LETTING DATE
APRIL 21, 2020

PCC PAVEMENT - REPLACE
STBG-SWAP-1867(617)--SG-96

WINNESHIEK COUNTY

	TOTAL SHEETS 113
PROJECT NUMBER	STBG-SWAP-1867(617)--SG-96
R.O.W. PROJECT NUMBER	NA
MEC PROJECT NUMBER	DEC - 30616018-001

IOWADOT

CITY OF DECORAH

PLANS FOR PROPOSED IMPROVEMENT ON THE

URBAN ROAD SYSTEM

WINNESHIEK COUNTY

PCC PAVEMENT - REPLACE

IN THE CITY OF DECORAH, ON LOCUST ROAD FROM COLLEGE DRIVE .87 MILES TO PINE CREST DRIVE - PCC PAVEMENT - REPLACE

BID ALTERNATE: PINE CREST DRIVE TO HIGHLAND DRIVE

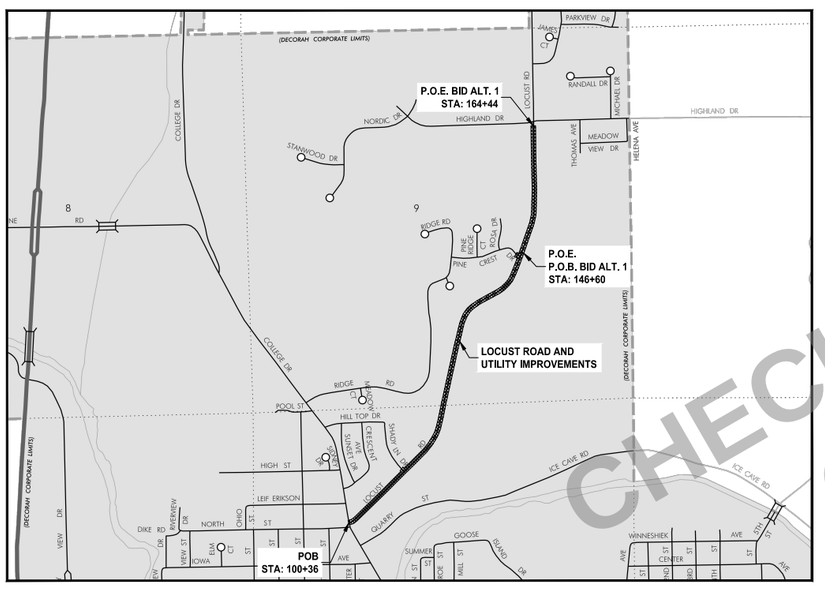
LOCATED IN SECTIONS 9 AND 16, T98N, R08W OF THE 5TH P.M., DECORAH TOWNSHIP

111-01
04-17-12

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
Quarry Street Improvements	Storm Sewer and Pavement



VICINITY MAP
WINNESHIEK COUNTY, IOWA
NOT TO SCALE

SCALES: AS NOTED

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.

See Tab 105-4 Standard Road Plans on Sheet C.02

See Tab 111-25 Index of Tabulations on Sheet C.02

See sheet A.03 for list of utility contacts.

04-30-02 101-4

DESIGN DATA RURAL

2017	AADT	4,210	V.P.D.
2038	AADT	-	V.P.D.
2038	DHV	-	V.P.H.
TRUCKS		5	%

MILEAGE SUMMARY 105-1 09-27-94

DIV.	LOCATION	LIN. FT.	MILES
1 & 2	STA 100+36 TO STA 146+60 - LOCUST ROAD	4,624	0.87
3	STA 146+60 TO STA 164+44 - LOCUST ROAD	1,784	0.34
	TOTAL	6,408	1.21

NPDES GENERAL PERMIT NO. 2

This project is covered by the Iowa Department of Natural Resources NPDES General Permit No. 2. The contractor shall carry out the terms and conditions of General Permit No. 2 and the storm water pollution prevention plan which is a part of these contract documents. Refer to Section 2602 of Standard Specifications for additional information.

INDEX OF SHEETS 105-3 10-18-05

No.	Description
A.01	TITLE SHEET
A.02	OVERALL PROJECT LAYOUT
A.03	GENERAL LEGEND
A.04	PLAN REVISIONS
B.01 - B.07	TYPICAL SECTIONS AND DETAILS
C.01 - C.13	QUANTITIES AND REFERENCE NOTES
D.01 - D.03	LOCUST ROAD REMOVALS PLAN
D.04 - D.11	LOCUST ROAD PLAN AND PROFILE
D.12 - D.14	LOCUST ROAD PLAN AND PROFILE - BID ALTERNATE 1
E.01	SHADY LANE DRIVE PLAN AND PROFILE
E.02	PINE CREST DRIVE PLAN AND PROFILE
G.01 - G.02	REFERENCE TIES, BENCHMARKS AND ALIGNMENT INFORMATION
H.01 - H.03	RIGHT-OF-WAY AND EASEMENTS
J.01 - J.06	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS
L.01 - L.04	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN
L.05 - L.06	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN - BID ALTERNATE 1
M.01 - M.07	LOCUST ROAD STORM SEWER PLAN AND PROFILE
M.08	LOCUST ROAD STORM SEWER CROSS SECTIONS
M.09 - M.10	LOCUST ROAD STORM SEWER PLAN - BID ALTERNATE 1
M.11	LOCUST ROAD STORM SEWER CROSS SECTIONS - BID ALTERNATE 1
N.01 - N.02	SIGNING, PAVEMENT MARKING AND SYMBOLS PLAN
N.03	SIGNING, PAVEMENT MARKING AND SYMBOLS PLAN - BID ALTERNATE 1
P.01 - P.02	JOINT UTILITY TRENCH AND LIGHTING PLAN
P.03	JOINT UTILITY TRENCH AND LIGHTING PLAN - BID ALTERNATE 1
P.04	JOINT UTILITY TRENCH CROSS SECTION
Q.01 - Q.13	SOIL BORING INFORMATION
Q.14 - Q.15	REINFORCED STEEPENED SLOPE AT DRAINAGE DITCH
R.01 - R.02	POLLUTION PREVENTION PLAN
R.03 - R.04	LOCUST ROAD GRADING AND EROSION CONTROL PLAN
R.05	LOCUST ROAD GRADING AND EROSION CONTROL PLAN - BID ALTERNATE 1
S.01 - S.02	SIDEWALK AND ACCESSIBLE RAMP DETAILS
U.01 - U.02	MODIFIED STANDARDS AND SPECIAL DETAILS
W.01 - W.10	LOCUST ROAD CROSS SECTIONS
W.11 - W.14	LOCUST ROAD CROSS SECTIONS - BID ALTERNATE 1

CHECK PLANS - NOT FOR CONSTRUCTION

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.

LICENSED PROFESSIONAL ENGINEER JEFFREY S. SCHUG 15306 IOWA

CHECK PLANS

DATE:

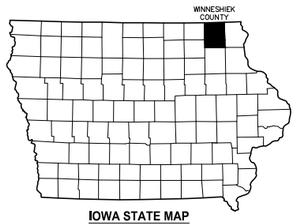
JEFFREY S. SCHUG, PE NO. 15306

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021

PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEETS

IOWA ONE CALL SM
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.



IOWA STATE MAP
NO SCALE

LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020

McCLURE ENGINEERING COMPANY

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	. . . .	McCLURE making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TITLE SHEET	STBG-SWAP-1867(617)--SG-96	SHEET NO. A.01
CHECKED BY BAK	FIELD BOOK NO. -							

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ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS					SHEET NO.
JSS	BAV	MEC #30616018-001	.	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	PROJECT LOCATION MAP	STBG-SWAP-1867(617)--SG-96	A.02
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.							
BAK	-		.							

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GENERAL LEGEND

EXISTING	PROPOSED	
8"SS	SS	SANITARY SEWER MAIN
SS	SS	SANITARY SEWER SERVICE
6"FM	6"FM	SANITARY SEWER FORCE MAIN
ST		STORM SEWER MAIN OR CULVERT
		SECONDARY STORM SEWER MAIN
ST	ST	SECONDARY STORM SEWER SERVICE
		SUBDRAIN/TILE
8"W	8"W	WATER MAIN
W	W	WATER SERVICE
UE	UE	UNDERGROUND ELECTRIC
OHE	OHE	OVERHEAD ELECTRIC
T	T	UNDERGROUND TELEPHONE
FO	FO	UNDERGROUND FIBER OPTIC
TV	TV	UNDERGROUND CABLE TV
G	G	GAS MAIN OR SERVICE
949	949	CONTOUR LINES INTERMEDIATE
950	950	CONTOUR LINES INDEX
		PROPERTY LINE / LOT LINE
R/W	ROW	RIGHT OF WAY LINE
		SECTION LINE
		EASEMENT
		GUARD RAIL
X	X	FIELD FENCE
O	O	CHAIN LINK FENCE
		WOODEN FENCE
		ROAD CENTERLINE
		GRADING LIMITS
		CONSTRUCTION LIMITS
AG	AG	AG LINE
		WATERWAY FLOWLINE
		TOP OF SLOPE
		BOTTOM OF SLOPE
		SILT FENCE

EXISTING	PROPOSED	
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		AIR RELEASE MANHOLE/DRAIN MANHOLE
		STORM SEWER MANHOLE
		STORM SEWER CLEANOUT
		STORM SEWER INTAKE
		STORM SEWER BEEHIVE INTAKE
		FLARED END SECTION
		FIRE HYDRANT
WV	WV	WATER VALVE
		WATER VALVE MANHOLE
		CURB STOP
		WATER METER MANHOLE
		YARD HYDRANT
		ELECTRIC MANHOLE / VAULT
		ELECTRIC PEDESTAL / TRANSFORMER
		OUTDOOR ELECTRIC POWER OUTLET
		POWER POLE
STL		POWER POLE w/ STREET LIGHT
		STREET LIGHT POLE
		GUY WIRE
		FLOODLIGHT
		FIBER OPTIC MARKER
		TRAFFIC SIGNAL
		TRAFFIC SIGNAL BOX
		TRAFFIC SIGNAL MANHOLE / VAULT
		RAILROAD CROSSING SIGNAL
		TELEPHONE MANHOLE / VAULT
		TELEPHONE PEDESTAL
		CABLE TV MANHOLE / VAULT
		CABLE TV PEDESTAL
		GAS VALVE
		IRRIGATION HANDHOLE
		BOLLARD (BUMPER POST)
		ROADWAY SIGN
		MAILBOX
		WELL
12"	12"	DECIDUOUS TREE
12"	12"	EVERGREEN TREE
36"	36"	SHRUB OR BUSH
		TREE OR SHRUB LINE
12"		STUMP
		MONITORING WELL
00	00	SOIL BORINGS
		FLAG POLE
		SATELLITE DISH
		SLOPE INDICATORS
1		CONTROL POINT
00		BENCH MARK
		SECTION CORNER
		IRON PIN SET
		IRON PIN FOUND

ABBREVIATIONS

T/S	TOP OF SLAB	TOP	TOP OF SLOPE
BC	BACK OF CURB	BOT	BOTTOM OF SLOPE
TC	TOP OF CURB	EP	EDGE OF PAVING
FG	FORM GRADE	BOP	BEGINNING OF PROJECT
FL	FLOWLINE	EOP	END OF PROJECT
CL	CENTERLINE	UAC	USE AS CONSTRUCTED
C	CUT		
F	FILL		

UTILITY CONTACT INFORMATION

Iowa One Call	**Ph: 811**
Decorah Fire Department	**Ph: 563-382-3472**
Emergency	**Ph: 911**
Decorah Police Department	**Ph: 563-382-3667**
Emergency	**Ph: 911**
Alliant Energy	**Ph: 319-286-1315**
Laura Barr - locate_IPL@alliantenergy.com	
Alpine Communications	**Ph: 563-245-4471**
Chad Ruegnitz - cruegnitz@alpine-communications.com	
Black Hills Energy	**Ph: 563-382-0953**
Jan Krueger - jan.krueger@blackhillscorp.com	
CenturyLink	**Ph: 720-578-8090**
Tom Sturmer - thomas.sturmer@centurylink.com	
Tommy Brower - tommy.brower@centurylink.com	
Decorah Water Department	**Ph: 563-382-5171**
Todd Idhe - decwat@decorahia.org	
Hawkeye Telephone Company	**Ph: 563-518-1012**
Tom Mayo - hawktel3@netins.net	
Mediacom	**Ph: 608-792-8987**
Brandon Thies - bthies@mediacomcc.com	
Jason Chicken - jchicken@mediacomcc.com	
Greg Jochims - gjochims@mediacomcc.com	

UTILITY QUALITY SERVICE LEVELS:

UTILITY QUALITY LEVELS ARE BASED ON THE CI/ASCE 38-02 STANDARD.

UTILITY QUALITY LEVEL A:
PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES.

UTILITY QUALITY LEVEL B:
INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

UTILITY QUALITY LEVEL C:
INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

UTILITY QUALITY LEVEL D:
INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

EXAMPLES:

8"SS(A)	SANITARY SEWER MAIN - QUALITY SERVICE LEVEL A
8"SS(B)	SANITARY SEWER MAIN - QUALITY SERVICE LEVEL B
8"SS(C)	SANITARY SEWER MAIN - QUALITY SERVICE LEVEL C
8"SS(D)	SANITARY SEWER MAIN - QUALITY SERVICE LEVEL D

CHECK PLANS - NOT FOR CONSTRUCTION

111-23
10-17-17

LISTING OF PROJECT REVISIONS

Date	Sheet No.	Description of Revisions

SHOP DRAWING SUBMITTALS

SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS SHOWN IN THE TABLE BELOW. (NOTE ADDITIONAL SHOP DRAWINGS MAY BE REQUIRED IN ACCORDANCE WITH ARTICLE 1105.03 OF THE STANDARD SPECIFICATIONS.)

SUBMITTAL REQUIREMENTS FOR SHOP DRAWINGS SHOULD BE IN ACCORDANCE WITH ARTICLE 1105.03, OF THE STANDARD SPECIFICATIONS, FOR HIGHWAY AND BRIDGE CONSTRUCTION OF THE IOWA DEPARTMENT OF TRANSPORATION.

SHOP DRAWINGS SHALL BE SUBMITTED WITH THE FOLLOWING NAMING CONVENTION:

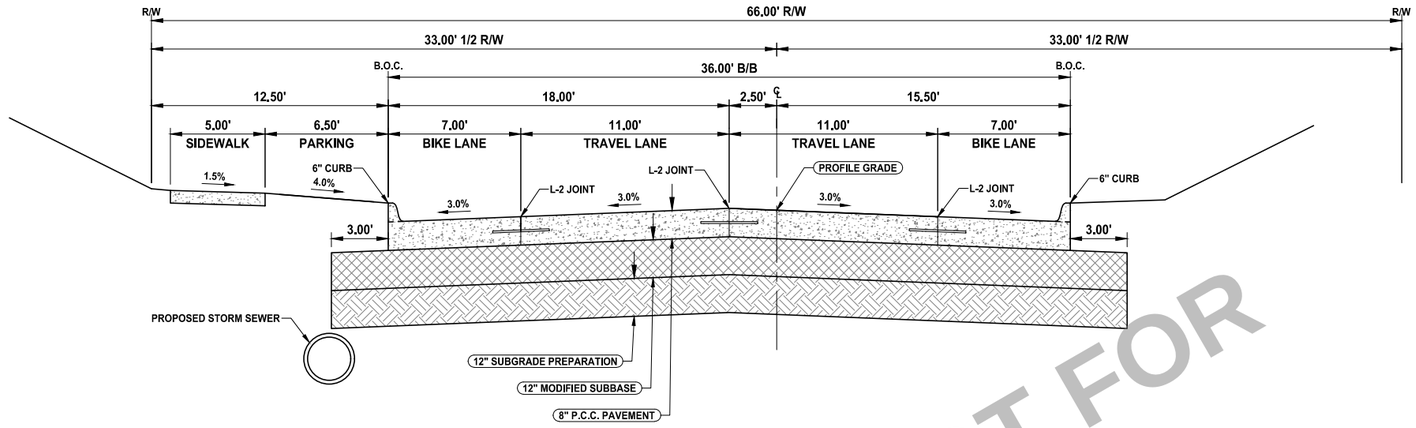
(Paren)_County_DesignNumber_SubmittalDescription.pdf
Example: (090)_BlackHawk_Design915_DeckDrains.pdf

Shop Drawings shall be submitted to:

McCLURE C/O TONY BABCOCK
1360 NW 121ST STREET
CLIVE, IA 50325
OFFICE (515) 964-1229
FAX (515) 964-2370
TBABCOCK@MECRESULTS.COM

1	REINFORCED STEEPENED SLOPE

CHECK PLANS - NOT FOR CONSTRUCTION



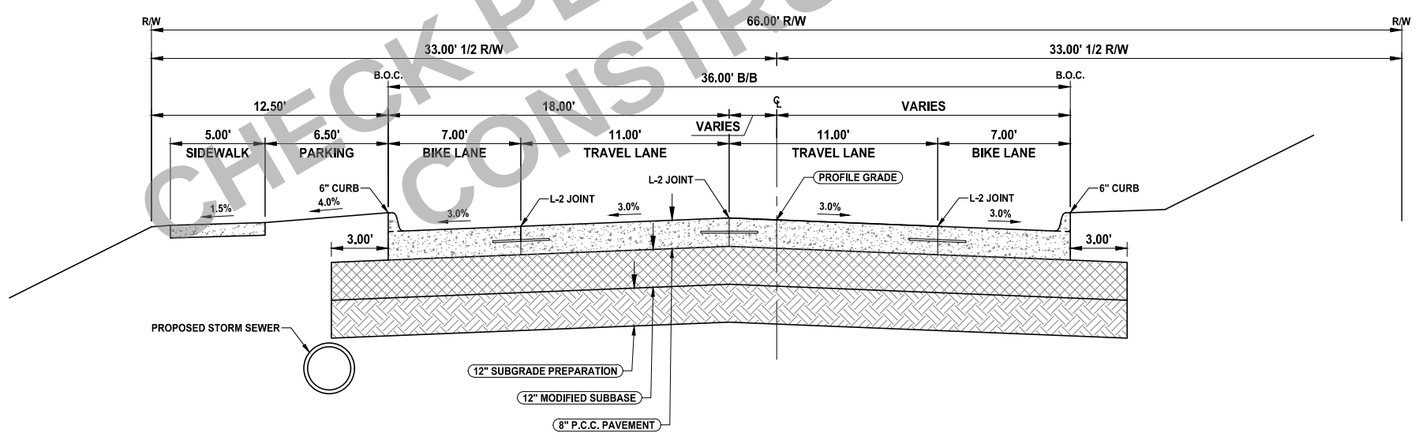
NOTE:
1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
100+98.53 TO 104+50.25

CHECK PLANS - NOT FOR CONSTRUCTION



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2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
100+35.83 TO 100+98.53
104+50.25 TO 105+55.25

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS					SHEET NO.
JSS	BAV	MEC #30616018-001	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TYPICAL SECTIONS AND DETAILS	STBG-SWAP-1867(617)--SG-96	B.01
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.						
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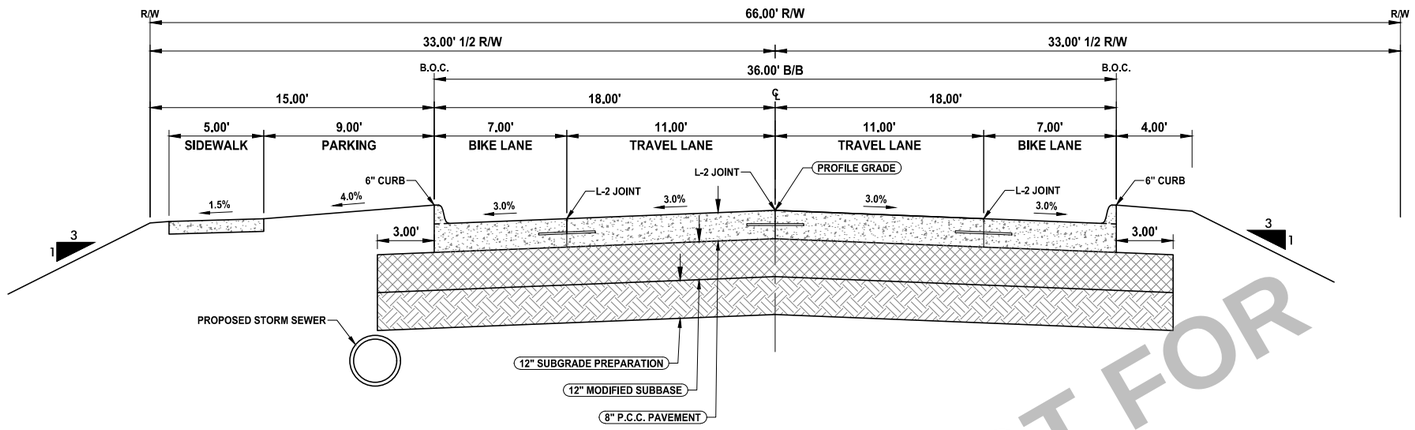

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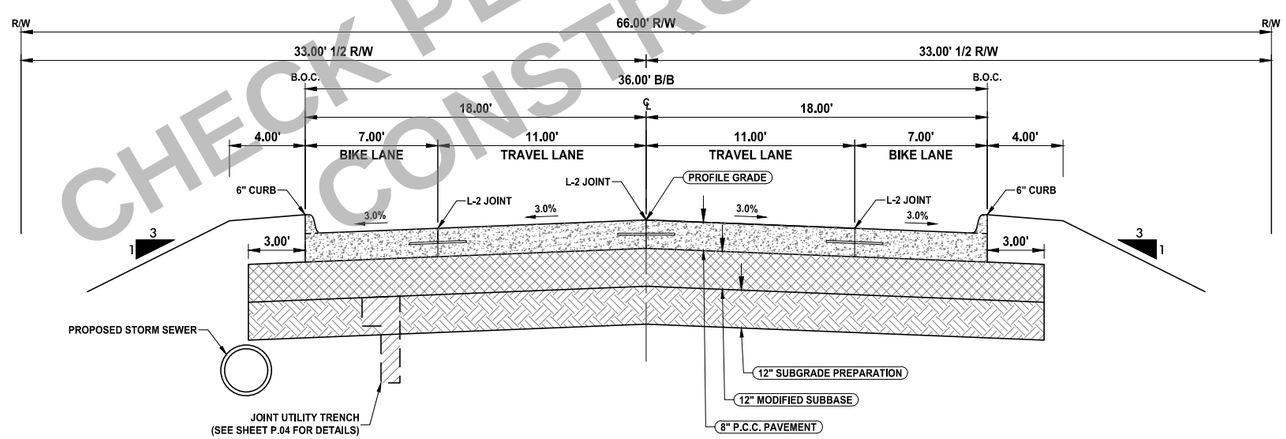
PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
105+55.25 TO 110+14.55

CHECK PLANS - NOT FOR CONSTRUCTION



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2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
110+14.55 TO 111+75.00
116+75.00 TO 118+00.00

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TYPICAL SECTIONS AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
JSS	BAV	MEC #30616018-001	-							B.02
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	-							
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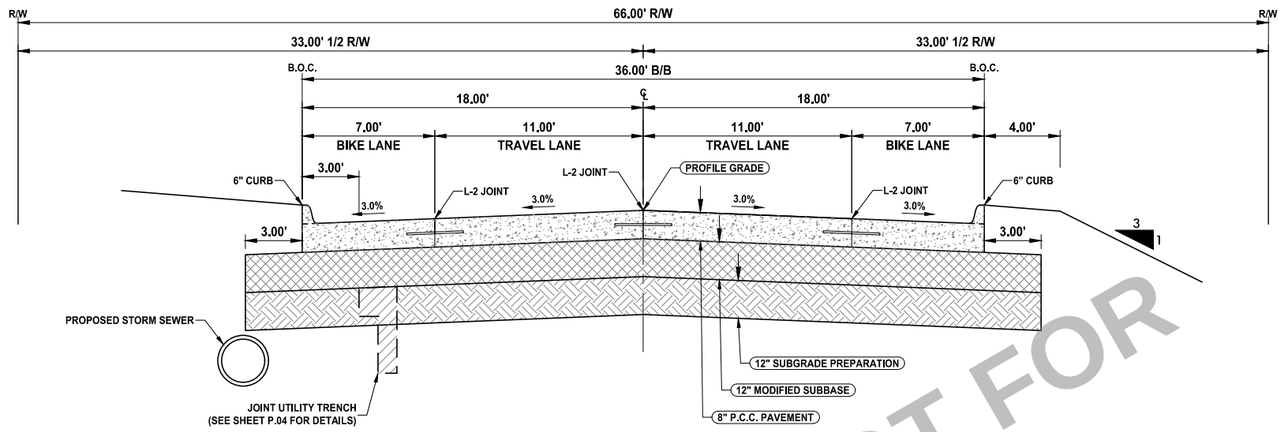

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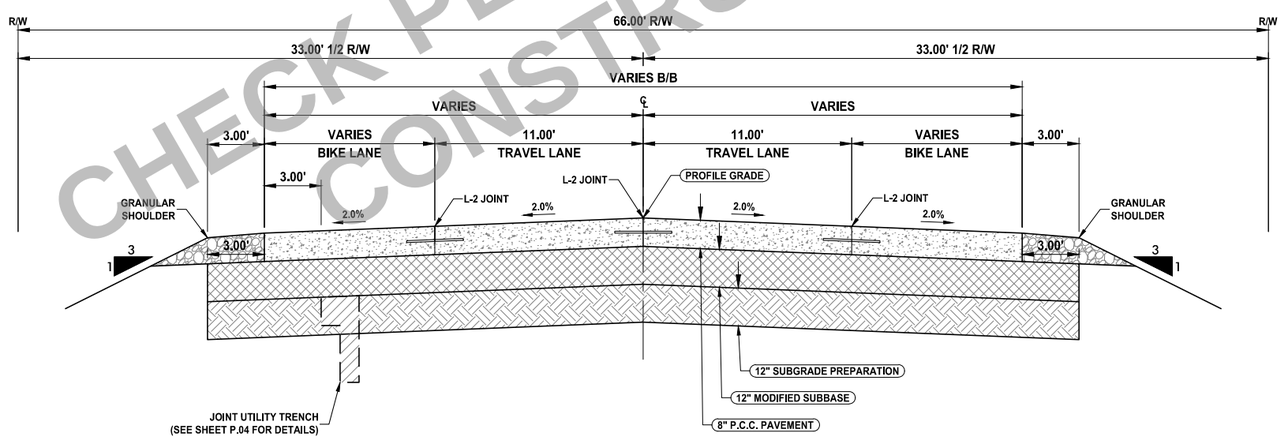
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
111+75.00 TO 116+75.00

CHECK PLANS - NOT FOR CONSTRUCTION



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2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - VARIES
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
118+00.00 TO 119+11.68

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TYPICAL SECTIONS AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
JSS	BAV	MEC #30616018-001	.							B.03
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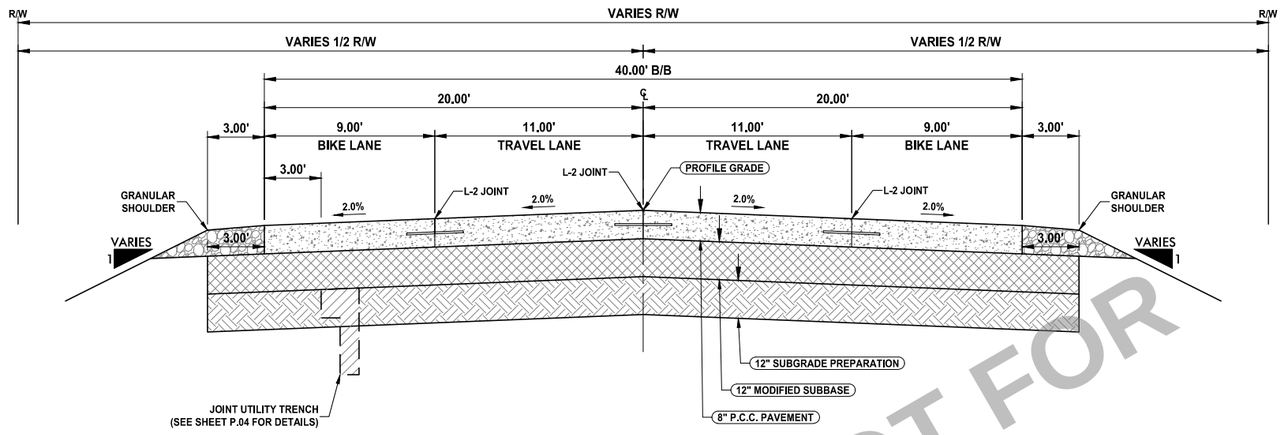

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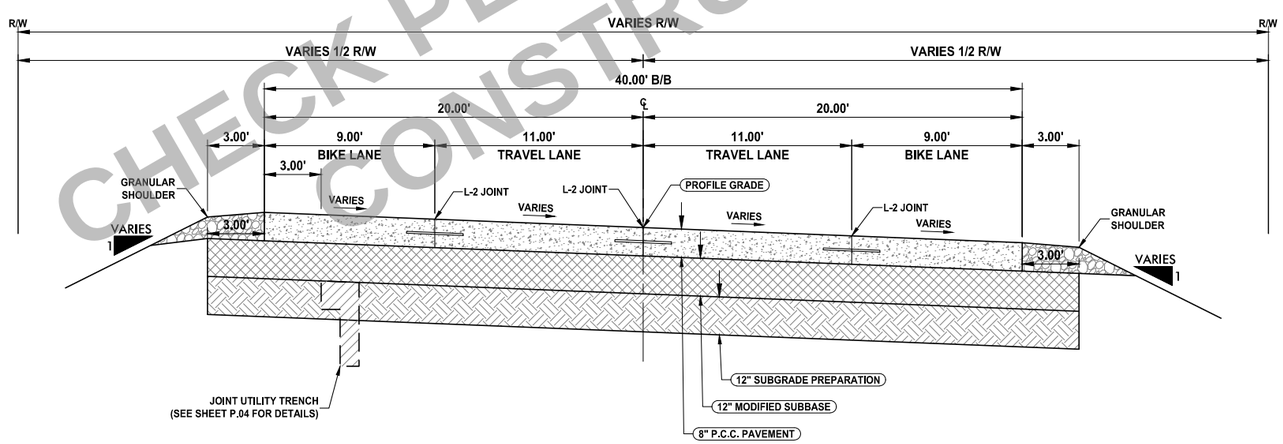
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
119+11.68 TO 131+15.12
145+08.28 TO 146+60.37

CHECK PLANS - NOT FOR CONSTRUCTION



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2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
131+15.12 TO 132+80.45
137+46.13 TO 138+52.50

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TYPICAL SECTIONS AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
JSS	BAV	MEC #30616018-001	-							B.04
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	-							
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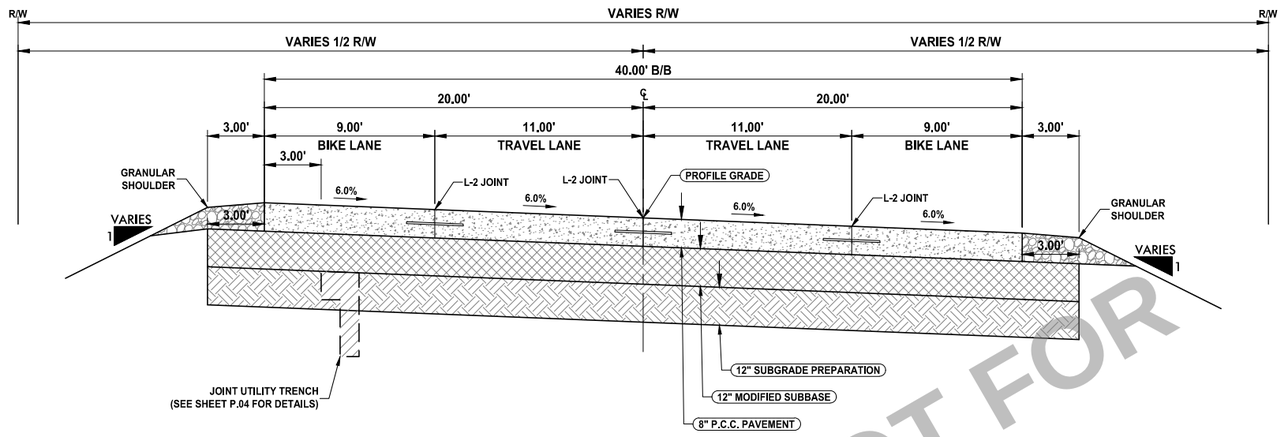

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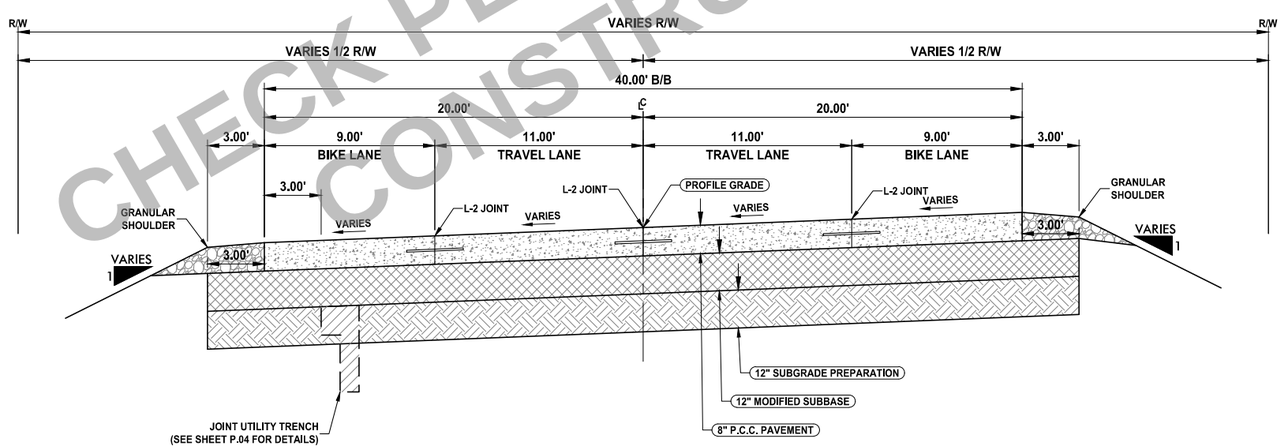
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
132+80.45 TO 137+46.13

CHECK PLANS - NOT FOR CONSTRUCTION



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1. NORMAL SECTIONS SHOWN MAY BE APPROPRIATELY MODIFIED FOR AREAS SPECIFICALLY DESIGNATED BY THE ENGINEER SUCH AS INTERSECTIONS. REFER TO OTHER DRAWINGS FOR DETAILS.
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
138+52.50 TO 139+58.88
143+42.95 TO 145+08.28

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TYPICAL SECTIONS AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
JSS	BAV	MEC #30616018-001	.							B.05
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.							
BAK	-		.							

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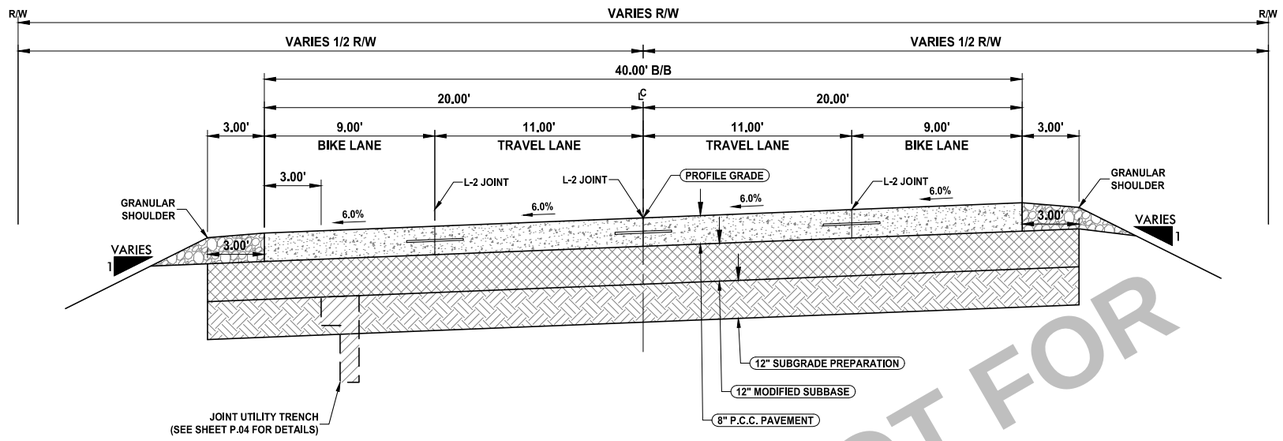

NOTE:
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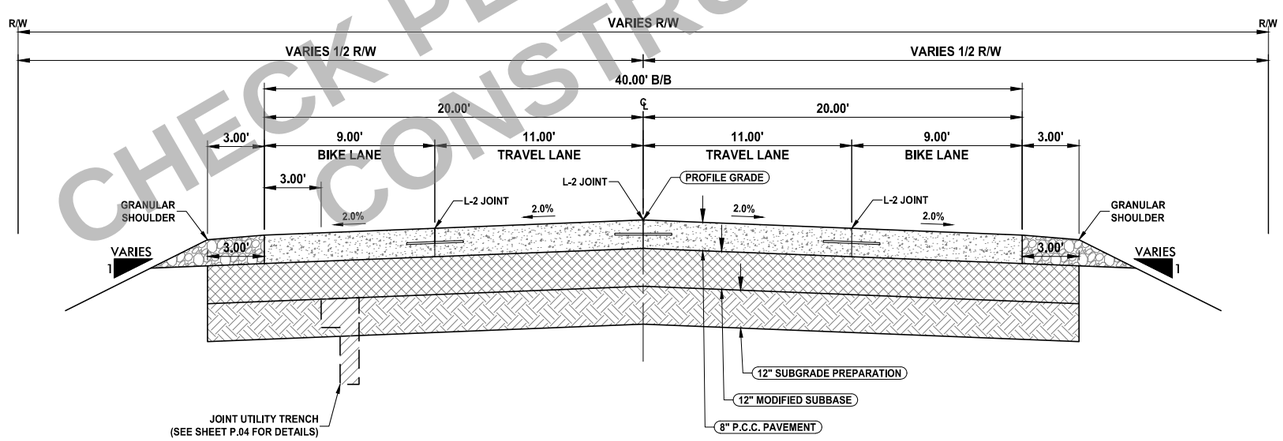
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD

NOT TO SCALE

STATION TO STATION
139+58.88 TO 143+42.95

CHECK PLANS - NOT FOR CONSTRUCTION



NOTE:
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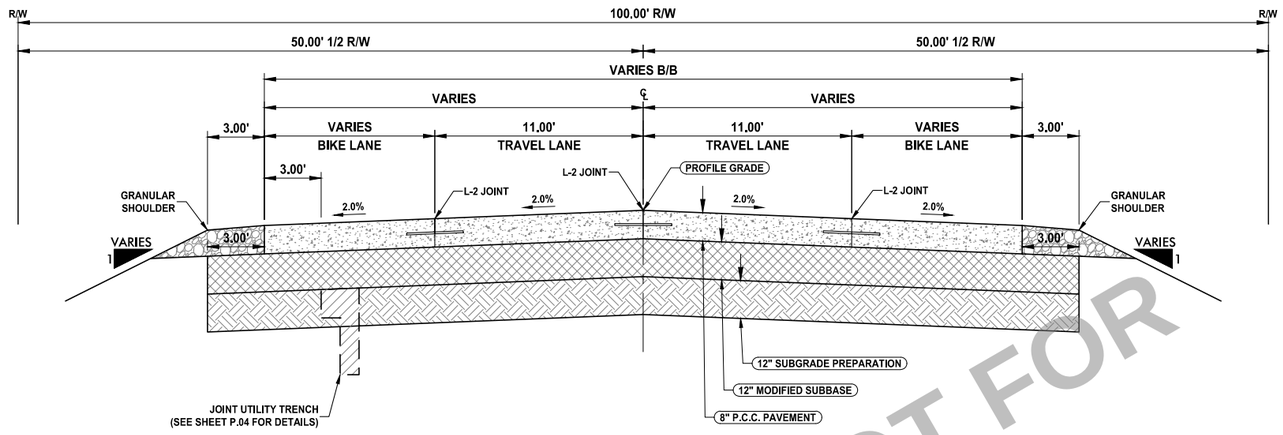
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - 40'
2 LANE WITH BIKE LANES - LOCUST ROAD
BID ALTERNATE 1

NOT TO SCALE

STATION TO STATION
146+60.37 TO 163+84.36



NOTE:
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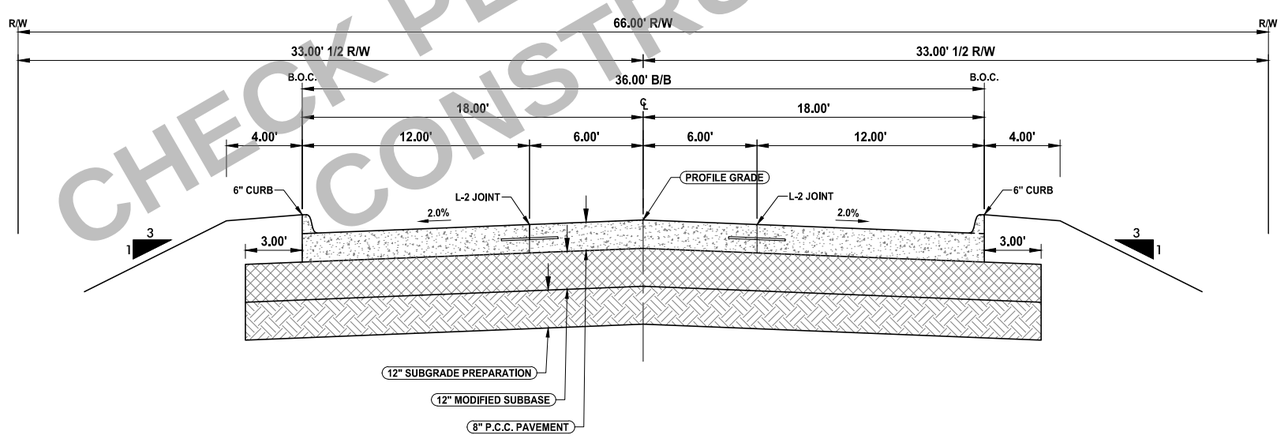
2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT RURAL TYPICAL SECTION - VARIES
2 LANE WITH BIKE LANES - LOCUST ROAD
BID ALTERNATE 1

NOT TO SCALE

STATION TO STATION
163+84.36 TO 164+44.36

CHECK PLANS - NOT FOR CONSTRUCTION



NOTE:
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2. SEE L-SHEETS FOR JOINT SPACING.

PCC PAVEMENT URBAN TYPICAL SECTION - 36'
2 LANE - SHADY LANE DR. / PINE CREST DR.

NOT TO SCALE

STATION TO STATION
200+32.95 TO 200+48.05
300+44.48 TO 300+83.79

ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)

Division 1: Roadway Items (College Dr to Pine Crest Dr)
Division 2: Non-Participating (College Dr to Pine Crest Dr)
Division 3: Bid Alt 1 - Non-Participating (Pine Crest Dr to Highland Dr)

Item No.	Item Code	Item	Unit	Quantities										
				Estimated						As Built				
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5
1	2101-0850001	CLEARING AND GRUBBING	ACRE	3.5		0.5			4.0					
2	2102-2625000	EMBANKMENT-IN-PLACE	CY	3,263.0		1,087.0			4,350.0					
3	2102-2713070	EXCAVATION, CLASS 13, ROADWAY AND BORROW	CY	5,952.0		1,984.0			7,936.0					
4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	5,495.0		2,355.0			7,850.0					
5	2115-0100000	MODIFIED SUBBASE	CY	7,767.4		3,001.2			10,768.6					
6	2121-7425010	GRANULAR SHOULDERS, TYPE A	TON	1,041.9		592.5			1,634.4					
7	2123-7450020	SHOULDER FINISHING, EARTH	STA	36.00					36.00					
8	2213-7100400	RELOCATION OF MAIL BOXES	EACH	25		14			39					
9	2301-1012080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLA SS A, CLASS 2 DURABILITY, 8 IN.	SY	20,196.9		7,892.2			28,089.1					
10	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	LS	0.70		0.30			1.00					
11	2304-0101000	TEMPORARY PAVEMENT	SY			2,160.0			2,160.0					
12	2315-8275055	SURFACING, DRIVEWAY	TON			20.3			20.3					
13	2401-6745910	REMOVAL OF SIGN	EACH	19		3			22					
14	2402-2720100	EXCAVATION, CLASS 20, FOR ROADWAY PIPE CULVERT	CY		2,235.0	90.0			1,300.0					
15	2416-0100015	APRONS, CONCRETE, 15 IN. DIA.	EACH		8	12			20					
16	2416-0100018	APRONS, CONCRETE, 18 IN. DIA.	EACH			4			4					
17	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.	EACH		7				7					
18	2416-0100030	APRONS, CONCRETE, 30 IN. DIA.	EACH			2			2					
19	2416-0100036	APRONS, CONCRETE, 36 IN. DIA.	EACH		4				4					
20	2416-0100042	APRONS, CONCRETE, 42 IN. DIA.	EACH		4				4					
21	2416-0100048	APRONS, CONCRETE, 48 IN. DIA.	EACH		4				4					
22	2416-1160015	CULVERT, CONCRETE ENTRANCE PIPE, 15 IN. DIA.	LF		108	256			364					
23	2416-1160018	CULVERT, CONCRETE ENTRANCE PIPE, 18 IN. DIA.	LF			80			80					
24	2416-1160024	CULVERT, CONCRETE ENTRANCE PIPE, 24 IN. DIA.	LF		206				206					
25	2416-1160042	CULVERT, CONCRETE ENTRANCE PIPE, 42 IN. DIA.	LF		42				42					
26	2416-1160048	CULVERT, CONCRETE ENTRANCE PIPE, 48 IN. DIA.	LF		58				58					
27	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 IN.	EACH		2				2					
28	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.	EACH		3				3					
29	2435-0140172	MANHOLE, STORM SEWER, SW-401, 72 IN.	EACH		3				3					
30	2435-0140184	MANHOLE, STORM SEWER, SW-401, 84 IN.	EACH		1				1					
31	2435-0250100	INTAKE, SW-501	EACH		1				1					
32	2435-0250700	INTAKE, SW-507	EACH		4				4					
33	2435-0250800	INTAKE, SW-508	EACH		2				2					
34	2435-0250900	INTAKE, SW-509	EACH		4				4					
35	2435-0251000	INTAKE, SW-510	EACH		4				4					
36	2435-0251300	INTAKE, SW-513	EACH		3				3					
37	2435-0600020	MANHOLE ADJUSTMENT, MAJOR	EACH	20		4			24					
38	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN.	LF		741.0				741.0					
39	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.	LF		55.0				55.0					
40	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN.	LF		222.0				222.0					
41	2503-0114230	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 30 IN.	LF		334.0	66.0			400.0					
42	2503-0114236	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 36 IN.	LF		894.0				894.0					
43	2503-0114242	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 42 IN.	LF		93.0				93.0					
44	2503-0114248	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 48 IN.	LF		91.0				91.0					
45	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF		801	206			1,007					
46	2503-0200136	REMOVE STORM SEWER PIPE GREATER THAN 36 IN.	LF		249	44			293					
47	2505-4008300	STEEL BEAM GUARDRAIL	LF	237.5					237.5					
48	2505-4021020	STEEL BEAM GUARDRAIL END ANCHOR, W-BEAM	EACH	1					1					
49	2505-4021720	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-205	EACH	1					1					
50	2510-6745850	REMOVAL OF PAVEMENT	SY	12,923.9		6,917.3			19,841.2					
51	2511-6745900	REMOVAL OF SIDEWALK	SY		10.6				10.6					
52	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY		488.7				488.7					
53	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	1,046.4		763.6			1,810.0					
54	2515-6745600	REMOVAL OF PAVED DRIVEWAY	SY	1,458.3		514.7			1,973.0					
55	2518-6910000	SAFETY CLOSURE	EACH	4					4					
56	2519-4200190	REMOVAL OF FENCE, WOOD	LF		133.2				133.2					
57	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	313.0		68.0			381.0					
58	2524-9276027	PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BA SE ASSEMBLY	EACH	17		4			21					
59	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	176		21			197					
60	2524-9325150	INSTALL TYPE A SIGN	EACH	16		4			20					
61	2526-8285000	CONSTRUCTION SURVEY	LS	0.50	0.20	0.30			1.00					
62	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA			142.72			142.72					
63	2527-9263117	PAINTED PAVEMENT MARKINGS, DURABLE	STA	180.40		70.16			250.56					
64	2527-9263143	PAINTED SYMBOLS AND LEGENDS, DURABLE	EACH	7		2			9					
65	2527-9263180	PAVEMENT MARKINGS REMOVED	STA			71.36			71.36					
66	2528-8445110	TRAFFIC CONTROL	LS	0.50	0.20	0.30			1.00					
67	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	10					10					
68	2533-4980005	MOBILIZATION	LS	0.50	0.20	0.30			1.00					
69	2548-0000200	MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE	STA	57.2		34.5			91.7					
70	2554-0212020	VALVE BOX EXTENSION	EACH	2		2			4					

CHECK PLANS - NOT FOR CONSTRUCTION

100-1C
04-17-12

ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)

Division 1: Roadway Items (College Dr to Pine Crest Dr)
Division 2: Non-Participating (College Dr to Pine Crest Dr)
Division 3: Bid Alt 1 - Non-Participating (Pine Crest Dr to Highland Dr)

Item No.	Item Code	Item	Unit	Quantities										
				Estimated						As Built				
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5
71	2554-0212030	VALVE BOX REPLACEMENT	EACH	2		1			3					
72	2554-0214000	FIRE HYDRANT ADJUSTMENT	EACH	2		2			4					
73	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS	LS		0.75	0.25			1.00					
74	2599-9999005	('EACH' ITEM) FIRE HYDRANT RELOCATION	EACH	2					2					
75	2599-9999005	('EACH' ITEM) RADAR SPEED SIGN	EACH	3					3					
76	2599-9999009	('LINEAR FEET' ITEM) JOINT UTILITY TRENCH	LF		5,485.0				5,485.0					
77	2599-9999014	('SQUARE FEET' ITEM) REINFORCED STEEPENED SLOPE	SF	1444										
78	2601-2634100	MULCHING	ACRE	8.8		4.2			13.0					
79	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	4.4		2.1			6.5					
80	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	ACRE	4.4		2.1			6.5					
81	2602-0000020	SILT FENCE	LF	2,890.9		1,115.4			4,006.3					
82	2602-0000030	SILT FENCE FOR DITCH CHECKS	LF	1,734.5		669.2			2,403.7					
83	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	4,625.4		1,784.6			6,410.0					
84	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	462.6		178.4			641.0					
85	2602-0000160	ROCK CHECK DAM	LF	765					765					
86	2602-0000170	MAINTENANCE OF ROCK CHECK DAM	EACH	45					45					
87	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	11,570.0		4,470.0			16,040.0					
88	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	11,570.0		4,470.0			16,040.0					
89	2602-0000500	OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	LF	102.0					102.0					
90	2602-0000510	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	14					14					
91	2602-0000520	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	14					14					
92	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1		1			2					
93	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1		1			2					

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
BA-200	04-16-19	Steel Beam Guardrail Components
BA-203	10-15-19	Steel Beam Guardrail W-Beam End Anchor
BA-205	04-19-16	Steel Beam Guardrail Tangent End Terminal (MASH TL-3)
BA-225	10-17-17	Steel Beam Guardrail Tangent End Terminal (MASH TL-2)
BA-252	04-19-16	Steel Beam Guardrail Installation at Side Obstacle (One-Way Protection)
DR-101	04-18-17	Pipe Culvert (Bedding and Backfill)
DR-102	04-21-15	Pipe Culvert (Cover and Camber)
DR-103	04-21-15	Pipe Culvert (Installation Details)
DR-104	04-19-16	Depth of Cover Tables for Concrete and Corrugated Pipe
DR-201	10-16-18	Concrete Aprons
DR-601	04-18-17	Reinforced Concrete Pipe Culvert
EC-201	10-15-19	Silt Fence
EC-204	04-18-17	Perimeter and Slope Sediment Control Devices
EC-302	10-16-18	Rock Check Dam
EC-602	10-16-18	Open-Throat Curb Intake Sediment Filter
EW-101	10-17-17	Embankment and Rebuilding Embankments
EW-102	10-20-15	Allowable Placement of Unsuitable Soil in Embankments
EW-103	10-20-15	Embankment Subgrade Treatment, Moisture Density Control and Special Compaction
EW-105	04-21-15	Reshaping Slopes and Ditches
EW-501	10-20-15	Rural Entrance
MI-210	10-20-15	PCC Driveways and Alleys
MI-220	10-20-15	Detectable Warnings and Pedestrian Ramp
PM-110	10-16-18	Line Types
PM-111	04-21-15	Symbols and Legends
PV-12	04-19-16	Milled Shoulder Rumble Strips
PV-101	04-16-19	Joints
PV-102	10-18-16	PCC Curb Details
PV-301	04-19-11	Superelevation Details Two Lane Roadway
SI-101	04-19-16	Locations - Type 'A' Signs
SI-112	04-19-16	Footings For Steel Breakaway Posts
SI-113	10-15-19	Support Structures - Steel Breakaway Posts
SI-119	10-17-17	Support Structures - Mounting Brackets
SI-131	10-18-16	Installation - Type 'A' Signs
SW-101	04-17-18	Trench Bedding and Backfill Zones
SW-102	04-16-19	Rigid Gravity Pipe Trench Bedding
SW-211	04-17-18	Storm Sewer Pipe Connections
SW-401	04-17-18	Circular Storm Sewer Manhole
SW-402	04-17-18	Rectangular Storm Sewer Manhole
SW-501	04-17-18	Single Grate Intake
SW-507	04-17-18	Single Open-Throat Intake, Small Box
SW-508	04-17-18	Single Open-Throat Intake, Large Box
SW-509	04-17-18	Double Open-Throat Curb Intake, Small Box
SW-510	04-17-18	Double Open-Throat Curb Intake, Large Box
SW-513	04-17-18	Open-Sided Area Intake
SW-514	04-17-18	Boxouts for Grate Intakes
SW-602	04-21-15	Castings for Storm Sewer Manholes
SW-603	10-16-18	Castings for Grate Intakes
SW-604	04-17-18	Castings for Area Intakes
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-81	10-15-19	Restricted Width Signing (Less Than 14.5 Feet)
TC-202	04-21-15	Work Within 15 ft of Traveled Way
TC-203	10-15-19	Aerial Seeding Operations
TC-232	10-21-14	Shoulder Rumble Strip Operations
TC-233	10-17-17	Pavement Marking Operations Two-Lane
TC-252	04-19-16	Routes Closed to Traffic
TC-284	10-15-19	No Centerline Markings on Non-Primary Roadways
TC-601	10-15-19	Pedestrian Detour

111-25
10-18-11

INDEX OF TABULATIONS

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A Sheets		
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105-1	MILEAGE SUMMARY	A.01
105-3	INDEX OF SHEETS	A.01
111-01	COORDINATED OPERATIONS	A.01
111-23	LISTING OF PROJECT REVISIONS	A.04
C Sheets		
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100-1D	PROJECT DESCRIPTION	C.05
100-4A	ESTIMATE REFERENCE INFORMATION	C.03 - C.04
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100-17	TABULATION OF SILT FENCES	C.05
100-18	SILT FENCES FOR DITCH CHECKS	C.05
100-19	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	C.05
100-24	PCC PAVEMENT	C.06
100-27	PROPOSED POSTED SPEED LIMIT	C.05
100-32	ROCK CHECK DAMS	C.10
100-36	OPEN-THROAT CURB INTAKE SEDIMENT FILTER	C.05
102-3	ACCESS POINTS AND SAFETY RAMPS	C.07
102-5	EXISTING PAVEMENT	C.05
103-10	TOPSOIL STRIPPING AND PLACEMENT	C.05
104-10	ADJUSTMENT OF FIXTURES	C.07
105-4	STANDARD ROAD PLANS	C.02
108-8C	STEEL BEAM GUARDRAIL FOR SIDE OBSTACLE (ONE-WAY PROTECTION)	C.06
108-13A	SAFETY CLOSURES	C.08
108-22	PAVEMENT MARKING LINE TYPES	C.08
108-29	PAVEMENT MARKING SYMBOLS AND LEGENDS	C.08
110-1	REMOVAL OF PAVEMENT	C.07
110-5	SIDEWALK REMOVAL	C.05
110-8	REMOVAL OF CONCRETE DRIVES	C.06
110-12	POLLUTION PREVENTION PLAN	R.01 - R.02
110-13	DELIVERY AND STOCKPILING	C.07
MEC-01	RELOCATION OF MAILBOXES	C.08
MEC-02	RELOCATION OF FIXTURES	C.07
110-14	SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL	C.09
111-25	INDEX OF TABULATIONS	C.03
112-9	SHOULDERS	C.10
112-10	MILLED RUMBLE STRIPS	C.09
113-1A	SIDEWALKS	C.13
190-51	MATERIALS FOR TYPE 'A' SIGNS	C.11
190-62	EXISTING SIGNS TO BE REMOVED	C.09
190-66	SUMMARY OF TYPE 'A' SIGNS	C.11
104-5B	STORM SEWER	C.12 - C.13
G Sheets		
101-16	ALIGNMENT COORDINATES	G.02
101-18	SUPERELEVATION DATA	G.02
S Sheets		
113-10A	SIDEWALK COMPLIANCE	S.02

CHECK PLANS - NOT FOR CONSTRUCTION

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2101-0850001	**CLEARING AND GRUBBING**
		This item is to be used for clearing and grubbing all areas within the right-of-way,
		as well as for removal of select trees outside of the right-of-way as shown on the D Sheets. Contractor shall
		take care to protect all trees and other plant material to remain as noted in the plans.
-	-	-
2	2102-2625000	**EMBANKMENT-IN-PLACE**
		Provide borrow material according to Section 2102 of the Standard Specifications. 30% shrinkage assumed for
		embankment-in-place quantity.
-	-	-
3	2102-2713070	**EXCAVATION, CLASS 13, ROADWAY AND BORROW**
		Item is included for all miscellaneous material to be excavated, transported, and placed at the project site.
		Overhaul will not be paid. Shrinkage was assumed to be 30%.

		QUANTITIES:
		DIVISION 1
		CUT 5,952 CY
		FILL + SHRINK 9,214 CY
		TOTAL -3,263 CY
		DIVISION 3
		CUT 1,984 CY
		FILL + SHRINK 3,071 CY
		TOTAL -1,087 CY
-	-	-
4	2105-8425015	**TOPSOIL, STRIP, SALVAGE AND SPREAD**
		Volume based on stripping 12 inches and spreading 8 inches.
		Bid quantity includes volume plus 40% shrinkage.
		Topsoil shall be placed on all disturbed areas that are not paved.
		Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation.
		Refer to Tab. 103-10 in the C Sheets for locations and details.
-	-	-
5	2115-0100000	**MODIFIED SUBBASE**
		Refer to Tab. 100-24 in the C Sheets and to the B Sheets for Typical Sections.
-	-	-
6	2121-7425010	**GRANULAR SHOULDERS, TYPE A**
		Refer to Tab. 112-9 in the C Sheets for locations and details.
-	-	-
7	2123-7450020	**SHOULDER FINISHING, EARTH**
		Included for earth shoulder finishing adjacent to integral curb from Station 100+35.93 to Station 118+00.00.
-	-	-
8	2213-7100400	**RELOCATION OF MAIL BOXES**
		Refer to Tab. MEC-01 in the C Sheets and to D Sheets for locations and details.
		Contractor to coordinate with Post Master.
		Measurement for relocation of mail boxes will be by count of each satisfactorily relocated.
		Payment for relocation of mailboxes shall include all material, equipment, labor, and storage necessary for
		removal and relocation of existing mailbox. Any damage caused to mailboxes by the Contractor during
		construction activities shall be repaired at the expense of the Contractor.
-	-	-
9	2301-1012080	**STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLA SS A, CLASS 2 DURABILITY, 8 IN.**
		Refer to Tab. 100-24 in the C Sheets and to typical sections on B Sheets for locations and details. Refer to L
		Sheets for geometric staking and jointing details. Includes an estimated 3542 linear feet of integral curb.
		Incidental to this item is providing a temporary washout that meets EPA minimum BMP measures. Certified plant
		inspection shall be provided by the Contractor.
-	-	-
10	2301-6911722	**PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES**
		- -
-	-	-
11	2304-0101000	**TEMPORARY PAVEMENT**
		Refer to J Sheets for locations and details. For PCC, meet the requirements of Section 2301 for Class A PCC
		Pavement. Use Class 2 durability coarse aggregate, or better, as defined in Article 4115.04 of the Iowa DOT
		Standard Specifications. For HMA, use a Standard Traffic (ST) surface or intermediate mixture with a PG 64-22
		or PG 58-28H asphalt binder. Temporary Pavement constructed, in square yards, will be the quantity shown in the
		contract documents. Payment for Temporary Pavement will be the contract unit price per square yard. Payment is
		full compensation for furnishing material, equipment, and labor to construct the temporary pavement, including
		all subbase material, in accordance with the contract documents. Contractor shall be responsible for maintaining
		temporary pavement throughout construction.
-	-	-
12	2315-8275055	**SURFACING, DRIVEWAY**
		Refer to Tab. 102-3 in the C Sheets for locations and details.
-	-	-
13	2401-6745910	**REMOVAL OF SIGN**
		Refer to Tab. 190-62 in the C Sheets for locations and details. Measurement for removal of signs will be by
		count of each removed. The payment for removal of signs is full compensation for furnishing all material,
		equipment, and labor; for performance of all work necessary for removal of the sign, including removal and
		disposal of the support structures and foundations; and placement of any backfill material made necessary by
		these operations. Signs are to become the property of and to be delivered to the City of Decorah. See item
		"Deliver and Stockpile Salvaged Materials" for more information.
-	-	-

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
14	2402-2720100	**EXCAVATION, CLASS 20, FOR ROADWAY PIPE CULVERT**
		Item is included for excavation needed to install roadway pipe culverts as shown on the M Sheets and on Tab.
		104-5B in the C Sheets. Division 2 volume was calculated based on a total excavation extending 10 feet on
		either side of the existing culvert at Station 120+28 and extending up at 2:1 to ensure excavation slope
		stability and to allow for construction of a reinforced steepened slope (RSS) from Station 119+52 to Station
		120+62 as shown in the Q Sheets.
-	-	-
15	2416-0100015	**APRONS, CONCRETE, 15 IN. DIA.**
16	2416-0100018	**APRONS, CONCRETE, 18 IN. DIA.**
17	2416-0100024	**APRONS, CONCRETE, 24 IN. DIA.**
18	2416-0100030	**APRONS, CONCRETE, 30 IN. DIA.**
19	2416-0100036	**APRONS, CONCRETE, 36 IN. DIA.**
20	2416-0100042	**APRONS, CONCRETE, 42 IN. DIA.**
21	2416-0100048	**APRONS, CONCRETE, 48 IN. DIA.**
22	2416-1160015	**CULVERT, CONCRETE ENTRANCE PIPE, 15 IN. DIA.**
23	2416-1160018	**CULVERT, CONCRETE ENTRANCE PIPE, 18 IN. DIA.**
24	2416-1160024	**CULVERT, CONCRETE ENTRANCE PIPE, 24 IN. DIA.**
25	2416-1160042	**CULVERT, CONCRETE ENTRANCE PIPE, 42 IN. DIA.**
26	2416-1160048	**CULVERT, CONCRETE ENTRANCE PIPE, 48 IN. DIA.**
27	2435-0140148	**MANHOLE, STORM SEWER, SW-401, 48 IN.**
28	2435-0140160	**MANHOLE, STORM SEWER, SW-401, 60 IN.**
29	2435-0140172	**MANHOLE, STORM SEWER, SW-401, 72 IN.**
30	2435-0140184	**MANHOLE, STORM SEWER, SW-401, 84 IN.**
31	2435-0250100	**INTAKE, SW-501**
32	2435-0250700	**INTAKE, SW-507**
33	2435-0250800	**INTAKE, SW-508**
34	2435-0250900	**INTAKE, SW-509**
35	2435-0251000	**INTAKE, SW-510**
36	2435-0251300	**INTAKE, SW-513**
		Refer to Tab. 104-5B in the C Sheets and to M Sheets for locations and details.
-	-	-
37	2435-0600020	**MANHOLE ADJUSTMENT, MAJOR**
		Refer to Tab. 104-10 in the C Sheets for locations and details.
-	-	-
38	2503-0114215	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN.**
39	2503-0114218	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.**
40	2503-0114224	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN.**
41	2503-0114230	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 30 IN.**
42	2503-0114236	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 36 IN.**
43	2503-0114242	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 42 IN.**
44	2503-0114248	**STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 48 IN.**
		Refer to Tab. 104-5B in the C Sheets and to M Sheets for locations and details.
-	-	-
45	2503-0200036	**REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.**
46	2503-0200136	**REMOVE STORM SEWER PIPE GREATER THAN 36 IN.**
		Refer to Tab. 110-14 in the C Sheets for locations and details.
-	-	-
47	2505-4008300	**STEEL BEAM GUARDRAIL**
48	2505-4021020	**STEEL BEAM GUARDRAIL END ANCHOR, W-BEAM**
49	2505-4021720	**STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-205**
		Refer to Tab. 108-8C in the C Sheets for locations and details.
-	-	-
50	2510-6745850	**REMOVAL OF PAVEMENT**
		Refer to Tabs. 110-1 and 102-5 in the C Sheets for locations and details. Division 3 quantity includes
		additional 2,160 SY for removal of temporary pavement at locations shown in the J Sheets.
-	-	-
51	2511-6745900	**REMOVAL OF SIDEWALK**
		Item is included for removal of sidewalk to be replaced along College Drive at the Locust Road intersection.
		Refer to Tab. 110-5 in the C Sheets for locations and details. Includes 9.5 LF of full-depth saw cut.
-	-	-
52	2511-7526004	**SIDEWALK, P.C. CONCRETE, 4 IN.**
		Refer to Tab. 113-1A in the C Sheets and to Typicals in the B Sheets for locations and details. Sidewalk through
		driveways is included in bid item DRIVEWAY, P.C. CONCRETE, 6 IN.
-	-	-
53	2515-2475006	**DRIVEWAY, P.C. CONCRETE, 6 IN.**
		Refer to Tab. 102-3 in the C Sheets for locations and details.
-	-	-
54	2515-6745600	**REMOVAL OF PAVED DRIVEWAY**
		Refer to Tab. 110-8 in the C Sheets for locations and details.
		Requires 638 linear foot of full depth saw cut.
-	-	-
55	2518-6910000	**SAFETY CLOSURE**
		Refer to Tab. 108-13A in the C Sheets for locations and details.
-	-	-
56	2519-4200190	**REMOVAL OF FENCE, WOOD**
		Refer to Tab. 100-08 in the C Sheets for locations and details.
-	-	-
57	2524-9276010	**PERFORATED SQUARE STEEL TUBE POSTS**
58	2524-9276027	**PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BA SE ASSEMBLY**
		Refer to Tab. 190-51 in the C Sheets for locations and details.
-	-	-
59	2524-9325001	**TYPE A SIGNS, SHEET ALUMINUM**
		Refer to Tab. 190-66 in the C Sheets for locations and details.
-	-	-

CHECK PLANS - NOT FOR CONSTRUCTION

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
60	**2524-9325150**	**INSTALL TYPE A SIGN**
		Refer to Tabs. 190-51 and 190-66 in the C Sheets for locations and details.
		Measurement for installation of type A signs shall be by count of each satisfactorily installed.
		The contractor will be paid the contract unit price per each. This shall be considered full compensation
		for furnishing all tools, equipment, labor, and materials necessary for installation of signs, posts, footings
		and hardware in accordance with the contract documents and applicable Standard Road Plans.
-	-	-
61	**2526-8285000**	**CONSTRUCTION SURVEY**
		- -
-	-	-
62	**2527-9263109**	**PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED**
63	**2527-9263117**	**PAINTED PAVEMENT MARKINGS, DURABLE**
		Refer to Tab. 108-22 in the C Sheets and to N Sheets for locations and details.
-	-	-
64	**2527-9263143**	**PAINTED SYMBOLS AND LEGENDS, DURABLE**
		Refer to Tab. 108-29 in the C Sheets and to N Sheets for locations and details.
-	-	-
65	**2527-9263180**	**PAVEMENT MARKINGS REMOVED**
		Refer to Tab. 108-22 in the C Sheets and to N Sheets for locations and details.
-	-	-
66	**2528-8445110**	**TRAFFIC CONTROL**
		Refer to Traffic Control Plan in the J Sheets for details.
-	-	-
67	**2528-9290050**	**PORTABLE DYNAMIC MESSAGE SIGN (PDMS)**
		Contractor to use Portable Dynamic Message Signs (PDMS) a minimum of four (4) days in advance to notify public
		of proposed changes in traffic patterns. PDMS shall be placed in both directions of travel.
-	-	-
68	**2533-4980005**	**MOBILIZATION**
		- -
-	-	-
69	**2548-0000200**	**MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE**
		Refer to Tab. 112-10 in the C Sheets for locations and details.
-	-	-
70	**2554-0212020**	**VALVE BOX EXTENSION**
71	**2554-0212030**	**VALVE BOX REPLACEMENT**
72	**2554-0214000**	**FIRE HYDRANT ADJUSTMENT**
		Refer to Tab. 104-10 in the C Sheets for locations and details.
-	-	-
73	**2555-0000010**	**DELIVER AND STOCKPILE SALVAGED MATERIALS**
		Refer to Tab. 110-13 in the C Sheets for locations and details.
-	-	-
74	**2599-9999005**	**('EACH' ITEM) FIRE HYDRANT RELOCATION**
		Refer to Tab. MEC-02 in the C Sheets for locations and details. Measurement for fire hydrant relocation will be
		by count of each satisfactorily relocated. Payment for fire hydrant relocation shall be full compensation for
		all material, equipment, labor, and storage necessary for removal and relocation of existing fire hydrant. Any
		damage caused to fire hydrants by the Contractor during construction activities shall be repaired at the expense
		of the Contractor.
-	-	-
75	**2599-9999005**	**('EACH' ITEM) RADAR SPEED SIGN**
		Measurement for radar speed signs shall be by count of each sign satisfactorily installed. Payment for radar
		speed signs is full compensation for furnishing all labor, equipment, tools, and materials and for performing
		all work necessary to assemble, mount, and activate the signs on the posts at locations detailed in Tab. 190-51
		in the C Sheets. Radar speed signs shall be solar powered. Static text shall have a minimum height of 6" and
		LED text shall have a minimum height of 12". Static sign background color shall be yellow with black static
		text and LED area background color shall be black with yellow LED text. Radar speed signs shall meet all
		requirements of Chapter 2L in the MUTCD.
-	-	-
76	**2599-9999009**	**('LINEAR FEET' ITEM) JOINT UTILITY TRENCH**
		Item is included for construction of a joint utility trench along Locust Road from Shady Lane Drive to Highland
		Drive. Measurement for joint utility trench will be by linear foot of joint utility trench constructed. Payment
		for joint utility trench is full compensation for all equipment, labor, materials, and work necessary to
		construct the utility trench. This includes trench excavation, installation of conduits, and satisfactorily
		backfilling the trench. Contractor shall coordinate construction of joint utility trench with Alliant Energy,
		including type, size, number, and color of conduits.
-	-	-
77	**2599-9999009**	**('SQUARE FEET' ITEM) REINFORCED STEEPENED SLOPE**
		Refer to Q Sheets for location and details.
		This work shall consist of preparing the design, furnishing the materials, and constructing the reinforced
		steepened slope (RSS) to the lines, grades, and dimensions shown in these plans and any additional requirements
		specified by the RSS system supplier in the approved shop drawings. The RSS system shall be designed for a
		minimum factor of safety of 1.5.
		Contractor shall submit complete design calculations and shop drawings to the Engineer for review and approval.
		All submittals shall be sealed by a Professional Engineer licensed in the state of Iowa and shall contain all
		details, dimensions, quantities, and cross sections necessary to construct the RSS.
		The reinforced steepened slope system will be measured for payment in square feet of vertical projected slope
		face area. The system will be measured from the top of RSS system line to the bottom of RSS system line for the
		length of the slope as shown on the contract plans. Any additional face area below or above the top or bottom
		of RSS contract plan lines to satisfy the design stability requirements or stepping of the facing will not
		be measured for payment but considered included in the cost of the measured area defined above. This work,
		including any excavation, placement of soil reinforcement, RSS fill, reinforced turf mat, facing treatment,
		and other items specified on the approved shop drawings will be paid for at the contract unit price per square
		foot for reinforced steepened slope.
-	-	-

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
78	**2601-2634100**	**MULCHING**
		Apply mulching to all disturbed areas and all cleared and grubbed areas.
		Perform mulching according to Article 2601.03, E, 2, of the Standard Specifications. Anchor mulch into the
		soil using mulch anchoring equipment with a minimum of two passes.
		Item is included for areas requiring reshaping and seedbed preparation. Use mulch that is Certified
		Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states
		Crop Improvement Associations.
		Mulch Rate: 1 1/2 tons of dry cereal straw or native grass straw per acre.
-	-	-
79	**2601-2636044**	**SEEDING AND FERTILIZING (URBAN)**
		Item is included for disturbed areas and areas of clearing and grubbing as directed by the Engineer.
		Prepare seedbed, fertilize, and seed according to Article 2601.03, C, 4, of the Standard Specifications.
		Use ground driven equipment.
-	-	-
80	**2601-2642120**	**STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)**
		Item is included for disturbed areas and areas of clearing and grubbing as directed by the Engineer.
		Seed and fertilize all urban disturbed areas according to Article 2601.03, C, 2, of the Standard Specifications.
-	-	-
81	**2602-0000020**	**SILT FENCE**
		Refer to Tab. 100-17 in the C Sheets for locations and details.
		The tabulation includes estimated locations for placement of "Silt Fence" to address
		erosion to be encountered during construction. Verify the specific locations with
		the Engineer prior to beginning placement. Bid item includes 25% additional quantity
		for field adjustments and replacement.
-	-	-
82	**2602-0000030**	**SILT FENCE FOR DITCH CHECKS**
		Refer to Tab 100-18 in the C Sheets for locations and details.
		The tabulation includes estimated locations for placement of "Silt Fence for Ditch Checks"
		to address erosion to be encountered during construction. Verify the specific locations
		with the Engineer prior to beginning placement. Bid item includes 50% additional quantity
		for field adjustments and replacements.
-	-	-
83	**2602-0000071**	**REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS**
		Refer to Tabs. 100-17 and 100-18 for locations and details.
		This item is included for silt fence and silt fence for ditch check removal required for
		staging reasons, removal to allow for replacement (replacement to be paid separately),
		or for areas that have achieved 70% permanent growth.
-	-	-
84	**2602-0000101**	**MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK**
		Refer to Tabs. 100-17 and 100-18 for locations and details.
		This item is included for clean-out and repair of the silt fence and silt fence for ditch
		checks during the project.
-	-	-
85	**2602-0000160**	**ROCK CHECK DAM**
86	**2602-0000170**	**MAINTENANCE OF ROCK CHECK DAM**
		Item is included for permanent installation of rock check dams at ditch locations specified in Tab. 100-32 in
		the C Sheets.
-	-	-
87	**2602-0000312**	**PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.**
		Refer to Tab. 100-19 in the C Sheets for locations and details.
		Verify the specific locations with the Engineer prior to beginning placement. Bid item
		includes 25% additional quantity for field adjustments and replacements.
		Use Perimeter and Slope Sediment Control Devices fabricated using wood excelsior.
-	-	-
88	**2602-0000350**	**REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE**
		Refer to Tab. 100-19 in the C Sheets for locations and details.
-	-	-
89	**2602-0000500**	**OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602**
90	**2602-0000510**	**MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER**
91	**2602-0000520**	**REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER**
		Refer to Tab. 100-36 in the C Sheets for locations and details.
-	-	-
92	**2602-0010010**	**MOBILIZATIONS, EROSION CONTROL**
		- -
-	-	-
93	**2602-0010020**	**MOBILIZATIONS, EMERGENCY EROSION CONTROL**
		- -
-	-	-

CHECK PLANS - NOT FOR CONSTRUCTION

100-08
04-17-18

REMOVAL OF FENCE

Removal of Field Fence is incidental to Clearing and Grubbing.

