



AGENDA
REGULAR MEETING OF THE
WINDSOR HEIGHTS CITY COUNCIL
MONDAY, JANUARY 20, 2020 – 6:00 P.M.
WINDSOR HEIGHTS COUNCIL CHAMBERS - 1133 66th ST

Notice to the Public: If you would like the supporting documents and information, please call City Hall by noon the day of the meeting. Copies of City Council Agendas are free to the public. In consideration of all, if you have a cell phone, please turn it off or put it on silent ring. The use of obscene and vulgar language, hate speech, racial slurs, slanderous comments, and any other disruptive behavior during the Council meeting will not be tolerated and the offender may be barred by the presiding officer from further comment before the Council during the meeting and/or removed from the meeting.

1. Call to Order/Roll Call/Pledge of Allegiance

2. Approval of the Agenda

3. Public Forum: This is time set aside for comments from the public on topics of City business other than those listed on the agenda. No action may be taken. Please come to the podium, state your name and address for the record and keep your comments to no more than 5 minutes.

4. Consent Agenda: Any item on the Consent Agenda may be removed for separate consideration.

- A. Approve Minutes of the Regular Council Meeting on January 6, 2020
- B. Approve Payment of Cash Disbursements
- C. Approve December Financial Reports
- D. Approve Liquor License – Wal-Mart Supercenter #1764 – 1001 73rd Street
- E. Approve Liquor License – Kum & Go #4098 – 7229 University Avenue

5. New Business:

- A. Consider Approval of Change to Ordinance 121.07 Related to the Sale, Giving, or Otherwise Supplying of Tobacco Products to Persons Under 21 Years of Age
- B. Consideration of Resolution No. 2020-5 - A Resolution Approving Plans and Specifications for the 2020 Street Reconstruction Projects and Authorizing Publication of Bids (College-Allison-69th Streets)
- C. Consideration of Resolution No. 2020-6 – A Resolution Authorizing STBG Grant Funding Application for 73rd Street Construction
- D. Consideration of Resolution No. 2020-7 – A Resolution Approving the Site Plan for Hy-Vee Fast & Fresh – 7200-7220 Hickman Rd. (Formerly Quik Trip)
- E. Consideration of Resolution No. 2020-8 – A Resolution Approving Severance Agreement and General Release
- F. Consideration of Resolution No. 2020-9 – A Resolution Appointing Emergency Management Commission Representatives
- G. Consideration of Resolution No. 2020-10 – A Resolution Waiving Fees for Nights in the Heights
- H. Consideration of Resolution No. 2020-11 – A Resolution Waiving Fees for Celebrate Windsor Heights
- I. Consideration of Resolution No. 2020-12 - A Resolution Waiving Fees for Movies in the Park

6. Reports:

The agenda was posted on the official bulletin boards and email on January 17, 2020 in compliance with the requirements of the open meetings law.

- A. Mayor and Council Reports and Committee Updates
 - B. Interim City Administrator Report and FY 21 Budget Update
 - C. City Clerk Report
 - D. Staff Reports
 - i. Public Safety Staff Report
 - ii. Public Works Staff Report
 - iii. Communications/Recreation Coordinator Staff Report
7. **Adjourn to 6:00 pm on Tuesday, February 4, 2020 for a Regular Council Meeting at the Council Chambers.**

The agenda was posted on the official bulletin boards and email on January 17, 2020 in compliance with the requirements of the open meetings law.

**City of Windsor Heights Regular Business Meeting Minutes
Monday, January 6, 2020 – 6:00 P.M. Council Chambers**

1. **Call to Order:** Mayor Burgess called the meeting to order at 6:00 PM. Council members present: Joseph Jones, Mike Loffredo, Mike Jones, and Threase Harms. Susan Skeries was absent. Staff present: Interim City Administrator Mark Arentsen, Finance Director Rachele Swisher, Public Works Director Dalton Jacobus, Communications/Recreation Coordinator Whitney Tucker, and City Attorney Erin Clanton. The Pledge of Allegiance was recited.
2. **Approval of the Agenda:** Motion by Mike Jones to approve the agenda with an amendment to add an additional closed session. Seconded by Harms. Motion passed unanimously on a roll call vote.
3. **Public Comment:** Laruen Campbell, 1004 63rd - gave an update on Windsor Heights Chamber activities.
4. **Consent Agenda: Any item on the Consent Agenda may be removed for separate consideration.**
 - A. Approve Minutes of the Regular Council Meeting on December 16, 2019
 - B. Approve Payment of Cash Disbursements
 - C. Approve Liquor License Renewal – Ridgemont - 7400-7460 Hickman Road
 - D. Approve Liquor License – Mojitos Mexican Grill – 6611 University Avenue
 - E. Approve Liquor License – Sam’s Club #6344 – 1101 73rd Street

Motion by Harms to approve the consent agenda. Seconded by Joseph Jones. Motion passed unanimously on a roll call vote.
5. **New Business:**
 - A. **Consideration of Resolution No. 2020-1 – A Resolution Naming City Depositories:** Motion by Mike Jones to approve Resolution No. 2020-1. Seconded by Joseph Jones. Motion passed unanimously on a roll call vote.
 - B. **Consideration of Resolution No. 2020-2 – A Resolution Naming the Des Moines Register as the City’s Official Newspaper:** Motion by Harms to approve Resolution No. 2020-2. Seconded by Mike Jones. Motion passed unanimously on a roll call vote.
 - C. **Consideration of Resolution No. 2020-3 – A Resolution Appointing Dalton Jacobus as the City’s Floodplain Manager:** Motion by Loffredo to approve Resolution No. 2020-3. Seconded by Joseph Jones. Motion passed unanimously on a roll call vote.
 - D. **Consideration of Resolution No. 2020-4 – A Resolution Authorizing the Mayor and City Clerk to Execute Assurances Relating to Real Property Acquisition Document and Future Administrative Documents Related to the 2020 North Walnut Creek Streambank Stabilization Project:** Motion by Joseph Jones to approve Resolution No. 2020-4. Seconded by Harms. Motion passed unanimously on a roll call vote.
6. **Reports:**
 - A. **Mayor and Council Reports and Committee Updates**
 Mayor Burgess – None.
 Joseph Jones – DART updates.
 Loffredo – None.
 Mike Jones – City-wide garage sale will be the 9th of May.
 Harms – Metro Waste meeting updates. Public safety committee is going to do ride alongs with officers. Will take up shared services when Chief McCluskey is back in March.
 - B. **Interim City Administrator Report and FY 21 Budget Preparation Status:** City Administrator search updates. Meeting with Tionna Pooler on future project financing. Planning for 73rd St. design work and construction projects. Rental inspection contractor to be hired. E-newsletter updates. Final valuation numbers are the same as preliminary numbers for FY 21 Budget.
7. **Closed Session:** Closed Session pursuant to Iowa Code Section 21.5 (1)(c) To discuss strategy with counsel in matters that are presently in litigation or where litigation is imminent where its disclosure would be likely to prejudice or disadvantage the position of the government body in that litigation: Motion by Harms to convene into closed session at 6:20 PM. Seconded by Mike Jones. Roll call vote: Joseph Jones – aye, Loffredo – aye, Mike Jones – aye, and Harms – aye. Motion passed 4-0.
8. **Convene Into Open Session:** Motion by Joseph Jones to convene into open session at 6:32 PM. Seconded by Mike Jones. Motion passed unanimously on a roll call vote.
9. **Closed Session:** Closed Session pursuant to Iowa Code Section 21.5 (1)(c) To discuss strategy with counsel in matters that are presently in litigation or where litigation is imminent where its disclosure would be likely to prejudice or disadvantage the position of the government body in that litigation: Motion by Loffredo to convene

into closed session at 6:33 PM. Seconded by Mike Jones. Roll call vote: Joseph Jones – aye, Loffredo – aye, Mike Jones – aye, and Harms – aye. Motion passed 4-0.

10. Convene Into Open Session: Motion by Harms to convene into open session at 6:42 PM. Seconded by Joseph Jones. Motion passed unanimously on a roll call vote.

11. Adjourn to 6:00 pm on Monday, January 20, 2020 for a Regular Council Meeting at the Council Chambers.

Motion by Loffredo to adjourn the meeting at 6:43 PM. Seconded by Mike Jones. Motion passed unanimously on a roll call vote.

David Burgess, Mayor

Attest: Travis Cooke, City Clerk

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK#	CHECK DATE
AMERICAN TRAFFIC SOLUTIONS	CITATIONS		5,746.00	50081	1/16/20
AUREON IT	IT SERVICES		741.00	50082	1/16/20
BANKERS TRUST COMPANY	CONSTANT CONTACT	100.90		2124	1/16/20
BANKERS TRUST COMPANY	ADOBE CREATIVE CLOUD	117.96		2125	1/16/20
BANKERS TRUST COMPANY	CAMERA EQUIPMENT	1,547.82		2126	1/16/20
BANKERS TRUST COMPANY	DUES	177.99		2127	1/16/20
BANKERS TRUST COMPANY	OFFICE CHAIR	809.00		2128	1/16/20
BANKERS TRUST COMPANY	GIFT CARD	158.88		2129	1/16/20
BANKERS TRUST COMPANY	CC FEES	35.24		2130	1/16/20
BANKERS TRUST COMPANY	CLOVER CC FEES	287.45	3,235.24	2131	1/16/20
BENEFITS, INC	HRA NISSEN		1,097.28	2132	1/16/20
BOB BROWN CHEVROLET INC.	REPAIRS		76.82	50083	1/16/20
BOLTON & MENK	ENGINEERING		46,683.00	50084	1/16/20
BOUND TREE MEDICAL LLC	MEDICAL SUPPLIES		335.44	50085	1/16/20
BRAUCHT, JUDY	FEBRUARY PENSION		1,067.86	50086	1/16/20
BRICK GENTRY PC	LEGAL FEES		13,052.50	50087	1/16/20
CAPITAL SANITARY SUPPLY	SUPPLIES		16.38	50088	1/16/20
CENTURY LINK	TELEPHONE		1,735.08	50089	1/16/20
CITY OF URBANDALE	HICKMAN TRAFFIC SIGNALS		109.44	50090	1/16/20
CITY OF WEST DES MOINES	STREET SWEEPING/LANDFILL FEES		15,568.25	50091	1/16/20
CIVIC PLUS	WEBSITE ANNUAL HOSTING FEES		8,160.01	50092	1/16/20
COOKE, TRAVIS	DEC/JAN CELL PHONE		126.68	50093	1/16/20
CRYSTAL CLEAR WATER CO.	WATER		24.00	50094	1/16/20
DES MOINES WATER WORKS	1133 66TH ST		330.86	50095	1/16/20
DUMERMUTH, JARED	VISION INS REFUND		11.22	50096	1/16/20
ELECTRICAL ENG. & EQ.	LIGHT BULBS FOR CITY HALL/PARK		161.23	50097	1/16/20
FAST SIGNS	WINDOW FILM		189.79	50098	1/16/20
FEDERAL TAX DEPOSIT	FED/FICA TAX		20,969.19	2122	1/10/20
GALL'S INC.	CLOTHING		1,129.32	50099	1/16/20
GOODYEAR TIRE & RUBBER CO	FLAT REPAIR		15.80	50100	1/16/20
HARMS, THREASE	WINDSOR WONDERLAND PRINTING		210.00	50101	1/16/20
O'DONNELL ACE HICKMAN	REPAIR PARTS TRUCK #5		2.69	50102	1/16/20
HOTSY CLEANING SYSTEMS	REPLACE HOSE/RUN/TEST		487.13	50103	1/16/20
HY-VEE ACCOUNTS RECEIVABLE	CAKE		102.21	50104	1/16/20
IA ASSOC OF PROF. FIRE CHIEFS	FIRE CHIEF ANNUAL MEMBERSHIP		100.00	50105	1/16/20
IA NARCOTICS OFFICERS ASSN.	NISSEN MEMBERSHIP DUES		25.00	50106	1/16/20
ICMA RETIREMENT TRUST	ICMA	713.92		50077	1/10/20
ICMA RETIREMENT TRUST	CITY CONTRIBUTION	874.60		50079	1/13/20
ICMA RETIREMENT TRUST	CITY CONTRIBUTION	848.53	2,437.05	50080	1/13/20
INDEPENDENT PUBLIC ADVISORS	QUARTERLY RETAINER SERVICES		2,250.00	50107	1/16/20
INTERSTATE ALL BATTERY	REPAIRS		205.20	50108	1/16/20
IOWA DEPT OF PUBLIC SAFETY	OCT-DEC BILLING		810.00	50109	1/16/20
IOWA NARCOTICS ASSOC.	NISSEN CONF REGISTRATION		250.00	50110	1/16/20
IRLBECK, MICHAEL	NOTARY RENEWAL FEE		30.00	50111	1/16/20
JOHNSON, KYLE	EDUCATION REIMBURSEMENT		2,100.00	50112	1/16/20
KABEL BUSINESS SERVICES	FLEX CLD BENEFIT		924.96	2123	1/10/20
KOCH OFFICE GROUP	INK CARTRIDGES		454.75	50113	1/16/20
LAUREN CAMPBELL PHOTOGRAPHY	HEADSHOTS FOR WEBSITE		150.00	50114	1/16/20
LOCAL GOVERNMENT CONSULTING	1/6/20-1/11/20 ADMINISTRATOR		5,800.00	50115	1/16/20
MID IOWA OCC TESTING	TESTING		40.00	50116	1/16/20
MPH INDUSTRIES INC.	RADAR		1,308.98	50117	1/16/20
NAPA AUTO PARTS	REPAIRS		58.48	50118	1/16/20
O'REILLY AUTO PARTS	WIPER BLADES		55.52	50119	1/16/20
OMNI BILLING	EMS BILLING DEC 2019		633.22	50120	1/16/20

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK#	CHECK DATE
POLK CO FIRE CHIEFS ASSN	DUES		25.00	50121	1/16/20
POLK COUNTY EMERG MGMT	28E AGREEMENT		2,430.00	50122	1/16/20
PRAXAIR DISTRIBUTION INC	MEDICAL SUPPLIES		554.92	50123	1/16/20
PREMIER AUTOMOTIVE	2017 FORD INTERCEPTOR		211.43	50124	1/16/20
QUALITY PEST CONTROL	PEST CONTROL		61.00	50125	1/16/20
QUEEN OF CLEAN, LLC	1/1-1/13 CLEANING		320.00	50126	1/16/20
R.A.D. SYSTEMS	DUES		76.00	50127	1/16/20
DES MOINES REGISTER	PUBLICATIONS		1,330.72	50128	1/16/20
RELIASTAR LIFE INS CO	BOWERS/NISSEN CONTRIBUTIONS		150.00	50129	1/16/20
SAFE BUILDING COMPLIANCE	BUILDING INSPECTIONS		740.00	50130	1/16/20
SIMMERING-CORY, INC	JANUARY SUPPLEMENT		150.00	50131	1/16/20
STIVERS FORD	REPAIRS		329.00	50132	1/16/20
TARGET SOLUTIONS	ONLINE TRAINING PLATFORM		3,046.22	50133	1/16/20
TEAMSTERS LOCAL 238	UNION DUES		724.16	50078	1/10/20
TRANSUNION RISK & ALTERNATIVE	TLOXP CHARGES		50.00	50134	1/16/20
UPHDM OCCUPATIONAL MED	PHYSICAL		129.00	50135	1/16/20
WESTSIDE MECHANICS LLC.	2012 FORD F450 REPAIRS		1,887.36	50136	1/16/20
WEX FLEET UNIVERSAL	FUEL		2,589.94	50137	1/16/20
ZWC CONDOMINIUM ASSOC	DIAM PEST CONTROL		103.62	50138	1/16/20
	Accounts Payable Total		153,925.95		

Payroll Checks

001	GENERAL	52,531.39
110	ROAD USE TAX	6,383.07
610	SEWER	258.76
740	STORM WATER	360.83
Total Paid On: 1/10/20		59,534.05
Total Payroll Paid		59,534.05
Report Total		213,460.00

**CLAIMS REPORT
CLAIMS FUND SUMMARY**

Payroll Checks: 1/09/2020- 1/16/2020

Item #4B

FUND	NAME	AMOUNT
001	GENERAL	133,655.99
110	ROAD USE TAX	10,485.38
112	EMPLOYEE BENEFITS	3,110.63
113	POLICE PENSION	1,067.86
145	URBAN RENEWAL ADVANCE	2,250.00
314	University Ave Redesign	262.00
319	2020 STREET PROJECTS	42,981.50
400	CAPITAL EQUIPMENT FUND	1,308.98
610	SEWER	1,029.89
740	STORM WATER	17,307.77

	TOTAL FUNDS	213,460.00

ACCOUNT NUMBER	ACCOUNT TITLE	MTD BALANCE	YTD BALANCE
001-000-1110	CASH - GENERAL	141,558.90-	3,521,144.78
001-000-1111	CASH - PR - GENERAL	.00	.00
001-000-1115	RESERVE CASH - COMM CENTER	730.49	42,645.45
001-000-1150	IPAIT - GENERAL	.00	520,741.71
001-000-1160	SAVINGS - 680-5592 - GENERAL	89.53	255,383.74
001-000-1161	SAVINGS - KWHB	1.04	2,949.56
001-000-1170	CD 082009 - KWHB	.00	11,539.60
001-050-2020	ACCOUNTS PAYABLE	.00	.00
001-050-2120	FEDERAL W/H PAYABLE	.00	18,845.65
001-050-2121	SS/MED W/H PAYABLE	.00	.00
001-050-2122	STATE W/H PAYABLE	.00	.00
001-050-2123	IPERS PAYABLE	.00	73.38
001-050-2124	INSURANCE W/H PAYABLE	.00	.00
001-050-2125	DEF COMP PAYABLE	.00	.00
001-050-2126	GARNISHMENT PAYABLE	.00	.00
001-050-2127	UNION DUES PAYABLE	.00	.00
001-050-2128	UNITED WAY PAYABLE	.00	.00
001-050-2129	MISC PAYABLE	.00	.00
001-050-3950	BEGINNING FUND BALANCE	.00	4,229,034.92
0010001150	IPAIT - GENERAL	.00	.00
110-000-1110	CASH - RUT	6,357.24	903,965.63
110-000-1111	CASH - PR - RUT	.00	.00
110-050-2020	ACCOUNTS PAYABLE	.00	.00
110-050-2120	FEDERAL W/H PAYABLE	.00	.00
110-050-2121	SS/MED W/H PAYABLE	.00	.00
110-050-2122	STATE W/H PAYABLE	.00	.00
110-050-2123	IPERS PAYABLE	.00	.00
110-050-2124	INSURANCE W/H PAYABLE	.00	.00
110-050-2125	DEF COMP PAYABLE	.00	.00
110-050-2126	GARNISHMENT PAYABLE	.00	.00
110-050-2127	UNION DUES PAYABLE	.00	.00
110-050-2128	UNITED WAY PAYABLE	.00	.00
110-050-2129	MISC PAYABLE	.00	.00
110-050-3950	BEGINNING FUND BALANCE	.00	783,032.76
112-000-1110	CASH - EMP BENEFIT FUND	41,759.44-	802,568.77
112-000-1111	CASH - PR - EMP BEN FUND	.00	.00
112-000-1150	IPAIT - EMPLOYEE BENEFITS	.00	.00
112-000-1160	SAVINGS - EMP BENEFIT 689-6237	51.97	148,268.56
112-050-2020	ACCOUNTS PAYABLE	.00	.00
112-050-3950	BEGINNING FUND BALANCE	.00	853,011.41
113-000-1110	CASH - POLICE PENSION	1,067.86-	4,772.86-
113-000-1111	CASH - PR - POLICE PENSION	.00	.00
113-000-1160	SAVINGS - 680-2292 - POLICE	11.79	32,489.42
113-000-1170	CD 051509 - POLICE PENSION	.00	.00
113-000-1171	CD 060209 - POLICE PENSION	.00	.00
113-050-2020	ACCOUNTS PAYABLE	.00	.00
113-050-3950	BEGINNING FUND BALANCE	.00	34,046.56
114-000-1110	CASH - POLICE TRUST	.00	12,083.75-
114-000-1160	SAVINGS - POLICE TRUST	.00	35,344.92
114-050-2020	ACCOUNTS PAYABLE	.00	.00
114-050-3950	BEGINNING FUND BALANCE	.00	11,944.27

BALANCE SHEET
CALENDAR 12/2019, FISCAL 6/2020

ACCOUNT NUMBER	ACCOUNT TITLE	MTD BALANCE	YTD BALANCE
115-000-1110	CASH - POLICE PREFORFEIT	.00	1,602.32-
115-000-1120	PETTY CASH - POLICE FOREITURE	.00	1,000.00
115-000-1160	SAVINGS - PREF/DEA	.00	1,147.13
115-050-2020	ACCOUNTS PAYABLE	.00	.00
115-050-3950	BEGINNING FUND BALANCE	.00	542.50
119-000-1110	CASH - EMERGENCY FUND	.00	1,660.26
119-050-2020	ACCOUNTS PAYABLE	.00	.00
119-050-3950	FUND BALANCE	.00	1,660.26
121-000-1110	CASH - LOCAL OPTION SALES TAX	179,685.76	443,172.45
121-050-2020	ACCOUNTS PAYABLE	.00	.00
121-050-3950	FUND BALANCE	.00	.00
125-000-1110	CASH - TIF	41,128.49	2,008,731.00
125-050-2020	ACCOUNTS PAYABLE	.00	.00
125-050-3950	BEGINNING FUND BALANCE	.00	880,221.03
145-000-1110	CASH - URBAN RENEWAL ADVANCE	.00	268,035.67
145-050-2020	ACCOUNTS PAYABLE	.00	.00
145-050-3950	FUND BALANCE	.00	269,785.67
175-000-1110	CASH - PROPRIETARY ATE REVENUE	.00	264.70
175-050-2020	ACCOUNTS PAYABLE	.00	.00
175-050-3950	FUND BALANCE	.00	264.70
200-000-1110	CASH - DEBT SERVICE	18,877.80	766,015.38
200-050-2020	ACCOUNTS PAYABLE	.00	.00
200-050-3950	BEGINNING FUND BALANCE	.00	498,665.76
300-000-1110	CASH - CAPITAL IMP	.00	.00
300-050-2020	ACCOUNTS PAYABLE	.00	.00
300-050-3950	BEGINNING FUND BALANCE	.00	.00
302-000-1110	CASH - 73RD STREET BRIDGE	.00	.00
302-050-2020	ACCOUNTS PAYABLE	.00	.00
302-050-3950	BEGINNING FUND BALANCE	.00	.00
303-000-1110	CASH - COLBY PARK	.00	37,979.05
303-050-2020	ACCOUNTS PAYABLE	.00	.00
303-050-3950	BEGINNING FUND BALANCE	.00	37,979.05
304-000-1110	CASH - CAPITAL PROJECT	.00	.00
304-050-2020	ACCOUNTS PAYABLE	.00	.00
304-050-3950	BEGINNING FUND BALANCE	.00	.00
305-000-1110	CASH - 73RD ST RESURFACING	.00	.00
305-050-2020	ACCOUNTS PAYABLE	.00	.00
305-050-3950	FUND BALANCE	.00	.00
306-000-1110	CASH - HICKMAN ROAD PROJECT	.00	.23-
306-000-1150	IPAIT - HICKMAN	.00	.00
306-050-2020	ACCOUNTS PAYABLE	.00	.00
306-050-3950	BEGINNING FUND BALANCE	.00	.23-
307-000-1110	CASH - TIF PORTION	.00	.00
307-050-2020	ACCOUNTS PAYABLE	.00	.00
307-050-3950	BEGINNING FUND BALANCE	.00	.00
308-000-1110	CASH - 73RD HICKMAN	.00	.00
308-050-2020	ACCOUNTS PAYABLE	.00	.00
308-050-3950	FUND BALANCE	.00	.00
309-000-1110	CASH - 2014 A STREET PROJECT	.00	510,207.46
309-050-2020	ACCOUNTS PAYABLE	.00	.00
309-050-3950	FUND BALANCE	.00	510,207.46

ACCOUNT NUMBER	ACCOUNT TITLE	MTD BALANCE	YTD BALANCE
310-000-1110	CASH - CITY HALL/PUBLIC SAFETY	.00	.00
310-050-2020	ACCOUNTS PAYABLE	.00	.00
310-050-3950	FUND BALANCE	.00	.00
311-000-1110	CASH - TRAIL CONNECTION	.00	160,000.00
311-050-2020	ACCOUNTS PAYABLE	.00	.00
311-050-3950	FUND BALANCE	.00	160,000.00
312-000-1110	CASH - 63/HICKMAN STREETScape	.00	.17
312-050-2020	ACCOUNTS PAYABLE	.00	.00
312-050-3950	FUND BALANCE	.00	.17
313-000-1110	CASH - 2017/18 STREET PROJECTS	.00	395,342.78-
313-050-2020	ACCOUNTS PAYABLE	.00	103,110.50-
313-050-3950	FUND BALANCE	.00	262,832.78-
314-000-1110	CASH - UNIVERSITY AVE REDESIGN	.00	32,389.26-
314-050-2020	ACCOUNTS PAYABLE	.00	.00
314-050-3950	FUND BALANCE	.00	17,151.24
315-000-1110	CASH - 2018 HMA PROJ	.00	106,099.23
315-050-2020	ACCOUNTS PAYABLE	.00	.00
315-050-3950	FUND BALANCE	.00	134,394.22
316-000-1110	CASH - 2018 PCC PATCHING PROJ	400.00-	139,423.93
316-050-2020	ACCOUNTS PAYABLE	.00	.00
316-050-3950	FUND BALANCE	.00	139,823.93
317-000-1110	CASH - WALNUT CREEK BIKE TRAIL	.00	.00
317-050-2020	ACCOUNTS PAYABLE	.00	.00
317-050-3950	FUND BALANCE	.00	.00
319-000-1110	CASH - 2020 STREET PROJECTS	.00	.00
319-050-2020	ACCOUNTS PAYABLE	.00	.00
319-050-3950	FUND BALANCE	.00	.00
400-000-1110	CASH - CAPITAL EQUIPMENT FUND	.00	1,204,115.00
400-000-1180	RESERVES - POLICE	.00	18,387.30
400-000-1181	RESERVES - FIRE	1,870.00-	39,453.02
400-000-1182	RESERVES - AMBULANCE	.00	28,664.07-
400-000-1183	RESERVES - STREETS	.00	48,468.34
400-000-1184	RESERVES - SNOW	.00	.00
400-000-1185	RESERVES - PARKS	.00	10,581.81-
400-000-1186	RESERVES - COMMUNITY CENTER	.00	15,815.00
400-000-1187	RESERVES - IT DEPARTMENT	.00	40,148.32-
400-050-2020	ACCOUNTS PAYABLE	.00	.00
400-050-3950	FUND BALANCE	.00	1,273,366.85
401-000-1110	CASH - CAP STREET PROJ/ATE	.00	11,200.00-
401-050-2020	ACCOUNTS PAYABLE	.00	.00
401-050-3950	FUND BALANCE	.00	11,200.00-
600-000-1110	CASH - WATER	.00	103,254.44-
600-000-1170	CD 12062707- WATER	.00	102,257.54
600-050-2020	ACCOUNTS PAYABLE	.00	.00
600-050-3950	BEGINNING FUND BALANCE	.00	996.90-
610-000-1110	CASH - SEWER	721.69-	39,834.30-
610-000-1111	CASH - PR - SEWER	.00	.00
610-050-2020	ACCOUNTS PAYABLE	.00	.00
610-050-2120	FEDERAL W/H PAYABLE	.00	.00
610-050-2121	SS/MED W/H PAYABLE	.00	.00
610-050-2122	STATE W/H PAYABLE	.00	.00

**BALANCE SHEET
CALENDAR 12/2019, FISCAL 6/2020**

ACCOUNT NUMBER	ACCOUNT TITLE	MTD BALANCE	YTD BALANCE
610-050-2123	IPERS PAYABLE	.00	.00
610-050-2124	INSURANCE W/H PAYABLE	.00	.00
610-050-2125	DEF COMP PAYABLE	.00	.00
610-050-2126	GARNISHMENT PAYABLE	.00	.00
610-050-2127	UNION DUES PAYABLE	.00	.00
610-050-2128	UNITED WAY PAYABLE	.00	.00
610-050-2129	MISC PAYABLE	.00	.00
610-050-3950	BEGINNING FUND BALANCE	.00	12,831.60
670-000-1110	CASH - LANDFILL/GARBAGE	24,680.02	385,215.55
670-050-2020	ACCOUNTS PAYABLE	.00	.00
670-050-2120	FEDERAL W/H PAYABLE	.00	.00
670-050-2121	FICA W/H PAYABLE	.00	.00
670-050-2122	STATE W/H PAYABLE	.00	.00
670-050-2123	IPERS W/H PAYABLE	.00	.00
670-050-2124	INSURANCE W/H PAYABLE	.00	.00
670-050-2125	DEFERRED COMP PAYABLE	.00	.00
670-050-2126	GARNISHMENT PAYABLE	.00	.00
670-050-2127	UNION DUES PAYABLE	.00	.00
670-050-2128	UNITED WAY PAYABLE	.00	.00
670-050-2129	MISC PAYABLE	.00	.00
670-050-3950	FUND BALANCE	.00	349,816.73
740-000-1110	CASH - STORM WATER	28,353.97	823,203.26
740-000-1111	CASH - PR - STORM WATER	.00	.00
740-050-2020	ACCOUNTS PAYABLE	.00	.00
740-050-2120	FEDERAL W/H PAYABLE	.00	.00
740-050-2121	SS/MED W/H PAYABLE	.00	.00
740-050-2122	STATE W/H PAYABLE	.00	.00
740-050-2123	IPERS PAYABLE	.00	.00
740-050-2124	INSURANCE W/H PAYABLE	.00	.00
740-050-2125	DEF COMP PAYABLE	.00	.00
740-050-2126	GARNISHMENT PAYABLE	.00	.00
740-050-2127	UNION DUES PAYABLE	.00	.00
740-050-2128	UNITED WAY PAYABLE	.00	.00
740-050-2129	MISC PAYABLE	.00	.00
740-050-3950	BEGINNING FUND BALANCE	.00	668,117.30
810-000-1110	CASH - REVOLVING FUND	.00	262,143.13-
810-000-1170	CD 050109 - REVOLVING FUND	.00	100,000.00
810-050-2020	ACCOUNTS PAYABLE	.00	.00
810-050-3950	BEGINNING FUND BALANCE	.00	161,026.22-
		=====	=====
	PROOF	112,590.21	2,170,025.52
		=====	=====

BUDGET REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0%
 Item #4C

ACCOUNT NUMBER	ACCOUNT TITLE	TOTAL BUDGET	MTD BALANCE	YTD BALANCE	PERCENT EXPENDED	UNEXPENDED
	POLICE TOTAL	2,093,443.00	144,091.43	1,025,074.51	48.97	1,068,368.49
	EMERGENCY MANAGEMENT TOTAL	8,870.00	.00	6,659.80	75.08	2,210.20
	FIRE TOTAL	667,484.00	19,765.51	279,833.40	41.92	387,650.60
	AMBULANCE TOTAL	192,190.00	35,204.01	131,446.76	68.39	60,743.24
	BUILDING INSPECTIONS TOTAL	106,233.00	2,778.72	46,379.87	43.66	59,853.13
	ANIMAL CONTROL TOTAL	900.00	99.90	714.19	79.35	185.81
	PUBLIC SAFETY TOTAL	3,069,120.00	201,939.57	1,490,108.53	48.55	1,579,011.47
	ROADS, BRIDGES, SIDEWALKS TOTA	496,152.00	28,717.59	217,370.47	43.81	278,781.53
	STREET LIGHTING TOTAL	67,000.00	4,182.85	25,124.31	37.50	41,875.69
	TRAFIC CONTROL & SAFETY TOTAL	5,500.00	250.04	1,264.63	22.99	4,235.37
	SNOW REMOVAL TOTAL	263,061.00	13,889.90	86,519.38	32.89	176,541.62
	PUBLIC WORKS TOTAL	831,713.00	47,040.38	330,278.79	39.71	501,434.21
	WATER,AIR,MOSQUITO CONTRO TOTA	.00	.00	.00	.00	.00
	OTHER HEALTH/SOCIAL SERV TOTA	3,000.00	.00	.00	.00	3,000.00
	HEALTH & SOCIAL SERVICES TOTA	3,000.00	.00	.00	.00	3,000.00
	LIBRARY TOTAL	95,032.00	.00	35,000.00	36.83	60,032.00
	PARKS TOTAL	110,473.00	4,822.66	48,973.65	44.33	61,499.35
	COMMUNITY CTR/ZOO/MARINA TOTA	3,200.00	.00	1,500.00	46.88	1,700.00
	SPECIAL EVENTS TOTAL	.00	.00	613.00	.00	613.00-
	COMMUNITY CENTER TOTAL	139,879.00	6,640.77	52,196.49	37.32	87,682.51
	CULTURE & RECREATION TOTAL	348,584.00	11,463.43	138,283.14	39.67	210,300.86
	COMMUNITY BEAUTIFICATION TOTA	.00	.00	.00	.00	.00
	HOUSING & URBAN RENEWAL TOTAL	7,737.00	7,737.00	20,866.00	269.69	13,129.00-
	COMMUNITY & ECONOMIC DEV TOTA	7,737.00	7,737.00	20,866.00	269.69	13,129.00-
	MAYOR/COUNCIL TOTAL	52,871.00	6,504.06	20,822.27	39.38	32,048.73
	IT DEPARTMENT TOTAL	50,747.00	7,580.31	25,330.01	49.91	25,416.99
	CLERK/TREASURER/ADM TOTAL	563,753.00	45,637.18	269,506.68	47.81	294,246.32
	ELECTIONS TOTAL	4,000.00	.00	.00	.00	4,000.00
	LEGAL SERVICES/ATTORNEY TOTAL	75,000.00	10,250.00	56,240.00	74.99	18,760.00
	OTHER GENERAL GOVERNMENT TOTA	.00	.00	.00	.00	.00
	GENERAL GOVERNMENT TOTAL	746,371.00	69,971.55	371,898.96	49.83	374,472.04
	ROADS, BRIDGES, SIDEWALKS TOTA	786,258.00	.00	115,547.50	14.70	670,710.50
	PARKS TOTAL	.00	.00	.00	.00	.00

BUDGET REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0% Item #4C

ACCOUNT NUMBER	ACCOUNT TITLE	TOTAL BUDGET	MTD BALANCE	YTD BALANCE	PERCENT EXPENDED	UNEXPENDED
	HOUSING & URBAN RENEWAL TOTAL	813,898.00	.00	48,498.75	5.96	765,399.25
	DEBT SERVICE TOTAL	1,600,156.00	.00	164,046.25	10.25	1,436,109.75
	POLICE TOTAL	.00	.00	.00	.00	.00
	FIRE TOTAL	.00	1,870.00	6,841.00	.00	6,841.00-
	AMBULANCE TOTAL	.00	.00	.00	.00	.00
	OTHER PUBLIC SAFETY TOTAL	.00	.00	.00	.00	.00
	ROADS, BRIDGES, SIDEWALKS TOTA	.00	400.00	28,694.99	.00	28,694.99-
	SNOW REMOVAL TOTAL	.00	.00	.00	.00	.00
	PARKS TOTAL	.00	.00	.00	.00	.00
	COMMUNITY CENTER TOTAL	.00	.00	.00	.00	.00
	IT DEPARTMENT TOTAL	.00	.00	19,681.39	.00	19,681.39-
	CITY HALL/GENERAL BLDGS TOTAL	.00	.00	.00	.00	.00
	CAPITAL PROJECTS TOTAL	.00	.00	78,940.00	.00	78,940.00-
	CAPITAL PROJECTS TOTAL	.00	2,270.00	134,157.38	.00	134,157.38-
	CAPITAL PROJECTS TOTAL	.00	.00	.00	.00	.00
	WATER TOTAL	.00	.00	.00	.00	.00
	SEWER/SEWAGE DISPOSAL TOTAL	189,334.00	721.69	52,793.40	27.88	136,540.60
	LANDFILL/GARBAGE TOTAL	337,818.00	.00	102,575.74	30.36	235,242.26
	STORM WATER TOTAL	258,745.00	2,210.59	33,401.98	12.91	225,343.02
	INTERNAL SERVICE TOTAL	.00	.00	.00	.00	.00
	ENTERPRISE FUNDS TOTAL	785,897.00	2,932.28	188,771.12	24.02	597,125.88
	TRANSFERS IN/OUT TOTAL	4,127,213.00	.00	.00	.00	4,127,213.00
	TRANSFER OUT TOTAL	4,127,213.00	.00	.00	.00	4,127,213.00
	TOTAL EXPENSES	11,519,791.00	343,354.21	2,838,410.17	24.64	8,681,380.83

REVENUE REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0%
 Rem #4C

ACCOUNT NUMBER	ACCOUNT TITLE	BUDGET ESTIMATE	MTD BALANCE	YTD BALANCE	PERCENT RECVD	UNCOLLECTED
001-110-4400	GRANTS	9,400.00	951.96	11,061.75	117.68	1,661.75-
001-110-4500	MISC CHARGES FOR SERVICE	10,500.00	745.00	13,239.13	126.09	2,739.13-
001-110-4700	DONATIONS K9 PROGRAM	.00	.00	.00	.00	.00
001-110-4715	REFUNDS/REIMBURSEMENTS	6,000.00	.00	3,000.00	50.00	3,000.00
001-110-4765	FINES & FEES	70,000.00	4,049.30	16,224.62	23.18	53,775.38
001-110-4770	ATE FINES	250,000.00	15,570.00	196,086.00	78.43	53,914.00
001-130-4014	PROP TAXES-EMERGENCY MANA	.00	.00	.00	.00	.00
001-130-4441	FEMA Reimbursement	.00	.00	.00	.00	.00
001-130-4830	TRANSFER IN	.00	.00	.00	.00	.00
001-150-4190	FIRE PERMITS	.00	.00	.00	.00	.00
001-150-4400	GRANTS	.00	.00	30,700.00	.00	30,700.00-
001-150-4500	FIRE SERVICE CHARGES	.00	1,103.75	1,700.47	.00	1,700.47-
001-150-4577	HAZMAT FEES	1,000.00	632.97	943.96	94.40	56.04
001-150-4578	COMMERCIAL INSP FEE	.00	.00	.00	.00	.00
001-150-4579	RENTAL INSP FEE	25,000.00	630.00	11,770.00	47.08	13,230.00
001-150-4700	DONATIONS FD DOG	.00	.00	.00	.00	.00
001-160-4500	AMBULANCE CHARGES	100,000.00	9,510.12	56,567.33	56.57	43,432.67
001-170-4122	BUILDING PERMITS	60,000.00	.00	21,791.25	36.32	38,208.75
001-170-4715	REFUNDS/REBATES	.00	.00	.00	.00	.00
001-170-4765	FINES/FEES	.00	.00	.00	.00	.00
001-190-4180	PET LICENSES	6,000.00	65.00	1,150.00	19.17	4,850.00
001-190-4500	ANIMAL CONTROL	.00	.00	.00	.00	.00
001-210-4715	REFUNDS/REIMBURSEMENTS	.00	.00	.00	.00	.00
001-240-4715	REFUNDS/REIMB	.00	.00	.00	.00	.00
001-430-4450	IOWA GRANTS	1,000.00	.00	.00	.00	1,000.00
001-430-4700	DONATIONS	500.00	.00	25.00	5.00	475.00
001-430-4715	REFUNDS/REIMB	.00	.00	160.00	.00	160.00-
001-470-4700	DONATIONS	.00	.00	.00	.00	.00
001-470-4704	SPECIAL EVENTS	.00	.00	635.00	.00	635.00-
001-470-4705	75TH DONATIONS	.00	.00	.00	.00	.00
001-470-4715	REFUNDS/REIMBURSEMENTS	.00	.00	.00	.00	.00
001-480-4500	RECREATION CHARGES	175,000.00	7,304.88	61,639.34	35.22	113,360.66
001-480-4830	TRANSFER IN	.00	.00	.00	.00	.00
001-610-4500	MISC CHARGES FOR SERVICE	.00	.00	18.00	.00	18.00-
001-620-4400	GRANTS	.00	.00	7,411.80	.00	7,411.80-
001-620-4715	REFUNDS/REIMBURSEMENTS	1,500.00	.00	.00	.00	1,500.00
001-910-4830	TRANSFER-IN	148,000.00	.00	.00	.00	148,000.00
001-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
001-950-4000	PROPERTY TAXES	1,795,030.00	45,963.52	1,005,607.37	56.02	789,422.63
001-950-4001	PROP TAXES-CITY OWNED CIVIC CT	29,917.00	762.98	16,762.32	56.03	13,154.68
001-950-4013	PROP TAXES-INSURANCE	50,974.00	1,308.15	28,553.14	56.02	22,420.86
001-950-4014	PROP TAXES-EMERGENCY MANAGEMEN	8,909.00	227.52	4,988.45	55.99	3,920.55
001-950-4015	PROPERTY TAXES	.00	.00	.00	.00	.00
001-950-4029	PROP TAXES-SUPPORT PUBLIC LIBR	59,834.00	1,532.27	33,521.61	56.02	26,312.39
001-950-4060	PROP-UTILITY TAX REPLACE EXCIS	20,060.00	.00	.00	.00	20,060.00
001-950-4065	UTILITY FRANCHISE FEES	260,000.00	.00	124,327.69	47.82	135,672.31
001-950-4085	HOTEL/MOTEL TAX	25.00	2,232.93	2,232.93	8,931.72	2,207.93-
001-950-4100	BEER/LIQUOR PERMITS	5,000.00	.00	2,126.88	42.54	2,873.12
001-950-4105	CIGARETTE PERMITS	600.00	100.00	175.00	29.17	425.00
001-950-4110	BUILDING TRADES LICENSES	300.00	.00	137.50	45.83	162.50
001-950-4122	BUILDING PERMITS	.00	.00	88.00	.00	88.00-

REVENUE REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0% Item #4C

ACCOUNT NUMBER	ACCOUNT TITLE	BUDGET ESTIMATE	MTD BALANCE	YTD BALANCE	PERCENT RECVD	UNCOLLECTED
001-950-4165	SPECIAL BUSINESS PERMITS	.00	.00	22.50	.00	22.50-
001-950-4300	INTEREST ON INVESTMENTS	10,000.00	589.16	7,501.97	75.02	2,498.03
001-950-4400	GRANTS	.00	500.00	10,500.00	.00	10,500.00-
001-950-4431	BANK FRANCHISE TAX	.00	.00	.00	.00	.00
001-950-4432	MONIES & CREDITS	.00	.00	.00	.00	.00
001-950-4433	STATE CONSOLIDATED PAYMENTS	.00	.00	.00	.00	.00
001-950-4435	PERSONAL PROPERTY TAX REPLACEM	.00	.00	.00	.00	.00
001-950-4436	MONIES & CREDITS-STATE (SEE PR	.00	.00	.00	.00	.00
001-950-4464	COMM/IND PROP TAX REPLACEMENT	70,403.00	.00	.00	.00	70,403.00
001-950-4500	CHARGES FOR SERVICE	.00	.00	9,192.30	.00	9,192.30-
001-950-4577	HAZMAT FEES	.00	.00	.00	.00	.00
001-950-4578	COMMERCIAL INSP FEE	.00	.00	.00	.00	.00
001-950-4579	RENTAL INSP FEE	.00	.00	.00	.00	.00
001-950-4700	DONATIONS	.00	250.00	250.00	.00	250.00-
001-950-4704	KWHB EVENTS	.00	.00	.00	.00	.00
001-950-4705	YOUTH COUNCIL	.00	.00	.00	.00	.00
001-950-4710	PAY IN LIEU OF TAXES NON FED	39,048.00	.00	.00	.00	39,048.00
001-950-4715	REFUNDS/REIMBURSEMENTS	5,000.00	.00	.00	.00	5,000.00
001-950-4750	SALE OF MERCHANDISE	.00	.00	310.00	.00	310.00-
001-950-4765	FINES & PENALTIES	1,000.00	147.50	9,711.63	971.16	8,711.63-
001-950-4810	SALE OF CAPITAL ASSETS	.00	.00	.00	.00	.00
001-950-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
001-950-4825	GENERAL FUND-BALANCE RESERVE	.00	.00	.00	.00	.00
110-210-4400	GRANTS	.00	.00	.00	.00	.00
110-210-4430	ROAD USE TAX	622,000.00	38,515.77	342,463.24	55.06	279,536.76
110-210-4440	GRANTS	.00	.00	.00	.00	.00
110-210-4715	REFUNDS/REIMBURSEMENTS	2,000.00	206.42	472.97	23.65	1,527.03
110-910-4830	TRANSFER-IN	.00	.00	.00	.00	.00
110-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
112-620-4731	DEPOSITS-BONDS	.00	.00	.00	.00	.00
112-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
112-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
112-950-4000	PROPERTY TAXES	1,095,274.00	28,044.83	591,575.43	54.01	503,698.57
112-950-4060	PROP-UTILITY TAX REPLACE EXCIS	11,299.00	.00	5,639.68	49.91	5,659.32
112-950-4300	INTEREST ON INVESTMENTS	.00	.00	.00	.00	.00
112-950-4464	COMM/IND PROP TAX REPLACEMENT	39,653.00	.00	16,330.39	41.18	23,322.61
112-950-4715	REFUNDS/REIMBURSEMENTS	46,000.00	51.97	18,073.28	39.29	27,926.72
112-950-4825	FUND BALANCE RESERVE	.00	.00	.00	.00	.00
112-950-4830	TRANSFER IN	25,000.00	.00	.00	.00	25,000.00
113-110-4000	PROPERTY TAXES	.00	.00	.00	.00	.00
113-110-4300	INTEREST ON INVESTMENTS	.00	11.79	77.16	.00	77.16-
113-110-4830	TRANSFER IN	.00	.00	.00	.00	.00
113-910-4830	TRANSFER IN	13,000.00	.00	.00	.00	13,000.00
114-110-4300	INTEREST ON INVESTMENTS	.00	.00	.00	.00	.00
114-110-4571	POLICE SERVICES	.00	.00	14,000.00	.00	14,000.00-
114-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
115-110-4300	INTEREST ON INVESTMENTS	.00	.00	2.31	.00	2.31-
115-110-4571	POLICE SERVICES	1,140.00	.00	.00	.00	1,140.00
115-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
115-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
119-910-4830	TRANSFER IN	.00	.00	.00	.00	.00

REVENUE REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0%
 Item #4C

ACCOUNT NUMBER	ACCOUNT TITLE	BUDGET ESTIMATE	MTD BALANCE	YTD BALANCE	PERCENT RECVD	UNCOLLECTED
119-950-4000	PROPERTY TAXES	.00	.00	.00	.00	.00
119-950-4464	COMM/IND PROP TAX REPLACEMENT	.00	.00	.00	.00	.00
121-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
121-950-4090	LOST TAX 50% OTHER	.00	89,842.88	221,586.23	.00	221,586.23-
121-950-4091	LOST TAX 50% PROP TAX	.00	89,842.88	221,586.22	.00	221,586.22-
125-530-4400	GRANTS	.00	.00	.00	.00	.00
125-530-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
125-750-4500	CHARGES FOR SERVICE	.00	.00	.00	.00	.00
125-750-4800	SALE OF LAND	.00	.00	.00	.00	.00
125-910-4830	TRANSFER-IN	.00	.00	.00	.00	.00
125-950-4050	TAX INCREMENT TAXES	3,142,387.00	41,128.49	1,128,509.97	35.91	2,013,877.03
125-950-4300	INTEREST ON INVESTMENTS	.00	.00	.00	.00	.00
125-950-4500	CHARGES FOR SERVICE	.00	.00	.00	.00	.00
125-950-4820	TAX INCREMENT-FUND BAL RESERVE	.00	.00	.00	.00	.00
145-910-4830	TRANSFER IN	217,315.00	.00	.00	.00	217,315.00
145-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
175-110-4780	MISC FINES ATE REVENUE	.00	.00	.00	.00	.00
175-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
200-210-4820	BOND PROCEEDS 2013A	.00	.00	.00	.00	.00
200-530-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
200-910-4830	TRANSFER-IN	813,898.00	.00	.00	.00	813,898.00
200-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
200-950-4000	PROPERTY TAXES	779,842.00	18,877.80	418,247.15	53.63	361,594.85
200-950-4015	PROPERTY TAXES	.00	.00	.00	.00	.00
200-950-4060	PROP-UTILITY TAX REPLACE EXCIS	6,416.00	.00	3,202.70	49.92	3,213.30
200-950-4464	COMM/IND PROP TAX REPLACEMENT	22,793.00	.00	9,946.02	43.64	12,846.98
200-950-4799	CHARGES FOR SERVICE	.00	.00	.00	.00	.00
303-750-4400	GRANTS	.00	.00	.00	.00	.00
303-750-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
303-910-4830	TRANSFER-IN	.00	.00	.00	.00	.00
304-750-4400	GRANTS	.00	.00	.00	.00	.00
304-750-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
305-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
305-950-4445	STIMULUS REVENUE (IA DOT)	.00	.00	.00	.00	.00
306-750-4440	GRANTS	.00	.00	.00	.00	.00
306-750-4820	BOND PROCEEDS	.00	.00	.00	.00	.00
306-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
306-950-4300	INTEREST	.00	.00	.00	.00	.00
307-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
308-750-4440	State Grants	.00	.00	.00	.00	.00
308-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
309-750-4820	2014A BOND PROCEEDS	.00	.00	.00	.00	.00
309-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
310-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
310-950-4820	PROCEEDS FROM DEBT/LOAN	.00	.00	.00	.00	.00
311-430-4705	DONATIONS - HUB	.00	.00	.00	.00	.00
311-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
311-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
312-750-4440	63 & HICKMAN STREETSCAPE GRANT	.00	.00	.00	.00	.00
312-910-4830	63/HICKMAN STREETSCAPE TRNS IN	.00	.00	.00	.00	.00
313-750-4820	PROCEEDS FROM DEBT/LOAN	.00	.00	.00	.00	.00

REVENUE REPORT
CALENDAR 12/2019, FISCAL 6/2020

PCT OF FISCAL YTD 50.0%
 Rem #4C

ACCOUNT NUMBER	ACCOUNT TITLE	BUDGET ESTIMATE	MTD BALANCE	YTD BALANCE	PERCENT RECVD	UNCOLLECTED
313-750-4830	TRANSFER IN	2,800,000.00	.00	.00	.00	2,800,000.00
313-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
314-750-4820	PROCEEDS FROM DEBT/LOAN	.00	.00	.00	.00	.00
314-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
314-910-4831	TRANSFER IN - TIF	.00	.00	.00	.00	.00
315-210-4440	STATE GRANTS	.00	.00	.00	.00	.00
315-210-4710	REIMBURSEMENTS	.00	.00	.00	.00	.00
315-210-4731	DEPOSIT-BONDS	.00	.00	.00	.00	.00
315-430-4825	FUND BALANCE RESERVE	.00	.00	.00	.00	.00
315-910-4830	TRANSFER IN	110,000.00	.00	.00	.00	110,000.00
316-210-4440	STATE GRANTS	.00	.00	.00	.00	.00
316-210-4710	REIMBURSEMENTS	.00	.00	.00	.00	.00
316-210-4731	DEPOSIT-BONDS	.00	.00	.00	.00	.00
316-430-4825	FUND BALANCE RESERVE	.00	.00	.00	.00	.00
316-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
317-430-4440	STATE GRANTS	.00	.00	.00	.00	.00
317-430-4710	REIMBURSEMENTS	.00	.00	.00	.00	.00
317-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
319-210-4820	PROCEEDS FROM DEBT/LOAN	.00	.00	.00	.00	.00
319-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
400-910-4830	TRANSFER IN-CAP EQUIPMENT FUND	.00	.00	.00	.00	.00
401-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
600-810-4300	INTEREST ON INVESTMENTS	.00	.00	.00	.00	.00
600-810-4500	UTILITY CHARGES FOR SERVICE	.00	.00	.00	.00	.00
610-815-4500	UTILITY CHARGES FOR SERVICE	92,350.00	.00	127.50	.14	92,222.50
610-815-4715	REIMBURSEMENT URB/WH DISTRICT	100,000.00	.00	.00	.00	100,000.00
610-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
670-840-4500	YARD WASTE STICKER SALES	18,000.00	.00	2,518.75	13.99	15,481.25
670-840-4501	CURB-IT RECYCLING FEES	76,500.00	5,238.77	5,839.17	7.63	70,660.83
670-840-4502	UTILITY CHARGES FOR SERVICE	256,969.00	19,441.25	129,616.64	50.44	127,352.36
670-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
740-865-4400	STORM WATER GRANTS	.00	.00	.00	.00	.00
740-865-4441	FEMA REIMBURSEMENT	.00	.00	.00	.00	.00
740-865-4500	UTILITY CHARGES FOR SERVICE	345,000.00	30,564.56	188,487.94	54.63	156,512.06
740-865-4715	REFUNDS/REBATES	.00	.00	.00	.00	.00
740-910-4830	TRANSFER IN	.00	.00	.00	.00	.00
810-910-4820	Bond Proceeds	.00	.00	.00	.00	.00
810-910-4830	TRANSFER-IN	.00	.00	.00	.00	.00
810-950-4300	INTEREST ON INVESTMENTS	.00	.00	.00	.00	.00
	DIFFERENCE	13,856,836.00	455,944.42	5,008,435.69	36.14	8,848,400.31
	PROOF	13,856,836.00	455,944.42	5,008,435.69	36.14	8,848,400.31

City: Bentonville **State:** Arkansas **Zip:** 72712 Item #4D
Position: Assistant Secretary
% of Ownership: 0.00% **U.S. Citizen:** **Yes**
Matthew Allen
First Name: Matthew **Last Name:** Allen
City: Rogers **State:** Arkansas **Zip:** 72758
Position: Assistant Treasurer
% of Ownership: 0.00% **U.S. Citizen:** **Yes**

Insurance Company Information

Insurance Company: <u>IMT Insurance Co</u>	
Policy Effective Date: <u>03/15/2019</u>	Policy Expiration <u>01/01/1900</u>
Bond Effective <u>2</u>	Dram Cancel Date:
Outdoor Service Effective	Outdoor Service Expiration
Temp Transfer Effective	Temp Transfer Expiration Date:

Name of Applicant: <u>Kum & Go LC</u>		
Name of Business (DBA): <u>Kum & Go # 4098</u>		
Address of Premises: <u>7229 University Ave</u>		
City <u>Windsor Heights</u>	County: <u>Polk</u>	Zip: <u>50311</u>
Business <u>(515) 279-0568</u>		
Mailing <u>1459 Grand Avenue</u>		
City <u>Des Moines</u>	State <u>IA</u>	Zip: <u>50309</u>

Contact Person

Name <u>Jody Deiter</u>
Phone: <u>(515) 457-6249</u> Email <u>licenses@kumango.com</u>

Classification Class E Liquor License (LE)

Term: 12 months

Effective Date: 03/15/2019

Expiration Date: 03/14/2020

Privileges:

- Class B Wine Permit
- Class C Beer Permit (Carryout Beer)
- Class E Liquor License (LE)
- Sunday Sales

Status of Business

BusinessType: <u>Limited Liability Company</u>
Corporate ID Number: <u>XXXXXXXXXX</u> Federal Employer ID <u>XXXXXXXXXX</u>

Ownership

Krause Group LTD

First Name: Krause Group **Last Name:** LTD
City: Des Moines **State:** Iowa **Zip:** 50309
Position: Shareholder
% of Ownership: 100.00% **U.S. Citizen:** Yes

Kyle Krause

First Name: Kyle **Last Name:** Krause
City: Waukee **State:** Iowa **Zip:** 50263
Position: CEO
% of Ownership: 0.00% **U.S. Citizen:** Yes

Craig Bergstrom

First Name: Craig **Last Name:** Bergstrom

ITEM # _____
 DATE: January 20, 2020

COUNCIL ACTION FORM

AGENDA ITEM: CONSIDER APPROVAL OF CHANGE TO ORDINANCE 121.07 RELATED TO THE SALE, GIVING, OR OTHERWISE SUPPLYING OF TOBACCO PRODUCTS TO PERSONS UNDER 21 YEARS OF AGE.

HISTORY:

On December 20, 2019, the President of the United States signed legislation to amend the Federal Food, Drug, and Cosmetic Act, and raise the federal minimum age of sale of tobacco products from 18 to 21 years. It is now illegal, federally, for a retailer to sell any tobacco product – including cigarettes, cigars and e-cigarettes – to anyone under 21.

The law signed is federal law, however the State of Iowa has yet to enact local legislation necessary to enforce the federal standard. As such, it is the recommendation of Police Department staff that the City Council consider an amendment to City Code 40.07.01, 40.07.03, and 121.07.01 raising the legal age for the sale, giving or otherwise supplying of tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes to a minimum of twenty-one (21) years of age. The current City Code prohibits the sale, giving, or otherwise supplying those under 18 years of age with such products, which conflicts with the new federal law.

This Police Department is not able to easily enforce Federal law without engaging our Federal law enforcement partners, only State and local laws. As such, the proposed amendments of City Code would ensure our ability to enforce the 21-year-old standard for the sale, giving, or otherwise supplying of tobacco products. Without the City amending our local Code, we would be forced to wait on legislation at the State level to be able to enforce the rule.

An additional note, this amendment and the new Federal law surround **only** the sale, giving, or otherwise supplying of tobacco. There has been no change in any laws with regards to possession of tobacco at this point. We do not feel it would be a wise decision for the City to further restrict possession of tobacco as the conflict with Federal, State and surrounding communities' laws would cause confusion and be difficult to enforce.

Finally, should the State of Iowa enact legislation raising the minimum age for sale, giving, or otherwise supplying such products, the City Code would require an amendment to be in compliance with any legislation at the State level.

POSSIBLE SOLUTIONS/OPTIONS:

1. Set a public hearing for February 3, 2020 Council Meeting regarding proposed changes to Ordinance 40.07.01, 40.07.03, and 121.07.01 related to the legal age for the sale, giving or otherwise supplying of tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes.
2. Direct staff to make changes to the proposal and bring back before Council.
3. Direct staff to wait for State legislation before any changes are made to City Code.

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE CODE OF ORDINANCES FOR THE CITY OF WINDSOR HEIGHTS, IOWA, BY AMENDING CHAPTERS 40 AND 121 RELATED TO THE SALE, GIVING, OR OTHERWISE SUPPLYING OF TOBACCO PRODUCTS TO PERSONS UNDER 21 YEARS OF AGE

WHEREAS, the City of Windsor Heights seeks to promote the public health, safety, general welfare and aesthetics of the community through consistent, content- neutral and nondiscriminatory code requirements within its city limits; and

WHEREAS, On December 20, 2019, the President of the United States signed legislation to amend the Federal Food, Drug, and Cosmetic Act, and raise the federal minimum age of sale of tobacco products from 18 to 21 years; and

WHEREAS, in conformance with federal law, the City Council of the City of Windsor Heights do hereby find and declare that the revisions to Chapters 40 and 121 ordinance are necessary and will promote the health, safety, general welfare and aesthetics of the community.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA:

SECTION 1. Purpose. The purpose of this ordinance is to amend Chapters 40 and 121 of the Windsor Heights Code of Ordinances to increase the minimum age of sale of tobacco products within the City of Windsor Heights from 18 to 2.

SECTION 2. Amend Chapter 40.07 MINORS, Subsection 01 CIGARETTES AND TOBACCO. Chapter 40.07.01 of the Windsor Heights Code of Ordinances, Public Offenses, Minors is amended by adding and deleting the following language:

40.07.01 CIGARETTES AND TOBACCO. It is unlawful for any person under twenty-one (21) years of age to purchase, or attempt to purchase any tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes. It is unlawful for any person under eighteen (18) years of age to smoke, use, or possess, purchase, or attempt to purchase any tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes. Possession of tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes by a person under eighteen years of age shall not constitute a violation of this section if said person possesses the tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes as part of the person's employment and said person is employed by a person who holds a valid permit under Chapter 453A of the Code of Iowa or who lawfully offers for sale or sells cigarettes or tobacco products.

SECTION 3. Amend Chapter 40.07 MINORS, Subsection 03 PERSONS UNDER LEGAL AGE. Chapter 40.07.03 of the Windsor Heights Code of Ordinances, Public Offenses, Minors is amended by adding and deleting the following language:

40.07.03 PERSONS UNDER LEGAL AGE. See Section 121.07 of this Code of Ordinances for provisions relating to persons selling, giving, or otherwise supplying tobacco, tobacco products, or cigarettes to persons under ~~18~~ 21 years of age.

SECTION 4. Amend Chapter 121.07 CIGARETTE AND TOBACCO PERMITS, Subsection 07 PERSONS UNDER LEGAL AGE. Chapter 121.07.07 of the Windsor Heights Code of Ordinances, Cigarettes and Tobacco Permits, Person Under Legal Age is amended by adding and deleting the following language:

121.07.01 PERSONS UNDER LEGAL AGE. No person shall sell, give, or otherwise supply any tobacco, tobacco products, alternative nicotine products, vapor products, or cigarettes to any person under ~~eighteen (18)~~ twenty-one (21) years of age. The provision of this section includes prohibiting a minor from purchasing tobacco, tobacco products, alternative nicotine products, vapor products, and cigarettes from a vending machine. If a retailer or employee of a retailer violates the provisions of this section, the Council shall, after written notice and hearing, and in addition to the other penalties fixed for such violation, assess the following:

1. For a first violation, the retailer shall be assessed a civil penalty in the amount of three hundred dollars (\$300.00). Failure to pay the civil penalty as ordered under this subsection shall result in automatic suspension of the permit for a period of fourteen (14) days.
2. For a second violation within a period of two years, the retailer shall be assessed a civil penalty in the amount of one thousand five hundred dollars (\$1,500.00) or the retailer's permit shall be suspended for a period of thirty (30) days. The retailer may select its preference in the penalty to be applied under this subsection.
3. For a third violation within a period of three years, the retailer shall be assessed a civil penalty in the amount of \$1,500.00 and the retailer's permit shall be suspended for a period of 30 days.
4. For a fourth violation within a period of three years, the retailer shall be assessed a civil penalty in the amount of \$1,500.00 and the retailer's permit shall be suspended for a period of sixty (60) days.
5. For a fifth violation within a period of four years, the retailer's permit shall be revoked.

The Clerk shall give ten (10) days' written notice to the retailer by mailing a copy of the notice to the place of business as it appears on the application for a permit. The notice shall state the reason for the contemplated action and the time and place at which the retailer may appear and be heard.

SECTION 5. Repealer. All ordinances or parts of ordinances in conflict with the

provisions of this ordinance are hereby repealed.

SECTION 6. Severability. If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

SECTION 7. Effective Date. This ordinance shall be effective after the final passage, approval and publication as provided by law.

Passed and Approved this ___ day of _____, 2020.

1st Reading: _____

2nd Reading: _____

3rd Reading: _____

Publish Date: _____

Dave Burgess, Mayor

(SEAL)

ATTEST:

Travis Cooke, City Clerk

RESOLUTION NO. 2020-5

A RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE 2020 STREET RECONSTRUCTION PROJECTS AND AUTHORIZING THE PUBLICATION OF BIDS

WHEREAS, it is deemed advisable and necessary to construct certain public improvements described in general as the 2020 Street Reconstruction Projects, and

WHEREAS, the City Engineer has prepared plans, specifications and form of contract, together with estimate of cost, which are presently on file in the office of the City Clerk for public inspection; and

WHEREAS, before the plans, specifications, form of contract and estimate of cost may be adopted, and contract for the construction of the public improvements is entered into, it is necessary, pursuant to Chapter 26 of the Code of Iowa to hold a public hearing and to advertise for bids.

NOW, THEREFORE BE IT HEREBY RESOLVED by the City of Windsor Heights City Council in session this 20th Day of January, 2020, that it is hereby determined that it is necessary and advisable to construct certain public improvements described in general as 2020 Street Reconstruction Projects, in the manner set forth in the plans and specifications, and form of contract, above referred to, the cost thereof to be paid in accordance with the provisions as set out in the published Notice of Hearing and Letting. The public improvements are more generally described as follows:

Construction of the College Drive Reconstruction project including all labor, materials and equipment necessary for street pavement, driveway approaches, sidewalk, watermain and storm sewer construction as well as traffic control, mobilization, and other miscellaneous construction on College Drive between Harbach Boulevard and 73rd Street.

Construction of the 2020 Street Reconstruction project including all labor, materials and equipment necessary for street pavement, driveway approaches, sidewalk, watermain and storm sewer construction as well as traffic control, mobilization, and other miscellaneous construction on Allison Avenue between 64th Street and 66th Street and 69th Street between School Street and University Avenue.

BE IT FURTHER RESOLVED that the amount of the bid security to accompany each bid shall be in an amount which shall conform to the provisions of the notice to bidders approved as part of the specifications.

BE IT FURTHER RESOLVED that the City Clerk be and is hereby directed to publish Notice to Bidders once in the Des Moines Register. Publication shall be not less than four days prior to the 20th Day of February, 2020, which is hereby fixed as the date for receiving bids. The bids are to be filed by 2:00 p.m. on such date.

The City Council hereby delegates to Interim City Administrator or his designee the duty of receiving, opening, and tabulating bids for construction of the project. Bids shall be received and opened as provided in the public notices and the results of the bids shall be considered at the meeting of this Council on March 2, 2020, at 6:00 p.m.

BE IT FURTHER RESOLVED, that the City Clerk be and is hereby directed to publish notice of hearing once in such newspaper, the publication to be not less than four days nor more than twenty days prior to the date hereinafter fixed as the date for a public hearing on the plans, specifications, form of contract and estimate of costs for the project, the hearing to be on March 2, 2020, at 6:00 p.m.

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

CITY OF WINDSOR HEIGHTS, IOWA

CONSTRUCTION PLANS FOR

COLLEGE DRIVE RECONSTRUCTION

WINDSOR HEIGHTS, IA

JANUARY 2020

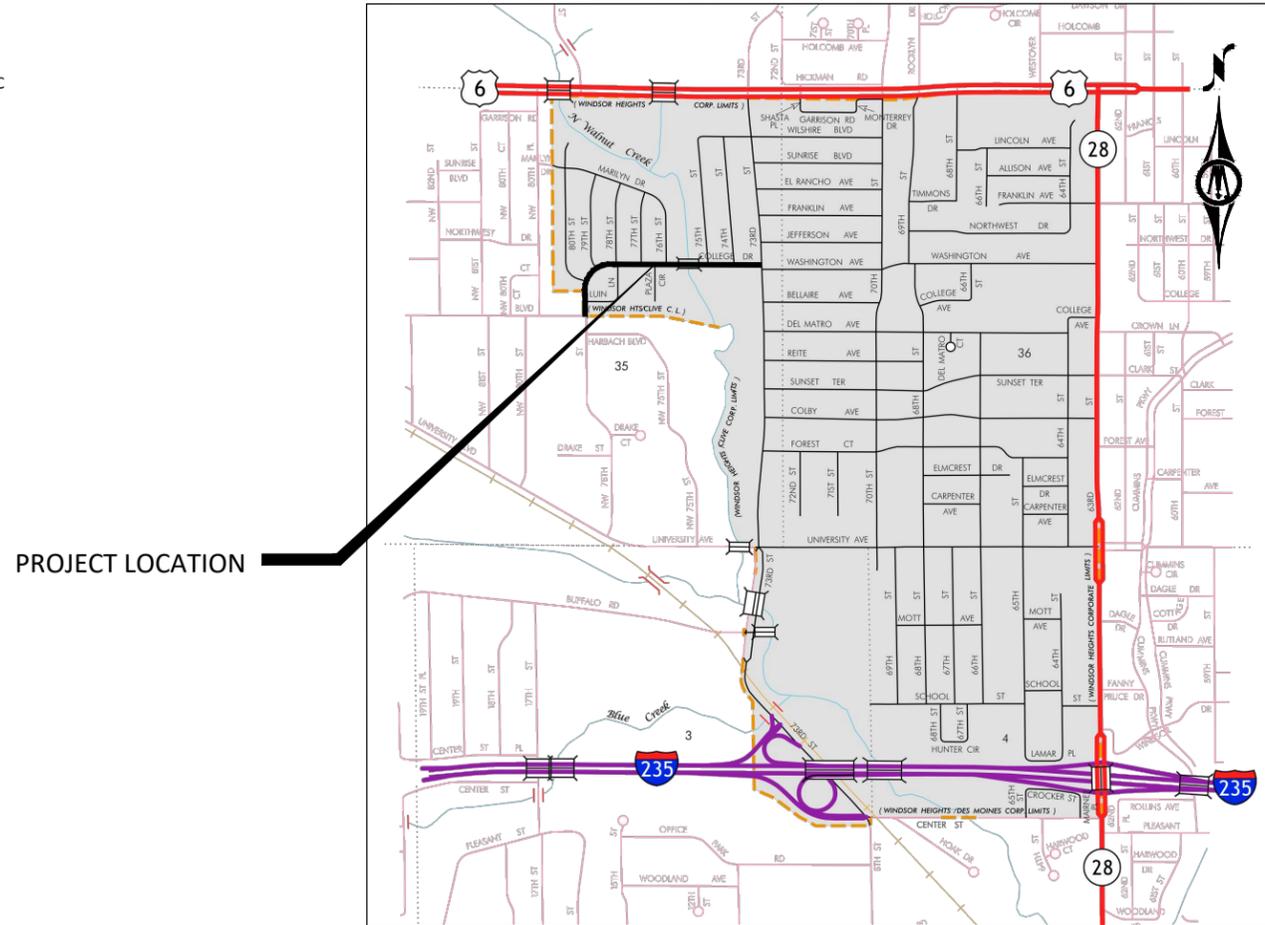
GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS".

IOWA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION", VERSION OCTOBER 2015 AND ALL CURRENT GENERAL SUPPLEMENTAL SPECIFICATIONS AND MATERIALS INSTRUCTIONAL MEMORANDUM SHALL GOVERN AS REFERENCED.

MUTCD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW, NOTIFY IOWA ONE CALL 1-800-292-8989



PROJECT LOCATION

MAP OF THE
CITY OF WINDSOR HEIGHTS
POLK COUNTY, IA

SHEET INDEX			
SHEET NUMBER	DESCRIPTION	REVISION	DATE ISSUED
A.1	TITLE SHEET	0	1/20/2020
A.2	LEGEND	0	1/20/2020
B.1	TYPICAL SECTIONS	0	1/20/2020
B.2 - B.4	TYPICAL DETAILS	0	1/20/2020
C.1	GENERAL NOTES	0	1/20/2020
C.2	ESTIMATED QUANTITIES	0	1/20/2020
C.3 - C.5	ESTIMATE REFERENCE NOTES	0	1/20/2020
C.6	TABULATIONS	0	1/20/2020
C.7 - C.9	EROSION CONTROL PLAN	0	1/20/2020
D.1 - D.5	PLAN AND PROFILE - COLLEGE DRIVE	0	1/20/2020
E.1 - E.9	PLAN AND PROFILE - SIDEROADS	0	1/20/2020
G.1 - G.2	REFERENCE TIES AND BENCH MARKS	0	1/20/2020
J.1	TRAFFIC CONTROL NARRATIVE	0	1/20/2020
J.2	PROJECT STAGING	0	1/20/2020
J.3	DETOUR	0	1/20/2020
J.4 - J.7	STAGING SHEETS	0	1/20/2020
L.1 - L.5	INTERSECTION DETAILS	0	1/20/2020
L.6 - L.10	JOINTING PLAN	0	1/20/2020
M.1 - M.4	STORM SEWER CROSS-RUNS	0	1/20/2020
MSA.1 - MSA.5	SANITARY SEWER PLAN	0	1/20/2020
MWM.1 - MWM.5	WATER MAIN PLAN & PROFILE	0	1/20/2020
N.1	PAVEMENT MARKINGS	0	1/20/2020
R.1 - R.3	REMOVALS	0	1/20/2020
S.1 - S.6	SIDEWALK COMPLIANCE	0	1/20/2020
S.7 - S.17	ADA COMPLIANCE	0	1/20/2020
U.1 - U.3	HMA PAVEMENT (BID ALTERNATE 2)	0	1/20/2020
W.1 - W.6	CROSS SECTIONS	0	1/20/2020

© Bolton & Menk, Inc. 2020. All Rights Reserved. H:\WINDSOR\HH_C\IA\A13118668\Task_02_College Drive\CAD\C3D\Sheets\118668_A01.dwg 1/15/2020 5:01 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

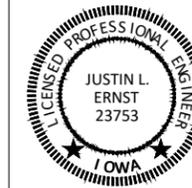


DESIGNED NAS
SEALED JLE
CHECKED NG
CLIENT PROJ. NO. A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION

TITLE SHEET

SHEET
A.1



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

JUSTIN L. ERNST, P.E.

REG. NO. 23753 DATE: 01-15-2020

MY LICENSE RENEWAL DATE IS Dec. 31, 2021

PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEET EXCEPT MWM SHEETS

EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		SIGN TRAFFIC
	AIR CONDITION UNIT		SIGNAL CONTROL CABINET
	ANTENNA		SOIL BORING
	AUTO SPRINKLER CONNECTION		SIREN
	BARRICADE PERMANENT		TELEPHONE BOOTH
	BASKETBALL POST		TILE INLET
	BENCH		TILE OUTLET
	BIRD FEEDER		TILE RISER
	BUSH-DECIDUOUS		TRANSFORMER-ELECTRIC
	CATCH BASIN RECTANGULAR CASTING		TREE-CONIFEROUS
	CATCH BASIN CIRCULAR CASTING		TREE-DEAD
	CURB STOP		TREE-DECIDUOUS
	CLEAN OUT		TREE STUMP
	CULVERT END		TRAFFIC ARM BARRIER
	DRINKING FOUNTAIN		TRAFFIC SIGNAL
	DOWN SPOUT		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VENT PIPE
	GRILL		WATER SPIGOT
	GUY WIRE ANCHOR		WELL
	HANDHOLE		WETLAND DELINEATED MARKER
	HANDICAP SPACE		WETLAND
	IRRIGATION SPRINKLER HEAD		YARD LIGHT
	IRRIGATION VALVE BOX		WET WELL
	LIFT STATION CONTROL PANEL		YARD HYDRANT
	LIFT STATION		
	MAILBOX		
	MANHOLE-COMMUNICATION		
	MANHOLE-ELECTRIC		
	MANHOLE-GAS		
	MANHOLE-HEAT		
	MANHOLE-SANITARY SEWER		
	MANHOLE-STORM SEWER		
	MANHOLE-UTILITY		
	MANHOLE-WATER		
	METER		
	ORDER MICROPHONE		
	PARKING METER		
	PAVEMENT MARKING		
	PEDESTAL-COMMUNICATION		
	PEDESTAL-ELECTRIC		
	PEDESTRIAN PUSH BUTTON		
	PICNIC TABLE		
	POLE-LIGHT		
	POLE-UTILITY		
	POST		
	RAILROAD SIGNAL POLE		
	REGULATION STATION GAS		
	SATELLITE DISH		

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW

SURVEY SYMBOLS

	BENCH MARK LOCATION
	CONTROL POINT
	MONUMENT IRON FOUND
	CAST IRON MONUMENT

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

HATCH PATTERNS

	ASPHALT		GRAVEL
	CONCRETE		

EXISTING PRIVATE UTILITY LINES

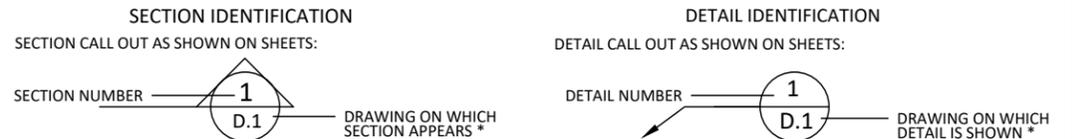
Item #5B

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY **IOWA ONE CALL**, 1-800-292-8989.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

SECTION AND DETAIL IDENTIFICATION



* NOTE: IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED BY A LINE.

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	SCH	SCHEDULE
ADJ	ADJUST	GU	GUTTER	SERV	SERVICE
ALT	ALTERNATE	GV	GATE VALVE	SHLD	SHOULDER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	STA	STATION
BLDG	BUILDING	HH	HANDHOLE	STD	STANDARD
BMP	BEST MANAGEMENT PRACTICE	HP	HIGH POINT	STM	STORM SEWER
BR	BEGIN RADIUS	HWL	HIGH WATER LEVEL	TC	TOP OF CURB
BV	BUTTERFLY VALVE	HYD	HYDRANT	TEMP	TEMPORARY
CB	CATCH BASIN	I	INVERT	TNH	TOP NUT HYDRANT
C&G	CURB AND GUTTER	K	CURVE COEFFICIENT	TYP	TYPICAL
CIP	CAST IRON PIPE	L	LENGTH	VCP	VITRIFIED CLAY PIPE
CIPP	CURED-IN-PLACE PIPE	LO	LOWEST OPENING	VERT	VERTICAL
CL	CENTER LINE	LP	LOW POINT	VPC	VERTICAL POINT OF CURVE
CL	CLASS	LT	LEFT	VPI	VERTICAL POINT OF INTERSECTION
CMP	CORRUGATED METAL PIPE	MH	MANHOLE	VPT	VERTICAL POINT OF TANGENT
CO	CLEAN OUT	MIN	MINIMUM	WM	WATERMAIN
C.O.	CHANGE ORDER	MR	MID RADIUS		
COMM	COMMUNICATION	NMC	NON-METALLIC CONDUIT		
CON	CONCRETE	NTS	NOT TO SCALE	AC	ACRES
CSP	CORRUGATED STEEL PIPE	NWL	NORMAL WATER LEVEL	CF	CUBIC FEET
CLVT	CULVERT	OHW	ORDINARY HIGH WATER LEVEL	CV	COMPACTED VOLUME
DIA	DIAMETER	PC	POINT OF CURVE	CY	CUBIC YARD
DIP	DUCTILE IRON PIPE	PCC	PORTLAND CEMENT CONCRETE	EA	EACH
DWY	DRIVEWAY	PED	PEDESTRIAN, PEDESTAL	EV	EXCAVATED VOLUME
E	EXTERNAL CURVE DISTANCE	PERF	PERFORATED PIPE	LB	POUND
EASE	EASEMENT	PERM	PERMANENT	LF	LINEAR FEET
ELEC	ELECTRIC	PI	POINT OF INTERSECTION	LS	LUMP SUM
ELEV	ELEVATION	PL	PROPERTY LINE	LV	LOOSE VOLUME
EOF	EMERGENCY OVERFLOW	PRC	POINT OF REVERSE CURVE	SF	SQUARE FEET
ER	END RADIUS	PT	POINT OF TANGENT	SV	STOCKPILE VOLUME
EX	EXISTING	PVC	POLYVINYL CHLORIDE PIPE	SY	SQUARE YARD
FES	FLARED END SECTION	PVMT	PAVEMENT		
F-F	FACE TO FACE	R	RADIUS		
FF	FINISHED FLOOR	RCP	REINFORCED CONCRETE PIPE		
F&I	FURNISH AND INSTALL	RET	RETAINING		
FM	FORCEMAIN	ROW	RIGHT-OF-WAY		
FO	FIBER OPTIC	RSC	RIGID STEEL CONDUIT		
F.O.	FIELD ORDER	RT	RIGHT		
GRAN	GRANULAR	SAN	SANITARY SEWER		

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

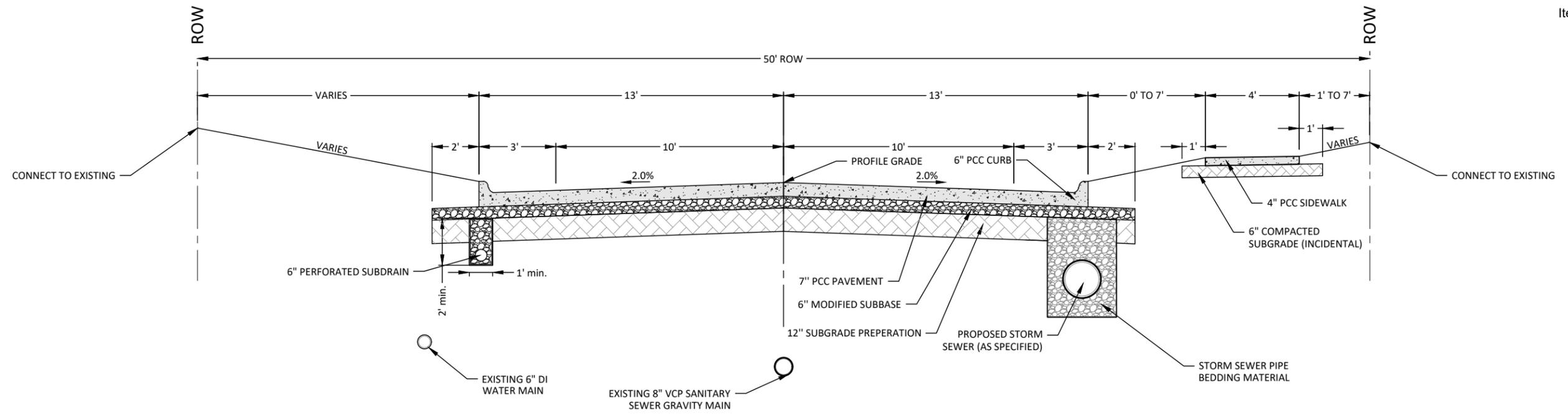
CITY OF WINDSOR HEIGHTS, IOWA

COLLEGE DRIVE RECONSTRUCTION

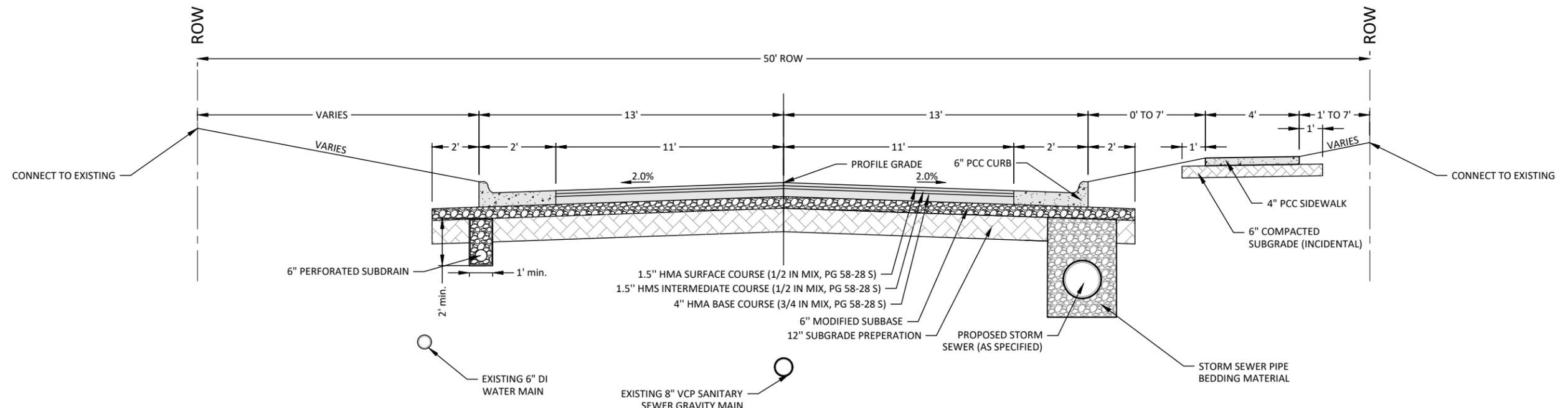
LEGEND

SHEET

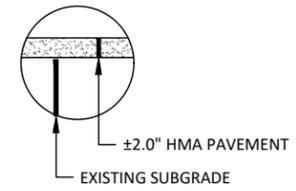
A.2



TYPICAL SECTION - PCC PAVEMENT (ALTERNATE A)
NOT TO SCALE



TYPICAL SECTION - HMA PAVEMENT (ALTERNATE B)
NOT TO SCALE



NOTE:
1. DEPTHS ARE AN AVERAGE OF 5 CORES
2. ONE CORE SHOWED 4.5" PCC & 1.5" HMA NEAR 73RD STREET.

TYPICAL EXISTING PAVEMENT SECTION
NOT TO SCALE

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



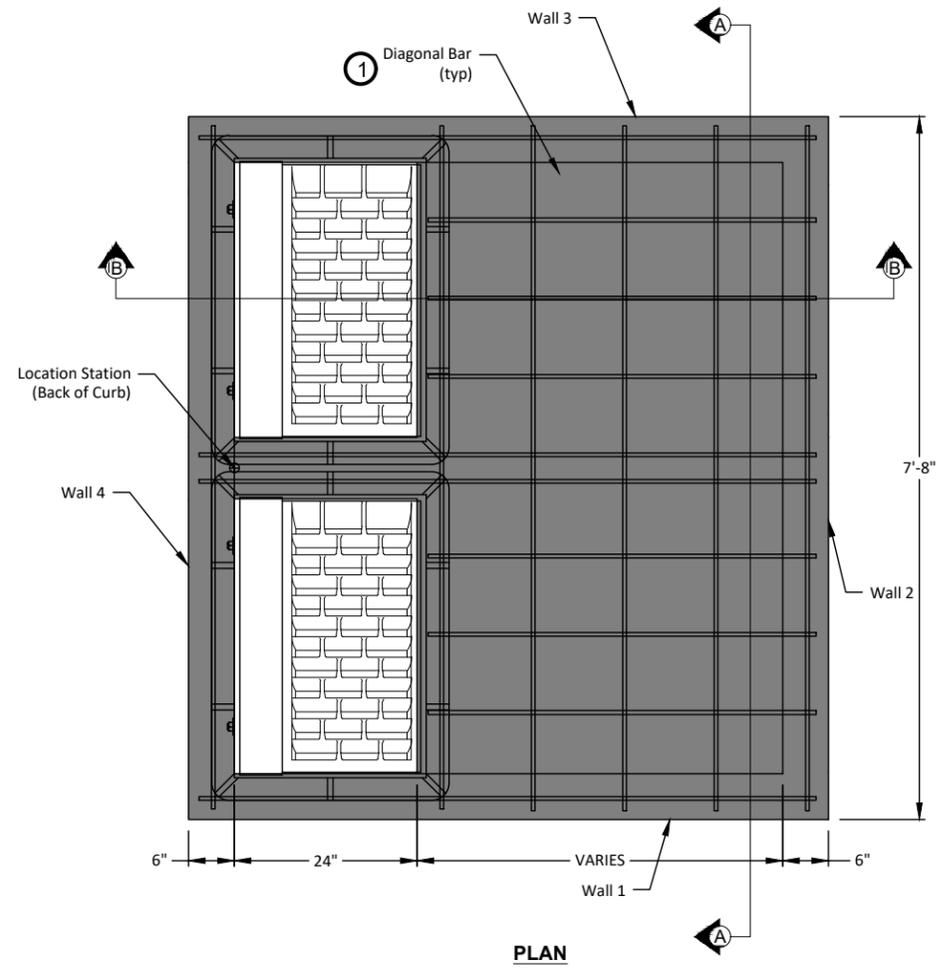
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



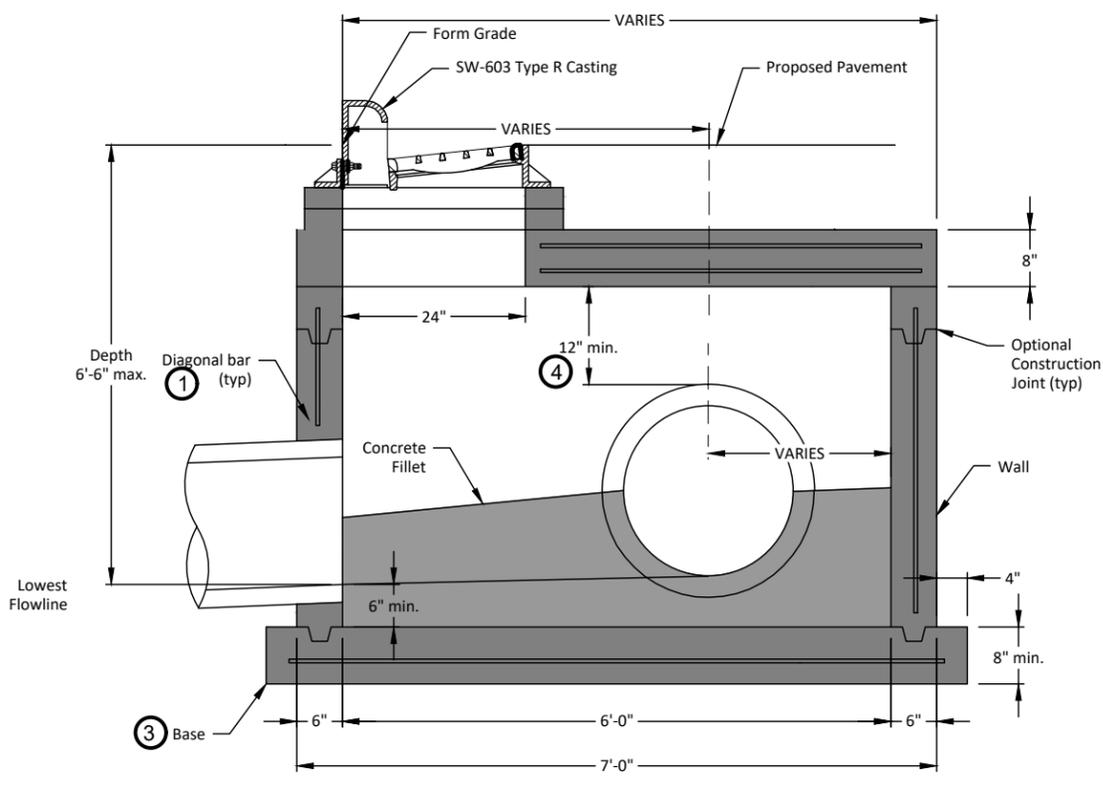
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
TYPICAL SECTION

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI_A13\118668\Task 02_College Drive\Drawings\Sheet\118668_B.01.dwg 1/19/2020 10:48 AM



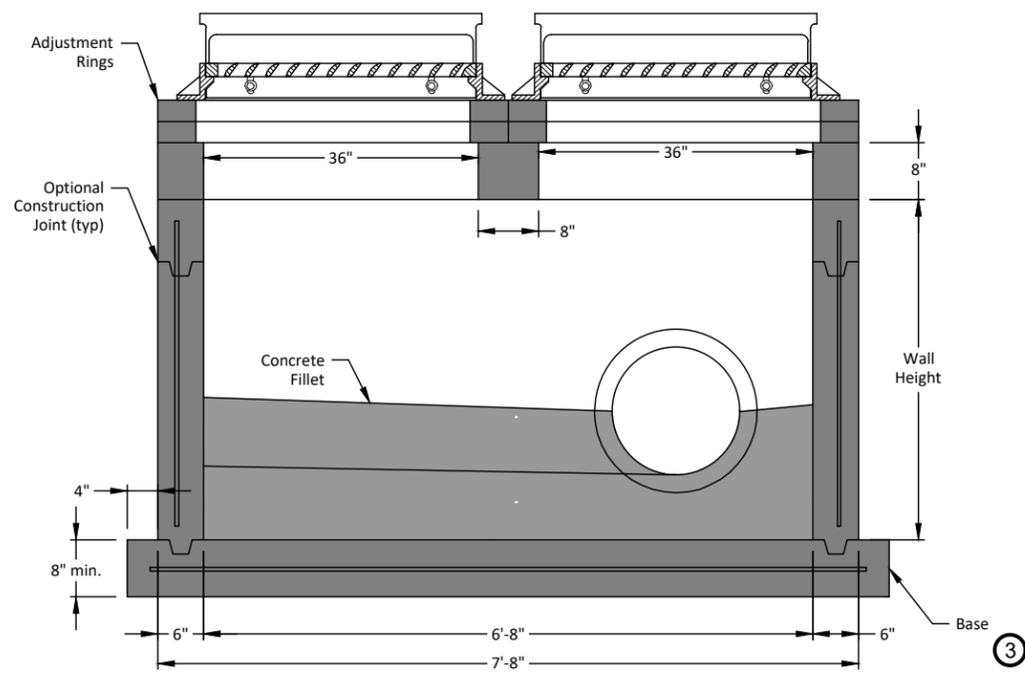
PLAN



SECTION B-B

- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Refer to SW-514 for boxout details.
- ③ Cast-in-place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.
- ④ 12 inch minimum wall height above all pipes.

- NOTES:
1. STORM SEWER PIPES IS AS SPECIFIED IN PLANS.
 2. REINFORCING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.
 3. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWING OF EACH STRUCTURE FOR APPROVAL.
 4. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATION.



SECTION A-A

A
D.1 SW-506 MODIFIED
NTS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
TYPICAL DETAILS

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CD\A13.118668\Task 02_College Drive\CAD\CAD\Sheets\118668_B.01.dwg 1/10/2020 10:48 AM

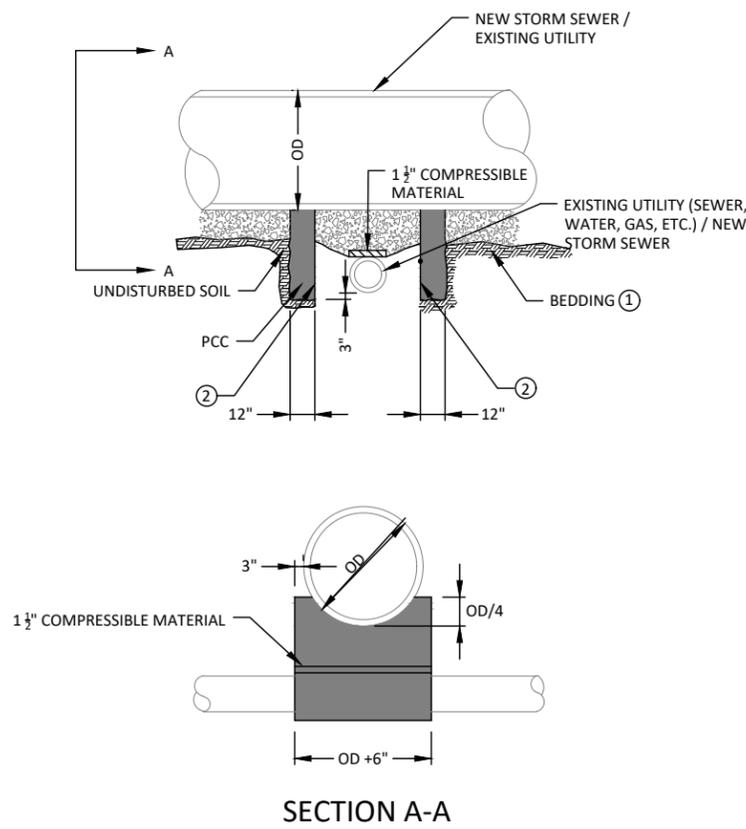
WATER MAIN ALTERATION NOTES

1. CONSTRUCT ALTERATION PER FIELD CONDITIONS AND PER WATER MAIN ALTERATION SCHEDULE.
2. WATER MAIN ALTERATIONS SHALL BE CLASS 52 DUCTILE IRON PIPE.
3. RESTRAIN ALL WATER MAIN, FITTINGS, AND VALVES.
4. THRUST PROTECTION FOR EACH WATER MAIN ALTERATION SHALL BE PROVIDED PER THE STANDARD DETAILS FOR THRUST AND GRAVITY BLOCKS.
5. NITRILE GASKETS SHALL BE USED FOR ALL NEW WATER MAIN ALTERATION WATER MAIN, FITTINGS, AND VALVES.
6. CENTER NEW WATER MAIN ALTERATION ON THE OBSTRUCTION (STORM SEWER PIPE, MANHOLE, ETC) MINIMUM LENGTH "A" AS DETAILED IN THE ALTERATION SCHEDULE.
7. CONTRACTOR SHALL USE THE SIZE AND TYPE OF FITTINGS NECESSARY TO COMPLETE THE CONNECTION WITH THE EXISTING WATER MAIN AND AVOID THE OBSTRUCTION. 45 DEGREE BENDS ARE SHOWN IN THE DETAILS, BUT OFFSETS AND OTHER BENDS OR FITTINGS MAY BE USED AS NECESSARY TO AVOID ADDITIONAL CONFLICTS. CHANGES TO THE DETAIL OR ALIGNMENT SHALL BE APPROVED BY DMWW PERSONNEL.

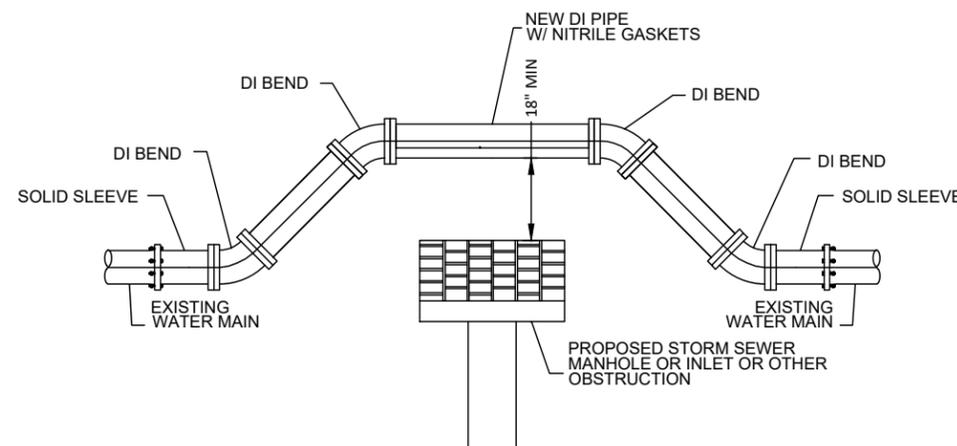
INSTALL PIPE SUPPORT FOR ALL NEW SEWERS / EXISTING UTILITIES WHEN CLEARANCE BETWEEN NEW SEWER AND EXISTING UTILITIES IS 12 INCHES OR LESS.

- ① COMPLY WITH STANDARD ROAD PLAN SW-101.
- ② FROM INTERIOR SURFACE OF FOOTINGS. KEEP THE 12 INCH UTILITY CLEAR ZONE FREE OF CONCRETE.

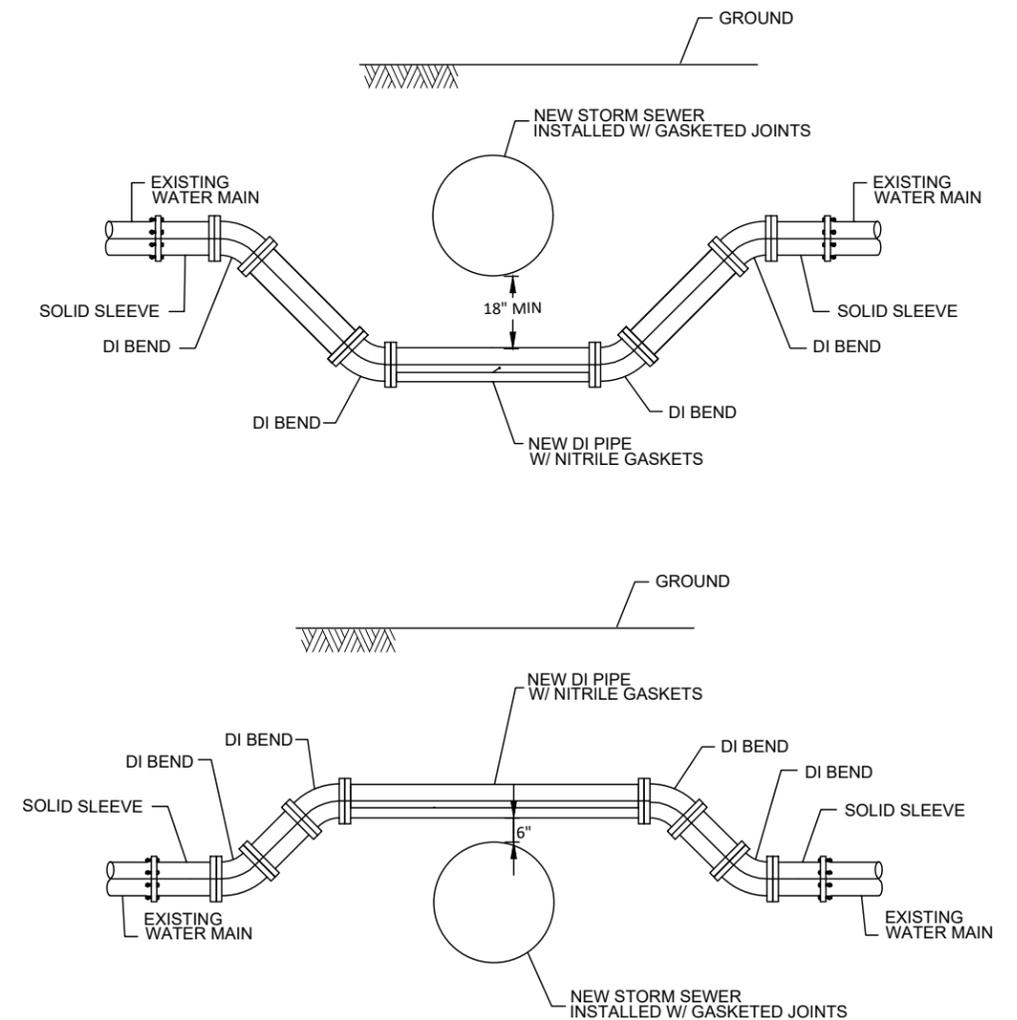
OD = OUTSIDE PIPE DIAMETER



B PIPE SUPPORT OVER EXISTING UTILITY LINE
M.1 NTS



C TYPE 1 WATER MAIN ALTERATION (HORIZONTAL)
NTS



D TYPE 2 WATER MAIN ALTERATION (VERTICAL)
MSA.1 NTS

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - IAW\118668\Task 02_College Drive\Drawings\CD\Sheets\118668_B.01.dwg 1/10/2020 10:48 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

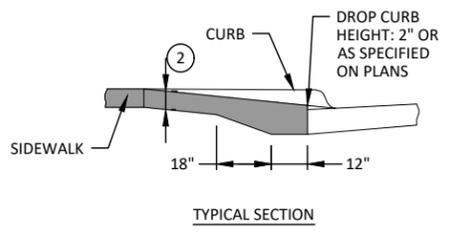
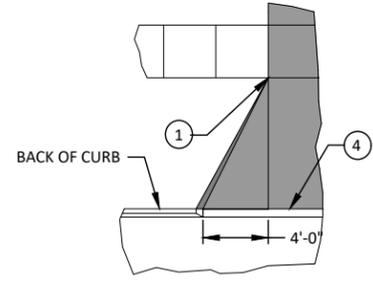
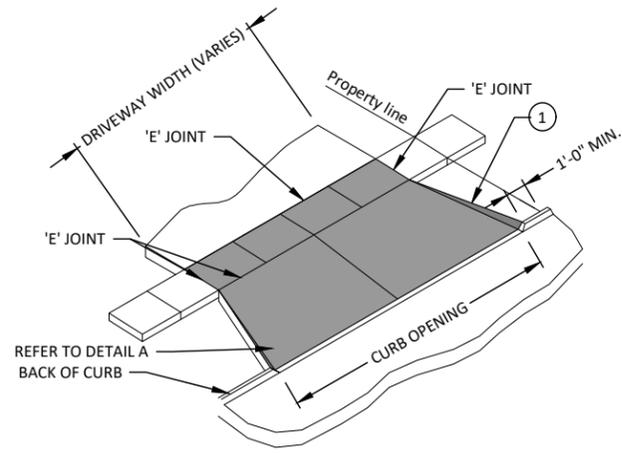
CITY OF WINDSOR HEIGHTS, IOWA

COLLEGE DRIVE RECONSTRUCTION

TYPICAL DETAILS

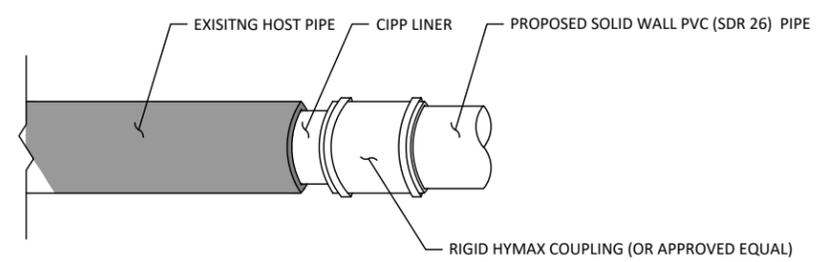
SHEET

B.3



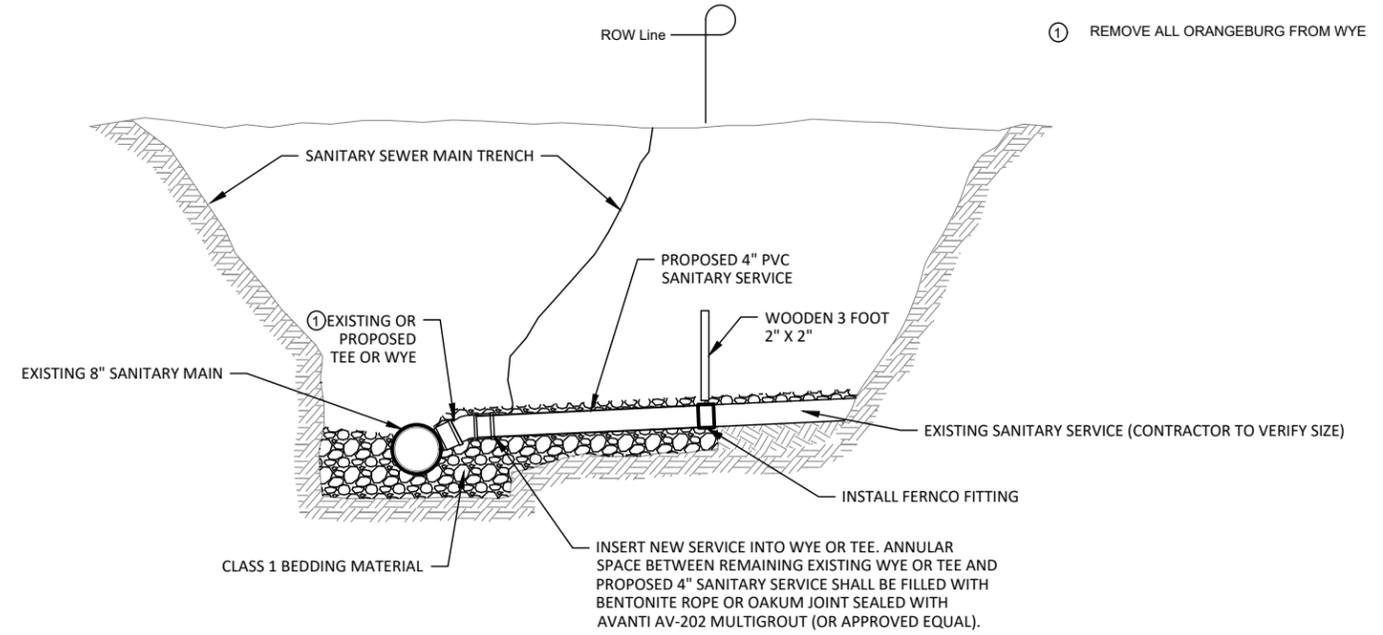
1. TRANSITION THE CURB HEIGHT TO 0 INCHES AT END OF TAPER/RADIUS OR AT THE FRONT EDGE OF SIDEWALK. DO NOT EXTEND RAISED CURB ACROSS SIDEWALK.
2. PAVEMENT THICKNESS. RESIDENTIAL: 6 INCHES MINIMUM.
3. SIDEWALK THICKNESS THROUGH DRIVEWAY TO MATCH THICKNESS OF DRIVEWAY.
4. PROVIDE 'B' JOINT AT BACK OF CURB.
5. ALL APPROACH JOINTS SHALL BE SEALED.
6. TARGET CROSS SLOPE OF 1.5% WITH A MAXIMUM CROSS SLOPE OF 2.0%. IF SPECIFIED IN THE CONTRACT DOCUMENTS, CONSTRUCT THE SIDEWALK THROUGH THE DRIVEWAY 5 FEET WIDE TO SERVE AS A PASSING SPACE.
7. THE CURB DROP SHALL BE ACCOMPLISHED IN 1'.

E
D.1
TYPICAL DRIVEWAY (MODIFIED)
NTS

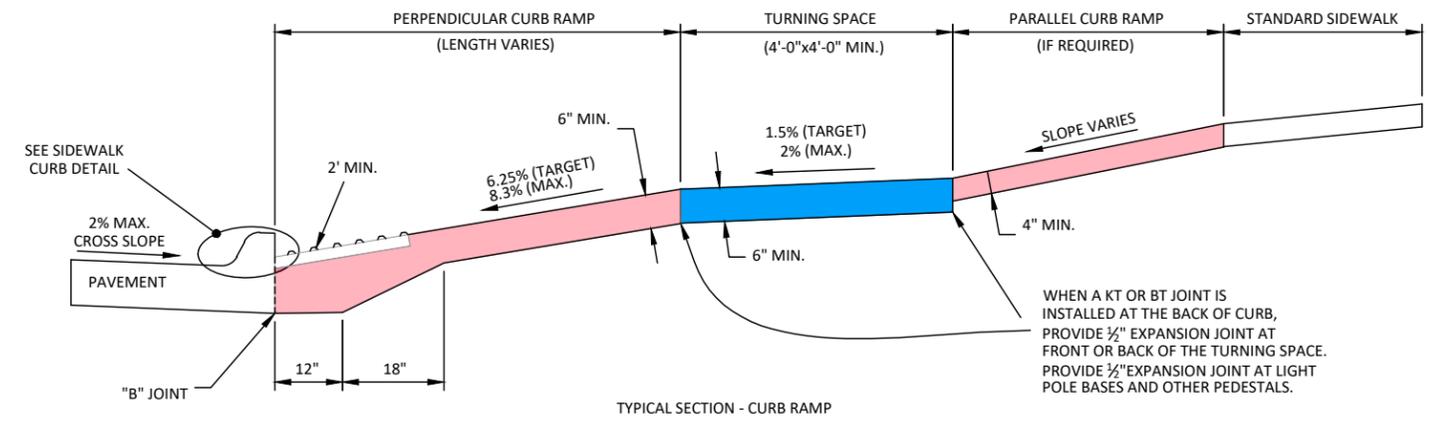


- NOTES:**
1. REMOVE A MINIMUM OF 12 INCHES OF HOST PIPE.
 2. RIGID HYMAX COUPLING SHALL CONNECT THE NEW PIPE TO THE EXISTING CIPP LINER.
 3. ANNULAR SPACE BETWEEN REMAINING HOST PIPE AND CIPP LINER SHALL BE FILLED WITH BENTONITE ROPE OR OAKUM JOINT SEALED WITH AVANTI AV-202 MULTIGROUT (OR APPROVED EQUAL).
 4. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY EXISTING PIPE SIZE AND MATERIAL PRIOR TO CONSTRUCTION.

G
MSA.1
SANITARY SEWER MAIN CONNECTION
NTS



F
MSA.1
SANITARY SEWER SERVICE CONNECTION
NTS



H
S.1
TYPICAL SIDEWALK RAMP
NTS

J
S.1
SIDEWALK CURB DETAIL
NTS

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CD\1318668\Task 02_College Drive\Drawings\CD\Sheets\1318668_B.01.dwg 1/10/2020 10:48 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
TYPICAL DETAILS

STANDARD CONSTRUCTION NOTES:

- ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE 2019 EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF THE CURRENT SUDAS STANDARD SPECIFICATIONS ON SITE DURING ALL CONSTRUCTION ACTIVITIES.
- ANY WORK THAT IS DETERMINED TO BE DEFECTIVE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH SUDAS SECTION 1050. FAILURE TO REMOVE DEFECTIVE WORK MAY RESULT IN SUSPENSION OF OPERATIONS AND/OR WITHHOLDING OF PAYMENTS UNTIL DEFECTIVE WORK HAS BEEN REMOVED AND REPLACED.
- PRIOR TO MOBILIZING OFF OF THE JOB SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO REQUEST A FINAL INSPECTION IN ACCORDANCE WITH SUDAS SECTION 1050.
- THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES IN ACCORDANCE WITH SUDAS SECTION 1070.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY AND COMPLYING WITH ALL CURRENT AND FUTURE FEDERAL AND STATE OSHA REQUIREMENTS IN ACCORDANCE WITH SUDAS SECTION 1070.
- LIMITS OF CONSTRUCTION ARE WITHIN THE CITY RIGHT OF WAY, UNLESS SHOWN OTHERWISE IN THE CONSTRUCTION DRAWINGS. WORK SHALL BE COMPLETED IN THE LIMITS OF CONSTRUCTION AND IN ACCORDANCE WITH SUDAS SECTION 1070.
- THE CONTRACTOR SHALL UPDATE THE TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH SUDAS SECTION 1070, IF CONSTRUCTION ACTIVITIES DEVIATE FROM STAGING PLAN PROVIDED. ANY TRAFFIC CONTROL DEVICES OR SAFETY EQUIPMENT NEEDED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING AND TRAFFIC CONTROL PLAN WITH PLANNED DETOURS TO THE CITY OF WEST DES MOINES PUBLIC SERVICES FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.
- THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITIES MAY NOT BE INDICATED ON THESE PLANS. WORK SHALL BE COMPLETED IN ACCORDANCE WITH SUDAS SECTION 1070. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DAMAGE TO EXISTING UTILITIES.
- IN ACCORDANCE WITH SUDAS SECTION 1070, THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL ITS WORK FROM DAMAGE AND SHALL PROTECT THE JURISDICTION'S PROPERTY AND ADJACENT PRIVATE PROPERTY FROM INJURY OR LOSS ARISING IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL REPAIR OR RESTORE ANY SUCH DAMAGE, INJURY, OR LOSS TO JURISDICTION PROPERTY OR ADJACENT PROPERTY. THE CONTRACTOR SHALL PROTECT TREES AND OTHER PROPERTY NOT MARKED FOR REMOVAL. THE CONTRACTOR SHALL SALVAGE ANY LANDSCAPING WITHIN THE RIGHT OF WAY UPON REQUEST BY THE ADJACENT PROPERTY OWNERS.
- THE CONTRACTOR SHALL PRESERVE OR REPLACE ALL PROPERTY MONUMENTS ON THE PROJECT SITE IN ACCORDANCE WITH IOWA STATE CODE SECTION 355.6A AND SUDAS SECTION 1070.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE CLEANLINESS. UPON REQUEST BY THE ENGINEER, THE CONTRACTOR SHALL, AT ITS EXPENSE, CLEANUP AND REMOVE ALL REFUSE AND UNUSED MATERIALS OF ANY KIND RESULTING FROM THE WORK INCLUDING CLEANING AND SWEEPING OF ADJACENT STREETS. UPON FAILURE TO DO SO WITHIN THREE WORKING DAYS AFTER SUCH REQUEST BY THE ENGINEER, THE WORK MAY BE DONE BY THE JURISDICTION AND THE COST THERE OF CHARGED TO THE CONTRACTOR AND DEDUCTED FROM ITS FINAL PAYMENT IN ACCORDANCE WITH SUDAS SECTION 1070.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PROGRESS SCHEDULE THAT WILL ENSURE THE COMPLETION OF THE PROJECT WITHIN THE TIME SPECIFIED. IF IT APPEARS THE RATE OF PROGRESS IS SUCH THAT THE CONTRACT WILL NOT BE COMPLETED WITHIN THE TIME ALLOWED, OR IF THE WORK IS NOT BEING EXECUTED IN A SATISFACTORY AND WORKMANLIKE MANNER, THE ENGINEER MAY ORDER THE CONTRACTOR TO TAKE SUCH STEPS AS NECESSARY TO COMPLETE THE WORK AS SPECIFIED IN THE CONTRACT IN ACCORDANCE WITH SUDAS SECTION 1080.
- IF PROJECT IS SUBSTANTIALLY COMPLETED AND ONLY CLEANUP AND MINOR WORK ITEMS REMAIN FOR MORE THAN 30 CALENDAR DAYS, THE ENGINEER MAY RESTART CHARGING OF WORKING DAYS OR CHARGE PENALTIES EQUAL TO THE CONTRACT LIQUIDATED DAMAGES UNTIL ALL CORRECTIVE ACTION HAS BEEN COMPLETED IN ACCORDANCE WITH SUDAS SECTION 1080.

UTILITY COORDINATION NOTES:

- THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 292-8989 TO LOCATE EXISTING UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- ANTICIPATED UTILITY CONFLICTS HAVE BEEN IDENTIFIED AND EACH RESPECTIVE UTILITY OWNER HAS BEEN INFORMED OF THE POTENTIAL CONFLICTS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES WITHIN THE PROJECT SITE.
- IF A CONFLICT IS DISCOVERED BY THE CONTRACTOR, NOTIFY THE ENGINEER IMMEDIATELY AND COORDINATE WITH OWNER OF UTILITY TO RESOLVE CONFLICT.
- UTILITY CONTACT NUMBERS:

WINDSOR HEIGHTS PUBLIC SERVICES (SEWERS)	DALTON JACOBUS (515-499-5998)	DJACOBUS@WINDSORHEIGHTS.ORG
DES MOINES WATER WORKS	CARLA SCHUMACHER (515-323-6227)	CSCHUMACHER@DMWWW.COM
CLIVE WATER WORKS	JEFF MAY (515-223-6231)	
MID-AMERICAN ENERGY (ELECTRIC)	DUSTIN WEDLUND (515-252-6565)	DLWEDLUND@MIDAMERICAN.COM
MID-AMERICAN ENERGY (GAS)	DUSTIN WEDLUND (515-252-6565)	DLWEDLUND@MIDAMERICAN.COM
MID-AMERICAN ENERGY (ELECTRIC) - EMERGENCY	1-800-799-4443	
MID-AMERICAN ENERGY (GAS) - EMERGENCY	1-800-595-5325	
IOWA COMMUNICATIONS NETWORK	TIMOTHY FLICKINGER (515-491-3750)	TIMOTHY.FLICKINGER@IOWA.GOV
MEDIACOM	PAUL MAY (515-554-2648)	PMAY@MEDIACOMCC.COM
CENTURYLINK COMMUNICATIONS	DUSTIN WITHERS (515-782-0618)	DUSTIN.WITHERSCENTURYLINK.COM

PROJECT NOTES:

- CONTRACTOR SHALL PROPERLY SECURE PROJECT SITE AT THE END OF EACH DAY.
- CONTRACTOR OPERATIONS CREATING OBJECTIONABLE LEVELS OF NOISE SHALL NOT BEGIN PRIOR TO 7:00 AM
- IN ORDER TO AVOID ANY UNNECESSARY SURFACE BREAKS OR PREMATURE SPALLING, THE CONTRACTOR IS CAUTIONED TO EXERCISE EXTREME CARE WHEN PERFORMING ANY OF THE NECESSARY SAW CUTTING OPERATIONS FOR THE PROPOSED PAVEMENT REMOVAL. ADJACENT PAVEMENT THAT IS CHIPPED OR DAMAGED DUE TO SAW OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S COST IN ACCORDANCE WITH THE PROJECT SPECIFICATION DETAILS FOR STREET EXCAVATION AND PAVEMENT REPLACEMENT. ALL SAW CUTS ADJACENT TO EXISTING PAVEMENT AND CURBS SHALL BE FULL DEPTH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NOT TO DAMAGE ADJACENT PAVEMENT, SIDEWALKS, DRIVES, MEDIANS, CURBS, STRUCTURES AND OTHER AREAS NOT DESIGNATED AS PART OF THE PATCHING WORK AREA. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO AREAS NOT DESIGNATED AS PART OF THE PATCHING WORK AT NO COST TO THE OWNER.

TRAFFIC CONTROL NOTES:

- THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 1070, 2.06 'TRAFFIC CONTROL' OF THE STANDARD SPECIFICATIONS. ANY TRAFFIC CONTROL DEVICES OR SAFETY EQUIPMENT NEEDED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING AND TRAFFIC CONTROL PLAN WITH PLANNED DETOURS, IF APPLICABLE, TO THE ENGINEER FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.
- ALL TRAFFIC CONTROL PLANS MUST BE REVIEWED AND APPROVED BY THE ENGINEER. COORDINATE WITH THE ENGINEER PRIOR TO PLACEMENT OF TRAFFIC CONTROL DEVICES AND SIGNS FOR EACH STAGE OF THE PROJECT.
- ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
- THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER
- SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
- ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
- AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
- THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER AND OWNER. THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
GENERAL NOTES

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	DIV.1	DIV. 2	TOTAL
SECTION 2010 - EARTHWORK, SUBGRADE, AND SUBBASE						
1	2010-108-C-0	CLEARING AND GRUBBING	LS	1		1
2	2010-108-D-1	TOPSOIL, ON-SITE	CY	807		807
3	2010-108-E-0	EXCAVATION, CLASS 10	CY	570		570
4	2010-108-G-0	SUBGRADE PREPARATION	SY	9,430		9,430
5	2010-108-H-0	SUBGRADE TREATMENT, GEO-GRID	SY	4,715		4,715
6	2010-108-I-0	SUBBASE, MODIFIED, 6 IN.	SY	9,430		9,430
7	2010-108-X-0	SURFACE AGGREGATE	TON	100		100
SECTION 3010 - TRENCH EXCAVATION AND BACKFILL						
8	3010-108-D-0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	CY	200		200
SECTION 4010 - SANITARY SEWERS						
9	4010-108-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, SOLID WALL PVC SDR 26, 8 IN.	LF	44		44
10	4010-108-A-2	SANITARY SEWER GRAVITY MAIN, TRENCHLESS, SOLID WALL PVC SDR 26, 10 IN.	LF	64		64
11	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION	EA	5		5
12	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION (STORM)	EA	1		1
13	4010-108-X-0	CONNECTION TO EXISTING SANITARY SEWER	EA	9		9
14	4010-108-X-1	TELEWISE EXISTING SANITARY SEWER	LF	175		175
SECTION 4020 - STORM SEWERS						
15	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 15 IN.	LF	726		726
16	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 18 IN.	LF	83		83
17	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 24 IN.	LF	402		402
18	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 42 IN.	LF	284		284
19	4020-108-C-0	REMOVAL OF STORM SEWER	LF	285		285
20	4020-108-X-0	TELEWISE EXISTING STORM SEWER	LF	500		500
SECTION 4030 - PIPE CULVERTS						
21	4030-108-B-0	PIPE APRON, RCP, 42 IN.	EA	1		1
22	4030-108-C-0	FOOTING FOR CONCRETE PIPE APRON, RCP, 42 IN.	EA	1		1
23	4030-108-D-0	PIPE APRON GUARD	EA	1		1
SECTION 4040 - SUBDRAINS AND FOOTING DRAINS COLLECTORS						
24	4040-108-A-0	SUBDRAIN, TYPE 1, PERFORATED HDPE, 6 IN.	LF	2,205.0		2,205.0
25	4040-108-A-0	SUBDRAIN, TYPE 1, SOLID HDPE, 6 IN.	LF	75.0		75.0
26	4040-108-C-0	SUBDRAIN CLEANOUT, TYPE A-1, 6 IN.	EA	9.0		9.0
27	4040-108-D-0	SUBDRAIN OUTLETS AND CONNECTIONS, CMP, 6 IN.	EA	9.0		9.0
28	4040-108-D-0	CONNECTION TO SUBDRAIN PIPE	EA	5.0		5.0
SECTION 4050 - PIPE REHABILITATION						
29	4050-108-C-2	SPOT REPAIRS BY PIPE REPLACEMENT, 10", SDR 26	LF	20.0		20.0
SECTION 5010 - PIPE AND FITTINGS						
30	5010-108-X-0	8" C900 DR18 PVC PIPE WITH TRACER WIRE	LF		734.0	734.0
31	5010-108-X-1	8" C900 DR18 PVC RESTRAINED JOINT PIPE WITH TRACER WIRE	LF		84.0	84.0
32	5010-108-X-2	12" C900 PVC CASING PIPE	LF		20.0	20.0
33	5010-108-X-3	FITTING, 6" BEND	EA		8.0	8.0
34	5010-108-X-4	FITTING, 8" BEND	EA		1.0	1.0
35	5010-108-X-5	FITTING, 8" X 6" REDUCER	EA		1.0	1.0
36	5010-108-X-6	FITTING, 6" SOLID SLEEVE	EA		2.0	2.0
37	5010-108-X-7	FITTING, 8" SOLID SLEEVE	EA		2.0	2.0
38	5010-108-X-8	FITTING, 6" X 6" TEE	EA		2.0	2.0
39	5010-108-X-9	FITTING, 8" X 6" TEE	EA		2.0	2.0
40	5010-108-X-10	FITTING, 8" X 8" TEE	EA		1.0	1.0
41	5010-108-X-11	FITTING, 6" CAP/PLUG	EA		4.0	4.0
42	5010-108-X-12	FITTING, 6" CAP/PLUG WITH MIN. 2" BLOWOFF	EA		3.0	3.0
43	5010-108-X-13	FITTING, 8" CAP/PLUG	EA		2.0	2.0
44	5010-108-X-14	6" VALVE	EA		3.0	3.0
45	5010-108-X-15	8" VALVE	EA		2.0	2.0
46	5010-108-X-16	HYDRANT ASSEMBLY	EA		4.0	4.0
47	5010-108-X-17	NEW 1" WATER SERVICE (SAME SIDE)	EA		1.0	1.0
48	5010-108-X-18	NEW 1" WATER SERVICE (OPPOSITE SIDE)	EA		9.0	9.0
49	5010-108-X-19	REMOVE EX 8" CONTROL VALVE & 8" BLOW-OFF PIPING	EA		1.0	1.0
50	5010-108-X-20	TYPE 1 WATER MAIN ALTERATION (VERTICAL)	EA	5.0		5.0
51	5010-108-X-21	TYPE 2 WATER MAIN ALTERATION (HORIZONTAL)	EA	6.0		6.0
52	5010-108-X-22	RELOCATE WATER SERVICE STOP BOX	EA	1.0		1.0
53	5010-108-X-23	NEW STOP BOX HOUSING	EA	9.0		9.0
54	5010-108-X-24	NEW STOP BOX ROD	EA	9.0		9.0
55	5010-108-X-25	CHECK DEPTH OF WATER SERVICE	EA	1.0		1.0
56	5010-108-X-26	RELOCATION OF WATER SERVICE	EA	1.0		1.0
57	5010-108-X-27	LOWER WATER SERVICE	EA	1.0		1.0
58	5010-108-X-28	LOWER WATER SERVICE WITH COPPER	EA	1.0		1.0
59	5010-108-X-29	POLYSTYRENE INSULATION, 2 IN.	SF	50.0		50.0
SECTION 5020 - VALVES, FIRE HYDRANTS, AND APPURTENANCES						
60	5020-108-F-0	VALVE BOX EXTENSION	EA	15.0		16.0
61	5020-108-H-0	FIRE HYDRANT ADJUSTMENT	EA	1.0		1.0
SECTION 6010 - STRUCTURES FOR SANITARY AND STORM SEWERS						
62	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN. (<10 FT DEEP)	EA	1.0		1.0
63	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN. (<10 FT DEEP)	EA	1.0		1.0

64	6010-108-A-0	STORM MANHOLE, SW-401, 60 IN. DIA.	EA	1.0		1.0
65	6010-108-A-0	STORM MANHOLE, SW-401, 96 IN. DIA.	EA	2.0		2.0
66	6010-108-B-0	INTAKE, SW-501	EA	9.0		9.0
67	6010-108-B-0	INTAKE, SW-505	EA	6.0		6.0
68	6010-108-B-0	INTAKE, SW-506	EA	2.0		2.0
69	6010-108-B-0	INTAKE, SW-509	EA	1.0		1.0
70	6010-108-B-0	INTAKE, SW-541	EA	1.0		1.0
71	6010-108-E-0	MANHOLE ADJUSTMENT, MINOR	EA	8.0		8.0
72	6010-108-G-0	CONNECTION TO EXISTING MANHOLE	EA	1.0		1.0
73	6010-108-H-0	REMOVE MANHOLE	EA	2.0		2.0
74	6010-108-H-0	REMOVE INTAKE	EA	5.0		5.0
SECTION 7030 - SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS						
75	7030-108-A-0	REMOVAL OF SIDEWALK	SY	941.0		941.0
76	7030-108-A-0	REMOVAL OF DRIVEWAY	SY	900.0		900.0
77	7030-108-E-0	SIDEWALK, PCC, 4 IN.	SY	1,162.0		1,162.0
78	7030-108-E-0	SIDEWALK, PCC, 6 IN.	SY	94.0		94.0
79	7030-108-G-0	DETECTABLE WARNING	SF	216.0		216.0
80	7030-108-H-1	DRIVEWAY, PAVED, TYPE A, 6 IN.	SY	895.0		895.0
SECTION 7040 - PAVEMENT REHABILITATION						
81	7040-108-H-0	PAVEMENT REMOVAL	SY	7,905.0		7,905.0
SECTION 8020 - PAVEMENT MARKINGS						
82	8020-108-B-0	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE	STA	8.0		8.0
83	8020-108-C-0	PAINTED PAVEMENT MARKINGS, DURABLE	STA	5.0		5.0
SECTION 8030 - TEMPORARY TRAFFIC CONTROL						
84	8030-108-A-0	TEMPORARY TRAFFIC CONTROL	LF	1.0		1.0
85	8020-108-X-0	SALVAGE AND REINSTALL SIGN	EA	14.0		14.0
86	8020-108-X-1	TYPE A SIGN, SHEET ALUMINUM	EA	4.0		4.0
SECTION 9010 - SEEDING						
87	9010-108-B-0	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING	AC	1.1		1.1
88	9010-108-D-0	WATERING	MGAL	0.4		0.4
SECTION 9040 - EROSION AND SEDIMENT CONTROL						
89	9040-108-A-1	SWPPP PREPARATION	LS	1.0		1.0
90	9040-108-A-2	SWPPP MANAGEMENT	LS	1.0		1.0
91	9040-108-D-1	FILTER SOCK, 9 IN.	LF	5,750.0	500.0	6,250.0
92	9040-108-E-0	TEMPORARY RECP, 3A	SY	100.0		100.0
93	9040-108-J-0	RIP RAP, CLASS 'E' REVETMENT	TON	65.0		65.0
94	9040-108-Q-2	EROSION CONTROL MULCHING, HYDROMULCHING	AC	1.1		1.1
95	9040-108-T-1	INLET PROTECTION DEVICE, MAINTENANCE, AND REMOVAL	EA	21.0		21.0
SECTION 9060 - CHAIN LINK FENCE						
96	9060-108-E-0	REMOVAL OF FENCE	LF	10.0		10.0
SECTION 11020 - MOBILIZATION						
97	11020-108-A	MOBILIZATION	LS	1.0		1.0
SECTION 11030 - TEMPORARY SERVICES DURING CONSTRUCTION						
98	11030-108-A	MAINTENANCE OF POSTAL SERVICE	LS	1.0		1.0
99	11030-108-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1.0		1.0
100	11030-108-X	RESIDENT COURTESY CART	LS	1.0		1.0
SECTION 12010 - SPECIALTY ITEMS						
101	12010-XXX-X-0	CURBIDE MAILBOX	EA	15.0		15.0
102	12010-XXX-X-1	TREE TRUNK PROTECTION	EA	3.0		3.0
103	12010-XXX-X-2	TREE PROTECTION FENCE	LF	100.0	200.0	300.0
104	12010-XXX-X-3	FOUNDATION ROCK	TON		50.0	50.0
105	12010-XXX-X-4	MANUFACTURED SAND	TON		50.0	50.0

ALTERNATE A						
A1	7010-108-A-0	PAVEMENT, PCC, 7 IN.	SY	8,295.0		8,295.0
A2	11050-108-A-0	CONCRETE WASHOUT	LS	1.0		1.0

ALTERNATE B						
B1	7010-108-E-0	CURB AND GUTTER, 2 FT, 7 IN. THICK W/ 6" STANDARD CURB	LF	5,065.0		5,065.0
B2	7020-108-B-0	PAVEMENT, FULL DEPTH HMA PAVING, ST. PG 58-28S	SY	7,160.0		7,160.0
B3	11050-108-A-0	CONCRETE WASHOUT	LS	1.0		1.0

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\13118668\Task 02_College Drive\Drawings\CD\Sheets\118668_C01.dwg 1/15/2020 8:37 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ESTIMATED QUANTITIES

ESTIMATE REFERENCE NOTES

Item No.	Item Code	Description
1	2010-108-C-0	CLEARING AND GRUBBING PROTECT ALL TREES NOT MARKED FOR REMOVAL.
2	2010-108-D-1	TOPSOIL, ON-SITE TOPSOIL WITHIN THE GRADING LIMITS OF THE PROJECT SHALL BE STRIPPED, SALVAGED, AND RESPREAD AT A MINIMUM DEPTH OF 6".
3	2010-108-E-0	EXCAVATION, CLASS 10
4	2010-108-G-0	SUBGRADE PREPARATION TO BE USED AS APPROVED BY ENGINEER. CONTRACTOR SHALL COMPACT SUBGRADE AND PROOF ROLL. IF SUBGRADE PASSES PROOF ROLL, NO SUBGRADE PREPARATION WILL BE REQUIRED. IF REQUIRED, SUBGRADE PREPARATION MUST BE COMPLETED IN 2 - 6" LIFTS. MOISTURE AND DENSITY TESTING WILL BE PROVIDED BY THE OWNER. CHECKING OF SUBGRADE WILL BE PERFORMED WITH ROUGH GRADING STAKES SET 25' APART.
5	2010-108-H-0	SUBGRADE TREATMENT, GEO-GRID THIS ITEM WILL BE USED ONLY WHEN THE ENGINEER DETERMINES IT IS REQUIRED TO PROVIDE SUITABLE SUBGRADE. LOCATION(S) OF TREATMENT, IF ANY, WILL BE SPECIFIED BY THE ENGINEER. MATERIAL SHALL MEET OR EXCEED THE REQUIREMENTS FOR TYPE 2 GEOGRID. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID.
6	2010-108-I-0	SUBBASE, MODIFIED, 6 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE. ENGINEER WILL VERIFY GRADE AFTER TRIMMING WITH PAVING HUBS.
7	2010-108-X-0	SURFACE AGGREGATE THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO INSTALL TEMPORARY SURFACE AGGREGATE AS DIRECTED BY ENGINEER.
8	3010-108-D-0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL UNSUITABLE BACKFILL MATERIAL SHALL BE REPLACED WITH GRANULAR BACKFILL OR OTHER APPROVED MATERIAL AS APPROVED BY THE ENGINEER. GRANULAR BACKFILL IS INCIDENTAL TO THIS ITEM. THIS ITEM WILL BE PAID BY THE CUBIC YARD - LOOSE VOLUME. NO RECYCLED CONCRETE OR RIP RAP ALLOWED. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID.
9	4010-108-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, SOLID WALL PVC SDR 26, 8 IN.
10	4010-108-A-2	SANITARY SEWER GRAVITY MAIN, TRENCHLESS, SOLID WALL PVC SDR 26, 10 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, REMOVAL OF EXISTING PIPE, DEWATERING, FURNISHING AND PLACEMENT OF BEDDING MATERIAL, WYES AND OTHER FITTINGS, PIPE JOINTS, PIPE CONNECTIONS, CONNECTION TO NEW MANHOLE, SEWAGE CONTROL/BYPASS PUMPING, TESTING, AND INSPECTION. TRENCH COMPACTION TESTING WILL BE PROVIDED BY THE OWNER. FOR PIPING AT NEW MANHOLES. PROVIDE VIDEO INSPECTION PRIOR TO PAVING (INCIDENTAL).
11	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION REMOVAL OF EXISTING PIPE, TRENCH EXCAVATION, FURNISHING NEW PIPE AND BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, CONNECTION BACK TO EXISTING SERVICE, COMPACTION, TESTING, AND INSPECTION. INFORM RESIDENT 48 HOURS PRIOR TO WORK ON THAT SERVICE. VISUAL INSPECTION BY ENGINEER IS REQUIRED. SEE DETAIL FOR SANITARY SEWER SERVICE RELOCATION.
12	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION (STORM) REMOVAL OF EXISTING PIPE, TRENCH EXCAVATION, FURNISHING NEW PIPE AND BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, CONNECTION BACK TO EXISTING SERVICE, COMPACTION, TESTING, AND INSPECTION. INFORM RESIDENT 48 HOURS PRIOR TO WORK ON THAT SERVICE. VISUAL INSPECTION BY ENGINEER IS REQUIRED. SEE DETAIL FOR SANITARY SEWER SERVICE RELOCATION.
13	4010-108-X-0	CONNECTION TO EXISTING SANITARY SEWER THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO MAKE A WATER TIGHT CONNECTION TO EXISTING SANITARY SEWER MAIN. ALL CONNECTIONS TO EXISTING PIPE SHALL BE RIGID PIPE CONNECTIONS. ANY METAL CONNECTION HARDWARE SHALL BE STAINLESS STEEL. FLEXIBLE PIPE CONNECTIONS WITH A CONCRETE COLLAR MAY BE USED IN LIEU OF RIGID PIPE CONNECTIONS, BUT ONLY AFTER APPROVAL BY ENGINEER. ALLOW SUFFICIENT TIME FOR CONCRETE TO CURE PRIOR TO BACKFILL. ANY EXISTING SEWERS WITH CURED-IN-PLACE PIPE (CIPP) LINER SHALL BE CUT AND THE CIPP LINER EXPOSED BY REMOVING A MINIMUM OF 12 INCHES OF HOST PIPE. RIGID HYMAX COUPLINGS (OR APPROVED EQUAL) SHALL CONNECT THE NEW PIPE TO THE EXISTING CIPP LINER (NOT THE HOST PIPE). ANNULAR SPACE BETWEEN REMAINING HOST PIPE AND CIPP LINER SHALL BE FILLED WITH BENTONITE ROPE OR OAKUM AND JOINT SEALED WITH AVANTI AV-202 MULTIGROUT (OR APPROVED EQUAL). SEE DETAIL.
14	4010-108-X-1	TELEWISE EXISTING SANITARY SEWER THIS ITEM INCLUDES, BUT NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO TELEWISE AND LOCATE EXISTING SANITARY SEWER (REGARDLESS OF SIZE). LOCATE THE PIPE ON THE GROUND BY THE USE OF PAINT AND FLAGS. A COPY OF THE TELEVISION REPORT SHALL BE PROVIDED TO THE ENGINEER ON RECORD. WORK TO BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION. SEE PLANS FOR LOCATIONS.
15	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 15 IN.
16	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 18 IN.
17	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 24 IN.
18	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 42 IN. INCLUDES FLEXIBLE GASKET JOINTS AT WATERMAIN CROSSINGS. VIDEO INSPECTION TO OCCUR PRIOR TO PAVING PER SUDAS 4060.
19	4020-108-C-0	REMOVAL OF STORM SEWER REMOVAL, DISPOSAL, AND CAPPING OF PIPE; AND FURNISHING AND PLACING BACKFILL MATERIAL.
20	4020-108-X-0	TELEWISE EXISTING STORM SEWER THIS ITEM INCLUDES, BUT NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO TELEWISE AND LOCATE EXISTING STORM SEWER (REGARDLESS OF SIZE). LOCATE THE PIPE ON THE GROUND BY THE USE OF PAINT AND FLAGS. A COPY OF THE TELEVISION REPORT SHALL BE PROVIDED TO THE ENGINEER ON RECORD. WORK TO BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION. SEE PLANS FOR LOCATIONS.
21	4030-108-B-0	PIPE APRON, RCP, 42 IN. TRENCH EXCAVATION, DEWATERING, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, CONNECTORS, AND OTHER APPURTENANCES.
22	4030-108-C-0	FOOTING FOR CONCRETE PIPE APRON, RCP, 42 IN. EXCAVATION, DEWATERING, REINFORCING STEEL, CONCRETE, AND PLACING BEDDING AND BACKFILL MATERIAL.
23	4030-108-D-0	PIPE APRON GUARD
24	4040-108-A-0	SUBDRAIN, TYPE 1, PERFORATED HDPE, 6 IN.

Item #5B

25	4040-108-A-0	SUBDRAIN, TYPE 1, SOLID HDPE, 6 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, FURNISHING AND PLACEMENT OF BEDDING AND BACKFILL MATERIAL, ENGINEERING FABRIC, CONNECTORS, AND ELBOWS AND TEES. THE LENGTH OF ELBOWS AND TEES OF THE PIPES INSTALLED WILL BE INCLUDED IN THE LENGTH OF PIPE MEASURED. POT HOLE FOR ALL EXISTING UTILITIES PRIOR TO SUBDRAIN INSTALLATION TO DETERMINE WHERE SUBDRAIN CAN BE PLACED. POT HOLE SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.
26	4040-108-C-0	SUBDRAIN CLEANOUT, TYPE A-1, 6 IN. THIS ITEM INCLUDED, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO INSTALL SUBDRAIN CLEANOUTS AS SPECIFIED IN THE CONTRACT DOCUMENTS. PVC RISER PIPE SHALL BE SOLID WALL PVC. ALL CLEANOUTS TO BE PLACED BEHIND OF CURB. USE LIGHT DUTY (HS-20) CAST IRON CASTING.
27	4040-108-D-0	SUBDRAIN OUTLETS AND CONNECTIONS, CMP, 6 IN.
28	4040-108-D-0	CONNECTION TO SUBDRAIN PIPE THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, COUPLING BANDS, AND RODENT GUARDS FOR ALL SUBDRAIN OUTLETS AND CONNECTIONS.
29	4050-108-C-2	SPOT REPAIRS BY PIPE REPLACEMENT, 10", SDR 26 THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, PIPE REMOVAL, DEWATERING, FURNISHING AND PLACEMENT OF BEDDING MATERIAL, WYES AND OTHER FITTINGS, SERVICE PIPE, PIPE JOINTS, SERVICE PIPE CONNECTIONS, TESTING, AND INSPECTION. TRENCH COMPACTION TESTING WILL BE PROVIDED BY THE OWNER. PROVIDE VIDEO INSPECTION PRIOR TO PAVING (INCIDENTAL).
30	5010-108-X-0	8" C900 DR18 PVC PIPE WITH TRACER WIRE
31	5010-108-X-1	8" C900 DR18 PVC RESTRAINED JOINT PIPE WITH TRACER WIRE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL PIPE OF SPECIFIED SIZE, TYPE, AND RESTRAINT INCLUDING EXCAVATION, DEWATERING, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION AND DECHLORINATION. DISINFECTION INCLUDES INSTALLATION AND REMOVAL OF 1" CHLORINATION TAP INCIDENTAL TO WATER MAIN.
32	5010-108-X-2	12" C900 PVC CASING PIPE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL CASING PIPE OF SPECIFIED SIZE AND TYPE INCLUDING EXCAVATION, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, BACKFILL, AND COMPACTION.
33	5010-108-X-3	FITTING, 6" BEND
34	5010-108-X-4	FITTING, 8" BEND
35	5010-108-X-5	FITTING, 8" X 6" REDUCER
36	5010-108-X-6	FITTING, 6" SOLID SLEEVE
37	5010-108-X-7	FITTING, 8" SOLID SLEEVE
38	5010-108-X-8	FITTING, 6" X 6" TEE
39	5010-108-X-9	FITTING, 8" X 6" TEE
40	5010-108-X-10	FITTING, 8" X 8" TEE
41	5010-108-X-11	FITTING, 6" CAP/PLUG
42	5010-108-X-12	FITTING, 6" CAP/PLUG WITH MIN. 2" BLOWOFF
43	5010-108-X-13	FITTING, 8" CAP/PLUG PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL FITTINGS OF SPECIFIED SIZE AND TYPE INCLUDING EXCAVATION, PIPE BEDDING, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, TESTING, AND DISINFECTION.
44	5010-108-X-14	6" VALVE
45	5010-108-X-15	8" VALVE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL VALVE OF SPECIFIED SIZE AND TYPE WITH VALVE BOX INCLUDING EXCAVATION, PIPE BEDDING, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, TRACER WIRE SYSTEM, VALVE BOX ADAPTER, BACKFILL, COMPACTION, TESTING, AND DISINFECTION.
46	5010-108-X-16	HYDRANT ASSEMBLY PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL HYDRANT, TEE, AND 6" PIPING AS REQUIRED, 6" VALVE, VALVE BOX, VALVE BOX ADAPTER, AND TRACER WIRE WITH RECEPTACLE POST INCLUDING EXCAVATION, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION.
47	5010-108-X-17	NEW 1" WATER SERVICE (SAME SIDE) PROVIDE LICENSED PLUMBER AND THE PERMITS NECESSARY TO COMPLETE WATER SERVICE INSTALLATION. PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL NEW WATER SERVICE USING OPEN-CUT FROM THE NEW WATER MAIN CONNECTING TO THE EXISTING WATER SERVICE ON THE BUILDING SIDE OF THE NEW STOP BOX. WORK TO INCLUDE CORPORATION ELBOW, COPPER PIPE, NEW CURB STOP AND STOP BOX, COUPLINGS NEEDED TO CONNECT TO EXISTING SERVICE, BACKFILL, AND COMPACTION. DMWW WILL PROVIDE TAP IN EXCAVATION PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS AND STANDARD DETAILS.
48	5010-108-X-18	NEW 1" WATER SERVICE (OPPOSITE SIDE) PROVIDE LICENSED PLUMBER AND THE PERMITS NECESSARY TO COMPLETE WATER SERVICE INSTALLATION. PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL NEW WATER SERVICE USING OPEN-CUT FROM THE NEW WATER MAIN CONNECTING TO THE EXISTING WATER SERVICE ON THE BUILDING SIDE OF THE NEW STOP BOX. WORK TO INCLUDE CORPORATION ELBOW, COPPER PIPE, NEW CURB STOP AND STOP BOX, COUPLINGS NEEDED TO CONNECT TO EXISTING SERVICE, BACKFILL AND COMPACTION. DMWW WILL PROVIDE TAP IN EXCAVATION PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS AND STANDARD DETAILS. IF STREET PAVEMENT REMAINS IN PLACE AT TIME OF WATER SERVICE TRANSFER, PAVEMENT SAW CUTTING AND REMOVAL IS INCIDENTAL TO WATER MAIN. FOR SERVICES OUTSIDE THE CITY STAGE, TRAFFIC CONTROL IS INCIDENTAL TO DIVISION 1.
49	5010-108-X-19	REMOVE EX 8" CONTROL VALVE & 8" BLOW-OFF PIPING PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL PIPE OF SPECIFIED SIZE, TYPE, AND RESTRAINT INCLUDING EXCAVATION, DEWATERING, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION AND DECHLORINATION. DISINFECTION INCLUDES INSTALLATION AND REMOVAL OF 1" CHLORINATION TAP INCIDENTAL TO WATER MAIN.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CD\1318668\Task 02 College Drive\CD\CD\Sheets\1318668_C01.dwg 1/15/2020 8:37 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ESTIMATE REFERENCE NOTES

SHEET
C.3

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02_College Drive\CAD\CAD Sheets\118668_College Drive\118668-02.dwg 1/15/2020 8:27 AM

50	5010-108-X-20	TYPE 1 WATER MAIN ALTERATION (VERTICAL) THIS ITEM INCLUDES ALL MATERIAL, LABOR, AND EQUIPMENT TO COMPLETE VERTICAL WATER MAIN ALTERATION OF SIZE AND TYPE INDICATED ON THE DRAWING SHEETS, WATER MAIN DETAIL SHEET, AND ALTERATION SCHEDULE. WORK INCLUDES EXCAVATION, PIPE, FITTINGS, NITRILE GASKETS, POLYETHYLENE ENCASUREMENT, TRACER WIRE SYSTEM AND CONNECTION (IF APPLICABLE), BEDDING, TRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION. WATER MAIN ALTERATIONS TO BE COMPLETED IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR WATER MAIN. WORK ALSO INCLUDES REMOVING THE EXISTING SECTION OF EXISTING PIPE AND CONNECTING TO EXISTING WATER MAIN AS INDICATED IN THE DETAIL. ITEM SHALL BE MEASURED AND PAID FOR ON A COUNT BASIS FOR EACH ALTERATION INSTALLED. REFER TO DETAIL.
51	5010-108-X-21	TYPE 2 WATER MAIN ALTERATION (HORIZONTAL) THIS ITEM INCLUDES ALL MATERIAL, LABOR, AND EQUIPMENT TO COMPLETE HORIZONTAL WATER MAIN ALTERATION OF SIZE AND TYPE INDICATED ON THE DRAWING SHEETS, WATER MAIN DETAIL SHEET, AND ALTERATION SCHEDULE. WORK INCLUDES EXCAVATION, PIPE, FITTINGS, NITRILE GASKETS, POLYETHYLENE ENCASUREMENT, TRACER WIRE SYSTEM AND CONNECTION (IF APPLICABLE), BEDDING, TRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION. WATER MAIN ALTERATIONS TO BE COMPLETED IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR WATER MAIN. WORK ALSO INCLUDES REMOVING THE EXISTING SECTION OF EXISTING PIPE AND CONNECTING TO EXISTING WATER MAIN AS INDICATED IN THE DETAIL. ITEM SHALL BE MEASURED AND PAID FOR ON A COUNT BASIS FOR EACH ALTERATION INSTALLED. REFER TO DETAIL.
52	5010-108-X-22	RELOCATE WATER SERVICE STOP BOX
53	5010-108-X-23	NEW STOP BOX HOUSING
54	5010-108-X-24	NEW STOP BOX ROD
55	5010-108-X-25	CHECK DEPTH OF WATER SERVICE
56	5010-108-X-26	RELOCATION OF WATER SERVICE
57	5010-108-X-27	LOWER WATER SERVICE
58	5010-108-X-28	LOWER WATER SERVICE WITH COPPER SEE SUPPLEMENTAL SPECIFICATIONS. QUANTITIES ARE ESTIMATED AND PERFORMED BY DIRECTION FROM ENGINEER.
59	5010-108-X-29	POLYSTYRENE INSULATION, 2 IN. CLOSED-CELL EXTRUDED POLYSTYRENE BOARDS SHALL HAVE A MINIMUM DIMENSION OF 2 INCHES THICK BY 2 FEET WIDE. QUANTITY IS ESTIMATED. PLACEMENT AS DIRECTED BY ENGINEER.
60	5020-108-F-0	VALVE BOX EXTENSION THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIAL NECESSARY TO ADJUST WATER VALVE BOXES TO FINISH GRADE. ALL VALVES WHICH CHANGE FROM GRASS TO PAVEMENT SHALL BE CHANGED FROM SCREW TYPE TO SLIDE TYPE. CHANGING VALVE BOX FROM SCREW TO SLIDE TYPE IS CONSIDERED INCIDENTAL TO THIS LINE ITEM.
61	5020-108-H-0	FIRE HYDRANT ADJUSTMENT REMOVAL AND REINSTALLATION OF THE EXISTING FIRE HYDRANT; FURNISHING AND INSTALLING THE EXTENSION BARREL SECTION AND STEM; AND ALL OTHER NECESSARY APPURTENANCES. LOCATION DETERMINED BY THE ENGINEER. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID.
62	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN. (<10 FT DEEP)
63	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN. (<10 FT DEEP) EXCAVATION, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, COMPACTION, BASE, STRUCTURAL CONCRETE, REINFORCING STEEL, PRECAST UNITS (IF USED), INFILTRATION BARRIERS, CASTINGS, ADJUSTMENT RINGS, PIPE CONNECTION AND BYPASS PUMPING OR OTHER OTHER METHODS OF SEWER TRANSFER. POURED CONCRETE COLLAR TO SURFACE AROUND CASTING IF HMA PAVEMENT.
64	6010-108-A-0	STORM MANHOLE, SW-401, 60 IN. DIA.
65	6010-108-A-0	STORM MANHOLE, SW-401, 96 IN. DIA. EXCAVATION, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, COMPACTION, BASE, STRUCTURAL CONCRETE, REINFORCING STEEL, PRECAST UNITS (IF USED), INFILTRATION BARRIERS (SANITARY SEWER MANHOLES ONLY), CASTINGS, AND ADJUSTMENT RINGS. ANY SHORING SHALL BE CONSIDERED INCIDENTAL. POURED CONCRETE COLLAR TO SURFACE AROUND CASTING IF HMA PAVEMENT.
66	6010-108-B-0	INTAKE, SW-501
67	6010-108-B-0	INTAKE, SW-505
68	6010-108-B-0	INTAKE, SW-506
69	6010-108-B-0	INTAKE, SW-509
70	6010-108-B-0	INTAKE, SW-541 EXCAVATION, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, COMPACTION, BASE, STRUCTURAL CONCRETE, REINFORCING STEEL, PRECAST UNITS (IF USED), CONCRETE FILLETS, PIPE CONNECTIONS, CASTINGS, AND ADJUSTMENT RINGS.
71	6010-108-E-0	MANHOLE ADJUSTMENT, MINOR REMOVING EXISTING CASTING AND EXISTING ADJUSTMENT RINGS, FURNISHING AND INSTALLING ADJUSTMENT RINGS, FURNISHING AND INSTALLING NEW CASTING, AND INSTALLING NEW INFILTRATION BARRIER (SANITARY SEWER MANHOLES ONLY). POURED CONCRETE COLLAR TO SURFACE AROUND CASTING IF HMA PAVEMENT.
72	6010-108-G-0	CONNECTION TO EXISTING MANHOLE CORING OR CUTTING INTO THE EXISTING MANHOLE OR INTAKE, PIPE CONNECTORS, GROUT, AND WATERSTOP (WHEN REQUIRED).
73	6010-108-H-0	REMOVE MANHOLE REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT; PLUGGING PIPES; FILLING REMAINING STRUCTURE WITH FLOWABLE MORTAR; AND PLACING COMPACTED FILL OVER STRUCTURE TO FINISHED GRADE NO MATTER THE SIZE.
74	6010-108-H-0	REMOVE INTAKE REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT; PLUGGING PIPES; FILLING REMAINING STRUCTURE WITH FLOWABLE MORTAR; AND PLACING COMPACTED FILL OVER STRUCTURE TO FINISHED GRADE NO MATTER THE SIZE.

75	7030-108-A-0	REMOVAL OF SIDEWALK	Item #5B
76	7030-108-A-0	REMOVAL OF DRIVEWAY ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.	
77	7030-108-E-0	SIDEWALK, PCC, 4 IN.	
78	7030-108-E-0	SIDEWALK, PCC, 6 IN. CONCRETE WILL BE C or M MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE IS INCIDENTAL TO THIS ITEM. CONCRETE TESTING WILL BE PROVIDED BY THE OWNER.	
79	7030-108-G-0	DETECTABLE WARNING DETECTABLE WARNINGS SHALL MEET CURRENT PROWAG STANDARDS. CONTRACTOR TO SUBMIT COLOR FOR APPROVAL PRIOR TO PURCHASE.	
80	7030-108-H-1	DRIVEWAY, PAVED, TYPE A, 6 IN. CONCRETE WILL BE C or M MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE IS INCIDENTAL TO THIS ITEM. CONCRETE TESTING WILL BE PROVIDED BY THE OWNER.	
81	7040-108-H-0	PAVEMENT REMOVAL ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. SEE B SHEETS FOR EXISTING PAVEMENT TYPICAL SECTIONS. EXISTING PAVEMENT DEPTHS AND TYPES MAY VARY.	
82	8020-108-B-0	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE REFLECTORIZING SPHERES, LAYOUT, SURFACE PREPARATION, AND APPLICATION OF MARKING PAINT.	
83	8020-108-C-0	PAINTED PAVEMENT MARKINGS, DURABLE LAYOUT, SURFACE PREPARATION, AND APPLICATION OF MARKING PAINT.	
84	8030-108-A-0	TEMPORARY TRAFFIC CONTROL INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL; TOTAL ROADWAY CLOSURES WITH INSTALLATION AND REMOVAL OF DETOUR SIGNING AS SHOWN IN THE CONTRACT DOCUMENTS; REMOVAL AND REINSTALLATION OR COVERING OF PERMANENT TRAFFIC CONTROL DEVICES THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL PLAN; MONITORING AND DOCUMENTING TRAFFIC CONTROL CONDITIONS; AND FLAGGERS. WHEN REQUIRED IN THE CONTRACT DOCUMENTS, THE FOLLOWING ARE ALSO INCLUDED IN TRAFFIC CONTROL UNLESS A SEPERATE BID ITEM IS PROVIDED; PORTABLE DYNAMIC MESSAGE SIGNS.	
85	8020-108-X-0	SALVAGE AND REINSTALL SIGN THIS ITEM INCLUDES THE REMOVAL, SALVAGING REINSTALLATION OF STREET SIGN WITH NEW POST AND DISPOSAL OF EXISTING POST AND FOOTINGS. POST INSTALLATION ACCORDING TO IADOT SPECIFICATION 2524 AND MUTCD. CONTRACTOR SHALL REPLACE ANY SIGNS THAT WERE DAMAGED DURING SALVAGING AT NO EXPENSE TO OWNER. ALL MOUNTING HARDWARE AND STEEL BREAKAWAY SIGN POST ARE INCIDENTAL TO THE BID ITEM. MEASURED PER POST INSTALLED, REGARDLESS THE NUMBER AND SIZE OF SIGNS ON THE POST.	
86	8020-108-X-1	TYPE A SIGN, SHEET ALUMINUM THIS ITEM INCLUDES THE FURNISHING AND INSTALLATION OF STREET SIGN ACCORDING TO IADOT SPECIFICATION 2524 AND MUTCD. ALL MOUNTING HARDWARE AND STEEL BREAKAWAY SIGN POST ARE INCIDENTAL TO THE BID ITEM. MEASURED PER POST INSTALLED, REGARDLESS THE NUMBER OF SIGNS ON THE POST.	
87	9010-108-B-0	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING PROVIDE UNITED SEEDS, INC. "RESCUE PLUS" MIX (UNITEDSEEDS.COM) OR APPROVED EQUAL. SEED PER MANUFACTURES REQUIREMENTS. APPLICATION OF STARTER FERTILIZER (NEW GRASS) REQUIRED AND IS INCIDENTAL TO THIS ITEM. FOR SEEDING IN UNDISTURBED AREAS, TREATMENT/REMOVAL OF EXISTING VEGETATION AND SEED BED PREPARATION IS CONSIDERED INCIDENTAL. INCLUDES USING PROGANICS BIOTIC SOIL MEDIA (BSM) BY PROFILE PRODUCTS.	
88	9010-108-D-0	WATERING THIS ITEM IS PROVIDE THE PROPOSED SEED WITH ENOUGH WATER TO MOISTEN THE DIRT TO A DEPTH OF 1 INCH AND ENSURE GROWTH OF THE SEED. WATER SHALL BE PREFORMED FOR 14 DAYS STRAIGHT. QUANTITY IS ESTIMATED AND USED TO ESTABLISHED A UNIT PRICE.	
89	9040-108-A-1	SWPPP PREPARATION DEVELOPMENT OF A SWPPP BY THE CONTRACTOR MEETING LOCAL AND STATE AGENCY REQUIREMENTS, FILING THE REQUIRED PUBLIC NOTICES, FILING A NOTICE OF INTENT FOR COVERAGE OF THE PROJECT UNDER THE IOWA DNR NPDES GENERAL PERMIT NO. 2, AND PAYMENT OF ASSOCIATED NPDES PERMIT FEES.	
90	9040-108-A-2	SWPPP MANAGEMENT THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL WORK REQUIRED TO COMPLY WITH THE ADMINISTRATIVE PROVISIONS OF THE IOWA DNR NPDES GENERAL PERMIT NO.2; INCLUDING RECORD KEEPING, DOCUMENTATION, UPDATING THE SWPPP, FILING THE NOTICE OF DISCONTINUATION, ETC. ITEM ALSO INCLUDES WEEKLY INSPECTION REQUIRED TO SATISFY THE PROVISIONS OF GENERAL PERMIT NO. 2.	
91	9040-108-D-1	FILTER SOCK, 9 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ANCHORING STAKES, MAINTENANCE, REPLACEMENT OF DEFICIENT FILTER SOCK, RESTORATION OF THE AREA TO FINISHED GRADE, AND OFF-SITE DISPOSAL OF FILTER SOCK AND ACCUMULATED SEDIMENT.	
92	9040-108-E-0	TEMPORARY RECP, 3A TEMPORARY RECP SHALL BE PLACED ALONG ALL CONSTRUCTED SLOPES WITH A GRADE OF 3:1 (H:V) OR STEEPER OR AS SHOWN ON THE PLANS. INCLUDES EXCAVATION, STAPLES, ANCHORING DEVICES, MATERIAL FOR ANCHORING SLOTS, AND SEEDING TYPE 2 OR 3 (DEPENDING ON SEEDING DATE).	
93	9040-108-J-0	RIP RAP, CLASS 'E' REVETMENT	
94	9040-108-Q-2	EROSION CONTROL MULCHING, HYDROMULCHING QUANTITY IS ESTIMATED AND INCLUDED TO ESTABLISH A UNIT PRICE.	
95	9040-108-T-1	INLET PROTECTION DEVICE, MAINTENANCE, AND REMOVAL THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY FOR INSTALLATION, REMOVAL AND OFF-SITE DISPOSAL OF ACCUMULATED SEDIMENT, AND REMOVAL OF THE DEVICE UPON COMPLETION OF THE PROJECT NO MATTER THE INTAKE TYPE. MEASUREMENT PER STRUCTURE.	
96	9060-108-E-0	REMOVAL OF FENCE OFF-SITE DISPOSAL OF FENCE (INCLUDING POSTS, CONCRETE ENCASUREMENT OF POSTS, GATES, GROUNDS, AND BARBED WIRE), PLACING AND COMPACTING BACKFILL MATERIAL IN POST HOLES AND MAKING THE LAST SECTION AN END SECTION.	
97	11020-108-A	MOBILIZATION	
98	11030-108-A	MAINTENANCE OF POSTAL SERVICE COORDINATE WITH USPS AND PROPERTY OWNERS FOR TEMPORARY MAILBOX LOCATION WHEN NECESSARY. ENSURING MAIL SERVICE IS MAINTAINED THROUGHOUT THE PROJECT.	
99	11030-108-B	MAINTENANCE OF SOLID WASTE COLLECTION CONTRACTOR SHALL COORDINATE WITH WASTE COLLECTION SERVICE TO ENSURE SERVICE IS MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT (INCLUDING RECYCLE). LABEL ALL BINS WITH ADDRESS BY REMOVABLE MEANS.	

