CITY OF FRUITLAND

CONSTRUCTION PLANS FOR

NORTH STREET TRAIL

TRAIL EXPANSION

MARCH, 2024

GOVERNING SPECIFICATIONS

THE 2024 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS".

MUTCD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.

IOWA ONE CALL
1-800-292-8989 | 811
www.iowaonecall.com

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 OR 811

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 38-22, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

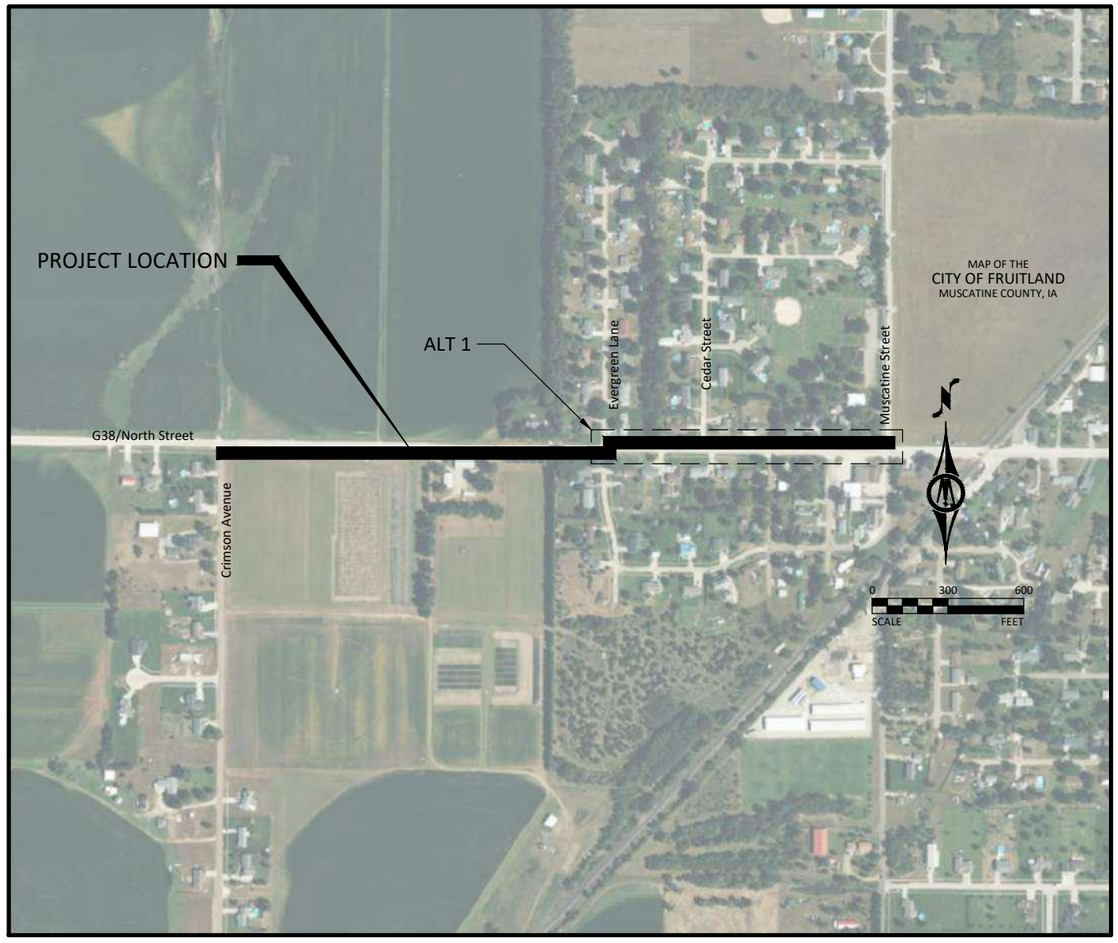
RESOURCE LIST

CITY OF FRUITLAND

City Hall
104 Sand Run Road
Fruitland, IA 52749
?563-264-1748

Mayor: Marty Hills

City Council Members:
Kirk Hogan
Susan Garrett
Sarah Hillman
Chris Painter
Jennifer Smith



MUSCATINE COUNTY, IA

INDEX OF SHEETS

SHEET	SHEET TITLE	REVISION	DATE ISSUED
A.01	TITLE SHEET	0	3/12/2024
A.02	LEGEND SHEET	0	3/12/2024
B.01	TYPICAL SECTIONS	0	3/12/2024
B.02	TYPICAL SECTIONS - ALT 1	0	3/12/2024
B.03	TYPICAL DETAILS	0	3/12/2024
C.01	ESTIMATED QUANTITIES	0	3/12/2024
C.02	ESTIMATE REFERENCE NOTES	0	3/12/2024
C.03	ALTERNATE ESTIMATE REFERENCE NOTES	0	3/12/2024
C.04	GENERAL PROJECT NOTES	0	3/12/2024
D.01	TRAIL PLAN AND PROFILE	0	3/12/2024
D.02	TRAIL PLAN AND PROFILE	0	3/12/2024
D.03	TRAIL PLAN AND PROFILE	0	3/12/2024
D.04	TRAIL PLAN AND PROFILE - ALT 1	0	3/12/2024
D.05	TRAIL PLAN AND PROFILE - ALT 1	0	3/12/2024
F.01	REMOVALS	0	3/12/2024
F.02	REMOVALS	0	3/12/2024
F.03	REMOVALS - ALT 1	0	3/12/2024
F.04	REMOVALS - ALT 1	0	3/12/2024
G.01	REFERENCES & BENCHMARKS	0	3/12/2024
K.01	PAVEMENT MARKINGS	0	3/12/2024
K.02	PAVEMENT MARKINGS - ALT 1	0	3/12/2024
R.01	EROSION CONTROL	0	3/12/2024
R.02	EROSION CONTROL	0	3/12/2024
R.03	EROSION CONTROL - ALT 1	0	3/12/2024
R.04	EROSION CONTROL - ALT 1	0	3/12/2024
S.01	SIDEWALK SHEETS	0	3/12/2024
S.02	SIDEWALK SHEETS	0	3/12/2024
S.03	SIDEWALK SHEETS - ALT 1	0	3/12/2024
S.04	SIDEWALK SHEETS - ALT 1	0	3/12/2024
S.05	SIDEWALK SHEETS - ALT 1	0	3/12/2024
S.06	SIDEWALK SHEETS - ALT 1	0	3/12/2024
S.07	SIDEWALK SHEETS - ALT 1	0	3/12/2024
W.01	CROSS SECTIONS	0	3/12/2024
W.02	CROSS SECTIONS	0	3/12/2024
W.03	CROSS SECTIONS	0	3/12/2024
W.04	CROSS SECTIONS - ALT 1	0	3/12/2024
W.05	CROSS SECTIONS - ALT 1	0	3/12/2024

LICENSED PROFESSIONAL ENGINEER
JUSTIN L. ERNST 23753
IOWA

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.

LICENSE NUMBER: 23753 DATE: 3/12/24

MY LICENSE RENEWAL DATE IS Dec. 31, 2025

PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEET

Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282A01.dwg 2/27/2024 2:28:42 PM

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM
DRAWN JRG
CHECKED JLE
CLIENT PROJ. NO. 0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
TITLE SHEET

SHEET A.01

EXISTING TOPOGRAPHIC SYMBOLS

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

Do Not Use for Construction

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
- TRAFFIC SIGNS

SURVEY SYMBOLS

- BENCHMARK LOCATION
- CONTROL POINT
- MONUMENT FOUND
- CAST IRON MONUMENT
- STONE 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
- TEMPORARY EASEMENT

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
- TRENCHLESS PIPE (PLAN VIEW)
- TRENCHLESS PIPE (PROFILE VIEW)

GRADING INFORMATION

952
950
952
950
× 953.53
× STA:5+67.19
980.87
1:4

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

HATCH PATTERNS

- PCC DRIVEWAY
- PCC TRAIL

EXISTING PRIVATE UTILITY LINES

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 GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

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 38-22, 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

UTILITIES IDENTIFIED WITH A QUALITY LEVEL :

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: G-A G-A UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-02.

UTILITY QUALITY LEVELS:

QUALITY LEVEL D: PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

QUALITY LEVEL C: INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

QUALITY LEVEL B: INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

QUALITY LEVEL A: PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

ABBREVIATIONS

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

HORZ. 0 10 20
SCALE FEET

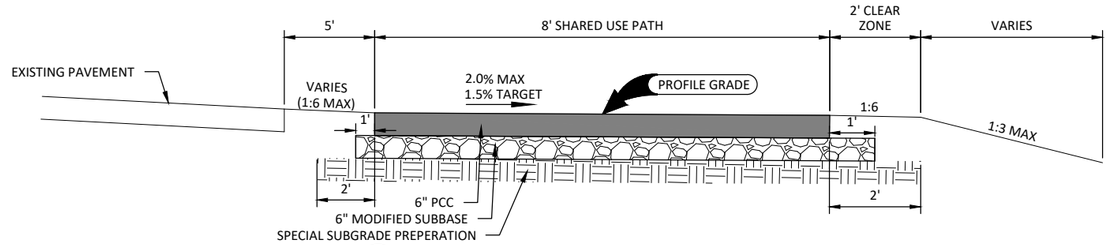
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. OG1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
LEGEND SHEET

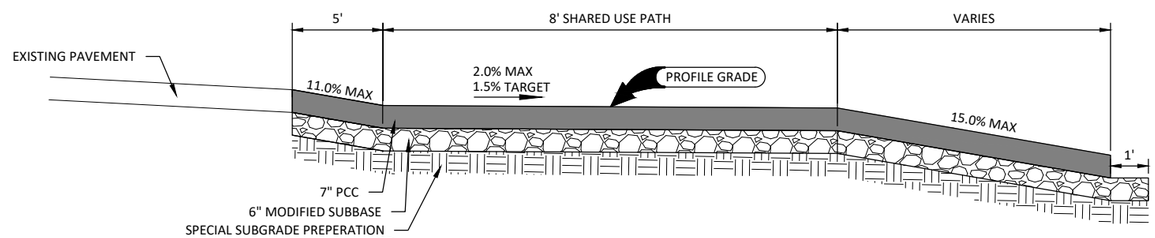
SHEET A.02

© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\CD\131282A01.dwg 2/27/2024 2:28:43 PM



1 / 2 SHEETS — TYPICAL SECTION: STA. 201+00 TO 215+75

NTS



2 / 2 SHEETS — DRIVEWAY TYPICAL SECTIONS: STA. 209+22 TO 209+52 & 211+90 TO 212+10

NTS

NOTE

1. SEE CROSS SECTIONS FOR ACCURATE SLOPES.

Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282B01.dwg 2/27/2024 2:28:51 PM

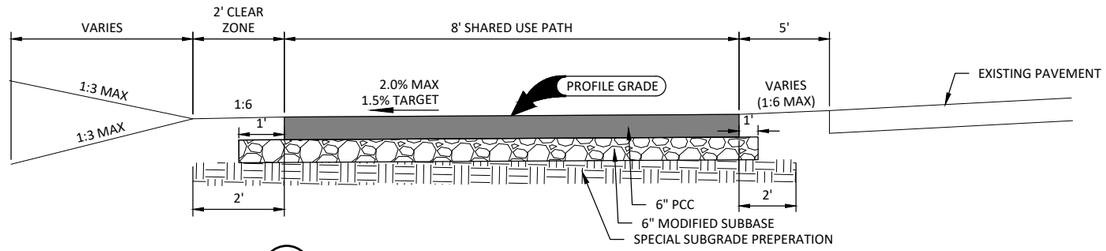
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

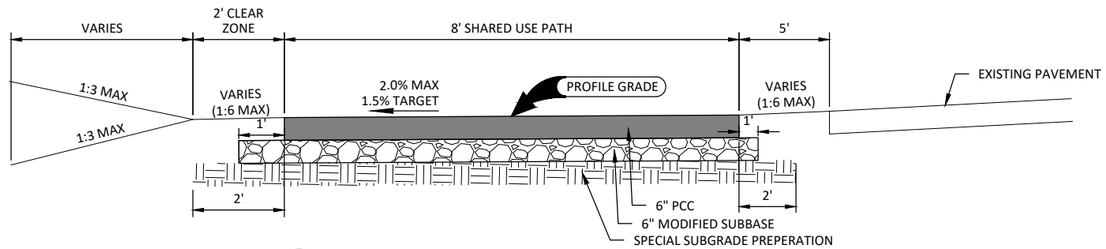
FRUITLAND, IOWA
NORTH STREET TRAIL
TYPICAL SECTIONS

SHEET B.01



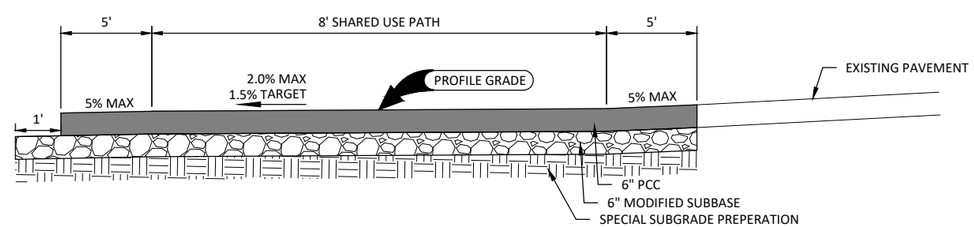
3 / 0 SHEETS — TYPICAL SECTION: STA. 316+40 TO 321+60

NTS



4 / 0 SHEETS — TYPICAL SECTION: STA. 322+20 TO 324+60

NTS



5 / 0 SHEETS — TYPICAL DRIVEWAY SECTION: STA. 321+87 TO 322+18, 323+98 TO 324+08, & 324+88 TO 325.22

NTS

NOTE

1. SEE CROSS SECTIONS FOR ACCURATE SLOPES.

Do Not Use for Construction

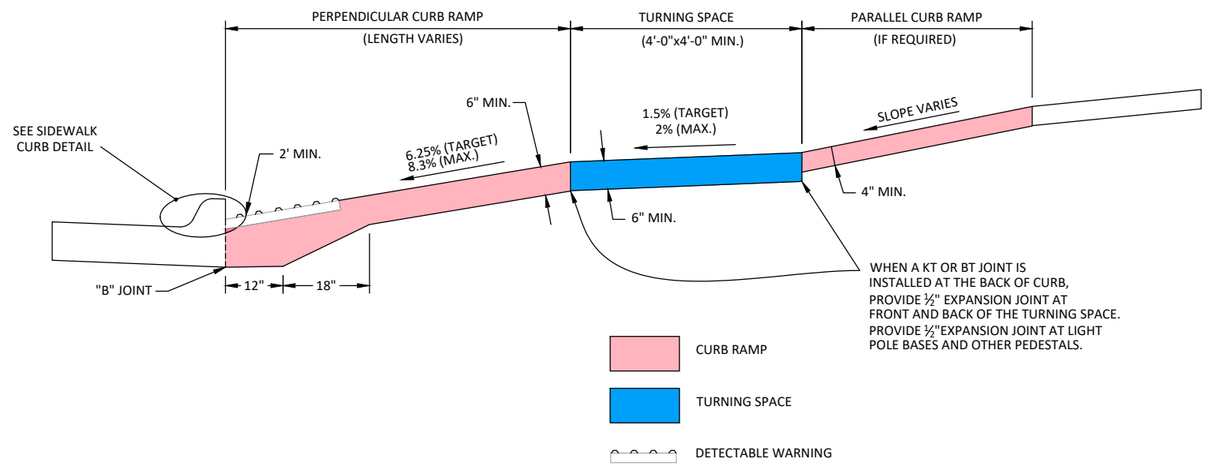
© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282B01.dwg 2/27/2024 2:28:51 PM

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

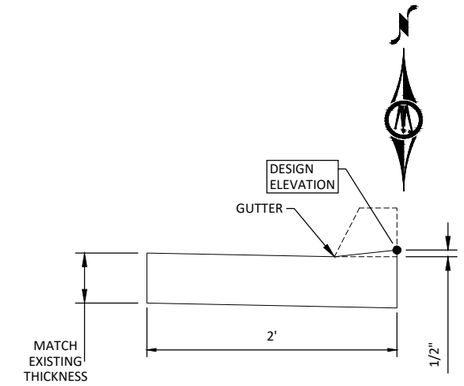
DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
TYPICAL SECTIONS - ALT 1

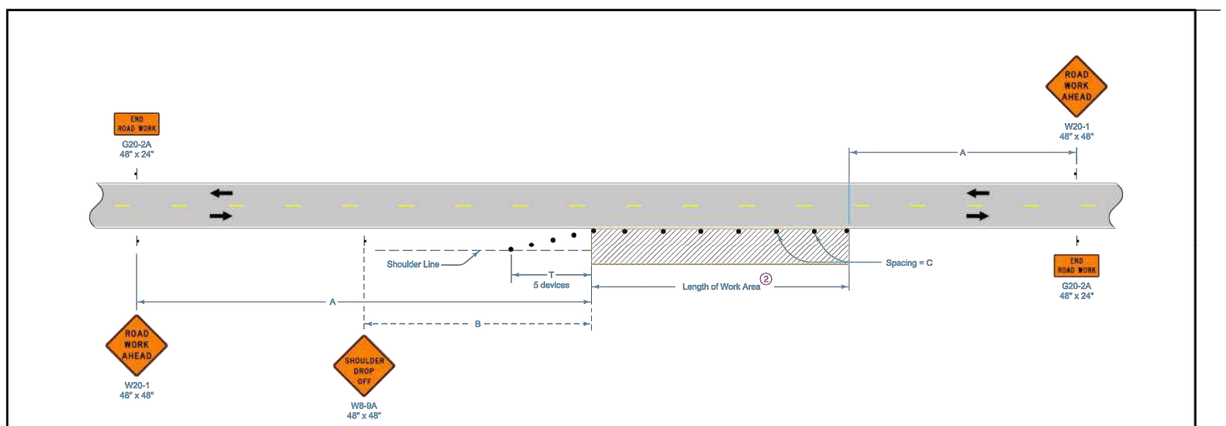
SHEET B.02



6 / 5 SHEETS TYPICAL SECTION: CURB RAMP
NTS



7 / 5 SHEETS TYPICAL SECTION: SIDEWALK CURB
NTS



When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.K2 of the Standard Specifications.

For work lasting less than one hour, refer to TC-1.

① When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

② For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

Possible Contract Item:
Traffic Control

LEGEND

- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)*	A	B	C ②	T
35 or less	500'	250'	40'	100'
40 - 45	1000'	350'	80' ①	200'
50 or greater	1000'	500'	100' ①	200'

*Select limit reflecting regulatory speed limit before road work.

Do Not Use for Construction

IOWA DOT
STANDARD ROAD PLAN

REVISION	
10	4-18-23

TC-202
SHEET 1 of 1

REVISIONS: Added speed limit note.

APPROVED BY DESIGN METHODS ENGINEER

WORK WITHIN 15 FT OF TRAVELED WAY

HORZ. SCALE 0 10 20 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
TYPICAL DETAILS

SHEET B.03

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_C_IA\0G1131282\CAD\C3D\131282B01.dwg 2/27/2024 2:28:52 PM

ESTIMATED PROJECT QUANTITIES - BASE BID

ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
1	2010-D-1	TOPSOIL, ON-SITE	CY	565	
2	2010-E	EXCAVATION, CLASS 10	CY	312	
3	2010-J	SUBBASE, MODIFIED, 6 IN	SY	1788	
4	7030-A	REMOVAL OF SIDEWALK	SY	30	
5	7030-C	SHARED USE PATH, PCC, 6 IN.	SY	1267	
6	7030-D	SPECIAL SUBGRADE PREPARATION FOR SHARED USE PATH	SY	2128	
7	7030-E	SIDEWALK, PCC, 4 IN	SY	30	
8	7030-E	SIDEWALK, PCC, 6 IN	SY	45	
9	7030-G	DETECTABLE WARNING	SF	70	
10	7030-H-1	DRIVEWAY, PAVED, PCC, 7 IN.	SY	137	
11	8020-X	SALVAGE AND REINSTALL SIGN	EA	2	
12	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
13	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING	AC	0.5	
14	9040-D-1	FILTER SOCK, 8 IN	LF	1600	
15	9040-D-2	FILTER SOCKS, REMOVAL	LF	1600	
16	11010-A	CONSTRUCTION SURVEY	LS	1	
17	11020-A	MOBILIZATION	LS	1	
18	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	
19	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	
20	11050-A	CONCRETE WASHOUT	LS	1	

ESTIMATED PROJECT QUANTITIES (ALTERNATE A)

ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
A1	2010-D-1	TOPSOIL, ON-SITE	CY	309	
A2	2010-E	EXCAVATION, CLASS 10	CY	159	
A3	2010-J	SUBBASE, MODIFIED, 6 IN	SY	1272	
A4	7030-A	REMOVAL OF SIDEWALK	SY	187	
A5	7030-A	REMOVAL OF DRIVEWAY	SY	145	
A6	7030-C	SHARED USE PATH, PCC, 6 IN.	SY	813	
A7	7030-D	SPECIAL SUBGRADE PREPARATION FOR SHARED USE PATH	SY	1495	
A8	7030-E	SIDEWALK, PCC, 4 IN	SY	38	
A9	7030-E	SIDEWALK, PCC, 6 IN	SY	94	
A10	7030-G	DETECTABLE WARNING	SF	142	
A11	7030-H-1	DRIVEWAY, PAVED, PCC, 6 IN.	SY	136	
A12	8020-B	PAINTED PAVEMENT MARKINGS, SOLVENT/WATERBORNE	STA	5	
A13	8020-X	SALVAGE AND REINSTALL SIGN	EA	5	
A14	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
A15	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING	AC	0.5	
A16	9040-A-1	SWPPP PREPARATION	LS	1	
A17	9040-A-2	SWPPP MANAGEMENT	LS	1	
A18	9040-D-1	FILTER SOCK, 8 IN	LF	1200	
A19	9040-D-2	FILTER SOCKS, REMOVAL	LF	1200	
A20	11010-A	CONSTRUCTION SURVEY	LS	1	
A21	11020-A	MOBILIZATION - ALTERNATE A	LS	1	
A22	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	
A23	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	
A24	11050-A	CONCRETE WASHOUT	LS	1	
A25	12040-X-X	STREET SIDE MAILBOX	EA	7	

Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282C01.dwg 2/27/2024 2:28:59 PM

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM
DRAWN JRG
CHECKED JLE
CLIENT PROJ. NO. 0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
ESTIMATED QUANTITIES