Location From Station	Location From Offset	Location To Station	Location To Offset	Type	Length LF	Remarks
108+80.49	33.43' LT	110+13.73	32.89' LT	Wood	133.2	
				DIVISION 1 TOTALS		
				REMOVAL OF FENCE, WOOD	**133.2**	**LF**

100-19
04-19-16

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Possible Standards: EC-204

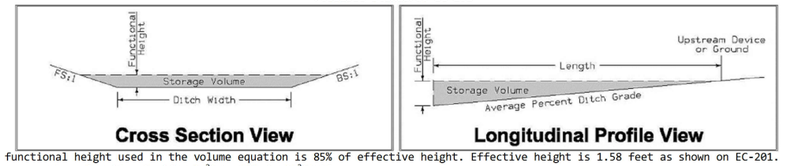
Location Begin Station	Location End Station	Location Side	Length of Installation 9 inch Dia LF	12 inch Dia LF	20 inch Dia LF	Remarks
Division 1 - College Drive to Pine Crest Drive						
100+35.00	146+60.37	BOTH		9250.7		
Division 3 - Pine Crest Drive to Highland Drive						
146+60.37	164+45.00	BOTH		3569.3		
		DIVISION 1 TOTALS				
		TAB TOTAL		9250.7		
		+25%		2312.7		
		BID TOTAL		**11570.0**	**LF**	
		REMOVAL		**11570.0**	**LF**	
		DIVISION 3 TOTALS				
		TAB TOTAL		3569.3		
		+25%		892.3		
		BID TOTAL		**4470.0**	**LF**	
		REMOVAL		**4470.0**	**LF**	

Note: Perimeter and Slope Sediment Control Device Quantity is estimated at twice the length of project, plus 25%.

100-18
10-16-18

SILT FENCES FOR DITCH CHECKS

Possible Standard: EC-201



* The functional height used in the volume equation is 85% of effective height. Effective height is 1.58 feet as shown on EC-201.
* Volume equation: $[0.5*Spacing*(0.5*H^2*FS+DW*H+0.5*H^2*BS)]$

Basin No.	Type	Location Station	Location Side	Bid Items Installation LF	Maintenance LF	Removal LF	Stormwater Storage Volume Summary Foreslope FS:1	Backslope BS:1	Ditch Width FT	Avg.% Slope Ditch Grade	Volume* CF	Remarks
Division 1 - College Drive to Pine Crest Drive												
		--	BOTH	1156.3	115.6	1156.3						
Division 3 - Pine Crest Drive to Highland Drive												
		--	BOTH	446.2	44.6	446.2						
		DIVISION 1 TOTALS										
		TAB TOTAL		1156.3								
		+50%		578.2								
		BID TOTAL		**1734.5**	**LF**							
		MAINTENANCE		**173.5**	**LF**							
		REMOVAL		**1734.5**	**LF**							
		DIVISION 3 TOTALS										
		TAB TOTAL		446.2								
		+50%		223.1								
		BID TOTAL		**669.2**	**LF**							
		MAINTENANCE		**66.9**	**LF**							
		REMOVAL		**669.2**	**LF**							

Note: Silt fence for ditch check quantities estimated at 25 LF per 100 LF of project length, plus 50%.

100-17
04-20-10

TABULATION OF SILT FENCES

Refer to EC-201

Location Begin Station	Location End Station	Location Side	Length LF	Remarks
Division 1 - College Drive to Pine Crest Drive				
100+35.00	146+60.37	BOTH	2312.7	
Division 3 - Pine Crest Drive to Highland Drive				
146+60.37	164+45.00	BOTH	892.3	
	DIVISION 1 TOTALS			
	TAB TOTAL		2312.7	
	+25%		578.2	
	BID TOTAL		**2890.9**	
	MAINTENANCE		**289.1**	
	REMOVAL		**2890.9**	
	DIVISION 3 TOTALS			
	TAB TOTAL		892.3	
	+25%		223.1	
	BID TOTAL		**1115.4**	
	MAINTENANCE		**111.5**	
	REMOVAL		**1115.4**	

Note: Silt fence quantities estimated at 50% of the length of project, plus 25%.

100-36
10-16-18

OPEN-THROAT CURB INTAKE SEDIMENT FILTER

Possible Standard: EC-602

Location Station	Side	Installation LF	Maintenance EACH	Removal EACH	Remarks
Division 1 - College Drive to Pine Crest Drive					
100+70.43	LT	9.0	1	1	
100+70.43	RT	9.0	1	1	
104+10.00	LT	9.0	1	1	
104+10.00	RT	9.0	1	1	
107+46.00	LT	9.0	1	1	
107+46.00	RT	9.0	1	1	
110+86.00	LT	5.0	1	1	
110+86.00	RT	5.0	1	1	
113+00.00	LT	5.0	1	1	
113+00.00	RT	5.0	1	1	
116+85.00	LT	5.0	1	1	
116+85.00	RT	5.0	1	1	
145+99.07	LT	9.0	1	1	
146+33.82	LT	9.0	1	1	
			DIVISION 1 TOTALS		
			OPEN-THROAT CURB INTAKE SEDIMENT FILTER		**102.0**
			MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER		**14**
			REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER		**14**

102-5
04-18-17

EXISTING PAVEMENT

No.	Location County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign	Year	Type	Project Number	Surface Type	Surface Depth IN	Base Type	Base Depth IN	Subbase Type	Subbase Depth IN	Removal Type	Removal Depth IN	Coarse Aggregate Source	Coarse Aggregate Type	Coarse Aggregate Durability Class	Reinforcement Type	Remarks
1	96	Locust Rd	BOTH						HMA	6 - 12			GSB	10 - 18				C. LST.			Information from Soil Boring Logs

103-10
04-18-17

TOPSOIL STRIPPING AND PLACEMENT

Road Identification	Location Dir. of Traffic	Location Begin Station	Location End Station	Topsoil Stripping Thickness IN	Topsoil Placement Thickness IN	Remarks
Division 1 - College Drive to Pine Crest Drive						
Locust Road	BOTH	100+36.00	146+60.00	12.0	8.0	
Division 3 - Pine Crest Drive to Highland Drive						
Locust Road	BOTH	146+60.00	164+44.00	12.0	8.0	

100-27
04-17-18

PROPOSED POSTED SPEED LIMIT

Road Identification	Begin Station	End Station	Proposed Posted Speed Limit 35 or less	40 - 45	over 45	Remarks
Locust Road	100+35.93	164+44.36	X			

100-1D
10-18-05

PROJECT DESCRIPTION

This project involves full reconstruction of Locust Road in Decorah, Iowa from College Drive north to Highland Drive. The project also includes storm sewer and drainage improvements to the entire corridor, and the addition of new sidewalk from College Drive north to Shady Lane Drive. The section from Pine Crest Drive to Highland Drive is a bid alternate and will be awarded if bids come within range of City estimate.

110-5
10-20-15

SIDEWALK REMOVAL

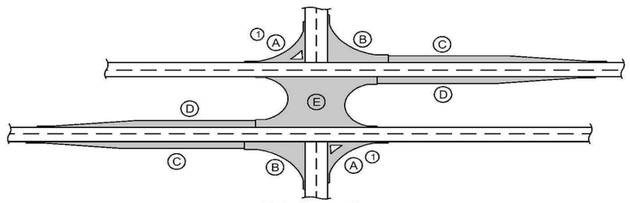
* Not a bid item

Begin Station	End Station	Area SY	Saw Cut* LF	Remarks
100+49.47	100+66.66	10.6	9.5	
	DIVISION 1 TOTALS			
	REMOVAL OF SIDEWALK	**10.6**	**SY**	

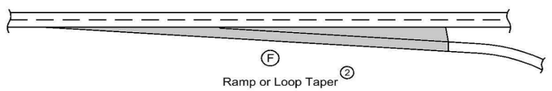
CHECK PLANS - NOT FOR CONSTRUCTION

100-24
04-21-15

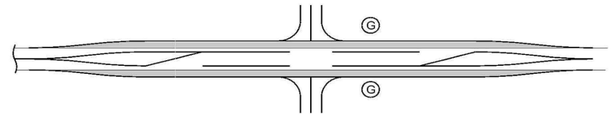
PCC PAVEMENT



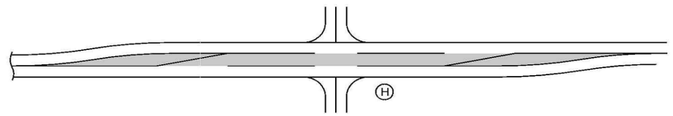
Typical Intersection



Ramp or Loop Taper (2)



Channelized Intersection
Widen Existing Roadway



Channelized Intersection
Reconstructed Roadway

(1) Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.

(2) Refer to PV-410, PV-411, PV-412, and PV-414.

(3) Quantity includes Pavement Header.

Location				Mainline			Area (3)								Total Area By Pavement Thickness		Special Backfill	Modified Subbase	Granular Subbase	Remarks
Road Identification	Direction of Travel	Station to Station		Width	Length	Area	A (1)	B	C	D	E	F (2)	G	H	SY 8 IN	SY 9 IN	TONS	CY	SY	
				FT	FT	SY	SY	SY	SY	SY	SY	SY	SY	SY						
Division 1 - College Drive to Pine Crest Drive																				
Locust Road	Both	100+35.83	100+68.53	Varies	32.7	168.5									168.5			62.6		
Locust Road	Both	100+68.53	100+98.53	Varies	30.0	123.9									123.9			48.0		
Locust Road	Both	100+98.53	110+14.55	36.0	916.0	3664.1									3664.1			1424.9		
Locust Rd & Shady Lane Dr	Both	110+14.55	110+80.55	Varies	66.0	394.9									394.9			147.0		
Locust Road	Both	110+80.55	118+00.00	36.0	719.5	2877.8									2877.8			1119.1		
Locust Road	Both	118+00.00	119+00.00	36-40	100.0	422.2									422.2			162.3		
Locust Road	Both	119+00.00	145+78.53	40.0	2678.5	11904.6									11904.6			4564.1		
Locust Rd & Pine Crest Dr	Both	145+78.53	146+45.37	Varies	66.8	574.2									574.2			213.7		
Locust Road	Both	146+45.37	146+60.37	40.0	15.0	66.7									66.7			25.6		
Division 3 - Pine Crest Drive to Highland Drive																				
Locust Road	Both	146+60.37	163+84.36	40.0	1724.0	7662.2									7662.2			2911.6		
Locust Road	Both	163+84.36	164+44.36	Varies	60.0	230.0									230.0			89.6		
															DIVISION 1 TOTALS					
															STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS A, CLASS 2 DURABILITY, 8 IN.			**20196.9**	**SY**	
															MODIFIED SUBBASE			**7767.4**	**CY**	
															DIVISION 3 TOTALS					
															STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS A, CLASS 2 DURABILITY, 8 IN.			**7892.2**	**SY**	
															MODIFIED SUBBASE			**3001.2**	**CY**	

CHECK PLANS - NOT FOR CONSTRUCTION

110-08
04-17-18

REMOVAL OF CONCRETE DRIVES

* Not a Bid Item

Location Station	Side	Area SY	Saw Cut* LF	Remarks
Division 1 - College Drive to Pine Crest Drive				
100+75.00	LT	38.8	9.8	
101+55.00	LT	214.9	97.2	
102+08.00	LT	113.3	86.9	
103+55.00	LT	113.8	63.4	
103+93.00	LT	59.6	32.2	
104+96.00	LT	95.8	39.1	
105+98.00	RT	159.4	82.5	
106+64.00	LT	79.4	21.9	
108+66.00	LT	66.8	16.0	
110+61.00	RT	51.6	13.0	
113+67.00	RT	68.6	13.8	
114+93.00	LT	41.5	11.2	
116+66.00	LT	45.8	11.0	
133+24.00	LT	138.5	10.0	
142+28.00	RT	68.2	12.2	
143+58.00	RT	102.3	18.0	
Division 3 - Pine Crest Drive to Highland Drive				
150+00.00	LT	103.2	21.3	
152+29.00	RT	68.2	9.6	
155+00.00	RT	38.3	8.8	
155+70.00	RT	77.5	11.9	
158+60.00	RT	48.8	11.8	
158+95.00	LT	57.9	12.0	
160+55.00	RT	59.7	11.5	
163+43.00	RT	61.1	13.0	
DIVISION 1 TOTALS				
REMOVAL OF PAVED DRIVEWAY		**1458.3**	**SY**	
DIVISION 3 TOTALS				
REMOVAL OF PAVED DRIVEWAY		**514.7**	**SY**	

232-10
04-18-17

EMERALD ASH BORER

Any living, dead, cut or fallen material of the ash (Fraxinus spp.) including trees, nursery stock, logs, firewood, stumps, roots, branches, and composted or uncomposted ash chips can be freely moved within the yellow areas of the most recent Federal EAB Quarantine & Authorized Transit.

https://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/downloads/eab_quarantine_map.pdf.

Obtain appropriate Compliance Agreements from USDA APHIS PPQ prior to moving any of the above listed ash articles to areas outside the yellow zone on the map.

For questions, concerns, and general assistance, contact:

USDA APHIS PPQ, Iowa office, 515-414-3295

Or

Iowa Department of Agriculture & Land Stewardship
515-725-1470
Entomology@IowaAgriculture.gov

108-8C
04-19-16

STEEL BEAM GUARDRAIL FOR SIDE OBSTACLE (ONE-WAY PROTECTION)

Possible Standards: BA-200, BA-203, BA-205, BA-206, BA-210, BA-211, BA-252, LS-625, LS 626, LS-632, SI-172, SI-173, and SI-211.

(1) Lane(s) to which the obstacle is adjacent.

Location No.	Direction of Traffic	Side (1) O= Outside M= Median	Station	O_L	D_O	Layout Lengths BA-252 or LS-632 Approach Side (A) ET	Approach Side (A) $VT2_A$	Approach Side (A) VF_A	Approach Side (A) $VT1_A$	Trailing Side (T) $VT1_T$	Trailing Side (T) EA	Long-Span System BA-211 STATION	Long-Span System BA-211 TYPE	Delineators and Object Markers SI-211 TYPE	Delineator SI-172 Type 1 White	Object Marker SI-173 Type 2 OM2-2	Type 3 OM3-L	Type 3 OM3-R	Bid Items Steel Beam Guardrail BA-200	W-Beam End Anchor BA-203	End Terminal Standard	End Terminal Count	Post Adapter BA-210	Remarks
				FT	FT	LF	LF	LF	LF	LF	LF	STATION	TYPE	TYPE	EACH	EACH	EACH	EACH	LF	EACH		EACH	EACH	
1	NB	O	120+91.42	--	3.00	47.7			243.75		9.375			6					237.5	1	BA-205	1		
																		DIVISION 1 TOTALS						
																		STEEL BEAM GUARDRAIL	**237.5**	**LF**				
																		STEEL BEAM GUARDRAIL END ANCHOR, W-BEAM	**1**	**EACH**				
																		STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-205	**1**	**EACH**				

262-5
10-18-05

UTILITIES
(POINT 25 PROJECT)

This is a POINT 25 project and is subject to the provisions of IAC 761-115.25.

104-10
08-01-08

ADJUSTMENT OF FIXTURES

No.	Location Station	Type of Fixture	Adjustment
Division 1 - College Drive to Pine Crest Drive			
1	101+57.50, 18.30' RT	Sanitary Sewer Manhole	Adjust to finished grade.
2	105+59.52, 15.28' RT	Sanitary Sewer Manhole	Adjust to finished grade.
3	105+71.00, 30.00' RT	Valve Box	Replace.
4	105+77.00, 28.00' RT	Valve Box	Replace.
5	109+19.00, 26.00' RT	Valve Box	Extend to finished grade.
6	109+19.00, 28.00' RT	Fire Hydrant	Adjust to finished grade.
7	109+59.07, 13.64' RT	Sanitary Sewer Manhole	Adjust to finished grade.
8	110+57.00, 21.00' RT	Valve Box	Extend to finished grade.
9	111+38.22, 13.87' RT	Sanitary Sewer Manhole	Adjust to finished grade.
10	115+35.97, 19.99' RT	Sanitary Sewer Manhole	Adjust to finished grade.
11	115+42.48, 17.06' LT	Sanitary Sewer Manhole	Adjust to finished grade.
12	116+74.15, 18.42' RT	Sanitary Sewer Manhole	Adjust to finished grade.
13	116+90.68, 19.78' RT	Sanitary Sewer Manhole	Adjust to finished grade.
14	118+86.66, 16.45' LT	Sanitary Sewer Manhole	Adjust to finished grade.
15	121+12.47, 15.24' LT	Sanitary Sewer Manhole	Adjust to finished grade.
16	125+12.34, 15.75' LT	Sanitary Sewer Manhole	Adjust to finished grade.
17	129+11.09, 16.24' LT	Sanitary Sewer Manhole	Adjust to finished grade.
18	130+49.14, 15.21' LT	Sanitary Sewer Manhole	Adjust to finished grade.
19	131+24.86, 15.63' LT	Sanitary Sewer Manhole	Adjust to finished grade.
20	133+01.19, 18.64' LT	Sanitary Sewer Manhole	Adjust to finished grade.
21	134+88.41, 21.30' LT	Sanitary Sewer Manhole	Adjust to finished grade.
22	136+72.99, 21.48' LT	Sanitary Sewer Manhole	Adjust to finished grade.
23	140+81.30, 18.34' LT	Sanitary Sewer Manhole	Adjust to finished grade.
24	141+31.00, 42.00' RT	Fire Hydrant	Adjust to finished grade.
25	142+96.30, 15.57' LT	Sanitary Sewer Manhole	Adjust to finished grade.
26	145+63.35, 18.11' LT	Sanitary Sewer Manhole	Adjust to finished grade.
Division 3 - Pine Crest Drive to Highland Drive			
27	152+06.07, 28.56' LT	Sanitary Sewer Manhole	Adjust to finished grade.
28	153+70.47, 37.94' RT	Sanitary Sewer Manhole	Adjust to finished grade.
29	153+72.07, 23.42' LT	Sanitary Sewer Manhole	Adjust to finished grade.
30	155+73.51, 25.92' LT	Sanitary Sewer Manhole	Adjust to finished grade.
31	155+93.00, 30.00' RT	Valve Box	Replace.
32	156+00.00, 33.00' RT	Valve Box	Extend to finished grade.
33	156+00.00, 35.00' RT	Fire Hydrant	Adjust to finished grade.
34	160+39.00, 33.00' RT	Valve Box	Extend to finished grade.
35	160+39.00, 35.00' RT	Fire Hydrant	Adjust to finished grade.
		DIVISION 1 TOTALS	
		MANHOLE ADJUSTMENT, MAJOR	**20**
		VALVE BOX EXTENSION	**2**
		VALVE BOX REPLACEMENT	**2**
		FIRE HYDRANT ADJUSTMENT	**2**
		DIVISION 3 TOTALS	
		MANHOLE ADJUSTMENT, MAJOR	**4**
		VALVE BOX EXTENSION	**2**
		VALVE BOX REPLACEMENT	**1**
		FIRE HYDRANT ADJUSTMENT	**2**

102-3
10-16-18

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of Unclassified Pipe calculated is based on using Corrugated Metal Pipe.
(1) Refer to MI-210
(2) Refer to EW-501.
(3) Refer to EW-501 or EW-502.
*Predetermined for access point not constructed with this project.

Location Station	Side	Type A, B, C, Safety Ramp, or Predetermined*	Length of Opening (1) Case 1 or 2	1½" Dropped Curb LF	3" Dropped Curb LF	W FT	(1)(2) PR FT	(2) SR FT	Pipe Culvert (3) H FT	Size IN	Pipe Length LF	Lt. LF	Rt. LF	Aprons No.	Driveway Surface Area HMA SY	PCC SY	Driveway Surfacing Material TON	Remarks
Division 1 - College Drive to Pine Crest Drive																		
101+48.51	LT	C	2		32.0	24.0	N/A	N/A								124.4		(1), (2)
102+21.98	LT	C	2		20.7	12.7	N/A	N/A								52.2		(1), (2)
103+61.12	LT	C	2		27.5	19.5	N/A	N/A								46.1		(1), (2)
103+95.78	LT	C	2		19.0	11.0	N/A	N/A								31.1		(1), (2)
105+02.27	LT	C	2		29.0	21.0	N/A	N/A								64.8		(1), (2)
106+02.45	RT	C	2		46.4	38.4	N/A	N/A								106.8		(1), (2), (3)
106+62.45	LT	C	2		30.0	22.0	N/A	N/A								70.8		(1), (2)
108+70.69	LT	C	2		24.0	16.0	N/A	N/A								49.9		(1), (2)
110+60.96	RT	C	2		21.4	13.0	N/A	N/A								30.8		(1), (2)
113+67.01	RT	C	2		22.2	13.8	N/A	N/A	1.0	15.0	35.5	17.8	17.7	2		35.3		(1), (2), (5)
114+85.94	RT	C	2		20.3	11.0	N/A	N/A	1.2	15.0	31.5	15.8	15.7	2		36.2		(1), (2), (5)
114+92.69	LT	C	2		19.2	11.2	N/A	N/A								25.0		(1), (2)
116+70.29	LT	C	2		19.0	11.0	N/A	N/A								24.6		(1), (2)
117+01.43	RT	C	2		20.1	12.0	N/A	N/A	0.9	15.0	31.5	15.5	16.0	2		32.2		(1), (2), (5)
117+44.33	LT	C	2		19.0	11.0	N/A	N/A	0.9	15.0	31.5	18.6	12.9	2		24.5		(1), (2), (5)
133+18.23	LT	C	1		N/A	10.0	10.0	10.0	4.0	24.0	60.8	35.3	25.4	2		58.9		(1), (5)
141+06.54	RT	C	1		N/A	14.0	10.0	10.0	1.0	42.0	45.5	19.0	26.5	2		58.4		(1), (5)
142+28.17	RT	C	1		N/A	12.2	10.0	10.0	0.7	48.0	60.0	30.0	30.0	2		51.8		(1), (5)
143+60.83	RT	C	1		N/A	17.8	10.0	10.0	2.6	24.0	52.8	22.3	30.5	2		71.2		(1), (5)
144+84.09	RT	C	1		N/A	12.0	10.0	10.0	0.9	24.0	44.8	22.4	22.4	2		51.4		(1), (5)
Division 3 - Pine Crest Drive to Highland Drive																		
150+02.68	LT	C	1		N/A	33.0	10.0	10.0	1.9	15.0	51.5	25.6	25.9	2		126.8		(1), (5)
151+51.73	RT	C	1		N/A	12.0	10.0	10.0								54.1		(1)
152+36.69	RT	C	1		N/A	10.0	10.0	10.0	1.8	18.0	47.5	22.9	24.6	2		45.0		(1), (5)
152+60.79	LT	C	1		N/A	20.0	N/A	10.0	0.6	18.0	43.6	17.8	25.9	2			20.31	(4), (5)
154+98.65	RT	C	1		N/A	8.8	10.0	10.0	0.9	15.0	39.5	19.6	19.9	2		40.9		(1), (5)
155+74.24	RT	C	1		N/A	12.4	10.0	10.0	1.3	15.0	47.5	23.8	23.8	2		52.7		(1), (5)
157+54.81	LT	C	1		N/A	12.0	10.0	10.0								51.5		(1)
158+63.00	RT	C	1		N/A	12.0	10.0	10.0	0.8	15.0	47.5	25.3	22.2	2		48.7		(1), (5)
158+94.65	LT	C	1		N/A	12.0	10.0	10.0								51.4		(1)
160+56.74	RT	C	1		N/A	11.5	10.0	10.0								49.8		(1)
161+75.55	RT	C	1		N/A	21.0	10.0	10.0	0.8	15.0	55.5	27.6	27.9	2		81.4		(1), (5)
162+22.38	LT	C	1		N/A	9.0	10.0	10.0								41.4		(1)
162+62.79	LT	C	1		N/A	15.5	10.0	10.0								65.1		(1)
163+44.78	RT	C	1		N/A	13.0	10.0	10.0	1.6	15.0	47.5	23.8	23.8	2		54.8		(1), (5)

Notes:
(1) - Residential Driveway
(2) - Includes curb transitons.
(3) - Includes 49 LF of integral curb.
(4) - Gravel Field Entrance
(5) - See M Sheets for culvert and apron bid quantities.

DIVISION 1 TOTALS
DRIVEWAY, P.C. CONCRETE, 6 IN. 1046.4 SY

DIVISION 3 TOTALS
DRIVEWAY, P.C. CONCRETE, 6 IN. 763.6 SY
SURFACING, DRIVEWAY 20.31 TON

110-1
04-16-13

REMOVAL OF PAVEMENT

Refer to Tabulation 102-5

* Not a Bid Item

Begin Station	End Station	Side	Pavement Type	Area SY	Saw Cut* LF	Remarks
Division 1 - College Drive to Pine Crest Drive						
100+35.83	100+94.20	BOTH	PCC & HMA	257.9	63.0	
100+94.20	110+11.98	BOTH	PCC & HMA	2447.4		
110+11.98	110+81.47	BOTH	PCC & HMA	354.3	36.0	
110+81.47	145+72.48	BOTH	PCC & HMA	9309.4		
145+72.48	146+60.37	BOTH	PCC & HMA	554.9	24.9	
Division 3 - Pine Crest Drive to Highland Drive						
146+60.37	164+44.36	BOTH	PCC & HMA	4757.3	28.5	
			DIVISION 1 TOTALS			
			REMOVAL OF PAVEMENT	**12923.9**	**SY**	
			DIVISION 3 TOTALS			
			REMOVAL OF PAVEMENT	**4757.3**	**SY**	

110-13
04-20-10

DELIVERY AND STOCKPILING

Item Description	Quantity	Units	Delivery Location	Contact Name & Number	Remarks
Division 2 - College Drive to Pine Crest Drive					
Signs, Sheet Aluminum			108 Railroad Avenue Decorah, IA 52101	Jeremy Bril, (563) 382-2157	See Tab. 190-62 for quantity.
Division 3 - Pine Crest Drive to Highland Drive					
Signs, Sheet Aluminum			108 Railroad Avenue Decorah, IA 52101	Jeremy Bril, (563) 382-2157	See Tab. 190-62 for quantity.
DIVISION 2 TOTALS					
DELIVER AND STOCKPILE SALVAGED MATERIALS	**0.75**	**LS**			
DIVISION 3 TOTALS					
DELIVER AND STOCKPILE SALVAGED MATERIALS	**0.25**	**LS**			

MEC-02
Modified

RELOCATION OF FIXTURES

Location Station	Side	Offset FT	Type of Fixture
105+77.00	RT	30.00	Fire Hydrant
113+12.00	RT	31.00	Fire Hydrant
DIVISION 1 TOTAL			
FIRE HYDRANT RELOCATION		**2**	

CHECK PLANS - NOT FOR CONSTRUCTION

108-29
04-21-15

PAVEMENT MARKING SYMBOLS AND LEGENDS

Refer to PM-111

Road Identification	Location Station	Location Side	STAW	RTAW	LTAW	CSRW	CSLW	CSTW	CRLW	FERW	LLRW	RLRW	RRCW	BLSW	WCSW	WPSB	SCLW	XNGW	STPW	AHDW	ONLW	BIKW	LANW	XITW	Groove Cuts EACH	Remarks
Division 1 - College Drive to Pine Crest Drive																										
Locust Road	100+86.50	LT												1												
	100+31.50	RT												1												
	100+42.50	RT	1																							
	109+92.00	LT	1																							
	110+05.00	LT												1												
	145+56.50	LT	1																							
	145+69.00	LT												1												
Division 3 - Pine Crest Drive to Highland Drive																										
Locust Road	164+22.50	LT	1																							
	164+35.00	LT												1												
DIVISION 1 TOTALS																										
PAINTED SYMBOLS AND LEGENDS, DURABLE				**7**	**EACH**																					
DIVISION 3 TOTALS																										
PAINTED SYMBOLS AND LEGENDS, DURABLE				**2**	**EACH**																					

108-22
04-16-13

PAVEMENT MARKING LINE TYPES

See PM-110

*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.
***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

BCY4: Broken Centerline (Yellow) @ 0.25 DCY4: Double Centerline (Yellow) @ 2.00 NPY4: No Passing Zone Line (Yellow) @ 1.25 BLW4: Broken Lane Line (White) @ 0.25 ELW4: Edge Line Right (White) @ 1.00
ELY4: Edge Line Left (Yellow) @ 1.00

Location: Road ID	Station to Station		Dir. of Travel	Marking Type	Side L	Side C	Side R	BCY4* STA	DCY4 STA	NPY4** STA	BLW4 STA	ELW4 STA	ELY4 STA	Remarks
Division 1 -														
Locust Road	100+35.86	100+91.45	BOTH	Durable Paint		X	X		0.56			0.56		
	100+91.45	110+14.55	BOTH	Durable Paint	X	X	X		9.23			18.46		
	110+14.55	110+80.55	BOTH	Durable Paint			X					0.66		
	110+80.55	145+78.53	BOTH	Durable Paint	X	X	X		34.98			69.96		
	145+78.53	146+45.37	BOTH	Durable Paint			X					0.67		
	146+45.37	146+60.37	BOTH	Durable Paint	X	X	X		0.15			0.30		
Division 3 -														
Locust Road	146+60.37	163+84.36	BOTH	Durable Paint	X	X	X		17.24			34.48		
	163+84.36	164+44.36	BOTH	Durable Paint		X			0.60					
	146+60.37	164+44.36	BOTH	Waterborne/Solvent Paint	X	X	X		17.84			35.68		Stage 1 Construction Paint
	146+60.37	164+44.36	BOTH	Waterborne/Solvent Paint	X	X	X		17.84			35.68		Stage 2 Construction Paint
	146+60.37	164+44.36	BOTH	Removal of Paint	X	X	X		17.84			35.68		Stage 2 Paint Removal
							DIVISION 1 TOTALS							
							FACTORED TOTALS (DURABLE)		89.83			90.61		
							PAINTED PAVEMENT MARKINGS, DURABLE		**180.44**	**STA**				
							DIVISION 3 TOTALS							
							FACTORED TOTALS (DURABLE)		35.68			34.48		
							FACTORED TOTALS (WATERBORNE/SOLVENT PAINT)		71.36			71.36		
							FACTORED TOTALS (REMOVAL)		35.68			35.68		
							PAINTED PAVEMENT MARKINGS, DURABLE		**70.16**	**STA**				
							PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT BASED		**142.72**	**STA**				
							PAVEMENT MARKINGS REMOVED		**71.36**	**STA**				

MEC-01
Modified

RELOCATION OF MAILBOXES

Location Station	Location Side	Offset FT	Count EACH	Remarks
Division 1 - College Drive to Pine Crest Drive				
101+27.30	RT	17.94	3	
102+30.30	RT	14.99	1	
103+70.33	RT	14.71	2	
104+92.80	RT	14.24	1	
105+59.31	RT	16.40	2	
106+29.43	RT	15.62	2	
108+58.26	RT	14.55	1	
110+27.60	LT	66.45	1	
110+46.19	RT	17.11	1	
114+00.89	RT	19.88	2	
117+22.10	RT	21.64	4	
132+92.48	RT	21.78	1	
141+23.53	RT	22.60	2	
142+44.77	RT	21.96	1	
143+83.35	RT	18.02	1	
Division 3 - Pine Crest Drive to Highland Drive				
149+93.93	RT	17.83	2	
151+69.10	RT	18.26	1	
152+55.24	RT	18.32	1	
155+10.80	RT	17.82	1	
155+90.34	RT	17.06	2	
157+36.69	RT	18.29	1	
158+75.94	RT	17.37	1	
160+72.51	RT	18.66	1	
160+73.70	RT	18.32	1	
162+20.08	RT	17.45	2	
163+68.62	RT	18.42	1	
DIVISION 1 TOTAL				
RELOCATION OF MAILBOXES			**25**	**EACH**
DIVISION 3 TOTAL				
RELOCATION OF MAILBOXES			**14**	**EACH**

108-13A
08-01-08

SAFETY CLOSURES

Refer to Section 2518 of the Standard Specifications

Station	Closure Type Road Qty.	Closure Type Hazard Qty.	Remarks
100+35.00	1		Locust Rd at BOP
110+47.50	1		Locust Rd at Shady Lane Dr
146+10.00	1		Locust Road at Pine Crest Dr
164+45.00	1		Locust Rd at EOP
DIVISION 1 TOTALS			
SAFETY CLOSURE		**4**	**EACH**

CHECK PLANS - NOT FOR CONSTRUCTION

110-14
04-16-13

SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL

* Not a bid item

Location/Description	Sanitary or Storm Sewer	Abandonment, Plug Only or Abandonment, Plug and Fill or Removal	Length of Pipe ≤ 36 inch diameter (LF)	Length of Pipe > 36 inch diameter (LF)	Fill Material* Flowable Mortar or CLSM (CY)	Remarks
Division 2 - College Drive to Pine Crest Drive						
Sta. 101+48.50, 20.50' LT	Storm Sewer	Removal	40			13" PVC Entrance Pipe
Sta. 103+65.50, 24.35' LT	Storm Sewer	Removal	83			24" CMP Entrance Pipe
Sta. 104+92.00, 27.30' LT	Storm Sewer	Removal	46			24" CMP Entrance Pipe
Sta. 106+05.00, 23.65' RT	Storm Sewer	Removal	50			18" CMP Entrance Pipe
Sta. 106+62.00, 27.74' LT	Storm Sewer	Removal	24			18" x 12" CMP Entrance Pipe
Sta. 108+70.50, 29.17' RT	Storm Sewer	Removal	24			24" CMP Entrance Pipe
Sta. 113+70.00, 27.82' RT	Storm Sewer	Removal	40			15" CMP Entrance Pipe
Sta. 114+90.50, 27.32' RT	Storm Sewer	Removal	28			15" CMP Entrance Pipe
Sta. 116+69.00, 24.03' LT	Storm Sewer	Removal	26			15" CMP Entrance Pipe
Sta. 117+25.00, 28.67' RT	Storm Sewer	Removal	67			15" CMP Entrance Pipe
Sta. 117+44.50, 24.95' LT	Storm Sewer	Removal	24			15" CMP Entrance Pipe
Sta. 120+28.00, 12.74' LT	Storm Sewer	Removal		143		42" CMP Roadway Pipe
Sta. 130+80.50, 7.72' RT	Storm Sewer	Removal	86			30" x 36" Box Culvert
Sta. 133+12.00, 31.58' LT	Storm Sewer	Removal	60			24" CMP Entrance Pipe
Sta. 141+04.50, 30.78' RT	Storm Sewer	Removal	26			36" CMP Entrance Pipe
Sta. 142+24.50, 40.43' RT	Storm Sewer	Removal		55		42" CMP Entrance Pipe
Sta. 143+10.50, 3.50' RT	Storm Sewer	Removal		51		6' x 2' Box Culvert
Sta. 143+57.50, 35.78' RT	Storm Sewer	Removal	41			24" CMP Entrance Pipe
Sta. 144+86.00, 33.26' RT	Storm Sewer	Removal	47			24" CMP Entrance Pipe
Sta. 146+15.50, 58.67' LT	Storm Sewer	Removal	87			24" CMP Storm Sewer Pipe
Division 3 - Pine Crest Drive to Highland Drive						
Sta. 150+03.00, 30.46' LT	Storm Sewer	Removal	46			15" HDPE Entrance Pipe
Sta. 151+77.00, 2.12' RT	Storm Sewer	Removal		44		2' x 2' Box Culvert
Sta. 152+34.50, 34.71' RT	Storm Sewer	Removal	22			18" CMP Entrance Pipe
Sta. 152+59.50, 34.24' LT	Storm Sewer	Removal	45			15" CMP Entrance Pipe
Sta. 154+99.50, 27.17' RT	Storm Sewer	Removal	23			15" CMP Entrance Pipe
Sta. 155+69.50, 26.81' RT	Storm Sewer	Removal	41			15" CMP Entrance Pipe
Sta. 163+46.50, 27.17' RT	Storm Sewer	Removal	28			12" CMP Entrance Pipe
		DIVISION 2 TOTALS				
		REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	**801**	**LF**		
		REMOVE STORM SEWER PIPE GREATER THAN 36 IN.	**249**	**LF**		
		DIVISION 3 TOTALS				
		REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	**206**	**LF**		
		REMOVE STORM SEWER PIPE GREATER THAN 36 IN.	**44**	**LF**		

190-62
10-15-13

EXISTING SIGNS TO BE REMOVED

SIGN NUMBER OR DESCRIPTION	LOCATION STATION	DIRECTION OF TRAVEL	TYPE 'A' SIGN ASSEMBLY (RA) EACH	TYPE 'B' SIGN ASSEMBLY (RB) EACH	REMOVE & REINSTALL EXISTING SIGNS TYPE 'A' (RR) EACH	REMOVE & REINSTALL EXISTING SIGNS TYPE 'B' (RR) EACH	CONCRETE FOUNDATION (RF) EACH	SUPPORT STRUCTURE & FOUNDATION (RS) EACH	APPLICABLE SIGNING NOTES	REMARKS
Division 1 - College Drive to Pine Crest Drive										
No Passing Zone/No Semi Parking	100+97.2	SB	1							
Speed Limit 25	101+05.4	NB	1							
Stop Ahead	107+81.1	SB	1							
Deer Xing/No Passing Zone	107+97.4	NB	1							
Curve	109+59.0	NB	1							
Street Sign	110+24.3	SB	1							
Stop	110+26.7	EB	1							
No Passing Zone	110+96.0	SB	1							
Speed Limit 35	112+14.5	NB	1							
Speed Limit 25/No Engine Braking	112+14.7	SB	1							
Destination Sign	114+44.4	NB	1							
Speed Limit 45	120+48.6	NB	1							
Speed Limit 35	120+49.1	SB	1							
Curve/No Passing Zone	123+79.4	NB	1							
Curve/No Passing Zone	127+64.6	SB	1							
Stop	145+91.0	EB	1							
Curve	146+02.3	NB	1							
Street Sign	146+34.5	SB	1							
Deer Xing/No Passing Zone	146+51.7	SB	1							
Division 3 - Pine Crest Drive to Highland Drive										
Speed Limit 45/No Passing Zone	148+84.3	NB	1							
Curve	148+85.2	SB	1							
Speed Limit 45	158+75.0	SB	1							
	DIVISION 1 TOTALS									
	REMOVAL OF SIGN		**19**	**EACH**						
	DIVISION 3 TOTALS									
	REMOVAL OF SIGN		**3**	**EACH**						

112-10
04-16-19

MILLED RUMBLE STRIPS

See PV-12 and PV-13.

* Calculated at 18" width for Shoulder.

Location: Road Identification	Station to Station		Shoulder Pavement Type	Rumble Strip Type (Centerline, Rt or Lt Shoulder)	Length PCC (STA)	Length HMA (STA)	Fog Seal* (Milled Rumble Strip) Shoulder (GAL)	Effective Shoulder Width PCC Paved (FT)	Effective Shoulder Width HMA Paved (FT)	Effective Shoulder Width Granular\ Earth (FT)	Remarks
Division 1 - College Drive to Pine Crest Drive											
Locust Road	118+00.00	146+60.37	PCC	Left Shoulder	28.60		0.0	(9' Bike Lane)		3.0	
	118+00.00	146+60.37	PCC	Right Shoulder	28.60		0.0	(9' Bike Lane)		3.0	
Division 3 - Pine Crest Drive to Highland Drive											
Locust Road	146+60.37	163+84.36	PCC	Left Shoulder	17.24		0.0	(9' Bike Lane)		3.0	
	146+60.37	163+84.36	PCC	Right Shoulder	17.24		0.0	(9' Bike Lane)		3.0	
							DIVISION 1 TOTALS				
					MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE			**57.2**	**STA**		
							DIVISION 3 TOTALS				
					MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE			**34.5**	**STA**		

CHECK PLANS - NOT FOR CONSTRUCTION

112-9
10-15-13

SHOULDERS

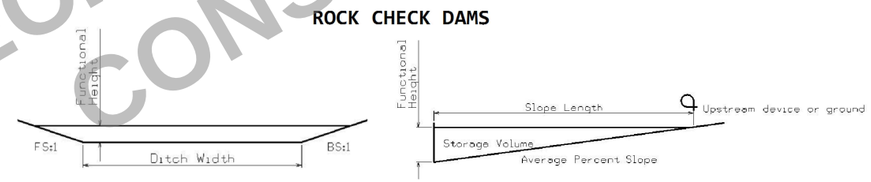
(1) Lane(s) to which the shoulder is adjacent.
(2) Bid Item
(3) Applies only for Paved Shoulders constructed on project with existing granular shoulders.
(4) Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 0, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Location					Quantities																		
Road Identification	Direction Of Traffic (1)	Station to Station		Side	(P) Width	(G) Width	(L) Length	Class 13 Excavation (3)	Hot Mix Asphalt		Binder	Paved Shoulder	Reinforced Paved Shoulder	Special Backfill				Modified Subbase	Granular Shoulder		Earth Shoulder Construction Alternates			Remarks
														HMA Alternate		PCC Alternate						HMA	PCC	
					FT	FT	FT	CY (2)	TON	TON/STA	TONS	SY (2)	SY (2)	TON (2)	TON/STA	TON (2)	TON/STA	CY (2)	TON (2)	TON/STA	STA (2)	CY (4)	CY (4)	
Division 1 - College Drive to Pine Crest Drive																								
Locust Road	SB	118+00.00	133+03.11	LT		3.0	1503.1												285.14	18.97				
	SB	133+32.30	145+78.53	LT		3.0	1246.2												236.41	18.97				
	SB	146+45.37	146+60.37	LT		3.0	15.0												2.85	18.97				
	NB	118+00.00	140+90.43	RT		3.0	2290.4												434.49	18.97				
	NB	141+22.94	142+12.98	RT		3.0	90.0												17.08	18.97				
	NB	142+43.51	143+42.91	RT		3.0	99.4												18.86	18.97				
	NB	143+80.15	144+68.09	RT		3.0	87.9												16.68	18.97				
	NB	145+00.09	146+60.37	RT		3.0	160.3												30.41	18.97				
Division 3 - Pine Crest Drive to Highland Drive																								
Locust Road	SB	146+60.37	149+75.74	LT		3.0	315.4												59.83	18.97				
	SB	150+30.25	157+38.77	LT		3.0	708.5												134.41	18.97				
	SB	157+70.98	158+78.65	LT		3.0	107.7												20.42	18.97				
	SB	159+10.65	162+07.88	LT		3.0	297.2												56.38	18.97				
	SB	162+36.88	162+56.30	LT		3.0	19.4												3.68	18.97				
	SB	162+92.66	164+44.36	LT		3.0	151.7												28.78	18.97				
	NB	146+60.37	151+35.80	RT		3.0	475.4												90.19	18.97				
	NB	151+68.24	152+22.12	RT		3.0	53.9												10.22	18.97				
	NB	152+51.40	154+84.24	RT		3.0	232.8												44.17	18.97				
	NB	155+13.07	155+58.05	RT		3.0	45.0												8.53	18.97				
	NB	155+90.43	158+47.02	RT		3.0	256.6												48.68	18.97				
	NB	158+79.15	160+40.99	RT		3.0	161.8												30.70	18.97				
	NB	160+72.49	161+55.05	RT		3.0	82.6												15.66	18.97				
	NB	161+96.05	163+28.29	RT		3.0	132.2												25.09	18.97				
	NB	163+61.28	164+44.36	RT		3.0	83.1												15.76	18.97				
																		DIVISION 1 TOTALS						
																		GRANULAR SHOULDERS, TYPE A	**1041.91**	**TON**				
																		DIVISION 3 TOTALS						
																		GRANULAR SHOULDERS, TYPE A	**592.50**	**TON**				

100-32
MODIFIED

ROCK CHECK DAMS



* The functional height used in the volume equation is 90% of effective height. Effective height is 2 feet as shown in EC-302.
* Volume equation: [0.5*Spacing*(0.5*H2*FS+DW*H+0.5*H2*BS)]

Location			Bid Items			Stormwater Storage Volume Summary					Remarks
Station	Station	Side	Installation	Maintenance	Removal	Foreslope	Backslope	Ditch Width	Avg. % Slope	Volume*	
			LF	Each	Each	FS:1	BS:1	FT		CF	
121+00.00	12300	RT	119.0	7	N/A	3.0	3.0	5.0	5.9%	330.0	7 CHECK DAMS AT 17 LF EACH (30' SPACING)
125+25.00	12610	LT	51.0	3	N/A	3.0	3.0	5.0	4.7%	440.0	3 CHECK DAMS AT 17 LF EACH (40' SPACING)
126+10.00	12655	LT	51.0	3	N/A	3.0	3.0	5.0	8.9%	220.0	3 CHECK DAMS AT 17 LF EACH (20' SPACING)
126+55.00	12835	LT	102.0	6	N/A	3.0	3.0	5.0	5.6%	330.0	6 CHECK DAMS AT 17 LF EACH (30' SPACING)
128+00.00	13165	RT	204.0	12	N/A	3.0	3.0	5.0	6.1%	330.0	12 CHECK DAMS AT 17 LF EACH (30' SPACING)
131+40.00	13280	LT	85.0	5	N/A	3.0	3.0	5.0	5.7%	330.0	5 CHECK DAMS AT 17 LF EACH (30' SPACING)
139+90.00	14295	LT	153.0	9	N/A	3.0	3.0	5.0	5.3%	385.0	9 CHECK DAMS AT 17 LF EACH (35' SPACING)
	DIVISION 1 TOTAL										
	ROCK CHECK DAM		**765.0**	**LF**							
	MAINTENANCE OF ROCK CHECK DAM		**45**	**EACH**							

CHECK PLANS - NOT FOR CONSTRUCTION

190-51
10-15-13

MATERIALS FOR TYPE 'A' SIGNS

TYPE A SIGNING TYPICALS	SIGN NUMBER	DIR OF TRAVEL	SIGN LOCATION	WOOD POSTS			PERFORATED SQUARE STEEL TUBE						Steel Rect. Tube			TYPE A SIGN MOUNTING BRACKETS						INSTALLATION			REMARKS
				NO. OF POSTS	4 x 6					ANCHOR			NO. OF POSTS	POST LENGTH	ANCHORS	ONE POST BRACKET	TWO POST	AUXILIARY	H	F	F1	TYPE	DIM 'X'	SEE SIGNING NOTES	
			STATION		LEG 1 FT	LEG 2 FT	LEG 1 FT	LEG 2 FT	LEG 3 FT	CONC	SOIL	SLIPBASE		FT	EACH								FT		
Division 1 - College Drive to Pine Crest Drive																									
	R2-1	NB	101+50.00				17					1				1									
	R2-1	NB	106+50.00				17					1				2									W/ RADAR SPEED SIGN
	W3-1	SB	107+81.12				17					1				1									
	W3-1P	SB	107+81.12													1									
	W11-3	NB	107+81.12				17					1				1									
	W11-3P	NB	107+81.12													1									
	W1-2L	NB	109+59.64				17					1				1									
	R1-1	EB	110+26.43				19					1				1									
	D3-1	EB	110+26.43													1									"LOCUST RD"
	D3-1	EB	110+26.43													1									"SHADY LANE DR"
	D1-3	NB	114+43.40				23	23				2					1								CITIES TO THE NORTH
	R2-1	NB	118+00.00				17					1				1									
	R2-1	SB	118+00.00				17					1				2									W/ RADAR SPEED SIGN
	W1-2R	SB	127+64.10				19					1				1									
	R2-5C	SB	127+64.10													1									
	W1-4	NB	130+06.50				17					1				1									
	R2-1	NB	132+00.00				17					1				2									W/ RADAR SPEED SIGN
	R2-1	NB	137+83.33				17					1				1									
	W1-4	SB	144+92.81				17					1				1									
	R1-1	EB	145+90.47				19					1				1									
	D3-1	EB	145+90.47													1									"LOCUST RD"
	D3-1	EB	145+90.47													1									"PINE CREST DR"
	R2-1	SB	146+54.54				23					1				2									W/ RADAR SPEED SIGN
Division 3 - Pine Crest Drive to Highland Drive																									
	R2-1	NB	148+85.25				17					1				1									
	W1-2L	NB	149+57.56				17					1				1									
	R2-1	NB	164+35.99				17					1				1									
	R2-1	SB	164+36.01				17					1				1									

DIVISION 1 TOTALS

PERFORATED SQUARE STEEL TUBE POSTS	**313.0**	**LF**
PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BASE ASSEMBLY	**17**	**EACH**
('EACH' ITEM) RADAR SPEED SIGN	**4**	**EACH**
INSTALL TYPE A SIGN	**16**	**EACH**

DIVISION 3 TOTALS

PERFORATED SQUARE STEEL TUBE POSTS	**68.0**	**LF**
PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BASE ASSEMBLY	**4**	**EACH**
INSTALL TYPE A SIGN	**4**	**EACH**

190-66
10-21-14

SUMMARY OF TYPE 'A' SIGNS

Sign Number	Quantity EACH	Size IN	Total Sign Area SF
Division 1 - College Drive to Pine Crest Drive			
D1-3	1	120 X 42	35.0
D3-1	4	72 X 18	36.0
R1-1	2	30 X 30	12.5
R2-1	7	24 X 30	35.0
R2-5C	1	24 X 30	5.0
W1-2L	1	30 X 30	12.5
W1-2R	1	30 X 30	6.3
W1-4R	2	30 X 30	12.5
W3-1	1	36 X 36	9.0
W3-1P	1	24 X 18	3.0
W11-3	1	30 X 30	6.3
W11-3P	1	24 X 18	3.0
Division 3 - Pine Crest Drive to Highland Drive			
R2-1	3	24 X 30	15.0
W1-2L	1	30 X 30	6.3
		DIVISION 1 TOTALS	
		TYPE A SIGNS, SHEET ALUMINUM	**176.0**
		DIVISION 3 TOTALS	
		TYPE A SIGNS, SHEET ALUMINUM	**21.3**

CHECK PLANS - NOT FOR CONSTRUCTION

STORM SEWER

* Bid Item

INTAKES AND UTILITY ACCESSES

No.	Location Station and Offset		*Type or Standard Road Plan	Rim / FG Elev.	Notes
Existing Structures: (For Information Only)					
E-101	100+16.09	18.73 LT	SW-402	882.49	84" X 84"
E-201	110+29.90	90.76 LT	SW-503	911.08	
Proposed Structures:					
S-101	100+75.03	20.50 LT	SW-510	884.46	
S-102	102+50.00	23.75 LT	SW-401	892.96	60" MANHOLE
S-103	104+14.00	20.50 LT	SW-510	899.02	
S-104	105+69.00	22.50 LT	SW-401	904.34	72" MANHOLE
S-105	107+46.00	18.00 LT	SW-510	908.30	
S-106	110+27.74	20.51 LT	SW-401	914.40	60" MANHOLE
S-107	110+86.00	18.00 LT	SW-508	916.09	
S-108	113+00.00	18.00 LT	SW-507	923.32	
S-109	115+10.00	22.00 LT	SW-401	932.86	48" MANHOLE
S-110	116+85.00	18.00 LT	SW-507	940.41	
S-111	100+75.03	17.35 RT	SW-510	884.40	
S-112	104+14.00	15.50 RT	SW-509	899.02	
S-113	105+69.00	30.00 RT	SW-401	906.27	48" MANHOLE
S-114	105+69.00	36.24 RT	SW-501	906.68	
S-115	106+30.43	30.00 RT	DR-201		24" APRON
S-116	107+46.00	18.00 RT	SW-509	908.30	
S-117	110+86.00	30.00 LT	SW-513	915.18	
S-118	110+86.00	18.00 RT	SW-507	916.09	
S-119	110+86.00	30.00 RT	SW-513	915.18	
S-120	113+00.00	18.00 RT	SW-508	923.32	
S-121	113+50.00	30.00 RT	DR-201		15" APRON
S-122	113+90.00	30.00 RT	DR-201		15" APRON
S-123	114+74.12	30.00 RT	DR-201		15" APRON
S-124	115+08.89	30.00 RT	DR-201		15" APRON
S-125	116+85.00	30.00 LT	SW-513	939.50	
S-126	116+85.00	18.00 RT	SW-507	940.41	
S-127	116+82.61	29.81 RT	DR-201		15" APRON
S-128	117+17.38	30.00 RT	DR-201		15" APRON
S-129	117+22.67	30.00 LT	DR-201		15" APRON
S-130	117+60.00	30.00 LT	DR-201		15" APRON
S-201	120+45.89	48.26 LT	DR-201		36" APRON
S-202	120+11.87	28.00 RT	SW-401		60" MANHOLE
S-203	119+99.44	55.85 RT	DR-201		36" APRON
S-301	131+25.00	34.25 LT	DR-201		36" APRON
S-302	131+10.00	34.25 LT	SW-401	1024.74	72" MANHOLE
S-303	130+50.13	28.00 RT	SW-401	1018.38	72" MANHOLE
S-304	130+34.93	43.81 RT	DR-201		36" APRON
S-401	132+80.95	34.25 LT	DR-201		24" APRON
S-402	133+45.02	36.34 LT	DR-201		24" APRON
S-501	140+77.40	37.50 RT	DR-201		42" APRON
S-502	141+30.00	37.50 RT	DR-201		42" APRON
S-601	141+95.07	37.31 RT	DR-201		48" APRON
S-602	142+62.10	43.80 RT	DR-201		48" APRON
S-701	142+74.87	40.90 RT	DR-201		48" APRON
S-702	143+37.91	42.01 LT	DR-201		48" APRON
S-801	143+29.17	37.50 RT	DR-201		24" APRON
S-802	143+85.89	33.00 RT	DR-201		24" APRON
S-901	144+58.09	30.00 RT	DR-201		24" APRON
S-902	145+10.09	30.00 RT	DR-201		24" APRON
S-1001	145+69.21	45.53 LT	DR-201		42" APRON
S-1002	145+92.71	45.56 LT	SW-401		84" MANHOLE
S-1003	146+67.21	45.66 LT	DR-201		42" APRON
S-1004	300+59.13	17.92 LT	SW-509	1101.82	
S-1005	300+59.46	18.08 RT	SW-509	1101.82	
S-1101	149+74.57	35.00 LT	DR-201		15" APRON
S-1102	150+31.91	36.00 LT	DR-201		15" APRON
S-1201	151+75.00	43.48 LT	DR-201		30" APRON
S-1202	151+75.00	32.52 RT	DR-201		30" APRON
S-1301	152+11.01	35.00 RT	DR-201		18" APRON
S-1302	152+61.47	35.00 RT	DR-201		18" APRON
S-1401	152+40.00	43.00 LT	DR-201		18" APRON
S-1402	152+90.00	43.00 LT	DR-201		18" APRON
S-1501	154+76.53	30.00 RT	DR-201		15" APRON
S-1502	155+20.53	30.00 RT	DR-201		15" APRON
S-1601	155+48.24	30.00 RT	DR-201		15" APRON
S-1602	156+00.24	30.00 RT	DR-201		15" APRON

PIPE

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to Design Length to account for estimated length to center of structures.