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ESTIMATE REFERENCE NOTES

SHEET
C.4

100	11030-108-X	RESIDENT COURTESY CART THIS ITEM INCLUDES THE USE OR RENTAL OF A COURTESY CART DURING CONSTRUCTION, PERSONNEL TO OPERATE THE CART, MAINTENANCE OF SAID CART, AND INSURANCE FOR THE CART AND ITS OCCUPANTS DURING OPERATION. THE COURTESY CART WILL BE USED FOR TRANSPORTING RESIDENTS TO AND FROM THEIR PARKED VEHICLES TO THEIR RESIDENCES WHILE THE ROADWAY IS CLOSED TO VEHICULAR TRAFFIC. THE CONTRACTOR HAS THE OPTION REGARDING THE KIND OF CART PROVIDED (GOLF, GATOR, ETC.). ENGINEER ON RECORD SHALL APPROVE CART OPTION. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A MOBILE PHONE NUMBER TO WHICH RESIDENTS CAN CALL BETWEEN THE HOURS OF 7:00 AM TO 7:00 PM. MONDAY THROUGH SUNDAY. TO WHICH THEY WILL BE ABLE TO REACH THE COURTESY CART DRIVER. REFER TO THE J SHEET FOR ADDITIONAL INFORMATION. THE CART WILL OPERATE IN CONJUNCTION WITH GRADING AND PAVING OPERATIONS. THE MAXIMUM WAIT TIME FOR THE COURTESY CART SHALL BE 30 MINUTES.
101	12010-XXX-X-0	CURBIDE MAILBOX THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF EXISTING POST, SALVAGING EXISTING MAILBOX, EXCAVATION FOR POST, A NEW 4"x4" POST, AND INSTALLATION OF SALVAGED MAILBOX. COORDINATED WITH THE LOCAL POSTMASTER AND USPS WEBSITE FOR GUIDANCE ON MAIL BOX INSTALLATION. CONTRACTOR RESPONSIBLE FOR DAMAGED MAILBOX DURING STORAGE AND SHALL REPLACE AT NO EXPENSE TO OWNER.
102	12010-XXX-X-1	TREE TRUNK PROTECTION SEE SUPPLEMENTAL SPECIFICATIONS. LOCATION AS DIRECTED BY ENGINEER
103	12010-XXX-X-2	TREE PROTECTION FENCE SEE SUPPLEMENTAL SPECIFICATIONS. LOCATION AS DIRECTED BY ENGINEER. QUANTITY IS ESTIMATED AND INCLUDED TO ESTABLISH A UNIT PRICE.
104	12010-XXX-X-3	FOUNDATION ROCK PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO PLACE ROCK USED TO STABILIZE PIPE TRENCHES PRIOR TO PIPE INSTALLATION AS DESIGNATED BY ENGINEER.
105	12010-XXX-X-4	MANUFACTURED SAND PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO PLACE MANUFACTURED SAND AS BACKFILL IN WATER MAIN TRENCH IN LOCATIONS AS DIRECTED BY ENGINEER. INCLUDES PROPER DISPOSAL OF UNSUITABLE MATERIAL. MEASUREMENT WILL BE BASED ON MATERIAL DELIVERY TICKET.

ALTERNATE A

A1	7010-108-A-0	PAVEMENT, PCC, 7 IN. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES.
A2	11050-108-A-0	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

ALTERNATE B

B1	7010-108-E-0	CURB AND GUTTER, 2 FT, 7 IN. THICK W/ 6" STANDARD CURB FINAL SUBGRADE/SUBBASE PREPARATION, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, AND BOXOUTS FOR FIXTURES.
B2	7020-108-B-0	PAVEMENT, FULL DEPTH HMA PAVING, ST. PG 58-28S PRIOR TO PLACEMENT, SUBMIT MIX DESIGNS FOR REVIEW AND APPROVAL BY THE ENGINEER. THE HMA SHALL BE PLACED EITHER WITH A FULL WIDTH PAVER OR TWO SINGLE LANE PAVERS OPERATING IN TANDEM TO PREVENT A COLD JOINT ON THE LANE LINE. NO SEPARATE PAY ITEM WILL BE USED FOR THE ASPHALT BINDER, THE COST OF THE BINDER SHALL BE INCLUDED IN THE HOT MIX ASPHALT PRICE. UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, ASPHALT MIX WITH ASPHALT BINDER, TACK COATS BETWEEN LAYERS, CONSTRUCTION ZONE PROTECTION, AND QUALITY CONTROL. THIS BID ITEM INCLUDES FURNISHING, DELIVERY, QUALITY CONTROL AND INSTALLATION OF THE ASPHALT MIX. FINAL SURFACE COURSE FOR ALL STAGES TO BE PLACE AT THE END OF THE FINAL STAGE.
B3	11050-108-A-0	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02_College Drive\CAD\Sheet3118668_C01.dwg 1/15/2020 8:27 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ESTIMATE REFERENCE NOTES

STORM SEWER PIPE TABLE			
Name	START	END	DESCRIPTION
STRM-1	IN - 1 STA:8+98.78, 13.00' L	IN - 2 STA:8+98.86, 13.00' R	26 LF, 15" RCP @ 2.00%
STRM-2	IN - 2 STA:8+98.86, 13.00' R	IN - 3 STA:12+16.66, 13.00' R	318 LF, 15" RCP @ 6.70%
STRM-3	IN - 3 STA:12+16.66, 13.00' R	IN - 7 STA:12+79.78, 13.00' R	63 LF, 15" RCP @ 4.00%
STRM-4	IN - 6 STA:12+47.28, 13.00' L	IN - 7 STA:12+79.78, 13.00' R	26 LF, 18" RCP @ 1.85%
STRM-5	IN - 5 STA:12+47.28, 13.00' L	IN - 6 STA:12+79.78, 13.00' L	41 LF, 15" RCP @ 1.00%
STRM-6	IN - 4 STA:12+21.28, 38.00' L	IN - 5 STA:12+47.28, 37.94' L	26 LF, 15" RCP @ 1.00%
STRM-7	IN - 7 STA:12+79.78, 13.00' R	IN - 11 STA:15+10.58, 13.00' R	231 LF, 24" RCP @ 1.68%
STRM-8	MH-1 STA:15+10.58, 6.63' L	IN - 11 STA:15+10.48, 13.00' R	20 LF, 24" RCP @ 1.00%
STRM-9	IN - 8 STA:14+82.24, 13.00' L	MH-1 STA:15+10.58, 6.63' L	29 LF, 15" RCP @ 2.00%
STRM-10	IN - 10 STA:15+10.58, 38.02' L	MH-1 STA:15+10.58, 6.63' L	31 LF, 18" RCP @ 1.00%
STRM-11	IN - 9 STA:15+36.58, 38.06' L	IN - 10 STA:15+10.58, 38.02' L	26 LF, 18" RCP @ 1.00%
STRM-12	MH-1 STA:15+10.58, 6.63' L	MH-2 STA:17+06.26, 0.14' L	196 LF, 42" RCP @ 0.55%
STRM-13	IN - 13 STA:17+06.25, 13.00' R	MH-2 STA:17+06.26, 0.14' L	13 LF, 15" RCP @ 2.00%
STRM-14	MH-2 STA:17+06.26, 0.14' L	IN - 12 STA:16+96.26, 13.00' L	16 LF, 15" RCP @ -2.00%
STRM-15	MH-2 STA:17+06.26, 0.14' L	MH-3 STA:17+06.27, 65.81' L	66 LF, 42" RCP @ 0.20%
STRM-16	MH-3 STA:17+06.27, 65.81' L	FES - 1 STA:17+28.61, 65.86' L	22 LF, 42" RCP @ 0.20%
STRM-17	BEND STA:19+08.39, 13.00' L	EX MH-1 STA:18+26.11, 32.64' R	94 LF, 24" RCP @ 3.00%
STRM-18	IN - 14 STA:19+65, 13.00' L	BEND STA:19+08.39, 13.00' L	57 LF, 24" RCP @ 2.96%
STRM-19	IN - 14 STA:19+65, 13.00' L	IN - 15 STA:19+65, 13.00' R	26 LF, 15" RCP @ -1.00%
STRM-20	IN - 16 STA:20+66.46, 13.00' L	IN - 14 STA:19+65, 13.00' L	101 LF, 15" RCP @ 0.70%
STRM-21	IN - 16 STA:20+66.46, 13.00' L	IN - 17 STA:20+66.46, 13.00' R	26 LF, 15" RCP @ -1.00%
STRM-22	IN - 18 STA:26+05.13, 22.23' L	IN - 19 STA:26+05.24, 19.14' R	41 LF, 15" RCP @ 2.00%

STORM SEWER STRUCTURE TABLE					
Structure Name	LOCATION	TYPE	FORM GRADE	INVERT EL. (IN)	INVERT EL. (OUT)
BEND	STA: 19+08.39, OS: -13.00'	30 DEG BEND			I = 834.45, 24.00" SW
FES - 1	STA: 17+28.61, OS: -65.86'	42 FES-N		I = 831.22, 42.00" W	
IN - 1	STA: 8+98.78, OS: -13.00'	SW-505 N	FG = 871.15		I = 867.86, 15.00" S I = 868.15, 6.00" NW
IN - 2	STA: 8+98.86, OS: 13.00'	SW-505 N	FG = 871.14	I = 867.34, 15.00" N	I = 867.24, 15.00" E I = 868.15, 6.00" SW
IN - 3	STA: 12+16.66, OS: 13.00'	SW-501 N	FG = 850.10	I = 845.95, 15.00" W	I = 845.85, 15.00" E
IN - 4	STA: 12+21.28, OS: -38.00'	SW-501 N	FG = 848.71		I = 845.42, 15.00" E I = 845.71, 6.00" SW
IN - 5	STA: 12+47.28, OS: -37.94'	SW-501 N	FG = 848.27	I = 845.16, 15.00" W	I = 845.06, 15.00" SE
IN - 6	STA: 12+79.78, OS: -13.00'	SW-505 N	FG = 847.76	I = 844.65, 15.00" NW	I = 844.43, 18.00" S
IN - 7	STA: 12+79.78, OS: 13.00'	SW-506 N	FG = 847.76	I = 843.95, 18.00" N I = 843.32, 15.00" W	I = 843.22, 24.00" E
IN - 8	STA: 14+82.24, OS: -13.00'	SW-505 N	FG = 843.90		I = 840.60, 15.00" E I = 841.62, 6.00" NW
IN - 9	STA: 15+36.58, OS: -38.06'	SW-501 N	FG = 842.67		I = 839.64, 18.00" W
IN - 10	STA: 15+10.58, OS: -38.02'	SW-501 N	FG = 843.00	I = 839.38, 18.00" E	I = 839.28, 18.00" S
IN - 11	STA: 15+10.48, OS: 13.00'	SW-506 N	FG = 843.48	I = 839.35, 24.00" W	I = 839.25, 24.00" N
IN - 12	STA: 16+96.26, OS: -13.00'	SW-505 N	FG = 841.75	I = 838.14, 15.00" SE	I = 838.66, 6.00" E
IN - 13	STA: 17+06.25, OS: 13.00'	SW-505 N	FG = 841.66	I = 838.58, 6.00" S	I = 838.14, 15.00" N
IN - 14	STA: 19+65, OS: -13.00'	"SW-541"	FG = 840.14	I = 836.53, 15.00" E	I = 836.74, 15.00" S I = 836.13, 24.00" W
IN - 15	STA: 19+65, OS: 13.00'	SW-509	FG = 840.14	I = 837.00, 15.00" N	I = 837.14, 6.00" W
IN - 16	STA: 20+66.46, OS: -13.00'	SW-501 N	FG = 840.70		I = 837.34, 15.00" S I = 837.70, 6.00" E I = 837.24, 15.00" W
IN - 17	STA: 20+66.46, OS: 13.00'	SW-501 N	FG = 840.70	I = 837.60, 15.00" N	I = 837.70, 6.00" SE
IN - 18	STA: 26+05.13, OS: -22.23'	SW-501 N	FG = 858.08		I = 854.50, 15.00" S
IN - 19	STA: 26+05.24, OS: 19.14'	SW-501 N	FG = 857.94	I = 853.67, 15.00" N	I = 851.97, 12.00" S
MH-1	STA: 15+10.58, OS: -6.63'	SW-401 N 60	FG = 843.59	I = 839.06, 24.00" S I = 838.97, 18.00" N I = 840.02, 15.00" W	I = 832.89, 42.00" E
MH-2	STA: 17+06.26, OS: -0.14'	SW-401 N 96	FG = 841.90	I = 837.88, 15.00" S I = 831.81, 42.00" W	I = 837.82, 15.00" NW I = 831.49, 42.00" N
MH-3	STA: 17+06.27, OS: -65.81'	SW-401 N 96	FG = 840.35	I = 831.36, 42.00" S	I = 831.26, 42.00" E

SANITARY PIPE TABLE			
NAME	START	END	DESCRIPTION
SAN 1	STA:19+97.98, 1.15' R	STA:20+09.52, 0.07' L	12 LF, 8" PVC @ 0.50%
SAN 2	STA:20+07.84, 21.60' L	STA:20+09.52, 0.07' L	22 LF, 10" PVC @ 0.50%
SAN 3	STA:20+09.52, 0.07' L	STA:20+21.12, 0.08' L	12 LF, 10" PVC @ 0.44%
SAN 4	STA:20+49.52, 0.10' L	STA:20+69.52, 0.11' L	20 LF, 10" PVC @ 0.44%
SAN 5	STA:22+94.09, 0.28' L	STA:23+14.09, 0.29' L	20 LF, 10" PVC @ 0.42%
SAN 6	STA:23+12.80, 11.82' L	STA:23+14.09, 0.29' L	12 LF, 8" PVC @ 0.50%
SAN 7	STA:23+34.09, 0.25' L	STA:23+14.09, 0.29' L	20 LF, 8" PVC @ 3.44%
SAN 8	STA:23+14.09, 0.29' L	STA:23+14.11, 11.31' R	12 LF, 10" PVC @ 0.50%

SANITARY STRUCTURE TABLE					
NAME	LOCATION	TYPE	FORM GRADE EL.	INVERT EL. (IN)	INVERT EL. (OUT)
296	STA: 20+09.52, 0.07' L	SW-301 N	FG = 840.55	I = 835.21, 10" N I = 835.17, 8" W	I = 835.10, 10" E
377	STA: 23+14.09, 0.29' L	SW-301 N	FG = 850.96	I = 834.51, 8" N I = 833.76, 8" E I = 833.76, 10" W	I = 833.58, 10" S

SANITARY SEWER SERVICE TABLE		
ADDRESS	EXISTING SERVICE SIZE & MATERIAL	APPROXIMATE LENGTH
8004 COLLEGE DRIVE	4", ORANGEBURG	25'
7508 COLLEGE DRIVE	4", ORANGEBURG	25'
7510 COLLEGE DRIVE	4", ORANGEBURG	25'
1723 PLAZA CIRCLE	4", ORANGEBURG	25'
7308 COLLEGE DRIVE	4", ORANGEBURG	25'

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SANITARY SERVICES. LOCATIONS ON SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY.

ESTIMATED DRIVEWAY QUANTITIES			
ADDRESS	REMOVAL (SY)	DRIVEWAY, 6" PCC (SY)	REMARKS
1805 74TH STREET	24.7	28.3	
1804 76TH STREET	39.1	39.1	
1804 77TH STREET	25.8	29.0	
1800 79TH STREET	39.1	42.4	
1800 80TH STREET	39.6	39.8	
1723 PLAZA CIRCLE	41.2	40.4	
1724 PLAZA CIRCLE	36.1	34.7	
1717 LUIN LANE	29.9	29.4	
7301 COLLEGE DRIVE	26.8	29.3	
7304 COLLEGE DRIVE	26.3	28.9	
7308 COLLEGE DRIVE	27.0	26.5	
7310 COLLEGE DRIVE	27.3	26.2	
7316 COLLEGE DRIVE	28.3	26.5	
7404 COLLEGE DRIVE	27.0	26.1	
7407 COLLEGE DRIVE	23.8	27.1	
7408 COLLEGE DRIVE	26.2	23.5	
7504 COLLEGE DRIVE	27.9	23.5	
7508 COLLEGE DRIVE	45.8	45.9	
7510 COLLEGE DRIVE	46.4	48.2	
7516 COLLEGE DRIVE	36.8	34.5	
7704 COLLEGE DRIVE	74.4	75.9	
7708 COLLEGE DRIVE	27.8	23.5	
7900 COLLEGE DRIVE	44.6	39.9	
8004 COLLEGE DRIVE	26.5	24.9	

EXCAVATION QUANTITY	Depth, FT	Quantity, SY	Quantity, SF	Volume, CF	Volume, CY	CUT, CY	FILL, CY	FILL FACTOR	ADJ. FILL	NET FILL, CY
Excavation RAW data (EG-FG)						315.47	886.53	1.35	1196.82	571.06
Existing Pavement Removal (Average 2")	0.17	7,905.00	71,145.00	11,857.50	439.17					
Existing Sidewalk Removal (assumed 4")	0.33	941.00	8,469.00	2,823.00	104.56					
Existing Driveway Removal (assumed 6")	0.50	819.00	7,371.00	3,685.50	136.50					
Proposed 7" Paving	0.67	8,295.00	74,655.00	49,770.00	1,843.33					
Modified Subbase 6"	0.50	9,430.00	84,870.00	42,435.00	1,571.67					
Proposed Sidewalk 4"	0.33	1,070.00	9,630.00	3,210.00	118.89					
Proposed Sidewalk 6"	0.50	94.00	846.00	423.00	15.67					
Proposed Driveway	0.50	814.00	7,326.00	3,663.00	135.67					
Proposed Topsoil	0.50	4,906.00	44,154.00	22,077.00	817.67					
Paving Difference						2975.83				
Sidewalk Difference						30.00				
Driveway Difference						-0.83				
Topsoil						-817.67				
						2502.80	886.53	1.35	1196.82	1305.99

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

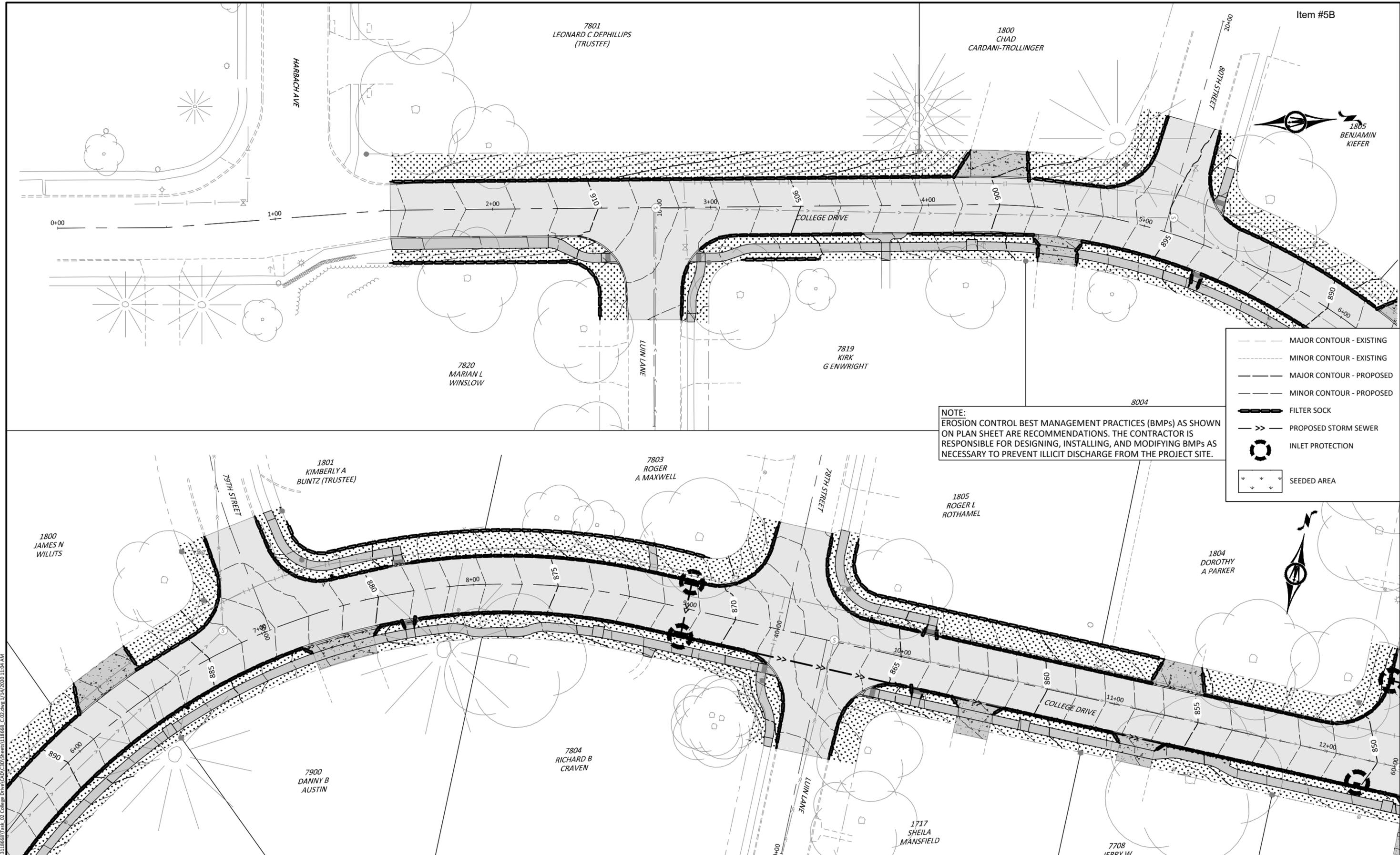


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
TABULATIONS



NOTE:
 EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.

- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- FILTER SOCK
- >> PROPOSED STORM SEWER
- INLET PROTECTION
- SEEDED AREA

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 W:\WINDSOR HTS\CL\A13118668\Work 02 College Drive\CD\CD Sheets\118668_C02.dwg 1/14/2020 11:04 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

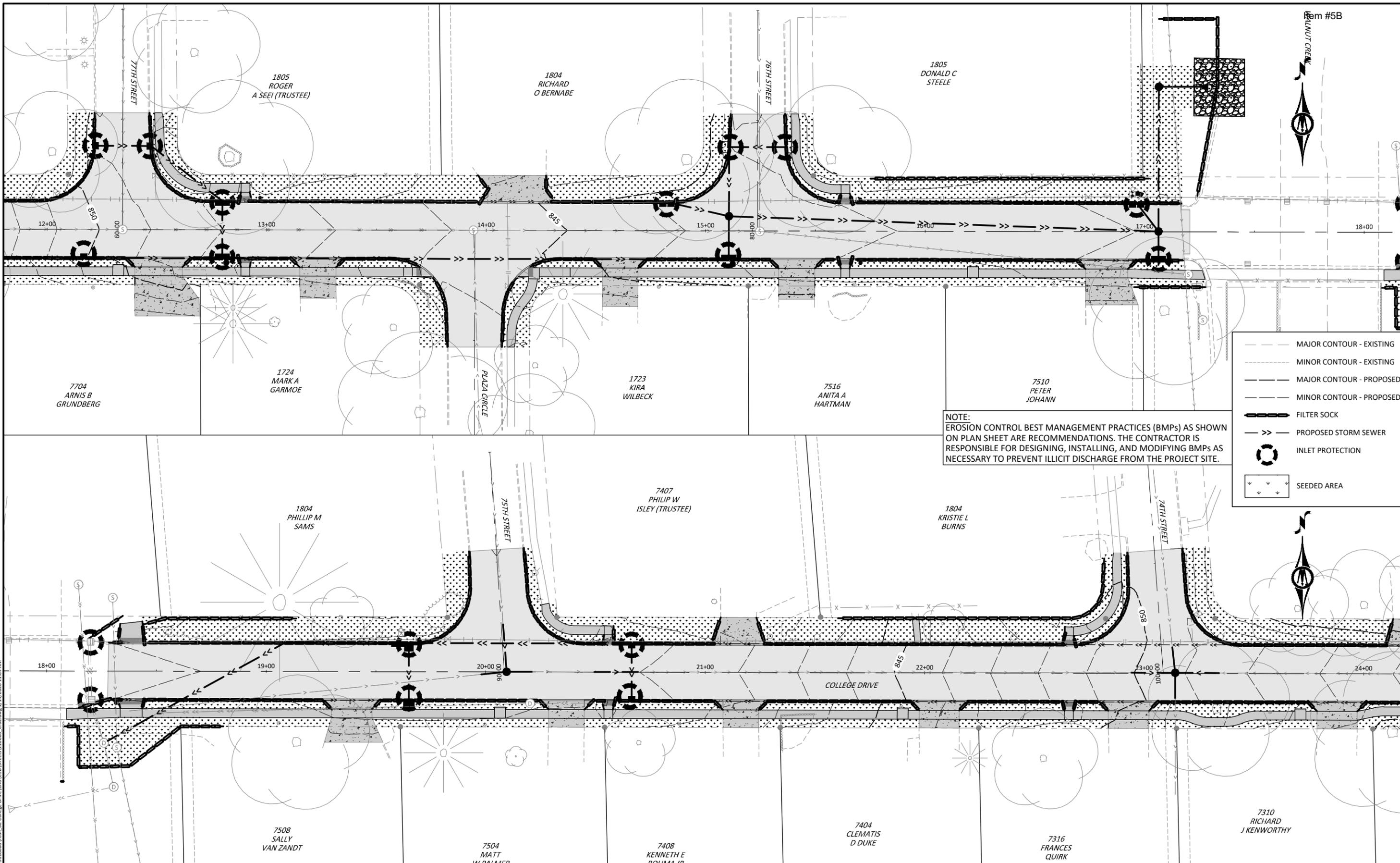


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 EROSION CONTROL PLAN



NOTE:
 EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.

- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- FILTER SOCK
- > PROPOSED STORM SEWER
- INLET PROTECTION
- SEEDED AREA

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 W:\WINDSOR\CI_A13118668\Task_02_College_Drive\Drawings\CD\Sheets\118668_C02.dwg 1/14/2020 11:04 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

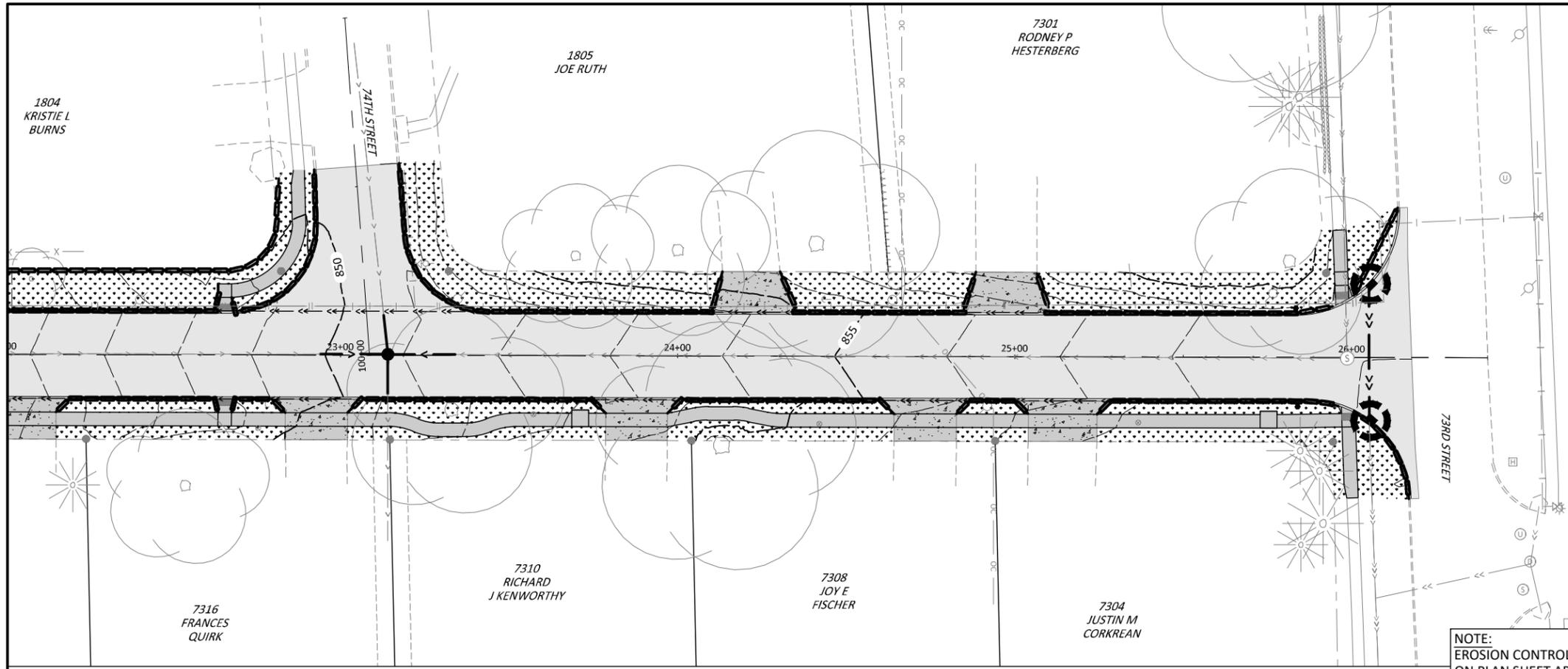


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEAL	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 EROSION CONTROL PLAN



NOTE: EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.

- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- ▬ FILTER SOCK
- >> — PROPOSED STORM SEWER
- ⊙ INLET PROTECTION
- ⌵ SEEDED AREA

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CD\A13118668\Task 02_College Drive\Drawings\CD\Sheets\118668_C02.dwg 1/14/2020 11:04 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

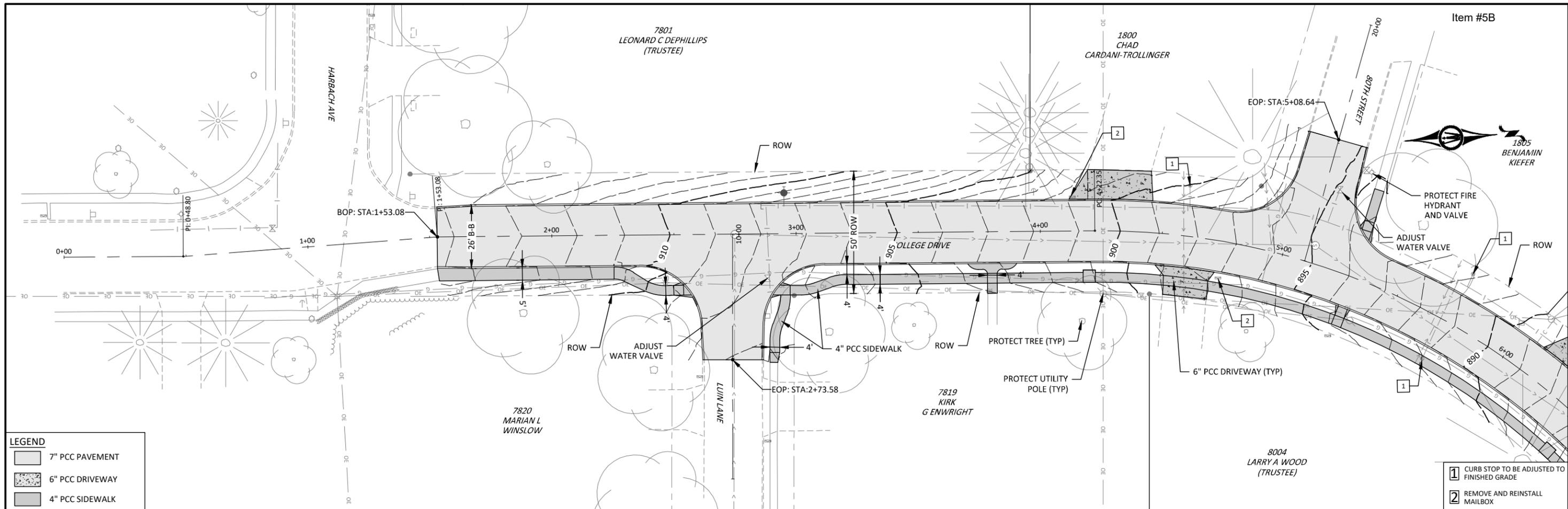


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

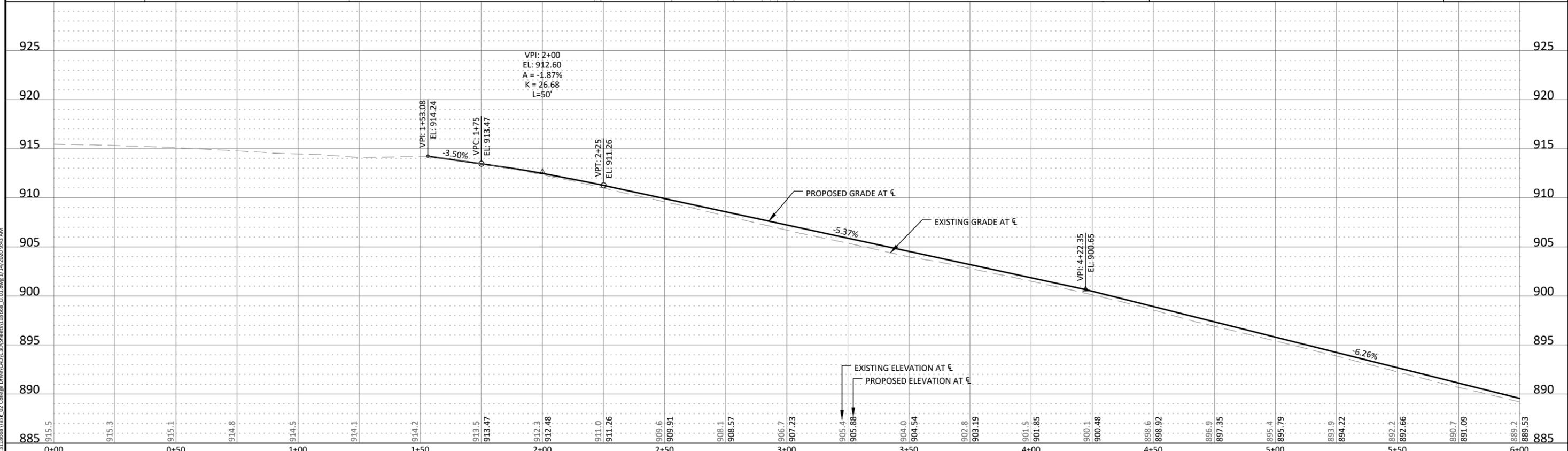
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
EROSION CONTROL PLAN



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK

- 1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE
- 2 REMOVE AND REINSTALL MAILBOX



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\COLLEGE DRIVE\DWG\Sheet3118668.DWG 1/14/2020 9:43 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

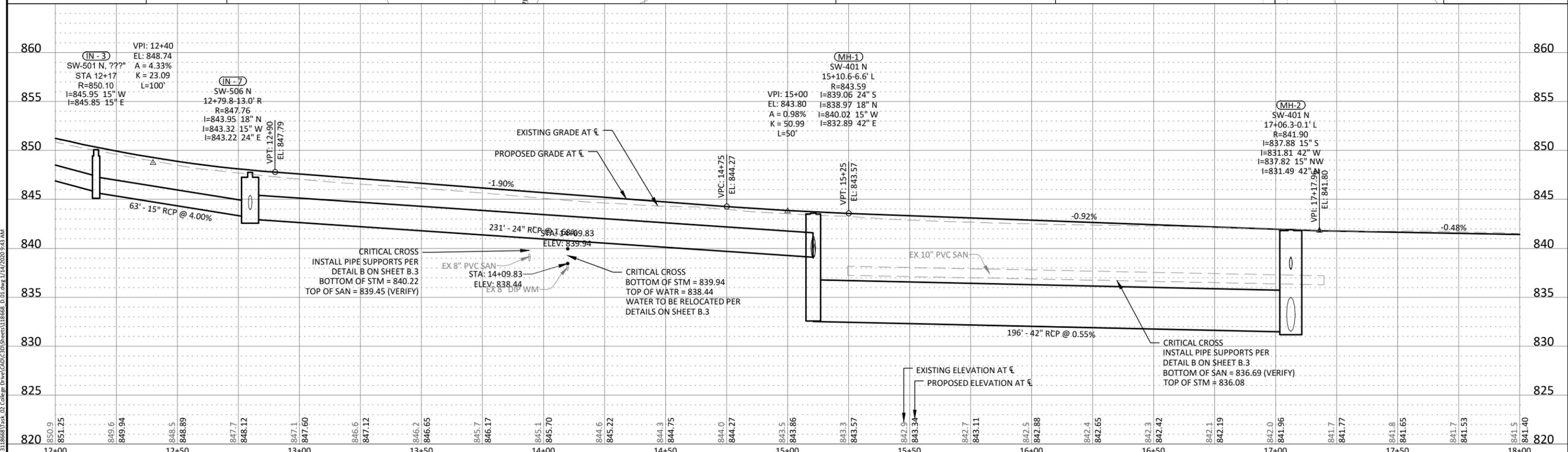
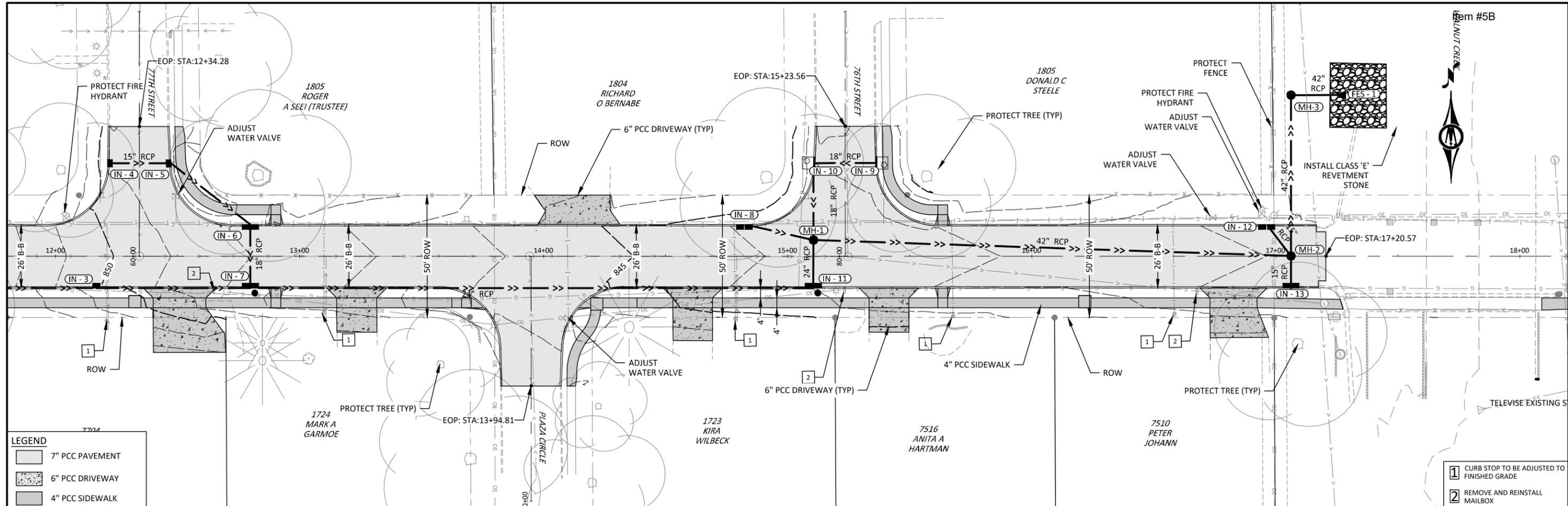


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

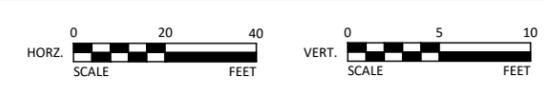


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE



© Bolton & Menk, Inc. 2020. All Rights Reserved. W:\WINDSOR\CI-1A13118668\Task 02 College Drive\Drawings\CD\Sheet3118668.DWG 1/14/2020 9:43 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



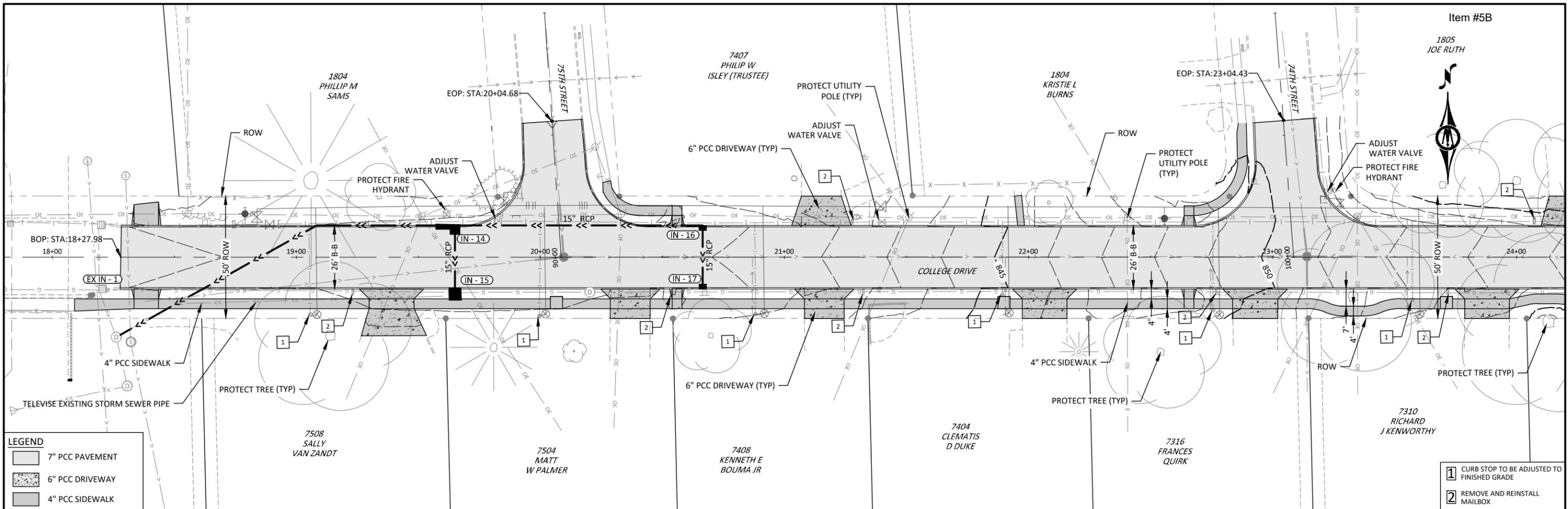
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED: N.A.S.
SEAL: J.L.E.
CHECKED: N.G.
CLIENT PROJ. NO: A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE

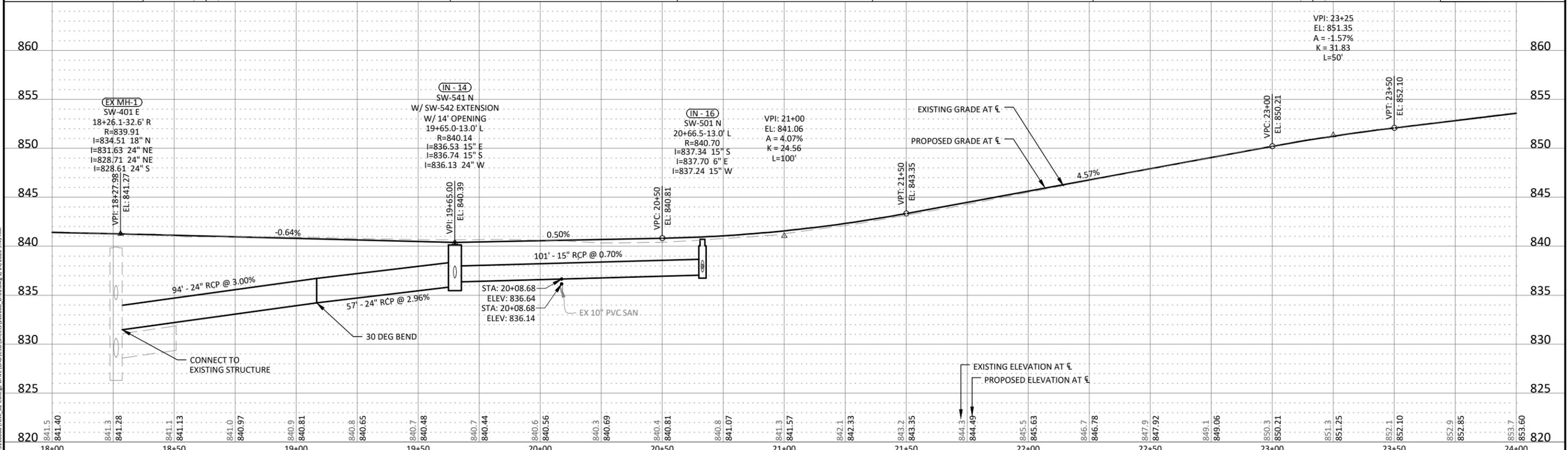
SHEET
D.3



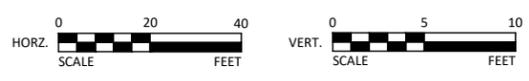
LEGEND

- 7" PCC PAVEMENT
- 6" PCC DRIVEWAY
- 4" PCC SIDEWALK

- 1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE
- 2 REMOVE AND REINSTALL MAILBOX



© Bolton & Menk, Inc. 2020. All Rights Reserved. WINDSOR HTS CI 1A13118668 Task 02 College Drive(CAD)Sheet118668.DWG 1/14/2020 9:43 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

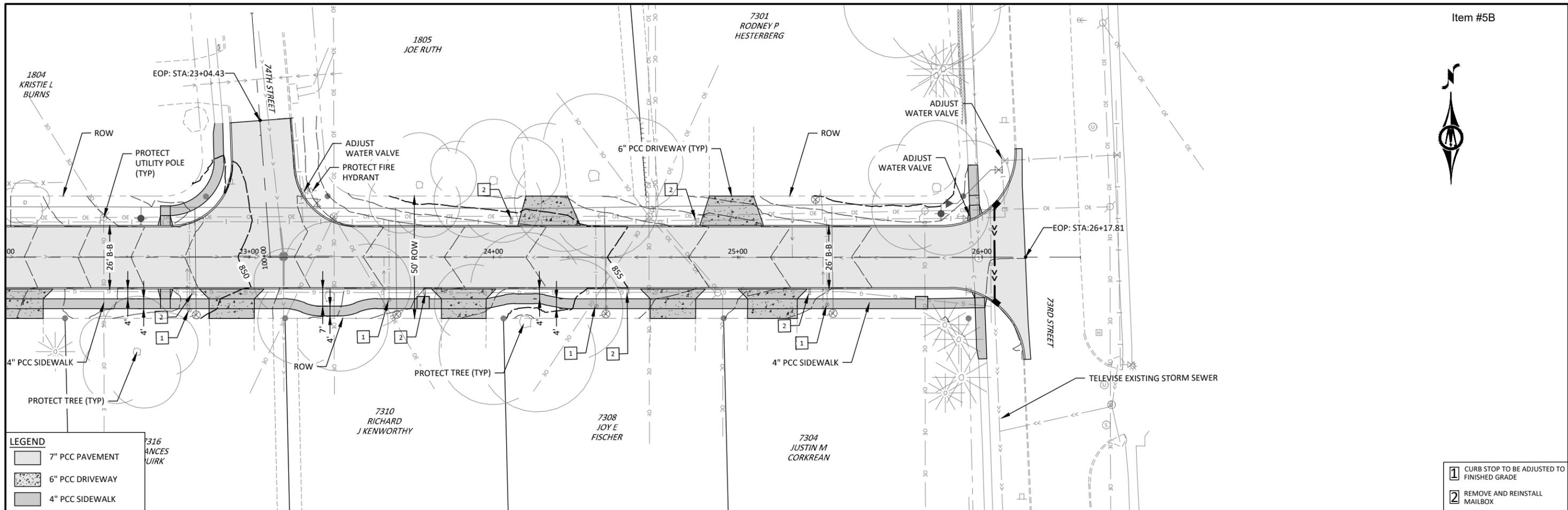


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

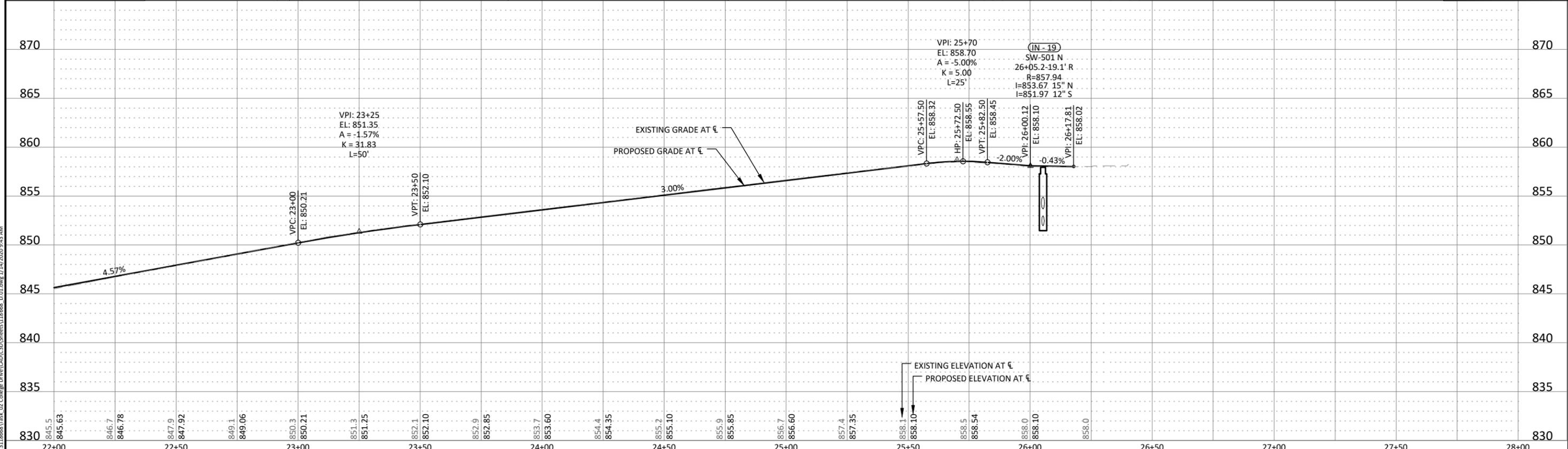
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE



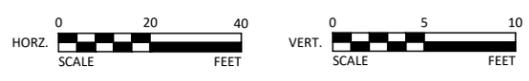
LEGEND

	7\" PCC PAVEMENT
	6\" PCC DRIVEWAY
	4\" PCC SIDEWALK

- 1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE
- 2 REMOVE AND REINSTALL MAILBOX



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI_A13118668\Task_02_College_Drive\Drawings\CD\Sheets\118668_D.01.dwg 1/14/2020 9:43 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



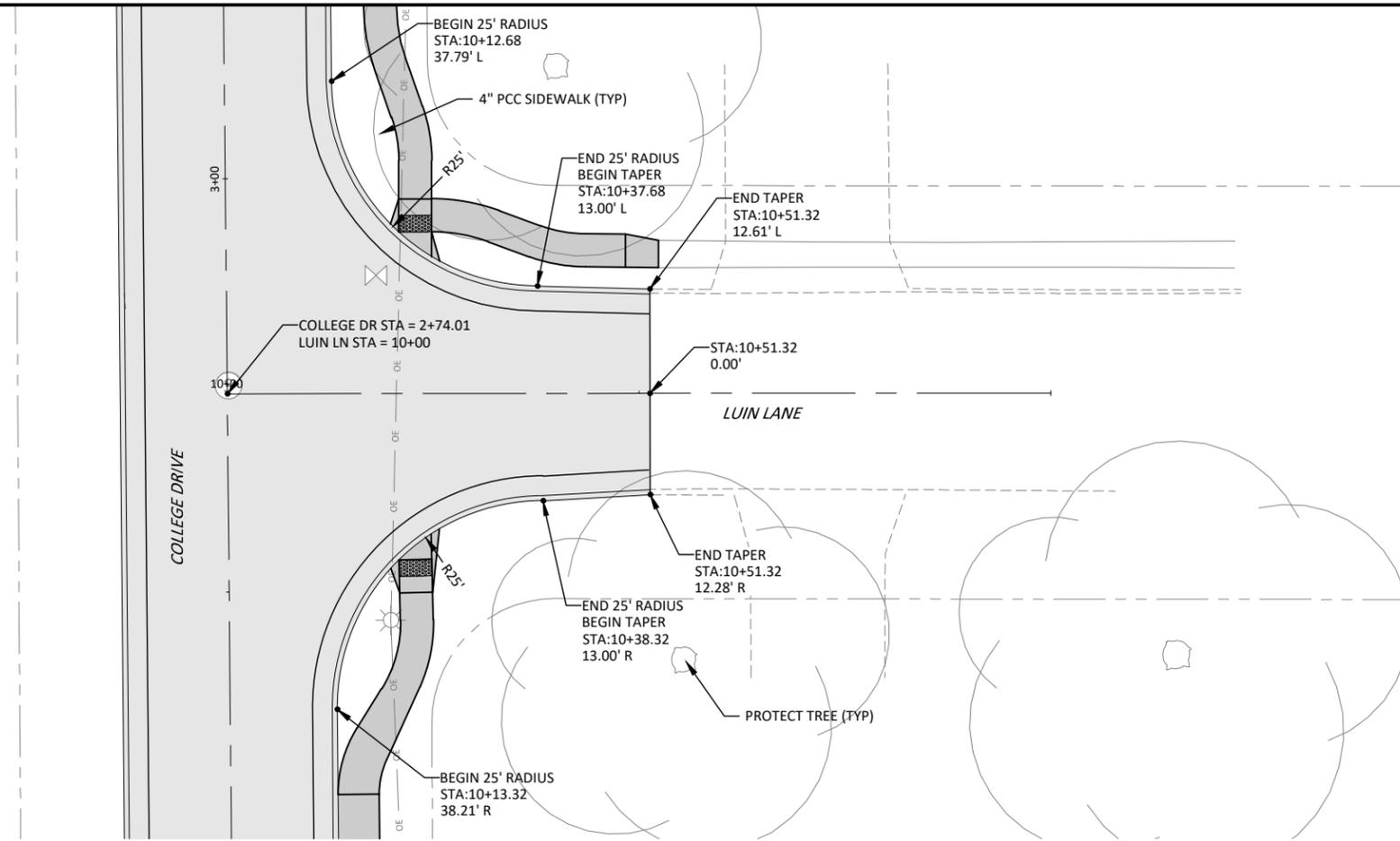
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

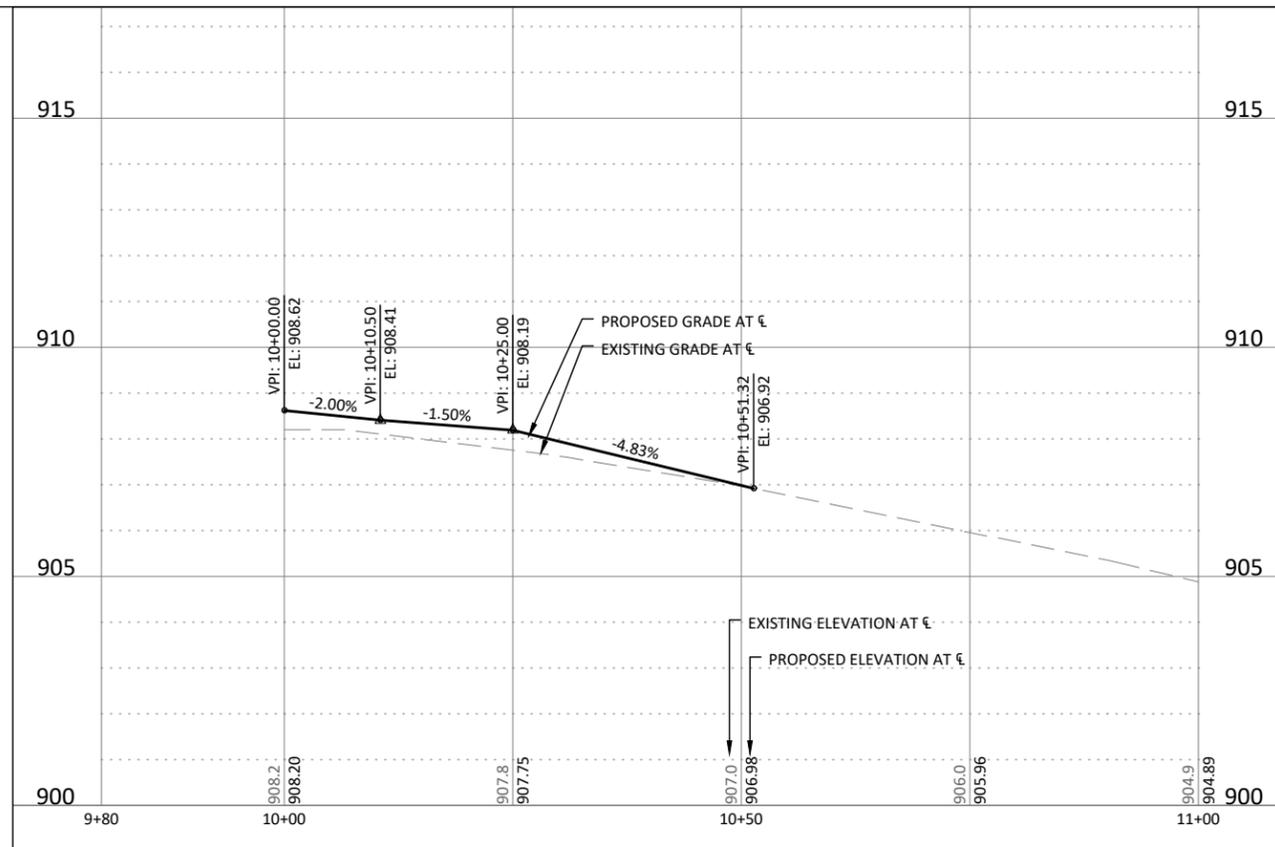
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE

SHEET
 D.5



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1318668\Task 02_College Drive\CD\Sheets\118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

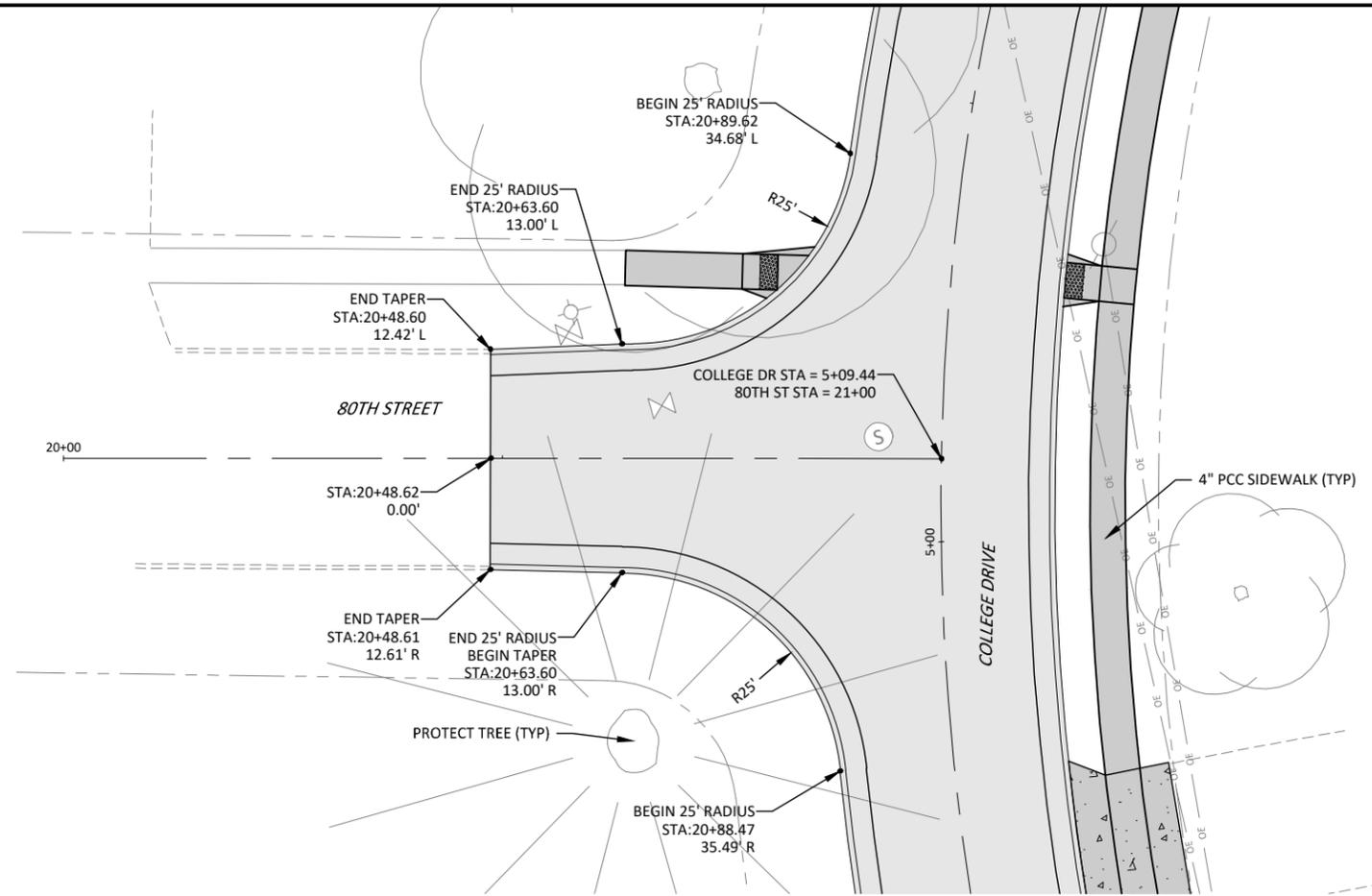


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



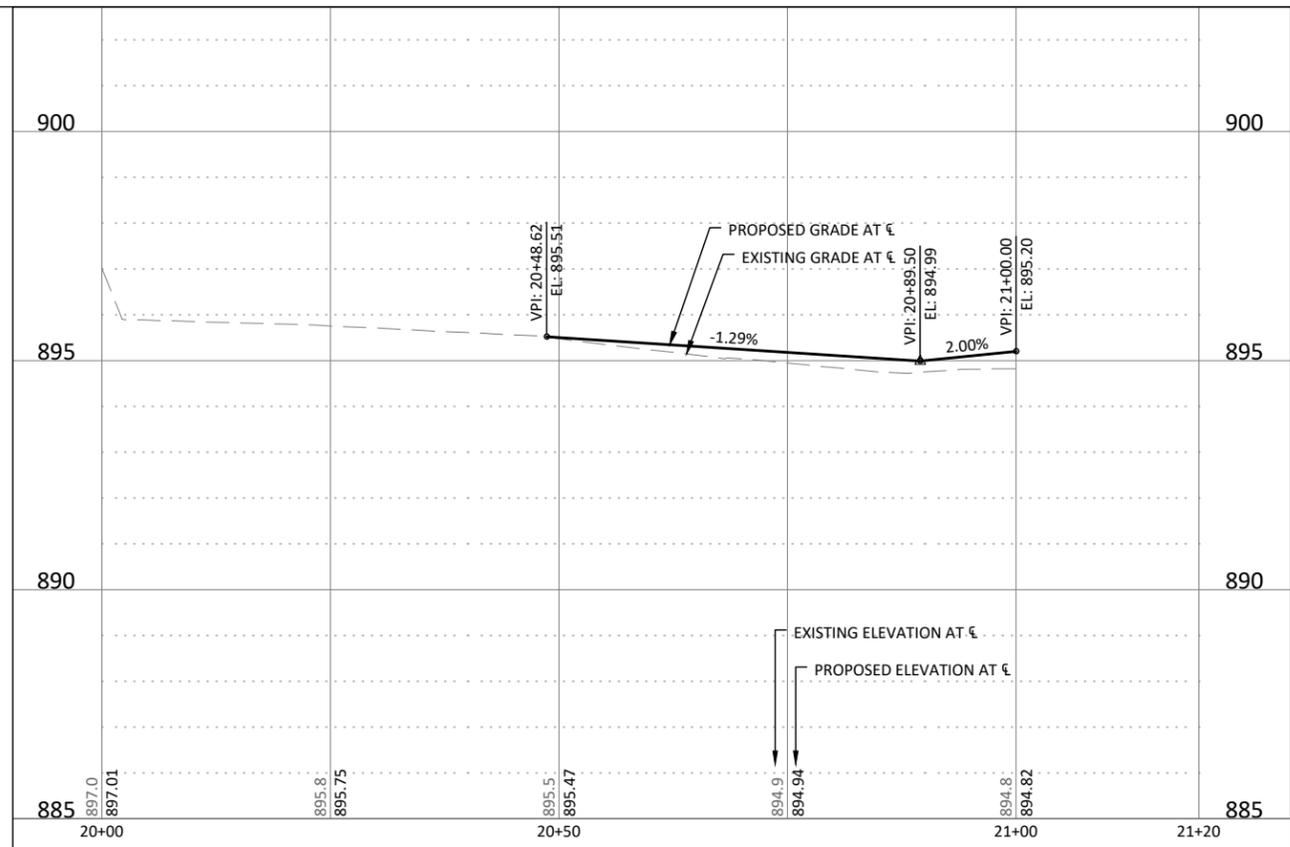
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE - LUIN LANE



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CAD\Sheet\118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

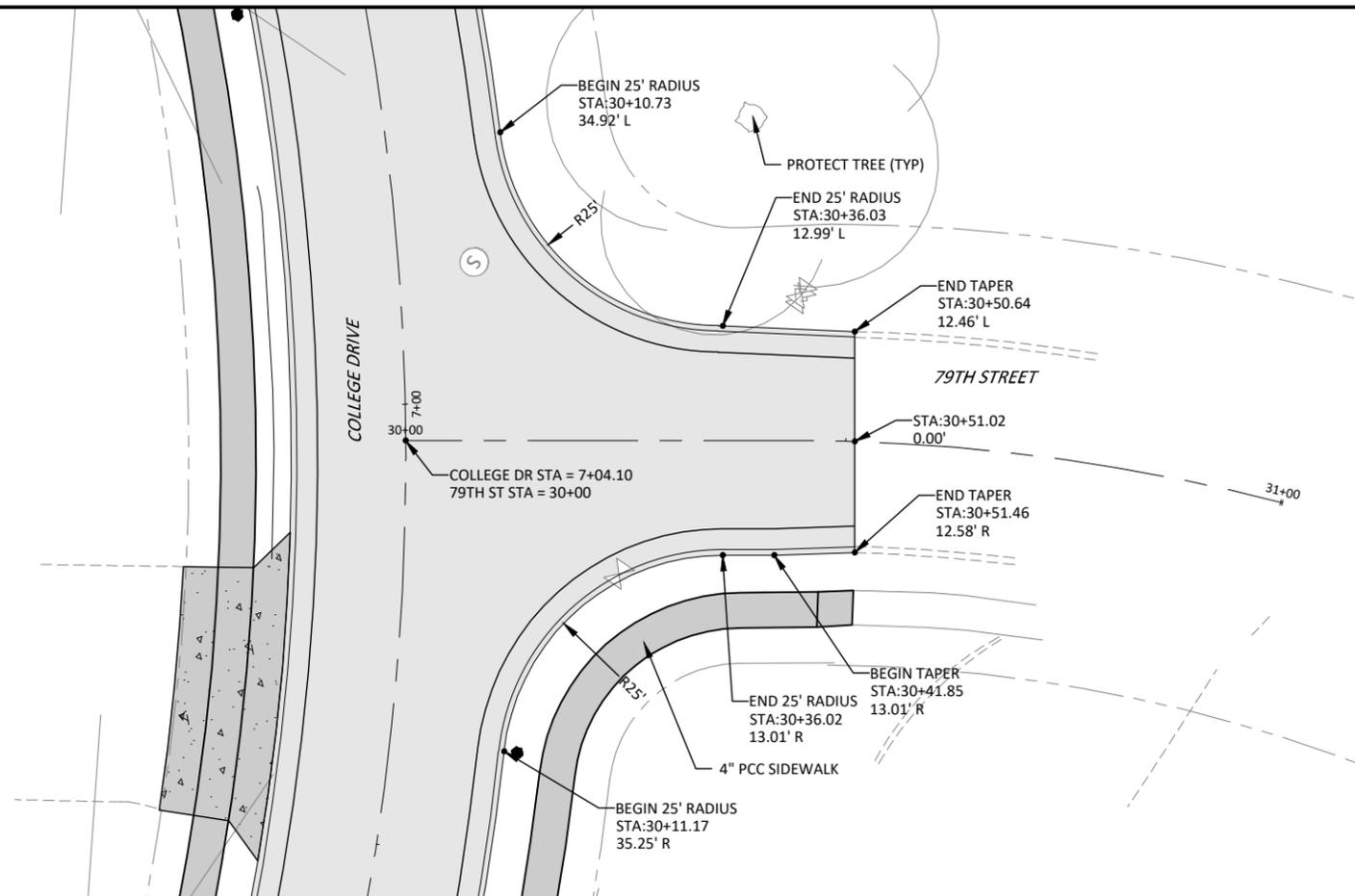


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



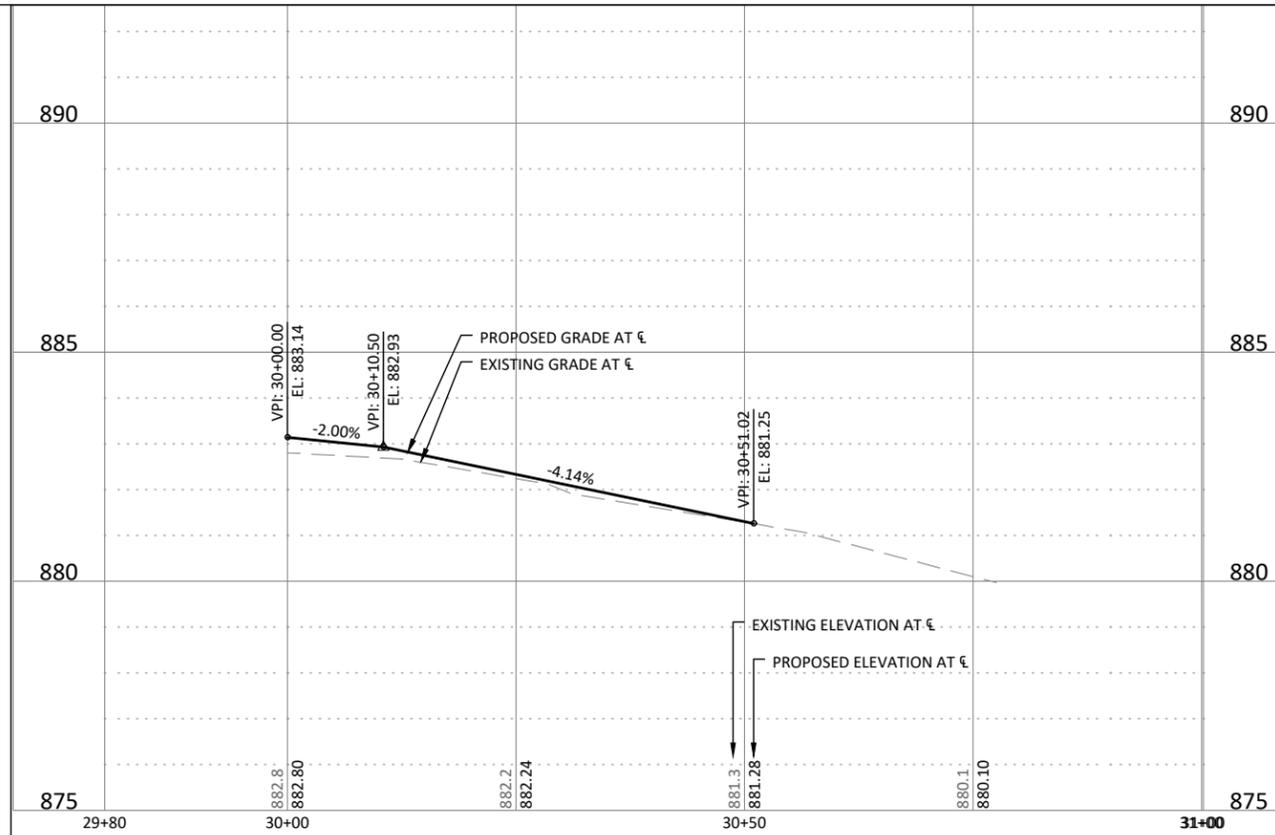
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE - 80TH STREET



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CAD\Sheet3118668_E.03.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

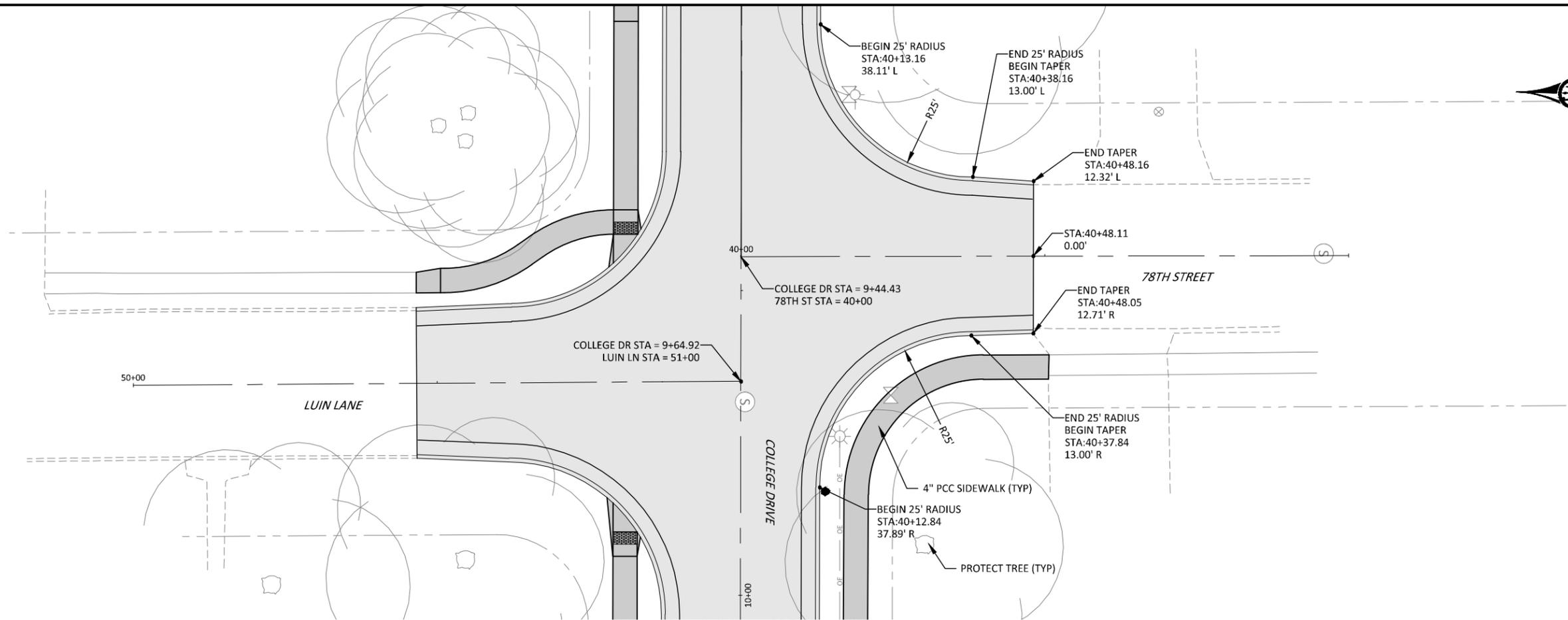


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

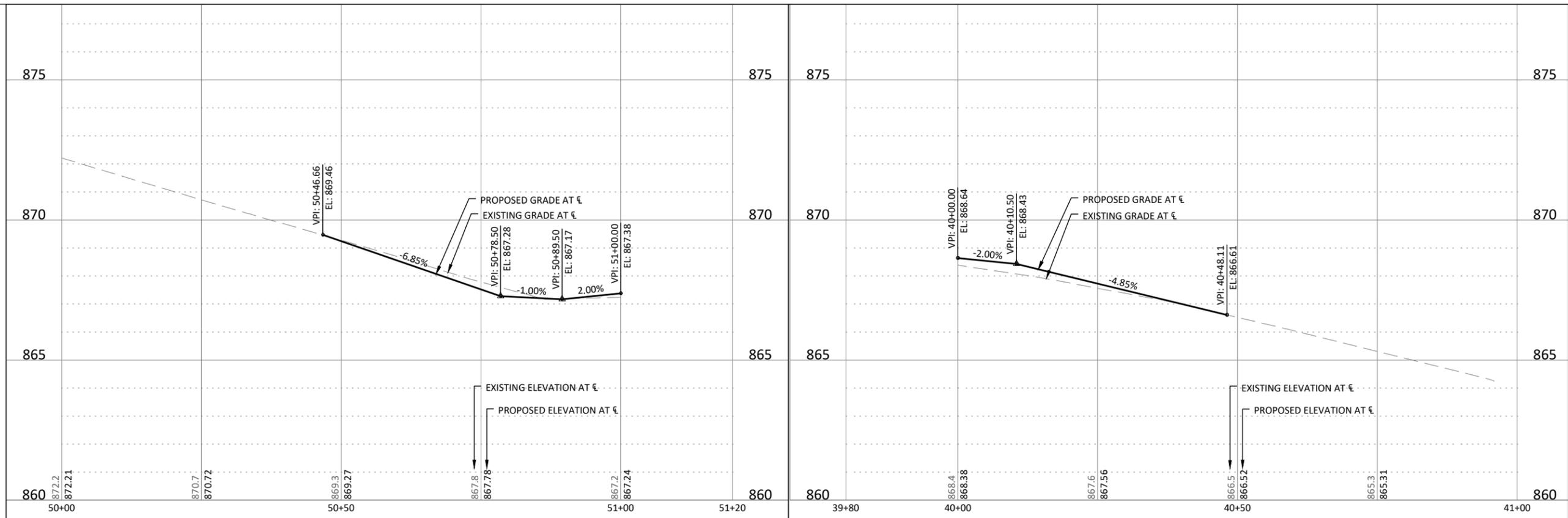


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

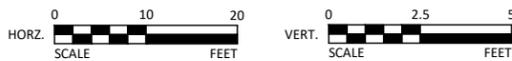
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE - 79TH STREET



LEGEND	
	7\"/>
	6\"/>
	4\"/>



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CD\CD\Sheets\18668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

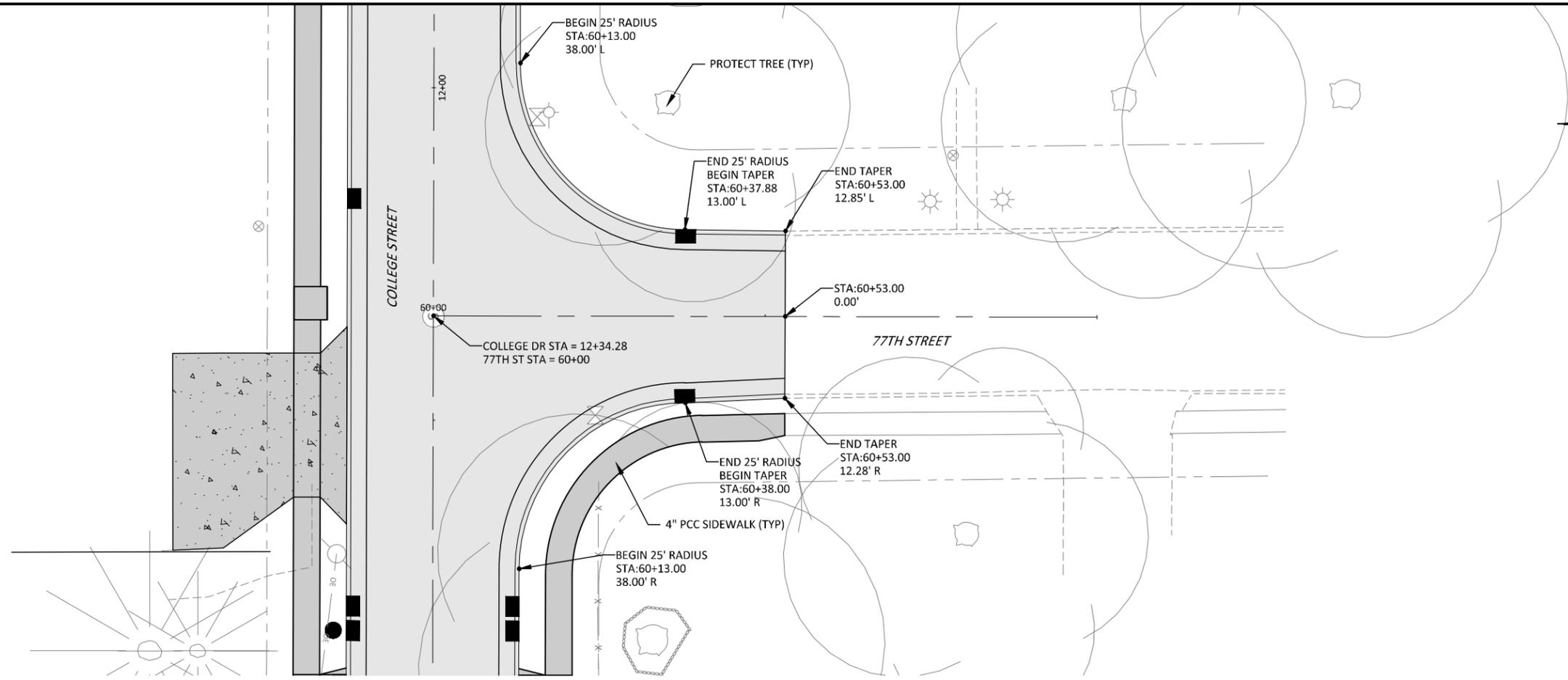


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



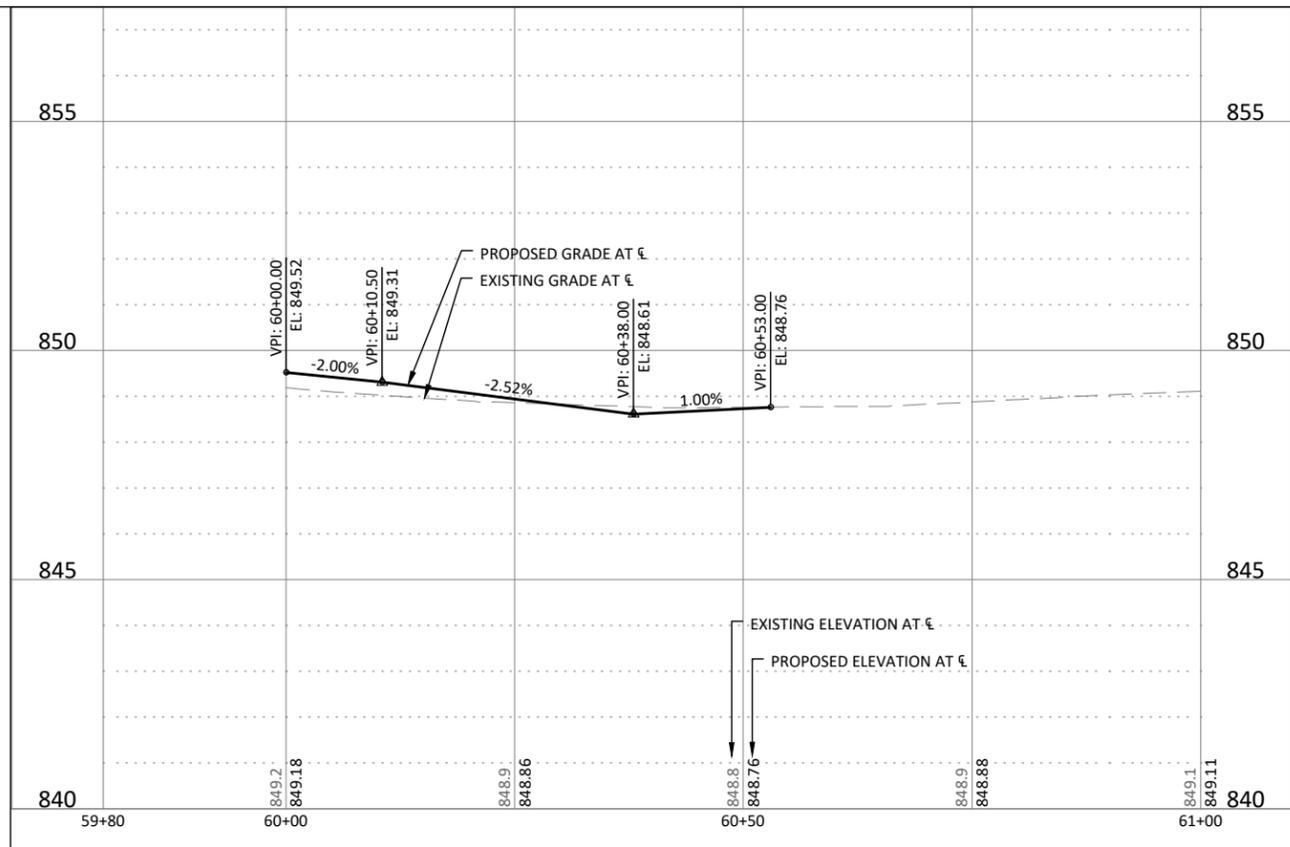
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE - 78TH STREET

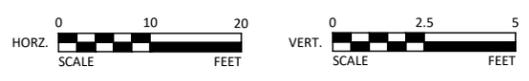


LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\CI\A13118668\Task 02_College Drive\CAD\Sheet3118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

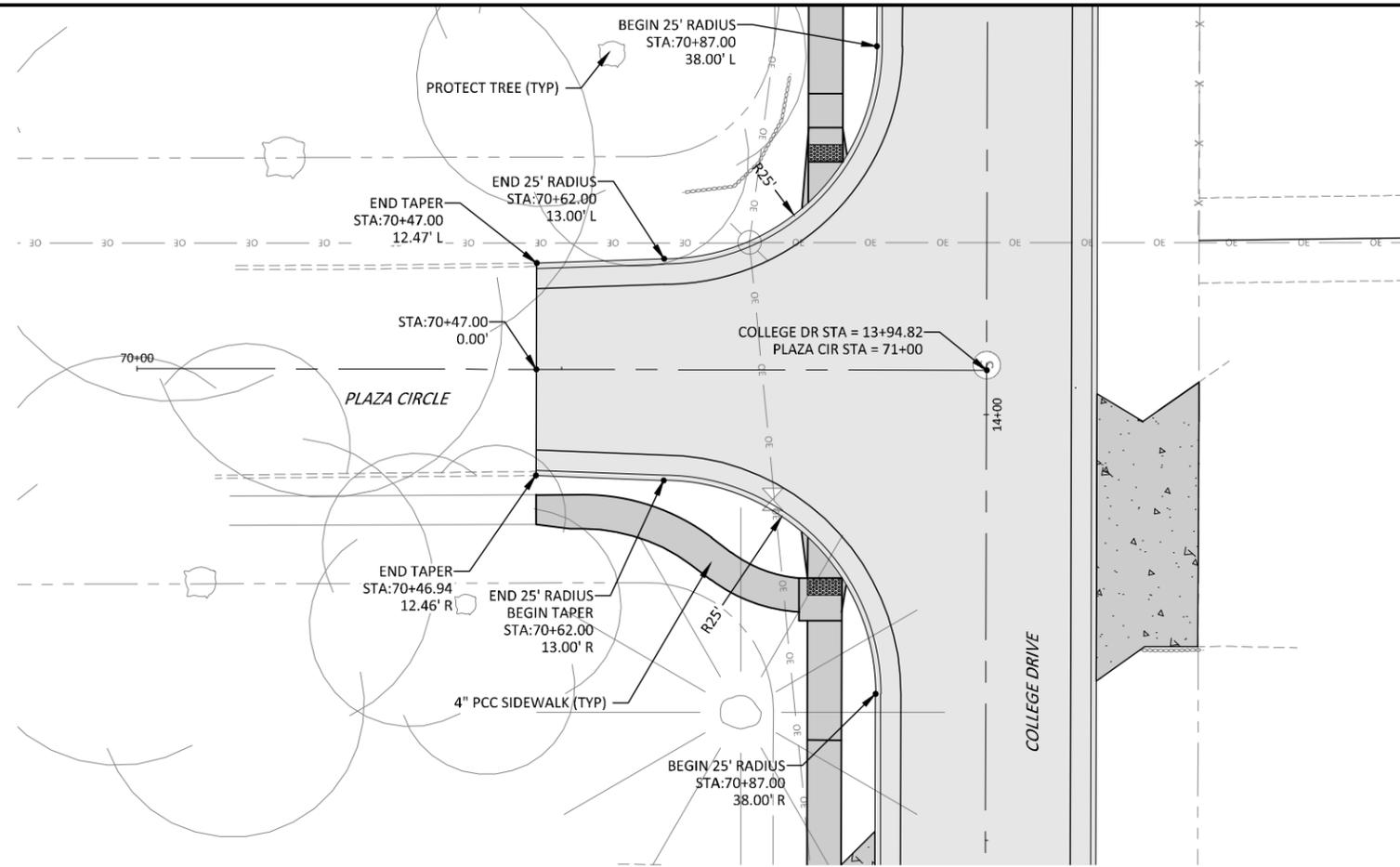


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

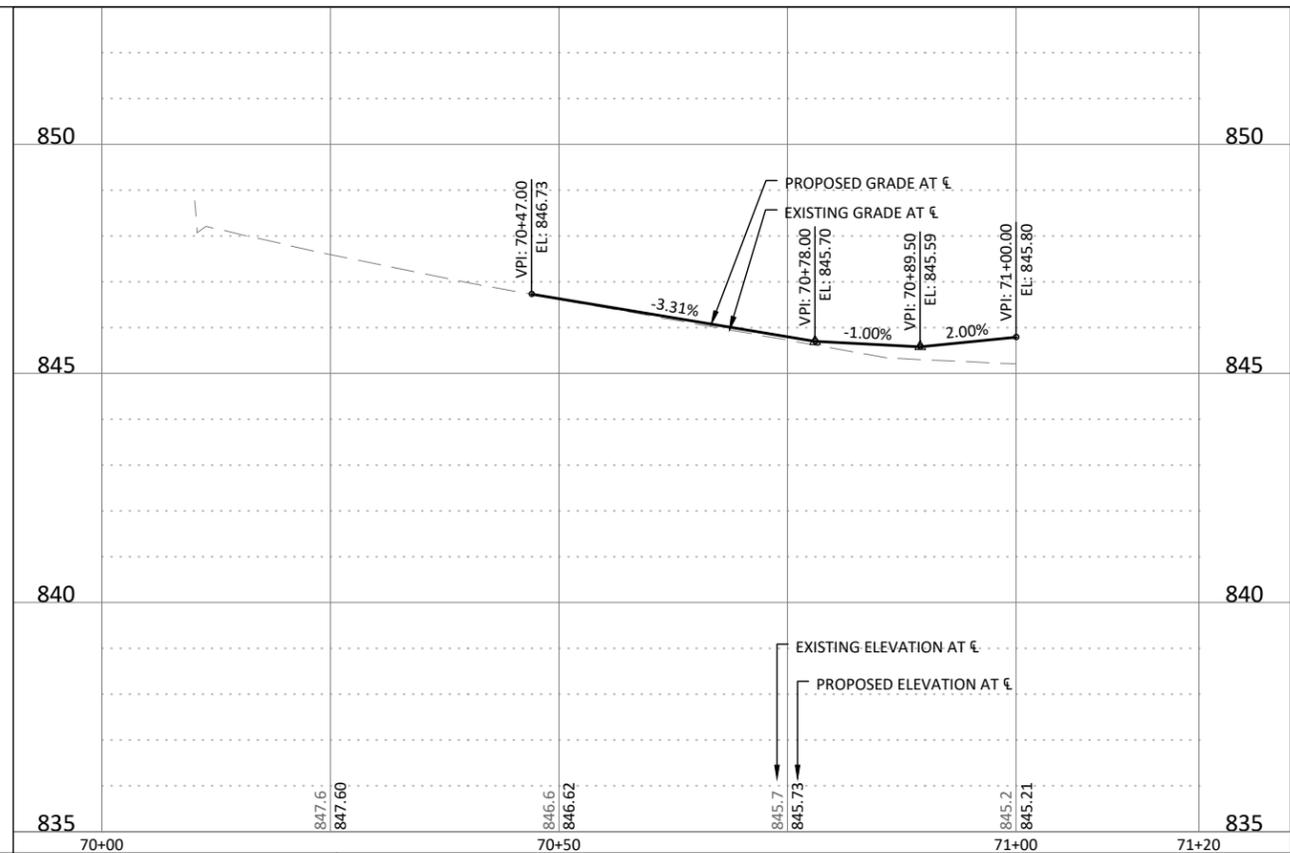


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

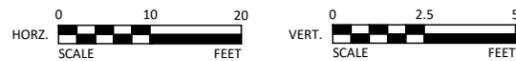
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE - 77TH STREET



LEGEND	
	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CAD\Sheet\118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

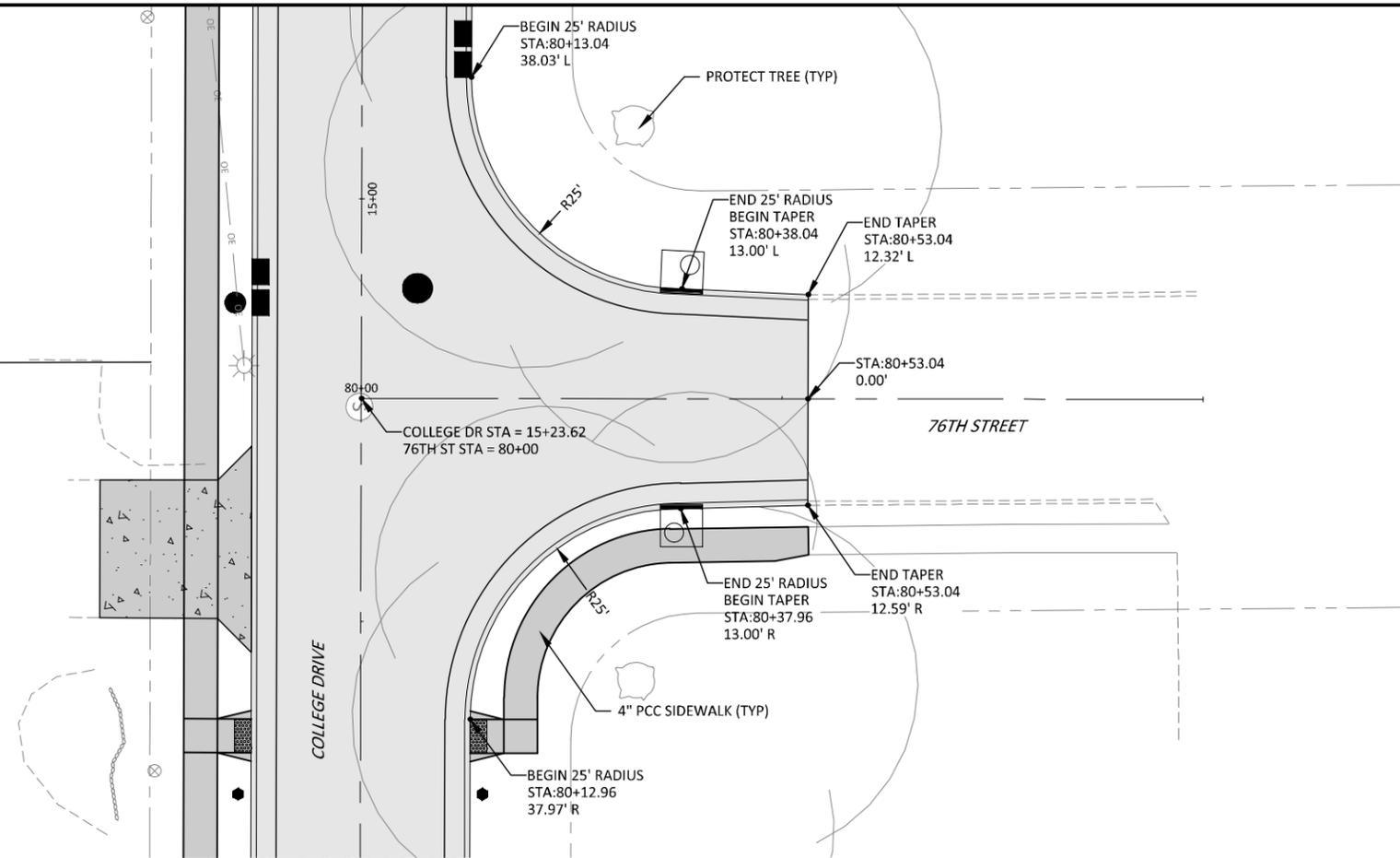


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



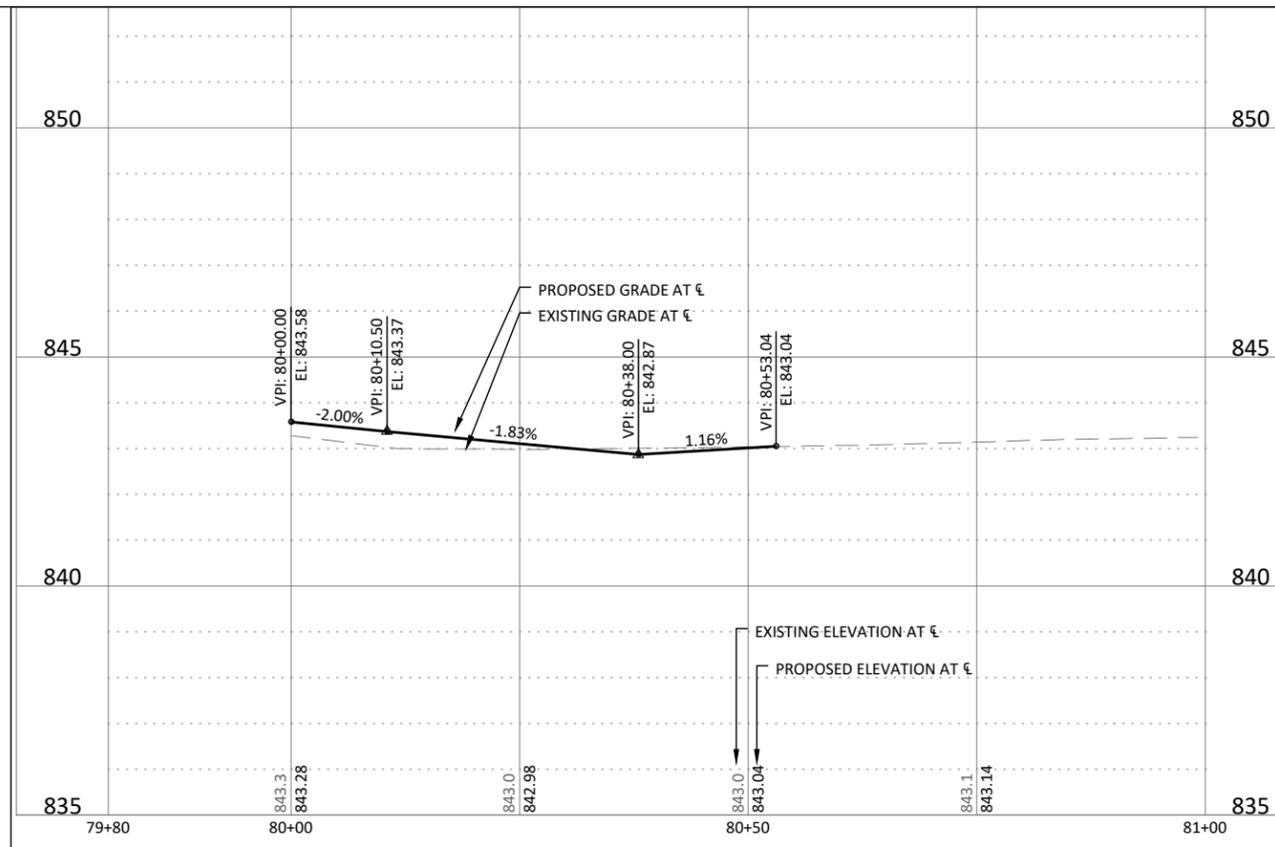
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE - PLAZA CIRCLE



LEGEND

7" PCC PAVEMENT
6" PCC DRIVEWAY
4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI_A13118668\Task_02_College_Drive\CD\Sheets\118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

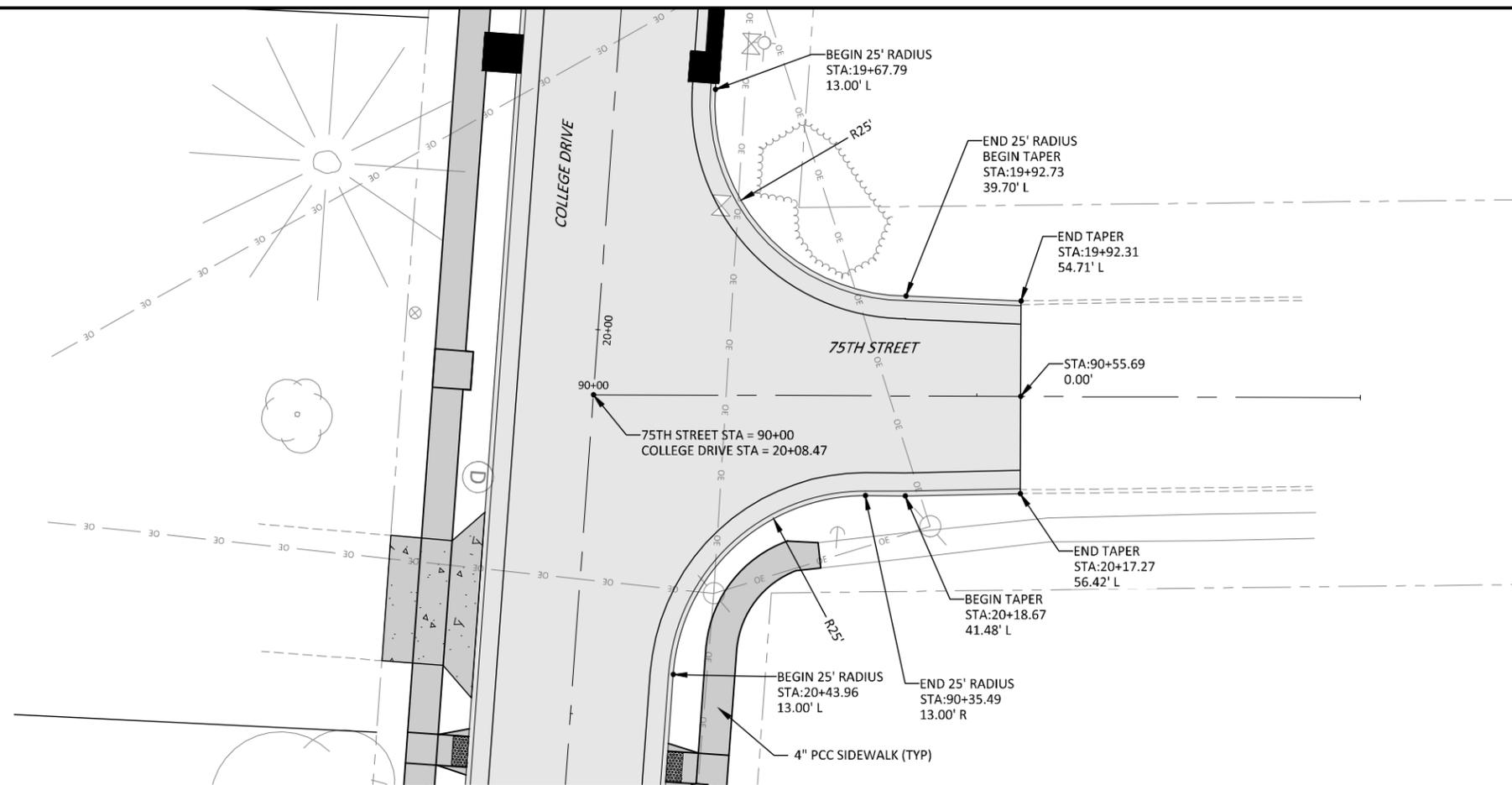


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

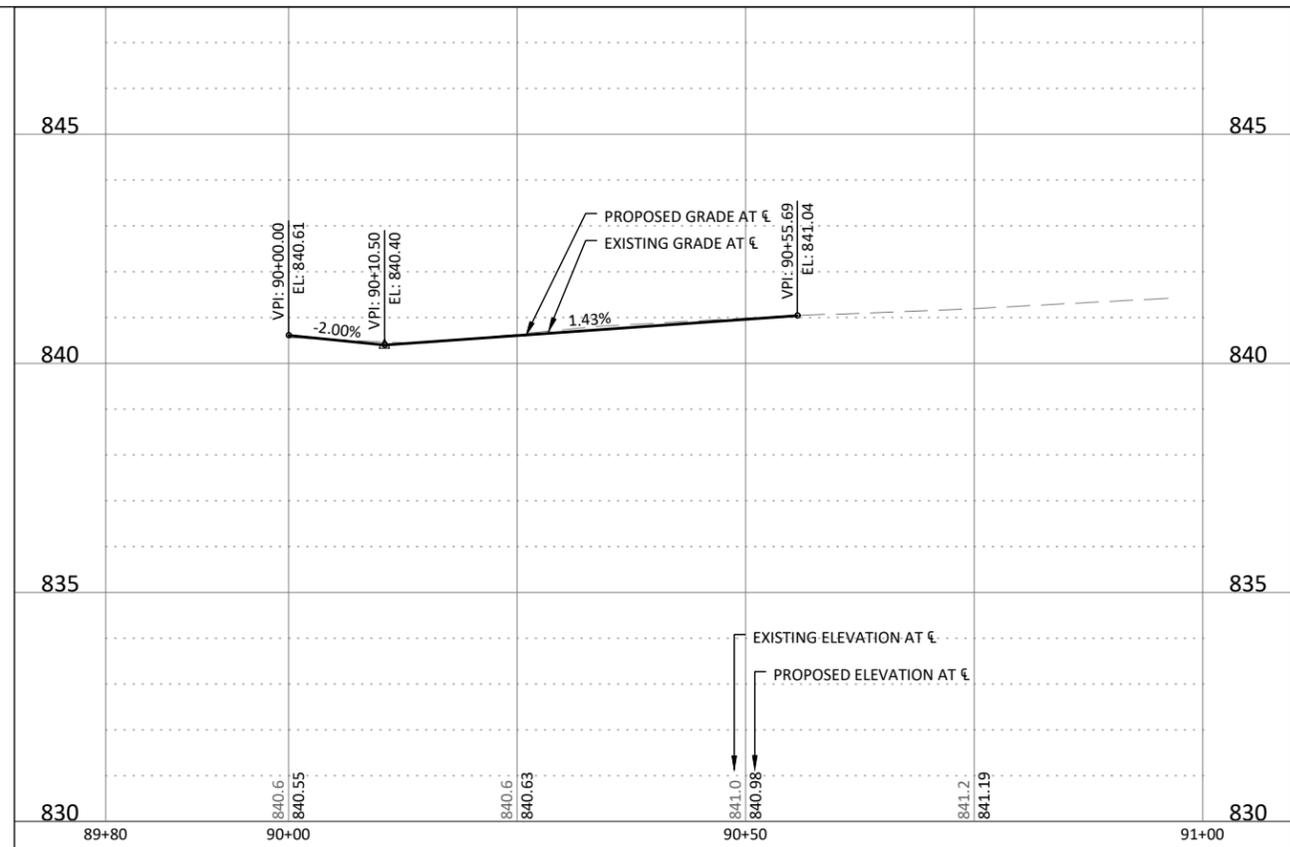


DESIGNED	NAS
SEAL	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE - 76TH STREET



LEGEND	
	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



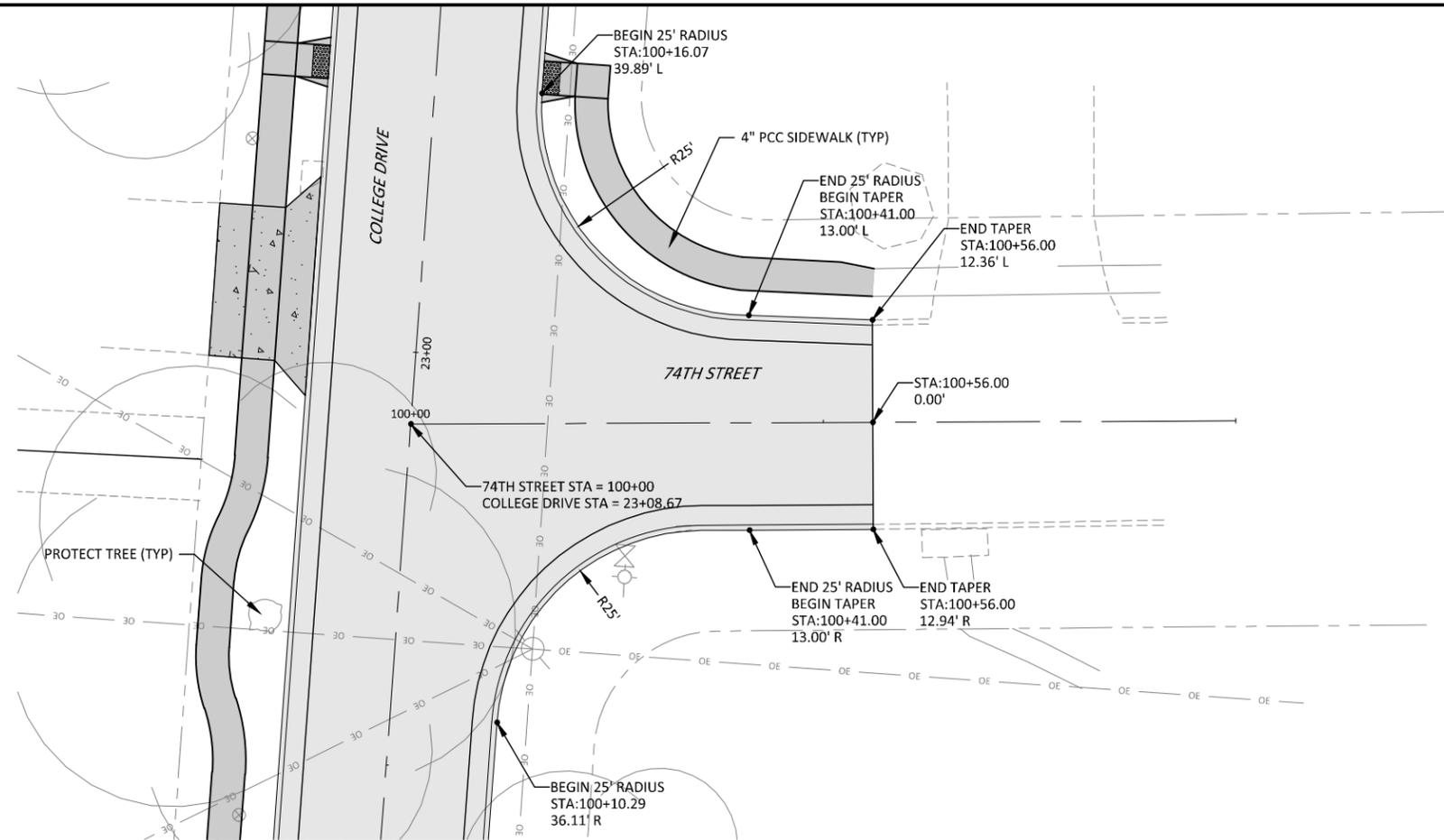
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

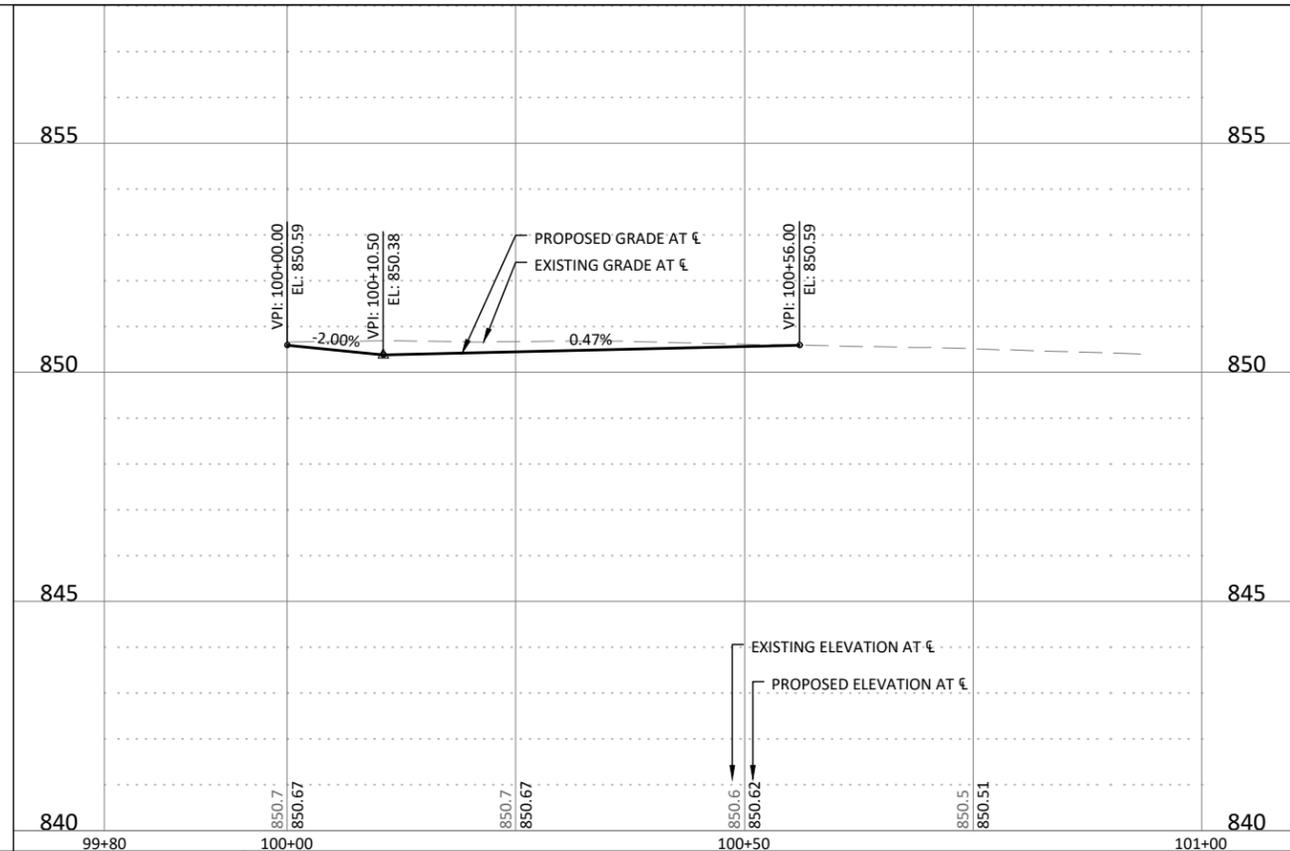
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 PLAN AND PROFILE - 75TH STREET

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR HTS CI\A13.118668\Task 02_College Drive\CAD\Sheet3118668_E.01.dwg 1/7/2020 3:40 PM



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02_College Drive\CAD\Sheet3118668_E.01.dwg 1/7/2020 3:40 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

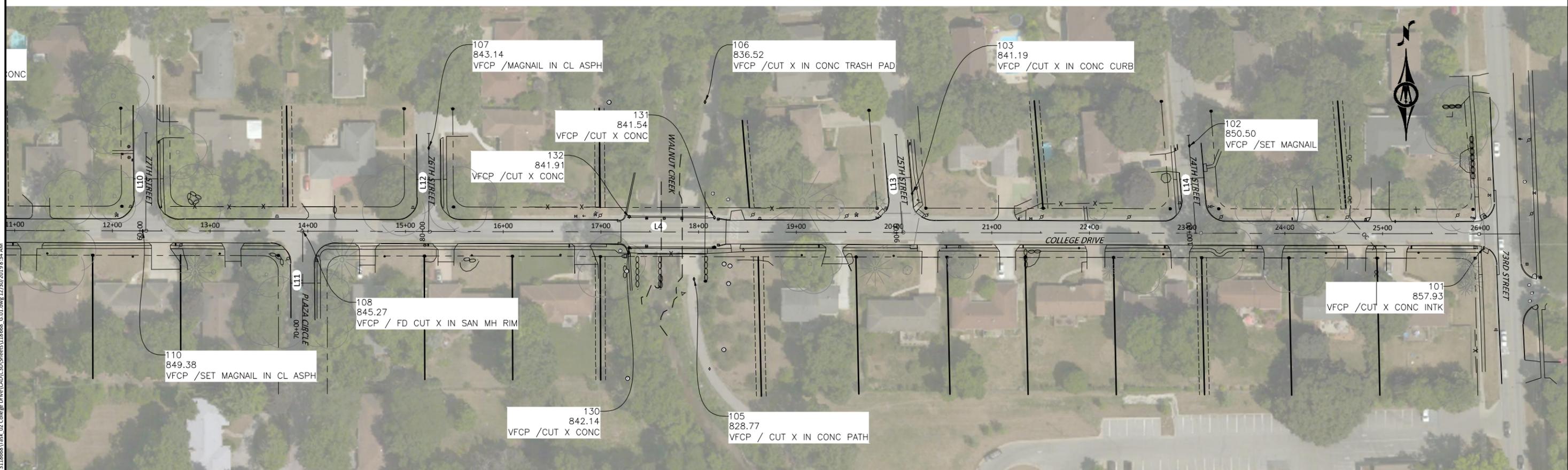
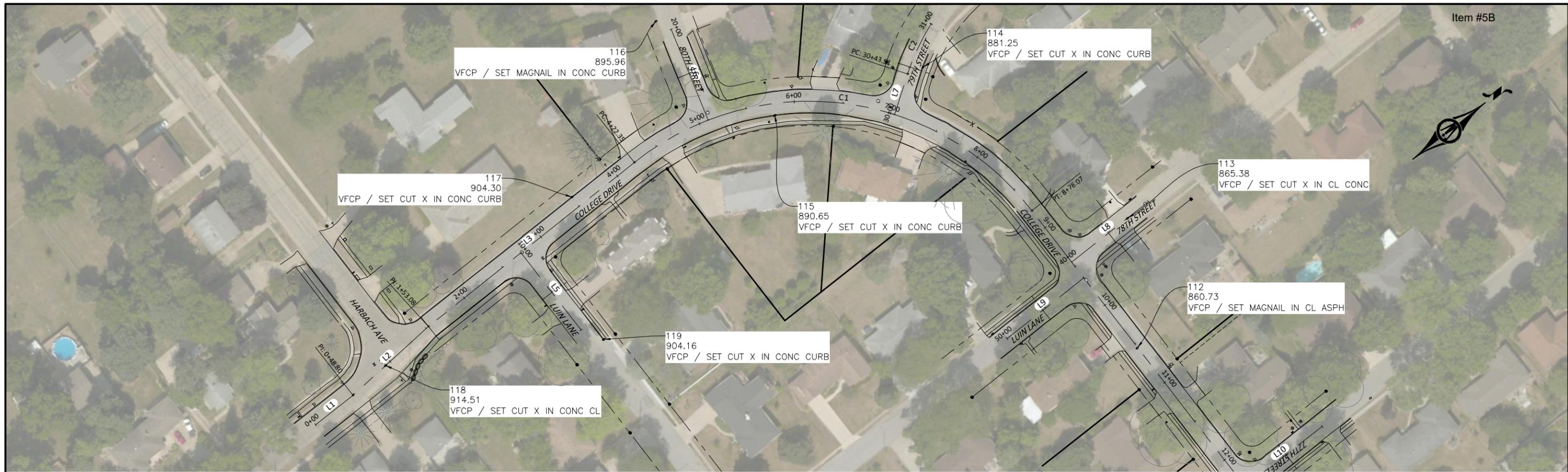


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PLAN AND PROFILE - 74TH STREET



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR HTS\CL\1A1118668\Task 02_College Drive\CD\Sheets\118668_G.01.dwg 12/20/2019 9:58:34 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
REFERENCE TIES AND BENCH MARKS

PROJECT DATUM
 HORIZONTAL DATUM: NAD 83 STATE PLANE SOUTH
 VERTICAL DATUM: NAVD 88

CONTROL POINT DATA				
POINT NO.	RAW DESCRIPTION	NORTHING	EASTING	ELEVATION
101	VFCP /CUT X CONC INTK	586396.016	1580796.992	857.93
102	VFCP /SET MAGNAIL	586500.033	1580495.371	850.50
103	VFCP /CUT X IN CONC CURB	586451.487	1580211.720	841.19
105	VFCP / CUT X IN CONC PATH	586364.231	1579988.448	828.77
106	VFCP /CUT X IN CONC TRASH PAD	586544.756	1579999.783	836.52
107	VFCP /MAGNAIL IN CL ASPH	586497.791	1579716.925	843.14
108	VFCP / FD CUT X IN SAN MH RIM	586413.903	1579587.266	845.27
109	VFCP / CUT X IN CURB	586149.591	1579601.657	858.21
110	VFCP /SET MAGNAIL IN CL ASPH	586413.124	1579424.109	849.38
112	VFCP / SET MAGNAIL IN CL ASPH	586413.150	1579248.217	860.73
113	VFCP / SET CUT X IN CL CONC	586486.603	1579137.613	865.38
114	VFCP / SET CUT X IN CONC CURB	586416.210	1578887.230	881.25
115	VFCP / SET CUT X IN CONC CURB	586266.171	1578833.094	890.65
116	VFCP / SET MAGNAIL IN CONC CURB	586229.045	1578682.551	895.96
117	VFCP / SET CUT X IN CONC CURB	586051.330	1578771.187	904.30
118	VFCP / SET CUT X IN CONC CL	585795.095	1578789.626	914.51
119	VFCP / SET CUT X IN CONC CURB	585987.530	1578905.744	904.16
130	VFCP /CUT X CONC	586396.113	1579921.964	842.14
131	VFCP /CUT X CONC	586426.916	1580009.290	841.54
132	VFCP /CUT X CONC	586427.671	1579922.150	841.91

ALIGNMENT LINE DATA							
LINE #	LENGTH	BEARING	START POINT	END POINT	START STATION	END STATION	Alignment Name
L1	48.8017	N0° 17' 57.79"W	(1578793.3890, 585701.4250)	(1578793.1340, 585750.2260)	0+00	0+48.80	COLLEGE DRIVE
L2	104.2735	N4° 24' 04.44"W	(1578793.1340, 585750.2260)	(1578785.1320, 585854.1920)	0+48.80	1+53.08	COLLEGE DRIVE
L3	269.2717	N0° 32' 04.50"W	(1578785.1320, 585854.1920)	(1578782.6197, 586123.4519)	1+53.08	4+22.35	COLLEGE DRIVE
L4	1762.2969	S89° 52' 20.07"E	(1579071.2493, 586414.1383)	(1580833.5418, 586410.2087)	8+78.07	26+40.36	COLLEGE DRIVE
L5	100.0000	N89° 56' 38.95"E	(1578784.0037, 585975.1188)	(1578884.0036, 585975.2163)	10+00	11+00	LUIIN LANE S
L6	100.0000	S74° 15' 22.64"E	(1578698.6397, 586236.4775)	(1578794.8882, 586209.3440)	20+00	21+00	80TH STREET
L7	43.5121	N34° 04' 22.81"W	(1578907.5597, 586363.5406)	(1578883.1821, 586399.5828)	30+00	30+43.51	79TH STREET
L8	100.0000	N0° 06' 51.86"W	(1579137.6182, 586413.9903)	(1579137.4185, 586513.9901)	40+00	41+00	78TH STREET
L9	100.0000	N0° 22' 43.72"W	(1579158.7139, 586313.9469)	(1579158.0527, 586413.9447)	50+00	51+00	LUIIN LANE N
L10	100.0000	N0° 07' 39.93"E	(1579427.4592, 586413.3440)	(1579427.6822, 586513.3438)	60+00	61+00	77TH STREET
L11	100.0000	N0° 07' 39.93"E	(1579587.7813, 586312.9863)	(1579588.0043, 586412.9860)	70+00	71+00	PLAZA CIRCLE
L12	100.0000	N0° 03' 49.24"E	(1579716.8008, 586412.6988)	(1579716.9120, 586512.6988)	80+00	81+00	76TH STREET
L13	100.0000	N3° 46' 57.82"W	(1580201.6541, 586411.6177)	(1580195.0568, 586511.3999)	90+00	91+00	75TH STREET
L14	100.0000	N4° 13' 05.78"W	(1580501.8503, 586410.9483)	(1580494.4947, 586510.6775)	100+00	101+00	74TH STREET

ALIGNMENT CURVE DATA					
CURVE #	RADIUS	LENGTH	CHORD DIRECTION	START POINT	END POINT
C1	288.00	455.72	NORTH44.796587EAST	(1578782.6197,586123.4519)	(1579071.2493,586414.1383)
C2	226.30	56.70	NORTH26.895815WEST	(1578883.1821,586399.5828)	(1578857.6014,586450.0142)

© Bolton & Menk, Inc. 2019. All Rights Reserved
 P:\WINDSOR HTS\CI-1A13118668\Task 02_College Drive CAD\CAD Sheets\118668_G.01.dwg 12/20/2019 9:34 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 REFERENCE TIES AND BENCH MARKS

TRAFFIC CONTROL NOTES:

1. CONTRACTOR RESPONSIBLE TO OBTAIN ANY PERMITS FOR TRAFFIC CONTROL DEVICES FOR ALL AFFECTED AGENCIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED TRAFFIC CONTROL PLANS FOR ANY OTHER STAGES THAT MAY BE REQUIRED. CHANGES TO THE STAGING PLAN MUST BE APPROVED BY THE ENGINEER. ADJUSTMENT TO ADVANCED SIGNAGE AND BARRICADING AS REQUIRED TO COMBINE STAGES ARE SUBJECT TO ENGINEER APPROVAL AND ARE CONSIDERED INCIDENTAL.
3. THE CONTRACTOR SHALL COVER ALL CONFLICTING EXISTING SIGNAGE (INCIDENTAL).
4. DETOUR SIGNAGE SHALL BE FURNISHED, INSTALLED, MAINTAINED AND REMOVED BY THE CONTRACTOR.
5. SOME CONSTRUCTION MAY REQUIRE TEMPORARY LANE CLOSURES NOT SHOWN ON THE PLANS. REFER TO PART 6 OF THE MUTCD FOR STANDARD LANE CLOSURE SIGNAGE.
6. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
7. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
8. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
9. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
10. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
11. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
12. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
13. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
14. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
15. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.
16. INSTALL DYNAMIC MESSAGE SIGNS THREE WEEKDAYS PRIOR TO ROAD CLOSURE AT BOTH ENDS OF THE PROJECT. MESSAGE SHALL BE APPROVED BY ENGINEER.

STAGING NOTES

1. THE CONTRACTOR IS TO CONSTRUCT THE PROJECT IN 4 STAGES. THE CONTRACTOR SHALL PROVIDE A STAGING PLAN AND SCHEDULE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. THESE STAGING NOTES ARE NOT INTENDED TO CONFINE THE CONTRACTOR'S ACTIVITIES TO THE AREAS OF SUGGESTED STAGES ALONE. IT IS UNDERSTOOD THAT VARIOUS STEPS INCLUDED HEREIN MAY OCCUR SIMULTANEOUSLY. THE CONTRACTOR MAY CONDUCT SEVERAL OPERATIONS CONCURRENTLY, PROVIDED THAT TRAFFIC AND ACCESS IS MAINTAINED AND THESE OPERATIONS DO NOT CONFLICT WITH THE STAGING INDICATED HEREIN, OTHER PORTIONS OF THIS PROJECT AND OTHER CONSTRUCTION ACTIVITIES.
3. AS LONG AS WORK REMAINS ON THE PROJECT, THE CONTRACTOR SHALL REMAIN ON THE PROJECT. IF ISSUES EXIST WITHIN A STAGE OF THE PROJECT WHICH ARE BEYOND THE CONTRACTOR'S CONTROL, THE CITY HAS THE OPTION TO REVISE THE CONTRACT STAGING AND DIRECT THE CONTRACTOR TO WORK ON OTHER "UNAFFECTED" STAGES OR AREAS OF THE PROJECT AS SHOWN WITHIN THE CONTRACT DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER. THE OWNER MAY, AT THE OWNERS DISCRETION, PROVIDED ADDITIONAL DAYS TO THE CONTRACTOR BASED UPON RELOCATION EFFORTS AND SCHEDULING JUSTIFICATION.
4. ONCE WORK WITHIN A STAGE HAS COMMENCED, THE CONTRACTOR SHALL CONTINUE WORK WITHIN THAT STAGE UNTIL ALL WORK WITHIN THAT STAGE HAS BEEN COMPLETED. IF WORK WITHIN THAT STAGE IS NOT COMPLETED AND THE CONTRACTOR REMOVES THE "NORMAL" SIZE CREW (AND/OR EQUIPMENT) FROM THE PROJECT WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER, THEN THE CONTRACTOR WILL BE CHARGED A DAY.
5. ANY ADJUSTMENT TO THE STAGING/TRAFFIC CONTROL SHALL BE COORDINATED WITH THE CITY OF WINDSOR HEIGHTS AND ENGINEER ON RECORD A MINIMUM OF TWO WEEKS IN ADVANCE.
6. THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION TO START EACH STAGE OF THE PROJECT AND SUBMIT AN UPDATED SCHEDULE FOR EACH STAGE UNDER CONSTRUCTION.
7. THE ROAD SHALL BE SCRAPPED AND BROOMED PRIOR TO OPENING THE STREET TO TRAFFIC.
8. SITE RESTORATION SHALL BE COMPLETE PRIOR TO NEXT STAGE STARTING.
9. MULTIPLE STAGES MAY BE COMPLETED AT ONE TIME IF OWNER AND ENGINEER APPROVE. THE CONTRACTOR SHALL SUBMIT A PLAN OUTLINING THE CONSTRUCTION ALONG WITH TRAFFIC CONTROL AND ACCESS MANAGEMENT.

WORK SPANNING MULTIPLE CONSTRUCTION SEASONS

1. THE CONTRACTOR SHALL NOT BEGIN THE FINAL STAGE(S) OF THE PROJECT UNLESS COMPLETION OF SAID CONSTRUCTION ACTIVITIES, PRIOR TO WINTER SHUT DOWN, CAN BE ACHIEVED.
2. IF IN THE CONTRACTOR'S JUDGEMENT A STAGE SHOULD BE POSTPONED TO THE FOLLOWING SPRING DUE TO IMPENDING WEATHER, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH THE ENGINEER AND OWNER TO DISCUSS THE SITUATION AND POTENTIAL SUSPENSION OF WORKING DAYS. THE CONTRACTOR IS NOT ALLOWED TO LEAVE ANY SECTION OF ROADWAY CLOSED TO TRAFFIC DURING WINTER SHUTDOWN.

SIDEWALKS

1. EXISTING SIDEWALK TO REMAIN IN PLACE AS LONG AS POSSIBLE TO PROVIDE ACCESS.
2. SIDEWALK REMOVAL AND RECONSTRUCTION SHALL BE STAGED TO MINIMIZE LOSS OF PEDESTRIAN ACCESS TO RESIDENTIAL AND BUSINESS ENTRANCES. ALL WORK AT ENTRANCES SHALL BE COORDINATED WITH THE RESIDENT AND/OR BUSINESS OWNER.
3. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SIGNAGE FOR SIDEWALK CLOSURES.
4. REFER TO IOWA DOT STANDARD ROAD PLAN TC-601 FOR SIDEWALK CLOSURE INFORMATION AND STANDARDS.
5. SIDEWALK TRAFFIC CONTROL SHALL REMAIN IN PLACE UNTIL SIDEWALKS ARE REPLACED AND ACCESSIBLE.
6. THE COST FOR SIDEWALK ACCOMMODATIONS IS INCIDENTAL TO THE COST OF TRAFFIC CONTROL.

MAINTAINING MOBILITY FOR HANDICAPPED RESIDENTS:

Item #5B

1. DUE TO THE MOBILITY ISSUES OF SEVERAL RESIDENTS ALONG THE CORRIDOR, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COURTESY CART FOR TRANSPORTING RESIDENTS TO AND FROM THEIR PARKED VEHICLES TO THEIR PLACE OF RESIDENCE WHILE THE ROADWAY IS CLOSED.
2. THE CONTRACTOR HAS THE OPTION REGARDING THE KIND OF CART PROVIDED (GOLF, GATOR, ETC.). ENGINEER ON RECORD SHALL APPROVE CART OPTION.
3. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE A MOBILE PHONE NUMBER TO WHICH RESIDENTS CAN CALL BETWEEN THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY TO WHICH THEY WILL BE ABLE TO REACH THE COURTESY CART DRIVER, UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE WITH THE RESIDENTS.
4. THE CART WILL OPERATE IN CONJUNCTION WITH GRADING AND PAVING OPERATIONS. THE MAXIMUM WAIT TIME FOR THE COURTESY CART SHALL BE 30 MINUTES.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02_College Drive\CAD\CAD Sheets\118668_01.dwg 1/7/2020 3:53 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



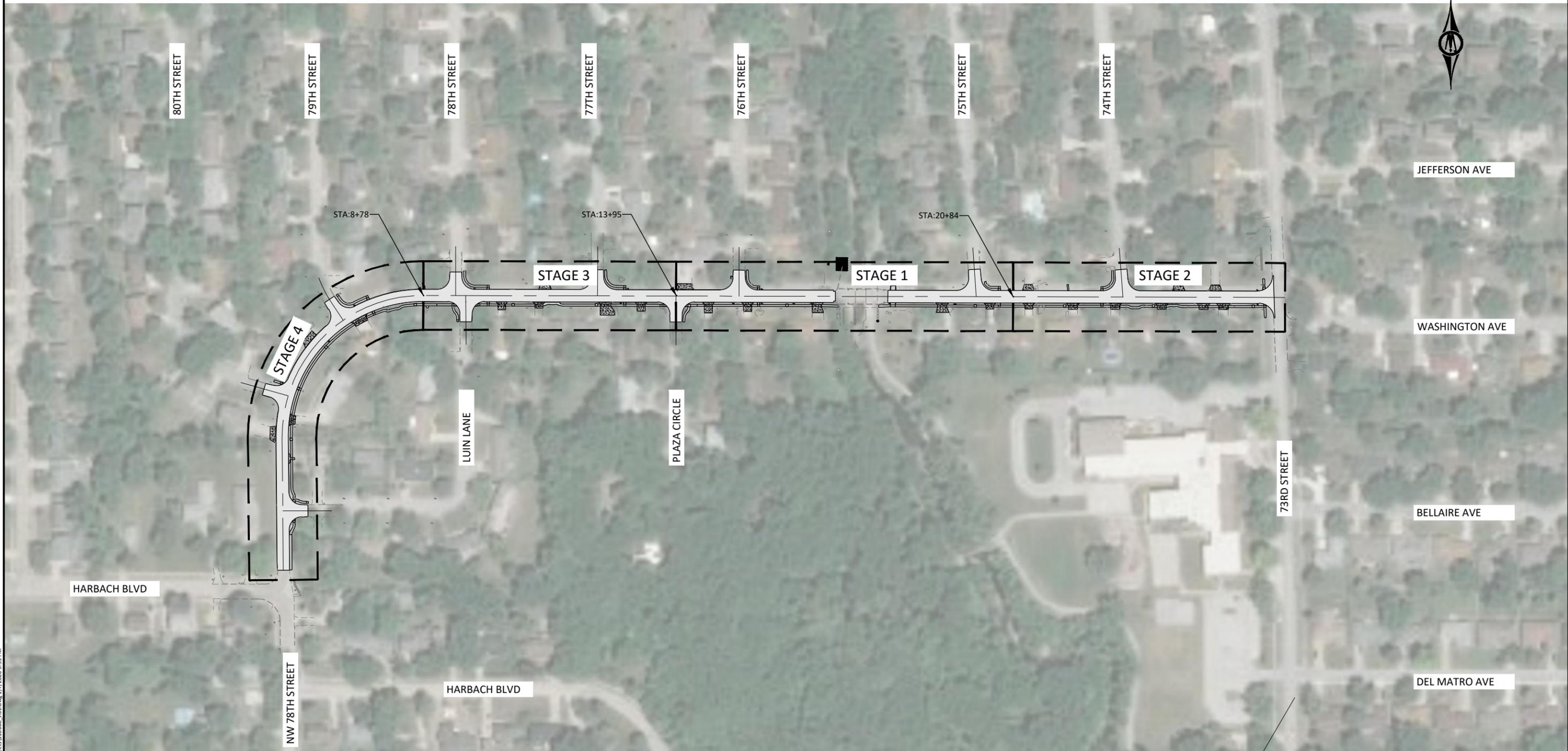
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
TRAFFIC CONTROL NARRATIVE

SHEET
J.1



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\Drawings\01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

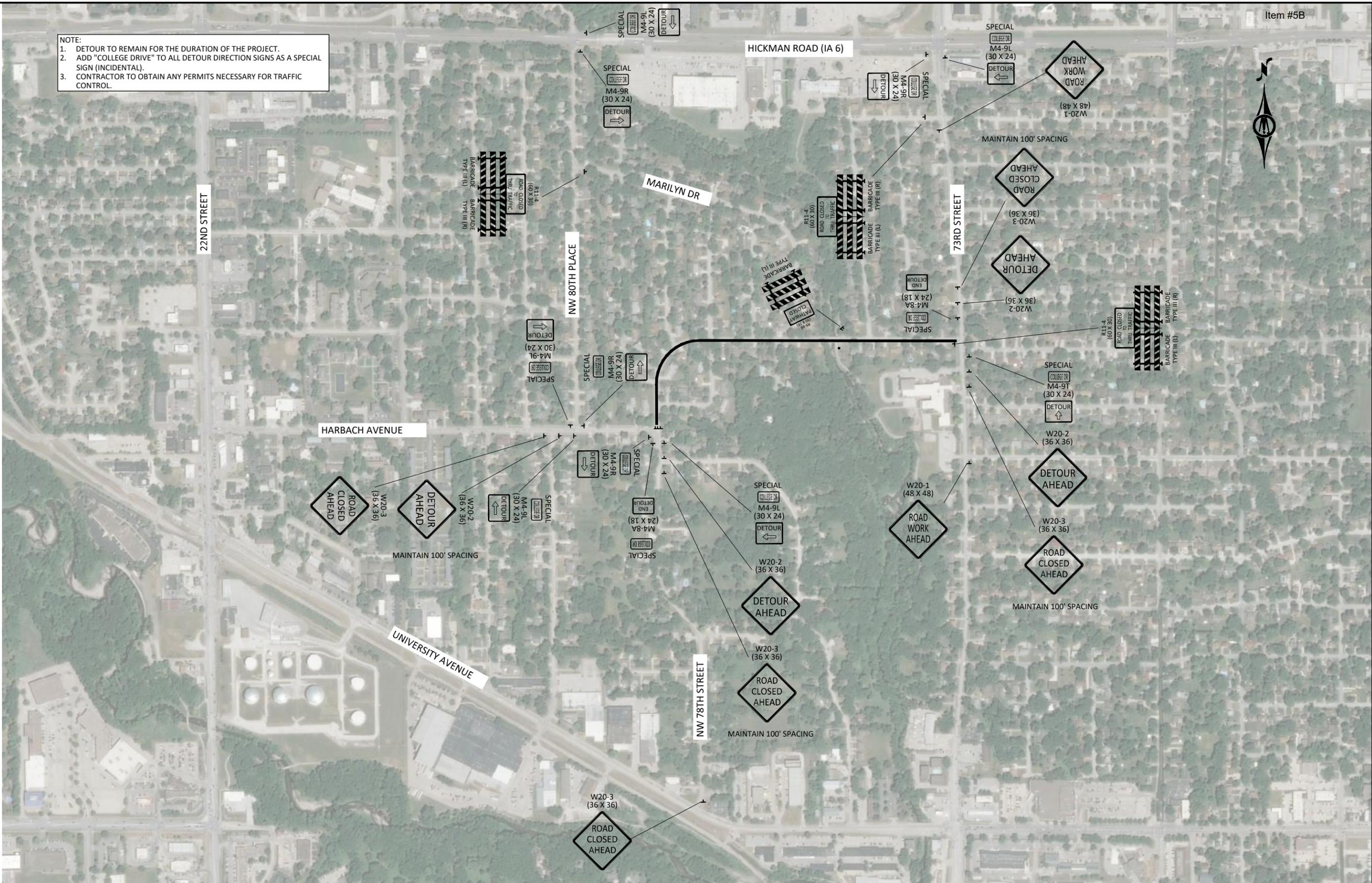


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

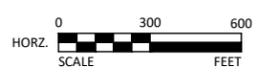
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION

PROJECT STAGING

NOTE:
 1. DETOUR TO REMAIN FOR THE DURATION OF THE PROJECT.
 2. ADD "COLLEGE DRIVE" TO ALL DETOUR DIRECTION SIGNS AS A SPECIAL SIGN (INCIDENTAL).
 3. CONTRACTOR TO OBTAIN ANY PERMITS NECESSARY FOR TRAFFIC CONTROL.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A1118668\Task 02_College Drive\CD\Sheets\118668_01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

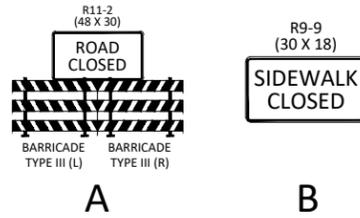


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 DETOUR



NOTES:
1. THIS SIGNAGE IS IN CONJUNCTION WITH THE DETOUR SIGNAGE.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A13118668\Task 02_College Drive\CAD\Sheet\118668_01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

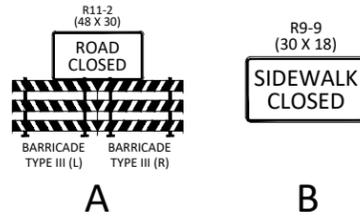


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
STAGE 1

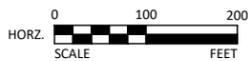


NOTES:

1. TRAFFIC ON 73RD STREET CAN BE REDUCED TO ONE LANE WITH THE USE OF FLAGGERS ONLY BETWEEN 9 AM AND 2 PM WHEN SCHOOL IS IN SESSION AND BETWEEN 8:30 AM AND 4:00 PM WHEN SCHOOL IS OUT OF SESSION. FOLLOW MUTCD FOR PROPER TRAFFIC CONTROL. ALL WORK SHALL BE INCIDENTAL TO TRAFFIC CONTROL.
2. THIS SIGNAGE IS IN CONJUNCTION WITH THE DETOUR SIGNAGE.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A13118668\Task 02_College Drive\CD\Sheets\118668_J01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

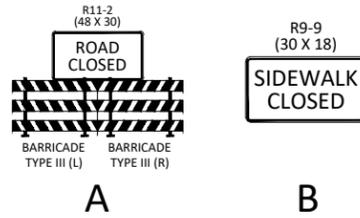


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
STAGE 2

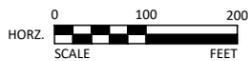


NOTES:

- 1. THIS SIGNAGE IS IN CONJUNCTION WITH THE DETOUR SIGNAGE.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A13118668\Task 02_College Drive\CAD\Sheets\118668_J01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



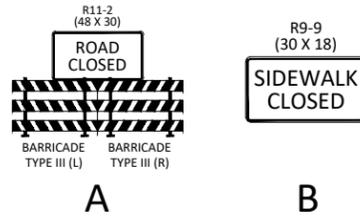
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION

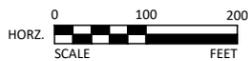
STAGE 3



NOTES:

1. THIS SIGNAGE IS IN CONJUNCTION WITH THE DETOUR SIGNAGE.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\13118668\Task 02_College Drive\Drawings\Sheet5118668_01.dwg 1/7/2020 3:53 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



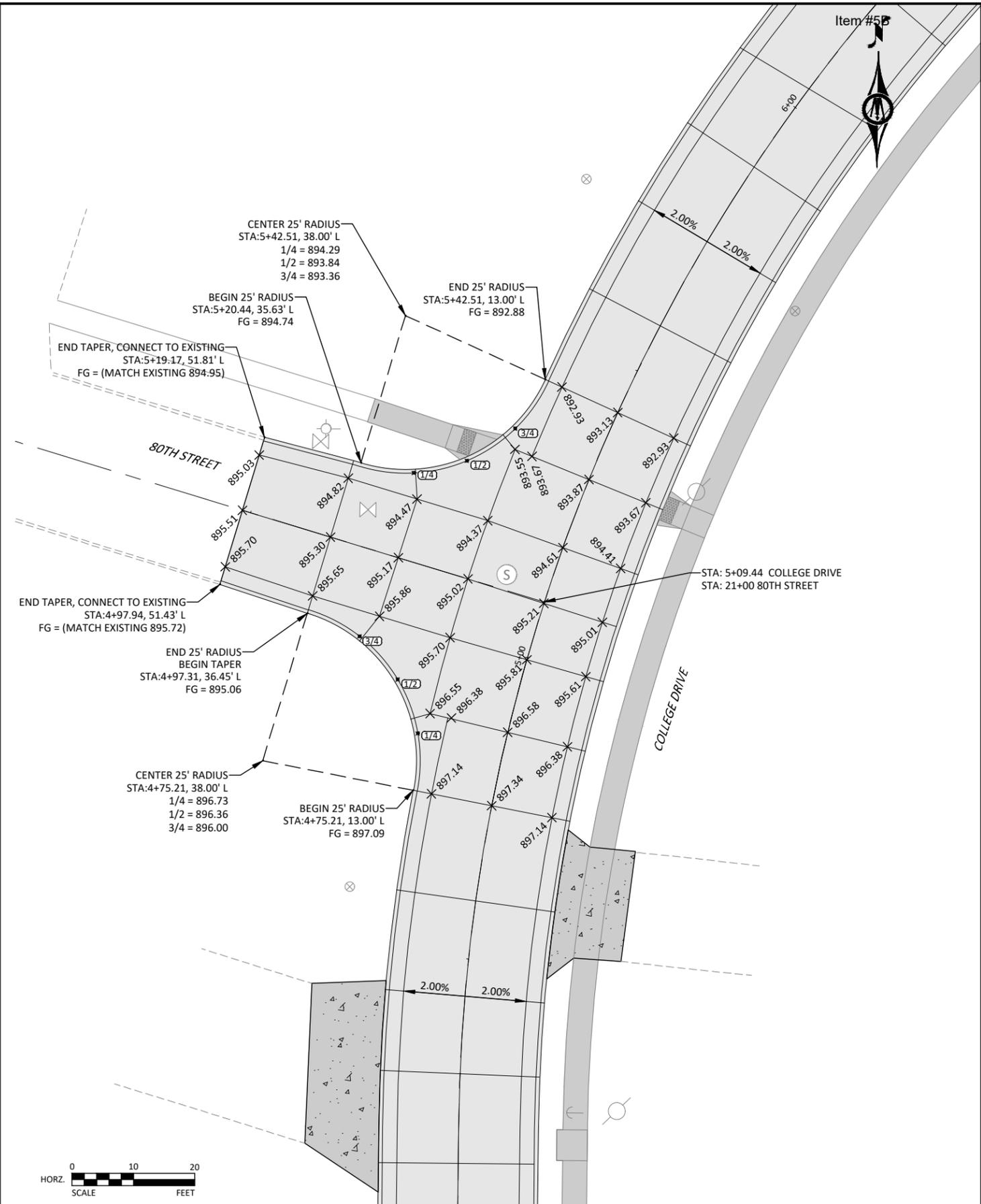
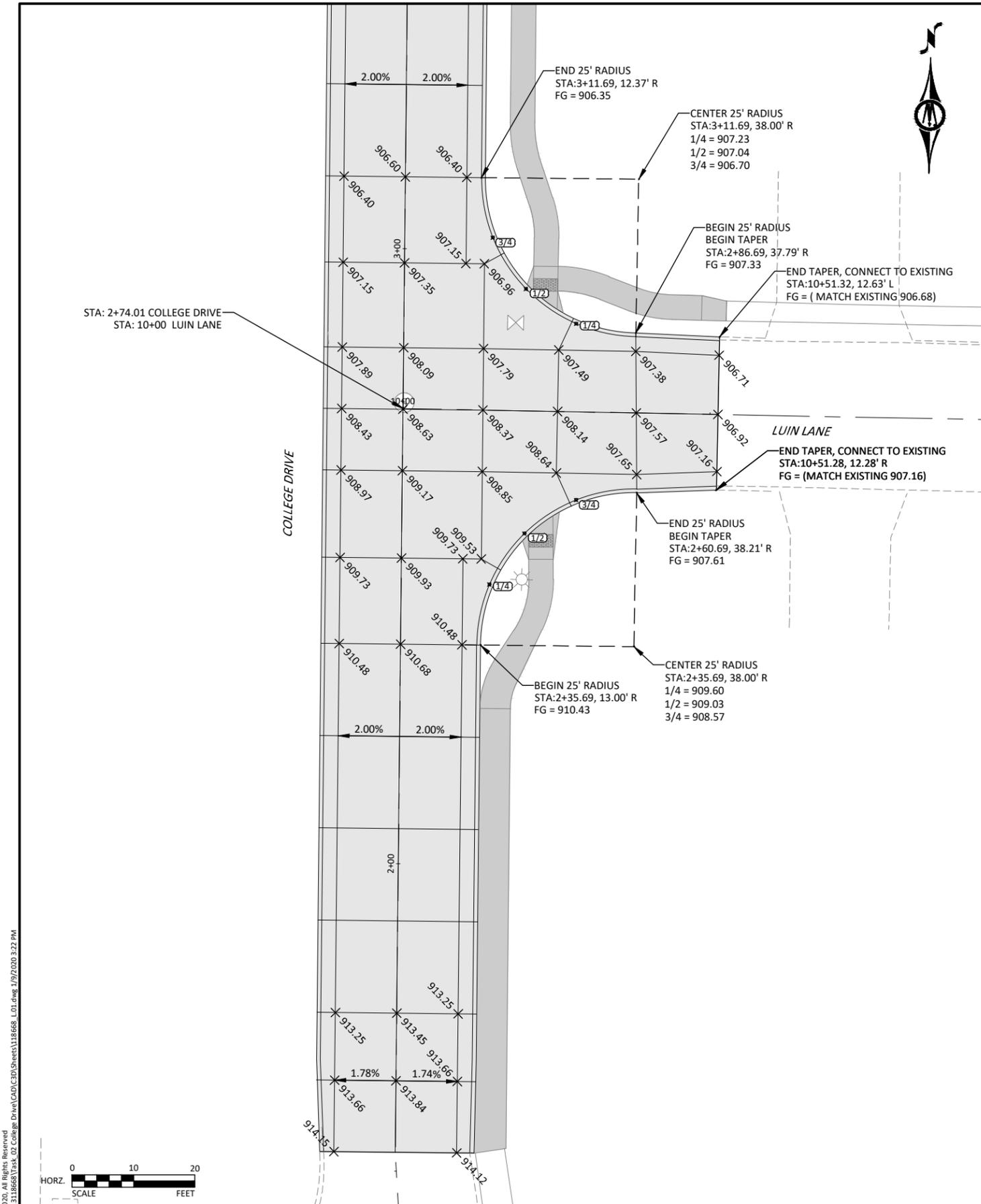
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION

STAGE 4



© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CD\Sheets\18668_L01.dwg 1/9/2020 3:27 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



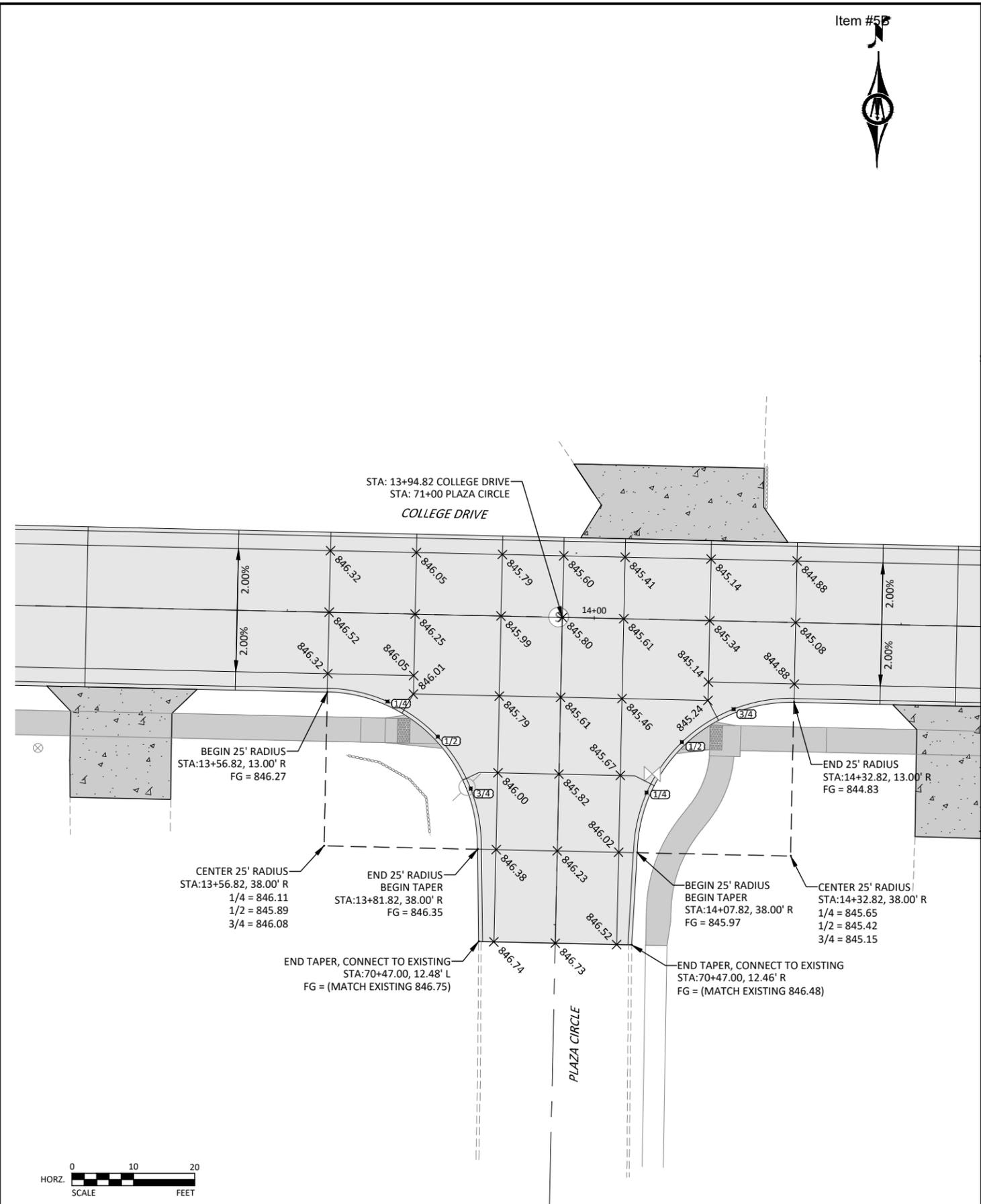
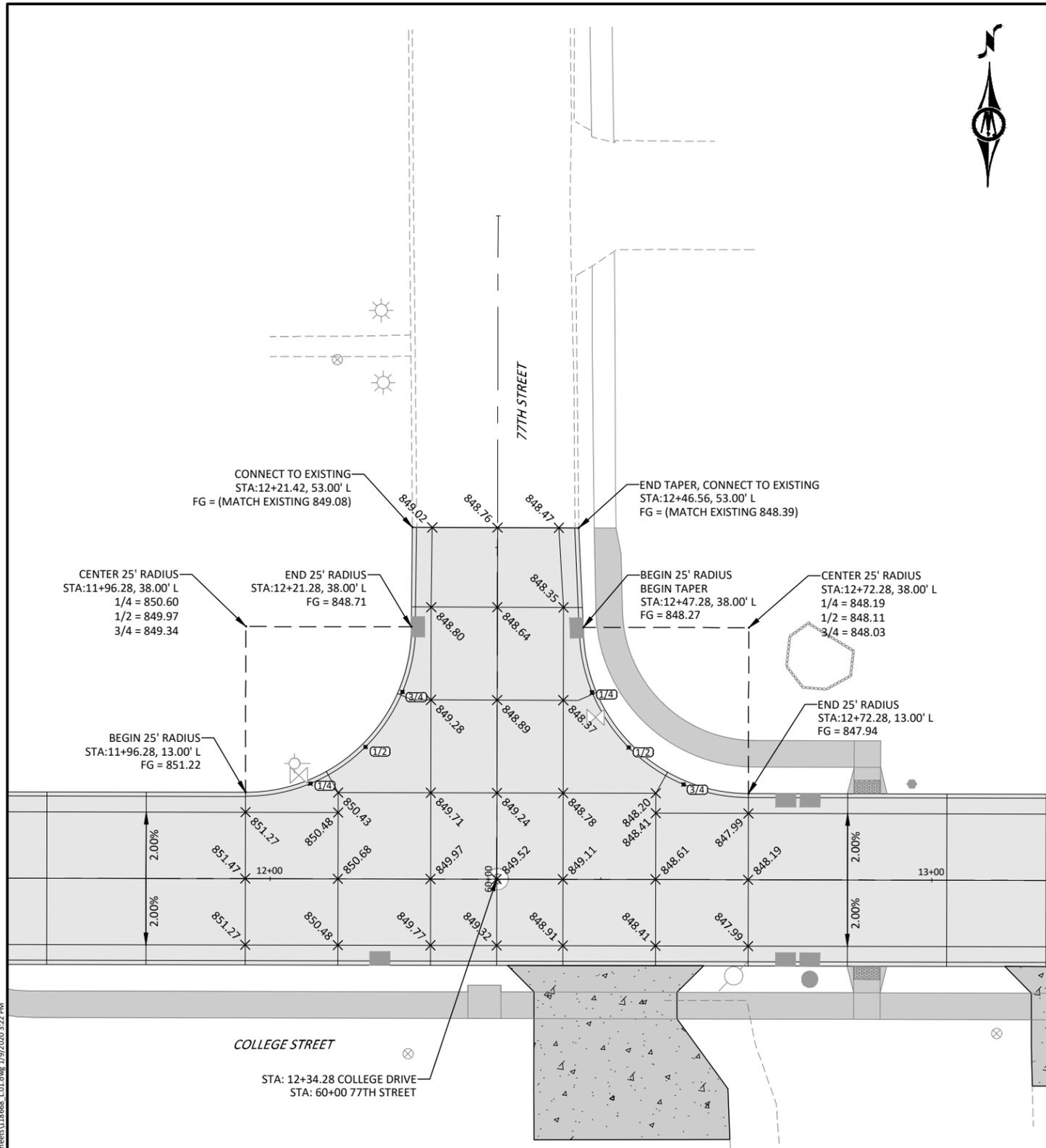
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 INTERSECTION DETAILS

SHEET
 L.1



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02_College Drive\CD\Sheets\118668_L01.dwg 1/9/2020 3:22 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

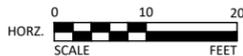
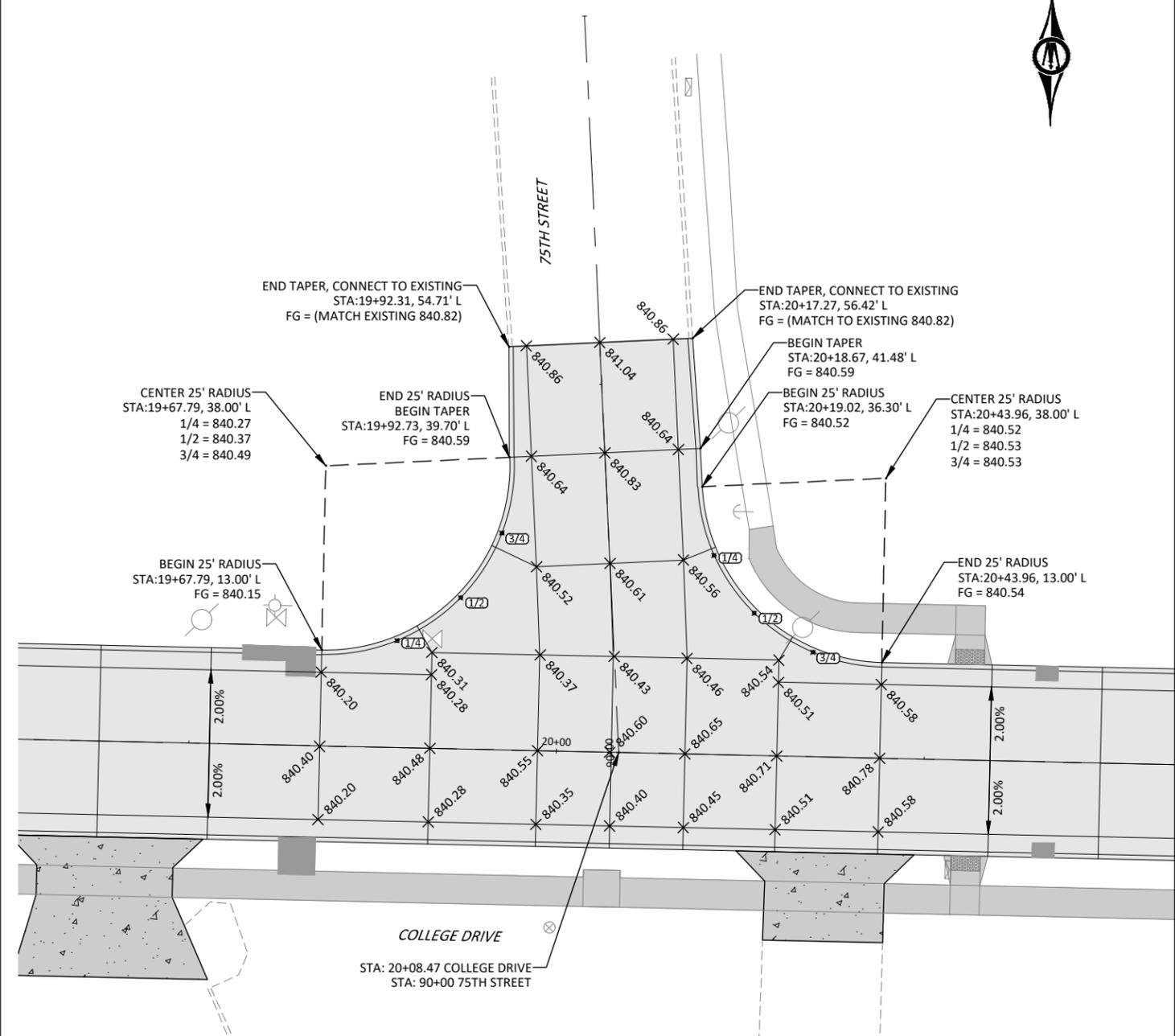
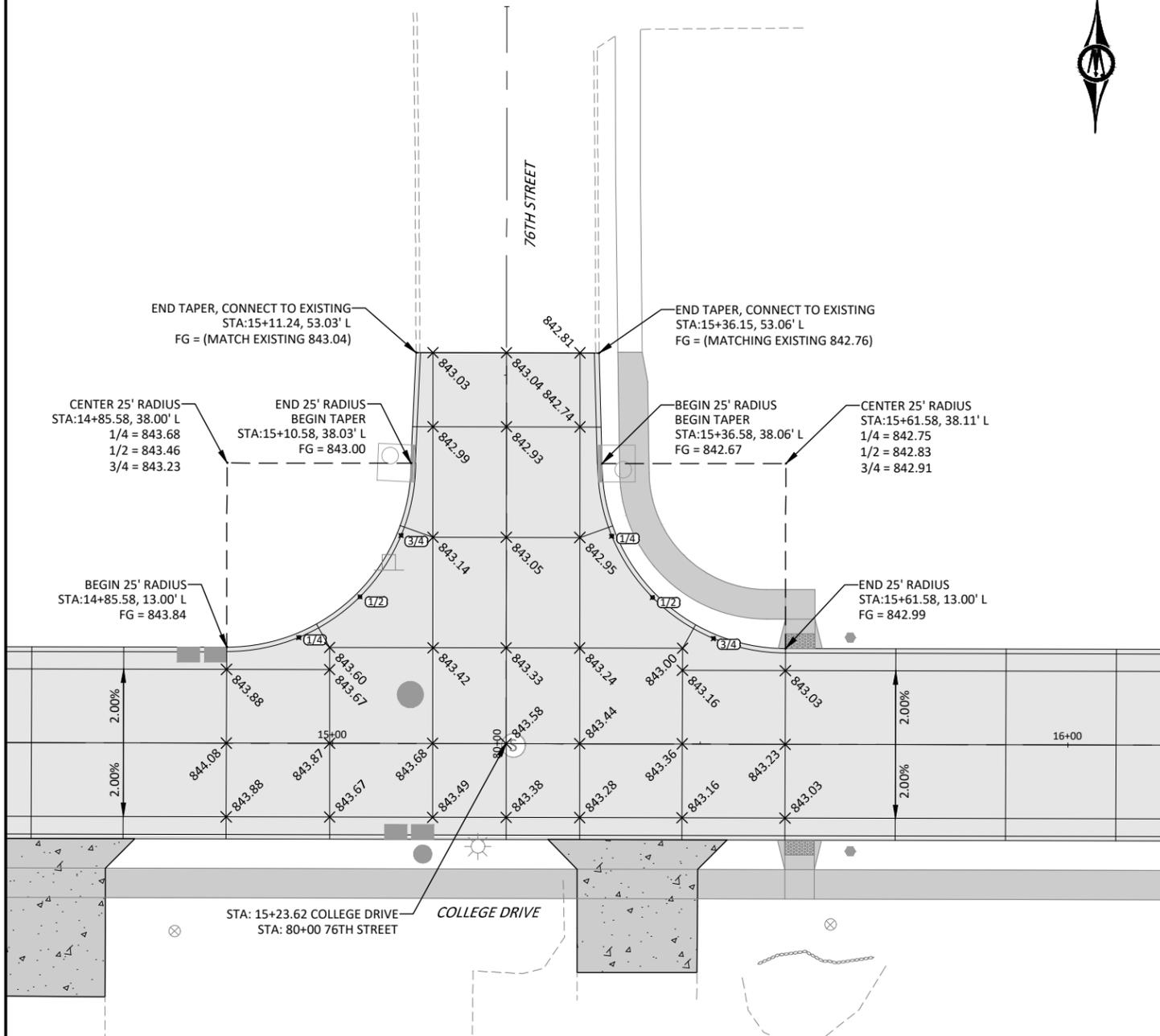


