

SEGMENT 2 TRAIL IMPROVEMENTS

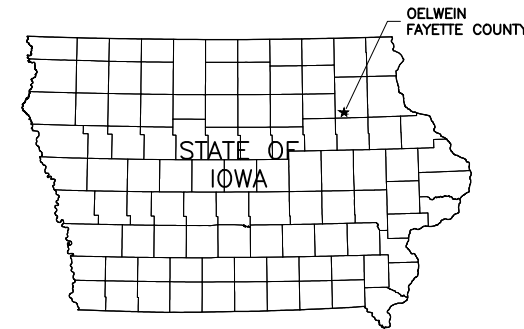
FOR

CITY OF OELWEIN OELWEIN, IOWA

21-1205

FAYETTE COUNTY

MAY 2025



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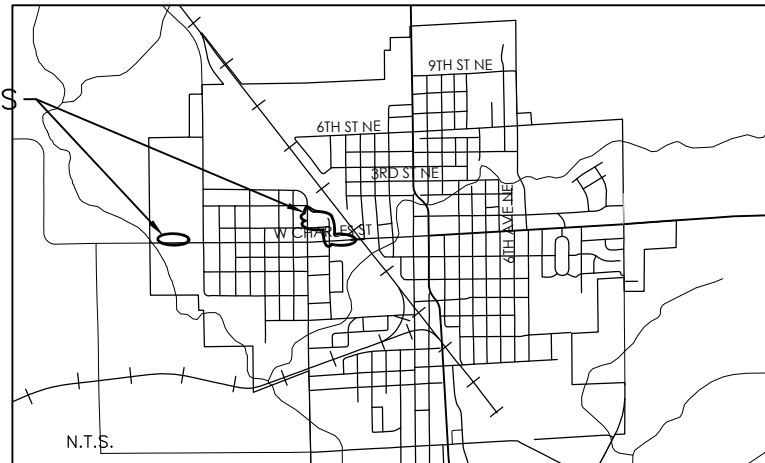
OWNER/DEV	CITY OF OELWEIN
ADDRESS	20 2ND AVE SW
	OELWEIN, IA 50662
P#	319-283-5440

CITY ADMINISTRATION	
MAYOR.....	BRETT DEVORE
COUNCIL MEMBERS.....	RENEE CANTRELL
	DAVE LENZ
	LYNDA PAYNE
	ANTHONY RICCHIO
	KAREN SEEDERS
	MATT WEBER
CITY ADMINISTRATOR.....	DYLAN MULFINGER
CITY CLERK.....	BARBARA RIGDON

UTILITIES	
UTILITY TYPE	COMMON NAME
WATER & SEWER	OELWEIN, CITY OF
ELECTRIC	ALLIANT
TELEPHONE	CENTURY LINK
GAS	ALLIANT
CABLE	MEDIACOM

(CONTRACTOR TO BE RESPONSIBLE FOR ANY ADJUSTMENTS TO BE MADE.)

PROJECT LOCATIONS



LOCATION MAP

FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

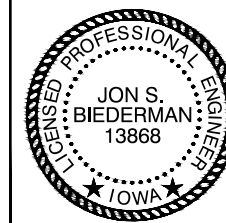
ILLINOIS

IOWA

WISCONSIN

WEST UNION, IOWA
128 S VINE STREET
WEST UNION, IA 52175
P# (563) 422-5131

BID SET



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.

05/07/2025

Jon S. Biederman, P.E.
License Number 13868
My license/renewal date is December 31, 2026.
Pages or sheets covered by this seal: All




















ORIGINAL SET FOR PROJECT: 21-1205		DATE CREATED: MAY 2025
REVISIONS		
REV. NO.	DESCRIPTION	DATE

ABBREVIATIONS

ANGLE
ABC AGGREGATE BASE COURSE
AC ACRE(S)
ACI AMERICAN CONCRETE INSTITUTE
AGR AGGREGATE
ARIC AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT ALTERNATE
ARCH ARCHITECT
ASPH ASPHALT
ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS
B BALL VALVE
B- BACKFLOW PREVENTER
BIT BITUMINOUS
BLDG BUILDING
BLK BLOCKING
BM BENCHMARK
BOT BOTTOM
BSMT BASEMENT
BV BUTTERFLY VALVE
C-B BACK-TO- BACK OF CURB DIMENSION
C of C CENTERLINE
C to C CENTER TO CENTER
C & G CURB AND GUTTER
CF CUBIC FEET
CHD CHORD LENGTH
CI CAST IRON PIPE
CHK CHECK VALVE
CLR CLEAR
CMP CORRUGATED METAL PIPE
CMU CONCRETE MASONRY UNIT
CTY COUNTY
CONC CONCRETE
CONT CONTINUOUS
C-B CENTERLINE TO BACK OF CURB DIMENSION
COORD COORDINATE
COPR COPPER PIPING
CTRS CENTERS
CY CUBIC YARDS
CS CORPORATION STOP
D DEGREE OF CURVE
DEP DEPRESSED
DET DETAIL
DIAG DIAGONAL
DIM DIMENSION
DI DUCTILE IRON PIPE
DN DOWN
DNSTR DOWNSTREAM
DP DRAINAGE PIPE/STORM PIPE
DWG DRAWING
E EAST
EJ EXPANSION JOINT
EL, ELEV ELEVATION
EP EDGE OF PAVEMENT
EQUIP EQUIPMENT
EQUIV EQUIVALENT
EW EACH WAY
EXP EXPANSION
EX, EXIST EXISTING
EXT EXTERIOR
E = EXTERNAL DISTANCE
FD FLOOR DRAIN
FDN FOUNDATION
FE FIELD ENTRANCE
FF FINISH FLOOR
FIL FILLET
FIN FINISH
FL FLOW LINE
FLR FLOOR
FM FORCE MAIN
FND FOUND
FRMG FRAMING
FTG FOOTING
F-F FACE TO FACE
G GAUGE
GI GALVANIZED IRON PIPE
GRD GRADE
GRS GRATING SUPPORT
GRT GROUT
GV GAS VALVE
GYP GYPSUM
H HOUSE
HC HORIZONTAL CURVE
HMA HOT MIX ASPHALT
HNGR HANGER
HORIZ HORIZONTAL
H.P. HIGH POINT
HW HOT WATER
HWH HOT WATER HEATER
Δ = CENTRAL ANGLE
I MOMENT OF INERTIA
ID INSIDE DIAMETER
INT INTERIOR
INV INVERT ELEVATION; BASED ON BENCH MARK DATUM
IP IRON PIPE
JST JOIST
L LENGTH OF CURVE
LAT LATERAL
LAV LAVATORY
LF LINEAL FEET
L.P. LOW POINT
LT LEFT OF SURVEY BASE LINE
MAX MAXIMUM
ME MATCH EXISTING
MH MANHOLE
MIN MINIMUM
MJ MECHANICAL JOINT
MTL METAL
N NORTH
No. OR # NUMBER
NOM NOMINAL
NTS NOT TO SCALE
OC ON CENTER
OD OUTSIDE DIAMETER
OO OUTSIDE TO OUTSIDE
OPNG OPENING
OPP OPPOSITE
PC POINT OF CURVATURE
PCC PORTLAND CEMENT CONCRETE
PCF POUNDS PER CUBIC FOOT
PDP PERFORATED DRAIN PIPE








PE	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
PL	PLATE
PLG	PLUG VALVE
PLP	POLYPROPYLENE PIPE
PLYWD	PLYWOOD
PM	PRINCIPAL MERIDIAN
PR	PRESSURE REGULATORS
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PR, PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PIPE SLEEVE
PT	POINT OF TANGENCY
PLG	PLUG VALVE
PVC	POLYVINYL CHLORIDE (PLASTIC) PIPE
R	RADIUS
RDCR	REDUCER
RCCP	REINFORCED CONCRETE CYLINDER PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REINF	REINFORCING
REQD	REQUIRED
ROW	RIGHT OF WAY
RFTR	RAFTER
RND	ROUND
RR	RAILROAD
RRSP	RAILROAD SPIKE
RT	RIGHT
R&R	REMOVE AND REPLACE
S	SOUTH
SB	STREAM BED
SCHED	SCHEDULE
SEC	SECTION
SF	SQUARE FEET
SHR	SHOWER
SHT	SHEET
SHTG	SHEATHING
SP	SANITARY PIPE
SPA	SPACING OR SPACES
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SERVICE
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SW	SIDEWALK
SY	SQUARE YARDS
SYM	SYMMETRICAL
TAN	TANGENT LENGTH
TBC	TOP BACK OF CURB
TBM	TEMPORARY BENCH MARK; BASED ON BENCHMARK DATUM
TD	TILE DRAIN
THIK	THICK
TR	TREAD
TY	TYPE
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
UP	UTILITY POLE
UPSTR	UPSTREAM
UR	URINAL
USGS	US GEOLOGICAL SURVEY
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WC	WATER CLOSET
WF	WIDE FLANGE
WM	WATER MAIN
WMQ	WATER MAIN QUALITY
WV	WATER VALVE
WGT	WEIGHT
WP	WEATHER PROOF
WS	WATER SERVICE
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
XP	EXPLOSION PROOF

HATCH PATTERNS

	EARTH - FILL		BRICK
	EARTH - UNDISTURBED		STEEL
	ROCK (GEOLOGICAL)		INSULATION (LOOSE/ BATT)
	STONE OR RIP RAP		INSULATION (RIGID)
	GRAVEL		WOOD (ROUGH)
	CONCRETE		WOOD (BLOCKING)
	CONCRETE BLOCK		WOOD (FINISH)
	CMU		DETECTABLE WARNING
	ASPHALT PAVEMENT		

SYMBOLS













EXISTING	CIVIL	PROPOSED
EXISTING R.O.W.	RIGHT-OF-WAY LINE	PROPOSED R.O.W.
	PROPERTY LINE	
	CENTERLINE	
	SETBACK LINE	
	EASEMENT LINE	
	SECTION LINE	
	SECTION CORNER	
	COORDINATE POINT ON GRID SYSTEM	
● FND	FOUND OR SET PROPERTY PIN	○ SET
☒	RIGHT-OF-WAY MARKER	☒
	BENCHMARK	
600	CONTOUR LINE	600
000.00 FS	SPOT ELEVATION (AT ●)	000.00 FS
x x	FENCE LINE	x x
○ ○	SILT FENCE LINE	○ ○
	CURB AND GUTTER	
	TIP OUT CURB AND GUTTER	
	SAWCUT, LIMITS OF PAVEMENT REMOVAL & REPLACEMENT	
○ x"	DECIDUOUS TREE W/ SIZE	○ x"
✶ x"	CONIFEROUS TREE W/ SIZE	✶ x"
☪ x"	TREE STUMP	☪ x"
	HEDGEROW	
	BUSH OR SHRUB	
	TREE LINE	
CL	CONSTRUCTION LIMIT LINE	CL
□ □ ✕ SIGN (MULTIPLE POST, SINGLE POST, STREET SIGN)	SIGN (PYLON)	□ □
	GUARD RAIL	
	RAILROAD TRACKS	
	BUILDING	
□	MAILBOX	□
~	FLAGPOLE	
●	BOLLARD	●
AC	AIR CONDITIONER	AC







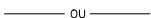
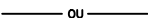



































EXISTING		PROPOSED	
	S.B. #XX		S.B. #XX
	MW #XX		MW #XX
	MONITORING WELL		
	REVISION NUMBER		
	OUTLINE OF DETAILED AREA		
	SECTION NUMBER		
	SHEET WHERE SHOWN		







































<u>EXISTING</u>	<u>SANITARY SEWER</u>	<u>PROPOSED</u>
—— SAN ——	SANITARY SEWER	—— SAN ——
—— SSV —— SSV ——	SANITARY SEWER SERVICE	—— SSV —— SSV ——
—— < FM ——	SANITARY SEWER FORCE MAIN	—— < FM ——
○	SANITARY CLEANOUT	CO ●
Ⓢ	SANITARY MANHOLE	●
	WYE FITTING	⌋

EXISTING		PROPOSED
	WATER SERVICE	
	WATER PIPE	
	FIRE HYDRANT	
	YARD HYDRANT	
	WATER VALVE WITH BOX	
	CURB STOP W/CURB BOX	
	REDUCER	
	WATER VALVE VAULT	
	11.25' BEND	
	22.50' BEND	
	45° BEND	
	90° BEND	
	TEE	
	CAP	
	WATER METER	
	SPRINKLER HEAD	
	TRACER WIRE BOX	

<u>EXISTING</u>	<u>STORM SEWER</u>	<u>PROPOSED</u>
— ST — ST —	STORM SEWER	— ST — ST —
— DT — DT —	DRAIN TILE	— DT — DT —
— —	DITCH LINE (PAVED)	— —
— —	DITCH LINE (UNPAVED)	— —
⊙	STORM MANHOLE	⦿
⊖	CATCH BASIN	⦶
▨	STORM SEWER INLET	▨
⊙	STORM SEWER INLET — BEHIND CURB	⊙
◇	DOWNSPOUT	
[— X" TYPE —]	CULVERT AND SIZE	[— X" TYPE —]
⌞	RCCP OR RCP EQRS (RCAP) END SECTION	⌞
⌞	METAL OR HDPE END SECTION	⌞
→	FLOW DIRECTION	→

<u>EXISTING</u>	<u>EROSION CONTROL</u>	<u>PROPOSED</u>
	EROSION CONTROL BLANKET	
	TEMPORARY AND PERMANENT SEEDING AREA	
	UNDISTURBED AREA	
	STABILIZED CONSTRUCTION ENTRANCE	
	SILT FENCE	
	INLET PROTECTION	
	TEMPORARY SEDIMENT TRAP	
	CULVERT INLET PROTECTION	
	ROCK OUTLET PROTECTION	
	ROCK CHECK DAM – COURSE AGGREGATE	
	ROCK CHECK DAM – RIP RAP	
	DITCH CHECK	

EXISTING		PROPOSED
	FIBER OPTIC LINE	
	UNDERGROUND TV CABLE	
	CABLE TV RISER PEDESTAL	
	OVERHEAD UTILITY	
	UNDERGROUND ELECTRIC	
	ELECTRIC RISER PEDESTAL	
	ELECTRIC MANHOLE	
	UNDERGROUND TELEPHONE	
	TELEPHONE RISER PEDESTAL	
	TELEPHONE MANHOLE	
	UTILITY POLE	
	UTILITY POLE W/ METER	
	UTILITY POLE W/ TRANSFORMER	
	UTILITY POLE W/ LIGHT	
	UTILITY POLE WITH GUY WIRE AND ANCHOR	
	LIGHT (MAST MOUNTED)	
	LIGHT POLE (SINGLE FIXTURE)	
	YARD LIGHT	
	GAS MAIN	
	GAS METER	
	GAS VALVE	
	GAS STRUCTURE	
	TRANSFORMER	
	GENERATOR	

EXISTING	TRAFFIC RELATED CONTROLLER	PROPOSED
		
	MAST ARM ASSEMBLY AND POLE	
	SIGNAL HEAD AND POST	
	SIGNAL HEAD	
	PEDESTRIAN HEAD	
	PEDESTRIAN PUSH-BUTTON	
	HAND HOLE	
	DOUBLE HAND HOLE	
	HAND HOLE OR JUNCTION BOX	
	HEAVY-DUTY HAND HOLE	
$(5' - 2')$	EXISTING CONDUIT (LENGTH AND SIZE) PROP GALVANIZED STEEL OR PVC CONDUIT UPPER NUMERAL INDICATES LENGTH "T" INDICATES CONDUIT IN TRENCH "P" INDICATED CONDUIT PUSHED LOWER NUMERAL INDICATES SIZE AND TYPE	$\frac{5}{2"} - \frac{T}{GS-PVC}$
	LUMINAIRE	
	ARROW - THROUGH, TURN LEFT	
	ARROW - THROUGH	
	ARROW - TURN LEFT	
	ARROW - TURN RIGHT	
	ONE DIRECTION TURN ONLY	
	HANDICAPPED PARKING STALL	
	TRAFFIC DETECTOR LOOP	
	TRAFFIC CONTROL BOX	



ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA, 50662

PROJECT AND LOCATION:
SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IA

DRAWN BY: JCB
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

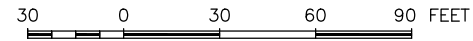
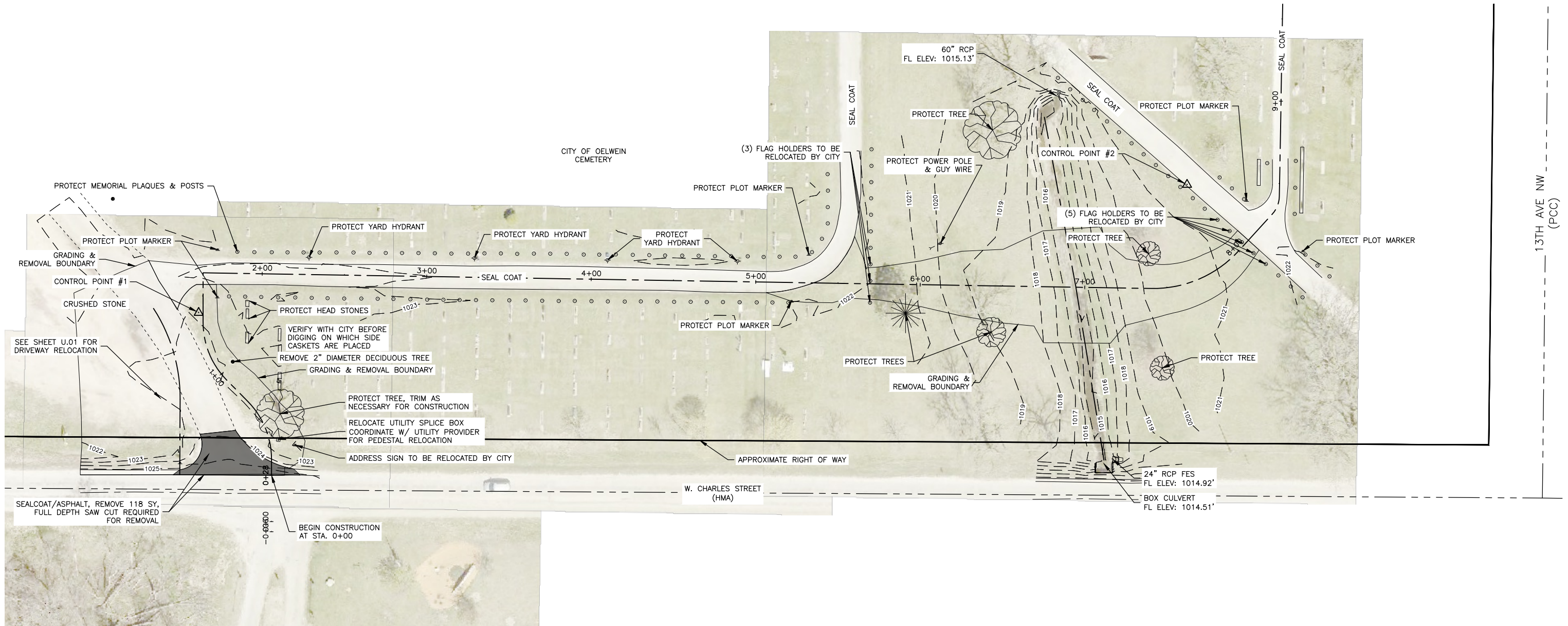
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
LEGEND

SET TYPE: **BID SET**
G:\C3D\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, A.02 LEGEND

DB NUMBER:
1-1205

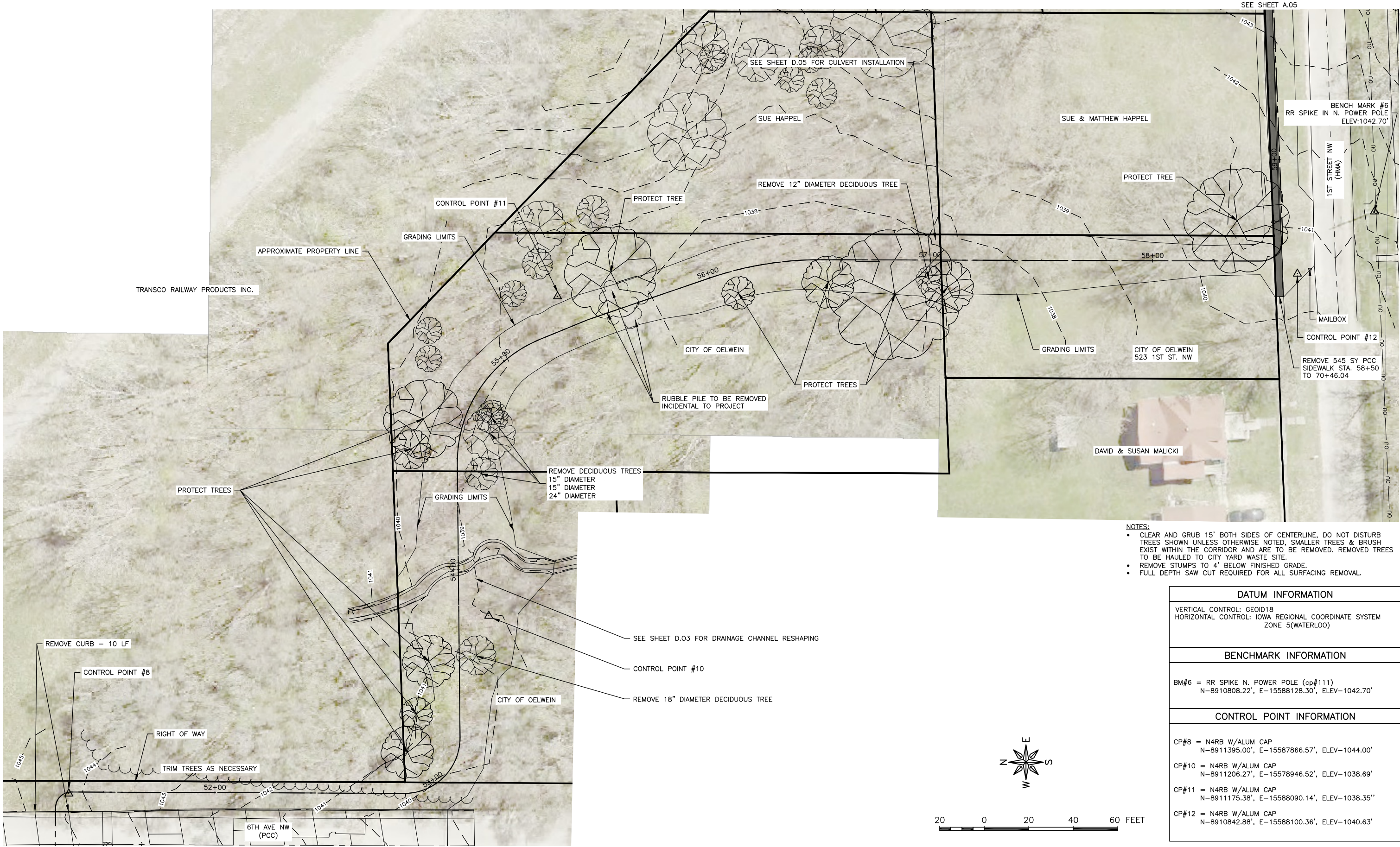
EET NUMBER:
A.02



- NOTES:**
- CLEAR AND GRUB 15' BOTH SIDES OF CENTERLINE, DO NOT DISTURB TREES SHOWN UNLESS OTHERWISE NOTED, SMALLER TREES & BRUSH EXIST WITHIN THE CORRIDOR AND ARE TO BE REMOVED. REMOVED TREES TO BE HAULED TO CITY YARD WASTE SITE.
 - REMOVE STUMPS TO 4' BELOW FINISHED GRADE.
 - FULL DEPTH SAW CUT REQUIRED FOR ALL SURFACING REMOVAL.

