

Town of Windsor

Memorandum

November 8, 2016

TO: The Honorable Mayor and Town Council

FROM: Michael Stallings, Town Manager *MS*

SUBJECT: Church St/Shiloh Drive Sidewalks

As you know, I have been working with Kimley-Horn to design the sidewalks from where they end on Church Street down to Holland Meadows. We have had the engineers look at both open ditches as well as curb and gutter. Attached you will find an email from them with some notes, preliminary layouts for both options as well as budget estimates for both options.

As you can see, the estimated cost for the sidewalks with open ditches is \$588,000. The estimated cost for the sidewalks with curb and gutter is \$1,061,000. These estimates are slightly higher than the estimates that were performed by a previous engineer, but the order of magnitude different between the two still remains approximately \$500,000.

I would like Council to discuss the two options and indicate a preferred path forward. Once Council has decided on a preferred alternative, we will proceed with the rest of the engineering work.

This is for Council's discussion and direction.

Michael Stallings

From: Andrew.Farthing@kimley-horn.com
Sent: Thursday, October 27, 2016 6:17 PM
To: mstallings@windsor-va.gov; brian.camden@alphacorporation.com
Cc: Dillon.Lynch@kimley-horn.com
Subject: Church St/Shiloh Dr Sidewalk Extension Project
Attachments: Church_Shiloh Conceptual Sidewalk Improvement Exhibit.pdf

Michael/Brian,

When we last met, we had discussed the Town's desire to include curb and gutter improvements with the sidewalk improvement project along Church St and Shiloh Drive, or at a minimum evaluate the feasibility of this option. We have prepared exhibits showing preliminary alignments of sidewalk improvements along Church St/Shiloh Drive within the Town of Windsor. The attached PDF includes an exhibit showing conceptual location of sidewalk improvements while maintaining the existing shoulder and roadside ditch section. The attached PDF also includes the conceptual location of sidewalk improvements located behind proposed curb and gutter. 2 plan sheets for each option have been provided along the project corridor.

