



**METROPOLITAN**  
C O U N C I L



**SOUTHWEST**  
Green Line LRT Extension

# CIVIL WEST CONSTRUCTION

# VOLUME 3

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# TRACKWORK

[illegible]

WARNING: THIS RECORD MAY CONTAIN SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 CFR PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW", AS DEFINED IN 49 CFR PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE IS GOVERNED BY 5 U.S.C. 552 AND 49 CFR PARTS 15 AND 1520.

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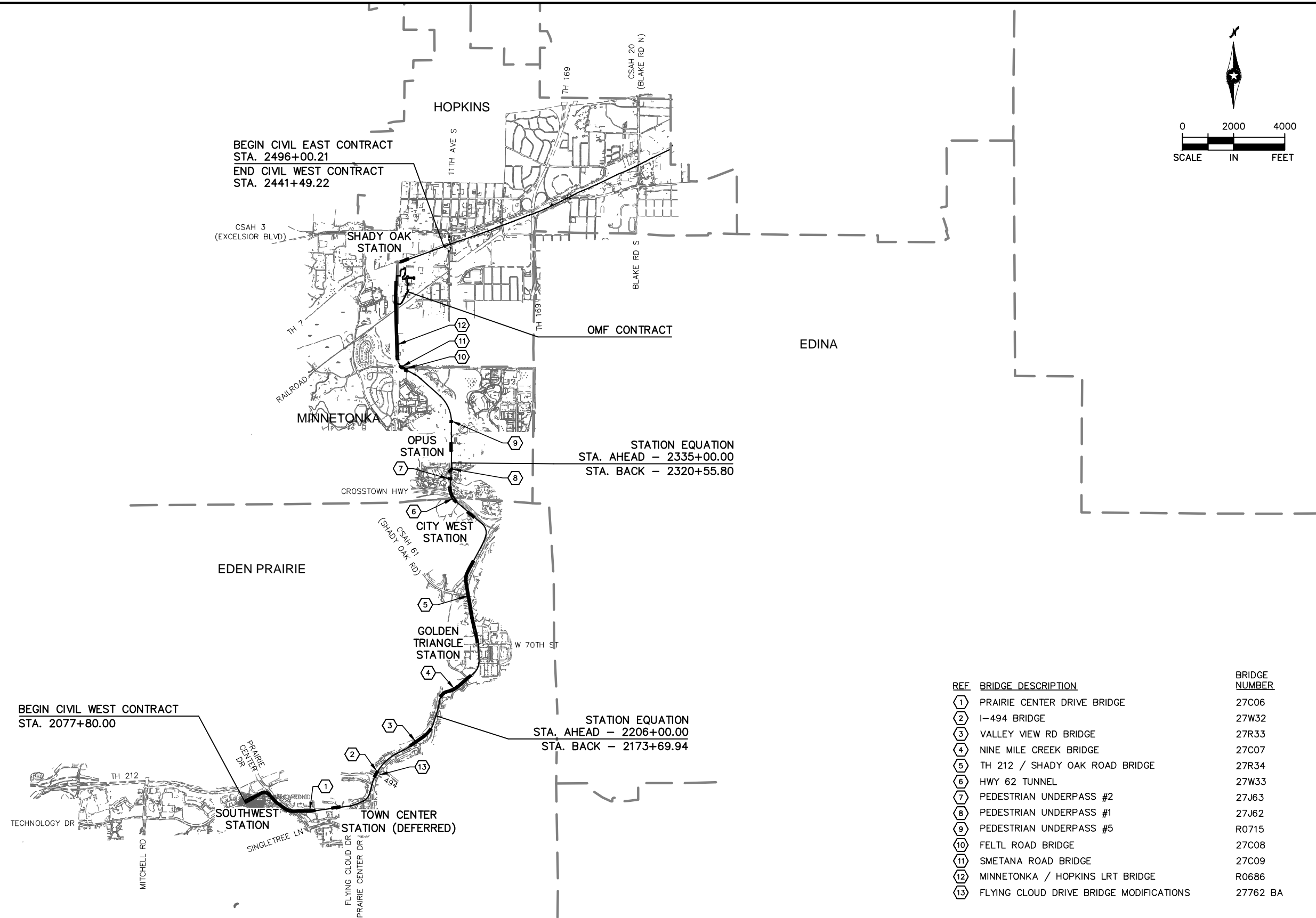
# AECOM

Sep. 21 2015 06:50 am v:\3400\_ADC\CAD\CAD MANAGEMENT\DRAWING\_LIST\W1\_GEN-idx.dwg By: V-KrewolMR

CIVIL WEST						CIVIL WEST						CIVIL WEST											
SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV	SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV	SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV
VOLUME 3 - TRACKWORK						73	W2-TRK-TYP-037		TRACK TYPICAL SECTIONS							146	W2-TRK-PRF-001		TRACK PLAN AND PROFILE		2206+00	2213+00	
1	W0-TRK-CVR-001		COVER SHEET					74	W2-TRK-TYP-038		TRACK TYPICAL SECTIONS					147	W2-TRK-PRF-002		TRACK PLAN AND PROFILE		2213+00	2220+50	
2	W0-TRK-IDX-001		VOLUME INDEX OF PLAN SHEETS					75	W2-TRK-TYP-039		TRACK TYPICAL SECTIONS					148	W2-TRK-PRF-003		TRACK PLAN AND PROFILE		2220+50	2227+50	
3	W0-GEN-KEY-001		GENERAL KEY MAP					76	W3-TRK-TYP-001		TRACK TYPICAL SECTIONS					149	W2-TRK-PRF-004		TRACK PLAN AND PROFILE		2227+50	2234+50	
4	W0-GEN-NTS-001		GENERAL LEGEND AND ABBREVIATIONS SHEET 1					77	W3-TRK-TYP-002		TRACK TYPICAL SECTIONS					150	W2-TRK-PRF-005		TRACK PLAN AND PROFILE		2234+50	2240+50	
5	W0-GEN-NTS-002		GENERAL LEGEND AND ABBREVIATIONS SHEET 2					78	W3-TRK-TYP-003		TRACK TYPICAL SECTIONS					151	W2-TRK-PRF-006		TRACK PLAN AND PROFILE		2240+50	2247+50	
6	W0-TRK-NTS-001		TRACK TRACK NOTES					79	W3-TRK-TYP-004		TRACK TYPICAL SECTIONS					152	W2-TRK-PRF-007		TRACK PLAN AND PROFILE		2247+50	2254+50	
7	W1-TRK-TYP-001		TRACK TYPICAL SECTIONS					80	W3-TRK-TYP-005		TRACK TYPICAL SECTIONS					153	W2-TRK-PRF-008		TRACK PLAN AND PROFILE		2254+50	2261+50	
8	W1-TRK-TYP-002		TRACK TYPICAL SECTIONS					81	W3-TRK-TYP-006		TRACK TYPICAL SECTIONS					154	W2-TRK-PRF-009		TRACK PLAN AND PROFILE		2261+50	2268+50	
9	W1-TRK-TYP-003		TRACK TYPICAL SECTIONS					82	W3-TRK-TYP-007		TRACK TYPICAL SECTIONS					155	W2-TRK-PRF-010		TRACK PLAN AND PROFILE		2268+50	2275+50	
10	W1-TRK-TYP-004		TRACK TYPICAL SECTIONS					83	W3-TRK-TYP-008		TRACK TYPICAL SECTIONS					156	W2-TRK-PRF-011		TRACK PLAN AND PROFILE		2275+50	2282+50	
11	W1-TRK-TYP-005		TRACK TYPICAL SECTIONS					84	W3-TRK-TYP-009		TRACK TYPICAL SECTIONS					157	W2-TRK-PRF-012		TRACK PLAN AND PROFILE		2282+50	2289+50	
12	W1-TRK-TYP-006		TRACK TYPICAL SECTIONS					85	W3-TRK-TYP-010		TRACK TYPICAL SECTIONS					158	W2-TRK-PRF-013		TRACK PLAN AND PROFILE		2289+50	2295+00	
13	W1-TRK-TYP-007		TRACK TYPICAL SECTIONS					86	W3-TRK-TYP-011		TRACK TYPICAL SECTIONS					159	W2-TRK-PRF-014		TRACK PLAN AND PROFILE		2295+00	2302+00	
14	W1-TRK-TYP-008		TRACK TYPICAL SECTIONS					87	W3-TRK-TYP-012		TRACK TYPICAL SECTIONS					160	W2-TRK-PRF-014A		TRACK PLAN AND PROFILE		1299+00	1302+00	
15	W1-TRK-TYP-009		TRACK TYPICAL SECTIONS					88	W3-TRK-TYP-013		TRACK TYPICAL SECTIONS					161	W2-TRK-PRF-015		TRACK PLAN AND PROFILE		2302+00	2308+50	
16	W1-TRK-TYP-010		TRACK TYPICAL SECTIONS					89	W3-TRK-TYP-014		TRACK TYPICAL SECTIONS					162	W2-TRK-PRF-015A		TRACK PLAN AND PROFILE		1302+00	1308+50	
17	W1-TRK-TYP-011		TRACK TYPICAL SECTIONS					90	W3-TRK-TYP-015		TRACK TYPICAL SECTIONS					163	W2-TRK-PRF-016		TRACK PLAN AND PROFILE		2308+50	2315+00	
18	W1-TRK-TYP-012		TRACK TYPICAL SECTIONS					91	W3-TRK-TYP-016		TRACK TYPICAL SECTIONS					164	W2-TRK-PRF-016A		TRACK PLAN AND PROFILE		1308+50	1315+00	
19	W1-TRK-TYP-013		TRACK TYPICAL SECTIONS					92	W3-TRK-TYP-017		TRACK TYPICAL SECTIONS					165	W2-TRK-PRF-017		TRACK PLAN AND PROFILE		2315+00	2320+55.80	
20	W1-TRK-TYP-014		TRACK TYPICAL SECTIONS					93	W3-TRK-TYP-018		TRACK TYPICAL SECTIONS					166	W2-TRK-PRF-017A		TRACK PLAN AND PROFILE		1315+00	1316+00	
21	W1-TRK-TYP-015		TRACK TYPICAL SECTIONS					94	W3-TRK-TYP-019		TRACK TYPICAL SECTIONS					167	W3-TRK-PRF-001		TRACK PLAN AND PROFILE		2335+00	2339+50	
22	W1-TRK-TYP-016		TRACK TYPICAL SECTIONS					95	W3-TRK-TYP-020		TRACK TYPICAL SECTIONS					168	W3-TRK-PRF-002		TRACK PLAN AND PROFILE		2339+50	2345+50	
23	W1-TRK-TYP-017		TRACK TYPICAL SECTIONS					96	W3-TRK-TYP-021		TRACK TYPICAL SECTIONS					169	W3-TRK-PRF-003		TRACK PLAN AND PROFILE		2345+50	2352+50	
24	W1-TRK-TYP-018		TRACK TYPICAL SECTIONS					97	W3-TRK-TYP-022		TRACK TYPICAL SECTIONS					170	W3-TRK-PRF-004		TRACK PLAN AND PROFILE		2352+50	2359+50	
25	W1-TRK-TYP-019		TRACK TYPICAL SECTIONS					98	W3-TRK-TYP-023		TRACK TYPICAL SECTIONS					171	W3-TRK-PRF-005		TRACK PLAN AND PROFILE		2359+50	2366+50	
26	W1-TRK-TYP-020		TRACK TYPICAL SECTIONS					99	W3-TRK-TYP-024		TRACK TYPICAL SECTIONS					172	W3-TRK-PRF-006		TRACK PLAN AND PROFILE		2366+50	2373+50	
27	W1-TRK-TYP-021		TRACK TYPICAL SECTIONS					100	W3-TRK-TYP-025		TRACK TYPICAL SECTIONS					173	W3-TRK-PRF-007		TRACK PLAN AND PROFILE		2373+50	2378+50	
28	W1-TRK-TYP-022		TRACK TYPICAL SECTIONS					101	W3-TRK-TYP-026		TRACK TYPICAL SECTIONS					174	W3-TRK-PRF-008		TRACK PLAN AND PROFILE		2378+50	2384+50	
29	W1-TRK-TYP-023		TRACK TYPICAL SECTIONS					102	W3-TRK-TYP-027		TRACK TYPICAL SECTIONS					175	W3-TRK-PRF-009		TRACK PLAN AND PROFILE		2384+50	2391+00	
30	W1-TRK-TYP-024		TRACK TYPICAL SECTIONS					103	W3-TRK-TYP-028		TRACK TYPICAL SECTIONS					176	W3-TRK-PRF-010		TRACK PLAN AND PROFILE		2391+00	2397+50	
31	W1-TRK-TYP-025		TRACK TYPICAL SECTIONS					104	W3-TRK-TYP-029		TRACK TYPICAL SECTIONS					177	W3-TRK-PRF-011		TRACK PLAN AND PROFILE		2397+50	2404+00	
32	W1-TRK-TYP-026		TRACK TYPICAL SECTIONS					105	W3-TRK-TYP-030		TRACK TYPICAL SECTIONS					178	W3-TRK-PRF-012		TRACK PLAN AND PROFILE		2404+00	2410+50	
33	W1-TRK-TYP-027		TRACK TYPICAL SECTIONS					106	W3-TRK-TYP-031		TRACK TYPICAL SECTIONS					179	W3-TRK-PRF-013		TRACK PLAN AND PROFILE		2410+50	2417+00	
34	W1-TRK-TYP-028		TRACK TYPICAL SECTIONS					107	W3-TRK-TYP-032		TRACK TYPICAL SECTIONS					180	W3-TRK-PRF-014		TRACK PLAN AND PROFILE		2417+00	2422+00	
35	W1-TRK-TYP-029		TRACK TYPICAL SECTIONS					108	W3-TRK-TYP-033		TRACK TYPICAL SECTIONS					181	W3-TRK-PRF-015		TRACK PLAN AND PROFILE		2422+00	2428+50	
36	W1-TRK-TYP-030		TRACK TYPICAL SECTIONS					109	W3-TRK-TYP-034		TRACK TYPICAL SECTIONS					182	W3-TRK-PRF-016		TRACK PLAN AND PROFILE		2428+50	2435+50	
37	W2-TRK-TYP-001		TRACK TYPICAL SECTIONS					110	W3-TRK-TYP-035		TRACK TYPICAL SECTIONS					183	W3-TRK-PRF-017		TRACK PLAN AND PROFILE		2435+50	2441+49.22	
38	W2-TRK-TYP-002		TRACK TYPICAL SECTIONS					111	W3-TRK-TYP-036		TRACK TYPICAL SECTIONS					184	W0-TRK-DTL-001		TRACK DETAILS TYPICAL SECTIONS INSETS				
39	W2-TRK-TYP-003		TRACK TYPICAL SECTIONS					112	W3-TRK-TYP-037		TRACK TYPICAL SECTIONS					185	W0-TRK-DTL-002		TRACK DETAILS TYPICAL SECTIONS INSETS				
40	W2-TRK-TYP-004		TRACK TYPICAL SECTIONS					113	W3-TRK-TYP-038		TRACK TYPICAL SECTIONS					186	W0-TRK-DTL-010		TRACK DETAILS SIMPLE CURVE DIAGRAM				
41	W2-TRK-TYP-005		TRACK TYPICAL SECTIONS					114	W3-TRK-TYP-039		TRACK TYPICAL SECTIONS					187	W0-TRK-DTL-011		TRACK DETAILS SPIRAL CURVE DIAGRAMS				
42	W2-TRK-TYP-006		TRACK TYPICAL SECTIONS					115	W3-TRK-TYP-040		TRACK TYPICAL SECTIONS					188	W0-TRK-DTL-012		TRACK DETAILS COMPOUND CURVE WITH SPIRALS				
43	W2-TRK-TYP-007		TRACK TYPICAL SECTIONS					116	W3-TRK-TYP-041		TRACK TYPICAL SECTIONS					189	W0-TRK-DTL-0						



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REF	BRIDGE DESCRIPTION	BRIDGE NUMBER
①	PRAIRIE CENTER DRIVE BRIDGE	27C06
②	I-494 BRIDGE	27W32
③	VALLEY VIEW RD BRIDGE	27R33
④	NINE MILE CREEK BRIDGE	27C07
⑤	TH 212 / SHADY OAK ROAD BRIDGE	27R34
⑥	HWY 62 TUNNEL	27W33
⑦	PEDESTRIAN UNDERPASS #2	27J63
⑧	PEDESTRIAN UNDERPASS #1	27J62
⑨	PEDESTRIAN UNDERPASS #5	R0715
⑩	FELTL ROAD BRIDGE	27C08
⑪	SMETANA ROAD BRIDGE	27C09
⑫	MINNETONKA / HOPKINS LRT BRIDGE	R0686
⑬	FLYING CLOUD DRIVE BRIDGE MODIFICATIONS	27762 BA

BA - BID ALTERNATE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



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CIVIL WEST - VOLUME 3 GENERAL KEY MAP	
DISCIPLINE: GENERAL	SHEET NAME: W0-GEN-KEY - 001

SHEET  
3  
OF  
189

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TRACK LINETYPES

- ROADWAY
- TRACK (LRT)
- TRACK (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- FENCE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- FENCE / RAILING
- ID ID INTRUSION DETECTION

CIVIL LINETYPES

- ROADWAY
- TRACK (LRT)
- TRACK (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- CONCRETE CURB AND GUTTER
- TRAIL
- SIDEWALK
- DRIVEWAY
- BRIDGE
- SAWCUT
- FENCE
- DELINEATED WETLAND
- WATER EDGE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- CROSSWALK
- STOP BAR
- MEDIAN NOSE

TRACK SYMBOLS

- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- PEDESTRIAN FLASHER
- AUTOMATIC GATE
- RAIL TURNOUT
- RAIL CROSSOVER (DOUBLE)
- RAIL CROSSOVER (SINGLE)
- POINT OF SWITCH (PS)
- OCS POLE FOUNDATION
- RAIL LUBRICATOR
- POINT OF INTERSECTION (PI) OF TURNOUT (TO)
- RAILROAD CURVE NUMBER

NOTE:  
ALL TURNOUTS AND CROSSOVERS TO BE EQUIPPED WITH POWER SWITCH MACHINES AND SWITCH HEATERS

CIVIL SYMBOLS

- ACCESSIBLE PEDESTRIAN CURB RAMP (DESIGN VARIES)
- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- AUTOMATIC GATE
- HANDICAP PARKING STALL
- TACTILE WARNING STRIP
- TPSS BUILDING (TPSS-SW###)
- SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE

SURVEY NOTES

- THE HORIZONTAL DATUM OF THIS MAP IS BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM WHICH IS RELATED TO THE MINNESOTA STATE PLANE COORDINATE SYSTEM NAD 83 (2007) ADJUSTMENT SOUTH ZONE.
- THE PLANIMETRIC FEATURES SHOWN ON THIS MAP ARE AS PREPARED BY AERO-METRIC, INC. FROM AERIAL DATA AND IMAGERY COLLECTED IN APRIL 2012, AS SUPPLEMENTED BY FIELD SURVEYS COMPLETED BY RANI ENGINEERING.
- HORIZONTAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.14 FEET HORIZONTAL ACCURACY AT A 95% CONFIDENCE LEVEL.
- VERTICAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.10 FEET VERTICAL ACCURACY AT 95% CONFIDENCE LEVEL.

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CIVIL WEST - VOLUME 3  
GENERAL  
LEGEND AND ABBREVIATIONS  
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: W0-GEN-NTS - 001

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ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE
AVE	AVENUE
BGN	BEGIN
BP	BEGINNING POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
BLVD	BOULEVARD
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY
C&G	CURB AND GUTTER
☉	CENTERLINE
CIR	CIRCLE
CP	CANADIAN PACIFIC
CPRAIL	CANADIAN PACIFIC RAILWAY
CS	CURVE TO SPIRAL
CSAH	COUNTY STATE AID HIGHWAY
D&U	DRAINAGE AND UTILITY
DF	DIRECT FIXATION
DR	DRIVE
DTL	DETAIL
DWY	DRIVEWAY
E	EAST
Ea	ACTUAL SUPERELEVATION (INCHES)
EB	EAST BOUND
EL or ELEV	ELEVATION
EP	END POINT
ESMT	EASEMENT
Eu	UNBALANCED SUPERELEVATION (INCHES)
EVCE	ENDING VERTICAL CURVE ELEVATION
EVCS	ENDING VERTICAL CURVE STATION
EX	EXISTING
HCRRRA	HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY
LH	LEFT HAND
LN	LANE
LRT	LIGHT RAIL TRANSIT
Lc	CURVE LENGTH (FEET)
Ls	SPIRAL LENGTH (FEET)
MIN	MINIMUM
MPH	MILES PER HOUR
MPLS	CITY OF MINNEAPOLIS
MPRB	MINNEAPOLIS PARK AND RECREATION BOARD
N	NORTH
NB	NORTH BOUND
NIC	NOT IN CONTRACT
NO	NUMBER
OMF	OPERATIONS AND MAINTENANCE FACILITY
OCS	OVERHEAD CONTACT SYSTEM
OH	OVERHEAD
PC	POINT OF CURVE
PE	PERMANENT EASEMENT
PITO	POINT OF INTERSECTION OF TURNOUT
PKWY	PARKWAY
POT	POINT ON TANGENT
PROP	PROPOSED
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS (FEET)
RD	ROAD
RL	RAIL LUBRICATOR
r	RATE OF CHANGE VERTICAL CURVE
RH	RIGHT HAND
ROW	RIGHT OF WAY
S	SOUTH
SB	SOUTH BOUND
SC	SPIRAL TO CURVE
SIG-COMM	SIGNAL COMMUNICATION
ST	STREET
ST	SPIRAL TO TANGENT
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TH	TRUNK HIGHWAY
THRU	THROUGH
TOR	TOP OF RAIL
TPSS	TRACTION POWER SUBSTATION
TRK	TRACK
TS	TANGENT TO SPIRAL
TYP	TYPICAL
UG	UNDERGROUND
V	DESIGN VELOCITY (MPH)
VC	VERTICAL CURVE
W	WEST
WB	WEST BOUND

TRAIL INDEX

ABBREVIATED NAME	FULL NAME / LOCATION
TRAIL 1	UNDER RED CIRCLE DR, LRT, AND YELLOW CIRCLE DR
TRAIL 2	FROM TRAIL 1 TO GREEN CIRCLE DR
TRAIL 3	OPUS STATION ACCESS FROM BREN RD E
TRAIL 4	FROM BREN RD W TO TRAIL 5
TRAIL 5	FROM OPUS STATION TO GREEN CIRCLE DR
TRAIL 6	FROM TRAIL 5 TO SMETANA RD
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/FROM SHADY OAK STATION TO 11TH AVE
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/WEST OF EXCELSIOR
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL LRT TRAIL/BETWEEN EXCELSIOR AND KENILWORTH TRAIL CONNECTION
MIDTOWN GREENWAY	MIDTOWN GREENWAY/EAST OF KENILWORTH TRAIL CONNECTION
TRAIL A	KENILWORTH TRAIL (SECONDARY)/BETWEEN CEDAR-ISLES CHANNEL AND 21ST STREET STATION
TRAIL B	KENILWORTH TRAIL (SECONDARY)/BETWEEN 21ST STREET STATION AND PENN STATION
TRAIL B	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL C	10' CONNECTOR TRAIL FROM CEDAR LAKE LRT REGIONAL TRAIL TO TYLER AVE.
TRAIL D	10' CONNECTOR TRAIL/BELTLINE STATION TO CEDAR LAKE LRT REGIONAL TRAIL
KENILWORTH TRAIL	KENILWORTH TRAIL (MAIN)/W LAKE ST TO PENN STATION
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/PENN STATION TO TH 394
TRAIL E	KENILWORTH TRAIL (SECONDARY)/EAST OF W LAKE ST
TRAIL F	KENILWORTH TRAIL (SECONDARY)/WEST OF CEDAR LAKE PKWY
TRAIL G	KENILWORTH TRAIL (SECONDARY)/WEST OF PENN STATION
TRAIL G	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL H	10' CONNECTOR TRAIL/EAST OF PENN STATION TO KENWOOD PKWY
TRAIL I	NOT USED
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/AT-GRADE CROSSING AT PENN STATION
TRAIL J	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL K	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL L	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL M	NOT USED
TRAIL N	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO EDGEBROOK DRIVE
TRAIL O	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO W LAKE STREET
TRAIL P	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO LOUISIANA AVE
TRAIL Q	10' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO TH 7 SERVICE ROAD
TRAIL R	20' CONNECTOR TRAIL FROM VAN WHITE STATION TO CEDAR LAKE TRAIL
TRAIL S	NOT USED
TRAIL T	8' CONNECTOR TRAIL FROM VAN WHITE STATION TO VAN WHITE MEMORIAL BLVD
TRAIL U	10' TRAIL PARALLEL TO CEDAR LAKE PKWY
LUCE LINE TRAIL	LUCE LINE REGIONAL TRAIL/ON BRIDGE OVER LIGHT RAIL
TRAIL V	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL
TRAIL W	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
GENERAL  
LEGEND AND ABBREVIATIONS  
SHEET 2

DISCIPLINE: GENERAL

SHEET NAME: W0-GEN-NTS - 002

TRACK GENERAL NOTES

- 1. THE EASTBOUND (EB) TRACK IS THE RIGHT TRACK AND IS USED FOR HORIZONTAL ALIGNMENT CONTROL FOR THE PROJECT. THIS TRACK ALIGNMENT IS REFERENCED AS TRACK 2. PROFILE AND CROSS SECTION STATIONING FOR THIS PROJECT ARE BASED ON STATIONS ESTABLISHED FOR THE TRACK 2 CENTER LINE. TRACK 2 STATION EQUATIONS OCCUR AT SEGMENT LIMITS AND AT THE CIVIL WEST/CIVIL EAST MATCH POINT.
- 2. THE WESTBOUND (WB) TRACK IS THE LEFT TRACK AND HAS A SEPARATELY DEFINED GEOMETRY WITH STATION EQUALITIES, TO THE TRACK 2 CENTER LINE, AT SPIRAL-TO-TANGENT (ST) POINTS. THIS TRACK ALIGNMENT IS REFERENCED AS TRACK 1.
- 3. TRACK CENTER DISTANCES ARE MEASURED PERPENDICULAR TO THE TRACK 2 CENTER LINE AND ARE LABELED AT ENDS OF DOUBLE TANGENT TRACKS, AT THE MAXIMUM TRACK SPACING IN HORIZONTAL CURVES, AND AT SELECT CARDINAL POINTS IN TRACK WIDENING AND NARROWING SEGMENTS.
- 4. SUPERELEVATION IS ATTAINED (AND REMOVED) LINEARLY THROUGH THE FULL LENGTH OF THE SPIRAL TRANSITION CURVES BY MAINTAINING TOP OF INSIDE (LOW) RAIL AT PROFILE GRADE AND BY RAISING (AND LOWERING) OUTSIDE RAIL AN AMOUNT EQUAL TO THE ACTUAL SUPERELEVATION (Eo).
- 5. OCS POLES ARE NOT IN CONTRACT (NIC) AND ARE SHOWN FOR REFERENCE ONLY.
- 6. TRACK PLANS AND TYPICAL SECTIONS INCLUDE ELEMENTS SUCH AS, BUT NOT LIMITED TO, FENCING, TRAILS, BRIDGES, RETAINING WALLS, TUNNELS, ROADWAYS, DRAINAGE, STATIONS AND SYSTEMS. DETAILS FOR THESE ITEMS ARE INCLUDED IN THEIR RESPECTIVE VOLUMES.
- 7. WORK IN AREAS PARALLEL TO ACTIVE FREIGHT RAILROAD SHALL MAINTAIN SAFE WORKING DISTANCES FROM ACTIVE FREIGHT TRACK. IF SAFE WORKING DISTANCES ARE NOT POSSIBLE, WORK SHALL BE DONE WITH THE FULL KNOWLEDGE AND APPROVAL OF THE OPERATING RAILROAD AND UTILIZE AN OPERATING RAILROAD FLAGMAN AS REQUIRED. REFER TO THE CONTRACT SPECIFICATIONS REGARDING RESTRICTIONS FOR PERFORMANCE WORK NEAR ACTIVE RAIL LINES.

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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15

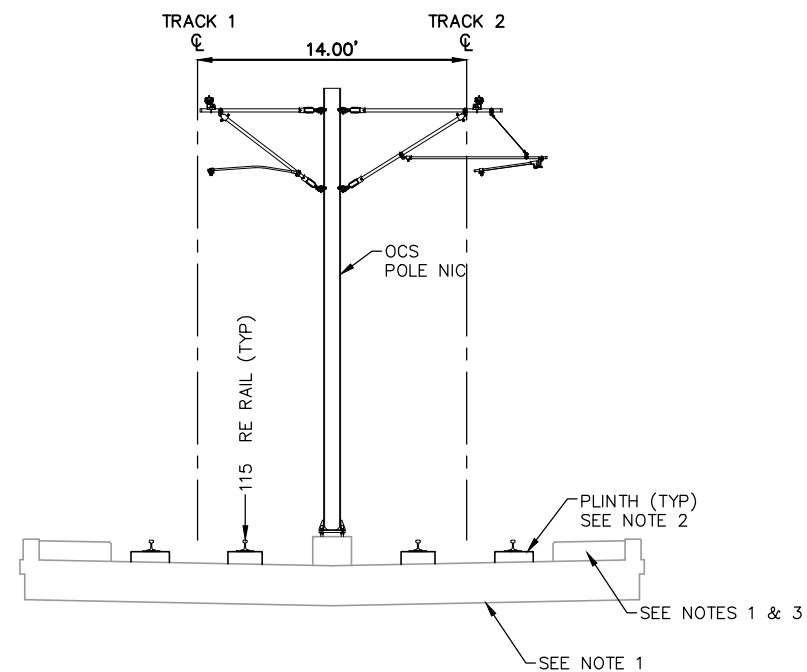


CIVIL WEST - VOLUME 3  
TRACK  
TRACK NOTES

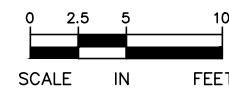
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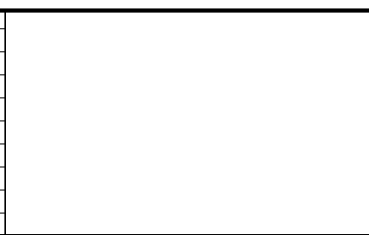
- NOTES:
1. SEE STATION PLANS FOR DETAILS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2077+80.00 TO 2078+20.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

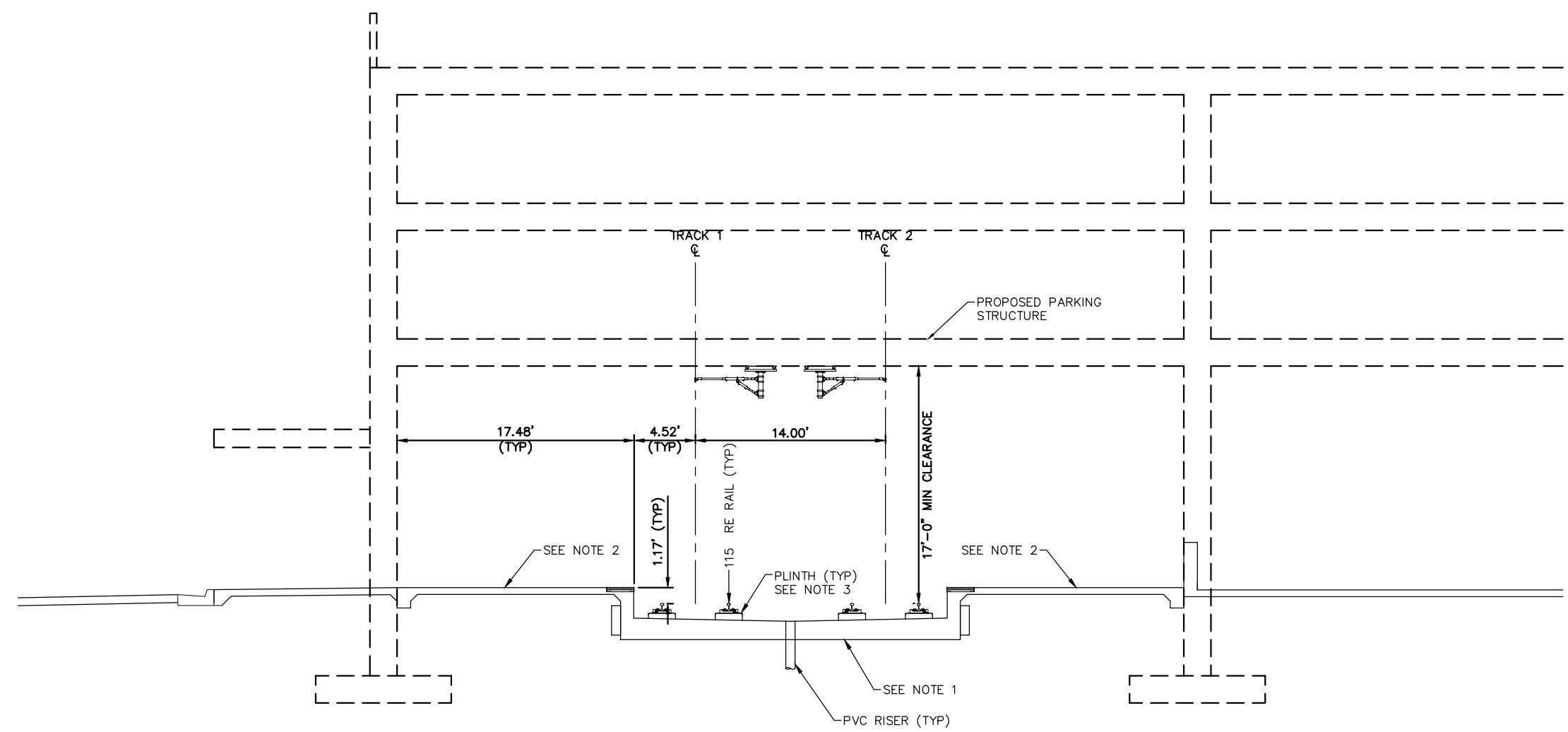
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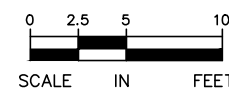
SHEET  
7  
OF  
189

Sep. 21 2015 01:41 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

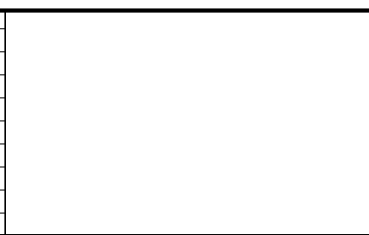
- NOTES:
- 1. SEE STATION PLANS FOR DETAILS.
  - 2. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
  - 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION – SOUTHWEST STATION  
STA. 2078+20.00 TO 2080+90.00





NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

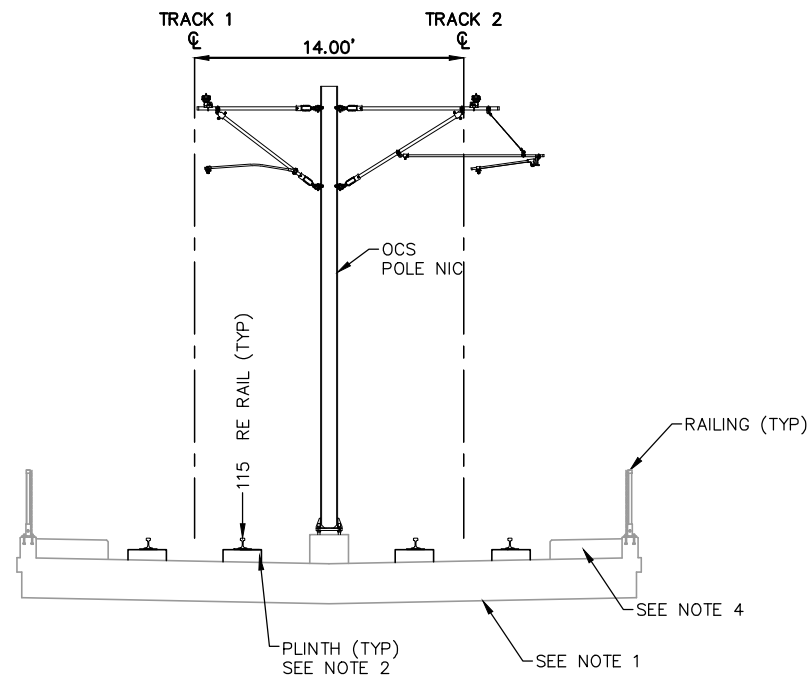
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SHEET NAME:  
W1-TRK-TYP - 002

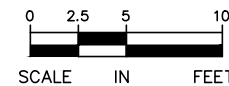
SHEET  
8  
OF  
189

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- NOTES:
1. MN/DOT BRIDGE CBR27C06. SEE STRUCTURAL PLANS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SPECIAL TRACKWORK NOT ILLUSTRATED.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2080+90.00 TO 2082+30.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

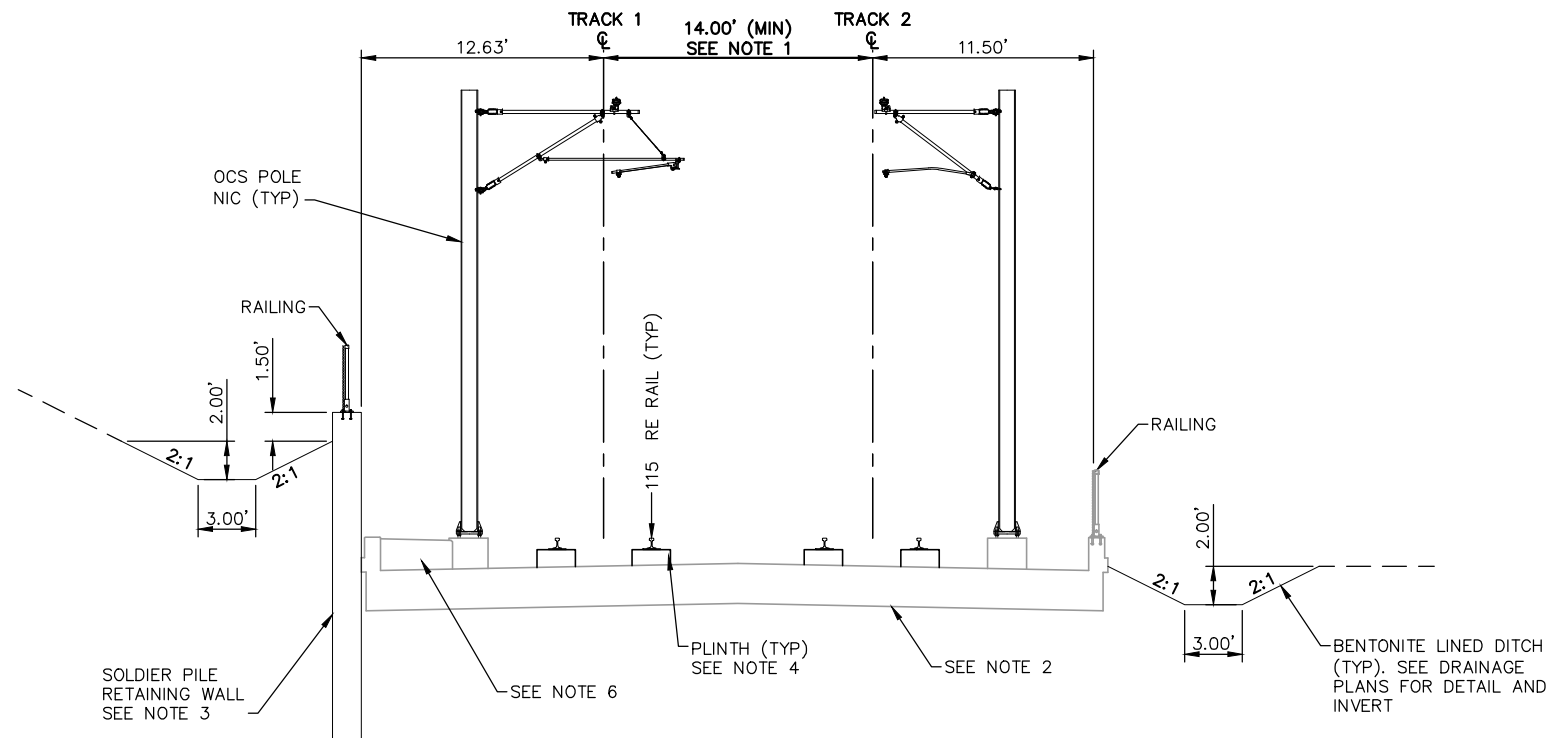
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SHEET  
9  
OF  
189

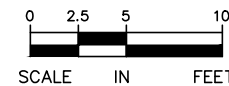


Sep. 21 2015 01:42 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-201. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE CBR27C06. SEE STRUCTURAL PLANS.
  3. SEE RETAINING WALL PLANS FOR DETAILS.
  4. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  5. SPECIAL TRACKWORK NOT ILLUSTRATED.
  6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2082+30.00 TO 2085+68.44

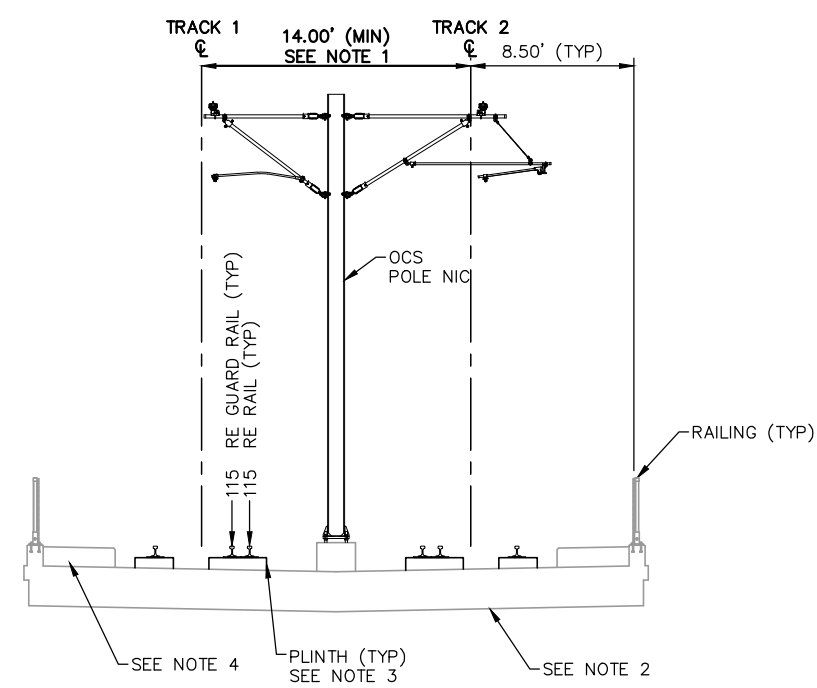


NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

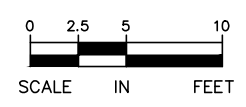
	 	<b>CIVIL WEST - VOLUME 3</b>		<b>SHEET</b> <b>10</b> <b>OF</b> <b>189</b>
		<b>TRACK</b>		
<b>60% SUBMISSION - 09/28/15</b>		DISCIPLINE: <b>TRACK</b>	SHEET NAME: <b>W1-TRK-TYP - 004</b>	

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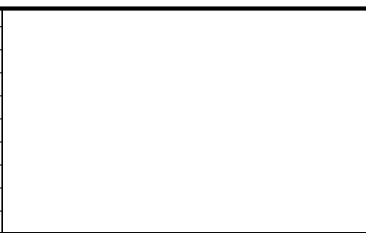
- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W1-201. SEE TRACK PLANS.
  - 2. Mn/DOT BRIDGE CBR27C06. SEE STRUCTURAL PLANS.
  - 3. SEE TRACK DETAILS FOR PLINTH DETAILS.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2085+68.44 TO 2088+84.14



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

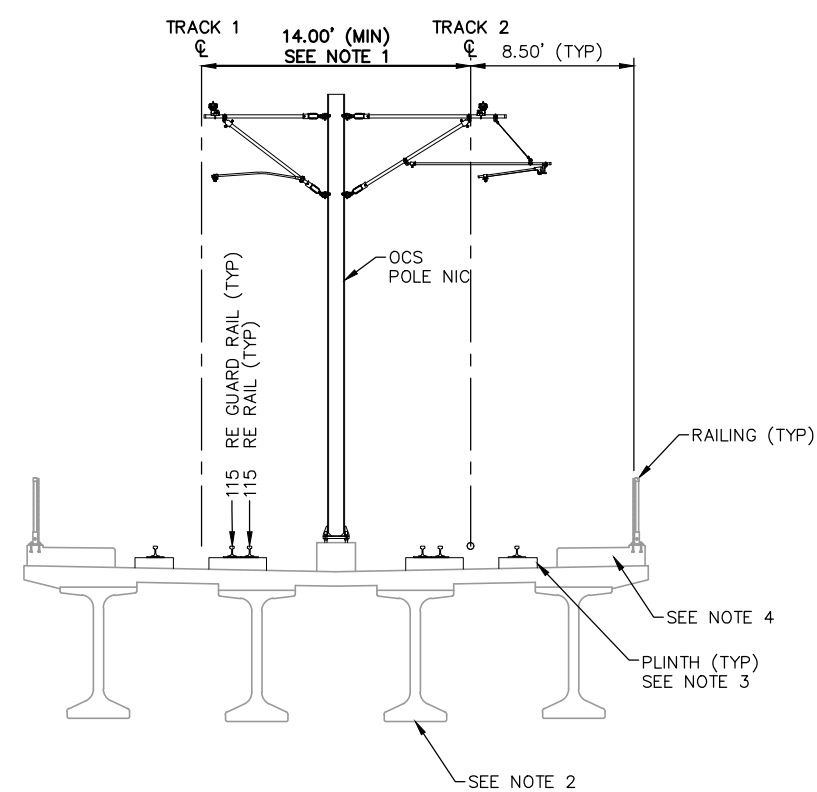
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SHEET NAME:  
W1-TRK-TYP - 005

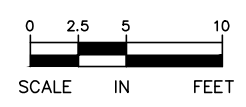
SHEET  
11  
OF  
189

Sep. 21 2015 01:42 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

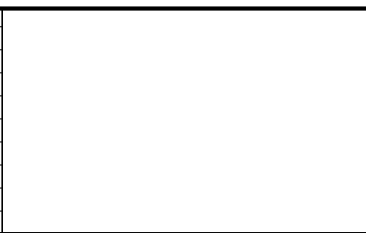
- NOTES:
1. TRACK CENTERS VARY IN CURVES W1-201 AND W1-202. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE CBR27C06. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2088+84.14 TO 2102+36.14



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

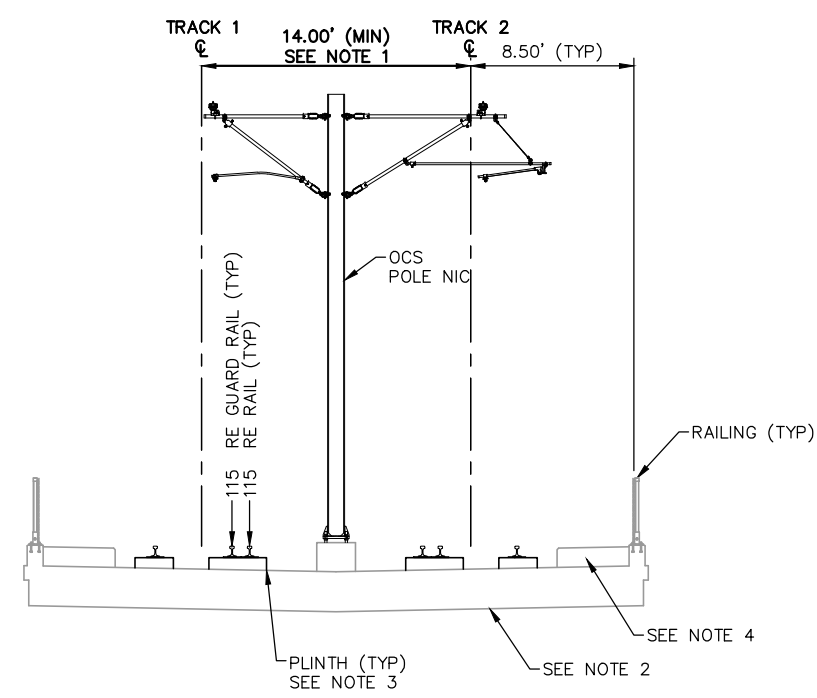
DISCIPLINE: TRACK

SHEET NAME: W1-TRK-TYP - 006

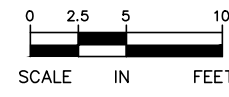
SHEET  
12  
OF  
189



Sep. 21 2015 01:42 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W1-203. SEE TRACK PLANS.
  - 2. Mn/DOT BRIDGE CBR27C06. SEE STRUCTURAL PLANS.
  - 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



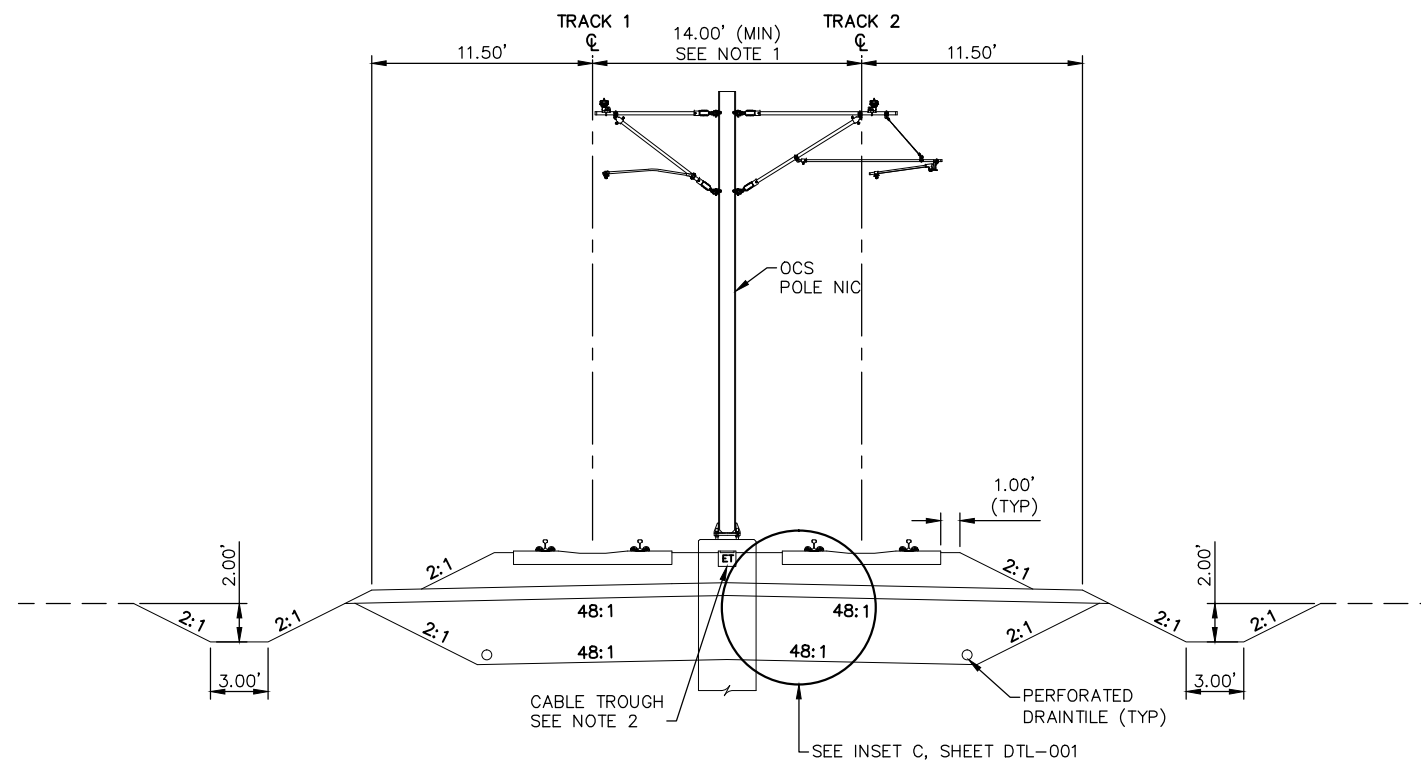
TYPICAL SECTION  
STA. 2102+36.14 TO 2108+37.14



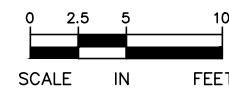
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>	<div><div>METROPOLITAN COUNCIL</div><div>SOUTHWEST Green Line LRT Extension</div></div>	CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS		DISCIPLINE: TRACK	SHEET NAME: W1-TRK-TYP - 007	SHEET 13 OF 189			
								60% SUBMISSION - 09/28/15							

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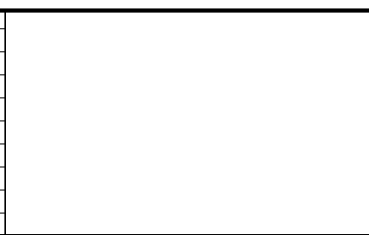
- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-203. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2108+37.14 TO 2110+52.24



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

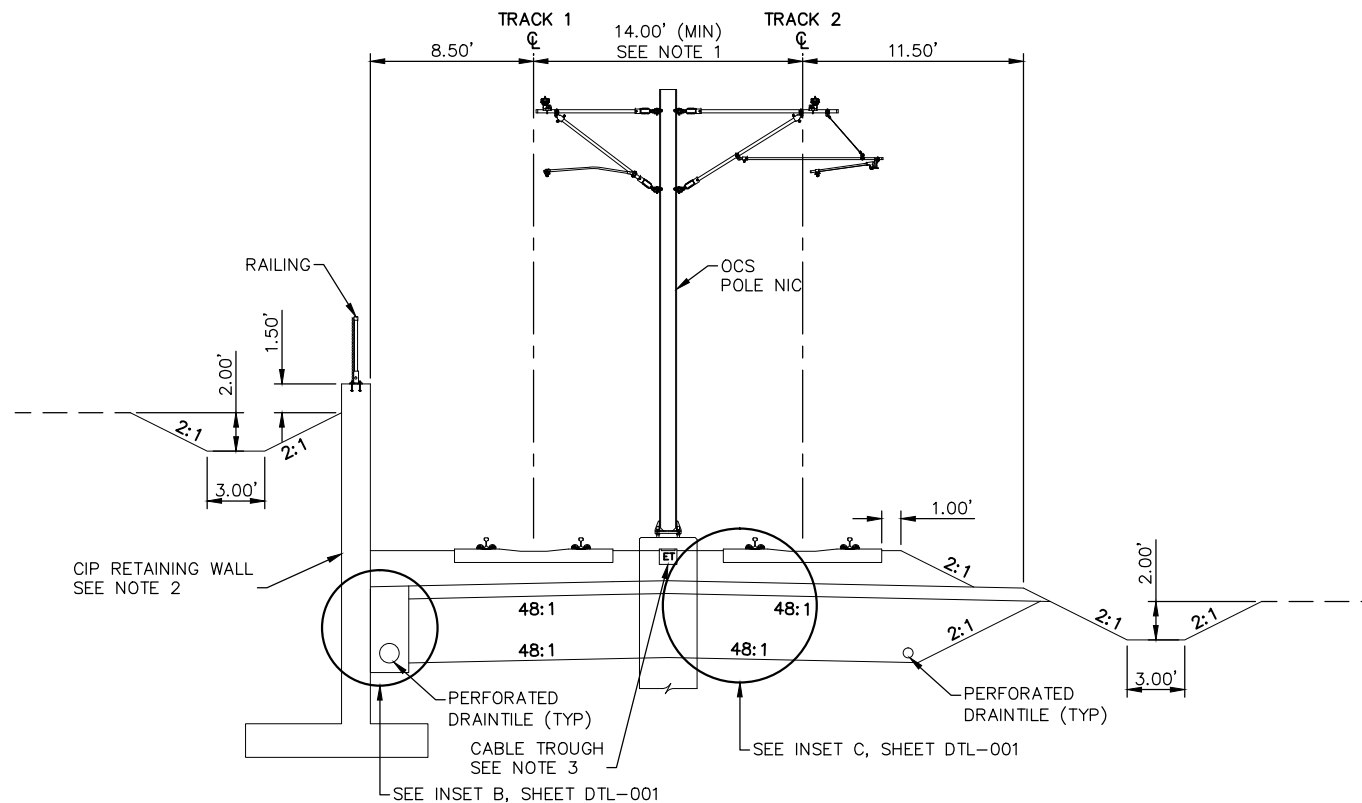
DISCIPLINE: **TRACK**

SHEET NAME: **W1-TRK-TYP - 008**

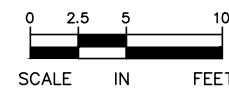
**SHEET**  
**14**  
**OF**  
**189**

Sep. 21 2015 01:43 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

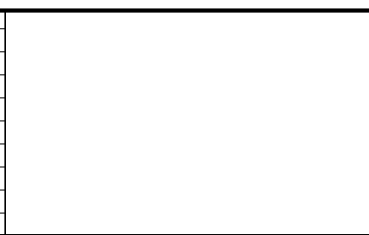
- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-104. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2110+52.24 TO 2112+07.79



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

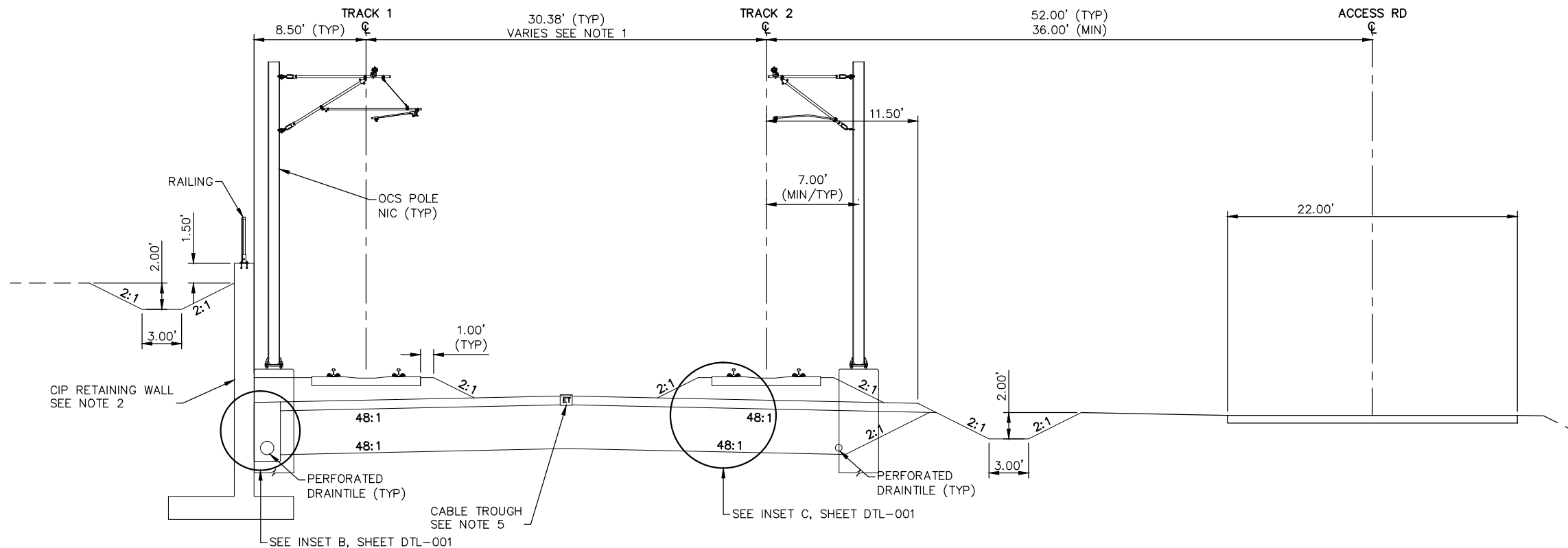
DISCIPLINE: TRACK

SHEET NAME: W1-TRK-TYP - 009

SHEET  
15  
OF  
189

Sep. 21 2015 01:43 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-105. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. TPSS SITE ON TRACK 2 SIDE NOT DEPICTED BETWEEN STA. 2112+08 AND 2113+01.
  4. LIMITS OF TOWN CENTER STATION (DEFERRED) ARE BETWEEN STA. 2115+57.17 AND 2118+27.17. NOT ILLUSTRATED.
  5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2112+07.79 TO 2115+67.79