SHEET C.01

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-D-1	TOPSOIL, ON-SITE STRIP AND STOCKPILE TOPSOIL TO A DEPTH OF 6" MINIMUM BEFORE EXCAVATION OR FILL OCCURS. SPREAD TO A MINIMUM OF 8". 565 CY SHALL BE STRIPPED. 519 CY SHALL BE RESPREAD AND INCLUDES 30% SHRINKAGE FACTOR. EXCESS TOPSOIL AFTER SPREADING SHALL BE WASTED ON EMBANKEMENTS OR HAULED OFF AS DETERMINED BY THE ENGINEER. THIS ITEM WILL BE PAID OUT TO PLAN QUANTITY.
2	2010-E	EXCAVATION, CLASS 10 TOTAL PROJECT CUT VOLUME = 312 CY. TOTAL PROJECT FILL VOLUME = 174 CY AND INCLUDES 30% FILL FACTOR. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED. TYPE A COMPACTION SHALL BE USED TO CONSTRUCT EMBANKMENTS. CONTRACTOR TO FURNISH BORROW MATERIAL AND BORROW SITE. DITCH SHAPING TO BE CONSIDERED INCIDENTAL TO GRADING. THIS ITEM WILL BE PAID OUT TO PLAN QUANTITY.
3	2010-J	SUBBASE, MODIFIED, 6 IN WORK INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE. THIS QUANTITIY IS FOR SUBASE UTILIZED FOR TRAILS AND DRIVEWAYS INCLUDING 1' OUTSIDE PAVING LIMITS.
4	7030-A	REMOVAL OF SIDEWALK UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, SAWING, HAULING, AND DISPOSAL OF MATERIALS REMOVED.
5	7030-C	SHARED USE PATH, PCC, 6 IN. UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, JOINTING, SAMPLING, AND TESTING. CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. ALL DAMAGE TO TRAIL OCCURING PRIOR TO FINAL PROJECT ACCEPTANCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. TRAIL TO BE CLEANED PRIOR TO OPENING TO REMOVE DIRT AND DEBRIS. THIS ITEM DOES NOT INCLUDED THE DRIVEWAYS.
6	7030-D	SPECIAL SUBGRADE PREPARATION FOR SHARED USE PATH SEE DETAIL FOR TYPICAL SECTION. NOT USED FOR FILL CONDITIONS.
7	7030-E	SIDEWALK, PCC, 4 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, MINOR GRADE ADJUSTMENTS AT DRIVEWAYS AND OTHER INTERSECTIONS, SUBGRADE PREPARATION, FORMWORK, ADDITIONAL THICKNESS AT THICKENED EDGES, JOINTING, SAMPLING, AND TESTING.
8	7030-E	SIDEWALK, PCC, 6 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, MINOR GRADE ADJUSTMENTS AT DRIVEWAYS AND OTHER INTERSECTIONS, SUBGRADE PREPARATION, FORMWORK, ADDITIONAL THICKNESS AT THICKENED EDGES, JOINTING, SAMPLING, AND TESTING.
9	7030-G	DETECTABLE WARNING DETECTABLE WARNINGS SHALL BE CAST IRON, RED IN COLOR. CONTRACTOR TO SUBMIT COLOR FOR APPROVAL PRIOR TO PURCHASE.
10	7030-H-1	DRIVEWAY, PAVED, PCC, 7 IN. ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, ALL RESIDENTIAL DRIVEWAYS. THIS ITEM INCLUDES THE SHARED USE PATH THROUGH THE DRIVEWAY. CONCRETE WILL BE C MIX WITH MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE AND ROCK IS INCIDENTAL TO THIS ITEM.
11	8020-X	SALVAGE AND REINSTALL SIGN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVING THE SIGN ASSEMBLY, REMOVING THE POST AND ANCHOR HARDWARE, FILLING THE POST HOLE, DELIVERING THE TRAFFIC SIGN TO THE SITE DESIGNATED BY THE CONTRACTING AUTHORITY AND REINSTALLING SIGN ON NEW POST. REPLACING SIGNS AND POSTS DESIGNATED FOR SALVAGE THAT HAVE BEEN DAMAGED IS THE CONTRACTOR'S RESPONSIBILITY.
12	8030-A	TEMPORARY TRAFFIC CONTROL ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL; LANE CLOSURES; REMOVAL AND REINSTALLATION OR COVERING OF PERMANENT TRAFFIC CONTROL DEVICES THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL PLAN OR OTHER CONSTRUCTION ACTIVITIES; MONITORING AND DOCUMENTING TRAFFIC CONTROL CONDITIONS; AND FLAGGERS.
13	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING SEED TO BE SUDAS TYPE 6 MIXTURE. 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. SEEDING AREAS OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE CITY. WATERING PER SUDAS IS CONSIDERED INCIDENTAL TO THIS ITEM.
14	9040-D-1	FILTER SOCK, 8 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, ANCHORING STAKES.
15	9040-D-2	FILTER SOCKS, REMOVAL UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, RESTORATION OF THE AREA TO FINISHED GRADE AND OFF-SITE DISPOSAL OF FILTER SOCKS AND ACCUMULATED SEDIMENT.
16	11010-A	CONSTRUCTION SURVEY LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, THE COSTS OF RESETTING PROJECT CONTROL POINTS, RE-STAKING, AND ANY ADDITIONAL STAKING REQUESTED BEYOND THE REQUIREMENTS OF THIS SECTION.
17	11020-A	MOBILIZATION
18	11030-A	MAINTENANCE OF POSTAL SERVICE COORDINATE WITH USPS AND PROPERTY OWNERS FOR TEMPORARY MAILBOX LOCATION. ENSURING MAIL SERVICE IS MAINTAINED THROUGHOUT THE PROJECT. LOCATION AND SET UP OF MAIL BOX BANK TO BE APPROVED BY USPS AND ENGINEER PRIOR TO PLACEMENT.
19	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION CONTRACTOR SHALL COORDINATE WITH WASTE COLLECTION SERVICE TO ENSURE SERVICE IS MAINTEAINED THROUGHOUT THE DURATION OF THE PLROJECT INCLUDING RECYCLE, YARD WASTE AND CURB PICK UP ITEMS (WITH APPROPRIATE STICKERS). LABEL ALL BINS WITH ADDRESS BY REMOVALBLE MEANS.
20	11050-A	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282C01.dwg 2/27/2024 2:28:59 PM

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM
DRAWN JRG
CHECKED JLE
CLIENT PROJ. NO. 0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
ESTIMATE REFERENCE NOTES

SHEET C.02

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-D-1	TOPSOIL, ON-SITE STRIP AND STOCKPILE TOPSOIL TO A DEPTH OF 6" MINIMUM BEFORE EXCAVATION OR FILL OCCURS. SPREAD TO A MINIMUM OF 8". 565 CY SHALL BE STRIPPED. 519 CY SHALL BE RESPREAD AND INCLUDES 30% SHRINKAGE FACTOR. EXCESS TOPSOIL AFTER SPREADING SHALL BE WASTED ON EMBANKEMENTS OR HAULED OFF AS DETERMINED BY THE ENGINEER. THIS ITEM WILL BE PAID OUT TO PLAN QUANTITY.
2	2010-E	EXCAVATION, CLASS 10 TOTAL PROJECT CUT VOLUME = 312 CY. TOTAL PROJECT FILL VOLUME = 174 CY AND INCLUDES 30% FILL FACTOR. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED. TYPE A COMPACTION SHALL BE USED TO CONSTRUCT EMBANKMENTS. CONTRACTOR TO FURNISH BORROW MATERIAL AND BORROW SITE. DITCH SHAPING TO BE CONSIDERED INCIDENTAL TO GRADING. THIS ITEM WILL BE PAID OUT TO PLAN QUANTITY.
3	2010-J	SUBBASE, MODIFIED, 6 IN WORK INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE. THIS QUANTITIY IS FOR SUBASE UTILIZED FOR TRAILS AND DRIVEWAYS INCLUDING 1' OUTSIDE PAVING LIMITS.
4	7030-A	REMOVAL OF SIDEWALK UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, SAWING, HAULING, AND DISPOSAL OF MATERIALS REMOVED.
5	7030-C	SHARED USE PATH, PCC, 6 IN. UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, JOINTING, SAMPLING, AND TESTING. CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. ALL DAMAGE TO TRAIL OCCURING PRIOR TO FINAL PROJECT ACCEPTANCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. TRAIL TO BE CLEANED PRIOR TO OPENING TO REMOVE DIRT AND DEBRIS. THIS ITEM DOES NOT INCLUDED THE DRIVEWAYS.
6	7030-D	SPECIAL SUBGRADE PREPARATION FOR SHARED USE PATH SEE DETAIL FOR TYPICAL SECTION. NOT USED FOR FILL CONDITIONS.
7	7030-E	SIDEWALK, PCC, 4 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, MINOR GRADE ADJUSTMENTS AT DRIVEWAYS AND OTHER INTERSECTIONS, SUBGRADE PREPARATION, FORMWORK, ADDITIONAL THICKNESS AT THICKENED EDGES, JOINTING, SAMPLING, AND TESTING.
8	7030-E	SIDEWALK, PCC, 6 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, MINOR GRADE ADJUSTMENTS AT DRIVEWAYS AND OTHER INTERSECTIONS, SUBGRADE PREPARATION, FORMWORK, ADDITIONAL THICKNESS AT THICKENED EDGES, JOINTING, SAMPLING, AND TESTING.
9	7030-G	DETECTABLE WARNING DETECTABLE WARNINGS SHALL BE CAST IRON, RED IN COLOR. CONTRACTOR TO SUBMIT COLOR FOR APPROVAL PRIOR TO PURCHASE.
10	7030-H-1	DRIVEWAY, PAVED, PCC, 7 IN. ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, ALL RESIDENTIAL DRIVEWAYS. THIS ITEM INCLUDES THE SHARED USE PATH THROUGH THE DRIVEWAY. CONCRETE WILL BE C MIX WITH MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. COMPACTION OF SUBGRADE AND ROCK IS INCIDENTAL TO THIS ITEM.
11	8020-X	SALVAGE AND REINSTALL SIGN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, REMOVING THE SIGN ASSEMBLY, REMOVING THE POST AND ANCHOR HARDWARE, FILLING THE POST HOLE, DELIVERING THE TRAFFIC SIGN TO THE SITE DESIGNATED BY THE CONTRACTING AUTHORITY AND REINSTALLING SIGN ON NEW POST. REPLACING SIGNS AND POSTS DESIGNATED FOR SALVAGE THAT HAVE BEEN DAMAGED IS THE CONTRACTOR'S RESPONSIBILITY.
12	8030-A	TEMPORARY TRAFFIC CONTROL ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL; LANE CLOSURES; REMOVAL AND REINSTALLATION OR COVERING OF PERMANENT TRAFFIC CONTROL DEVICES THAT CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL PLAN OR OTHER CONSTRUCTION ACTIVITIES; MONITORING AND DOCUMENTING TRAFFIC CONTROL CONDITIONS; AND FLAGGERS.
13	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING SEED TO BE SUDAS TYPE 6 MIXTURE. 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. SEEDING AREAS OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE CITY. WATERING PER SUDAS IS CONSIDERED INCIDENTAL TO THIS ITEM.
14	9040-D-1	FILTER SOCK, 8 IN UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, ANCHORING STAKES.
15	9040-D-2	FILTER SOCKS, REMOVAL UNIT PRICE INCLUDES, BUT IS NOT LIMITED TO, RESTORATION OF THE AREA TO FINISHED GRADE AND OFF-SITE DISPOSAL OF FILTER SOCKS AND ACCUMULATED SEDIMENT.
16	11010-A	CONSTRUCTION SURVEY LUMP SUM PRICE INCLUDES, BUT IS NOT LIMITED TO, THE COSTS OF RESETTING PROJECT CONTROL POINTS, RE-STAKING, AND ANY ADDITIONAL STAKING REQUESTED BEYOND THE REQUIREMENTS OF THIS SECTION.
17	11020-A	MOBILIZATION
18	11030-A	MAINTENANCE OF POSTAL SERVICE COORDINATE WITH USPS AND PROPERTY OWNERS FOR TEMPORARY MAILBOX LOCATION. ENSURING MAIL SERVICE IS MAINTAINED THROUGHOUT THE PROJECT. LOCATION AND SET UP OF MAIL BOX BANK TO BE APPROVED BY USPS AND ENGINEER PRIOR TO PLACEMENT.
19	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION CONTRACTOR SHALL COORDINATE WITH WASTE COLLECTION SERVICE TO ENSURE SERVICE IS MAINTEAINED THROUGHOUT THE DURATION OF THE PLROJECT INCLUDING RECYCLE, YARD WASTE AND CURB PICK UP ITEMS (WITH APPROPRIATE STICKERS). LABEL ALL BINS WITH ADDRESS BY REMOVALBLE MEANS.
20	11050-A	CONCRETE WASHOUT PROVIDING CONCRETE WASHWATER CONTAINMENT, COLLECTION, AND DISPOSAL.

NOTE:
FILL MATERIAL SHOULD BE SIMILAR TO EXISTING SITE MATERIAL.

Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282C01.dwg 3/14/2024 9:45:23 AM

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM
DRAWN JRG
CHECKED JLE
CLIENT PROJ. NO. 0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
ESTIMATE REFERENCE NOTES

SHEET C.02

STANDARD CONSTRUCTION NOTES:

1. ANY WORK THAT IS DETERMINED TO BE DEFECTIVE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. FAILURE TO REMOVE DEFECTIVE WORK MAY RESULT IN SUSPENSION OF OPERATIONS AND/OR WITHHOLDING OF PAYMENTS UNTIL DEFECTIVE WORK HAS BEEN REMOVED AND REPLACED.

2. PRIOR TO MOBILIZING OFF OF THE JOB SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO REQUEST A FINAL INSPECTION.

3. THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES.

4. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY AND COMPLYING WITH ALL CURRENT AND FUTURE FEDERAL AND STATE OSHA REQUIREMENTS.

5. 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 SHOWN.

6. THE CONTRACTOR SHALL UPDATE THE TRAFFIC CONTROL PLAN 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 FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.

7. THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITIES MAY NOT BE INDICATED ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DAMAGE TO EXISTING UTILITIES.

8. 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 .

9. 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 THEREOF CHARGED TO THE CONTRACTOR AND DEDUCTED FROM ITS FINAL PAYMENT.

10. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, A DETAILED SCHEDULE OF THE WORK WHICH SHALL BE SUBMITTED A MINIMUM OF 10 DAYS PRIOR TO THE PRECONSTRUCTION MEETING. SCHEDULE SHALL INCLUDED ANTICIPATED MATERIAL DELIVERIES AND COMPLETION OF MAJOR TASKS FOR THE PROJECT TO 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.

11. THE CONTRACTOR SHALL CONFINE ALL WORK TO THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. IF THE CONTRACTOR OBTAINS ADDITIONAL EASEMENTS FOR THE STORAGE OF EQUIPMENT AND MATERIALS, COPIES OF THE AGREEMENTS WITH THE PROPERTY OWNERS SHALL BE PROVIDED TO CITY AND ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OUTSIDE THE CONSTRUCTION LIMITS RESULTING FROM THEIR NEGLIGENCE. THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT OR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. THE ENGINEER MAY LIMIT THE CONTRACTOR'S OPERATIONS IN ACCORDANCE WITH THE SPECIFICATIONS.

12. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE CITY AND SHALL BE OUTSIDE THE CLEAR ZONE.

13. CONTRACTOR TO CONTACT ALL UTILITY COMPANIES TO COORDINATE SCHEDULES PRIOR TO BIDDING THE PROJECT. CONTRACTOR SHALL WORK WITH UTILITY COMPANIES TO ACCOMMODATE RELOCATION OF PUBLIC UTILITIES. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THAT OF THE UTILITY COMPANIES SUCH THAT THE PROJECT IS COMPLETED IN ACCORDANCE WITH THE PROJECT TIME REQUIREMENTS.

14. THE CONTRACTOR SHALL VERIFY WHICH UTILITIES HAVE BEEN RECONSTRUCTED AND/OR ABANDONED ALONG WITH THEIR LOCATIONS PRIOR TO STARTING ANY WORK UNDER THIS CONTRACT.

15. ANY DAMAGES AS A RESULT OF CONSTRUCTION OR STAGING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

16. DO NOT RESTRICT DRAINAGE CHANNELS. CONTRACTOR IS FULLY LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR HANDLING OF STORM WATER FLOW DURING CONSTRUCTION.

17. THE CONTRACTOR IS REQUIRED TO REPLACE ALL CONTROL POINTS, PROPERTY CORNERS, SECTION CORNERS, BENCHMARKS, AND OTHER MONUMENTS OBLITERATED BY CONSTRUCTION. PRIOR TO GRADING, THE CONTRACTOR SHALL LOCATE ADDITIONAL EXISTING PROPERTY CORNERS, ESTABLISH COORDINATES AND TIES TO EXISTING FACILITIES WHICH ARE TO REMAIN, ESTABLISH HORIZONTAL AND VERTICAL CONTROL. THE CONTRACTOR SHALL PRESERVE OR REPLACE MONUMENTS AND BENCHMARKS ON THE PROJECT SITE IN ACCORDANCE WITH IOWA STATE CODE SECTION 355.6A. AFTER CONSTRUCTION.

18. THE TOP SIX (6) INCHES OF DISTURBED (TOP SOIL) AREAS SHALL BE FREE OF ROCK AND DEBRIS AND SHALL BE SUITABLE FOR ESTABLISHMENT OF VEGETATION, SUBJECT TO THE APPROVAL OF THE ENGINEER.

19. THE COST INCURRED TO FACILITATE CONSTRUCTION PHASING OR TO MAINTAIN ACCESS SHALL BE INCIDENTAL TO THE PROJECT.

20. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT OBJECTIONABLE LEVELS OF DUST.

21. THE CONTRACTOR SHALL ADEQUATELY BARRICADE FRESH P.C.C. TO PREVENT UNWANTED MARKINGS. BLEMISHED CONCRETE SURFACES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE, ESTIMATED QUANTITY FOR NEW CONCRETE PAVEMENT INCLUDES ALL CURB, ALL STREET RETURNS, SPECIAL AREAS, AND AREAS OF REPAIRS TO CONNECTING PAVING.

22. ALL HOLES RESULTING FROM OPERATIONS OF THE CONTRACTOR, INCLUDING REMOVAL OF FENCE POSTS, UTILITY POLES, OR FOUNDATIONS SHALL BE FILLED AND CONSOLIDATED TO FINISHED GRADE AS DIRECTED BY THE ENGINEER TO PREVENT FUTURE SETTLEMENT. THE VOIDS SHALL BE FILLED AS SOON AS PRACTICAL AND PREFERABLE THE DAY CREATED AND NOT LATER THEN THE FOLLOWING DAY. ANY PORTION OF THE RIGHT-OF-WAY OR PROJECT LIMITS DISTURBED BY ANY SUCH OPERATIONS SHALL BE RESTORED TO AN ACCEPTABLE CONDITION. THIS OPERATION SHALL BE CONSIDERED INCIDENTAL TO OTHER BID ITEMS IN PROJECT.

23. THE PROJECT INVOLVES CONTACT WITH THE PUBLIC. THE CONTRACTOR IS ENCOURAGED TO PERFORM THEIR OPERATIONS AND THOSE OF THEIR STAFF AND SUBCONTRACTORS IN A PROFESSIONAL MANNER SO AS TO MINIMIZE CONFLICTS WITH THE PUBLIC.

24. CONTRACTOR IS RESPONSIBLE FOR KEEPING DIRT AND DEBRIS DEPOSITED BY CONSTRUCTION ACTIVITY OFF ADJACENT SIDEWALKS, TRAILS, AND ROADS.

25. CONTRACTOR SHALL COMPLETE SEEDING OPERATIONS IN STAGES AND AS WORK AREAS BECOME AVAILABLE SUCH THAT SEEDING IS COMPLETED WITHIN THE REQUIRED TIME FRAME, SEEDING DATES AND WEATHER LIMITATIONS.

26. THE CONTRACTOR MAY BE REQUIRED OR DIRECTED BY THE ENGINEER OR CITY TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE CONSTRUCTION FEATURES ARE NOT INSTALLED THE SAME DAY. THIS WILL BE INCIDENTAL TO THE BID ITEM - TRAFFIC CONTROL.

Do Not Use for Construction

27. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL WHICH IS NOT DESIRABLE TO BE INCORPORATED IN THE WORK INVOLVED ON THIS PROJECT (EXCAVATION, METAL POSTS, BROKEN CONCRETE, ETC.). NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES.

28. ALL UNPROTECTED EXCAVATIONS WITHIN 12 FEET OF THE TRAVELED WAY SHALL BE BACKFILLED TO WITHIN EIGHT INCHES FROM THE TOP OF THE ROADWAY SURFACE OR PROPER PROTECTION DEVICES SHALL BE INSTALLED (INCIDENTAL TO TRAFFIC CONTROL), DURING NON-WORKING HOURS.

29. THE CONTRACTOR WILL BE REQUIRED TO LIMIT WORK HOURS ON THE PROJECT FROM 7:00 A.M. TO 7:00 P.M., MONDAY THROUGH FRIDAY, 8:00 A.M. TO 4:00 P.M. ON SATURDAY. SHOULD EQUIPMENT BE USED WHICH IS EXCESSIVELY NOISY AND DISTRESSING TO AREA RESIDENTS, THE CITY RESERVES THE RIGHT TO LIMIT HOURS OF OPERATION. PRIOR APPROVAL FROM THE CITY WILL BE REQUIRED FOR WORK ON SUNDAYS AND HOLIDAYS AND FOR EXCEPTIONS TO THESE TIME RESTRICTIONS.

30. CONTRACTOR SHALL PROPERLY SECURE PROJECT SITE AT THE END OF EACH DAY.

31. 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 PAVEMENT REMOVAL. ADJACENT PAVEMENT THAT IS CHIPPED OR DAMAGED DUE TO SAWING AND REMOVAL OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS FOR STREET EXCAVATION AND PAVEMENT REPLACEMENT. ALL SAW CUTS TO EXISTING PAVEMENT AND CURBS SHALL BE FULL DEPTH.

32. 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 CITY.

33. THE OWNER WILL PROVIDE CONSTRUCTION STAKING. ALL REQUEST MUST BE MADE IN WRITING A MINIMUM OF 72 HOURS (3 BUSINESS DAYS) PRIOR TO NEEDING STAKING.

34. REMOVAL, SALVAGING AND RE-INSTALLATION OF EXISTING SIGNS ARE CONSIDERED INCIDENTAL TO THE PROJECT. THIS INCLUDES SALVAGING SIGN(S) AND REINSTALLING THE SIGN(S) WITH NEW POST. CONTRACTOR SHALL REPLACE ANY SIGN(S) THAT ARE DAMAGED DURING CONSTRUCTION OR STORAGE AT THEIR COST.

TRAFFIC CONTROL NOTES:

1. MAINTAIN A MINIMUM LANE WIDTH OF 11 FEET IN EACH DIRECTION. ENGINEER'S APPROVAL WILL BE REQUIRED FOR NARROWER LANES AND/OR CLOSURE IF NECESSARY.

2. CONTRACTOR TO PROVIDE A MINIMUM OF 2 WORKING DAYS NOTICE FOR ANY LANE CLOSURES.

3. TRAFFIC CONTROL SHALL MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130), CHANGES AND ALTERATION OF TRAFFIC CONTROLS ARE EXPECTED AND ARE PART OF THE TRAFFIC CONTROL BID PRICE.

4. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.

5. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS, AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE ENGINEER.

6. REFER TO IOWA DOT STANDARD ROAD PLAN TC-202 FOR LANE CLOSURE DETAILS.

7. SIGNAGE MAINTENANCE SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER/OWNER.

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 LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER. THE CONTRACTOR MUST OBTAIN A WRITTEN AGREEMENT WITH PROPERTY OWNER IF USING STORAGE AREA OUTSIDE OF THE R.O.W.