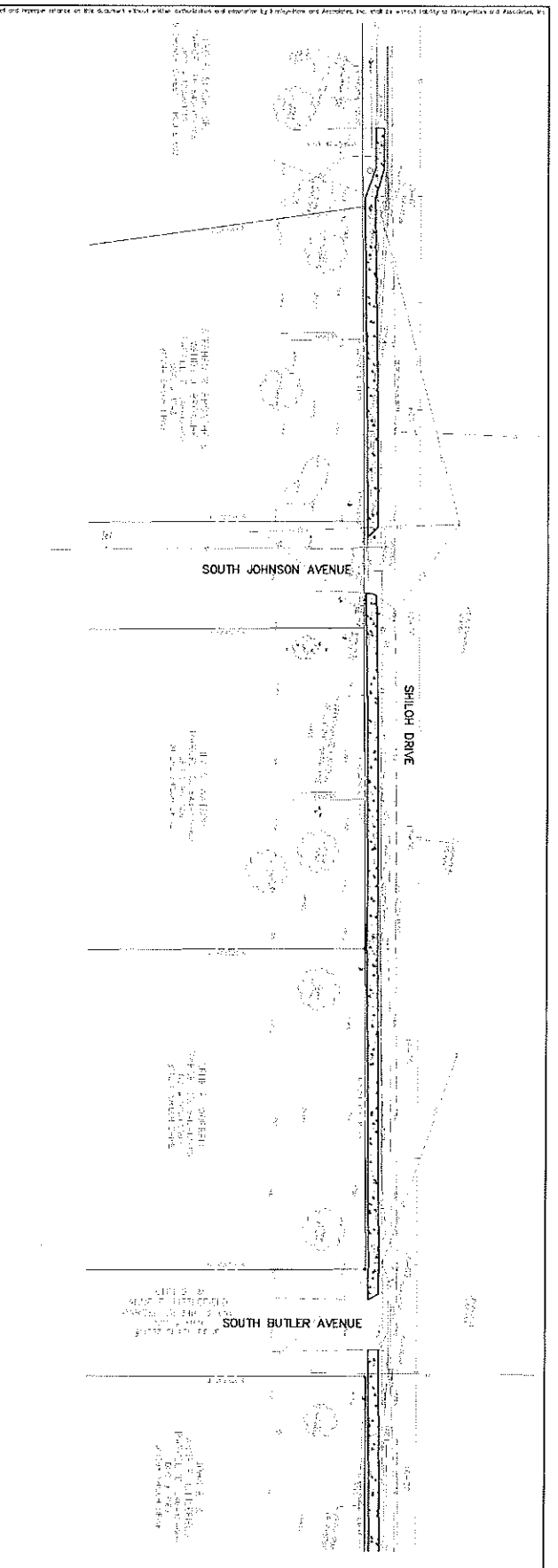
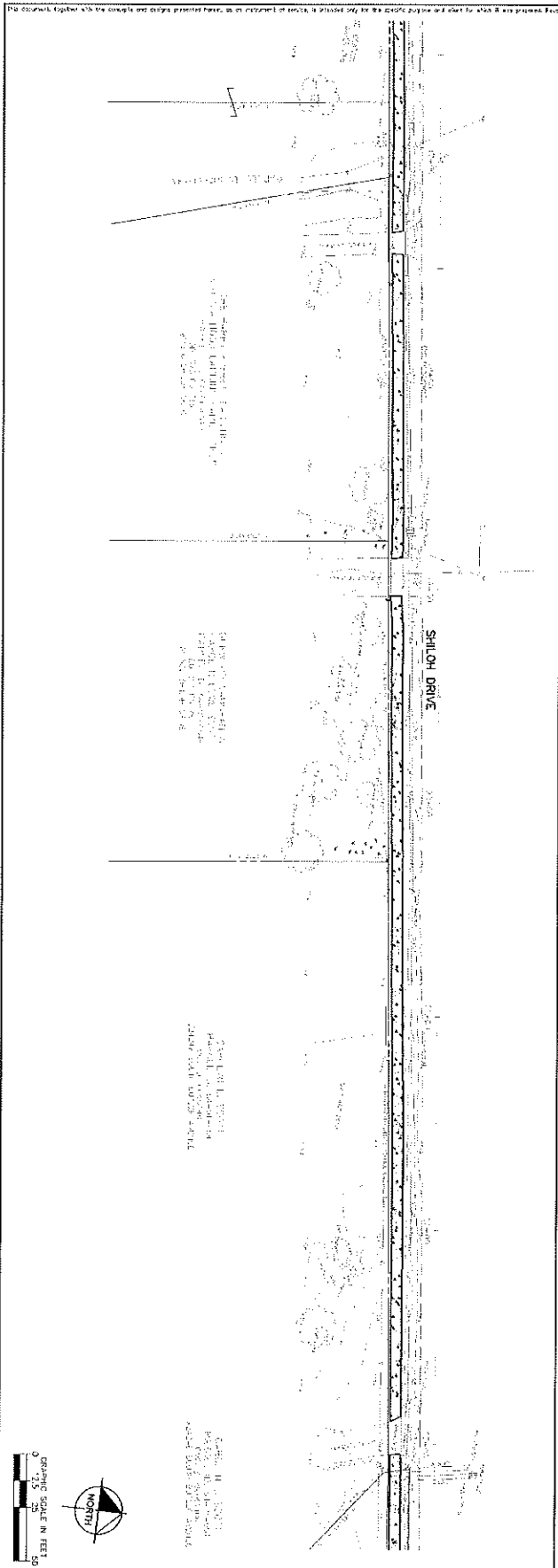
We would like to offer the following notes for your consideration:

1. Generally, the location of proposed sidewalk is unchanged between the two scenarios. Based on the location and number of existing drainage and utility conflict points along the project corridor, the location of the proposed sidewalk does not change between the two alternatives. There is some flexibility along the project corridor for the exact location of the sidewalk but for the sake of the conceptual exhibits, we have shown a consistent offset for each "block" of sidewalk improvements.
2. Installing curb and gutter not only presents additional costs to the project but also additional drainage requirements to be in accordance with VDOT design standards. While not specifically shown on the exhibits we are providing, we have evaluated the curb and gutter alternative for spread calculations to determine if additional curb inlets are required along the corridor. While additional inlets will be required, and present some challenges to connect to the existing drainage system which is very shallow, we believe we developed a feasible and constructible solution for drainage improvements along the curb and gutter project corridor.
3. Please note the alternative with curb and gutter will include additional construction costs for curb and gutter, borrow material to backfill the existing ditch, modifications to existing entrances, and additional drainage improvements. If you would like us to prepare opinion of probable costs for both alternatives, we can do so, but at our last meeting, it sounded like someone had already provided you with estimates of construction costs for both alternatives.

After your review, please let us know if you would like to meet again and discuss or if you need additional information before selecting an alternative to proceed with the design phase.