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

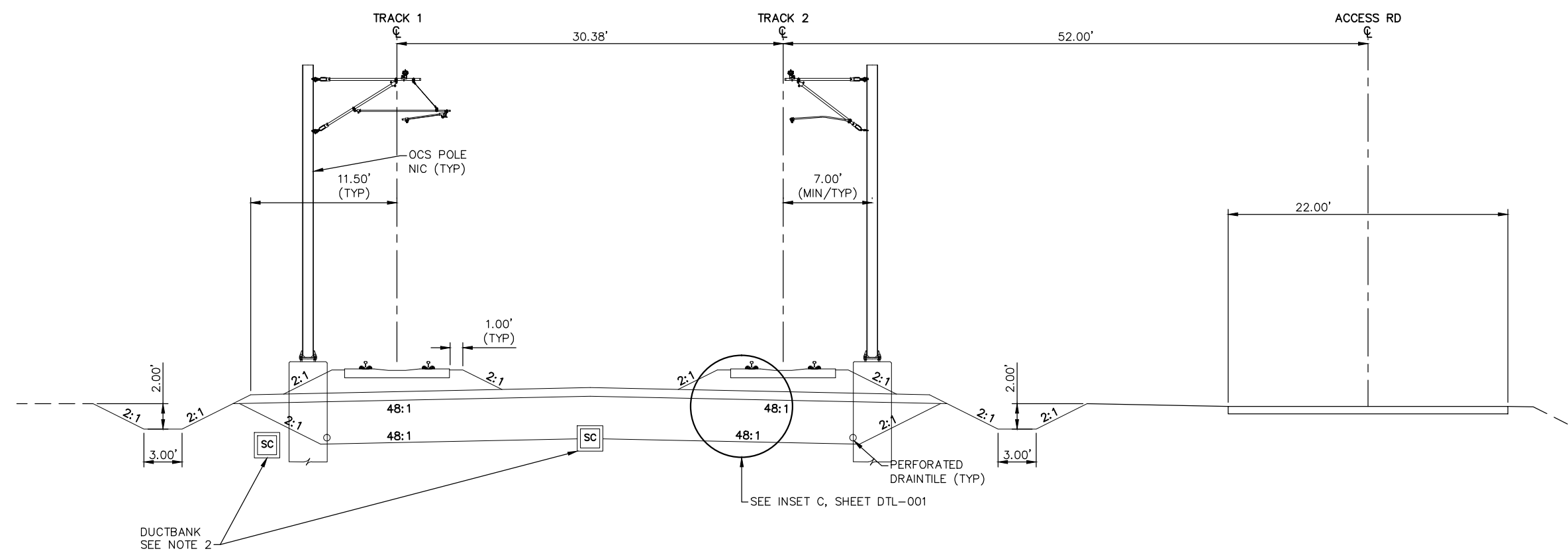
DISCIPLINE: TRACK SHEET NAME: W1-TRK-TYP - 010

SHEET  
16  
OF  
189



Sep. 21 2015 01:43 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. LIMITS OF TOWN CENTER STATION (DEFERRED) ARE BETWEEN STA. 2115+57.17 AND 2118+27.17. NOT ILLUSTRATED.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2115+67.79 TO 2118+27.17

**AECOM**



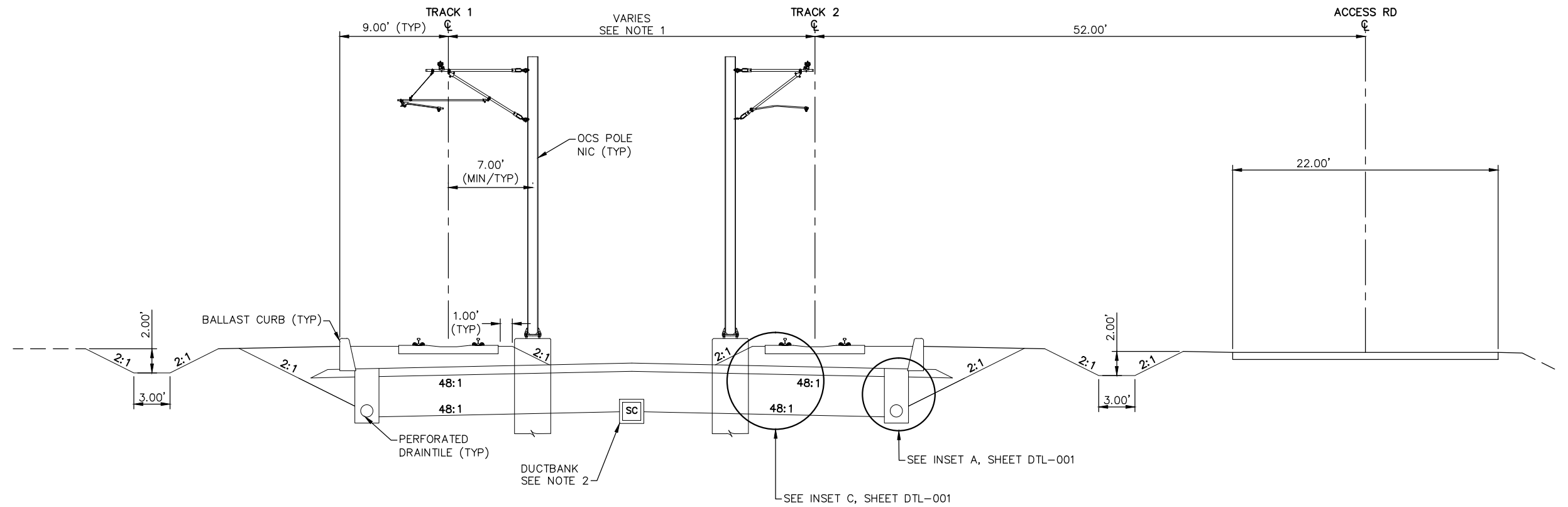
60% SUBMISSION - 09/28/15

**CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS**

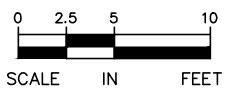
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**SHEET  
17  
OF  
189**

- NOTES:**
1. TRACK CENTERS NARROW FROM 30.38' TO 20.00' BETWEEN STA. 2118+77.32 AND 2121+65.07.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



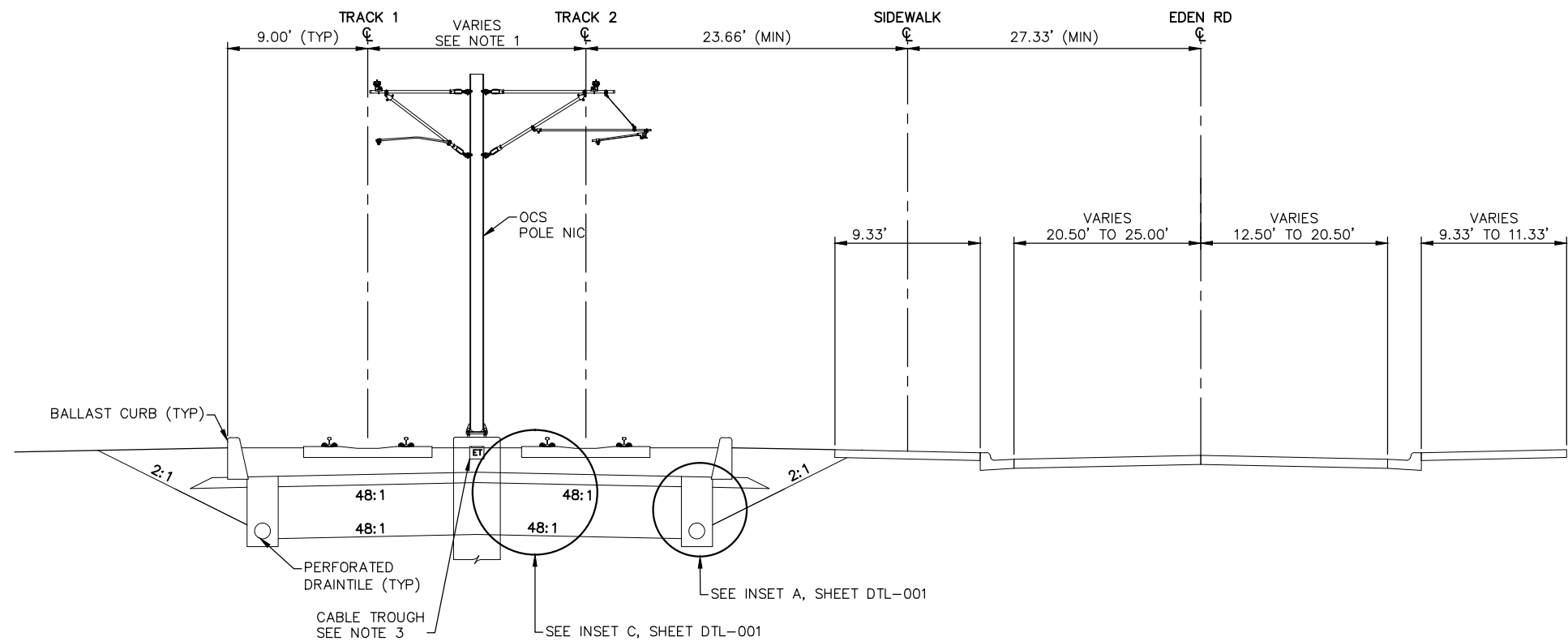
TYPICAL SECTION  
STA. 2118+27.17 TO 2121+65.07



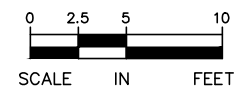
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div>	<div></div>	<div></div>	CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS		SHEET 18 OF 189
60% SUBMISSION - 09/28/15						DISCIPLINE: TRACK		SHEET NAME: W1-TRK-TYP - 012			

Sep. 21 2015 01:43 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 20.00' TO 14.00' BETWEEN STA. 5121+65.07 AND 2126+24.68. SEE TRACK PLANS.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT EDEN ROAD. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2121+65.07 TO 2129+50.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



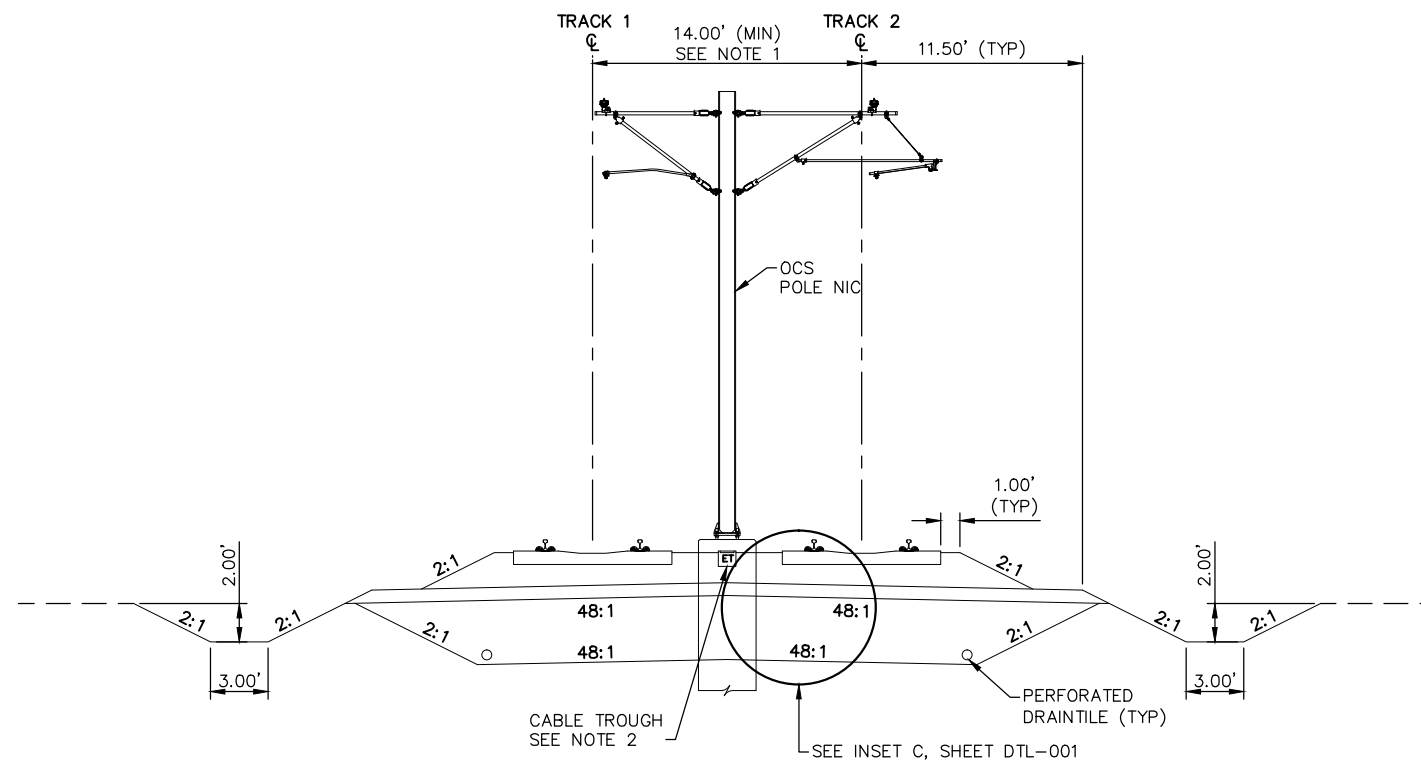
60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS	
DISCIPLINE: TRACK	SHEET NAME: W1-TRK-TYP - 013

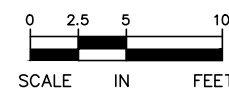
SHEET  
19  
OF  
189

Sep. 21 2015 01:43 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-208. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2129+50.00 TO 2131+33.58



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

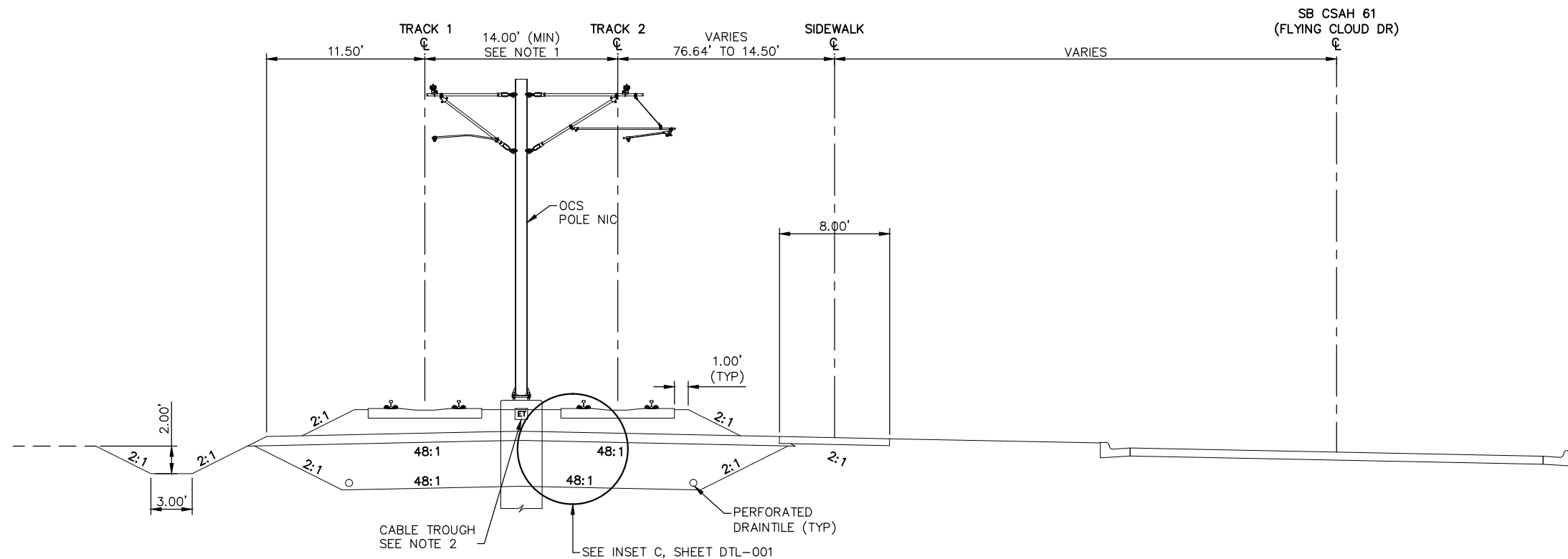
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SHEET NAME: **W1-TRK-TYP - 014**

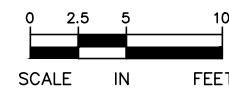
**SHEET**  
**20**  
**OF**  
**189**

Sep. 21 2015 01:44 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

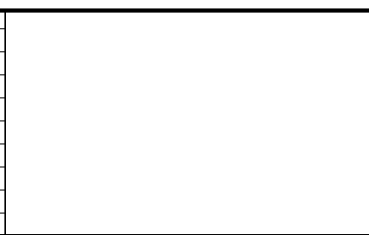
- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-208. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2131+33.58 TO 2135+19.09



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

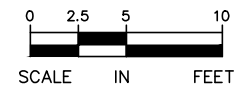
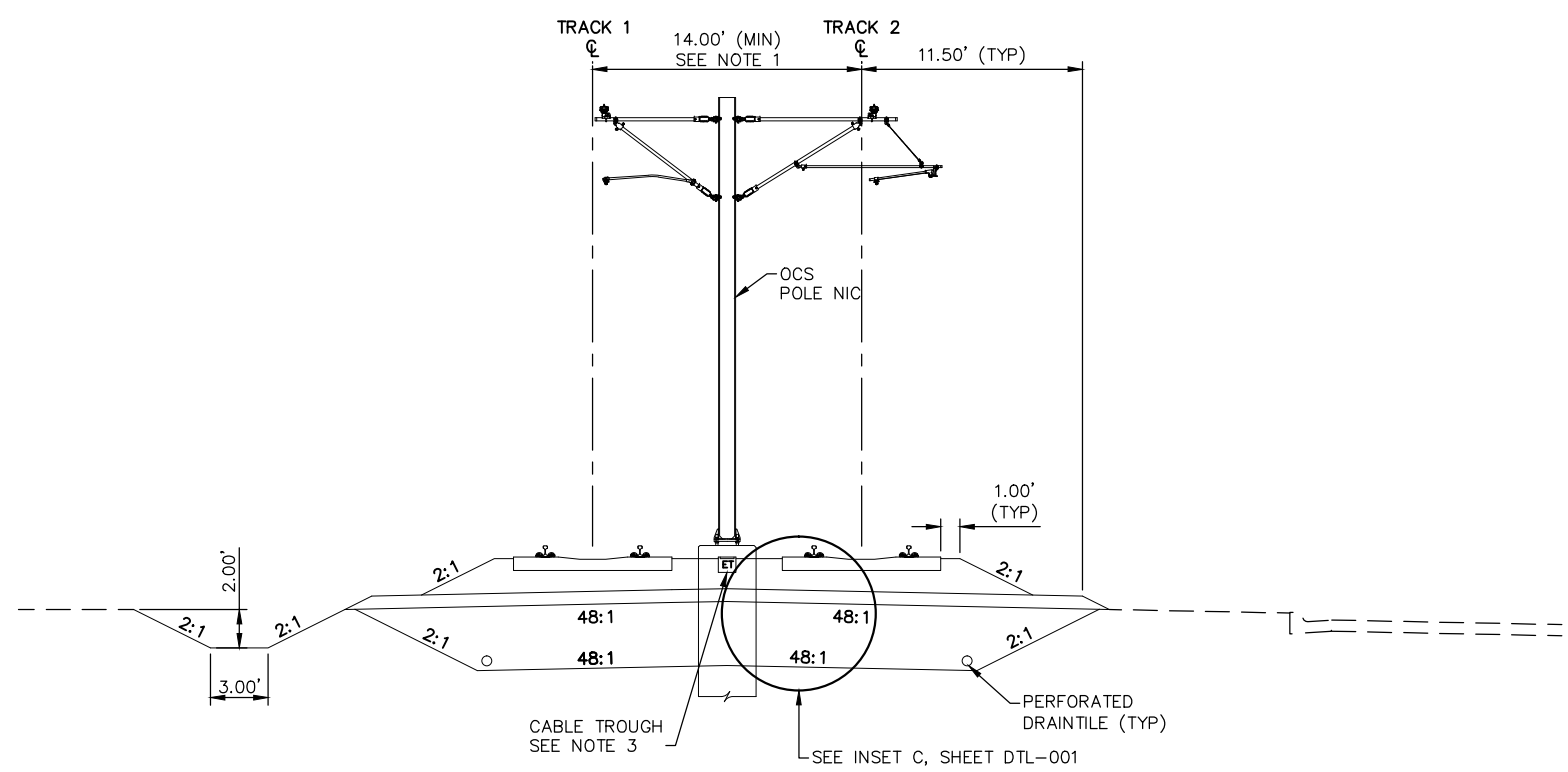
DISCIPLINE: **TRACK**

SHEET NAME: **W1-TRK-TYP - 015**

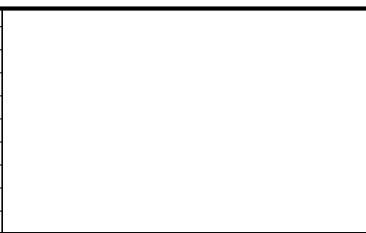
**SHEET**  
**21**  
**OF**  
**189**

Sep. 21 2015 01:44 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT TECHNOLOGY DRIVE. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



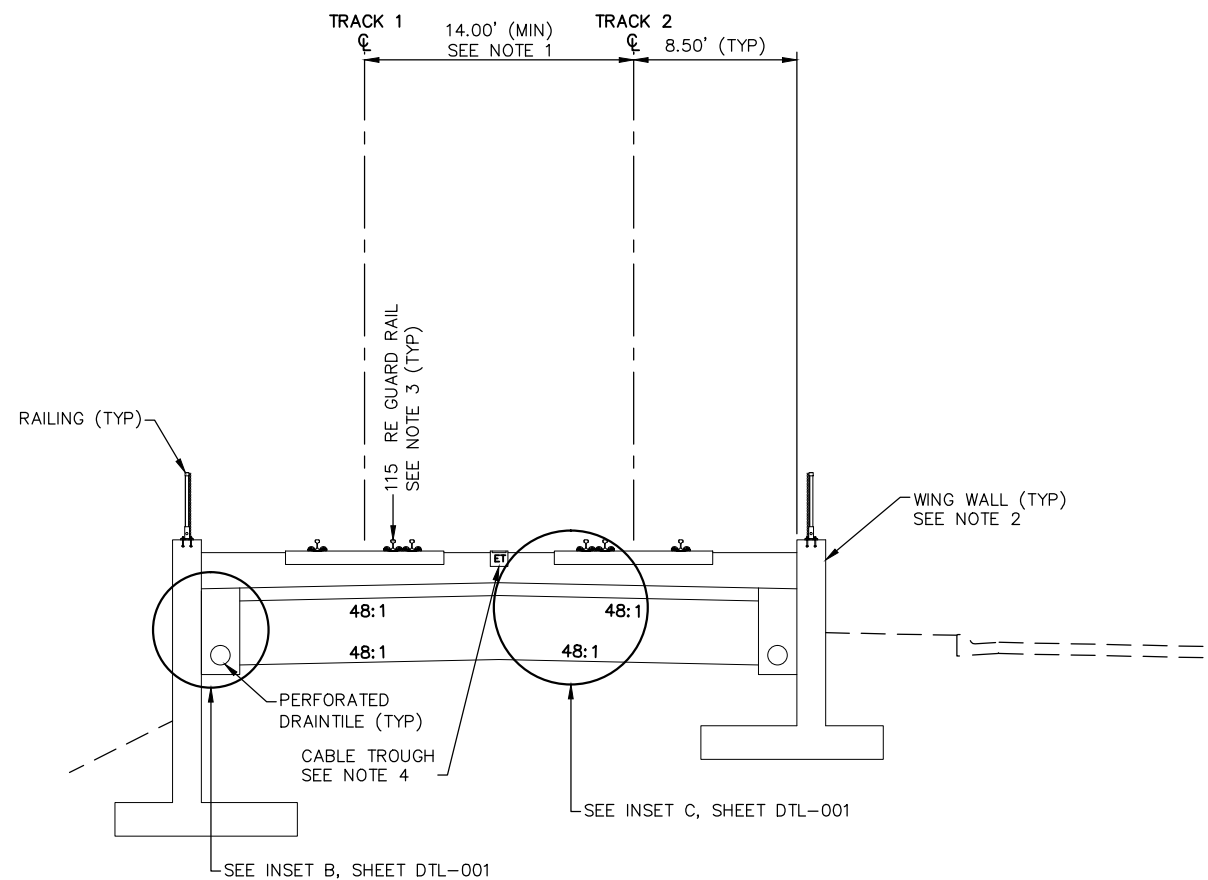
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W1-TRK-TYP - 016

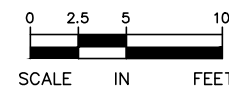
SHEET  
22  
OF  
189

Sep. 21 2015 01:44 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

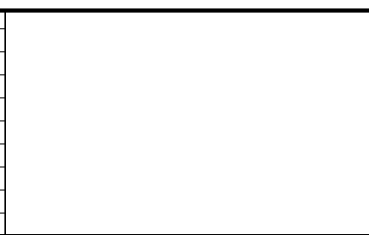
- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  2. SEE BRIDGE PLANS FOR WING WALL DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2138+57.61 TO 2138+89.27



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

DISCIPLINE: **TRACK**

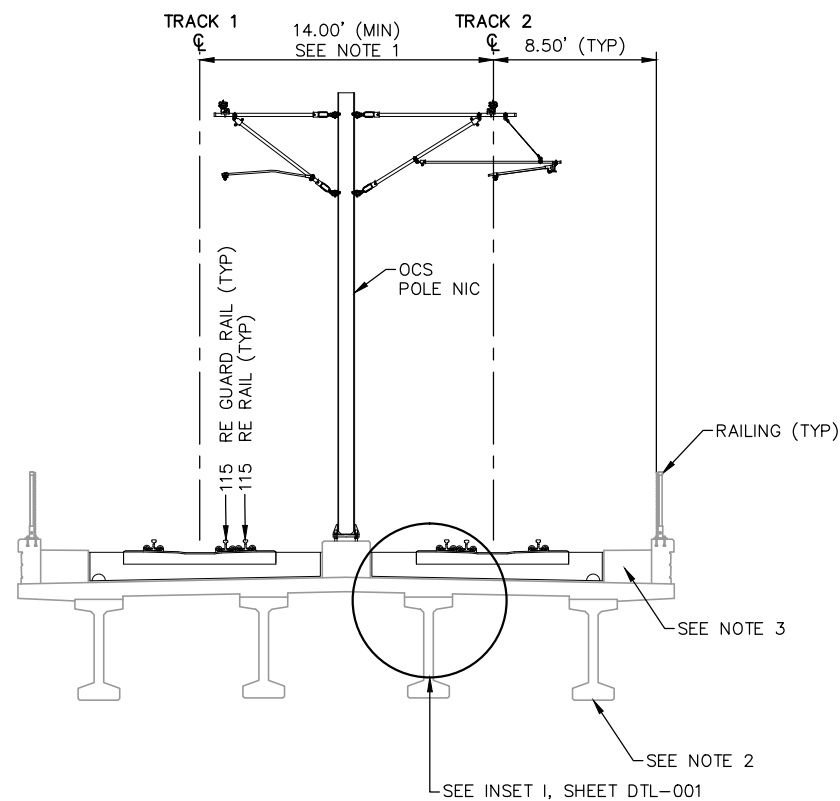
SHEET NAME: **W1-TRK-TYP - 017**

**SHEET**  
**23**  
**OF**  
**189**

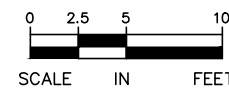


Sep. 21 2015 01:44 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE CBR27W32. SEE STRUCTURAL PLANS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2138+89.27 TO 2140+86.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

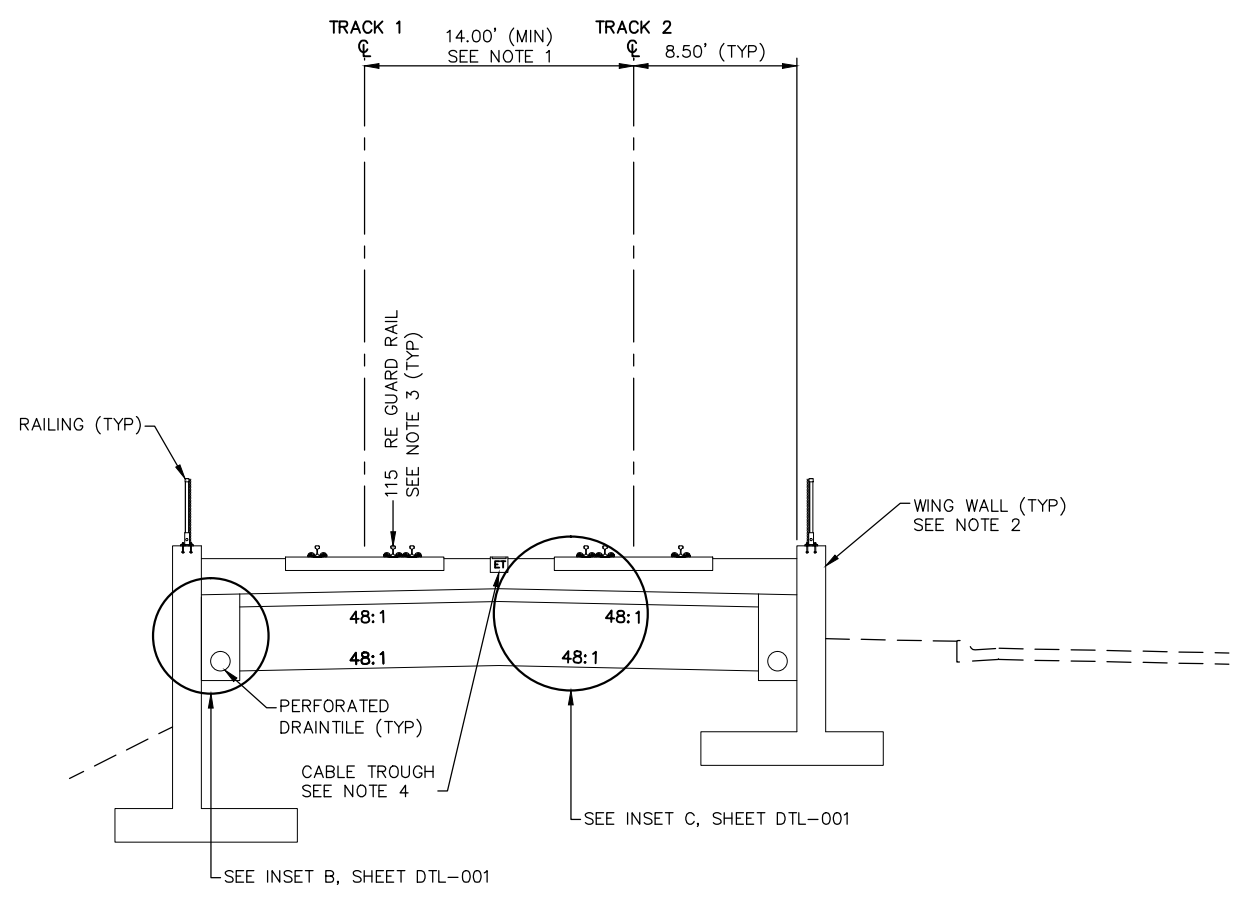
DISCIPLINE: TRACK

SHEET NAME: W1-TRK-TYP - 018

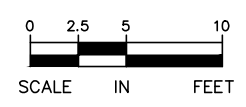
SHEET  
24  
OF  
189

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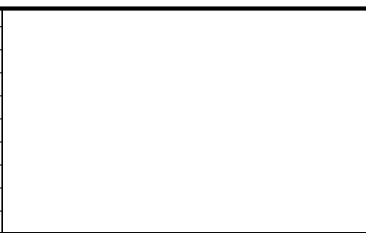
- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  - 2. SEE BRIDGE PLANS FOR WING WALL DETAILS.
  - 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2140+86.00 TO 2141+34.93



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

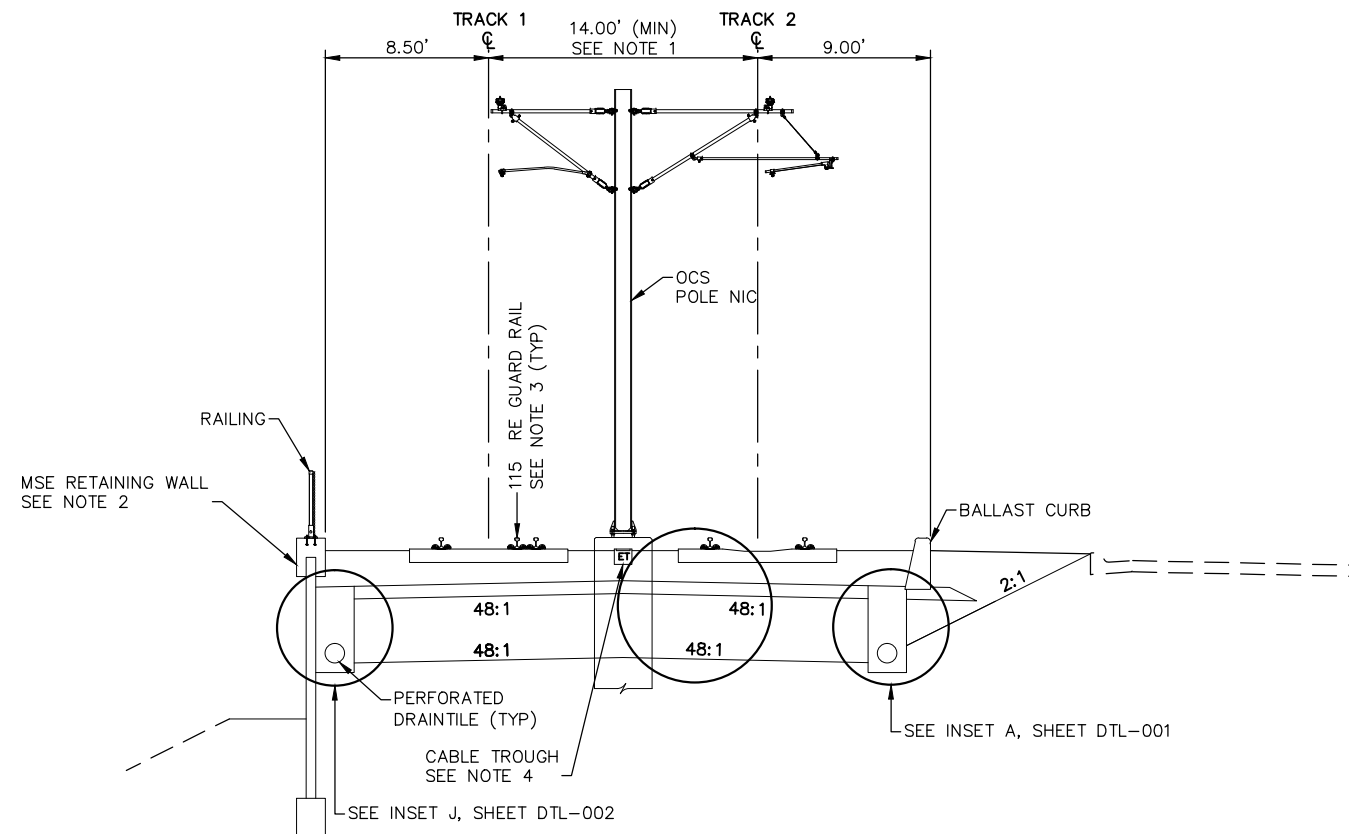
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SHEET NAME: W1-TRK-TYP - 019

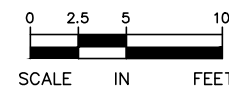
SHEET  
25  
OF  
189

Sep. 21 2015 01:44 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2141+34.93 TO 2146+68.34




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

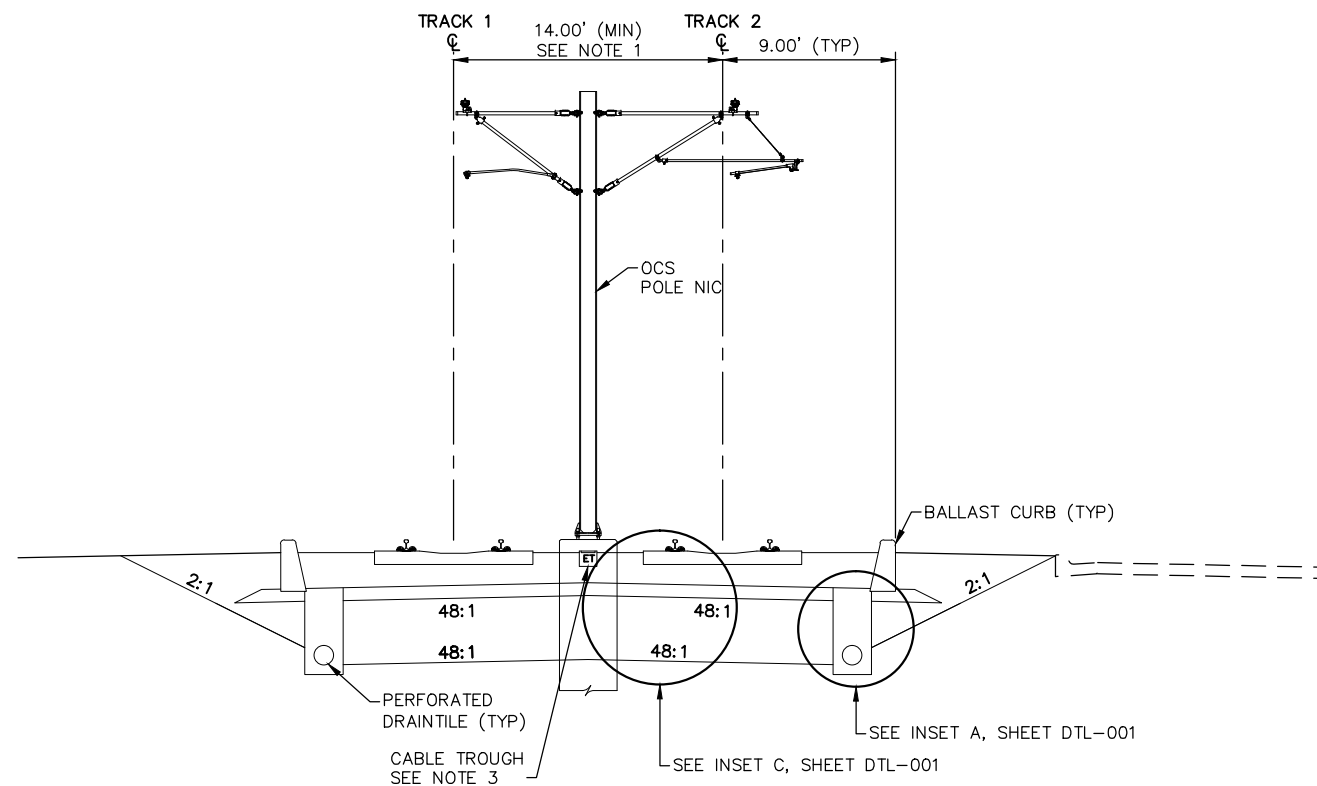
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SHEET NAME: W1-TRK-TYP - 020

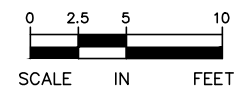
SHEET  
26  
OF  
189

Sep. 21 2015 01:45 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-209. SEE TRACK PLANS.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT VIKING DRIVE. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2146+68.34 TO 2152+66.63




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

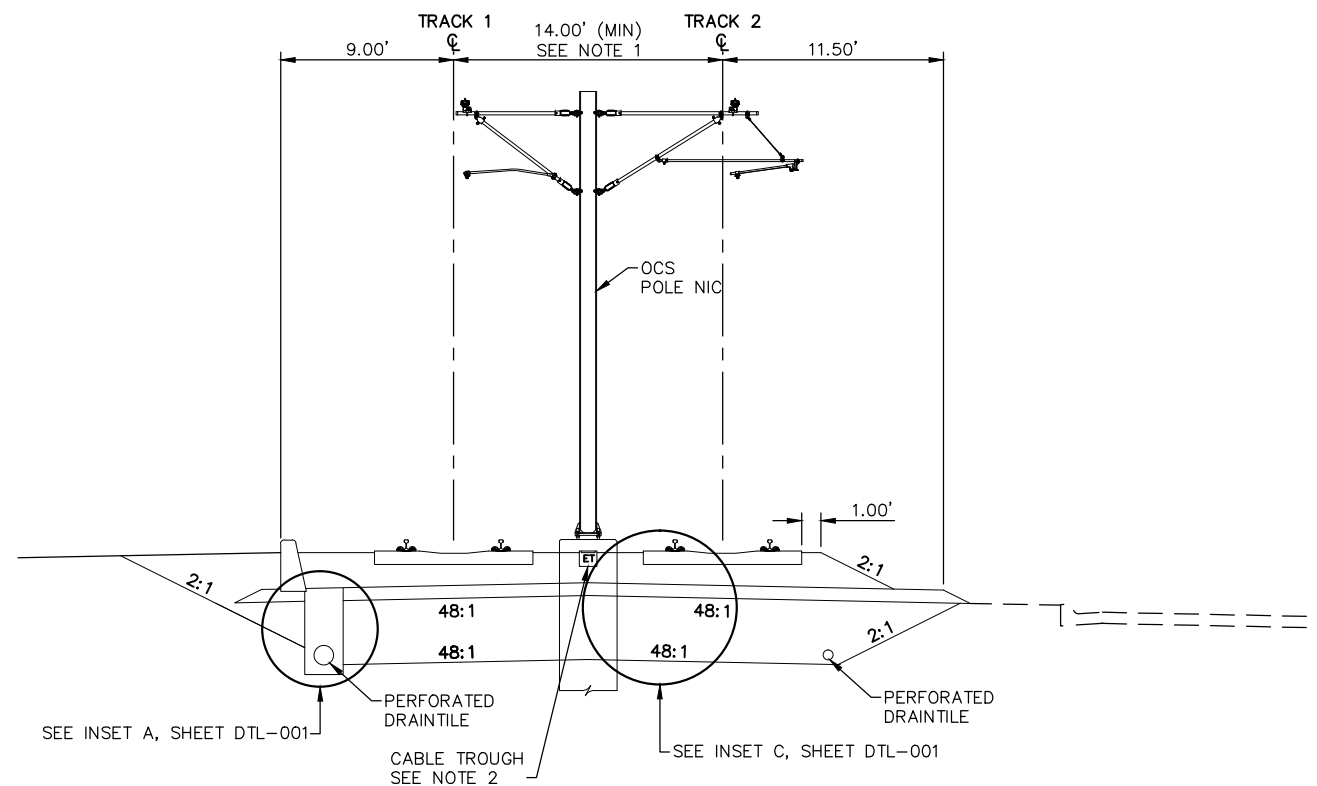
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SHEET NAME: W1-TRK-TYP - 021

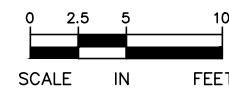
SHEET  
27  
OF  
189

Sep. 21 2015 01:45 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

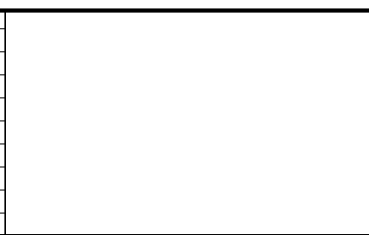
- NOTES:
1. TRACK CENTERS VARY IN CURVES W1-209 AND W1-210. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2152+66.63 TO 2154+39.28



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



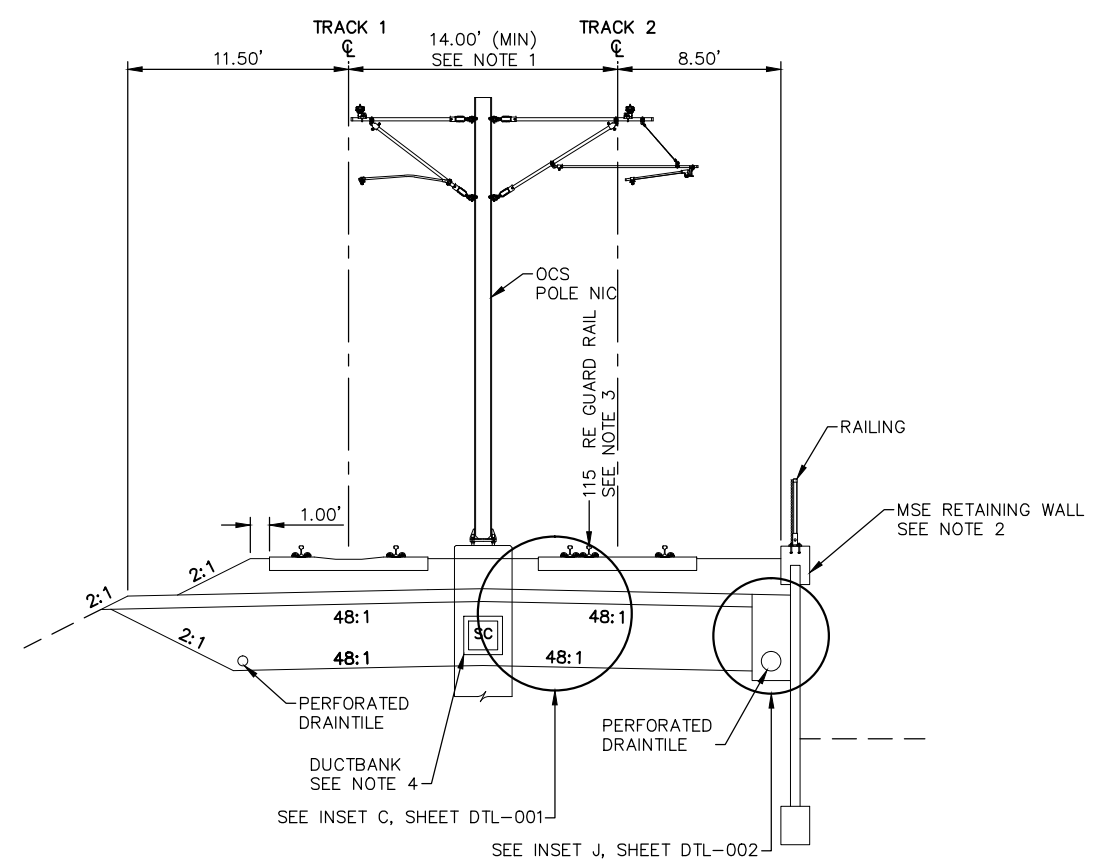
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W1-TRK-TYP - 022

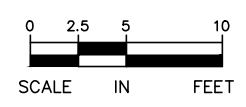
SHEET  
28  
OF  
189

Sep. 21 2015 01:45 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

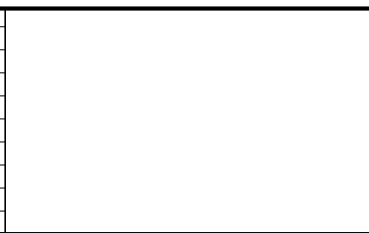
- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W1-210. SEE TRACK PLANS.
  - 2. SEE RETAINING WALL PLANS FOR DETAILS.
  - 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2154+39.28 TO 2155+49.94



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

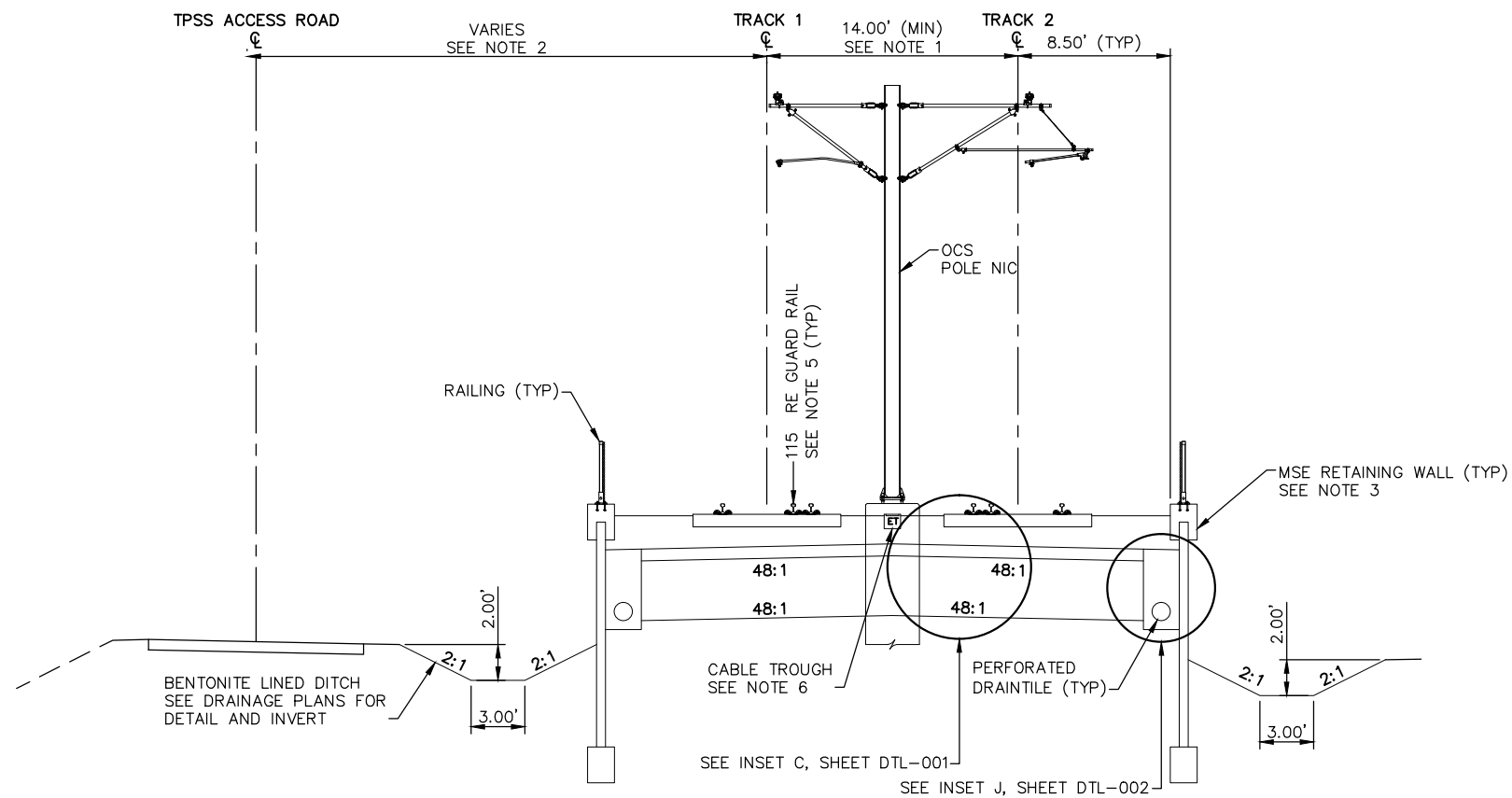
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SHEET NAME:  
W1-TRK-TYP - 023

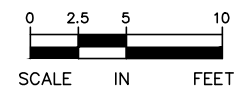
SHEET  
29  
OF  
189

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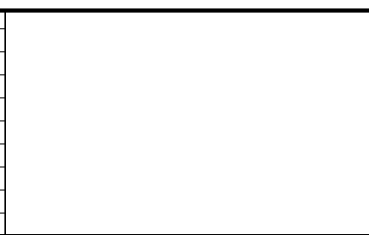
- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-210. SEE TRACK PLANS.
  2. OFFSET FROM  $\phi$  TRACK 1 TO  $\phi$  ACCESS ROAD VARIES FROM 76.02' TO 50.93'
  3. SEE RETAINING WALL PLANS FOR DETAILS.
  4. TPSS SITE NOT DEPICTED BETWEEN STA. 2155+65 AND STA. 2156+26.
  5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2155+49.94 TO 2157+94.68




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

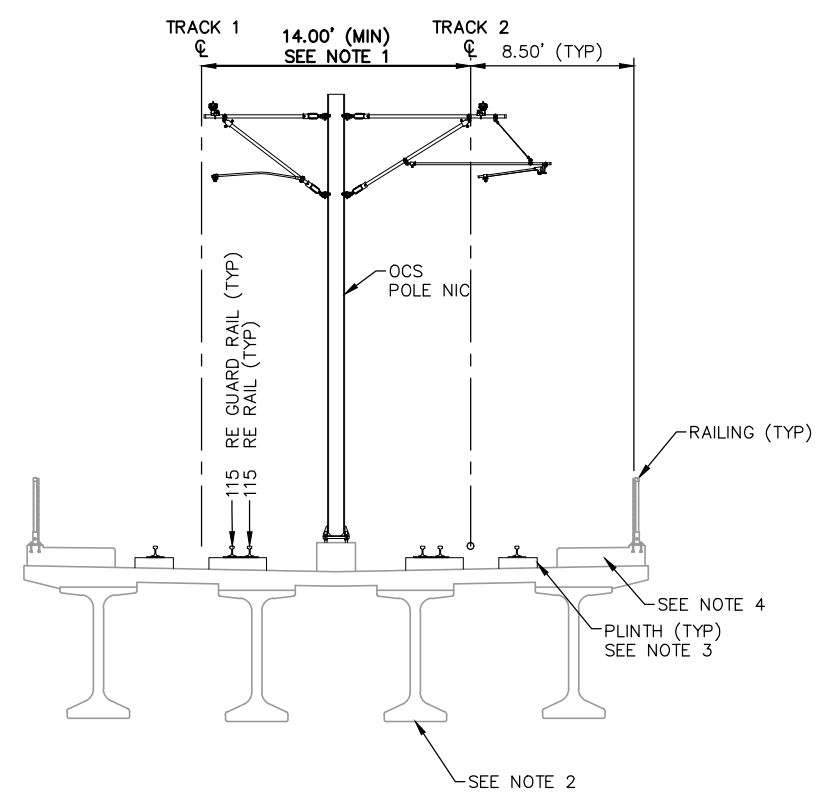
SHEET NAME: W1-TRK-TYP - 024

SHEET  
30  
OF  
189

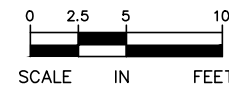


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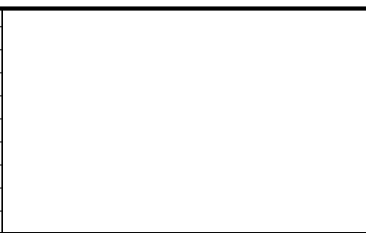
- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W1-211. SEE TRACK PLANS.
  - 2. Mn/DOT BRIDGE BR27R33. SEE STRUCTURAL PLANS.
  - 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2157+94.68 TO 2167+91.35



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

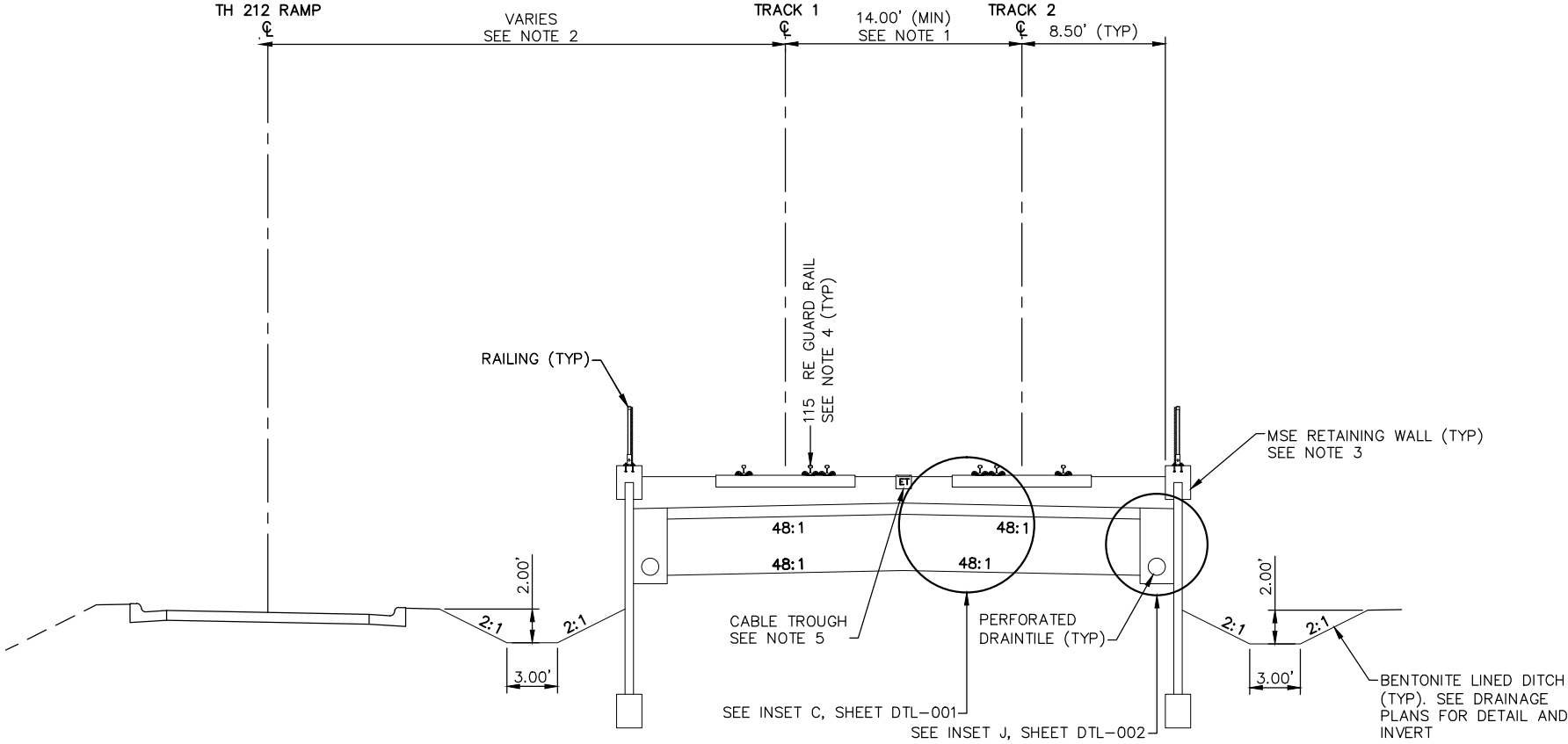
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SHEET NAME: W1-TRK-TYP - 025

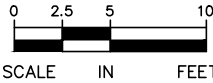
SHEET  
31  
OF  
189

Sep. 21 2015 01:46 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W1-211. SEE TRACK PLANS.
  2. OFFSET FROM  $\phi$  TRACK 1 TO  $\phi$  TH 212 RAMP VARIES FROM 40.31' TO 55.22'.
  3. SEE RETAINING WALL PLANS FOR DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2167+91.35 TO 2168+33.96



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

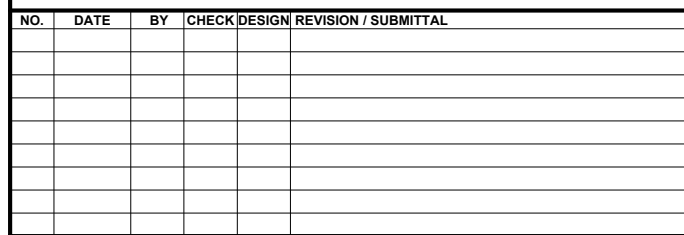
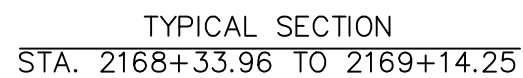


CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK  
SHEET NAME: W1-TRK-TYP - 026

SHEET  
32  
OF  
189

- Sep, 21 2015 01:46 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM



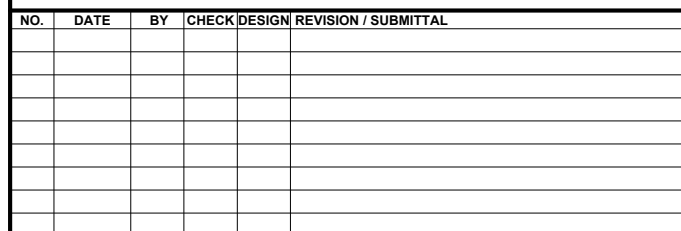
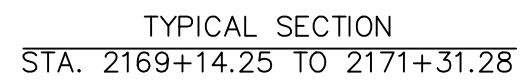
**METROPOLITAN**  
COUNCIL



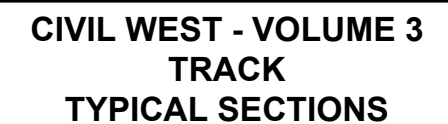
DISCIPLINE: **TRACK**

**SHEET**  
**33**  
**OF**  
**189**

- Sep, 21 2015 01:46 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-TYP.dwg By: MaurisBM



60% SUBMISSION - 09/28/15



DISCIPLINE:

