9. WHERE UNDERGROUND UTILITIES CONFLICT WITH PROPOSED PLANTINGS, TREE PLACEMENT SHALL BE A MINIMUM OF TEN FEET FROM THE UNDERGROUND UTILITY OR A DEEPROOT UB 24-2 ROOT BARRIER (OR APPROVED EQUAL) OF TWO FEET DEEP SHALL BE INSTALLED PER TLDC SECTION 5-85(M)(14).
10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CONDITIONS THAT MAY ADVERSELY AFFECT PLANTING OPERATIONS IMMEDIATELY UPON SUCH FINDINGS.

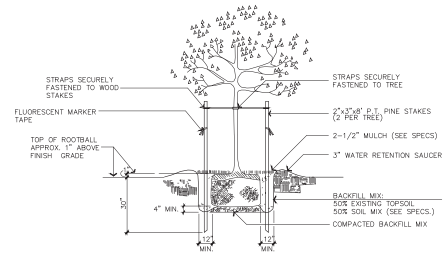




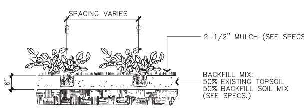
TYPICAL TREE PLANTING AND GUYING
Trees 4" and Greater
NTS



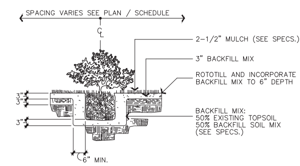
TREE PLANTING (MULTI-TRUNK)
NTS



TYPICAL TREE PLANTING AND GUYING
1" – 3 1/2" Caliper Tree Planting
NTS



TYPICAL GROUNDCOVER PLANTING
NTS



TYPICAL SHRUB PLANTING
NTS

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		REVISIONS

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LEON
FLORIDA'S CAPITAL COUNTY

PREPARED FOR
LEON COUNTY PUBLIC WORKS

PROJECT NAME
LINENE WOODS DRAINAGE IMPROVEMENTS

SHEET TITLE
LANDSCAPE NOTES AND DETAILS

SEAL
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License Number 38670

PROJECT NUMBER LCP5-003
DATE 02/13/2018
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April 23, 2019 (16:46:16 EST)
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