

COUNTY COUNCIL OF BEAUFORT COUNTY
 ADMINISTRATION BUILDING
 BEAUFORT COUNTY GOVERNMENT ROBERT SMALLS COMPLEX
 100 RIBAUT ROAD
 POST OFFICE DRAWER 1228
 BEAUFORT, SOUTH CAROLINA 29901-1228
 TELEPHONE: (843) 255-2000
 FAX: (843) 255-9401
 www.bcgov.net

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 DEPUTY COUNTY ADMINISTRATOR
 SPECIAL COUNSEL

THOMAS J. KEAVENY, II
 COUNTY ATTORNEY

ASHLEY M. BENNETT
 CLERK TO COUNCIL

AGENDA
 PUBLIC FACILITIES COMMITTEE

Monday, November 21, 2016

4:00 p.m.

Executive Conference Room, Administration Building
 Beaufort County Government Robert Smalls Complex
 100 Ribaut Road, Beaufort

Committee Members:

Gerald Dawson, Chairman
 Roberts "Tabor" Vaux, Vice Chairman
 Cynthia Bensch
 Rick Caporale
 Steve Fobes
 Alice Howard
 William McBride

Staff Support:

Colin Kinton, Division Director
 Transportation Engineering
 Eric Larson, Division Director
 Environmental Engineering
 Robert McFee, Division Director
 Facilities and Construction Engineering

1. CALL TO ORDER – 4:00 P.M.
2. CONSIDERATION OF CONTRACT AWARDS
 - A. One Knuckle Boom Loader Truck for Solid Waste and Recycling Department ([backup](#))
 - B. Change Order for Boundary Street Redevelopment Construction ([backup](#))
 - C. One 2017 CAT Model 325FCR Excavator for Public Works Department – Stormwater ([backup](#))
3. A RESOLUTION AUTHORIZING COUNTY ADMINISTRATOR TO ACCEPT SPANISH MOSS, PHASE 1, ROADS, DRAINAGE EASEMENTS AND POND INTO THE COUNTY SYSTEM ([backup](#))
4. UPDATE / TRAFFIC IMPACT FEE ([backup](#))
5. ADJOURNMENT

2016 Strategic Plan Committee Assignments

Solid Waste Curbside Pick Up / Recycling / Convenience Centers / Landfill
 Ditch Maintenance and Drainage Policy
 Detention Center Study
 Windmill Harbour Entrance Solution
 Bridge Replacement Plan (Hilton Head Island)
 Daufuskie Island Public Improvements
 County Facilities Condition Assessment Plan
 Sidewalks / Biking in Rural Areas Plan and Funding



**COUNTY COUNCIL OF BEAUFORT COUNTY
PURCHASING DEPARTMENT**

106 Industrial Village Road, Bldg. 2, Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

David L Thomas, Purchasing Director
dthomas@bcgov.net 843.255.2353

TO: Councilman Gerald Dawson. Chairman. Public Facilities Committee

FROM: David L Thomas. CPPO. Purchasing Director

SUBJ: State Contract Purchase
Request to Purchase One Knuckle Boom Loader Truck for the Public Works Department, Solid Waste and Recycling

DATE: 10/28/2016

BACKGROUND:

The Purchasing Department received a request from the Public Works Department, Solid Waste and Recycling Section, to purchase one Knuckle Boom Loader Truck from a State contract vendor. The new truck is a replacement for a 2010 Freightliner Truck assigned to the Public Works Department, Solid Waste and Recycling Section, with over 344,521 miles of operation. The Section utilizes the truck to pack trash in the containers at the Convenience Centers and to pick up white goods from the Convenience Centers. The old vehicle will be sold on GovDeals.

VENDOR INFORMATION:

Carolina International Trucks, Inc., Columbia, SC

COST:

\$128,806

FUNDING:


Account # 10001340-54200, Specialized Capital Equipment-Solid Waste, with a balance of \$150,000.

Funding approved: By: Date:

FOR ACTION:

RECOMMENDATION:

The Purchasing Department recommends that the Public Facilities Committee approve and recommend to County Council the contract award of \$128,806 to purchase one Knuckle Boom Loader Truck from the aforementioned vendor in support of Public Works operations.

Attachment:  2.24 MB

cc: Gary Kubic, County Administrator Approved: Date:

Check to override approval: Overridden by: Override Date:

Joshua Gruber, Deputy County Administrator/Special Counsel Approved: Date:

Check to override approval: Overridden by: Override Date:

Alicia Holland, Assistant County Administrator, Finance Approved: Date:

Approved: Date:

Check to override approval: Overridden by: Override Date: ready for admin:

Approved: Date:

Check to override approval: Overridden by: Override Date: ready for admin:

After Initial Submission, Use the Save and Close Buttons



COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY ENGINEERING DEPARTMENT
104 Industrial Village Road, Building #3, Beaufort, SC 29906
Post Office Drawer 1228, Beaufort, SC 29901-1228
Telephone: 843-255-2700 Facsimile: 843-255-9420

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator *GKubic*
Josh Gruber, Deputy County Administrator
Alicia Holland, Assistant County Administrator for Finance *Chauk...*

FROM: Robert McFee, PE, Division Director for Construction, Engineering & Facilities *JRM*

SUBJ: **Change Order #6 for Boundary Street Redevelopment Construction**

DATE: November 16, 2016

BACKGROUND. Beaufort County awarded the Boundary Street Redevelopment construction contract to Preferred Materials, Inc., (PMI) for \$18,765,274 on September 14, 2015.

Change Order 6 (CO 6) is for adjustments in the duct bank construction details, variances in structure locations and alignment. CO 6 has been reviewed by the project Construction Manager and was recommended for approval. The City of Beaufort Manager and the County Administrator have signed the change order for acceptance and City Council approved CO 6 on November 8, 2016. Therefore, it is requested that CO 6 be approved by the Committee so it can be included on the contractor's purchase order and processed for payment.

FUNDING. Change Order 6 will be funded from the Boundary Street Redevelopment total budget of \$33,573,358 which is provided by TIGER Grant, County Sales Tax Fund, County Road Impact Fee and City of Beaufort TIF II.

FOR ACTION. Public Facilities Committee Meeting on November 21, 2016.

RECOMMENDATION. The Public Facilities Committee approve CO 6 to Preferred Materials, Inc., for construction of the Boundary Street Redevelopment in the amount of \$83,860 from the funding source listed above.

JRM/mjh

Attachments: 1) Change Order 6
2) 11/8/16 City of Beaufort Agenda

cc: Kathy Todd

BStReDevlop/CO 6

Change Order Report

Contract ID: LPA07.036939A

Change Order Nbr: 006 Force Acct ID: 0

Change Order Type: Standard Change Order

CO Description: Boundary Street Right Side Duct Bank Impacts

Zero Dollar Change Order: No

Project Nbr	Itm Nbr	Catg	Item Code	Unit	Unit Price	Bid Qty	Prev Apprvd Qty	Curr CO Qty	Curr Apprvd Qty	Amount of Change
0036939RD01	2021	1	9800100	LS	\$83,860.63	0	0	1	0	This Chng: \$83,860.63
<p>Item Description CHANGE ORDER ITEM</p> <p>Supplemental Description1 Boundary Street Right Side Duct Bank Impacts</p> <p>Supplemental Description2</p>										<p>CO Item Description Boundary Street Right Side Duct Bank Impacts</p> <p>Prev Revised: \$0.00</p> <p>New Revised: \$83,860.63</p> <p>Bid Contract: \$0.00</p> <p>Net Change: \$83,860.63</p> <p>Pct Change:</p>

Total Value for Change Order 006 = \$83,860.63

Change Order Report: Contract Completion Date Time Adjustment

Original Compl Date: 2017/12/30 Adj Compl Date: 2018/02/18 Adj No. of Days: 42

Explanation: Forty-two (42) days are granted as additional time for the Boundary Street right side ductbank impacts as associated with this change order.

Ret-ID: RCOCORPT

SOUTH CAROLINA

Date: 10/28/2016

User: fralixja

Department of Transportation

Page: 2 of 2

General or Standard Change Order Explanation

This change order is necessary to resolve impacts associated with the Boundary Street Right Side Duct Bank. Impacts include duct bank detail changes, additional staking for utility coordination, and material and labor for installing additional conduit fittings.

Prices have been verified by the City of Beaufort staff and CEI consultants.

This brings the contract total to date to \$18,895,455.22 which overruns the original contract by a cumulative percentage of 0.69%.

Pursuant to Section 104.05 of the Standard Specifications on the above referred to project, I/we (Prime Contractor), do hereby agree to the unit price stipulated above, for performing the work items listed, as part of my/our contract on this project. The work shall be performed under and in accordance with the specifications and contract requirements of our contract. The compensation and time extension, (if any), provided in this supplemental agreement constitute complete satisfaction for all direct, indirect, impact, and delay costs relating to this work.

JUSTIFICATION OF COST

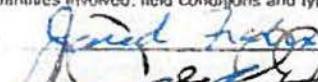
FIRM



Date: 11-8-16

Based upon quantities involved, field conditions and type of construction, these prices are reasonable.

Recommended by



Date: 11/14/16

Reviewed by



Date: NOV 14 2016

Accepted by (City)

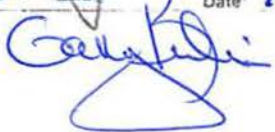


Date: 11/15/16

Accepted by (County)



Date: 11/15/16



October 27, 2016

Micah Shultzman
Project Manager
Preferred Materials
47 Telfair Place
Savannah, GA 31415

RE: Right Side Duct Bank Impacts
IFB # 062315E US 21 Business (Boundary Street) and First Street Improvements

Dear Mr. Shultzman,

We have received your letter Right Side Duct Bank Revisions – IFB #062315E US 21 (Boundary Street) and First Street Improvements dated August 17, 2016 and have completed our review. Per the letter, you are requesting compensation for the work performed per directives without plan changes, modifications of details, and variances in structure locations. The values associated are an equitable adjustment of \$148,033.05 and a time extension of 53.2 days. We concur that several variances in the duct bank details and alignment were made during construction and that an adjustment is warranted.

We have reviewed both the original baseline CPM schedule and the actual in-place work performed to construct the right side duct bank. Based on the original activity #A1060 (Ductbank – Boundary Street Right), you had anticipated to install 50.2lf of duct bank per work day (assuming the first 15 days of the 86 day duration were used for survey, exploratory excavations, material procurement and site preparations). Using this rate to install the 2,710lf of duct bank built in place, it should have taken 48 days to install the complete right side section. However, due to the impacts to the contractor as listed above, the actual duration of this same section took 83 work days. That is an increase of 35 work days. Due to some inefficiencies that are recognized by both parties, 5 days (approximately 5% of the 83 days) are being deducted from the 35 days beyond planned performance to provide a final time extension of 30 work days (42 calendar days).

The cost portion of the adjustment was also reviewed. The cost impact is directly related to the additional time spent constructing the duct bank, along with the added effort and material to turn the ductbank up at the structure locations. The equitable adjustment will be comprised of the following (details attached):

Additional daily labor cost of \$2,669.00 for 30 days	\$ 80,070.00
Additional mobilization cost of \$1,500.00 for 2 occurrences	\$ 3,000.00
Additional survey required for changes to alignment	\$ 7,500.00
Reduction of concrete for communication conduits	\$ (20,738.73)
Additional cost of materials for connection to structures	<u>\$ 14,029.36</u>
	\$ 83,860.63

Further review of impacts to the loaded unit rate will be determined when final details for SCE&G structures are provided and modifications to ductbank details are determined to complete the left side ductbank. The total value for this change order is a time extension of 42 calendar days and an equitable adjustment of \$ 83,860.63.

If you agree with our review, a change order will be developed to cover these changes. This change order will account for all items associated with the right side duct bank and that you acknowledge that no further compensation will be provided for this item, except as noted above. A revised CPM schedule will be required to update the sequence of activities and the substantial completion date accordingly.

Thank you for your continued cooperation as we work together to complete the construction of this project.

Regards,



Jared Fralix
CM-CEI Project Manager

CC: Job File
City of Beaufort, Sammy Negron
Beaufort County, Rob McFee

Impact	Description	Quantity	Unit	Unit Price	Total	Comment
#1 & #2	Additional Time per linear foot installed		Days			
	Additional Time per turn out location		Days			
					30	Working Days and/or 42 Calendar Days
	Additional Mobilization to structures 16 and 17	2	EA	\$1,500.00	\$3,000.00	
	Additional Daily Cost Associated with Duct Configuration		Days	\$2,669.00	\$0.00	
	Additional Daily Cost Associated with Structure Changes		Days	\$2,669.00	\$0.00	
		30	Days	\$2,669.00	\$80,070.00	
#3	<u>Detail 3 Changes</u>					
	Length Changes	0	LF	\$64.61	\$0.00	adjust contract unit price later
	Concrete Reduction	121.6524	CY	\$113.95	-\$13,862.29	
	<u>Detail 4 Changes</u>					
	Length Changes	0	LF	\$73.85	\$0.00	
	Concrete Reduction	60.34614	CY	\$113.95	-\$6,876.44	
#4	Additional Survey \$1,500/day	5	Days	\$1,500.00	\$7,500.00	
	Extra material costs (steel sweeps)	35	6" EA	\$278.27	\$9,739.45	
		26	4" EA	\$158.40	\$4,118.40	
		3	2" EA	\$57.17	\$171.51	
	Total Cost incurred				\$83,860.63	
	Additional Time to complete				42	Calendar Days

Extra Material
for use at turn up locations

material value	6" Steel	\$278.27
	4" PVC	\$158.40
	2" PVC	\$57.17

Structure	Power Conduits	6" Dia	Cost	2" Dia	Cost	Comm Conduits	4" Dia	Cost
2	X,Y,Z,AA	4	\$1,113.08		\$0.00	W,U,V	3	\$475.20
5	Y	1	\$278.27		\$0.00	V	1	\$158.40
6	X,Y,Z,AA,F,G	6	\$1,669.62		\$0.00	V,U,W	3	\$475.20
7	X,Y,Z,AA,F,G	6	\$1,669.62		\$0.00	V,U,W	3	\$475.20
17	X,Y,Z,AA	4	\$1,113.08		\$0.00	V	1	\$158.40
19	X,Y,Z,AA	4	\$1,113.08		\$0.00	W,U,V	3	\$475.20
23			\$0.00		\$0.00	V	1	\$158.40
24	X,Y	2	\$556.54		\$0.00	V	1	\$158.40
28	X,T	1	\$278.27	1	\$57.17	W	1	\$158.40
29A			\$0.00		\$0.00	V	1	\$158.40
29			\$0.00		\$0.00	V	1	\$158.40
30	X,T	1	\$278.27	1	\$57.17	W,V	2	\$316.80
31	X,Y	2	\$556.54		\$0.00	U	1	\$158.40
31A			\$0.00		\$0.00	W	1	\$158.40
35			\$0.00		\$0.00	V	1	\$158.40
16	X,Y	2	\$556.54		\$0.00	V	1	\$158.40
43A	T,X,Y	2	\$556.54	1	\$57.17	V	1	\$158.40
		35	\$9,739.45	3	\$171.51		26	\$4,118.40

Additional Material Total **\$14,029.36**

Concrete savings

	6" Dia	4" Dia	2" Dia
Area	0.196349	0.080425	0.020106

Detail 3 Original Concrete Volume

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
3.25	1.68	5.46	4	2	2	0.98645926	4.47354074 cf/lf	1,635	270.8977

Revised to include just power

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
3.25	1.00	3.25	4	0	0	0.7853975	2.4646025 cf/lf	1,635	149.2454

concrete reduction 121.6524 cy

	6" Dia	4" Dia	2" Dia
Area	0.196349	0.080425	0.020106

Detail 4 Original Concrete Volume

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
2.5	1.68	4.2	4	2	2	0.98645926	3.21354074	1,087	129.3748

Revised to include just power

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
2.5	1.00	2.5	4	0	0	0.7853975	1.7146025	1,087	69.02863

concrete reduction 60.34614 cy

August 17, 2016

Correspondence #1015 C-012

Mr. Jared Fralix, PE
CE&I Project Manager
ICE
26 John Galt Road
Beaufort, SC 29906

RE: **Right Side Duct Bank Revisions**
IFB # 062315E US 21 Business (Boundary Street) and First Street Improvements

Dear Mr. Fralix,

Preferred Materials, Inc (PMI) has encountered several obstacles thus far in its efforts to navigate the numerous utility conflicts and design changes specific to the duct bank installation on the aforementioned project. Further, PMI and its subcontractors constructed the right side Duct Bank via verbal directives from ICE without the aid of completed design drawings and/or final locations for the respective utility companies' equipment terminations. The main changes encountered thus far have been the duct configuration changes to details 3& 4(flowable fill vs granular fill), the substantial modification of detail 5 (revising the turn-out detail to turn up to the equipment locations and revising all of those equipment locations), the reduction in quantity for the overall right side duct bank construction specifically due to utility conflicts, and several horizontal/vertical alignment changes due to the aforementioned utility impacts. The bulk of these changes were received via verbal and/or written field work orders followed up by a whole sale plan revision received on April 29, 2016.

While PMI was able to keep construction activities moving forward during this litany of changes, several impacts to both our cost structure and schedule have been incurred. PMI requests an equitable adjustment for the right side duct bank construction in the amount of \$148,033.05 as compensation for the changes identified above, accompanied by a time extension to the project of 53.2 calendar days. A summary of the cost and schedule impacts is outlined below:

1. While the modification of details 3&4 reduced the amount of flowable fill on the project, it caused the construction activities to consume additional time and resources. At the commencement of the duct bank construction, SCE&G requested the bottom ducts be encased in flowable fill separate from the top communication ducts. This change added concrete cure time before the top communication ducts could be installed, backfilled, and completed. PMI anticipated an average production of 100LF per day to install details 3 &4. This change doubled the amount of construction time necessary to complete said details. The daily reports for the project will show that the 100LF per day was achievable had the design changes been clarified prior to constructing the duct bank. 2361LF of duct bank was installed on the Right side of construction centerline. It took PMI approximately 47 days to install 2361LF of duct bank resulting in an additional 23 days.



- The revised equipment locations and duct configuration greatly complicated the construction of each turn out location both from a constructability and project duration perspective. Each individualized configuration caused several additional bends in an extremely crowded work area, utilizing much more time, materials and resources to perform this work. PMI assumed two turn out locations per day to complete based off the original configuration (attached). With the revised 14 structures, it took PMI an additional 15 days to complete the 14 locations. To complicate matters Structures 16 and 17 had easement procurement and utility conflicts respectfully that caused PMI to re-mobilize to finish once those issues were resolved.
- The reduction in quantity on the right side has skewed the average level of effort on the project. Deleting less significant (less ducts / less complicated) work has caused the average pricing of the single duct bank line item on the project to increase in an effort to maintain the overall project average. PMI had to assume all duct configurations into a single per linear foot price as there is one pay item to cover all duct bank details. The following table depicts our subcontractors approach to each duct bank detail:

Description	Quantity	Unit	Unit Price	Amount
Boundary Detail 1	5,697	Lf	\$ 239.41	\$ 1,363,918.77
Boundary Detail 2	2,067	Lf	\$ 203.91	\$ 421,481.97
Boundary Detail 3	2,310	Lf	\$ 127.26	\$ 293,970.60
Boundary Detail 4	1,256	Lf	\$ 118.86	\$ 149,288.16
First Detail 1	2,952	Lf	\$ 144.86	\$ 427,626.72
TAKEOFF TOTALS	14,282	Lf	\$ 185.99	\$ 2,656,286.22

By reducing the lesser priced detail, the average price overall becomes skewed by approximately \$51,063.30

- Lastly, the lack of a specific and constructible location (horizontal and vertical) of the right side duct bank predicated several field meetings, additional field layout, and survey effort to determine an adequate corridor to facilitate the duct bank construction. This was not anticipated at the time of our bid and has increased the overall survey time and effort on the project.

In summary, PMI has proceeded in good faith and continued to push project construction forward in an attempt to complete on time. PMI understands the importance of this project for members of Beaufort County, City of Beaufort, and SCDOT. Receiving revised duct bank plans 120 calendar days (Jan 1 to April 29, 2016) into the project is a true testament of the constructability issues associated with the duct bank design. At this time the Left side duct bank design is not complete and/or been provided to PMI. To further complicate matters, all necessary easements to facilitate construction of the Left side duct bank turnouts have not been acquired. PMI requests the following adjustments for the above mentioned issues:

Impact	Description	Quantity	Unit	Unit Price	Total	
#1 and #2	Additional Time per linear foot installed	23	DAYS		23	Working Days and/or 32.2 Calendar Days
	Additional Time per turn out location	15	DAYS		15	Working Days and/or 21.0 Calendar Days
					38	Working Days and/or 53.2 Calendar Days
	Additional Mobilization to structures 16 and 17	2	EA	\$1,500.00	\$3,000.00	
	Additional Daily Cost Associated with Duct Configuration	23	DAYS	\$2,669.00	\$61,387.00	
	Additional Daily Cost Associated with Structure Changes	15	DAYS	\$2,669.00	\$40,035.00	
#3	Detail 3					
	Length Changes	675	LF	\$64.61	\$43,611.75	Subcontractor price of \$58.74 plus 10%
	Concrete Reduction	(116)	CY	\$113.95	(\$13,218.20)	
#4	Detail 4					
	Length Changes	170	LF	\$73.85	\$12,554.50	Subcontractor price of \$67.14 plus 10%
	Concrete Reduction	(60)	CY	\$113.95	(\$6,837.00)	
#4	Additional Survey \$1500/Day	5	DAYS	\$1,500.00	\$7,500.00	
	Total Cost Incurred				\$148,033.05	
	Additional Time to complete				53.2	Calendar Days

The schedule impacts incurred from the lack of proper design and utility conflicts have changed the nature of the project. PMI is currently re-baselining the project CPM to reflect this request and the changes in construction staging. It is PMI intent to reach an amicable solution moving forward to avoid any further setbacks. Please consider this request and respond with any questions or concerns. Feel free to contact me at micah.shultzman@preferredmaterials.com or by phone at 864-444-0149. Thank you for your time and consideration.

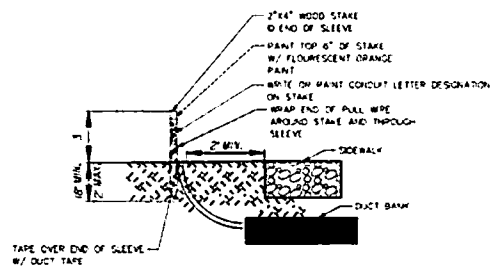
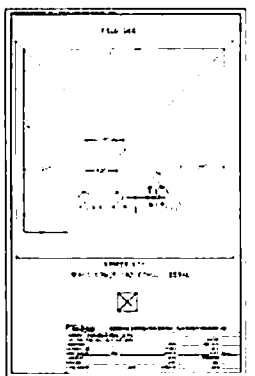
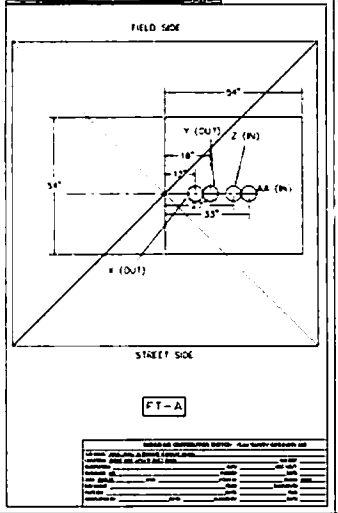
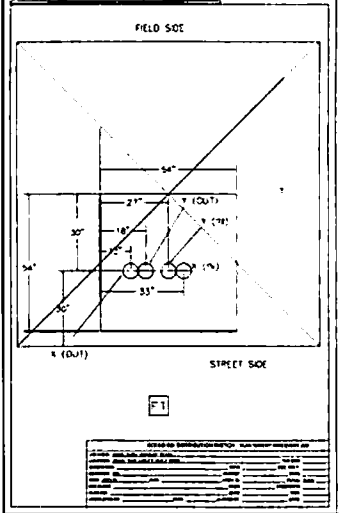
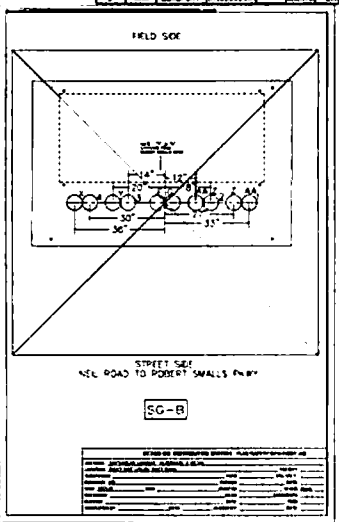
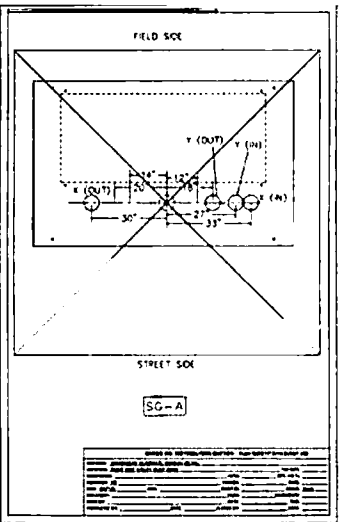
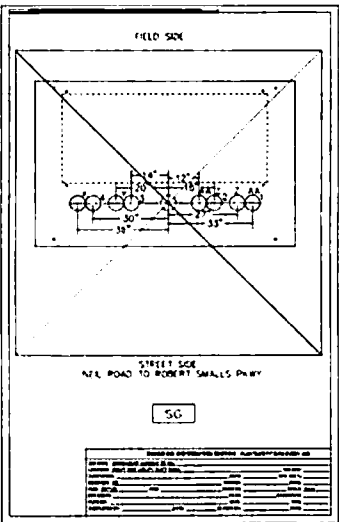
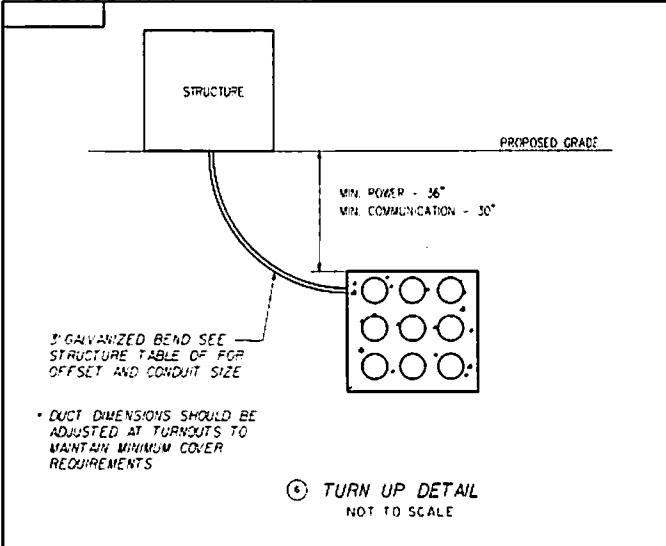
Respectfully,

A handwritten signature in blue ink, appearing to read "Micah Shultzman", with a long horizontal flourish extending to the right.