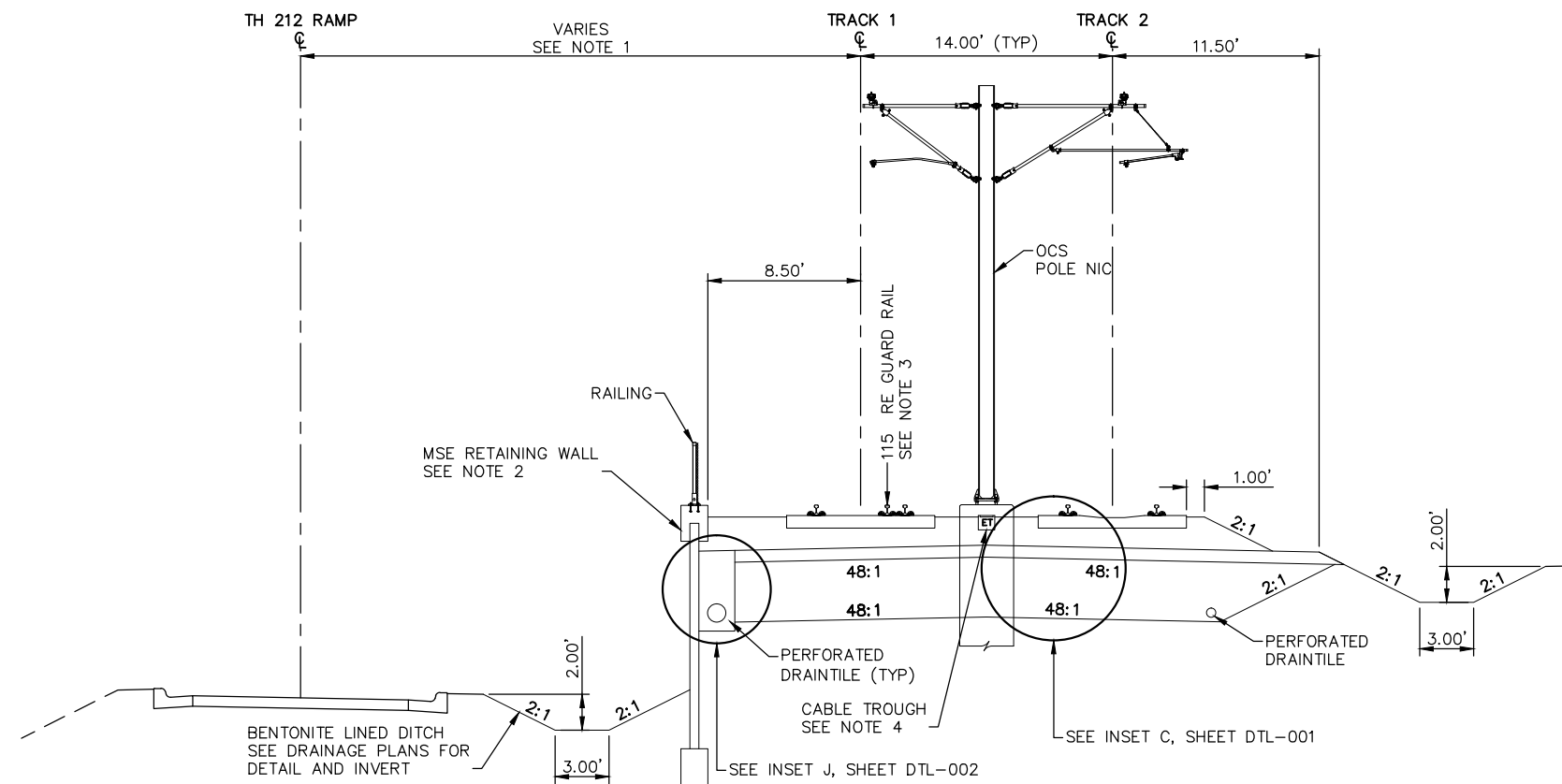
## TRACK

SHEET NAME:
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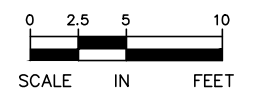
W1-TRK-TYP - 028




**SHEET**  
**34**  
**OF**  
**189**

- NOTES:**
1. OFFSET FROM C TRACK 1 TO C TH 212 RAMP VARIES FROM 63.09' TO 49.34'.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



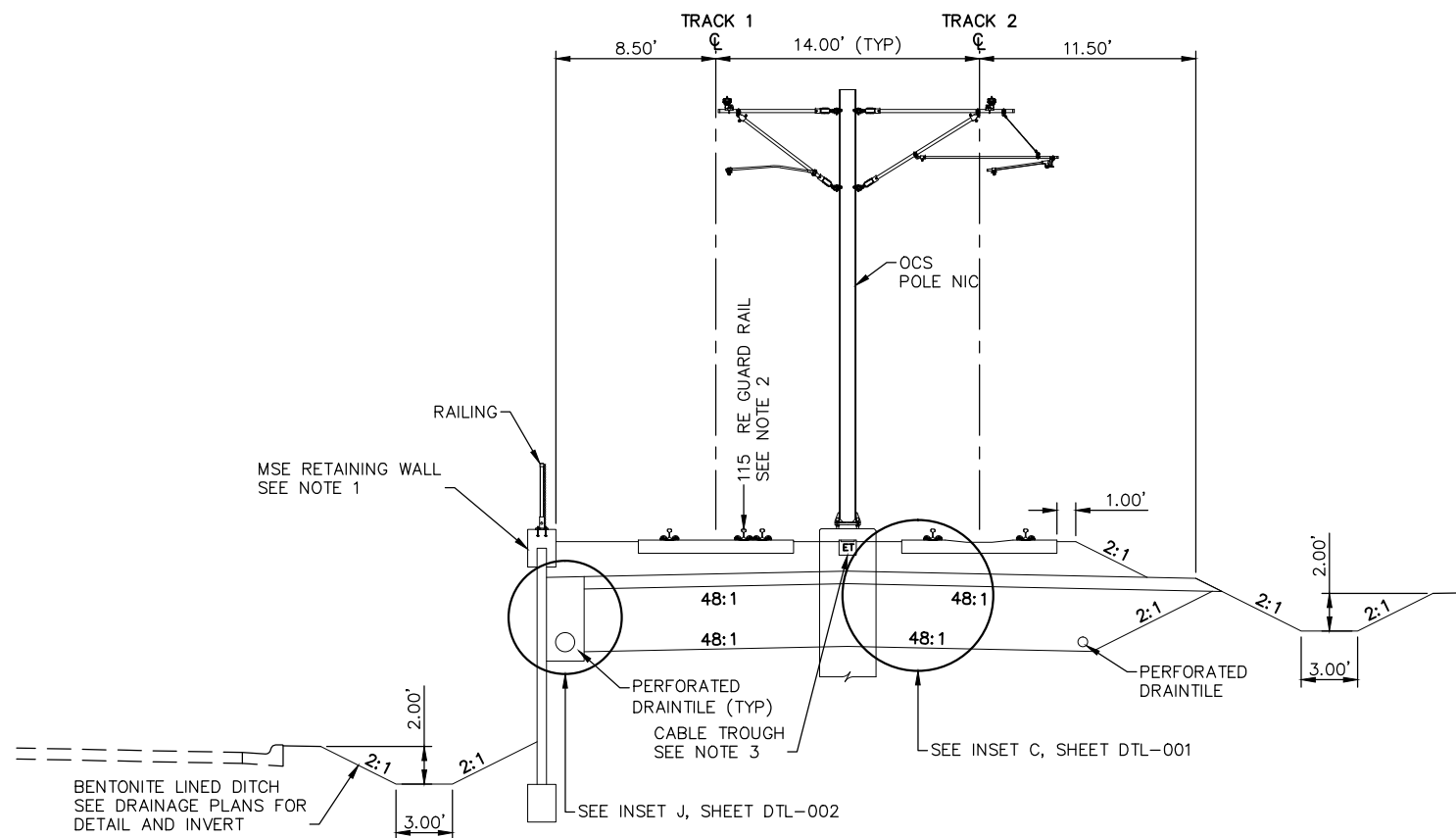
TYPICAL SECTION  
STA. 2171+31.28 TO 2171+81.41



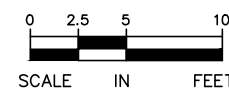
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div>	<div></div>	<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>TYPICAL SECTIONS</div>		<div>SHEET</div> <div>35</div> <div>OF</div> <div>189</div>
						60% SUBMISSION - 09/28/15	<div>DISCIPLINE:</div> <div>TRACK</div>		<div>SHEET NAME:</div> <div>W1-TRK-TYP - 029</div>	

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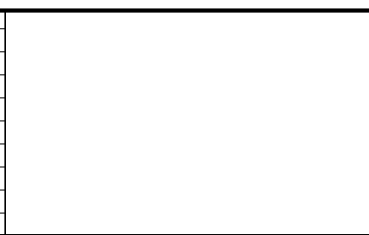
- NOTES:
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



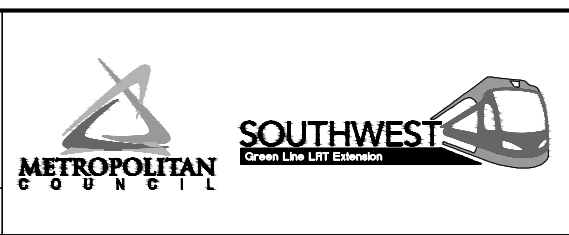
TYPICAL SECTION  
STA. 2171+81.41 TO 2173+69.94



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



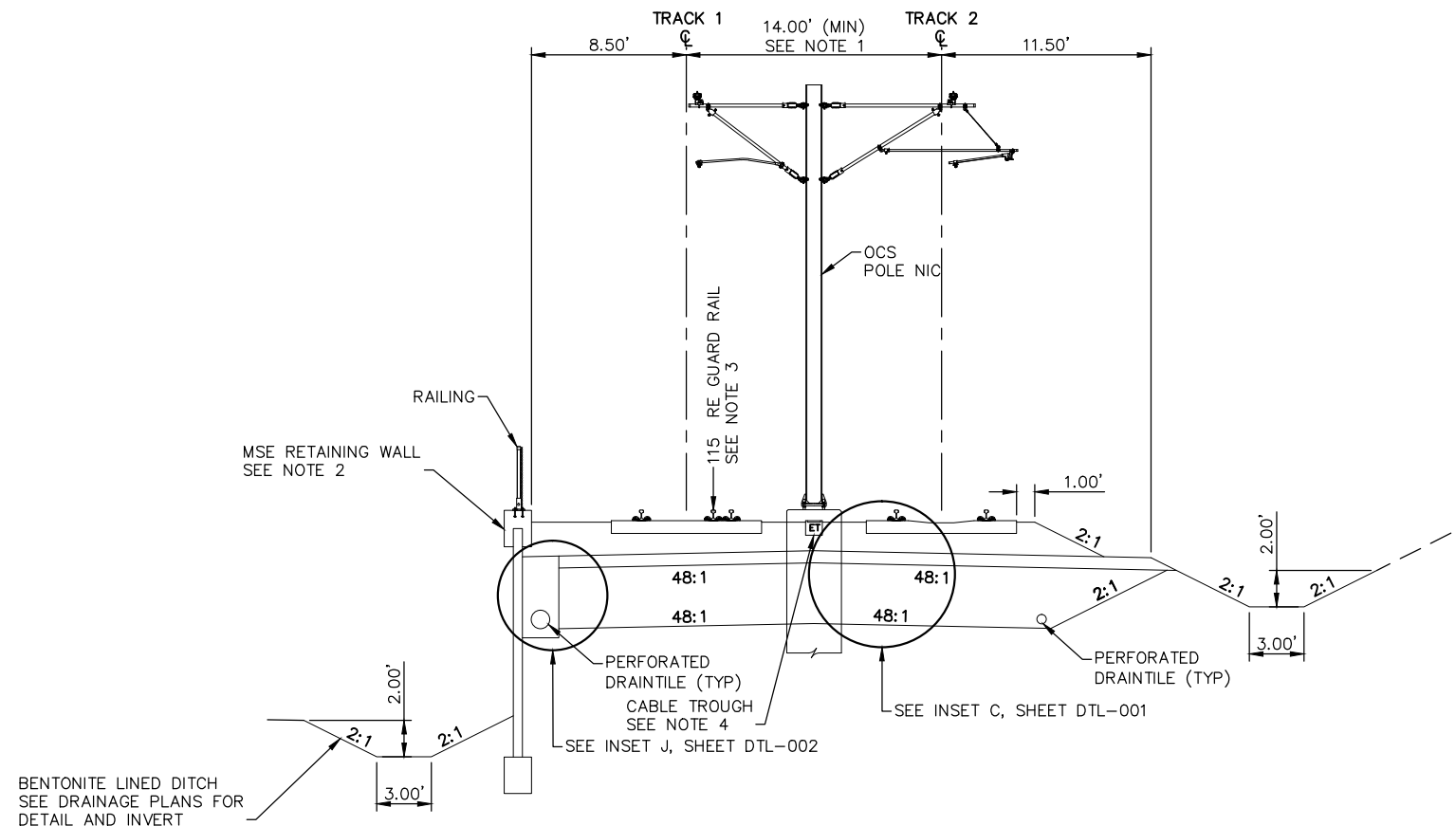
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W1-TRK-TYP - 030

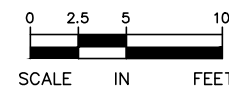
SHEET  
36  
OF  
189

Sep. 21 2015 01:47 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

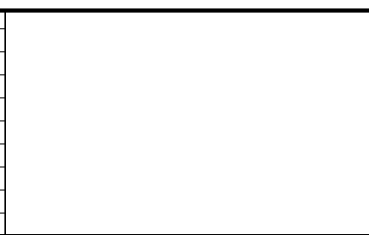
- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-200. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2206+00.00 TO 2207+24.23



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

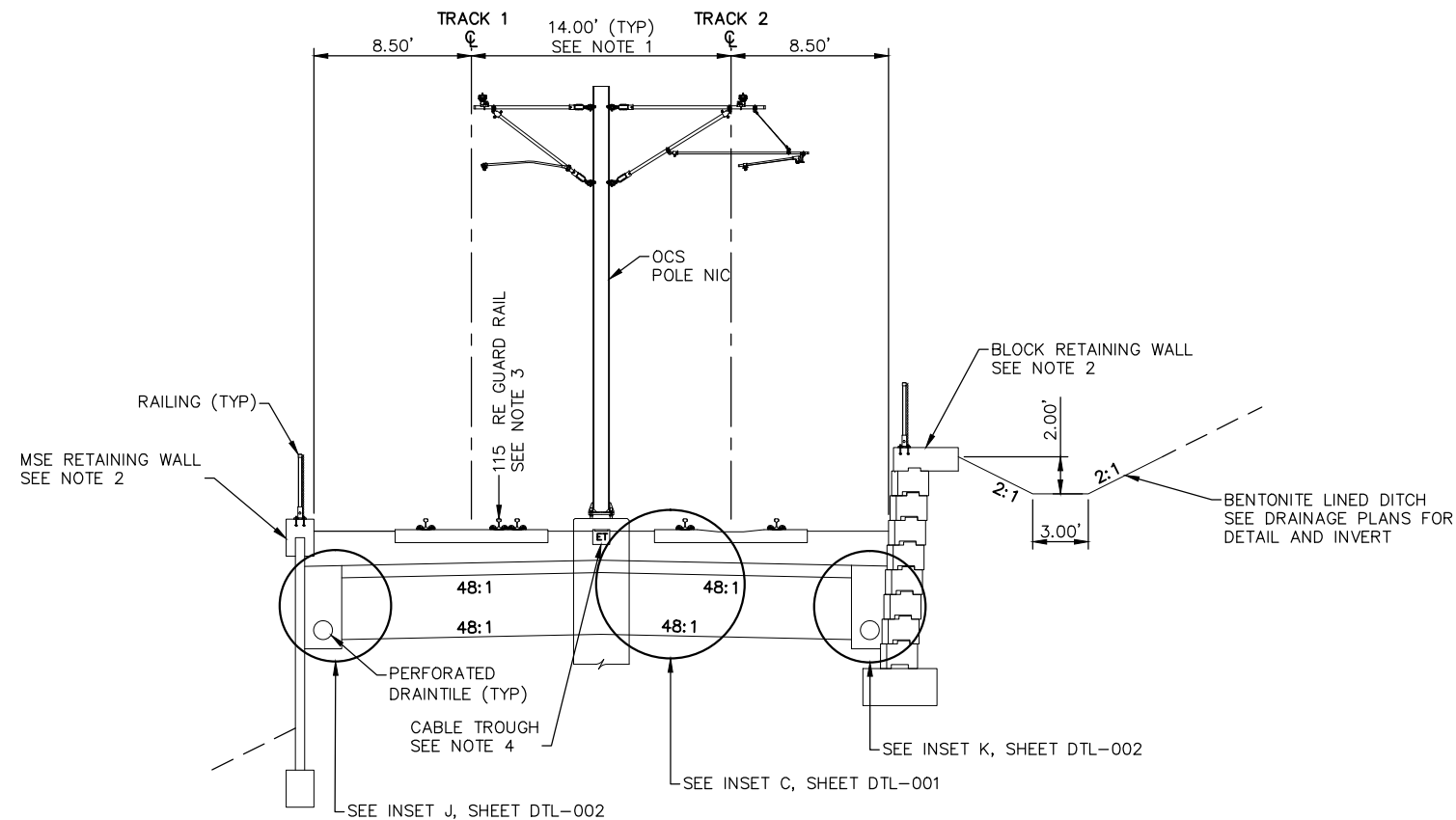
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 001**

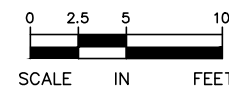
**SHEET**  
**37**  
**OF**  
**189**

Sep. 21 2015 01:47 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

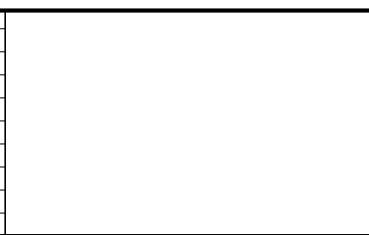
- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-200. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2207+24.23 TO 2211+50.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

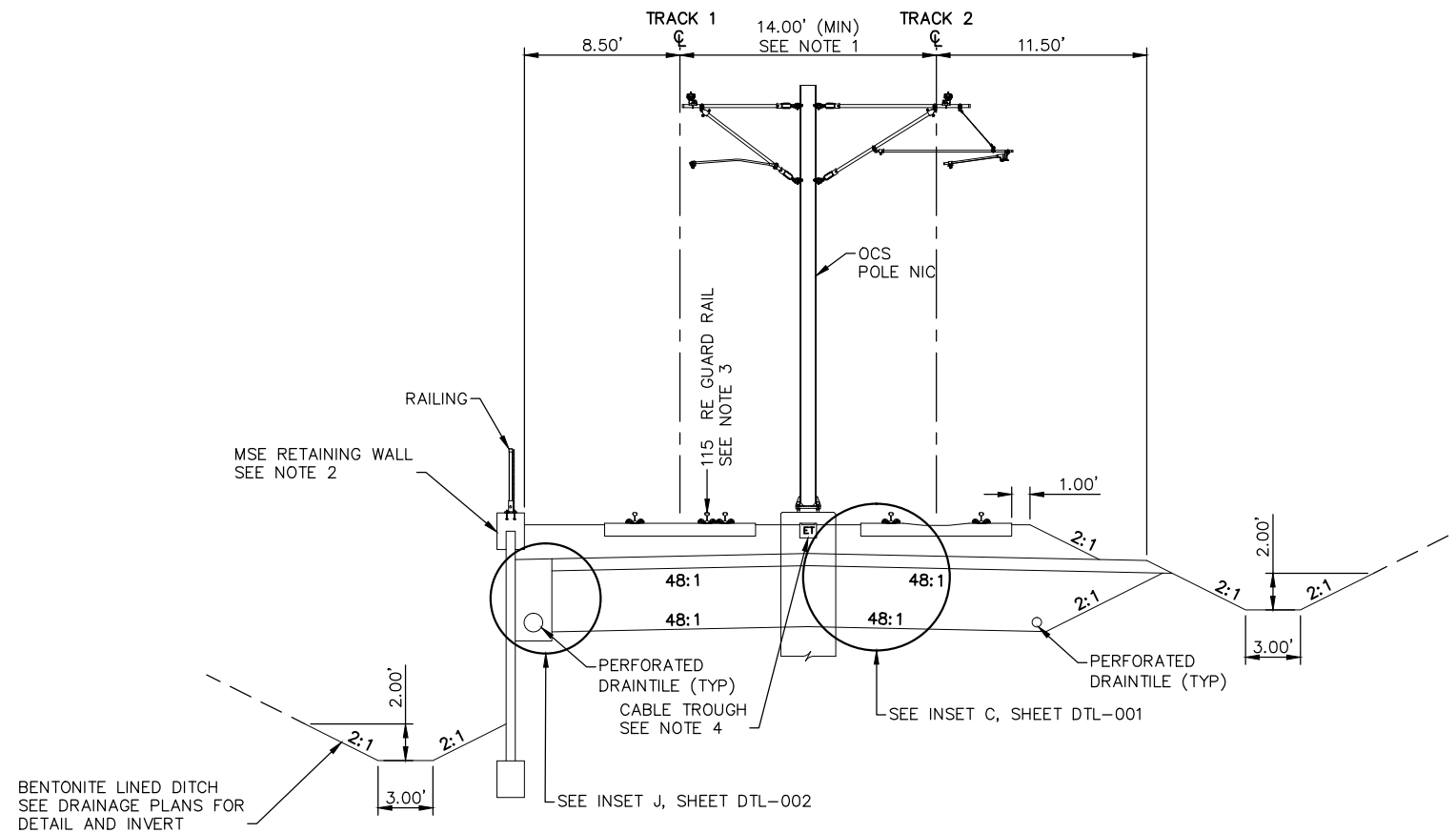
DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 002

SHEET  
38  
OF  
189

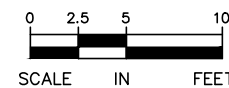


Sep. 21 2015 01:47 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-201. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2211+50.00 TO 2213+92.25



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

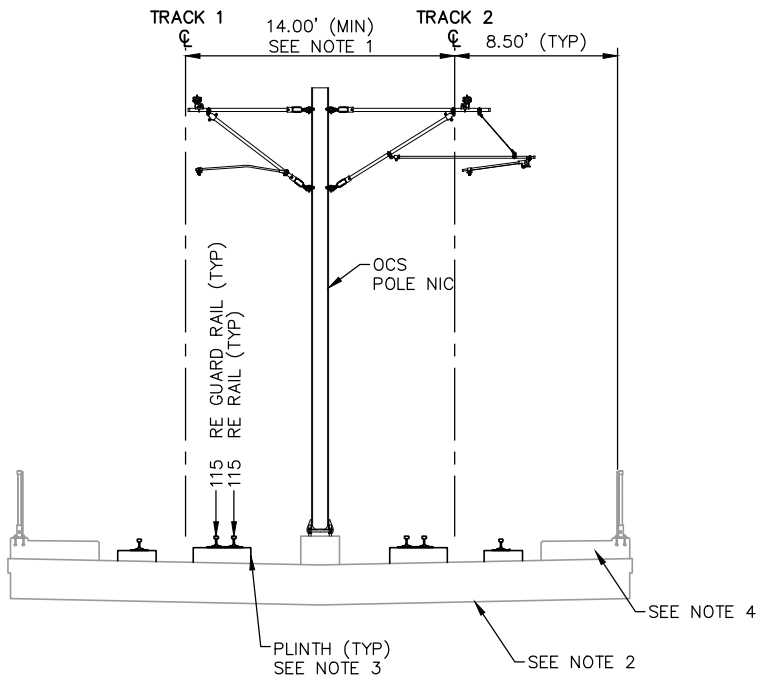
DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 003

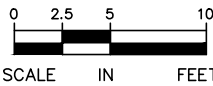
SHEET  
39  
OF  
189

Sep. 21 2015 01:47 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-201. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE CBR27C07. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2213+92.25 2216+95.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15

**METROPOLITAN**  
COUNCIL

**SOUTHWEST**  
Green Line Light Extension

**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

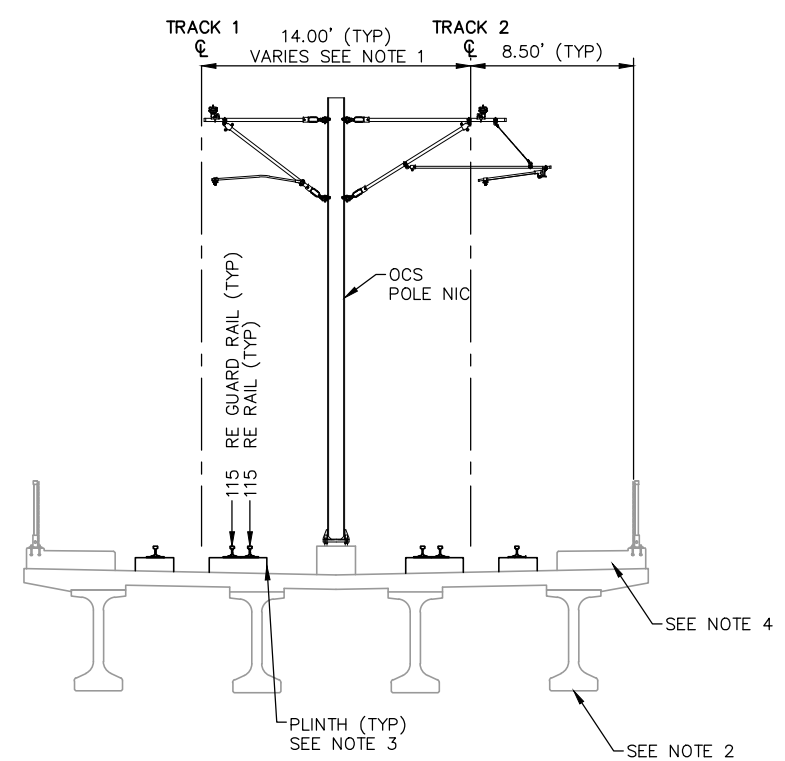
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 004**

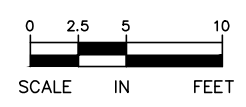
**SHEET**  
**40**  
**OF**  
**189**




Sep. 21 2015 01:48 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
- 1. TRACK CENTERS VARY IN CURVES W2-201 AND W2-202. SEE TRACK PLANS.
  - 2. Mn/DOT BRIDGE CBR27C07. SEE STRUCTURAL PLANS.
  - 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



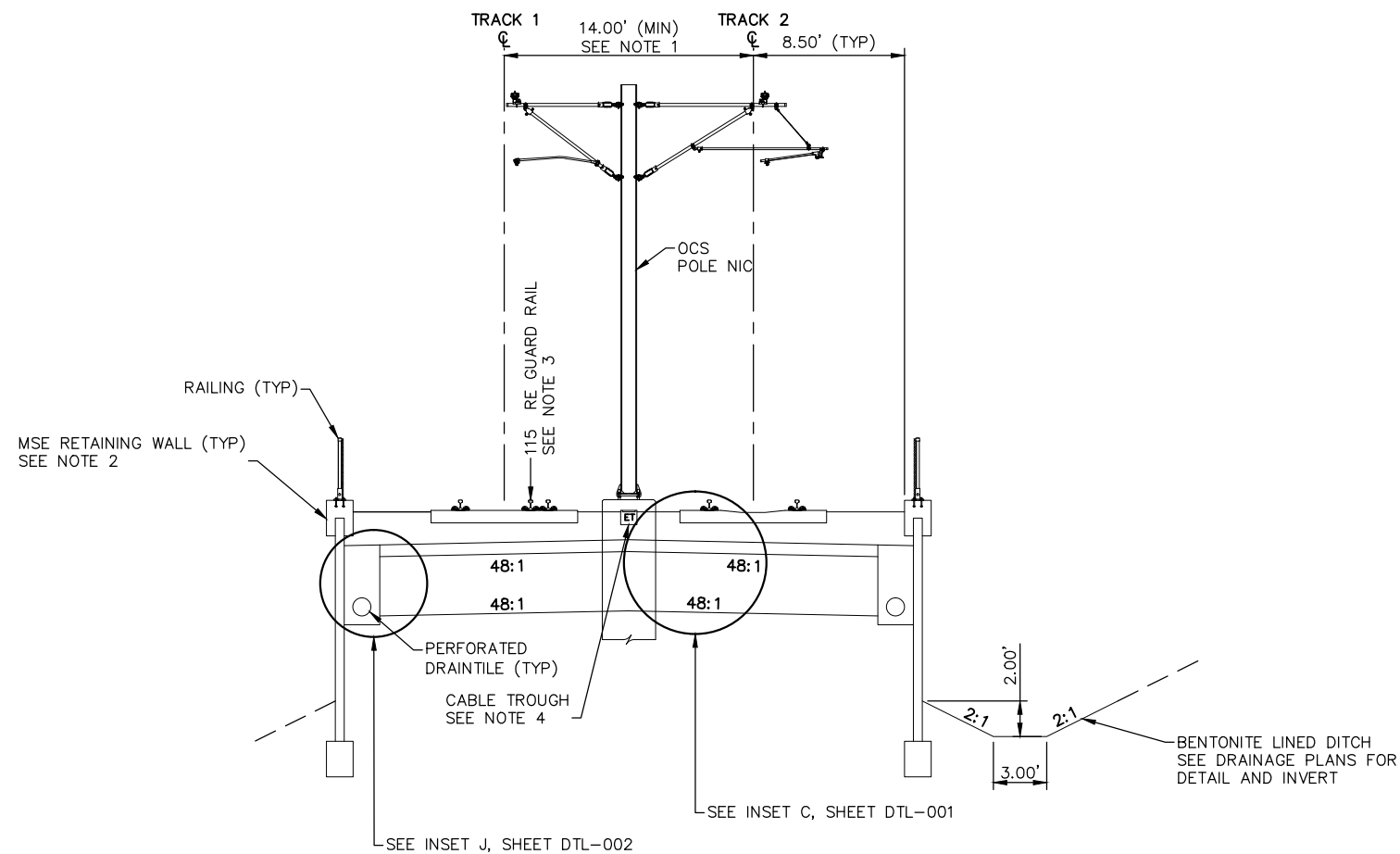
TYPICAL SECTION  
STA. 2216+95.00 TO 2227+97.75



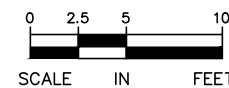
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div> <div>60% SUBMISSION - 09/28/15</div>		<div></div>		<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>TYPICAL SECTIONS</div> <div>DISCIPLINE: TRACK</div> <div>SHEET NAME: W2-TRK-TYP - 005</div>		SHEET 41 OF 189

Sep. 21 2015 01:48 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-203. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2227+97.75 TO 2231+50.16



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



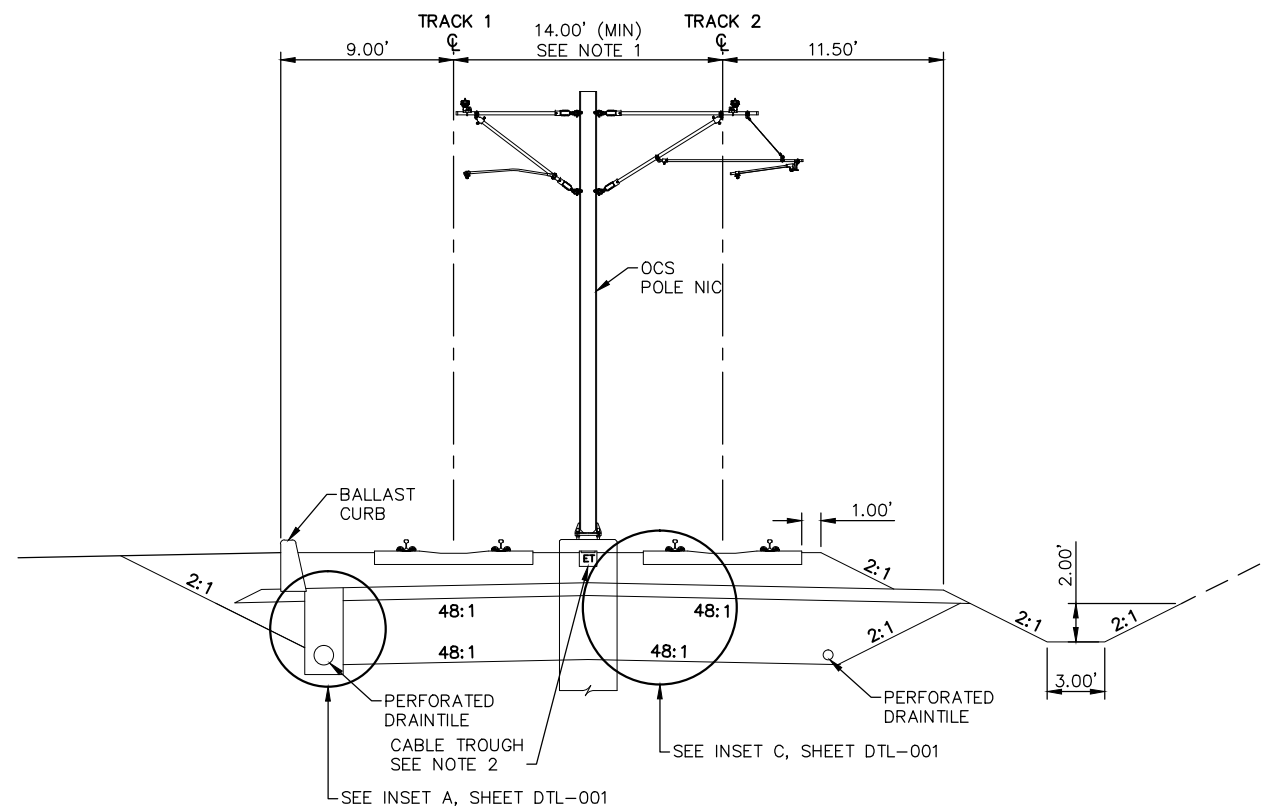
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 006

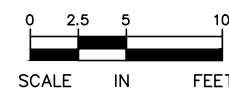
SHEET  
42  
OF  
189

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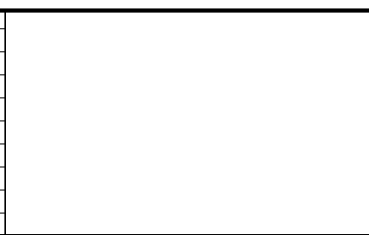
- NOTES:
1. TRACK CENTERSVARY IN CURVE W2-203. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2231+50.16 TO 2232+97.55



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

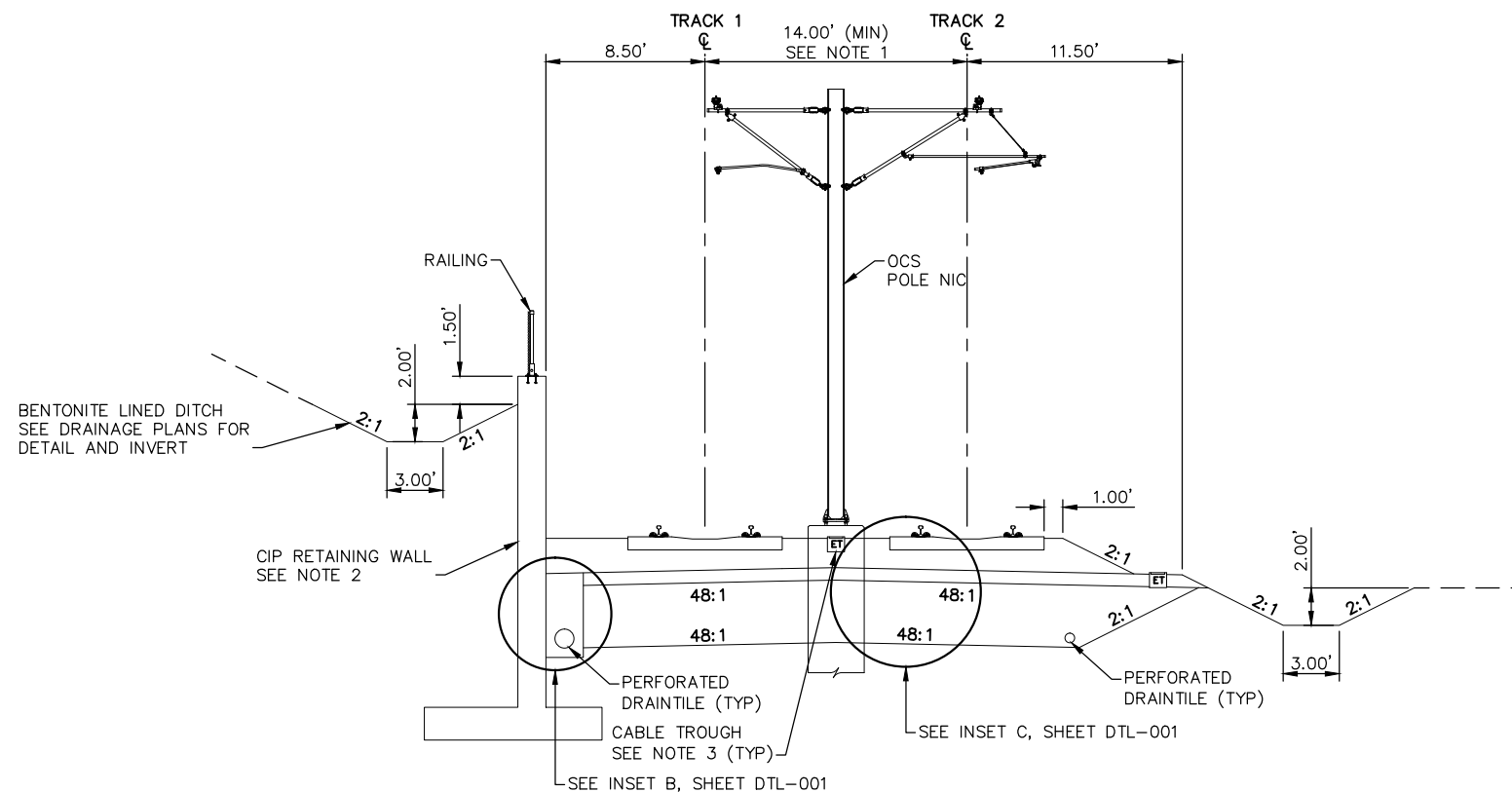
DISCIPLINE: TRACK

SHEET NAME:  
W2-TRK-TYP - 007

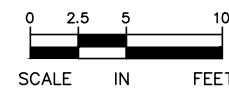
SHEET  
43  
OF  
189

Sep. 21 2015 01:48 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

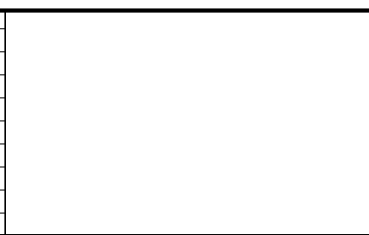
- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-203. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2232+97.55 TO 2235+41.92



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





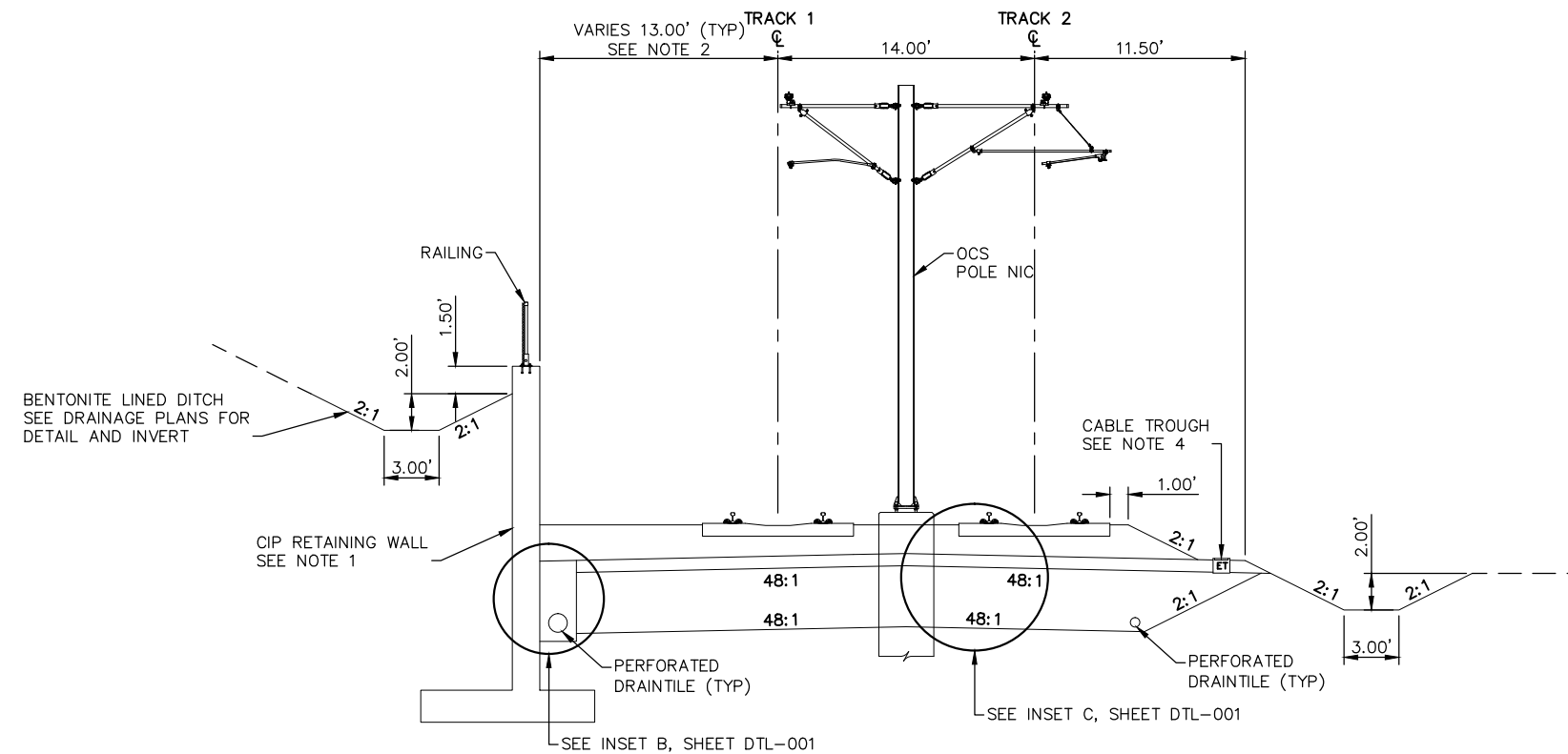
60% SUBMISSION - 09/28/15



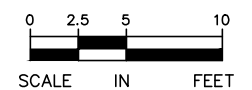
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS




DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 008

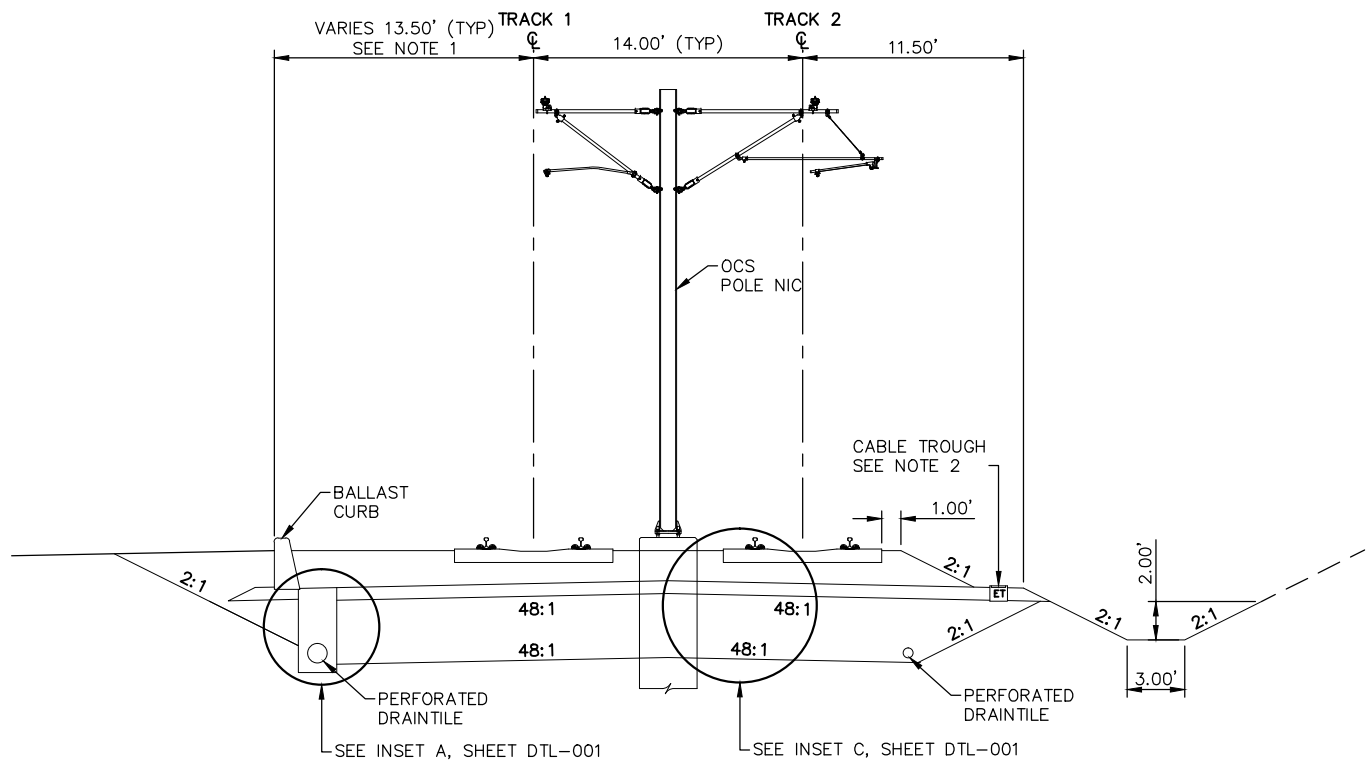
- NOTES:**
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. DIMENSION WIDENS FROM 8.50' TO 13.00' BETWEEN STA. 2235+41.92 AND 2235+66.92.
  3. SPECIAL TRACKWORK NOT ILLUSTRATED.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



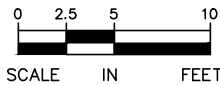
TYPICAL SECTION  
STA. 2235+41.92 TO 2237+97.41



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div>	<div></div>	CIVIL WEST - VOLUME 3		SHEET 45 OF 189
								TRACK		
								TYPICAL SECTIONS		
60% SUBMISSION - 09/28/15						DISCIPLINE:		SHEET NAME:		
						TRACK		W2-TRK-TYP - 009		



TYPICAL SECTION  
STA. 2237+97.41 TO 2238+45.34



- NOTES:
1. DIMENSION NARROWS FROM 13.50' TO 9.00' BETWEEN STA. 2238+20.34 AND 2238+45.34.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



  
60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

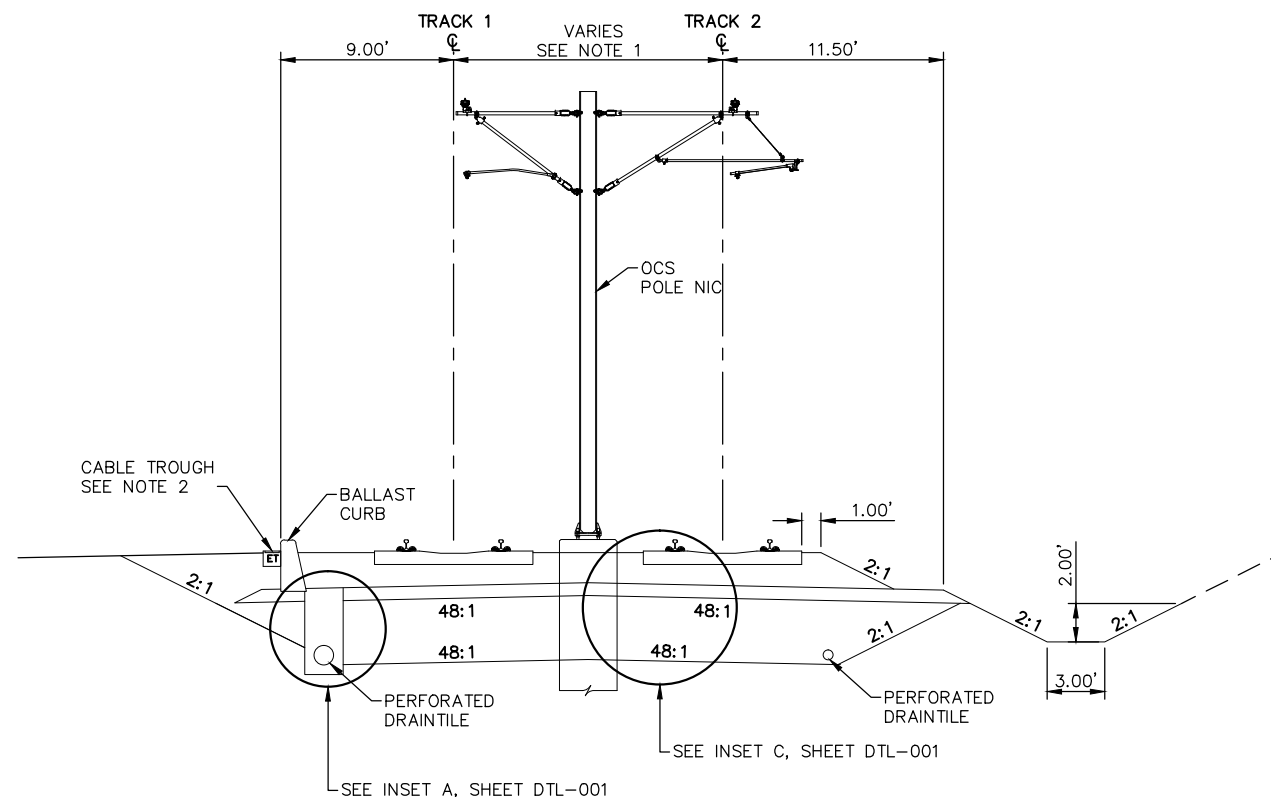
DISCIPLINE: TRACK  
SHEET NAME: W2-TRK-TYP - 010

SHEET  
46  
OF  
189

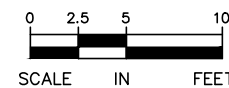


Sep. 21 2015 01:49 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA. 2238+63 AND 2240+19.00.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2238+45.34 TO 2240+19.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

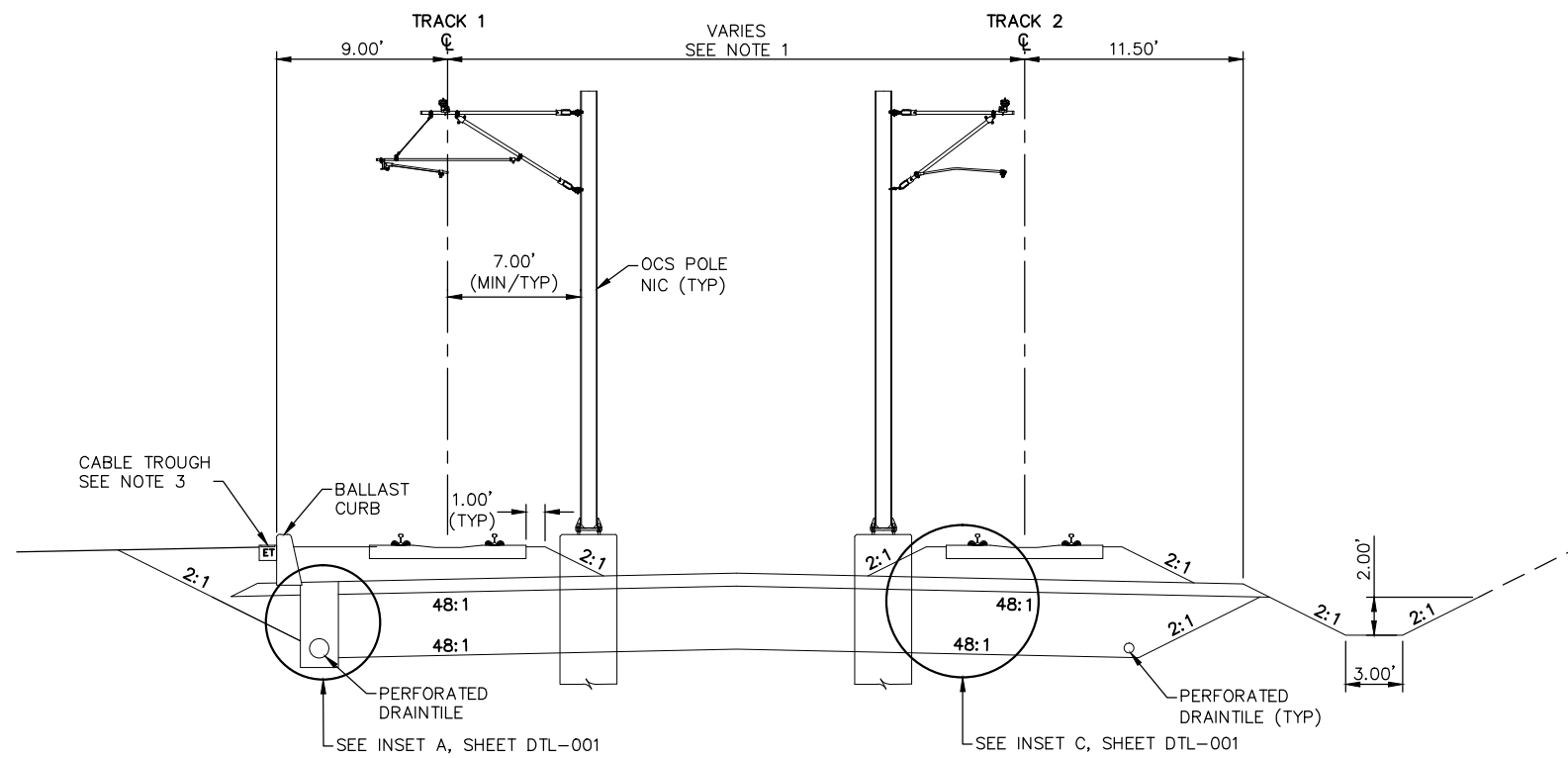
DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 011

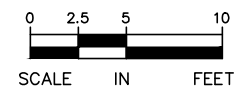
SHEET  
47  
OF  
189

Sep. 21 2015 01:49 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 20.00' TO 30.38' BETWEEN STA. 2240+19.00 AND 2242+25.85.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT 70TH ST W. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2240+19.00 TO 2242+26.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

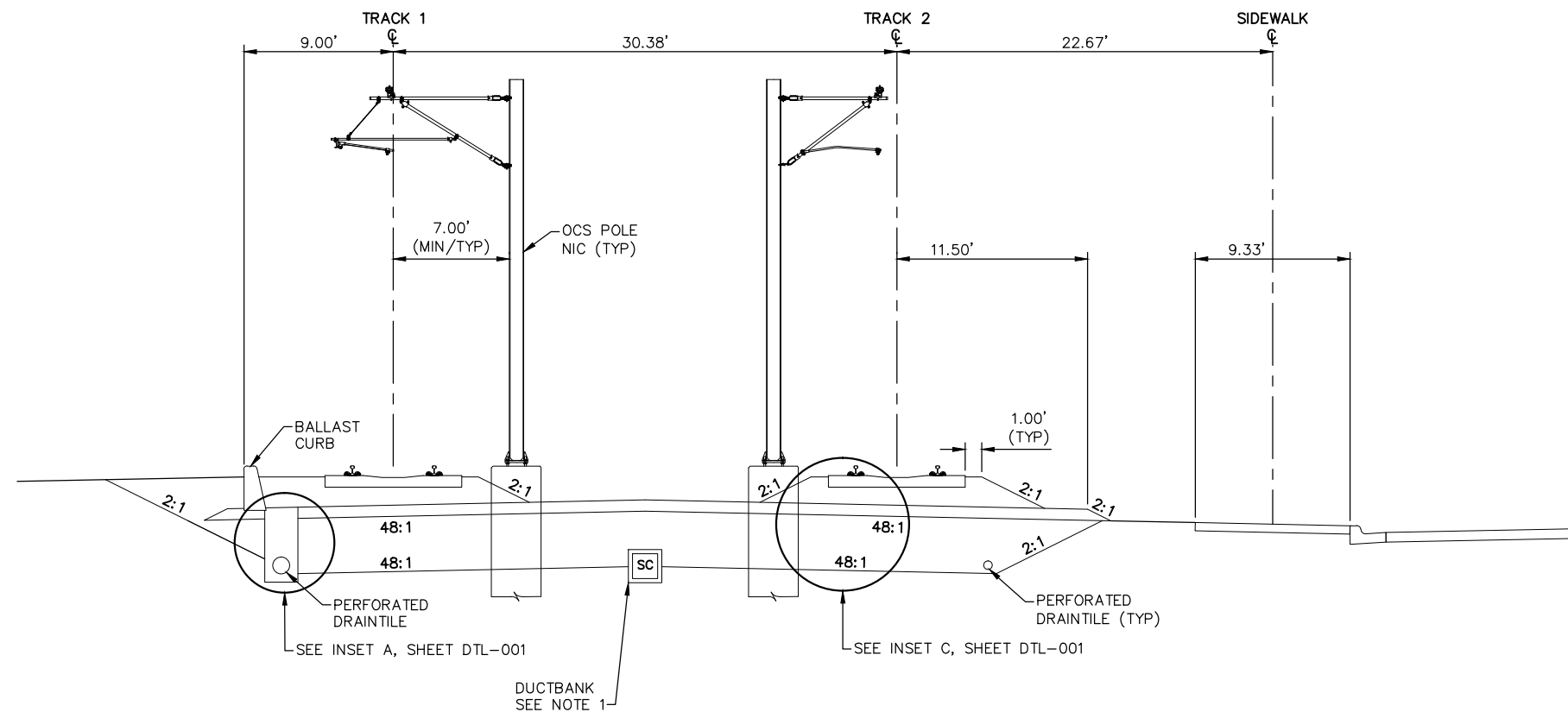
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SHEET NAME: **W2-TRK-TYP - 012**

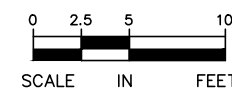
**SHEET**  
**48**  
**OF**  
**189**

Sep. 21 2015 01:49 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

NOTES:  
1. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2242+26.00 TO 2242+75.85



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

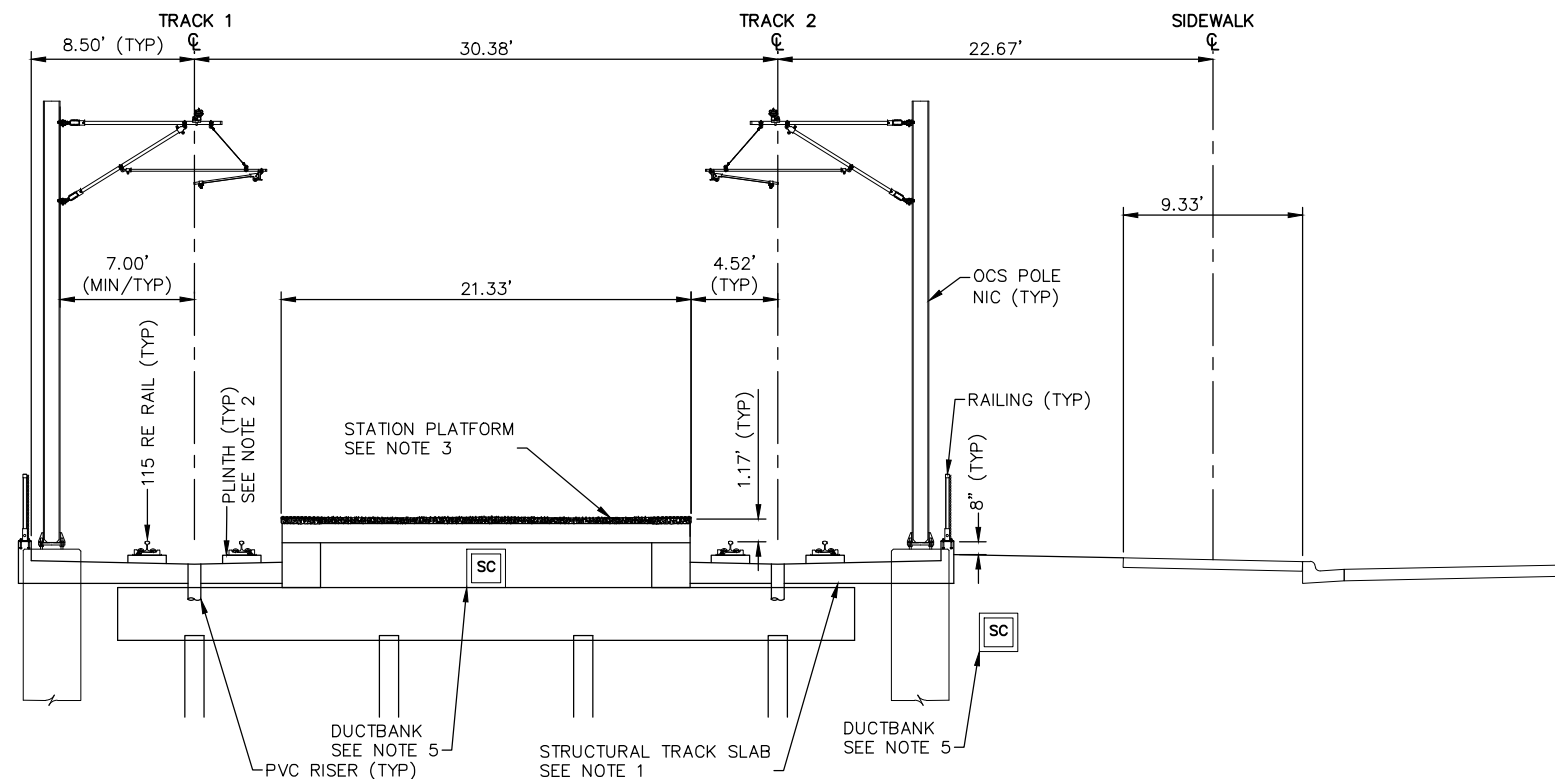
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 013**

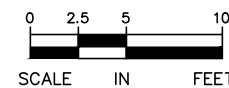
**SHEET**  
**49**  
**OF**  
**189**

Sep. 21 2015 01:50 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

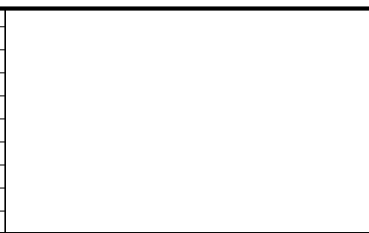
- NOTES:
1. SEE STATION PLANS FOR DETAILS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
  4. STATION PLATFORM ENDS AT STA. 2245+45.85.
  5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION - GOLDEN TRIANGLE STATION  
STA. 2242+75.85 TO 2245+81.08  
SEE NOTE 4



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

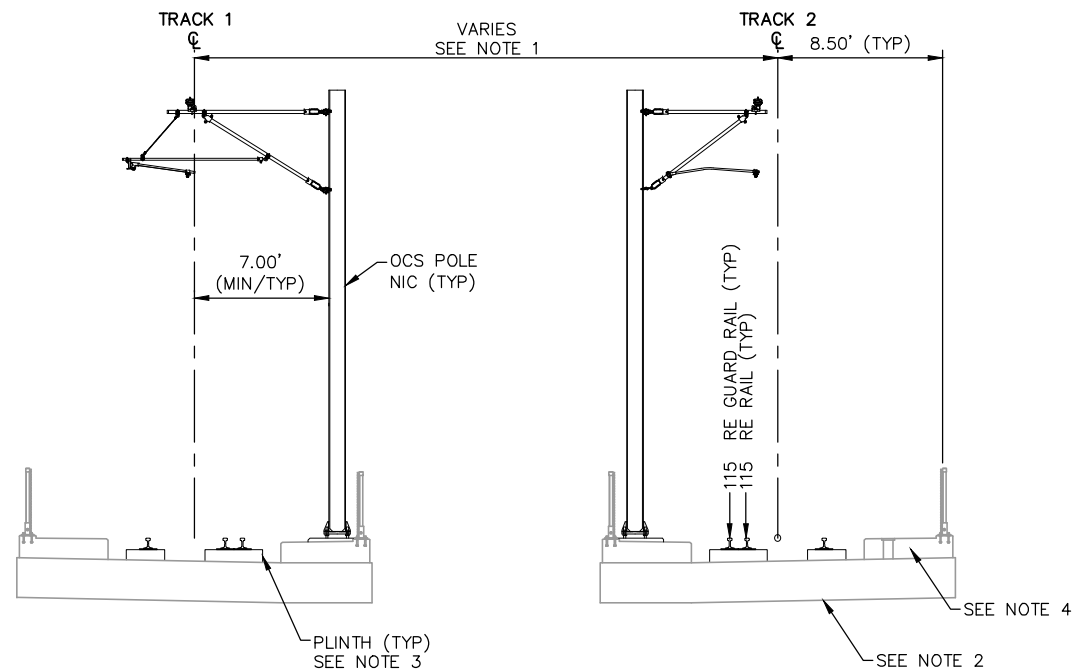
DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 014

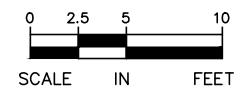
SHEET  
50  
OF  
189

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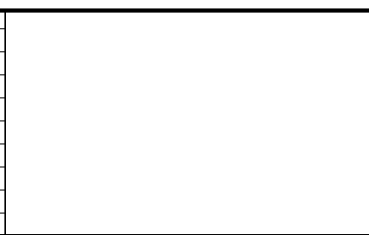
- NOTES:
1. TRACK CENTERS NARROW FROM 30.38' TO 24.58' BETWEEN STA. 2245+95.94 AND 2248+30.94.
  2. Mn/DOT BRIDGE BR27R34. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2245+81.08 TO 2248+30.94



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

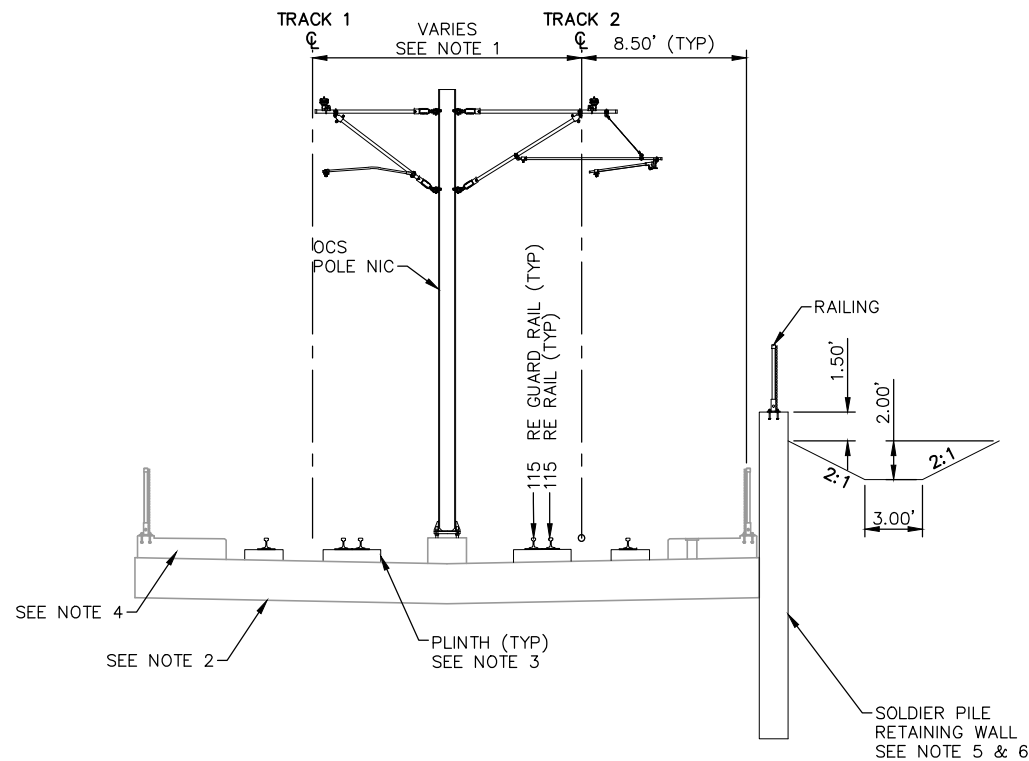
DISCIPLINE: TRACK

SHEET NAME:  
W2-TRK-TYP - 015

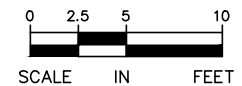
SHEET  
51  
OF  
189

Sep. 21 2015 01:50 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

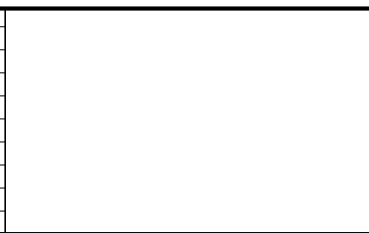
- NOTES:
1. TRACK CENTERS NARROW FROM 24.58' TO 14.00' BETWEEN STA. 2248+70.94 AND 2252+50.85.
  2. Mn/DOT BRIDGE BR27R34. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  5. SEE RETAINING WALL PLANS FOR DETAILS.
  6. RETAINING WALL STARTS AT STA. 2248+75.00 AND ENDS AT STA. 2250+50.00.



