

ADDENDUM NUMBER ONE

Date: June 6, 2013

To: All Bidders

From: **Jenkins•Peer Architects**
Charlotte, NC

Re: Catawba County
Sherrills Ford – Terrell Branch Library
JPA Project #: 11SFL900

NOTICE TO BIDDERS:

Bidder is hereby notified that this Addendum shall hereby become a part of the Contract Documents, and shall be attached to the Project Manual for the Project.

The following items are intended to revise and clarify the Drawings and the Project Manual.

The bidder shall see that his Sub-Bidders are in full receipt of the information contained herein.

GENERAL NOTES:

1. This Addendum includes the following groups and subsequent “items” referring to various parts of the Contract Documents.
2. Where an “item” is “Drawing Sheets reissued,” the sheet is replaced in its entirety with the attached sheets.
3. Where an “item” is “Bulletin Drawings enclosed,” the attached bulletin drawing modifies the sheet referenced in that bulletin drawing’s titleblock.

CORRECTIONS TO PREVIOUS ADDENDA ISSUED: N/A

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS (0) ITEMS

PROJECT MANUAL:

SPECIFICATION DIVISIONS (3) ITEMS

- 3- Descriptive changes enclosed
- 0- Specification Sections reissued

DRAWINGS:

(T) TITLE, GENERAL, LIFE-SAFETY DRAWINGS (0) ITEMS

(C) CIVIL, PLANTING, & IRRIGATION DRAWINGS (5) ITEMS

- 0- Descriptive changes enclosed
- 0- Bulletin Drawings enclosed
- 5- Drawing Sheets reissued

(S) STRUCTURAL DRAWINGS (3) ITEMS

- 0- Descriptive changes enclosed
- 3- Bulletin Drawings enclosed
- 0- Drawing Sheets reissued

(A) ARCHITECTURAL DRAWINGS (1) ITEMS

- 0- Descriptive changes enclosed
- 1- Bulletin Drawings enclosed
- 0- Drawing Sheets reissued

(FP) FIRE PROTECTION DRAWINGS (0) ITEMS

(P) PLUMBING DRAWINGS (3) ITEMS

- 1- Descriptive changes enclosed
- 2- Bulletin Drawings enclosed
- 0- Drawing Sheets reissued

(M) MECHANICAL DRAWINGS (0) ITEMS

(E) ELECTRICAL DRAWINGS (0) ITEMS

MISCELLANEOUS:

MISCELLANEOUS DOCUMENTS (3) ITEMS

- 1- Sign In Sheet
- 1- Pre-Bid Meeting Minutes
- 1- Catawba County Contractor Safety Guidebook: FOR REFERENCE ONLY

END OF TITLE PAGE

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS**PROJECT MANUAL**

1. Specification Section 01 30 00 –

Para. 3.1 A: Replace “General Contractor” with “Architect” in the first sentence.

Para. 3.4 A: Replace in its entirety with the following: “Progress meetings shall be held bi-monthly at the General Contractor’s field office and in coordination with Architect’s scheduled site visits. Day and time of progress meetings shall be coordinated with Architect and Owner.”

2. Specification Section 22 01 00

“Alternates” should read as follows:

Refer to Section 01 23 00 Alternates for a listing of project alternate requirements.

3. Specification Section 22 05 10

The following should be added to the above specifications:

ROOF DRAINAGE PIPING:

All roof drainage piping in return air plenums shall be cast iron pipe per ASTM A74-75 exactly as specified for sanitary sewer systems.

Schedule 40 PVC pipe and fittings per ASTM D-2665-78 shall be used for conductor piping within the building and above ground. PVC piping shall not be used in return air plenums. It shall be the contractor's responsibility to obtain approval from local authorities.

All underground storm and yard drainage piping and catch basin structures outside the building will be furnished and installed by the General Contractor. The Plumbing Contractor shall provide and install roof drain conductor pipes from roof drain units to a point five foot (5') outside the building or to an adjacent storm drain catch basin as shown on the contract drawings.

The General Contractor's roof subcontractor will set roof drain units. However, the Plumbing Contractor shall make connection between roof drain units and conductor pipes. General Contractor will make the connection between conductor pipes and the general yard drainage piping system.

DRAWINGS**(T) TITLE, GENERAL, LIFE-SAFETY DRAWINGS****(C) CIVIL, PLANTING, & IRRIGATION DRAWINGS**

See sheets C1.01, C1.02, C1.03, C5.02 & C5.03

(S) STRUCTURAL DRAWINGS

See bulletin drawings SBD-01, SBD-02 & SBD-03

(A) ARCHITECTURAL DRAWINGS

See bulletin drawing ABD1

(FP) FIRE PROTECTION DRAWINGS

(P) PLUMBING DRAWINGS

1. See bulletin drawing PBD1 for added roof drain piping and PBD2 for RD and EOD specifications.
2. Sheet P3 (via PBD2): Add American Standard to the acceptable manufacturers for flush valves.

(M) MECHANICAL DRAWINGS

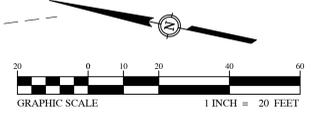
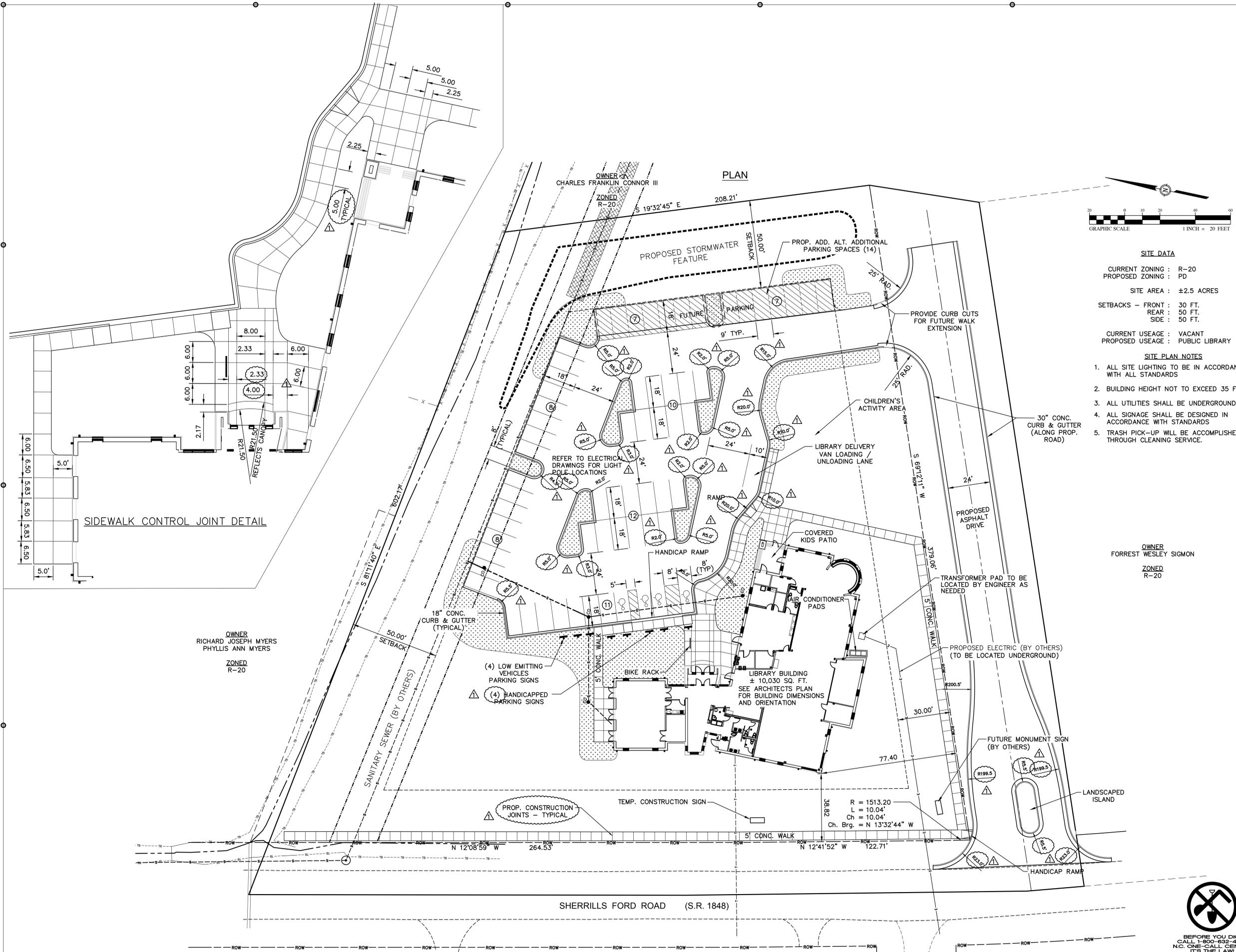
(E) ELECTRICAL DRAWINGS

MISCELLANEOUS DOCUMENTS

Pre-Bid Meeting minutes and Sign-in Sheet

Catawba County Contractor Safety Guidebook is attached FOR REFERENCE ONLY

END OF ADDENDUM NUMBER ONE



SITE DATA

CURRENT ZONING : R-20
PROPOSED ZONING : PD

SITE AREA : ±2.5 ACRES

SETBACKS - FRONT : 30 FT.
REAR : 50 FT.
SIDE : 50 FT.

CURRENT USAGE : VACANT
PROPOSED USAGE : PUBLIC LIBRARY

SITE PLAN NOTES

1. ALL SITE LIGHTING TO BE IN ACCORDANCE WITH ALL STANDARDS
2. BUILDING HEIGHT NOT TO EXCEED 35 FT.
3. ALL UTILITIES SHALL BE UNDERGROUND.
4. ALL SIGNAGE SHALL BE DESIGNED IN ACCORDANCE WITH STANDARDS
5. TRASH PICK-UP WILL BE ACCOMPLISHED THROUGH CLEANING SERVICE.