Micah Shultzman
Project Manager

CC: Job File 761015
Jeffrey Andrews, OM APAC
Robert Royal, AM APAC

DATE	BY	APP'D	REV. NO.	FIELD	NO.	DATE
3	S.C.	BEAUFORT	07/28/1994			



CONDUIT TERMINAL
NOT TO SCALE

SCALE CONSTRUCTION
PAGES 10/10

PLANS PREPARED FOR
BEAUFORT COUNTY

THOMAS & HUTTON
A PART OF CH2M HILL
1000 W. BROADWAY, SUITE 1000
BEAUFORT, NC 28516
TEL: 252/738-1111 FAX: 252/738-1112

US 21 BUSINESS (BOUNDARY STREET)
IMPROVEMENTS
DUCT BANK PLAN
DETAILS

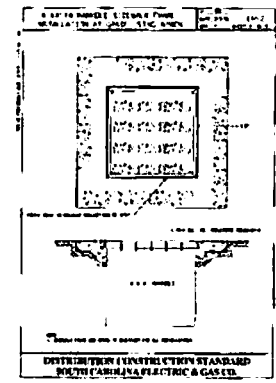
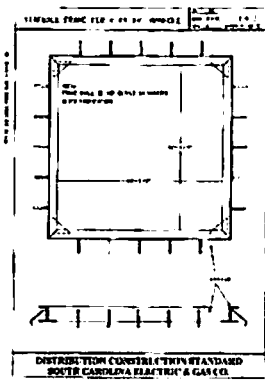
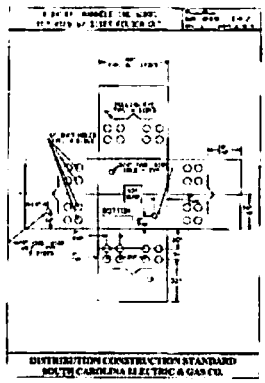
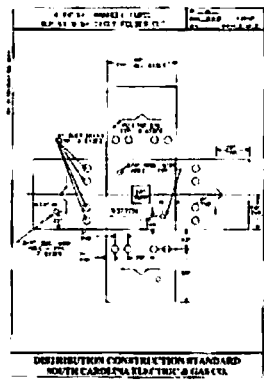
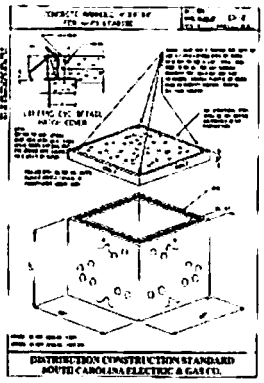
SCALE: P. 1/125 SHEET 082-1

REV.	BY	DATE	REVISION
1	SC	07/28/94	ISSUED FOR PERMIT
2	SC	07/28/94	ISSUED FOR PERMIT
3	SC	07/28/94	ISSUED FOR PERMIT
4	SC	07/28/94	ISSUED FOR PERMIT
5	SC	07/28/94	ISSUED FOR PERMIT
6	SC	07/28/94	ISSUED FOR PERMIT
7	SC	07/28/94	ISSUED FOR PERMIT
8	SC	07/28/94	ISSUED FOR PERMIT
9	SC	07/28/94	ISSUED FOR PERMIT
10	SC	07/28/94	ISSUED FOR PERMIT



B:\US21\Boundary Street\US21\082-1.dwg
 7/28/94
 11:20 AM

DATE	BY	CHKD	NO. IN	PROJ.	APP.	APP.
3	S.C.	BEAUFORT	07/20/75		J.L.D.	C.H.T.



USE ON CONSTRUCTION
REVISION 4/28/76

COURTESY: Time Boundary - StreetPlan - Sheets 13011-002-2.dwg
4/7/2018



NO.	DATE	BY	CHKD	PROJ. NO.
1	07/20/75	S.C.	BEAUFORT	07/20/75

PLANS PREPARED FOR
BEAUFORT COUNTY

THOMAS & HUTTON
1000 W. 10th Street, Beaufort, N.C. 28520
Telephone: 252-738-2121 • Fax: 252-738-2122
www.thomasthutton.com

US 21 BUSINESS (BOUNDARY STREET)
IMPROVEMENTS
CUT BANK PLAN
DETAILS

SCALE: AS SHOWN SHEET 082-2



CITY OF BEAUFORT
1911 BOUNDARY STREET
BEAUFORT MUNICIPAL COMPLEX
BEAUFORT, SOUTH CAROLINA 29902
(843) 525-7070

**CITY COUNCIL REGULAR MEETING AGENDA
November 8, 2016**

**NOTE: IF YOU HAVE SPECIAL NEEDS DUE TO A PHYSICAL CHALLENGE,
PLEASE CALL IVETTE BURGESS 525-7070 FOR ADDITIONAL INFORMATION**

STATEMENT OF MEDIA NOTIFICATION

"In accordance with South Carolina Code of Laws, 1976, Section 30-4-80(d), as amended, all local media was duly notified of the time, date, place and agenda of this meeting."

REGULAR MEETING - Council Chambers, 2nd Floor - 7:00 PM

I. CALL TO ORDER

A. Billy Keyserling, Mayor

II. INVOCATION AND PLEDGE OF ALLEGIANCE

A. Mike McFee, Mayor Pro Tem

III. PROCLAMATIONS/COMMENDATIONS/RECOGNITIONS

A. Proclamation Proclaiming November 26, 2016 as Small Business Saturday

IV. PUBLIC COMMENT

V. PUBLIC HEARING

VI. MINUTES

A. Worksession and Regular Meeting September 27, 2016

VII. OLD BUSINESS

A. Ordinance Establishing the Licensing and Regulation of Food Trucks, Food Trailers and Food Truck Vendors in City limits - 2nd Reading

VIII. NEW BUSINESS

- A. Annual Holiday Parking Request from Main Street Beaufort
- B. Request from Main Street Beaufort to host Holiday Events December 2-4, 2016 to include Night on the Town with permission to sell alcohol on Bay Street, Light up the Night Boat Parade, and Christmas Parade
- C. Request for Co-Sponsorship for use of Waterfront Park from Agape Hospice for Life Blooms Eternal event Friday, November 11, 2016
- D. Street Closure Request from Beaufort County Black Chamber of Commerce for Grand Opening event Friday, January 13, 2017
- E. Annual Request from Southern Scooters to host Toy Run 2016 Sunday, December 11,

2016

- F. Approval of Change Order of \$83,860.63 for the Boundary Street Project per previously agreed procedure
- G. Approval to pursue Commerce Department Grant from County Council

IX. REPORTS

- City Manager's Report
- Mayor Report
- Reports by Council Members

X. ADJOURN

Change Order Report

Contract ID: LPA07.036939A

Change Order Nbr: 006 Force Acct ID: 0

Change Order Type: Standard Change Order

CO Description: Boundary Street Right Side Duct Bank Impacts

Zero Dollar Change Order: No

Project Nbr	Itm Nbr	Catg	Item Code	Unit	Unit Price	Bid Qty	Prev Apprvd Qty	Curr CO Qty	Curr Apprvd Qty	Amount of Change	
0036939RD01	2021	1	9800100	LS	\$83,860.63	0	0	1	0	This Chng: \$83,860.63	
Item Description			CHANGE ORDER ITEM			CO Item Description			Boundary Street Right Side Duct Bank Impacts		
Supplemental Description1			Boundary Street Right Side Duct Bank Impacts						Prev Revised: \$0.00		
Supplemental Description2									New Revised: \$83,860.63		
									Bid Contract: \$0.00		
									Net Change: \$83,860.63		
									Pct Change:		
Total Value for Change Order 006						= \$83,860.63					

Change Order Report: Contract Completion Date Time Adjustment

Original Compl Date: 2017/12/30 Adj Compl Date: 2018/02/18 Adj No. of Days: 42

Explanation: Forty-two (42) days are granted as additional time for the Boundary Street right side ductbank impacts as associated with this change order.

General or Standard Change Order Explanation

This change order is necessary to resolve impacts associated with the Boundary Street Right Side Duct Bank. Impacts include duct bank detail changes; additional staking for utility coordination; and material and labor for installing additional conduit fittings.

Prices have been verified by the City of Beaufort staff and CEI consultants.

This brings the contract total to date to \$18,895,455.22 which overruns the original contract by a cumulative percentage of 0.69%

Pursuant to Section 104.05 of the Standard Specifications on the above referred to project, I/we (Prime Contractor), do hereby agree to the unit price stipulated above, for performing the work items listed, as part of my/our contract on this project. The work shall be performed under and in accordance with the specifications and contract requirements of our contract. The compensation and time extension, (if any), provided in this supplemental agreement constitute complete satisfaction for all direct, indirect, impact, and delay costs relating to this work.

JUSTIFICATION OF COST:

FIRM: [Signature] Date: 11-8-16

Based upon quantities involved, field conditions and type of construction, these prices are reasonable.

Recommended by: Jared Fralix Date: 11/14/16

Reviewed by: [Signature] Date: _____

Accepted by (City): [Signature] Date: _____

Accepted by (County): [Signature] Date: _____

October 27, 2016

Micah Shultzman
Project Manager
Preferred Materials
47 Telfair Place
Savannah, GA 31415

RE: Right Side Duct Bank Impacts
IFB # 062315E US 21 Business (Boundary Street) and First Street Improvements

Dear Mr. Shultzman,

We have received your letter Right Side Duct Bank Revisions – IFB #062315E US 21 (Boundary Street) and First Street Improvements dated August 17, 2016 and have completed our review. Per the letter, you are requesting compensation for the work performed per directives without plan changes, modifications of details, and variances in structure locations. The values associated are an equitable adjustment of \$148,033.05 and a time extension of 53.2 days. We concur that several variances in the duct bank details and alignment were made during construction and that an adjustment is warranted.

We have reviewed both the original baseline CPM schedule and the actual in-place work performed to construct the right side duct bank. Based on the original activity #A1060 (Ductbank – Boundary Street Right), you had anticipated to install 50.2lf of duct bank per work day (assuming the first 15 days of the 86 day duration were used for survey, exploratory excavations, material procurement and site preparations). Using this rate to install the 2,710lf of duct bank built in place, it should have taken 48 days to install the complete right side section. However, due to the impacts to the contractor as listed above, the actual duration of this same section took 83 work days. That is an increase of 35 work days. Due to some inefficiencies that are recognized by both parties, 5 days (approximately 5% of the 83 days) are being deducted from the 35 days beyond planned performance to provide a final time extension of 30 work days (42 calendar days).

The cost portion of the adjustment was also reviewed. The cost impact is directly related to the additional time spent constructing the duct bank, along with the added effort and material to turn the ductbank up at the structure locations. The equitable adjustment will be comprised of the following (details attached):

Additional daily labor cost of \$2,669.00 for 30 days	\$ 80,070.00
Additional mobilization cost of \$1,500.00 for 2 occurrences	\$ 3,000.00
Additional survey required for changes to alignment	\$ 7,500.00
Reduction of concrete for communication conduits	\$ (20,738.73)
Additional cost of materials for connection to structures	<u>\$ 14,029.36</u>
	\$ 83,860.63

Further review of impacts to the loaded unit rate will be determined when final details for SCE&G structures are provided and modifications to ductbank details are determined to complete the left side ductbank. The total value for this change order is a time extension of 42 calendar days and an equitable adjustment of \$ 83,860.63.

If you agree with our review, a change order will be developed to cover these changes. This change order will account for all items associated with the right side duct bank and that you acknowledge that no further compensation will be provided for this item, except as noted above. A revised CPM schedule will be required to update the sequence of activities and the substantial completion date accordingly.

Thank you for your continued cooperation as we work together to complete the construction of this project.

Regards,



Jared Fralix
CM-CEI Project Manager

CC: Job File
City of Beaufort, Sammy Negron
Beaufort County, Rob McFee

Impact	Description	Quantity	Unit	Unit Price	Total	Comment
#1 & #2	Additional Time per linear foot installed		Days			
	Additional Time per turn out location		Days			
					30	Working Days and/or 42 Calendar Days
	Additional Mobilization to structures 16 and 17	2	EA	\$1,500.00	\$3,000.00	
	Additional Daily Cost Associated with Duct Configuration		Days	\$2,669.00	\$0.00	
	Additional Daily Cost Associated with Structure Changes		Days	\$2,669.00	\$0.00	
		30	Days	\$2,669.00	\$80,070.00	
#3	<u>Detail 3 Changes</u>					
	Length Changes	0	LF	\$64.61	\$0.00	adjust contract unit price later
	Concrete Reduction	121.6524	CY	\$113.95	-\$13,862.29	
	<u>Detail 4 Changes</u>					
	Length Changes	0	LF	\$73.85	\$0.00	
	Concrete Reduction	60.34614	CY	\$113.95	-\$6,876.44	
#4	Additional Survey \$1,500/day	5	Days	\$1,500.00	\$7,500.00	
	Extra material costs (steel sweeps)	35	6" EA	\$278.27	\$9,739.45	
		26	4" EA	\$158.40	\$4,118.40	
		3	2" EA	\$57.17	\$171.51	
	Total Cost incurred				\$83,860.63	
	Additional Time to complete				42	Calendar Days

Extra Material

for use at turn up locations

material value	6" Steel	\$278.27
	4" PVC	\$158.40
	2" PVC	\$57.17

Structure	Power Conduits	6" Dia	Cost	2" Dia	Cost	Comm Conduits	4" Dia	Cost
2	X,Y,Z,AA	4	\$1,113.08		\$0.00	W,U,V	3	\$475.20
5	Y	1	\$278.27		\$0.00	V	1	\$158.40
6	X,Y,Z,AA,F,G	6	\$1,669.62		\$0.00	V,U,W	3	\$475.20
7	X,Y,Z,AA,F,G	6	\$1,669.62		\$0.00	V,U,W	3	\$475.20
17	X,Y,Z,AA	4	\$1,113.08		\$0.00	V	1	\$158.40
19	X,Y,Z,AA	4	\$1,113.08		\$0.00	W,U,V	3	\$475.20
23			\$0.00		\$0.00	V	1	\$158.40
24	X,Y	2	\$556.54		\$0.00	V	1	\$158.40
28	X,T	1	\$278.27	1	\$57.17	W	1	\$158.40
29A			\$0.00		\$0.00	V	1	\$158.40
29			\$0.00		\$0.00	V	1	\$158.40
30	X,T	1	\$278.27	1	\$57.17	W,V	2	\$316.80
31	X,Y	2	\$556.54		\$0.00	U	1	\$158.40
31A			\$0.00		\$0.00	W	1	\$158.40
35			\$0.00		\$0.00	V	1	\$158.40
16	X,Y	2	\$556.54		\$0.00	V	1	\$158.40
43A	T,X,Y	2	\$556.54	1	\$57.17	V	1	\$158.40
		35	\$9,739.45	3	\$171.51		26	\$4,118.40

Additional Material Total \$14,029.36

Concrete savings

	6" Dia	4" Dia	2" Dia
Area	0.196349	0.080425	0.020106

Detail 3 Original Concrete Volume

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
3.25	1.68	5.46	4	2	2	0.98645926	4.47354074 cf/lf	1,635	270.8977

Revised to include just power

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
3.25	1.00	3.25	4	0	0	0.7853975	2.4646025 cf/lf	1,635	149.2454

concrete reduction 121.6524 cy

	6" Dia	4" Dia	2" Dia
Area	0.196349	0.080425	0.020106

Detail 4 Original Concrete Volume

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
2.5	1.68	4.2	4	2	2	0.98645926	3.21354074	1,087	129.3748

Revised to include just power

Width	Height	Area (sqft)	6" Dia	4" Dia	2" Dia	PVC Area (sqft)	Concrete Volume	If installed	Volume
2.5	1.00	2.5	4	0	0	0.7853975	1.7146025	1,087	69.02863

concrete reduction 60.34614 cy

August 17, 2016

Correspondence #1015 C-012

Mr. Jared Fralix, PE
CE&I Project Manager
ICE
26 John Galt Road
Beaufort, SC 29906

RE: **Right Side Duct Bank Revisions**
IFB # 062315E US 21 Business (Boundary Street) and First Street Improvements

Dear Mr. Fralix,

Preferred Materials, Inc (PMI) has encountered several obstacles thus far in its efforts to navigate the numerous utility conflicts and design changes specific to the duct bank installation on the aforementioned project. Further, PMI and its subcontractors constructed the right side Duct Bank via verbal directives from ICE without the aid of completed design drawings and/or final locations for the respective utility companies' equipment terminations. The main changes encountered thus far have been the duct configuration changes to details 3& 4(flowable fill vs granular fill), the substantial modification of detail 5 (revising the turn-out detail to turn up to the equipment locations and revising all of those equipment locations), the reduction in quantity for the overall right side duct bank construction specifically due to utility conflicts, and several horizontal/vertical alignment changes due to the aforementioned utility impacts. The bulk of these changes were received via verbal and/or written field work orders followed up by a whole sale plan revision received on April 29, 2016.

While PMI was able to keep construction activities moving forward during this litany of changes, several impacts to both our cost structure and schedule have been incurred. PMI requests an equitable adjustment for the right side duct bank construction in the amount of \$148,033.05 as compensation for the changes identified above, accompanied by a time extension to the project of 53.2 calendar days. A summary of the cost and schedule impacts is outlined below:

1. While the modification of details 3&4 reduced the amount of flowable fill on the project, it caused the construction activities to consume additional time and resources. At the commencement of the duct bank construction, SCE&G requested the bottom ducts be encased in flowable fill separate from the top communication ducts. This change added concrete cure time before the top communication ducts could be installed, backfilled, and completed. PMI anticipated an average production of 100LF per day to install details 3 &4. This change doubled the amount of construction time necessary to complete said details. The daily reports for the project will show that the 100LF per day was achievable had the design changes been clarified prior to constructing the duct bank. 2361LF of duct bank was installed on the Right side of construction centerline. It took PMI approximately 47 days to install 2361LF of duct bank resulting in an additional 23 days.



2. The revised equipment locations and duct configuration greatly complicated the construction of each turn out location both from a constructability and project duration perspective. Each individualized configuration caused several additional bends in an extremely crowded work area, utilizing much more time, materials and resources to perform this work. PMI assumed two turn out locations per day to complete based off the original configuration (attached). With the revised 14 structures, it took PMI an additional 15 days to complete the 14 locations. To complicate matters Structures 16 and 17 had easement procurement and utility conflicts respectfully that caused PMI to re-mobilize to finish once those issues were resolved.
3. The reduction in quantity on the right side has skewed the average level of effort on the project. Deleting less significant (less ducts / less complicated) work has caused the average pricing of the single duct bank line item on the project to increase in an effort to maintain the overall project average. PMI had to assume all duct configurations into a single per linear foot price as there is one pay item to cover all duct bank details. The following table depicts our subcontractors approach to each duct bank detail:

Description	Quantity	Unit	Unit Price	Amount
Boundary Detail 1	5,697	Lf	\$ 239.41	\$ 1,363,918.77
Boundary Detail 2	2,067	Lf	\$ 203.91	\$ 421,481.97
Boundary Detail 3	2,310	Lf	\$ 127.26	\$ 293,970.60
Boundary Detail 4	1,256	Lf	\$ 118.86	\$ 149,288.16
First Detail 1	2,952	Lf	\$ 144.86	\$ 427,626.72
TAKEOFF TOTALS	14,282	Lf	\$ 185.99	\$ 2,656,286.22

By reducing the lesser priced detail, the average price overall becomes skewed by approximately \$51,063.30

4. Lastly, the lack of a specific and constructible location (horizontal and vertical) of the right side duct bank predicated several field meetings, additional field layout, and survey effort to determine an adequate corridor to facilitate the duct bank construction. This was not anticipated at the time of our bid and has increased the overall survey time and effort on the project.

In summary, PMI has proceeded in good faith and continued to push project construction forward in an attempt to complete on time. PMI understands the importance of this project for members of Beaufort County, City of Beaufort, and SCDOT. Receiving revised duct bank plans 120 calendar days (Jan 1 to April 29, 2016) into the project is a true testament of the constructability issues associated with the duct bank design. At this time the Left side duct bank design is not complete and/or been provided to PMI. To further complicate matters, all necessary easements to facilitate construction of the Left side duct bank turnouts have not been acquired. PMI requests the following adjustments for the above mentioned issues:

Impact	Description	Quantity	Unit	Unit Price	Total	
#1 and #2	Additional Time per linear foot installed	23	DAYS		23	Working Days and/or 32.2 Calendar Days
	Additional Time per turn out location	15	DAYS		15	Working Days and/or 21.0 Calendar Days
					38	Working Days and/or 53.2 Calendar Days
	Additional Mobilization to structures 16 and 17	2	EA	\$1,500.00	\$3,000.00	
	Additional Daily Cost Associated with Duct Configuration	23	DAYS	\$2,669.00	\$61,387.00	
	Additional Daily Cost Associated with Structure Changes	15	DAYS	\$2,669.00	\$40,035.00	
#3	Detail 3					
	Length Changes	675	LF	\$64.61	\$43,611.75	Subcontractor price of \$58.74 plus 10%
	Concrete Reduction	(116)	CY	\$113.95	(\$13,218.20)	
#4	Detail 4					
	Length Changes	170	LF	\$73.85	\$12,554.50	Subcontractor price of \$67.14 plus 10%
	Concrete Reduction	(60)	CY	\$113.95	(\$6,837.00)	
#4	Additional Survey \$1500/Day	5	DAYS	\$1,500.00	\$7,500.00	
	Total Cost incurred				\$148,033.05	
	Additional Time to complete				53.2	Calendar Days

The schedule impacts incurred from the lack of proper design and utility conflicts have changed the nature of the project. PMI is currently re-baselining the project CPM to reflect this request and the changes in construction staging. It is PMI intent to reach an amicable solution moving forward to avoid any further setbacks. Please consider this request and respond with any questions or concerns. Feel free to contact me at micah.shultzman@preferredmaterials.com or by phone at 864-444-0149. Thank you for your time and consideration.

Respectfully,

A handwritten signature in blue ink, appearing to read "Micah Shultzman", with a long horizontal flourish extending to the right.