TYPICAL SECTION  
STA. 2248+30.94 TO 2253+50.95



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

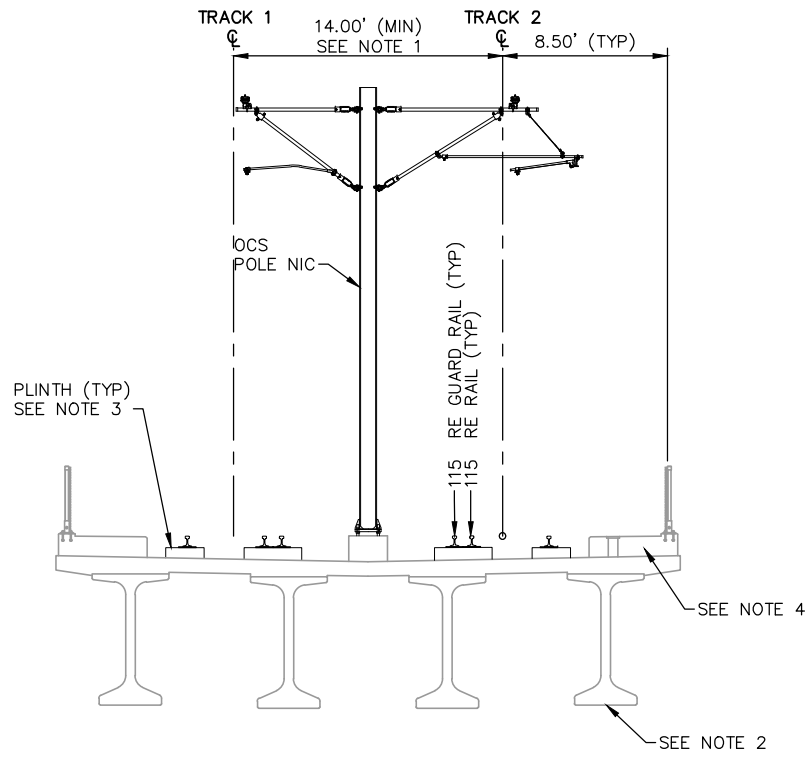
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 016**

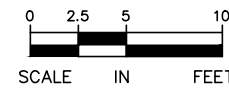
**SHEET**  
**52**  
**OF**  
**189**

Sep. 21 2015 01:50 am V:\3400\_ADC\CAD\CAD\_00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

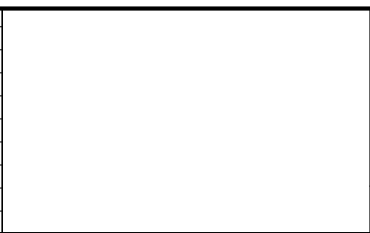
- NOTES:
- 1. TRACK CENTERS VARY IN CURVE W2-207. SEE TRACK PLANS.
  - 2. Mn/DOT BRIDGE BR27R34. SEE STRUCTURAL PLANS.
  - 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2253+50.94 TO 2264+32.94



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



  
**60% SUBMISSION - 09/28/15**



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

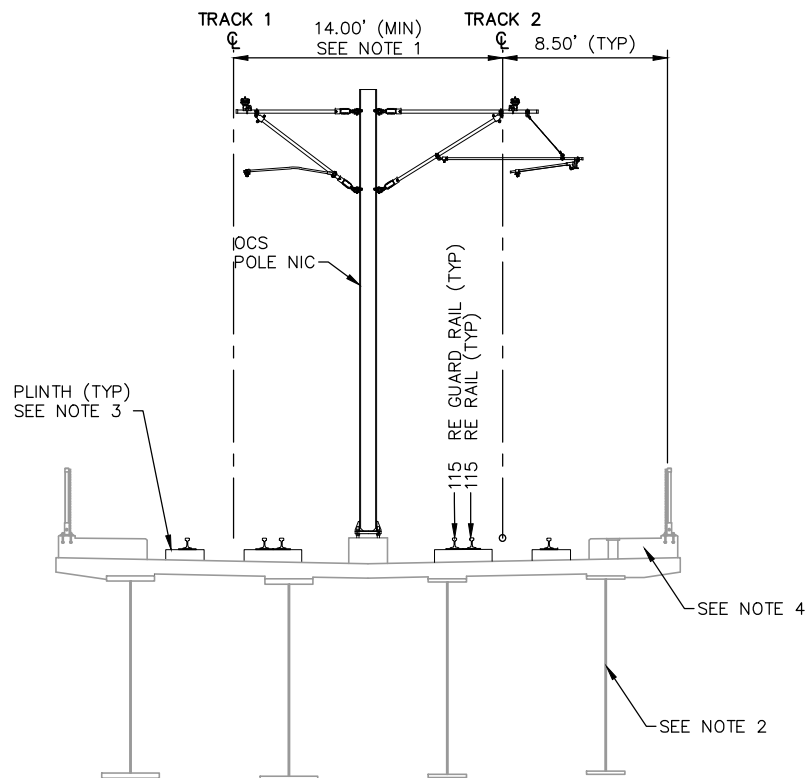
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 017**

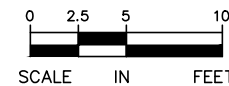
**SHEET**  
**53**  
**OF**  
**189**

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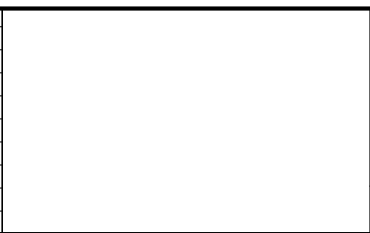
- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-207. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE BR27R34. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2264+32.95 TO 2270+67.93



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

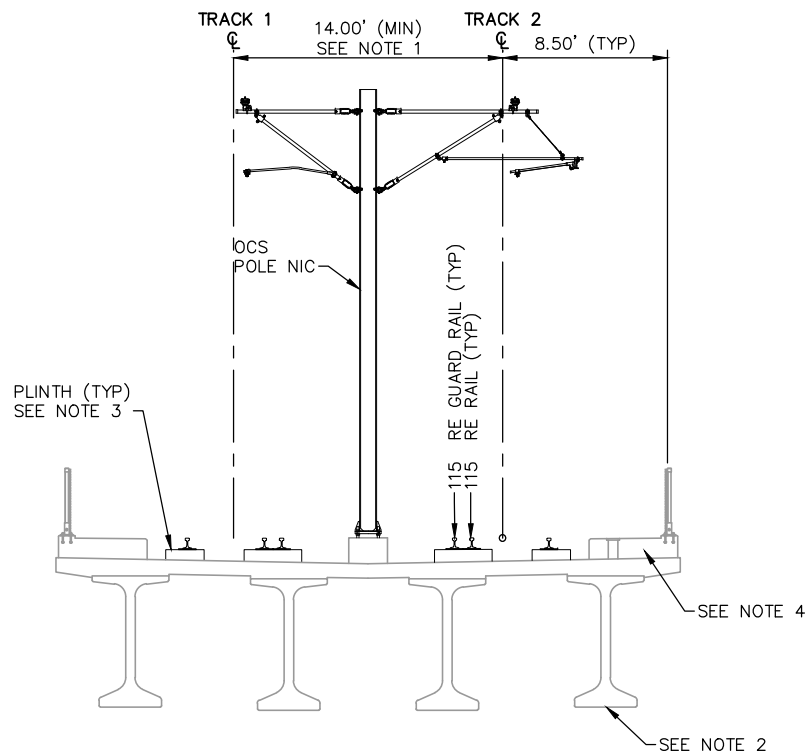
SHEET NAME: W2-TRK-TYP - 018

SHEET  
54  
OF  
189

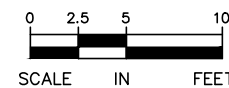


Sep. 21 2015 01:51 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-207. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE BR27R34. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2270+67.93 TO 2275+00.27



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

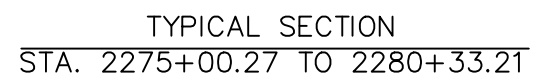
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 019

SHEET  
55  
OF  
189

- Sep, 21 2015 01:51 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM



**METROPOLITAN**  
COUNCIL



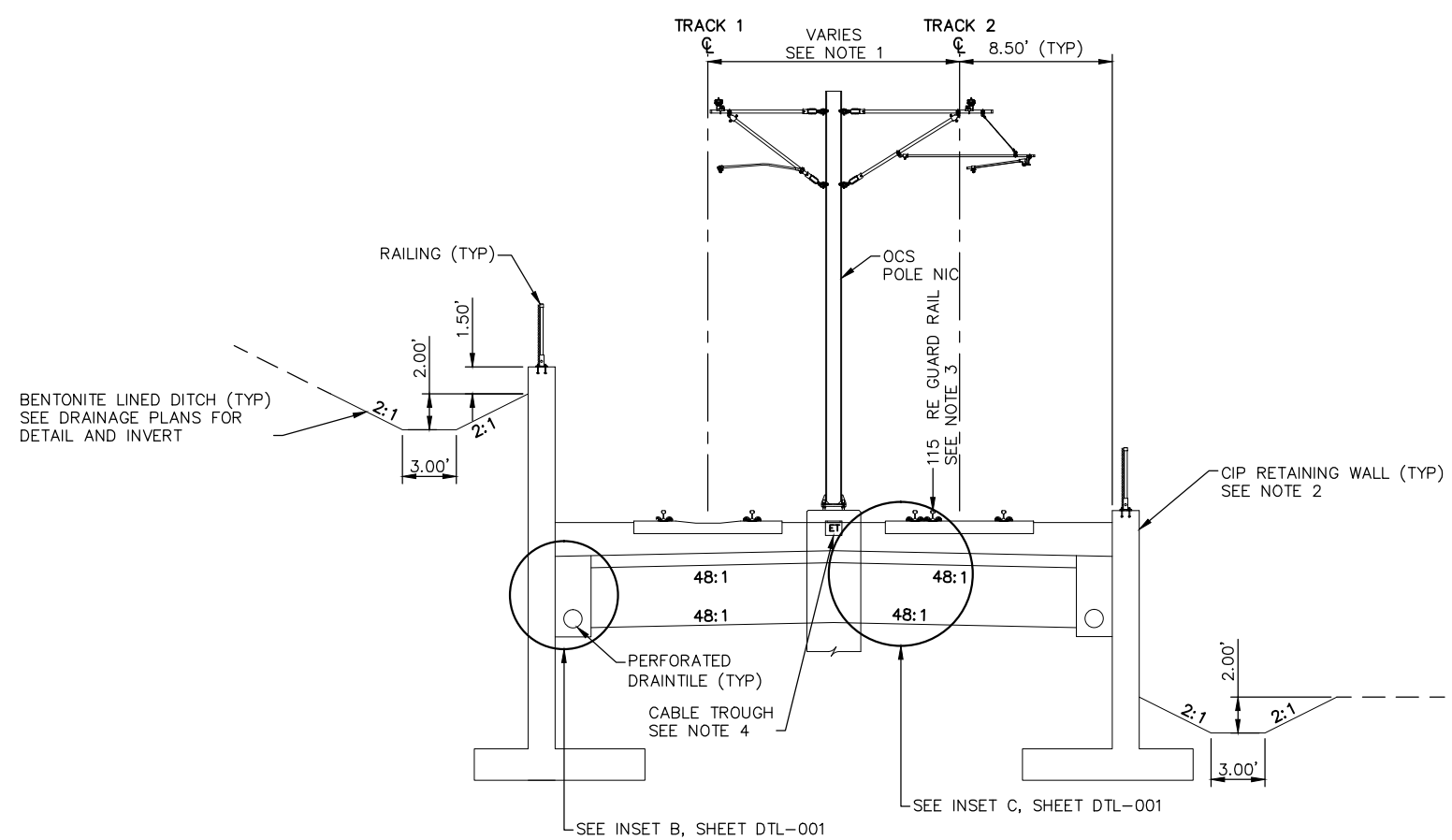
**SOUTHWEST**  
Green Line LRT Extension

DISCIPLINE: **TRACK**

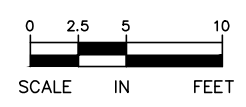
SHEET  
56  
OF  
189




Sep. 21 2015 01:51 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 14.00' TO 14.05' BETWEEN STA. 2281+71.67' AND 2282+50.60.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



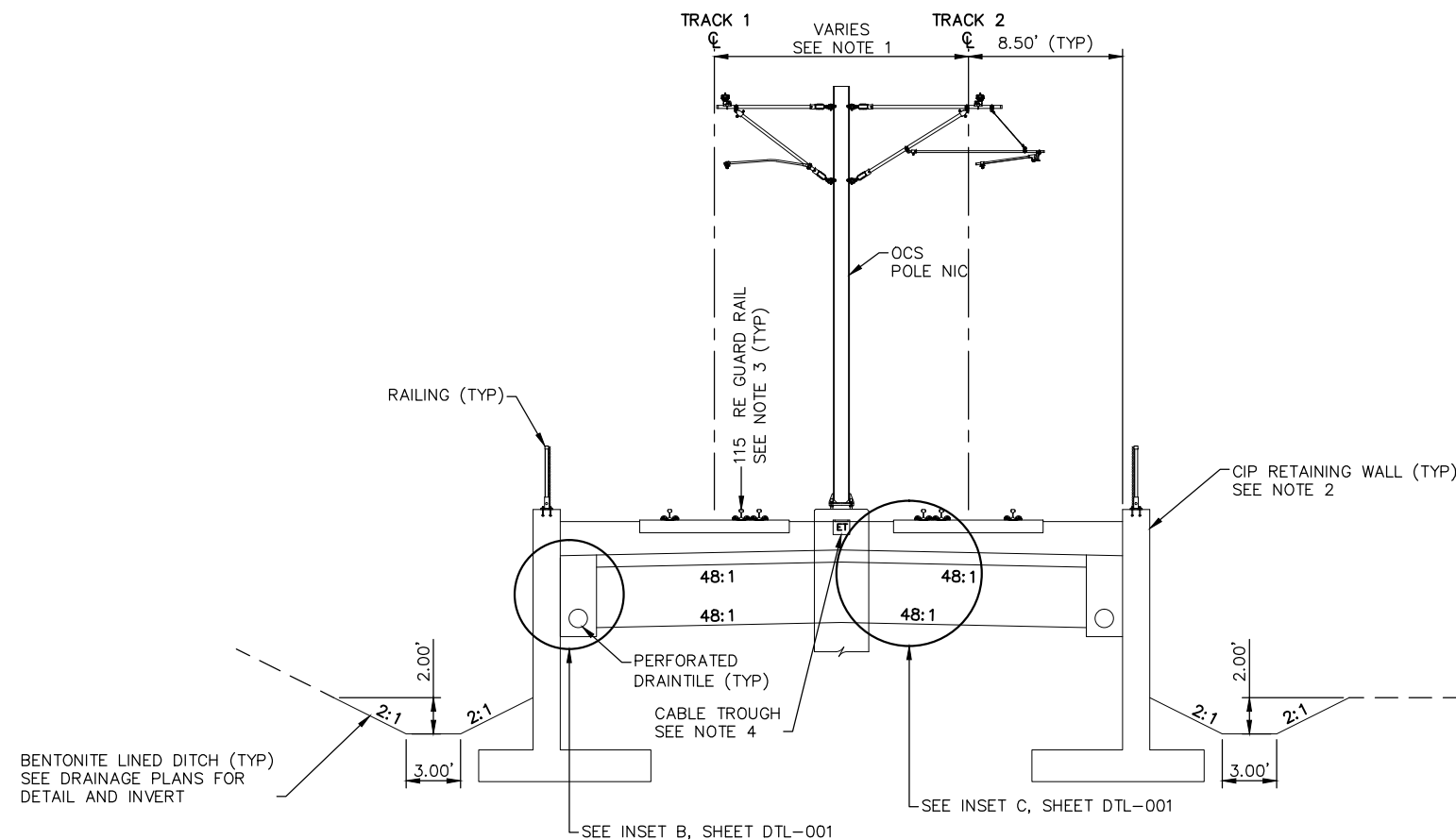
TYPICAL SECTION  
STA. 2280+33.21 TO 2282+50.60



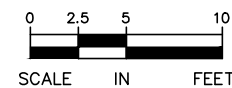
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div> 60% SUBMISSION - 09/28/15</div>		<div></div>		CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS		SHEET 57 OF 189
										DISCIPLINE: TRACK	SHEET NAME: W2-TRK-TYP - 021	

Sep. 21 2015 01:51 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 14.05' TO 16.92' BETWEEN STA. 2282+50.60 TO 2286+41.74.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2282+50.60 TO 2286+41.74



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



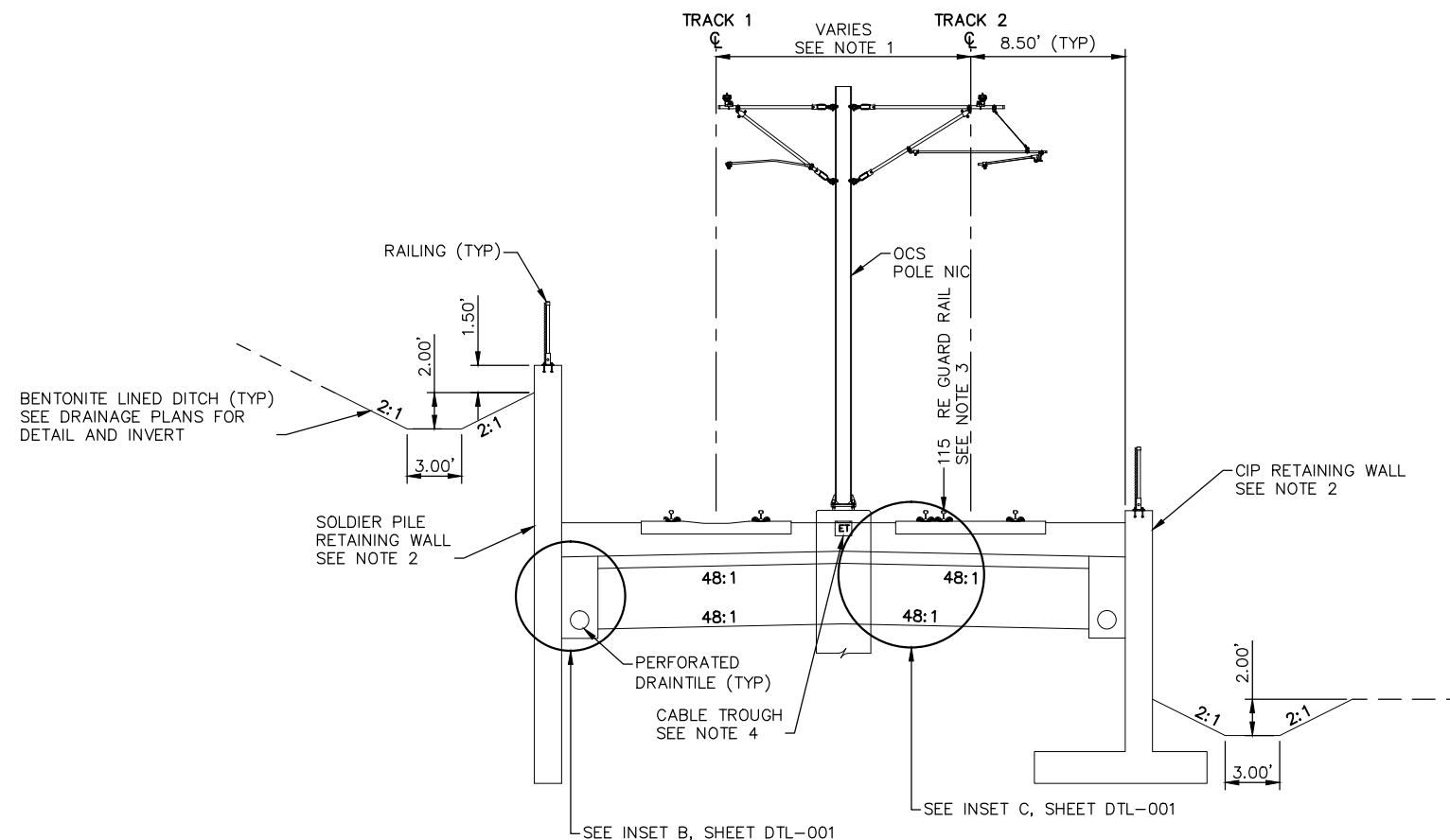
**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

DISCIPLINE: **TRACK** SHEET NAME: **W2-TRK-TYP - 022**

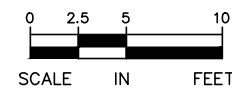
SHEET  
58  
OF  
189

Sep. 21 2015 01:52 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

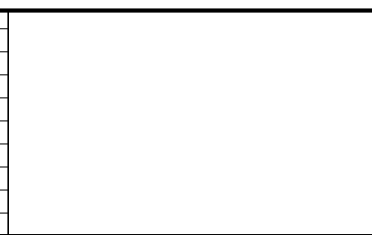
- NOTES:
1. TRACK CENTERS WIDEN FROM 16.92' TO 24.06' BETWEEN STA. 2281+71.67' AND 2287+89.56.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2286+41.74 TO 2287+89.56



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



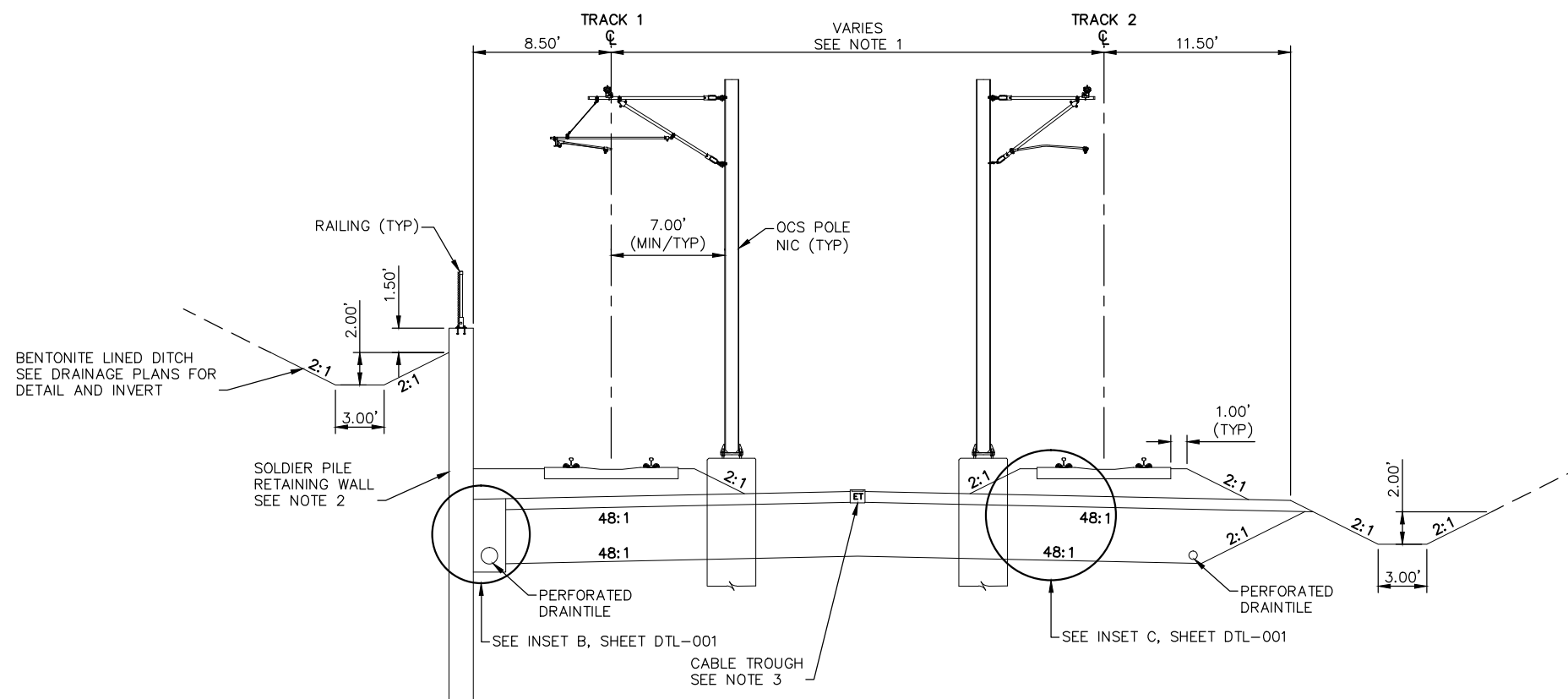
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

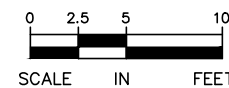
SHEET NAME: W2-TRK-TYP - 023




SHEET  
59  
OF  
189

- NOTES:**
1. TRACK CENTERS WIDEN FROM 24.06' TO 29.64' BETWEEN STA. 2287+89.56 TO 2289+84.63.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

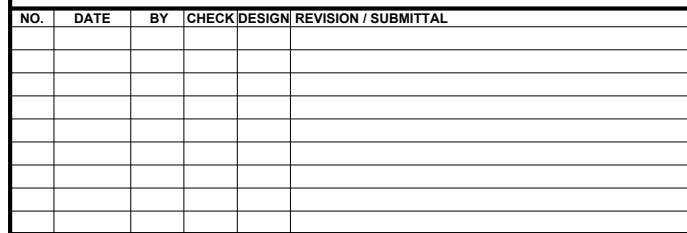
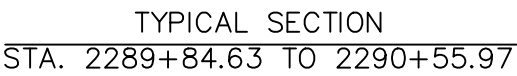


TYPICAL SECTION  
STA. 2287+89.56 TO 2289+84.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div> <div></div>	CIVIL WEST - VOLUME 3		SHEET
							TRACK		
							TYPICAL SECTIONS		OF
							60% SUBMISSION - 09/28/15		189
							DISCIPLINE: TRACK		SHEET NAME: W2-TRK-TYP - 024

- Sep, 21 2015 01:52 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM



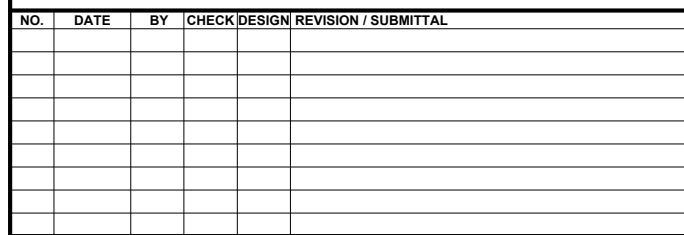
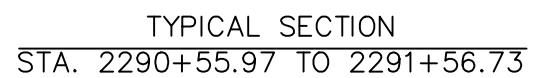
**60% SUBMISSION - 09/28/15**



DISCIPLINE:	TRACK
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SHEET  
61  
OF  
189

- Sep, 21 2015 01:52 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MaurisBM



60% SUBMISSION - 09/28/15



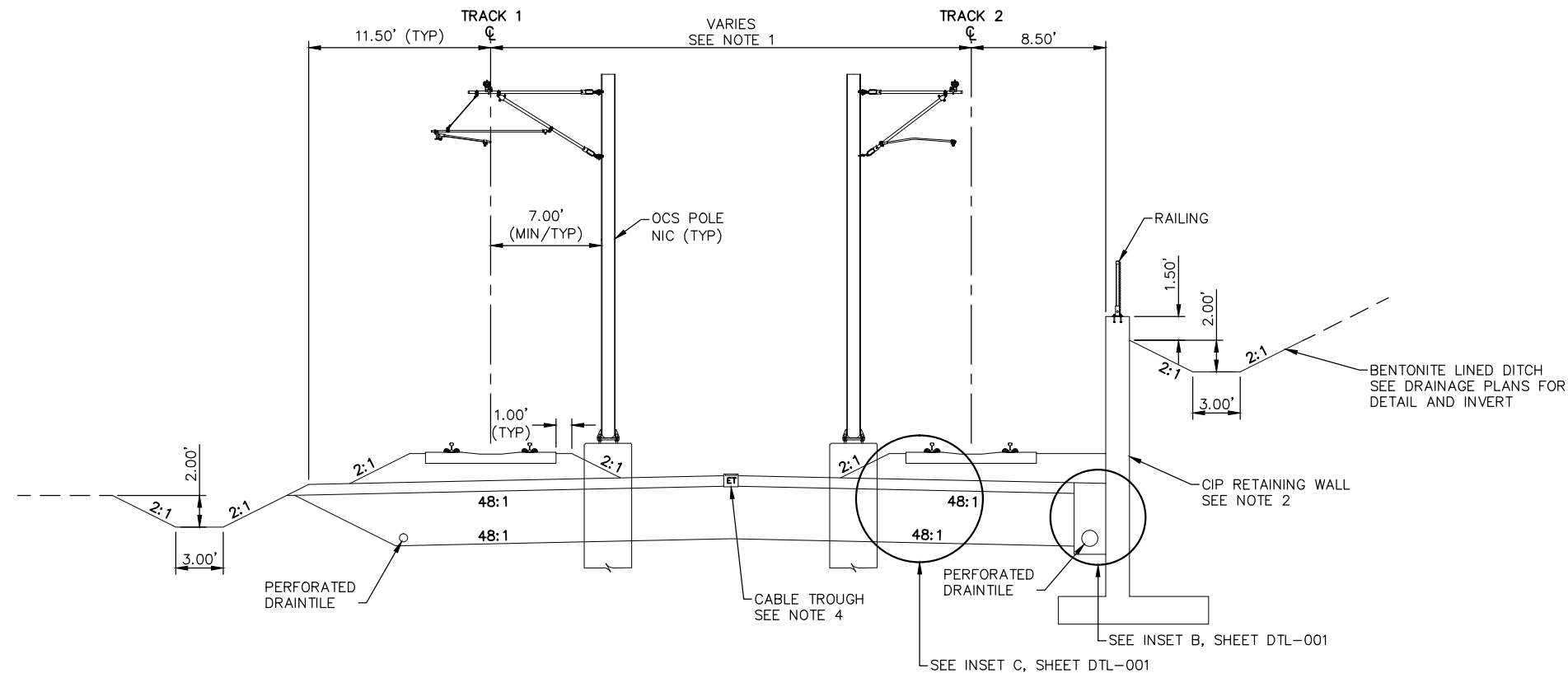
DISCIPLINE: **TRACK**

**SHEET**  
**62**  
**OF**  
**189**

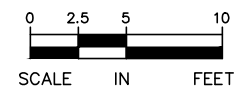


Sep. 21 2015 01:52 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 30.42' TO 30.38' FROM STA. 2291+56.00 TO 2291+59.86.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. TPSS SITE NOT DEPICTED BETWEEN STA. 2293+26 AND STA. 2294+06.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2291+56.73 TO 2294+38.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



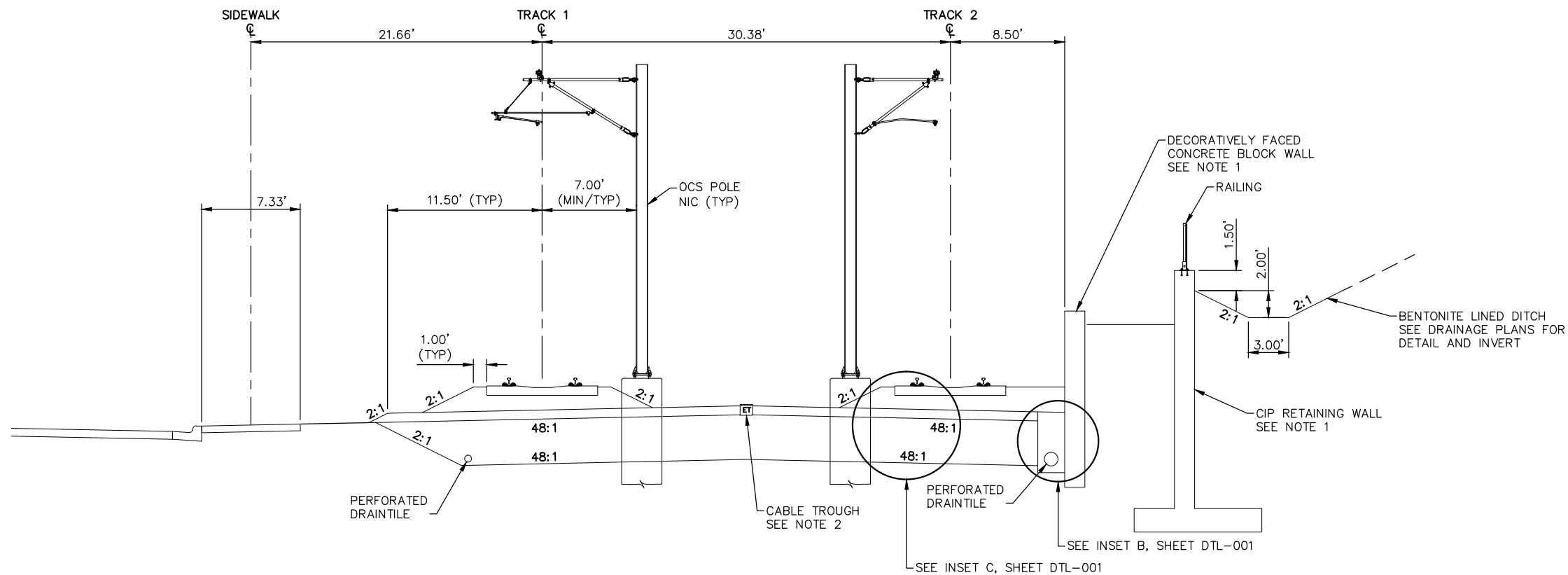
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 027

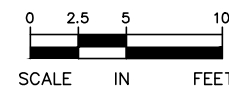
SHEET  
63  
OF  
189

Sep. 21 2015 01:53 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2294+38.00 TO 2295+80.80




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

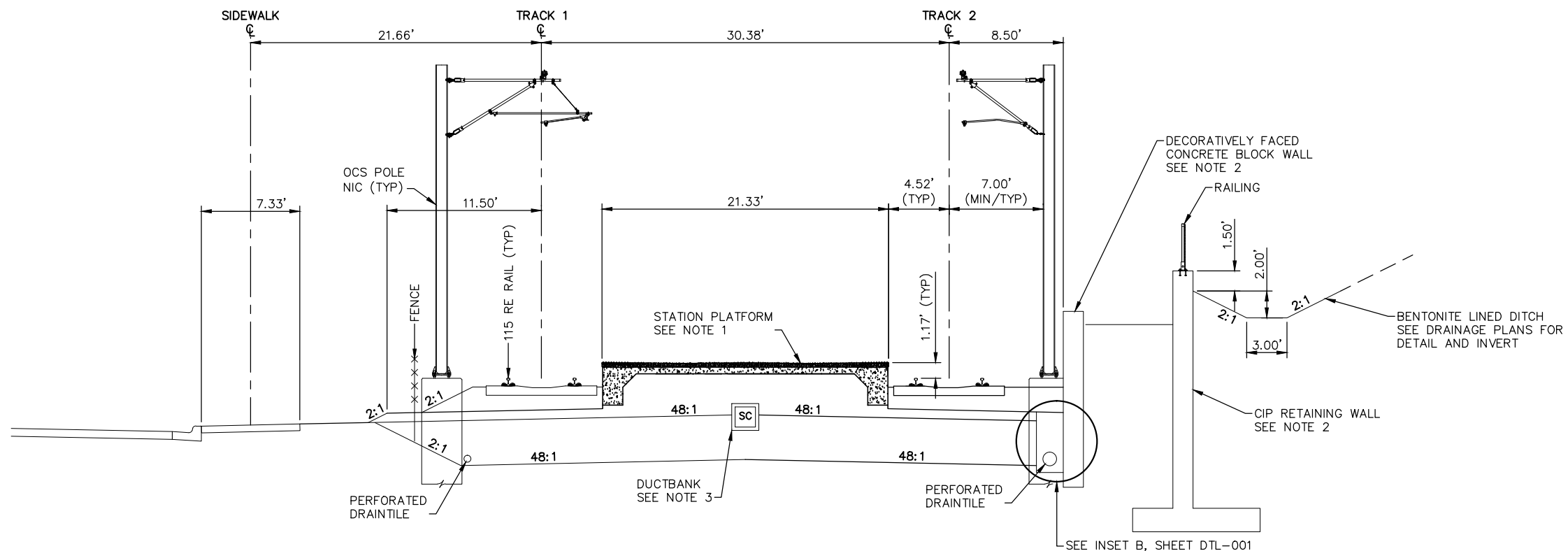
DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 028

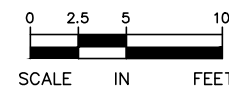
SHEET  
64  
OF  
189

Sep. 21 2015 01:53 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



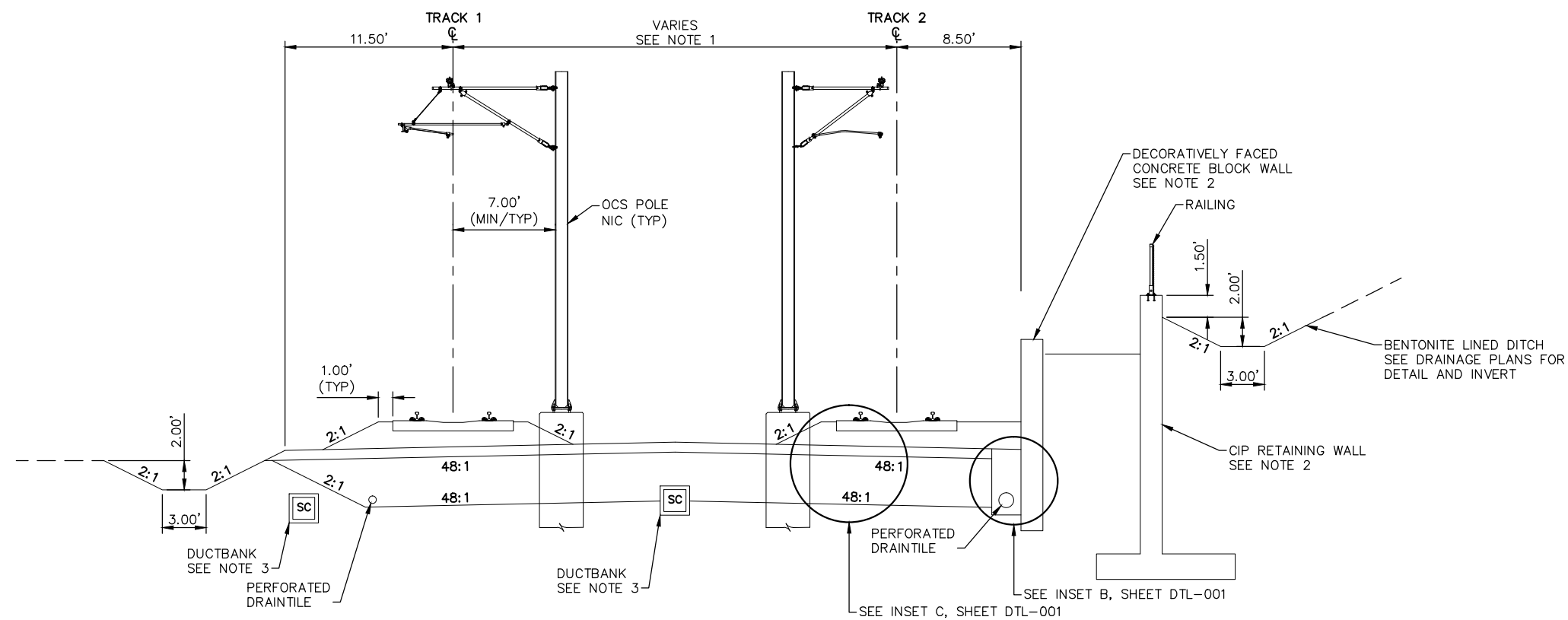
TYPICAL SECTION - CITY WEST STATION  
STA. 2295+80.80 TO 2298+50.80



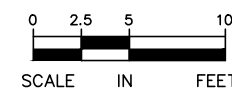
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




	 	<b>CIVIL WEST - VOLUME 3</b>		<b>SHEET</b>  65  OF  189
		<b>TRACK</b>  <b>TYPICAL SECTIONS</b>		
60% SUBMISSION - 09/28/15		DISCIPLINE: <b>TRACK</b>	SHEET NAME: <b>W2-TRK-TYP - 029</b>	

- NOTES:**
1. TRACK CENTERS NARROW FROM 30.38' TO 30.25' BETWEEN STA. 2298+50.80 AND 2299+45.92.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



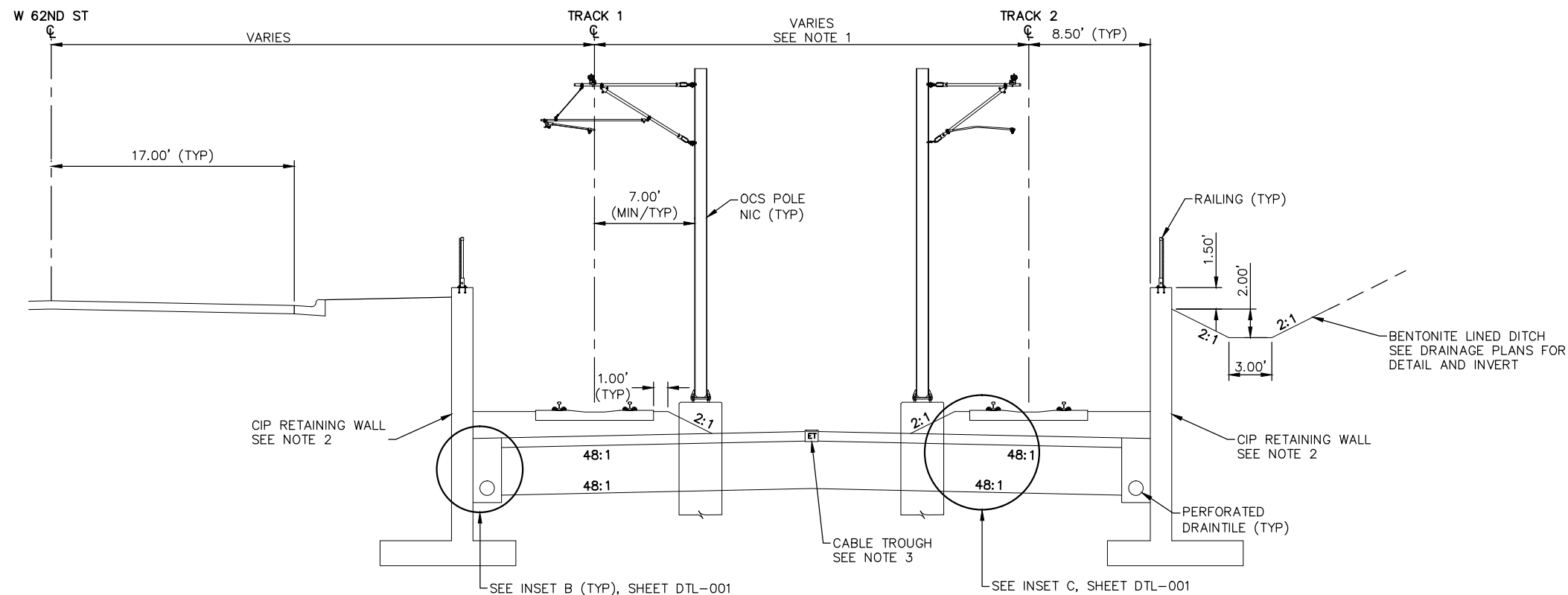
TYPICAL SECTION  
STA. 2298+50.80 TO 2299+45.92



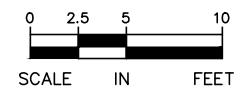
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div> <div>60% SUBMISSION - 09/28/15</div>	<div></div>	CIVIL WEST - VOLUME 3		SHEET 66 OF 189
					TRACK			SHEET NAME: W2-TRK-TYP - 030		

Sep. 21 2015 01:53 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

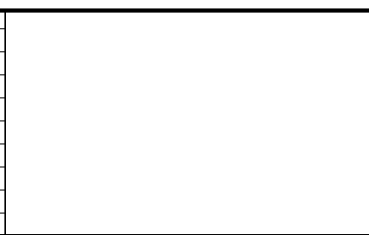
- NOTES:
1. TRACK CENTERS NARROW FROM 30.38' TO 20.00' BETWEEN STA. 2299+45.92 AND 2302+21.00.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2299+45.92 TO 2302+21.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



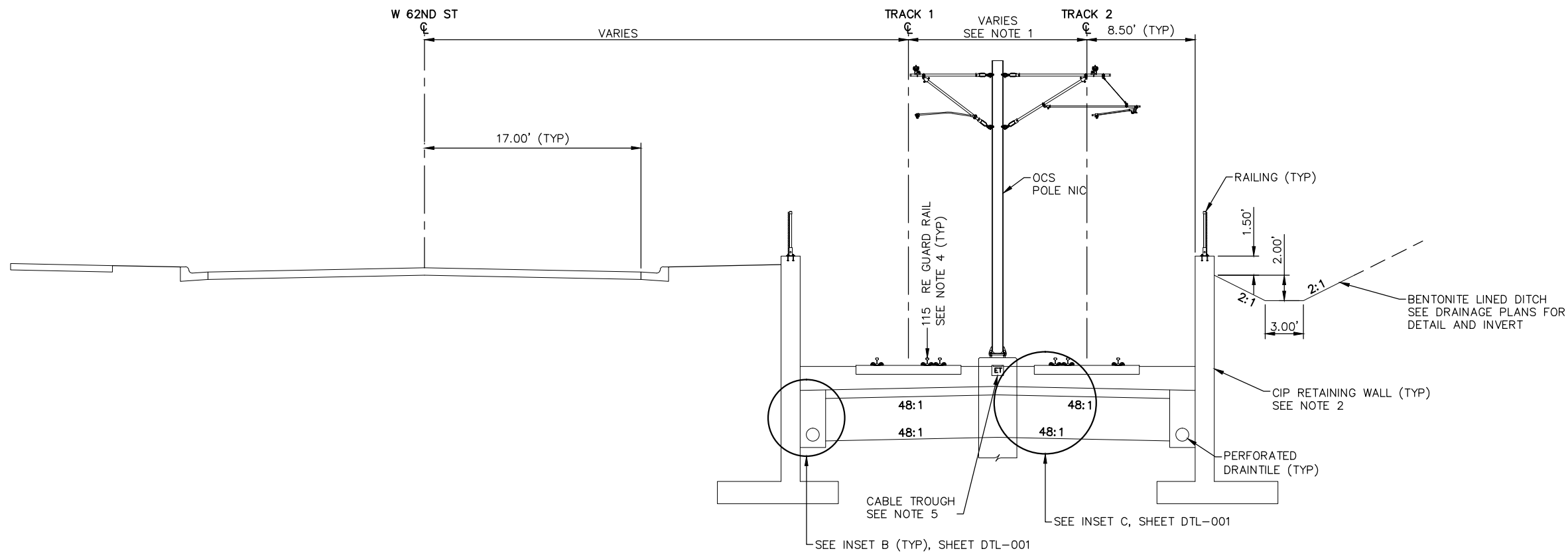
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

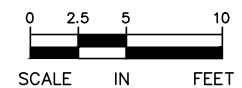
SHEET NAME: W2-TRK-TYP - 031

Sep. 21 2015 01:54 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

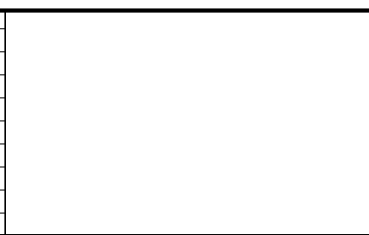
- NOTES:
1. TRACK CENTERS NARROW FROM 20.00' TO 19.50' BETWEEN STA. 2302+21.00 AND 2302+89.89.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE DRAINAGE PLANS FOR GUIDEWAY DRAINAGE SCHEMATIC AT PORTAL AREA.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2302+21.00 TO 2305+00.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

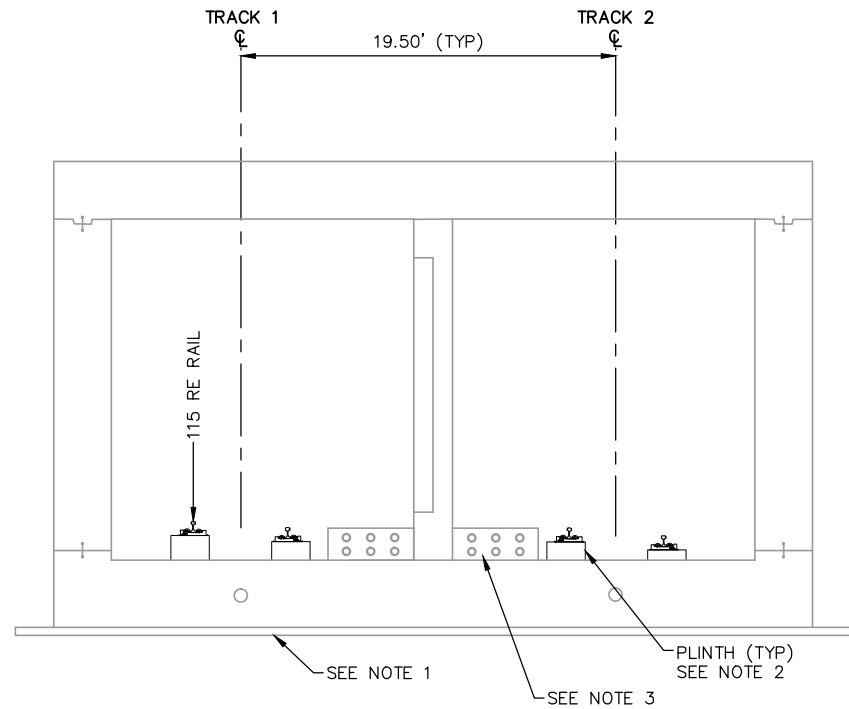
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 032**

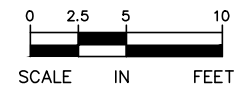
**SHEET**  
**68**  
**OF**  
**189**



Sep. 21 2015 01:54 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
- 1. Mn/DOT BRIDGE CBR27W33. SEE TUNNEL PLANS.
  - 2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  - 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



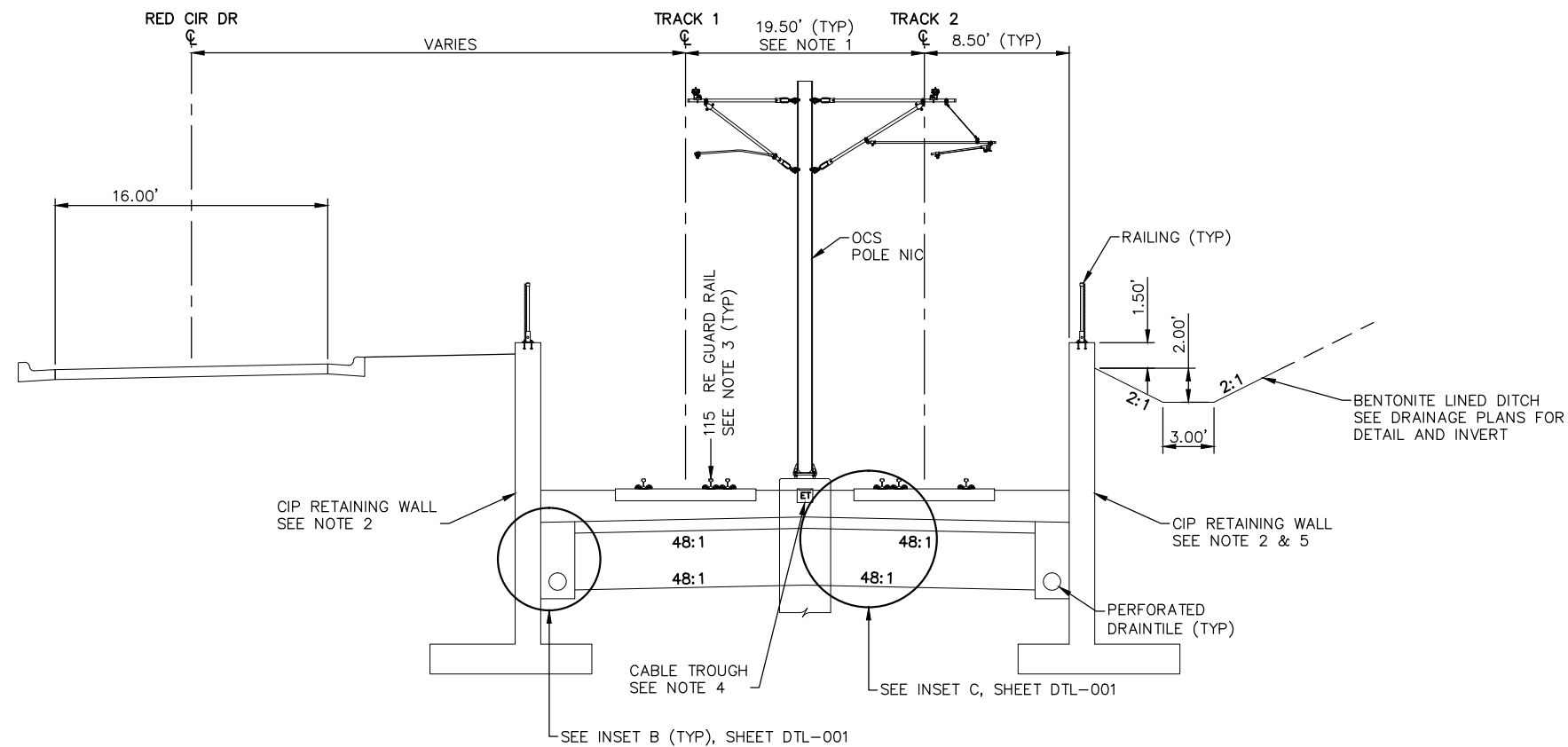
TYPICAL SECTION  
STA. 2305+00.00 TO 2310+82.00



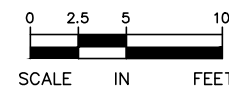
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>	<div><div>METROPOLITAN COUNCIL</div><div>SOUTHWEST Green Line Light Rail Extension</div></div>	CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS		DISCIPLINE: TRACK	SHEET NAME: W2-TRK-TYP - 033	SHEET 69 OF 189			
								60% SUBMISSION - 09/28/15							

Sep. 21 2015 01:54 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

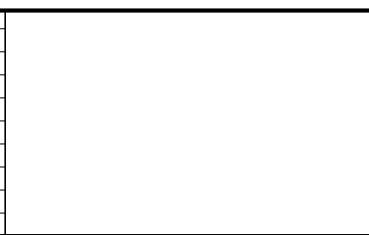
- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-211. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  5. RETAINING WALL ENDS AT STA. 2312+55.80.