OWNER
FORREST WESLEY SIGMON

ZONED
R-20



Sherrills Ford - Terrell
Branch Library



TAG	DESCRIPTION	DATE
△	ADDENDUM #1	6-6-2013

Project: 00XXX111
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Checked By: DER
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LAYOUT PLAN



BID DOCUMENTS

C1.01

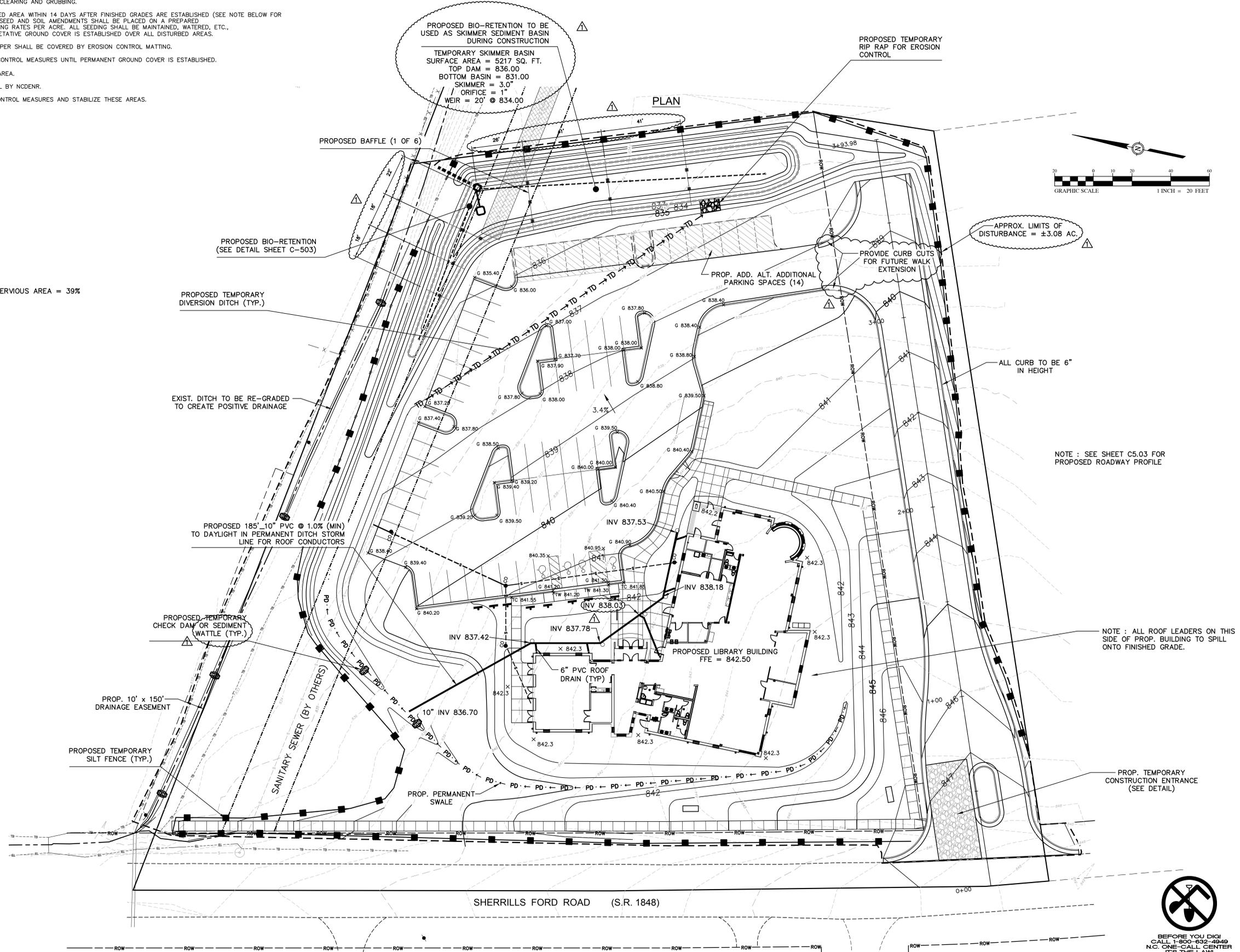


EROSION CONTROL NOTES

GENERAL: ALL EROSION CONTROL MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE NCDENR. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH FOR ALL WORK.

- OBTAIN EROSION CONTROL AND STORMWATER PERMITS FROM THE STATE.
- INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED BY THE NCDENR.
- PROCEED WITH GRADING, CLEARING AND GRUBBING.
- SEED AND MULCH DENUDED AREA WITHIN 14 DAYS AFTER FINISHED GRADES ARE ESTABLISHED (SEE NOTE BELOW FOR 7 DAY REQUIREMENTS). SEED AND SOIL AMENDMENTS SHALL BE PLACED ON A PREPARED SEEDBED AT THE FOLLOWING RATES PER ACRE. ALL SEEDING SHALL BE MAINTAINED, WATERED, ETC., UNTIL A PERMANENT VEGETATIVE GROUND COVER IS ESTABLISHED OVER ALL DISTURBED AREAS.
ALL SLOPES 2:1 OR STEEPER SHALL BE COVERED BY EROSION CONTROL MATTING.
- MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- INSTALL BIO-RETENTION AREA.
- REQUEST FINAL APPROVAL BY NCDENR.
- REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREAS.

SITE IMPERVIOUS AREA = 39%



119 South Tryon Street
 Charlotte, North Carolina 28284
 704/372-6665
 704/372-0102

civil + landscape
 McGill Associates
 1240 19th Street Lane NW
 Hickory, North Carolina 28601

structural
 Interface for Consulting Engineers, PA
 5222 Begonia Drive
 Charlotte, North Carolina 28215

mechanical, electrical, plumbing + fire protection
 Brittain Engineering
 P.O. Box 939
 56 3rd Street NW
 Hickory, NC 28603



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GRADING AND EROSION CONTROL PLAN

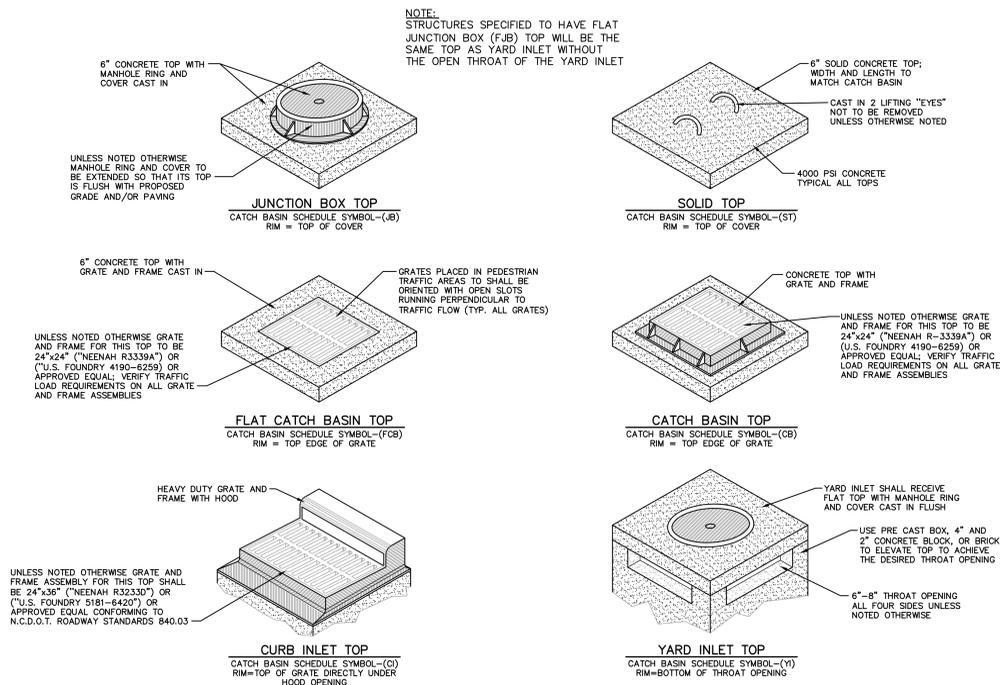


BID DOCUMENTS

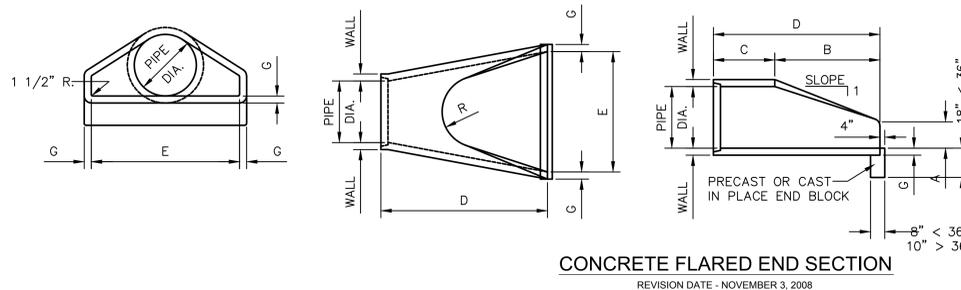
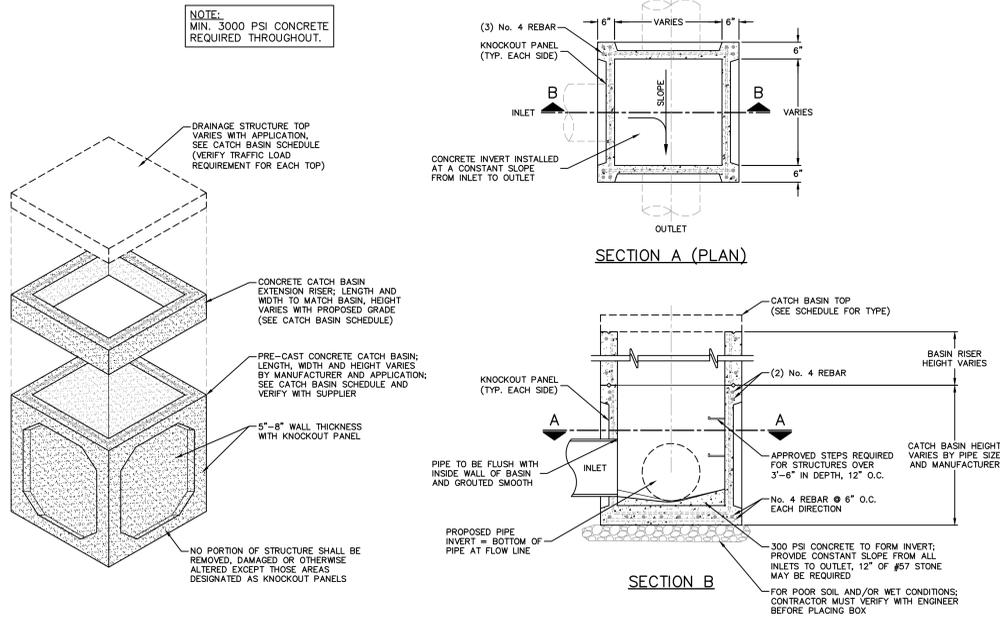
C1.02



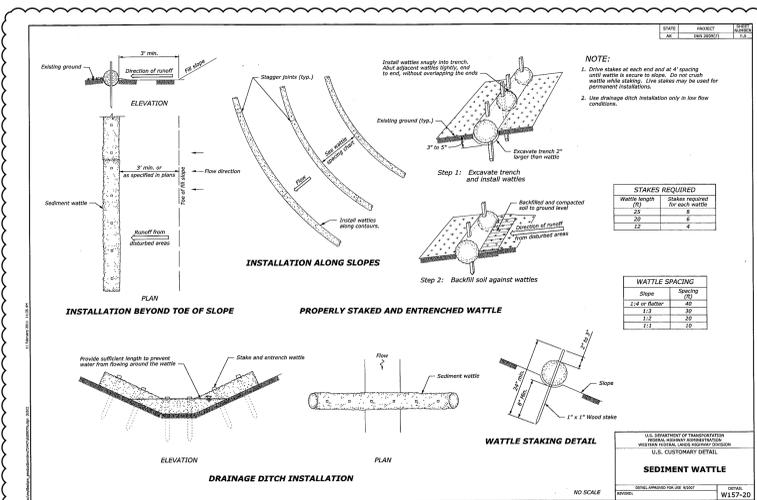
BEFORE YOU DIG!
 CALL 1-800-632-4949
 N.C. ONE-CALL CENTER
 IT'S THE LAW



CATCH BASIN TOP DETAILS
REVISION DATE - OCTOBER 22, 2010



PIPE DIA.	APPROX. WT.-LB.	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12"	530	6"	6"	6"	21"	21"	6"	6"	6"	21"
15"	740	6"	6"	6"	21"	21"	6"	6"	6"	26"
18"	990	6"	6"	6"	21"	21"	6"	6"	6"	31"
21"	1280	6"	6"	6"	21"	21"	6"	6"	6"	41"
24"	1520	6"	6"	6"	21"	21"	6"	6"	6"	51"

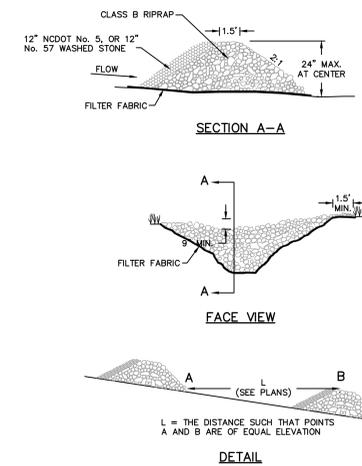


WATTLE INSTALLATION AND MAINTENANCE NOTES

1. STRAW ROLL INSTALLATION REQUIRES PLACEMENT AND SECURE STAKING OF THE ROLL ALONG THE CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND THE ROLL.
2. IF WOODEN STAKES CAN NOT BE USED BECAUSE OF ROCK, THEN RE-BAR MAY BE USED. BE SURE TO REMOVE RE-BAR WHEN WATTLES ARE REMOVED.
3. ABUT ADJACENT ROLL TIGHTLY END TO END (DO NOT OVERLAP).
4. DO NOT CRUSH WATTLE WHILE STAKING.
5. REPLACE WATTLE ONCE SATURATED WITH SEDIMENT.