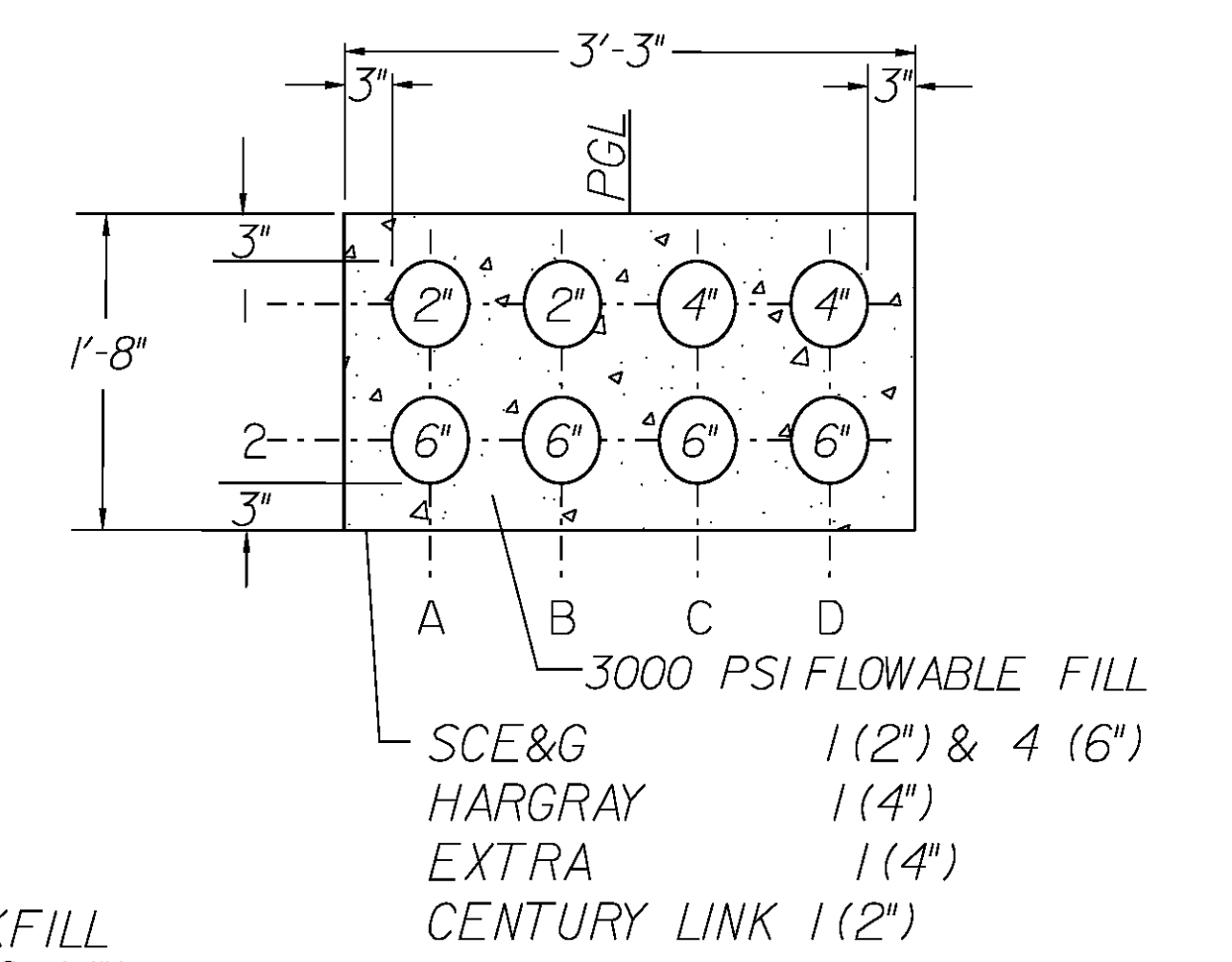
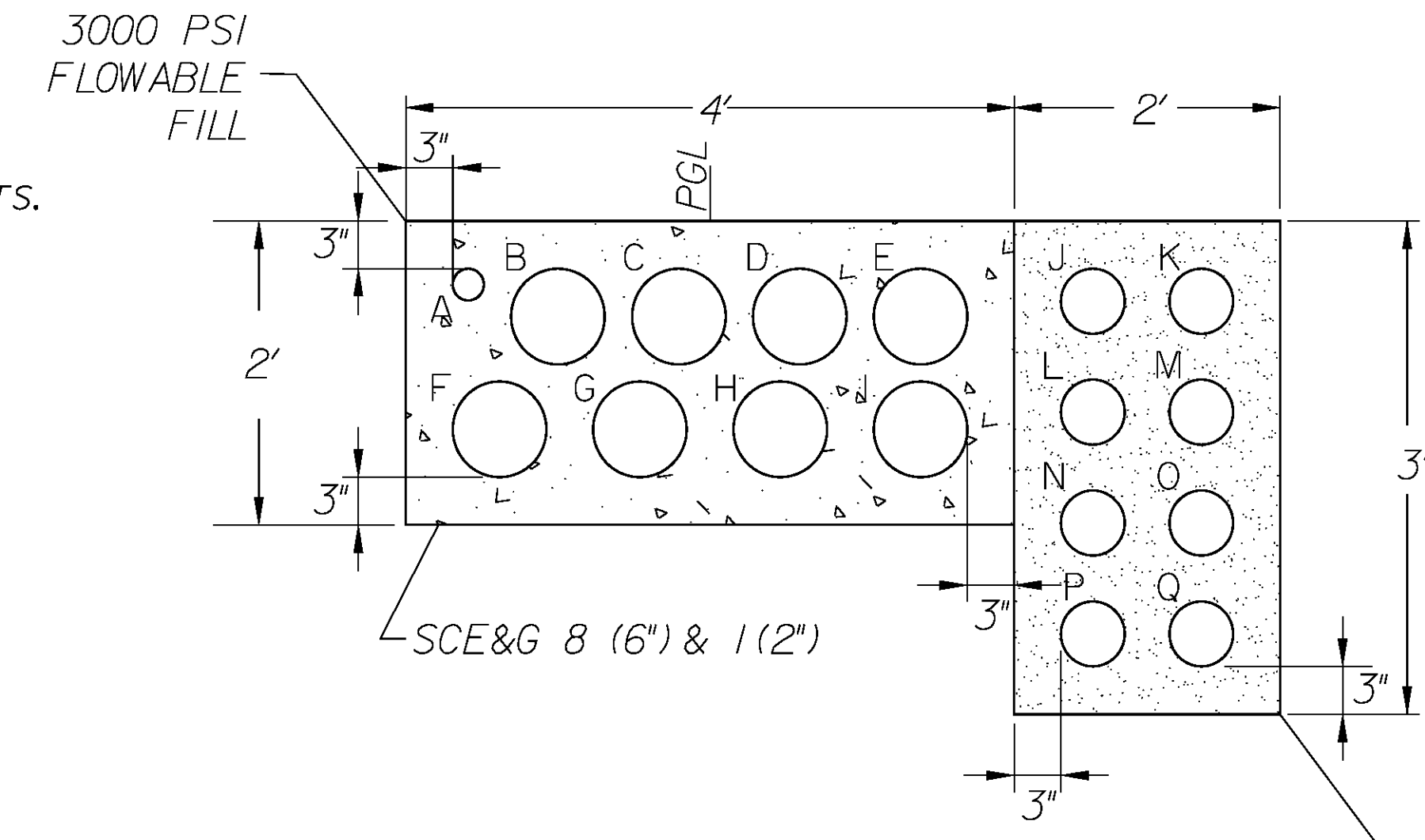
Micah Shultzman
Project Manager

CC: Job File 761015
Jeffrey Andrews, OM APAC
Robert Royal, AM APAC

FED. RD. DIST. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
3	S.C.	BEAUFORT	07.036939A		U.S.21B	DB2

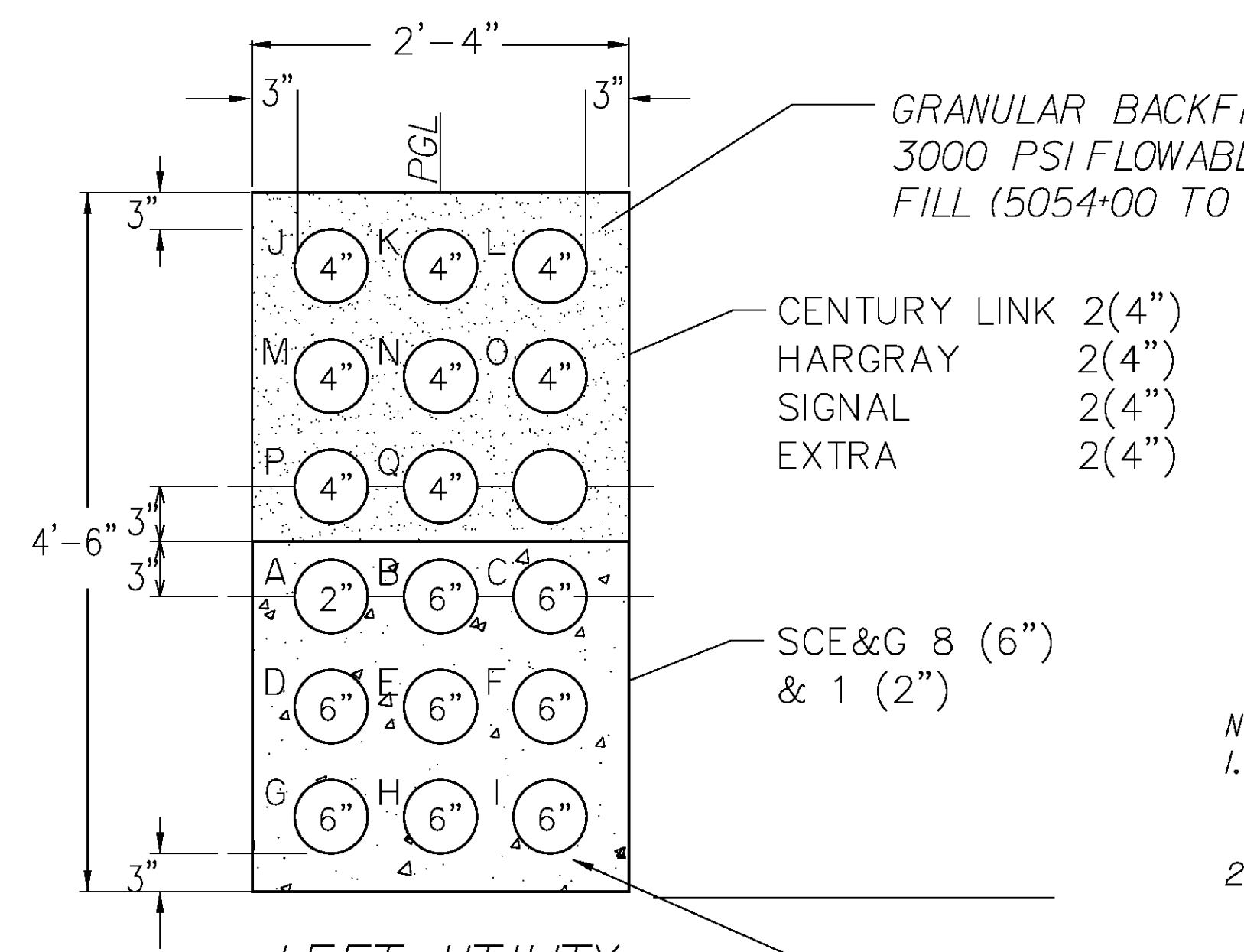
- UTILITY DUCT BANK NOTES:**
- CABINET LOCATIONS SHOWN ON RELOCATION PLANS ARE SCHEMATICS AS PROVIDED BY UTILITIES. THESE SHALL BE VERIFIED BY OWNERS PRIOR TO CONSTRUCTION OF DUCT.
 - DUCT BANK PROFILE ALIGNMENT AND EXISTING PIPES TO BE RETAINED SHALL BE FIELD VERIFIED TO ELIMINATE CONFLICTS.
 - CONTRACTOR SHALL SUBMIT TRANSITION PLAN FOR CHANGES IN CONDUIT CONFIGURATIONS AND INTERSECTIONS WITH SIDE ROAD DUCT BANKS TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO INSTALLATION.
 - ALL DRY UTILITY CONDUIT ENDS SHALL BE CAPPED AND MARKED WITH A STEEL REBAR STAKE IMBEDDED ONE (1) FOOT BELOW GROUND SURFACE AND ONE (1) FOOT OUTSIDE OF THE DUCT BANK.
 - EXTEND CONDUIT BEYOND PAVEMENT, CURB, AND SIDEWALKS.

STRUCTURE	STATION	OFFSET	CONDUIT	OWNERS
1	LT DUCT 5002-27	118' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
2	RT DUCT 6003-79	7' RT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
3	LT DUCT 5004-43	126' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
4	LT DUCT 5005-94	253' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
5	RT DUCT 6006-46	49' RT	J,K	SCE&G,HARGRAY
6	RT DUCT 6009-48	11' RT	N,O	SCE&G,SIGNAL
7	RT DUCT 6009-94	9' RT	J,K	HARGRAY
8	LT DUCT 5010-83	8' LT	J,K	SCE&G,HARGRAY
9	LT DUCT 5011-55	7' LT	L,M	CENTURY LINK
10	LT DUCT 5013-84	6' LT	J,K	HARGRAY
11	LT DUCT 5014-69	7' LT	J,K	SCE&G,HARGRAY
12	LT DUCT 5015-22	5' LT	L,M	CENTURY LINK
12A	LT DUCT 5016-85	7' LT	J,K	SCE&G,HARGRAY
13	LT DUCT 5018-05	8' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
14	LT DUCT 5019-86	7' LT	J,K	SCE&G,HARGRAY
15	LT DUCT 5021-04	84' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
17	RT DUCT 6017-66	7' RT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
18	RT DUCT 6019-00	7' RT	J,K	HARGRAY
19	RT DUCT 6022-55	7' RT		SCE&G
20	LT DUCT 5023-53	97' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
20A	LT DUCT 5025-31	7' RT	N,O	SIGNAL
21	LT DUCT 5026-31	5' LT	J,K,L,M	CENTURY LINK,HARGRAY
22	LT DUCT 5026-82	5' LT		SCE&G
23	RT DUCT 6026-50	7' RT	J,K	HARGRAY
24	RT DUCT 6027-51	7' RT	J,K	SCE&G,HARGRAY
25	LT DUCT 5028-35	7' LT	J,K	SCE&G,HARGRAY
26	LT DUCT 5030-61	7' LT	J,K	SCE&G,HARGRAY
27	LT DUCT 5031-67	7' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
28	RT DUCT 6028-85	7' RT	J,K	SCE&G,HARGRAY
29	RT DUCT 6031-67	7' RT	J,K	SCE&G,HARGRAY
30	RT DUCT 6032-78	7' RT	J,K	SCE&G,HARGRAY
31	RT DUCT 6033-80	7' RT	J,K	SCE&G,HARGRAY
32	LT DUCT 5034-52	70' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
33	LT DUCT 5036-81	14' LT	J,K	SCE&G,HARGRAY
34	LT DUCT 5038-16	7' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
35	RT DUCT 6035-67	7' RT	J,K	SCE&G,HARGRAY
35A	LT DUCT 5040-63	7' LT	J,K,L,M,N,O	SCE&G,CENTURY LINK,HARGRAY,SIGNAL
36	LT DUCT 5042-22	7' LT	J,K	SCE&G,HARGRAY
37	LT DUCT 5043-49	8' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
38	LT DUCT 5045-54	7' LT	J,K	SCE&G,HARGRAY
39	LT DUCT 5049-00	8' LT	J,K,N,O	SCE&G,SIGNAL,HARGRAY
40	LT DUCT 5050-83	7' LT	J,K,L,M	HARGRAY
41	LT DUCT 5051-39	7' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
41A	LT DUCT 5052-06	8' LT	J,K,L,M	SCE&G
42	LT DUCT 5053-33	7' LT	J,K,L,M	CENTURY LINK,HARGRAY
43	LT DUCT 5056-13	7' LT	J,K	SCE&G,HARGRAY
44	LT DUCT 5058-72	23' LT	J,K	SCE&G,HARGRAY
45	LT DUCT 5059-49	7' LT	J,K,L,M	CENTURY LINK,HARGRAY
46	LT DUCT 5062-40	7' LT	J,K,L,M	CENTURY LINK,HARGRAY
47	LT DUCT 5062-74	7' LT	N,O	SIGNAL
48	LT DUCT 5063-37	7' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
49	LT DUCT 5066-85	7' LT	J,K,L,M	SCE&G,CENTURY LINK,HARGRAY
50	LT DUCT 5068-14	6' LT	J,K,N,O	SIGNAL,HARGRAY
51	LT DUCT 5069-80	7' RT	J,K	HARGRAY
52	SC170 7003-84	35' RT	J,K	SCE&G,HARGRAY
53	RT DUCT 6005-73	4' RT	J,K,L,M	CENTURY LINK,HARGRAY

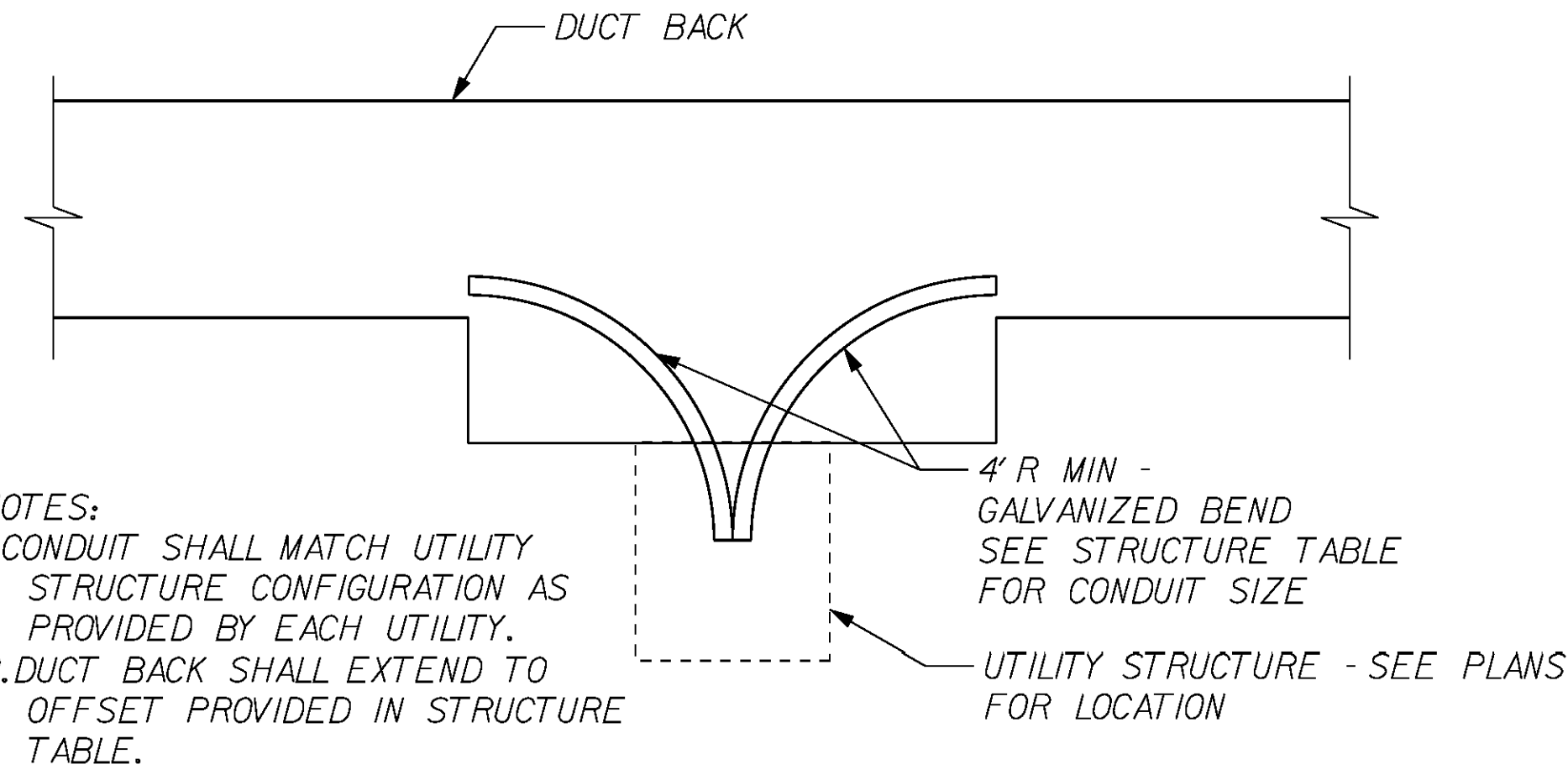


1 LEFT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 5000+00.00 TO 5001+46.00
 5001+93.70 TO 5006+26.48
 5007+26.34 TO 5013+16.32
 5014+16.25 TO 5035+24.06
 5036+39.03 TO 5052+88.02
 SC 170
 7000+00.00 TO 7007+71.75
 NOT TO SCALE

3 RIGHT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 6000+00.00 TO 6023+09.57
 6025+81.30 TO 6038+37.12
 NOT TO SCALE

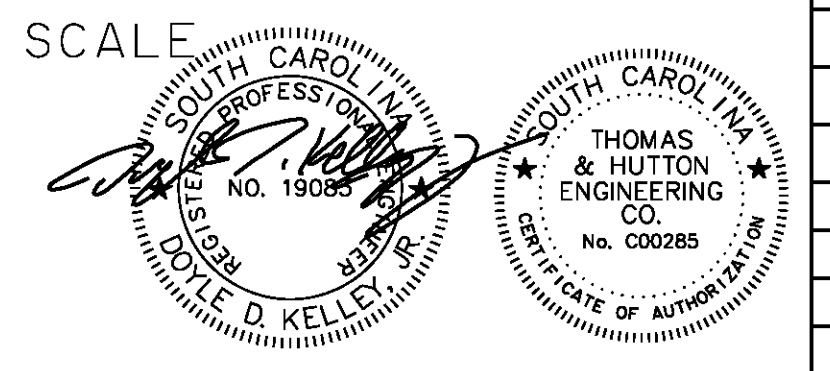


4 RIGHT LIGHTING CONDUIT
 USE THIS SECTION ON BOUNDARY STREET STA 6038+37.12 TO 6055+15.99
 NOT TO SCALE



2 LEFT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 5001+46.00 TO 5001+93.70
 5006+26.48 TO 5007+26.34
 5013+16.32 TO 5014+16.25
 5035+24.06 TO 5036+39.03
 5052+88.02 TO 5069+92.93
 NOT TO SCALE

5 UTILITY DUCT BANK TO STRUCTURE DETAIL
 NOT TO SCALE



RTE.	DESIGN SPEED		PAVEMENT DESIGN
	MPH	FROM STA. TO STA.	
40	30+25.42	372+00.00	
EXCEPTIONS TO DESIGN SPEED			DWG. DATE
			CKD. DATE
			FILE:

