

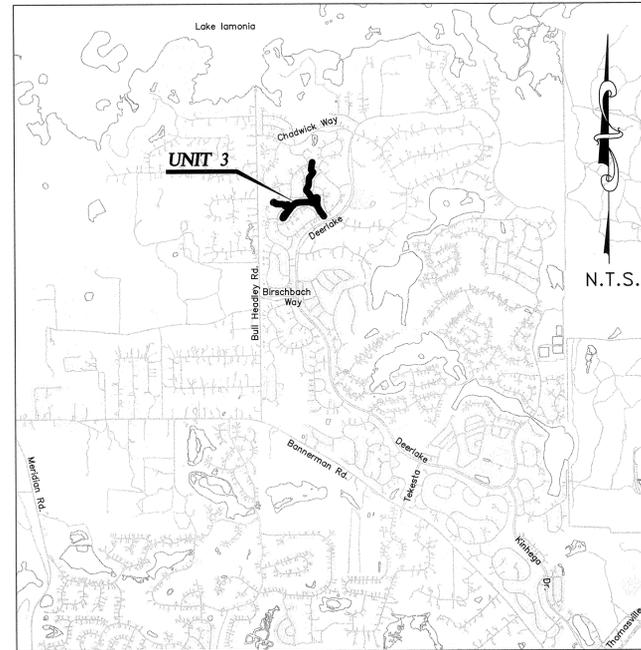
# CONSTRUCTION DOCUMENTS

FOR:  
**Killearn Lakes Greenways  
 Maintenance and Restoration Plans  
 Phase 1 B - Unit 3**

PREPARED FOR:



**LEON COUNTY  
 PUBLIC WORKS**  
 2280 Miccosukee Road  
 Tallahassee, FL 32308  
 Ph: 850-606-1500 Fax: 850-606-1501



**LOCATION MAP**  
 N.T.S.

PREPARED BY:



2639 N. Monroe St. Building C - Tallahassee, Florida 32303 - 850.575.1800  
 FBPR Certificate of Authorization No. 24

**MAY 10, 2013**

## SHEET INDEX

DESCRIPTION	SHEET NO.
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UNIT 3 KEY MAP	300
UNIT 3 BASIN MAP	301
UNIT 3 DEMOLITION AND EROSION CONTROL PLANS	302-305
UNIT 3 DRAINAGE PLAN AND PROFILES	306-309
UNIT 3 CROSS SECTIONS	310-312
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CONCEPTUAL LANDSCAPE RESTORATION PLANS	L1.0-L2.0

NOTE:  
 EXTREME CAUTION! - UNDERGROUND ELECTRIC AND UNDERGROUND GAS PRESENT IN CONSTRUCTION AREAS. CONTRACTOR MUST USE EXTREME CAUTION DURING ANY EXCAVATIONS OR DIGGING, AND REFER TO GENERAL NOTE #7.

**TREE TABLE:**  
 51 TREES TO BE REMOVED, SIZES VARY 12"-22"±.  
 ASSUMING 10 DEBITS PER TREE, WOULD REQUIRE 510 DEBITS NEEDED.  
 348 TREES WILL BE PRESERVED, SIZES VARY 12"-22"±.  
 ASSUMING 6 CREDITS PER TREE, WOULD PROVIDE 2,088 CREDITS PROVIDED.

THE CONTRACTOR WILL FOLLOW THE ARBORICULTURAL MITIGATION PLAN DESCRIBED ON SHEET L2.0 FOR ALL TREES WITHIN THE LIMITS OF CONSTRUCTION, AND ALL POTENTIALLY IMPACTED TREES.

SURVEYOR OF RECORD:

John M. Pulice, PSM  
 HSA Consulting Group, Inc.  
 1648 Metropolitan Circle, Suite A  
 Tallahassee FL, 32308  
 Phone: 850.309.7510

ENGINEER OF RECORD:

ATKINS  
 WILLIAM K. JOHNSON  
 P.E. NO. 41040

APPROVED: *[Signature]*  
 PERMIT # LE-112-00029  
 DATE: 05-02-2013  
 Special Conditions Exist For This Permit. Refer to Exhibits.  
 Attachment: A

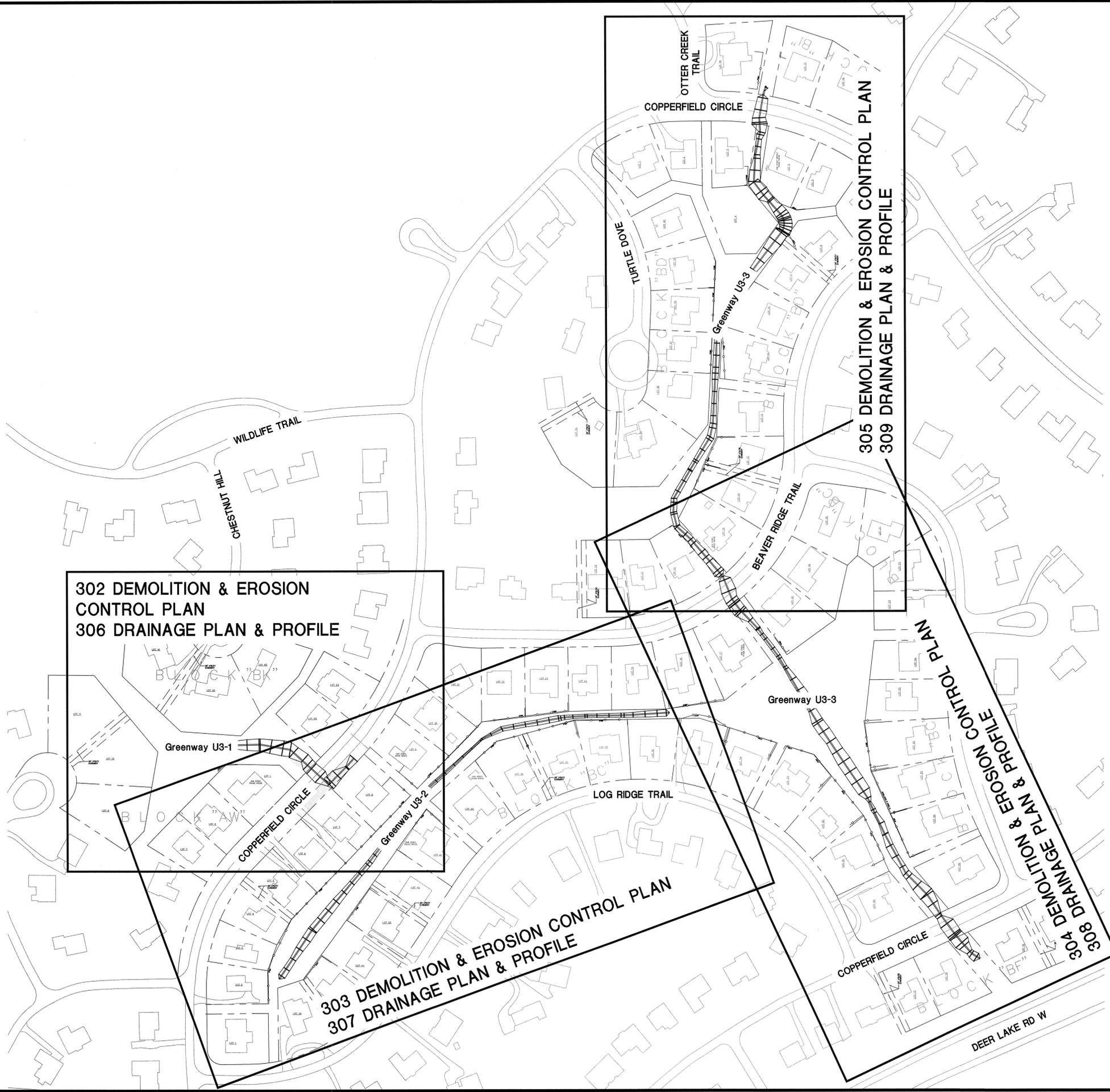
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**EXHIBIT A**



## GENERAL NOTES

- ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON A FIELD SURVEY BY HSA CONSULTING GROUP INC. DATED 6/25/2010, AND 12/22/2011, AND TLGCS LIDAR 2' CONTOURS.
- SURVEY DATUM-NAVD 1988.
- ALL ROADWAY AND DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010, DIVISIONS II AND III.
- ALL FDOT INDEX NUMBERS REFER TO THE 2010 EDITION OF THE FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM
- AT THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL DESIGNATE A REPRESENTATIVE WHO IS CERTIFIED IN EROSION AND SEDIMENTATION CONTROL AND SHALL BE CAPABLE OF BEING REACHED 24 HOURS A DAY, 7 DAYS A WEEK.
- THE CONTRACTOR WILL DESIGNATE A STORMWATER MANAGEMENT CONTROL OFFICER PRIOR TO THE PRECONSTRUCTION MEETING, AND WILL INFORM THE ENVIRONMENTAL INSPECTOR.
- EXISTING UTILITIES HAVE BEEN LOCATED USING THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND PROVIDE FOR PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY SUNSHINE ONE CALL (1-800-432-4770), 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CURRENT EXISTING DEEDS AND PLATS COMPILED FROM THE LEON COUNTY CLERK OF COURT WERE UTILIZED FOR COMPILING PROPERTY AND EASEMENT LINES FOR THIS SURVEY. PROPERTY LINES WITHIN THE PLATS USED, IN SOME AREAS, DON'T MEET OR MATCH THE MONUMENTATION FOUND, RECORDED PLAT LINES, TLGCS PARCEL DATA AND MONUMENTATION WERE MERGED TO CREATE THE PARCEL BOUNDARIES SHOWN ON THESE PLANS. THE CONTRACTOR SHOULD CONFIRM THAT ALL DISTURBED AREAS ARE WITHIN THE RIGHT OF WAY, H.O.A. GREEN SPACES, OR DRAINAGE EASEMENTS.
- HORIZONTAL AND VERTICAL CONTROL SHALL BE OBTAINED FROM THE PROJECT SURVEYOR, AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LAYOUT COSTS, MAINTAINING THE CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION, & FOR POST CONSTRUCTION AS-BUILT SURVEY.
- ALL WORK SHALL OCCUR WITHIN THE PUBLIC R.O.W., COUNTY DRAINAGE EASEMENTS, AND GREENWAY OPEN SPACES UNLESS SPECIFICALLY INDICATED OTHERWISE. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND STAKING R.O.W. AND PROPERTY LINES PRIOR TO CONSTRUCTION.
- ALL DISTURBED AREAS THAT ARE NOT STABILIZED OR PLANTED SHALL BE SODED, AS APPLICABLE, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS. PROBLEM AREAS SHALL BE SODED AS DIRECTED BY THE STORMWATER MANAGEMENT CONTROL OFFICER.
- THE CONTRACTOR SHALL SUBMIT A POST-CONSTRUCTION CERTIFICATION AND REPRODUCIBLE RECORD DRAWINGS TO THE ENGINEER PRIOR TO INSPECTION AND ACCEPTANCE. THE RECORD DRAWINGS SHALL BE PREPARED AND CERTIFIED BY A PROFESSIONAL LAND SURVEYOR.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE LEON COUNTY ENVIRONMENTAL MANAGEMENT PERMIT.
- THE CONTRACTOR SHALL NOT SUBSTITUTE ANY ARTICLE, DEVICE, PRODUCT, MATERIAL OR FIXTURE, OR ANY FORM OR TYPE OF CONSTRUCTION, FOR THAT WHICH IS INDICATED IN THE APPROVED PLANS WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE COUNTY ENGINEER OR THE COUNTY ENGINEER'S DESIGNATED FIELD REPRESENTATIVE.
- AT LEAST FOURTEEN CALENDAR DAYS PRIOR TO THE PRECONSTRUCTION CONFERENCE THE CONTRACTOR SHALL SUBMIT A TENTATIVE BASE CONSTRUCTION SCHEDULE, TRAFFIC CONTROL PLAN, AND STAGING AREA PLAN TO THE ENGINEER AND LEON COUNTY PUBLIC WORKS FOR APPROVAL. NO WORK WILL BEGIN PRIOR TO APPROVAL OF THE CONSTRUCTION SCHEDULE, TRAFFIC PLAN, AND STAGING AREA PLAN. IF THE STAGING AREA PLAN REQUIRES OFF-SITE STAGING THE CONTRACTOR WILL BE REQUIRED TO OBTAIN ANY ADDITIONAL PERMITS THAT MAY BE NEEDED.
- CONTRACTOR WILL BE RESPONSIBLE FOR PROPERLY DISPOSING OF ANY EXCAVATED MATERIAL IN ACCORDANCE WITH COUNTY STANDARDS.
- A DISPOSAL SITE SHALL BE SUBMITTED BY THE CONTRACTOR AT OR PRIOR TO THE PRECONSTRUCTION MEETING, TO BE APPROVED BY THE ENVIRONMENTAL INSPECTOR. NO WORK WILL BEGIN PRIOR TO APPROVAL OF THE DISPOSAL SITE BY THE COUNTY ENGINEER, OR THE COUNTY ENGINEER'S DESIGNATED FIELD REPRESENTATIVE, AND THE ENVIRONMENTAL INSPECTOR.
- LEON COUNTY PUBLIC WORKS OR THEIR DESIGNEE SHALL BE RESPONSIBLE FOR SUBMITTING NOTICE OF CONSTRUCTION COMMENCEMENT AT THE PRE CONSTRUCTION MEETING, MONITORING DURING CONSTRUCTION, AND SUBMITTING AS-BUILT CERTIFICATIONS FOR THE PROJECT ONCE COMPLETED.
- IF DURING CONSTRUCTION OF THE DITCH SYSTEM, A STRUCTURAL FAILURE IS OBSERVED THAT HAS THE POTENTIAL TO CAUSE THE DIRECT DISCHARGE OF SURFACE WATER INTO THE FLORIDIAN AQUIFER SYSTEM, THE SITE SUPERINTENDENT AND LEON COUNTY PUBLIC WORKS DEPARTMENT SHALL BE INFORMED IMMEDIATELY. THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND LEON COUNTY GROWTH & ENVIRONMENTAL COMPLIANCE DIVISION SHALL BE NOTIFIED WITHIN 48 HOURS AND CORRECTIVE ACTIONS DESIGNED OR APPROVED BY REGISTERED PROFESSIONALS WITH QUALIFICATIONS IN HYDROGEOLOGY AND ENGINEERING, SPECIFIC TO THE SITE AND TO THE FAILURE OBSERVED, SHALL BE TAKEN AS SOON AS PRACTICAL TO CORRECT THE FAILURE.
  - IMMEDIATE ACTION UPON THE DISCOVERY OF THE FAILURE SHALL INCLUDE (BUT NOT BE LIMITED TO):
  - CEASE CONSTRUCTION ACTIVITIES WITHIN 100 FEET OF THE FAILURE AREA;
  - ISOLATE, IDENTIFY AND SECURING THE FAILURE AREA WITH BARRIER FENCING AND/OR WARNING RIBBON (OR BY OTHER APPROPRIATE MEANS);
  - INITIATE WRITTEN AND PHOTOGRAPHIC DOCUMENTATION;
  - COMPLY WITH VERBAL INSTRUCTIONS FROM LEON COUNTY PUBLIC WORKS DEPARTMENT REPRESENTATIVE;
  - A REPORT WITH DETAILED SINKHOLE EVALUATION AND REPAIR PLAN PREPARED BY A PROFESSIONAL GEOLOGIST OR A PROFESSIONAL GEOTECHNICAL ENGINEER WITH QUALIFICATIONS IN HYDROGEOLOGY AND ENGINEERING MUST BE PROVIDED BY LEON COUNTY PUBLIC WORKS AS SOON AS PRACTICAL TO THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT FOR REVIEW AND APPROVAL. THE REPORT MUST DEMONSTRATE REASONABLE ASSURANCE THAT THE BREACH OR FAILURE WILL BE PERMANENTLY CORRECTED IN COMPLIANCE WITH THE PERMIT.
- CONTRACTOR SHALL NOT ADVERSELY IMPACT WETLANDS. CONTRACTOR WILL STAKE THE LIMITS OF CONSTRUCTION LINE SUPPLIED BY ATKINS, AND NO WORK SHALL BE CONDUCTED OUTSIDE OF THE LIMITS OF CONSTRUCTION. NO ACTIVITY SHALL OCCUR OUTSIDE OF THE LIMITS OF CONSTRUCTION, EXCEPT REMOVAL OF INVASIVE AND EXOTIC SPECIES AND INSTALLATION OF WETLAND PLANTS AS DIRECTED BY THE LANDSCAPE ARCHITECT. NO MATERIALS OR EQUIPMENT SHALL BE STORED IN WETLANDS OR ADJACENT TO WETLANDS.



