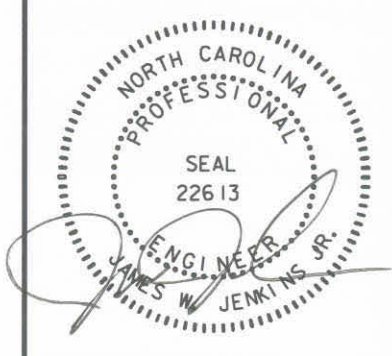


NO.	REVISION DESCRIPTION	DATE	BY	CHK

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EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

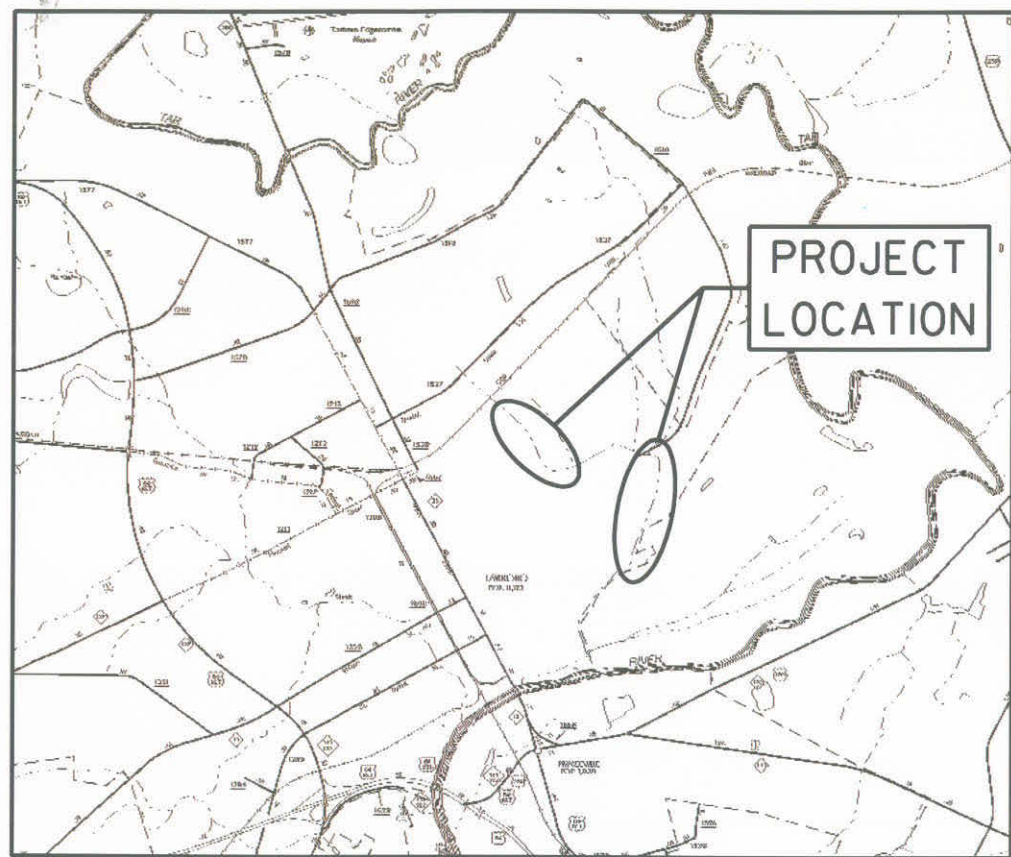
PROJECT NO. 03-06031-01 SHEET NO. C-1
 TITLE



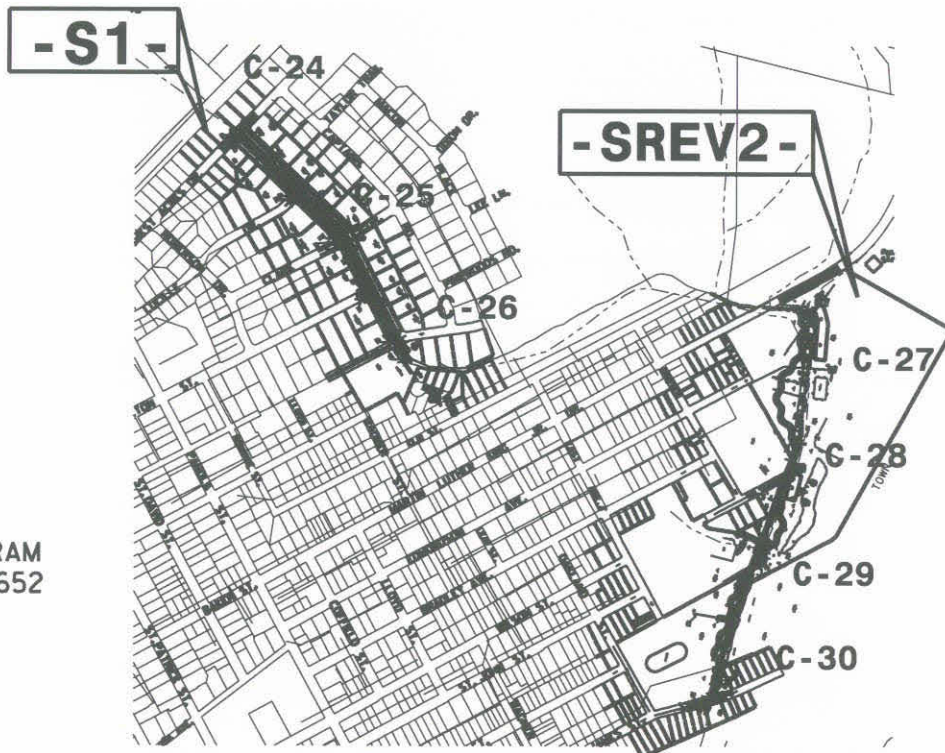
EAST TARBORO CANAL STREAM RESTORATION EDGECOMBE COUNTY

CLEARING, GRADING, EROSION CONTROL, STREAM RESTORATION AND ENHANCEMENT, DRAINAGE, DEBRIS REMOVAL AND OTHER IMPROVEMENTS AS NOTED ON THE PLANS. THIS WORK WILL INCLUDE ALL ITEMS NECESSARY TO CONSTRUCT THE STREAM AND ASSOCIATED STRUCTURES COMPLETE WITH LANDSCAPING.

STATE CONSTRUCTION OFFICE ID# 03-06031-01



VICINITY MAP
 (Not to Scale)



INDEX OF SHEETS

C-1	TITLE
C-2	SYMBOLGY
C-3 THRU C-4	TYPICAL SECTIONS
C-5 THRU C-15	DETAILS
C-16	ALIGNMENT DATA
C-17 THRU C-23	EXISTING CONDITIONS & CROSS SECTION LAYOUT
C-24 THRU C-30	GRADING, DRAINAGE, AND EROSION CONTROL
C-31 THRU C-35	PROFILES
V-1 THRU V-7	VEGETATION PLAN
V-8 THRU V-10	VEGETATION DETAILS
X-1 THRU X-14	CROSS SECTIONS

SITE DATA

Project: EAST TARBORO CANAL STREAM RESTORATION
 Design Manager Contact: JEFF SCHAFER Phone # 919-715-1952
 Owner: NORTH CAROLINA ECOSYSTEM ENHANCEMENT PROGRAM
 Address: 1652 MAIL SERVICE CENTER; RALEIGH, NC 27699-1652
 Disturbed Area: 14.1 ACRES

GENERAL NOTES

- SURVEY INFORMATION PROVIDED BY 4D SITE SOLUTIONS, INC.
- CONTRACTOR SHALL CONDUCT HIS/HER OWN UNDERGROUND UTILITIES INVESTIGATIONS BEFORE COMMENCEMENT OF CONSTRUCTION AND CLEARLY MARK UTILITIES USING PAINT AND STAKES.
- UNLESS SPECIFICALLY NOTED ON THE PLANS, NO TREES (>4" BASAL DIA.) SHALL BE REMOVED WITHOUT EXPLICIT CONSENT FROM THE DESIGNER.

STREAM DATA

STREAM REACH	PROP. CENTERLINE LENGTH (FT)	PROPOSED STREAM CLASSIFICATION	MODIFICATION TYPE	AS-BUILT LENGTH (FT)
-S1-	1,876	C	ENHANCEMENT	1,869
-SREV2-	2,989	C	RESTORATION	2,933
TOTAL	4,865			4,802

07/13/2007 AS-BUILT DRAWINGS

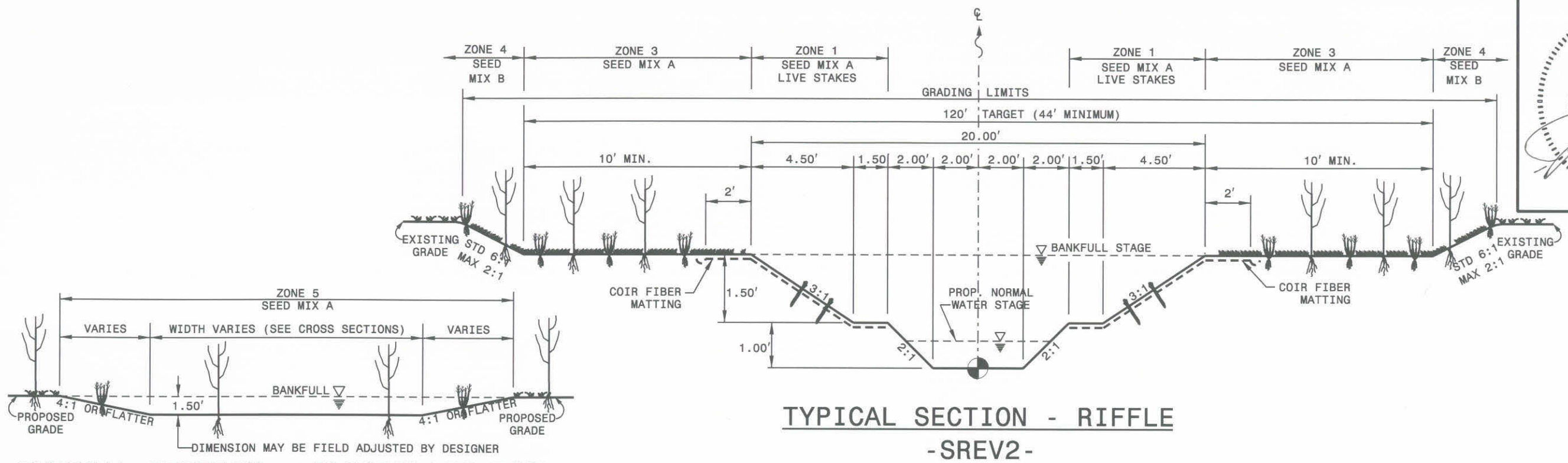
EARTHWORK

REACH	UNCLASSIFIED EXCAVATION (CY)	UNDERCUT (CY)	EMBANKMENT (CY)	BORROW (CY)	** WASTE (CY)	WASTE IN LIEU OF BORROW
-S1-	1,835	0	894	0	941	0
-SREV2-	33,858	0	12,954	0	20,904	0
TOTAL	35,693	0	13,848	0	21,845	0

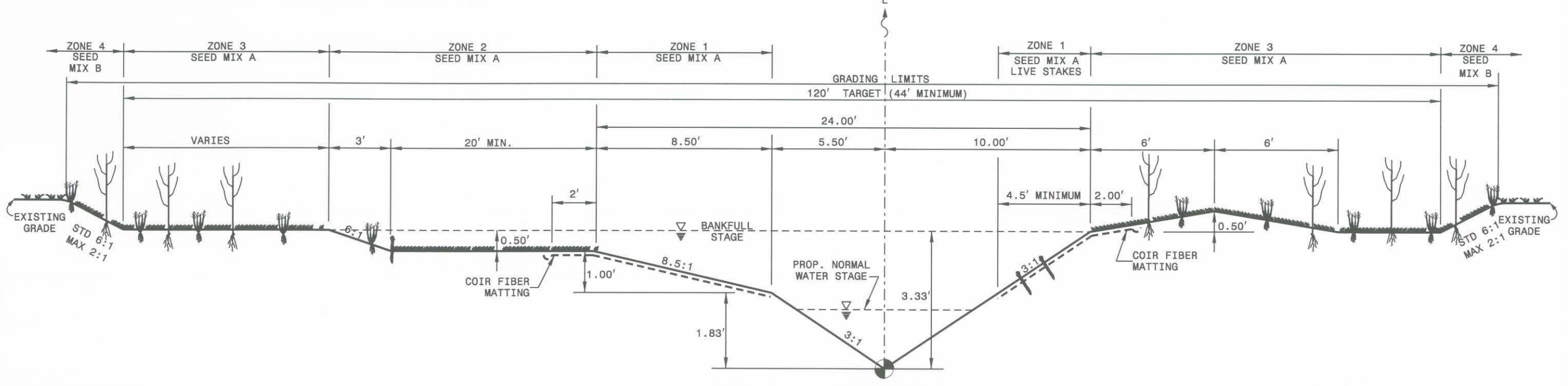
* EMBANKMENT INCLUDES A FACTOR FOR SHRINKAGE.
 ** SEE TECHNICAL SPECIFICATIONS FOR NOTES ON WASTE AREAS.

DATE: 07/13/07 TIME: 10:01 AM
 USER: JWS/RES/DOH

NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY



TYPICAL SECTION - FLOODPLAIN POOL



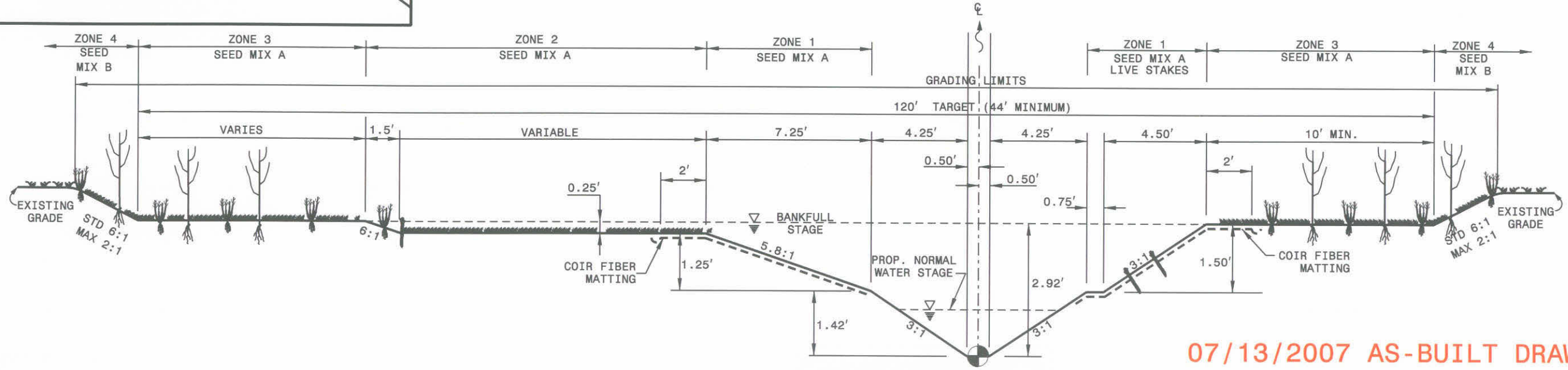
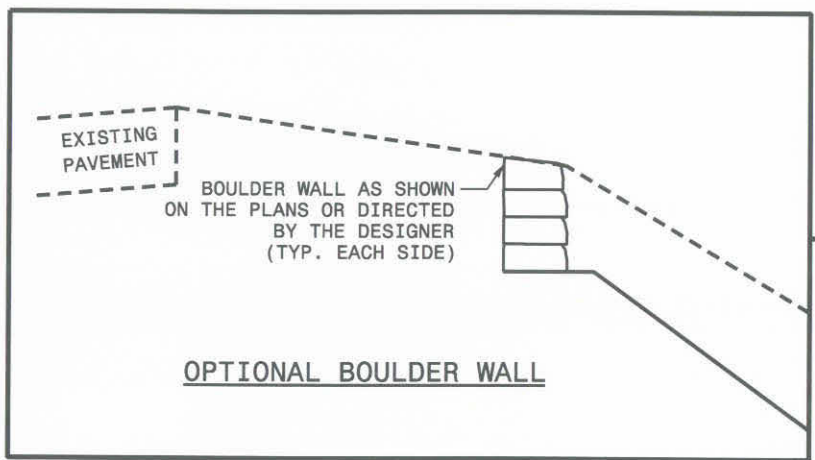
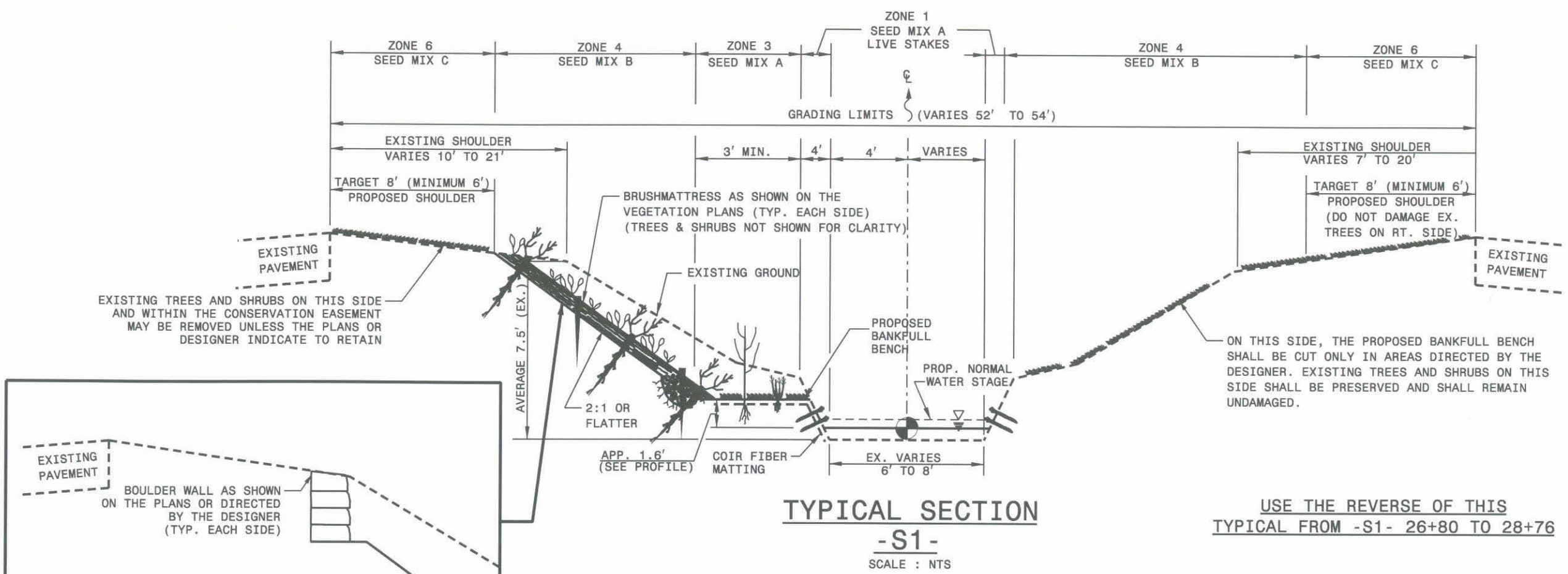
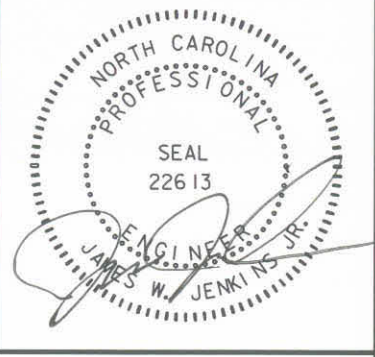
07/13/2007 AS-BUILT DRAWINGS

IN A RIFFLE THE THALWEG (DEEPEST POINT IN CROSS SECTION) IS LOCATED IN CENTER OF CHANNEL
 POOL BANK - TO - BANK SPACING IS ADJUSTED THROUGHOUT THE CURVE.
 POOL BANK - TO - BANK DIMENSIONS SHOWN ARE AT THE CENTER OF THE CURVE.
 SCALE : NTS

NOTE:
 THE PLANTING ZONES SHOWN ON THE TYPICAL SECTIONS ARE FOR THE USUAL CASE, BUT MAY NOT BE USED ALONE. THE SPECIFICATIONS, DETAILS, AND PLANTING PLAN MUST BE USED IN CONJUNCTION WITH THE BASIC DESCRIPTIONS NOTED HERE.

USER: russel@barbour DATE: 11/20/2007
 DGN: 03-06031-01-CONSTRUCTION-SECTION-CROSS-SECTION-RIFFLE.dwg

NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY



07/13/2007 AS-BUILT DRAWINGS

NOTE:
 THE PLANTING ZONES SHOWN ON THE TYPICAL SECTIONS ARE FOR THE USUAL CASE, BUT MAY NOT BE USED ALONE. THE SPECIFICATIONS, DETAILS, AND PLANTING PLAN MUST BE USED IN CONJUNCTION WITH THE BASIC DESCRIPTIONS NOTED HERE.

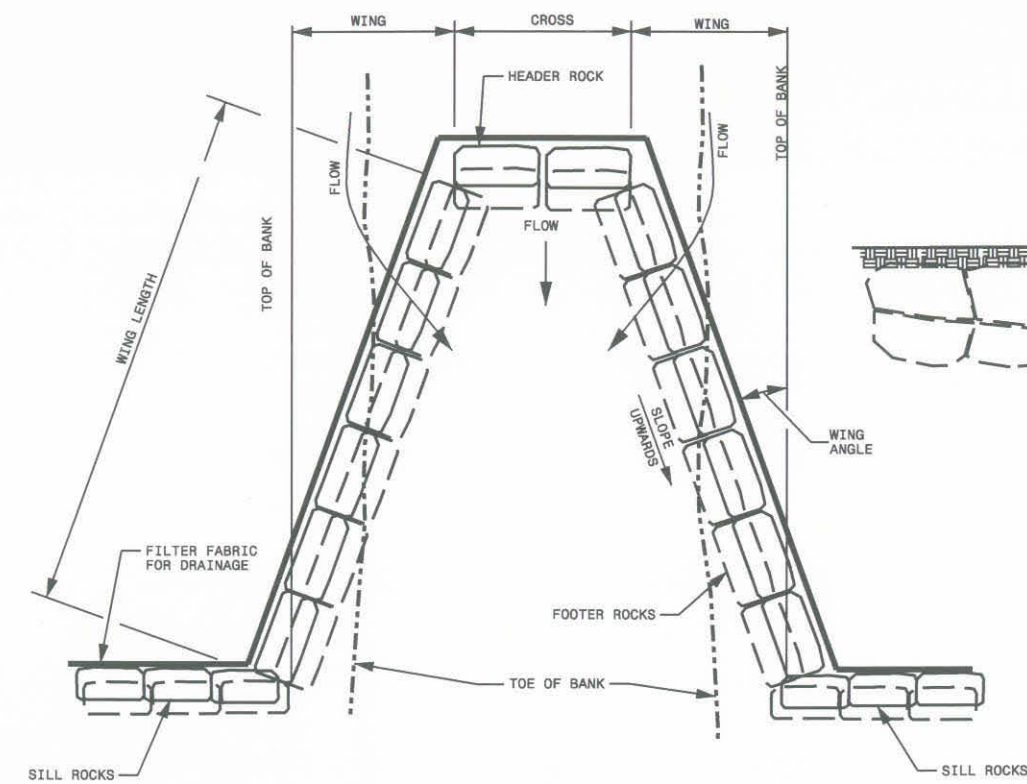
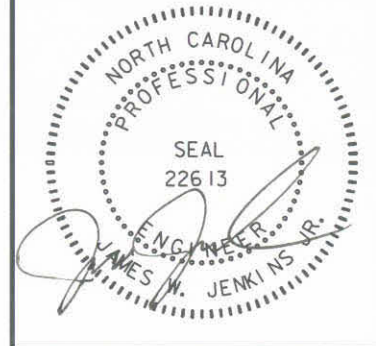
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NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY

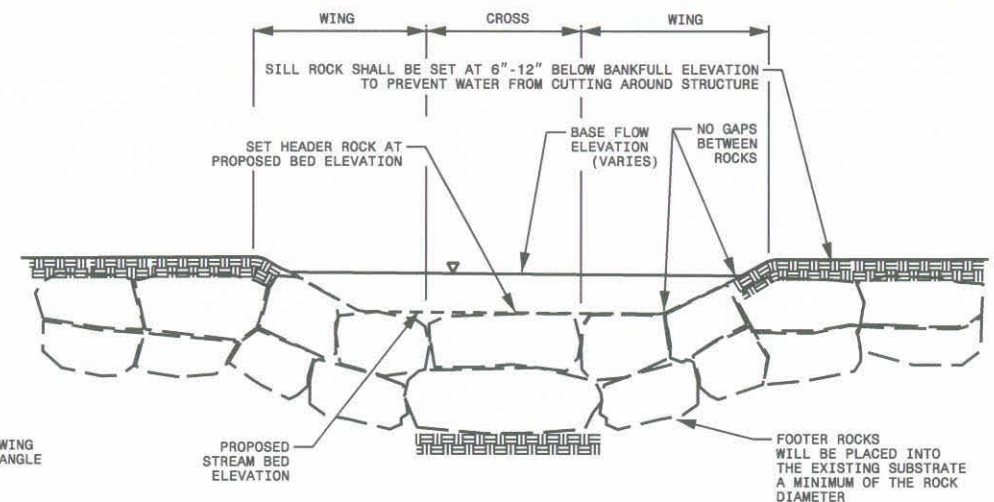
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
 SHEET NO. C-5
 DETAILS



PLAN VIEW

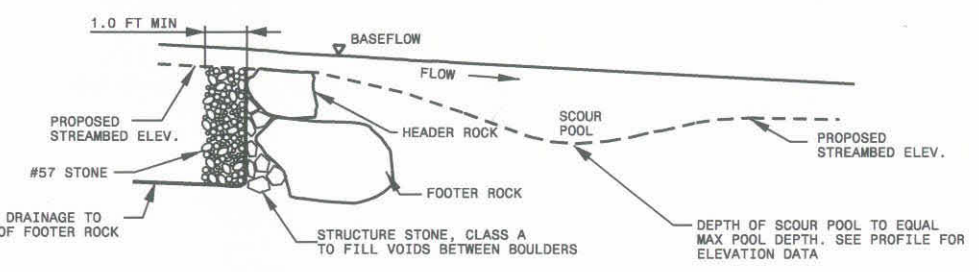


CROSS SECTION

ROCK CROSS VANE

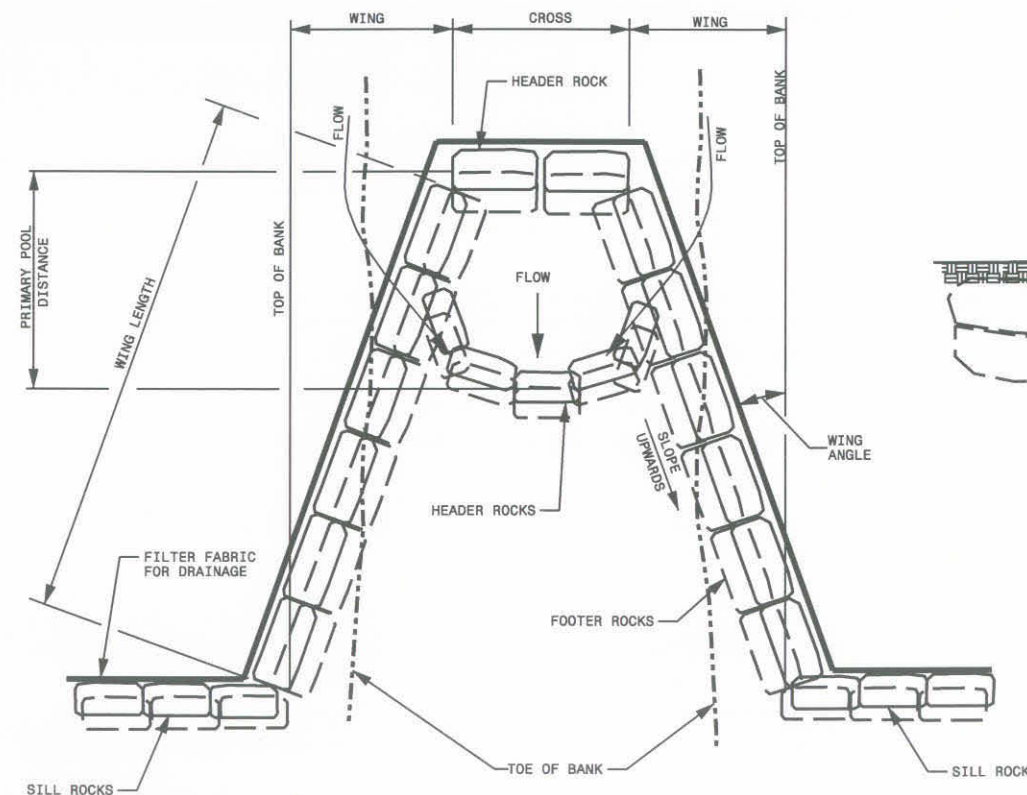
SCALE: NTS

	-S1-	-SREV2-
WING ANGLE	21°	20°
CROSS WIDTH	4'	6'
WING RISE	1.1'	2.0'
INTERIOR TO INTERIOR AT WING END	12'	20'
WING LENGTH	11'	20.5'
APPROXIMATE LENGTH ALONG CENTERLINE	10'	19'

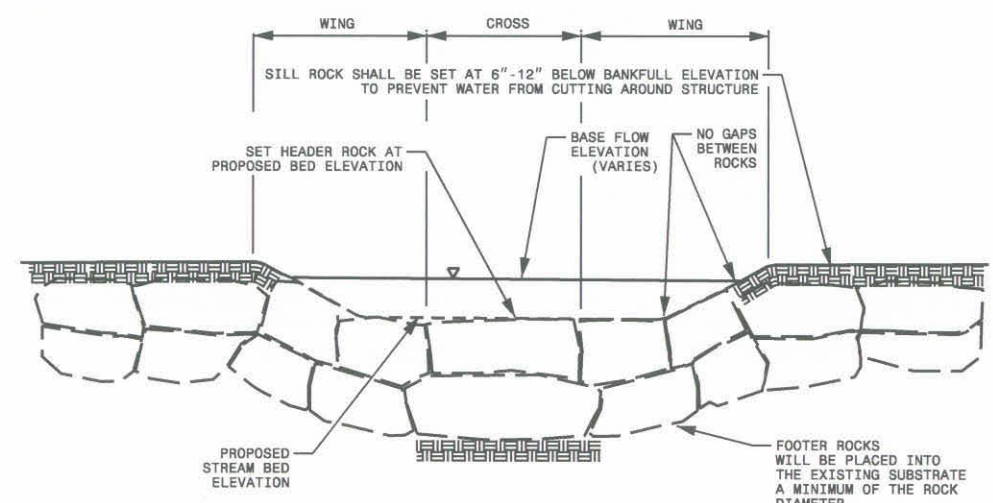


PROFILE VIEW

NOTES:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.



PLAN VIEW

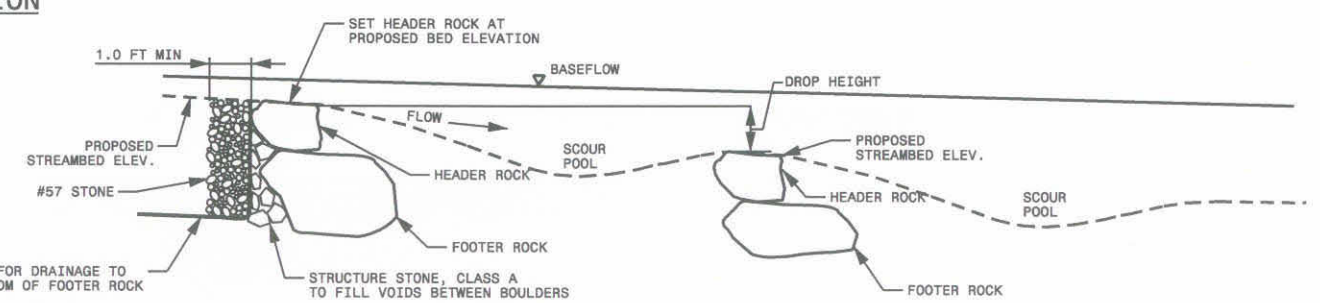


CROSS SECTION

DOUBLE DROP ROCK CROSS VANE

SCALE: NTS

	-S1-	-SREV2-
WING ANGLE	21°	N/A
CROSS WIDTH	4'	N/A
WING RISE	1.1'	N/A
INTERIOR TO INTERIOR AT WING END	12'	N/A
WING LENGTH	11'	N/A
APPROXIMATE LENGTH ALONG CENTERLINE	10'	N/A
DROP HEIGHT	0.25'	N/A
PRIMARY POOL DISTANCE	5'	N/A



PROFILE VIEW

NOTES:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.