10. ANY LANE CLOSURES TO BE APPROVED BY ENGINEER/OWNER. COST FOR ADDITIONAL SIGNAGE, FLAGGERS OR TEMPORARY SIGNALS SYSTEM, PERMITS AND OTHER ITEMS DURING ACTIVITIES REQUIRING LANE CLOSURES REDUCING THE ROADWAY TO ONE LANE IS CONSIDERED INCIDENTAL. CONTRACTOR TO OBTAIN PERMITS IF NECESSARY.

11. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED TRAFFIC CONTROL PLANS FOR THIS PROJECT AT OR PRIOR TO THE PRECONSTRUCTION MEETING FOR APPROVAL. CHANGES TO THE TRAFFIC CONTROL PLANS THEREAFTER MUST BE APPROVED BY THE ENGINEER/OWNER.

12. TRAFFIC CONTROL DEVICES, PROCEDURES, AND LAYOUTS SHALL BE PER THE IOWA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS AND STANDARD ROAD PLANS.

PEDESTRIAN TRAFFIC CONTROL NOTES:

1. TRAIL SHALL NOT BE OPENED UNTIL ALL GRADING AND SEEDING IS COMPLETE AND ALL CONSTRUCTION EQUIPMENT IS REMOVED AND TRAIL CLEANED.

2. TRAIL SHALL BE WASHED TO REMOVE ANY DIRT OR DEBRIS PRIOR TO OPENING. THIS WORK SHALL BE CONSIDERED INCIDENTAL.

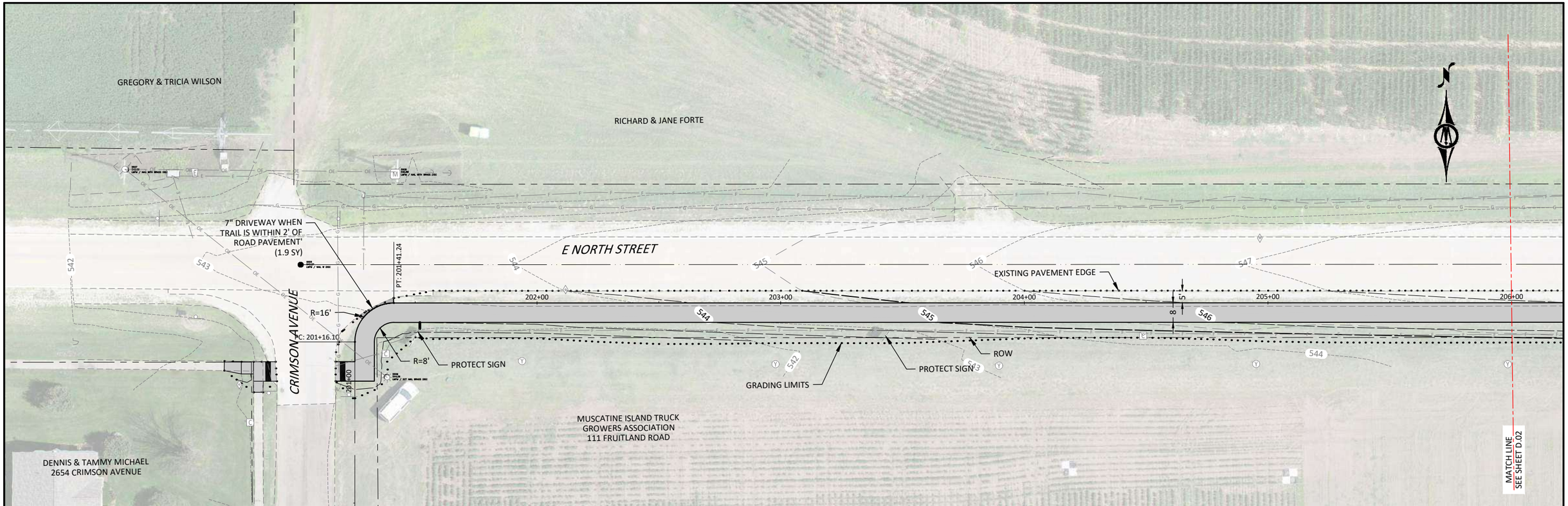
©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G113128 2\CAD\C3D\131282C01.dwg 2/27/2024 2:29:00 PM

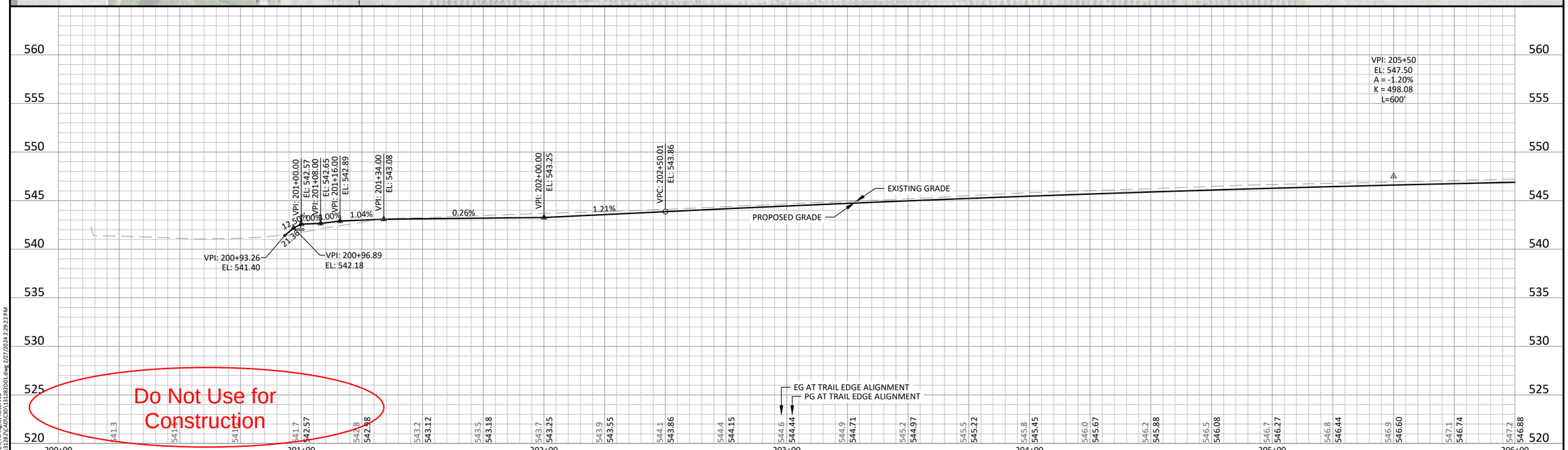
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
GENERAL PROJECT NOTES

SHEET C.04





HORZ. 0 20 40 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

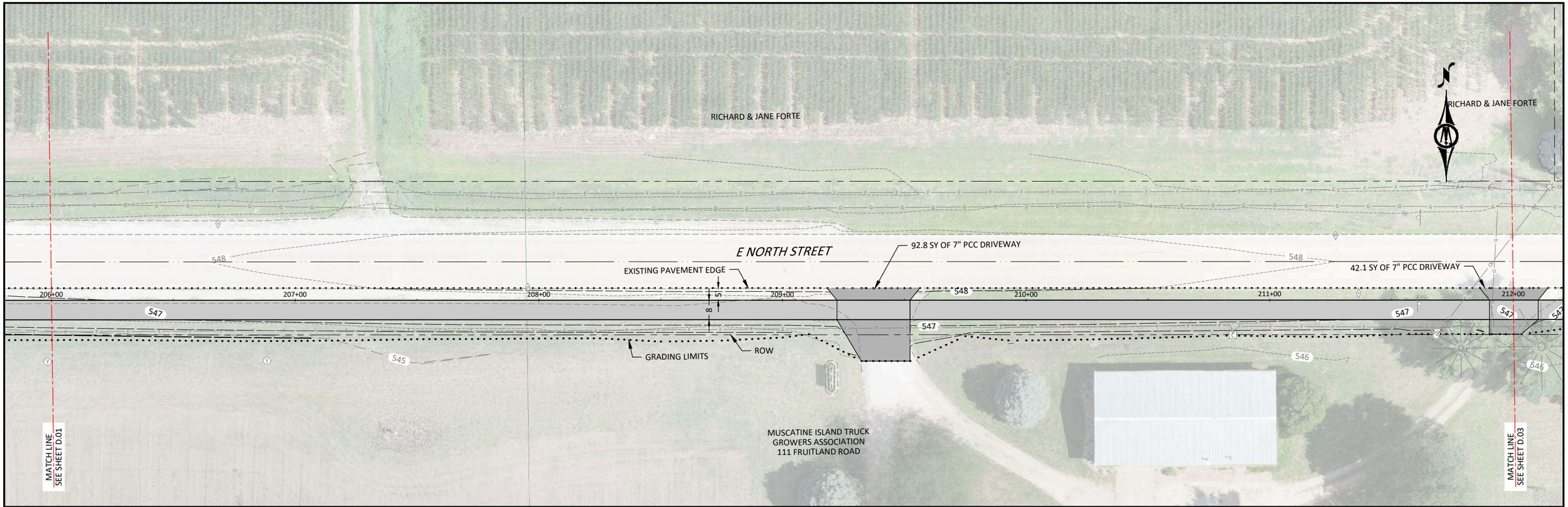
FRUITLAND, IOWA

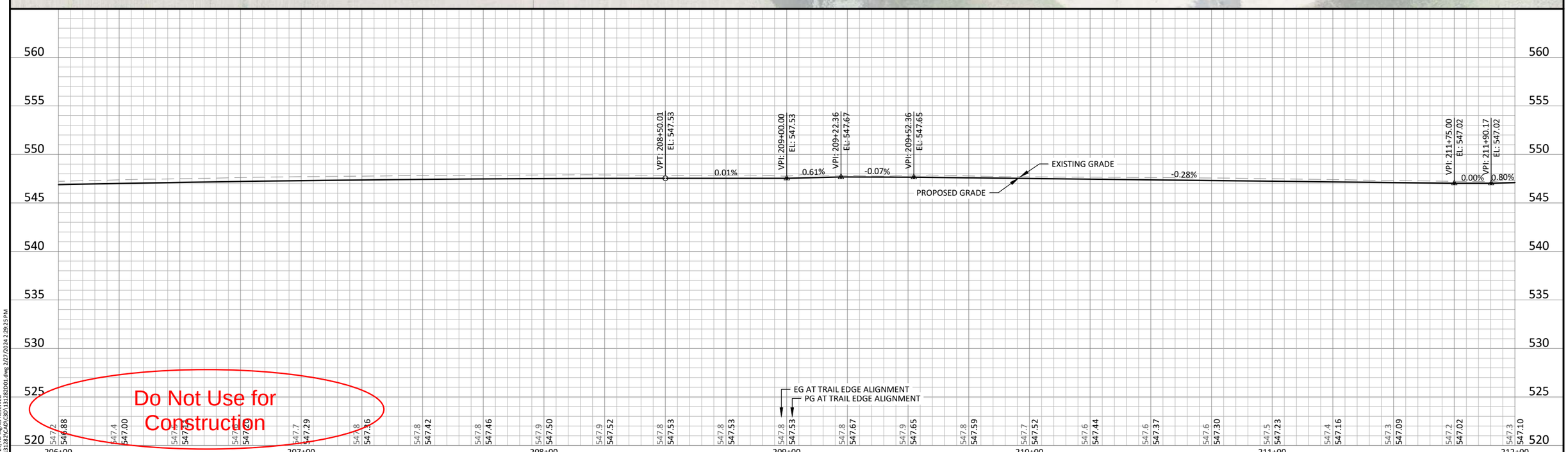
NORTH STREET TRAIL

TRAIL PLAN & PROFILE

SHEET D.01

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282D01.dwg 2/27/2024 2:29:22 PM





Do Not Use for Construction

HORZ. 0 20 40 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	OG1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

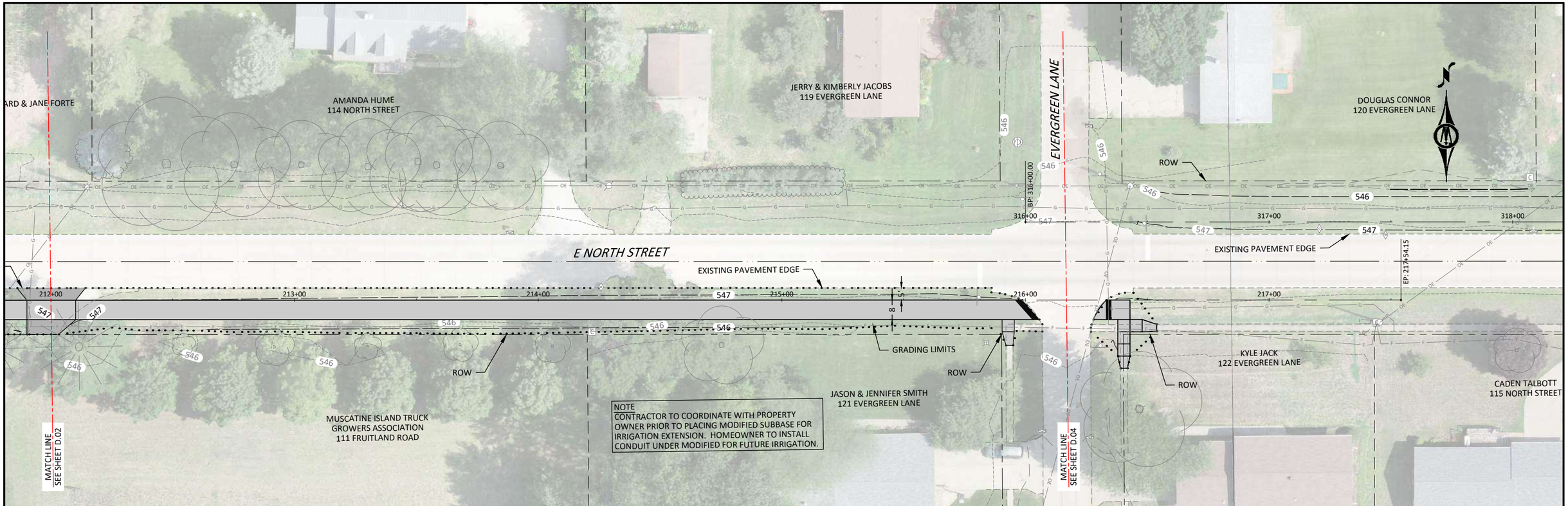
FRUITLAND, IOWA

NORTH STREET TRAIL

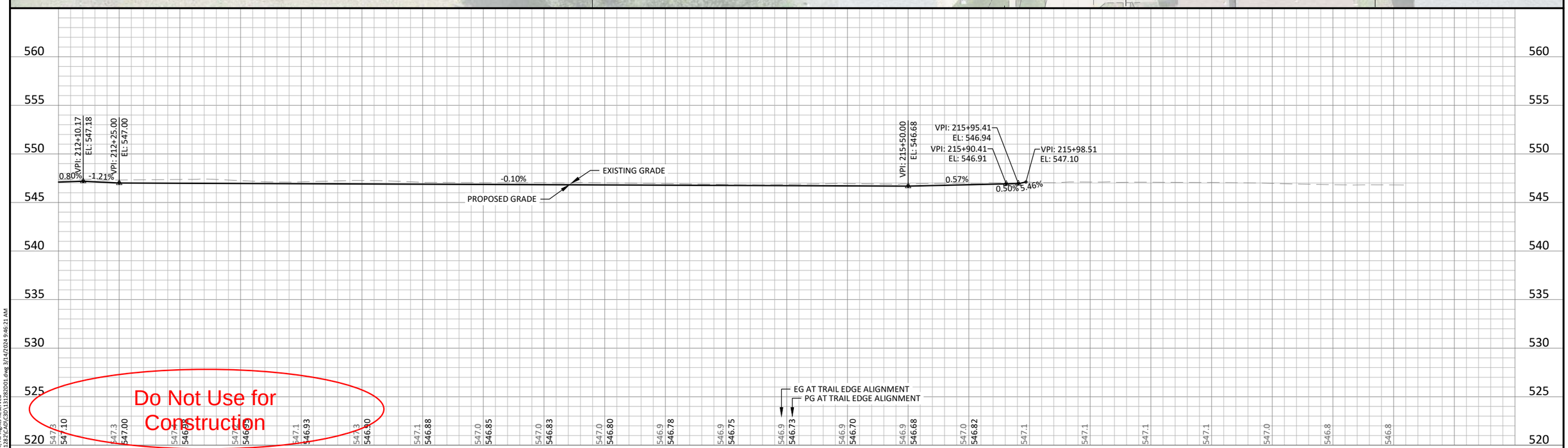
TRAIL PLAN & PROFILE

SHEET D.02

© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\C3D\131282D01.dwg 2/27/2024 2:29:25 PM



NOTE
CONTRACTOR TO COORDINATE WITH PROPERTY OWNER PRIOR TO PLACING MODIFIED SUBBASE FOR IRRIGATION EXTENSION. HOMEOWNER TO INSTALL CONDUIT UNDER MODIFIED FOR FUTURE IRRIGATION.



Do Not Use for Construction

HORZ. 0 20 40 SCALE FEET

VERT. 0 5 10 SCALE FEET

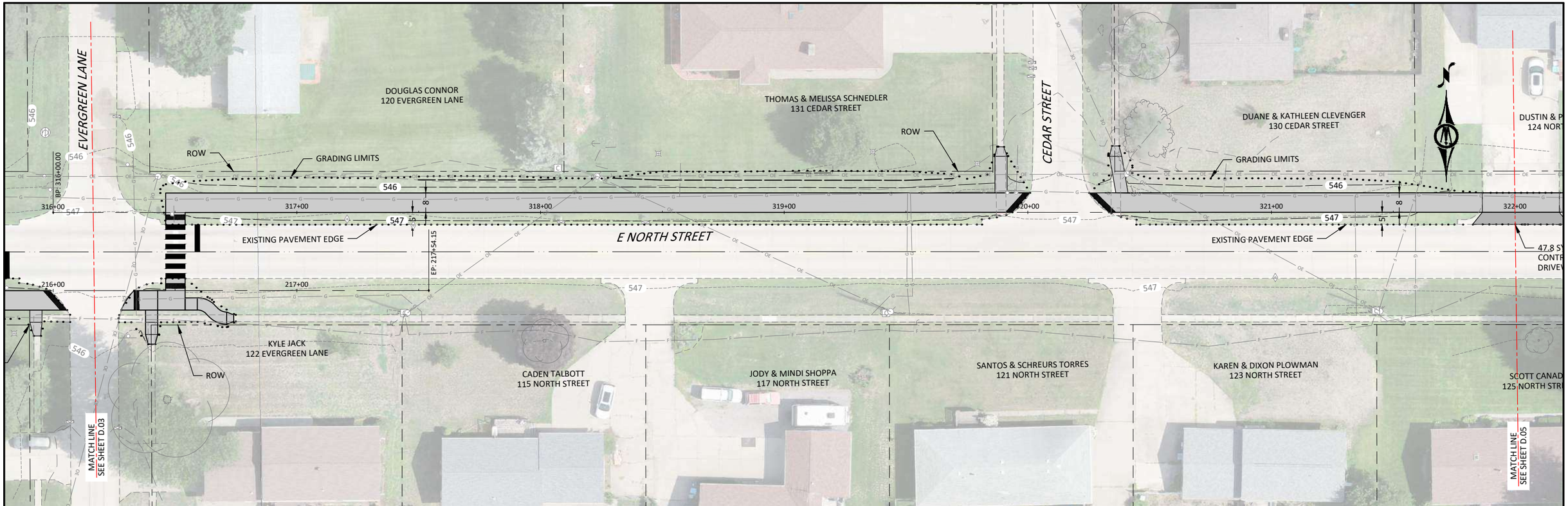
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

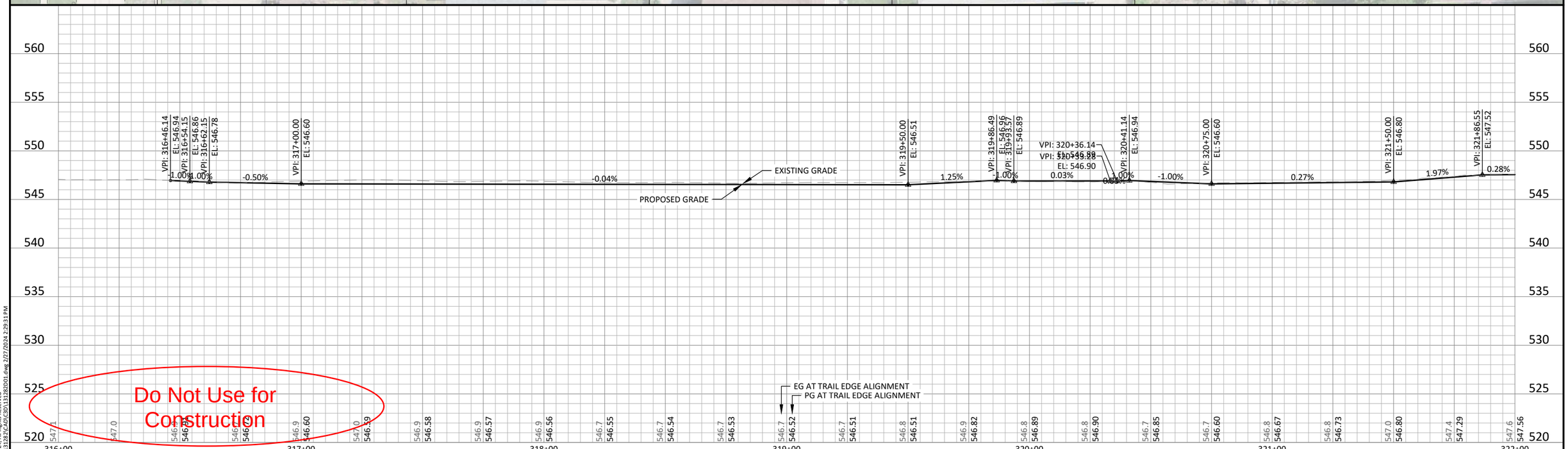
DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. OG1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
TRAIL PLAN & PROFILE

SHEET D.03

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\C3D\131282D01.dwg 3/14/2024 9:46:21 AM