SEDIMENT WATTLE DETAIL
(MODIFIED FOR THIS PROJECT)

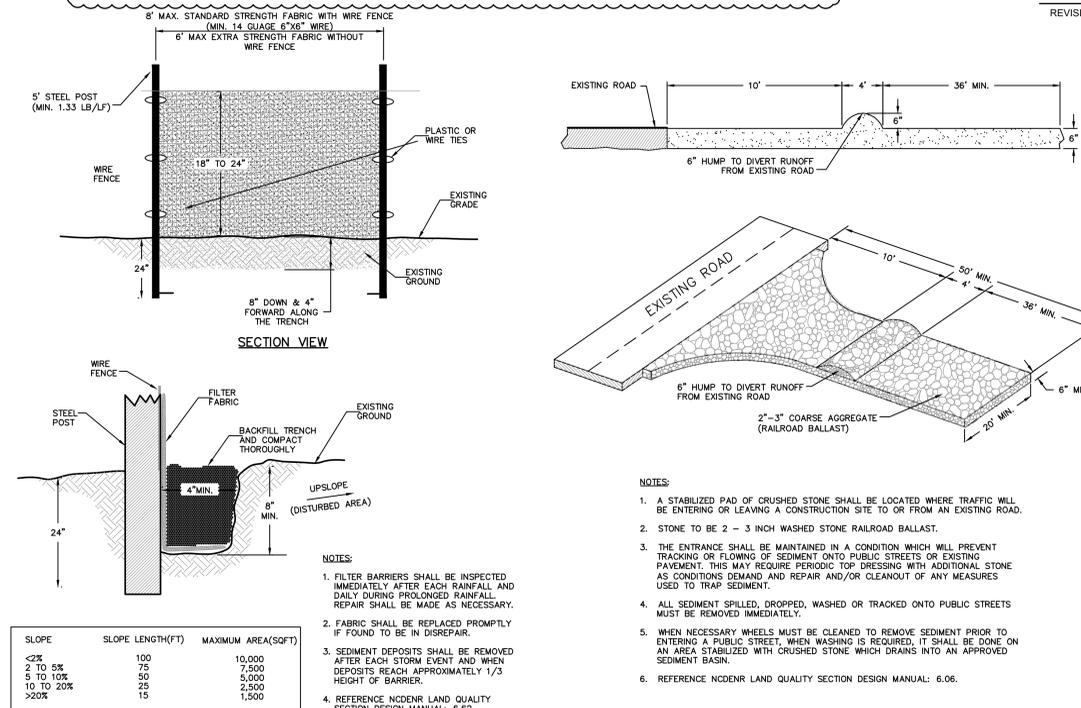
NOTE: DETAIL OBTAINED BY INTERNET U.S.D.O.T.



- THE FOLLOWING CRITERIA SHOULD BE USED WHEN DESIGNING A CHECK DAM:**
- DRAINAGE AREA IS LIMITED TO ONE HALF ACRE.
 - KEEP THE MAXIMUM HEIGHT OF 2 FT AT THE CENTER OF THE CHECK DAM.
 - KEEP THE CENTER OF THE CHECK DAM AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES AT NATURAL GROUND ELEVATION.
 - KEEP THE SIDE SLOPES OF THE DAM AT 2:1 OR FLATTER.
 - KEY THE STONE INTO THE DITCH BANKS AND EXTEND BEYOND THE ABUTMENTS 1.5 FEET MINIMUM TO AVOID WASHOUTS FROM OVERFLOW AROUND DAM.
 - STABILIZE OUTFLOW AREAS ALONG THE CHANNEL TO RESIST EROSION CAUSED BY CHECK DAMS.

- NOTES:**
1. INSPECT CHECK DAMS AND CHANNELS WEEKLY AND AFTER EACH RAINFALL OF 1/2" OR GREATER AND REPAIR IMMEDIATELY.
 2. CLEAN OUT SEDIMENT AND DEBRIS.
 3. ADD STONES TO DAM IF NEEDED TO MAINTAIN DESIGN HEIGHT AND WIDTH.
 4. REFERENCE NCDNR LAND QUALITY SECTION DESIGN MANUAL: 6.83

RIPRAP CHECK DAM
REVISION DATE - NOVEMBER 3, 2008



SLOPE	SLOPE LENGTH(FT)	MAXIMUM AREA(SQFT)
<2%	100	10,000
2 TO 5%	75	7,500
5 TO 10%	50	5,000
10 TO 20%	25	2,500
>20%	15	1,500

- NOTES:**
1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND DAILY DURING PROLONGED RAINFALL REPAIR SHALL BE MADE AS NECESSARY.
 2. FABRIC SHALL BE REPLACED PROMPTLY IF FOUND TO BE IN DISREPAIR.
 3. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT AND WHEN DEPOSITS REACH APPROXIMATELY 1/3 HEIGHT OF BARRIERS.
 4. REFERENCE NCDNR LAND QUALITY SECTION DESIGN MANUAL: 6.62.

- NOTES:**
1. A STABILIZED PAD OF CRUSHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM AN EXISTING ROAD.
 2. STONE TO BE 2 - 3 INCH WASHED STONE RAILROAD BALLAST.
 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 CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 4. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
 5. WHEN NECESSARY WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
 6. REFERENCE NCDNR LAND QUALITY SECTION DESIGN MANUAL: 6.06.



STABILIZED CONSTRUCTION ENTRANCE
REVISION DATE - NOVEMBER 3, 2008



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STANDARD DETAILS



BID DOCUMENTS

C5.02



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TAG	DESCRIPTION	DATE
ADDENDUM #1		6-6-2013

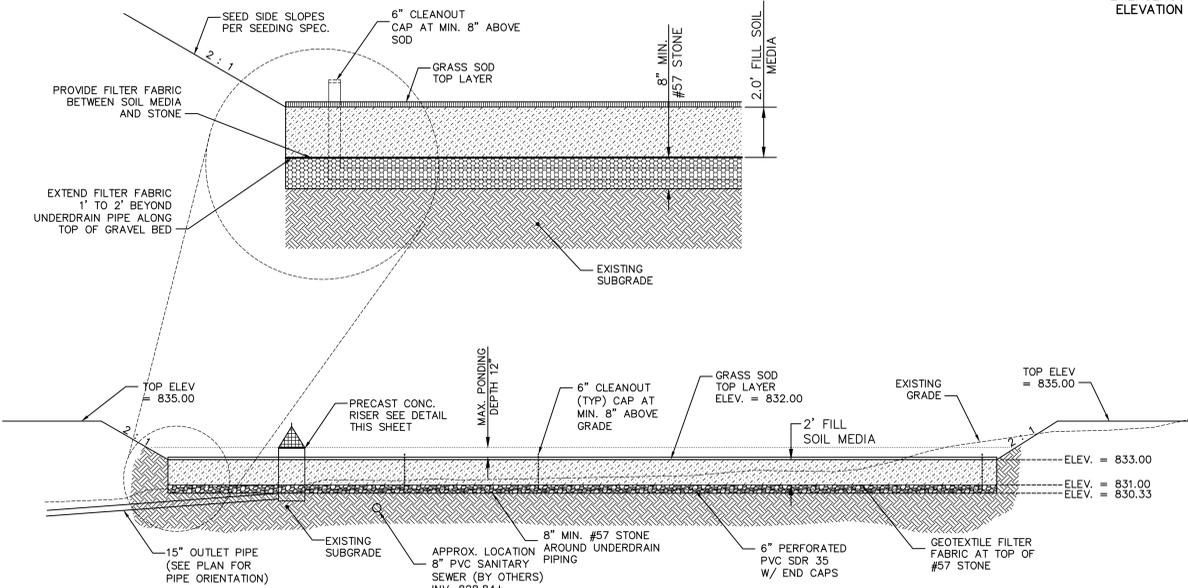
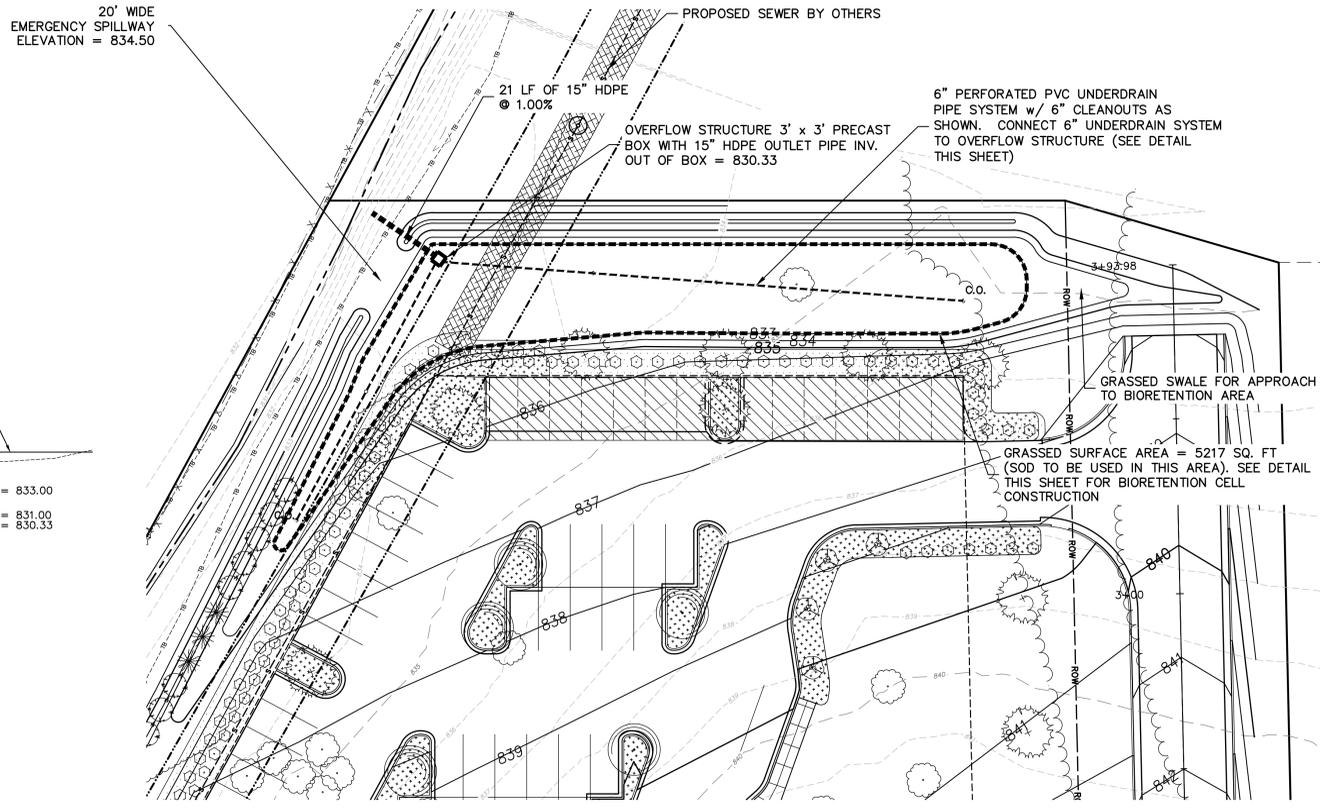
Project: 00XXX111
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STANDARD DETAILS