07/13/2007 AS-BUILT DRAWINGS

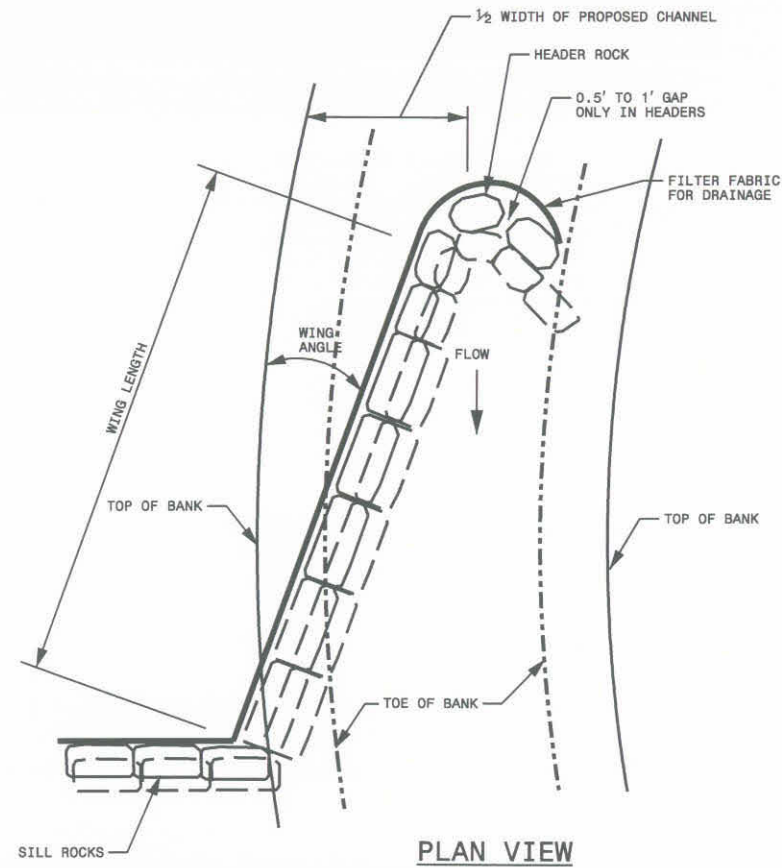
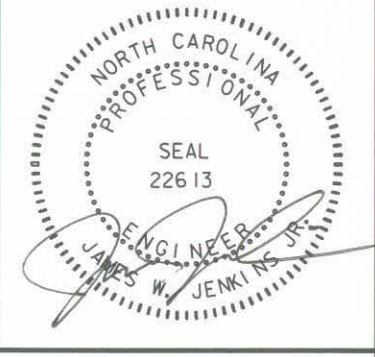
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 DGN: 03-06031-01-CONSTRUCTION-SC03-06031-01-us-built drawings79-457.dgn

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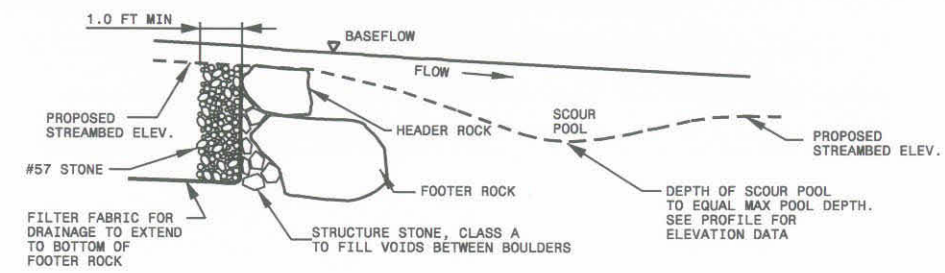
**EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM**

PROJECT NO. 03-06031-01
SHEET NO. C-6
DETAILS



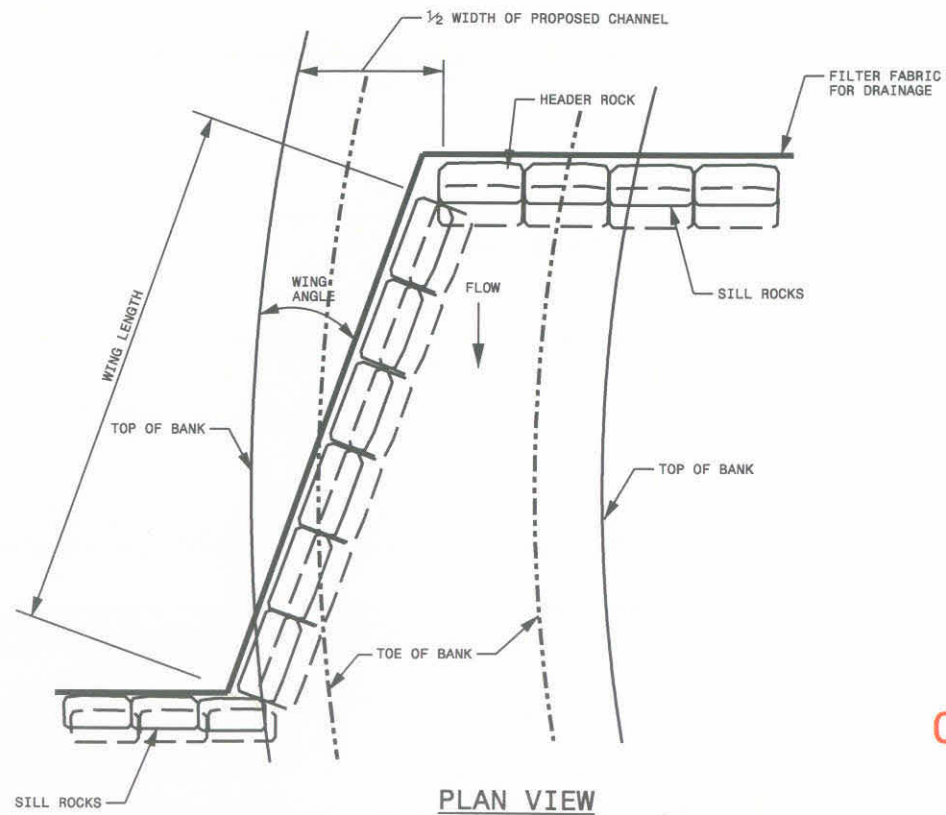
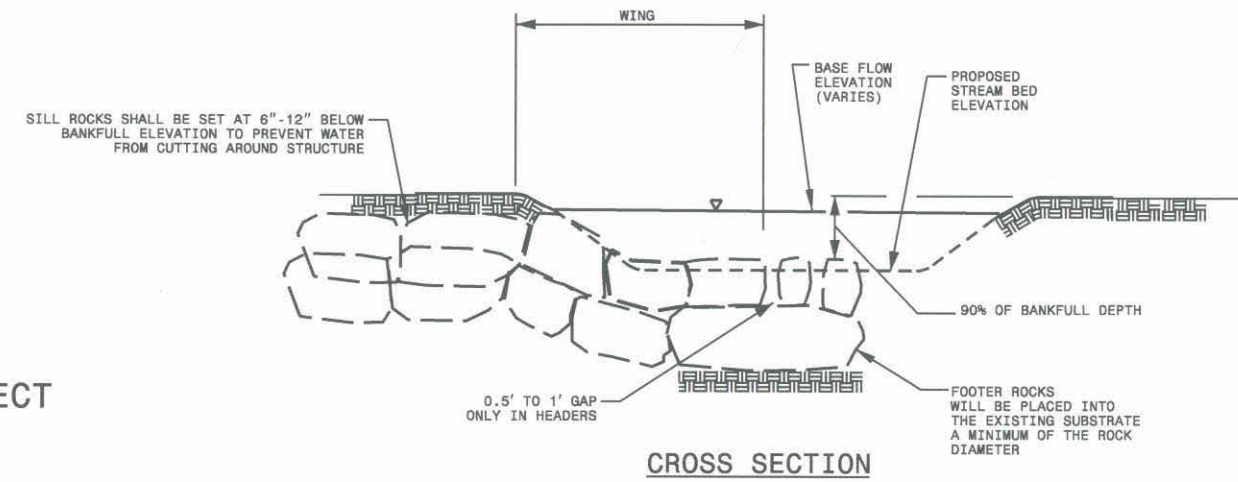
	-S1-	-SREV2-
WING LENGTH	N/A	30'
APPROXIMATE LENGTH ALONG CENTERLINE	N/A	26'
WING RISE	N/A	2.25'

DISREGARD - NOT USED ON THIS PROJECT
ROCK J-HOOK VANE
 SCALE: NTS



PROFILE VIEW

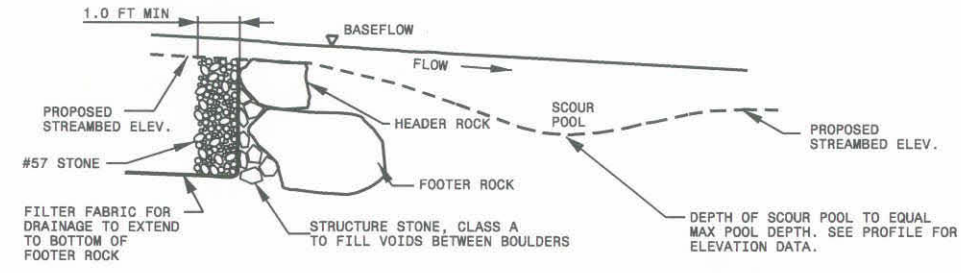
NOTES:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.



	-S1-	-SREV2-
WING LENGTH	N/A	30'
APPROXIMATE LENGTH ALONG CENTERLINE	N/A	26'
WING RISE	N/A	2.25'

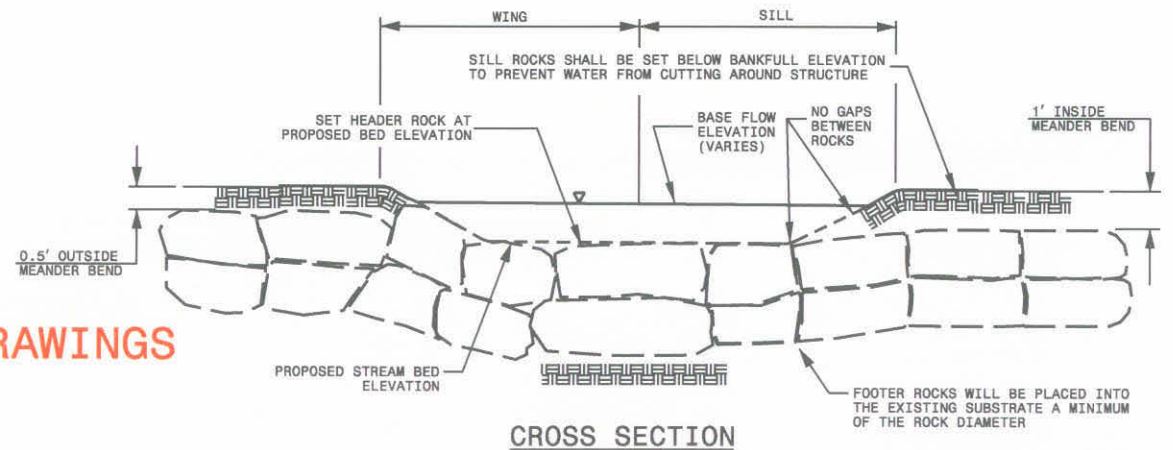
NOTE:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.

07/13/2007 AS-BUILT DRAWINGS
GRADE CONTROL VANE
 SCALE: NTS



PROFILE VIEW

NOTES:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.
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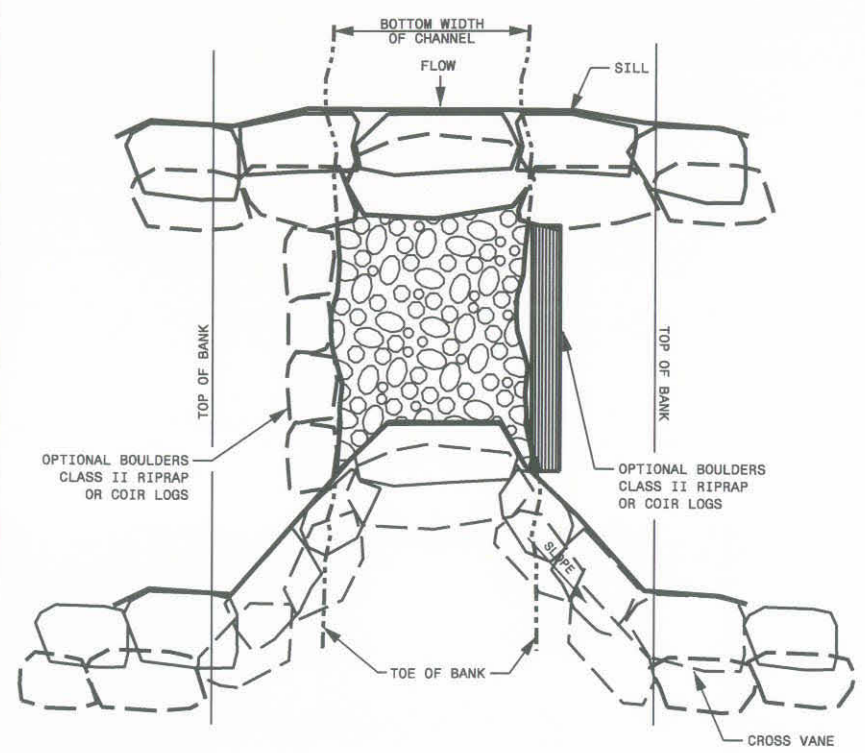
USER: russel.darbour DATE: 11/20/2007
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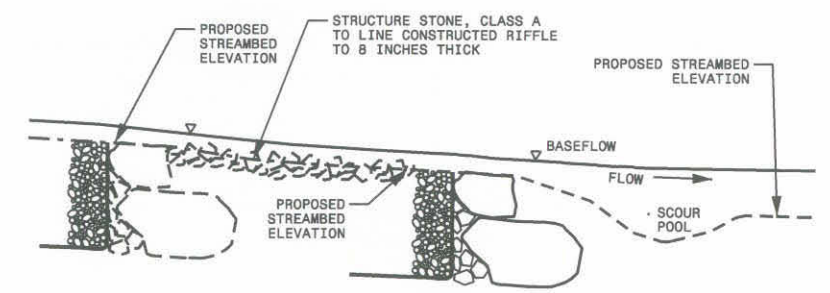
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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-7
 DETAILS



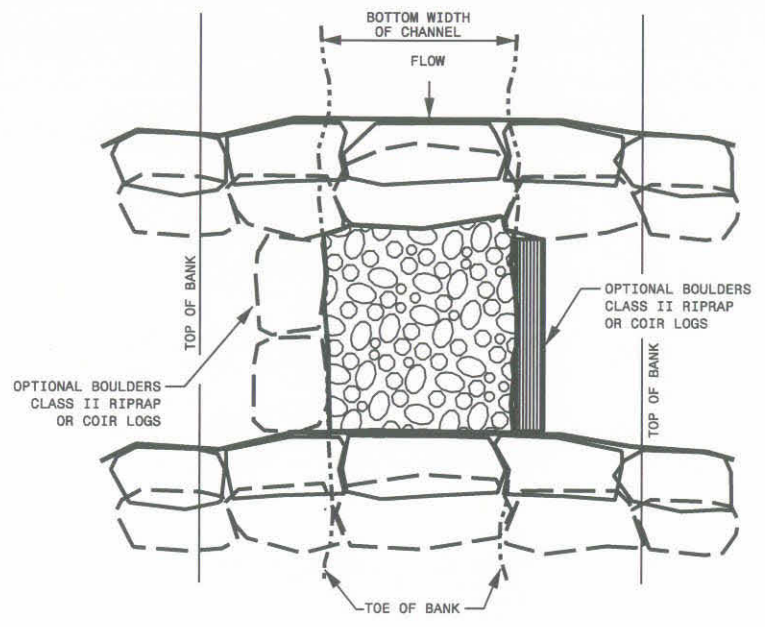
PLAN VIEW



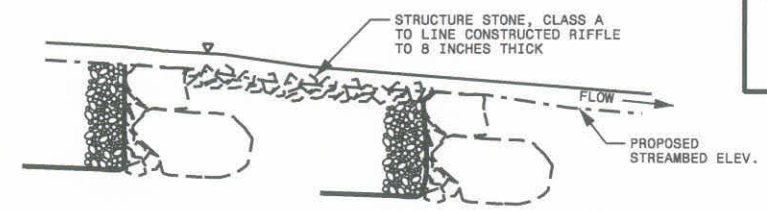
PROFILE VIEW

CONSTRUCTED RIFFLE USING SILL AND CROSS VANE

SCALE: NTS



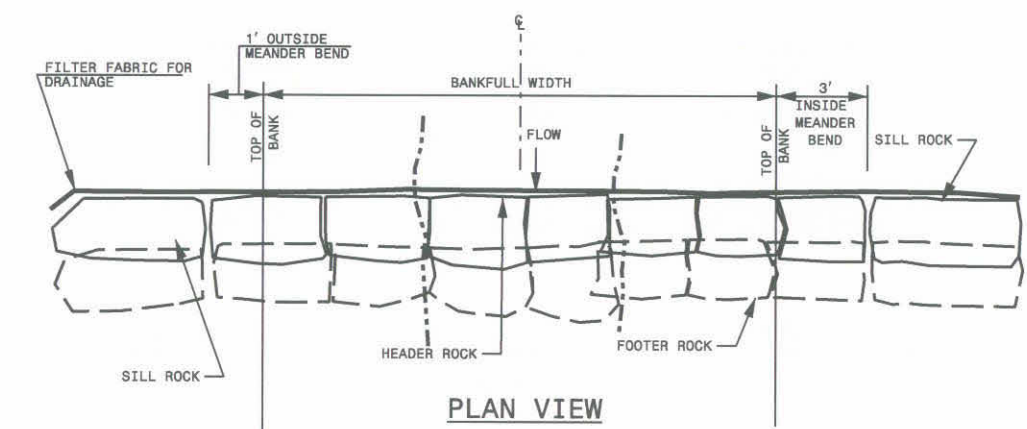
PLAN VIEW



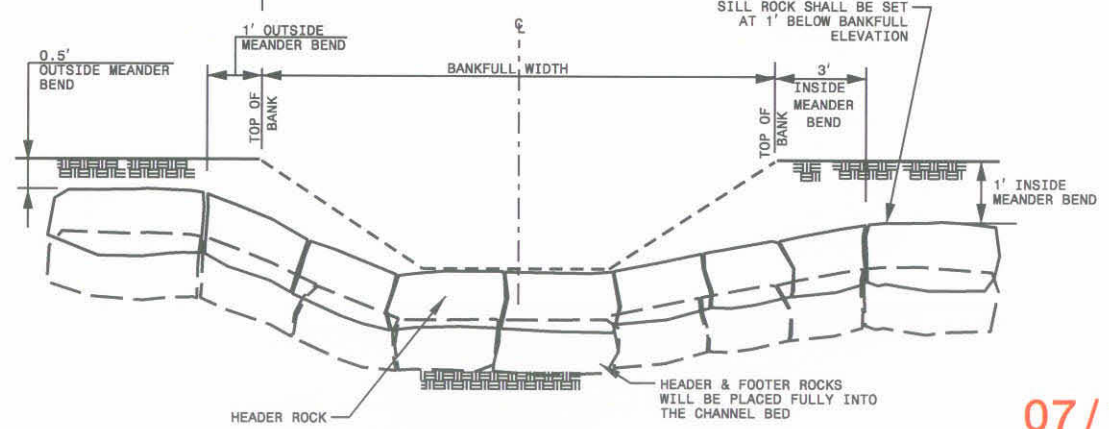
PROFILE VIEW

**DISREGARD - NOT USED ON THIS PROJECT
 CONSTRUCTED RIFFLE USING SILL**

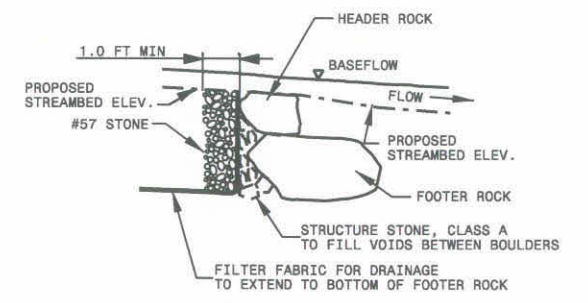
SCALE: NTS



PLAN VIEW



CROSS SECTION



PROFILE VIEW

NOTES:
 HEADER, FOOTER, AND SILL ROCKS TO BE STRUCTURE STONE, CLASS BOULDER.
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.

07/13/2007 AS-BUILT DRAWINGS

ROCK SILL
 SCALE: NTS

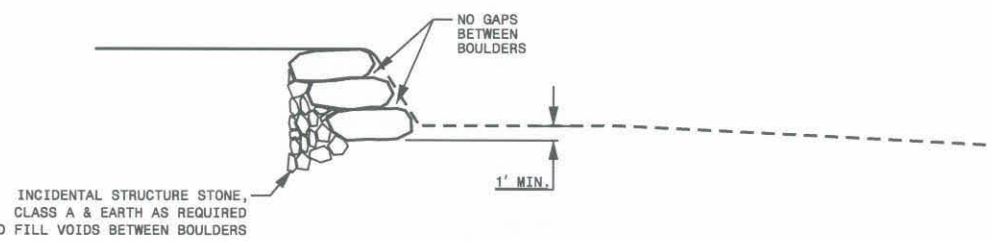
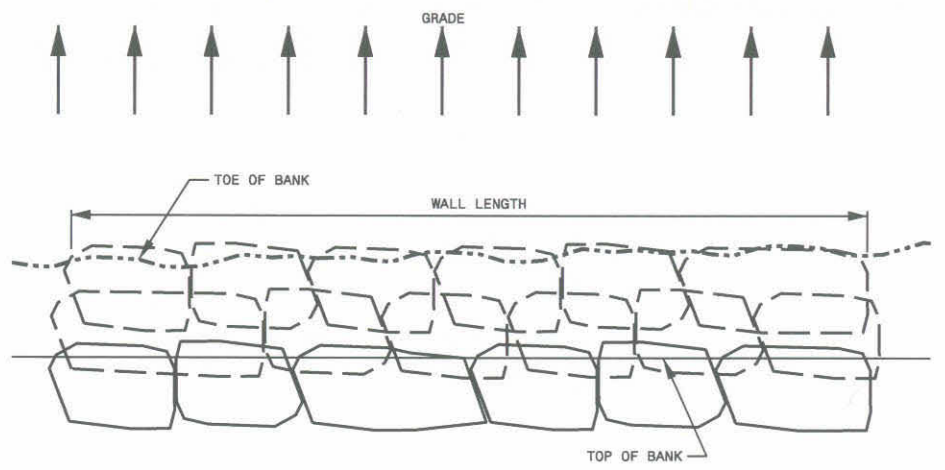
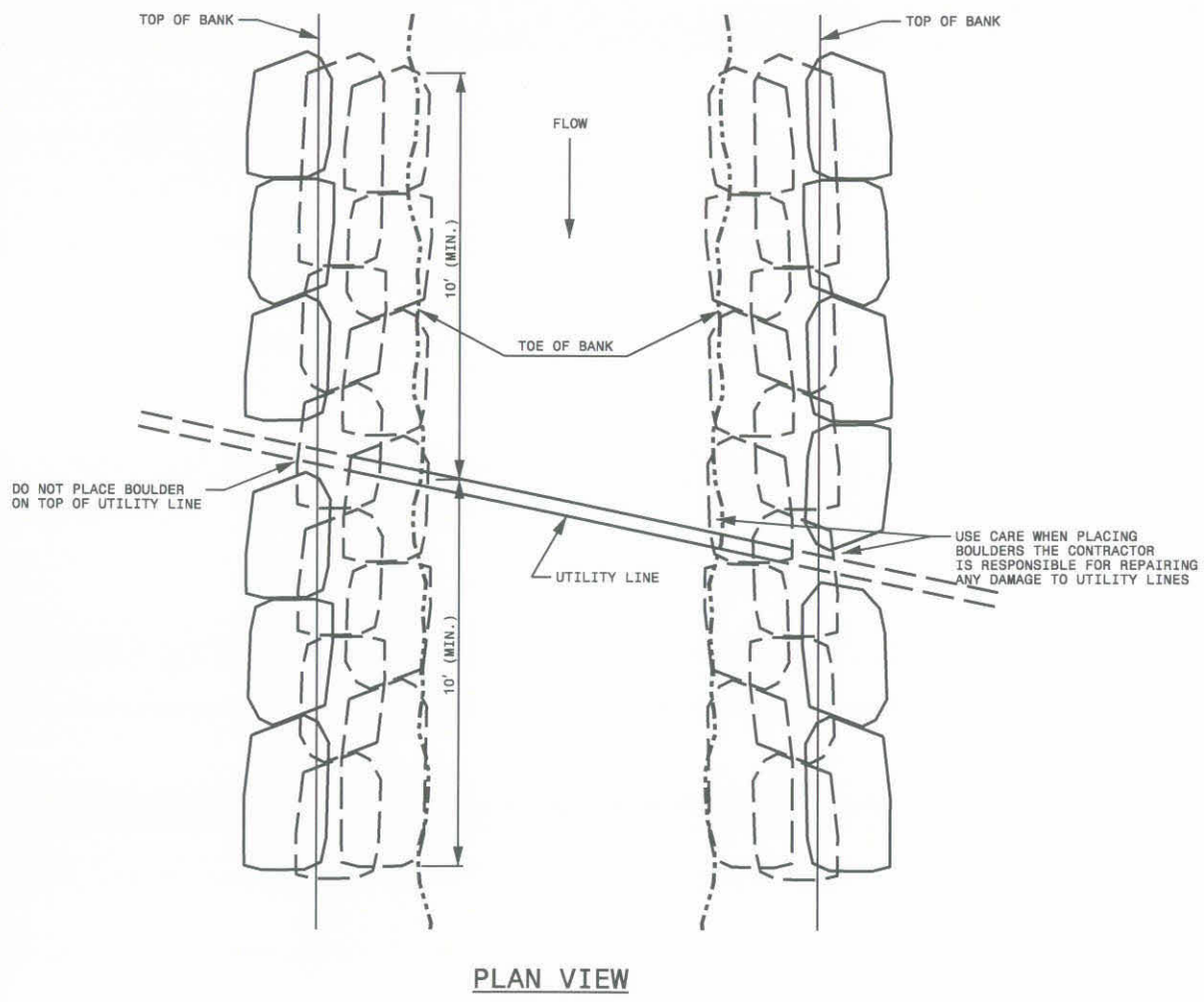
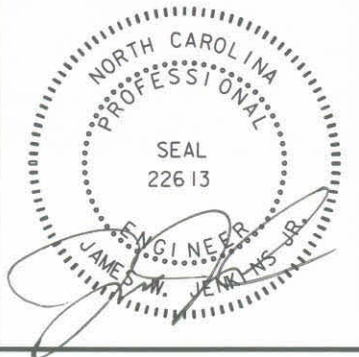
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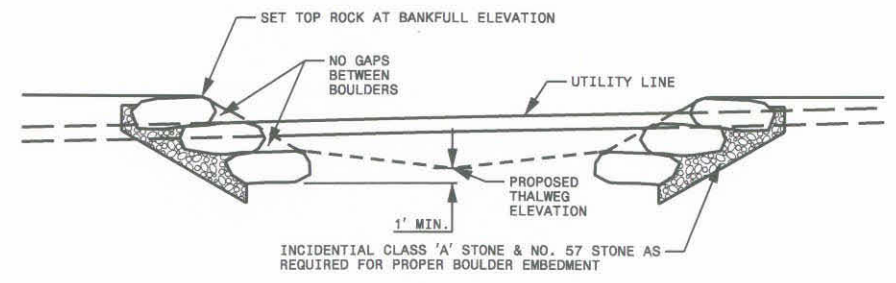
EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-8
 DETAILS



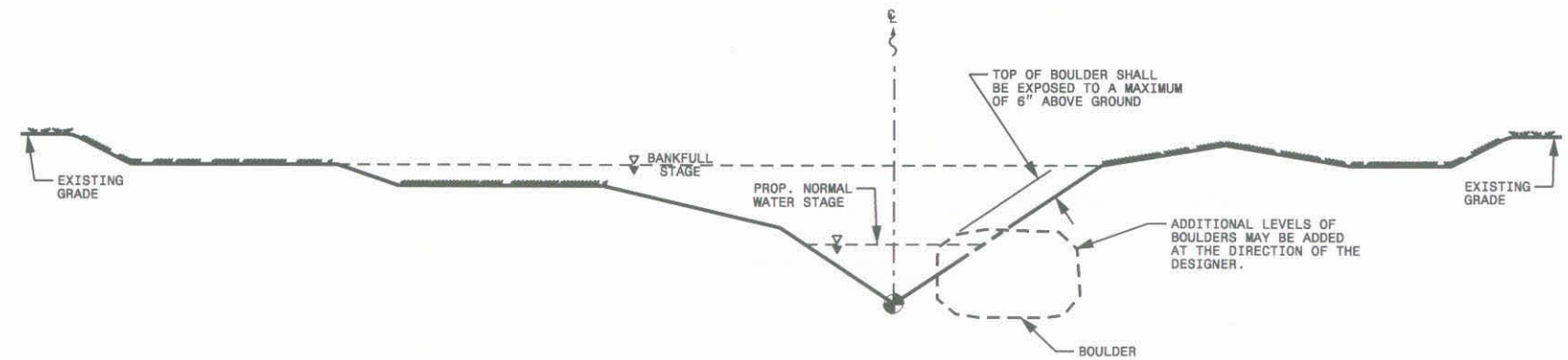
NOTE:
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.

BOULDER WALL
 SCALE: NTS



NOTE:
 AT THE DISCRETION OF THE DESIGNER, SURGE STONE MAY BE USED IN LIEU OF #57 STONE AND CLASS 'A' USED TO FILL VOIDS.