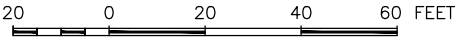
DATUM INFORMATION	
CONTROL INFORMATION IOWA REGIONAL COORDINATE SYSTEM; ZONE 5(WATERLOO) GEOID18	
CONTROL POINTS	
CP#1(N4RB W/ ALUM CAP) N: 8910598.97' E: 15584391.59' ELEV: 1022.74'	
CP#2(MAG-NAIL) N: 8910676.77' E: 15584992.41' ELEV: 1021.76'	

REVISIONS		
REV. NO.	DESCRIPTION	DATE



- NOTES:
- CLEAR AND GRUB 15' BOTH SIDES OF CENTERLINE, DO NOT DISTURB TREES SHOWN UNLESS OTHERWISE NOTED, SMALLER TREES & BRUSH EXIST WITHIN THE CORRIDOR AND ARE TO BE REMOVED. REMOVED TREES TO BE HAULED TO CITY YARD WASTE SITE.
 - REMOVE STUMPS TO 4" BELOW FINISHED GRADE.
 - FULL DEPTH SAW CUT REQUIRED FOR ALL SURFACING REMOVAL.

DATUM INFORMATION
VERTICAL CONTROL: GEOID18 HORIZONTAL CONTROL: IOWA REGIONAL COORDINATE SYSTEM ZONE 5(WATERLOO)
BENCHMARK INFORMATION
BM#6 = RR SPIKE N. POWER POLE (cp#111) N-8910808.22', E-15588128.30', ELEV-1042.70'
CONTROL POINT INFORMATION
CP#8 = N4RB W/ALUM CAP N-8911395.00', E-15587866.57', ELEV-1044.00'
CP#10 = N4RB W/ALUM CAP N-8911206.27', E-15578946.52', ELEV-1038.69'
CP#11 = N4RB W/ALUM CAP N-8911175.38', E-15588090.14', ELEV-1038.35"
CP#12 = N4RB W/ALUM CAP N-8910842.88', E-15588100.36', ELEV-1040.63'



FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA, 50662

PROJECT AND LOCATION:
SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IA

DRAWN BY: JCB
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

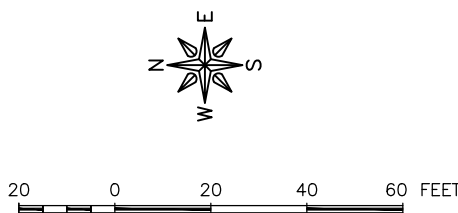
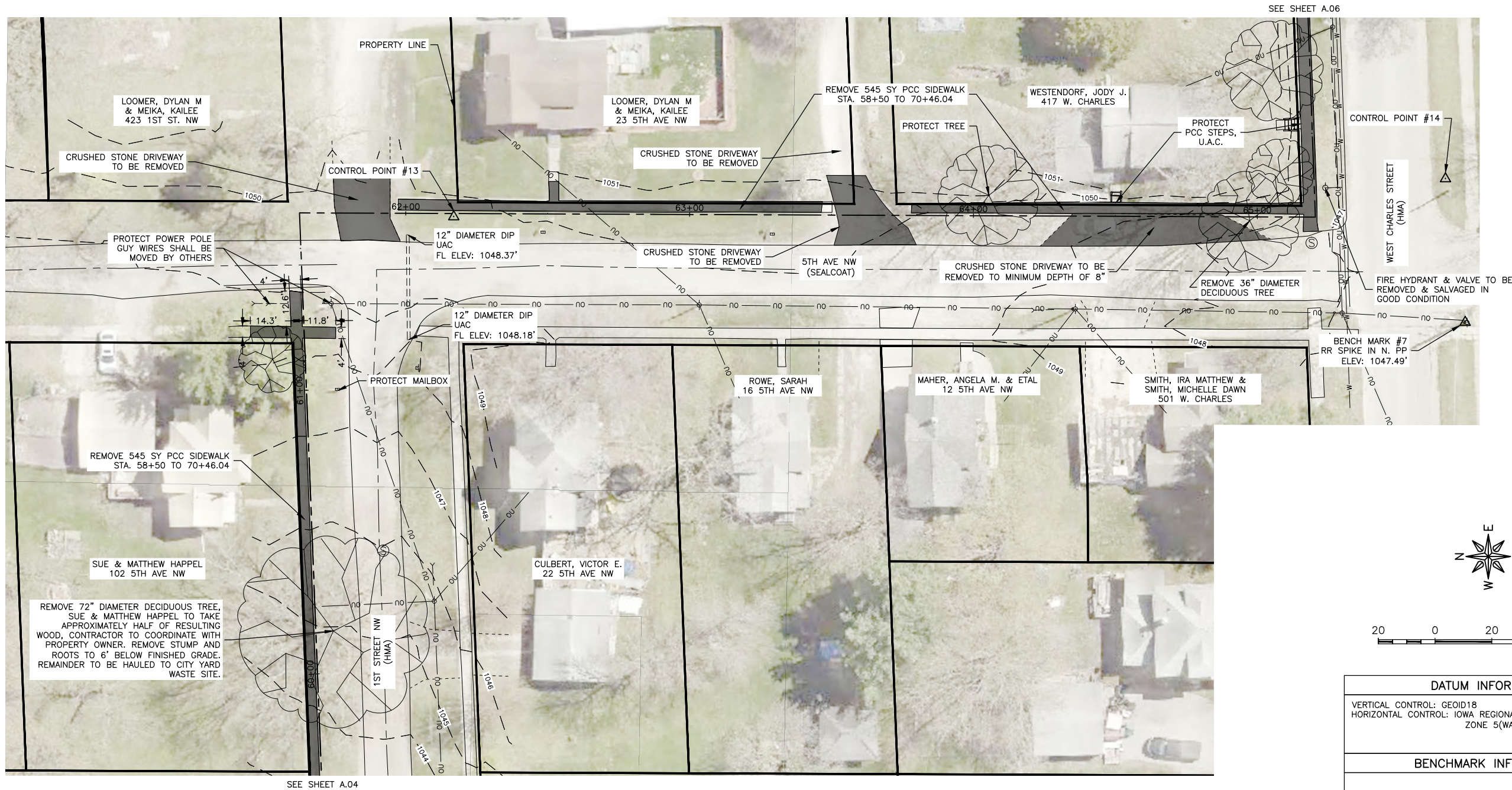
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
EXISTING CONDITIONS AND REMOVALS
EASTERLY TRAIL

SET TYPE: BID SET
G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, A04

JOB NUMBER:
21-1205

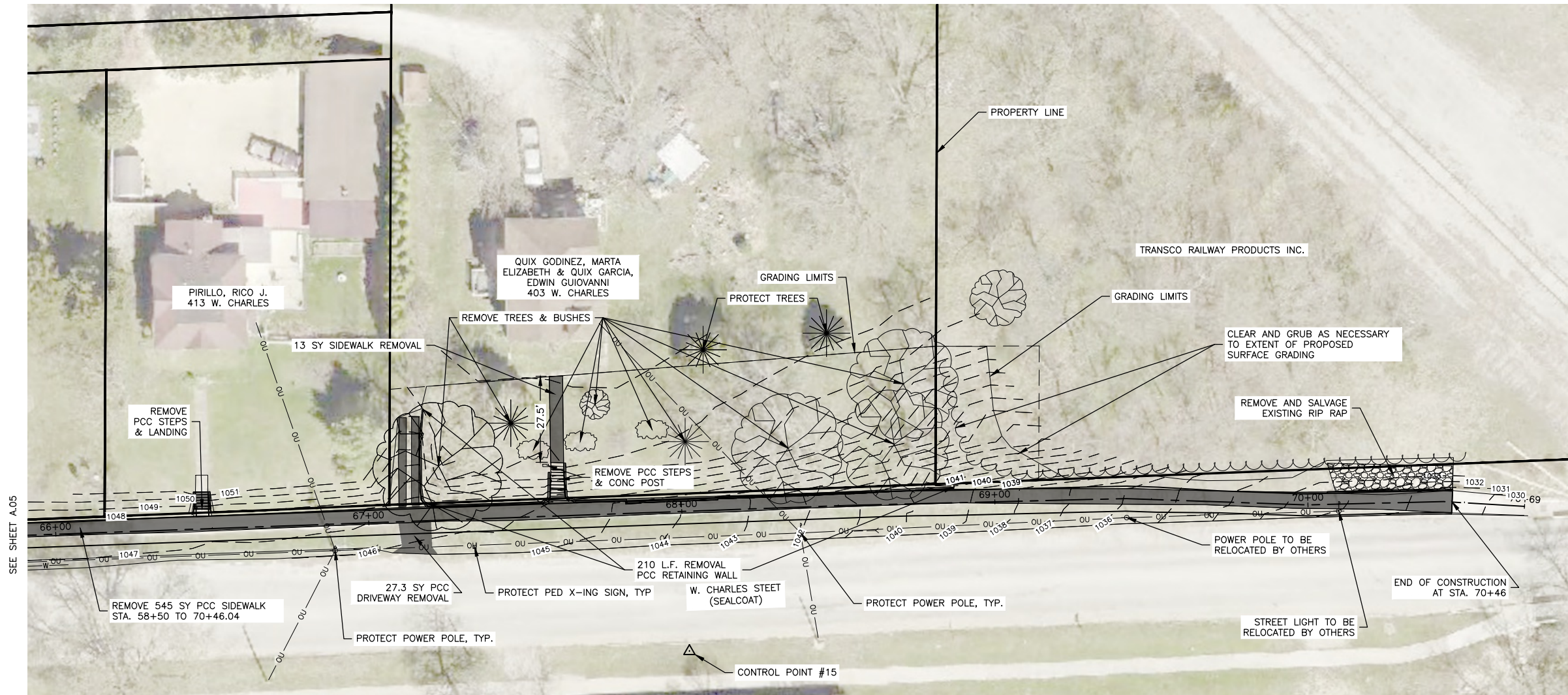
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A.04



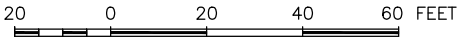
DATUM INFORMATION
VERTICAL CONTROL: GEOID18 HORIZONTAL CONTROL: IOWA REGIONAL COORDINATE SYSTEM ZONE 5(WATERLOO)
BENCHMARK INFORMATION
BM#7 = RR SPIKE IN N. POWER POLE (CP#112) N-8910450.41', E-15588375.60', ELEV-1047.49'
CONTROL POINT INFORMATION
CP#14 = N4RB W/ALUM CAP N-8910457.45', E-15588426.25', ELEV-1047.22'
CP#13 = N4RB W/ALUM CAP N-8910806.77', E-15588412.89', ELEV-1049.85'

- NOTES:
- REMOVE STUMPS TO 4' BELOW FINISHED GRADE, EXCEPT AS NOTED (6' FOR 72" TREE).
 - FULL DEPTH SAW CUT REQUIRED FOR ALL SURFACING REMOVAL.

REVISIONS		
REV. NO.	DESCRIPTION	DATE



- NOTES:
- REMOVE STUMPS TO 4' BELOW FINISHED GRADE.
 - FULL DEPTH SAW CUT REQUIRED FOR ALL SURFACING REMOVAL.



DATUM INFORMATION
VERTICAL CONTROL: GEOD18 HORIZONTAL CONTROL: IOWA REGIONAL COORDINATE SYSTEM ZONE 5(WATERLOO)
CONTROL POINT INFORMATION
CP#15 = N4RB W/ALUM CAP N=8910468.73', E=15588694.46', ELEV=1043.82'

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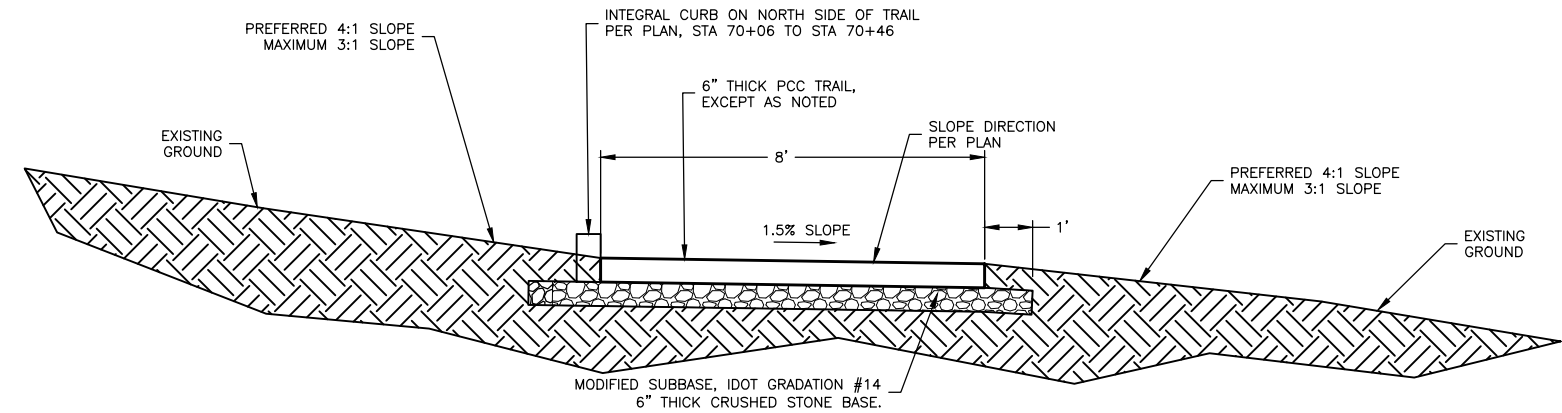
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
EXISTING CONDITIONS AND REMOVALS
EASTERLY TRAIL

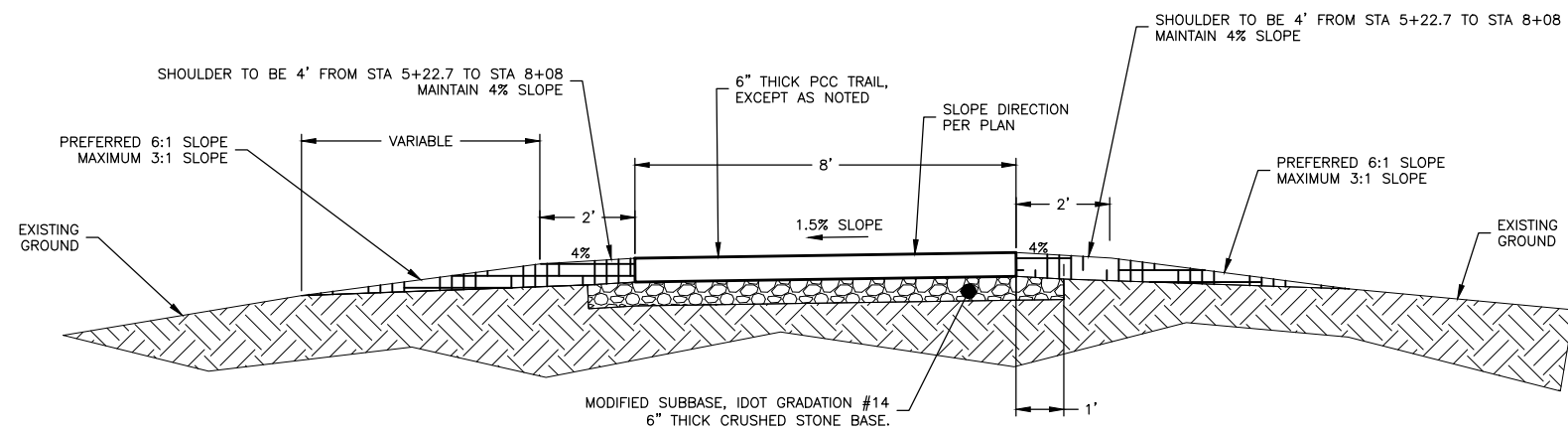
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G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, A06

JOB NUMBER:
21-1205

SHEET NUMBER:
A.06



**TYPICAL TRAIL CROSS SECTION
WITHOUT SHOULDER
N.T.S.**



**TYPICAL TRAIL CROSS SECTION
WITH SHOULDER
N.T.S.**

REVISIONS		
REV. NO.	DESCRIPTION	DATE

GENERAL NOTES

1. All work shall conform to and be performed in accordance with all applicable codes and ordinances.
2. The Urban Standard Specifications for Public Improvements (SUDAS), 2025 edition plus Supplemental Specifications and Special Provisions as prepared by Fehr Graham shall be considered a part of these documents as if bound herein.
3. The quantities indicated on the proposal form are approximate only, and do not constitute a warranty or guarantee by the Jurisdiction as to the actual quantities involved in the work. Such quantities are to be used for the purpose of comparison of bids and determining the amount of bid security, contract, and performance, payment, and maintenance bond. In the event of discrepancies between unit prices and unit price extensions listed in a bidder's proposal, unit prices shall govern and unit price extensions shall be corrected, as necessary, for agreement with unit prices. The Jurisdiction expressly reserves the right to increase or decrease the quantities during construction, and to make reasonable changes in design, provided such changes do not materially change the intent of the contract. The amount of work to be paid for shall be based upon the actual quantities performed.
4. Construction Survey for this project to be provided by the OWNER.
5. The CONTRACTOR shall notify all appropriate engineering departments and utility companies prior to construction. All necessary precautions shall be taken to avoid damage to any existing utility. Iowa Code 480, Underground Facilities Information, requires notice to Iowa One Call (1-800-292-8989) not less than 48 hours before excavation, excluding weekends and legal holidays.
6. The location of existing underground utilities and rock elevations are shown in an approximate way only and have not been independently verified by the OWNER or its representative. The CONTRACTOR shall determine the exact location of all existing utilities and rock elevations before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the CONTRACTOR'S failure to locate and preserve any and all underground utilities and rock elevations.
7. The CONTRACTOR shall visit the site and inspect the project area and become thoroughly familiar with the actual job conditions prior to bidding and the start of any work. Failure to visit the site shall not relieve the CONTRACTOR from performing the work in accordance with these drawings.
8. The CONTRACTOR shall verify at the site, all dimensions and conditions shown on the drawings, and shall notify the ENGINEER of any discrepancies, omissions, and/or conflict prior to proceeding with the work.
9. The CONTRACTOR shall not scale drawings. Dimensions shall govern. Large scale drawings shall govern over small scale drawings. Notes and details on the drawings shall apply to all similar conditions whether they are repeated or not.
10. The CONTRACTOR shall be responsible for any damage to existing facilities outside the construction limits resulting from negligence.
11. CONTRACTOR shall protect existing facilities, buildings, and other appurtenances not to be removed from the site during the construction activities.
12. CONTRACTOR shall confine his work to the construction limits and easements. If the CONTRACTOR obtains additional easement for the storage of equipment and materials, copies of the agreements with the property Owners shall be provided to the OWNER.
13. CONTRACTOR shall submit a detailed construction schedule and staging plan a minimum of two (2) days prior to the preconstruction meeting.
14. CONTRACTOR shall be responsible to maintain access to individual properties during construction whenever practical. CONTRACTOR shall notify residents of access restrictions minimum of 24 hours prior to removal of existing access.
15. CONTRACTOR shall submit for acceptance work plans and schedules for accomplishment of temporary and permanent erosion control prior to the start of construction.
16. CONTRACTOR shall coordinate temporary disruption of utility services with the City of Oelwein, affected utility companies and/or affected property owners when relocating existing facilities, connecting to existing facilities and placing new services.

ESTIMATED QUANTITIES

NO.	CODE	DESCRIPTION	QUANTITY	UNIT
1	2010-C	CLEARING AND GRUBBING	1	LS
2	2010-E	EXCAVATION, CLASS 10	2,400	CY
3	2010-G	SUBGRADE PREPARATION	2,838	SY
4	2010-H	GRANULAR STABILIZATION	200	TON
5	2010-J	SUBBASE, MODIFIED, 6" THICK	2,838	SY
6	2010-K-1	REMOVAL OF STRUCTURE, PCC STAIRS	2	EA
7	4030-A-1	PIPE CULVERT, TRENCHED, RCP, 12" DIA.	16	LF
8	4030-A-1	PIPE CULVERT, TRENCHED, RC ARCH, 51"X31" DIA.	32	LF
9	4030-B	PIPE APRON, RCP, 12" DIA.	2	EA
10	4030-B	PIPE APRON, RC ARCH, 51"X31"	2	EA
11	4030-C	FOOTING FOR CONCRETE PIPE APRON, RCP, 51"X31"	2	EA
12	5020-999-A	FIRE HYDRANT RELOCATION	1	EA
13	7030-A-1	REMOVAL OF SIDEWALK	560	SY
14	7030-A-3	REMOVAL OF DRIVEWAY, PCC	28	SY
15	7030-B	REMOVAL OF CURB	10	LF
16	7030-C	SHARED USE PATH, PCC, 6" THICK. 8' WIDE	1,917	SY
17	7030-C	SHARED USE PATH, PCC, 6" THICK REINFORCED. 8' WIDE	28	SY
18	7030-E	SIDEWALK, PCC, 5" THICK.	27	SY
19	7030-G	DETECTABLE WARNING	122	SF
20	7030-H-1	DRIVEWAY, PAVED, PCC, 6" THICK REINFORCED	117	SY
21	7030-H-1	DRIVEWAY, PAVED, PCC, 8" THICK	225	SY
22	7030-H-3	DRIVEWAY, CLASS A ROAD STONE, 12" THICK	100	TON
23	7030-999-A	REMOVAL & SALVAGE OF DRIVEWAY, CLASS A CRUSHED STONE	340	SY
24	7040-A	FULL DEPTH PATCHES, PCC	16	SY
25	7040-999-A	POURED CONCRETE WALL REMOVAL	1	LS
26	8030-A	TEMPORARY TRAFFIC CONTROL	1	LS
27	8040-A	TRAFFIC SIGNS AND POSTS, TRAIL, FURNISH AND INSTALL	30	EA
28	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS	2	EA
29	9010-A	CONVENTIONAL SEEDING, FERTILIZING, AND MULCHING (TYPE 1 PERMANENT LAWN MIX)	1.2	AC
30	9010-A	CONVENTIONAL SEEDING, FERTILIZING, AND MULCHING (TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE)	1.2	AC
31	9040-E	TEMPORARY RECP, (TYPE) 2C	885	SY
32	9040-J	RIP RAP, CLASS E	500	TON
33	9040-F-1	WATTLE, INSTALLATION	110	LF
34	9040-F-1	WATTLE, REMOVAL	110	LF
35	9040-N-1	SILT FENCE OR SILT FENCE DITCH CHECK	890	LF
36	9040-N-2	SILT FENCE OR SILT FENCE DITCH CHECK, REMOVAL OF SEDIMENT	890	LF
37	9040-N-3	SILT FENCE OR SILT FENCE DITCH CHECK, REMOVAL OF DEVICE	890	LF
38	9040-O-2	TRACK-OUT CONTROL	50	TON
39	9040-T-1	INLET PROTECTION DEVICE, WATTLES	1	EA
40	9040-T-2	INLET PROTECTION DEVICE, MAINTENANCE AND REMOVAL	1	EA
41	9080-A	CONCRETE STEPS, TYPE B	29.2	SF
42	9080-B	HANDRAIL	11.0	LF
43	9999-A	BOLLARD, 6" DIA. STEEL, REMOVABLE	2	EA
44	11,020-A	MOBILIZATION	1	LS
45	2429-0000100	PRE-ENGINEERED STEEL TRUSS TRAIL BRIDGE WITH EXPRESS ABUTMENTS	1	EA