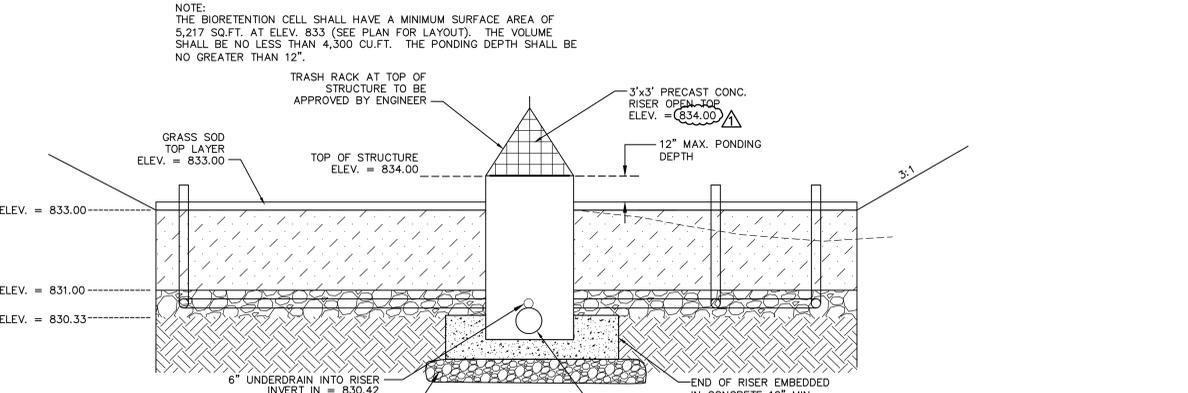
BID DOCUMENTS

C5.03

PLAN

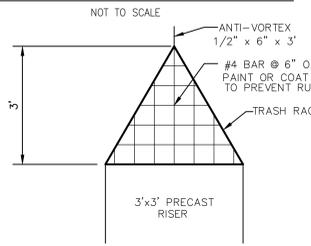


SECTION

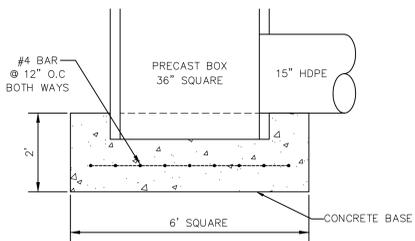


RISER DETAIL

BIORETENTION FACILITY DETAIL

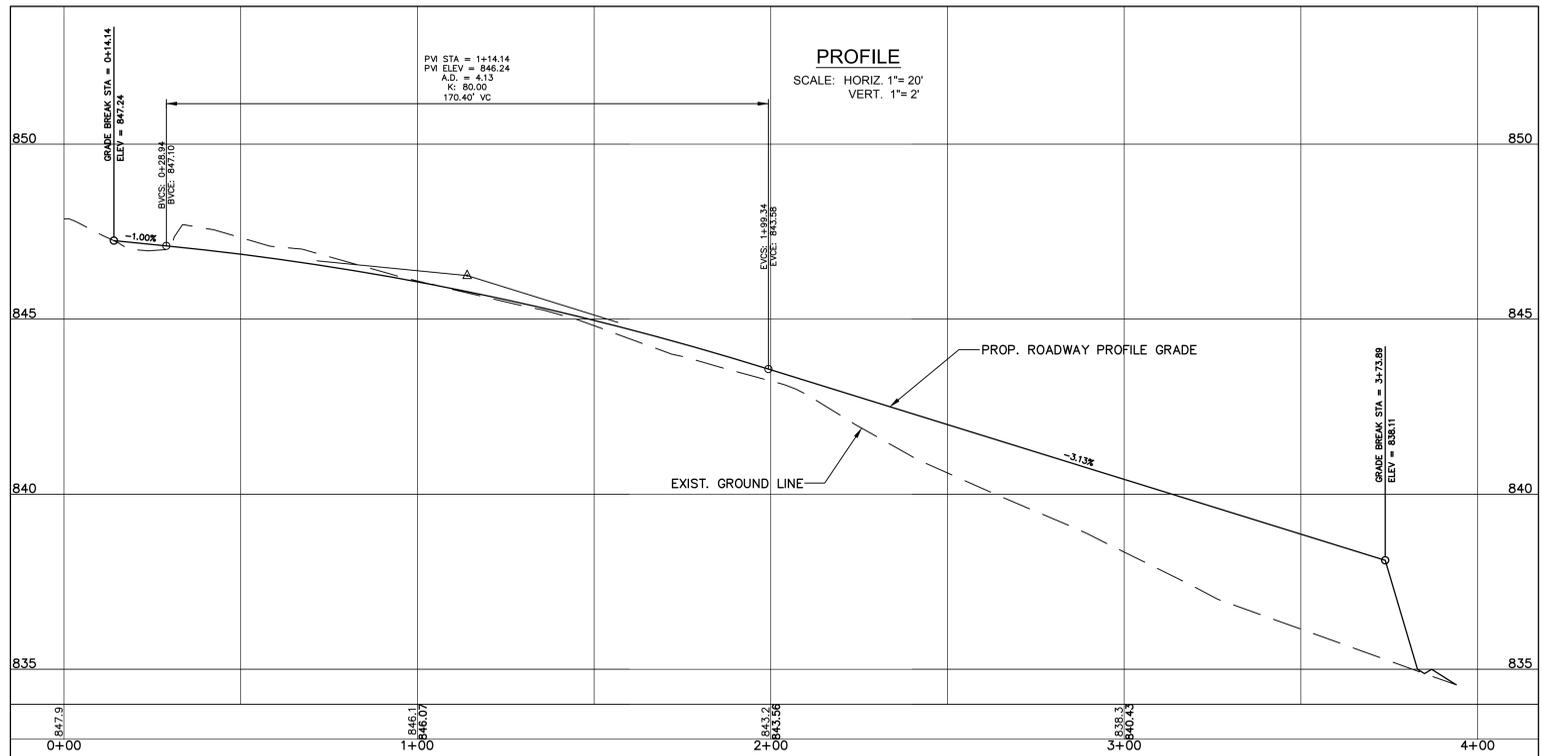


FRONT VIEW OF TRASH RACK



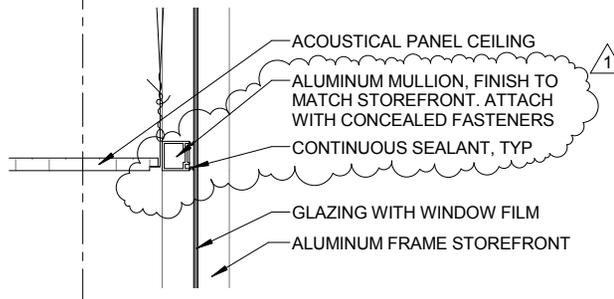
CONCRETE BASE AT RISER DETAIL

- NOTES:**
- TOP LAYER OF BIORETENTION CELL SHALL BE GRASSED USING SOD (NOT SEEDS). THE SOD SHALL NOT BE GROWN FROM SOIL THAT HAS AN IMPERMEABLE LAYER (CLAY).
 - PLANTING MEDIUM FOR BIORETENTION FACILITY SHALL CONSIST OF A HOMOGENEOUS SOIL MIX OF 85-88 PERCENT SAND, 8 TO 12 PERCENT FINES AND 3 TO 5 PERCENT ORGANIC MATTER. THE DEPTH OF THE FILL SOIL SHALL BE 2'.
 - SEE OPERATION AND MAINTENANCE AGREEMENT FOR ONGOING MAINTENANCE OF BIORETENTION AREA.
 - CONTINUE TO USE TEMPORARY SEDIMENT TRAP FOR EROSION CONTROL UNTIL THE ENTIRE AREA IS STABILIZED. THE TRAP SHALL BE COMPLETELY CLEANED OUT PRIOR TO CHANGING OVER TO THE BIORETENTION CELL.
 - CONTRACTOR SHALL POST A CONSPICUOUS SIGN STATING WHO IS RESPONSIBLE FOR THE REQUIRED MAINTENANCE AND ANNUAL INSPECTION OF THE BIORETENTION FACILITY.
 - THE CONTRACTOR SHALL PROVIDE DIGITAL (CAD) AND PAPER AS-BUILTS OF THE BIORETENTION FACILITY TO THE ENGINEER. THE AS-BUILTS SHALL BE SIGNED AND SEALED BY A NORTH CAROLINA LICENSED SURVEYOR.