Line Number	Intake/ Utility Access No. From	Intake/ Utility Access No. To	Class 'D'	Pipe Size IN	Bid* Length FT	Design Length FT	Slope %	Flow Lines Inlet Elevation	Flow Lines Outlet Elevation	Flow Lines Other Elevation	Pipe Profile Sheet No.	Notes
Existing Pipe: (For Information Only)												
Proposed Pipe:												
P-101	S-101	E-101	2000D	36	54	52	1.98	878.46	877.43		M.01	STORM SEWER GRAVITY MAIN
P-102	S-102	S-101	2000D	36	171	169	1.00	880.24	878.56		M.01	STORM SEWER GRAVITY MAIN
P-103	S-103	S-102	2000D	36	160	158	1.00	889.54	887.96		M.01	STORM SEWER GRAVITY MAIN
P-104	S-104	S-103	2000D	36	150	148	2.00	892.60	889.64		M.01	STORM SEWER GRAVITY MAIN
P-105	S-105	S-104	2000D	36	173	171	0.99	901.40	899.70		M.01 / M.02	STORM SEWER GRAVITY MAIN
P-106	S-106	S-105	2000D	30	278	276	1.50	906.03	901.90		M.02	STORM SEWER GRAVITY MAIN
P-107	S-107	S-106	2000D	30	56	54	2.83	910.84	909.31		M.02	STORM SEWER GRAVITY MAIN
P-108	S-108	S-107	2000D	15	212	210	3.30	919.02	912.09		M.02 / M.03	STORM SEWER GRAVITY MAIN
P-109	S-109	S-108	2000D	15	206	204	4.49	928.29	919.12		M.03	STORM SEWER GRAVITY MAIN
P-110	S-110	S-109	2000D	15	169	167	4.48	935.88	928.39		M.03	STORM SEWER GRAVITY MAIN
P-111	S-111	S-101	2000D	24	40	38	1.00	879.04	878.66		M.08	STORM SEWER GRAVITY MAIN
P-112	S-112	S-103	2000D	18	38	36	0.97	895.36	895.00		M.08	STORM SEWER GRAVITY MAIN
P-113	S-113	S-104	2000D	24	49	47	1.98	900.72	899.77		M.08	STORM SEWER GRAVITY MAIN
P-114	S-114	S-113	2000D	24	7	5	1.70	900.90	900.82		M.08	STORM SEWER GRAVITY MAIN
P-115	S-115	S-113	2000D	24	56	54	2.00	904.00	902.93		M.01 / M.02	CONCRETE ENTRANCE PIPE
P-116	S-116	S-105	2000D	24	38	36	1.00	901.96	901.60		M.08	STORM SEWER GRAVITY MAIN
P-117	E-201	S-106	2000D	15	69	67	2.31	907.38	905.83		M.08	STORM SEWER GRAVITY MAIN
P-118	S-117	S-107	2000D	18	8	6	1.00	911.10	911.04		M.08	STORM SEWER GRAVITY MAIN
P-119	S-118	S-107	2000D	24	38	36	0.97	911.40	911.04		M.08	STORM SEWER GRAVITY MAIN
P-120	S-119	S-118	2000D	18	9	7	1.00	911.57	911.50		M.08	STORM SEWER GRAVITY MAIN
P-121	S-120	S-108	2000D	15	38	36	1.00	919.58	919.22		M.08	STORM SEWER GRAVITY MAIN
P-122	S-122	S-121	2000D	15	30	28	1.50	924.15	923.73		M.03	CONCRETE ENTRANCE PIPE
P-123	S-124	S-123	2000D	15	26	24	2.00	929.54	929.06		M.03	CONCRETE ENTRANCE PIPE
P-124	S-125	S-110	2000D	15	9	7	1.00	936.14	936.08		M.08	STORM SEWER GRAVITY MAIN
P-125	S-126	S-110	2000D	15	38	36	1.00	936.44	936.08		M.08	STORM SEWER GRAVITY MAIN
P-126	S-128	S-127	2000D	15	26	24	1.50	939.11	938.75		M.03	CONCRETE ENTRANCE PIPE
P-127	S-1302	S-129	2000D	15	26	24	1.50	941.22	940.86		M.03	CONCRETE ENTRANCE PIPE
P-201	S-201	S-202	2000D	36	75	73	1.00	951.08	950.35		M.04	STORM SEWER GRAVITY MAIN
P-202	S-202	S-203	2000D	36	22	20	0.50	936.84	936.74		M.04	STORM SEWER GRAVITY MAIN
P-301	S-301	S-302	2000D	36	6	4	2.50	1019.69	1019.60		M.05	STORM SEWER GRAVITY MAIN
P-302	S-302	S-303	2000D	36	83	81	2.48	1015.01	1013.00		M.05	STORM SEWER GRAVITY MAIN
P-303	S-303	S-304	2000D	42	13	11	0.50	1012.31	1012.26		M.05	STORM SEWER GRAVITY MAIN
P-401	S-402	S-401	2000D	24	58	56	1.59	1033.08	1032.19		M.05	CONCRETE ENTRANCE PIPE
P-501	S-502	S-501	2000D	42	42	40	6.30	1077.15	1074.63		M.06	CONCRETE ENTRANCE PIPE
P-601	S-602	S-601	2000D	48	58	56	1.32	1082.72	1081.98		M.06	CONCRETE ENTRANCE PIPE
P-701	S-702	S-701	2000D	48	91	89	0.74	1083.80	1083.14		M.06	STORM SEWER GRAVITY MAIN
P-801	S-802	S-801	2000D	24	50	48	8.60	1091.07	1086.94		M.06	CONCRETE ENTRANCE PIPE
P-901	S-902	S-901	2000D	24	42	40	4.10	1096.94	1095.30		M.07	CONCRETE ENTRANCE PIPE
P-1001	S-1002	S-1001	2000D	42	14	12	1.81	1096.09	1095.87		M.07	STORM SEWER GRAVITY MAIN
P-1002	S-1003	S-1002	2000D	42	66	64	1.78	1097.33	1096.19		M.07	STORM SEWER GRAVITY MAIN
P-1003	S-1004	S-1002	2000D	24	12	10	2.00	1096.59	1096.39		M.07	STORM SEWER GRAVITY MAIN
P-1004	S-1005	S-1004	2000D	24	38	36	1.95	1097.51	1096.79		M.08	STORM SEWER GRAVITY MAIN
P-1101	S-1102	S-1101	2000D	15	46	44	3.23	1115.55	1114.12		M.09	CONCRETE ENTRANCE PIPE
P-1201	S-1202	S-1201	2000D	30	66	64	4.25	1119.75	1117.03		M.11	STORM SEWER GRAVITY MAIN
P-1301	S-1302	S-1301	2000D	18	42	40	7.18	1124.18	1121.31		M.09	CONCRETE ENTRANCE PIPE
P-1401	S-1402	S-1401	2000D	18	38	36	4.57	1121.15	1119.50		M.09	CONCRETE ENTRANCE PIPE
P-1501	S-1502	S-1501	2000D	15	34	32	5.43	1134.34	1132.60		M.09	CONCRETE ENTRANCE PIPE
P-1601	S-1602	S-1601	2000D	15	42	40	3.75	1137.51	1136.01		M.09	CONCRETE ENTRANCE PIPE

CHECK PLANS - NOT FOR CONSTRUCTION

104-5B
10-20-15

STORM SEWER

* Bid Item

INTAKES AND UTILITY ACCESSES

No.	Location Station and Offset		*Type or Standard Road Plan	Rim / FG Elev.	Notes
S-1701	158+38.37	30.00 RT	DR-201		15" APRON
S-1702	158+90.37	30.00 RT	DR-201		15" APRON
S-1801	161+45.37	30.00 RT	DR-201		15" APRON
S-1802	162+05.37	30.00 RT	DR-201		15" APRON
S-1901	163+18.79	30.00 RT	DR-201		15" APRON
S-1902	163+70.78	31.00 RT	DR-201		15" APRON
				DIVISION 2	**BID LENGTH TOTAL**
			15" STORM SEWER / ENTRANCE PIPE		**849**
			18" STORM SEWER / ENTRANCE PIPE		**55**
			24" STORM SEWER / ENTRANCE PIPE		**428**
			30" STORM SEWER GRAVITY MAIN		**334**
			36" STORM SEWER GRAVITY MAIN		**894**
			42" STORM SEWER GRAVITY MAIN		**135**
			48" STORM SEWER GRAVITY MAIN		**149**
				DIVISION 3	**BID LENGTH TOTAL**
			15" CONCRETE ENTRANCE PIPE		**256**
			18" CONCRETE ENTRANCE PIPE		**80**
			30" STORM SEWER GRAVITY MAIN		**66**

PIPE

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to Design Length to account for estimated length to center of structures.

Line Number	Intake/ Utility Access No. From	Intake/ Utility Access No. To	Class 'D'	Pipe Size IN	Bid* Length FT	Design Length FT	Slope %	Flow Lines Inlet Elevation	Flow Lines Outlet Elevation	Flow Lines Other Elevation	Pipe Profile Sheet No.	Notes
P-1701	S-1702	S-1701	2000D	15	42	40	1.77	1146.05	1145.34		M.09	CONCRETE ENTRANCE PIPE
P-1801	S-1801	S-1802	2000D	15	50	48	0.85	1147.05	1146.64		M.10	CONCRETE ENTRANCE PIPE
P-1901	S-1901	S-1902	2000D	15	42	40	1.23	1146.53	1146.04		M.10	CONCRETE ENTRANCE PIPE

113-1A
04-16-19

SIDEWALKS

See MI-220 and S Sheets

Road Identification	Station to Station		Side	A FT	B FT	S %	4" PCC Sidewalk SY	6" PCC Sidewalk SY	8" PCC Sidewalk SY	10" PCC Sidewalk SY	Detectable Warnings SF	Remarks
College Drive												
	100+49.27	100+66.66	LT	Varies	5.00		11.1					
Locust Road												
	100+56.31	101+14.87	LT	Varies	5.00		39.3					
	101+14.87	101+36.48	LT	6.50	5.00		12.0					
	101+60.53	102+15.64	LT	6.50	5.00		30.6					
	102+28.32	103+51.37	LT	6.50	5.00		68.4					
	103+70.87	103+90.27	LT	6.50	5.00		10.8					
	104+01.27	104+50.25	LT	6.50	5.00		27.2					
	104+50.25	104+91.76	LT	Varies	5.00		23.1					
	105+12.78	105+55.25	LT	Varies	5.00		23.6					
	105+55.25	106+51.45	LT	9.00	5.00		53.4					
	106+73.45	108+62.69	LT	9.00	5.00		105.1					
	108+78.69	110+14.55	LT	9.00	5.00		75.5					
	110+14.55	110+20.16	LT	Varies	5.00		3.1					
Shady Lane Drive												
	200+41.95	200+31.95	LT	Varies	5.00		5.6					
						DIVISION 1 TOTAL						
						SIDEWALK, P.C. CONCRETE, 4 IN.	**488.7**	**SY**				

Note: Sidewalk through driveways is included in bid item DRIVEWAY, P.C. CONCRETE, 6 IN. on Tab. 102-3.

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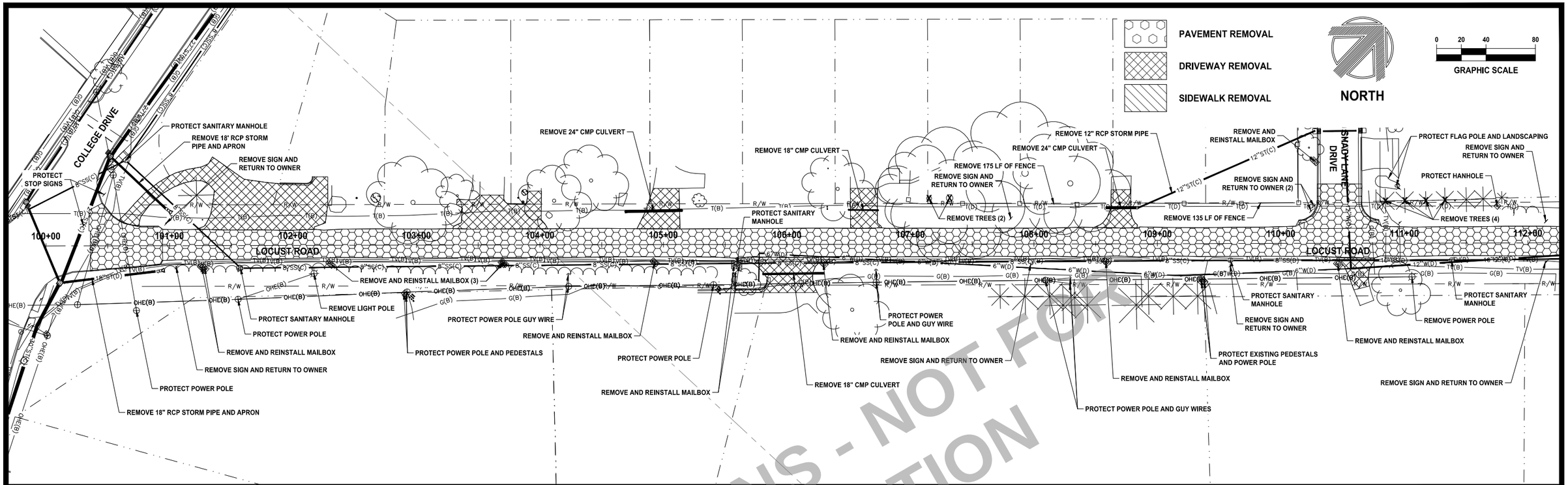

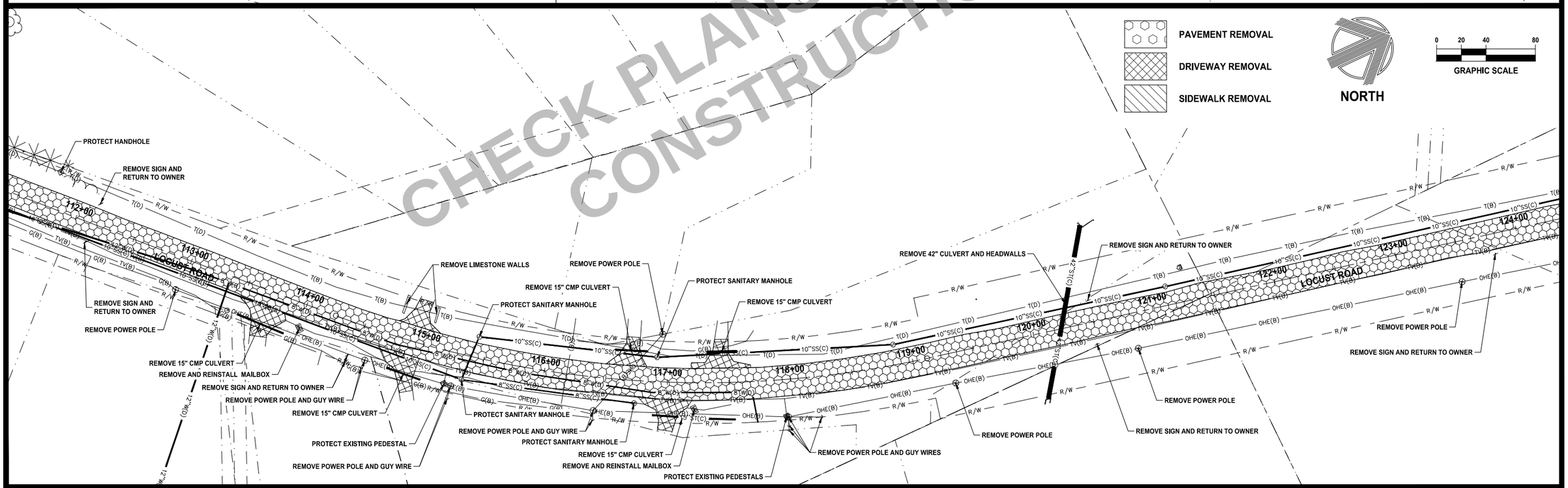

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA		McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD REMOVALS PLAN	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001							
BAK	-	DECEMBER 2019							D.01

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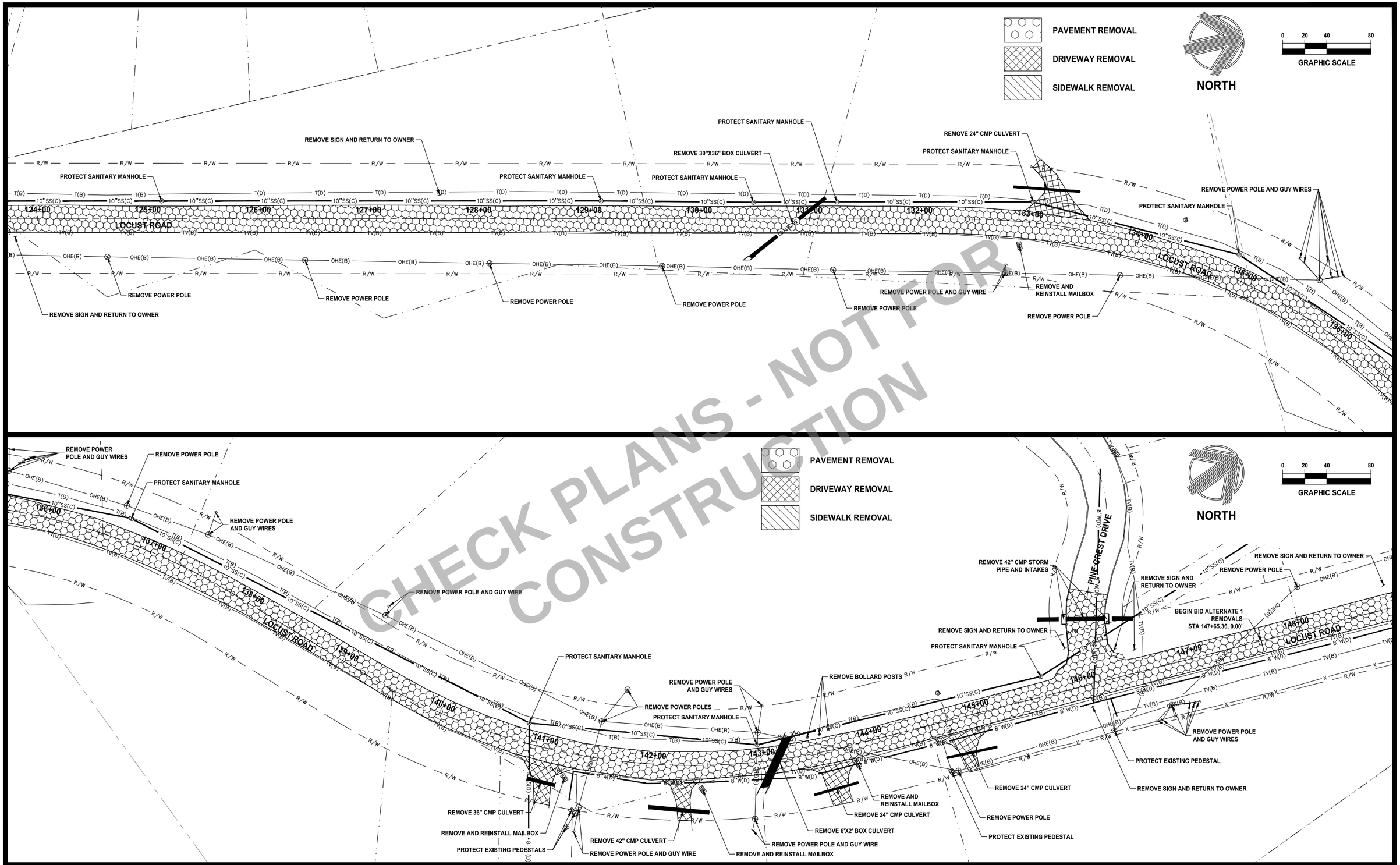

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001							
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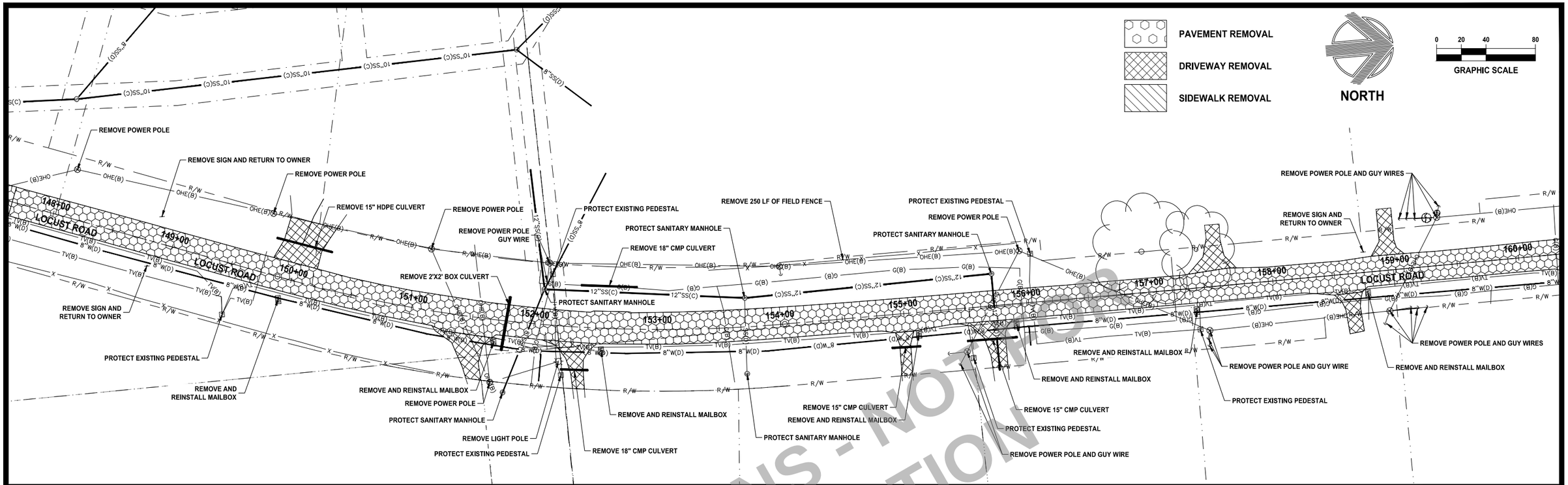

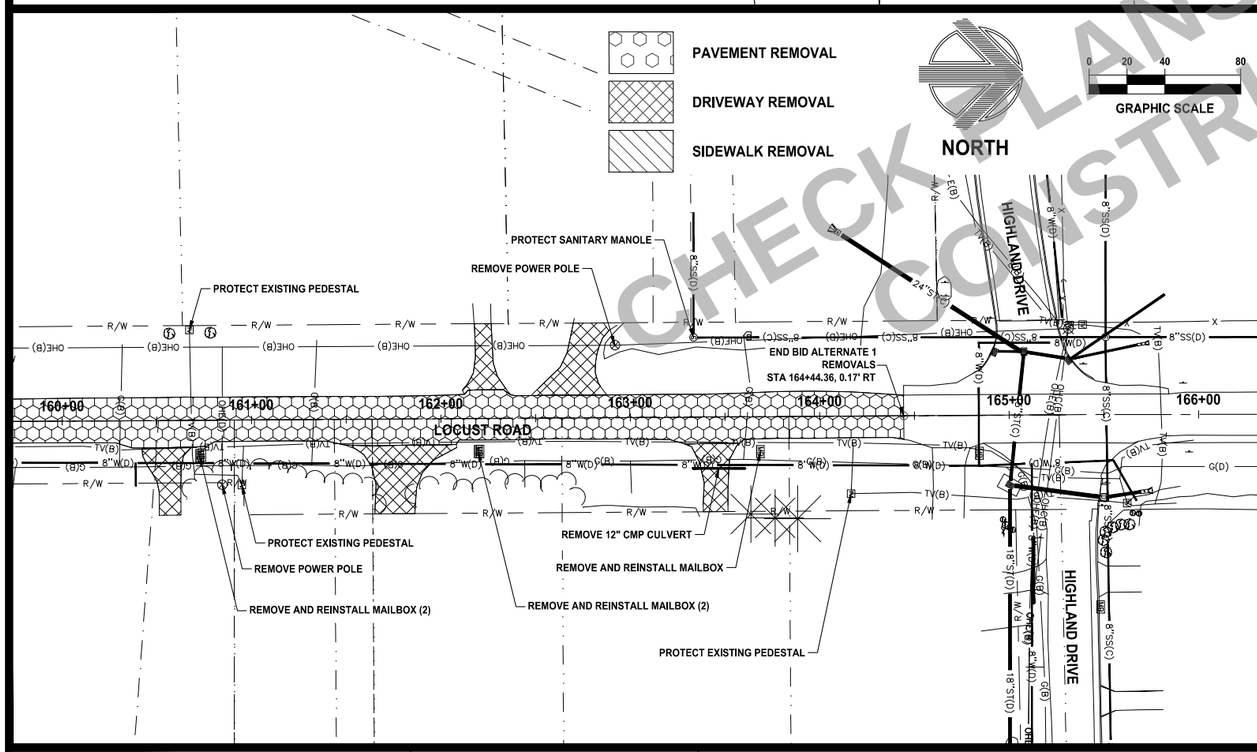

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ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA		McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD REMOVALS PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO. D.03
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001							
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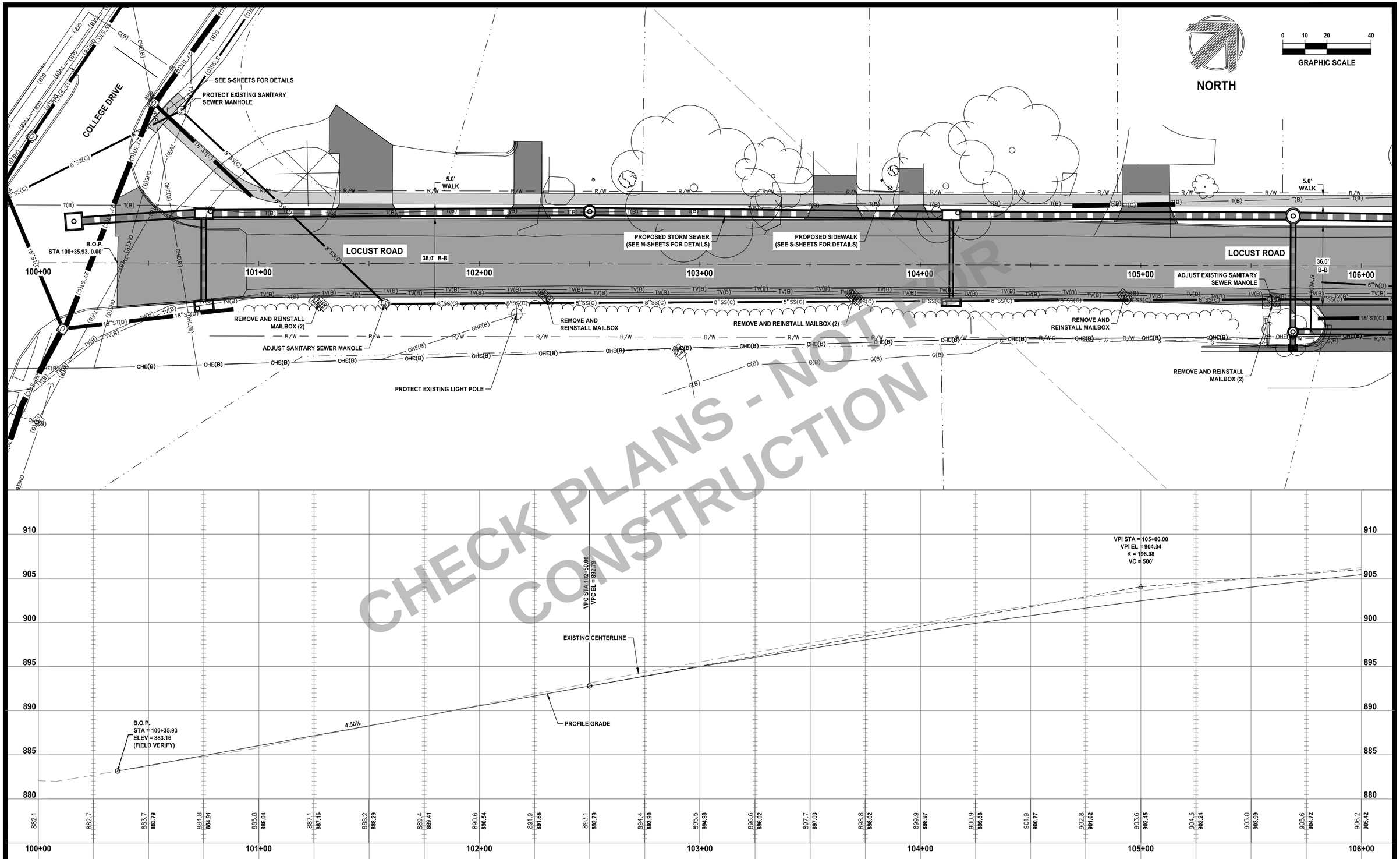

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JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						D.04
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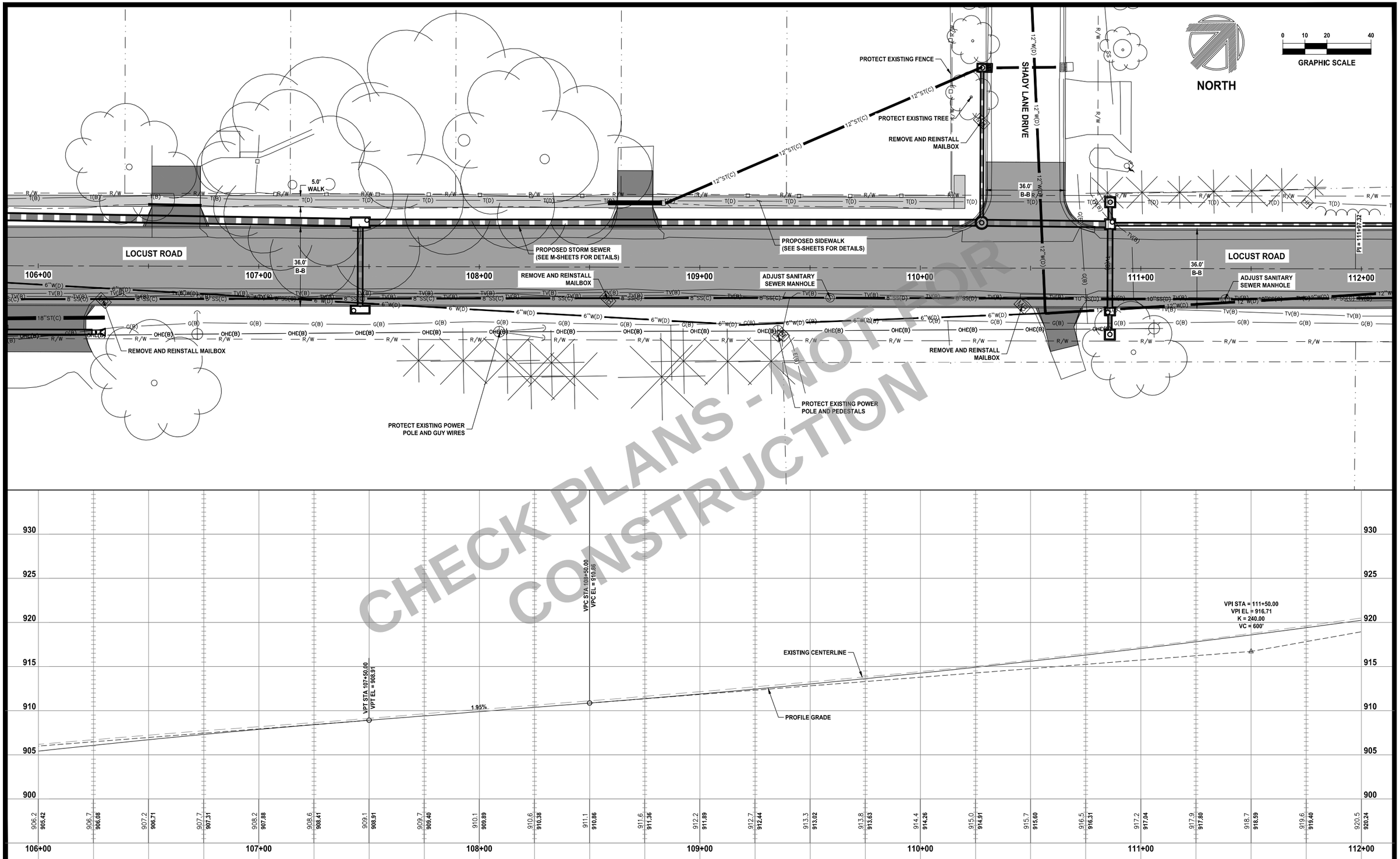

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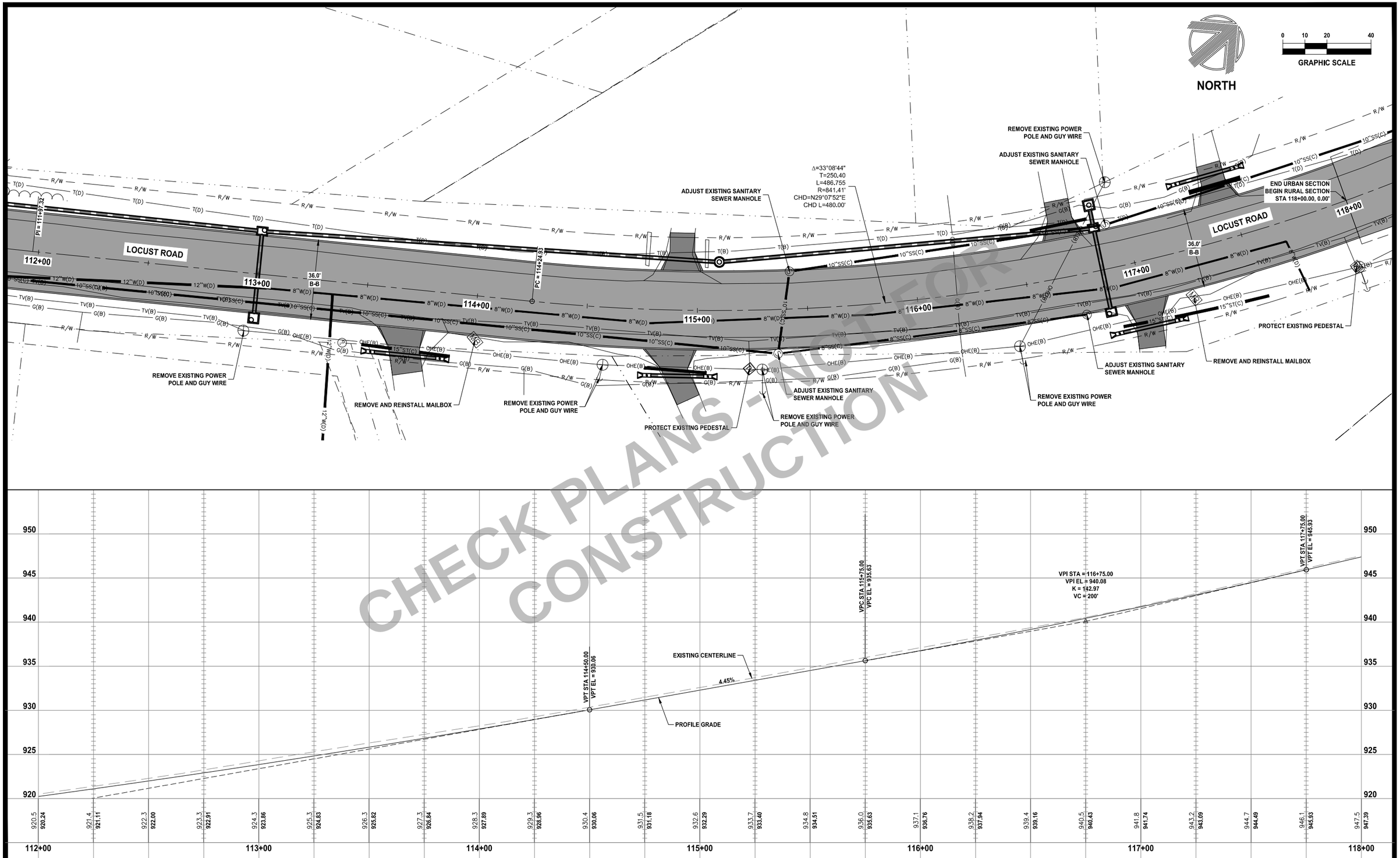

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ENGINEER	DRAWN BY		REVISIONS					
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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
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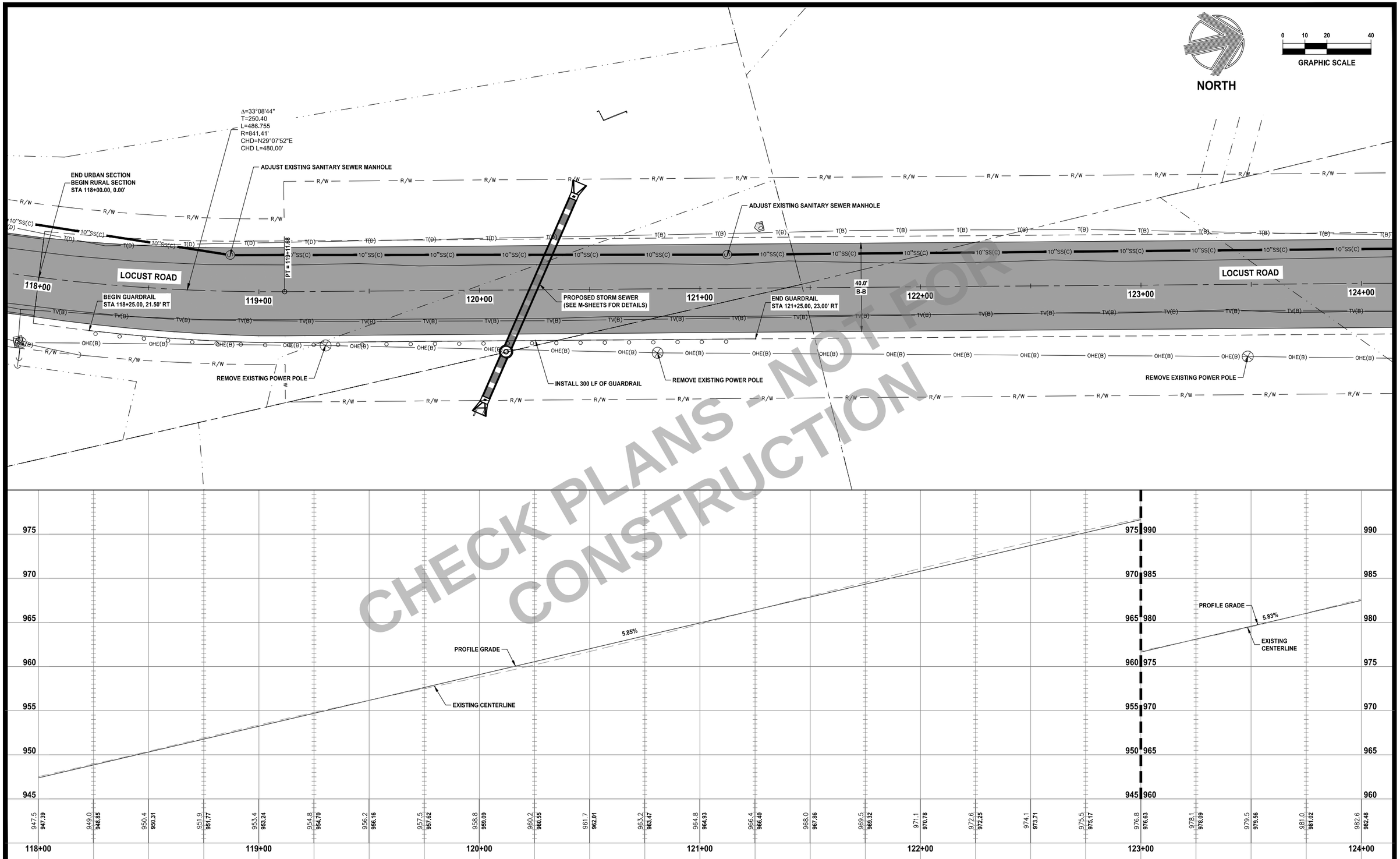

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	D.07
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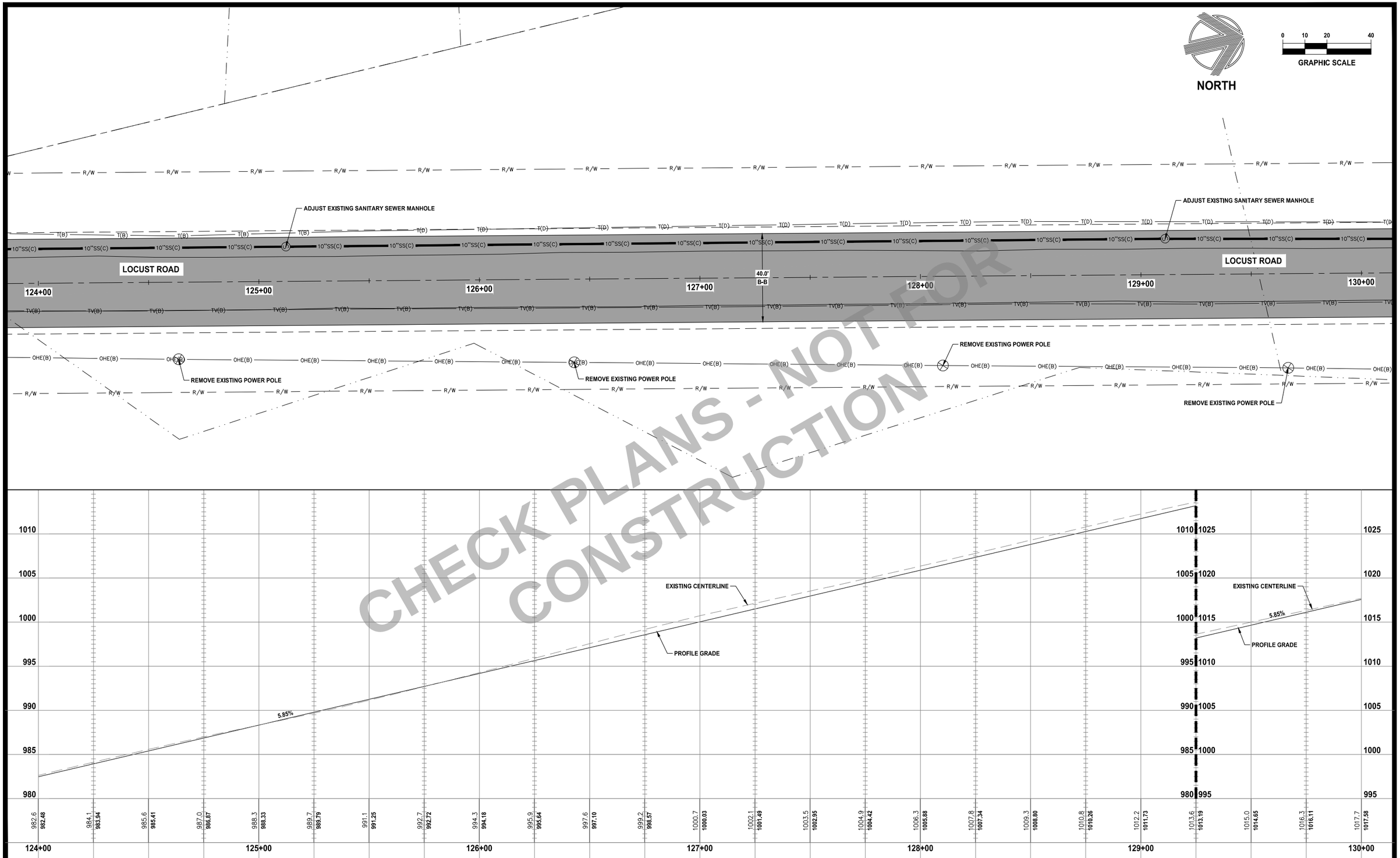

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ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						D.08
BAK	-	DECEMBER 2019	.						

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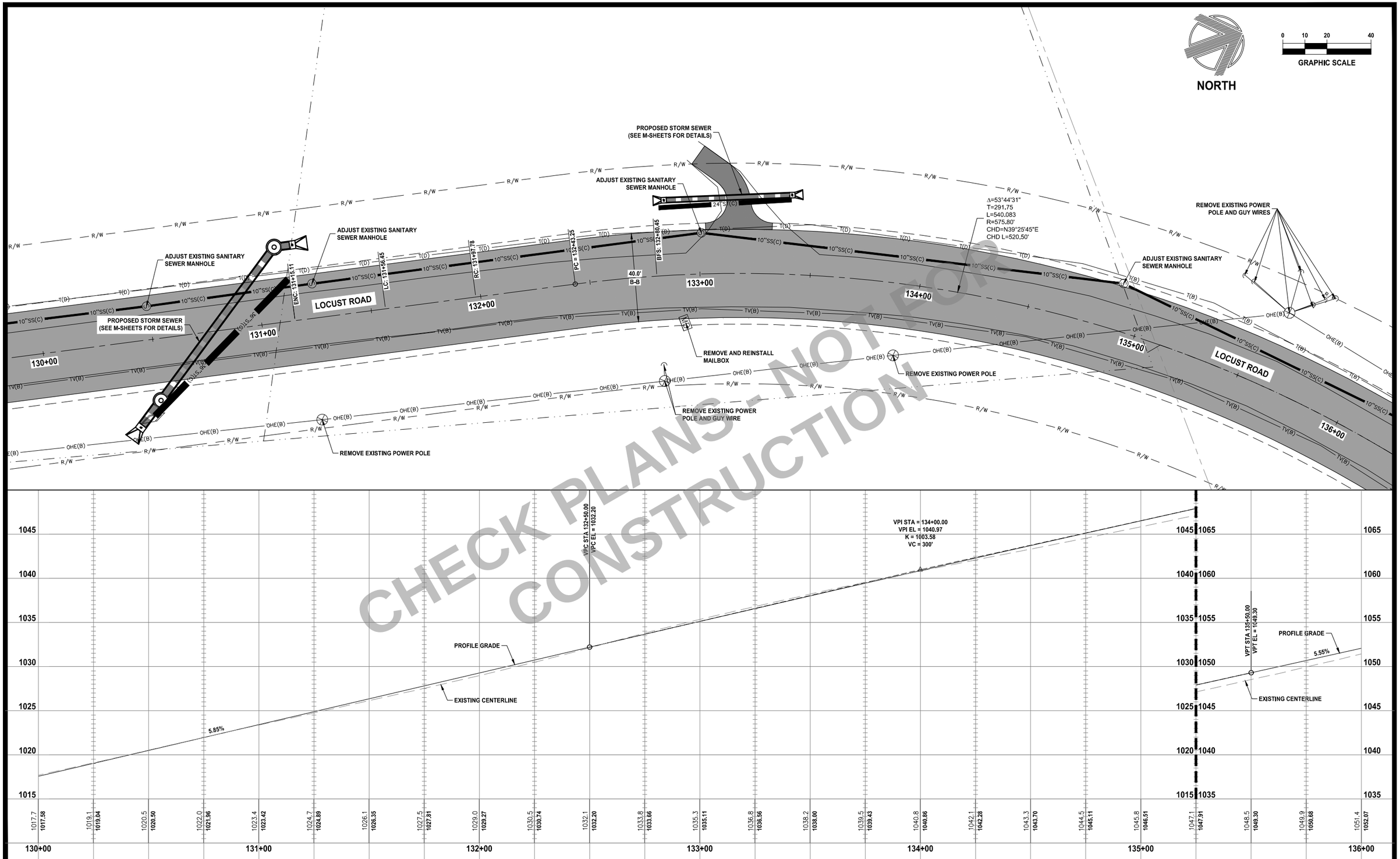

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						D.09
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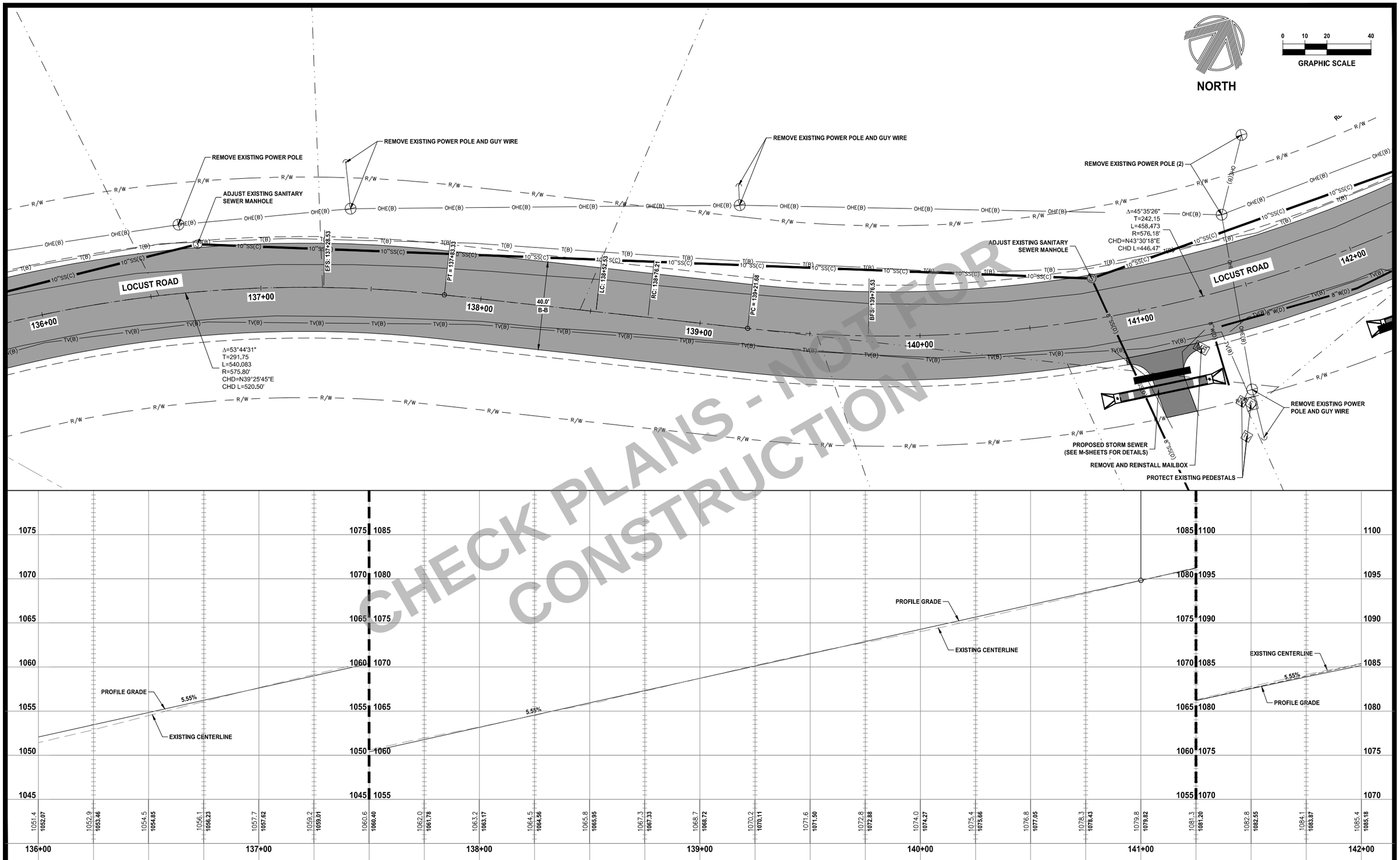

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ENGINEER	DRAWN BY		REVISIONS					
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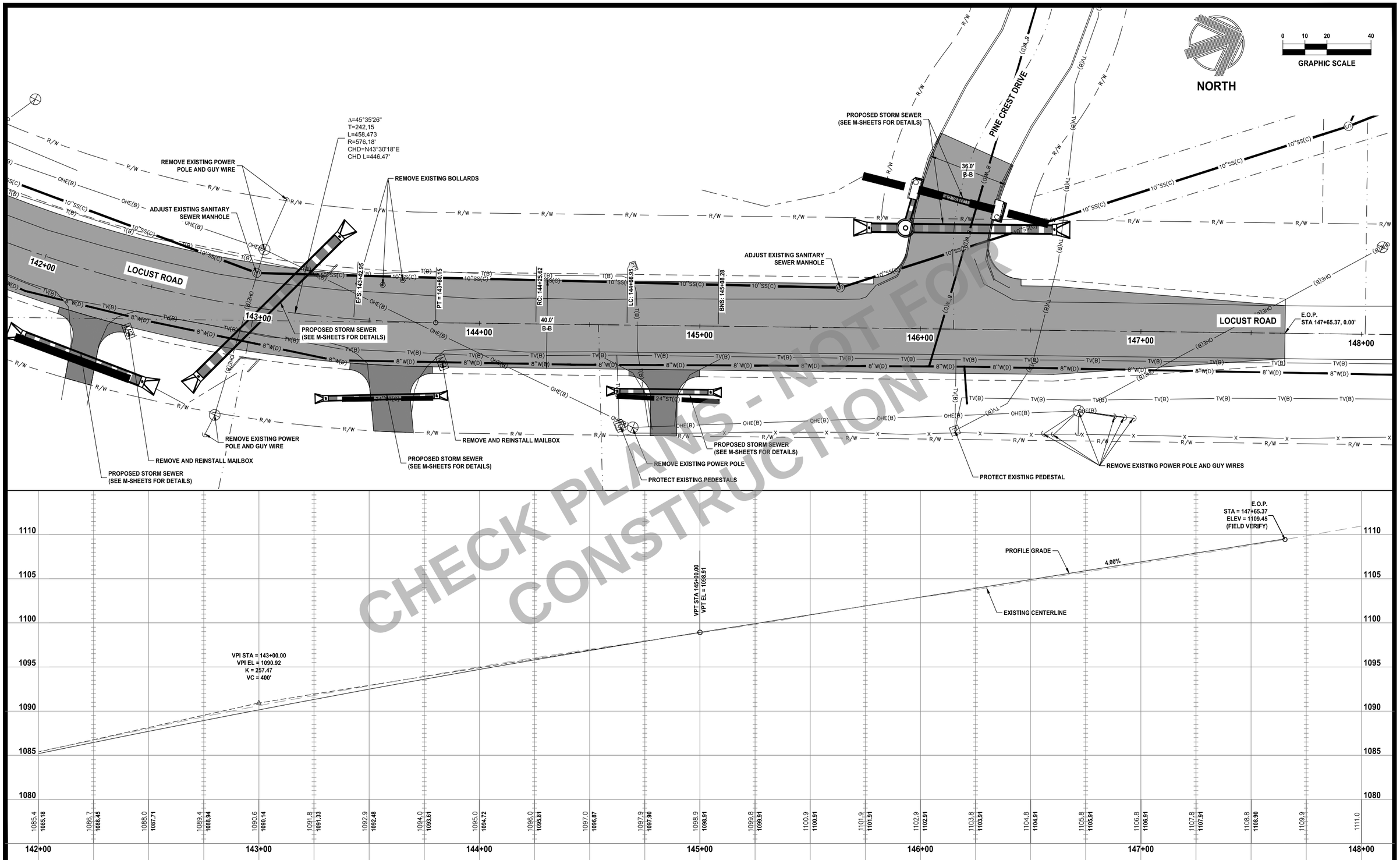

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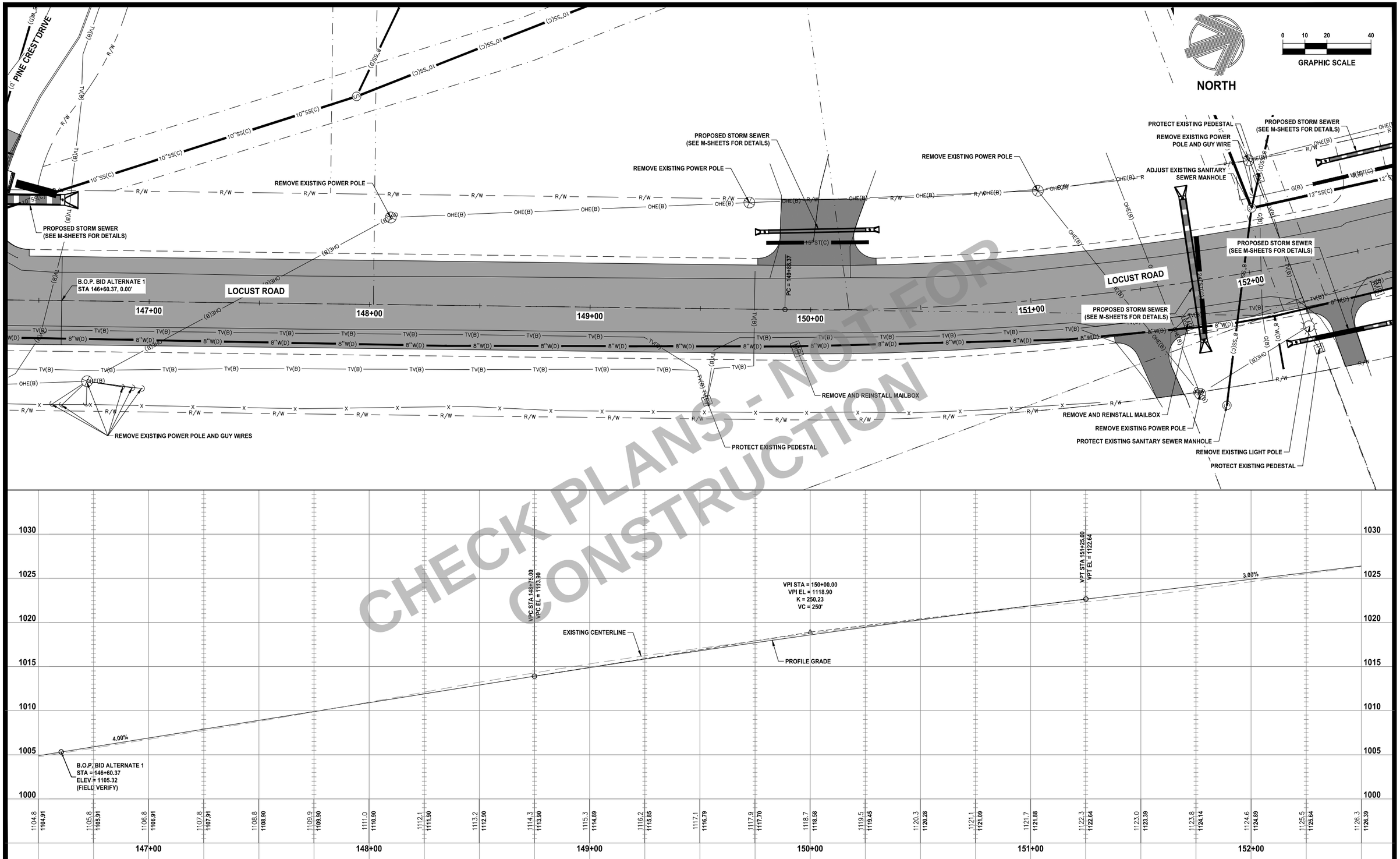

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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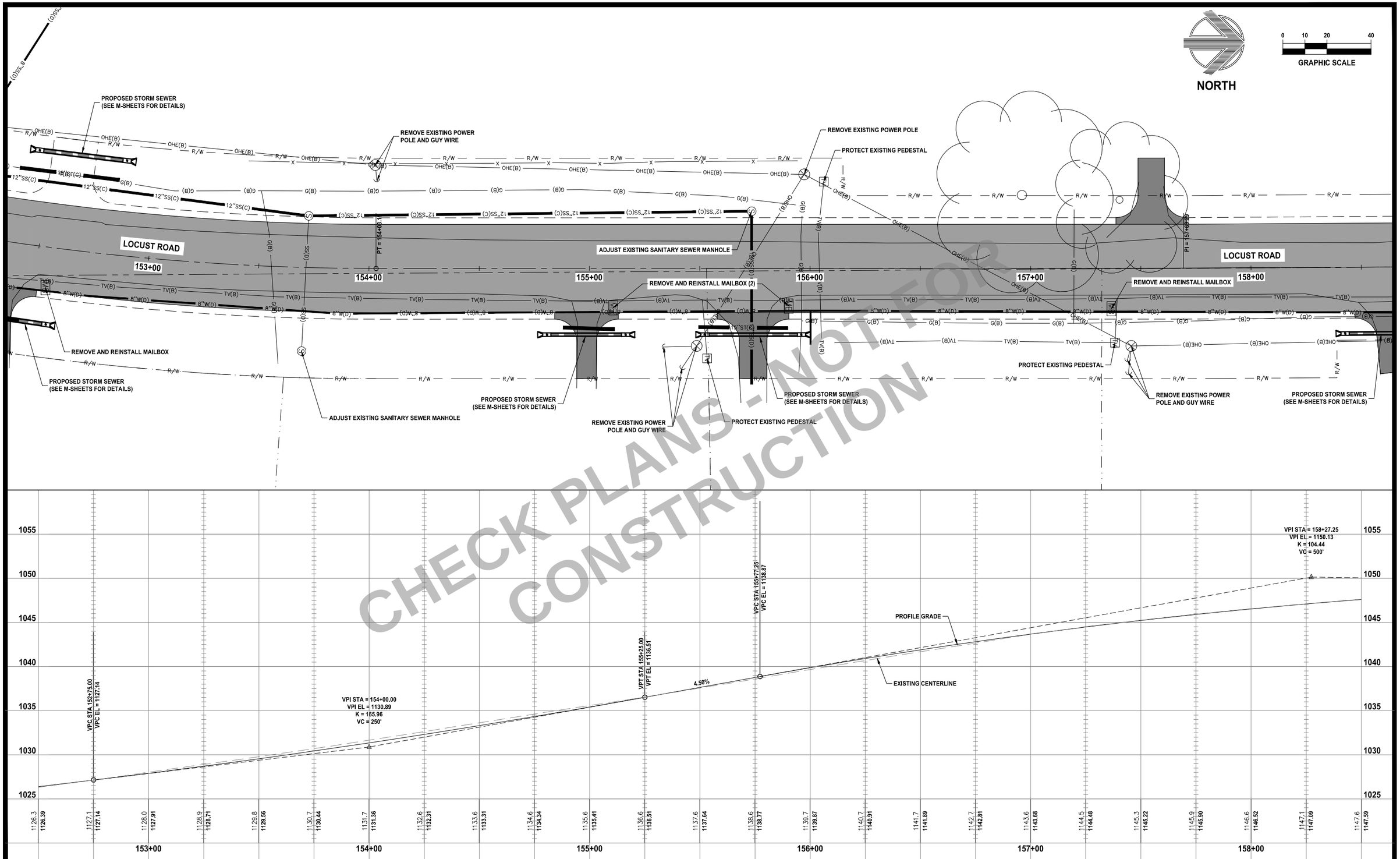

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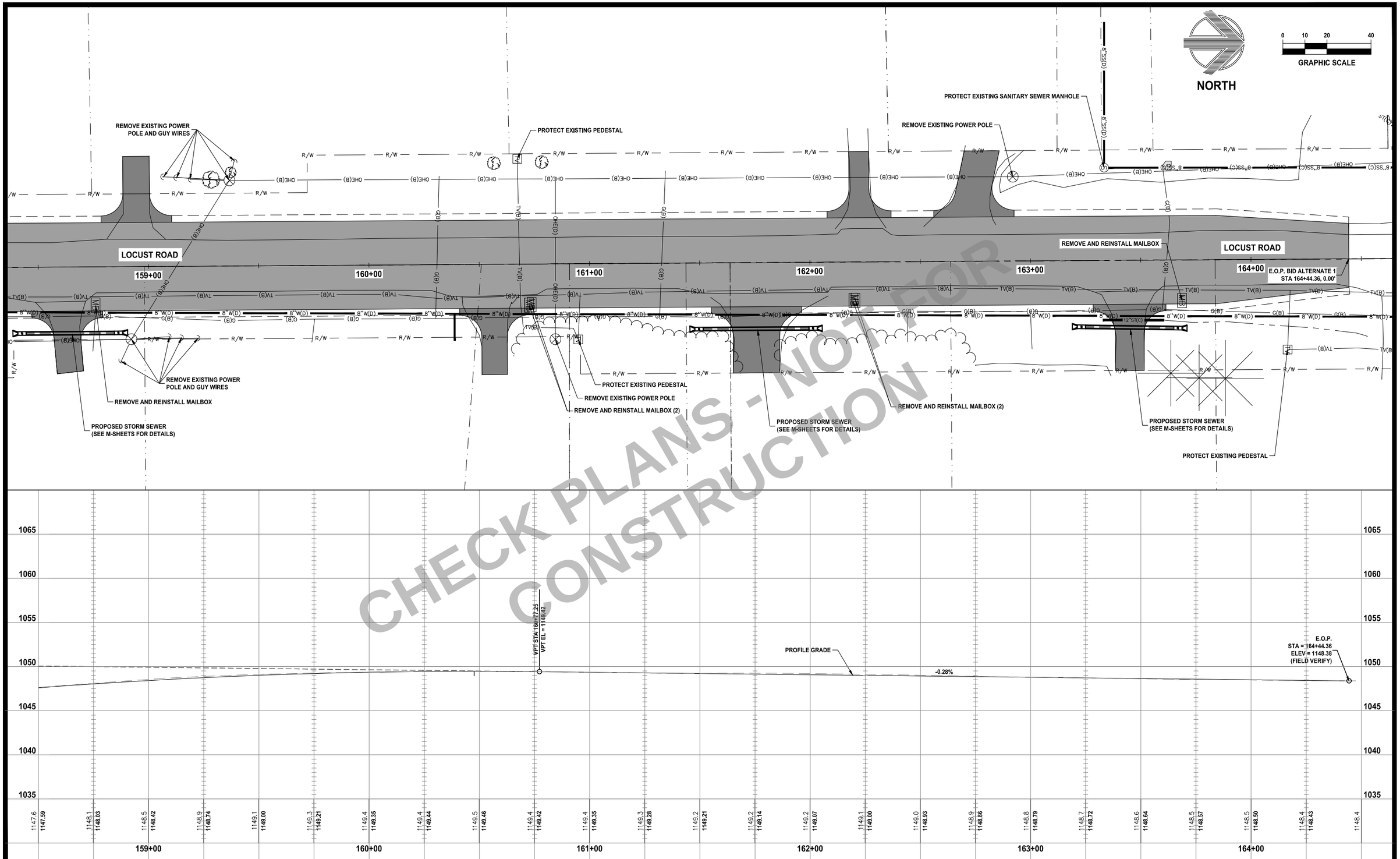

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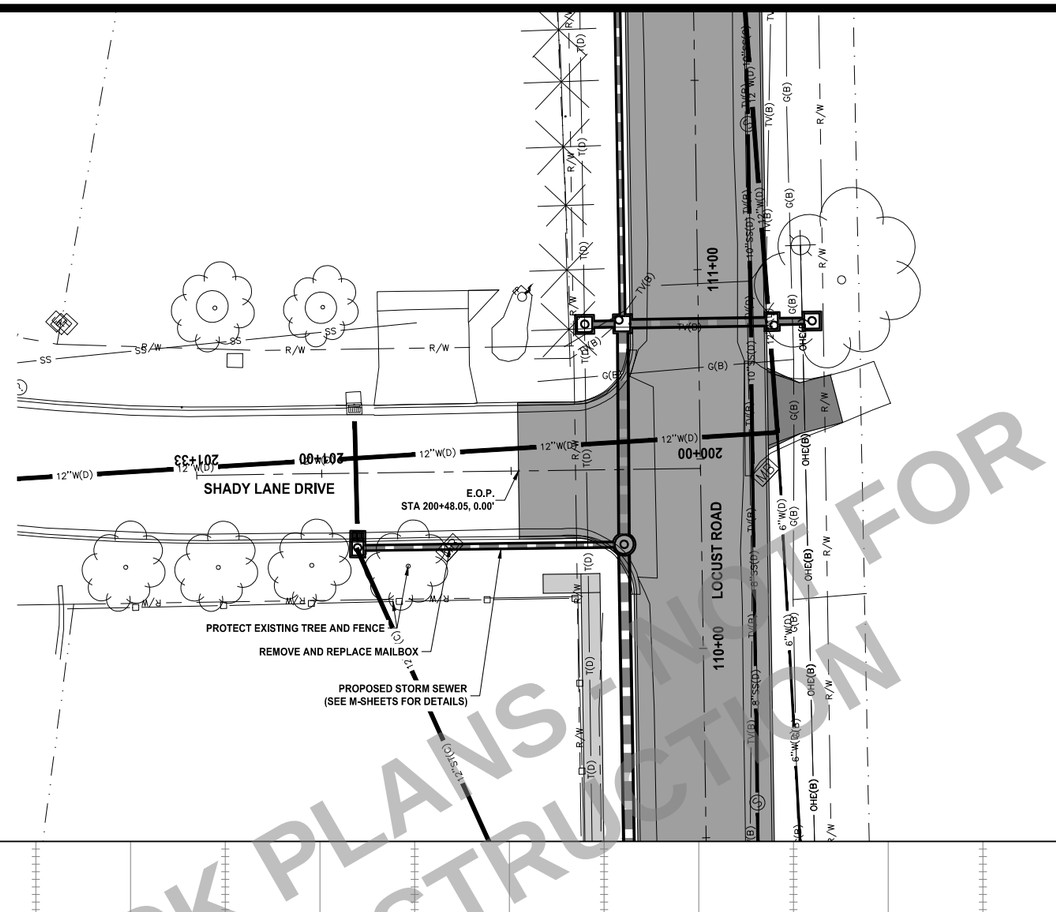

ENGINEER	DRAWN BY	
JSS	BAV	DECORAH, IOWA
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001
BAK	-	DECEMBER 2019

REVISIONS
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McCLURE™ making lives better

1740 Lininger Lane
North Liberty, Iowa 52317
319-626-9090
fax 319-626-9095

LOCUST ROAD AND
UTILITY IMPROVEMENTS - 2020

SHADY LANE DRIVE
PLAN AND PROFILE

STBG-SWAP-1867(617)--SG-96

SHEET NO.
E.01

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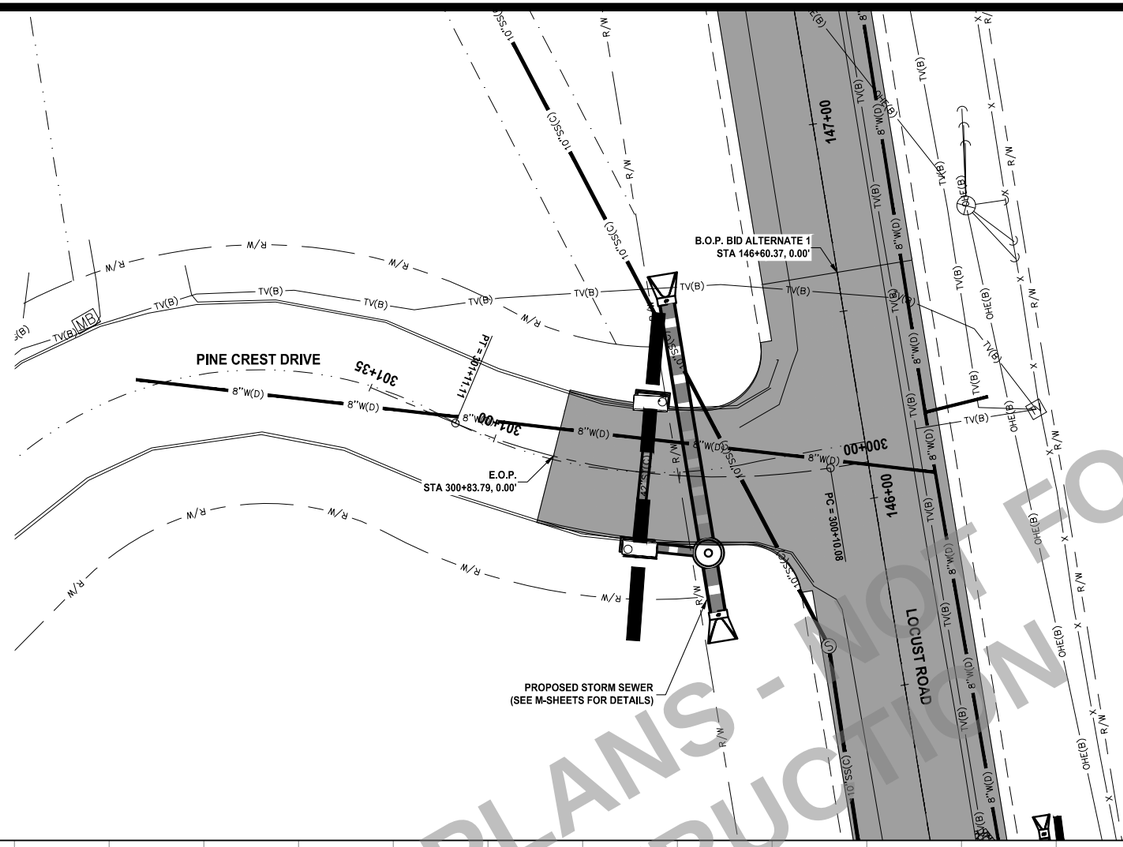

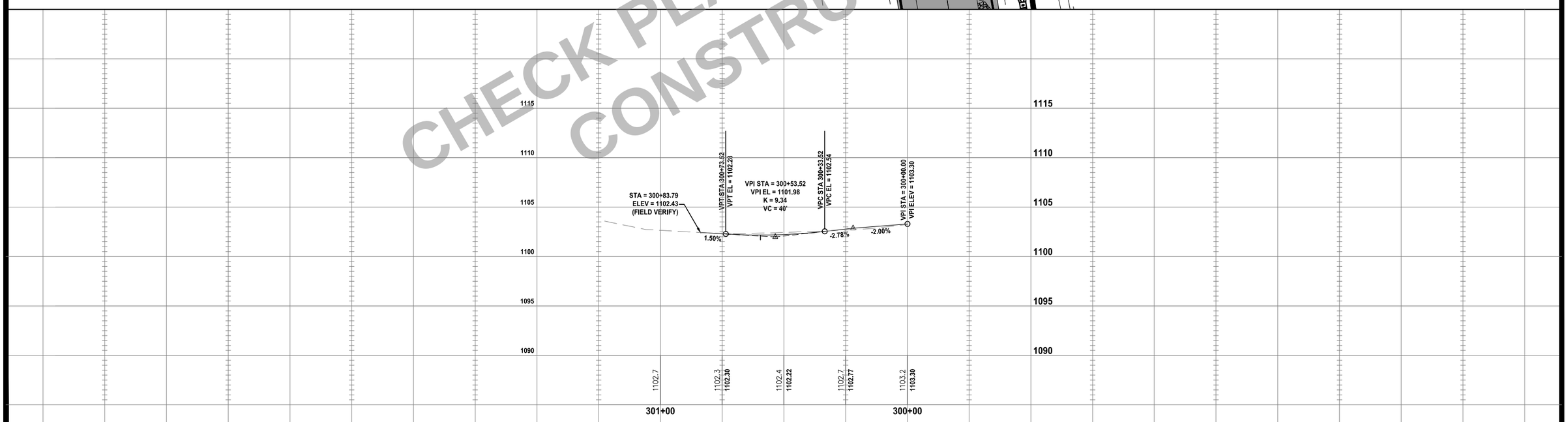

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ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	PINE CREST DRIVE PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
JSS	BAV	MEC #30616018-001	.							E.02
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.							
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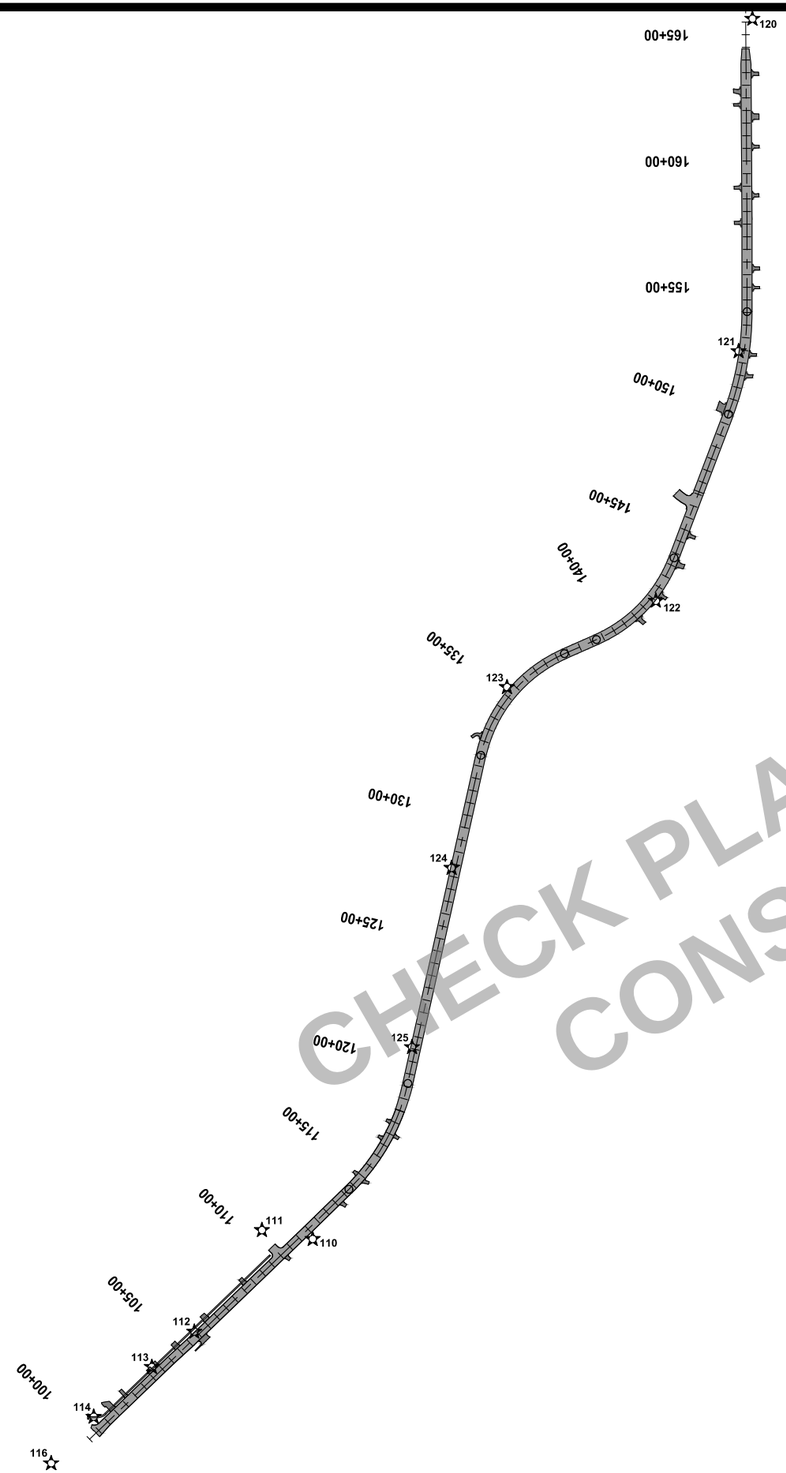

HORIZONTAL & VERTICAL CONTROL

NO.	STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
CP # 110	111+85.88 : 41.07' R	9853155.31	12753329.50	880.71	½" REBAR WITH BLUE PLASTIC CAP
CP # 111	110+65.49 : 123.87' L	9853054.13	12753508.65	877.03	MAG NAIL IN CURB
CP # 112	105+93.74 : 19.21' L	9853339.52	12753497.96	887.18	½" REBAR WITH BLUE PLASTIC CAP
CP # 113	103+75.89 : 35.17' L	9854043.04	12754365.20	918.34	½" REBAR WITH BLUE PLASTIC CAP
CP # 114	100+73.11 : 52.66' L	9858874.50	12756106.15	1148.51	½" REBAR WITH BLUE PLASTIC CAP
CP # 116	N/A	9856570.29	12755723.94	1084.84	½" REBAR WITH BLUE PLASTIC CAP
CP # 120	165+62.89 : 26.27' R	9856228.29	12755134.49	1046.74	½" REBAR WITH BLUE PLASTIC CAP
CP # 121	152+42.80 : 22.30' L	9855512.28	12754915.17	1004.67	½" REBAR WITH BLUE PLASTIC CAP
CP # 122	141+99.84 : 21.93' R	9854802.88	12754758.35	961.33	½" REBAR WITH BLUE PLASTIC CAP
CP # 123	135+26.42 : 29.46' L	9853676.18	12753896.51	904.71	½" REBAR WITH BLUE PLASTIC CAP
CP # 124	127+82.47 : 16.11' L	9853536.72	12753728.38	897.61	NAIL
CP # 125	120+55.95 : 14.93' L	9854078.53	12754164.11	912.13	NAIL

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GENERAL INFORMATION

ALIGNMENT INFORMATION:

THE ALIGNMENT FOR THIS PROJECT WAS A BEST FIT OF THE ALIGNMENT FROM IOWA HIGHWAY COMMISSION- SECONDARY ROAD- WINNESHIEK COUNTY- TRUNK ROAD "L" OUT OF DECORAH NORTHEAST- GRADING PLANS- S. PROJECT NUMBER- 533 (4), APPROVED BY THE IHC MARCH 31, 1947. THESE PLANS WERE ACQUIRED FROM THE WINNESHIEK COUNTY ENGINEER. FACTORS SUCH AS EXISTING PAVEMENT, DRAINAGE STRUCTURES, AND SURVEY MONUMENTATION THROUGHOUT THE CORRIDOR, WERE RESEARCHED, LOCATED, AND WEIGHED IN RELATIVE IMPORTANCE TO BEST RECREATE THE ORIGINAL LOCATION OF THE ROAD AND ADJOINING RIGHT OF WAY. RESEARCH WAS DONE IN THE OFFICES OF THE WINNESHIEK COUNTY RECORDER, AUDITOR, AND ENGINEER, AS WELL AS THROUGH IOWA DEPARTMENT OF TRANSPORTATION AND ON-LINE THROUGH THE WINNESHIEK COUNTY ASSESSOR AND IOWA LAND RECORDS.