SIGNAGE TABLE			
POINT	DESCRIPTION	STATION	OFFSET
1	STOP SIGN, R1-1	0+33.8	-7.0 LT
2	TRAIL CROSSING, W11-15, W11-15P, W16-7P	0+33.8	9.4 RT
3	NO MOTORIZED VEHICLES, R5-3	0+42.7	7.0 RT
4	STOP AHEAD, W3-1	0+81.3	-7.0 LT
5	STOP AHEAD, W3-1	1+04.5	7.0 RT
6	TRAIL CROSSING, W11-15, W11-15P, W16-7P	1+50.4	-8.6 LT
7	STOP SIGN, R1-1	1+51.9	7.0 RT
8	STOP SIGN, R1-1 RELOCATE	0+98.9	-67.6 LT
9	STREET ADDRESS SIGN RELOCATE	0+44.5	15.0 RT
10	NO MOTORIZED VEHICLES, R5-3	5+49.7	7.0 RT
11	STOP SIGN, R1-1	5+63.7	-7.0 LT
12	STOP AHEAD, W3-1	6+09.7	-7.0 LT
13	STOP AHEAD, W3-1	7+30.3	7.0 RT
14	NO MOTORIZED VEHICLES, R5-3	7+82.8	-7.0 LT
15	STOP SIGN, R1-1	8+03.0	7.0 RT
16	TRAIL CROSSING, W11-15, W11-15P, W16-7P	8+03.8	-8.7 LT
17	STOP SIGN, R1-1	51+24.0	-7.0 LT
18	TRAIL CROSSING, W11-15, W11-15P, W16-7P	51+37.0	7.0 RT
19	NO MOTORIZED VEHICLES, R5-3	51+48.4	6.0 RT
20	STOP AHEAD, W3-1	52+02.8	6.0 RT
21	STOP AHEAD, W3-1	60+87.1	7.0 RT
22	NO MOTORIZED VEHICLES, R5-3	61+10.5	7.0 RT
23	STOP SIGN, R1-1	61+31.6	7.0 RT
24	STOP SIGN, R1-1	61+55.1	-7.0 LT
25	NO MOTORIZED VEHICLES, R5-3	62+03.5	7.0 RT
26	STOP AHEAD, W3-1	62+10.7	7.0 RT
27	STOP AHEAD, W3-1	64+66.3	7.0 RT
28	STOP AHEAD, W3-1	65+66.6	7.0 RT
30	TRAIL CROSSING, W11-15, W11-15P, W16-7P	-0+02.2	-54.0 LT
31	TRAIL CROSSING, W11-15, W11-15P, W16-7P	-0+01.1	-154.0 LT
32	TRAIL CROSSING, W11-15, W11-15P, W16-7P	0+36.1	154.0 RT



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SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IOWA

DRAWN BY: JGK
APPROVED BY: JSB
DATE: MAY 2022
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
ESTIMATED QUANTITIES AND GENERAL NOTES

SET TYPE: BID SET
G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, C.01

JOB NUMBER:
21-1205

SHEET NUMBER:
C.01

DIVISION 1 – GENERAL PROVISIONS AND COVENANTS

SECTION 1010
1.03 – DEFINITIONS AND TERMS
JURISDICTION: The Jurisdiction is the City of Oelwein. Any reference to either shall be considered one in the same.
SECTION 1020
1.14 – OPENING OF PROPOSALS
Only bid totals will be made publicly available at and immediately after the bid opening. An itemized bid tabulation will be made publicly available for interested parties after the project has been awarded by the Owner.
SECTION 1030
1.02 – RELEASE OF BID SECURITY
A. The Jurisdiction shall retain the bid security of the lowest three bidders. The bid securities of the three lowest bidders will be released after the Jurisdiction’s approval of the contract executed by the lowest responsive, responsible bidder.
SECTION 1040
1.05 – PLANS
SUDAS Standard Specifications apply. In addition to section 1040–1.05 the following apply.
A. Contractor’s bids shall be based on the final Plans and any addendum received.
B. CAD files or electronic surface information will be available for bidding purposes.
1.06 – INCREASE OR DECREASE OF WORK
B. Quantity change, regardless of the percentage increase or decrease of the total bid, shall not affect the unit bid price of that item.
1.14–MUNICIPAL TERMINATION FOR CONVENIENCE CLAUSE
The Jurisdiction, by written notice, may terminate this contract, in whole or in part, when it is in the Jurisdiction’s interest. If this contract is terminated, the rights, duties, and obligations of the parties, including compensation to the Contractor, shall be as agreed as follows: a reasonable proration compensating contractor for work performed as determined by the Jurisdiction’s engineer following the notice and procedure outlined herein: After receipt of a Notice of Termination, and except as otherwise directed by the Jurisdiction, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
A. Stop work as specified in the notice.
B. Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
C. Terminate all subcontracts to the extent they relate to the work terminated.
D. Assign to the Jurisdiction, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
E. With approval or ratification to the extent required by the Jurisdiction, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.
F. As directed by the Jurisdiction, transfer title and deliver to the Government—
1. The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;
2. The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.
G. Complete performance of the work not terminated.
H. Take any action that may be necessary, or that the Jurisdiction may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Jurisdiction has or may acquire an interest.
I. Use its best efforts to sell, as directed or authorized by the Jurisdiction, any property of the types referred to in this termination for convenience clause; provided, however, that the Contractor
1. is not required to extend credit to any purchaser
2. may acquire the property under the conditions prescribed by, and at prices approved by, the Jurisdiction. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Jurisdiction.
J. The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Jurisdiction upon written request of the Contractor within this 120–day period.
K. After termination, the Contractor shall submit a final termination settlement proposal to the Jurisdiction. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Jurisdiction upon written request of the Contractor within this 1–year period. However, if the Jurisdiction determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Jurisdiction Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
L. After receipt of the final termination proposal, the proposal will be reviewed by the Jurisdiction’s engineer, and a final determination recommendation by the engineer shall be final and agreed to settlement.
M. If the termination is partial, the Contractor may file a proposal with the Jurisdiction for an equitable adjustment of the price(s) of the continued portion of the contract. The Jurisdiction shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Jurisdiction.
SECTION 1050
1.03 – COOPERATION BY THE CONTRACTOR – SPECIAL ATTENTION TO THIS SECTION IS REQUESTED OF ALL BIDDING CONTRACTORS
1.10 – LINE AND GRADE STAKES
A. The Contractor is required to provide minimum of two business days’ notice to the Engineer when requesting stakes.
1.12 – SALVAGE
A. Contractor shall salvage all metal items for the Jurisdiction. Any excess soil material shall be taken to the city storage area located in the southwest corner of Woodlawn Cemetery (just west of the cemetery portion of the trail).
SECTION 1060
1.04 – STORAGE OF MATERIALS
City storage area located in the southwest corner of Woodlawn Cemetery may be used as a staging area for storage of equipment and materials for this project. Contractor shall return area to a condition similar to that prior to construction. This includes, but is not limited to: smoothing any ruts, removing all trash and debris, and reseeding any grassed areas that are disturbed. No payment will be made for work or materials required to return staging area to preconstruction condition.
SECTION 1070
2.02 – CONVENIENCE AND SAFETY – SPECIAL ATTENTION TO THIS SECTION IS REQUESTED OF ALL BIDDING CONTRACTORS
C. Work shall be completed in a manner that will cause the least inconvenience and annoyance to the public and property owners abutting the work area and shall provide access to the abutting property to the greatest extent practicable. Contractor shall notify property owners a minimum of 48 hours in advance when access will be restricted to their properties.
2.05 – EXPLOSIVES
A. Use: Due to the risk of collateral damage, blasting will not be allowed for this project as part of rock removal activities.
2.06 – TRAFFIC CONTROL
A. 3. Traffic Control shall be paid for by lump sum as specified in section 8030 and shall include any and all traffic control used on the Project as outlined in section 8030, including but not limited to flaggers, pilot cars, signs, barricades, safety closures, etc., if necessary. The Contractor shall take full responsibility for Traffic Control and hold both the Jurisdiction and the Jurisdictional Engineer harmless.
2.13 – BORROW AND WASTE SITES
A. Contractor shall secure and operate, at its own expense, sites for disposal of class 12 rock excavation, structures, surfacing materials, rubbish and debris.
3.01 – PERFORMANCE, PAYMENT, AND MAINTENANCE BOND
B. Products and Completed Operations shall be maintained for the duration of the work; and shall be further maintained for a minimum period of two (2) years after final acceptance and payment.

3.02 – INSURANCE REQUIREMENTS
C. 2. j. Not Applicable.
6. Additional Insured Endorsements –
c. See Section 1070, Part 3.06 for information on all required endorsements which include naming of the Jurisdiction as an additional insured, cancellation and material change endorsement, and Nonwaiver of Governmental Immunity.
3.05 – PROPERTY INSURANCE – NOT APPLICABLE
SECTION 1080
1.01 – SUBLETTING OR ASSIGNMENT OF CONTRACT
A. The percentage of work to be completed by the contractor is waived on this project due to the types of work required.
1.02 – CONTRACT TIME
A. 3. Contractor shall fully complete the project by December 5, 2025, with seeding completed by May 15, 2026.
SECTION 1090
1.05 – PROGRESS PAYMENTS
D. Partial pay estimates shall be submitted by the Contractor to the Engineer by the Thursday following the last Saturday of the month for work completed through the last Saturday of the month.

DIVISION 2 – EARTHWORK

SECTION 2010
1.03 – SUBMITTALS
A. The Jurisdictional Engineer hereby requests that all materials to be incorporated into the work have certifications furnished which show that the materials comply with Specifications prior to any construction.
1.08 – MEASUREMENT AND PAYMENT
D. 1. Existing topsoil shall be stripped and salvaged with the Class 10 Excavation, no separate payment will be made for topsoil. Topsoil shall not be incorporated into trail subgrade, but may be utilized as fill material outside of the trail and structural footprint. Contractor is to salvage all topsoil for replacement. Adequate topsoil exists currently. No separate payment will be made for importing topsoil if topsoil was exported or wasted.
E. 1. Estimates of Earthwork for the Project (30% shrinkage factor included) are as follows: Topsoil Strip – 994 CY; Topsoil Replace – 696 CY; Fill Material – 1484 CY; Cut Material – 1406 CY; Total Excavation – 2400 CY; Balance – 220 CY Cut (Excess). Cut volume is calculated to top of proposed subgrade (bottom of crushed stone base). Excess material is to salvaged for the Owner and stockpiled at the southwest corner of the cemetery as directed by the Owner.
3. e. No additional payment will be made for hauling of salvaged excavated material, as noted in Section 1050, 1.12, as it shall be incidental to Class 10 Excavation.
3. g. Contractor to complete proof rolling as required in Part 3.06, B. No additional payment will be made for proof rolling, as it shall be incidental to the Excavation bid item.
G. 3. Includes providing and placing water required to bring subgrade moisture content to within the required limits.
2.04 – D. 3. Use Modified Subbase for this project.
3.01 – CLEARING AND GRUBBING
C. 1. Trees and stumps, including roots to a depth of at least 48 inches below existing ground within 4’ of the trail footprint.
3.04 – EMBANKMENT CONSTRUCTION
E. Type A Compaction required for all embankment construction and subgrade preparation.
3.06 – SUBGRADE PREPARATION
A. A disk of the size indicated in Section 2010, Part 3.04, C. 4 shall be used to turn and mix all soils in cut or fill sections. Type A Compaction required for all subgrade preparation.

DIVISION 3 – TRENCH AND BACKFILL

SECTION 3010
1.03 – SUBMITTALS
B. Results of Standard Proctor and In–Place Density tests will not be required.
1.08 – MEASUREMENT AND PAYMENT
F. No payment shall be made for trench compaction testing, when required. Jurisdictional Engineer or Jurisdiction to require compaction testing only if backfill operations are deemed inappropriate or proof rolling over trenches indicates a deficiency.
3.05 – PIPE BEDDING AND BACKFILL
Pipe Embedment Requirements for Rigid Gravity Pipe:
RCP: Class R–1
RCAP and RCEP: Class R–5
Pipe Embedment Requirements for Flexible Gravity Pipe:
DIP: Class F–1
PVC Truss Pipe and DR18: Class F–2
CMP, HDPE Single & Dual Wall, PVC Gravity Pipe (SDR 23.5, 26, 35): Class F–3
Pipe Embedment Requirements for Pressure Pipe:
DIP: Class P–1
PVC DR18: Class P–3
3.07 – DRAINAGE TILE REPAIR
Contractor shall repair any drainage tile damaged by trenching operations. Damaged drainage tile shall be repaired with Schedule 40 PVC of the same nominal interior diameter as the existing drainage tile. A minimum 2’ length of pipe on each side of the trench shall be placed on undisturbed ground. PVC repair section shall be abutted to existing tile ends with 1/8” maximum joint spacing and joint wrapped with engineering fabric. Trench backfill below tile repair shall be compacted to 95% standard proctor density. Granular pipe envelope will not be required for tile repair. Drainage tiles shall be replaced so that the former gradient and alignment is restored. Contractor shall furnish all materials. Drainage tile repair shall be incidental for all tile repairs with tile crossing trench perpendicular plus or minus 70 degrees to the trench unless otherwise indicated in the Plans or Contract Documents. Repair of tile crossings within 20 degrees of parallel to the trench shall have a separate payment item.

DIVISION 4 – SEWERS AND DRAINS

SECTION 4030
1.03 – SUBMITTALS
A. The Jurisdictional Engineer hereby requests that all materials to be incorporated into the work have certifications furnished which show that the materials comply with Specifications prior to any construction.
1.08 – MEASUREMENT AND PAYMENT
A. 1. c. Includes tie hardware and tying all pipe and end section joints for all culverts.
D. Pipe apron guards are not required for this project.
2.01 – PIPE CULVERTS
A. 2. All culverts shall be reinforced concrete.

DIVISION 5 – WATER MAINS AND APPURTENANCES

SECTION 5020
1.08 – MEASUREMENT AND PAYMENT
999–A. Fire Hydrant Relocation
1. Measurement: Lump sum item; no measurement will be made.
2. Payment: Payment will be made at the contract lump sum price.
3. Includes: Lump Sum price includes, but is not limited to all excavation, labor, equipment, and materials required to shut down water, disconnect existing hydrant, salvage gate valve and hydrant in good condition for relocation, plug tee, place and compact backfill, cut in new hydrant tee (with solid repair sleeves), provide new hydrant lead if necessary, install assembly, provide and place thrust blocks, place and compact backfill. Street repair is a separate bid item.

DIVISION 7 – STREETS & RELATED WORK

SECTION 7010
1.03 – SUBMITTALS
All submittals listed in the standard specifications shall be provided.
D. Certified plant inspection by the Contractor is NOT required on this project.
Standard Iowa DOT plant report forms shall be completed by the Contractor/Supplier and submitted to the Jurisdictional Engineer weekly. Iowa DOT Standard form 830212 for ready mix concrete (load tickets) shall be completed for each load for collection at the grade.
1.08 – MEASUREMENT AND PAYMENT
I. 1. Contractor will not be required to perform Plastic Concrete testing. Air, Slump, Cylinders, and/or Beams to be completed by the Jurisdictional Engineer. Contractor shall provide materials for these tests.
2. Jurisdictional Engineer reserves the right to require thickness cores if paying operations or edge thickness indicate a thickness deficiency. If cores not required, this bid item will be deleted.
2.01 – MATERIALS
D. 1. Class 3 durability ONLY for this project.
2.02 – MIX DESIGN
A. 1. Minimum compressive strength shall be 4,500 psi at 28 days. Contractor may use Class M, C–SUD, or CV–SUD mixes, but not additional payment shall be made for these mixes.
SECTION 7030
1.08 – MEASUREMENT AND PAYMENT
H. 1. c. Excavation and subgrade preparation for driveways shall be considered incidental to the driveways. Subgrade preparation for driveways is included under Subgrade Preparation bid item. 6” of Modified Subbase under driveways shall be paid under Subbase bid item. Includes reinforcement where specified. Reinforcement to be #4 coated rebar at 18” both ways.
3. c. Material shall be Class A crushed stone.
I. Contractor will not be required to perform Plastic Concrete testing. Air, Slump, Cylinders, and/or Beams to be completed by the Jurisdictional Engineer. Contractor shall provide materials for these tests with no additional payment.
999–A REMOVAL AND SALVAGE OF DRIVEWAY, CLASS A CRUSHED STONE
1. Measurement: Measurement will be made in square yards.
2. Payment: Payment will be made at the unit price per square yard of crushed stone salvaged.
3. Includes: Unit price includes, but is not limited to removal of usable crushed stone, estimated to be 4” thick, stockpile, and placement as base of new 12” thick Class A for expansion of cemetery drive, just east of proposed bridge.
2.01 – PORTLAND CEMENT CONCRETE MIX
A. Class C, 4,500 psi at 28 days compressive strength required.
2.07 – DETECTABLE WARNINGS
A. Detectable warnings shall be pre–manufactured panels. Panels shall be uncoated cast iron.
3.01. E. Maximum 0.5” curb to remain adjacent to detectable warning panels.
3.04 – PCC RECREATIONAL TRAILS, SIDEWALKS, AND DRIVEWAYS
F. 2. b. 3. All transverse contraction joints shall be sawed. Joints may be sawed within 12 hours of placement with a 1/8 inch blade saw to a depth of 1/3 the pavement thickness. Use a straightedge if joints are sawed with a hand–held saw.
3. b. 2. All longitudinal contraction joints shall be sawed. Joints may be sawed with a 1/8 inch blade to a depth of 1/3 the pavement thickness. Use a straightedge if joints are sawed with a hand–held saw.
5. b. Sealing of expansion and isolation joints is required. Trim preformed joint material to a depth of ½ inch below the concrete surface. Ensure the joint is clean and dry. Install joint sealant per manufacturer’s recommendations.
SECTION 7040
A. 3. Patches shall be full depth PCC, one inch thicker than existing total pavement thickness.
999–A POURED CONCRETE WALL REMOVAL
1. Measurement: Lump sum item; no measurement will be made.
2. Payment: Payment will be made at the contract lump sum price.
3. Includes: Lump Sum price includes, but is not limited to all excavation, labor, equipment, and materials required to remove and dispose of the concrete retaining wall as indicated on the plans, located at 403 W. Charles Street.

DIVISION 8 – TRAFFIC CONTROL

SECTION 8040
1.08 – MEASUREMENT AND PAYMENT
A. 3. Includes providing and placing new breakaway steel sign post

DIVISION 9 – SITE WORK & LANDSCAPING

SECTION 9010
1.02 – DESCRIPTION OF WORK
Completed installation shall include preparation of the seedbed, furnishing and installing seed, fertilizer and mulch, maintenance, and guarantee for completed seeded areas.
1.07 – SPECIAL REQUIREMENTS
A. Warranty is required and is incidental to the seeding bid item. No separate bid item is allowed. Warranty is for only permanent seeding within the dates for each variety specified per Section 9010, 2.02.
B. Warranty period is two full years from acceptance.
1.08 – MEASUREMENT AND PAYMENT
A. 1. Seeding for a completed installation shall be measured in acres, of accepted seeding within the contract or easement limits. Seeding item includes supplying and applying proper seed, fertilizer, and mulch. Different payment for method of application will not be allowed. At the Contractor’s option, Hydraulic or Pneumatic Seeding may be used, but will not be paid separately.
2. Fertilizing shall be incidental to the seeding bid item and will not be paid separately.
3. Mulching shall be incidental to the seeding bid item and will not be paid separately.
E. Warranty for seeding, fertilizing, and mulching is required but is incidental to the seeding bid item. Warranty period shall be for two full years from the date of acceptance. No separate bid item is allowed.
2.02 – SEED MIXTURES
All permanent seeding shall be Type 1 (Permanent Lawn Mixture).
3.08 – RE–SEEDING
A. When all work related to seeding on an area has been completed but is washed out or damaged prior to final acceptance of the seeding area, the area shall be reseeded, refertilized, and remulched without additional compensation.
3.10 – ACCEPTANCE AND WARRANTY
B. 1. Required but incidental to the seeding bid item and shall not be paid separately.
2. The warranty period is twenty–four months beginning on the date of acceptance.
3.13 – RIP RAP
Install Class E rip rap as shown on Figures 9040.110 and 9040.111. Place rip rap on engineering fabric. Engineering fabric is incidental to rip rap bid item.
SECTION 9999
1.08 – MEASUREMENT AND PAYMENT
A. BOLLARD, 6” DIA. STEEL, REMOVABLE
1. Measurement: Each bollard installed will be counted.
2. Payment: Payment will be at the unit price for each bollard that is installed.
3. Includes: Unit price includes, but is not limited to, labor, equipment, and materials necessary to complete the installation of the bollard in accordance with the suppliers recommendation for PCC foundation for base embedment, including addition PCC for foundation.
2.01 – BOLLARD, 6” DIA. STEEL, REMOVABLE
A. Bollard shall be 6” internal diameter carbon steel, removable with 36” above ground, 12” below ground, dome top, schedule 40, powdercoated yellow. Bollard shall be Source4industries, SKU RPCS6040+ESV60, or approved equal. Owner to provide lock.



ENGINEERING & ENVIRONMENTAL

ILLINOIS
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OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA 50662

PROJECT AND LOCATION:
SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IOWA

DRAWN BY: JGK
APPROVED BY: JSB
DATE: MAY 2022
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
SUPPLEMENTAL SPECIFICATIONS

SET TYPE: BID SET
G:\C30\21\21–1205 Oelwein Trail Pl. 2\Plans\21–1205 PLANS.dwg, C.02

JOB NUMBER:
21–1205

SHEET NUMBER:
C.02

IDOT ITEMS SUPPLEMENTAL SPECIFICATIONS

Construction shall be in accordance with the current version of Iowa DOT Standard Specifications for Highway and Bridge Construction.

DIVISION 24 – STRUCTURES

SECTION 2429

Additional Requirements:

Bridge shall be 40’ span x 8’ clear width weathering steel Keystone Continental Truss Bridge (underhung) with 3” x 12” treated wood decking, horizontal tube safety railing, steel toe/rub rail, bearing plates/pads and steel cover plates at the ends of the bridge. Bridge shall be designed for AASHTO LRFD, 90 psf live load, 35 psf wind load, and 10,000 lb. vehicle load.
Supplier contact is: Contech Engineered Solutions LLC, Jake Vogel, ph. 612–352–7944, jake.vogel@conteches.com

Other models or suppliers are not allowed for this project.

Precast Express Abutments, provided by Contech Engineered Solutions LLC, are expected to be of the following dimensions: 6’ tall (with additional 1’ wall extension on sides and back) x 5’ wide x 12.4’ long. Contractor is responsible for placing approximately 10.9 CY of 4,000 psi PCC as abutment infill. Sizing will be verified with Contech final design. Coordinate with Contech for other work that may be required. Includes 6”x6”x1/2” steel angle on each abutment for approach support, refer to plan detail.

Construction shall be in accordance with all notes and specifications on the construction plans and shop drawings provided by the bridge supplier. Bridge members are fabricated from high strength, low alloy, enhance atmospheric corrosion resistant ASTM cold-formed welded square and rectangular tubing, and ASTM A588, ASTM A709–50W plate and structural shapes.

Bridge Deck material to be treated Douglas Fir Wood Decking.
Minimum material thickness of ¾” on all structural members.
All foundation work is included.



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DRAWING:
SUPPLEMENTAL SPECIFICATIONS

SET TYPE: BID SET
G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, C.03

JOB NUMBER:
21–1205

SHEET NUMBER:
C.03

I. GENERAL INFORMATION

PROJECT LOCATION

THE SITE IS LOCATED ON THE WEST SIDE OF OELWEIN, NORTH OF WEST CHARLES STREET, INCLUDING DRIVES IN THE CEMETERY, AND STREETS INCLUDING PARTS OF 6TH AVENUE NW, 5TH AVENUE NW, AND 1ST STREET NW.

OWNER

CITY OF OELWEIN

EXISTING SITE CONDITIONS

THE SITE CONSISTS OF EXISTING RESIDENTIAL STREETS & HOUSING AND EXISTING CEMETERY DRIVES.

PROJECT DESCRIPTION & ACTIVITIES

PROJECT CONSISTS OF CONSTRUCTING A NEW 8' WIDE PCC TRAIL, NEW STORM CULVERT AND DRAINAGE IMPROVEMENTS, NEW PEDESTRIAN BRIDGE.