UTILITY LINE SLOPE PROTECTION
 SCALE: NTS



07/13/2007 AS-BUILT DRAWINGS
 SCALE: NTS

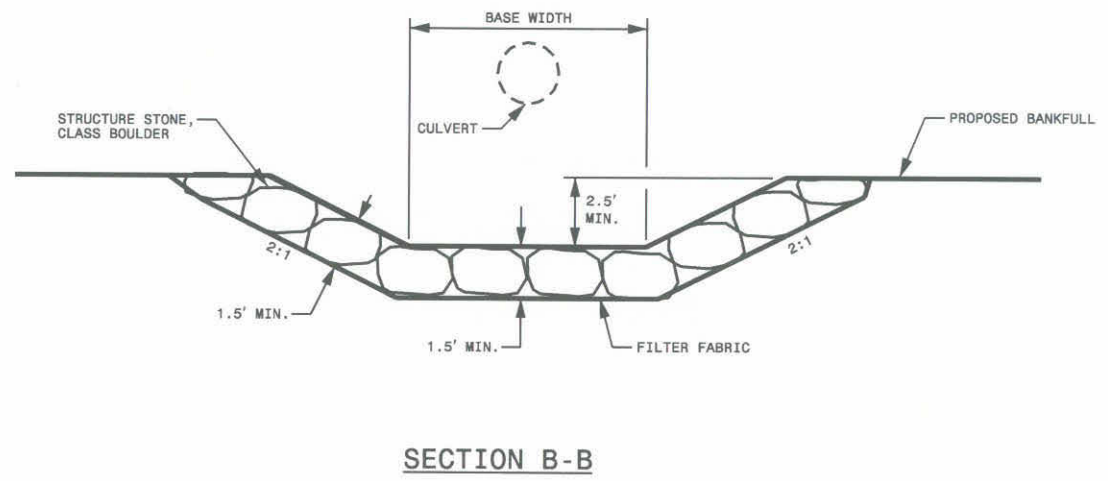
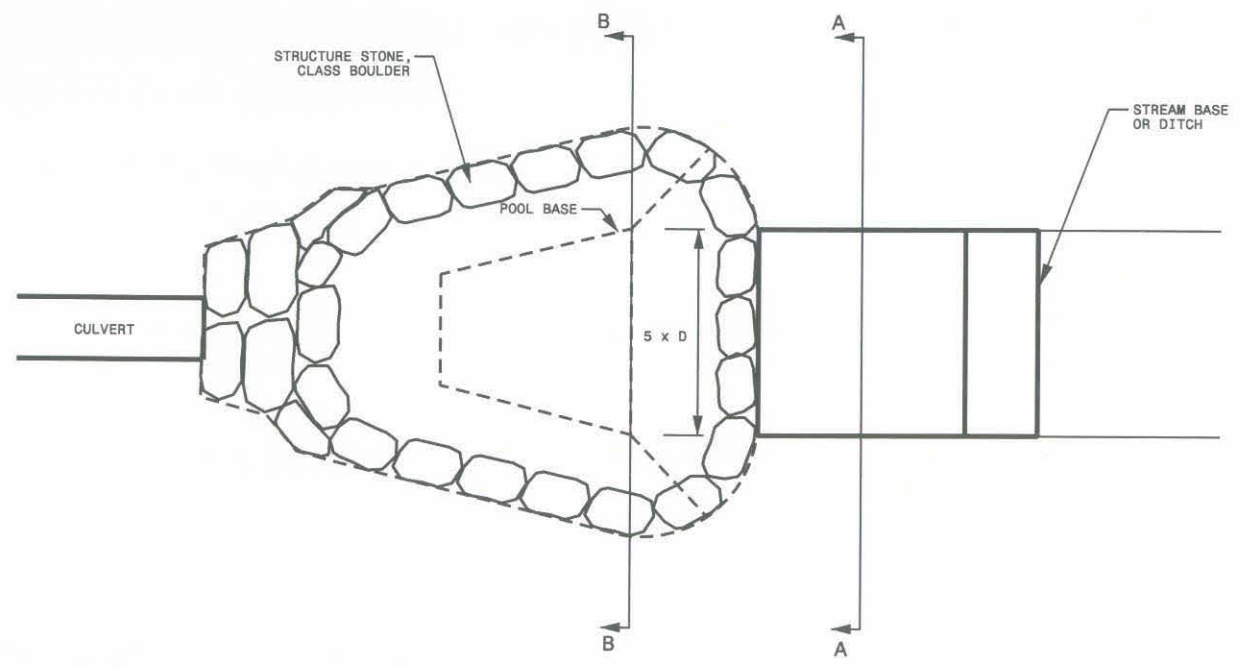
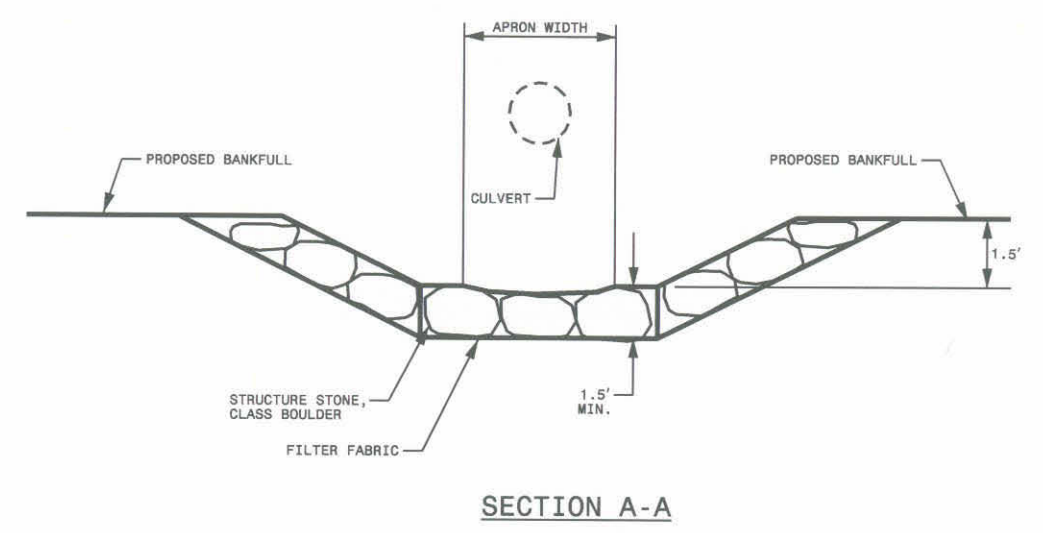
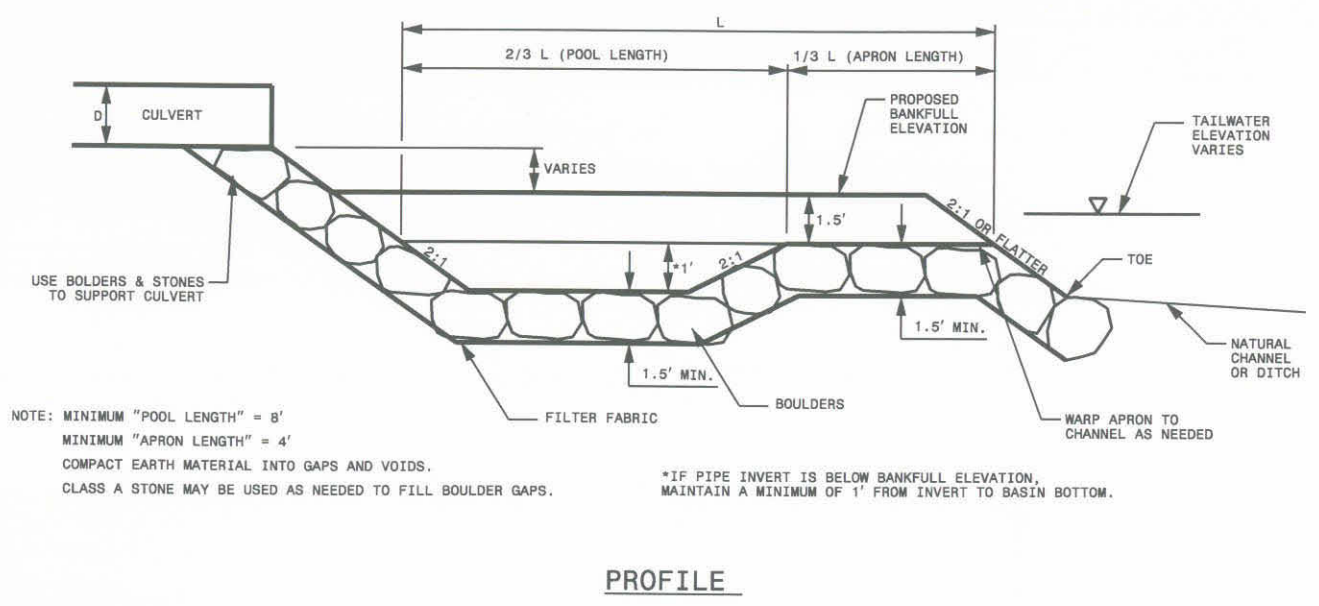
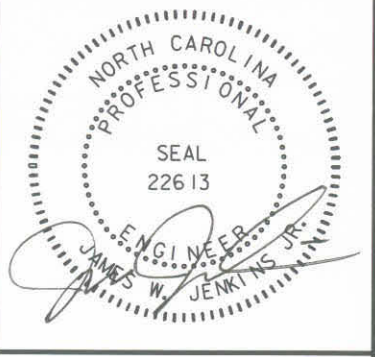
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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-9
 DETAILS



BASIN	L (feet)
#1	36

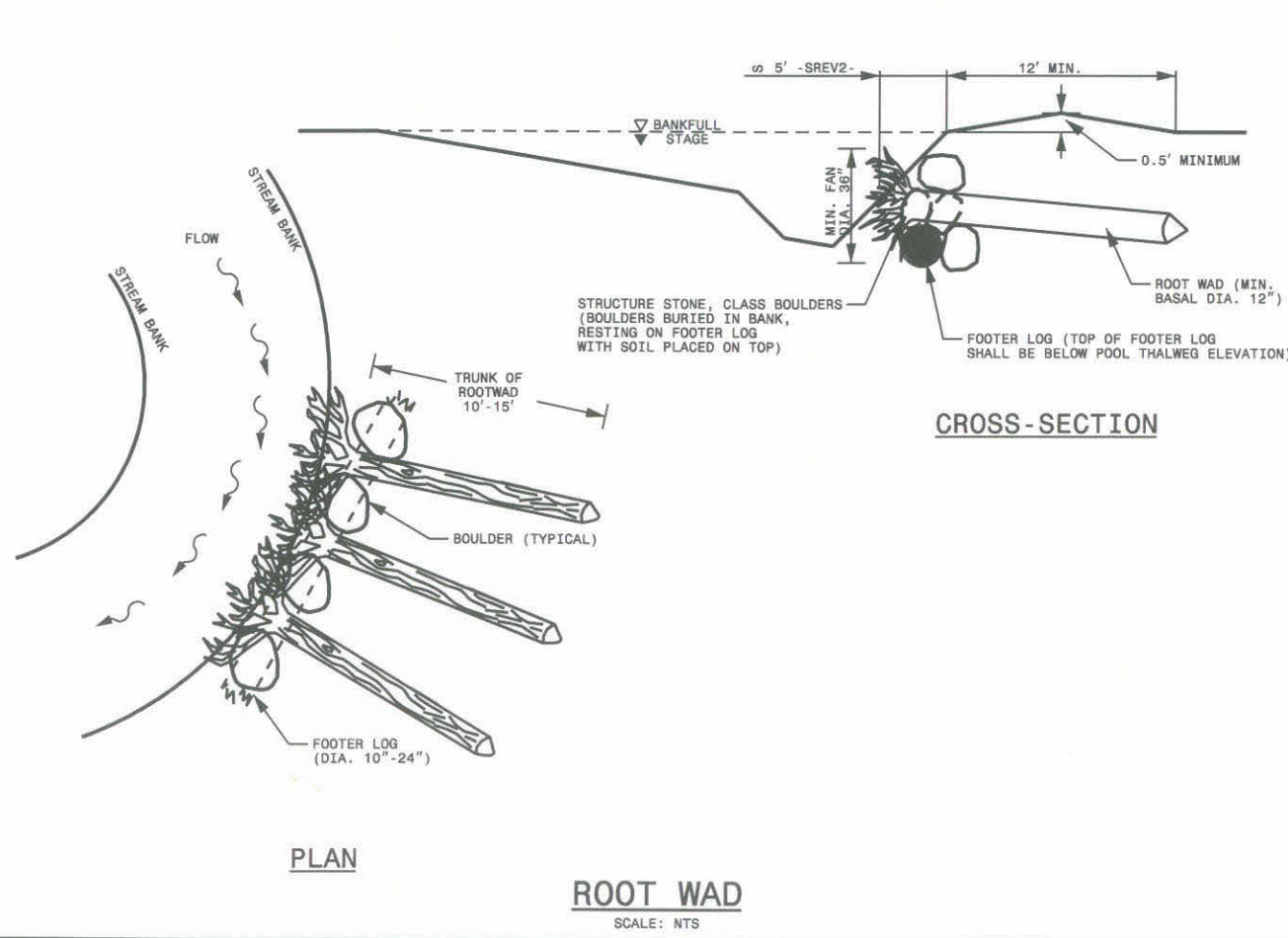
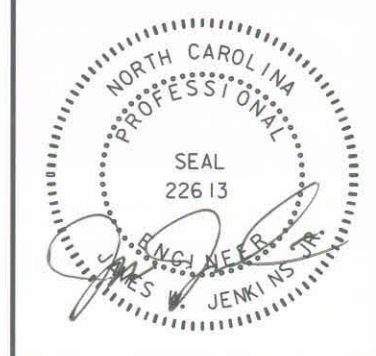
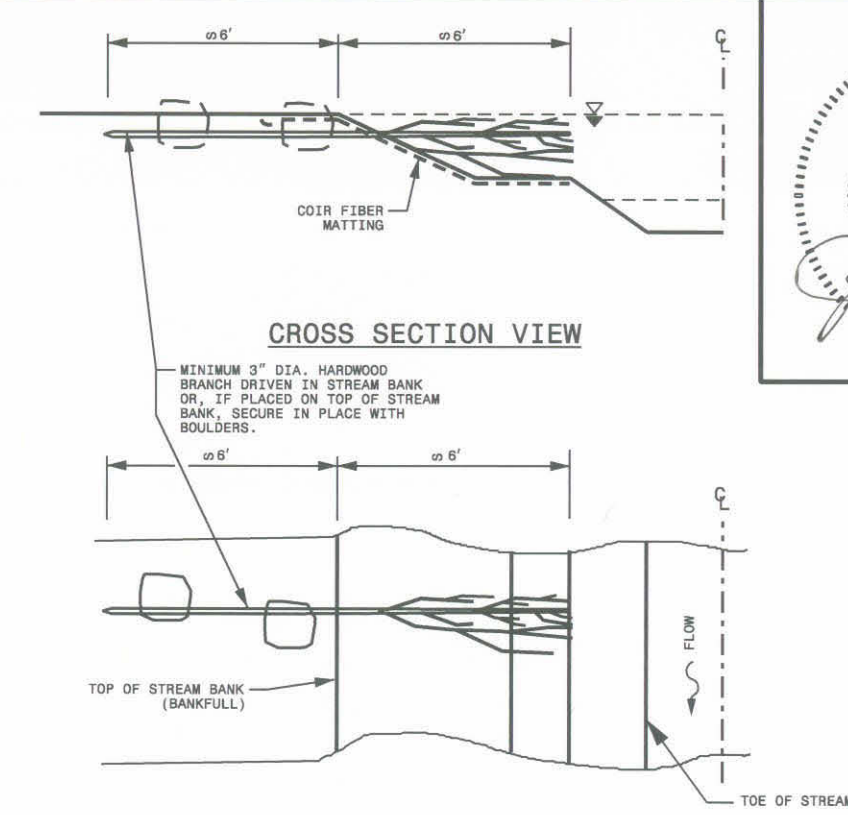
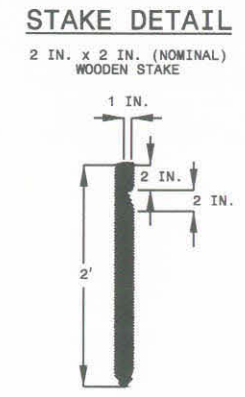
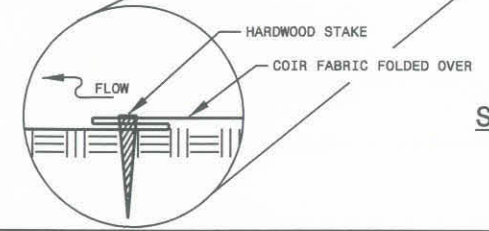
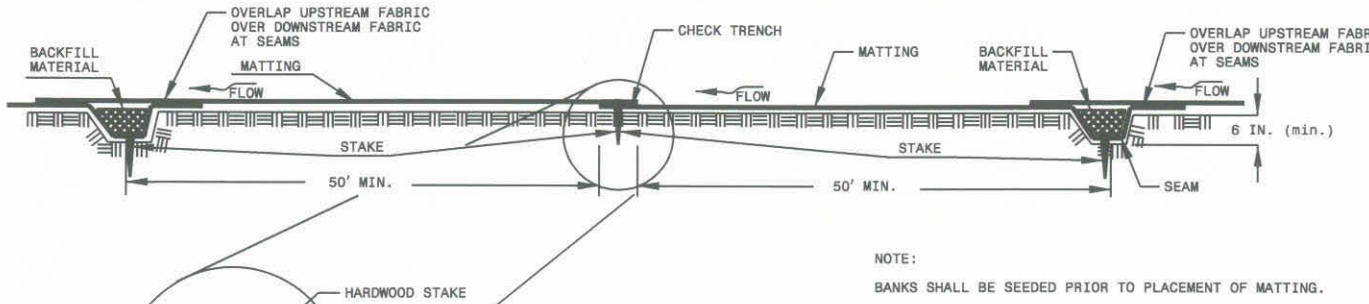
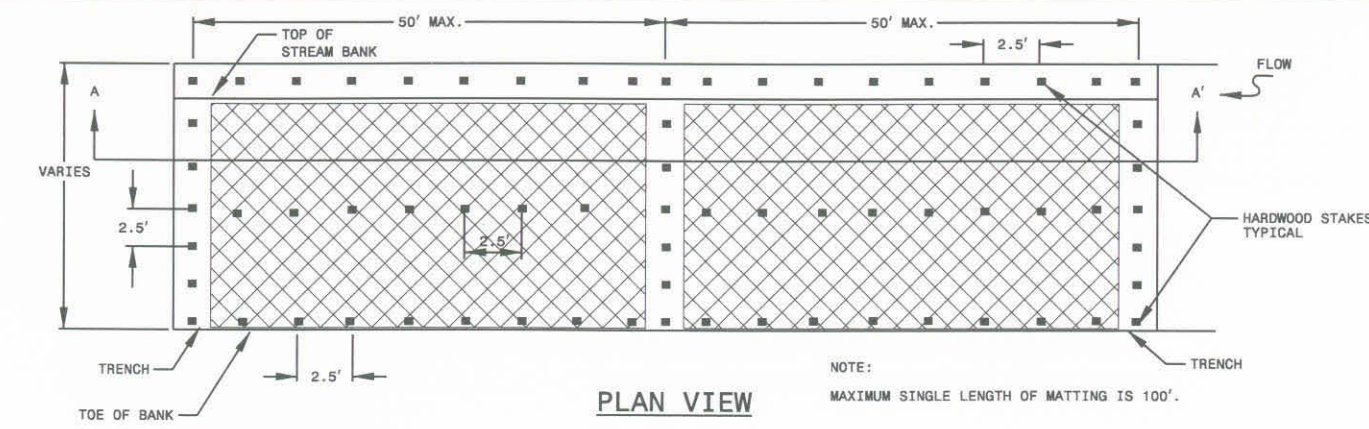
NOTE:
 BASIN BOULDERS NOT SHOWN FOR CLARITY.
 INCIDENTAL RIP RAP AND FILL MATERIAL MAY
 BE REQUIRED AROUND FOOTER ROCKS FOR PROPER EMBEDMENT.

Boulder Dissipator Basin
 SCALE: NTS

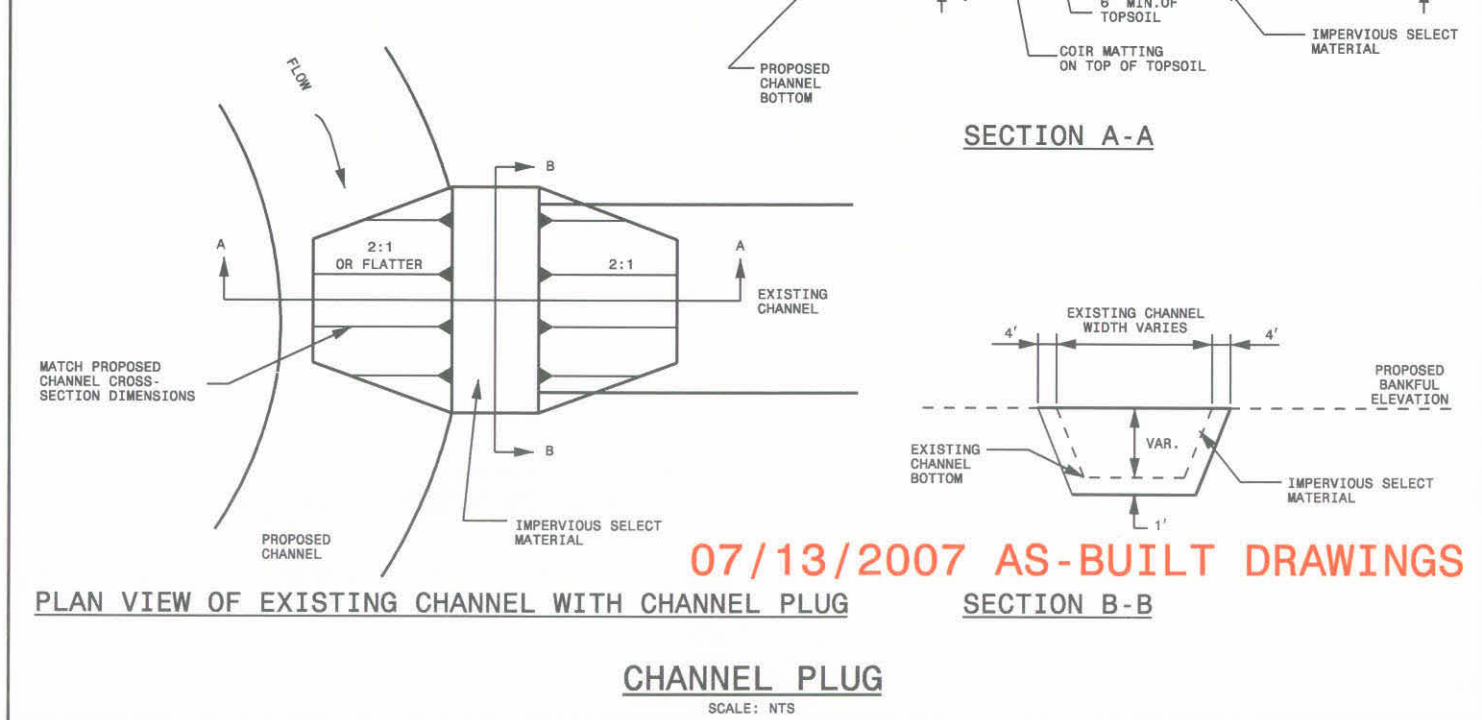
07/13/2007 AS-BUILT DRAWINGS

USER: fuser@tarboro.com DATE: 11/20/2007
 DGN: 0379457A.CONSTRUCTION\SC00\C0000000\BoulderDissipatorBasin.dwg - built drawings\79457det.dgn

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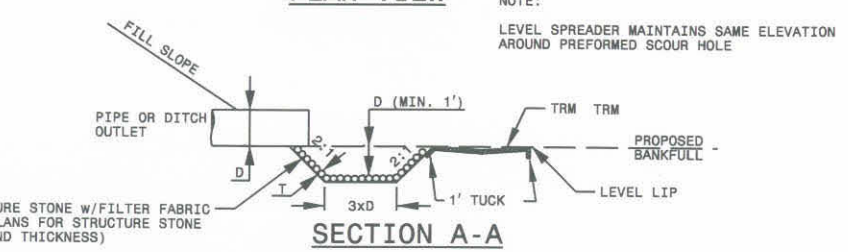
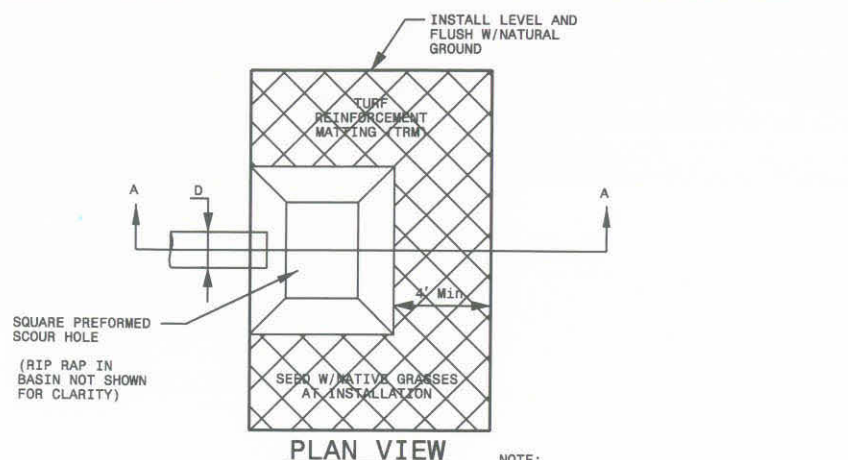


- NOTES:**
- 90% COMPACTION RATE IS REQUIRED ON CHANNEL PLUG OR AS APPROVED BY THE DESIGNER.
 - SIDE SLOPE THAT IS ADJACENT TO PROPOSED STREAM NEEDS TO MATCH PROPOSED CROSS SECTION IN THAT REGION.
 - THIS STRUCTURE SHALL BE PLACED AS DIRECTED BY THE DESIGNER.

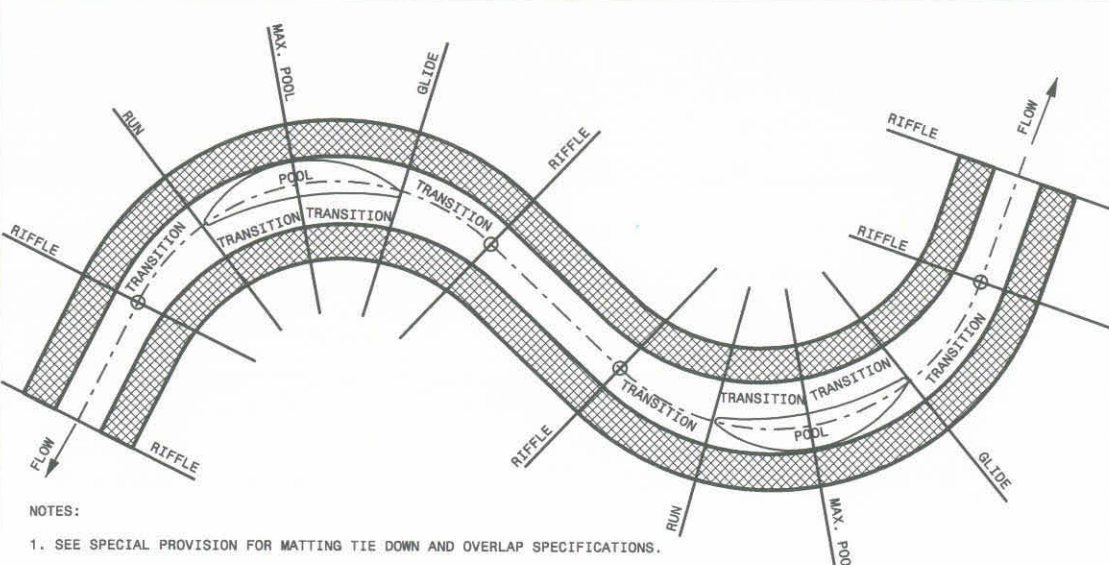


USER: russell@earthtech.com DATE: 11/20/2007
 DGN: Q:\9457\CONSTRUCTION\SC03\0301\0301.dwg drawings\79457.dwg

NO.	REVISION DESCRIPTION	DATE	BY	CHK BY

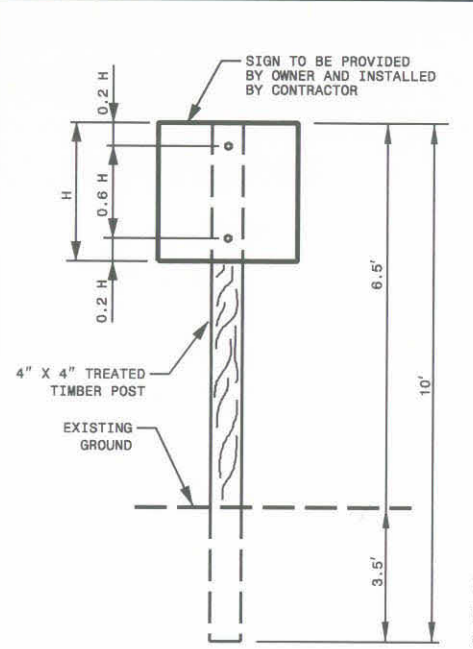


DISREGARD - NOT USED ON THIS PROJECT
PRE-FORMED SCOUR HOLE WITH LEVEL SPREADER
 SCALE: NTS



- NOTES:
1. SEE SPECIAL PROVISION FOR MATTING TIE DOWN AND OVERLAP SPECIFICATIONS.
 2. MATTING SHALL BE COIR FIBER MATTING AND SHALL BE BIODEGRADABLE, INCLUDING TWINE, FILLER, AND BONDING MATERIAL.
 3. AREAS IN BETWEEN LABELED FEATURES ARE TRANSITION AREAS.
 4. THE AREA BETWEEN THE CONCURRENT RIFFLE CROSS-SECTIONS ARE CONSIDERED THE RIFFLE SECTION.
 5. THE AREA BETWEEN THE DOWNSTREAM RIFFLE AND RUN CROSS-SECTION IS CONSIDERED THE RUN SECTION.
 6. THE AREA BETWEEN THE RUN AND GLIDE CROSS-SECTION IS CONSIDERED THE POOL SECTION.
 7. THE AREA BETWEEN THE GLIDE AND THE UPSTREAM RIFFLE CROSS-SECTION IS CONSIDERED THE GLIDE SECTION.

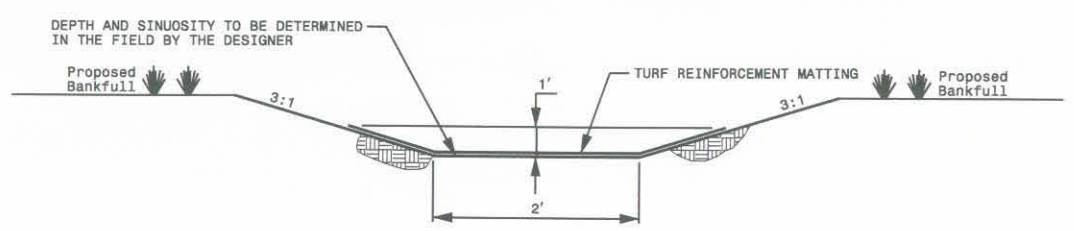
TYPICAL MATTING LOCATION & STANDARD PLAN LAYOUT
 SCALE: NTS



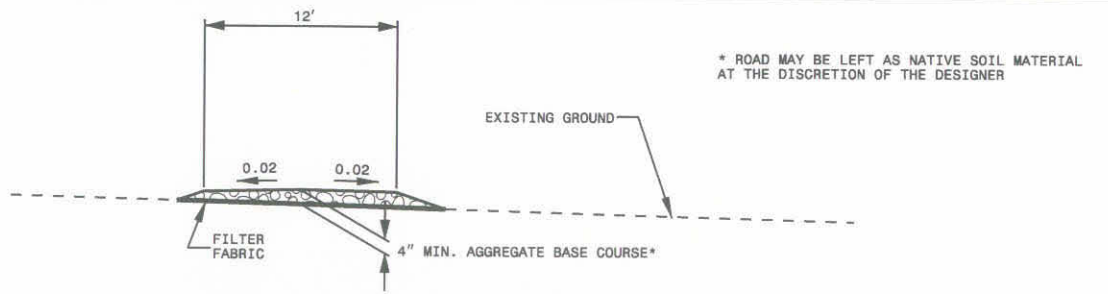
NOTE:
 USE HIGH STRENGTH BOLTS, NUTS AND WASHERS THAT CONFORM TO A.S.T.M. A-325 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-153.