**302 DEMOLITION & EROSION CONTROL PLAN**  
**306 DRAINAGE PLAN & PROFILE**

**303 DEMOLITION & EROSION CONTROL PLAN**  
**307 DRAINAGE PLAN & PROFILE**

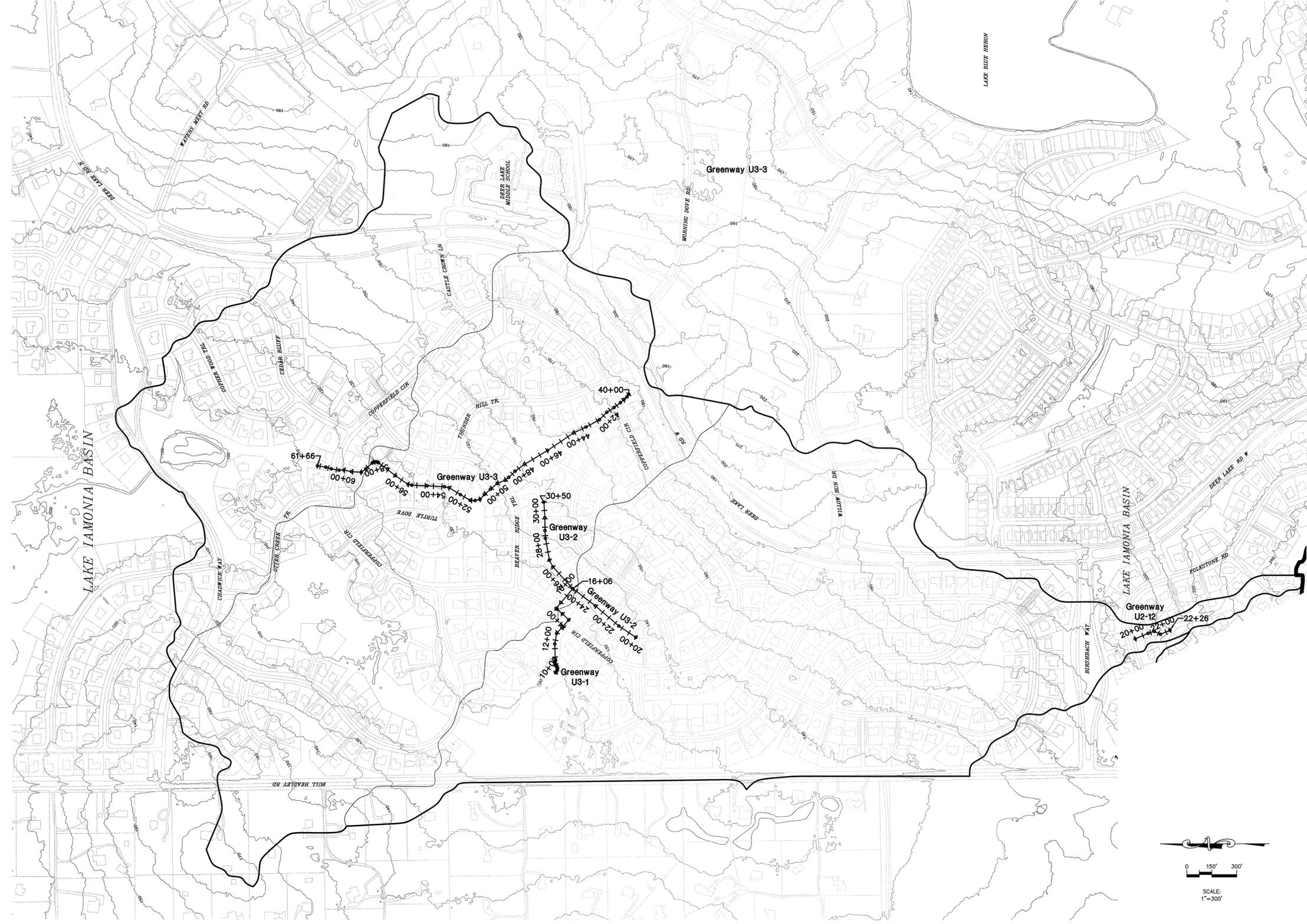
**305 DEMOLITION & EROSION CONTROL PLAN**  
**309 DRAINAGE PLAN & PROFILE**

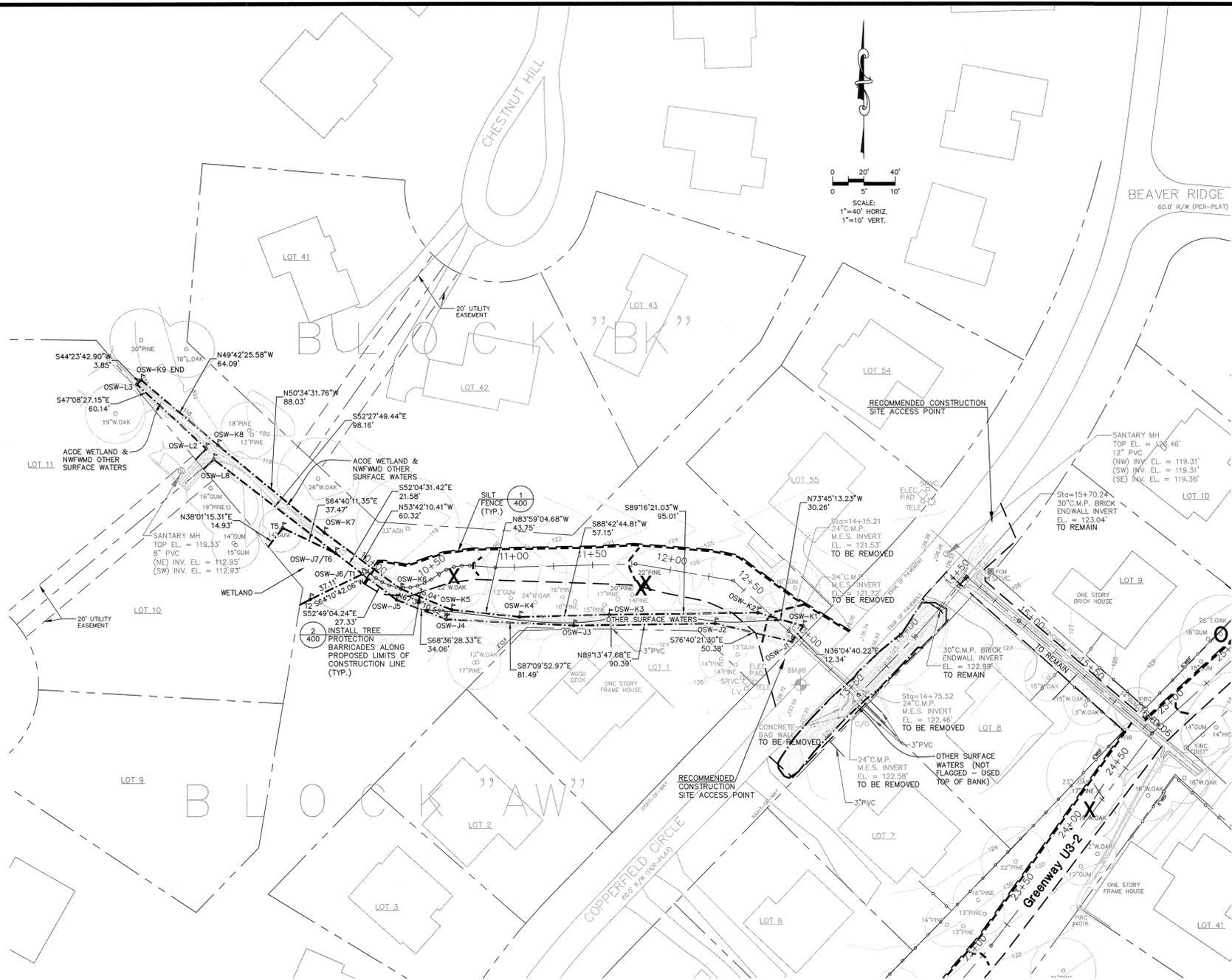
**304 DEMOLITION & EROSION CONTROL PLAN**  
**308 DRAINAGE PLAN & PROFILE**

**LEGEND**

FULL LEGEND SHOWN ON SHEET 200  
 FIELD LOCATED WETLANDS OR OTHER SURFACE WATERS







CONSTRUCTION SEQUENCE:

1. PRIOR TO BEGINNING CONSTRUCTION SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE PERMIT AGENCIES, AS DIRECTED BY LEON COUNTY PUBLIC WORKS.
2. STAKEOUT LIMITS OF CONSTRUCTION LINE. (20' WIDE MIN.-AS SHOWN) WHERE THERE ARE TREES, INSTALL TREE PROTECTION BARRICADES ALONG LIMITS OF CONSTRUCTION LINE. DO NOT DISTURB ANY AREAS OUTSIDE OF LIMITS OF CONSTRUCTION.
3. LOCATE ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND PROTECT THEM FROM DAMAGE.
4. INSTALL SILT FENCE AS SHOWN. ADDITIONAL SILT FENCES MAY BE ADDED AS REQUESTED BY THE ENVIRONMENTAL INSPECTOR.
5. INSTALL HAY BALES EVERY 100' DOWNSTREAM OF CONSTRUCTION ACTIVITY AS SHOWN. MAINTAIN AND REPAIR SILT FENCES UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETE, AND STABILIZED.
6. THE CONTRACTOR WILL FOLLOW THE ARBORICULTURAL MITIGATION PLAN DESCRIBED ON SHEET L2.0 FOR ALL TREES WITHIN THE LIMITS OF CONSTRUCTION, AND ALL POTENTIALLY IMPACTED TREES.
7. NO OFF-SITE ADVERSE IMPACTS FROM CONSTRUCTION EQUIPMENT ENTERING AND LEAVING THE SITE IS ALLOWED. CONTRACTOR SHALL INSTALL SOIL TRACKING PREVENTION DEVICES PER FDOT INDEX 106 TO THE EXTENT THAT IT IS PRACTICAL. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO ANY ROADS SHALL BE REMOVED DAILY.
8. CLEAR AND GRUB SITE, REMOVE TREES, AND DEMOLISH OR RELOCATE FENCES, ETC. AS SHOWN.
9. INSTALL SWALES AND STORMWATER PIPES AS SHOWN.
10. LANDSCAPE AND SOD ALL DISTURBED AREAS AS DIRECTED BY LEON COUNTY PUBLIC WORKS.
11. FLUSH ALL STORMWATER PIPES.
12. REMOVE EROSION CONTROLS AND TREE PROTECTION BARRICADES.
13. SUBMIT AS-BUILT DRAWINGS TO ENGINEER TO PREPARE A COMPLIANCE REPORT.
14. REQUEST A FINAL INSPECTION FROM ALL APPLICABLE PERMIT AGENCIES.

LEGEND

FULL LEGEND SHOWN ON SHEET 200

- FEMA FIRM FLOODPLAIN ZONE "A"
- TLOGIS ESA WETLANDS
- PROPOSED SILT FENCE
- PROPOSED LIMITS OF CONSTRUCTION
- PROPOSED IMPACTS TO WETLANDS OR OTHER SURFACE WATERS
- FIELD LOCATED WETLAND OR OTHER SURFACE WATERS FLAGS AND LINES
- WETLAND --- NWFWD AND ACCE WETLAND UNLESS OTHERWISE NOTED
- X EXISTING 12"-17" TREES TO BE REMOVED. (TYP.)
- X EXISTING 18" OR LARGER TREES TO BE REMOVED. (TYP.)
- O EXISTING 18" OR LARGER TREE TO BE IMPACTED. (60% OF CPZ ENCROACHMENT)

NOTE:  
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JOB NO.	100014954
MR	
DESIGNED	GCB
CHECKED	WKJ
OC	
SHEET	302



ORIGINAL	NOV. 13, 2012
REVISIONS:	
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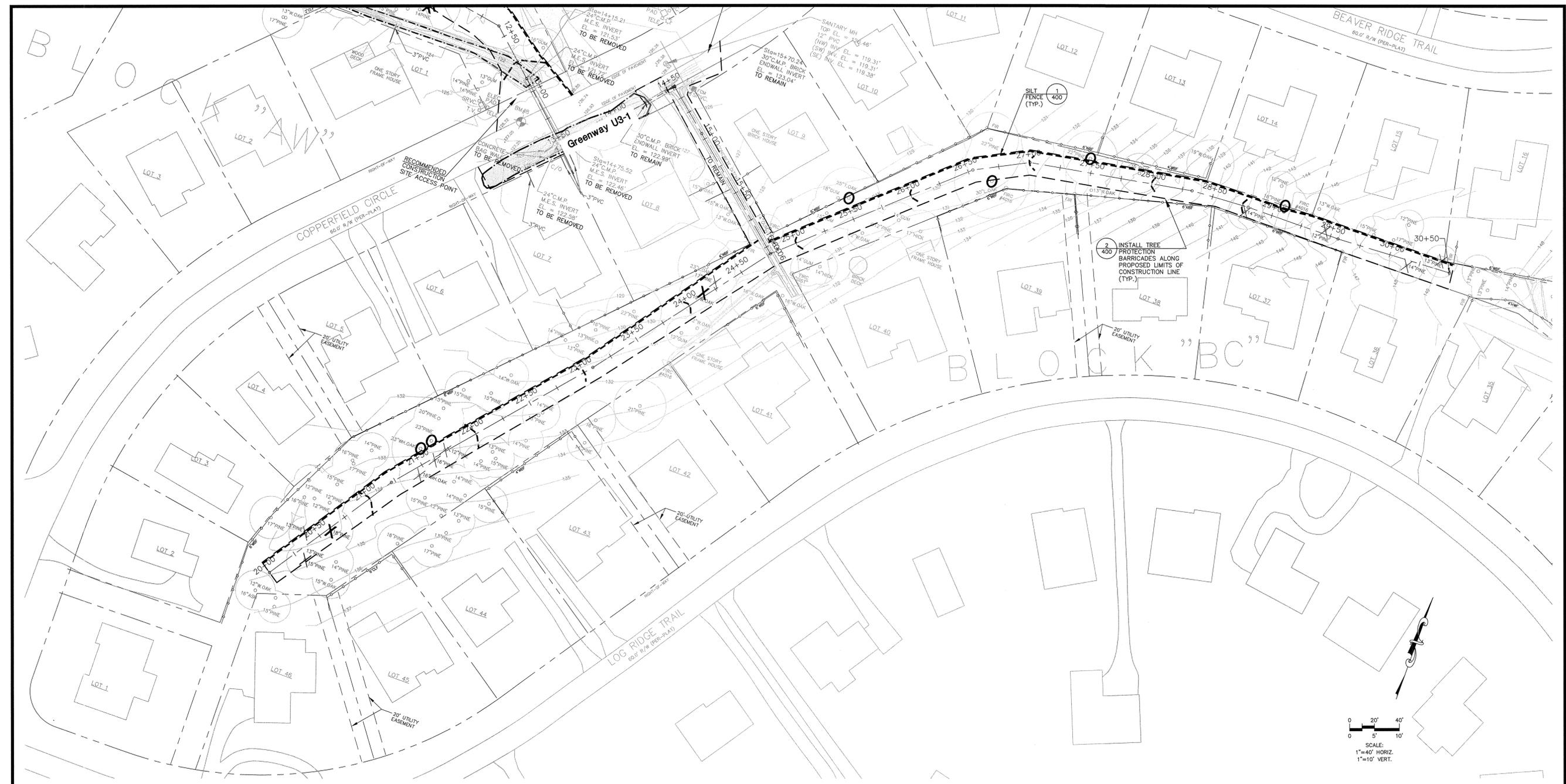
TASK  
Greenway U3-1  
DEMOLITION  
AND EROSION  
CONTROL PLAN