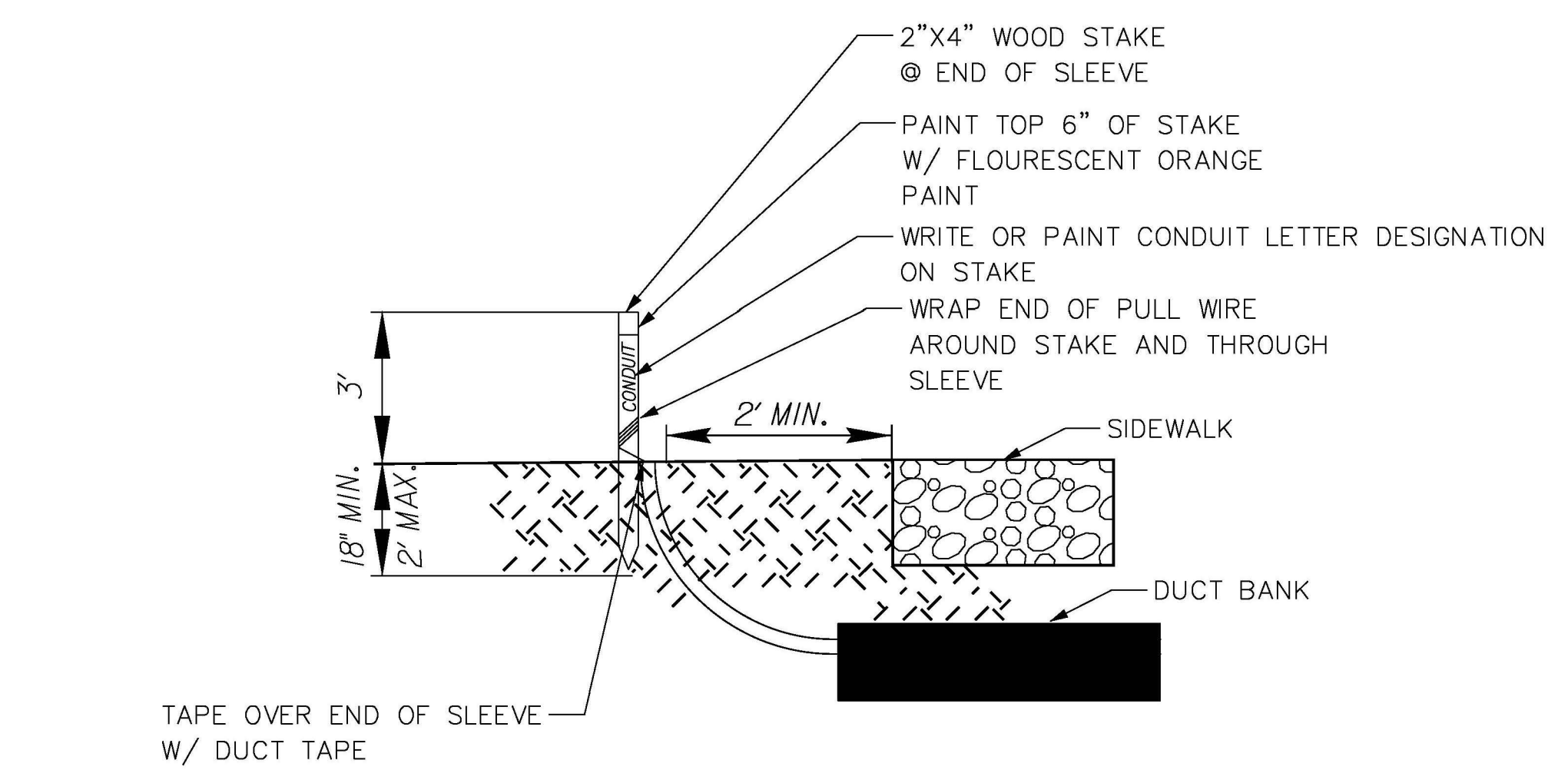
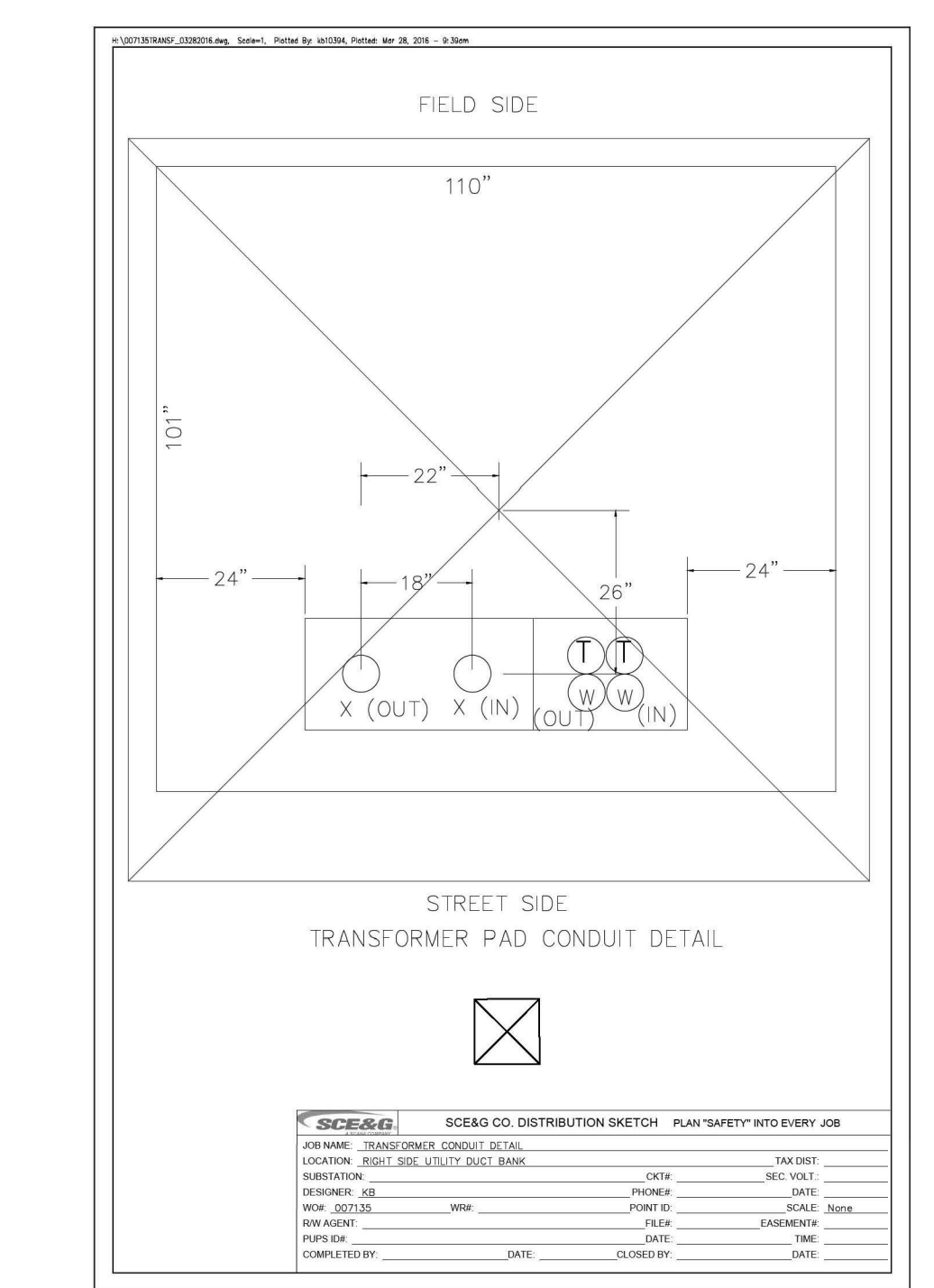
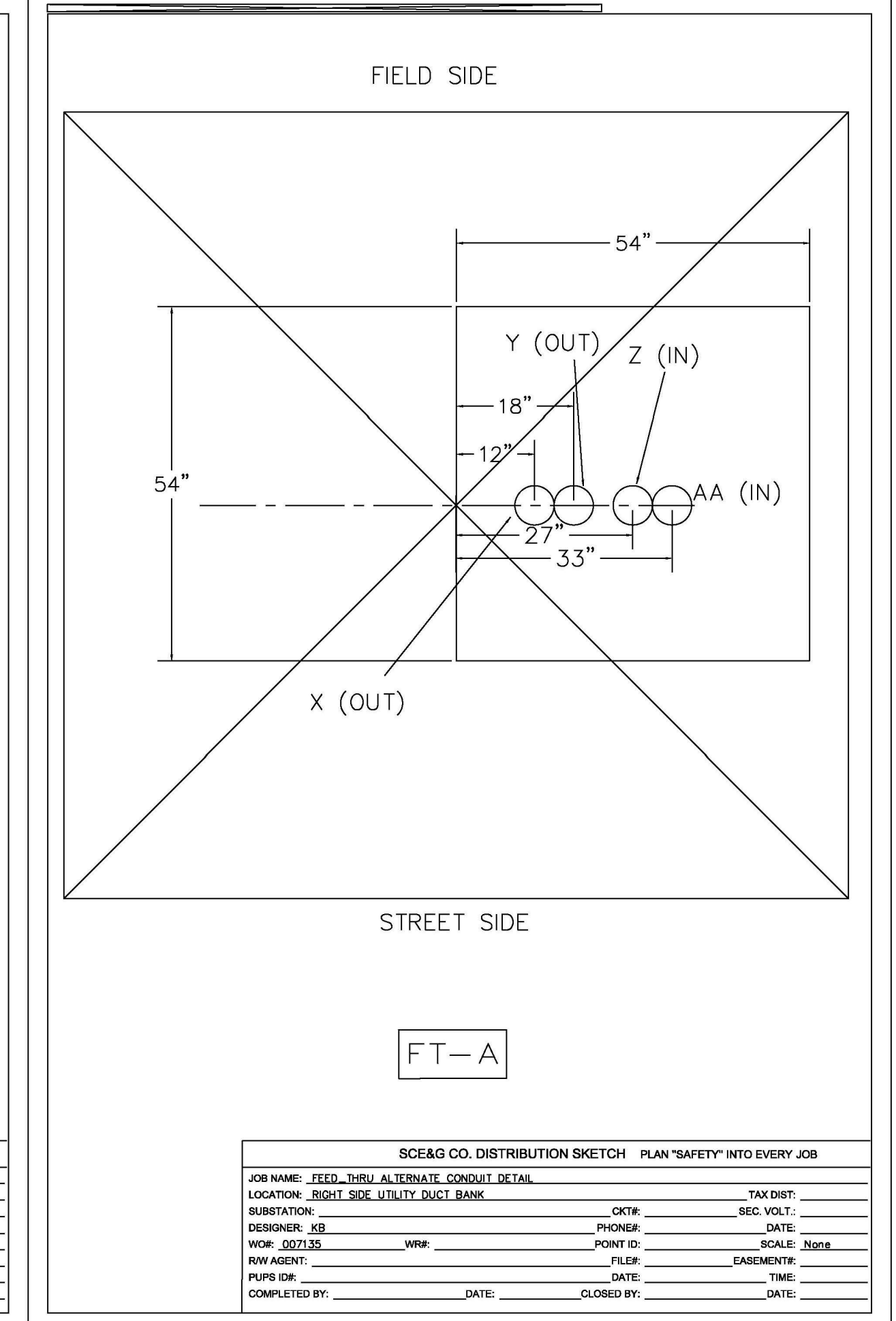
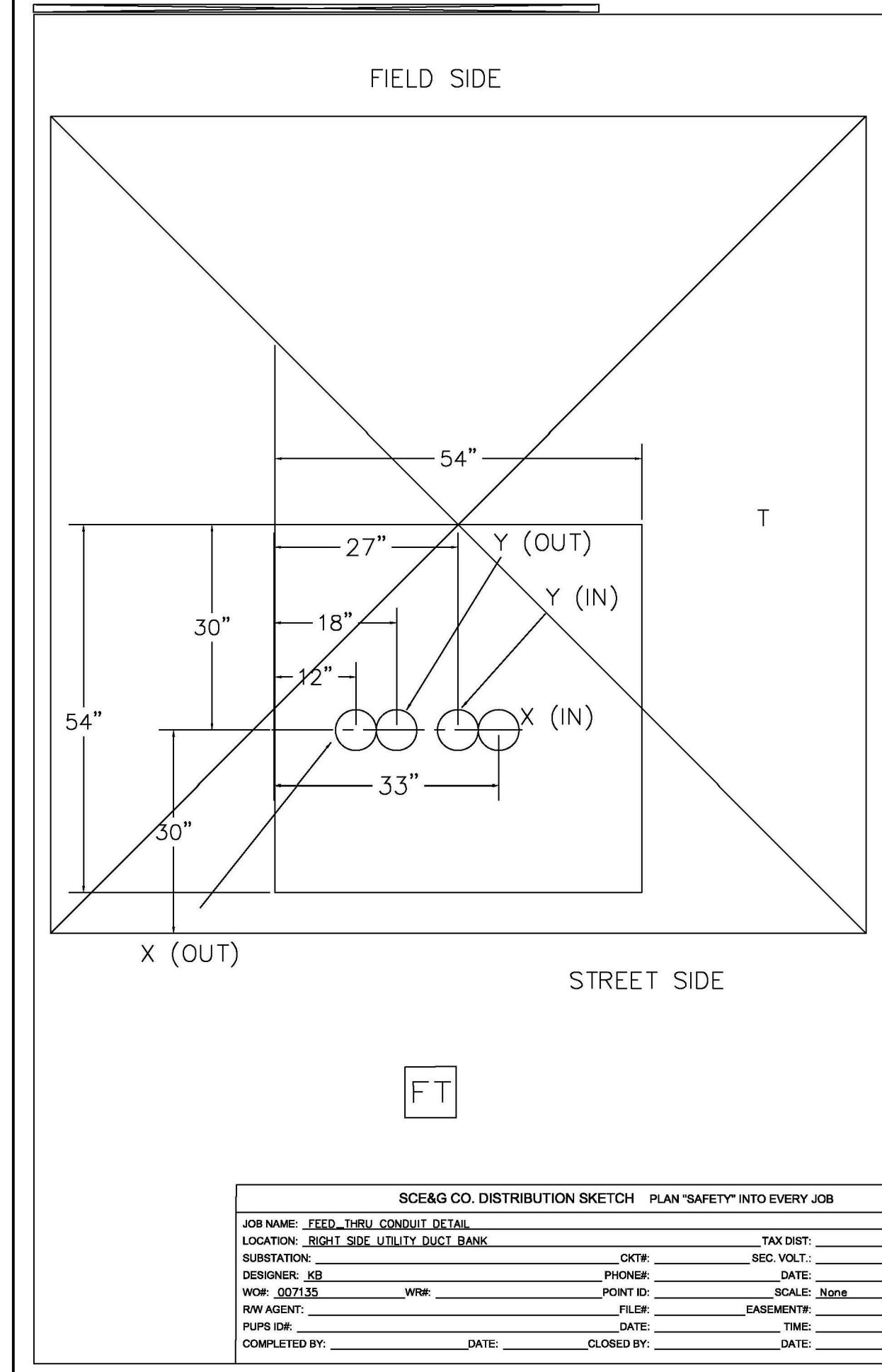
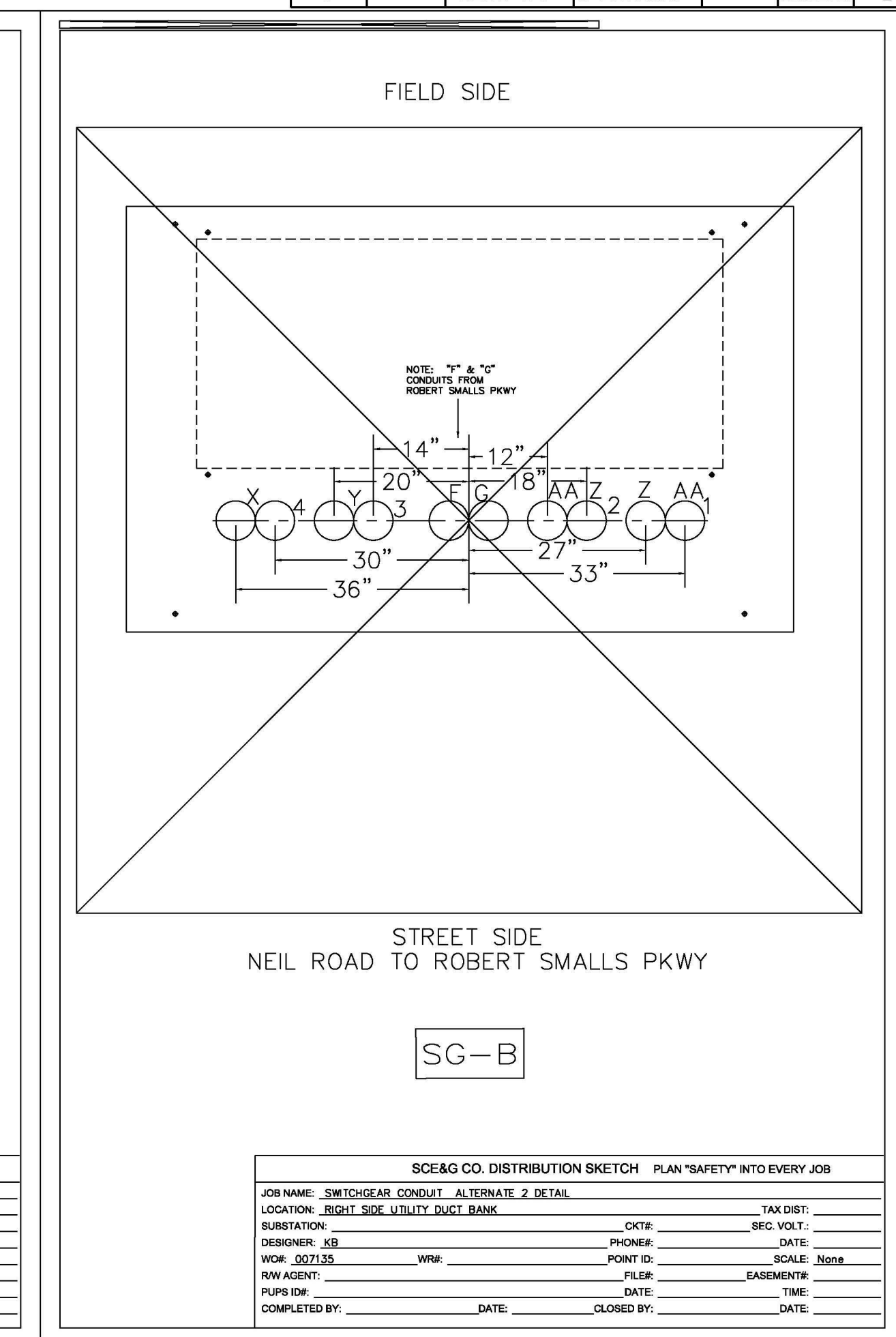
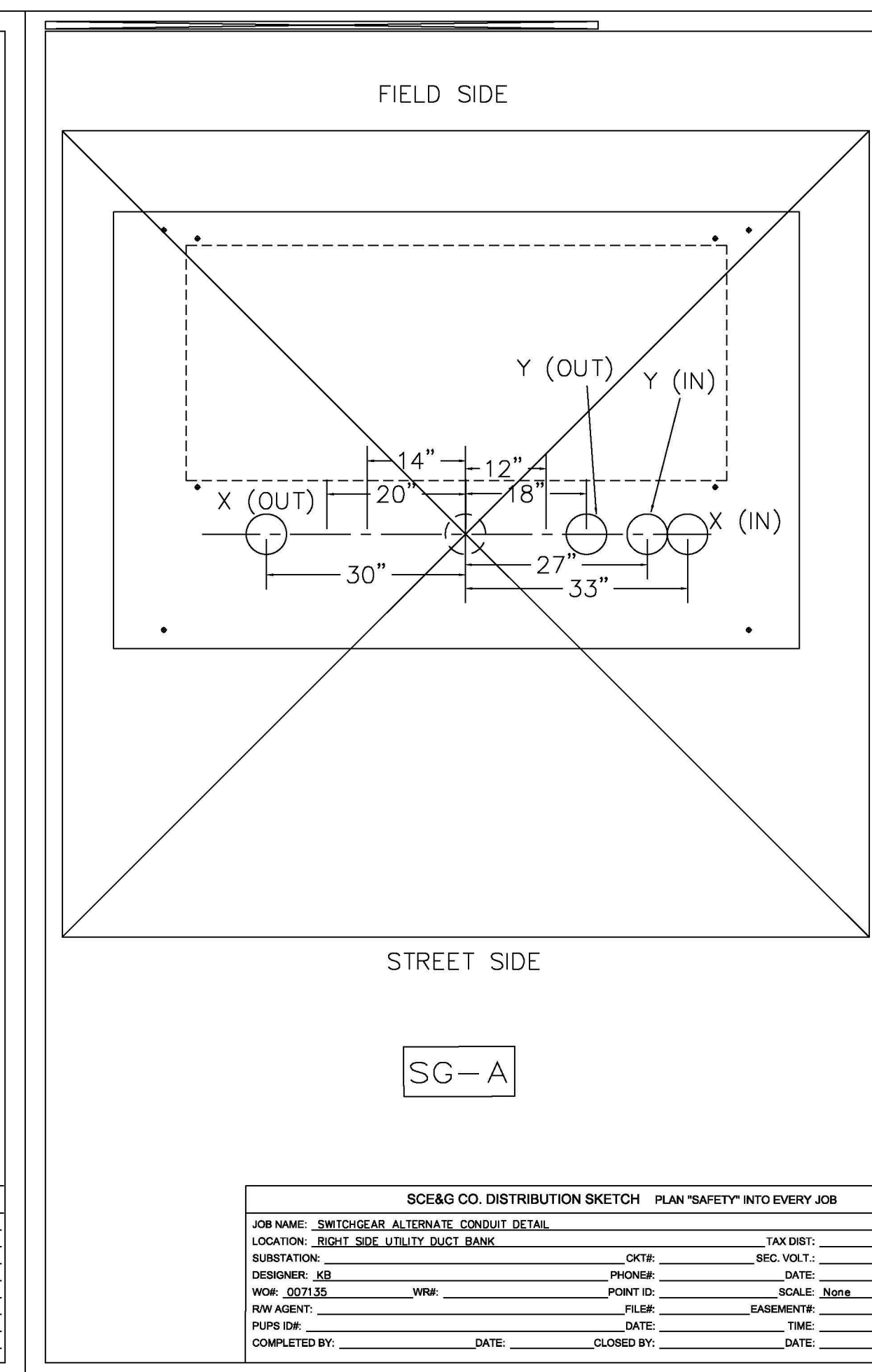
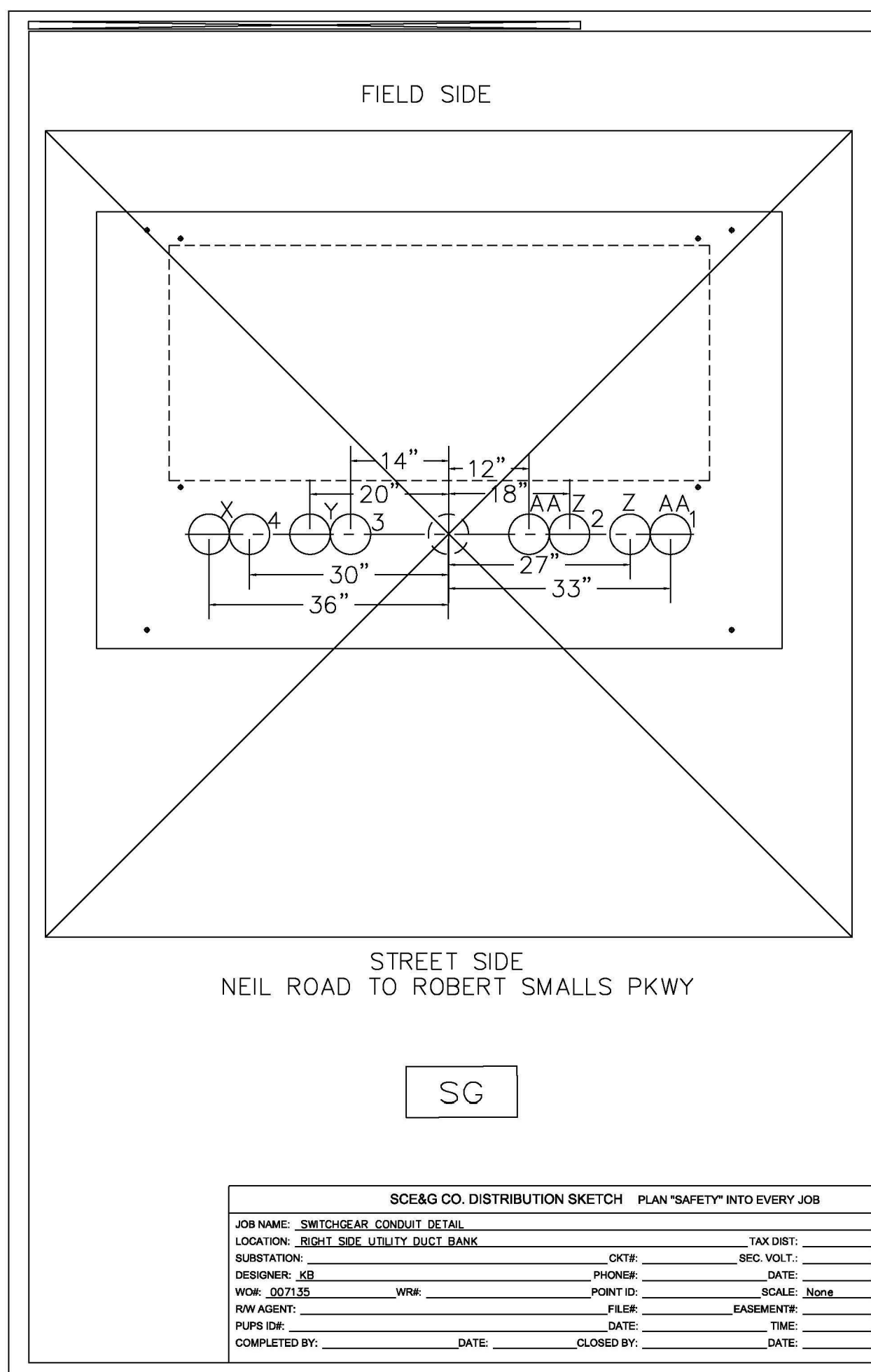
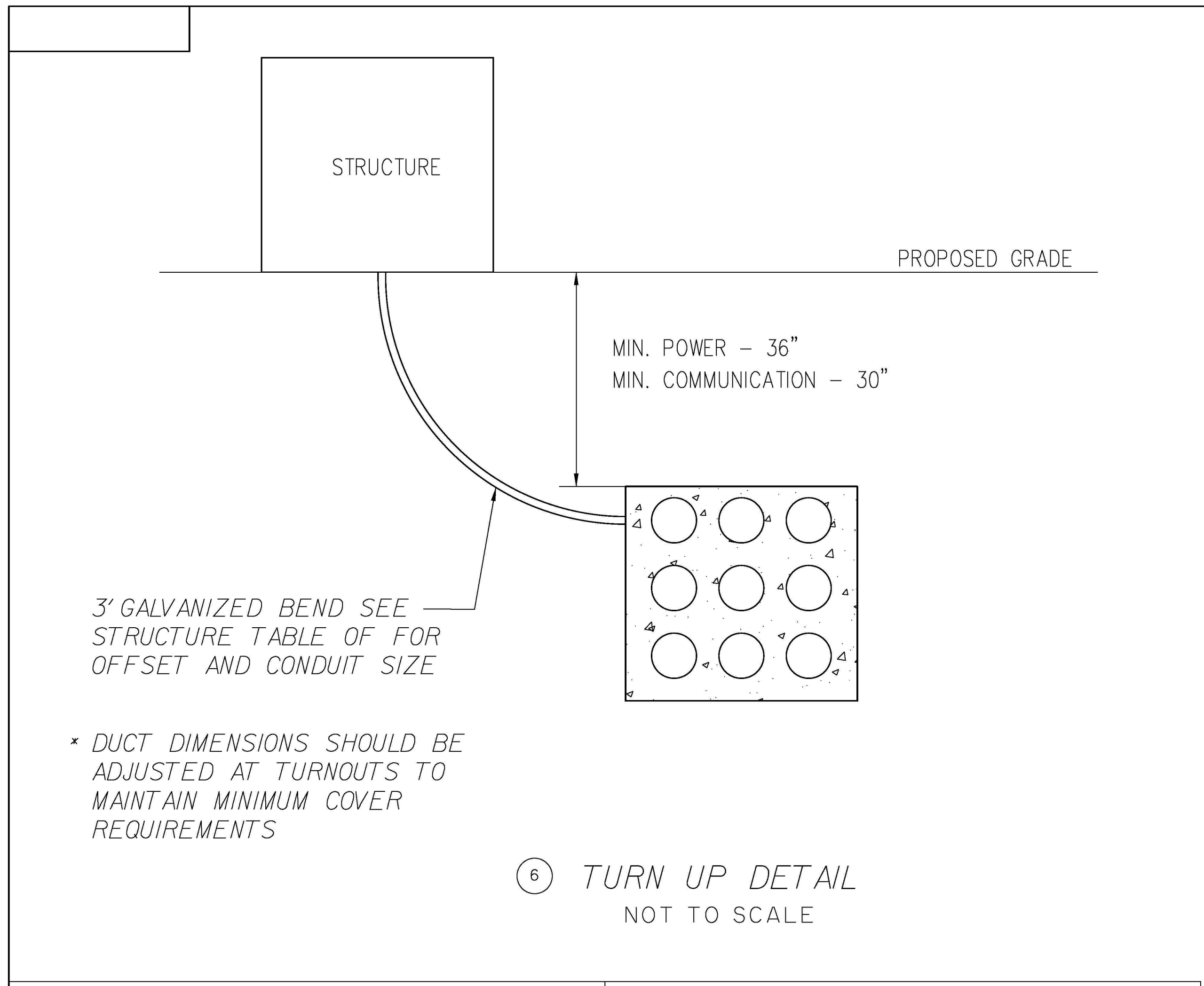
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 www.thomasandhutton.com