BOLT SIZE (DIA.)	TORQUE (IN LBS.)
1/2" DIA.	1,200
5/8" DIA.	2,400
3/4" DIA.	4,280
7/8" DIA.	6,280
1" DIA.	9,480

SIGN POST DETAIL
 SCALE: NTS

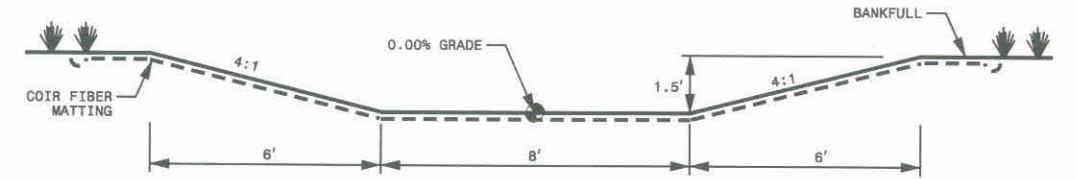


DISREGARD - NOT USED ON THIS PROJECT
2' BASE TAIL DITCH W/TRM LINER
 SCALE: NTS

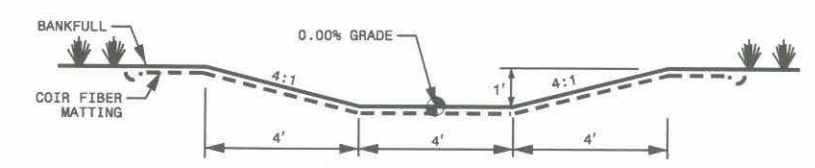


DISREGARD - NOT USED ON THIS PROJECT
PROPOSED CONSTRUCTION ACCESS ROAD - TYPICAL SECTION
 SCALE: NTS

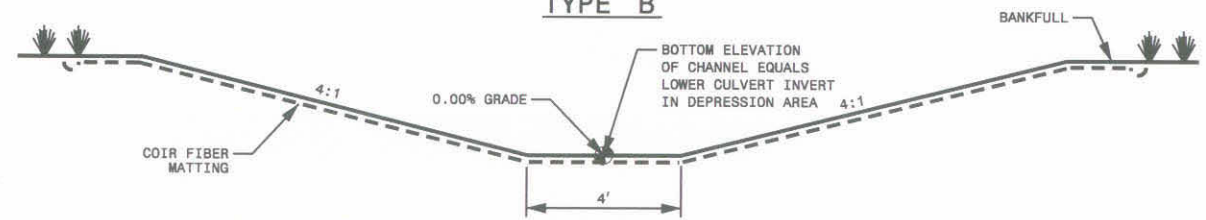
07/13/2007 AS-BUILT DRAWINGS



TYPE 'C'



TYPE 'B'

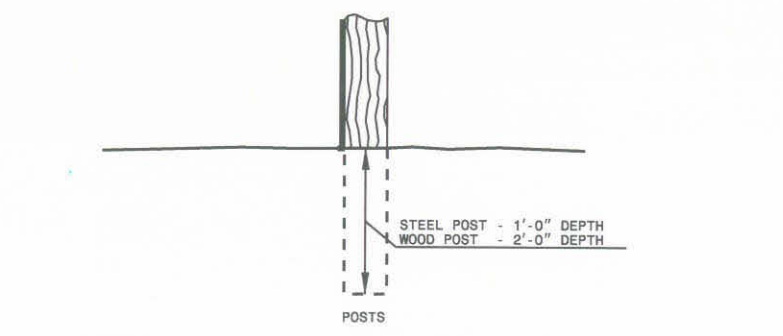


TYPE 'A'

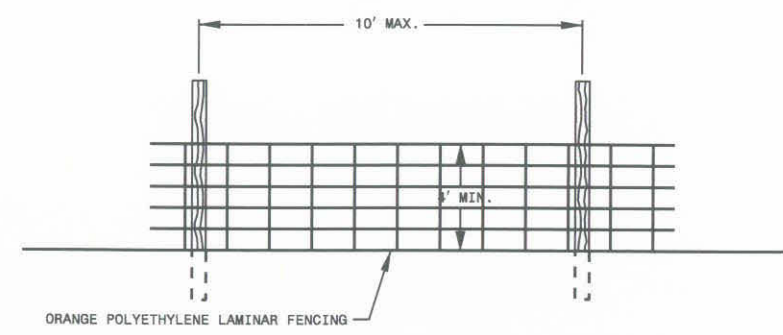
CONNECTION CHANNEL DETAIL
 SCALE: NTS

USER: russelbortovr DATE: 11/20/2007
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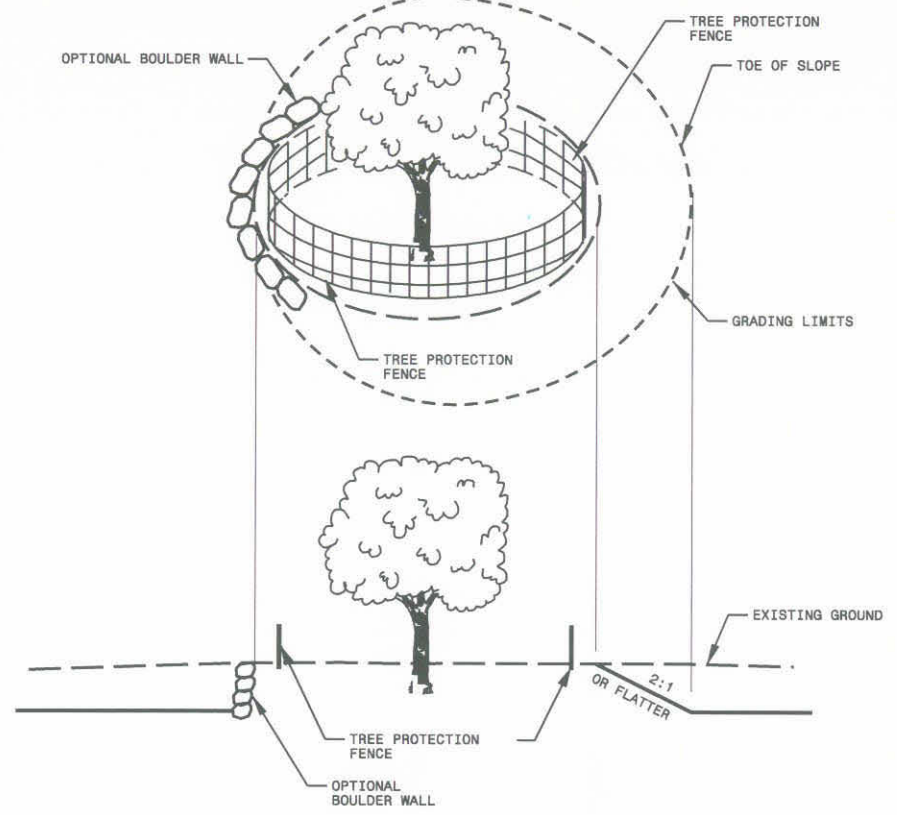
NO.	REVISION DESCRIPTION	DATE	CHK	DATE



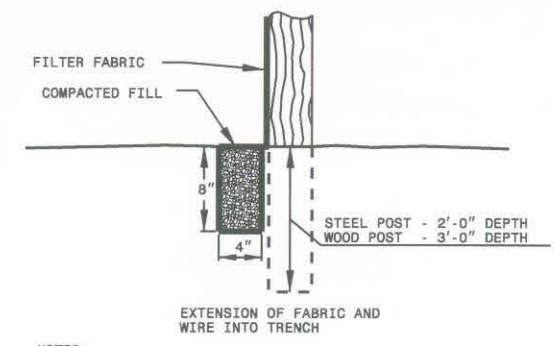
- NOTES:
1. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
 2. WOOD POST SHALL BE 6'-0" IN HEIGHT AND 3" MINIMUM IN DIAMETER.



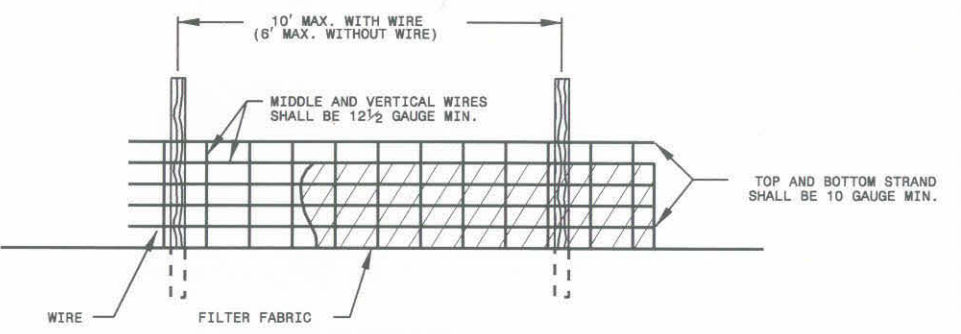
SAFETY FENCE/TREE PROTECTION FENCE
 SCALE: NTS



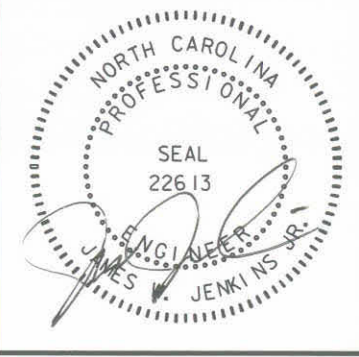
TREE ISLAND
 SCALE: NTS



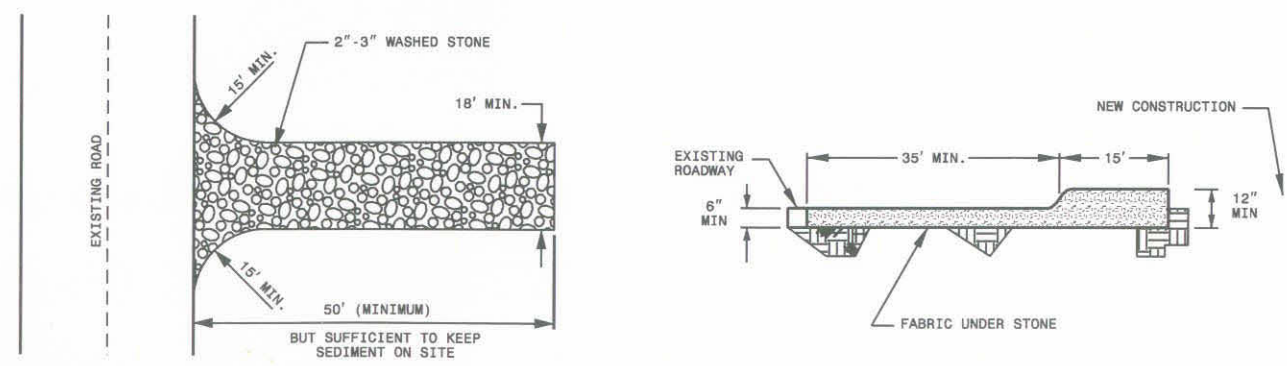
- NOTES:
1. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 2. FILTER FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE DESIGNER.
 3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
 4. WOOD POST SHALL BE 6'-0" IN HEIGHT AND 3" MINIMUM IN DIAMETER.



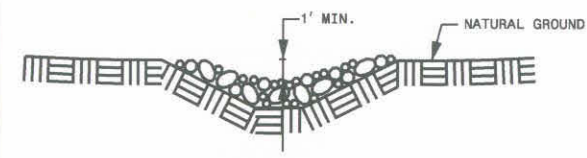
TEMPORARY SILT FENCE
 SCALE: NTS



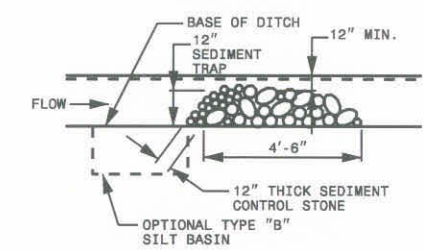
- NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED
 2. A 6" TO 12" MINIMUM STABILIZED PAD OF WASHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC STREET. THE STONE SHALL BE PLACED ON TOP OF FILTER FABRIC FOR A DISTANCE OF 50 FEET MINIMUM.
 3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 4. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
 5. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
 6. ADDITIONAL GRADING SHALL BE REQUIRED TO CONNECT THE STONE ENTRANCE TO THE EXISTING GROUND. UPON COMPLETION OF THE PROJECT, THE ROAD SHALL BE RETURNED TO A CONDITION THAT MEETS OR EXCEEDS THE PRE-EXISTING CONDITIONS.



TEMPORARY CONSTRUCTION ENTRANCE
 SCALE: NTS

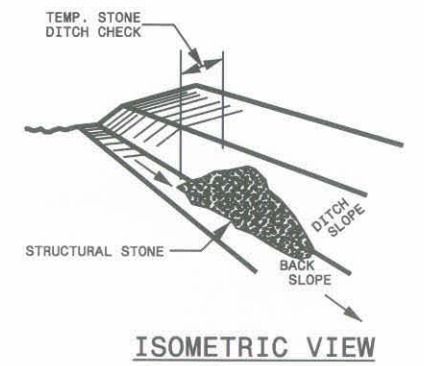


CROSS SECTION



ELEVATION VIEW

07/13/2007 AS-BUILT DRAWINGS



ISOMETRIC VIEW

- NOTES:
1. STRUCTURAL STONE SHALL BE STRUCTURE STONE, CLASS "B".
 2. THE DESIGNER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.
 3. SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57 STONE. SEDIMENT CONTROL STONE SHALL BE USED AS DIRECTED BY THE DESIGNER.

DISREGARD - NOT USED ON THIS PROJECT
TEMPORARY ROCK SILT CHECK TYPE 'B'
 SCALE: NTS

USER: russelljarbour DATE: 11/20/2007 DGN: QN9457CONSTRUCTION-SCOC080816.rvt EarthTech\BIM-Build drawings\9457det.dgn

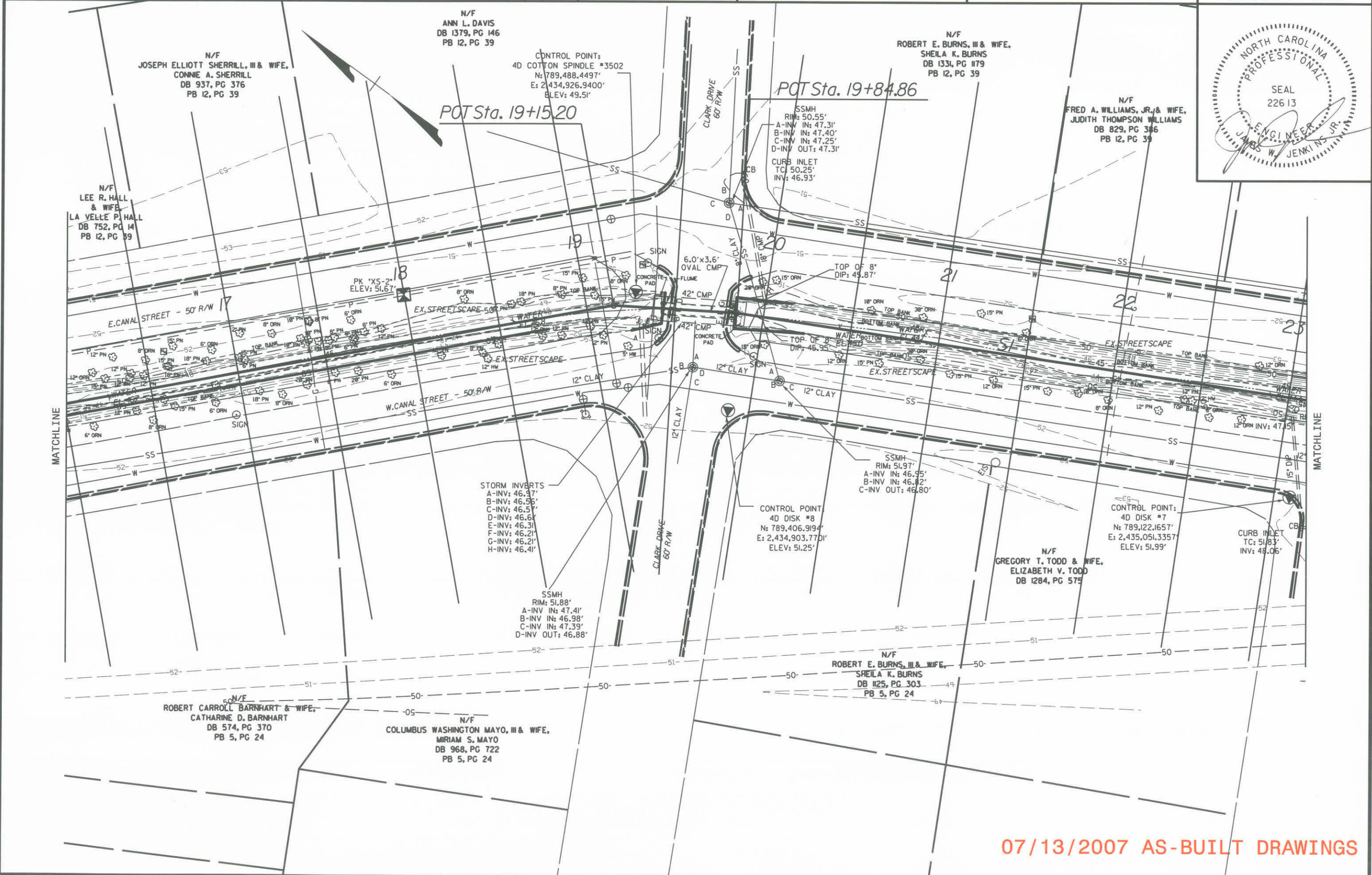
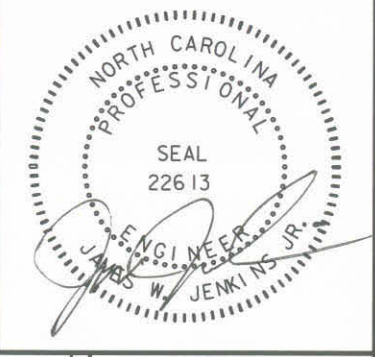
NO.	REVISION DESCRIPTION	DATE



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Phone: (919) 854-6200 Fax: (919) 854-6259

EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-18
EXISTING CONDITIONS & CROSS SECTION LAYOUT



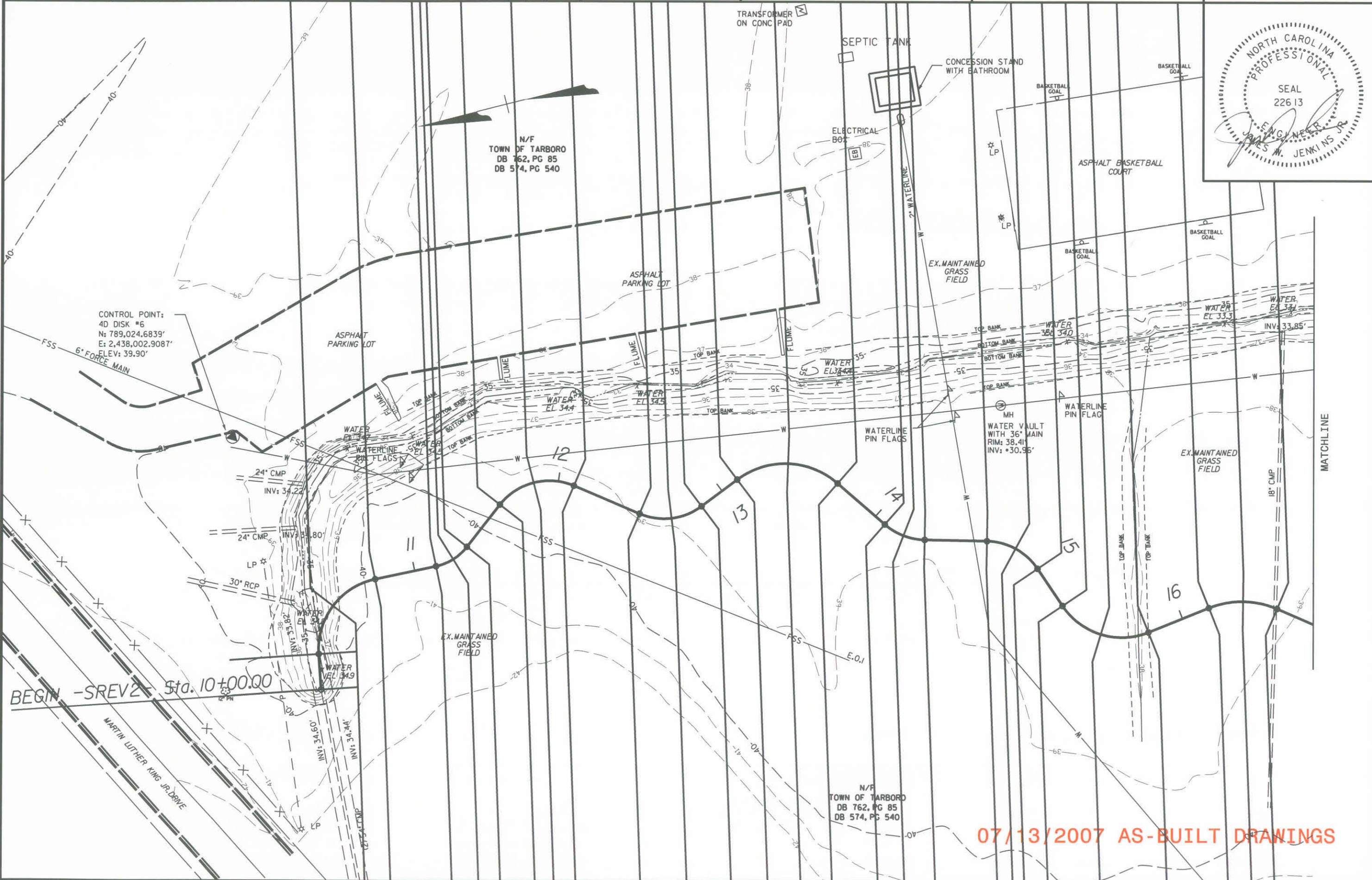
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EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-20
EXISTING CONDITIONS & CROSS SECTION LAYOUT



USER: russell.barbour DATE: 11/20/2007
DGN: 03-06031-CONSTRUCTION\CONSTRUCTION-bull draw\ngs\79457\psh\mexcon.dgn

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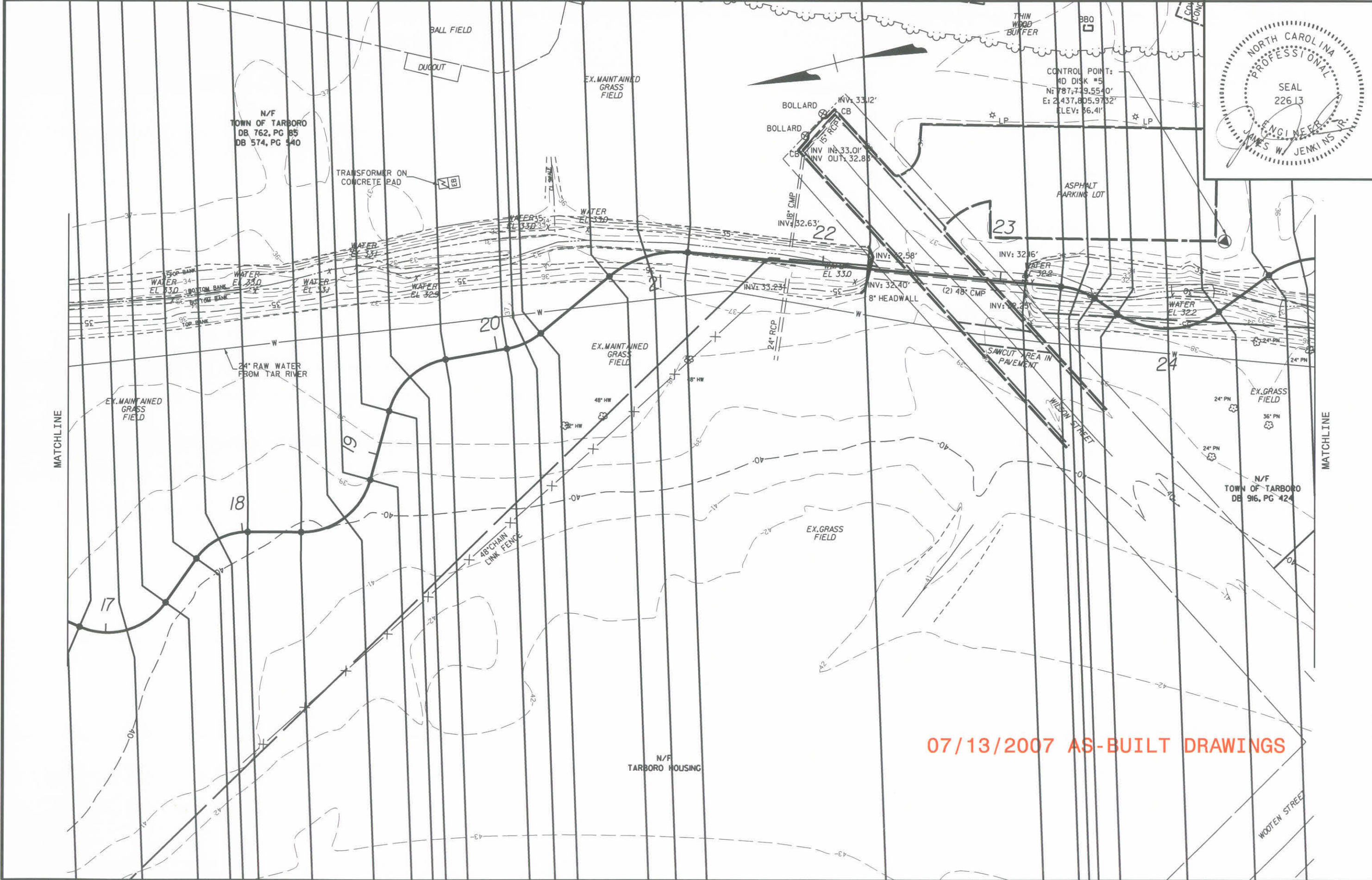
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EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-21
 EXISTING CONDITIONS & CROSS SECTION LAYOUT



07/13/2007 AS-BUILT DRAWINGS

USER: russel.barbour DATE: 11/20/2007
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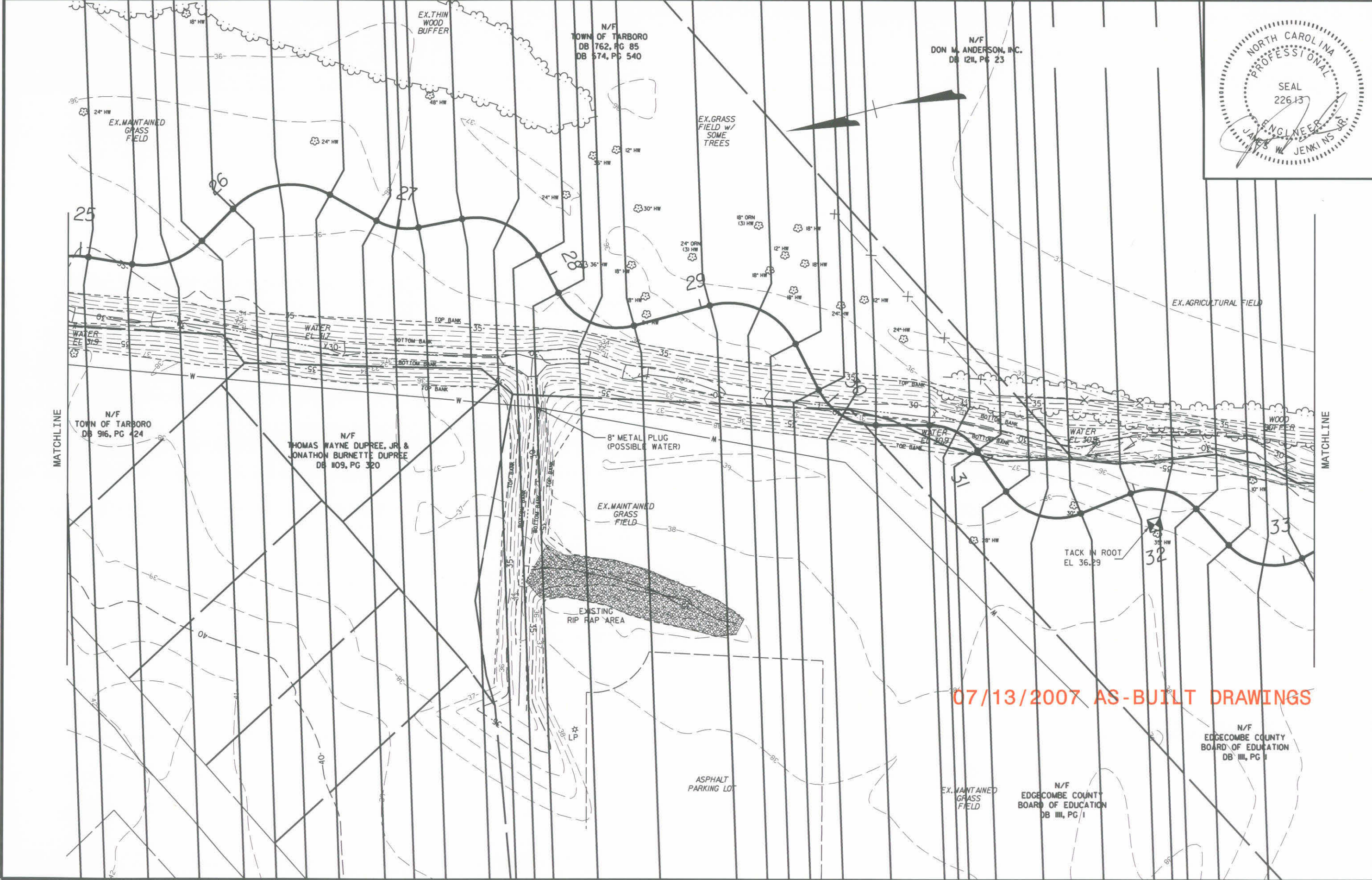
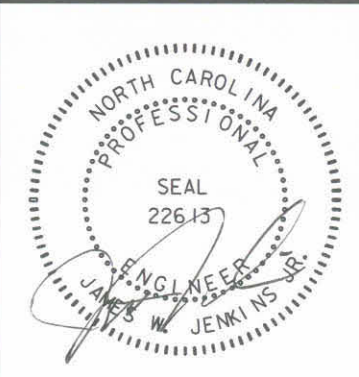
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EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-22
 EXISTING CONDITIONS & CROSS SECTION LAYOUT



07/13/2007 AS-BUILT DRAWINGS

USER: russel@tarbour DATE: 11/20/2007
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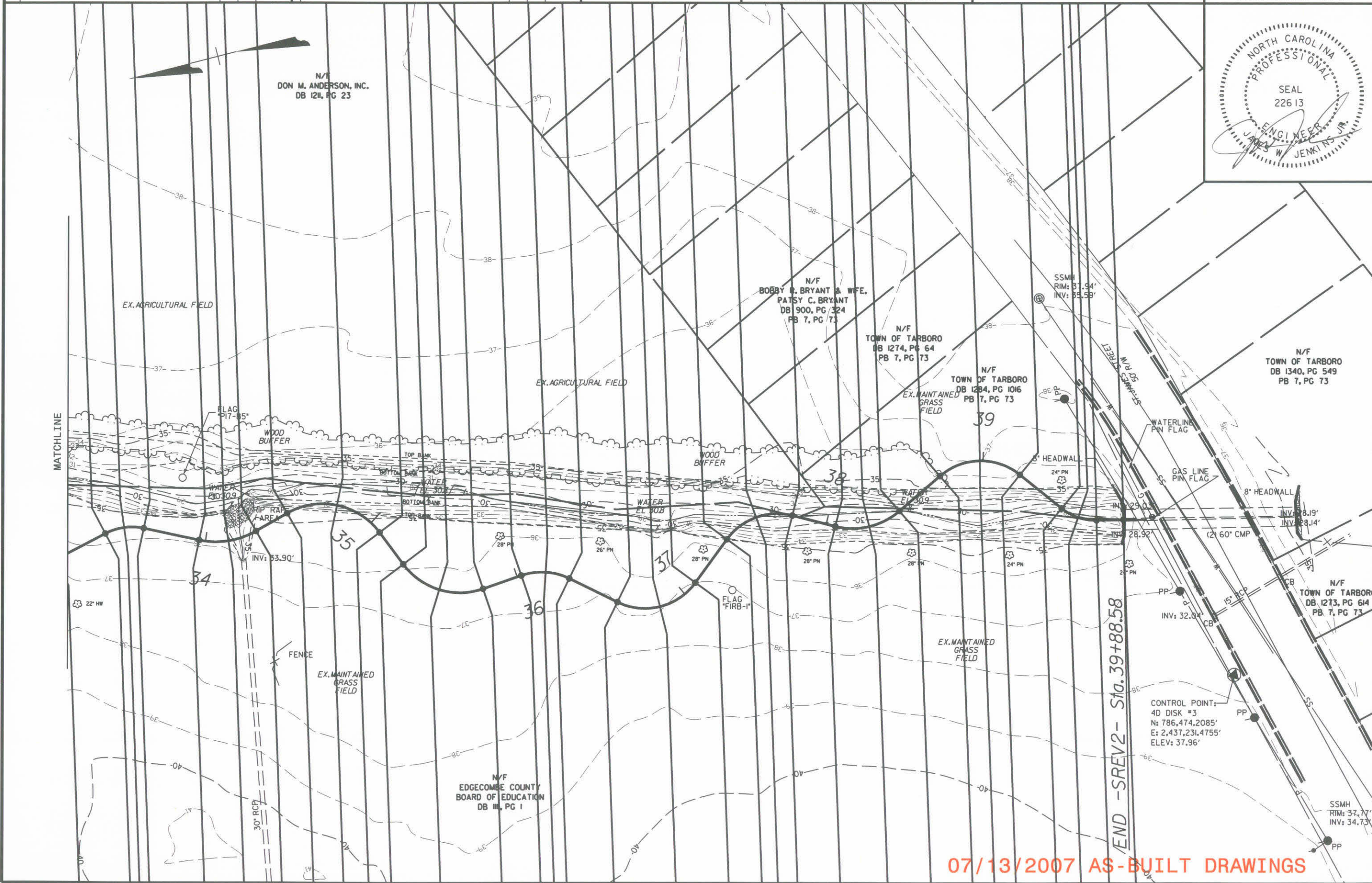
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
SHEET NO. C-23
EXISTING CONDITIONS & CROSS SECTION LAYOUT



USER: russelbarbour DATE: 11/20/2007
DGN: 0379457CONSTRUCTIONASCONC1.dwg
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NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY



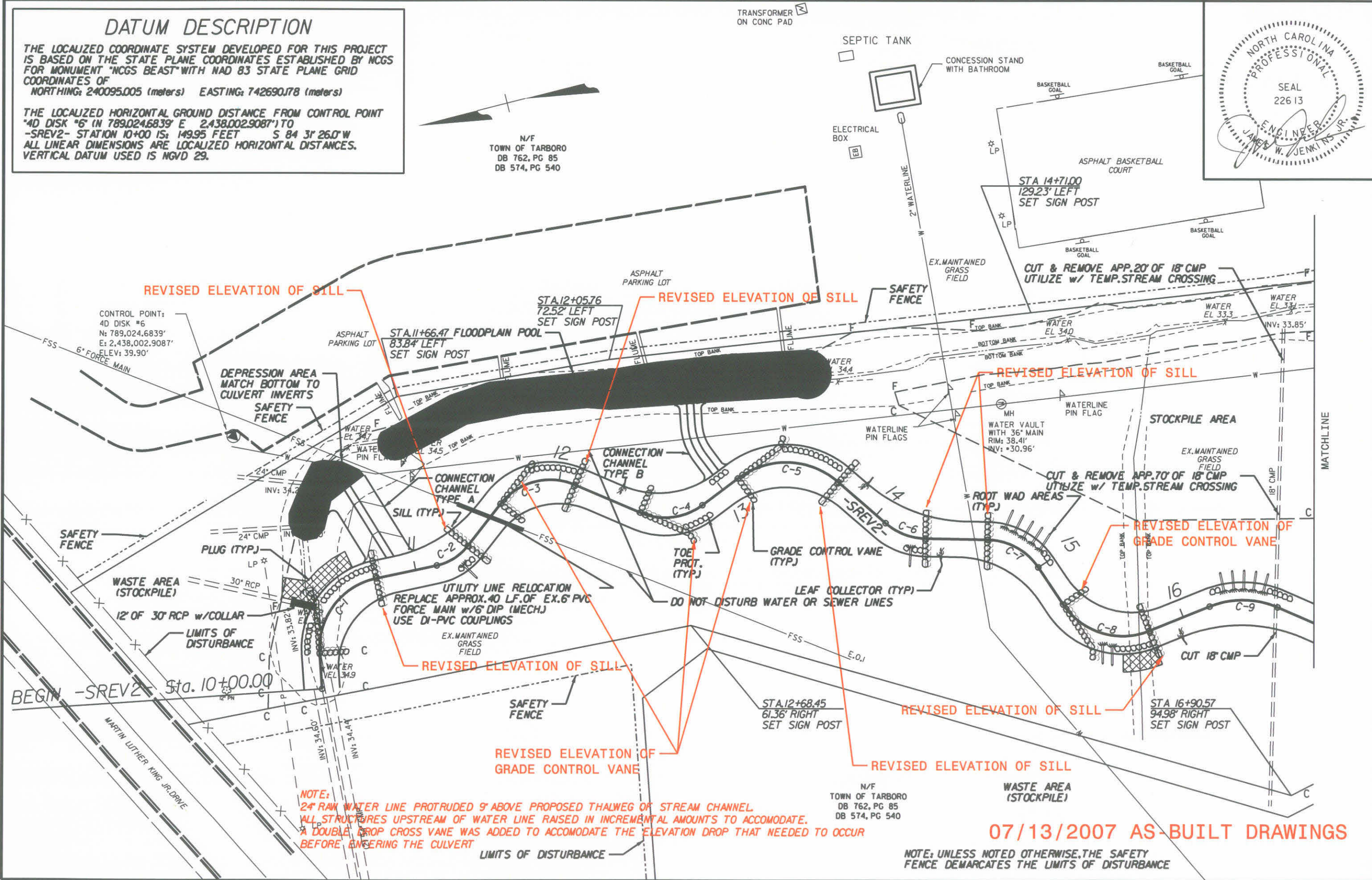
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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-27
 GRADING, DRAINAGE, & EROSION CONTROL

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "NCGS BEAST" WITH NAD 83 STATE PLANE GRID COORDINATES OF
 NORTHING: 240095.005 (meters) EASTING: 742690.778 (meters)
 THE LOCALIZED HORIZONTAL GROUND DISTANCE FROM CONTROL POINT "4D DISK #6 IN 789,024.6839' E 2,438,002.9087' TO -SREV2- STATION 10+00 IS: 149.95 FEET S 84 3' 26.0" W
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES. VERTICAL DATUM USED IS NGVD 29.