PROJECT  
Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1



CLIENT

**ATKINS**  
2639 N. Monroe St. Building C  
Tallahassee, Florida 32303  
850.575.1800  
FBPR Certificate of Authorization No. 24



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  5. INSTALL HAY BALES EVERY 100' DOWNSTREAM OF CONSTRUCTION ACTIVITY AS SHOWN, MAINTAIN AND REPAIR SILT FENCES UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETE, AND STABILIZED.
  6. THE CONTRACTOR WILL FOLLOW THE ARBORICULTURAL MITIGATION PLAN DESCRIBED ON SHEET L2.0 FOR ALL TREES WITHIN THE LIMITS OF CONSTRUCTION, AND ALL POTENTIALLY IMPACTED TREES.
  7. NO OFF-SITE ADVERSE IMPACTS FROM CONSTRUCTION EQUIPMENT ENTERING AND LEAVING THE SITE IS ALLOWED. CONTRACTOR SHALL INSTALL SOIL TRACKING PREVENTION DEVICES PER FDOT INDEX 106 TO THE EXTENT THAT IT IS PRACTICAL. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO ANY ROADS SHALL BE REMOVED DAILY.
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**LEGEND**

- FULL LEGEND SHOWN ON SHEET 200
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  - TLCOIS ESA WETLANDS
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  - WETLAND NFWMD AND ACQE WETLAND UNLESS OTHERWISE NOTED
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JOB NO.	100014954
DRAWN	MR
DESIGNED	GCB
CHECKED	WJU
OC	
SHEET 303	



ORIGINAL	NOV. 13, 2012
REVISIONS:	
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**Greenway U3-2  
DEMOLITION  
AND EROSION  
CONTROL PLAN**

**Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1**



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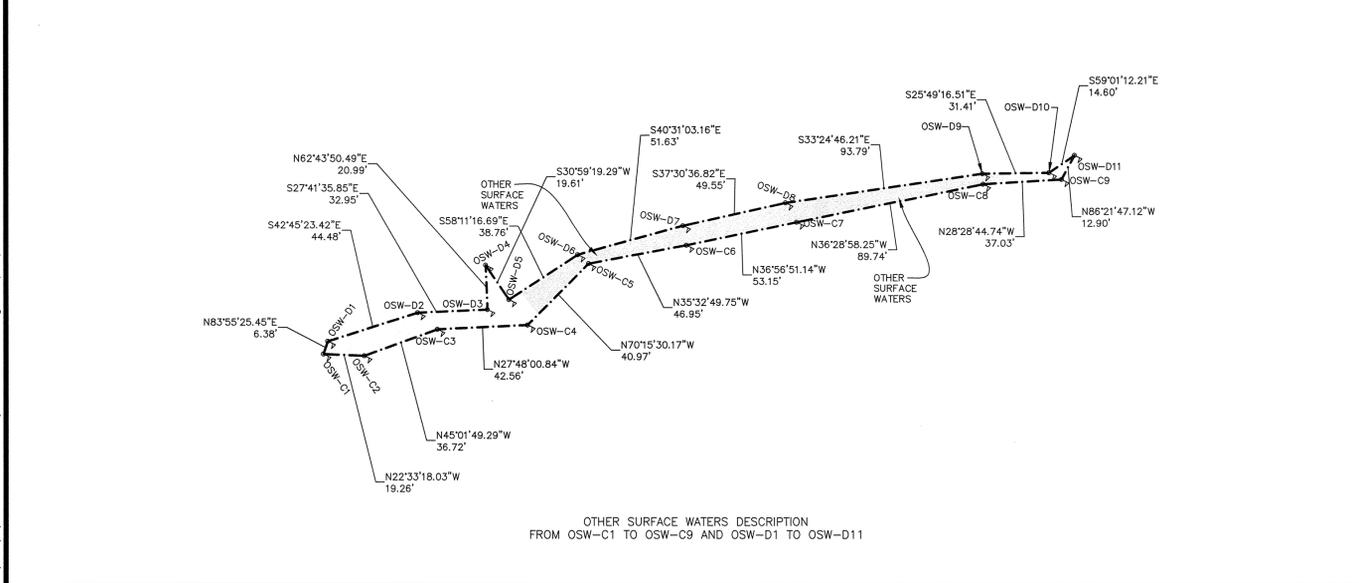
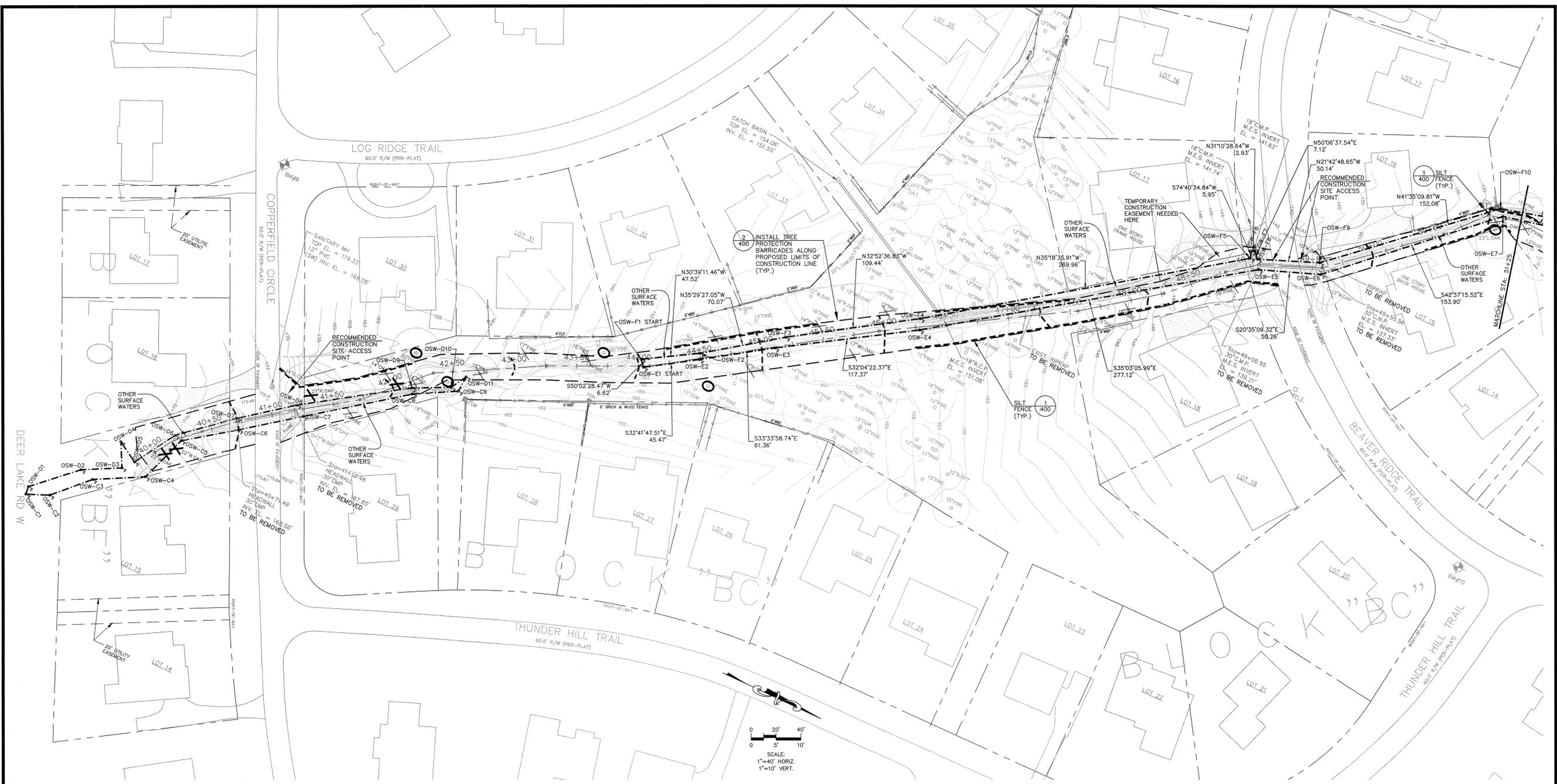
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**Greenway U3-3  
 DEMOLITION  
 AND EROSION  
 CONTROL PLAN**

PROJECT: **Killearn Lakes Greenways  
 Maintenance and Restoration  
 Plans - Phase 1**



CLIENT: **ATKINS**  
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 Tallahassee, Florida 32303  
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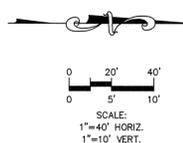
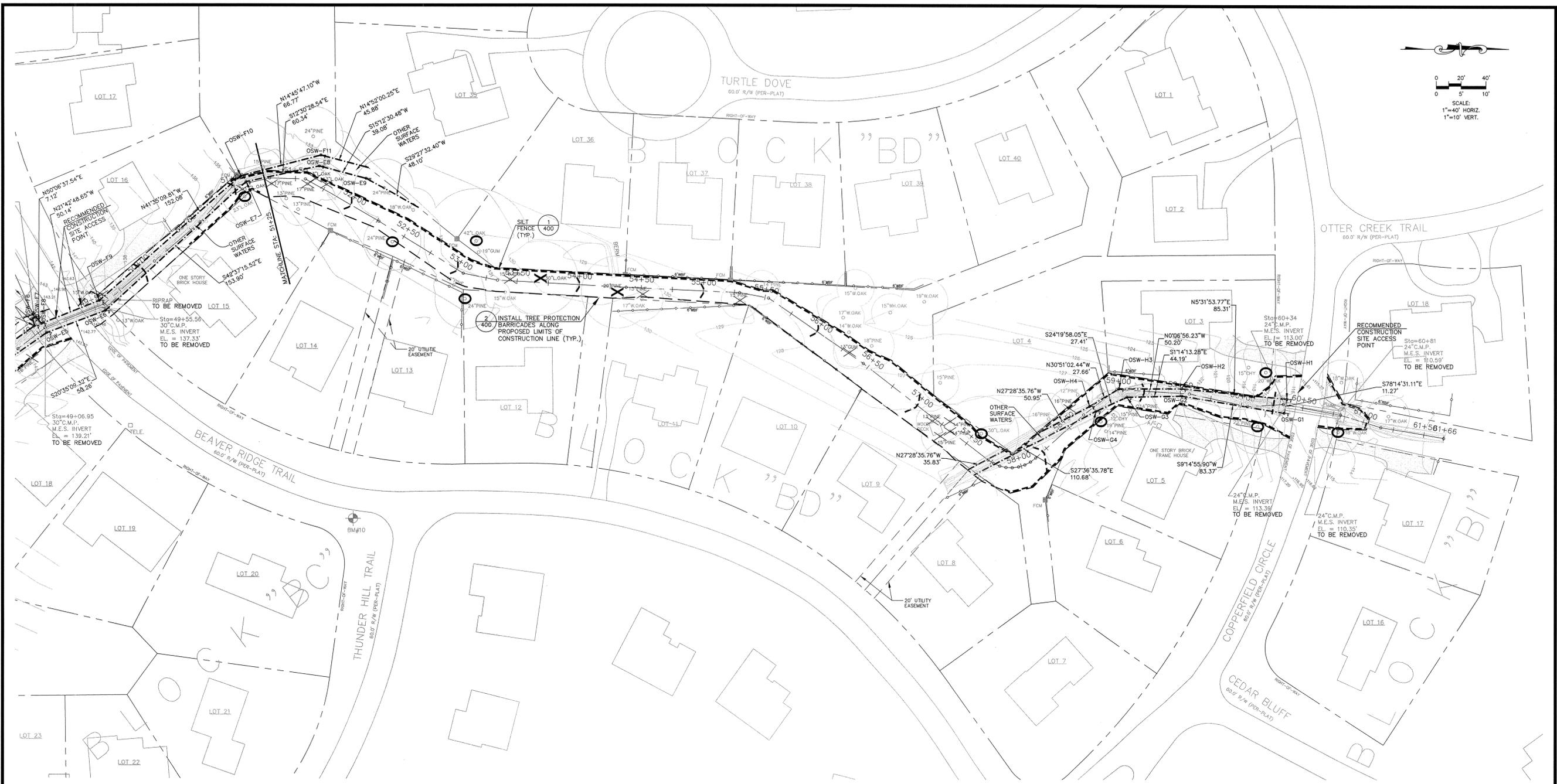


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JOB NO. 100014954  
 DRAWN MR  
 DESIGNED GGB  
 CHECKED WKJ  
 CC  
 SHEET 305



ORIGINAL NOV. 13, 2012  
 REVISIONS:  
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**Greenway U3-3  
 DEMOLITION  
 AND EROSION  
 CONTROL PLAN**