TYPICAL SECTION  
STA. 2310+82.00 TO 2313+50.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

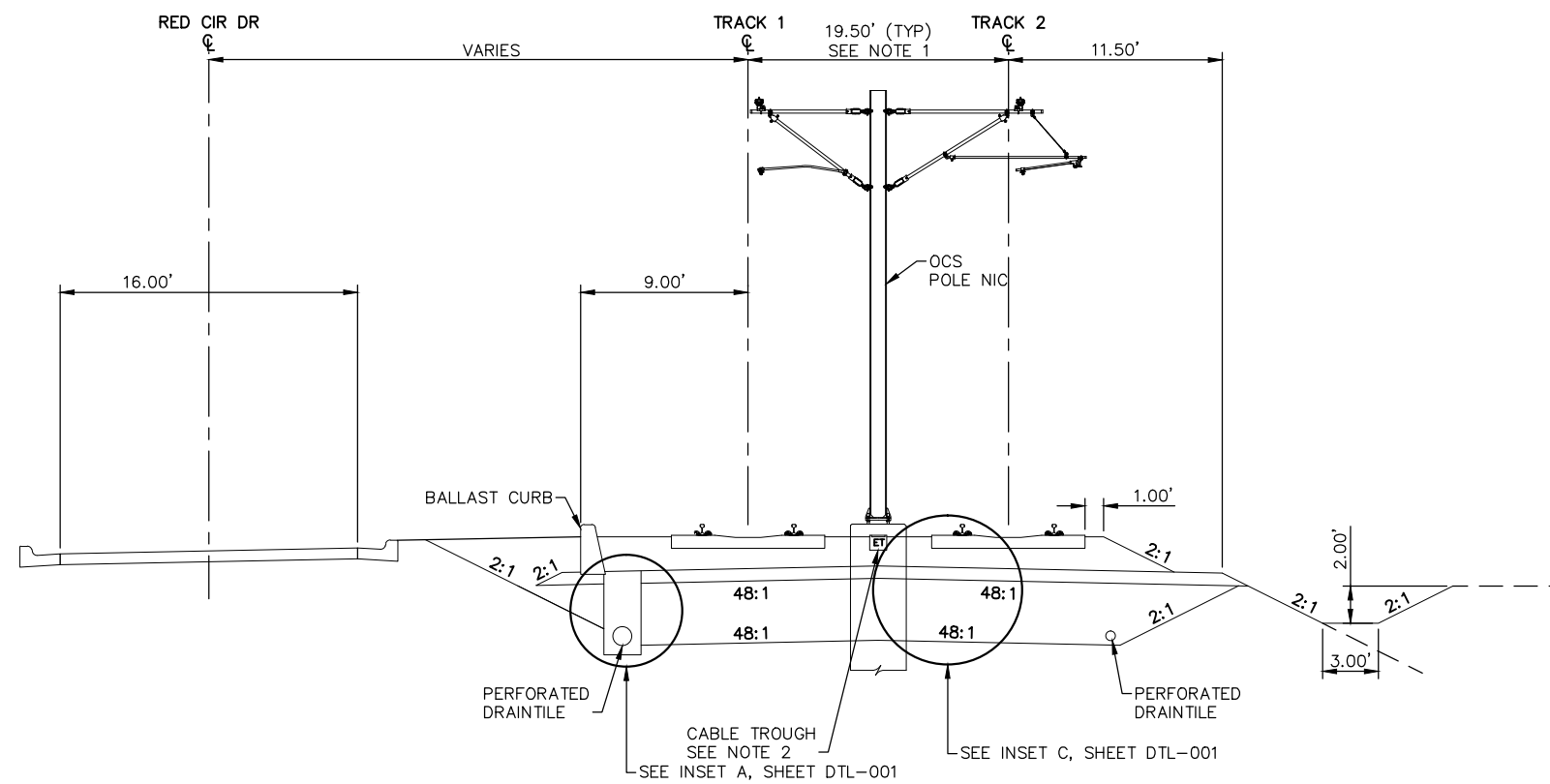
DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 034

SHEET  
70  
OF  
189

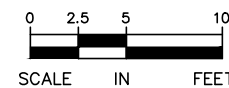


Sep. 21 2015 01:54 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W2-212. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2313+50.00 TO 2314+77.93



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

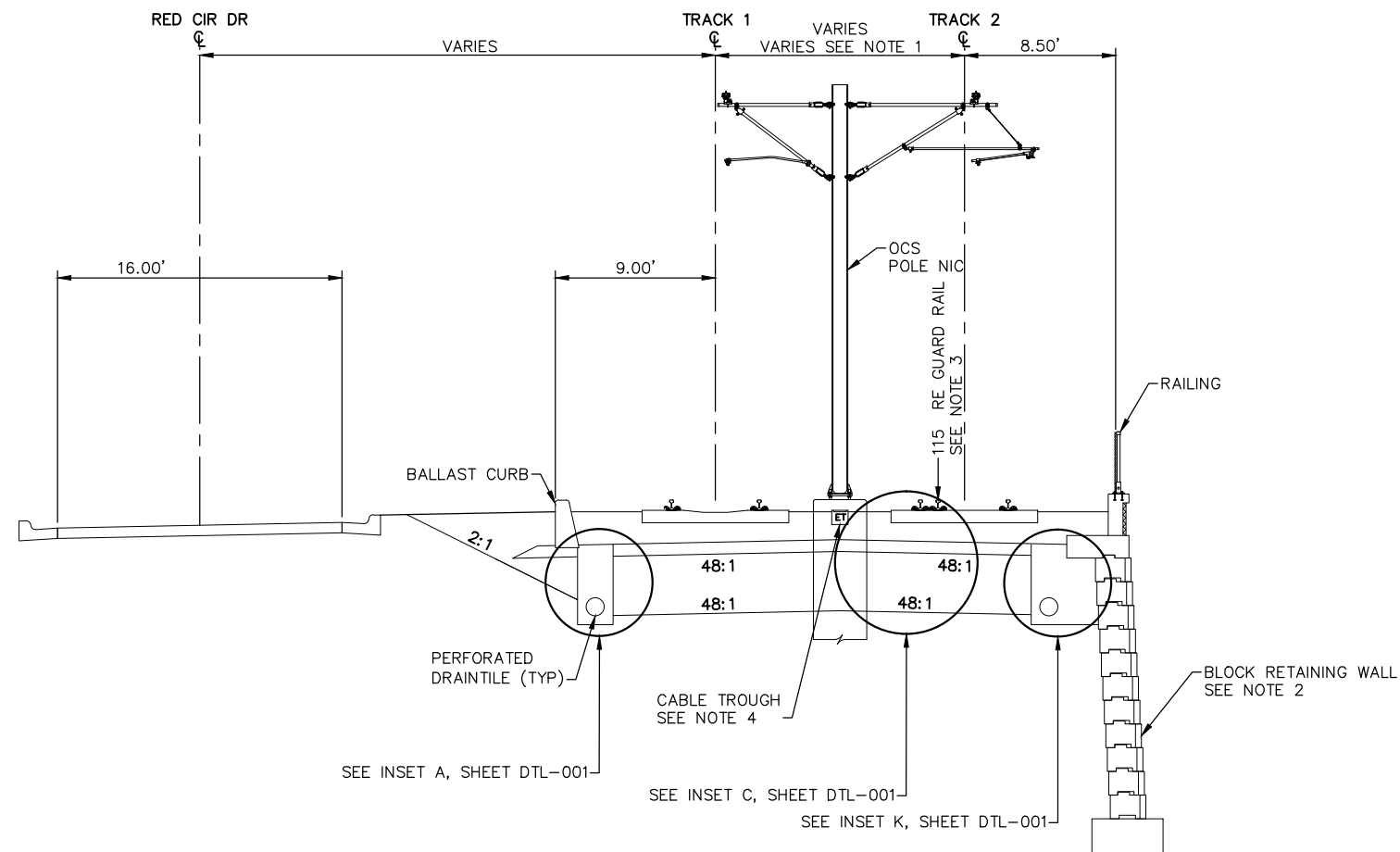
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 035**

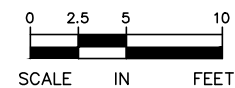
**SHEET**  
**71**  
**OF**  
**189**

Sep. 21 2015 01:55 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 19.50' TO 19.28' BETWEEN STA. 2314+78.00 AND 2315+55.74.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2314+77.93 TO 2315+55.74



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



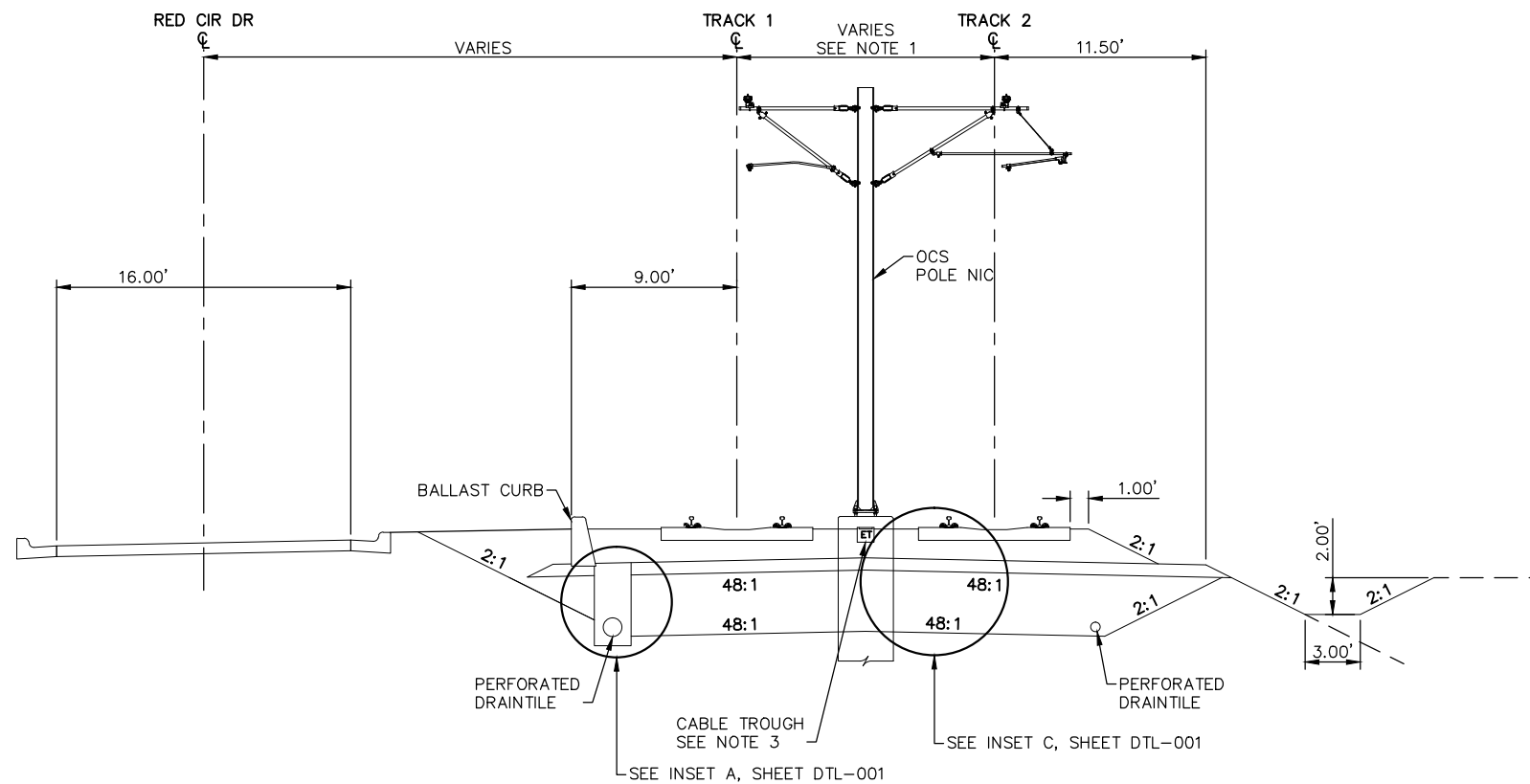
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W2-TRK-TYP - 036

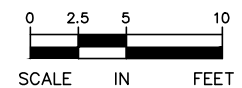
SHEET  
72  
OF  
189

Sep. 21 2015 01:55 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:**
1. TRACK CENTERS NARROW FROM 19.24' TO 17.82' BETWEEN STA. 2315+55.74 AND 2317+50.00
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BREN RD W. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2315+55.74 TO 2317+50.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

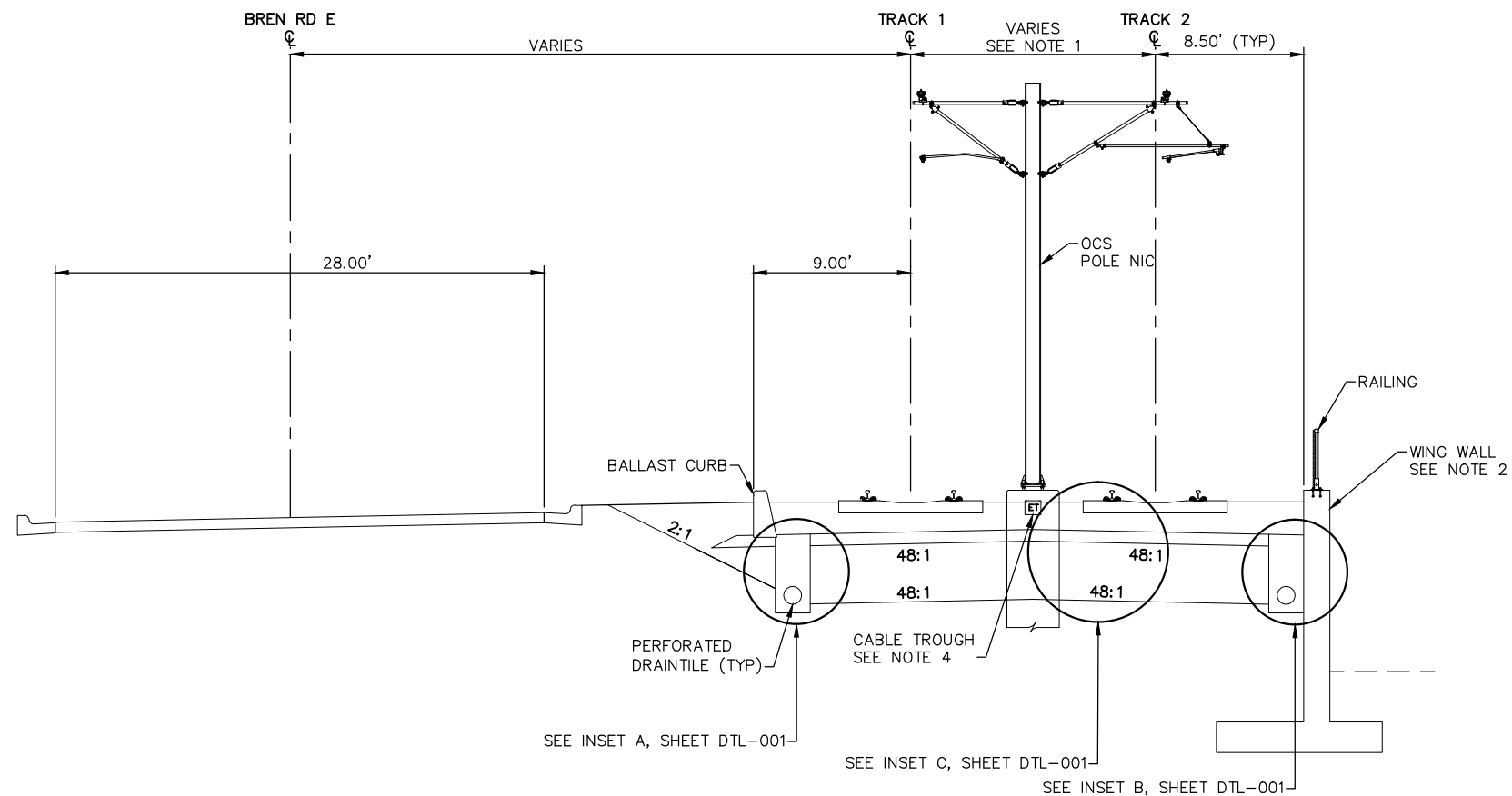
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-TYP - 037**

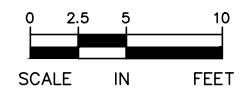
**SHEET**  
**73**  
**OF**  
**189**

Sep. 21 2015 01:55 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 17.82' TO 17.59' BETWEEN STA. 2317+50.00 AND 2319+00.00.
  2. SEE BRIDGE PLANS FOR WING WALL DETAILS.
  3. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BREN RD W. SEE TRACK PLANS FOR CROSSING LIMITS. SEE SHEET XX FOR DETAILS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2317+50.00 TO 2319+00.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



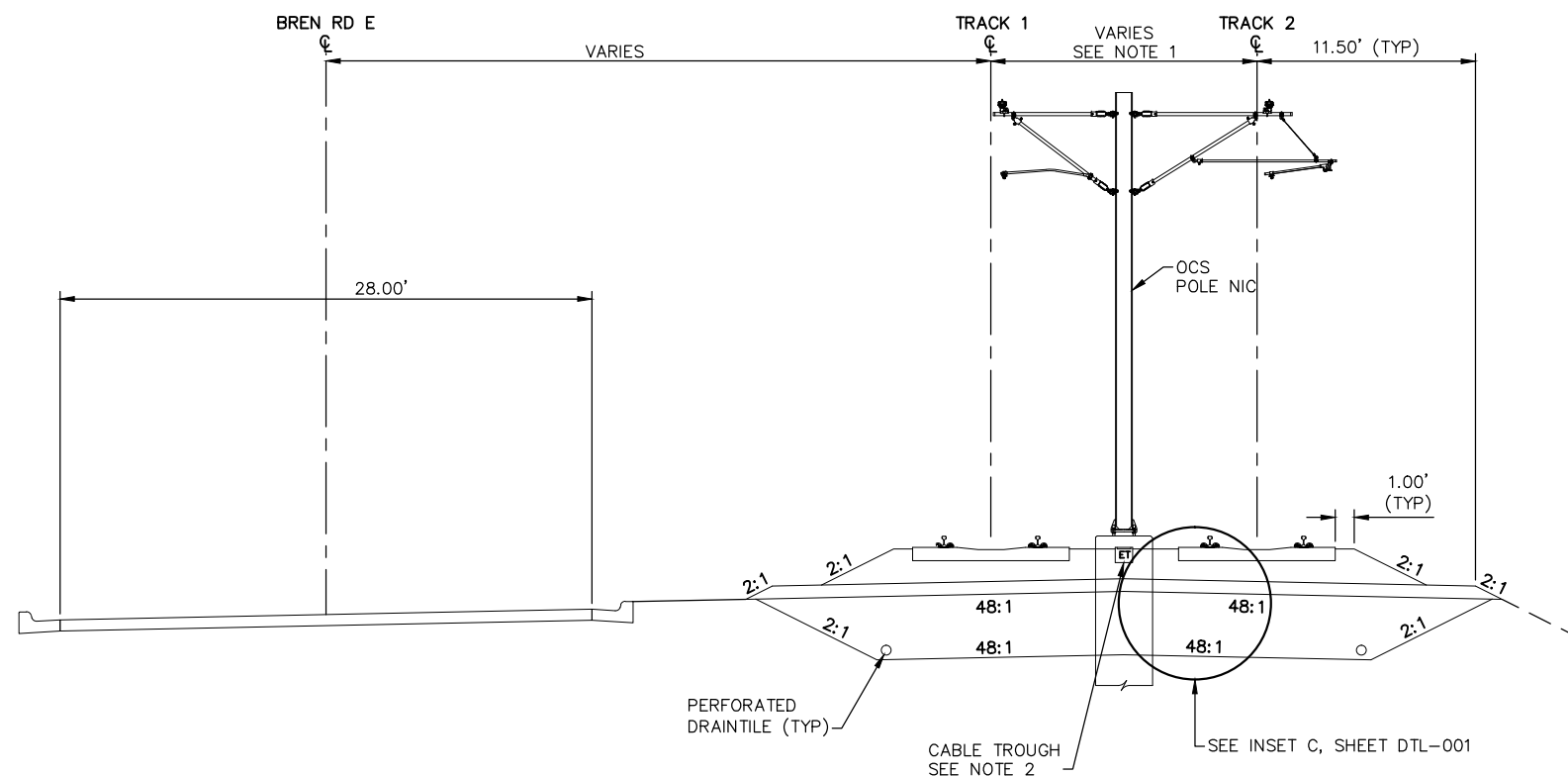
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK  
SHEET NAME: W2-TRK-TYP - 038

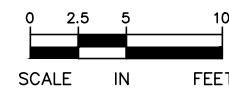
SHEET  
74  
OF  
189

Sep. 21 2015 01:55 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-TYP.dwg By: MourisBM

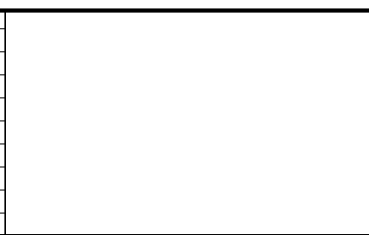
- NOTES:
1. TRACK CENTERS WIDEN FROM 17.59' TO 21.90' BETWEEN STA. 2319+00.00 AND 2320+55.80.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2319+00.00 TO 2320+55.80



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

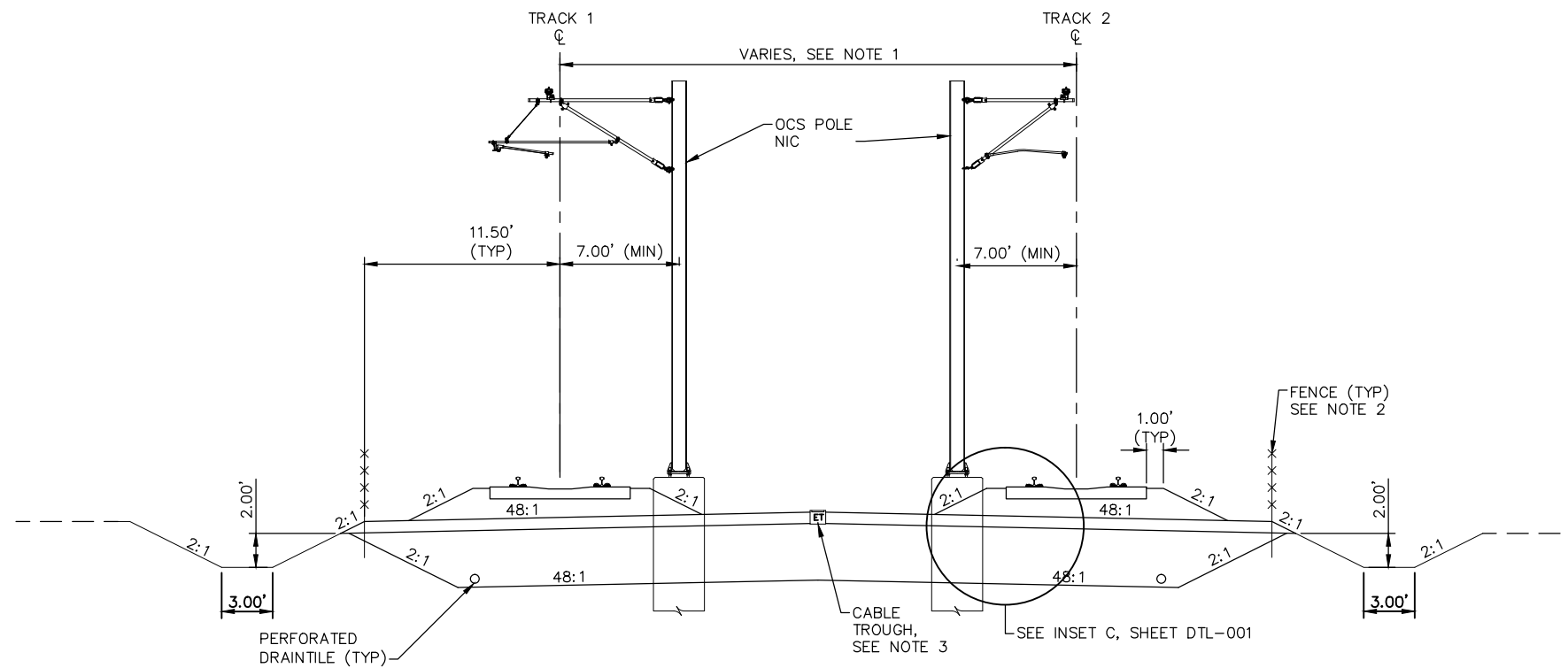
DISCIPLINE: TRACK

SHEET NAME: W2-TRK-TYP - 039

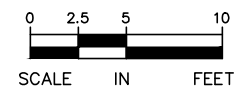
SHEET  
75  
OF  
189

Sep. 21 2015 02:03 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

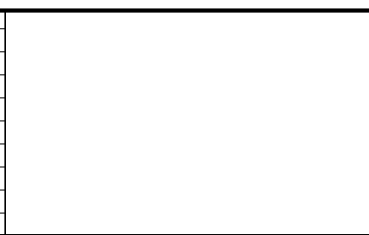
- NOTES:
1. TRACK CENTERS WIDEN FROM 21.90' TO 30.38' BETWEEN STA. 2335+00.00 AND 2338+62.79.
  2. FENCE ON TRACK 2 SIDE BEGINS AT STA. 2336+54.16.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2335+00.00 TO STA. 2338+97.06



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

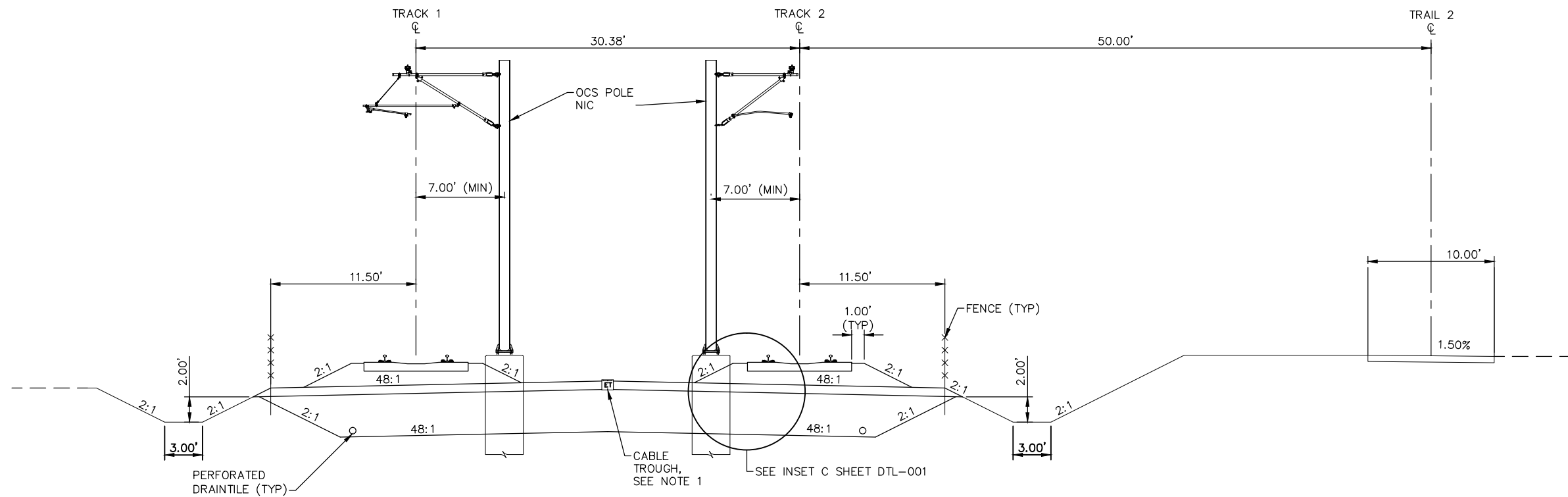
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 001**

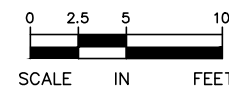
**SHEET**  
**76**  
**OF**  
**189**

Sep. 21 2015 02:03 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

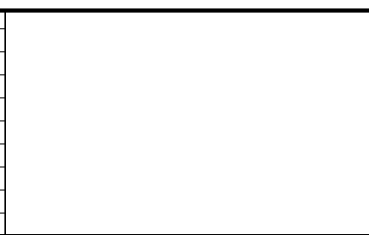
NOTES:  
1. SEE SYSTEMS PLANS FOR DUCTBANK  
AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2338+97.06 TO STA. 2339+92.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



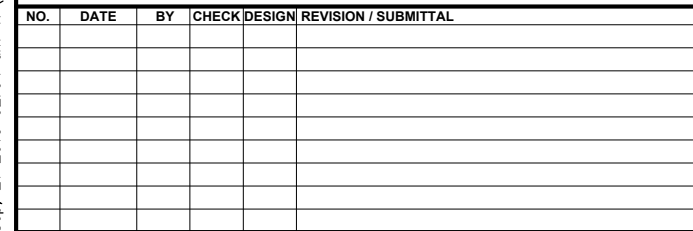
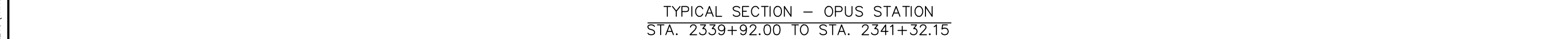
**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 002**

**SHEET**  
**77**  
**OF**  
**189**

- Sep, 21 2015 02:04 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

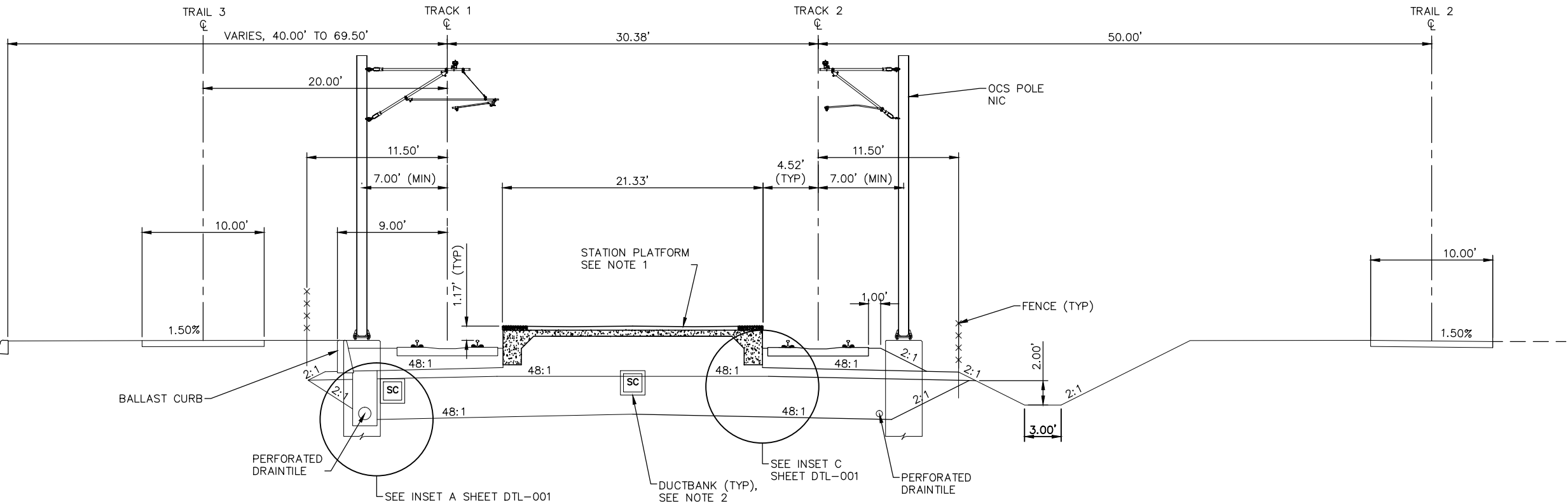


DISCIPLINE:	SHEET NAME:
<b>TRACK</b>	<b>W3-TRK-TYP - 003</b>

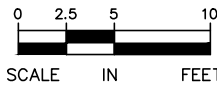
**SHEET**  
**78**  
**OF**  
**189**



- NOTES:
1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION - OPUS STATION  
STA. 2341+32.15 TO STA. 2342+62.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

**AECOM**

60% SUBMISSION - 09/28/15



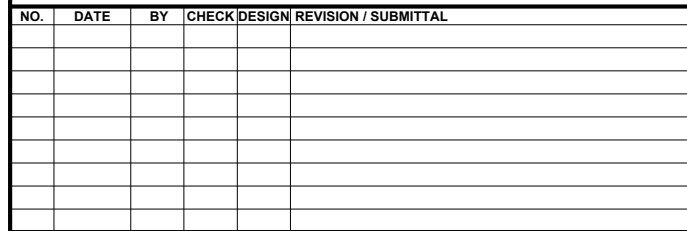
**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

DISCIPLINE:  
**TRACK**

SHEET NAME:  
**W3-TRK-TYP - 004**

**SHEET**  
**79**  
**OF**  
**189**

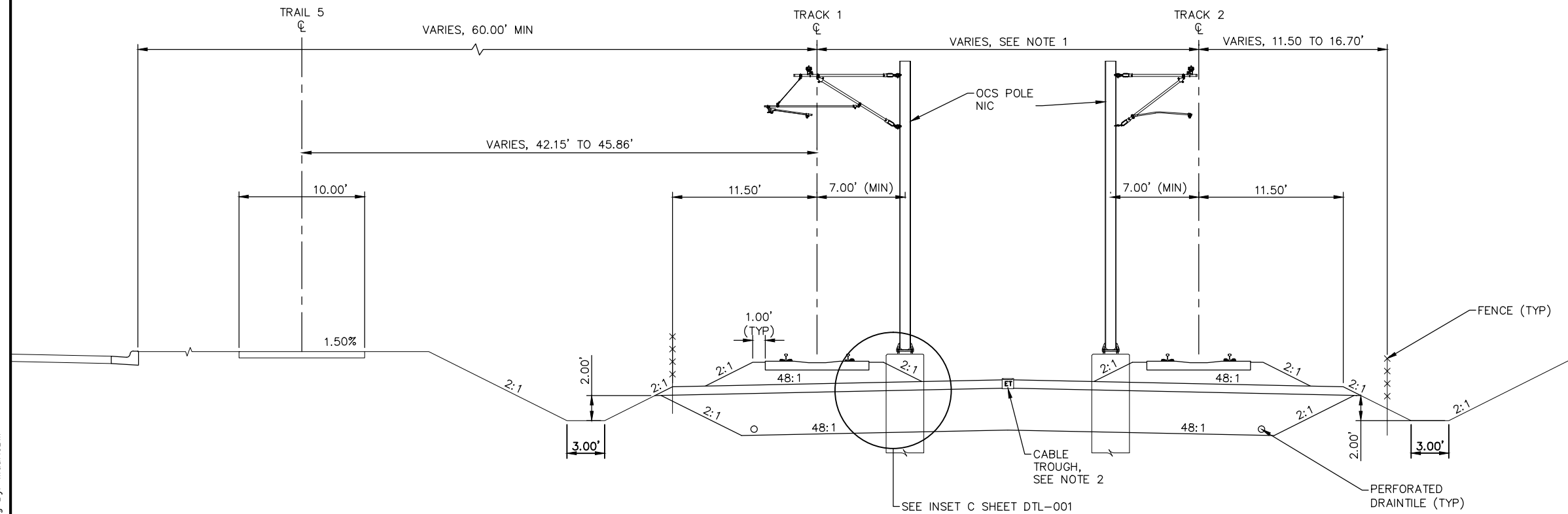
- TYPICAL SECTION  
STA. 2342+62.00 TO 2344+46.19



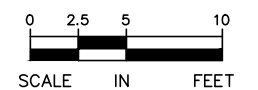
DISCIPLINE:	SHEET NAME:
<b>TRACK</b>	<b>W3-TRK-TYP - 005</b>



**SHEET**  
**80**  
**OF**  
**189**

- NOTES:**
1. TRACK CENTERS NARROW FROM 27.38' TO 20.00 BETWEEN STA. 2344+46.19 AND 2345+58.58.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



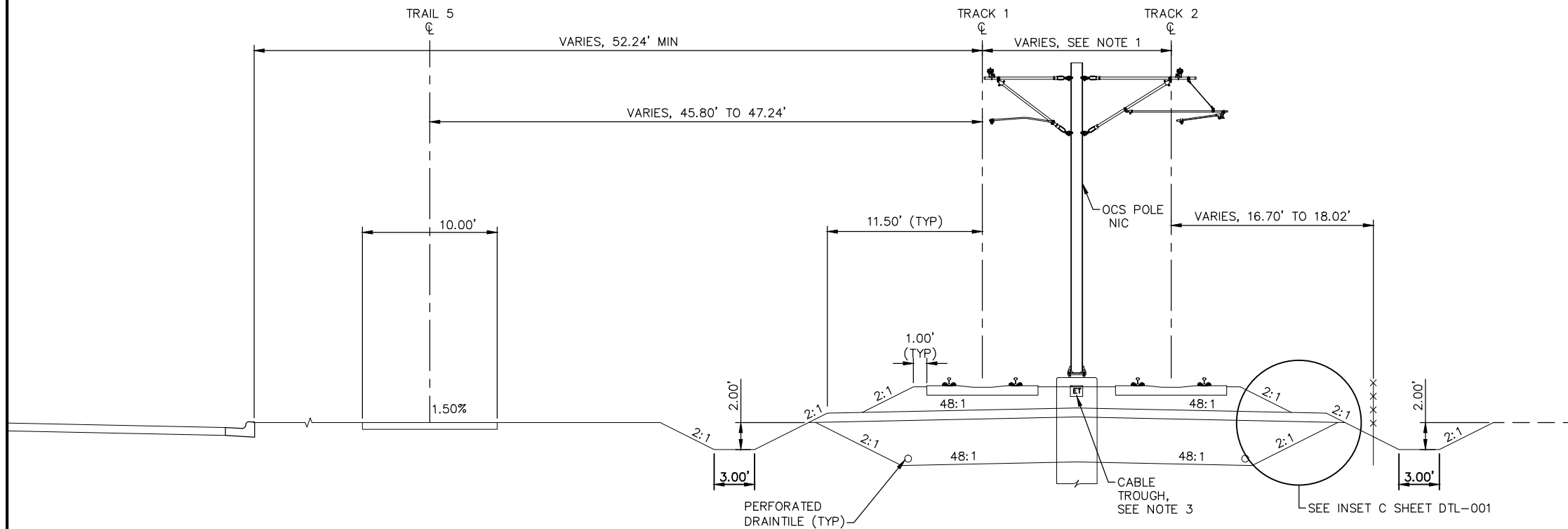
TYPICAL SECTION  
STA. 2344+46.19 TO 2345+58.58



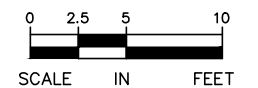
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	AECOM		 METROPOLITAN C O U N C I L		 SOUTHWEST Green Line LRT Extension		CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS		SHEET
														81
														OF
														189
						60% SUBMISSION - 09/28/15				DISCIPLINE: TRACK		SHEET NAME: W3-TRK-TYP - 006		

Sep. 21 2015 02:05 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 20.00' TO 15.50' BETWEEN STA. 2245+58.58 TO 2346+36.84.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BREN RD E. SEE TRACK PLANS FOR CROSSING LIMITS. SEE SHEET XX FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2345+58.58 TO STA. 2346+33.56



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

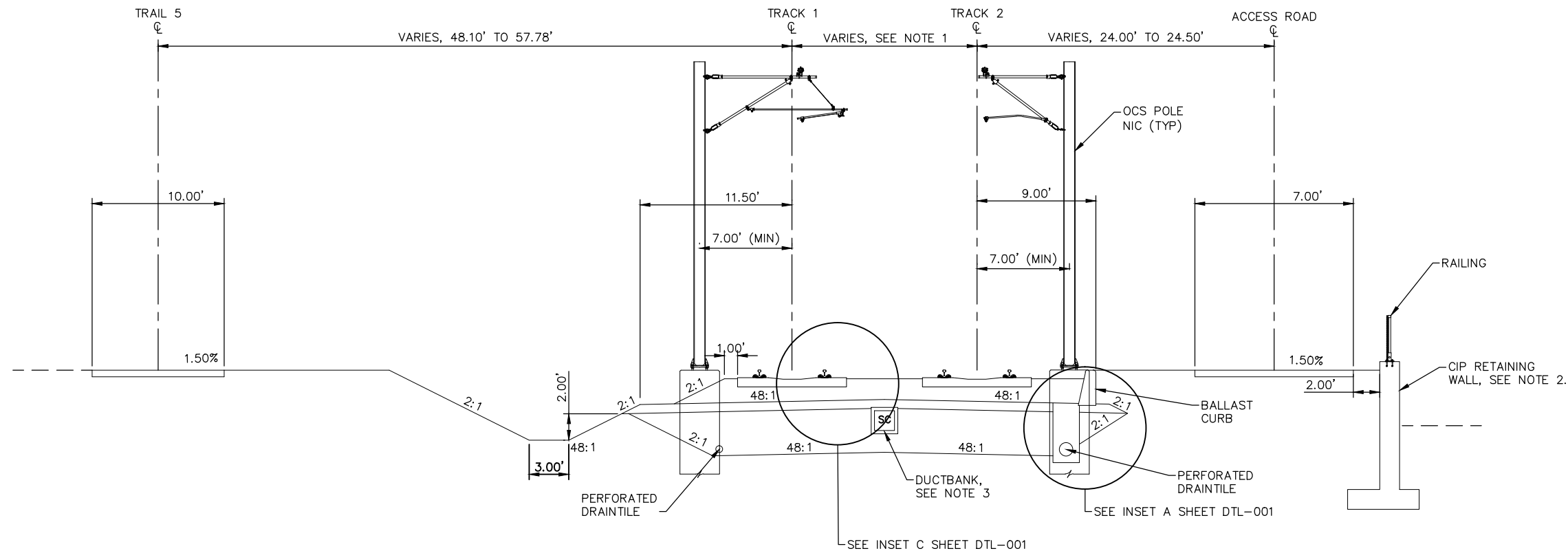


CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS	
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-TYP - 007

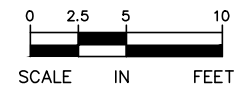
SHEET  
82  
OF  
189

Sep. 21 2015 02:05 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

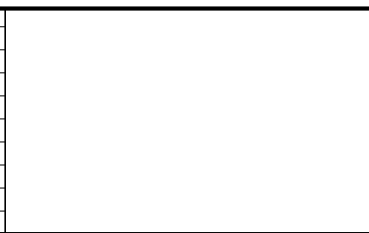
- NOTES:
1. TRACK CENTERS NARROW FROM 15.50' TO 14.00' BETWEEN STA. 2346+36.84 AND 2347+38.37.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BREN ROAD W. SEE TRACK PLANS AND DETAILS.



TYPICAL SECTION  
STA. 2346+33.56 TO STA. 2347+47.45



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

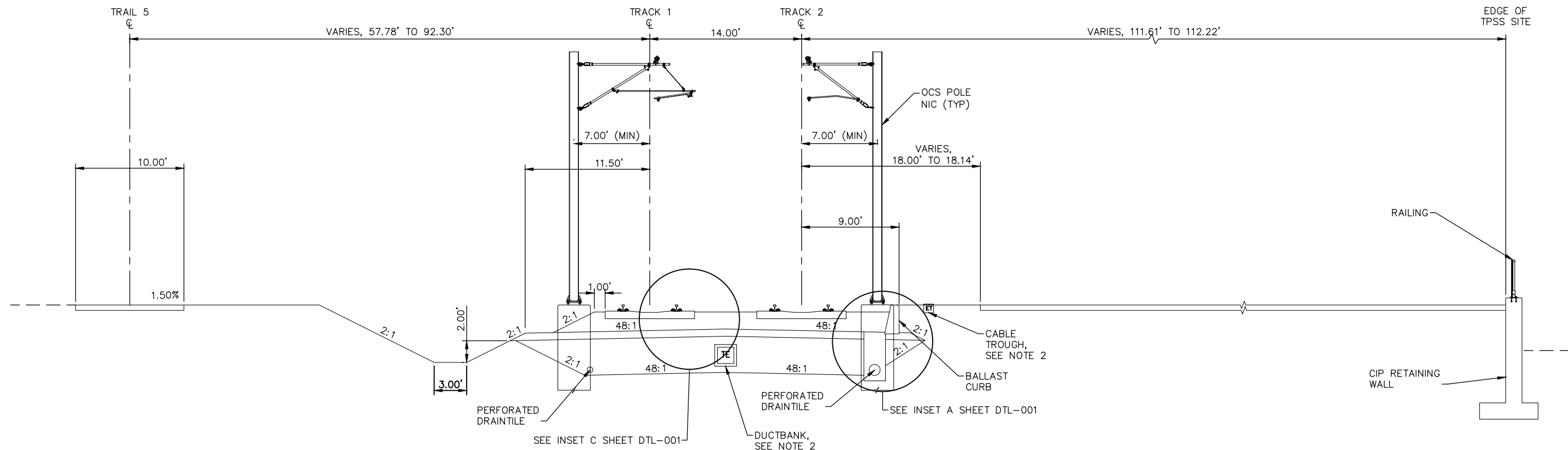
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK  
SHEET NAME: W3-TRK-TYP - 008

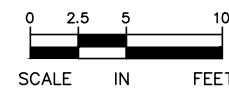
SHEET  
83  
OF  
189

Sep. 21 2015 02:05 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

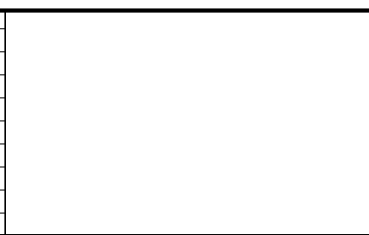
- NOTES:
1. SPECIAL TRACKWORK NOT ILLUSTRATED.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2347+47.45 TO STA. 2348+25.79



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

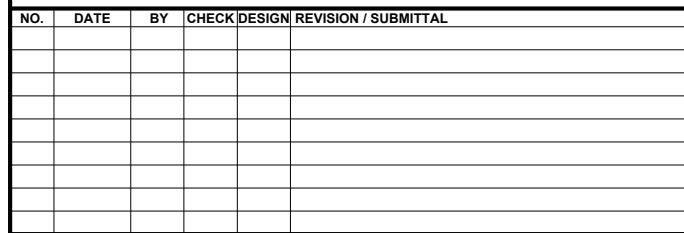
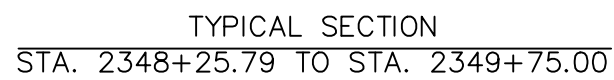
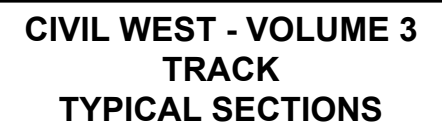
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 009

SHEET  
84  
OF  
189

- Sep, 21 2015 02:06 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

**AECOM**

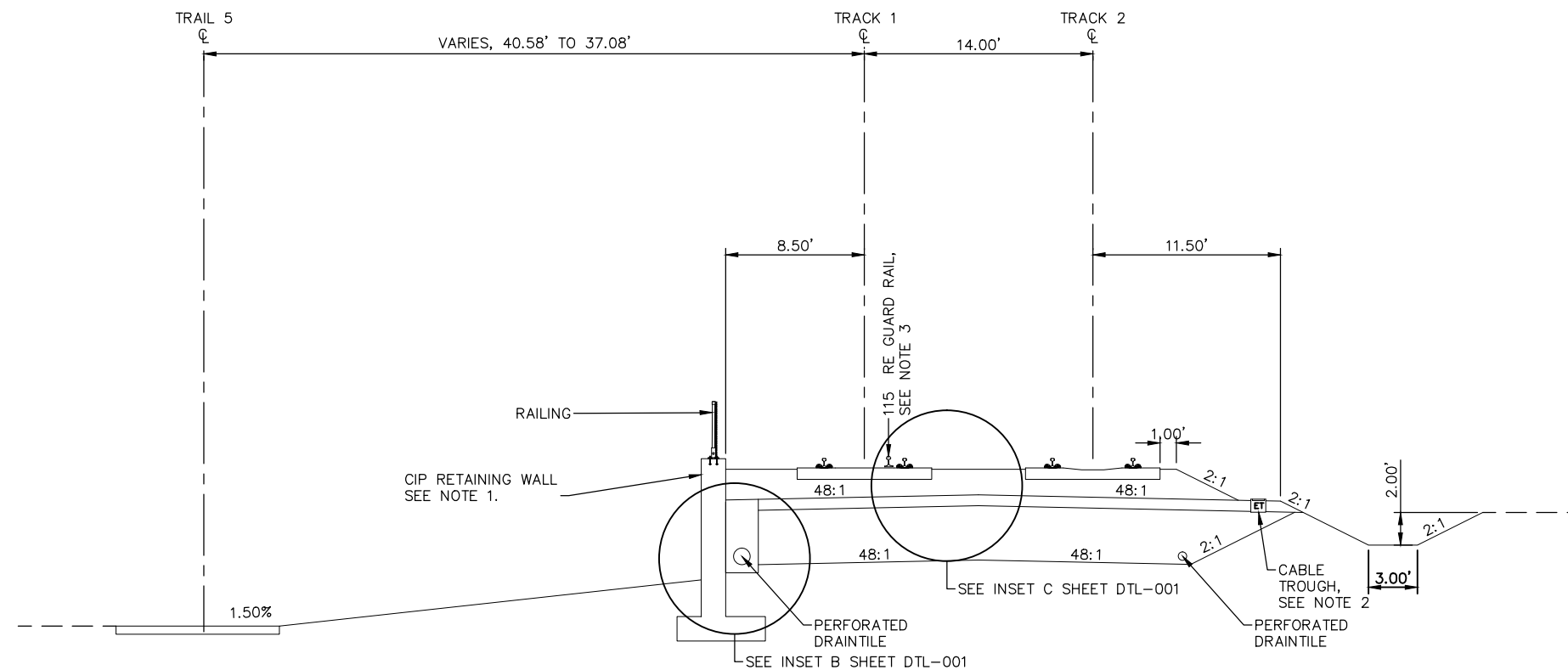
## TRACK

**W3-TRK-TYP - 010**

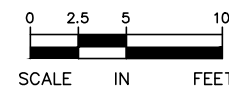
**SHEET**  
**85**  
**OF**  
**189**

Sep. 21 2015 02:06 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



TYPICAL SECTION  
STA. 2349+75.00 TO STA. 2349+91.06



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

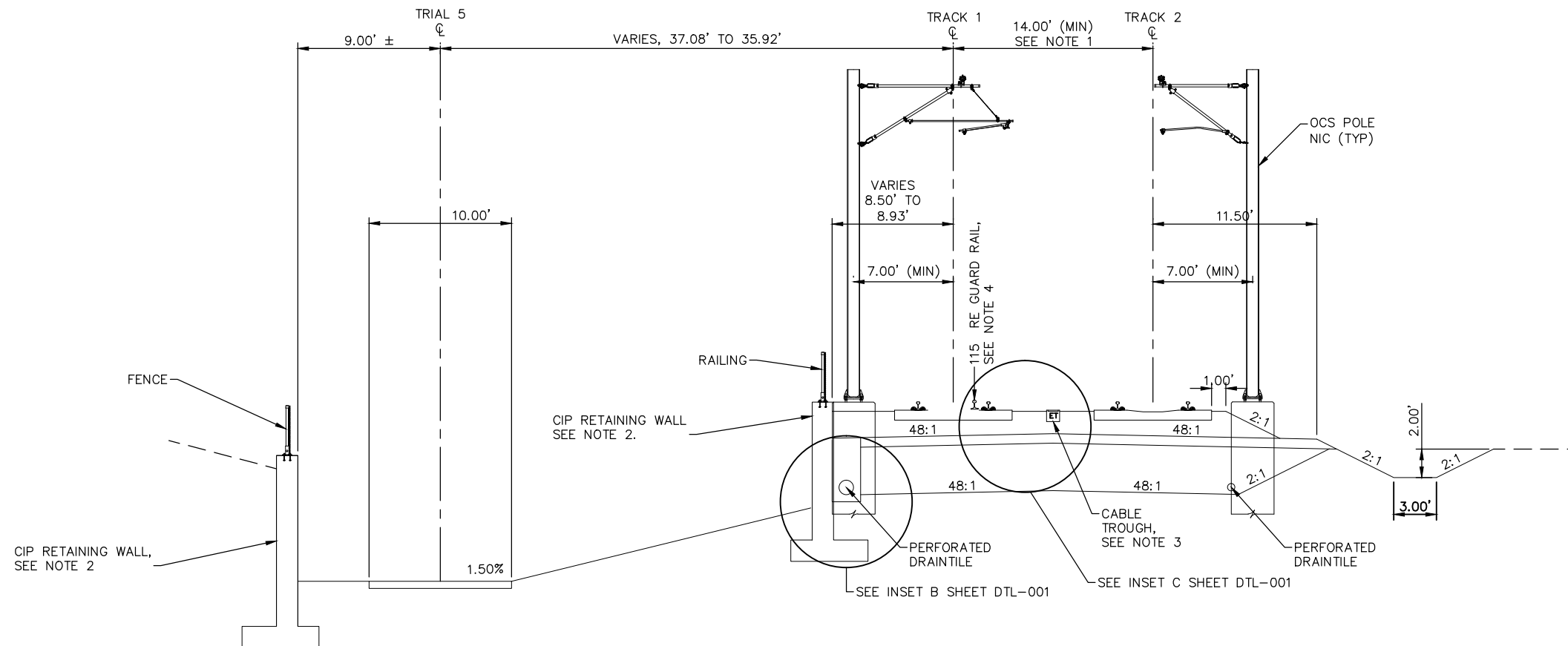
SHEET NAME: W3-TRK-TYP - 011

SHEET  
86  
OF  
189

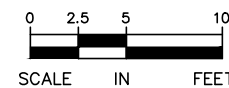


Sep. 21 2015 02:06 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  5. SEE BRIDGE PLANS FOR WING WALL DETAILS.



TYPICAL SECTION  
STA. 2349+91.06 TO STA. 2350+88.96



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

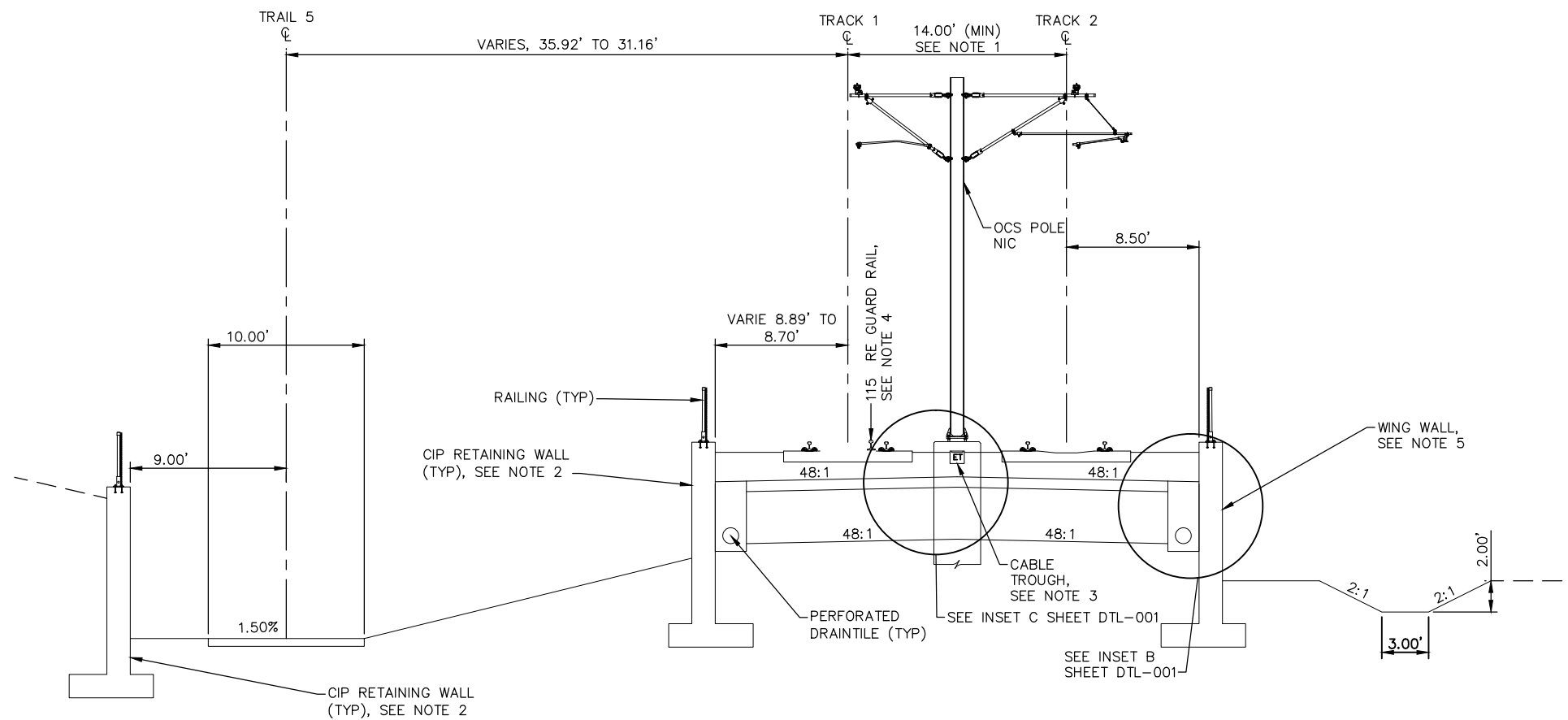
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 012

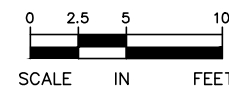
SHEET  
87  
OF  
189

Sep. 21 2015 02:06 am v:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
  5. SEE BRIDGE PLANS FOR WING WALL DETAILS.



TYPICAL SECTION  
STA. 2350+88.96 TO STA. 2351+15.02



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

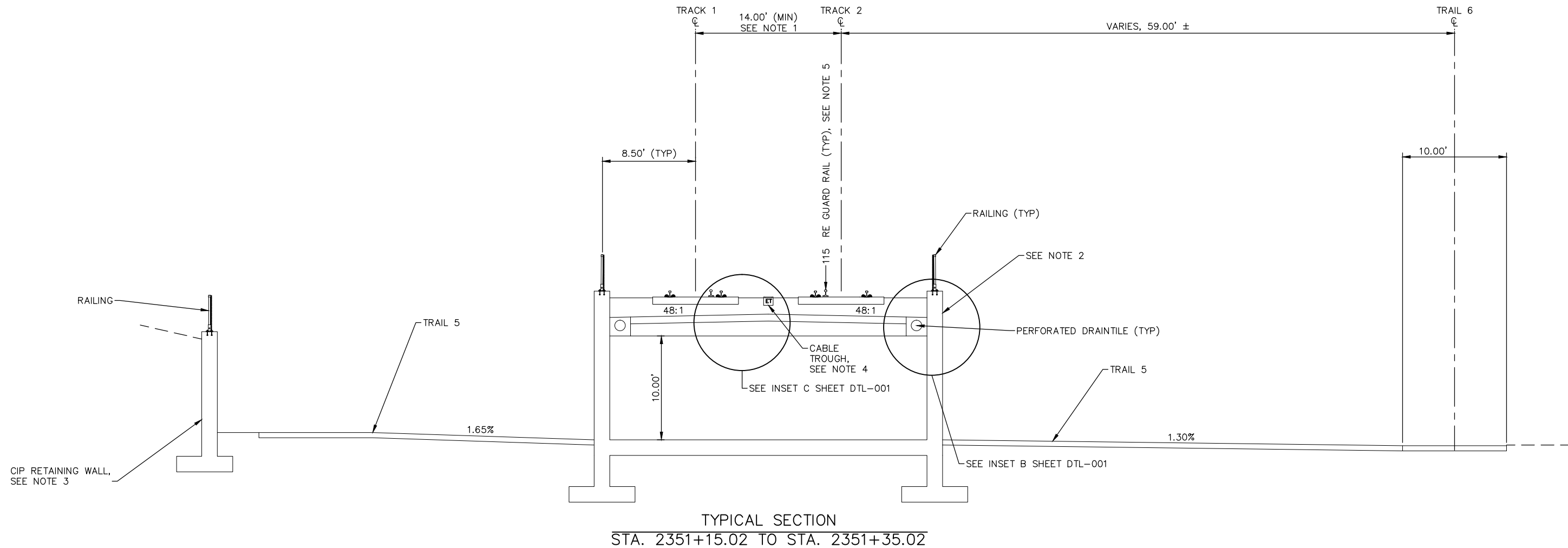
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 013**

**SHEET**  
**88**  
**OF**  
**189**

Sep. 21 2015 02:07 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE R0715. SEE STRUCTURAL PLANS.
  3. SEE RETAINING WALL PLANS FOR DETAILS.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.





NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



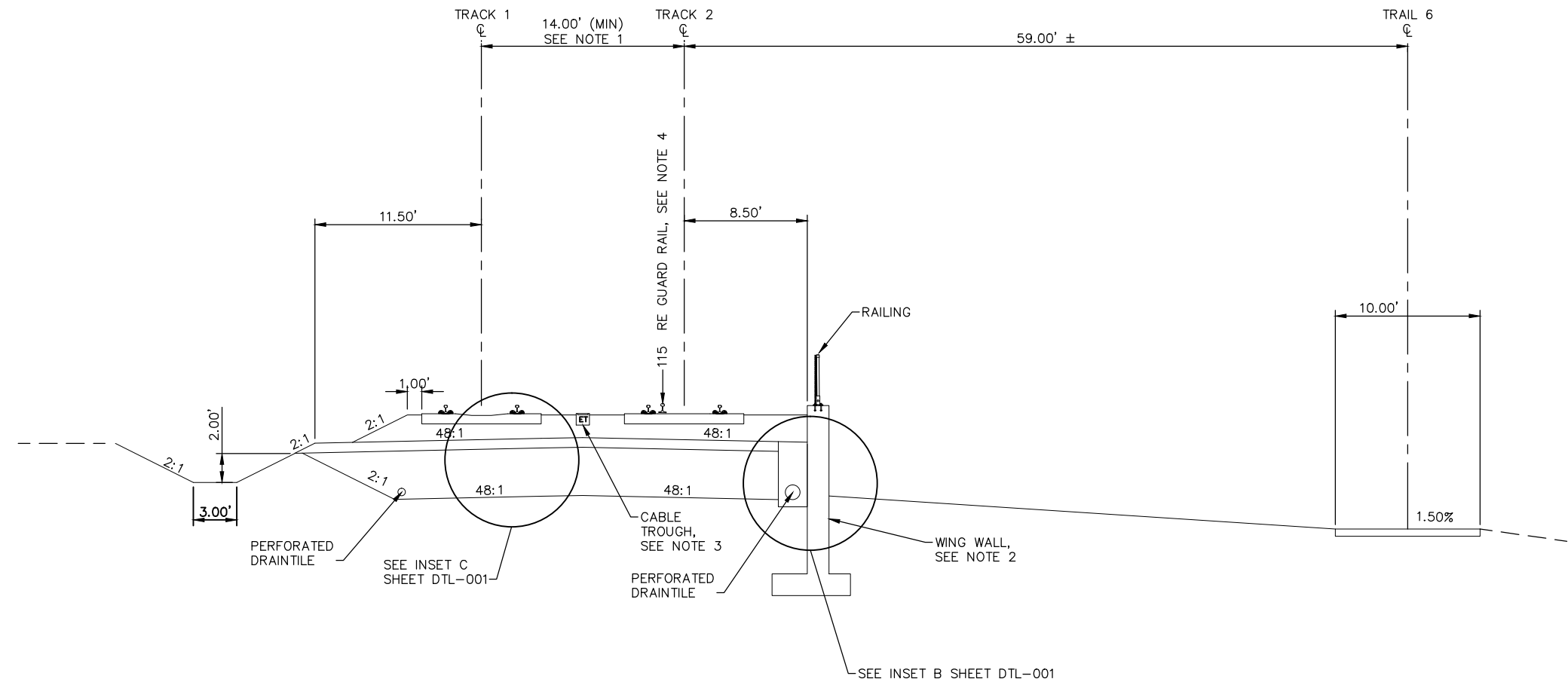
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

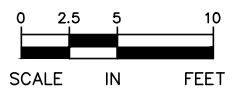
SHEET NAME:  
W3-TRK-TYP - 014




SHEET  
89  
OF  
189

- NOTES:**
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS.
  2. SEE BRIDGE PLANS FOR WING WALL DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



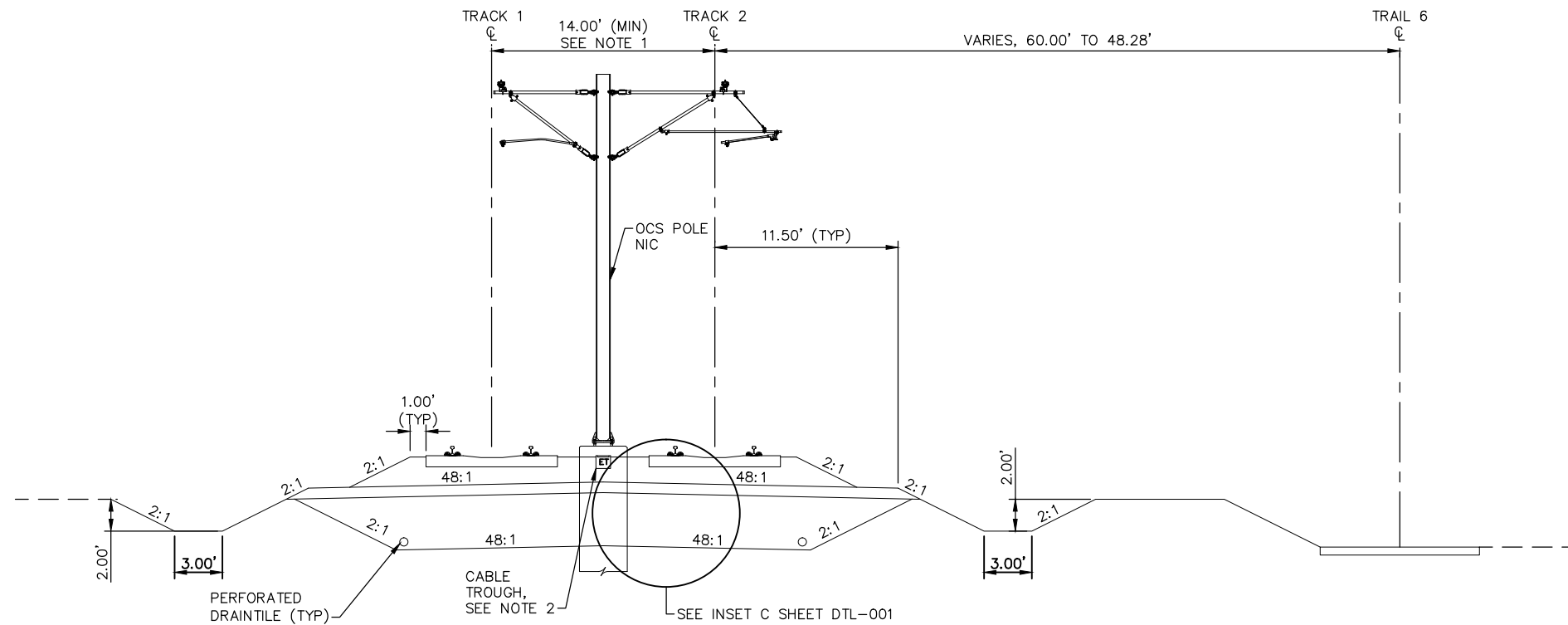
TYPICAL SECTION  
STA. 2351+35.02 TO STA. 2351+61.52



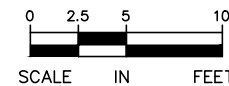
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	  		CIVIL WEST - VOLUME 3		SHEET 90 OF 189
								TRACK		
								TYPICAL SECTIONS		
60% SUBMISSION - 09/28/15						DISCIPLINE:		TRACK	SHEET NAME:	W3-TRK-TYP - 015

Sep. 21 2015 02:07 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

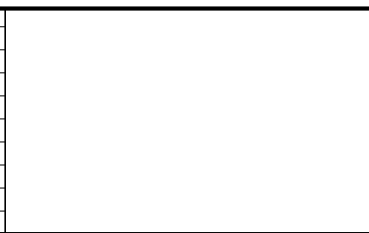
- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2351+61.52 TO STA. 2352+25.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

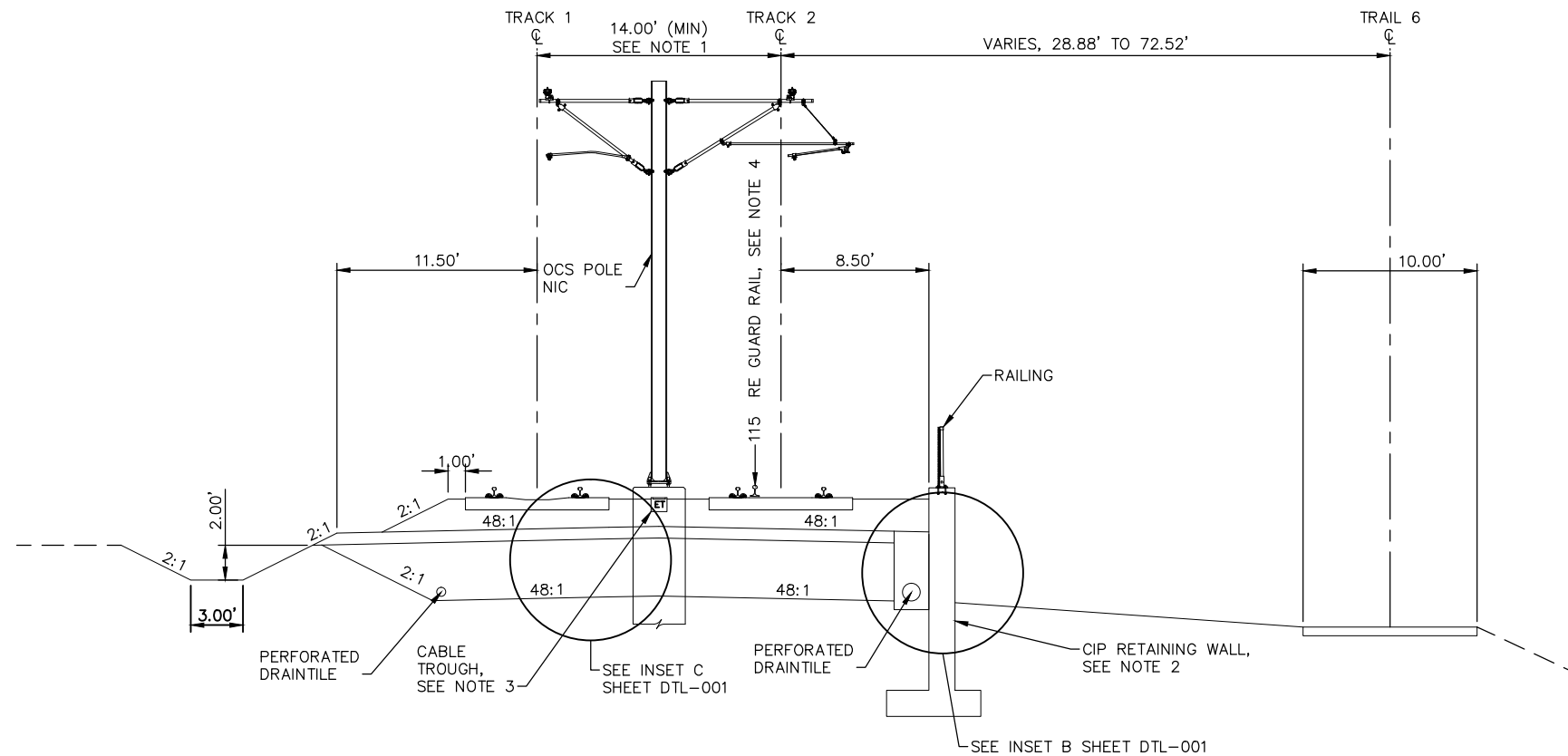
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 016

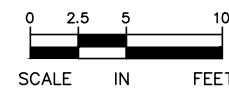
SHEET  
91  
OF  
189

Sep. 21 2015 02:07 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

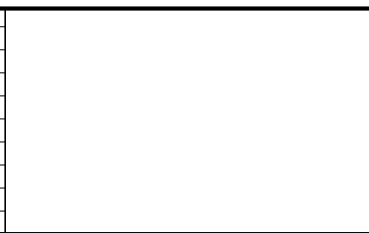
- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



TYPICAL SECTION  
STA. 2352+25.00 TO STA. 2358+50.03



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

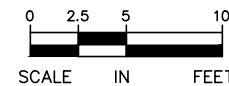
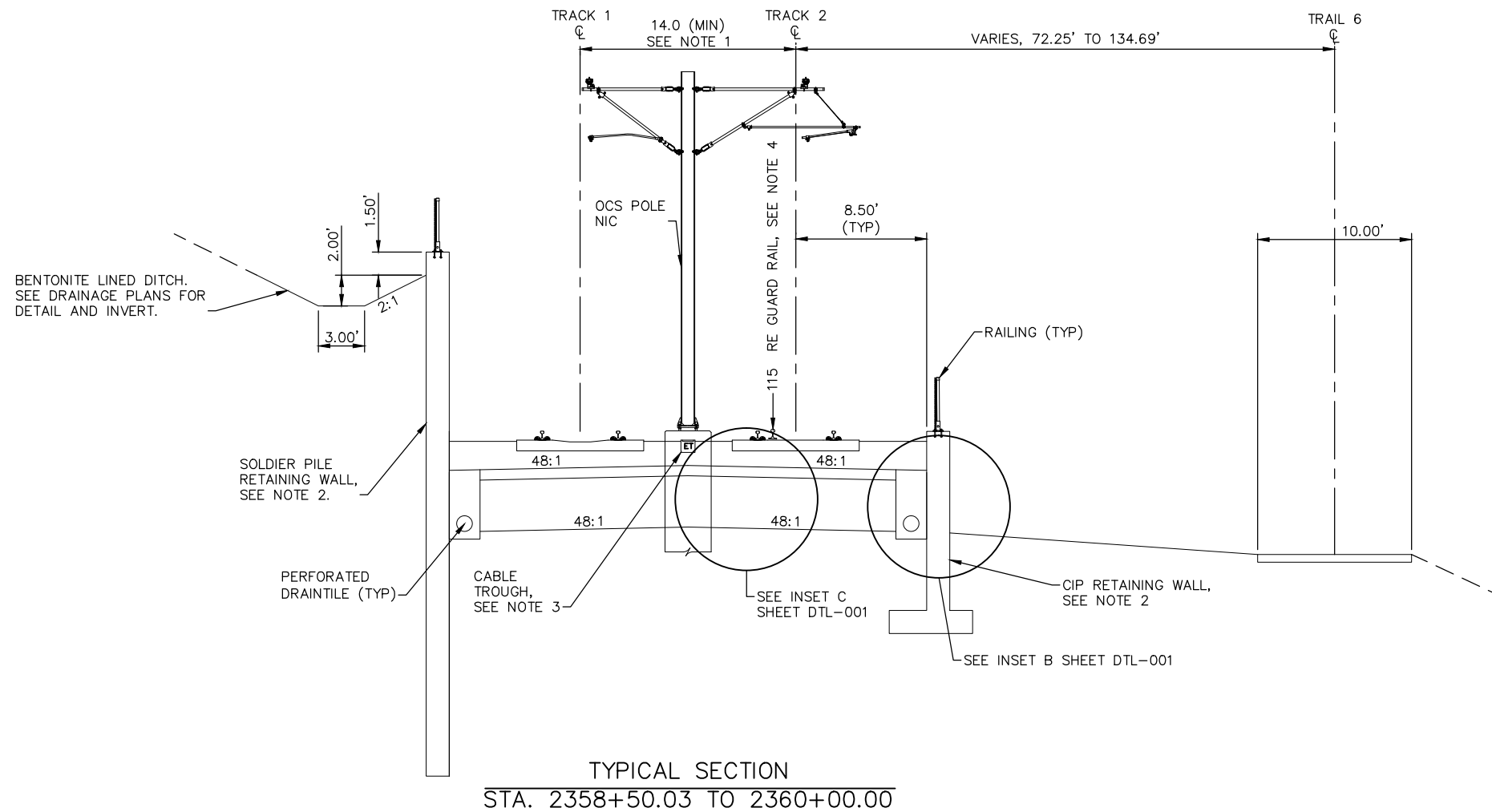
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 017

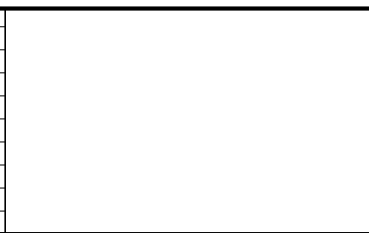
SHEET  
92  
OF  
189

Sep. 21 2015 02:08 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203 SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

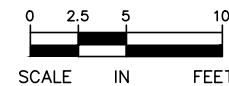
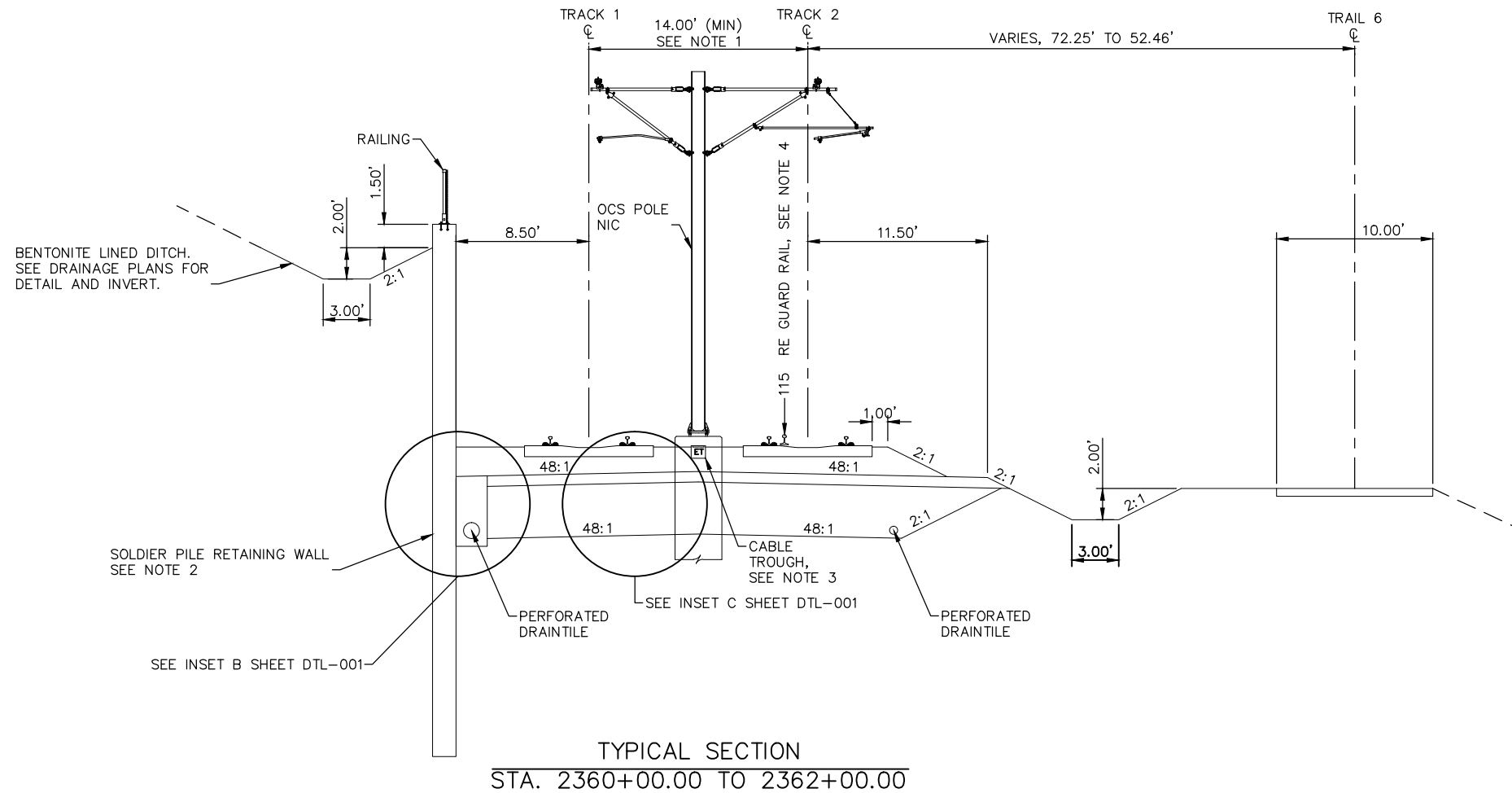
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 018

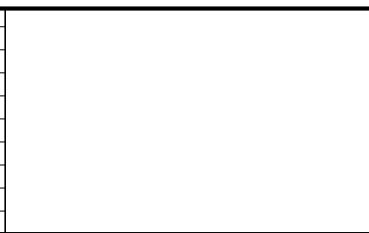
SHEET  
93  
OF  
189

Sep. 21 2015 02:08 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203 SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

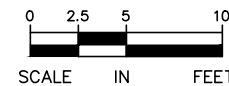
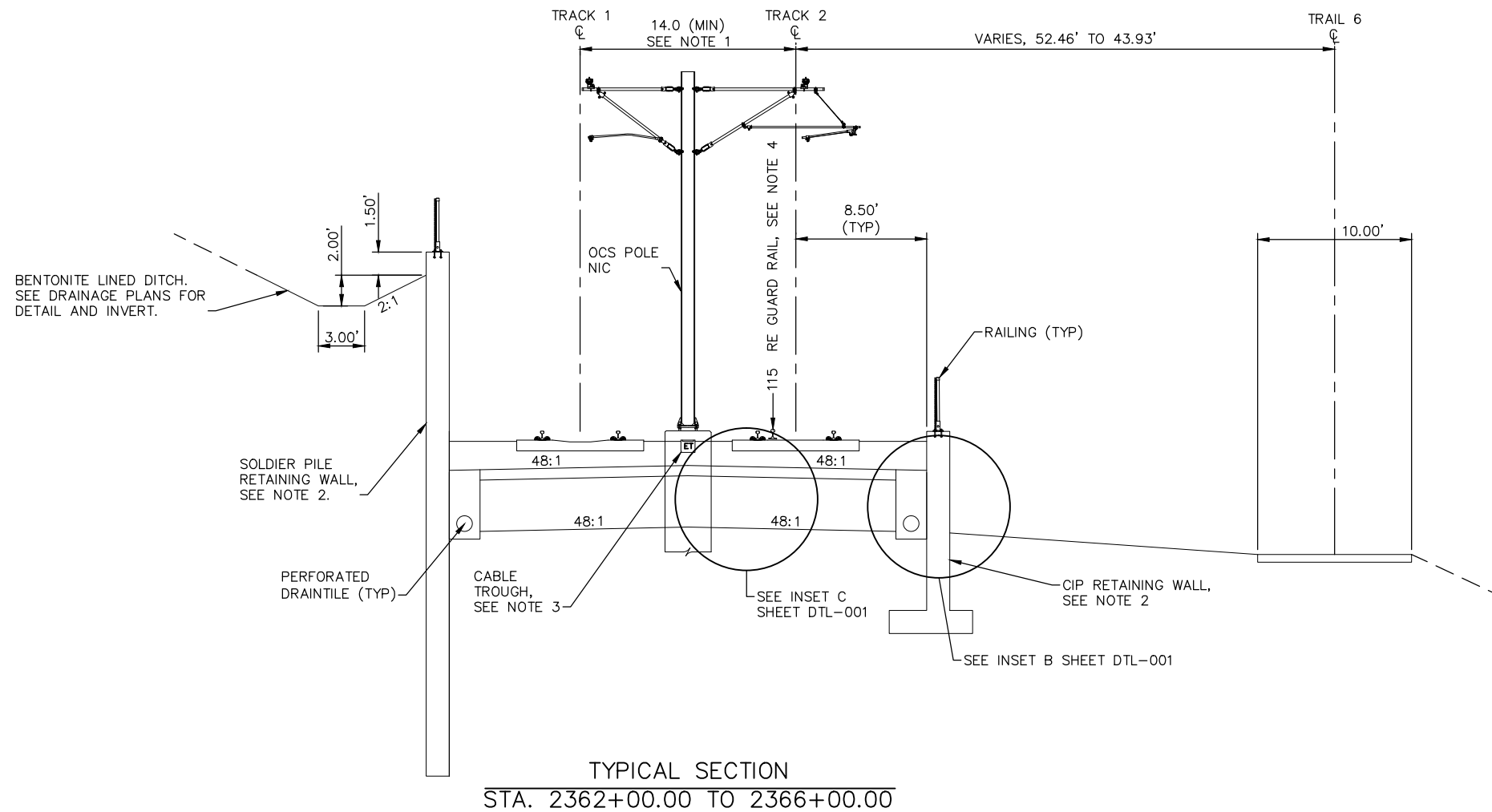
SHEET NAME: W3-TRK-TYP - 019

SHEET  
94  
OF  
189

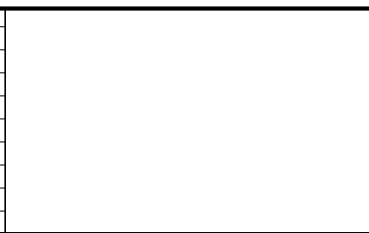


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- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203 SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



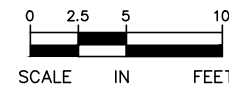
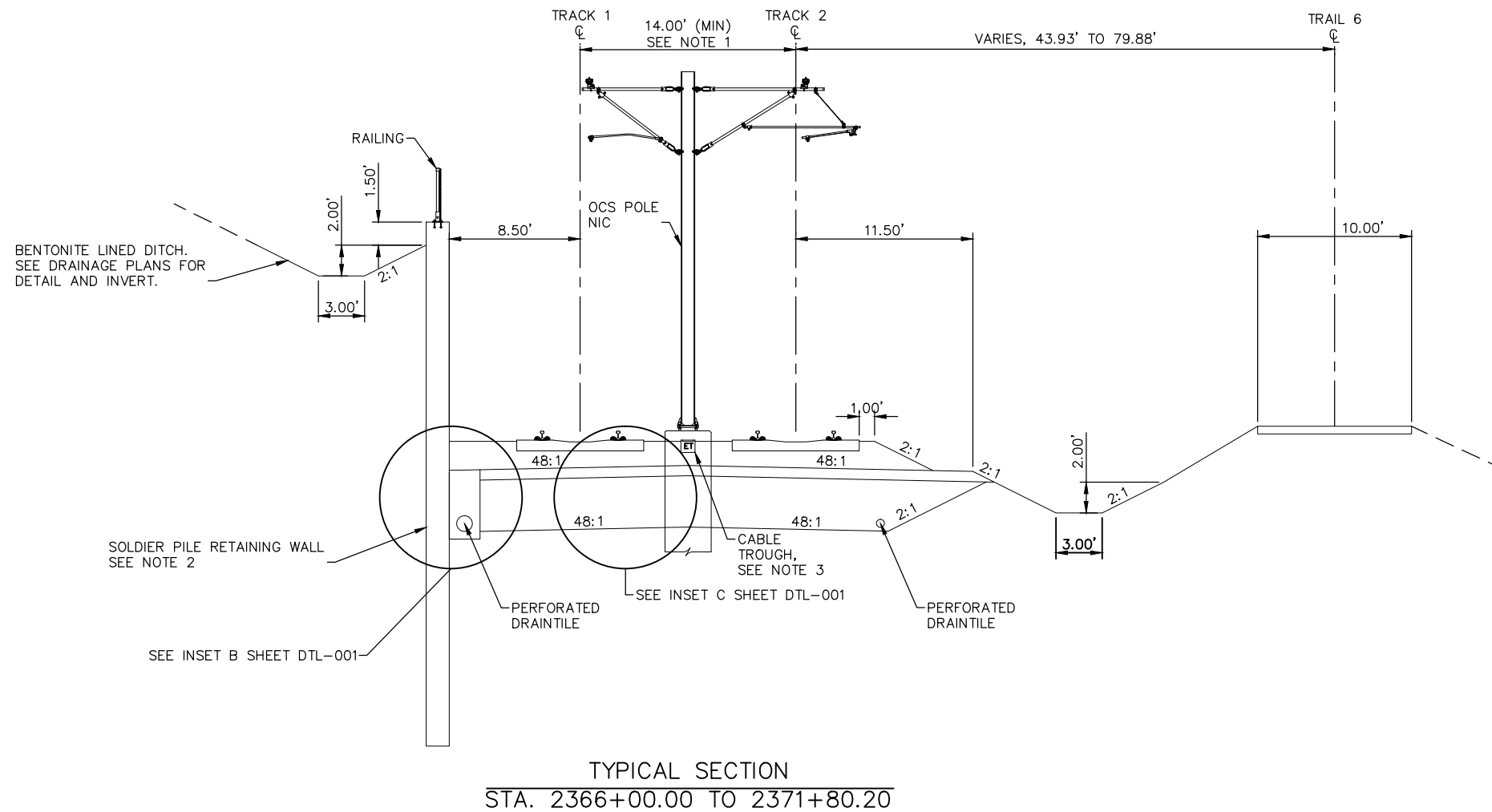
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W3-TRK-TYP - 020

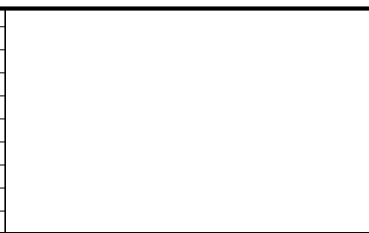
SHEET  
95  
OF  
189

Sep. 21 2015 02:09 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203 SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

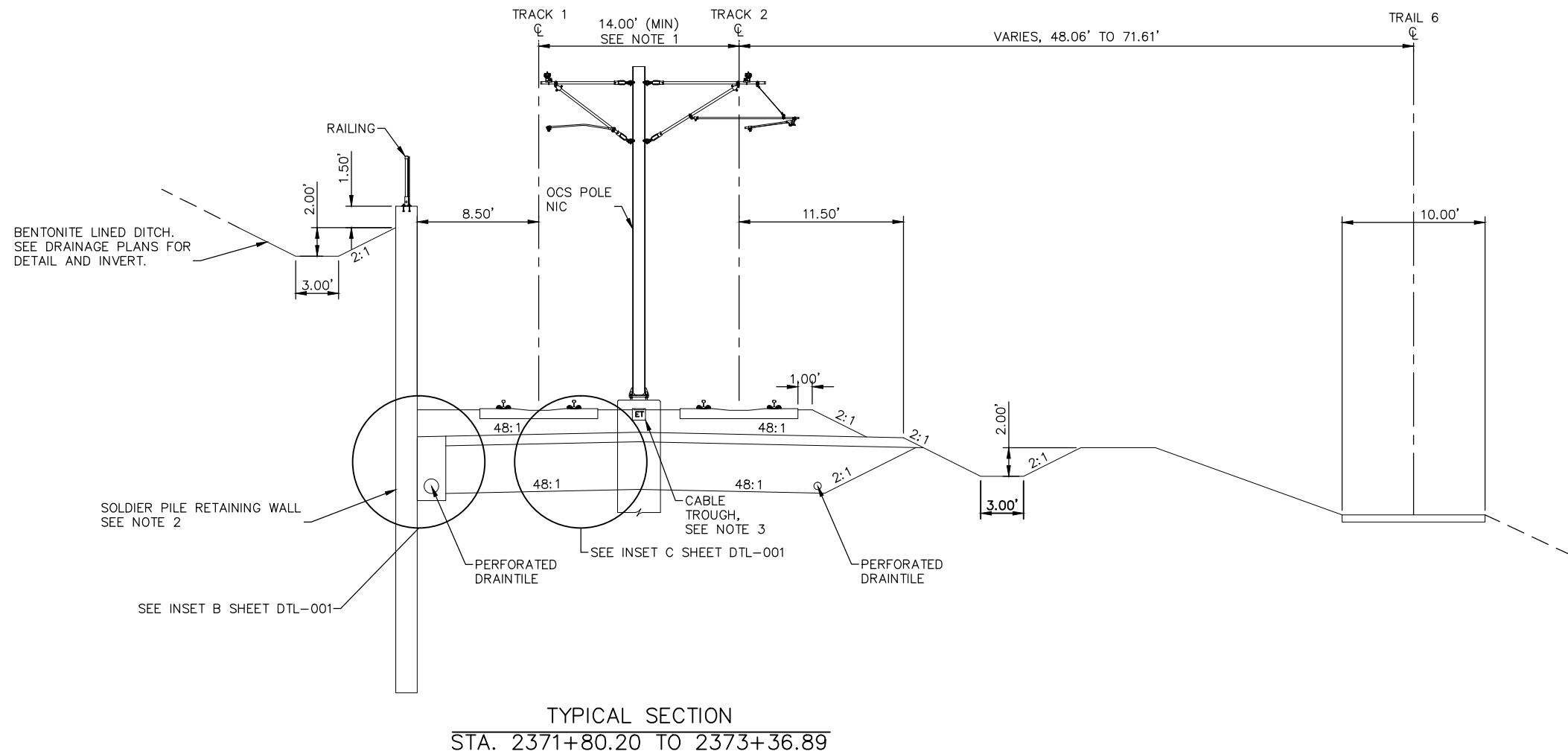
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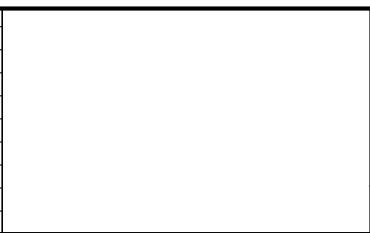
SHEET  
96  
OF  
189

Sep. 21 2015 02:09 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-203 SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

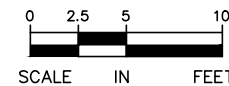
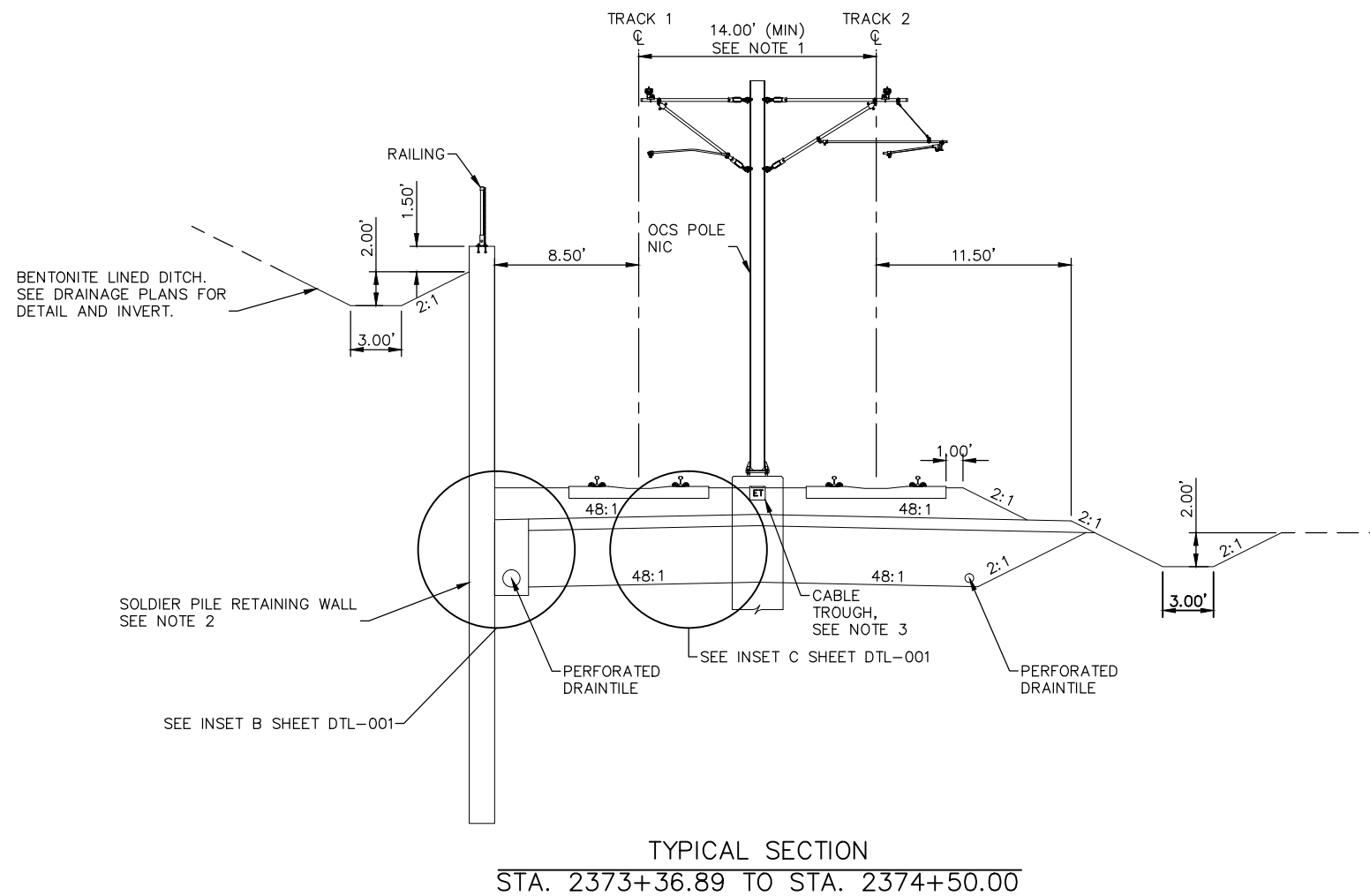
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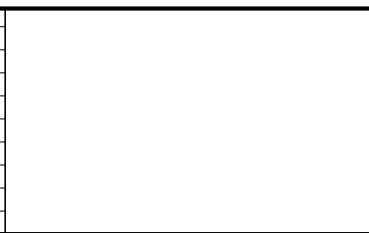
SHEET  
97  
OF  
189

Sep. 21 2015 02:09 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-204. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

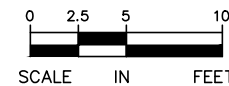
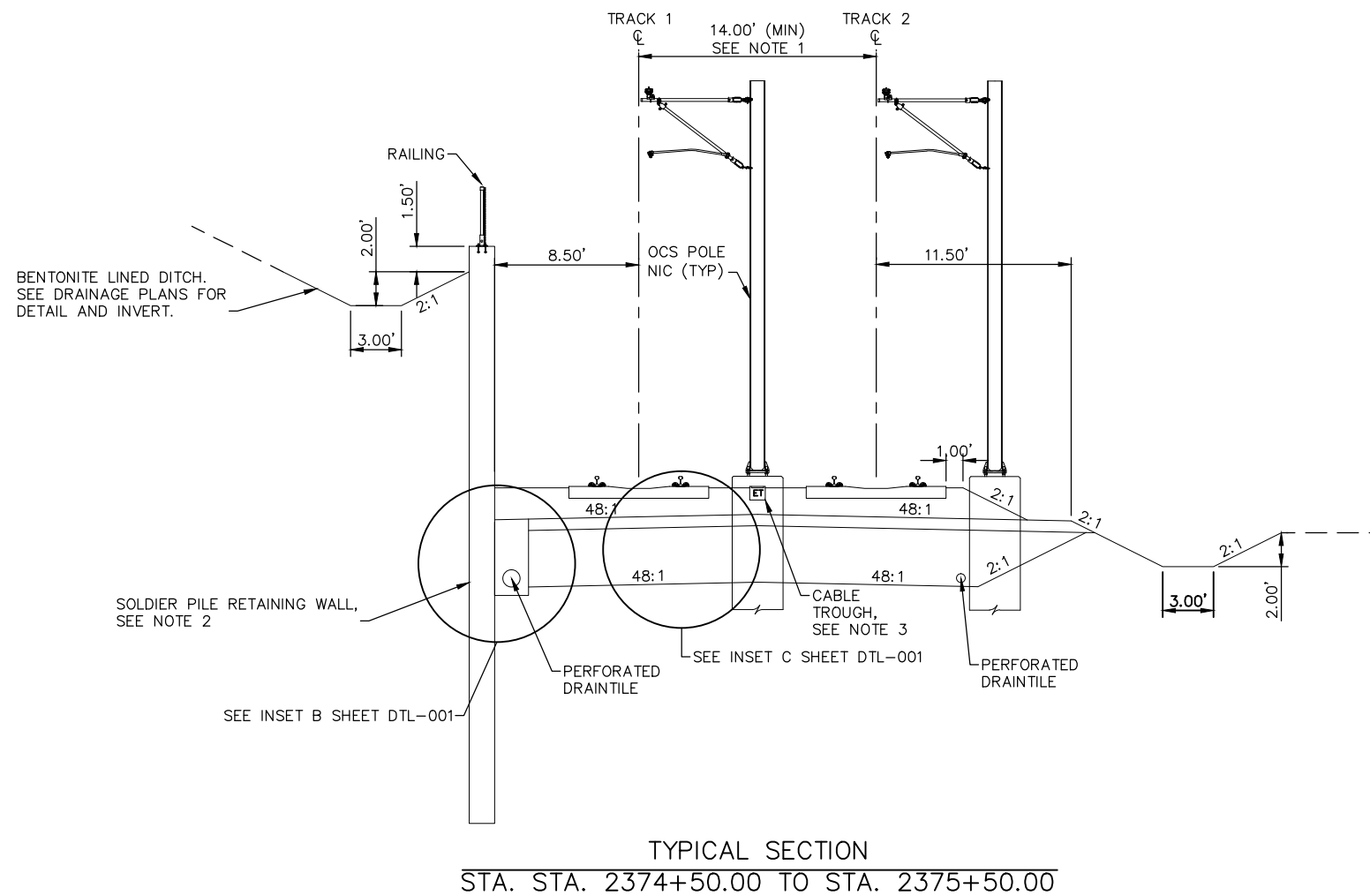
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

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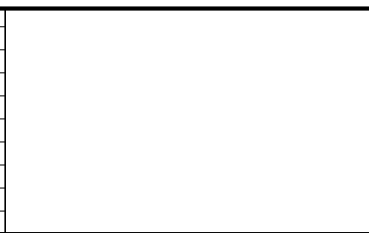
SHEET  
98  
OF  
189

Sep. 21 2015 02:09 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-204. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

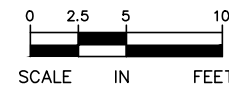
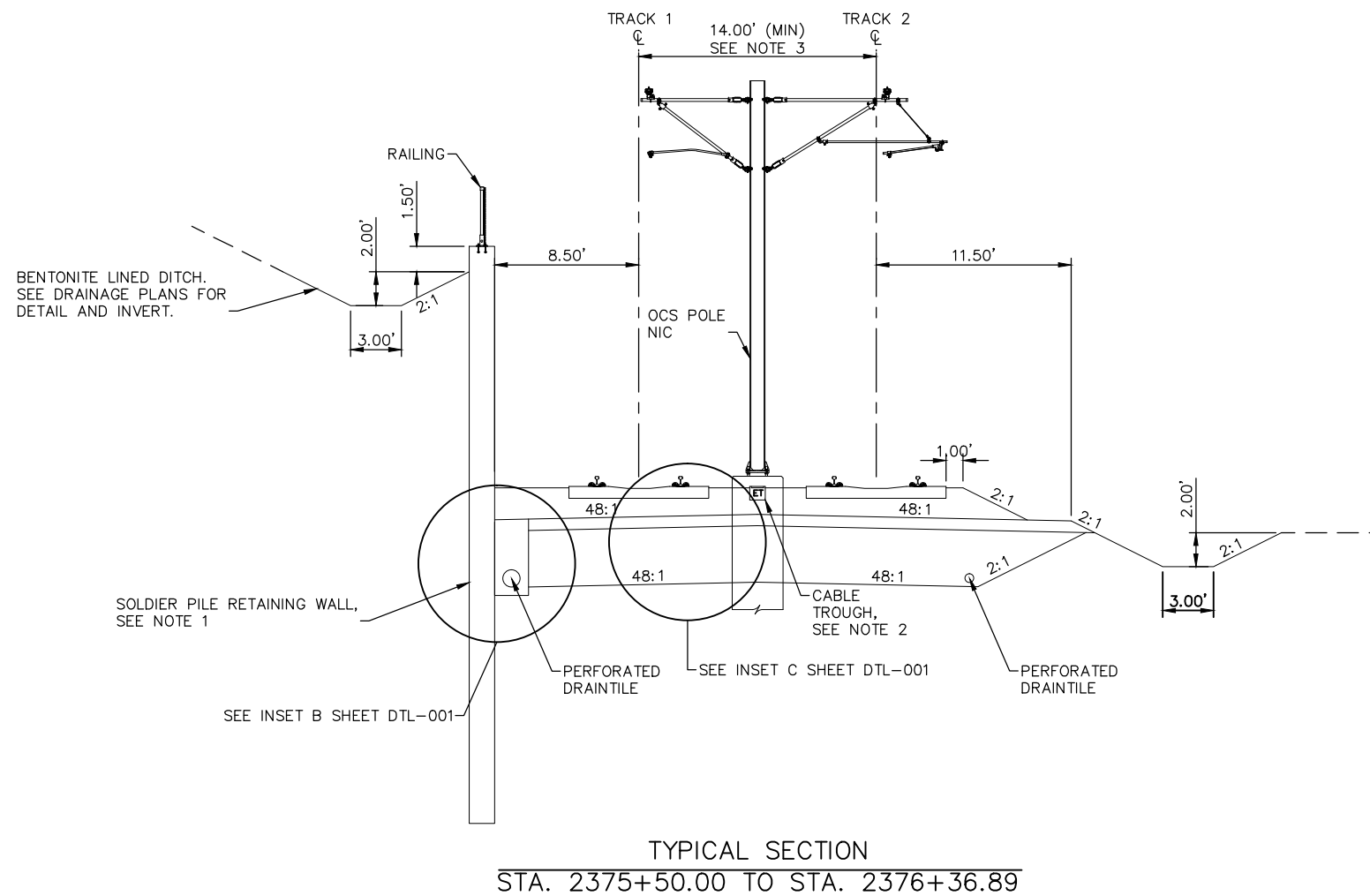
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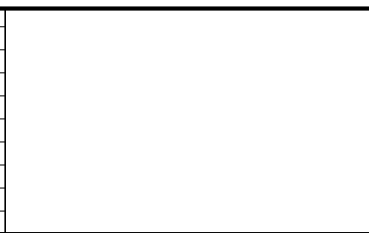
SHEET  
99  
OF  
189

Sep. 21 2015 02:10 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  3. TRACK CENTERS VARY IN CURVE W3-204. SEE TRACK PLANS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

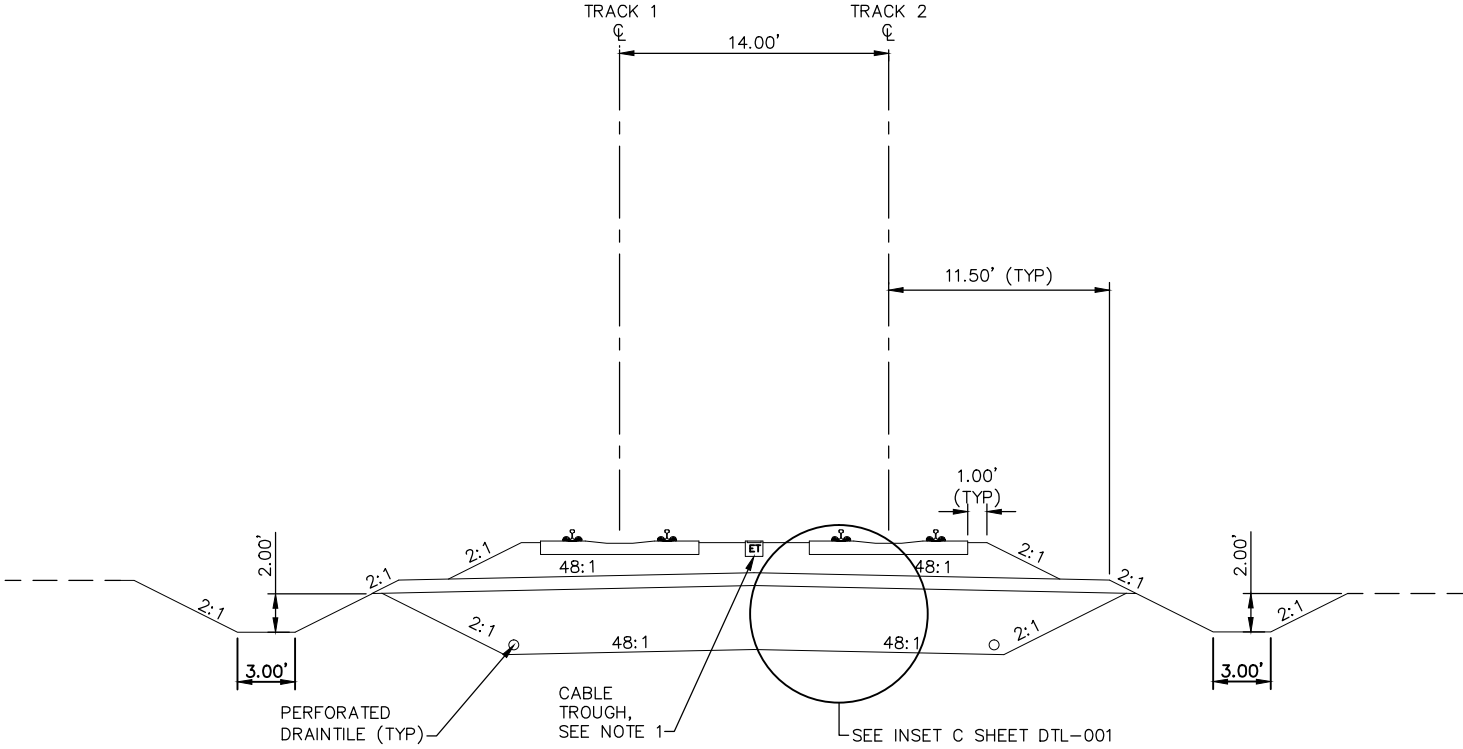
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 025

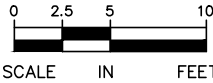
SHEET  
100  
OF  
189

Sep. 21 2015 02:10 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

NOTES:  
1. SEE SYSTEMS PLANS FOR DUCTBANK  
AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2376+36.89 TO STA. 2377+38.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

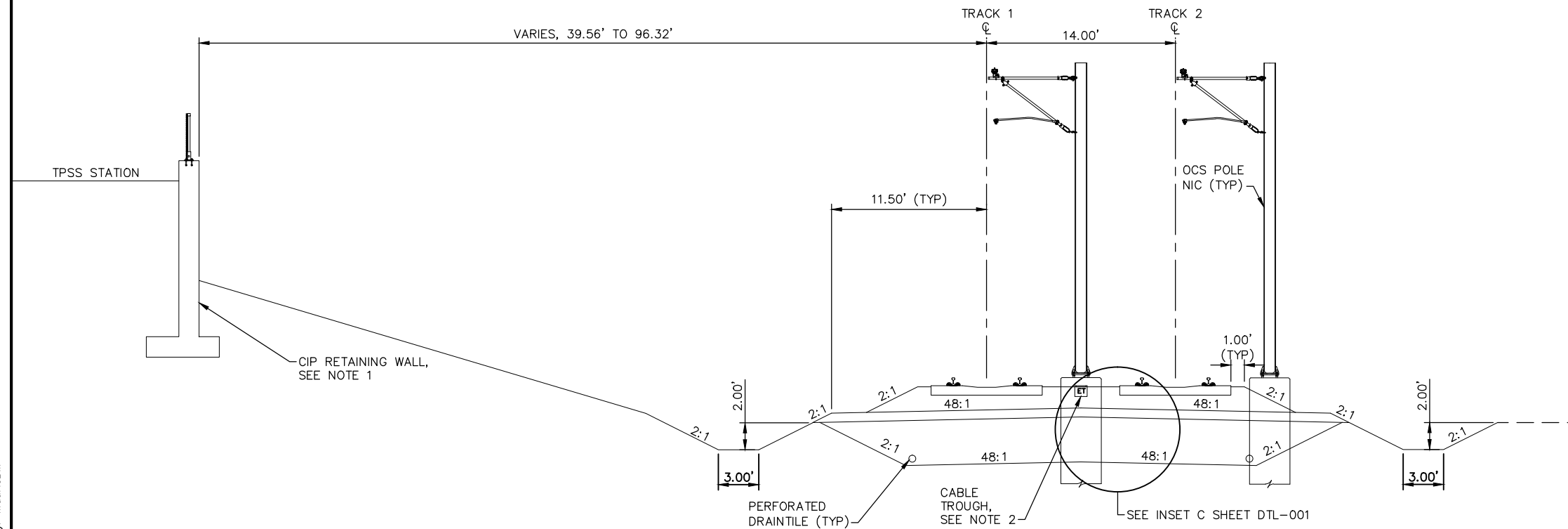


CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

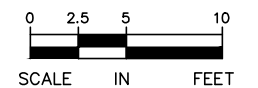
DISCIPLINE: TRACK SHEET NAME: W3-TRK-TYP - 026

SHEET  
101  
OF  
189

- NOTES:
1. SEE RETAINING WALL PLANS FOR DETAILS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2377+38.63 TO STA. 2379+16.61



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

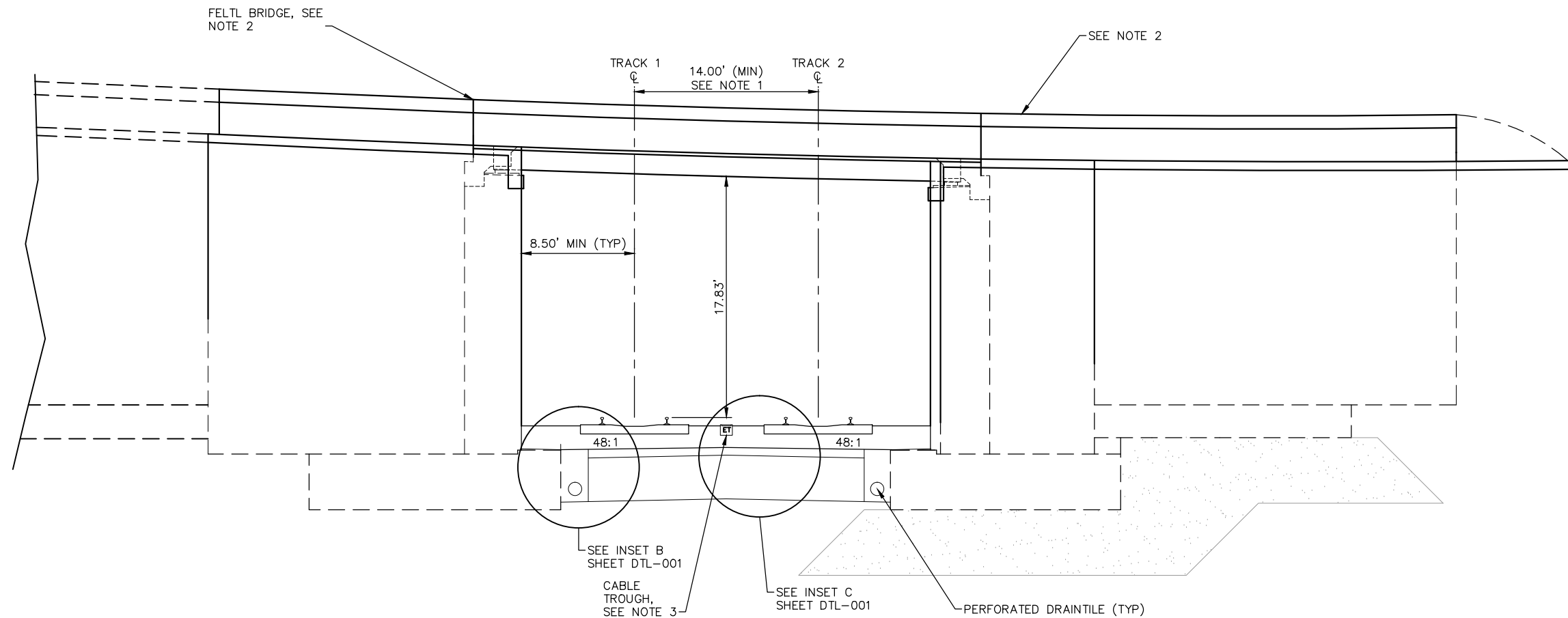
SHEET NAME: W3-TRK-TYP - 027

SHEET  
102  
OF  
189

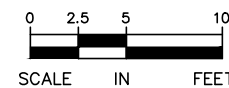


Sep. 21 2015 02:10 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE 27C08. SEE STRUCTURAL PLANS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2379+16.61 TO STA. 2379+68.64



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

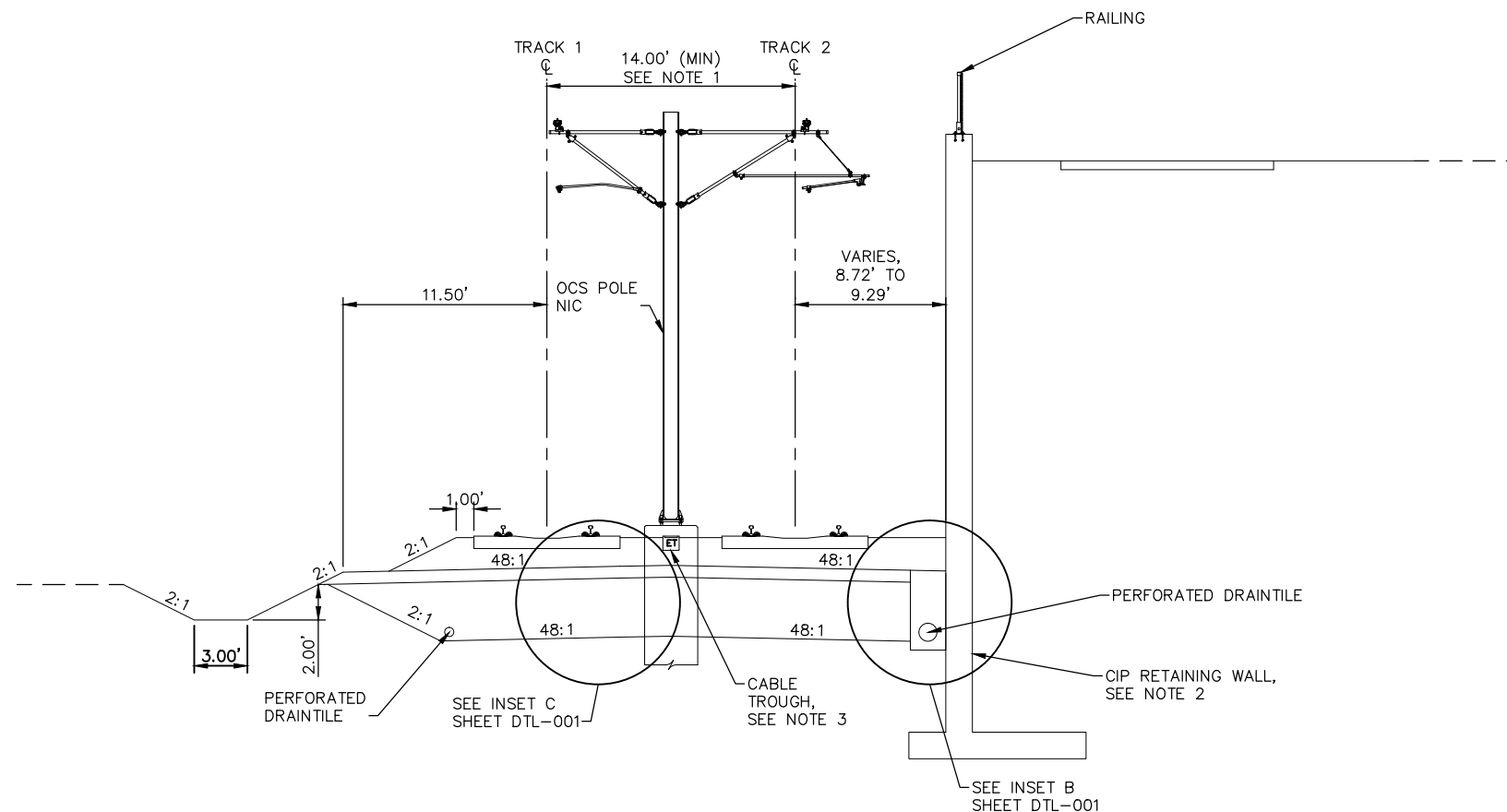
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SHEET NAME: **W3-TRK-TYP - 028**

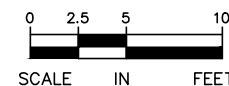
**SHEET**  
**103**  
**OF**  
**189**

Sep. 21 2015 02:11 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2379+68.64 TO STA. 2380+60.35