We were also curious if the Town has any information on the owner of the property located west and east of John Henry Street, between Shiloh Drive and the subdivision properties. It is the properties with the berm running through them so we anticipate that land being owned by the subdivision/developer but were curious of the Town owned it.

Thanks,
Andrew



CHURCH STREET/SHILOH DRIVE
SIDEWALK EXTENSION PROJECT

WHDSDOR VA

OPTION 1
SHOULDER AND
SIDEWALK SECTION

KHA PROJECT
11/3/2015
DATE

SCALE AS SHOWN

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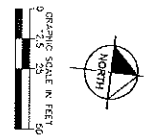
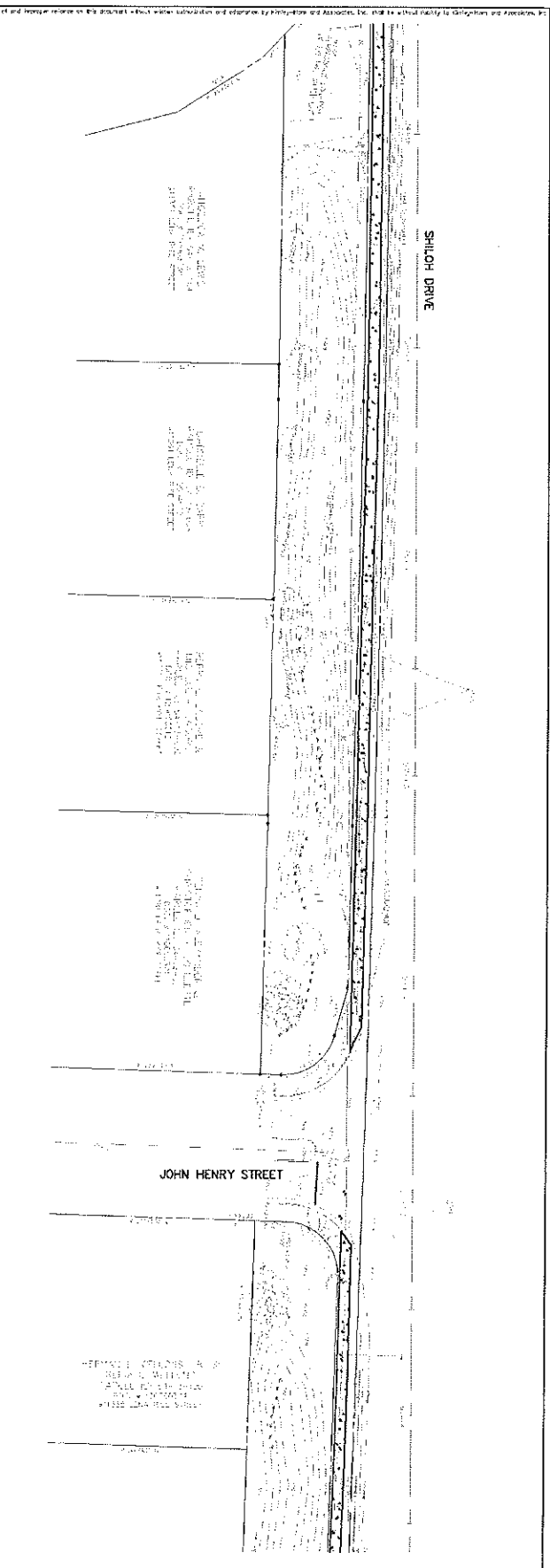
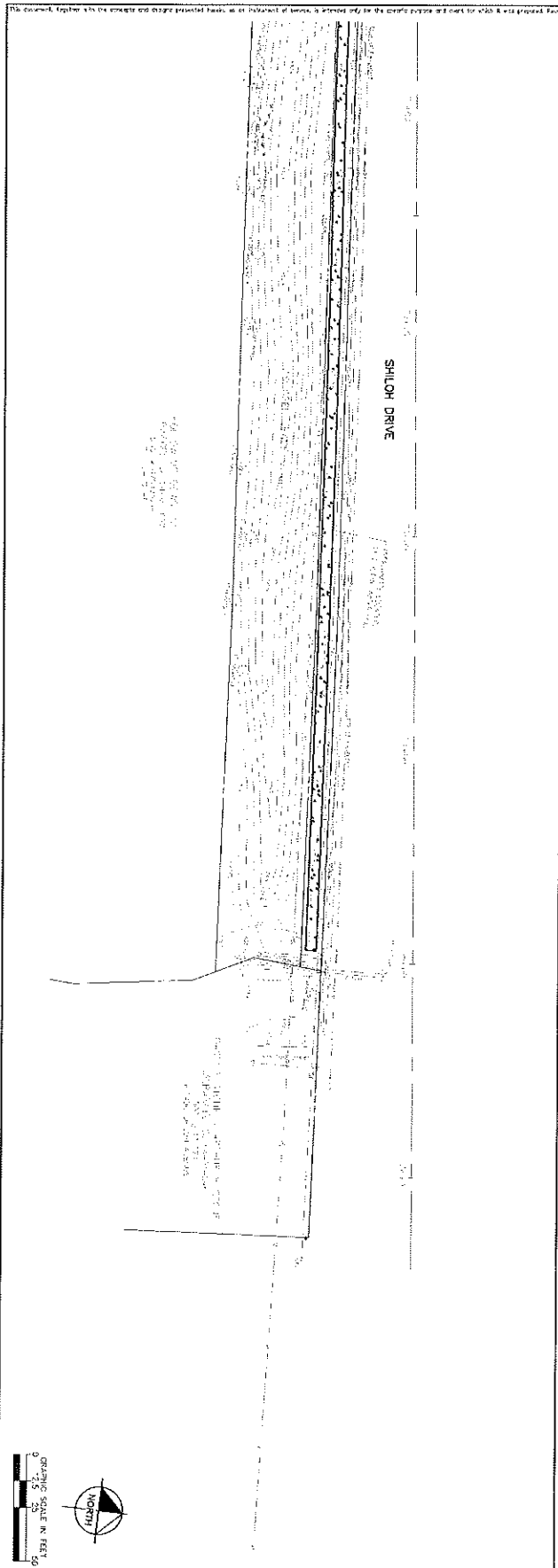
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CHECKED BY