HORZ. SCALE 0 20 40 FEET

VERT. SCALE 0 5 10 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

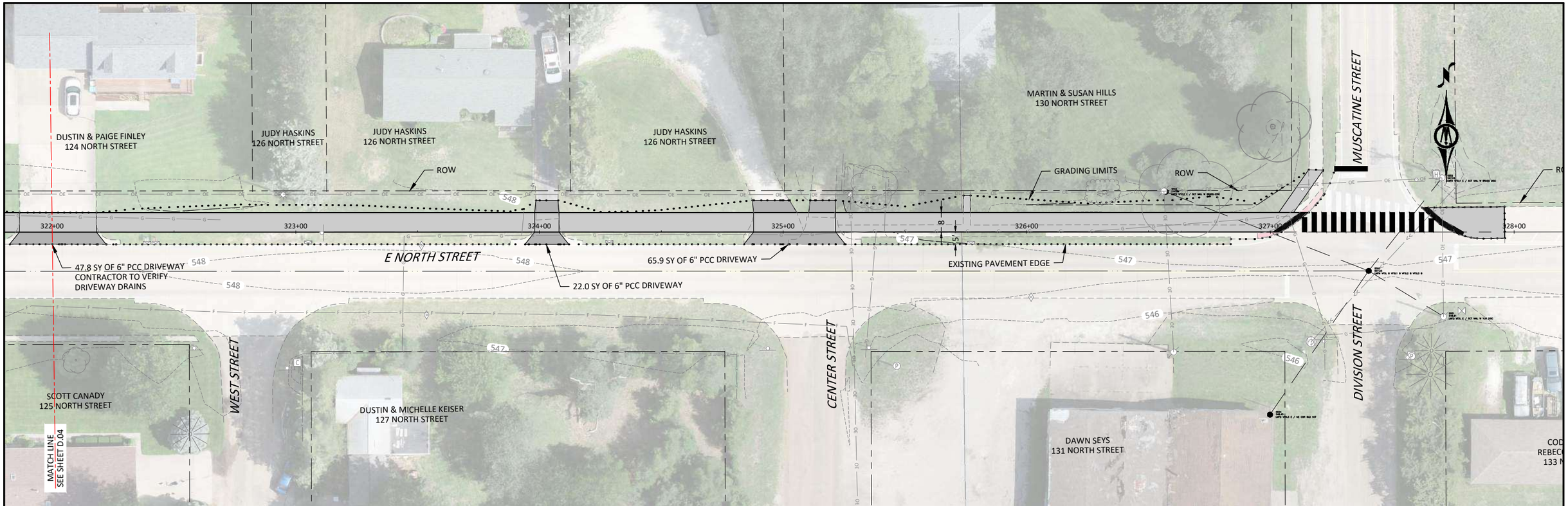
FRUITLAND, IOWA

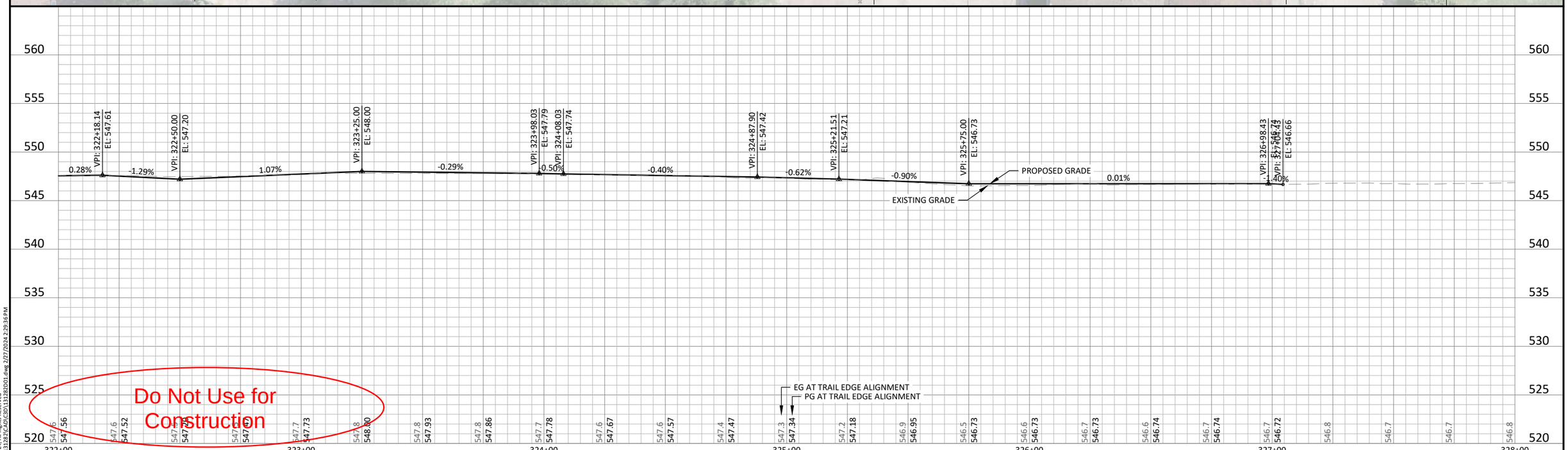
NORTH STREET TRAIL

TRAIL PLAN AND PROFILE - ALT 1

SHEET D.04

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282D01.dwg 2/27/2024 2:29:31 PM





Do Not Use for Construction

HORZ. 0 20 40 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

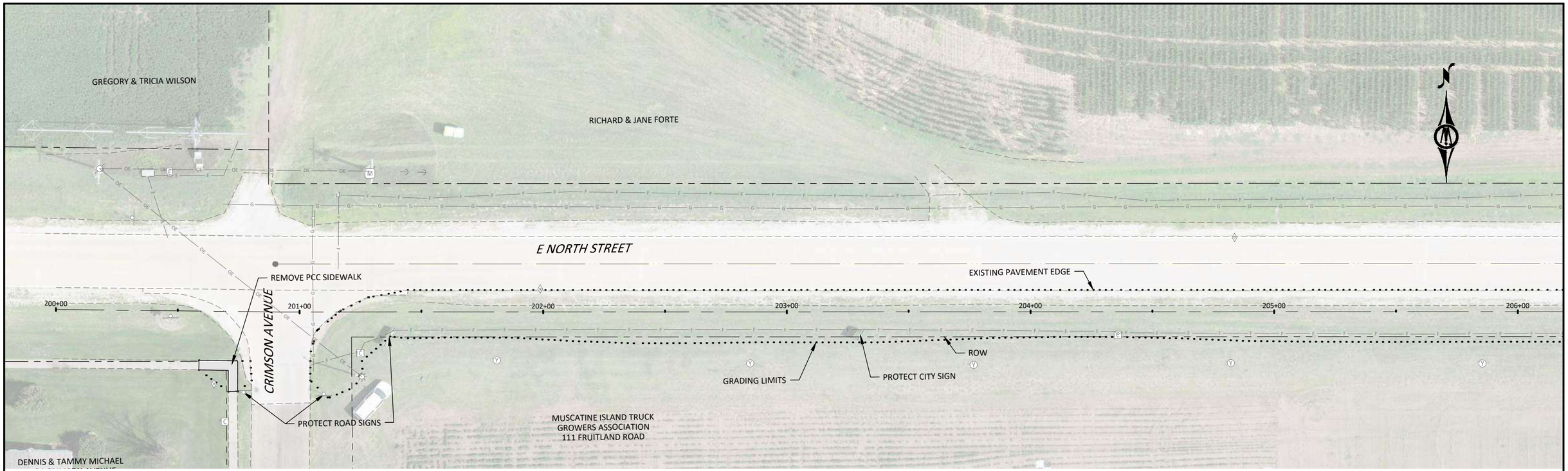
FRUITLAND, IOWA

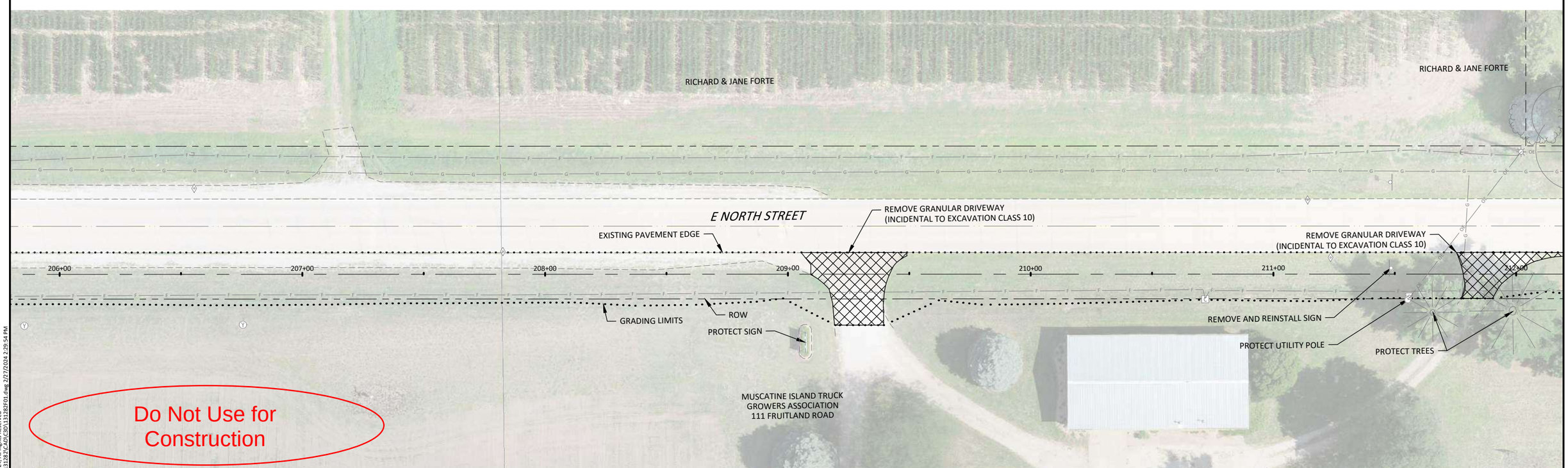
NORTH STREET TRAIL

TRAIL PLAN AND PROFILE - ALT 1

SHEET D.05

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282D01.dwg 2/27/2024 2:29:36 PM





Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282F01.dwg 2/27/2024 2:29:54 PM

HORZ. SCALE 0 20 40 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

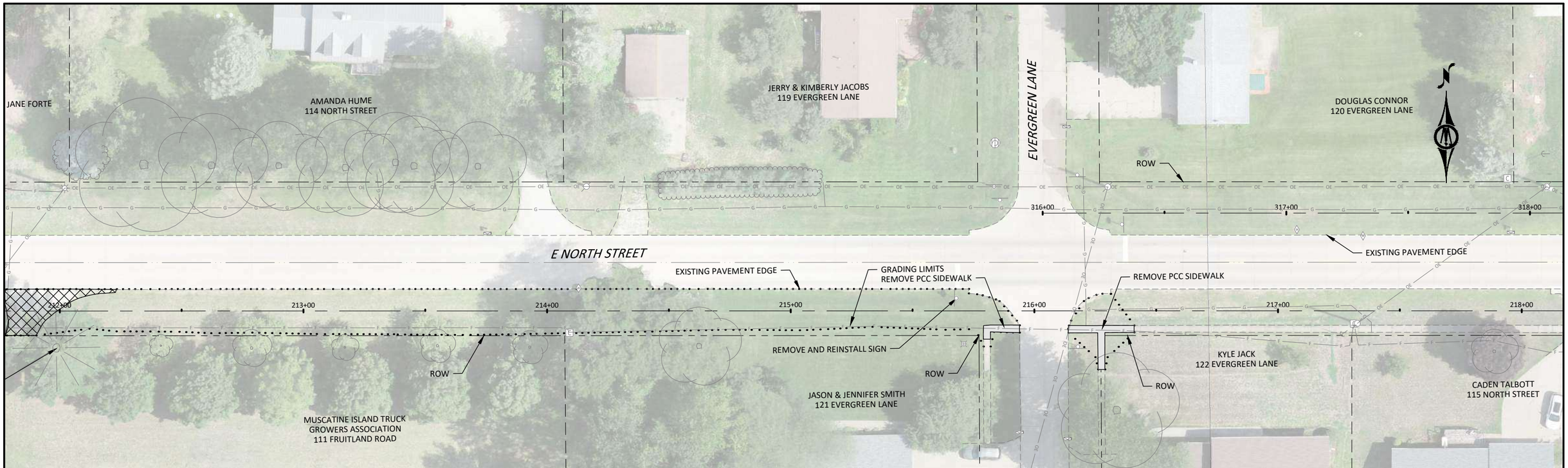
REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA

NORTH STREET TRAIL

REMOVALS

SHEET F.01



Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282F01.dwg 2/27/2024 2:29:57 PM

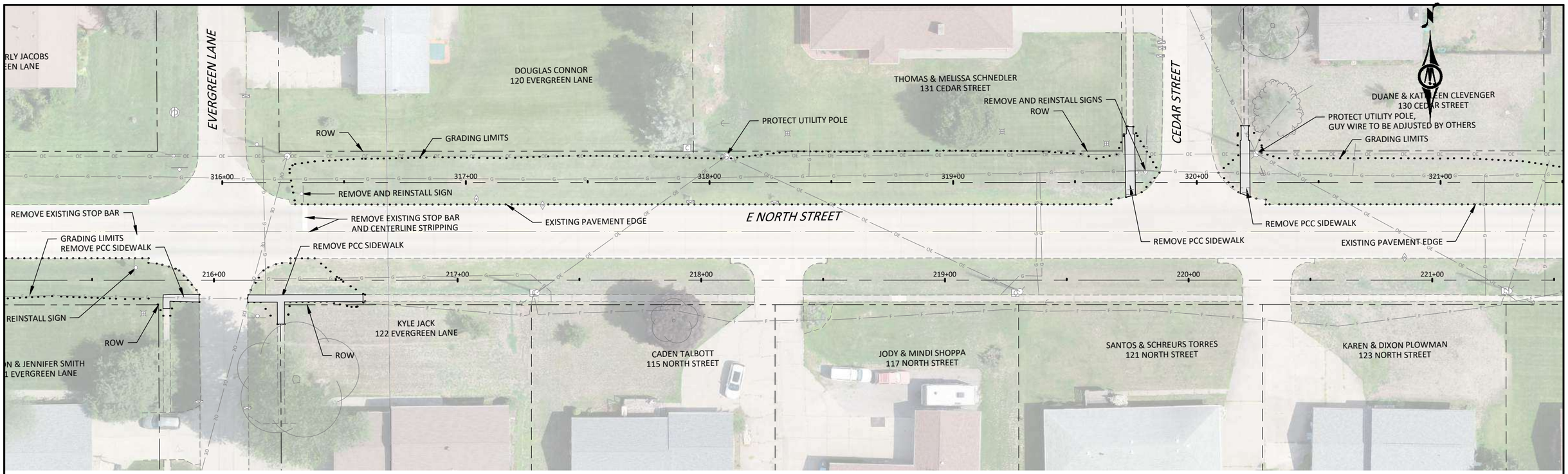
HORZ. 0 20 40
SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
REMOVALS

SHEET F.02



Do Not Use for Construction

HORZ. 0 20 40
SCALE FEET

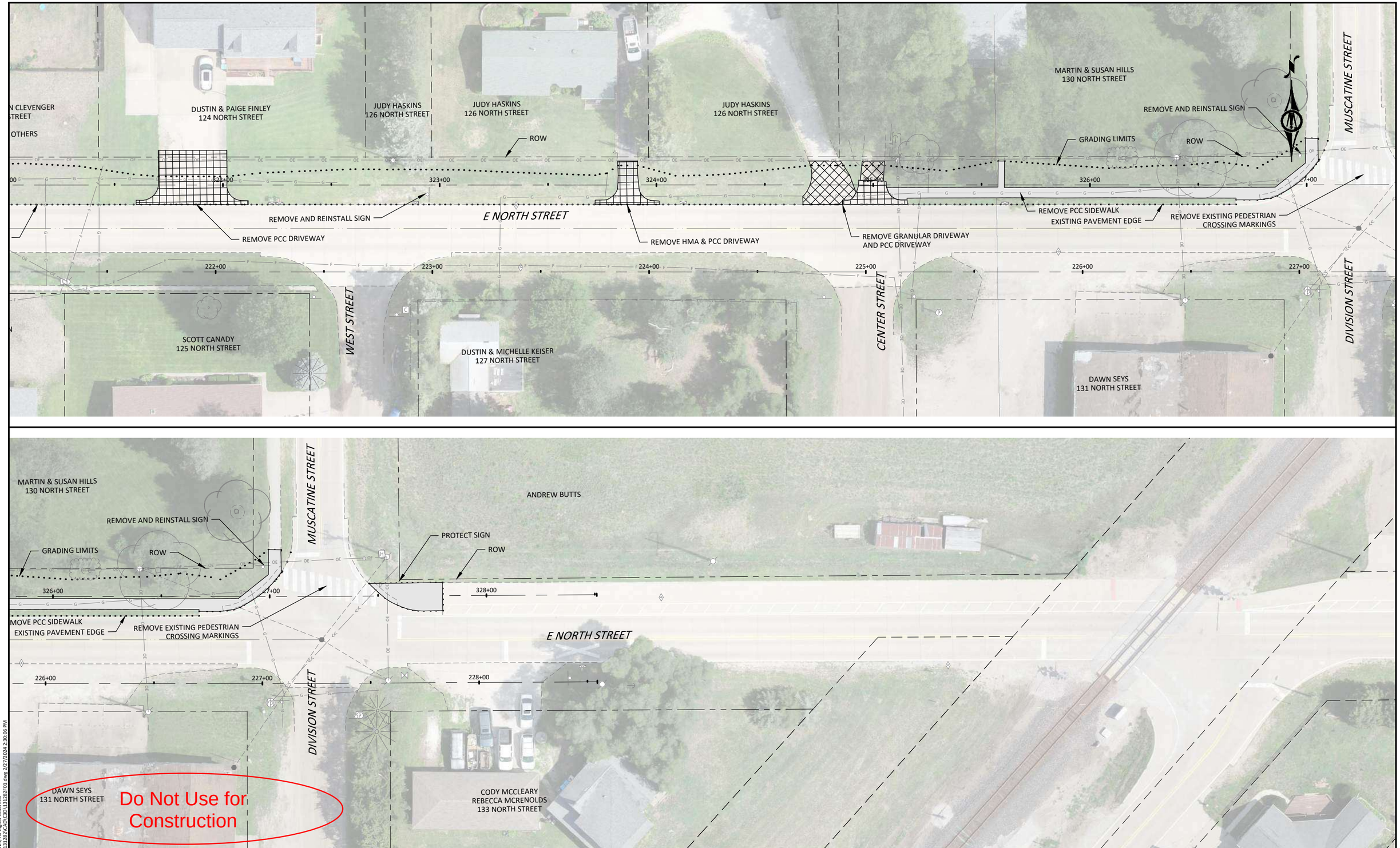
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
REMOVALS - ALT 1

SHEET F.03

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282F01.dwg 2/27/2024 2:30:00 PM



HORZ. 0 20 40
SCALE FEET

BOLTON & MENK

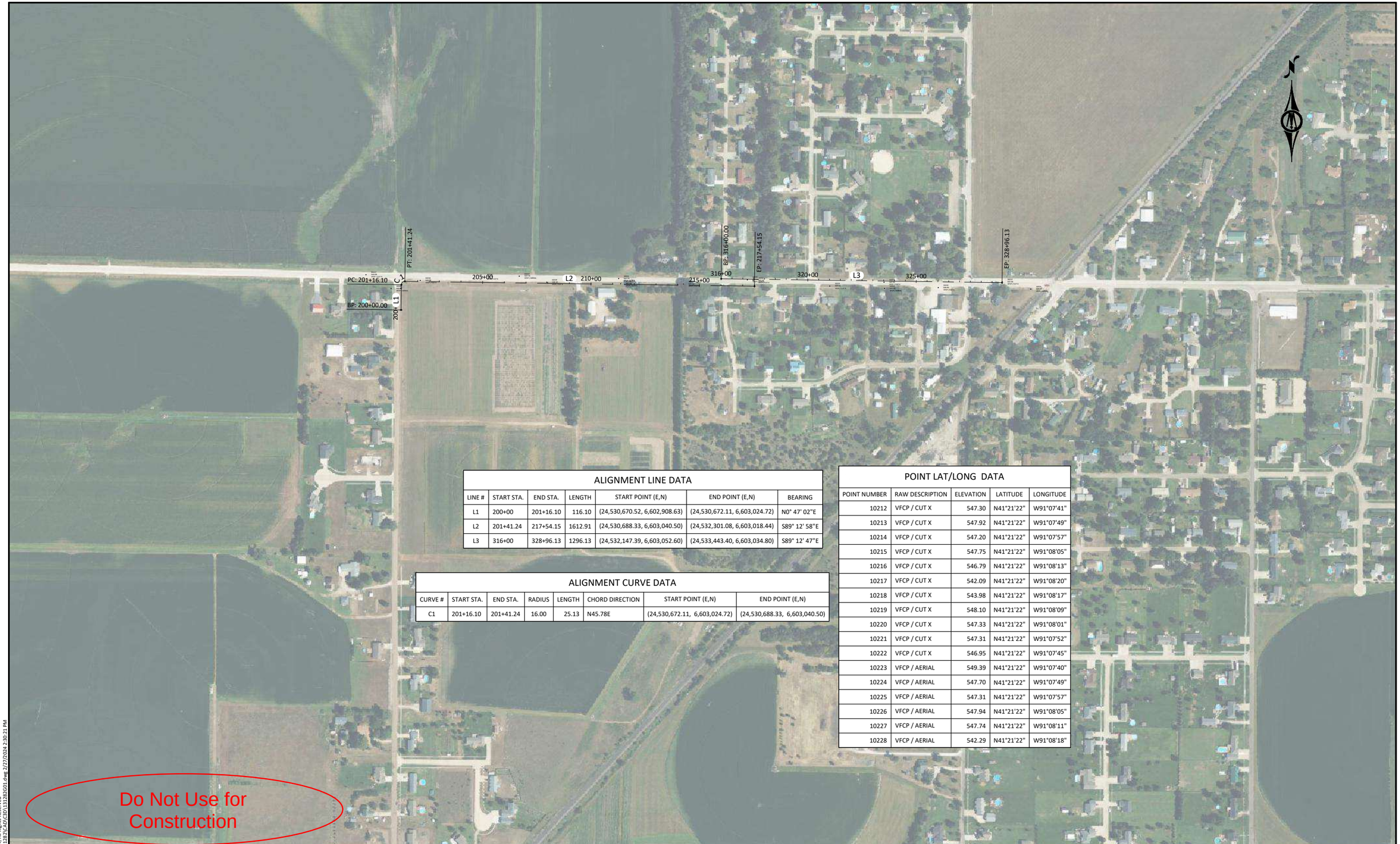
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
REMOVALS - ALT 1

SHEET F.04

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282F01.dwg 2/27/2024 2:30:06 PM



Do Not Use for Construction

ALIGNMENT LINE DATA

LINE #	START STA.	END STA.	LENGTH	START POINT (E,N)	END POINT (E,N)	BEARING
L1	200+00	201+16.10	116.10	(24,530,670.52, 6,602,908.63)	(24,530,672.11, 6,603,024.72)	N0° 47' 02"E
L2	201+41.24	217+54.15	1612.91	(24,530,688.33, 6,603,040.50)	(24,532,301.08, 6,603,018.44)	S89° 12' 58"E
L3	316+00	328+96.13	1296.13	(24,532,147.39, 6,603,052.60)	(24,533,443.40, 6,603,034.80)	S89° 12' 47"E

ALIGNMENT CURVE DATA

CURVE #	START STA.	END STA.	RADIUS	LENGTH	CHORD DIRECTION	START POINT (E,N)	END POINT (E,N)
C1	201+16.10	201+41.24	16.00	25.13	N45.78E	(24,530,672.11, 6,603,024.72)	(24,530,688.33, 6,603,040.50)