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

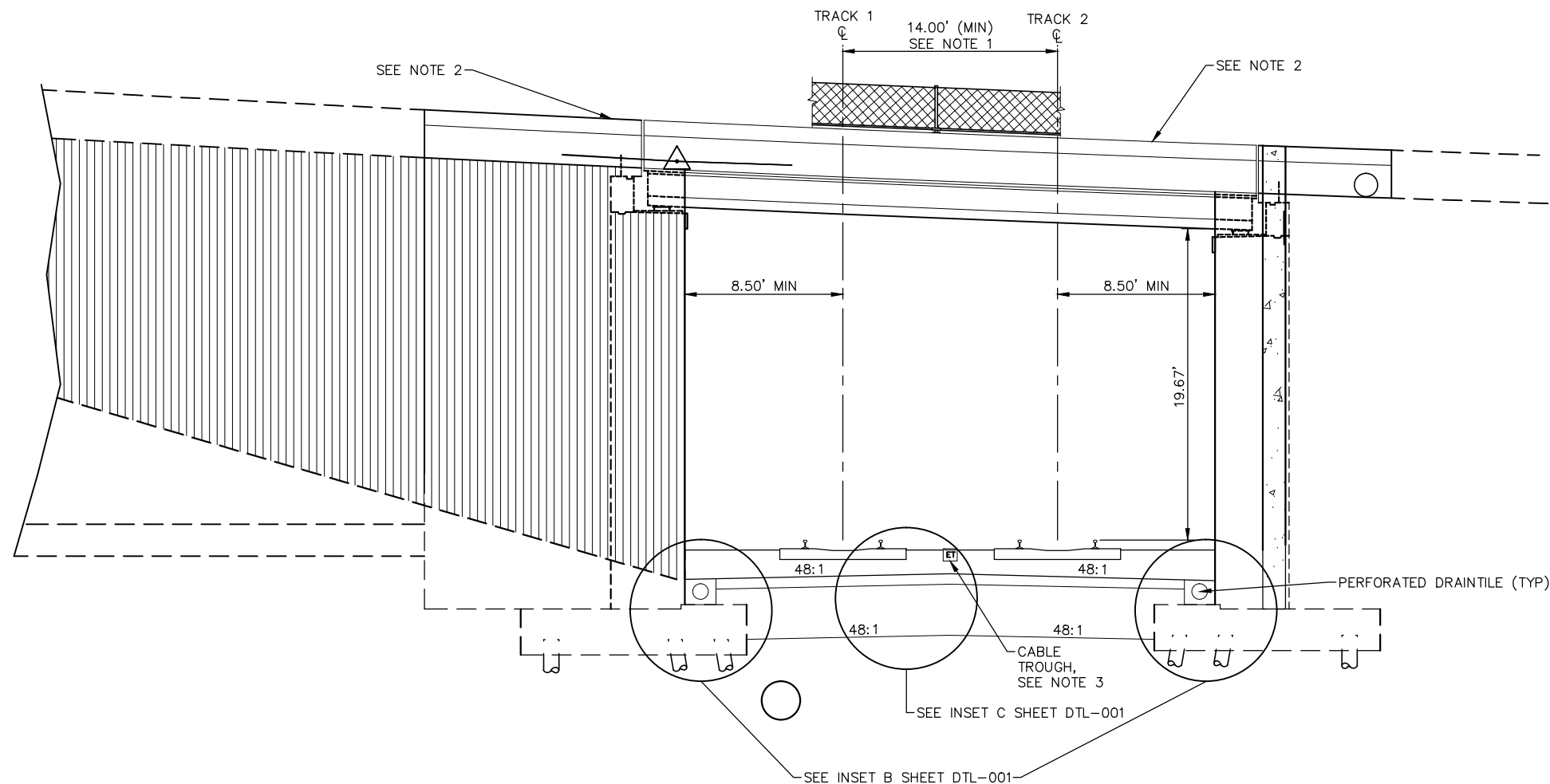
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SHEET NAME: W3-TRK-TYP - 029

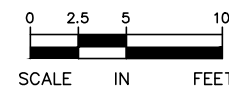
SHEET  
104  
OF  
189

Sep. 21 2015 02:11 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205. SEE TRACK PLANS.
  2. Mn/DOT BRIDGE 27C08. SEE STRUCTURAL PLANS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2380+60.35 TO 2381+55.10



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

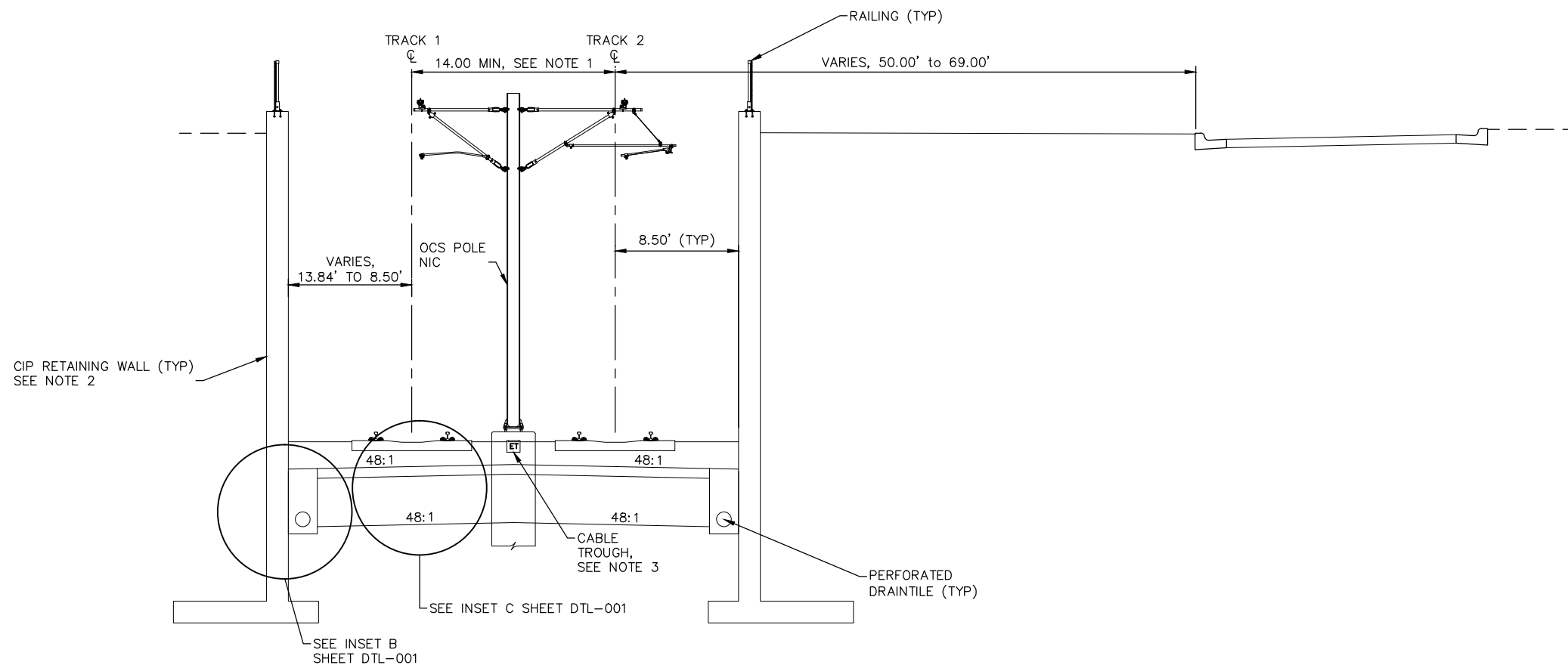
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SHEET NAME: W3-TRK-TYP - 030

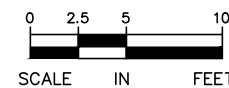
SHEET  
105  
OF  
189

Sep. 21 2015 02:11 am v:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MaurisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205. SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



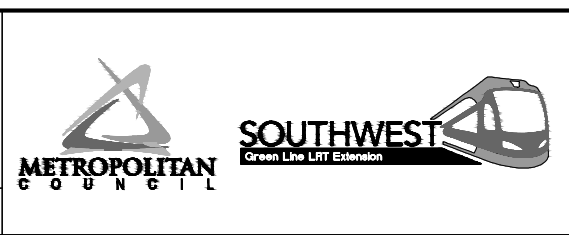
TYPICAL SECTION  
STA. 2381+53.66 TO STA. 2382+86.36



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



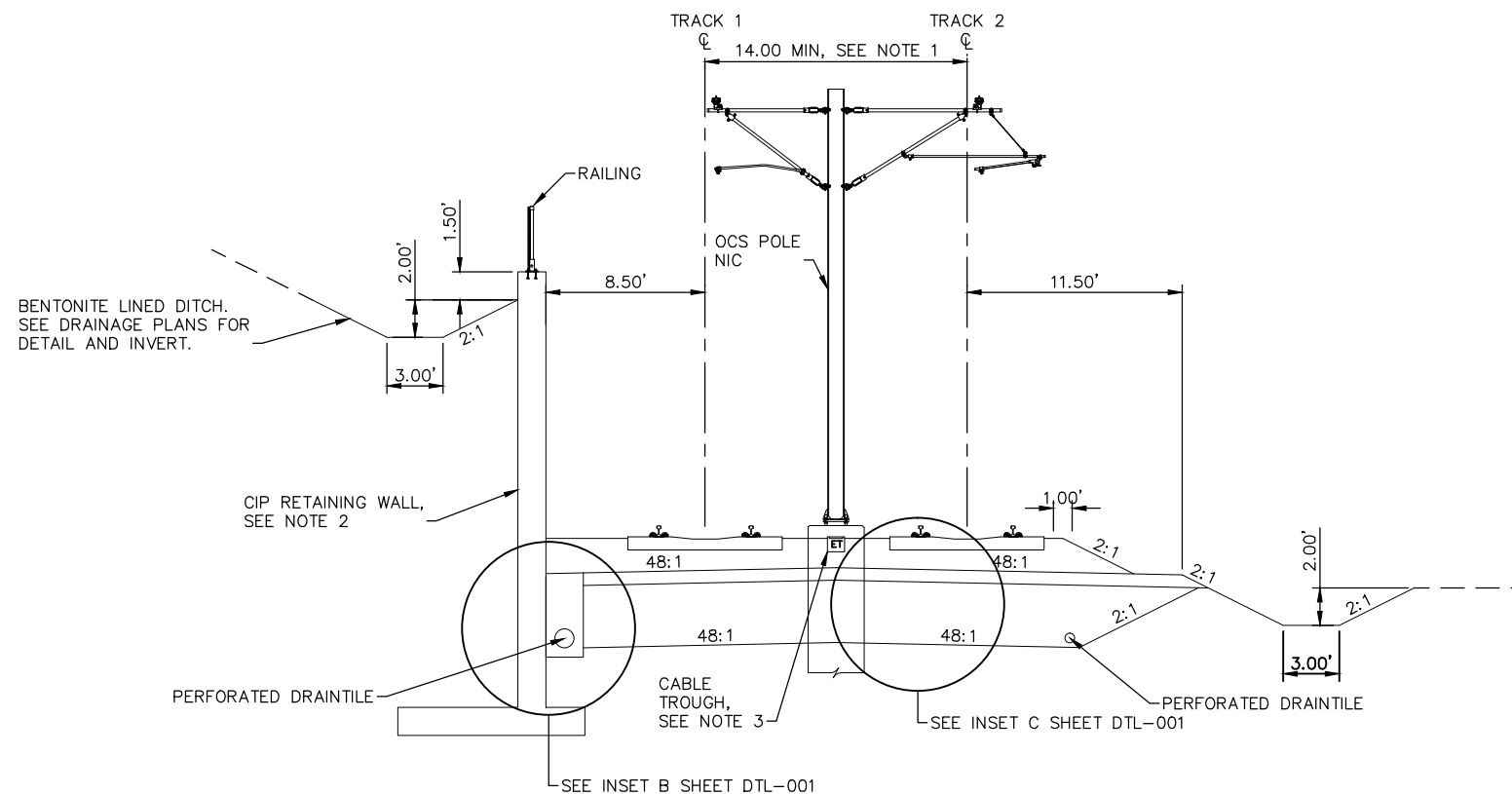
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK SHEET NAME: W3-TRK-TYP - 031

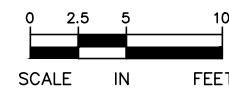
SHEET  
106  
OF  
189

Sep. 21 2015 02:12 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

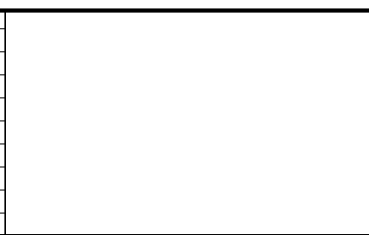
- NOTES:
1. TRACK CENTERS IN CURVE W3-205, SEE TRACK PLANS.
  2. SEE RETAINING WALL PLANS FOR DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2382+86.36 TO STA. 2384+15.89



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

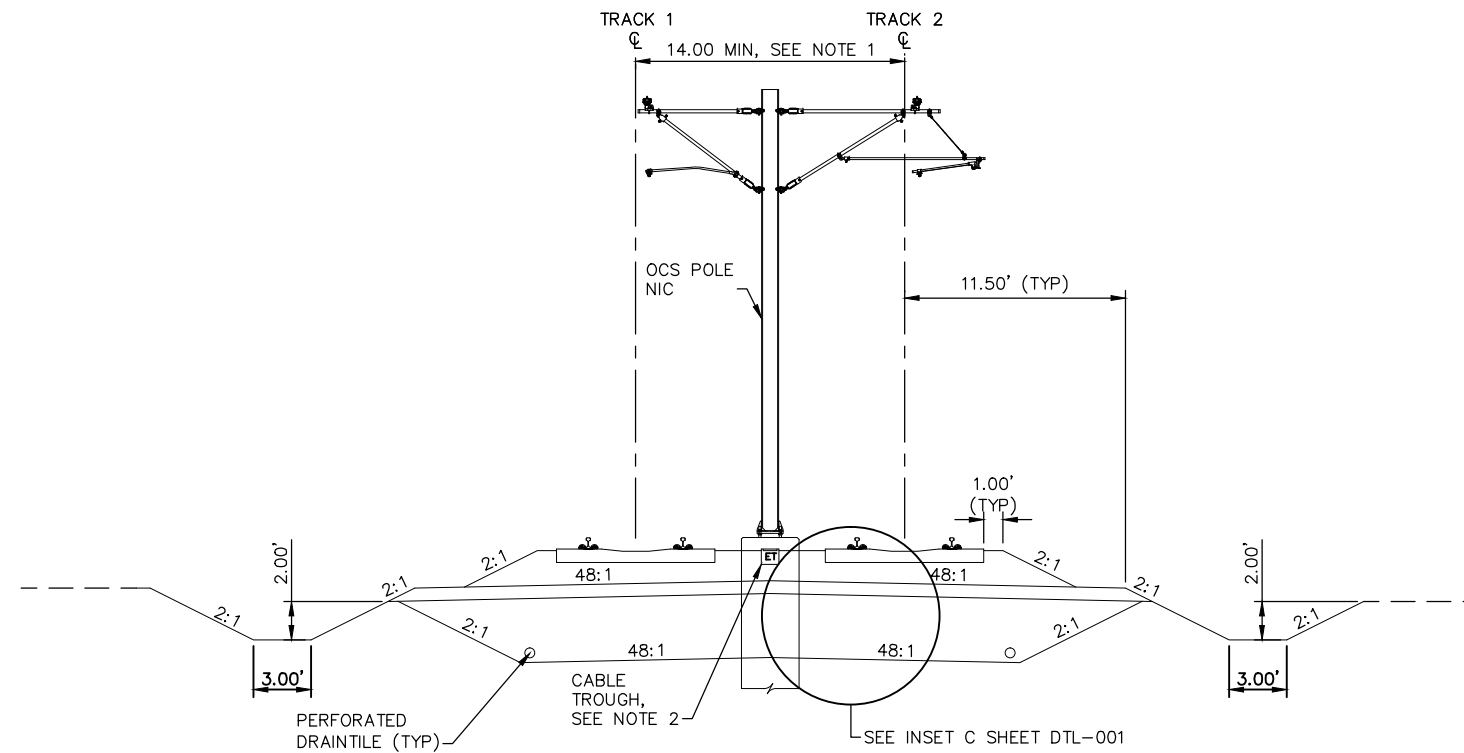
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK  
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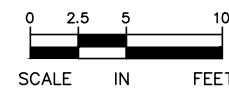
SHEET  
107  
OF  
189

Sep. 21 2015 02:12 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

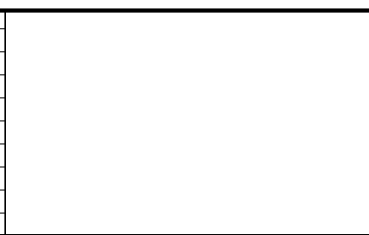
- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205, SEE TRACK PLANS.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2384+15.89 TO STA. 2384+91.88



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

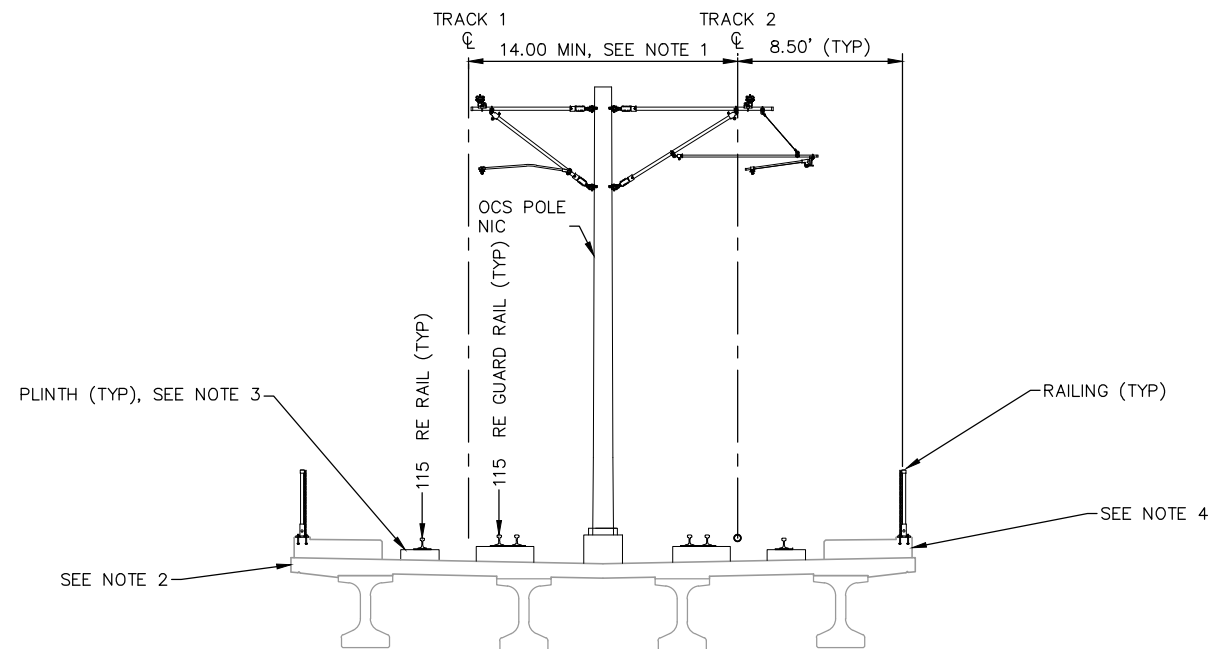
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SHEET NAME: **W3-TRK-TYP - 033**

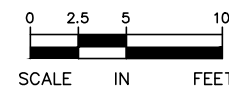
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**108**  
**OF**  
**189**

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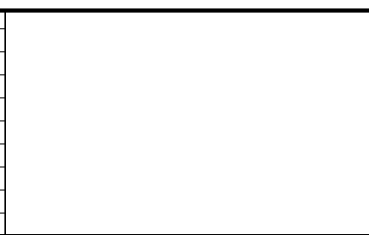
- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-205, SEE TRACK PLANS.
  2. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2384+91.88 TO STA. 2390+94.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

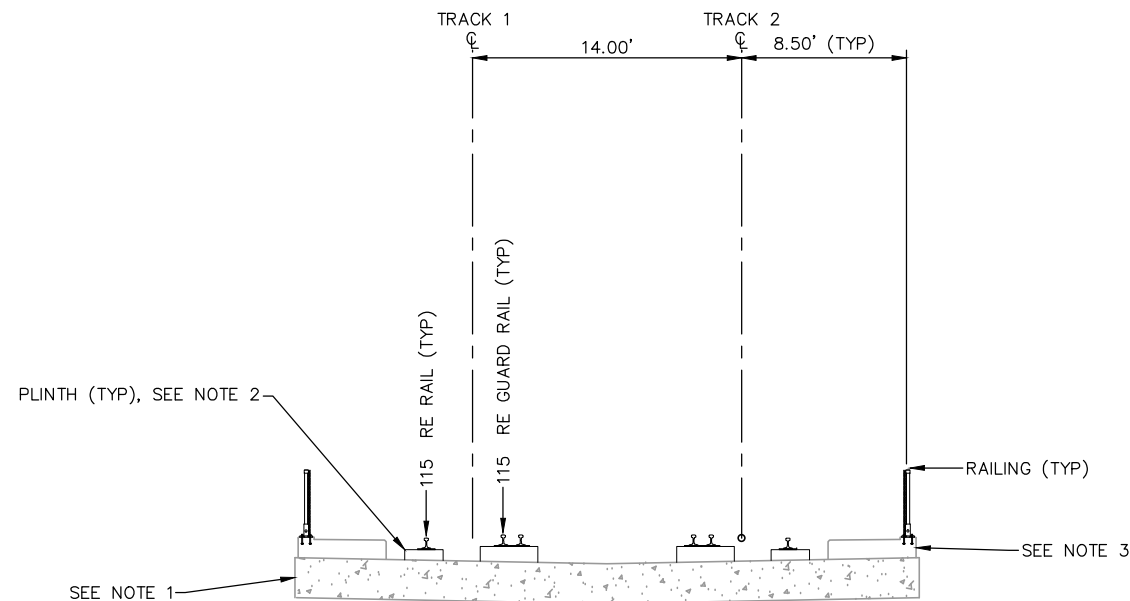
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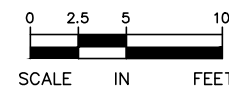
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**109**  
**OF**  
**189**

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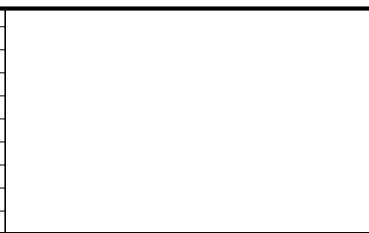
- NOTES:
1. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2390+94.63 TO STA. 2391+94.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15

**METROPOLITAN**  
COUNCIL

**SOUTHWEST**  
Green Line LRT Extension

**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

DISCIPLINE: **TRACK**

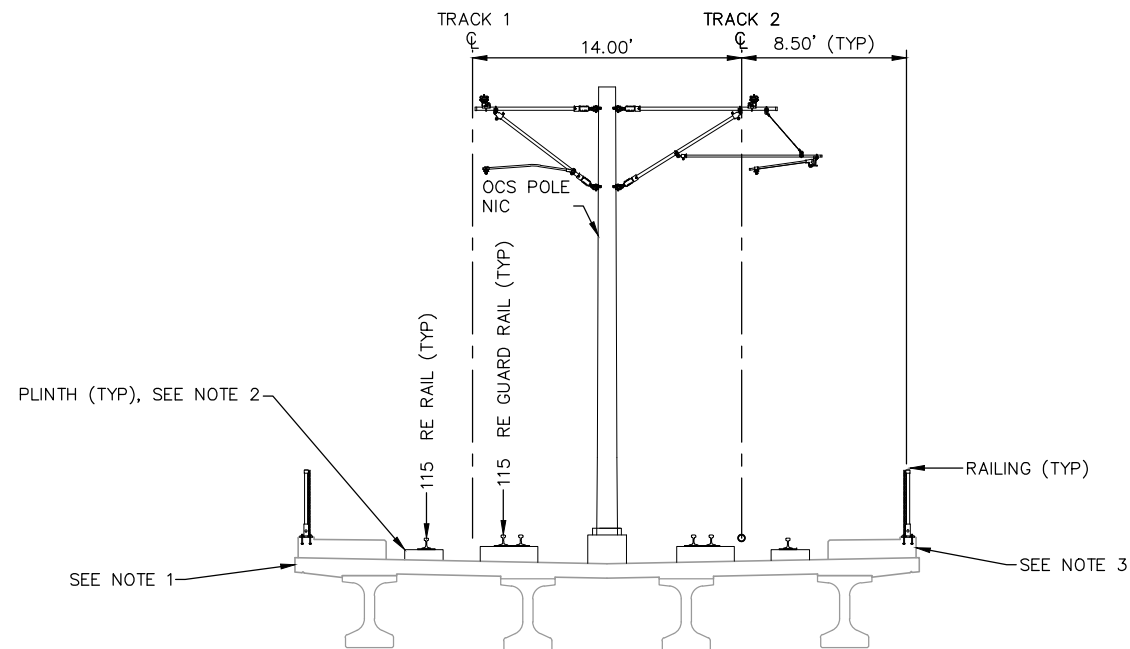
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**SHEET**  
**110**  
**OF**  
**189**

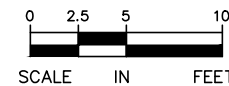


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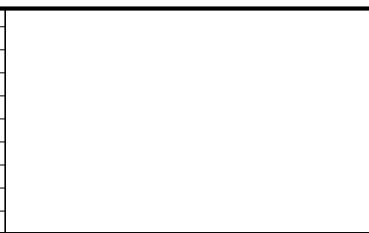
- NOTES:
1. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2391+94.63 TO STA. 2395+94.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

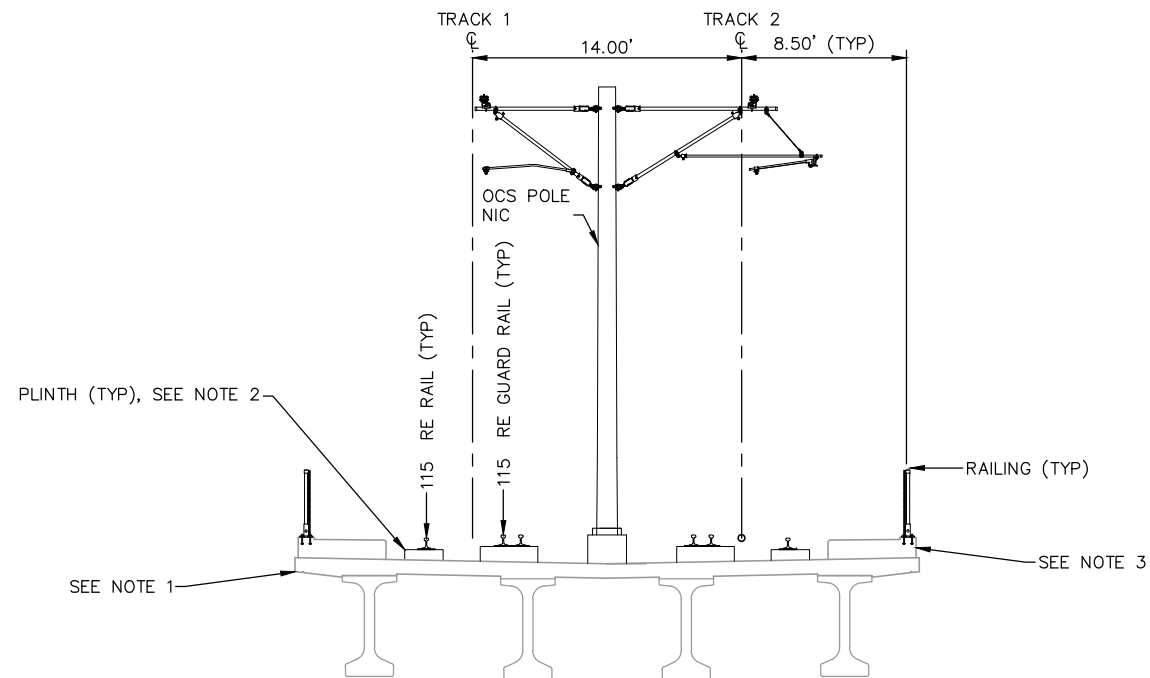
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SHEET NAME: W3-TRK-TYP - 036

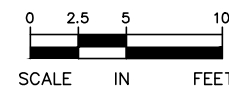
SHEET  
111  
OF  
189

Sep. 21 2015 02:13 am V:\3400\_ADC\CAD\CAD\_00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2395+94.63 TO STA. 2403+44.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

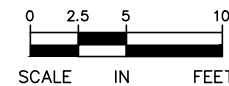
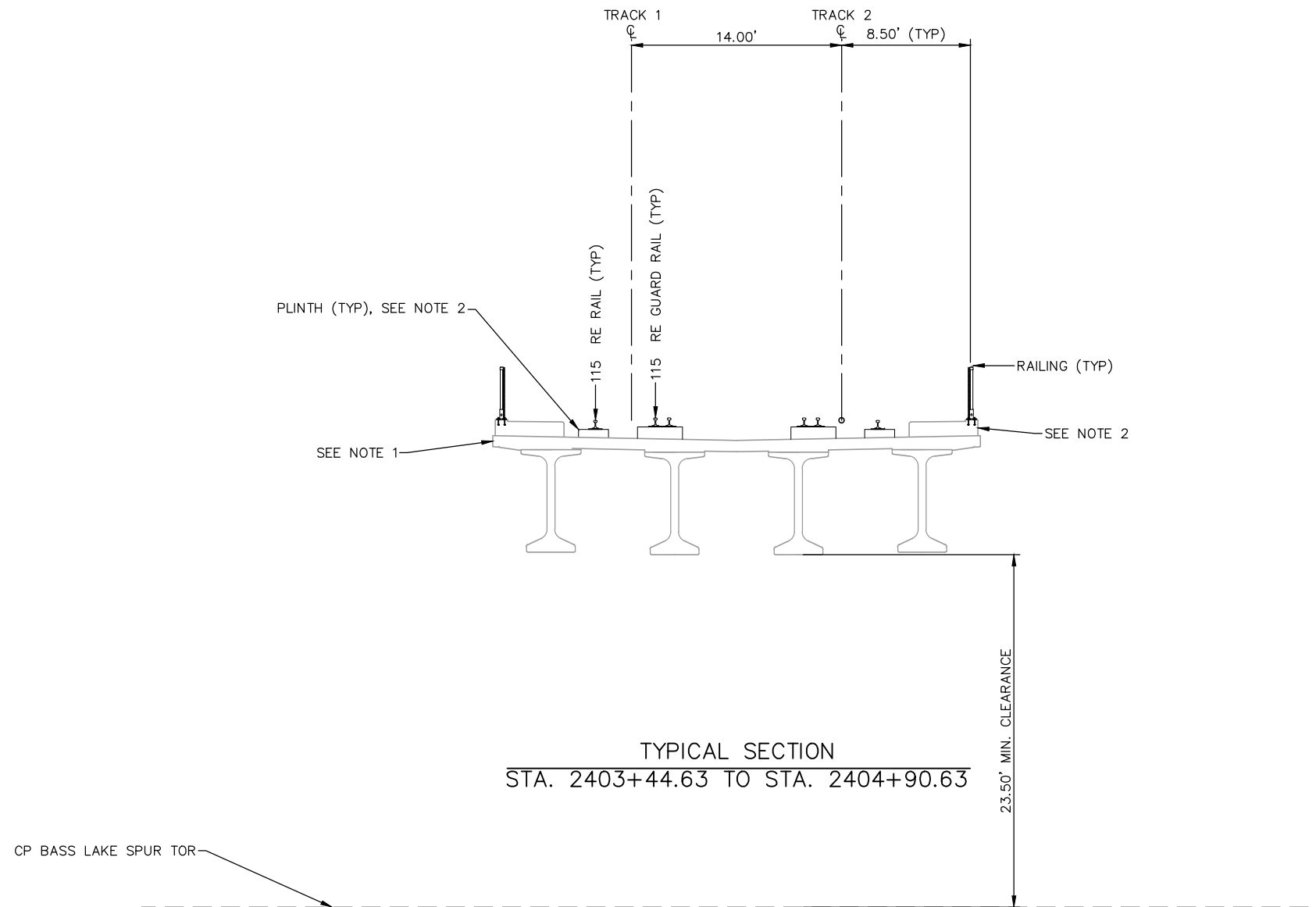
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 037**

**SHEET**  
**112**  
**OF**  
**189**

Sep. 21 2015 02:13 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

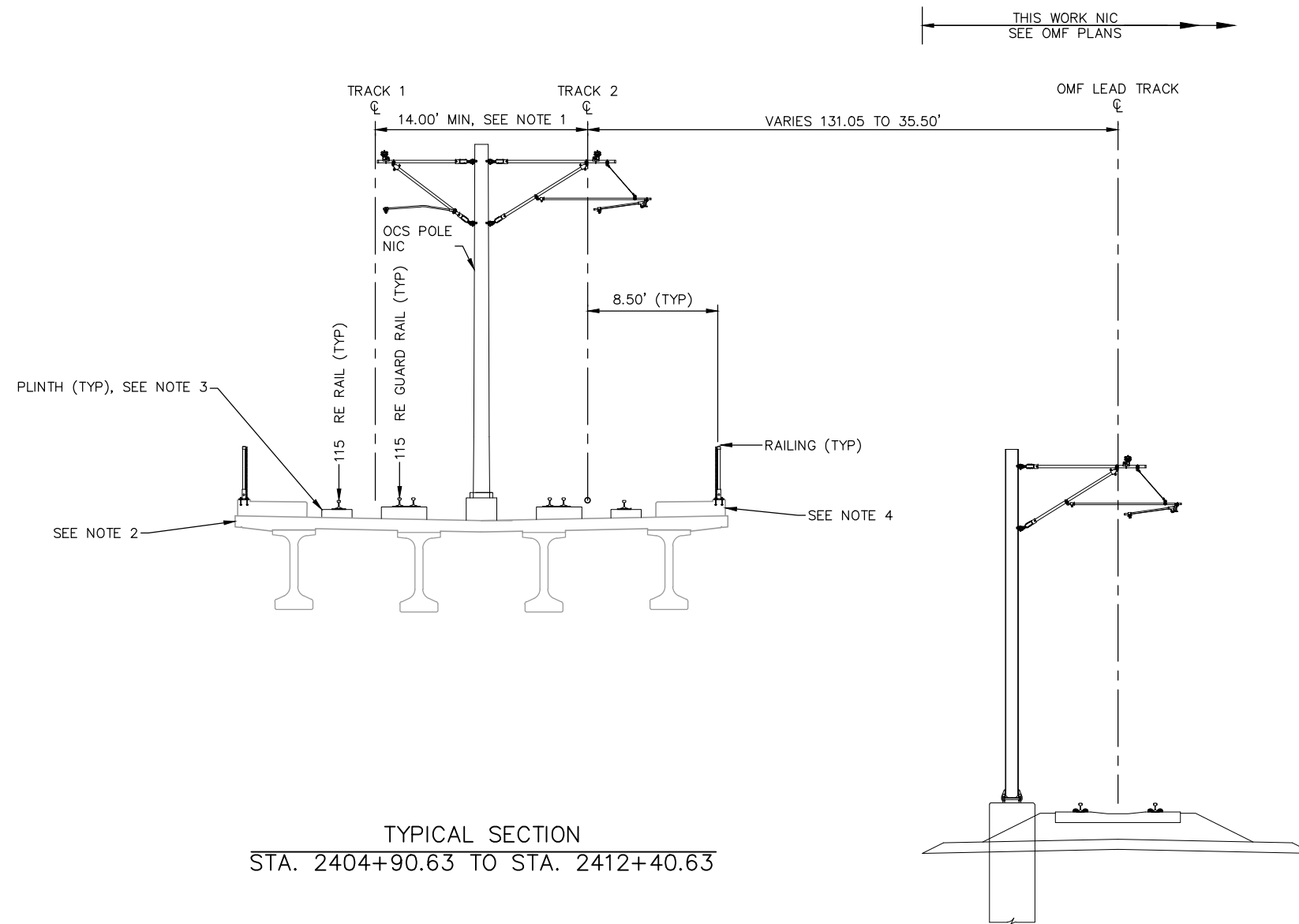
- NOTES:
1. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.SEE TRACK DETAILS FOR PLINTH LAYOUT.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



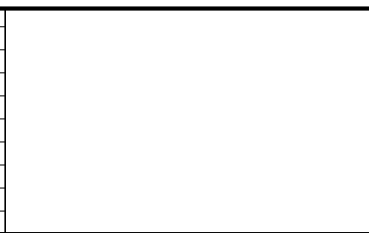
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><b>AECOM</b></div></div></div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><b>METROPOLITAN</b> COUNCIL</div><div><b>SOUTHWEST</b> Green Line LRT Extension</div></div></div><div><div><div>CIVIL WEST - VOLUME 3</div><div>TRACK</div><div>TYPICAL SECTIONS</div></div><div>DISCIPLINE: TRACK</div></div><div><div>SHEET NAME: W3-TRK-TYP - 038</div></div></div>		SHEET	
						60% SUBMISSION - 09/28/15			113
									OF
									189

Sep. 21 2015 02:13 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS VARY IN CURVE W3-206, SEE TRACK PLANS.
  2. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  3. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

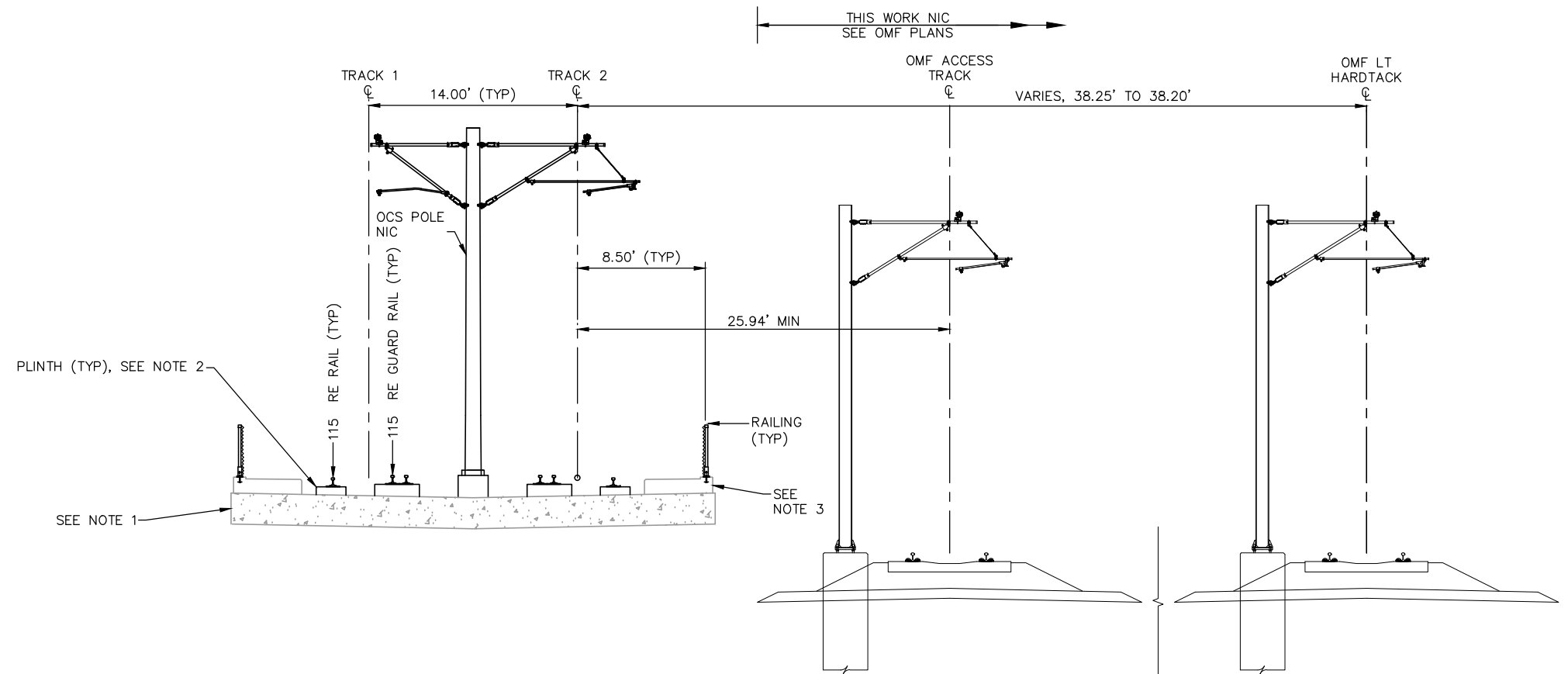


CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS	
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-TYP - 039

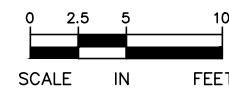
SHEET  
114  
OF  
189

Sep. 21 2015 02:14 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

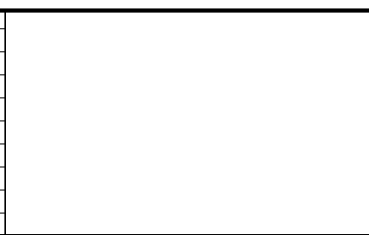
- NOTES:
1. Mn/DOT BRIDGE R0686. SEE STRUCTURAL PLANS.
  2. SEE TRACK DETAILS FOR PLINTH LAYOUT.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2412+40.63 TO STA. 2414+91.63



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

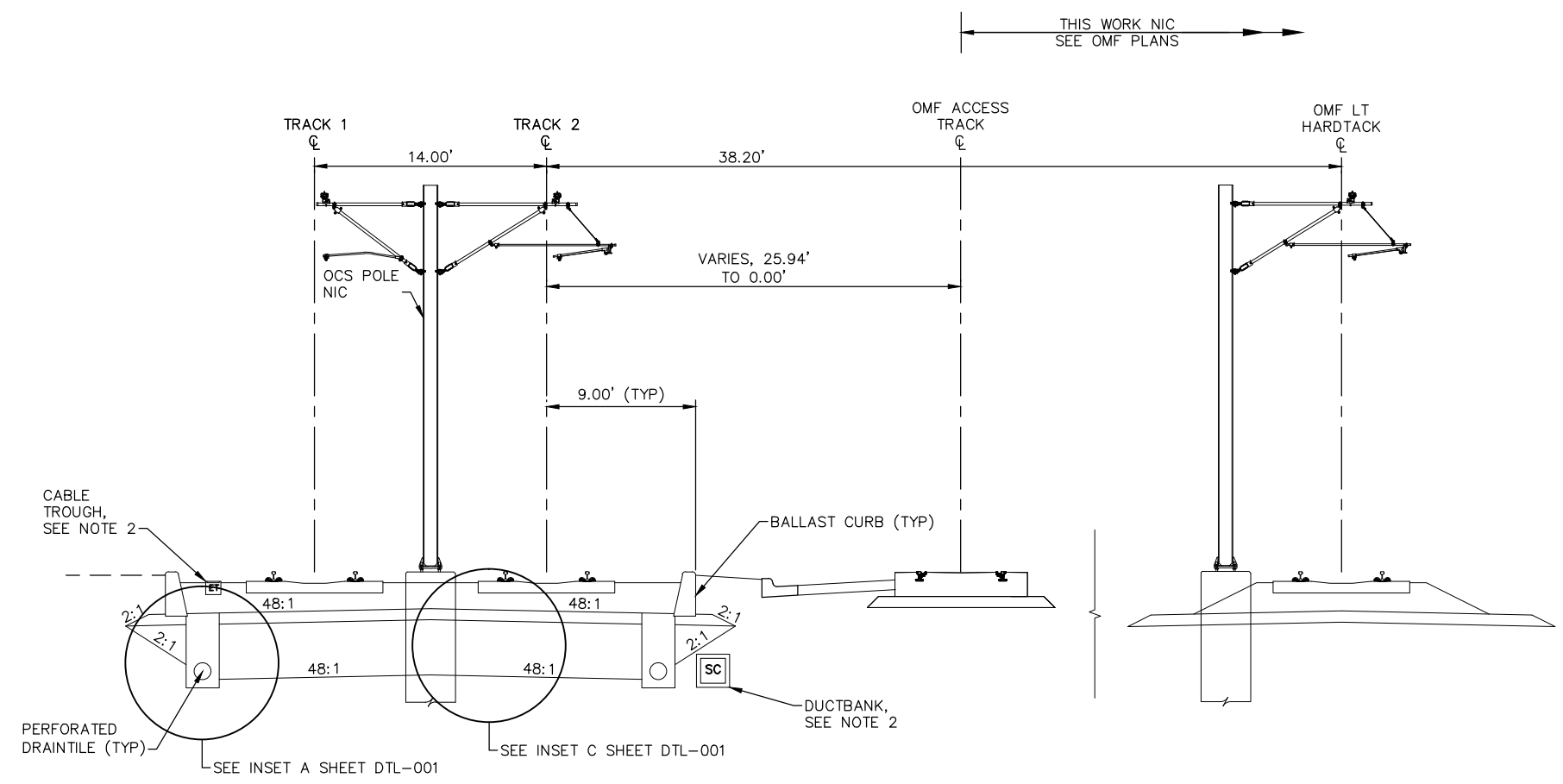
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SHEET NAME: **W3-TRK-TYP - 040**

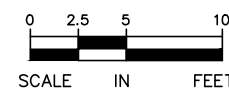
**SHEET**  
**115**  
**OF**  
**189**

Sep. 21 2015 02:14 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

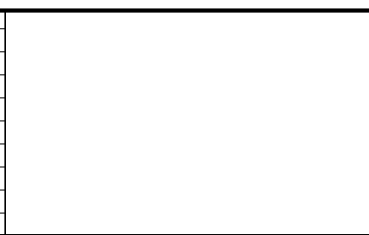
- NOTES:
1. SPECIAL TRACKWORK NOT ILLUSTRATED.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2414+91.63 TO STA. 2417+46.68

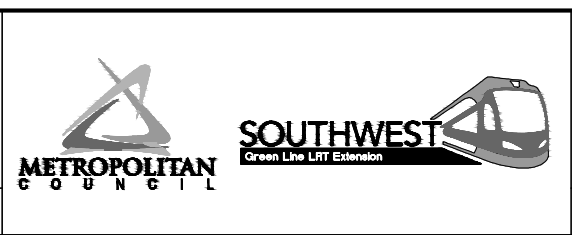


NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

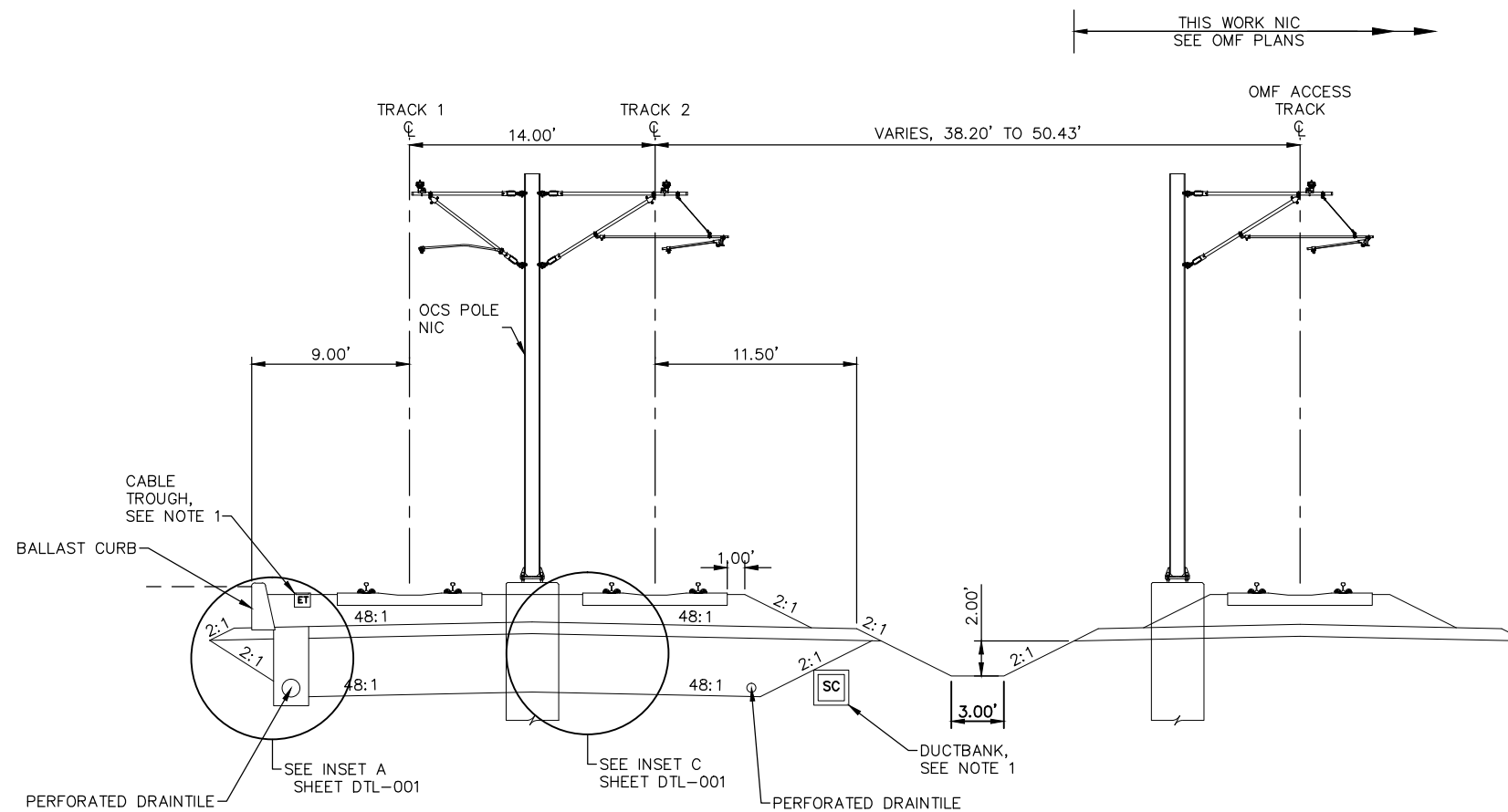
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 041**

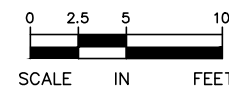
**SHEET**  
**116**  
**OF**  
**189**

Sep. 21 2015 02:14 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

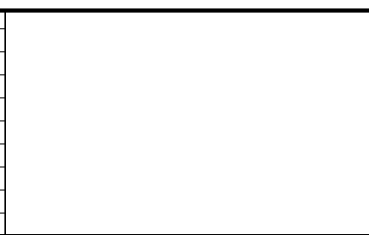
- NOTES:
1. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  2. SPECIAL TRACKWORK NOT ILLUSTRATED.



TYPICAL SECTION  
STA. 2417+46.68 TO STA. 2418+09.83



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



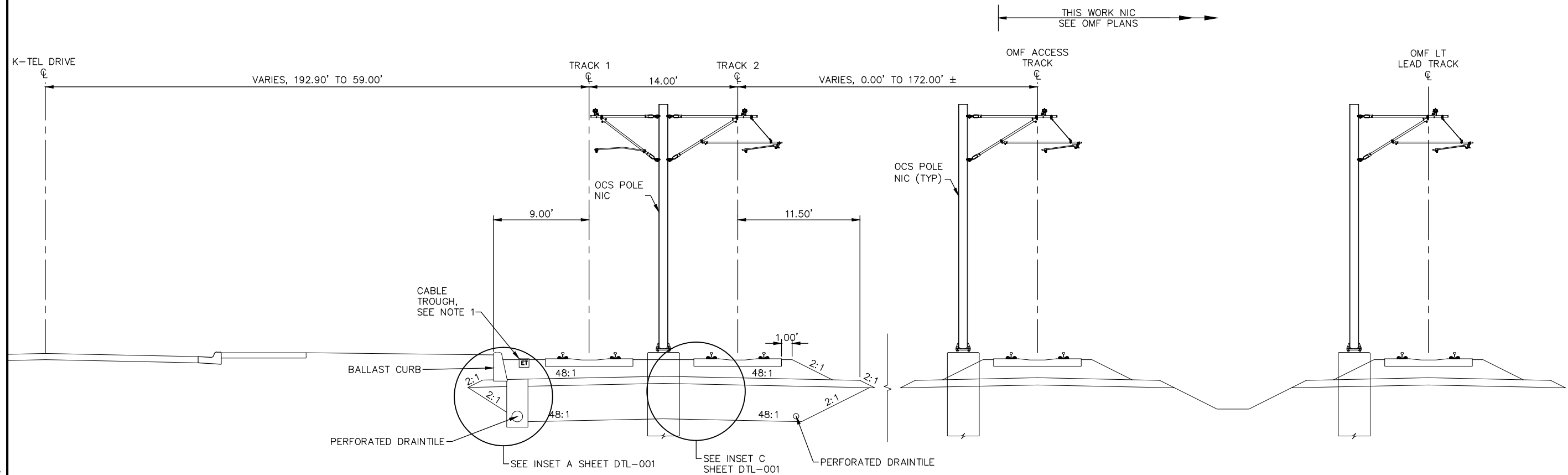
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

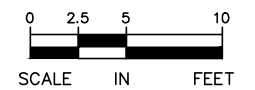
SHEET NAME: W3-TRK-TYP - 042

SHEET  
117  
OF  
189

- NOTES:
1. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  2. SPECIAL TRACKWORK NOT ILLUSTRATED.