**Killbuck Lakes Greenways  
 Maintenance and Restoration  
 Plans - Phase 1**



CLIENT

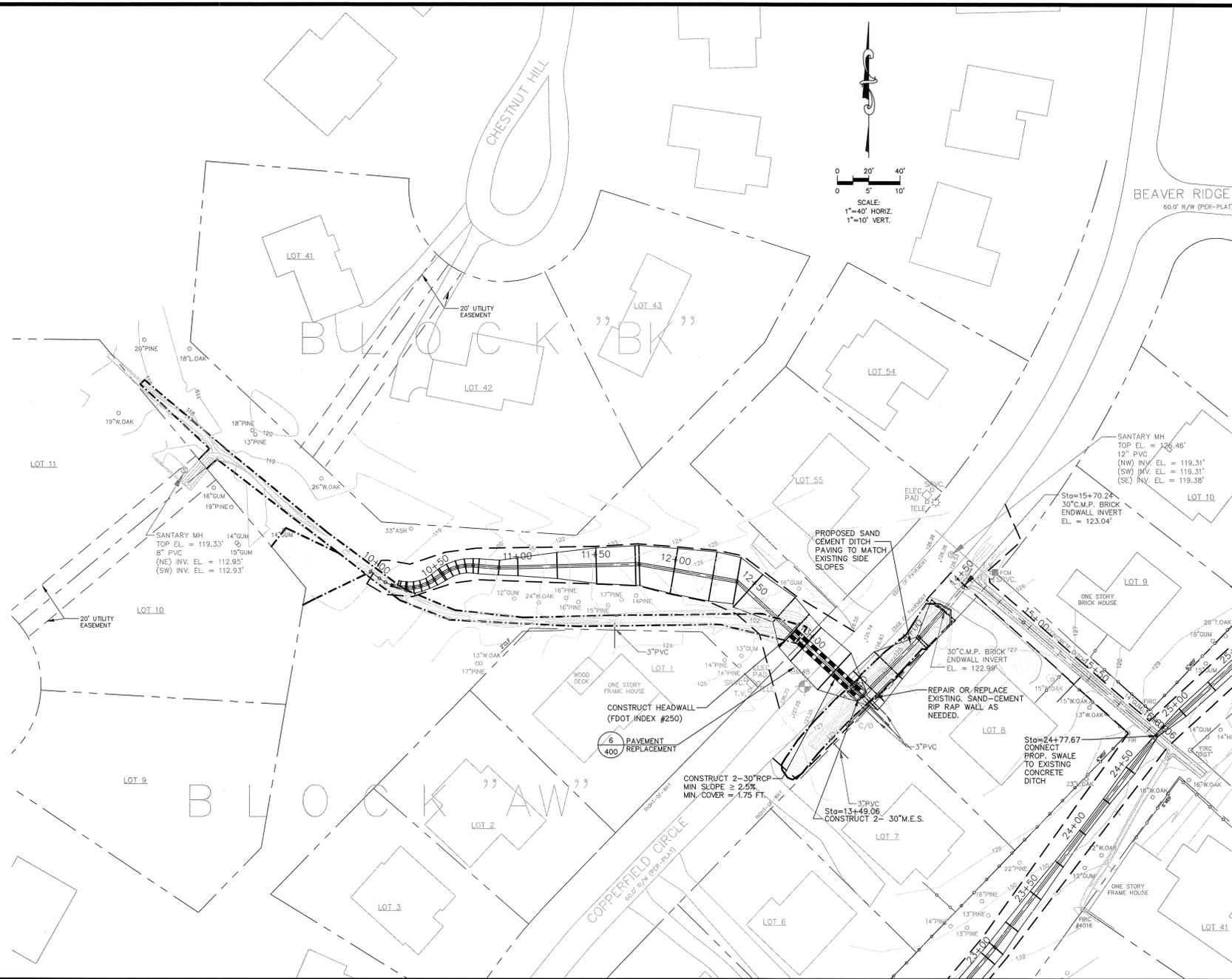
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  7. NO OFF-SITE ADVERSE IMPACTS FROM CONSTRUCTION EQUIPMENT ENTERING AND LEAVING THE SITE IS ALLOWED. CONTRACTOR SHALL INSTALL SOIL TRACKING PREVENTION DEVICES PER FDOT INDEX 106 TO THE EXTENT THAT IT IS PRACTICAL. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO ANY ROADS SHALL BE REMOVED DAILY.
  8. CLEAR AND GRUB SITE, REMOVE TREES, AND DEMOLISH OR RELOCATE FENCES, ETC. AS SHOWN.
  9. INSTALL SWALES AND STORMWATER PIPES AS SHOWN.
  10. LANDSCAPE AND SOD ALL DISTURBED AREAS AS DIRECTED BY LEON COUNTY PUBLIC WORKS.
  11. FLUSH ALL STORMWATER PIPES.
  12. REMOVE EROSION CONTROLS AND TREE PROTECTION BARRICADES.
  13. SUBMIT AS-BUILT DRAWINGS TO ENGINEER TO PREPARE A COMPLIANCE REPORT.
  14. REQUEST A FINAL INSPECTION FROM ALL APPLICABLE PERMIT AGENCIES.

**LEGEND**

- FULL LEGEND SHOWN ON SHEET 200
- - - FEMA FIRM FLOODPLAIN ZONE "A"
  - - - TLGCS ESA WETLANDS
  - - - PROPOSED SILT FENCE
  - - - PROPOSED LIMITS OF CONSTRUCTION
  - ▨ PROPOSED IMPACTS TO WETLANDS OR OTHER SURFACE WATERS
  - M-4 FIELD LOCATED WETLAND OR OTHER SURFACE WATERS FLAGS AND LINES
  - WETLAND NFWMD AND ACEE WETLAND UNLESS OTHERWISE NOTED
  - X EXISTING 12"-17" TREES TO BE REMOVED. (TYP.)
  - X EXISTING 18" OR LARGER TREES TO BE REMOVED. (TYP.)
  - O EXISTING 18" OR LARGER TREE TO BE IMPACTED. (60% OF CPZ ENCROACHMENT)

NOTE:  
 EXTREME CAUTION! - UNDERGROUND ELECTRIC AND UNDERGROUND GAS PRESENT IN CONSTRUCTION AREAS. CONTRACTOR MUST USE EXTREME CAUTION DURING ANY EXCAVATIONS OR DIGGING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND PROVIDE FOR PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY SUNSHINE ONE CALL (1-800-432-4770), 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.



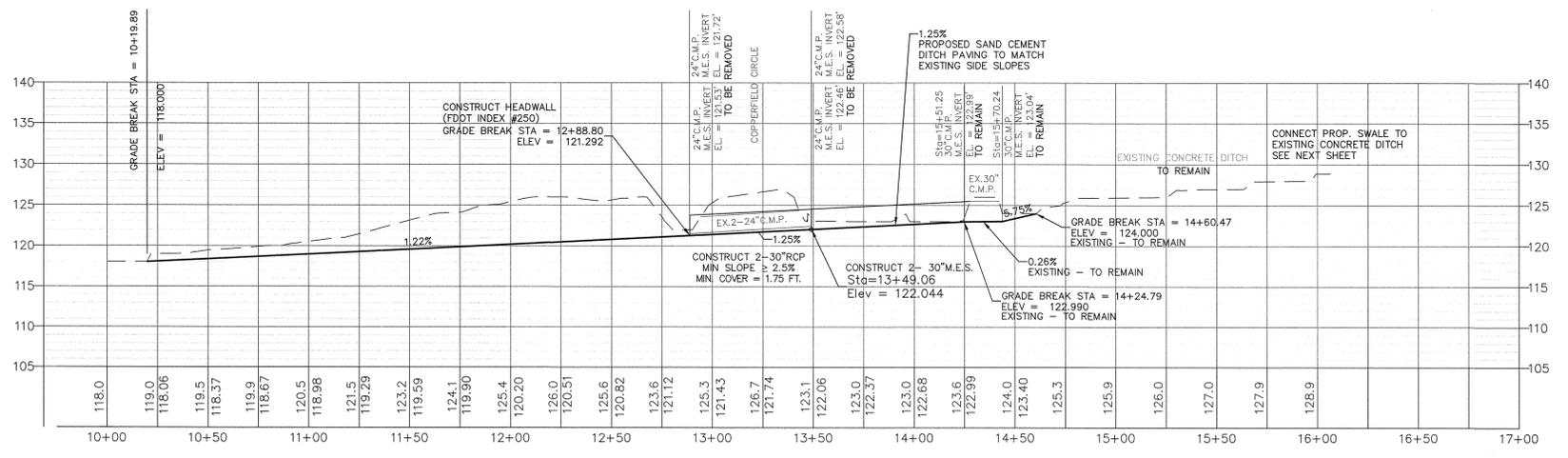
**LEGEND**

FULL LEGEND SHOWN ON SHEET 200

— PROPOSED LIMITS OF CONSTRUCTION

— FIELD LOCATED WETLANDS OR OTHER SURFACE WATERS FLAGS AND LINES

SEE DEMOLITION AND EROSION CONTROL SHEETS FOR WETLAND FLAG NUMBERS AND WETLAND LABELS



JOB NO.	100014954
DRAWN	MR
DESIGNED	GCB
CHECKED	WKJ
OC	



ORIGINAL	NOV. 13, 2012
REVISIONS:	
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TASK

**Greenway U3-1  
DRAINAGE  
PLAN AND PROFILE**

PROJECT

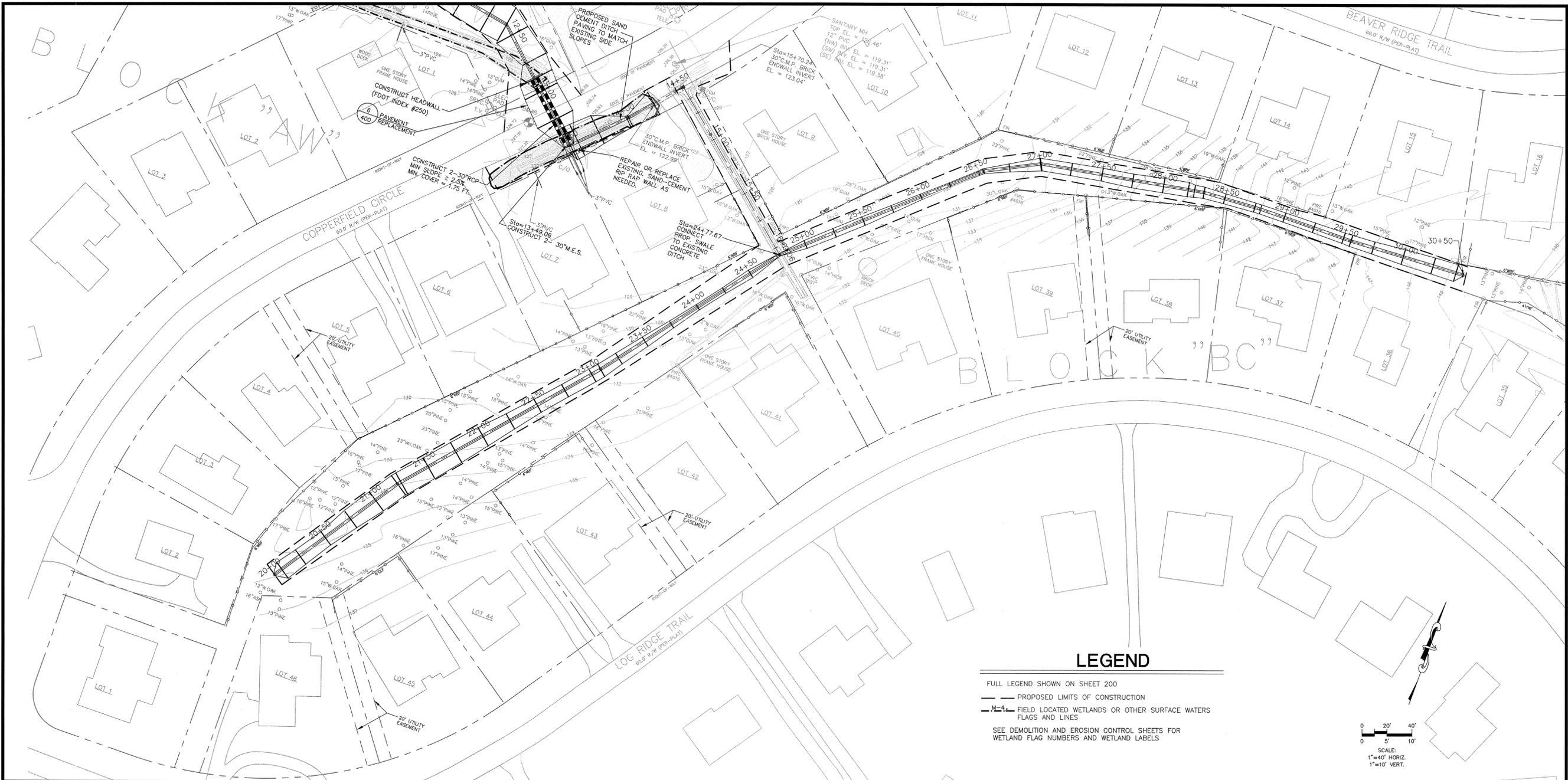
**Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1**



CLIENT

**ATKINS**

2639 N. Monroe St. Building C  
Tallahassee, Florida 32303  
850.575.1800  
FBPI Certificate of Authorization No. 24

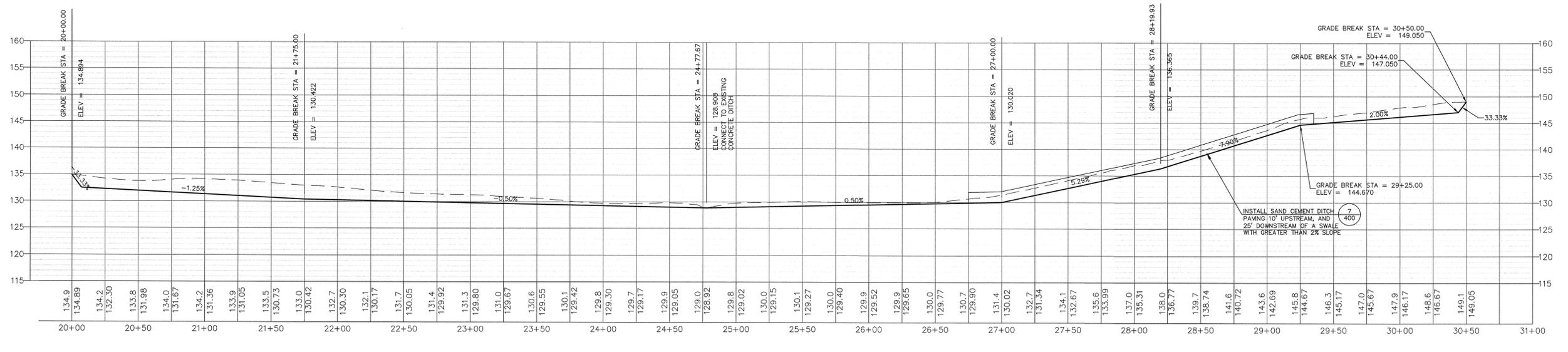
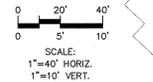


**LEGEND**

FULL LEGEND SHOWN ON SHEET 200

- PROPOSED LIMITS OF CONSTRUCTION
- FIELD LOCATED WETLANDS OR OTHER SURFACE WATERS FLAGS AND LINES

SEE DEMOLITION AND EROSION CONTROL SHEETS FOR WETLAND FLAG NUMBERS AND WETLAND LABELS



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JOB NO. 100014954

DRAWN	MR
DESIGNED	GCB
CHECKED	WKJ
QC	QC

SHEET 307



ORIGINAL NOV. 13, 2012

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**Greenway U3-2  
DRAINAGE  
PLAN AND PROFILE**

**Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1**



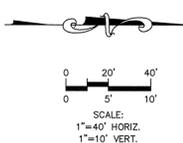
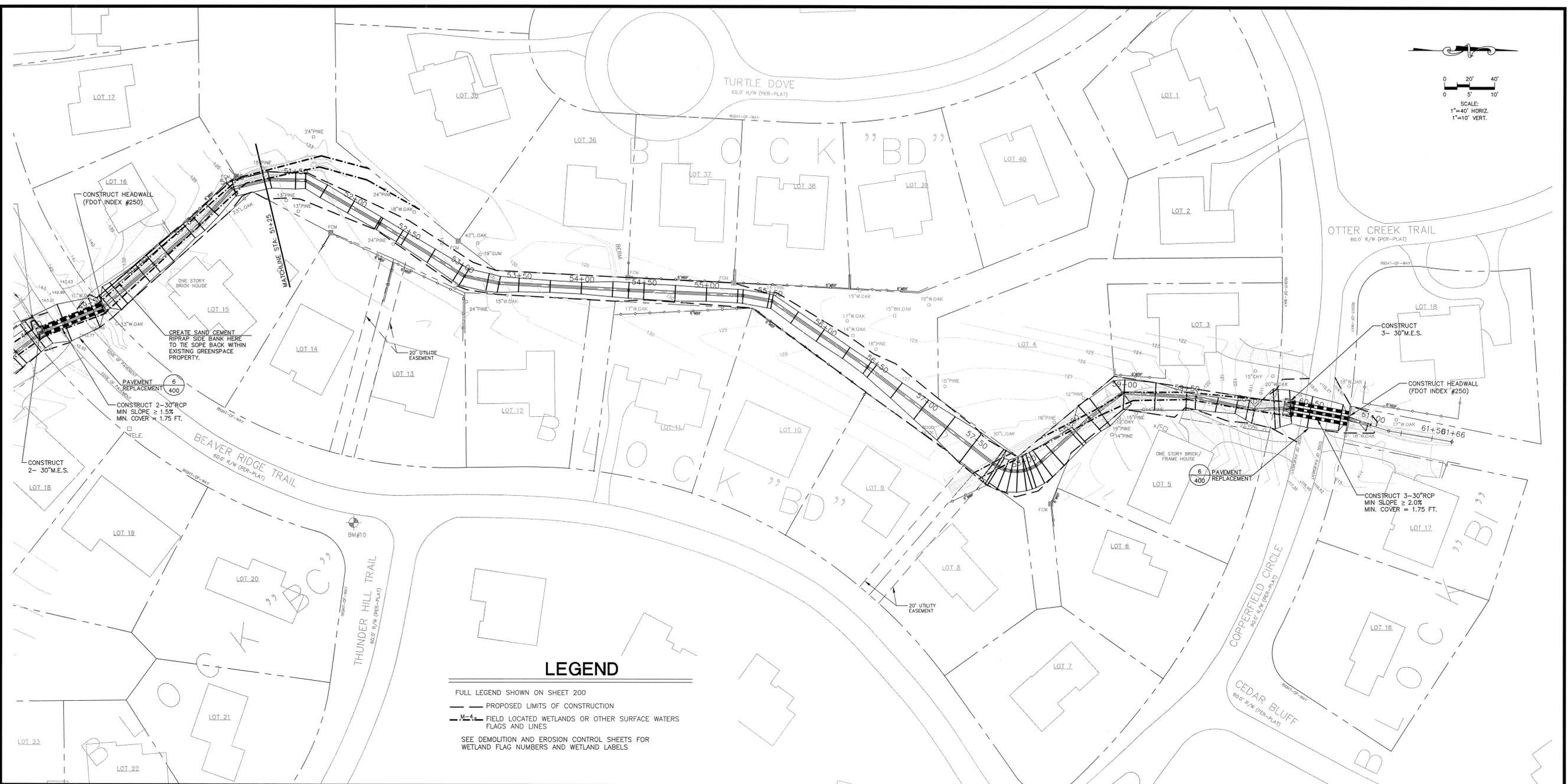
CLIENT

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FBPR Certificate of Authorization No. 24



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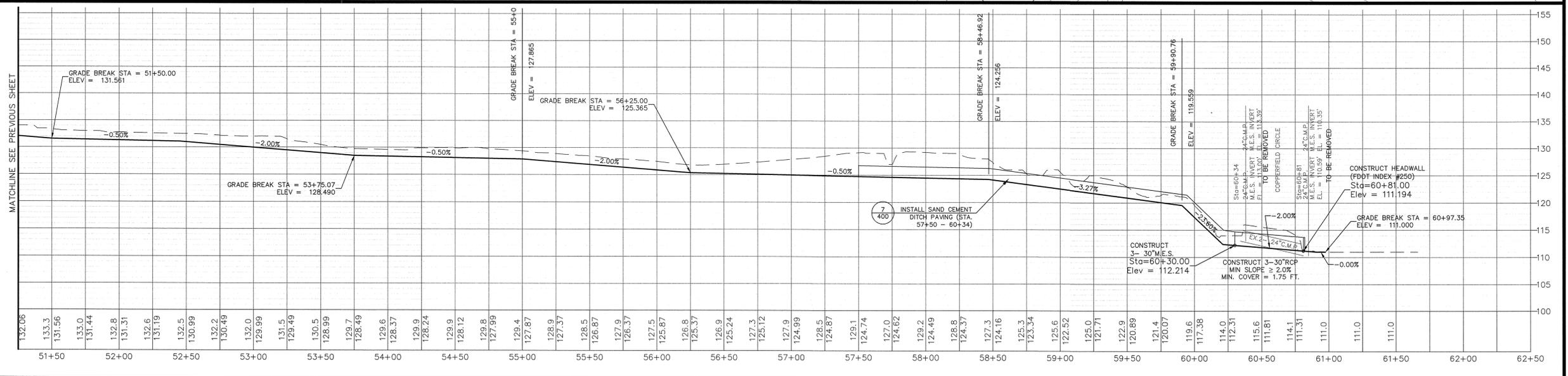


**LEGEND**

FULL LEGEND SHOWN ON SHEET 200

- PROPOSED LIMITS OF CONSTRUCTION
- FIELD LOCATED WETLANDS OR OTHER SURFACE WATERS FLAGS AND LINES

SEE DEMOLITION AND EROSION CONTROL SHEETS FOR WETLAND FLAG NUMBERS AND WETLAND LABELS



JOB NO. 100014954  
 DRAWN MR  
 DESIGNED GCB  
 CHECKED WKJ  
 OC  
 SHEET 309



ORIGINAL NOV. 13, 2012  
 REVISIONS:  
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**Greenway U3-3  
 DRAINAGE  
 PLAN AND PROFILE**

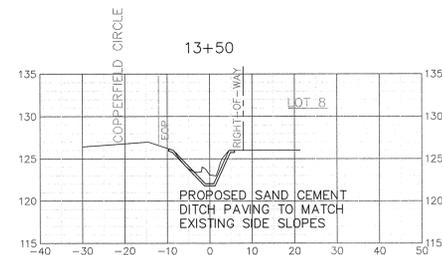
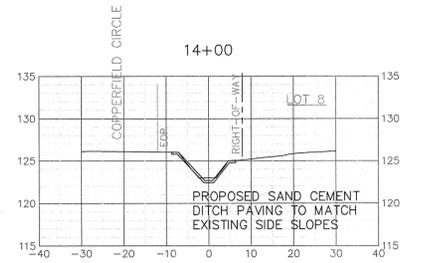
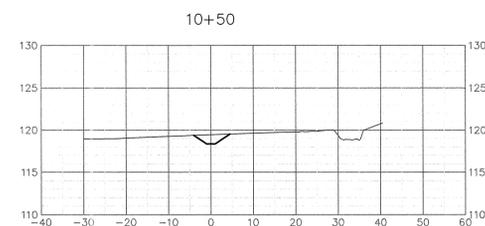
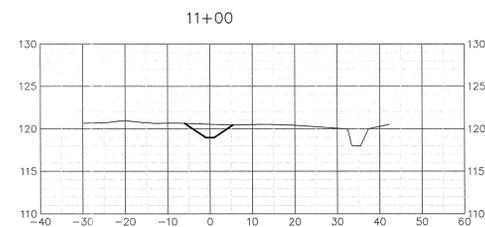
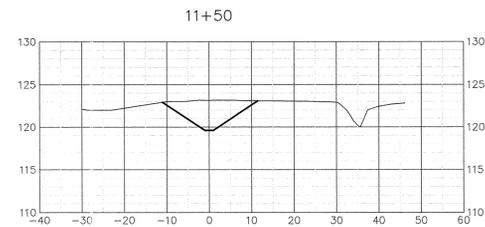
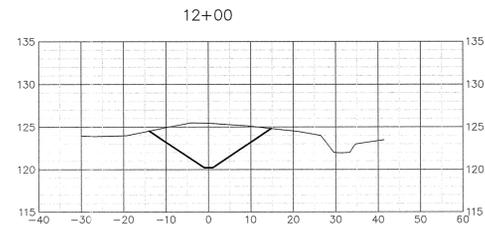
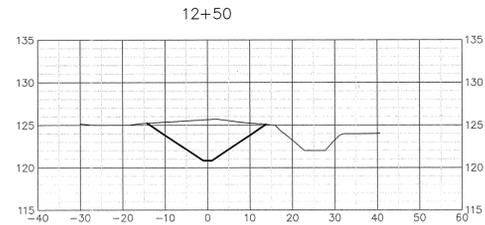
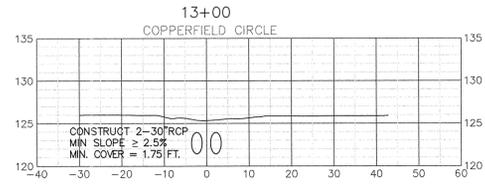
**Kilbourn Lakes Greenways  
 Maintenance and Restoration  
 Plans - Phase 1**



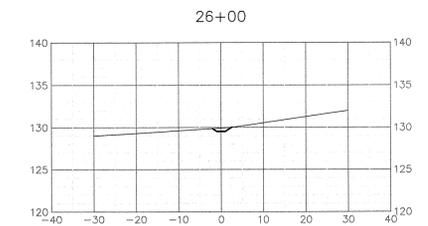
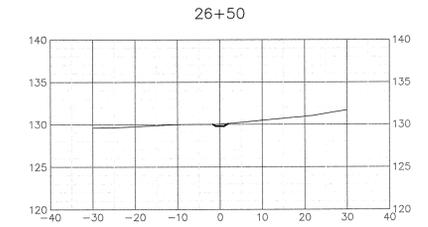
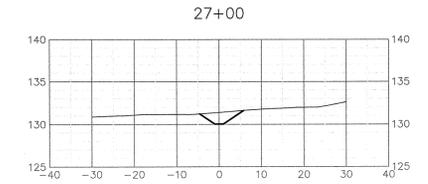
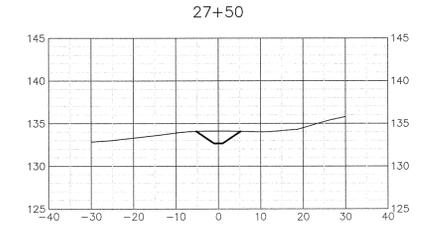
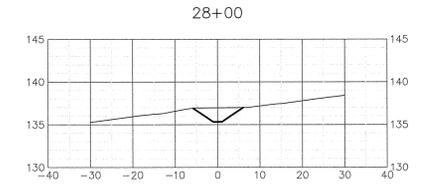
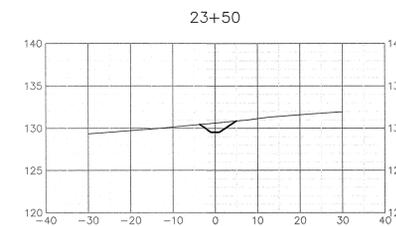
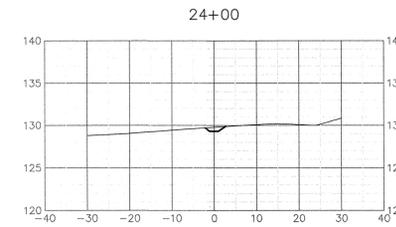
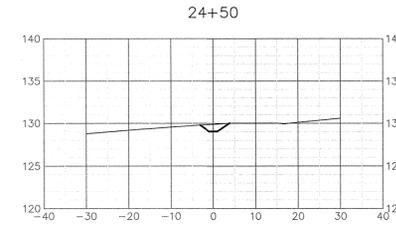
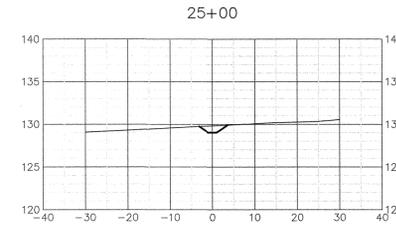
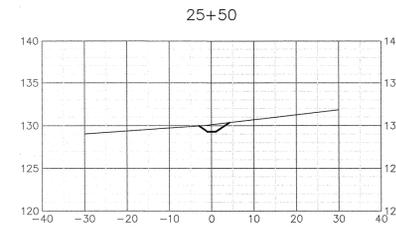
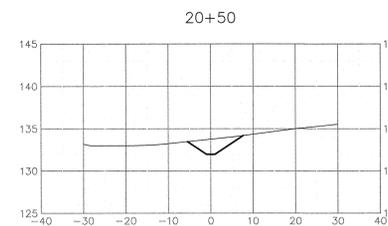
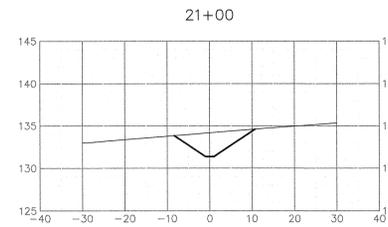
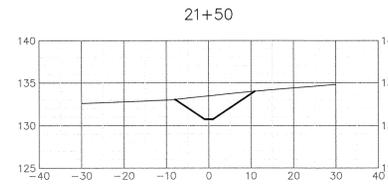
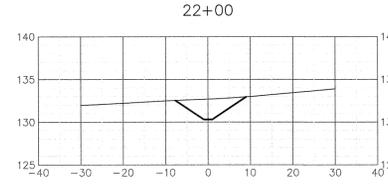
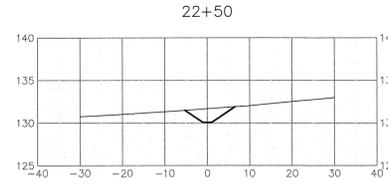
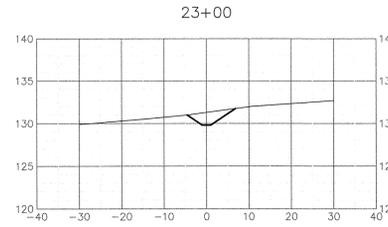
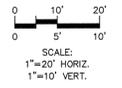
CLIENT

**ATKINS**  
 2699 N. Monroe St. Building C  
 Tallahassee, Florida 32303  
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 FBR Certificate of Authorization No. 24

### Greenways U3-1 CROSS SECTIONS



### Greenways U3-2 CROSS SECTIONS



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JOB NO. 100014954  
DRAWN MR  
DESIGNED GCB  
CHECKED WKJ  
OC  
SHEET 310



ORIGINAL NOV. 13, 2012  
REVISIONS:  
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TASK  
Greenway U3-1 & U3-2  
CROSS SECTIONS