POINT LAT/LONG DATA

POINT NUMBER	RAW DESCRIPTION	ELEVATION	LATITUDE	LONGITUDE
10212	VFCP / CUT X	547.30	N41°21'22"	W91°07'41"
10213	VFCP / CUT X	547.92	N41°21'22"	W91°07'49"
10214	VFCP / CUT X	547.20	N41°21'22"	W91°07'57"
10215	VFCP / CUT X	547.75	N41°21'22"	W91°08'05"
10216	VFCP / CUT X	546.79	N41°21'22"	W91°08'13"
10217	VFCP / CUT X	542.09	N41°21'22"	W91°08'20"
10218	VFCP / CUT X	543.98	N41°21'22"	W91°08'17"
10219	VFCP / CUT X	548.10	N41°21'22"	W91°08'09"
10220	VFCP / CUT X	547.33	N41°21'22"	W91°08'01"
10221	VFCP / CUT X	547.31	N41°21'22"	W91°07'52"
10222	VFCP / CUT X	546.95	N41°21'22"	W91°07'45"
10223	VFCP / AERIAL	549.39	N41°21'22"	W91°07'40"
10224	VFCP / AERIAL	547.70	N41°21'22"	W91°07'49"
10225	VFCP / AERIAL	547.31	N41°21'22"	W91°07'57"
10226	VFCP / AERIAL	547.94	N41°21'22"	W91°08'05"
10227	VFCP / AERIAL	547.74	N41°21'22"	W91°08'11"
10228	VFCP / AERIAL	542.29	N41°21'22"	W91°08'18"

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282G01.dwg 2/27/2024 2:30:21 PM

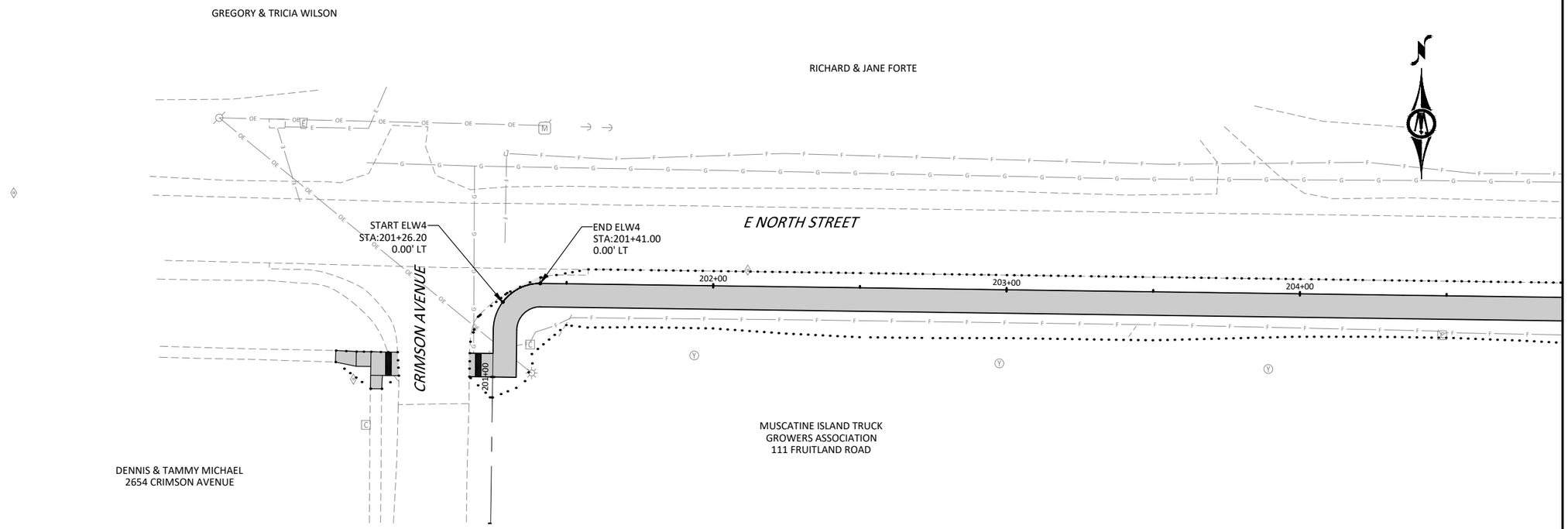
HORZ. 0 50 100 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
REFERENCES AND BENCHMARKS

SHEET G.01



Do Not Use for Construction

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CADD\C3D\131282K01.dwg 2/27/2024 2:30:33 PM

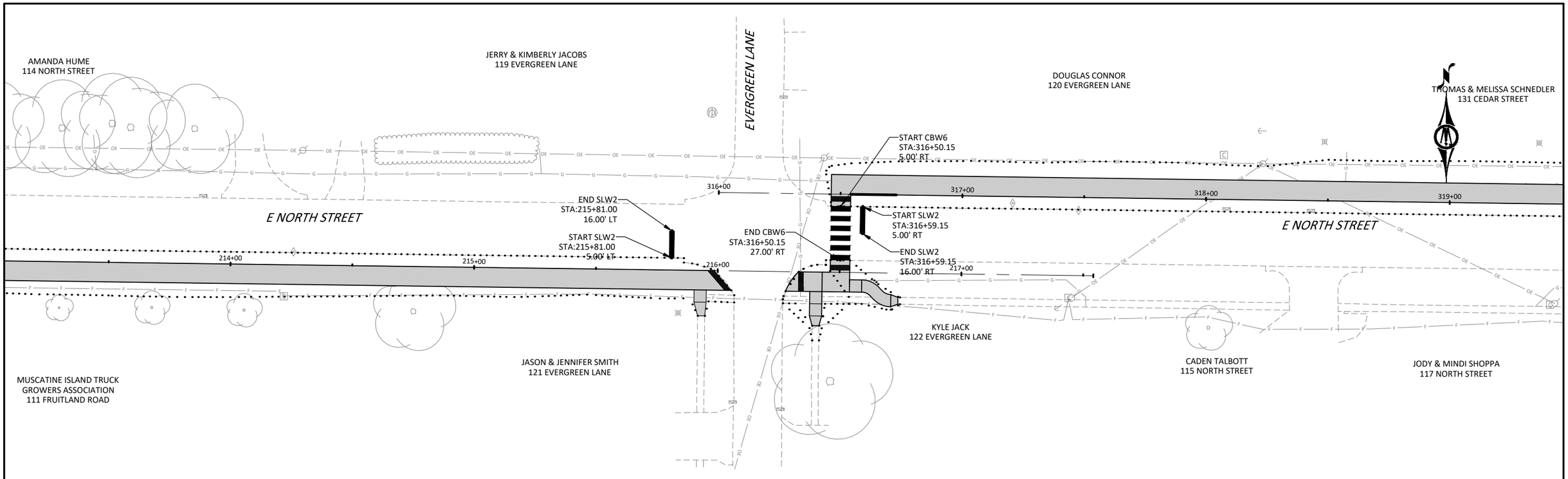
HORZ. 0 20 40
SCALE FEET

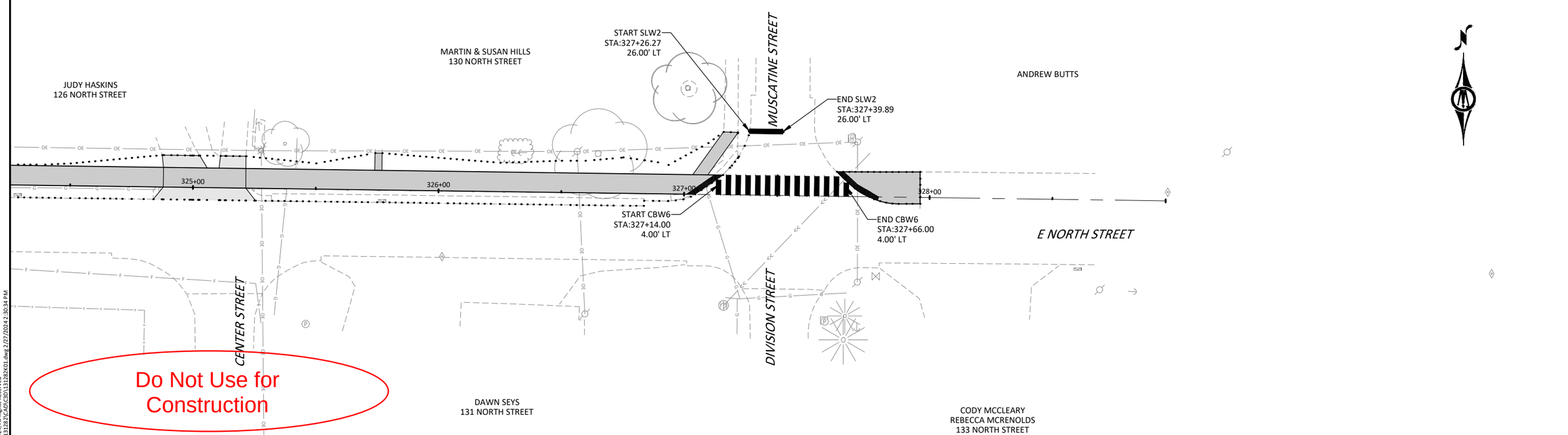
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
PAVEMENT MARKINGS

SHEET
K.01





Do Not Use for Construction

HORZ. SCALE 0 20 40 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

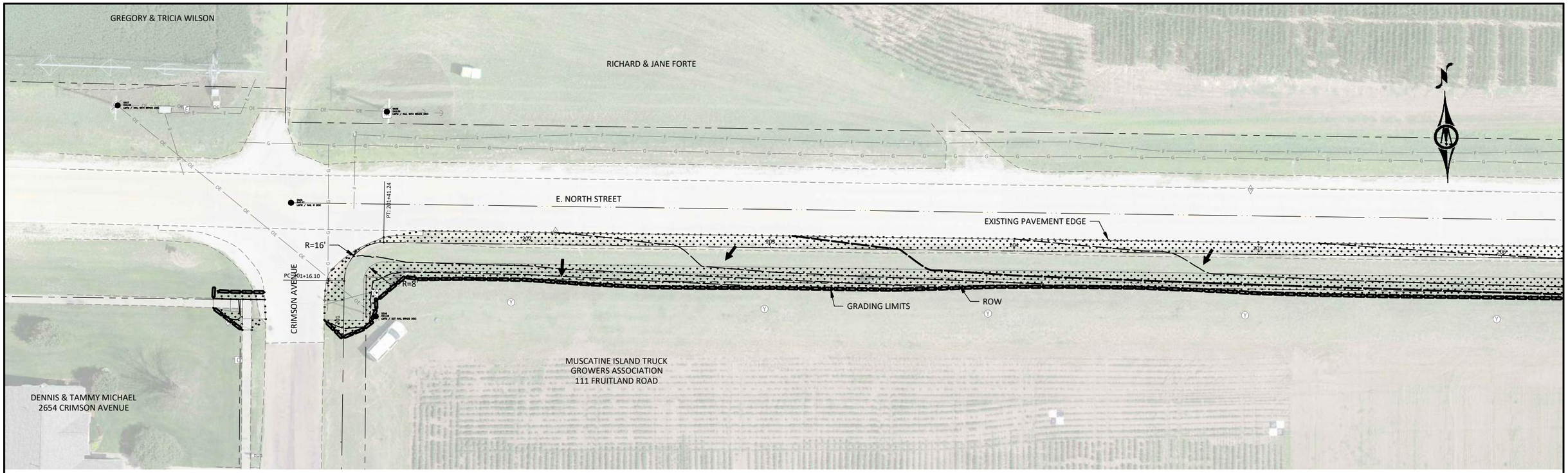
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

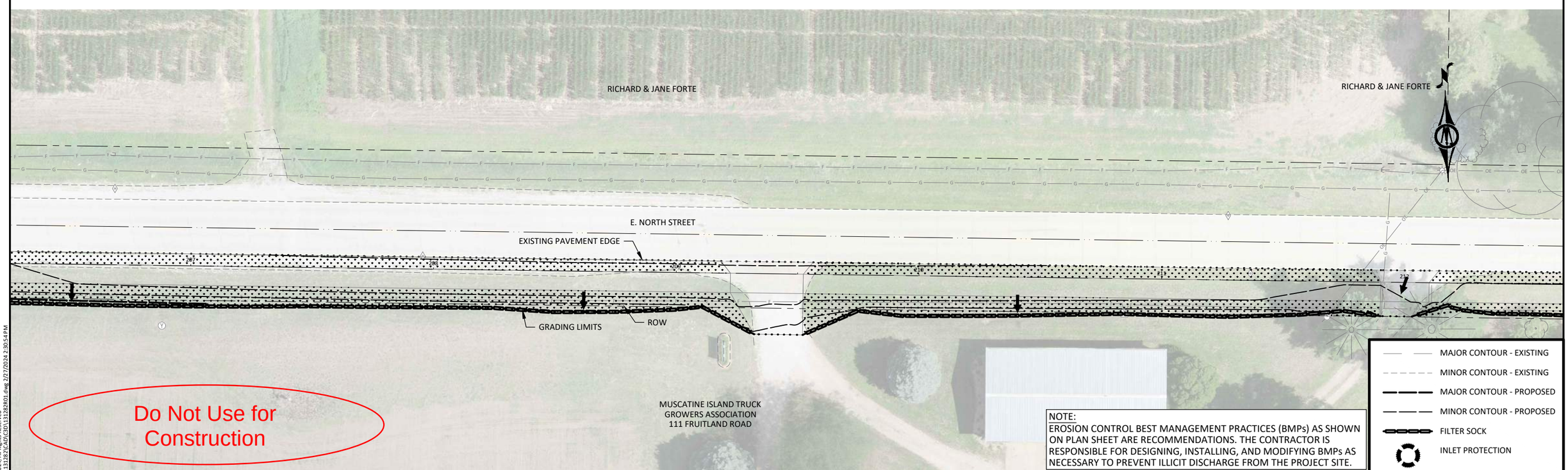
REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
PAVEMENT MARKINGS - ALT 1

SHEET K.02

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282K01.dwg 2/27/2024 2:30:34 PM





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
- INLET PROTECTION

HORZ. SCALE 0 20 40 FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

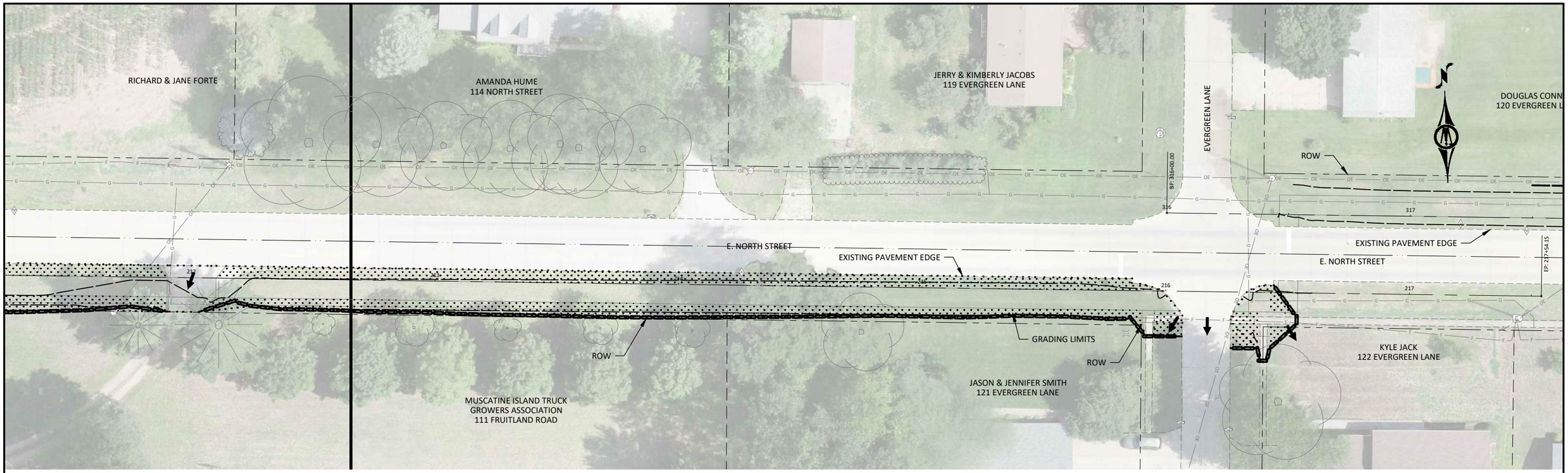
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
EROSION CONTROL

SHEET R.01

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CADD\C3D\131282R01.dwg 2/27/2024 2:30:54 PM



MAJOR CONTOUR - EXISTING
MINOR CONTOUR - EXISTING
MAJOR CONTOUR - PROPOSED
MINOR CONTOUR - PROPOSED
FILTER SOCK
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.

Do Not Use for Construction

HORZ. 0 20 40
SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

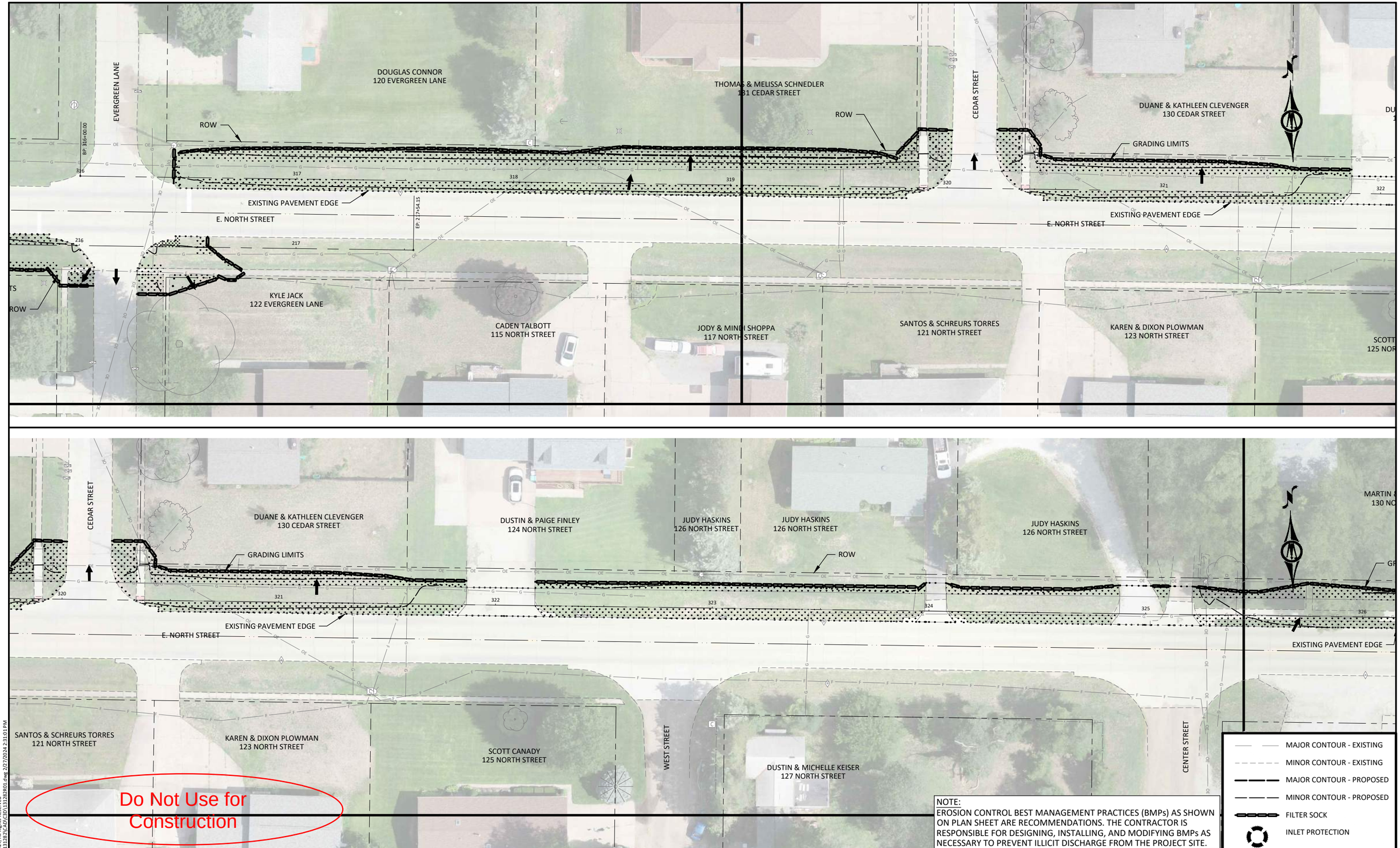
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
EROSION CONTROL

SHEET
R.02

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282R01.dwg 2/27/2024 2:30:56 PM



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
- INLET PROTECTION

HORZ. SCALE 0 20 40 FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

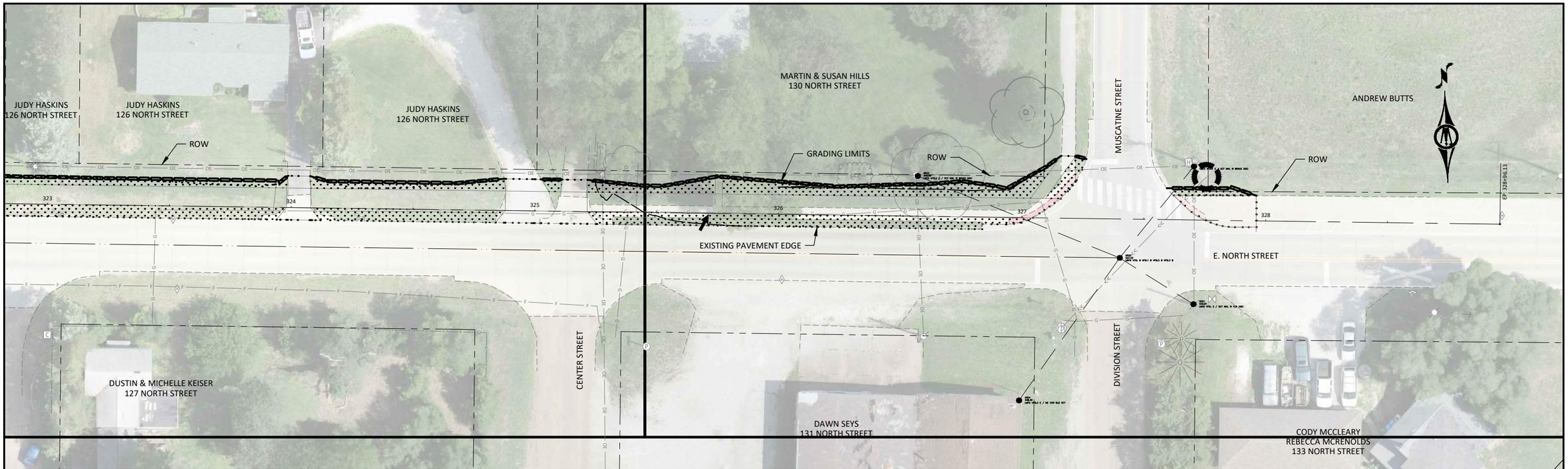
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
EROSION CONTROL - ALT 1

SHEET R.02

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_C_IA\0G1131282\CAD\C3D\131282R01.dwg 2/27/2024 2:31:01 PM



MAJOR CONTOUR - EXISTING
MINOR CONTOUR - EXISTING
MAJOR CONTOUR - PROPOSED
MINOR CONTOUR - PROPOSED
FILTER SOCK
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.