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 INTERSECTION DETAILS



© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR HTS\CI\143118668\Task 02_College Drive\CD\Sheets\118668_L01.dwg 1/9/2020 3:27 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



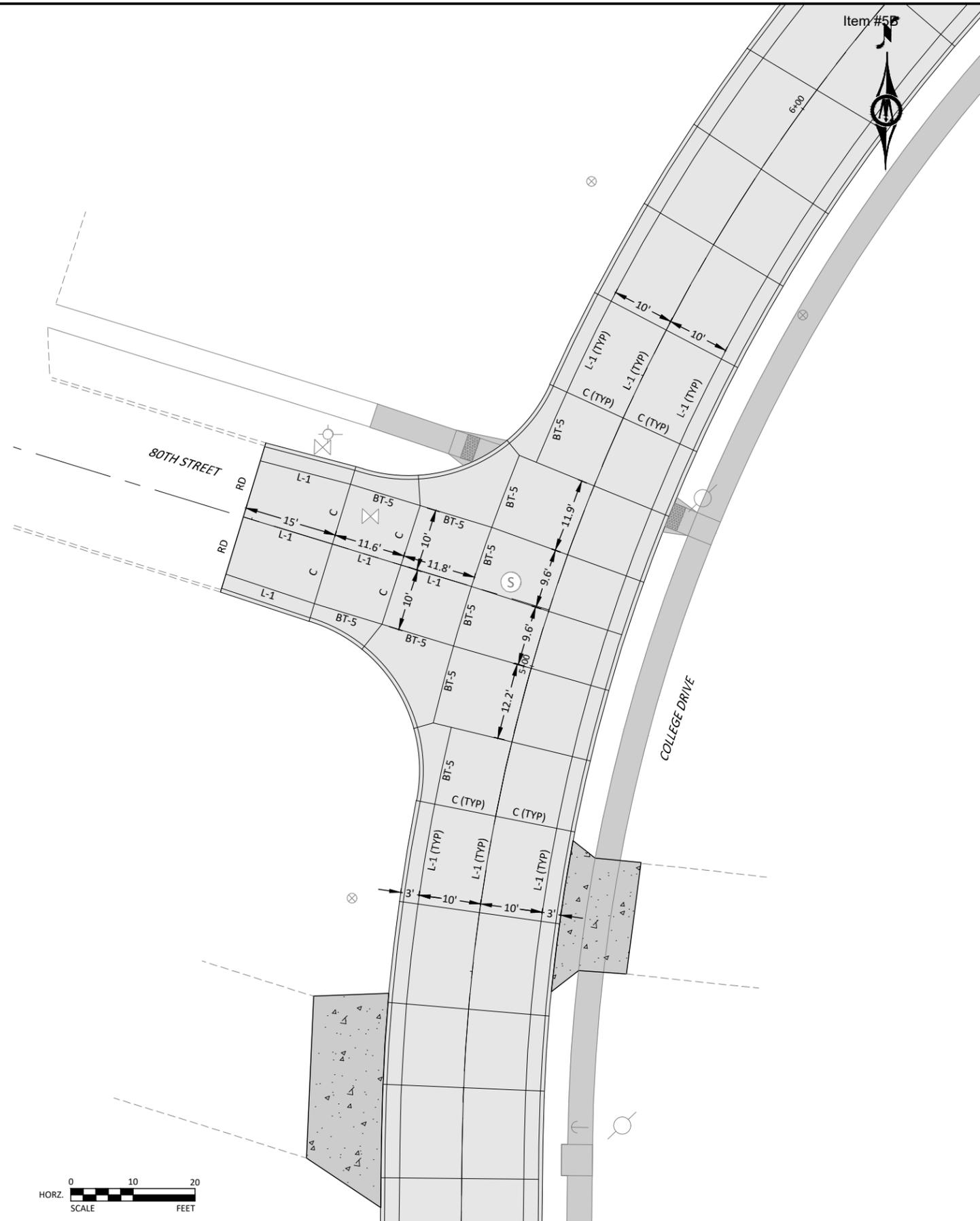
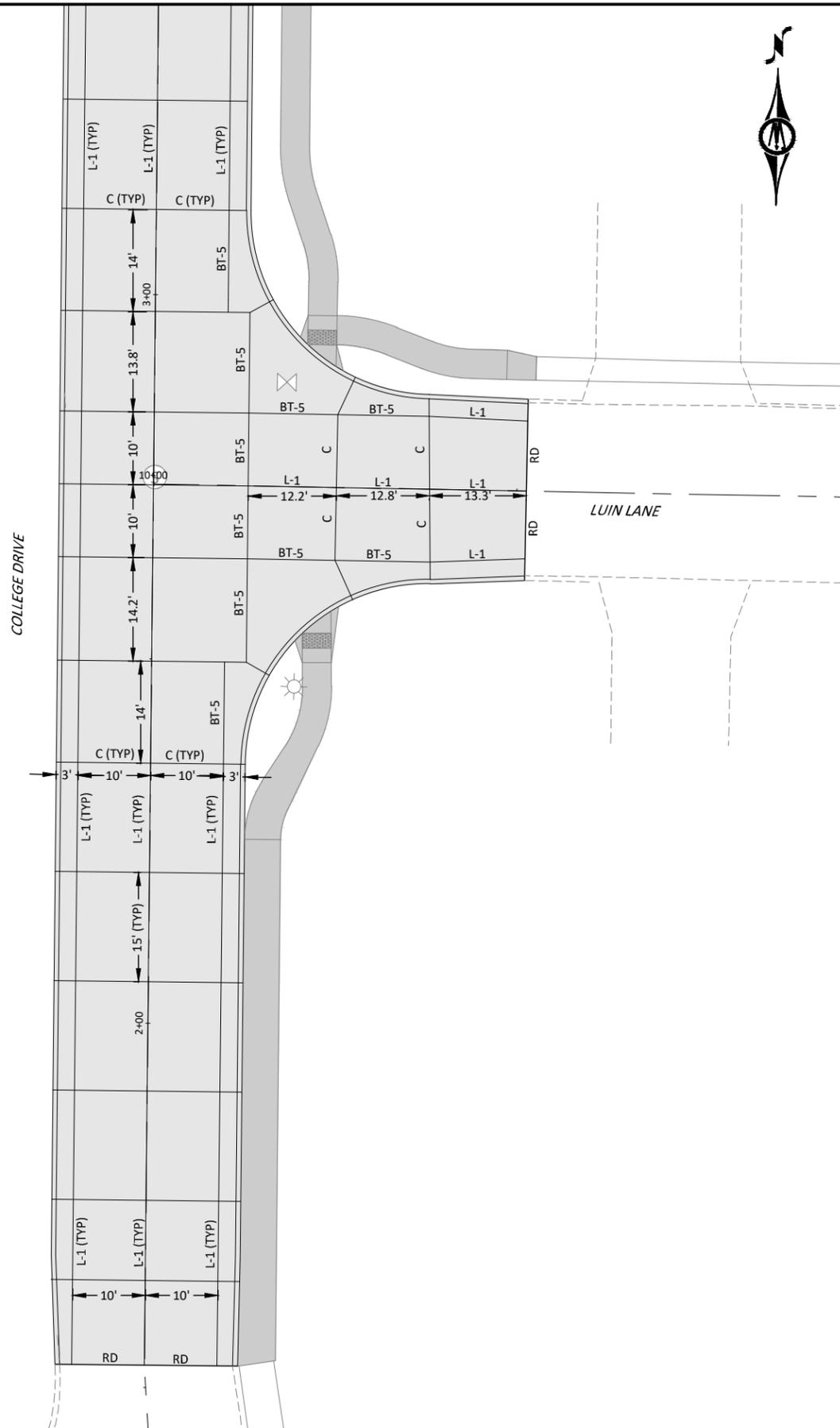
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 INTERSECTION DETAILS

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR HTS\CI\1A13118668\Task 02_College Drive\Drawings\CD\Sheets\118668_L01.dwg 1/9/2020 3:22 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

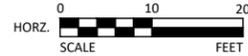
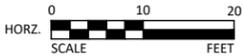
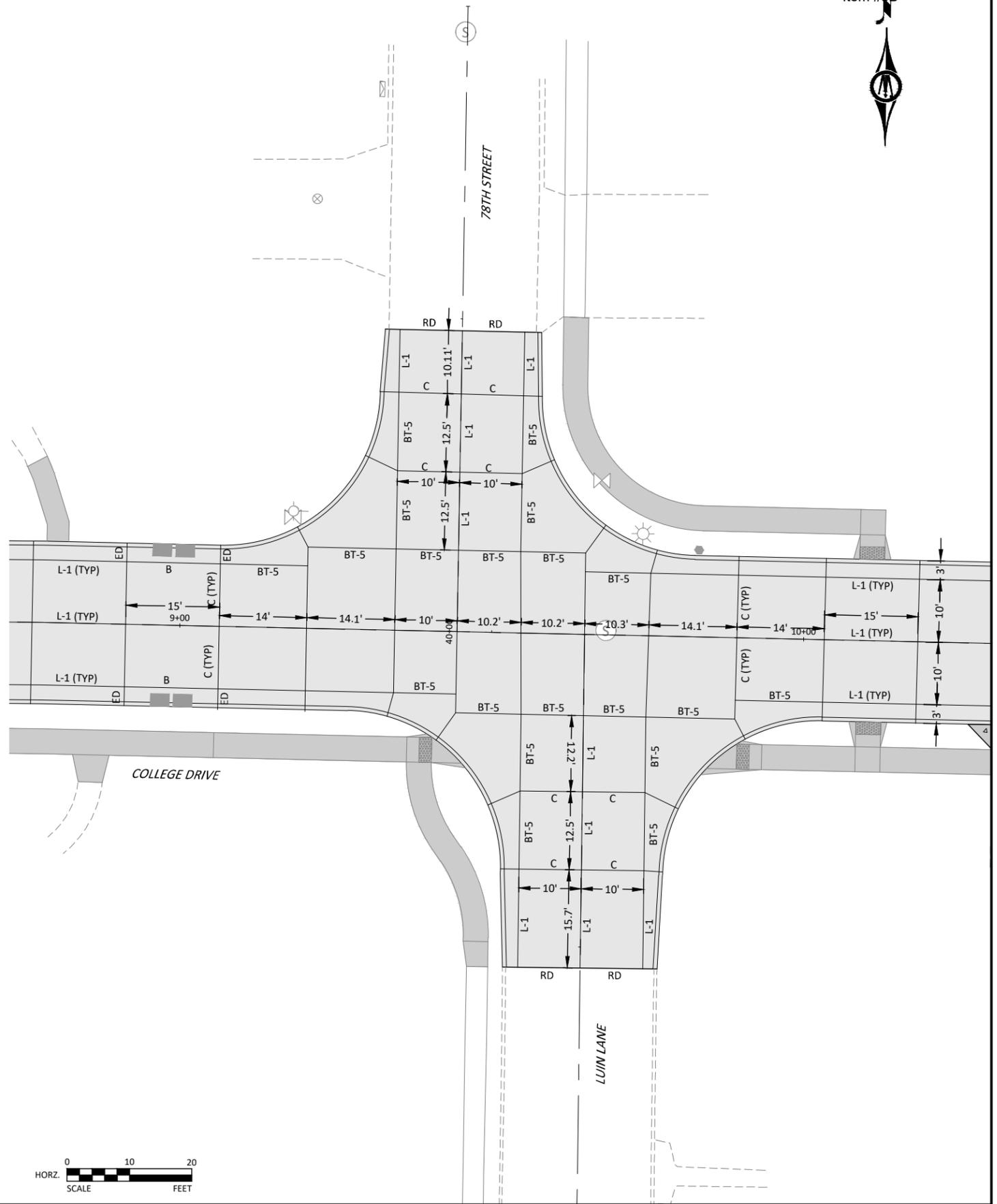
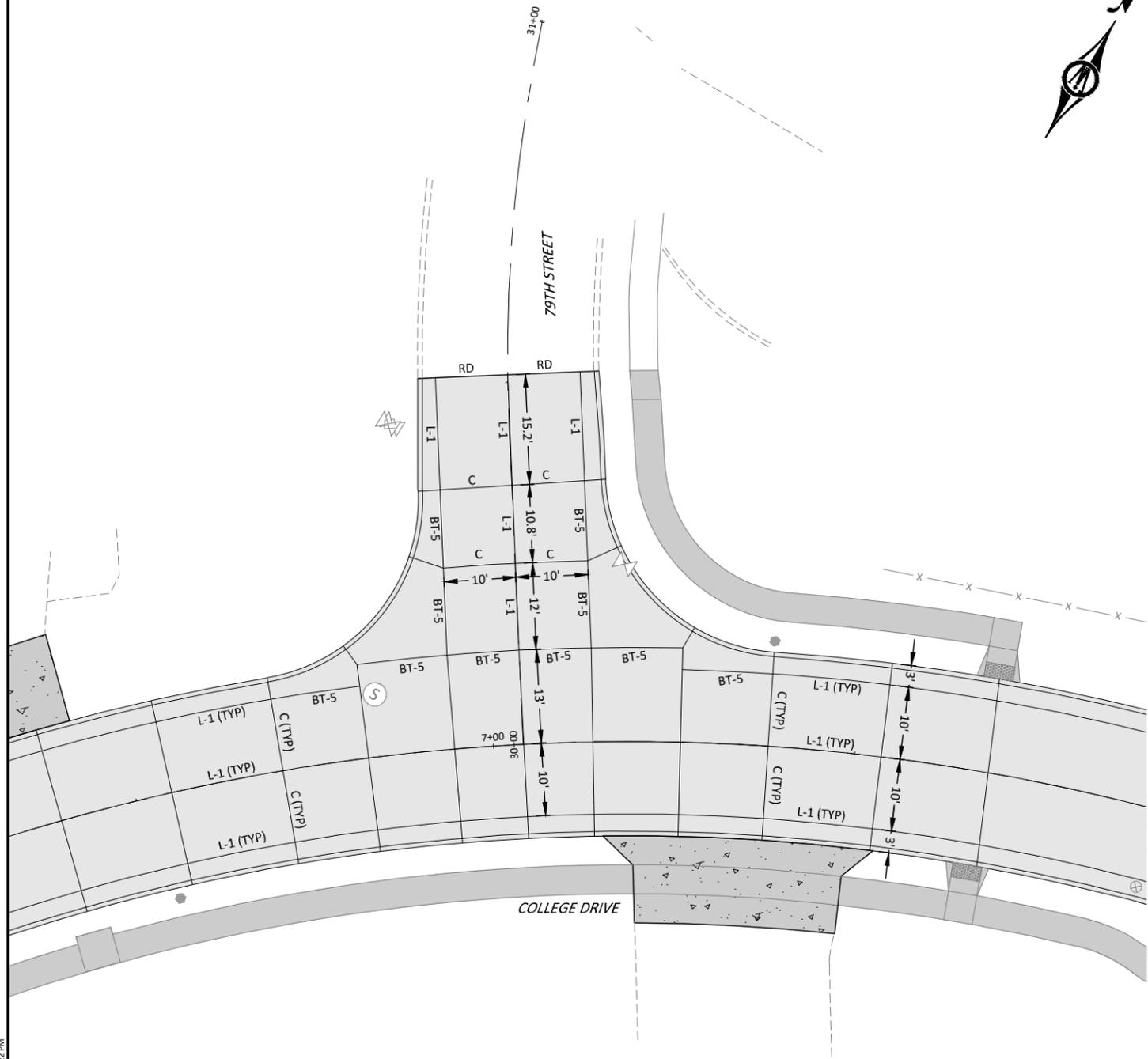


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 JOINTING PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved
 P:\WINDSOR HTS\CI\A13118668\Task 02_College Drive\CAD\Sheet\118668_L01.dwg 1/9/2020 3:22 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

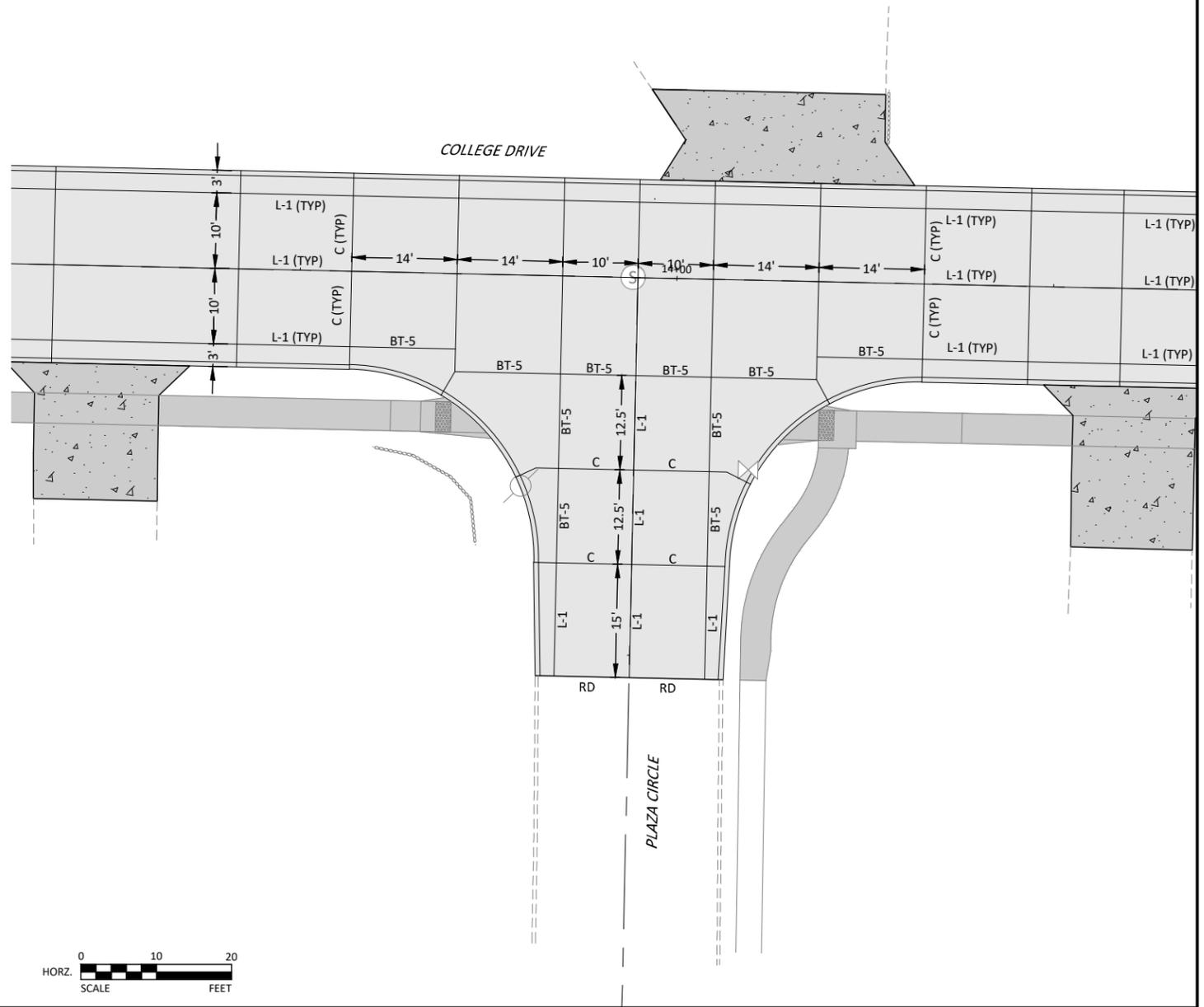
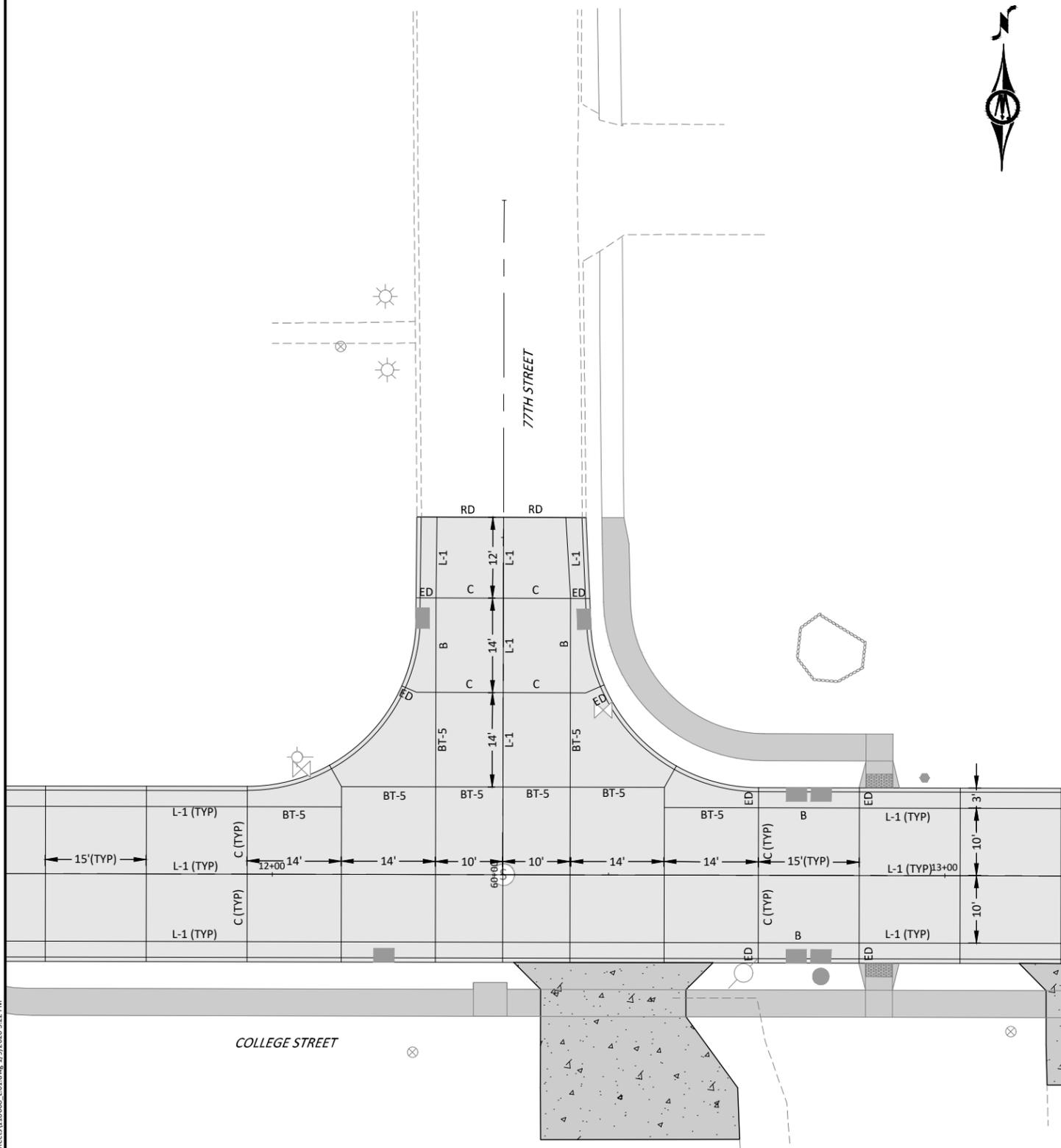


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 JOINTING PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02_College Drive\CAD\ED\Sheets\118668_L01.dwg 1/9/2020 3:27 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

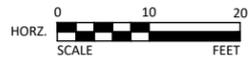
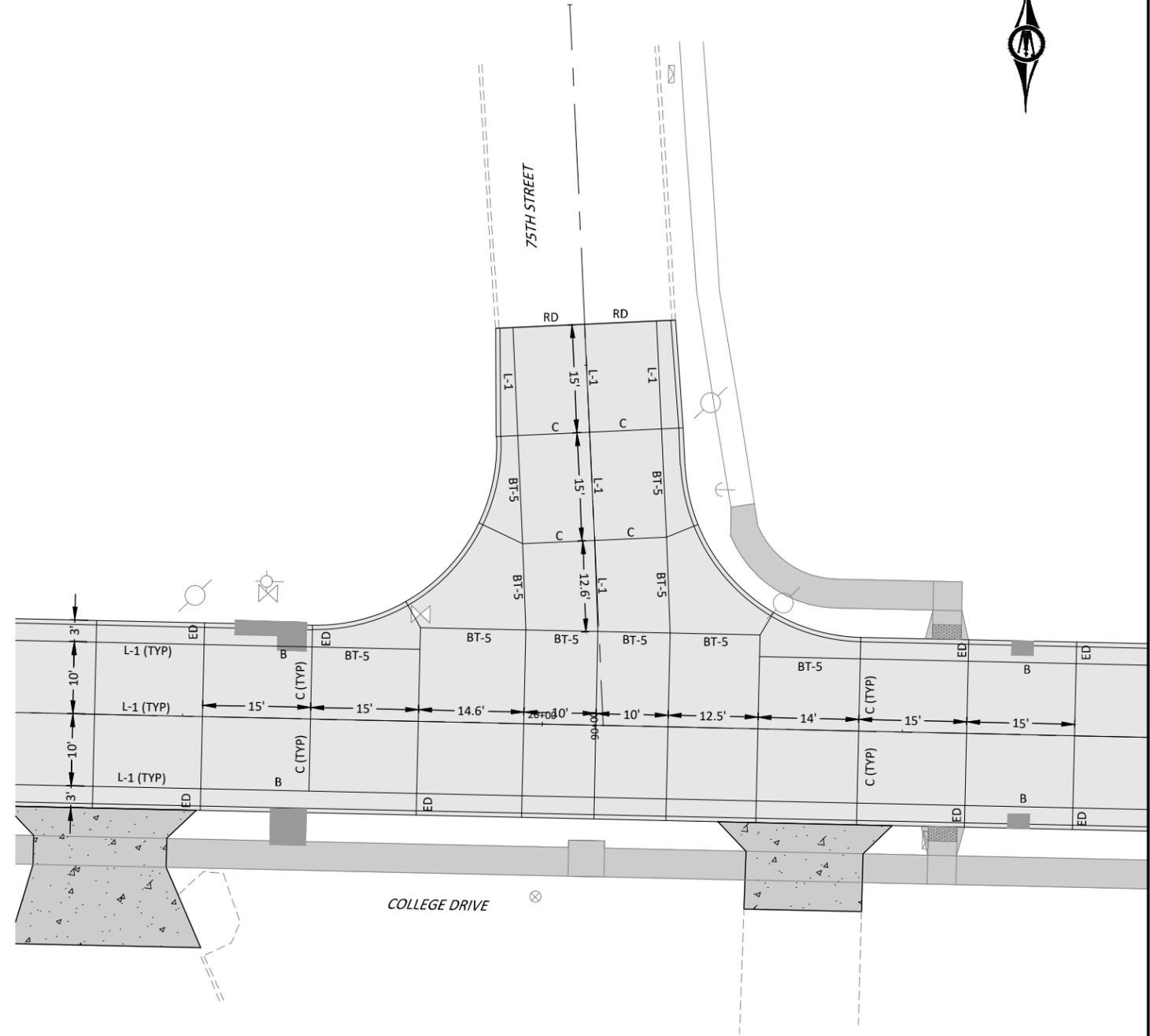
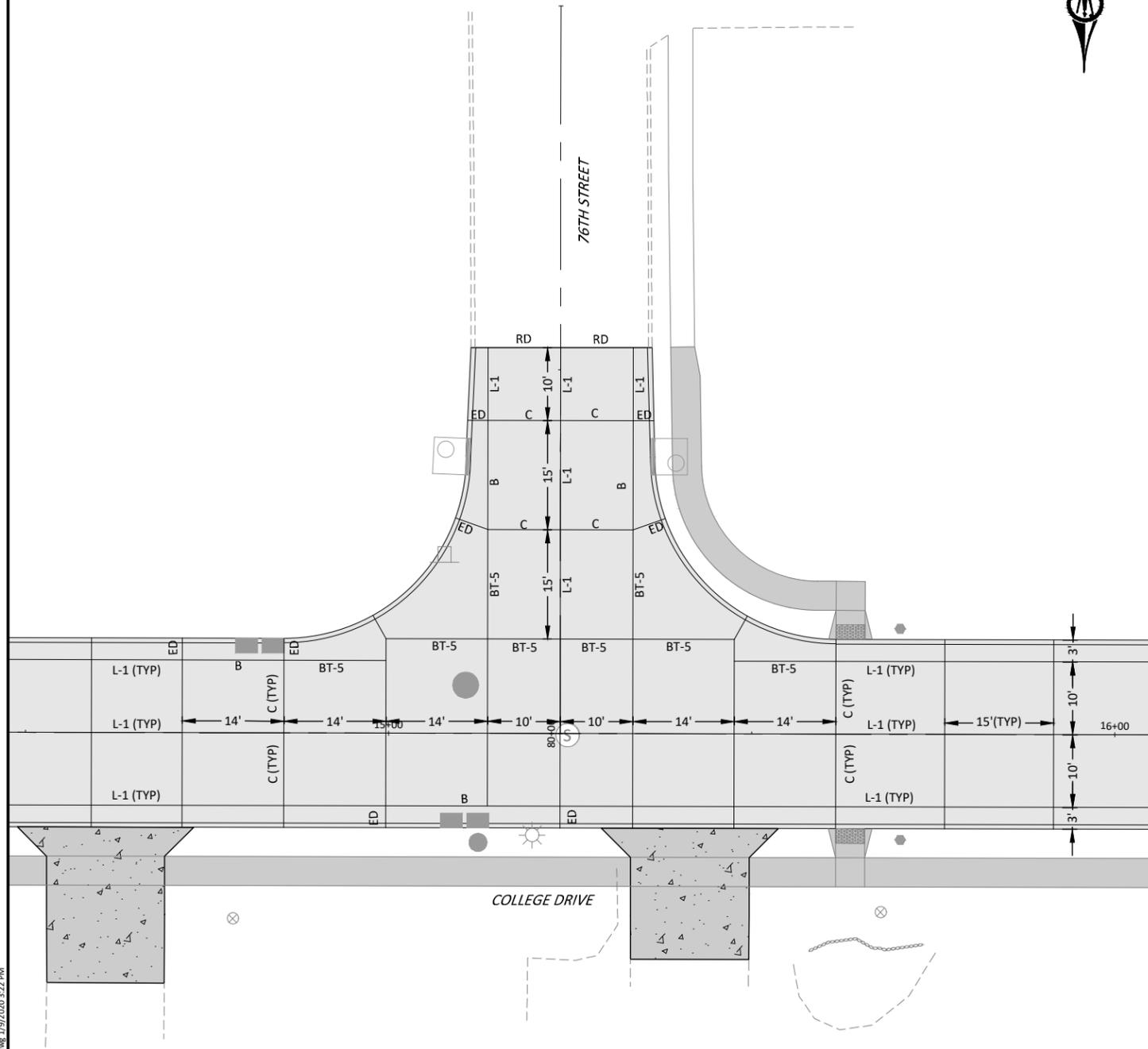


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 JOINTING PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved
 P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CAD\Sheet\1318668_L01.dwg 1/9/2020 3:27 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



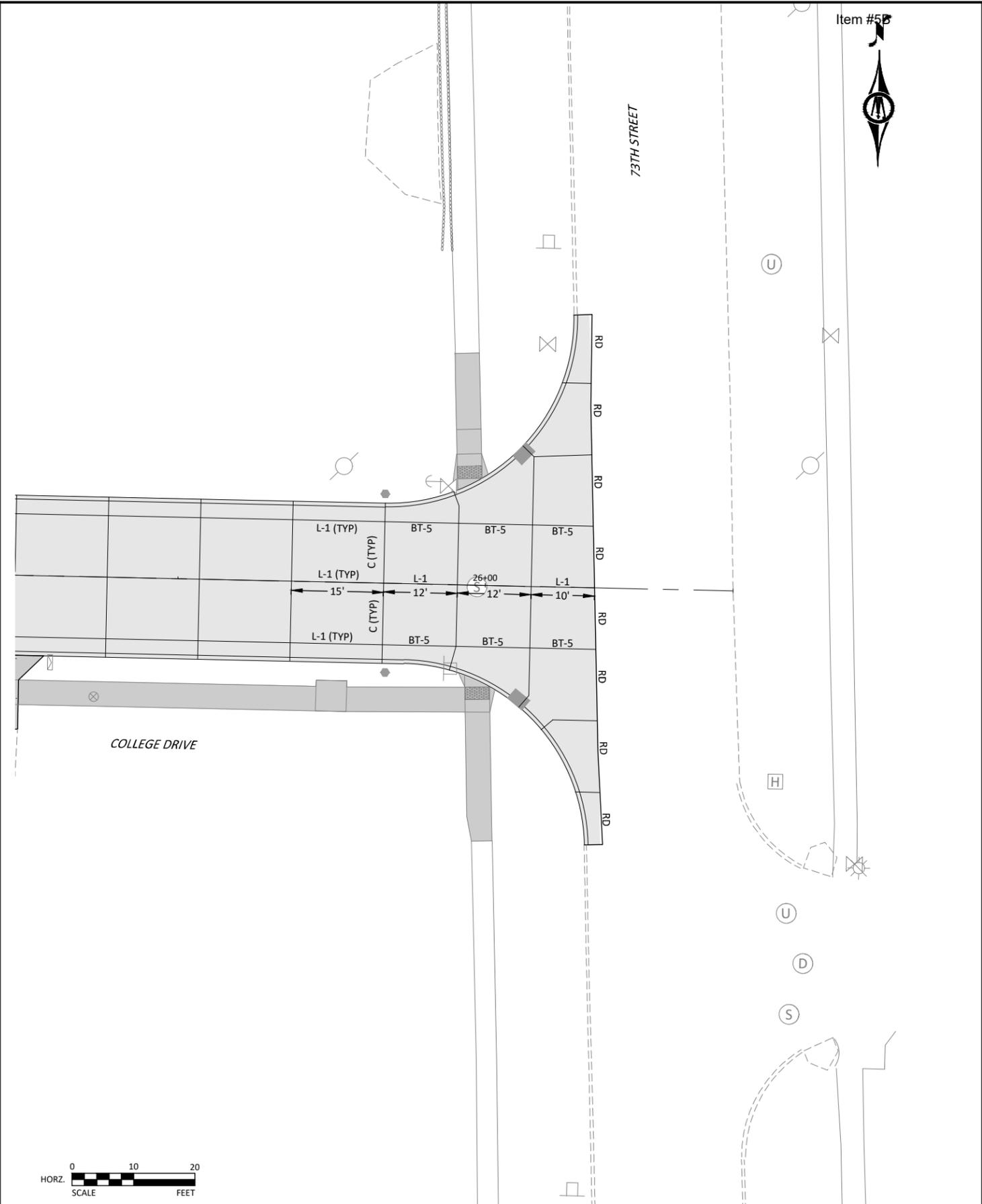
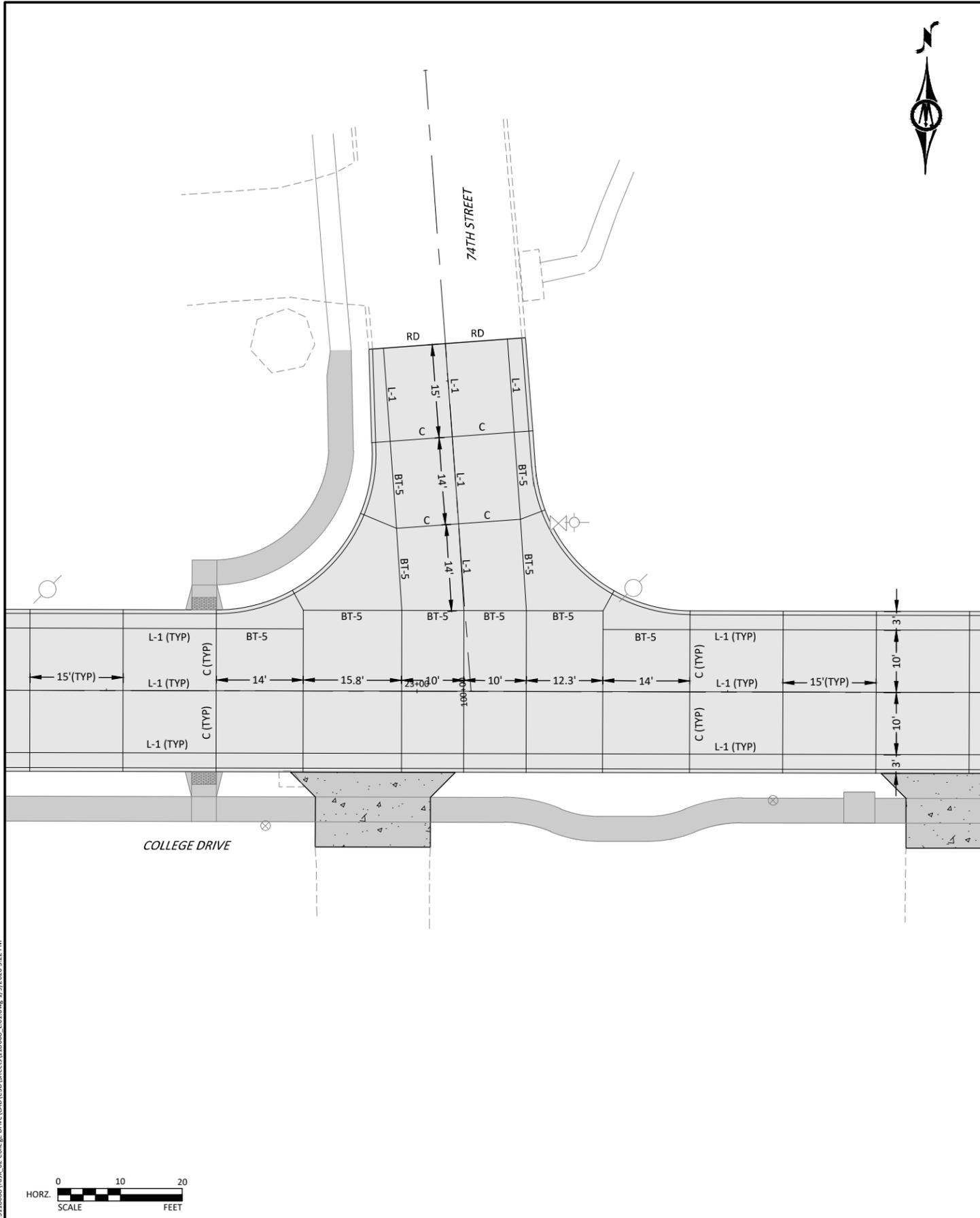
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 JOINTING PLAN

© Bolton & Menk, Inc. 2020. All Rights Reserved
 P:\WINDSOR HTS\CI\A13118668\Task 02_College Drive\CAD\Sheet3118668_L01.dwg 1/9/2020 3:22 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



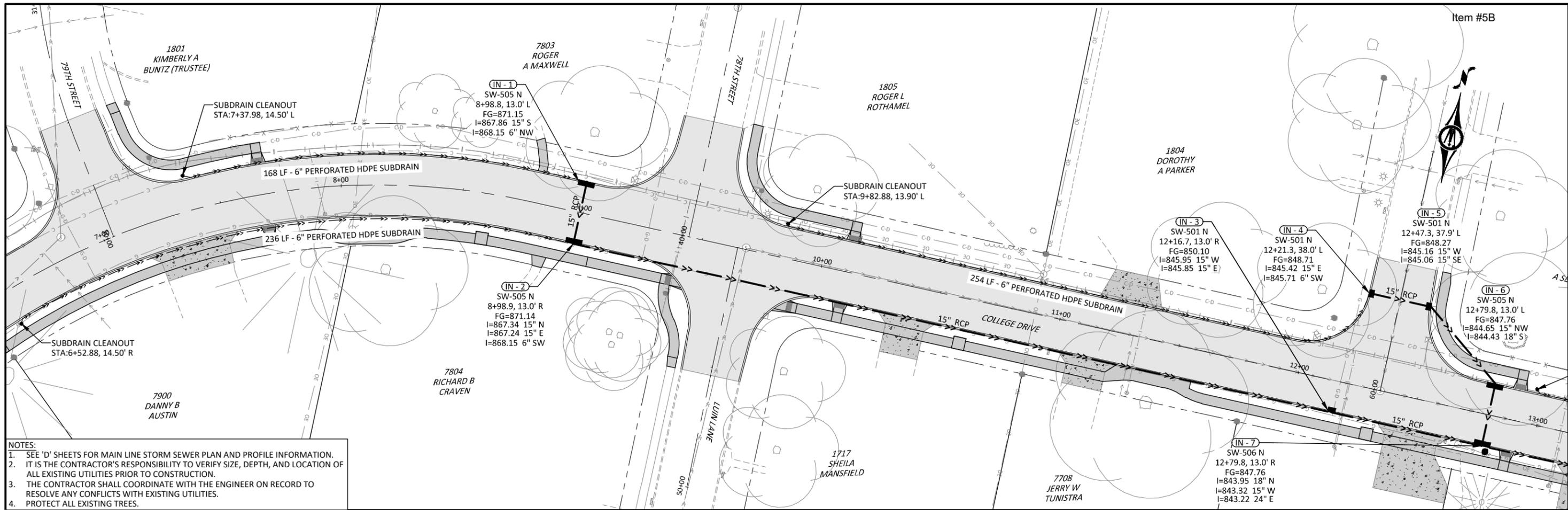
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



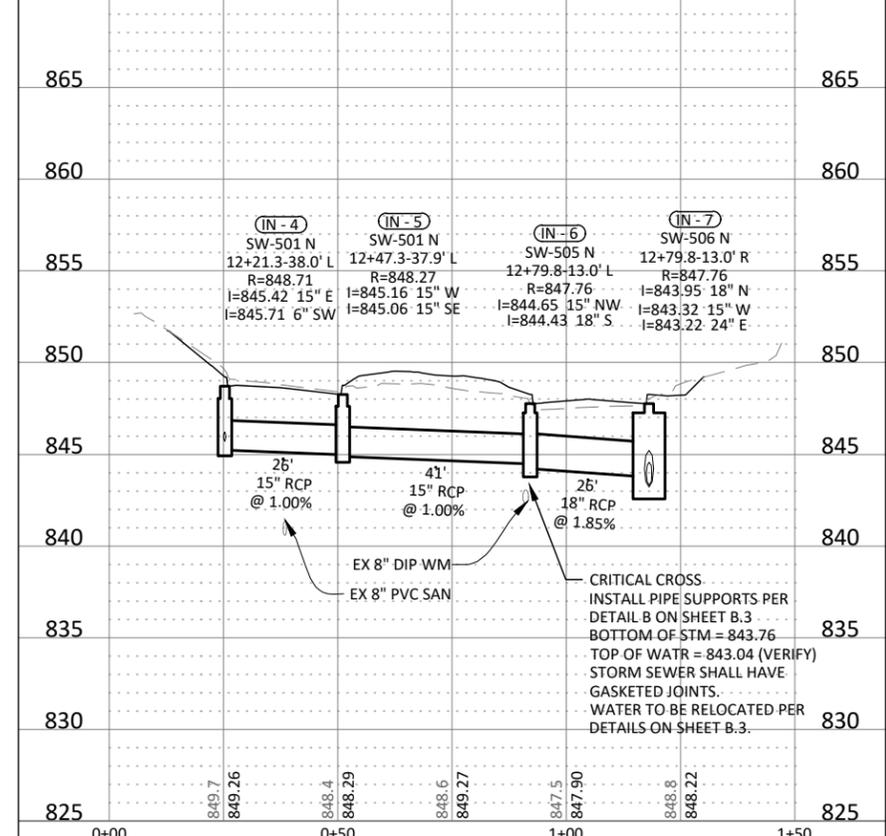
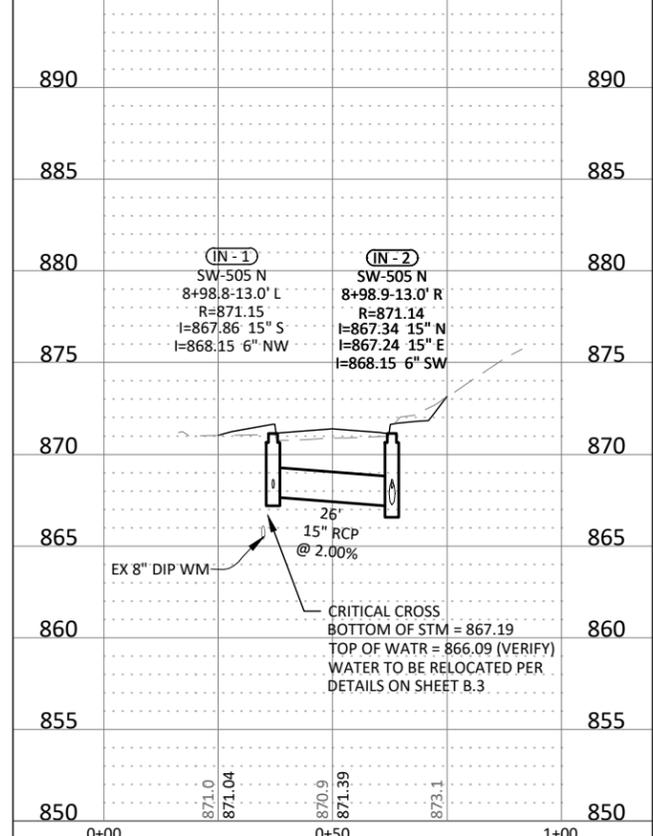
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 JOINTING PLAN

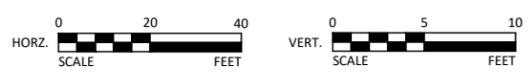
SHEET
 L.10



- NOTES:**
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 4. PROTECT ALL EXISTING TREES.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CA\181118668\Task 02_College Drive(CAD)\CD\Sheets\181118668_M01.dwg, 1/14/2020 10:10 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



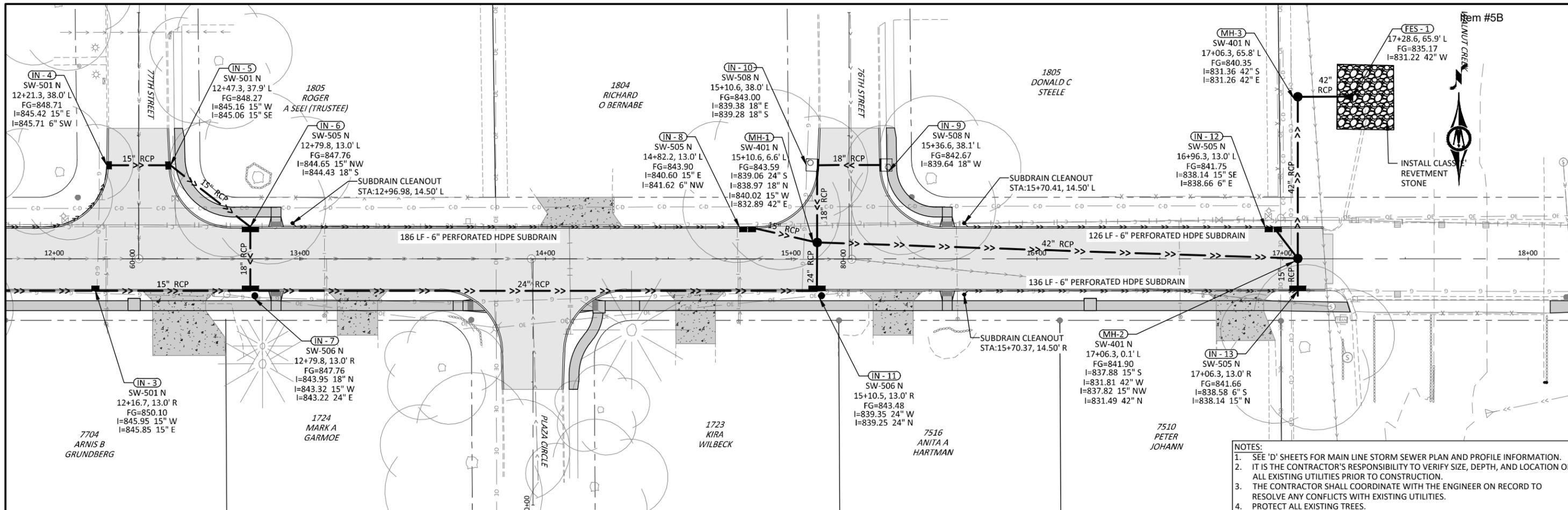
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



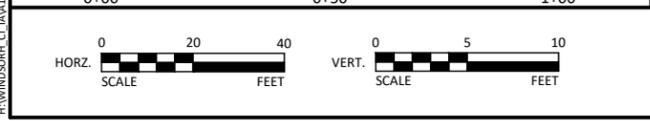
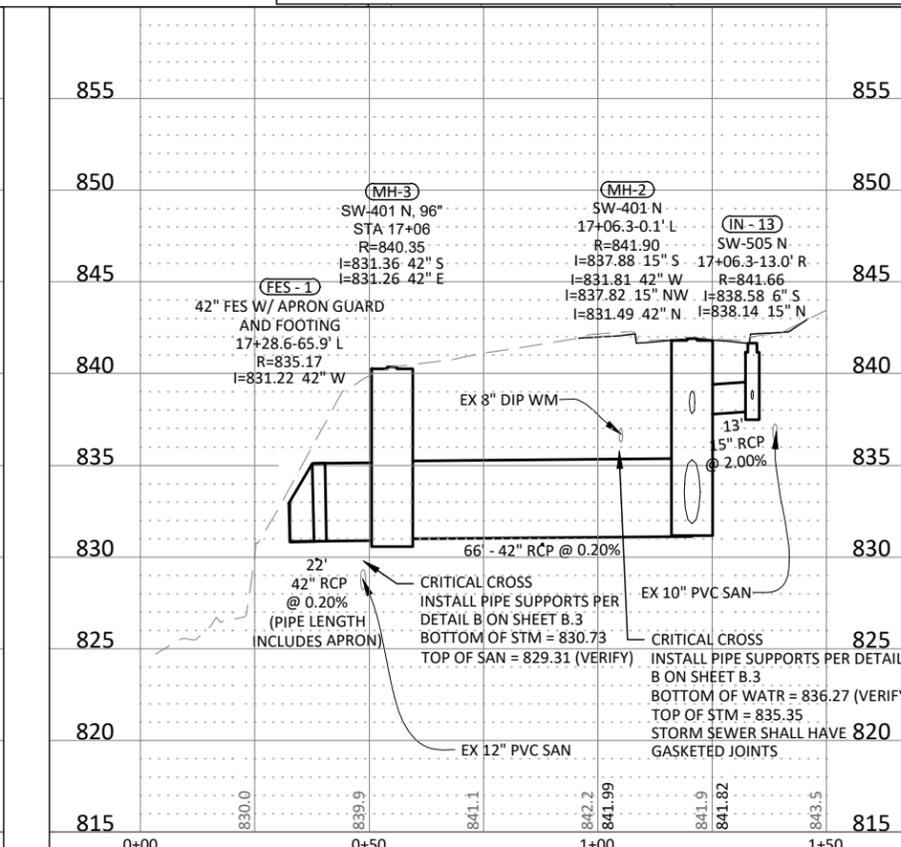
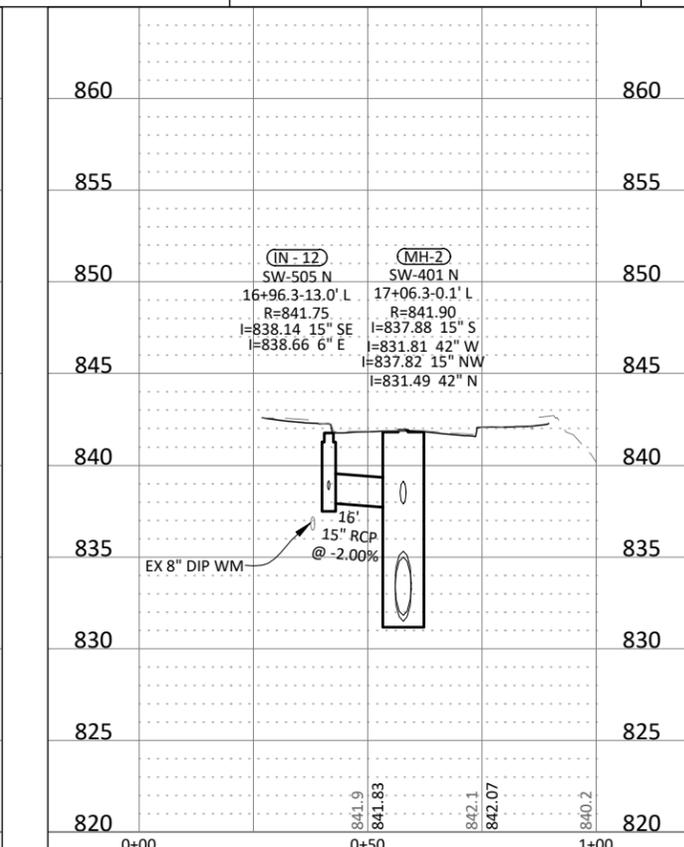
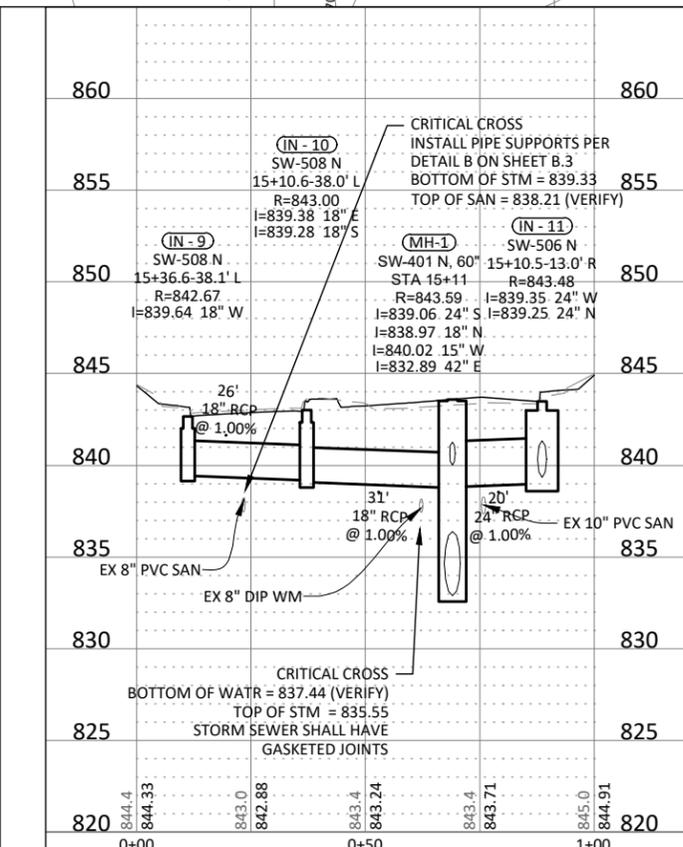
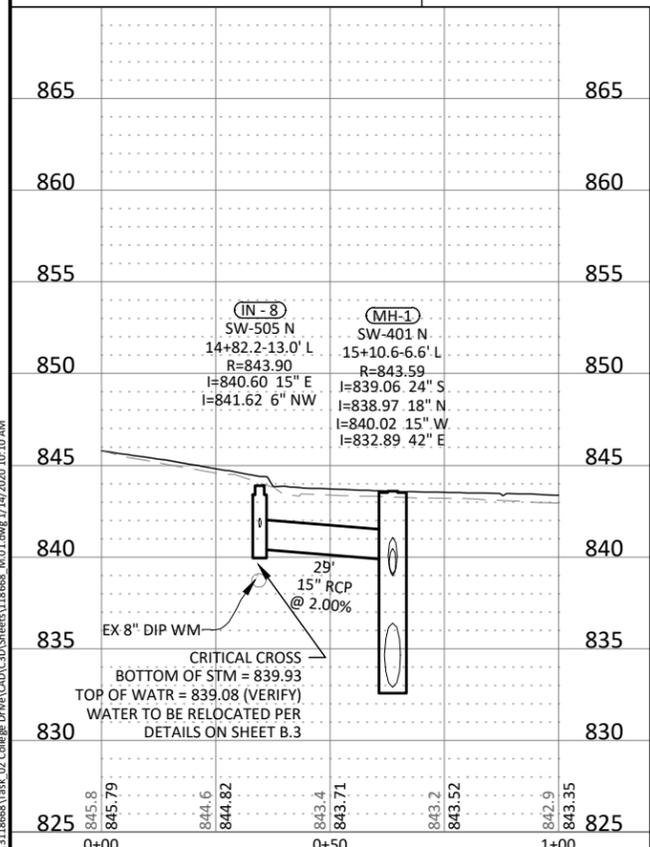
DESIGNED
NAS
SEATED
JLE
CHECKED
NG
CLIENT PROJ. NO.
A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
STORM SEWER CROSS-RUNS

SHEET
M.1



- NOTES:**
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 - PROTECT ALL EXISTING TREES.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

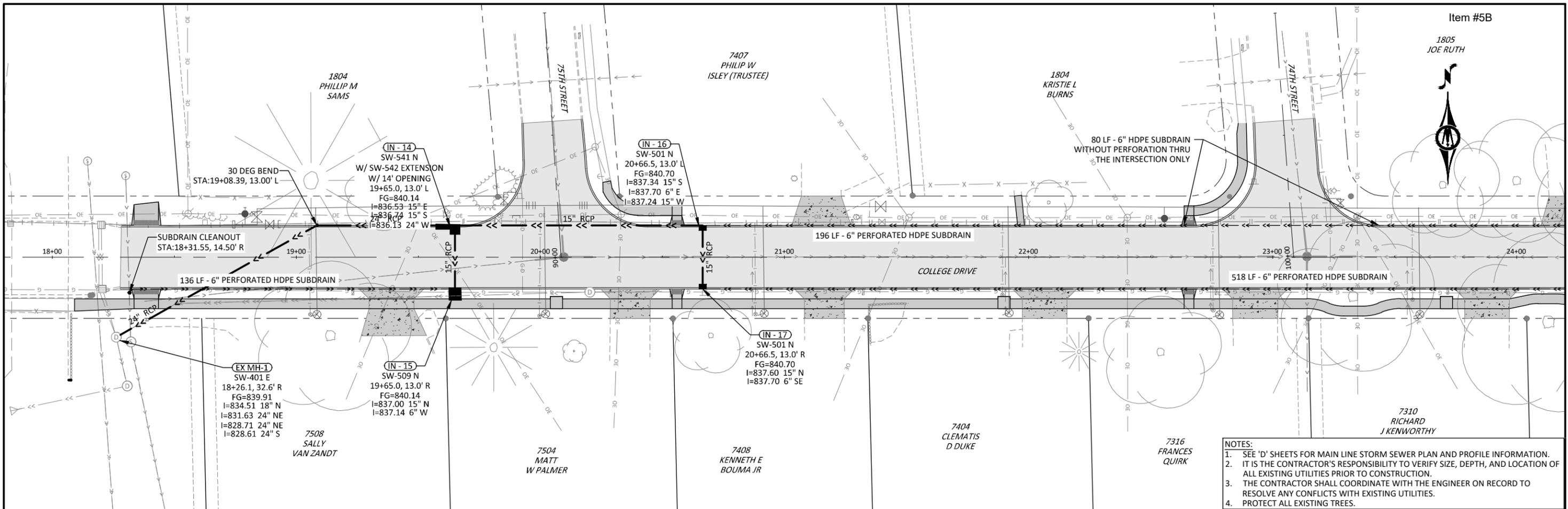


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

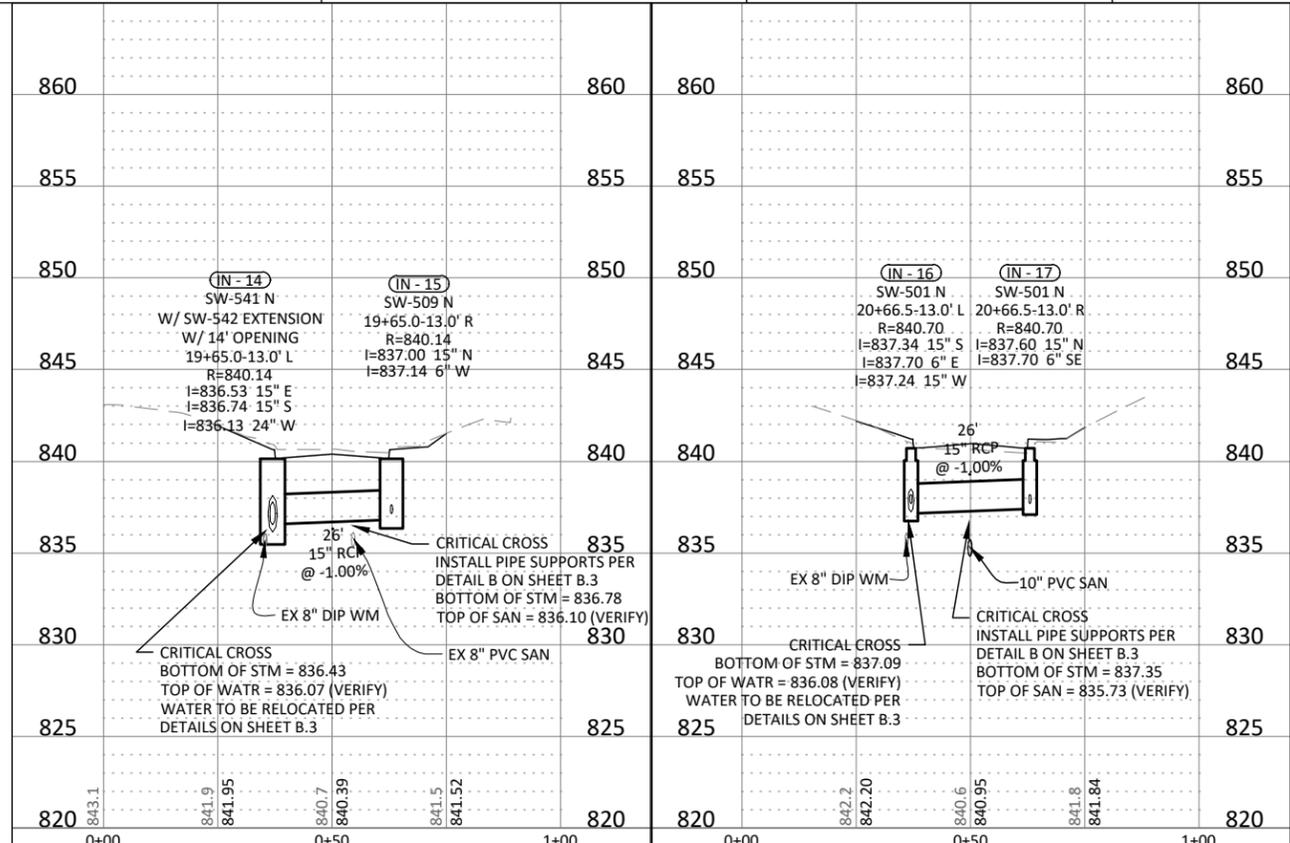


DESIGNED	NAS
SEAL	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

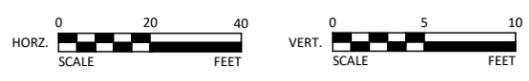
© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR HTS\CD\DWG\CD\Storm Sewer\118668_M.01.dwg, 1/14/2020, 10:10 AM



- NOTES:**
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 4. PROTECT ALL EXISTING TREES.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1805\1805\1805\1805.dwg, M:01.dwg, 1/14/2020 10:10 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

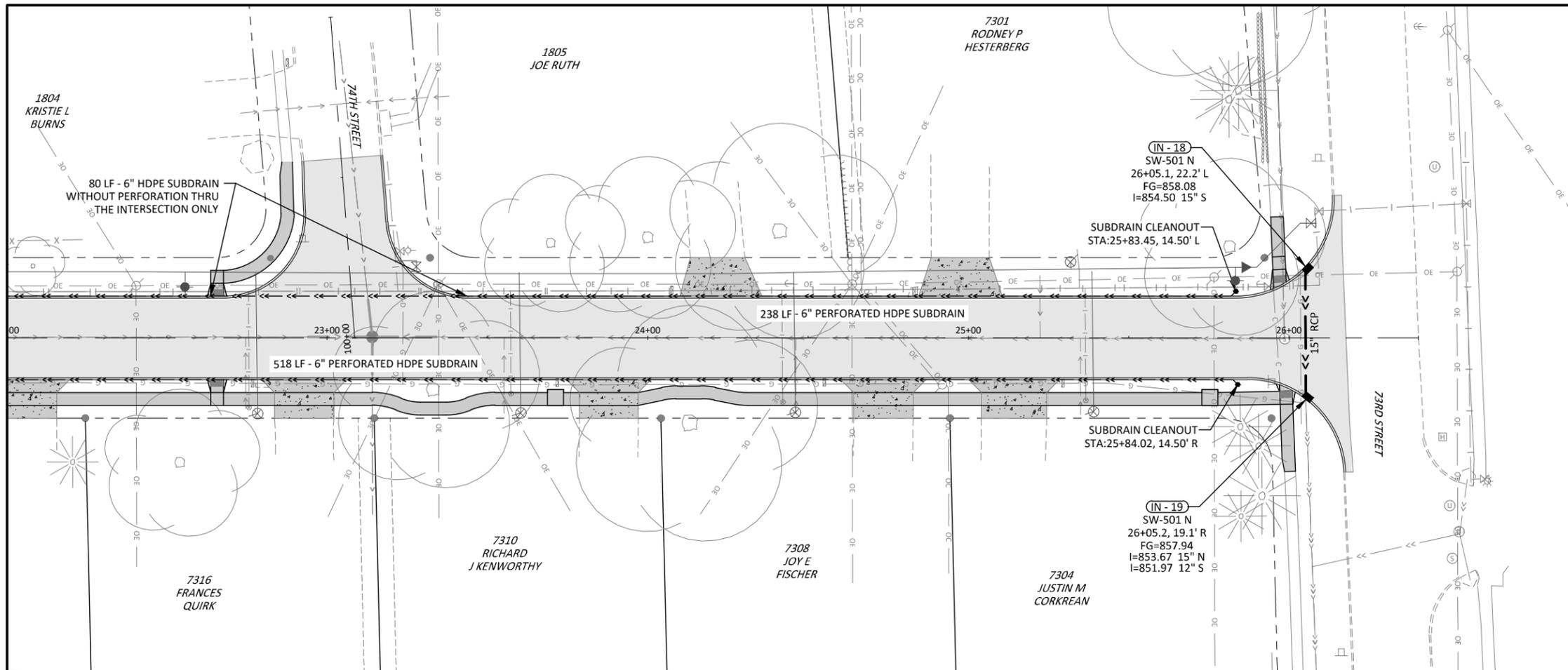


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

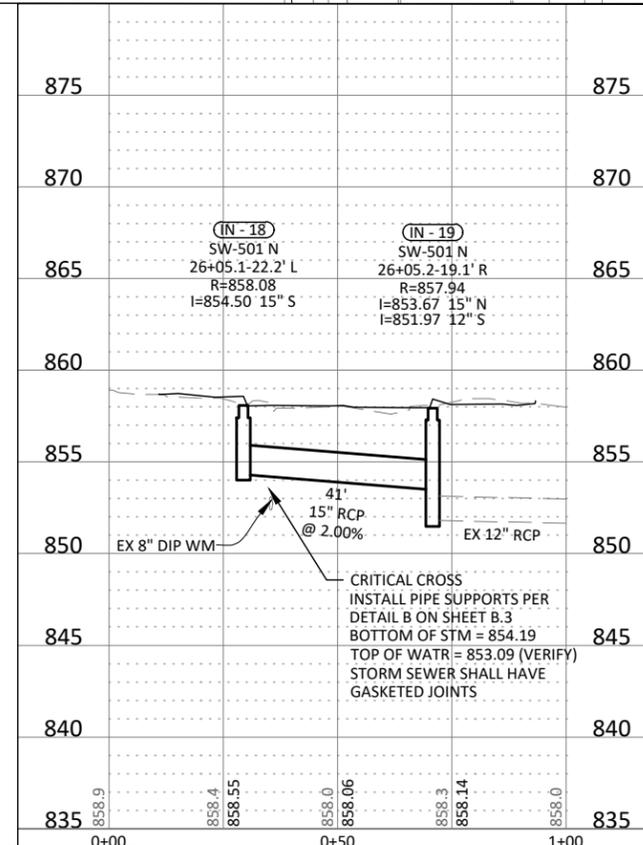


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
STORM SEWER - CROSS-RUNS



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 - PROTECT ALL EXISTING TREES.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

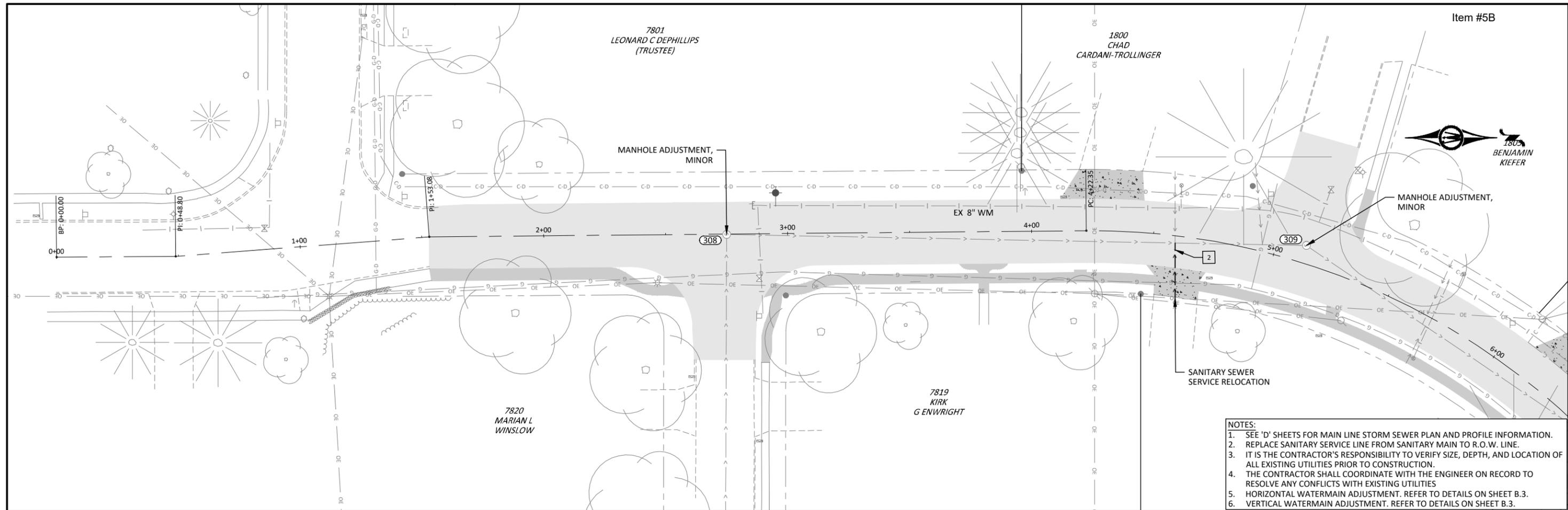


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

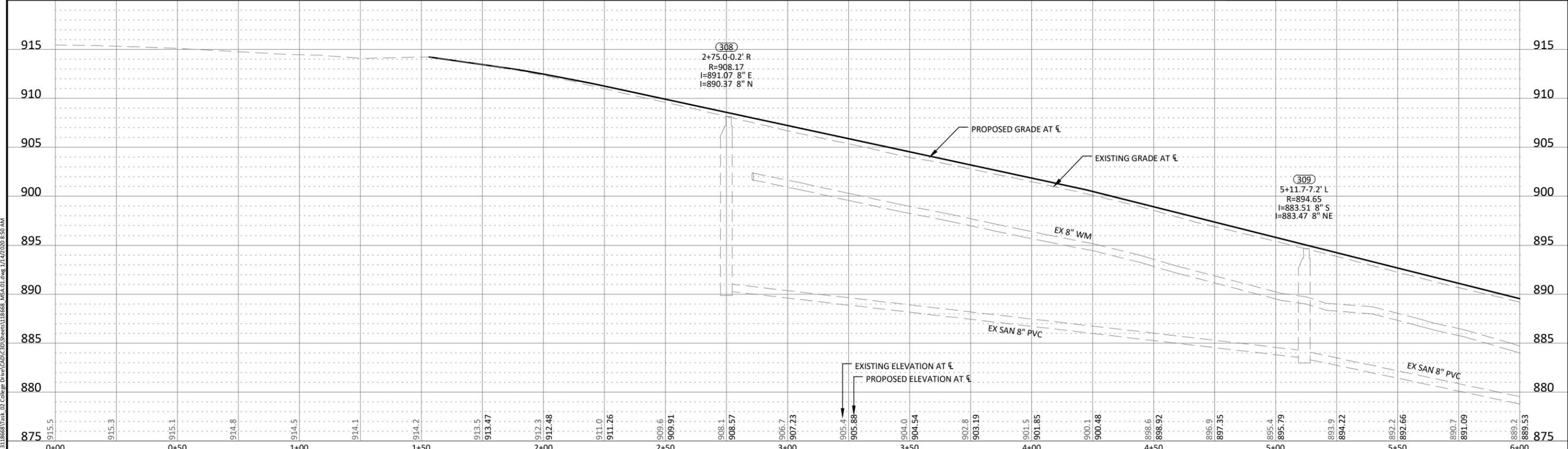


DESIGNED BY	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

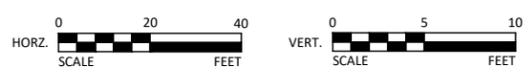
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
STORM SEWER CROSS-RUNS



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES
 - HORIZONTAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.
 - VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02 College Drive\Drawings\CD\Sheets\118668_MSA_01.dwg 1/14/2020 8:50 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

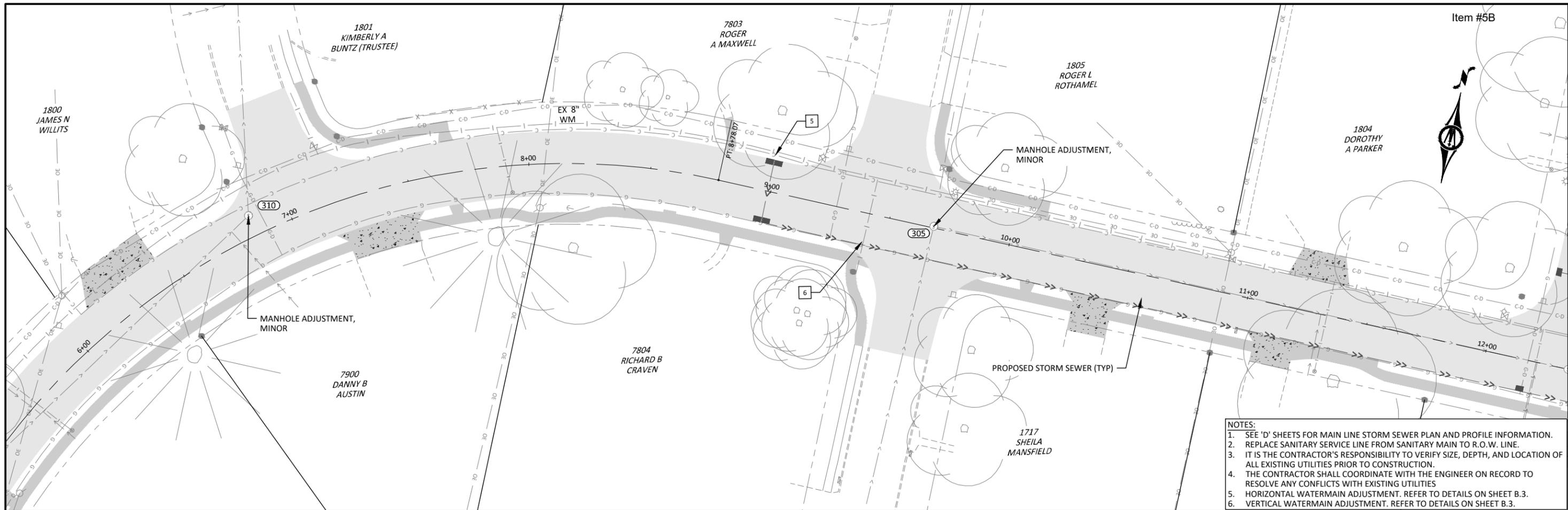


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

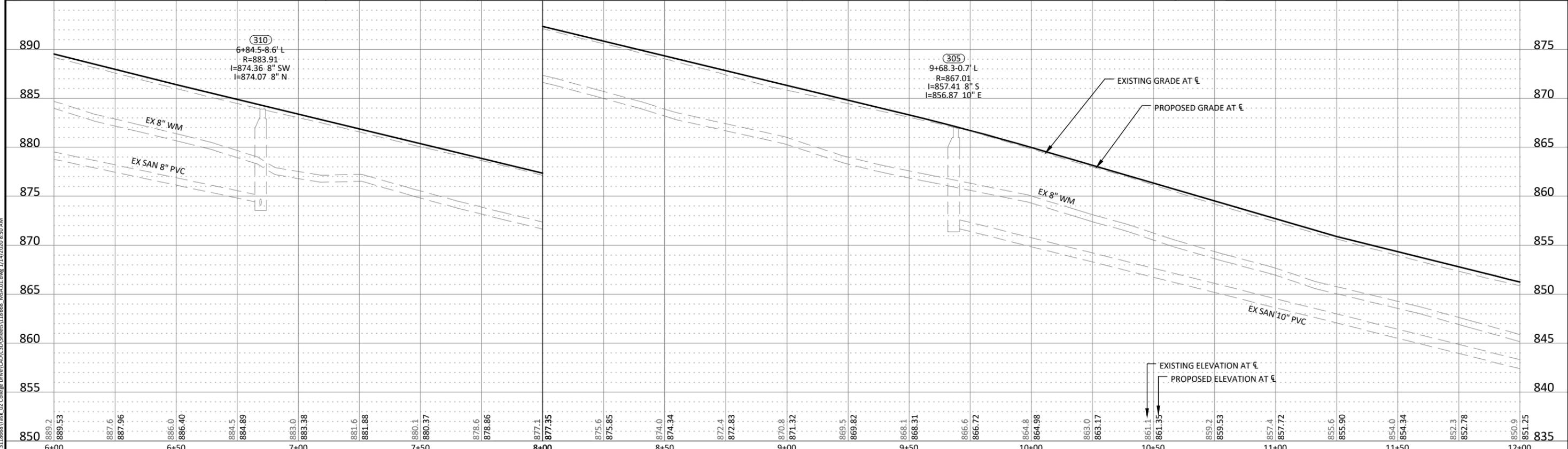


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SANITARY SEWER PLAN



- NOTES:**
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES
 - HORIZONTAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.
 - VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02 College Drive\Drawings\CD\Sheets\118668_MSA.01.dwg 1/14/2020 8:50 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



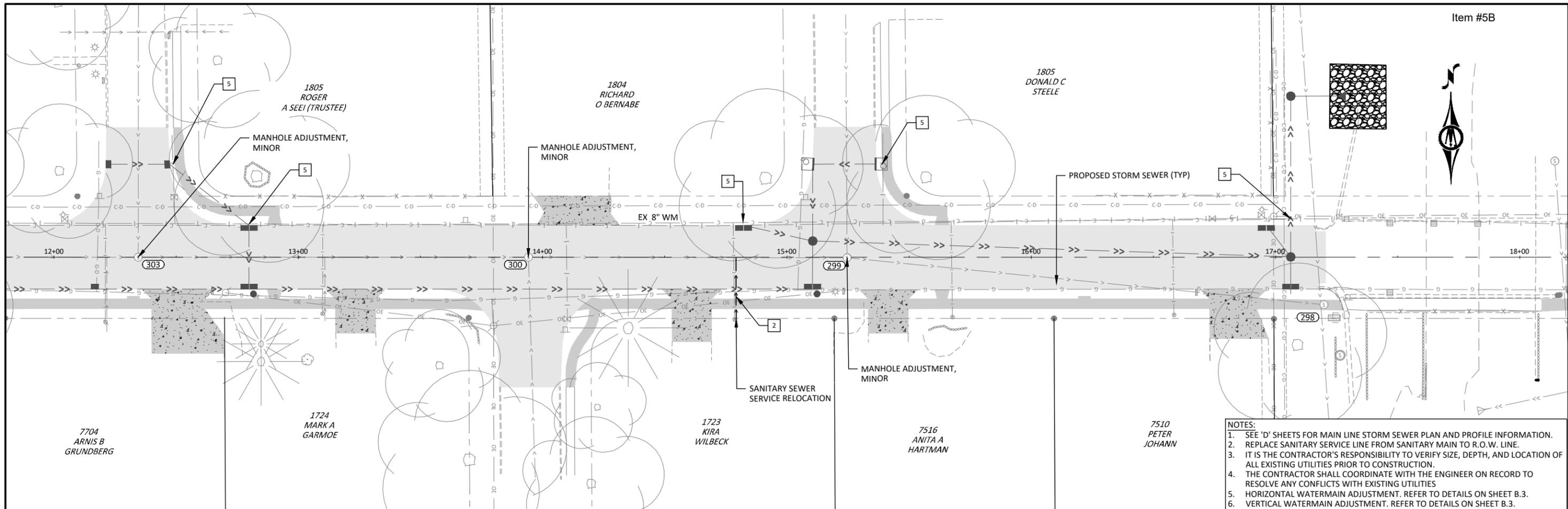
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



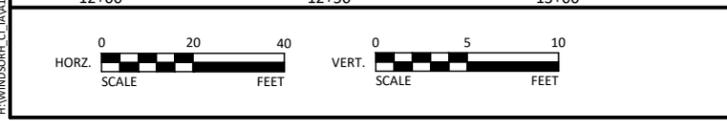
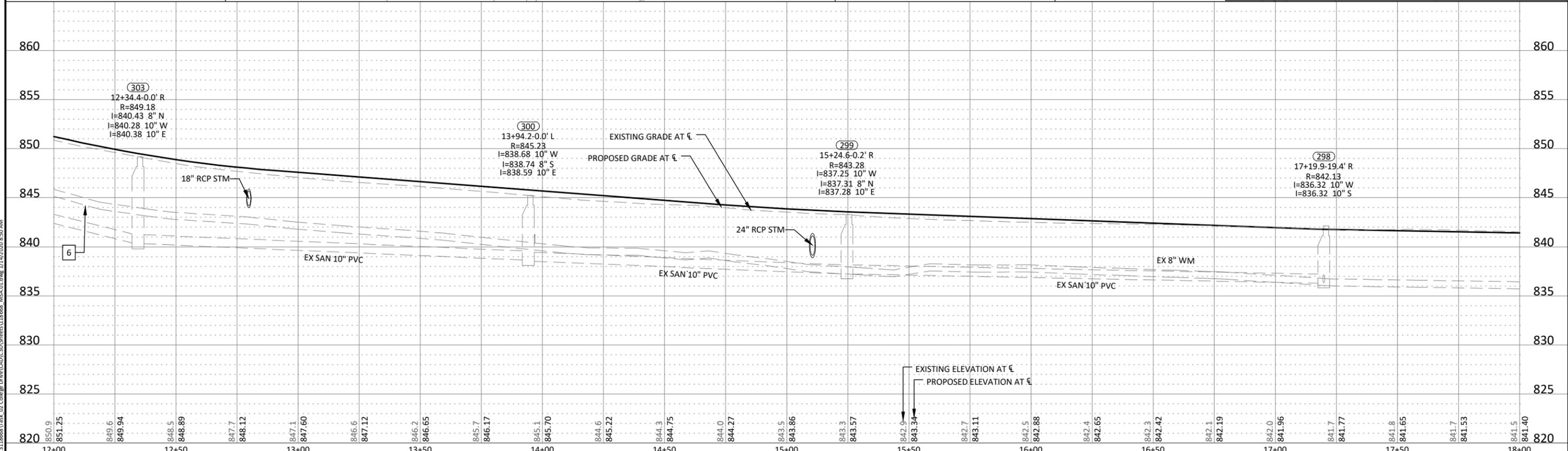
DESIGNED: NAS
SEATED: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SANITARY SEWER PLAN

SHEET
MSA.2



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 5. HORIZONTAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.
 6. VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

BOLTON & MENK

309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

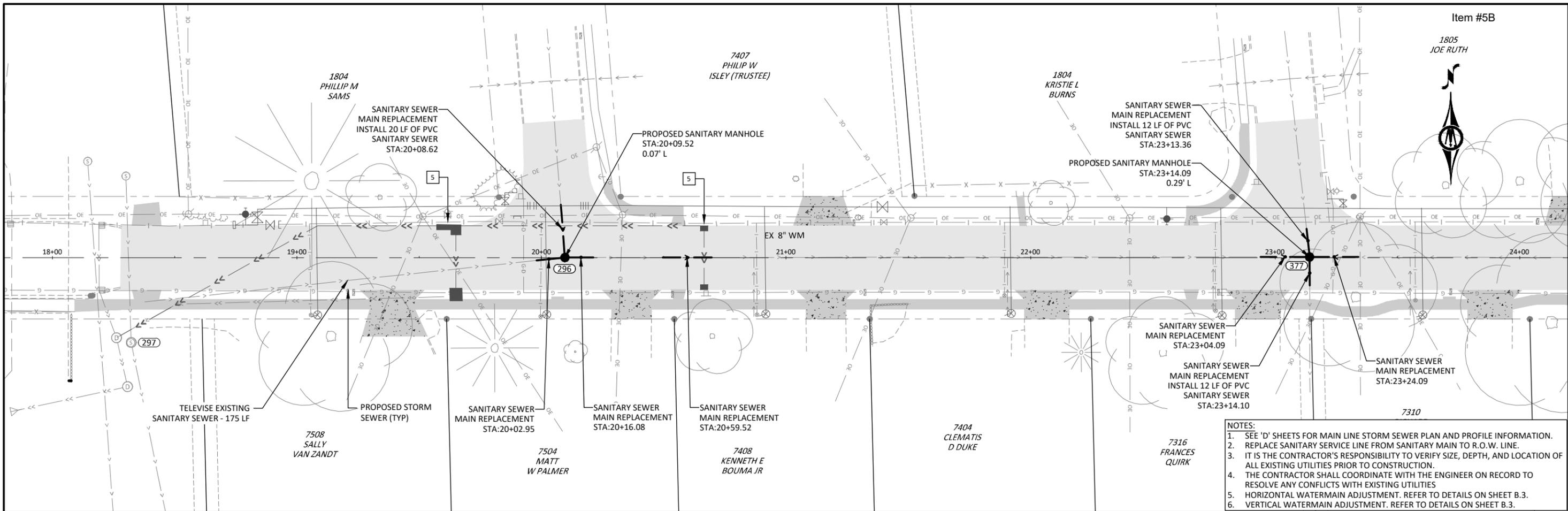
WINDSOR HEIGHTS
The heart of it all!

DESIGNED: NAS
SEATED: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

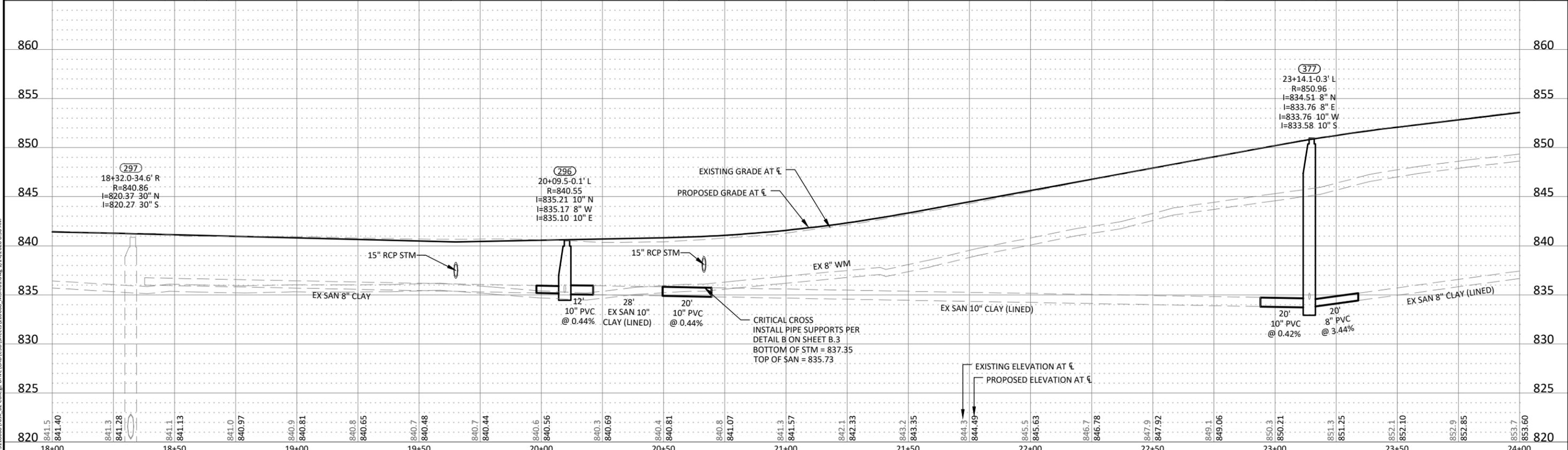
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SANITARY SEWER PLAN

SHEET MSA.3

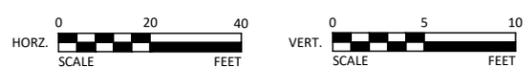
© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI_A13\118668\Task_02_College_Drive\CAD\Sheet\118668_MSA.03.dwg 1/17/2020 8:50 AM



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES
 5. HORIZONTAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.
 6. VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-181318668\Task 02 College Drive\Drawings\CD\Sheets\181318668_MSA.A1.dwg 1/17/2020 8:50 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



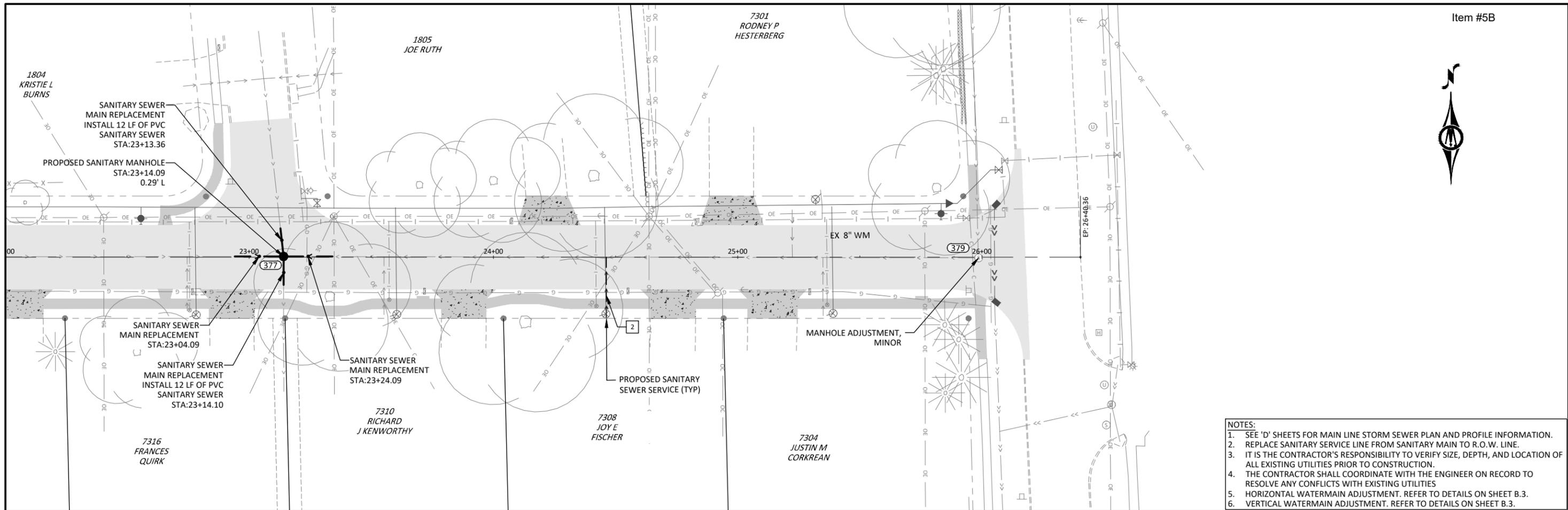
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



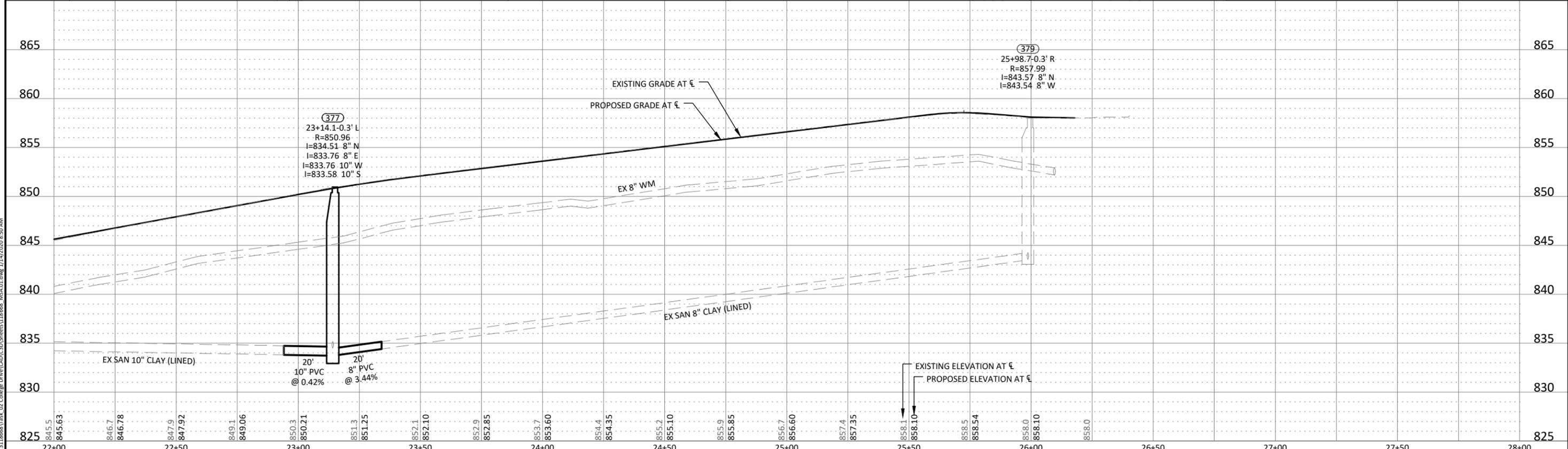
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SANITARY SEWER PLAN

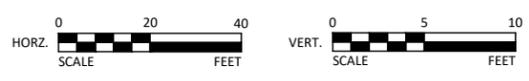
SHEET
MSA.4



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES
 - HORIZONTAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.
 - VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.3.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02 College Drive\Drawings\CD\Sheets\118668_MSA.01.dwg 1/14/2020 8:50 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SANITARY SEWER PLAN

SHEET
MSA.5

WATER MAIN PROJECT SUMMARY

AS PART OF THE 2020 WINDSOR HEIGHTS COLLEGE AVENUE PROJECT, NEW WATER MAIN WILL BE INSTALLED AND EXISTING WATER MAIN WILL BE ABANDONED IN STAGES 1, 2, AND 4. WATER MAIN STAGES DIFFER FROM CITY STAGES AS NOTED ON PLAN SHEETS. STAGE 4 WATER MAIN WORK IS LIMITED TO BLOWOFF REMOVAL AND FIRE HYDRANT INSTALLATION.

WORK INCLUDES THE FOLLOWING:

1. PROVIDE MATERIALS, EQUIPMENT, AND LABOR NECESSARY, INCLUDING EXCAVATION, INSTALLATION, BACKFILL, TESTING, DISINFECTION, DECHLORINATION, AND MISCELLANEOUS WORK, TO COMPLETE THE INSTALLATION OF APPROXIMATELY 734 FEET OF 8-INCH C900 DR18 PVC.
2. WORK INCLUDES CONNECTION TO EXISTING WATER MAINS, INSTALLATION OF APPURTENANCES AND WATER SERVICE TRANSFERS, DISCONNECTION OF MAINS TO BE ABANDONED, AND REMOVAL OF OLD SURFACE FACILITIES.
3. CONTRACTOR'S FOREMAN/SUPERINTENDANT AND DMWW ENGINEER/ENGINEERING TECHNICIAN TO COORDINATE THE WEEK PRIOR FOR WATER MAIN ACTIVITIES THE FOLLOWING WEEK.
4. IF PER DIVISION 1 REQUIREMENTS, DRIVEWAYS REMAIN ACCESSIBLE TO RESIDENTS DURING WATER MAIN CONSTRUCTION WITHIN THE STAGE, PROVIDE CHANNELIZERS AS REQUIRED TO DELINEATE REQUIRED STORAGE AND WORK SPACE FOR WATER MAIN WORK WITHIN EACH STAGE. CHANNELIZERS CONSIDERED INCIDENTAL TO PROJECT TRAFFIC CONTROL.
5. WATER MAIN INSTALLATION WORK REQUIRES COORDINATION AND SEQUENCING WITH OTHER WORK WITHIN EACH STAGE. WATER MAIN WORK IN EACH WATER MAIN STAGE IS NOT COMPLETE UNTIL WATER SERVICES ARE TRANSFERRED, CONNECTIONS TO EXISTING MAINS ARE COMPLETED, AND EXISTING WATER MAIN WITHIN STAGE IS ABANDONED, INCLUDING ALL REMOVALS OF TEMPORARY OR ABANDONED APPURTENANCES THAT WOULD INTERFERE WITH NEW SIDEWALK, DRIVEWAY OR STREET PAVING.
6. WATER MAIN INSTALLATION REQUIRES DRIVEWAY REMOVAL PRIOR TO WATER MAIN INSTALLATION WITHIN THE WATER MAIN STAGE. THESE REMOVALS ARE COVERED BY DIVISION 1 WORK. COSTS ASSOCIATED WITH REMOVALS AND/OR TEMPORARY ROCK PLACEMENT FOR RESIDENT ACCESS ARE CONSIDERED INCIDENTAL TO DIVISION 1.
7. WATER SERVICES FOR OPPOSITE SIDE ARE TO BE OPEN CUT. THIS ASSUMES THAT STREET PAVING IS REMOVED PRIOR TO WATER SERVICE TRANSFERS.
8. WATER MAIN WORK IS UNDER DIVISION 2. QUANTITIES FOR DIVISION 2 WORK SHALL BE TRACKED SEPARATE FROM DIVISION 1 WORK. QUANTITIES TO BE APPROVED BY DMWW ENGINEER/ENGINEERING TECHNICIAN PRIOR TO PAYMENT. CHANGE ORDERS INCLUDING WATER MAIN REQUIRE APPROVAL BY DMWW PRIOR TO PAYMENT.
9. TRAFFIC CONTROL IS PER J SHEETS AND DIVISION 1. ANY ADDITIONAL TRAFFIC CONTROL FOR WATER MAIN WORK OUTSIDE OF THE CITY ACTIVE STAGE IS INCIDENTAL TO PROJECT TRAFFIC CONTROL.
10. SIDEWALK AND STREET PAVING REMOVALS AND REPLACEMENT ARE PER DIVISION 1. ANY ADDITIONAL PAVING REQUIREMENTS FOR WATER MAIN WORK IS INCIDENTAL TO PROJECT PAVING.
11. PROVIDE TREE PROTECTION PER CITY OF WINDSOR HEIGHTS REQUIREMENTS. WATER MAIN WORK IS ADJACENT TO SHRUBS, TREES AND TREE ROOTS LOCATED BOTH WITHIN AND ADJACENT TO THE RIGHT-OF-WAY.

WATER MAIN CONSTRUCTION NOTES:

1. WATER SERVICE SHALL BE MAINTAINED TO ALL CUSTOMERS DURING CONSTRUCTION.
2. CONTRACTOR TO ADHERE TO DMWW SPECIFICATION REQUIREMENT THAT NO MORE THAN 100 FEET OF TRENCH LENGTH ARE TO BE OPEN AT A TIME.
3. CONTRACTOR TO MAINTAIN EROSION CONTROL FOR WATER MAIN WORK DURING CONSTRUCTION. DIVISION 2 EROSION CONTROL INCLUDES FILTER SOCKS AROUND BACKFILL PILES AND OPEN TRENCHES DURING WATER MAIN CONSTRUCTION. OVERALL SITE EROSION CONTROL IS PER DIVISION 1 REQUIREMENTS.
4. HOMEOWNER ACCESS REQUIREMENTS ARE ESTABLISHED IN DIVISION 1 REQUIREMENTS. COSTS ASSOCIATED WITH MAINTAINING ACCESS ARE ACCOUNTED FOR IN DIVISION 1 ITEMS.
5. THE CONTRACTOR'S SCHEDULE SHALL ACCOUNT FOR TIME REQUIRED TO PRESSURE TEST AND CHLORINATE WATER MAIN (3 DAYS MINIMUM EACH STAGE).
6. THE CONTRACTOR SHALL COORDINATE ALL WATER MAIN WORK, SEWER & PAVING WORK WITH DMWW ENGINEER/ENGINEERING TECHNICIAN IN EACH STAGE.
7. ALL WATER SERVICES SHALL BE OPEN CUT FOR THIS PROJECT DUE TO SPACE RESTRICTIONS. ALL EQUIPMENT FOR WATER SERVICE TRANSFERS SHALL REMAIN WITHIN THE DESIGNATED RIGHT-OF-WAY. RESTORATION REQUIRED FOR ANY DAMAGED AREAS CAUSED BY CONTRACTOR WORKING OUTSIDE OF THE RIGHT-OF-WAY SHALL BE AT CONTRACTOR'S EXPENSE.
8. DMWW ENGINEER/ENGINEERING TECHNICIAN AND CONTRACTOR TO AGREE ON QUANTITIES BEFORE PAYMENT.
9. DMWW WILL HIRE A SOIL TESTING FIRM TO TEST SOIL COMPACTIONS IN FIELD. PER DMWW SPECIFICATION PROVISIONS, SOILS DEEMED UNSUITABLE DUE TO MOISTURE CONTENT BUT OTHERWISE ACCEPTABLE ARE REQUIRED TO BE DRYED. SOIL COMPACTION EQUIPMENT IS REQUIRED TO FIT WITHIN DESIGNATED TRENCH WIDTHS. WIDER COMPACTION EQUIPMENT IS NOT ACCEPTABLE.
11. BACKFILL REQUIREMENTS IN DMWW SPECIAL PROVISIONS INCLUDE ADJUSTING MOISTURE CONTENT OF MATERIAL THAT EXCEEDS OPTIMUM MOISTURE RANGE BUT IS OTHERWISE DEEMED ACCEPTABLE. CONTRACTOR TO KEEP EXCAVATED MATERIAL PROTECTED FROM EXPOSURE TO MOISTURE DUE TO RAIN. TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT.
12. DMWW ANTICIPATES THAT WATER MAIN WORK WILL BE DONE PRIOR TO SEWER, INTAKES, AND SUBDRAIN INSTALLATION. CONTRACTOR TO COORDINATE ACTUAL SCHEDULE AND SEQUENCE WITH DMWW ENGINEER/ENGINEERING TECHNICIAN THROUGHOUT PROJECT.
13. INSTALL RESTRAINED JOINT PIPE LENGTHS IN ACCORDANCE WITH RESTRAINED LENGTH SCHEDULE TO CONNECT TO VALVE AT END OF STAGE AT LOCATIONS SHOWN ON PLANS.

WATER MAIN GENERAL NOTES

1. CONTRACTOR TO COORDINATE ACTIVITIES DURING WATER MAIN CONSTRUCTION WITH DMWW ENGINEER/ENGINEERING TECHNICIAN ASSIGNED TO PROJECT.
2. DMWW PERSONNEL SHALL BE ON SITE FOR THE CONSTRUCTION OF THE NEW WATER MAIN INFRASTRUCTURE.
3. ONLY DMWW PERSONNEL SHALL OPERATE VALVES AND HYDRANTS.
4. CONTRACTOR TO PROVIDE DMWW WITH SHOP DRAWINGS AND PRODUCT SUBMITTALS PER THE SPECIAL PROVISIONS FOR WATER MAINS. SHOP DRAWINGS SHALL BE SUBMITTED TWO (2) WEEKS PRIOR TO WATER MAIN CONSTRUCTION.
5. CONTRACTOR SHALL COORDINATE WITH DMWW TO TEST TRACER WIRE PRIOR TO PERMANENT PAVEMENT INSTALLATION.
6. HYDRANT EXTENSIONS ARE NOT ALLOWED.
7. NOTIFY DMWW ENGINEERING TECHNICIAN 48-HOURS PRIOR TO THE START OF ANY WATER MAIN RELATED CONSTRUCTION.
8. PROVIDE 48-HOUR NOTICE TO DMWW ENGINEERING TECHNICIAN FOR ANY CONNECTIONS TO DMWW EXISTING WATER MAINS INCLUDING MAIN CUTS AND TAPS. COORDINATE WITH DMWW ENGINEERING TECHNICIAN FOR SCHEDULING.
9. CONTRACTOR TO PROVIDE 24-HOUR NOTICE FOR ALL AFFECTED CUSTOMERS PRIOR TO WATER OUTAGES.
10. SCHEDULING OF WATER MAIN CUTS REQUIRES PREPLANNING THE WEEK PRIOR TO A MAIN CUT. WHILE DMWW TRIES TO ACCOMMODATE REQUESTS FOR TAPS AND MAIN CUTS WITHIN THE CONTRACTOR'S SCHEDULE, THERE MAY BE TIMES WHEN STAFF IS NOT AVAILABLE TO COMPLETE THE WORK ON THE DAY REQUESTED.
11. DMWW ENGINEER/ENGINEERING TECHNICIAN TO APPROVE ALL INSTALLED QUANTITIES AND PAY APPLICATIONS FOR WATER MAIN CONSTRUCTION.
12. CONTRACTOR'S EQUIPMENT TO REMAIN WITHIN RIGHT-OF-WAY DURING WATER SERVICE TRANSFERS. CONTRACTOR TO PLAN ACCORDINGLY WITH PROPERLY SIZED EQUIPMENT AND METHODS USED TO TRANSFER SERVICES.
13. WATER SERVICES FOR NEW WATER MAIN CONSTRUCTION SHALL BE PAID PER THE UNIT COST PROVIDED AND INSTALLED PER DMWW RULES AND REGULATIONS.
14. WATER SERVICE STOP BOX TO BE LOCATED IN RIGHT-OF-WAY, 1' TO 6' FROM RIGHT-OF-WAY LINE.
15. ALL DUCTILE IRON PIPE TO BE INSTALLED WITH POLYETHYLENE ENCASEMENT PER THE SPECIAL PROVISIONS FOR WATER MAIN CONSTRUCTION.
16. MAINTAIN A MINIMUM BURY DEPTH OF 5-FEET FOR ALL NEW WATER MAIN, WATER MAIN ALTERATIONS, AND WATER SERVICES.
17. INSTALL WATER MAIN PER IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR SEPARATION OF DRINKING WATER INFRASTRUCTURE FROM STORM AND SANITARY SEWERS.
18. WATER MAIN WORK ASSUMES THAT EXISTING SOIL WILL BE RETURNED TO THE EXCAVATION AND COMPACTED PER SPECIFICATIONS. CONTRACTOR TO FOLLOW REQUIREMENTS TO HAVE NO MORE THAN 100 FEET OF TRENCH OPEN AT A TIME.
19. CONTRACTOR TO FOLLOW DMWW WATER MAIN STANDARD DETAILS FOR TRENCH WIDTHS FOR WATER MAIN INSTALLATION AND WATER SERVICES. COSTS ASSOCIATED WITH WIDER TRENCH WIDTHS SHALL BE INCIDENTAL TO WATER MAIN WORK UNLESS APPROVED BY ENGINEER/ENGINEERING TECHNICIAN.
20. CONTRACTOR TO KEEP STORED AND INSTALLED WATER MAIN PIPE FREE OF DIRT AND DEBRIS.
21. TEMPORARY CAPS/PLUGS ARE INCIDENTAL TO WATER MAIN WORK.
22. TRAFFIC CONTROL IS PER J SHEETS. ANY ADDITIONAL TRAFFIC CONTROL FOR WATER MAIN WORK OUTSIDE OF THE ACTIVE STAGE IS INCIDENTAL TO PROJECT TRAFFIC CONTROL.

WATER SERVICE TRANSFER SCHEDULE				
No.	Station	Address	Service Size	DMWW Stage/Side
1		1804 74th St	3/4" taps 74th st	
2		1805 74th St	3/4" taps 74th st	
3		1804 75th St	3/4" taps 75th st	
4		7301 College Ave	unk	2/same
5		7304 College Ave	3/4"	2/opposite
6		7308 College Ave	3/4"	2/opposite
7		7310 College Ave	3/4"	2/opposite
8		7316 College Ave	3/4"	2/opposite
9		7404 College Ave	3/4"	2/opposite
10		7407 College Ave	unk taps 75th st	2/opposite
11		7408 College Ave	unk	1/opposite
12		7504 College Ave	unk	1/opposite
13		7508 College Ave	unk	1/opposite

C900 PVC & CL52 DIP Restrained Joint (RJ) Table									
Nominal Pipe Diameter	Pipe Material	Minimum Restrained Length (ft)*							Cap/Dead End
		Horizontal & Vertical (Up) Bend				Vertical (Down) Bend			
		11.25°	22.5°	45°	90°	11.25°	22.5°	45°	
16	PVC	7	14	29	70	19	39	80	147
12	PVC	6	11	23	55	15	30	62	113
8	PVC	4	8	16	39	10	21	44	80
16	DIP	7	14	28	70	17	35	73	178
8	DIP	4	8	16	38	10	19	40	97

*Use restrained joints on all pipe joints that fall within the lengths above on both sides of the fitting indicated.
 **Ductile Iron Pipe (DIP) is assumed to be polyethylene encased
 ***This table is based on the following assumptions:

Soil Type:	ML
Factor of Safety:	2
Min. Bury Depth:	5
Test Pressure:	150
Trench Condition:	Type 3

WATER MAIN LEGEND

- TREE PROTECTION FENCE
- ASPHALT PAVEMENT REMOVAL & REPLACEMENT
- CONCRETE SIDEWALK REMOVAL & REPLACEMENT
- CONCRETE PAVEMENT REMOVAL & REPLACEMENT
- CONCRETE DRIVEWAY REMOVAL & REPLACEMENT
- ADDRESS BOX
- WATER SERVICE SIZE

- ① NEW 1" WATER SERVICE, STOP BOX, AND CONNECTION TO NEW WATER MAIN OPPOSITE SIDE OF THE STREET.
- ② NEW 1" WATER SERVICE, STOP BOX, AND CONNECTION TO NEW WATER MAIN SAME SIDE OF THE STREET.

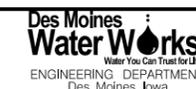


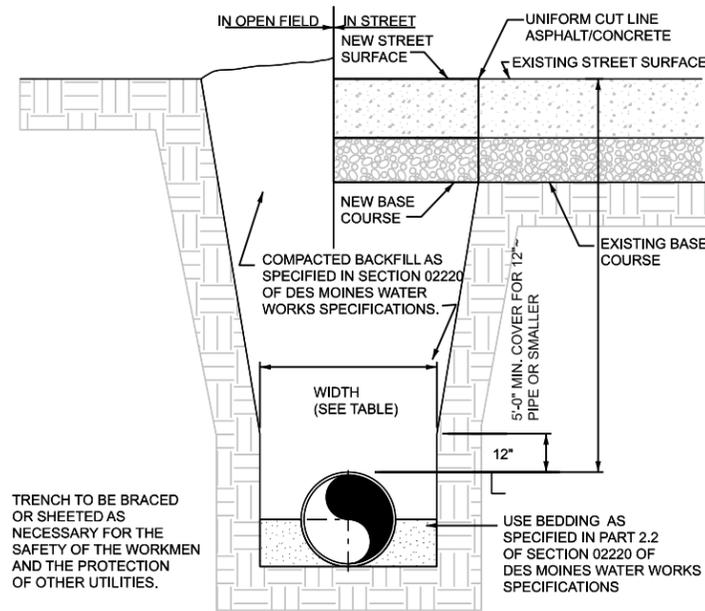
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Carla J. Schumacher 01/13/2020
 Date

Carla J. Schumacher, P.E.
 Des Moines Water Works
 License Number 18191
 MY LICENSE RENEWAL DATE IS DEC. 31, 2020
 Pages or sheets covered by this seal: MWM.1 TO MWM.5

MARK	DATE	BY	PROJECT	DESIGNED BY	DRAWN BY	CHECKED BY	SURVEY NOTES
			2020 WINDSOR HEIGHTS COLLEGE AVENUE	CJS	JLH	CJS	
			SHEET TITLE	ACTIVITY I.D.	DATE		
			WATER MAIN GENERAL NOTES		1-13-2020		
			SHEET	FILE NO.			
			MWM.1				





PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"

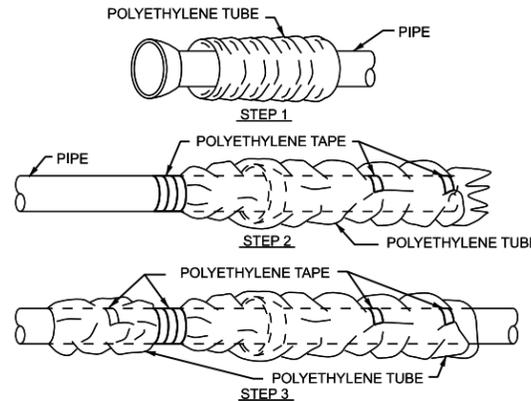
TYPICAL TRENCH SECTION

NOT TO SCALE

- STEP 1 - PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO THE TRENCH
- STEP 2 - PULL THE TUBE OVER THE LENGTH OF PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE
- STEP 3 - OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP AND TAPED IN PLACE.

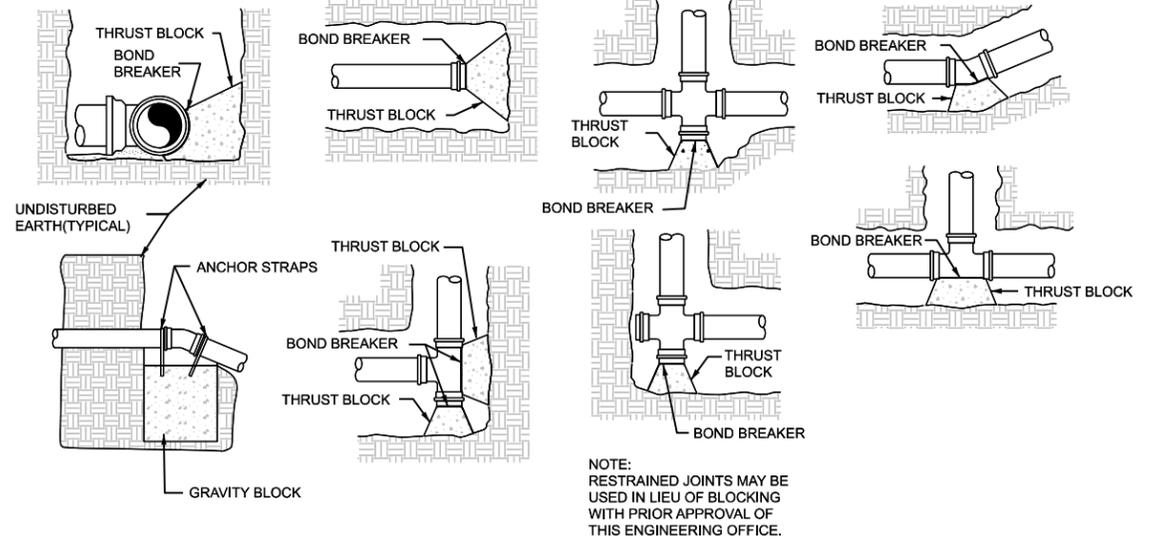
NOTE:

IRON PIPE FITTINGS, INCLUDING VALVES AND HYDRANTS SHALL BE WRAPPED WITH TWO LAYERS OF POLYETHYLENE MATERIAL. THE WRAPPING SHALL EXTEND AT LEAST 1' BEYOND THE FITTING JOINTS ONTO THE ADJOINING PIPE AND SHALL BE FASTENED TO THE PIPE WITH PLASTIC TAPE. TAPE SHALL BE USED AS NEEDED TO HOLD WRAP IN PLACE. EITHER POLYETHYLENE SHEETS OR SLIT TUBING MAY BE USED.



POLYETHYLENE WRAP FIELD INSTALLATION DETAIL

NOT TO SCALE



SIZE OF PIPE	BENDS			
	11 1/4°	22.5°	45°	90°
4"	0.24	0.65	1.35	2.03
6"	0.24	0.65	1.35	2.03
8"	0.45	1.14	2.35	3.49
12"	0.98	2.44	4.99	7.38
16"	1.73	4.27	8.70	12.84
20"	2.66	6.56	13.36	19.70
24"	3.70	9.25	18.94	27.96
30"	5.73	14.26	29.15	42.99

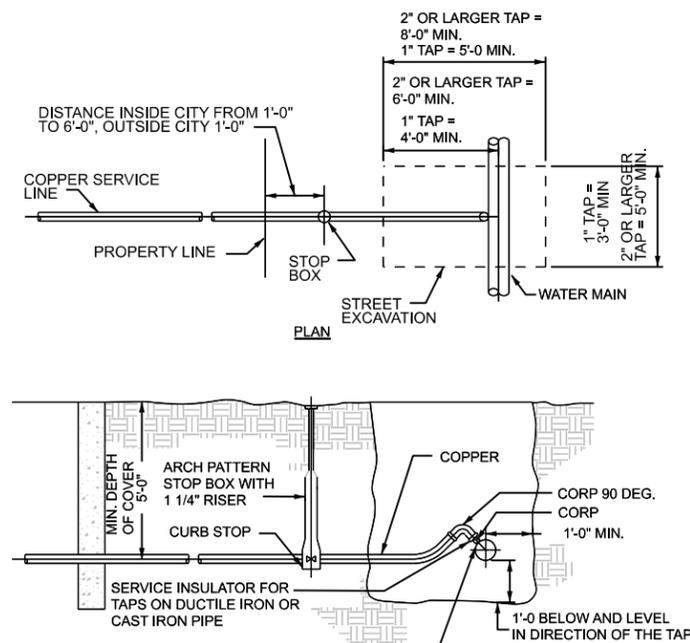
VOLUME OF GRAVITY BLOCK

NOT TO SCALE

SIZE OF PIPE	BENDS				TEE OR DEAD END
	11 1/4°	22.5°	45°	90°	
6"	1	2	4	8	6
8"	2	4	8	14	10
12"	4	8	16	29	21
16"	7	14	28	51	36
20"	11	22	43	79	56
24"	16	31	61	112	79

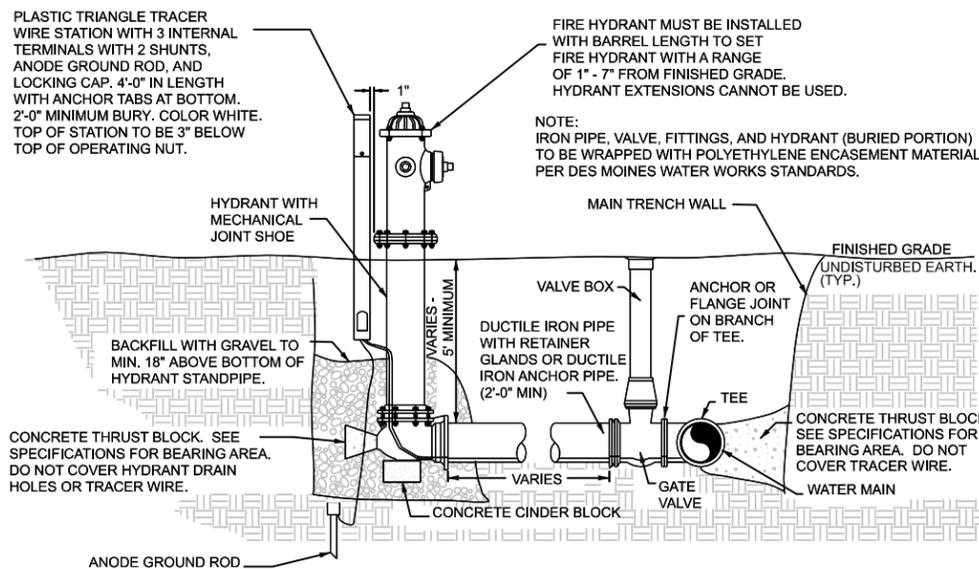
STANDARD CONCRETE THRUST BLOCKS

NOT TO SCALE



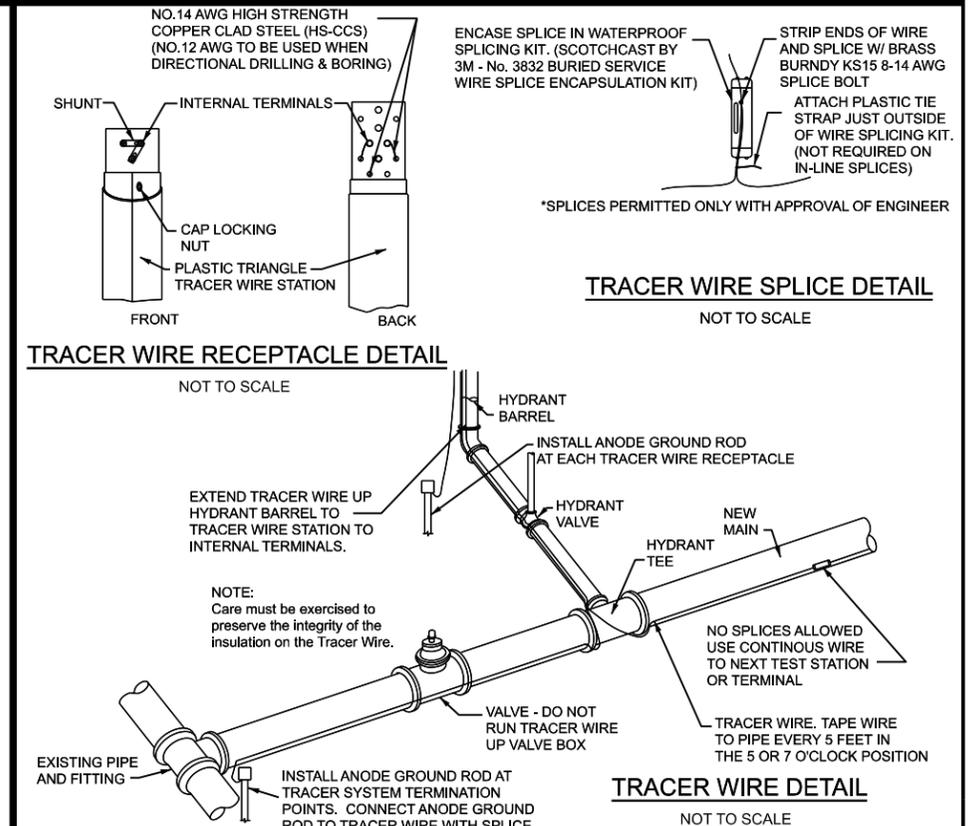
SERVICE INSTALLATION

NOT TO SCALE



STANDARD HYDRANT ON WATER MAINS 16" OR LESS

NOT TO SCALE



TRACER WIRE SPLICING DETAIL

NOT TO SCALE

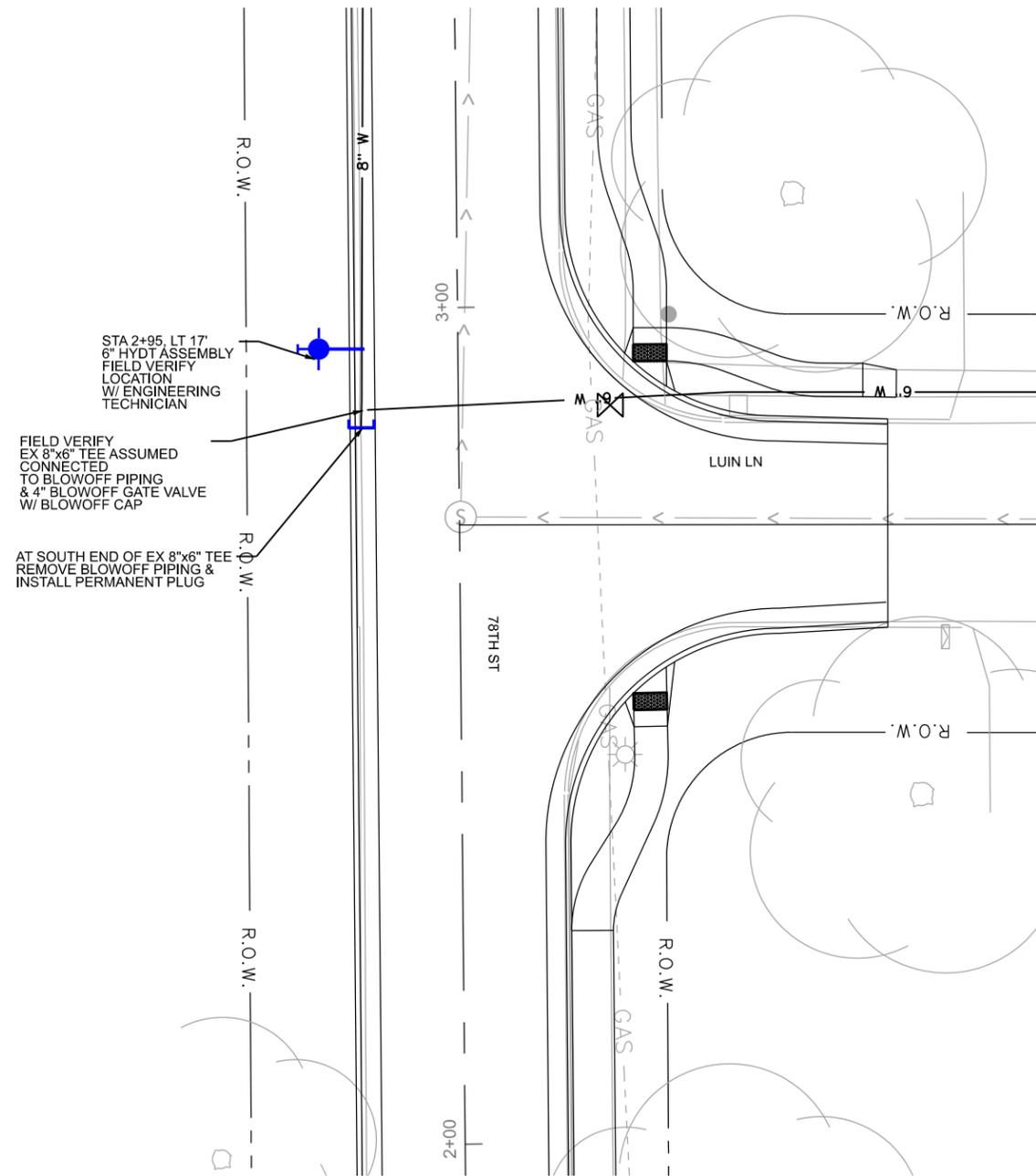
TRACER WIRE RECEPTACLE DETAIL

NOT TO SCALE

TRACER WIRE DETAIL

NOT TO SCALE

MARK	DATE	BY

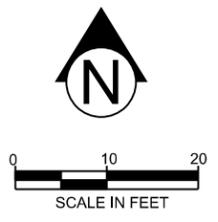


STA 2+95, LT 17'
6" HYDT ASSEMBLY
FIELD VERIFY
LOCATION
W/ ENGINEERING
TECHNICIAN

FIELD VERIFY
EX 8"x6" TEE ASSUMED
CONNECTED
TO BLOWOFF PIPING
& 4" BLOWOFF GATE VALVE
W/ BLOWOFF CAP

AT SOUTH END OF EX 8"x6" TEE
REMOVE BLOWOFF PIPING &
INSTALL PERMANENT PLUG

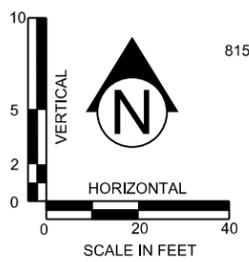
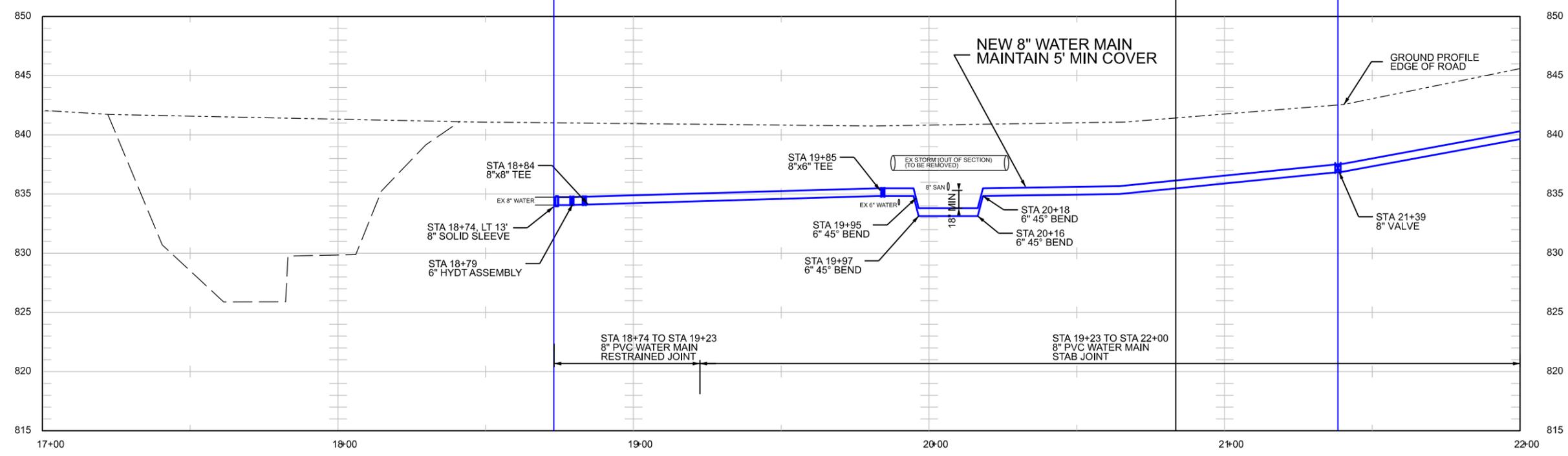
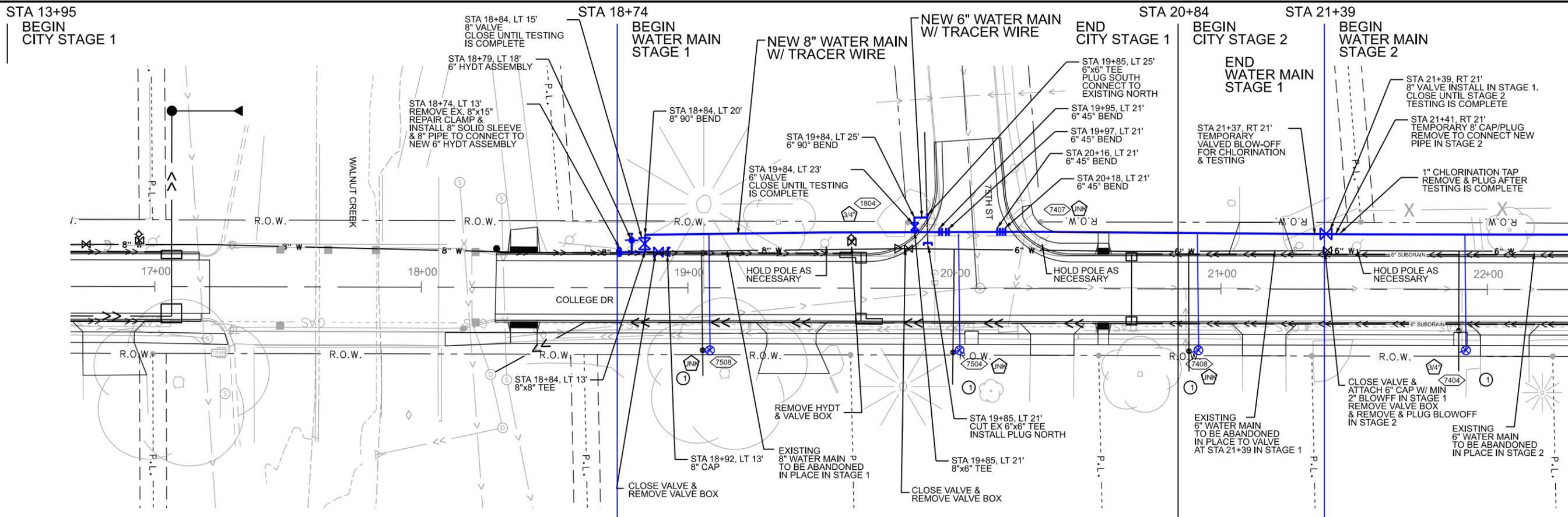
DETAIL 1
NEW HYDRANT ASSEMBLY



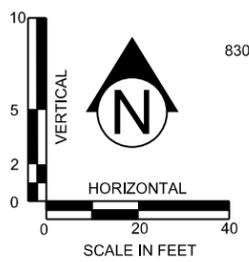
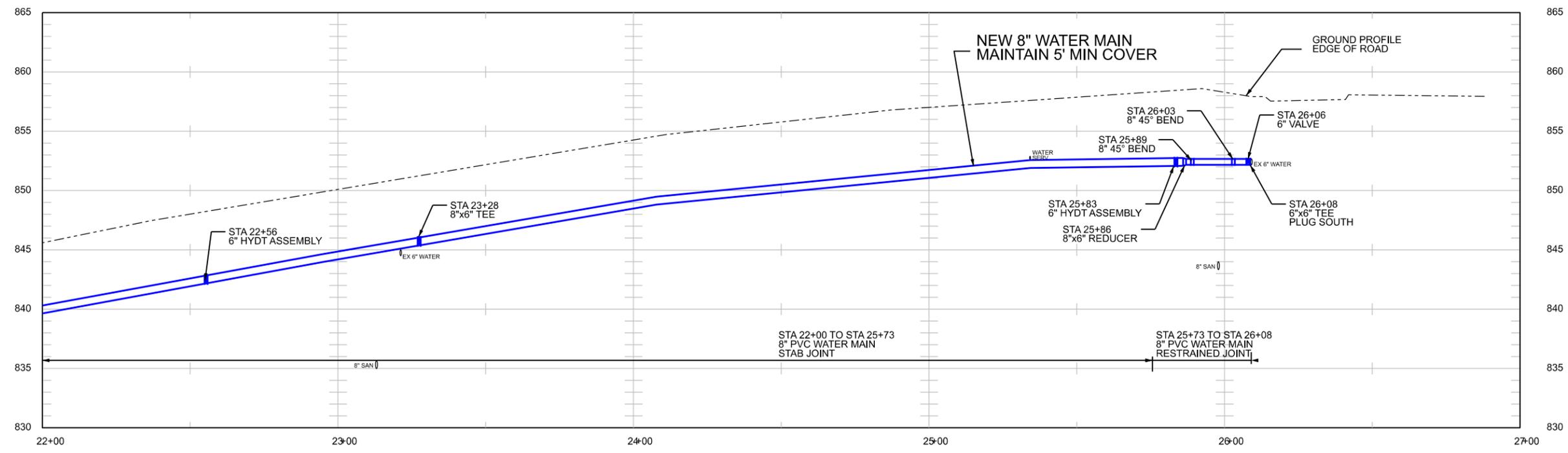
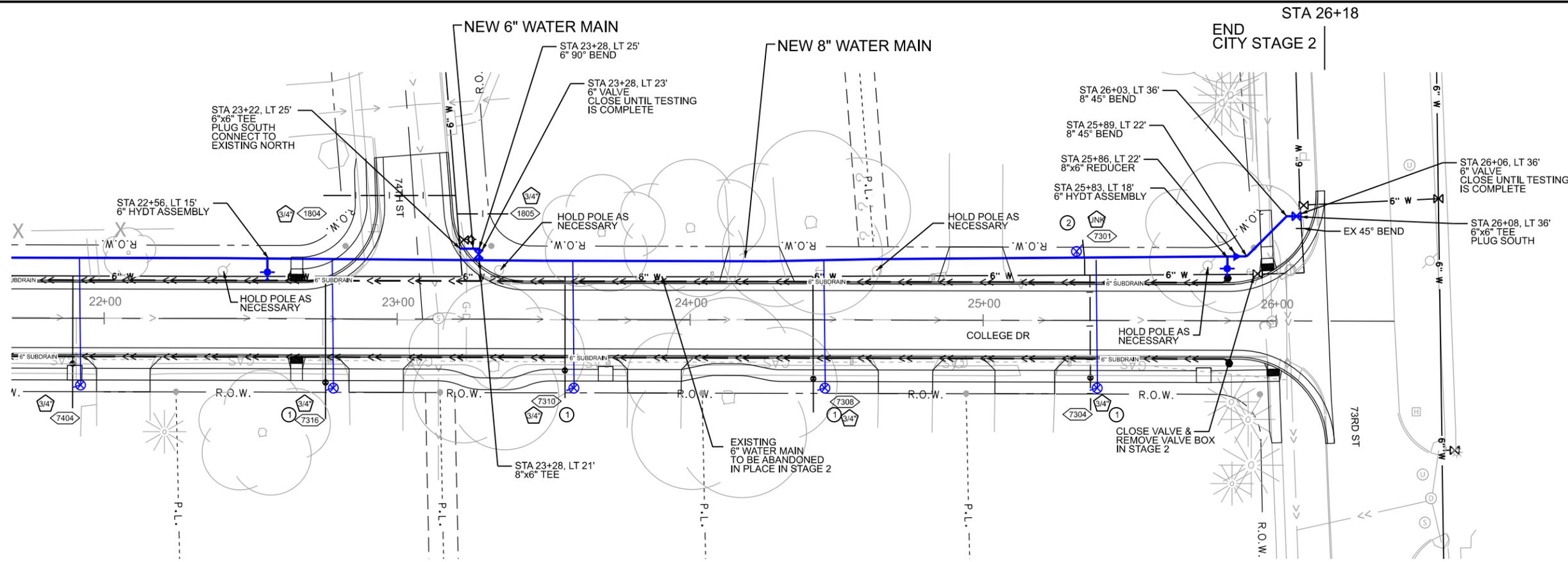
MARK	DATE	BY	<p>Des Moines Water Works ENGINEERING DEPARTMENT Des Moines, Iowa</p>	PROJECT	2020 WINDSOR HEIGHTS COLLEGE AVENUE	DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	CJS	SURVEY	NOTES
				SHEET TITLE	WATER MAIN PLAN & PROFILE	ACTIVITY I.D.				DATE	1-13-2020	SHEET	MW. 3

1/13/2020
 U:\Projects\In Design\A Water Distribution\Design\A1949W_2020 Windsor Heights College Ave\20 Windsor Heights College Ave bid.dgn

Item #5B

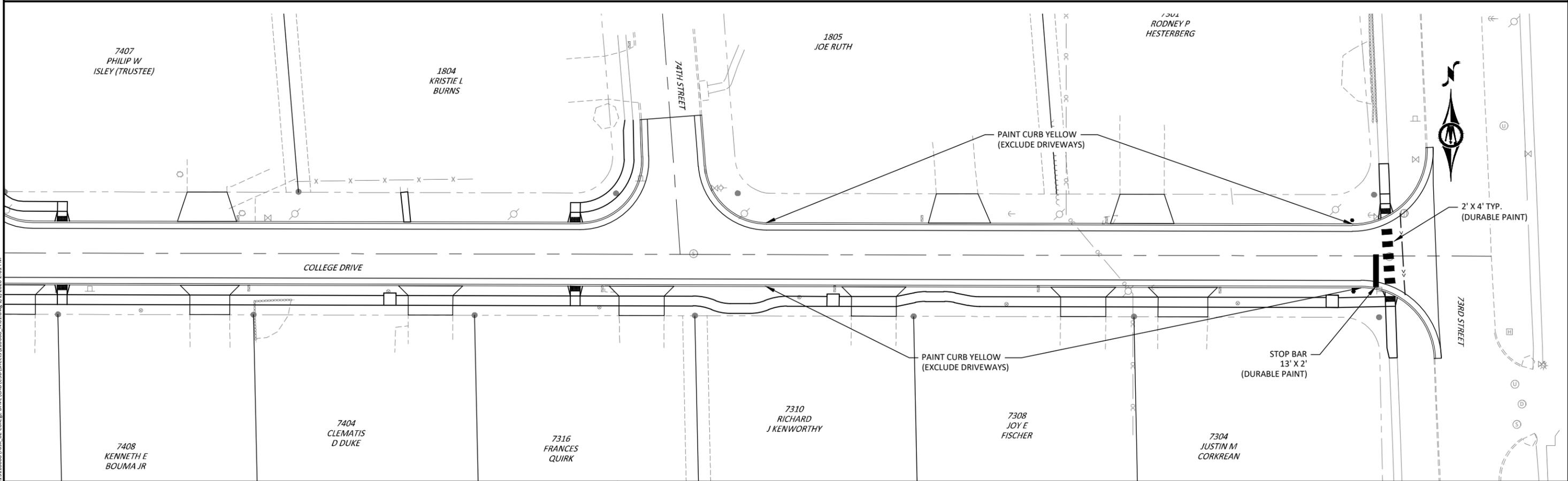
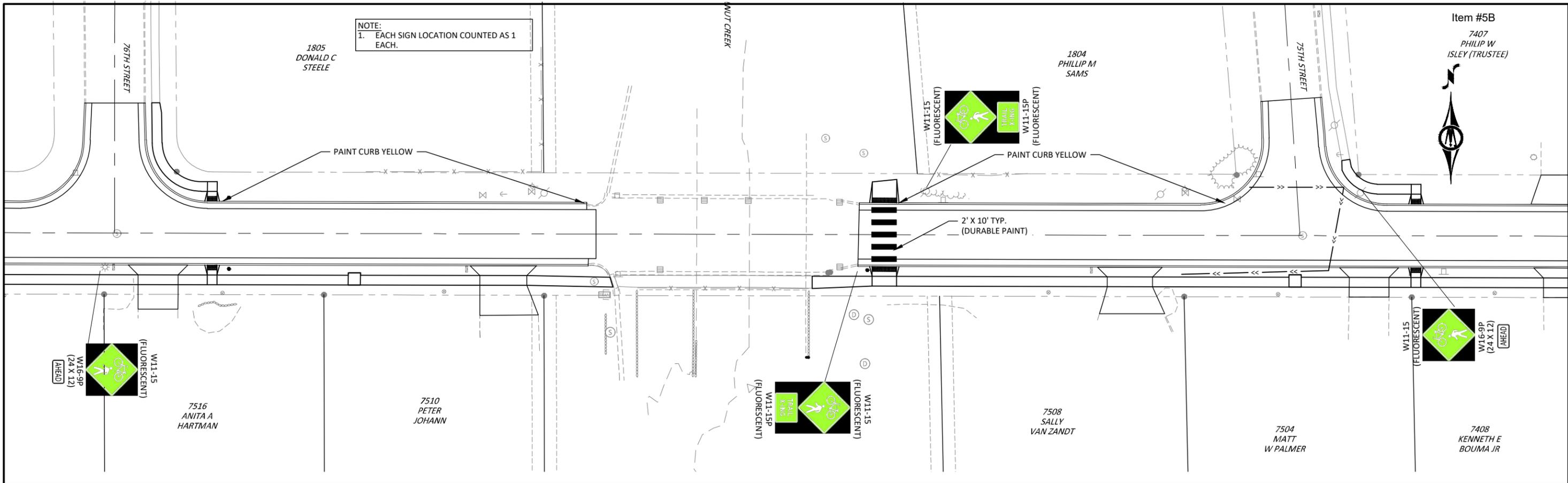


Des Moines Water Works WATER WORKS ENGINEERING DEPARTMENT Des Moines, Iowa		PROJECT: 2020 WINDSOR HEIGHTS COLLEGE AVENUE SHEET TITLE: WATER MAIN PLAN & PROFILE	DESIGNED BY: CJS DRAWN BY: JLH CHECKED BY: CJS SURVEY DATE: 1-13-2020	SHEET: MM-4 FILE NO.:
--	--	--	--	--------------------------



DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	CJS	SURVEY	NOTES
ACTIVITY	2020 WINDSOR HEIGHTS COLLEGE AVENUE		DATE		1-13-2020		
SHEET TITLE	WATER MAIN PLAN & PROFILE		SHEET	MM.5		FILE NO.	