US 21 BUSINESS (BOUNDARY STREET) IMPROVEMENTS
 DUCT BANK PLAN DETAILS

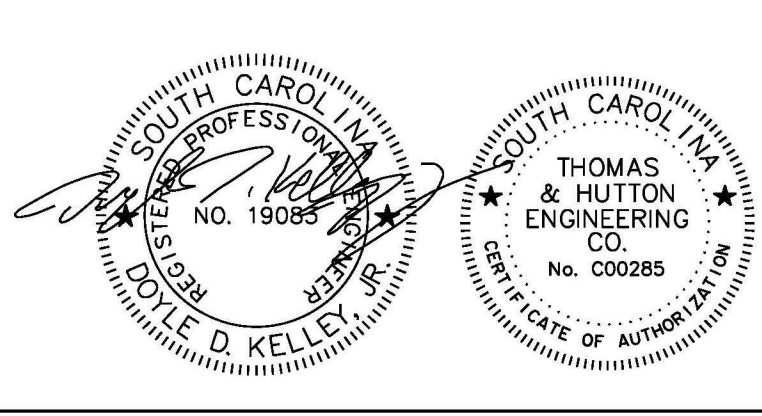
SCALE 1"= NTS SHEET DB2

O:\21717\Roadway\Tiger\Boundary Street\Plan Sheets\21717-DB2.dgn 5/18/2015



CONDUIT TERMINAL
NOT TO SCALE

USE ON CONSTRUCTION
REVISION 4/28/16



RTE.	DESIGN SPEED		PAVEMENT DESIGN
	MPH	FROM STA. TO STA.	
EXCEPTIONS TO DESIGN SPEED			

APPROVED BY _____

DATE _____

DWG. _____ DATE _____

CKD. _____ DATE _____

FILE: _____

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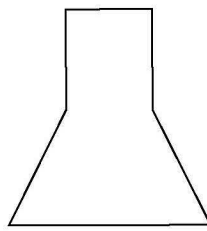
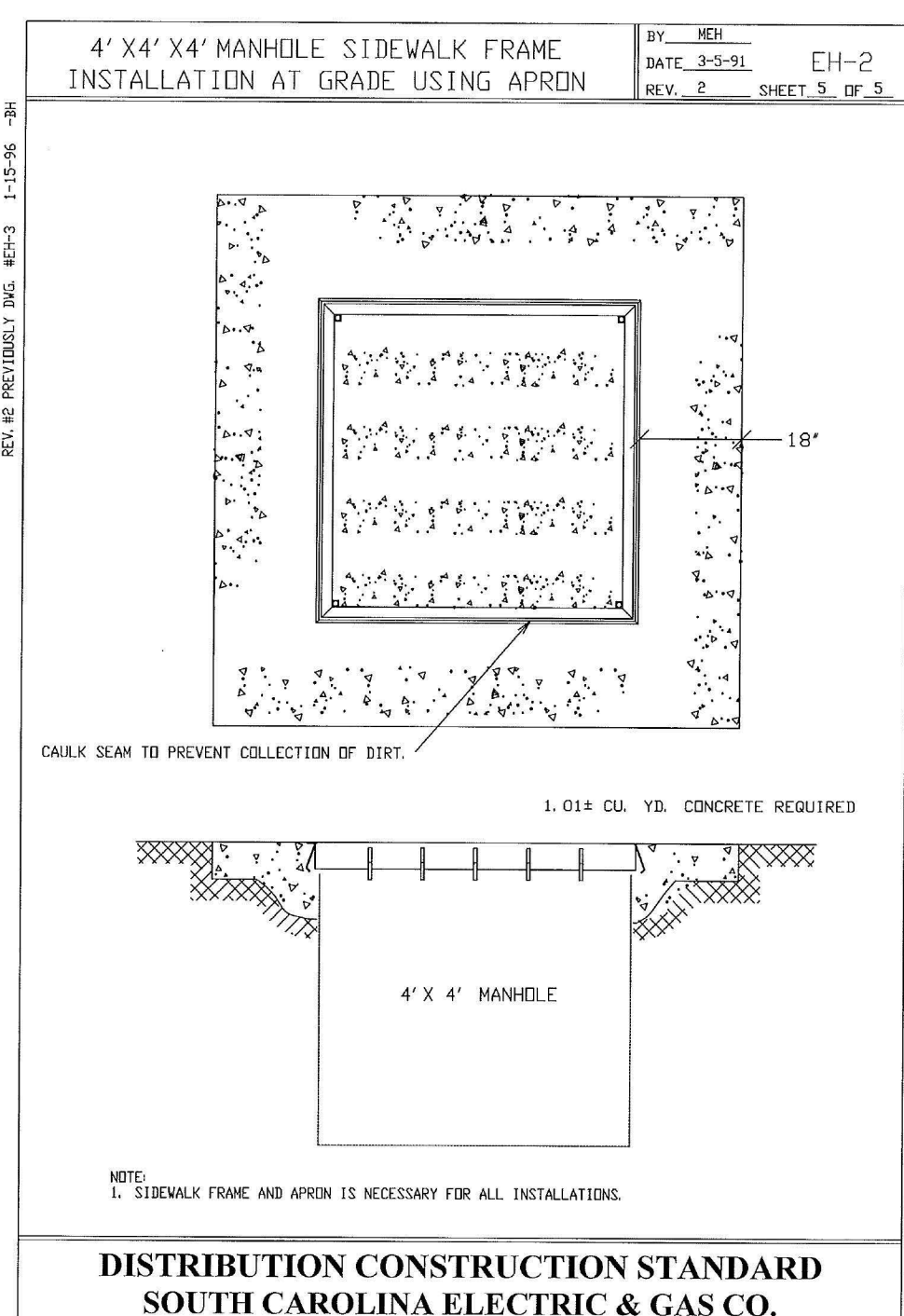
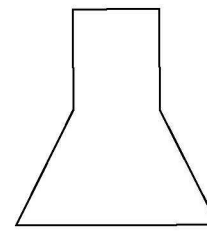
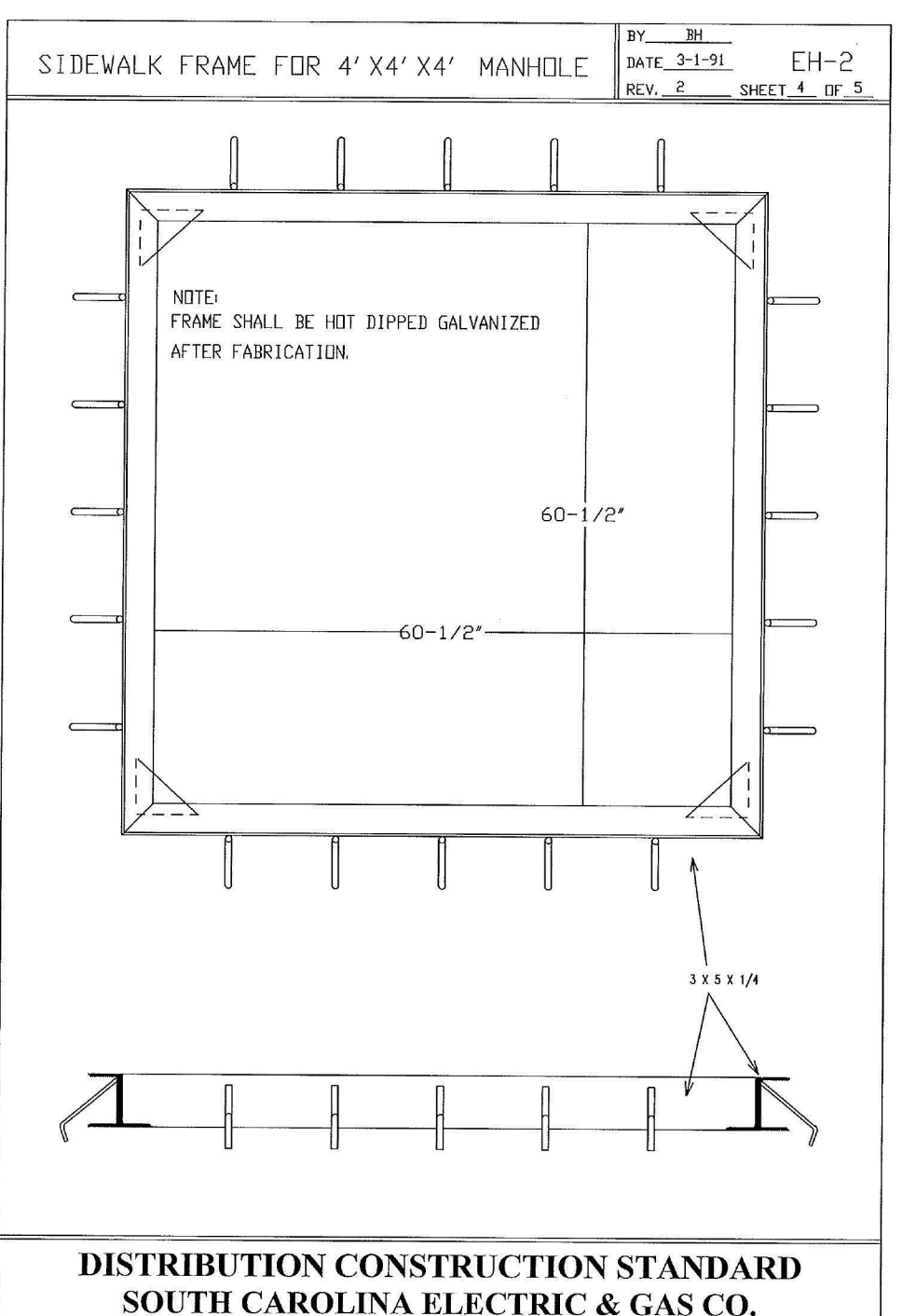
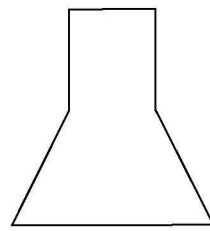
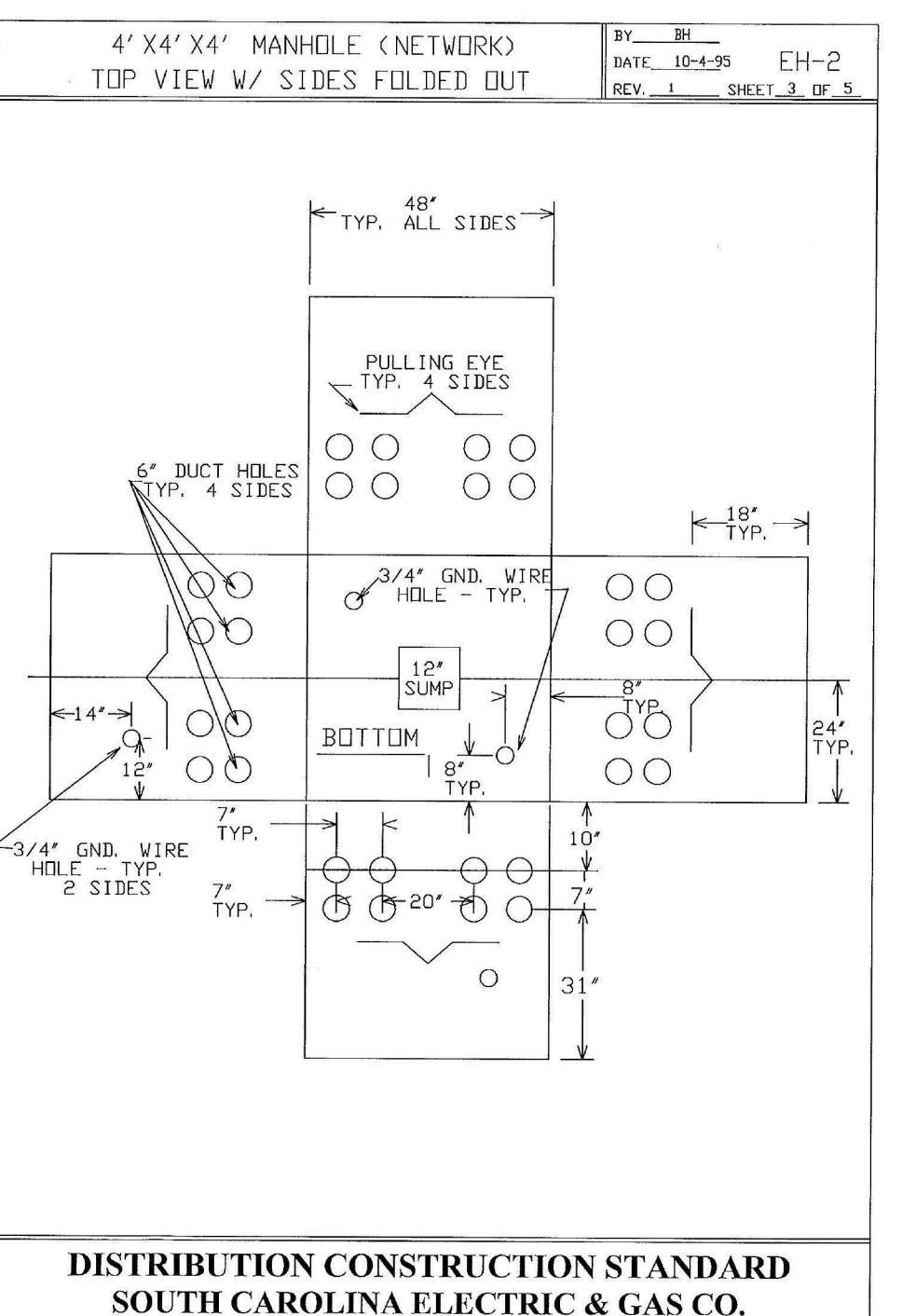
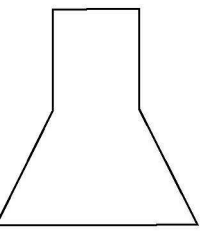
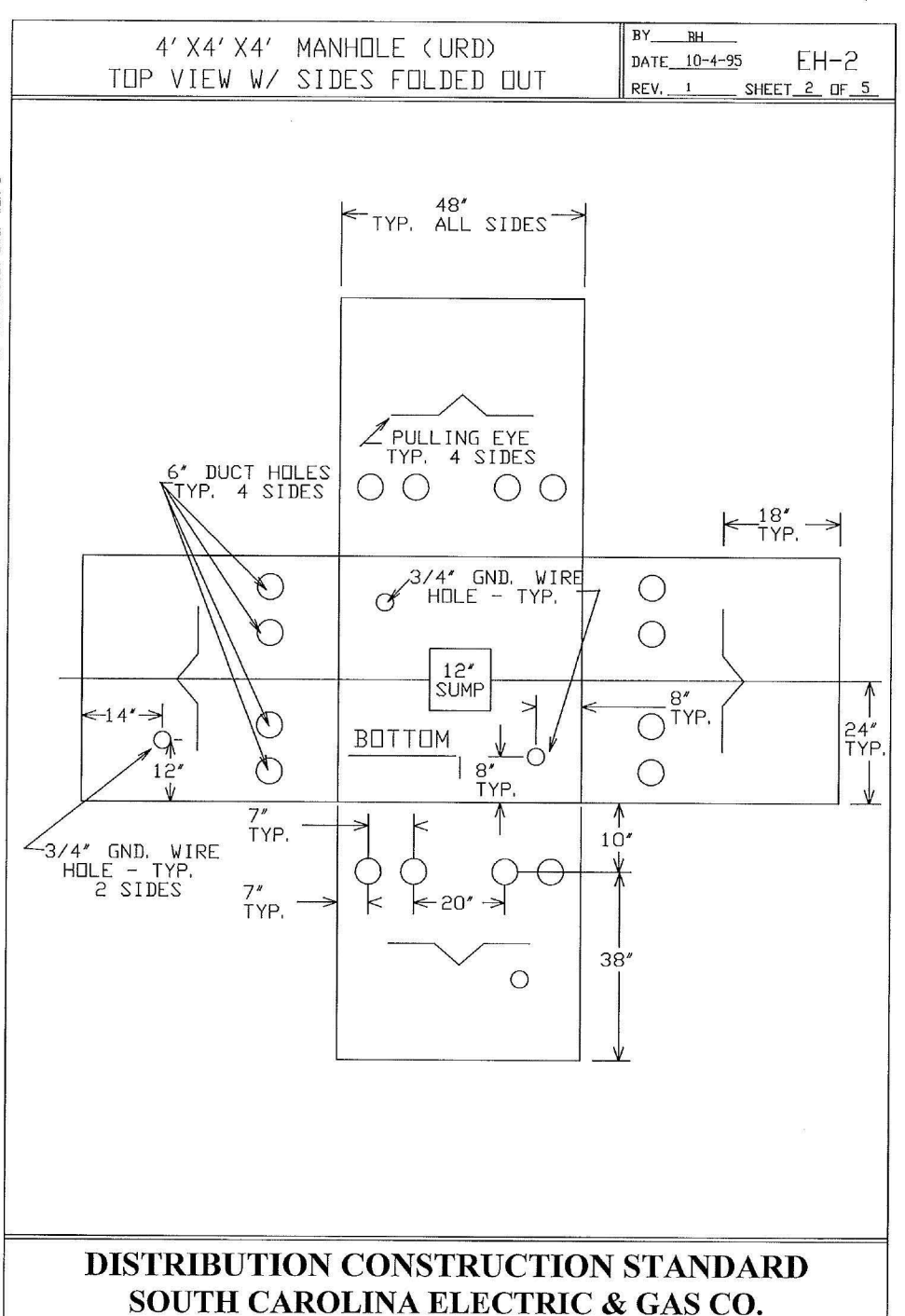
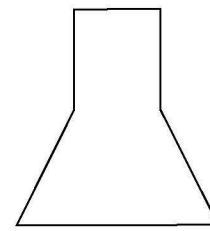
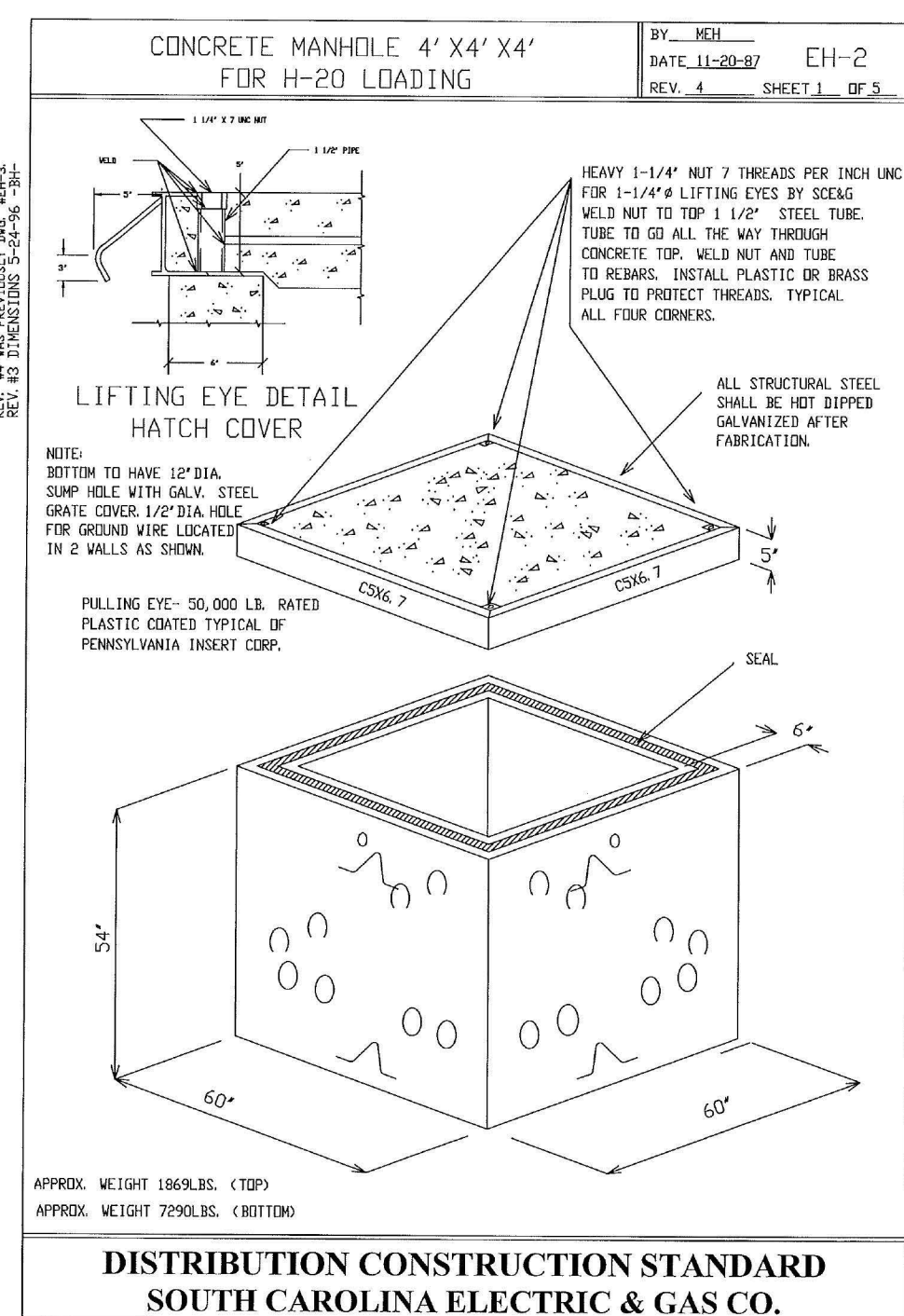
US 21 BUSINESS (BOUNDARY STREET)
IMPROVEMENTS
DUCT BANK PLAN
DETAILS

SCALE 1"= NTS

SHEET DB2-1

Q:\21717\Roadway\Tiger\Boundary Street\Plan Sheets\21717-DB2-1.dgn 4/28/2016

FED. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.
3	S.C.	BEAUFORT	07.036939A		U.S.21B	DB2



USE ON CONSTRUCTION
REVISION 4/28/16

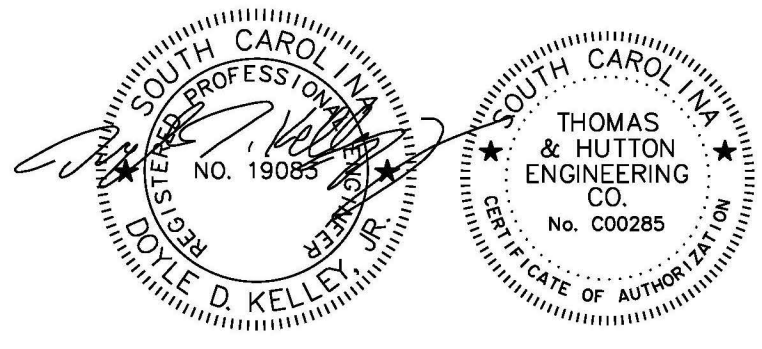
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US 21 BUSINESS (BOUNDARY STREET)
IMPROVEMENTS
DUCT BANK PLAN
DETAILS

SCALE 1"= NTS SHEET DB2-2

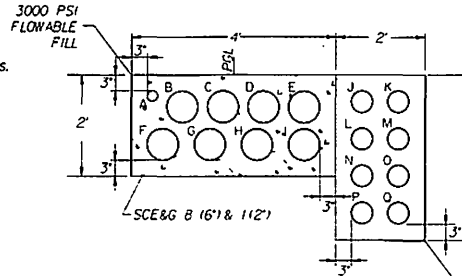
RTE.	DESIGN SPEED		PAVEMENT DESIGN
	MPH	FROM STA. TO STA.	
			APPROVED BY _____
			DATE _____
			DWG. _____ DATE _____
			CKD. _____ DATE _____
			FILE: _____



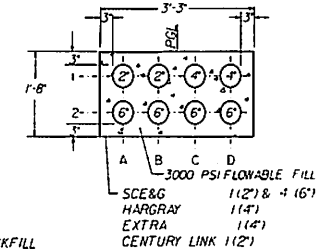
UTILITY DUCT BANK NOTES:

1. CABINET LOCATIONS SHOWN ON RELOCATION PLANS ARE SCHEMATICS AS PROVIDED BY UTILITIES. THESE SHALL BE VERIFIED BY OWNERS PRIOR TO CONSTRUCTION OF DUCT.
2. DUCT BANK PROFILE ALIGNMENT AND EXISTING PIPES TO BE RETAINED SHALL BE FIELD VERIFIED TO ELIMINATE CONFLICTS.
3. CONTRACTOR SHALL SUBMIT TRANSITION PLAN FOR CHANGES IN CONDUIT CONFIGURATIONS AND INTERSECTIONS WITH SIDE ROAD DUCT BANKS TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO INSTALLATION.
4. ALL DRY UTILITY CONDUIT ENDS SHALL BE CAPPED AND MARKED WITH A STEEL REBAR STAKE IMBEDDED ONE (1) FOOT BELOW GROUND SURFACE AND ONE (1) FOOT OUTSIDE OF THE DUCT BANK.
5. EXTEND CONDUIT BEYOND PAVEMENT, CURB, AND SIDEWALKS.