N/F
 TOWN OF TARBORO
 DB 762, PG 85
 DB 574, PG 540



USER: russelbarbour DATE: 11/20/2007
 DGN: 0379457-CONSTRUCTION-SOCCONC-030101.dwg
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07/13/2007 AS-BUILT DRAWINGS

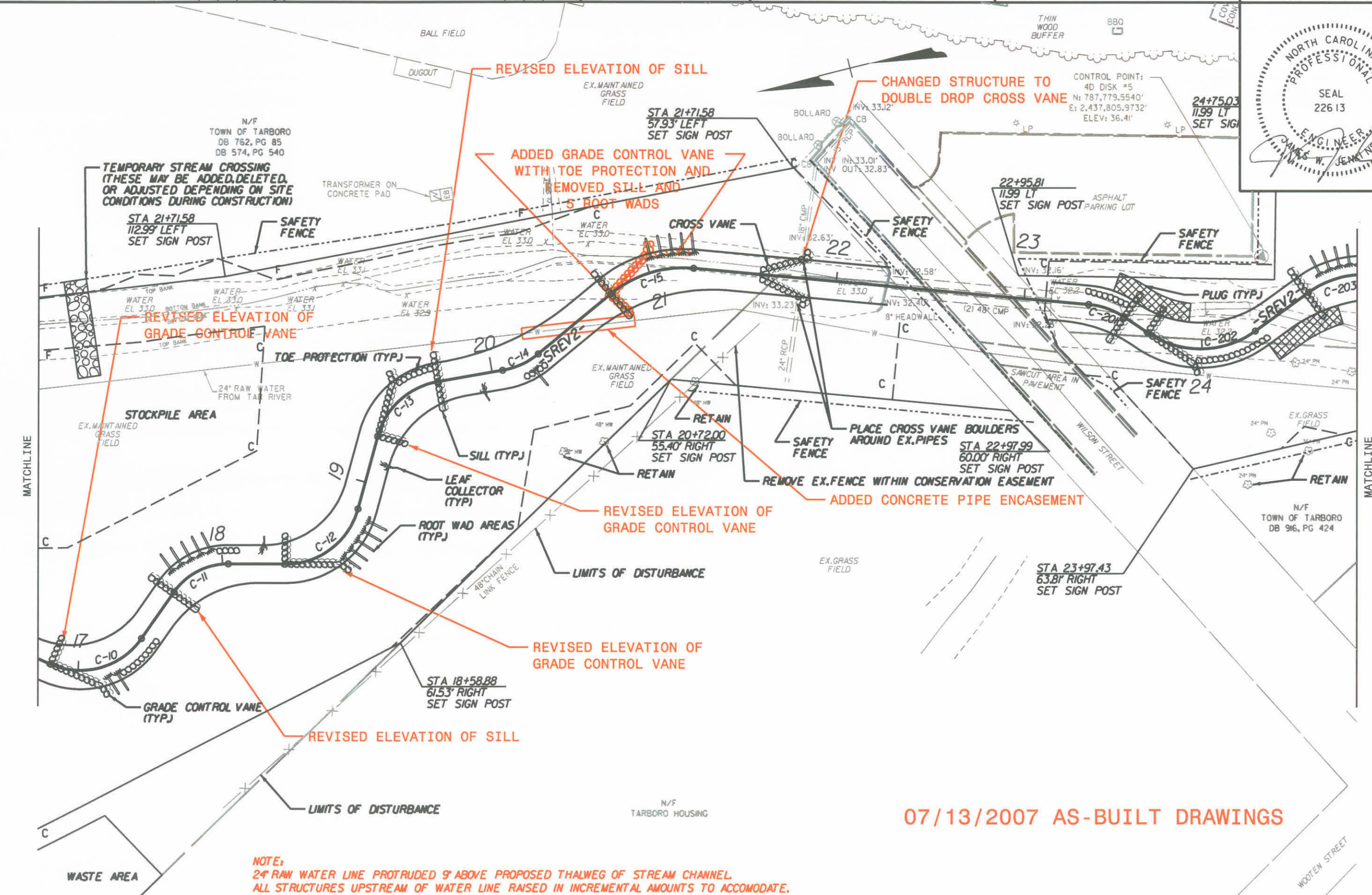
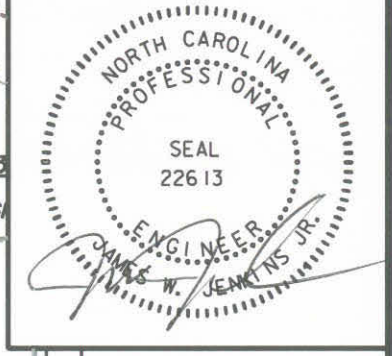
NO.	REVISION DESCRIPTION	DATE	BY	CHECKED BY



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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-28
 GRADING, DRAINAGE, & EROSION CONTROL



NOTE:
 24" RAW WATER LINE PROTRUDED 9" ABOVE PROPOSED THALWEG OF STREAM CHANNEL.
 ALL STRUCTURES UPSTREAM OF WATER LINE RAISED IN INCREMENTAL AMOUNTS TO ACCOMODATE.
 A DOUBLE DROP CROSS VANE WAS ADDED TO ACCOMODATE THE ELEVATION DROP THAT NEEDED TO OCCUR
 BEFORE ENTERING THE CULVERT

07/13/2007 AS-BUILT DRAWINGS

NOTE: UNLESS NOTED OTHERWISE, THE SAFETY FENCE DEMARCATES THE LIMITS OF DISTURBANCE

USER: russellbarbour DATE: 12/11/2007
 DGN: GV-9457-CONSTRUCTI0N\CONSTRUCTI0N\Bldgs\Bldgs-bull\drawings\9457\psht2.dgn

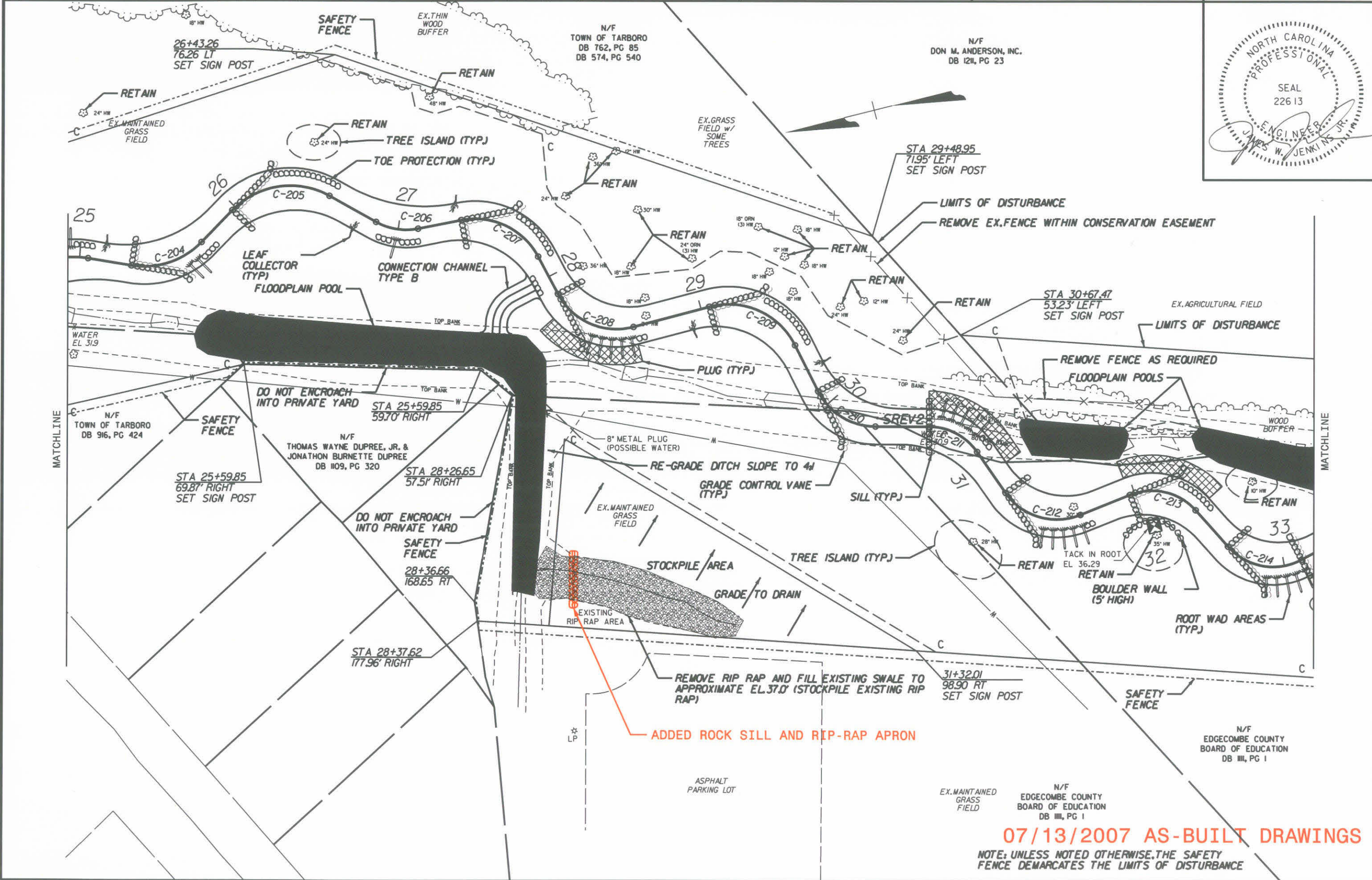
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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-29
 GRADING, DRAINAGE, & EROSION CONTROL



USER: russel.darbof DATE: 11/20/2007
 DGN: G:\79451\CONSTRUCTION\SCC\Civil\Bldg\11/20/07\psh3.dgn

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NOTE: UNLESS NOTED OTHERWISE, THE SAFETY FENCE DEMARCATES THE LIMITS OF DISTURBANCE

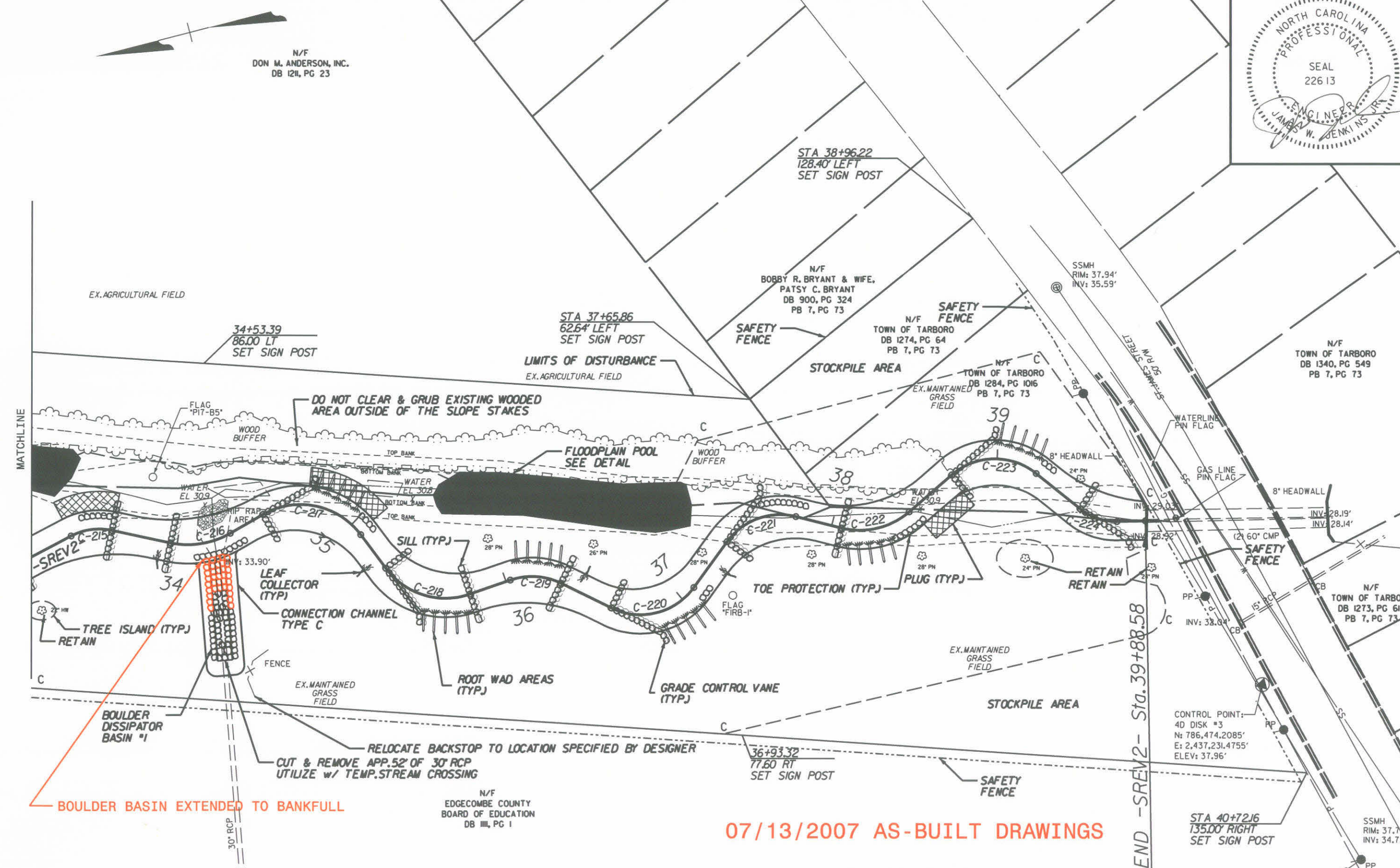
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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
 SHEET NO. C-30
 GRADING, DRAINAGE,
 & EROSION CONTROL



07/13/2007 AS-BUILT DRAWINGS

NOTE: UNLESS NOTED OTHERWISE, THE SAFETY FENCE DEMARCATES THE LIMITS OF DISTURBANCE

USER: russell@earthtech.com DATE: 11/20/2007
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NO.	REVISION DESCRIPTION	DATE	BY	CHK BY



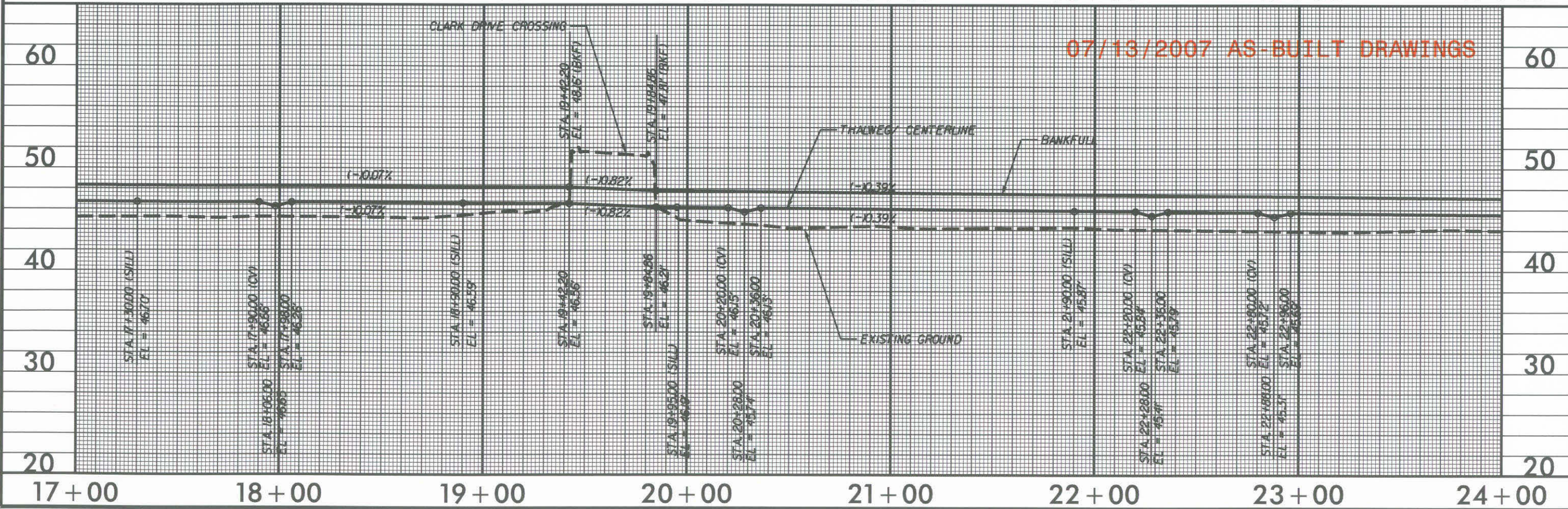
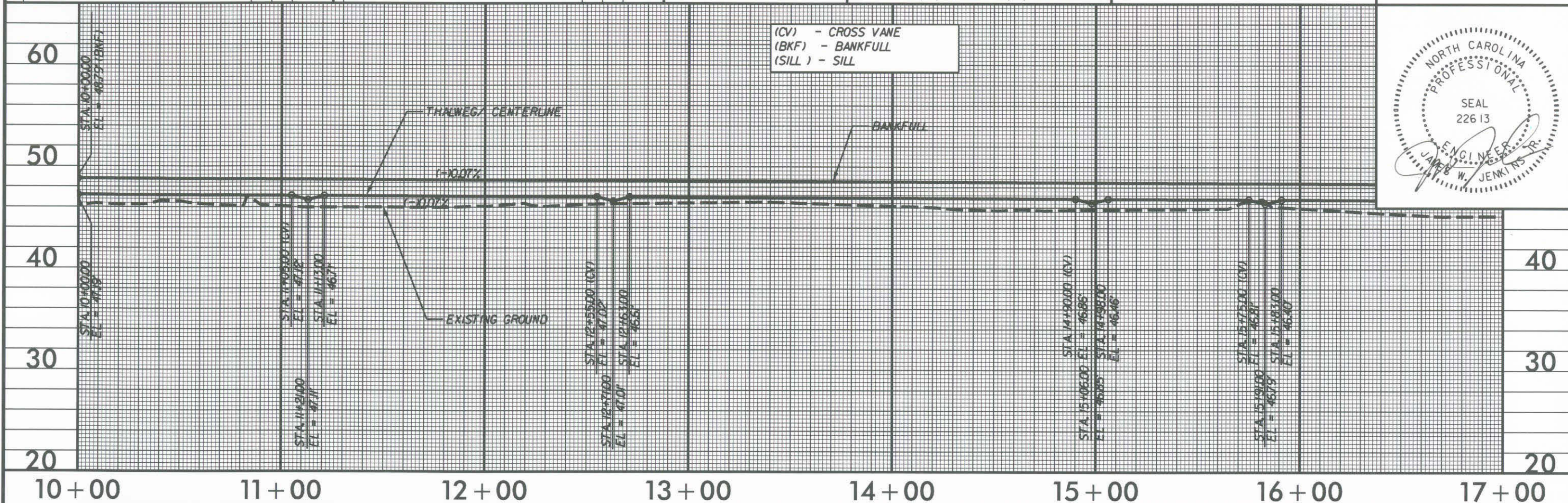
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
SHEET NO. C-31
-S1- PROFILE



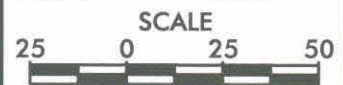
(CV) - CROSS VANE
(BKF) - BANKFULL
(SILL) - SILL



07/13/2007 AS-BUILT DRAWINGS

USER: russelbarbour DATE: 11/20/2007
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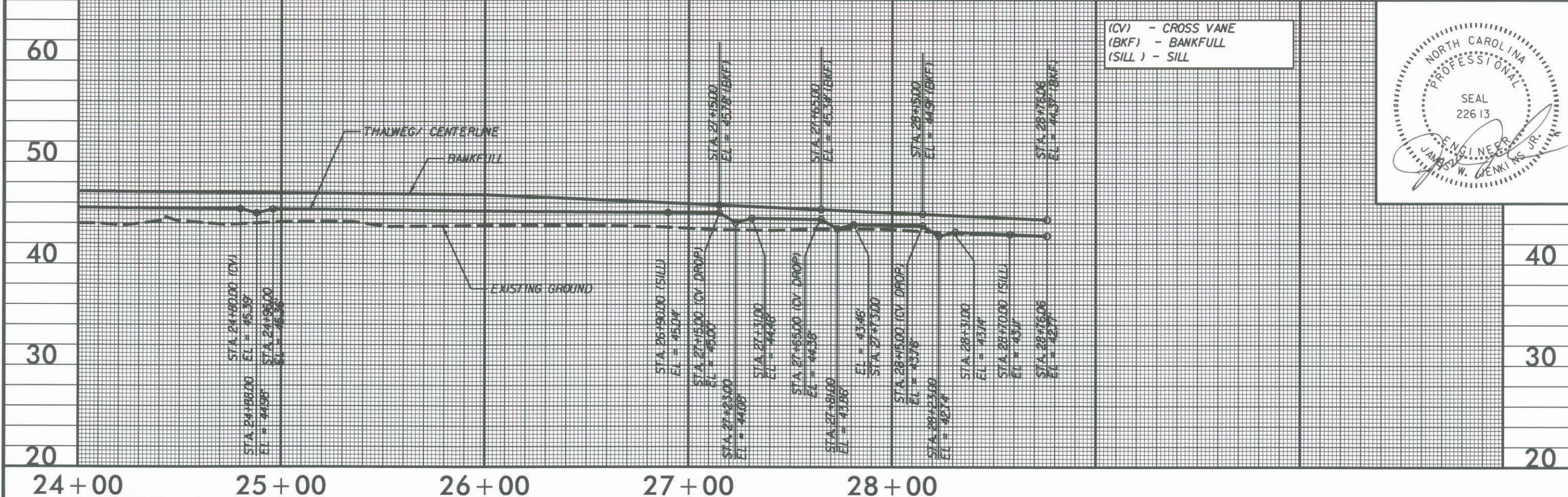
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. C-32
-S1- PROFILE



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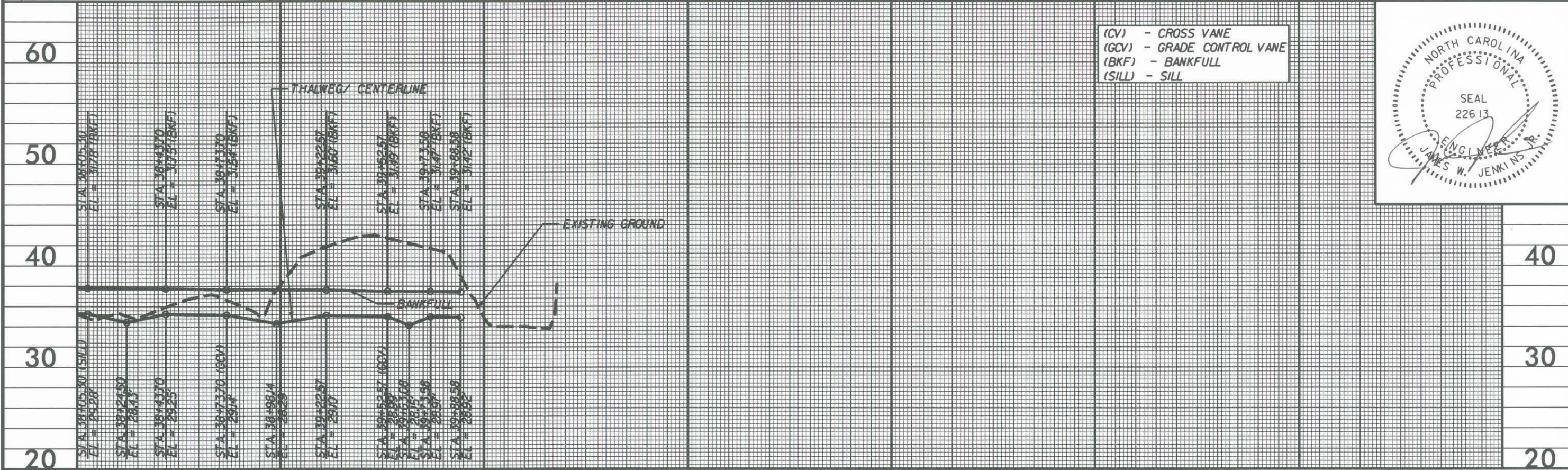
NO.	REVISION DESCRIPTION	DESIGNED BY	CHECKED BY	DATE



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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

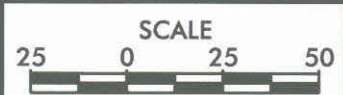
PROJECT NO. 03-06031-01 SHEET NO. C-35
-SREV2- PROFILE



07/13/2007 AS-BUILT DRAWINGS

USER: russell@earthtech.com DATE: 11/20/2007
DGN: 03-06031-01-03-01-01.dgn

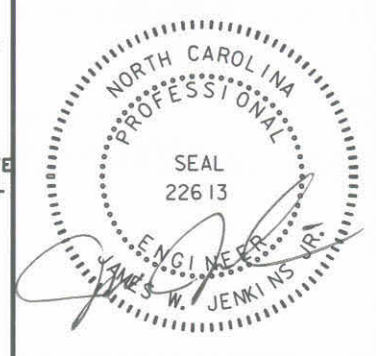
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
SHEET NO. V-1
VEGETATION



VEGETATIVE PLANTING LEGEND

- ZONE 1
- ZONE 2
- ZONE 3
- ZONE 4
- ZONE 5
- ZONE 6
- ZONE 2 SHRUBS/LIVESTAKES
- BRUSH MATTRESS/ SEED MIX B

N/F
JAMES D. MCPHAIL & WIFE,
MARY BRICE MCPHAIL
DB 856, PG 870
PB 12, PG 39

N/F
LEE R. HALL & WIFE
LA VELLE P. HALL
DB 752, PG 14
PB 12, PG 39

CONTROL POINT:
4D COTTON SPINDLE #19
N: 789,812.1594'
E: 2,434,662.7819'
ELEV: 51.76'

N/F
AUTHUR WHITFIELD FOUNDATION & WIFE,
MARY ALICE WEEKS FOUNDATION
DB 856, PG 871
PB 12, PG 39

N/F
THOMAS W. CLARK & WIFE,
PATRICIA K. CLARK
DB 834, PG 720
PB 12, PG 39

BEGIN -SI- Sta. 10+00.00

CONTROL POINT:
4D COTTON SPINDLE #9
N: 790,115.5839'
E: 2,434,340.9931'
ELEV: 50.79'