Kimley»Horn

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4500 BAHAM STREET, SUITE 500, VIRGINIA BEACH, VA 23462
PHONE: 757-213-8600 FAX: 757-213-8601
WWW.KHAET-USA.COM

No.	REVISIONS	DATE



CHURCH STREET/SHILOH DRIVE
SIDEWALK EXTENSION PROJECT

WINDSOR VA

OPTION 1
SHOULDER AND
SIDEWALK SECTION

IHA PROJECT
11732015
DATE

SCALE AS SHOWN

DESIGNED BY

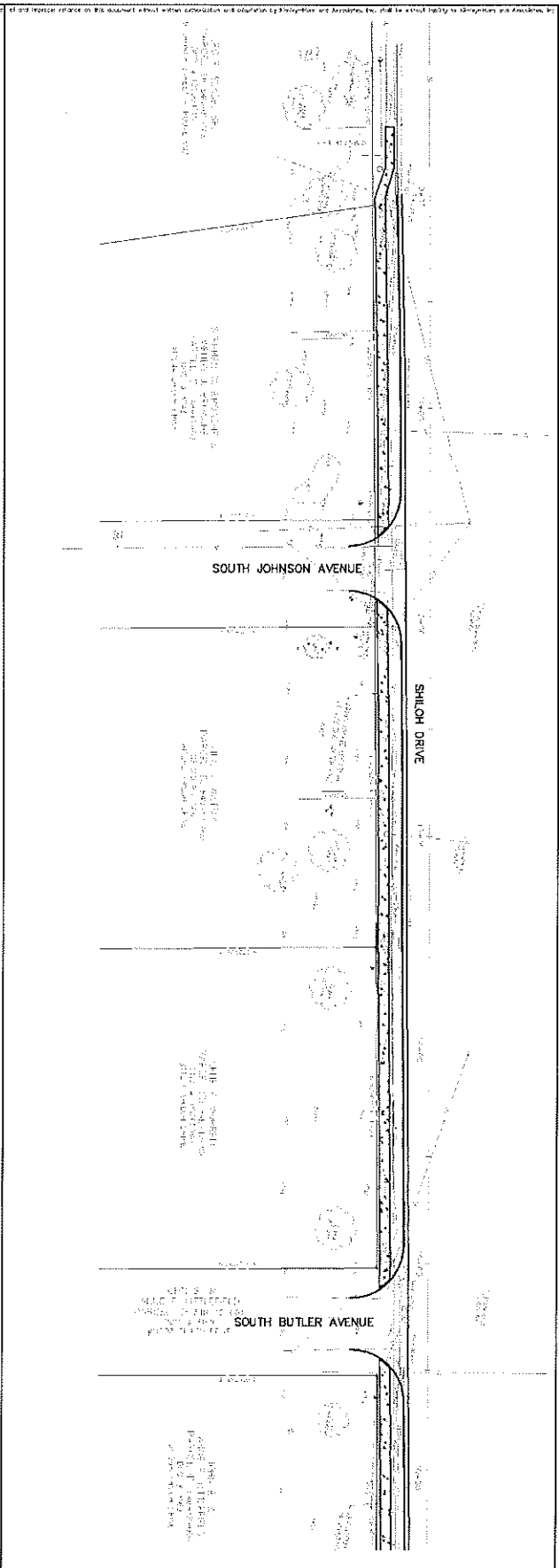
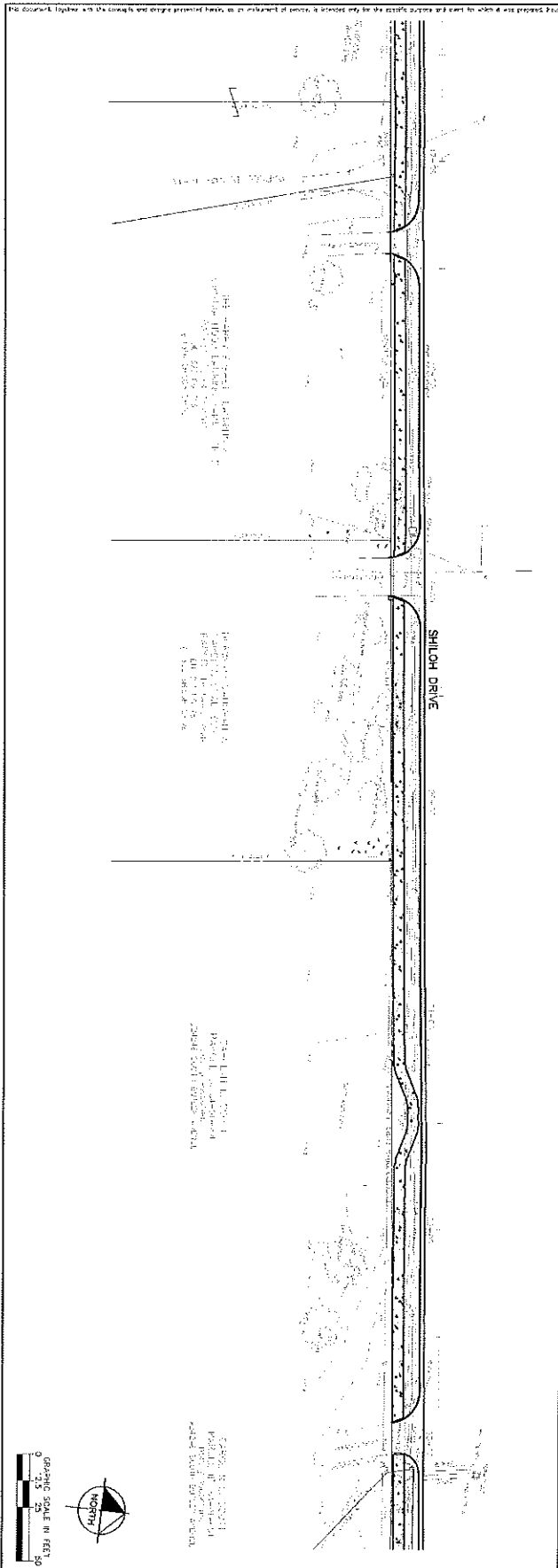
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NO.	REVISIONS	DATE