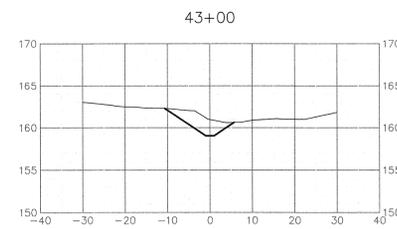
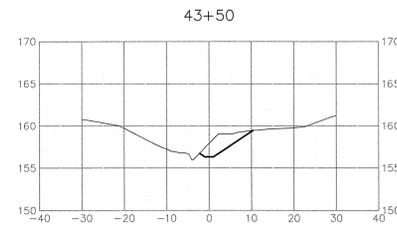
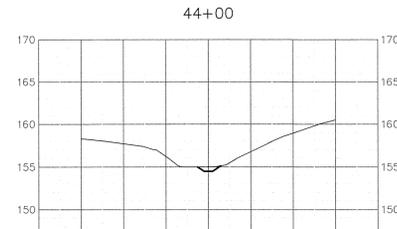
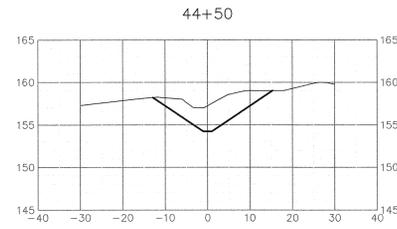
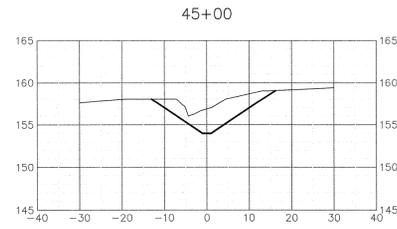
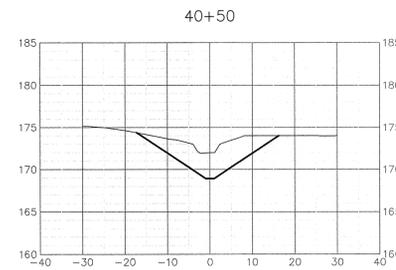
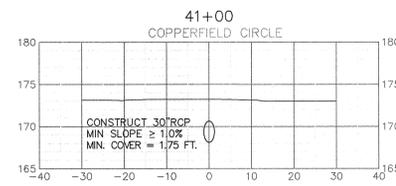
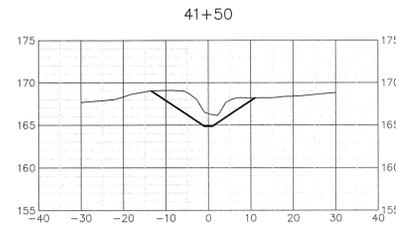
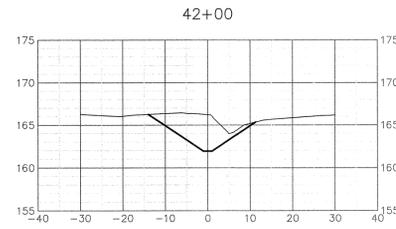
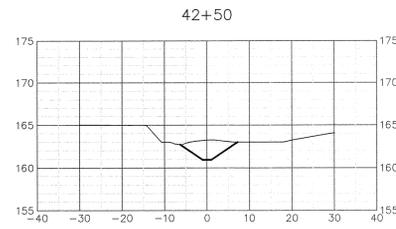
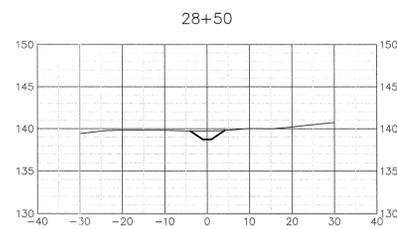
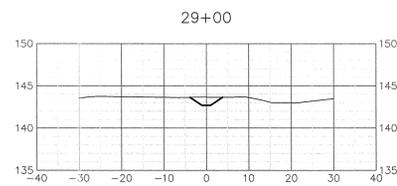
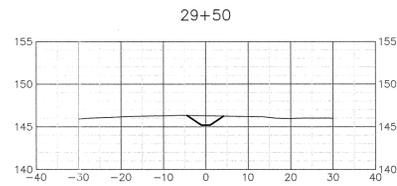
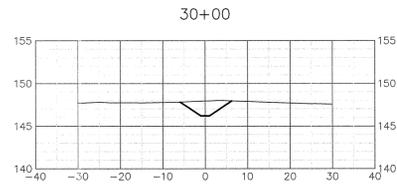
PROJECT  
Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1



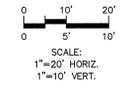
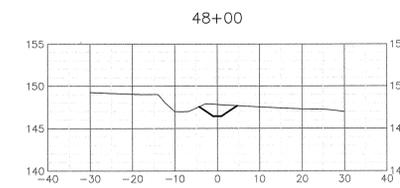
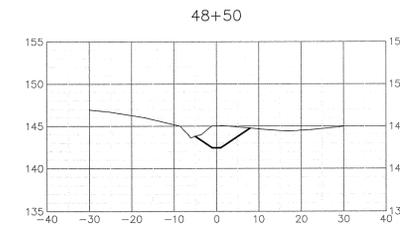
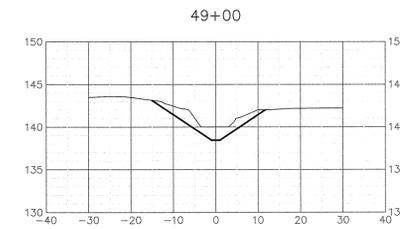
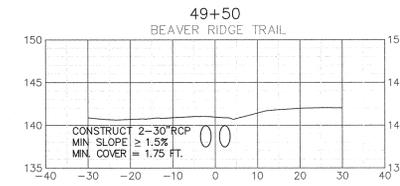
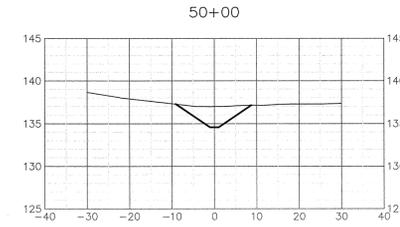
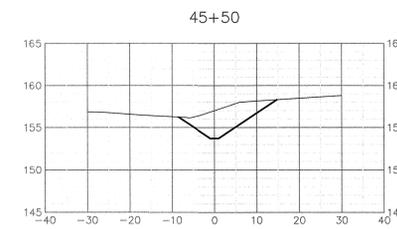
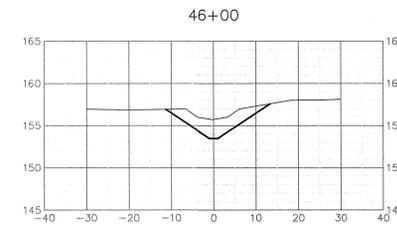
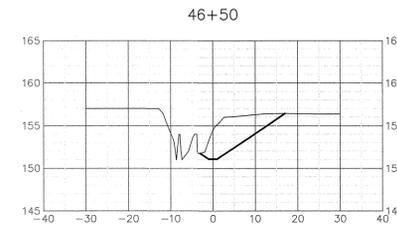
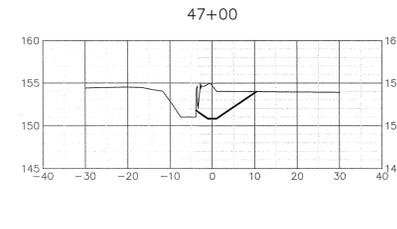
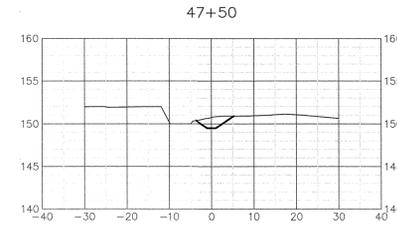
CLIENT

**ATKINS**  
2639 N. Monroe St. Building C  
Tallahassee, Florida 32303  
850.575.1800  
FBPR Certificate of Authorization No. 24

Greenways U3-2  
CROSS SECTIONS



Greenways U3-3  
CROSS SECTIONS



JOB NO.	100014954
MIR	
DRAWN	
DESIGNED	CCB
CHECKED	WJK
OC	



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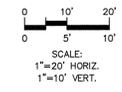
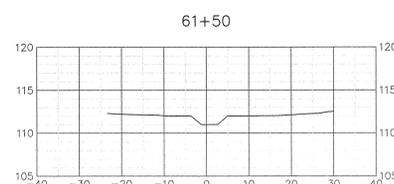
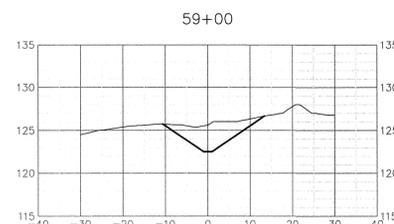
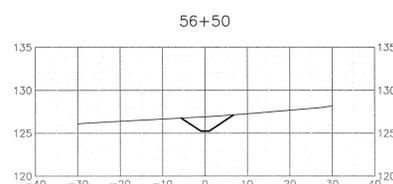
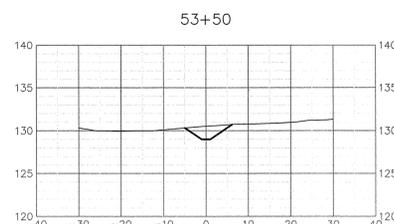
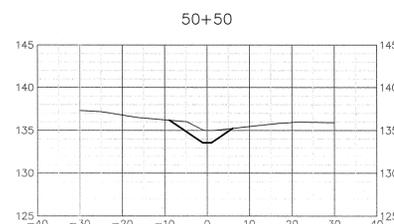
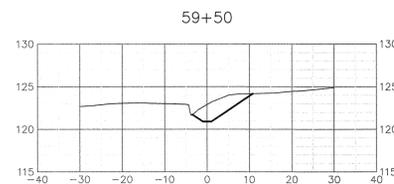
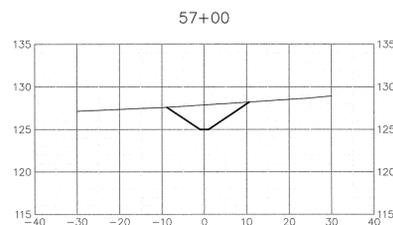
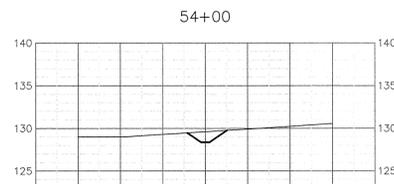
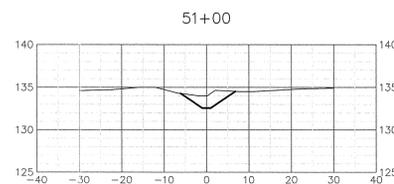
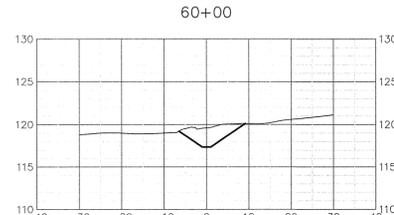
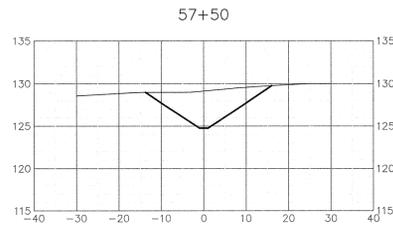
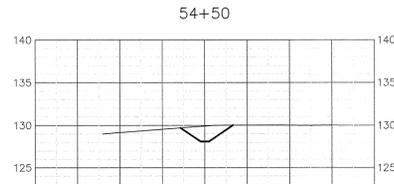
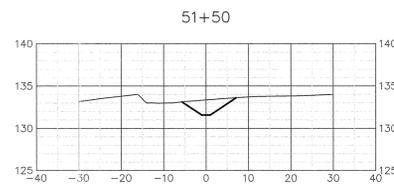
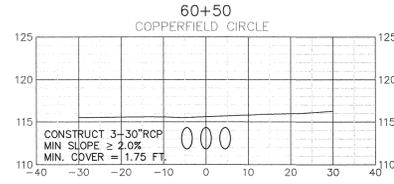
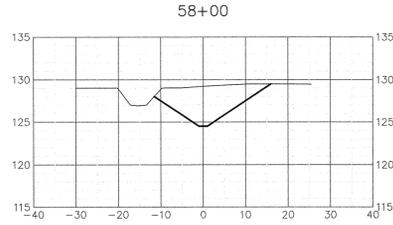
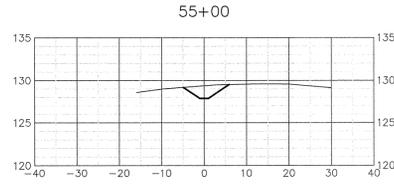
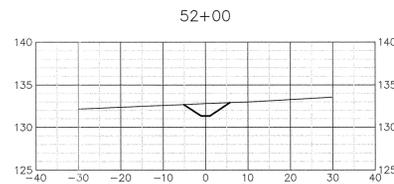
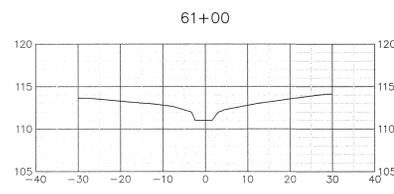
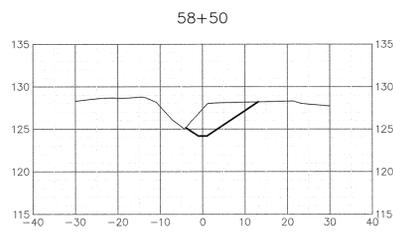
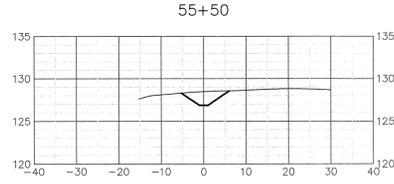
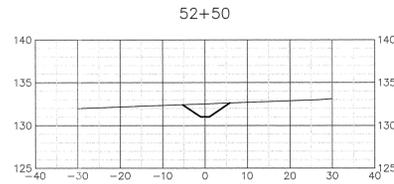
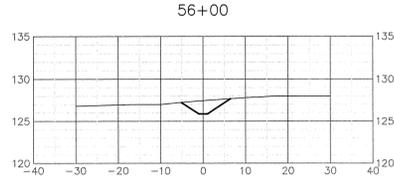
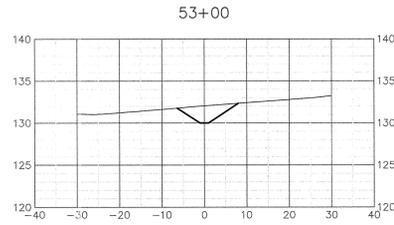
TASK  
Greenways U3-2 & U3-3  
CROSS SECTIONS

PROJECT  
Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1



CLIENT  
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MR.	
DESIGNED	GCB
CHECKED	WKJ
DATE	OC



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TASK  
Greenway U3-3  
CROSS SECTIONS

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**CONSTRUCTION DETAILS**

**Killbuck Lakes Greenways Maintenance and Restoration Plans - Phase 1**

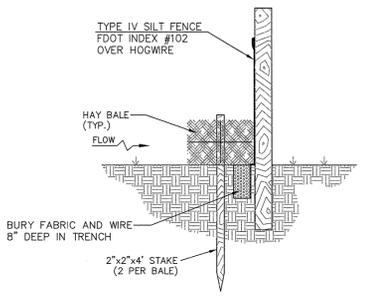


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 Tallahassee, Florida 32303  
 850.575.1800  
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**SHEET FLOW APPLICATION: SILT FENCE**

**GENERAL NOTES**

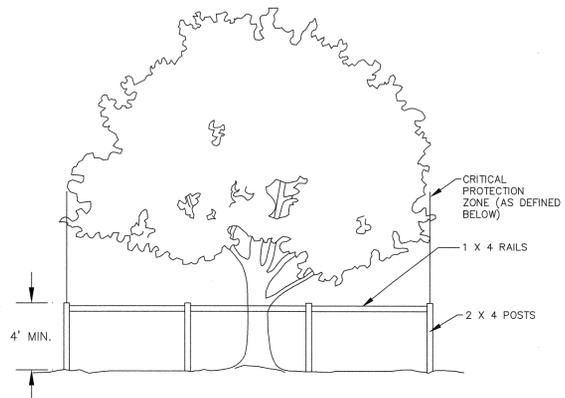
1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED AS DESCRIBED IN ITEM NO. 8 BELOW.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. TRENCHING SHALL NOT BE ALLOWED WITHIN THE CPZ OF TREES TO REMAIN.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.
8. WHEN ATTACHING TWO SILT FENCES TOGETHER, PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE. ROTATE BOTH POSTS AT LEAST 180 DEGREES ON A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FILTER FABRIC. DRIVE BOTH POSTS INTO THE GROUND AND BURY THE FLAP.
9. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
10. WHEN USED TO CONTROL SEDIMENTS FROM A STEEP SLOPE, SILT FENCES SHOULD BE PLACED AWAY FROM THE TOE OF THE SLOPE FOR INCREASED HOLDING CAPACITY.
11. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.