Do Not Use for Construction

HORZ. 0 20 40
SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

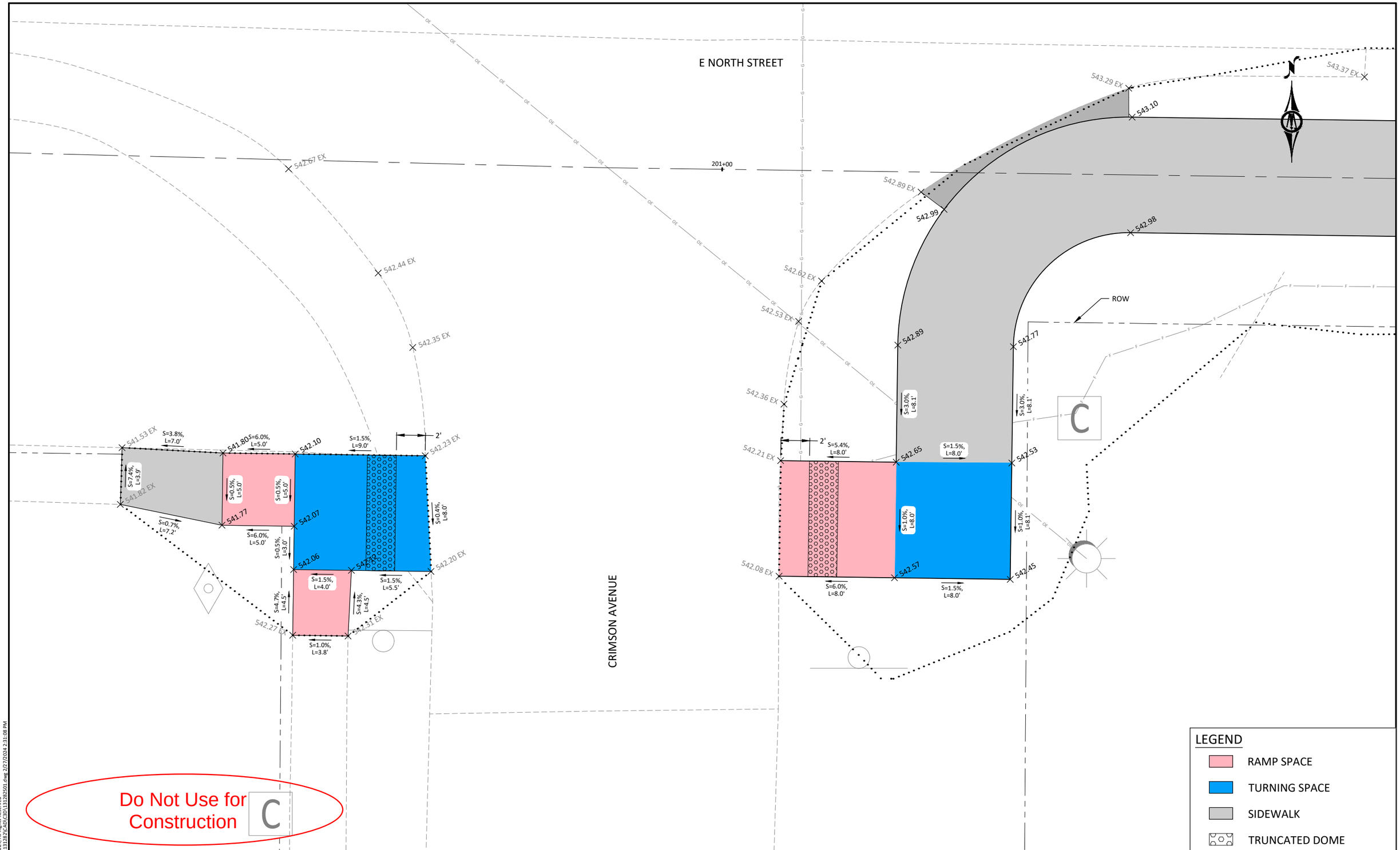
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
EROSION CONTROL - ALT 1

SHEET
R.04

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CADD\C3D\131282R01.dwg 2/27/2024 2:31:03 PM



LEGEND

- RAMP SPACE
- TURNING SPACE
- SIDEWALK
- TRUNCATED DOME

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAND_CI_IA\0G1131282\CAD\C3D\131282501.dwg 2/27/2024 2:31:08 PM

HORZ. SCALE 0 3 6 FEET

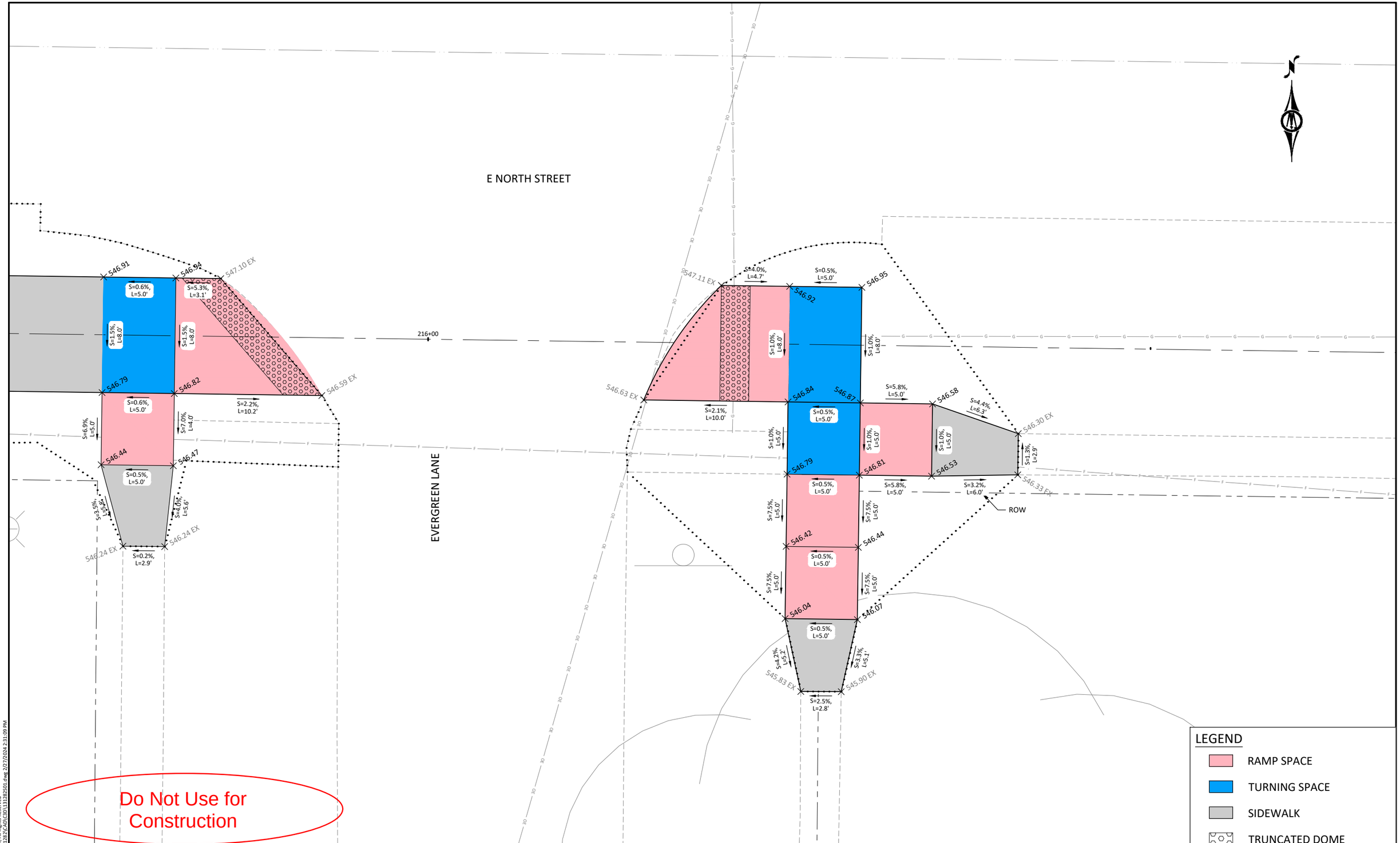
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS

SHEET S.01



© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282S01.dwg 2/27/2024 2:31:09 PM

HORZ. 0 3 6 SCALE FEET

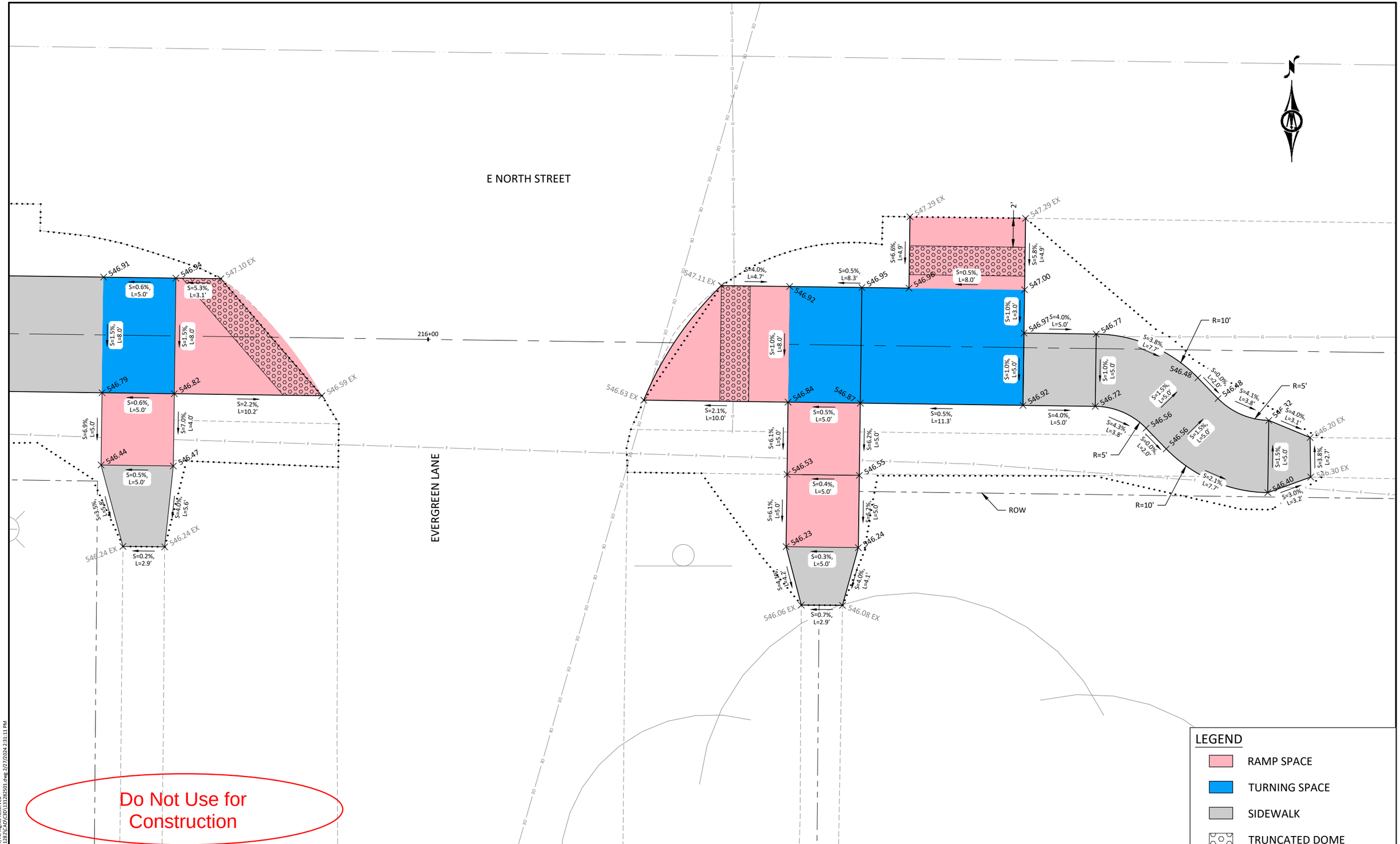
BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS

SHEET S.02



HORZ. SCALE 0 3 6 FEET

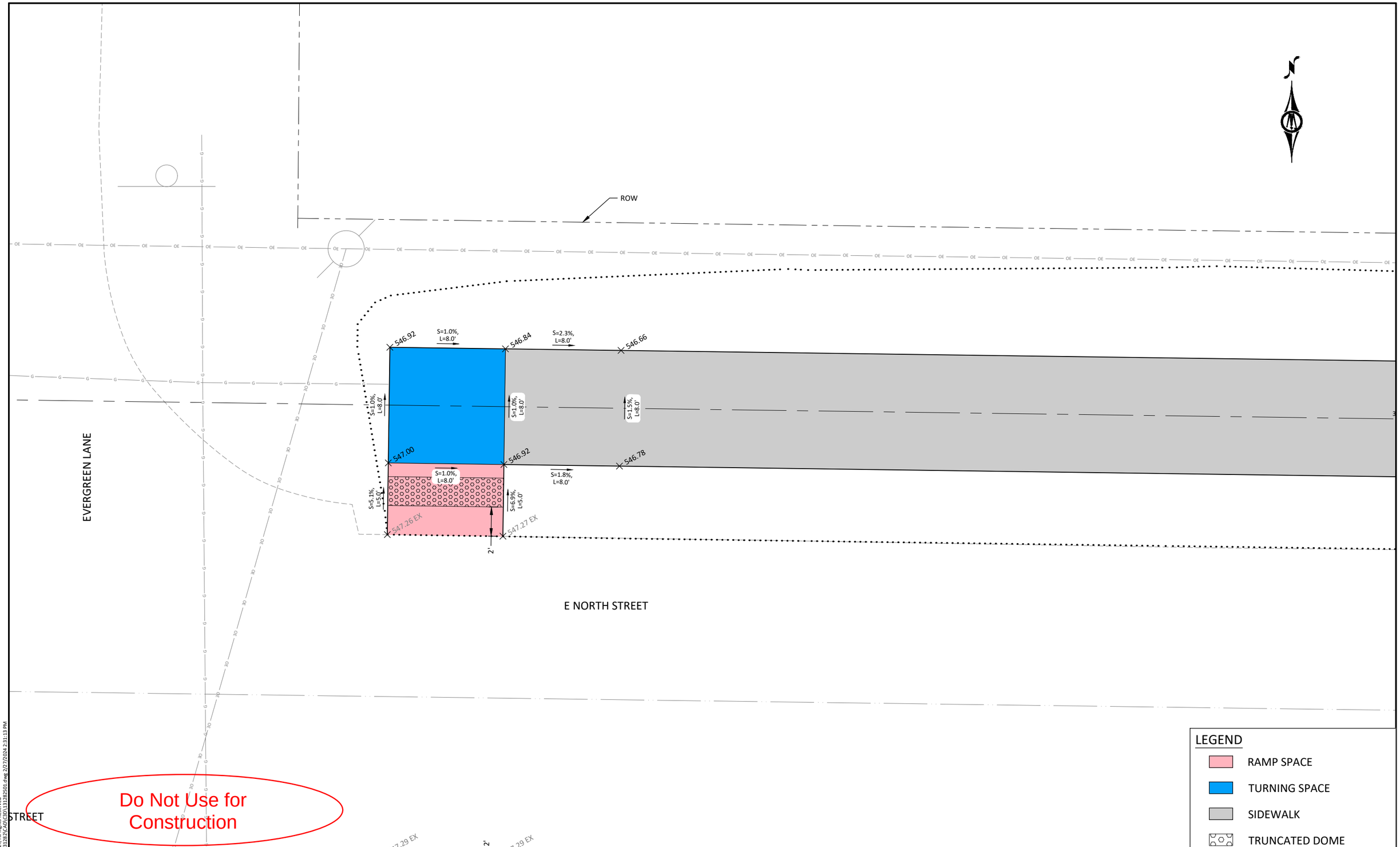
BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS - ALT 1

SHEET S.03

© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_C1_IA\0G1131282\CAD\C3D\131282S01.dwg 2/27/2024 2:31:11 PM



HORZ. SCALE 0 3 6 FEET

BOLTON & MENK

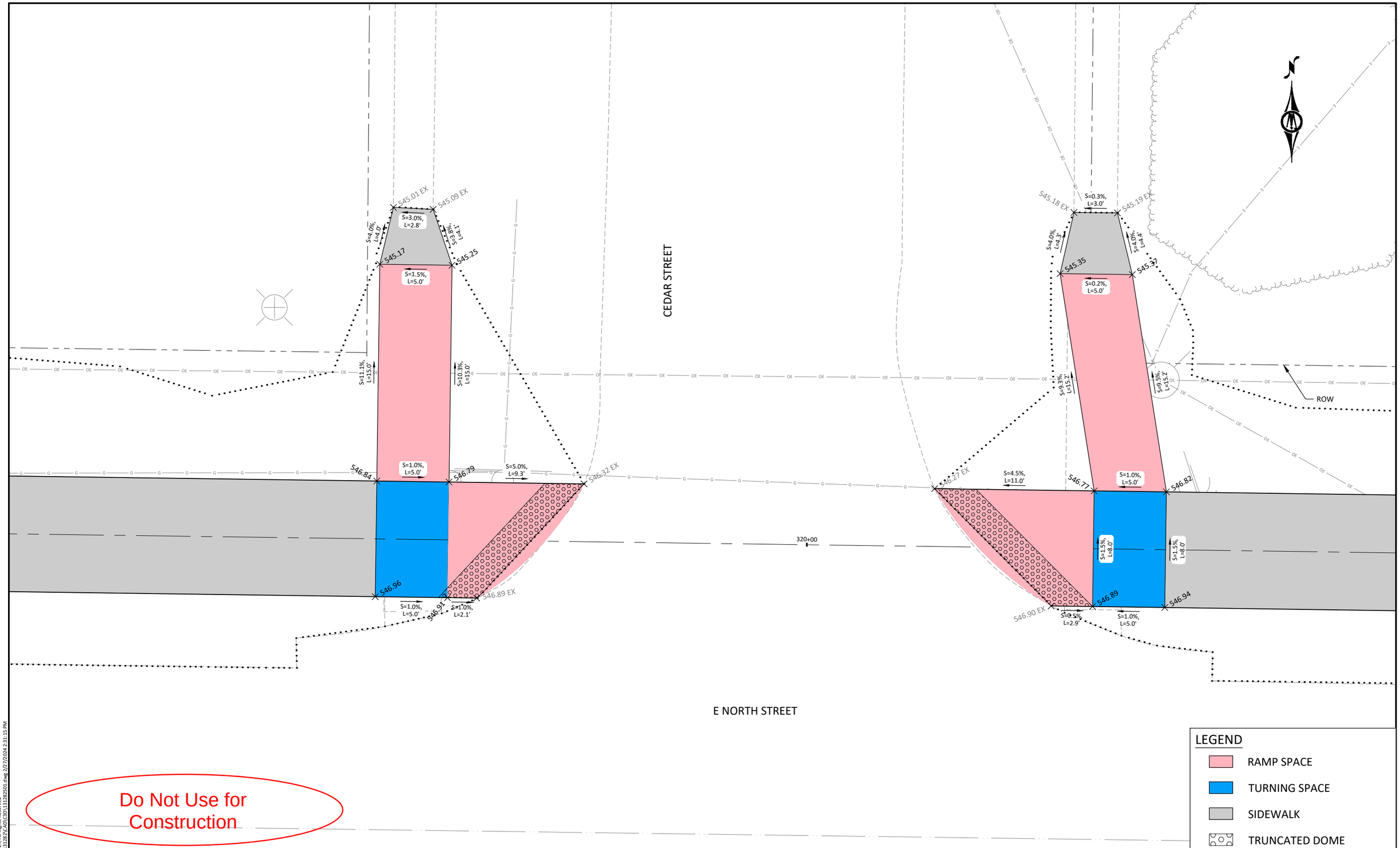
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. OG1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS - ALT 1

SHEET S.04

© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\C3D\131282S01.dwg 2/27/2024 2:31:13 PM



Do Not Use for Construction

HORZ. SCALE 0 3 6 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

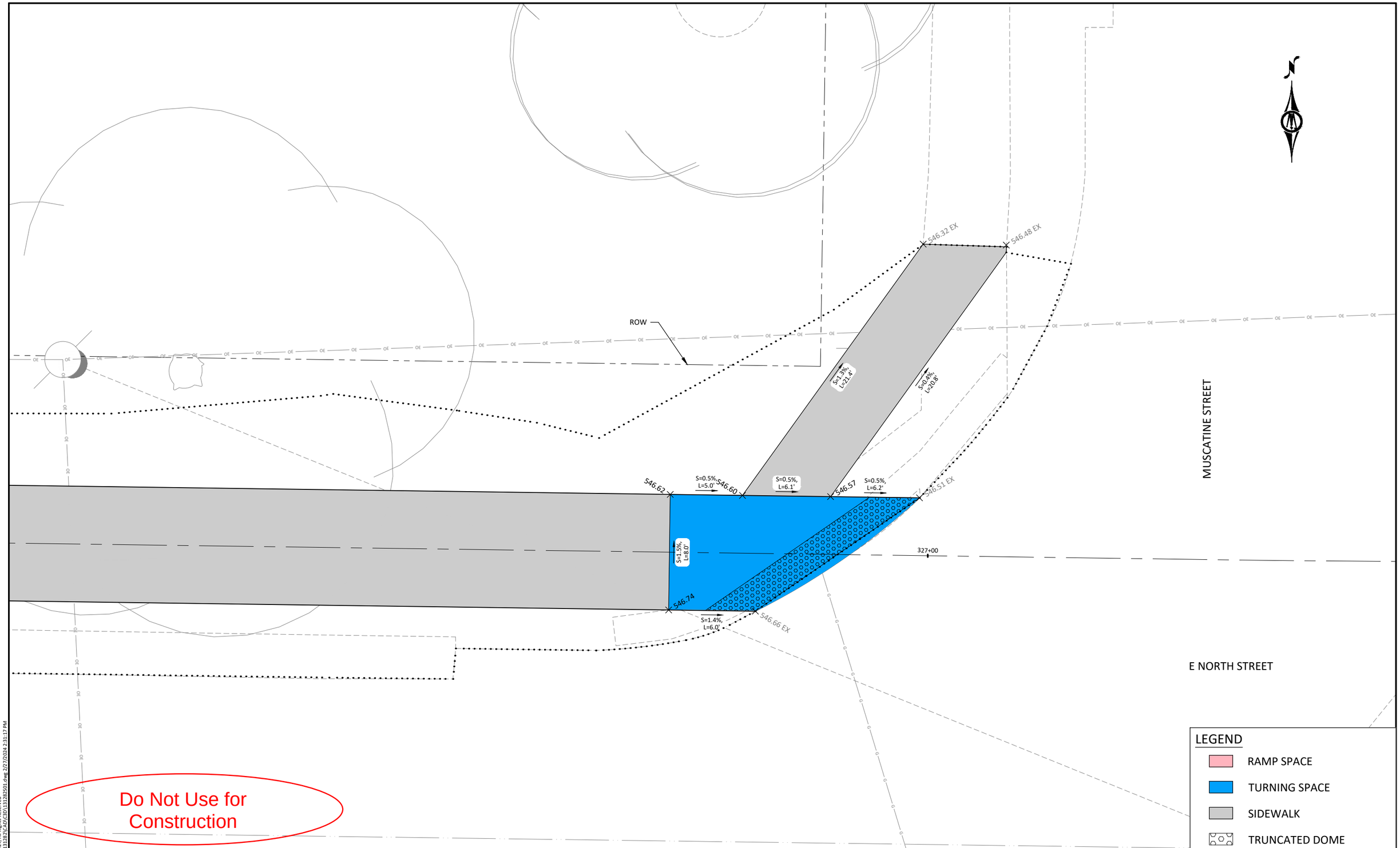
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	OG1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS - ALT 1