CHURCH STREET/ SHILOH DRIVE
SIDEWALK EXTENSION PROJECT

WINDSOR VA

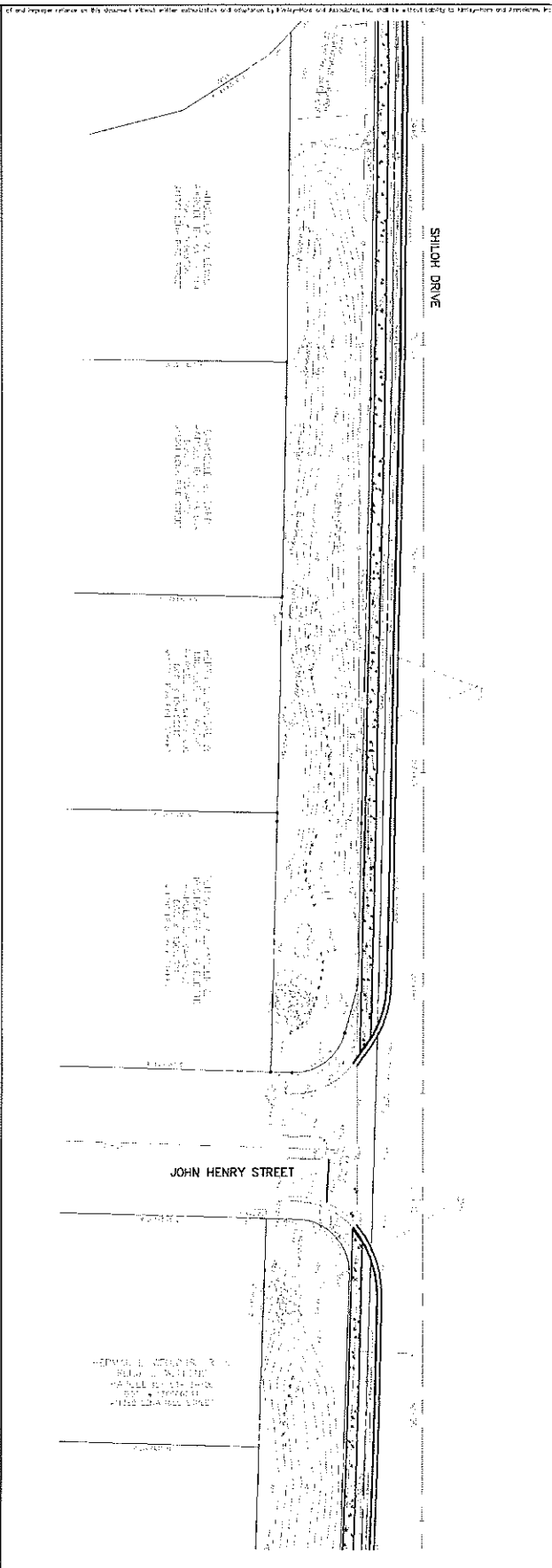
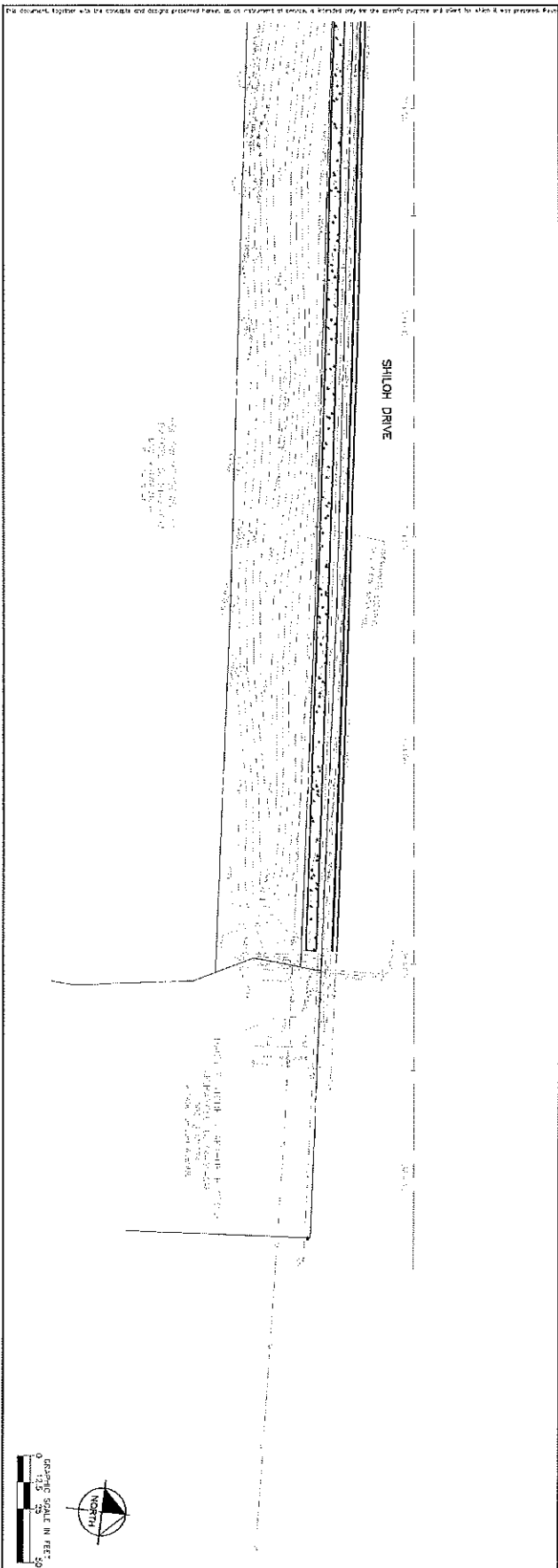
OPTION 2
CURB AND GUTTER AND
SIDEWALK SECTION