DO NOT PLANT TREES WITHIN
10' OF UTILITY. USE LOW GROWING
GRASSES AND SHRUBS

LIMITS OF DISTURBANCE

MATCHLINE

07/13/2007 AS-BUILT DRAWINGS

NOTE: UNLESS NOTED OTHERWISE, THE EDGE OF
PAVEMENT DEMARCATES THE LIMITS OF DISTURBANCE

USER: russellbarbour DATE: 11/20/2007
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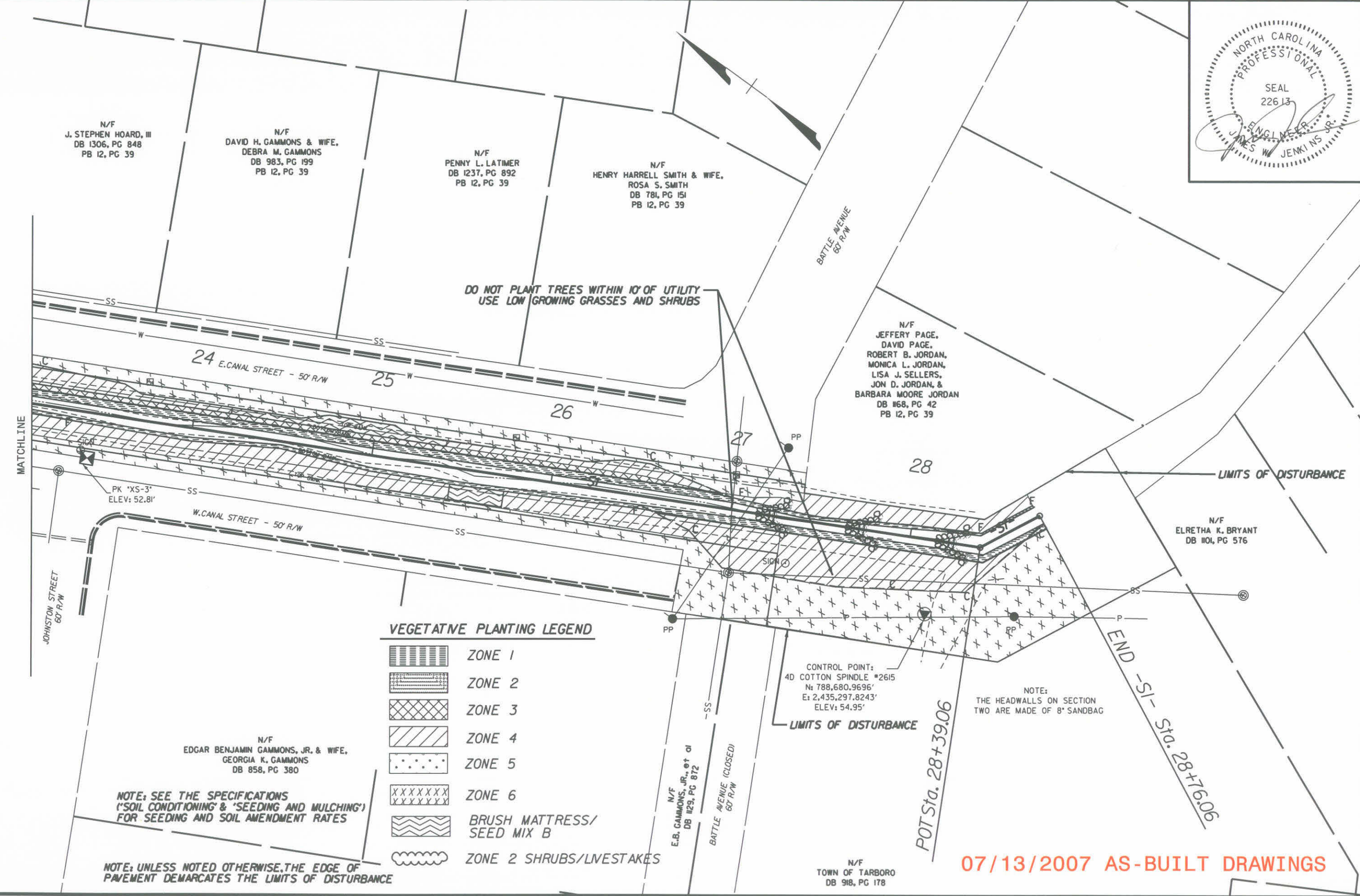
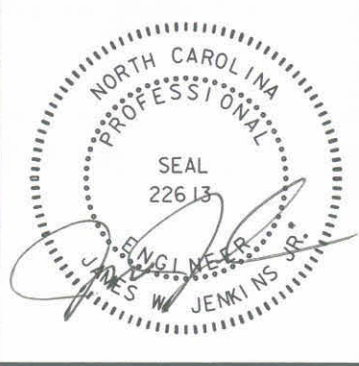
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EAST TARBORO CANAL STREAM RESTORATION
EDGEcombe COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. V-3
VEGETATION



USER: russelbarbour DATE: 11/20/2007
 DGN: 03-06031-01-VEG.dwg
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07/13/2007 AS-BUILT DRAWINGS

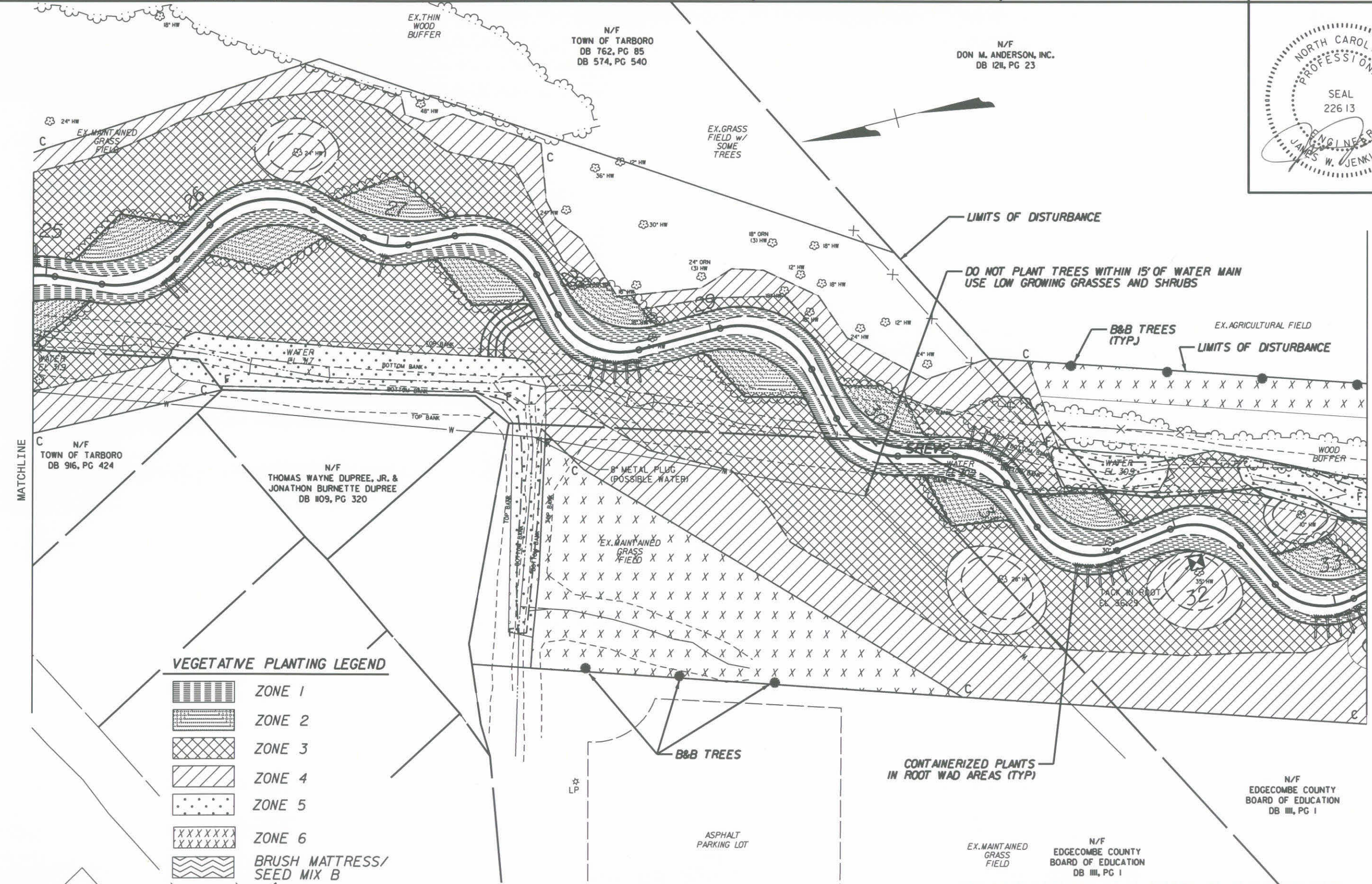
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EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01 SHEET NO. V-6
 VEGETATION



VEGETATION PLANTING LEGEND

	ZONE 1
	ZONE 2
	ZONE 3
	ZONE 4
	ZONE 5
	ZONE 6
	BRUSH MATTRESS/ SEED MIX B
	ZONE 2 SHRUBS/LVESTAKES

NOTE: SEE THE SPECIFICATIONS ('SOIL CONDITIONING' & 'SEEDING AND MULCHING') FOR SEEDING AND SOIL AMENDMENT RATES

07/13/2007 AS-BUILT DRAWINGS

NOTE: UNLESS NOTED OTHERWISE, THE SAFETY FENCE DEMARCATES THE LIMITS OF DISTURBANCE

USER: russelbarbour DATE: 11/20/2007
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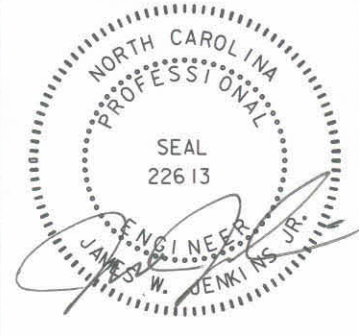
NO.	REVISION DESCRIPTION	DATE



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EAST TARBORO CANAL STREAM RESTORATION
EDGECOMBE COUNTY
ECOSYSTEM ENHANCEMENT PROGRAM

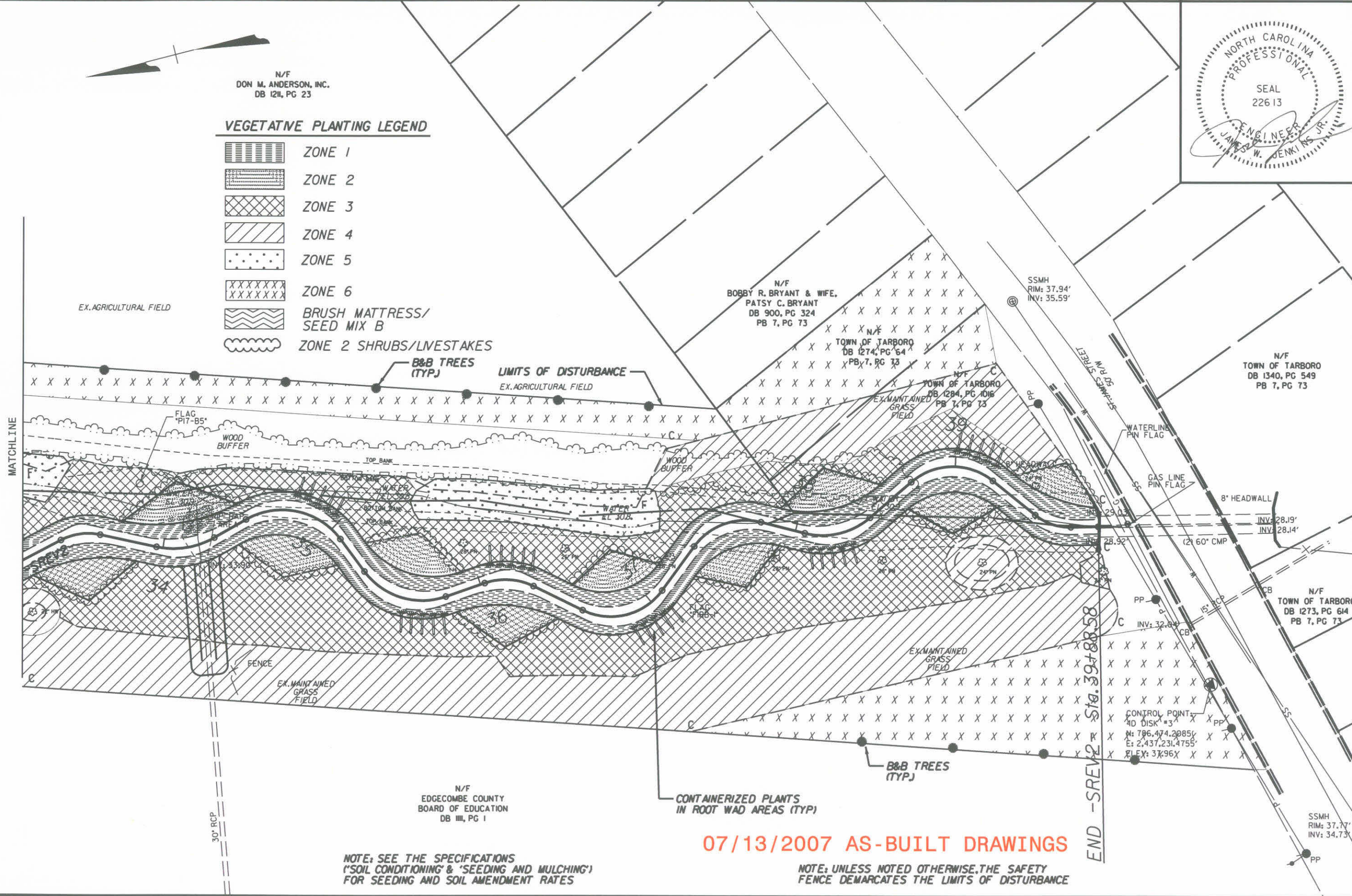
PROJECT NO. 03-06031-01
SHEET NO. V-7
VEGETATION



N/F
DON M. ANDERSON, INC.
DB 1211, PG 23

VEGETATIVE PLANTING LEGEND

- ZONE 1
- ZONE 2
- ZONE 3
- ZONE 4
- ZONE 5
- ZONE 6
- BRUSH MATTRESS/
SEED MIX B
- ZONE 2 SHRUBS/LVESTAKES



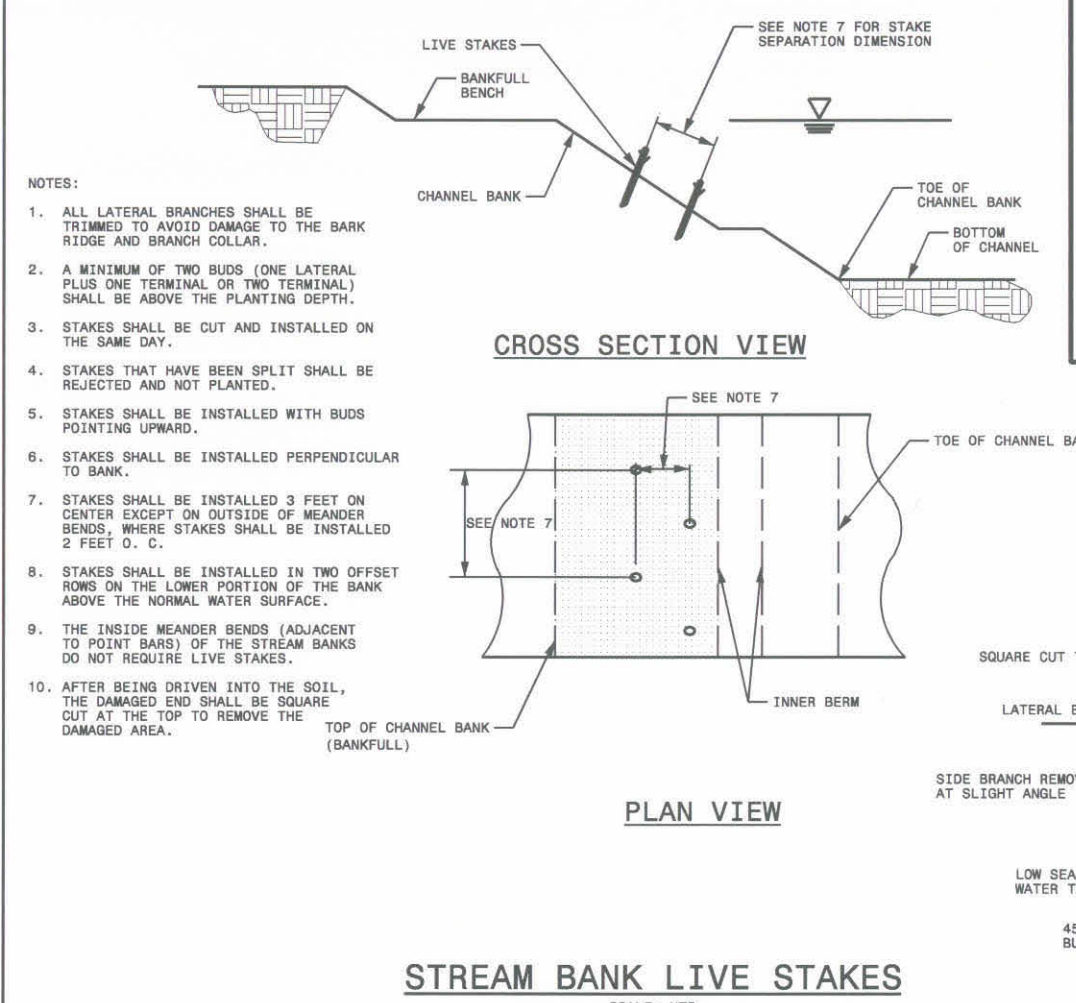
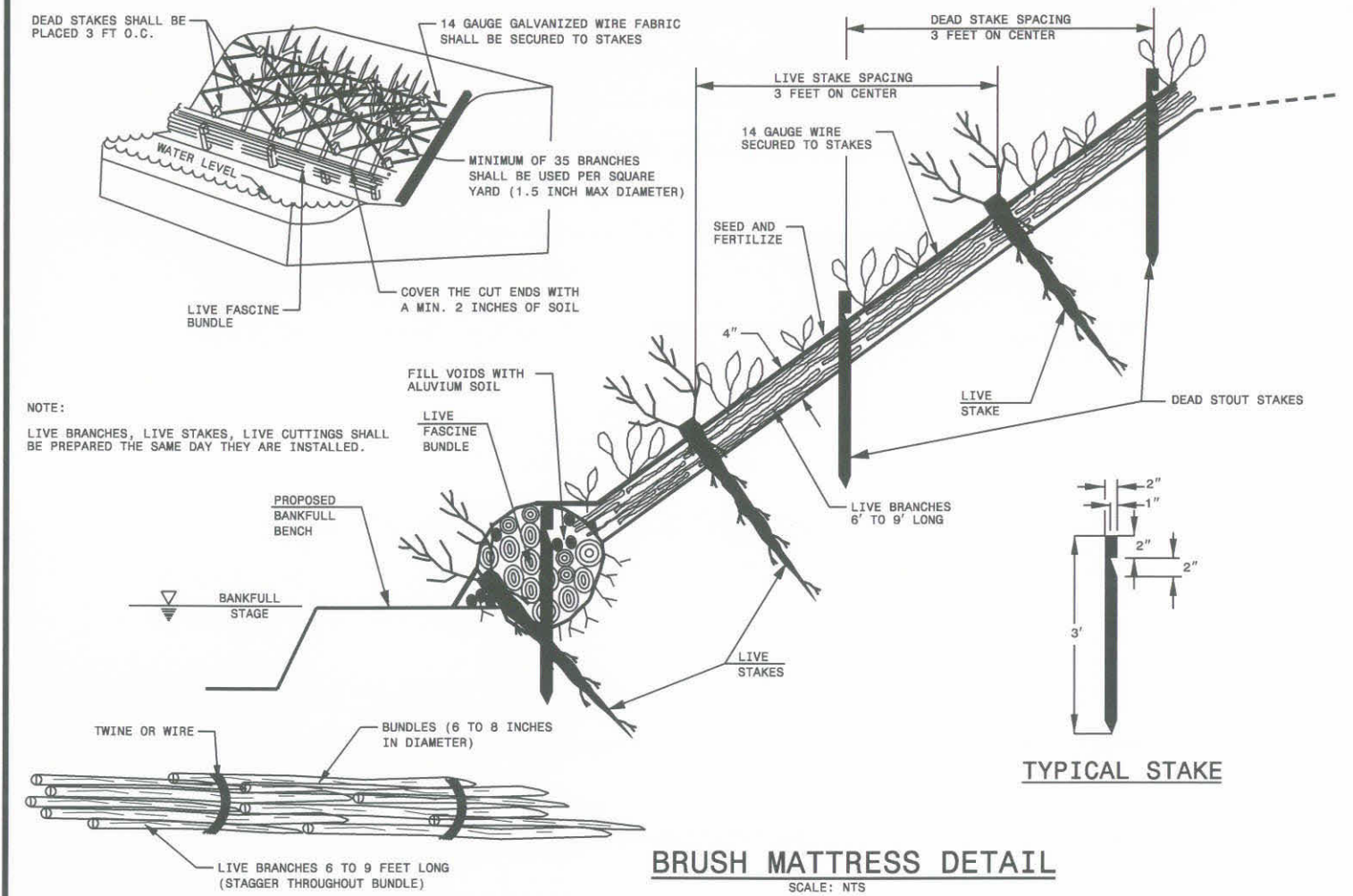
NOTE: SEE THE SPECIFICATIONS ('SOIL CONDITIONING' & 'SEEDING AND MULCHING') FOR SEEDING AND SOIL AMENDMENT RATES

07/13/2007 AS-BUILT DRAWINGS

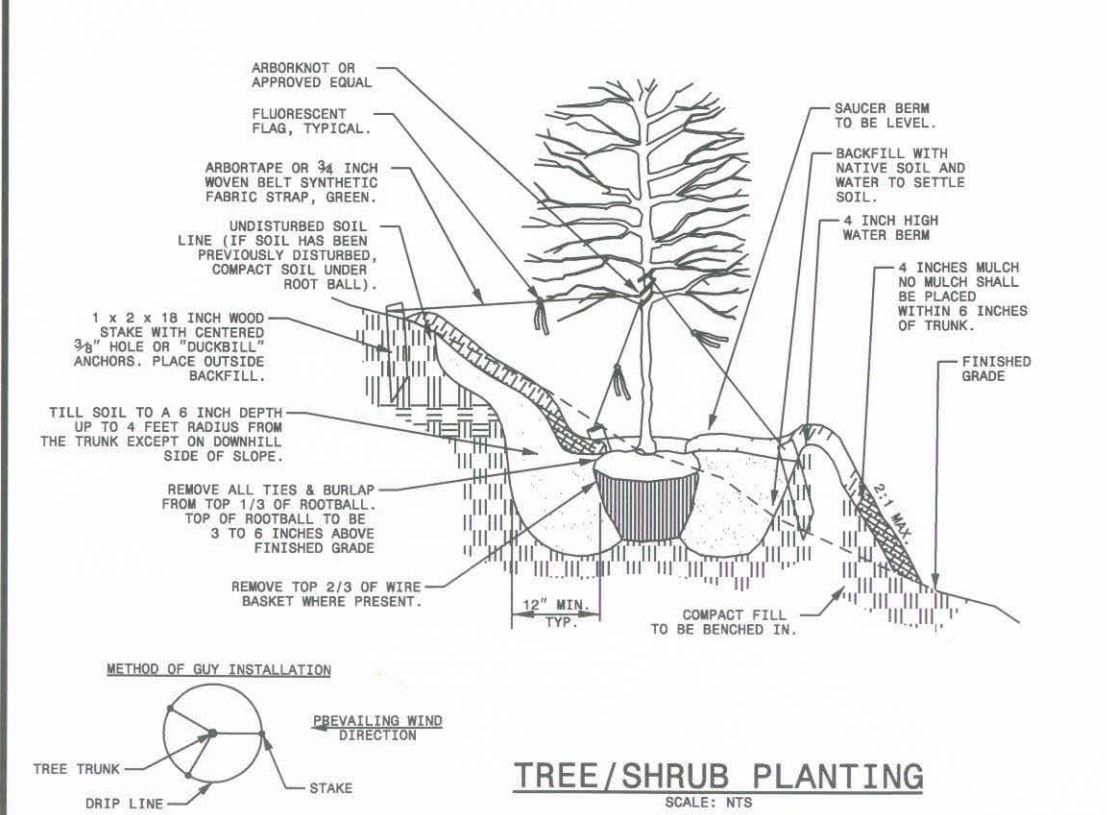
NOTE: UNLESS NOTED OTHERWISE, THE SAFETY FENCE DEMARCATES THE LIMITS OF DISTURBANCE

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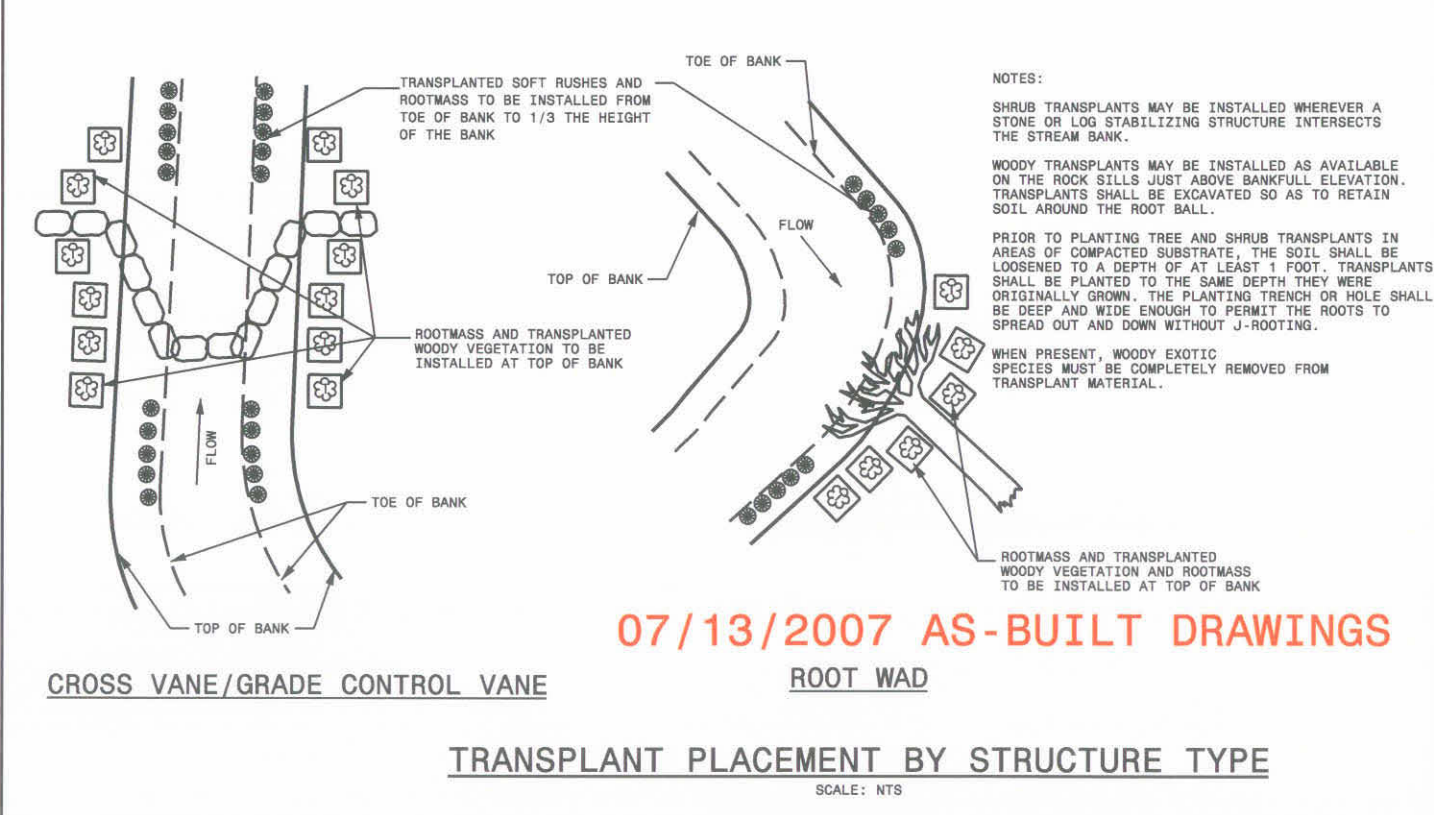
NO.	REVISION DESCRIPTION	DATE	BY	CHK BY	DATE



- NOTES:
1. ALL LATERAL BRANCHES SHALL BE TRIMMED TO AVOID DAMAGE TO THE BARK RIDGE AND BRANCH COLLAR.
 2. A MINIMUM OF TWO BUDS (ONE LATERAL PLUS ONE TERMINAL OR TWO TERMINAL) SHALL BE ABOVE THE PLANTING DEPTH.
 3. STAKES SHALL BE CUT AND INSTALLED ON THE SAME DAY.
 4. STAKES THAT HAVE BEEN SPLIT SHALL BE REJECTED AND NOT PLANTED.
 5. STAKES SHALL BE INSTALLED WITH BUDS POINTING UPWARD.
 6. STAKES SHALL BE INSTALLED PERPENDICULAR TO BANK.
 7. STAKES SHALL BE INSTALLED 3 FEET ON CENTER EXCEPT ON OUTSIDE OF MEANDER BENDS, WHERE STAKES SHALL BE INSTALLED 2 FEET O. C.
 8. STAKES SHALL BE INSTALLED IN TWO OFFSET ROWS ON THE LOWER PORTION OF THE BANK ABOVE THE NORMAL WATER SURFACE.
 9. THE INSIDE MEANDER BENDS (ADJACENT TO POINT BARS) OF THE STREAM BANKS DO NOT REQUIRE LIVE STAKES.
 10. AFTER BEING DRIVEN INTO THE SOIL, THE DAMAGED END SHALL BE SQUARE CUT AT THE TOP TO REMOVE THE DAMAGED AREA.



- NOTES:
- 1) THIS DETAIL APPLIES TO SINGLE AND MULTI-STEM TREES AND SHRUBS.
 - 2) NO SYNTHETIC FABRIC IS ALLOWED ON ROOT BALLS.
 - 3) REMOVE ALL BALL TIES OR STRAPPING FROM ROOT BALL.
 - 4) SOAK ROOT BALL AND SAUCER IMMEDIATELY AFTER INSTALLATION.
 - 5) BACKFILL SHALL CONSIST OF THOROUGHLY BROKEN UP ALUVIUM SOIL. IF ADDITIONAL SOIL IS REQUIRED FOR BACKFILL DUE TO POOR SUBSOIL DRAINAGE CONDITIONS, USE SOIL SIMILAR TO EXISTING NATIVE TOPSOIL. ADDITIONAL SOIL SHALL BE APPROVED BY THE DESIGNER.
 - 6) DO NOT PRUNE OR CUT LEADER OR BRANCHES EXCEPT TO STABILIZE DAMAGE OR AS DIRECTED BY THE DESIGNER.
 - 7) DO NOT INSTALL TREES/SHRUBS DURING PERIODS OF WET OR FREEZING SOIL CONDITIONS.
 - 8) INCORPORATE COMMERCIALY PREPARED MYCORRHIZA SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATES SPECIFIED BY THE MANUFACTURER.
- NOTES FOR TREES ONLY:
- 1) SET TREES VERTICALLY IN ALL DIRECTIONS PRIOR TO GUYING.
 - 2) MINIMUM THREE GUYS PER TREE. NO GUYS ARE REQUIRED FOR SHRUBS AND NON-BALLED AND BURLAPPED TREES UNDER 5 FEET. ALL BALLED AND BURLAPPED TREES RECEIVE GUYS.
 - 3) INSTALL GUY STRAPS TO ALLOW FOR PLANT MOVEMENT.
 - 4) USE "BIO-BARRIER" OR EQUIVALENT ACCORDING TO MANUFACTURER'S RECOMMENDATION FOR TREES THAT WILL BE PLANTED WITHIN 10 FEET OF PAVEMENT.
 - 5) NO TREES SHALL BE PLANTED UNDER POWERLINES (WITHIN 15') OR IN UTILITY EASEMENTS.



- NOTES:
- SHRUB TRANSPLANTS MAY BE INSTALLED WHEREVER A STONE OR LOG STABILIZING STRUCTURE INTERSECTS THE STREAM BANK.
- WOODY TRANSPLANTS MAY BE INSTALLED AS AVAILABLE ON THE ROCK SILLS JUST ABOVE BANKFULL ELEVATION. TRANSPLANTS SHALL BE EXCAVATED SO AS TO RETAIN SOIL AROUND THE ROOT BALL.
- PRIOR TO PLANTING TREE AND SHRUB TRANSPLANTS IN AREAS OF COMPACTED SUBSTRATE, THE SOIL SHALL BE LOOSENEED TO A DEPTH OF AT LEAST 1 FOOT. TRANSPLANTS SHALL BE PLANTED TO THE SAME DEPTH THEY WERE ORIGINALLY GROWN. THE PLANTING TRENCH OR HOLE SHALL BE DEEP AND WIDE ENOUGH TO PERMIT THE ROOTS TO SPREAD OUT AND DOWN WITHOUT J-ROOTING.
- WHEN PRESENT, WOODY EXOTIC SPECIES MUST BE COMPLETELY REMOVED FROM TRANSPLANT MATERIAL.