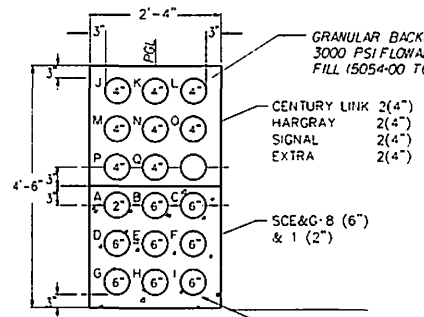
STRUCTURE TABLE				
STRUCTURE	STATION	OFFSET	CONDUIT	OWNERS
1	LT DUCT 5082-27	12' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
2	RT DUCT 6003-79	7' RT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
3	LT DUCT 5004-43	120' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
4	LT DUCT 5009-94	253' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
5	RT DUCT 6006-46	47' RT	J,K	SCE&G,HARGRAY
6	RT DUCT 6009-48	11' RT	K,O	SCE&G,SIGNAL
7	RT DUCT 6009-94	9' RT	J,K	HARGRAY
8	LT DUCT 5000-83	8' LT	J,K	SCE&G,HARGRAY
9	LT DUCT 5001-55	7' LT	L,W	CENTURY LINK
10	LT DUCT 5013-84	6' LT	J,K	HARGRAY
11	LT DUCT 5014-69	7' LT	J,K	SCE&G,HARGRAY
12	LT DUCT 5015-22	5' LT	L,W	CENTURY LINK
12A	LT DUCT 5016-85	7' LT	J,K	SCE&G,HARGRAY
13	LT DUCT 5018-05	8' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
14	LT DUCT 5019-86	7' LT	J,K	SCE&G,HARGRAY
15	LT DUCT 5021-04	84' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
16	RT DUCT 6017-66	7' RT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
18	RT DUCT 6020-00	7' RT	J,K	HARGRAY
19	RT DUCT 6022-55	7' RT	J,K	SCE&G
20	LT DUCT 5023-53	9' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
20A	LT DUCT 5025-31	7' RT	K,O	SIGNAL
21	LT DUCT 5026-31	5' LT	J,K,L,W	CENTURY LINK,HARGRAY
22	LT DUCT 5026-42	6' LT	J,K,L,W	SCE&G
23	RT DUCT 6026-50	7' RT	J,K	HARGRAY
24	RT DUCT 6027-51	7' RT	J,K	SCE&G,HARGRAY
25	LT DUCT 5028-15	7' LT	J,K	SCE&G,HARGRAY
26	LT DUCT 5030-41	7' LT	J,K	SCE&G,HARGRAY
27	LT DUCT 5031-42	7' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
28	RT DUCT 6029-85	7' RT	J,K	SCE&G,HARGRAY
29	RT DUCT 6031-42	7' RT	J,K	SCE&G,HARGRAY
32	RT DUCT 6032-78	7' RT	J,K	SCE&G,HARGRAY
33	RT DUCT 6033-80	7' RT	J,K	SCE&G,HARGRAY
32	LT DUCT 5031-32	10' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
33	LT DUCT 5036-11	14' LT	J,K	SCE&G,HARGRAY
34	LT DUCT 5038-16	7' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
35	RT DUCT 6035-67	7' RT	J,K	SCE&G,HARGRAY
35A	LT DUCT 5040-63	7' LT	J,K,L,W,K,O	SCE&G,CENTURY LINK,HARGRAY,SIGNAL
36	LT DUCT 5042-22	7' LT	J,K	SCE&G,HARGRAY
37	LT DUCT 5043-49	8' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
38	LT DUCT 5045-54	7' LT	J,K	SCE&G,HARGRAY
39	LT DUCT 5049-00	8' LT	J,K,K,O	SCE&G,SIGNAL,HARGRAY
40	LT DUCT 5050-83	7' LT	J,K,L,W	HARGRAY
41	LT DUCT 5051-39	7' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
41A	LT DUCT 5052-06	8' LT	J,K,L,W	SCE&G
42	LT DUCT 5053-13	7' LT	J,K,L,W	CENTURY LINK,HARGRAY
43	LT DUCT 5056-13	7' LT	J,K	SCE&G,HARGRAY
44	LT DUCT 5058-72	23' LT	J,K	SCE&G,HARGRAY
45	LT DUCT 5059-49	7' LT	J,K,L,W	CENTURY LINK,HARGRAY
46	LT DUCT 5062-40	7' LT	J,K,L,W	CENTURY LINK,HARGRAY
47	LT DUCT 5062-74	7' LT	K,O	SIGNAL
48	LT DUCT 5063-37	7' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
49	LT DUCT 5066-05	7' LT	J,K,L,W	SCE&G,CENTURY LINK,HARGRAY
50	LT DUCT 5068-44	6' LT	J,K,K,O	SIGNAL,HARGRAY
51	LT DUCT 5069-80	7' RT	J,K	HARGRAY
52	SC70 7003-84	33' RT	J,K	SCE&G,HARGRAY
53	RT DUCT 6001-73	4' RT	J,K,L,W	CENTURY LINK,HARGRAY



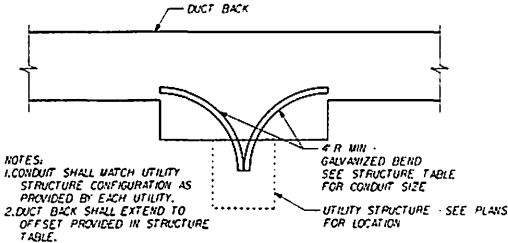
LEFT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 5000-0000 TO 5004-6000
 5007-9370 TO 5008-2648
 5007-2634 TO 5013-1632
 5014-1625 TO 5015-2406
 5036-3903 TO 5052-8802
 SC 170
 7000-0000 TO 7007-7175
 NOT TO SCALE



RIGHT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 6003-0000 TO 602-1408-57
 6059-8130 TO 6059-3772
 NOT TO SCALE



LEFT UTILITY DUCT BANK DETAIL
 USE THIS SECTION ON BOUNDARY STREET STA 5000-0000 TO 5004-6000
 5007-9370 TO 5008-2648
 5007-2634 TO 5013-1632
 5014-1625 TO 5015-2406
 5036-3903 TO 5052-8802
 NOT TO SCALE



UTILITY DUCT BANK TO STRUCTURE DETAIL
 NOT TO SCALE

REV.	DESCRIPTION	DATE	BY	CHECKED
01	ISSUE FOR PERMITS	10/20/05	JLH	WJH
02	REVISED PER COMMENTS	11/10/05	JLH	WJH

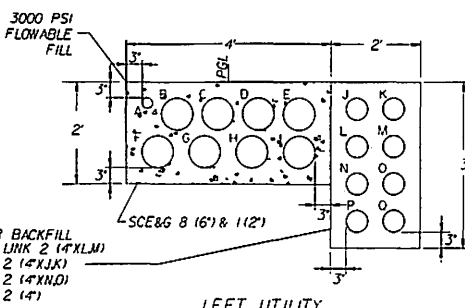
PLANS PREPARED FOR
BEAUFORT COUNTY

THOMAS & HUTTON
 ENGINEERS & ARCHITECTS
 21 BUSINESS (BOUNDARY STREET) IMPROVEMENTS
 DUCT BANK PLAN DETAILS

SCALE: 1" = 12'
 SHEET 082

G:\JIT\Roadway\Tiger\Boundary Street\10111-082.dwg
 5/11/2005

STRUCTURE TABLE				
SPRINKLER	STATION	OFFSET	CONDUIT	OWNERS
2	RT DUCT 603179	7 RT	11Z,2AARUV	SCE&G,HARGRAY,CENTURY LINK
5	RT DUCT 602646	49 RT	11V	SCE&G,HARGRAY
6	RT DUCT 602949	8 RT	V11KX,Z,AAFG	SCE&G,HARGRAY,CENTURY LINK
7	RT DUCT 603178	9 RT	V	HARGRAY
17	RT DUCT 60751	20 RT	V11Z,JA	SCE&G,HARGRAY,CENTURY LINK
19	RT DUCT 602200	7 RT	11V	SCE&G
23	RT DUCT 602645	0 RT	V	HARGRAY
24	RT DUCT 602751	7 RT	11V	SCE&G,HARGRAY
28	RT DUCT 602669	45 RT	11KJ	SCE&G,HARGRAY,CENTURY LINK
29A	RT DUCT 602950	2 RT	V	HARGRAY
29	RT DUCT 603467	7 RT	V	HARGRAY
30	RT DUCT 603278	7 RT	11KJ	SCE&G,HARGRAY
31	RT DUCT 603367	8 RT	11V	SCE&G,CENTURY LINK
31A	RT DUCT 603457	7 RT	W	SCE&G
35	RT DUCT 603640	4 RT	V	HARGRAY
45	RT DUCT 604657	4 RT	V11Z	SCE&G,HARGRAY
43A	RT DUCT 605529	6 RT	V11Z	SCE&G,HARGRAY,EXTRA
LT SEE STRUCTURES UNDER REVER BY SCE&G 4/28/76				
30	LT DUCT 500075	6 LT	ADCF,JK	SCE&G,HARGRAY
32	LT DUCT 500392	8 LT	ADCF,HJLM	SCE&G,CENTURY LINK
33	LT DUCT 500277	8 LT	EF,JK	SCE&G,HARGRAY
34	LT DUCT 500441	106 LT	ADCF,HJLM	SCE&G,CENTURY LINK,HARGRAY
35	LT DUCT 500594	253 LT	EF,JKLM	SCE&G,CENTURY LINK,HARGRAY
36	LT DUCT 500939	7 LT	ADCF,HJLM	SCE&G,CENTURY LINK,HARGRAY
37	LT DUCT 500909	7 LT	NO	SG&M
38	LT DUCT 500943	8 LT	DGN,JK	SCE&G,HARGRAY
39	LT DUCT 500555	7 LT	LW	CENTURY LINK
40	LT DUCT 500544	6 LT	NO	SIGNAL
41	LT DUCT 500469	7 LT	11K	SCE&G,HARGRAY
42	LT DUCT 500582	5 LT	LW	CENTURY LINK
43	LT DUCT 500485	7 LT	DGN,JK	SCE&G,HARGRAY
44	LT DUCT 500405	8 LT	ADCF,HJLM	SCE&G,CENTURY LINK,HARGRAY
45	LT DUCT 500986	7 LT	JK	HARGRAY
46	LT DUCT 502404	84 LT	J,K,L,V	CENTURY LINK,HARGRAY
47	LT DUCT 502353	59 LT	J,K,L,W	CENTURY LINK,HARGRAY
48	LT DUCT 502531	7 RT	NO	SIGNAL
49	LT DUCT 502631	5 LT	J,K,L,W	CENTURY LINK,HARGRAY
50	LT DUCT 502835	7 LT	EF,JK	SCE&G,HARGRAY
51	LT DUCT 503064	7 LT	ADCF,JK	SCE&G,HARGRAY
52	LT DUCT 503467	7 LT	ADCF,HJLM	SCE&G,CENTURY LINK,HARGRAY
54	LT DUCT 503452	70 LT	DJLJLM	SCE&G,CENTURY LINK,HARGRAY
53	LT DUCT 503437	7 LT	DEFJ	SCE&G
55	LT DUCT 503640	14 LT	EF,JK	SCE&G,HARGRAY
56	LT DUCT 503846	7 LT	DGN,DJLJLM	SCE&G,CENTURY LINK,HARGRAY
57	LT DUCT 504043	7 LT	EF,JK,LW&D	SCE&G,CENTURY LINK,HARGRAY, SIGNAL
58	LT DUCT 504222	7 LT	EF,JK	SCE&G,HARGRAY
59	LT DUCT 504349	8 LT	DEFJLJLM	SCE&G,CENTURY LINK,HARGRAY
60	LT DUCT 504903	8 LT	EF,JK&D	SCE&G, SIGNAL,HARGRAY
61	LT DUCT 505176	8 LT	DGN,HJLM	SCE&G,CENTURY LINK
62	LT DUCT 505206	8 LT	EF,JK	SCE&G
63	LT DUCT 505313	7 LT	J,K,L,W	CENTURY LINK,HARGRAY
65	LT DUCT 505645	20 LT	DGN,JK	SCE&G,HARGRAY
66	LT DUCT 505949	7 LT	EF,LJLM	CENTURY LINK,HARGRAY
67	LT DUCT 506240	7 LT	J,K,L,W	CENTURY LINK,HARGRAY
68	LT DUCT 506374	7 LT	DGN	SIGNAL,SCE&G
69	LT DUCT 506518	7 LT	ADCF,HJLM	SCE&G,CENTURY LINK,HARGRAY
70	LT DUCT 506685	7 LT	DGN,HJLM	SCE&G,CENTURY LINK,HARGRAY
71	LT DUCT 506844	6 LT	J,K,R,D	SIGNAL,HARGRAY
72	LT DUCT 506980	7 RT	JK	HARGRAY
9	SCV0 100348	35 RT	11JK	SCE&G,HARGRAY
50	SCV0 100060	0	11JK	SCE&G,HARGRAY



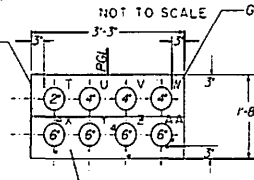
GRANULAR BACKFILL
CENTURY LINK 2 (4'XLM)
HARGRAY 2 (4'XJK)
SIGNAL 2 (4'XND)
EXTRA 2 (4')

TERMINATE B.C.D.
E,H,J @ STRUCTURE *6

LEFT UTILITY DUCT BANK DETAIL

USE THIS SECTION ON BOUNDARY STREET STA 5000+00.00 TO 5001+60.00
5001+91.70 TO 5006+28.43
5007+26.14 TO 5013+6.32
5014+6.25 TO 5035+24.06
5036+39.03 TO 5052+88.02
SC 10
7000+00.00 TO 7007+71.5 RT

SCE&G (2'X7) & 4 (6'X11,2,AA)
HARGRAY (11'X11)
EXTRA (11'X11)
CENTURY LINK (11'X11)



RIGHT UTILITY DUCT BANK DETAIL

SCE&G (2'X7) & 2 (6'X11,2,AA)
HARGRAY (11'X11)
CENTURY LINK (11'X11)
(U) END @ 6033+66.65
STRUCTURE *31

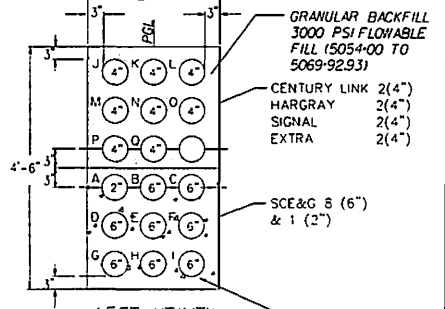
GRANULAR BACKFILL

RIGHT UTILITY DUCT BANK DETAIL

USE THIS SECTION ON BOUNDARY STREET STA 6021+50.95 TO 6038+37.12
NOT TO SCALE

USE ON CONSTRUCTION REVISED 1/25/76

REV	DATE	DESCRIPTION	BY	CHKD
3	5/15/76	BEAUFORT 01.03.03.031A		DB2

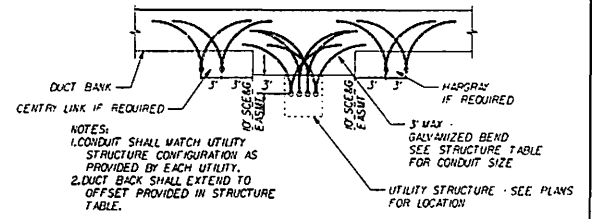


LEFT UTILITY DUCT BANK DETAIL

USE THIS SECTION ON BOUNDARY STREET STA 5001+60.00 TO 5001+93.70
5006+28.43 TO 5007+26.14
5013+6.32 TO 5014+6.25
5035+24.06 TO 5036+39.03
5052+88.02 TO 5069+92.93

GRANULAR BACKFILL
3000 PSI FLOWABLE FILL (5054+00 TO 5069+92.93)
CENTURY LINK 2(4")
HARGRAY 2(4")
SIGNAL 2(4")
EXTRA 2(4")

3000 PSI FLOWABLE FILL
SWEEPS NEED TO BE 90° EDGE OF DUCT.



UTILITY DUCT BANK TO STRUCTURE DETAIL (TYPICAL) NOT TO SCALE

- UTILITY DUCT BANK NOTES:
1. CABINET LOCATIONS SHOWN ON RELOCATION PLANS ARE SOMETIMES AS PROVIDED BY UTILITIES. THESE SHALL BE VERIFIED BY OWNERS PRIOR TO CONSTRUCTION OF DUCT.
 2. DUCT BANK PROFILE ALIGNMENT AND EXISTING PIPES TO BE RETAINED SHALL BE FIELD VERIFIED TO ELIMINATE CONFLICTS.
 3. CONTRACTOR SHALL SUBMIT TRANSITION PLAN FOR CHANGES IN CONDUIT CONFIGURATIONS AND INTERSECTIONS WITH SIDE ROAD DUCT BANKS TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO INSTALLATION.
 4. EXTEND CONDUIT BEYOND PAVEMENT, CURB AND SIDEWALKS.

REV	FROM	TO	REASON	DATE

PLANS PREPARED FOR
BEAUFORT COUNTY

THOMAS & HUTTON
14 Years of Combined Experience • 112 Years of
Professional Engineering • 100 Years of
Dedication to the Community

US 21 BUSINESS (BOUNDARY STREET)
IMPROVEMENTS
DUCT BANK PLAN
DETAILS

SCALE: 1" = 12'
SHEET DB2

G:\P111\Roadway\111\Boundary Street\111\082.dwg
11/11/2009 10:00:00 AM



COUNTY COUNCIL OF BEAUFORT COUNTY
PURCHASING DEPARTMENT

106 Industrial Village Road, Bldg 2, Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

David L. Thomas, Purchasing Director
dthomas@bcgov.net, 843.255.2353

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

FROM: Dave Thomas, CPPO, Purchasing Director *DT*

SUBJ: Request to Purchase a replacement Excavator from the National Joint Powers Association Cooperative Contract (NJPA) for Beaufort County's Public Works Department, Stormwater Section

DATE: November 21, 2016

BACKGROUND: The Purchasing Department received a request from the Director of Public Works to purchase one new 2017 CAT Model 325FCR Excavator from Blanchard CAT, Columbia, SC, a certified NJPA cooperative contract vendor, for the Stormwater Section. The new equipment is a replacement for a 2005 Volvo EC290 assigned to the Public Works Department, with over 4,896 hours of operation. The Stormwater Section utilizes the excavator to install underground infrastructure, clean channels, remove debris, etc. The old excavator will be traded in for \$23,000. Total cost of \$223,126 includes all discounts, trade-ins, delivery, SC sales tax; manuals, cleaning bucket, and a one year/1,500 hour powertrain and hydraulics warranty (see the attached price quote).

<u>NJPA CONTRACT VENDOR INFORMATION:</u>	<u>COST</u>
Blanchard CAT, Inc., Columbia, SC	\$223,126

AT **FUNDING:** Account #50250011-54200, Stormwater Specialized Capital Equipment
Current balance is \$810,000.

FOR ACTION: Public Facilities Committee meeting on November 21, 2016.

RECOMMENDATION: The Purchasing Department recommends that the Public Facilities Committee approve and recommend to County Council the contract award of \$223,126 to purchase one new 2017 CAT Model 325FCR excavator from the aforementioned vendor in support of Public Works operations.

Attachment: Pricing Information

cc: Gary Kubic, County Administrator *GKubic*
Joshua Gruber, Deputy County Administrator/Special Counsel
Alicia Holland, Assistant County Administrator, Finance *AT*
Eric Larson, Environmental Engineer *EWL*
David Wilhelm, Director, Public Works *DMW*



Quote 117874-01

November 9, 2016

BEAUFORT COUNTY GOVERNMENT-
PUBLIC WORKS and MAINTENANCE
120 SHANKLIN ROAD
BEAUFORT, SC 29901

Attention: CHAD STANLEY

Dear Chad,

We would like to thank you for your interest in our company and our products, and are pleased to quote the following for your consideration.

One (1) New CAT Model: 325FCR Excavators with all standard equipment in addition to the additional specifications listed below:

. This quotation is valid for 30 days, after which time we reserve the right to re-quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Ryan Luthren
Machine Sales Representative

One (1) New CAT Model: 325FCR Excavators with all standard equipment in addition to the additional specifications listed below:

STANDARD EQUIPMENT

POWERTRAIN-Diesel engine, CAT C4.4 Twin Turbo-down function-certified to EPA Tier4 Final,-Three stage fuel filtration system with-EU Stage IV, MLIT 2014-water separator and indicator-- Three selectable power modes-3000m (9840ft) altitude capability-capability; HHP, STD and ECO-without de-rate-- After-treatment system: CEM (DOC-52 deg. C (126F) high ambient cooling-+ DPF + SCR) and DEF System-capability with de-rate from-(DEF Tank and DEF Lines)-48 deg. C (118F)-Variable fan speed control with-85 amp. Alternator-viscous clutch-Radial seal air filter with double-One touch low idle with Automatic Engine-filter element-speed Control (AEC)-Electric fuel lifting pump-Automatic (programmable) idling shut-Capability of using Bio-Diesel fuel(B20)

UNDERCARRIAGE-HD track rollers-(ISO 15818 compliant)-Grease lubricated track link-Swivel guard-Tie down points on base frame

HYDRAULICS-Electric boom regeneration circuit-Reverse swing damping valve-Stick regeneration circuit-High performance hydraulic return filter-One touch lifting mode-(Capsule filter type)-Automatic two speed travel-CRN compliant accumulator-Boom and stick drift reduction valve

ELECTRICAL-Maintenance free battery-working lights (halogen); Base machine-Centralized electrical disconnect switch-frame (one), Cab mounted (two),-CAT Product Link-Boom mounted both sides (two)-90 seconds programmable time delay

OPERATOR ENVIRONMENT-CAB:-distortion free rear view camera-Sound suppressed ROPS cab (ISO 12117-2-picture-compliant) with viscous mount-Automatic bi-level air conditioner with-Openable skylight as emergency exit-pressurized function-(Dual exit hatch)-24V radio ready (1DIN size, stereo-Openable laminated front upper-speakers, antenna-flexible type)-windshield w/ assist device-12V x 2 power supply with sockets-Removable tempered lower windshield-(Maximum 10 amp.)-with in cab storage bracket-Roll Down Sun Screen, Washable Floomat-High back seat with air suspension, seat-Interior utilities (Interior lighting,-heater and head rest-Coat hook, Beverage holder, Literature-Fully adjustable seat, console and armrest-holder, Document holding space, and-51MM (2") width seat belt-Cab rear storage compartment)-Full graphic 7inch LCD monitor, with

SAFETY AND SECURITY-Rearview camera with three mirrors-Anti-skid Plate-(ISO 5006 compliant) and one additional-Neutral lever(lock out)for all controls-hand rail mirror for right rear view-Ground level accessible secondary engine-RH Hand rail and hand hold (ISO 2867-shutoff switch in cab-compliant)-Signaling/ Warning horn, Jump Start Stud-Bolt free service platform with-Safety hammer for cab evacuation

OTHER STANDARD EQUIPMENT-Engine oil, Fuel, and Hydraulic oil-located separately)-filters grouped for ease of-Sampling ports for Scheduled Oil-maintenance (Secondary fuel filter is-Sampling (S.O.S)

MACHINE SPECIFICATIONS

Description

325F L CR HEX AM-N/ANZ BCF2

LANE 2 - AVAILABLE FROM AKASHI FACTORY

LANE 3 - AVAILABLE FROM AKASHI FACTORY

Base machine with BLCV/SLCV for reach boom configuration.
Well suited for general applications in a limited space requiring
Compact Radius machines, and those requiring BLCV/SLCV.