EARTH DISTURBING ACTIVITIES INCLUDE THE FOLLOWING: REGRADING FOR NEW TRAIL ALIGNMENT PROFILE, REGRADING OF DRAINAGE CHANNELS FOR IMPROVEMENT, REGRADING FOR AND INSTALLATION OF STORM IMPROVEMENTS.

PROJECT AREA, SOIL TYPES & RUNOFF COEFFICIENT

PROJECT AREA: 1.8 ACRES
DISTURBED AREA: 1.8 ACRES
SOIL TYPES: SITE CONSISTS MAINLY OF CLYDE–FLOYD CLASS C/D, CRESCO LOAM CLASS C, PROTIVIN LOAM CLASS C/D, WAPSIE LOAM CLASS B.
POST–CONSTRUCTION RUNOFF COEFFICIENT: **0.35**

RECEIVING WATERS

OVERLAND FLOW TO CITY STORM SEWER TO UNNAMED WATERWAY TO OTTER CREEK.

II. CONTROLS

THE FOLLOWING CONTROLS SHALL BE IMPLEMENTED ON THE SITE TO REDUCE THE EROSION AND SEDIMENTS FROM LEAVING THIS SITE. ALL CO–PERMITTEES SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MANAGEMENT OF THESE EROSION, SEDIMENT, AND STORM WATER MANAGEMENT CONTROL MEASURES SPECIFIED HEREIN. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION (2025) OF THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS). MODIFICATIONS MAY BE MADE AND ADDITIONAL ITEMS AND/OR WORK REQUIRED AS PART OF THIS PLAN AS WORK PROGRESSES AS DETERMINED BY THE OWNER, ENGINEER, CO–PERMITTEES, OR OTHER GOVERNMENTALLY REGULATED AGENCIES AFTER FIELD INSPECTION.

TEMPORARY EROSION CONTROL

1. NOT DISTURBING THE NATURAL GROUND UNTIL ACTUAL CONSTRUCTION BEGINS
2. STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR 14 CALENDAR DAYS. IN DROUGHT STRICKEN AREAS AND AREAS THAT HAVE RECENTLY RECEIVED SUCH HIGH AMOUNTS OF RAIN THAT SEEDING WITH FIELD EQUIPMENT IS IMPOSSIBLE AND INITIATING VEGETATIVE STABILIZATION IS INFEASIBLE, ALTERNATIVE STABILIZATION MEASURES MUST BE EMPLOYED AS SPECIFIED BY THE REGULATORY AGENCY. IN LIMITED CIRCUMSTANCES, STABILIZATION MAY NOT BE REQUIRED IF THE INTENDED FUNCTION OF A SPECIFIC AREA OF THE SITE NECESSITATES THAT IT REMAIN UNDISTURBED.
3. PLACE STONE SUBBASE ON AREAS TO BE PAVED AS SOON AS POSSIBLE AFTER GRADING
4. PLACE MULCH ON SLOPES AS REQUIRED TO PREVENT EROSION AND AID IN ESTABLISHING VEGETATION
5. PLACE RECP AS INDICATED ON PLANS

PERMANENT EROSION CONTROLS

1. ESTABLISH VEGETATION ON ALL UNSURFACED DISTURBED AREAS
2. STABILIZE SURFACED AREAS
3. PLACE RIPRAP AROUND BRIDGE OPENING AS INDICATED ON PLANS

TEMPORARY SEDIMENT CONTROLS

1. INSTALL SILT FENCE AROUND INTAKES – UNTIL STONE BASE IS PLACED
2. INSTALL SILT FENCE ALONG DITCHES AND SWALES
3. INSTALL SILT FENCE AT CULVERT INLETS AT THE PROJECT BOUNDARIES
4. NOT DISTURBING EXISTING VEGETATION UNTIL NECESSARY
5. INSTALLATION OF EROSION CONTROL DEVICES IN ACCORDANCE WITH SECTION 9040 OF SUDAS
6. STABILIZED CONSTRUCTION ENTRANCE.

PERMANENT SEDIMENT CONTROLS

1. ESTABLISH VEGETATION IN ALL DITCHES AND SWALES
2. ESTABLISH VEGETATION AT PERIMETER OF PROJECT.

TRACKING

STABILIZED, TEMPORARY CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS NEEDED BY THE CONTRACTOR TO PREVENT TRACKING OF EXCESS DIRT, MUD, AND ROCK ONTO ADJACENT ROADS AND STREETS. ANY TRACKING THAT OCCURS SHALL BE CLEANED AS NECESSARY.

DUST CONTROL

FUGITIVE DUST SHALL BE CONTROLLED BY WATERING THE GRADE OR OTHER MEANS AS APPROVED BY THE ENGINEER IN ACCORDANCE WITH SECTION 9040 OF SUDAS.

III. MAINTENANCE

THE PRIMARY CONTRACTOR SHALL MAINTAIN ANY TEMPORARY AND PERMANENT CONTROL MEASURES. THIS INCLUDES CLEANING, REPAIR, OR REPLACEMENT OF SILT FENCES, AND RESEEDING THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE SHALL BE CLEANED WHEN FILLED TO HALF CAPACITY OR MORE TO PREVENT FAILURE.

IV. INSPECTIONS

THE PROJECT SHALL BE INSPECTED BY A DESIGNATED REPRESENTATIVE OF THE CONTRACTOR EVERY SEVEN CALENDAR DAYS. SILT FENCES WILL BE INSPECTED FOR DEPTH OF SEDIMENT AND OVERALL QUALITY AND EFFECTIVENESS. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH. AN INSPECTION REPORT SHALL BE COMPLETED AFTER EACH INSPECTION. THIS PLAN MAY BE REVISED AND UPDATED UPON CONCLUSIONS DERIVED FROM INSPECTIONS, AND THE PRIMARY CONTRACTOR SHALL BE NOTIFIED AND SHALL IMPLEMENT ALL REVISIONS AND UPDATES AS SOON AS PRACTICAL BUT NOT MORE THAN 7 DAYS AFTER NOTIFICATION.

V. NON–STORM WATER DISCHARGES

IOWA DEPARTMENT OF NATURAL RESOURCES ALLOWS THE FOLLOWING NON–STORM WATER DISCHARGES UNDER THE CONDITION THAT NO POLLUTANTS ARE ALLOWED TO COME IN CONTACT WITH THE WATER PRIOR TO OR AFTER IT IS DISCHARGED FROM THE SITE:

1. UNCONTAMINATED GROUNDWATER FROM DEWATERING EXCAVATION
2. POTABLE WATER FROM WATERLINE FLUSHING OR IRRIGATION
3. WASH WATER FROM EQUIPMENT, BUILDINGS, AND/OR VEHICLES EXCLUDING DETERGENTS PAVEMENT WASH WATER WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED
4. AIR CONDITIONING CONDENSATE
5. SPRINGS

EROSION CONTROL MEASURES SHALL BE TAKEN TO REDUCE OR ELIMINATE THE SOURCES OF NON–STORM WATER DISCHARGES THAT ARE COMBINED WITH STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE.

ALL CONCRETE TRUCKS MUST WASH OUT @ THE REDI–MIX PLANT IN A CONTAINMENT AREA. NO WASHOUT ON SITE OR ADJACENT PROPERTY WILL BE ALLOWED.

VI. SPILL PREVENTION

THE FOLLOWING IS A LIST OF POSSIBLE MATERIALS THAT MAY BE ON SITE DURING CONSTRUCTION ACTIVITIES:

1. CONCRETE
2. CONCRETE CURING COMPOUND
3. DETERGENTS
4. TAR
5. FERTILIZERS
6. PETROLEUM BASED PRODUCTS
7. SOLVENTS
8. PAINTS
9. ADHESIVES
10. FUELS
11. LUBRICANTS

TO PREVENT OR MINIMIZE THE RISK OF SPILLS OR ACCIDENTAL EXPOSURE OF MATERIALS TO STORM WATER, THE CO–PERMITTEES SHALL MAKE A GOOD FAITH EFFORT TO STORE ONLY THE PRODUCTS NECESSARY AND ONLY ENOUGH OF THE PRODUCTS NECESSARY TO DO THE JOB. ALL MATERIALS SHALL BE STORED IN APPROPRIATE, LABELED CONTAINERS, AND WHENEVER POSSIBLE, THE ORIGINAL MANUFACTURER’S PACKAGING AND LABELS.

A LIST OF ANY MATERIALS ON SITE THAT ARE NOT LISTED HERE SHALL BE PROVIDED BY THE CO–PERMITTEE SUPPLYING AND USING THOSE MATERIALS, AS WELL AS A SPECIFIC PLAN TO MINIMIZE THE RISK OF SPILLS OR EXPOSURE TO STORM WATER DISCHARGES. IF CERTIFICATION IS REQUIRED TO HANDLE CERTAIN MATERIALS, A LIST OF INDIVIDUALS WITH THE PROPER CERTIFICATIONS AND THEIR CONTACT INFORMATION SHALL BE READILY AVAILABLE ON SITE AT ALL TIMES WHILE THOSE MATERIALS ARE PRESENT.

IN THE EVENT OF A SPILL, ALL CONTAMINATED SOIL, WATER, OR OTHER MATERIALS SHALL BE CLEANED OR DISPOSED OF IMMEDIATELY AFTER DISCOVERY. PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH CONTAMINATES. SPILLS OF HAZARDOUS OR TOXIC MATERIAL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY AND TO THE OWNER AND PRIMARY CONTRACTOR, REGARDLESS OF SIZE.

VII. WASTE DISPOSAL

MATERIALS

EXCESS MATERIAL AND ALL CONTAINERS SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER’S RECOMMENDATIONS AND LOCAL, STATE, AND FEDERAL REGULATIONS. SOLID WASTE SHALL BE DISPOSED OF INTO A DUMPSTER OR OTHER SOLID WASTE CONTAINER THAT WILL BE EMPTIED WEEKLY OR MORE OFTEN AS NECESSARY. NO CONSTRUCTION MATERIALS WILL BE BURIED ON SITE OR IN AN UNAPPROVED LANDFILL. SOLID WASTE CONTAINERS SHALL BE PLACED IN AN AREA WHERE CONTACT WITH STORM WATER DISCHARGE IS MINIMAL.

SANITARY WASTE

A PORTABLE RESTROOM FACILITY SHALL BE LOCATED ON SITE AT ALL TIMES UNLESS AN APPROVED EQUAL IS ALLOWED. THIS FACILITY SHALL BE LOCATED IN AN AREA WHERE CONTACT WITH STORM WATER DISCHARGE IS MINIMAL. AN APPROVED SANITARY WASTE MANAGEMENT CONTRACTOR SHALL COLLECT ALL SANITARY WASTE FROM THE PORTABLE UNITS.

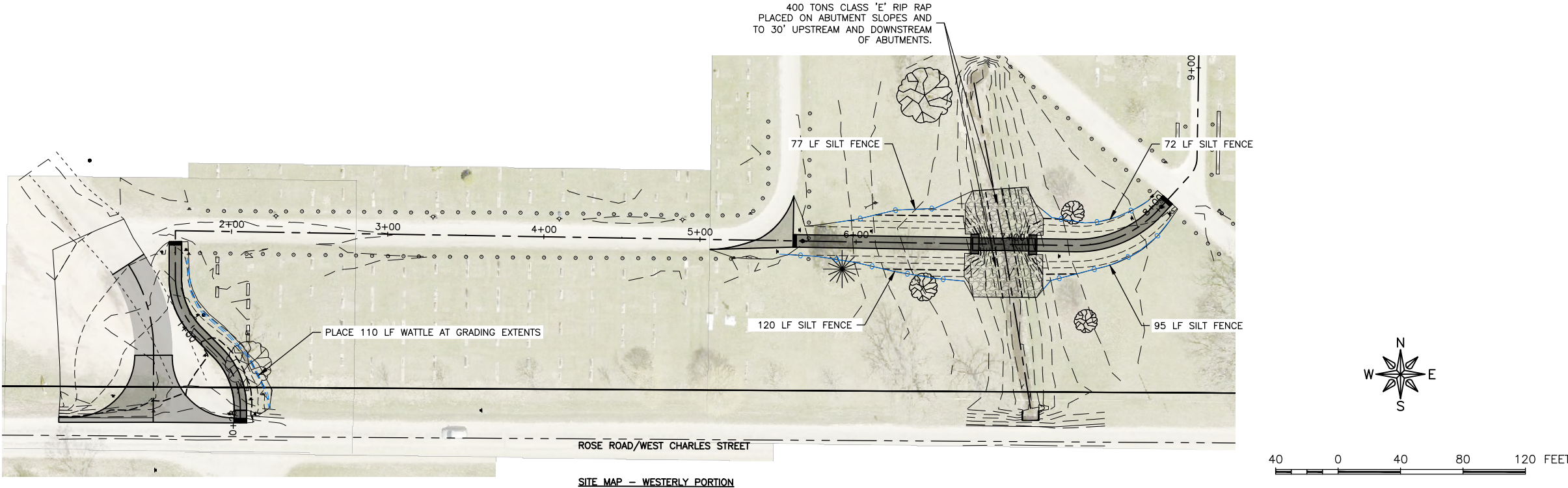
VIII. UPDATES & REVISIONS

THIS SWPPP SHALL BE UPDATED AND REVISED AS NECESSARY, AND DOCUMENTATION OF ALL UPDATES AND REVISIONS IS REQUIRED. THE DOCUMENTATION SHALL BE KEPT ON SITE WITH THE SWPPP

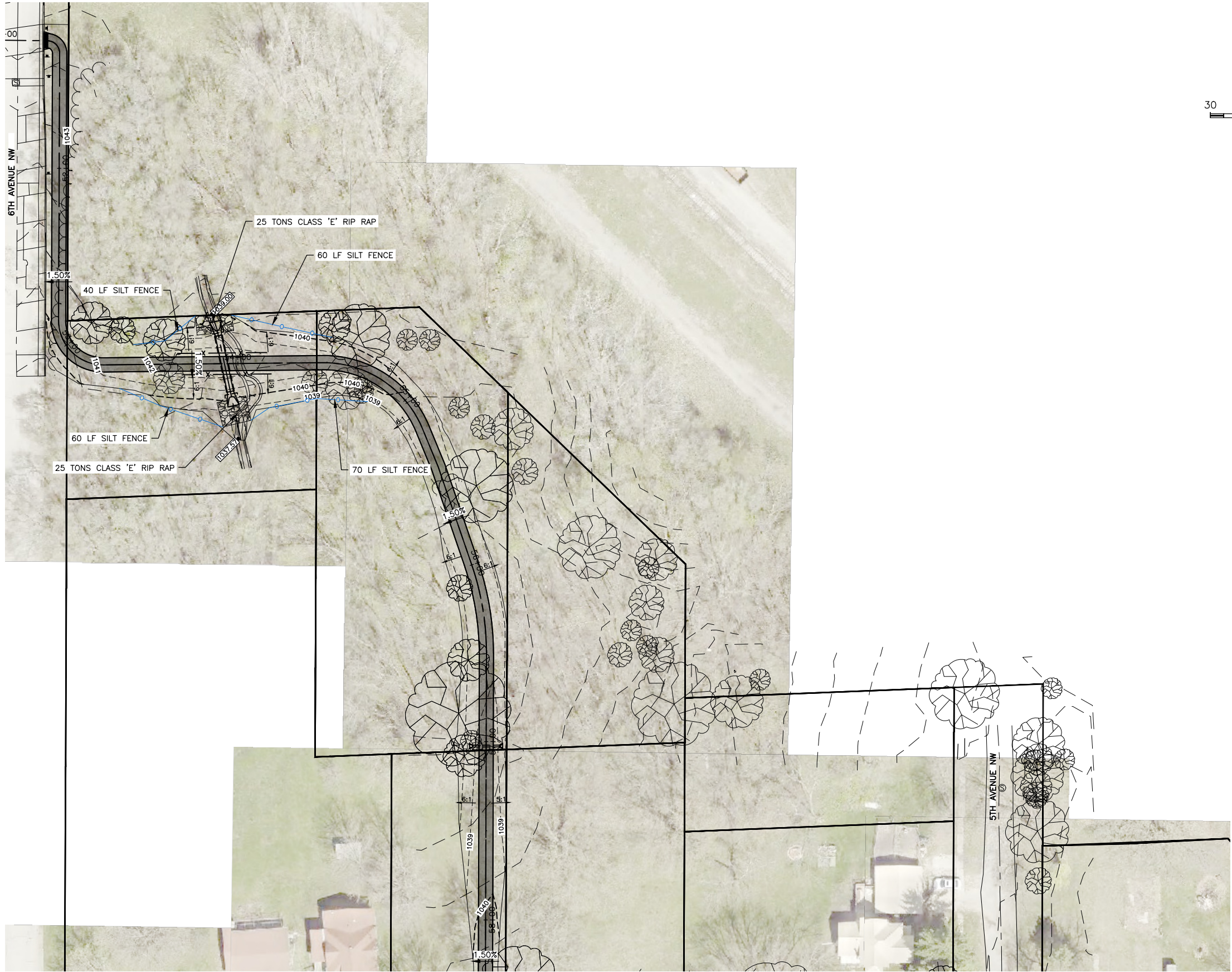
IX. NOTICES AND FORMS

THE FOLLOWING ARE CONSIDERED AS A PART OF THE OVERALL STORM WATER POLLUTION PREVENTION PLAN.

1. PUBLIC NOTICE OF STORM WATER DISCHARGE
2. NOTICE OF INTENT
3. SWPPP CERTIFICATION BY OWNER
4. SWPPP CERTIFICATION BY CO–PERMITTEES
5. INSPECTION AND MAINTENANCE FORM



REVISIONS		
REV. NO.	DESCRIPTION	DATE



SEE SHEET C.06

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ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
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OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA, 50662

PROJECT AND LOCATION:
TRAIL SEGEMENT 2 IMPROVEMENTS
OELWEIN, IOWA

DRAWN BY: JGK
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

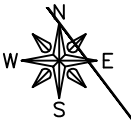
DRAWING:
STORM WATER POLLUTION PREVENTION PLAN
- EASTERLY PORTION

SET TYPE: **BID SET**
G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, C.05

JOB NUMBER:
21-1205

SHEET NUMBER:
C.05

SEE SHEET C.05



30 0 30 60 90 FEET

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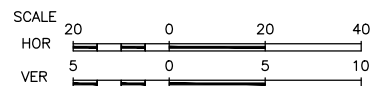
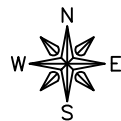
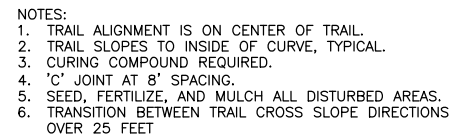
DRAWING:
STORM WATER POLLUTION PREVENTION PLAN
- EASTERLY PORTION

SET TYPE: BID SET

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OELWEIN, IA

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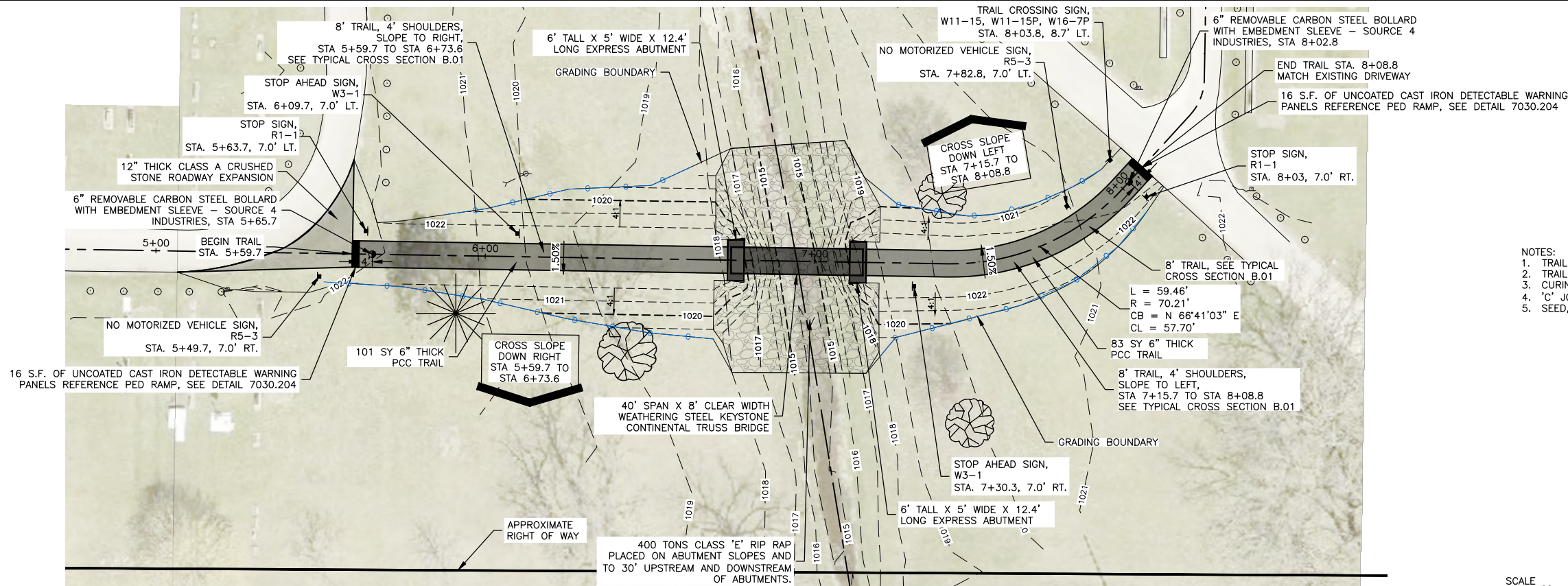
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
TRAIL PLAN AND PROFILE – WESTERLY

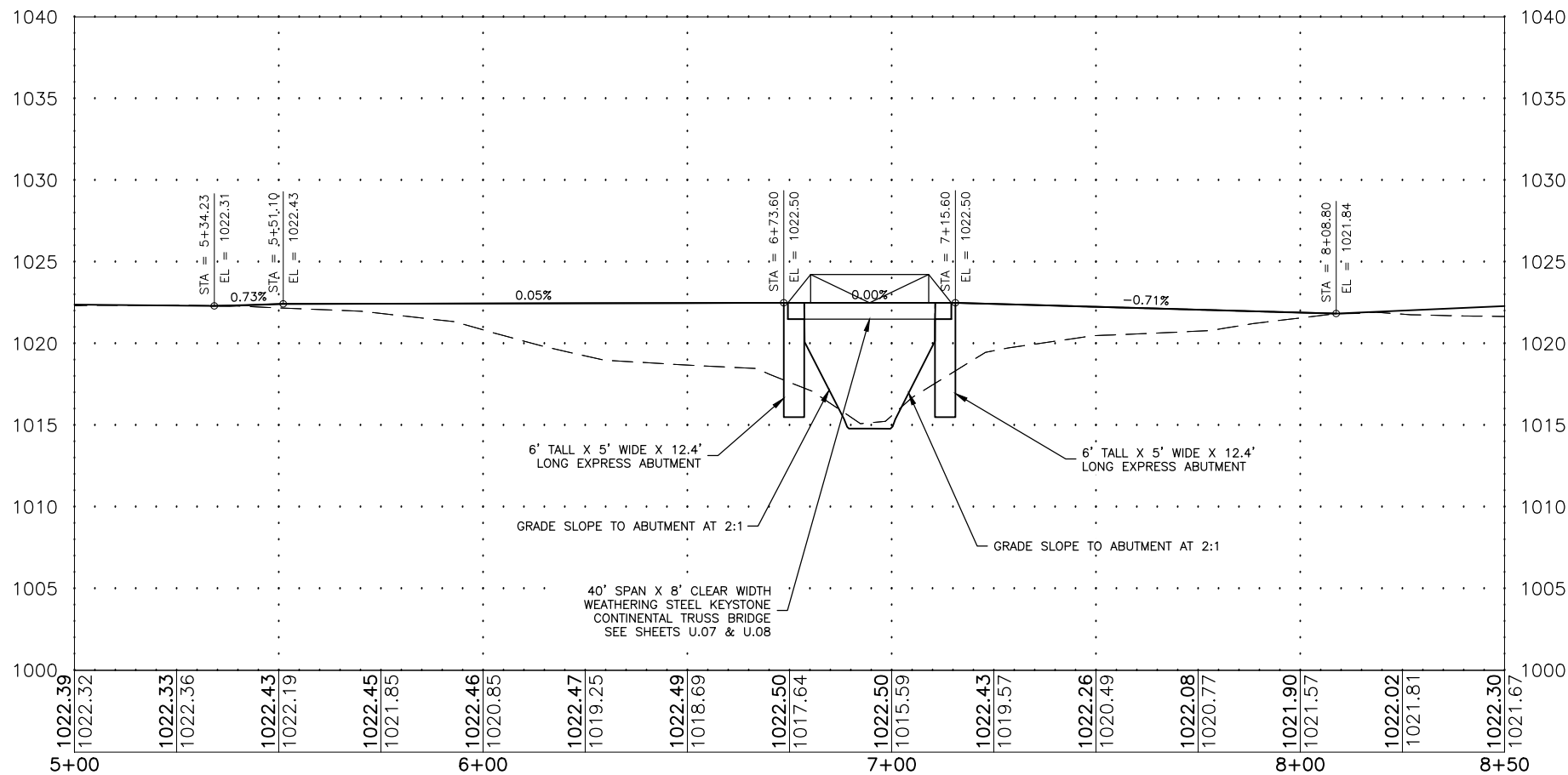
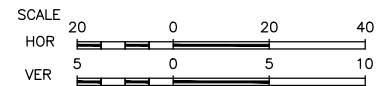
SET TYPE: BID SET

JOB NUMBER:
21-1205

SHEET NUMBER:
D.01



- NOTES:
1. TRAIL ALIGNMENT IS ON CENTER OF TRAIL.
 2. TRAIL SLOPES TO INSIDE OF CURVE, TYPICAL.
 3. CURING COMPOUND REQUIRED.
 4. 'C' JOINT AT 8' SPACING.
 5. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.