PROPOSED ROADWAY PROFILE

D.8



1 Acoustic Ceiling at Storefront

1 1/2" = 1'-0"



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704/372-6665 704/372-0102 (F)



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6/6/2013

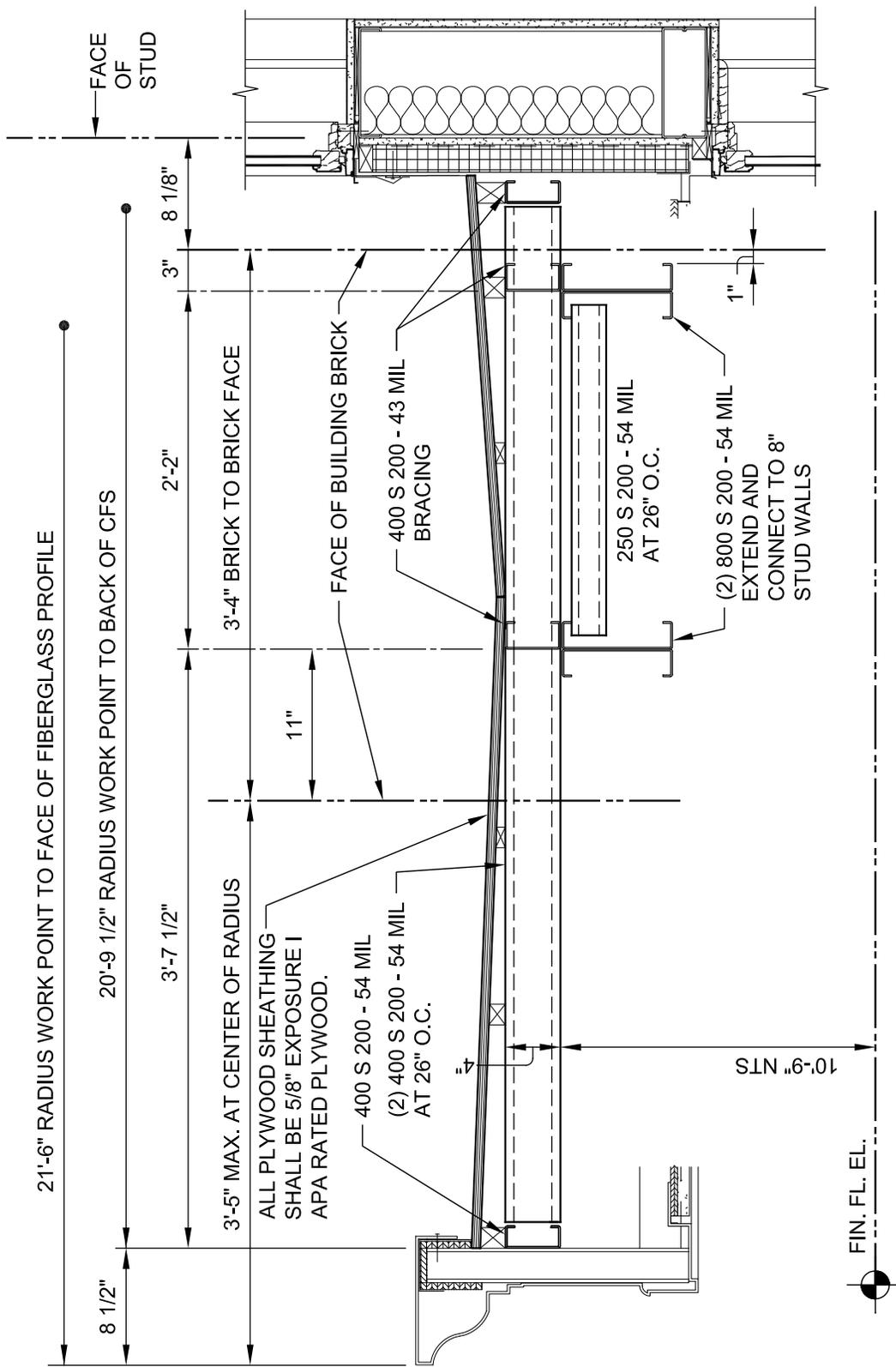
#11SFL900

BULLETIN DRAWINGS NO.

ABD1

REFERENCED FROM NO.

A9.31



USE TSN STIFFCLIP CONNECTIONS OF CFS TO CFS MEMBERS

17 / S1.30 SECTION THRU ENTRY CANOPY 1" = 1'-0"



SECTION THRU ENTRY CANOPY
SCALE: 1" = 1'-0"

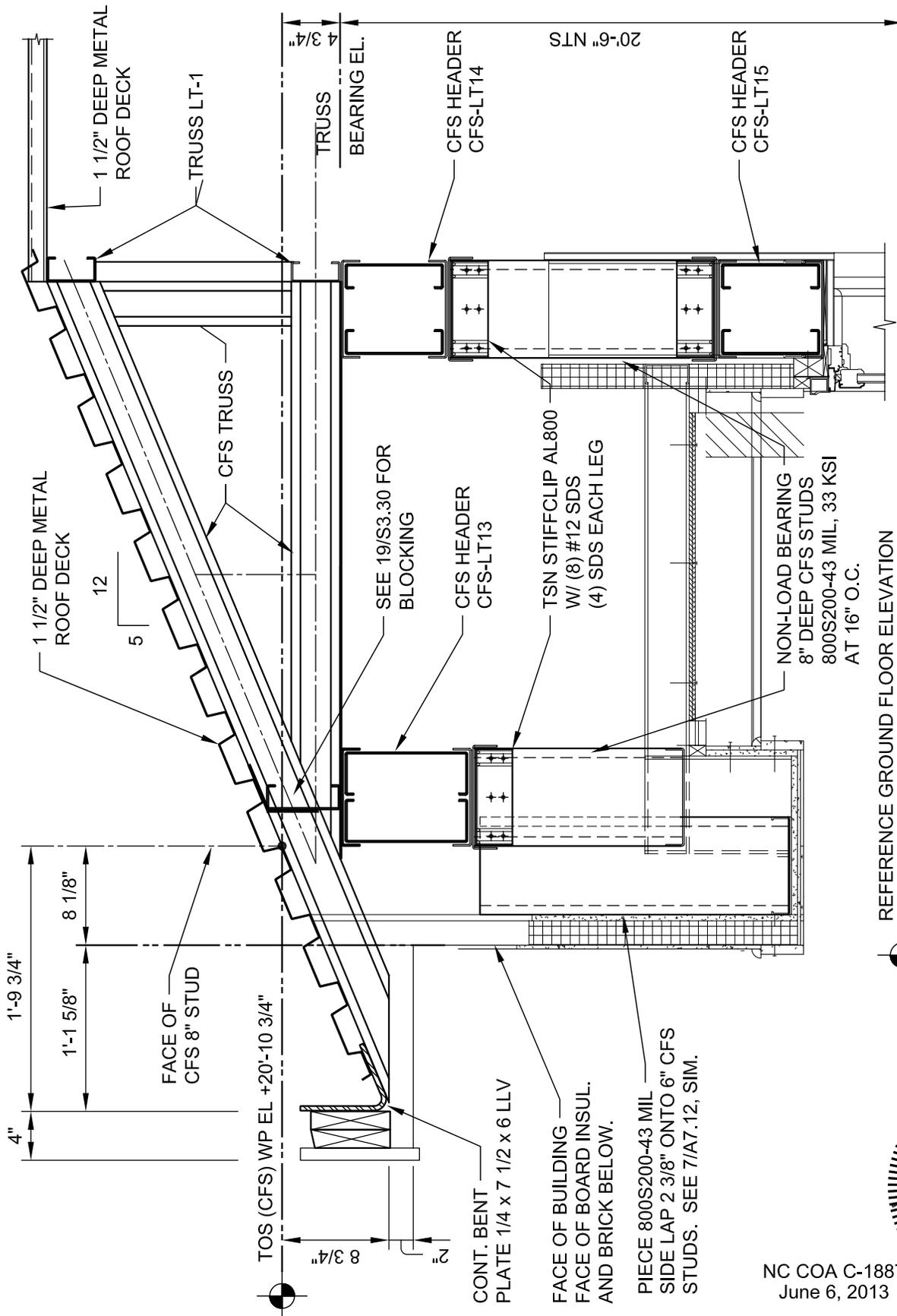
NC COA C-1887
JUNE 6, 2013

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Interface For Consulting Engineers, PA
Structural Engineering Consultants
Charlotte, NC 28215 704-599-8811



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BULLETIN DRAWINGS NO.
SBD-01
REFERENCED FROM NO.
S1.30



1" = 1'-0"

20 SECTION AT LOBBY MAIN ENTRY



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BULLETIN DRAWINGS NO.
SBD-02
REFERENCED FROM NO.
S3.30

CFS-L13 15'-0"

CFS (COLD FORMED STEEL) SECTIONS

MEMBER	TYPE	TSN SECTION	TSN CLIP TYPE	LOCATION	FASTENERS TO JAMB STUD	FASTENERS TO SILL / BASE / HEADER
JAMB		800 JS 300 - 68 MIL, 50 KSI	STIFFCLIP AL800 STIFFCLIP AL800	HEAD BASE	(4) #12 SDS (4) #12 SDS	(3) #12 SDS TO HEAD TOP TRACK (2) HILTI DS PAF TO BASE
HEADER	H2	(2) 1000 S 350 - 68 MIL, 33 KSI (2) 800 T 150 - 54 MIL, 33 KSI	STIFFCLIP EA SIDE HE - 68 MIL, 50 KSI	JAMB	F3 - (12) #10 SDS, EA. SIDE OF STIFFCLIPS F2 - (3) #10 TO JAMB, EA. STIFFCLIP	F3 - (12) #10 SDS, EA. SIDE OF HEADER, EA STIFFCLIP F2 - (3) #10 SDS TO HEADER, EA STIFFCLIP

CFS-L14 12'-0"

CFS (COLD FORMED STEEL) SECTIONS

MEMBER	TYPE	TSN SECTION	TSN CLIP TYPE	LOCATION	FASTENERS TO JAMB STUD	FASTENERS TO SILL / BASE / HEADER
JAMB		800 JS 350 - 118 MIL, 50 KSI 800 T 150 - 97 MIL, 33 KSI	STIFFCLIP AL800 STIFFCLIP AL800	HEAD BASE	(4) #12 SDS (4) #12 SDS	(3) #12 SDS TO HEAD TOP TRACK (2) HILTI DS PAF TO BASE
HEADER	H2	(2) 800 S 350 - 68 MIL, 33 KSI (2) 800 T 150 - 68 MIL, 33 KSI	STIFFCLIP EA SIDE HE - 68 MIL, 50 KSI	JAMB	F3 - (14) #10 SDS, EA. SIDE OF STIFFCLIPS F2 - (3) #10 TO JAMB, EA. STIFFCLIP	F3 - (14) #10 SDS, EA. SIDE OF HEADER, EA STIFFCLIP F2 - (3) #10 SDS TO HEADER, EA STIFFCLIP

CFS-L15 12'-0"

CFS (COLD FORMED STEEL) SECTIONS

MEMBER	TYPE	TSN SECTION	TSN CLIP TYPE	LOCATION	FASTENERS TO JAMB STUD	FASTENERS TO SILL / BASE / HEADER
JAMB		800 JS 350 - 118 MIL, 50 KSI 800 T 150 - 97 MIL, 33 KSI	STIFFCLIP AL800 STIFFCLIP AL800	HEAD BASE	(4) #12 SDS (4) #12 SDS	(3) #12 SDS TO HEAD TOP TRACK (2) HILTI DS PAF TO BASE
HEADER	H2	(2) 800 S 350 - 68 MIL, 33 KSI (2) 800 T 150 - 68 MIL, 33 KSI	STIFFCLIP EA SIDE HE - 68 MIL, 50 KSI	JAMB	F3 - (14) #10 SDS, EA. SIDE OF STIFFCLIPS F2 - (3) #10 TO JAMB, EA. STIFFCLIP	F3 - (14) #10 SDS, EA. SIDE OF HEADER, EA STIFFCLIP F2 - (3) #10 SDS TO HEADER, EA STIFFCLIP

BRICK / LOAD BEARING CFS LINTEL SCHEDULE

SEE SBD-02, SECTION 20/S3.30 FOR REFERENCE
LOCATION OF CFS-L13, 14, & 15NC COA C-1887
June 6, 2013

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06/06/13

#11SFL900

BULLETIN DRAWINGS NO.

SBD-03

REFERENCED FROM NO.