© Bolton & Menk, Inc. 2020. All Rights Reserved. W:\WINDSOR HTS\CI\1A13118668\Task 02_College Drive\CAD\Sheets\118668_N.01.dwg 1/2/2020 3:01 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



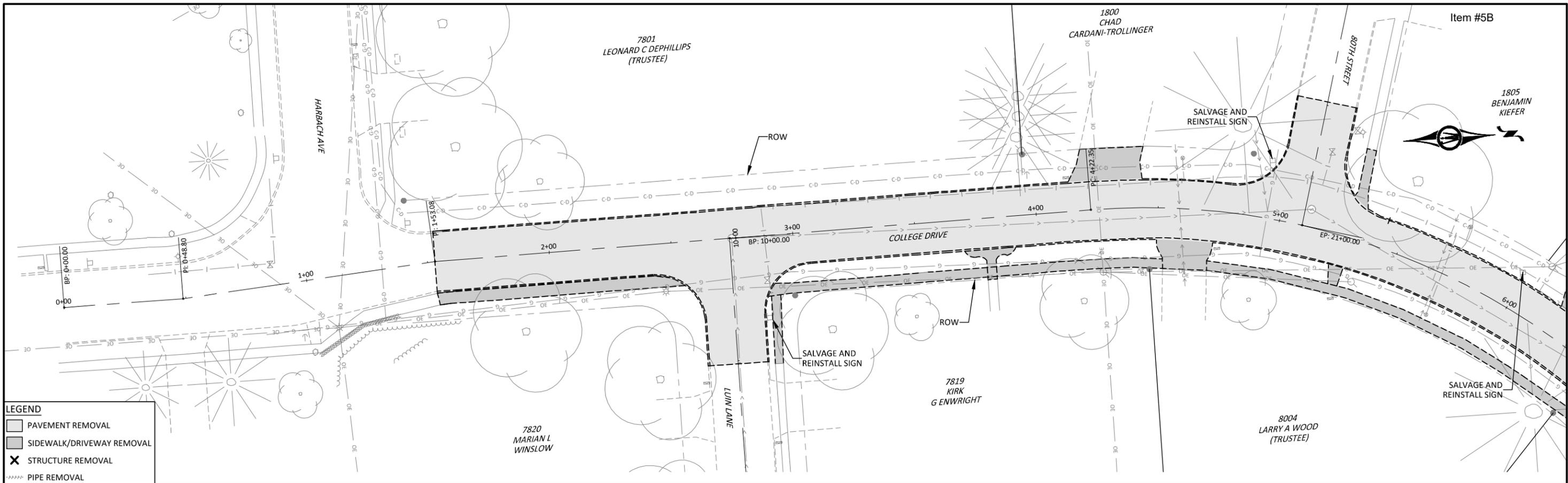
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

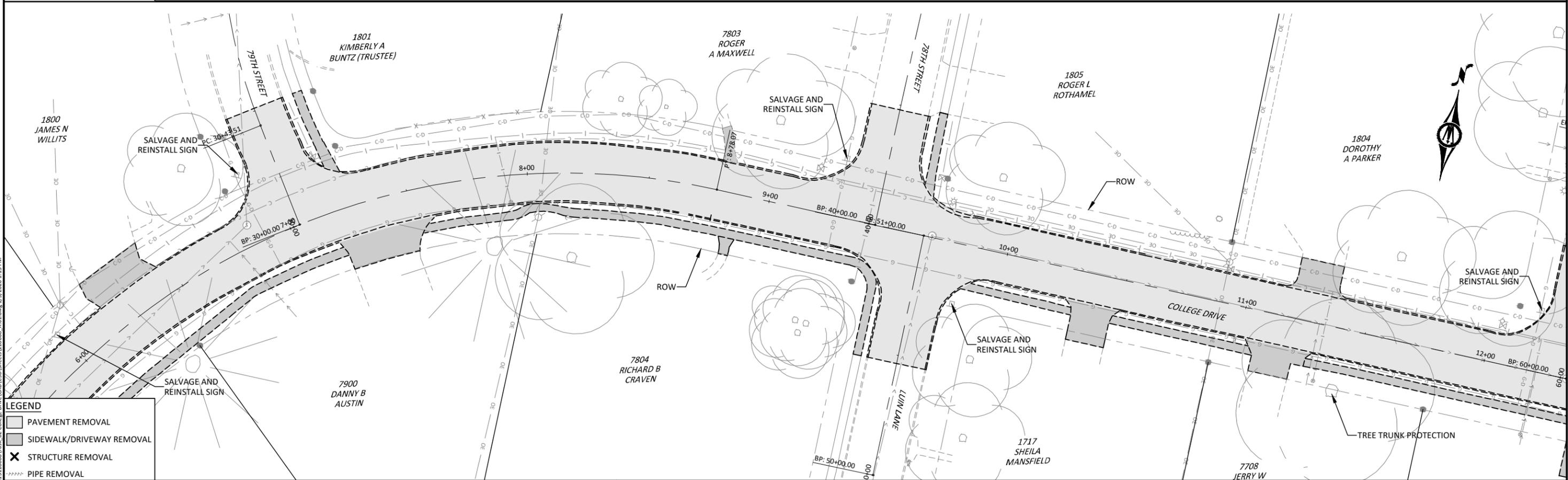
CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
PAVEMENT MARKINGS

SHEET
N.1



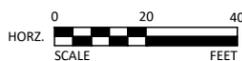
LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



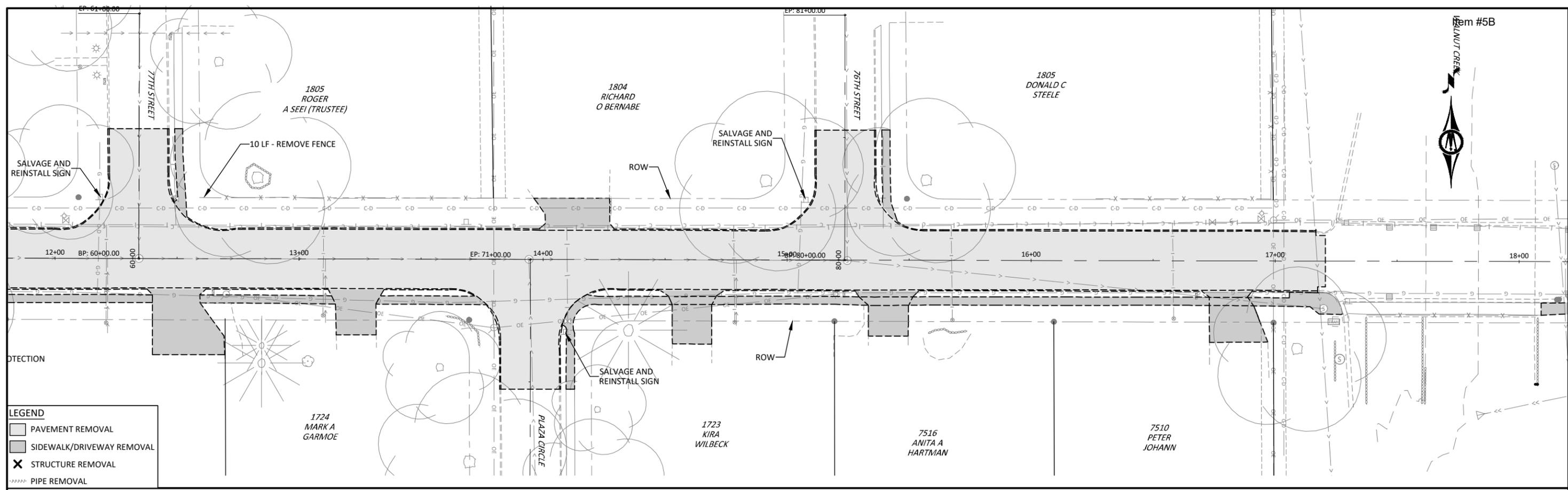
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

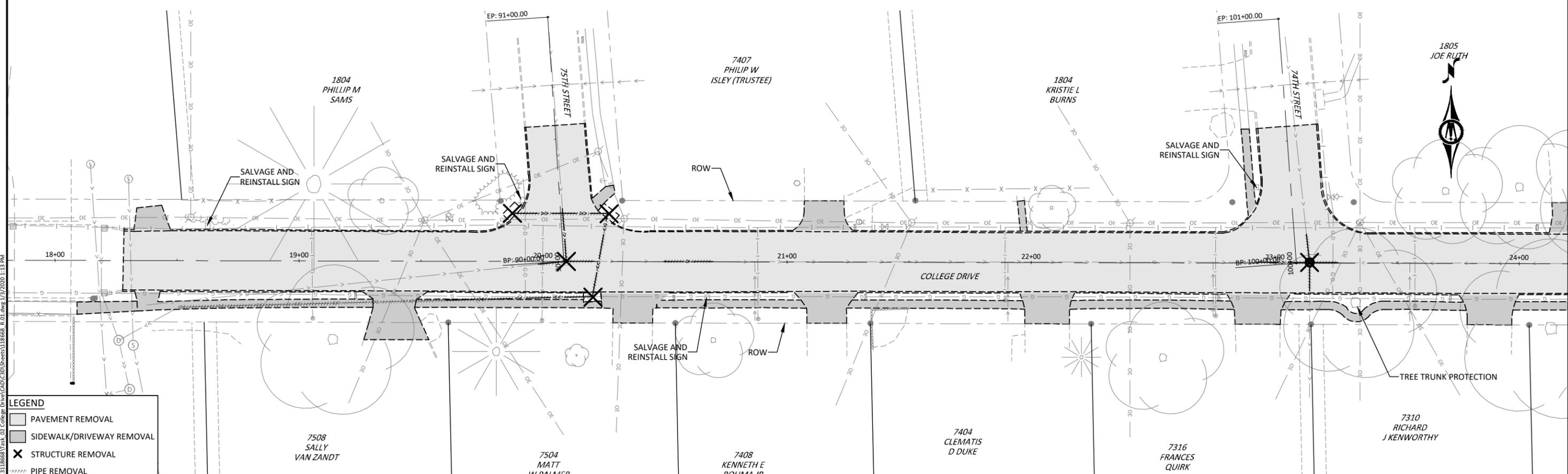
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 REMOVALS

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task 02 College Drive\CD\CD\Sheets\118668_R.01.dwg 1/2/2020 1:13 PM



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



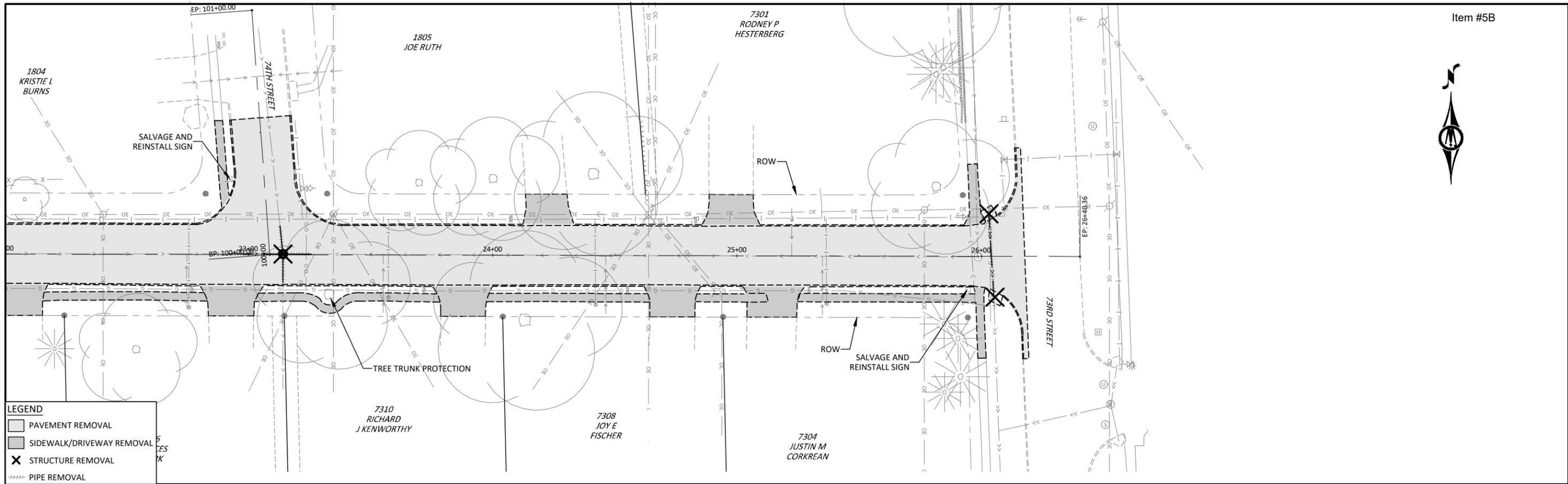
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
REMOVALS

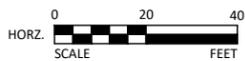
© Bolton & Menk, Inc. 2020. All Rights Reserved.
 A:\WINDSOR HTS\CD\1318668\Task 02 College Drive\CD\CD\Sheets\118668_R.01.dwg 1/2/2020 1:15 PM



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\18668\Task 02_College Drive\CAD\Sheet3118668_R.01.dwg 1/2/2020 1:13 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

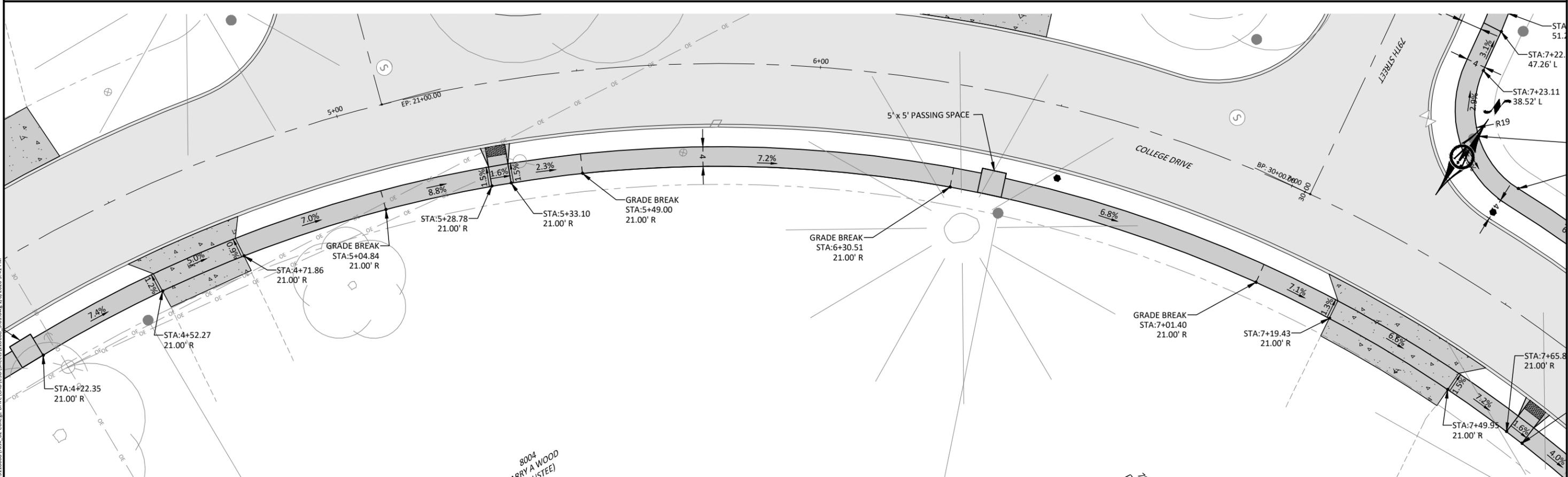
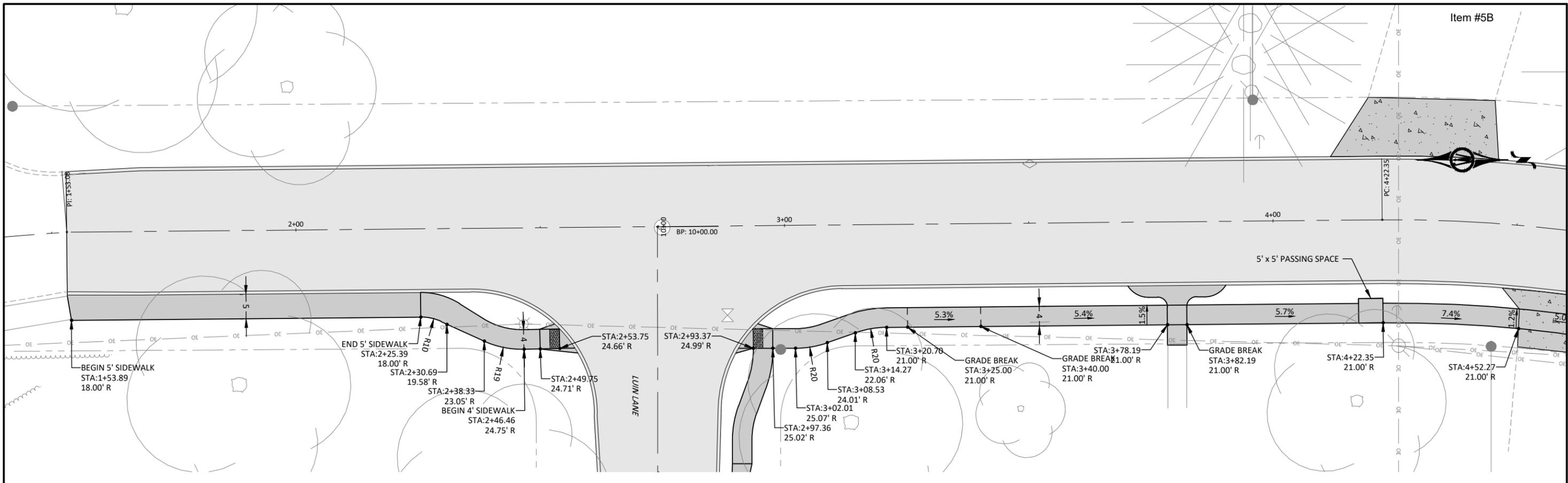


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

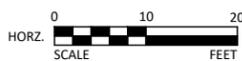


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 REMOVALS



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A1118668\Task 02_College Drive\CD\Sheets\118668_S01.dwg 1/8/2020 3:41 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

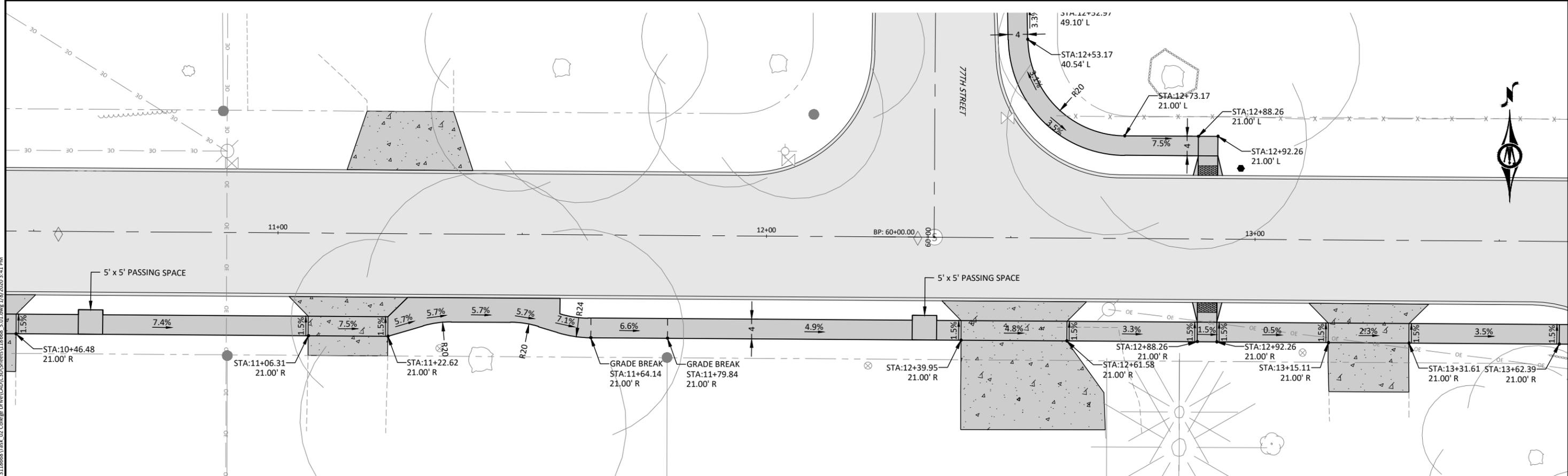
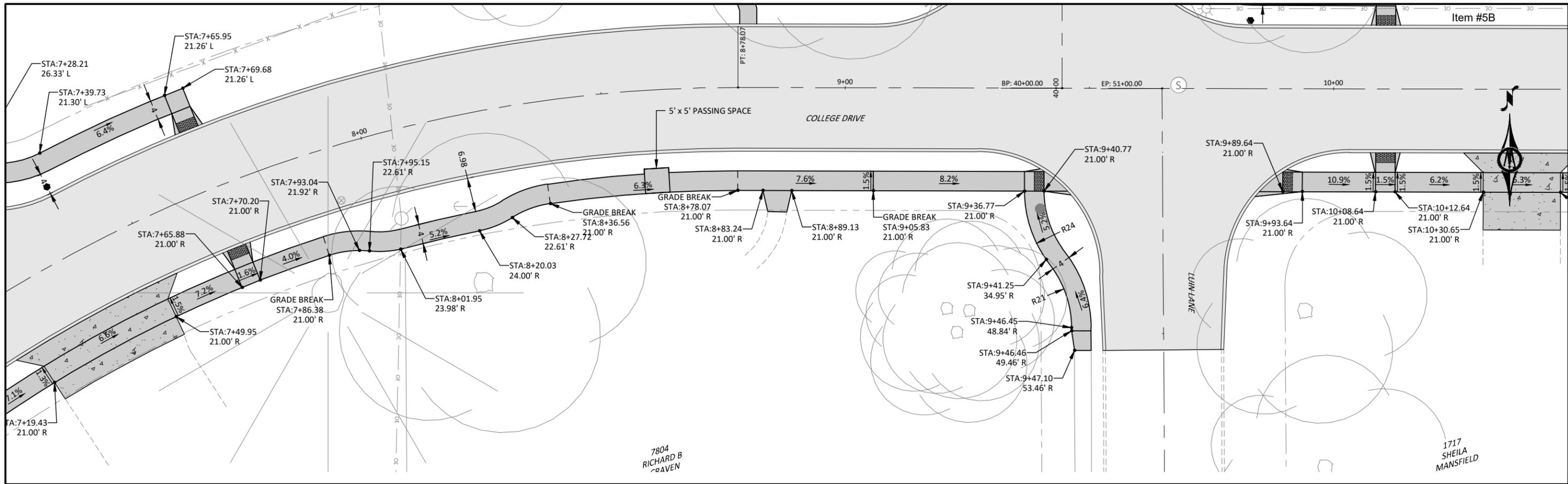


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

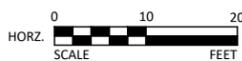


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SIDEWALK SHEETS - PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1118668\Task 02_College Drive\CD\Sheets\118668_S01.dwg 1/8/2020 3:41 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

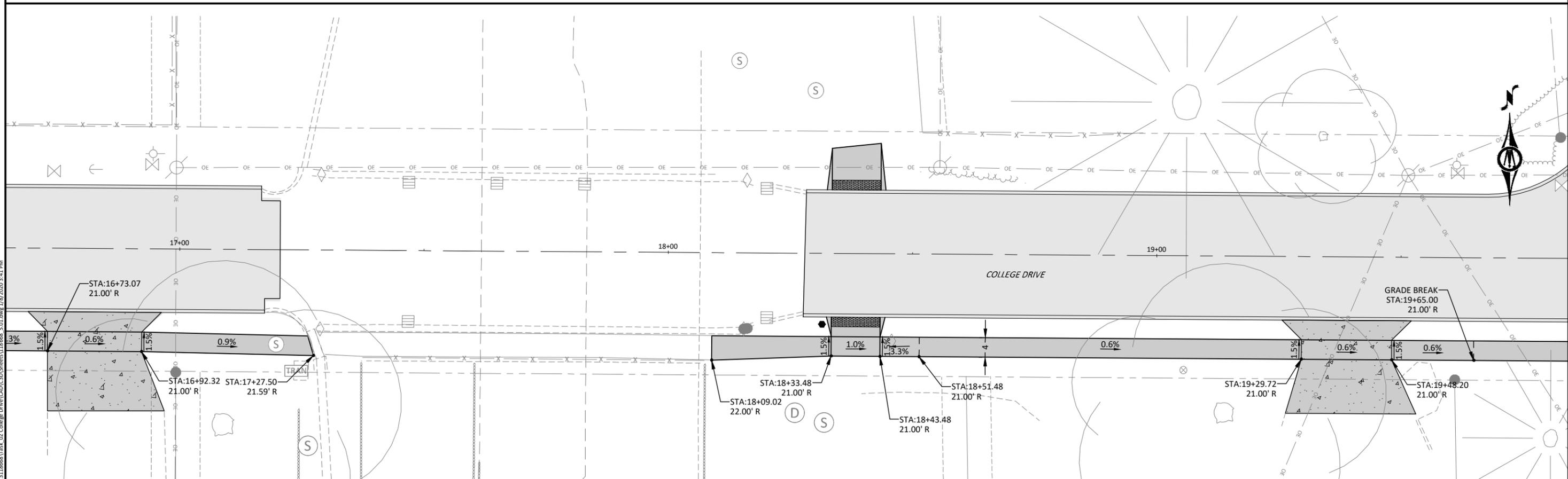
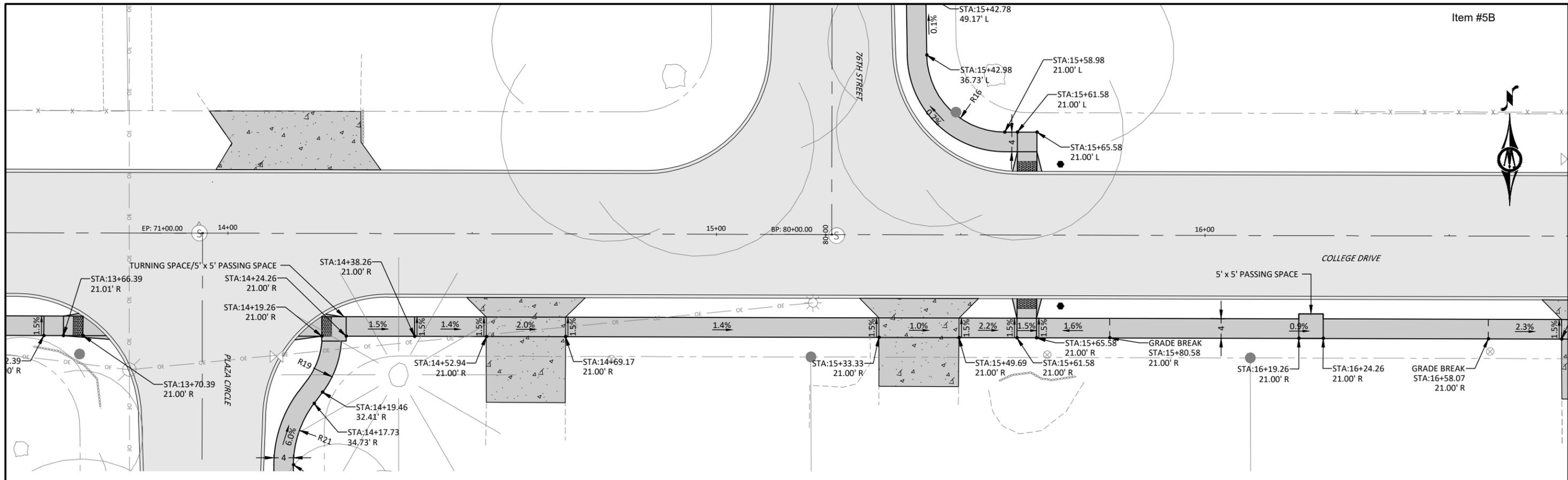


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 SIDEWALK SHEETS - PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CD\Sheet\18668_S.DWG 1/8/2020 3:41 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

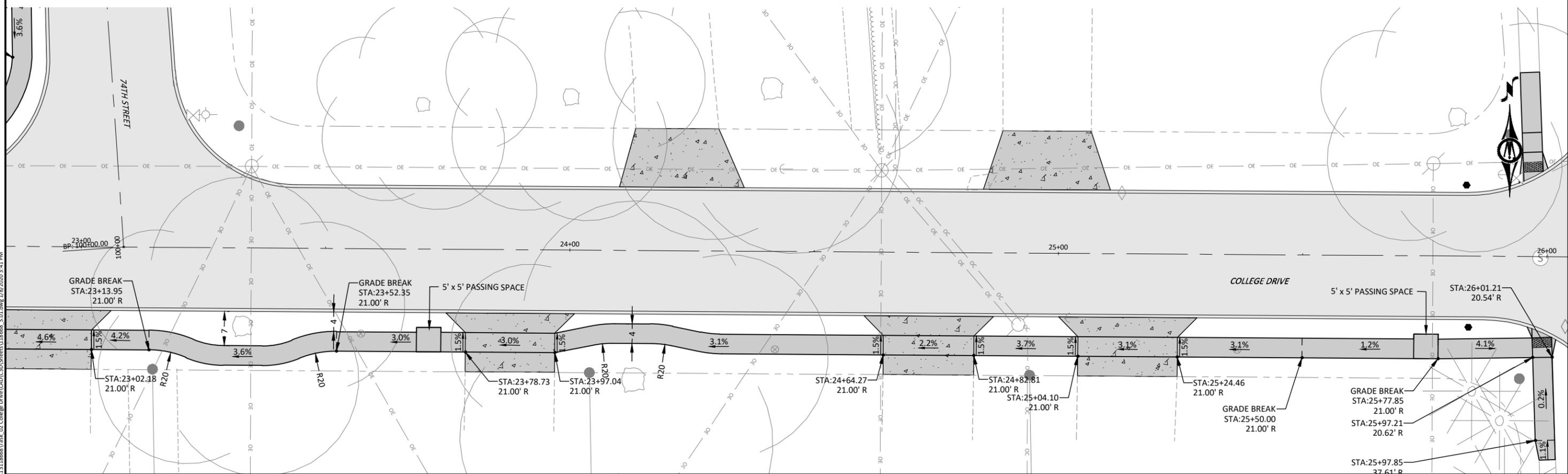
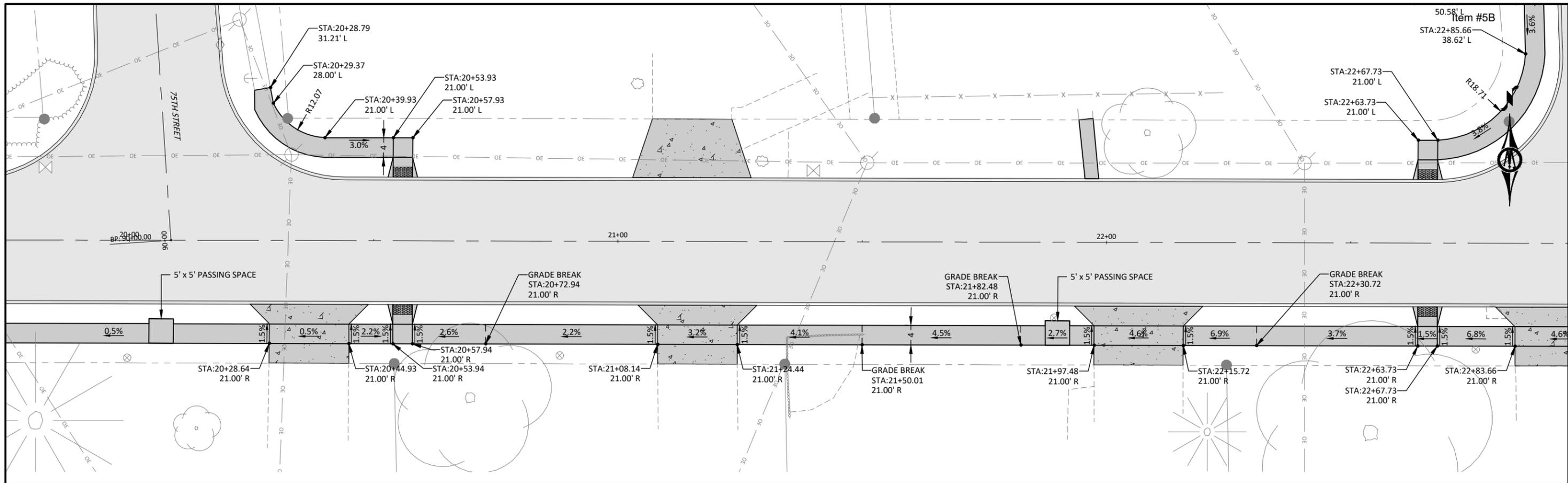


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

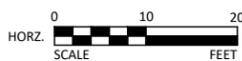


DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 SIDEWALK SHEETS - PLAN



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\18668\Task 02 College Drive\CD\Sheet118668_S.DWG 1/8/2020 3:41 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



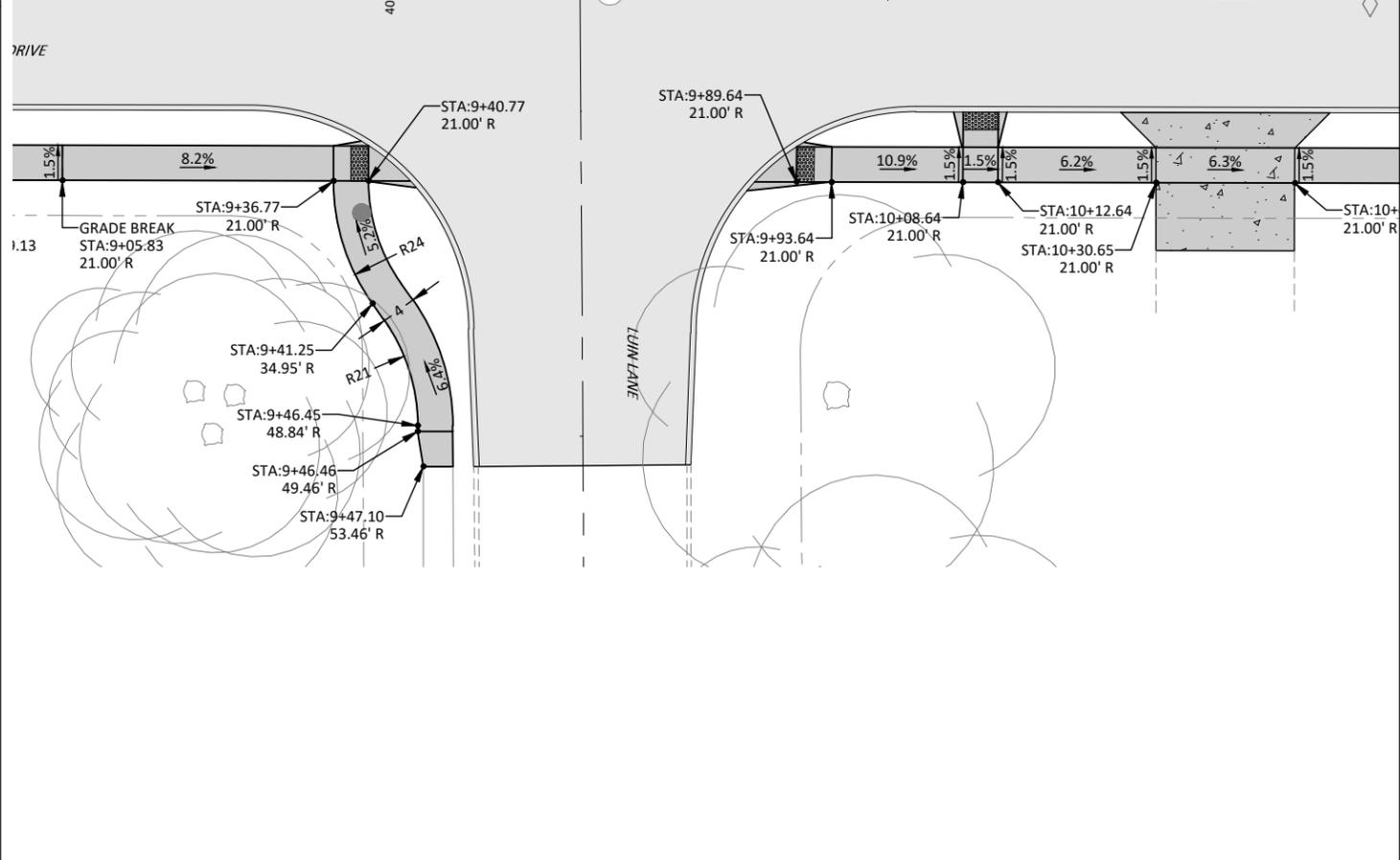
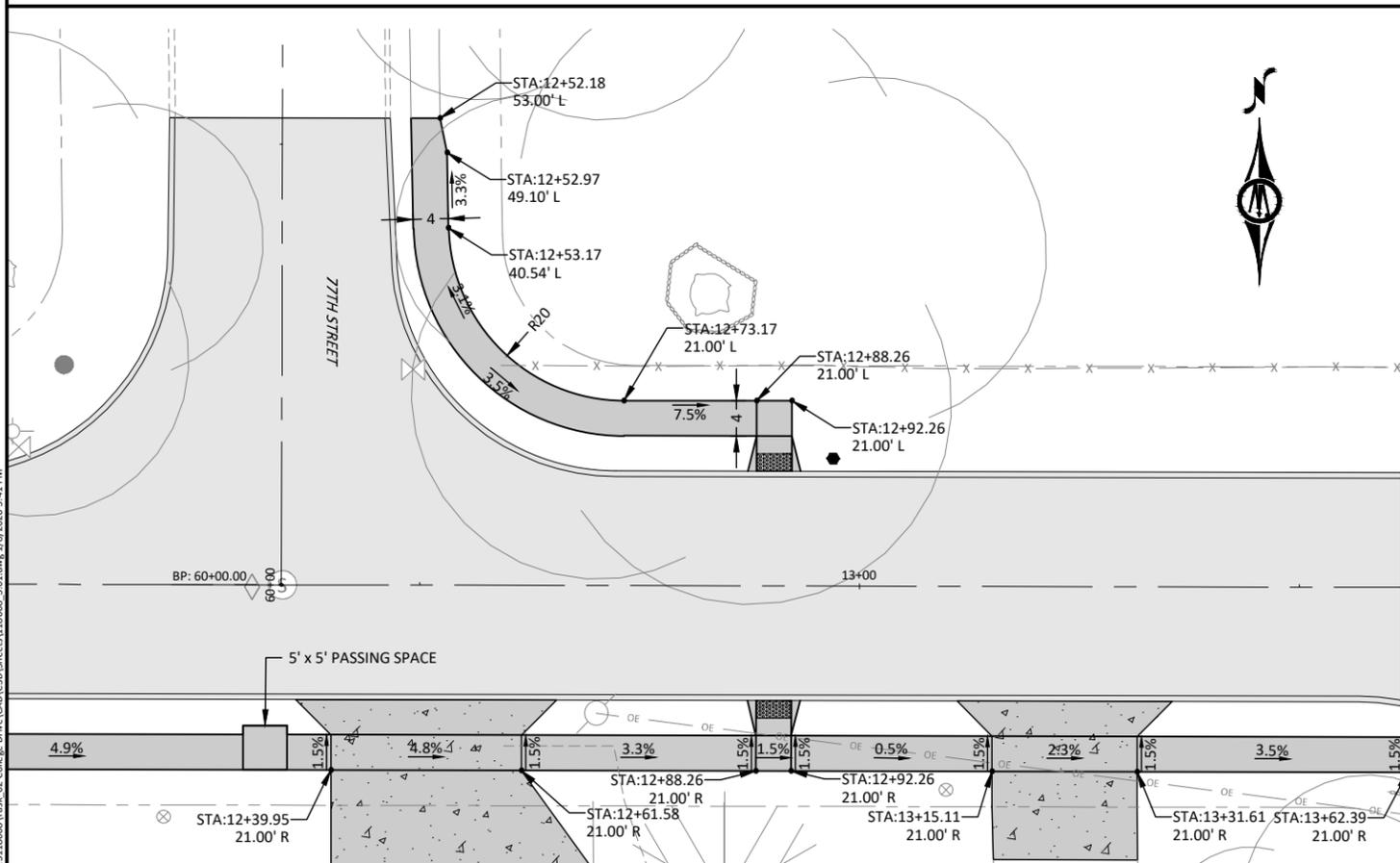
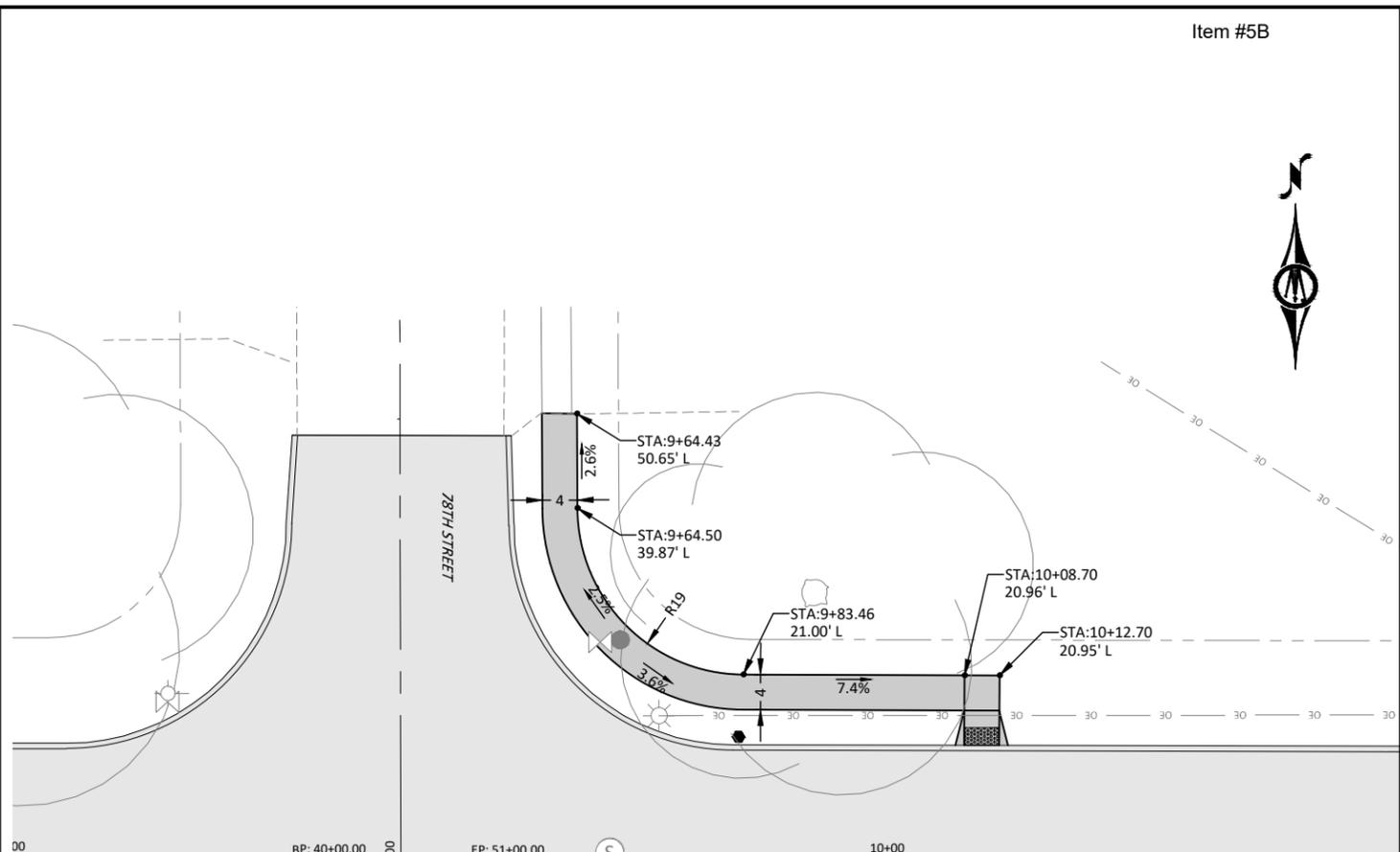
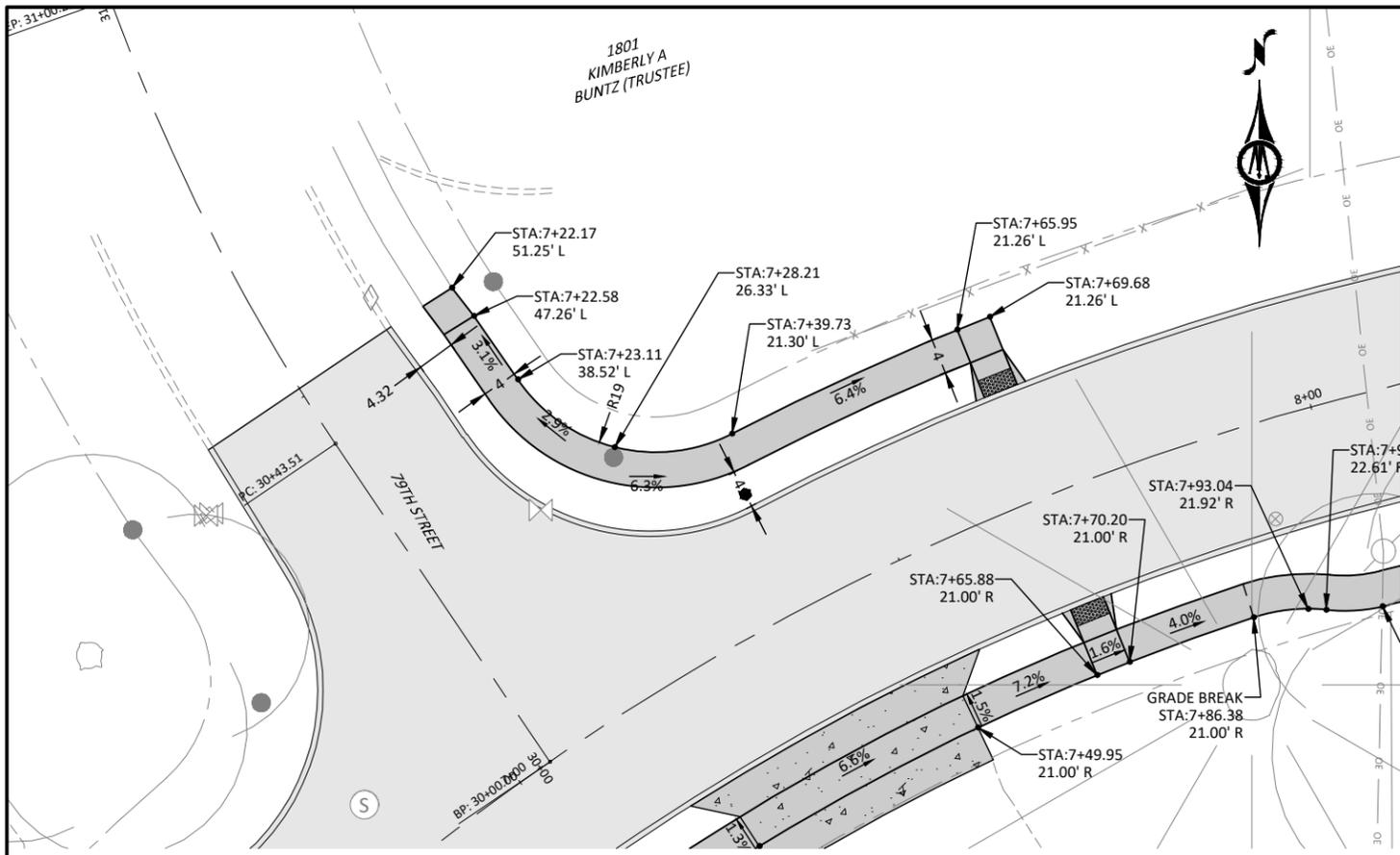
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



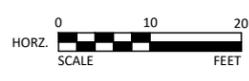
DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SIDEWALK SHEETS - PLAN

SHEET
S.4



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task 02 College Drive\Drawings\CD\Sidewalk\118668_S01.dwg 1/8/2020 3:41 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

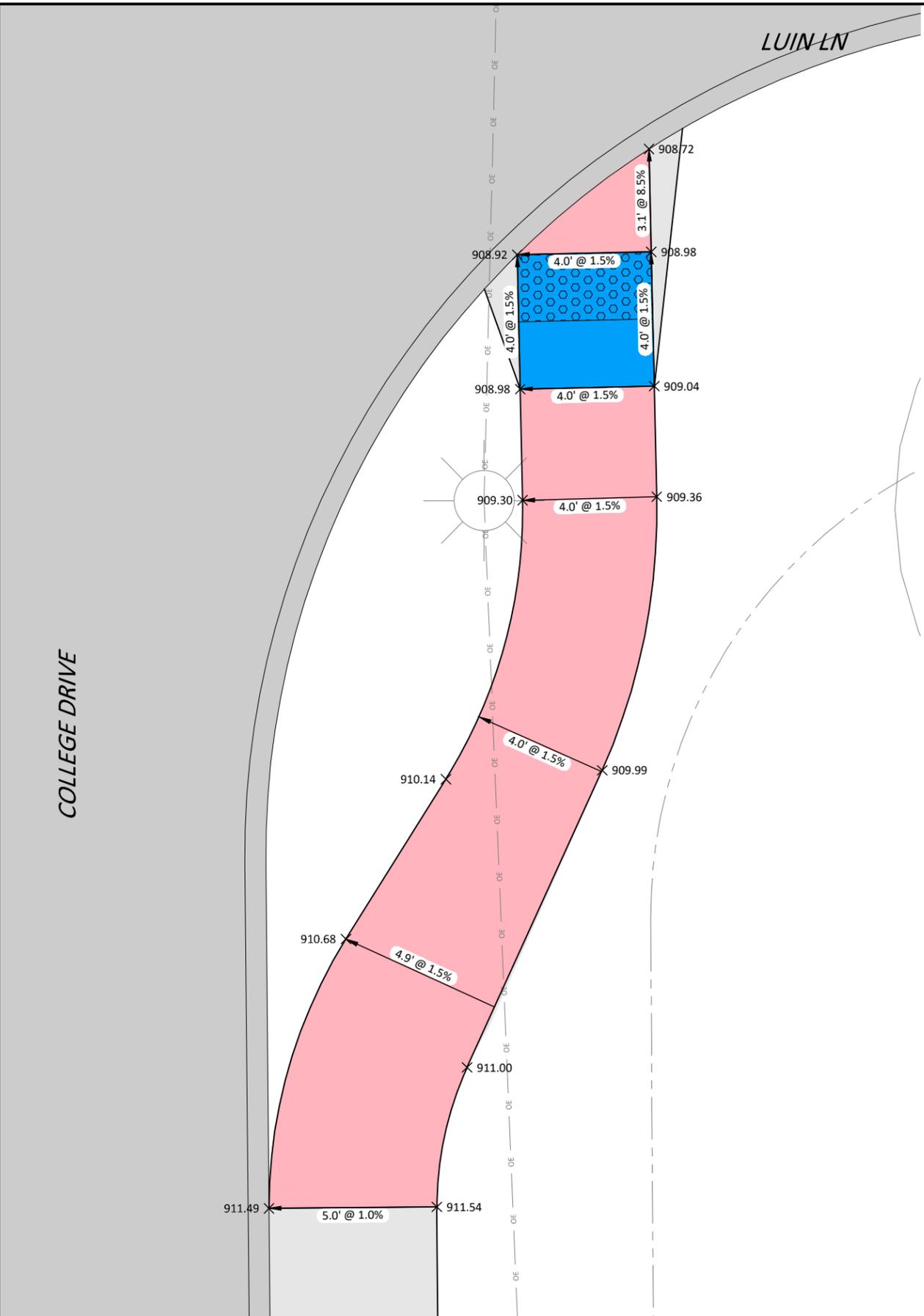


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
SIDEWALK SHEETS - PLAN



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



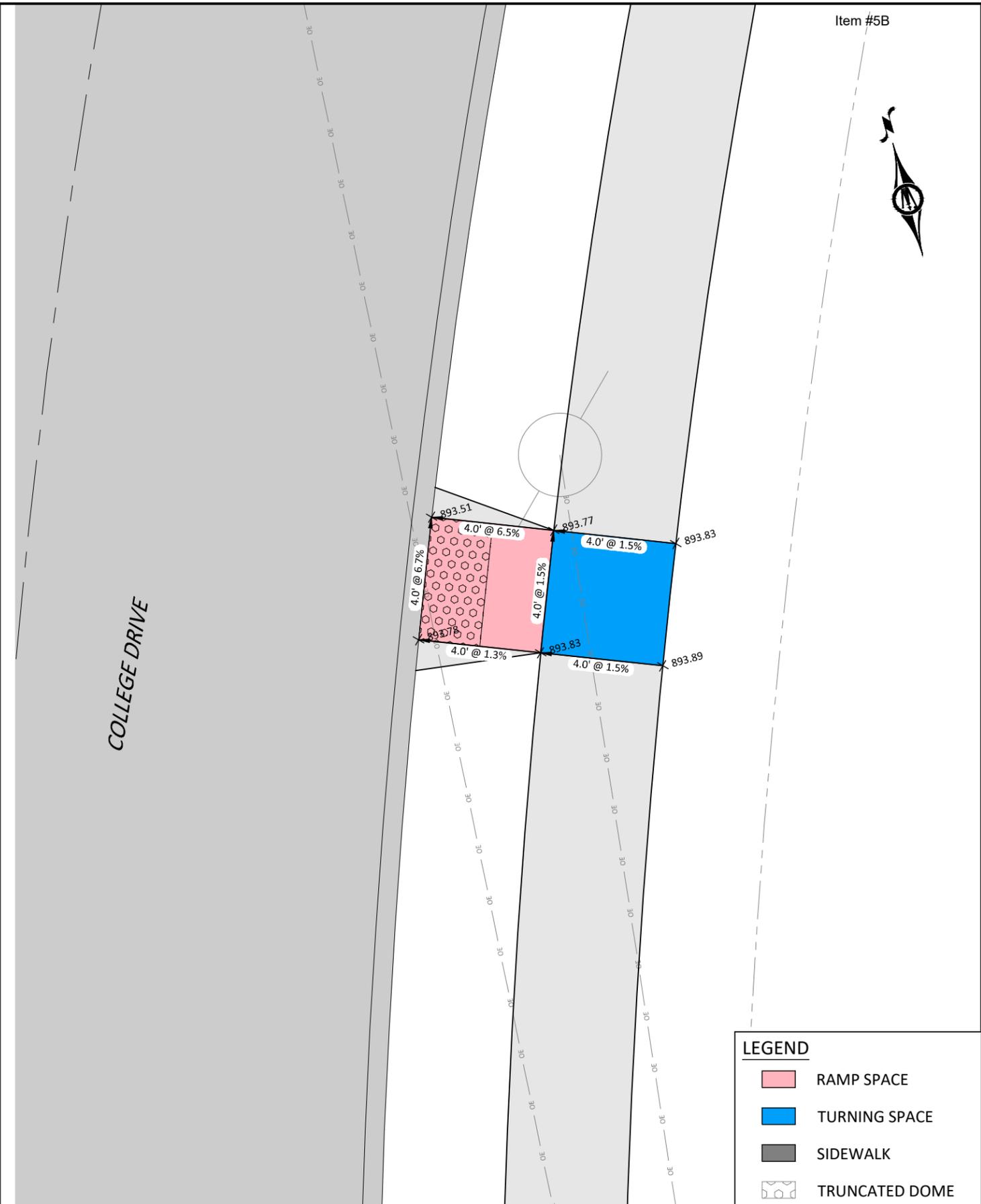
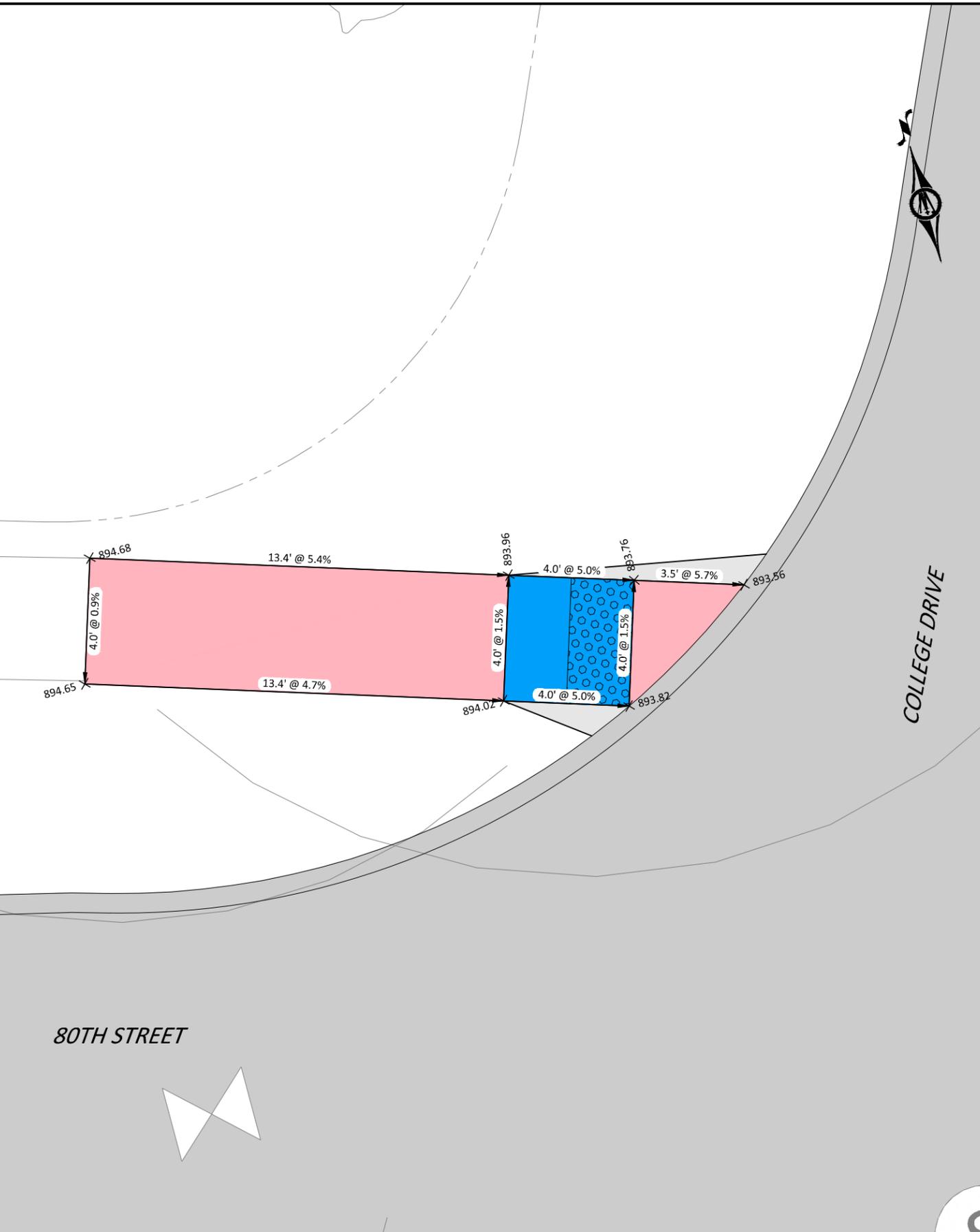
DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ADA COMPLIANCE

SHEET
S.7

LEGEND	
	RAMP SPACE
	TURNING SPACE
	SIDEWALK
	TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task 02_College Drive\CAD\Sheet\118668_S.02.dwg 1/8/2020 3:45 PM



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02_College Drive\CAD\Sheets\118668_S.02.dwg 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



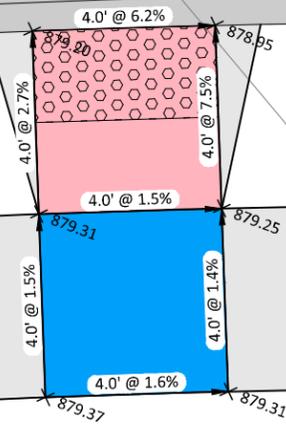
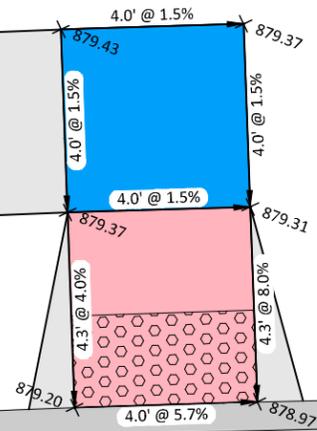
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE



79TH STREET

COLLEGE DRIVE



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A1118668\Task 02_College Drive\CAD\Sheets\118668_S.02.dwg 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

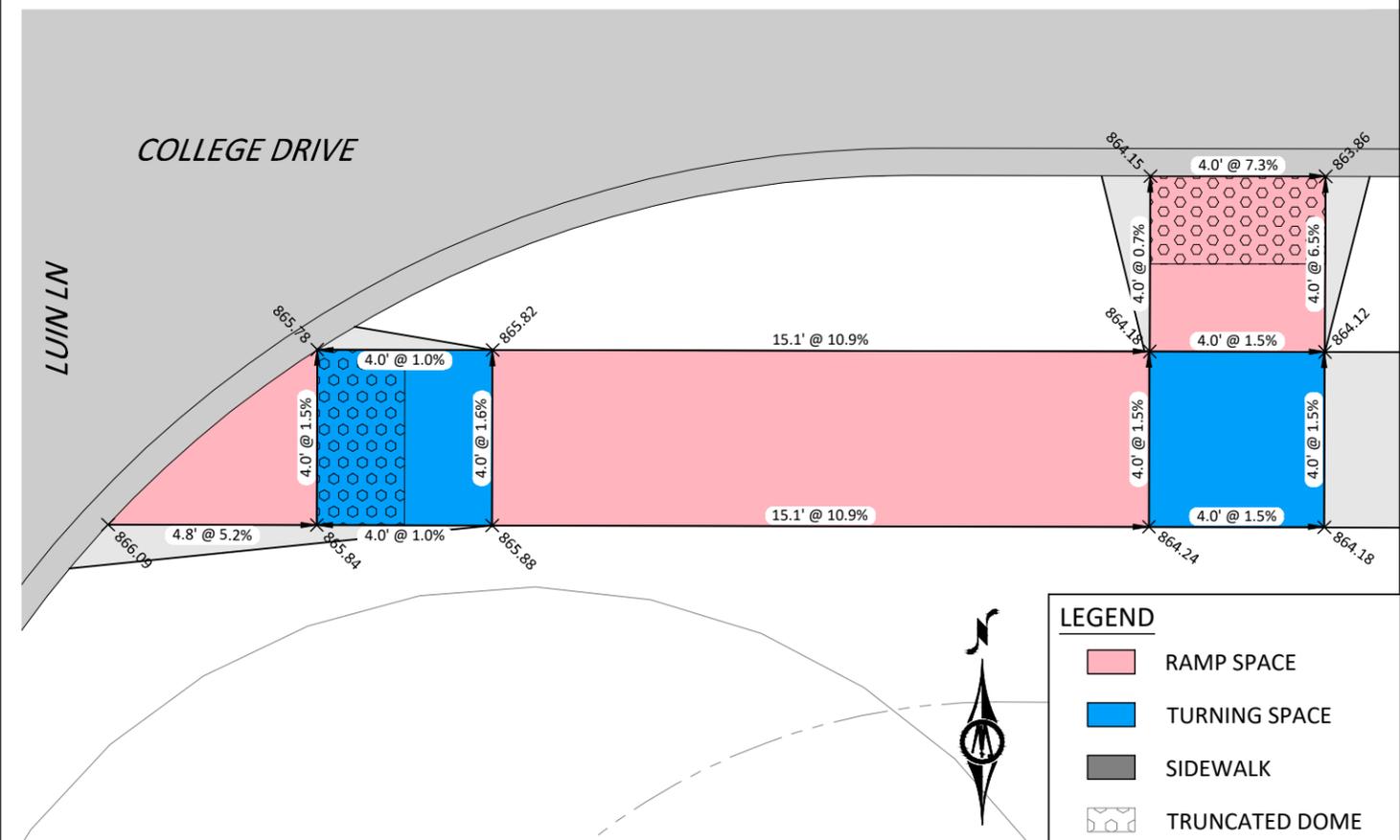
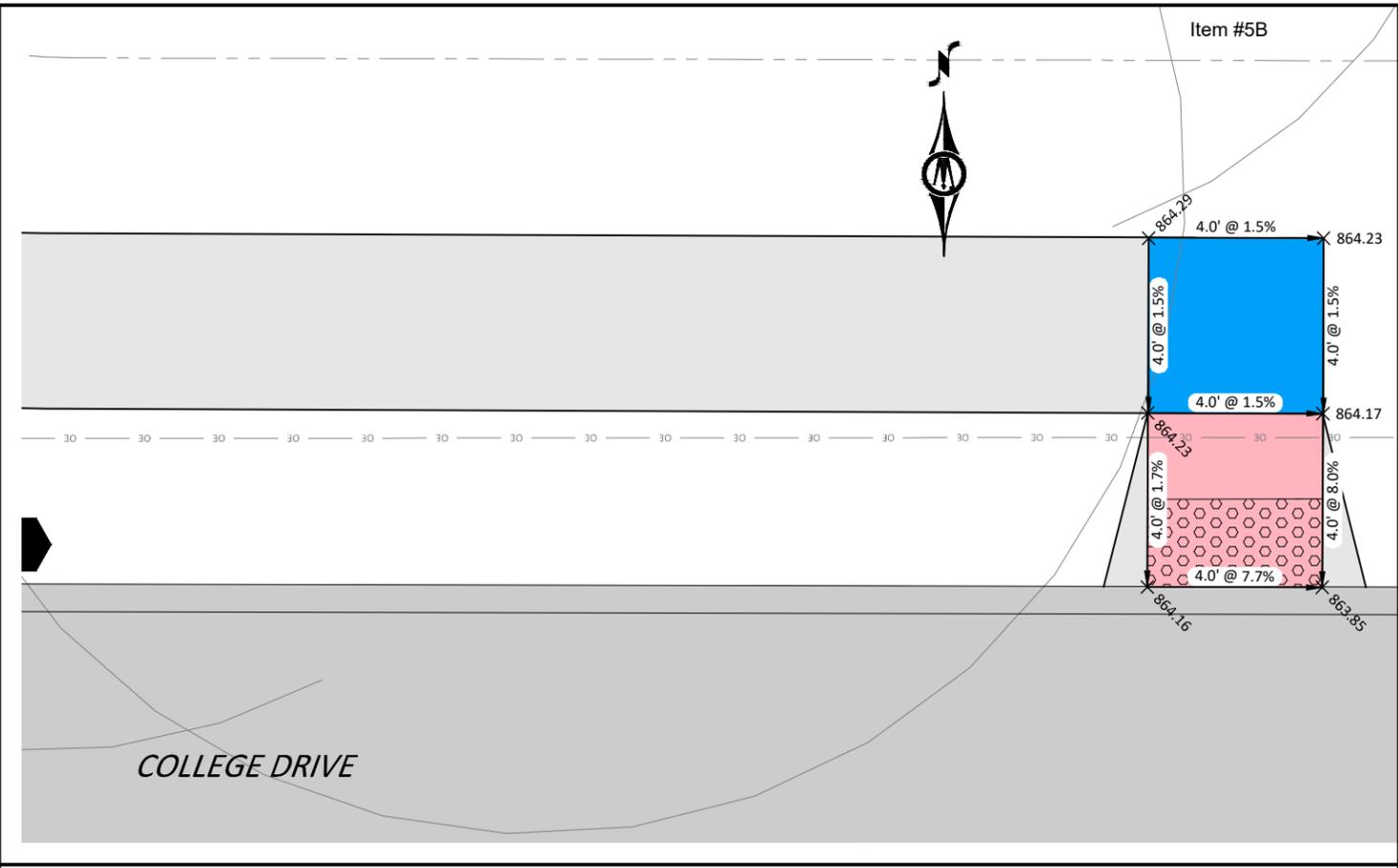
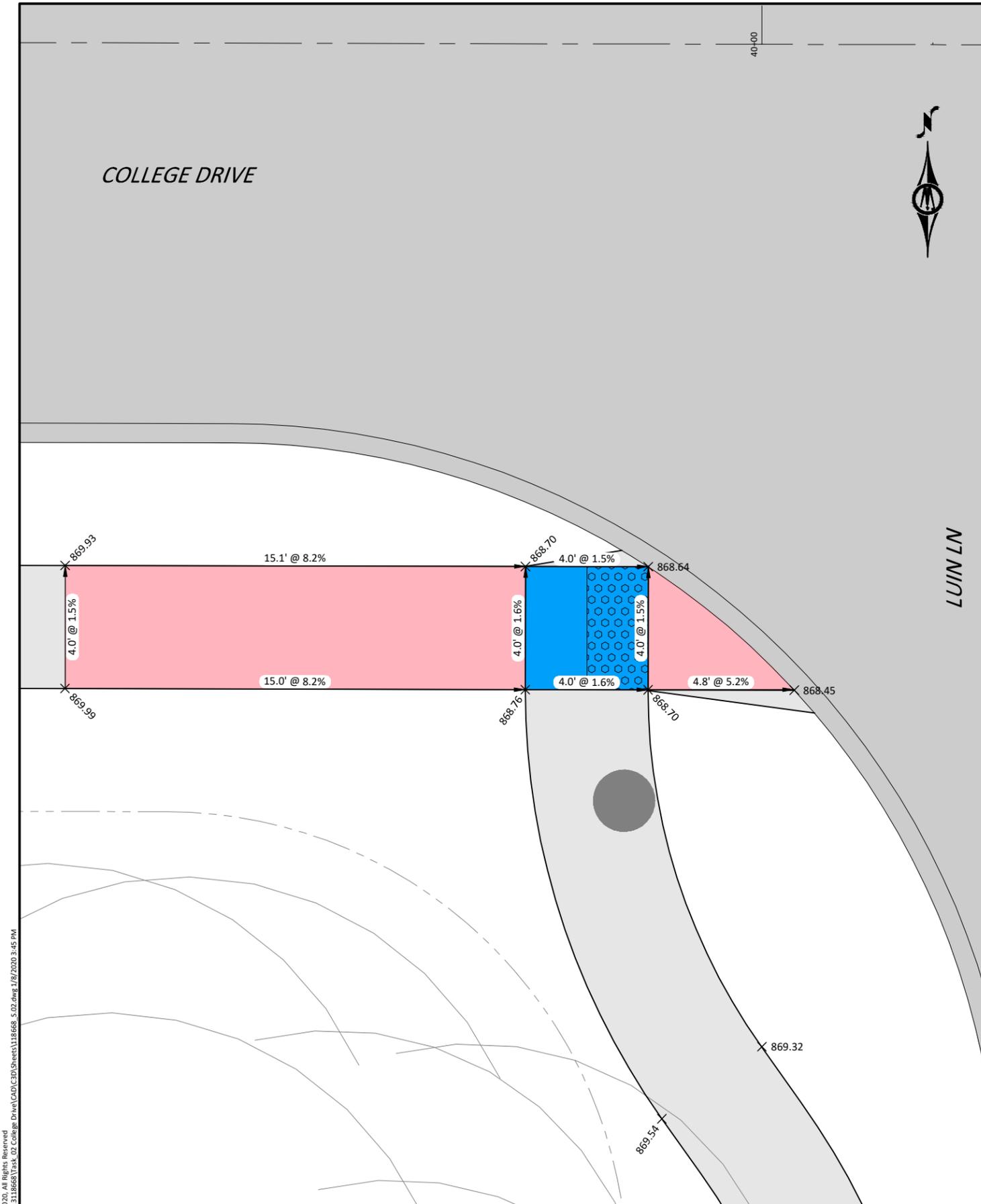
CITY OF WINDSOR HEIGHTS, IOWA

COLLEGE DRIVE RECONSTRUCTION

ADA COMPLIANCE

SHEET

S.9



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\13118668\Task 02_College Drive\CAD\Sheets\118668_S.D2.dwg 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



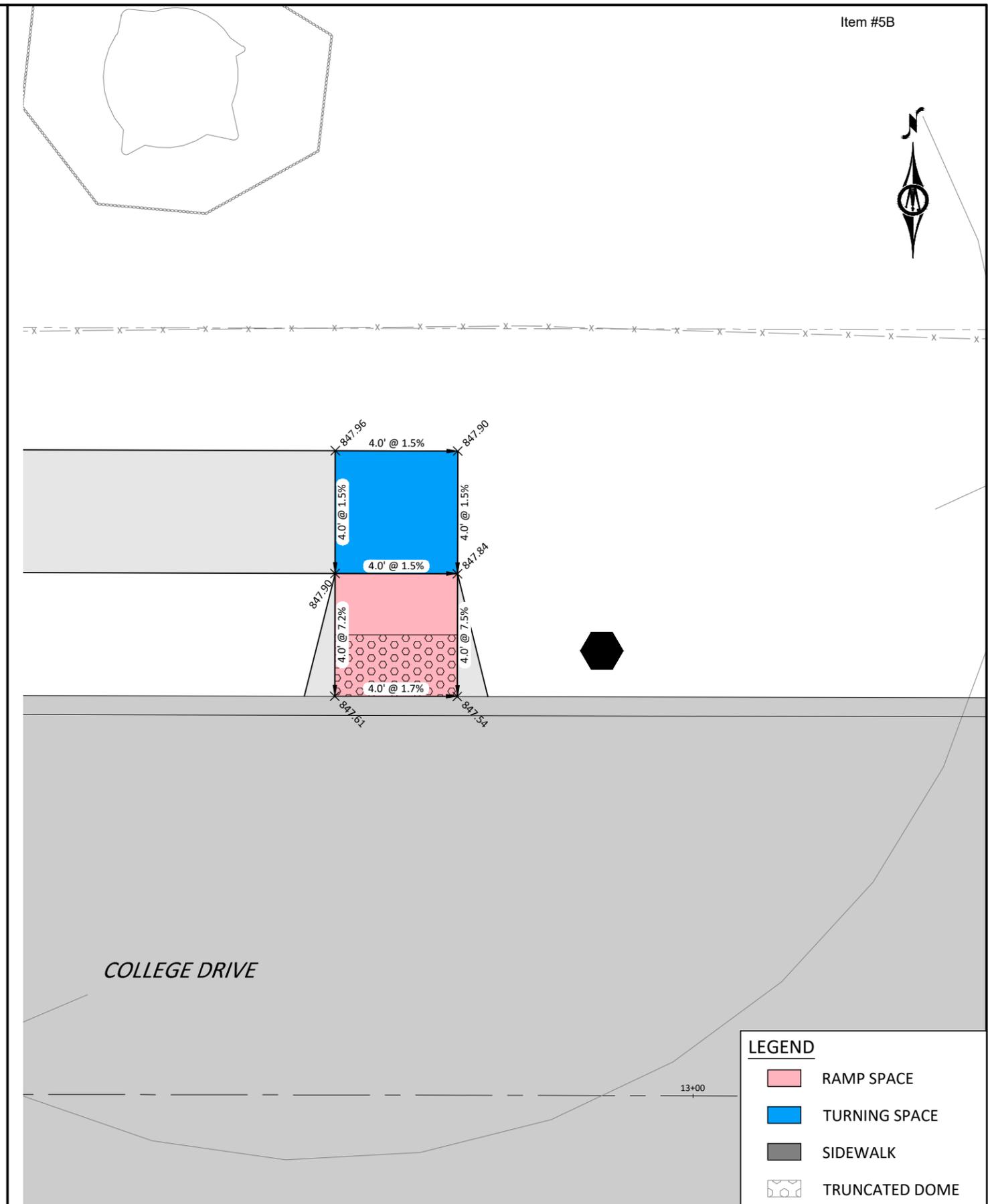
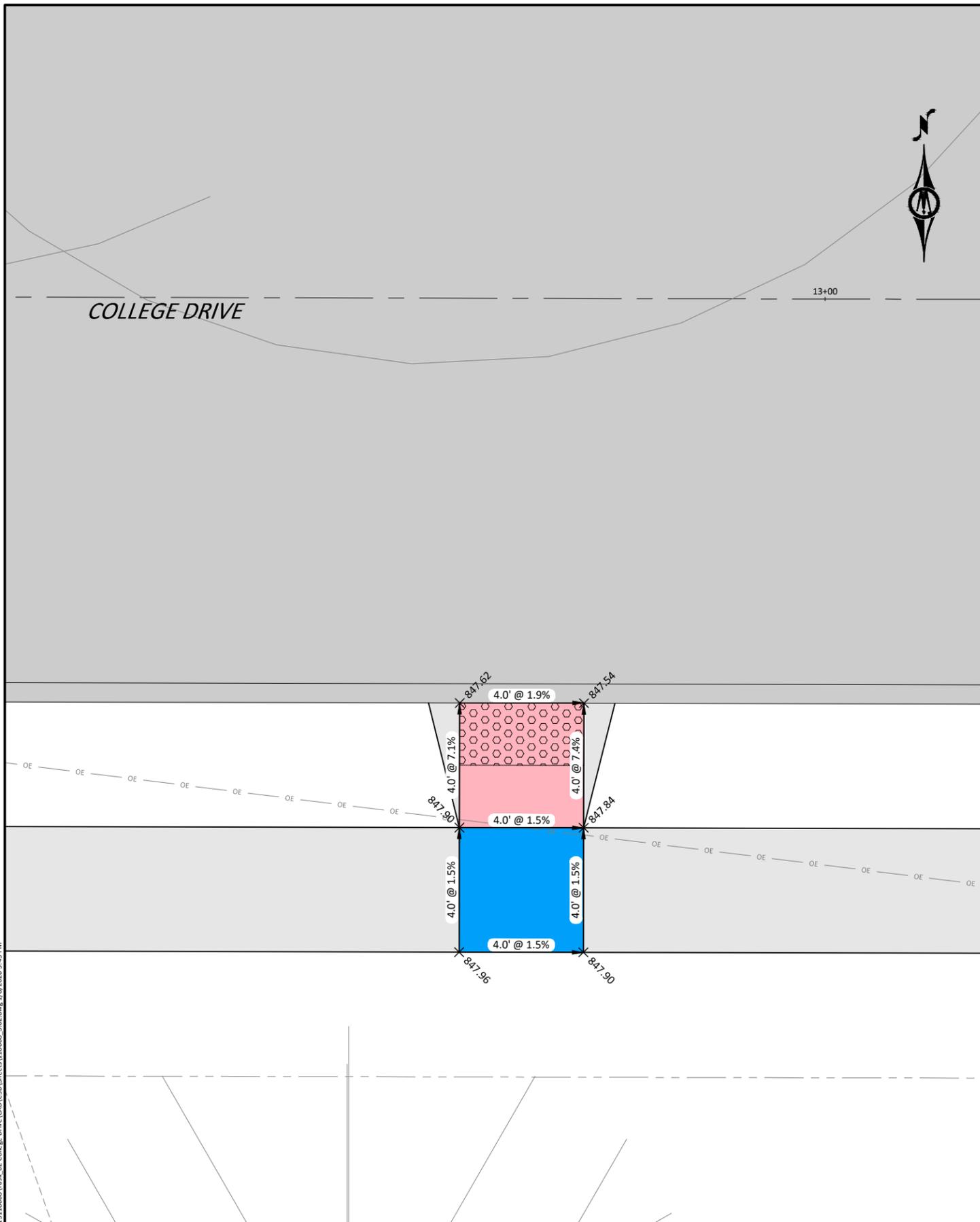
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ADA COMPLIANCE

SHEET
S.10



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A13118668\Task 02_College Drive\CD\Sheets\118668_S.D2.dwg 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

LEGEND	
	RAMP SPACE
	TURNING SPACE
	SIDEWALK
	TRUNCATED DOME

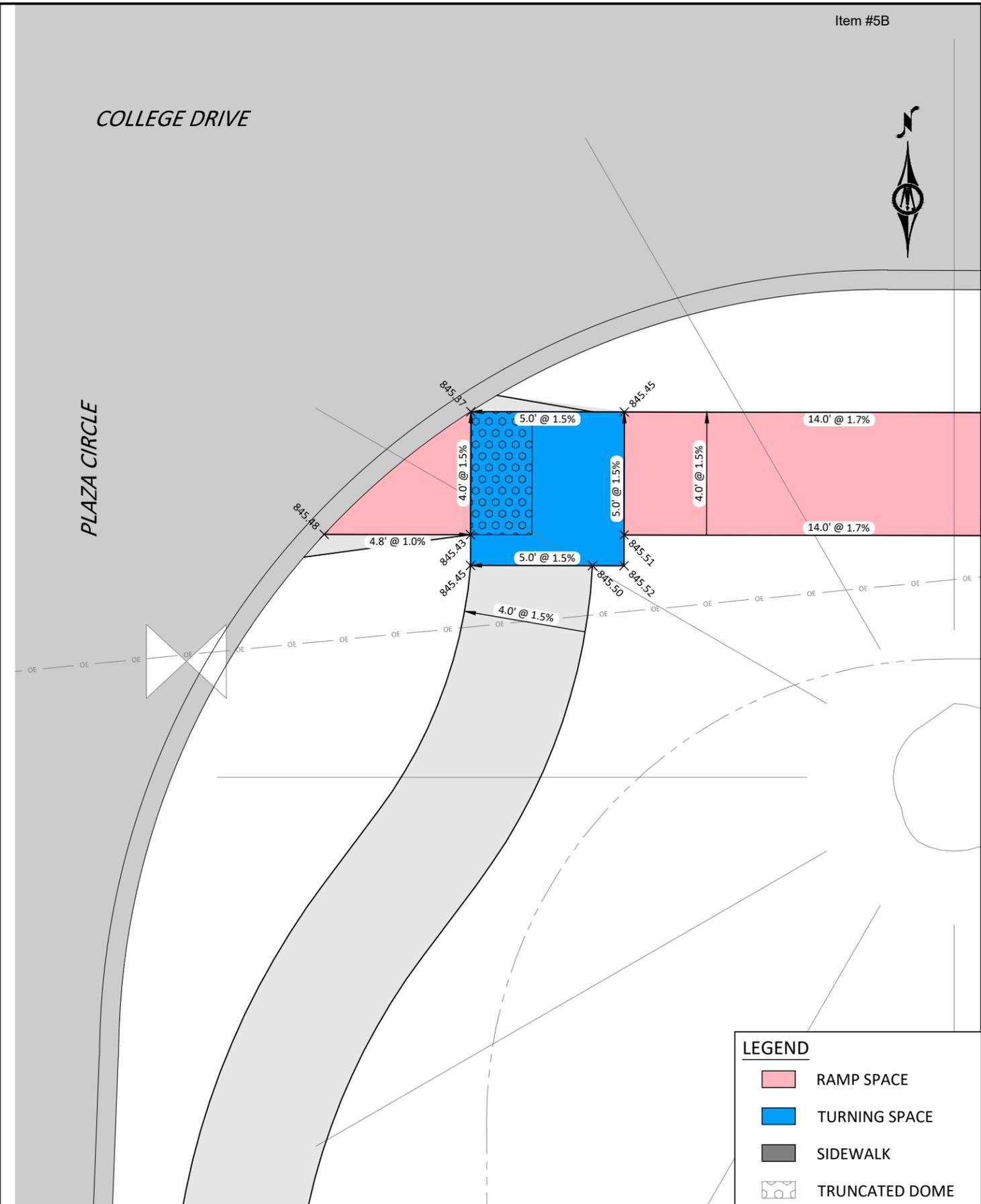
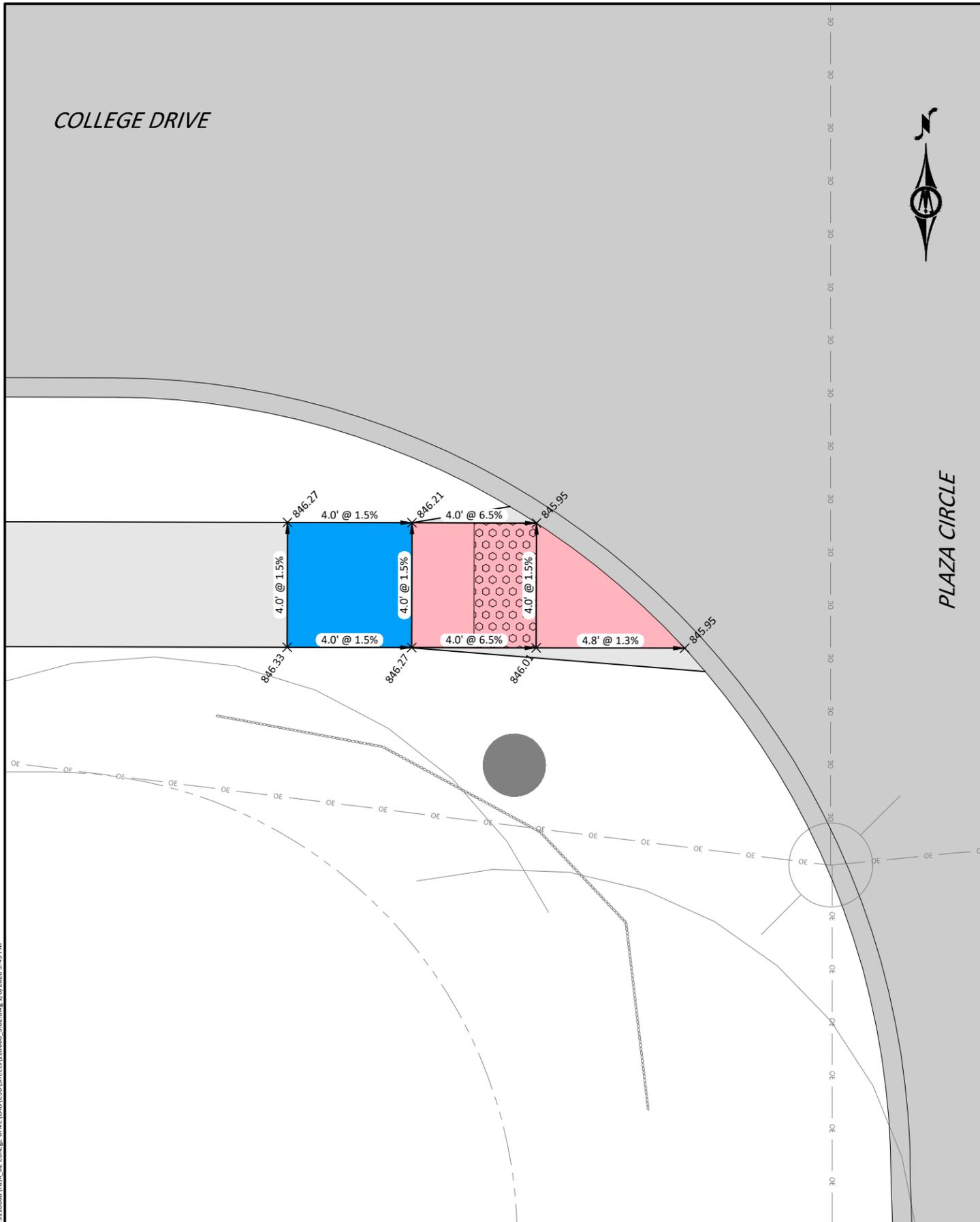
COLLEGE DRIVE

COLLEGE DRIVE



PLAZA CIRCLE

PLAZA CIRCLE



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



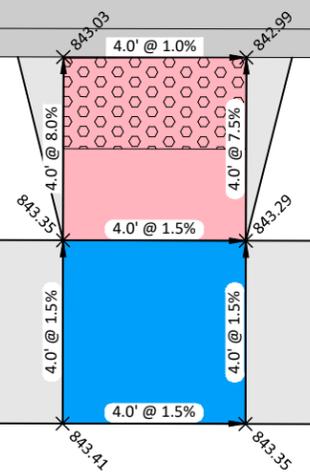
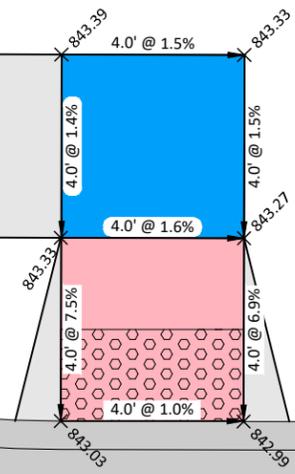
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\CI\A13.118668\Task 02_College Drive CAD\Sheet3118668_S.02.dwg 1/8/2020 3:45 PM

COLLEGE DRIVE

76TH STREET



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

COLLEGE DRIVE



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

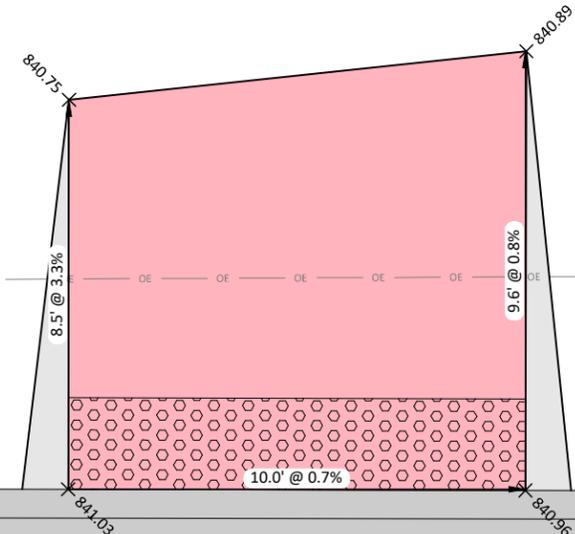
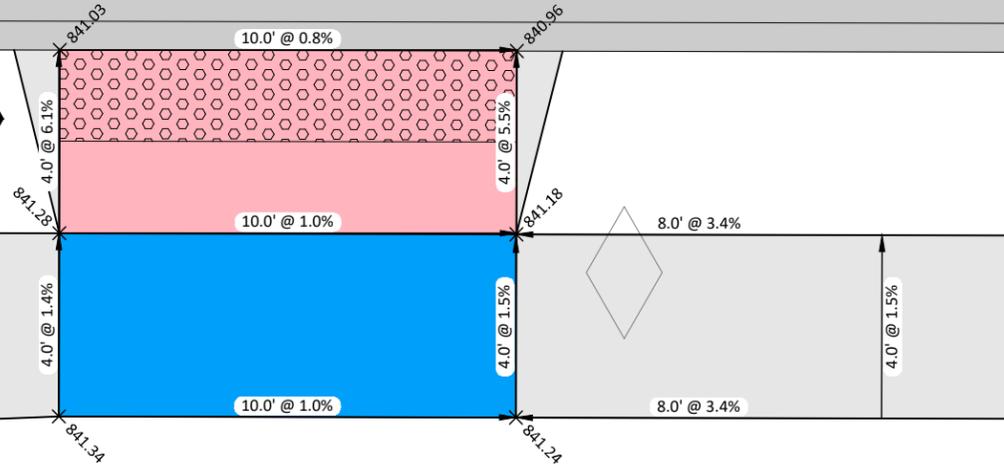


DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI\A13\118668\Task 02_College Drive\Drawings\118668_S.D2.dwg 1/8/2020 3:45 PM

COLLEGE DRIVE



COLLEGE DRIVE

LEGEND

-  RAMP SPACE
-  TURNING SPACE
-  SIDEWALK
-  TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task 02_College Drive\CAD\Sheets\118668_S.DWG 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



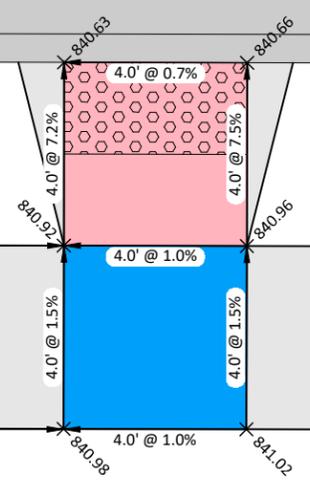
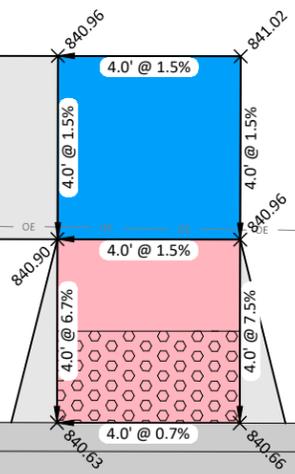
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

75TH STREET



COLLEGE DRIVE



COLLEGE DRIVE

LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

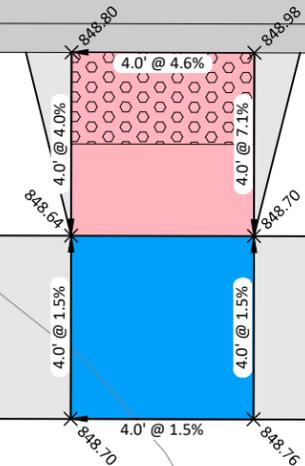
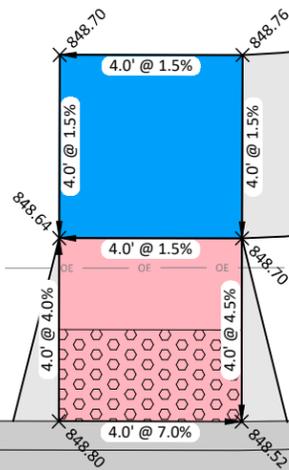
CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI\A13.118668\Task 02_College Drive\CAD\Sheet3118668_S.02.dwg 1/8/2020 3:45 PM

74TH STREET

COLLEGE DRIVE

COLLEGE DRIVE



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



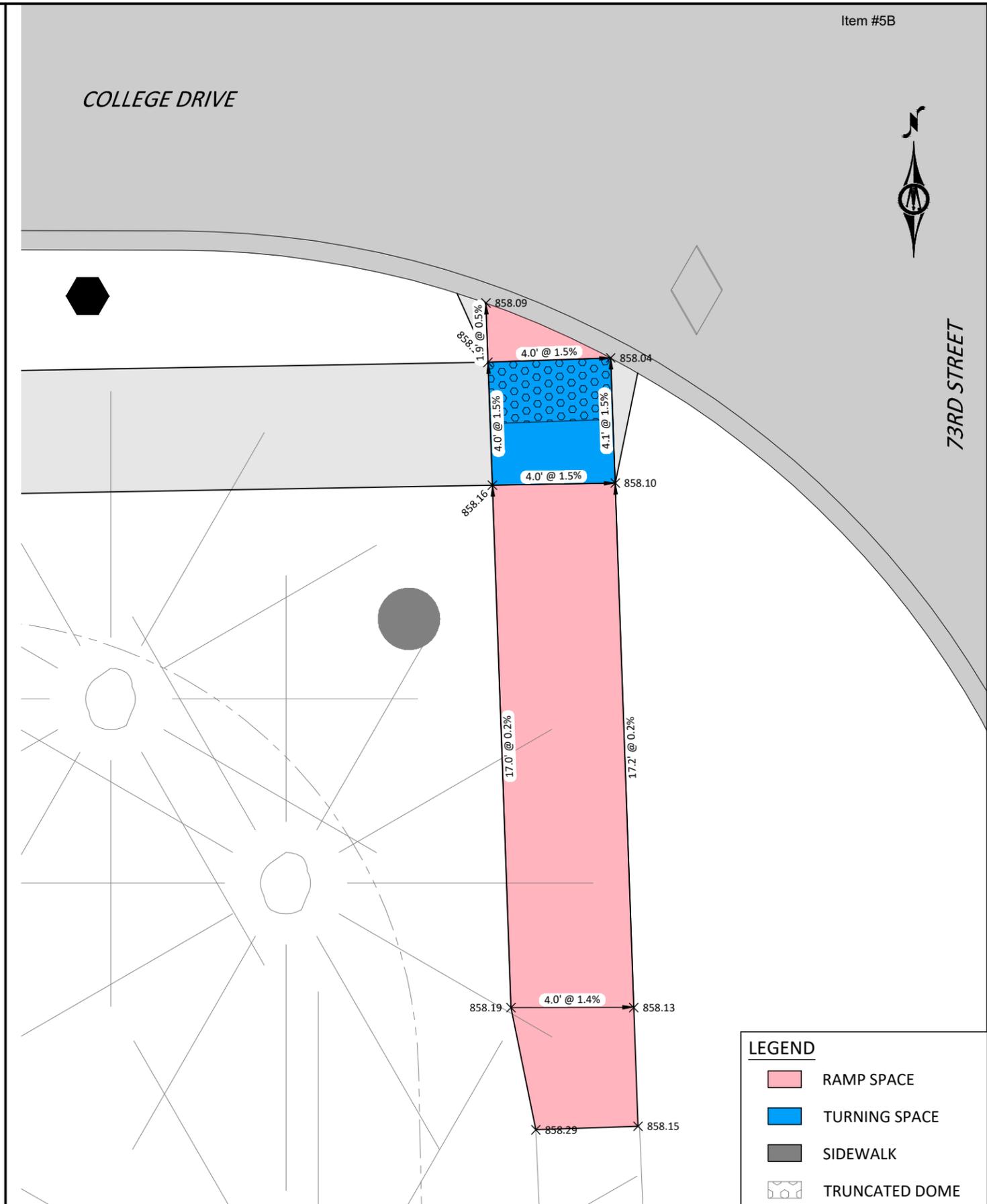
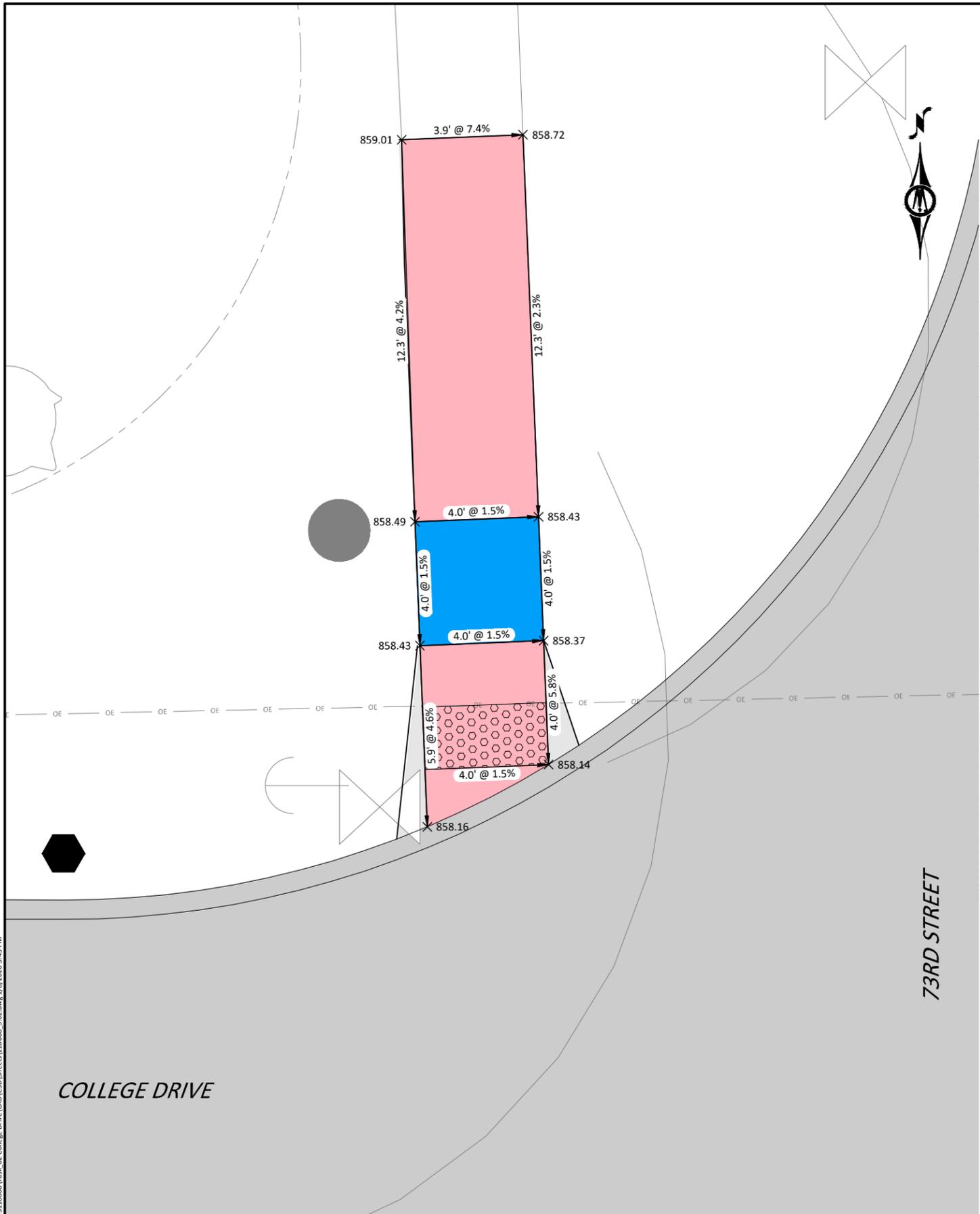
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 ADA COMPLIANCE

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task 02_College Drive CAD\CAD Sheets\118668_S.02.dwg 1/8/2020 3:45 PM



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task 02_College Drive\CAD\Sheets\118668_S.02.dwg 1/8/2020 3:45 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

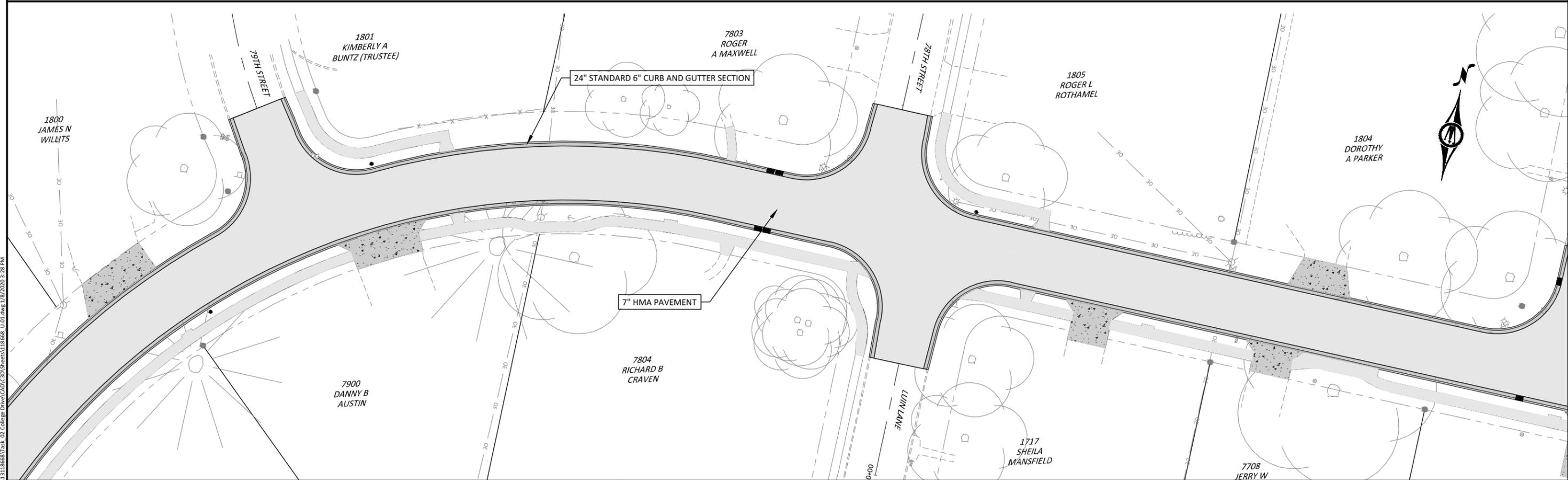
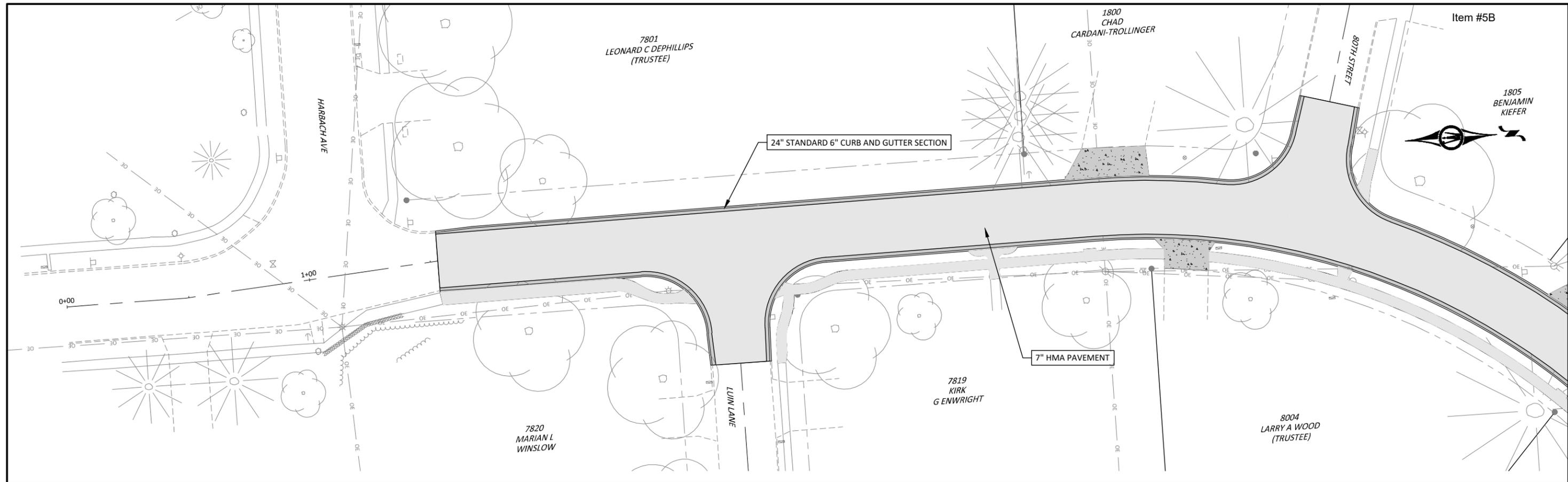


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
ADA COMPLIANCE



© Bolton & Menk, Inc. 2020. All Rights Reserved
P:\WINDSOR HTS\CD\Drawings\CD\Drawings\18668_U01.dwg 1/2/2020 3:28 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

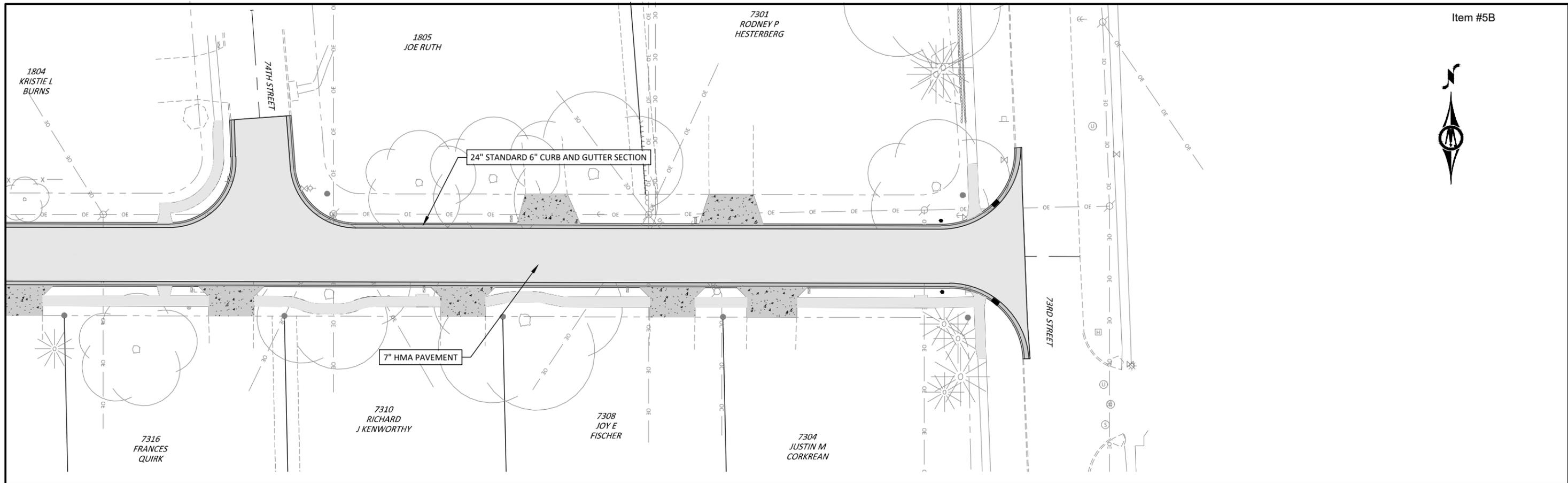


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 HMA PAVEMENT (ALTERNATE 2)



© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI - I\A13118668\Task 02_College Drive\CAD\Sheets\118668_U01.dwg 1/8/2020 3:28 PM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

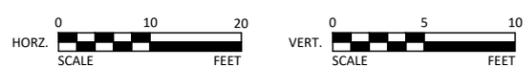
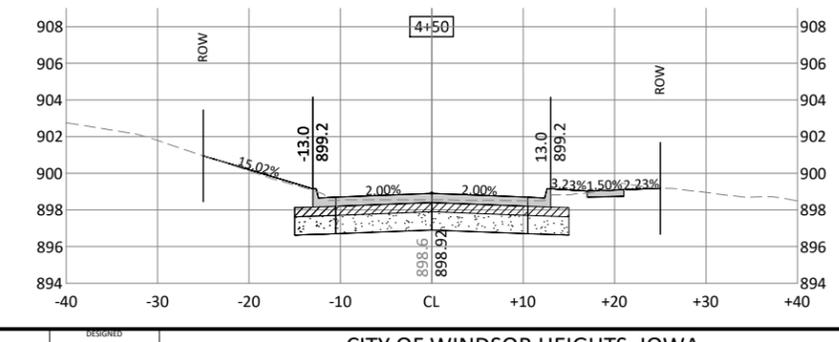
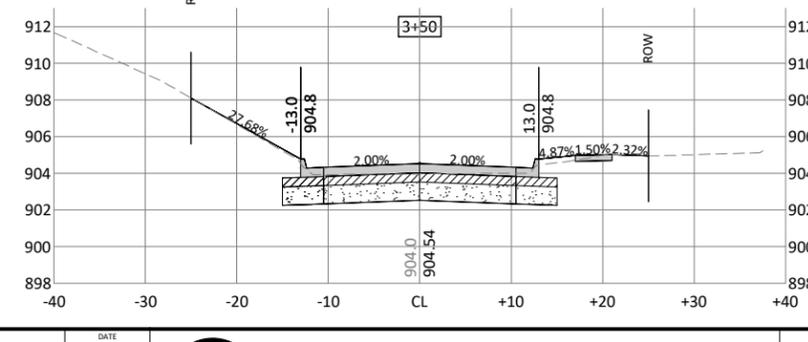
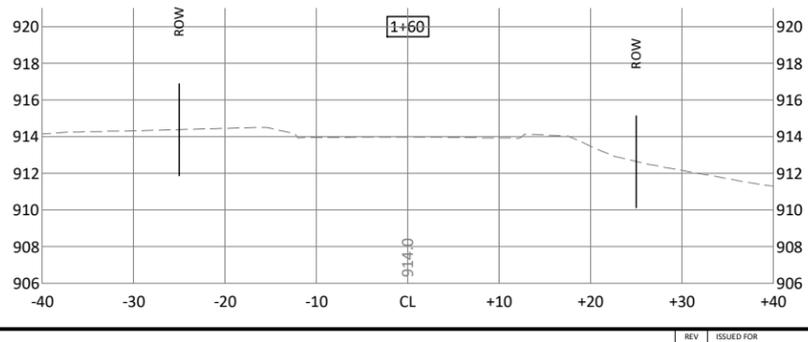
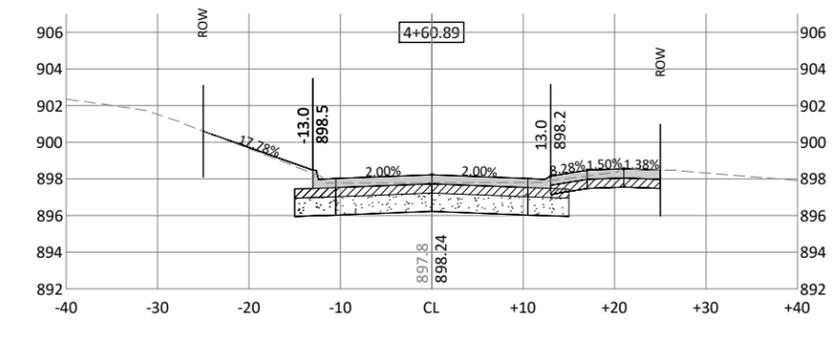
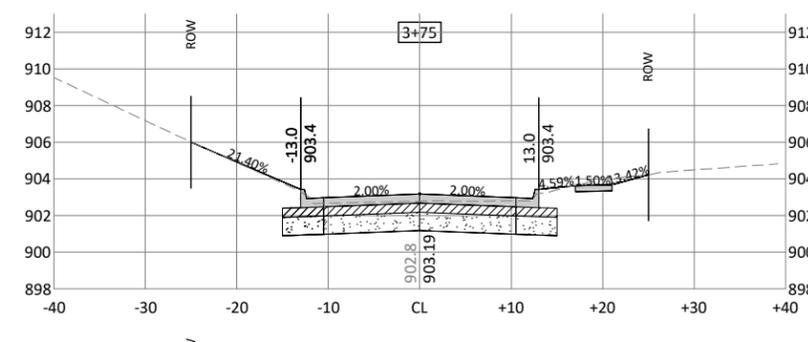
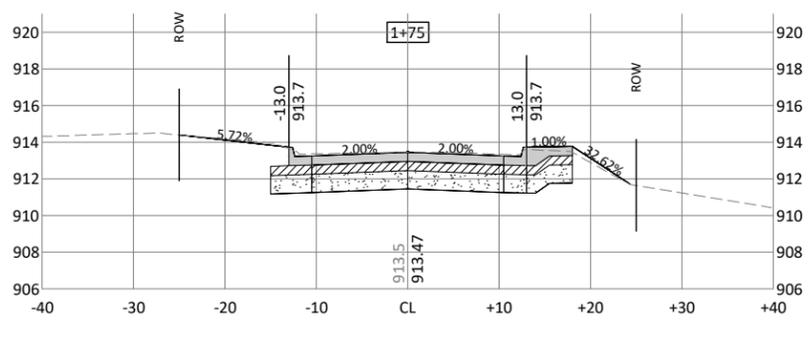
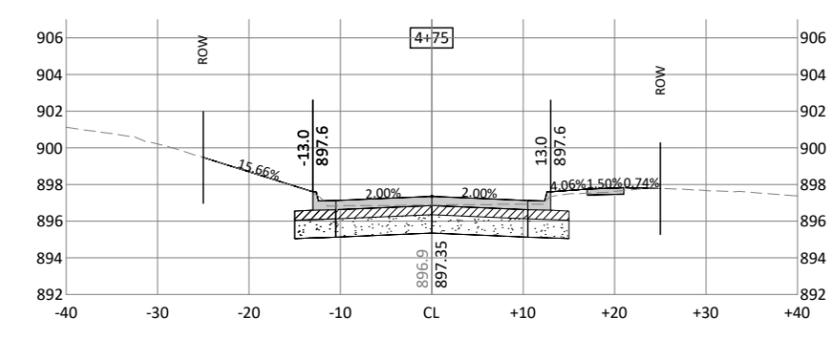
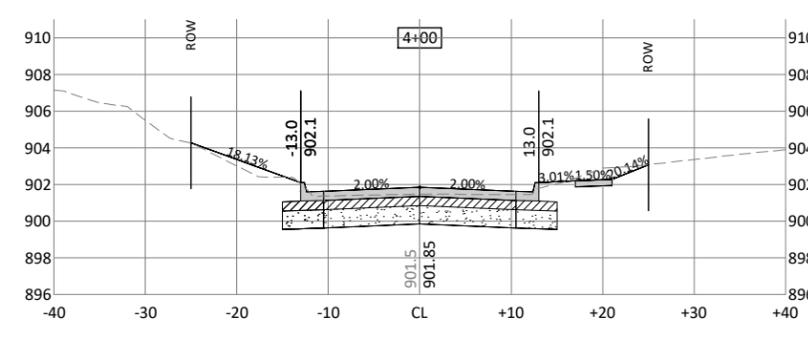
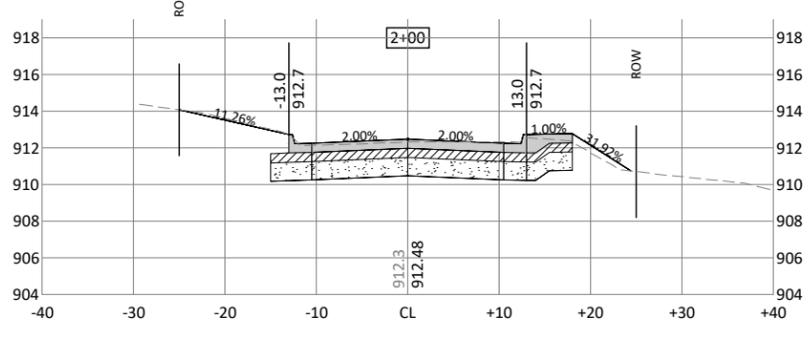
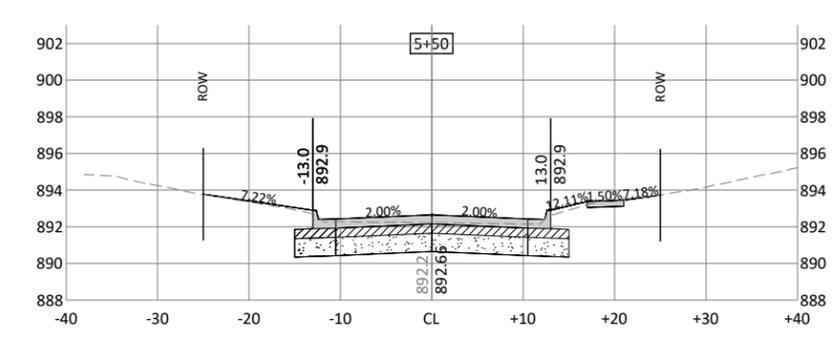
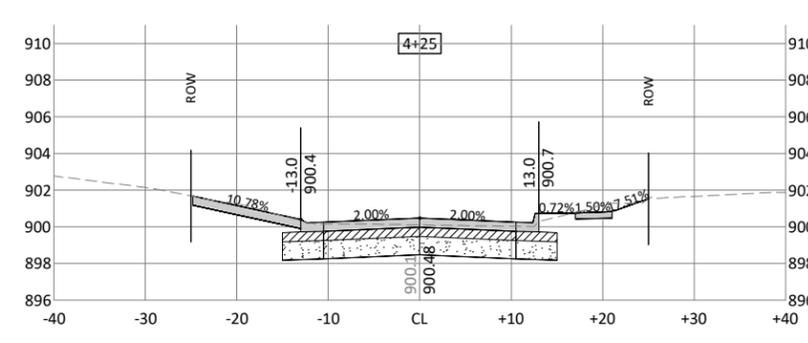
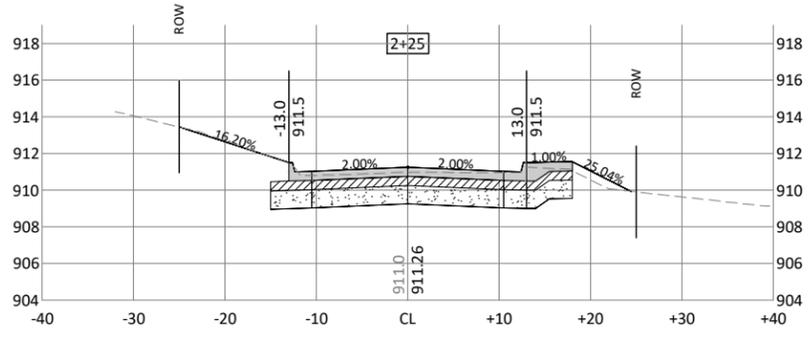
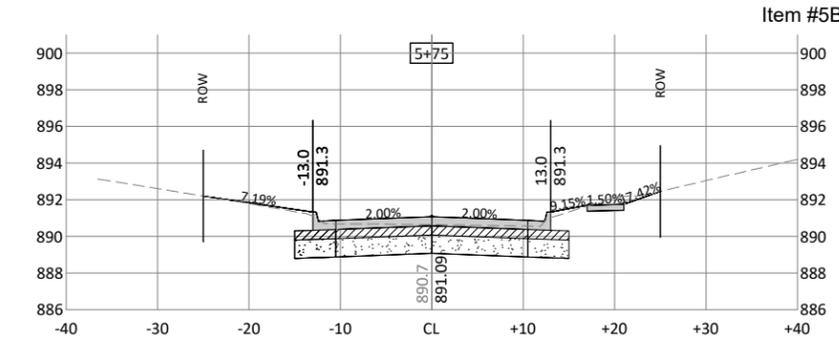
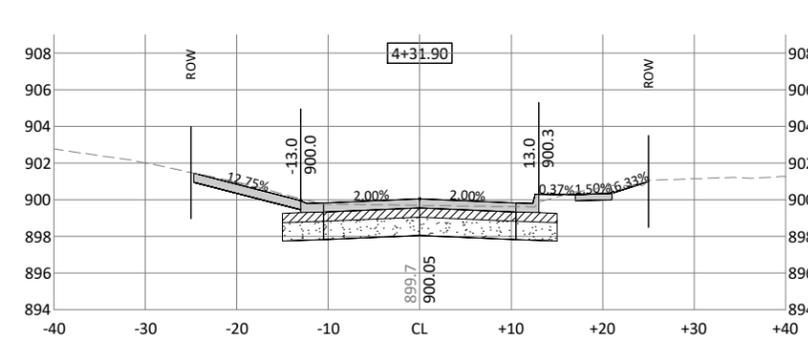
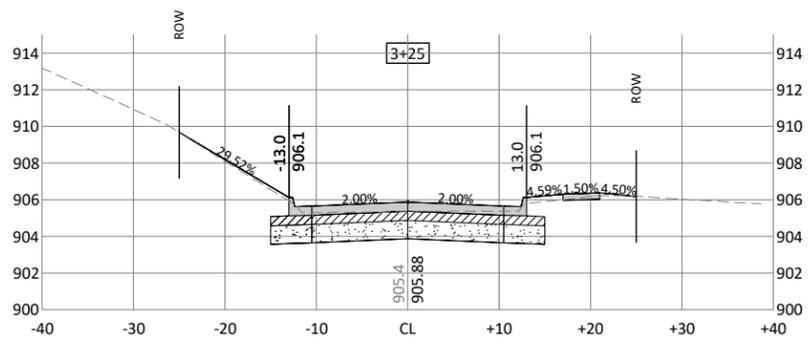


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 COLLEGE DRIVE RECONSTRUCTION
 HMA PAVEMENT (ALTERNATE 2)



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



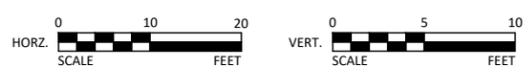
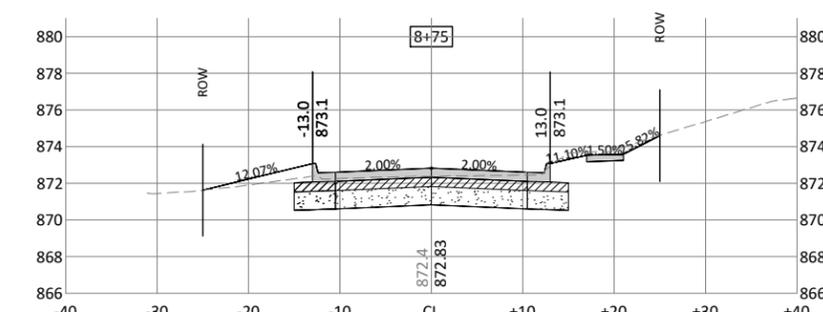
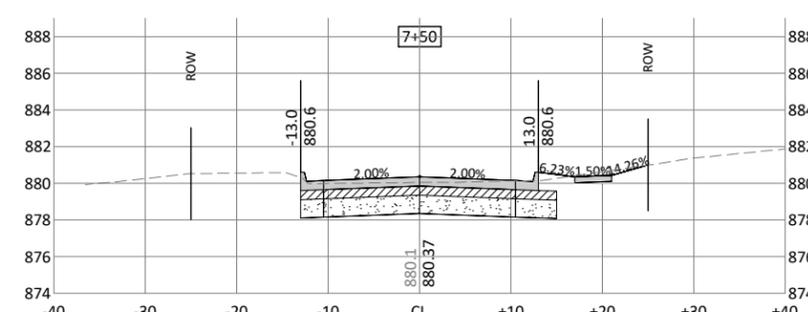
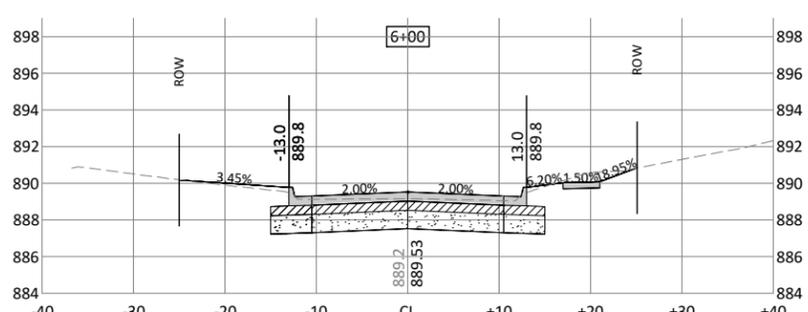
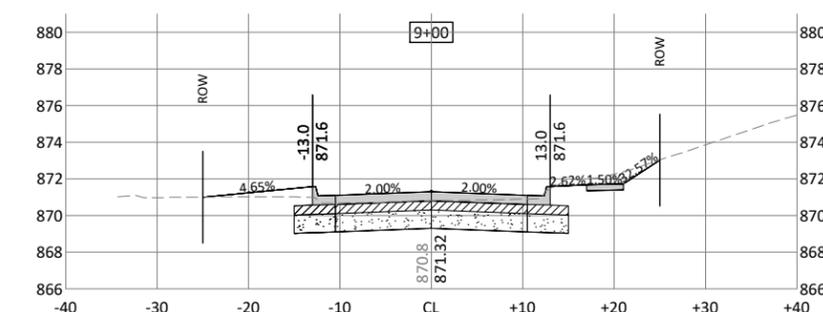
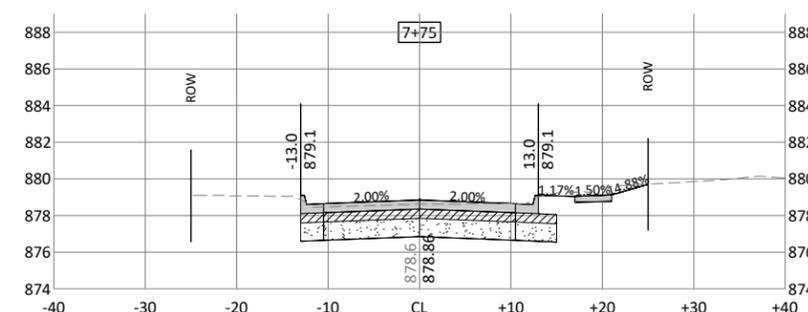
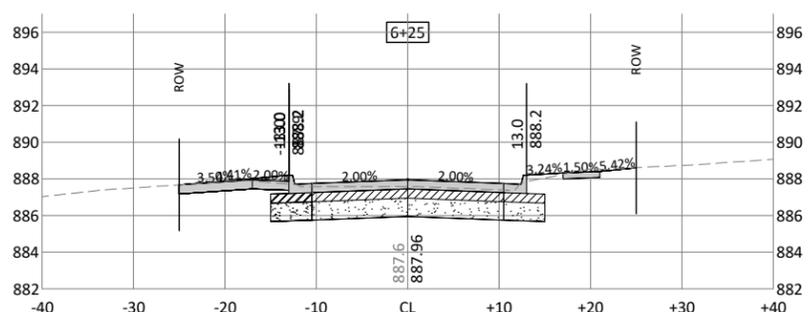
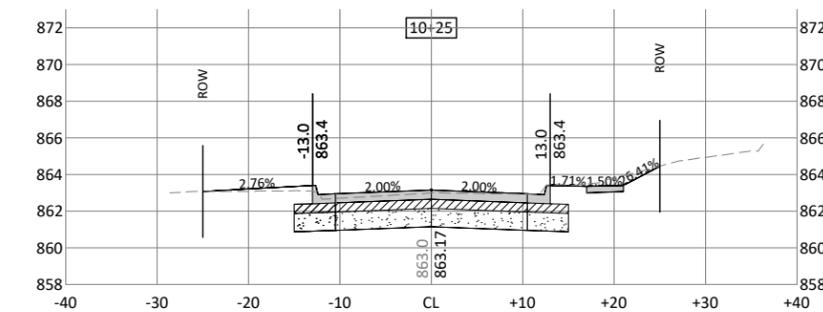
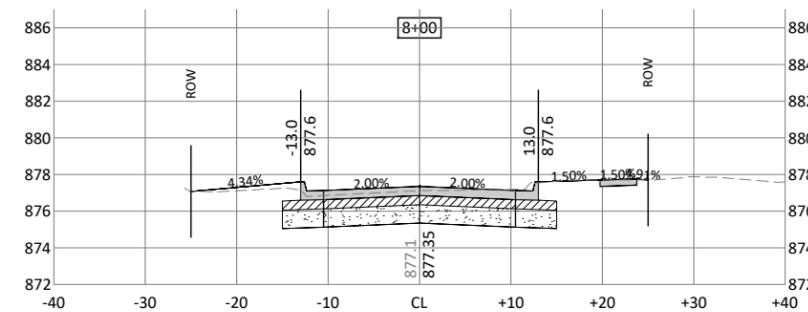
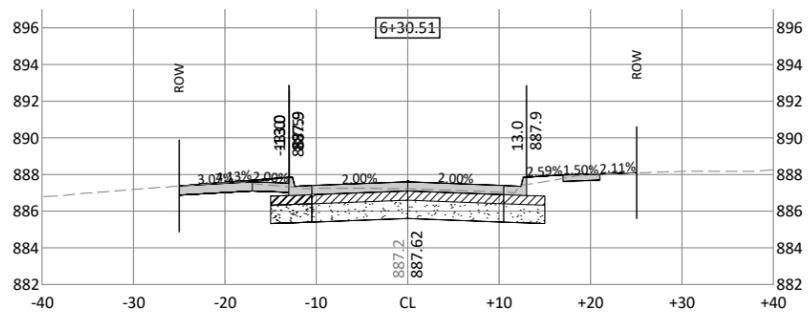
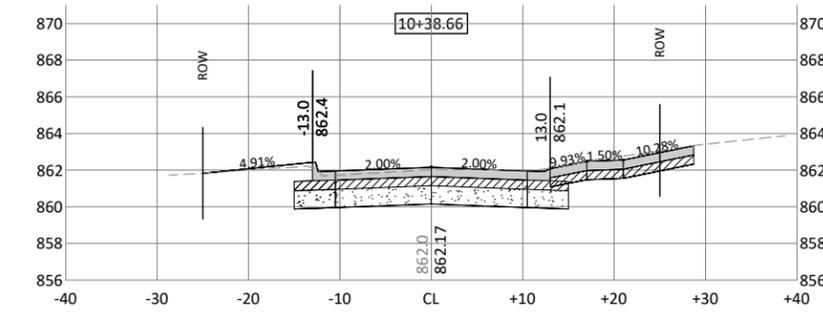
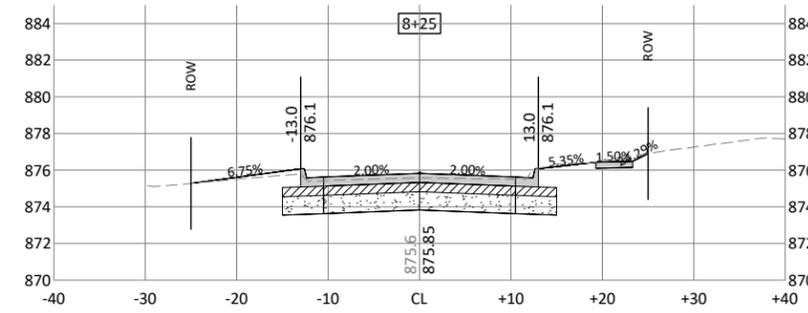
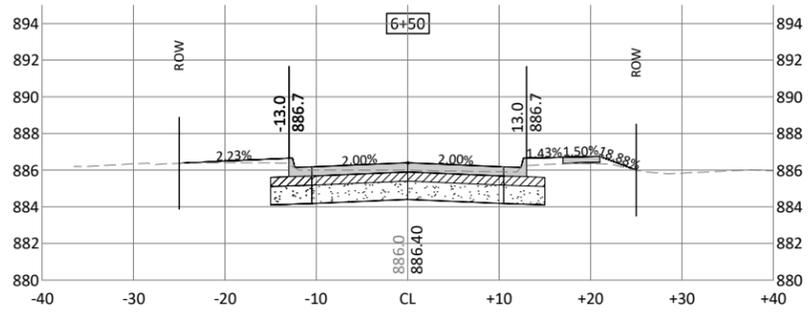
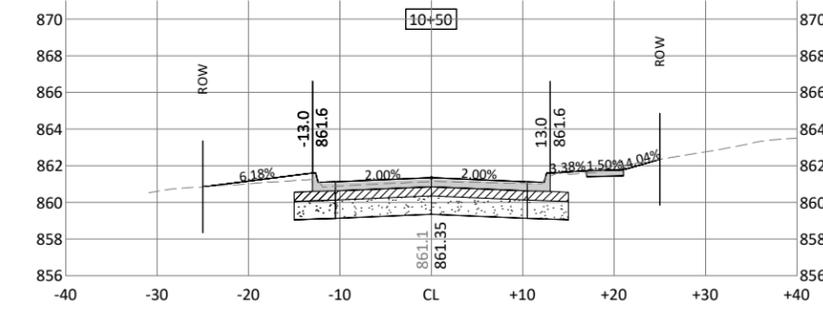
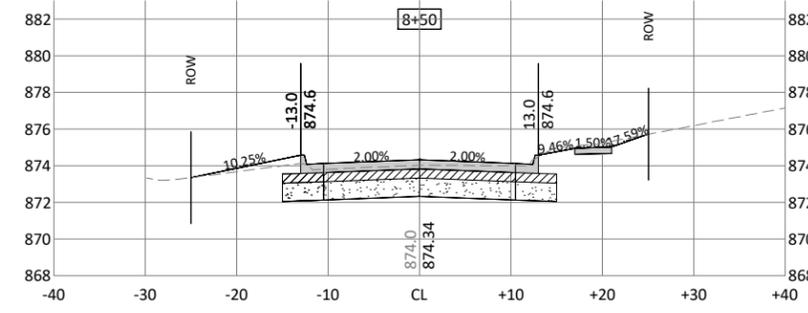
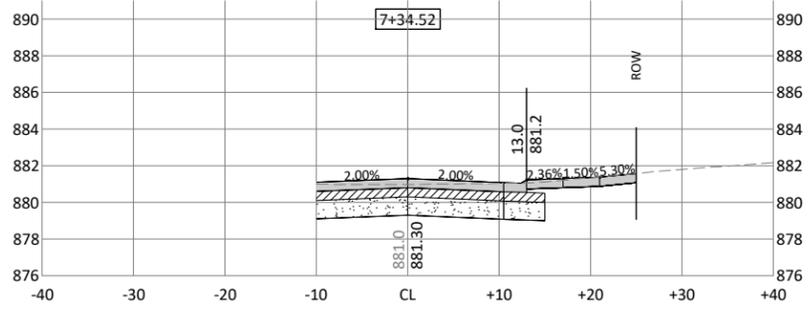
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS

© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CL\A13.118668\Task 02_College Drive\CD\Sheets\18668_W.01.dwg 12/12/2019 4:57 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



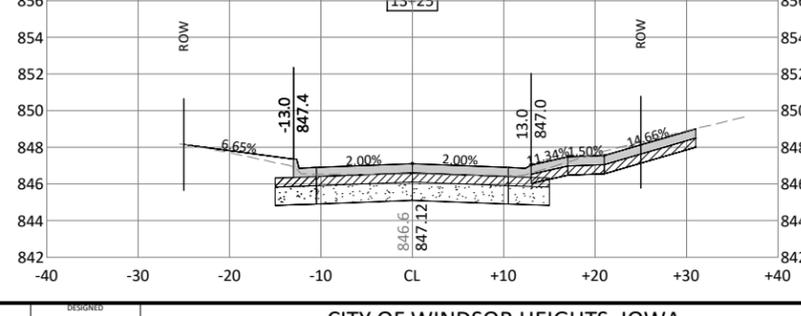
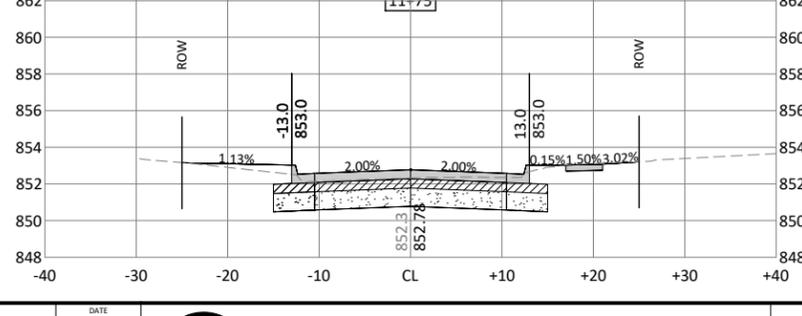
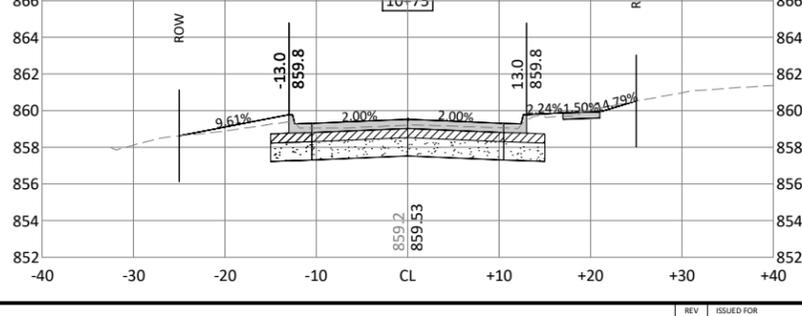
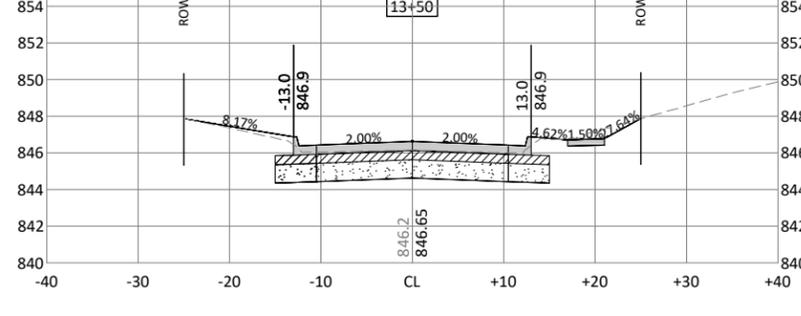
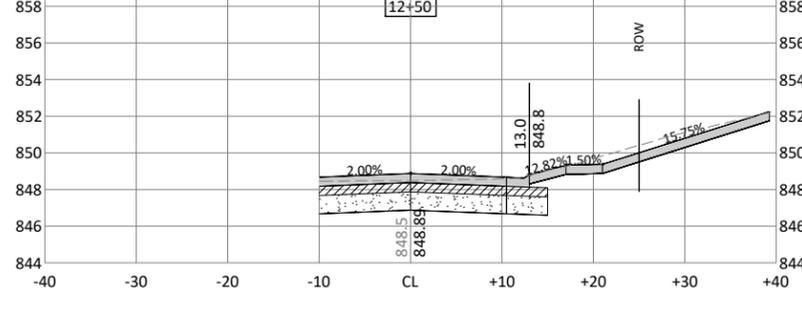
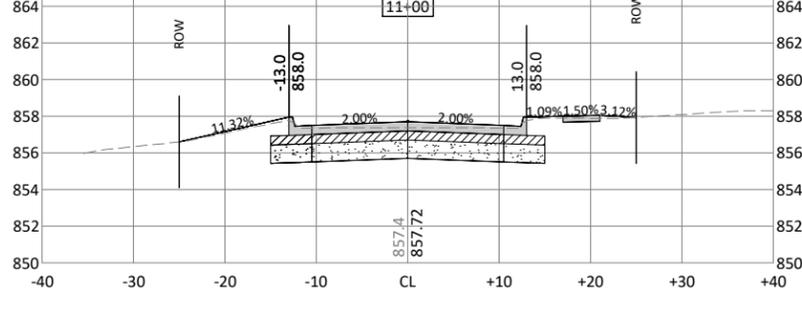
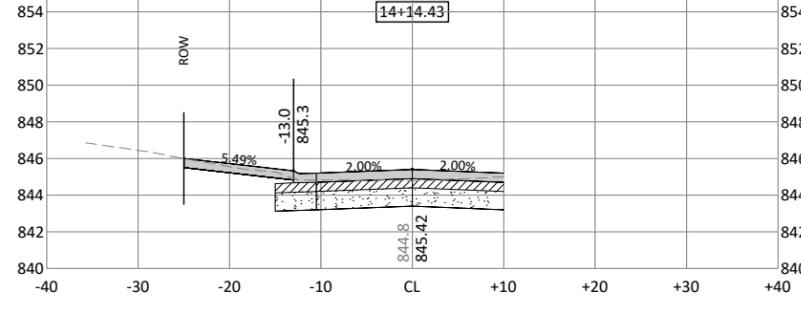
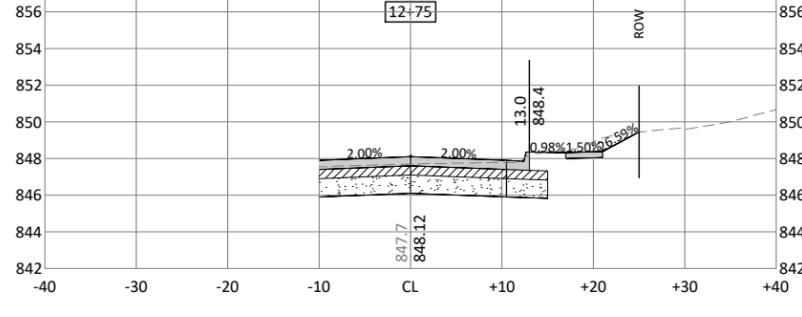
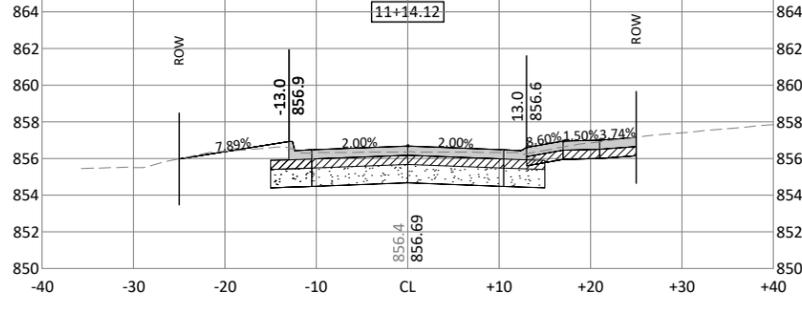
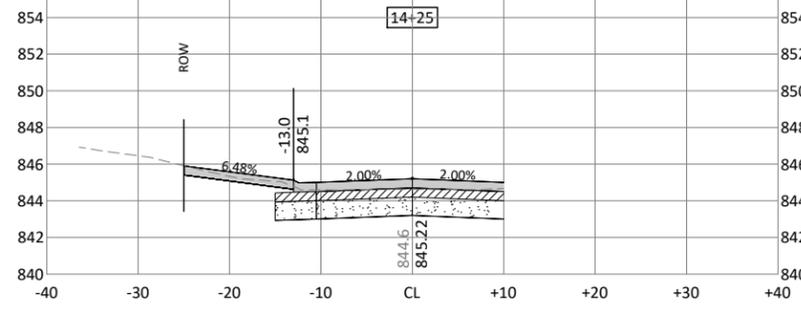
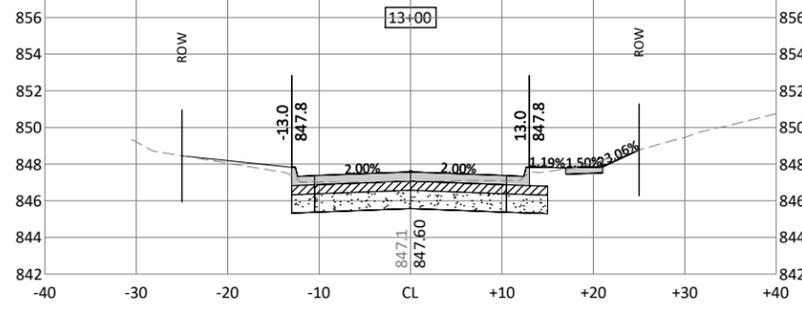
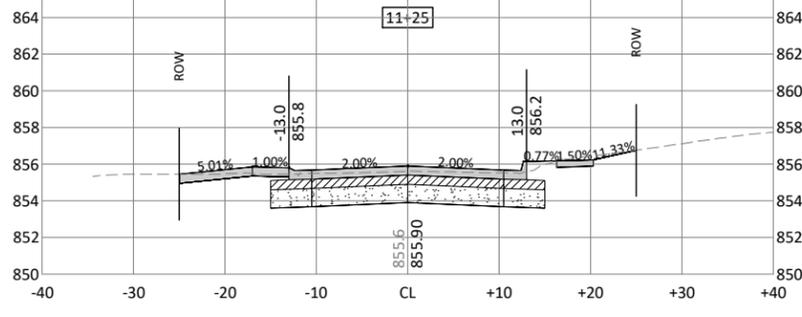
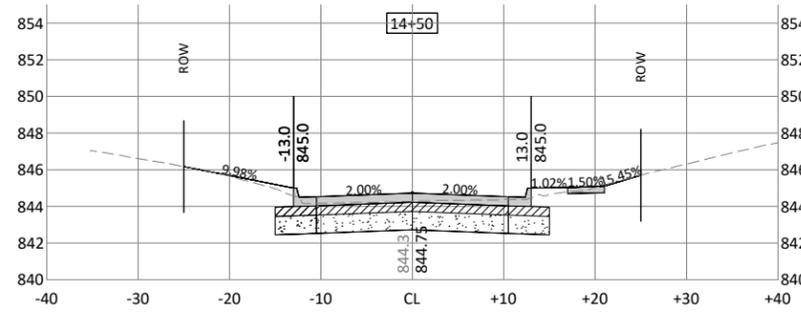
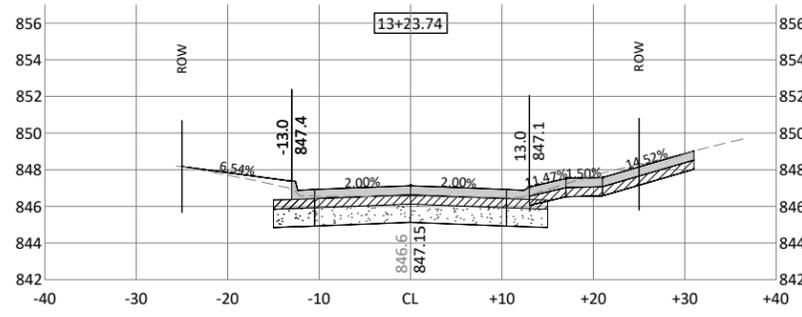
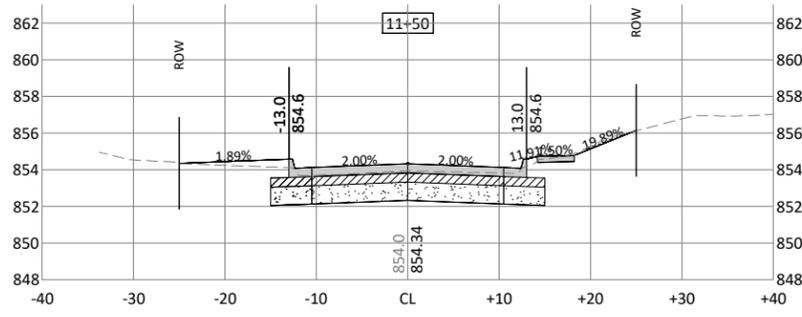
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



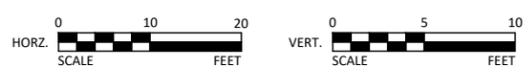
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS

© Bolton & Menk, Inc. 2019. All Rights Reserved. Windsor Heights, IA A13.118668. User: G. College Drive (CAD). Sheets\118668_W.01.dwg 12/12/2019 4:57 PM



© Bolton & Menk, Inc. 2019. All Rights Reserved. W:\WINDSOR\CL\A13118668\Task 02 College Drive\Drawings\CD\Sheets\118668_W.01.dwg 12/12/2019 4:57 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

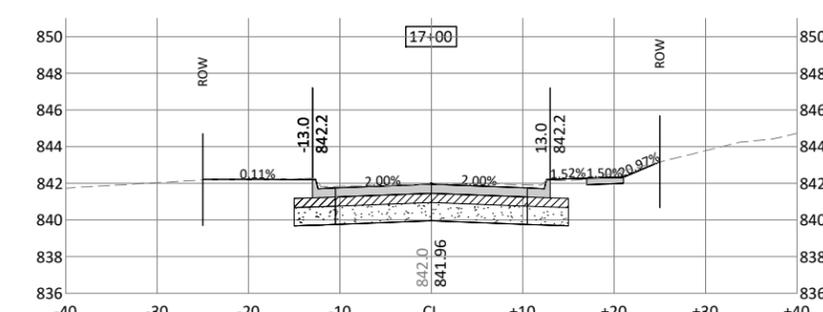
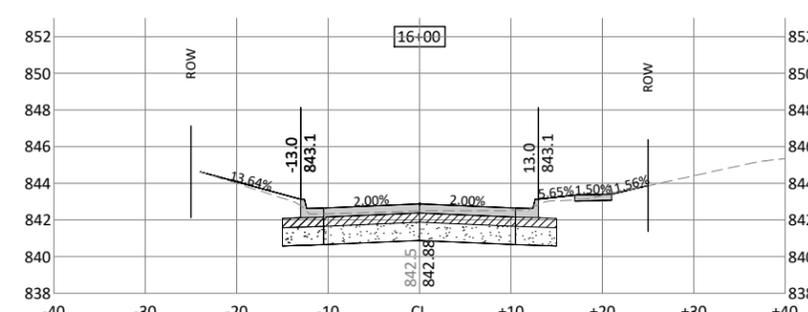
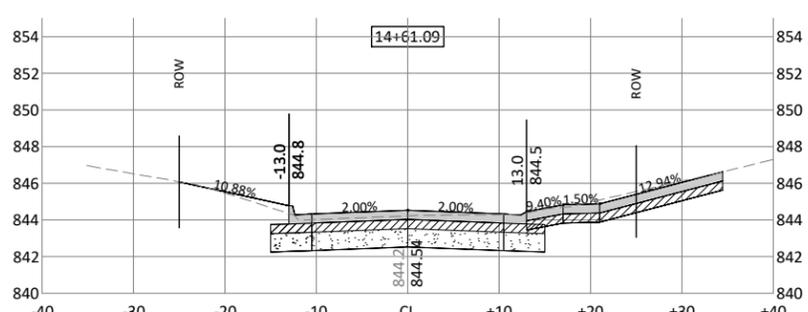
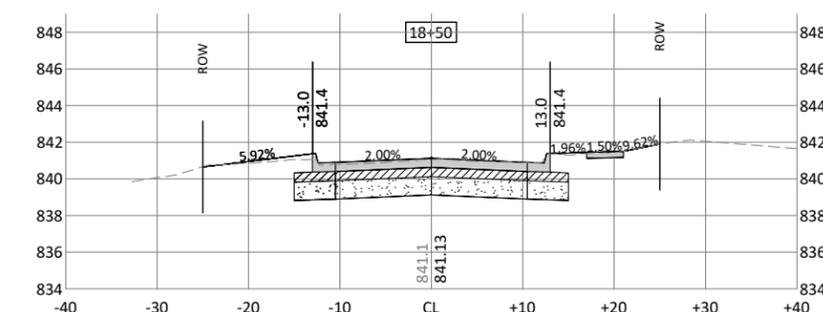
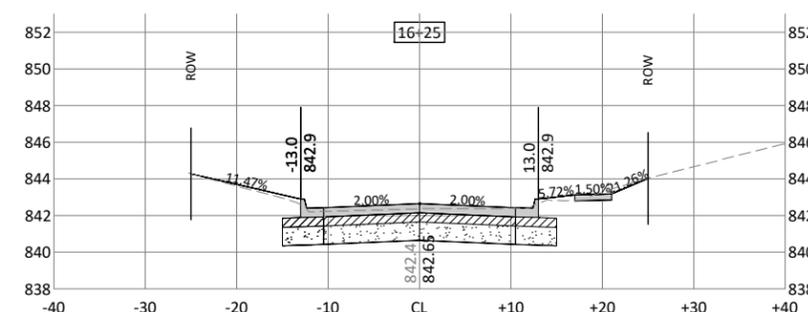
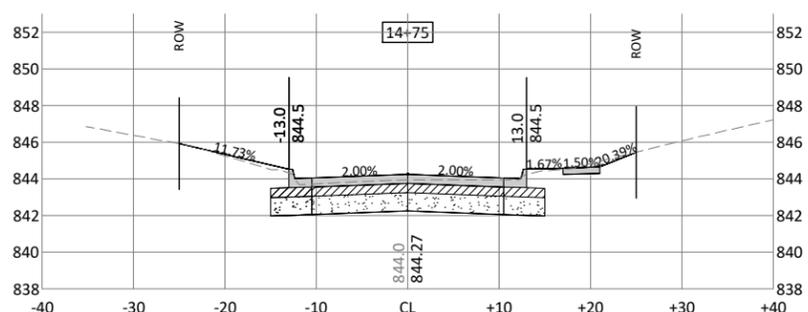
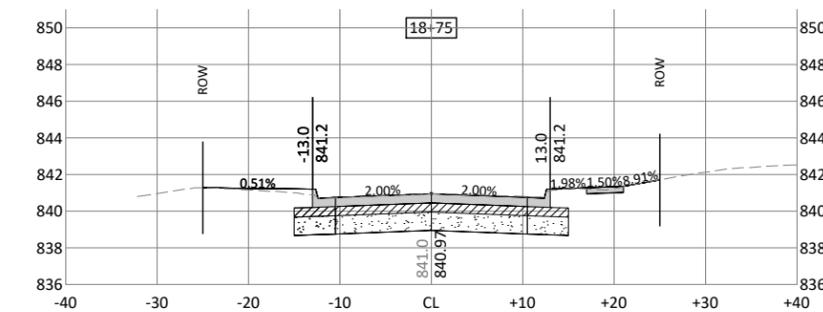
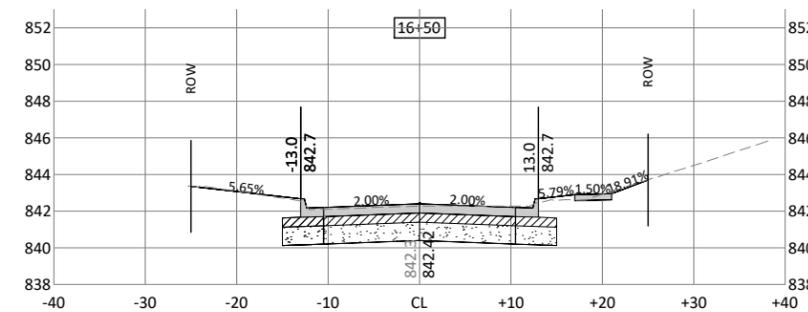
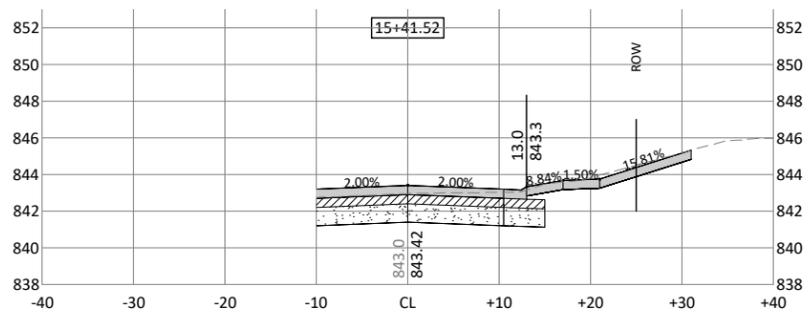
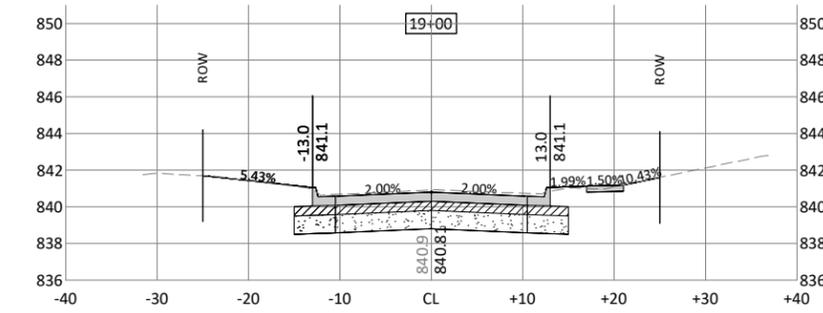
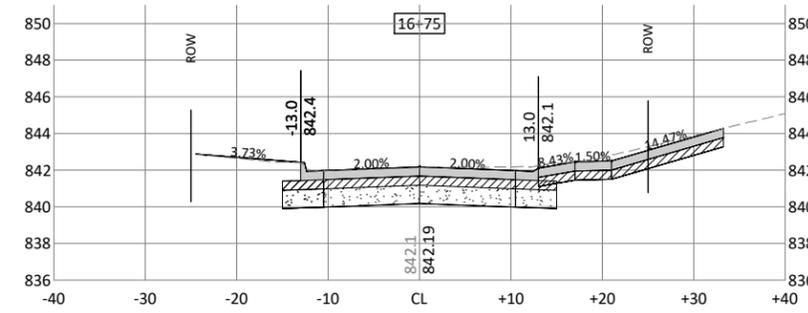
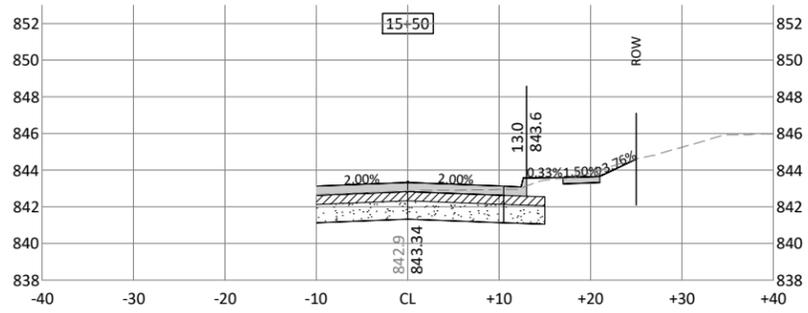
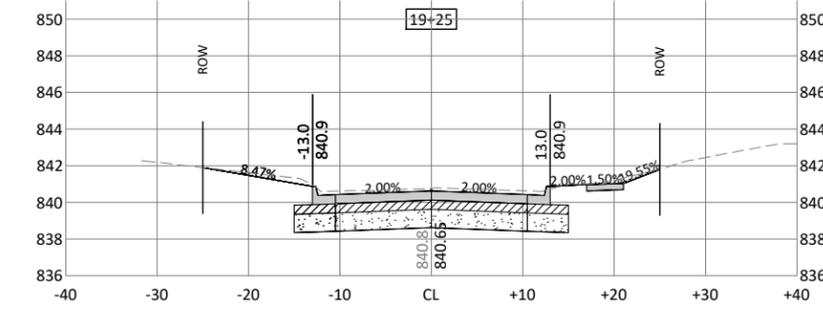
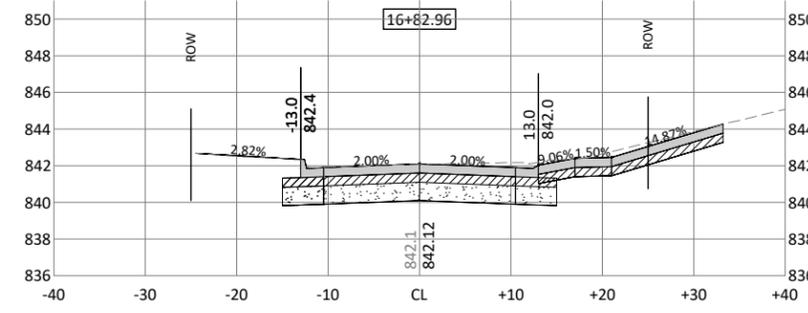
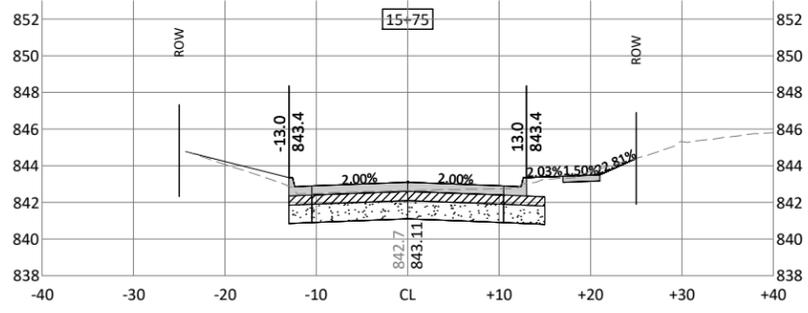


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

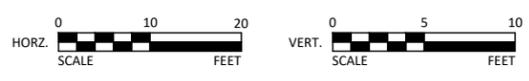


DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS



© Bolton & Menk, Inc. 2019. All Rights Reserved. W:\WINDSOR\CL\A13118668\Task 02 College Drive\Drawings\CD\Sheets\18668_W.01.dwg 12/12/2019 4:57 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

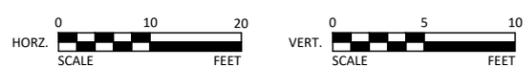
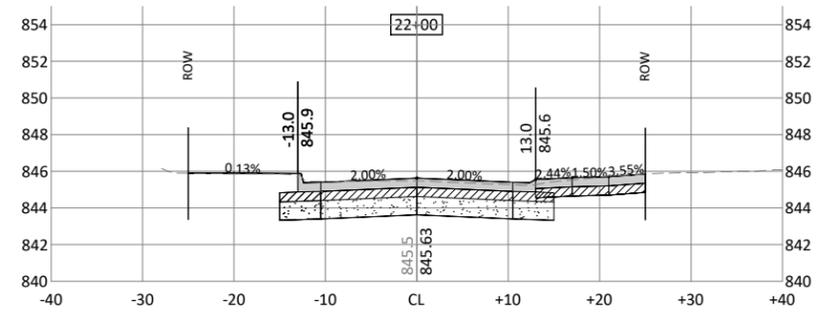
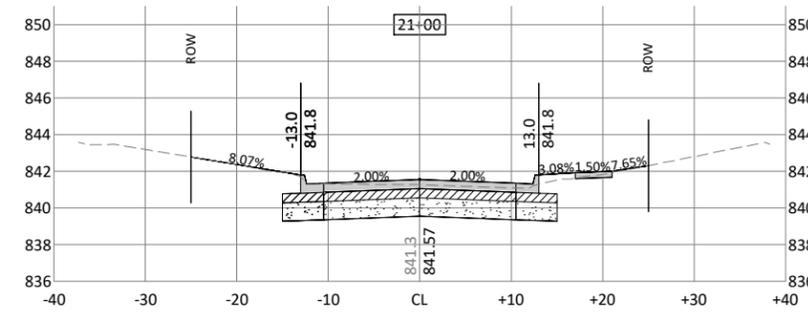
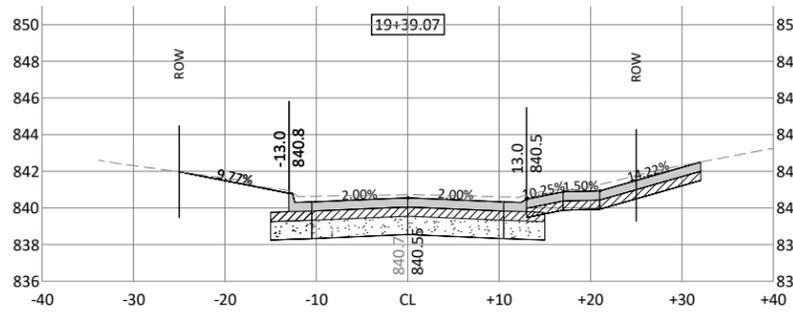
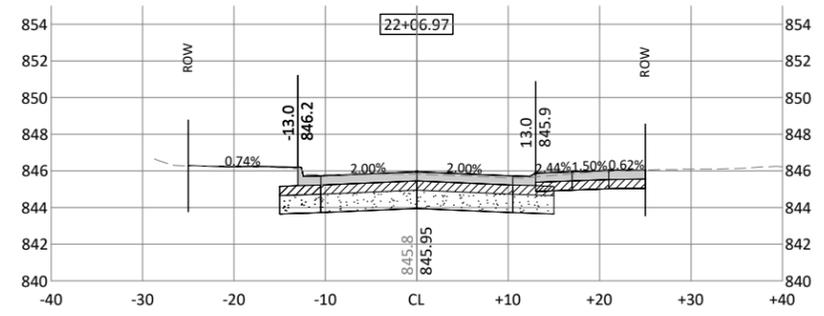
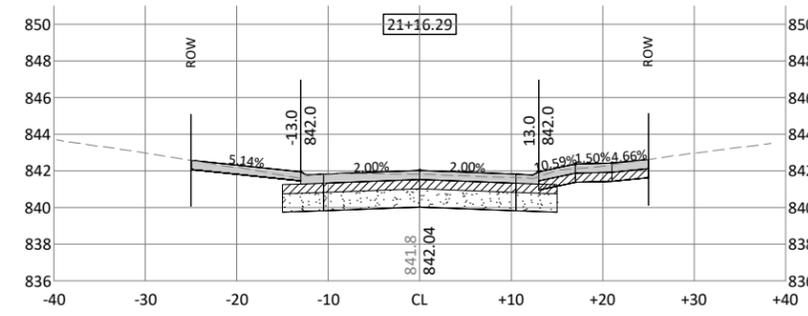
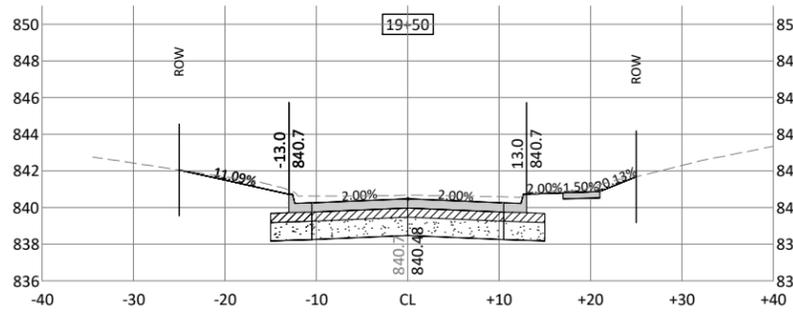
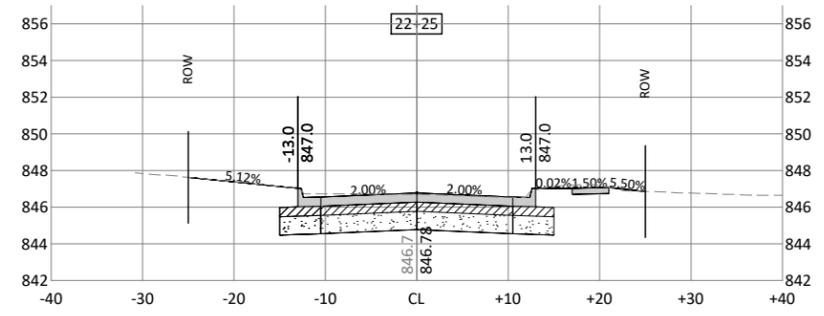
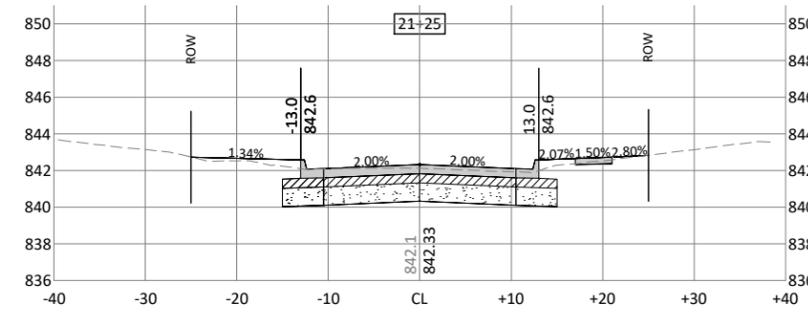
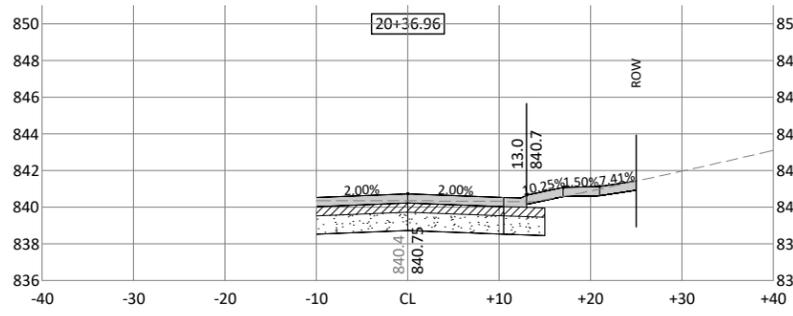
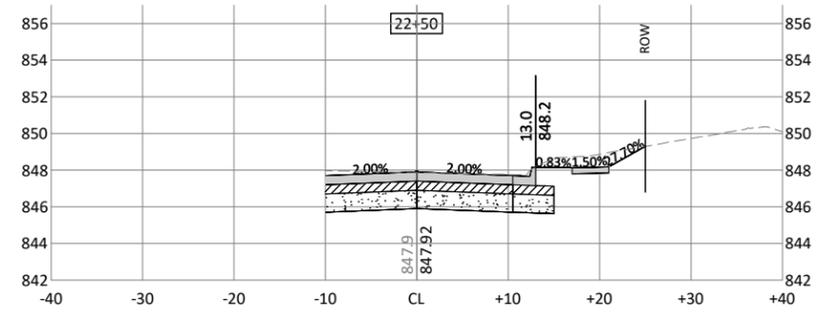
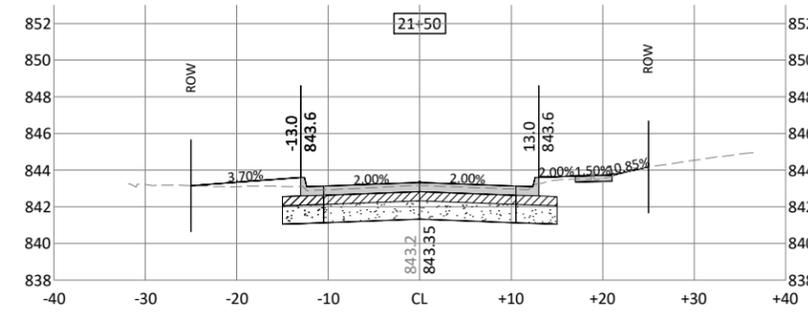
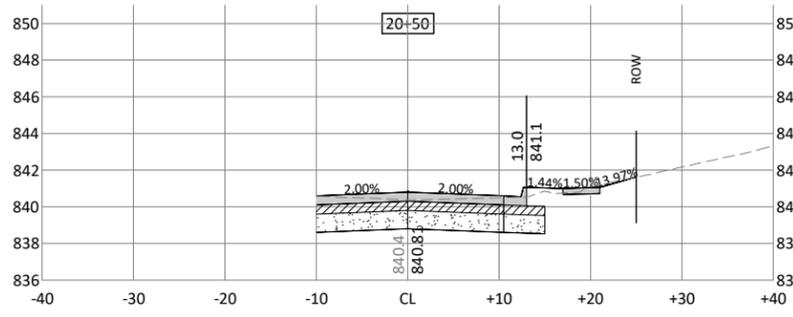
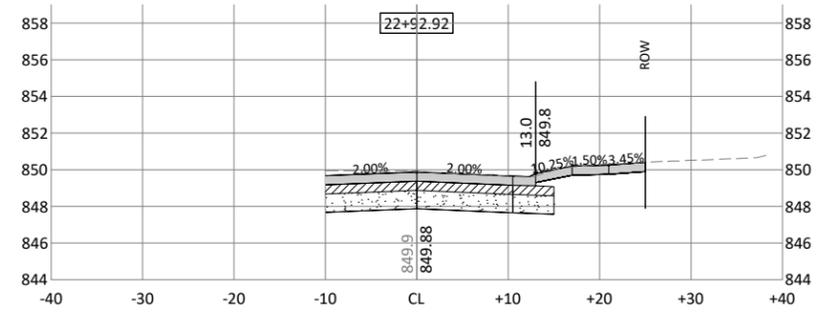
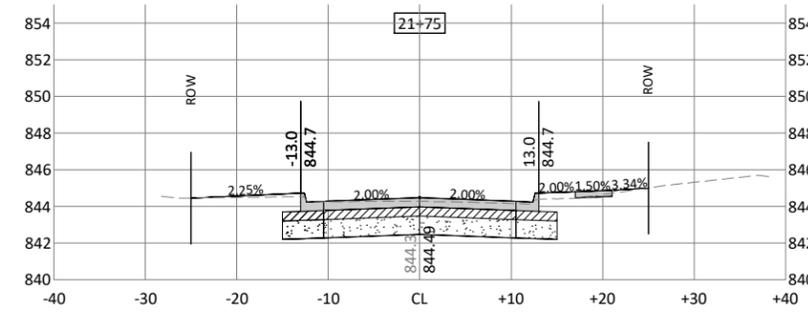
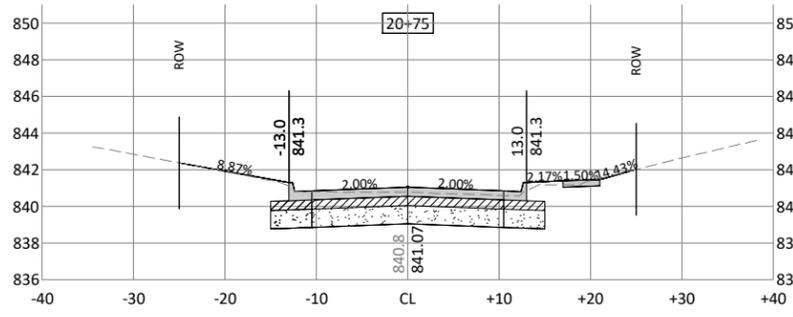


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



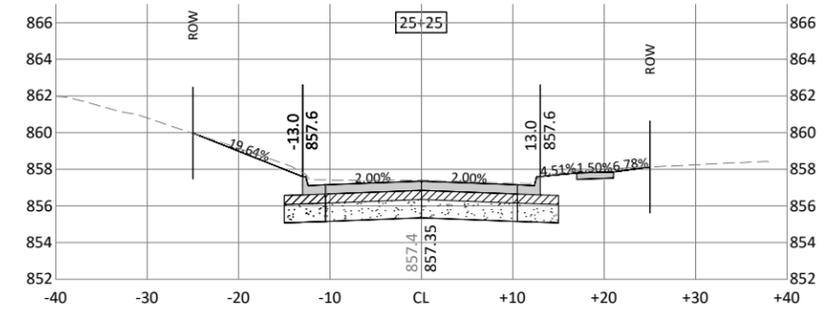
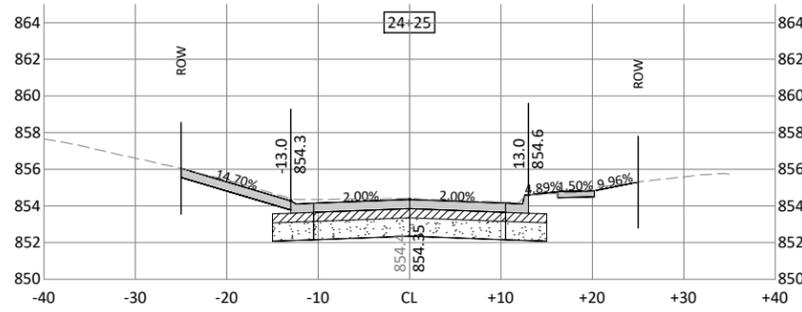
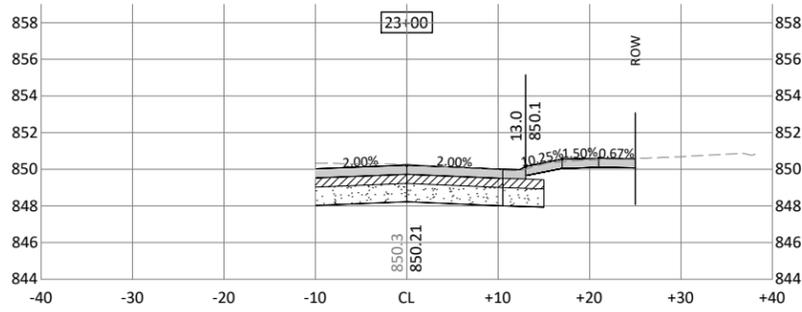
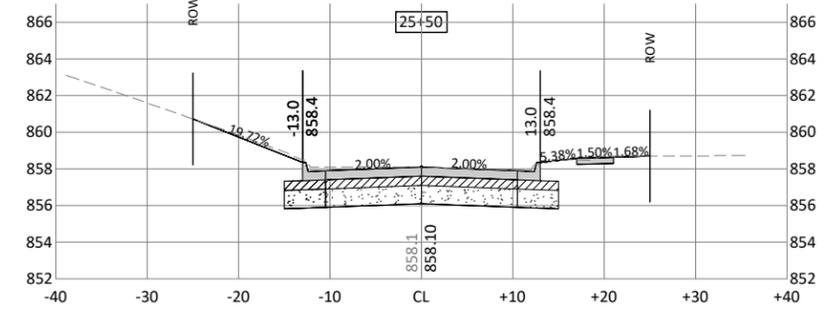
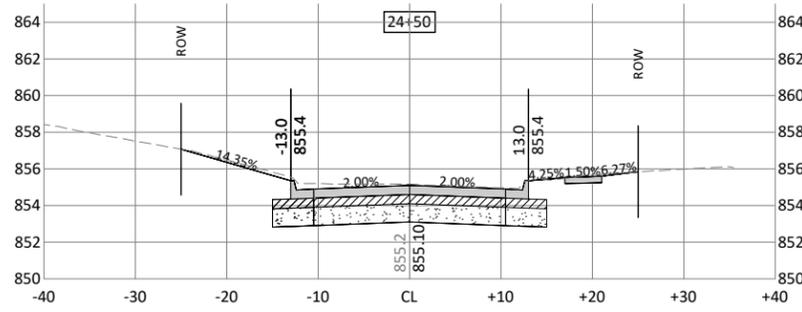
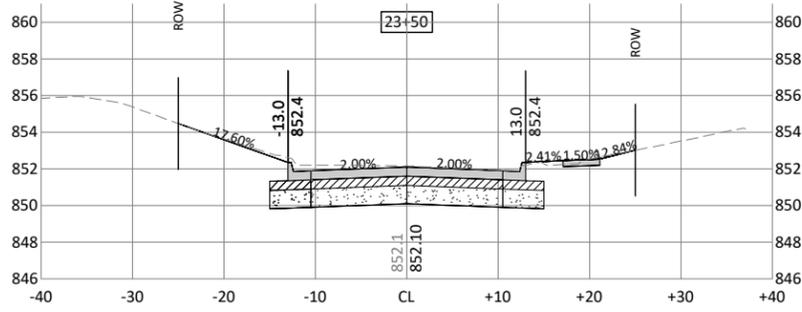
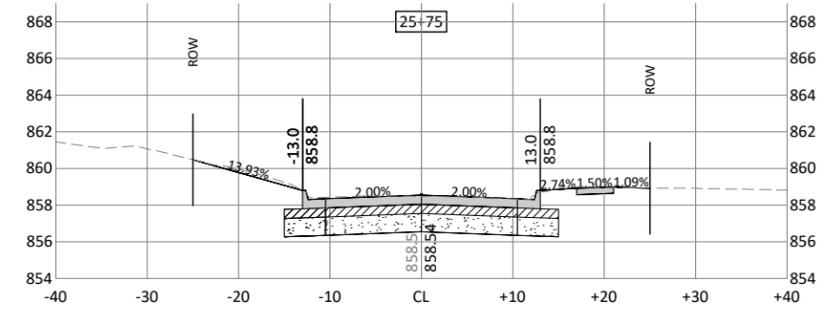
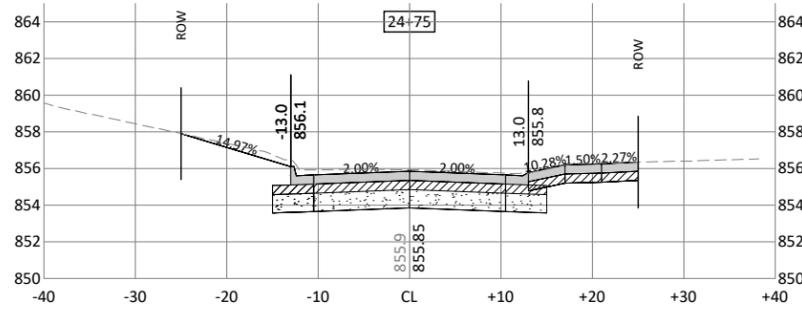
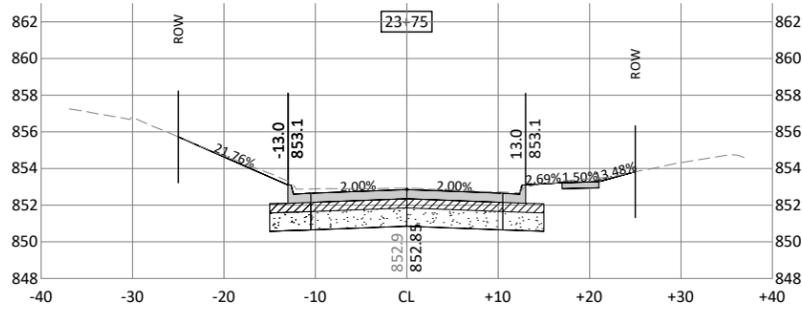
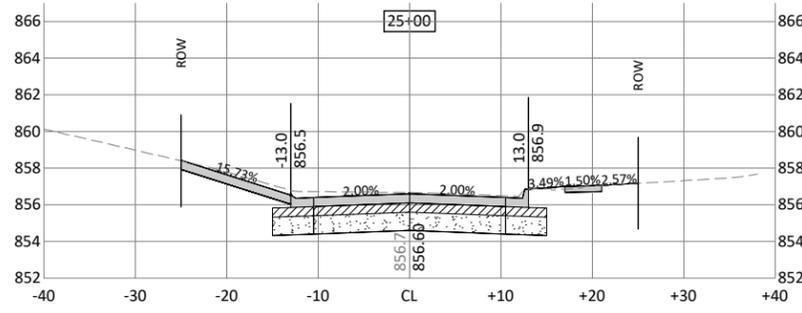
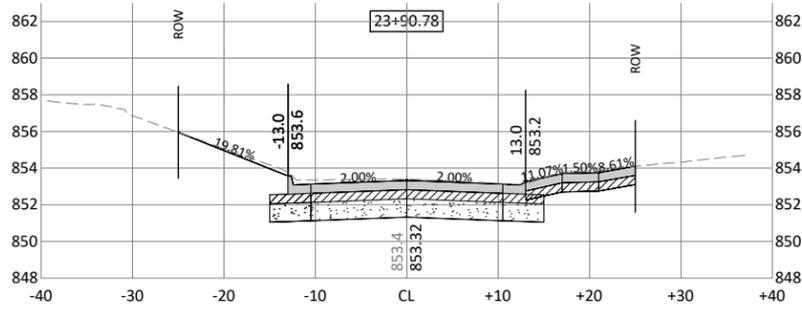
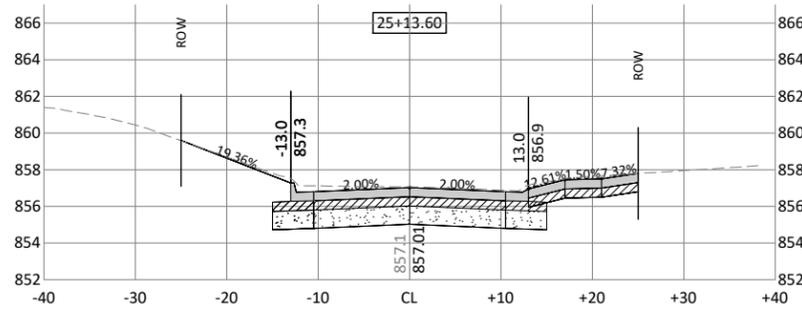
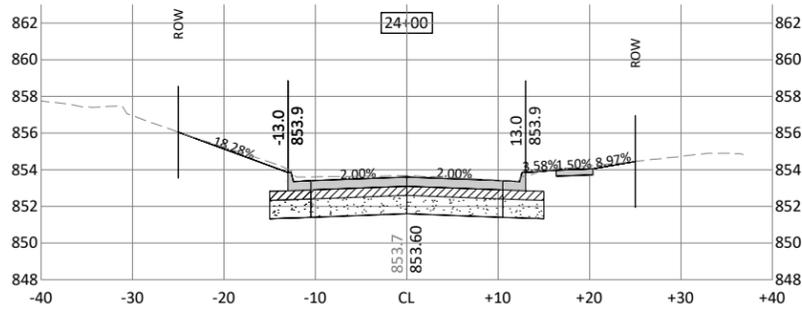
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS

© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CD\A13118668\Task 02 College Drive\CD\Sheets\118668_W.01.dwg 12/12/2019 4:57 PM



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CL\A13118668\Task 02_College Drive\Drawings\CD\Sheets\18668_W.01.dwg 12/12/2019 4:57 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
COLLEGE DRIVE RECONSTRUCTION
CROSS SECTIONS

CITY OF WINDSOR HEIGHTS, IOWA

CONSTRUCTION PLANS FOR

2020 STREET RECONSTRUCTION

WINDSOR HEIGHTS, IA

JANUARY 2020

GOVERNING SPECIFICATIONS

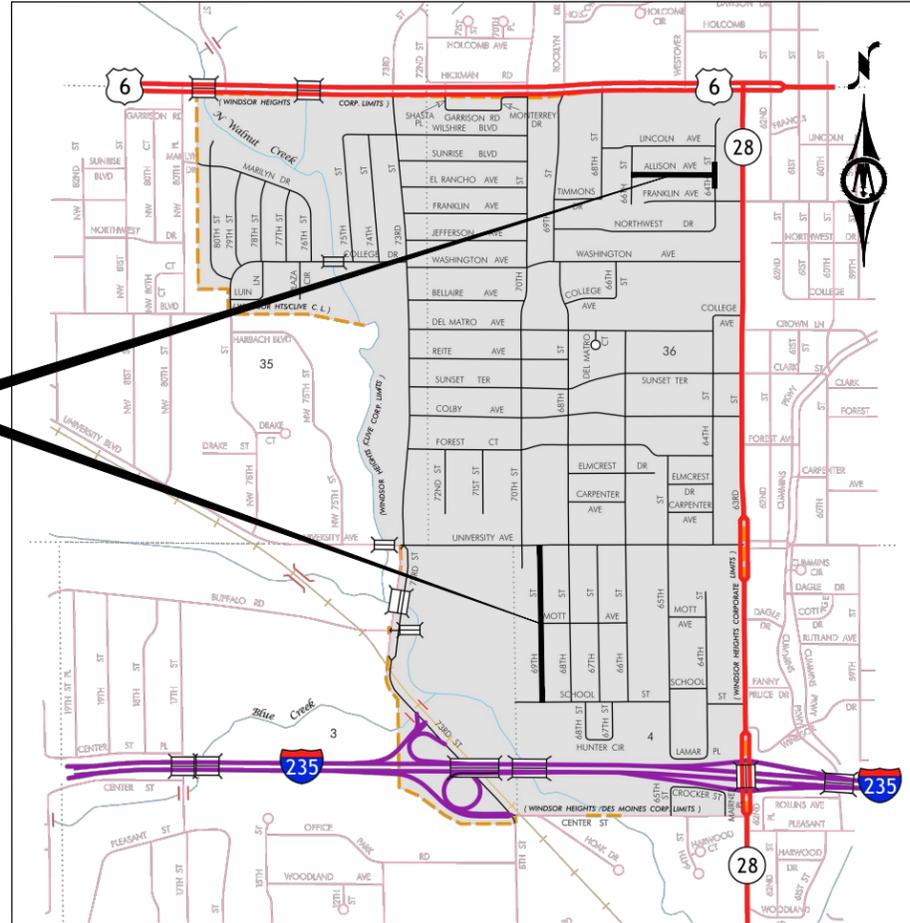
THE 2020 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS".