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SCALE: AS NOTED

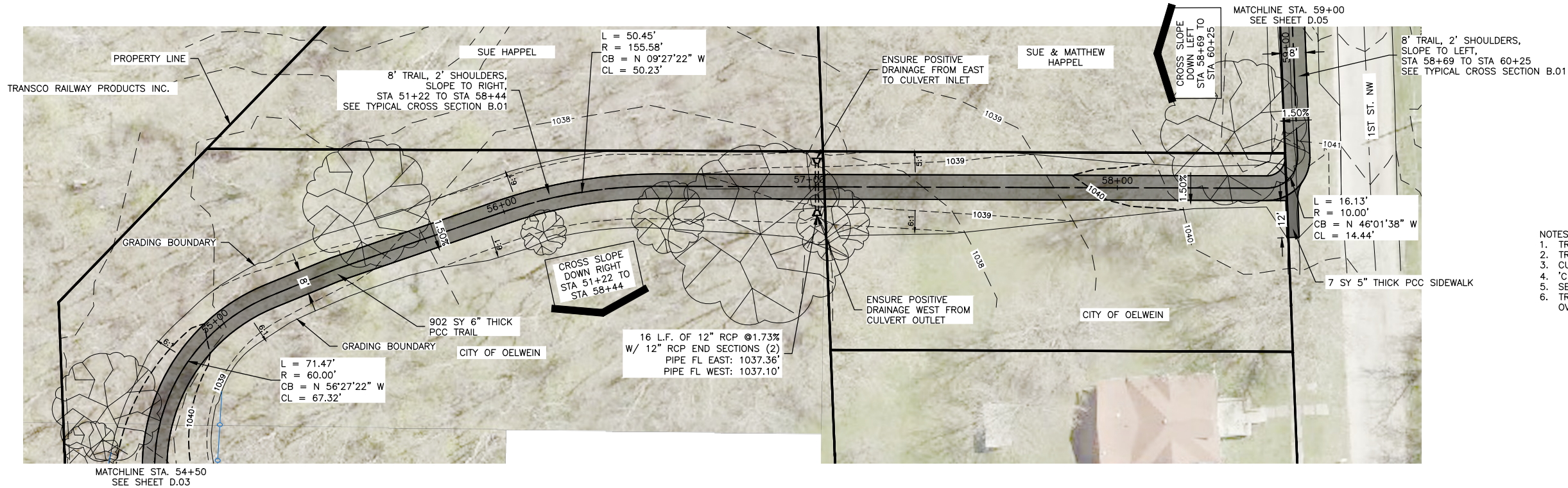
REVISIONS		
REV. NO.	DESCRIPTION	DATE

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TRAIL PLAN AND PROFILE – WESTERLY

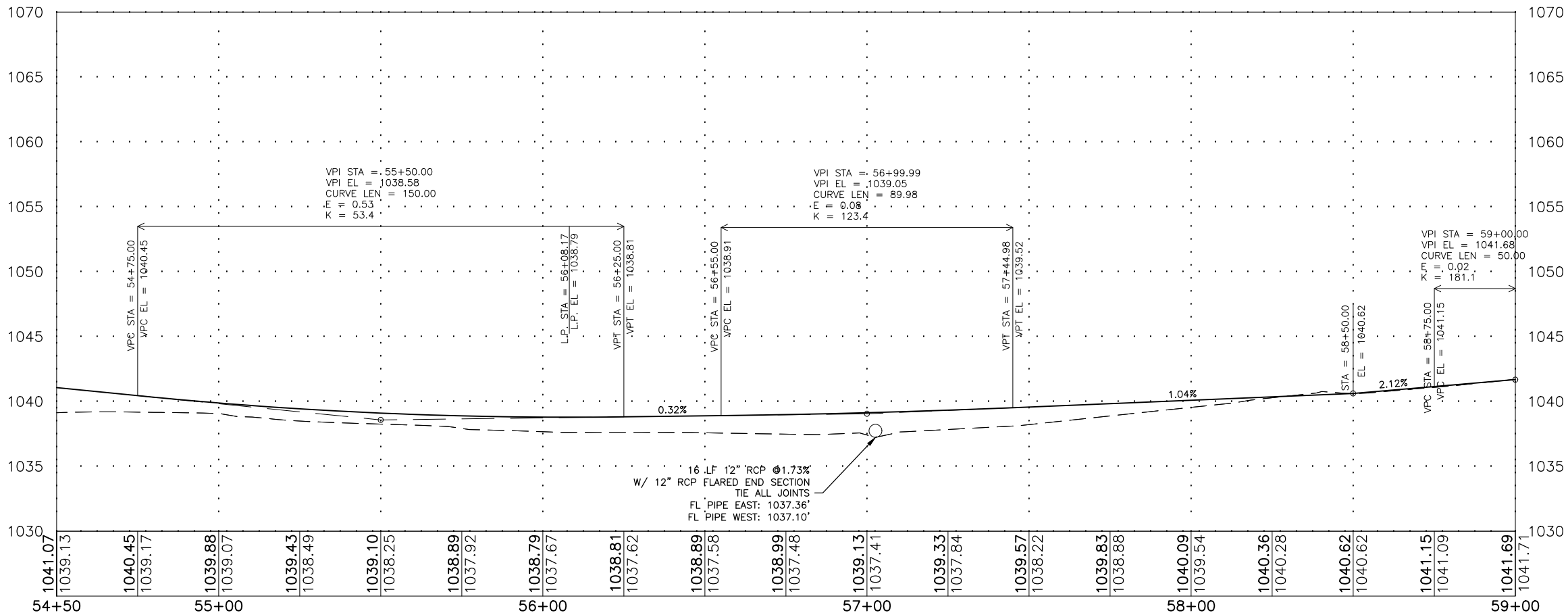
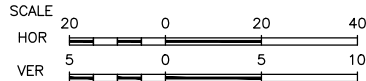
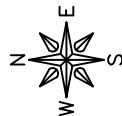
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JOB NUMBER:
21-1205

SHEET NUMBER:
D.02



- NOTES:
1. TRAIL ALIGNMENT IS ON CENTER OF TRAIL.
 2. TRAIL SLOPES TO WEST AND SOUTH, TYPICAL.
 3. CURING COMPOUND REQUIRED.
 4. 'C' JOINT AT 8' SPACING.
 5. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.
 6. TRANSITION BETWEEN TRAIL CROSS SLOPE DIRECTIONS OVER 25 FEET



FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA, 50662

PROJECT AND LOCATION:
SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IA

DRAWN BY: JCB
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

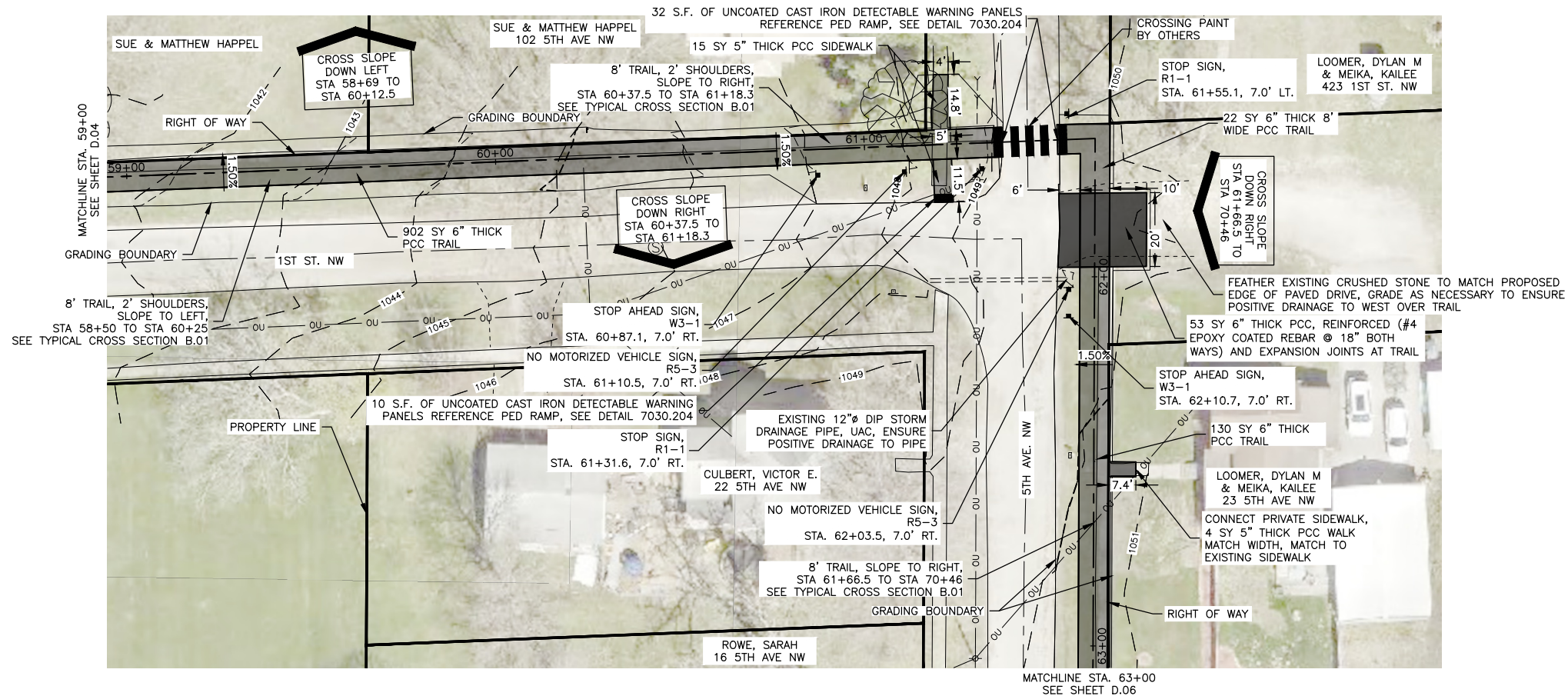
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TRAIL PLAN AND PROFILE – EASTERLY

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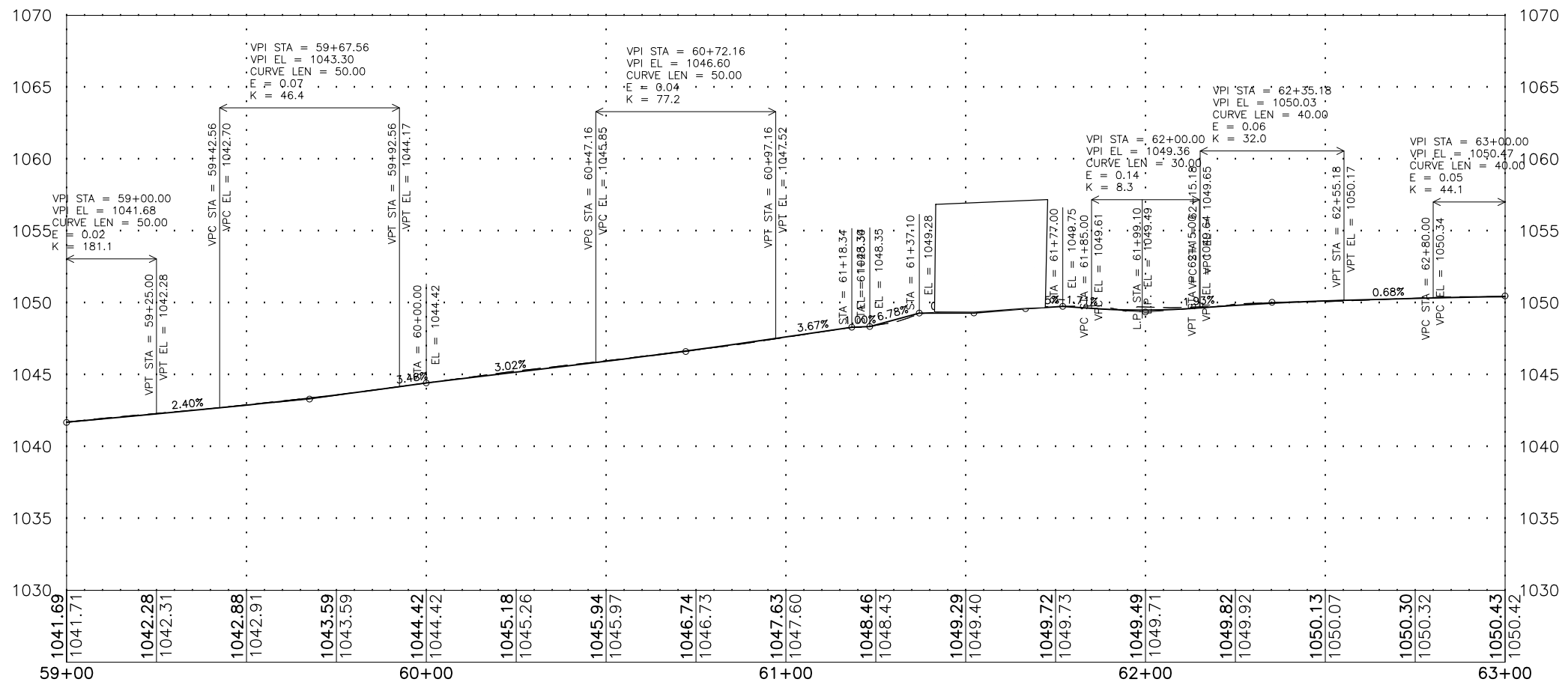
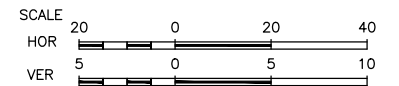
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JOB NUMBER:
21-1205

SHEET NUMBER:
D.04



- NOTES:
1. TRAIL ALIGNMENT IS ON CENTER OF TRAIL.
 2. TRAIL SLOPES TO STREET, TYPICAL.
 3. CURING COMPOUND REQUIRED.
 4. 'C' JOINT AT 8' SPACING.
 5. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.
 6. SEAL 'E' JOINTS.
 7. TRANSITION BETWEEN TRAIL CROSS SLOPE DIRECTIONS OVER 25 FEET



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ENGINEERING & ENVIRONMENTAL

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IOWA
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SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IA

DRAWN BY: JCB
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

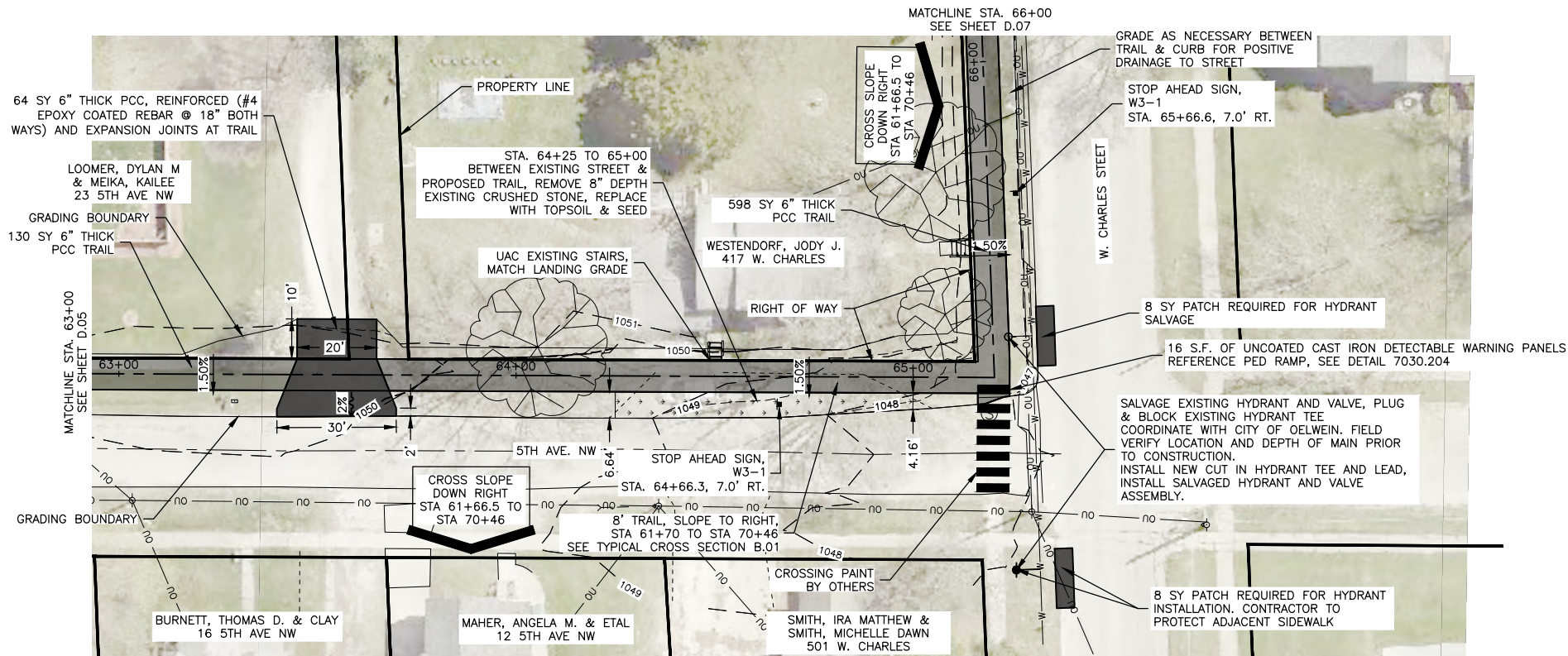
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TRAIL PLAN AND PROFILE – EASTERLY