S3.10

RCP	RECIRCULATION PUMP	BELL & GOSSETT MODEL PL-30 ALL BRONZE PUMP, 1/12 HP, 1", 115V, 10 GPM @ 10' HD. 3/4" FLANGED CONNECTIONS.		
EWCH	ELECTRIC WATER COOLER HANDICAP	ELKAY EZSTL8WSLK WALL HUNG BI-LEVEL ELECTRIC WATER COOLER, WITH ATTACHED ELKAY EZH20 BOTTLE FILLING STATION. 8.0 GPH, 1/4 HP., 115V., 460W., ROUGH STOP SUPPLY, STAINLESS STEEL FINISH & CABINET, C.P.B. "P" TRAP, MOUNT RIM 40" A.F.F.	2"	1 1
FD	FLOOR DRAIN	JOSAM #30000-6S-92-50 SERIES CAST IRON FLOOR DRAIN WITH GALVANIZED INTERIOR AND 6" SQUARE STRAINER/TRAP PRIMER CONNECTION.	4"	2"
TP	TRAP PRIMER	PRECISION PRODUCTS INC. "PRIME-RITE" TRAP PRIMER VALVE, MACHINED BRASS, 1/2" MALE NPT INLET, 1/2" FEMALE NPT OUTLET. PROVIDE DISTRIBUTION UNIT AS APPLICABLE FOR MULTIPLE FLOOR DRAINS. 		
RD	ROOF DRAIN	ZURN ZC-121-G ROOF DRAIN.	3"	
EOD	EMERGENCY OVERFLOW DRAIN	ZURN ZC-121-G ROOF DRAIN.	3"	

ACCEPTABLE MANUFACTURERS:

WATER CLOSETS, URINALS, LAVATORIES: KOHLER, AMERICAN STANDARD, ELJER, CRANE, TOTO, ZURN ONE, GERBER, MANSF CARRIERS - WADE, SMITH, ZURN, MIFAB.

SINKS - KOHLER, AMERICAN STANDARD, JUST, ELKAY, AMERICAN STANDARD, ZURN, CECO.
ELECTRIC WATER COOLERS - ELKAY, HALSEY-TAYLOR, OASIS.

WATER HEATERS - STATE, BOCK, LOCHINVAR, BRADFORD WHITE, A.O. SMITH, RHEEM.
WALL FAUCETS - WOODFORD, ZURN, WADE, SMITH, MIFAB, PRIER.

FLOOR DRAINS, ROOF DRAINS, FLOOR SINKS - WADE, SMITH, ZURN, JOSAM, SIOUX CHIEF, WATTS DRAINAGE, MIFAB.

FLUSH VALVES - DELANY, SLOAN, ZURN, HYDROTEK, AMERICAN STANDARD. 

MOP RECEPTOR - FIAT, FLOKSTONE, WILLIAMS, AMERICAN STANDARD.

RECIRCULATION PUMP - BELL & GOSSETT, TACO, GRUNDFOS

FAUCETS - DELTA, SYMMONS, T&S, AMERICAN STANDARD, MOEN, CHICAGO FAUCETS.



BULLETIN DRAWINGS NO. **PBD2** REFERENCED FROM NO. **P3**

Sherrills Ford - Terrell Branch Library #11SFL900 05/30/13

CATAWBA COUNTY North Carolina

Jenkins • Peer Architects
112 South Tryon St. Charlotte, NC 28284
704/372-6665 704/372-0102 (F)

SHERILLS FORD - TERRELL LIBRARY
A branch of the Catawba County Library System
Pre-Bid Meeting
JPA Project 11SFL900

Wednesday, May 29, 2013 at 2:00 PM

THOSE PRESENT

	NAME	REPRESENTING	TELEPHONE	FAX	EMAIL	HUB (Y/N)
1	DAVIS RICHMOND	McGILL ASSOCIATES	828 328-2024	828-328-3870	David.Richmond@McGILLBUSINESS.COM	
2	RANBY ICARD	BRITAIN ENGR.	828-328-1813	828-328-1814	Ricard@britainengineering.com	
3	Todd Anderson	Catawba County	828-465-8224	828-465-8477	AndersonT@co.catawba.nc.us	
4	Tod Bolick	Matthews Construction	828-464-7327	828-466-2068	tbolick@matthewsconstruction.com	
5	Chuck Moss	Hickory Construction	828-322-9234	828-322-5138	cmoss@hickory-construction.com	
6	Alex Kirby	Catawba County	828-217-2123	828-466-0063	akirby@cccg.com	
7	Justin Collins	Monteith Construction	704-405-1011	704-405-2868	jcollins@monteithco.com	
8	Matt Winters	David E. Loper & Co. Inc.	828-324-1884	828-324-1289	m.winters@dela.com	
9	Mike Hill	Edison Ford	704-329-0000	704-295-0053	mhill@edisonford.com	
10	Mike Wood	C.L. Wilson	704-857-2411		MWood@clwilson.com	
11	Sterling Smith	ICES-PA	704-599-8811		S.Smith@ices-pa.com	
12	Jay Gould	WA SMITH, INC.	704-373-9733		ESTIMATOR@WASmithINC.com	
13	BEN BENSON	JPA				
14	THOM TONCTT	JPA				
15						
16						
17						
18						



Sherrills Ford – Terrell Library
A branch of the Catawba County Library System

JPA Project #11SFL900

Pre-Bid Meeting Minutes

May 29, 2013

Agenda:

1. Introduction of Project Team
 - a. Catawba County
 - b. Jenkins Peer Architects
 - c. McGill Associates – Civil Engineering and Landscape Architecture
 - d. Interface for Consulting Engineers – Structural Engineering
 - e. Brittain Engineering – Mechanical, Plumbing, Electrical and Fire Protection Engineering

2. Description of the Project
 - a. New +/-10,000 sf library with site work, utilities and parking
 - b. Site address: 9154 Sherrills Ford Road, Terrell, NC
 - c. LEED Silver Certification, minimum
 - d. Applicable building codes: 2012 North Carolina State Codes
 - e. Catawba County Commercial Building Plan review has been completed. Reference #CBPR-04-2013-17272
 - f. Building inspections by Catawba County Building Services will be required.

3. Owner Preferred Alternates:

PA-1 Section 08 71 00 – Door Hardware Locksets - Corbin Russwin 59A1 Keyway
PA-2 Section 08 87 33 – Decorative Glazing Films - Solar Graphics
PA-3 Section 09 68 13 – Tile Carpeting - Mohawk International (Bigelow)
PA-4 Section 23 08 31 – Large Diameter Fans - Delta T Corporation, dba Big Ass Fans

4. Review of Bidding Requirements:
 - a. Pre-Qualified General Contractors are:

DeVere Construction Company, Inc.
Edison Foard Construction Services, Inc. dba Edison Foard

Sherrills Ford – Terrell Library
Pre-Bid Meeting Agenda – May 29, 2013
Page 2 of 3

Hickory Construction Company
David E. Looper & Company, Inc.
Matthews Construction Co., Inc.
Monteith Construction Corporation
New Atlantic Contracting, Inc.
Randolph Builders, Inc.
G.L. Wilson Building Company

- b. Bid Opening Date: June 13, 2013 at 2:30 PM, in the Catawba County Government Center, Second Floor Conference Room, 100A South West Boulevard, Newton, NC
 - c. Each proposal shall be accompanied by a bid bond of five percent (5%) of the bid executed by a surety company licensed under the laws of North Carolina to execute the contract in accordance with the bid bond. Said deposit shall be retained by the owner as liquidated damages in event of failure of the successful bidder to execute the contract within ten days after the award or to give satisfactory surety as required by law.
 - d. No bids may be withdrawn for a period of 45 days after receipt of bids. Catawba County reserves the right to reject any and all bids, to waive any and all defects or irregularities in any bid, as many as may be permitted by law.
 - e. Bid security, Form of Proposal and MBE requirements must be submitted with Bid. All Contractors cautioned to keep full records.
5. Allowances & Unit Prices:
- a. Allowances are part of total bid number.
 - b. Unit prices are used to establish the cost of additional work beyond the allowance quantity listed.
 - c. All unused portions of allowance values will be returned to the Owner via deductive change order at the end of the project.
6. Time of Completion and Liquidated Damages:
- a. 300 calendar days from Notice to Proceed. Completion of project on schedule is critical for Catawba County
 - b. \$500 per day liquidated damages
7. Clarifications or Interpretations: Bidders & Sub-bidders shall make a request via facsimile, US Mail, and e-mail which shall reach the **Architect** at least seven days prior to the date for receipt of bids. Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding and Bidders shall not rely upon them. If the requested information is available in the bidding documents, a response will not be issued. Reference the Instructions to Bidders and Project Manual for complete requirements. For e-mail, use bbenson@jenkinspeer.com or ttonetti@jenkinspeer.com.

Sherrills Ford – Terrell Library
Pre-Bid Meeting Agenda – May 29, 2013
Page 3 of 3

1. Product Substitutions: No substitution will be considered prior to receipt of bids unless written request for approval has been received by the **Architect** at least ten days prior to the date for receipt of bids. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner. Requests that do not contain all required information will not be reviewed. Refer to the Instructions for Bidders and Project Manual for complete requirements.
2. Owner comments
 - a. Minority Outreach:
 - i. *Debbie Anderson noted that Catawba County maintains a 5% minority participation goal.*
 - ii. *Minority contractors must be certified by the State of North Carolina to contribute toward that goal.*
 - b. All contractors and sub-contractors working on the project site shall comply with the Catawba County Substance Abuse/Drug-Free Workplace Policy and Catawba County Smoke-Free Policy.
 - c. Contractor Safety Guidebook
 - i. *County's safety guidelines to be issued via addendum.*
3. Bidders questions:
 - a. Who is responsible for tap and impact fees?
Response: Catawba County will pay all impact and tap fees.
 - b. When is the anticipated date for Notice of Intent to Award?
Response: It is currently anticipated that the recommendation for contract award will be on agenda for July 15, 2013 County Commission meeting. The Notice of Intent to Award, therefore, is anticipated sometime after July 15, but before August 1, 2013.
 - c. Who is responsible for permit fee?
Response: Catawba County has already paid for the building permit.

Contractor Safety Guidebook

Catawba County Government April 4, 2013



Catawba County Government

Contractor Safety Guidebook

I hereby acknowledge that I have received a copy of the Catawba County Government Contractor Safety Guidebook.

Name: _____

Title: _____

Company: _____

Signed: _____

Date: _____

Return to: Catawba County Government

Purchasing Department

PO BOX 389

Newton, NC 28658

The safety policy of Catawba County Government is to provide for the protection of its employees, citizens, visitors, facilities and surrounding environment through the development and implementation of a comprehensive safety program.

Contractors are expected to also provide safe workplaces and **implement their own safety programs**. This guidebook is intended to assist in coordinating Catawba County Government facilities and contractor operations during construction and renovation projects. By becoming familiar with the policies and procedures in this guidebook, the safety-minded contractor should get the job done safer and with less workplace hazards.

Contractors are expected to comply with all applicable Federal, State, and Local laws and also follow safe work practices for construction trades. Some of these regulations and safe work practices are outlined in this guidebook.

Due to the wide variety of construction operations, it is not possible to outline every conceivable applicable regulation and work practice in this guidebook. Nothing in this guidebook should be construed to be part of the contract specification.