HORIZONTAL AND VERTICAL CONTROL:

THE PROJECT COORDINATE SYSTEM IS IOWA REGIONAL COORDINATE SYSTEM ZONE 2 (U.S. SURVEY FEET), NAVD 88 HEIGHT USING GEOID 12A, ALL RELATIVE TO WINNESHIEK COUNTY 2014 GPS CONTROL. PROJECT CONTROL WAS ESTABLISHED USING GPS BASE AND ROVER, FROM COUNTY CONTROL POINTS 10604 AND 10601, WITH AVERAGED OBSERVATIONS ON SITE PROJECT CONTROL AND CHECKS ON COUNTY CONTROL. ADDITIONAL CHECKS WERE MADE ON PROJECT AND COUNTY CONTROL USING IOWA RTN GPS OBSERVATIONS

101-16
10-20-09

ALIGNMENT COORDINATES

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
Locust Road																			
L1		100+00.00	9,853,250.89	12,753,481.74															
L2		111+97.32	9,854,080.58	12,754,344.98															
C1								114+24.93	9,854,239.53	12,754,507.89	116+75.33	9,854,414.41	12,754,687.11	119+11.68	9,854,658.82	12,754,741.56			
L3		119+11.68	9,854,658.82	12,754,741.56															
C2								132+43.25	9,855,958.52	12,755,031.08	135+35.00	9,856,243.30	12,755,094.52	137+83.33	9,856,360.56	12,755,361.67			
L4		137+83.33	9,856,360.56	12,755,361.67															
C3								139+21.68	9,856,416.17	12,755,488.34	141+63.83	9,856,513.50	12,755,710.07	143+80.15	9,856,740.00	12,755,795.70			
L5		143+80.15	9,856,740.00	12,755,795.70															
C4								149+88.37	9,857,308.93	12,756,010.79	151+98.07	9,857,505.08	12,756,084.95	154+03.19	9,857,714.78	12,756,084.92			
L6		154+03.19	9,857,714.78	12,756,084.92															
L7		157+69.29	9,858,080.88	12,756,084.88															
L8		165+29.83	9,858,841.40	12,756,079.94															
		167+96.27	9,859,107.83	12,756,079.48															
Shady Lane Drive																			
L1		200+00.00	9,853,976.76	12,754,236.97															
		201+32.99	9,854,072.79	12,754,144.95															
Pine Crest Drive																			
L1		300+00.00	9,856,954.71	12,755,876.88															
C1								300+10.08	9,856,958.28	12,755,867.45	300+61.96	9,856,976.63	12,755,818.92	301+11.18	9,857,017.99	12,755,787.60			
L2		301+11.18	9,857,017.99	12,755,787.60															
		301+35.43	9,857,037.38	12,755,772.91															

101-18
04-19-11

SUPERELEVATION DATA

See PV-300 Series

Road Identification	Circular Curve or Spiral Curve Name	Radius	Superelevation Data			Standard Road Plan	PC Station or SC Station	PT Station or CS Station	Superelevation Transition	Normal Shoulder Slope	Case A or B	Section A-A	Section B-B	Section C-C	Section D-D	Section E-E	Section F-F	Case A	Case B	Case C	Case S	Case T	Case U	Remarks
			e	L	x																			
		FT	%	FT	FT					%	(PV-303 Only)													
Locust Road	C2	575.8	6.0	124	41.33	PV-301	132+43.25	137+83.33	Tangent to Curve	2		131+15.12	131+56.45	131+97.78	132+80.45			132+43.25			131+97.78	132+80.45		
												139+11.46	138+70.13	138+28.80	137+46.13			137+83.33			138+28.80	137+46.13		
Locust Road	C3	576.2	6.0	124	41.33	PV-301	139+21.68	143+80.15	Tangent to Curve	2		137+93.55	138+34.88	138+76.21	139+58.88			139+21.68			138+76.21	139+58.88		
												145+08.28	144+66.95	144+25.62	143+42.95			143+80.15			144+25.62	143+42.95		

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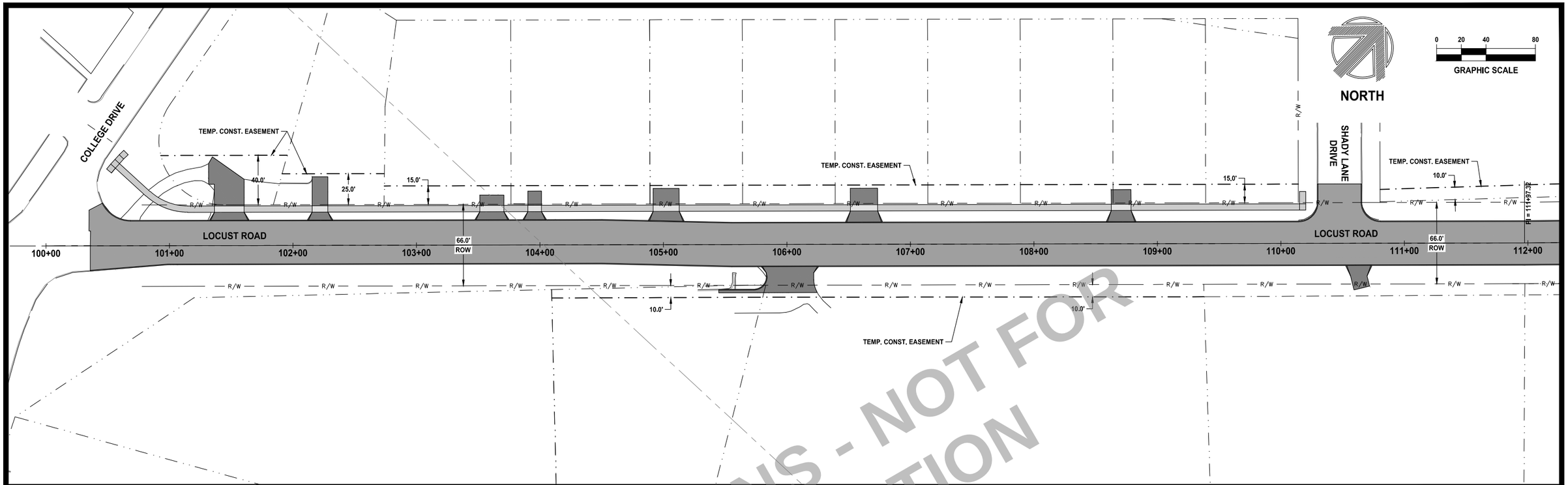

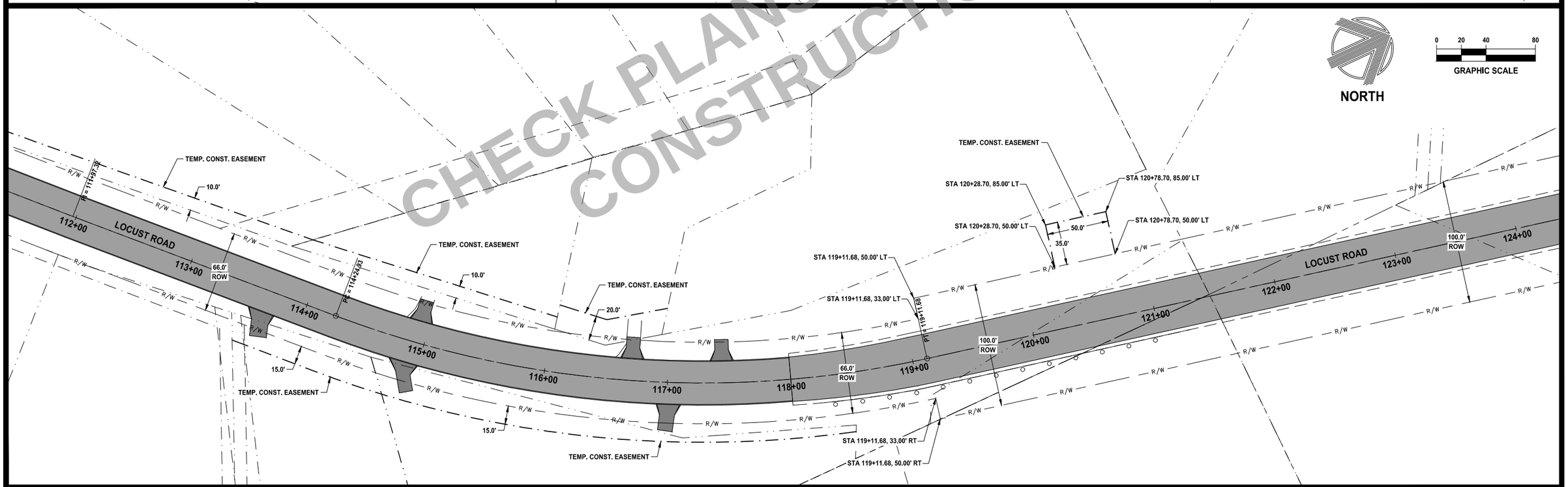

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001						
BAK	-	DECEMBER 2019						

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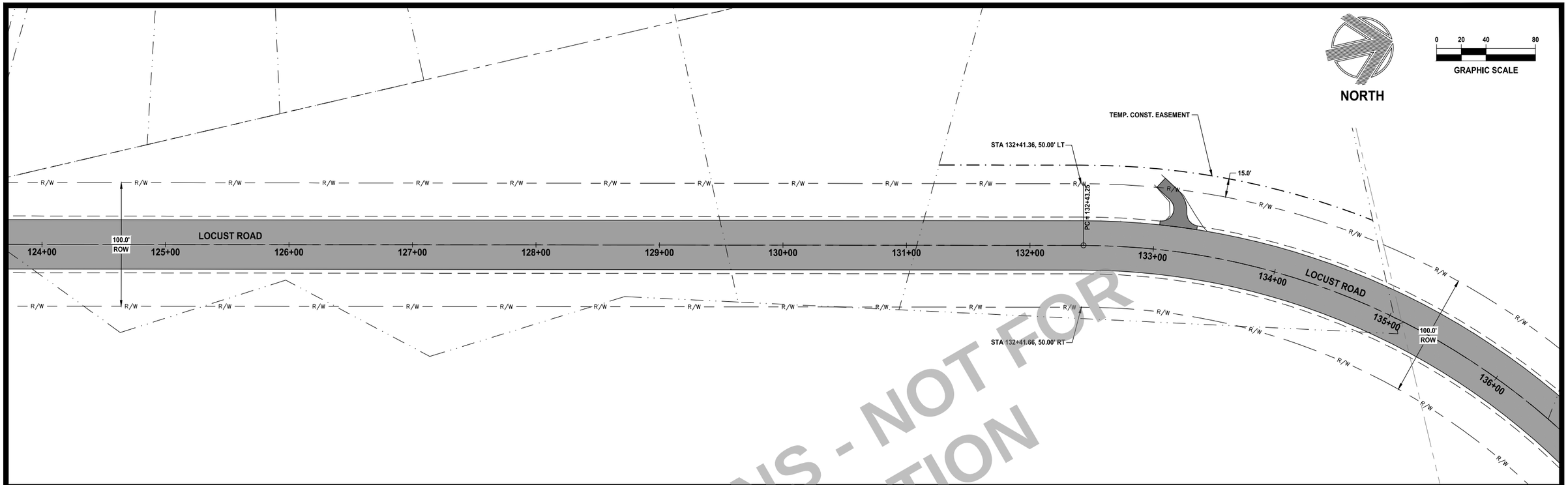

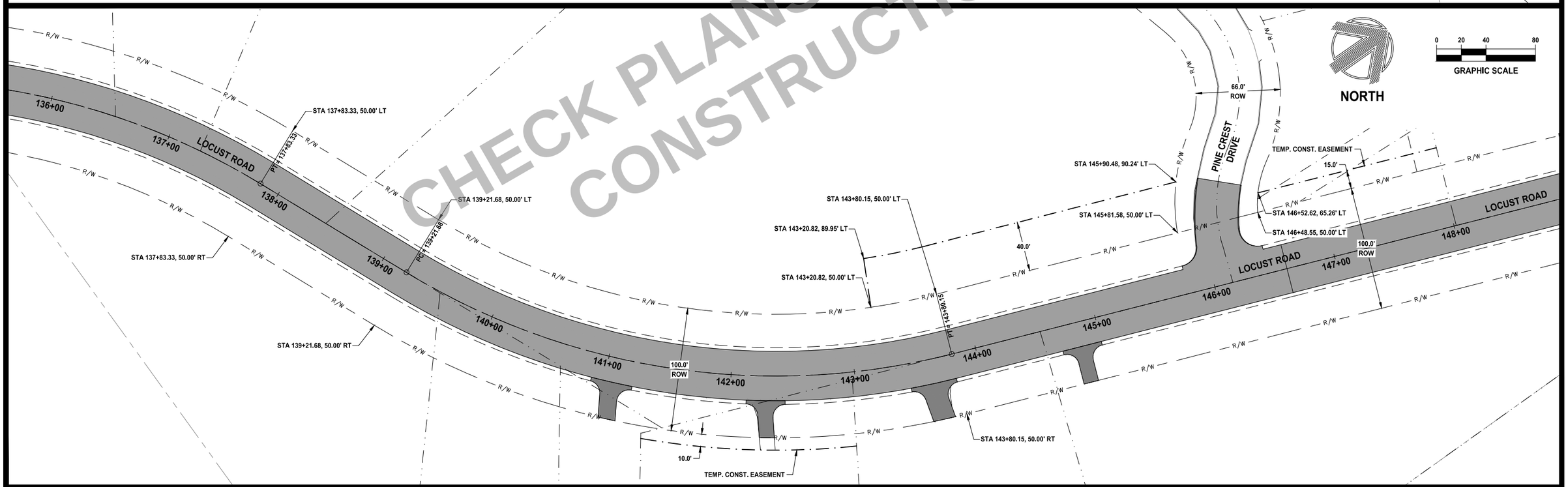

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	-					
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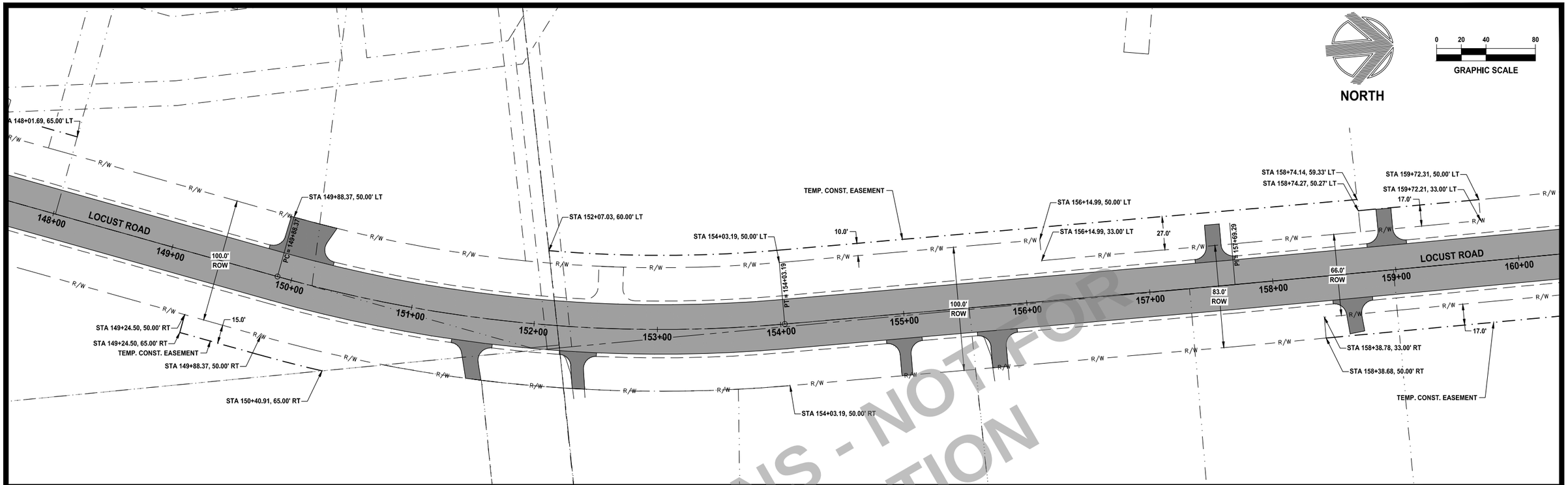

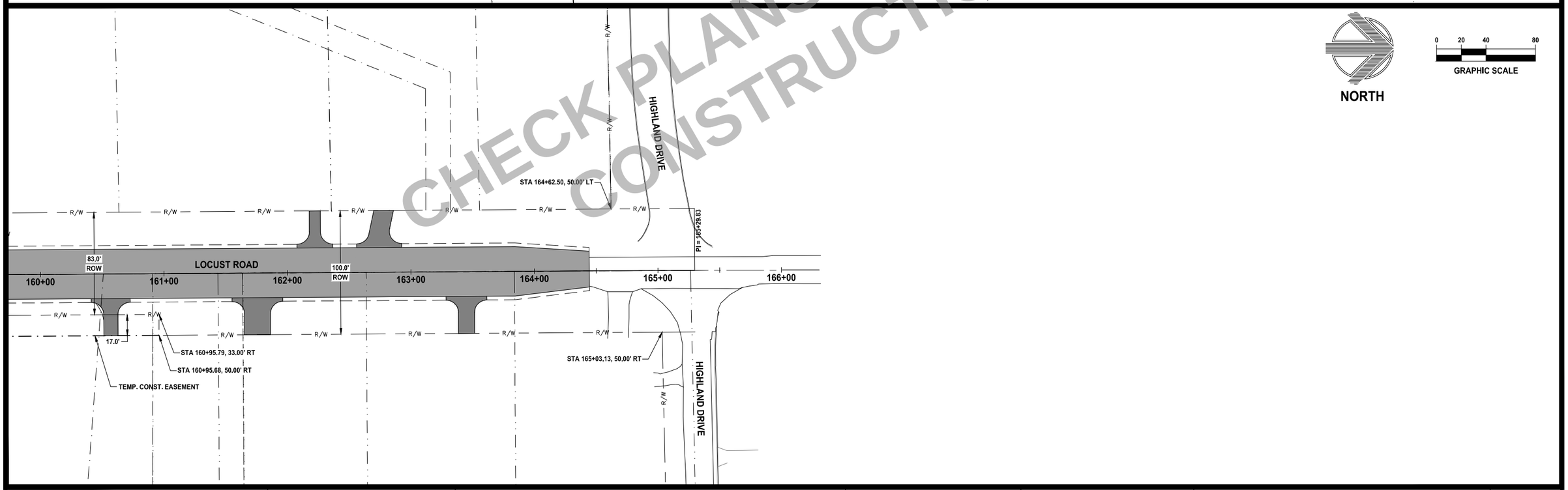

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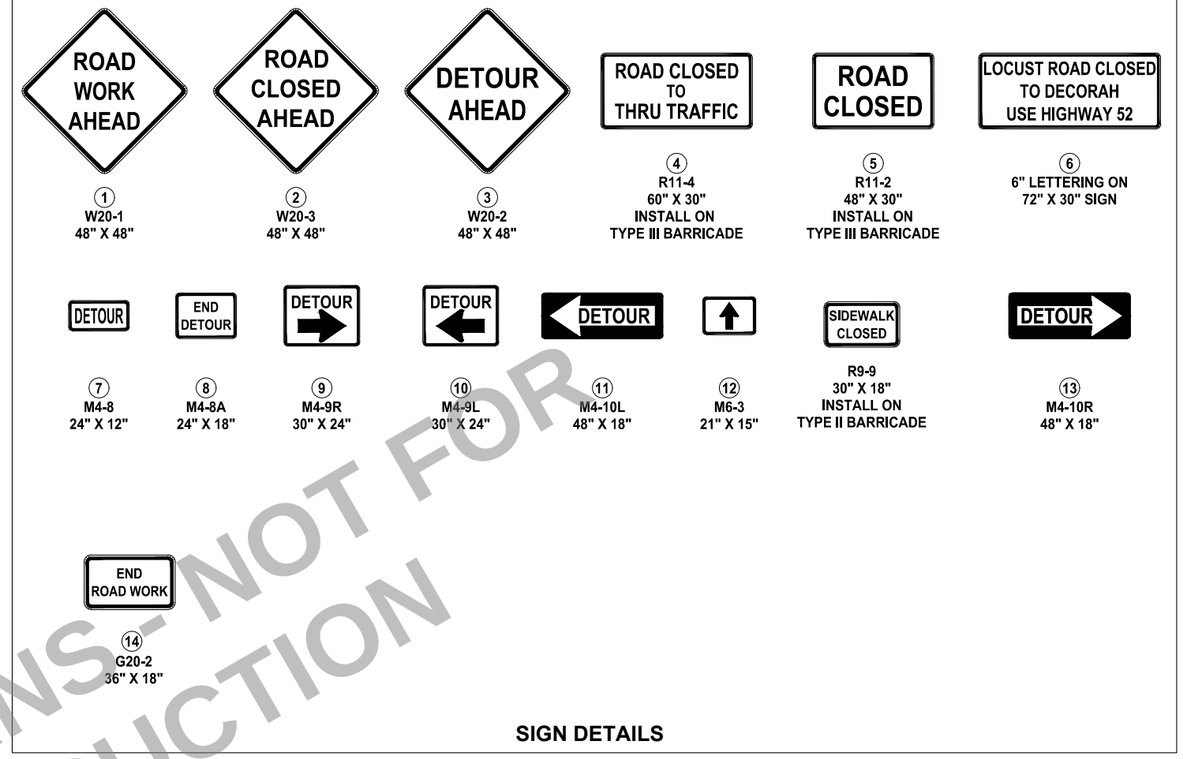
TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL EMPLOY SOUND PRACTICES OF SAFETY AND TRAFFIC CONTROL. THESE METHODS AND PRACTICES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

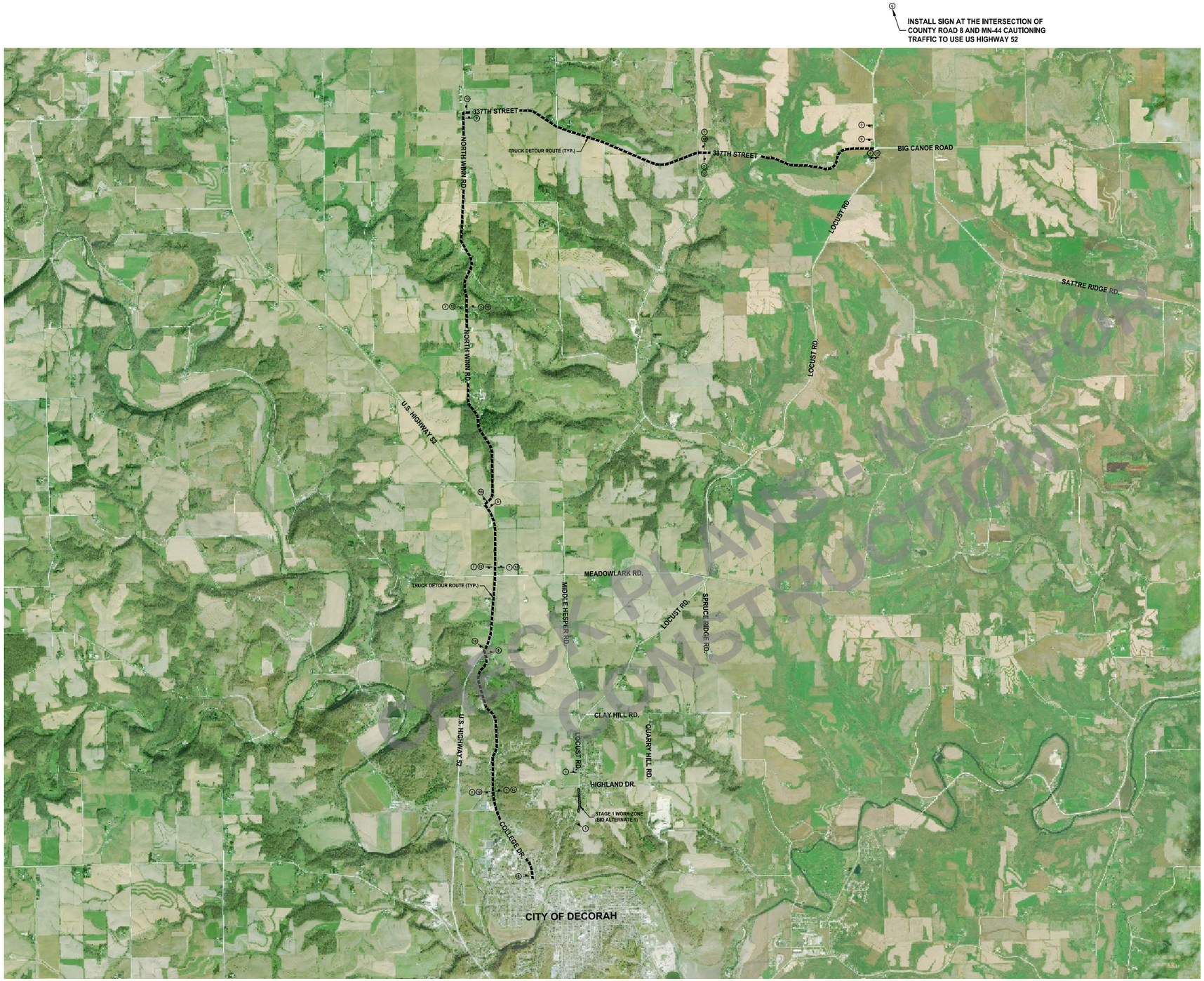
1. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH OTHER PROJECTS IN THE AREA.
2. TRAFFIC CONTROL ON THIS PROJECT SHALL BE IN ACCORDANCE WITH SPECIFIC LAYOUTS SHOWN ON THESE PLANS AND STANDARD ROAD PLANS. TRAFFIC CONTROL DEVICES, PROCEDURES, AND LAYOUTS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.
4. ALL TRAFFIC CONTROL SIGNS SHALL BE PLACED A MINIMUM OF TWO FEET CLEAR OF THE OUTSIDE EDGE OF SHOULDER WHERE POSSIBLE.
5. CONTRACTOR SHALL ERECT ALL WARNING SIGNS ON FIXED POSTS. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS.
6. THE PROPOSED SIGNING MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE ENGINEER.
7. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AND SHOULDERS AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH ROAD CLOSED SIGNS ARE USED.
8. THE BACK SIDE OF THE TYPE III BARRICADES SHALL BE REFLECTORIZED BY A MINIMUM OF SIX YELLOW REFLECTORS, ON AT EACH END OF EACH RAIL, OR AT LEAST ONE RAIL ON EACH BARRICADE SHALL HAVE REFLECTORIZED STRIPES PROPERLY SLOPED AT EACH END.
9. LONG TERM OR PERMANENT TRAFFIC CONTROL SIGNS THAT CONFLICT WITH SPECIFIC LAYOUTS SHOWN ON THESE PLANS ARE TO BE COVERED AS DIRECTED BY THE ENGINEER.
10. SIGN WASHING SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.
11. REFER TO IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SEC. 4186.03 FOR SIGN REQUIREMENTS.
12. THE LOCATION FOR STORAGE OF EQUIPMENT AND MATERIALS BY THE CONTRACTOR DURING NON-WORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER. NO STORAGE OF MATERIALS OR EQUIPMENT WILL BE PERMITTED WITHIN THE IOWA DOT RIGHT OF WAY.
13. THE BID ITEM "TRAFFIC CONTROL" SHALL INCLUDE THE COST FOR ALL TRAFFIC CONTROL MEASURES REQUIRED OF THE CONTRACTOR EXCEPT FOR THOSE WHICH ARE SEPARATE BID ITEMS OR ARE INCIDENTAL TO OTHER BID ITEMS.
14. SHOULD A SITUATION ARISE REQUIRING AN EMERGENCY RESPONSE TO THE PROJECT SITE OR ADJACENT LOCATION, THE CONTRACTOR SHALL MAKE REASONABLE ACCOMMODATIONS TO NOT HINDER EMERGENCY VEHICLES AND/OR PERSONNEL.
15. REFER TO SHEETS J.02, J.03 AND J.04 FOR SPECIFIC TRAFFIC CONTROL SITUATIONS. REFER TO THE FOLLOWING IOWA DOT STANDARD ROAD PLANS FOR OTHER TRAFFIC CONTROL SITUATIONS THAT MAY BE REQUIRED:
16. BID ITEM "TRAFFIC CONTROL" INCLUDES INSTALLATION OF TYPE II BARRICADES AND R9-9 "SIDEWALK CLOSED" SIGNS AT ALL SIDEWALK CLOSURES.

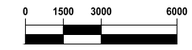
TC-1 - WORK AFFECTING TRAFFIC (TWO-LANE OR MULTILANE)
TC-211 LANE CLOSURE ON LOW VOLUME ROADWAY
TC-212 - SPOT LANE CLOSURE WITH FLAGGERS
TC-213 - LANE CLOSURE WITH FLAGGERS
TC-233 - PAVEMENT MARKING OPERATIONS TWO-LANE
TC-251 TEMPORARY ROAD CLOSURE
TC-252 - ROUTES CLOSED TO TRAFFIC
TC-273 - CONSTRUCTION SITE ENTRANCE



SIGN DETAILS

CHECK PLANS - NOT FOR CONSTRUCTION





LEGEND

FLAGGER	TYPE II BARRICADE
42" CHANNELIZER	TYPE III BARRICADE
DRUM	ORANGE PLASTIC SAFETY FENCE
TRAFFIC SIGN	WORK ZONE
DIRECTION OF TRAFFIC	

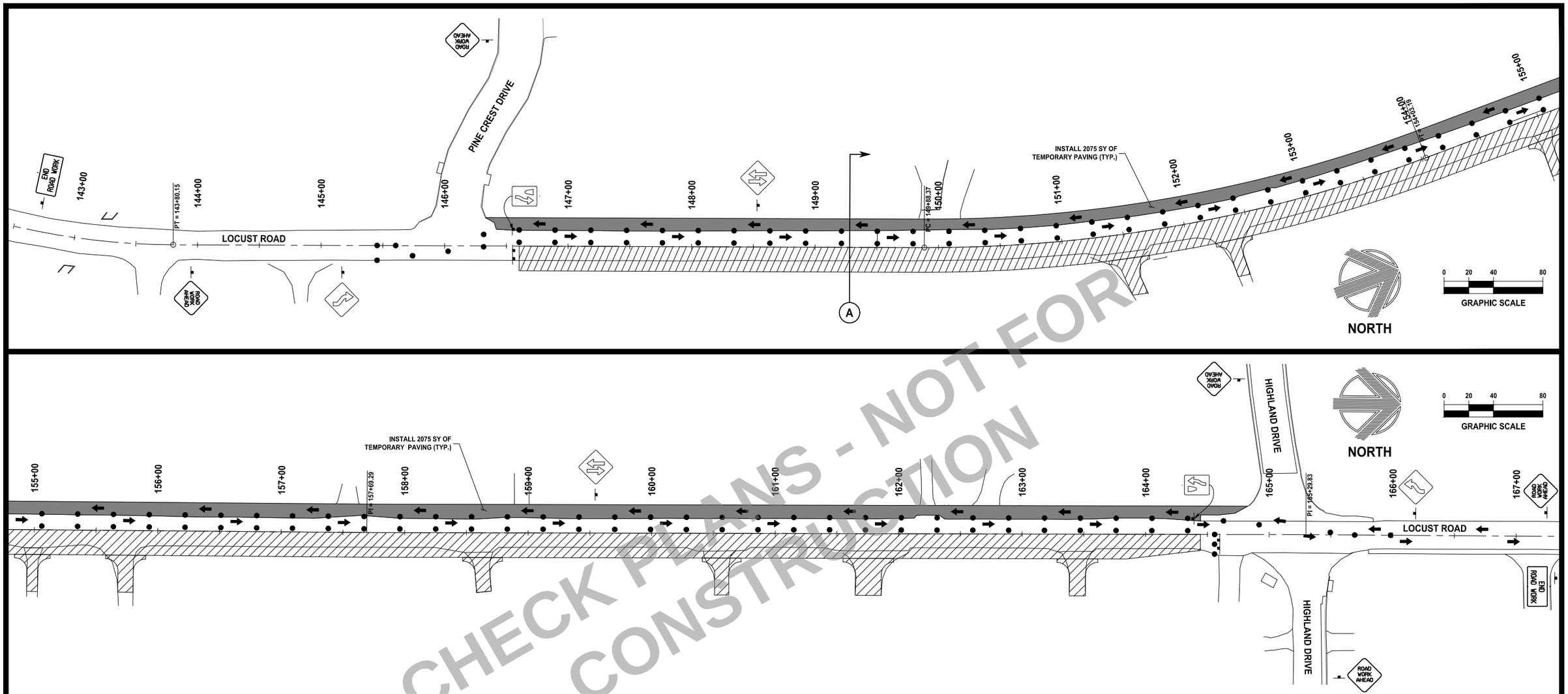
STAGE 1

STAGE 1 TRAFFIC CONTROL NOTES:

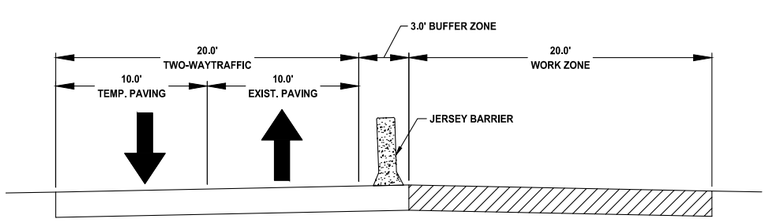
1. WORK IN THIS STAGE INCLUDES ALL WORK ON LOCUST ROAD FROM PINE CREST DRIVE TO THE NORTHERN PROJECT LIMITS OF BID ALTERNATE 1.
2. INSTALL ONE TYPE III BARRICADE FOR EACH TRAFFIC LANE WITH R11-2 "ROAD CLOSED" SIGN AT THE PROJECT LIMITS. INSTALL ORANGE PLASTIC SAFETY FENCE CONTINUOUSLY ACROSS BOTH TRAVEL LANES AND EXTEND 10 FEET PAST TRAVEL LANES. INSTALL STAGGERED TYPE III BARRICADES WITH R11-4 "ROAD CLOSED TO THRU TRAFFIC" SIGNS AT INTERSECTION CLOSEST TO STREET CLOSURES.
3. ALL RESIDENTS SHALL HAVE ACCESS AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH ALL RESIDENTS WHO LIVE ALONG THE PROJECT LIMITS TO ALLOW ACCESS TO AND FROM THEIR HOMES THROUGHOUT THE ENTIRE DURATION OF THE PROJECT. ANY ADDITIONAL MATERIALS, WORK, OR MAINTENANCE TO ACCOMPLISH THIS SHALL BE CONSIDERED INCIDENTAL TO THE TRAFFIC CONTROL BID ITEM.
4. NO TRUCK TRAFFIC SHALL BE ALLOWED ON LOCUST ROAD DURING ANY STAGE OF THIS PROJECT.

CHECK PLAN NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS						SHEET NO.
JSS	BAV	MEC #30616018-001	.	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS	STBG-SWAP-1867(617)--SG-96	J.02
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.							
BAK	-		.							



CHECK PLANS - NOT FOR CONSTRUCTION



STAGE 1 - PHASE A
SECTION A
N.T.S.

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHOWN ON THESE PLANS ARE FOR ILLUSTRATIONAL PURPOSES ONLY AND MAY NOT INCLUDE ALL TRAFFIC CONTROL DEVICES AND SIGNS NEEDED TO PERFORM THE STAGING AND DETOURS SHOWN HERE.
2. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE IOWA DEPARTMENT OF TRANSPORTATION (IDOT) STANDARD ROAD PLANS. THIS INCLUDES BUT IS NOT LIMITED TO SPACING BETWEEN TRAFFIC CONTROL DEVICES AND SIGNS, SIGN SIZE AND PLACEMENT OF SIGNS.

LEGEND

FLAGGER	TYPE II BARRICADE
42" CHANNELIZER	TYPE III BARRICADE
DRUM	ORANGE PLASTIC SAFETY FENCE
TRAFFIC SIGN	WORK ZONE
DIRECTION OF TRAFFIC	

ENGINEER JSS	DRAWN BY BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	REVISIONS	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO. J.03
CHECKED BY BAK	FIELD BOOK NO. -								

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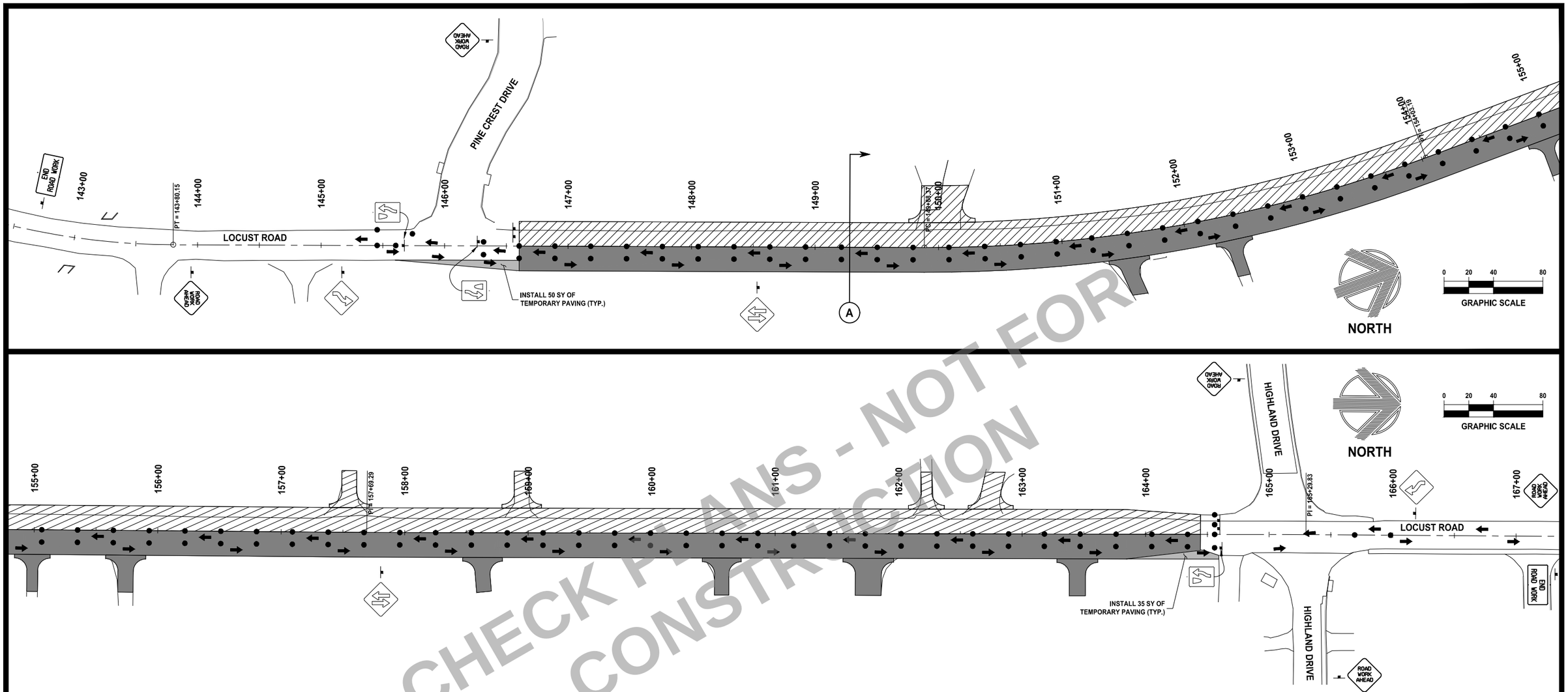
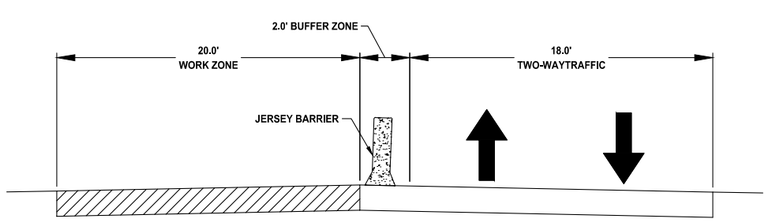


CHECK PLANS - NOT FOR CONSTRUCTION



STAGE 1 - PHASE B
SECTION A
N.T.S.

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHOWN ON THESE PLANS ARE FOR ILLUSTRATIONAL PURPOSES ONLY AND MAY NOT INCLUDE ALL TRAFFIC CONTROL DEVICES AND SIGNS NEEDED TO PERFORM THE STAGING AND DETOURS SHOWN HERE.
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LEGEND

	FLAGGER		TYPE II BARRICADE
	42" CHANNELIZER		TYPE III BARRICADE
X	DRUM		ORANGE PLASTIC SAFETY FENCE
	TRAFFIC SIGN		WORK ZONE
	DIRECTION OF TRAFFIC		

ENGINEER	DRAWN BY		REVISIONS						SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS	STBG-SWAP-1867(617)--SG-96	J.03
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						

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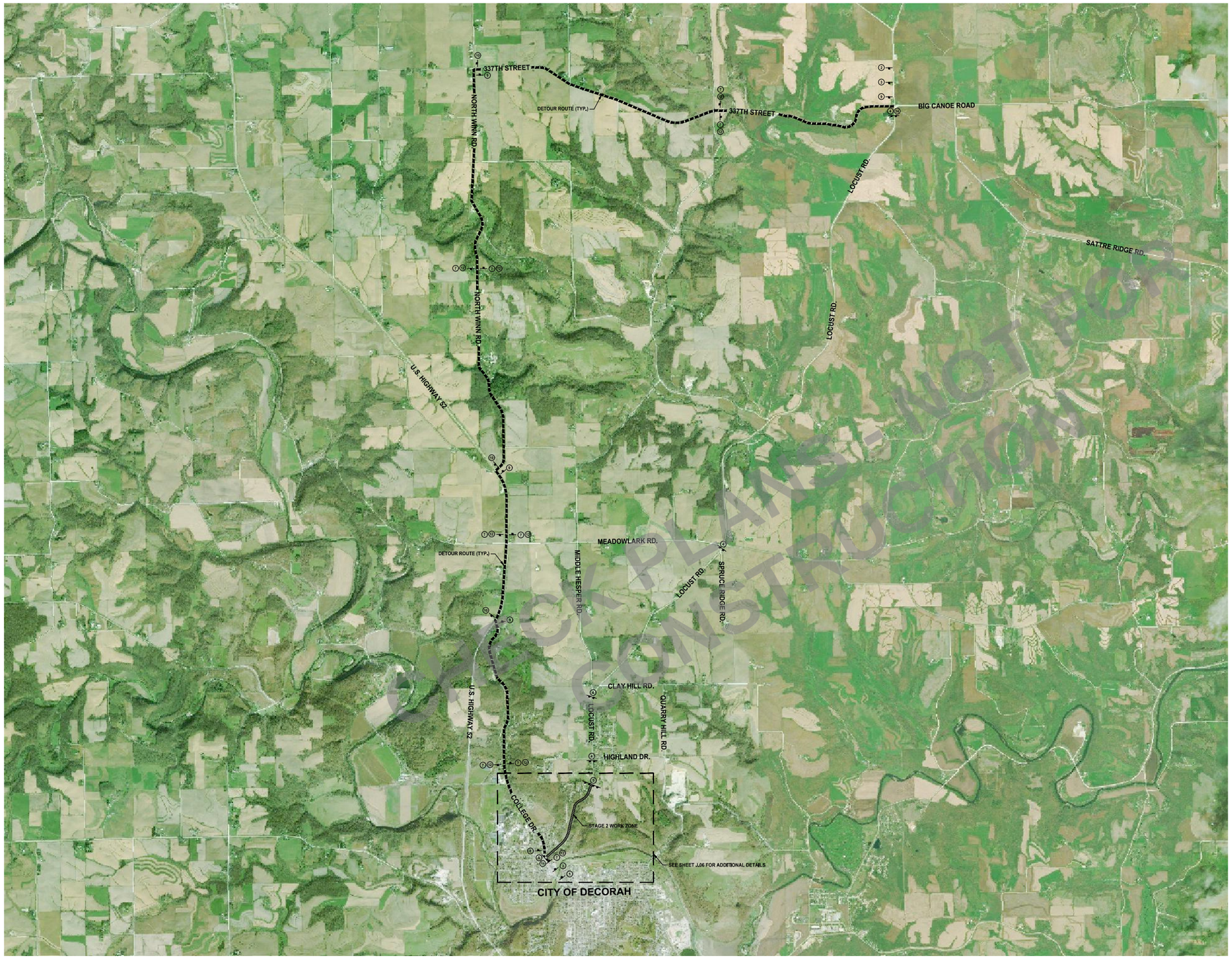

LEGEND

FLAGGER	TYPE II BARRICADE
42" CHANNELIZER	TYPE III BARRICADE
DRUM	ORANGE PLASTIC SAFETY FENCE
TRAFFIC SIGN	WORK ZONE
DIRECTION OF TRAFFIC	

STAGE 2

STAGE 2 TRAFFIC CONTROL NOTES:

1. WORK IN THIS STAGE INCLUDES ALL WORK ON LOCUST ROAD FROM COLLEGE DRIVE TO PINE CREST DRIVE INCLUDING THE INTERSECTION IMPROVEMENTS OF SHADY LANE DRIVE AND PINE CREST DRIVE.
2. INSTALL ONE TYPE III BARRICADE FOR EACH TRAFFIC LANE WITH R11-2 "ROAD CLOSED" SIGN AT THE PROJECT LIMITS. INSTALL ORANGE PLASTIC SAFETY FENCE CONTINUOUSLY ACROSS BOTH TRAVEL LANES AND EXTEND 10 FEET PAST TRAVEL LANES. INSTALL STAGGERED TYPE III BARRICADES WITH R11-4 "ROAD CLOSED TO THRU TRAFFIC" SIGNS AT INTERSECTION CLOSEST TO STREET CLOSURES.
3. ALL RESIDENTS SHALL HAVE ACCESS AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH ALL RESIDENTS WHO LIVE ALONG THE PROJECT LIMITS TO ALLOW ACCESS TO AND FROM THEIR HOMES THROUGHOUT THE ENTIRE DURATION OF THE PROJECT. ANY ADDITIONAL MATERIALS, WORK, OR MAINTENANCE TO ACCOMPLISH THIS SHALL BE CONSIDERED INCIDENTAL TO THE TRAFFIC CONTROL BID ITEM.
4. NO TRUCK TRAFFIC SHALL BE ALLOWED ON LOCUST ROAD DURING ANY STAGE OF THIS PROJECT.

PLANS NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.		.						
BAK	-		.						J.05
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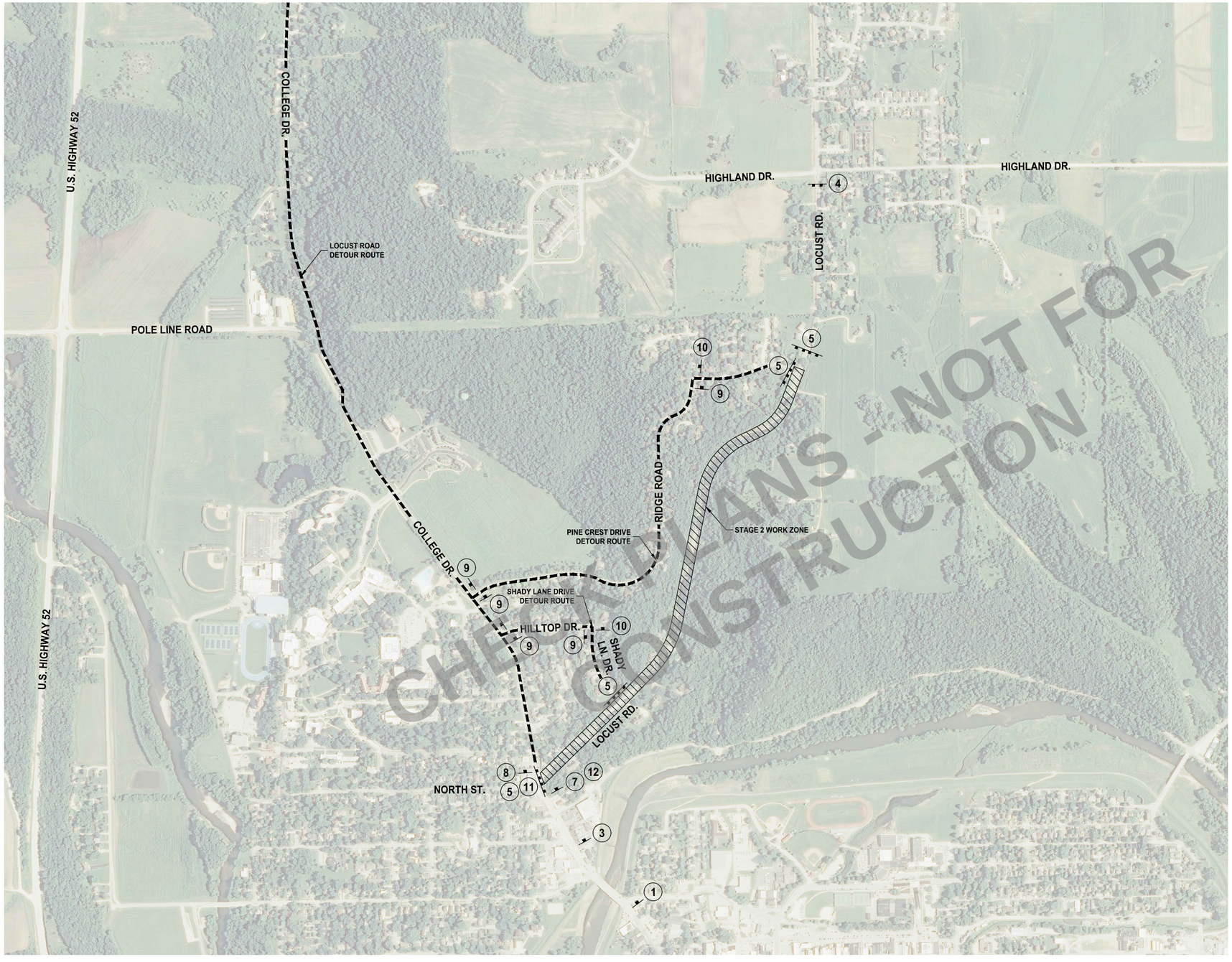

CHECK PLANS - NOT FOR CONSTRUCTION

NORTH

0 250 500 1000
GRAPHIC SCALE

LEGEND

- FLAGGER
- 42" CHANNELIZER
- DRUM
- TRAFFIC SIGN
- DIRECTION OF TRAFFIC
- TYPE II BARRICADE
- TYPE III BARRICADE
- ORANGE PLASTIC SAFETY FENCE
- WORK ZONE

STAGE 2

STAGE 2 TRAFFIC CONTROL NOTES:

1. WORK IN THIS STAGE INCLUDES ALL WORK ON LOCUST ROAD FROM COLLEGE DRIVE TO PINE CREST DRIVE INCLUDING THE INTERSECTION IMPROVEMENTS OF SHADY LANE DRIVE AND PINE CREST DRIVE.
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4. NO TRUCK TRAFFIC SHALL BE ALLOWED ON LOCUST ROAD DURING ANY STAGE OF THIS PROJECT.

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS						SHEET NO.
JSS	BAV	MEC #30616018-001	.	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	TEMPORARY TRAFFIC CONTROL, DETOUR AND STAGING PLAN AND DETAILS	STBG-SWAP-1867(617)--SG-96	J.06
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019	.							
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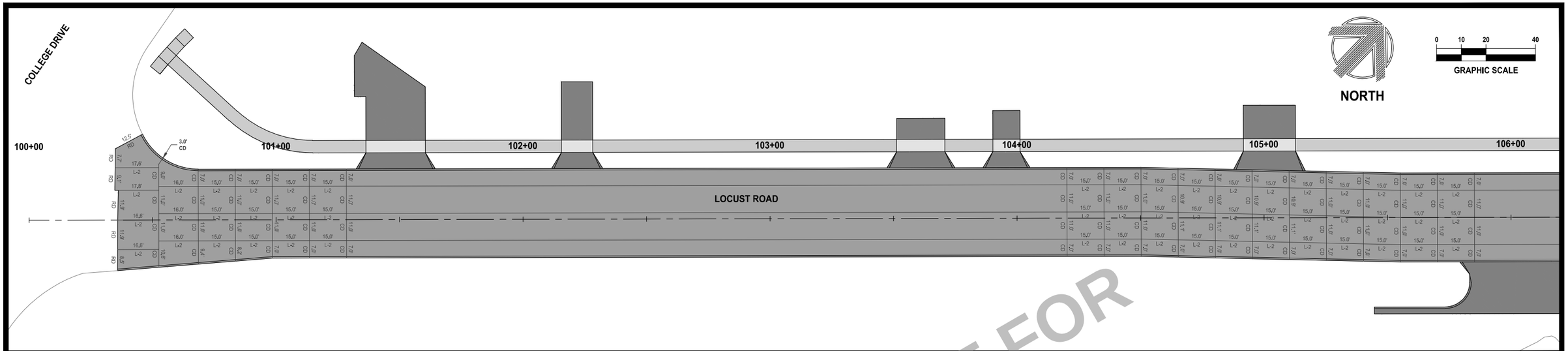
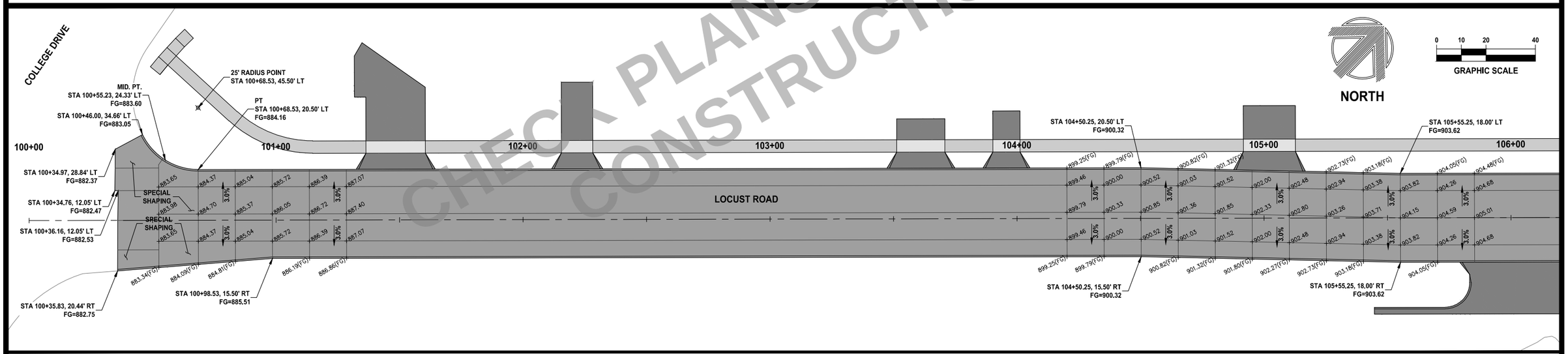


NOTES

1. REFER TO STANDARD ROAD PLAN PV-101 FOR JOINT DETAILS.
2. REFER TO INDIVIDUAL SW STANDARD ROAD PLANS FOR BOXOUT DETAILS.
3. TYPICAL CD JOINT SPACING WHERE NOT SHOWN IS 15 FEET.
4. ELEVATIONS SHOWN ARE TOP OF SLAB OR FORM GRADE UNLESS NOTED OTHERWISE.
5. ELEVATIONS IN PARENTHESIS ARE EXISTING ELEVATIONS.

LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION



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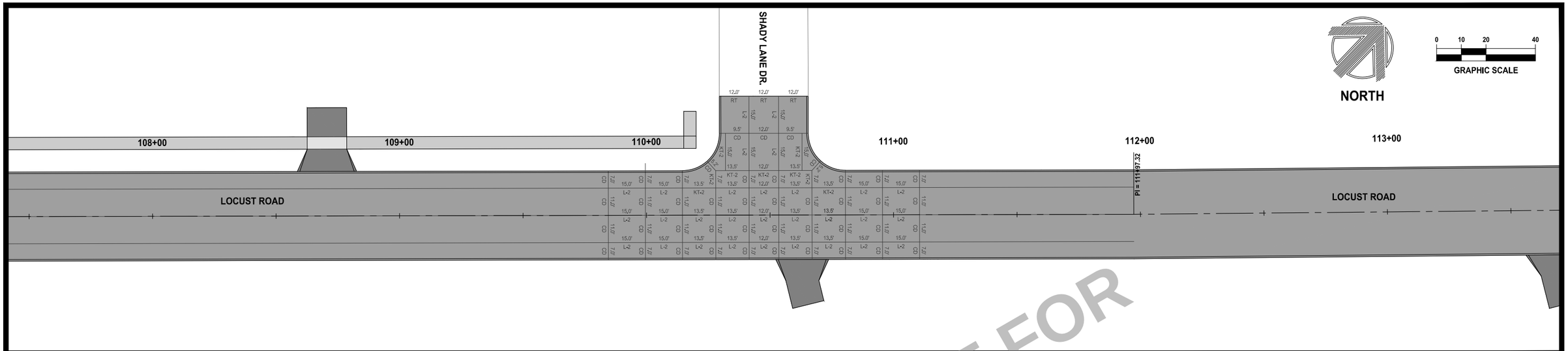
LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						L.01



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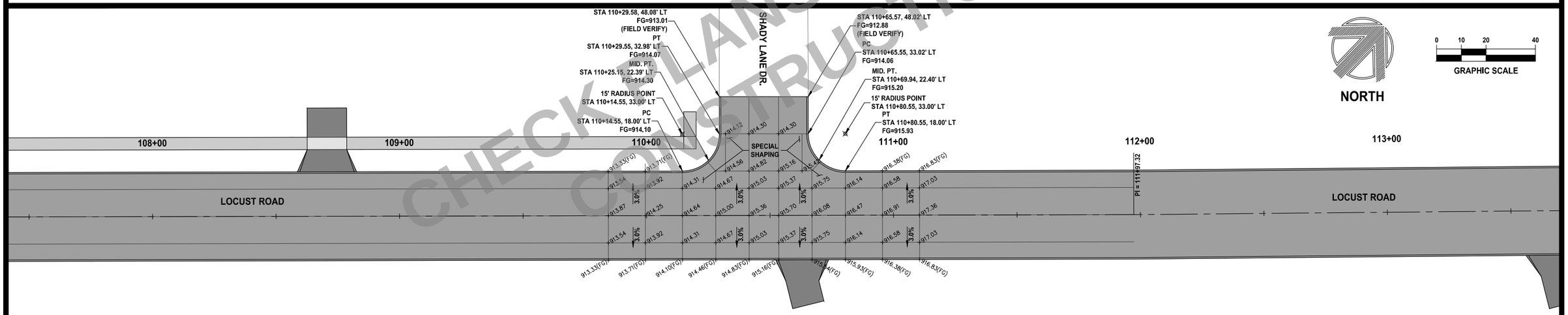
LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION



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LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						L.02

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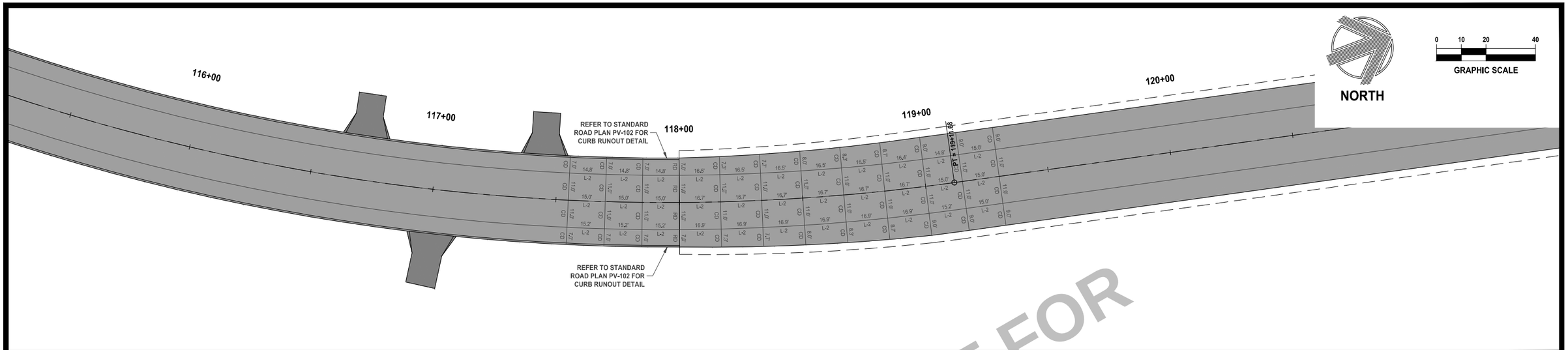

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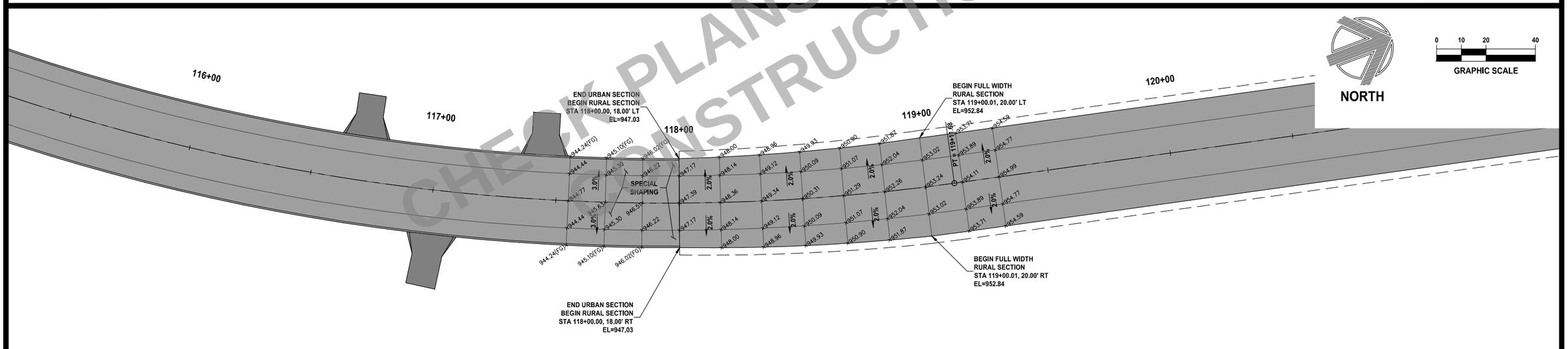
LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION



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LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS						SHEET NO.
JSS	BAV	DECORAH, IOWA	-	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN	STBG-SWAP-1867(617)--SG-96	L.03
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	-						
BAK	-	DECEMBER 2019	-						

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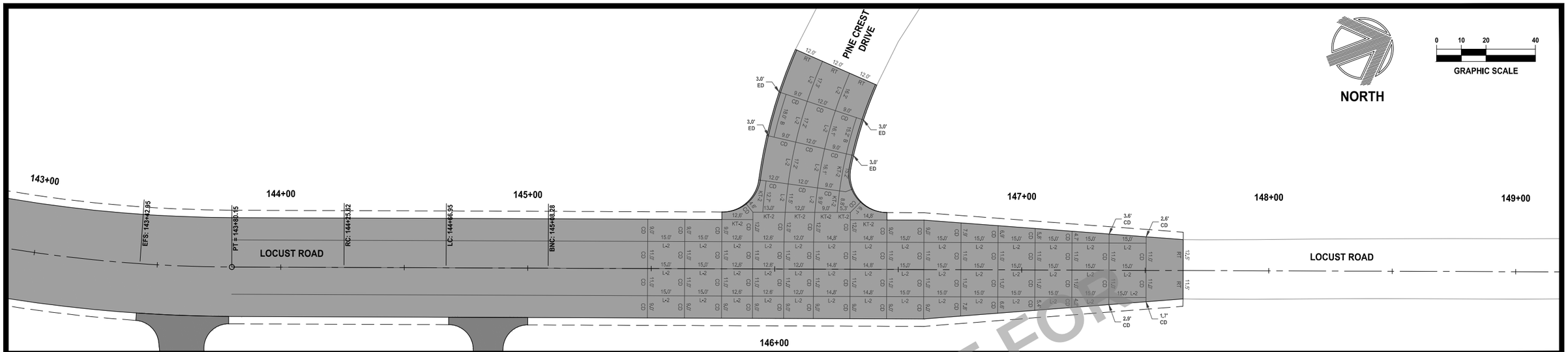

NOTES

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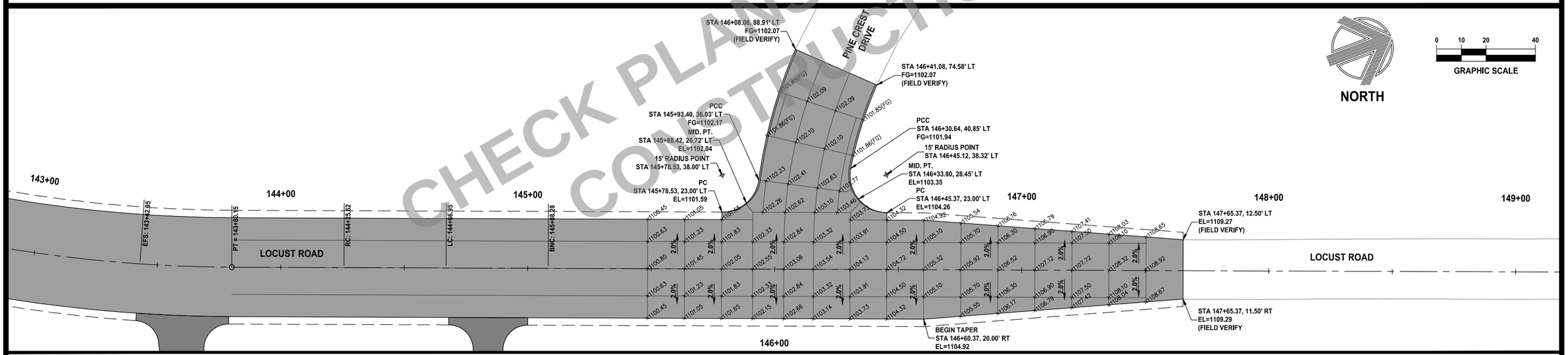
LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION



NOTES

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LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						L.04

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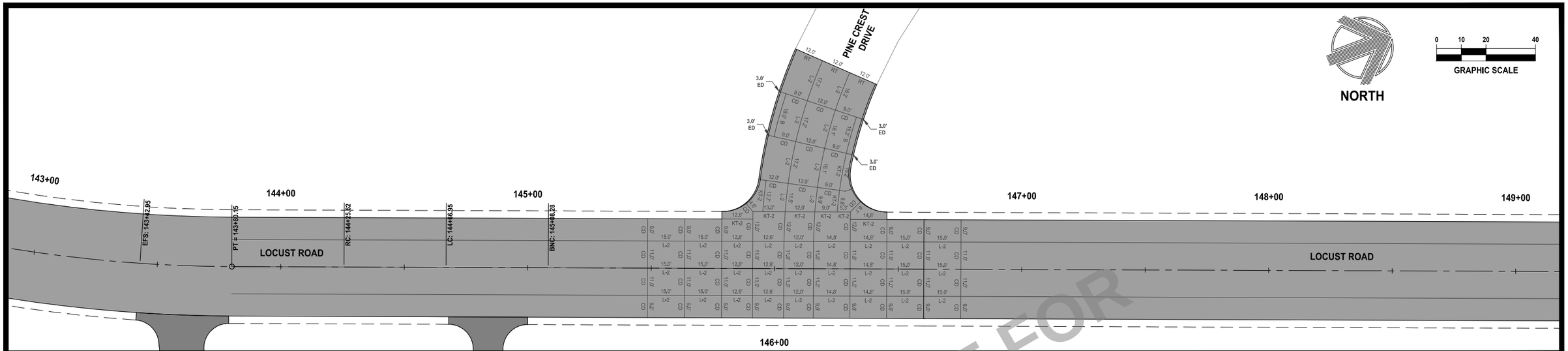

NOTES

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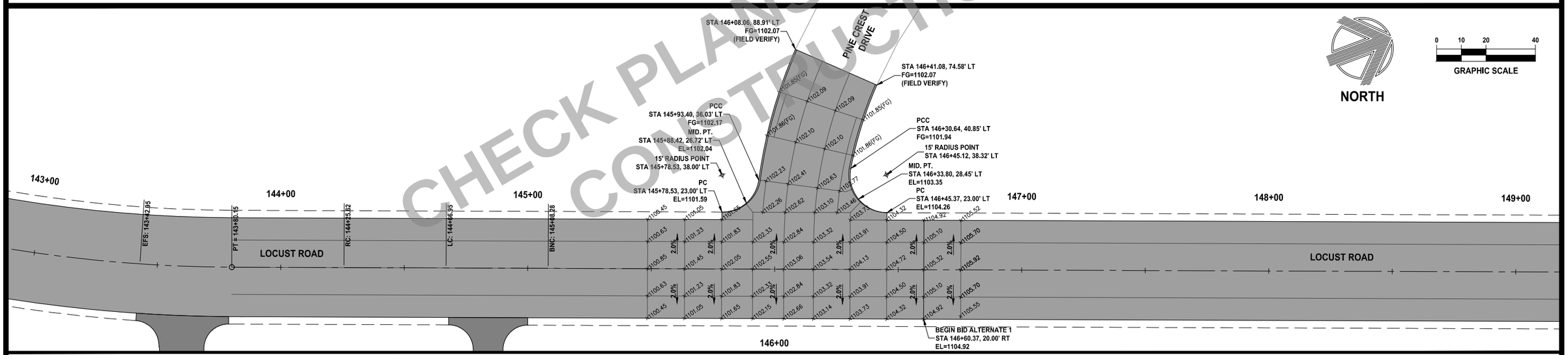
LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION



NOTES

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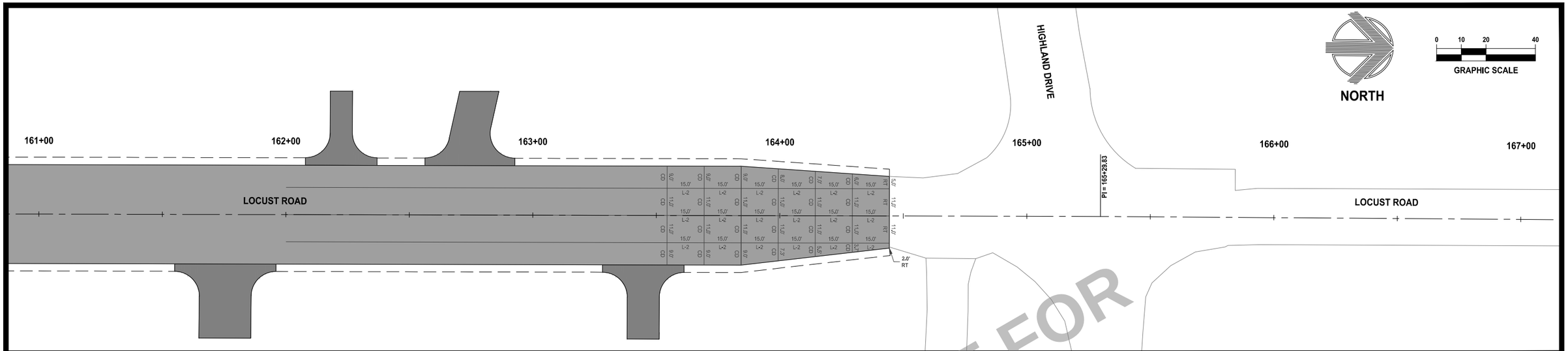
LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS						
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO. L.05
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						

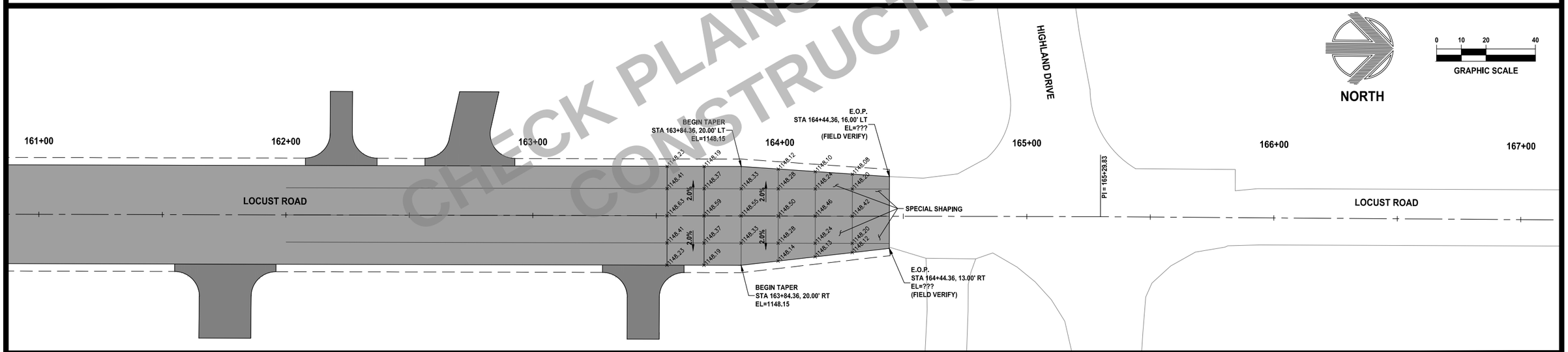


NOTES

1. REFER TO STANDARD ROAD PLAN PV-101 FOR JOINT DETAILS.
2. REFER TO INDIVIDUAL SW STANDARD ROAD PLANS FOR BOXOUT DETAILS.
3. TYPICAL CD JOINT SPACING WHERE NOT SHOWN IS 15 FEET.
4. ELEVATIONS SHOWN ARE TOP OF SLAB OR FORM GRADE UNLESS NOTED OTHERWISE.
5. ELEVATIONS IN PARENTHESIS ARE EXISTING ELEVATIONS.

LOCUST ROAD (JOINTING DETAIL)

CHECK PLANS - NOT FOR CONSTRUCTION

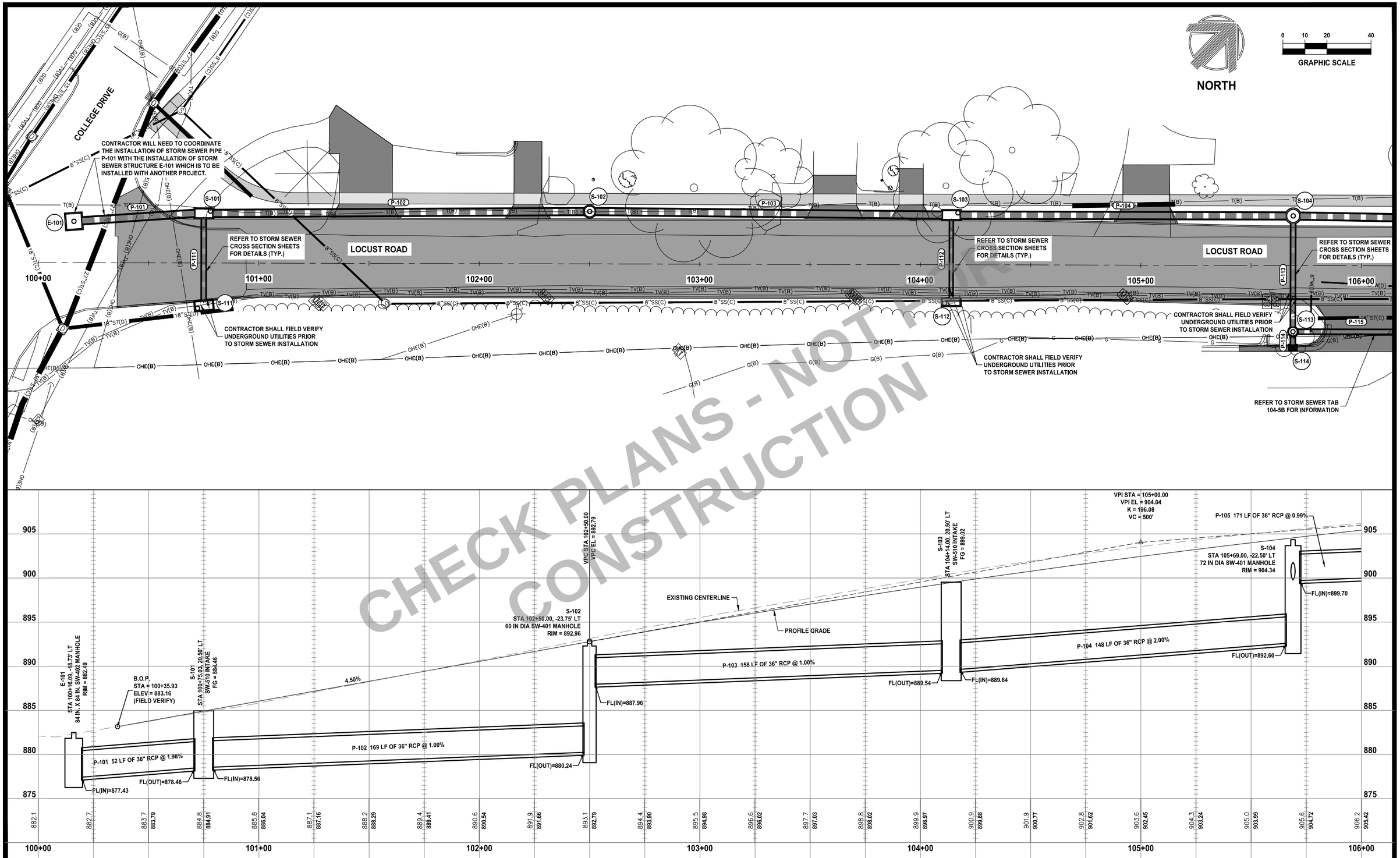


NOTES

1. REFER TO STANDARD ROAD PLAN PV-101 FOR JOINT DETAILS.
2. REFER TO INDIVIDUAL SW STANDARD ROAD PLANS FOR BOXOUT DETAILS.
3. TYPICAL CD JOINT SPACING WHERE NOT SHOWN IS 15 FEET.
4. ELEVATIONS SHOWN ARE TOP OF SLAB OR FORM GRADE UNLESS NOTED OTHERWISE.
5. ELEVATIONS IN PARENTHESIS ARE EXISTING ELEVATIONS.

LOCUST ROAD (GEOMETRIC AND STAKING DETAIL)

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD GEOMETRIC, STAKING AND JOINTING PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						L.06
BAK	-	DECEMBER 2019	.						



ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	M.01
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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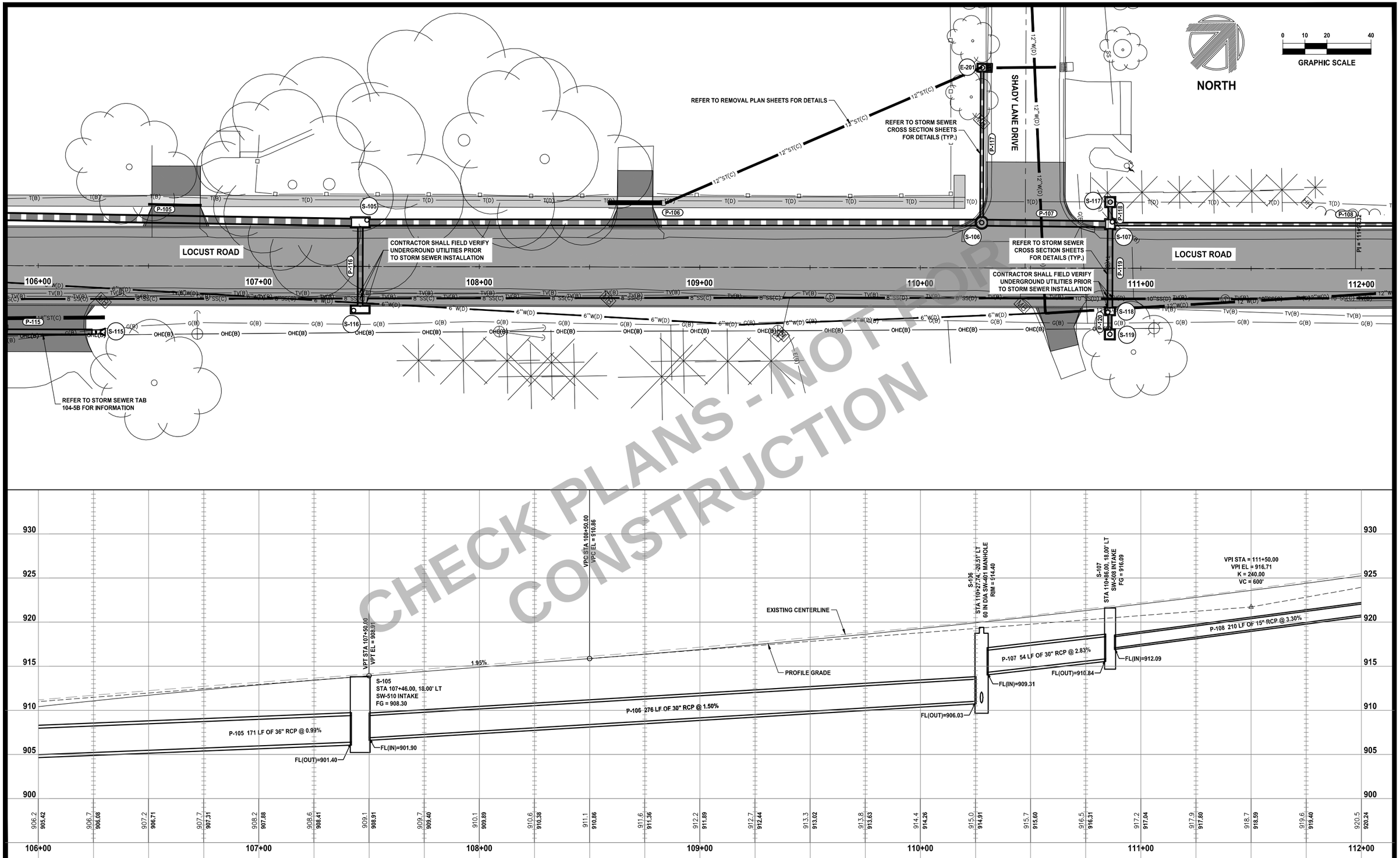

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	M.02
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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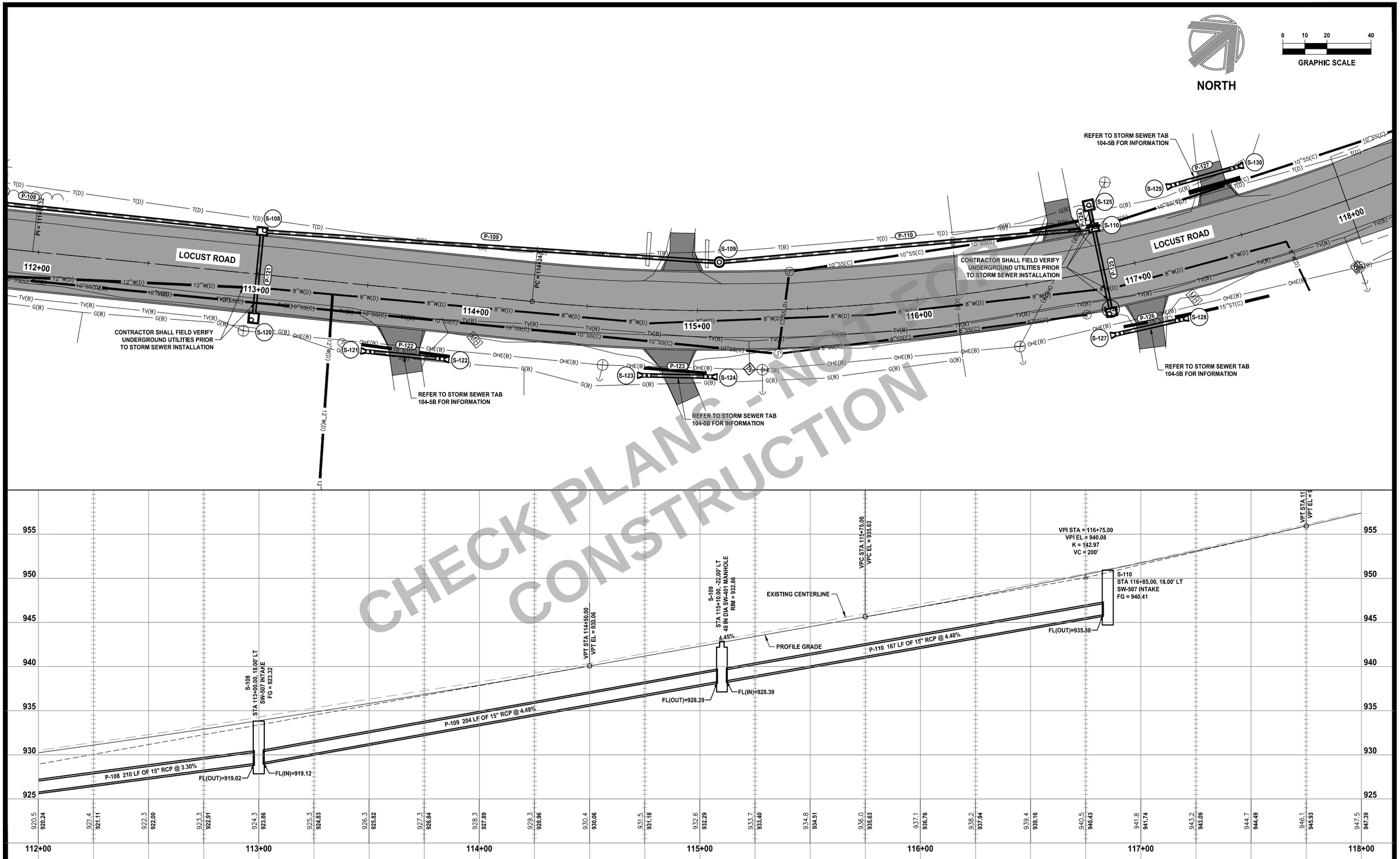

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						M.03
BAK	-	DECEMBER 2019	.						

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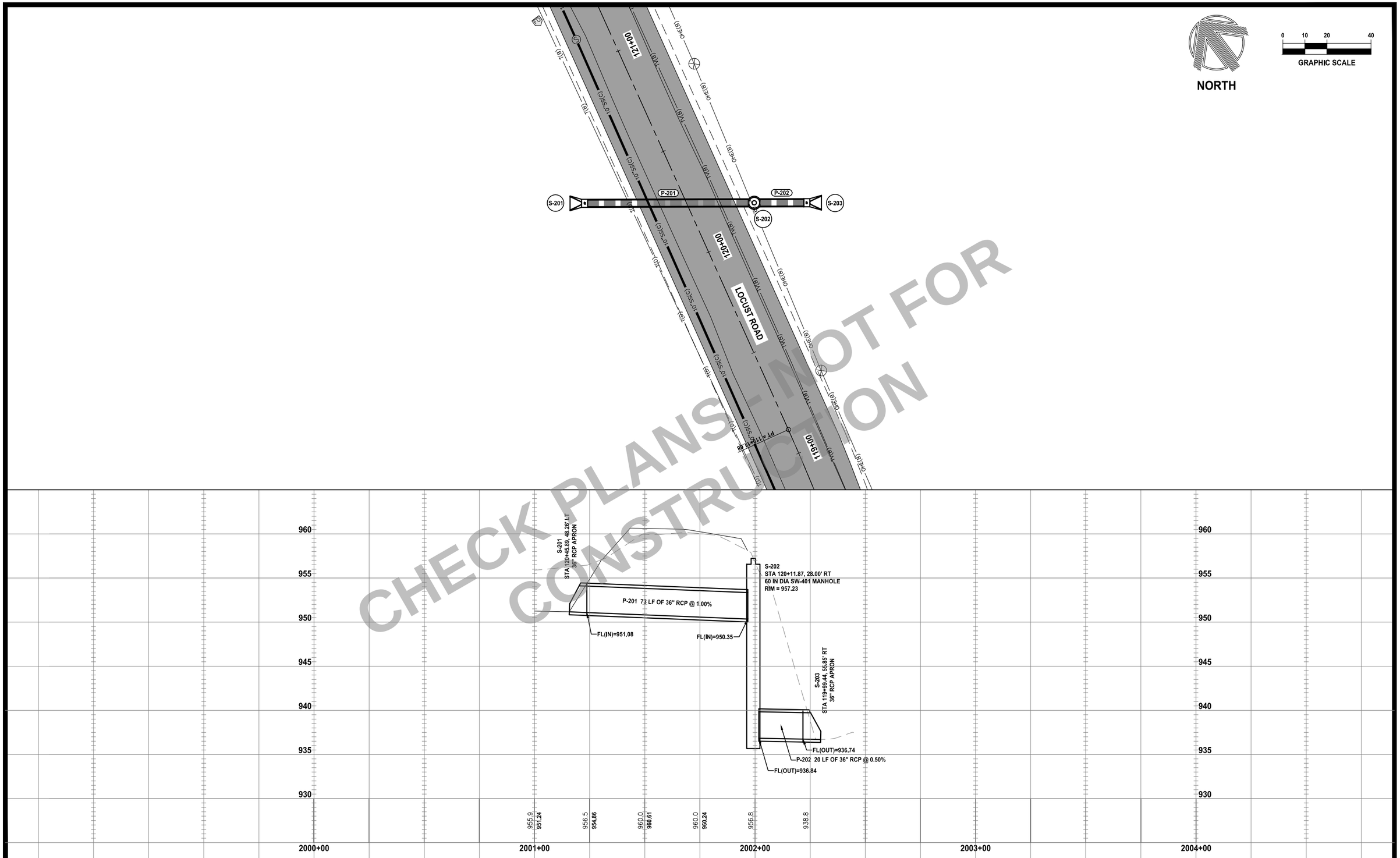

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY	
JSS	BAV	DECORAH, IOWA
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001
BAK	-	DECEMBER 2019

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McCLURE™ making lives better

1740 Lininger Lane
North Liberty, Iowa 52317
319-626-9090
fax 319-626-9095

LOCUST ROAD AND
UTILITY IMPROVEMENTS - 2020

LOCUST ROAD
STORM SEWER
PLAN AND PROFILE

STBG-SWAP-1867(617)--SG-96

SHEET NO.
M.04

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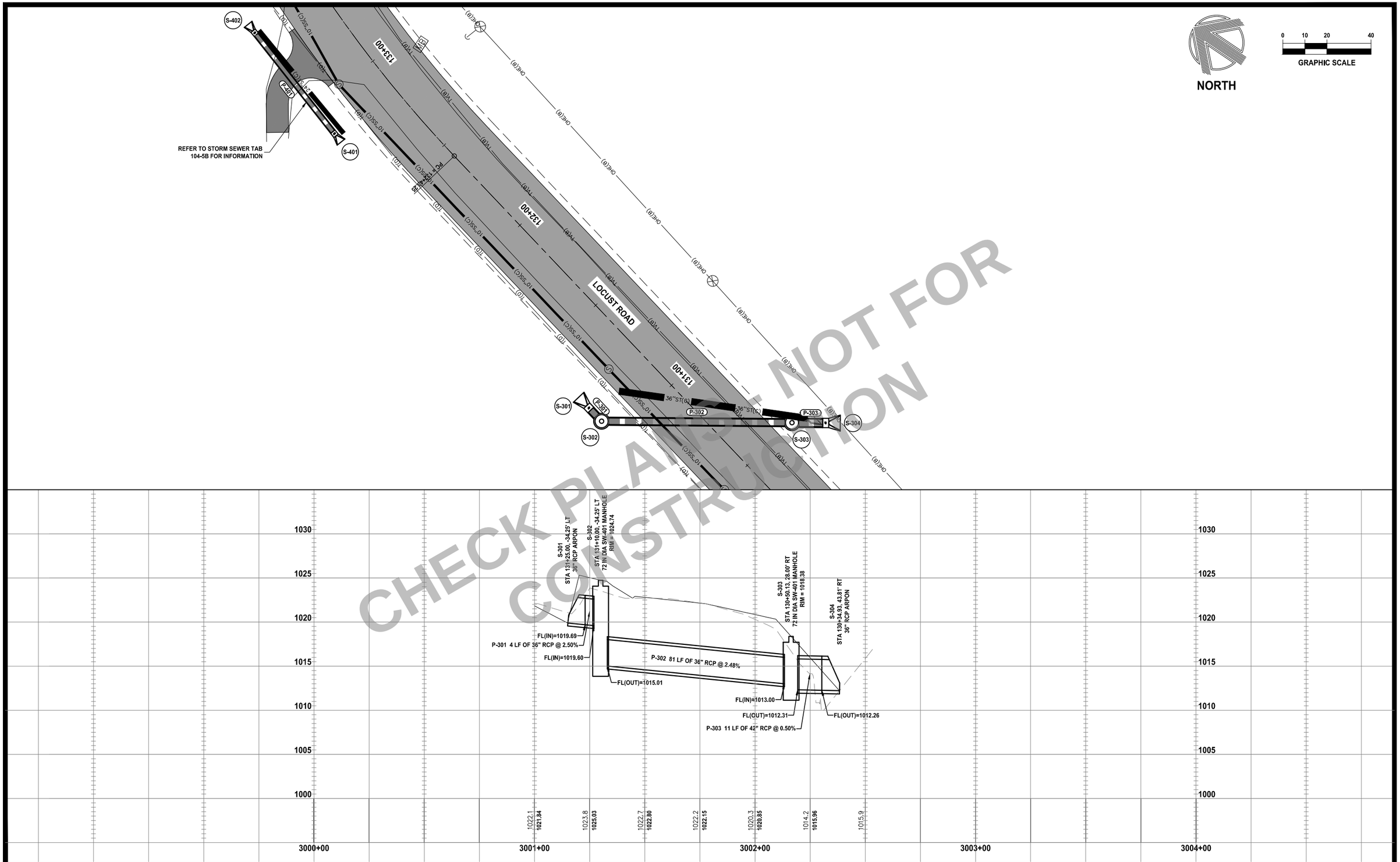

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY	DECORAH, IOWA
JSS	BAV	MEC #30616018-001
CHECKED BY	FIELD BOOK NO.	DECEMBER 2019
BAK	-	

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North Liberty, Iowa 52317
319-626-9090
fax 319-626-9095

LOCUST ROAD AND
UTILITY IMPROVEMENTS - 2020

LOCUST ROAD
STORM SEWER
PLAN AND PROFILE

STBG-SWAP-1867(617)--SG-96

SHEET NO.
M.05

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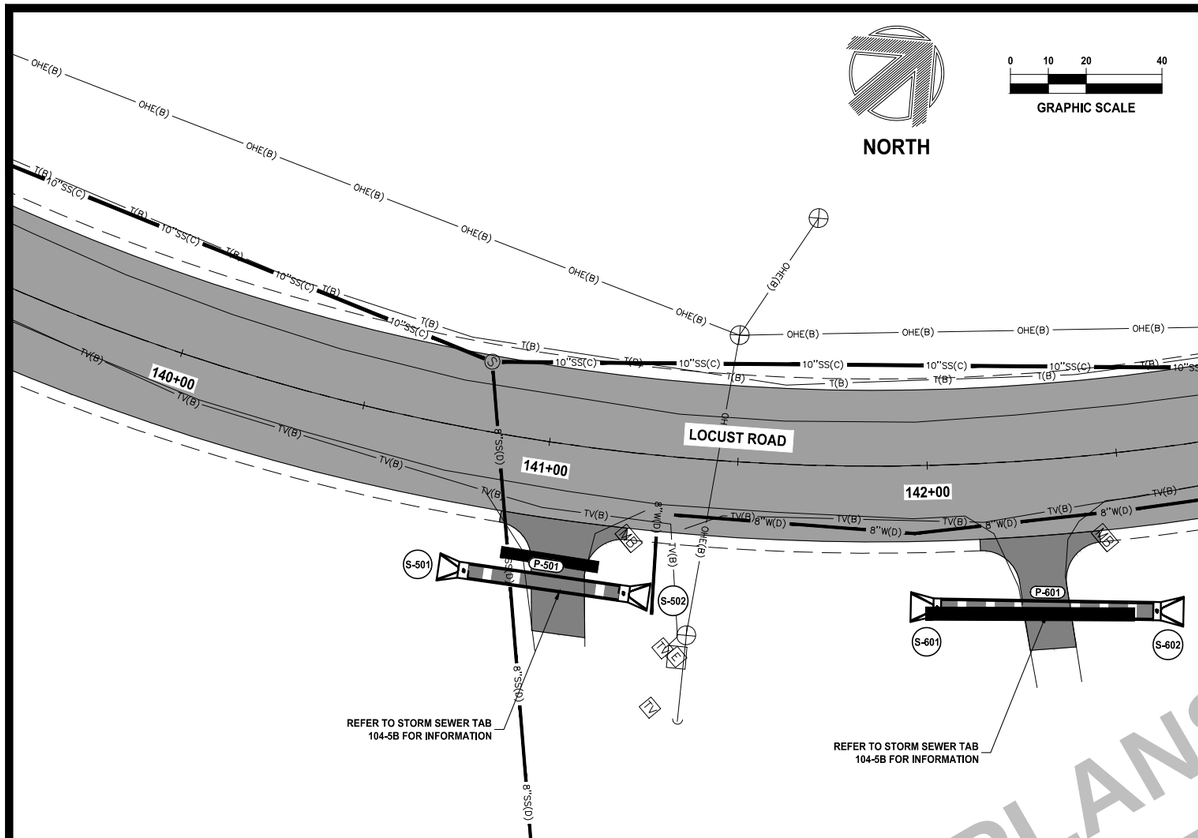

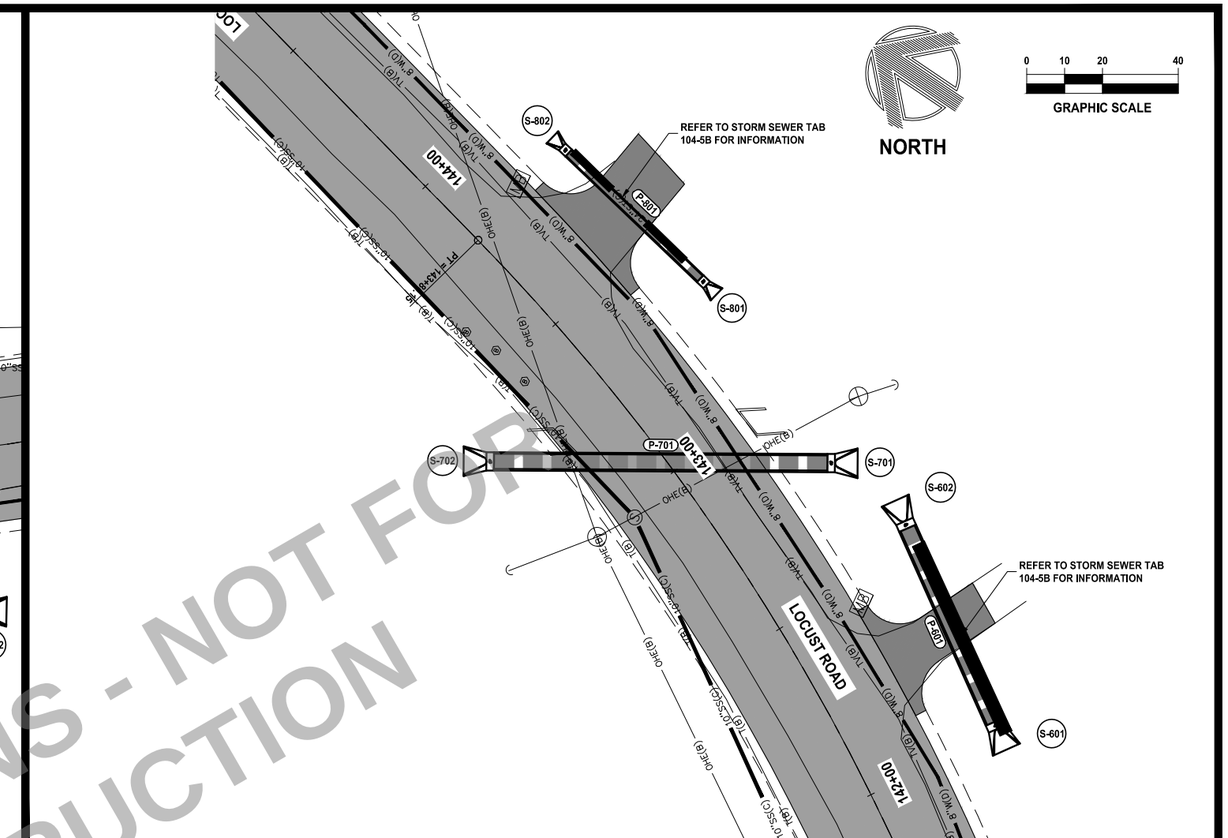

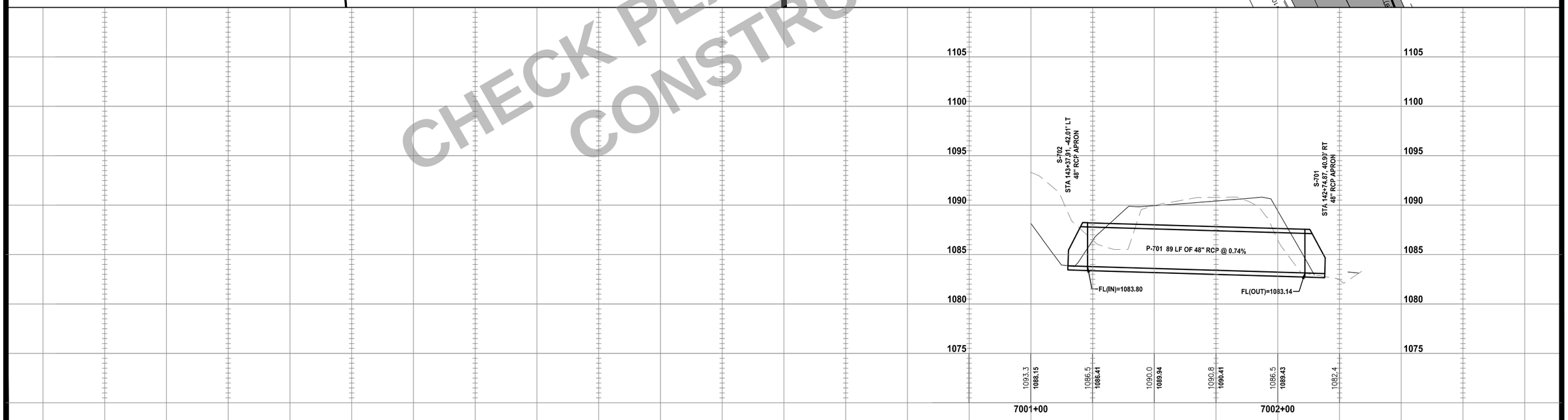

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY	
JSS	BAV	DECORAH, IOWA
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001
BAK	-	DECEMBER 2019

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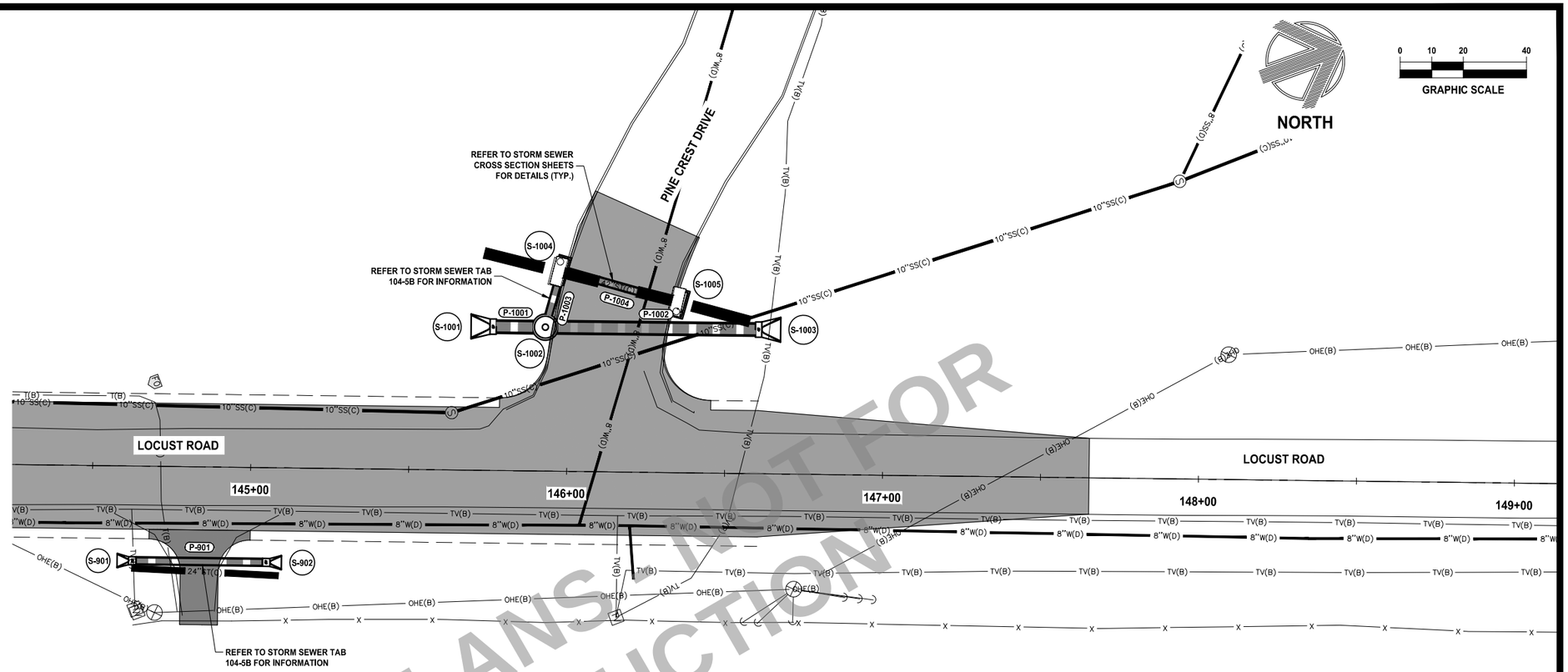
fax 319-626-9095

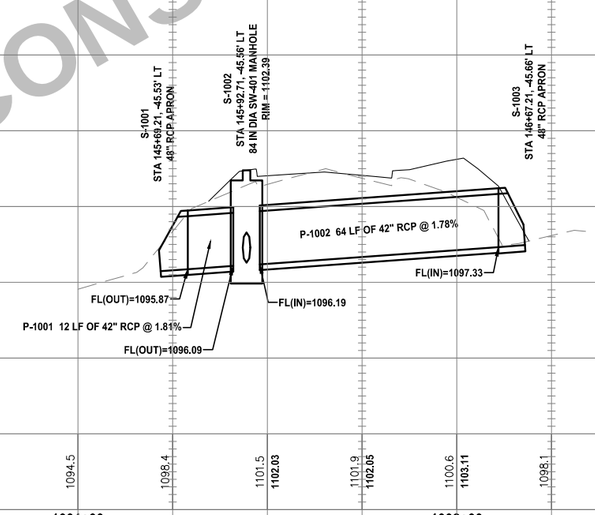
LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020

LOCUST ROAD STORM SEWER PLAN AND PROFILE

STBG-SWAP-1867(617)--SG-96

SHEET NO. M.06





CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN AND PROFILE	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						M.07
BAK	-	DECEMBER 2019	.						

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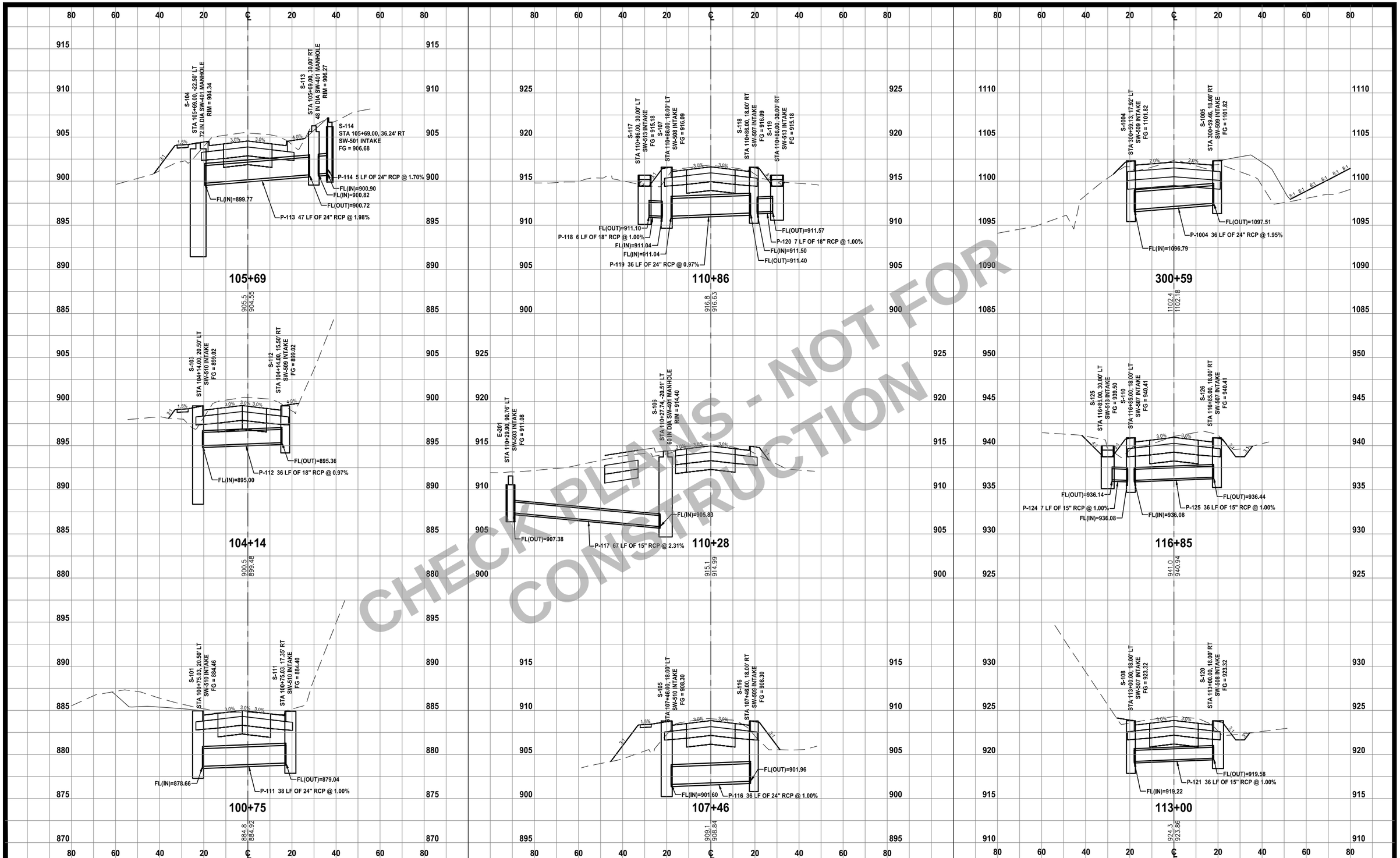

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	-	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER CROSS SECTIONS	STBG-SWAP-1867(617)--SG-96	M.08
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	-					
BAK	-	DECEMBER 2019	-					

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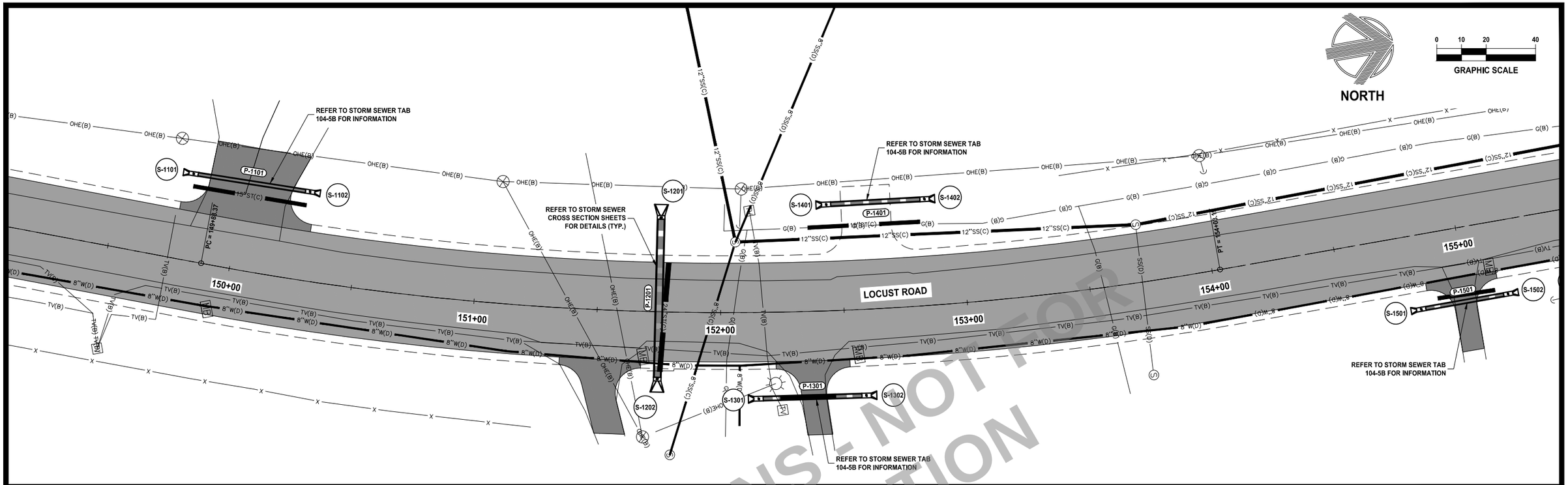

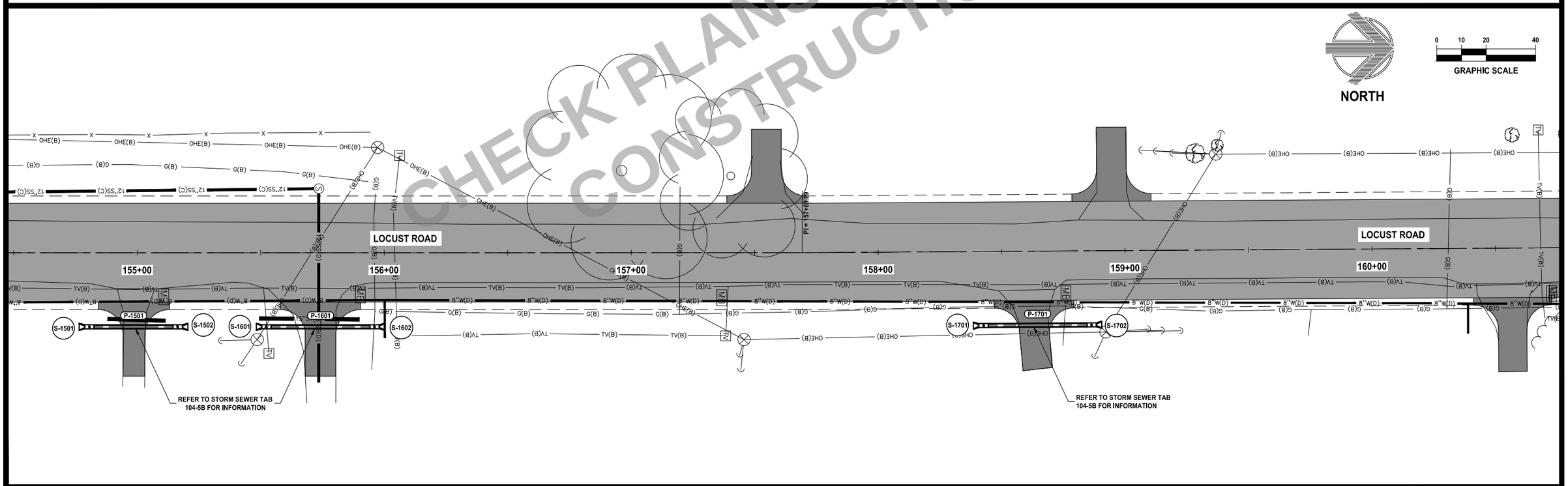

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	M.09
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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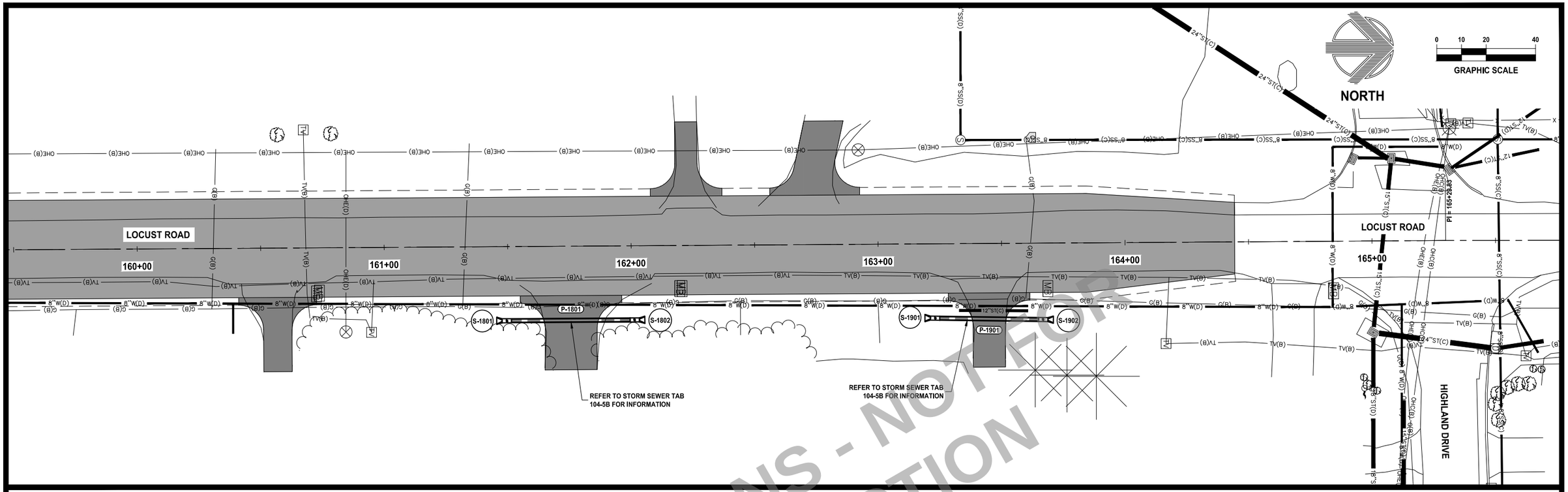

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS						
JSS	BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	.	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.		.							
BAK	-		.							M.10
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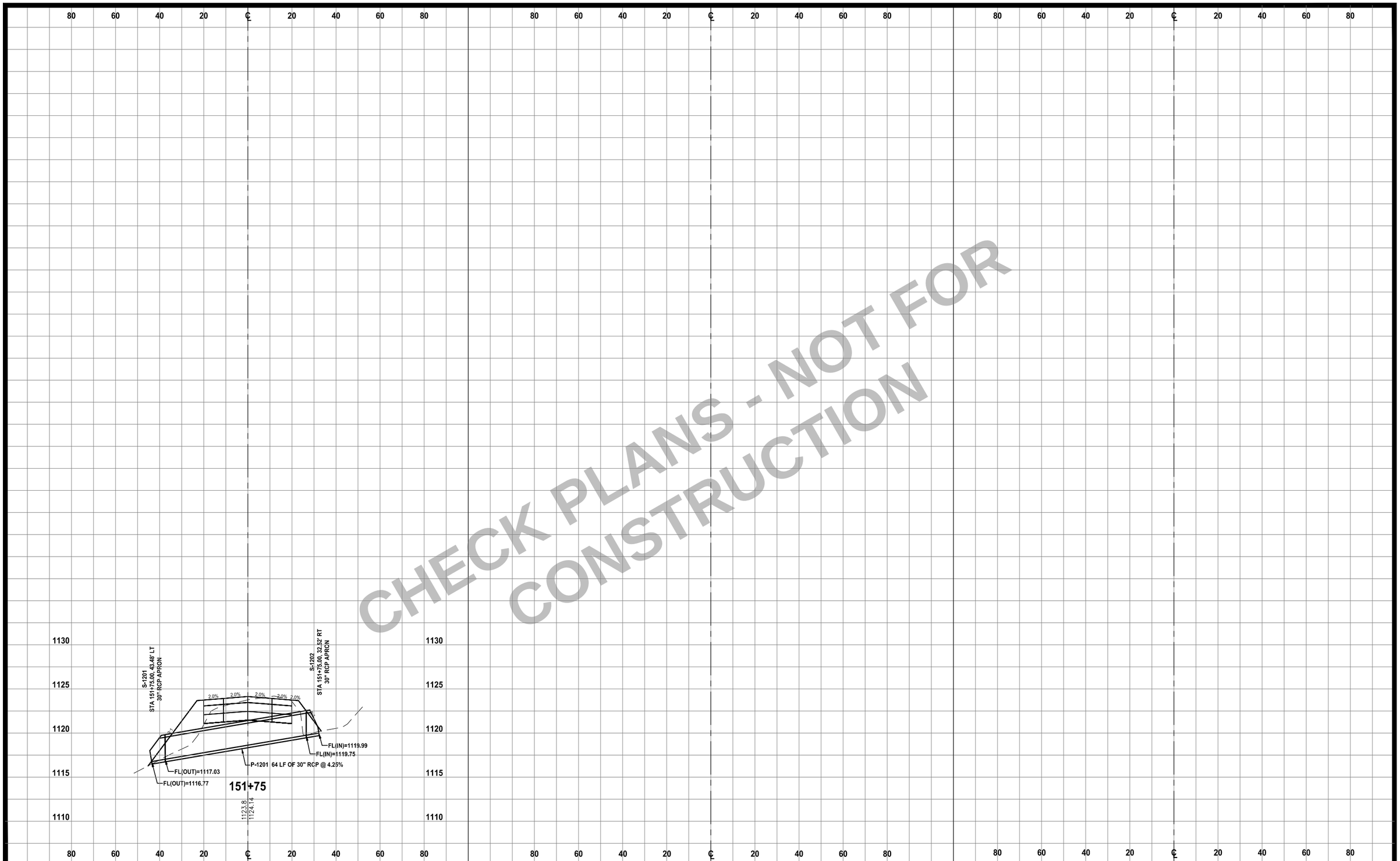
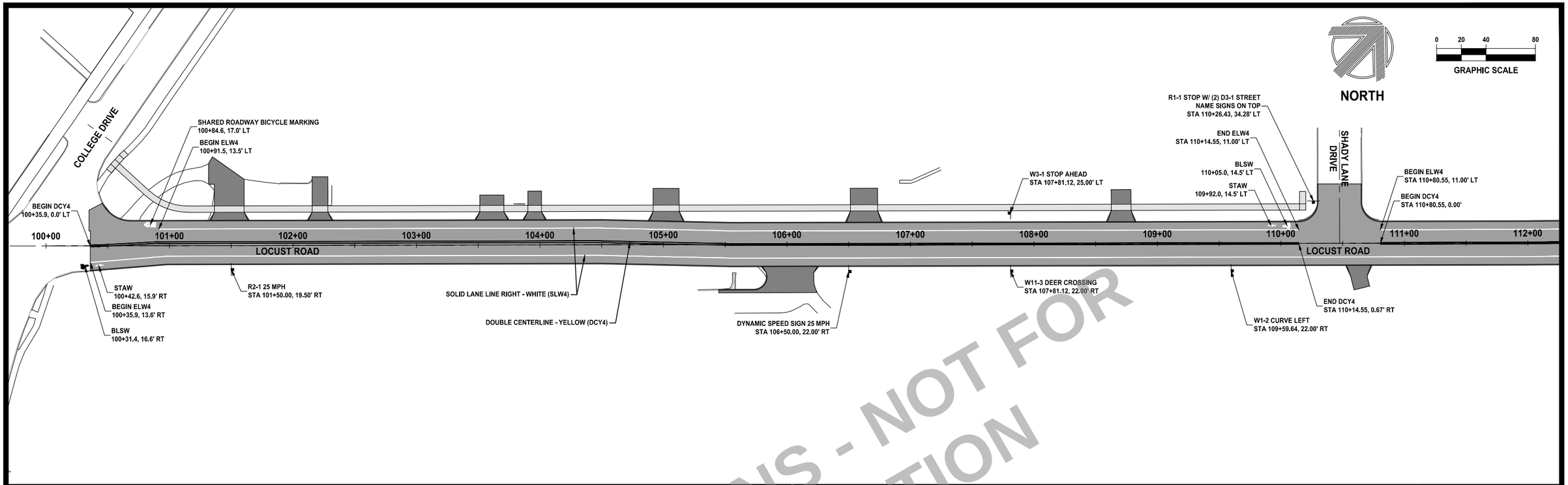
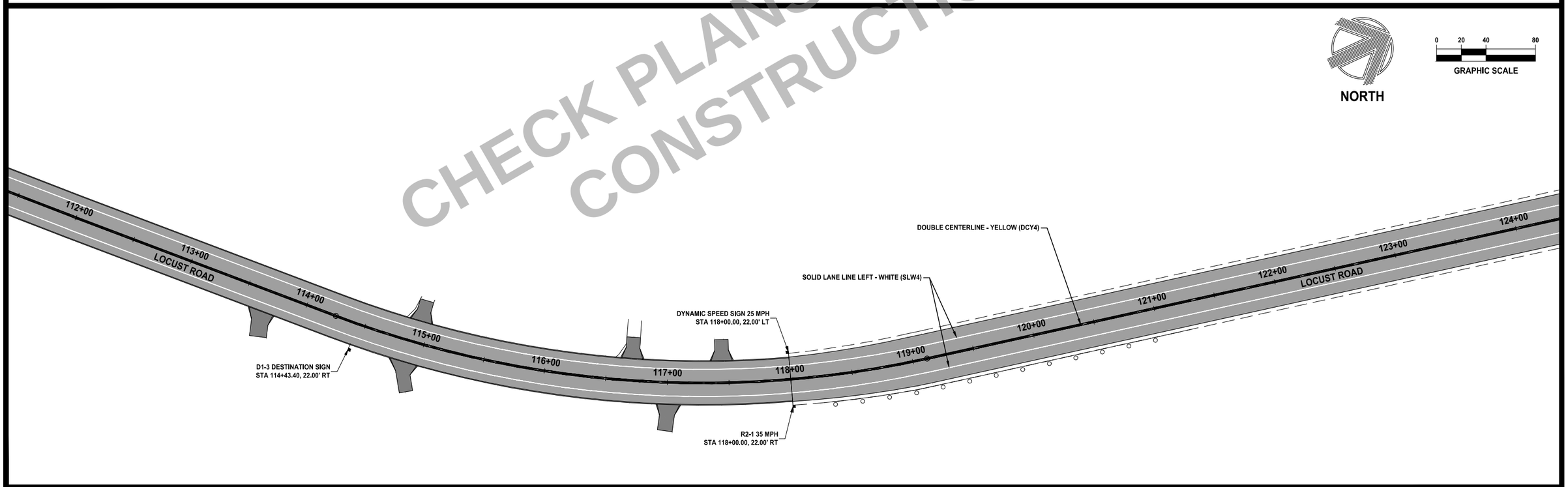


CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS						
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD STORM SEWER CROSS SECTIONS BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO. M.11
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						





CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	SIGNING, PAVEMENT MARKING AND SYMBOLS PLAN	STBG-SWAP-1867(617)--SG-96	N.01
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
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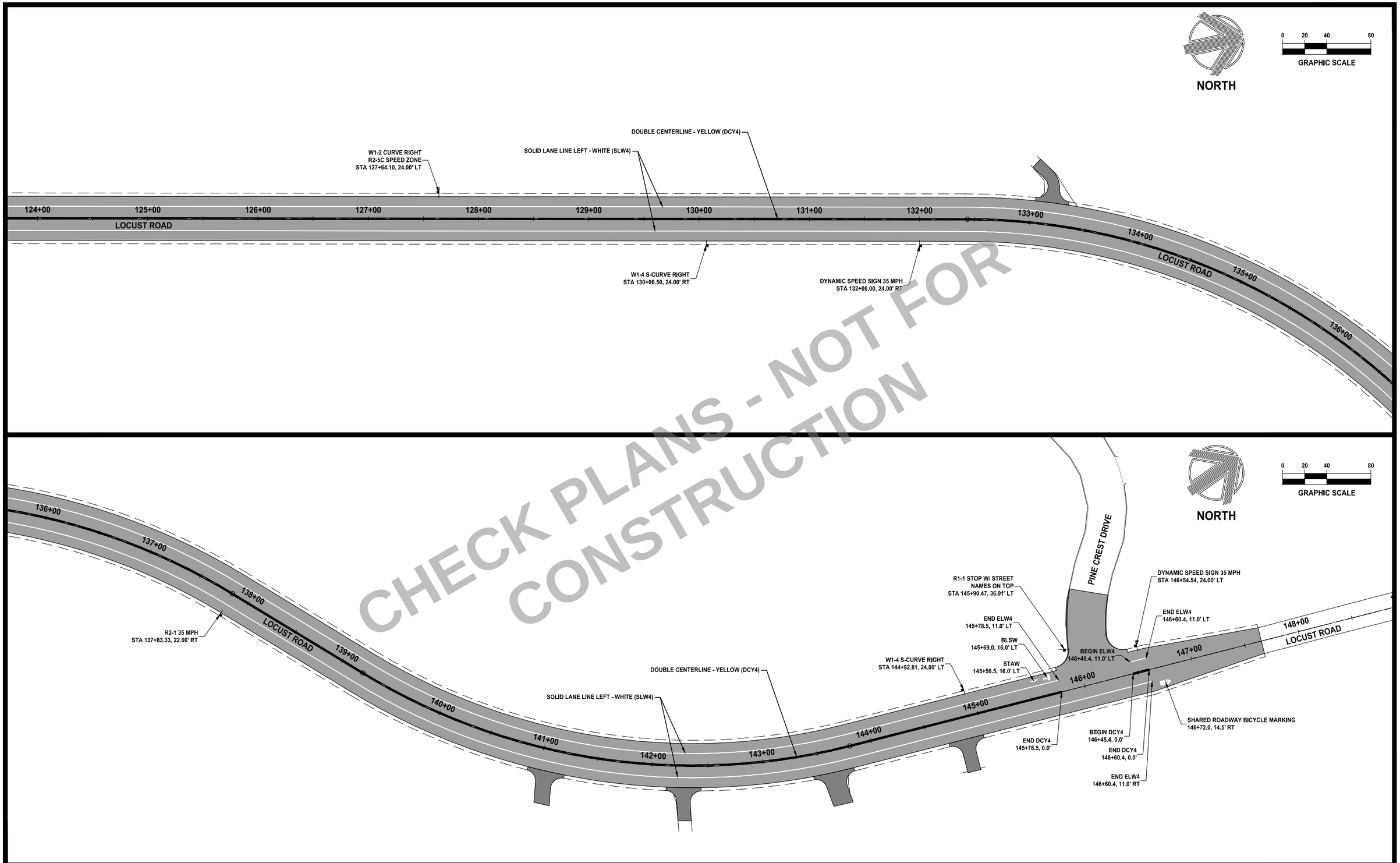

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	SIGNING, PAVEMENT MARKING AND SYMBOLS PLAN	STBG-SWAP-1867(617)--SG-96	N.02
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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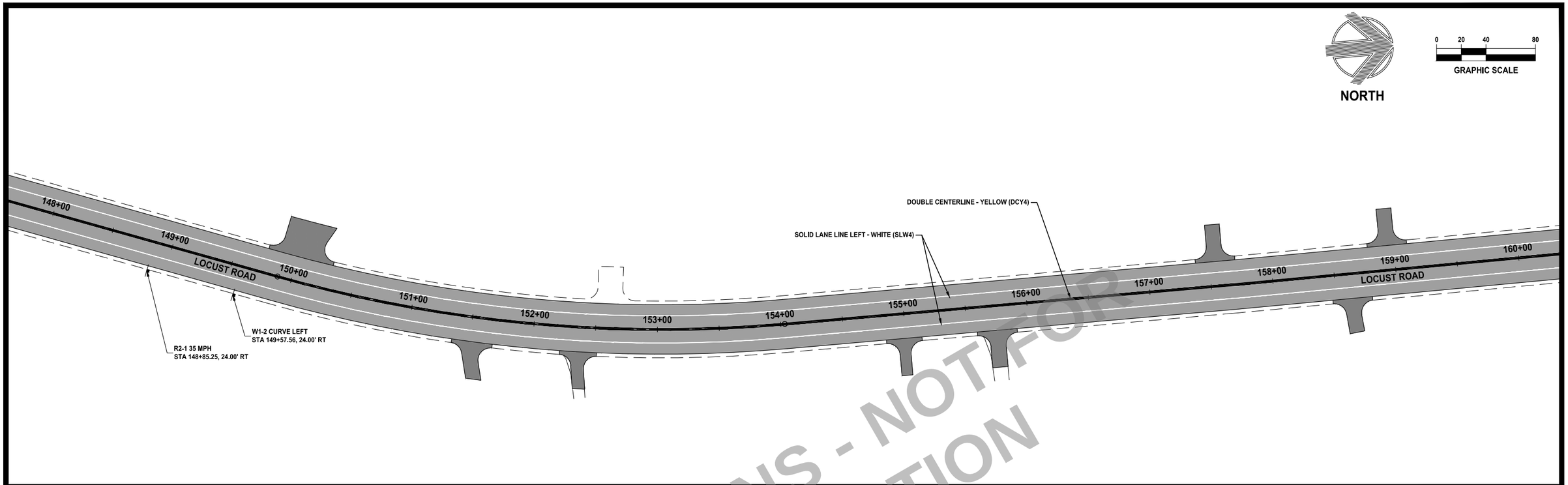

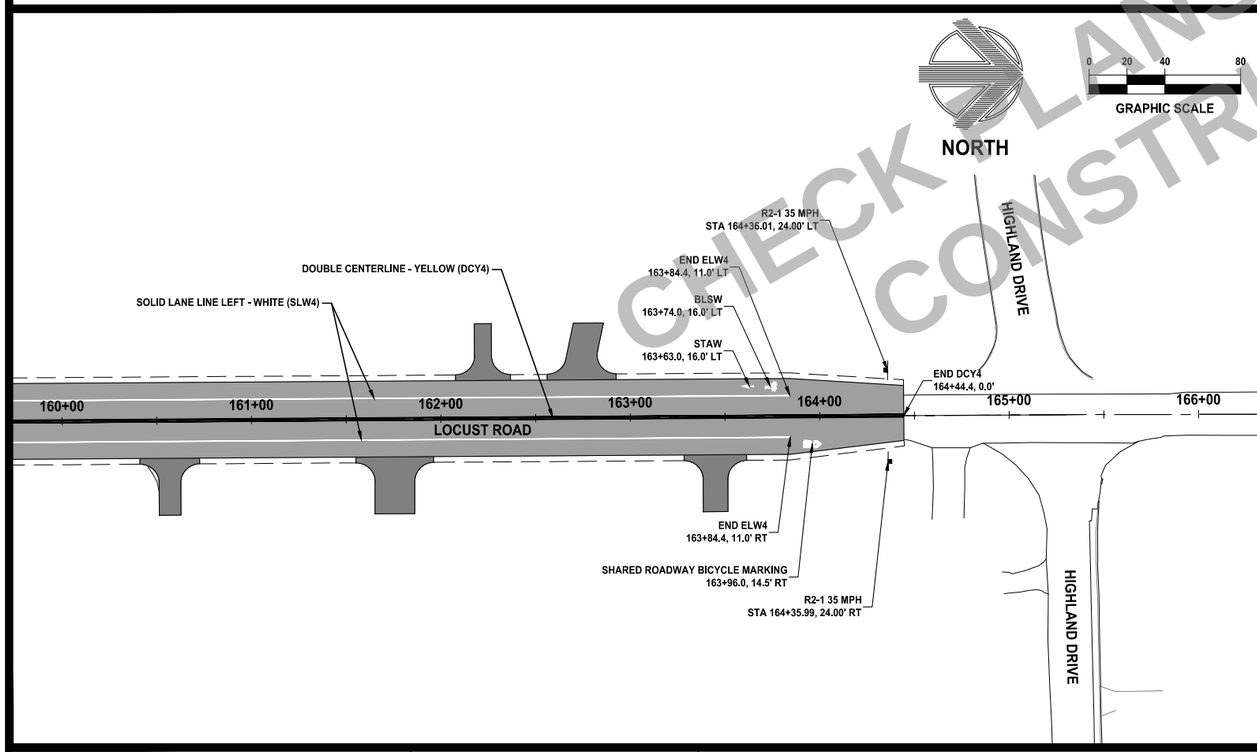

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	SIGNING, PAVEMENT MARKING AND SYMBOLS PLAN BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						N.03
BAK	-	DECEMBER 2019	.						

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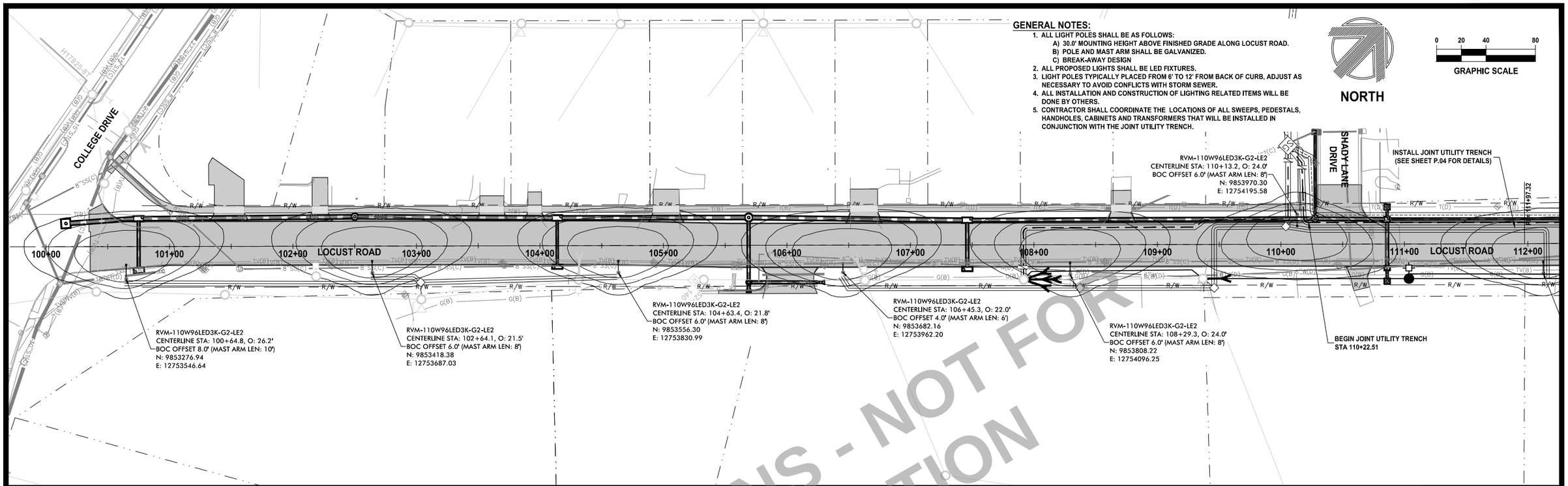
GENERAL NOTES:

1. ALL LIGHT POLES SHALL BE AS FOLLOWS:
   A) 30.0' MOUNTING HEIGHT ABOVE FINISHED GRADE ALONG LOCUST ROAD.
   B) POLE AND MAST ARM SHALL BE GALVANIZED.
   C) BREAK-AWAY DESIGN
2. ALL PROPOSED LIGHTS SHALL BE LED FIXTURES.
3. LIGHT POLES TYPICALLY PLACED FROM 6' TO 12' FROM BACK OF CURB, ADJUST AS NECESSARY TO AVOID CONFLICTS WITH STORM SEWER.
4. ALL INSTALLATION AND CONSTRUCTION OF LIGHTING RELATED ITEMS WILL BE DONE BY OTHERS.
5. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL SWEEPS, PEDESTALS, HANDHOLES, CABINETS AND TRANSFORMERS THAT WILL BE INSTALLED IN CONJUNCTION WITH THE JOINT UTILITY TRENCH.

NORTH

0 20 40 80
GRAPHIC SCALE



NORTH

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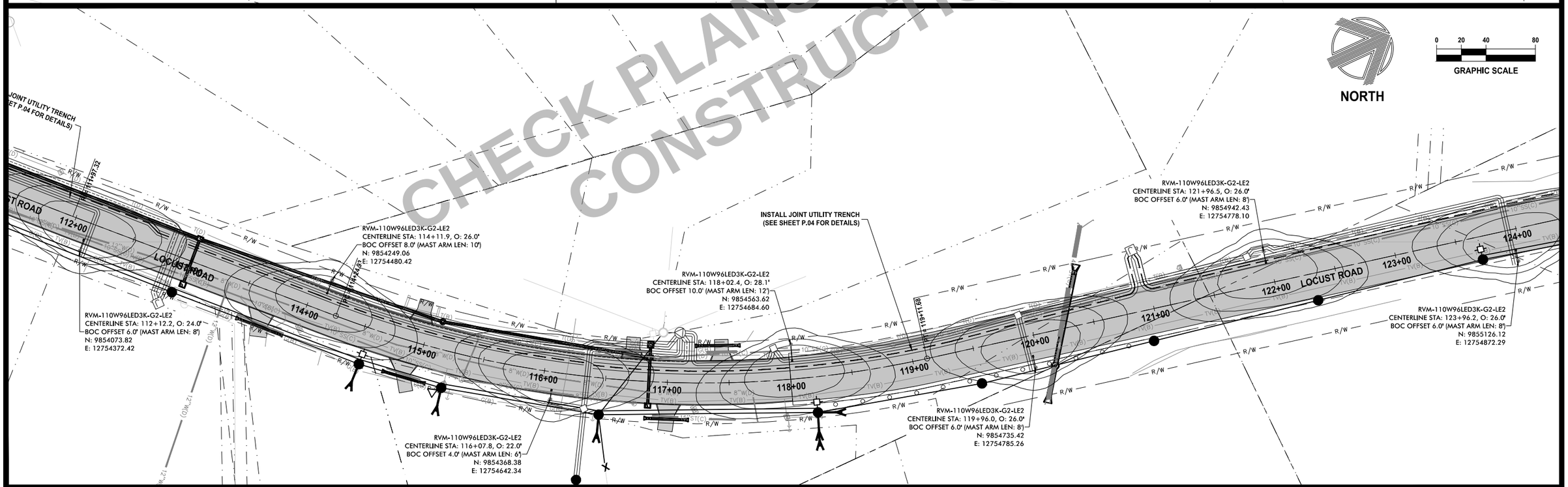
GRAPHIC SCALE



CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BMF	DECORAH, IOWA	-	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	JOINT UTILITY TRENCH AND LIGHTING PLAN	STBG-SWAP-1867(617)--SG-96	P.01
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	-					
-	-	NOVEMBER 2019	-					

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GENERAL NOTES:

1. ALL LIGHT POLES SHALL BE AS FOLLOWS:
   A) 30.0' MOUNTING HEIGHT ABOVE FINISHED GRADE ALONG LOCUST ROAD.
   B) POLE AND MAST ARM SHALL BE GALVANIZED.
   C) BREAK-AWAY DESIGN
2. ALL PROPOSED LIGHTS SHALL BE LED FIXTURES.
3. LIGHT POLES TYPICALLY PLACED FROM 6' TO 12' FROM BACK OF CURB, ADJUST AS NECESSARY TO AVOID CONFLICTS WITH STORM SEWER.
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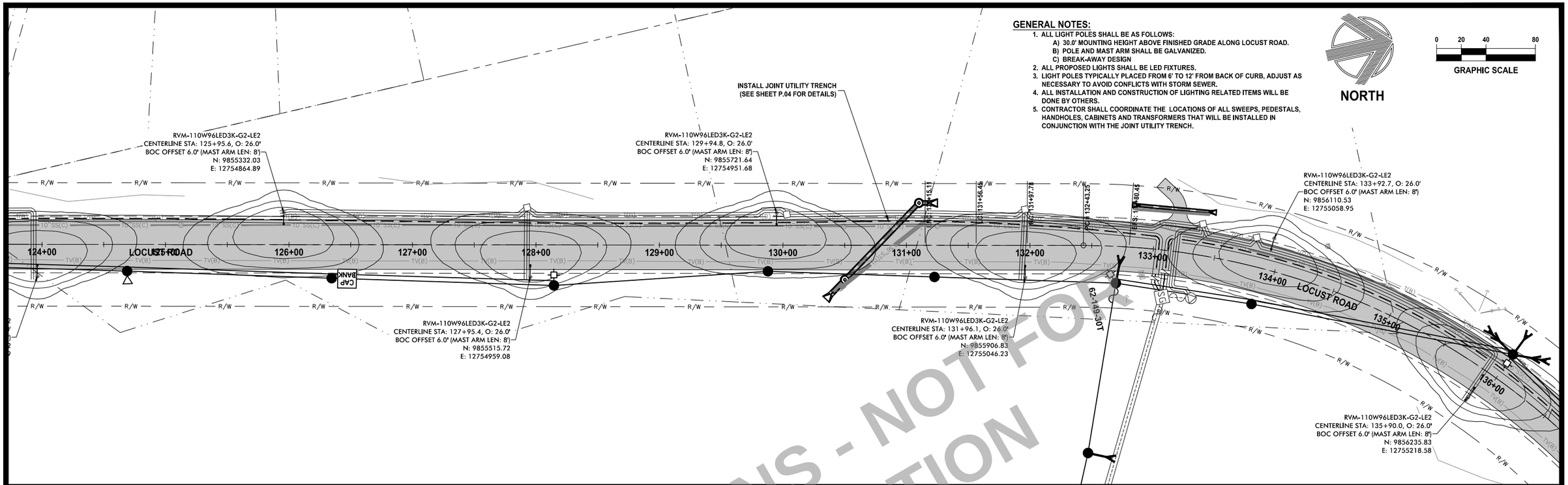
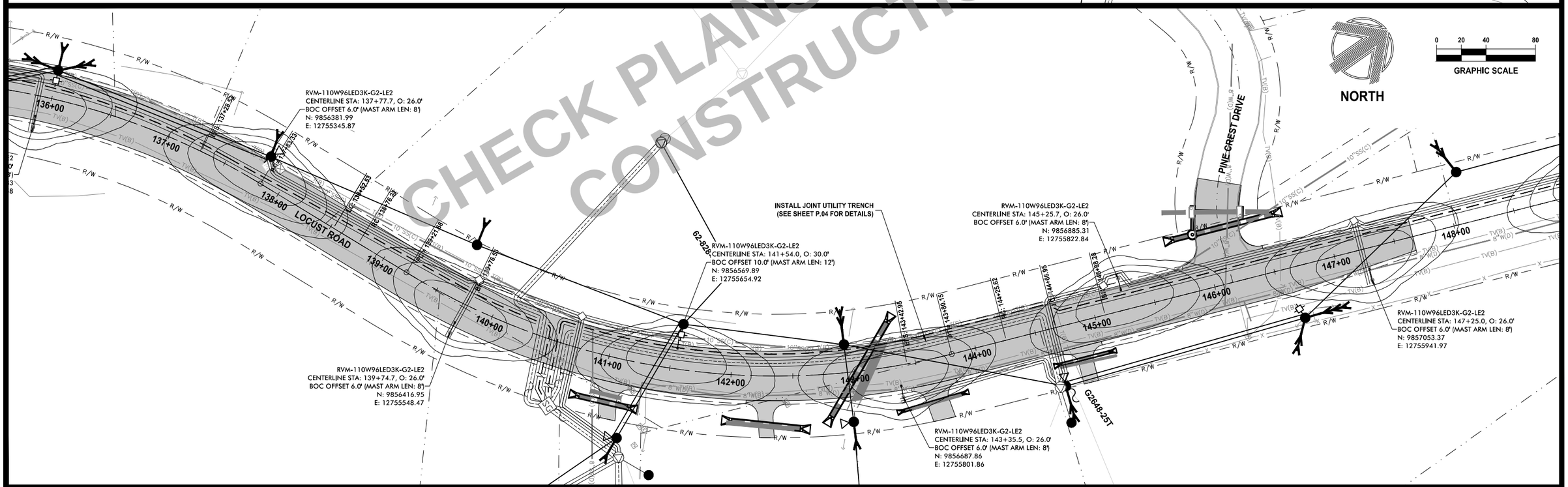
NORTH

0 20 40 80
GRAPHIC SCALE





NORTH

0 20 40 80
GRAPHIC SCALE

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER	DRAWN BY	DECORAH, IOWA	REVISIONS					SHEET NO.
JSS	BMF	MEC #30616018-001	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	JOINT UTILITY TRENCH AND LIGHTING PLAN	STBG-SWAP-1867(617)--SG-96	P.02
CHECKED BY	FIELD BOOK NO.	NOVEMBER 2019	.					
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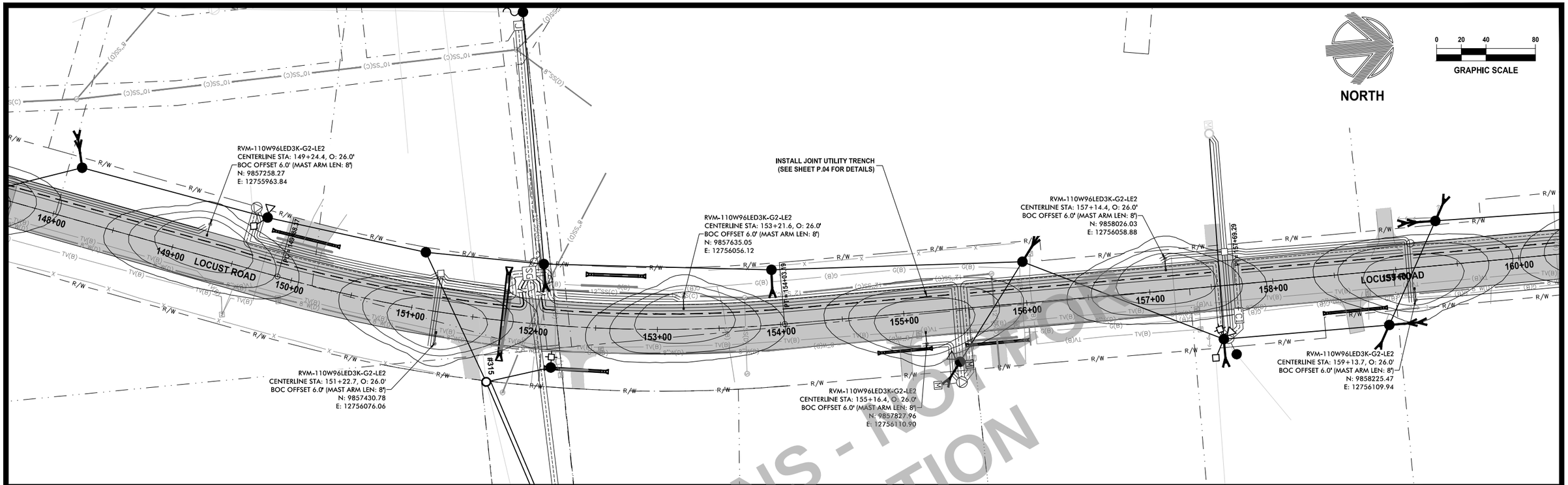

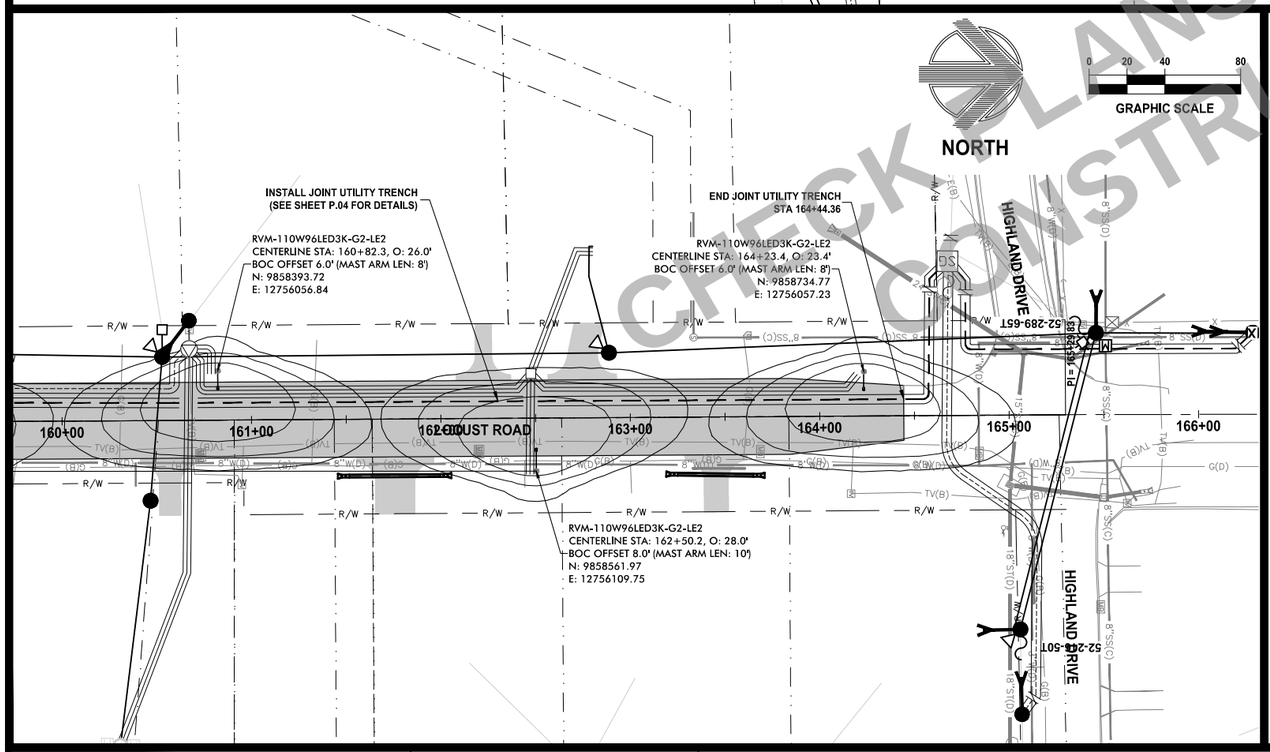

CHECK PLANS - NOT FOR CONSTRUCTION

GENERAL NOTES:

1. ALL LIGHT POLES SHALL BE AS FOLLOWS:
   A) 30.0' MOUNTING HEIGHT ABOVE FINISHED GRADE ALONG LOCUST ROAD.
   B) POLE AND MAST ARM SHALL BE GALVANIZED.
   C) BREAK-AWAY DESIGN
2. ALL PROPOSED LIGHTS SHALL BE LED FIXTURES.
3. LIGHT POLES TYPICALLY PLACED FROM 6' TO 12' FROM BACK OF CURB, ADJUST AS NECESSARY TO AVOID CONFLICTS WITH STORM SEWER.
4. STANDARD ROAD PLAN SPEC LI-201, TYPE A LIGHT POLE FOUNDATION TO BE USED, TYPE C FOUNDATION CAN BE USED WHEN COMPETENT ROCK IS FOUND.
5. ALL INSTALLATION AND CONSTRUCTION OF LIGHTING RELATED ITEMS WILL BE DONE BY OTHERS.
6. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL SWEEPS, PEDESTALS, HANDHOLES, CABINETS AND TRANSFORMERS THAT WILL BE INSTALLED IN CONJUNCTION WITH THE JOINT UTILITY TRENCH.

Statistics

Description	Avg	Max	Min	Avg/Min
Locust Road	0.84 fc	2.94 fc	0.14 fc	6.0:1

Schedule

QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
34	RVM-110W96LED3K-G2-LE2	RoadView LED Cobra Head (RVM), 96 LED's, 3000K CCT, TYPE LE2 OPTIC, Clear Glass Lens	(6) LEDgine 3 IP20 DRIVEN AT 350mA	1	10483	0.85	102.1

LUMEC by Signify

Roadway
RoadView
RVM
LED Luminaire (medium)

Lumec **RoadView LED** roadway luminaires were created to help those responsible for lighting our streets and highways succeed in their lighting design goals. Powered by the latest LED technology, and featuring innovative thermal management design, the RoadView offers exceptional performance and value. This versatile luminaire can be tailored to the unique specifications of each project by offering multiple LED boards and wattage options.

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Ordering guide

Example: RVM-215W96LED4K-G2-LE3-UNV-DMG-GY3

Series	LED module	Gen.	Optical system	Voltage	Driver options	Luminaire options	Accessories	Finish
RVM	110W96LED3K	G2	LE2					GY3
RVM	**3000K** 110W96LED3K 125W112LED3K 145W128LED3K 160W144LED3K 160W96LED3K 180W160LED3K 190W112LED3K 215W96LED3K 215W128LED3K 245W144LED3K 270W160LED3K **4000K** 110W96LED4K 125W112LED4K 145W128LED4K 160W144LED4K 160W96LED4K 180W160LED4K 190W112LED4K 215W96LED4K 215W128LED4K 245W144LED4K 270W160LED4K	**G2** Gen2	**LE2** Type II (ASYM) **LE3** Type III (ASYM) **LE4** Type IV (ASYM) **LE5**[2] Type V (ASYM)	**HVU** 347-480V **UNV** 120-277V	**AST**[1,4] Pre-set driver for progressive start-up **CDMGE25**[1,4] 8 hrs. 25% reduction **CDMGE50**[1,4] 8 hrs. 50% reduction **CDMGE75**[1,4] 8 hrs. 75% reduction **CDMGM25**[1,4] 6 hrs. 25% reduction **CDMGM50**[1,4] 6 hrs. 50% reduction **CDMGM75**[1,4] 6 hrs. 75% reduction **CDMGS25**[1,4] 4 hrs. 25% reduction **CDMGS50**[1,4] 4 hrs. 50% reduction **CDMGS75**[1,4] 4 hrs. 75% reduction **CLO**[1,4] Pre-set driver to manage lumen depreciation **DMG**[2] 0-10V **OTL**[1,4] Pre-set driver to signal end of life of the lamp	**API** Factory Installed NEMA label, ANSI C136.15 compliant **BL** Bubble Level **HS** House Side Shield, shield, 1 per 16 LED light engine **RC**[1] Receptacle for twist-lock photocell or shorting cap, 3-pin **SP2** 20kV / 20kA Surge Protector (optional)	**PH8** Twist-lock Photoelectric Cell, UNV (120–277VAC) **PH8/347** Twist-lock Photoelectric Cell, (347VAC) **PH8/480** Twist-lock Photoelectric Cell, (480VAC) **PHXL** Twist-lock Photoelectric Cell, extended life, UNV (120–277VAC) **PH9** Shorting cap	**BK** Black **BR** Bronze **GY3** Medium Grey **WH** White

ENGINEER	DRAWN BY		REVISIONS
JSS	BMF	DECORAH, IOWA	
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	
-	-	NOVEMBER 2019	

McCLURE™ making lives better

1740 Lininger Lane
North Liberty, Iowa 52317
319-626-9090
fax 319-626-9095

LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020

JOINT UTILITY TRENCH AND LIGHTING PLAN BID ALTERNATE 1

STBG-SWAP-1867(617)--SG-96

SHEET NO. P.03

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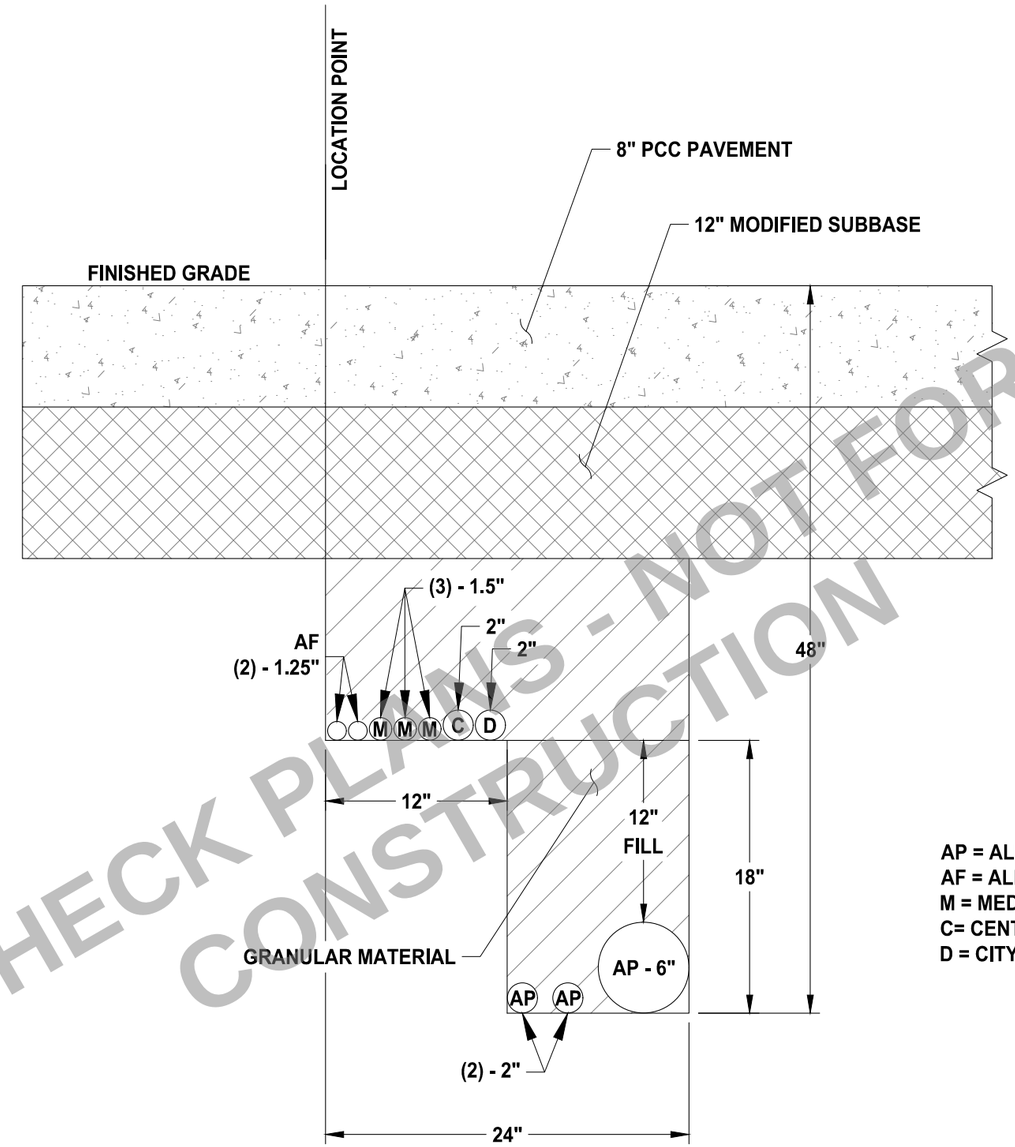

AP = ALLIANT POWER
AF = ALLIANT FIBER
M = MEDIACOM
C= CENTURYLINK
D = CITY OF DECORAH

CHECK PLANS - NOT FOR CONSTRUCTION

JOINT UTILITY TRENCH CROSS SECTION

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BMF	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	JOINT UTILITY TRENCH CROSS SECTION	STBG-SWAP-1867(617)--SG-96	P.04
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
-	-	NOVEMBER 2019	.					
			.					

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY	FIELD BOOK NO.		.						Q.01
BAK	-		.						
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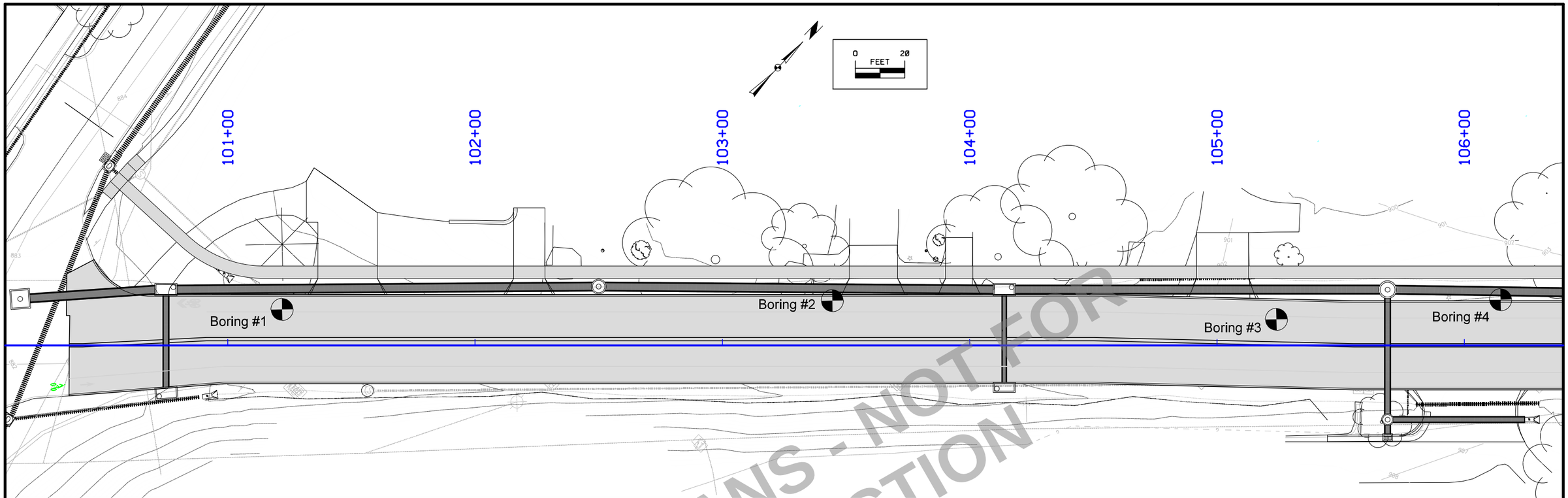

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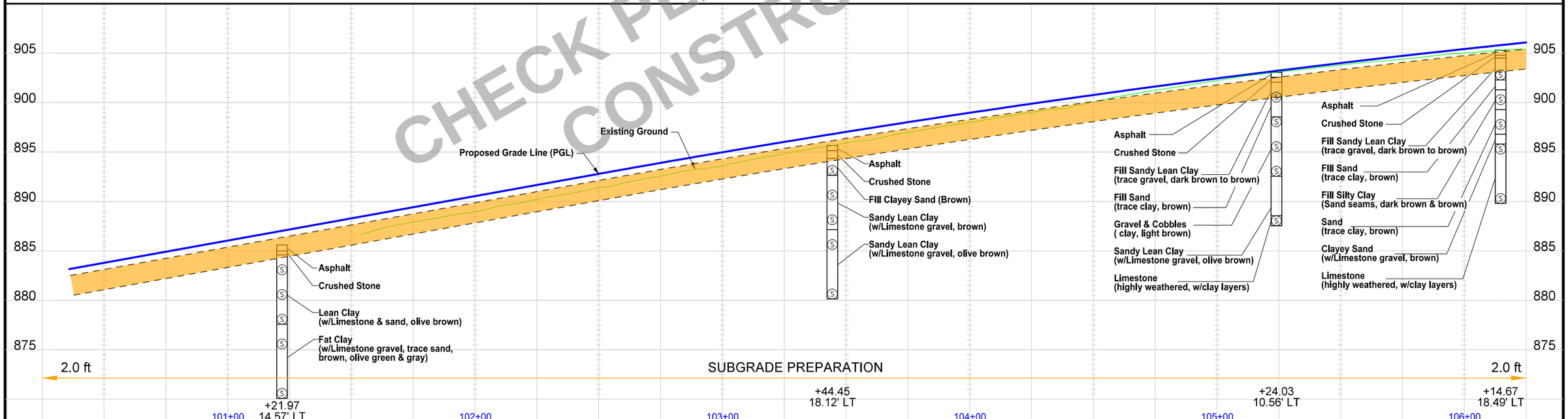

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	JJC	DECORAH, IOWA		McCLURE™ ENGINEERING Co.	building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	Q.02
CHECKED BY	FIELD BOOK NO.	MEC JOB #: 30616018						
BAK	--	DECEMBER 2019						

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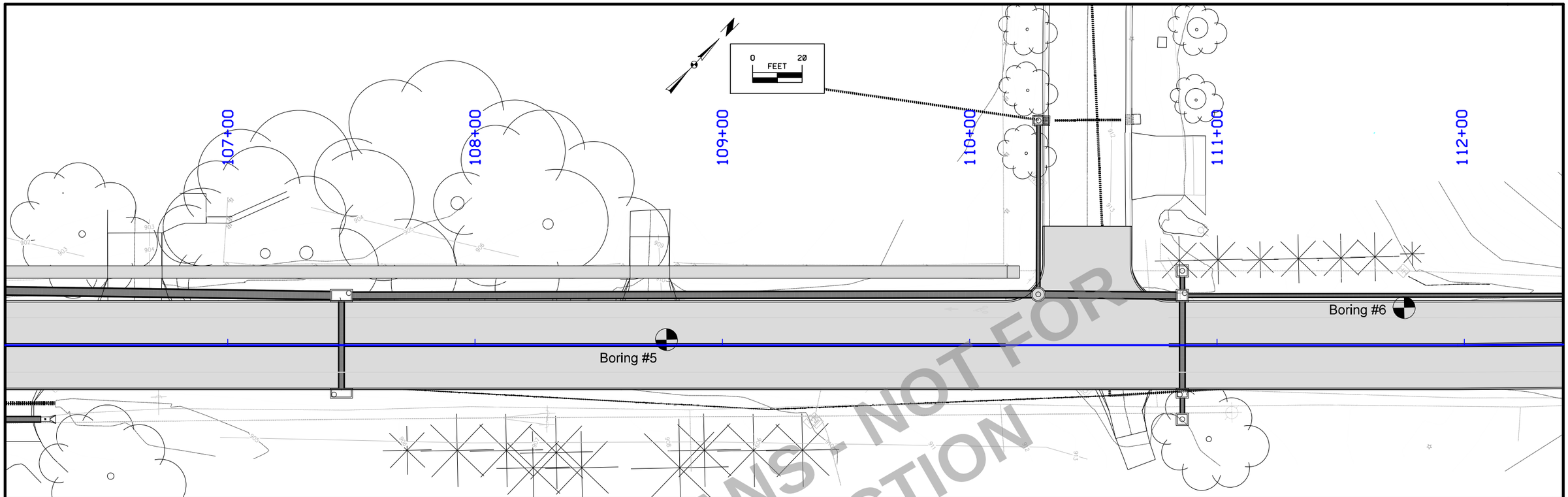

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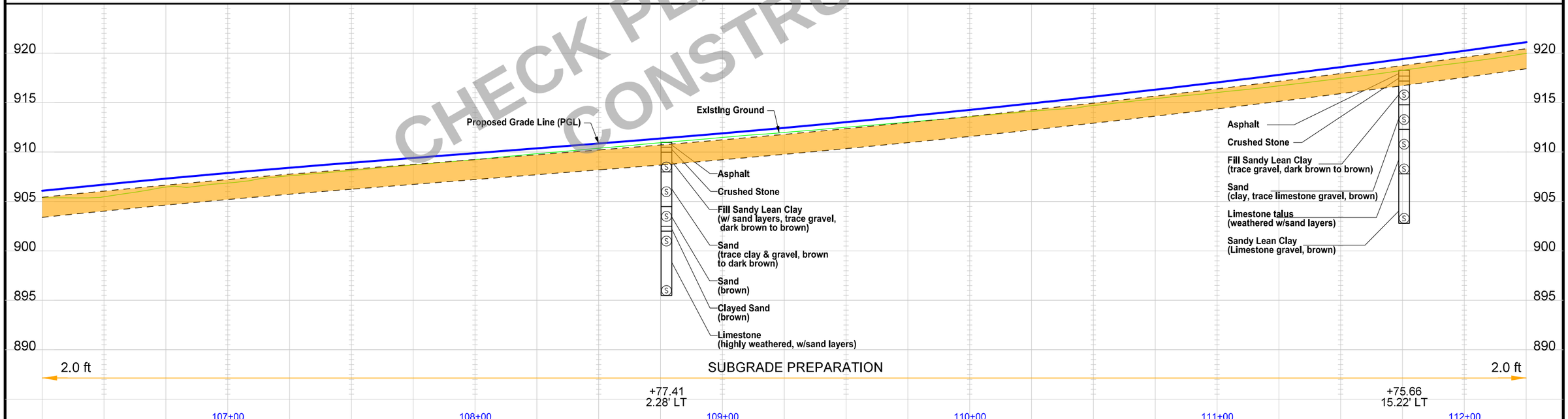

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ENGINEER JSS CHECKED BY BAK	DRAWN BY JJC FIELD BOOK NO. --	DECORAH, IOWA MEC JOB #: 30616018 DECEMBER 2019	REVISIONS	McCLURE™ ENGINEERING Co. building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	SHEET NO. Q.03

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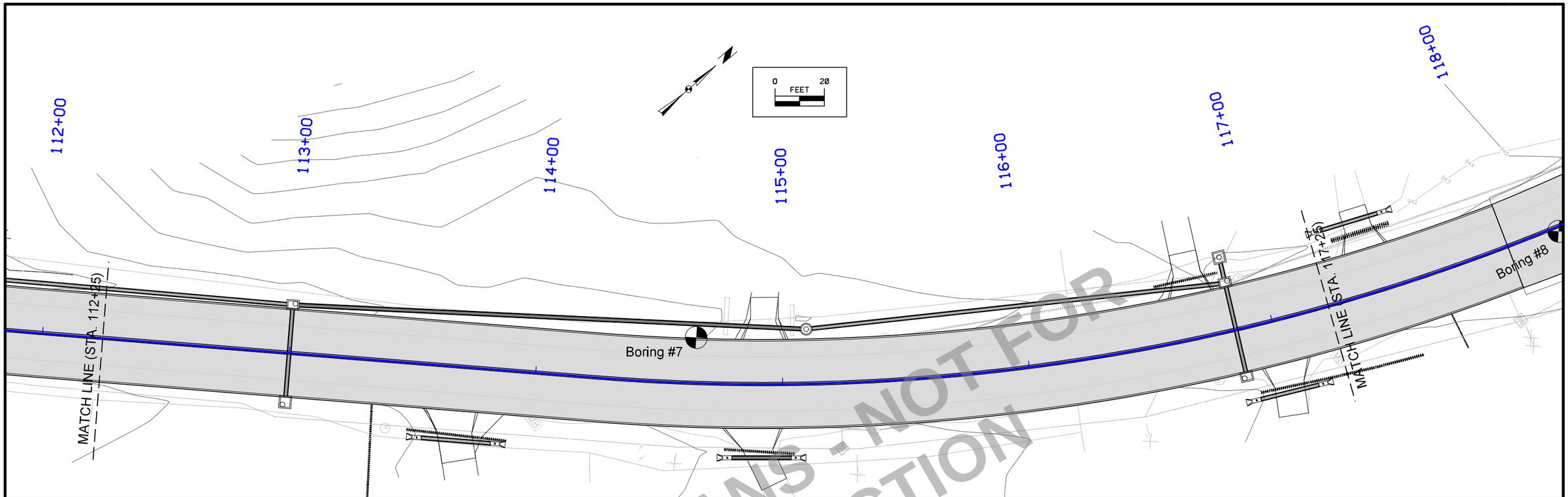

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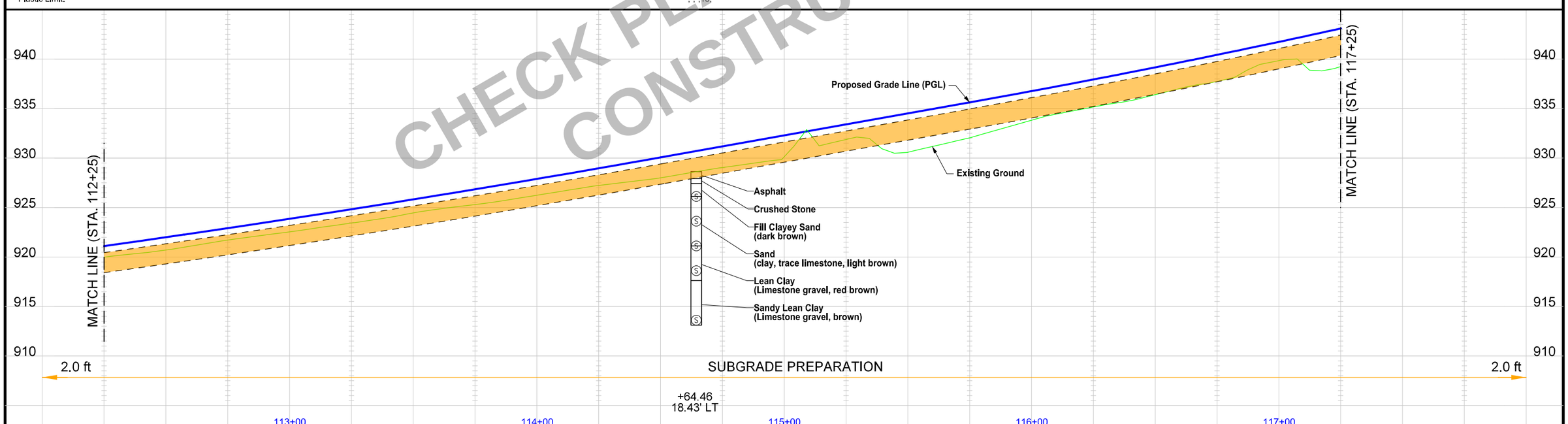

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ENGINEER JSS CHECKED BY BAK	DRAWN BY JJC FIELD BOOK NO. --	DECORAH, IOWA MEC JOB #: 30616018 DECEMBER 2019	REVISIONS	McCLURE™ ENGINEERING Co. building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	SHEET NO. Q.04

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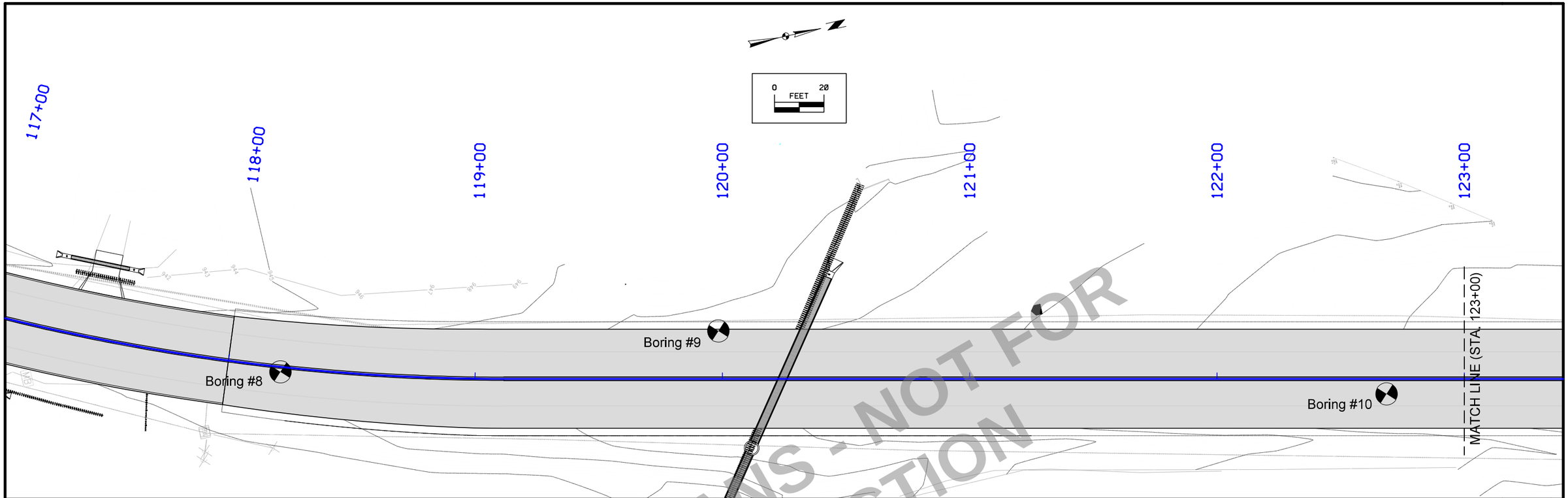

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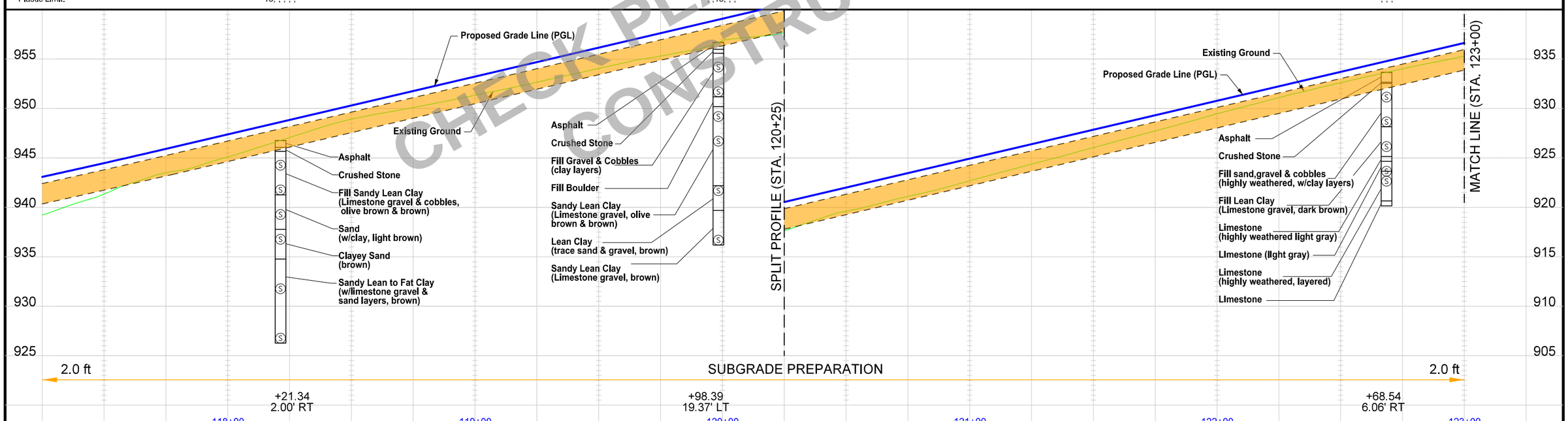

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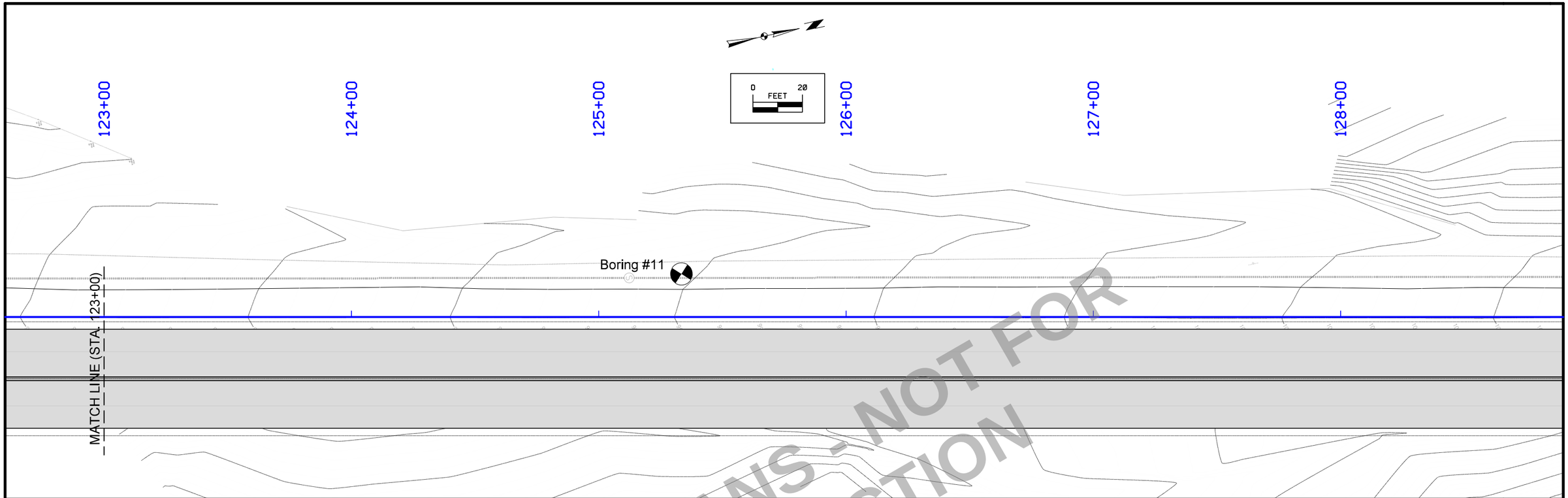

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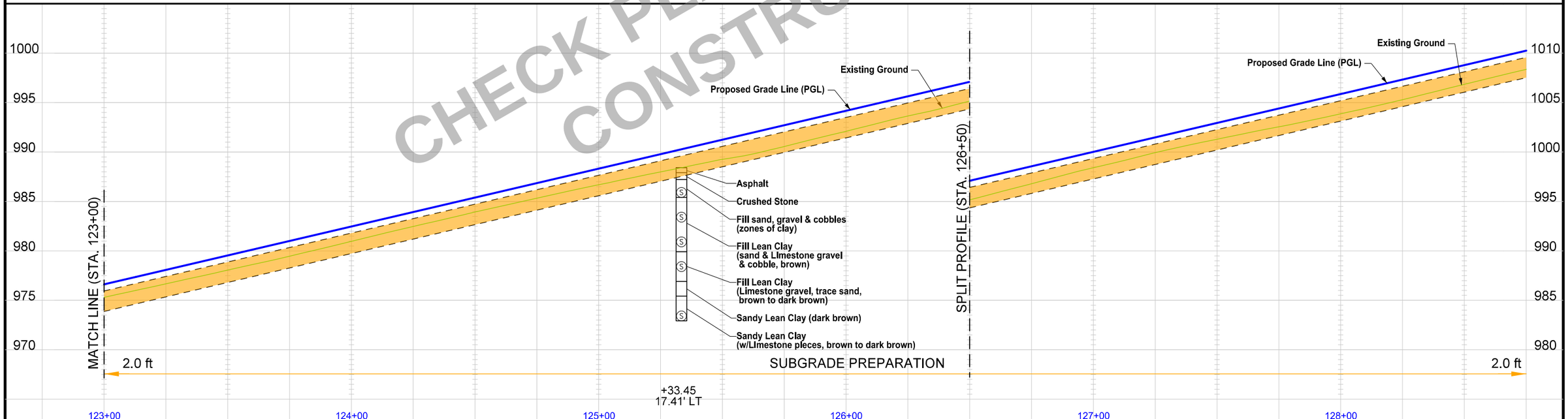

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JSS	JJC	DECORAH, IOWA		McCLURE™ ENGINEERING Co.	building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	Q.06
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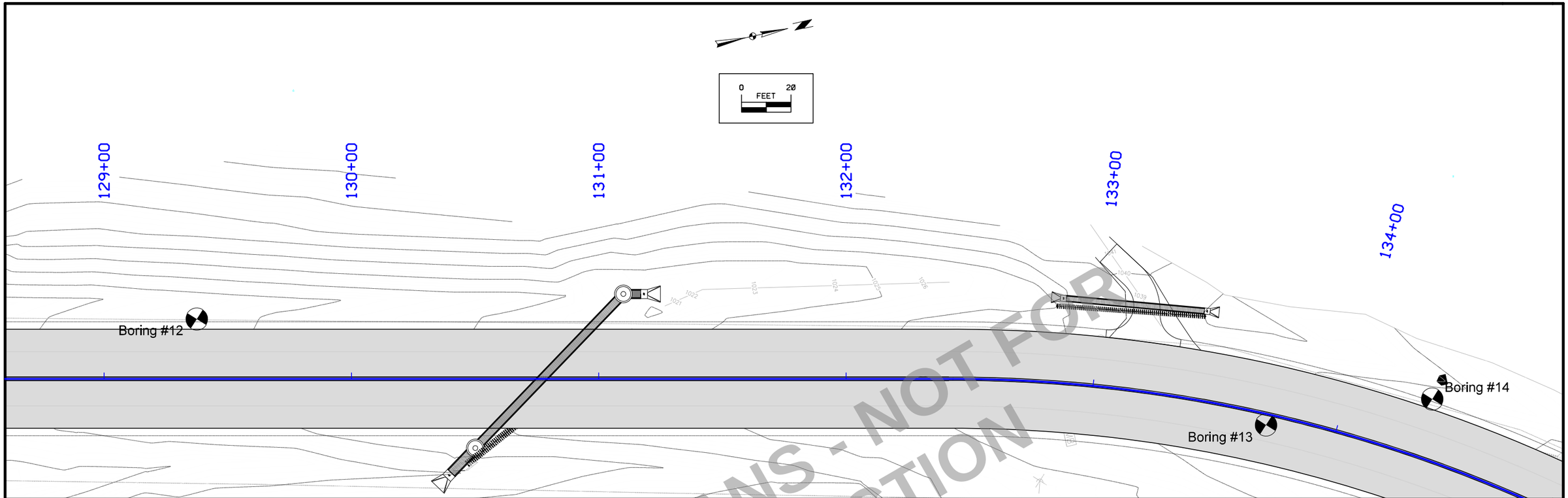

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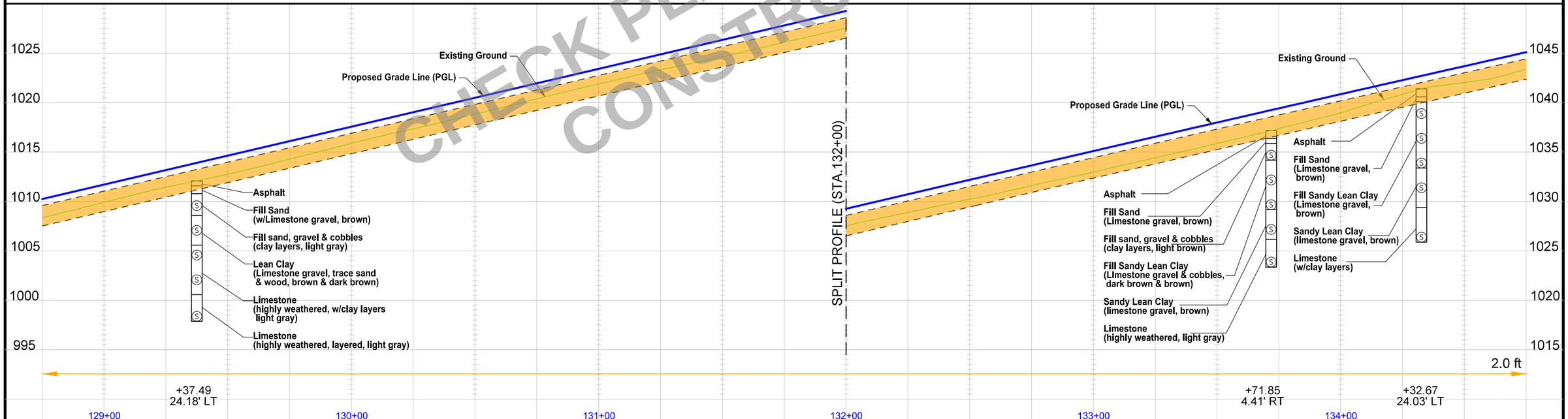
Plastic Limit:	-,16,-,-,-	-,-,-,-,-	-,-,-,-,-

CHECK PLANS - NOT FOR CONSTRUCTION



ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
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BAK	--	DECEMBER 2019								

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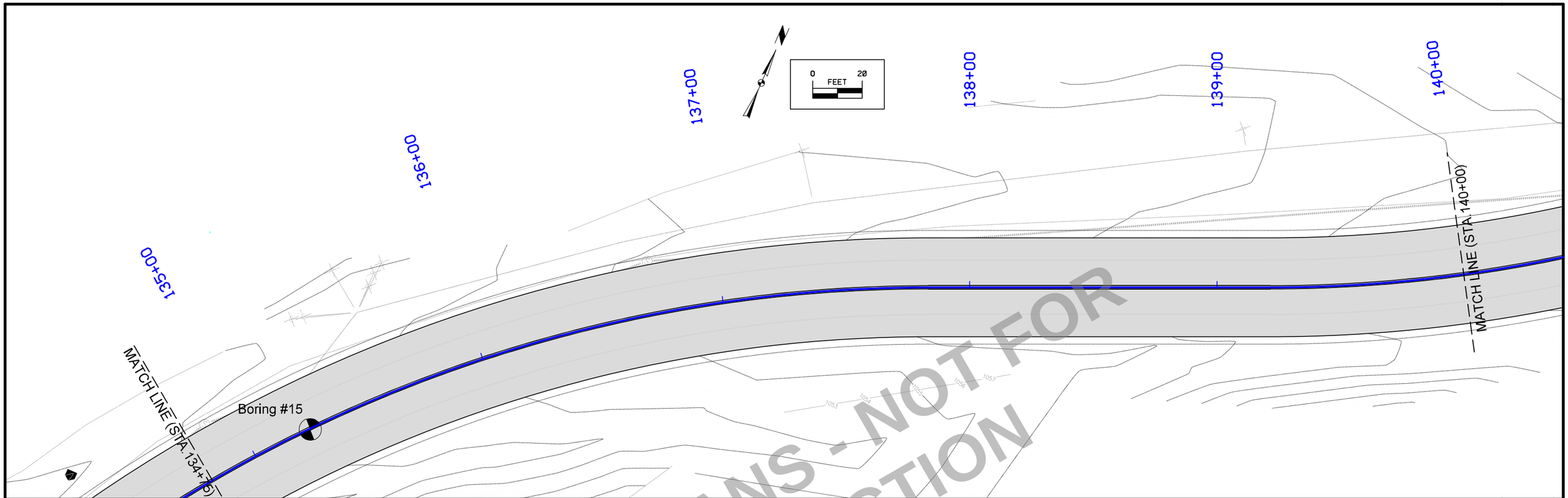