PROJECT NUMBER	11732915
DATE	
SCALE	AS SHOWN
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CHECKED BY	
DESIGNED BY	

Kimley»Horn

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NO.	REVISIONS	DATE



SHEET NUMBER
CHURCH STREET/ SHILOH DRIVE
SIDEWALK EXTENSION PROJECT
 WINDSOR VA

OPTION 2
CURB AND GUTTER AND
SIDEWALK SECTION

RHA PROJECT 11732015	DATE
SCALE AS SHOWN	DRAWN BY
CHECKED BY	

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NO.	REVISIONS	DATE

Preliminary Opinion of Probable Construction Cost

PROJECT: Church St/Shiloh Dr Sidewalk Extension Project
No Curb and Gutter Option
Planning Level Cost Estimate

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	
EARTHWORK/PRELIMINARY SITE WORK						\$ 105,000
1	Mobilization	1	LS	\$ 35,000.00	\$ 35,000.00	
2	Construction Surveying	1	LS	\$ 10,000.00	\$ 10,000.00	
3	Field Office, Type 1	6	MO	\$ 2,000.00	\$ 12,000.00	
4	Clearing and Grubbing	1.5	AC	\$ 10,000.00	\$ 15,000.00	
5	Regular Excavation	600	CY	\$ 30.00	\$ 18,000.00	
6	Borrow Excavation	500	CY	\$ 30.00	\$ 15,000.00	
PAVEMENT						\$ 3,600
7	Asphalt Concrete Type SM-9.5A	12	TON	\$ 150.00	\$ 1,833.33	
8	Untreated Aggregate Type 1 No. 21A or 21B	24	TON	\$ 70.00	\$ 1,691.67	
INCIDENTALS						\$ 76,400
9	Hydraulic Cement Concrete Sidewalk 4"	1300	SY	\$ 50.00	\$ 65,000.00	
10	Detectable Warning Surface, CG-12	12	SF	\$ 300.00	\$ 3,600.00	
11	Class A3 Concrete, Ramps, 7"	12	CY	\$ 650.00	\$ 7,800.00	
DEMOLITION						\$ 15,000
12	Removal of Items (Drainage Pipes, Trees)	1	LS	\$ 15,000.00	\$ 15,000.00	
DRAINAGE						\$ 59,800
13	15"/18" Concrete Pipe	100	LF	\$ 150.00	\$ 15,000.00	
14	24" Concrete Pipe	16	LF	\$ 300.00	\$ 4,800.00	
15	Drop Inlet	5	EA	\$ 6,000.00	\$ 30,000.00	
16	End Section, ES-1	5	EA	\$ 1,000.00	\$ 5,000.00	
17	Manhole, MH-1 or 2	2	LF	\$ 1,500.00	\$ 3,000.00	
18	Frame and Cover, MH-1	2	EA	\$ 1,000.00	\$ 2,000.00	
UTILITY ADJUSTMENTS						\$ 50,000
19	Utility Adjustments	1	LS	\$ 50,000.00	\$ 50,000.00	
PAVEMENT STRIPING/MARKING/SIGNING						\$ 10,000
20	Pavement Striping/Marking/Signing	1	LS	\$ 10,000.00	\$ 10,000.00	
EROSION AND SEDIMENT CONTROL						\$ 20,000
21	Erosion and Sediment Control	1	LS	\$ 20,000.00	\$ 20,000.00	
TEMPORARY TRAFFIC CONTROL						\$ 50,000
22	Maintenance of Traffic and Temporary Traffic Control	1	LS	\$ 50,000.00	\$ 50,000.00	
LANDSCAPING/ROADSIDE DEVELOPMENT						\$ 15,000
23	Seeding/Mulching/Top soil	1	LS	\$ 15,000.00	\$ 15,000.00	

Bid Items Total	\$ 404,800
Contingency 30% (Rounded)	\$ 121,500
Construction Engineering and Inspection (15%)	\$ 61,000
Total Construction Cost Opinion	\$ 588,000

* OPINION OF PROBABLE CONSTRUCTION COSTS IS BASED ON CONCEPTUAL DESIGN PREPARED FOR THE TOWN OF WINDSOR. THE COST OPINION DOES NOT INCLUDE PROJECT COSTS FOR RIGHT-OF-WAY ACQUISITION, ENVIRONMENTAL MITIGATION, FRANCHISE UTILITY RELOCATIONS, OR VDOT OVERSIGHT COSTS.