Contractor management and supervision must thoroughly review their own work practices and workplace hazards and then provide employees all the necessary training and equipment for their safety.

EMERGENCY NUMBER — call 911.

I. SAFETY PROGRAM OBJECTIVES	1
II. BASIC SAFETY RULES	1
III. SPECIAL PROCEDURES AND WORK PERMITS	1
1. Hazard Communication and Chemical Safety	1
2. Excavations and Trenches	2
3. Electrical Hazards	2
4. Lockout/Tag out	2
5. Confined Space Entry Program	3
6. Fall Protection	3
7. Scaffolds	4
IV. SAFETY POLICIES	4
V. GENERAL SAFETY PROCEDURES	5
1. OSHA General Duty Clause	5
2. General Inspections and Training	5
3. Medical Services and First Aid	5
4. Hand and Power Tools	5
5. Personal Protective Equipment (PPE)	6
6. Eye and Face Protection	6
7. Head Protection	6
8. Hearing Protection	6
9. Respiratory Protection	7
10. Gases, Vapors, Fumes, Dusts, and Mists	7
11. Electrical	7
12. Fire Protection	8
13. Flammable and Combustible Liquids	8
14. Welding, Cutting and Heating	8
15. Housekeeping	9
16. Storage	9
17. Ladders	9
18. Railings	10
19. Scaffolds	10
20. Air Tools	11
21. Compressed Air	11
22. Compressed Gas Cylinders	11
23. Hoists and Cranes	11
24. Accident Record Keeping and Reporting Requirements	11

I. SAFETY PROGRAM OBJECTIVES

Safety and health programs strive to protect people, property, and the environment and must comply with governmental regulations. The objective of this guidebook is to assist in providing a safe environment for employees, citizens, visitors and construction workers in all areas during renovation or new construction projects.

Major objectives of a contractor's safety and health program are to:

1. Protect employees, visitors, property and the environment from potential hazards.
2. Provide a safe and healthful workplace free from recognized hazards.
3. Comply with all governmental safety, health, and environmental standards.
4. Maintain an effective health and safety program, which includes managers, supervisors, and employees.
5. Cooperate with building occupants and others involved in the work area to maintain a safe and healthful workplace.

II. BASIC SAFETY RULES

Contractors and their employees shall:

1. Observe the posted speed limit.
2. Obey all posted warnings.
3. Observe the No Smoking and Drug Free Workplace policies on the Catawba County Government Campus.
4. Refrain from fighting and horseplay on Catawba County Government property.
5. Remain in designated areas at all times and use approved travel routes into and out of the job site.
6. Maintain work areas in an orderly manner that does not block exits or traffic through the work area.
7. Remove trash daily.

III. SPECIAL PROCEDURES AND WORK PERMITS

The following special procedures are specific to Catawba County Government. Although some topics listed below are covered by state and federal regulations, they receive special interest in the County setting.

1. Hazard Communication and Chemical Safety

- a. Contractors shall have copies of Safety Data Sheets (SDS) available at the job site for review.
- b. To ensure that all contractors' employees know and understand the hazards of all chemicals they are exposed to and how to protect themselves from hazardous chemicals, each contractor must establish and maintain an effective hazard communication program. The program must comply with OSHA standard 29 CFR 1926.59.

- c. The contractors HAZCOM program must provide:
 - A written hazard communication program,
 - An inventory of chemicals,
 - Safety data sheets (SDS) for all chemicals at the site,
 - Labeling of all containers and other warnings, and
 - Employee training.
- d. Catawba County will provide information to contractors if known asbestos or lead hazards are involved in the construction project. Upon discovery of materials that may contain asbestos (Presumed Asbestos Containing Material, PACM) or lead, the contractor should contact the Project Manager and/or Risk Manager for environmental testing.

2. Excavations and Trenches

- a. A daily inspection of excavations, the adjacent areas, and protective systems shall be performed by a competent person.
- b. Trenches more than 5 feet deep require shoring or sloping.
- c. Substantial barricades to prevent persons from falling into an open trench shall be maintained around the perimeter of trenches. This is especially important at the end of the workday for trenches that must remain open overnight. A plastic ribbon is not substantial for this purpose.
- d. Ladders will be provided at least every 25 feet for access to trenches over 4 feet deep.

3. Electrical Hazards

- a. It is very important that each contractor establish and maintain an effective electrical safety-related work practices program. References for such a program include OSHA standards 29 CFR 1910.331 to 1910.333 — Electrical Safety-Related Work practices and CFR 1926 Subpart K Electrical.
- b. Training shall be documented for all employees who face a risk of electric shock from working on, near, or with electrical circuits which are not reduced to a safe level by electrical insulation.

4. Lockout/Tagout

- a. The lockout/tagout standard (the control of hazardous energy standard) in 29 CFR 1926.417 and 1910.147 will be followed by all contractors on all job sites. The OSHA lockout/tagout procedure requires at a minimum:
 - Use of locks and/or tags on energy isolating devices.
 - Special lockout/tagout procedures for jobs requiring multiple lockout/tagout devices.
 - Contractors must provide their own lockout/tagout equipment.

- All contractors' employees, (authorized, affected, and other employees), must be trained by the contractor (or another acceptable training source) concerning lockout/tagout procedures.
 - An annual inspection shall be conducted by an authorized employee of the contractor to evaluate the implementation & efficacy of lockout/ tagout procedures.
 - Locks and/or tags must not be removed by anyone other than the employee applying them except under a special, approved permit.
 - Testing or positioning of machines or equipment will be performed only under special procedures per OSHA 29 CFR 1910.147(f).
- b. Procedures: All contractors will have a general lockout/tagout program prior to performing work at or for Catawba County Government. A written form will be required for lockout/tagout procedures for machinery on equipment which require more than one energy isolating device to be locked and/or tagged.
- c. Training: All contractors' employees will be trained by the contractor (or another acceptable training source) concerning the lockout/tagout procedures prior to beginning work at the site. A record will be kept of all employees trained and verification (by exam or other written means) that they understood the training they received. The training will include the disciplinary actions which will be taken if lockout/ tagout procedures are not followed.
- d. Inspections: Audits and inspections of the lockout/tagout procedures will be conducted routinely by the contractor's foreman, supervisor, or on-site safety personnel. A record will be kept of the inspections and the follow- up action taken.

5. Confined Space Entry Program

- a. Confined spaces present serious potential hazards to employees entering them, including oxygen deficiency, toxic materials, flammable materials, and hazardous energy. Each contractor must establish and maintain an effective confined space entry procedure that complies with OSHA standard 29 CFR 1926.21(b)(6) and 1910.146 when applicable.
- b. For those contractors performing work in areas with confined spaces, a copy of the confined space entry procedures must be submitted to the Project Manager and/or Risk Manager prior to beginning work at the site.
- c. Contractors must provide all equipment required for safe entry, including special rescue equipment.

6. Fall Protection

- a. Reasonable fall protection shall be provided to protect personnel from accidental falls associated with floors, platforms, scaffolds, guardrails, physical barriers, and elevated work locations. Standard guardrails must be provided for work locations 6 feet or more above the

adjacent level per OSHA standard 29 CFR 1926.500 and fall protection generally provided over 10 feet.

- b. All employees working at unguarded locations above 6 feet in construction (10 feet on scaffolds) must be protected by properly wearing approved fall protection equipment including safety harnesses and life lines as specified by supervision. All employees required to wear approved fall protection devices must be properly trained concerning the need for and purpose of the protection. In addition, employees must be instructed in the proper use of the equipment and shall demonstrate that they know, understand, and can use the fall protection devices properly.
- c. Supervisors shall ensure the use of fall protection devices as required by 29 CFR 1926.500 Subpart M.

7. Scaffolds

- a. Contractors shall comply with OSHA Standards 29 CFR 1926, Subpart L on Scaffolding and 29 CFR 1910.28.
- b. Access to scaffolds shall be limited to authorized personnel only, especially after working hours.

IV. SAFETY POLICIES

1. **Facilities, Equipment, Tools and Vehicles:** All workplace facilities equipment, tools and vehicles must be properly designed and maintained from a safety standpoint. All workplace facilities, equipment, and activities must comply with the applicable governmental regulations including OSHA and EPA. Proper stairs, ladders, platforms, and guardrails must be provided to ensure employee safety and compliance with OSHA regulations. All equipment tools and vehicles used must be used in accordance with manufacturers operating instructions.
2. **Education and Training:** All managers, supervisors, and employees must be properly trained to recognize, evaluate, and control workplace safety and health hazards. No employee is allowed to perform a job until he or she has been properly trained to perform the job safely. Specific training must be provided concerning the safety rules and procedures pertaining to the jobs being performed. Safety and health training is to be conducted initially upon employment and at least annually thereafter. Frequent refresher training such as tool box safety talks should also be part of the training program.
3. **Inspections:** Contractors should perform frequent and regular safety inspections.
4. **Emergency Procedures:** All employees must know, understand, and be able to follow all workplace emergency procedures pertaining to their assignment, including calling 911. Periodic tests, drills, audits, etc. must be conducted to verify employee knowledge and understanding of all emergency procedures.
5. **Accidents:** All accidents, incidents, injuries and illnesses must be reported to supervision immediately, so they can be properly investigated and employees properly protected. Injuries and illnesses requiring an "Employers' first Report of Accident" will be reported to the Project

Manager and/or Risk Manager.

6. **Manual Materials Handling:** Manual materials handling and other physical activities must be performed only by those employees physically able to do so.
7. **Enforcement:** Contractors should consider disciplinary action for unsafe acts.

V. GENERAL SAFETY PROCEDURES

The following General Safety Procedures apply to the entire workplace and should be followed by managers, supervisors and employees.

1. OSHA General Duty Clause

Hazardous conditions or practices not covered in an OSHA standard may be covered under Section 5(a)(1) of the Occupational Safety and Health Act of 1970 which states: "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

2. General Inspections and Training

- a. Contractors should designate a competent site-safety coordinator for each job site. The contractor's site-safety coordinator should be identified to the Project Manager and/or Risk Manager in the event that safety concerns regarding the worksite arise.
- b. Contractors should initiate and maintain an inspection program to provide for frequent and regular self-inspections of the job site, materials, and equipment.
- c. Contractors should instruct each employee in the recognition and avoidance of unsafe conditions and in the regulations applicable to his or her work environment and to control or eliminate any hazards or other exposure to illnesses or injury.
- d. The use of any machinery, tool, material, or equipment which is not in compliance with any applicable requirements of North Carolina DOL or OSHA standards is prohibited.

3. Medical Services and First Aid

- a. A person trained to render first aid is to be available at the worksite.
- b. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

4. Hand and Power Tools

- a. Electric power operated tools shall either be approved double-insulated, or be properly grounded, and used with ground fault circuit interrupters when used in damp or wet areas.
- b. Only authorized and properly trained employees shall use power tools.

- c. Powder actuated tools require certified operators and warning signs posted in all areas affected by the noise of the nail gun.
- d. Wrenches shall not be used when the jaws are sprung to the point that slip page occurs.
- e. Impact tools shall be kept free of mushroomed heads.
- f. The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

5. Personal Protective Equipment (PPE)

Appropriate personal protective equipment shall be worn in all operations where there is an exposure to hazardous conditions or where the need is indicated for using such equipment to reduce the hazard to the employees.