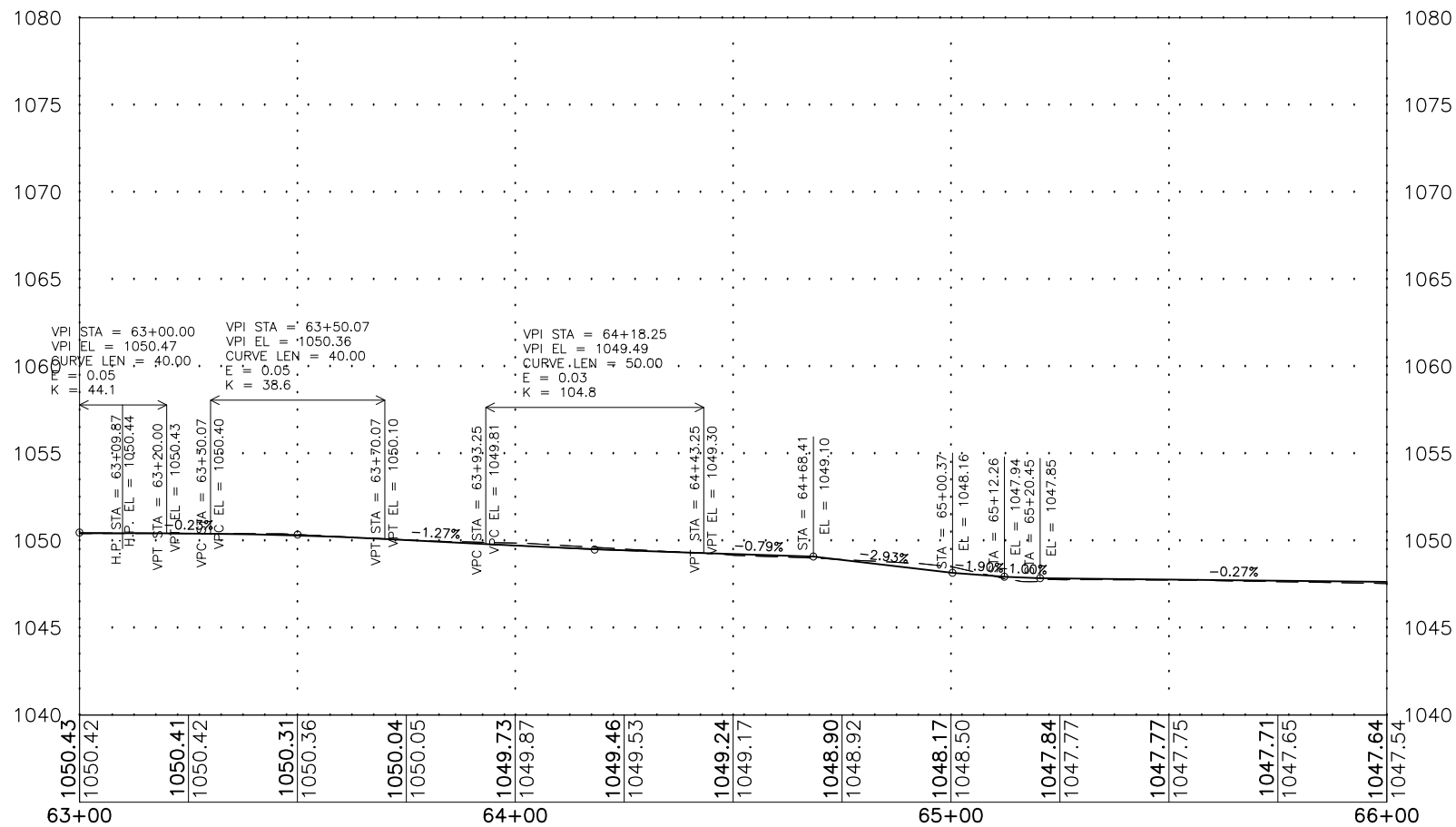
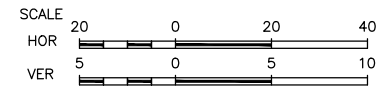
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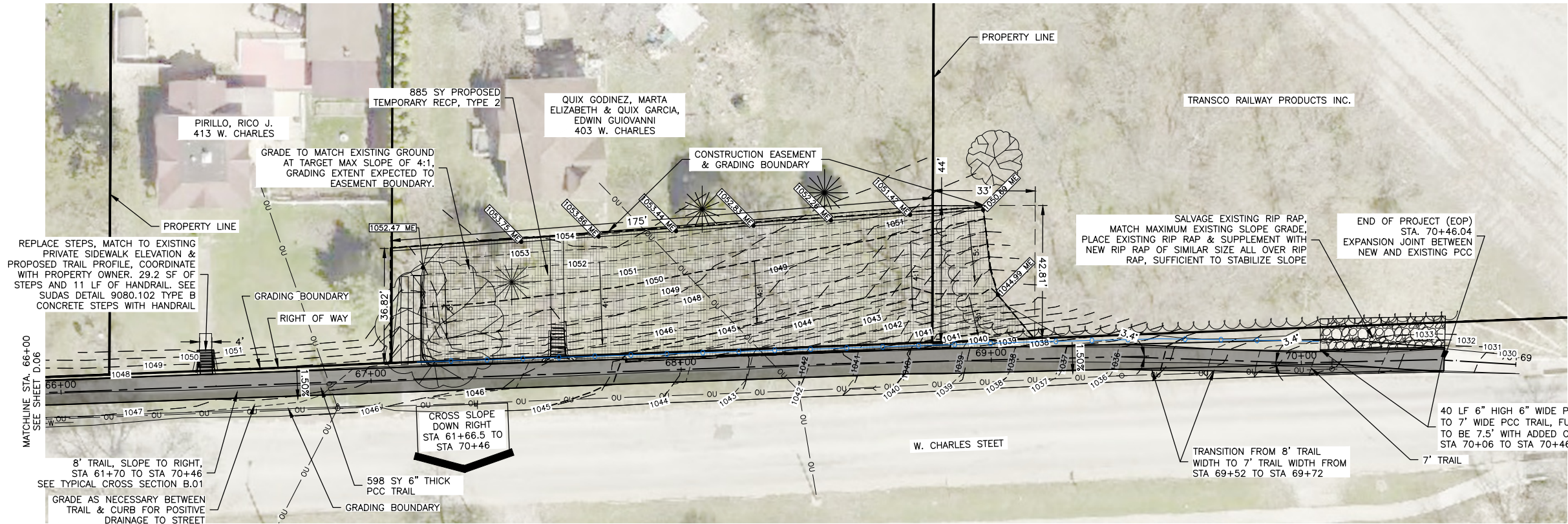
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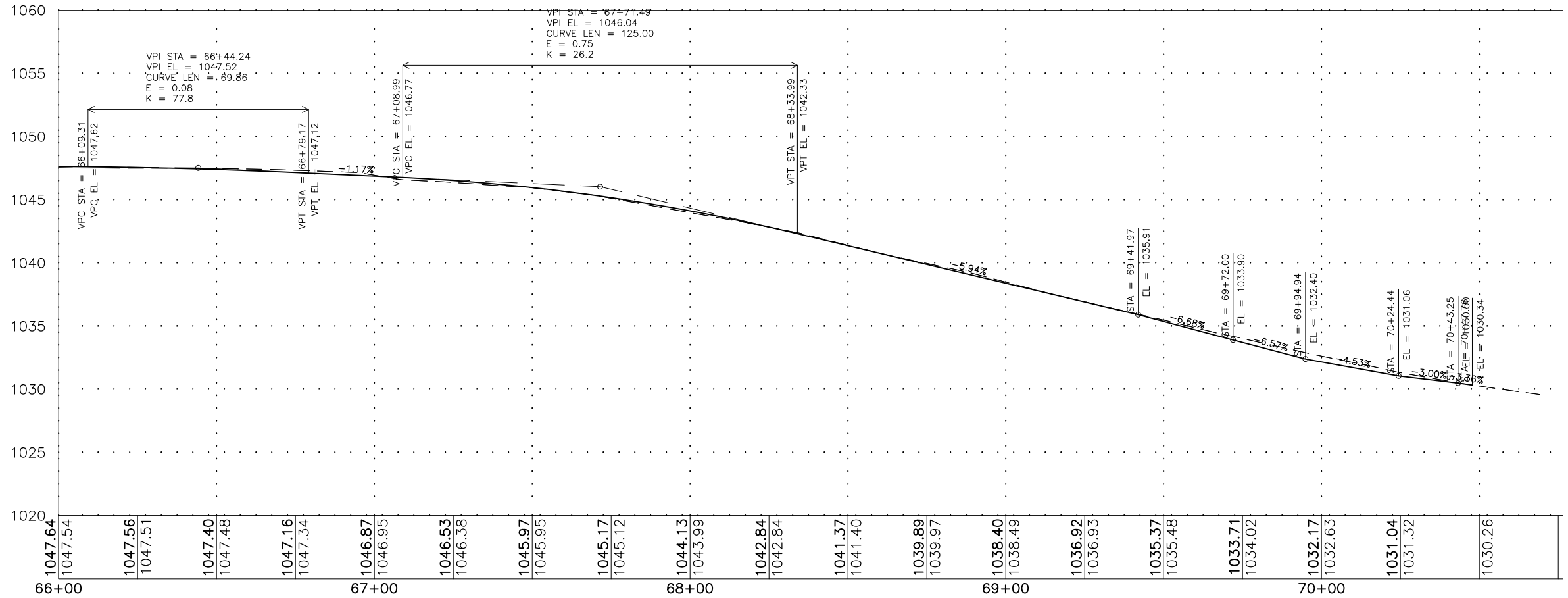
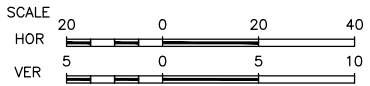
- NOTES:
1. TRAIL ALIGNMENT IS ON CENTER OF TRAIL.
 2. TRAIL SLOPES TO STREET, TYPICAL.
 3. CURING COMPOUND REQUIRED.
 4. 'C' JOINT AT 8' SPACING.
 5. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.
 6. HYDRANT SALVAGE AND INSTALLATION INCLUDES BUT IS NOT LIMITED TO ALL EXCAVATION, LABOR EQUIPMENT, AND MATERIALS REQUIRED TO SHUT DOWN WATER, DISCONNECT EXISTING HYDRANT, SALVAGE GATE VALVE AND HYDRANT IN GOOD CONDITION FOR RELOCATION, PLUG TEE, PLACE AND COMPACT BACKFILL, CUT IN NEW HYDRANT TEE (WITH SOLID REPAIR SLEEVES), AND PROVIDE NEW HYDRANT LEAD IF NECESSARY, INSTALL ASSEMBLY, PROVIDE AND PLACE THRUST BLOCKS, PLACE AND COMPACT BACKFILL. STREET REPAIR IS A SEPARATE ITEM.
 7. STREET PATCH SHALL BE FULL DEPTH PCC, 1" THICKER THAN EXISTING TOTAL PAVEMENT THICKNESS.



REVISIONS		
REV. NO.	DESCRIPTION	DATE



- NOTES:
1. TRAIL ALIGNMENT IS ON CENTER OF TRAIL.
 2. TRAIL SLOPES TO STREET, TYPICAL.
 3. CURING COMPOUND REQUIRED.
 4. 'C' JOINT AT 8' SPACING.
 5. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.
 6. 'E' JOINT AT END OF TRAIL, SEAL 'E' JOINTS.



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PROJECT AND LOCATION:
SEGMENT 2 TRAIL IMPROVEMENTS
OELWEIN, IA

DRAWN BY: JCB
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

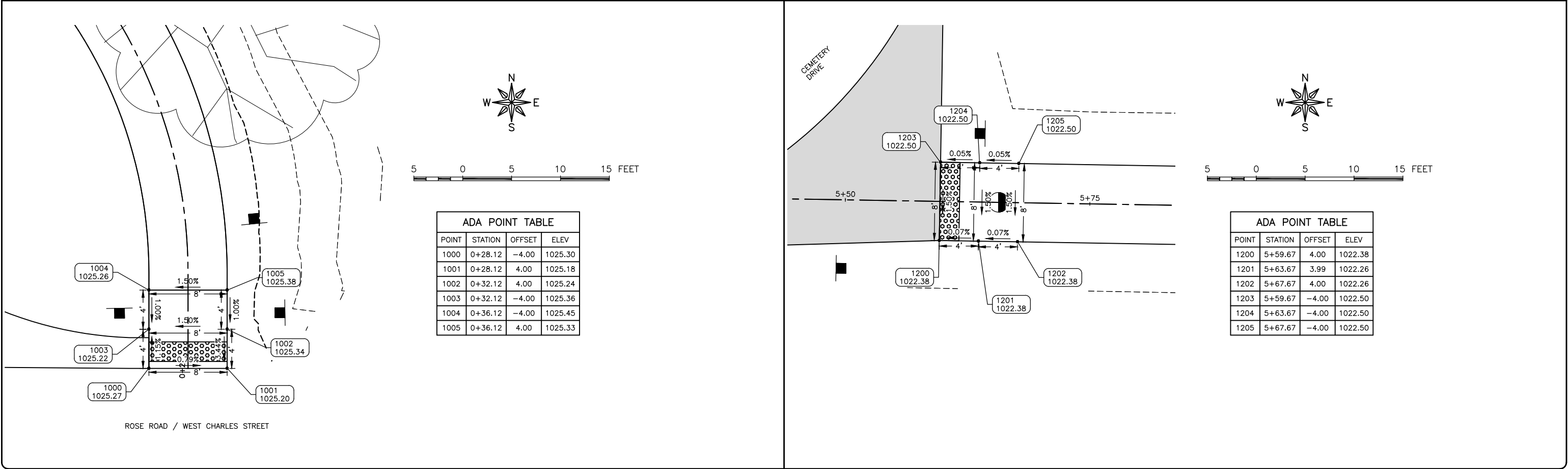
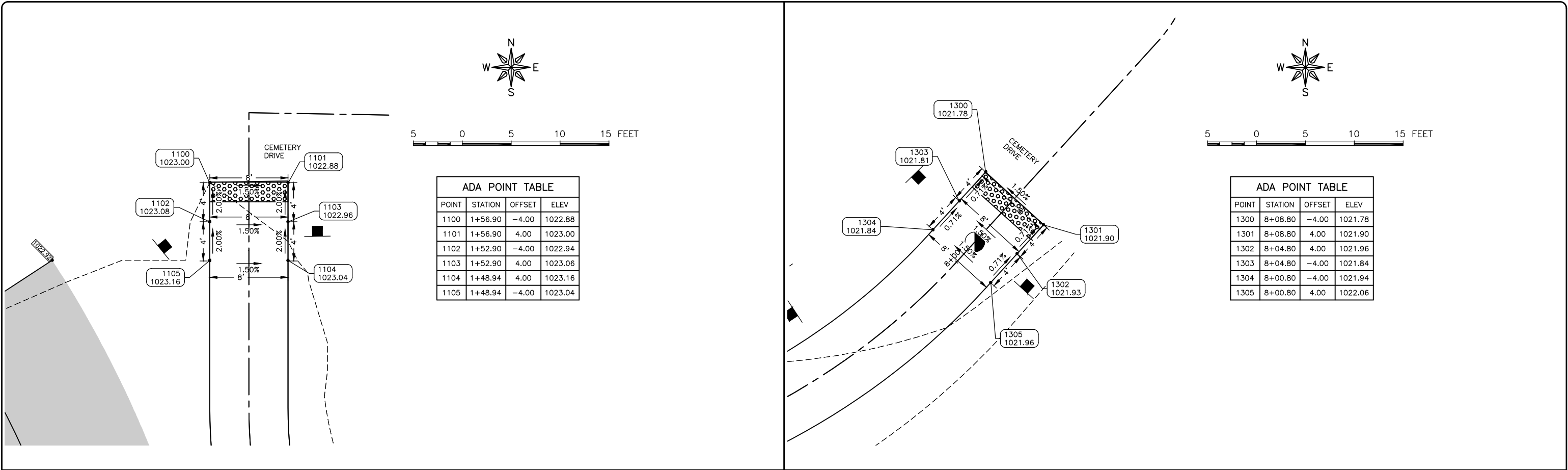
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REV. NO.	DESCRIPTION	DATE

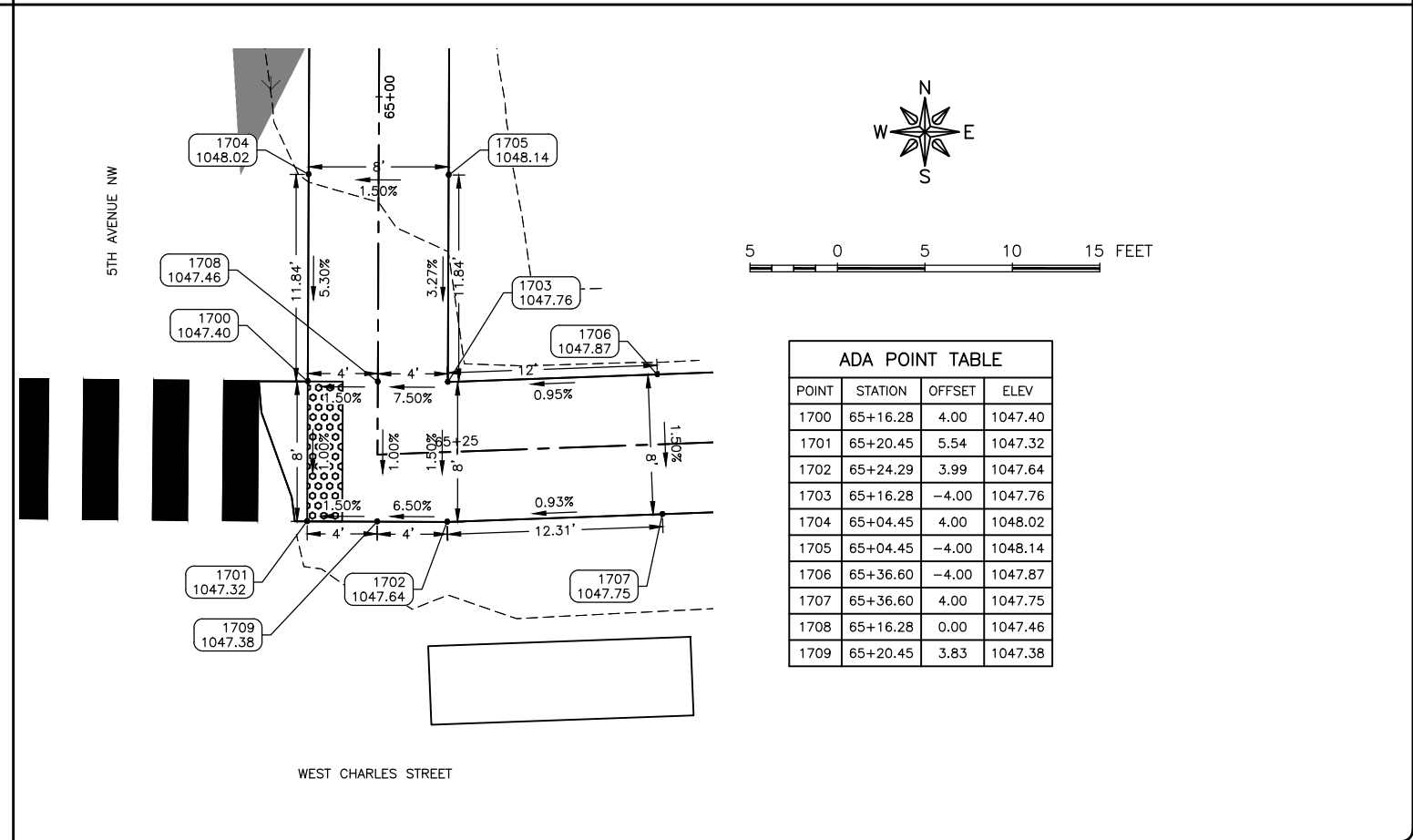
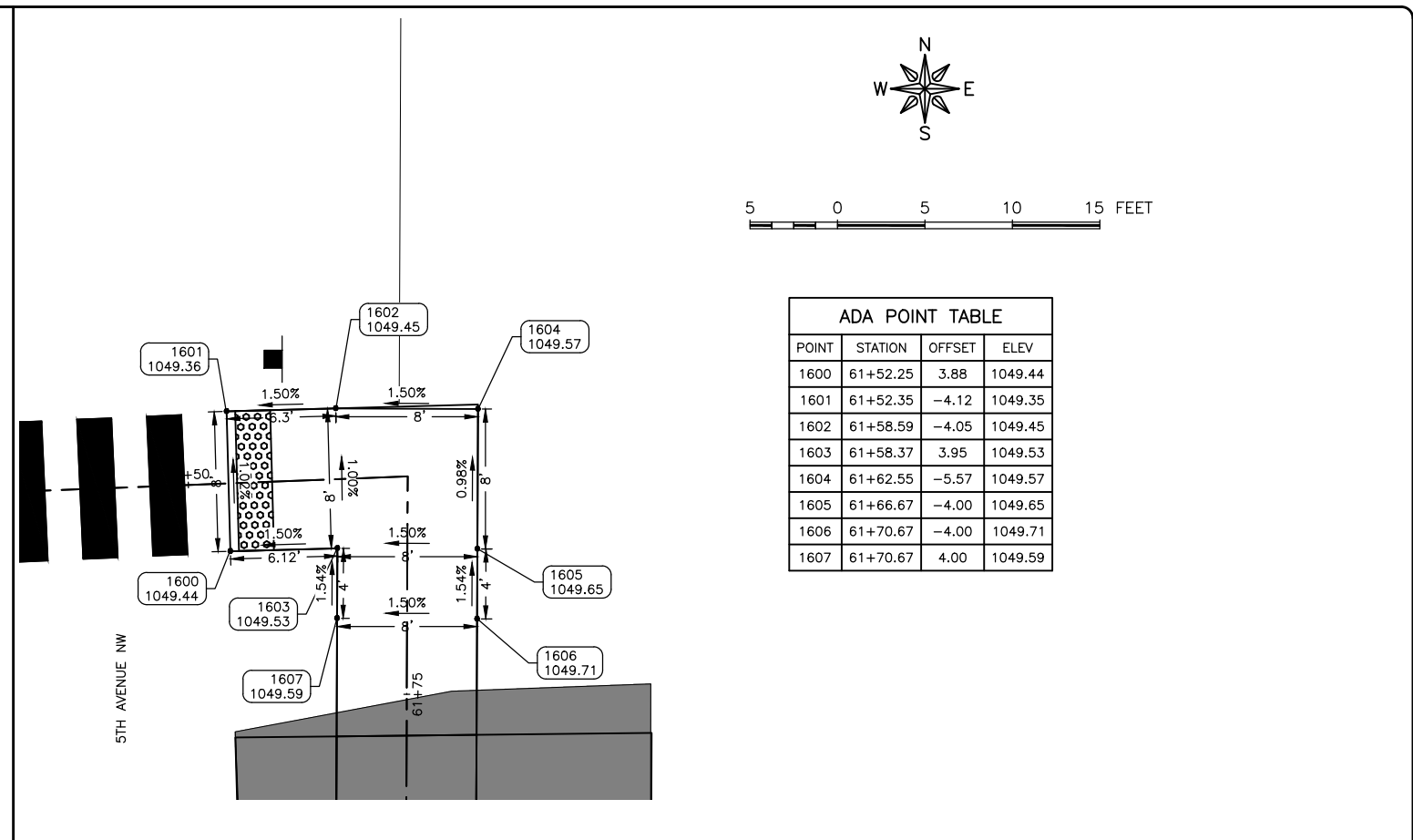
DRAWING:
TRAIL PLAN AND PROFILE – EASTERLY

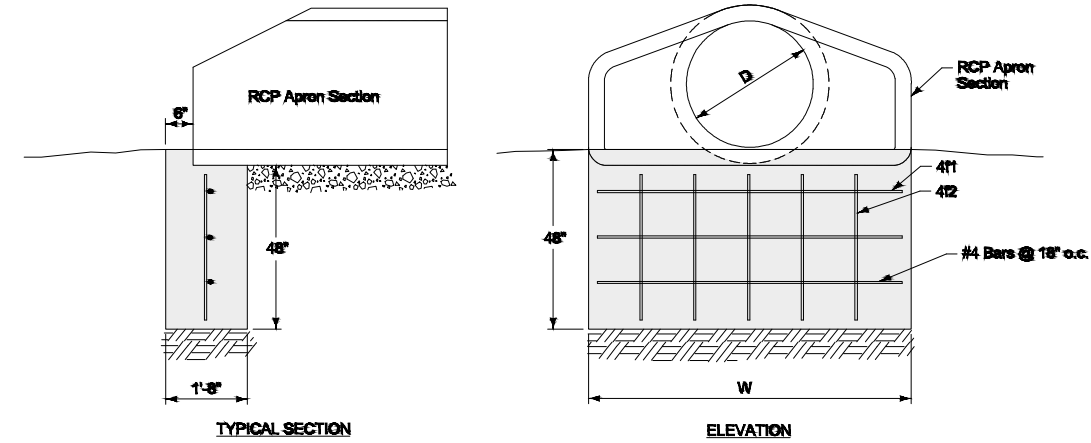
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JOB NUMBER:
21-1205

SHEET NUMBER:
D.07







REINFORCING BAR LIST

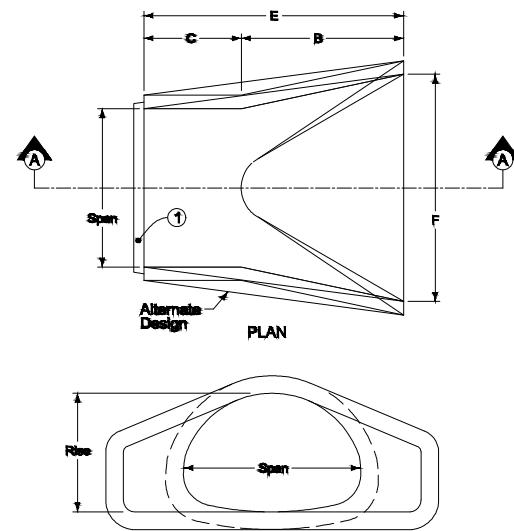
D	W	Mark	Size	Length	Count	D	W	Mark	Size	Length	Count
12"	2'-4"	4#1	4	2'-0"	3	48"	7'-10"	4#1	4	7'-0"	3
		4#2	4	3'-0"	2			4#2	4	3'-0"	6
15"	2'-10 1/2"	4#1	4	2'-6 1/2"	3	54"	8'-5"	4#1	4	8'-1"	3
		4#2	4	3'-0"	2			4#2	4	3'-0"	6
18"	3'-5"	4#1	4	3'-1"	3	60"	8'-11"	4#1	4	8'-7"	3
		4#2	4	3'-0"	3			4#2	4	3'-0"	6
24"	4'-0"	4#1	4	4'-2"	3	66"	8'-11"	4#1	4	8'-7"	3
		4#2	4	3'-0"	3			4#2	4	3'-0"	6
30"	5'-7"	4#1	4	5'-3"	3	72"	10'-0"	4#1	4	9'-0"	3
		4#2	4	3'-0"	4			4#2	4	3'-0"	7
36"	6'-8"	4#1	4	6'-4"	3	78"	10'-7"	4#1	4	10'-3"	3
		4#2	4	3'-0"	5			4#2	4	3'-0"	7
42"	7'-3"	4#1	4	6'-11"	3	84"	11'-1"	4#1	4	10'-9"	3
		4#2	4	3'-0"	5			4#2	4	3'-0"	8

FIGURE 4030.221 SHEET 1 OF 1

SUDAS 4030.221
SHEET 1 OF 1

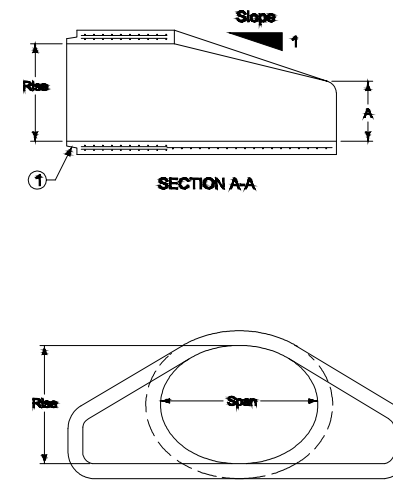
SUDAS Standard Specifications

RCP APRON SECTION FOOTING



EQUIVALENT DIAMETER Inches	SLOPE	APPROXIMATE DIMENSIONS				
		Inches				
		A	B	C	E	F
18	3:1	7	27	45	72	36
24	3:1	9	36	54	72	48
30	3:1	11	45	63	90	60
36	3:1	13	54	72	90	72
42	3:1	15	63	81	90	78
48	3:1	17	72	90	90	84
54	3:1	19	81	90	90	90
60	3:1	21	90	90	90	96
72	2:1	21	90	90	90	108
84	2:1	21	90	90	102	144

ARCH PIPE



EQUIVALENT DIAMETER Inches	SLOPE	APPROXIMATE DIMENSIONS Inches				
		A	B	C	E	F
18	3:1	7	27	45	72	36
24	3:1	9	36	54	72	48
30	3:1	11	45	63	72	60
36	2.5:1	11	54	63	90	72
42	2.5:1	13	63	72	90	78
48	2.5:1	15	72	81	90	84
54	2.5:1	17	81	90	90	90
60	2.5:1	19	90	90	90	96
72	2.5:1	19	90	90	90	108
84	1.5:1	23	90	90	90	119

ELLIPTICAL PIPE

Dimension 'E' shown is the minimum and is considered the design length. Adjust for any difference between the actual length of concrete apron installed and the length indicated below for the length of concrete culvert pipe furnished.