The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Consultant at this time and represent only the Consultant's judgment as a design professional familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Preliminary Opinion of Probable Construction Cost

**PROJECT: Church St/Shiloh Dr Sidewalk Extension Project
Curb and Gutter Option
Planning Level Cost Estimate**

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	
EARTHWORK/PRELIMINARY SITE WORK						\$ 211,000
1	Mobilization	1	LS	\$ 60,000.00	\$ 60,000.00	
2	Construction Surveying	1	LS	\$ 10,000.00	\$ 10,000.00	
3	Field Office, Type 1	6	MO	\$ 2,000.00	\$ 12,000.00	
4	Clearing and Grubbing	1.5	AC	\$ 10,000.00	\$ 15,000.00	
5	Regular Excavation	2300	CY	\$ 30.00	\$ 69,000.00	
6	Borrow Excavation	1500	CY	\$ 30.00	\$ 45,000.00	
PAVEMENT						\$ 32,000
7	Asphalt Concrete Type SM-9.5A	31	TON	\$ 150.00	\$ 4,583.33	
8	Asphalt Concrete Type IM-19.0D	46	TON	\$ 120.00	\$ 5,500.00	
9	Asphalt Concrete Base Course Type BM-25.0A	76	TON	\$ 100.00	\$ 7,638.89	
10	Untreated Aggregate Type 1 No. 21A or 21B	24	TON	\$ 70.00	\$ 1,691.67	
11	NS Saw-cut Asph Conc (Full Depth)	2500	LF	\$ 5.00	\$ 12,500.00	
INCIDENTALS						\$ 178,900
12	Hydraulic Cement Concrete Sidewalk 4"	1300	SY	\$ 50.00	\$ 65,000.00	
13	Comb. Curb and Gutter, CG-7	2500	LF	\$ 35.00	\$ 87,500.00	
14	Detectable Warning Surface, CG-12	12	SF	\$ 300.00	\$ 3,600.00	
15	Class A3 Concrete, Ramps/Entrances, 7"	35	CY	\$ 650.00	\$ 22,750.00	
DEMOLITION						\$ 20,000
16	Removal of Items (Drainage Pipes, Trees)	1	LS	\$ 20,000.00	\$ 20,000.00	
DRAINAGE						\$ 94,300
17	15"/18" Concrete Pipe	250	LF	\$ 150.00	\$ 37,500.00	
18	24" Concrete Pipe	16	LF	\$ 300.00	\$ 4,800.00	
19	Drop Inlet	7	EA	\$ 6,000.00	\$ 42,000.00	
20	End Section, ES-1	5	EA	\$ 1,000.00	\$ 5,000.00	
21	Manhole, MH-1 or 2	2	LF	\$ 1,500.00	\$ 3,000.00	
22	Frame and Cover, MH-1	2	EA	\$ 1,000.00	\$ 2,000.00	
UTILITY ADJUSTMENTS						\$ 75,000
23	Utility Adjustments	1	LS	\$ 75,000.00	\$ 75,000.00	
PAVEMENT STRIPING/MARKING/SIGNING						\$ 10,000
24	Pavement Striping/Marking/Signing	1	LS	\$ 10,000.00	\$ 10,000.00	
EROSION AND SEDIMENT CONTROL						\$ 20,000
25	Erosion and Sediment Control	1	LS	\$ 20,000.00	\$ 20,000.00	
TEMPORARY TRAFFIC CONTROL						\$ 75,000
26	Maintenance of Traffic and Temporary Traffic Control	1	LS	\$ 75,000.00	\$ 75,000.00	
LANDSCAPING/ROADSIDE DEVELOPMENT						\$ 15,000
27	Seeding/Mulching/Top soil	1	LS	\$ 15,000.00	\$ 15,000.00	

Bid Items Total \$ 731,200

Contingency 30% (Rounded) \$ 219,400

Construction Engineering and Inspection (15%) \$ 110,000

Total Construction Cost Opinion \$ 1,061,000

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