6. Eye and Face Protection

- a. Eye and face protection shall be provided when machines or operations present potential eye or face injury.
- b. Eye and face protective equipment shall meet the requirements of ANSI Z87.1-1991, "Practice for Occupational and Educational Eye and Face Protection."
- c. Employees involved in welding operations shall be furnished with filter lenses or plates of at least the proper shade number.
- d. Employees exposed to laser beams shall be furnished suitable laser safety goggles that will protect for the specific wavelength of the laser and be optical density adequate for laser involved.

7. Head Protection

Head protective equipment (hard hats/ helmets) shall be worn in areas where there is a possible danger of head injuries from impact, flying or falling objects, or electrical shock and burns. Hard hats/ helmets shall meet the performance requirements of ANSI Z89.1, "Standard for Industrial Protective Helmets."

8. Hearing Protection

- a. Feasible engineering or administrative controls shall be utilized to protect employees against sound levels in excess of those shown in Table D-2, OSHA Standard 1926.52
- b. When engineering or administrative controls fail to reduce sound levels within the limits of Table D-2, hearing protective devices shall be provided and used.
- c. Hearing protection is required at constant noise above 85 decibels or impact noise above 140 decibels.
- d. In all cases where the sound levels exceed the values shown in safety and health regulations, a hearing conservation program shall be administered.

9. Respiratory Protection

- a. When engineering or administrative controls are not effective in controlling toxic substances, appropriate respiratory protective equipment will be provided and shall be used.
- b. Respiratory protective devices provided by supervisors shall be appropriate for the hazardous material involved and the extent and nature of the work requirements and conditions.
- c. Employees required to use respiratory protective devices shall be thoroughly trained in their use.
- d. Contractors should have a written respirator protection program that includes respirator training, fit-testing and medical qualification documentation.

10. Gases, Vapors, Fumes, Dusts, and Mists

- a. Exposure to toxic gases, vapors, fumes, dusts, and mists at a concentration above those specified in the most recent "Threshold Limit Values of Airborne Contaminants" of the ACGIH, shall be avoided.
- b. Administrative or engineering controls must be implemented whenever feasible to comply with TLV's.
- c. When engineering and administrative controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed. Any equipment and technical measures used for this purpose must first be approved for each particular use by an industrial hygienist or other technically qualified person.

11. Electrical

- a. All electrical work shall be in compliance with the most recent National Electrical Code or the NEC according to the construction documents.
- b. Only qualified persons are permitted to work on or near energized conductors or parts and then only under special procedures that ensure proper employee protection.
- c. Unqualified persons shall not be allowed to work within 10 feet of energized overhead power lines.
- d. Equipment must not be operated closer than 10 feet to overhead energized power lines unless specific procedures are followed by qualified persons using appropriate protection equipment.
- e. Extension cords used with portable electric tools shall be the 3-wire type and shall be protected from damage. Splices shall have soldered wire connections with insulation equal to the original. Worn or frayed cords shall not be used.
- f. Bulbs on temporary lights shall be equipped with guards or deeply recessed in the reflector. Temporary lights shall not be suspended by their electric cords unless designed for suspension.
- g. Receptacles for attachment plugs shall be of the approved concealed contact type. Where different voltages, frequencies, or types of current are supplied receptacles shall be of such designs that attachment plugs are not interchangeable.

- h. Each disconnecting means of motors and appliances and each service feeder or branch circuit at the point where it originates shall be legibly marked to indicate its purpose, unless located and arranged so the purpose is evident.
- i. Cable passing through work areas shall be covered or elevated to protect it from damage which would create a hazard to employees.
- j. Boxes for disconnecting means shall be securely and rigidly fastened to the surface upon which they are mounted and fitted with covers.
- k. All extension cords and cord and plug connected equipment shall be protected by an assigned equipment grounding conductor program.
- l. No employer shall permit an employee to work in proximity to any part of an electric power circuit that he may contact, unless the employee is protected against electric shock by de-energizing the circuit and grounding it or by guarding it by effective insulation or other means.
- m. In work areas where the exact location of underground electric power lines is unknown, workers using jackhammers, bars, or other hand tools which may contact an energized line shall be provided with insulated protective gloves.

12. Fire Protection

- a. Firefighting equipment will be conspicuously located, readily accessible at all times, shall be periodically inspected, and shall be maintained in operating condition.
- b. Extinguishers are to be placed at least every 75 feet. Extinguishers are to be provided by the contractor.
- c. Each employee must know the alarm system at the worksite so the employees and the local fire department, can be alerted during an emergency.

13. Flammable and Combustible Liquids

- a. Flammable and combustible liquids shall only be stored in approved containers and in appropriate quantities for the job site use.
- b. Conspicuous and legible signs prohibiting smoking shall be posted in service and refueling areas.
- c. Flammable liquids shall be dispensed through grounded and bonded containers.

14. Welding, Cutting and Heating

- a. All employees shall be instructed in the safe use of welding equipment prior to using this equipment.
- b. Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention shall be taken where welding or other "hot work" is being done. No welding, cutting or heating shall be done where the application of flammable paints or the presence of any other flammable compounds, or heavy dust concentration creates a fire hazard.
- c. Arc welding and cutting operations shall be shielded by noncombustible or flameproof shields to protect persons from direct arc rays. Visual barrier screens are required for arc welding operations.

- d. When electrode holders are to be left unattended, electrodes shall be removed and the holder shall be placed or protected so that it cannot make electrical contact with employees or conducting objects.
- e. All arc welding and cutting cables shall be completely insulated and be capable of handling the maximum current requirements for the job. There shall be no repairs or splices within 10 feet of the electrode holder except where splices are insulated equal to the insulation of the cable. Defective cables shall be repaired or replaced.
- f. Fuel gas and oxygen hoses shall be easily distinguishable and shall not be interchangeable. Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective.
- g. General mechanical or local exhaust ventilation or air line respirators shall be provided, as required, when welding, cutting or heating:
 - zinc, lead, cadmium, mercury, or beryllium-bearing, materials in enclosed spaces.
 - stainless steel with inert-gas equipment.
 - in confined spaces.
 - where an unusual condition can cause an unsafe accumulation of contaminants.
- h. Proper eye protective equipment shall be provided when appropriate.
- i. Oxygen cylinders will be stored in a well protected, well ventilated, dry location 20 feet from combustibles.

15. Housekeeping

- a. Form and scrap lumber with protruding nails and all other debris shall be kept clear from all work areas.
- b. Combustible scrap and debris shall be removed at regular intervals.
- c. Containers shall be provided for collection and separation of all refuse.
- d. Covers shall be provided on containers used for flammable or harmful substances.
- e. Wastes shall be disposed of at frequent intervals
- f. Lay down areas shall be orderly and free from tripping hazards

16. Storage

- a. All materials stored in tiers shall be secured to prevent sliding, falling, or collapse.
- b. Aisles and passageways shall be kept clear and in good repair.
- c. Storage of materials shall not obstruct exits.
- d. Materials shall be stored with due regard to their fire characteristics.

17. Ladders

- a. The use of ladders with broken or missing rungs or steps, broken or split side rails or with other faulty or defective construction is prohibited. When ladders with such defects are discovered they shall immediately be withdrawn from service.

- b. Portable ladders shall be placed on a substantial base at a 4 to 1 pitch, have clear access at top and bottom, extend a minimum of 36 inches above the landing, or be provided with grab rails and secured against movement while in use.
- c. Portable metal ladders shall not be used for electrical work or where they may contact electrical conductors.
- d. Job-made ladders shall be constructed for their intended use. Cleats shall be inset into side rails 1/2 inch, or filler blocks used. Cleats shall be uniformly spaced, 12 inches, top-to-top.
- e. Except where either permanent or temporary stairways or suitable ramps or runways are provided, ladders shall be used to give safe access to all elevations.
- f. All users of ladders shall be properly trained and documented by the contractor.
- g. Ladders shall be inspected periodically by the contractor.

18. Railings

- a. A standard railing used to protect personnel from falls shall consist of top rail, intermediate rail, toe board, and posts, and have a vertical height of approximately 42 inches from upper surface of top rail to the floor, platform, etc.
- b. The top rail of a railing shall be smooth-surfaced, with strength to withstand at least 200 pounds. The intermediate rail shall be approximately halfway between the top rail and floor.
- c. A stair railing shall be of construction similar to a standard railing, but the vertical height shall be not more than 34 inches, nor less than 30 inches from upper surface of top rail to surface of tread in line with face or riser at forward edge of tread.

19. Scaffolds

- a. Scaffolds shall be erected on sound, rigid footing, capable of carrying the maximum intended load without settling or displacement.
- b. Scaffolds and their components shall be capable of supporting, without failure, at least 4 times the maximum intended load.
- c. Guardrails and toe boards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor, except needle beam scaffolds and floats. Scaffolds 4 feet to 10 feet in height, having a minimum dimension in either direction of less than 45 inches, shall have standard guardrails installed on all open sides and ends of platform.
- d. There shall be a screen with maximum 1/2-inch openings between the toe board and the guardrail, where the persons are required to work or pass under the scaffold.
- e. All planking shall be Scaffold Grade or equivalent. The maximum permissible span for 1 1/4 x 9 inch or wider plank of full thickness is 4 feet, with medium loading of 50 p.s.f.
- f. Scaffolding planking shall be overlapped a minimum of 12 inches or secured from movement.
- g. Scaffold planks shall extend over their end supports not less than 6 inches nor more than 12 inches.
- h. All scaffolding and accessories shall have any defective parts immediately replaced or repaired.
- i. An access ladder or equivalent safe access shall be provided.

20. Air Tools

- a. Pneumatic power tools shall be secured to the hose or whip in a positive manner to prevent accidental disconnection.
- b. Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent attachments from being accidentally expelled.
- c. The manufacturer's safe operating pressure for all fittings shall not be exceeded.
- d. All hoses exceeding 1/2-inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.

21. Compressed Air

- a. Compressed air used for cleaning purposes shall not exceed 30 psi.
- b. Compressed air for cleaning will only be used with effective chip guarding and personal protective equipment. This requirement does not apply to concrete form, mill scale, and similar cleaning operations.

22. Compressed Gas Cylinders

- a. Valve protection caps shall be in place when compressed gas cylinders are transported, moved, or stored.
- b. Cylinder valves shall be closed when work is finished and when cylinders are empty or moved.
- c. Compressed gas cylinders shall be secured in an upright position at all times, except if necessary for short periods of time when cylinders are actually being hoisted or carried.
- d. Cylinders shall be kept at safe distances or shielded from welding or cutting operations. Cylinders shall be placed where they cannot become part of an electrical circuit.
- e. Oxygen and fuel gas regulators shall be in proper working order while in use.
- f. Applicable technical portions of American National Standards Institute, Z49.1, Safety in Welding and Cutting, shall be followed.

23. Hoists and Cranes

- a. Contractors must comply with the manufacturer's specifications and limitations for hoists. Rated load capacities, recommended operating speeds, and special hazard Warnings or instructions shall be posted on cars and platforms.
- b. Suspended loads should never be moved directly over personnel.

24. Accident Record Keeping and Reporting Requirements

Within 8 hours after its occurrence, an accident which is fatal to one or more employees or which results in the hospitalization of three or more employees shall be reported by the employer to the nearest OSHA Area Director at 1-800-LABOR-NC as well as the Catawba County Risk Manager.