① Tongue and used on inlet end section. Groove and used on outlet end section.

SUDAS 4030.223
SHEET 1 OF 1

SUDAS Standard Specifications

ARCH AND ELLIPTICAL CONCRETE PIPE APRONS

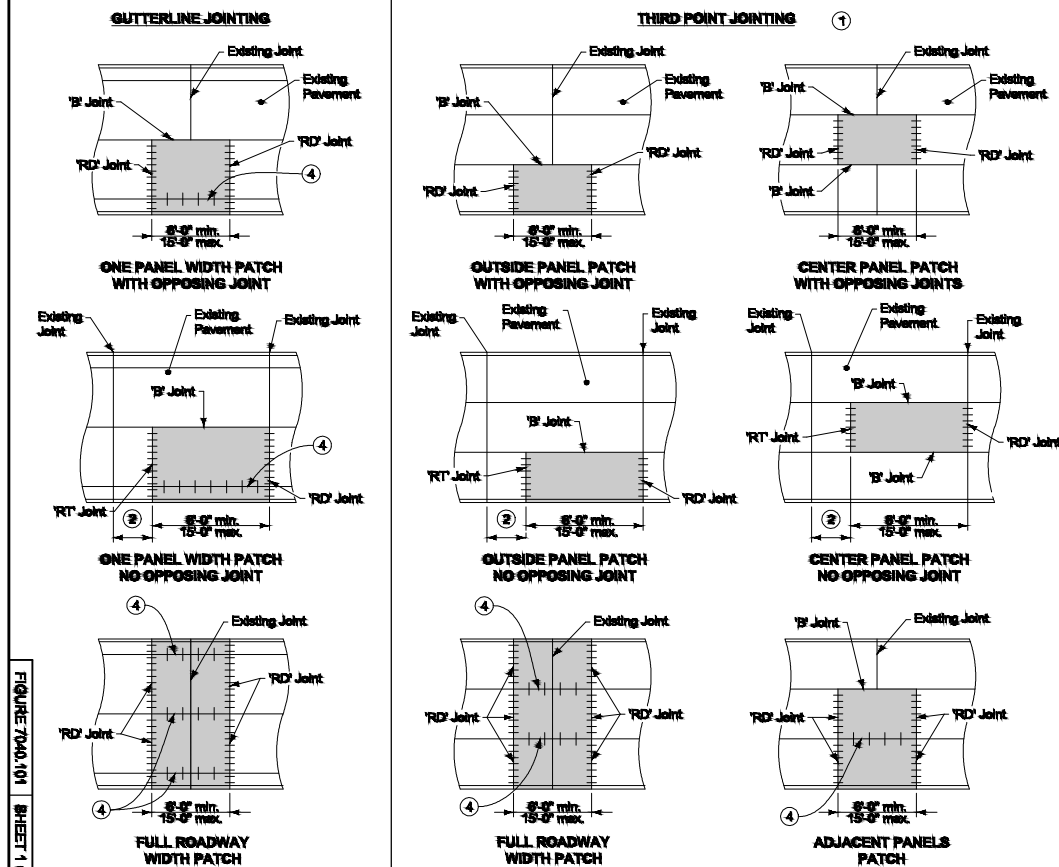
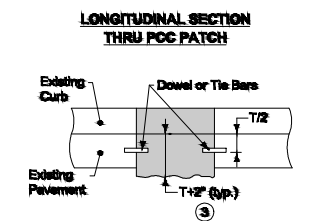


FIGURE 7040.101 SHEET 1 OF 1

- Patches on roadways with quarter point jointing will be similar to third point jointing details.
- Minimum distance between existing joint and patch is 6 feet. If distance is less than 6 feet, extend patch to existing joint.
- If subgrade or subbase material is required below patch, bring material to a level 2 inches below bottom of existing pavement.
- RT, KT, or L joint depending on pavement thickness and pouring sequence.

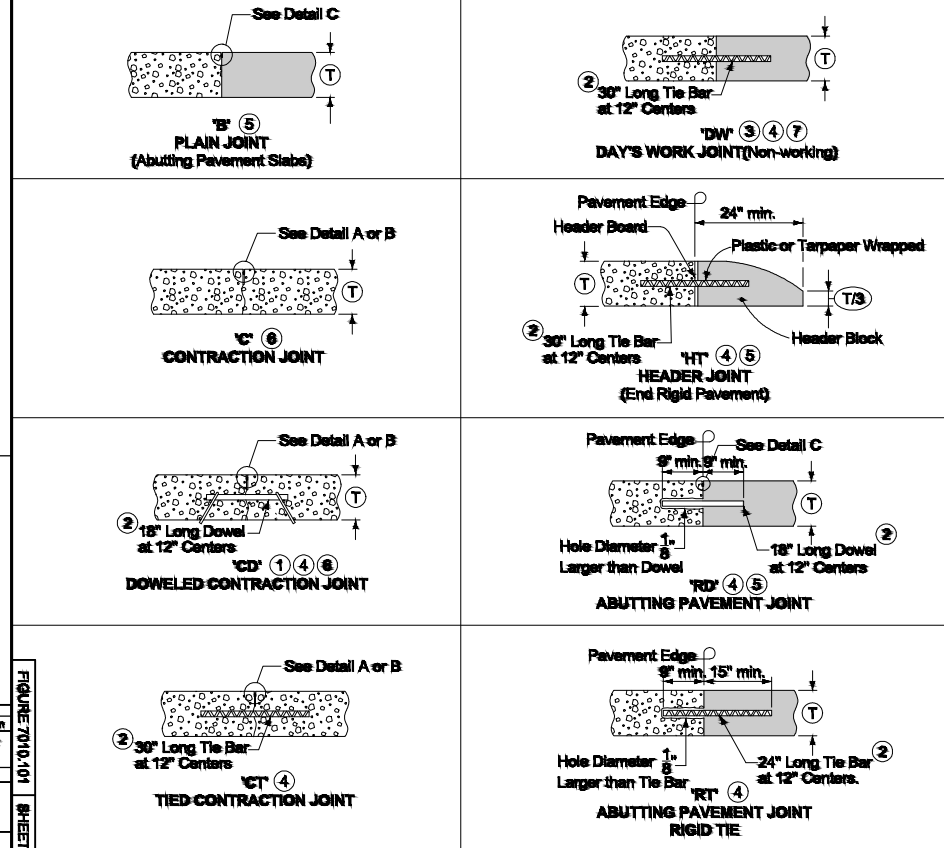


SUDAS 7040.101
SHEET 1 OF 1

SUDAS Standard Specifications

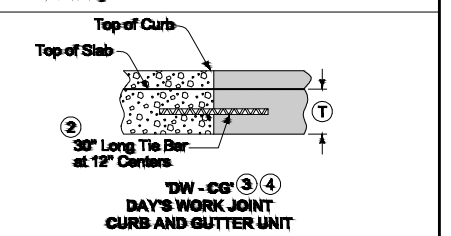
FULL DEPTH PCC PATCHES LESS THAN OR EQUAL TO 15' LONG

FIGURE 7040.101 SHEET 1 OF 1



TRANSVERSE CONTRACTION

- See dowel assemblies for fabrication details.
- See Bar Size Table for Contraction Joints on Sheet 2.
- Locate 'DW' joint at a mid-panel location between future 'C' or 'CD' joints. Place no closer than 5 feet to a 'C' or 'CD' joint.
- Place bars within the limits shown under dowel assemblies.
- Edge with 1/8 inch tool for length of joint. For HT joint, remove header block and board when second slab is placed.
- Unless specified otherwise, use 'CD' transverse contraction joints in mainline pavement when 'T' is greater or equal to 8 inches. Use 'C' joints when 'T' is less than 8 inches.
- 'RT' joint may be used in lieu of 'DW' joint at the end of the days work. Remove any pavement damaged due to the drilling at no additional cost to the Contracting Authority.



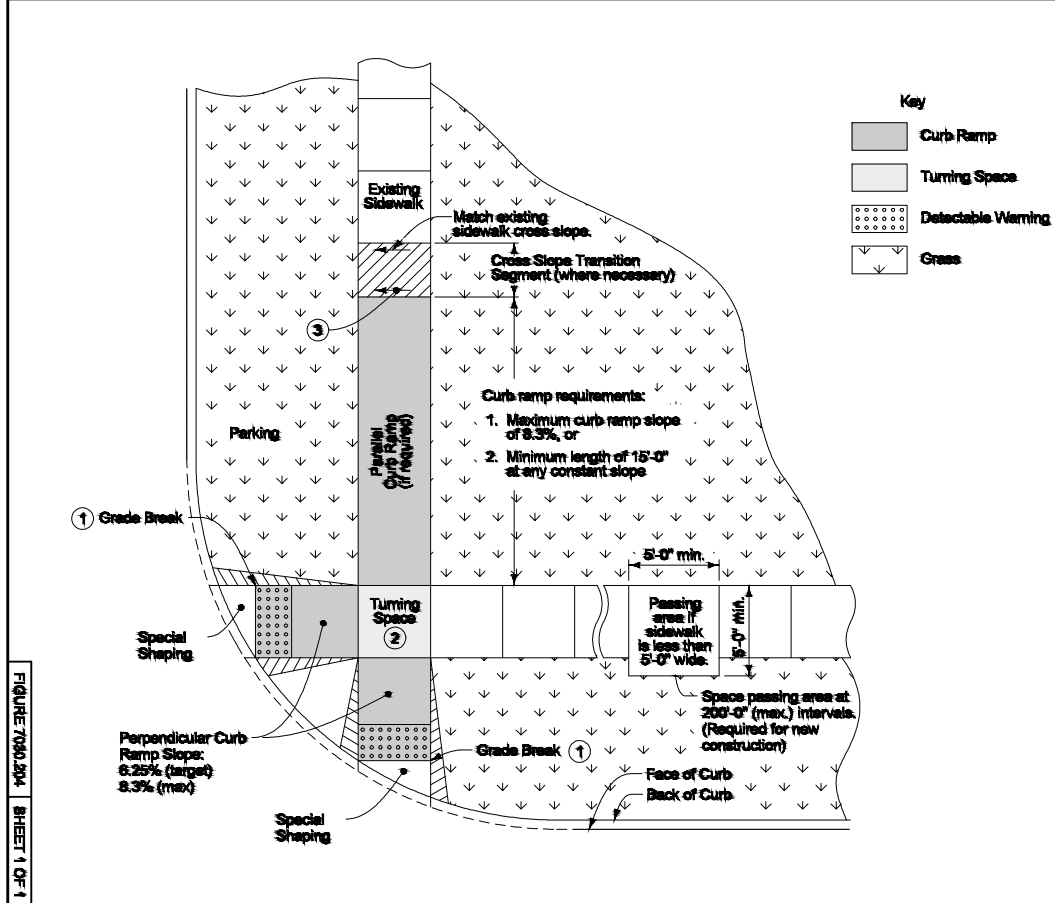
SUDAS 7040.101
SHEET 1 OF 1

SUDAS Standard Specifications


JOINTS

REV. NO.	DESCRIPTION	DATE



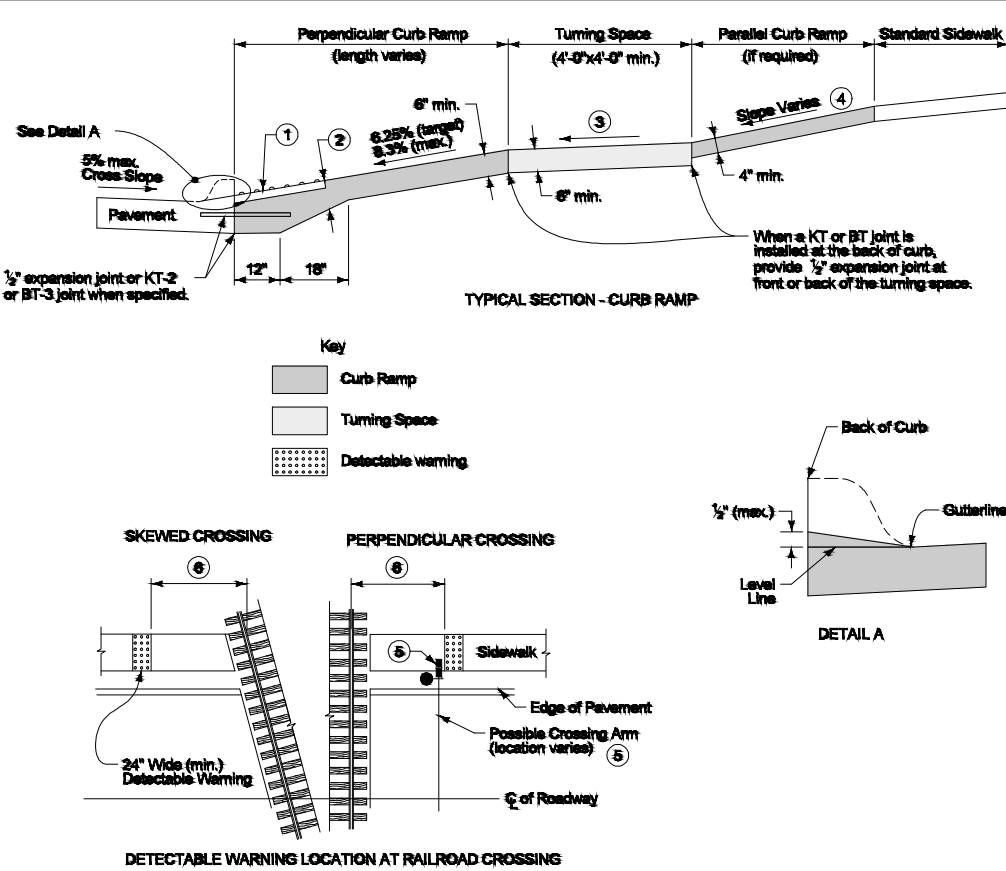


- 1 Match pedestrian street crossing slope, or flatter.
- 2 Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- 3 Target cross slope of 1.5% with a maximum cross slope of 2.0%.


**SUDAS**
7030.204
SHEET 1 of 1

SUDAS Standard Specifications

GENERAL FEATURES
OF AN ACCESSIBLE SIDEWALK

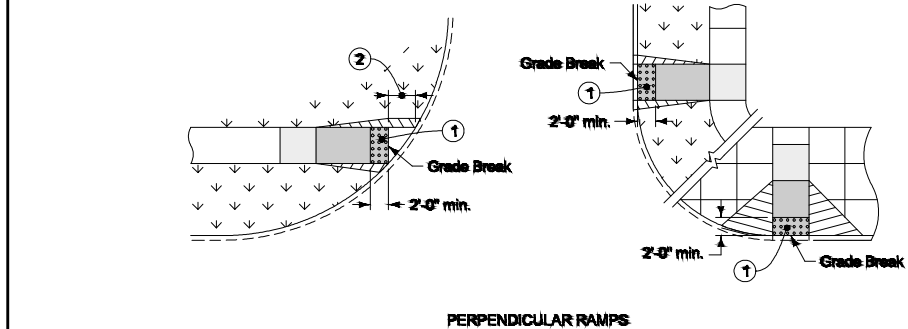


- 1 Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.
 - 2 Provide a minimum of 6 inches of concrete below the detectable warning panel.
 - 3 Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0%.
 - 4 If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
- The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- 5 If crossing gate conflicts with location of detectable warning or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.
 - 6 Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.


**SUDAS**
7030.205
SHEET 1 of 1

SUDAS Standard Specifications

GENERAL SIDEWALK AND
CURB RAMP DETAILS

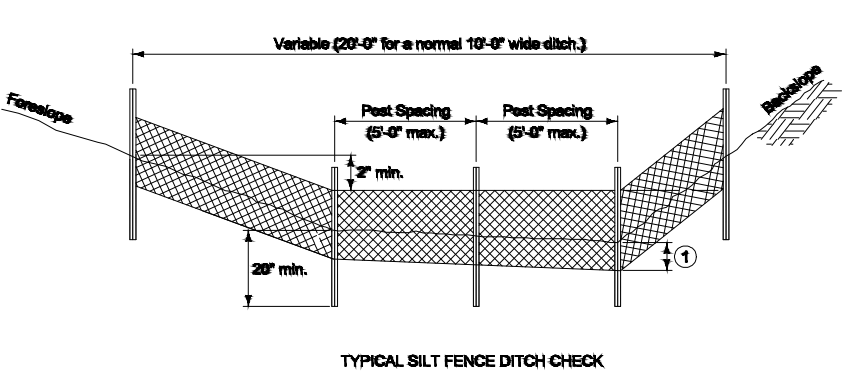


- Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.
- 1 When detectable warning is located on curb ramp surface, orient domes in the direction of pedestrian travel.
 - 2 When the distance between the grade break and the back of curb is less than 5 feet, place detectable warning surface at the bottom of the curb ramp.
- Where one corner of the curb ramp is more than 5 feet from the back of curb, construct curb ramp as a parallel curb ramp. Move grade break back as required to place detectable warning on turning space at the back of curb.

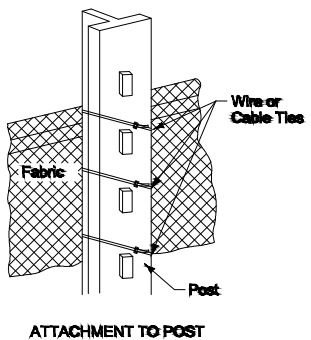
**SUDAS**
7030.210
SHEET 1 of 1


SUDAS Standard Specifications

DETECTABLE WARNING
PLACEMENT



- 1 Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).

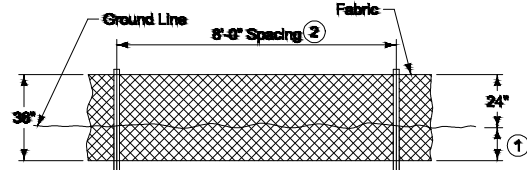


**SUDAS**
9040.119
SHEET 1 of 2


SUDAS Standard Specifications

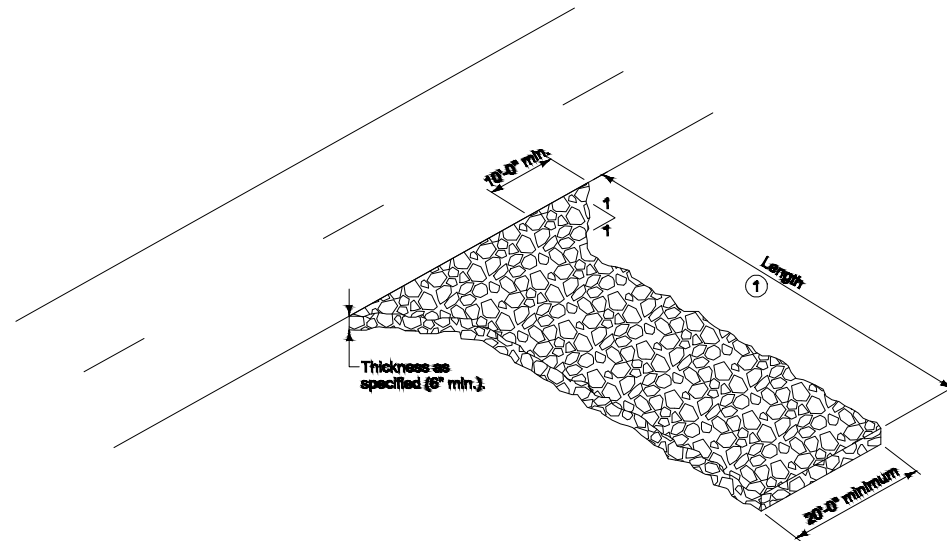
SILT FENCE

REVISIONS		
REV. NO.	DESCRIPTION	DATE




DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES

	SUDAS	REVISION 2 10-21-14
		0040.119 SHEET 2 of 2
SUDAS Standard Specifications		
SILT FENCE		





- ① Entrance length: 50 foot minimum (30 foot for single family residential), or as specified in the contract documents. Length of entrance may be increased if sediment track-out occurs.

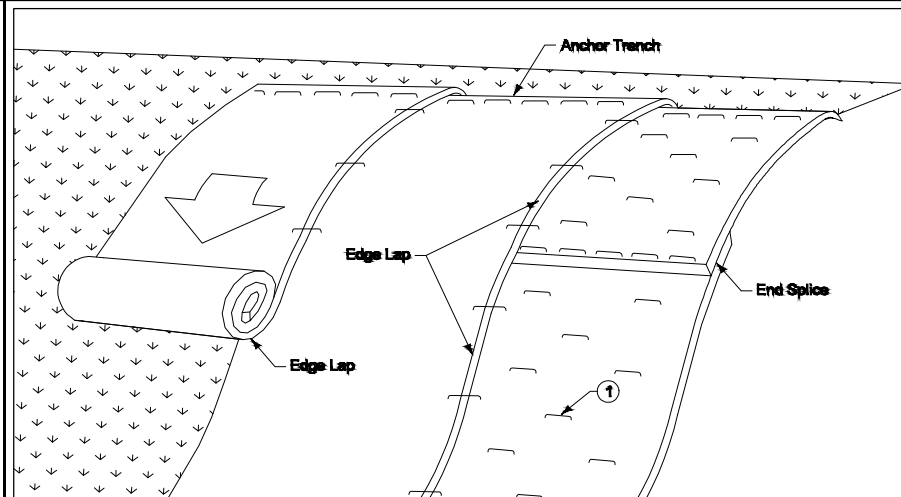
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		<div>9040.120</div>
		<div>SHEET 1 of 1</div>
<h2>SUDAS Standard Specifications</h2>		
<h3>STABILIZED CONSTRUCTION ENTRANCE</h3>		



TYPICAL LONGITUDINAL SECTION OF RETAINING WALL

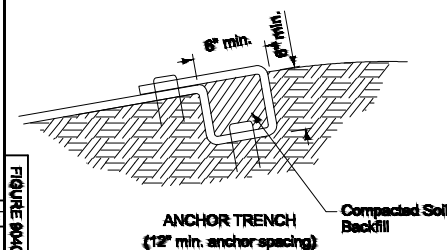


	SUDAS		IOWA DOT	REVISION
				2 10-30-18
FIGURE 1072.221	STANDARD ROW PLAN	MI-221		
		SHEET 1 OF 3		
REVISIONS: Replaced .DOT and IOWA logos with new version.				
<i>Paul D. Wiegand</i>		<i>Brian Smith</i>		
SUDAS DIRECTOR		DESIGN METHODS ENGINEER		
COMBINED RETAINING WALL - SIDEWALK				

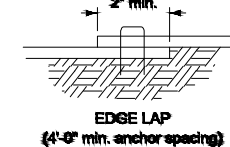


- ① Secure blanket to ground according to manufacturer's recommended anchoring pattern and minimum shown in Table 1.