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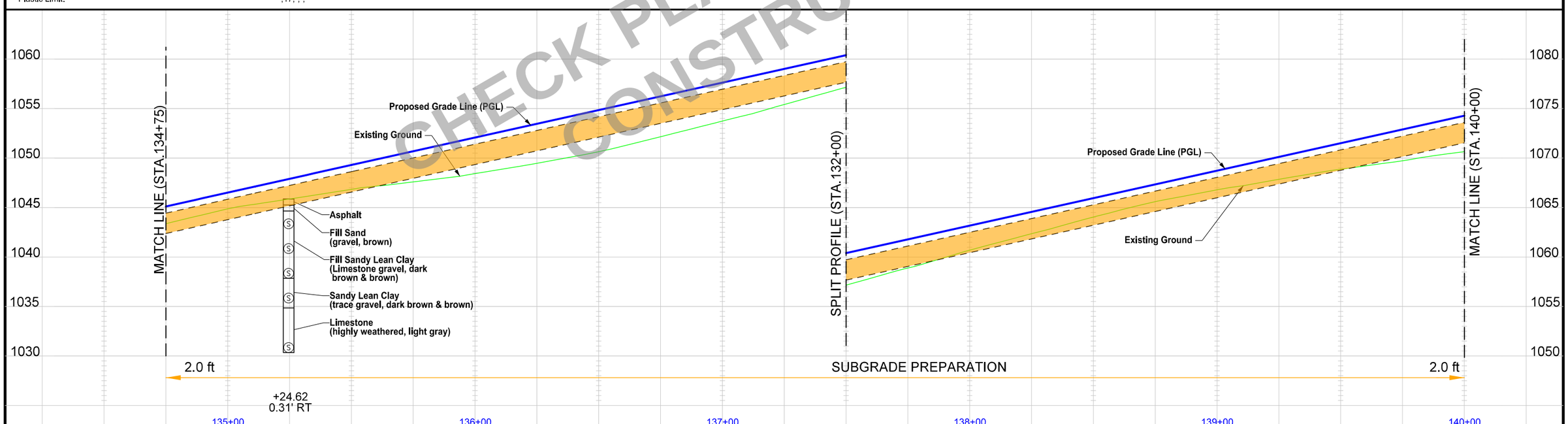
Cut Density:	-,-,-,-,-
Plastic Limit:	-,17,-,-,-



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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	JJC	DECORAH, IOWA		McCLURE™ ENGINEERING Co. building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	Q.08
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BAK	--	DECEMBER 2019						

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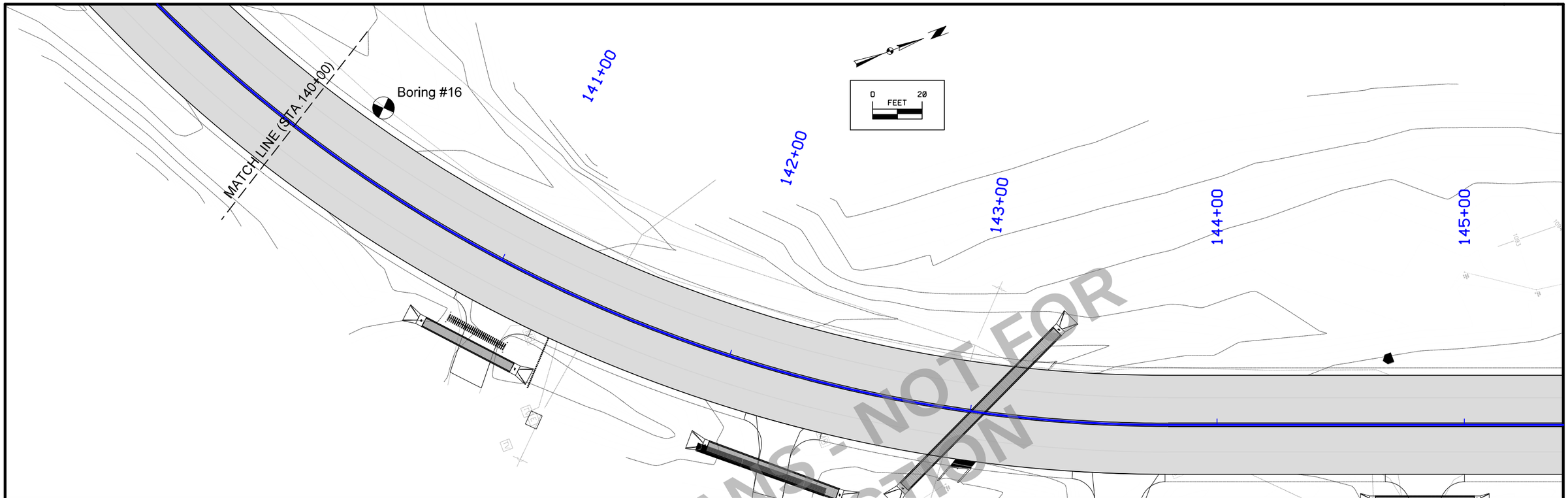

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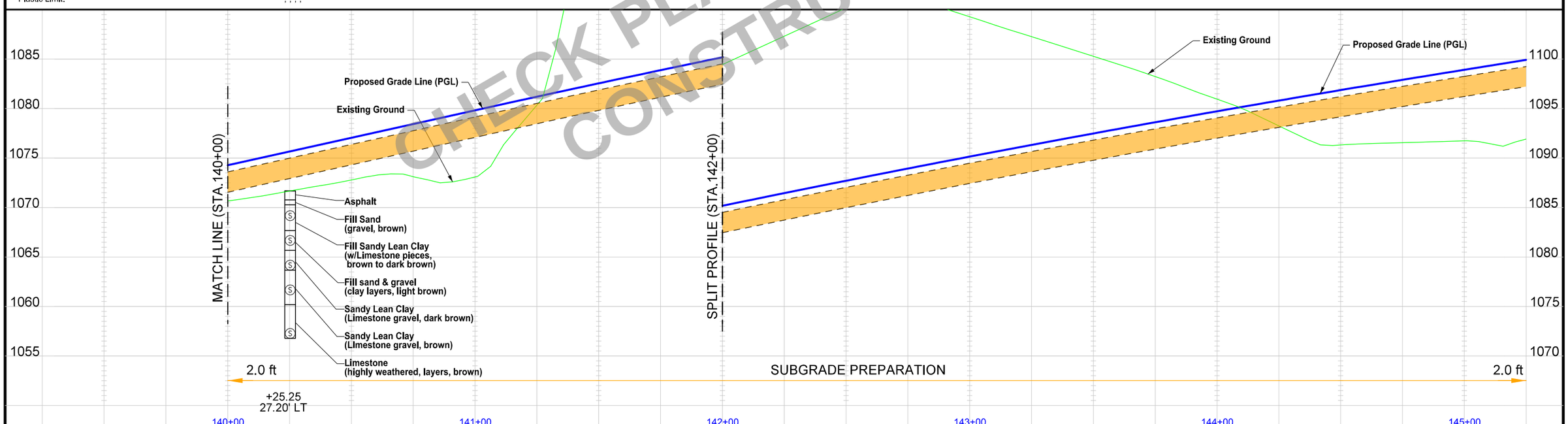
Plastic Limit:	-.-.-.-



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ENGINEER JSS CHECKED BY BAK	DRAWN BY JJC FIELD BOOK NO. --	DECORAH, IOWA MEC JOB #: 30616018 DECEMBER 2019	REVISIONS	McCLURE™ ENGINEERING Co.	building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	SHEET NO. Q.09

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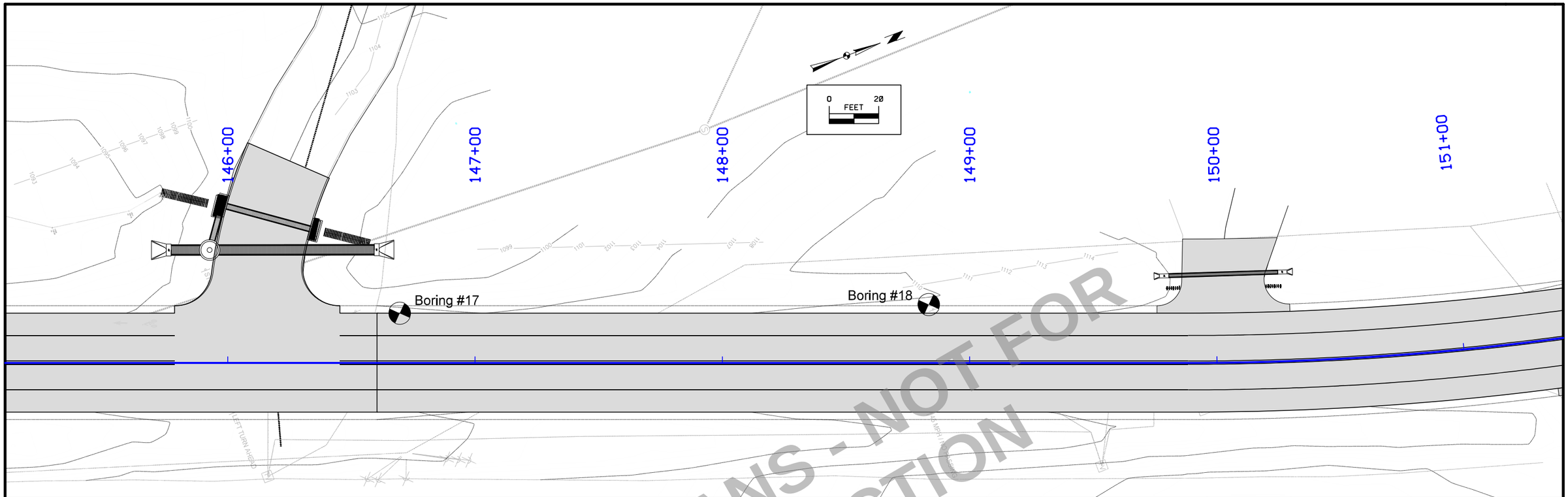

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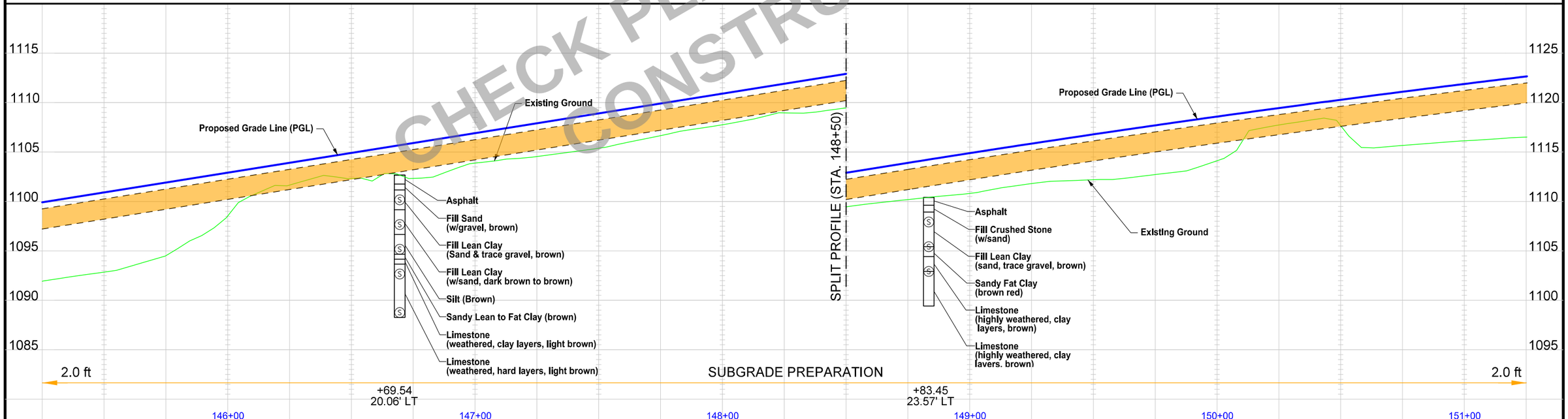

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	JJC	DECORAH, IOWA		McCLURE™ ENGINEERING Co. building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	Q.10
CHECKED BY	FIELD BOOK NO.	MEC JOB #: 30616018						
BAK	--	DECEMBER 2019						

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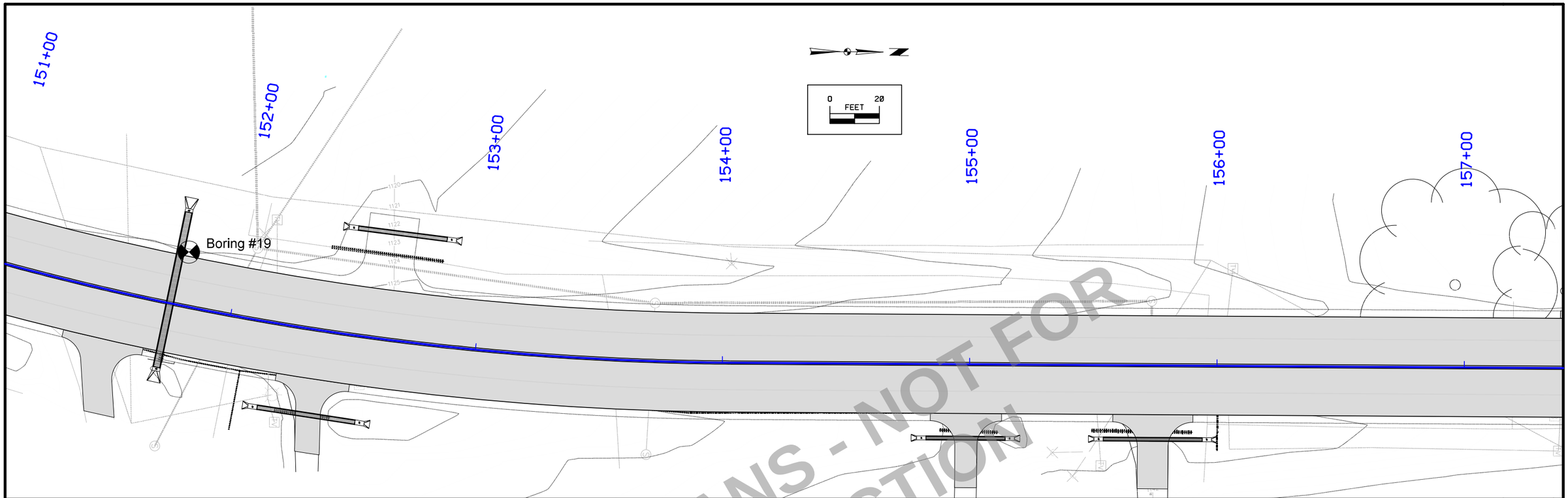

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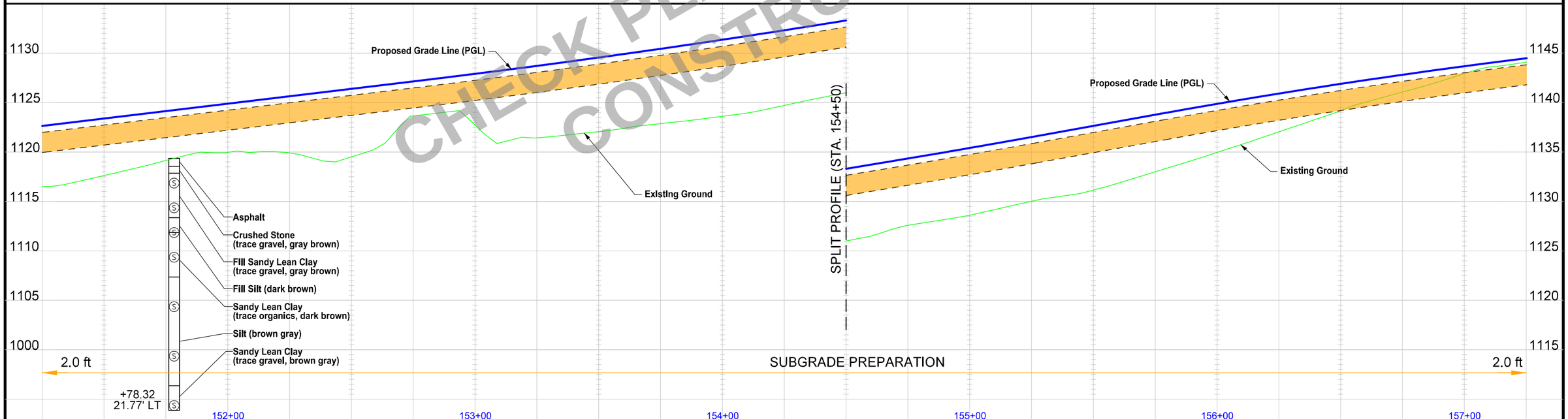
Plastic Limit:	-,-,23,-,-,-,-



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ENGINEER JSS CHECKED BY BAK	DRAWN BY JJC FIELD BOOK NO. --	DECORAH, IOWA MEC JOB #: 30616018 DECEMBER 2019	REVISIONS	McCLURE™ ENGINEERING Co. building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	SHEET NO. Q.11

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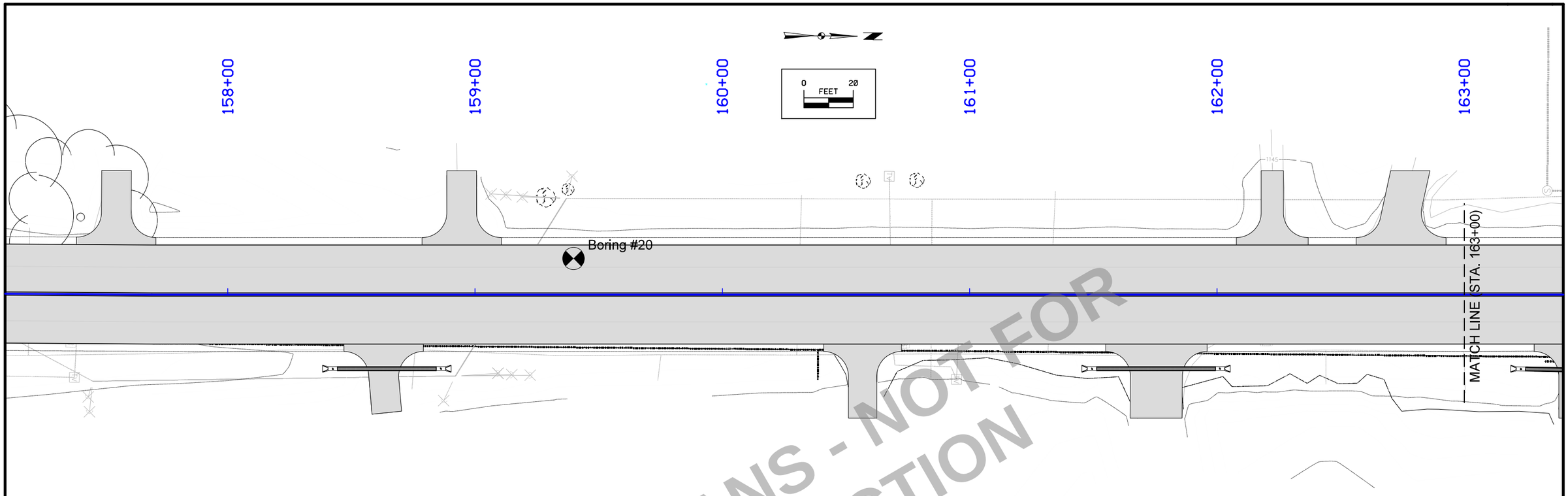

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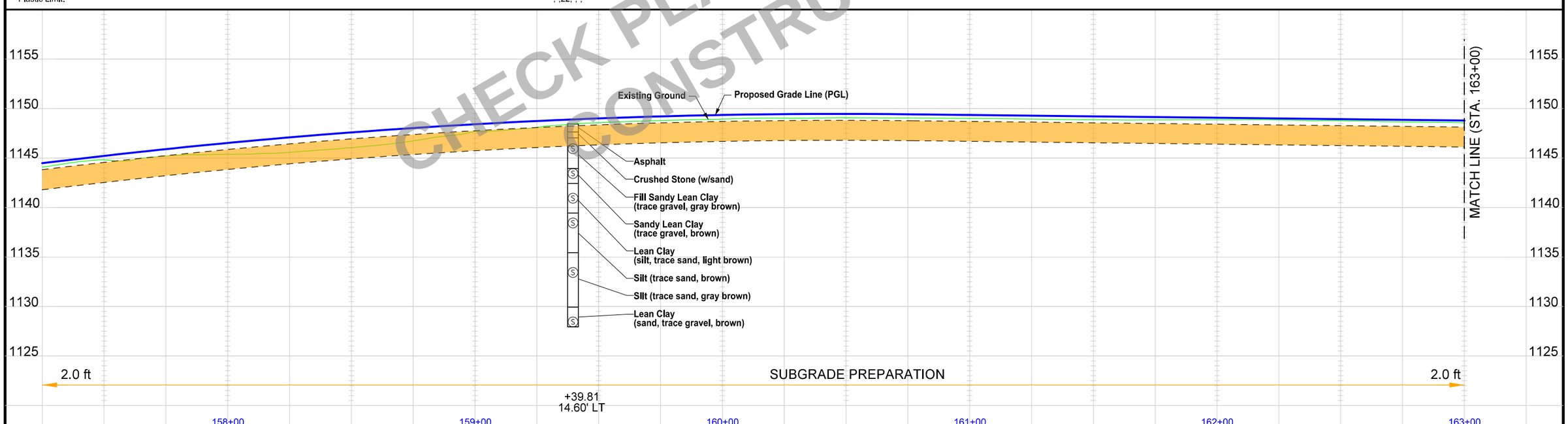

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	JJC	DECORAH, IOWA		McCLURE™ ENGINEERING Co.	building strong communities.	1360 NW 121st Street, Suite A Clive, IA 50325 main 515-964-1229 fax 515-964-2370	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020 CITY OF DECORAH	SOIL BORING INFORMATION	STBG-SWAP-1867(617)--SG-96	Q.12
CHECKED BY	FIELD BOOK NO.	MEC JOB #: 30616018						
BAK	--	DECEMBER 2019						

$DATE$

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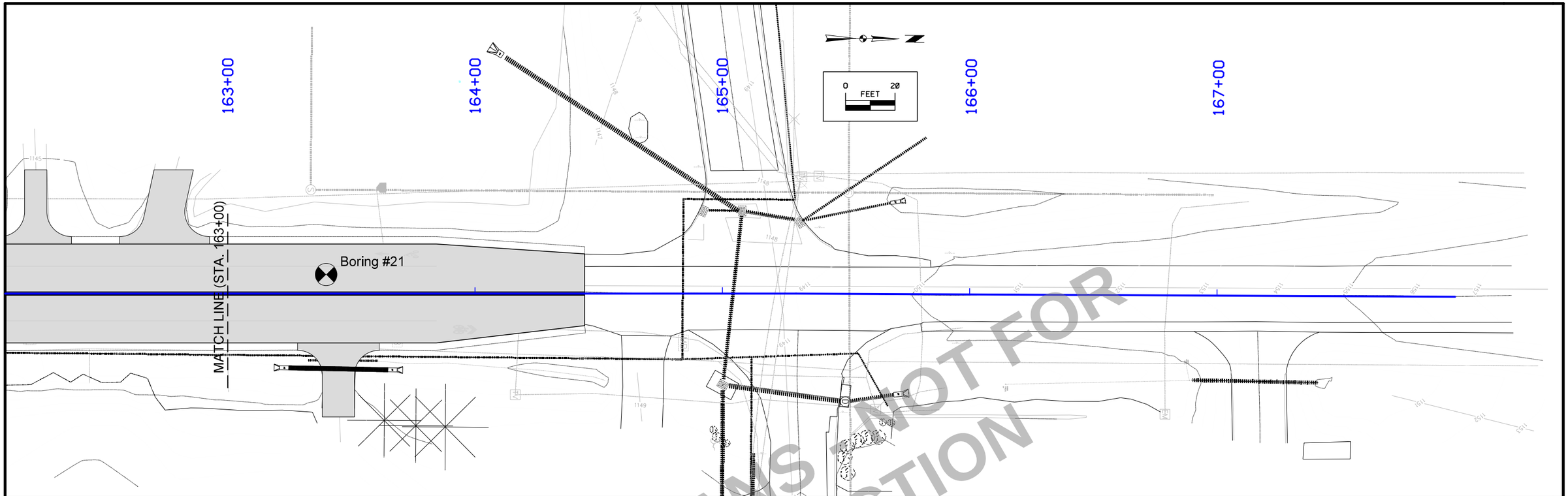
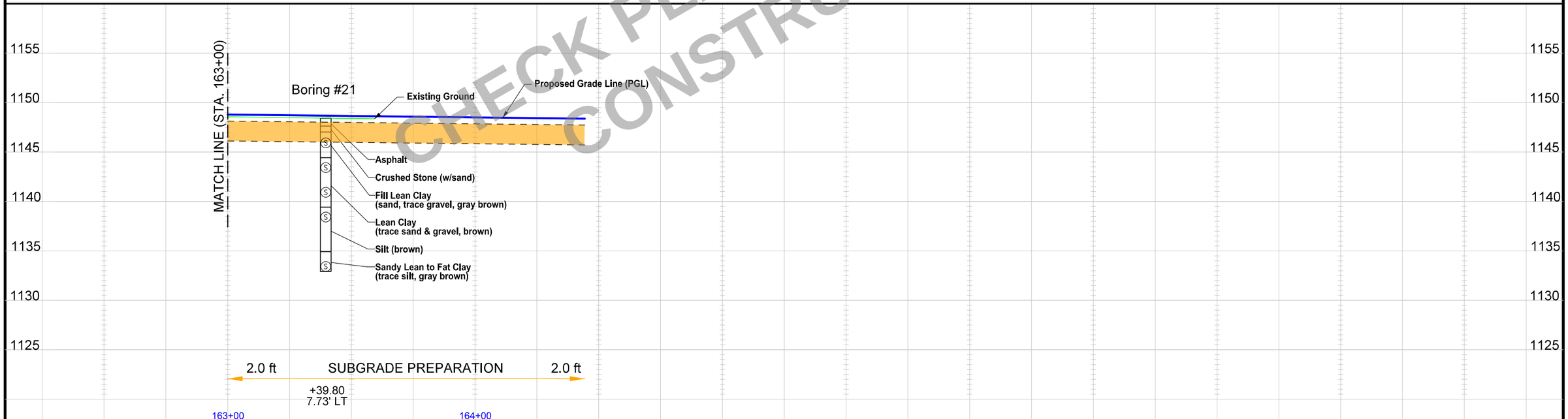
LETTING DATE



Boring #:	21
Cut Moisture:	18,18,26,27,22
Cut Density:	-,-,-,-,-
Plastic Limit:	18,20,-,-,-



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CHECKED BY	FIELD BOOK NO.	MEC JOB #: 30616018						
BAK	--	DECEMBER 2019						

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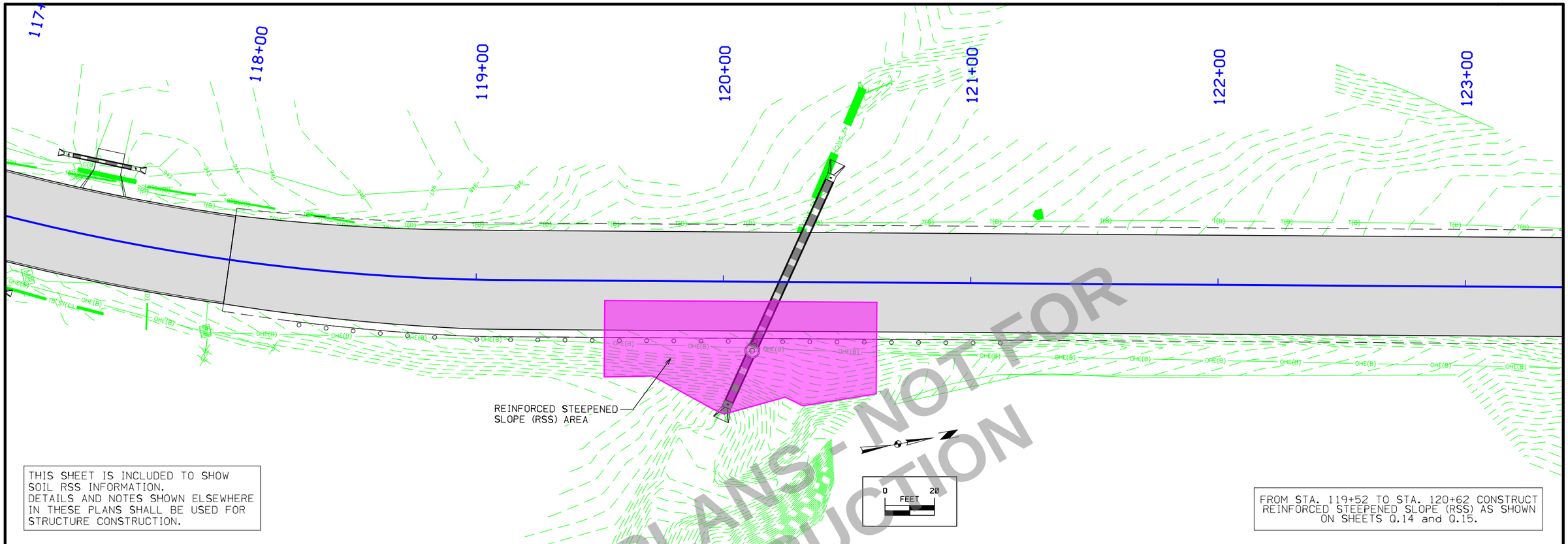

THIS SHEET IS INCLUDED TO SHOW SOIL RSS INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

FROM STA. 119+52 TO STA. 120+62 CONSTRUCT REINFORCED STEEPENED SLOPE (RSS) AS SHOWN ON SHEETS Q.14 and Q.15.

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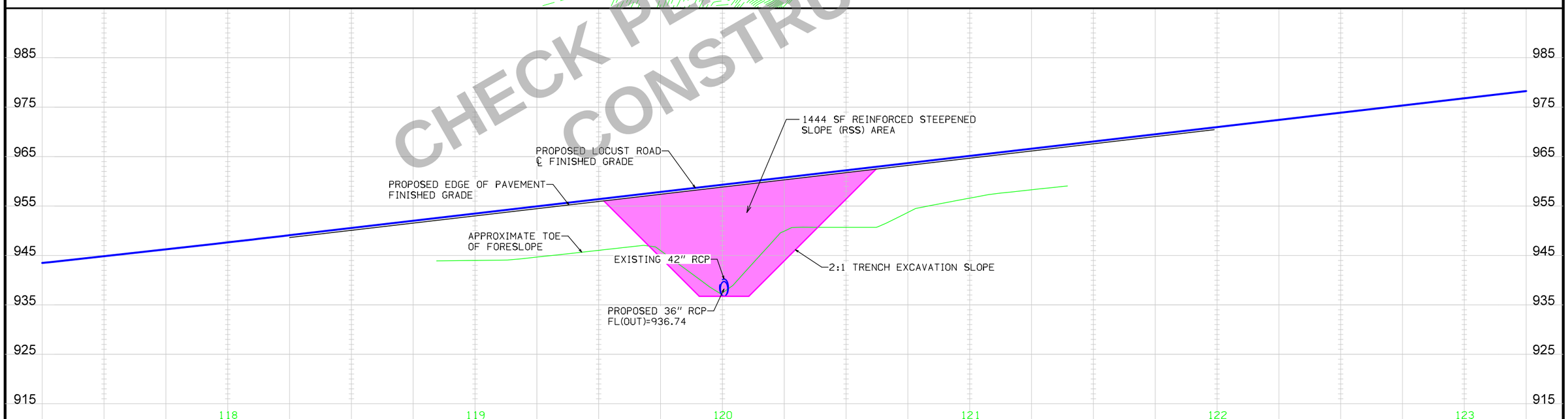

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	JCH	DECORAH, IOWA		McCLURE™ making lives better	1740 Lininger Lane North Liberty, IA 52317 main 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	REINFORCED STEEPENED SLOPE AT DRAINAGE DITCH	STBG-SWAP-1867(617)--SG-96	Q.14
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001						
BAK	-	DECEMBER 2019						

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Face Detail Of Reinforced Steepened Slope (RSS) At Storm Sewer Outlets.

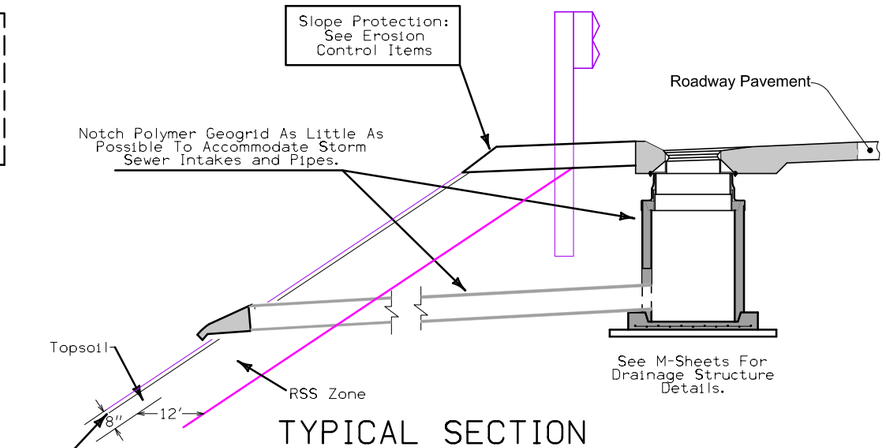
(Also see plan view on Q.14)

Not To Scale

Approximate Storm Sewer Outlet Location Within RSS Area

Station

120+00



TYPICAL SECTION

SOIL PROPERTIES FOR DESIGN BASED ON IOWA DEPARTMENT OF TRANSPORTATION DESIGN MANUAL CHAPTER 200E ARE COHESION OF 600 PSF AND FRICTION ANGLE OF 12 DEGREES FOR COMPACTED FILL.

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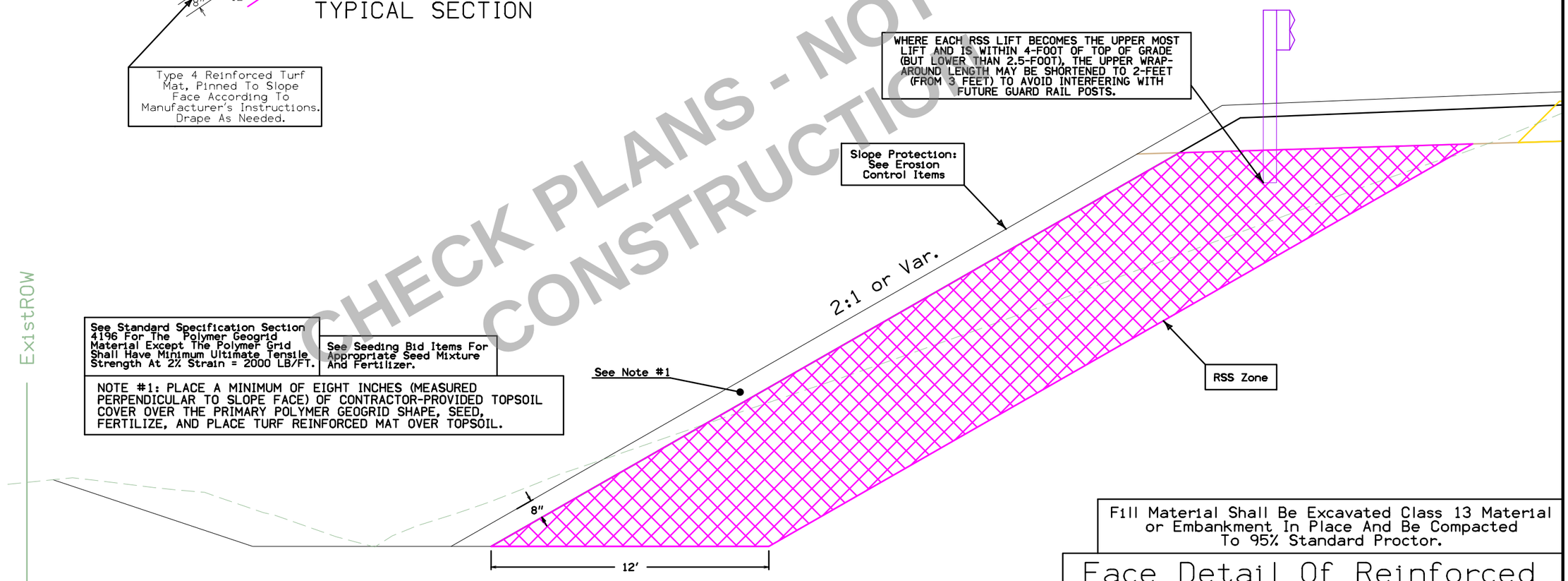
WHERE EACH RSS LIFT BECOMES THE UPPER MOST LIFT AND IS WITHIN 4-FOOT OF TOP OF GRADE (BUT LOWER THAN 2.5-FOOT), THE UPPER WRAP-AROUND LENGTH MAY BE SHORTENED TO 2-FEET (FROM 3 FEET) TO AVOID INTERFERING WITH FUTURE GUARD RAIL POSTS.



See Standard Specification Section 4196 For The Polymer Geogrid Material Except The Polymer Grid Shall Have Minimum Ultimate Tensile Strength At 2% Strain = 2000 LB/FT.

See Seeding Bid Items For Appropriate Seed Mixture And Fertilizer.

NOTE #1: PLACE A MINIMUM OF EIGHT INCHES (MEASURED PERPENDICULAR TO SLOPE FACE) OF CONTRACTOR-PROVIDED TOPSOIL COVER OVER THE PRIMARY POLYMER GEOGRID SHAPE, SEED, FERTILIZE, AND PLACE TURF REINFORCED MAT OVER TOPSOIL.

Fill Material Shall Be Excavated Class 13 Material or Embankment In Place And Be Compacted To 95% Standard Proctor.

Face Detail Of Reinforced Steepened Slope (RSS) with Type 4 Reinforced Turf Mat

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CHECKED BY BAK	FIELD BOOK NO. -	MEC #30616018-001 DECEMBER 2019								

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POLLUTION PREVENTION PLAN

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed per plan revisions or by contract modification, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The prime contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

I. ROLES AND RESPONSIBILITES

A. Designer:
1. Prepares Base PPP included in the project plan.
2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
3. Is signature authority on the Base PPP.

B. Contractor:
1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.
4. Installs and maintains appropriate controls. This work may be subcontracted.
5. Supervises and implements good housekeeping practices.
6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.
7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.

C. Subcontractors:
1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if responsible for sediment or erosion controls or involved in land disturbing activities. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Implement good housekeeping practices.

D. RCE/Project Engineer:
1. Is Project Storm Water Manager.
2. On projects where DOT is the Contracting Authority, is current with erosion control training or certification.
3. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.
4. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
5. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.
6. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
7. Is familiar with the Project PPP and storm water site map.
8. On projects where DOT is Contracting Authority, is responsible for monitoring inspection reports on a monthly basis, to determine whether deficiencies identified in inspection reports were adequately and timely addressed, and if not, has the authority and responsibility to direct immediate actions to correct the deficiencies.
9. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.
10. Is signature authority on Notice of Discontinuation.

E. Inspector:
1. Updates PPP whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
2. Maintains an up-to-date record that identifies contractors and subcontractors as co-permittees.
3. Makes these plans available to the DNR upon their request.
4. Conducts joint required inspections of the site with the contractor/subcontractor.
5. Completes an inspection report after each inspection.
6. Is signature authority on storm water inspection reports.

II. PROJECT SITE DESCRIPTION

A. This Pollution Prevention Plan (PPP) is for the construction of a grading and roadway reconstruction project.
B. This PPP covers approximately 13.3 acres with an estimated 10.0 acres being disturbed. The portion of the PPP covered by this contract has 10.0 acres disturbed.
C. The PPP is located in an area of one soil association (Downs - Fayette - Nordness). The estimated weighted average runoff coefficient number for this PPP after completion will be 0.52.
D. Storm Water Site Map is located in the R sheets. Proposed slopes are shown in cross sections, details, or standard road plans. Supplemental information is located in the Tabulations in the C or CE sheets.
E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries.
F. Runoff from this work will flow into unnamed tributaries of the Upper Iowa River.

POLLUTION PREVENTION PLAN

III. CONTROLS

A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
B. Preserve vegetation in areas not needed for construction.
C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water monitoring inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.

1. EROSION AND SEDIMENT CONTROLS

a. Stabilization Practices
1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
a) Permanently ceased on any portion of the site, or
b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
4) Permanent and Temporary Stabilization practices to be used for this project are located in the storm water site map (when included), Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets.
5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Additional information may be found in the Tabulations in the C or T Tabulation sheets, or is referenced in Section 2105 of the Standard Specifications.

b. Structural Practices
1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
2) Structural practices to be used for this project are located in the storm water site map (when included), Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C sheets.

c. Storm Water Management
1) Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the storm water site map (when included) and Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS

a. Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.
1) Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
2) Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
3) Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
4) Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
5) Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean-up spills and prevent material discharges to the storm drain system and waters of the state.
6) Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
7) Concrete Grooving/Grinding Slurry – Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
8) Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
9) Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
10) Dewatering – Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS

During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

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POLLUTION PREVENTION PLAN

V. INSPECTION REQUIREMENTS

A. Inspections shall be made jointly by the Contractor and the Contracting Authority at least once every seven calendar days. Storm water monitoring inspections will include:
   1. Date of the inspection.
   2. Summary of the scope of the inspection.
   3. Name and qualifications of the personnel making the inspection.
   5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
   6. Major observations related to the implementation of the PPP.
   7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.

B. Include storm water monitoring inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

VI. NON-STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS

A. Base PPP - Initial Pollution Prevention Plan.
B. Amended PPP - May include Plan Revisions or Contract Modifications for new items, storm water monitoring inspection reports, and fieldbook entries made by the inspector.
C. IDR - Inspector’s Daily Report – this contains the inspector’s daily diary and bid item postings.
D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
E. Signature Authority - Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____
Signature

_____
Printed or Typed Name

_____
Signature

_____

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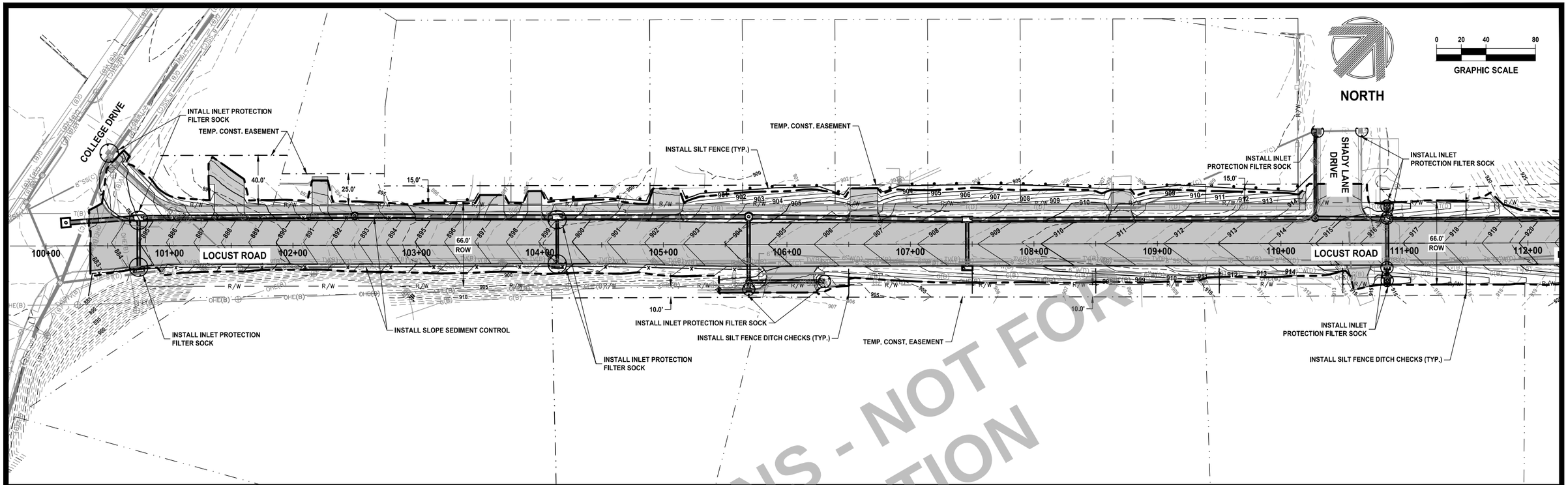

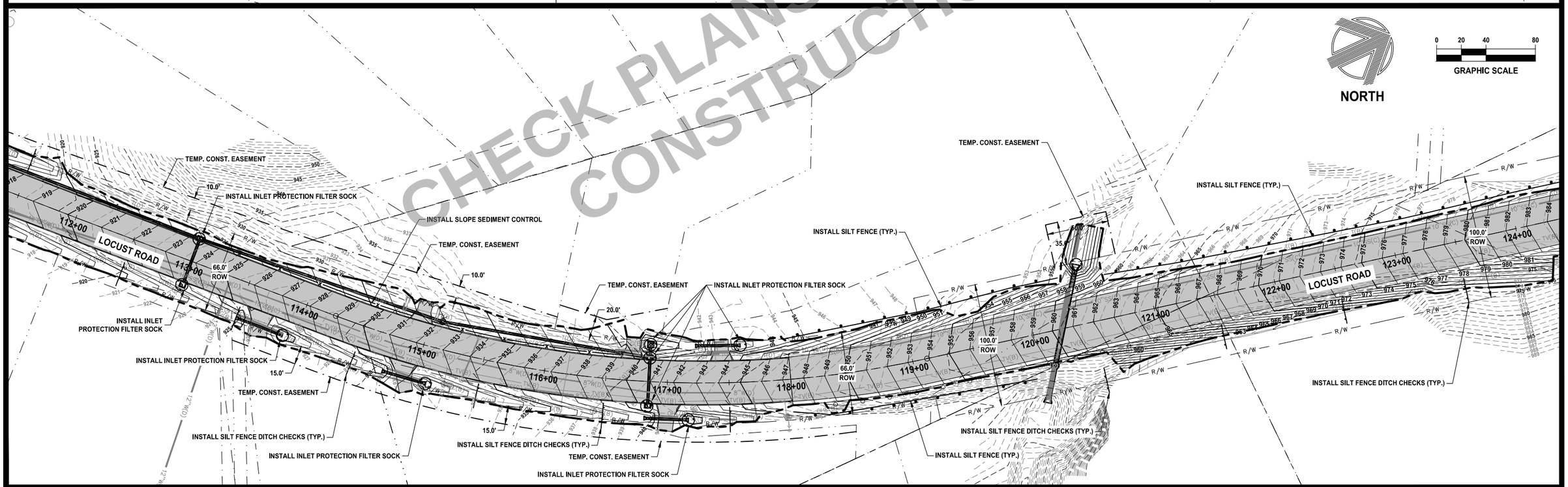

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001							
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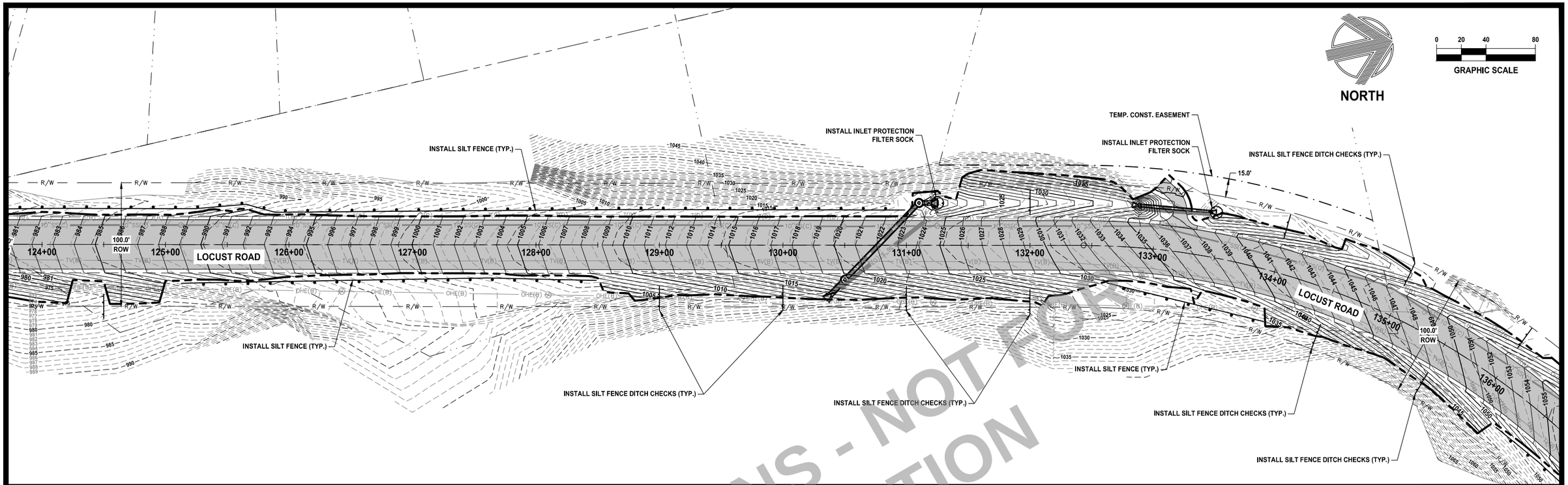

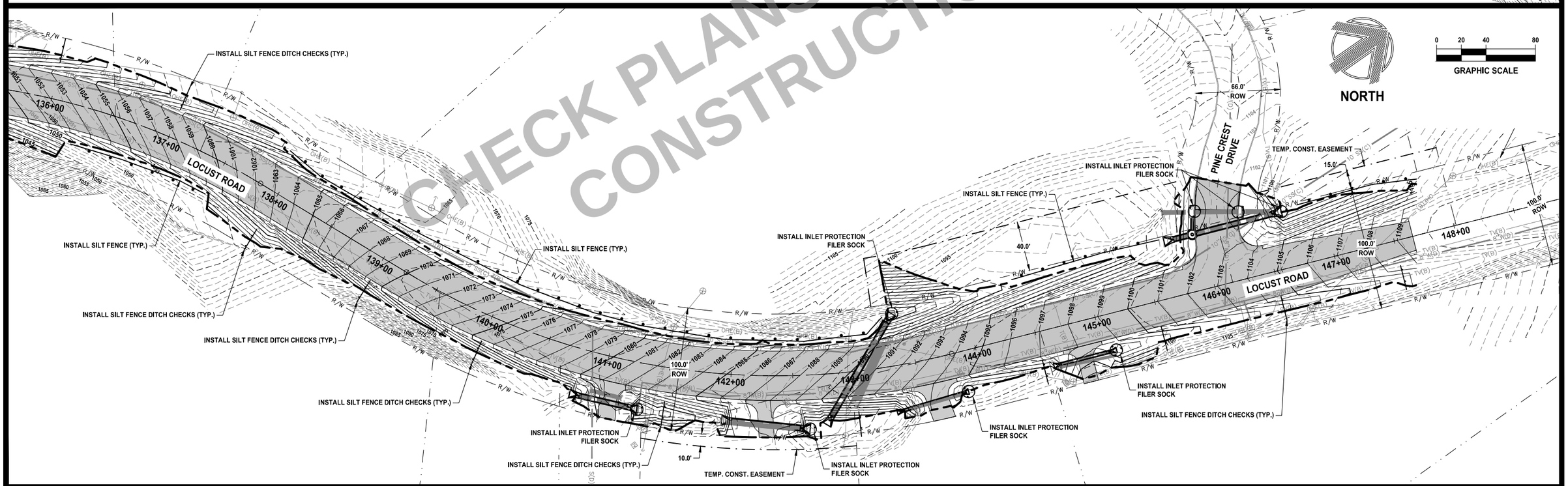

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JSS	BAV	MEC #30616018-001	.						R.04
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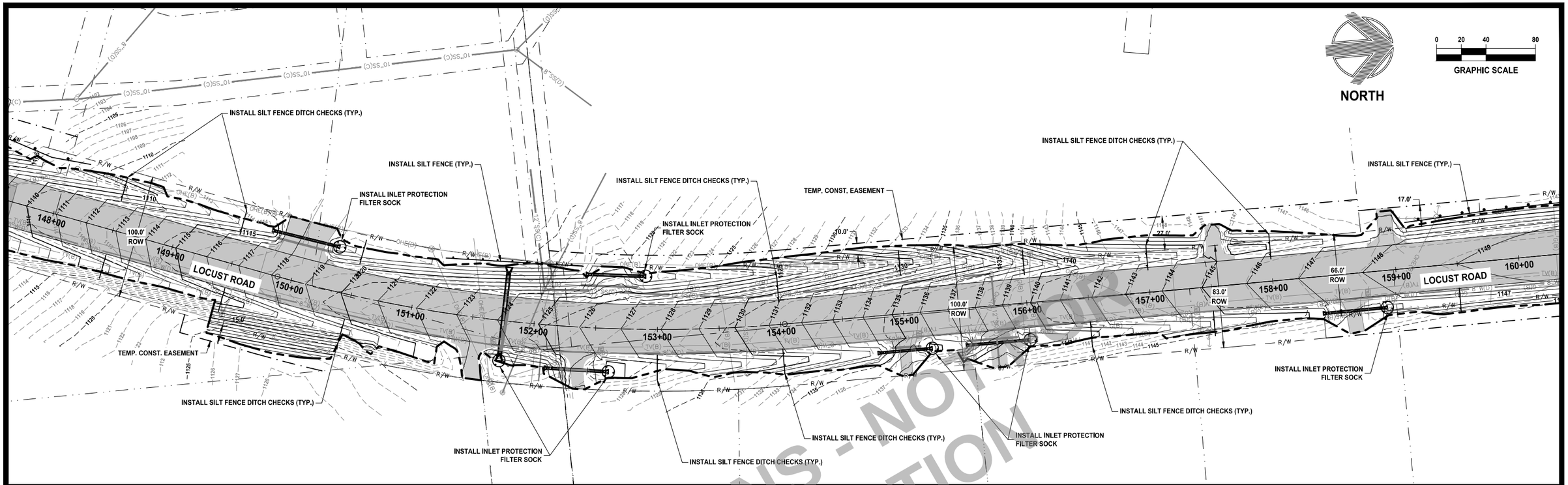

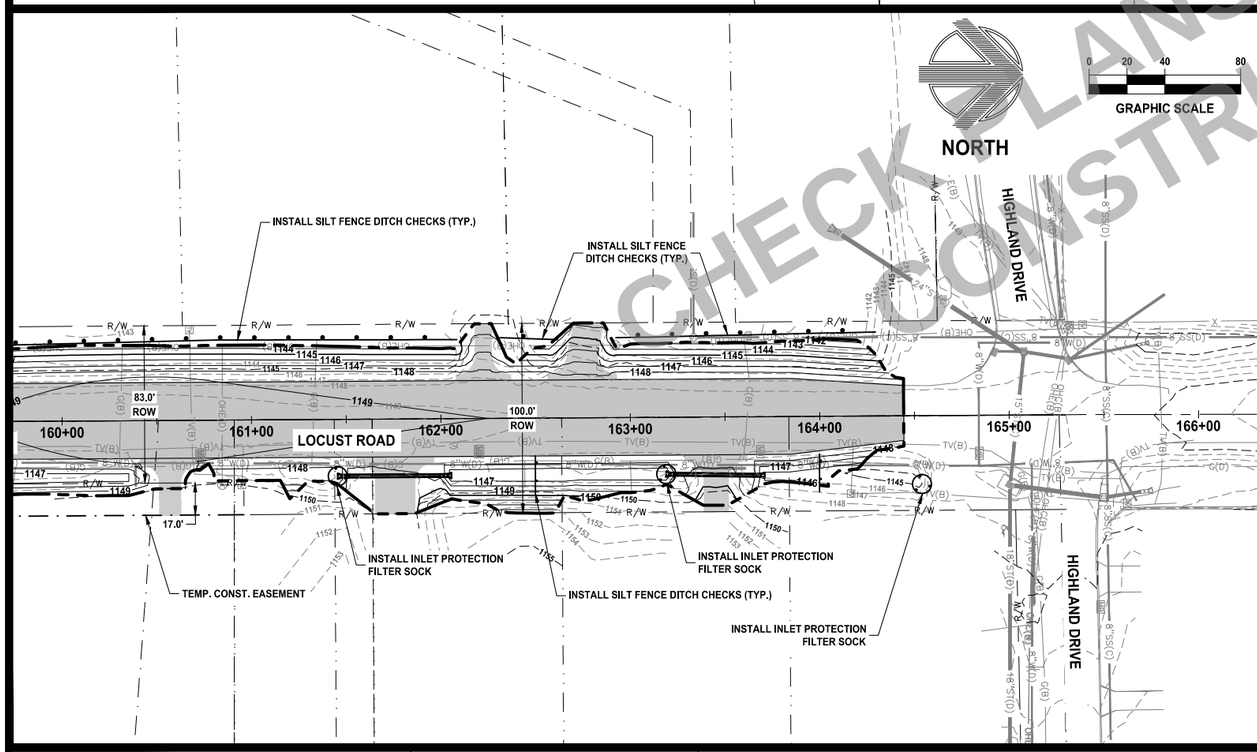

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001						
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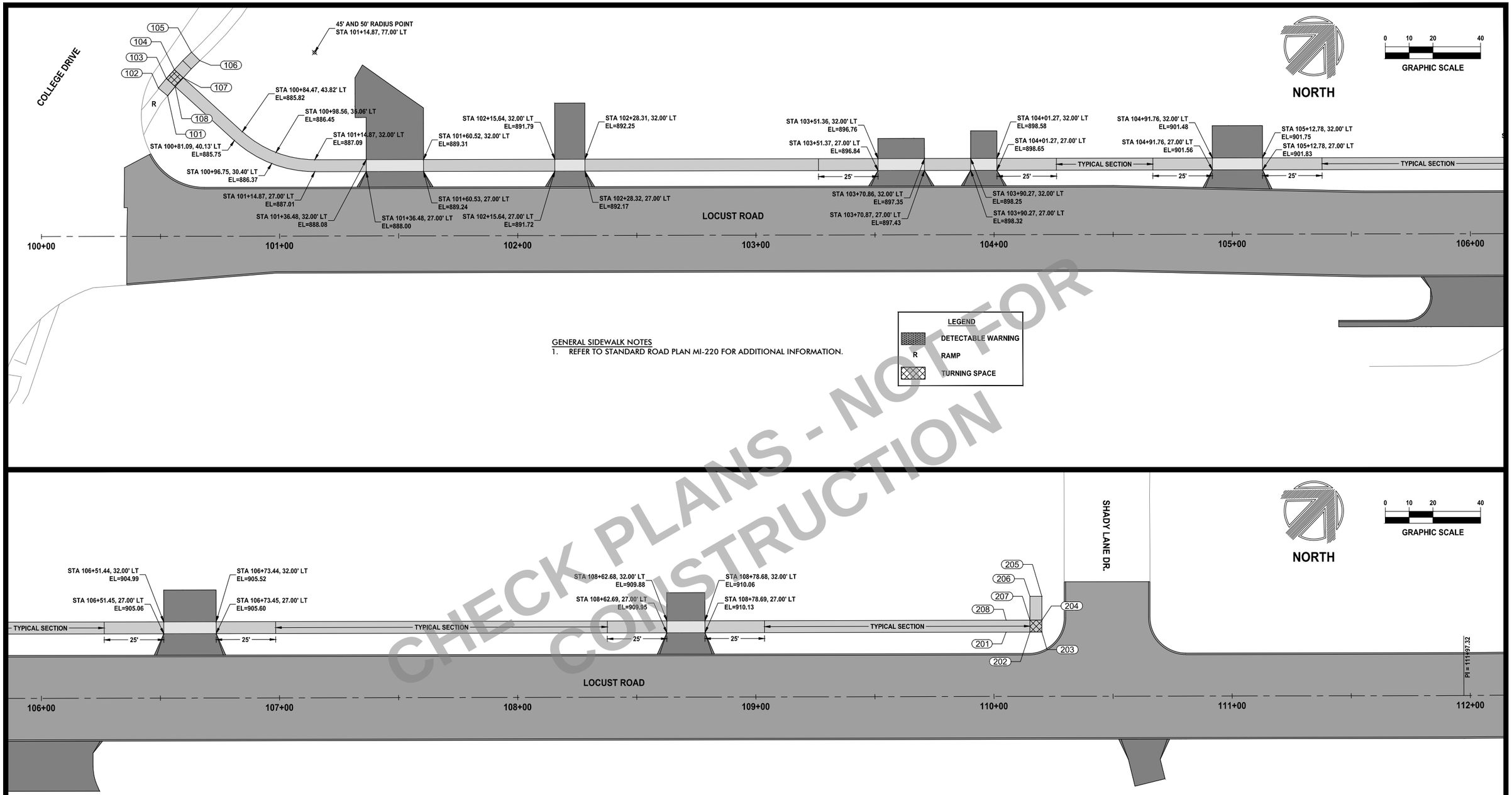

GENERAL SIDEWALK NOTES

1. REFER TO STANDARD ROAD PLAN MI-220 FOR ADDITIONAL INFORMATION.

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
BAK	-	DECEMBER 2019	.						S.01

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SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb

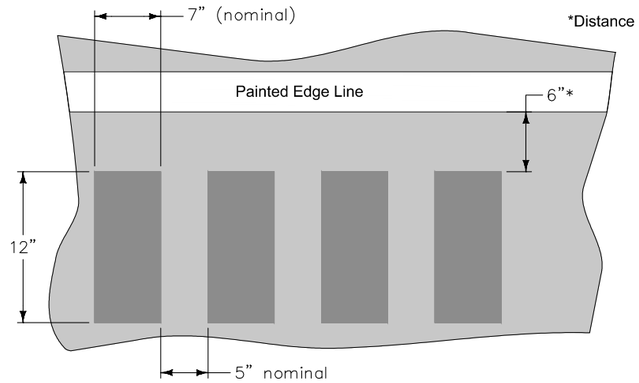
(1) Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.

(2) Refer to tabulation 113-01 for bid quantities.

This Data Entry Sheet fills Tab 113-10 effective 04-18-17

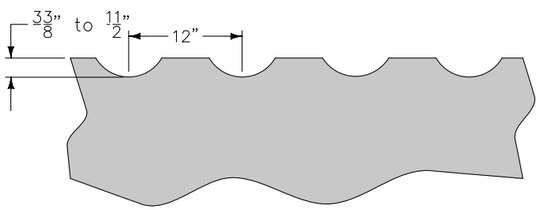
Point to Point		Sidewalk Designation	_" PCC Sidewalk (2)	Distance* FT	Δ Elevation FT	Slope %	Legally Acceptable Range Pos. or Neg.	Difference between Designed Slope and Maximum Legally	Acceptable Constructed Range Pos. or Neg.	Does Designer need to obtain design approval	Staking Required on this Quadrant? (1)	Measured Slope %	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES Point	Station	Offset	Elevation
101	102	Sidewalk Cross Slope	4	5.00	-0.08	-1.6%	0.5% to 2.0%	0.4%	0.5% to 2.0%	Yes	Yes				101	100+53.12	-58.99	884.37
101	108	Sidewalk Running Slope	4	5.00	0.23	4.6%	0.5% to 5.0%	0.4%	0.5% to 5.0%	Yes	Yes			Match general street grade	102	100+49.27	-62.18	884.29
102	103	Sidewalk Running Slope	4	5.00	0.25	4.9%	0.5% to 5.0%	0.1%	0.5% to 5.0%	Yes	Yes			Match general street grade	103	100+52.62	-66.21	884.54
103	104	Landing/Turning Space	4	5.00	0.07	1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%						104	100+56.00	-69.90	884.61
104	107	Landing/Turning Space	4	5.00	0.06	1.3%	0.1% to 2.0%	0.7%	0.1% to 2.0%						105	100+63.18	-77.28	885.09
107	108	Landing/Turning Space	4	5.00	-0.07	-1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%						106	100+66.66	-73.69	885.16
108	103	Landing/Turning Space	4	5.00	-0.06	-1.3%	0.1% to 2.0%	0.7%	0.1% to 2.0%						107	100+59.69	-66.52	884.68
104	105	Sidewalk Running Slope	4	10.00	0.47	4.7%	0.5% to 5.0%	0.3%	0.5% to 5.0%	Yes	Yes			Match general street grade	108	100+56.31	-62.84	884.60
105	106	Sidewalk Cross Slope	4	5.00	0.07	1.5%	0.5% to 2.0%	0.5%	0.5% to 2.0%									
106	107	Sidewalk Running Slope	4	10.00	-0.49	-4.9%	0.5% to 5.0%	0.1%	0.5% to 5.0%	Yes	Yes			Match general street grade				
201	202	Sidewalk Running Slope	4	10.00	0.26	2.6%	0.5% to 5.0%	2.4%	0.5% to 5.0%						201	110+05.16	-27.00	914.00
202	203	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						202	110+15.16	-27.00	914.26
203	204	Landing/Turning Space	4	5.00	-0.08	-1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%						203	110+20.16	-27.00	914.31
204	207	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%	1.0%	0.1% to 2.0%						204	110+20.16	-32.00	914.23
207	202	Landing/Turning Space	4	5.00	0.07	1.5%	0.1% to 2.0%	0.5%	0.1% to 2.0%						205	110+20.18	-42.00	913.83
204	205	Sidewalk Running Slope	4	10.00	-0.40	-4.0%	0.5% to 5.0%	1.0%	0.5% to 5.0%						206	110+15.18	-42.00	913.76
205	206	Sidewalk Cross Slope	4	5.00	-0.08	-1.5%	0.5% to 2.0%	0.5%	0.5% to 2.0%						207	110+15.16	-32.00	914.18
206	207	Sidewalk Running Slope	4	10.00	0.43	4.3%	0.5% to 5.0%	0.7%	0.5% to 5.0%	Yes	Yes				208	110+05.16	-32.00	913.92
207	208	Sidewalk Running Slope	4	10.00	-0.26	-2.6%	0.5% to 5.0%	2.4%	0.5% to 5.0%									
208	201	Sidewalk Cross Slope	4	5.00	0.08	1.5%	0.5% to 2.0%	0.5%	0.5% to 2.0%									

CHECK PLANS - NOT FOR CONSTRUCTION



*Distance shall be increased to 12" along all roadway curves.