SHEET S.05

© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\C3D\131282501.dwg 2/27/2024 2:31:15 PM



©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282S01.dwg 2/27/2024 2:31:17 PM

HORZ. SCALE 0 3 6 FEET

BOLTON & MENK

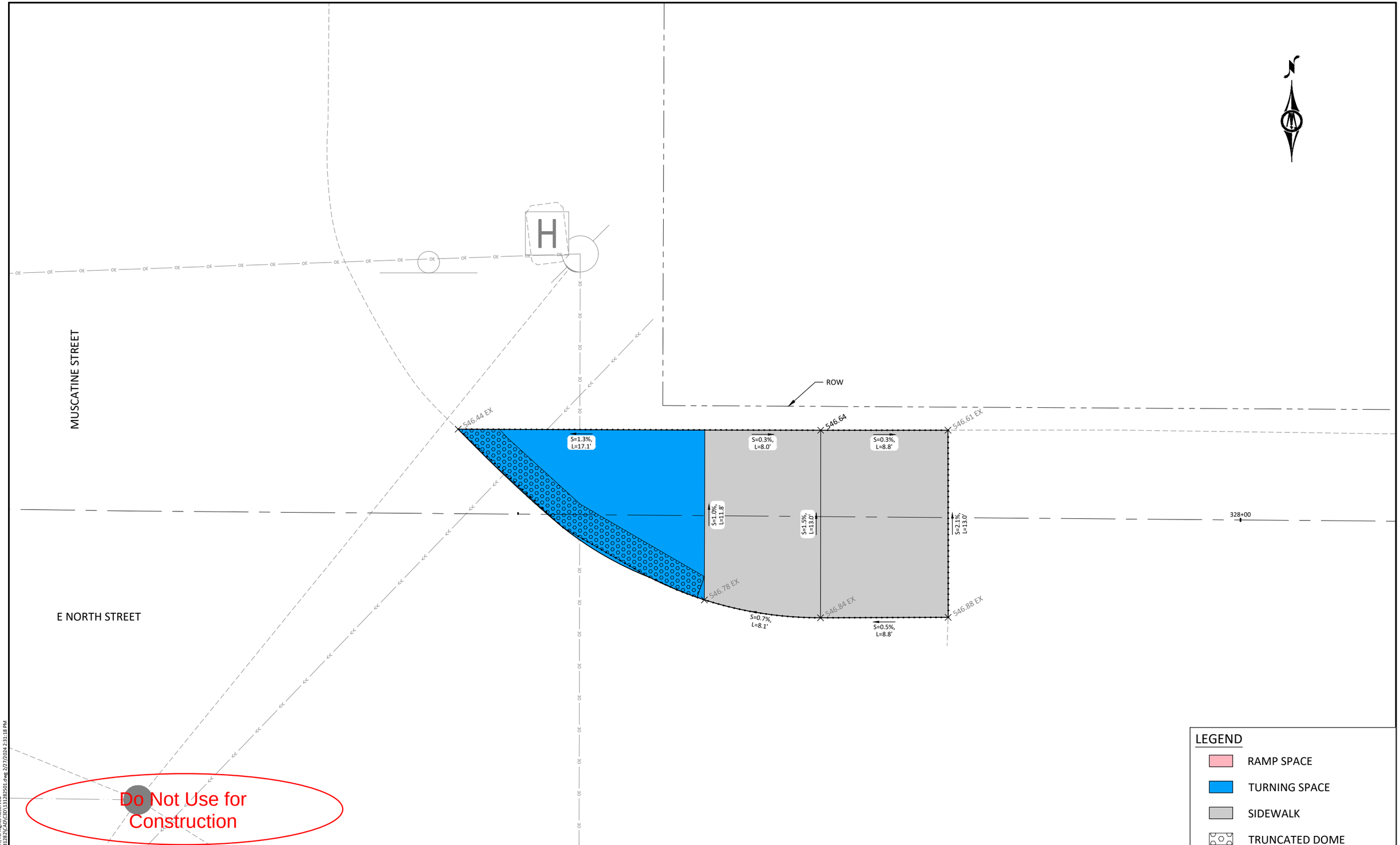
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS - ALT 1

SHEET S.06



HORZ. SCALE 0 3 6 FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

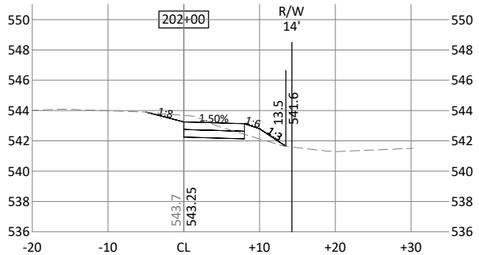
DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	OG1.131282

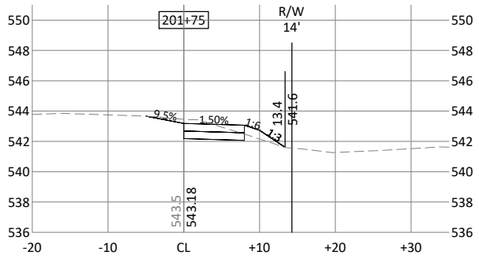
REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

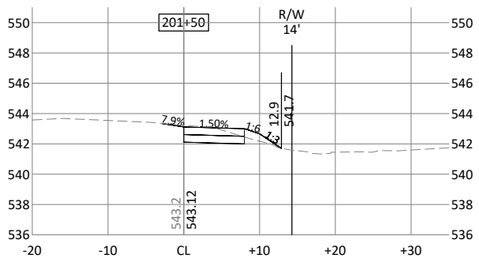
FRUITLAND, IOWA
NORTH STREET TRAIL
SIDEWALK SHEETS - ALT 1

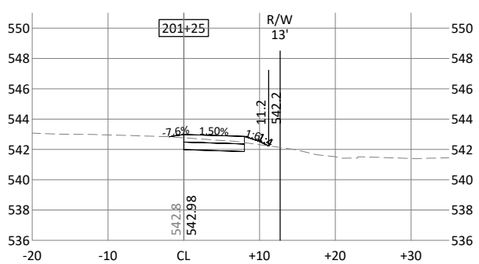
SHEET S.07

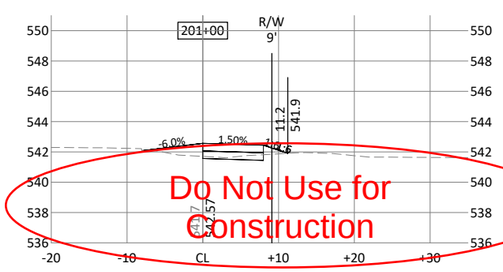
©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\OG1131282\CAD\C3D\131282S01.dwg 2/27/2024 2:31:18 PM

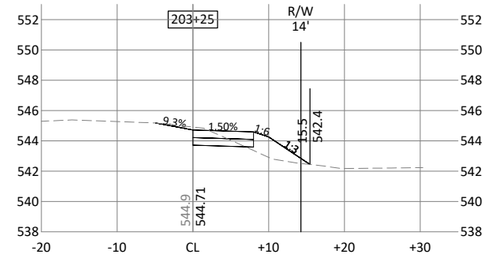


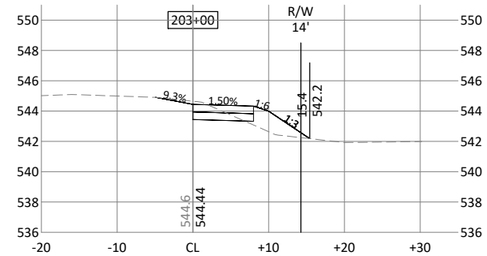


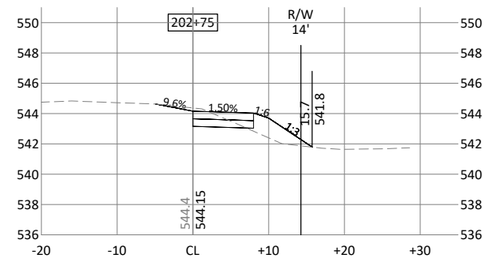


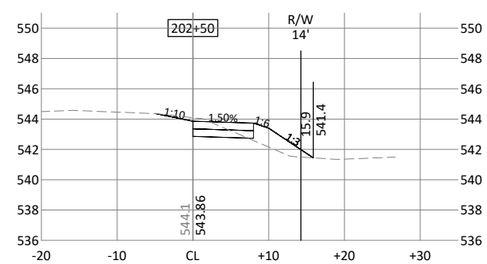


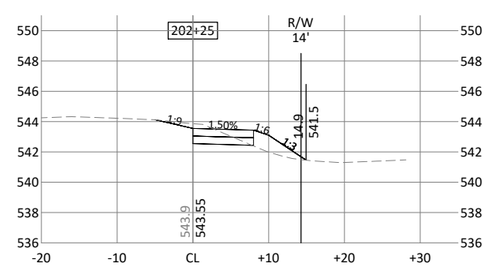


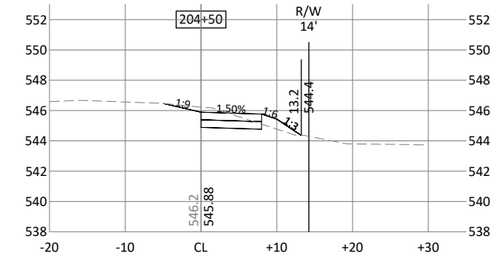


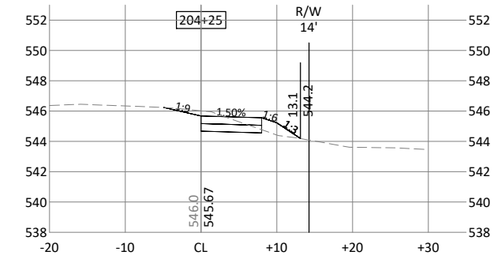


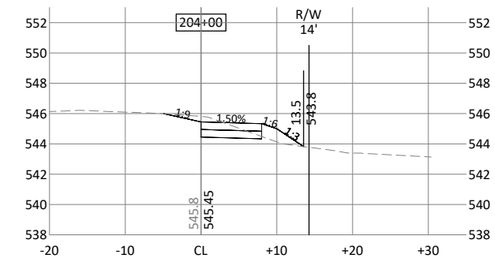


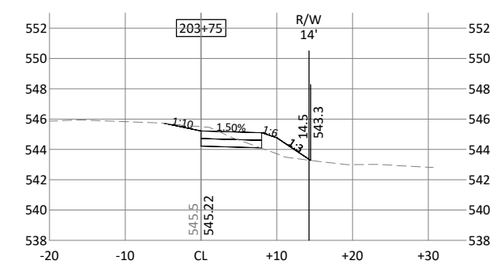


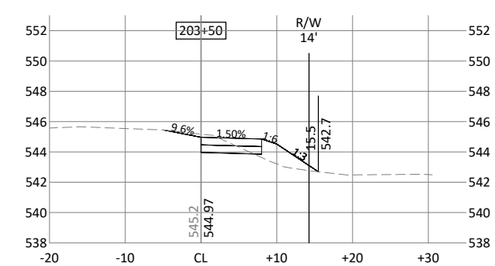


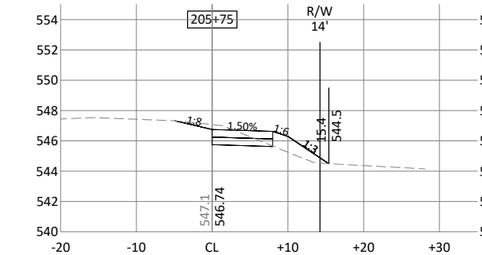


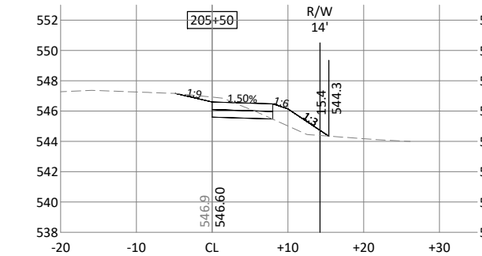


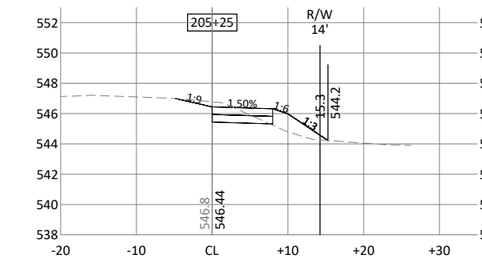


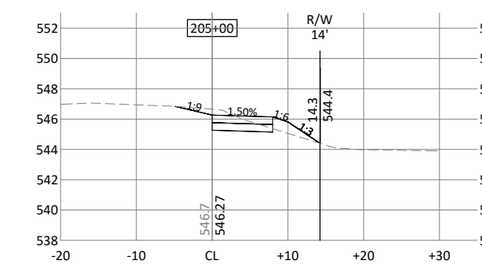


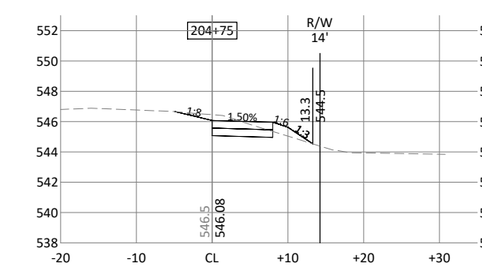












Do Not Use for Construction

HORZ. 0 10 20 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK

401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

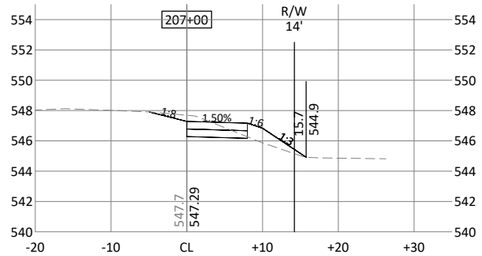
FRUITLAND, IOWA

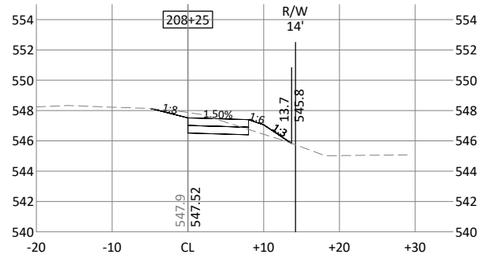
NORTH STREET TRAIL

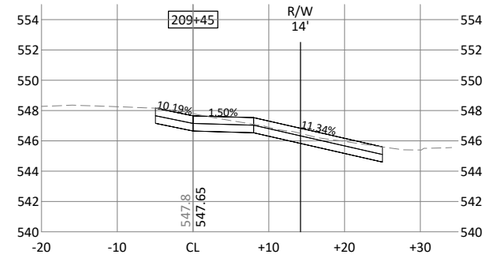
CROSS SECTIONS

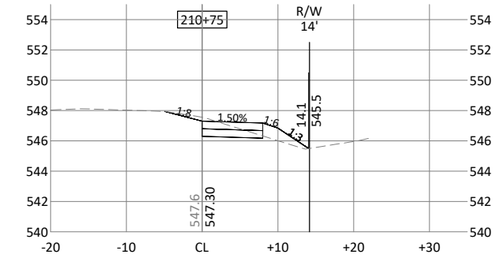
SHEET W.01

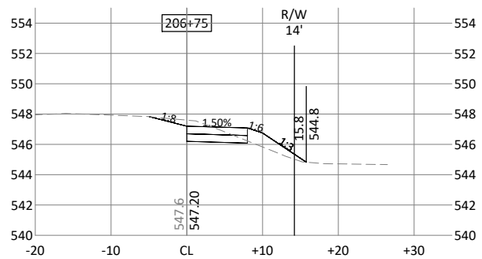
©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282W01.dwg 2/27/2024 2:31:31 PM