IOWA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION", VERSION OCTOBER 2015 AND ALL CURRENT GENERAL SUPPLEMENTAL SPECIFICATIONS AND MATERIALS INSTRUCTIONAL MEMORANDUM SHALL GOVERN AS REFERENCED.

MUTCD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW, NOTIFY IOWA ONE CALL 1-800-292-8989

PROJECT LOCATIONS



MAP OF THE
CITY OF WINDSOR HEIGHTS
POLK COUNTY, IA

SHEET INDEX			
SHEET NUMBER	DESCRIPTION	REVISION	DATE ISSUED
A.1	TITLE SHEET	0	1/20/2020
A.2	LEGEND	0	1/20/2020
B.1 - B.2	TYPICAL SECTIONS	0	1/20/2020
B.3 - B.8	TYPICAL DETAILS	0	1/20/2020
C.1	GENERAL NOTES	0	1/20/2020
C.2	ESTIMATED QUANTITIES	0	1/20/2020
C.3-C.5	ESTIMATE REFERENCE NOTES	0	1/20/2020
C.6 - C.7	TABULATIONS	0	1/20/2020
C.8 - C.10	EROSION CONTROL PLAN	0	1/20/2020
D.1 - D.2	PLAN AND PROFILE - ALLISON AVENUE	0	1/20/2020
D.3	PLAN AND PROFILE - 64TH STREET	0	1/20/2020
D.4 - D.6	PLAN AND PROFILE - 69TH STREET	0	1/20/2020
E.1	PLAN AND PROFILE - MOTT AVENUE	0	1/20/2020
G.1 - G.2	REFERENCE TIES AND BENCH MARKS	0	1/20/2020
J.1	STAGING - ALLISON AVENUE	0	1/20/2020
J.2 - J.4	TRAFFIC CONTROL - ALLISON AVENUE	0	1/20/2020
J.5	STAGING - 69TH STREET	0	1/20/2020
J.6 - J.11	TRAFFIC CONTROL - 69TH STREET	0	1/20/2020
L.1 - L.3	INTERSECTION DETAILS	0	1/20/2020
L.4 - L.5	JOINTING PLAN - ALLISON AVENUE	0	1/20/2020
L.6 - L.7	JOINTING PLAN - 69TH STREET	0	1/20/2020
M.1 - M.2	STORM SEWER CROSSRUNS - ALLISON AVENUE	0	1/20/2020
M.3 - M.5	STORM SEWER CROSSRUNS - 69TH STREET	0	1/20/2020
MSA.1 - MSA.3	SANITARY SEWER - ALLISON AVENUE	0	1/20/2020
MSA.4 - MSA.6	SANITARY SEWER - 69TH STREET	0	1/20/2020
MWM.1 - MWM.10	WATERMAIN - 69TH STREET	0	1/20/2020
R.1	REMOVALS - ALLISON AVENUE	0	1/20/2020
R.2 - R.3	REMOVALS - 69TH STREET	0	1/20/2020
S.1 - S.6	SIDEWALK COMPLIANCE	0	1/20/2020
S.7 - S.10	ADA COMPLIANCE	0	1/20/2020
U.1	HMA PAVEMENT (BID ALTERNATE 2) - ALLISON AVENUE	0	1/20/2020
U.2-U.3	HMA PAVEMENT (BID ALTERNATE 2) - 69TH STREET	0	1/20/2020
W.1 - W.5	CROSS SECTIONS - ALLISON AVENUE	0	1/20/2020
W.6 - W.14	CROSS SECTIONS - 69TH STREET	0	1/20/2020



© Bolton & Menk, Inc. 2020. All Rights Reserved. H:\WINDSOR\HH_C\IA\A\1318668\Task_01_Allison Avenue\CAD\C10\Sheets\118668_A.01.dwg 1/15/2020 2:15 PM



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

JUSTIN L. ERNST, P.E.
REG. NO. 23753 DATE: 01-15-2020

MY LICENSE RENEWAL DATE IS Dec. 31, 2021
PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEET EXCEPT MWM SHEETS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



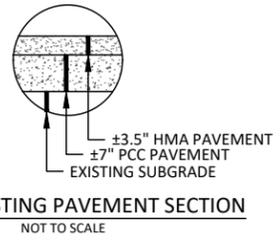
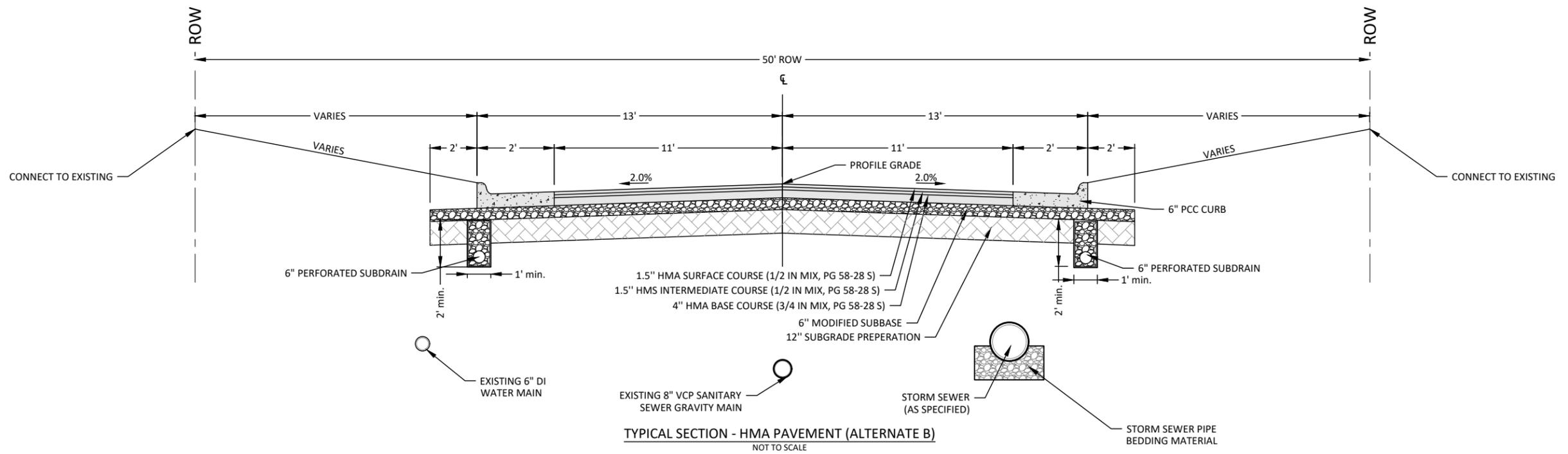
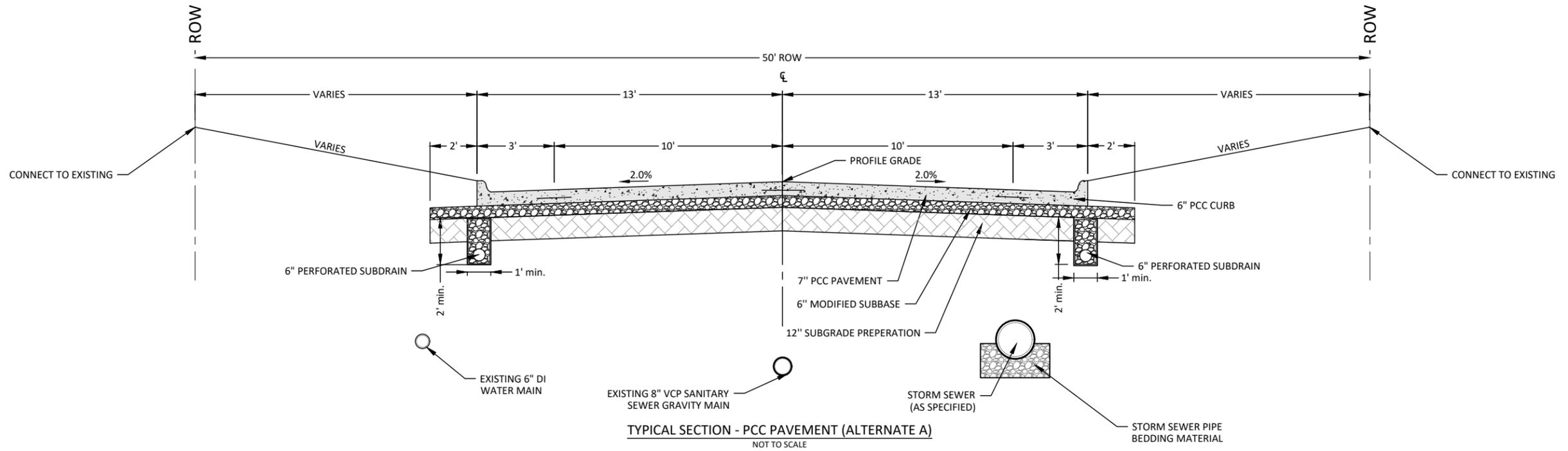
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TITLE SHEET

SHEET
A.1



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\CI\1118668\Task 01 Allison Avenue\CAD\Sheet\118668_B.01.dwg 1/10/2020 9:43 AM

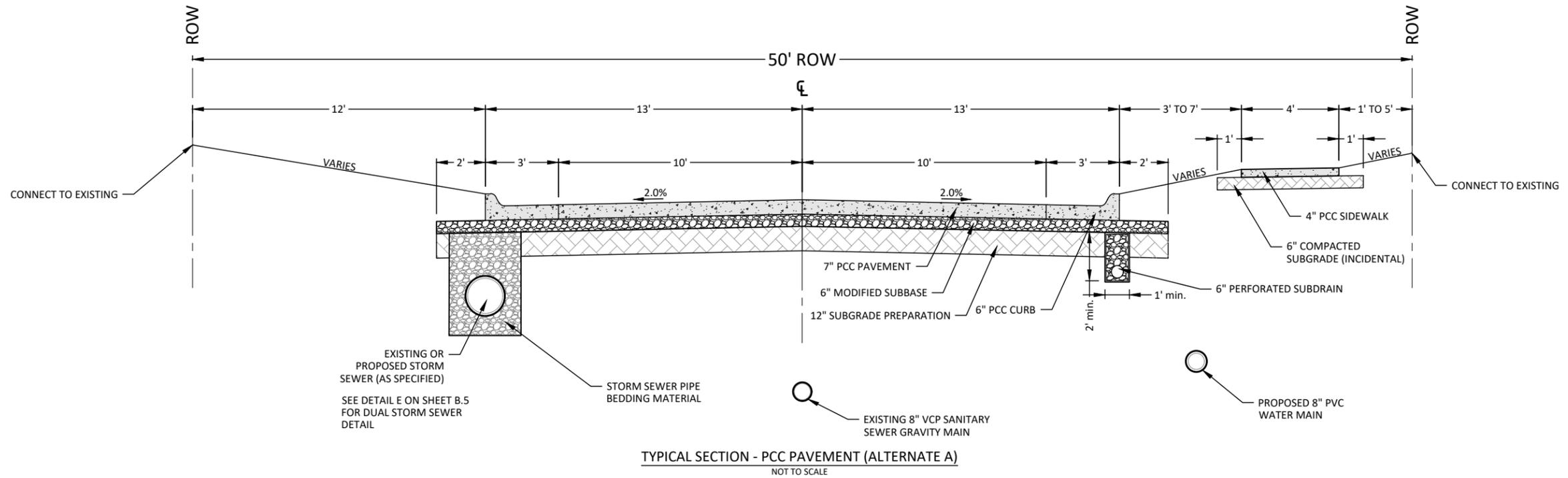
REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

BOLTON & MENK

309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

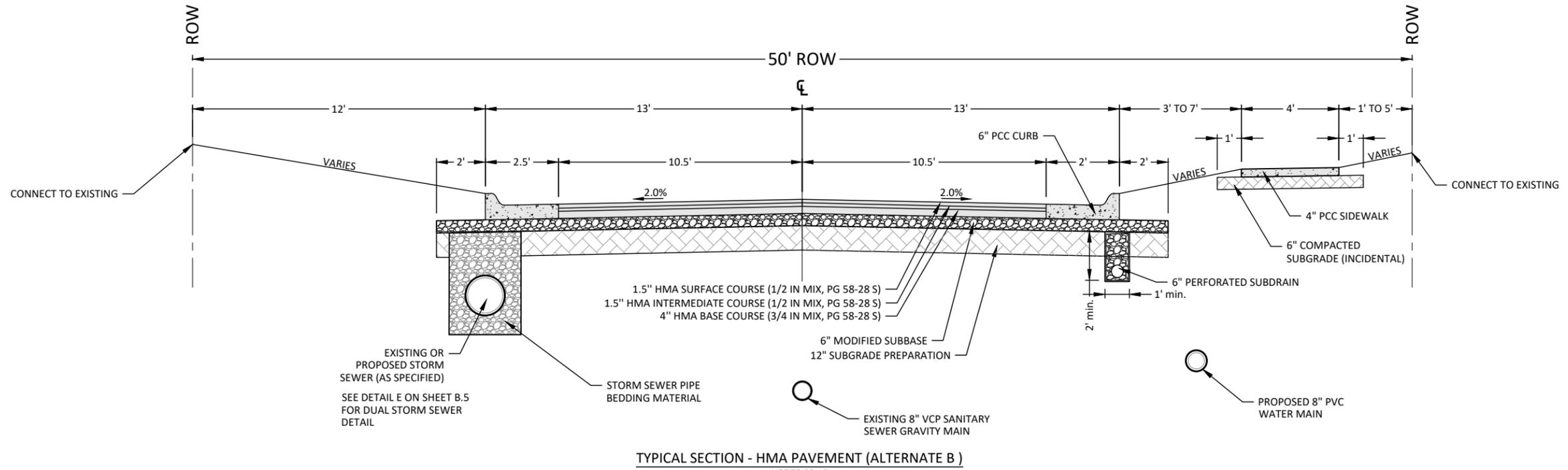
WINDSOR HEIGHTS
the heart of it all!

DESIGNED NAS	CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION TYPICAL SECTIONS - ALLISON AVENUE
SEALED JLE	
CHECKED NG	
CLIENT PROJ. NO. A13.118668	



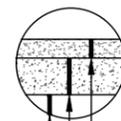
TYPICAL SECTION - PCC PAVEMENT (ALTERNATE A)

NOT TO SCALE



TYPICAL SECTION - HMA PAVEMENT (ALTERNATE B)

NOT TO SCALE



TYPICAL EXISTING PAVEMENT SECTION

NOT TO SCALE

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task_03_69th_Street\CAD\Sheet\5118668_01.dwg 1/20/2020 11:31 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

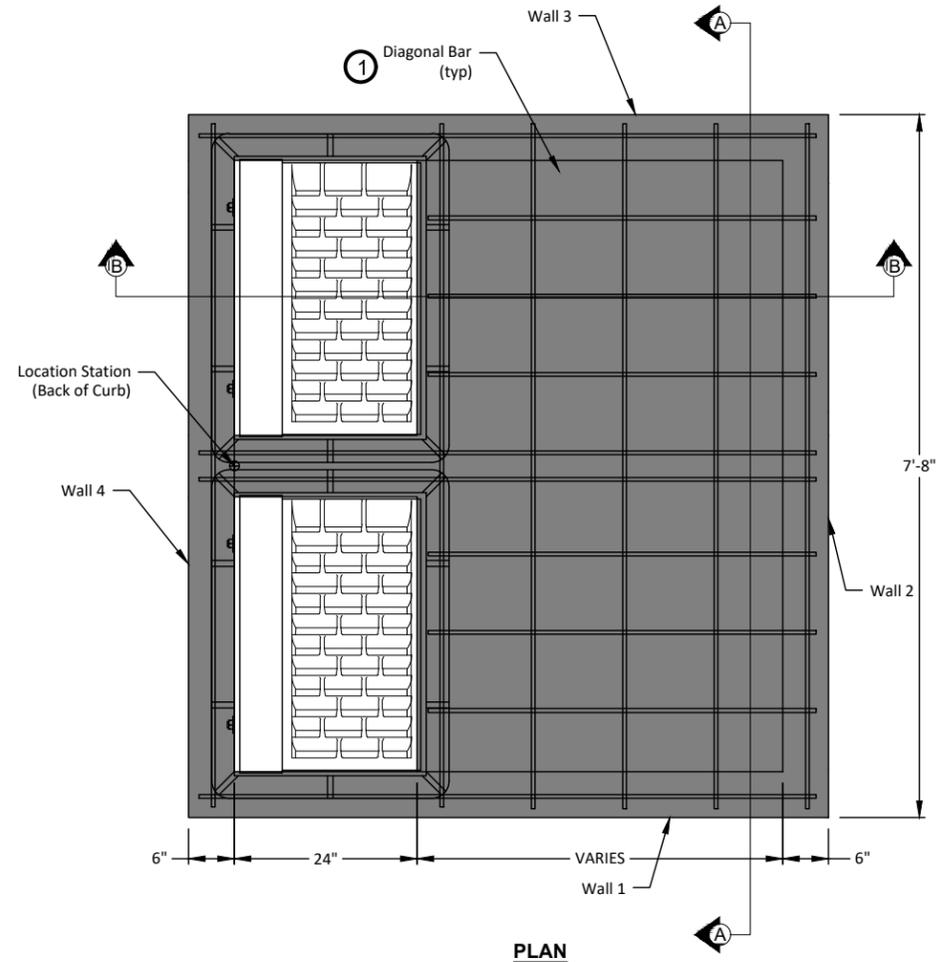


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

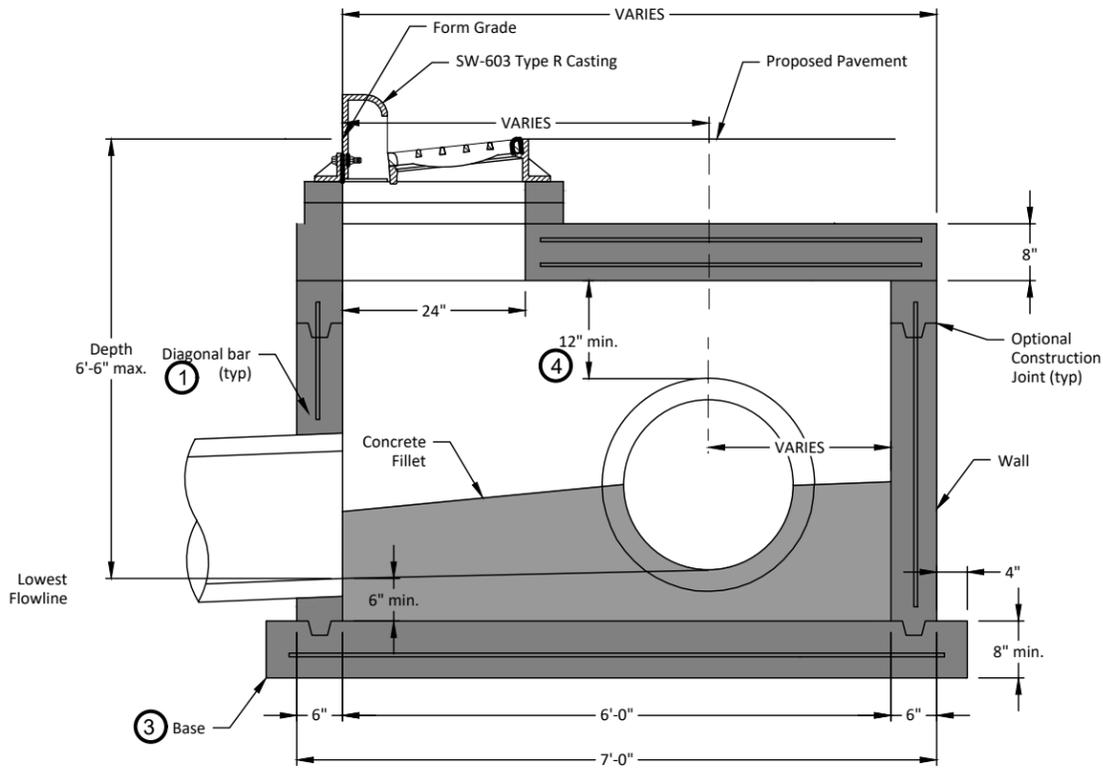


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TYPICAL SECTIONS - 69TH STREET



PLAN

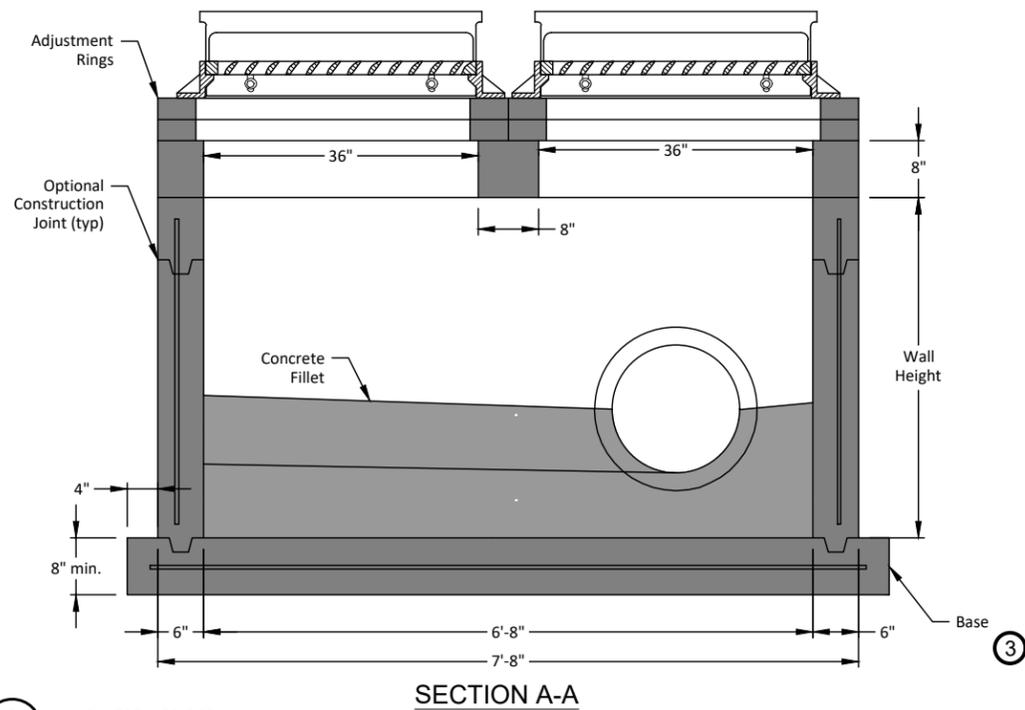


SECTION B-B

- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Refer to SW-514 for boxout details.
- ③ Cast-in-place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.
- ④ 12 inch minimum wall height above all pipes.

NOTES:

- 1. STORM SEWER PIPES IS AS SPECIFIED IN PLANS.
- 2. REINFORCING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.
- 3. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWING OF EACH STRUCTURE FOR APPROVAL.
- 4. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATION.



SECTION A-A

A
D.01 SW-506 MODIFIED
NTS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

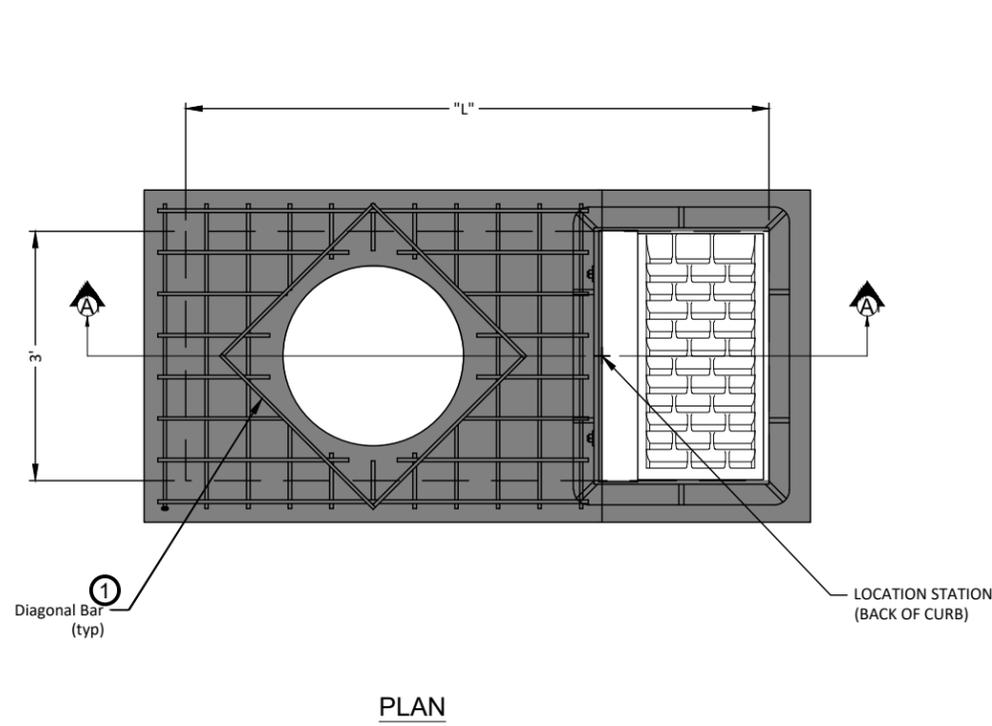
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TYPICAL DETAILS

Refer to SW-514 for boxout details.

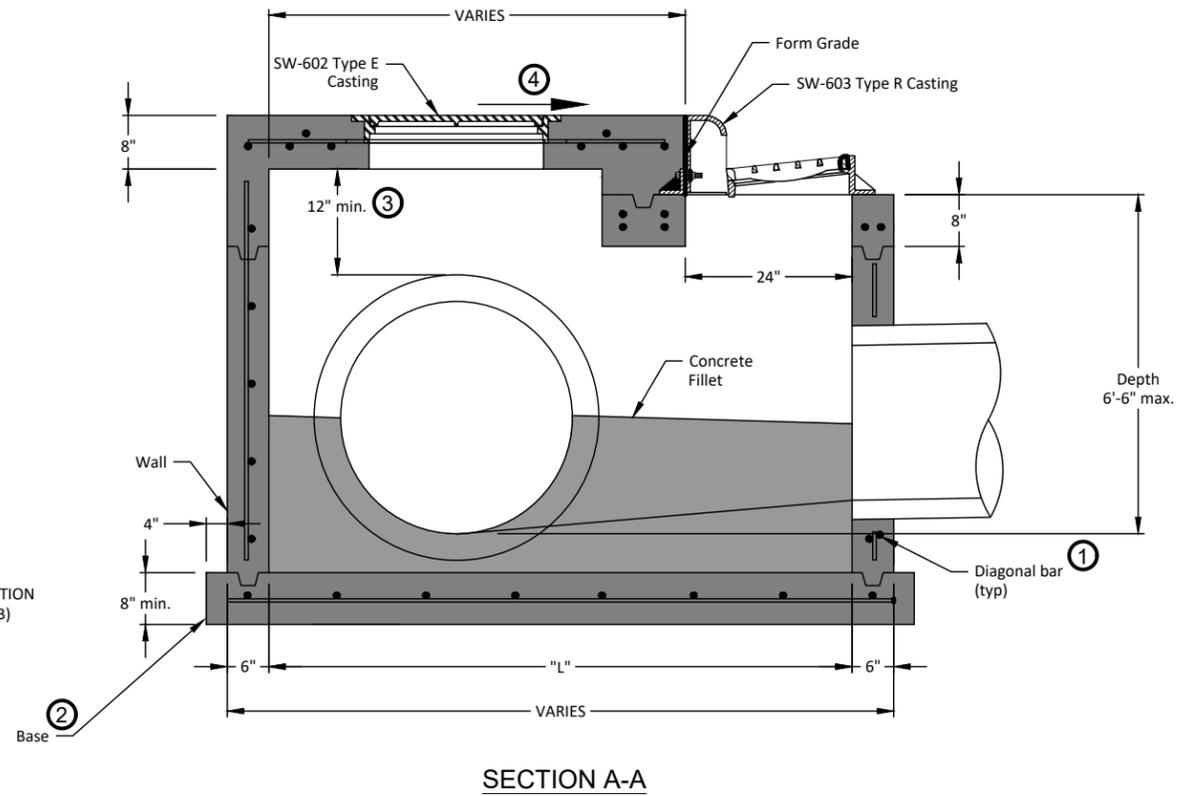
- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.
- ④ Slope of 1.5%

INTAKE DIMENSIONS	
INTAKE	LENGTH "L"
10	10'-0"
12	9'-0"
15	9'-0"

- NOTES:
- 1. STORM SEWER PIPES IS AS SPECIFIED IN PLANS.
 - 2. REINFORCING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.
 - 3. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWING OF EACH STRUCTURE FOR APPROVAL.
 - 4. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATION.

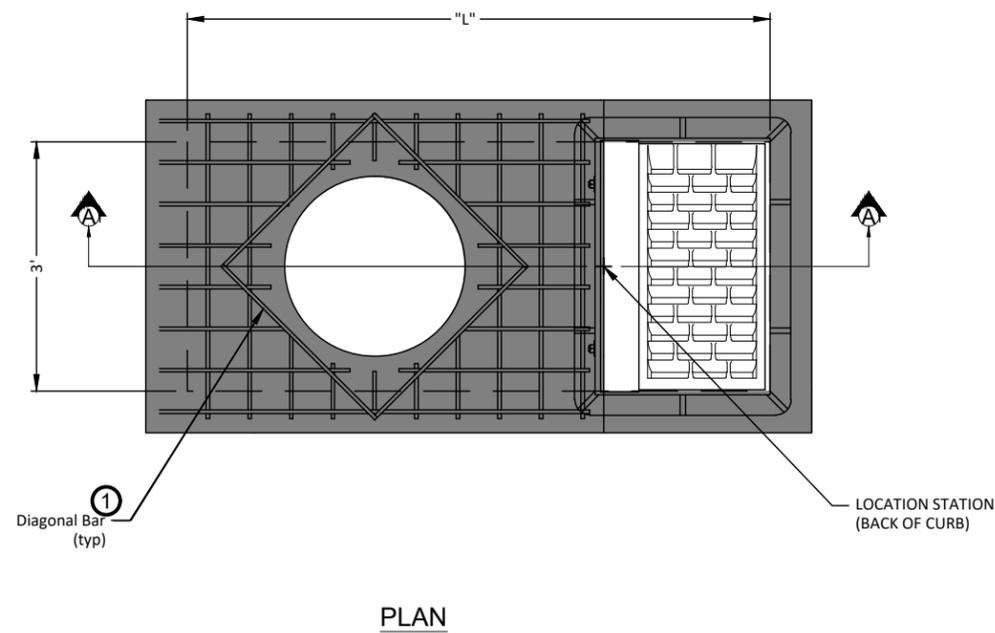


PLAN

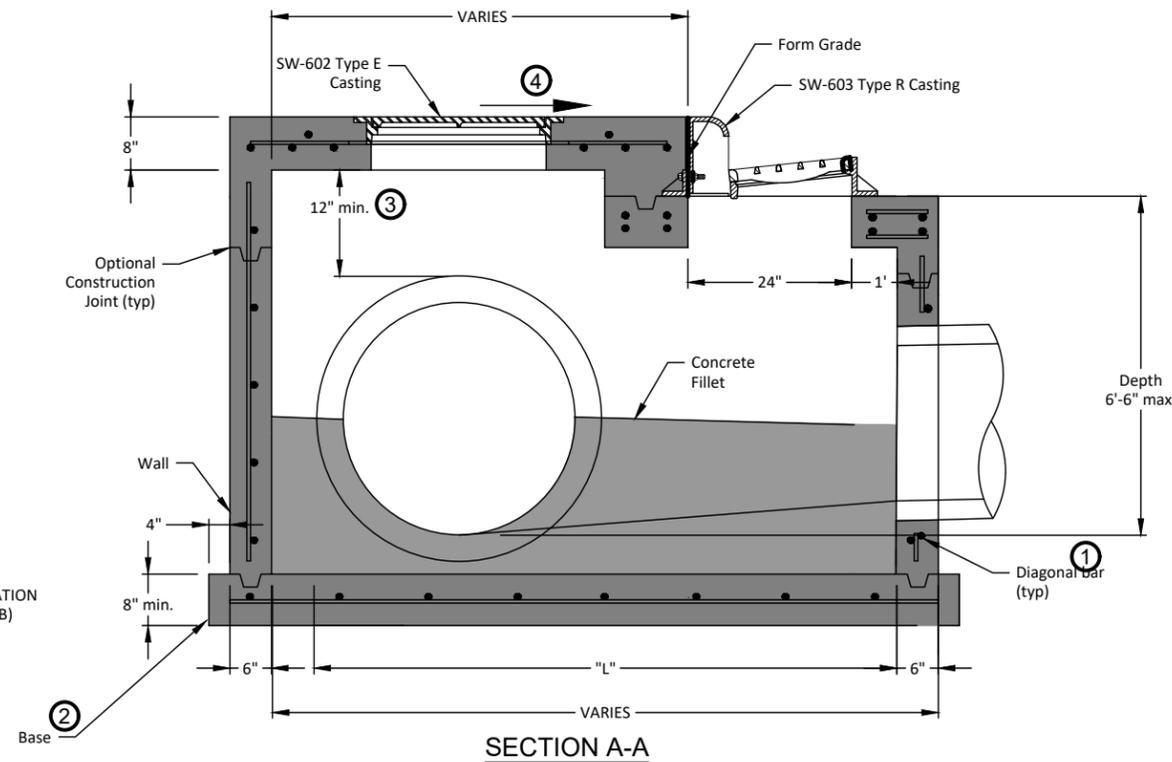


SECTION A-A

B
D.01 SW-504 MODIFIED (INTAKE 10, 12, AND 15)
NTS



PLAN



SECTION A-A

Refer to SW-514 for boxout details.

- ① Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.
- ④ Slope of 1.5%

INTAKE DIMENSIONS	
INTAKE	LENGTH "L"
14	9'-0"

- NOTES:
- 1. STORM SEWER PIPES IS AS SPECIFIED IN PLANS.
 - 2. REINFORCING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.
 - 3. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWING OF EACH STRUCTURE WITH REBAR PLACEMENT FOR APPROVAL.
 - 4. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATION.

C
D.01 SW-504 MODIFIED (INTAKE 14)
NTS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

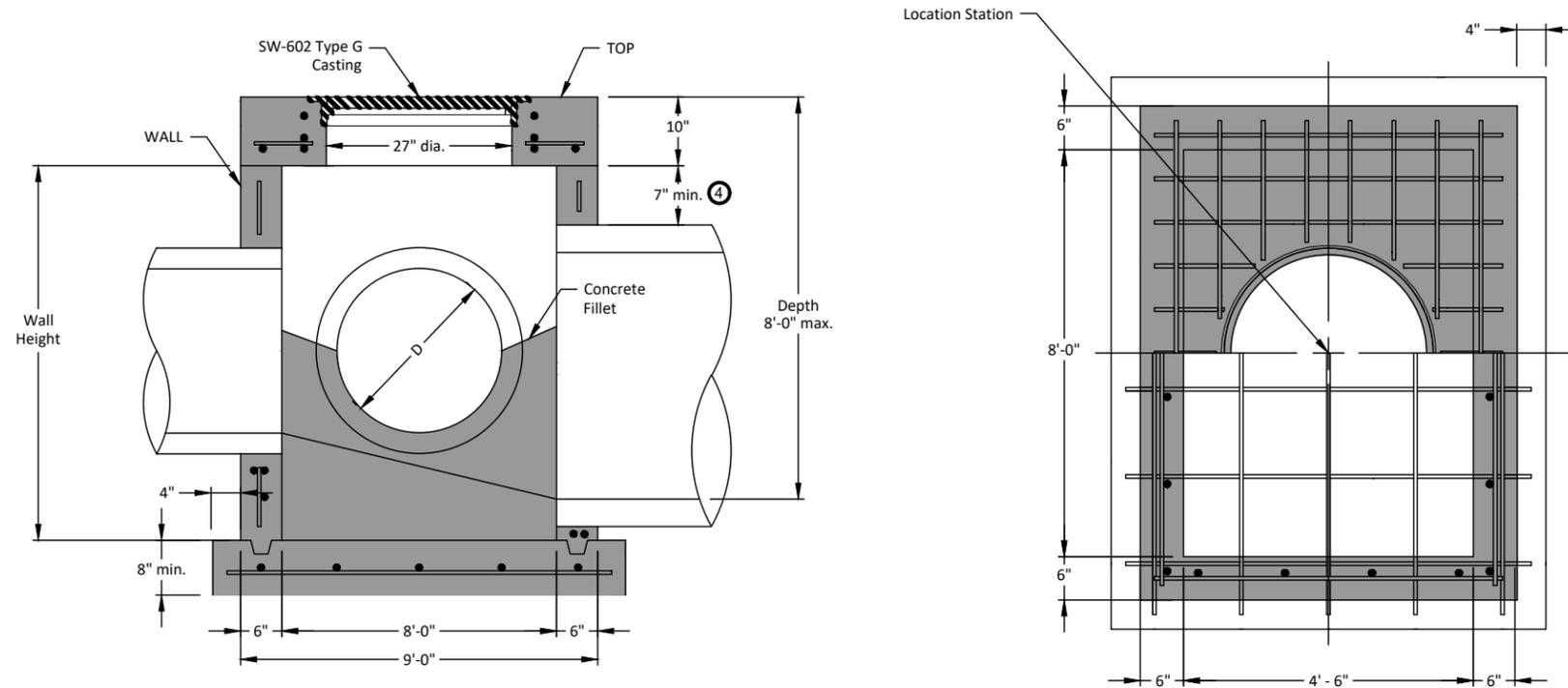


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TYPICAL DETAILS



Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

- ① Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ② Provide 6 inches of wall width (minimum) each side of pipe opening.
- ③ Provide two #4 hoop bars at top opening and at all pipe openings.
- ④ 7 inch minimum wall height above all pipes.

NOTES:

- 1. STORM SEWER PIPES IS AS SPECIFIED IN PLANS.
- 2. REINFORCING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.
- 3. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWING OF EACH STRUCTURE WITH REBAR PLACEMENT FOR APPROVAL.
- 4. CONTRACTOR SHALL VERIFY EXISTING PIPE LOCATION.

D
D.01 SW-406 MODIFIED
NTS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

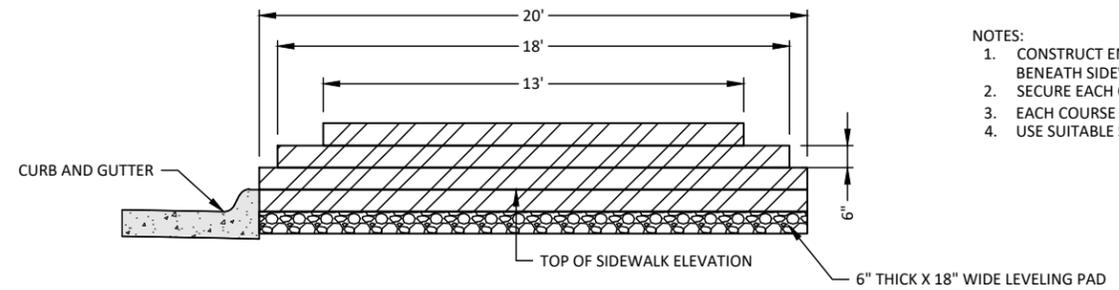
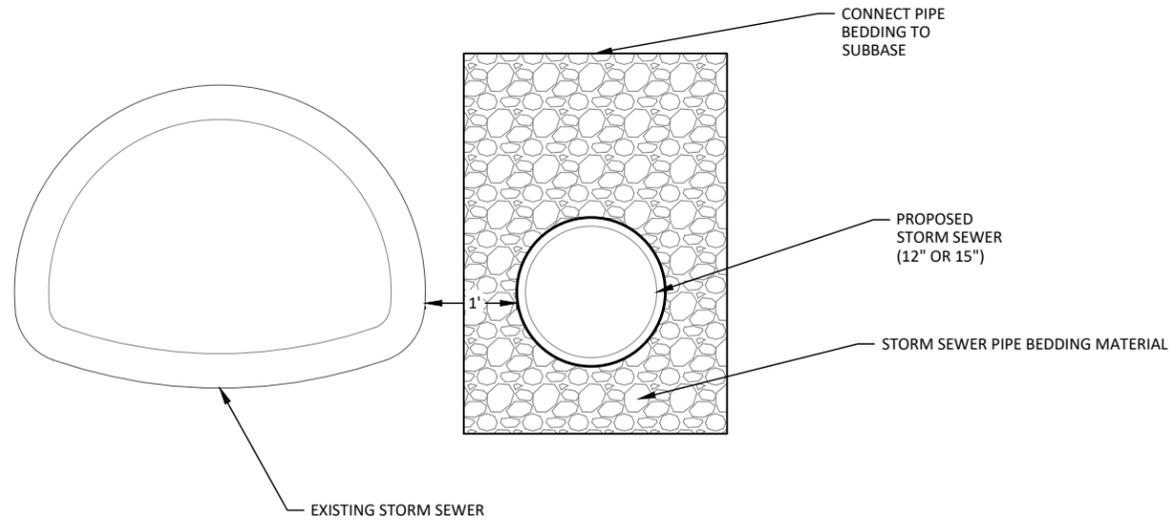


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA

2020 STREET RECONSTRUCTION

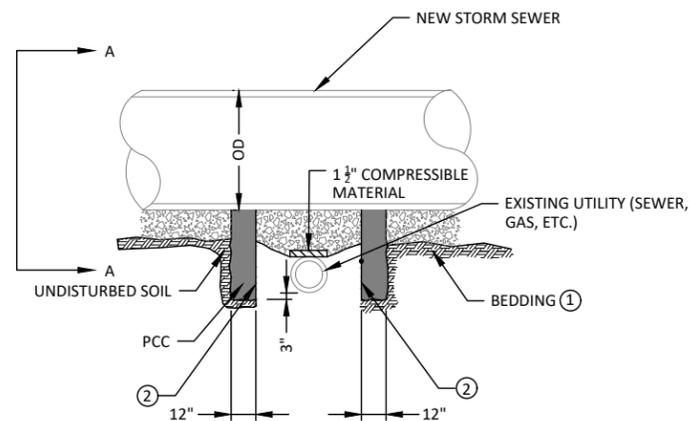
TYPICAL DETAILS



- NOTES:
1. CONSTRUCT ENTIRE FIRST COURSE OF TIMBER BENEATH SIDEWALK FINISH GRADE.
 2. SECURE EACH COURSE WITH SPIKES.
 3. EACH COURSE SHALL HAVE AN OFFSET OF 1/2".
 4. USE SUITABLE SOIL FOR BACKFILL MATERIAL.

E
DUAL STORM SEWER PIPES (EXISTING AND PROPOSED)
D.04/D.05
NTS

F
LANDSCAPE TIMBER RETAINING WALL
D.6
NTS



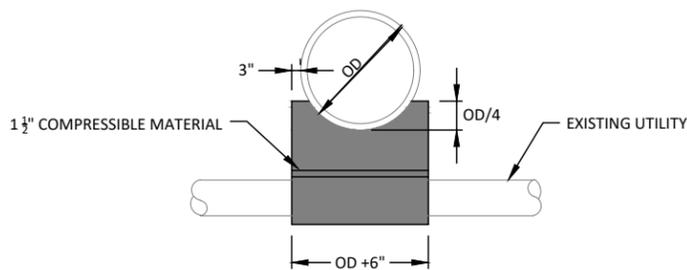
INSTALL PIPE SUPPORT FOR ALL NEW SEWERS 12 INCHES IN DIAMETER OR LARGER WHEN CLEARANCE BETWEEN BOTTOM OF NEW SEWER AND TOP OF EXISTING LINE IS 12 INCHES OR LESS.

- ① COMPLY WITH STANDARD ROAD PLAN SW-101.
- ② FROM INTERIOR SURFACE OF FOOTINGS. KEEP THE 12 INCH UTILITY CLEAR ZONE FREE OF CONCRETE.

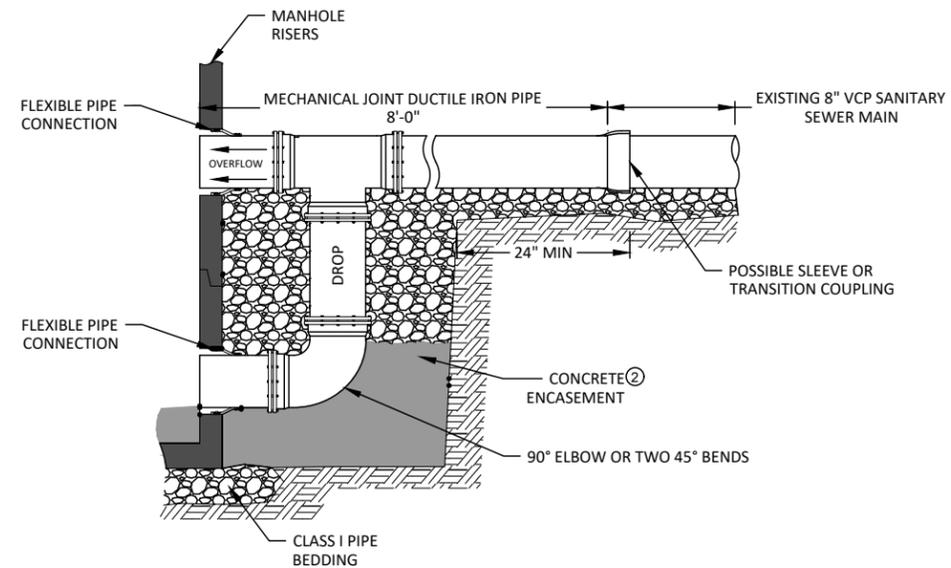
OD = OUTSIDE PIPE DIAMETER

Construct drop and overflow from ductile iron pipe of same diameter specified for sewer main. Provide mechanical joints for all ductile iron pipe and fittings.

- ① Place Class 1 bedding material, CLSM, flowable mortar, or concrete from top of elbow to bottom of sewer main.
- ② Encase elbow in concrete. 12 inches minimum on all sides.



SECTION A-A

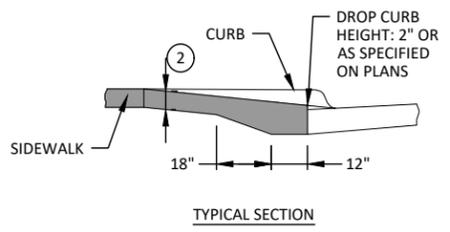
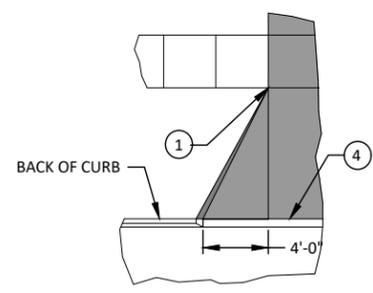
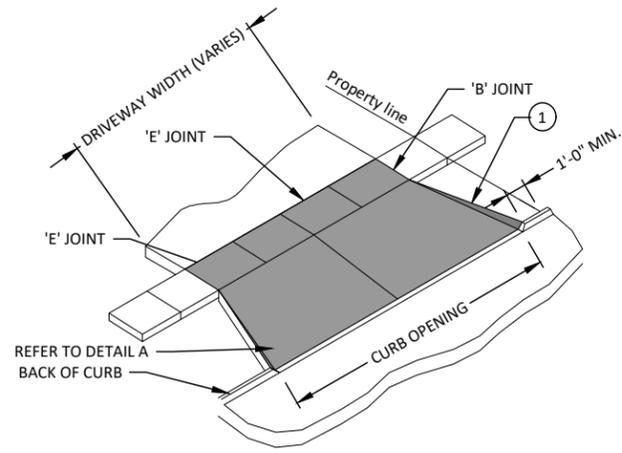


G
PIPE SUPPORT OVER EXISTING UTILITY LINE
M.1
NTS

H
DROP CONNECTION FOR SANITARY SEWER MANHOLES MODIFIED
MSA.1
NTS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

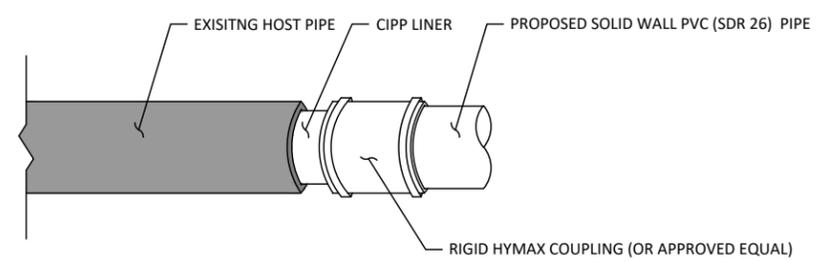
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668



- 1. TRANSITION THE CURB HEIGHT TO 0 INCHES AT END OF TAPER/RADIUS OR AT THE FRONT EDGE OF SIDEWALK. DO NOT EXTEND RAISED CURB ACROSS SIDEWALK.
- 2. PAVEMENT THICKNESS. RESIDENTIAL: 6 INCHES MINIMUM.
- 3. SIDEWALK THICKNESS THROUGH DRIVEWAY TO MATCH THICKNESS OF DRIVEWAY.
- 4. PROVIDE 'B' JOINT AT BACK OF CURB.
- 5. ALL APPROACH JOINTS SHALL BE SEALED.
- 6. TARGET CROSS SLOPE OF 1.5% WITH A MAXIMUM CROSS SLOPE OF 2.0%. IF SPECIFIED IN THE CONTRACT DOCUMENTS, CONSTRUCT THE SIDEWALK THROUGH THE DRIVEWAY 5 FEET WIDE TO SERVE AS A PASSING SPACE.
- 7. THE CURB DROP SHALL BE ACCOMPLISHED IN 1'.

I
D.01
NTS

TYPICAL DRIVEWAY

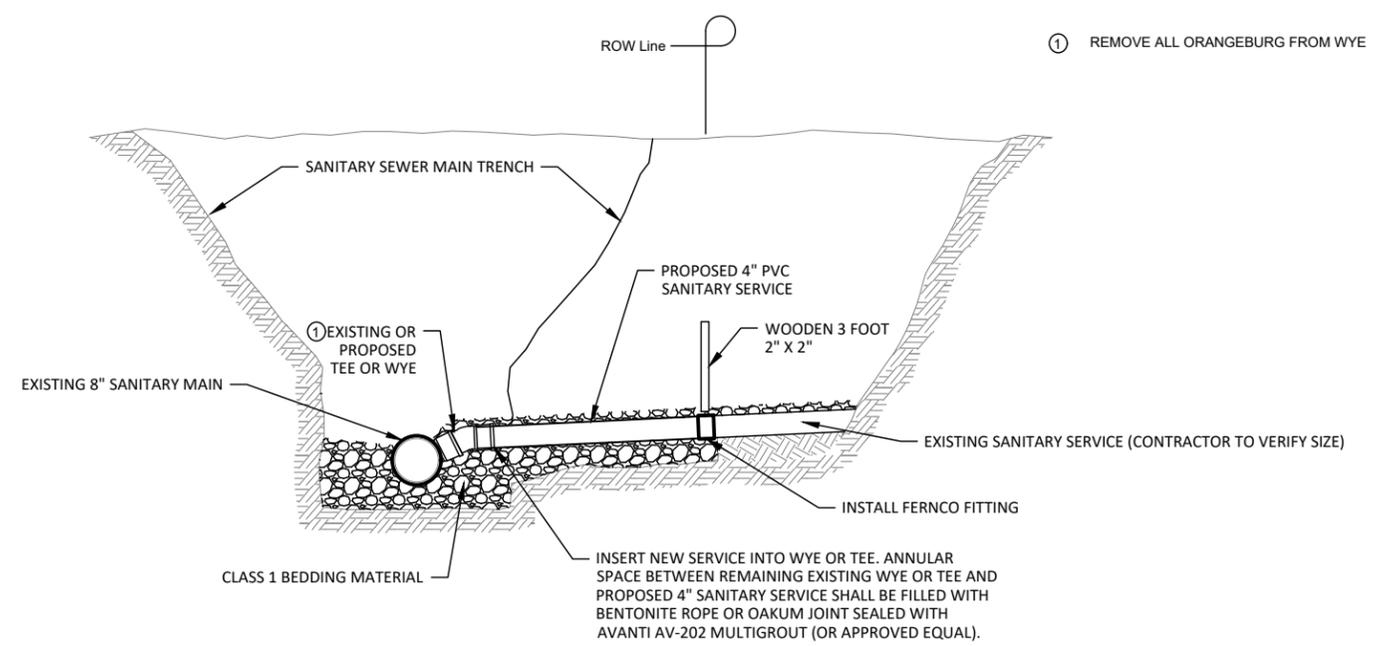


NOTES:

- 1. REMOVE A MINIMUM OF 12 INCHES OF HOST PIPE.
- 2. RIGID HYMAX COUPLING SHALL CONNECT THE NEW PIPE TO THE EXISTING CIPP LINER.
- 3. ANNULAR SPACE BETWEEN REMAINING HOST PIPE AND CIPP LINER SHALL BE FILLED WITH BENTONITE ROPE OR OAKUM JOINT SEALED WITH AVANTI AV-202 MULTIGROUT (OR APPROVED EQUAL).
- 4. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY EXISTING PIPE SIZE AND MATERIAL PRIOR TO CONSTRUCTION.

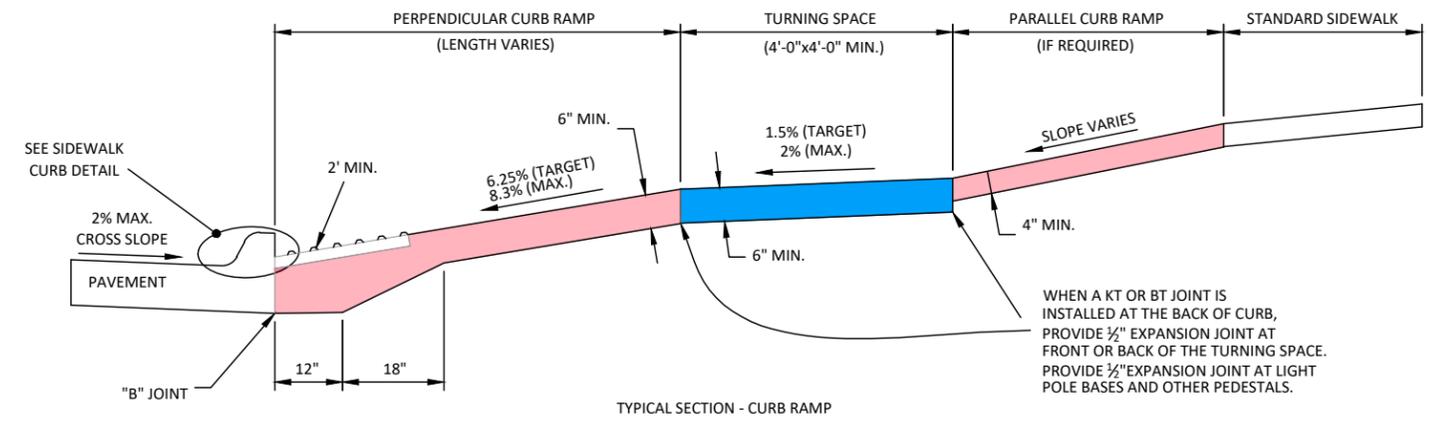
K
MSA.1
NTS

SANITARY SEWER MAIN CONNECTION

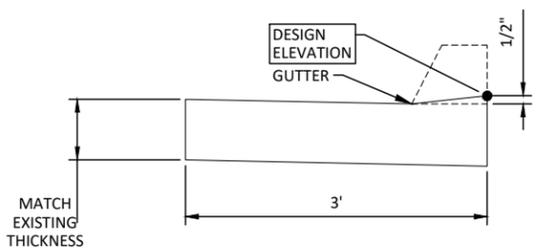


J
MSA.1
NTS

SANITARY SEWER SERVICE CONNECTION



- CURB RAMP
- TURNING SPACE
- DETECTABLE WARNING



M
S.1
NTS

SIDEWALK CURB DETAIL

L
S.07
NTS

TYPICAL SIDEWALK RAMP

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\2020\2020 STREET RECONSTRUCTION\DWG\01.dwg 17/02/2020 11:31 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

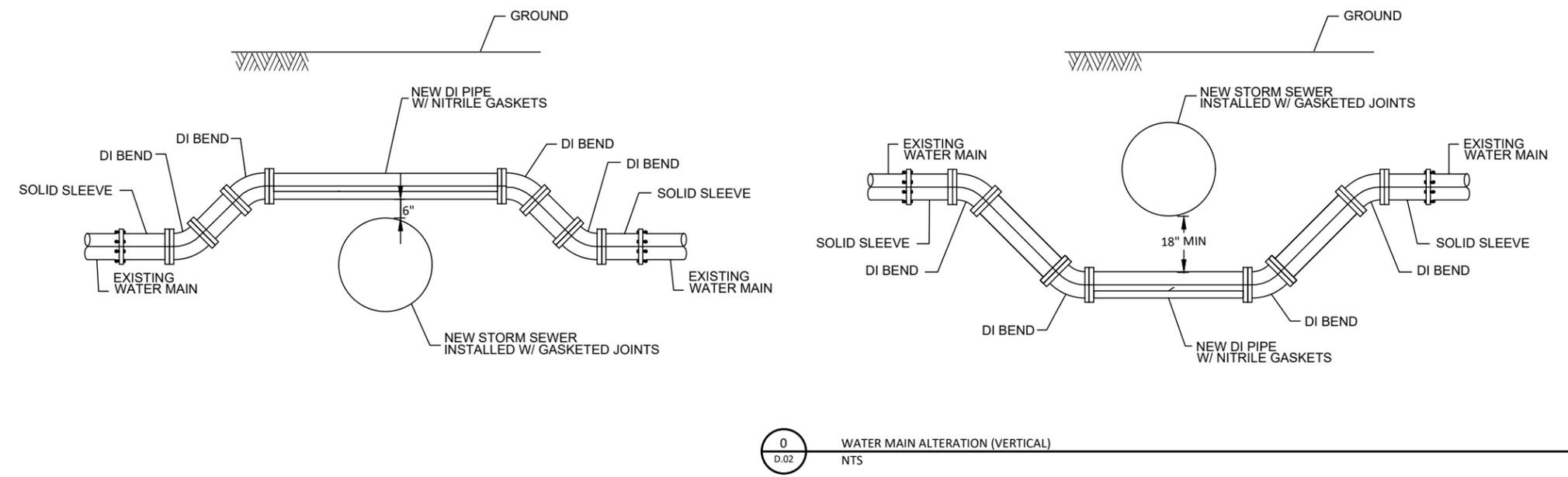
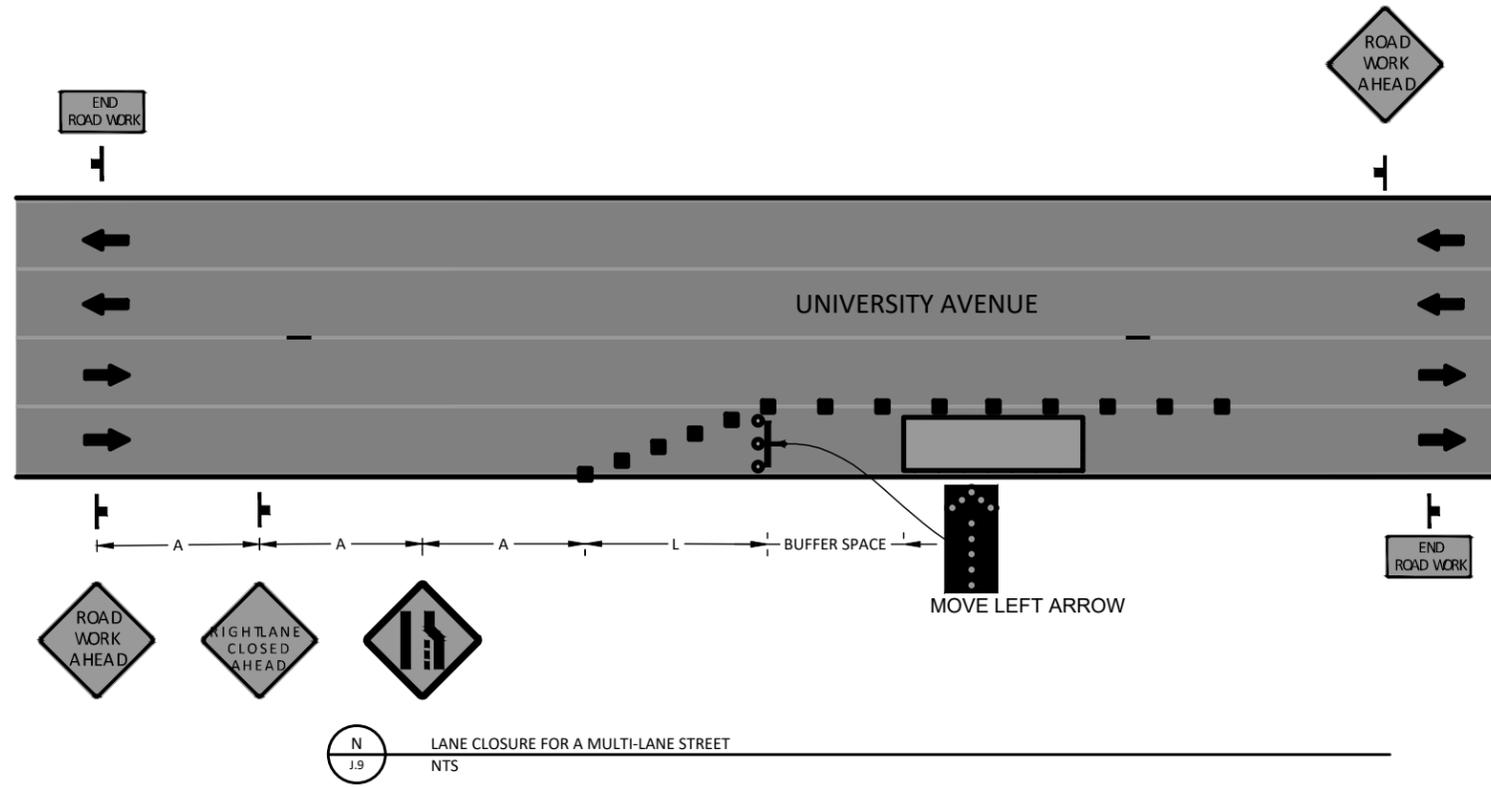


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TYPICAL DETAILS



WATER MAIN ALTERATION NOTES

1. CONSTRUCT ALTERATION PER FIELD CONDITIONS AND PER WATER MAIN ALTERATION SCHEDULE.
2. WATER MAIN ALTERATIONS SHALL BE CLASS 52 DUCTILE IRON PIPE.
3. RESTRAIN ALL WATER MAIN, FITTINGS, AND VALVES.
4. THRUST PROTECTION FOR EACH WATER MAIN ALTERATION SHALL BE PROVIDED PER THE STANDARD DETAILS FOR THRUST AND GRAVITY BLOCKS.
5. NITRILE GASKETS SHALL BE USED FOR ALL NEW WATER MAIN ALTERATION WATER MAIN, FITTINGS, AND VALVES.
6. CENTER NEW WATER MAIN ALTERATION ON THE OBSTRUCTION (STORM SEWER PIPE, MANHOLE, ETC) MINIMUM LENGTH "A" AS DETAILED IN THE ALTERATION SCHEDULE.
7. CONTRACTOR SHALL USE THE SIZE AND TYPE OF FITTINGS NECESSARY TO COMPLETE THE CONNECTION WITH THE EXISTING WATER MAIN AND AVOID THE OBSTRUCTION. 45 DEGREE BENDS ARE SHOWN IN THE DETAILS, BUT OFFSETS AND OTHER BENDS OR FITTINGS MAY BE USED AS NECESSARY TO AVOID ADDITIONAL CONFLICTS. CHANGES TO THE DETAIL OR ALIGNMENT SHALL BE APPROVED BY DMWW PERSONNEL.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task_03_09th_Street\CAD\SHEETS\1118668_01.dwg 1/20/2020 11:31 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TYPICAL DETAILS

STANDARD CONSTRUCTION NOTES:

1. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE 2020 EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF THE CURRENT SUDAS STANDARD SPECIFICATIONS ON SITE DURING ALL CONSTRUCTION ACTIVITIES.
2. ANY WORK CONDEMNED THAT IS DETERMINE TO BE DEFECTIVE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH SUDAS SECTION 1050. FAILURE TO REMOVE DEFECTIVE WORK MAY RESULT IN SUSPENSION OF OPERATIONS AND/OR WITHHOLDING OF PAYMENTS UNTIL DEFECTIVE WORK HAS BEEN REMOVED AND REPLACED.
3. PRIOR TO MOBILIZING OFF OF THE JOB SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO REQUEST A FINAL INSPECTION IN ACCORDANCE WITH SUDAS SECTION 1050.
4. THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES IN ACCORDANCE WITH SUDAS SECTION 1070.
5. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY AND COMPLYING WITH ALL CURRENT FEDERAL AND STATE OSHA REQUIREMENTS IN ACCORDANCE WITH SUDAS SECTION 1070.
6. LIMITS OF CONSTRUCTION ARE WITHIN THE CITY RIGHT OF WAY, UNLESS SHOWN OTHERWISE IN THE CONSTRUCTION DRAWINGS. WORK SHALL BE COMPLETED IN THE LIMITS OF CONSTRUCTION AND IN ACCORDANCE WITH SUDAS SECTION 1070.
7. THE CONTRACTOR SHALL UPDATE THE TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH SUDAS SECTION 1070, IF CONSTRUCTION ACTIVITIES DEVIATE FROM STAGING PLAN PROVIDED. ANY TRAFFIC CONTROL DEVICES OR SAFETY EQUIPMENT NEEDED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING AND TRAFFIC CONTROL PLAN WITH PLANNED DETOURS TO THE CITY OF WINDSOR HEIGHTS AND ENGINEER FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.
8. THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITIES MAY NOT BE INDICATED ON THESE PLANS. WORK SHALL BE COMPLETED IN ACCORDANCE WITH SUDAS SECTION 1070. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DAMAGE TO EXISTING UTILITIES.
9. IN ACCORDANCE WITH SUDAS SECTION 1070, THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL ITS WORK FROM DAMAGE AND SHALL PROTECT THE JURISDICTION'S PROPERTY AND ADJACENT PRIVATE PROPERTY FROM INJURY OR LOSS ARISING IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL REPAIR OR RESTORE ANY SUCH DAMAGE, INJURY, OR LOSS TO JURISDICTION PROPERTY OR ADJACENT PROPERTY. THE CONTRACTOR SHALL PROTECT TREES AND OTHER PROPERTY NOT MARKED FOR REMOVAL . THE CONTRACTOR SHALL SALVAGE ANY LANDSCAPING WITHIN THE RIGHT OF WAY UPON REQUEST BY THE ADJACENT PROPERTY OWNERS.
10. THE CONTRACTOR SHALL PRESERVE OR REPLACE ALL PROPERTY MONUMENTS ON THE PROJECT SITE IN ACCORDANCE WITH IOWA STATE CODE SECTION 355.6A AND SUDAS SECTION 1070.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE CLEANLINESS. UPON REQUEST BY THE ENGINEER, THE CONTRACTOR SHALL, AT ITS EXPENSE, CLEANUP AND REMOVE ALL REFUSE AND UNUSED MATERIALS OF ANY KIND RESULTING FROM THE WORK INCLUDING CLEANING AND SWEEPING OF ADJACENT STREETS. UPON FAILURE TO DO SO WITHIN THREE WORKING DAYS AFTER SUCH REQUEST BY THE ENGINEER, THE WORK MAY BE DONE BY THE JURISDICTION AND THE COST THERE OF CHARGED TO THE CONTRACTOR AND DEDUCTED FROM ITS FINAL PAYMENT IN ACCORDANCE WITH SUDAS SECTION 1070.
12. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PROGRESS SCHEDULE THAT WILL ENSURE THE COMPLETION OF THE PROJECT WITHIN THE TIME SPECIFIED. IF IT APPEARS THE RATE OF PROGRESS IS SUCH THAT THE CONTRACT WILL NOT BE COMPLETED WITHIN THE TIME ALLOWED, OR IF THE WORK IS NOT BEING EXECUTED IN A SATISFACTORY AND WORKMANLIKE MANNER, THE ENGINEER MAY ORDER THE CONTRACTOR TO TAKE SUCH STEPS AS NECESSARY TO COMPLETE THE WORK AS SPECIFIED IN THE CONTRACT IN ACCORDANCE WITH SUDAS SECTION 1080.
13. IF PROJECT IS SUBSTANTIALLY COMPLETED AND ONLY CLEANUP AND MINOR WORK ITEMS REMAIN FOR MORE THAN 30 CALENDAR DAYS, THE ENGINEER MAY RESTART CHARGING OF WORKING DAYS OR CHARGE PENALTIES EQUAL TO THE CONTRACT LIQUIDATED DAMAGES UNTIL ALL CORRECTIVE ACTION HAS BEEN COMPLETED IN ACCORDANCE WITH SUDAS SECTION 1080.

PROJECT NOTES:

1. CONTRACTOR SHALL PROPERLY SECURE PROJECT SITE AT THE END OF EACH DAY.
2. CONTRACTOR OPERATIONS CREATING OBJECTIONABLE LEVELS OF NOISE SHALL NOT BEGIN PRIOR TO 7:00 AM AND SHALL BE COMPLETED BY 7:00 PM.
3. IN ORDER TO AVOID ANY UNNECESSARY SURFACE BREAKS OR PREMATURE SPALLING, THE CONTRACTOR IS CAUTIONED TO EXERCISE EXTREME CARE WHEN PERFORMING ANY OF THE NECESSARY SAW CUTTING OPERATIONS FOR THE PROPOSED PAVEMENT REMOVAL. ADJACENT PAVEMENT THAT IS CHIPPED OR DAMAGED DUE TO SAW OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S COST IN ACCORDANCE WITH THE PROJECT SPECIFICATION DETAILS FOR STREET EXCAVATION AND PAVEMENT REPLACEMENT. ALL SAW CUTS ADJACENT TO EXISTING PAVEMENT AND CURBS SHALL BE FULL DEPTH.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NOT TO DAMAGE ADJACENT PAVEMENT, SIDEWALKS, DRIVES, MEDIANS, CURBS, STRUCTURES AND OTHER AREAS NOT DESIGNATED AS PART OF THE PATCHING WORK AREA. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO AREAS NOT DESIGNATED AS PART OF THE PATCHING WORK AT NO COST TO THE OWNER.

UTILITY COORDINATION NOTES:

1. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 292-8989 TO LOCATE EXISTING UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
2. ANTICIPATED UTILITY CONFLICTS HAVE BEEN IDENTIFIED AND EACH RESPECTIVE UTILITY OWNER HAS BEEN INFORMED OF THE POTENTIAL CONFLICTS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES WITHIN THE PROJECT SITE.
3. IF A CONFLICT IS DISCOVERED BY THE CONTRACTOR, NOTIFY THE ENGINEER IMMEDIATELY AND COORDINATE WITH OWNER OF UTILITY TO RESOLVE CONFLICT.
4. UTILITY CONTACT NUMBERS:

WINDSOR HEIGHTS PUBLIC SERVICES (SEWERS)	DALTON JACOBUS (515-499-5998)	DJACOBUS@WINDSORHEIGHTS.ORG
DES MOINES WATER WORKS	CARLA SCHUMACHER (515-323-6227)	CSHUMACHER@DMWWW.COM
CLIVE WATER WORKS	JEFF MAY (515-223-6231)	
MID-AMERICAN ENERGY (ELECTRIC)	DUSTIN WEDLUND (515-252-6565)	DLWEDLUND@MIDAMERICAN.COM
MID-AMERICAN ENERGY (GAS)	DUSTIN WEDLUND (515-252-6565)	DLWEDLUND@MIDAMERICAN.COM
MID-AMERICAN ENERGY (ELECTRIC) - EMERGENCY	1-800-799-4443	
MID-AMERICAN ENERGY (GAS) - EMERGENCY	1-800-595-5325	
IOWA COMMUNICATIONS NETWORK	TIMOTHY FLICKINGER (515-491-3750)	TIMOTHY.FLICKINGER@IOWA.GOV
MEDIACOM	PAUL MAY (515-554-2648)	PMAY@MEDIACOMCC.COM
CENTURYLINK COMMUNICATIONS	DUSTIN WITHERS (515-782-0618)	DUSTIN.WITHERSCENTURYLINK.COM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 GENERAL NOTES

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	69TH ST	ALLISON	DIV. 2	TOTAL
SECTION 2010 - EARTHWORK, SUBGRADE, AND SUBBASE							
1	2010-108-D-1	TOPSOIL, ON-SITE	CY	720	411		1131.0
2	2010-108-E-0	EXCAVATION, CLASS 10	CY	659	79		738.0
3	2010-108-E-0	EXCAVATION, CLASS 10 (BORROW)	CY		166		166.0
4	2010-108-G-0	SUBGRADE PREPARATION	SY	6,354	3,525		9879.0
5	2010-108-H-0	SUBGRADE TREATMENT, GEO-GRID	SY	3,177	1,763		4940.0
6	2010-108-I-0	SUBBASE, MODIFIED, 6 IN.	SY	6,354	3,525		9879.0
7	2010-108-X-0	SURFACE AGGREGATE	TON	100	100		200.0
SECTION 3010 - TRENCH EXCAVATION AND BACKFILL							
8	3010-108-D-0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	CY	200	200		400.0
SECTION 4010 - SANITARY SEWERS							
9	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION	EA	13	5		18.0
10	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION (STORM)	EA		1		1.0
11	4010-108-X-0	CONNECTION TO EXISTING SANITARY SEWER	EA	6	9		15.0
SECTION 4020 - STORM SEWERS							
12	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 12 IN.	LF	664			664.0
13	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 15 IN.	LF	272	377		649.0
14	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 18 IN.	LF	148			148.0
15	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 24 IN.	LF	72			72.0
16	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 36 IN.	LF		539		539.0
17	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 43" X 26" ARCH	LF	61			61.0
18	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 51" X 31" ARCH	LF	45			45.0
19	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 58" X 36" ARCH	LF	49			49.0
20	4020-108-C-0	REMOVAL OF STORM SEWER	LF	330	40		370.0
21	4020-108-X-0	TELEWISE EXISTING STORM SEWER	LF	2,200			2200.0
SECTION 4040 - SUBDRAINS AND FOOTING DRAINS COLLECTORS							
22	4040-108-A-0	SUBDRAIN, TYPE 1, PERFORATED HDPE, 6 IN.	LF	2,111.0	1,450.0		3561.0
23	4040-108-C-0	SUBDRAIN CLEANOUT, TYPE A-1, 6 IN.	EA	6.0	7.0		13.0
24	4040-108-D-0	SUBDRAIN OUTLETS AND CONNECTIONS, CMP, 6 IN.	EA	6.0	7.0		13.0
25	4040-108-D-0	CONNECTION TO SUBDRAIN PIPE	EA	2.0	3.0		5.0
SECTION 4050 - PIPE REHABILITATION							
26	4050-108-C-2	SPOT REPAIRS BY PIPE REPLACEMENT, 8", SDR 26	LF	48.0			48.0
SECTION 5010 - PIPE AND FITTINGS							
27	5010-108-X-0	6" CL 52 DIP PIPE WITH TRACER WIRE	LF			10.0	10.0
28	5010-108-X-1	8" CL 52 DIP PIPE WITH TRACER WIRE	LF			376.0	376.0
29	5010-108-X-2	8" CL 52 DIP RESTRAINED JOINT PIPE WITH TRACER WIRE	LF			84.0	84.0
30	5010-108-X-3	8" C900 DR18 PVC PIPE WITH TRACER WIRE	LF			1,120.0	1120.0
31	5010-108-X-4	8" C900 DR18 PVC RESTRAINED JOINT PIPE WITH TRACER WIRE	LF			240.0	240.0
32	5010-108-X-5	12" C900 PVC CASING PIPE	LF			20.0	20.0
33	5010-108-X-6	FITTING, 8" BEND	EA			6.0	6.0
34	5010-108-X-7	FITTING, 8" X 6" REDUCER	EA			1.0	1.0
35	5010-108-X-8	FITTING, 6" SOLID SLEEVE	EA			1.0	1.0
36	5010-108-X-9	FITTING, 8" SOLID SLEEVE	EA			2.0	2.0
37	5010-108-X-10	FITTING, 8" X 8" TEE (STA 9+96)	EA			1.0	1.0
38	5010-108-X-11	FITTING, 4" CAP/PLUG	EA			4.0	4.0
39	5010-108-X-12	FITTING, 4" CAP/PLUG WITH MIN. 2" BLOWOFF	EA			3.0	3.0
40	5010-108-X-13	FITTING, 8" CAP/PLUG	EA			2.0	2.0
41	5010-108-X-14	8" VALVE	EA			3.0	3.0
42	5010-108-X-15	HYDRANT ASSEMBLY	EA			5.0	5.0
43	5010-108-X-16	HYDRANT ASSEMBLY WITH EXTRA BENDS	EA			1.0	1.0
44	5010-108-X-17	PREPARE EXCAVATION FOR TAPPING SLEEVE & VALVE (8X8)	EA			1.0	1.0
45	5010-108-X-18	PREPARE TEE AT SCHOOL ST & 69TH ST	EA			1.0	1.0
46	5010-108-X-19	REMOVE 6" WATER MAIN & APPURTENANCES ON MOTT AVE	LF			37.0	37.0
47	5010-108-X-20	NEW 1" WATER SERVICE (SAME SIDE)	EA			22.0	22.0
48	5010-108-X-21	NEW 1" WATER SERVICE (OPPOSITE SIDE)	EA			29.0	29.0
49	5010-108-X-22	CATHODIC PROTECTION TEST STATION	EA			1.0	1.0
50	5010-108-X-23	MAGNESIUM ANODE, 32-POUND	EA			6.0	6.0
51	5010-108-X-24	TYPE 2 WATER MAIN ALTERATION (HORIZONTAL)	EA		4.0		4.0
52	5010-108-X-25	NEW STOP BOX HOUSING	EA		8.0		8.0
53	5010-108-X-26	NEW STOP BOX ROD	EA		8.0		8.0
54	5010-108-X-27	CHECK DEPTH OF WATER SERVICE	EA		1.0		1.0
55	5010-108-X-28	RELOCATION OF WATER SERVICE	EA		9.0		9.0
56	5010-108-X-29	POLYSTYRENE INSULATION, 2 IN.	SF	100.0	100.0		200.0
SECTION 5020 - VALVES, FIRE HYDRANTS, AND APPURTENANCES							
57	5020-108-F-0	VALVE BOX EXTENSION	EA		4.0		4.0
58	5020-108-H-0	FIRE HYDRANT ADJUSTMENT	EA		3.0		3.0
SECTION 6010 - STRUCTURES FOR SANITARY AND STORM SEWERS							
59	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN.	EA		1.0		1.0
60	6010-108-A-0	STORM MANHOLE, SW-401, 48 IN. DIA.	EA	1.0			1.0
61	6010-108-A-0	STORM MANHOLE, SW-401, 60 IN. DIA.	EA		2.0		2.0
61	6010-108-A-0	STORM MANHOLE, SW-401, 84 IN. DIA.	EA		2.0		2.0
62	6010-108-A-0	STORM MANHOLE, SW-406, MODIFIED	EA	3.0			3.0
63	6010-108-B-0	INTAKE, SW-501	EA	3.0			3.0
64	6010-108-B-0	INTAKE, SW-503	EA	4.0			4.0

Item #5B

65	6010-108-B-0	INTAKE, SW-504 MODIFIED	EA	2.0			2.0
66	6010-108-B-0	INTAKE, SW-505	EA	2.0	7.0		9.0
67	6010-108-B-0	INTAKE, SW-506	EA	2.0			2.0
68	6010-108-B-0	INTAKE, SW-545	EA		2.0		2.0
69	6010-108-C-0	DROP CONNECTION	EA		1.0		1.0
70	6010-108-E-0	MANHOLE ADJUSTMENT, MINOR	EA	8.0	3.0		11.0
71	6010-108-G-0	CONNECTION TO EXISTING MANHOLE	EA	3.0			3.0
72	6010-108-H-0	REMOVE MANHOLE	EA	4.0	1.0		5.0
73	6010-108-H-0	REMOVE INTAKE	EA	12.0	2.0		14.0
SECTION 7030 - SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS							
74	7030-108-A-0	REMOVAL OF SIDEWALK	SY	602.0			602.0
75	7030-108-A-0	REMOVAL OF DRIVEWAY	SY	956.0	624.0		1580.0
76	7030-108-E-0	SIDEWALK, PCC, 4 IN.	SY	615.0			615.0
77	7030-108-E-0	SIDEWALK, PCC, 6 IN.	SY	31.0			31.0
78	7030-108-G-0	DETECTABLE WARNING	SF	48.0			48.0
79	7030-108-H-1	DRIVEWAY, PAVED, TYPE A, 6 IN.	SY	1,092.0	713.0		1805.0
SECTION 7040 - PAVEMENT REHABILITATION							
80	7040-108-H-0	PAVEMENT REMOVAL	SY	5,250.0	3,109.0		8359.0
SECTION 8030 - TEMPORARY TRAFFIC CONTROL							
81	8030-108-A-0	TEMPORARY TRAFFIC CONTROL	LF	0.5	0.5		1.0
SECTION 9010 - SEEDING							
82	9010-108-B-0	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING	AC	0.9	0.6		1.5
83	9010-108-D-0	WATERING	MGAL	0.2	0.2		0.4
SECTION 9040 - EROSION AND SEDIMENT CONTROL							
84	9040-108-A-1	SWPPP PREPARATION	LS	0.5	0.5		1.0
85	9040-108-A-2	SWPPP MANAGEMENT	LS	0.5	0.5		1.0
86	9040-108-D-1	FILTER SOCK, 9 IN.	LF	4,585.0	2,585.0		7150.0
87	9040-108-Q-2	EROSION CONTROL MULCHING, HYDROMULCHING	AC	0.9	0.6		1.5
88	9040-108-T-1	INLET PROTECTION DEVICE, MAINTENANCE, AND REMOVAL	EA	24.0	17.0		41.0
SECTION 11020 - MOBILIZATION							
89	11020-108-A	MOBILIZATION	LS	0.5	0.5		1.0
SECTION 11030 - TEMPORARY SERVICES DURING CONSTRUCTION							
90	11030-108-A	MAINTENANCE OF POSTAL SERVICE	LS	0.5	0.5		1.0
91	11030-108-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	0.5	0.5		1.0
92	11030-108-X	RESIDENT COURTESY CART	LS	0.5	0.5		1.0
SECTION 12010 - SPECIALTY ITEMS							
93	12010-XXX-X-0	CURBIDE MAILBOX	EA		24.0		24.0
94	12010-XXX-X-1	TREE PROTECTION FENCE	LF	500.0			500.0
95	12010-XXX-X-2	LANDSCAPE TIMBERS	SY	70.0			70.0
96	12010-XXX-X-3	FOUNDATION ROCK	TON	50.0			50.0
97	12010-XXX-X-4	MANUFACTURED SAND	TON	100			100.0

ALTERNATE A							
A1	7010-108-A-0	PAVEMENT, PCC, 7 IN.	SY	5,556.0	3,176.0		8,732
A2	11050-108-A-0	CONCRETE WASHOUT	LS	0.5	0.5		1

ALTERNATE B							
B1	7010-108-A-0	PAVEMENT, PCC, 7 IN.	SY	154	90		244
B2	7010-108-E-0	CURB AND GUTTER, 2 FT, 7 IN. THICK W/ 6" STANDARD CURB	LF	3,590.0	2,030.0		5,620
B3	7020-108-B-0	PAVEMENT, FULL DEPTH HMA PAVING, ST. PG 58-28S	SY	4,700.0	2,635.0		7,335
B4	11050-108-A-0	CONCRETE WASHOUT	LS	0.5	0.5		1

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
ESTIMATED QUANTITIES

SHEET

C.2

ESTIMATE REFERENCE NOTES

Item No.	Item Code	Description
1	2010-108-D-1	TOPSOIL, ON-SITE TOPSOIL WITHIN THE GRADING LIMITS OF THE PROJECT SHALL BE STRIPPED, SALVAGED, AND RESPREAD AT A MINIMUM DEPTH OF 6".
2	2010-108-E-0	EXCAVATION, CLASS 10
3	2010-108-E-0	EXCAVATION, CLASS 10 (BORROW)
4	2010-108-G-0	SUBGRADE PREPARATION TO BE USED AS APPROVED BY ENGINEER. CONTRACTOR SHALL COMPACT SUBGRADE AND PROOF ROLL. IF SUBGRADE PASSES PROOF ROLL, NO SUBGRADE PREPARATION WILL BE REQUIRED. IF REQUIRED, SUBGRADE PREPARATION MUST BE COMPLETED IN 2 - 6" LIFTS. MOISTURE AND DENSITY TESTING WILL BE PROVIDED BY THE OWNER. CHECKING OF SUBGRADE WILL BE PERFORMED WITH ROUGH GRADING STAKES SET 25' APART.
5	2010-108-H-0	SUBGRADE TREATMENT, GEO-GRID THIS ITEM WILL BE USED ONLY WHEN THE ENGINEER DETERMINES IT IS REQUIRED TO PROVIDE SUITABLE SUBGRADE. LOCATION(S) OF TREATMENT, IF ANY, WILL BE SPECIFIED BY THE ENGINEER. MATERIAL SHALL MEET OR EXCEED THE REQUIREMENTS FOR TYPE 2 GEOGRID.
6	2010-108-I-0	SUBBASE, MODIFIED, 6 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE. ENGINEER WILL VERIFY GRADE AFTER TRIMMING WITH PAVING HUBS.
7	2010-108-X-0	SURFACE AGGREGATE THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO INSTALL TEMPORARY SURFACE AGGREGATE AS DIRECTED BY ENGINEER.
8	3010-108-D-0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL UNSUITABLE BACKFILL MATERIAL SHALL BE REPLACED WITH GRANULAR BACKFILL OR OTHER APPROVED MATERIAL AS APPROVED BY THE ENGINEER. GRANULAR BACKFILL IS INCIDENTAL TO THIS ITEM. THIS ITEM WILL BE PAID BY THE CUBIC YARD - LOOSE VOLUME. NO RECYCLED CONCRETE OR RIP RAP ALLOWED. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID. QUANTITY IS ESTIMATED AND USED TO ESTABLISHED A UNIT PRICE.
9	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION REMOVAL OF EXISTING PIPE, TRENCH EXCAVATION, FURNISHING NEW PIPE AND BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, CONNECTION BACK TO EXISTING SERVICE, COMPACTION, TESTING, AND INSPECTION. INFORM RESIDENT 48 HOURS PRIOR TO WORK ON THAT SERVICE. VISUAL INSPECTION BY ENGINEER IS REQUIRED. SEE DETAIL FOR SANITARY SEWER SERVICE RELOCATION.
10	4010-108-F-0	SANITARY SEWER SERVICE RELOCATION (STORM) REMOVAL OF EXISTING PIPE, TRENCH EXCAVATION, FURNISHING NEW PIPE AND BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, CONNECTION BACK TO EXISTING SERVICE, COMPACTION, TESTING, AND INSPECTION. INFORM RESIDENT 48 HOURS PRIOR TO WORK ON THAT SERVICE. VISUAL INSPECTION BY ENGINEER IS REQUIRED. QUANTITY IS ESTIMATED, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID. USED FOR ANY ALTERNATION TO EXISTING SANITARY SERVICE DUE TO STORM SEWER PLACEMENT. POTHOLING INCIDENTAL.
11	4010-108-X-0	CONNECTION TO EXISTING SANITARY SEWER THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO MAKE A WATER TIGHT CONNECTION TO EXISTING SANITARY SEWER MAIN. ALL CONNECTIONS TO EXISTING PIPE SHALL BE RIGID PIPE CONNECTIONS. ANY METAL CONNECTION HARDWARE SHALL BE STAINLESS STEEL. FLEXIBLE PIPE CONNECTIONS WITH A CONCRETE COLLAR MAY BE USED IN LIEU OF RIGID PIPE CONNECTIONS, BUT ONLY AFTER APPROVAL BY ENGINEER. ALLOW SUFFICIENT TIME FOR CONCRETE TO CURE PRIOR TO BACKFILL. ANY EXISTING SEWERS WITH CURED-IN-PLACE PIPE (CIPP) LINER SHALL BE CUT AND THE CIPP LINER EXPOSED BY REMOVING A MINIMUM OF 12 INCHES OF HOST PIPE. RIGID HYMAX COUPLINGS (OR APPROVED EQUAL) SHALL CONNECT THE NEW PIPE TO THE EXISTING CIPP LINER (NOT THE HOST PIPE). ANNULAR SPACE BETWEEN REMAINING HOST PIPE AND CIPP LINER SHALL BE FILLED WITH BENTONITE ROPE OR OAKUM AND JOINT SEALED WITH AVANTI AV-202 MULTIGROUT (OR APPROVED EQUAL). SEE DETAIL.
12	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 12 IN.
13	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 15 IN.
14	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 18 IN.
15	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 24 IN.
16	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 36 IN.
17	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 43" X 26" ARCH
18	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 51" X 31" ARCH
19	4020-108-A-1	STORM SEWER, TRENCHED, RCP, 58" X 36" ARCH INCLUDES FLEXIBLE GASKET JOINTS AT WATERMAIN CROSSINGS. VIDEO INSPECTION TO OCCUR PRIOR TO PAVING PER SUDAS 4060.
20	4020-108-C-0	REMOVAL OF STORM SEWER REMOVAL, DISPOSAL, AND CAPPING OF PIPE; AND FURNISHING AND PLACING BACKFILL MATERIAL.
21	4020-108-X-0	TELEWISE EXISTING STORM SEWER THIS ITEM INCLUDES, BUT NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO TELEWISE AND LOCATE EXISTING STORM SEWER (REGARDLESS OF SIZE). LOCATE THE PIPE ON THE GROUND BY THE USE OF PAINT AND FLAGS. A COPY OF THE TELEVISION REPORT SHALL BE PROVIDED TO THE ENGINEER ON RECORD. WORK TO BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION. SEE PLANS FOR LOCATIONS.
22	4040-108-A-0	SUBDRAIN, TYPE 1, PERFORATED HDPE, 6 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, FURNISHING AND PLACEMENT OF BEDDING AND BACKFILL MATERIAL, ENGINEERING FABRIC, CONNECTORS, AND ELBOWS AND TEES. THE LENGTH OF ELBOWS AND TEES OF THE PIPES INSTALLED WILL BE INCLUDED IN THE LENGTH OF PIPE MEASURED. POTHOLE FOR ALL EXISTING UTILITIES PRIOR TO SUBDRAIN INSTALLATION TO DETERMINE WHERE SUBDRAIN CAN BE PLACED. POTHOLING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.
23	4040-108-C-0	SUBDRAIN CLEANOUT, TYPE A-1, 6 IN. THIS ITEM INCLUDED, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO INSTALL SUBDRAIN CLEANOUTS AS SPECIFIED IN THE CONTRACT DOCUMENTS. PVC RISER PIPE SHALL BE SOLID WALL PVC. ALL CLEANOUTS TO BE PLACED BEHIND OF CURB. USE LIGHT DUTY (HS-20) CAST IRON CASTING.
24	4040-108-D-0	SUBDRAIN OUTLETS AND CONNECTIONS, CMP, 6 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, COUPLING BANDS, AND RODENT GUARDS FOR ALL SUBDRAIN OUTLETS AND CONNECTIONS.

Item #5B

25	4040-108-D-0	CONNECTION TO SUBDRAIN PIPE THIS ITEM INCLUDES, BUT NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY TO MAKE A CONNECTION TO PROPOSED SUBDRAIN WITH THE USE OF A WYE. WYES WILL BE EITHER 6" X 1" OR 6" X 2". CONTRACTOR TO VERIFY PIPE DIAMETER FOR CONNECTION. INCLUDES UP TO 20' OF SCHEDULE 40 PIPE WITH CAPPED END, A STEEL MARKER AT THE END FOR LOCATING PERPOSES, AND CONNECTION TO EXISTING PIPE IF ONE EXISTS. LOCATION DETERMINED BY ENGINEER.
26	4050-108-C-2	SPOT REPAIRS BY PIPE REPLACEMENT, 8", SDR 26 THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, PIPE REMOVAL, DEWATERING, FURNISHING AND PLACEMENT OF BEDDING MATERIAL, WYES AND OTHER FITTINGS, SERVICE PIPE, PIPE JOINTS, SERVICE PIPE CONNECTIONS, TESTING, AND INSPECTION. TRENCH COMPACTION TESTING WILL BE PROVIDED BY THE OWNER. PROVIDE VIDEO INSPECTION PRIOR TO PAVING (INCIDENTAL).
27	5010-108-X-0	6" CL 52 DIP PIPE WITH TRACER WIRE
28	5010-108-X-1	8" CL 52 DIP PIPE WITH TRACER WIRE
29	5010-108-X-2	8" CL 52 DIP RESTRAINED JOINT PIPE WITH TRACER WIRE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL PIPE OF SPECIFIED SIZE, TYPE, AND RESTRAINT INCLUDING EXCAVATION, SHORING, BONDING CABLES, NITRILE GASKETS, POLYETHYLENE ENCASEMENT, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION AND DECHLORINATION. DISINFECTION INCLUDES INSTALLATION AND REMOVAL OF 1" CHLORINATION TAP INCIDENTAL TO WATER MAIN.
30	5010-108-X-3	8" C900 DR18 PVC PIPE WITH TRACER WIRE
31	5010-108-X-4	8" C900 DR18 PVC RESTRAINED JOINT PIPE WITH TRACER WIRE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL PIPE OF SPECIFIED SIZE, TYPE, AND RESTRAINT INCLUDING EXCAVATION, DEWATERING, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION AND DECHLORINATION. DISINFECTION INCLUDES INSTALLATION AND REMOVAL OF 1" CHLORINATION TAP INCIDENTAL TO WATER MAIN.
32	5010-108-X-5	12" C900 PVC CASING PIPE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL CASING PIPE OF SPECIFIED SIZE AND TYPE INCLUDING EXCAVATION, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, BACKFILL, AND COMPACTION.
33	5010-108-X-6	FITTING, 8" BEND
34	5010-108-X-7	FITTING, 8" X 6" REDUCER
35	5010-108-X-8	FITTING, 6" SOLID SLEEVE
36	5010-108-X-9	FITTING, 8" SOLID SLEEVE
37	5010-108-X-10	FITTING, 8" X 8" TEE (STA 9+96)
38	5010-108-X-11	FITTING, 4" CAP/PLUG
39	5010-108-X-12	FITTING, 4" CAP/PLUG WITH MIN. 2" BLOWOFF
40	5010-108-X-13	FITTING, 8" CAP/PLUG PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL FITTINGS OF SPECIFIED SIZE AND TYPE INCLUDING EXCAVATION, PIPE BEDDING, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, TRACER WIRE SYSTEM, BACKFILL, COMPACTION, TESTING, AND DISINFECTION.
41	5010-108-X-14	8" VALVE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL VALVE OF SPECIFIED SIZE AND TYPE WITH VALVE BOX INCLUDING EXCAVATION, PIPE BEDDING, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, TRACER WIRE SYSTEM, VALVE BOX ADAPTER, BACKFILL, COMPACTION, TESTING, AND DISINFECTION.
42	5010-108-X-15	HYDRANT ASSEMBLY PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL HYDRANT, TEE, AND 6" PIPING AS REQUIRED, 6" VALVE, VALVE BOX, VALVE BOX ADAPTER, AND TRACER WIRE WITH RECEPTACLE POST INCLUDING EXCAVATION, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION.
43	5010-108-X-16	HYDRANT ASSEMBLY WITH EXTRA BENDS PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL HYDRANT, TEE, AND 6" PIPING AS REQUIRED, 6" VALVE, VALVE BOX, VALVE BOX ADAPTER, ADDITIONAL BEND AND TRACER WIRE WITH RECEPTACLE POST INCLUDING EXCAVATION, BONDING CABLES, POLYETHYLENE ENCASEMENT, THRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION.
44	5010-108-X-17	PREPARE EXCAVATION FOR TAPPING SLEEVE & VALVE (8X8) PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO PREPARE EXCAVATION FOR INSTALLATION OF THE TAPPING SLEEVE AND VALVE INCLUDING SHORING, CLEANING THE MAIN PRIOR TO TAPPING, POLYETHYLENE ENCASEMENT, THRUST BLOCKING, SETTING OF THE VALVE BOX, BACKFILL, AND COMPACTION. TAPPING SLEEVE AND VALVE WILL BE PROVIDED AND INSTALLED BY DES MOINES WATER WORKS (DMWW) IN CONTRACTOR'S EXCAVATION. EXCAVATION TO BE COMPLETED PER DMWW RULES & REGULATIONS AND STANDARD DETAILS IN ADVANCE OF SCHEDULED TAP.
45	5010-108-X-18	PREPARE TEE AT SCHOOL ST & 69TH ST PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO CAP OUT WATER MAIN TO BE ABANDONED BY REMOVAL OF TEE INCLUDING EXCAVATION, SHORING, LOCATION AND PROTECTION OF UTILITIES, PIPE BEDDING, POLYETHYLENE ENCASEMENT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION. WORK TO INCLUDE NECESSARY PIPE AND SOLID SLEEVES.
46	5010-108-X-19	REMOVE 6" WATER MAIN & APPURTENANCES ON MOTT AVE PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO TEMPORARILY CAP OUT, REMOVE, AND PROPERLY DISPOSE OF A SECTION OF EXISTING WATER MAIN INCLUDING A REDUCER AND FIRE HYDRANT. INCLUDES EXCAVATION, SHORING, PROTECTION OF UTILITIES, CLOSING 4" VALVE, INSTALLATION OF TEMPORARY 4" CAP ON CLOSED 4" VALVE, CUTTING AND CAPPING 6" WATER MAIN, REMOVAL OF WATER MAIN, REDUCER, AND FIRE HYDRANT, AND INSTALLATION OF TEMPORARY THRUST SUPPORT TO HOLD TEMPORARY 4" AND 6" CAPS IN PLACE WHILE NEW WATER MAIN IS INSTALLED. INCLUDES ROCK TO PROVIDE TEMPORARY SURFACE IN STREET UNTIL NEW PAVING INSTALLED. TRAFFIC CONTROL AND PAVING REMOVAL AND FINAL NEW PAVEMENT ARE INCIDENTAL TO DIVISION 1 BID ITEMS.
47	5010-108-X-20	NEW 1" WATER SERVICE (SAME SIDE) PROVIDE LICENSED PLUMBER AND THE PERMITS NECESSARY TO COMPLETE WATER SERVICE INSTALLATION. PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL NEW WATER SERVICE USING OPEN-CUT FROM THE NEW WATER MAIN CONNECTING TO THE EXISTING WATER SERVICE ON THE BUILDING SIDE OF THE NEW STOP BOX. WORK TO INCLUDE CORPORATION ELBOW, COPPER PIPE, NEW CURB STOP AND STOP BOX, COUPLINGS NEEDED TO CONNECT TO EXISTING SERVICE, BACKFILL, AND COMPACTION. DMWW WILL PROVIDE TAP IN EXCAVATION PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS AND STANDARD DETAILS.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CD\1318668\1318668_C01.dwg 17/15/2020 8:26 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
ESTIMATE REFERENCE INFORMATION

SHEET

C.3

48	5010-108-X-21	NEW 1" WATER SERVICE (OPPOSITE SIDE) PROVIDE LICENSED PLUMBER AND THE PERMITS NECESSARY TO COMPLETE WATER SERVICE INSTALLATION. PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO INSTALL NEW WATER SERVICE USING OPEN-CUT FROM THE NEW WATER MAIN CONNECTING TO THE EXISTING WATER SERVICE ON THE BUILDING SIDE OF THE NEW STOP BOX. WORK TO INCLUDE CORPORATION ELBOW, COPPER PIPE, NEW CURB STOP AND STOP BOX, COUPLINGS NEEDED TO CONNECT TO EXISTING SERVICE, BACKFILL AND COMPACTION. DMWW WILL PROVIDE TAP IN EXCAVATION PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH DMWW RULES AND REGULATIONS AND STANDARD DETAILS. IF STREET PAVEMENT REMAINS IN PLACE AT TIME OF WATER SERVICE TRANSFER, PAVEMENT SAW CUTTING AND REMOVAL IS INCIDENTAL TO WATER MAIN. FOR SERVICES OUTSIDE THE CITY STAGE, TRAFFIC CONTROL IS INCIDENTAL TO DIVISION 1.
49	5010-108-X-22	CATHODIC PROTECTION TEST STATION PROVIDE ALL MATERIAL, EQUIPMENT, AND LABOR TO INSTALL MAGNESIUM ANODE INCLUDING EXCAVATION, BEDDING, ANODE INSTALLATION, ATTACHING LEAD WIRE TO PIPE, BACKFILL, AND COMPACTION.
50	5010-108-X-23	MAGNESIUM ANODE, 32-POUND PROVIDE ALL MATERIAL, EQUIPMENT, AND LABOR TO INSTALL MAGNESIUM ANODE OF SPECIFIED SIZE INCLUDING EXCAVATION, BEDDING, ANODE INSTALLATION, ATTACHING LEAD WIRE TO PIPE, BACKFILL, AND COMPACTION.
51	5010-108-X-24	TYPE 2 WATER MAIN ALTERATION (HORIZONTAL) THIS ITEM INCLUDES ALL MATERIAL, LABOR, AND EQUIPMENT TO COMPLETE HORIZONTAL WATER MAIN ALTERATION OF SIZE AND TYPE INDICATED ON THE DRAWING SHEETS, WATER MAIN DETAIL SHEET, AND ALTERATION SCHEDULE. WORK INCLUDES EXCAVATION, PIPE, FITTINGS, NITRILE GASKETS, POLYETHYLENE ENCASMENT, TRACER WIRE SYSTEM AND CONNECTION (IF APPLICABLE), BEDDING, TRUST RESTRAINT, BACKFILL, COMPACTION, PRESSURE TESTING, AND DISINFECTION. WATER MAIN ALTERATIONS TO BE COMPLETED IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR WATER MAIN. WORK ALSO INCLUDES REMOVING THE EXISTING SECTION OF EXISTING PIPE AND CONNECTING TO EXISTING WATER MAIN AS INDICATED IN THE DETAIL. ITEM SHALL BE MEASURED AND PAID FOR ON A COUNT BASIS FOR EACH ALTERATION INSTALLED. REFER TO DETAIL.
52	5010-108-X-25	NEW STOP BOX HOUSING
53	5010-108-X-26	NEW STOP BOX ROD
54	5010-108-X-27	CHECK DEPTH OF WATER SERVICE
55	5010-108-X-28	RELOCATION OF WATER SERVICE SEE SUPPLEMENTAL SPECIFICATIONS. QUANTITIES ARE ESTIMATED AND PERFORMED BY DIRECTION FROM ENGINEER.
56	5010-108-X-29	POLYSTYRENE INSULATION, 2 IN. CLOSED-CELL EXTRUDED POLYSTYRENE BOARDS SHALL HAVE A MINIMUM DIMENSION OF 2 INCHES THICK BY 2 FEET WIDE. QUANTITY IS ESTIMATED. PLACEMENT AS DIRECTED BY ENGINEER.
57	5020-108-F-0	VALVE BOX EXTENSION THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIAL NECESSARY TO ADJUST WATER VALVE BOXES TO FINISH GRADE. ALL VALVES WHICH CHANGE FROM GRASS TO PAVEMENT SHALL BE CHANGED FROM SCREW TYPE TO SLIDE TYPE. CHANGING VALVE BOX FROM SCREW TO SLIDE TYPE IS CONSIDERED INCIDENTAL TO THIS LINE ITEM.
58	5020-108-H-0	FIRE HYDRANT ADJUSTMENT REMOVAL AND REINSTALLATION OF THE EXISTING FIRE HYDRANT; FURNISHING AND INSTALLING THE EXTENSION BARREL SECTION AND STEM; AND ALL OTHER NECESSARY APPURTENANCES. LOCATION DETERMINED BY THE ENGINEER. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED BY ENGINEER WILL BE PAID.
59	6010-108-A-0	SANITARY MANHOLE, SW-301, 48 IN.
60	6010-108-A-0	STORM MANHOLE, SW-401, 48 IN. DIA.
61	6010-108-A-0	STORM MANHOLE, SW-401, 60 IN. DIA.
62	6010-108-A-0	STORM MANHOLE, SW-406, MODIFIED EXCAVATION, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, COMPACTION, BASE, STRUCTURAL CONCRETE, REINFORCING STEEL, PRECAST UNITS (IF USED), INFILTRATION BARRIERS, CASTINGS, ADJUSTMENT RINGS, PIPE CONNECTION AND BYPASS PUMPING OR OTHER OTHER METHODS OF SEWER TRANSFER. POURED CONCRETE COLLAR TO SURFACE AROUND CASTING IF HMA PAVEMENT.
63	6010-108-B-0	INTAKE, SW-501
64	6010-108-B-0	INTAKE, SW-503
65	6010-108-B-0	INTAKE, SW-504 MODIFIED
66	6010-108-B-0	INTAKE, SW-505
67	6010-108-B-0	INTAKE, SW-506
68	6010-108-B-0	INTAKE, SW-545 EXCAVATION, FURNISHING BEDDING MATERIAL, PLACING BEDDING AND BACKFILL MATERIAL, COMPACTION, BASE, STRUCTURAL CONCRETE, REINFORCING STEEL, PRECAST UNITS (IF USED), CONCRETE FILLETS, PIPE CONNECTIONS, CASTINGS, AND ADJUSTMENT RINGS.
69	6010-108-C-0	DROP CONNECTION
70	6010-108-E-0	MANHOLE ADJUSTMENT, MINOR REMOVING EXISTING CASTING AND EXISTING ADJUSTMENT RINGS, FURNISHING AND INSTALLING ADJUSTMENT RINGS, FURNISHING AND INSTALLING NEW CASTING, AND INSTALLING NEW INFILTRATION BARRIER (SANITARY SEWER MANHOLES ONLY). POURED CONCRETE COLLAR TO SURFACE AROUND CASTING IF HMA PAVEMENT.
71	6010-108-G-0	CONNECTION TO EXISTING MANHOLE CORING OR CUTTING INTO THE EXISTING MANHOLE OR INTAKE, PIPE CONNECTORS, GROUT, AND WATERSTOP (WHEN REQUIRED).
72	6010-108-H-0	REMOVE MANHOLE REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT; PLUGGING PIPES; FILLING REMAINING STRUCTURE WITH FLOWABLE MORTAR; AND PLACING COMPACTED FILL OVER STRUCTURE TO FINISHED GRADE NO MATTER THE SIZE.

73	6010-108-H-0	REMOVE INTAKE REMOVAL OF CASTING, CONCRETE, AND REINFORCEMENT; PLUGGING PIPES; FILLING REMAINING STRUCTURE WITH FLOWABLE MORTAR; AND PLACING COMPACTED FILL OVER STRUCTURE TO FINISHED GRADE NO MATTER THE SIZE.
74	7030-108-A-0	REMOVAL OF SIDEWALK
75	7030-108-A-0	REMOVAL OF DRIVEWAY ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
76	7030-108-E-0	SIDEWALK, PCC, 4 IN.
77	7030-108-E-0	SIDEWALK, PCC, 6 IN. CONCRETE WILL BE C OR M MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE IS INCIDENTAL TO THIS ITEM. CONCRETE TESTING WILL BE PROVIDED BY THE OWNER.
78	7030-108-G-0	DETECTABLE WARNING DETECTABLE WARNINGS SHALL MEET CURRENT PROWAG STANDARDS. CONTRACTOR TO SUBMIT COLOR FOR APPROVAL PRIOR TO PURCHASE.
79	7030-108-H-1	DRIVEWAY, PAVED, TYPE A, 6 IN. CONCRETE WILL BE C OR M MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE IS INCIDENTAL TO THIS ITEM. CONCRETE TESTING WILL BE PROVIDED BY THE OWNER.
80	7040-108-H-0	PAVEMENT REMOVAL ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. SEE B SHEETS FOR EXISTING PAVEMENT TYPICAL SECTIONS. EXISTING PAVEMENT DEPTHS AND TYPES MAY VARY.
81	8030-108-A-0	TEMPORARY TRAFFIC CONTROL INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL; TOTAL ROADWAY CLOSURES WITH INSTALLATION AND REMOVAL OF DETOUR SIGNING AS SHOWN IN THE CONTRACT DOCUMENTS; REMOVAL AND REINSTALLATION OR COVERING OF PERMANENT TRAFFIC CONTROL DEVICES THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL PLAN; MONITORING AND DOCUMENTING TRAFFIC CONTROL CONDITIONS; AND FLAGGERS. WHEN REQUIRED IN THE CONTRACT DOCUMENTS, THE FOLLOWING ARE ALSO INCLUDED IN TRAFFIC CONTROL UNLESS A SEPERATE BID ITEM IS PROVIDED; PORTABLE DYNAMIC MESSAGE SIGNS.
82	9010-108-B-0	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING PROVIDE UNITED SEEDS, INC. "RESCUE PLUS" MIX (UNITEDSEEDS.COM) OR APPROVED EQUAL. SEED PER MANUFACTURES REQUIREMENTS. APPLICATION OF STARTER FERTILIZER (NEW GRASS) REQUIRED AND IS INCIDENTAL TO THIS ITEM. FOR SEEDING IN UNDISTURBED AREAS, TREATMENT/REMOVAL OF EXISTING VEGETATION AND SEED BED PREPARATION IS CONSIDERED INCIDENTAL. INCLUDES USING PROGANICS BIOTIC SOIL MEDIA (BSM) BY PROFILE PRODUCTS.
83	9010-108-D-0	WATERING THIS ITEM IS PROVIDE THE PROPOSED SEED WITH ENOUGH WATER TO MOISTEN THE DIRT TO A DEPTH OF 1 INCH AND ENSURE GROWTH OF THE SEED. WATER SHALL BE PREFORMED FOR 14 DAYS STRAIGHT. QUANTITY IS ESTIMATED AND USED TO ESTABLISHED A UNIT PRICE.
84	9040-108-A-1	SWPPP PREPARATION DEVELOPMENT OF A SWPPP BY THE CONTRACTOR MEETING LOCAL AND STATE AGENCY REQUIREMENTS, FILING THE REQUIRED PUBLIC NOTICES, FILING A NOTICE OF INTENT FOR COVERAGE OF THE PROJECT UNDER THE IOWA DNR NPDES GENERAL PERMIT NO. 2, AND PAYMENT OF ASSOCIATED NPDES PERMIT FEES.
85	9040-108-A-2	SWPPP MANAGEMENT THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL WORK REQUIRED TO COMPLY WITH THE ADMINISTRATIVE PROVISIONS OF THE IOWA DNR NPDES GENERAL PERMIT NO.2; INCLUDING RECORD KEEPING, DOCUMENTATION, UPDATING THE SWPPP, FILING THE NOTICE OF DISCONTINUATION, ETC. ITEM ALSO INCLUDES WEEKLY INSPECTION REQUIRED TO SATISFY THE PROVISIONS OF GENERAL PERMIT NO. 2.
86	9040-108-D-1	FILTER SOCK, 9 IN. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ANCHORING STAKES, MAINTENANCE, REPLACEMENT OF DEFICIENT FILTER SOCK, RESTORATION OF THE AREA TO FINISHED GRADE, AND OFF-SITE DISPOSAL OF FILTER SOCK AND ACCUMULATED SEDIMENT.
87	9040-108-Q-2	EROSION CONTROL MULCHING, HYDROMULCHING
88	9040-108-T-1	INLET PROTECTION DEVICE, MAINTENANCE, AND REMOVAL THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY FOR INSTALLATION, REMOVAL AND OFF-SITE DISPOSAL OF ACCUMULATED SEDIMENT, AND REMOVAL OF THE DEVICE UPON COMPLETION OF THE PROJECT NO MATTER THE INTAKE TYPE. MEASUREMENT PER STRUCTURE.
89	11020-108-A	MOBILIZATION
90	11030-108-A	MAINTENANCE OF POSTAL SERVICE COORDINATE WITH USPS AND PROPERTY OWNERS FOR TEMPORARY MAILBOX LOCATION WHEN NECESSARY. ENSURING MAIL SERVICE IS MAINTAINED THROUGHOUT THE PROJECT.
91	11030-108-B	MAINTENANCE OF SOLID WASTE COLLECTION CONTRACTOR SHALL COORDINATE WITH WASTE COLLECTION SERVICE TO ENSURE SERVICE IS MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT (INCLUDING RECYCLE). LABEL ALL BINS WITH ADDRESS BY REMOVABLE MEANS.
92	11030-108-X	RESIDENT COURTESY CART THIS ITEM INCLUDES THE USE OR RENTAL OF A COURTESY CART DURING CONSTRUCTION, PERSONNEL TO OPERATE THE CART, MAINTENANCE OF SAID CART, AND INSURANCE FOR THE CART AND ITS OCCUPANTS DURING OPERATION. THE COURTESY CART WILL BE USED FOR TRANSPORTING RESIDENTS TO AND FROM THEIR PARKED VEHICLES TO THEIR RESIDENCES WHILE THE ROADWAY IS CLOSED TO VEHICULAR TRAFFIC. THE CONTRACTOR HAS THE OPTION REGARDING THE KIND OF CART PROVIDED (GOLF, GATOR, ETC.). ENGINEER ON RECORD SHALL APPROVE CART OPTION. IT WILL BE THE CONTRACTOR'S RESPNSIBILITY TO PROVIDE A MOBILE PHONE NUMBER TO WHICH RESIDENTS CAN CALL BETWEEN THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY. TO WHICH THEY WILL BE ABLE TO REACH THE COURTESY CART DRIVER. REFER TO THE J SHEET FOR ADDITIONAL INFORMATION. THE CART WILL OPERATE IN CONJUNCTION WITH GRADING AND PAVING OPERATIONS. THE MAXIMUM WAIT TIME FOR THE COURTESY CART SHALL BE 30 MINUTES. THE CONTRACTOR SHALL PROVIDE ONE CART PER STREET IF WORK IS TAKING PLACE SIMULTANEOUSLY ON ALLISON AVENUE AND 69TH STREET.
93	12010-XXX-X-0	CURBIDE MAILBOX THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF EXISTING POST, SALVAGING EXISTING MAILBOX, EXCAVATION FOR POST, A NEW 4"x4" POST, AND INSTALLATION OF SALVAGED MAILBOX. COORDINATED WITH THE LOCAL POSTMASTER AND USPS WEBSITE FOR GUIDANCE ON MAIL BOX INSTALLATION. CONTRACTOR RESPONSIBLE FOR DAMAGED MAILBOX DURING STORAGE AND SHALL REPLACE AT NO EXPENSE TO OWNER.
94	12010-XXX-X-1	TREE PROTECTION FENCE SEE SUPPLEMENTAL SPECIFICATIONS. ESTIMATED QUANTITY, LOCATION AS DIRECTED BY ENGINEER. PAID AMOUNT PER FENCE INSTALLED.
95	12010-XXX-X-2	LANDSCAPE TIMBERS

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA

2020 STREET RECONSTRUCTION

ESTIMATE REFERENCE INFORMATION

SHEET

C.4

96	12010-XXX-X-3	FOUNDATION ROCK PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO PLACE ROCK USED TO STABILIZE PIPE TRENCHES PRIOR TO PIPE INSTALLATION AS DESIGNATED BY ENGINEER.
97	12010-XXX-X-4	MANUFACTURED SAND PROVIDE MATERIAL, EQUIPMENT, AND LABOR TO PLACE MANUFACTURED SAND AS BACKFILL IN WATER MAIN TRENCH IN LOCATIONS AS DIRECTED BY ENGINEER. INCLUDES PROPER DISPOSAL OF UNSUITABLE MATERIAL. MEASUREMENT WILL BE BASED ON MATERIAL DELIVERY TICKET.

ALTERNATE A

A1	7010-108-A-0	PAVEMENT, PCC, 7 IN. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES.
A2	11050-108-A-0	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

ALTERNATE B

B1	7010-108-A-0	PAVEMENT, PCC, 7 IN. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES.
B2	7010-108-E-0	CURB AND GUTTER, 2 FT, 7 IN. THICK W/ 6" STANDARD CURB FINAL SUBGRADE/SUBBASE PREPARATION, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, AND BOXOUTS FOR FIXTURES.
B3	7020-108-B-0	PAVEMENT, FULL DEPTH HMA PAVING, ST. PG 58-28S PRIOR TO PLACEMENT, SUBMIT MIX DESIGNS FOR REVIEW AND APPROVAL BY THE ENGINEER. THE HMA SHALL BE PLACED EITHER WITH A FULL WIDTH PAVER OR TWO SINGLE LANE PAVERS OPERATING IN TANDEM TO PREVENT A COLD JOINT ON THE LANE LINE. NO SEPARATE PAY ITEM WILL BE USED FOR THE ASPHALT BINDER, THE COST OF THE BINDER SHALL BE INCLUDED IN THE HOT MIX ASPHALT PRICE. UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, ASPHALT MIX WITH ASPHALT BINDER, TACK COATS BETWEEN LAYERS, CONSTRUCTION ZONE PROTECTION, AND QUALITY CONTROL. THIS BID ITEM INCLUDES FURNISHING, DELIVERY, QUALITY CONTROL AND INSTALLATION OF THE ASPHALT MIX. FINAL SURFACE COURSE FOR ALL STAGES TO BE PLACE AT THE END OF THE FINAL STAGE.
B4	11050-108-A-0	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CH_C\1A1118668\Task_03_09th Street\CAD\Sheet\1118668_C.01.dwg 1/15/2020 8:26 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
ESTIMATE REFERENCE INFORMATION

STORM SEWER PIPE TABLE			
Name	START	END	DESCRIPTION
STRM 1	INT 2 STA:4+67.87, 13.00' L	INT 1 STA:4+67.87, 13.00' R	26 LF, 15" RCP @ 1.85%
STRM 2	INT 1 STA:4+67.87, 13.00' R	INT 3 STA:7+57.87, 13.00' R	290 LF, 15" RCP @ 3.50%
STRM 3	MH - 97 STA:7+57.96, 21.00' L	INT 4 STA:7+57.87, 13.00' L	8 LF, 36" RCP @ 1.00%
STRM 4	INT 4 STA:7+57.87, 13.00' L	INT 3 STA:7+57.87, 13.00' R	26 LF, 36" RCP @ 0.50%
STRM 5	INT 3 STA:7+57.87, 13.00' R	MH - 98 STA:7+57.87, 21.00' R	8 LF, 36" RCP @ 4.09%
STRM 6	MH 1 STA:9+74.41, 6.50' R	INT 3 STA:7+57.87, 13.00' R	217 LF, 36" RCP @ 2.34%
STRM 7	INT 6 STA:9+74.41, 13.00' L	MH 1 STA:9+74.41, 6.50' R	20 LF, 15" RCP @ 2.00%
STRM 8	MH 1 STA:9+74.41, 6.50' R	INT 5 STA:9+74.41, 13.00' R	7 LF, 15" RCP @ -2.00%
STRM 9	MH 2 STA:0+56.50, 686.54' L	MH 1 STA:0+56.50, 506.54' L	180 LF, 36" RCP @ 3.00%
STRM 10	INT 8 STA:11+54.41, 13.00' L	MH 2 STA:11+54.41, 6.50' R	20 LF, 15" RCP @ 2.00%
STRM 11	MH 2 STA:11+54.41, 6.50' R	INT 7 STA:11+54.41, 13.00' R	7 LF, 15" RCP @ -2.00%
STRM 12	MH 3 STA:11+94.16, 6.52' R	MH 2 STA:11+54.41, 6.50' R	40 LF, 36" RCP @ 2.90%
STRM 13	MH 4 STA:22+71.71, 5.71' L	MH 3 STA:22+20.09, 5.82' L	52 LF, 36" RCP @ 1.11%
STRM 14	INT 9 STA:22+71.73, 13.00' L	MH 4 STA:22+71.71, 5.71' L	7 LF, 15" RCP @ 2.00%
STRM 15	MH 4 STA:11+94.40, 45.10' L	MH - 99 STA:11+94.44, 53.10' L	8 LF, 36" RCP @ -1.00%

STORM SEWER STRUCTURE TABLE					
Structure Name	LOCATION	TYPE	FORM GRADE	INVERT EL. (IN)	INVERT EL. (OUT)
INT 1	STA: 4+67.87, OS: 13.00'	SW-505	FG = 913.35	I = 908.82, 15.00" N I = 910.27, 6.00" W	I = 908.72, 15.00" E
INT 2	STA: 4+67.87, OS: -13.00'	SW-505 N	FG = 913.35	I = 910.76, 6.00" W	I = 909.30, 15.00" S
INT 3	STA: 7+57.87, OS: 13.00'	SW-545 N	FG = 903.95	I = 898.57, 15.00" W I = 898.16, 36.00" N I = 898.23, 36.00" E I = 901.41, 6.00" W	I = 898.29, 36.00" S
INT 4	STA: 7+57.87, OS: -13.00'	SW-545 N	FG = 903.95	I = 901.41, 6.00" E I = 901.41, 6.00" W I = 898.36, 36.00" N	I = 898.29, 36.00" S
INT 5	STA: 9+74.41, OS: 13.00'	SW-505 N	FG = 911.45	I = 907.80, 15.00" N	I = 908.50, 6.00" E
INT 6	STA: 9+74.41, OS: -13.00'	SW-505 N	FG = 911.45	I = 908.37, 6.00" E	I = 907.80, 15.00" S I = 908.37, 6.00" W
INT 7	STA: 11+54.41, OS: 13.00'	SW-505 N	FG = 918.77	I = 915.15, 15.00" N	
INT 8	STA: 11+54.41, OS: -13.00'	SW-505 N	FG = 918.77		I = 915.15, 15.00" S
INT 9	STA: 22+71.73, OS: -13.00'	SW-505 N	FG = 919.77		I = 915.70, 15.00" E
MH 1	STA: 9+74.41, OS: 6.50'	SW-401 N	FG = 911.57	I = 907.41, 15.00" N I = 903.41, 36.00" E	I = 907.67, 15.00" S I = 903.31, 36.00" W
MH 2	STA: 11+54.41, OS: 6.50'	SW-401 N	FG = 918.89	I = 914.76, 15.00" N I = 908.91, 36.00" E	I = 915.02, 15.00" S I = 908.81, 36.00" W
MH 3	STA: 22+20.09, OS: -5.82'	SW-401 N	FG = 920.63	I = 910.37, 36.00" N	I = 910.06, 36.00" W
MH 4	STA: 22+71.71, OS: -5.71'	SW-401 N	FG = 920.02	I = 915.55, 15.00" W	I = 910.94, 36.00" S I = 911.04, 36.00" N

SANITARY SEWER PIPE TABLE			
Name	START	END	DESCRIPTION
SAN 1	STA:6+90.37, 0.41' L	STA:6+98.37, 0.44' L	8 LF, 8" DIP @ 3.24%
SAN 2	STA:6+98.37, 0.44' L	STA:6+98.41, 9.56' R	10 LF, 8" PVC @ 10.62%
SAN 3	STA:7+60.38, 0.71' L	STA:6+98.37, 0.44' L	62 LF, 8" PVC @ 1.61%
SAN 6	STA:8+22.38, 0.98' L	STA:8+07.41, 0.99' L	15 LF, 8" PVC @ 1.61%
SAN 7	STA:8+82.38, 1.24' L	STA:8+72.38, 1.19' L	10 LF, 8" PVC @ 1.61%
SAN 8	STA:10+75.80, 0.96' L	STA:10+60.80, 0.99' L	15 LF, 8" PVC @ 3.03%

SANITARY SEWER SERVICE TABLE		
ADDRESS	EXISTING SERVICE SIZE & MATERIAL	APPROXIMATE LENGTH
6405 ALLISON AVENUE	4", ORANGEBURG	
6409 ALLISON AVENUE	4", ORANGEBURG	25'
6413 ALLISON AVENUE	4", ORANGEBURG	25'
6501 ALLISON AVENUE	4", ORANGEBURG	25'
6502 ALLISON AVENUE	4", ORANGEBURG	25'

EXCAVATION QUANTITY	Depth, FT	Quantity, SY	Quantity, SF	Volume, CF	Volume, CY	CUT, CY	FILL, CY	FILL FACTOR	ADJ. FILL	NET FILL, CY
Excavation RAW data (EG-FG)						44.17	180.47	1.35	243.63	136.30
Existing Pavement Removal (Average 10.5")	0.88	2,940.00	26,460.00	23,152.50	857.50					
Existing Sidewalk Removal (assumed 4")	0.00	-	-	-	-					
Existing Driveway Removal (assumed 6")	0.50	594.00	5,346.00	2,673.00	99.00					
Existing Gravel Removal (assumed 6")	0.00	-	-	-	-					
Proposed 7" Paving	0.58	3,076.00	27,684.00	16,149.00	598.11					
Modified Subbase 6"	0.50	3,525.00	31,725.00	15,862.50	587.50					
Proposed Sidewalk 4"	0.00	-	-	-	-					
Proposed Sidewalk 6"	0.00	-	-	-	-					
Modified Subbase 4"	0.00	-	-	-	-					
Proposed Driveway	0.50	679.00	6,111.00	3,055.50	113.17					
Proposed Topsoil	0.50	1,850.00	16,650.00	8,325.00	308.33					
Paving Difference						328.11				
Sidewalk Difference						0.00				
Driveway Difference						14.17				
Topsoil						-308.33				
						78.11	180.47	1.35	243.63	-165.52

ESTIMATED DRIVEWAY QUANTITIES			
ADDRESS	REMOVAL (SY)	DRIVEWAY, 6" (SY)	REMARKS
6400 ALLISON AVENUE	35.5	39.5	
6401 ALLISON AVENUE	15.0	15.7	3" DROP CURB
6404 ALLISON AVENUE	24.5	27.8	
6405 ALLISON AVENUE	17.8	20.1	
6408 ALLISON AVENUE	15.3	20.3	
6409 ALLISON AVENUE	22.8	24.4	
6412 ALLISON AVENUE	13.1	18.0	
6413 ALLISON AVENUE	22.7	24.9	
6416 ALLISON AVENUE	23.1	27.5	
6417 ALLISON AVENUE	14.8	17.6	
6420 ALLISON AVENUE	13.7	17.8	
6421 ALLISON AVENUE	22.3	24.9	
6424 ALLISON AVENUE	32.4	37.2	
6425 ALLISON AVENUE	23.4	25.3	
6501 ALLISON AVENUE	28.9	32.6	
6502 ALLISON AVENUE	22.6	26.7	
6505 ALLISON AVENUE	23.5	25.4	
6506 ALLISON AVENUE	23.0	26.8	
6509 ALLISON AVENUE	23.9	25.5	
6510 ALLISON AVENUE	22.6	26.9	
6513 ALLISON AVENUE	24.3	27.5	
6514 ALLISON AVENUE	23.3	26.8	
6517 ALLISON AVENUE	22.5	25.7	
6518 ALLISON AVENUE	22.3	26.6	
6525 ALLISON AVENUE	22.5	25.7	
1923 64TH STREET	25.9	29.3	
2001 64TH STREET	11.6	12.2	PARTIAL DRIVEWAY REMOVAL

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - I1118668\Task 01 Allison Avenue\CAD\Sheet\118668_C-TAB.dwg 1/8/2020 10:26 AM

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TABULATIONS - ALLISON AVENUE

STORM SEWER PIPE TABLE			
NAME	START	END	DESCRIPTION
STRM 13	MH 4 STA:21+04.27, 28.66' L	MH 3 STA:20+91.23, 18.48' R	49 LF, 58"x36" ARCH @ 2.51%
STRM 14	STA:1+28.46, 21.81' R	MH 4 STA:1+28.96, 20.31' L	42 LF, Concrete, Arch Pipe, Existing @ 0.40%
STRM 16	INT 10 STA:1+65, 13.00' L	MH 4 STA:1+28.96, 20.31' L	37 LF, 51"x31" ARCH @ 2.53%
STRM 17	INT 11 STA:1+65, 13.00' R	INT 10 STA:1+65, 13.00' L	26 LF, Reinforced Concrete Pipe, New @ 1.00%
STRM 18	INT 12 STA:3+85, 13.00' L	INT 10 STA:1+65, 13.00' L	220 LF, 15" RCP @ 1.30%
STRM 19	INT 13 STA:3+85, 13.00' R	INT 12 STA:3+85, 13.00' L	26 LF, 15" RCP @ 0.50%
STRM 20	INT 14 STA:6+09.06, 13.00' L	INT 12 STA:3+85, 13.00' L	224 LF, 12" RCP @ 1.35%
STRM 21	INT 15 STA:6+86.32, 13.00' L	INT 14 STA:6+09.06, 13.00' L	77 LF, 12" RCP @ 1.32%
STRM 22	INT 16 STA:6+86.32, 13.00' R	INT 15 STA:6+86.32, 13.00' L	26 LF, 15" RCP @ 0.50%
STRM 23	MH 5 STA:10+21.25, 18.34' L	INT 15 STA:6+86.32, 13.00' L	335 LF, 12" RCP @ 1.43%
STRM 24	INT 17 STA:10+18.92, 42.65' R	MH 5 STA:10+21.25, 18.34' L	61 LF, 43"x26" ARCH @ 0.50%
STRM 25	INT 18 STA:9+92.93, 42.28' R	INT 17 STA:10+18.92, 42.65' R	26 LF, Reinforced Concrete Pipe, New @ 1.00%
STRM 26	INT 19 STA:10+44.44, 13.00' L	MH 5 STA:10+21.25, 18.34' L	24 LF, 24" RCP @ 1.26%
STRM 27	INT 20 STA:10+48.68, 12.99' R	INT 19 STA:10+44.44, 13.00' L	26 LF, Reinforced Concrete Pipe, New @ 1.00%
STRM 28	INT 22 STA:12+89.54, 13.00' R	INT 21 STA:12+89.54, 13.00' L	26 LF, Reinforced Concrete Pipe, New @ 1.00%
STRM 29	INT 24 STA:15+66.10, 13.00' R	INT 23 STA:15+75.66, 13.00' L	28 LF, Reinforced Concrete Pipe, New @ 1.00%
STRM EX 3	INT 12 STA:3+85, 13.00' L	INT 10 STA:1+65, 13.00' L	220 LF, 36"x22" ARCH @ 1.30%
STRM EX 4	INT 14 STA:6+09.06, 13.00' L	INT 12 STA:3+85, 13.00' L	224 LF, 36"x22" ARCH @ 1.35%
STRM EX 5	INT 15 STA:6+86.32, 13.00' L	INT 14 STA:6+09.06, 13.00' L	77 LF, 36"x22" ARCH @ 1.32%
STRM EX 6	MH 5 STA:10+21.25, 18.34' L	INT 15 STA:6+86.32, 13.00' L	335 LF, 36"x22" ARCH @ -1.43%

STORM STRUCTURE TABLE					
NAME	LOCATION	TYPE	FORM GRADE EL.	INVERT EL. (IN)	INVERT EL. (OUT)
INT 10	STA: 1+65, 13.00' L	SW-504 MODIFIED	FG = 823.60	I = 819.90, 15" E I = 819.90, 36" N I = 819.90, 15" N	I = 819.80, 51" S
INT 11	STA: 1+65, 13.00' R	SW-501	FG = 823.60	I = 820.66, 6" N	I = 820.16, 15" W
INT 12	STA: 3+85, 13.00' L	SW-504 MODIFIED	FG = 825.80	I = 822.76, 15" E I = 822.76, 12" N I = 822.76, 36" N	I = 822.76, 36" S I = 822.76, 15" S
INT 13	STA: 3+85, 13.00' R	SW-501	FG = 825.80	I = 823.00, 6" N	I = 822.89, 15" W
INT 14	STA: 6+09.06, 13.00' L	SW-504 MODIFIED	FG = 828.41	I = 825.78, 12" N I = 825.78, 36" N	I = 825.78, 12" S I = 825.78, 36" S
INT 15	STA: 6+86.32, 13.00' L	SW-504 MODIFIED	FG = 829.75	I = 826.80, 15" E I = 826.80, 12" N	I = 826.80, 36" N I = 826.80, 12" S I = 826.80, 36" S
INT 16	STA: 6+86.32, 13.00' R	SW-501	FG = 829.75	I = 827.09, 6" N	I = 826.93, 15" W
INT 17	STA: 10+18.92, 42.65' R	SW-506 N	FG = 836.28	I = 832.44, 15" S I = 832.03, 24" E	I = 831.94, 44" W
INT 18	STA: 9+92.93, 42.28' R	SW-505 N	FG = 836.25		I = 832.70, 15" N
INT 19	STA: 10+44.44, 13.00' L	SW-506 N	FG = 836.97	I = 832.82, 15" E I = 832.42, 24" N I = 834.97, 6" N	I = 832.16, 24" S
INT 20	STA: 10+48.68, 12.99' R	SW-505 N	FG = 837.10	I = 834.21, 6" N	I = 833.08, 15" W
INT 21	STA: 12+89.54, 13.00' L	SW-506 N	FG = 844.74	I = 840.00, 15" E I = 839.32, 24" N I = 842.74, 6" N	I = 839.27, 24" S
INT 22	STA: 12+89.54, 13.00' R	SW-505 N	FG = 844.74	I = 841.57, 6" N	I = 840.26, 15" W
INT 23	STA: 15+75.66, 13.00' L	SW-503 N	FG = 851.80	I = 845.50, 15" E I = 845.14, 24" N	I = 844.74, 24" S I = 844.58, 24" W
INT 24	STA: 15+66.10, 13.00' R	SW-503 N	FG = 851.43	I = 846.71, 12" S I = 847.46, 18" N	I = 845.78, 15" W
MH 3	STA: 20+91.23, 18.48' R	SW-401 E	FG = 822.91	I = 817.60, 58" N	I = 817.60, 51" W
MH 4	STA: 1+28.96, 20.31' L	SW-401 E	FG = 823.69	I = 818.87, 51" N I = 818.87, 44" E	I = 818.83, 58" S
MH 5	STA: 10+21.25, 18.34' L	SW-406 MODIFIED	FG = 836.65	I = 831.63, 44" E I = 831.86, 24" N I = 831.59, 36" S	I = 831.59, 12" S I = 830.95, 24" W
MH 6	STA: 16+97.99, 15.03' L	SW-401 48"	FG = 858.86	I = 851.76, 24" N I = 851.86, 12" E	I = 851.76, 24" S

SANITARY PIPE TABLE			
NAME	START	END	DESCRIPTION
SAN 9	STA:1+87.44, 0.53' R	STA:1+79.44, 0.54' R	8 LF, 8" PVC @ 1.90%
SAN 11	STA:7+99.91, 0.17' L	STA:7+79.91, 0.13' L	20 LF, 8" PVC @ 1.31%
SAN 12	STA:10+30.57, 0.58' L	STA:10+10.57, 0.56' L	20 LF, 8" PVC @ 3.01%

SANITARY SEWER SERVICE TABLE		
ADDRESS	EXISTING SERVICE SIZE & MATERIAL	APPROXIMATE LENGTH
1005 69TH STREET	4", ORANGEBURG	25'
1010 69TH STREET	4", ORANGEBURG	25'
1011 69TH STREET	4", ORANGEBURG	25'
1015 69TH STREET	4", ORANGEBURG	25'
1019 69TH STREET	4", ORANGEBURG	25'
1020 69TH STREET	4", ORANGEBURG	25'
1022 69TH STREET	4", ORANGEBURG	25'
1023 69TH STREET	4", ORANGEBURG	25'
1025 69TH STREET	4", ORANGEBURG	25'
1026 69TH STREET	4", ORANGEBURG	25'
1028 69TH STREET	4", ORANGEBURG	25'
1131 69TH STREET	4", ORANGEBURG	25'
1141 69TH STREET	4", ORANGEBURG	25'

ESTIMATED DRIVEWAY QUANTITIES			
ADDRESS	REMOVAL (SY)	DRIVEWAY, 6" PCC (SY)	REMARKS
1005 69TH STREET	13.7	13.6	
1007 69TH STREET	13.7	13.6	
1009 69TH STREET	29.3	30.0	
1010 69TH STREET	14.5	11.2	
1011 69TH STREET	15.8	15.1	
1012 69TH STREET	11.9	12.4	
1014 69TH STREET	11.4	11.5	
1015 69TH STREET	15.7	17.2	
1016 69TH STREET	13.0	13.9	
1017 69TH STREET	16.8	15.4	
1018 69TH STREET	10.3	12.0	
1019 69TH STREET	13.6	12.4	
1020 69TH STREET	12.4	14.3	
1022 69TH STREET	16.4	19.8	
1023 69TH STREET	11.5	13.3	
1024 69TH STREET	14.8	18.3	
1025 69TH STREET	11.4	13.3	
1026 69TH STREET	17.2	20.1	
1027 69TH STREET	24.2	23.9	
1028 69TH STREET	19.3	20.0	
1031 69TH STREET	19.8	15.8	
1032 69TH STREET	16.2	14.9	
1035 69TH STREET	15.6	13.1	
1036 69TH STREET	14.1	16.4	
1040 69TH STREET	18.7	19.1	
1042 69TH STREET	17.3	19.3	
1043 69TH STREET	15.0	12.6	REMOVAL - GRANULAR
1045 69TH STREET	19.0	15.9	
1046 69TH STREET	13.6	15.9	
1104 69TH STREET	20.1	20.7	
1105 69TH STREET	17.5	17.5	
1106 69TH STREET	18.5	18.3	
1110 69TH STREET	16.1	15.8	
1111 69TH STREET	23.7	23.6	
1117 69TH STREET	20.2	20.2	
1118 69TH STREET	15.1	18.6	
1122 69TH STREET	16.5	19.6	
1123 69TH STREET	34.7	32.9	
1126 69TH STREET	32.1	34.6	
1127 69TH STREET	30.7	27.5	
1130 69TH STREET	14.3	13.8	REMOVAL - 4.62 PCC/9.63 GRANULAR
1131 69TH STREET	23.8	23.7	
1134 69TH STREET	21.5	25.4	
1138 69TH STREET	19.9	23.2	
1141 69TH STREET	28.5	28.9	
1145 69TH STREET	30.1	29.0	
6842 UNIVERSITY AVENUE (SOUTH)	41.0	37.7	3" CURB DROP, 10' RADIUS
6842 UNIVERSITY AVENUE (NORTH)	54.4	50.6	10' RADIUS

EXCAVATION QUANTITY	Depth, FT	Quantity, SY	Quantity, SF	Volume, CF	Volume, CY	CUT, CY	FILL, CY	FILL FACTOR	ADJ. FILL	NET FILL, CY
Excavation RAW data (EG-FG)						171.08	189.91	1.35	256.38	18.83
Existing Pavement Removal (Average 6.875")	0.57	5,338.00	48,042.00	27,524.06	1,019.41					
Existing Sidewalk Removal (assumed 4")	0.33	624.00	5,616.00	1,872.00	69.33					
Existing Driveway Removal (assumed 6")	0.50	910.00	8,190.00	4,095.00	151.67					
Existing Gravel Removal (assumed 6")	0.50	25.00	225.00	112.50	4.17					
Proposed 7" Paving	0.67	5,545.00	49,905.00	33,270.00	1,232.22					
Modified Subbase 6"	0.50	6,354.00	57,186.00	28,593.00	1,059.00					
Proposed Sidewalk 4"	0.33	630.00	5,670.00	1,890.00	70.00					
Proposed Sidewalk 6"	0.50	31.00	279.00	139.50	5.17					
Modified Subbase 4"	0.00									
Proposed Driveway	0.50	947.00	8,523.00	4,261.50	157.83					
Proposed Topsoil	0.50	3,240.00	29,160.00	14,580.00	540.00					
Paving Difference						1271.81				
Sidewalk Difference						5.83				
Driveway Difference						6.17				
Topsoil						-540.00				
						914.89	189.91	1.35	256.38	658.51

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

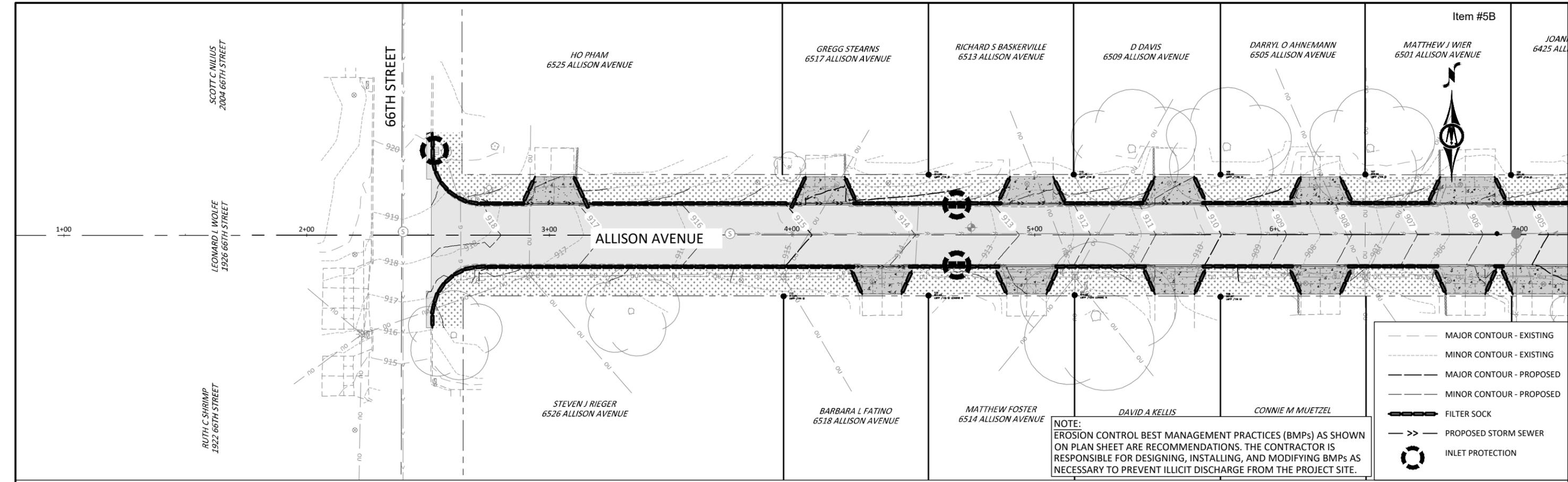


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

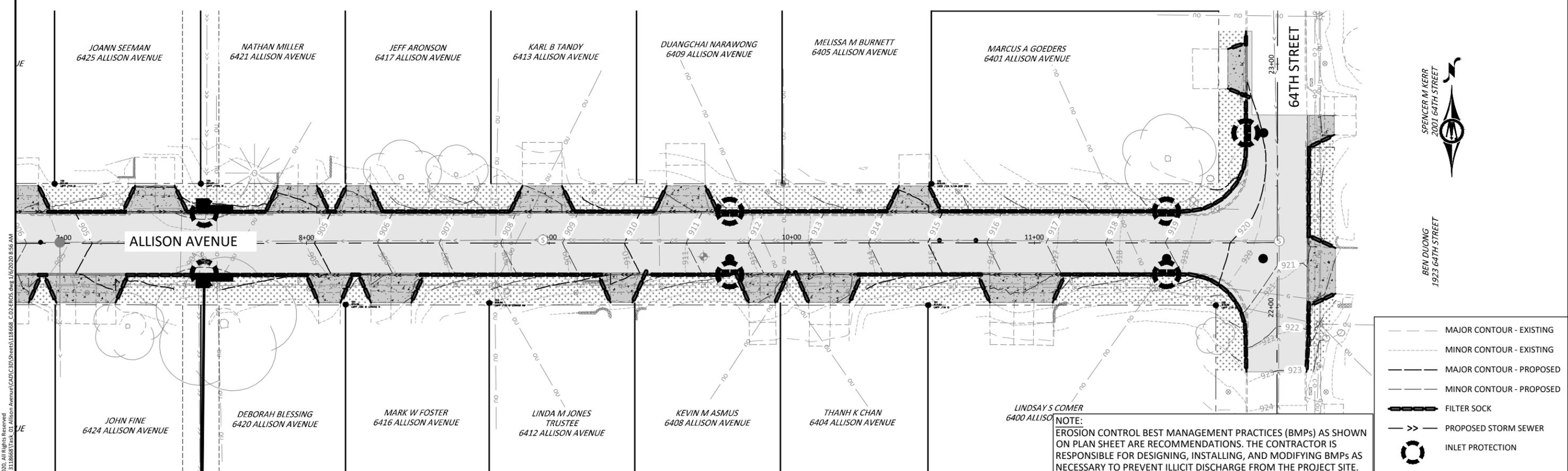
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TABULATIONS - 69TH STREET



Item #5B
JOANN SEEMAN
6425 ALLISON AVENUE

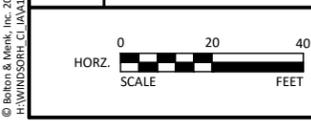
- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- FILTER SOCK
- PROPOSED STORM SEWER
- INLET PROTECTION

NOTE:
EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.



- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- FILTER SOCK
- PROPOSED STORM SEWER
- INLET PROTECTION

NOTE:
EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

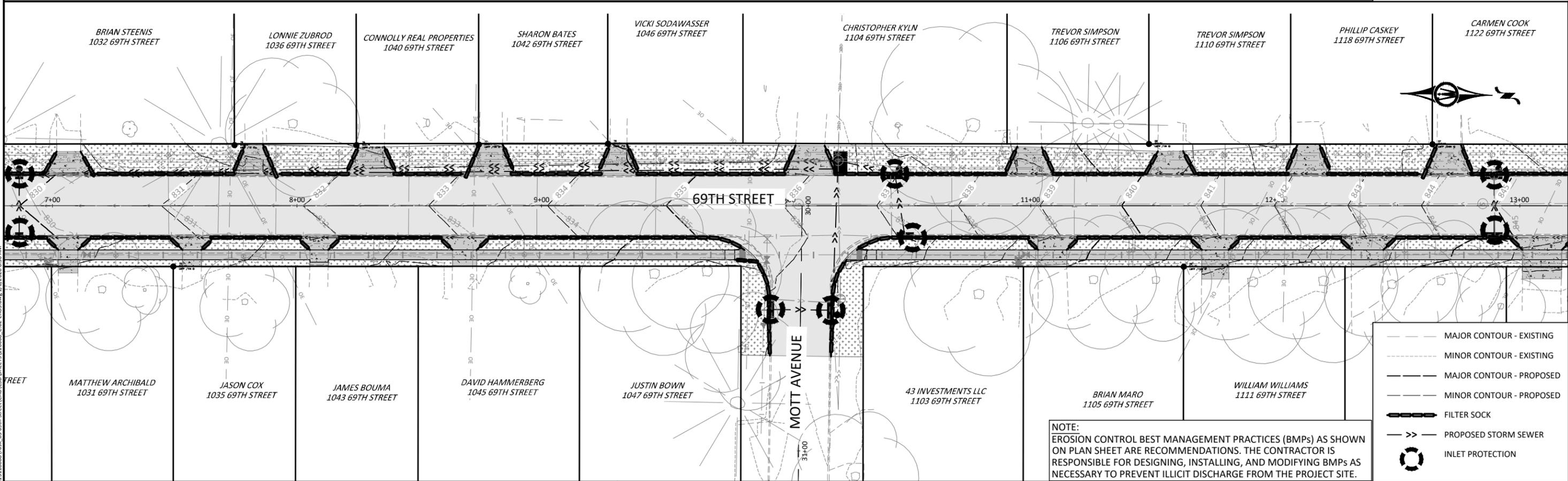
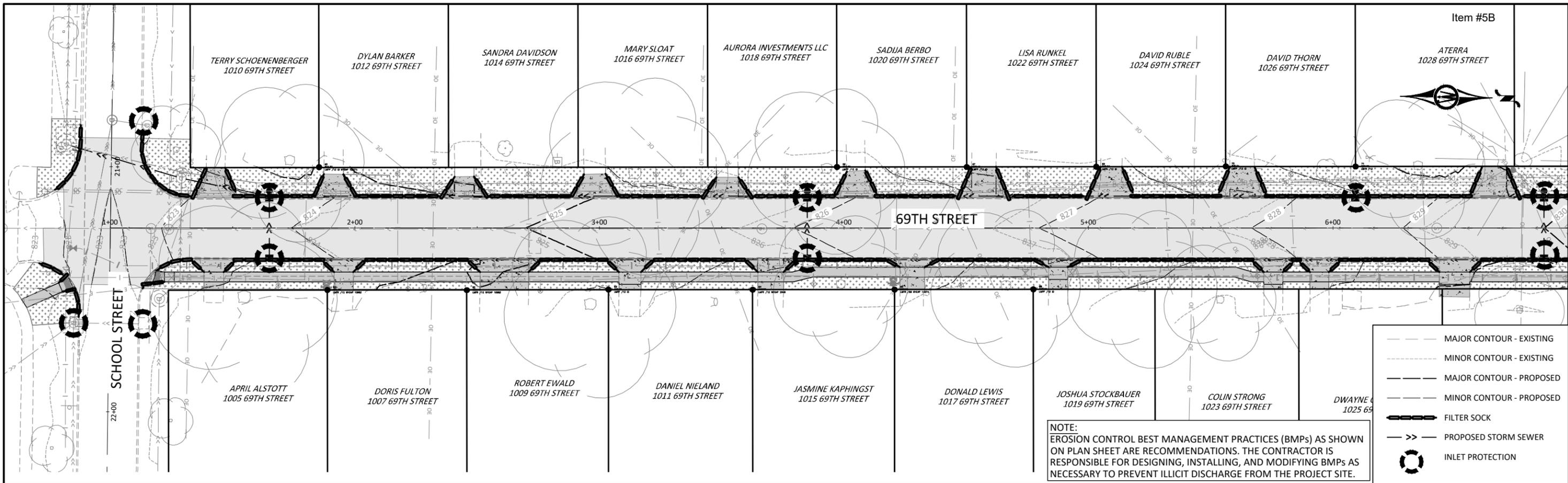


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\CI\A13\118668\Task 01 Allison Avenue\CAD\Sheet\118668_C03.EROS.dwg 1/20/2020 8:56 AM



© Bolton & Menk, Inc. 2020. All Rights Reserved. Windsor Heights, IA 50395. 1/27/2020 8:56 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED BY
NAS
SEATED
JLE
CHECKED
NG
CLIENT PROJ. NO.
A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
EROSION CONTROL PLAN - 69TH STREET

SHEET
C.9

CARMEN COOK
122 69TH STREET

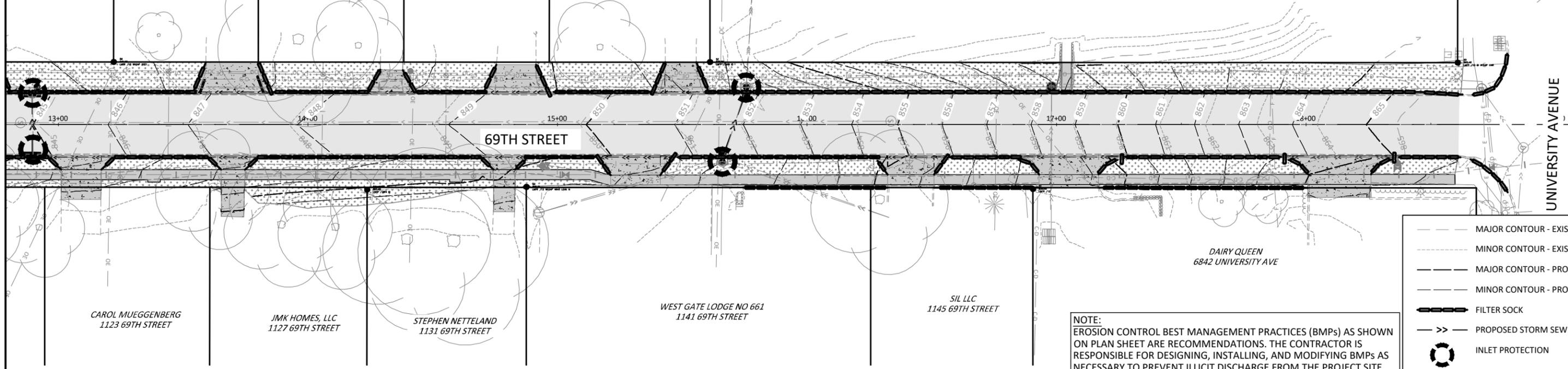
WILLIAM MAXWELL
1126 69TH STREET

DENNIS WILLIAMS
1130 69TH STREET

ALMA MUJANOVIC
1134 69TH STREET

LYNDA WILGENBUSH
1138 69TH STREET

COLBY INTERESTS
6900 UNIVERSITY AVE



UNIVERSITY AVENUE

DAIRY QUEEN
6842 UNIVERSITY AVE

CAROL MUEGGENBERG
1123 69TH STREET

JMK HOMES, LLC
1127 69TH STREET

STEPHEN NETTELAND
1131 69TH STREET

WEST GATE LODGE NO 661
1141 69TH STREET

SIL LLC
1145 69TH STREET

NOTE:
EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON PLAN SHEET ARE RECOMMENDATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, INSTALLING, AND MODIFYING BMPs AS NECESSARY TO PREVENT ILLICIT DISCHARGE FROM THE PROJECT SITE.