PLAN



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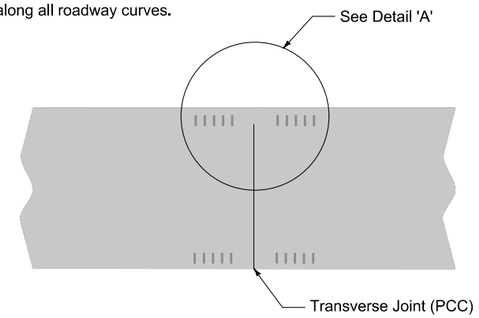
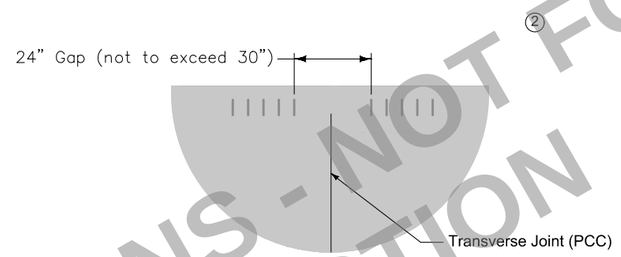
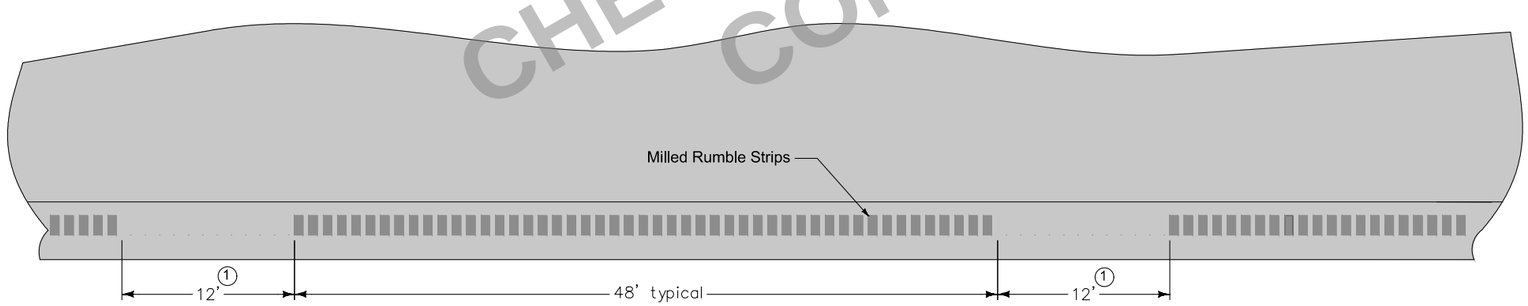




Detail 'A'

MILLED RUMBLE STRIP



GAP DETAILS

1. Place continuous Milled Rumble Strips (no 12 foot gaps) on all median side shoulders and on all interstate shoulders.
2. Gap rumble strips at transverse joints. Centering the gap about the joint is desireable. Maintain a minimum of 3 inches between rumble and transverse joint.

Possible Contract Items:
- Asphalt Emulsion for Fog Seal (Shoulder Rumble Strips)
- Milled Shoulder Rumble Strips, HMA Surface
- Milled Shoulder Rumble Strips, PCC Surface

Possible Tabulation:
- 112-10

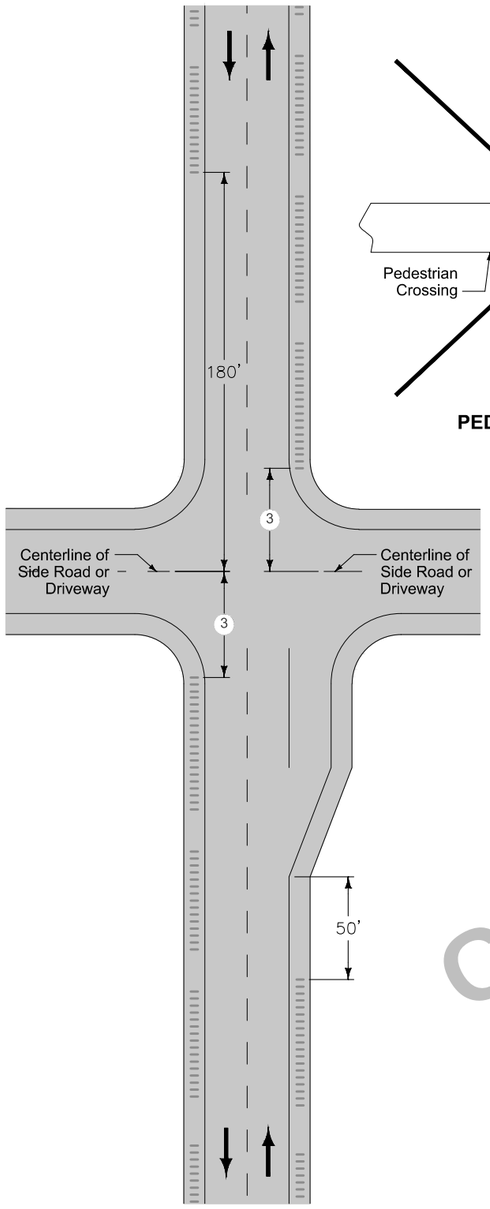
MODIFIED STANDARD ROAD PLAN	REVISION 6	04-19-16
	PV-12	
	SHEET 1 of 2	

MODIFICATIONS: Increased spacing between edge line and rumble strip edge to 12" along roadway curves

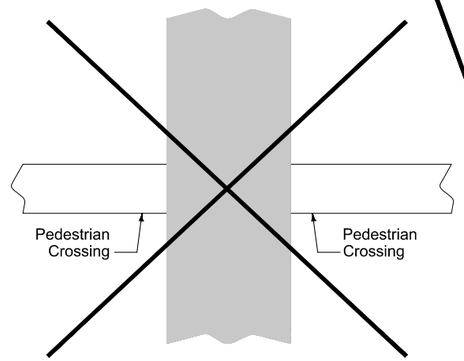
APPROVED BY DESIGN METHODS ENGINEER

MILLED SHOULDER RUMBLE STRIPS

CHECK PLANS - NOT FOR CONSTRUCTION



UNDIVIDED HIGHWAYS



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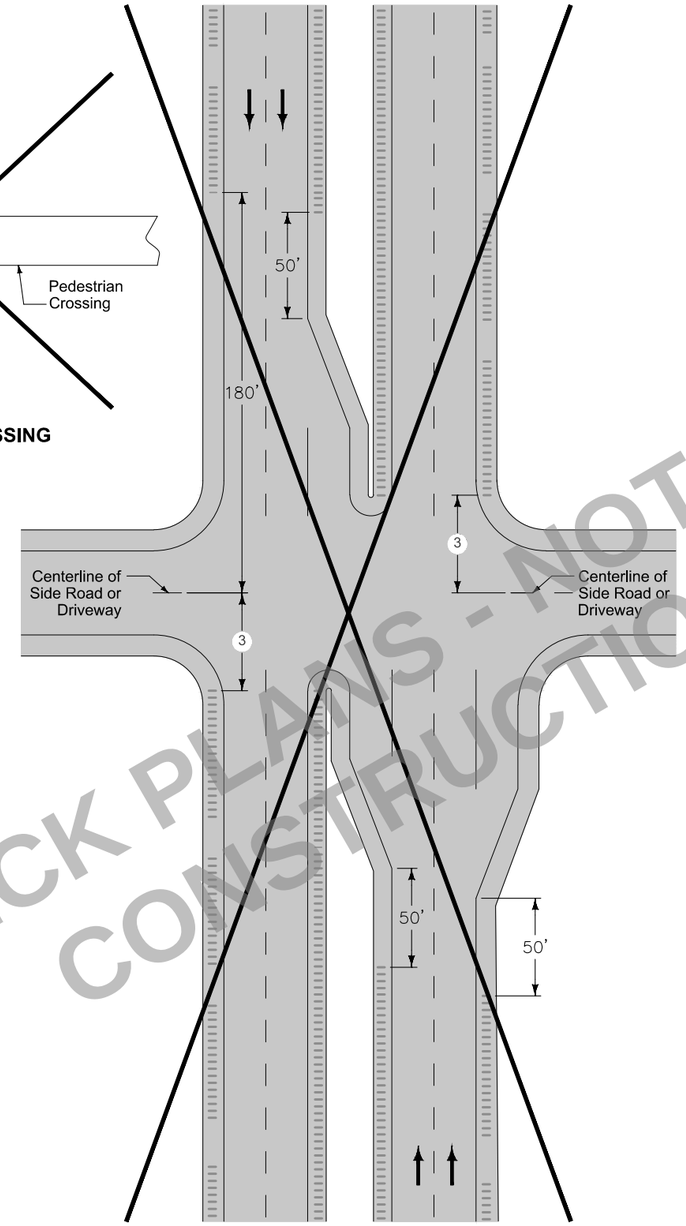
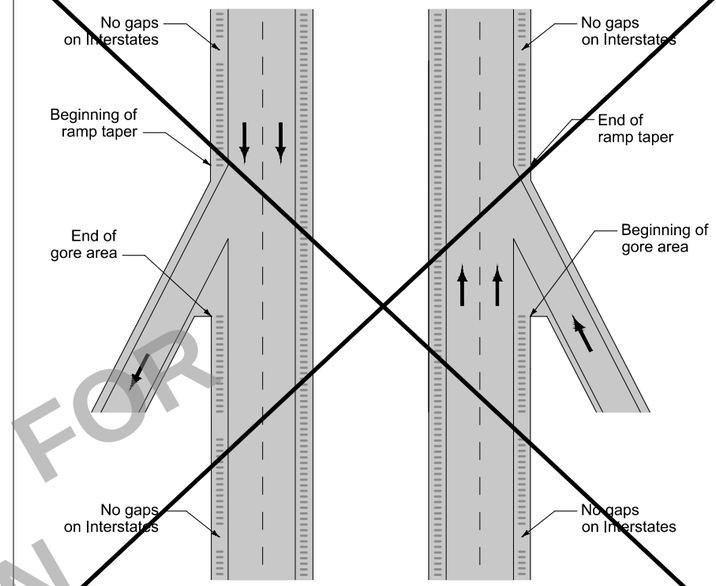
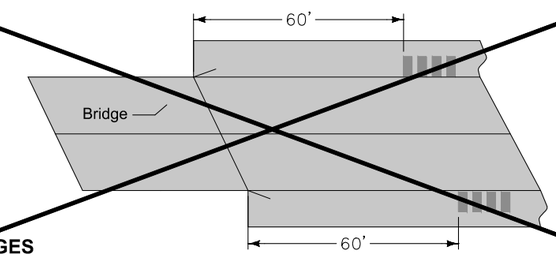


DIVIDED HIGHWAYS

INTERSECTION SITUATIONS



RAMP AND LOOP TERMINALS (1)



BRIDGES

~~(1) Place continuous Milled Rumble Strips (no 12 foot gaps) on all median side shoulders and on all interstate shoulders.~~

(3) Begin rumbles 100 feet beyond paved side roads or 50 feet for driveways or granular side roads.

MODIFIED STANDARD ROAD PLAN	REVISION 6 04-19-16 PV-12 SHEET 2 of 2

MODIFICATIONS: Omitted information that doesn't pertain to this project.

APPROVED BY DESIGN METHODS ENGINEER

MILLED SHOULDER RUMBLE STRIPS

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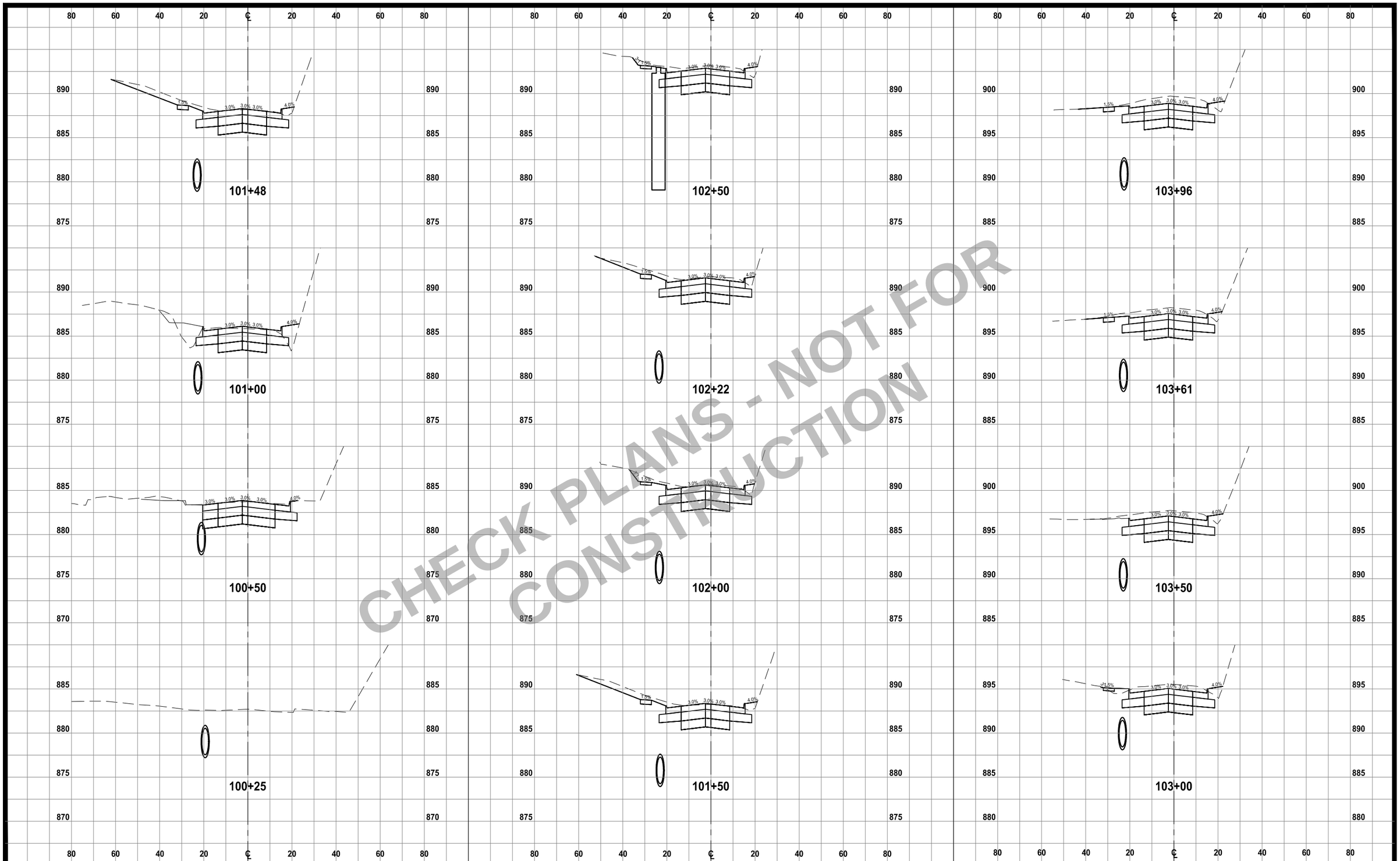

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ENGINEER JSS	DRAWN BY BAV	DECORAH, IOWA	REVISIONS	McCLURE™	making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
CHECKED BY BAK	FIELD BOOK NO. -	MEC #30616018-001 DECEMBER 2019								W.01

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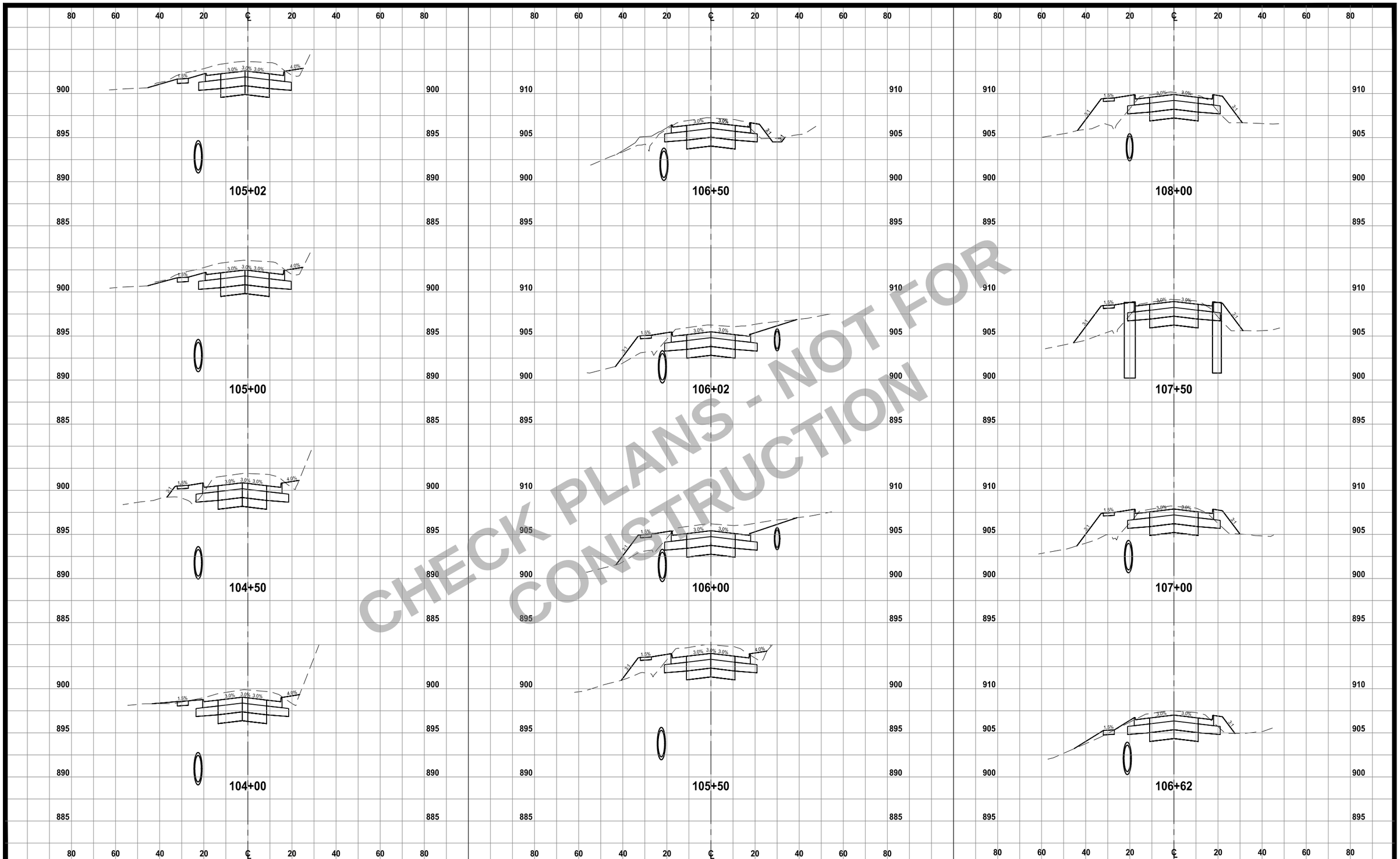

CHECK PLANS - NOT FOR CONSTRUCTION

ENGINEER JSS	DRAWN BY BAV	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	REVISIONS	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS	STBG-SWAP-1867(617)--SG-96	SHEET NO. W.02
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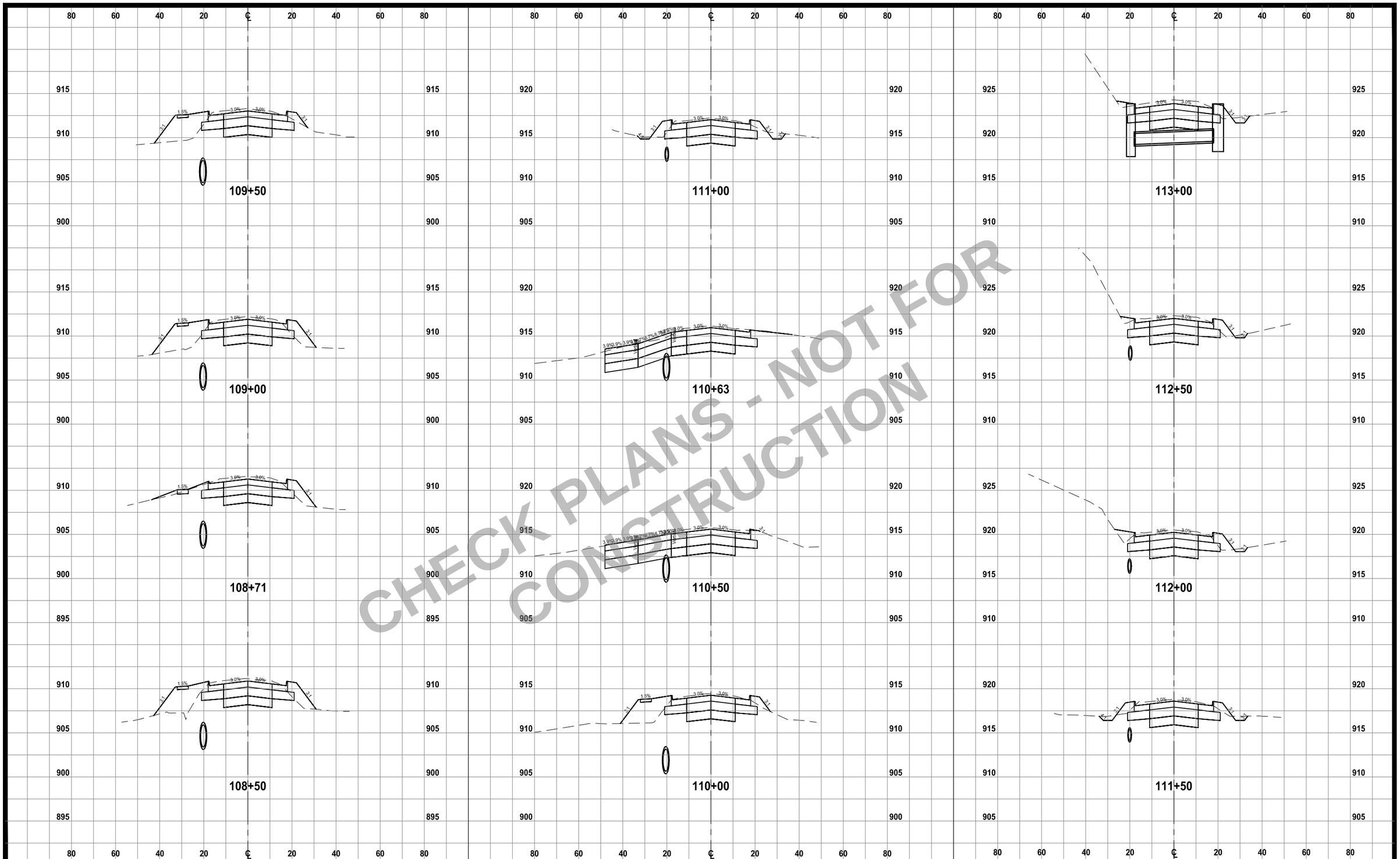

ENGINEER	DRAWN BY		REVISIONS					
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS	STBG-SWAP-1867(617)--SG-96	SHEET NO.
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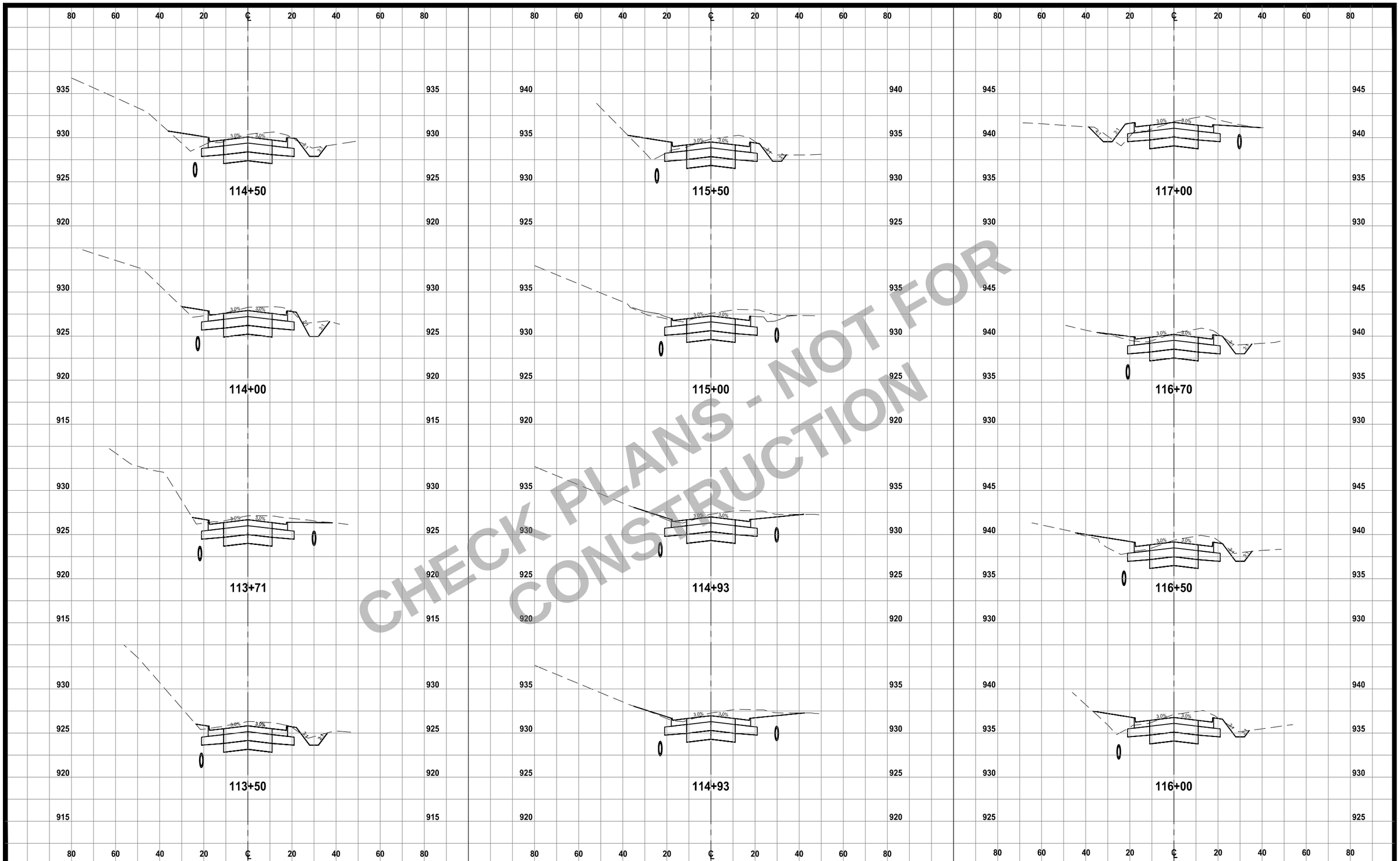

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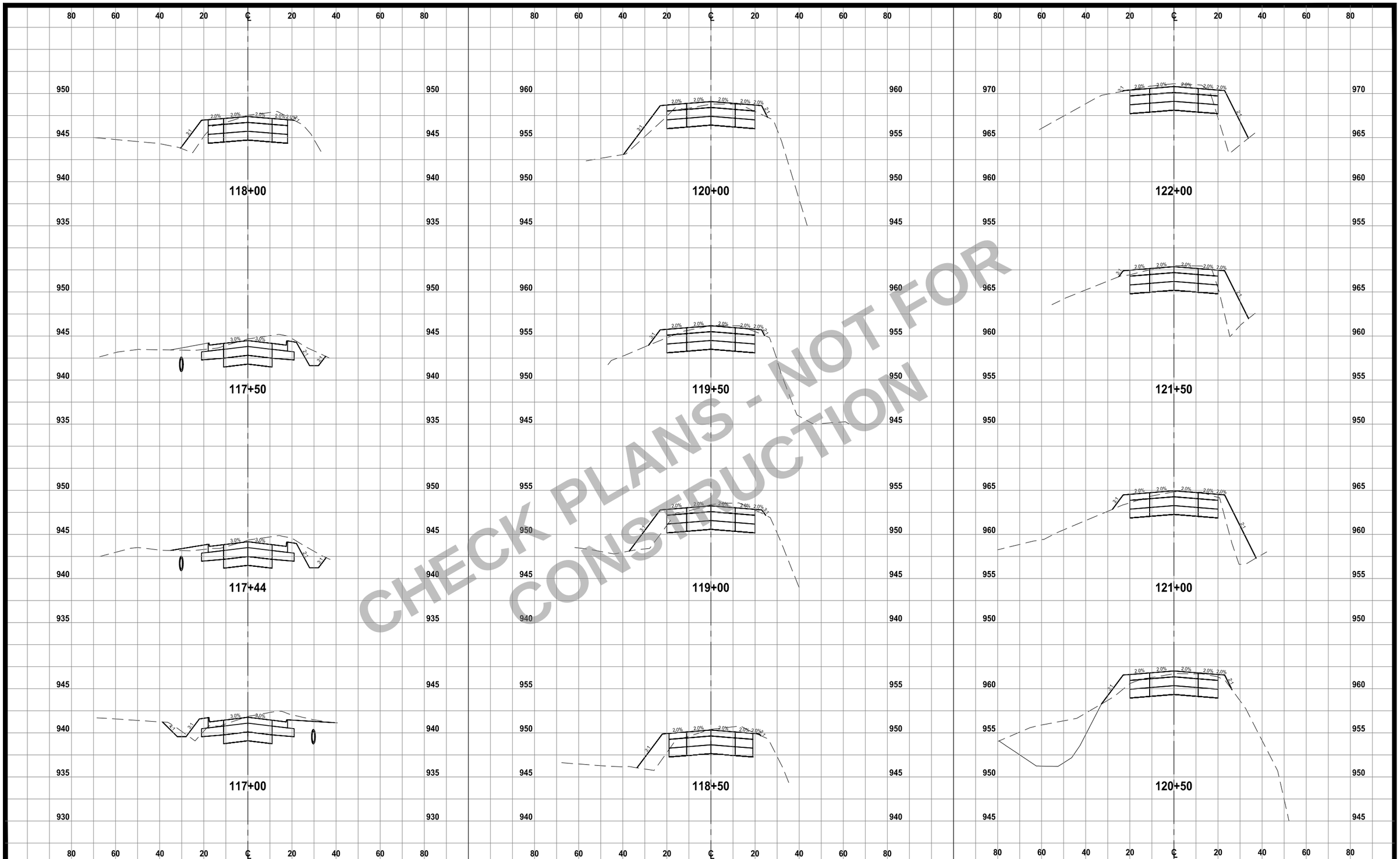

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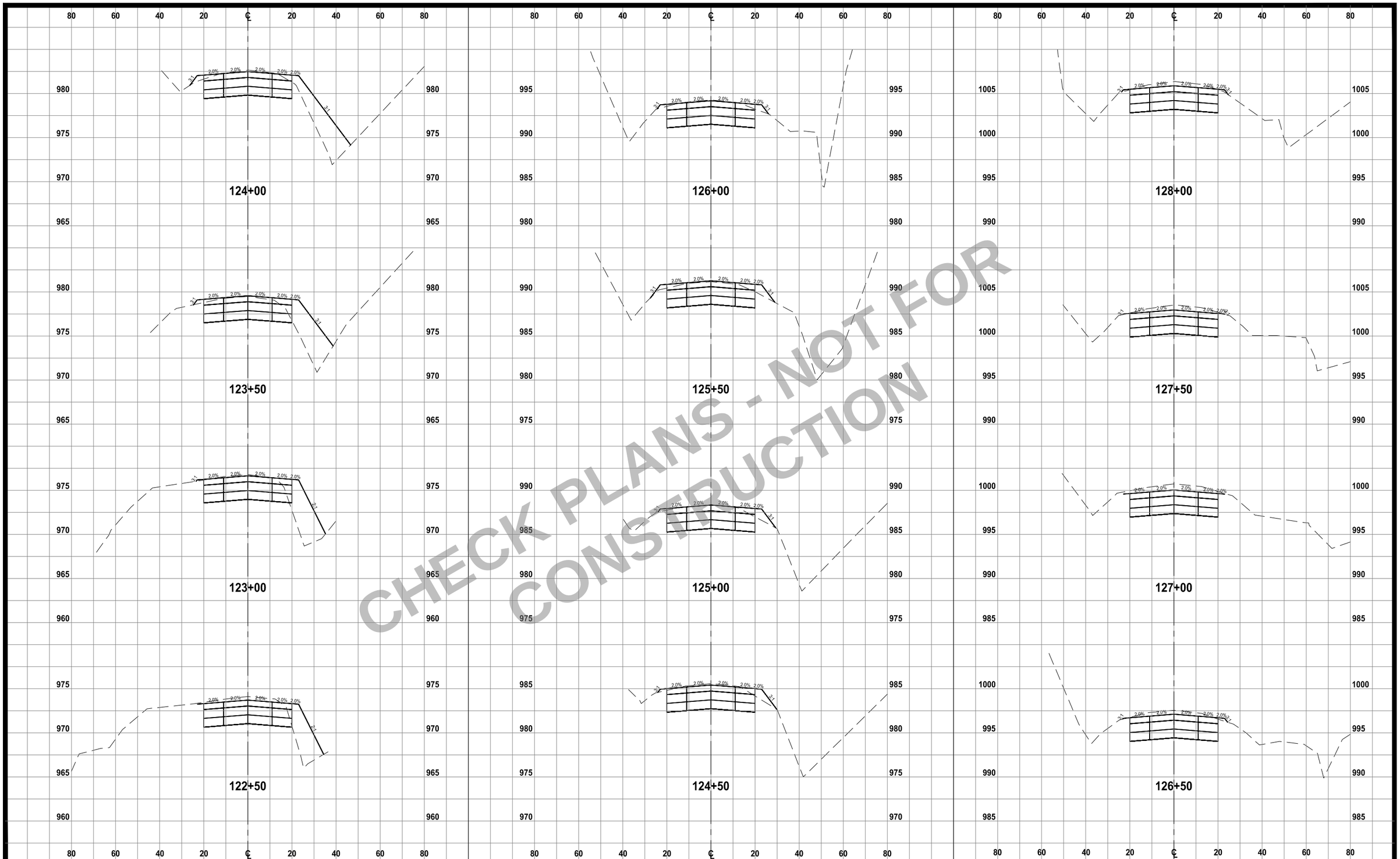

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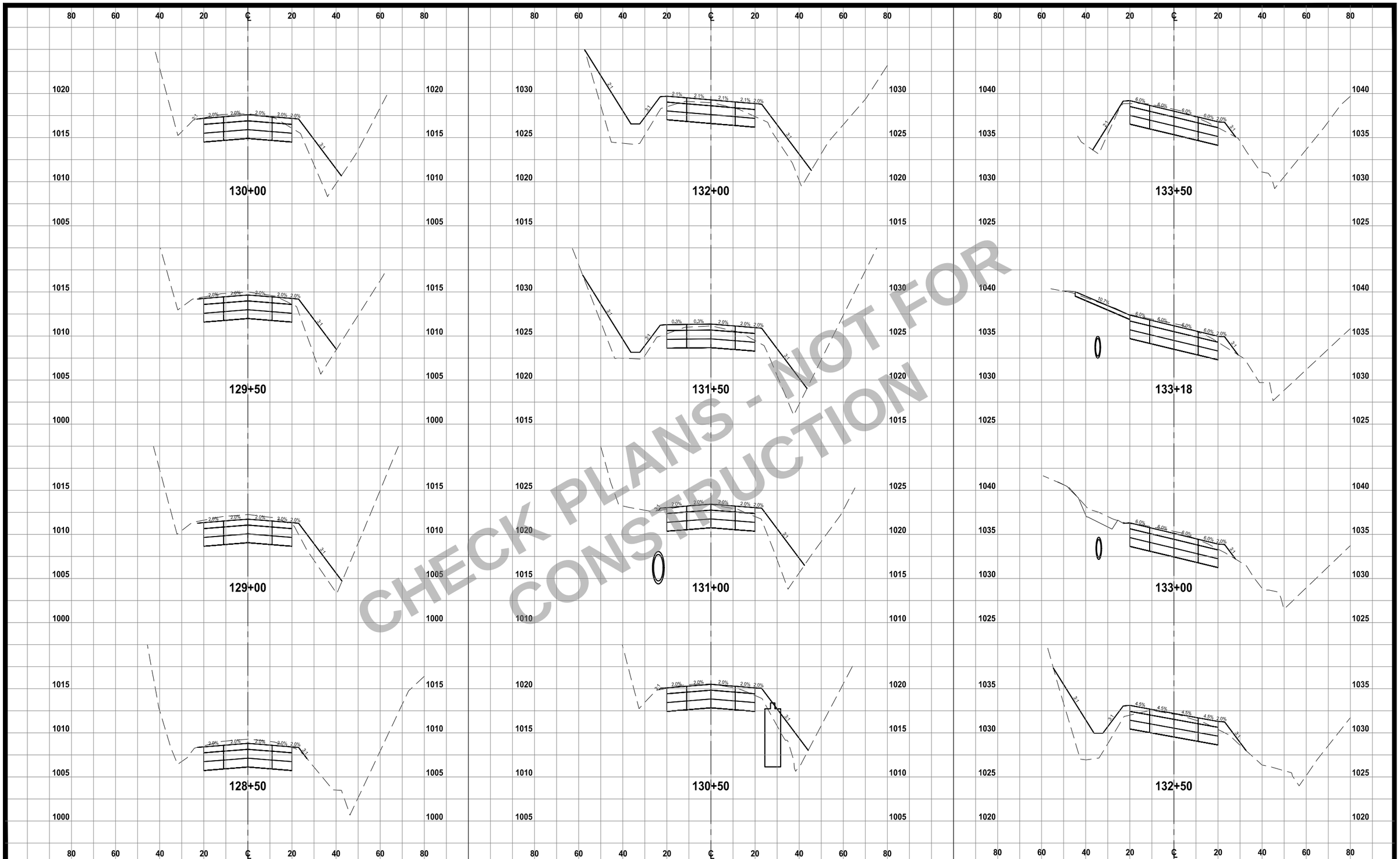

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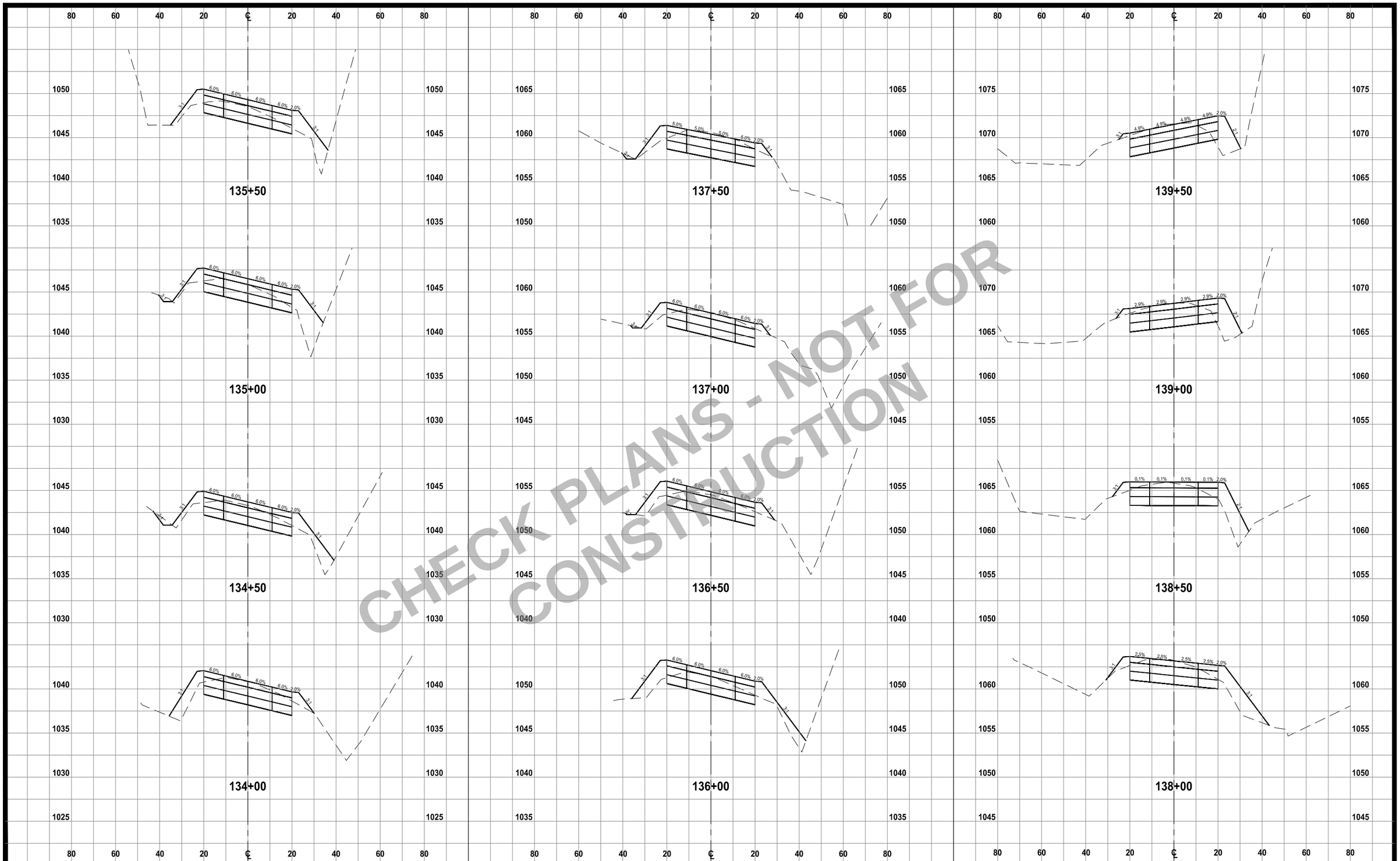

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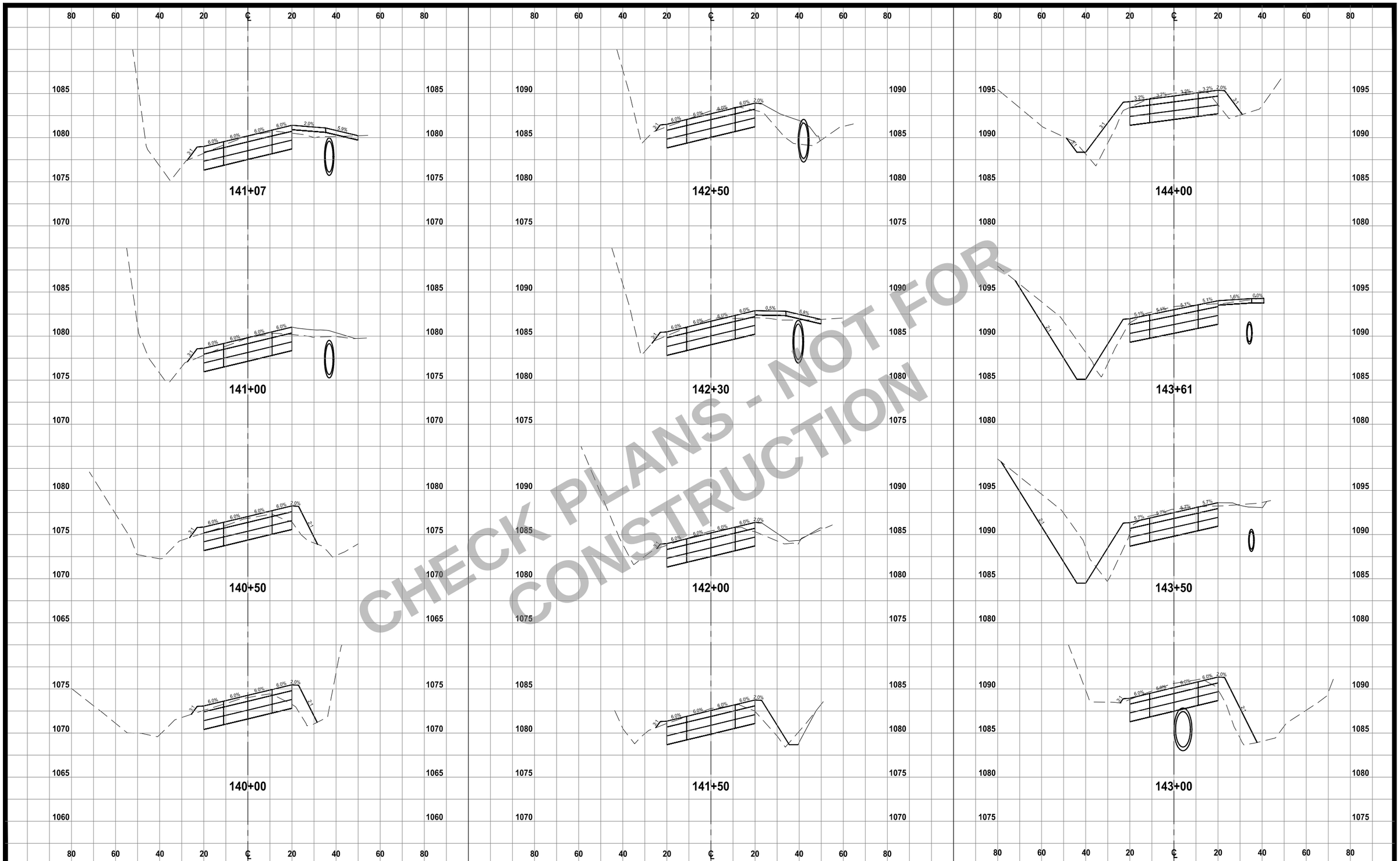

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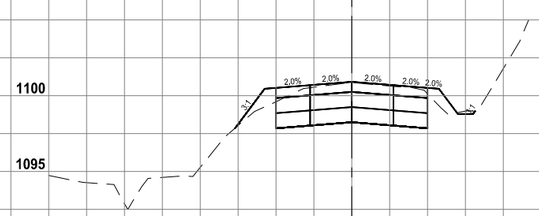

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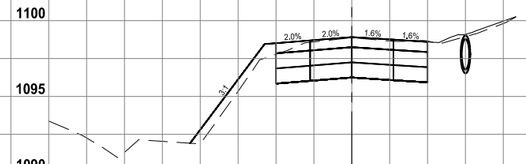

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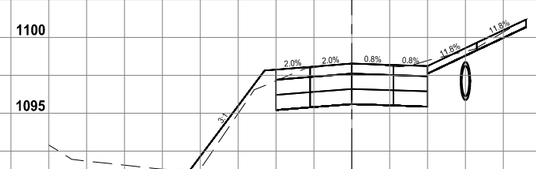

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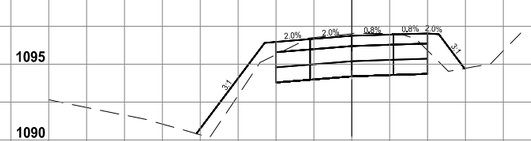

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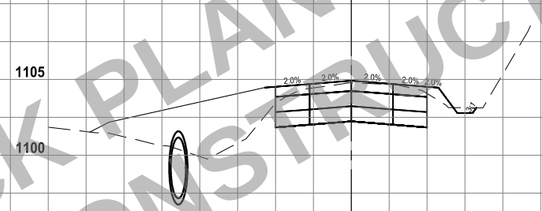

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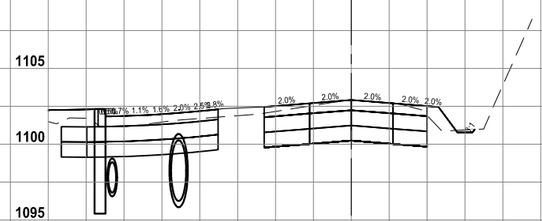

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CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.						
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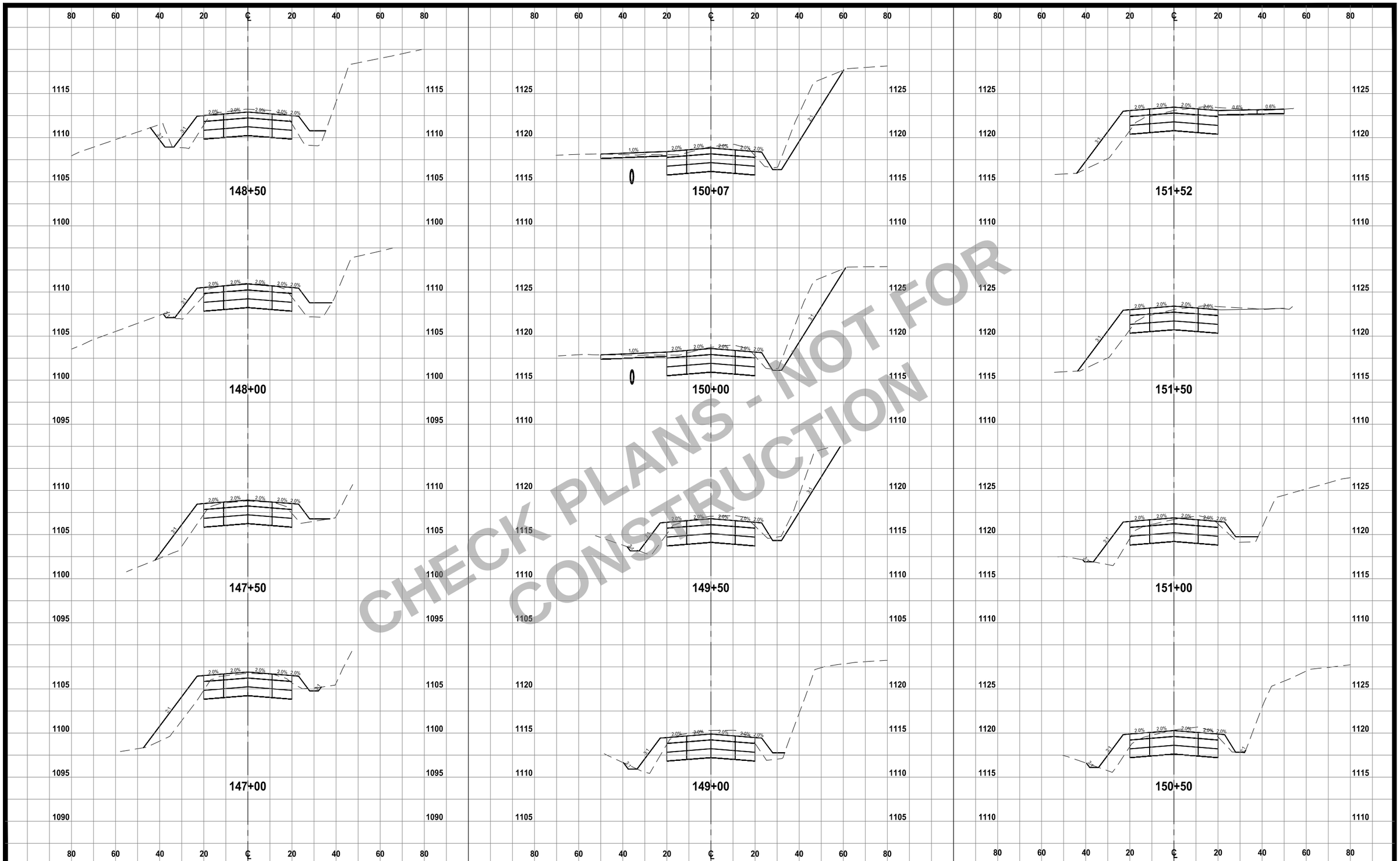

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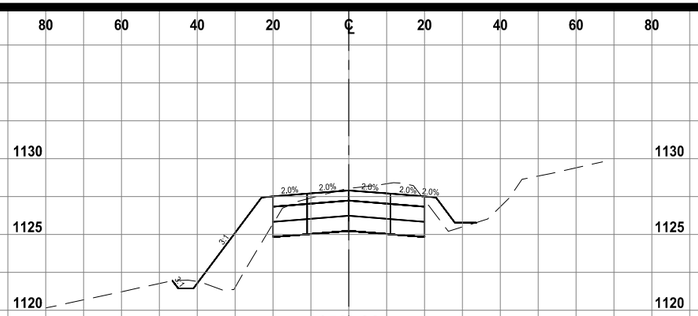

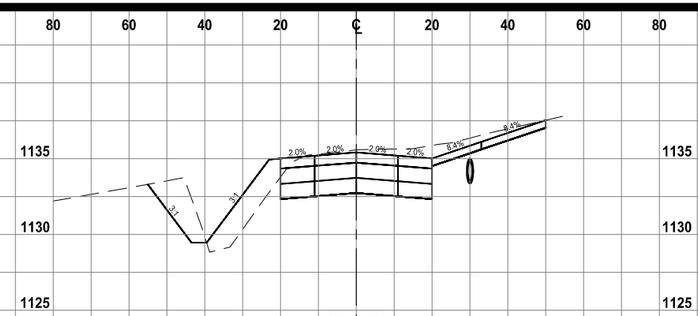

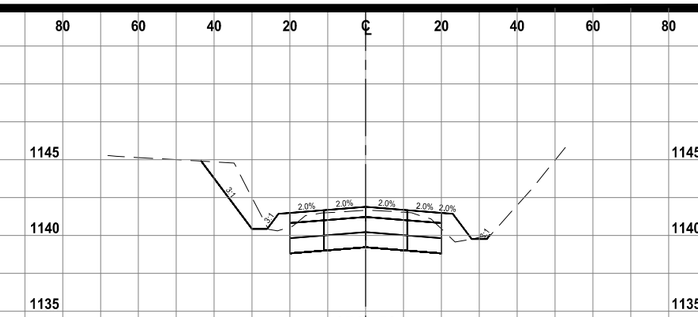

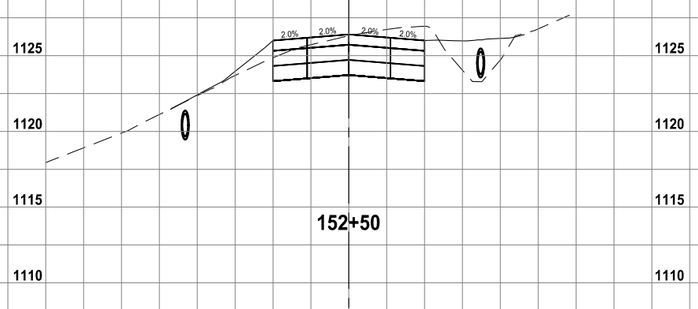

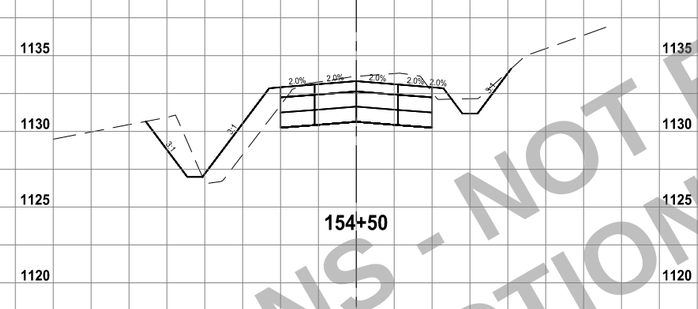

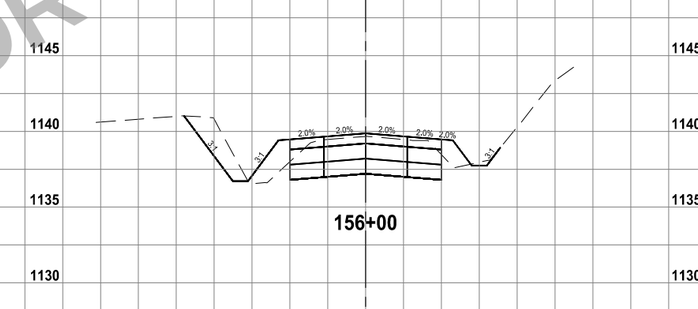

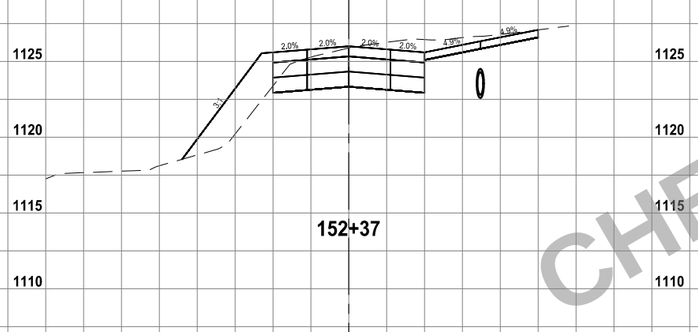

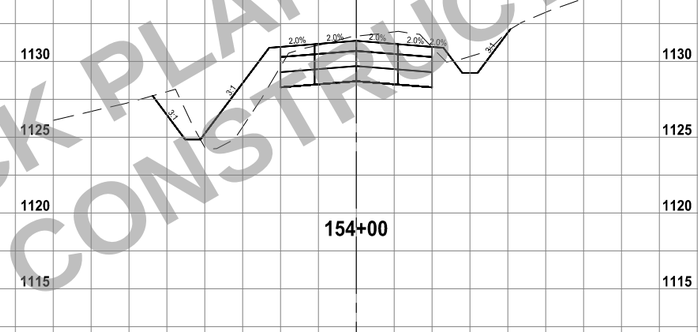

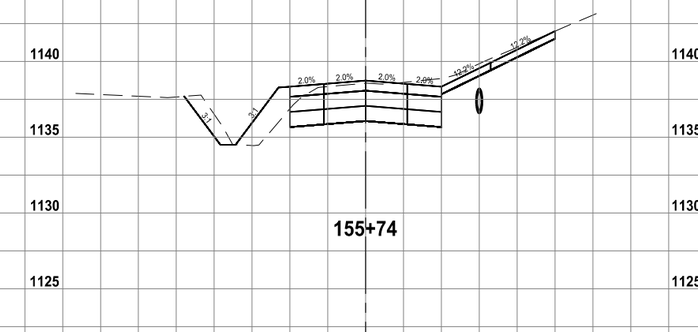

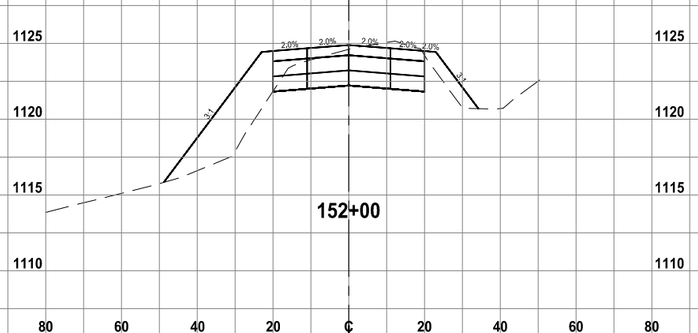

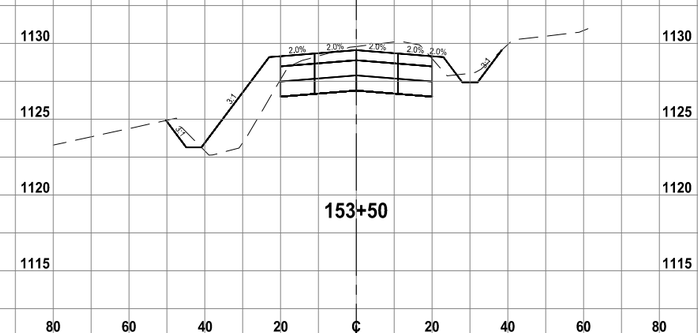

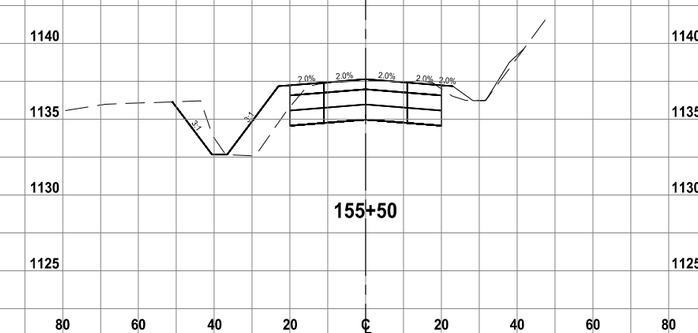

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ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	W.12
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
BAK	-	DECEMBER 2019	.					

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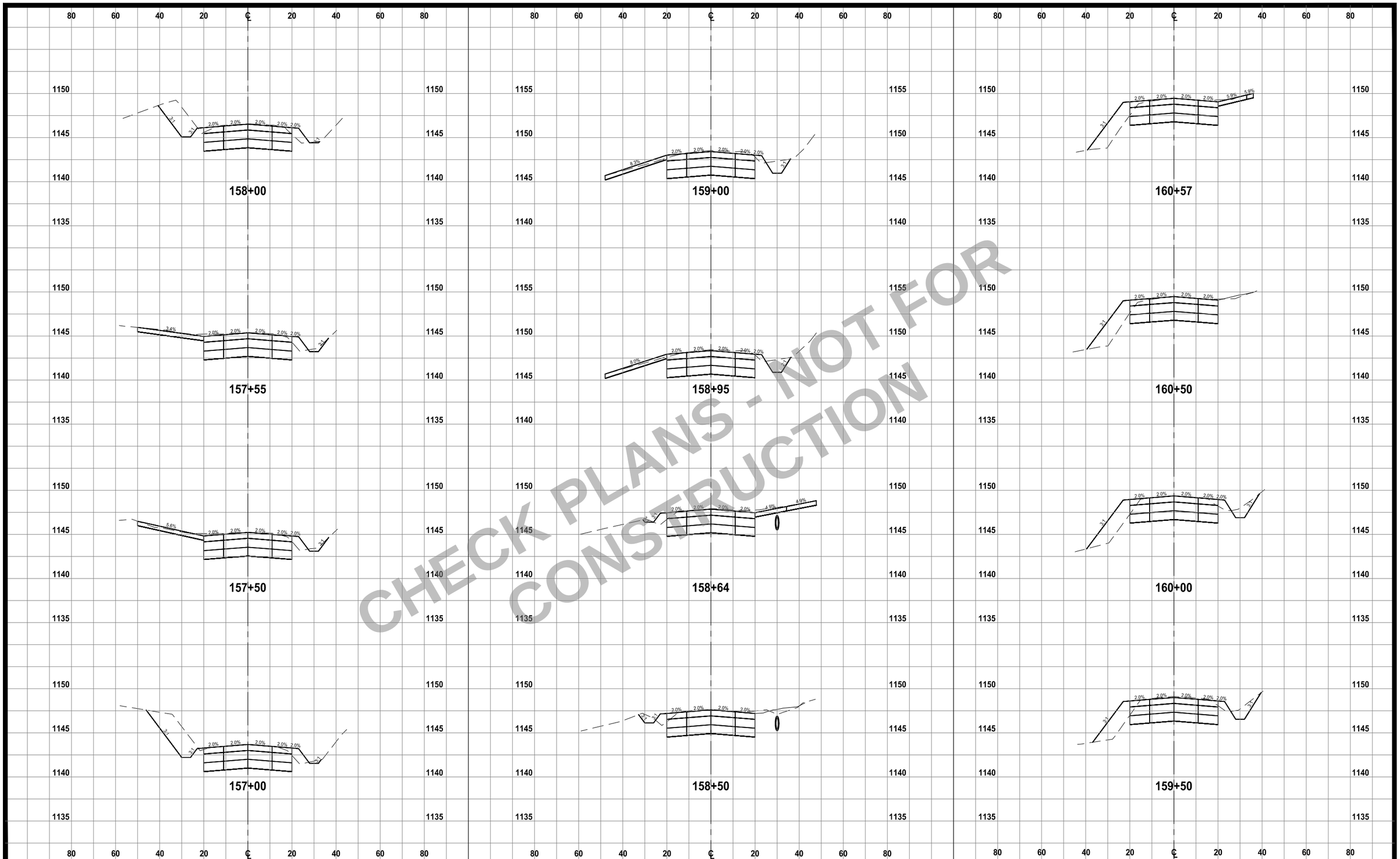

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ENGINEER JSS CHECKED BY BAK	DRAWN BY BAV FIELD BOOK NO. -	DECORAH, IOWA MEC #30616018-001 DECEMBER 2019	REVISIONS	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	SHEET NO. W.13

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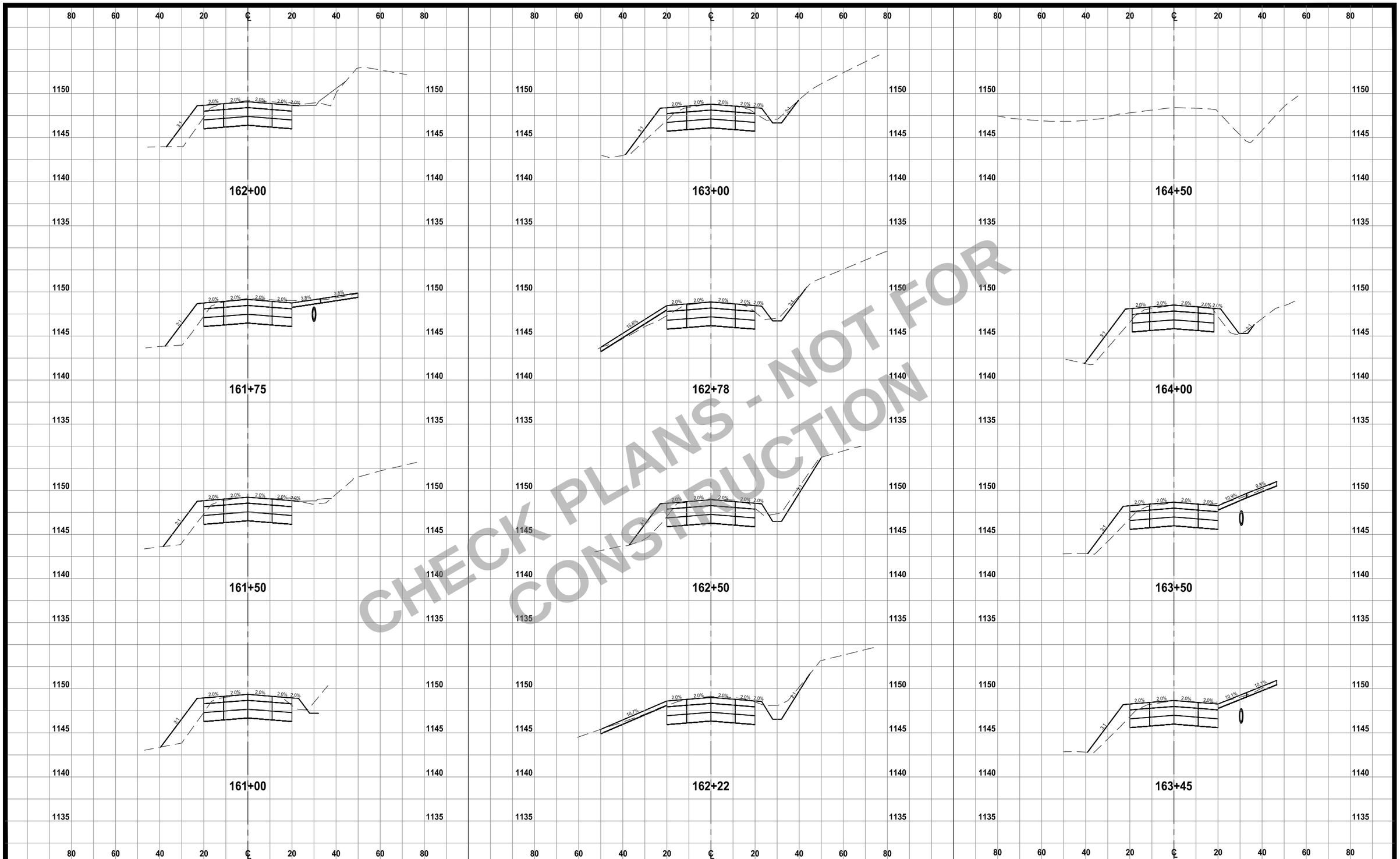

ENGINEER	DRAWN BY		REVISIONS					SHEET NO.
JSS	BAV	DECORAH, IOWA	.	McCLURE™ making lives better	1740 Lininger Lane North Liberty, Iowa 52317 319-626-9090 fax 319-626-9095	LOCUST ROAD AND UTILITY IMPROVEMENTS - 2020	LOCUST ROAD CROSS SECTIONS BID ALTERNATE 1	STBG-SWAP-1867(617)--SG-96	W.14
CHECKED BY	FIELD BOOK NO.	MEC #30616018-001	.					
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