**MAINTENANCE NOTES:**

1. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
5. NO TRENCHING SHALL OCCUR WITHIN THE CRITICAL PROTECTION ZONE OF ANY PROTECTED OR DESIRABLE TREE.

**1 STAKED TYPE IV SILT FENCE WITH HAY BALES**  
 400 NTS

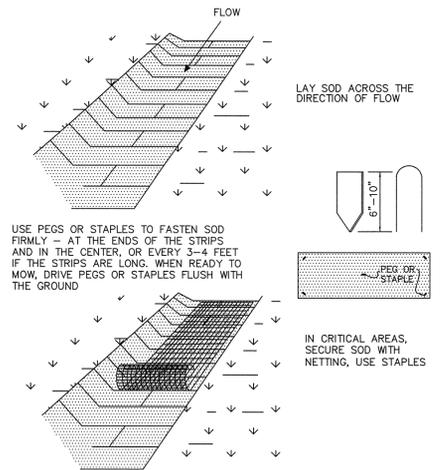


**NOTES:**

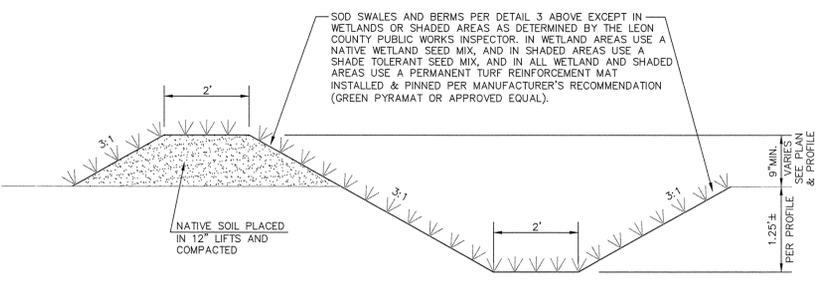
THE TREE PROTECTION BARRICADE IS TO PREVENT DISTURBANCE OF THE CRITICAL PROTECTION ZONE (CPZ). THE CPZ IS THAT AREA SURROUNDING A TREE WITH A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT. ANY ACTIVITY THAT ENCLOSES WITHIN THE CPZ OF ANY TREE WILL REQUIRE DEBITS OR AN ARBORICULTURAL MITIGATION PLAN.

THE AREA WITHIN BARRICADE IS NOT TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT.

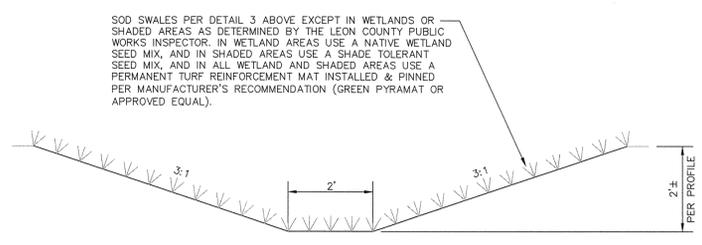
**2 TREE PROTECTION BARRICADE**  
 400 NTS



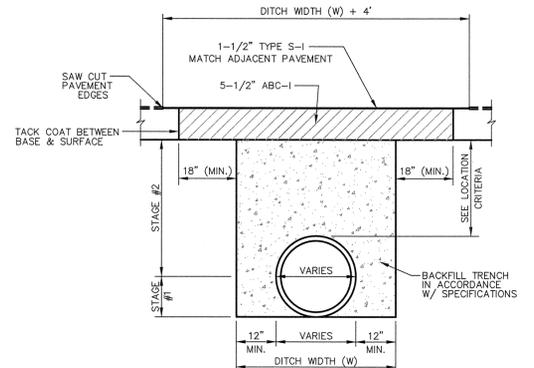
**3 SODDING DETAILS FOR SWALES**  
 400 NTS



**4 CONTAINMENT BERM / SWALE**  
 400 NTS



**5 SODDED SWALE**  
 400 NTS



**DENSITY PROCEDURES:**

THE BACKFILL FOR THE FIRST AND SECOND STAGES SHALL BE PLACED IN 6\"/>

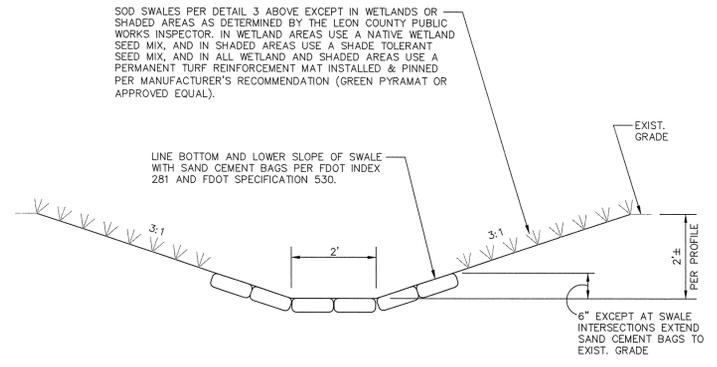
**STAGE #1**

THE CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED.

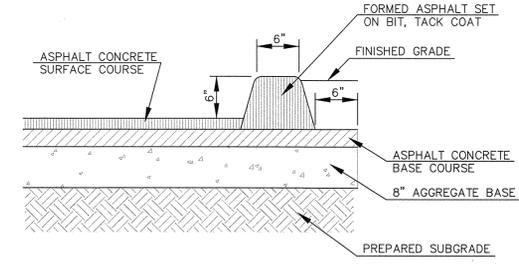
**STAGE #2**

THE CONTRACTOR SHALL OBTAIN A WELL-COMPACTED BED AND FILL ALONG THE SIDES OF THE PIPE AND TO A POINT INDICATING THE TOP OF SUB-GRADE MATERIAL.

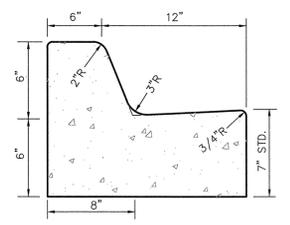
**6 PAVEMENT REPLACEMENT FOR PIPE INSTALLATION & PIPE REMOVAL**  
 400 NTS



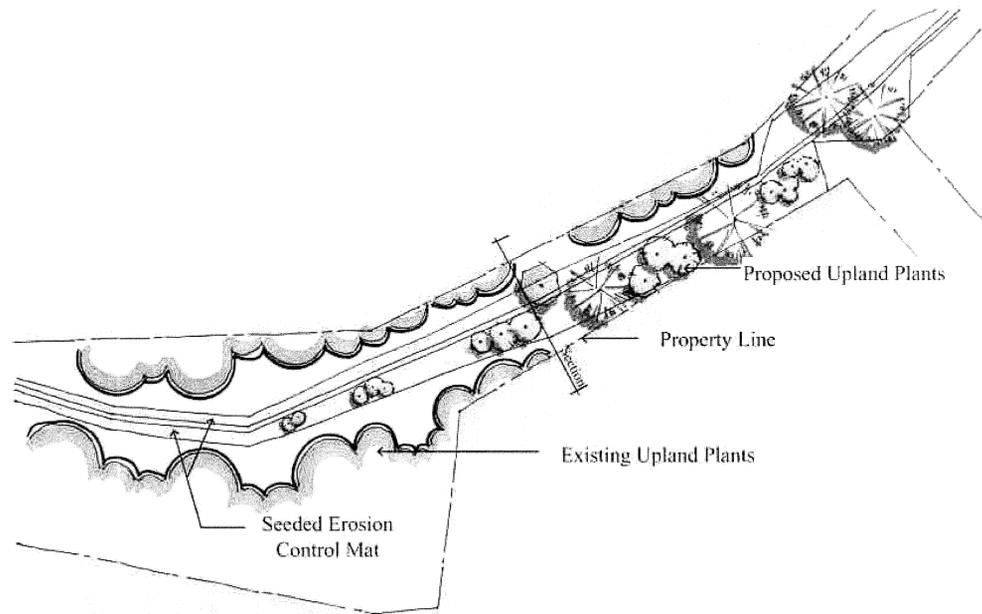
**7 SAND CEMENT DITCH PAVING**  
 400 NTS



**8 ASPHALT CURB**  
 400 NTS

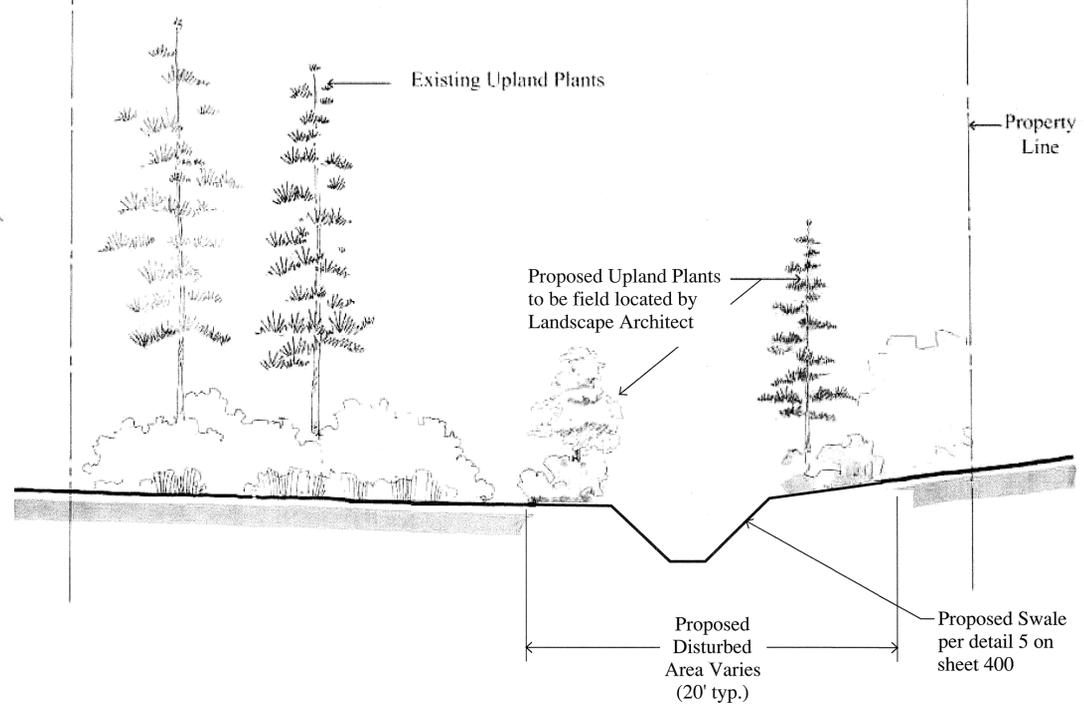


**9 CONC. CURB**  
 400 NTS



TYPICAL UPLAND PLAN

N.T.S



TYPICAL UPLAND SECTION

N.T.S

UPLAND PLANT LIST		
Trees (all shall be 15 gal. or 1" cal.)		60
<i>Cornus florida</i>	Flowering Dogwood	3
<i>Diospyros virginiana</i>	Persimmon	6
<i>Cercis canadensis</i>	Redbud	3
<i>Carya glabra</i>	Pignut Hickory	6
<i>Ilex vomitoria</i>	Yaupon Holly	3
<i>Liquidambar styraciflua</i>	Sweetgum	3
<i>Magnolia grandiflora</i>	Southern Magnolia	6
<i>Nyssa sylvatica</i>	Black Gum	6
<i>Pinus palustris</i>	Longleaf Pine	6
<i>Prunus angustifolia</i>	Chickasaw Plum	6
<i>Quercus virginiana</i>	Live Oak	6
<i>Sassafras albidum</i>	Sassafras	6

Shrubs (all shall be 1 gal.)		
<i>Callicarpa americana</i>	Beautyberry	50
<i>Erythrina herbacea</i>	Cherokee Bean	41
<i>Hamamelis virginiana</i>	Witch-hazel	16
<i>Ilex glabra</i>	Inkberry	53
<i>Ilex vomitoria</i>	Yaupon Holly	53
<i>Vaccinium darrowii</i>	Darrow's Blueberry	33
<i>Vaccinium myrsinites</i>	Shiny Blueberry	33
<i>Viburnum dentatum</i>	Southern Arrowwood	51

Groundcover, Vines, and Ferns (all shall be 1 gal.)		
<i>Muhlenbergia capillaris</i>	Pink Muhly	266
<i>Eragrostis spectabilis</i>	Purple Lovegrass	266
<i>Gelsemium sempervirens</i>	Carolina Jasmine	33
<i>Lonicera sempervirens</i>	Coral Honeysuckle	33
<i>Yucca filamentosa</i>	Adam's Needle	66

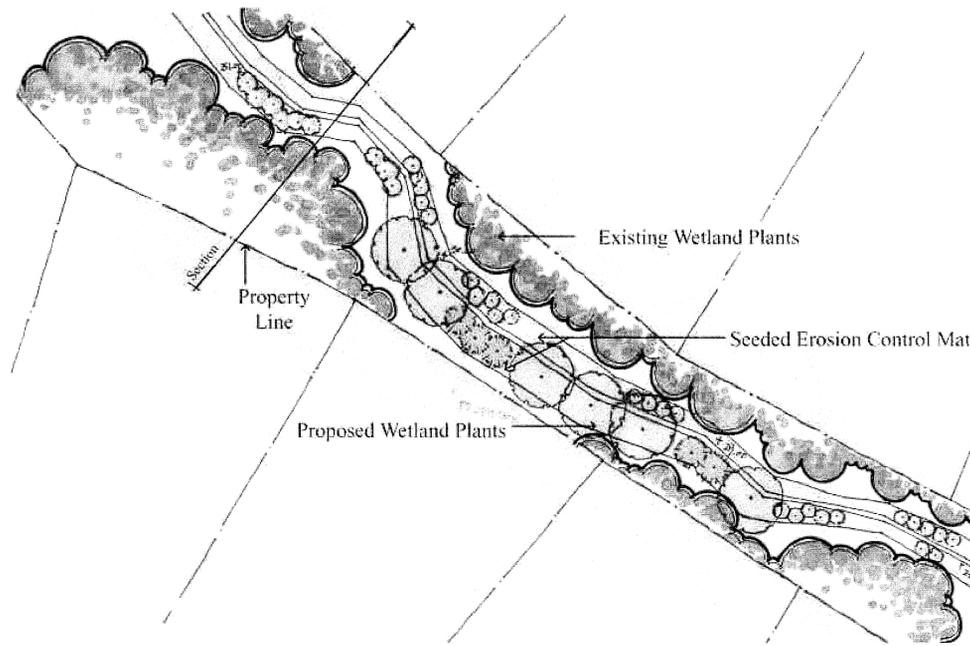
Wildflowers (seed)		
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	4,000 sy
<i>Phlox drummondii</i>	Drummond Phlox	2,000 sy

NOTE: THE LANDSCAPE SUPERVISOR FOR THIS PROJECT WILL BE:

Patricia H. Farley  
Landscape Designer, ATKINS  
2639 N. Monroe Street, Bldg. C  
Tallahassee, FL 32303  
Tel: (850) 575 1800