- MAJOR CONTOUR - EXISTING
- MINOR CONTOUR - EXISTING
- MAJOR CONTOUR - PROPOSED
- MINOR CONTOUR - PROPOSED
- FILTER SOCK
- >> PROPOSED STORM SEWER
- INLET PROTECTION

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\CI\A13118668\Task_03_69th_Street\CAD\Sheet\CAD\Sheet118668_C03-EROS.dwg, 1/17/2020 8:56 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



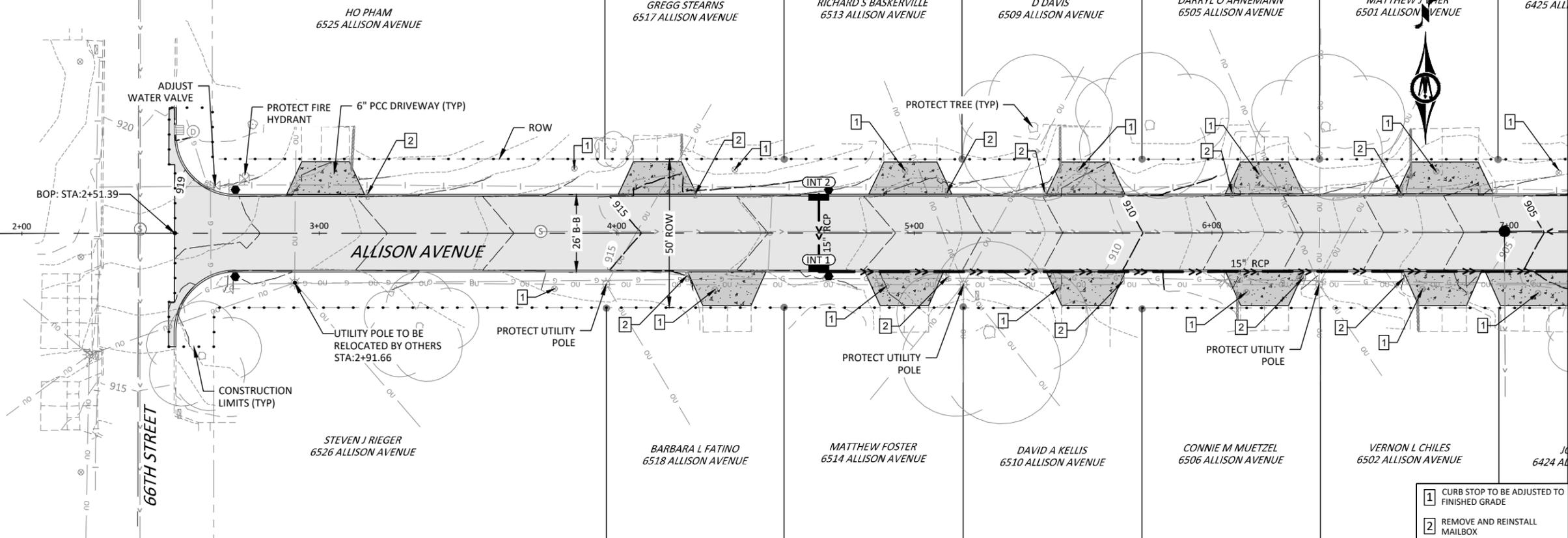
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
EROSION CONTROL PLAN - 69TH STREET

SCOTT C MILLIS
2004 66TH STREET

LEONARD L WOLFE
1926 66TH STREET

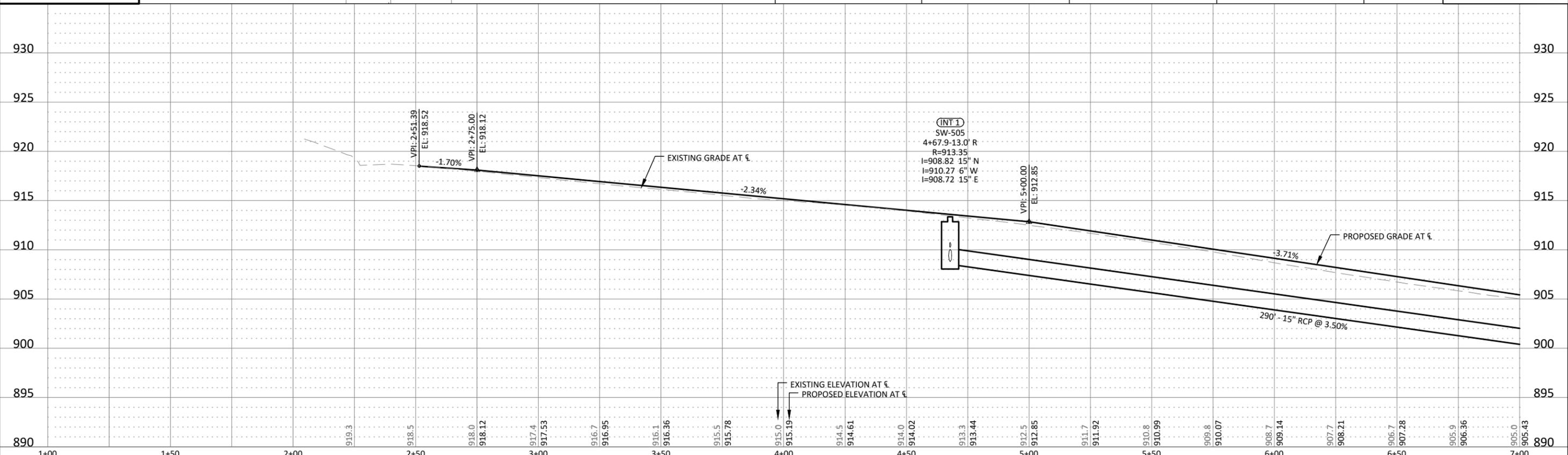
RUTH C SHRIMP
1922 66TH STREET



LEGEND

- 7" PCC PAVEMENT
- 6" PCC DRIVEWAY

- 1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE
- 2 REMOVE AND REINSTALL MAILBOX



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13118668\Task 01 Allison Avenue\CAD\Sheet\118668_P01.dwg 1/13/2020 4:23 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



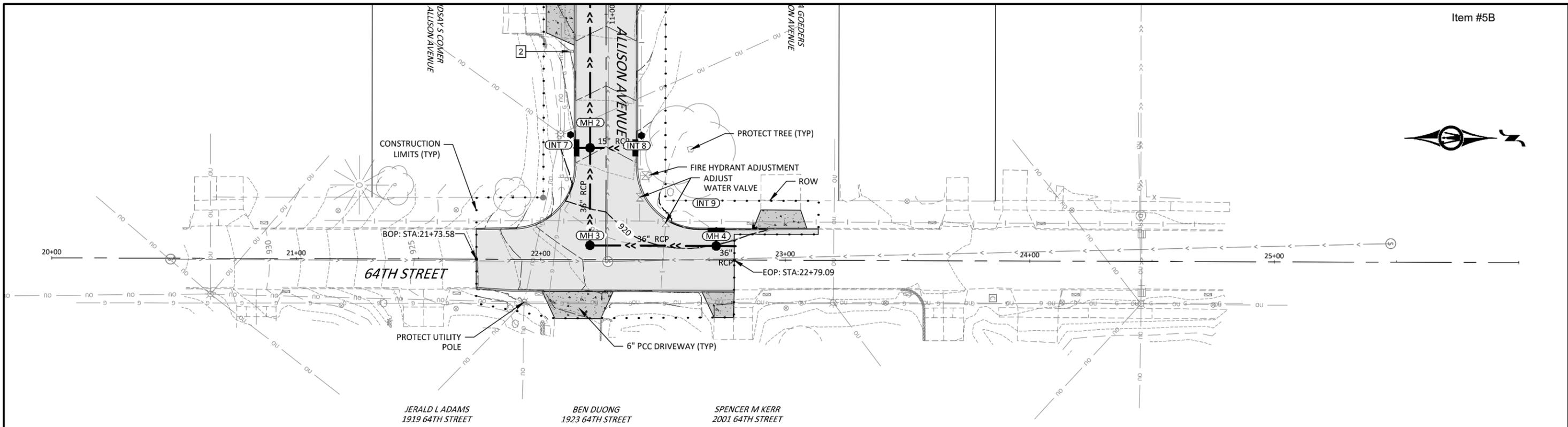
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
PLAN AND PROFILE - ALLISON AVENUE

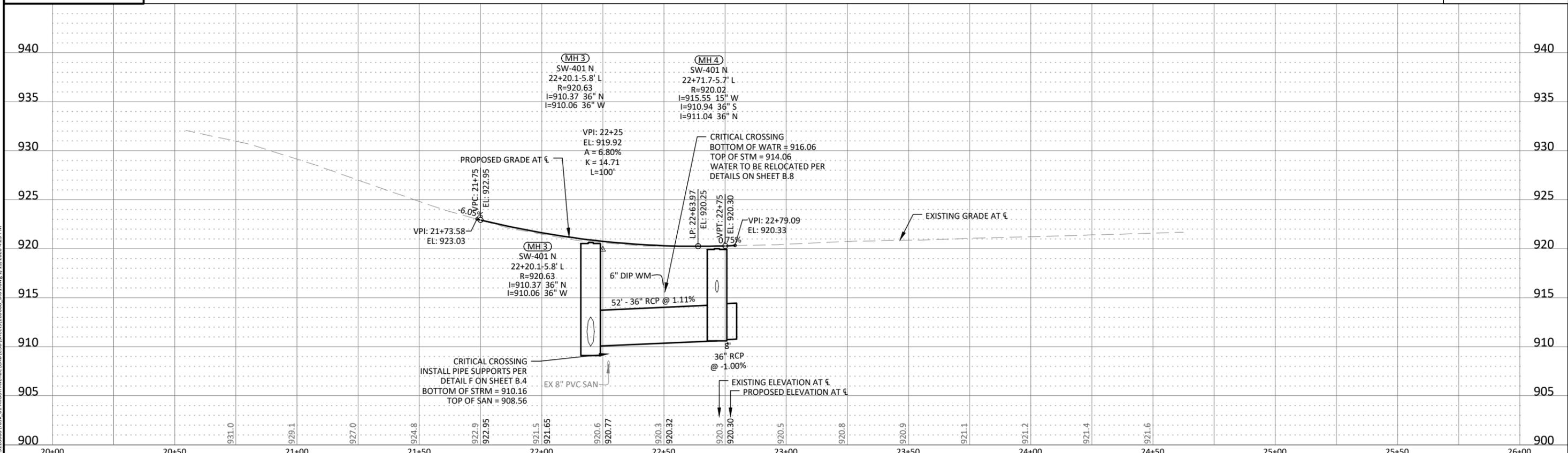
SHEET
D.1



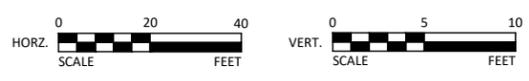
LEGEND

- 7" PCC PAVEMENT
- 6" PCC DRIVEWAY

- 1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE
- 2 REMOVE AND REINSTALL MAILBOX



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13118668\Task 01 Allison Avenue\CAD\Sheet\118668_P01.dwg 1/13/2020 4:23 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

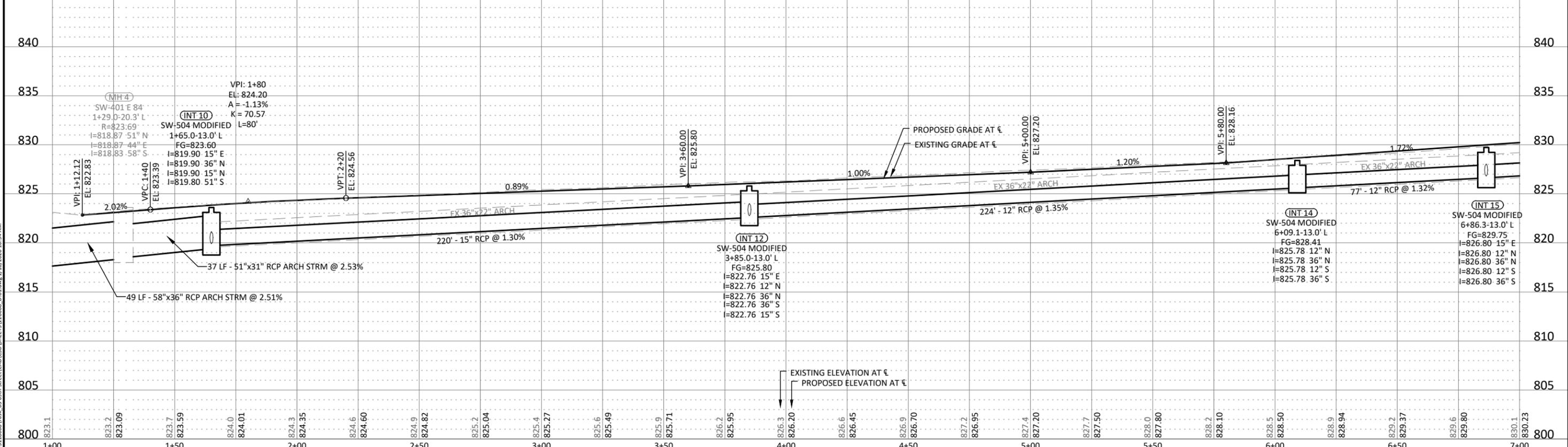
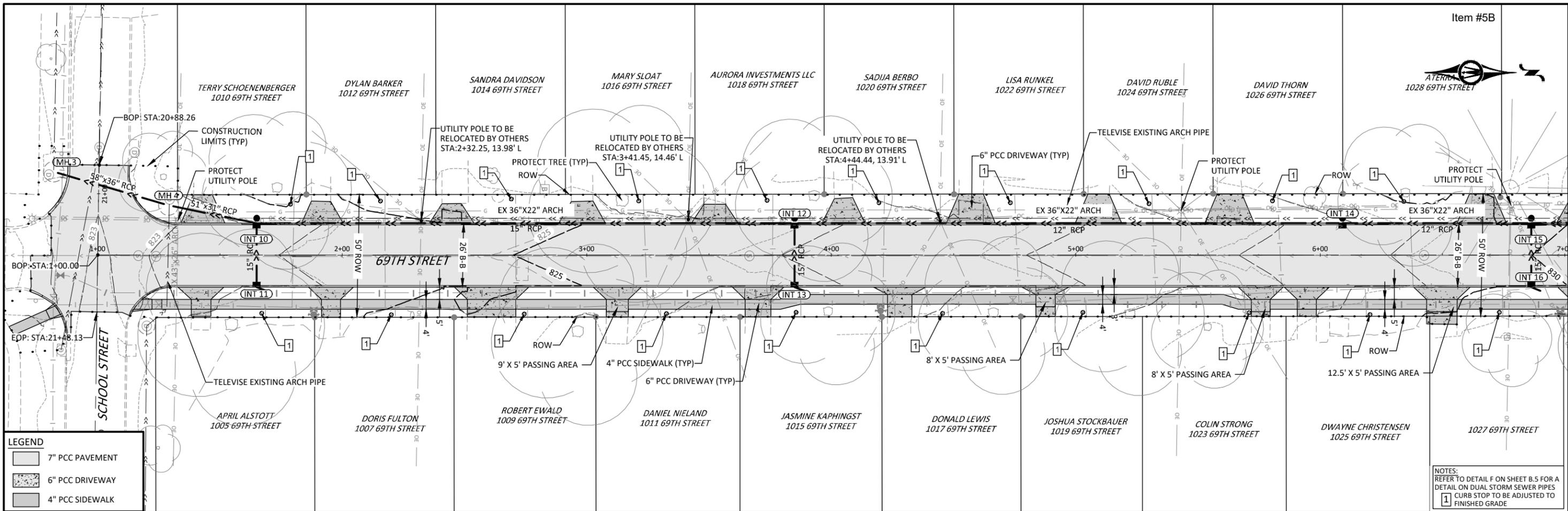


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

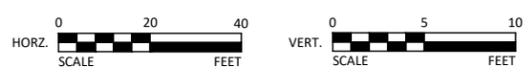


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
PLAN AND PROFILE - 64TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task_03_69th_Street\CAD\Sheet\118668_01.dwg 17/09/2020 10:54 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

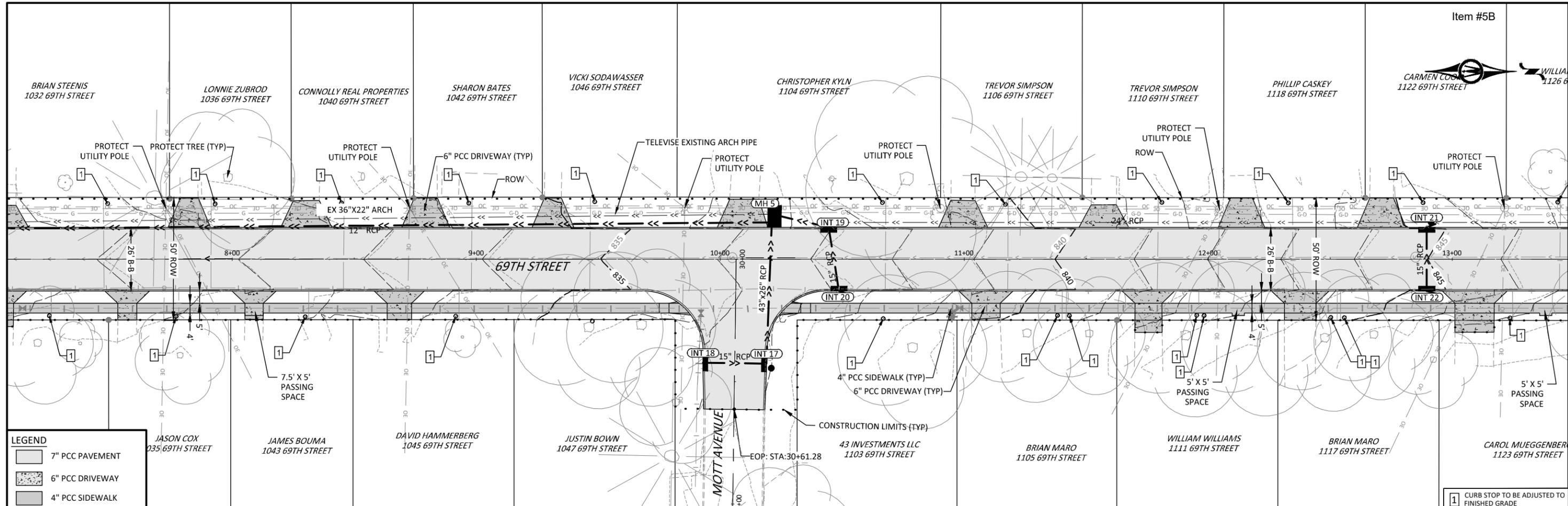


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

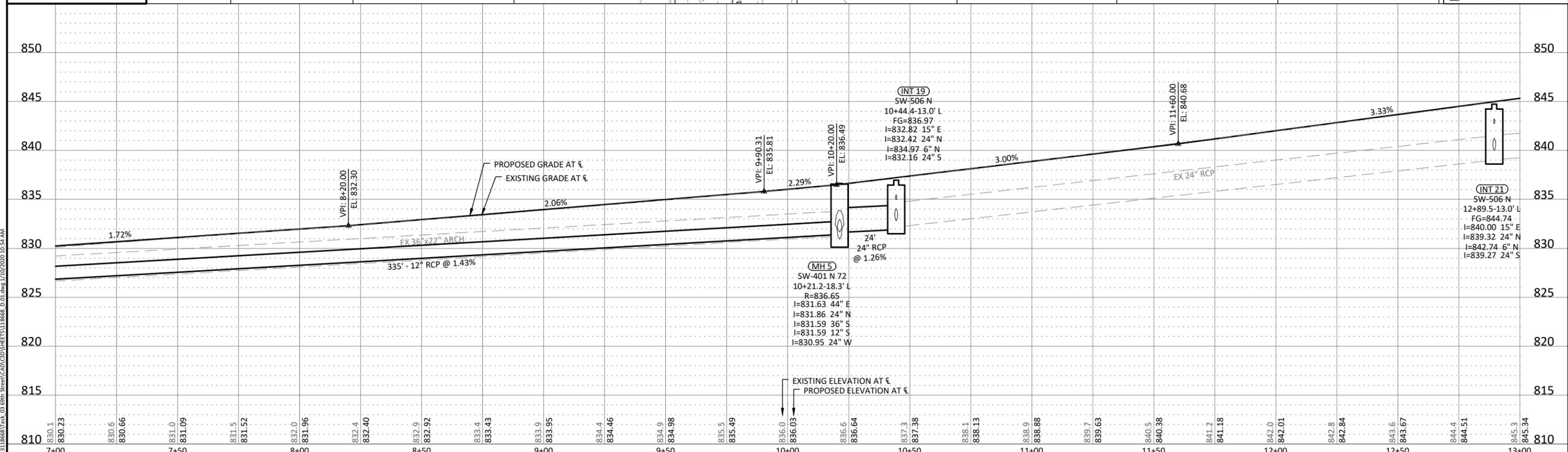
CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 PLAN & PROFILE - 69TH ST



LEGEND

- 7" PCC PAVEMENT
- 6" PCC DRIVEWAY
- 4" PCC SIDEWALK

1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task_03_69th_Street\CAD\Sheet\118668_D.01.dwg 17/02/2020 10:54 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

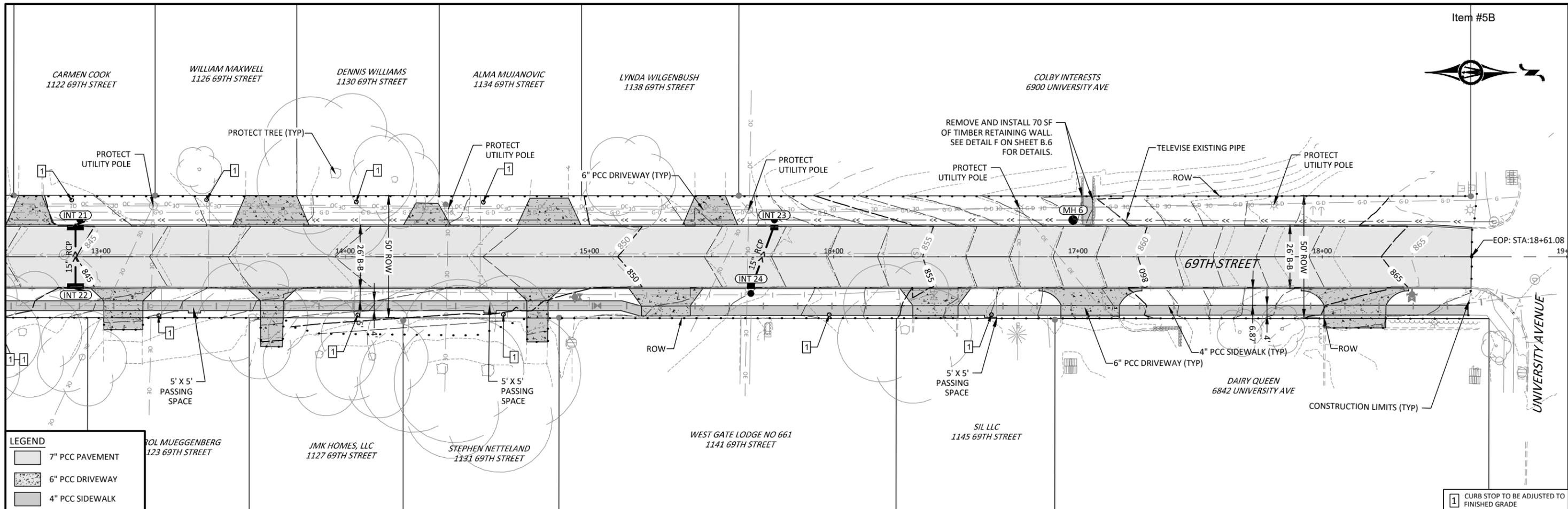


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

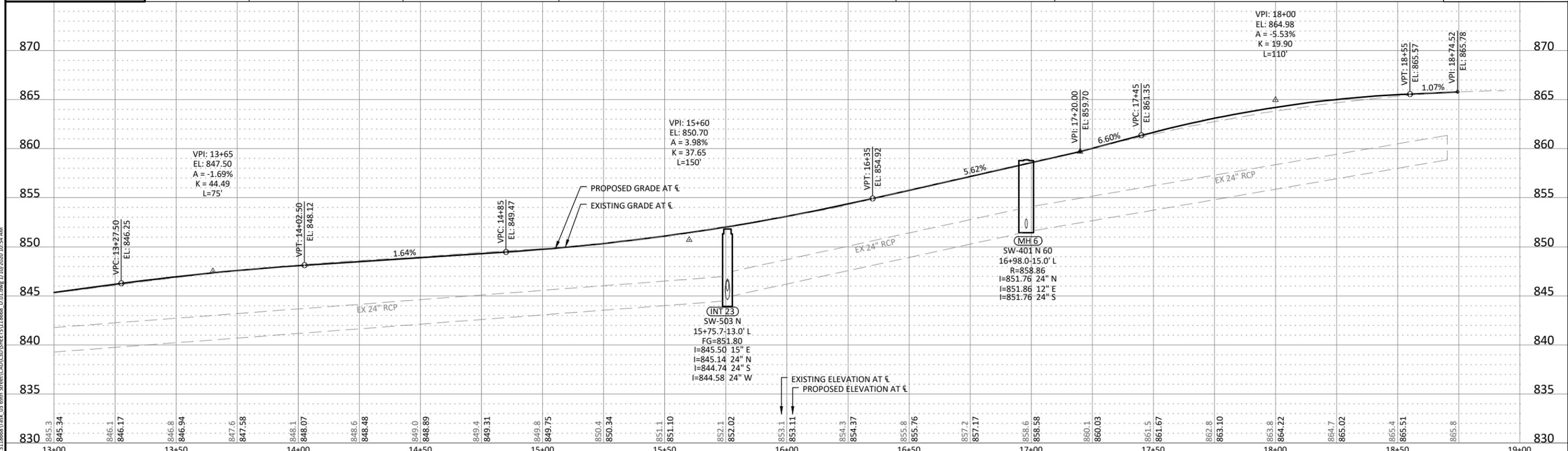
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
PLAN & PROFILE - 69TH ST



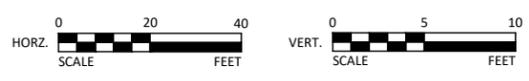
LEGEND

- 7" PCC PAVEMENT
- 6" PCC DRIVEWAY
- 4" PCC SIDEWALK

1 CURB STOP TO BE ADJUSTED TO FINISHED GRADE



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1413118668\Task_03_69th_Street\CAD\Sheet\5118668_01.dwg 17/02/2020 10:54 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

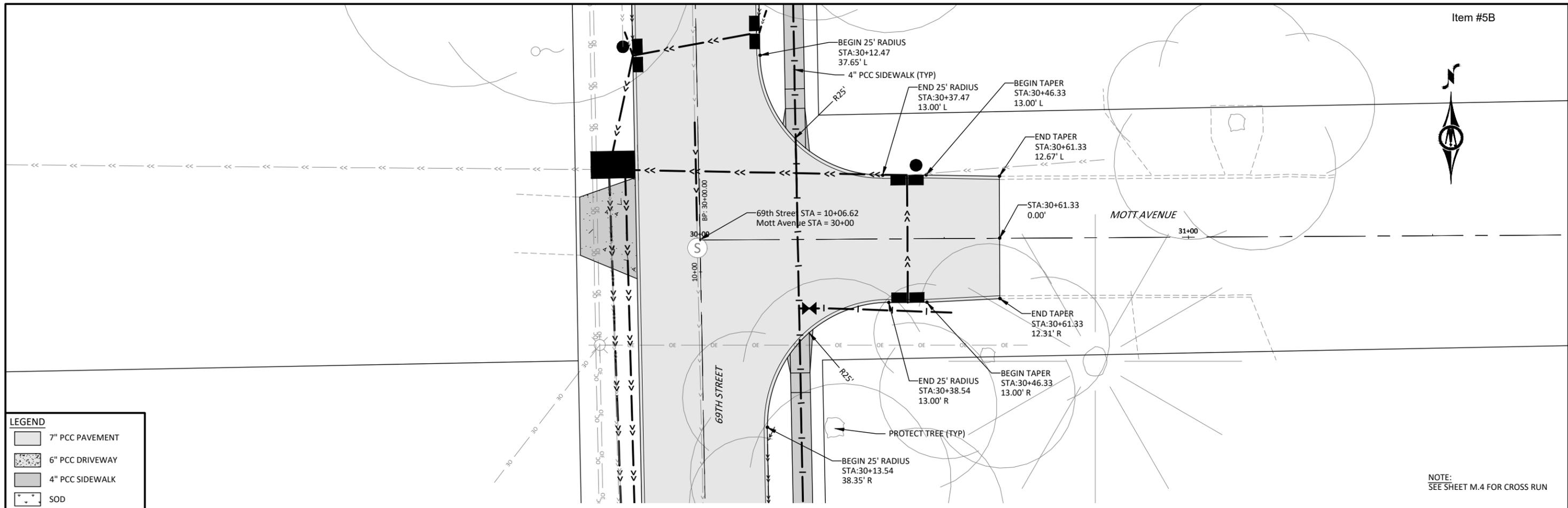


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

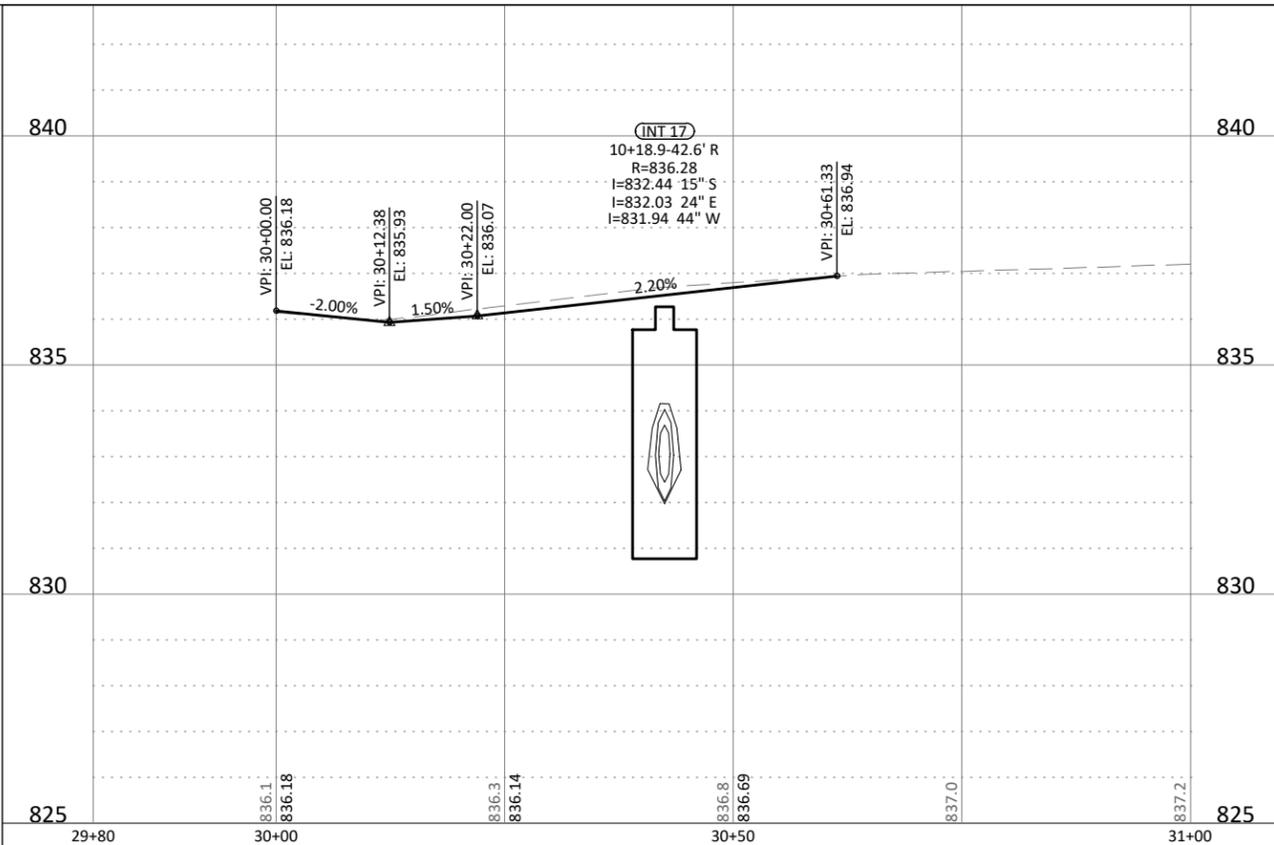
CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 PLAN & PROFILE - 69TH ST



LEGEND

	7" PCC PAVEMENT
	6" PCC DRIVEWAY
	4" PCC SIDEWALK
	SOD

NOTE:
SEE SHEET M.4 FOR CROSS RUN



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\2020\CI\A13118668\Task_03_69th_Street\CAD\CD\SHHEETS\118668_E.01.dwg 1/8/2020 11:45 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 PLAN & PROFILE - MOTT AVE



ALIGNMENT LINE DATA					
LINE #	LENGTH	BEARING	START POINT (E, N)	END POINT (E, N)	ALIGNMENT NAME
L1	1200.00	N89° 58' 12.56"E	(1583183.6608, 587426.3610)	(1584383.6606, 587426.9860)	ALLISON AVE
L2	600.00	N0° 06' 10.11"E	(1584383.2540, 587200.3636)	(1584384.3306, 587800.3626)	64TH ST

PROJECT DATUM:
 HORIZONTAL: IA83-SF
 VERTICAL: NAVD 88

CONTROL POINTS				
POINT NUMBER	RAW DESCRIPTION	NORTHING	EASTING	ELEVATION
60	VFCP /SET CUT X	587464.976	1583410.952	920.28
61	VFCP /SET CUT X	587402.157	1583612.783	914.66
62	VFCP /SET CUT X	587402.293	1583793.553	908.70
63	VFCP /SET CUT X	587450.583	1583929.091	905.02
64	VFCP /SET CUT X	587402.289	1584010.513	906.47
65	VFCP /SET CUT X	587450.676	1584239.886	915.44
66	VFCP /SET CUT X	587467.349	1584395.820	920.84
67	VFCP /SET CUT X	587384.081	1584395.617	922.65
68	VFCP /SET MAGNAIL	587212.986	1583422.947	901.62
69	VFCP /SET MAGNAIL	587743.524	1583423.929	930.25

© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR CT - IAW1118668\Task 01 Allison Avenue\CAD\Sheet\118668_G.01.dwg 12/7/2019 6:38 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

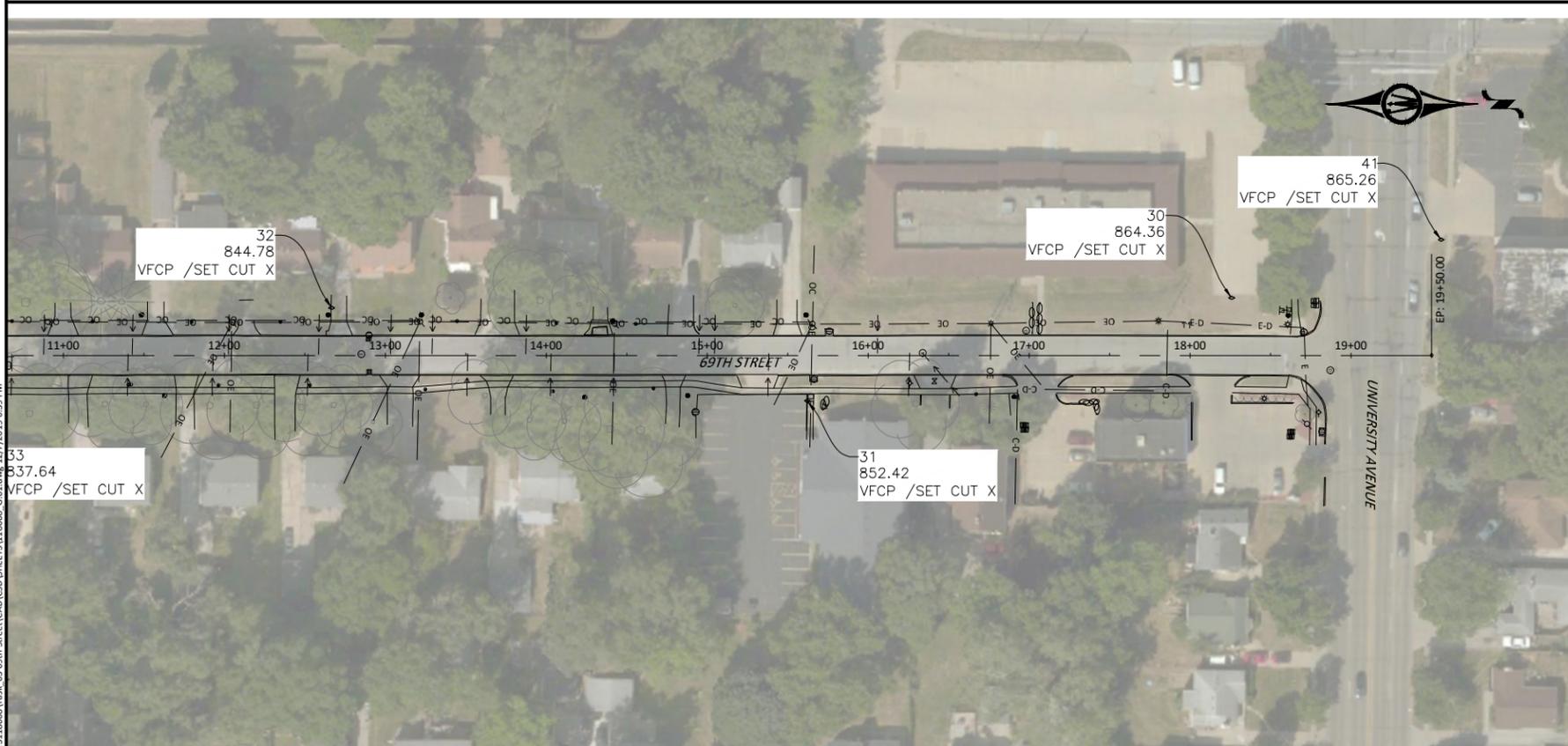


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEAL	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 REFERENCE TIES AND BENCH MARKS - ALLISON AVENUE

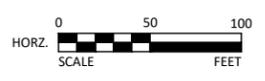


CONTROL POINT DATA				
POINT NO.	RAW DESCRIPTION	NORTHING	EASTING	ELEVATION
30	VFCP /SET CUT X	7491938.067	18501170.010	864.36
31	VFCP /SET CUT X	7491675.838	18501239.030	852.42
32	VFCP /SET CUT X	7491379.143	18501187.350	844.78
33	VFCP /SET CUT X	7491150.803	18501241.770	837.64
34	VFCP /SET CUT X	7490940.764	18501241.300	832.87
35	VFCP /SET CUT X	7490724.658	18501245.800	828.80
36	VFCP /SET CUT X	7490175.256	18501230.910	822.92
37	VFCP /SET CUT X	7490132.043	18501092.360	821.15
38	VFCP /SET CUT X	7490201.435	18501313.680	823.42
39	VFCP /SET CUT X	7491133.967	18501525.900	842.98
41	VFCP /SET CUT X	7492067.430	18501131.430	865.26

PROJECT DATUM:
HORIZONTAL: IRCS 8: AMES-DES MOINES
VERTICAL: NAVD 88

ALIGNMENT LINE DATA					
LINE #	LENGTH	BEARING	START POINT (E, N)	END POINT (E, N)	ALIGNMENT NAME
L1	1850.00	N1° 08' 01.18"W	(18501239.7711, 7490213.3915)	(18501203.1691, 7492063.0294)	69TH STREET
L2	250.00	N89° 41' 35.81"E	(18501114.7728, 7490212.7224)	(18501364.7693, 7490214.0607)	SCHOOL STREET
L3	200.00	N89° 40' 08.95"E	(18501221.8357, 7491119.7336)	(18501421.8324, 7491120.8885)	MOTT AVENUE

© Bolton & Menk, Inc. 2019. All Rights Reserved. W:\WINDSOR HTS\CI\141118668\Task_03_69th Street\CAD\DWG\SHEETS\118668_C01.dwg 1/27/2019 6:39 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

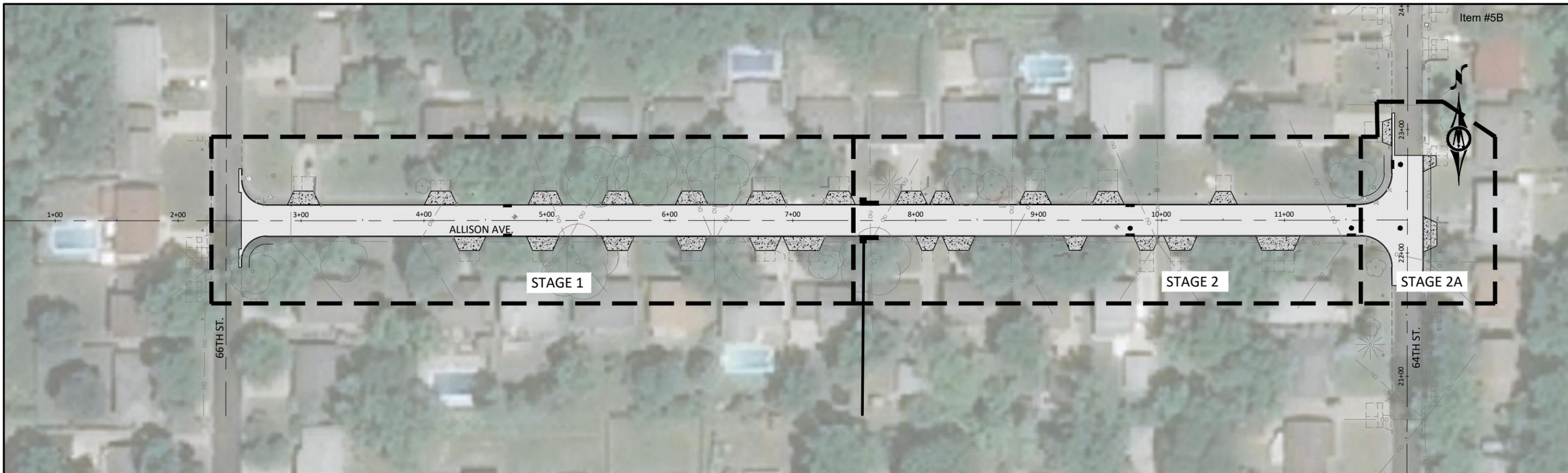


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
REFERENCE TIES AND BENCH MARKS - 69TH STREET



STAGING NOTES:

1. WORK MAY NOT COMMENCE UNTIL XXXX AND MUST BE SUBSTANTIALLY COMPLETED BY XXXX. FINAL COMPLETION OF MUST BE BY XXXX.
2. THE CONTRACTOR IS TO CONSTRUCT THE PROJECT IN STAGES. THE CONTRACTOR SHALL PROVIDE A STAGING PLAN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. ANY ADJUSTMENT TO THE STAGING/TRAFFIC CONTROL SHALL BE COORDINATED WITH THE CITY OF WINDSOR HEIGHTS AND ENGINEER ON RECORD A MINIMUM OF TWO WEEKS IN ADVANCE.
4. THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION TO START EACH STAGE OF THE PROJECT AND SUBMIT AN UPDATED SCHEDULE FOR EACH STAGE UNDER CONSTRUCTION
5. THE ROAD SHALL BE SCRAPPED AND BROOMED PRIOR TO OPENING THE STREET TO TRAFFIC.
6. SITE RESTORATION SHALL BE COMPLETE PRIOR TO NEXT STAGE STARTING.

MAINTAINING MOBILITY FOR HANDICAPPED RESIDENTS:

1. DUE TO THE MOBILITY ISSUES OF SEVERAL RESIDENTS ALONG THE CORRIDOR, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COURTESY CART FOR TRANSPORTING RESIDENTS TO AND FROM THEIR PARKED VEHICLES TO THEIR PLACE OF RESIDENCE WHILE THE ROADWAY IS CLOSED.
2. THE CONTRACTOR HAS THE OPTION REGARDING THE KIND OF CART PROVIDED (GOLF, GATOR, ETC.). ENGINEER ON RECORD SHALL APPROVE CART OPTION.
3. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE A MOBILE PHONE NUMBER TO WHICH RESIDENTS CAN CALL BETWEEN THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY TO WHICH THEY WILL BE ABLE TO REACH THE COURTESY CART DRIVER, UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE WITH THE RESIDENTS.
4. THE CART WILL OPERATE IN CONJUNCTION WITH GRADING AND PAVING OPERATIONS. THE MAXIMUM WAIT TIME FOR THE COURTESY CART SHALL BE 30 MINUTES.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\2020\2020 STREETS\Task 01 Allison Avenue\CAD\Sheet\118668_101.dwg, 1/8/2020 12:11 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

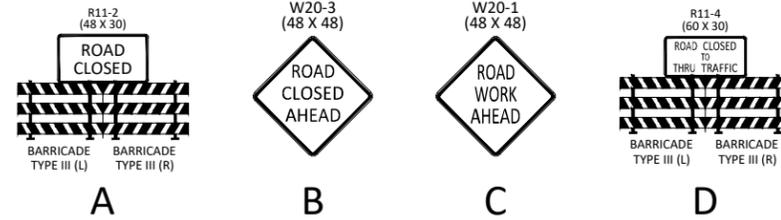


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 STAGING - ALLISON AVENUE



TRAFFIC CONTROL NOTES:

1. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
6. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
9. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - I13118668\Task 01 Allerton Avenue\CAD\Sheet5\118668_101.dwg, 1/8/2020 12:11 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

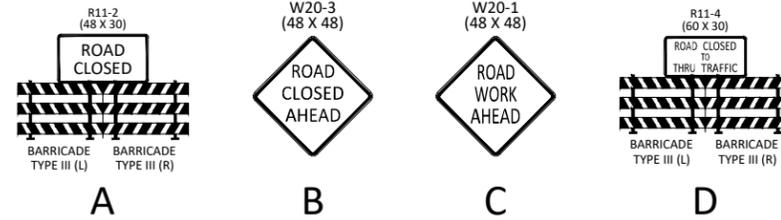
CITY OF WINDSOR HEIGHTS, IOWA

2020 STREET RECONSTRUCTION

TRAFFIC CONTROL - ALLISON AVENUE

SHEET

J.2



TRAFFIC CONTROL NOTES:

1. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
6. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
9. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - I13118668\Task 01 Allerton Avenue\CAD\Sheet5\118668_101.dwg, 1/8/2020 12:11 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

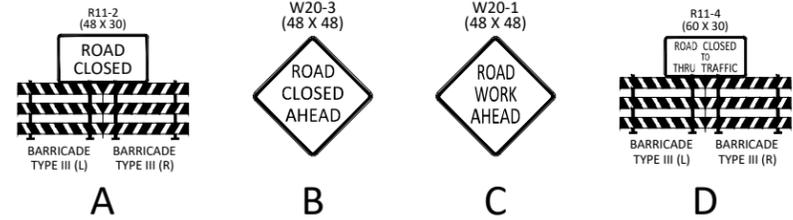


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - ALLISON AVENUE

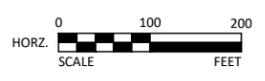


TRAFFIC CONTROL NOTES:

1. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
6. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
9. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.
12. 64TH STREET MUST BE OPEN TO TRAFFIC AFTER STORM SEWER INSTALLATION. TEMPORARY GRAVEL TO BE USED (INCIDENTAL TO TRAFFIC CONTROL).



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - I13118668\Task 01 Allison Avenue\CAD\Sheet\118668_101.dwg, 1/8/2020 12:11 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

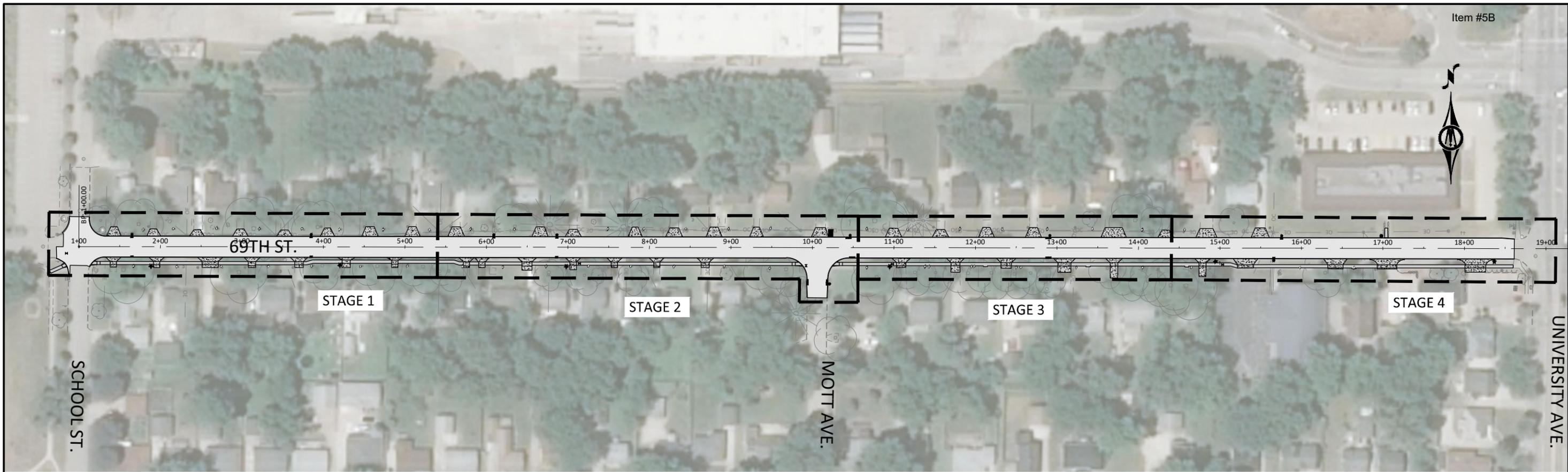


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - ALLISON AVENUE



STAGING NOTES:

1. THE CONTRACTOR IS TO CONSTRUCT THE PROJECT IN 4 STAGES. THE CONTRACTOR SHALL PROVIDE A STAGING PLAN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. ANY ADJUSTMENT TO THE STAGING/TRAFFIC CONTROL SHALL BE COORDINATED WITH THE CITY OF WINDSOR HEIGHTS AND ENGINEER ON RECORD A MINIMUM OF TWO WEEKS IN ADVANCE.
3. THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION TO START EACH STAGE OF THE PROJECT AND SUBMIT AN UPDATED SCHEDULE FOR EACH STAGE UNDER CONSTRUCTION
4. THE ROAD SHALL BE SCRAPPED AND BROOMED PRIOR TO OPENING THE STREET TO TRAFFIC.
5. SITE RESTORATION SHALL BE COMPLETED PRIOR TO NEXT STAGE STARTING.
6. REFER TO WATER MAIN PLANS FOR WATER MAIN PHASING.

MAINTAINING MOBILITY FOR HANDICAPPED RESIDENTS:

1. DUE TO THE MOBILITY ISSUES OF SEVERAL RESIDENTS ALONG THE CORRIDOR, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COURTESY CART FOR TRANSPORTING RESIDENTS TO AND FROM THEIR PARKED VEHICLES TO THEIR PLACE OF RESIDENCE WHILE THE ROADWAY IS CLOSED.
2. THE CONTRACTOR HAS THE OPTION REGARDING THE KIND OF CART PROVIDED (GOLF, GATOR, ETC.). ENGINEER ON RECORD SHALL APPROVE CART OPTION.
3. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE A MOBILE PHONE NUMBER TO WHICH RESIDENTS CAN CALL BETWEEN THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH SUNDAY TO WHICH THEY WILL BE ABLE TO REACH THE COURTESY CART DRIVER, UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE WITH THE RESIDENTS.
4. THE CART WILL OPERATE IN CONJUNCTION WITH GRADING AND PAVING OPERATIONS. THE MAXIMUM WAIT TIME FOR THE COURTESY CART SHALL BE 30 MINUTES.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CH_C\1A1118668\Task_03_69th_Street\CAD\Sheet\118668_01.dwg, 1/8/2020 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

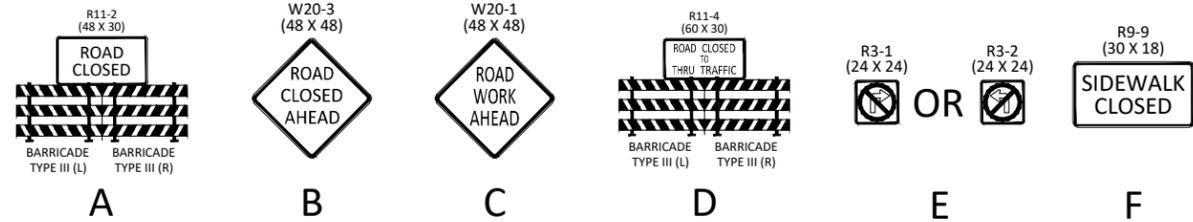


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

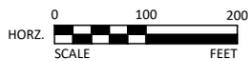
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STAGING AND TRAFFIC CONTROL - 69TH ST.



TRAFFIC CONTROL NOTES:

1. REFER TO SHEET J.6 FOR MORE INFORMATION ON SCHOOL STREET AND 69TH STREET INTERSECTION.
2. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
3. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
5. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
6. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
7. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
8. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
9. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
10. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
11. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
12. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\2020 STREETS\2020 STREETS\2020 STREETS\118668_101.dwg, 18/02/20 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

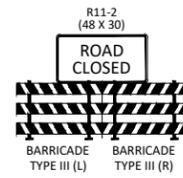


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - 69TH STREET



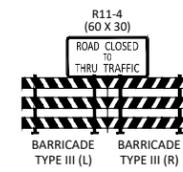
A



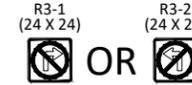
B



C



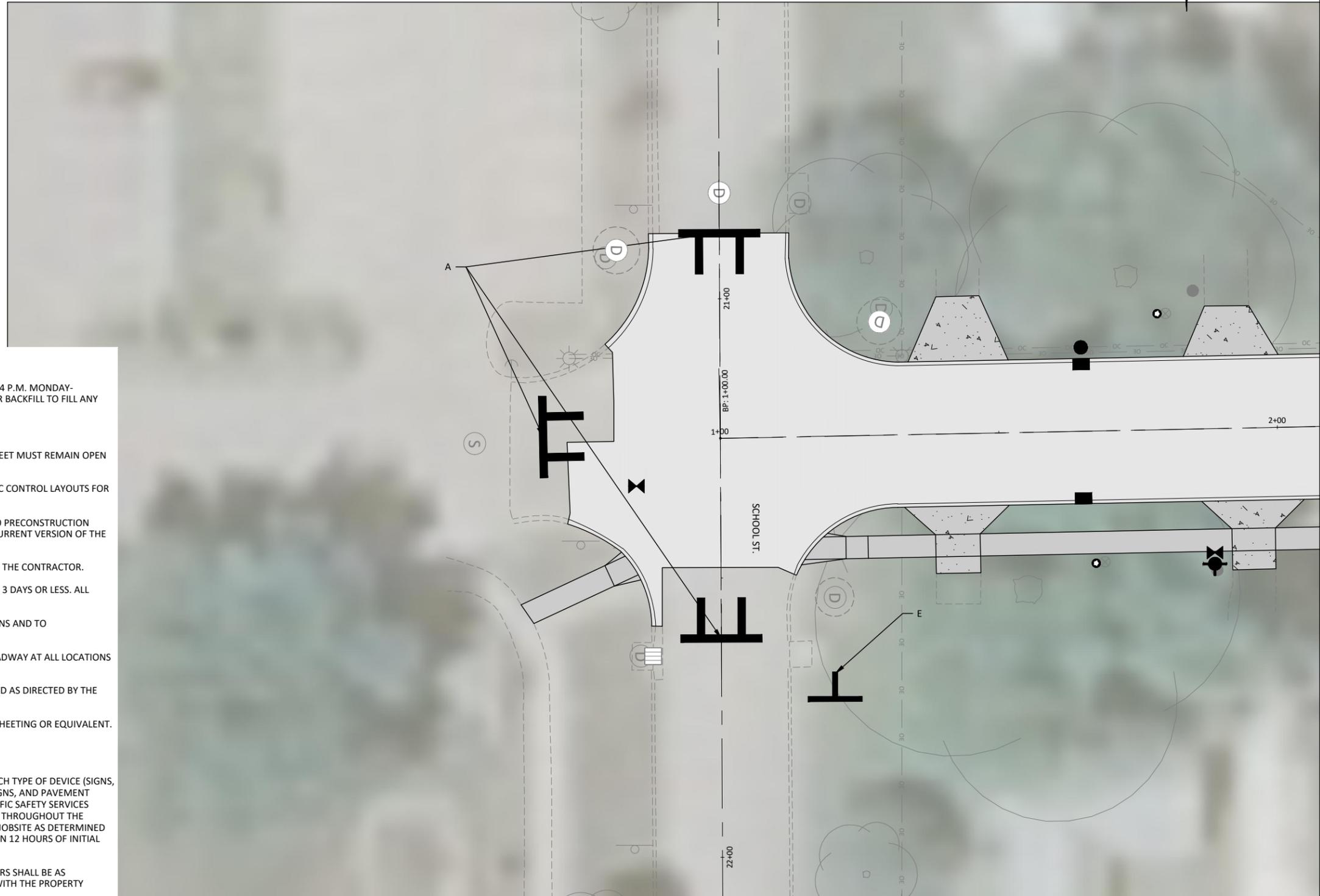
D



E

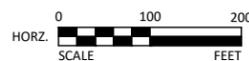


F



TRAFFIC CONTROL NOTES:

1. PHASE 1A SHALL BE LIMITED TO THE INTERSECTION OF SCHOOL STREET AND 69TH STREET.
2. ACCESS TO COLBY PARK CAN ONLY BE RESTRICTED FROM THE HOURS OF 7 A.M. TO 4 P.M. AFTER 4 P.M. MONDAY-THURSDAY AND REMAIN OPEN ON WEEKENDS, THE ROAD MUST BE REOPENED USING GRANULAR BACKFILL TO FILL ANY VOIDS UNTIL PAVEMENT CAN BE PLACED.
3. TEMPORARY ROCK TO BE PLACED.
4. HALF THE INTERSECTION MUST BE POURED AT A TIME. ONE THROUGH LANE ALONG SCHOOL STREET MUST REMAIN OPEN DURING PAVEMENT PLACEMENT TO MAINTAIN ACCESS TO COLBY PARK.
5. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
6. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
8. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
9. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
10. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
11. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
12. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
13. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
14. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
15. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

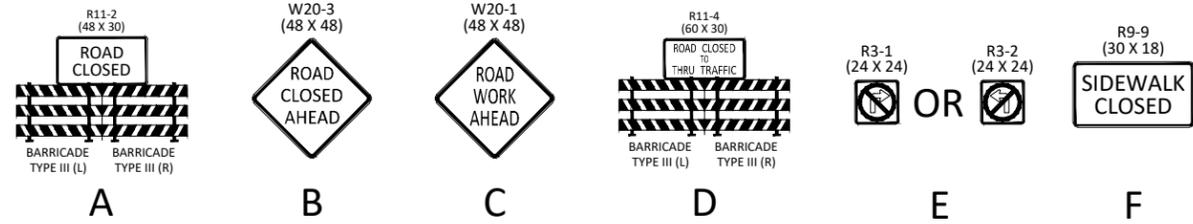


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 TRAFFIC CONTROL - 69TH STREET



TRAFFIC CONTROL NOTES:

1. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
6. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
9. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\101.dwg, 18/02/20 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

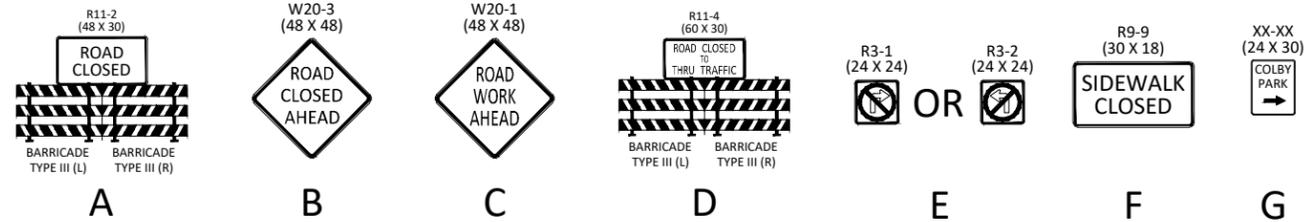


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

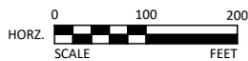
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - 69TH STREET



TRAFFIC CONTROL NOTES:

1. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
6. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
8. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
9. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
10. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
11. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\101.dwg, 18/02/20 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

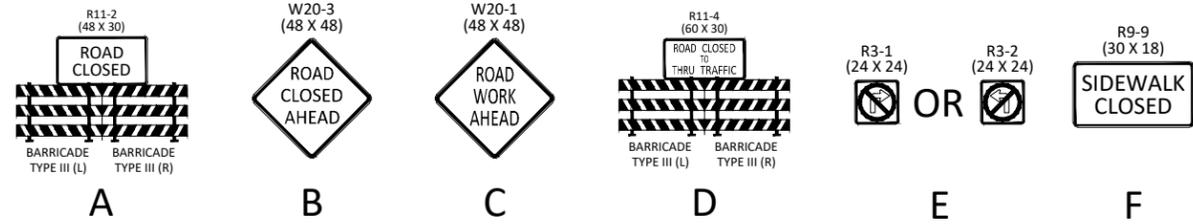


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - 69TH STREET



TRAFFIC CONTROL NOTES:

1. CONTRACTOR TO FOLLOW DETAIL N ON SHEET B.8 FOR WATERMAIN CONNECTION ON UNIVERSITY. MAINTAIN A 11' WIDE LANE.
2. SPECIFIC TRAFFIC CONTROL LAYOUTS ARE SHOWN ON THESE PLANS. THESE ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
3. SUBMIT DETAILED TRAFFIC CONTROL PLANS FOR ALL WORK LOCATIONS FOR APPROVAL PRIOR TO PRECONSTRUCTION MEETING. ALL TRAFFIC CONTROL PLANS, DEVICES, AND PROCEDURES SHALL CONFORM TO THE CURRENT VERSION OF THE MUTCD.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
5. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS. ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
6. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER.
7. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
8. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
9. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
10. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL CITY SIGNS THAT WILL BE IN THE WAY.
11. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.
12. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\101.dwg, 18/02/20 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

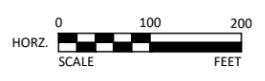


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
TRAFFIC CONTROL - 69TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CA\1318668\101.dwg, 1/8/2020 3:49 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

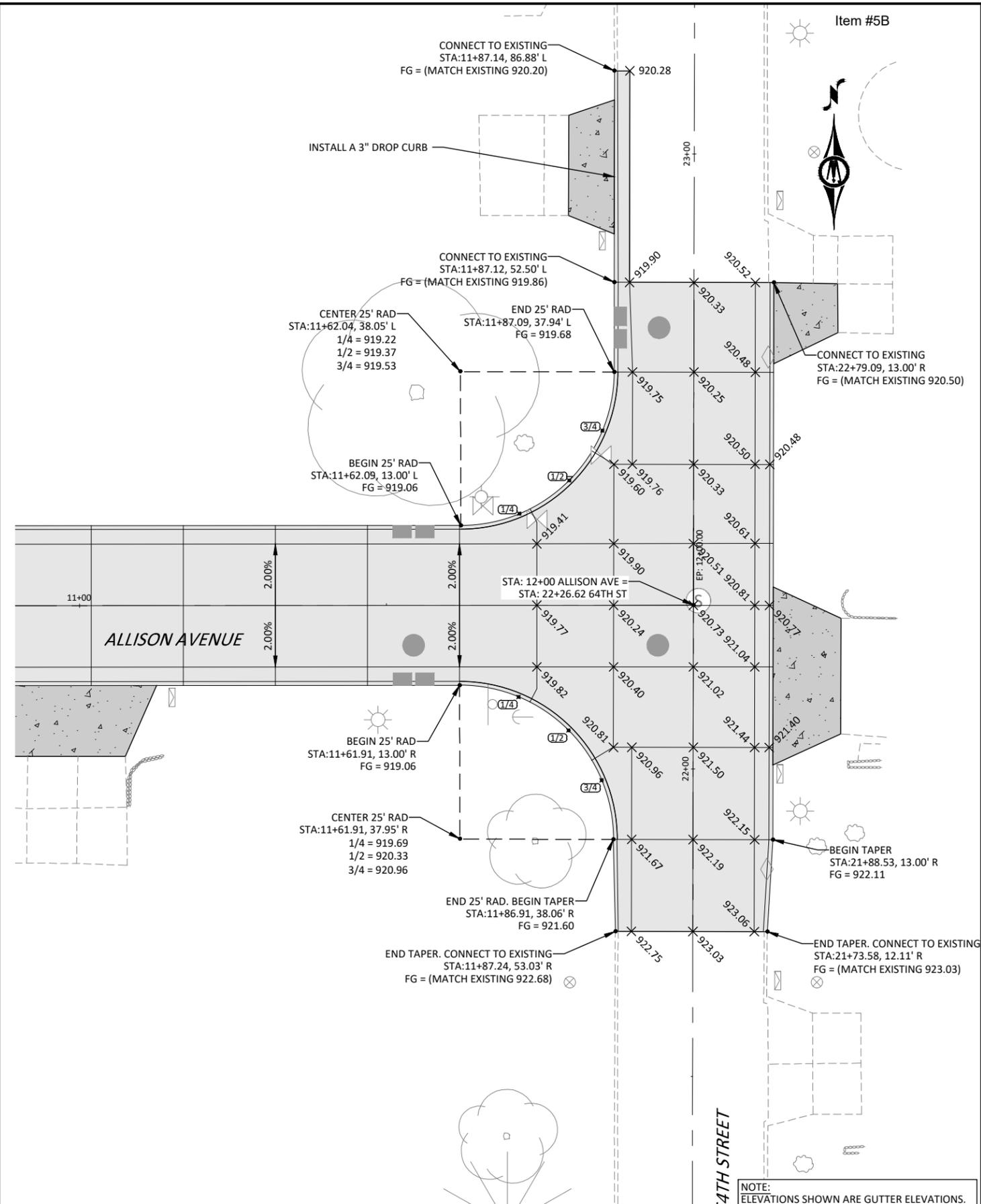
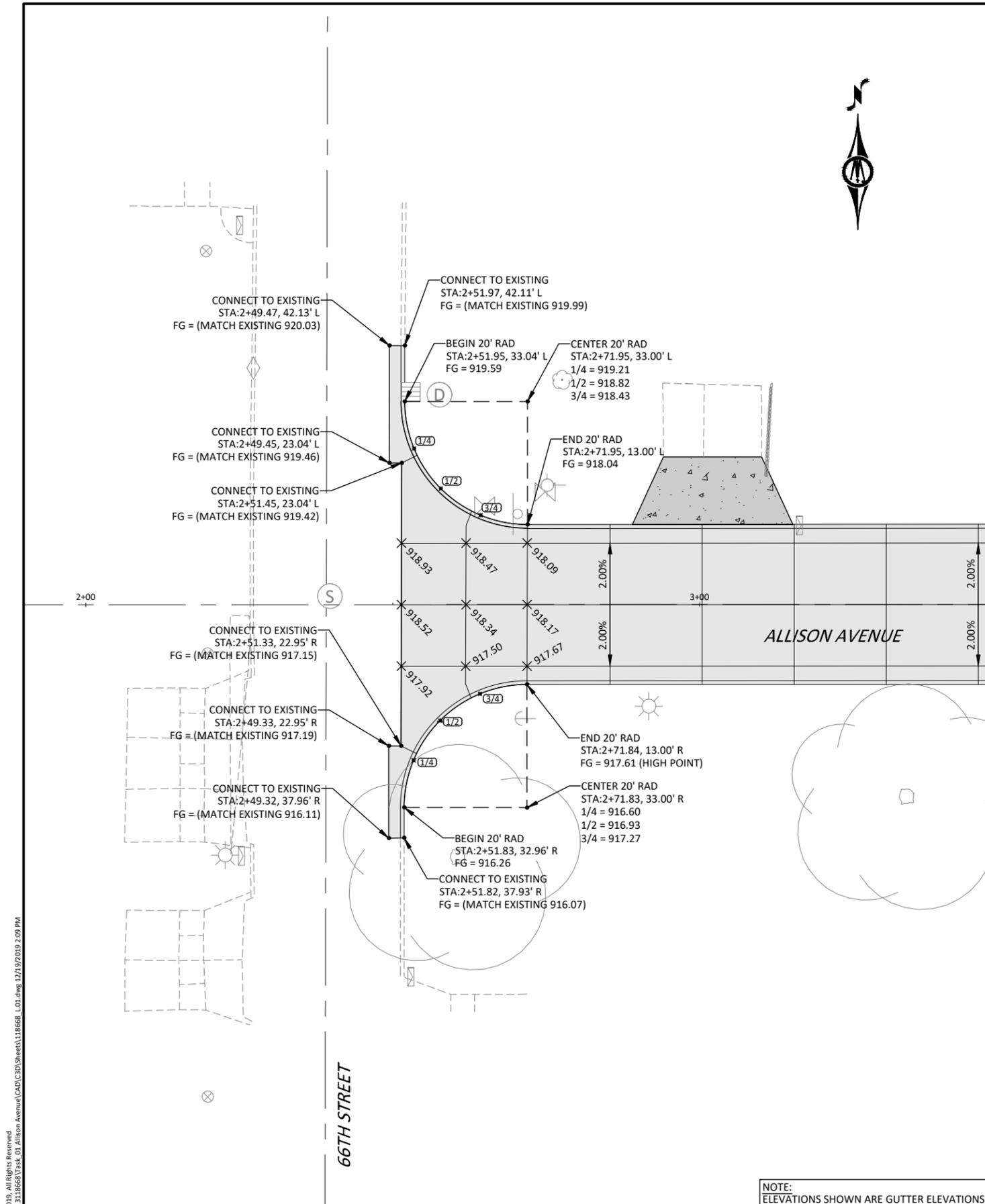


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

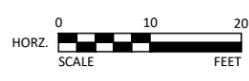


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 TRAFFIC CONTROL - 69TH STREET - DETOUR



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI\118668\Task 01 Allison Avenue\CAD\Sheet\118668_L01.dwg 12/19/2019 2:09 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



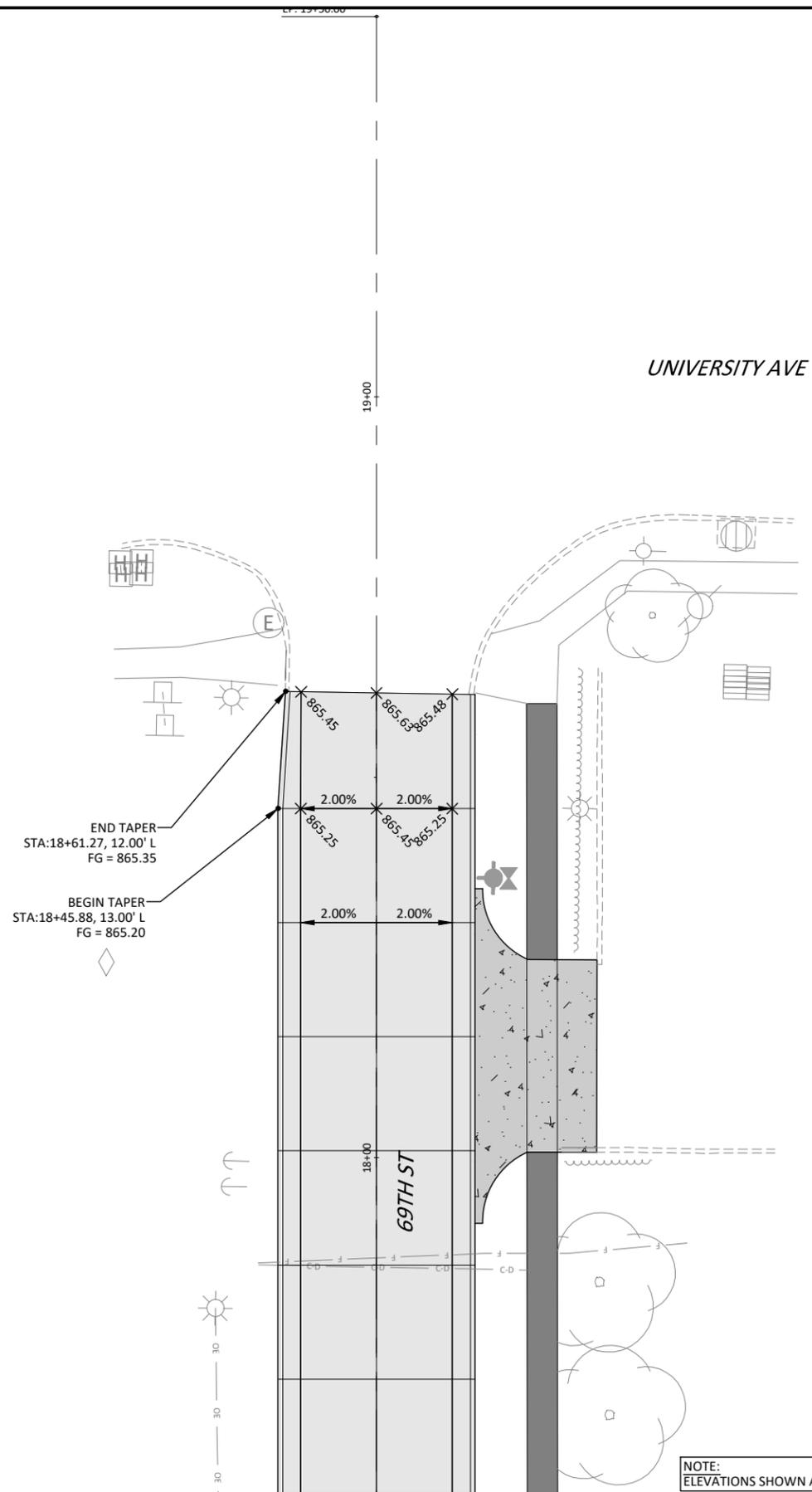
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
INTERSECTION DETAILS

SHEET
L.1



END TAPER
STA:18+61.27, 12.00' L
FG = 865.35

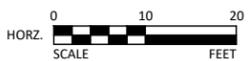
BEGIN TAPER
STA:18+45.88, 13.00' L
FG = 865.20

UNIVERSITY AVE

18+00
69TH ST

NOTE:
ELEVATIONS SHOWN ARE GUTTER ELEVATIONS.

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\181118668\Task_03_69th_Street\CAD\Sheet\118668_L01.dwg 17/02/2020 1:59 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



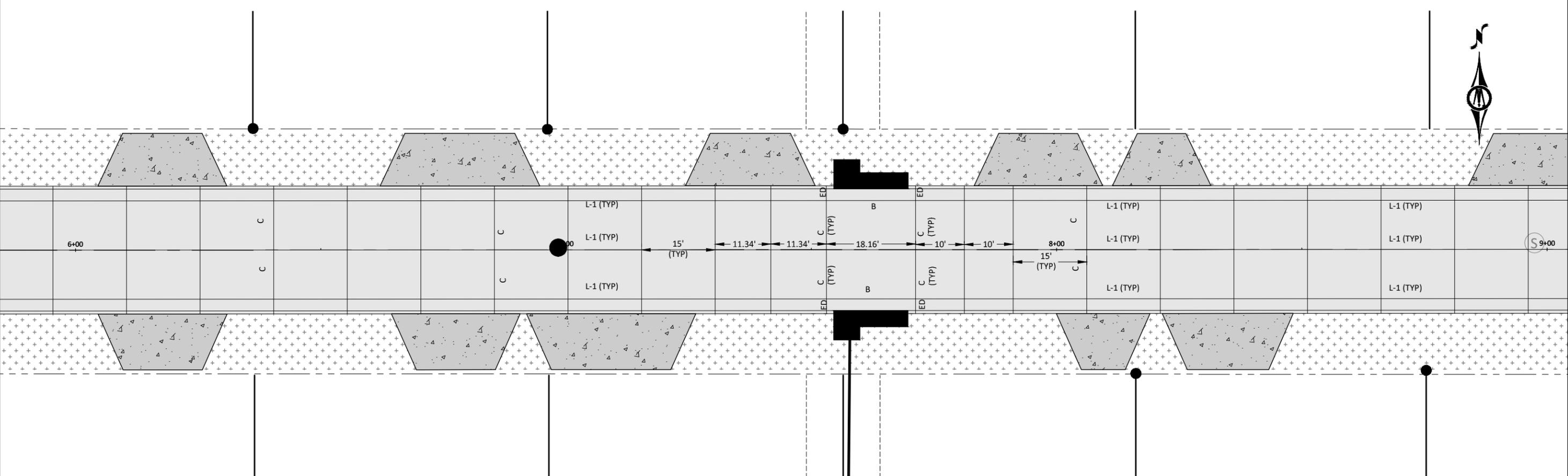
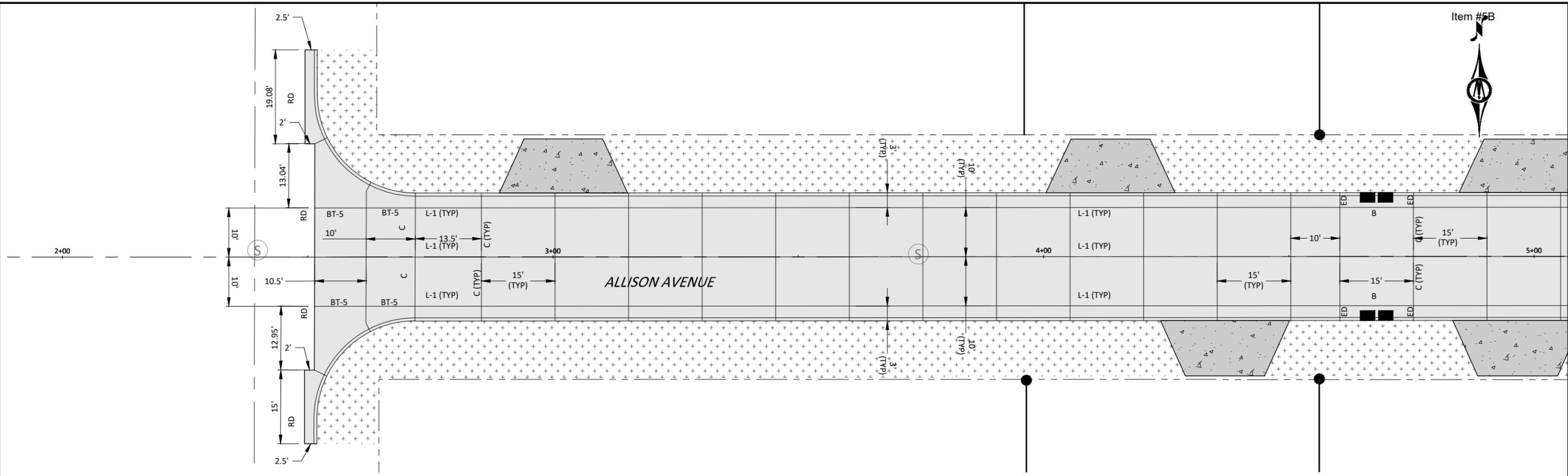
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



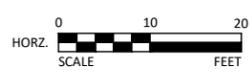
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
INTERSECTION DETAILS - 69TH ST

Item #5B



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI-1A\13118668\Task 01 Allison Avenue\CAD\Sheet\118668_L02.dwg, 12/9/2019 3:05 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



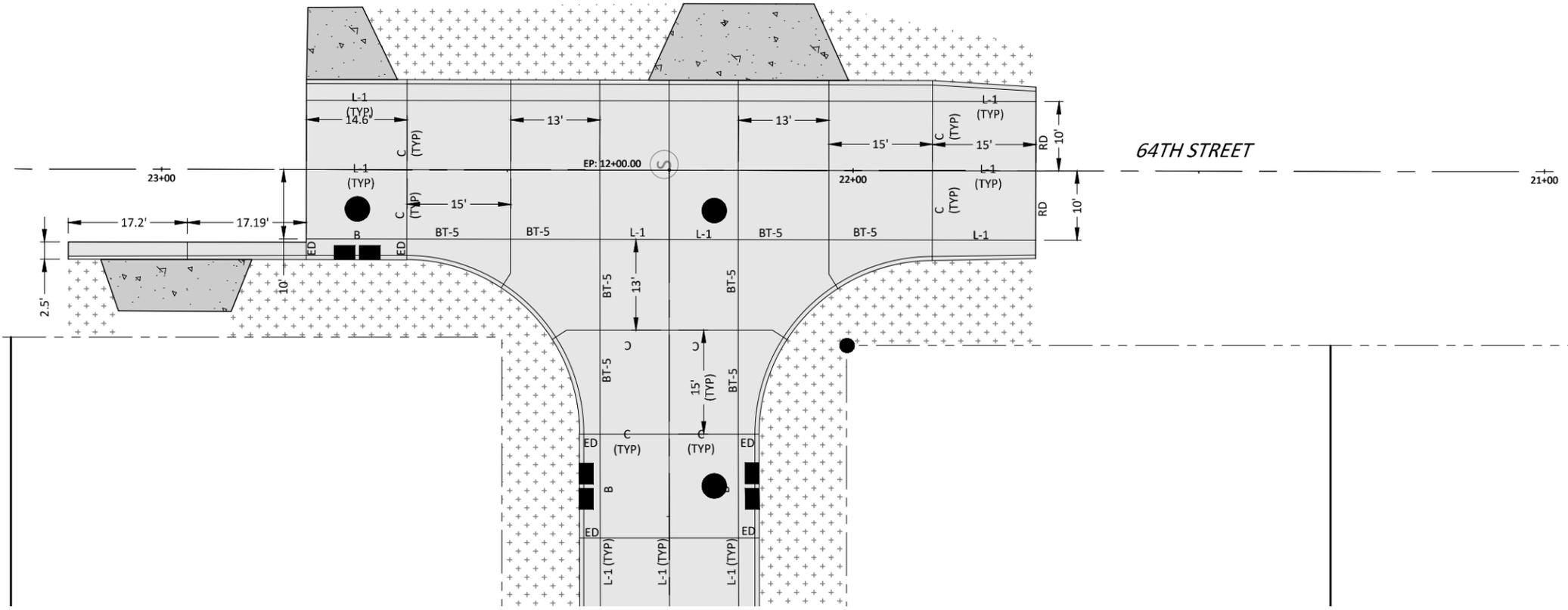
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



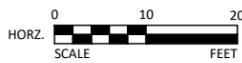
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 JOINTING PLAN - ALLISON AVE.

SHEET
L.4



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI\A13118668\Task 01 Allison Avenue\CAD\Sheet\118668_L02.dwg, 12/9/2019 3:05 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

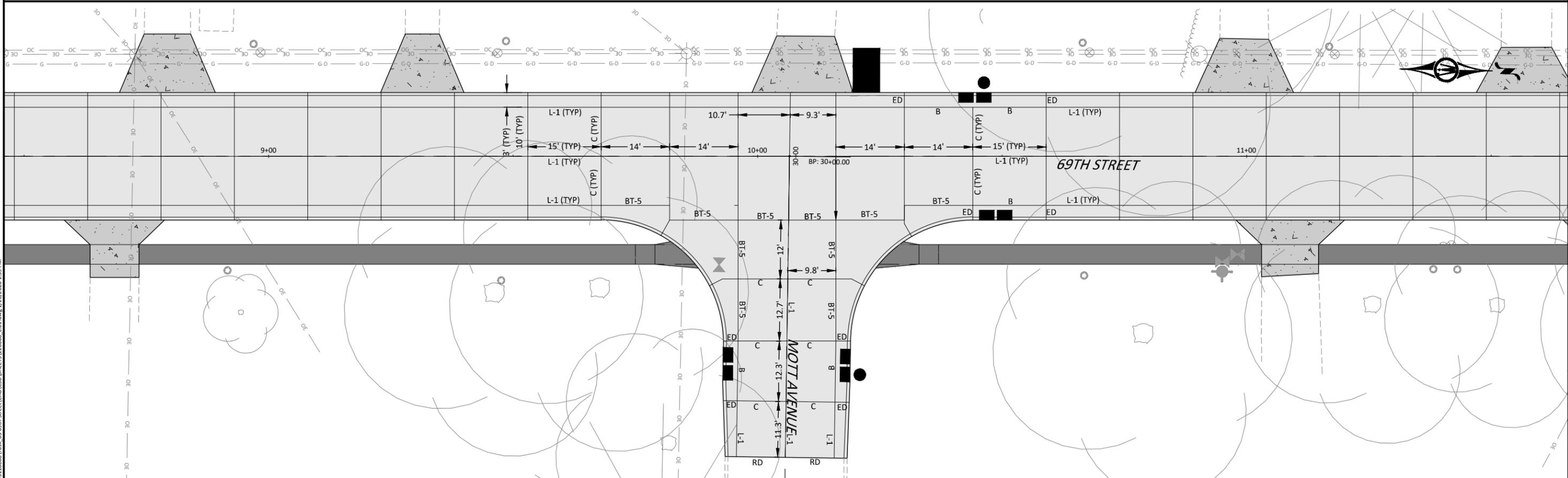
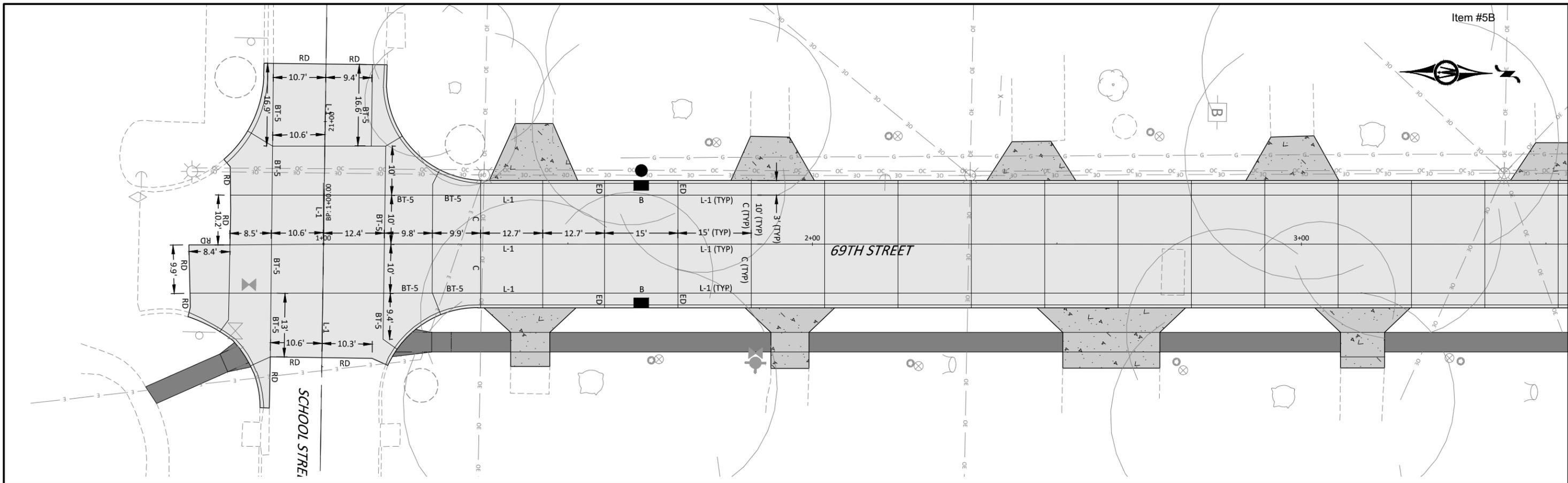


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

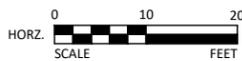


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 JOINTING PLAN - ALLISON AVE.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1118668\Task_03_69th Street\CAD\Sheets\1118668_L01.dwg 17/02/2020 1:59 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

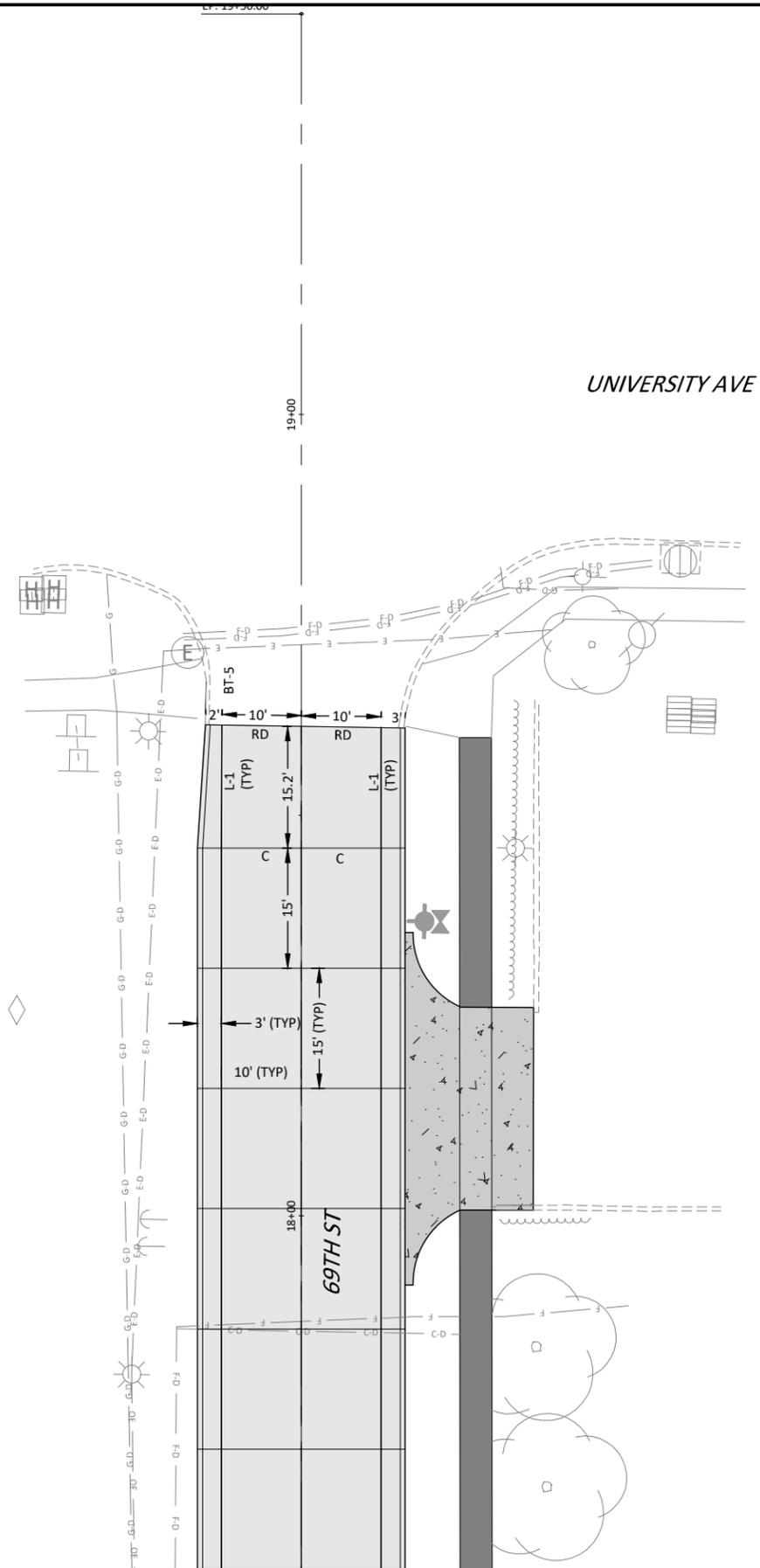


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
JOINTING PLAN - 69TH STREET



UNIVERSITY AVE



© Bolton & Menk, Inc. 2020. All Rights Reserved
 P:\WINDSOR\CI-1A\1318668\Task_03_69th_Street\CAD\Sheet\1318668_L01.dwg 17/02/2020 1:59 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

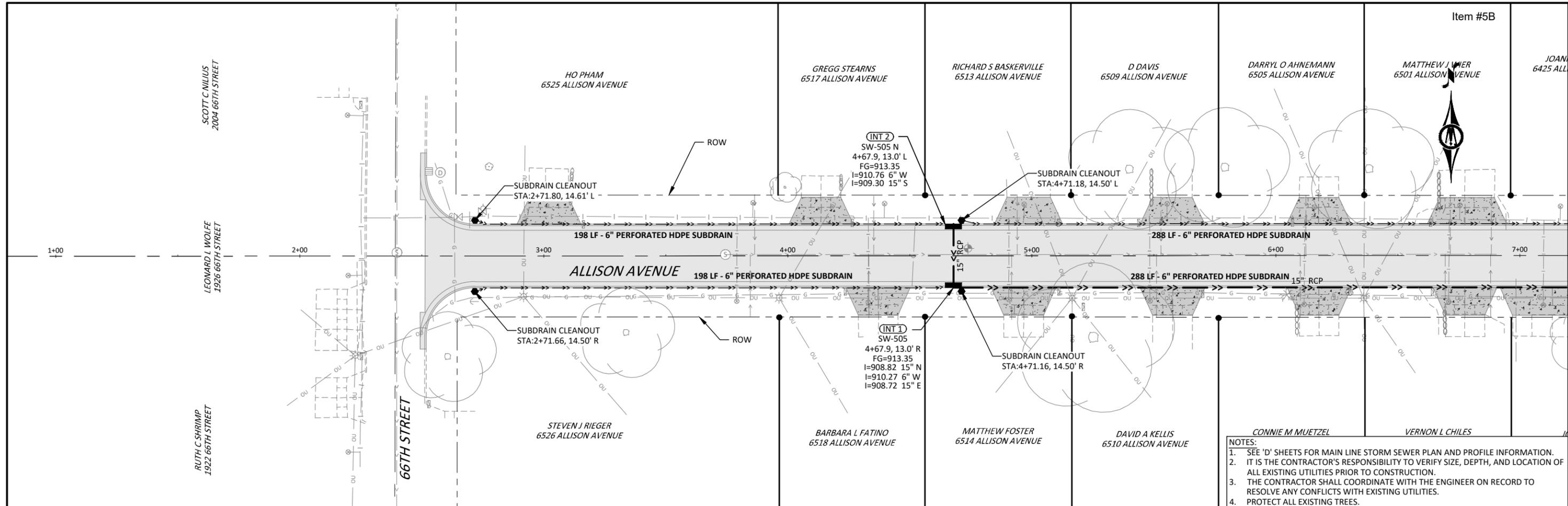


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

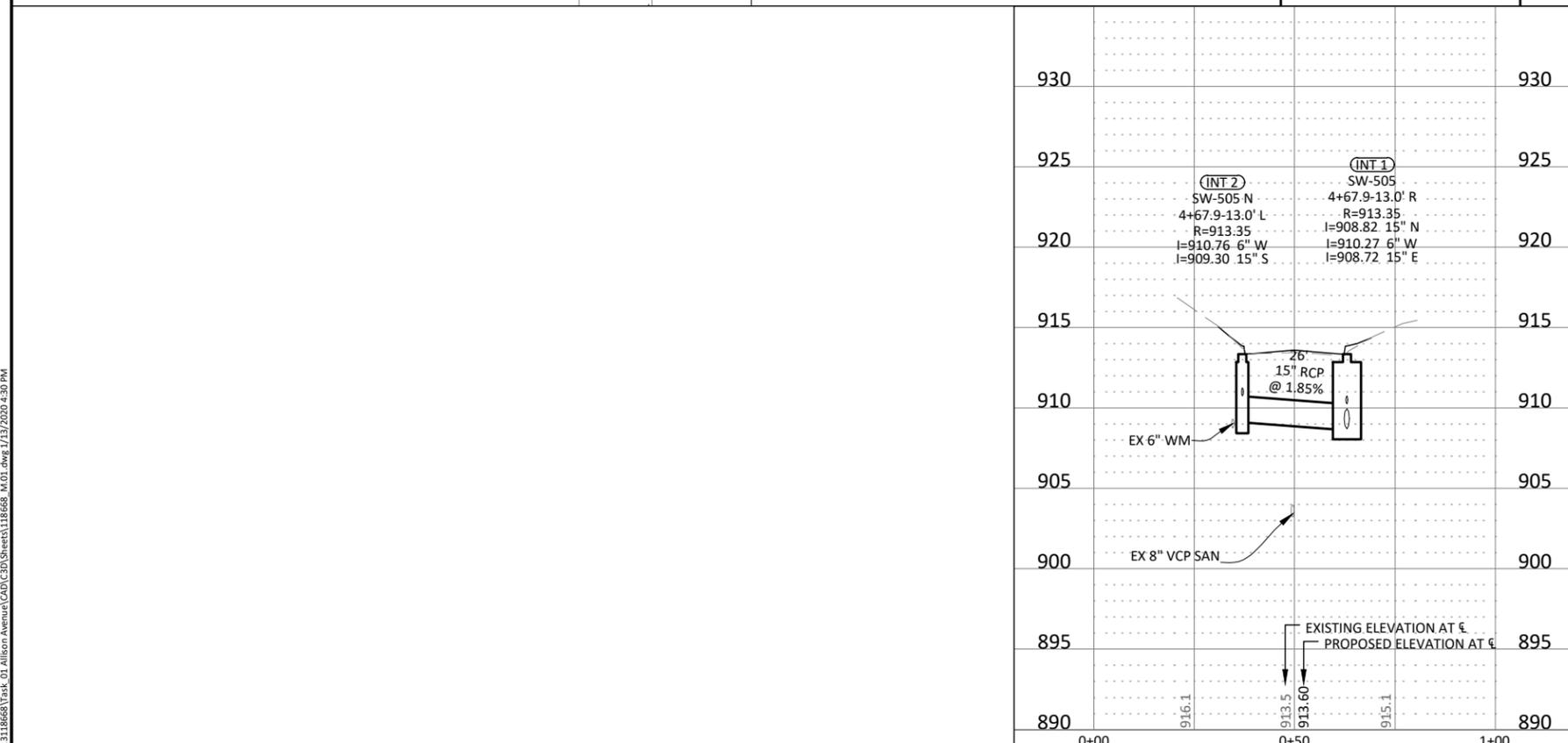


DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 JOINTING PLAN - 69TH ST.



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 4. PROTECT ALL EXISTING TREES.



0 20 40
SCALE FEET

0 5 10
SCALE FEET

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

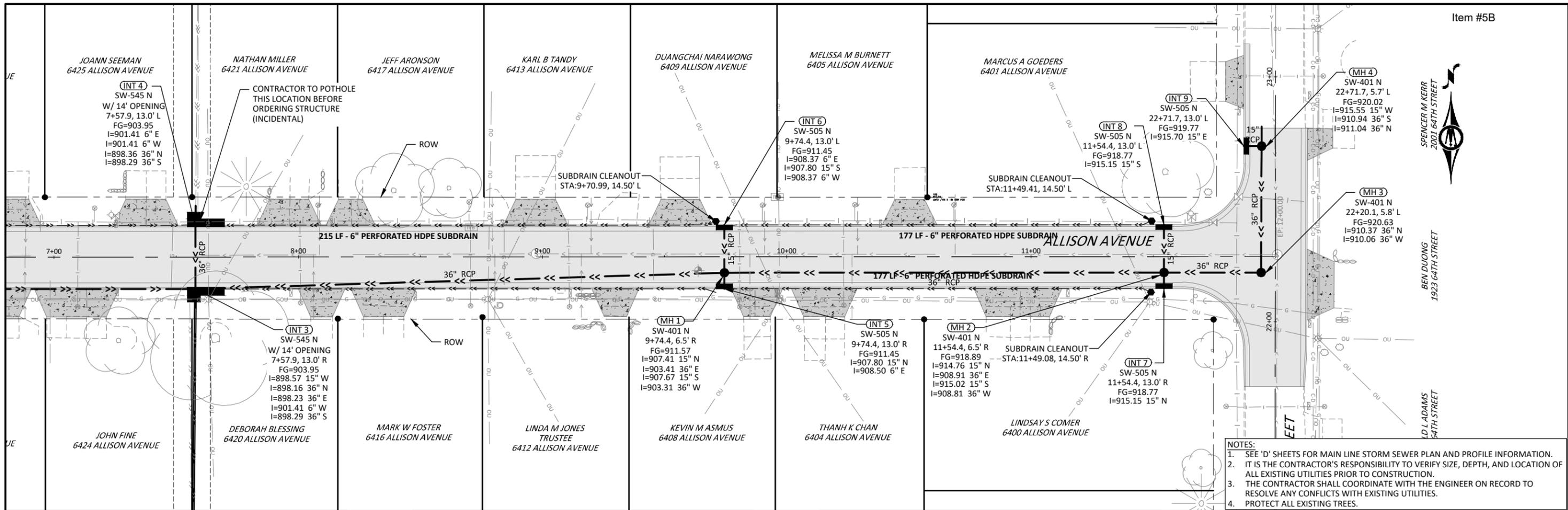
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

DESIGNED: NAS
SEALED: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

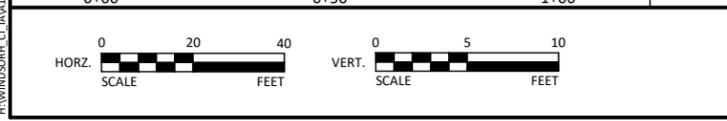
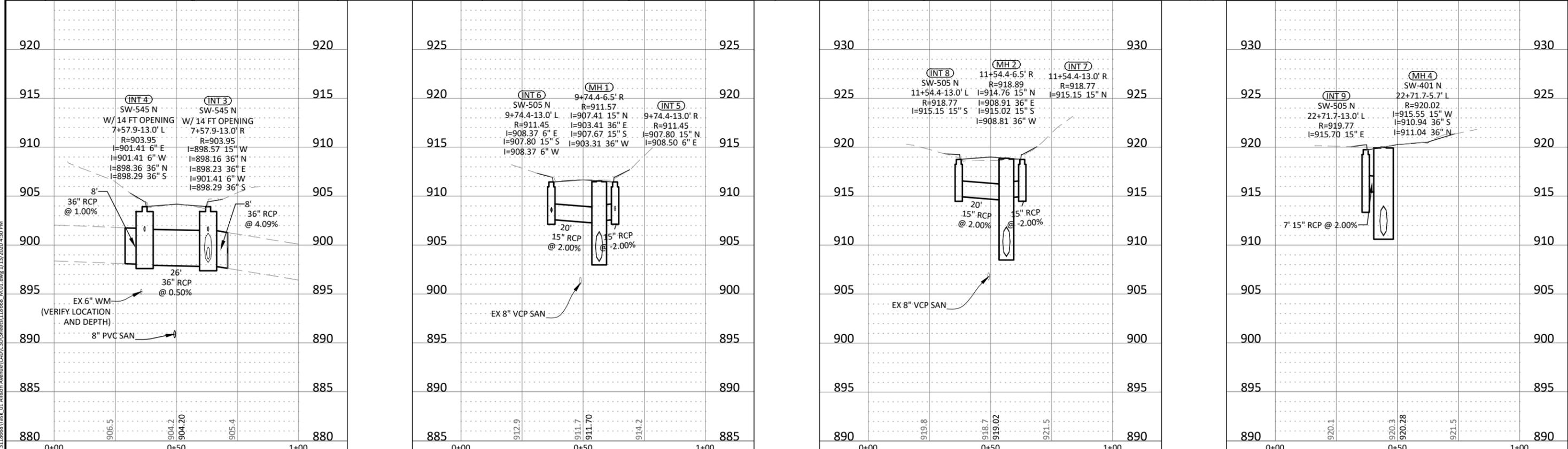
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STORM SEWER CROSSRUNS - ALLISON AVENUE

SHEET
M.1

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task 01 Allison Avenue\CAD\Sheet\118668_M.01.dwg 1/13/2020 4:30 PM



- NOTES:**
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 - PROTECT ALL EXISTING TREES.



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

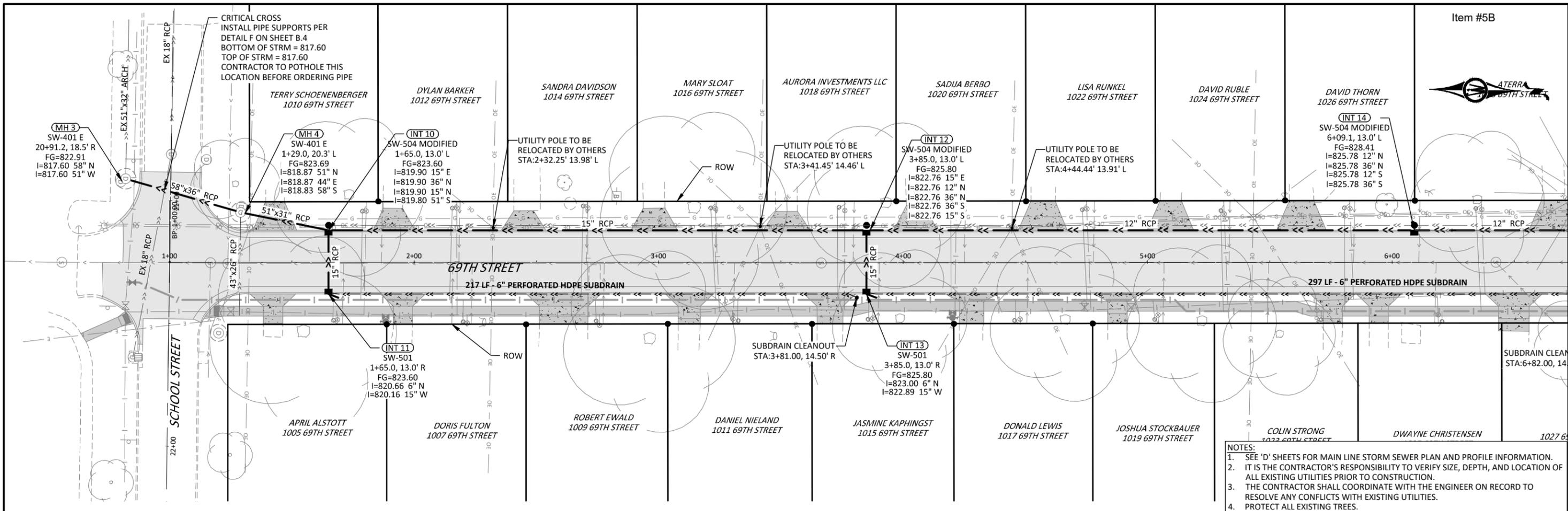


CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STORM SEWER CROSSRUNS - ALLISON AVENUE

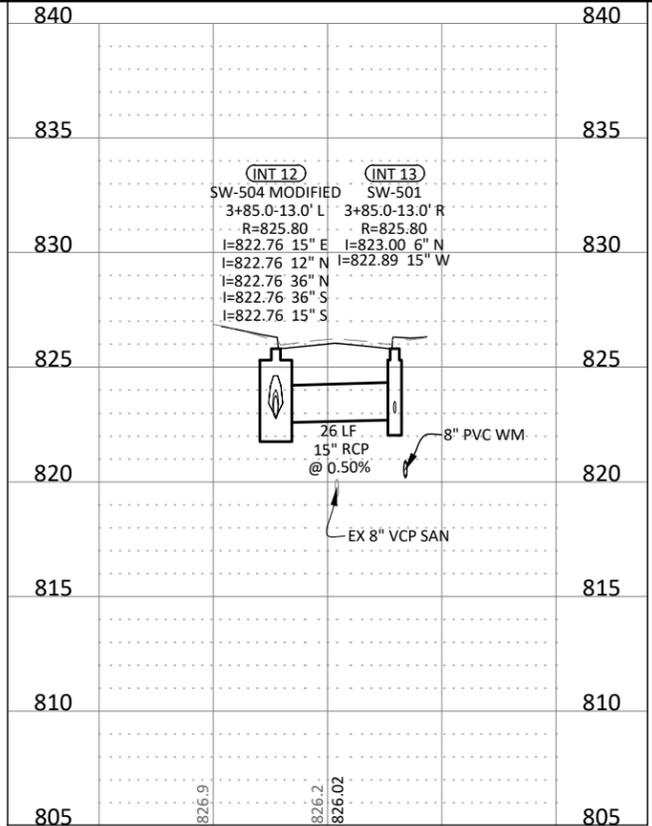
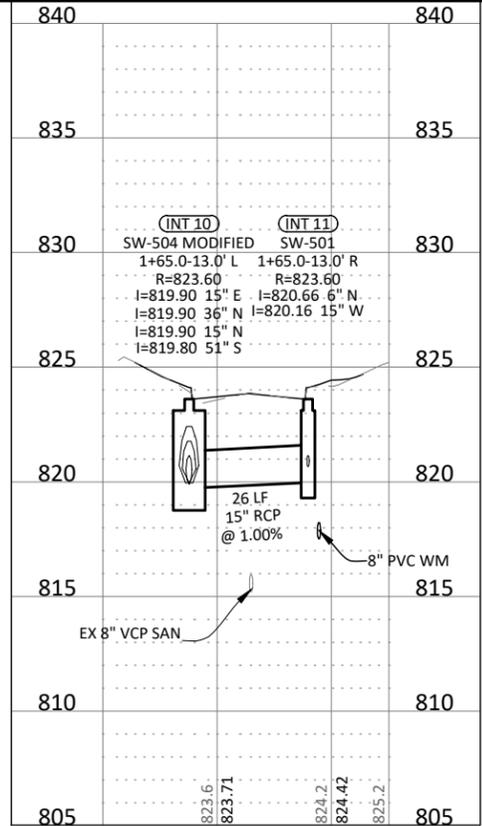
DESIGNED BY: N.A.S.
SEATED BY: J.L.E.
CHECKED BY: N.G.
CLIENT PROJ. NO.: A13.118668

SHEET
M.2

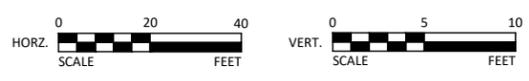
© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR HTS\2020\2020 STREETS\Task 01 Allison Avenue\CADD\Sheet\A13.118668_M.01.dwg 1/13/2020 4:30 PM



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 - PROTECT ALL EXISTING TREES.



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI-1A\1118668\Task_03_69th_Street\CAD\Sheet\5B11.8668_M_01.dwg 12/20/2019 9:48 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

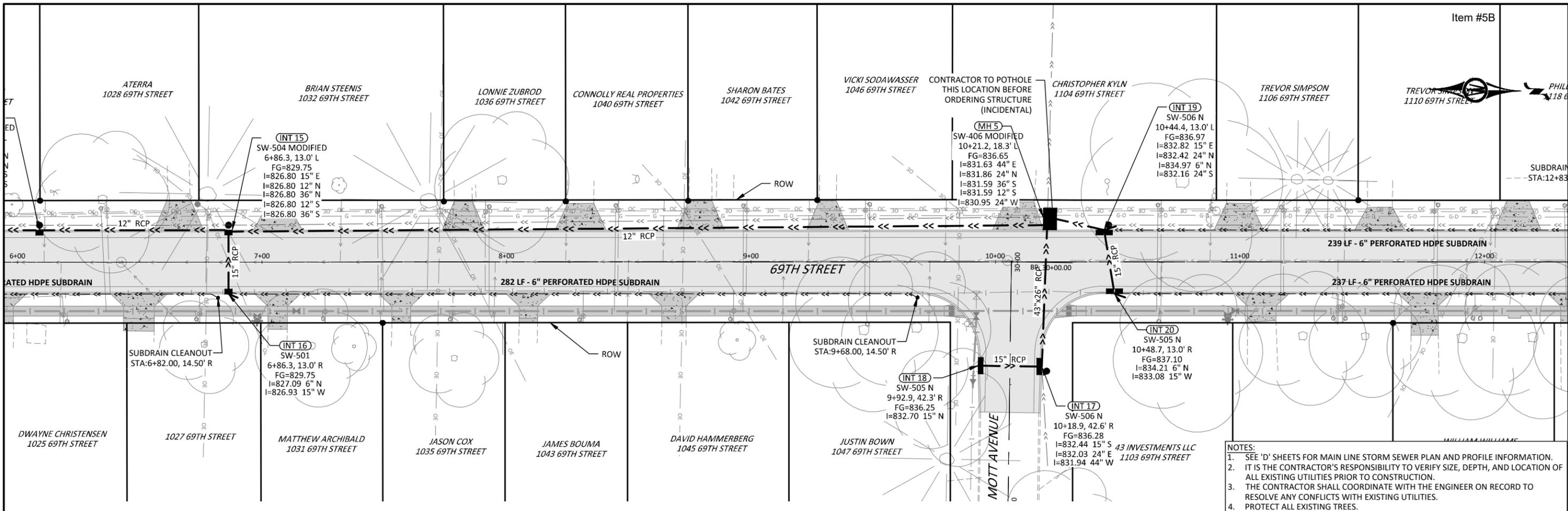


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

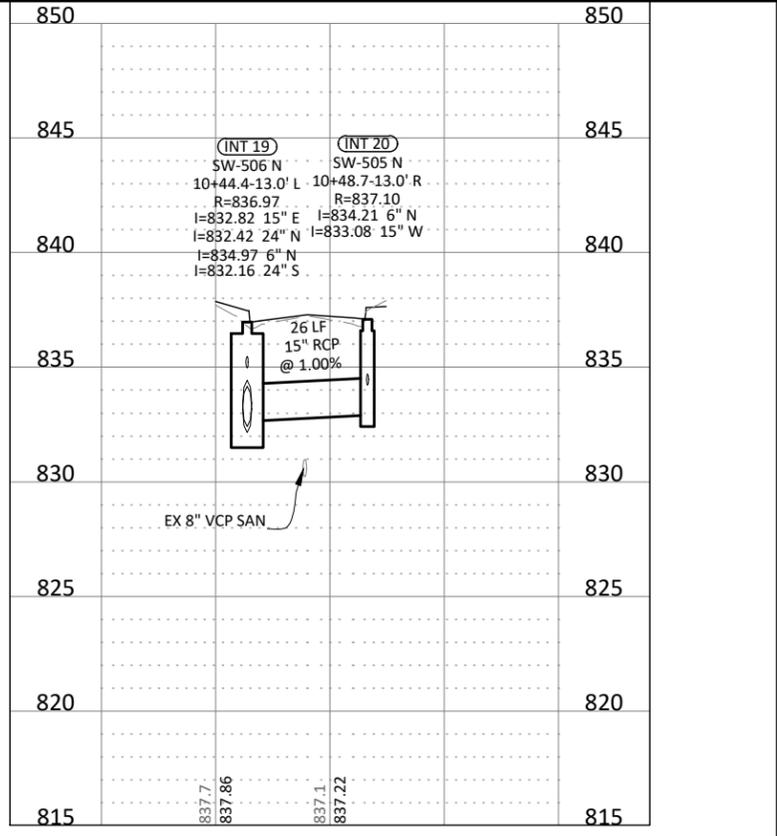
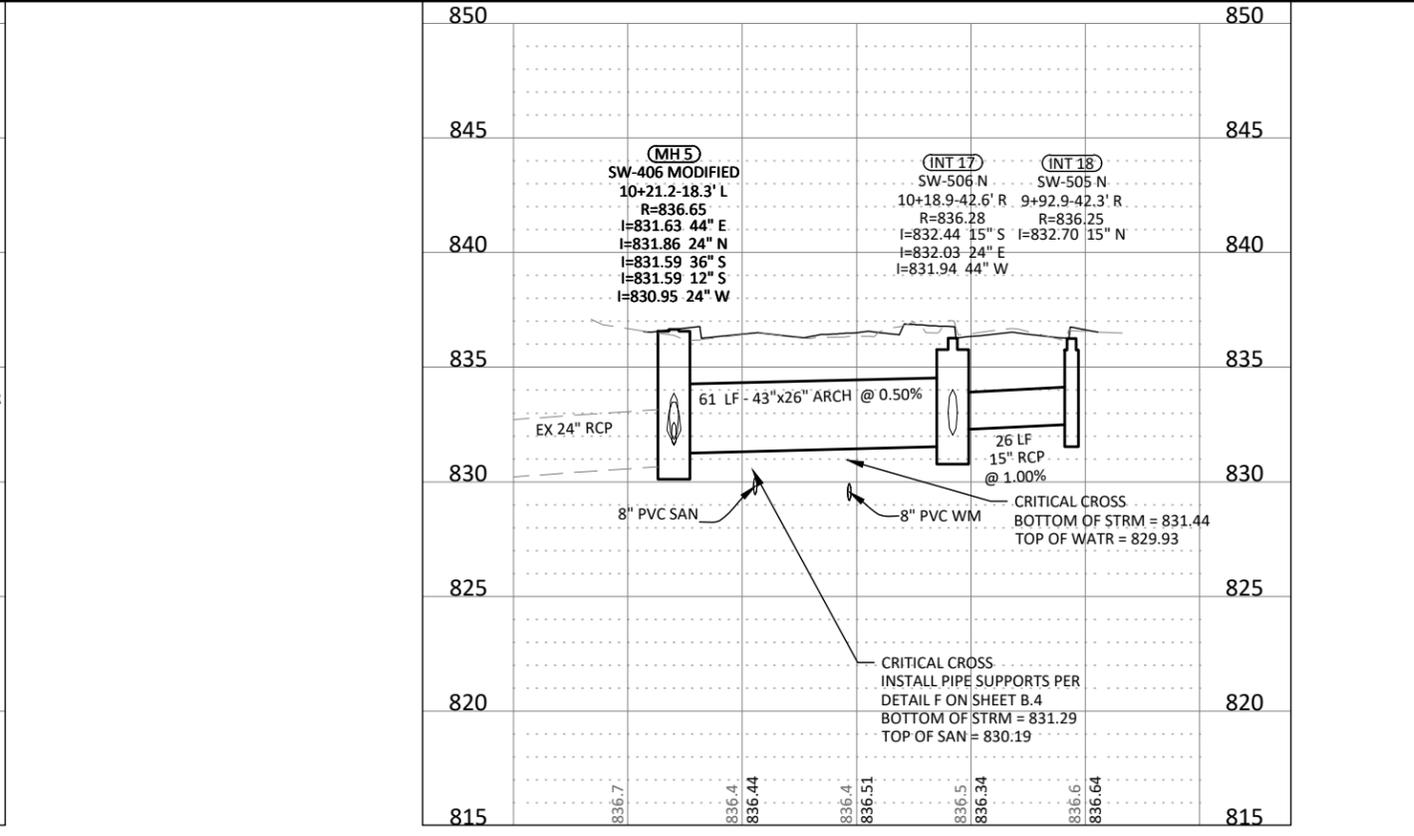
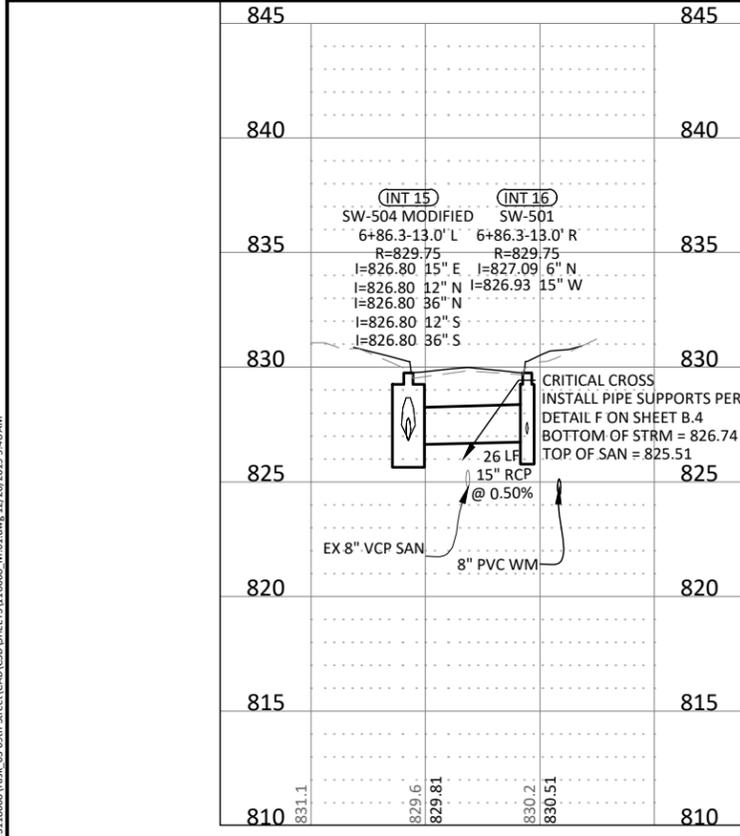


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

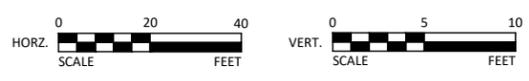
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STORM SEWER CROSS-RUNS



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 - PROTECT ALL EXISTING TREES.



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task_03_69th_Street\CAD\Sheet\5118668_M_01.dwg 12/20/2019 9:48 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

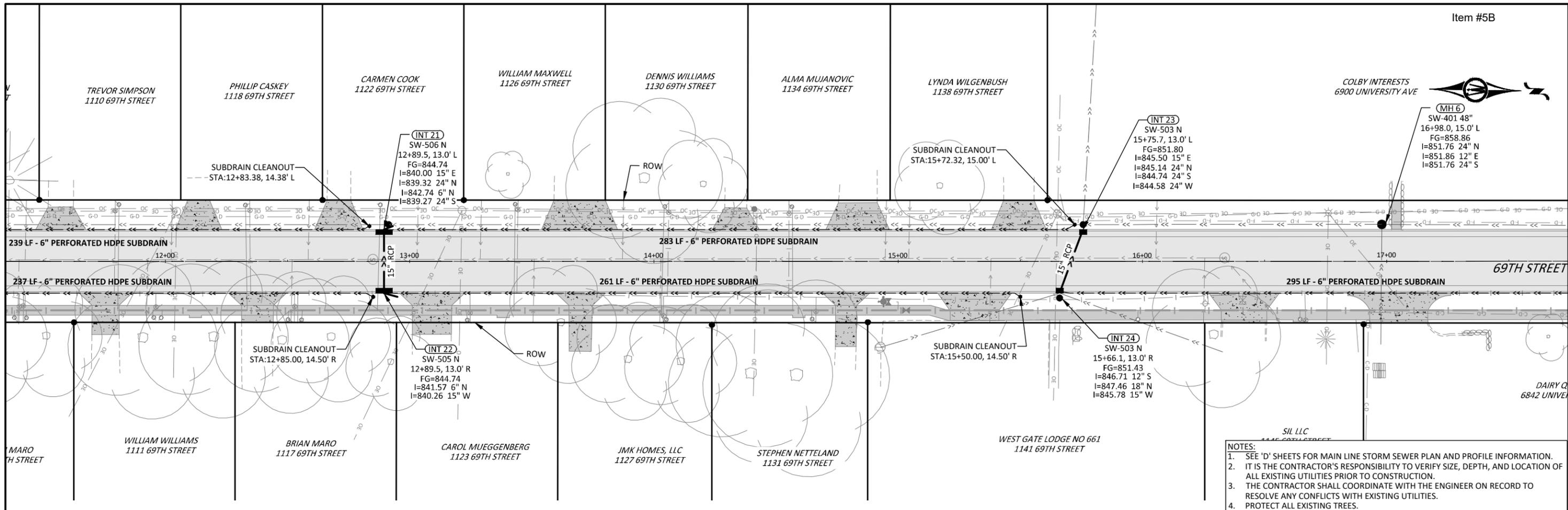


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

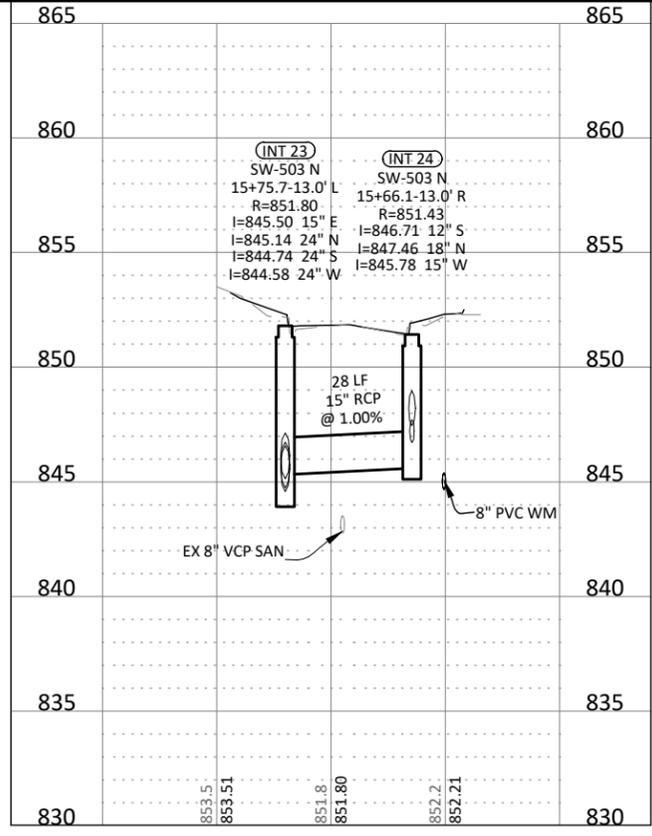
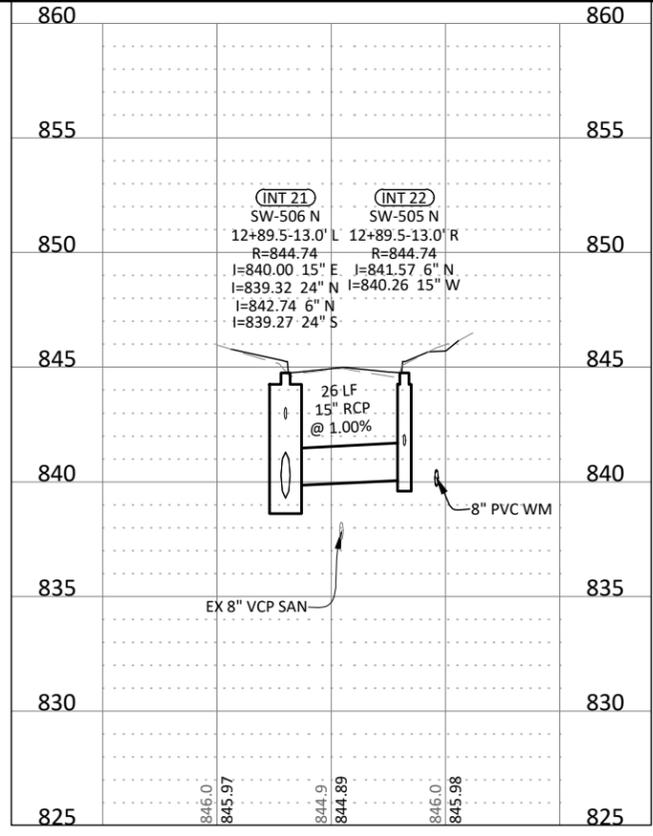


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

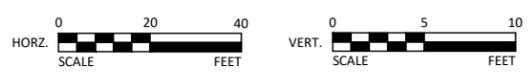
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STORM SEWER CROSS-RUNS



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 4. PROTECT ALL EXISTING TREES.



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\2020 ST RECON\2020 ST RECON\CAD\DWG\118668.M_01.dwg 12/20/2019 9:48 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

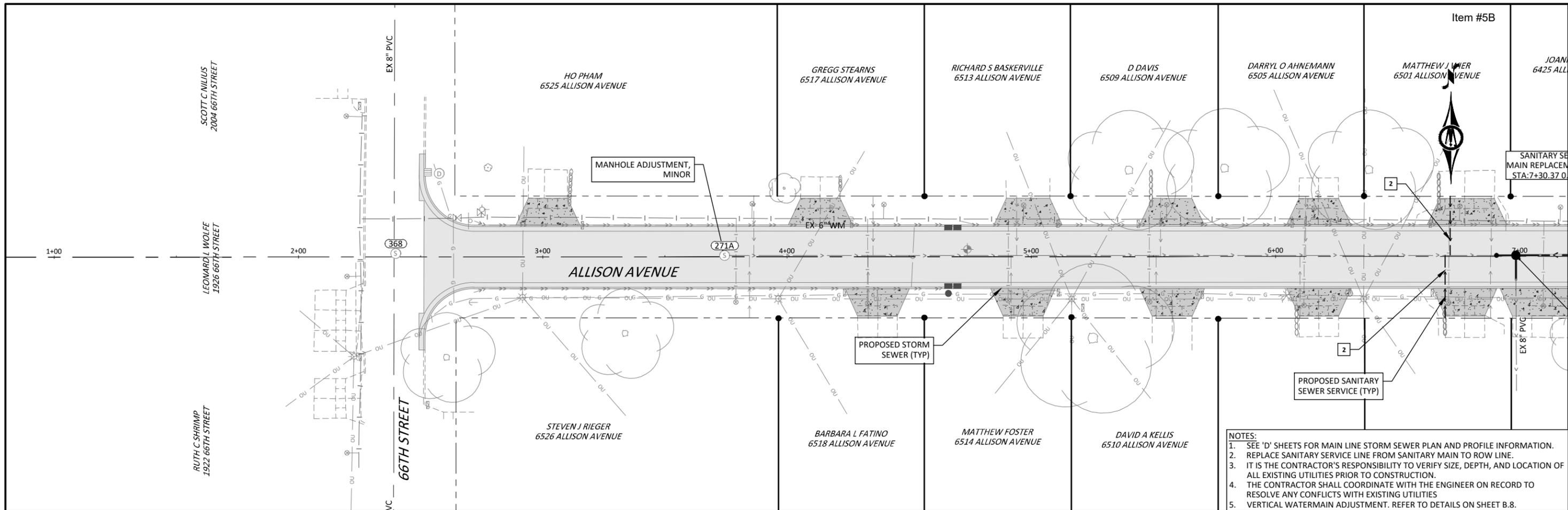


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

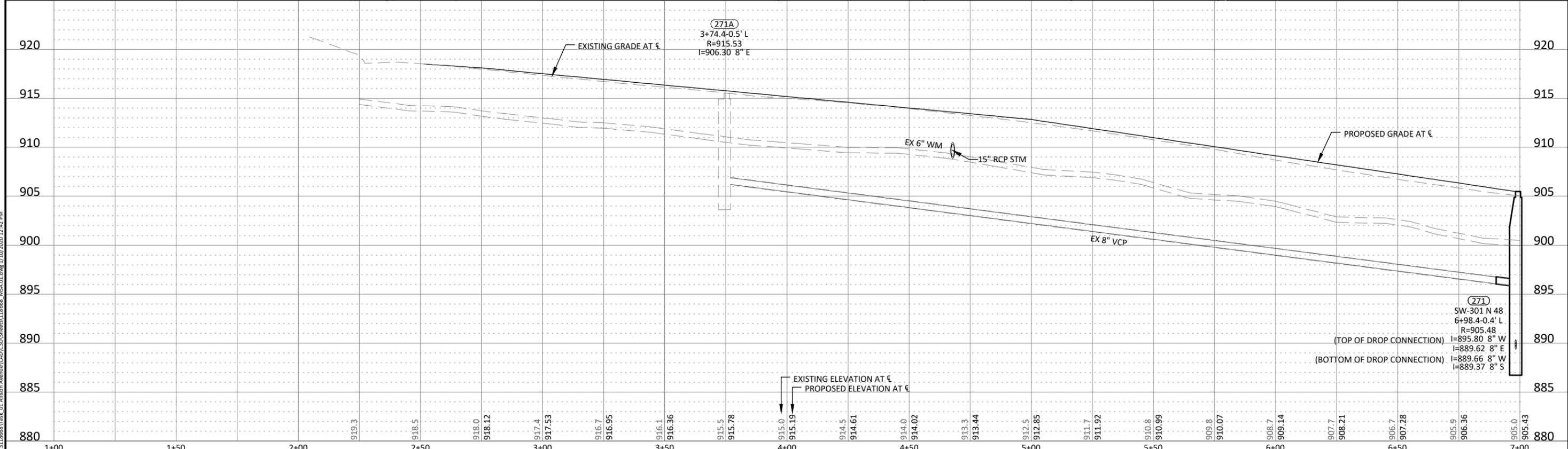


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

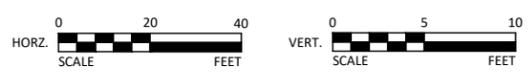
CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
STORM SEWER CROSS-RUNS



- NOTES:**
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO ROW LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 5. VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.8.



© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR HTS\CA\13118668\Task 01 Allison Avenue\CAD\Sheet\118668_MSA.01.dwg, 1/10/2020 12:42 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



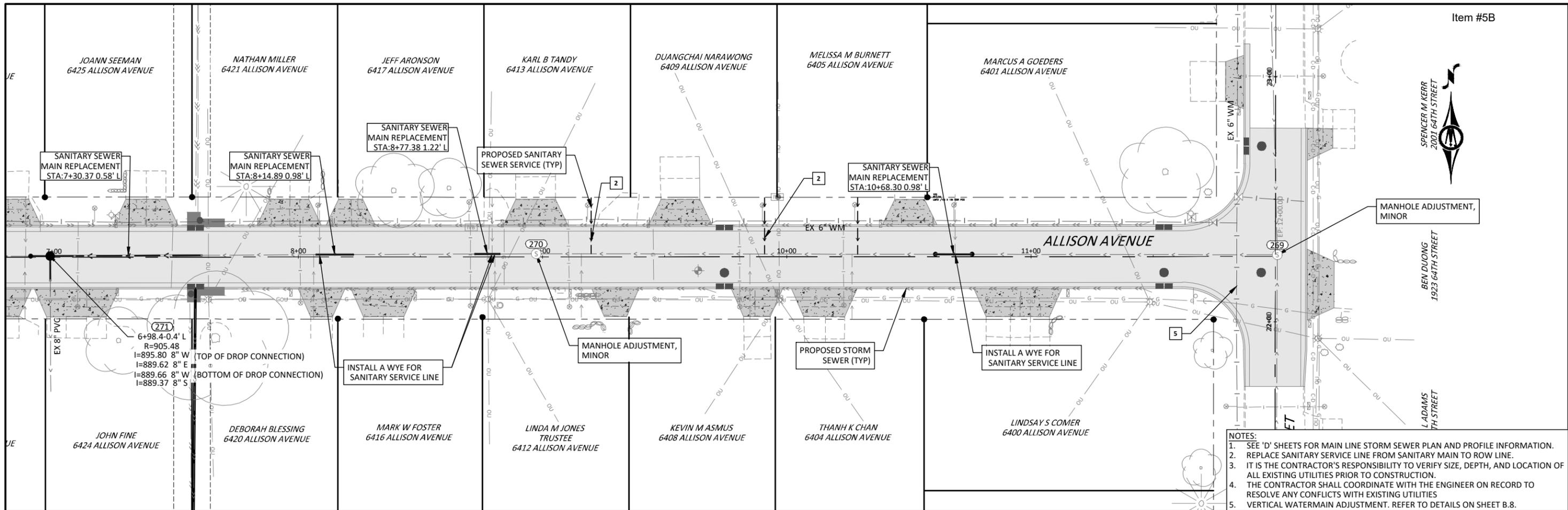
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



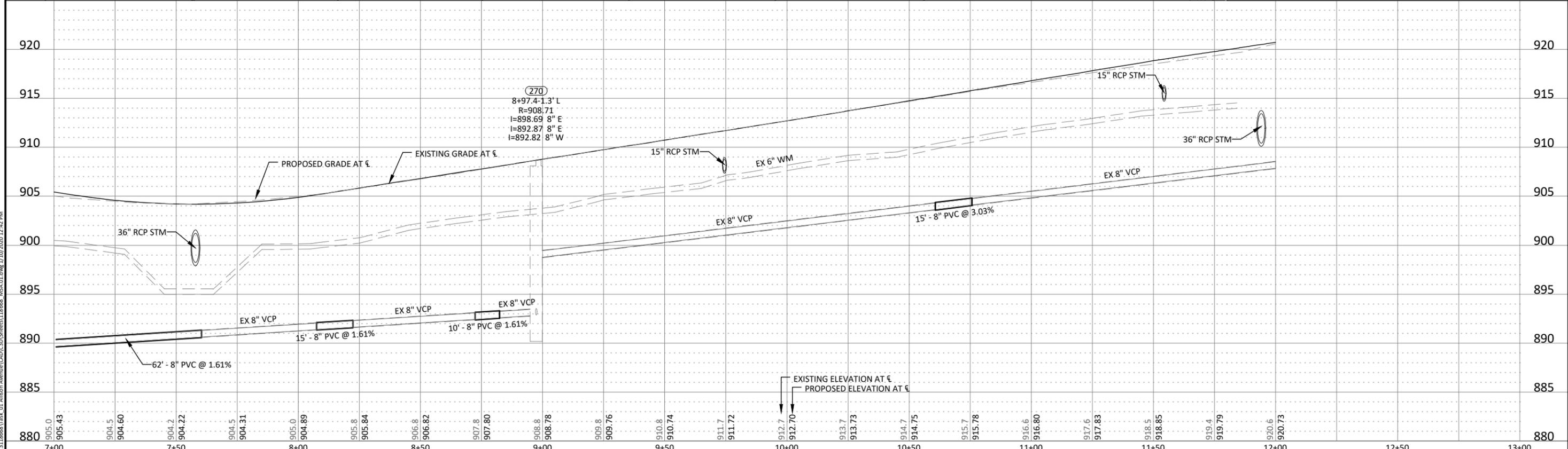
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 SANITARY SEWER - ALLISON AVENUE

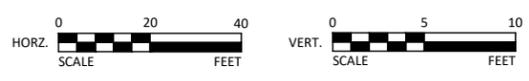
SHEET
 MSA.1



- NOTES:**
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO ROW LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 5. VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.8.



© Bolton & Menk, Inc. 2020. All Rights Reserved. W:\WINDSOR HTS\2020 STREET RECONSTRUCTION\MSA.01.dwg, 1/10/2020 12:42 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



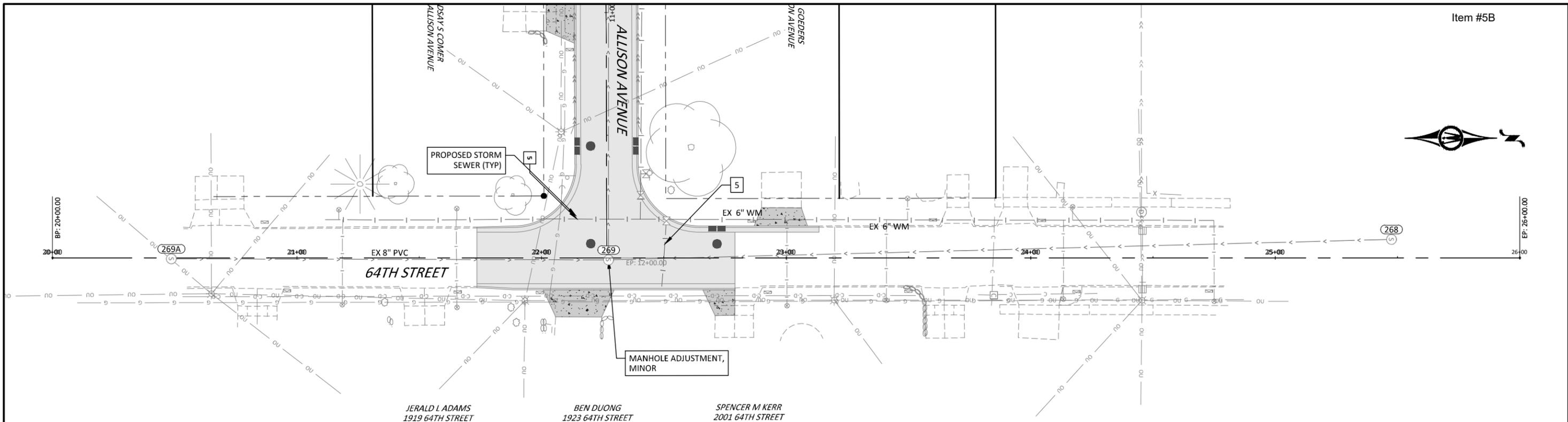
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



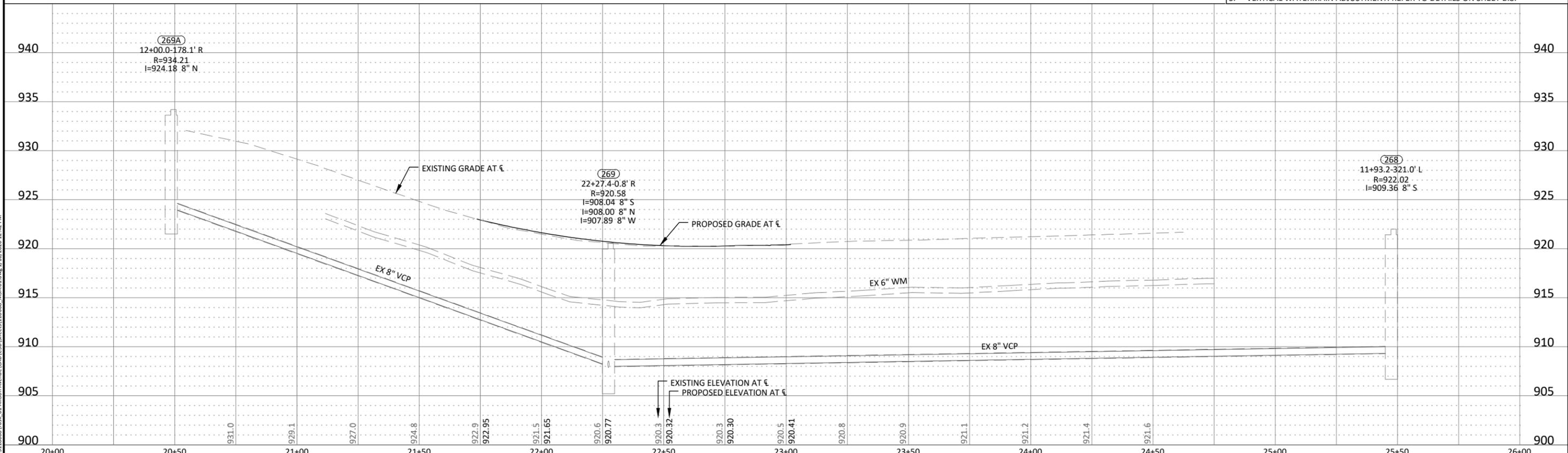
DESIGNED: NAS
SEATED: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SANITARY SEWER - ALLISON AVENUE

SHEET
MSA.2



- NOTES:**
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO ROW LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
 5. VERTICAL WATERMAIN ADJUSTMENT. REFER TO DETAILS ON SHEET B.8.



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI_A13118668\Task_01 Allison Avenue\CAD\Sheet\118668_MSA.01.dwg, 1/10/2020 12:42 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



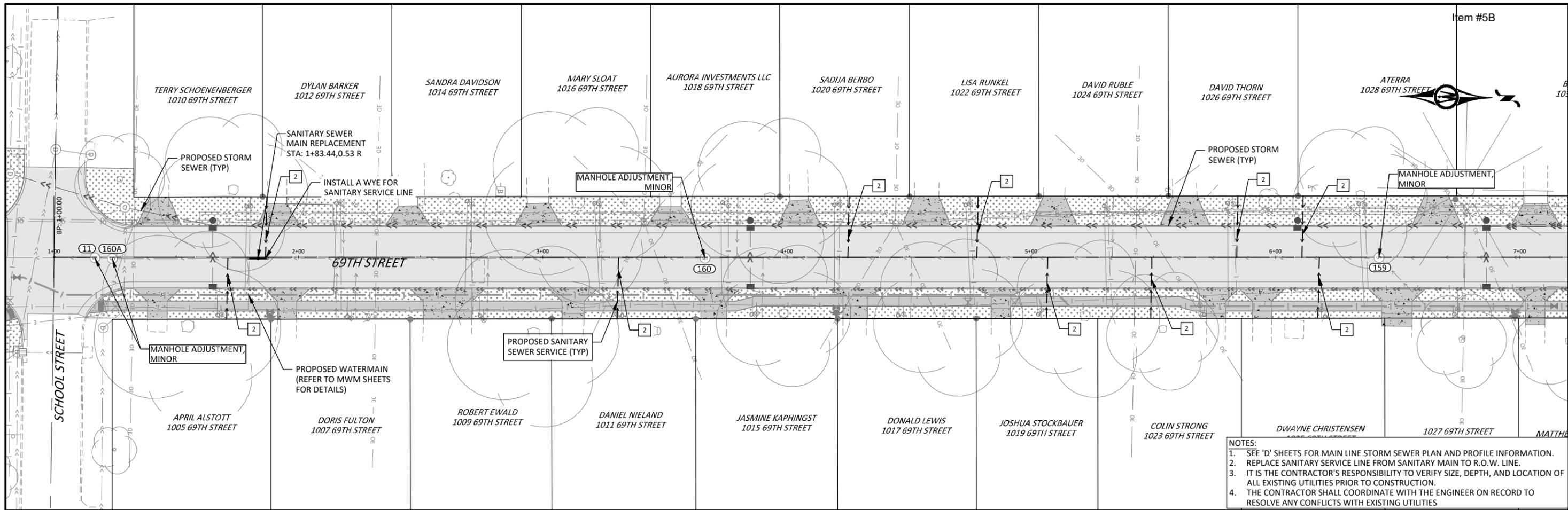
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



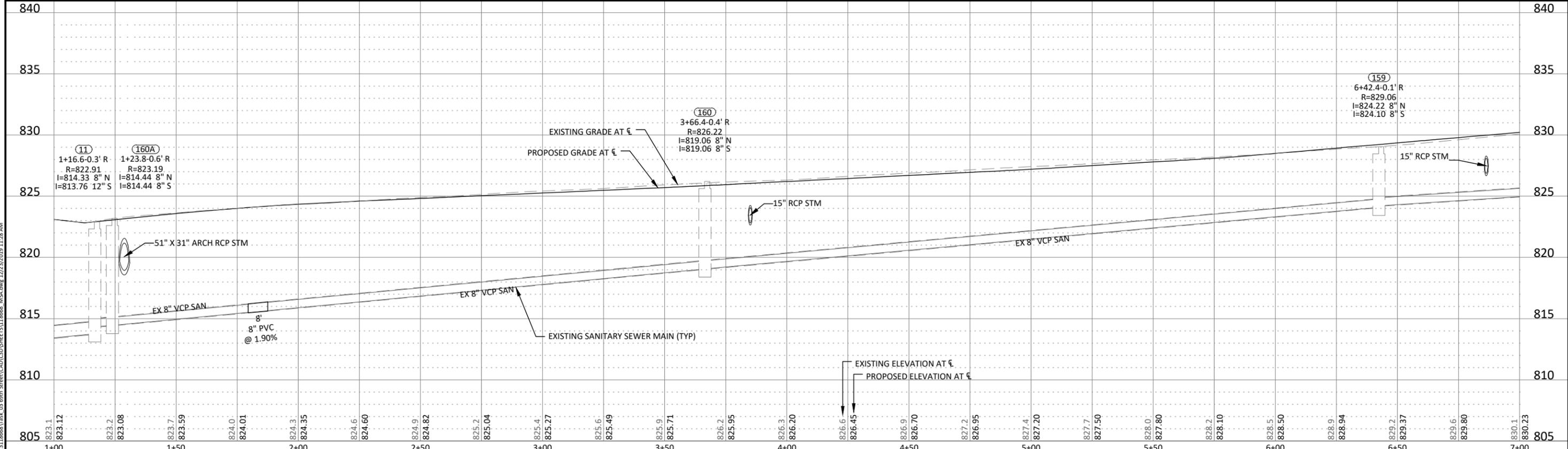
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SANITARY SEWER - ALLISON AVENUE

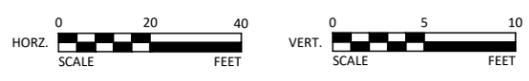
SHEET
MSA.3



- NOTES:
- SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 - REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task_03_69th Street\CAD\CD\118668_MSA.dwg 12/23/2019 11:28 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SANITARY SEWER PLAN - 69TH ST

BRIAN STEENIS
1032 69TH STREET

LONNIE ZUBROD
1036 69TH STREET

CONNOLLY REAL PROPERTIES
1040 69TH STREET

SHARON BATES
1042 69TH STREET

VICKI SODAWASSER
1046 69TH STREET

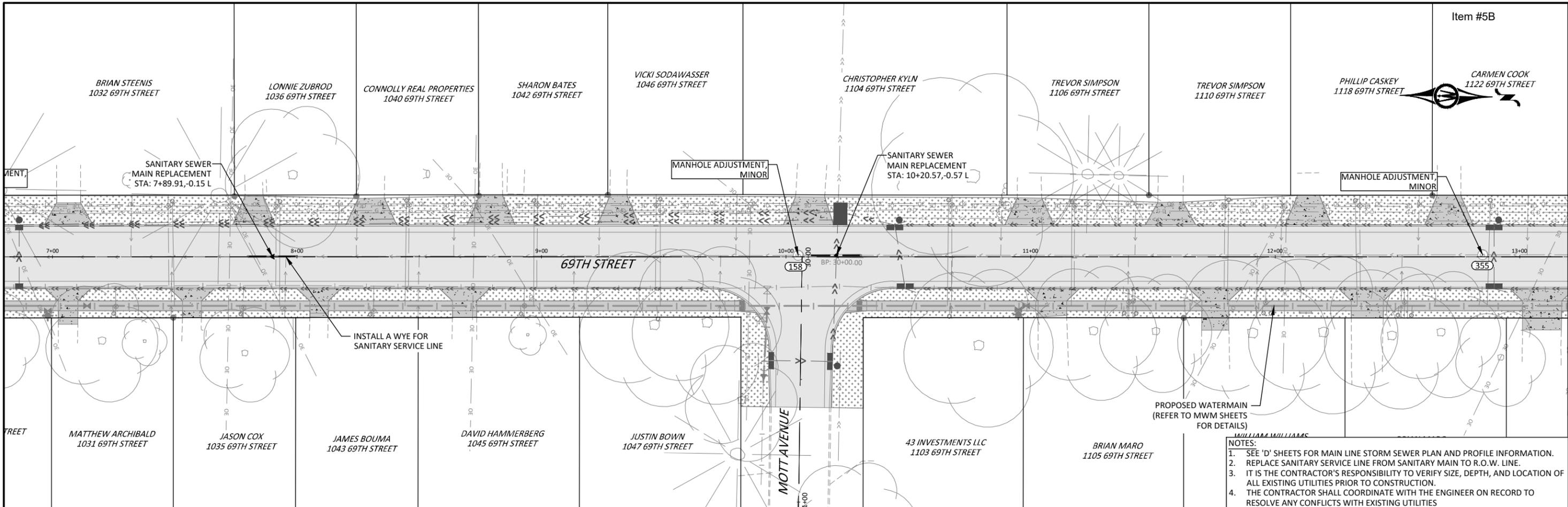
CHRISTOPHER KYLN
1104 69TH STREET

TREVOR SIMPSON
1106 69TH STREET

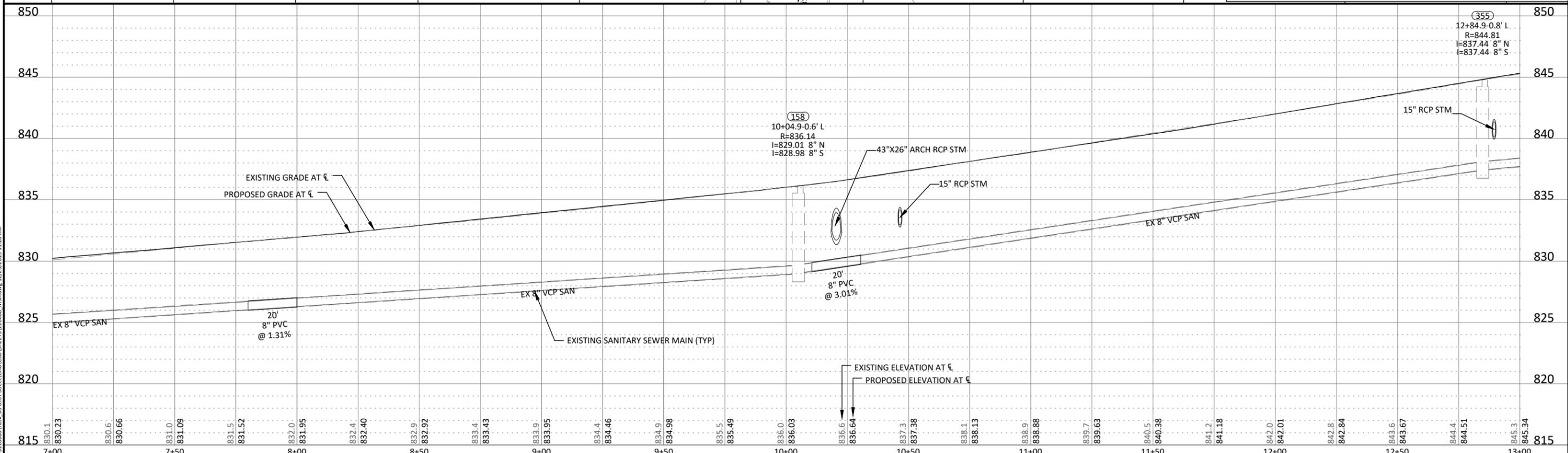
TREVOR SIMPSON
1110 69TH STREET

PHILLIP CASKEY
1118 69TH STREET

CARMEN COOK
1122 69TH STREET



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI\1A1118668\Task_03_69th Street\CAD\DWG\SS118668_MSA.dwg 12/23/2019 11:28 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



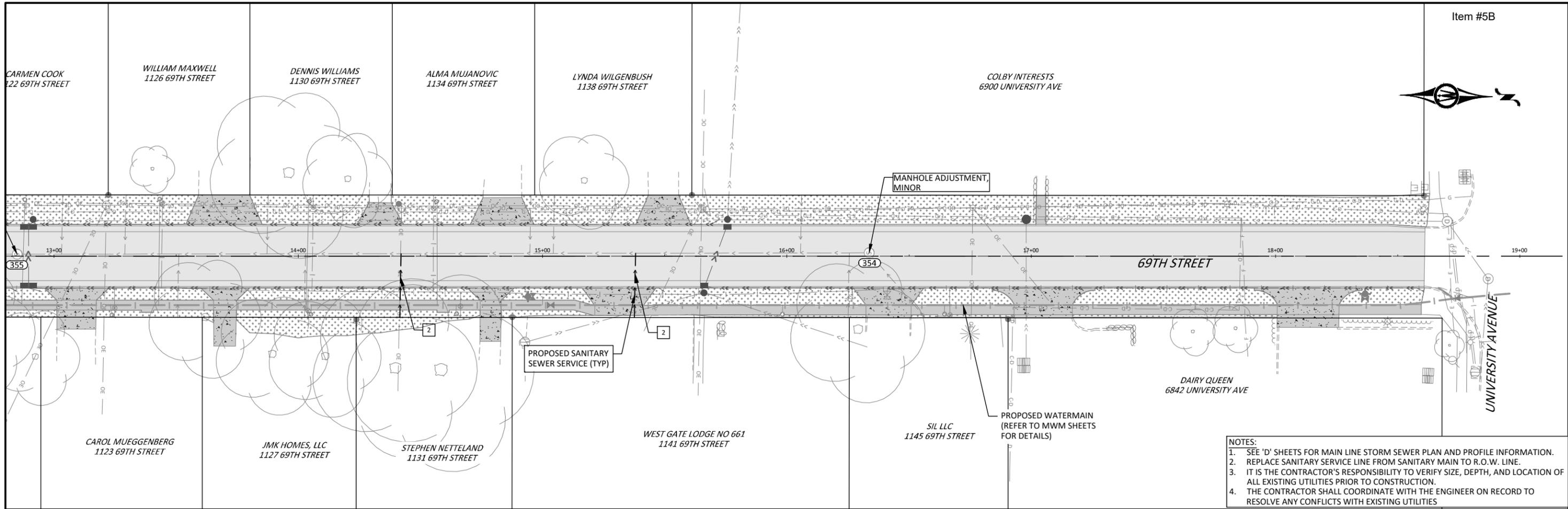
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



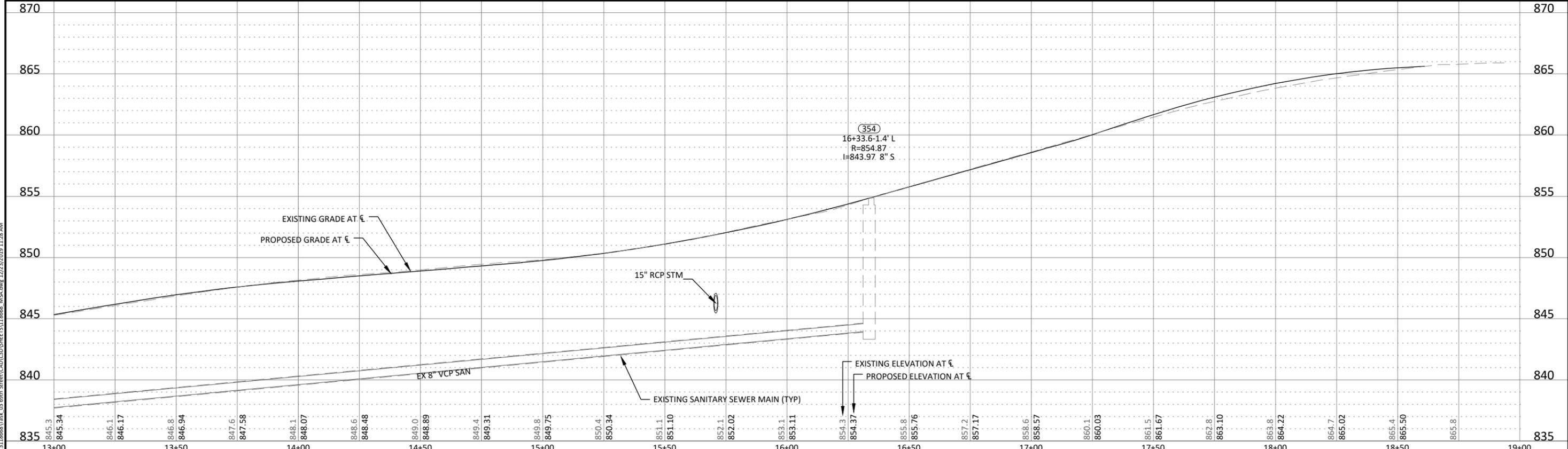
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SANITARY SEWER PLAN - 69TH ST

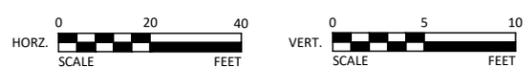
SHEET
MSA.5



- NOTES:
1. SEE 'D' SHEETS FOR MAIN LINE STORM SEWER PLAN AND PROFILE INFORMATION.
 2. REPLACE SANITARY SERVICE LINE FROM SANITARY MAIN TO R.O.W. LINE.
 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SIZE, DEPTH, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON RECORD TO RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI_1A13118668\Task_03_69th Street\CAD\DWG\SHEETS\118668_MSA.dwg 12/23/2019 11:28 AM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SANITARY SEWER PLAN - 69TH ST

U:\Projects in Design\A Water Distribution Design\A1934W_2020 Windsor Heights\A1934W_2020 WMR Windsor Heights 69th St.dgn 1/3/2020

WATER SERVICE TRANSFER SCHEDULE				
No.	Station	Address	Service Size	DMWW Stage/Side
1	Sta 1+67	1005 69th St	unk	1/same
2	sta 2+22	1007 69th St	unk	1/same
3	sta 2+76	1009 69th St	3/4"	1/same
4	sta 1+80	1010 69th St	3/4"	1/opposite
5	sta 3+32	1011 69th St	3/4"	1/same
6	sta 2+17	1012 69th St	3/4"	1/opposite
7	sta 2+71	1014 69th St	3/4"	1/opposite
8	sta 3+88	1015 69th St	3/4"	1/same
9	sta 3+24	1016 69th St	3/4"	1/opposite
10	sta 4+48	1017 69th St	3/4"	1/same
11	sta 3+76	1018 69th St	3/4"	1/opposite
12	sta 5+05	1019 69th St	3/4"	1/same
13	sta 4+21	1020 69th St	3/4"	1/opposite
14	sta 4+76	1022 69th St	3/4"	1/opposite
15	sta 5+69	1023 69th St	3/4"	1/same
16	sta 5+32	1024 69th St	3/4"	1/opposite
17	sta 6+18	1025 69th St	3/4"	1/same
18	sta 5+83	1026 69th St	3/4"	1/opposite
19	sta 6+75	1027 69th St	3/4"	1/same
20	sta 6+37	1028 69th St	unk	1/same
21	sta 7+26	1031 69th St	3/4"	2/same
22	sta 7+47	1032 69th St	3/4"	2/same
23	sta 7+78	1035 69th St	3/4"	2/same
24	sta 7+91	1036 69th St	unk	2/opposite
25	sta 8+45	1040 69th St	unk	2/opposite
26	sta 8+98	1042 69th St	unk	2/opposite
27	sta 8+32	1043 69th St	3/4"	2/same
28	sta 8+93	1045 69th St	3/4"	2/same
29	sta 9+46	1046 69th St	unk	2/opposite
30	sta 9+49	1047 69th St	3/4"	2/same
31	sta 10+69	1103 69th St	unk	2/same
32	sta 10+68	1104 69th St	unk	2/opposite
33	sta 11+40	1105 69th St	3/4"	3/same
34	sta 11+18	1106 69th St	unk	3/opposite
35	sta 11+42	1107 69th St	3/4"	3/same
36	sta 11+96	1109 69th St	3/4"	3/same
37	sta 11+79	1110 69th St	unk	3/opposite
38	sta 11+97	1111 69th St	3/4"	3/same
39	sta 12+53	1115 69th St	3/4"	3/same
40	sta 12+54	1117 69th St	3/4"	3/same
41	sta 12+35	1118 69th St	unk	3/opposite
42	sta 13+86	1122 69th St	3/4"	3/opposite
43	sta 13+25	1123 69th St	3/4"	3/same
44	sta 13+44	1126 69th St	unk	3/opposite
45	sta 14+06	1127 69th St	3/4"	3/same
46	sta 14+04	1130 69th St	unk	3/opposite
47	sta 14+67	1131 69th St	unk	4/same
48	sta 14+55	1134 69th St	unk	4/opposite
49	sta 13+32	1138 69th St	3/4"	4/opposite
50	sta 15+97	1141 69th St	unk	4/same
51	sta 16+67	1145 69th St	unk	4/same
52		6842 University Ave	taps University Ave	
53		6900 University Ave	taps University Ave	

WATER MAIN GENERAL NOTES

1. CONTRACTOR TO COORDINATE ACTIVITIES DURING WATER MAIN CONSTRUCTION WITH DMWW ENGINEER/ENGINEERING TECHNICIAN ASSIGNED TO PROJECT.
2. DMWW PERSONNEL SHALL BE ON SITE FOR THE CONSTRUCTION OF THE NEW WATER MAIN INFRASTRUCTURE.
3. ONLY DMWW PERSONNEL SHALL OPERATE VALVES AND HYDRANTS.
4. CONTRACTOR TO PROVIDE DMWW WITH SHOP DRAWINGS AND PRODUCT SUBMITTALS PER THE SPECIAL PROVISIONS FOR WATER MAINS. SHOP DRAWINGS SHALL BE SUBMITTED TWO (2) WEEKS PRIOR TO WATER MAIN CONSTRUCTION.
5. CONTRACTOR SHALL COORDINATE WITH DMWW TO TEST TRACER WIRE PRIOR TO PERMANENT PAVEMENT INSTALLATION.
6. HYDRANT EXTENSIONS ARE NOT ALLOWED.
7. NOTIFY DMWW ENGINEERING TECHNICIAN 48-HOURS PRIOR TO THE START OF ANY WATER MAIN RELATED CONSTRUCTION.
8. PROVIDE 48-HOUR NOTICE TO DMWW ENGINEERING TECHNICIAN FOR ANY CONNECTIONS TO DMWW EXISTING WATER MAINS INCLUDING MAIN CUTS AND TAPS. COORDINATE WITH DMWW ENGINEERING TECHNICIAN FOR SCHEDULING.
9. CONTRACTOR TO PROVIDE 24-HOUR NOTICE FOR ALL AFFECTED CUSTOMERS PRIOR TO WATER OUTAGES.
10. SCHEDULING OF WATER MAIN CUTS REQUIRES PREPLANNING THE WEEK PRIOR TO A MAIN CUT. WHILE DMWW TRIES TO ACCOMMODATE REQUESTS FOR TAPS AND MAIN CUTS WITHIN THE CONTRACTOR'S SCHEDULE, THERE MAY BE TIMES WHEN STAFF IS NOT AVAILABLE TO COMPLETE THE WORK ON THE DAY REQUESTED.
11. DMWW ENGINEER/ENGINEERING TECHNICIAN TO APPROVE ALL INSTALLED QUANTITIES AND PAY APPLICATIONS FOR WATER MAIN CONSTRUCTION.
12. CONTRACTOR'S EQUIPMENT TO REMAIN WITHIN RIGHT-OF-WAY DURING WATER SERVICE TRANSFERS. CONTRACTOR TO PLAN ACCORDINGLY WITH PROPERLY SIZED EQUIPMENT AND METHODS USED TO TRANSFER SERVICES.
13. WATER SERVICES FOR NEW WATER MAIN CONSTRUCTION SHALL BE PAID PER THE UNIT COST PROVIDED AND INSTALLED PER DMWW RULES AND REGULATIONS.
14. WATER SERVICE STOP BOX TO BE LOCATED IN RIGHT-OF-WAY, 1' TO 6' FROM RIGHT-OF-WAY LINE.
15. ALL DUCTILE IRON PIPE TO BE INSTALLED WITH POLYETHYLENE ENCASEMENT PER THE SPECIAL PROVISIONS FOR WATER MAIN CONSTRUCTION.
16. MAINTAIN A MINIMUM BURY DEPTH OF 5-FEET FOR ALL NEW WATER MAIN, WATER MAIN ALTERATIONS, AND WATER SERVICES.
17. INSTALL WATER MAIN PER IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR SEPARATION OF DRINKING WATER INFRASTRUCTURE FROM STORM AND SANITARY SEWERS.
18. WATER MAIN WORK ASSUMES THAT EXISTING SOIL WILL BE RETURNED TO THE EXCAVATION AND COMPACTED PER SPECIFICATIONS. CONTRACTOR TO FOLLOW REQUIREMENTS TO HAVE NO MORE THAN 100 FEET OF TRENCH OPEN AT A TIME.
19. CONTRACTOR TO FOLLOW DMWW WATER MAIN STANDARD DETAILS FOR TRENCH WIDTHS FOR WATER MAIN INSTALLATION AND WATER SERVICES. COSTS ASSOCIATED WITH WIDER TRENCH WIDTHS SHALL BE INCIDENTAL TO WATER MAIN WORK UNLESS APPROVED BY ENGINEER/ENGINEERING TECHNICIAN.
20. CONTRACTOR TO KEEP STORED AND INSTALLED WATER MAIN PIPE FREE OF DIRT AND DEBRIS.
21. TEMPORARY CAPS/PLUGS ARE INCIDENTAL TO WATER MAIN WORK.
22. TRAFFIC CONTROL IS PER J SHEETS. ANY ADDITIONAL TRAFFIC CONTROL FOR WATER MAIN WORK OUTSIDE OF THE ACTIVE STAGE IS INCIDENTAL TO PROJECT TRAFFIC CONTROL.