07/13/2007 AS-BUILT DRAWINGS

NO.	REVISION DESCRIPTION	CHK BY	DATE

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EAST TARBORO CANAL STREAM RESTORATION
 EDGECOMBE COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
 SHEET NO. V-9
 VEGETATION DETAILS

-S1- PLANTING SCHEDULE

Zone	Common Name	Scientific Name	Indicator Status	Stock Type	Maximum Percent	Size	Quantity
Zone 1 WITHIN BANKFULL	<i>Live stakes</i> Total Each 2510						
	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Livestake	20	1/2 - 2"	
	Silky dogwood	<i>Cornus amomum</i>	FACW+	Livestake	20	1/2 - 2"	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Livestake	20	1/2 - 2"	
	Willow, black	<i>Salix nigra</i>	OBL	Livestake	20	1/2 - 2"	
	Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	20	1/2 - 2"	
	Willow, silky	<i>Salix sericea</i>	OBL	Livestake	20	1/2 - 2"	
Zone 2 POINT BARS	<i>Live stakes</i> Total Each 0						
	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Livestake	40	1/2 - 2"	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Livestake	40	1/2 - 2"	
	Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	40	1/2 - 2"	
	<i>Shrubs</i> Total Each 0						
	Tag alder	<i>Alnus serrulata</i>	FACW+	Container	33.3	1 Gal. Min.	
	Stiff dogwood	<i>Cornus foemina</i>	FACW-	Container	33.3	1 Gal. Min.	
Zone 3 FLOODPLAIN	<i>Trees</i> Total Each 100						
	American sycamore	<i>Platanus occidentalis</i>	FACW-	Bare-root	16.7	3/8" RCD	
	Bald cypress	<i>Taxodium distichum</i>	OBL	Bare-root	16.7	1/4" RCD	
	Bitternut hickory	<i>Carya cordiformis</i>	FAC	Bare-root	16.7	3/8" RCD	
	Cherrybark oak	<i>Quercus pagoda</i>	FAC+	Bare-root	16.7	3/8" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	16.7	3/8" RCD	
	Laurel oak	<i>Quercus laurifolia</i>	FACW	Bare-root	16.7	3/8" RCD	
	River Birch	<i>Betula Nigra</i>	FACW	Bare-root	16.7	3/8" RCD	
	Swamp tupelo	<i>Nyssa biflora</i>	OBL	Bare-root	16.7	1/4" RCD	
	<i>Shrubs</i> Total Each 50						
	Tag alder	<i>Alnus serrulata</i>	FACW+	Container	20	1 Gal. Min.	
	Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	20	1 Gal. Min.	
	Swamp titi	<i>Cyrilla racemiflora</i>	FACW	Container	20	1 Gal. Min.	
	Virginia sweetspire	<i>Itea virginica</i>	FACW+	Container	20	1 Gal. Min.	
	Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	20	1 Gal. Min.	
Swamp rose	<i>Rosa palustris</i>	OBL	Container	20	1 Gal. Min.		
Poosumhaw viburnum	<i>Viburnum nudum</i>	FACW+	Container	20	1 Gal. Min.		
Zone 4 SIDE SLOPES OUTSIDE OF FLOODPLAIN	<i>Trees above Root Wads</i> Total Each 0						
	Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	25	1 Gal. Min.	
	Common winterberry	<i>Ilex verticillata</i>	FACW	Container	25	1 Gal. Min.	
	Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	25	1 Gal. Min.	
	Flameleaf sumac	<i>Rhus Copallinum</i>	UPL	Container	25	1 Gal. Min.	
	Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Container	25	1 Gal. Min.	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Container	25	1 Gal. Min.	
	<i>Trees</i> Total Each 480						
	Bitternut hickory	<i>Carya cordiformis</i>	FAC	Bare-root	20	3/8" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	20	3/8" RCD	
	Laurel oak	<i>Quercus laurifolia</i>	FACW	Bare-root	20	3/8" RCD	
	Sycamore	<i>Platanus occidentalis</i>	FACW-	Bare-root	20	3/8" RCD	
	Water oak	<i>Quercus nigra</i>	FAC	Bare-root	20	3/8" RCD	
	Willow oak	<i>Quercus phellos</i>	FACW-	Bare-root	20	3/8" RCD	
	<i>Shrubs</i> Total Each 240						
Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	25	1 Gal. Min.		
American beautyberry	<i>Callicarpa americana</i>	FACU-	Container	25	1 Gal. Min.		
Flowering dogwood	<i>Cornus florida</i>	FACU	Container	25	1 Gal. Min.		
Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	25	1 Gal. Min.		
Elderberry	<i>Sambucus canadensis</i>	FACW-	Container	25	1 Gal. Min.		
<i>Brush Mattress</i> Total Square Yards 300							
<i>Live Branches for Brush Mattress</i>							
Coastal plain willow	<i>Salix caroliniana</i>	OBL	Live Branch	33.3	1/2 - 2"		
Elderberry	<i>Sambucus canadensis</i>	FACW-	Live Branch	33.3	1/2 - 2"		
Swamp cottonwood	<i>Populus heterophylla</i>	FAC+	Live Branch	33.3	1/2 - 2"		
Swamp rose	<i>Rosa palustris</i>	OBL	Live Branch	33.3	1/4 - 1"		
Sycamore	<i>Platanus occidentalis</i>	FACW-	Live Branch	33.3	1/2 - 2"		
<i>Live stakes for Brush Mattress</i> Total Each 300							
Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	N/A	1/2 - 2"		
<i>Live Fascine for Brush Mattress</i> Total Linear Feet 380							
Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Live Branch	33.3	1 1/2" Max.		
Elderberry	<i>Sambucus canadensis</i>	FACW-	Live Branch	33.3	1 1/2" Max.		
Swamp cottonwood	<i>Populus heterophylla</i>	FAC+	Live Branch	33.3	1 1/2" Max.		
Swamp rose	<i>Rosa palustris</i>	OBL	Live Branch	33.3	1 1/2" Max.		
Sycamore	<i>Platanus occidentalis</i>	FACW-	Live Branch	33.3	1 1/2" Max.		



Zone 5 FLOODPLAIN POOLS	<i>Trees</i> Total Each 0						
	Bald cypress	<i>Taxodium distichum</i>	OBL	Bare-root	40	1/4" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	40	3/8" RCD	
	Swamp tupelo	<i>Nyssa biflora</i>	OBL	Bare-root	40	1/4" RCD	
	<i>Shrubs</i> Total Each 0						
	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Container	33.3	1 Gal. Min.	
	Virginia sweetspire	<i>Itea virginica</i>	FACW+	Container	33.3	1 Gal. Min.	
Zone 6 DISTURBED AREAS OUTSIDE CONSERVATION EASEMENT	<i>Grass Seed Only</i>						
	Tag alder	<i>Alnus serrulata</i>	FACW+	Container	33.3	1 Gal. Min.	
ADDITIONAL	<i>Trees</i> Total Each 0						
	River Birch	<i>Betula Nigra</i>	FACW	B & B	25	1 1/2" Cal. Min.	
	American sycamore	<i>Platanus occidentalis</i>	FACW-	B & B	25	1 1/2" Cal. Min.	
	Water Oak	<i>Quercus nigra</i>	FAC	B & B	25	1 1/2" Cal. Min.	
	Pin Oak	<i>Quercus palustris</i>	FACW	B & B	25	1 1/2" Cal. Min.	
	Willow Oak	<i>Quercus phellos</i>	FACW-	B & B	25	1 1/2" Cal. Min.	
	Live Oak	<i>Quercus virginiana</i>	FACU+	B & B	25	1 1/2" Cal. Min.	
Permanent Seed Mix A ZONES 1, 2, 3, & 5	Total Acres 0.4						
	Creeping bentgrass	<i>Agrostis stolonifera</i>	FACW-	Seed	20	N/A	
	Fringed sedge	<i>Carex crinita</i>	FACW+	Seed	20	N/A	
	Indian woodoats	<i>Chasmanthium latifolium</i>	FAC-	Seed	20	N/A	
	Slender woodoats	<i>Chasmanthium laxum</i>	FACW-	Seed	20	N/A	
	Shallow sedge	<i>Carex lurida</i>	OBL	Seed	20	N/A	
	Common rush	<i>Juncus effusus</i>	FACW+	Seed	20	N/A	
Switchgrass	<i>Panicum virgatum</i>	FAC+	Seed	20	N/A		
Permanent Seed Mix B ZONE 4	Total Acres 0.8						
	Little blue stem	<i>Schizachyrium scoparium</i>	FACU	Seed	33.3	N/A	
	Purple Lovegrass	<i>Eragrostis spectabilis</i>	FACU	Seed	33.3	N/A	
	Switchgrass	<i>Panicum virgatum</i>	FAC+	Seed	33.3	N/A	
Permanent Seed Mix C ZONE 6	Total Acres 0.9						
	Centipede grass	<i>Eremochloa ophiuroides</i>	N/A	Seed	100	N/A	
Temporary Seed Mix Total Acres 2.0							
WINTER MIX	Barley	<i>Hordeum sp.</i>	N/A	Seed	40	N/A	
	Sheep fescue	<i>Festuca ovina</i>	N/A	Seed	40	N/A	
	Winter Rye	<i>Secale cereale</i>	N/A	Seed	40	N/A	
SUMMER MIX	Japanese Millet	<i>Echinochloa esculenta</i>	N/A	Seed	60	N/A	
	Pearl Millet	<i>Pennisetum glaucum</i>	N/A	Seed	60	N/A	

07/13/2007 AS-BUILT DRAWINGS

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EAST TARBORO CANAL STREAM RESTORATION
 EDGEcombe COUNTY
 ECOSYSTEM ENHANCEMENT PROGRAM

PROJECT NO. 03-06031-01
 SHEET NO. V-10

VEGETATION DETAILS



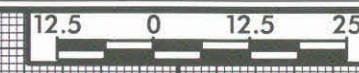
-SREV2- PLANTING SCHEDULE

Zone	Common Name	Scientific Name	Indicator Status	Stock Type	Maximum Percent	Size	Quantity
Zone 1 WITHIN BANKFULL	Live stakes						
							Total Each 3450
	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Livestake	20	1/2 - 2"	
	Silky dogwood	<i>Cornus amomum</i>	FACW+	Livestake	20	1/2 - 2"	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Livestake	20	1/2 - 2"	
	Willow, black	<i>Salix nigra</i>	OBL	Livestake	20	1/2 - 2"	
	Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	20	1/2 - 2"	
Zone 2 POINT BARS	Live stakes						
							Total Each 350
	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Livestake	40	1/2 - 2"	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Livestake	40	1/2 - 2"	
	Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	40	1/2 - 2"	
	Shrubs						
							Total Each 350
Zone 3 FLOODPLAIN	Trees						
							Total Each 3070
	American sycamore	<i>Platanus occidentalis</i>	FACW-	Bare-root	16.7	3/8" RCD	
	Bald cypress	<i>Taxodium distichum</i>	OBL	Bare-root	16.7	1/4" RCD	
	Bitternut hickory	<i>Carya cordiformis</i>	FAC	Bare-root	16.7	3/8" RCD	
	Cherrybark oak	<i>Quercus pagoda</i>	FAC+	Bare-root	16.7	3/8" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	16.7	3/8" RCD	
	Laurel oak	<i>Quercus laurifolia</i>	FACW	Bare-root	16.7	3/8" RCD	
	River Birch	<i>Betula Nigra</i>	FACW	Bare-root	16.7	3/8" RCD	
	Swamp tupelo	<i>Nyssa biflora</i>	OBL	Bare-root	16.7	1/4" RCD	
	Shrubs						
							Total Each 1540
	Tag alder	<i>Alnus serrulata</i>	FACW+	Container	20	1 Gal. Min.	
	Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	20	1 Gal. Min.	
Swamp titi	<i>Cyrilla racemiflora</i>	FACW	Container	20	1 Gal. Min.		
Virginia sweetspire	<i>Itea virginica</i>	FACW+	Container	20	1 Gal. Min.		
Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	20	1 Gal. Min.		
Swamp rose	<i>Rosa palustris</i>	OBL	Container	20	1 Gal. Min.		
Possumhaw viburnum	<i>Viburnum nudum</i>	FACW+	Container	20	1 Gal. Min.		
Trees above Root Wads							
						Total Each 250	
Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	25	1 Gal. Min.		
Common winterberry	<i>Ilex verticillata</i>	FACW	Container	25	1 Gal. Min.		
Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	25	1 Gal. Min.		
Flameleaf sumac	<i>Rhus Copallinum</i>	UPL	Container	25	1 Gal. Min.		
Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Container	25	1 Gal. Min.		
Elderberry	<i>Sambucus canadensis</i>	FACW-	Container	25	1 Gal. Min.		
Zone 4 SIDE SLOPES OUTSIDE OF FLOODPLAIN	Trees						
							Total Each 1840
	Bitternut hickory	<i>Carya cordiformis</i>	FAC	Bare-root	20	3/8" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	20	3/8" RCD	
	Laurel oak	<i>Quercus laurifolia</i>	FACW	Bare-root	20	3/8" RCD	
	Sycamore	<i>Platanus occidentalis</i>	FACW-	Bare-root	20	3/8" RCD	
	Water oak	<i>Quercus nigra</i>	FAC	Bare-root	20	3/8" RCD	
	Willow oak	<i>Quercus phellos</i>	FACW-	Bare-root	20	3/8" RCD	
	Shrubs						
							Total Each 920
	Purple chokeberry	<i>Aronia arbutifolia</i>	FACW	Container	25	1 Gal. Min.	
	American beautyberry	<i>Callicarpa americana</i>	FACU-	Container	25	1 Gal. Min.	
	Flowering dogwood	<i>Cornus florida</i>	FACU	Container	25	1 Gal. Min.	
	Wax myrtle	<i>Myrica cerifera</i>	FAC+	Container	25	1 Gal. Min.	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Container	25	1 Gal. Min.	
	Brush Mattress						
	Live Branches for Brush Mattress						Total Square Yards 0
	Coastal plain willow	<i>Salix caroliniana</i>	OBL	Live Branch	33.3	1/2 - 2"	
	Elderberry	<i>Sambucus canadensis</i>	FACW-	Live Branch	33.3	1/2 - 2"	
	Swamp cottonwood	<i>Populus heterophylla</i>	FAC+	Live Branch	33.3	1/2 - 2"	
	Swamp rose	<i>Rosa palustris</i>	OBL	Live Branch	33.3	1/4 - 1"	
	Sycamore	<i>Platanus occidentalis</i>	FACW-	Live Branch	33.3	1/2 - 2"	
	Live stakes for Brush Mattress						
							Total Each 0
Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Livestake	N/A	1/2 - 2"		
Live Fascine for Brush Mattress							
						Total Linear Feet 0	
Willow, coastal plain	<i>Salix caroliniana</i>	OBL	Live Branch	33.3	1 1/2" Max.		
Elderberry	<i>Sambucus canadensis</i>	FACW-	Live Branch	33.3	1 1/2" Max.		
Swamp cottonwood	<i>Populus heterophylla</i>	FAC+	Live Branch	33.3	1 1/2" Max.		
Swamp rose	<i>Rosa palustris</i>	OBL	Live Branch	33.3	1 1/2" Max.		
Sycamore	<i>Platanus occidentalis</i>	FACW-	Live Branch	33.3	1 1/2" Max.		

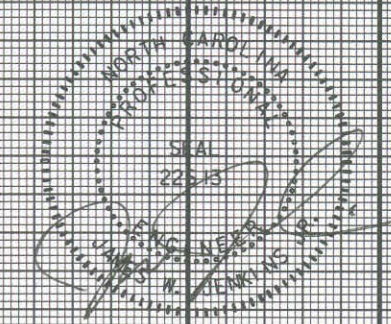
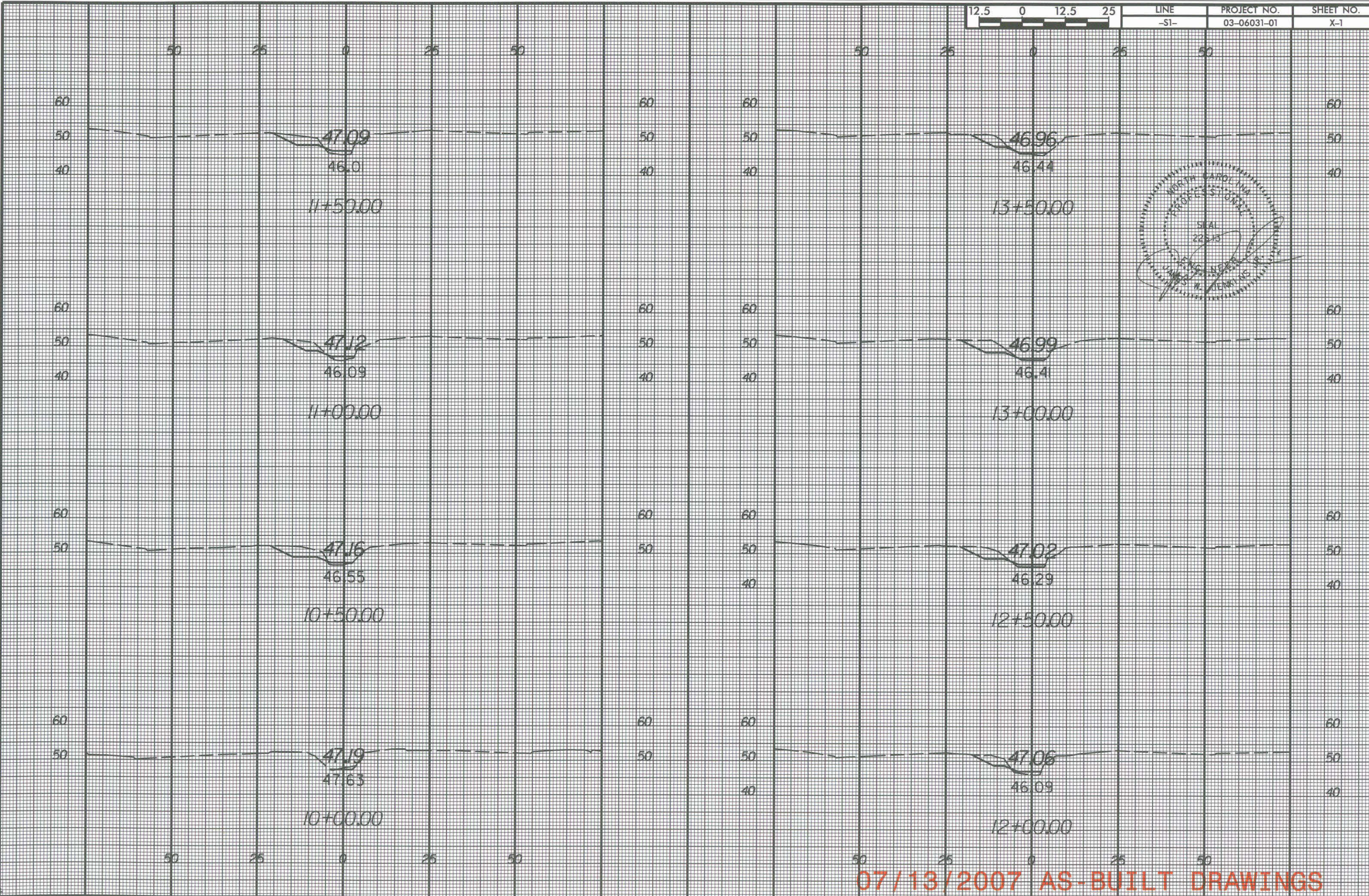
Zone 5 FLOODPLAIN POOLS	Trees						
							Total Each 300
	Bald cypress	<i>Taxodium distichum</i>	OBL	Bare-root	40	1/4" RCD	
	Green ash	<i>Fraxinus pennsylvanica</i>	FACW	Bare-root	40	3/8" RCD	
	Swamp tupelo	<i>Nyssa biflora</i>	OBL	Bare-root	40	1/4" RCD	
	Shrubs						
							Total Each 220
Zone 6 DISTURBED AREAS OUTSIDE CONSERVATION EASEMENT	Common buttonbush	<i>Cephalanthus occidentalis</i>	OBL	Container	33.3	1 Gal. Min.	
	Virginia sweetspire	<i>Itea virginica</i>	FACW+	Container	33.3	1 Gal. Min.	
	Tag alder	<i>Alnus serrulata</i>	FACW+	Container	33.3	1 Gal. Min.	
	Wild raisin	<i>Viburnum nudum</i>	FACW+	Container	33.3	1 Gal. Min.	
ADDITIONAL	Grass Seed Only						
	Trees						
							Total Each 14
	River Birch	<i>Betula Nigra</i>	FACW	B & B	25	1 1/2" Cal. Min.	
	American sycamore	<i>Platanus occidentalis</i>	FACW-	B & B	25	1 1/2" Cal. Min.	
	Water Oak	<i>Quercus nigra</i>	FAC	B & B	25	1 1/2" Cal. Min.	
	Pin Oak	<i>Quercus palustris</i>	FACW	B & B	25	1 1/2" Cal. Min.	
	Willow Oak	<i>Quercus phellos</i>	FACW-	B & B	25	1 1/2" Cal. Min.	
	Live Oak	<i>Quercus virginiana</i>	FACU+	B & B	25	1 1/2" Cal. Min.	
	Permanent Seed Mbx A	Total Acres 6.4					
Creeping bentgrass		<i>Agrostis stolonifera</i>	FACW-	Seed	20	N/A	
Fringed sedge		<i>Carex crinita</i>	FACW+	Seed	20	N/A	
Indian woodoats		<i>Chasmanthium latifolium</i>	FAC-	Seed	20	N/A	
ZONES 1, 2, 3, & 5	Slender woodoats	<i>Chasmanthium laxum</i>	FACW-	Seed	20	N/A	
	Shallow sedge	<i>Carex lurida</i>	OBL	Seed	20	N/A	
	Common rush	<i>Juncus effusus</i>	FACW+	Seed	20	N/A	
	Switchgrass	<i>Panicum virgatum</i>	FAC+	Seed	20	N/A	
	Permanent Seed Mbx B	Total Acres 2.7					
Little blue stem		<i>Schizachyrium scoparium</i>	FACU	Seed	33.3	N/A	
Purple Lovegrass		<i>Eragrostis spectabilis</i>	FACU	Seed	33.3	N/A	
Switchgrass		<i>Panicum virgatum</i>	FAC+	Seed	33.3	N/A	
Permanent Seed Mbx C	Total Acres 2.9						
	Virginia wildrye	<i>Elymus virginicus</i>	FAC	Seed	33.3	N/A	
ZONE 6	Centipede grass	<i>Eremochloa ophiuroides</i>	N/A	Seed	100	N/A	
	Total Acres 12.1						
Temporary Seed Mbx	WINTER MIX						
	Barley	<i>Hordeum sp.</i>	N/A	Seed	40	N/A	
	Sheep fescue	<i>Festuca ovina</i>	N/A	Seed	40	N/A	
SUMMER MIX	Winter Rye	<i>Secale cereale</i>	N/A	Seed	40	N/A	
	Japanese Millet	<i>Echinochloa esculenta</i>	N/A	Seed	60	N/A	
	Pearl Millet	<i>Pennisetum glaucum</i>	N/A	Seed	60	N/A	

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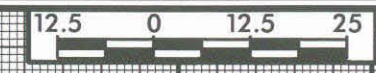


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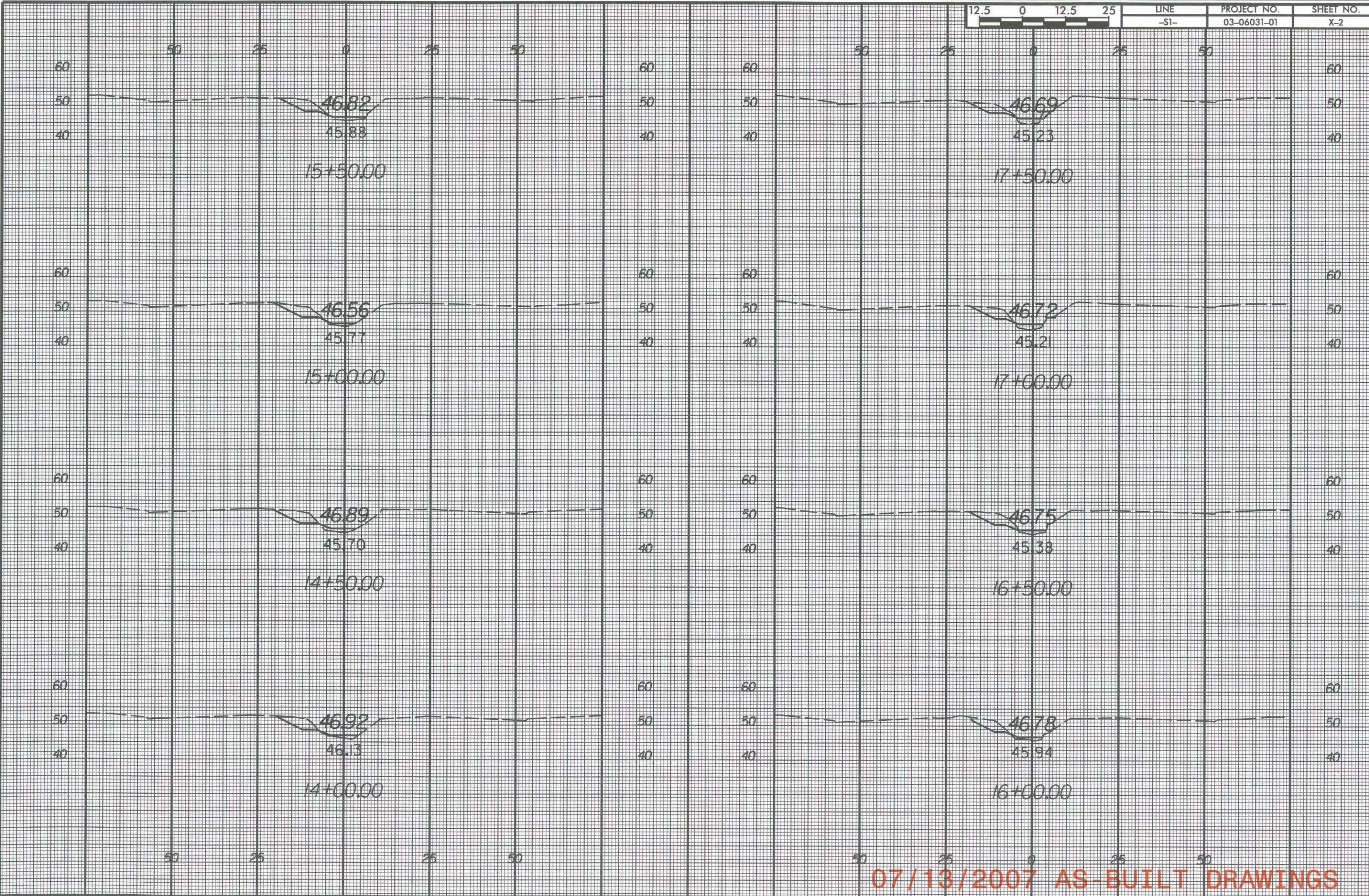


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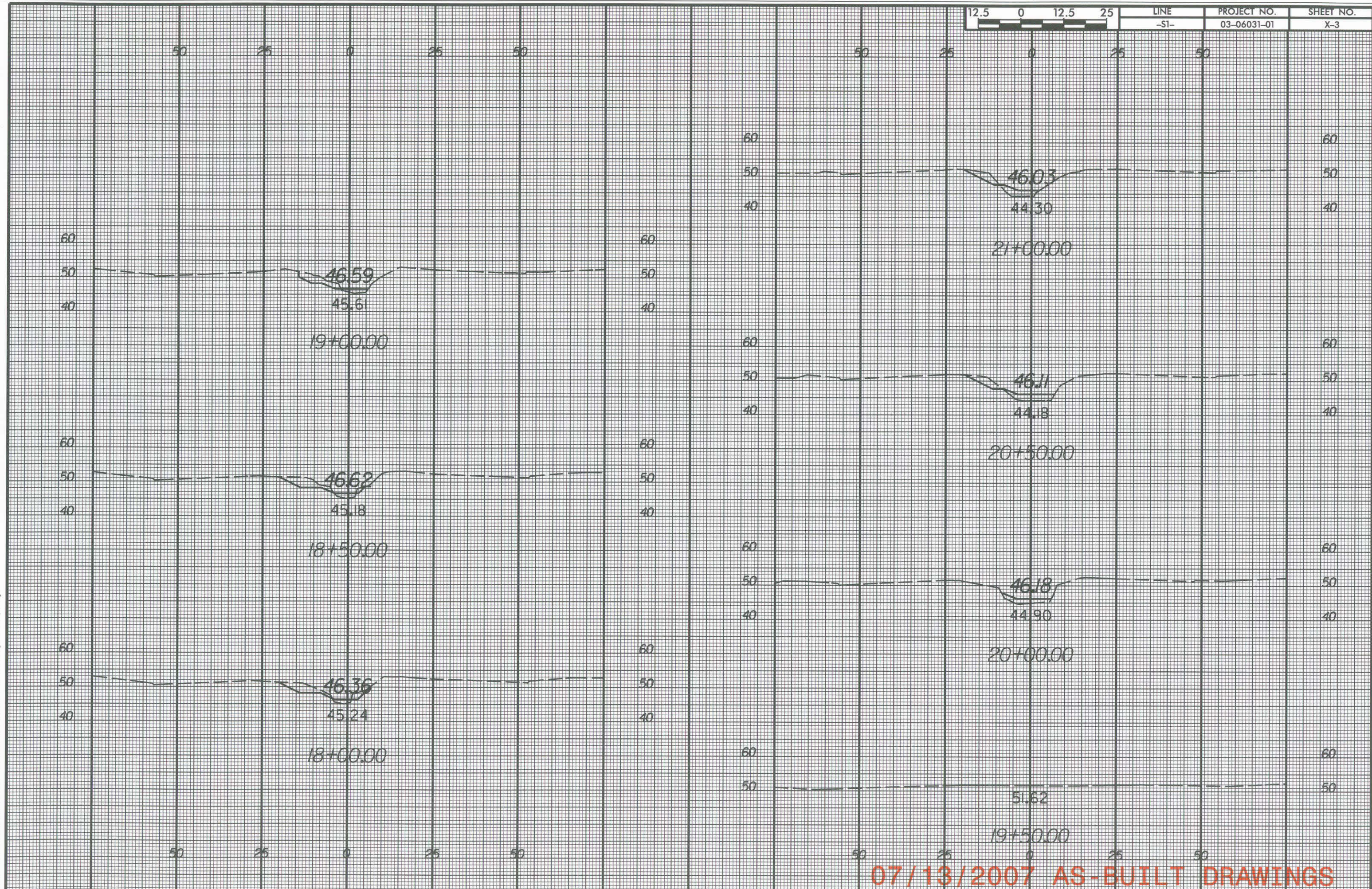