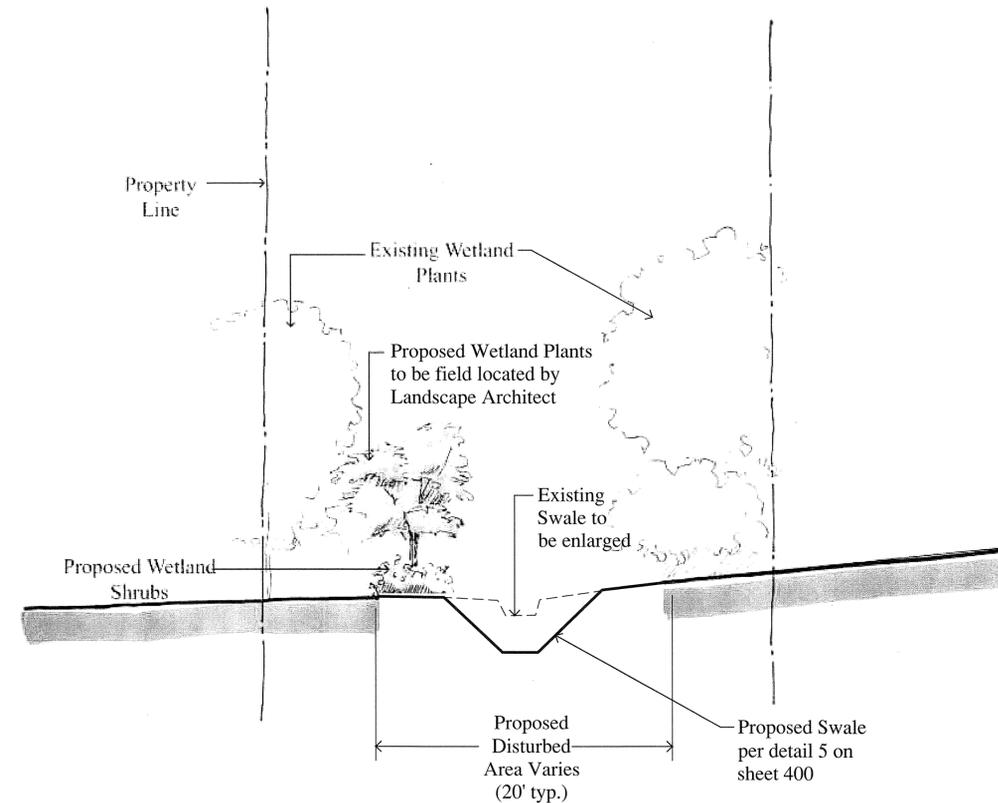
THE CONTRACTOR WILL FOLLOW THE ARBORICULTURAL MITIGATION PLAN DESCRIBED ON SHEET L2.0 FOR ALL TREES WITHIN THE LIMITS OF CONSTRUCTION, AND ALL POTENTIALLY IMPACTED TREES.

THE TREE QUANTITIES SHOWN HERE ON THE UPLAND AND WETLAND PLANT LIST ARE APPROXIMATE. PRIMARILY TO BE USED TO PROVIDE THE CONTRACTOR AN APPROXIMATE NUMBER OF PLANTS THAT ARE EXPECTED TO BE USED TO ESTABLISH UNIT PRICING DURING BIDDING, BUT THE ACTUAL AMOUNT TO BE PLANTED WILL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD BASED ON FIELD CONDITIONS.



TYPICAL WETLAND PLAN

N.T.S



TYPICAL WETLAND SECTION

N.T.S

WETLAND PLANT LIST		
Trees (all shall be 15 gal. or 1" cal.)		32
<i>Acer saccharum</i>	Florida Maple	5
<i>Cornus foemina</i>	Stiff Cornel Dogwood	3
<i>Gordonia lasianthus</i>	Loblolly Bay	3
<i>Halesia diptera</i>	Silverbell	4
<i>Ilex cassine</i>	Dahoon Holly	2
<i>Liquidambar styraciflua</i>	Sweetgum	3
<i>Magnolia virginiana</i>	Sweet-bay	5
<i>Nyssa biflora</i>	Swamp Tupelo	4
<i>Betula nigra</i>	River birch	3

Shrubs (all shall be 1 gal.)		
<i>Ilex glabra</i>	Inkberry	31
<i>Itea virginica</i>	Virginia-willow	26
<i>Myrica cerifera</i>	Wax Myrtle	31
<i>Vaccinium corymbosum</i>	Highbush Blueberry	30
<i>Viburnum dentatum</i>	Southern Arrowwood	23
<i>Viburnum obovatum</i>	Small Viburnum	23

Groundcover, Vines, and Ferns (all shall be 1 gal. except carpetgrass)		
<i>Axonopus fissifolius (seed)</i>	Carpetgrass	1,000 sy
<i>Dryopteris ludoviciana</i>	Southern Woodfern	33
<i>Panicum virgatum</i>	Switchgrass	100
<i>Juncus effusus</i>	Soft Rush	100
<i>Osmunda cinnamomea</i>	Cinnamon Fern	100

Wildflowers (all shall be 1 gal.)		
<i>Helianthus angustifolium</i>	Swamp Sunflower	41
<i>Iris virginica</i>	Blue Flag Iris	41
<i>Liatris spicata</i>	Blazingstar	41
<i>LOBELIA cardinalis</i>	Cardinal Flower	41

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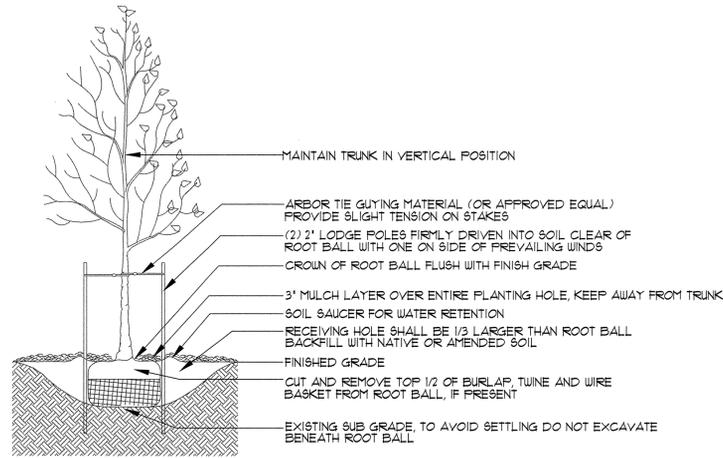
TASK  
**CONCEPTUAL LANDSCAPE RESTORATION PLANS (Phase 1b - Unit 3)**

PROJECT  
**Killearn Lakes Greenways Maintenance and Restoration Plans - Phase 1**



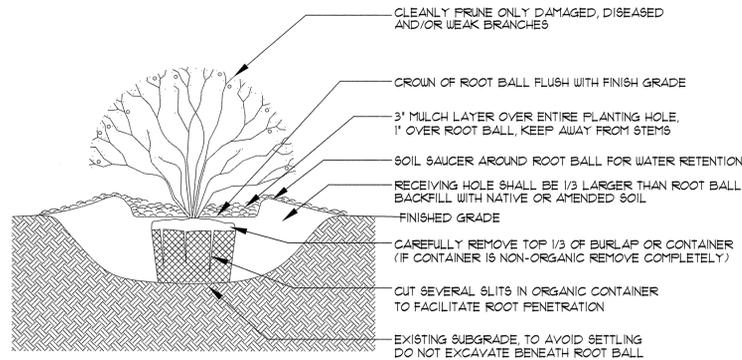
CLIENT

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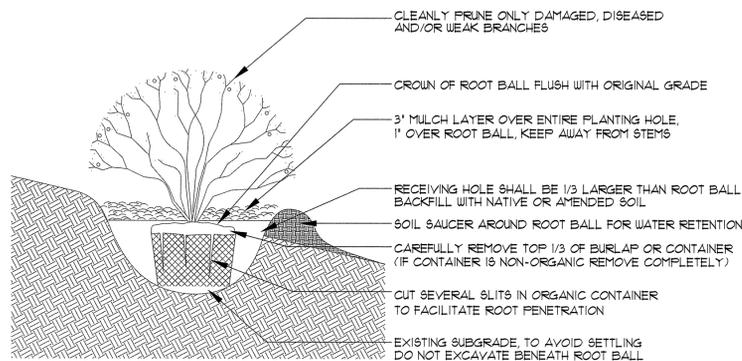
- NOTES:
- DO NOT DAMAGE MAIN ROOTS OR ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE SAUCER AND STAKES ONE YEAR AFTER INSTALLATION.
  - PROVIDE DRAINAGE FOR PLANTING PIT IF IN IMPERMEABLE SOIL.

1 TREE PLANTING/STAKING  
DETAIL N.T.S.



- NOTES:
- WATER THOROUGHLY AFTER INSTALLATION.
  - PROVIDE WEED BARRIER FABRIC FOR ALL PLANTING BEDS. SEE GENERAL NOTES/CONTRACT DOCUMENTS FOR SPECIFICATION.
  - FOR PLANTING BED INSTALLATION EXCAVATE ENTIRE SHRUB BED AS SHOWN ON PROJECT DRAWINGS.
  - REMOVE SOIL SAUCER ONE YEAR AFTER INSTALLATION.

2 SHRUB/GROUNDCOVER  
PLANTING DETAIL N.T.S.



- NOTES:
- WATER THOROUGHLY AFTER INSTALLATION.
  - PROVIDE WEED BARRIER FABRIC FOR ALL PLANTING BEDS. SEE GENERAL NOTES/CONTRACT DOCUMENTS FOR SPECIFICATION.
  - FOR PLANTING BED INSTALLATION EXCAVATE ENTIRE SHRUB BED AS SHOWN ON PROJECT DRAWINGS.
  - REMOVE SOIL SAUCER ONE YEAR AFTER INSTALLATION.

3 SHRUB/GROUNDCOVER  
PLANTING DETAIL ON SLOPE N.T.S.

LANDSCAPE GENERAL NOTES:

- THE CONTRACTOR SHALL VERIFY THE EXISTENCE OF AND STAKE ALL UTILITIES PRIOR TO CONSTRUCTION. EXCAVATION OF PLANT FITS LOCATED WITHIN 5' OF UTILITIES SHALL BE PERFORMED BY HAND. ANY UTILITY/PLANT MATERIAL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OR ANY FIELD ADJUSTMENTS.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR LEON COUNTY PUBLIC WORKS. ALL PLANTS SHALL MEET SIZE, CONTAINER AND SPACING SPECIFICATIONS AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR LEON COUNTY PUBLIC WORKS. THE CONTRACTOR SHALL GUARANTEE PLANT HEALTH AND SURVIVABILITY FOR ONE YEAR FROM DATE OF PROJECT ACCEPTANCE. ANY MATERIAL NOT MEETING SPECIFICATIONS OR DISPLAYING POOR HEALTH SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 OR BETTER AS SET FORTH IN 'GRADES AND STANDARDS FOR NURSERY PLANTS, SECOND EDITION' STANDARDS AND DESIGNATIONS. NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF ONE WEEK PRIOR TO PLANT DELIVERY TO SCHEDULE ON-SITE INSPECTION UPON DELIVERY. INSTALLED PLANT MATERIAL NOT MEETING SPECIFICATIONS SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO MAKE PLANTING BED FIELD CHANGES TO ACCOMMODATE SITE CONDITIONS AND TO ACHIEVE THE DESIGN INTENT. THE LANDSCAPE CONTRACTOR SHALL FLAG ALL TREE AND BEDLINE LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO ANY INSTALLATION.
- ALL PLANTS SHALL RECEIVE A 3\"/>

NOTE: THE LANDSCAPE SUPERVISOR FOR THIS PROJECT WILL BE:

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Tallahassee, FL 32303  
Tel: (850) 575 1800

INVASIVE PLANT MANAGEMENT PLAN:

The Certified Arborist will coordinate with the Environmental Inspector and the Landscape Architect to specify to the contractor which trees or plants outside of the limits of construction, but within the Greenways are Invasive and/or Exotic Species to be removed as part of the mitigation for Wetland Impacts to this project.

The Arborist will also specify what method of removal, and herbicides are to be used, in such a way to minimize impacts to plants and trees that will remain, and be installed.

ARBORICULTURAL MITIGATION PLAN:

SITE MONITORING

All tree protection procedures and activities shall be monitored and approved throughout the construction period by a Certified Arborist.

SOIL TESTING

The Critical Protection Zone (CPZ) of the designated trees shall be soil tested for existing nutrient content to determine the necessity of fertilizer application and recommended percentages and rates. The soil samples shall be taken within the CPZ; multiple samples shall be taken if locations of obvious change in soil texture and color exist within the CPZ. Samples shall be submitted to IFAS Extension Soil Testing Laboratory or approved soil testing service for analysis and recommendations.

Percolation tests shall be performed within the CPZ of each designated tree to determine the necessity of soil aeration. Multiple samples shall be taken if locations of obvious change in soil texture and color exist within the CPZ.

The Certified Arborist shall be responsible for all soil testing. Submittals of samples shall be made to the Owner's Agent and the Landscape Architect for review.

WATERING

All protected trees shall be watered as necessary to deliver a minimum rate equivalent to one inch of rainfall per week. Application rate shall be dependent upon soil type and weather conditions. A tensiometer shall be required for verification of application rates. Care shall be taken to prevent water from soaking the base of trees and root collars. Irrigation shall commence as far in advance as possible to development activity and shall continue through the completion of the project. All watering shall be under the direction and supervision of the Certified Arborist.

ROOT PRUNING

Root pruning shall occur prior to site grading, earthwork, excavation or any other activity which may damage the roots of a tree proposed for mitigation in all areas of demolition or new construction requiring removal of existing roots: i.e. excavation, construction of footings, retaining walls, curbs paving and base. Roots shall be cut with a mechanical trenching device to a minimum depth of 18\"/>

PRUNING

Pruning shall be performed by a Certified Arborist in accordance with the ANSI A300 standards as directed on site by the Landscape Architect or determined by the Certified Arborist. Pruning and crown thinning shall be done to all dead and diseased limbs that harbor decay and all heavy concentrations of moss and vines shall be removed that compete with crown foliage. All branch removal for the clearance or raising of larger limbs for traffic or structures shall be done by the Certified Arborist. All limbs larger than six inch diameter that are proposed to be cut shall first be approved by the Certified Arborist and work performed by the Certified Arborist.

Removal of competing understory trees, shrubs and vines shall be done by the Certified Arborist. Any propagules of exotic invasive plants shall be removed from the site and destroyed in a manner that prevents the spread of invasive infestation.

SOIL AERATION

Soil aeration shall be performed by the Certified Arborist upon his recommendation based on results of percolation tests within the CPZ. If required, use a 1 1/2 - 1 3/4 inch diameter soil auger to drill holes to a depth of 12 inches every 24 inches apart, starting three feet from the trunk collar outward to five feet past the drip line of the tree. The entire area within the CPZ of the tree should be aerated.

MULCHING

Mulching shall be used throughout the project within the CPZ of the protected trees to the greatest extent possible. A 2-3 inch layer of mulch, preferably wood chips, shall be placed over the entire CPZ of the protected tree. Where heavy construction traffic will be located within a portion of the CPZ, a layer of 4-6 inches of wood chips, covered with 1/2 inch plywood placed over the mulch shall be placed down to lessen soil compaction and damage to the tree roots.

FERTILIZING

Fertilizing and pH adjustment should be in response to the soil test. Fertilize with a complete fertilizer, containing at least 5% nitrogen in organic form, including minor elements. Apply in the spring at a rate recommended by soil testing service. Fertilizer proposed for soil injection and/or liquid fertilization should be in a ratio of elements as determined by soil tests and the Certified Arborist as well as application method. Water soil immediately after initial application of fertilizer at a rate equivalent to one inch of rainfall.

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CONCEPTUAL  
LANDSCAPE  
RESTORATION PLANS

Killearn Lakes Greenways  
Maintenance and Restoration  
Plans - Phase 1



CLIENT

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