C900 PVC & CL52 DIP Restrained Joint (RJ) Table									
Nominal Pipe Diameter	Pipe Material	Minimum Restrained Length (ft)*							Cap/Dead End
		Horizontal & Vertical (Up) Bend				Vertical (Down) Bend			
		11.25°	22.5°	45°	90°	11.25°	22.5°	45°	
16	PVC	7	14	29	70	19	39	80	147
12	PVC	6	11	23	55	15	30	62	113
8	PVC	4	8	16	39	10	21	44	80
16	DIP	7	14	28	70	17	35	73	178
8	DIP	4	8	16	38	10	19	40	97

*Use restrained joints on all pipe joints that fall within the lengths above on both sides of the fitting indicated.
 **Ductile Iron Pipe (DIP) is assumed to be polyethylene encased
 ***This table is based on the following assumptions:
 Soil Type: ML
 Factor of Safety: 2
 Min. Bury Depth: 5
 Test Pressure: 150
 Trench Condition: Type 3

WATER MAIN LEGEND

- TREE PROTECTION FENCE
- ASPHALT PAVEMENT REMOVAL & REPLACEMENT
- CONCRETE SIDEWALK REMOVAL & REPLACEMENT
- CONCRETE PAVEMENT REMOVAL & REPLACEMENT
- CONCRETE DRIVEWAY REMOVAL & REPLACEMENT
- ADDRESS BOX
- WATER SERVICE SIZE

- ① NEW 1" WATER SERVICE, STOP BOX, AND CONNECTION TO NEW WATER MAIN OPPOSITE SIDE OF THE STREET.
- ② NEW 1" WATER SERVICE, STOP BOX, AND CONNECTION TO NEW WATER MAIN SAME SIDE OF THE STREET.



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Carla J. Schumacher Date: 01/03/20

Carla J. Schumacher, P.E.
Des Moines Water Works
License Number 18191

MY LICENSE RENEWAL DATE IS DEC. 31, 2020
Pages or sheets covered by this seal: MWM.01 TO MWM.10

MARK	DATE	BY	PROJECT	DESIGNED BY	DRAWN BY	CHECKED BY	SURVEY NOTES
			CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	CJS	JLH	KGV	
			SHEET TITLE	ACTIVITY I.D.	DATE		
			WATER SERVICE TRANSFER SCHEDULE		01/06/2020		
			SHEET	MWM.01	FILE NO.		

WATER MAIN PROJECT SUMMARY

Item #5B

AS PART OF THE CITY OF WINDSOR HEIGHTS 2020 STREET RECONSTRUCTION PROJECT, NEW WATER MAIN WILL BE INSTALLED AND EXISTING WATER MAIN WILL BE ABANDONED THROUGHOUT THE PROJECT AREA. WATER MAIN WORK FOR STAGE 1 EXTENDS BEYOND THE CITY STAGE 1 TRAFFIC CONTROLS. A SMALL SECTION OF WATER MAIN REQUIRES REMOVAL AT LOCATION SHOWN ON PLANS TO ALLOW NEW WATER MAIN INSTALLATION. COSTS ASSOCIATED WITH TRAFFIC CONTROL, PAVEMENT REMOVAL & REPLACEMENT (STREET & SIDEWALK), TEMPORARY DRIVEWAYS, AND ACCESS TO DRIVEWAYS DURING CONSTRUCTION ARE CONSIDERED PART OF DIVISION 1 COSTS AND ANY ADDITIONAL COSTS IN THESE AREAS DURING WATER MAIN WORK ARE CONSIDERED INCIDENTAL.

WORK INCLUDES THE FOLLOWING:

1. PROVIDE MATERIALS, EQUIPMENT, AND LABOR NECESSARY, INCLUDING EXCAVATION, INSTALLATION, BACKFILL, TESTING, DISINFECTION, DECHLORINATION, AND MISCELLANEOUS WORK, TO COMPLETE THE INSTALLATION OF APPROXIMATELY 1,360 FEET OF 8-INCH C900 DR18 PVC AND 460 FEET OF 8-INCH THICKNESS CLASS 52 DUCTILE IRON PIPE.
2. WORK INCLUDES CONNECTION TO EXISTING WATER MAINS, INSTALLATION OF APPURTENANCES AND WATER SERVICE TRANSFERS, DISCONNECTION OF MAINS TO BE ABANDONED, REMOVAL OF SELECT SECTIONS OF WATER MAIN, AND REMOVAL OF OLD SURFACE FACILITIES.
3. ATTENDANCE IS MANDATORY FOR WEEKLY MEETINGS ON SITE WITH CONTRACTOR'S FOREMAN/SUPERINTENDANT AND DMWW ENGINEER/ENGINEERING TECHNICIAN TO IDENTIFY AND COORDINATE WATER MAIN ACTIVITIES FOR THE FOLLOWING WEEK.
4. CONNECTION TO EXISTING WATER MAIN ON MOTT AVENUE AS SHOWN ON PLANS ASSUMES THAT AN EXISTING SECTION OF 6" WATER MAIN SHALL BE REMOVED PRIOR TO NEW 8" WATER MAIN INSTALLATION AND CONNECTION AS SHOWN ON PLANS. ELEVATIONS OF EXISTING 6" WATER MAIN SHALL BE CONFIRMED IN FIELD. CONTRACTOR TO PROVIDE TEMPORARY THRUST SUPPORT FOR EXISTING 4" VALVE AND TEMPORARY 6" CAP WHICH IS INCIDENTAL TO WATER MAIN REMOVAL.
5. IF PER DIVISION 1 REQUIREMENTS, DRIVEWAYS REMAIN ACCESSIBLE TO RESIDENTS DURING WATER MAIN CONSTRUCTION WITHIN THE STAGE, PROVIDE CHANNELIZERS AS REQUIRED TO DELINEATE REQUIRED STORAGE AND WORK SPACE FOR WATER MAIN WORK WITHIN EACH STAGE. CHANNELIZERS CONSIDERED INCIDENTAL TO PROJECT TRAFFIC CONTROL.
6. WATER MAIN INSTALLATION WORK REQUIRES COORDINATION AND SEQUENCING WITH OTHER WORK WITHIN EACH STAGE. WATER MAIN WORK IN EACH WATER MAIN STAGE IS NOT COMPLETE UNTIL WATER SERVICES ARE TRANSFERRED, CONNECTIONS TO EXISTING MAINS ARE COMPLETED, AND EXISTING WATER MAIN WITHIN STAGE IS ABANDONED, INCLUDING ALL REMOVALS OF TEMPORARY OR ABANDONED APPURTENANCES THAT WOULD INTERFERE WITH NEW SIDEWALK OR STREET PAVING.
7. WATER MAIN STAGES DIFFER FROM CITY STAGES AS NOTED ON PLAN SHEETS. TRAFFIC CONTROL, SIDEWALK & STREET PAVING REMOVAL & REPLACEMENT ARE COVERED BY DIVISION 1 WORK. ANY ADDITIONAL COSTS ASSOCIATED WITH COMPLETING WATER MAIN WORK OUTSIDE OF THE CITY STAGE ARE CONSIDERED INCIDENTAL.
8. WATER MAIN INSTALLATION REQUIRES SIDEWALK REMOVAL AND DRIVEWAY REMOVAL PRIOR TO WATER MAIN INSTALLATION WITHIN THE WATER MAIN STAGE. THESE REMOVALS ARE COVERED BY DIVISION 1 WORK. ANY ADDITIONAL COSTS ASSOCIATED WITH REMOVALS DUE TO SEQUENCING/STAGING OF WORK ARE CONSIDERED INCIDENTAL.
9. WATER SERVICES FOR OPPOSITE SIDE ARE TO BE OPEN CUT. THIS ASSUMES THAT STREET PAVING IS REMOVED PRIOR TO WATER SERVICE TRANSFERS.
10. WHERE WATER MAIN INSTALLATION IS BENEATH NEW SIDEWALK OR NEW STREET, COMPACTION OF BACKFILL MATERIAL WILL BE TO ELEVATION OF BOTTOM OF PAVING SUBBASE.
11. WATER MAIN WORK IS UNDER DIVISION 2. QUANTITIES FOR DIVISION 2 WORK SHALL BE TRACKED SEPARATE FROM DIVISION 1 WORK. QUANTITIES TO BE APPROVED BY DMWW ENGINEER/ENGINEERING TECHNICIAN PRIOR TO PAYMENT. CHANGE ORDERS INCLUDING WATER MAIN REQUIRE APPROVAL BY DMWW PRIOR TO PAYMENT.
12. TRAFFIC CONTROL IS PER J SHEETS AND DIVISION 1. ANY ADDITIONAL TRAFFIC CONTROL FOR WATER MAIN WORK OUTSIDE OF THE CITY ACTIVE STAGE IS INCIDENTAL TO PROJECT TRAFFIC CONTROL.
13. SIDEWALK AND STREET PAVING REMOVALS AND REPLACEMENT ARE PER DIVISION 1. ANY ADDITIONAL PAVING REQUIREMENTS FOR WATER MAIN WORK OUTSIDE OF THE CITY ACTIVE STAGE IS INCIDENTAL TO PROJECT PAVING.
14. PROVIDE TREE PROTECTION PER CITY OF WINDSOR HEIGHTS REQUIREMENTS. WATER MAIN WORK IS ADJACENT TO TREES AND TREE ROOTS LOCATED BOTH WITHIN AND ADJACENT TO THE RIGHT-OF-WAY.

WATER MAIN CONSTRUCTION NOTES:

1. WATER SERVICE SHALL BE MAINTAINED TO ALL CUSTOMERS DURING CONSTRUCTION.
2. CONTRACTOR TO ADHERE TO DMWW SPECIFICATION REQUIREMENT THAT NO MORE THAN 100 FEET OF TRENCH LENGTH ARE TO BE OPEN AT A TIME.
3. CONTRACTOR TO MAINTAIN EROSION CONTROL FOR WATER MAIN WORK DURING CONSTRUCTION. DIVISION 2 EROSION CONTROL INCLUDES FILTER SOCKS AROUND BACKFILL PILES AND OPEN TRENCHES DURING WATER MAIN CONSTRUCTION. OVERALL SITE EROSION CONTROL IS PER DIVISION 1 REQUIREMENTS.
4. HOMEOWNER ACCESS REQUIREMENTS ARE ESTABLISHED IN DIVISION 1 REQUIREMENTS. COSTS ASSOCIATED WITH MAINTAINING ACCESS ARE ACCOUNTED FOR IN DIVISION 1 ITEMS.
5. THE CONTRACTOR'S SCHEDULE SHALL ACCOUNT FOR TIME REQUIRED TO PRESSURE TEST AND CHLORINATE WATER MAIN (3 DAYS MINIMUM EACH STAGE).
6. THE CONTRACTOR SHALL COORDINATE ALL WATER MAIN WORK, SEWER & PAVING WORK WITH DMWW ENGINEER/ENGINEERING TECHNICIAN IN EACH STAGE.
7. ALL WATER SERVICES SHALL BE OPEN CUT FOR THIS PROJECT DUE TO SPACE RESTRICTIONS. ALL EQUIPMENT FOR WATER SERVICE TRANSFERS SHALL REMAIN WITHIN THE DESIGNATED RIGHT-OF-WAY. RESTORATION REQUIRED FOR ANY DAMAGED AREAS CAUSED BY CONTRACTOR WORKING OUTSIDE OF THE RIGHT-OF-WAY SHALL BE AT CONTRACTOR'S EXPENSE.
8. DMWW ENGINEER/ENGINEERING TECHNICIAN AND CONTRACTOR TO AGREE ON QUANTITIES BEFORE PAYMENT.
9. DMWW WILL HIRE A SOIL TESTING FIRM TO TEST SOIL COMPACTIONS IN FIELD. PER DMWW SPECIFICATION PROVISIONS, SOILS DEEMED UNSUITABLE DUE TO MOISTURE CONTENT BUT OTHERWISE ACCEPTABLE ARE REQUIRED TO BE DRIED.
10. SOIL COMPACTION EQUIPMENT IS REQUIRED TO FIT WITHIN DESIGNATED TRENCH WIDTHS. WIDER COMPACTION EQUIPMENT IS NOT ACCEPTABLE.
11. BACKFILL REQUIREMENTS IN DMWW SPECIAL PROVISIONS INCLUDE ADJUSTING MOISTURE CONTENT OF MATERIAL THAT EXCEEDS OPTIMUM MOISTURE RANGE BUT IS OTHERWISE DEEMED ACCEPTABLE. CONTRACTOR TO KEEP EXCAVATED MATERIAL PROTECTED FROM EXPOSURE TO MOISTURE DUE TO RAIN. TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT.
12. INSTALL RESTRAINED JOINT PIPE LENGTHS IN ACCORDANCE WITH RESTRAINED LENGTH SCHEDULE TO CONNECT TO VALVE AT END OF STAGE AT LOCATIONS SHOWN ON PLANS.

WATER MAIN SEQUENCING REQUIREMENTS:

1. WATER MAIN INSTALLATION SHALL BE COORDINATED WITH OTHER WORK WITHIN EACH STAGE.
2. DMWW ANTICIPATES THAT WATER MAIN WORK WILL BE DONE PRIOR TO SEWER, INTAKES, AND SUBDRAIN INSTALLATION. CONTRACTOR TO COORDINATE ACTUAL SCHEDULE AND SEQUENCE WITH DMWW ENGINEER/ENGINEERING TECHNICIAN THROUGHOUT PROJECT.
3. ACTUAL SEQUENCE OF WATER MAIN WORK SHALL BE DISCUSSED AT WEEKLY SCHEDULED MEETINGS BEFORE STARTING WORK.
4. AT THE END OF EACH DAY, COMPACT BACKFILL TO MEET CITY COMPACTION REQUIREMENTS.
5. DMWW STAGES DIFFERS FROM CITY STAGES AS NOTED ON PLANS.

WATER MAIN STAGE 1

1. REMOVE SIDEWALK AND SAW CUT/REMOVE DRIVEWAYS (DIVISION 1 BID ITEMS).
2. INSTALL TAPPING SLEEVE & VALVE AND INSTALL WATER MAIN PER PLANS.
3. PRESSURE TEST AND CHLORINATE NEW WATER MAIN (3 DAYS MINIMUM).
4. REMOVE 1" CHLORINATION TAP.
5. TRANSFER WATER SERVICES.
6. BACKFILL AND COMPACT TRENCHES PER CITY COMPACTION REQUIREMENTS FOR RESPECTIVE SIDEWALK & STREET PAVING OR GRASS AREA FINAL SURFACE.
7. ABANDON WATER MAIN PER PLANS AND REMOVE OLD SURFACE FACILITIES.
8. FINAL PAVING AND RESTORATION TO BE COMPLETED IN ACCORDANCE WITH CITY REQUIREMENTS AS PART OF DIVISION 1 WORK.

WATER MAIN STAGE 2

1. REMOVE SIDEWALK AND SAW CUT/REMOVE DRIVEWAYS (DIVISION 1 BID ITEMS).
2. REMOVE CAP ON VALVE AND INSTALL WATER MAIN PER PLANS. INCLUDES CONNECTION TO 6" WATER MAIN AT MOTT AVE PER PLANS.
3. PRESSURE TEST AND CHLORINATE NEW WATER MAIN (3 DAYS MINIMUM).
4. REMOVE 1" CHLORINATION TAP.
5. TRANSFER WATER SERVICES.
6. BACKFILL AND COMPACT TRENCHES PER CITY COMPACTION REQUIREMENTS FOR RESPECTIVE SIDEWALK & STREET PAVING OR GRASS AREA FINAL SURFACE.
7. ABANDON WATER MAIN PER PLANS AND REMOVE OLD SURFACE FACILITIES.
8. FINAL PAVING AND RESTORATION TO BE COMPLETED IN ACCORDANCE WITH CITY REQUIREMENTS AS PART OF DIVISION 1 WORK.

WATER MAIN STAGE 3

1. REMOVE SIDEWALK AND SAW CUT/REMOVE DRIVEWAYS (DIVISION 1 BID ITEMS).
2. REMOVE CAP ON VALVE AND INSTALL WATER MAIN PER PLANS.
3. PRESSURE TEST AND CHLORINATE NEW WATER MAIN (3 DAYS MINIMUM).
4. REMOVE 1" CHLORINATION TAP.
5. TRANSFER WATER SERVICES.
6. BACKFILL AND COMPACT TRENCHES PER CITY COMPACTION REQUIREMENTS FOR RESPECTIVE SIDEWALK & STREET PAVING OR GRASS AREA FINAL SURFACE.
7. ABANDON WATER MAIN PER PLANS AND REMOVE OLD SURFACE FACILITIES.
8. FINAL PAVING AND RESTORATION TO BE COMPLETED IN ACCORDANCE WITH CITY REQUIREMENTS AS PART OF DIVISION 1 WORK.

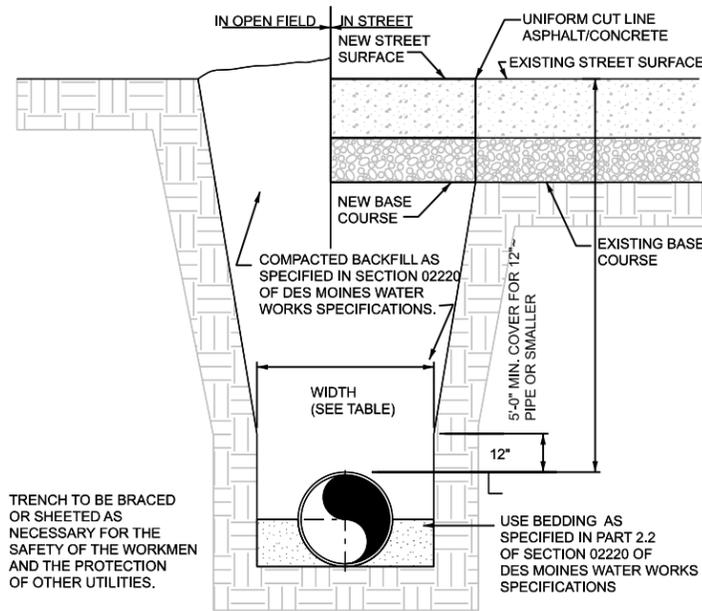
WATER MAIN STAGE 4

1. REMOVE SIDEWALK AND SAW CUT/REMOVE DRIVEWAYS (DIVISION 1 BID ITEMS).
2. REMOVE CAP ON VALVE AND INSTALL WATER MAIN PER PLANS. INCLUDES CONNECTION TO EXISTING 8" WATER MAIN AT UNIVERSITY AVE PER PLANS.
3. PRESSURE TEST AND CHLORINATE NEW WATER MAIN (3 DAYS MINIMUM).
4. REMOVE 1" CHLORINATION TAP.
5. TRANSFER WATER SERVICES.
6. BACKFILL AND COMPACT TRENCHES PER CITY COMPACTION REQUIREMENTS FOR RESPECTIVE SIDEWALK & STREET PAVING OR GRASS AREA FINAL SURFACE.
7. ABANDON WATER MAIN PER PLANS AND REMOVE OLD SURFACE FACILITIES.
8. FINAL PAVING AND RESTORATION TO BE COMPLETED IN ACCORDANCE WITH CITY REQUIREMENTS AS PART OF DIVISION 1 WORK.

U:\Projects\In Design\A Water Distribution\Design\A1934W_2020 Windsor Heights\A1934W_2020 WMR Windsor Heights 69th St.dgn

1/3/2020

MARK	DATE	BY	 Des Moines Water Works ENGINEERING DEPARTMENT Des Moines, Iowa	PROJECT	CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	KGW	SURVEY NOTES	DATE	01/06/2020
				SHEET TITLE	WATER MAIN PAVEMENT PROFILE	SHEET	MMW.02	FILE NO.						



PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"

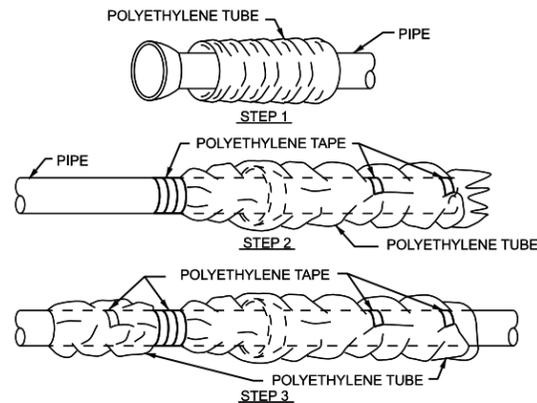
TYPICAL TRENCH SECTION

NOT TO SCALE

- STEP 1 - PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO THE TRENCH
- STEP 2 - PULL THE TUBE OVER THE LENGTH OF PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE
- STEP 3 - OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP AND TAPED IN PLACE.

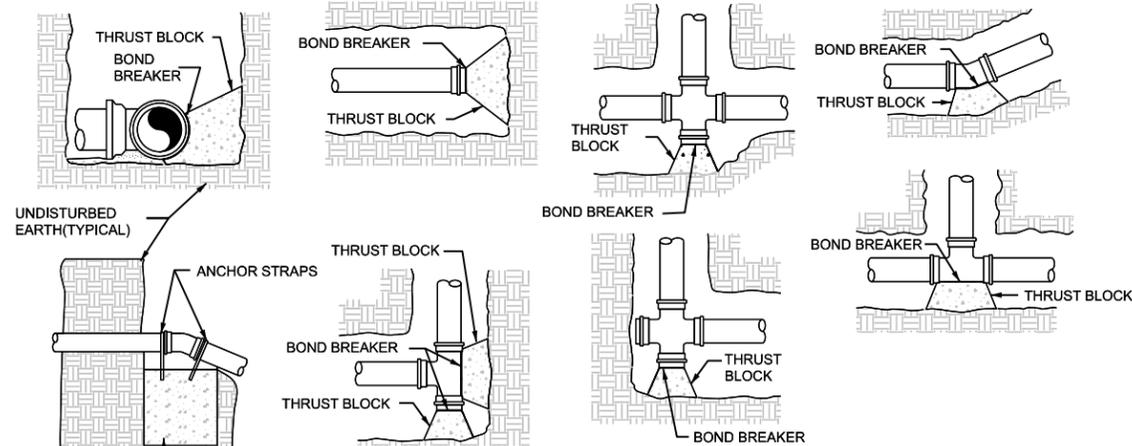
NOTE:

IRON PIPE FITTINGS, INCLUDING VALVES AND HYDRANTS SHALL BE WRAPPED WITH TWO LAYERS OF POLYETHYLENE MATERIAL. THE WRAPPING SHALL EXTEND AT LEAST 1' BEYOND THE FITTING JOINTS ONTO THE ADJOINING PIPE AND SHALL BE FASTENED TO THE PIPE WITH PLASTIC TAPE. TAPE SHALL BE USED AS NEEDED TO HOLD WRAP IN PLACE. EITHER POLYETHYLENE SHEETS OR SLIT TUBING MAY BE USED.



POLYETHYLENE WRAP FIELD INSTALLATION DETAIL

NOT TO SCALE



SIZE OF PIPE	VOLUME IN CUBIC YARDS			
	11 1/4"	22.5"	45"	90"
4"	0.24	0.65	1.35	2.03
6"	0.24	0.65	1.35	2.03
8"	0.45	1.14	2.35	3.49
12"	0.98	2.44	4.99	7.38
16"	1.73	4.27	8.70	12.84
20"	2.66	6.56	13.36	19.70
24"	3.70	9.25	18.94	27.96
30"	5.73	14.26	29.15	42.99

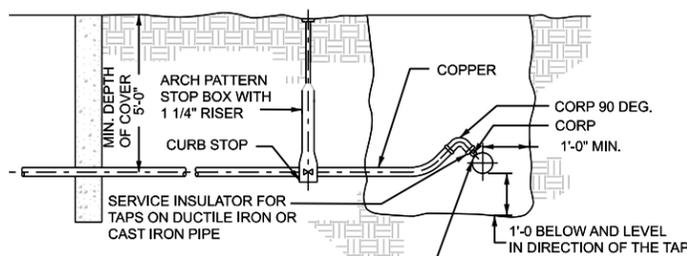
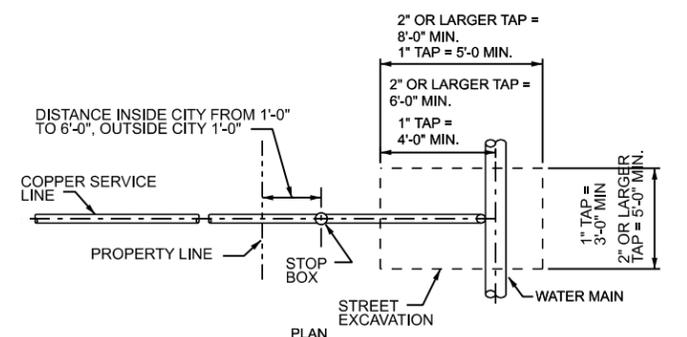
VOLUME OF GRAVITY BLOCK

NOT TO SCALE

SIZE OF PIPE	MINIMUM BEARING SURFACE (IN SQ. FT.)			
	11 1/4"	22.5"	45"	90"
6"	1	2	4	8
8"	2	4	8	14
12"	4	8	16	29
16"	7	14	28	51
20"	11	22	43	79
24"	16	31	61	112

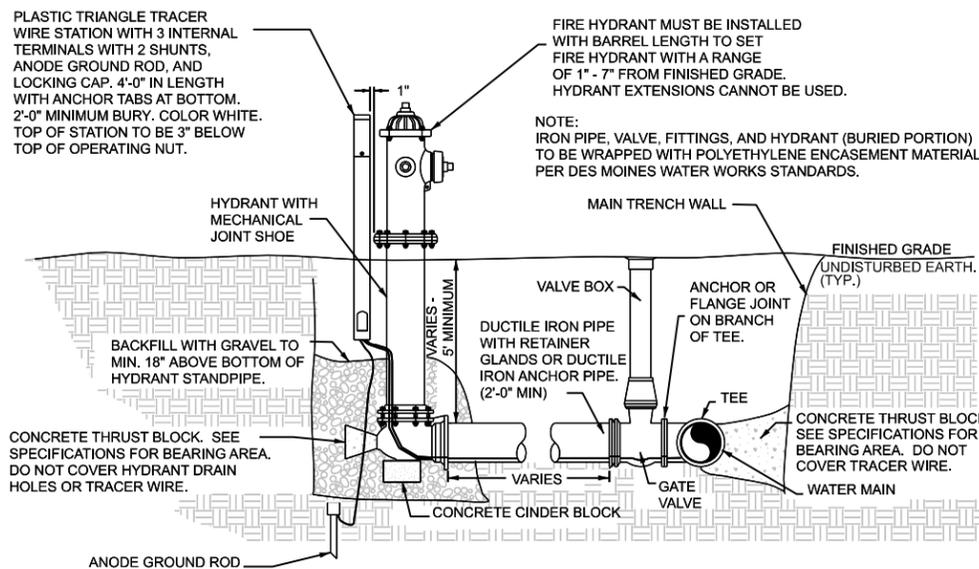
STANDARD CONCRETE THRUST BLOCKS

NOT TO SCALE



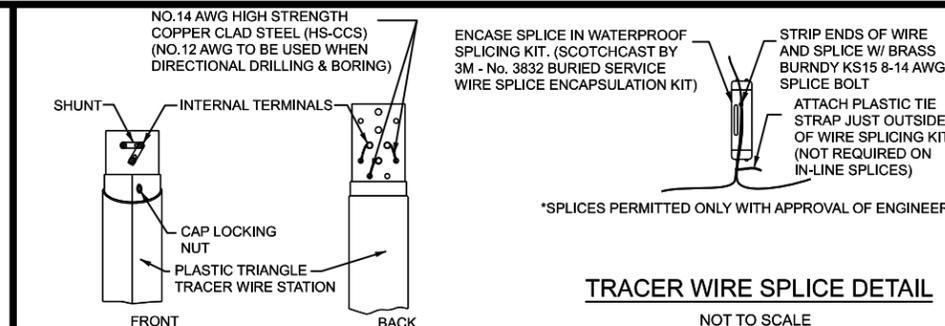
SERVICE INSTALLATION

NOT TO SCALE



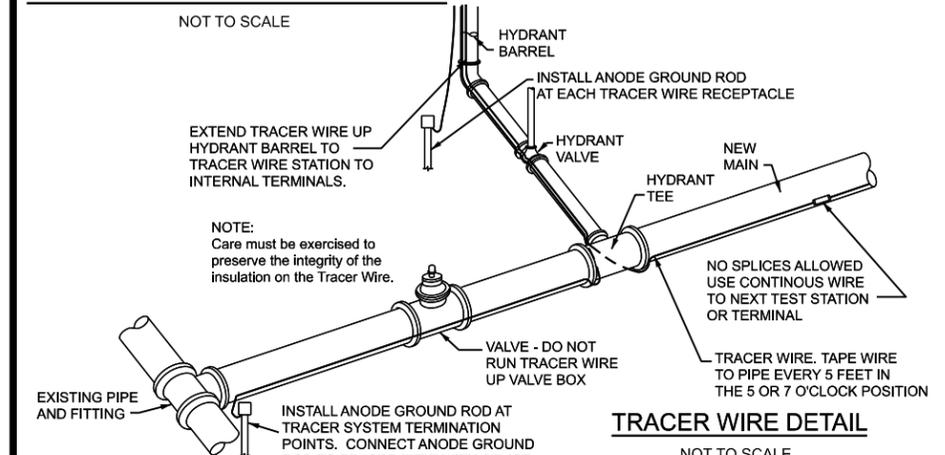
STANDARD HYDRANT ON WATER MAINS 16" OR LESS

NOT TO SCALE



TRACER WIRE RECEPTACLE DETAIL

NOT TO SCALE

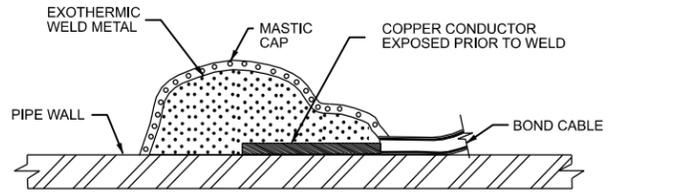


TRACER WIRE DETAIL

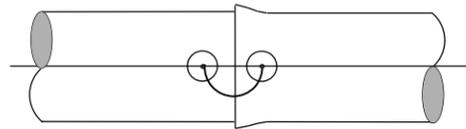
NOT TO SCALE

MARK	DATE	BY

PROJECT	DESIGNED BY	DRAWN BY	CHECKED BY	SURVEY NOTES
CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	CJS	JLH	KGV	DATE 01/06/2020
SHEET TITLE	ACTIVITY I.D.	SHEET	FILE NO.	
WATER MAIN STANDARD DETAILS		MMW.03		

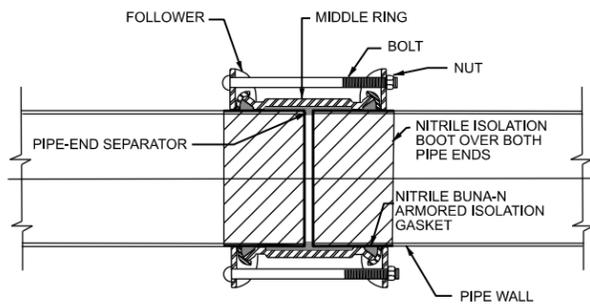


DETAIL - EXOTHERMIC WELD CONNECTION TO PIPE

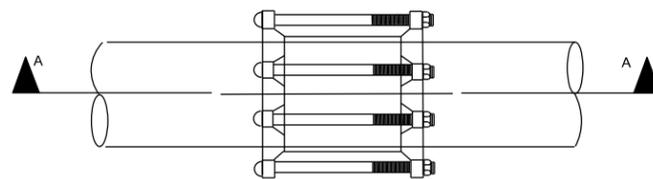


CABLE BOND ACROSS PIPE JOINT

PIPE JOINT CONTINUITY BONDING FOR DUCTILE IRON PIPE



SECTION A: VIEW THROUGH PIPE COUPLING

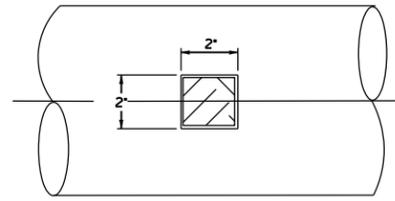


PIPE ISOLATION COUPLING

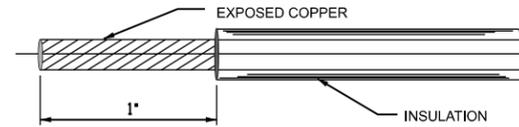
PIPE ISOLATION COUPLING (W/O RESTRAINT)

NOTE: FOR CONNECTIONS OF NEW DIP TO EXISTING CIP, USE DRESSER STYLE 39 OR APPROVED EQUAL.

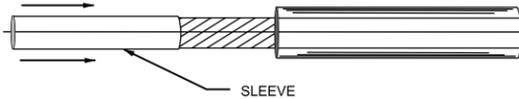
1. CLEAN A SMALL SQUARE AREA AT THE TOP DEAD CENTER OF THE PIPE. USE A GRINDER OR FLAT FILE TO EXPOSE BRIGHT SHINY METAL. (DO NOT USE PIPE SAW)



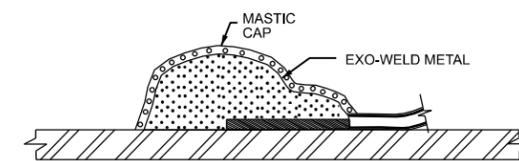
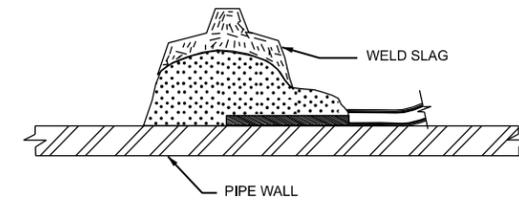
2. STRIP OFF ABOUT 1" OF INSULATION FROM STRANDED/SOLID COPPER WIRES OR STRANDED COPPER CABLES.



3. SLIP ON A COPPER WELD SLEEVE TO #10 AWG WIRE AND SMALLER TEST WIRE AND TO #2 AWG AND #4 AWG STRANDED COPPER BOND CABLES.



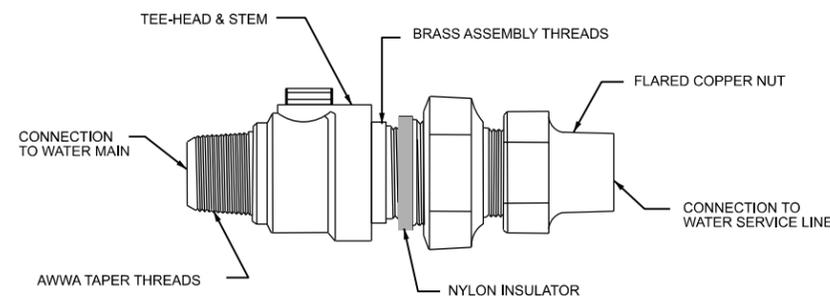
4. PLACE THE WELD FURNACE DIRECTLY OVER THE COPPER WIRE OR CABLE AND WHILE HOLDING FIRMLY IN PLACE, IGNITE FLASH POWDER WITH A FLINT IGNITER. AFTER COOLING, REMOVE ALL SLAG FROM THE TOP OF THE WELD METAL.



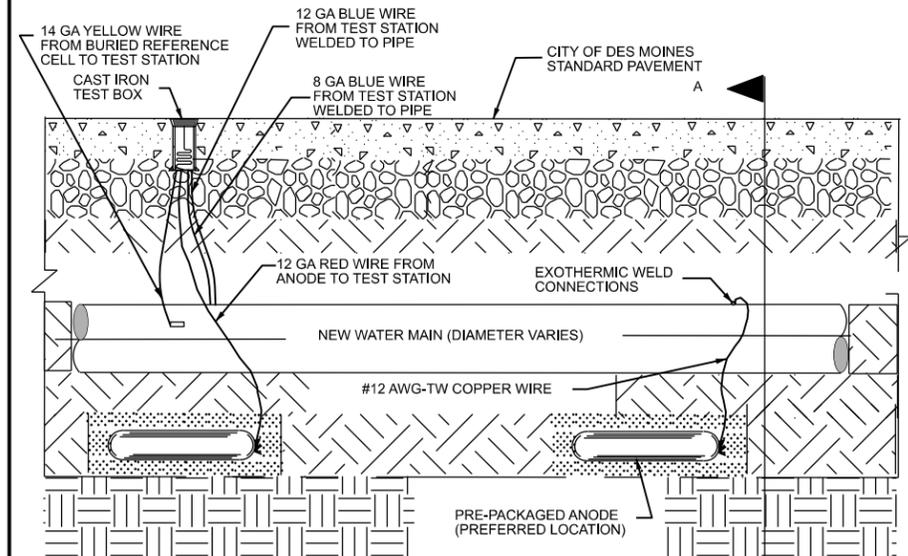
5. APPLY COLD-APPLIED MASTIC CAP TO COVER ALL EXPOSED COPPER AND BARE PIPE METAL PRIOR TO BACKFILLING.

DO NOT USE EXOTHERMIC WELD EQUIPMENT IF THE GRAPHITE FURNACE IS WET. FOLLOW MANUFACTURER'S SPECIFIC INSTRUCTIONS FOR STORAGE, HANDLING, AND USE.

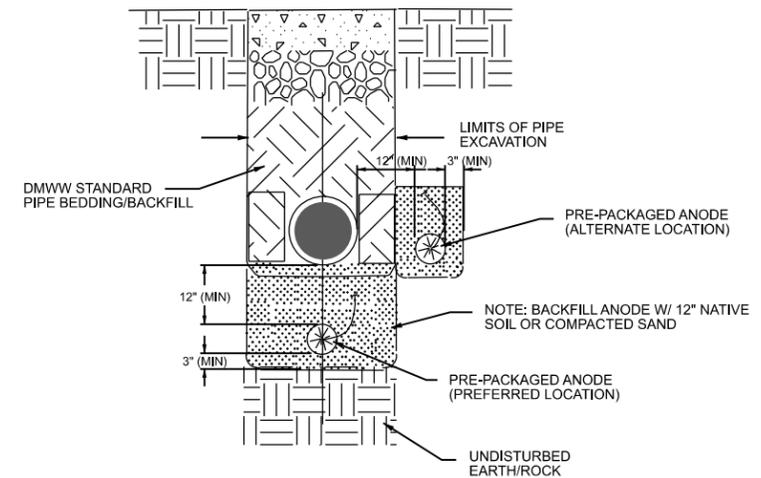
EXOTHERMIC WELD PROCEDURE FOR DUCTILE IRON PIPE (HORIZONTAL ONLY)



INSULATED CORPORATION FOR COPPER SERVICE LINES ON DUCTILE IRON PIPE



ELEVATION



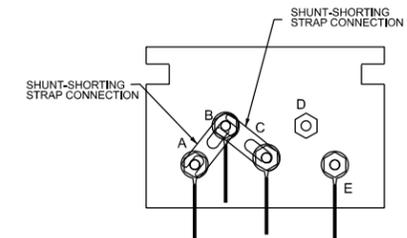
SECTION A-A

ANODE INSTALLATION FOR DUCTILE IRON PIPE

Pipe Dia. (in.)	Anode O-C Sp. (ft.)
4	180
6	120
8	90
10	72
12	60
16	45

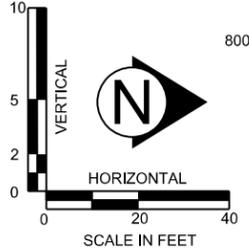
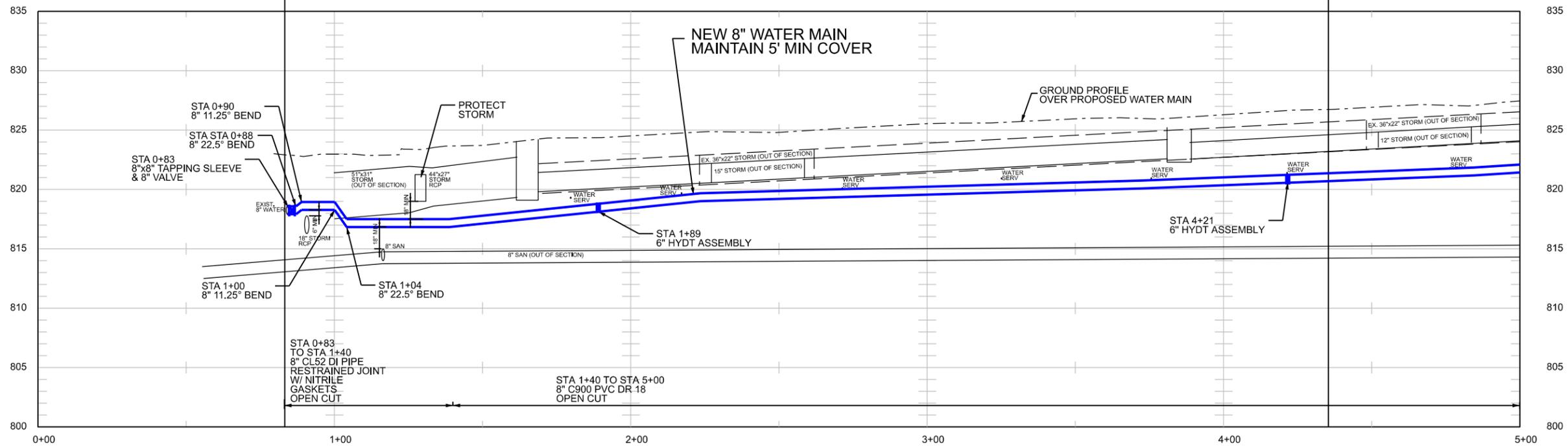
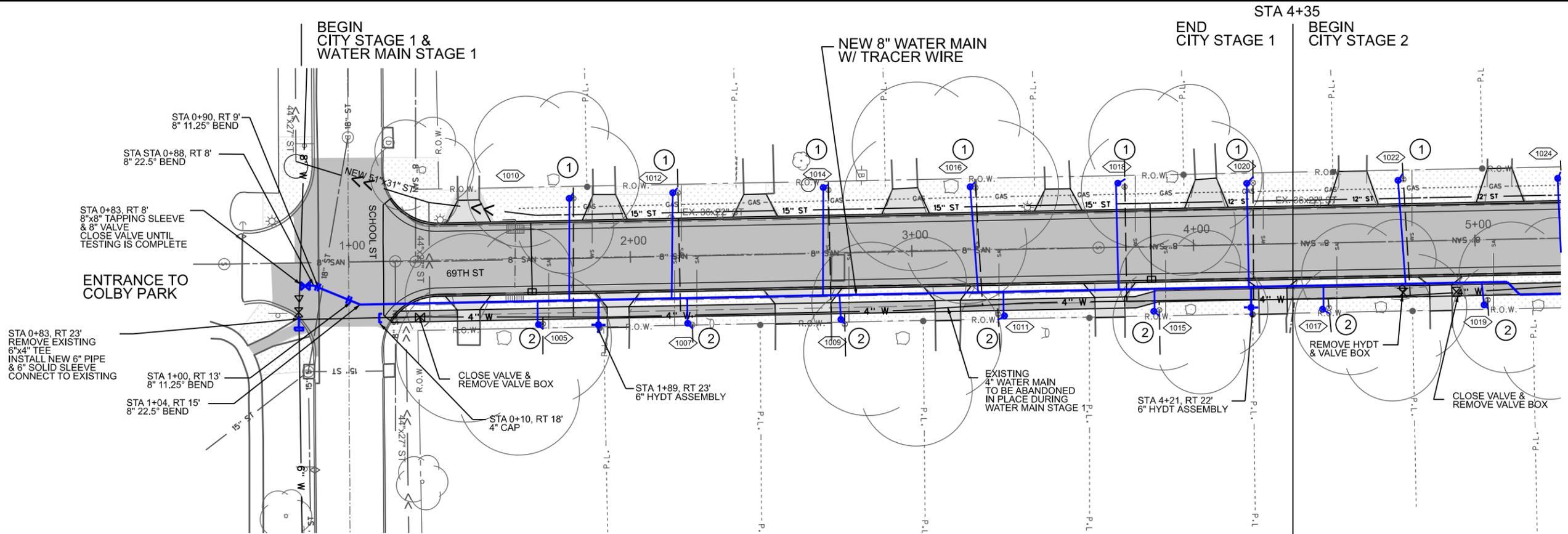
ANODE INSTALLATION SPACING

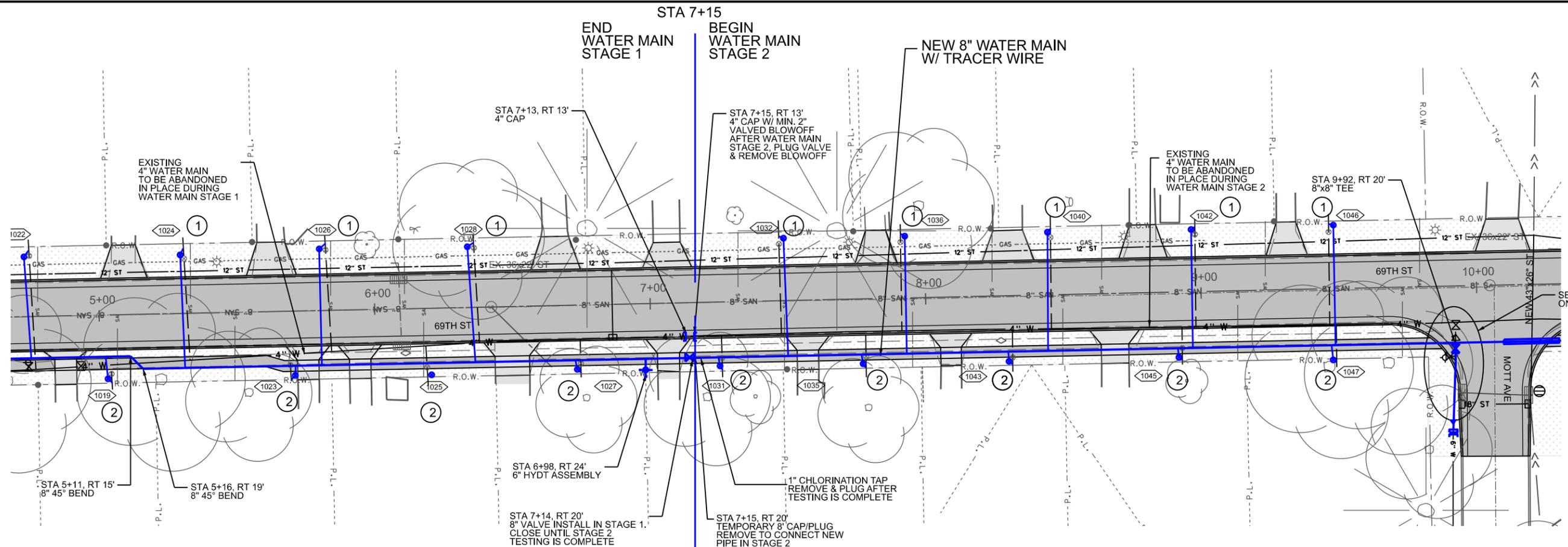
NOTE: INSTALL FIRST ANODE WITHIN 10' OF INTENDED CATHODIC PROTECTION LOCATIONS THEN FOLLOW SPACING



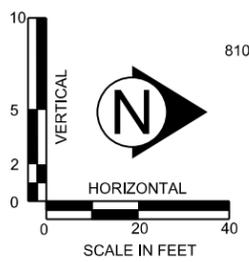
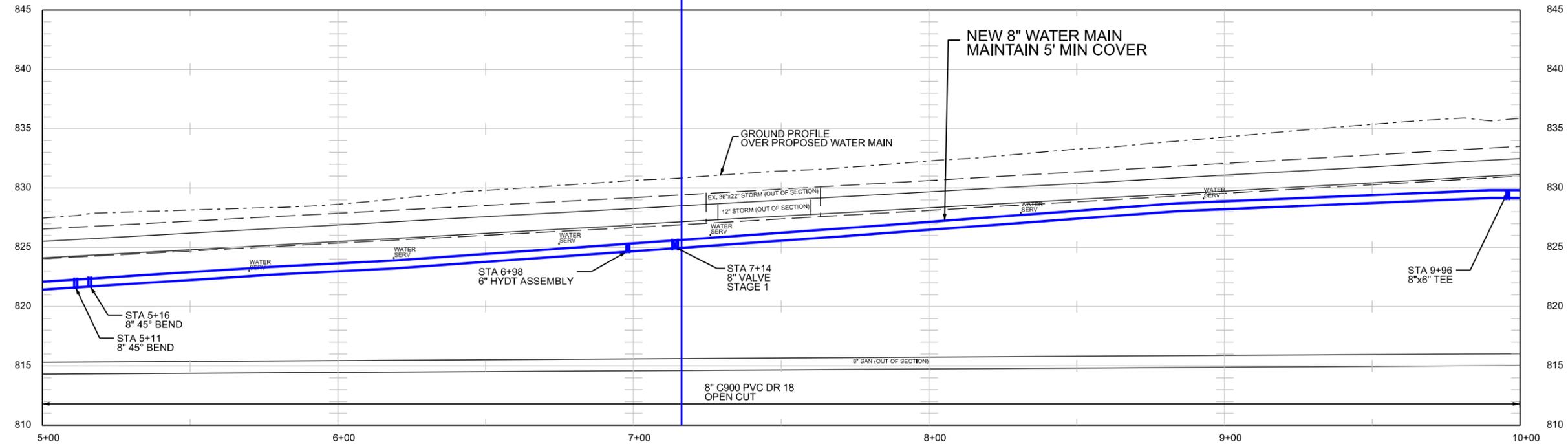
ATS BOARD ID	STRUCTURE	AWG#	WIRE COLOR
A	WATER MAIN WIRE	12	BLUE
B	ANODE WIRE	12	RED
C	WATER MAIN WIRE	8	BLUE
D	NOT USED	-	-
E	REF CELL	14	YELLOW

TEST STATION TERMINAL BOARD





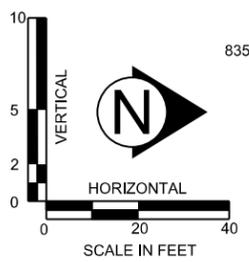
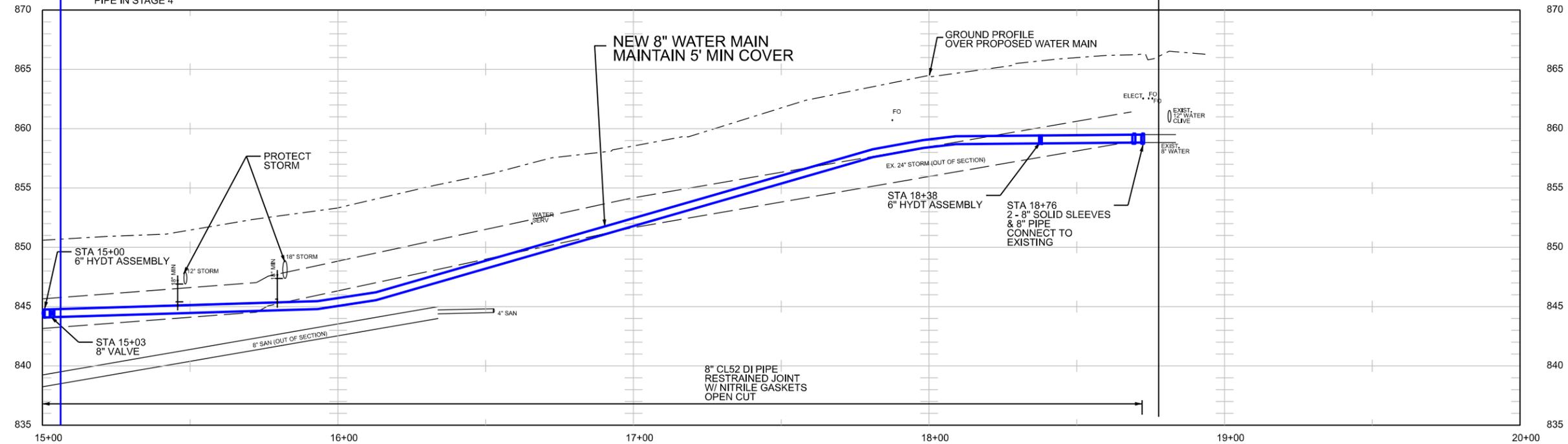
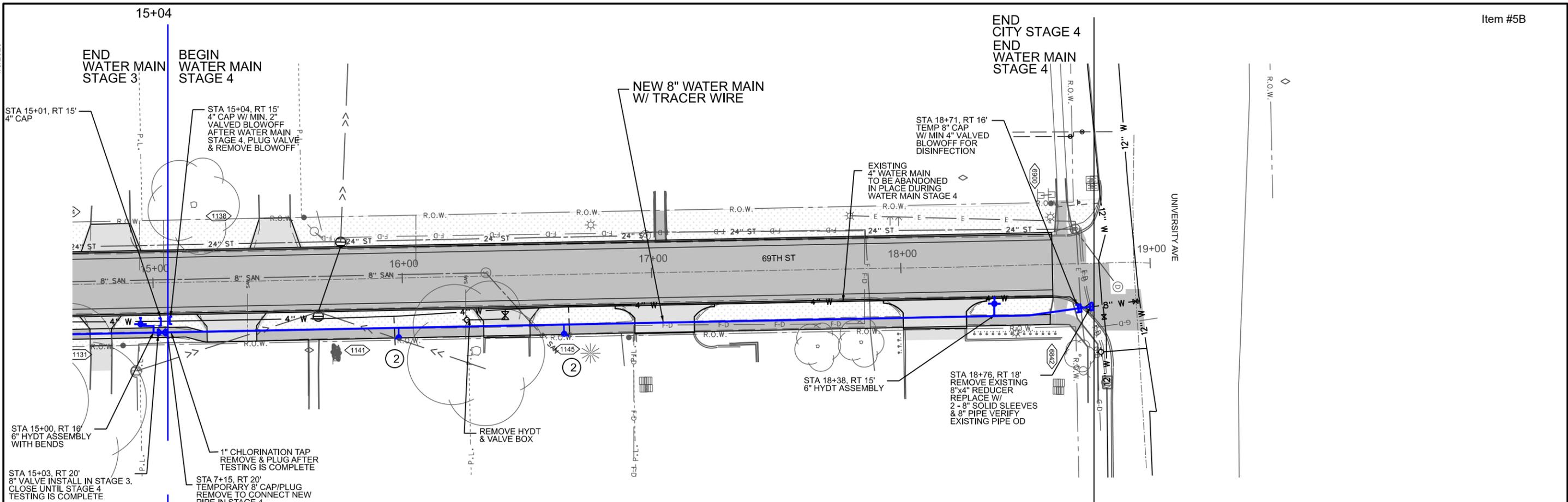
SEE DETAIL 1 ON SHEET MWM.09



Des Moines Water Works ENGINEERING DEPARTMENT Des Moines, Iowa		PROJECT CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	DESIGNED BY CJS ACTIVITY I.D.	DRAWN BY JLH	CHECKED BY KGV	SURVEY NOTES DATE 01/06/2020
SHEET TITLE WATER MAIN PLAN & PROFILE		SHEET MWM.06		FILE NO.		

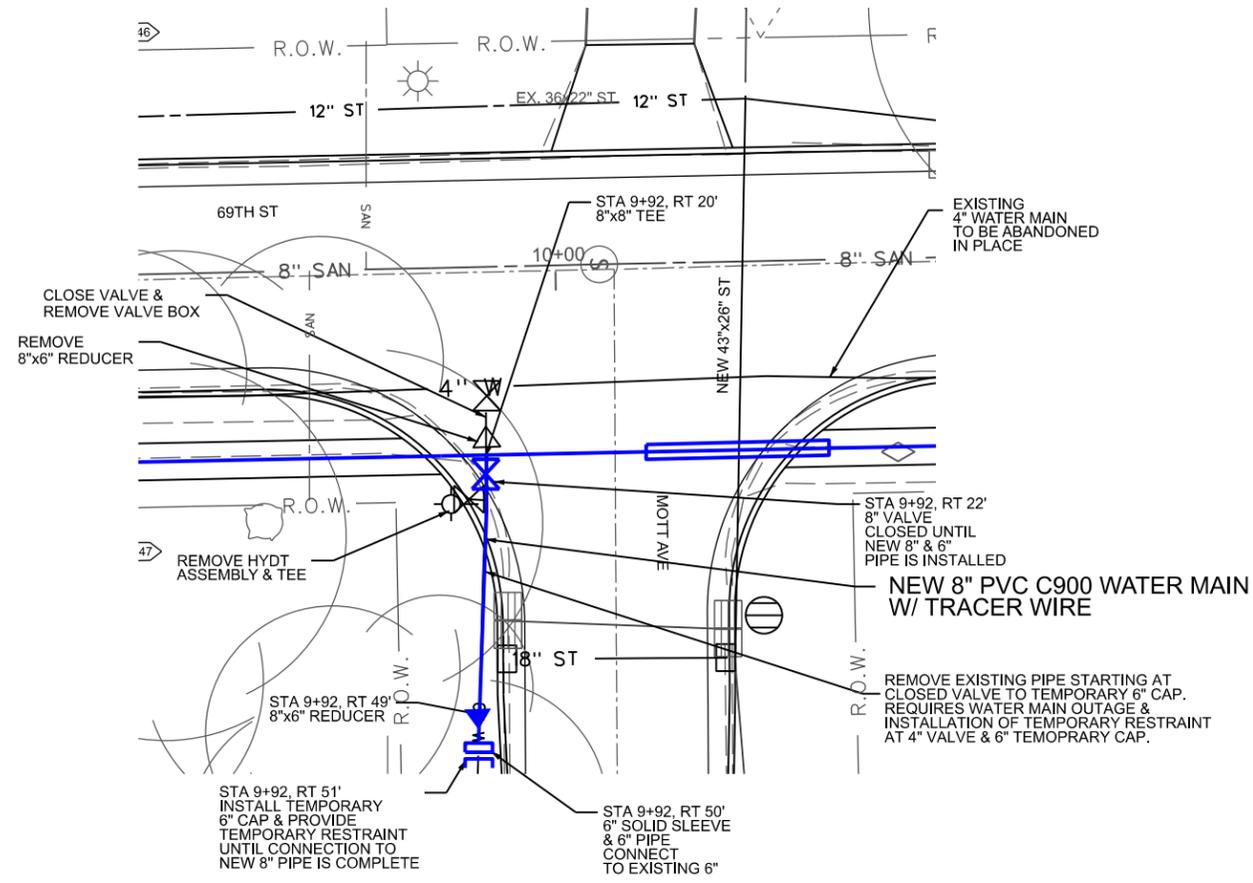
1/3/2020

U:\Projects\In Design\Water Distribution\Design\A1934W_2020 Windsor Heights\69th St.dgn

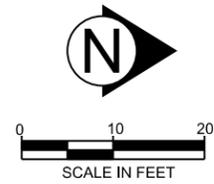


PROJECT	CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	KGV	SURVEY DATE	01/06/2020
SHEET TITLE	WATER MAIN PLAN & PROFILE	SHEET	MMW.08	FILE NO.					

1/3/2020



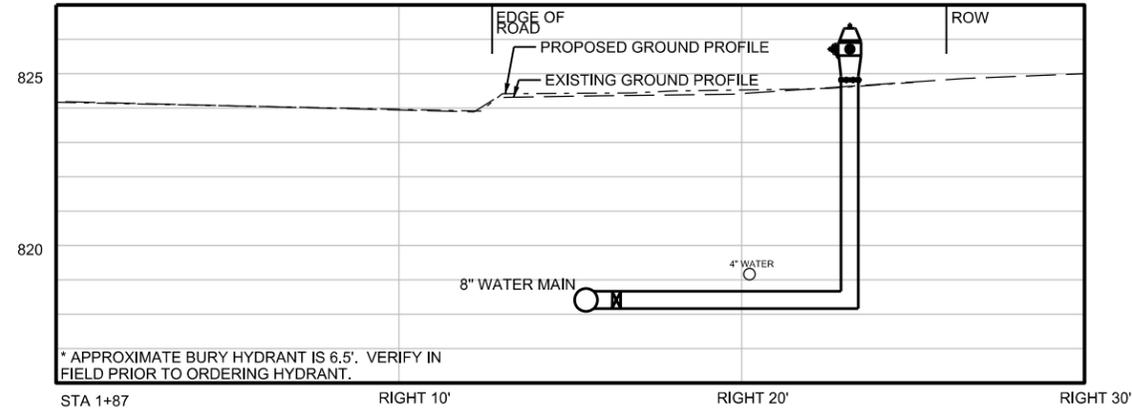
DETAIL 1
CONNECTION AT STA 9+92
MOTT AVENUE



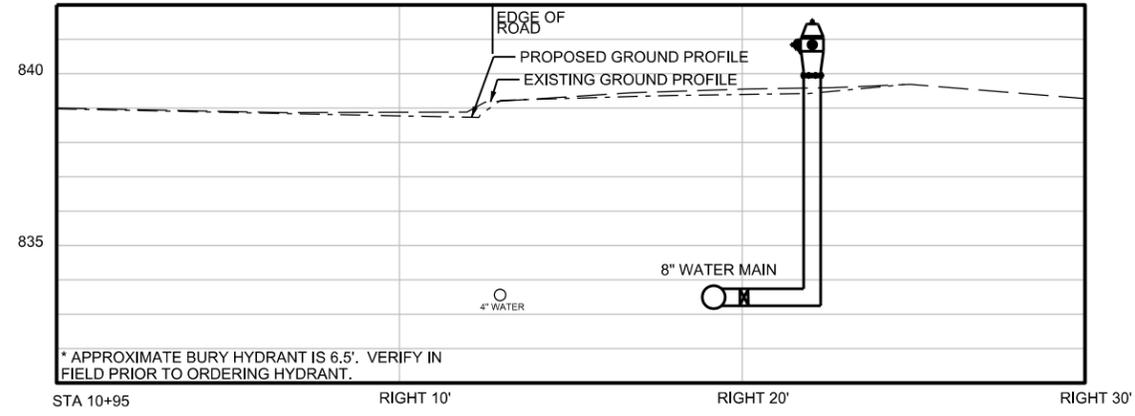
U:\Projects in Design\A Water Distribution Design\A1934W_2020 Windsor Heights\A1934W_2020 WMR Windsor Heights 69th St.dgn

MARK	DATE	BY	 Des Moines Water Works Water You Can Trust for Life ENGINEERING DEPARTMENT Des Moines, Iowa	PROJECT	CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION	DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	KGV	SURVEY NOTES	
				SHEET TITLE	WATER MAIN PLAN & PROFILE	ACTIVITY I.D.		DATE	01/06/2020	SHEET	MMW.09	FILE NO.	

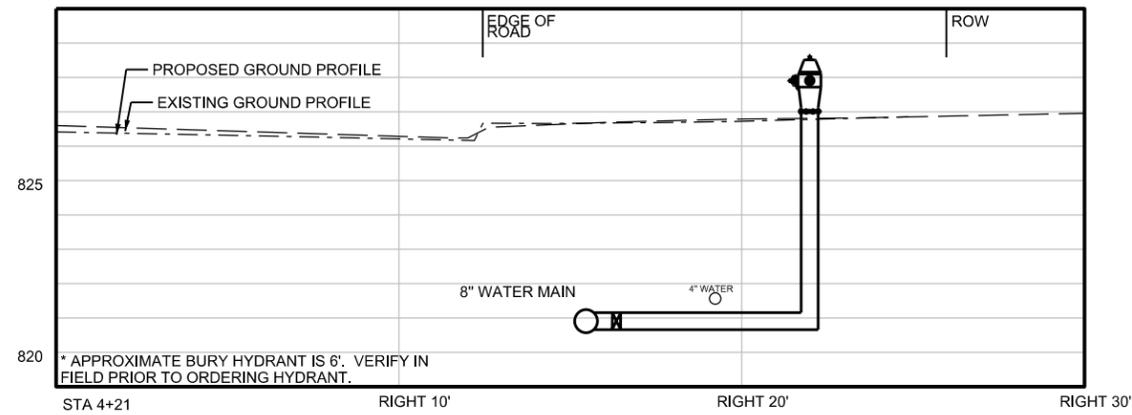
1/3/2020



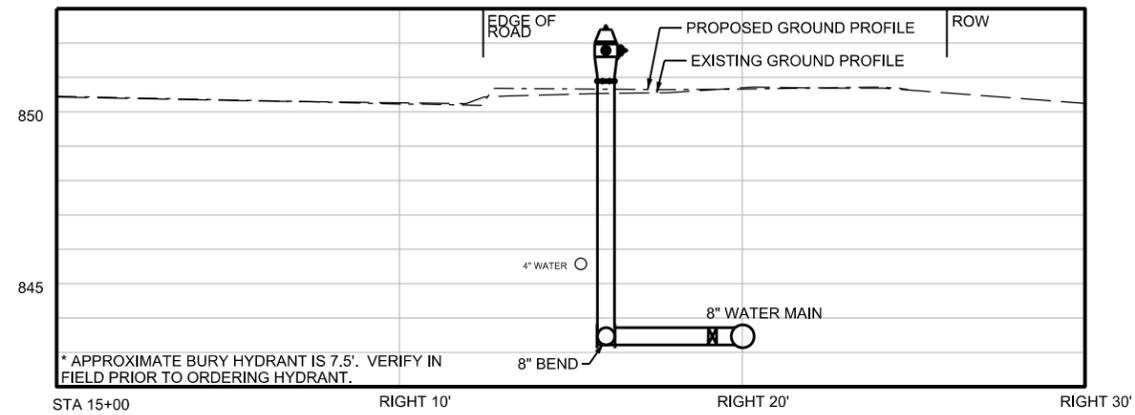
STA 1+89, RT 23'
SHEET MWM.05



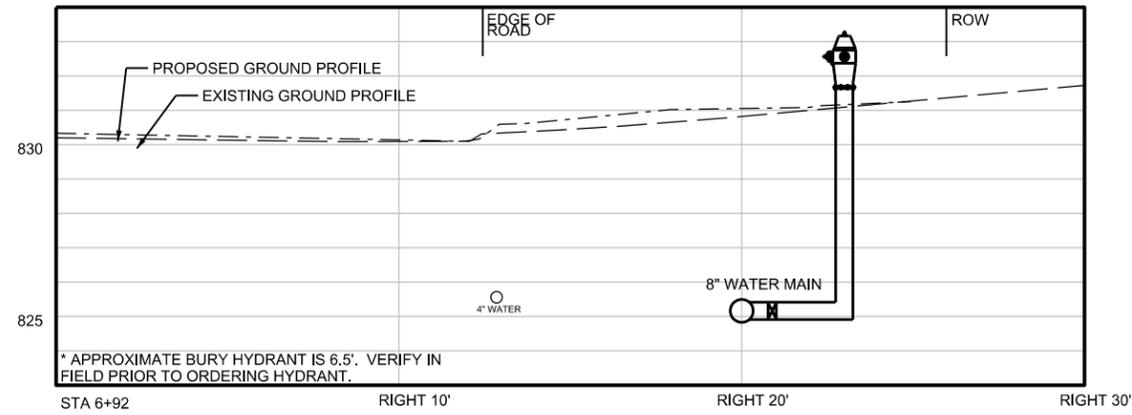
STA 10+95, RT 22'
SHEET MWM.07



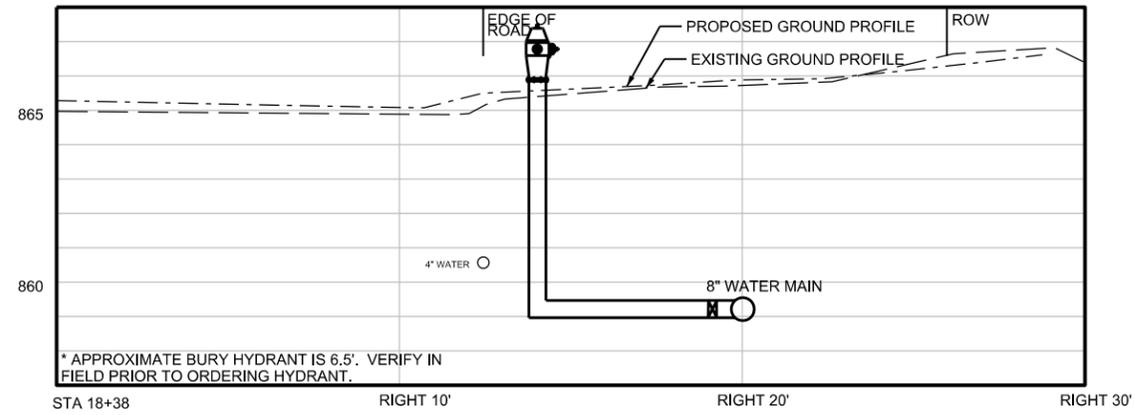
STA 4+21, RT 22'
SHEET MWM.05



STA 15+00, RT 16'
SHEET MWM.08



STA 6+98, RT 24'
SHEET MWM.06

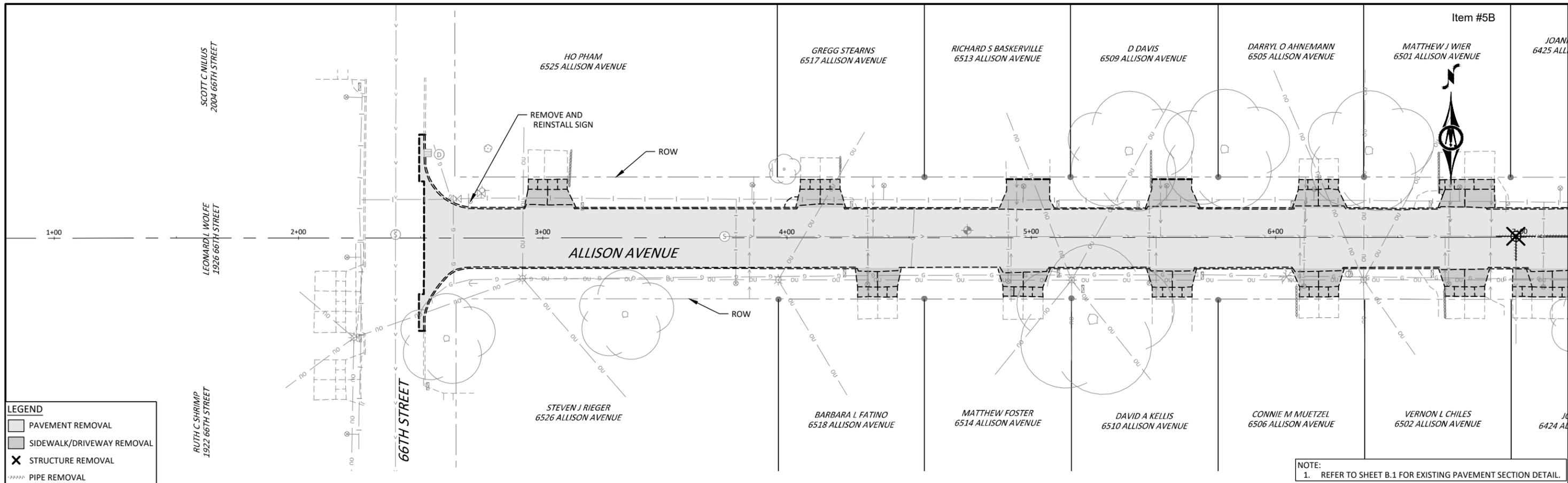


STA 18+38, RT 14'
SHEET MWM.08

U:\Projects in Design\A Water Distribution Design\A1934W_2020 Windsor Heights\A1934W_2020 WMR Windsor Heights 69th St.dgn

DESIGNED BY	CJS	DRAWN BY	JLH	CHECKED BY	KGV	SURVEY NOTES	
ACTIVITY I.D.						DATE	01/06/2020
SHEET TITLE	HYDRANT PROFILES					SHEET	MWM.10
PROJECT	CITY OF WINDSOR HEIGHTS, IOWA 2020 STREET RECONSTRUCTION					FILE NO.	

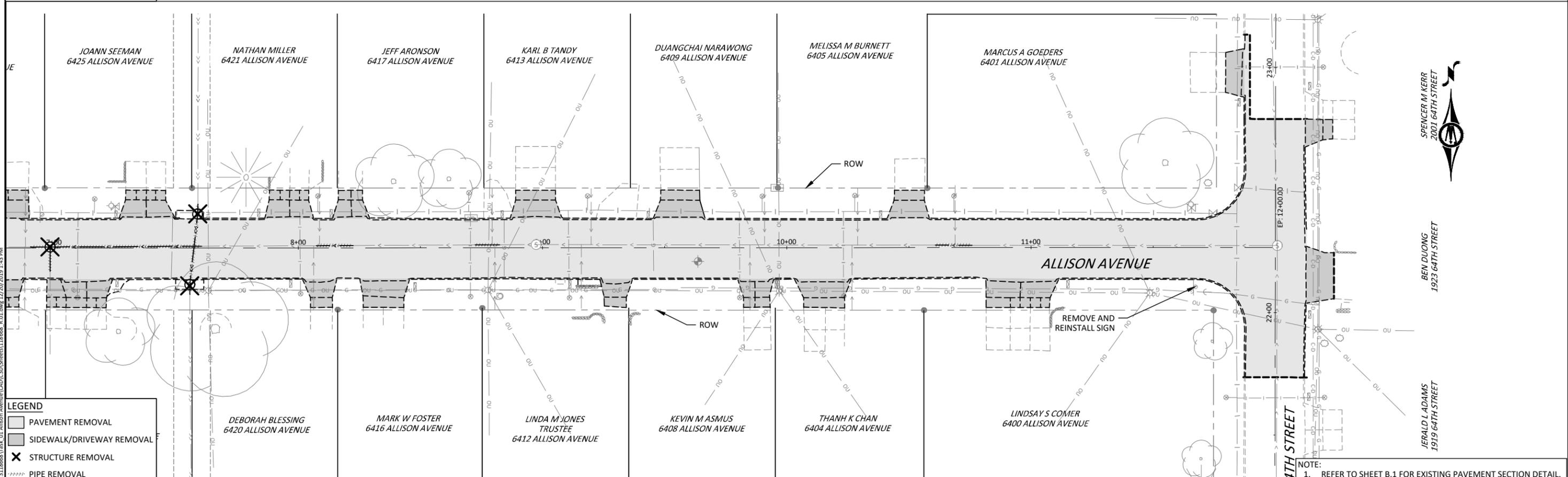




LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL

NOTE:
1. REFER TO SHEET B.1 FOR EXISTING PAVEMENT SECTION DETAIL.



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK/DRIVEWAY REMOVAL
- X STRUCTURE REMOVAL
- PIPE REMOVAL

NOTE:
1. REFER TO SHEET B.1 FOR EXISTING PAVEMENT SECTION DETAIL.

© Bolton & Menk, Inc. 2019. All Rights Reserved. A:\WINDSOR HTS\CI\A13118668\Task 01 Allison Avenue\CAD\Sheet\A13118668_R.01.dwg 12/20/2019 1:43 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



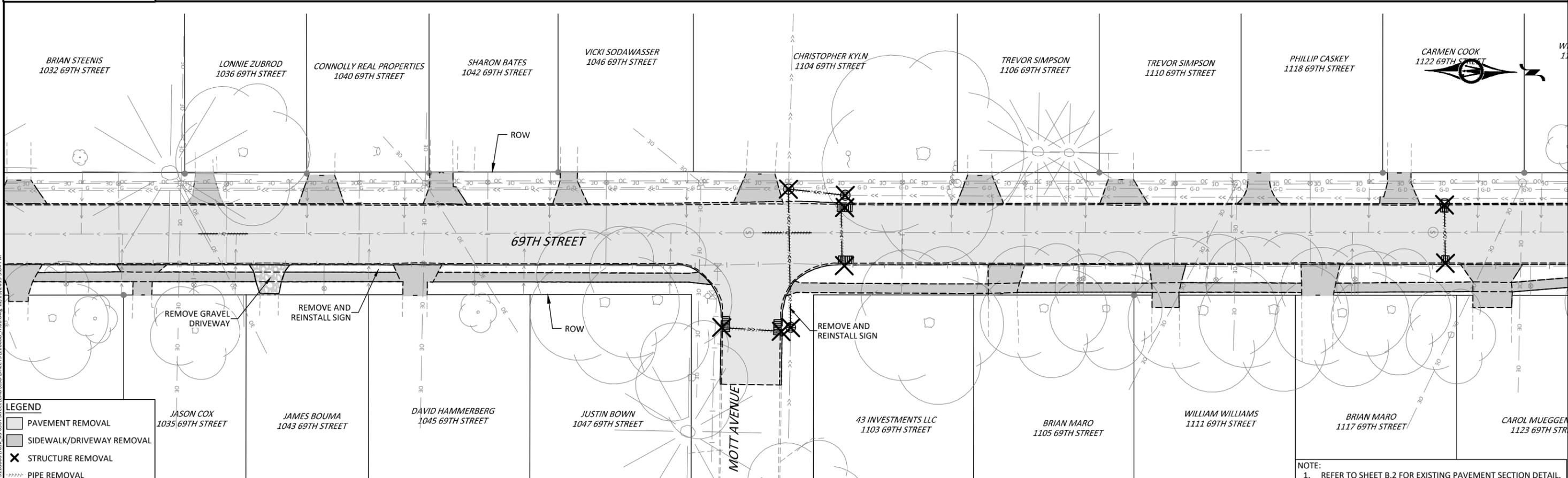
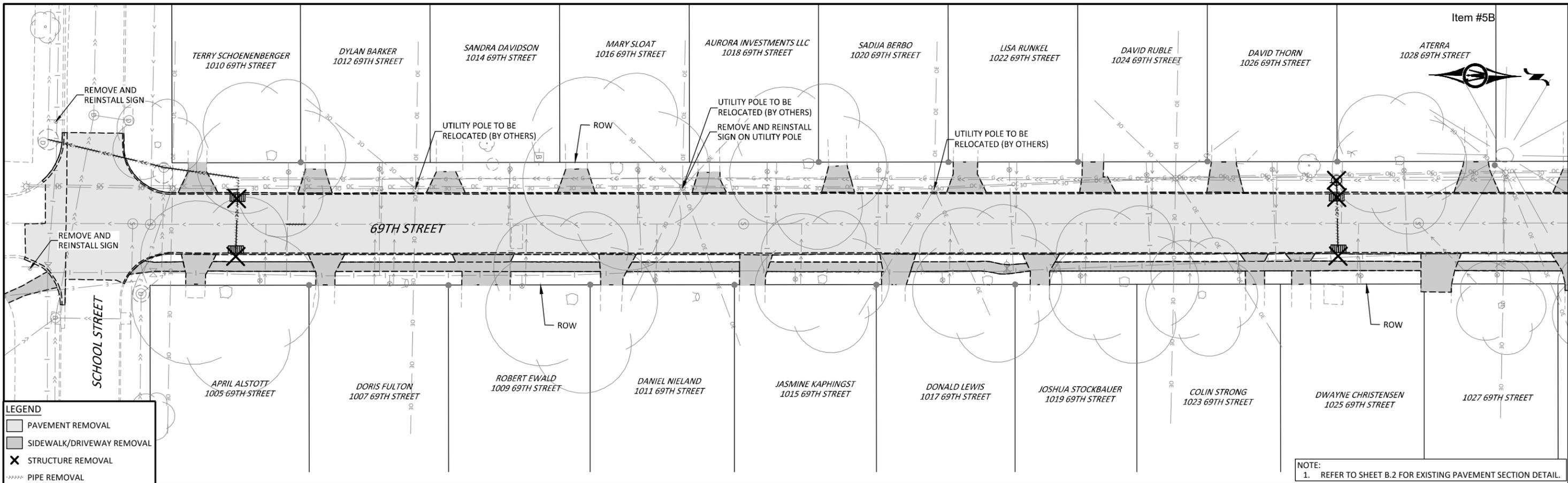
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
REMOVALS SHEETS - ALLISON AVENUE

SHEET
R.1



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR HTS\2020 STREET RECONSTRUCTION\CAD\CD\CD\SHEETS\118668_01.dwg 12/16/2019 5:04 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

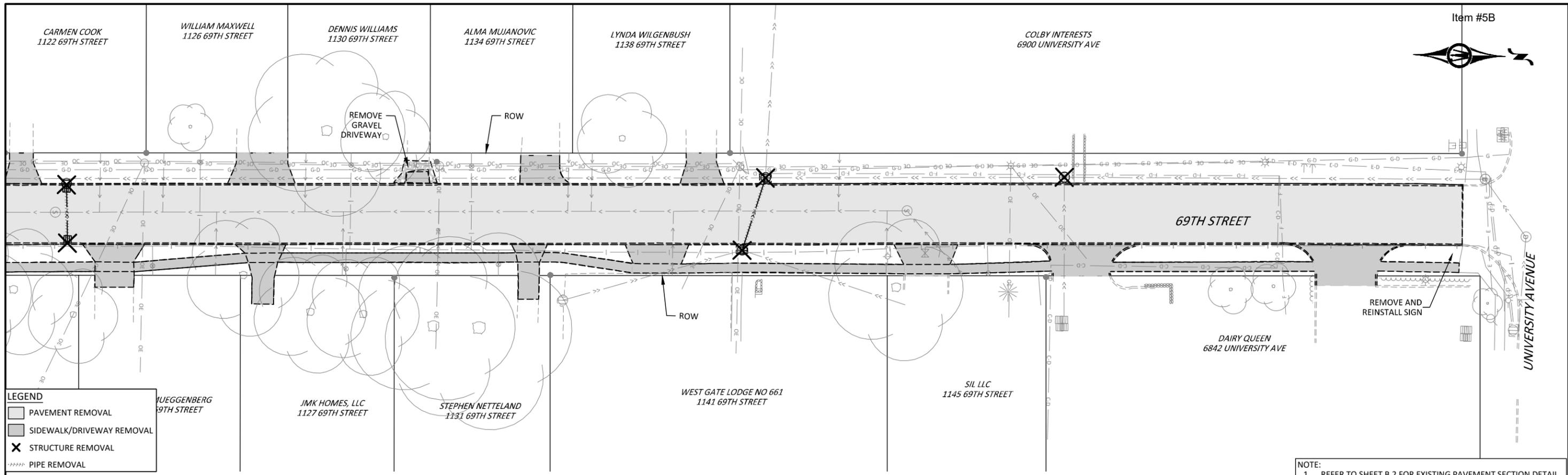


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
REMOVAL SHEETS - 69TH STREET



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CI-1A13118668\Task_03_69th_Street\CAD\Sheet\118668_01.dwg 12/19/2019 5:04 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

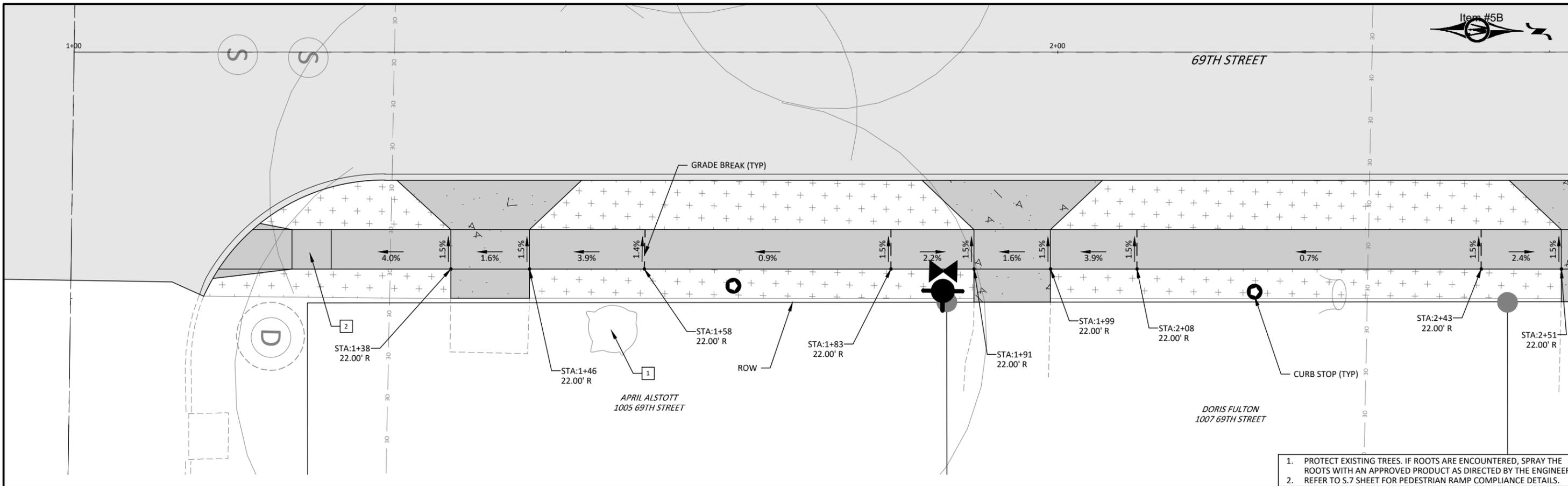


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

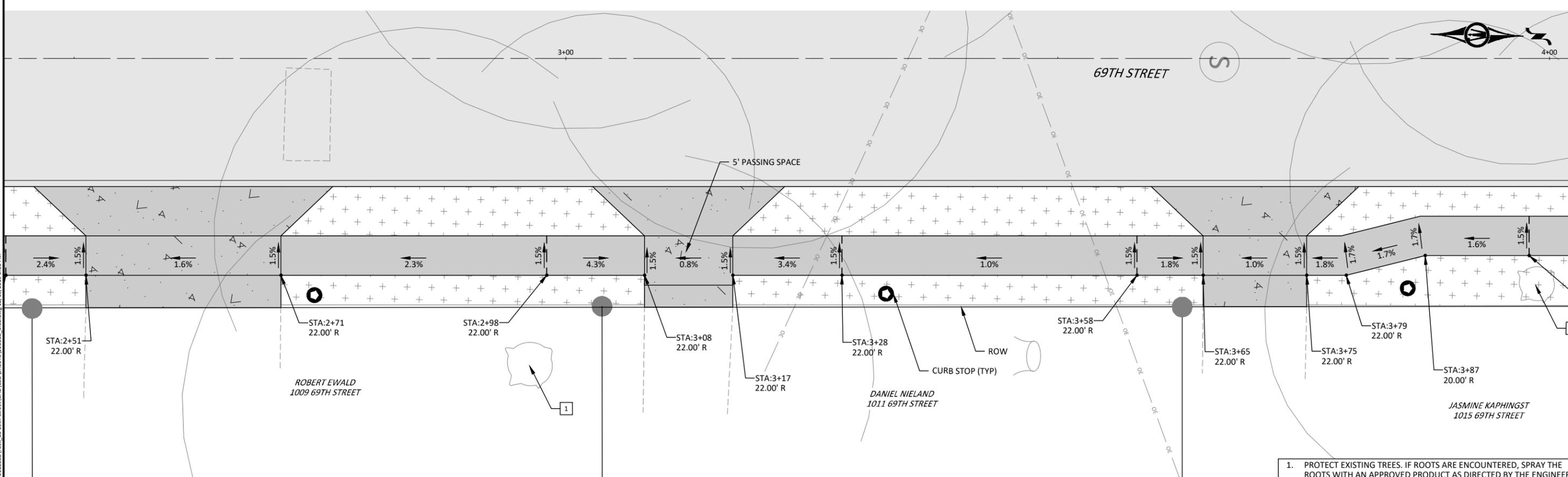


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 REMOVAL SHEETS - 69TH STREET



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.
2. REFER TO S.7 SHEET FOR PEDESTRIAN RAMP COMPLIANCE DETAILS.



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.

© Bolton & Menk, Inc. 2019. All Rights Reserved. C:\WINDSOR\CI\101118668\101118668_S.02.dwg 12/19/2019 5:06 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



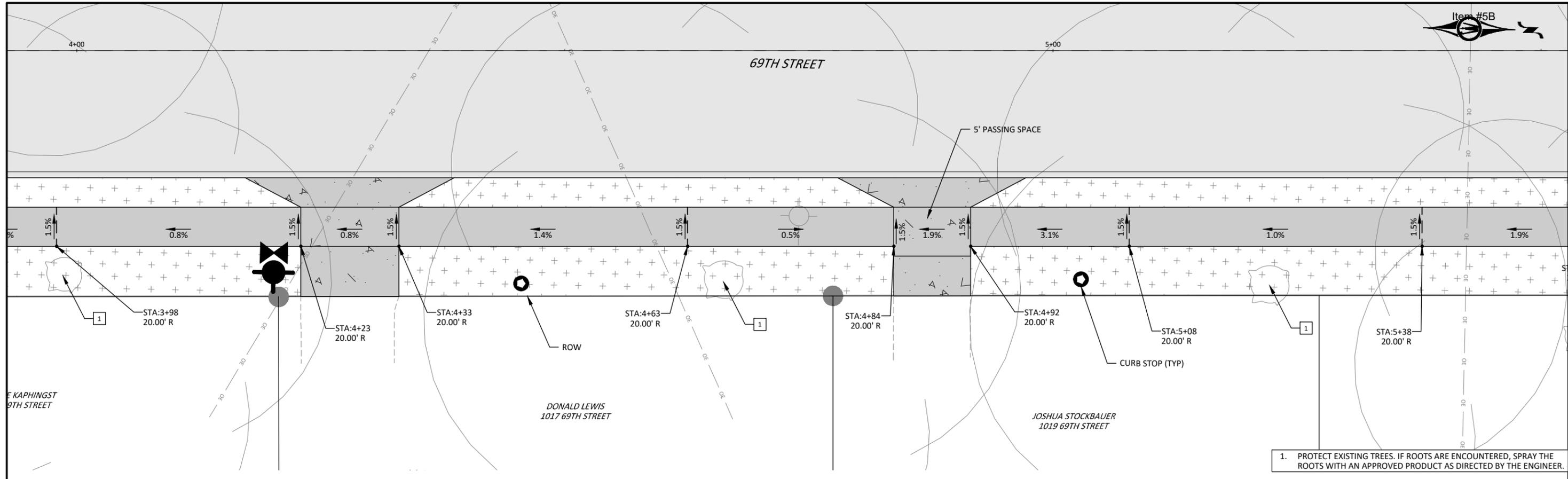
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



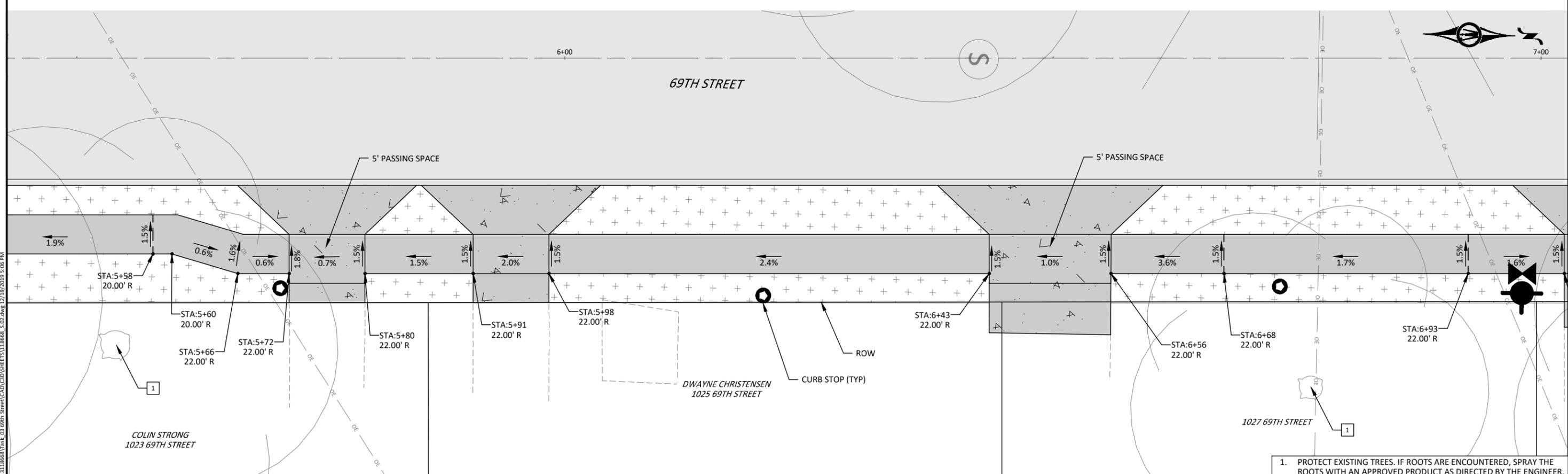
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SIDEWALK SHEETS - 69TH ST

SHEET
S.1



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.

© Bolton & Menk, Inc. 2019. All Rights Reserved. C:\WINDSOR\CI\A13118668\Task_03_69th_Street\CAD\DWG\SHEETS\118668_S.02.dwg 12/19/2019 5:06 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



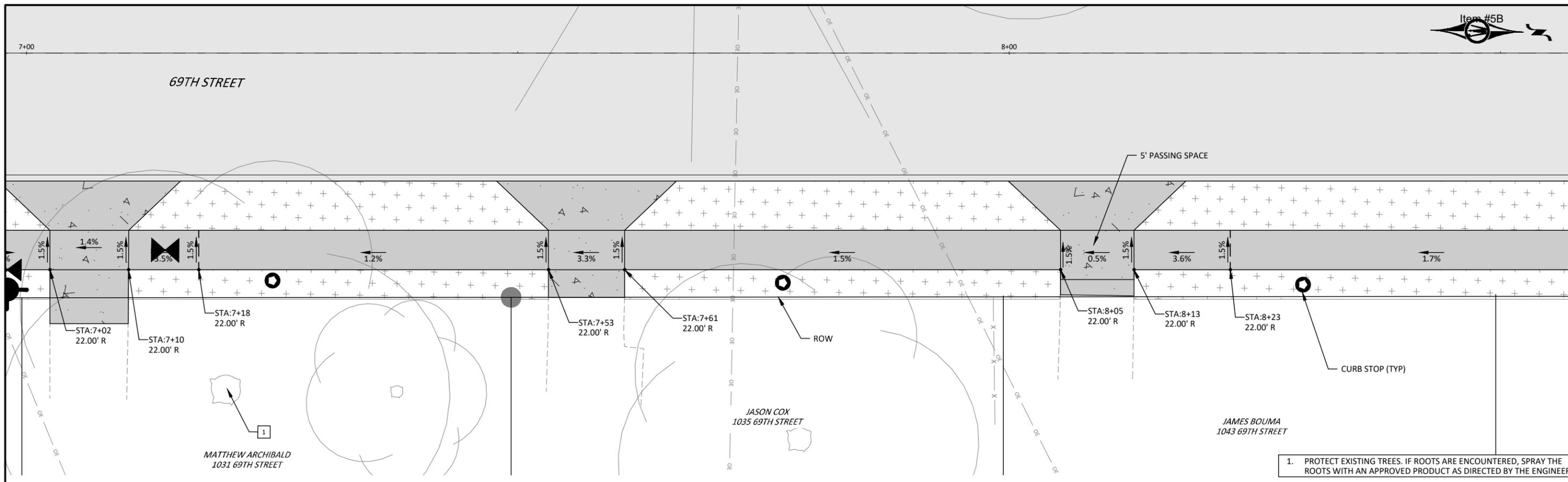
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



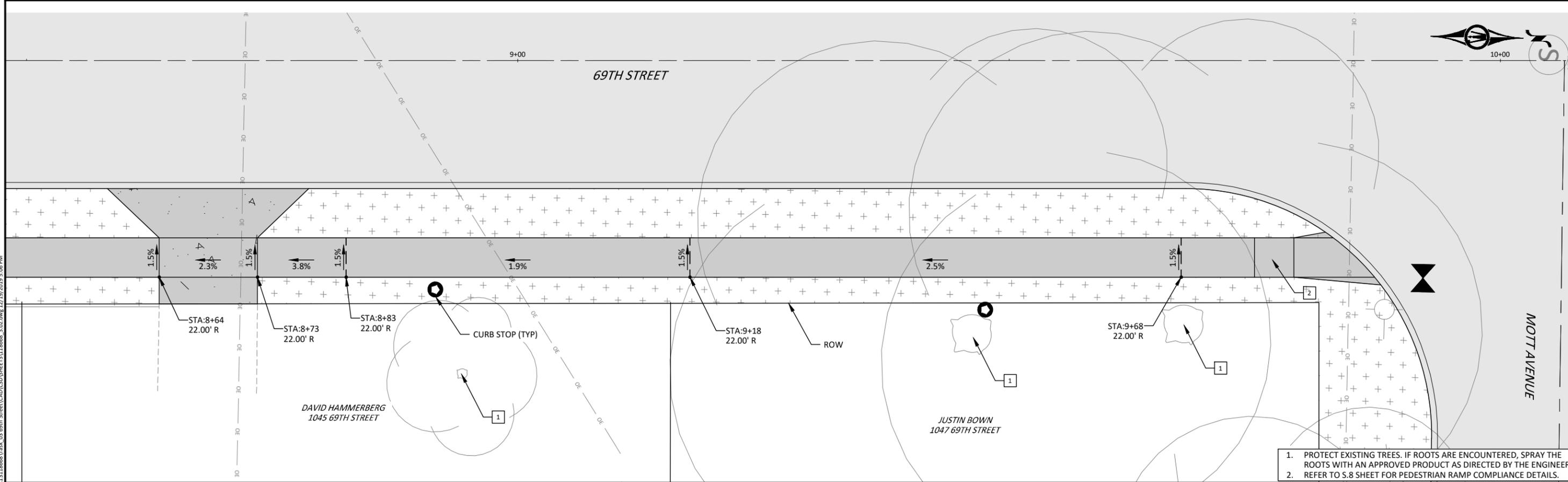
DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SIDEWALK SHEETS - 69TH ST

SHEET
S.2



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.
2. REFER TO S.8 SHEET FOR PEDESTRIAN RAMP COMPLIANCE DETAILS.

© Bolton & Menk, Inc. 2019. All Rights Reserved.
 C:\WINDSOR\CI\A13118668\Task_03_69th_Street\CAD\SHEETS\118668_S.02.dwg 12/19/2019 5:06 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

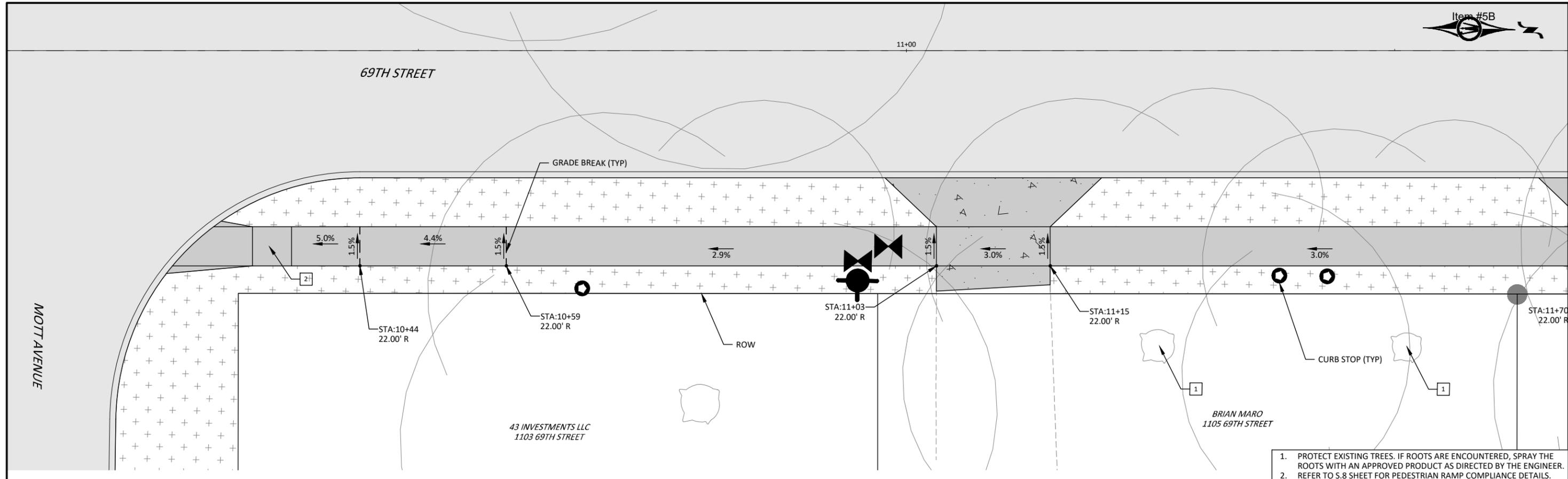


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com

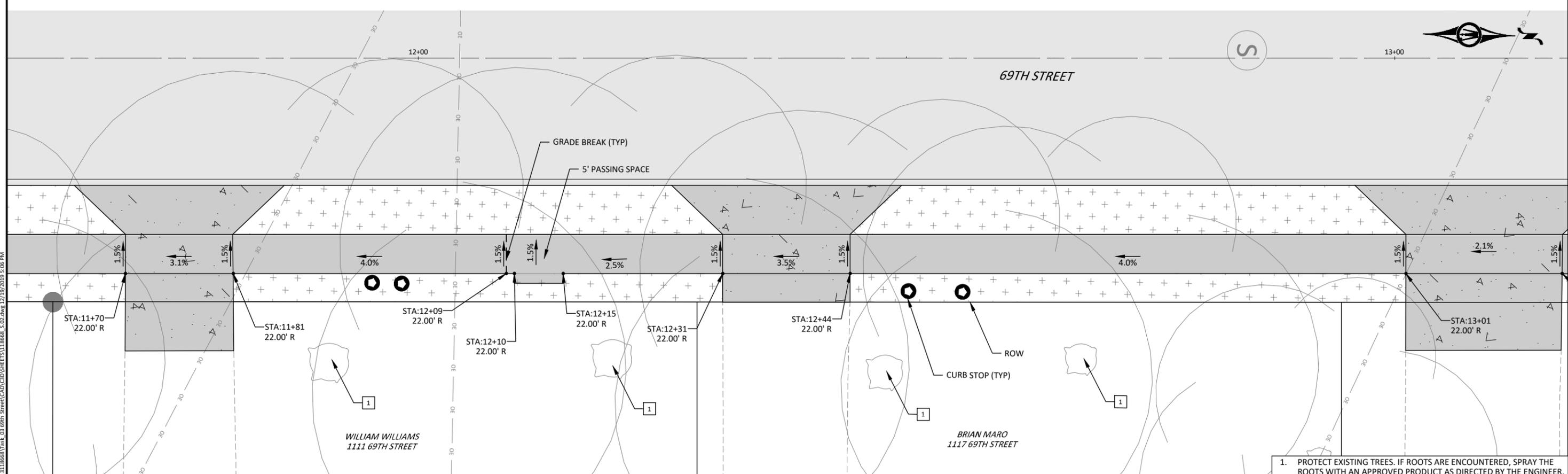


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 SIDEWALK SHEETS - 69TH ST



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.
2. REFER TO S.8 SHEET FOR PEDESTRIAN RAMP COMPLIANCE DETAILS.



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.

© Bolton & Menk, Inc. 2019. All Rights Reserved. C:\WINDSOR\CI\A13118668\Task_03_69th_Street\CAD\DWG\SHEETS\118668_S.02.dwg 12/19/2019 5:06 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



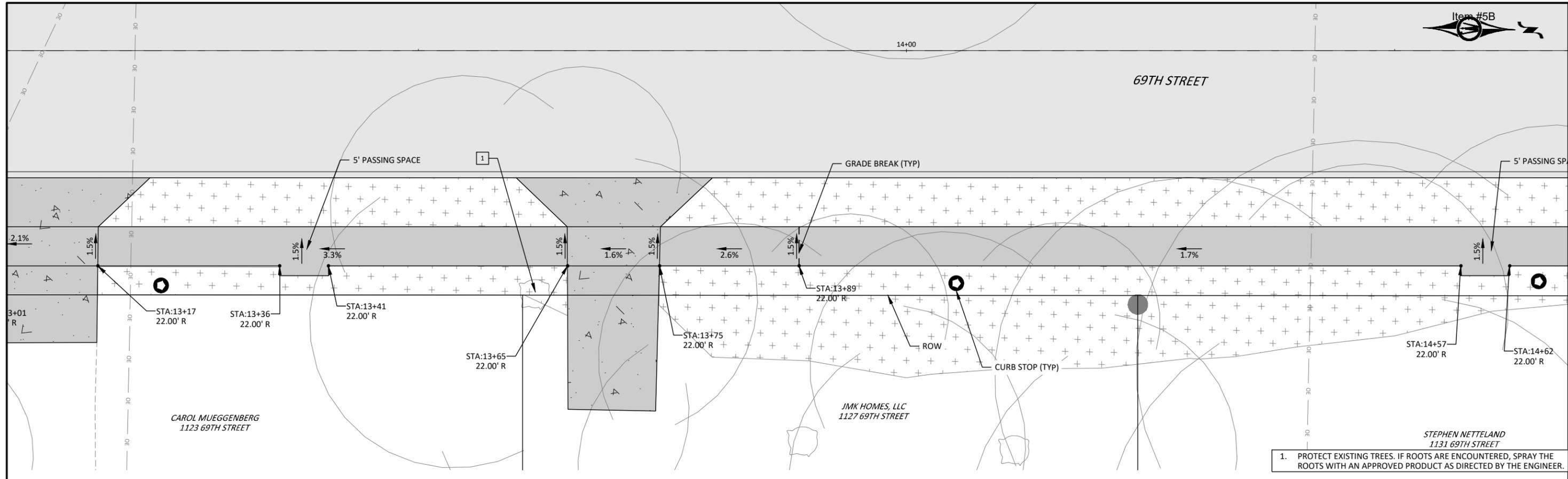
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



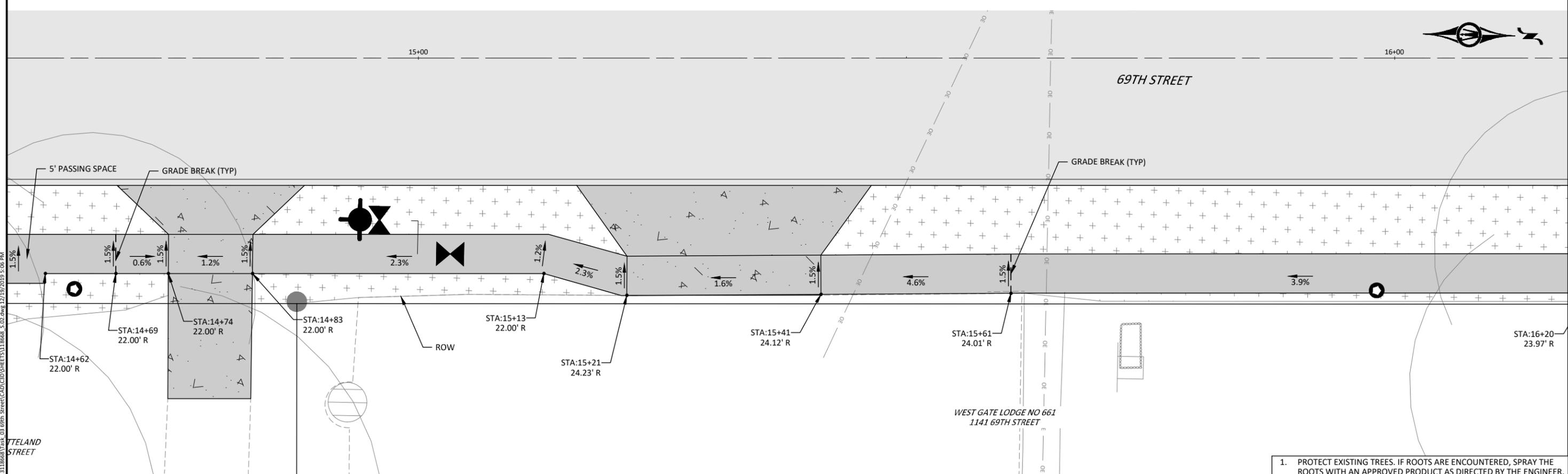
DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SIDEWALK SHEETS - 69TH ST

SHEET
S.4



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.

© Bolton & Menk, Inc. 2019. All Rights Reserved. C:\WINDSOR\CI\141118668\69th Street\CAD\CD\DWG\12/19/2019 5:06 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

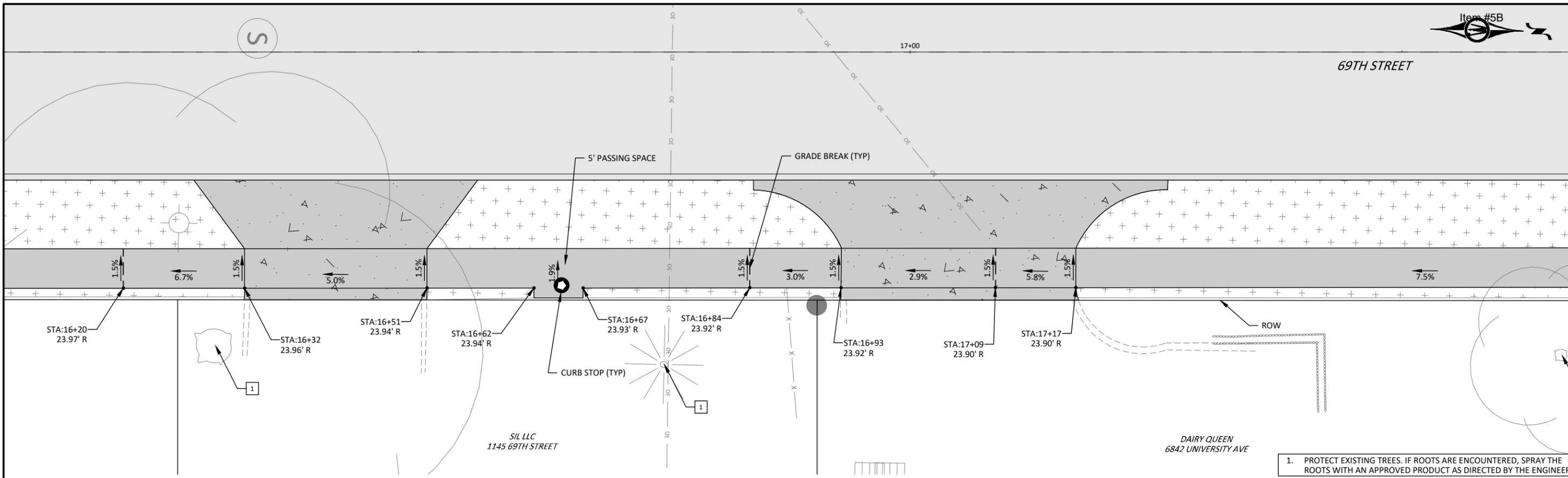


DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SIDEWALK SHEETS - 69TH ST



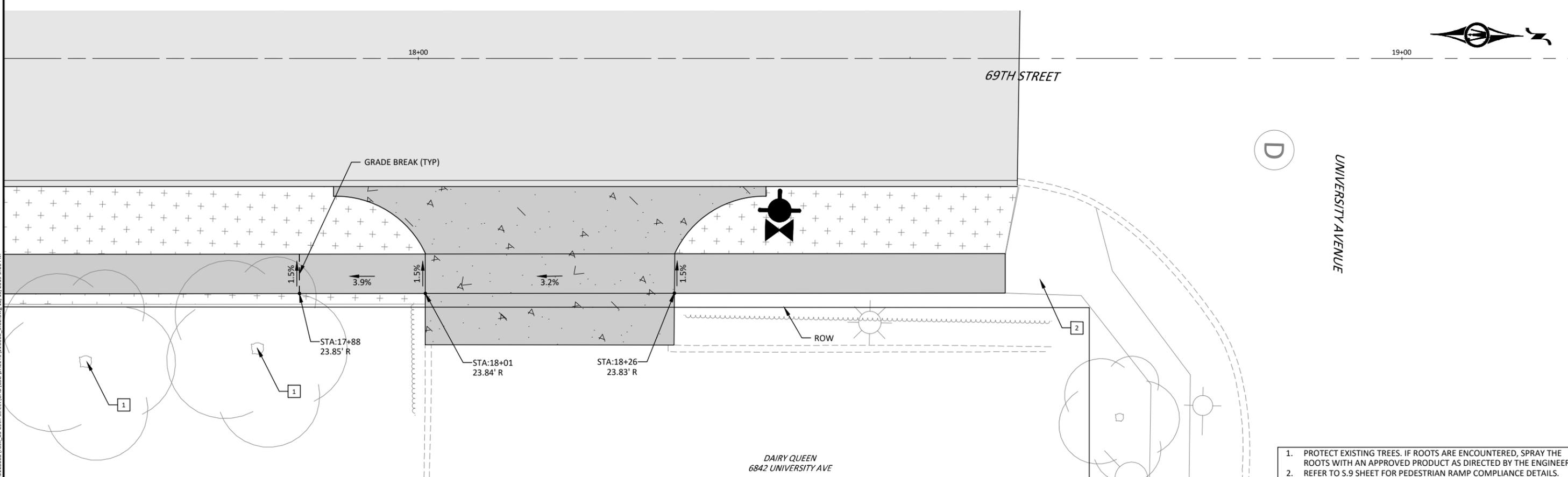
69TH STREET



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.



69TH STREET



1. PROTECT EXISTING TREES. IF ROOTS ARE ENCOUNTERED, SPRAY THE ROOTS WITH AN APPROVED PRODUCT AS DIRECTED BY THE ENGINEER.
 2. REFER TO S.9 SHEET FOR PEDESTRIAN RAMP COMPLIANCE DETAILS.

DAIRY QUEEN
6842 UNIVERSITY AVE

UNIVERSITY AVENUE



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

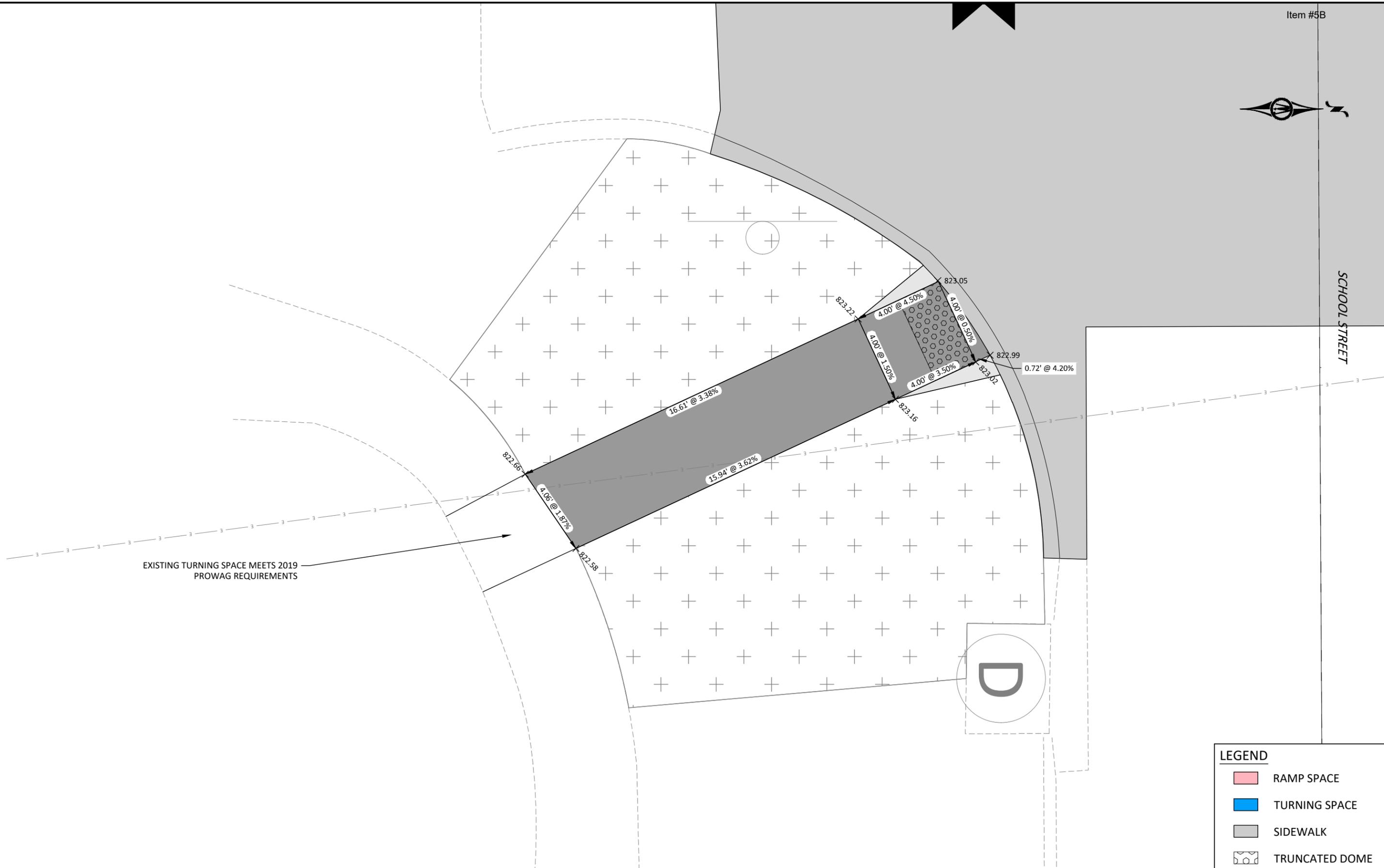
CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 SIDEWALK SHEETS - 69TH ST

SHEET
 S.6

© Bolton & Menk, Inc. 2019. All Rights Reserved.
 C:\WINDSOR\CI\A13\118668\Task_03_69th_Street\CAD\CD\SHEETS\118668_S.02.dwg 12/19/2019 5:06 PM



SCHOOL STREET



EXISTING TURNING SPACE MEETS 2019 PROWAG REQUIREMENTS

LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

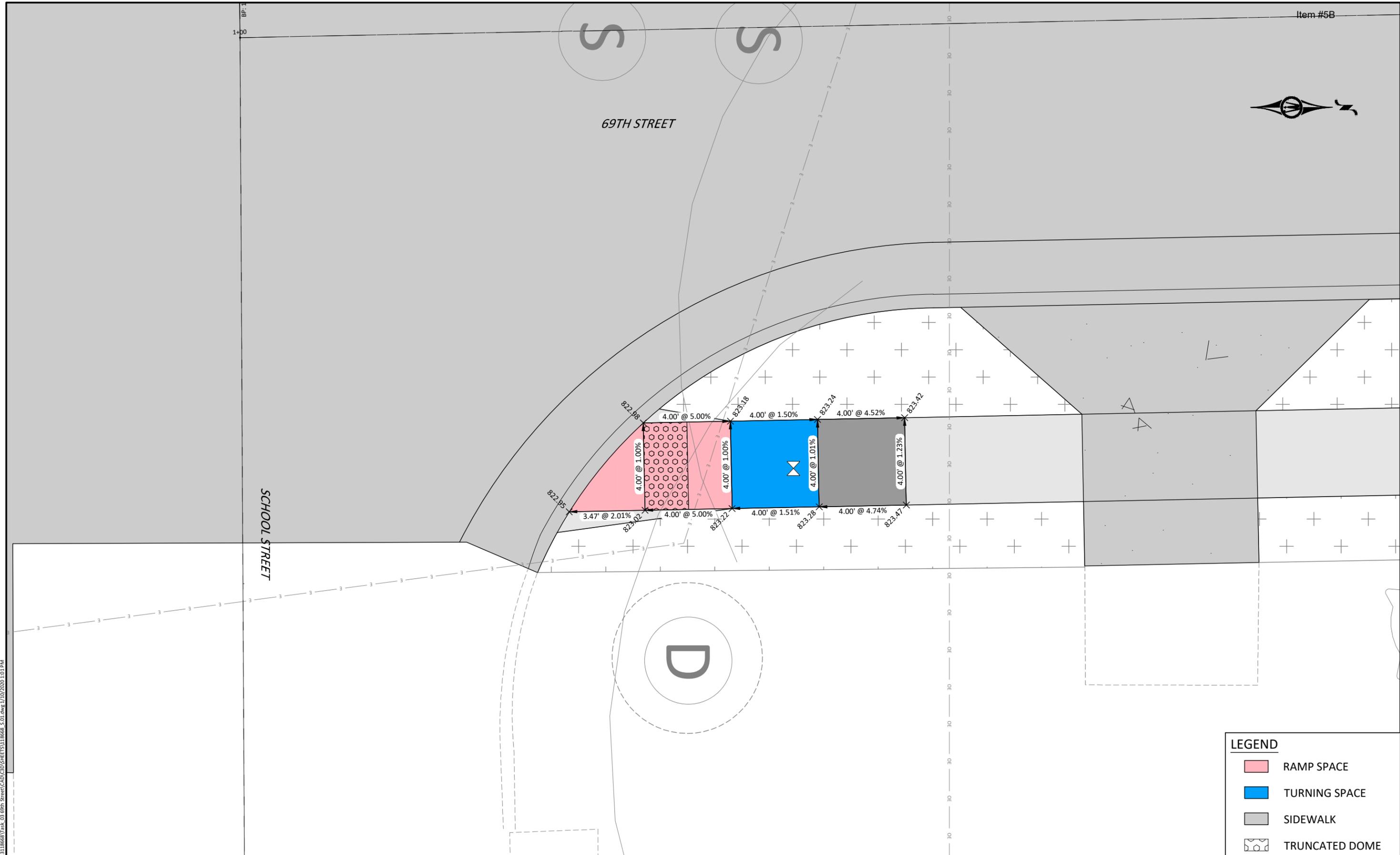
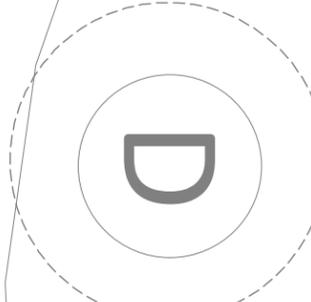
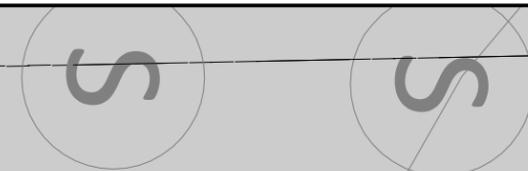
CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 SIDEWALK SHEETS - 69TH ST

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI\A13.118668\Task_03_69th_Street\CAD\SHEETS\118668_S.01.dwg 17/07/2020 1:01 PM



69TH STREET

SCHOOL STREET



LEGEND

-  RAMP SPACE
-  TURNING SPACE
-  SIDEWALK
-  TRUNCATED DOME

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\1A1118668\Task_03_69th Street\CAD\Sheets\118668_S.01.dwg 17/07/2020 1:01 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
SIDEWALK SHEETS - 69TH ST

69TH STREET

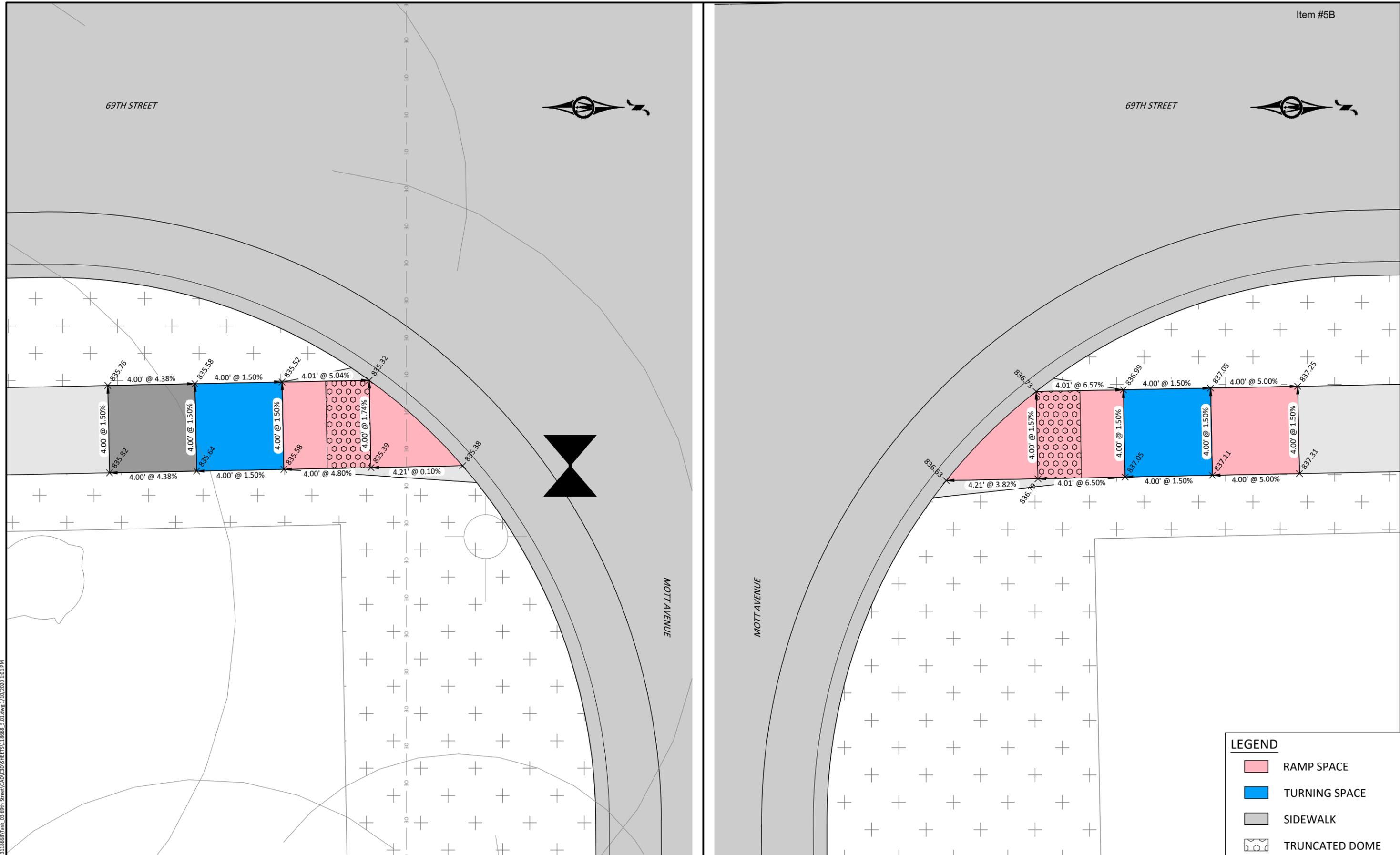


69TH STREET



MOTT AVENUE

MOTT AVENUE



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



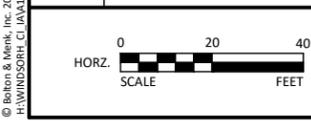
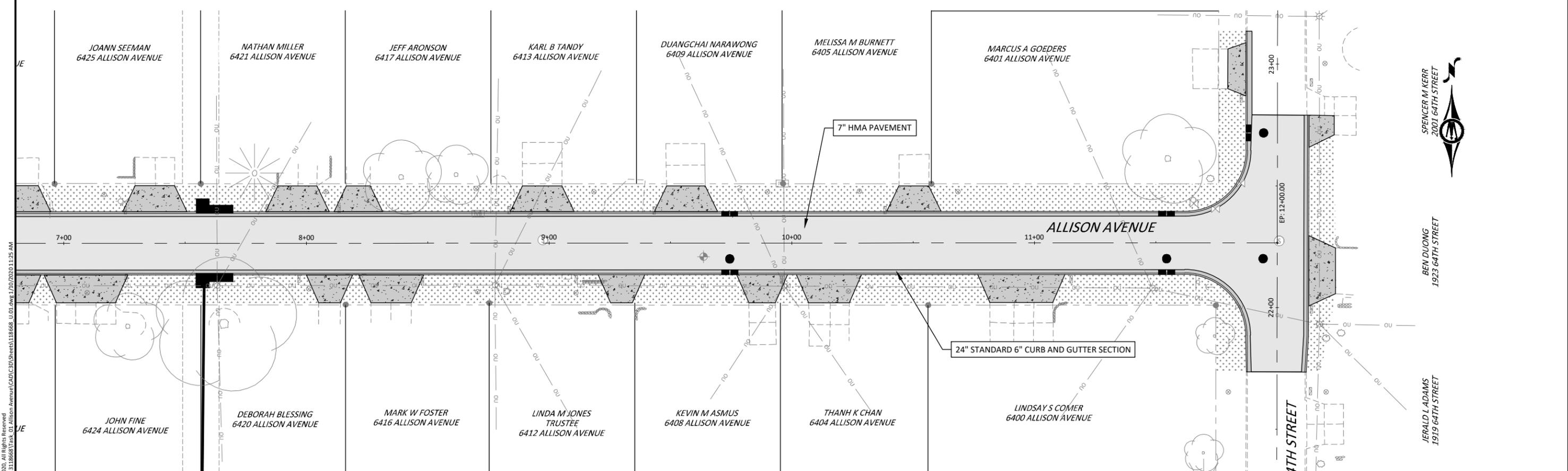
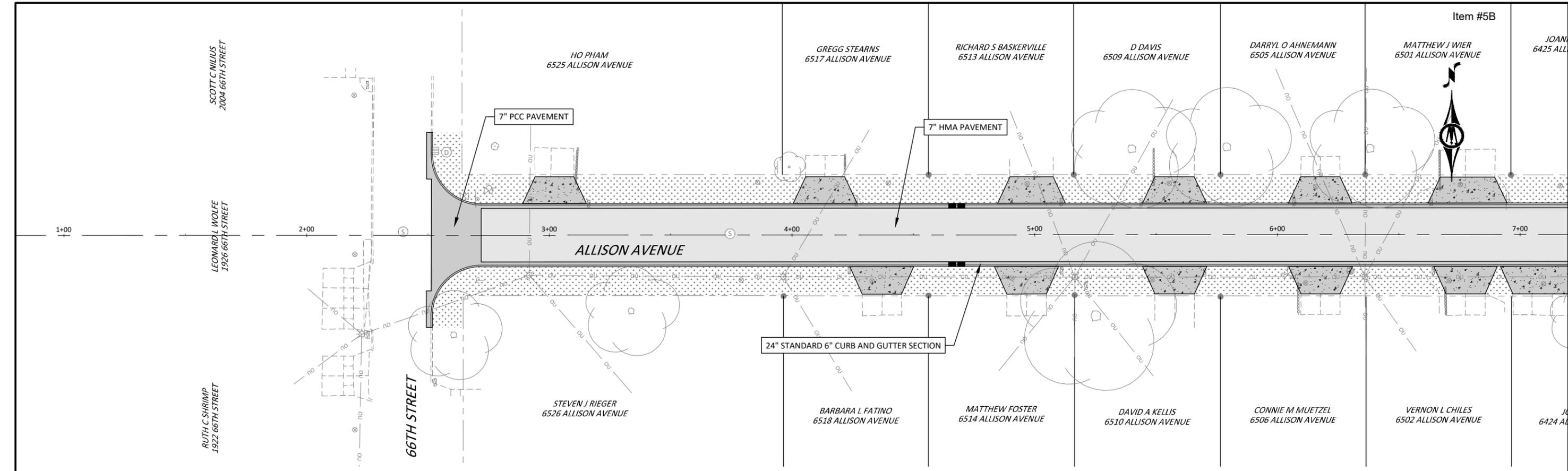
309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	JLE
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 SIDEWALK SHEETS - 69TH ST

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task_03_69th_Street\CAD\SHEETS\118668_S.01.dwg 17/07/2020 1:01 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

BOLTON & MENK

309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

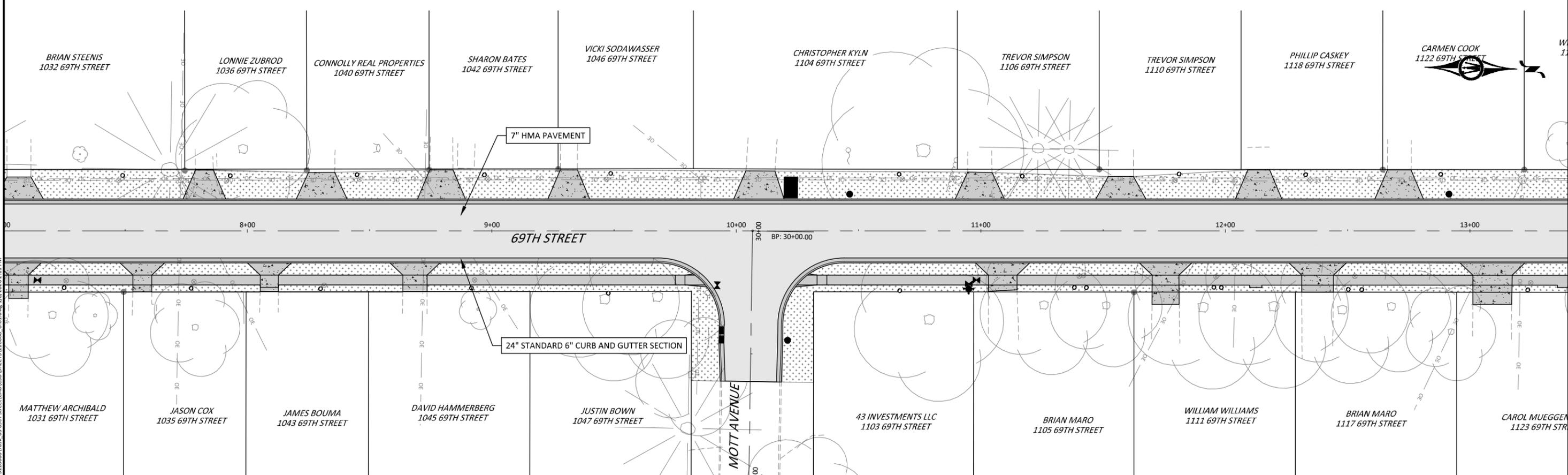
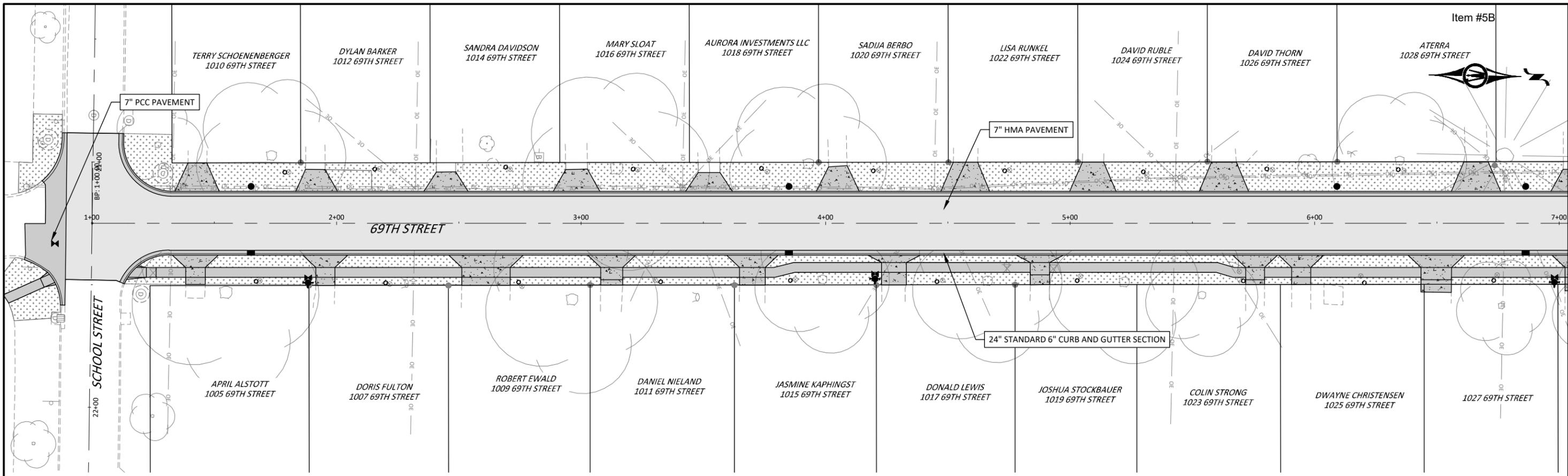
WINDSOR HEIGHTS
The heart of it all!

DESIGNED: NAS
SEATED: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
HMA PAVEMENT (ALTERNATE 2) - ALLISON AVENUE

SHEET
U.1

© Bolton & Menk, Inc. 2020. All Rights Reserved. A:\WINDSOR HTS\CI\A13.118668\Task 01 Allison Avenue\CAD\Sheet\118668_U.01.dwg 1/20/2020 1:25 AM



0 20 40
HORIZ. SCALE FEET

REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

BOLTON & MENK

309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com

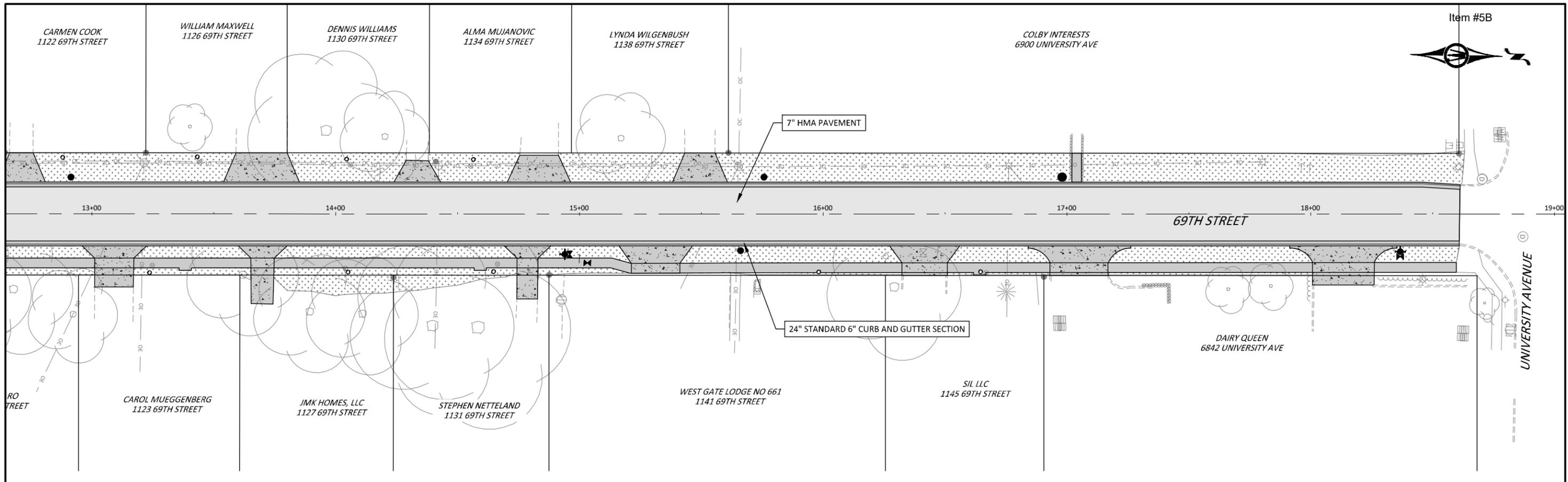
WINDSOR HEIGHTS
The Heart of It All!