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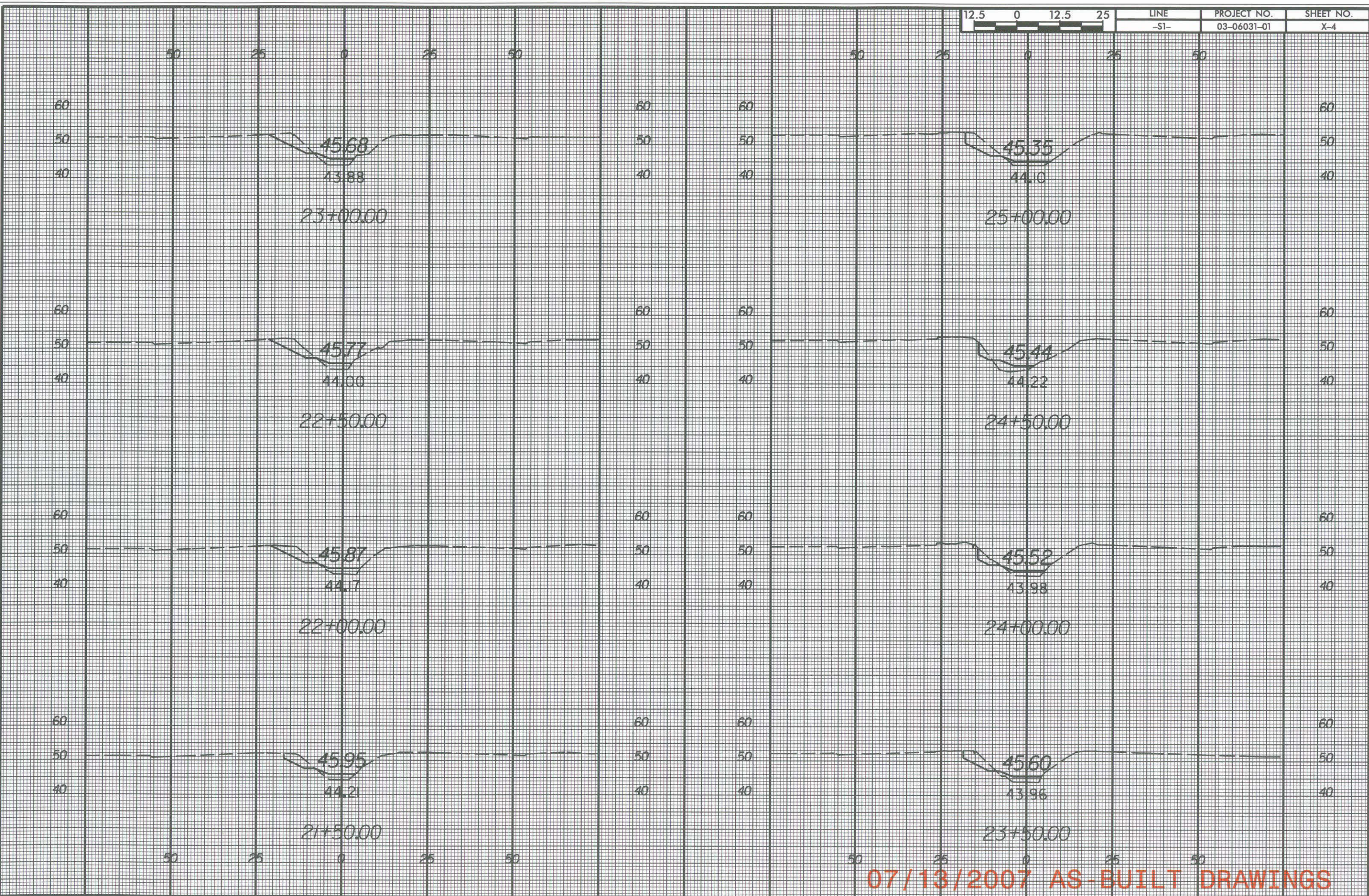
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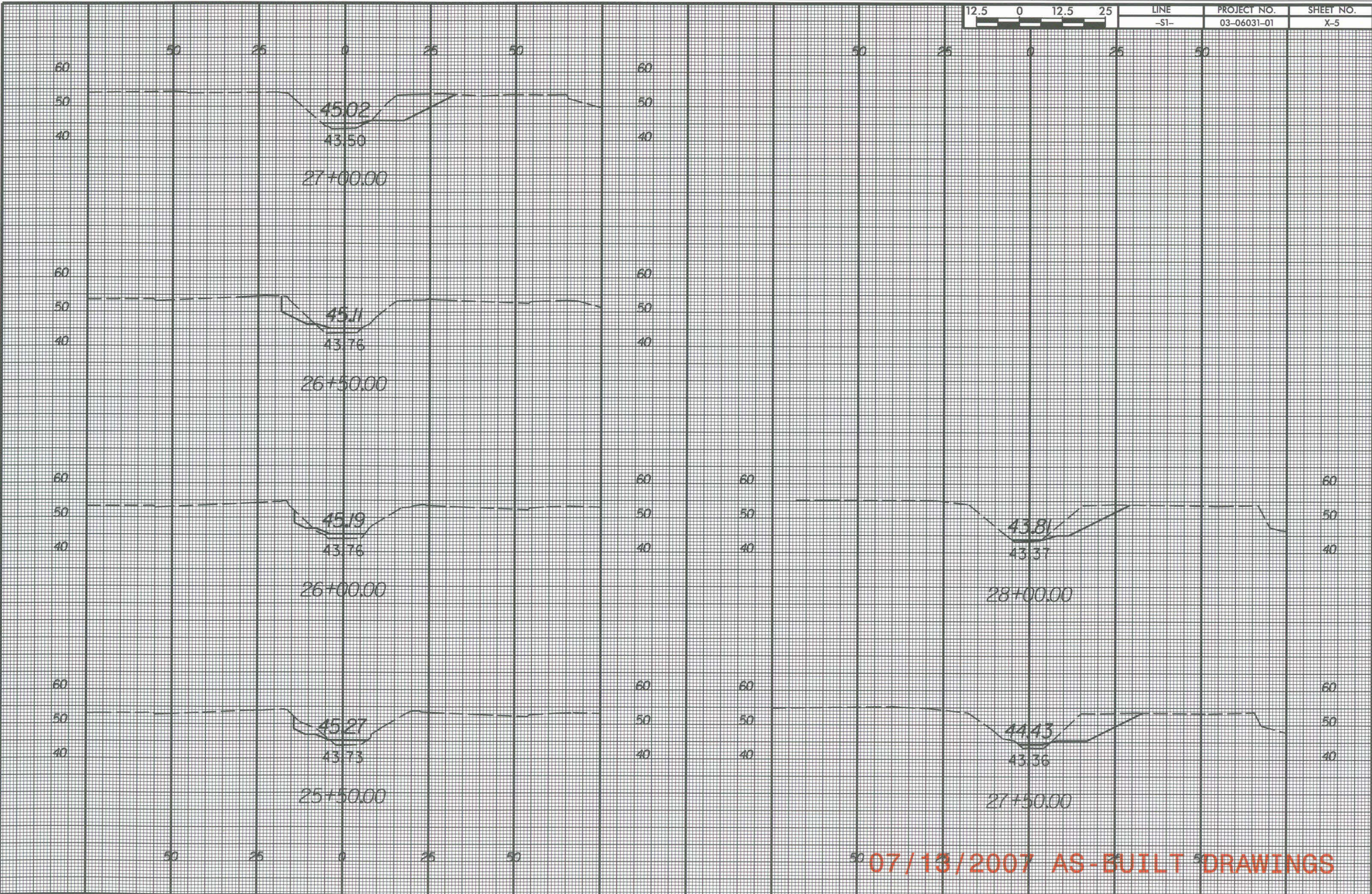
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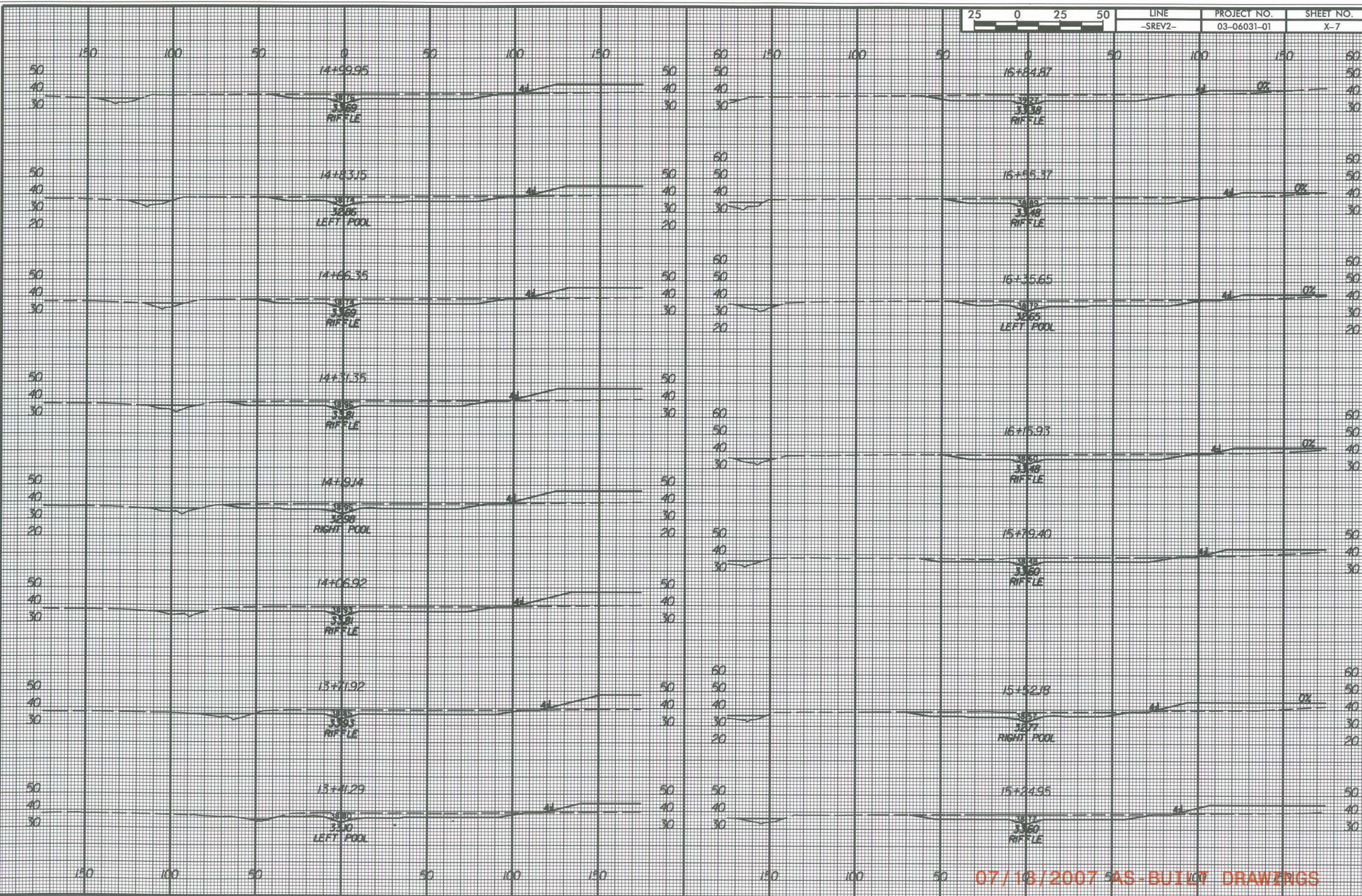


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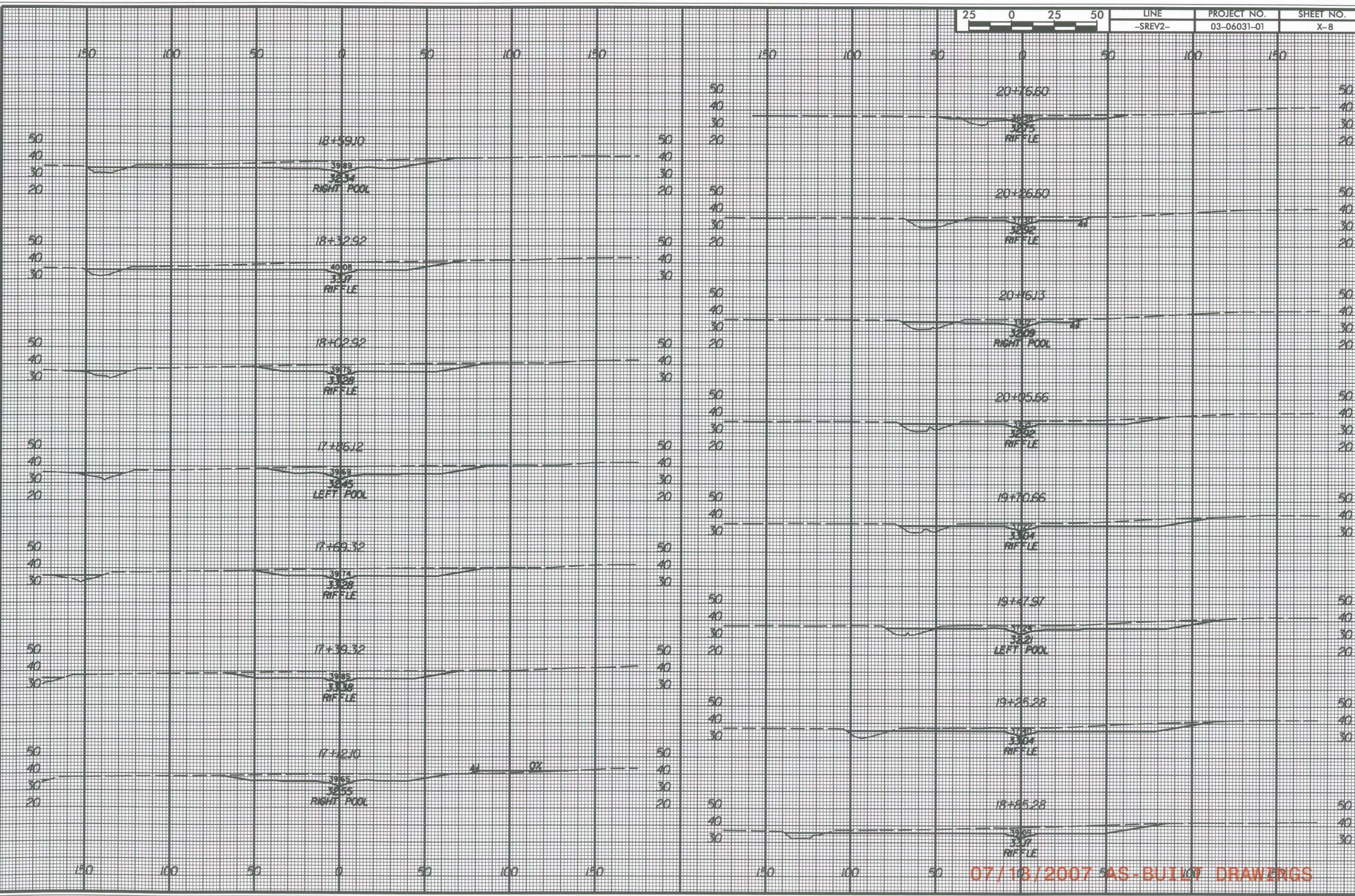


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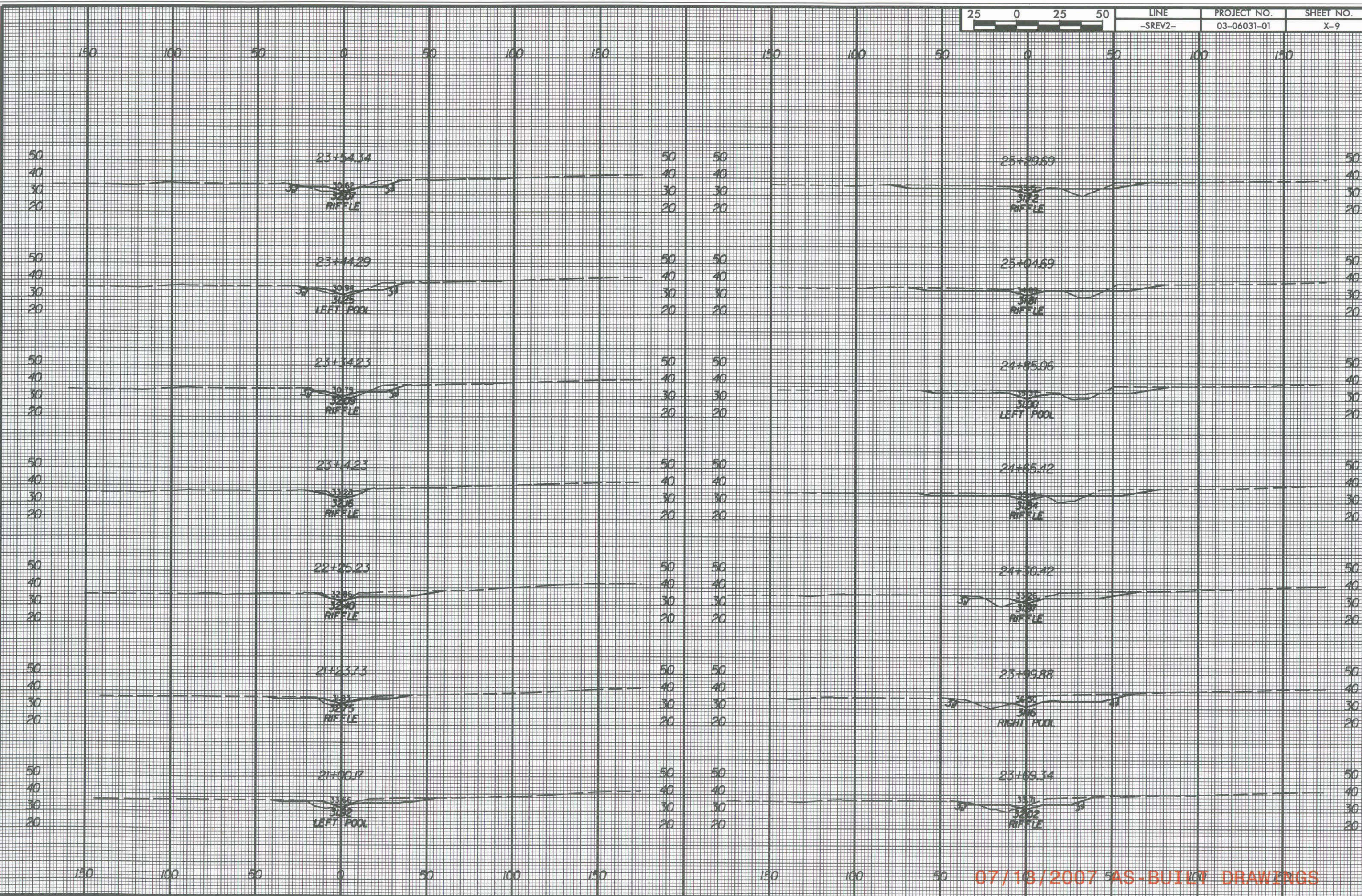
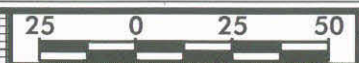
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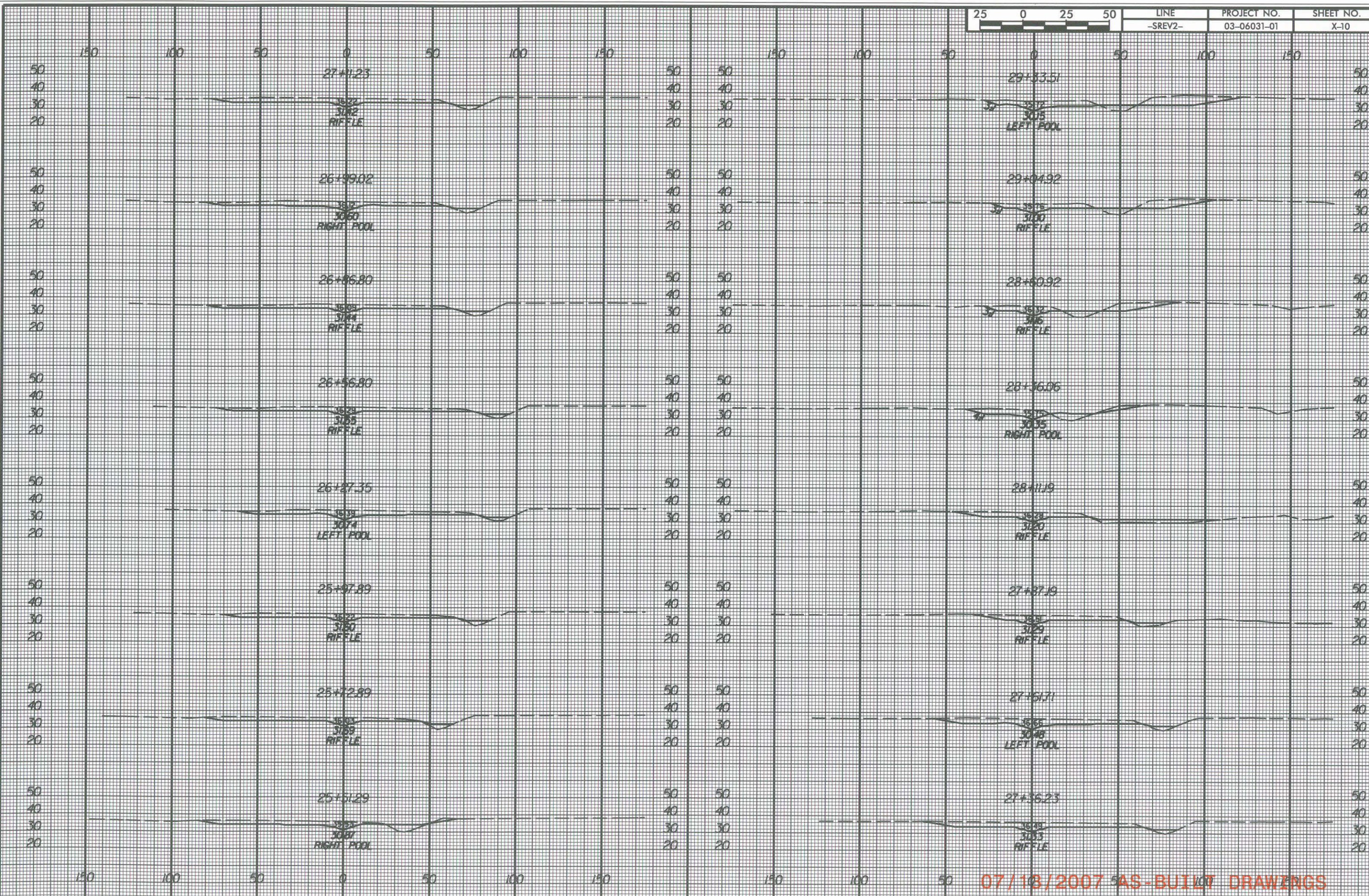
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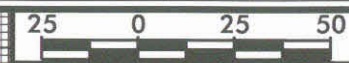
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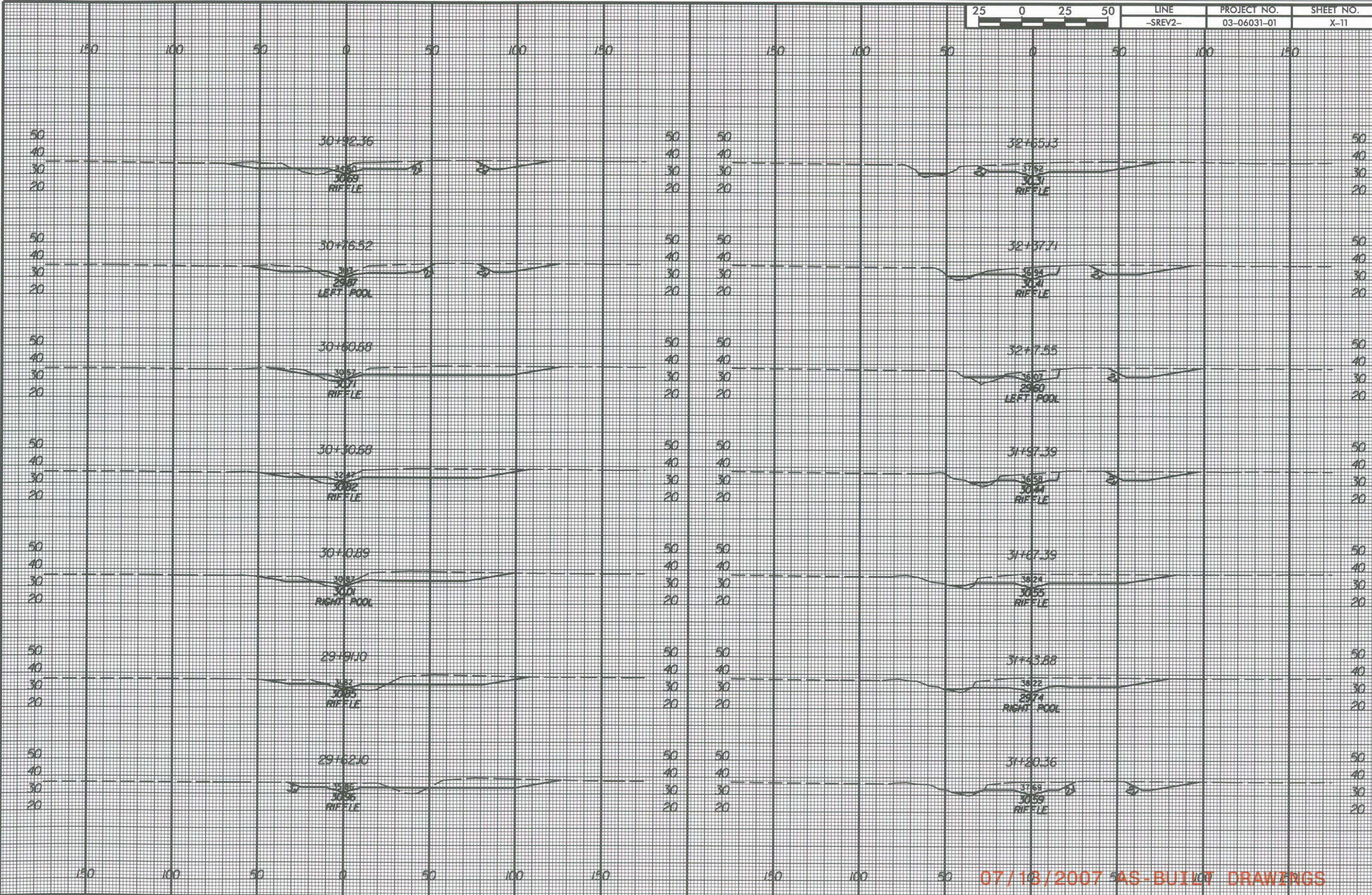


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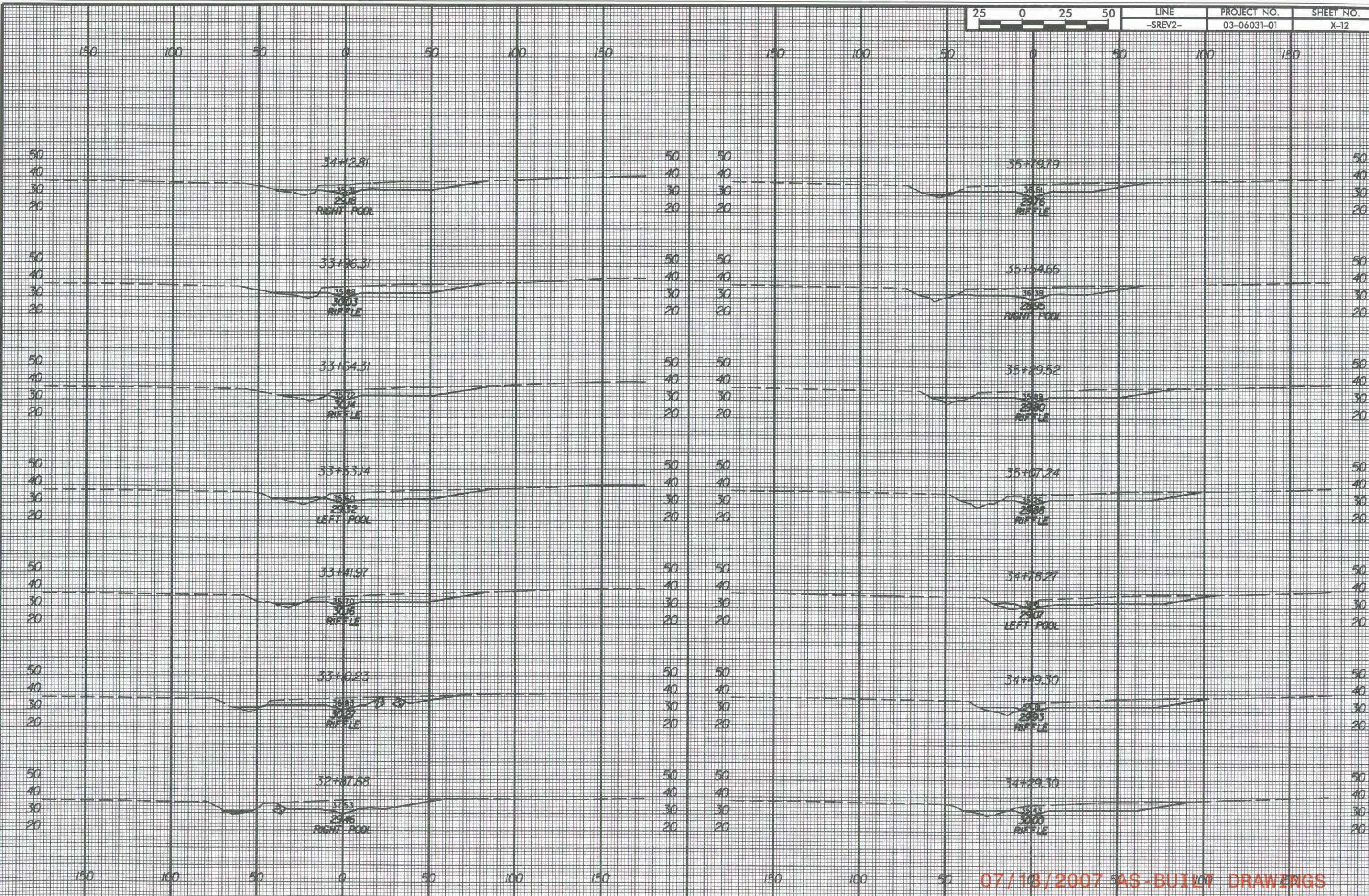


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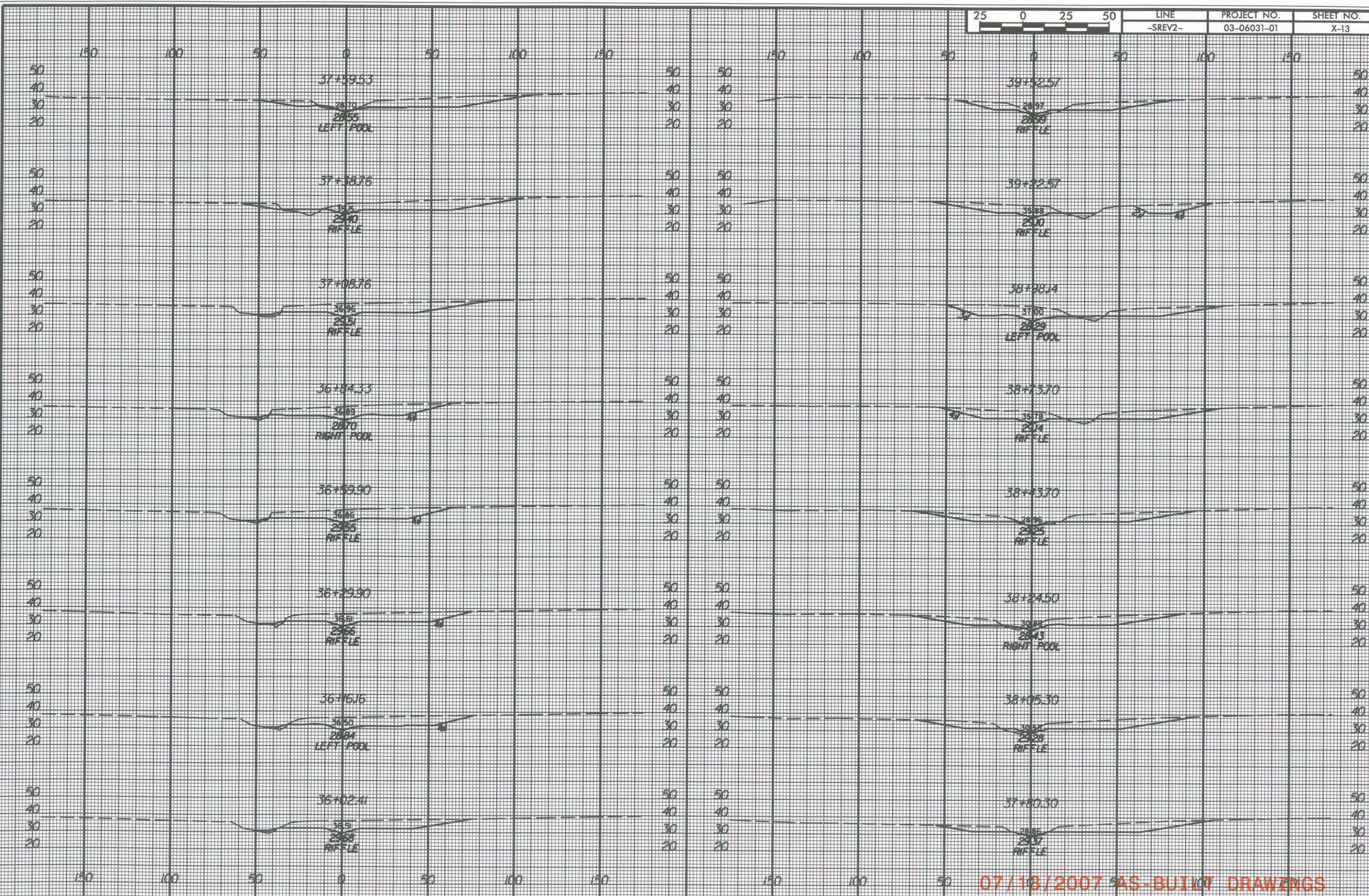
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