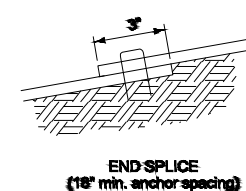
Max. slope	Min. anchors
≤3:1	1.5/yd ²
2:1	2/yd ²
1:1	2.5/yd ²




ANCHOR TRENCH
(12" min. anchor spacing)



EDGE LAP
6" min. anchor spacing)

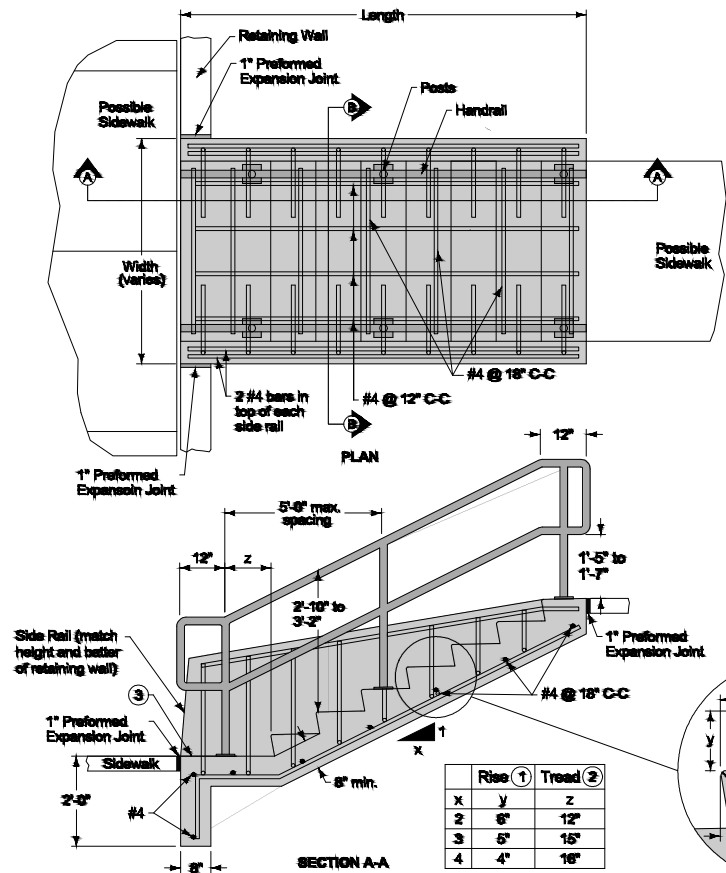


END SPLICE
(18" min. anchor spacing)

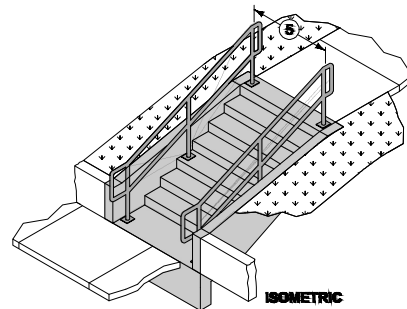
	SUDAS	REVISION 2 10-21-04
		9040.103 SHEET 1 of 1
SUDAS Standard Specifications		
ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES		

REVISIONS		
REV. NO.	DESCRIPTION	DATE

FIGURE 9000.102 SHEET 1 OF 2



- Provide a minimum of 2 inches of cover for all reinforcing.
- Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.
- Minimum riser height is 4 inches. Maximum riser height is 7 inches.
 - Minimum tread depth is 11 inches.
 - Construct cross slope of landing to match adjacent sidewalk.
 - Slope tread 1% minimum to 2% maximum in any direction.
 - Match existing sidewalk width.

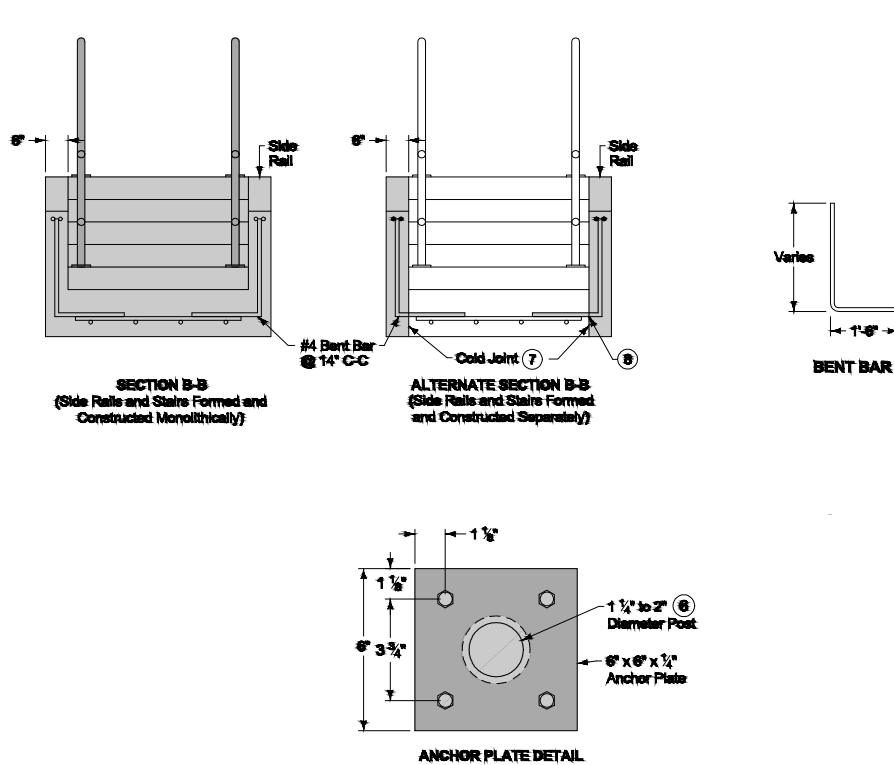


SUDAS 9000.102 SHEET 1 of 2

SUDAS Standard Specifications

TYPE B CONCRETE STEPS WITH HANDRAIL

FIGURE 9000.102 SHEET 2 OF 2



- Provide a minimum of 2 inches of cover for all reinforcing.
- Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.
- Weld post to anchor plate with 1/4 inch weld. Grind weld to provide smooth surface, free of burrs.
 - Upon approval of Engineer, side rails may be formed and constructed separately from the stairs. Seal the cold joint between the side rail and stairs according to Section 7010.
 - If side rails and stairs are constructed separately, dowel bar substitutes may be used for the bent bar connections between the side rails and the stairs.

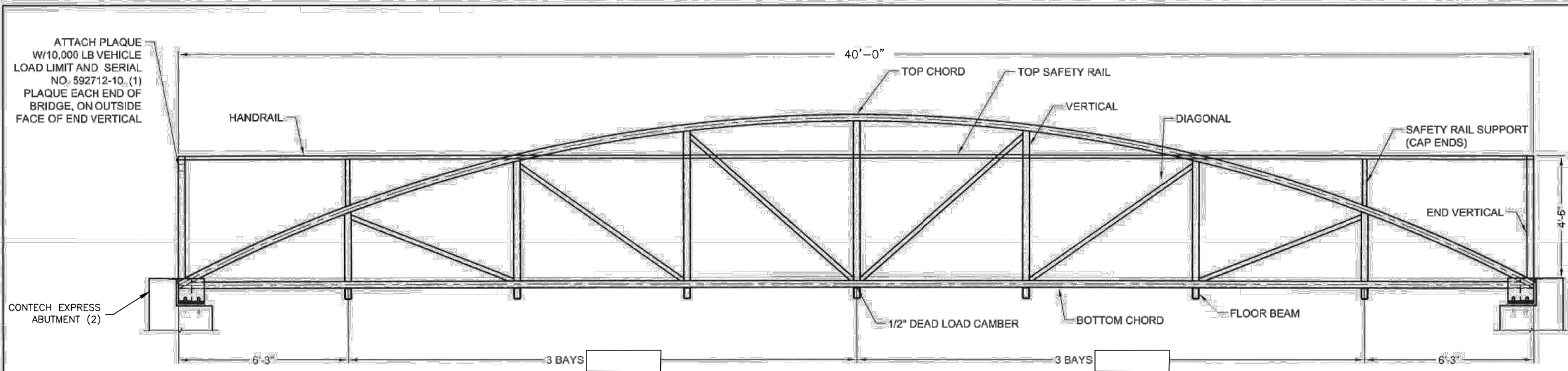
SUDAS 9000.102 SHEET 2 of 2

SUDAS Standard Specifications

TYPE B CONCRETE STEPS WITH HANDRAIL

REVISIONS		
REV. NO.	DESCRIPTION	DATE

KEYSTONE CONTINENTAL TRUSS BRIDGE



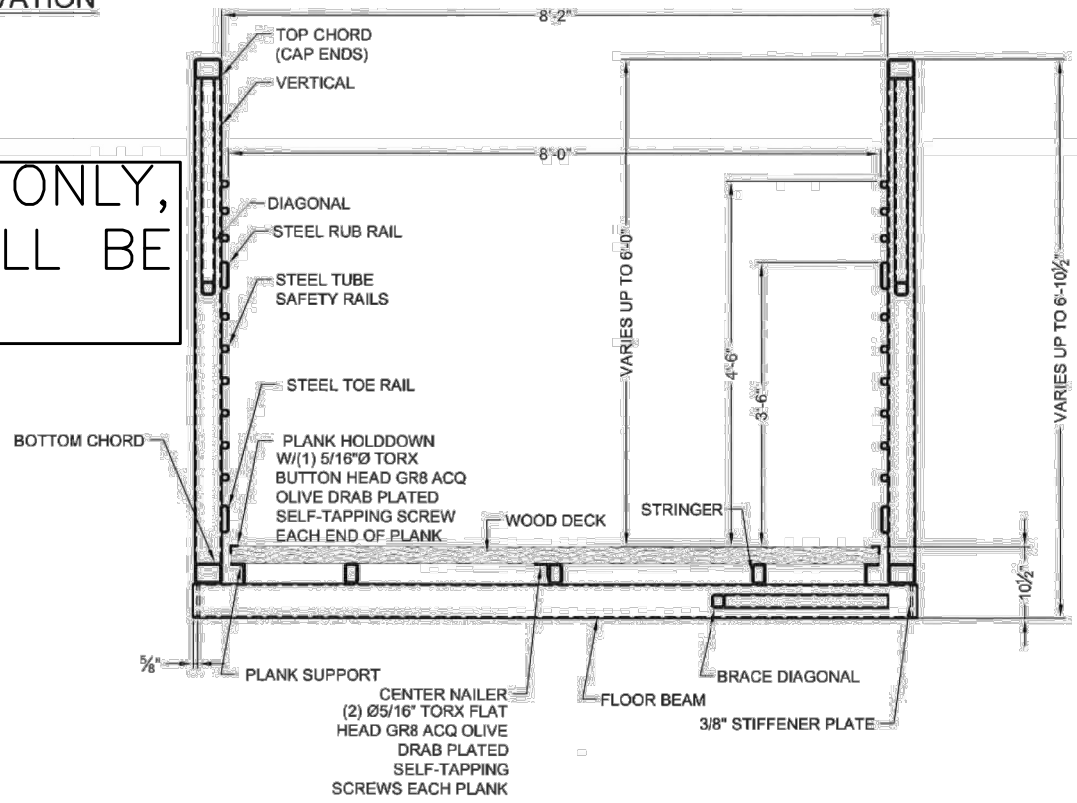
BRIDGE ELEVATION

GENERAL NOTES

- DESIGN PROCEDURE IS IN ACCORDANCE WITH "LRFD BRIDGE DESIGN SPECIFICATIONS" 7TH EDITION & "LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION, 2015 INTERIM REVISIONS BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).
- BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A347 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A709-50W PLATE AND STRUCTURAL SHAPES (FY=50,000 PSI).
- BRIDGE DECK NOMINAL 3X12 TREATED DOUGLAS FIR WOOD DECKING.
- THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED. WELDING TO BE IN ACCORDANCE WITH AWS D1.1.
- ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE AS DETAILED.
- UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
 - A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
 - B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
 - C. BOTTOM OF STRINGERS WILL BE STITCH WELDED TO TOP OF FLOOR BEAMS.
 - D. MISCELLANEOUS NON-STRUCTURAL MEMBERS (DEFINED AS MEMBERS WITH CONNECTION WELDS NOT SPECIFICALLY DETAILED) WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS, BUTT WELDED AT SHOP SPLICE LOCATIONS, AND ARE TO BE EXEMPT FROM THE REQUIREMENTS OF AWS D1.1.
- BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
 - A. 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 10,000 LB VEHICLE LOAD. THE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 80% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 14'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.
 - B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
 - C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.8.2).
- CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO.7 BRUSH-OFF BLAST CLEANING, SSPC-SP7-LATEST EDITION.
- MINIMUM MATERIAL THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.

SAFETY SYSTEM NOT FULLY SHOWN IN ELEVATION FOR CLARITY. SEE BRIDGE SECTION FOR LOCATIONS.

FOR INFORMATION ONLY,
ACTUAL BRIDGE WILL BE
40' SPAN



BRIDGE SECTION

CAUTION:
WE ARE PROVIDING A WOOD DECK ON THIS STRUCTURE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR THE CONTRACT DOCUMENTS. BE AWARE THAT MOST PEDESTRIAN BRIDGE LIABILITY CLAIMS ARE STATISTICALLY SLIP AND FALL CLAIMS. IT IS THE OWNER'S RESPONSIBILITY TO KEEP THE DECK FREE FROM SLIP OR TRIP HAZARDS DUE TO CUPPING, SPLITS, GAPS AND SMOOTH SURFACES.

CONTECH
PROPOSAL
DRAWING



40'-0" X 8'-0"
OELWEIN IOWA
PEDESTRIAN BRIDGE
OELWEIN, IA

CONTECH
ENGINEERED SOLUTIONS LLC
www.conteches.com
1000 E. Main, Suite 100, Oelwein, IA 50662
TEL: 562-2001 FAX: 562-2002

DATE: 5/29/2018
DESIGNED: XXX
DRAWN: DJB
CHECKED: XXX
APPROVED: XXX
PROJECT No: 591712
SEQUENCE No: 010
SHEET: 1 OF 2

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF OELWEIN
20 2ND AVE SW
OELWEIN IA, 50662

PROJECT AND LOCATION:
TRAIL SEGEMENT 2 IMPROVEMENTS
OELWEIN, IOWA

DRAWN BY: JGK
APPROVED BY: JSB
DATE: MAY 2025
SCALE: AS NOTED

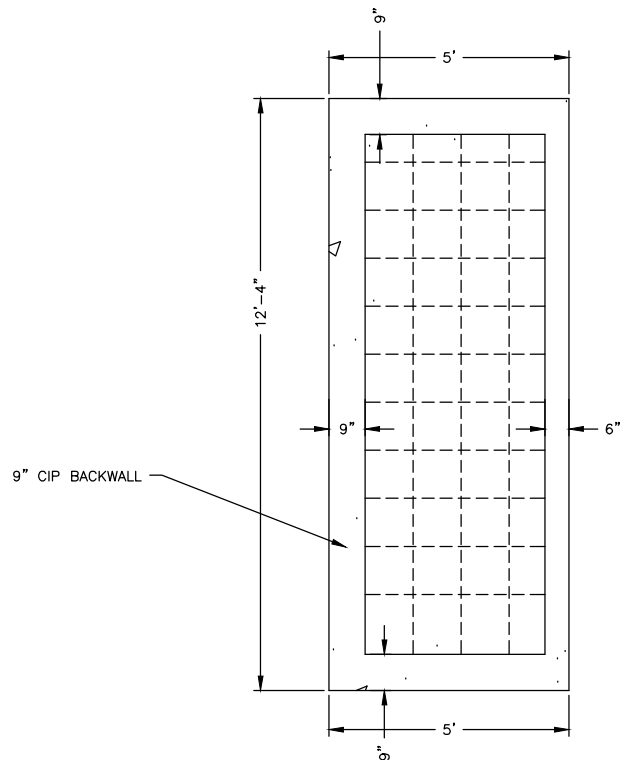
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:
BRIDGE DETAIL

SET TYPE: BID SET
G:\C30\21\21-1205 Oelwein Trail Ph. 2\Plans\21-1205 PLANS.dwg, Bridge

JOB NUMBER:
21-1205

SHEET NUMBER:
U.07



EXPRESS ABUTMENTS (2) WILL BE PROVIDED BY CONTECH (BRIDGE SUPPLIER).

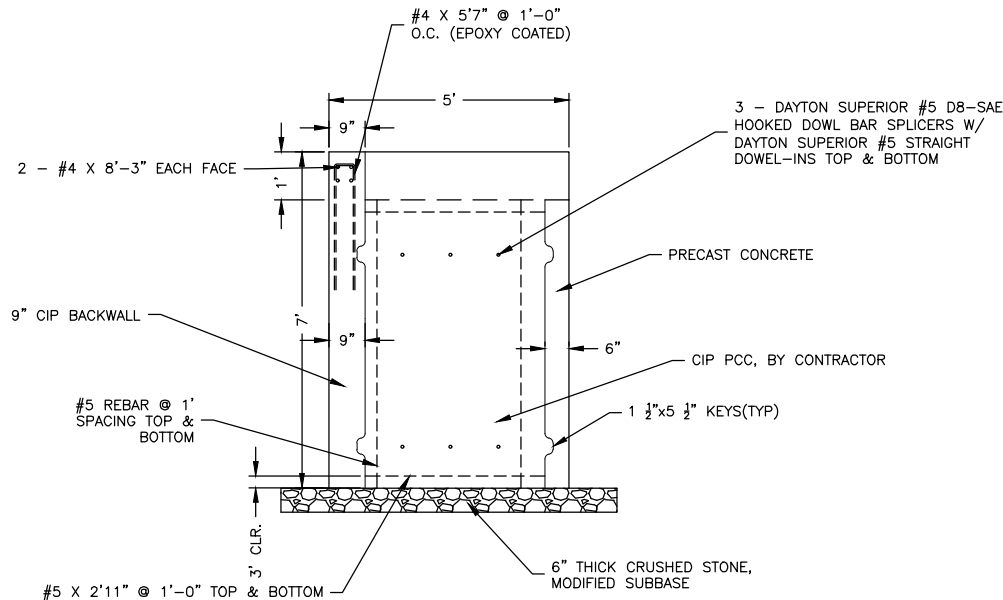
DIMENSIONS ARE ASSUMED BASED ON 2,500 PSF NET ALLOWABLE BEARING CAPACITY.
BEARING CAPACITY TO BE VERIFIED BY GEOTECHNICAL INVESTIGATION PROVIDED BY OWNER.

CONTRACTOR TO PROVIDE PCC INFILL, ESTIMATED TO BE 10.9 CY TOTAL.

12" WALL EXTENSION REQUIRED ON BACK AND SIDES OF ABUTMENT.

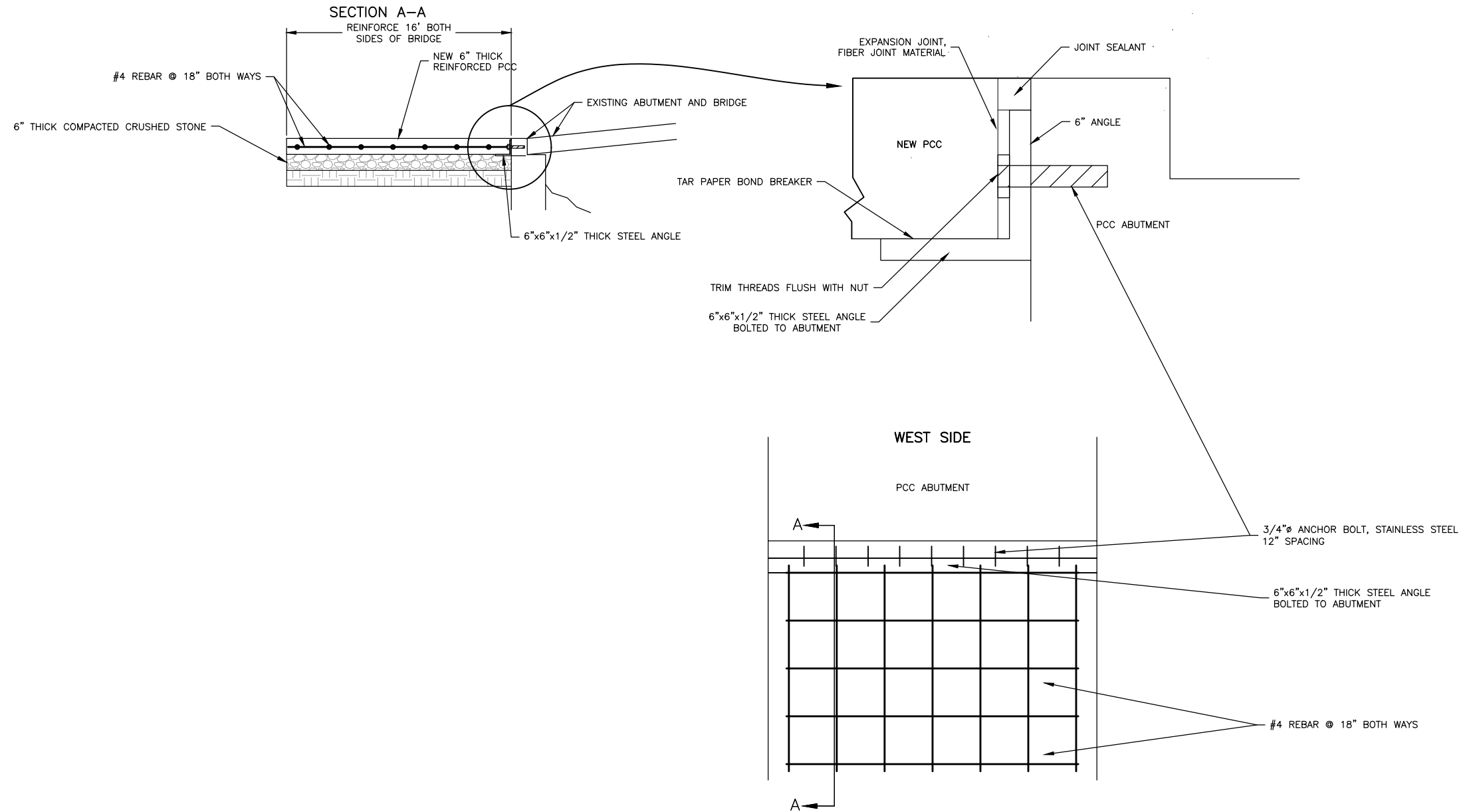
COORDINATE WITH CONTECH, JAKE VOGEL, 612-352-7944, JAKE.VOGEL@CONTECHES.COM
FOR EXACT DETAIL OF EXPRESS ABUTMENTS AND WHAT PORTIONS OF WORK WILL BE
REQUIRED BY CONTRACTOR.

DETAIL SHOWN IS APPROXIMATE.



BRIDGE ABUTMENT/PCC DETAIL
N.T.S.

REVISIONS		
REV. NO.	DESCRIPTION	DATE



BRIDGE ABUTMENT/PCC DETAIL
N.T.S.

REVISIONS		
REV. NO.	DESCRIPTION	DATE