DESIGNED: NAS
SEAL: JLE
CHECKED: NG
CLIENT PROJ. NO: A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
HMA PAVEMENT (ALTERNATE 2) - 69TH STREET

SHEET
U.2

© Bolton & Menk, Inc. 2020. All Rights Reserved.
 P:\WINDSOR\CI - IAW\118668\Task 03 69th Street\CAD\SHETS\118668_U.01.dwg 1/20/2020 11:11 PM



© Bolton & Menk, Inc. 2020. All Rights Reserved
P:\WINDSOR HTS CI\A13118668\Task_03_69th Street\CAD\Sheet\118668_U.01.dwg 1/8/2020 2:11 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

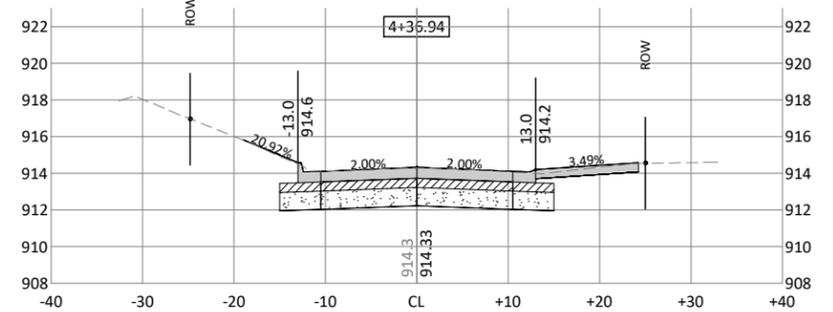
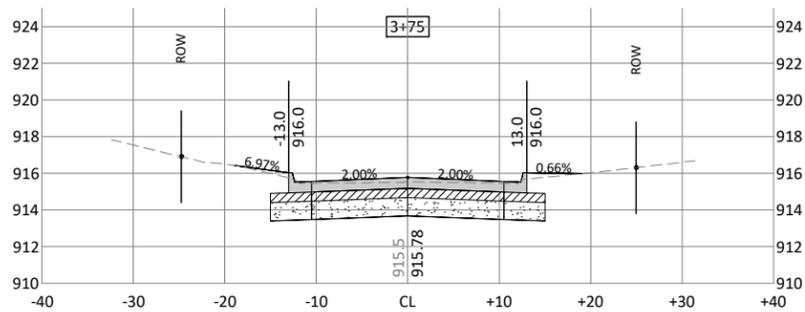
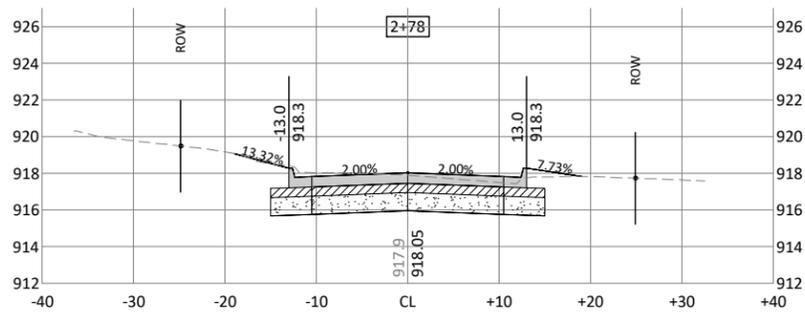
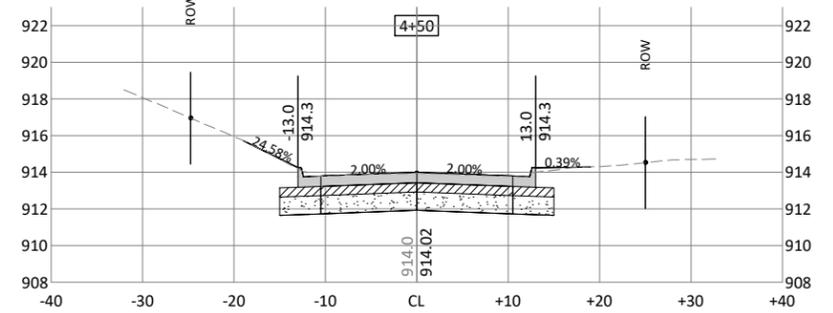
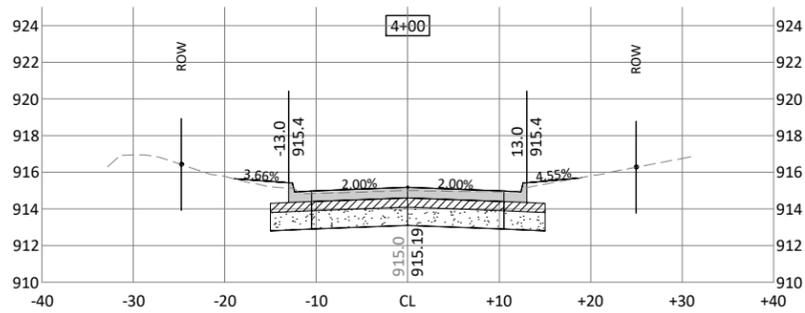
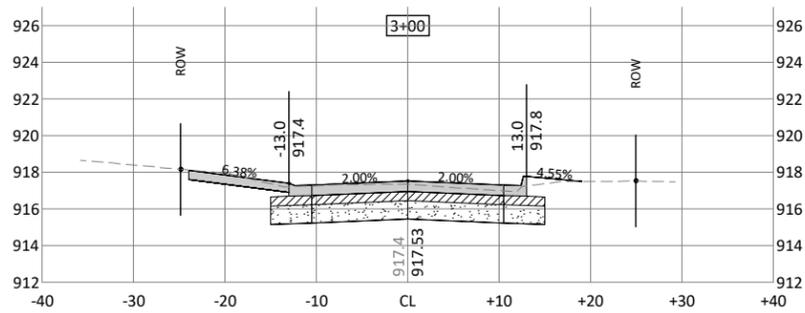
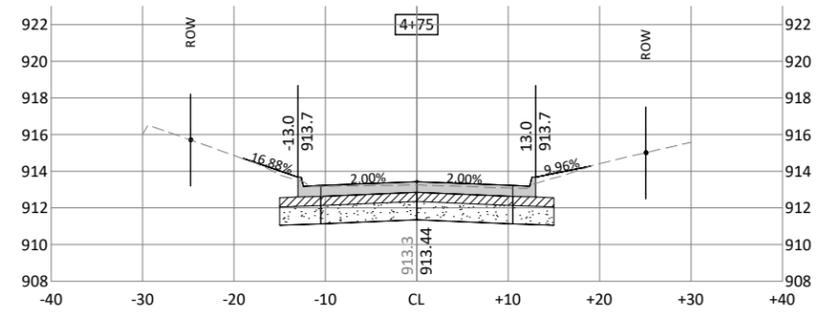
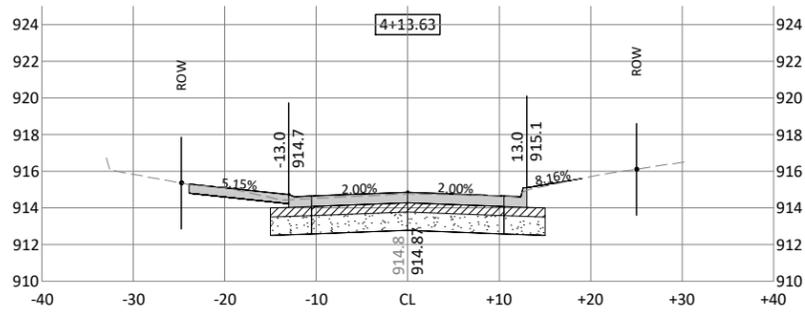
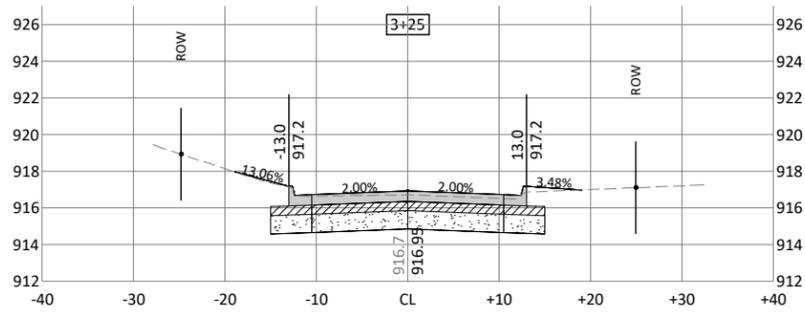
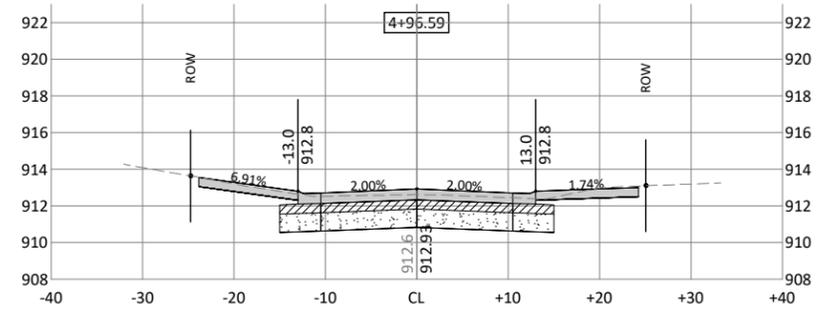
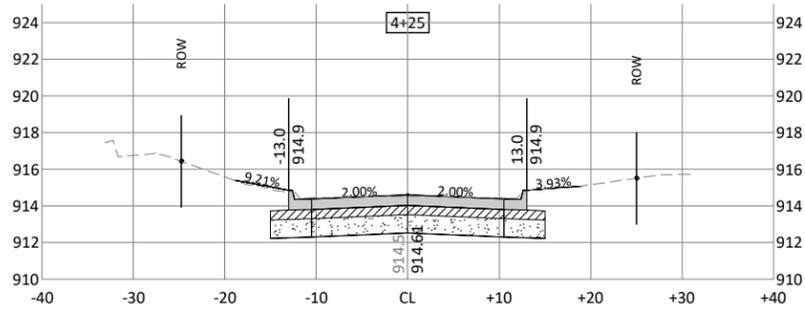
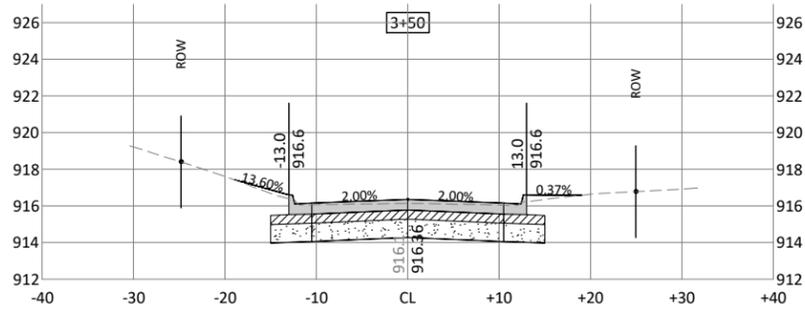


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEATED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
HMA PAVEMENT (ALTERNATE 2) - 69TH STREET



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

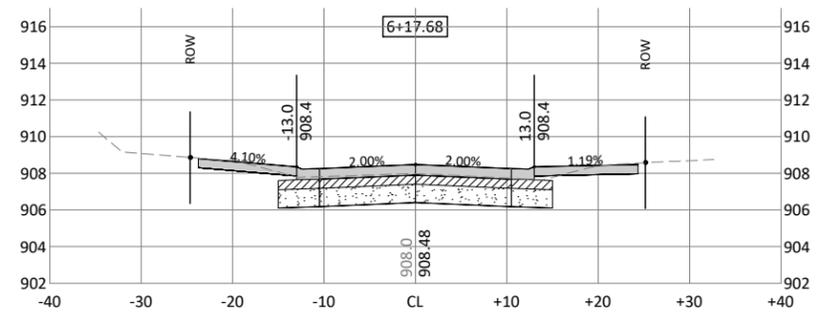
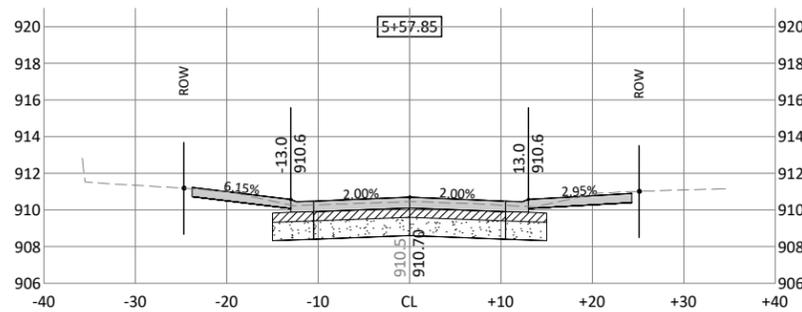
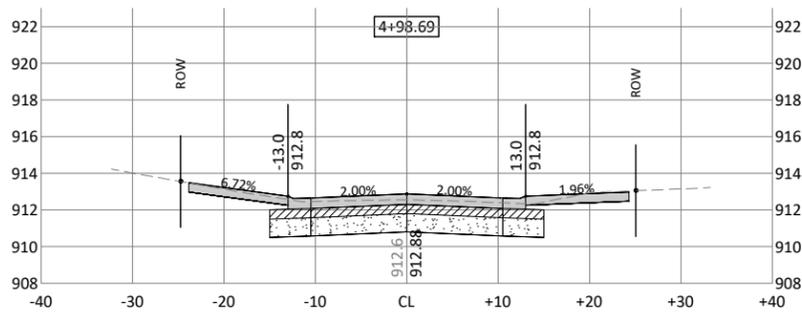
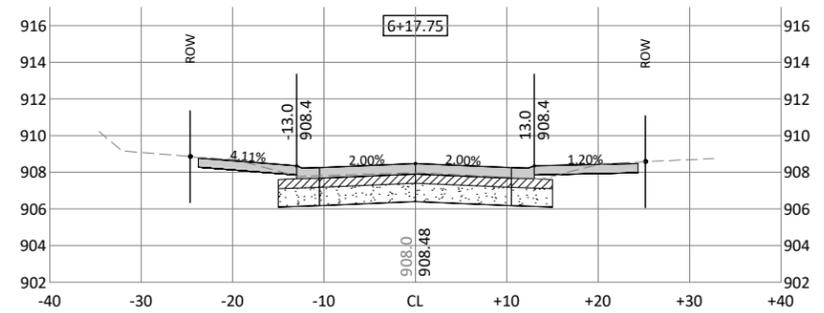
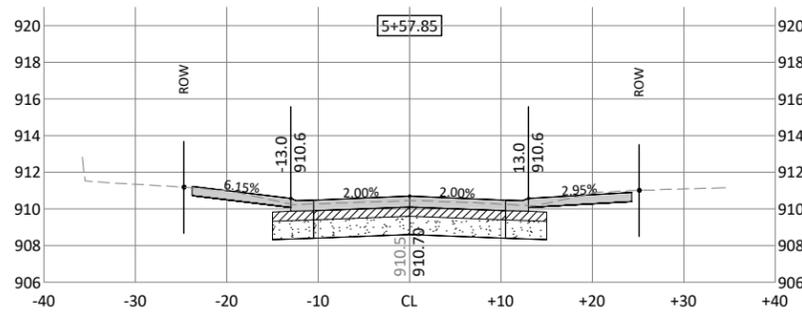
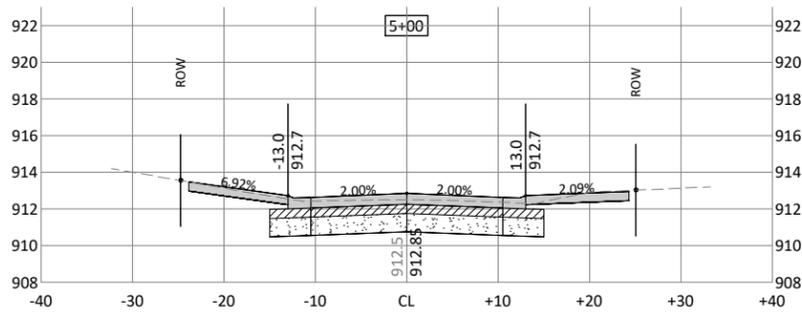
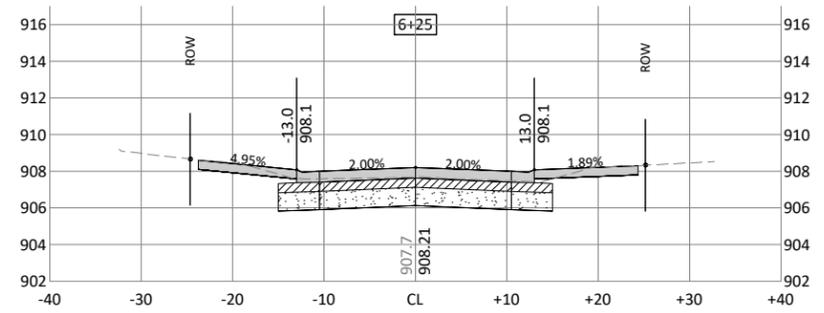
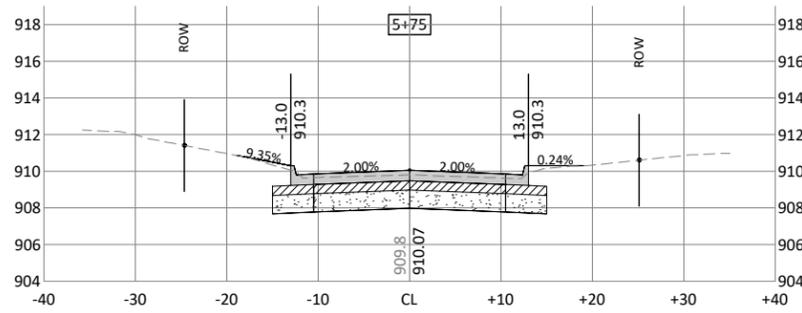
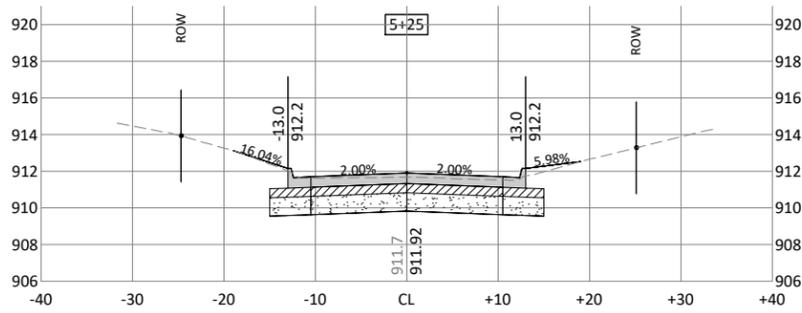
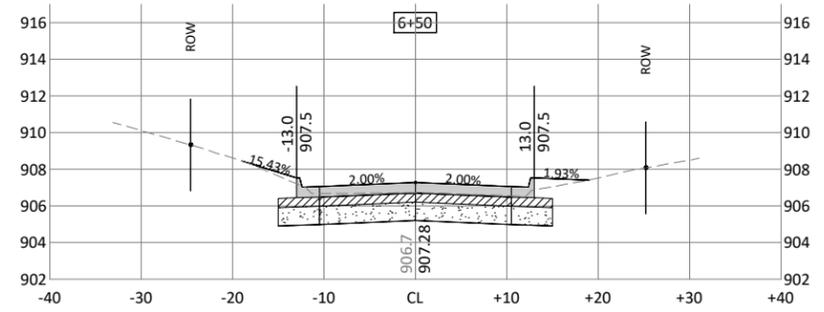
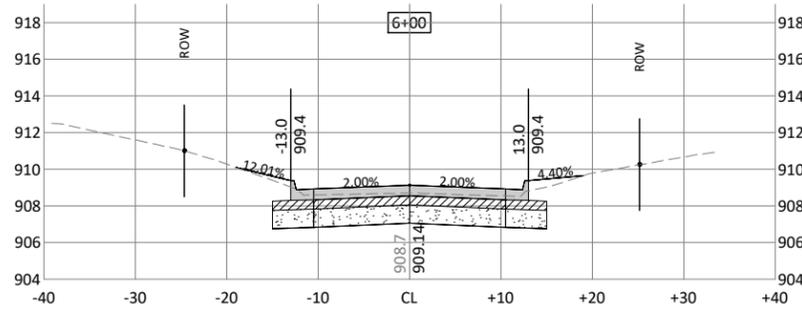
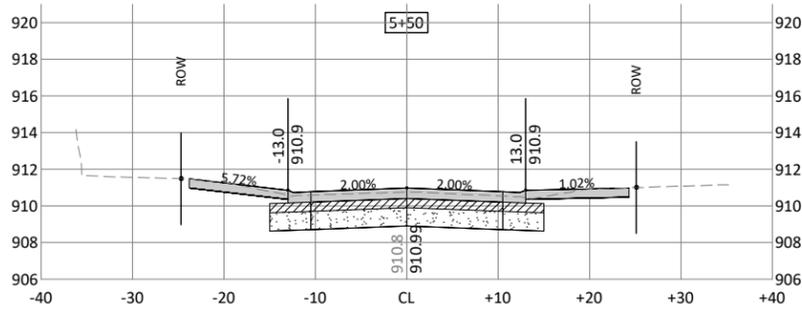


309 E 5TH STREET, SUITE 202
 DES MOINES, IOWA 50309
 Phone: (515) 259-9190
 Email: DesMoines@bolton-menk.com
 www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
 2020 STREET RECONSTRUCTION
 CROSS SECTIONS - ALLISON AVENUE



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



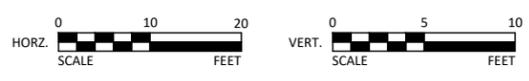
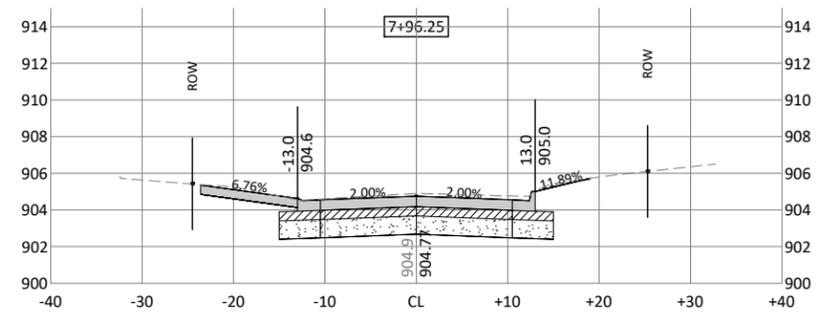
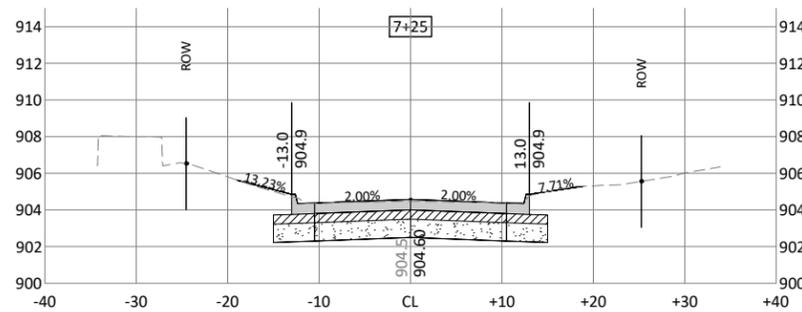
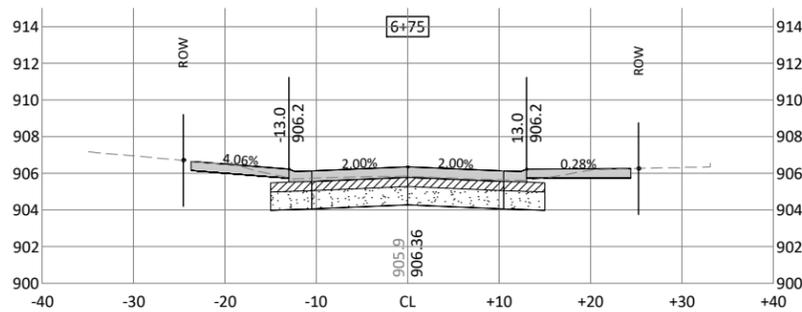
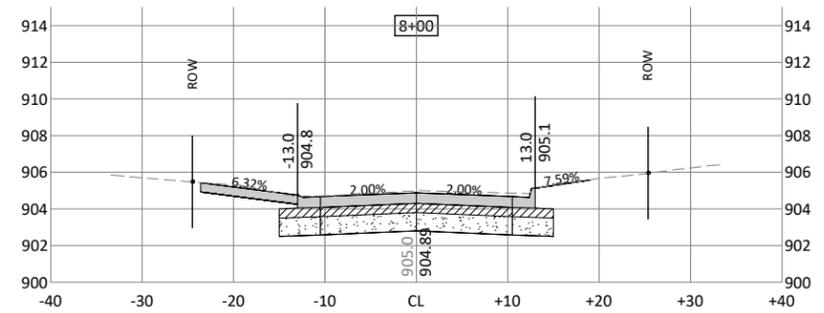
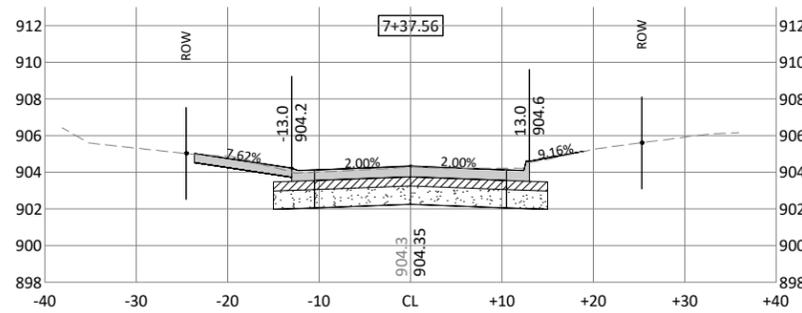
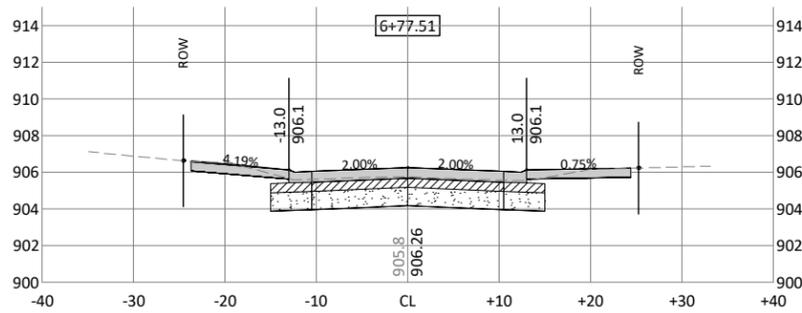
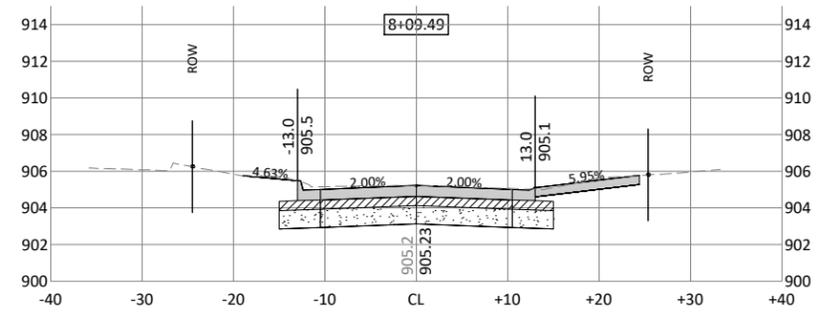
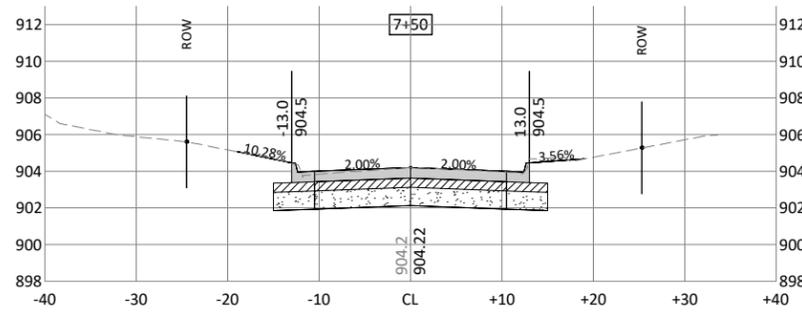
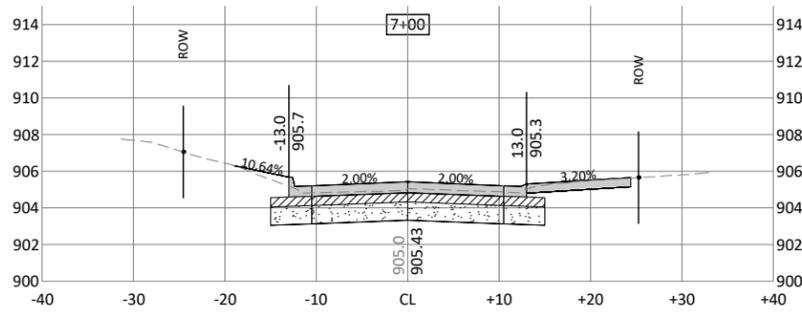
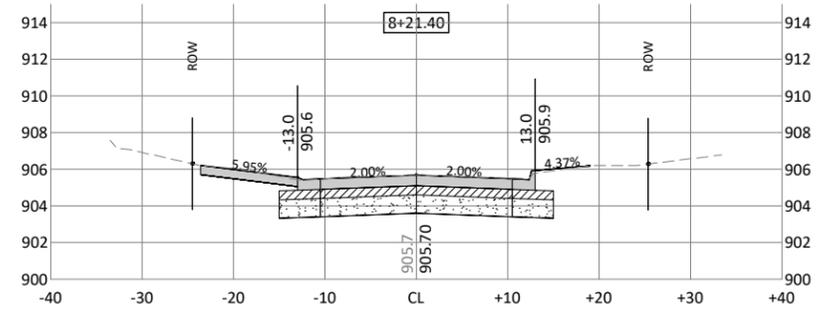
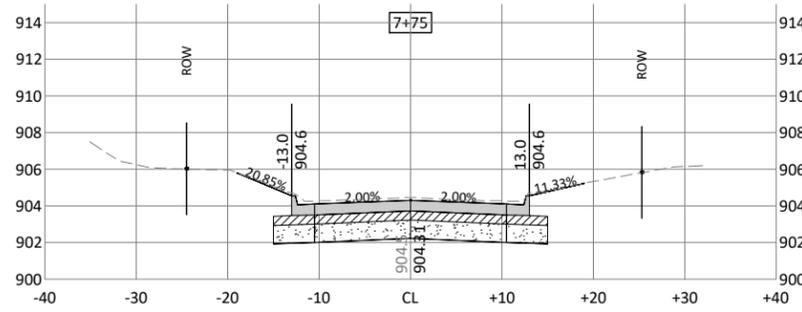
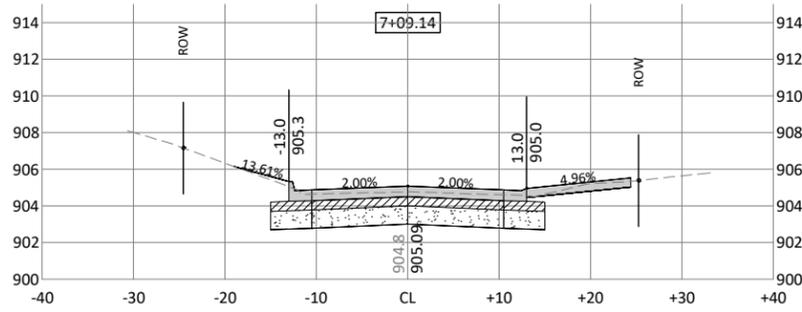
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - ALLISON AVENUE

© Bolton & Menk, Inc. 2019. All Rights Reserved. Windsor Heights, IA A13.118668 (Task 01 Allison Avenue) CAD (Sheet) 118668_W.01.dwg 12/17/2019 7:26 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



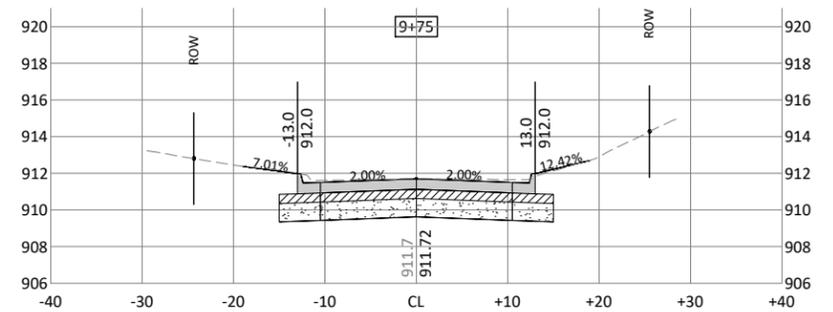
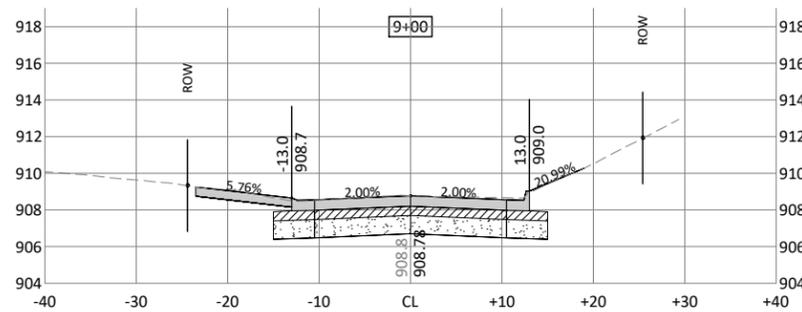
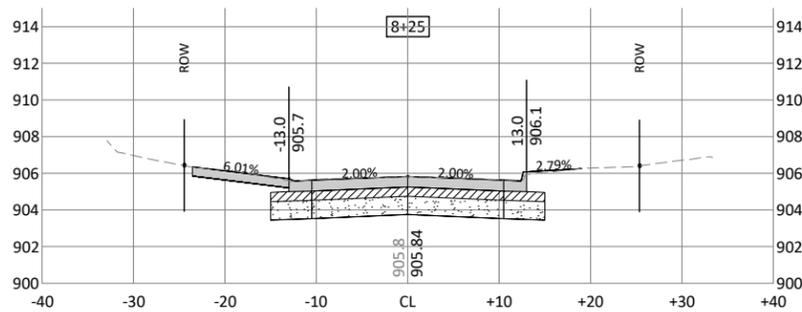
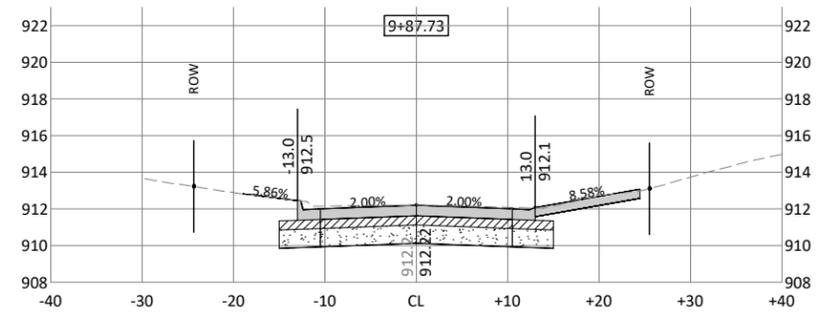
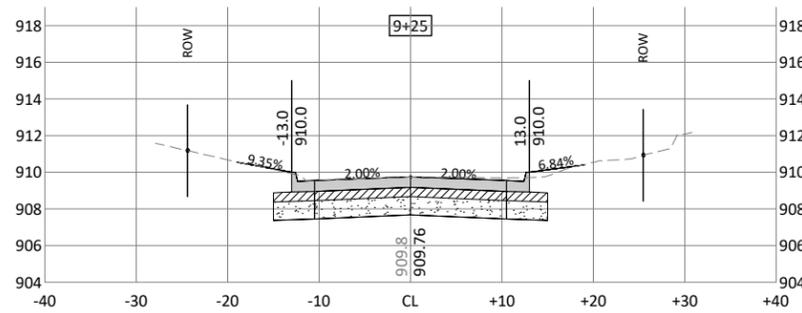
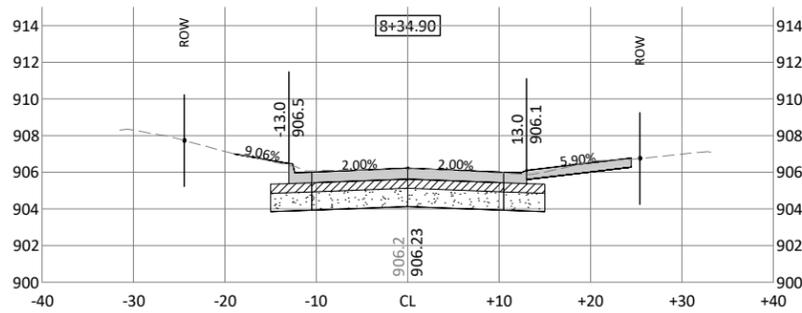
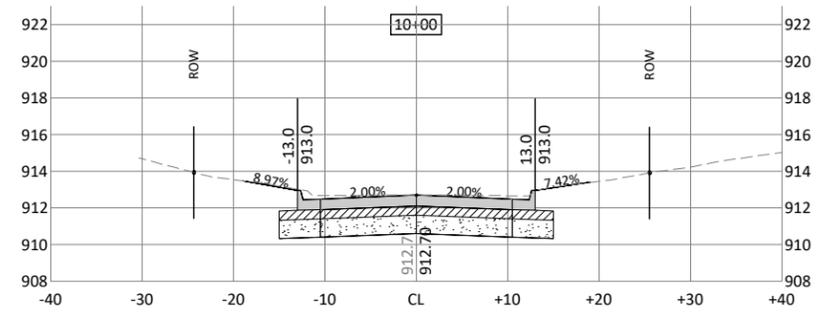
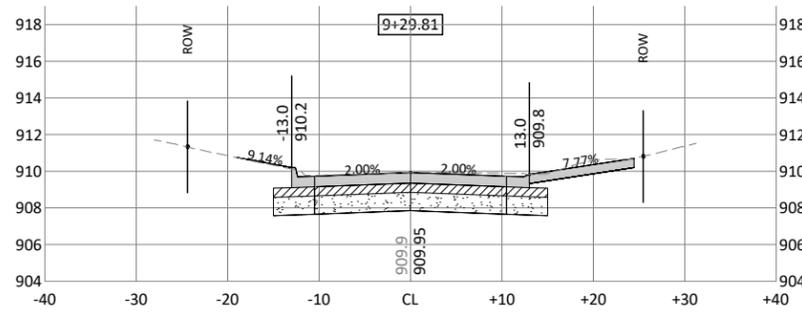
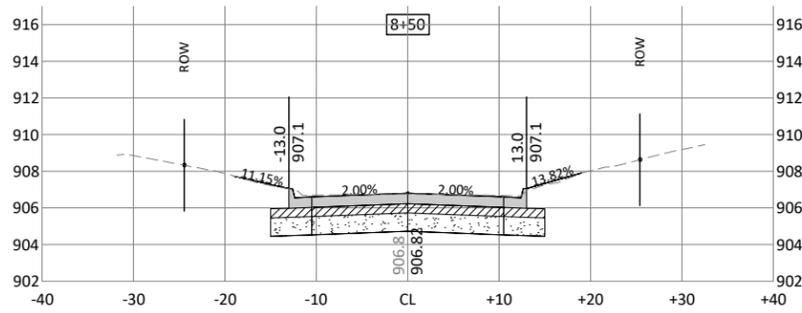
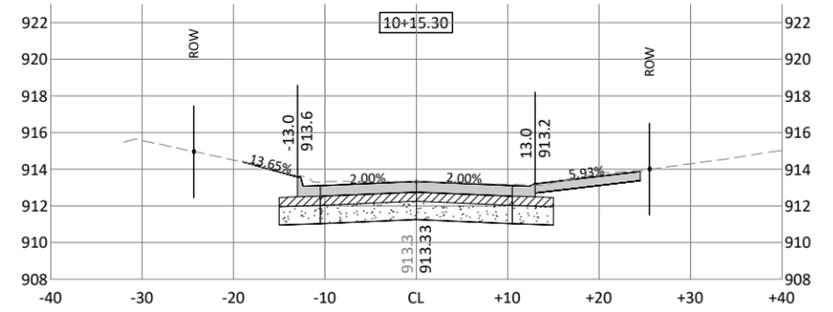
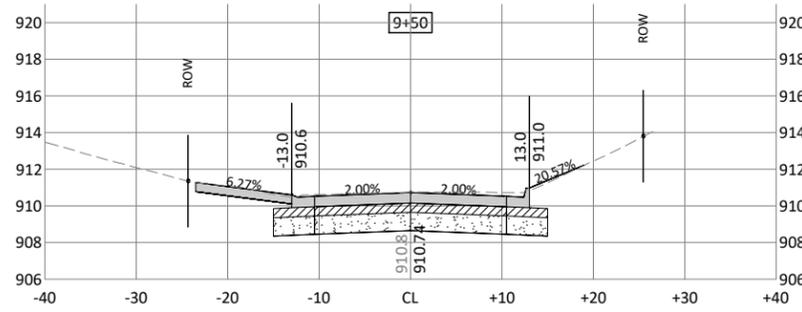
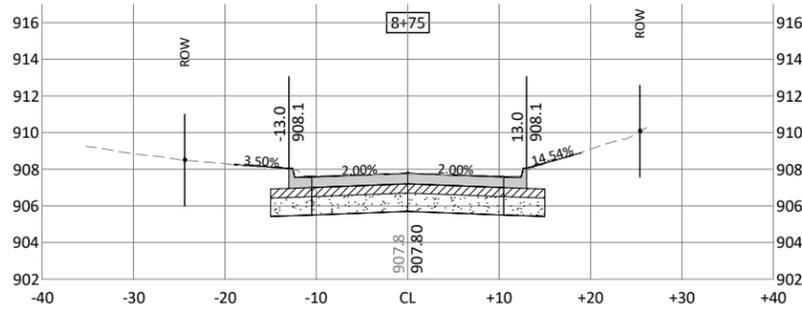
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - ALLISON AVENUE

© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR HTS\CL\A13.118668\Task 01 Allison Avenue\CAD\Sheet\118668_W.03.dwg 12/7/2019 7:26 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

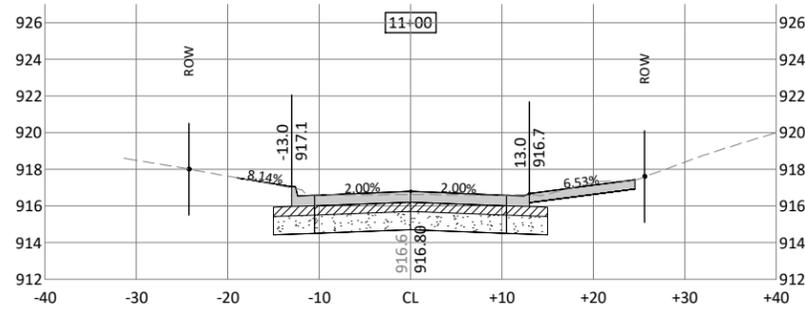
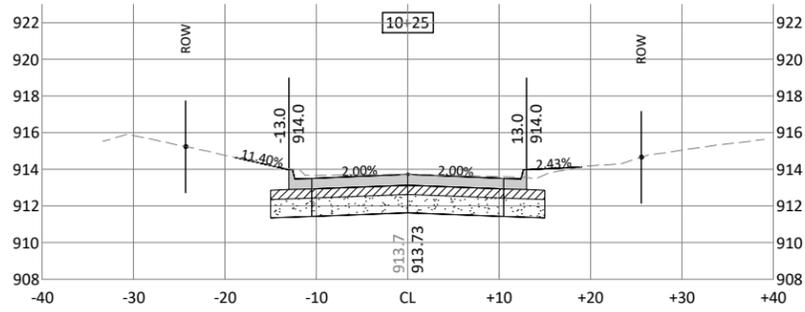
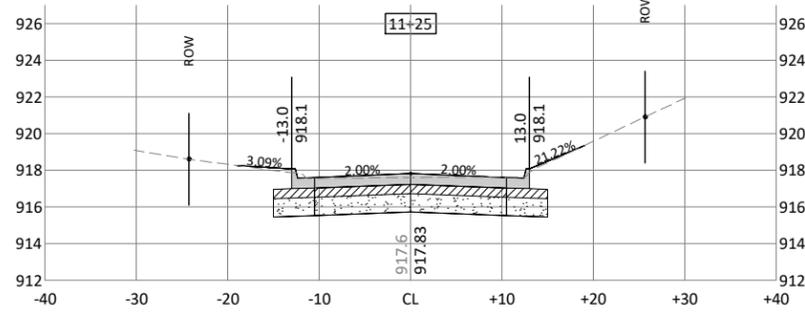
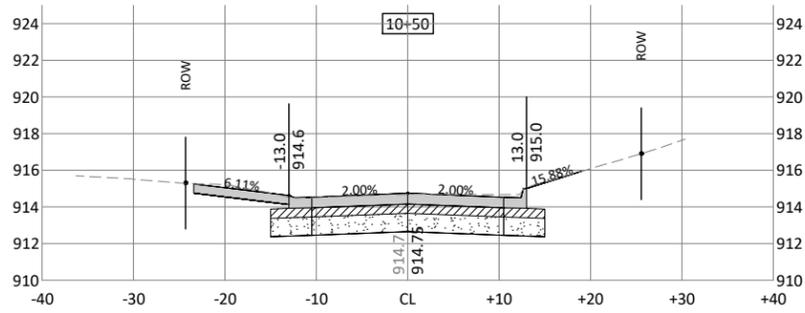
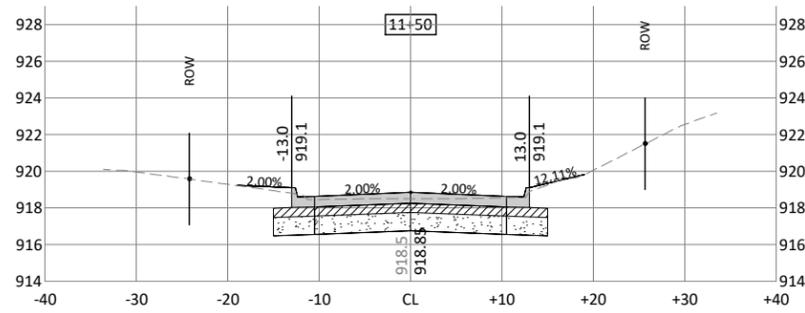
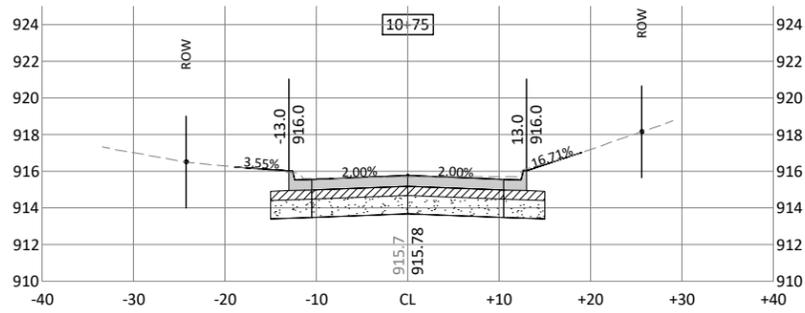
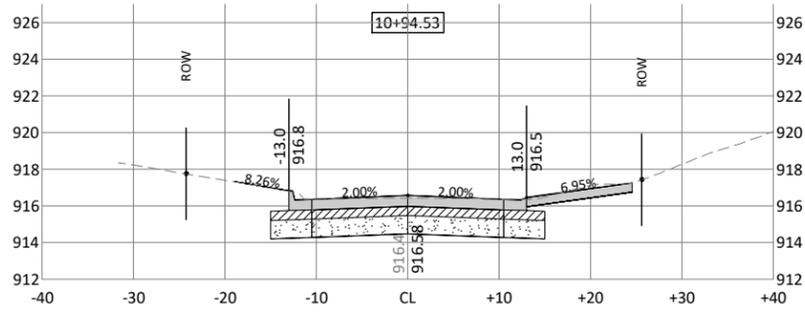


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - ALLISON AVENUE



© Bolton & Menk, Inc. 2019. All Rights Reserved. P:\WINDSOR\CL\A13118668\Task 01 Allison Avenue\CAD\Sheet\118668_W.01.dwg 12/7/2019 7:26 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

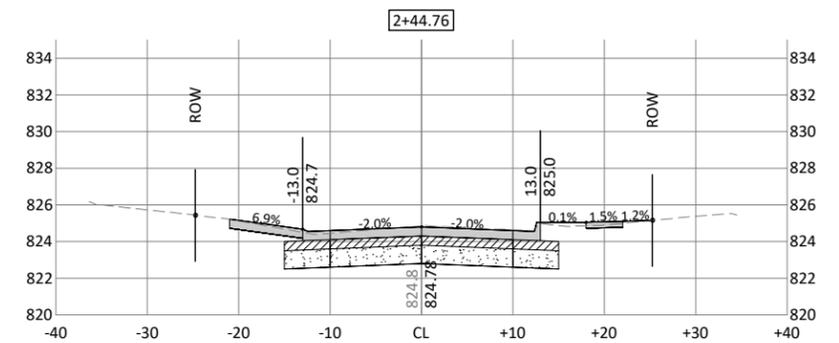
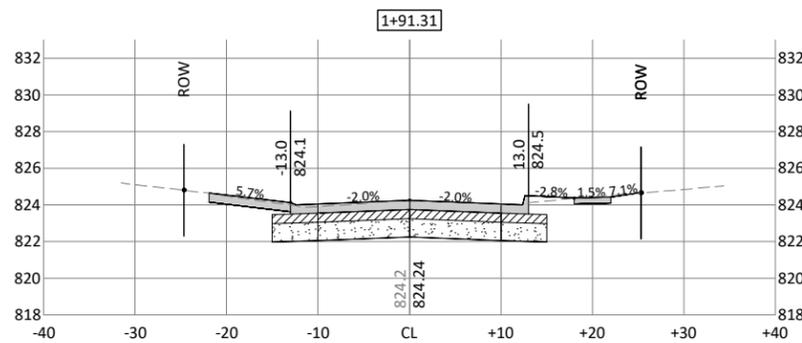
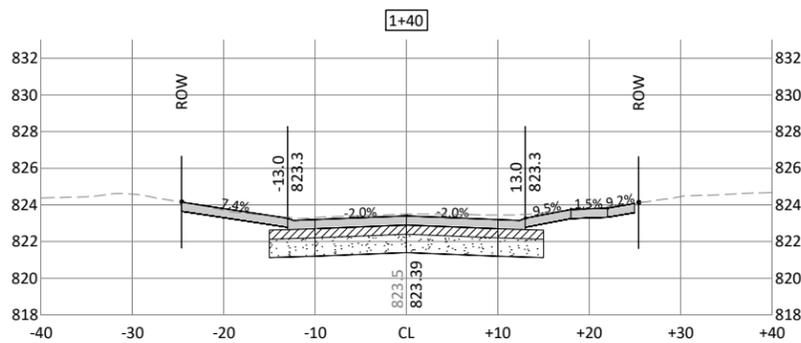
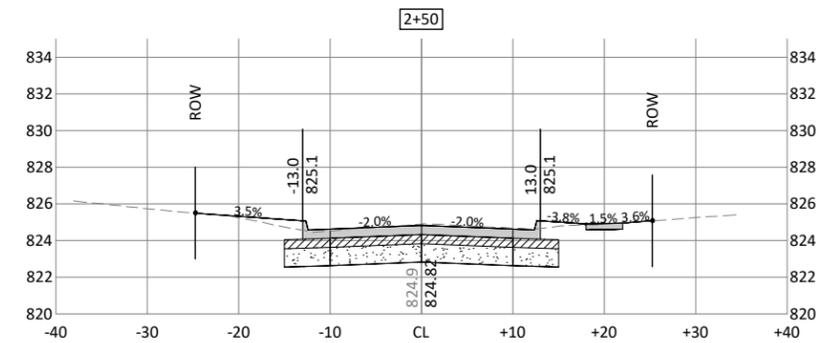
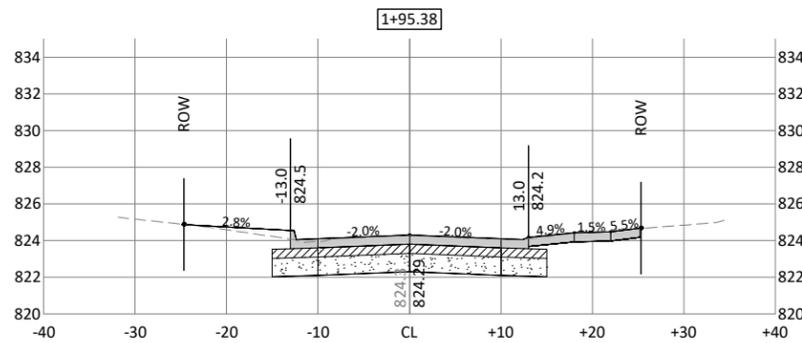
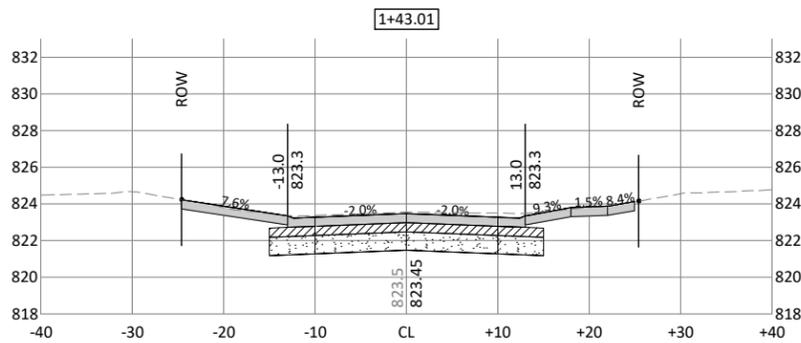
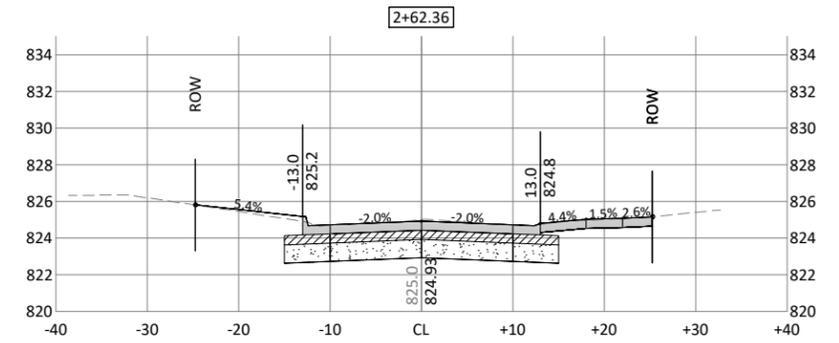
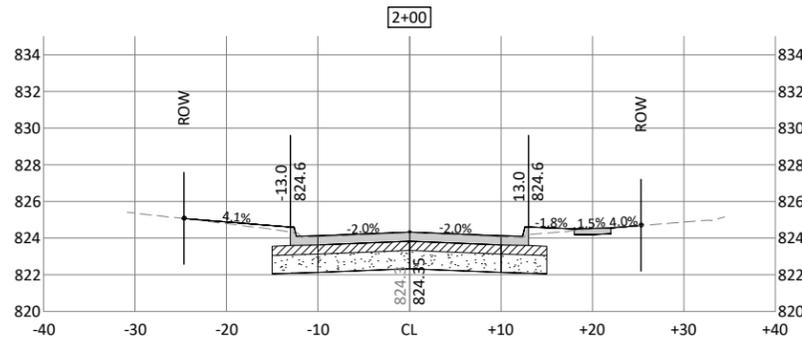
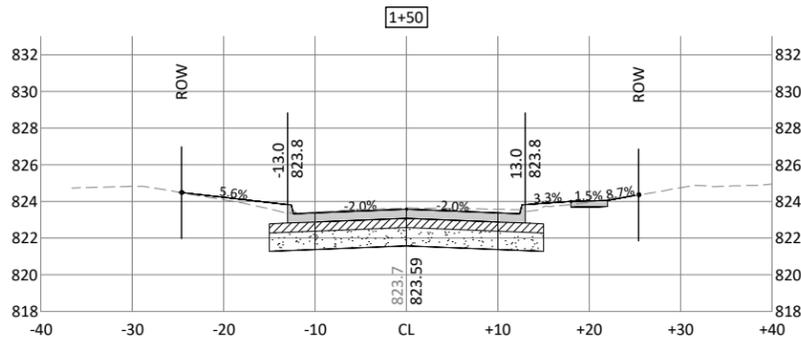
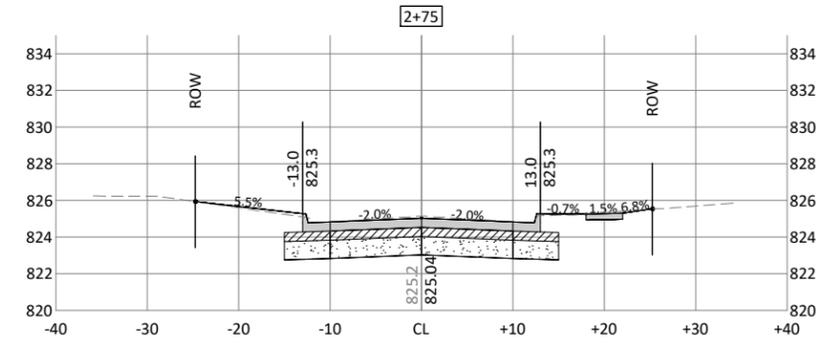
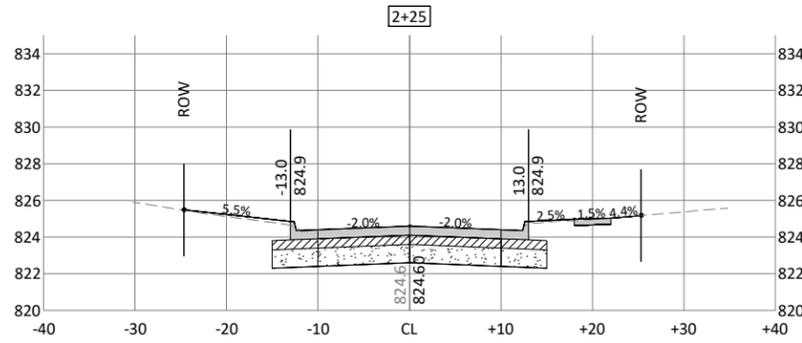
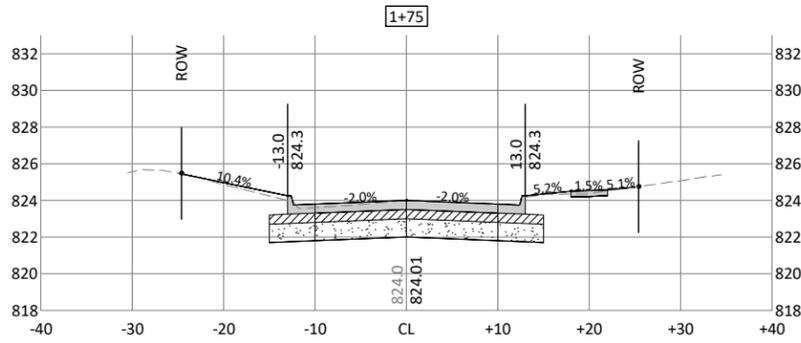


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - ALLISON AVENUE



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



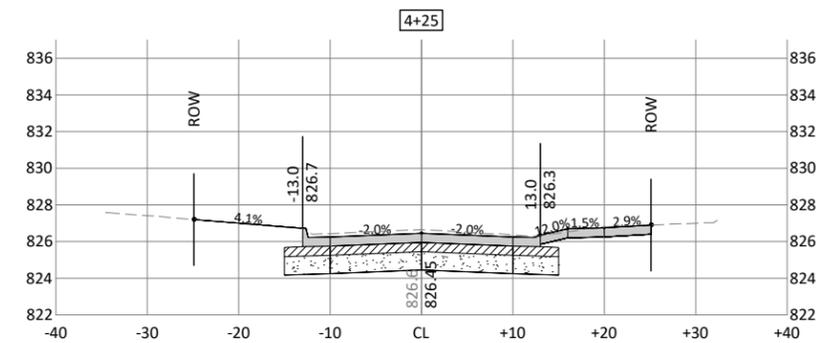
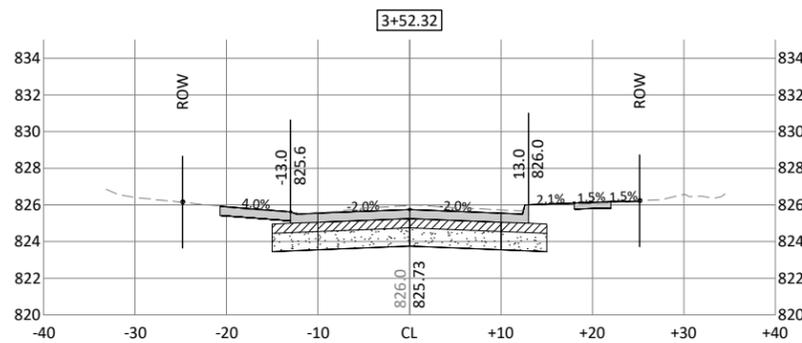
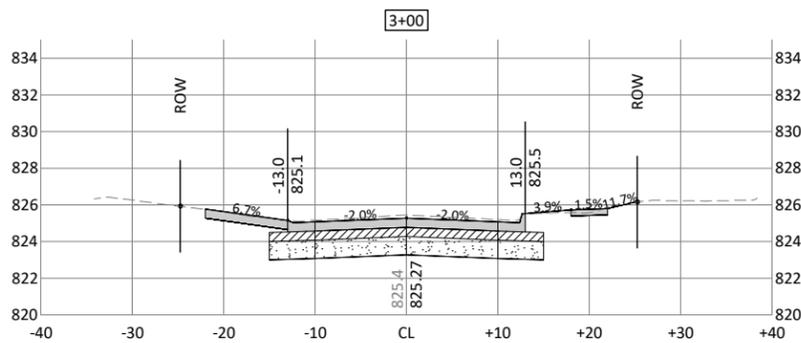
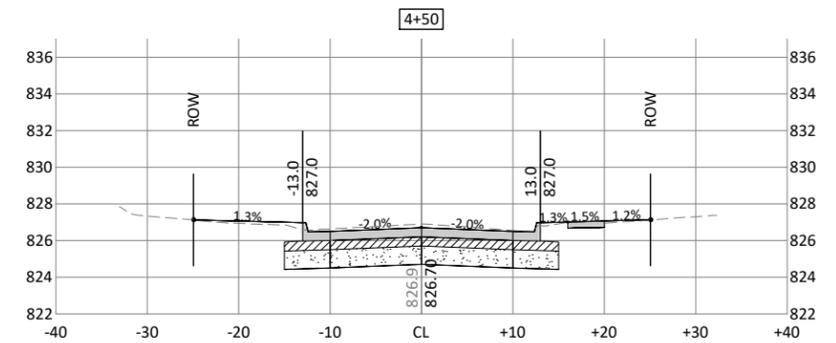
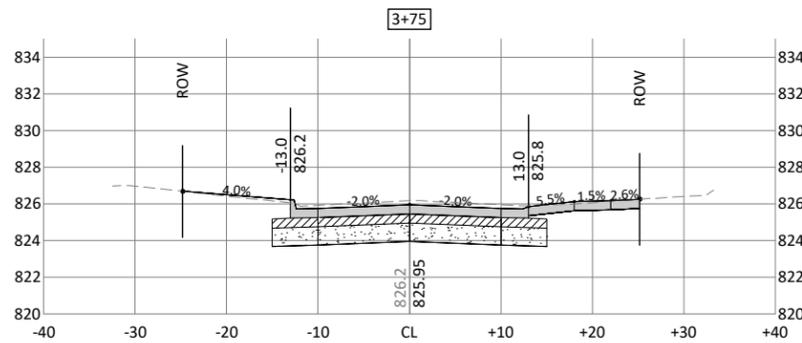
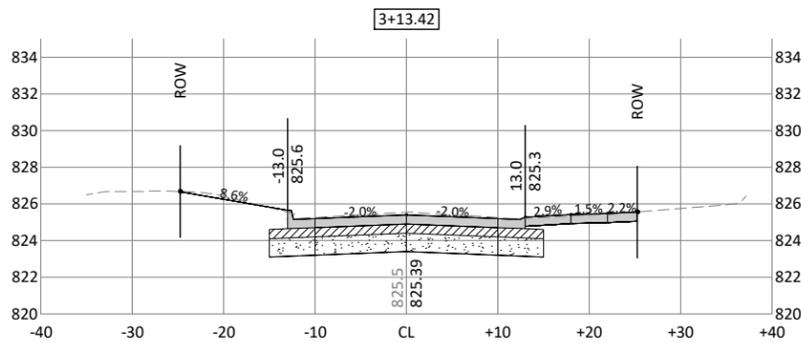
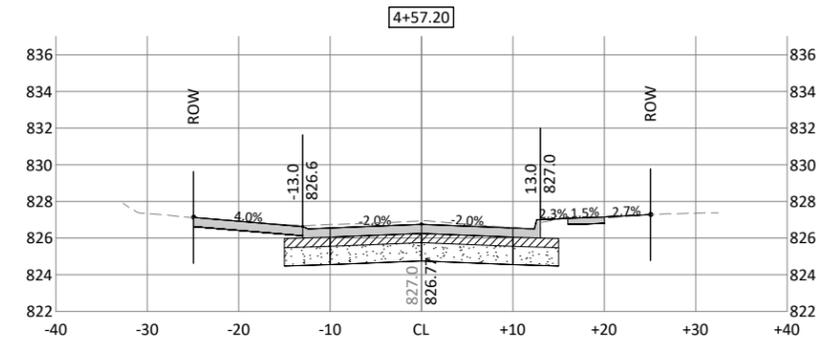
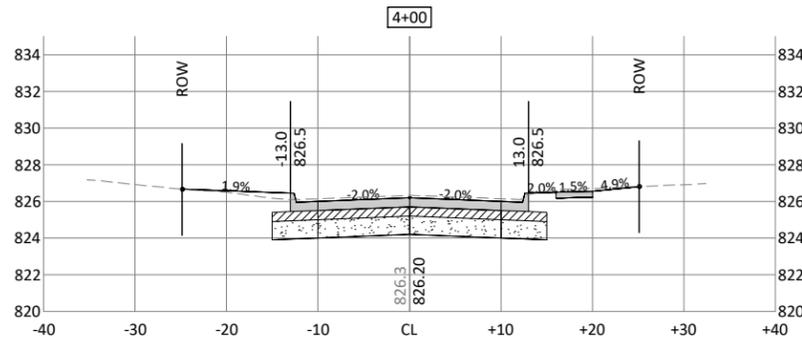
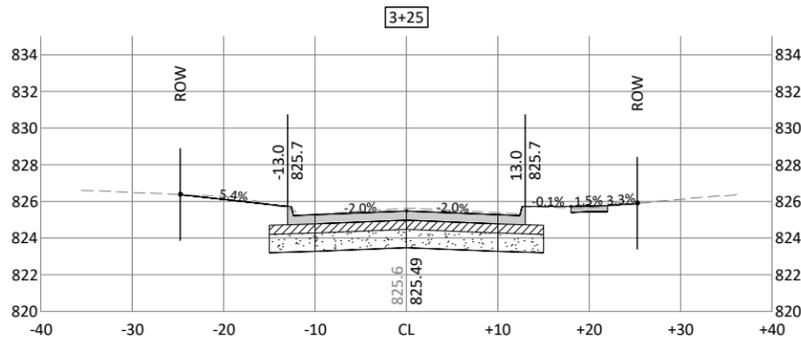
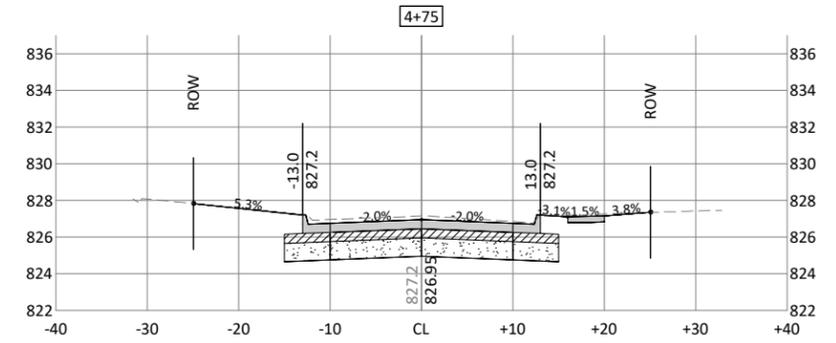
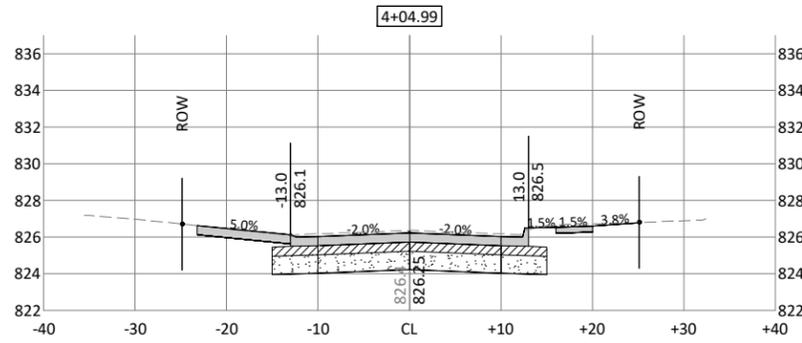
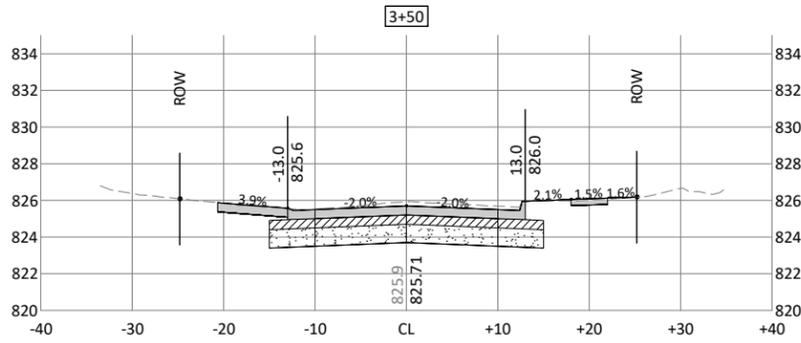
309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET

© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI\A13.118668\Task_03_69th Street\CAD\Sheet\118668_W.01.dwg 1/15/2020 2:00 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

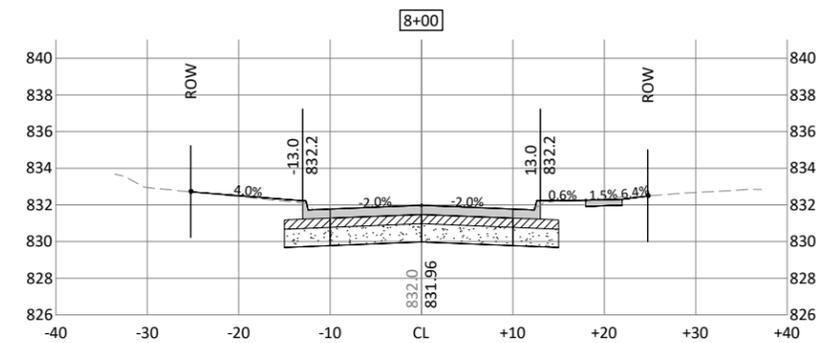
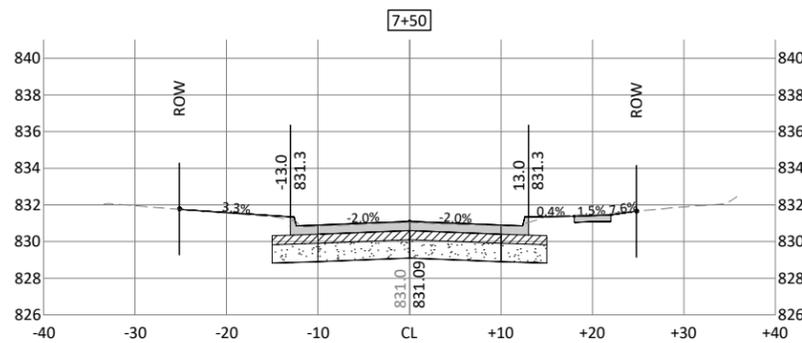
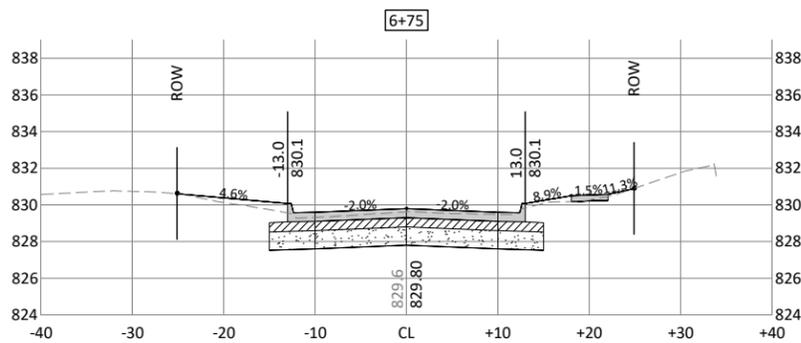
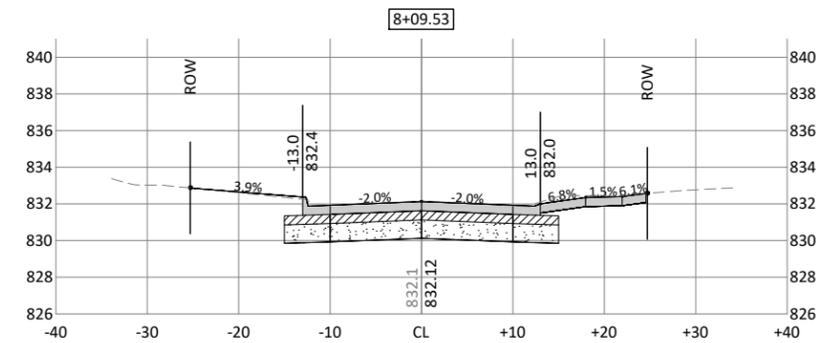
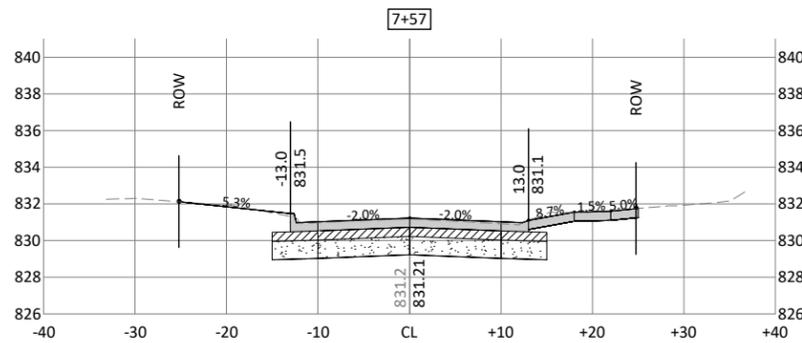
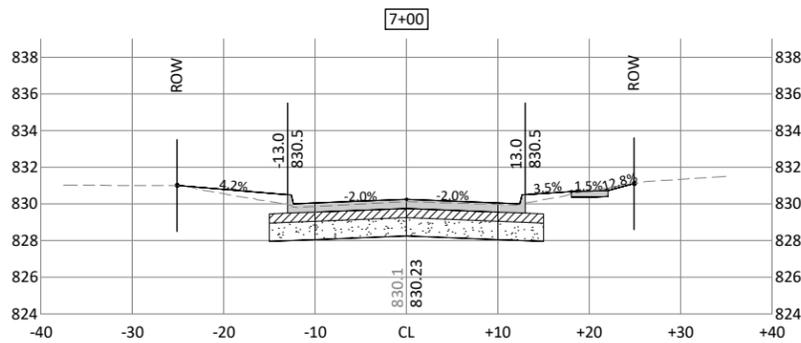
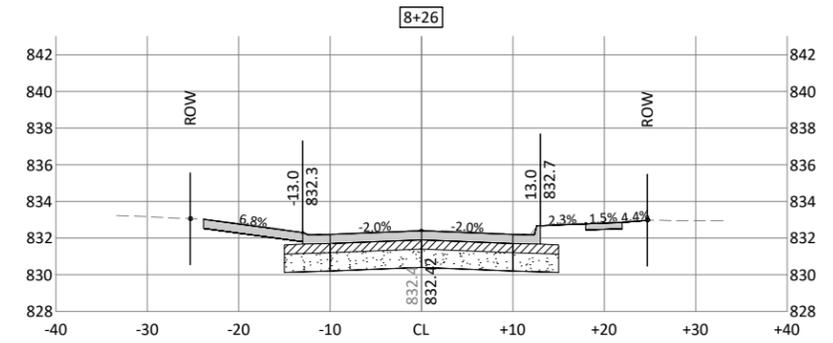
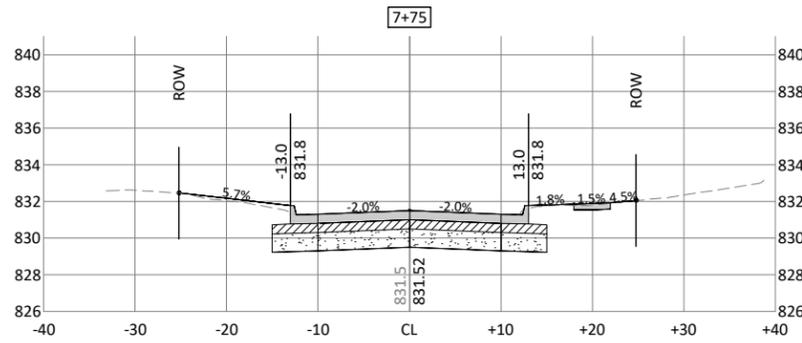
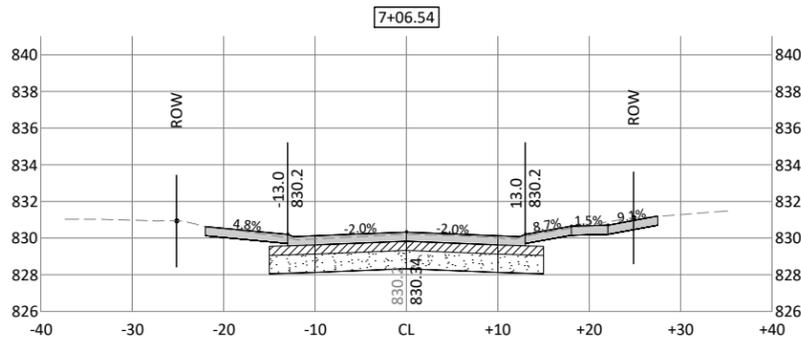
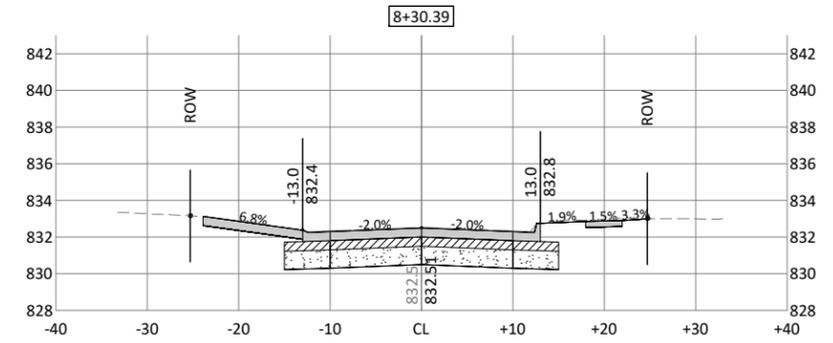
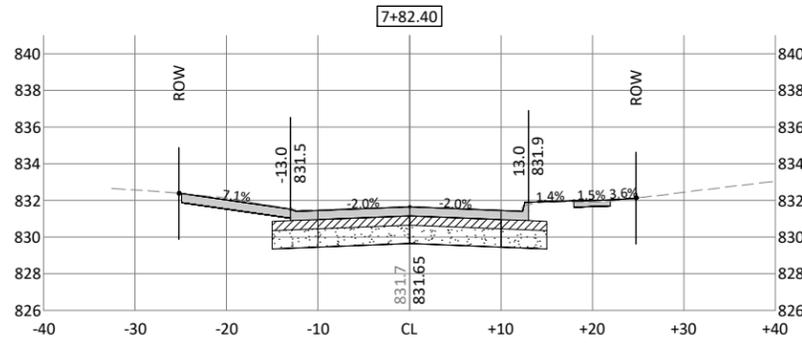
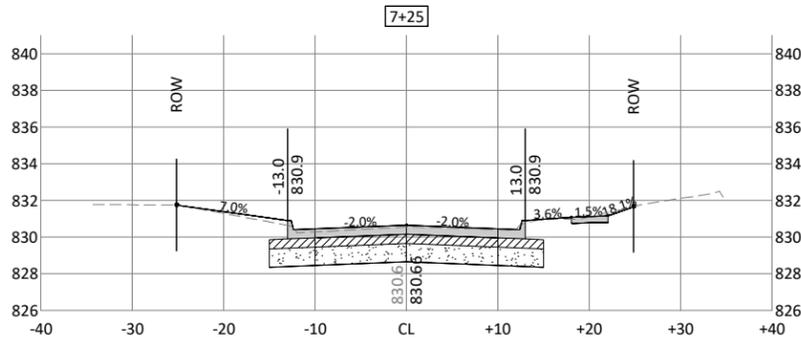


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-1A\1318668\Task_03_69th Street\CAD\Sheet\5118668_W.01.dwg 1/15/2020 2:00 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

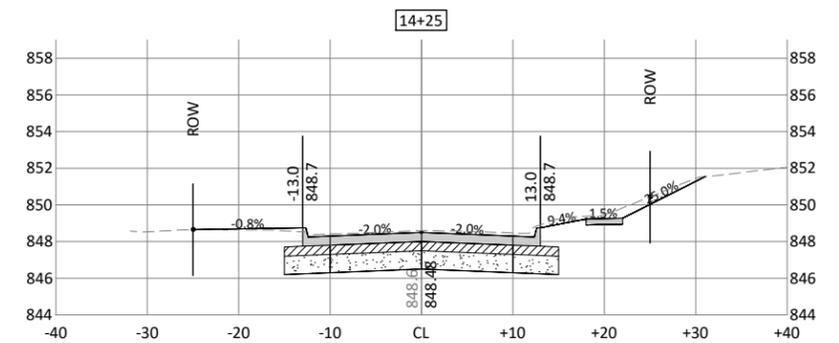
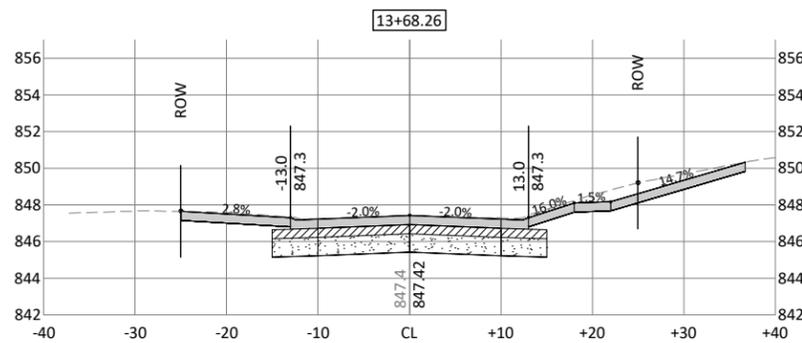
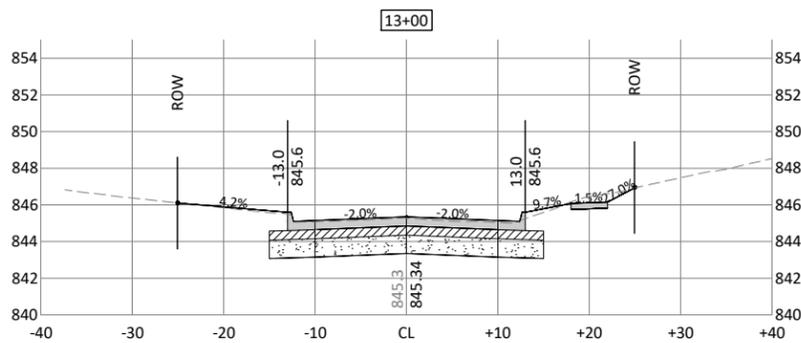
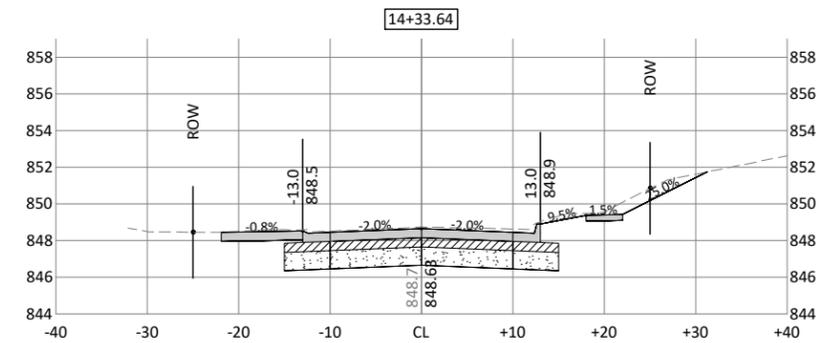
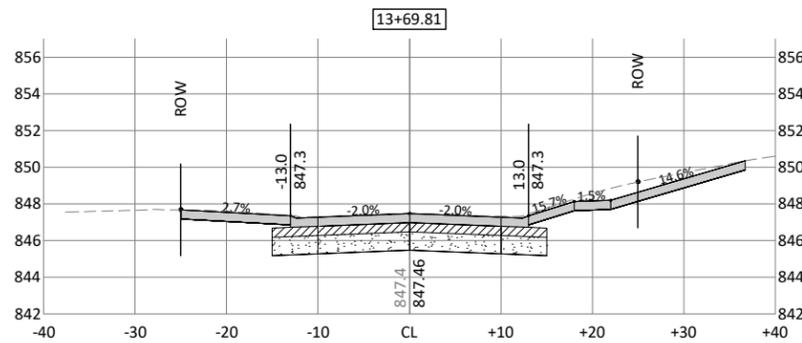
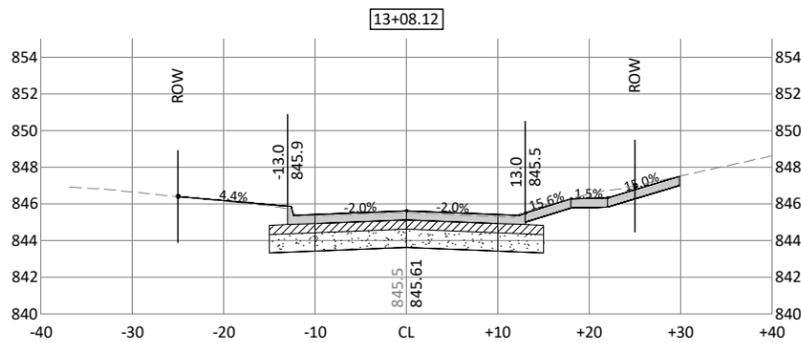
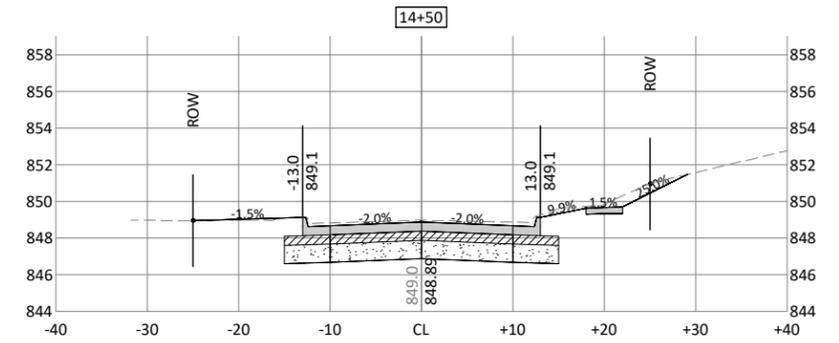
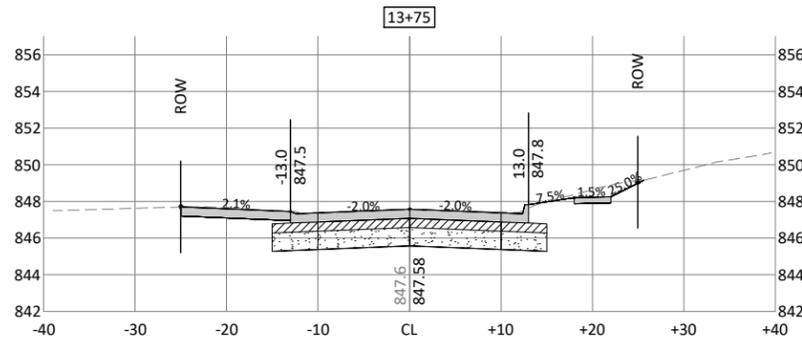
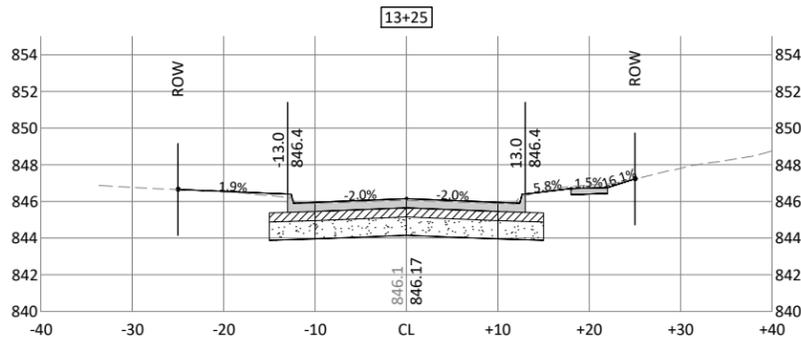
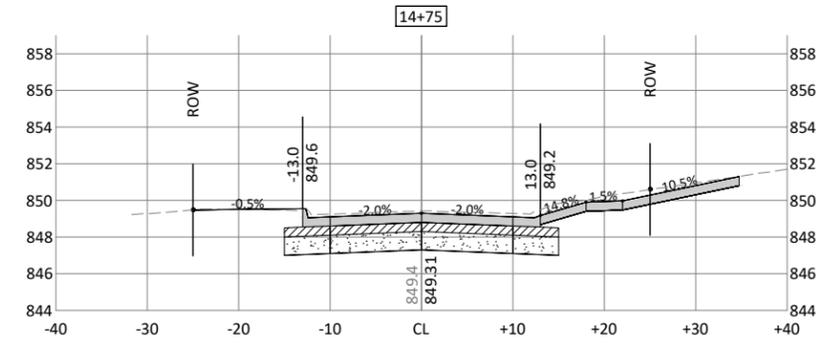
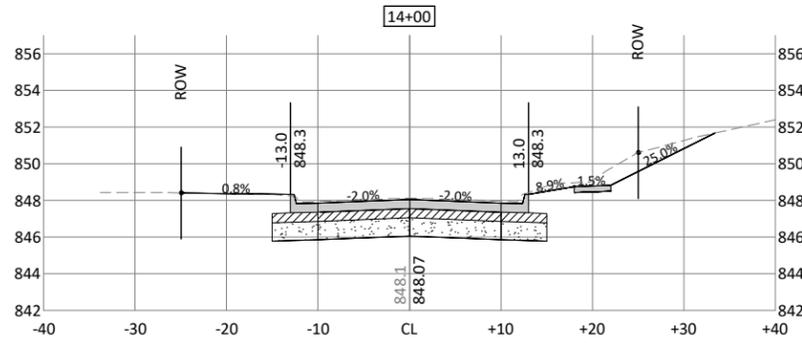
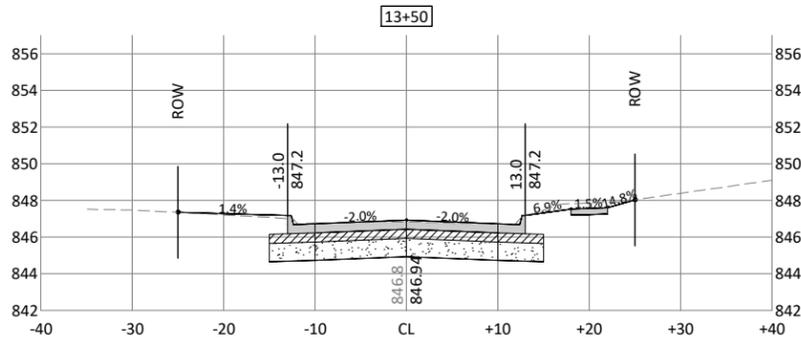


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	
NG	
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI - 143118668\Task 03 69th Street\CAD\Sheet\118668_W.01.dwg 1/15/2020 2:00 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

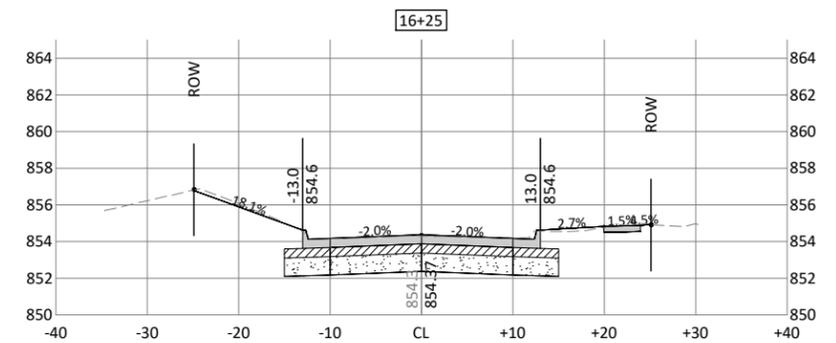
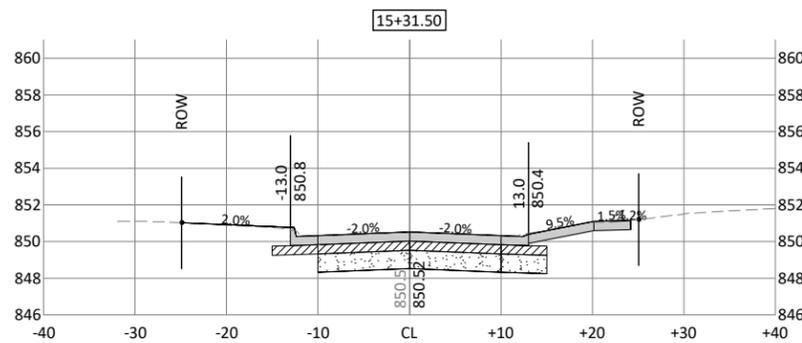
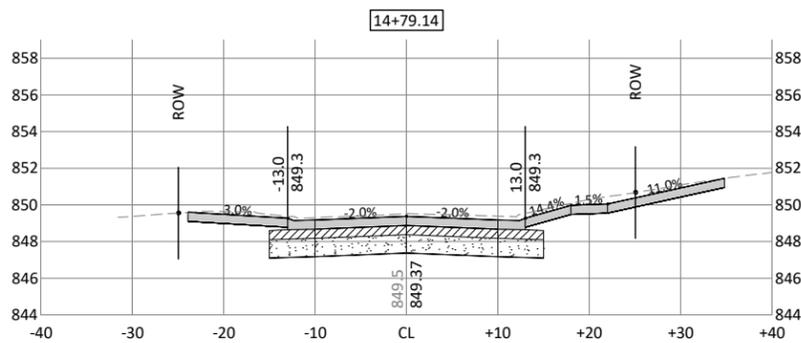
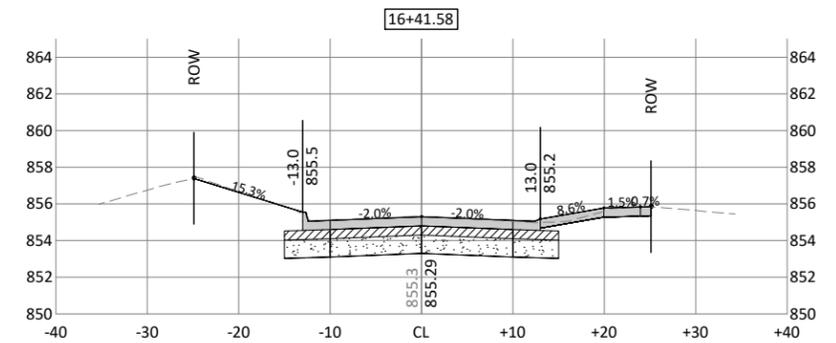
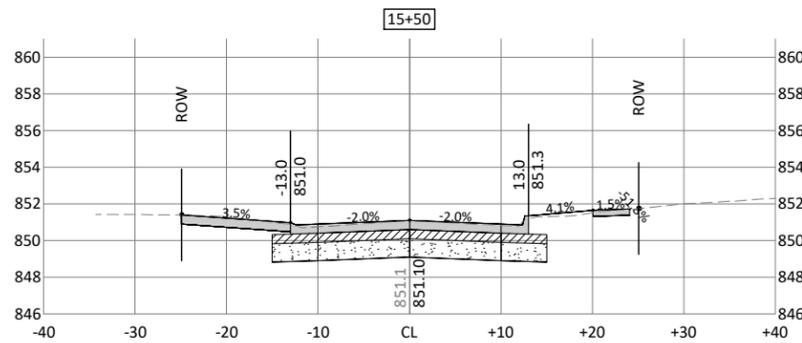
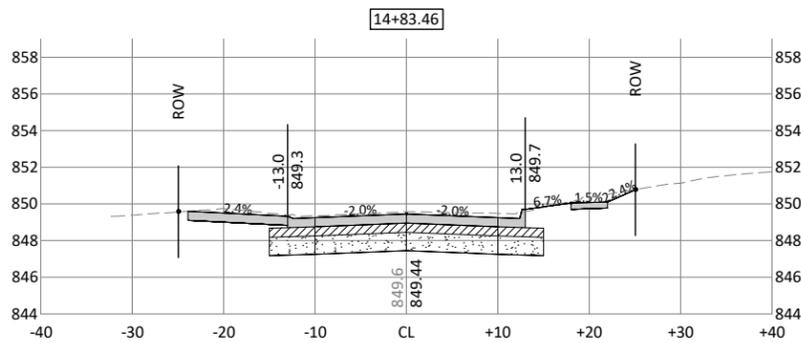
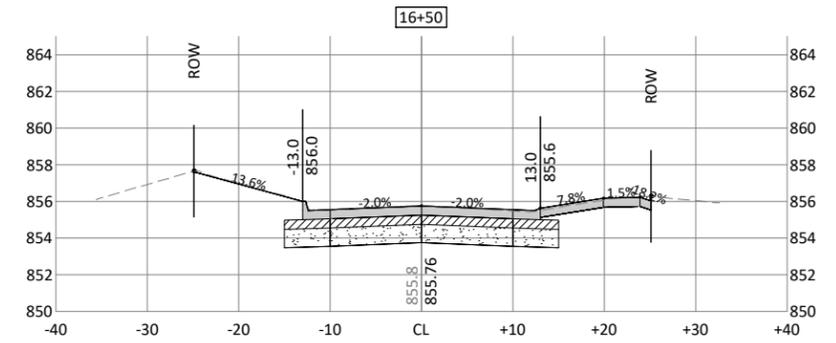
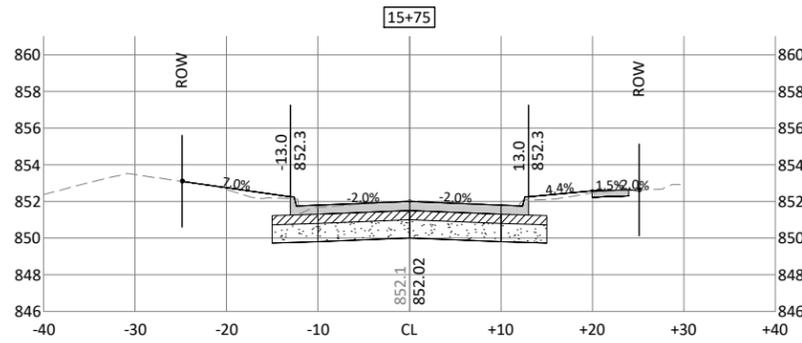
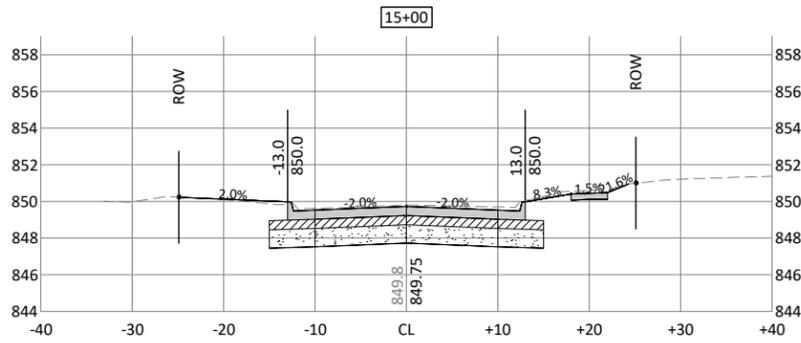
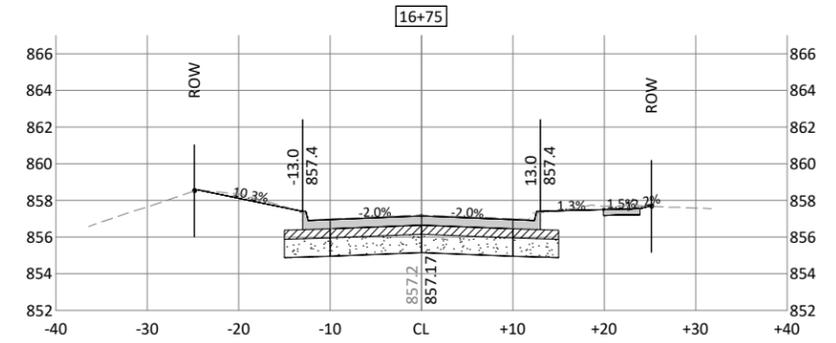
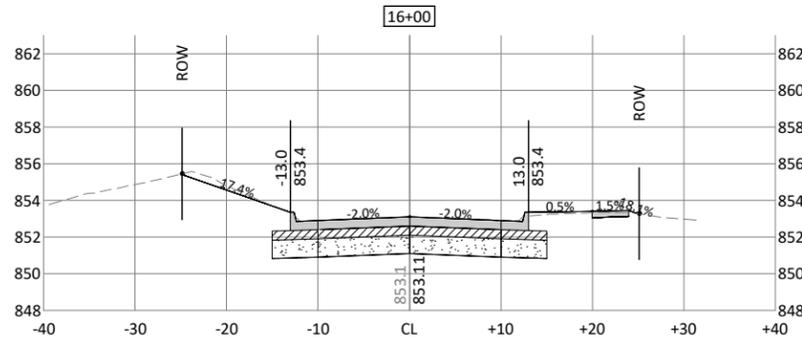
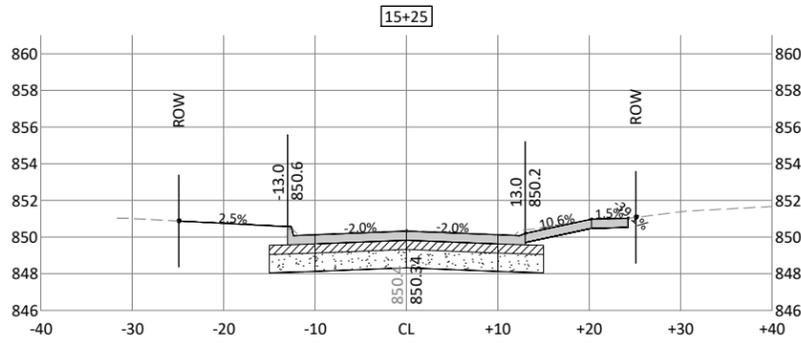


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\CI-14\13118668\Task_03_69th Street\CAD\Sheet\13118668_W.01.dwg 1/15/2020 2:00 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020

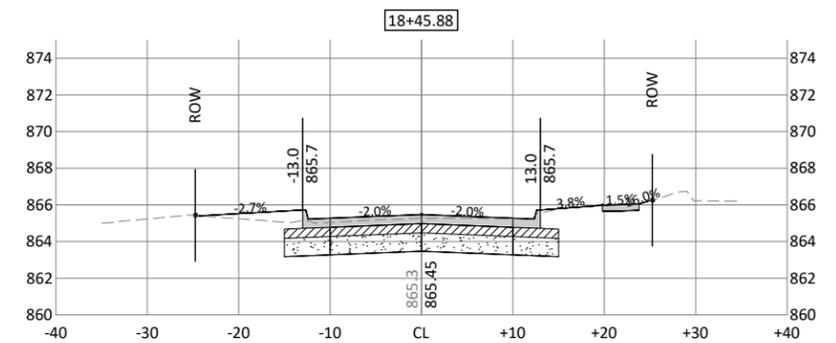
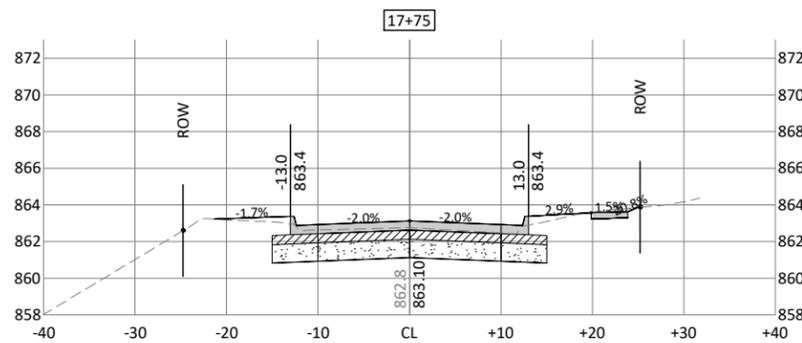
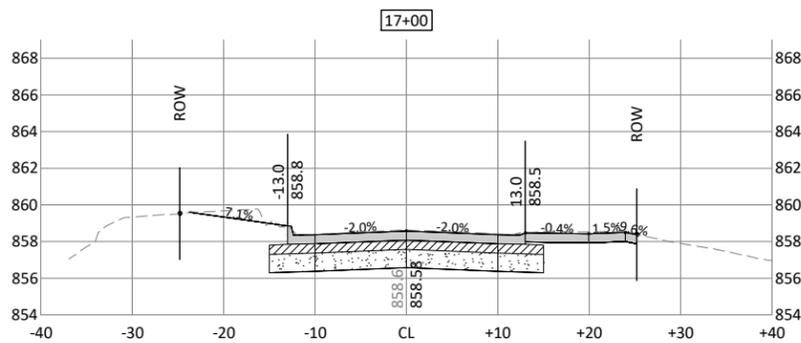
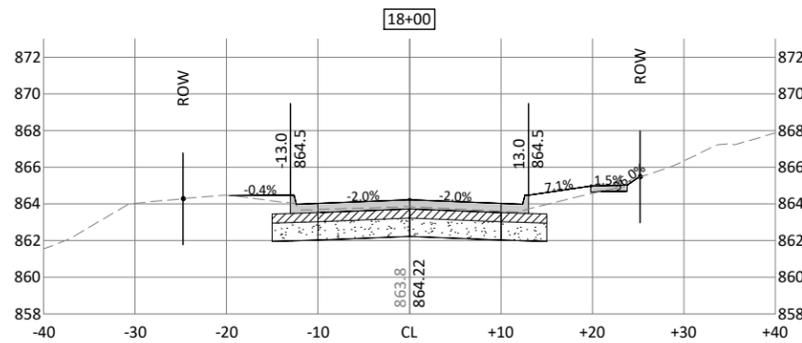
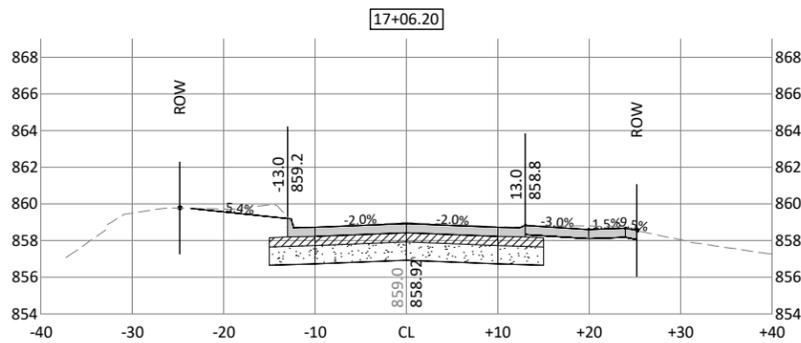
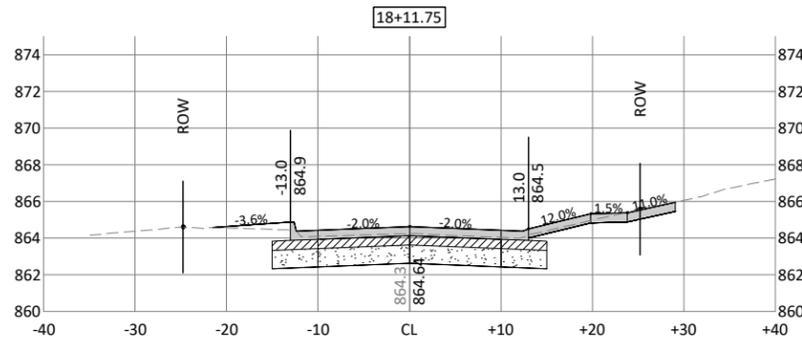
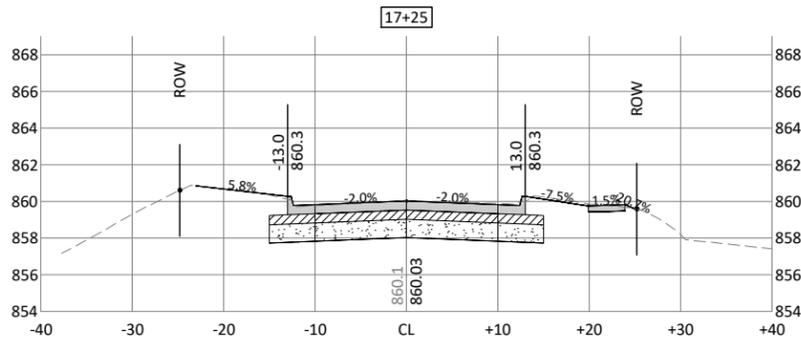
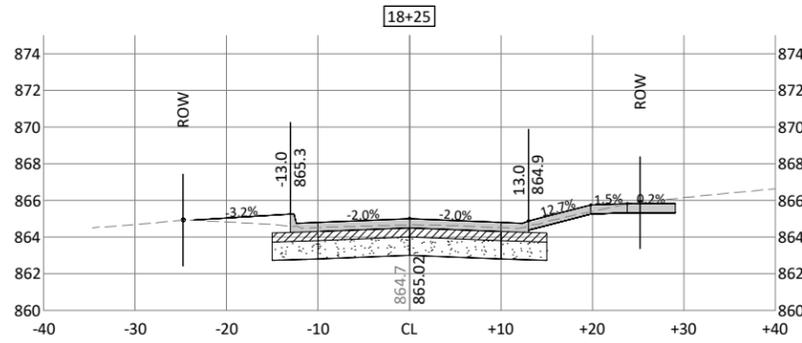
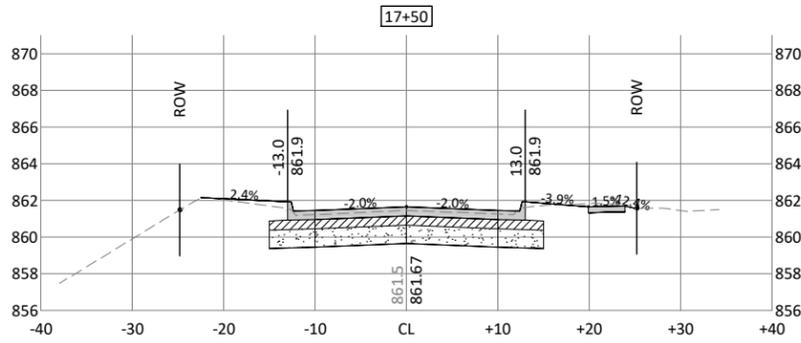


309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET



© Bolton & Menk, Inc. 2020. All Rights Reserved. P:\WINDSOR\911\171118668\911\69th Street\CAD\DWG\SHEET1118668.W.01.dwg 1/15/2020 2:00 PM



REV	ISSUED FOR	DATE
0	ISSUED FOR CONSTRUCTION	01-20-2020



309 E 5TH STREET, SUITE 202
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
www.bolton-menk.com



DESIGNED	NAS
SEALED	JLE
CHECKED	NG
CLIENT PROJ. NO.	A13.118668

CITY OF WINDSOR HEIGHTS, IOWA
2020 STREET RECONSTRUCTION
CROSS SECTIONS - 69TH STREET

RESOLUTION NO. 2020-6

A RESOLUTION AUTHORIZING THE CITY OF WINDSOR HEIGHTS, IOWA TO SUBMIT AN APPLICATION FOR FUNDING FROM THE FEDERAL SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG) TO THE DES MOINES AREA METROPOLITAN PLANNING ORGANIZATION (MPO) FOR THE PARTIAL FUNDING OF THE CONSTRUCTION OF 73rd STREET AND FURTHER APPROVING THE APPLICATION WHICH OBLIGATES THE CITY OF WINDSOR HEIGHTS TO MATCHING FUNDS FOR THE CONSTRUCTION OF SAID PROJECT

WHEREAS, the City of Windsor Heights, Iowa is a full member of the Des Moines Area Metropolitan Planning Organization; and

WHEREAS, the Federal Surface Transportation Block Grant Program provides funding to local jurisdictions for the construction of eligible projects; and

WHEREAS, the program is administered by the Des Moines Area Metropolitan Planning Organization which prioritizes and ranks all project applications.

NOW, THEREFORE BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, IOWA THAT:

1. The City Council supports and approves the attached application for Federal Surface Transportation Program funding.
2. The City Council hereby commits the City of Windsor Heights to matching monies as required by the Federal Surface Transportation Program funding.
3. The City of Windsor Heights hereby commits to accepting and maintaining these improvements for a minimum of twenty (20) years following the completion.
4. The Mayor and City Clerk are hereby authorized to approve and execute the application on behalf of the City of Windsor Heights.

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

FFY 2024 STBG Program Application

1. Mark Arentsen, Interim City Administrator
2. Primary Sponsor: Windsor Heights
3. Secondary Sponsor: None
4. Contact Person: Mark Arentsen
5. Email Address: marentsen@windsorheights.org
6. Project Title: 73rd Street Reconstruction – Phase 1
7. Termini Description: Hickman Avenue to University Avenue
8. Project Description: 73rd Street between Hickman Avenue and University Avenue will be reconstructed including added turn lanes and improvement sidewalks and shared use trail. The roadway is a major road within Windsor Heights that is a connection between Hickman and I-235 and University Avenue.
9. Total Estimated Project Cost: \$10,000,000
10. Federal Fiscal Year 2024 STBG: \$4,000,000
11. Total Funding Secured: \$0
12. Source of additional funds and local match? (list the sources and FFY of each): RUTF '24, TIF '24, GO Debt '24
13. Is the project seeking funding over multiple years? No
14. How many consecutive years will funding be requested? Not applicable
15. What is the total anticipated STBG funding requested over the multiple years? \$2,000,000
16. What is the project LRTP number (if applicable)? Not Applicable
17. Has your agency previously applied for STBG funds for this project? No
18. Has this project previously been awarded STBG funds? No
19. What is the project's TPMS number? Not Applicable
20. The Federal Highway Administration requires STBG funds to be used towards regionally significant projects. Please describe how this project fulfills this requirement.

73rd Street is a major roadway that connects Hickman Road (Highway 6) and University Avenue. Hickman Road and University Avenue are highly trafficked roads by residents and visitors from all of the neighboring communities. 73rd Street is also used as a connector for residents and visitors to get onto Interstate 235 and off

Interstate 235 into the City of Windsor Heights. Many businesses are located along 73rd Street or are accessed from 73rd Street which helps the economy for the City. Additionally, Clive Elementary is located along 73rd Street and has over 500 students attending. Improvements to 73rd Street will allow for better access and crossing for students and faculty members. Reconstruction of this project will allow for a safer and better road for the entire Des Moines metro.

21. Describe how this project impacts other city/county goals, plans, and projects.
With this project being a major connector, it helps not only the City of Windsor Heights but also benefits users of the Metro Area along with those living in the City of Clive, the City of West Des Moines and the City of Urbandale. This roadway connects each of these towns in different

areas. The school located in this segment enrolls children throughout the metro area. The entire project is technically in the City of Windsor Heights but connects to all of these cities.

22. Expansion is considered an expensive and last resort to address congestion issues. If this is an expansion project please explain what other methods have been used to address. Reference the Hierarchy of Congestion Strategies document.

This project is not an expansion project. This project includes the reconstruction of 73rd street only.

23. Project type: Reconstruction

24. Surface Type:

- a. Existing: Asphalt & Portland Cement
- b. Proposed: Portland Cement

25. Existing Travel Lane Width: 11-12 ft

26. Proposed Travel Lane Width: 11 ft

27. Existing Total Facility Width: 24 ft

28. Proposed Total Facility Width: 26-40 ft

29. Existing Posted Speed: 25 mph

30. Existing Median: No

31. Describe Existing Median: There is currently no median.

32. Proposed Median: No

33. Describe the Proposed Median: No median is being proposed for this project

34. Does the project include any of the following Improvements to turning movement?

- a. Left turn lanes: No
- b. Right turn lanes: Yes
- c. Center turn lanes: Yes
- d. Turning signals: No
- e. Extending turn lanes: No
- f. Roundabouts: No

35. Existing paved shoulders? No

36. Proposed paved shoulders? No

37. Existing curb radius at intersections? 20'

38. Proposed curb radius at intersections? 25 - 30

39. Existing signal interconnection? No

40. Does project include improvements to signal interconnection? No

41. Proposed number of access points along project length? The number of access points along 73rd street will be determined once the traffic study is completed.

42. Existing sidewalk width? 4ft

43. Proposed sidewalk width? 5ft

44. Number of existing pedestrian benches? 0

45. Existing curb extensions? No

46. Proposed curb extensions? No

47. Existing crosswalks? Yes

48. *Can't read the first question on Section 16*

49. Proposed crosswalks? Yes
50. Do proposed crosswalks have a raised pedestrian refuge? No
51. Number of existing bus shelters: 0
52. Is there an existing paved connection between sidewalk and bus shelter? No
53. Number of existing bus shelters: 0
54. Is there an existing paved connection between sidewalk and bus shelter? No
55. Number of existing on-street parking spots? 0
56. Number of proposed on-street parking spots? 0
57. How many electric vehicle charging stations does this project include? 0
58. Existing bicycle facility? Yes
59. Existing bicycle facility type? Dedicated Facility
60. Existing bicycle facility width: 8-10ft
61. Proposed bicycle facility? Yes
62. What type of bicycle facility? Dedicated facility
63. What is the width of the bicycle facility? 8-10
64. Existing bicycle signals? No
65. Proposed bicycle signals? No
66. Existing pedestrian signals? Yes
67. Proposed pedestrian signals? Yes
68. Existing street trees? No
69. Proposed street trees? No
70. What variety of tree(s) will be planted? No street trees are being proposed.
71. What is the space of street trees along the corridor (ft)? No street trees are being proposed.
72. Does the project improve a parallel facility or contribute to alternative routing? Yes
73. Describe how the project improves a parallel facility or contributes to alternative routing? Both 70th Street and 63rd Street (Hwy 28) are the majority north-south routes within Windsor Heights. By providing a better travel way, traffic may lessen on those roadways.
74. Does the project use green infrastructure to manage 1 ¼ inches of rainfall? No
75. Does the project use traffic calming measures? Yes
76. Describe how the project uses traffic calming measures: Narrow lanes, possible bumpouts for pedestrian crossings.
77. Does the project incorporate solutions to reduce idling? Yes
78. Describe how the project incorporates solutions to reduce idling?

This project will incorporate turning lanes. By utilizing turn lanes on 73rd Street, it will reduce the back up of vehicles and lessen car idling as they are trying to cross traffic instead of multiple cars idling as they wait for one car to turn.

79. Does project cross a bridge? No
80. Is the bridge included on the structurally deficient list? Not applicable
81. What is the structural rating of the bridge? Not applicable
82. Will the project include the replacement or reconstruction of the bridge? No
83. Are any of the following elements included in this project?: Right-of-Way Acquisition, Utility Relocation, Traffic Signal Infrastructure, and Light Poles

84. Does the project include digital infrastructure elements that serve a transportation or mobility-related function? No
85. *Can't read complete first question of section 39*
86. Does this project affect or touch another jurisdiction agency? Yes
87. *Can't read first question of section 40*
88. Does this project include engagement with DART relating to improvements to digital infrastructure that will benefit transit service? No
89. Will the digital infrastructure systems associated with this project be interoperable with other such systems serving public infrastructure in the region? No
90. Does this project include engagement with DART relating to improvements to digital infrastructure that will benefit transit service? No
91. Will the digital infrastructure systems associated with this project be interoperable with other such systems serving public infrastructure in the region? No
92. Does the project add or upgrade any of the following digital infrastructure? Not applicable
93. ITS are technologies that advance transportation safety and mobility and enhance productivity by integrating advanced communications technologies into transportation infrastructure and modes of travel. Please describe any ITS elements of this project: No applicable
94. Please describe the overall operations and maintenance plan for this project. What agency will be responsible for ongoing maintenance and operations of the infrastructure, including digital infrastructure, and how will this be budgeted? The City of Windsor Heights will be responsible for maintaining and operating the road. This is a local roadway. The cost will come out of the City's operating budget.
95. The MPO received federal funding and may not discriminate against anyone on the basis of race, color, or national origin, according to Title VI of the Civil Rights Act of 1964. By applying to receive these funds the applicant is acknowledging that they understand and adhere to the principles of Title VI when performing activities related to the funding they receive from the Des Moines Area Metropolitan Planning Organization. Agree
96. To the best of my knowledge all information included in this application is true and accurate, including the commitment of all design features, physical and financial resources.... Yes
97. A GIS shapefile has been sent to MPO: Yes.
98. An executed city resolution has been emailed to the MPO: Will be emailed after January 20th Council meeting.
99. If proposed project is on an existing or future DART transit line, has a letter of review from DART been emailed to the MPO: No (not applicable)
100. Additional Information: If full funding requested is received from STBG, only one year of funding is anticipated. If partial funding is received from STBG, then an additional year of funding will be requested.

RESOLUTION 2020-7

**A RESOLUTION APPROVING THE DEVELOPMENT SITE PLAN SUBMITTED BY
HY-VEE FAST AND FRESH FOR REDEVELOPMENT OF 7200-7220 HICKMAN
ROAD**

WHEREAS, Hy-Vee, Inc. has submitted a site plan for review for redevelopment of 7200-7220 Hickman Road; and

WHEREAS, Hy-Vee Fast and Fresh site plans were considered by the Planning and Zoning Commission who recommends approval; and

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Windsor Heights, Iowa that the City does hereby approve the proposed site plan for 7200-7220 Hickman Road.

Passed and Approved this 20th day of January, 2020.

David Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

RESOLUTION NO. PZC 2020-01

WHEREAS, Hy-Vee, Inc. has purchased the property at 7200 – 7220 Hickman Road in Windsor Heights, Iowa, **AND**,

WHEREAS, Hy-Vee intends to rebrand the property as a Fast & Fresh facility with changes to signage and other exterior site amenities, **AND**,

WHEREAS, the City of Windsor Heights Planning & Zoning Commission has reviewed proposed changes to the property and finds them to be a desirable upgrade to the property,

NOW THEREFORE BE IT RESOLVED, that the City of Windsor Heights Planning & Zoning Commission, in session this 8th day of January, 2020, finds the changes proposed to the building exterior and gas canopy island to be appropriate modifications to the property given the changes in ownership and Hy-Vee’s desire to upgrade the property to reflect the Hy-Vee corporate image.

PASSED AND ADOPTED this 8th day of January, 2020.

James Eggers, Chair
Windsor Heights Planning & Zoning Commission

Elevation	Signage Area
Front	72 sf
Left	--
Rear	--
Right	--
TOTAL	72 sf

Stonewood Phenolic Panel - 7031 Blue Gray

Stonewood Phenolic Panel - 7045 Telegray

Existing Storefront To Remain

Existing Brick - To Remain

New Coping - To Match 7031 Blue Gray



Front Elevation

Stonewood Phenolic Panel - 7031 Blue Gray

Existing Door To Remain - To Match 7031 Blue Gray

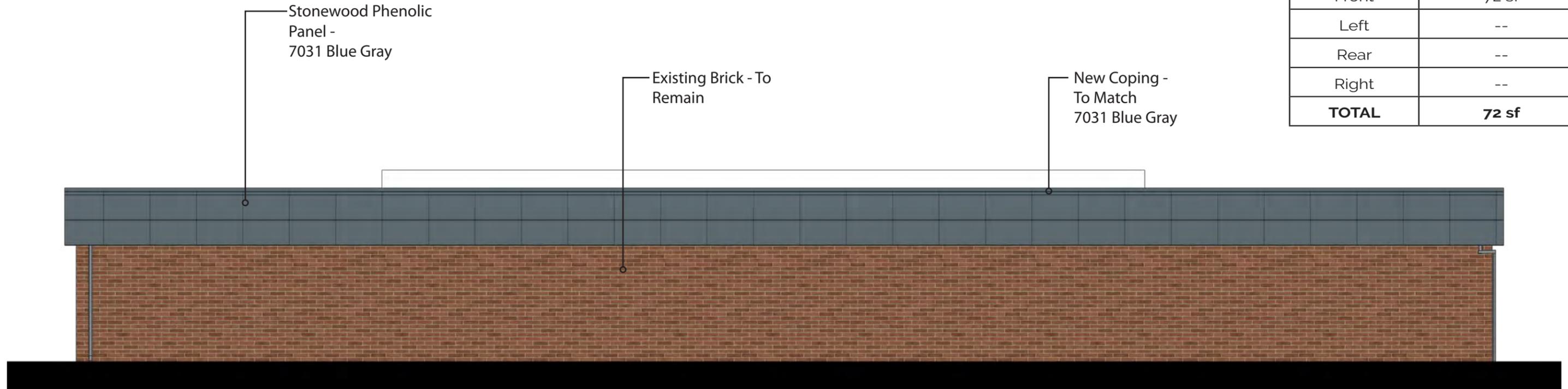
Existing Brick - To Remain



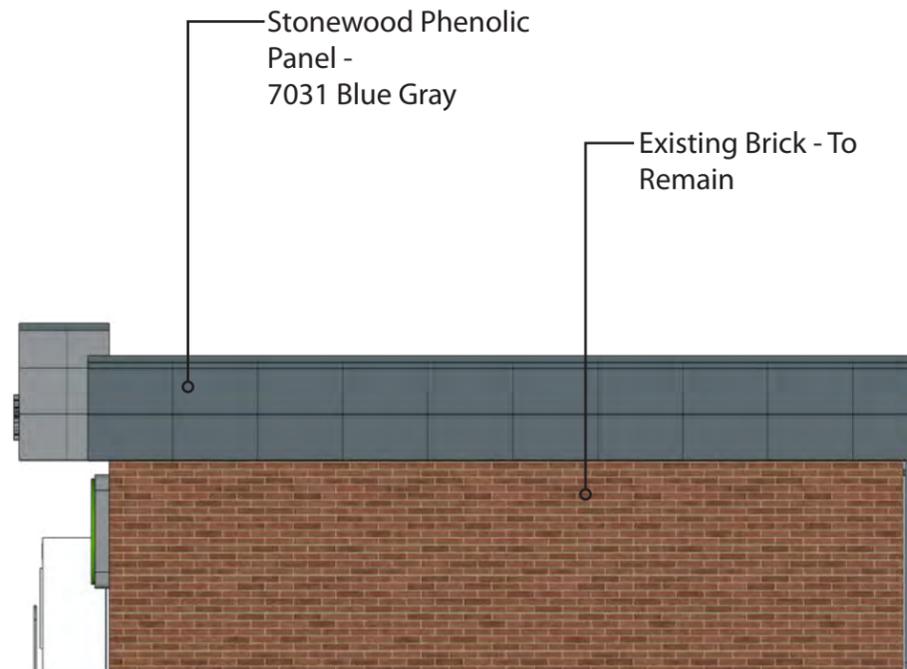
Left Elevation



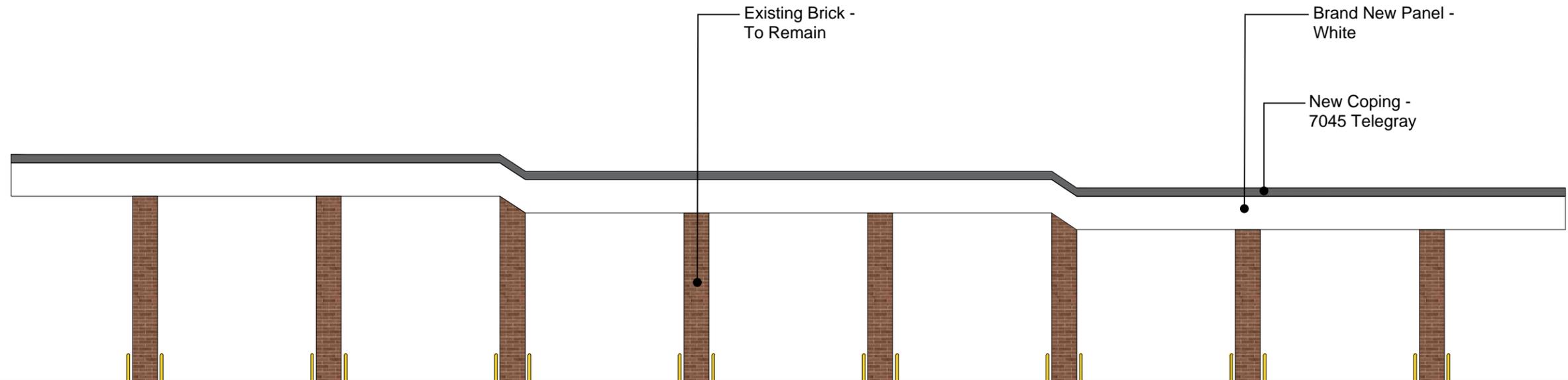
Elevation	Signage Area
Front	72 sf
Left	--
Rear	--
Right	--
TOTAL	72 sf



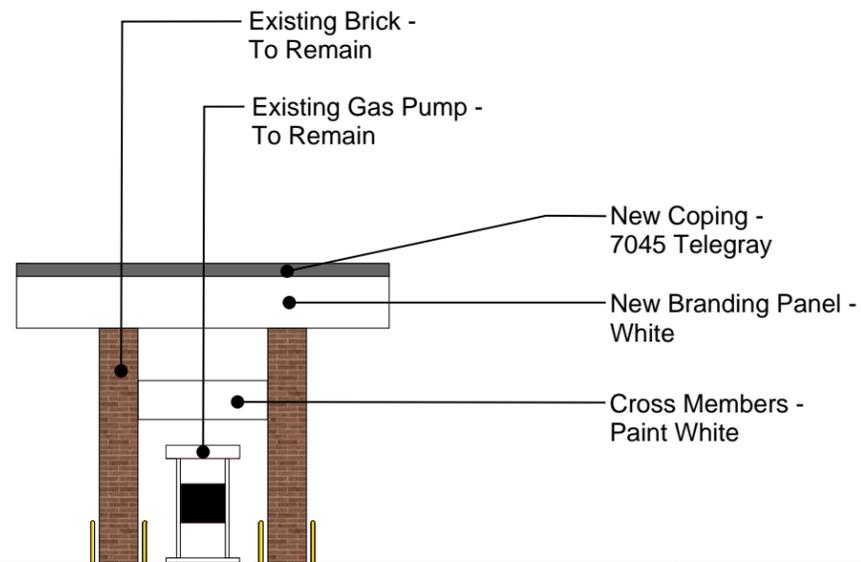
Rear Elevation



Right Elevation

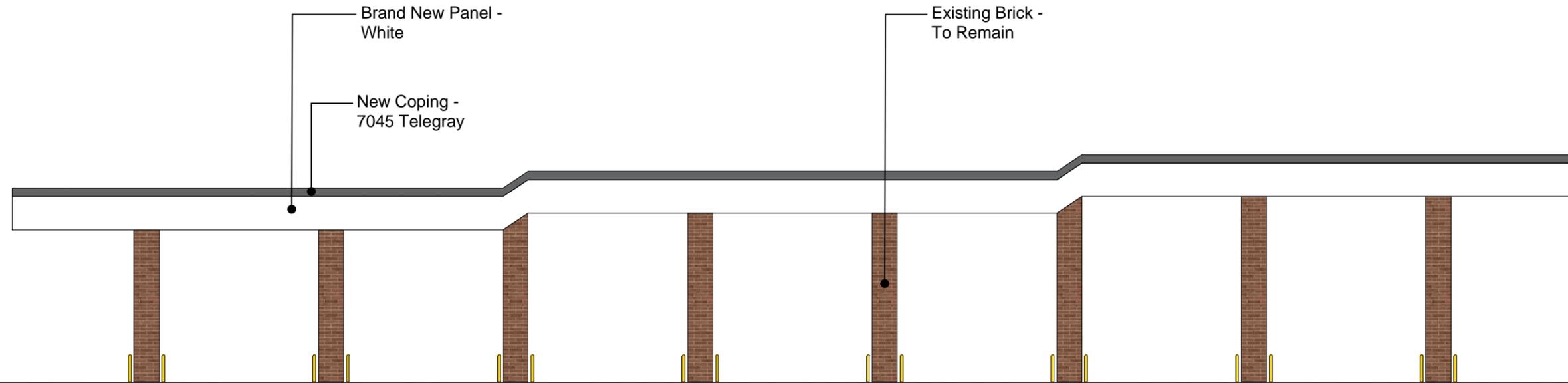


Front Elevation

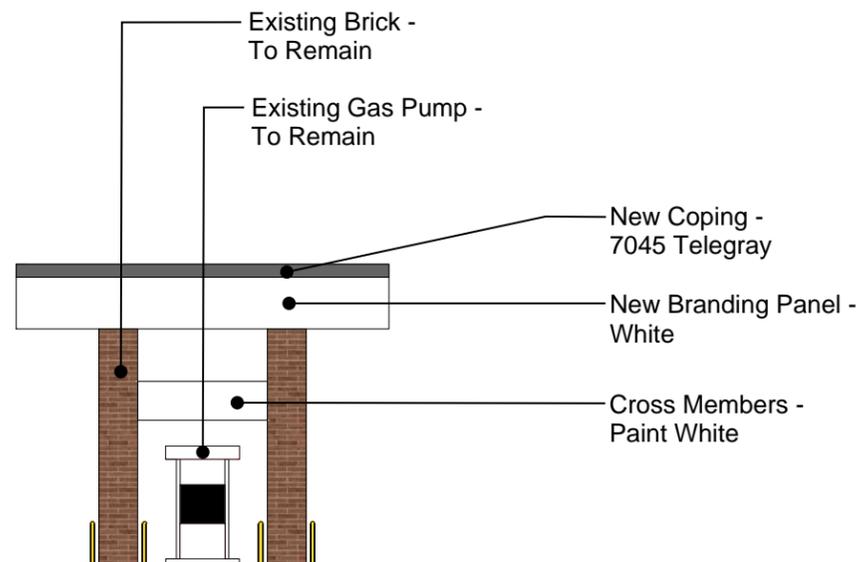


Left Elevation





Rear Elevation



Right Elevation





Polk County Assessor

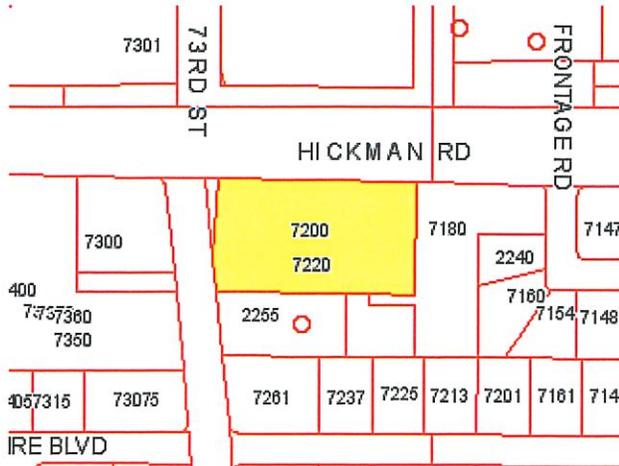
111 Court Avenue #195
Des Moines, IA 50309-0904

Item #5D
(515) 286-3014 Fax (515) 286-3386
polkweb@assess.co.polk.ia.us

Location					
Address	7200 HICKMAN RD				
City	WINDSOR HEIGHTS	Zip	50324	Jurisdiction	Windsor Heights
District/Parcel	292/01885-007-000	Geoparcel	7925-35-231-007	Status	Active
School	West Des Moines	Nbhd/Pocket	WH01/B	Tax Authority Group	WIH-C-WDM-77033
Sewer	Urbandale/Winds Hts San Sewer	Submarket	Western Suburbs	Appraiser	Mark Patterson, CAE, CCIM, ICA 515-286-3148

Map and Current Photos - 2 Records

Click on parcel to get a new listing



[Bigger Map](#) [Polk County GIS](#)
[Google Map](#) [Pictometry](#)

Photo Processed on 2016-07-15 a



Photo Processed on 2016-07-15 b



[Historical Photos](#)

Ownership - 1 Record

Ownership	Num	Name	Recorded	Book/Page
Title Holder	1	QUIK TRIP CORP	2004-07-01	10622/162

RESOLUTION 2020-8

A RESOLUTION APPROVING A SEVERANCE PACKAGE

WHEREAS, the City has determined that it is more cost effective to eliminate the Building & Zoning Department and provide the services conducted by this Department in other ways; and

WHEREAS, the City Council wishes to compensate the employee of this Department for the unanticipated elimination of the Department; and

WHEREAS, the City has funds available to compensate this employee without creating a financial hardship for the City.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Windsor Heights, Iowa that the attached severance package is hereby approved.

Passed and Approved this 20th day of January, 2020.

David Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

SEVERANCE AGREEMENT AND GENERAL RELEASE

This SEVERANCE AGREEMENT AND GENERAL RELEASE (the “Agreement”) is entered into by and between the City of Windsor Heights, Iowa (collectively and interchangeably referred hereinafter as “Windsor Heights” or the “City”) and Sheilah Lizer (the “Employee”).

1. Resignation. Employee hereby resigns her employment with the City effective December 18, 2019 (“Resignation Date”). Employer will pay Employee’s salary through the Resignation Date, and will pay Employee for 100% of Employee’s vacation entitlement, less all vacation hours used. Employee’s salary and unused vacation equates to zero dollars (\$0.00). Both Amounts will be subject to all applicable withholdings and deductions.

2. Definitions of Claims. “Claims” means all theories of recovery of whatever nature, whether known or unknown, including any claim for salary, benefits or other compensation. This term includes, but is not limited to, any employment-related claims, such as discrimination, harassment, retaliation, retaliatory discharge, or wrongful discharge, and any other claim that is alleged or that could be alleged by Employee, or on Employee’s behalf, in any lawsuit or other proceeding. *This term also includes, but is not limited to, claims and rights arising under the Older Workers’ Benefit Protection Act and/or The Age Discrimination in Employment Act, Title VII of the Civil Rights Act of 1964, The Fair Labor Standards Act, The Americans With Disabilities Act, The Equal Pay Act, The Employee Retirement Income Security Act of 1974 and The Iowa Civil Rights Act of 1965; each as amended.*

3. Definition of Damages. “Damages” means all elements of relief or recovery of whatever nature, whether known or unknown, which are recognized by the law or equity of any jurisdiction that is sought or that could be sought by Employee, or on Employee’s behalf, in any lawsuit or other proceeding.

4. Definition of Parties. “Employee” means and includes Employee acting individually and on behalf of her heirs, executors, administrators, legal representatives, successors, beneficiaries, and assigns. “Released Parties” means and includes the City, and its past, present and future related entities—including but not limited to—administrators, officers, employees, agents and representatives, in both their representative and individual capacities. Each Released Party is an intended beneficiary of this Agreement.

5. Consideration. In consideration for Employee’s promises herein, the City agrees to:

- (a) Pay Employee a severance equal to wages through June 30, 2020, in the amount of **\$36,603.13**. Payment will be made in a lump sum, less all applicable taxes and withholdings, within ten (10) days of expiration of the revocation period. The payment shall be direct deposited in the Employee’s account on file.
- (b) Pay Employee an amount equal to twelve (12) months of health insurance at the rate of \$1,568.44 per month, for a total amount of **\$18,821.28**. Payment will be made in a lump sum, less all applicable taxes and

withholdings, within ten (10) days of expiration of the revocation period. The payment shall be direct deposited in the Employee's account on file.

- (c) ***In addition and in exchange for Employee's release of her claims under the Federal Age Discrimination in Employment Act and the Older Workers Benefit Protection Act, the Employer agrees to not contest Employee's claim for unemployment benefits.***

6. Consideration – Other Benefits and Employee Programs. Following the Resignation Date, Employee shall be entitled to any and all other rights or benefits afforded to other terminated employees of the City, including the right to elect to continue, at Employee's cost, coverage under the City health plan, in accordance with the health care continuation coverage provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA").

7. Waiver and Release. Employee releases and discharges the Released Parties from all Claims and Damages as identified above—including, but not limited to, those related to, arising from or attributed to: (1) Employee's employment with the City; (2) the severance of such employment or service; and (3) all other acts or omissions related to any matter at any time prior to and including the date of Employee's execution of this Agreement. ***Employee further understands and expressly agrees that the release waives any Claims and rights Employee may have against any of the Released Parties under the Older Workers' Benefit Protection Act and/or the Age Discrimination in Employment Act, Title VII of the Civil Rights Act of 1964, The Fair Labor Standards Act, The Americans With Disabilities Act, The Equal Pay Act, The Employee Retirement Income Security Act of 1974 and The Iowa Civil Rights Act of 1965; each as amended.***

8. Nondisparagement. The parties recognize that their professional reputation is a unique and valuable asset. The parties agree that they shall not make any negative, disparaging, or unfavorable comments regarding the other party, including any of Employer's owners, officers, or employees to any person, either during the term of this Agreement or following termination of this Agreement.

9. Breach of Agreement. If Employee breaches this Agreement, all payment or payments that have been made to the Employee under this Agreement shall be repaid in full, in addition to any other legal or equitable remedies available to the City.

10. Warranties. The Employee agrees, represents and warrants that Employee: (a) is legally and mentally competent to sign this Agreement and the Consideration is good and sufficient consideration being paid in full satisfaction and settlement of any Claims and Damages; (b) is the sole owner of any Claims that have been or could have been asserted by Employee against the City and Employee has the authority to execute this Agreement; and (c) shall not, and shall not authorize anyone else to, libel or slander the City or the other Released Parties; provided that this Section shall not apply to comments made by Employee to any governmental entity or as required by law.

11. Successors. Employee understands that this Agreement binds Employee's heirs, administrators, representatives, executors, successors and assigns, and will inure to the benefit of

the City and other Released Parties and their respective heirs, administrators, representatives, executors, successors, and assigns.

12. Choice of Law & Choice of Forum. This Agreement shall be interpreted and construed in accordance with and shall be governed by the laws of the State of Iowa (without regard to any conflicts of law principle which would require the application of some other state law) and, when applicable, the laws of the United States. Any disputes arising out of this Agreement shall be determined in the Iowa Southern District of the U.S. District Court. The parties acknowledge the existence of sufficient contacts to the State of Iowa to confer jurisdiction upon that court.

13. Entire Agreement. This Agreement constitutes the entire agreement of the parties relating to the subject matter hereof. No term, provision or condition of this Agreement may be modified except by a writing executed by both parties. This Agreement has not been executed in reliance upon any representation or promise except those contained herein.

14. Acknowledgment of Terms. Employee acknowledges that Employee: (a) has carefully read this Agreement; (b) *has had the opportunity for review of it by an attorney*; (c) fully understands its final and binding effect; (d) understands it is intended as a compromise of all claims which Employee could allege against any of the Released Parties; (e) agrees the only promises or representations made to sign it are those stated herein; and (f) signs this Agreement voluntarily.

15. Waiver & Severability. The failure of either party to enforce or to require timely compliance with any term or provision of this Agreement shall not be deemed to be a waiver or relinquishment of rights or obligations arising hereunder, nor shall this failure preclude the enforcement of any term or provision or avoid the liability for any breach of this Agreement. In addition, the parties understand that each part, term or provision of this Agreement is severable from the others and, notwithstanding any possible future finding by a duly constituted authority that a particular part, term or provision is invalid, void or unenforceable, this Agreement has been made with the clear intention that the validity and enforceability of the remaining parts, terms and provisions shall not be affected thereby.

16. Costs and Attorneys' Fees. If action is initiated either party to enforce this Agreement, the prevailing party shall be entitled to recover reasonable costs and attorneys' fees.

17. Return of City Property. Employee represents that, within three (3) business days of the Resignation Date, Employee will deliver all City property, including but not limited to all credit cards, cardkey passes, car, City ID, door and file keys, reports, files, memoranda, notes, records, computer, computer programs, computer files, drawings or other documentation, and all copies, duplicates, reproductions or excerpts thereof, in Employee's possession, custody or control.

18. Acceptance and Timing. **Employee may accept this Agreement by signing it and returning it to Mark Arentsen. Employee understands and acknowledges that she has been given twenty-one (21) days to consider this Agreement before executing it. In addition,**

Employee shall have the right to revoke the Age Discrimination in Employment Act and the Older Workers Benefit Protection Act portions of this Agreement within seven (7) days following the date on which Employee signs it, and those portions of this Agreement shall not become effective or enforceable until this seven (7) day period has expired without revocation. If, after executing this Agreement, Employee wishes to invoke the revocation right, Employee must do so in writing delivered to Mark Arentsen no later than 5:00 p.m. on the seventh (7th) calendar day after the date Employee signs this Agreement. If the seventh (7th) calendar day after the date Employee signs this Agreement falls on a Saturday, Sunday or holiday, the last day of the Revocation Period will be deemed to be the next business day.

Employee Acknowledgment and Acceptance

I, _____, have read and understood the provisions in the above Agreement. I understand that my signature below waives and releases important legal rights and I have carefully and completely reviewed this agreement prior to execution. I expressly understand and accept the terms of this Agreement and agree to be bound by all obligations herein. I execute this Agreement on the ____ day of _____, 2020.

Employee shall have the right to revoke the Age Discrimination in Employment Act and the Older Workers Benefit Protection Act portions of this Agreement within seven (7) days following the date on which Employee signs it, and those portions of this Agreement shall not become effective or enforceable until this seven (7) day period has expired without revocation. If, after executing this Agreement, Employee wishes to invoke the revocation right, Employee must do so in writing delivered to Mark Arentsen no later than 5:00 p.m. on the seventh (7th) calendar day after the date Employee signs this Agreement. If the seventh (7th) calendar day after the date Employee signs this Agreement falls on a Saturday, Sunday or holiday, the last day of the Revocation Period will be deemed to be the next business day.

Employee Acknowledgment and Acceptance

I, Julia L., have read and understood the provisions in the above Agreement. I understand that my signature below waives and releases important legal rights and I have carefully and completely reviewed this agreement prior to execution. I expressly understand and accept the terms of this Agreement and agree to be bound by all obligations herein. I execute this Agreement on the 14 day of Jan, 2020.

Julia L.

RESOLUTION NO. 2020-9**A RESOLUTION APPOINTING A MEMBER AND ALTERNATE MEMBER(S)
TO THE POLK COUNTY EMERGENCY MANAGEMENT COMMISSION**

WHEREAS, the county boards of supervisors and city councils in each county shall cooperate with the Iowa Homeland Security and Emergency Management Department to establish a local emergency management commission to carry out the provisions of Iowa Code Chapter 29C; and

WHEREAS, the Commission shall be composed of a member of the board of supervisors, the sheriff, and the mayor from each city within the county; and

WHEREAS, a commission member may designate an alternate to represent the designated entity; and

WHEREAS, for any activity related to approval or amendment of the Commission's budget as addressed in section 29C.17, subsection 2, or chapter 24 of the Code of Iowa, participation shall be by a commission member or a designated alternate that is an elected official from the same designated entity; and

WHEREAS, the commission members shall be the operational liaisons between their jurisdiction and the commission; and

WHEREAS, the commission shall meet regularly to determine the mission of its agency and program and provide direction for the delivery of the emergency management services of planning, administration, coordination, training, and support for local governments and their departments; and

WHEREAS, the commission shall coordinate emergency management services in the event of a disaster.

NOW, THEREFORE BE IT RESOLVED that the City of Windsor Heights appoints Mayor Dave Burgess, as the City's Emergency Management Commission Member; and

BE IT FURTHER RESOLVED that the City of Windsor Heights appoints Mayor Pro Tem Mike Jones, as an Alternate Elected Member for the City's representation on the Emergency Management Commission; and

BE IT FURTHER RESOLVED that the City of Windsor Heights appoints the Public Safety Director/Police Chief and the Police Captain to serve as the City's Alternate Non-Elected Representatives; and

BE IT FURTHER RESOLVED that the Member or Alternate Members attend the Commission meetings on behalf of City of Windsor Heights.

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

RESOLUTION NO. 2020-10

**A RESOLUTION WAIVING FEES FOR THE PAVILION, PARK, AND
COMMUNITY CENTER FOR THE WINDSOR HEIGHTS FOUNDATION FOR
THE NIGHTS IN THE HEIGHTS CONCERT SERIES**

WHEREAS, the Windsor Heights Foundation will be hosting the Nights in the Heights on Tuesdays in June and July in Colby Park; and

WHEREAS, the City of Windsor Heights wishes to support the efforts of the Foundation and contribute to community betterment; and

WHEREAS, the fees associated with rental of the Community Center and Pavilion from 4-10 PM during the nine Tuesdays in June and July of 2020 are estimated to total \$4,556.25 ; and

WHEREAS, the Windsor Heights Foundation is requesting these fees be waived.

NOW, THEREFORE BE IT RESOLVED that the rental fees associated with Nights in the Heights hosted by the Windsor Heights Foundation be waived;

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

RESOLUTION NO. 2020-11

A RESOLUTION WAIVING FEES FOR THE COMMUNITY CENTER FOR THE WINDSOR HEIGHTS CHAMBER OF COMMERCE FOR THE CELEBRATE WINDSOR HEIGHTS EVENT ON MARCH 26, 2020

WHEREAS, the Windsor Heights Chamber of Commerce will be hosting their Celebrate Windsor Heights event in the Community Center on March 26th from 5-7 PM; and

WHEREAS, the Chamber of Commerce is selling tickets to this event for \$25 as a fundraiser to support their mission; and

WHEREAS, the Chamber of Commerce will be honoring the Citizen and Business of the Year; and

WHEREAS, the costs associated with this rental will total \$425; and

WHEREAS, the Chamber of Commerce will clean the facility themselves after the event.

NOW, THEREFORE BE IT RESOLVED that the rental fees associated with Celebrate Windsor Heights hosted by the Windsor Heights Chamber of Commerce on March 26, 2020 be waived.

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk

RESOLUTION NO. 2020-12

A RESOLUTION WAIVING FEES FOR THE COMMUNITY CENTER FOR THE WINDSOR HEIGHTS CHAMBER OF COMMERCE FOR MOVIES IN THE PARK ON FEBRUARY 13, 2020

WHEREAS, the Windsor Heights Chamber of Commerce will be hosting a Movies in the Park event in the Community Center on February 13th from 5-10 PM; and

WHEREAS, the Chamber of Commerce is hosting this event for the public; and

WHEREAS, there is no fee or charge to the public to attend this event; and

WHEREAS, the costs associated with this rental will total \$675; and

WHEREAS, the Chamber of Commerce will clean the facility themselves after the event.

NOW, THEREFORE BE IT RESOLVED that the rental fees associated with Movies in the Park hosted by the Windsor Heights Chamber of Commerce on February 13, 2020 be waived.

Passed and approved this 20th day of January 2020.

Dave Burgess, Mayor

ATTEST:

Travis Cooke, City Clerk



Windsor Heights Public Safety

POLICE ♦ FIRE ♦ EMS

Monthly Report



To: Interim City Administrator Mark Arentsen

From: Public Safety Director Chad McCluskey

Date: January 6, 2020

RE: November, 2019 Public Safety Monthly Report

MAJOR WORK AREAS:

- During the month of January, Patrol Officers will concentrate efforts to slow traffic and educate motorists along 73rd Street. With the construction at Clive Learning Academy, the area is experiencing even more congestion than normal.
- Officers will monitor 63rd Street, from Hickman Road south to the 1400 block where it 63rd turns into a wider roadway. Excessive speed is common on the two-lane portion of the roadway, as well as distracted driving.
- Officers will also spend extra time on Washington Avenue looking for speed and stop sign violations.
- Officers will monitor the area near Clive Elementary for parking violators on the side streets as complaints were made about issues in the area. With colder temperatures, people are parking on side streets in the no parking areas trying to get closer to the school, which creates a safety issue for other vehicles, pedestrians, and buses trying to make their way through the neighborhood near the school. Officers will also be enforcing other parking violations to include snow violations. Keeping the snow routes clear of vehicles allows Public Works to clear roadways of snow and at the same time gives them fewer obstacles to look out for while plowing.
- During the overnight hours, officers will spend extra time in the residential areas in attempt to prevent criminal activity.
- Officers will also focus on distracted driving during the month of January, specifically texting and driving. An increasing number of accidents result from distracted driving, not only locally, but nationally.
- The Investigations section will provide monthly in-service training for the department. The training will focus on the topics of sexual assault reports, crime-victim trauma, crime scene processing and investigative referrals.

- Investigators are working with other agencies in the metro to consolidate case information regarding a theft case. As a result, investigator's plan to present this information to the county attorney with the recommendation of a warrant(s).
- Fire Training for the month of December will cover Commercial Hood (vent) Inspections and Systems. The training is being instructed by Keith Martin with General Fire and Safety, a company who installs and maintains the hood vent systems for commercial properties.
- Paramedic/Firefighter Gerrit Foreman, Firefighter/EMT Brian Jones, and Paramedic/Firefighter James Mease will instruct "stop the bleed" and hands only CPR training for faculty and staff at Clive Learning Academy during the month of January.

ACCOMPLISHMENTS:

- During the month of December, officers concentrated patrol around the 1600 block of 73rd Street in effort to educate and enforce those exceeding the posted speed limit of 25MPH. 352 minutes were directed toward this goal. 3 citations and 8 warnings were issued for speed.
- With knowledge that the stop signs at 69th/Washington and 70th/Washington were not being adhered to officers gave extra focus to this area looking to educate and enforce stop sign violators. Officers spent 205 minutes in a marked patrol vehicle and in plain view. 3 Warnings were issued and officers noted over 20 vehicles apply brakes hard to make sure they stopped as they saw the marked unit.
- Officers continued to give extra attention toward educating and enforcing traffic and criminal violations along main roadways in and out of the city, knowing visual presence on the main thoroughfares is a deterrent in itself. Officers spent 2,730 minutes on this goal and issued 42 Citations and 30 Warnings and 9 Arrests. Enforcement included; Possession Controlled Substance-Marijuana, Driving While Barred, Driving While Suspended, Speeding, Registration Violation, No Insurance, failing to Maintain Control, No Driver's License, equipment violations, failing to Obey a Traffic Control Device.
- Officers focused attention toward parking violations in the city, to include snow violations. Keeping the snow routes clear of vehicles allows Public Works to clear roadways of snow and at the same time gives them fewer obstacles to look out for while plowing. During this goal officers spent 123 minutes and educated 4 drivers on fire lane violation and issued 17 snow ordinance citations.

- The Windsor Heights Police Department partnered with Klassic Kids Inc., Akili Design, Peterson Painting, Mr. and Ms. Executive, Walmart Des Moines - 73rd St and a couple of other community partners who asked to remain anonymous to facilitate this year's "Shop with a Cop" event. Thanks to the generous donations by our community partners, we were able to help brighten the holidays for ten local youth this year! Thank you to all who helped make this event possible.



- Officers and Firefighters participated in the Hy-Vee Food Drive during the month of December and were able to help bring in a truck load of food for the Urbandale Food Pantry
- Officer Irlbeck stopped a vehicle driving erratically on I-235. The driver showed signs of alcohol impairment and was tested. The driver failed testing showing a blood alcohol content of .178. The driver was cited for OWI 1st.
- Officer Irlbeck noticed a vehicle travelling at 45 MPH on I-235 and got behind the vehicle. Once behind the vehicle the hazard lights came on and the vehicle quickly exited the interstate. Officer Irlbeck ran the license plate of the vehicle and found the registered owner had a barred license. Officer Irlbeck stopped the vehicle and found the driver was in fact the registered owner who was also in possession of marijuana. The driver was cited for Driving While Barred and Possession of Controlled Substance 2nd.
- Officers Clingan and Davison were dispatched to a local restaurant where an assault had just occurred. Upon their arrival, four of the suspects fled on foot and officers gave chase. Officer Clingan caught one and Davison the other. One of the victims who was punched in the face did not want to prosecute and another did. One male was taken to the Polk County Jail on the charge of Harassment 1st because the suspect threatened to shoot the victim.
- Officer Johnson stopped a vehicle that had no license plates and a loud exhaust. Upon speaking with the driver Officer Johnson noticed the odor of marijuana coming from within the vehicle. The vehicle was searched and marijuana was located. The driver was charged with Possession of Controlled Substance and many driving charges.
- Officer Irlbeck stopped a vehicle that was speeding (78MPH in a 60MPH Zone) on I-235. The driver showed signs of alcohol impairment and was tested. The driver failed testing showing a blood alcohol content of .222. The driver was cited for OWI 1st.

- Officer Irlbeck stopped a vehicle that was speeding (85MPH in a 60MPH Zone) on I-235. The driver showed signs of alcohol impairment and was tested. The driver failed testing showing a blood alcohol content of .112 . The driver was cited for OWI 1st.
- Detectives continued to work on two cases where catalytic converters were stolen from parked motor vehicles in October of 2019. Detectives worked with other agencies to identify the individual(s) involved. Detectives did not obtain any leads and the cases were suspended.
- Officers completed sex offender checks within the city this month. There were five individuals that required contact and four of them were compliant. One registrant was non-compliant and their status was reported to the Polk County Sheriff's Office.
- Detectives continued to work a credit card fraud case from November. Detectives spoke with witnesses and gathered video from area businesses to review. Detectives were able to identify two individuals involved in this case but were unable to locate their whereabouts. Arrest warrants have been requested as a result of probable cause findings.
- Detectives were assigned a sexual assault case in November. After several interviews and follow up with the victims and known associates, the suspect was arrested and charged with sex assault 3rd. The suspect gave a full confession of the crime committed and was arrested before taken to Polk County Jail.
- Detective Nissen, along with Detective Woods and Captain Meyer, worked on a narcotics investigation during the month of December. As a result of this investigation by detectives and patrol officers, a search warrant was obtained for the residence and vehicles associated with the address.
- Detectives suspended two forgery cases after exhausting leads and working with several other metro departments with similar cases.
- Detective Nissen and Detective Woods had trial reference case where the victim had an appointment to receive a massage. The victim was sexually assaulted during the massage by the person giving the massage, and the suspect requested a jury trial. Detectives testified in the trial and the suspect was found guilty. The suspect will be sentenced to a mandatory 10-year sentence in prison on January 29, 2020.
- Captain Meyer, while working off duty at Bankers Trust, was alerted to an elderly female withdrawing large sums of money and making transfers to individuals on a regular basis. The bank employees and Captain Meyer found the circumstances to be suspicious in nature after speaking with the elderly female. Detective Nissen was able to get hold of a relative and advise them of the situation. After speaking with relatives it was determined that the female was being exploited. The relative filed a police report in the jurisdiction where the victim lived and appropriate steps were put in place so that she won't be victimized again.
- Paid-On-Call Firefighter Brett Merseal was promoted to fulltime Firefighter/EMT in December and was assigned to "B" Shift with Paramedic/Firefighter Jared Dumermuth. We are excited to help Brett continue his firefighting career. Brett joined the department in July of 2016 and was one of approximately 15 applicants for the fulltime position.

- Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Dayton Harryman, and Firefighter/EMS Jessie Evans provided a station tour for the Easter seals on December 3, 2019.
- Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Brett Merseal, and Firefighter/EMT Jessie Evans continued the Fire Department goal of deep cleaning and organizing during the month of December. The team deep cleaned the crew sleeping quarters and threw out an old, broken couch. The couch was cut up for disposal, which allowed a unique opportunity for some of our Police Officers to be exposed to rescue tools and see how they work, including the “jaws of life” and our cutters.
- Paramedic/Firefighter Jared Dumermuth and Firefighter/EMT Brett Merseal visited with a Valley High School student who came to the Fire Department. The student is 16 years old and is currently a lifeguard with Clive Aquatic Center. The student aspires to be a firefighter. Dumermuth and Merseal walked him through our equipment on the ambulance and the engine. The student donned fire gear, including an SCBA and face piece, and dragged a 175-pound dummy.
- Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Brett Merseal, and Firefighter/EMT Dayton Harryman took the initiative to reprogram fire pagers so they automatically reset. In the past, the pagers were set to “monitor” after they went off, causing disruption to council meetings and other events in the building. The pagers will now automatically reset to help prevent this issue in the future.
- Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Brett Merseal, and Firefighter/EMT Dayton Harryman checked all fire extinguishers in City owned facilities as part of the monthly checks as assigned. All extinguishers were charged and compliant.
- Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Brett Merseal, Firefighter/EMT Dayton Harryman and Chief McCluskey cleaned out the room on the east side of the council chambers as part of the deep cleaning goal for the Fire Department. The storage room was cluttered with debris, trash and old items without a home. The room was cleaned, organized and disinfected with the Fire Department UV Light. The UV light was also used to disinfect the council chambers and the Fire Department sleeping quarters.
- Ambulance 553 was out of service for several days at the end of December. The check engine light came on in the truck on Friday, December 27th and it was checked with no issue being found. On Monday, December 30, the light came on again and the vehicle was taken to our mechanic. An issue with the fuel pressure was identified. Due to the holiday falling in the middle of the week, the truck was not placed back in service until Saturday, January 4th. A huge thank you to our partners with Clive and Urbandale Fire Departments for assisting with medical transports while the truck was out of service.
- Seven rentals were inspected during the month of December, with several others electing to wait until after the holidays. Over 20 letters of non-compliance were mailed out and more than 22 letters related to upcoming due dates for inspections were sent out. A total of 13 owners have yet to answer or contact the Fire Department. Paramedic/Firefighter Jared Dumermuth has been working extremely hard to get the rental database updated and organized and his efforts do not go unnoticed.

- On December 9, the Fire Department had four people on-duty during the day as Firefighter/EMT Brett Merseal was in orientation. A 9-1-1 call was dispatched related to a chest pain call. Once units arrived, the EKG showed the patient was having a heart attack. The receiving hospital called a “Cardiac Alert” and the patient was moved to a resuscitation room upon arrival at the hospital. As a result of the quick actions by the crew, and the new cardiac monitor, a quick EKG was obtained and early recognition resulted in a positive outcome for this patient.
- On December 21, on-duty Fire Department crews, along with paid-on-call members, were conducting some in-house training on hose deployment. Paramedic/Firefighter Jared Dumermuth, Firefighter/EMT Brett Merseal, Firefighter/EMT Jessie Evans, Firefighter/EMS Robert Fleming, and Firefighter/EMT Jacob Eslick were all participating in the non-mandatory training. At the beginning of the training, crews were dispatched to a cardiac arrest call. While enroute, crews were told the call may involve a Heroin overdose. Crews were also notified on-scene Police Officers had administered two doses of Narcan and were starting CPR. Once on-scene, fire crews took over patient care and Firefighter/EMT Jessie Evans continued CPR efforts. The LUCAS device was attached to the patient and the patient regained consciousness while crews were working to get the LUCAS device started. The patient was able to consent to treatment and walked to the stretcher. Care was provided by J. Dumermuth and J. Evans enroute to the hospital. The patient was alert and coherent upon arrival to the hospital and remembered the majority of the events. Quick actions by Officers Palmer and Bowers, along with follow-up care by Dumermuth, Jessie Evans, Merseal, Fleming and Eslick resulted in the patient surviving the event.
- Firefighter/EMT Brett Merseal worked through orientation on multiple shifts throughout December. Once assigned to “B” Shift with Paramedic/Firefighter Jared Dumermuth, daily company training was scheduled each shift, including both fire and EMS topics. Topics covered included scene size-up, ladder ops and inspections, knots (uses and techniques), hose component familiarization, BLS vitals, ACS, CPR, airway management, and capnography.
- On December 4th, Paramedic/Firefighter Don Nekola, Firefighter/EMT Nick Evans, and Firefighter/EMT Brett Merseal were dispatched to the 7800 block of Hickman for a motor vehicle crash involving two passenger cars. The crash occurred when a driver of one vehicle was not paying attention and rear-ended a vehicle sitting at a red light. The impact pushed the car through the intersection. The driver ended up being transported for neck and back pain. Fluids from the car that rear-ended the other were on the ground and needed cleaned up by fire crews.
- On December 7th, while the fire department was conducting driver/operator training exercises, crews were dispatched to Cowles Elementary School for a fire alarm. Paramedic/Firefighter Don Nekola, Firefighter/EMT Nick Evans, and Firefighter/EMT Brett Merseal responded, and on arrival it was found that a series of smoke alarms were bad and were the cause of the fire alarm.

- On December 13th, Paramedic/Firefighter Don Nekola, Firefighter/EMT Nick Evans, and Firefighter/EMT Jeff Price were dispatched to the 3.5 Mile Marker of I-235 for a motor vehicle crash involving two passenger cars. The crash occurred when a driver of one vehicle rear-ended a vehicle that was slowing down for slowing traffic ahead. Fluids from the car that rear-ended the other were on the ground and needed cleaned up by the FD. No injuries in this incident. Once fluids were cleaned up by the FD, they remained on scene to protect the accident scene. Just after going back in service from the crash on I-235, WHFD crews were dispatched to 63rd and Hickman Rd. for a motor vehicle crash involving passenger car and pickup. Firefighter/EMT Jacob Eslick also responded to this alarm. Once on scene the crash was located at Western Hills & Hickman Rd. Again, the crash was caused by inattention when a driver of one vehicle rear-ended a vehicle that was slowing down for slowing traffic ahead. Fluids from the car that rear-ended the other were on the ground and needed cleaned up by the FD. No injuries in this incident. Both cars were able to be moved off of the roadway and all lanes of Hickman were opened back up.
- On December 22nd just after 10:00 pm, Paramedic/Firefighter Don Nekola and Firefighter/EMT Nick Evans were dispatched to the apartments at 63rd & Hickman, on the Des Moines' side, for a gunshot victim. While enroute dispatch advised there were three gunshot victims on scene. Two adults, both with multiple gunshot wounds and a child with one gunshot wound. Chief McCluskey also responded to the scene, as did Officer Irlbeck and Officer Johnson. When Windsor Heights Fire crews arrived, Des Moines medics were just leaving the scene with the two adults. Windsor Heights medics were directed to the child. Our patient was inside an apartment on a couch. The patient was loaded onto our cot and moved to the ambulance, where it was a more calm and quiet environment, to conduct an exam. During our exam the child was found to be breathing normally. A detailed exam was done where an entrance and exit wound found on the boy's foot. Bleeding control was accomplished. On the opposite leg, a second bullet wound was found, but luckily did not enter the body. The boy was transported to the hospital for further care.
- Christmas Day turned out to be busy for the Windsor Heights Fire Department. A total of six medical calls were received, along with a mutual aid request on a residential structure fire in Johnston. Paramedic/Firefighter Don Nekola, Firefighter/EMT Nick Evans, and Firefighter/EMT Dayton Harryman resolved all incidents efficiently.
- The Windsor Heights Firefighters Association brought smiles to faces of our youth and our adults alike with Santa Day during December. This is a great pre-Christmas event allowing our Fire Department to connect with the community.
- On December 27, Paramedic/Firefighter Jeremy Dietch, Firefighter/EMT Brian Jones, and Firefighter/EMT Marcus Thie were dispatched to a traffic crash at 73rd and University. When units arrived, they found the vehicle had crashed following a pursuit with Des Moines Police. The driver was transported to the hospital, with a police escort, complaining of back pain.
- Monthly EMS training focused on Coaching the Emergency Vehicle Operator/emergency driving. Toward the end of the month, our Medical Director, Dr. Poole, gave training related to cold weather emergencies, seizures and trend updates.

PATROL	Jan 18	Jan 19	Feb 18	Feb 19	Mar 18	Mar 19	Apr 18	Apr 19	May 18	May 19	Jun 18	Jun 19	Jul 18	JUL 19	AUG 18	AUG 19	SEP 18	SEP 19	OCT 18	OCT 19	NOV 18	NOV 19	DEC 18	DEC 19	CY18	CY 19
Calls for Service	721	804	625	804	737	1156	719	961	836	879	1050	838	1051	897	994	905	964	834	908	774	835	693	807	10247	9545	
Incidents	143	108	81	107	112	128	104	117	117	138	164	104	128	144	127	122	119	111	100	138	90	116	99	1384	1333	
Arrests	55	47	30	43	48	67	46	69	57	62	59	65	52	58	46	60	50	50	40	64	42	47	44	569	632	
Total Number of Charges	117	68	53	62	100	120	81	110	121	107	122	80	80	91	89	93	86	77	69	103	56	66	78	1052	977	
OWI Arrests	5	10	3	3	4	2	1	4	5	4	3	4	3	4	4	10	3	6	1	7	2	11	5	39	65	
Criminal Complaints Filed	68	59	42	49	58	64	50	47	58	71	76	59	56	63	67	51	43	46	56	76	35	56	30	639	641	
Felony Charges Filed	3	2	3	5	2	6	0	6	4	4	2	6	3	7	1	7	4	2	3	12	2	3	1	28	60	
Field Interviews	2	1	3	1	0	1	2	0	2	1	0	0	0	2	2	2	2	0	0	1	0	0	0	13	9	
Supplemental Reports	22	37	35	32	36	41	30	47	28	39	44	31	23	41	36	51	26	38	29	42	15	50	31	355	449	
Accidents	18	25	11	27	18	19	16	20	16	23	25	22	20	23	25	18	22	20	20	21	20	26	23	234	244	
Citations Issued	148	113	134	125	131	198	131	195	178	143	166	165	171	136	122	136	153	99	128	191	114	131	150	1726	1632	
Written Warning Citations Issued	56	54	77	69	99	134	62	122	80	72	84	97	111	73	72	80	84	52	85	20	72	46	76	958	819	

INVESTIGATIONS	Jan 18	Jan 19	Feb 18	Feb 19	Mar 18	Mar 19	Apr 18	Apr 19	May 18	May 19	Jun 18	Jun 19	Jul 18	JUL 19	AUG 18	AUG 19	SEP 18	SEP 19	OCT 18	OCT 19	NOV 18	NOV 19	DEC 18	DEC 19	CY18	CY 19
Cases Assigned by Month	8	3	5	4	2	4	6	12	5	8	4	2	5	4	5	4	5	8	6	14	2	3	10	63	66	
Cases Open	35	6	37	3	34	3	30	5	33	6	36	5	31	2	27	5	27	5	12	8	9	10	17	328	58	
Cases Active by Month	2	1	5	1	2	1	4	3	3	6	3	0	3	1	4	2	4	4	1	8	1	2	5	37	29	
Cases Inactive	3	2	2	3	2	4	10	5	1	4	2	3	0	3	3	3	6	9	4	1	4	1	37	41		
Cases Cleared by Arrest	7	0	0	4	1	0	0	4	1	0	0	0	3	0	3	0	3	2	0	2	0	3	2	20	15	
Cases Cleared Exceptional Clearance	0	1	0	1	0	1	1	0	0	0	0	0	0	1	0	3	0	0	2	1	0	0	2	5	8	
Cases Unfounded	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2	0	0	0	0	2	4	

ATE Program

7100 University

Vehicle Count	293338	269690	266744	251727	310188	293265	314431	311720	341593	321018	352699	282977	333059	197909	336,568	208,498	341,614	174,861	323,385	213,449	301,476	187,419	306,763	3821858	2712533
Citations Issued	749	581	506	417	739	635	941	622	983	667	1045	512	981	83	1057	103	501	83	994	106	759	82	791	10046	3891
% of drivers Cited	0.26%	0.22%	0.19%	0.17%	0.24%	0.22%	0.30%	0.20%	0.29%	0.21%	0.30%	0.18%	0.29%	0.04%	0.31%	0.05%	0.15%	0.05%	0.31%	0.05%	0.25%	0.04%	0.26%	0.26%	0.14%

6400 University

Vehicle Count	273621	297712	270396	274741	340226	308512	326787	333029	365103	351163	356498	293475	363002	254920	360126	243,289	365,746	270,786	346,752	271,166	320,821	241,065	324,504	4013582	3139858
Citations Issued	1811	1109	1618	994	1808	1509	1891	1570	1837	1487	1797	1000	2040	123	1731	140	649	145	1,572	138	1444	141	1134	19332	8356
% of drivers Cited	0.66%	0.37%	0.60%	0.36%	0.53%	0.49%	0.58%	0.47%	0.50%	0.42%	0.50%	0.34%	0.56%	0.05%	0.48%	0.06%	0.18%	0.05%	0.45%	0.05%	0.45%	0.06%	0.35%	0.48%	0.27%

FIRE DEPARTMENT STATISTICS

Total Calls for Service:	62	55	49	43	60	64	49	48	53	48	47	45	46	45	47	49	49	57	48	70	42	58	42	0	594	582
Unclassified Incidents	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Fire Incidents	2	0	4	1	3	2	5	5	2	5	1	0	2	0	1	2	3	1	3	3	2	5	0	0	28	24
Rescue and EMS Incidents	41	41	29	33	43	44	33	28	39	28	33	34	33	21	24	32	32	35	43	32	35	28	395	374		
Hazarous Conditions - No Fire	5	2	1	2	0	1	1	3	3	3	0	2	1	2	1	3	0	3	3	0	3	3	0	18	27	
Service Calls	2	4	6	3	7	8	2	6	4	6	9	4	4	4	15	10	3	14	4	9	5	6	8	69	74	
Good Intent Calls	8	5	5	3	5	3	7	2	1	2	5	3	2	3	5	6	5	4	1	6	3	6	1	48	43	
False Alarm / False Call Incidents	4	3	4	1	1	6	1	3	4	3	4	3	2	3	4	3	6	2	2	6	0	3	2	34	36	
911 Citizen Complaints	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	1	4	
Rental Inspections	17	19	13	4	11	17	8	10	8	14	5	28	5	14	2	6	2	5	14	5	4	7	16	6	105	135
Commercial Inspections	12	1	6	13	6	13	0	10	15	2	0	3	0	4	0	0	0	0	0	0	0	0	0	0	39	46
Commercial Re-Inspections	6	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
PrePlans Completed	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	

Public Works Staff Report for 20 January 2020 Council Meeting

Report covers 12/13/2019 – 1/16/2020

- PW Staff has finished taking down holiday lights from the decorative street lights on University Avenue.
- We got an ICAP safety grant for both the City and the UWHD. We used the City's grant to pay for a repair on the slide at the playground and the UWHD for personal protective equipment for the operators and some workzone signage.
- I have been getting the County caught up on the permit reporting from the second half of 2019. They need to know building and trade permits that were submitted to the City in order to update valuations on properties.
- Worked with Whitney on newsletter content for the January and February newsletters. Requested that we post some items on the social media pages about snow ordinance information.
- Worked through some sign permitting requests for a couple new businesses in town. Met with one of the sign contractors with Mark.
- We have been out plowing several times over the last month. Most of the winter operations have just been treating the roads with salt.
- I looked into installing under bridge lighting under the I-235 bridge over Walnut Creek. Total project cost for this is approximately \$22,000.
- The Citywide garage sale will be May 16th. The garbage pick up will be June 6th. Whitney will be including this information in the next newsletter.
- Discussions surrounding a regional detention basin on North Walnut Creek at Cutty's are moving along well. We met with the original design engineer, Cutty's representatives, Grimes City Staff, and the County on 1/8. Our next goal is to have a benefits analysis substantially completed by

the end of February. If it appears that a project at this location makes sense from a cost/benefit standpoint, we will approach affected communities and seek their support.

- Listened in on a webinar about the CRS and Hazard Mitigation put on by FEMA.
- I am attending floodplain manager training in Moline January 28-31.
- The budget work has gone very smoothly – in large part thanks to Rachelle!
- We received a complaint about pitbulls in the dog park. We are surveying other metro communities to see what their policies are. If our policy is out of line with the rest of the metro we may bring an action item to council. It is too early to tell yet what this will look like though.
- I am requesting that we do a PCC Patching project in the summer of 2020. The locations to be patched are on 70th Street between Hickman and Wilshire, the approaches to the 73rd Street Bridge as it crosses Walnut Creek, and the west lane on SB 73rd Street near the entrance to the YMCA. These areas cannot wait further for repair. My initial cost estimate for construction on these projects is \$502,595. This is not ready for council consideration, yet. My hope is to bring it to the 2/5 council meeting.
- I am still working on getting a bid for the hand rail at the Community Center. Three contractors have told me that they are not interested in the project. I am working with a fourth contractor now. They are requesting a design for the handrail, which I'm not thrilled about taking on. It would be my preference that the contractor handle the design, fabrication, and installation of the handrail. If I am not able to find anyone to do this I may have to get someone to design a rail.
- I spent quite a bit of time tracking down cost estimates for an exercise equipment circuit or Colby Park. Clinton, IA installed a system for \$130,000. I have found base estimates for a pretty plain set of equipment for about \$65,000. This price would not include City installation time or materials.
- Mark submitted a Letter of Support to the STBG funding subcommittee for a grant application sponsored by Clive to bring B Cycles to the west suburbs. This is something that staff started working on about a year ago so it's good to see that progress is being made.

- Worked through some traffic issues near the Clive Learning Academy that were caused by construction activities on the school property. I think we've got a solution in place to make everyone happy and not inconvenience the City or School unduly.

*****Please let me know if you have questions about anything in this report and I can get you more information*****

Communications/Recreation 2019 Staff Report

Covers 12/13/19 – 1/13/20

Communications

- The first e-newsletter was released on Thursday, January 2nd. It had an open rate of 42%. The industry average is 27%. This was sent to 1005 people. That email list was partially generated by the previous communications coordinator. I also put out multiple social media posts to gain new email subscribers. Future e-newsletters will be sent out on the first Thursday of every month.
- The first edition of the print newsletter will be mailed out in March. Nine people have asked to receive the newsletter. Because the number is small, I will be printing and mailing these from City Hall and will not be using an outside service. The printed newsletter will be exactly the same as the emailed newsletter. The Communications Committee will decide before the end of 2020 if the print newsletter will continue into 2021.
- City Council meeting videos are now available to view on the City's website, Facebook, Twitter, and YouTube accounts. They will be available on Facebook Live until March. Before each meeting, I post on Facebook letting residents know that the Facebook Live video will discontinue in March. There has been very little push back about this. Currently, I record the Facebook Live video through the webcam and also record the meeting on the City's camera equipment. The internet bandwidth is extremely low with upload speeds as low as 1 Mbps and download speeds around 12 Mbps. Because of this, it takes hours or even days (based on the length of the meeting) to import, render, export, and upload video files. The first video took 8 hours to export alone. I was able to get the second video out much faster because the meeting was only 15 minutes making the video file substantially smaller. My goal is to have these videos available the day after Council meetings. But right now, it may take longer due to our internet bandwidth, which hopefully will be upgraded in a few months.
- Social media numbers
 - Facebook – we have 1909 Facebook followers. Our posts have reached 1895 people in the past month and the City's profile has been viewed 357 times. The 1/6/20 Facebook Live video reached 437 people, with 39 people watching it for 3 seconds or more, this does not count live views, which averaged around 10 views during the live recording. Videos on YouTube (which is linked to our website, Twitter, and Facebook accounts) have been viewed 36 times with the average view being 3.5 minutes. Facebook does not calculate the average view time. There have been 37 posts.

- Twitter – has 645 followers. In the past 28 days we've had 7,755 tweet impressions and 70 profile visits for 25 tweets.
- Instagram – there have been 23 posts in the past month and there are 185 followers.
- I've continued to update and create new graphics as needed for social media.
- Website – I've continued to update the website as needed. This means adding new news flashes, updating old copy for clarification or to adjust dates, adding new staff images, adding new pages, and more.

Community Center

- The rental and payment process for the Community Center is in the process of moving online. Rachele, Travis, and I had a conference call with CivicRec. This is an additional software through our Website CivicPlus that will allow us to move the rental and payment process for the Community Center online. Implementing this software will not only save time during the rental process, but will present the Community Center in a more modern and efficient light. I have a meeting on 1/29 with CivicRec for training on the software and will begin the rollout process sometime after that. I will update the website as needed.
- The Community Center is booked through the summer of 2020, almost completely for weekends in the fall, and is starting to book into 2021. I continue to do several showings a week and handle all phone calls and emails in regards to the City. People who tour the facility for the first time always express how much they like the space.

Front Desk

- I have answered all phone calls coming into City Hall's main line. During the past month, residents have had a lot of questions about winter yard waste collection. I help every resident that comes into City Hall. I distribute mail every day to employees at City Hall.

Permits

- I am helping Safe Building with the permit process by collecting permit payments at City Hall and will be meeting with Safe Building on 1/22 to finalize our process workflow process with them.

Planning and Zoning Commission

- I attended the 1/8 PZC meeting to do minutes and will attend future meetings to do minutes.

Board of Adjustment

- I will attend the 1/15 Board of Adjustment meet to do minutes and will attend future meetings to do minutes.