INCLUDES:

451-5808 325F L CR HYD EXCAVATOR

507-5716 325F L CR STANDARD ARRANGEMENT

STANDARD OIL

ROLLERS, HEAVY DUTY

ACCUMULATOR WITH CRN

CAB-ROPS,70/30,W/VANDAL-G BOSS

SEAT, H-BACK, W/HEATER,S/AIR

SEAT BELT, 51MM (2")

HATCH, OPENABLE ROOF (DUAL)

WIPER-RADIAL, 70/30 W/O LOWER

WASHER, WINDSHIELD W/O LOWER

AIR CONDITIONER

PANEL, STD START SWITCH

MIRROR, W/O GUARD

HOOD, ENGINE

COVER, FRONT RIGHT SIDE

GUARD, TRACK MOTOR

FAN, VARIABLE

SUN SCREEN (70/30)

LIGHTING, CAB (HALOGEN)

GUARD, SWIVEL

508-7674 LINKAGE, BKT-B1 W/LIFT EYE

452-0151 CONTROL, FINE SWING

352-6832 COVER BLOCK and MOUNTING (BLCV)

352-6834 COVER BLOCK and MOUNTING (SLCV)

450-9255 CYLINDER, R-BOOM (W/BLCV)

341-2803 CYLINDER, STICK SLCV

451-5238 LINES, CYLINDER BOOM BLCV

451-5245 PILOT LINES, SLCV STD

451-5249 PILOT LINES, BOOM STD

451-5253 PILOT LINES, BKT OPEN

496-8191 RADIO, 24V AM/FM

452-0150 CAMERA, REAR VIEW, MIRRORS RH
459-5100 TANK, FUEL, STD
452-0113 DEVICE, BOOM LOWERING CONTROL
452-0114 DEVICE, STICK LOWERING CONTROL
231-1771 ALARM, TRAVEL

NOTE: For AM-N, AM-S (Puerto Rico only) and ANZ
TIP, PENETRATION PLUS
BUCKET-HD, 48" 1.56 YD3
SIDECUTTERS, HEAVY DUTY
COUPLER, PIN GRABBER B1 W/PINS
COMBINED CIR STP PKG
72" DITCH CLEANING BUCKET

List Price	\$285,982
Less NJPA Discount (18%)	-\$51,476
Additional Discount	-\$9,000
Less Trade in Volvo EC290 HEX	-\$23,000
Freight & Prep	\$5,500
Manuals	\$850
3 year/3500 hour Powertrain + Hydraulics Warranty	\$1,640
SC Sales Tax (6%)	\$12,933.36
Total Investment	\$223,125.76

WARRANTY

Standard Warranty: 12 Month/1,500 Hour Standard Warranty

F.O.B/TERMS
Heavy Columbia

Accepted by _____ on _____
Signature



COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY ENGINEERING DEPARTMENT
104 Industrial Village Road, Building #3, Beaufort, SC 29906
Post Office Drawer 1228, Beaufort, SC 29901-1228
Telephone: 843-255-2700 Facsimile: 843-255-9420

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator *GKubic*
Josh Gruber, Deputy County Administrator *JG*
Tom Keaveny, County Attorney *TK*
Eric Larson, PE, Division Director for Environmental Engineering & Land Management *Eric W Larson*
David Wilhelm, PE, County Public Works Director *DW* *JL McFee*

FROM: Robert McFee, PE, Division Director for Construction, Engineering & Facilities

SUBJ: Spanish Moss Subdivision, Phase I Right of Way and Drainage Acquisitions for Tax Map
Number R200 006 000 0394 000 and R200 006 000 0397 0000.

DATE: October 27, 2016

BACKGROUND. Spanish Moss Subdivision is a residential community on Lady's Island. The subdivision's development was divided into Phase I and Phase II. Both Phases I and II dedicated roads and drainage to Beaufort County by reference in the recorded plats in the Office of the County Register of Deeds. Phase I is dated October 27, 2000 in Book 76 at Page 119. Phase II is dated January 19, 2010 in Book 129 at Page 171.

The Beaufort County Attorney accepted conveyance of Phase II roads (drainage was not included) in the recorded deed dated December 21, 2011 in Book 3106 at Pages 2684-2686 in the Office of the County Register of Deeds.

Beaufort County Stormwater Department has received numerous requests to help resolve drainage issues in the Spanish Moss Phase I Subdivision. The Phase I subdivision does not have a Homeowner's Association which has impeded the County efforts to obtain easements to perform the needed drainage work. The County was able to acquire a notarized deed conveying right of way of streets, cul de sacs and drainage easements originally dedicated to the County and is provided in Attachment #1.

Attachment #2 is a draft County Council Resolution accepting the streets, cul de sacs, drainage easements and pond from Spanish Moss Phase I Subdivision. County Public Works inspected the Phase I roads on September 15, 2016 and determined that the surface condition of the roads is acceptable given the age of the roads. It was noted that one pipe crossing on Fig Drive is slightly depressed and may need to be excavated, re-compacted and paved within the next year or two (see Attachment #3 pictures).

FOR ACTION. Public Facilities Committee Meeting on November 21, 2016.

RECOMMENDATION. The attached draft County Council Resolution for the acceptance into the County's maintenance inventory of the streets, cul de sacs, drainage easements and pond for Spanish Moss Phase I Subdivision is presented to the Public Facilities Committee for discussion and consideration.

JRM/PLW/mjh
PLW

Attachments: 1) Phase 2 Notarized Deed
2) Draft Resolution with Plat & Map
3) Pictures for Fig Drive

ROW/SpMossPhIconvey/PFC1116

WITNESS the hand and seal of the Grantor this 8th day of August, 2016.

WITNESSED BY:

GRANTOR

[Signature]
Witness #1

x [Signature]
Ralph M. Bailey, Jr.

[Signature]
Witness #2

STATE OF South Carolina)
COUNTY OF Beaufort)

I, the undersigned Notary Public, do hereby certify that Ralph M. Bailey, Jr. personally appeared before me this day and, in the presence of the two witnesses above named, acknowledged the due execution of the foregoing instrument.

Witness my Hand and Seal, this 8th day of August, 2016.

[Signature]
Signature of Notary Public



Notary Public for the State of: _____

My commission expires: _____

(Seal required if outside South Carolina)

RESOLUTION NO. _____

**A RESOLUTION AUTHORIZING COUNTY
ADMINISTRATOR TO ACCEPT INTO COUNTY SYSTEM
ROADS, DRAINAGE EASEMENTS AND POND IN
SPANISH MOSS SUBDIVISION**

WHEREAS, Spanish Moss Subdivision, Phase 1 is a residential community on Lady's Island in Beaufort County; and

WHEREAS, the subdivision includes several streets, cul de sacs, drainage easements and a pond all of which appear on the Beaufort County Tax Map as parcel number R200 006 000 0394 0000 and a portion of R200 006 000 0397 0000; and

WHEREAS, construction of the neighborhood began in and around 2000 and was completed in the years thereafter but the streets, cul de sacs, drainage easements and pond, **all as highlighted on the attached plat and Exhibit "A"**, were not conveyed to Beaufort County; and

WHEREAS, Beaufort County has accepted the streets in Phase 2 of Spanish Moss Subdivision; and

WHEREAS, the Spanish Moss Subdivision, Phase 1 does not have a homeowner's association, property owner's association or other organization which can or does maintain the streets, cul de sacs, drainage easements or pond; and

WHEREAS, construction of the subdivision is complete, but the roads, cul de sacs, drainage easements and pond in Phase 1 have not been conveyed to the County and the developers of the subdivision wish to convey them into the County system now for the health, benefit, safety and general welfare of the residents.

NOW, THEREFORE, BE IT RESOLVED that the County Administrator is hereby authorized to accept into Beaufort County's system the streets, cul de sacs, drainage easements and pond at Spanish Moss Subdivision, Phase 1 more particularly described as parcel number R200 006 000 0394 0000 and a portion of R200 006 000 0397 0000, **as highlighted on the attached plat and Exhibit "A"**.

ADOPTED this _____ day of _____, 2016.

BEAUFORT COUNTY, SOUTH CAROLINA

D. Paul Sommerville, Chairman

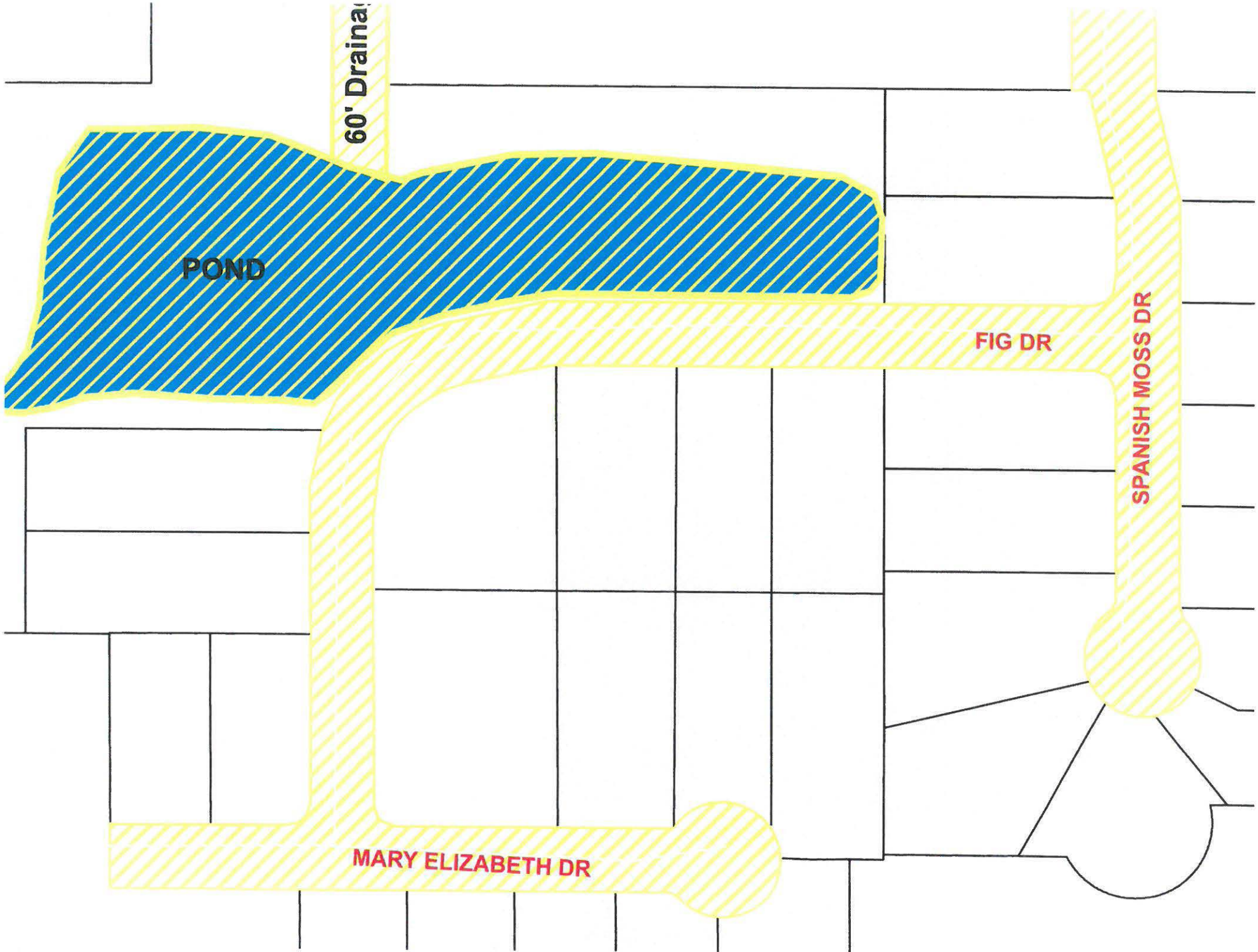
BEAUFORT COUNTY COUNCIL

APPROVED AS TO FORM:

Thomas J. Keaveny, II
Beaufort County Attorney

ATTEST:

Suzanne M. Rainey,
Clerk to County Council



POND

60' Drainage

FIG DR

SPANISH MOSS DR

MARY ELIZABETH DR







SPANISH MOSS PHASE 1 SUBDIVISION

Presentation to Public Facilities Committee Meeting

November 21, 2016

3 OPTIONS TO CONSIDER

1. Ownership of common area, pond/drainage, and roads
2. Ownership of pond/drainage easement (Weir) and roads
3. Ownership of pond and select common area easements



Desired location of drainage weir

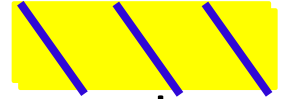


County ditch maintenance currently stops at tree line

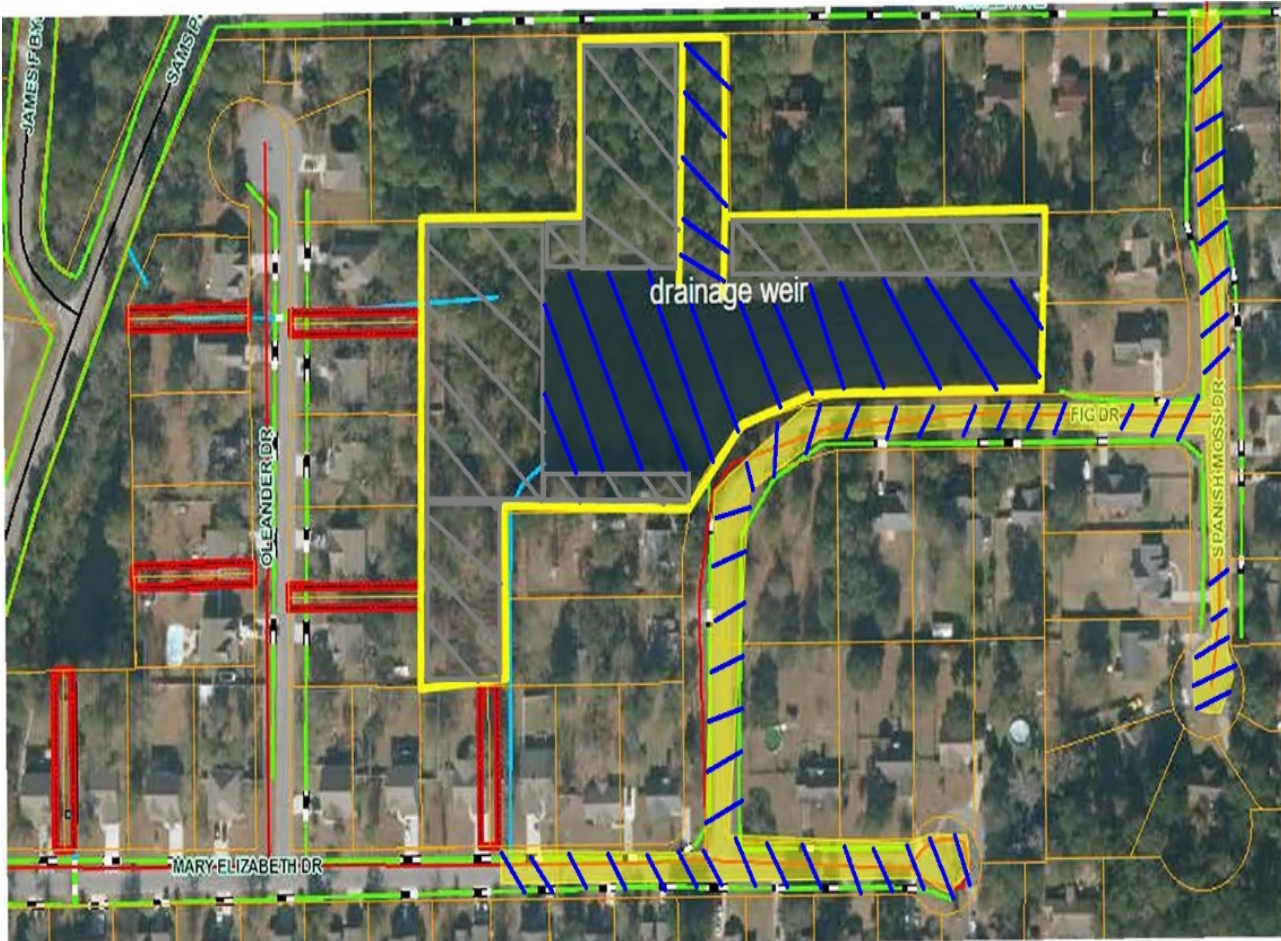


Pond overflows into drainage ditch

Option 1:

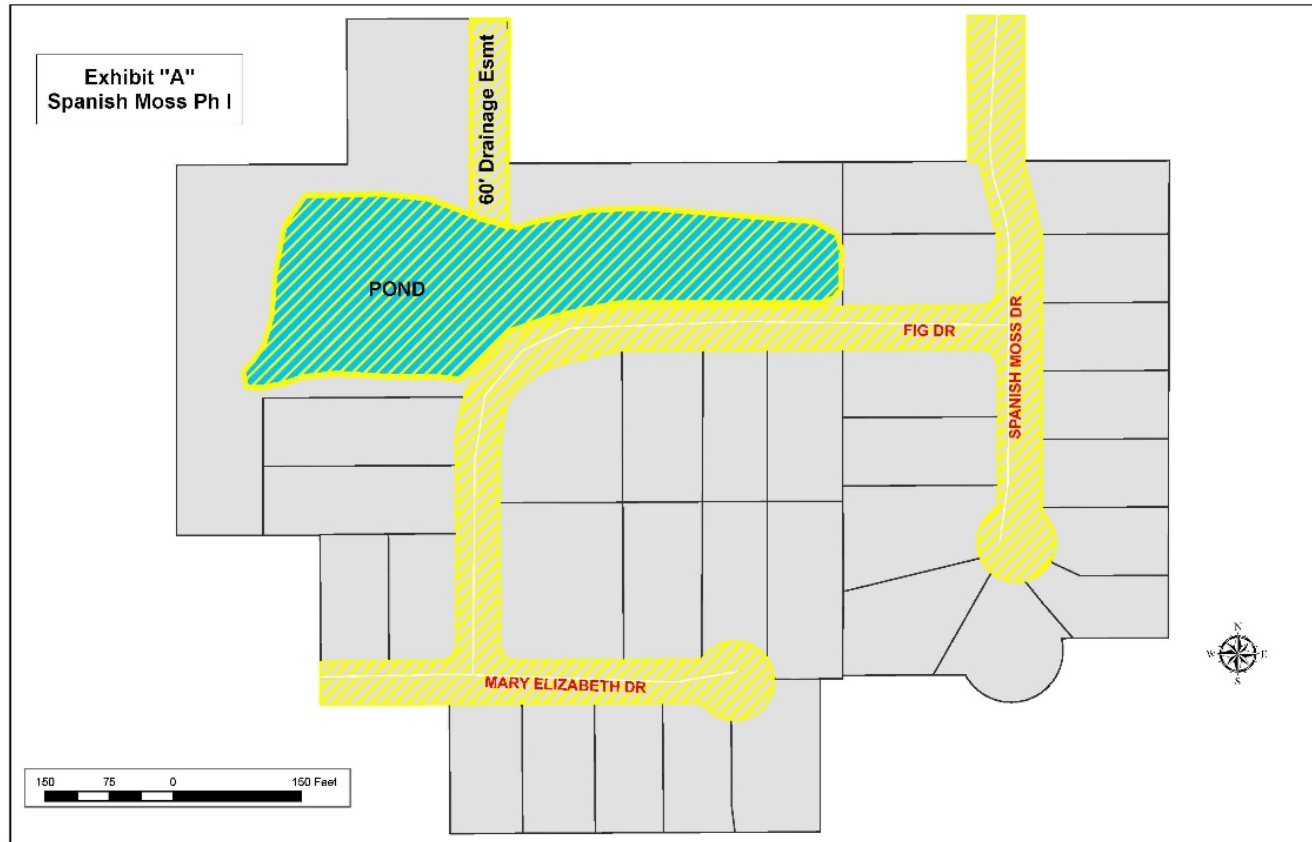


Ownership of Common Area, Pond/drainage weir and Roads



- Drainage weir needed to maintain desired water level (Estimated Cost \$6000)
- Currently-All drainage in area drains to pond.
- Pond overflows and backs up into drainage ditches
- Ditches flood roads
- County has full responsibility of roads and roadside ditches/pipes
- Estimated Cost to maintain weir easement \$300/year
- Estimated cost of road maintenance \$1200/year
- Estimated cost to maintain roadside drainage \$3500/Year
- Estimated cost of condemnation of common area to acquire ownership is \$4000
- Total estimated cost first year = \$15,000
- Total estimated cost following years = \$5,000

Option 2: Ownership of Pond/Drainage Easement (Weir) and Road



- 60' drainage easement (weir) needed to maintain desired water level (Estimated Cost \$6000)
- Estimated cost to maintain Weir Easement \$300/Year
- County has full responsibility of roads and roadside ditches/pipes
- County does not acquire common area through condemnation process
- County has limited drainage responsibility and limited access to pond
- Estimated cost of road maintenance \$1200/Year
- Estimated cost to maintain roadside drainage \$3500/Year
- Total estimated cost first year = \$11,000
- Total estimated cost following years = \$5,000

Option 3: Ownership of Pond/Select Common Area Easements



- Drainage weir needed to maintain desired water level (Estimated Cost \$6000)
- Estimated cost to maintain Weir Easement \$300/Year
- Estimated cost of condemnation of common area to acquire Pond and Select easements is \$4000
- County has no responsibility to roadside ditches/pipes
- Total estimated cost first year = \$10,300
- Total estimated cost following years = \$300

The above estimates are based on the following calculations:

- Weir: Lump sum cost to furnish and install precast concrete overflow structure with 20 LF of 24" RCP
- Weir easement: 220 LF of open ditch @ \$1.23/LF = \$270.60
- Road maintenance: Assume two 10' x 12' patches/year; 240 SF @ \$5.00 = \$1,200
- Roadside drainage: open ditch 2,619 LF @ \$1.23 = \$3,221.37; drainage pipe 441 LF @ \$0.41 = \$180.81

2017-2030 Beaufort County Future Roadway Network Deficiencies/Needs

Service Area	Project #	Recommended Project	Project Description	Existing Deficiency	Estimated Cost (2016 Dollars)	Road Impact Fee Funding
NOB	1	US 21/SC 802 Connector	Planned new connector road along Hazel Farms Rd	No	\$ 14,500,000	\$ 10,000,000
NOB	2	US 21 at US 21 BUS at SC 802	Intersection Improvement	Yes	\$ 3,690,000	
NOB	3	US 21 at SC 128 (Savannah Hwy)	Intersection Improvement	No	\$ 1,000,000	\$ 1,000,000
NOB	4	Boundary St. Connectivity	Parallel Connector Roadway	No	\$ 4,000,000	\$ 2,000,000
NOB	5	Joe Frazier Rd - Broad River to Cherokee Farms	Turn lanes, access management and bike/ped improvements	No	\$ 7,000,000	\$ 2,000,000
NOB	6	US 21 BUS ITS Bridge System	Travel time/delay, driver information, vms signs and smart phone broadcast	No	\$ 500,000	\$ 500,000
NOB	7	US 21 from Beaufort River to Chowan Creek Bridge	Road connectivity, access management, widening and complete street improvements	No	\$ 15,000,000	\$ 5,000,000
NOB	8	Port Royal Port Property Spine Rd	New roadway from Ribaut Rd to Port Redevelopment along RR Corridor	No	\$ 4,500,000	
NOB	9	Midtown to Broad River Dr Connection	New roadway connection between Midtown Commercial and Broad River Dr	No	\$ 2,000,000	\$ 2,000,000
NOB	10	SC 170 Access Management/Connectivity	NOB	No	\$ 4,000,000	\$ 2,000,000
SOB	11	US 278 at Jenkins Island	Alternate 2A Super Street Plan	Yes	\$ 7,400,000	
SOB	12	US 278 at Pinckney Island	Access Improvements and underpass	Yes	\$ 2,000,000	
SOB	13	US 278 Widening	Jenkins Island to Squire Pope Rd	Yes	\$ 4,500,000	
SOB	14	US 278 Bridge Widening	6-lane widening from Bluffton 5A to Jenkins Is	Yes	\$ 200,000,000	
SOB	15	US 278 Access Management	Medians, Safety Projects, Signal System Upgrades, Connector/Frontage Roadways	No	\$ 12,600,000	\$ 7,000,000
SOB	16	US 278/SC 170 Interchange	Interchange ramp reconfiguration for added capacity	No	\$ 25,000,000	\$ 7,000,000
SOB	17	SC 170 - US 278 to Tide Watch	Widen to 6-lane divided from US 278 to Tidewatch w/access management	No	\$ 15,000,000	
SOB	18	SC 170 - Argent Blvd to SC 462	Widen to 6-lane divided from Argent Blvd to SC 462 w/access management	No	\$ 10,000,000	
SOB	19	Buckwalter Parkway Access Management	Roadway connectivity	No	\$ 2,000,000	\$ 1,500,000
SOB	20	May River Rd Access Management	Turn lanes, access management and bike/ped improvements	No	\$ 10,000,000	\$ 2,500,000
SOB	21	Burnt Church Rd Improvements from Bluffton Parkway to All Joy	Turn lanes, access management and bike/ped improvements	No	\$ 5,000,000	\$ 4,300,000
SOB	22	Buck Island Rd Improvements from US 278 to Bluffton Pkwy	Widening to provide 3 lanes with bike/ped improvements	No	\$ 8,000,000	\$ 4,000,000
SOB	23	Lake Point Dr / Old Miller Rd Connection	Two-lane roadway connection between Lake Point and Old Miller with bike/ped improves	No	\$ 1,000,000	\$ 1,000,000
SOB	24	SC 170/SC 46 Widening to Jasper County	4-lane divided from SC 46/170 Roundabout to Jasper County	No	\$ 45,000,000	\$ 10,000,000
TOTALS					\$ 403,690,000	\$ 61,800,000
					TOTAL NOB	\$ 24,500,000
					TOTAL SOB	\$ 37,300,000