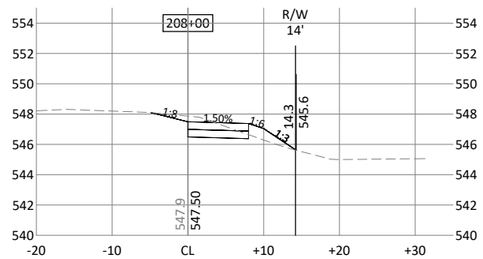


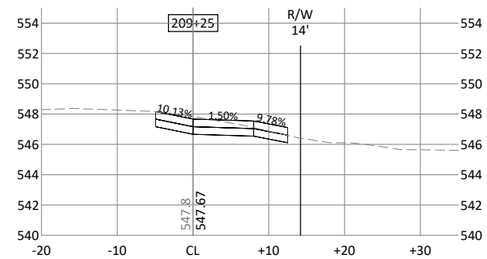


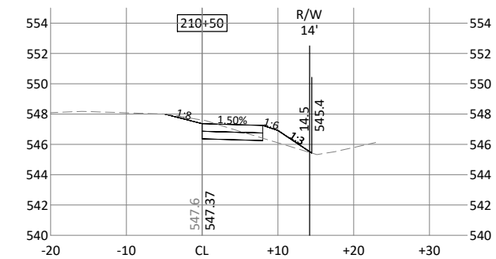


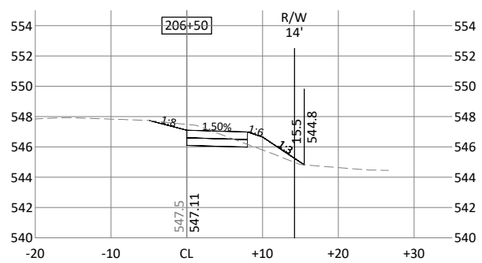


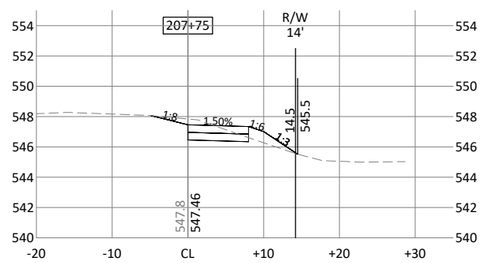


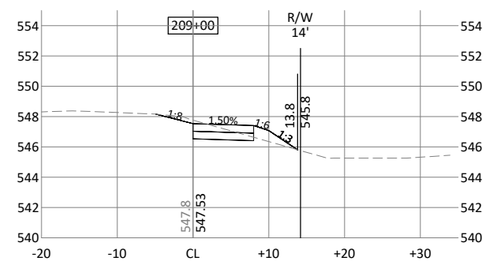


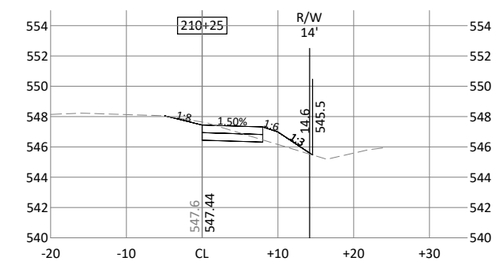


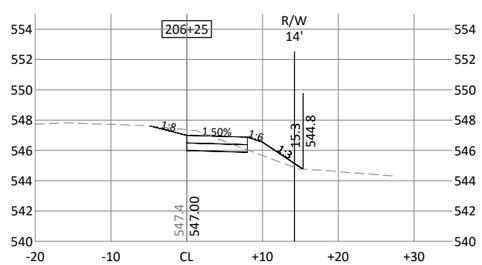


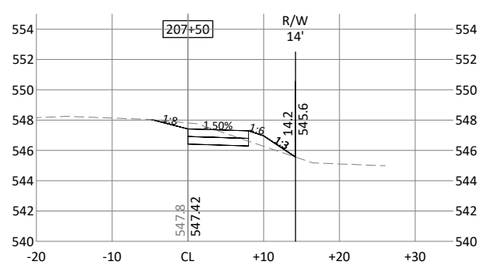


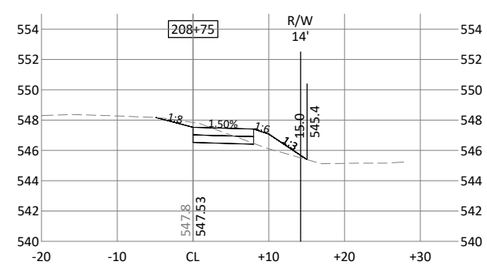


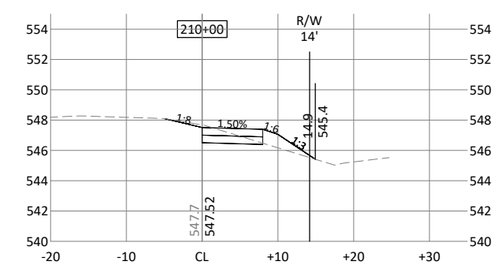


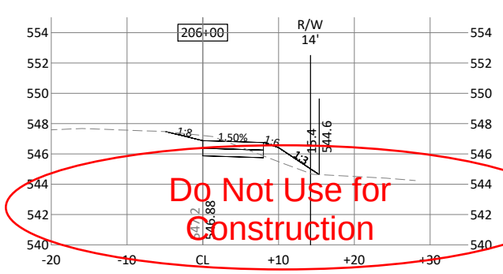




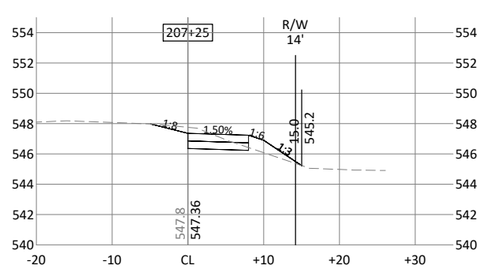


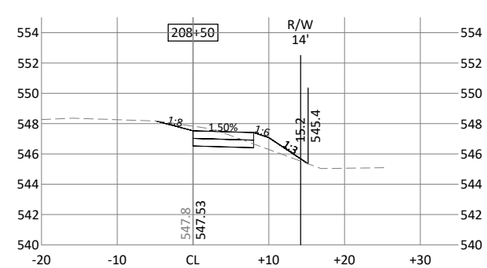


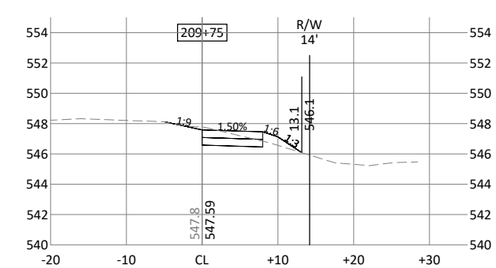




Do Not Use for Construction







HORZ. 0 10 20 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

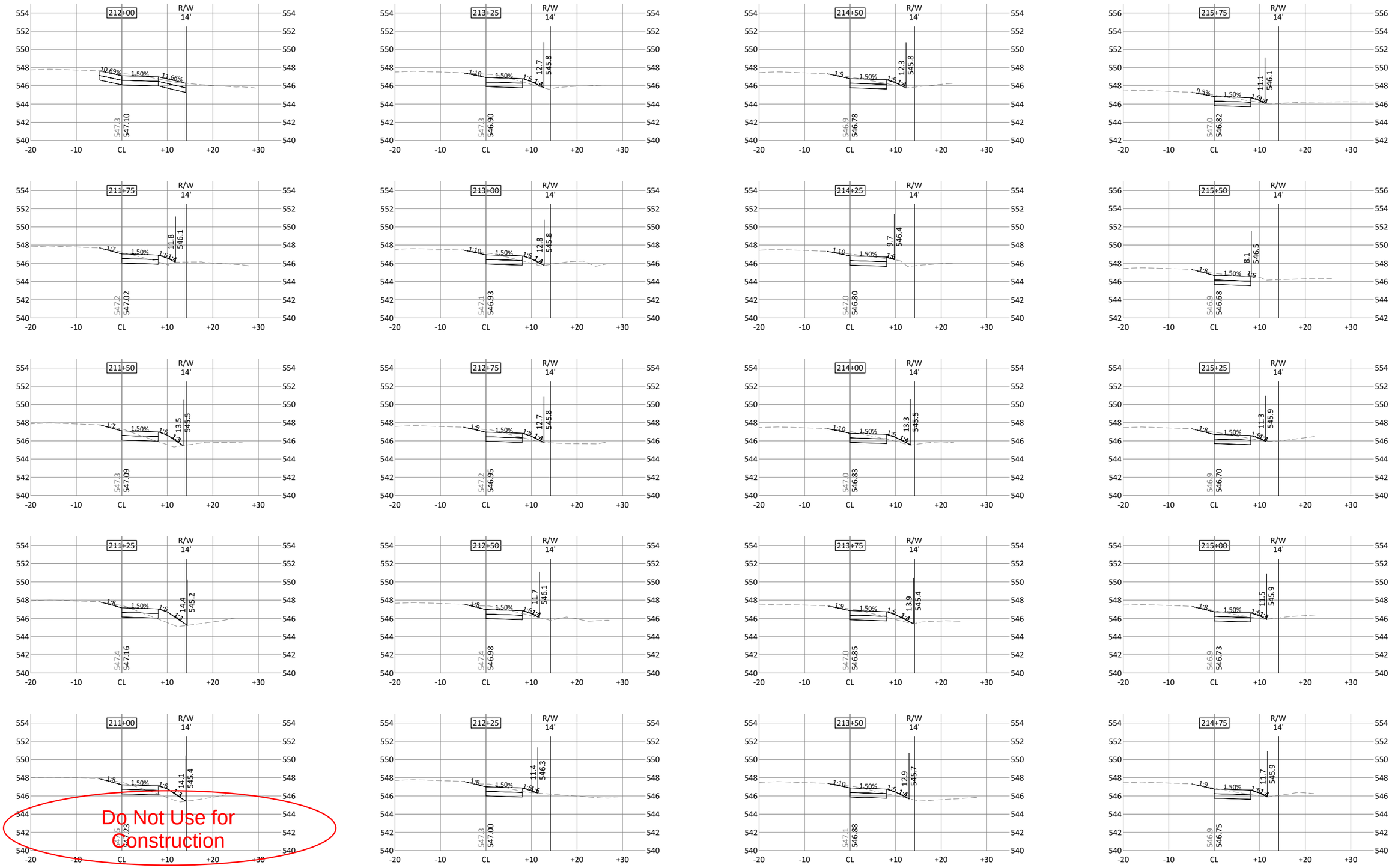
FRUITLAND, IOWA

NORTH STREET TRAIL

CROSS SECTIONS

SHEET W.02

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282W01.dwg 2/27/2024 2:31:33 PM



HORZ. 0 10 20 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	JRG/FAM
DRAWN	JRG
CHECKED	JLE
CLIENT PROJ. NO.	0G1.131282

REV	DESCRIPTION	DATE
0	CONSTRUCTION	3/12/24

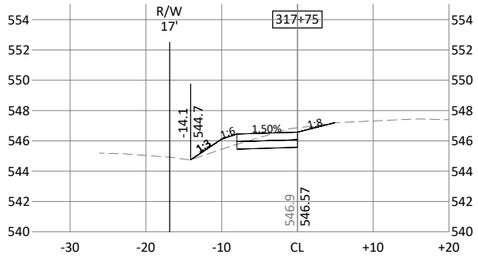
FRUITLAND, IOWA

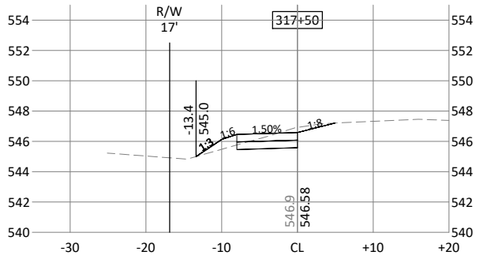
NORTH STREET TRAIL

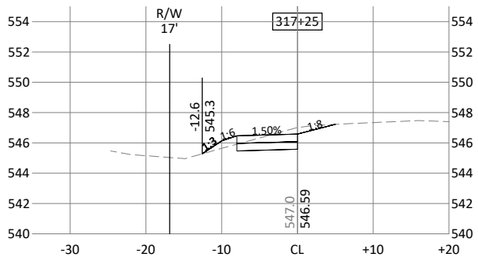
CROSS SECTIONS

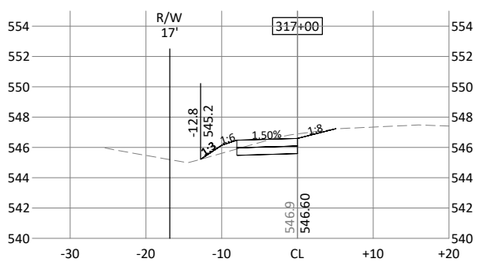
SHEET W.03

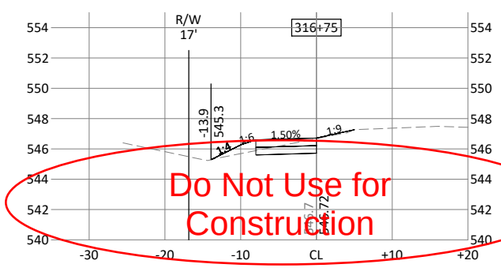
© Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CADD\C3D\131282W01.dwg 2/27/2024 2:31:34 PM

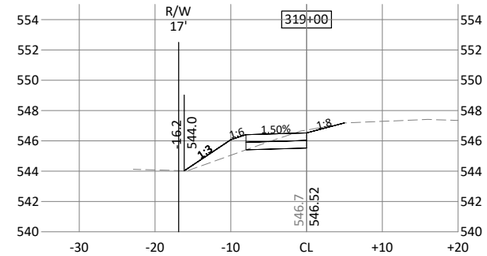


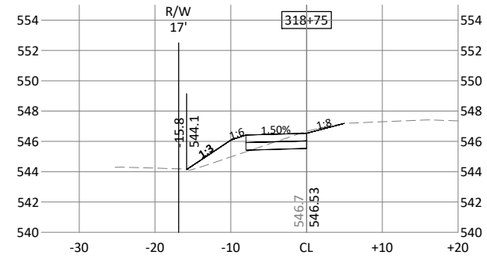


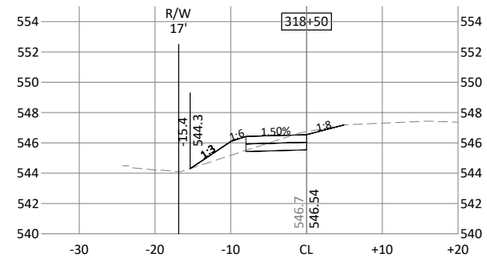


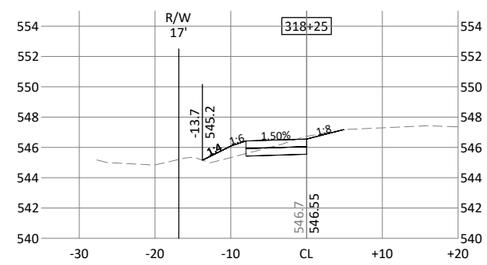


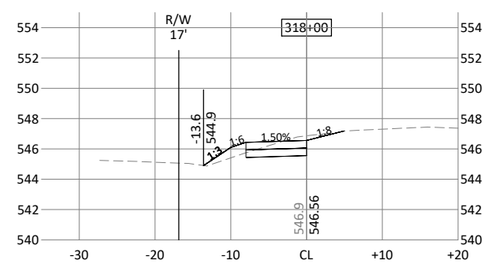


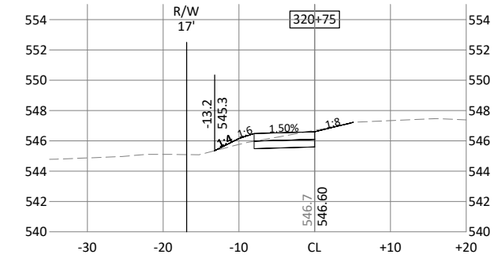


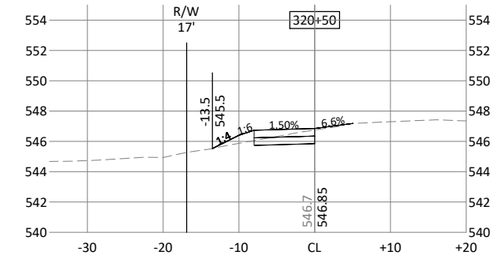


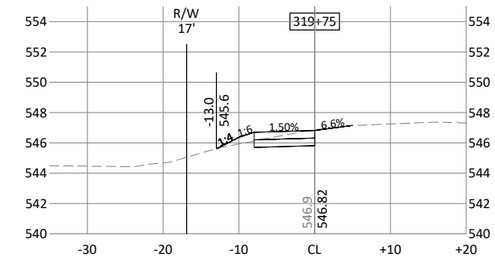


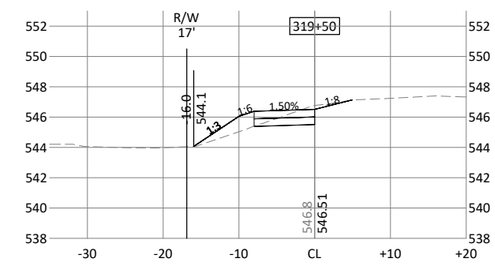


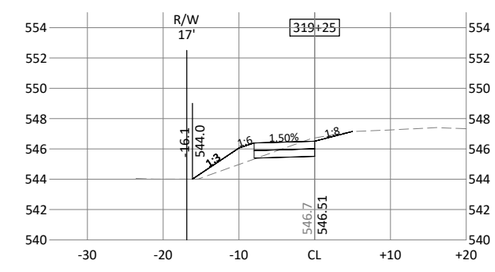


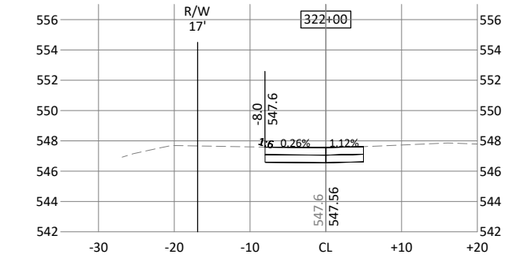


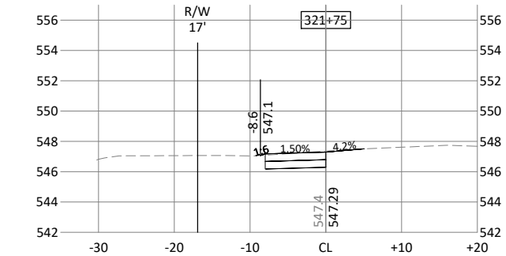


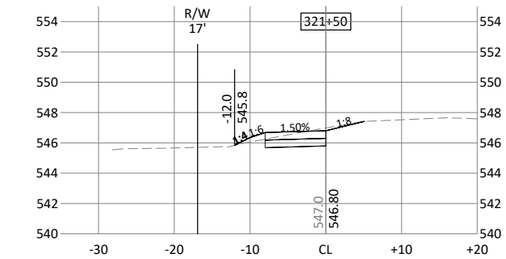


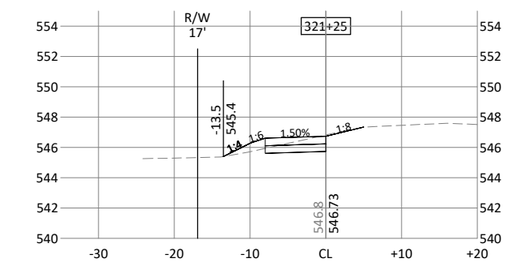


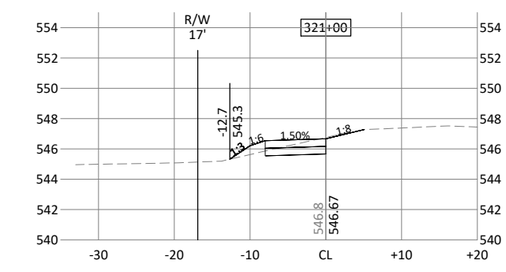












HORZ. 0 10 20 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED JRG/FAM	REV	DESCRIPTION	DATE
DRAWN JRG	0	CONSTRUCTION	3/12/24
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

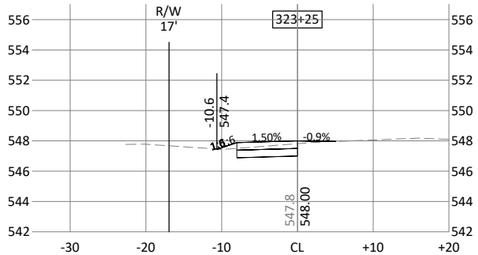
FRUITLAND, IOWA

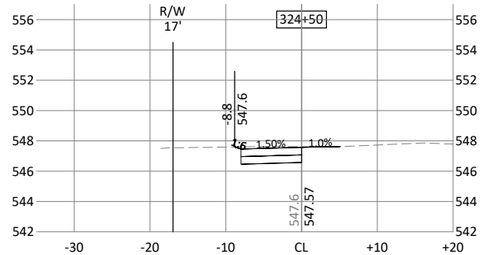
NORTH STREET TRAIL

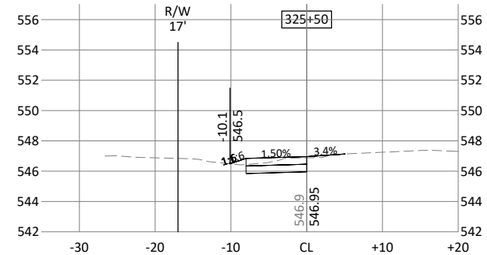
CROSS SECTIONS - ALT 1

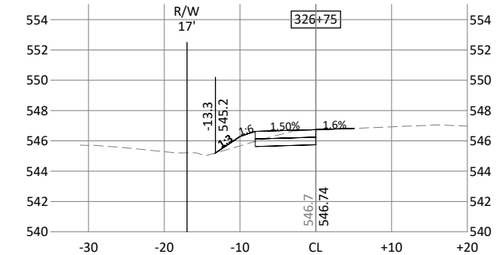
SHEET W.04

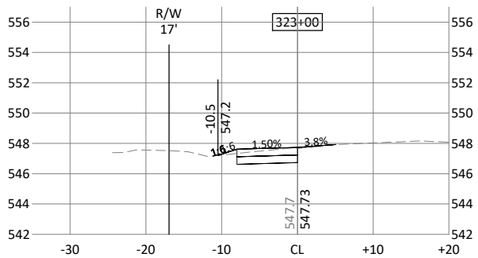
©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282W02.dwg 2/27/2024 2:31:47 PM

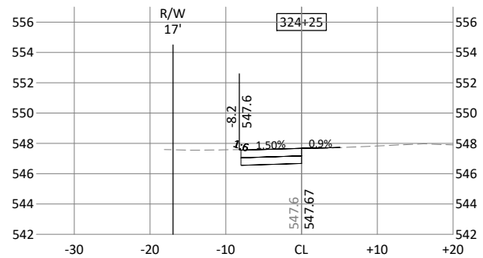


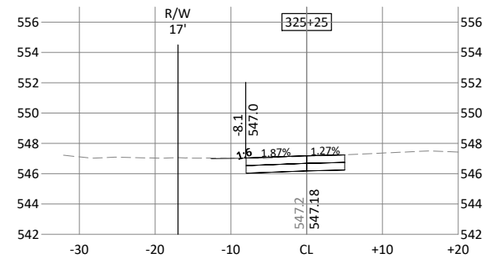


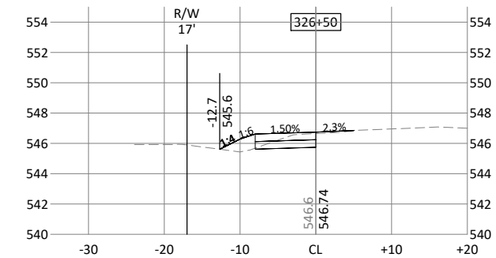


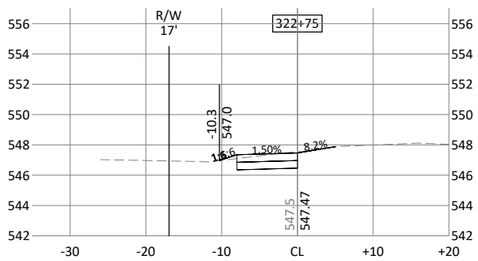


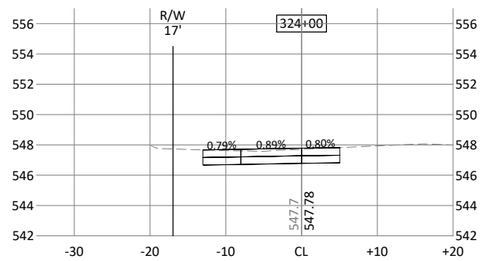


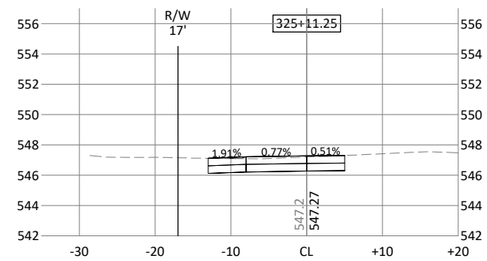


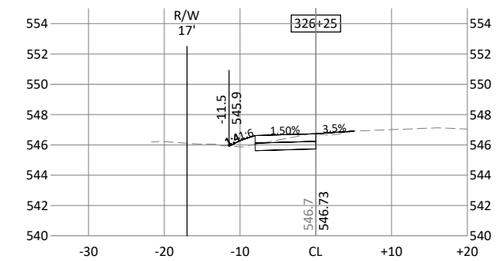


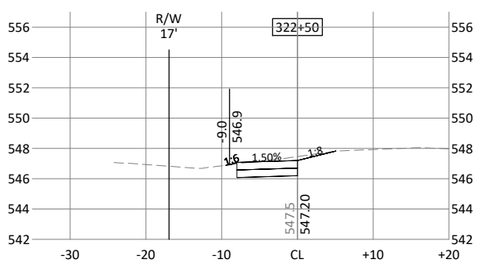


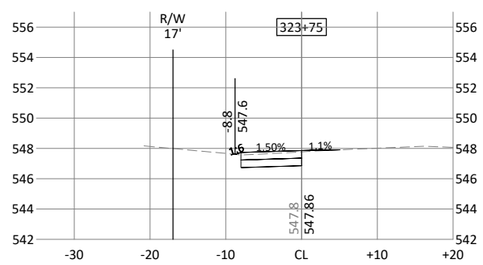


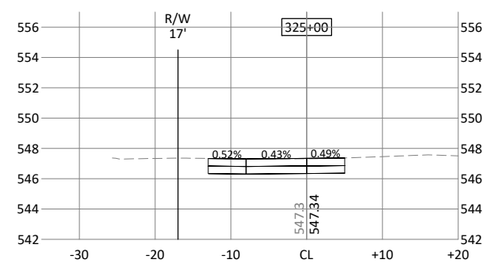


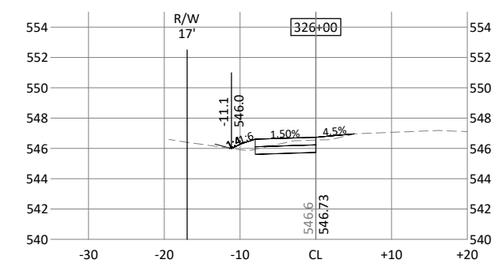


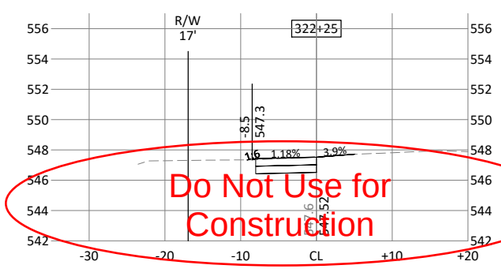




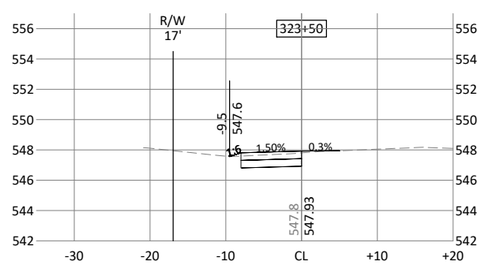


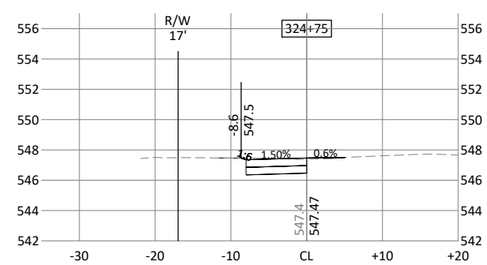


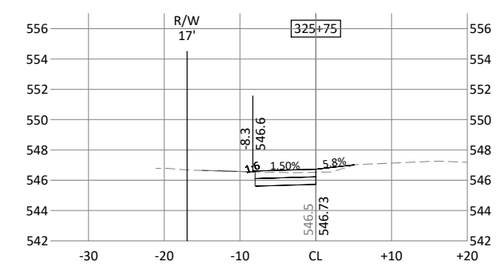




Do Not Use for Construction







HORZ. 0 10 20 SCALE FEET

VERT. 0 5 10 SCALE FEET

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	REV	DESCRIPTION	DATE
JRG/FAM	0	CONSTRUCTION	3/12/24
DRAWN JRG			
CHECKED JLE			
CLIENT PROJ. NO. 0G1.131282			

FRUITLAND, IOWA
NORTH STREET TRAIL
CROSS SECTIONS - ALT 1

SHEET W.05

©Bolton & Menk, Inc. 2024, All Rights Reserved
H:\FRUITLAN_CI_IA\0G1131282\CAD\C3D\131282W02.dwg 2/27/2024 2:31:49 PM