2017-2030 Beaufort County Future Roadway Network Deficiencies/Needs

Service Area	Project #	Recommended Project	Project Description	Existing Deficiency	Estimated Cost (2016 Dollars)	Road Impact Fee Funding
NOB	1	US 21/SC 802 Connector	Planned new connector road along Hazel Farms Rd	No	\$ 14,500,000	\$ 12,000,000
NOB	2	US 21 at US 21 BUS at SC 802	Intersection Improvement	Yes	\$ 3,690,000	
NOB	3	US 21 at SC 128 (Savannah Hwy)	Intersection Improvement	No	\$ 1,000,000	\$ 1,000,000
NOB	4	Boundary St. Connectivity	Parallel Connector Roadway	No	\$ 4,000,000	\$ 2,000,000
NOB	5	Joe Frazier Rd - Broad River to Cherokee Farms	Turn lanes, access management and bike/ped improvements	No	\$ 7,000,000	\$ 2,500,000
NOB	6	US 21 BUS ITS Bridge System	Travel time/delay, driver information, vms signs and smart phone broadcast	No	\$ 500,000	\$ 500,000
NOB	7	US 21 from Beaufort River to Chowan Creek Bridge	Road connectivity, access management, widening and complete street improvements	No	\$ 15,000,000	\$ 7,500,000
NOB	8	Port Royal Port Property Spine Rd	New roadway from Ribaut Rd to Port Redevelopment along RR Corridor	No	\$ 4,500,000	
NOB	9	Midtown to Broad River Dr Connection	New roadway connection between Midtown Commercial and Broad River Dr	No	\$ 2,000,000	\$ 2,000,000
NOB	10	SC 170 Access Management/Connectivity	NOB	No	\$ 4,000,000	\$ 2,000,000
SOB	11	US 278 at Jenkins Island	Alternate 2A Super Street Plan	Yes	\$ 7,400,000	
SOB	12	US 278 at Pinckney Island	Access Improvements and underpass	Yes	\$ 2,000,000	
SOB	13	US 278 Widening	Jenkins Island to Squire Pope Rd	Yes	\$ 4,500,000	
SOB	14	US 278 Bridge Widening	6-lane widening from Bluffton 5A to Jenkins Is	Yes	\$ 200,000,000	
SOB	15	US 278 Access Management	Medians, Safety Projects, Signal System Upgrades, Connector/Frontage Roadways	No	\$ 12,600,000	\$ 7,000,000
SOB	16	US 278/SC 170 Interchange	Interchange ramp reconfiguration for added capacity	No	\$ 25,000,000	\$ 7,000,000
SOB	17	SC 170 - US 278 to Tide Watch	Widen to 6-lane divided from US 278 to Tidewatch w/access management	No	\$ 15,000,000	
SOB	18	SC 170 - Argent Blvd to SC 462	Widen to 6-lane divided from Argent Blvd to SC 462 w/access management	No	\$ 10,000,000	
SOB	19	Buckwalter Parkway Access Management	Roadway connectivity	No	\$ 2,000,000	\$ 1,500,000
SOB	20	May River Rd Access Management	Turn lanes, access management and bike/ped improvements	No	\$ 10,000,000	\$ 2,500,000
SOB	21	Burnt Church Rd Improvements from Bluffton Parkway to All Joy	Turn lanes, access management and bike/ped improvements	No	\$ 5,000,000	\$ 4,300,000
SOB	22	Buck Island Rd Improvements from US 278 to Bluffton Pkwy	Widening to provide 3 lanes with bike/ped improvements	No	\$ 8,000,000	\$ 4,000,000
SOB	23	Lake Point Dr / Old Miller Rd Connection	Two-lane roadway connection between Lake Point and Old Miller with bike/ped improvents	No	\$ 1,000,000	\$ 1,000,000
SOB	24	SC 170/SC 46 Widening to Jasper County	4-lane divided from SC 46/170 Roundabout to Jasper County	No	\$ 45,000,000	\$ 10,000,000
				TOTALS	\$ 403,690,000	\$ 66,800,000
					TOTAL NOB	\$ 29,500,000
					TOTAL SOB	\$ 37,300,000

ADD-ONS

The document(s) herein were provided to Council for information and/or discussion after release of the official agenda and backup items.

Topic: Road Impact Fee Program Update
Date Submitted: November 21, 2016
Submitted By: Colin Kinton
Venue: Public Facilities Committee

Road Impact Fee Program Update

Presentation of an update on Road Impact
Fee future projects and revenue projections

November 21, 2016



Road Impact Fee Calculation

- Long Range Transportation Model
- Net Growth in Traffic Over 20 Years
- Trip Generation + Trip Length (Vehicle-miles of Travel)
- Fee Charged to All New Construction (private, nonprofit & governmental)

EXISTING FEE RATES

Northern Beaufort County Service Area

- Single-Family Home: \$775.17
- 1,000 Sq. Ft. Retail: \$1,947.76

Bluffton/Okatie Assessment District

- Single-Family Home: \$3,063
- 1,000 Sq. Ft. Retail: \$6,309

Hilton Head/Daufuskie Assessment District

- Single-Family Home: \$1,126
- 1,000 Sq. Ft. Retail: \$2,319

TOTALS

Northern Beaufort County

Collected: \$ 5,526,786

Expended: \$ 5,210,243

Balance: \$ 316,543

TOTALS

Southern Beaufort County

Collected: \$ 33,616,987

Expended: \$ 29,497,034

Balance: \$ 4,119,953

FUTURE CONDITIONS

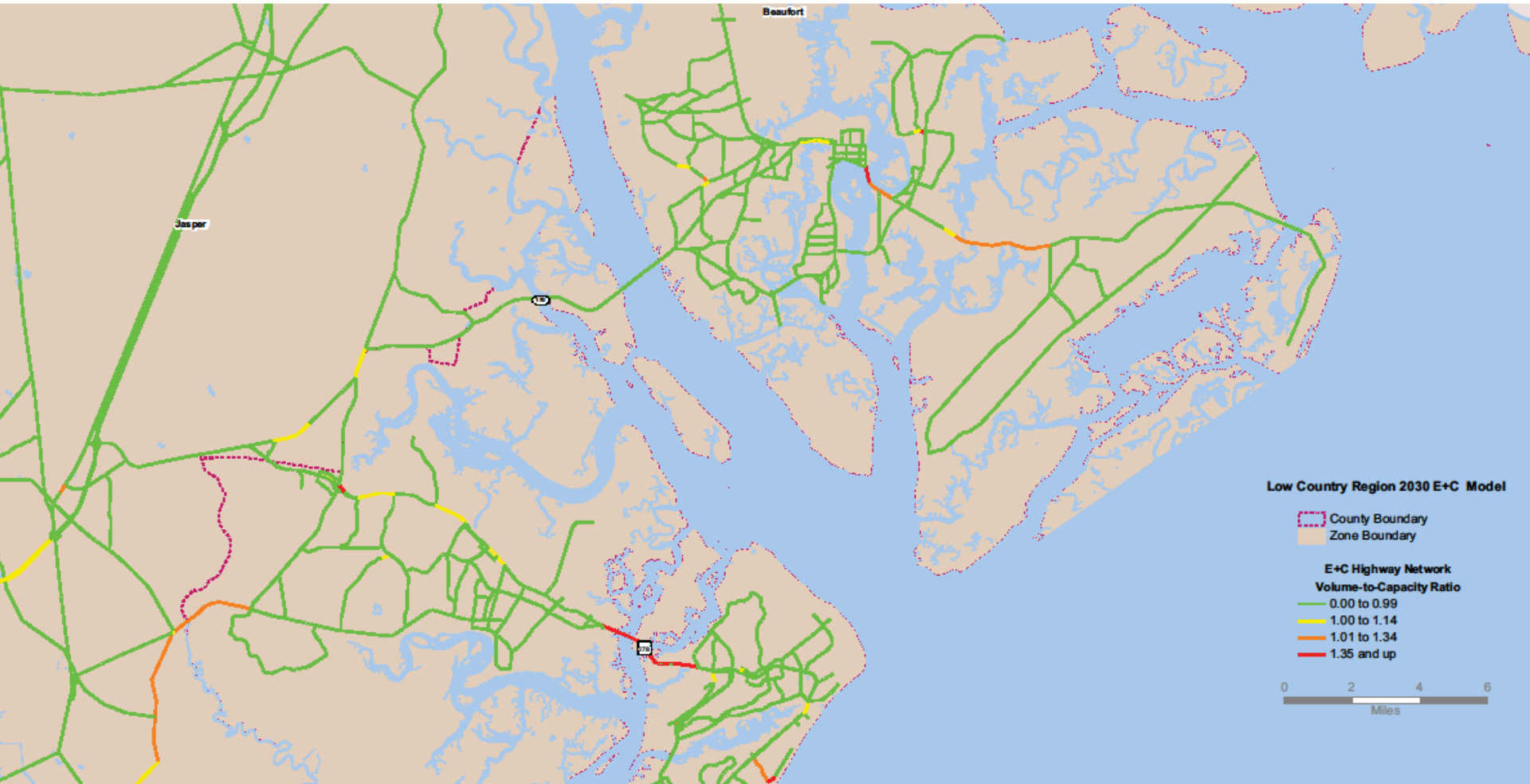
Population Growth over 20 years: (2015-2035)

Commercial/Employment Growth

Regional Model (2020, 2030, 2040)

Identify Emerging Deficiencies Resulting from Growth

Identify Projects to Address Deficiencies



2017-2030 Beaufort County Future Roadway Network Deficiencies/Needs

Service Area	Project #	Recommended Project	Project Description	Existing Deficiency	Estimated Cost (2016 Dollars)	Road Impact Fee Funding
NOB	1	US 21/SC 802 Connector	Planned new connector road along Hazel Farms Rd	No	14,500,000	10,000,000
NOB	2	US 21 at US 21 BUS at SC 802	Intersection Improvement	Yes	3,690,000	
NOB	3	US 21 at SC 128 (Savannah Hwy)	Intersection Improvement	No	1,000,000	1,000,000
NOB	4	Boundary St. Connectivity	Parallel Connector Roadway	No	4,000,000	2,000,000
NOB	5	Joe Frazier Rd - Broad River to Cherokee Farms	Turn lanes, access management and bike/ped improvements	No	7,000,000	2,000,000
NOB	6	US 21 BUS ITS Bridge System	Travel time/delay, driver information, vms signs and smart phone broadcast	No	500,000	500,000
NOB	7	US 21 from Beaufort River to Chowan Creek Bridge	Road connectivity, access management, widening and complete street improvements	No	15,000,000	5,000,000
NOB	8	Port Royal Port Property Spine Rd	New roadway from Ribaut Rd to Port Redevelopment along RR Corridor	No	4,500,000	1,000,000
NOB	9	Midtown to Broad River Dr Connection	New roadway connection between Midtown Commercial and Broad River Dr	No	2,000,000	2,000,000
NOB	10	SC 170 Access Management/Connectivity	NOB	No	4,000,000	2,000,000
SOB	11	US 278 at Jenkins Island	Alternate 2A Super Street Plan	Yes	7,400,000	
SOB	12	US 278 at Pinckney Island	Access Improvements and underpass	Yes	2,000,000	
SOB	13	US 278 Widening	Jenkins Island to Squire Pope Rd	Yes	4,500,000	
SOB	14	US 278 Bridge Widening	6-lane widening from Bluffton 5A to Jenkins Is	Yes	200,000,000	
SOB	15	US 278 Access Management	Medians, Safety Projects, Signal System Upgrades, Connector/Frontage Roadways	No	12,600,000	7,000,000
SOB	16	US 278/SC 170 Interchange	Interchange ramp reconfiguration for added capacity	No	25,000,000	7,000,000
SOB	17	SC 170 - US 278 to Tide Watch	Widen to 6-lane divided from US 278 to Tidewatch w/access management	No	15,000,000	
SOB	18	SC 170 - Argent Blvd to SC 462	Widen to 6-lane divided from Argent Blvd to SC 462 w/access management	No	10,000,000	
SOB	19	Buckwalter Parkway Access Management	Roadway connectivity	No	2,000,000	1,500,000
SOB	20	May River Rd Access Management	Turn lanes, access management and bike/ped improvements	No	10,000,000	2,500,000
SOB	21	Burnt Church Rd Improvements from Bluffton Parkway to All Joy	Turn lanes, access management and bike/ped improvements	No	5,000,000	4,300,000
SOB	22	Buck Island Rd Improvements from US 278 to Bluffton Pkwy	Widening to provide 3 lanes with bike/ped improvements	No	8,000,000	4,000,000
SOB	23	Lake Point Dr / Old Miller Rd Connection	Two-lane roadway connection between Lake Point and Old Miller with bike/ped improvements	No	1,000,000	1,000,000
SOB	24	SC 170/SC 46 Widening to Jasper County	4-lane divided from SC 46/170 Roundabout to Jasper County	No	45,000,000	10,000,000
				TOTALS	403,690,000	62,800,000
					TOTAL NOB	25,500,000
					TOTAL SOB	37,300,000
					SOB Debt Service	10,500,000
					TOTAL SOB w/ Debt	47,800,000

NEW PROPOSED PROJECTS

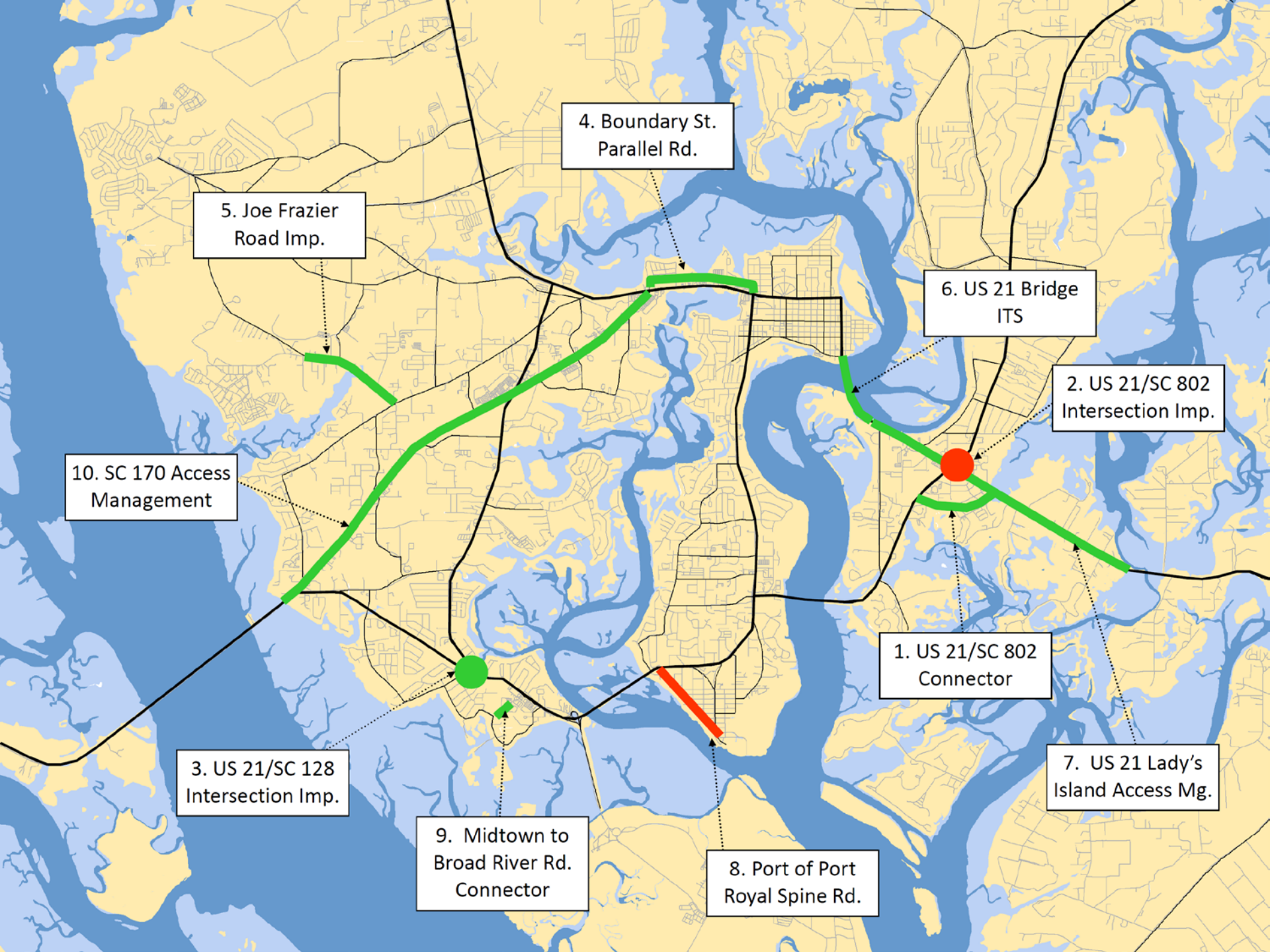
Northern Beaufort County

Impact Fee Funding

- US 21/SC 802 Connector \$ 10,000,000
- Intersection Improvements:
(US21 at SC 128 (Savannah Hwy) \$ 1,000,000
- Boundary St. Connectivity (First Street) \$ 2,000,000
- Joe Frazier Rd – Broad River to
Cherokee Farms \$ 2,000,000
- US 21 Business, ITS Bridge System \$500,000
- US 21 from Beaufort River to
Chowan Creek Bridge \$ 5,000,000
- Port Royal Port Development Spine Rd \$1,000,000
- Midtown to Broad River Dr Connection \$ 2,000,000
- SC170 Access Management/Connectivity \$ 2,000,000

TOTAL: \$ 25,500,000





NEW PROPOSED PROJECTS

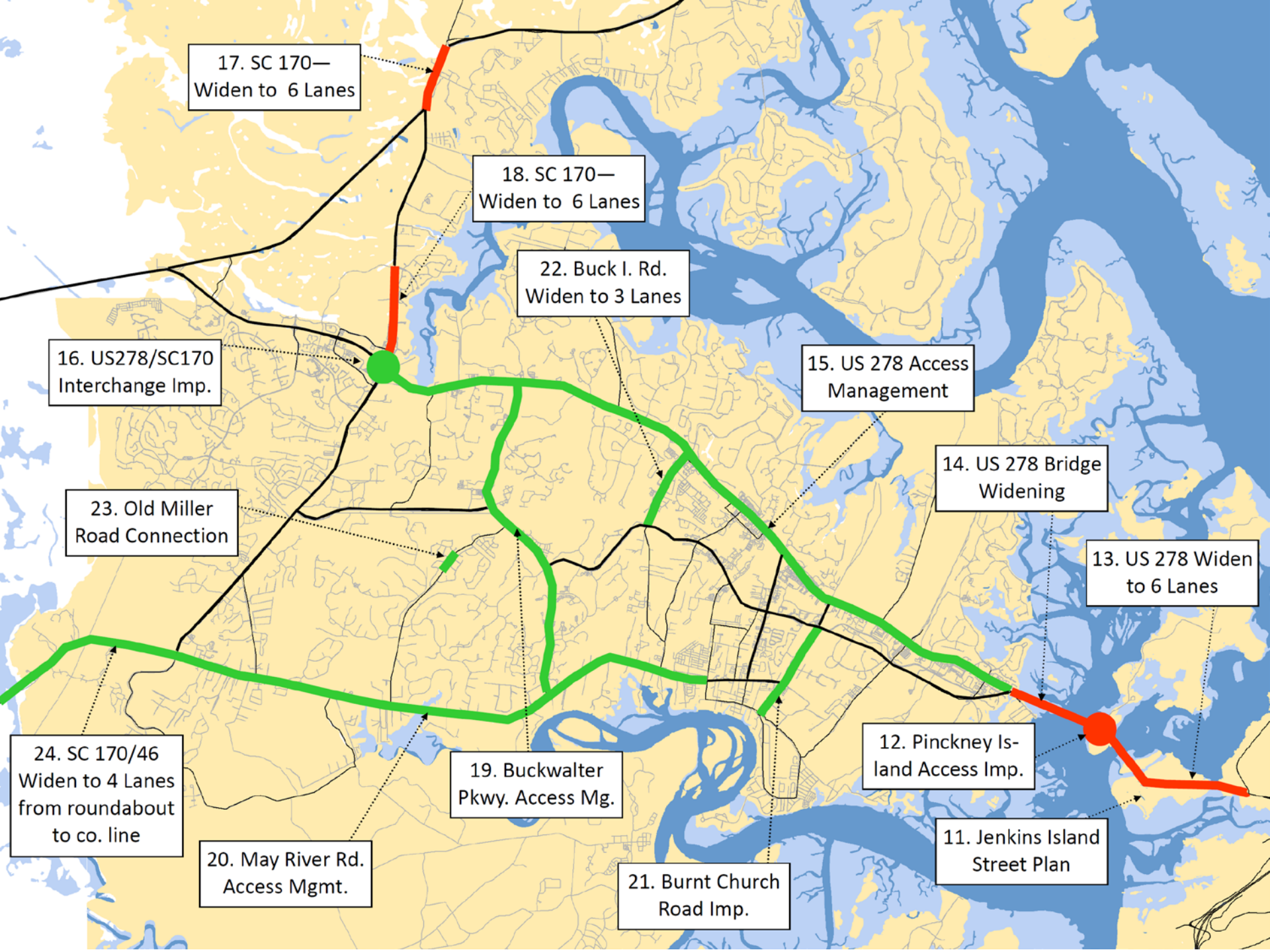
Southern Beaufort County

Impact Fee Funding

• US 278 Access Management	\$ 7,000,000
• US 278/SC 170 Interchange	\$ 7,000,000
• Buckwalter Pkwy Access Management	\$ 1,500,000
• May River Rd Access Management	\$ 2,500,000
• Burnt Church Rd from Bluffton Pkwy to All Joy Rd	\$ 4,300,000
• Buck Island Rd from US 278 to Bluffton Pkwy	\$ 4,000,000
• Lake Point Dr/Old Miller Rd Connection	\$ 1,000,000
• SC 170/SC 46 Widening to Jasper County	<u>\$ 10,000,000</u>

TOTAL: \$37,300,000





17. SC 170—
Widen to 6 Lanes

18. SC 170—
Widen to 6 Lanes

22. Buck I. Rd.
Widen to 3 Lanes

16. US278/SC170
Interchange Imp.

15. US 278 Access
Management

14. US 278 Bridge
Widening

13. US 278 Widen
to 6 Lanes

23. Old Miller
Road Connection

12. Pinckney Is-
land Access Imp.

11. Jenkins Island
Street Plan

24. SC 170/46
Widen to 4 Lanes
from roundabout
to co. line

19. Buckwalter
Pkwy. Access Mg.

21. Burnt Church
Road Imp.

20. May River Rd.
Access Mgmt.

PROPOSED FEE RATES

Northern Beaufort County Service Area

- Single-Family Home: \$796.00
- 1,000 Sq. Ft. Retail: \$1,639.00

Bluffton/Okatie Assessment District

- Single-Family Home: \$1,812.00
- 1,000 Sq. Ft. Retail: \$3,733.00

Hilton Head/Daufuskie Assessment District

- Single-Family Home: \$703.00
- 1,000 Sq. Ft. Retail: \$1,447.00

NEXT STEPS

- **Update Transportation Element of Comp Plan**
- **Develop New Road CIP to Include New Road Impact Fee Calculation**
- **Prioritize Projects and Implementation based on Anticipated Revenue**