TYPICAL SECTION  
STA. 2418+09.83 TO 2420+35.82



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

**AECOM**

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**CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS**

DISCIPLINE:

**TRACK**

SHEET NAME:

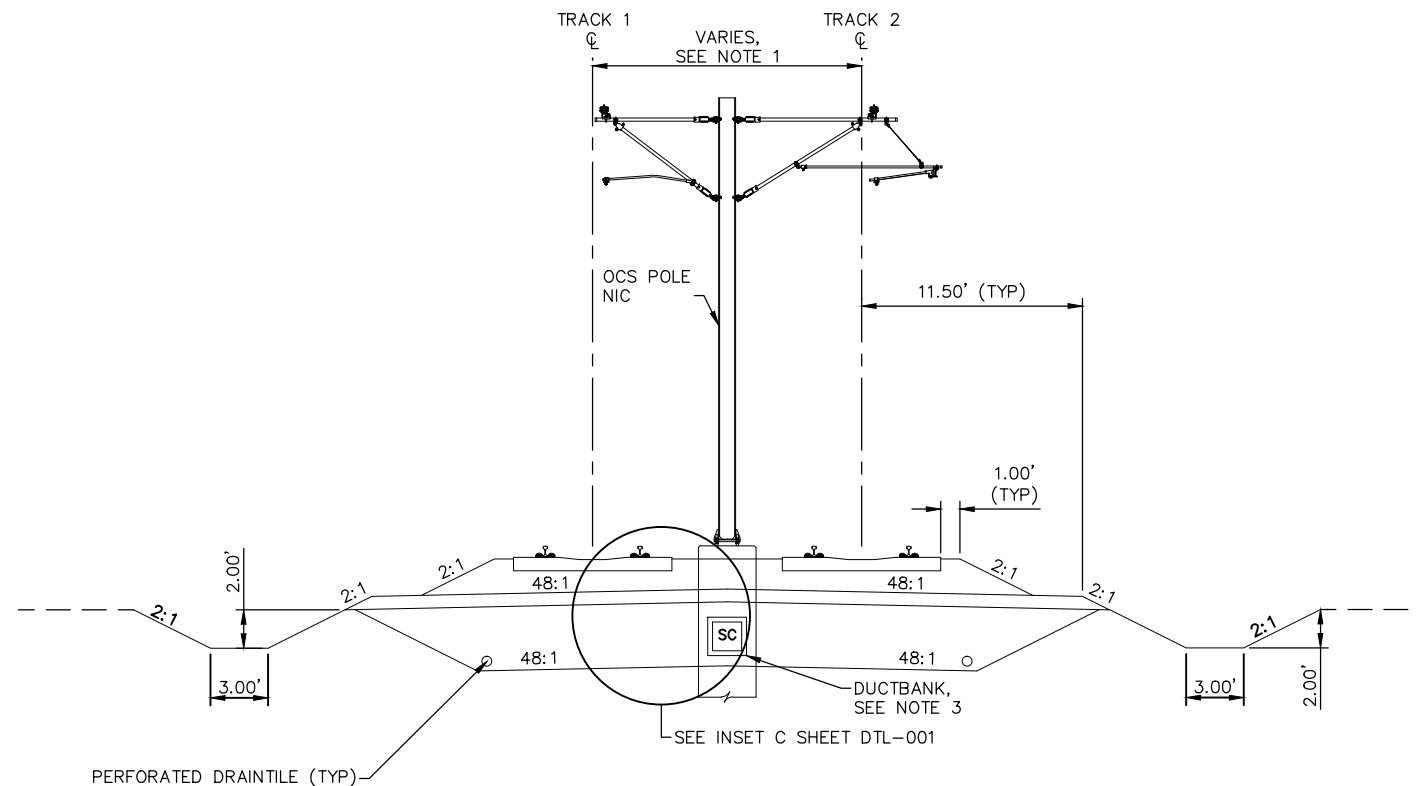
**W3-TRK-TYP - 043**

**SHEET  
118  
OF  
189**

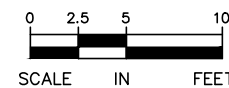


Sep. 21 2015 02:15 am v:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 14.00' TO 17.89' BETWEEN STATION 2420+82.83 TO 2421+50.00.
  2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT K-TEL DRIVE. SEE TRACK PLANS AND DETAILS.
  3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2420+35.82 TO STA. 2421+50.00



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

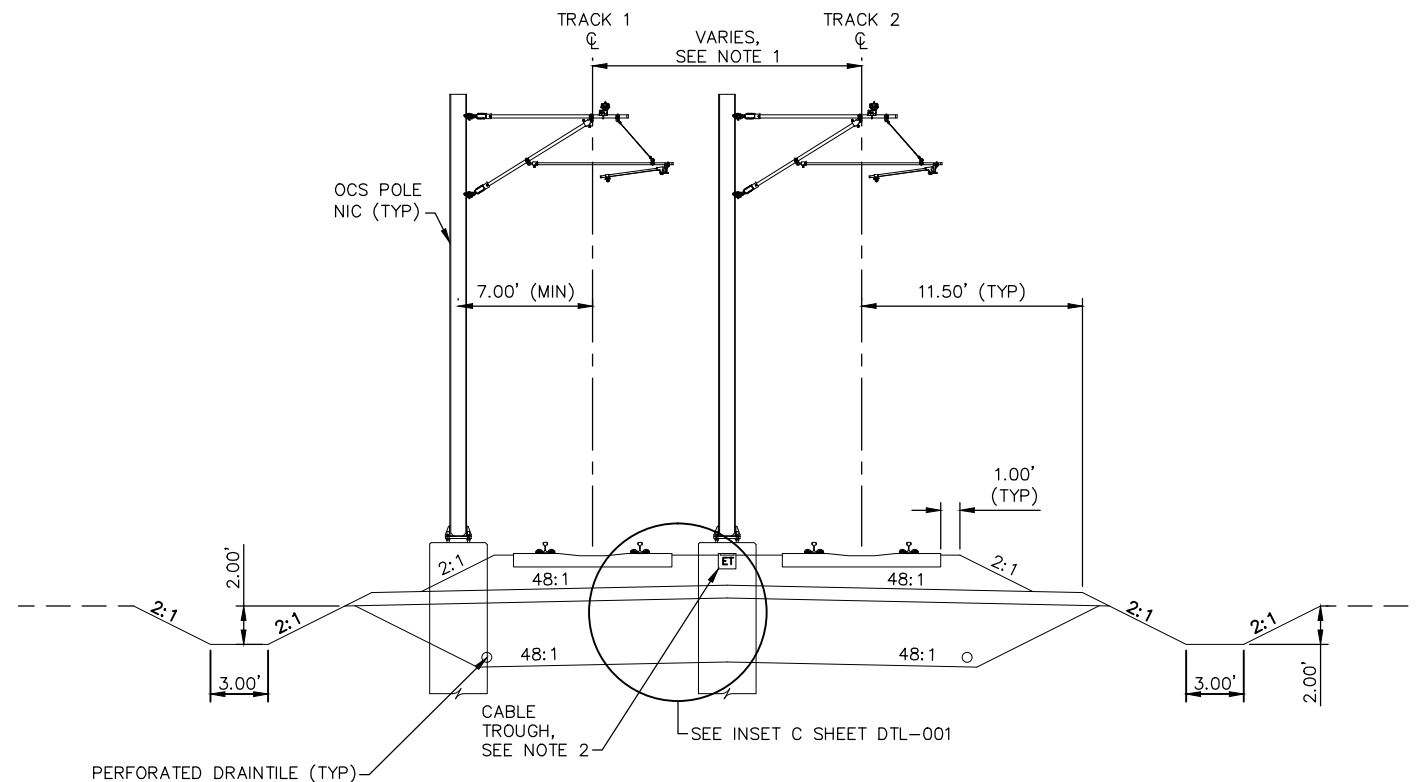
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 044**

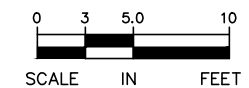
**SHEET**  
**119**  
**OF**  
**189**

Sep. 21 2015 02:15 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 17.89' TO 20.00' BETWEEN STATION 2421+50.00 TO 2421+63.94.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2421+50.00 TO STA. 2421+63.94



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

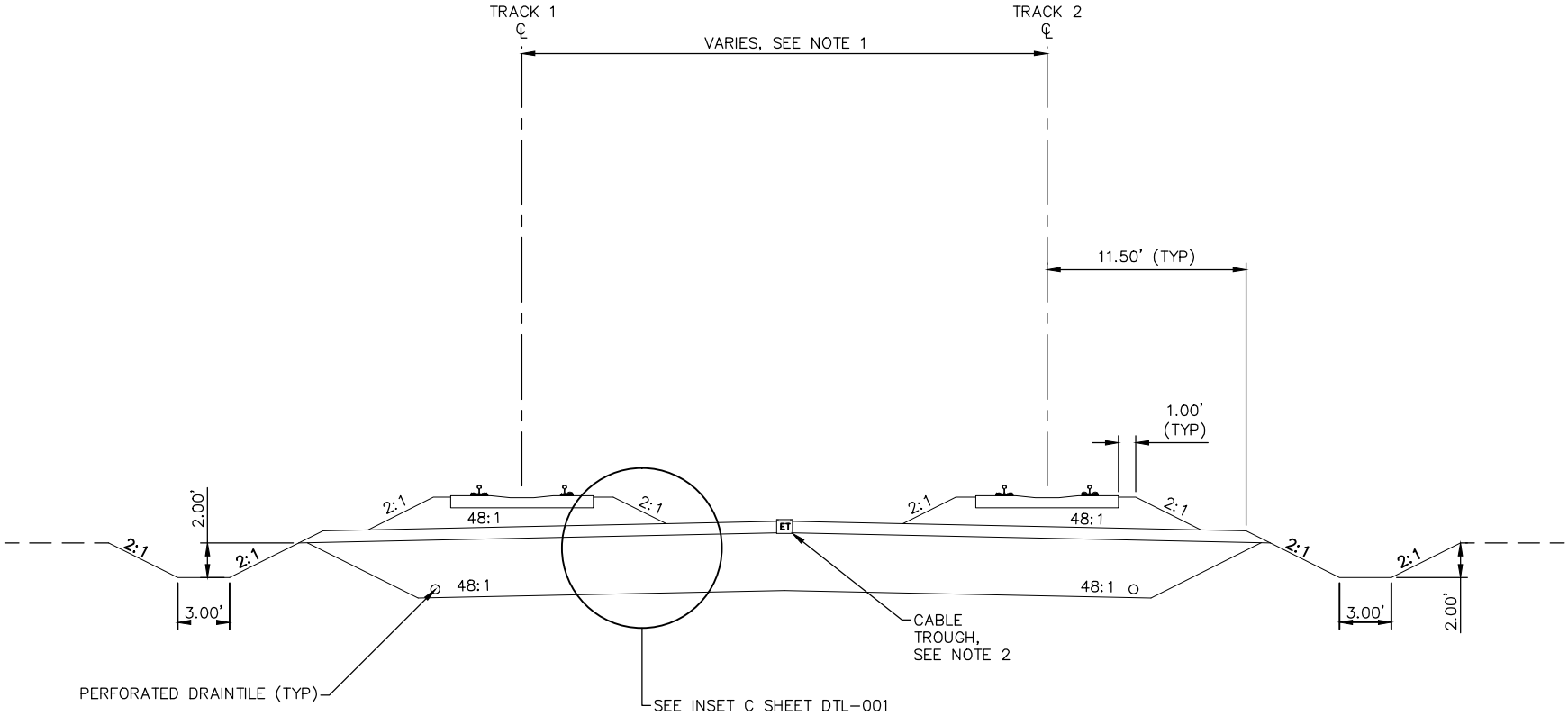
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 045**

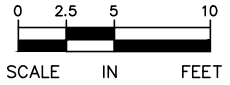
**SHEET**  
**120**  
**OF**  
**189**

Sep. 21 2015 02:15 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDEN FROM 20.00' TO 25.12' BETWEEN STATION 2421+63.94 TO 2421+99.01.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2421+63.94 TO STA. 2421+99.07



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

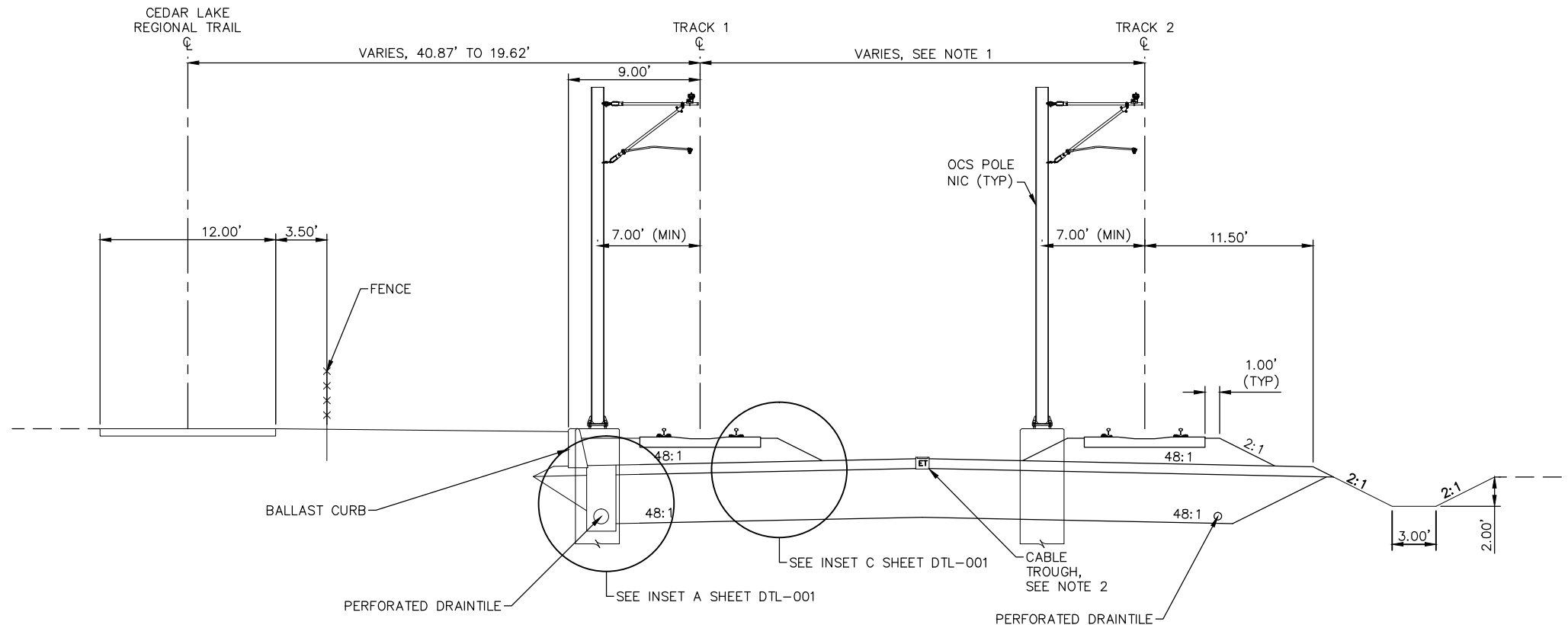
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 046**

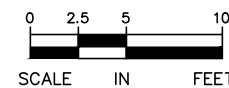
**SHEET**  
**121**  
**OF**  
**189**

Sep. 21 2015 02:16 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS WIDENS FROM 25.12' TO 30.38' BETWEEN STATION 2421+99.07 TO 2423+31.60.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2421+99.07 TO STA. 2423+81.60



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

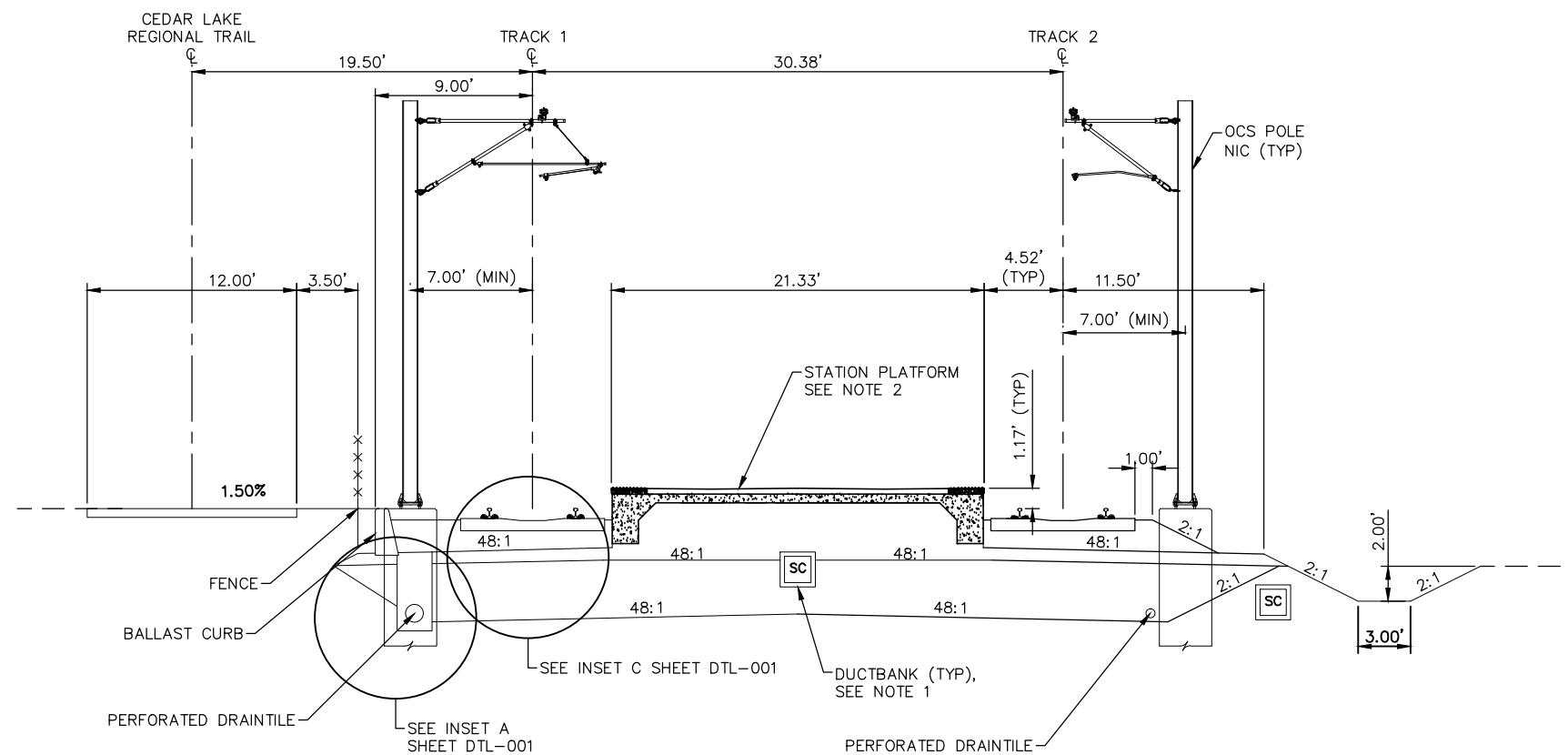
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 047

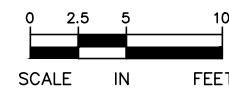
SHEET  
122  
OF  
189

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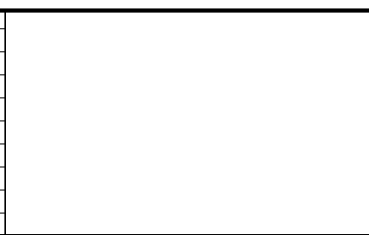
- NOTES:
1. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
  2. SEE STATION PLANS FOR STATION PLATFORM DETAILS.



TYPICAL SECTION - SHADY OAK STATION  
STA. 2423+81.60 TO STA. 2426+51.60



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

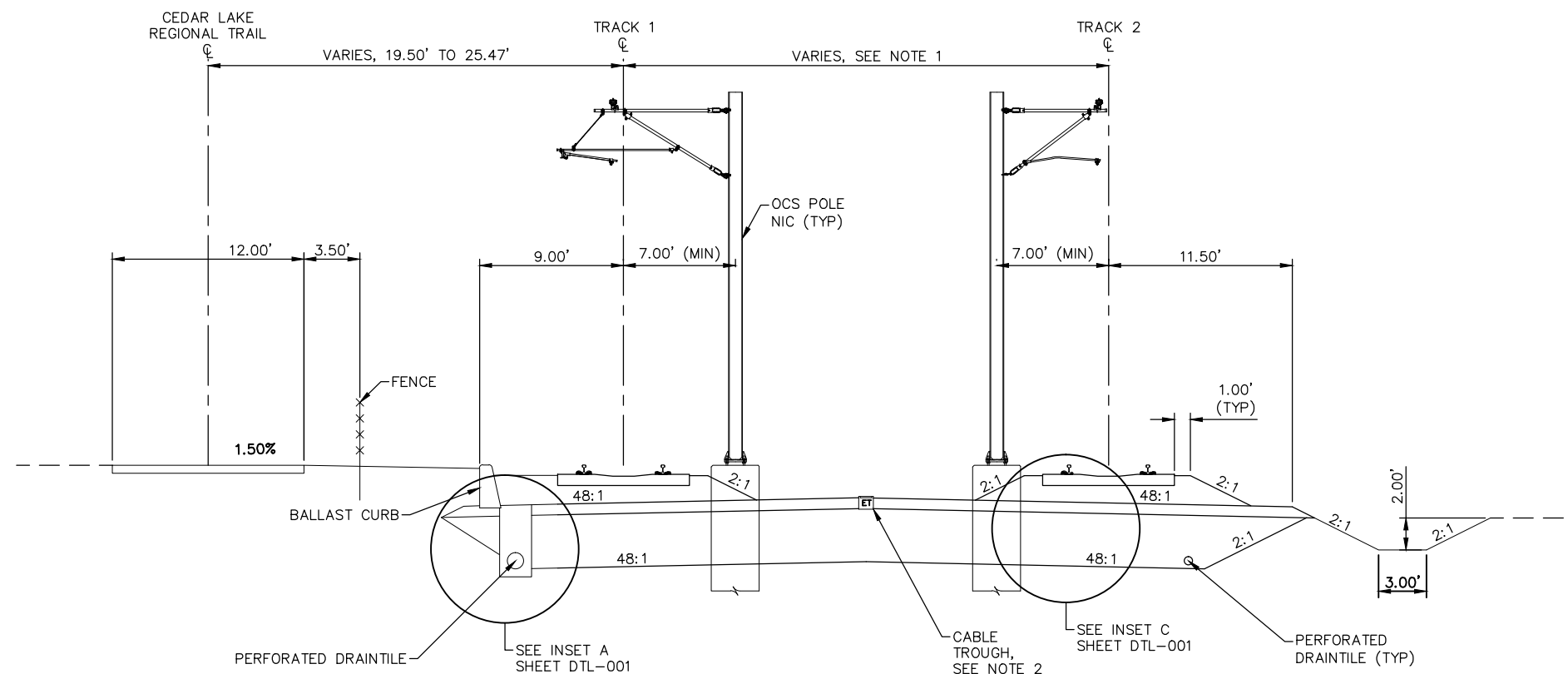


CIVIL WEST - VOLUME 3 TRACK TYPICAL SECTIONS	
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-TYP - 048

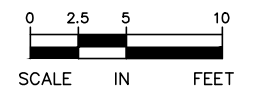
SHEET  
123  
OF  
189

Sep. 21 2015 02:16 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

- NOTES:
1. TRACK CENTERS NARROW FROM 30.38' TO 24.40' BETWEEN STA. 2426+51.60 TO 2429+72.84.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2426+51.60 TO STA. 2429+72.84



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



**AECOM**

60% SUBMISSION - 09/28/15



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**TYPICAL SECTIONS**

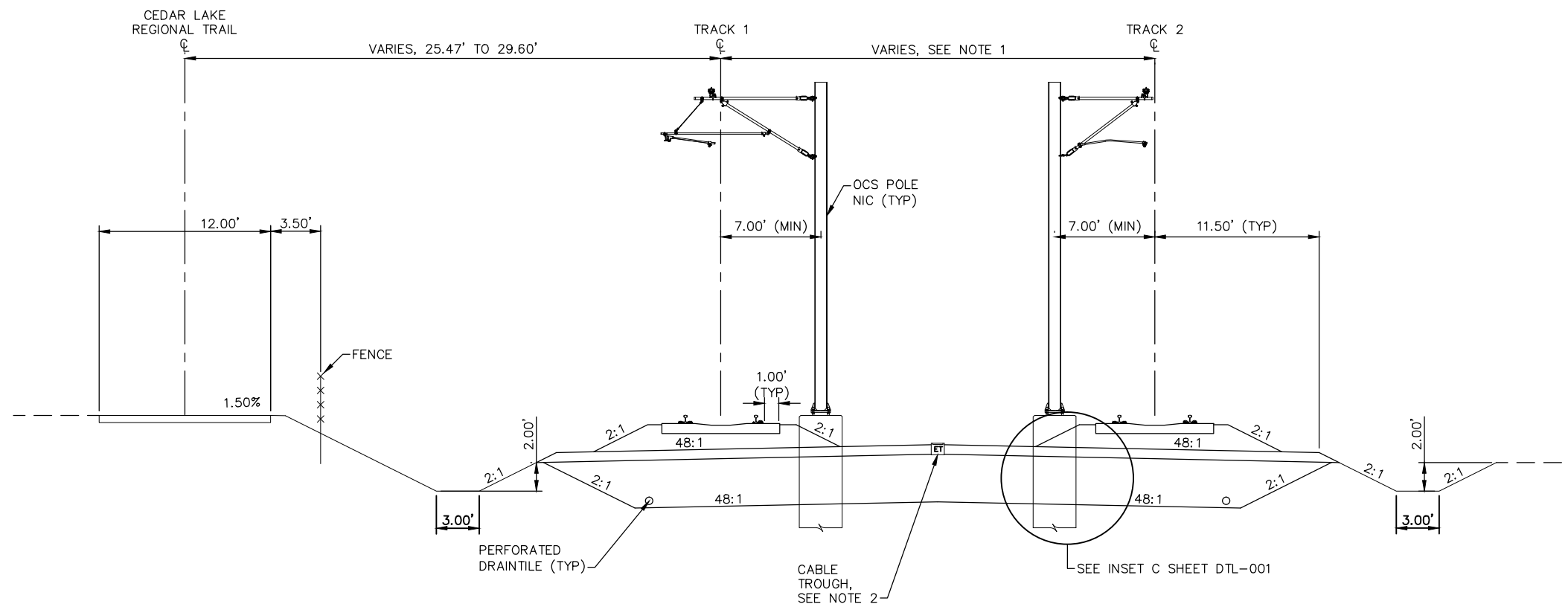
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-TYP - 049**

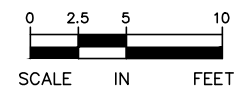
**SHEET**  
**124**  
**OF**  
**189**

Sep. 21 2015 02:16 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-TYP.dwg By: MourisBM

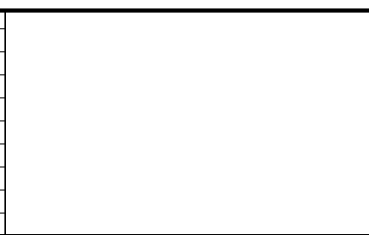
- NOTES:
1. TRACK CENTERS NARROW FROM 24.40' TO 20.00' BETWEEN STA. 2429+71.84 TO 2430+71.93.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2429+71.84 TO STA. 2430+71.93



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

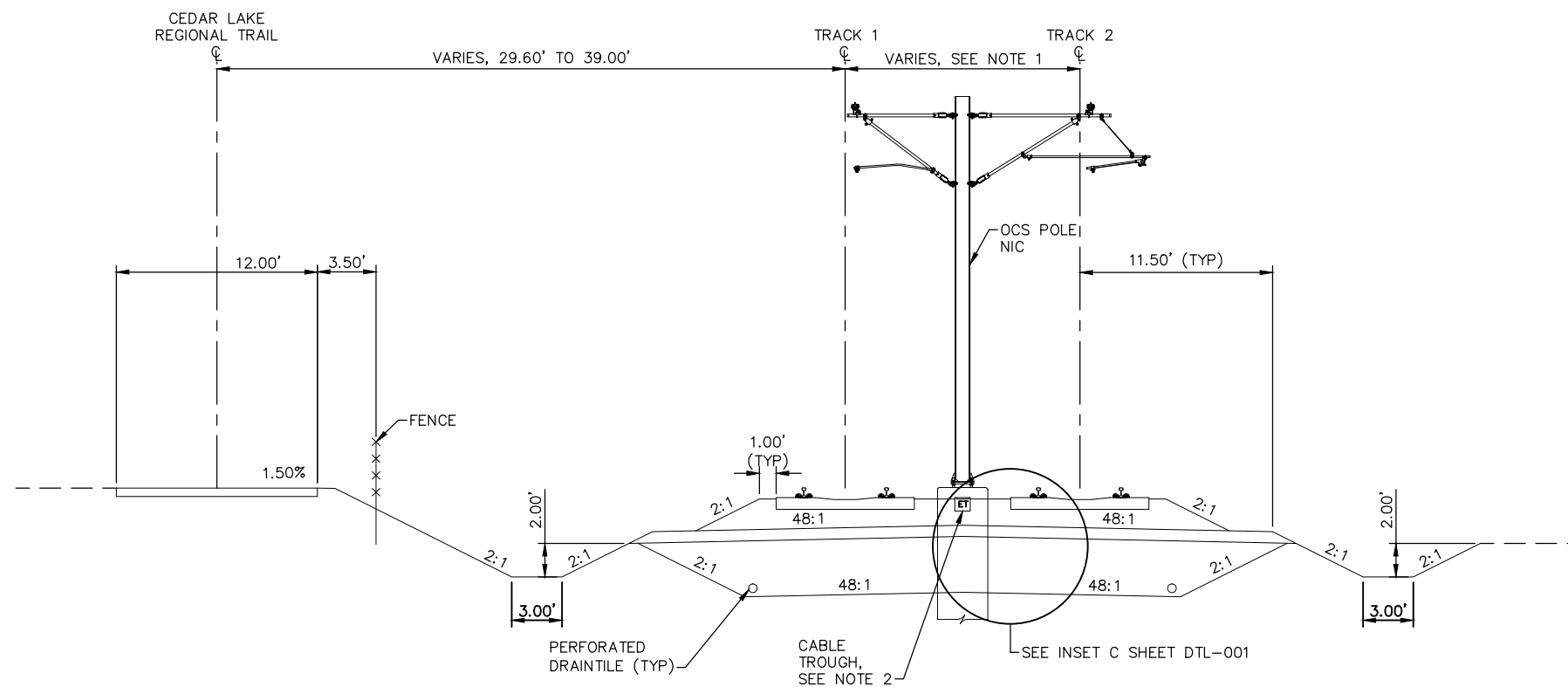
DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 050

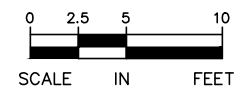
SHEET  
125  
OF  
189

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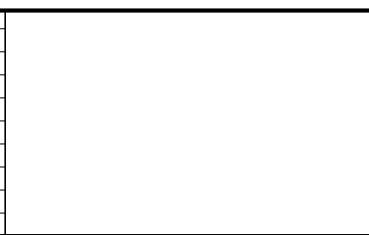
- NOTES:
1. TRACK CENTERS NARROW FROM 20.00' TO 14.00' BETWEEN STA.2430+71.93 TO 2433+43.33.
  2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION  
STA. 2430+71.93 TO STA. 2441+49.22



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



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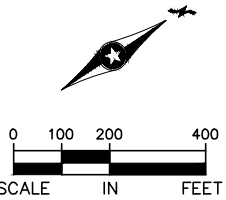
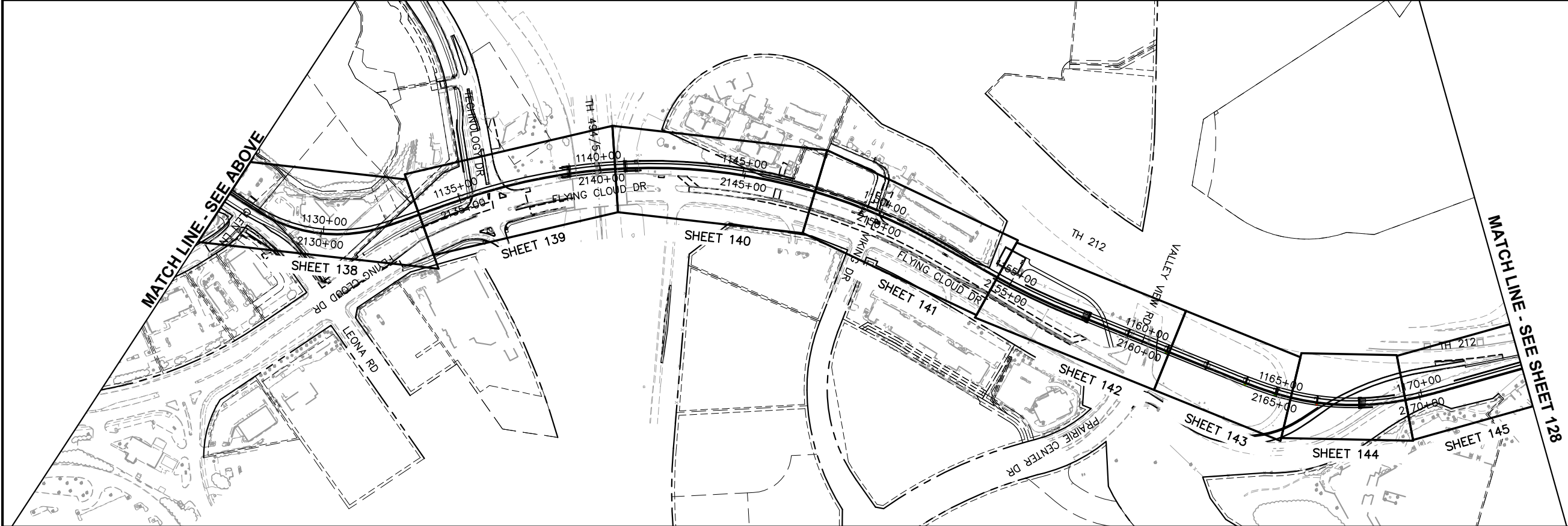
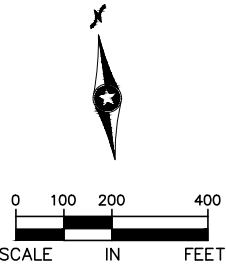
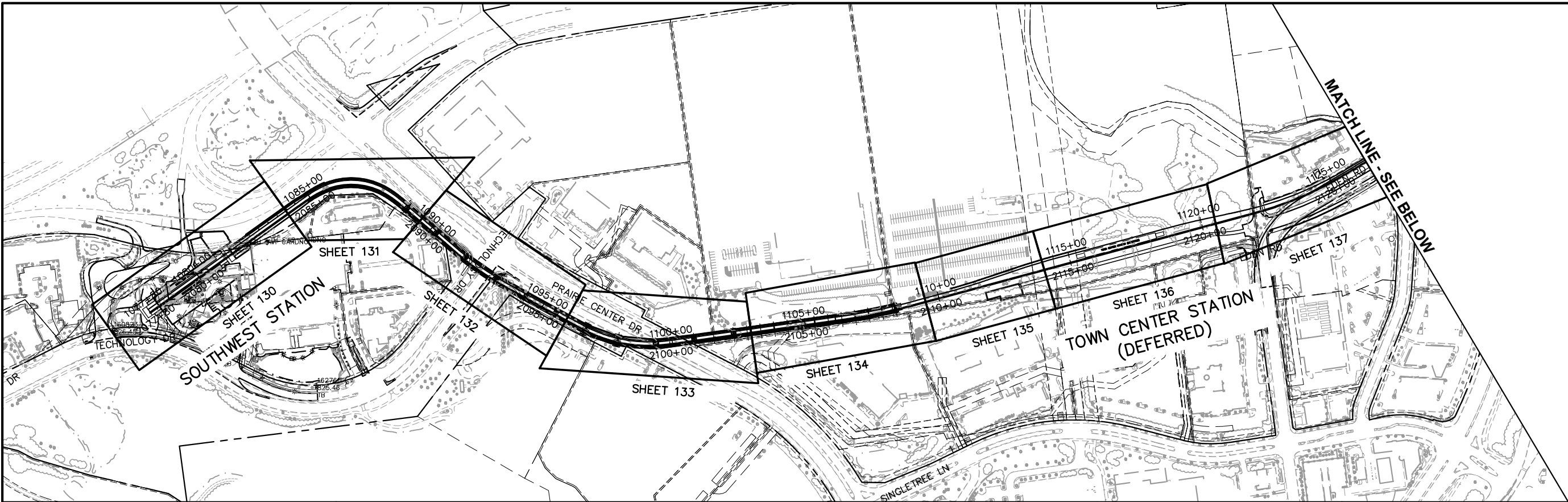
CIVIL WEST - VOLUME 3  
TRACK  
TYPICAL SECTIONS

DISCIPLINE: TRACK

SHEET NAME: W3-TRK-TYP - 051

SHEET  
126  
OF  
189







NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
PLAN SHEET LAYOUT  
SHEET 1

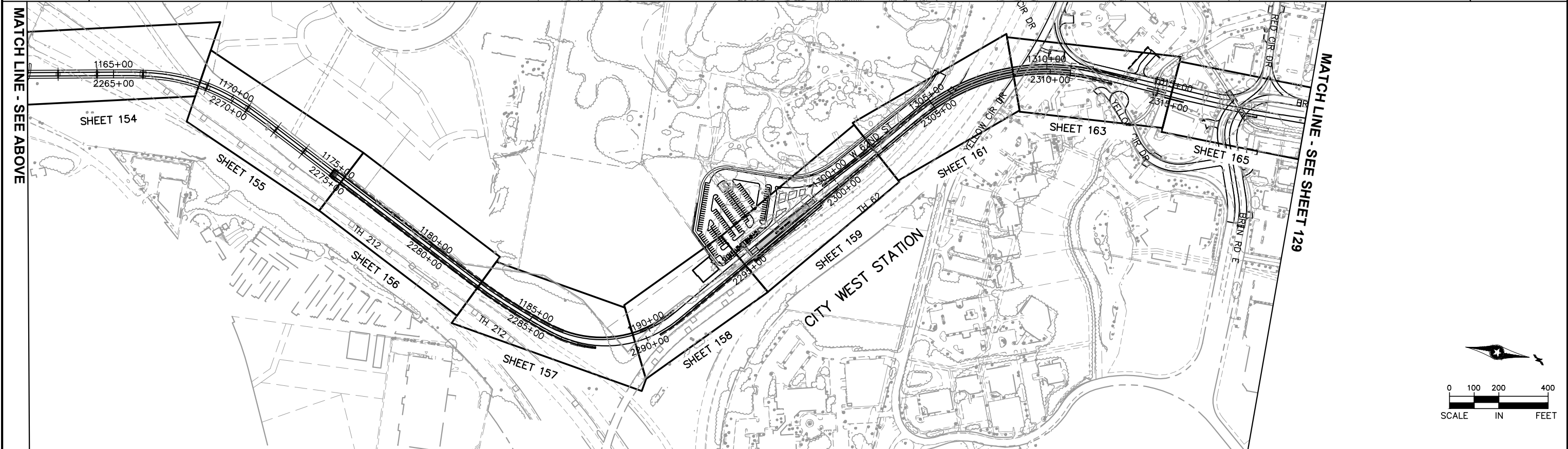
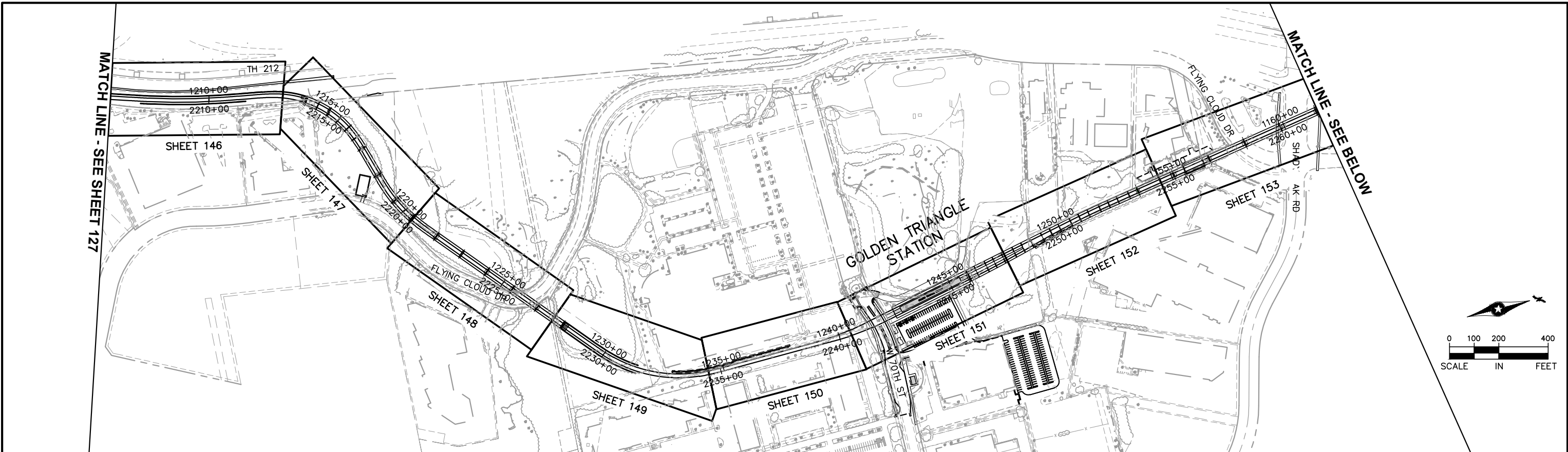
DISCIPLINE: TRACK

SHEET NAME: W1-TRK-LAY-001

SHEET  
127  
OF  
189



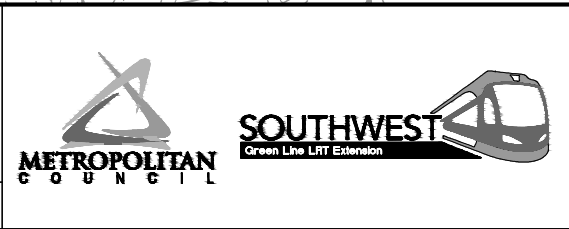
Sep. 21 2015 08:18 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-LAY.dwg By: V-RasulL



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

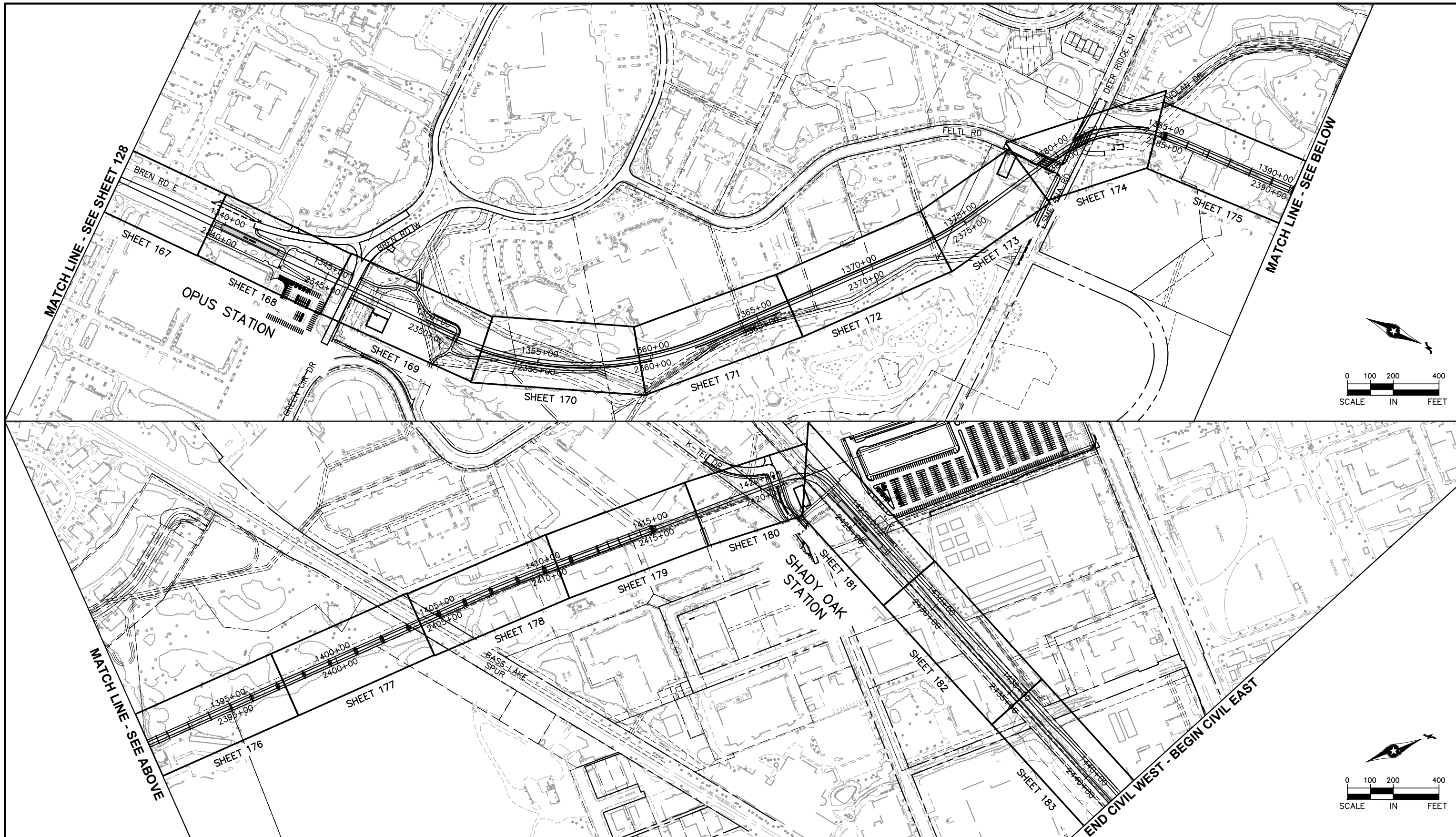


60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3 TRACK PLAN SHEET LAYOUT SHEET 2		SHEET 128 OF 189
DISCIPLINE: TRACK	SHEET NAME: W2-TRK-LAY-001	

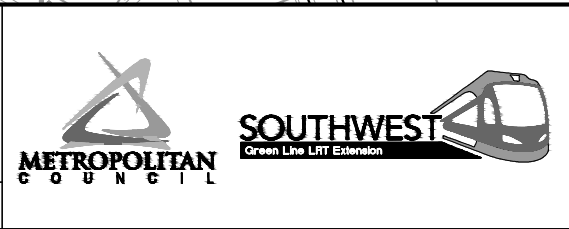
Sep. 21 2015 02:23 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-LAY.dwg By: MaurisBM



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3 TRACK PLAN SHEET LAYOUT SHEET 3		SHEET 129 OF 189
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-LAY-001	

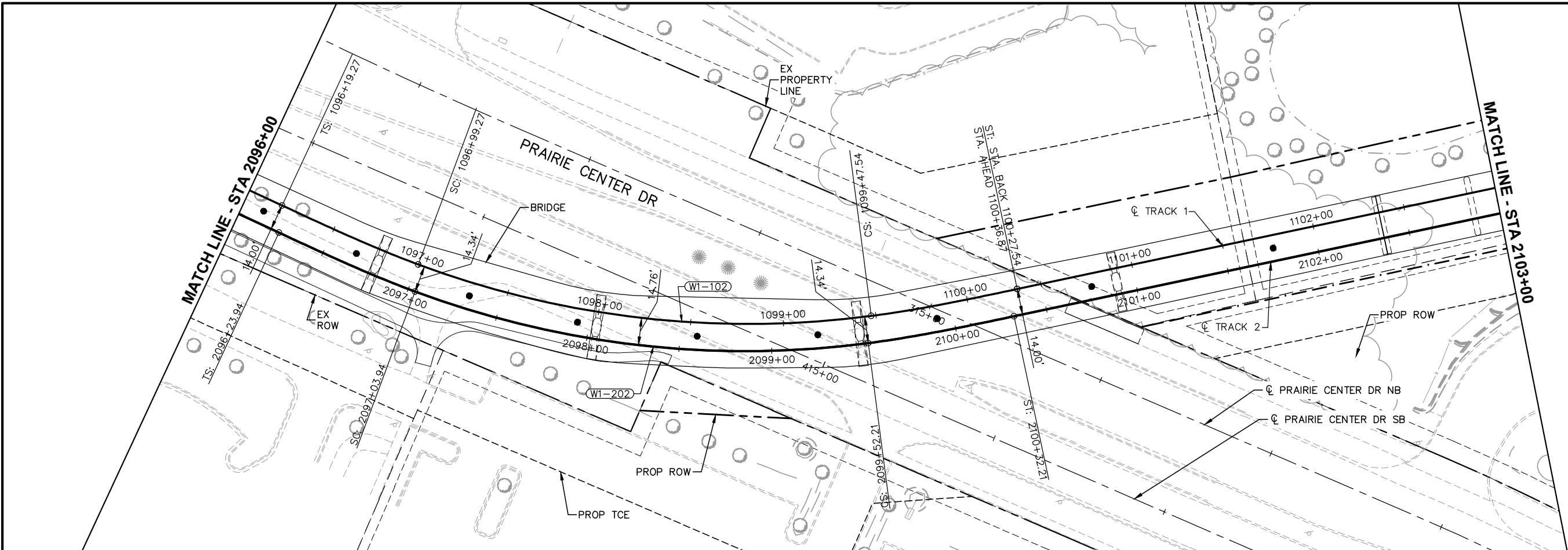






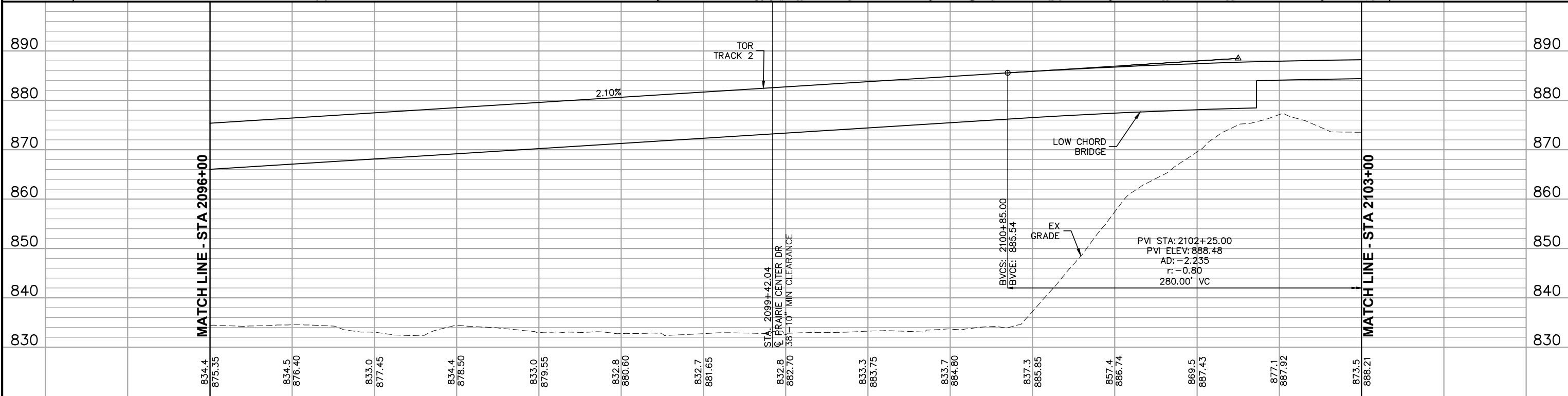
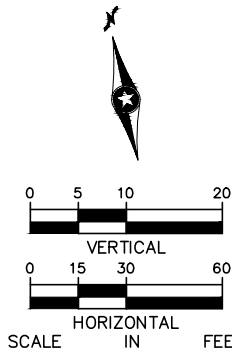




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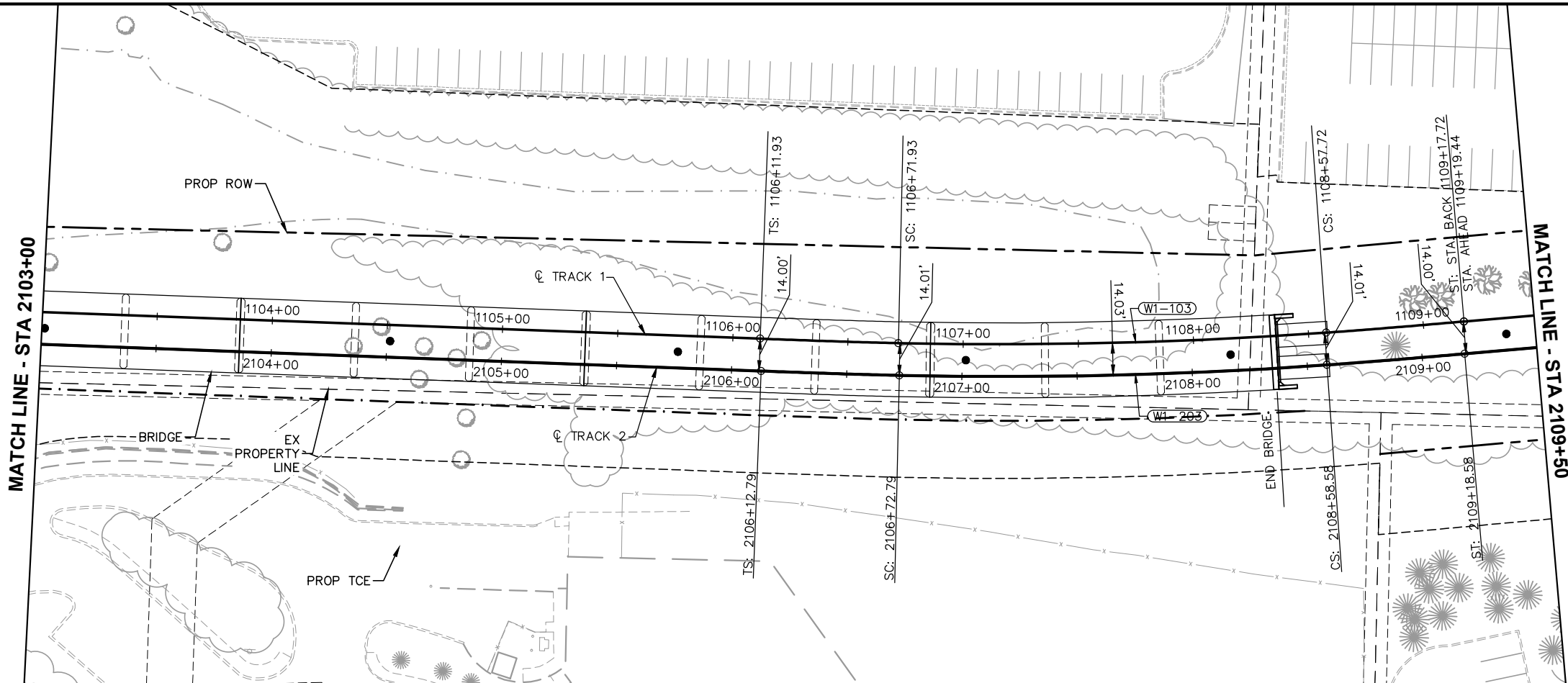
CURVE NO. W1-202
R = 510.00'
Lc = 248.27'
Ls = 80.00'
Ea = 2.25"
Eu = 2.60"
V = 25 MPH

CURVE NO. W1-102
R = 510.00'
Lc = 248.27'
Ls = 80.00'
Ea = 2.25"
Eu = 2.60"
V = 25 MPH



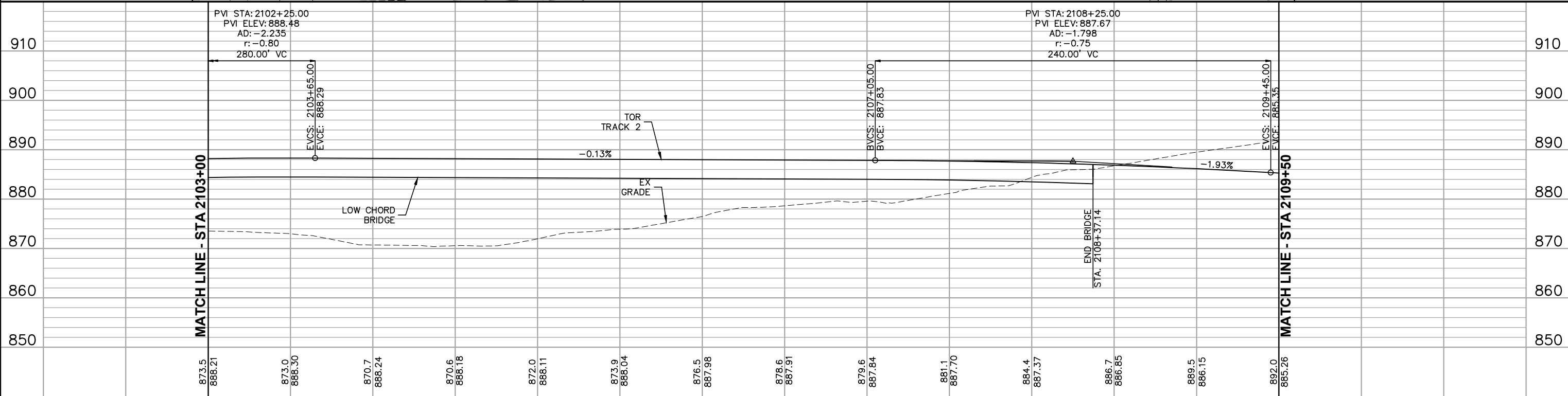
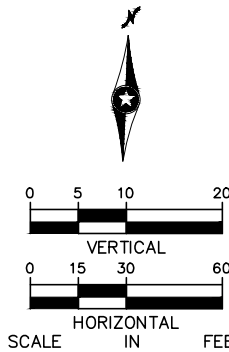
2096+00						2097+00						2098+00						2099+00						2100+00						2101+00						2102+00						2103+00						SHEET																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL							<div>AECOM</div>						<div><div>METROPOLITAN COUNCIL</div><div>SOUTHWEST Green Line LRT Extension</div></div>						CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2096+00 TO STA 2103+00												133																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								



Sep. 21 2015 02:29 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MourisBM





CURVE NO. W1-203
R = 2000.00'
Lc = 185.79'
Ls = 60.00'
Ea = 1.00"
Eu = 1.43"
V = 35 MPH

CURVE NO. W1-103
R = 2000.00'
Lc = 185.79'
Ls = 60.00'
Ea = 1.00"
Eu = 1.43"
V = 35 MPH

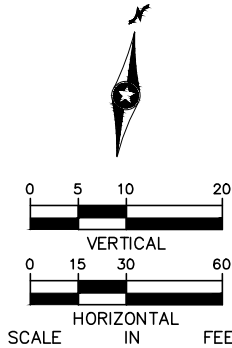


2103+00						2104+00		2105+00		2106+00		2107+00		2108+00		2109+00		SHEET	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL					<div>CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2103+00 TO STA 2109+50</div>		<div>DISCIPLINE: TRACK</div> <div>SHEET NAME: W1-TRK-PRF - 005</div>		134 OF 189					
						60% SUBMISSION - 09/28/15													



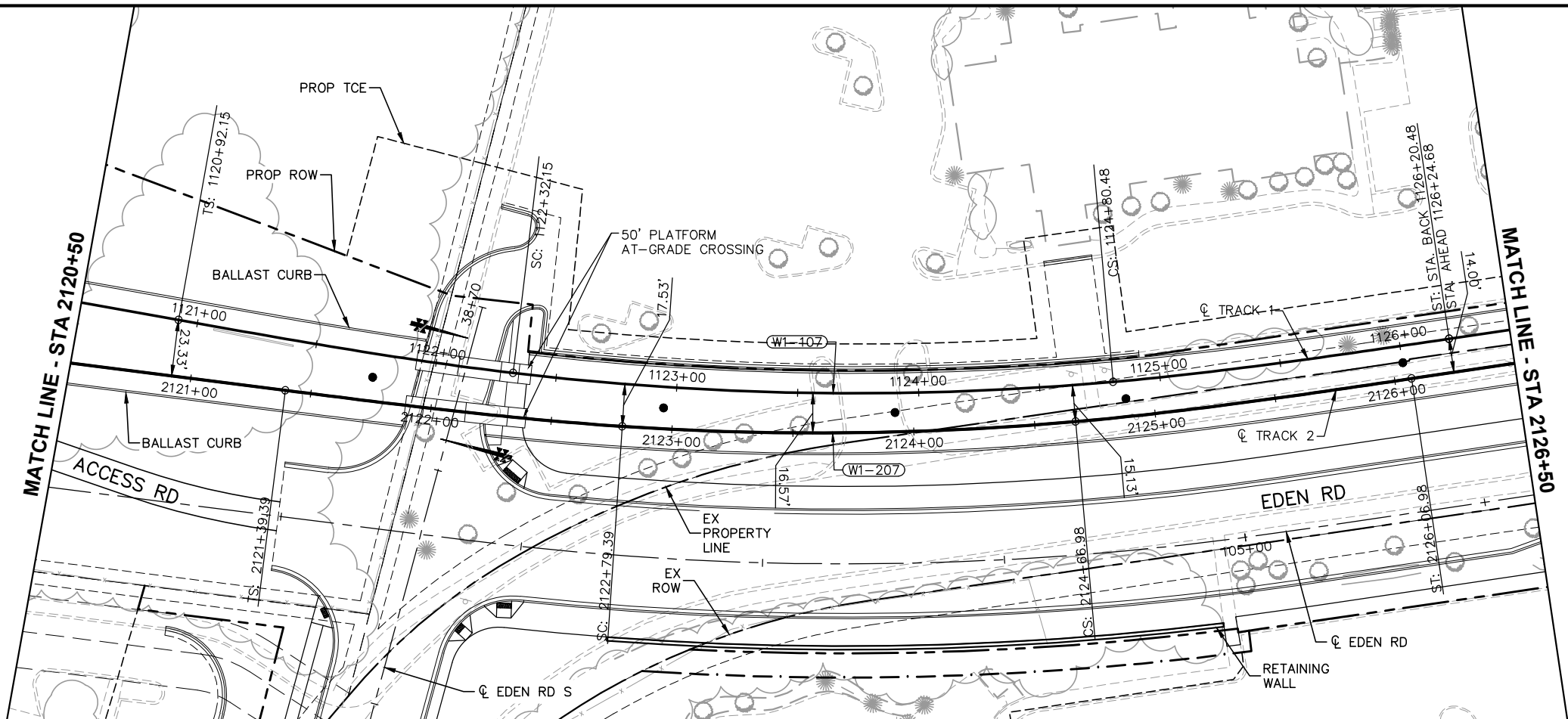
						2110+00	2111+00	2112+00	2113+00	2114+00	<b>CIVIL WEST - VOLUME 3</b> <b>TRACK</b> <b>PLAN AND PROFILE</b> <b>STA 2109+50 TO STA 2114+00</b>		<b>SHEET</b>  <b>135</b>  <b>OF</b>  <b>189</b>
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL						DISCIPLINE: <b>TRACK</b>	SHEET NAME: <b>W1-TRK-PRF - 006</b>	

CURVE NO. W1-105
R = 2000.00'
Lc = 63.27'
Ls = 55.00'
Ea = 1.00"
Eu = 1.43"
V = 35 MPH



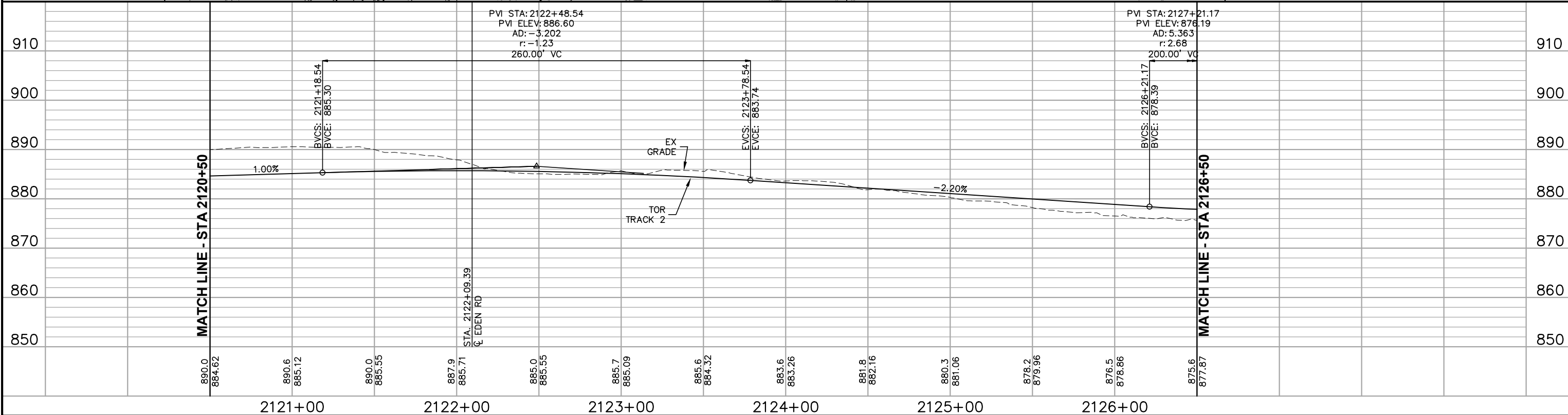
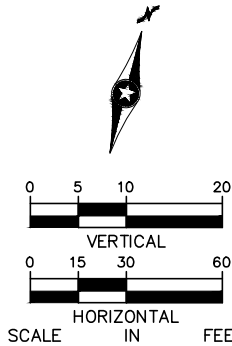


Sep. 21 2015 02:31 am V:\3400\_ADC\CAD\CAD\_00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MaurisEM



CURVE NO. W1-207
R = 1200.00'
Lc = 187.59'
Ls = 140.00'
Ea = 1.00"
Eu = 3.04"
V = 35 MPH

CURVE NO. W1-107
R = 1200.00'
Lc = 248.33'
Ls = 140.00'
Ea = 1.00"
Eu = 3.04"
V = 35 MPH



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15



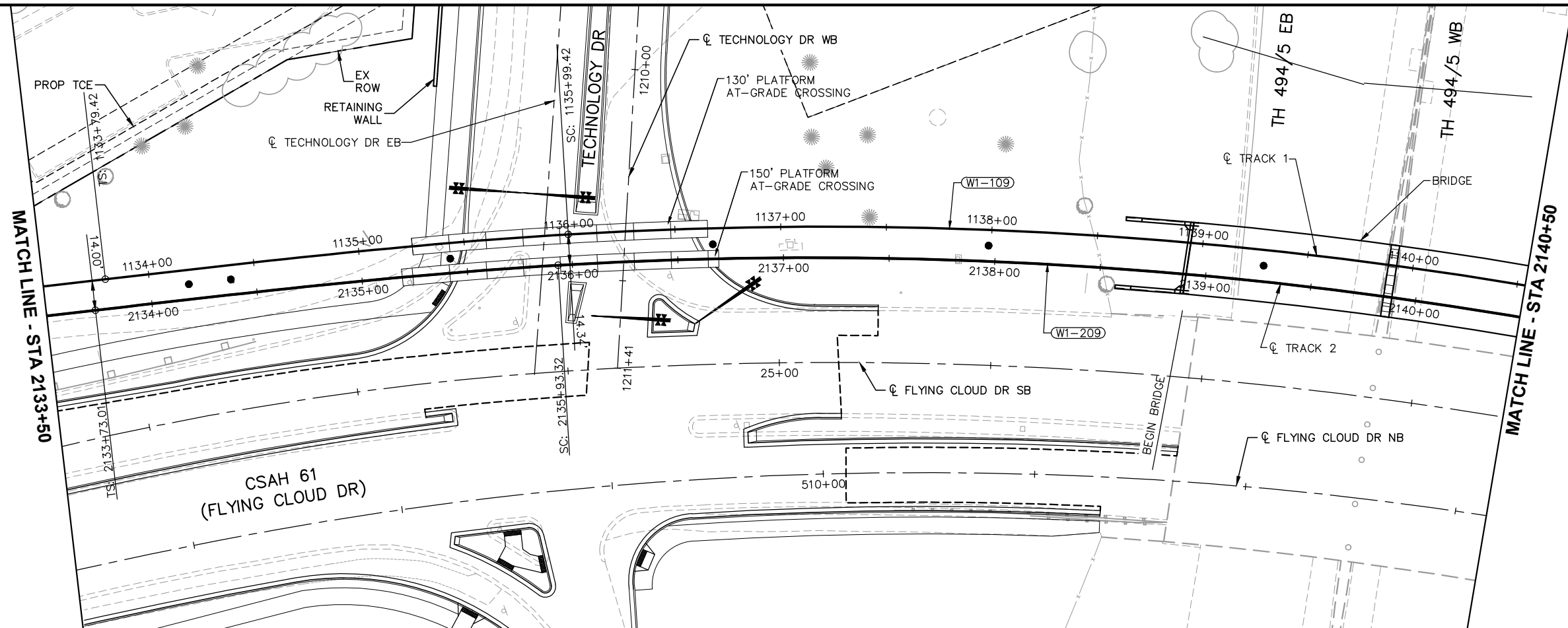
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2120+50 TO STA 2126+50

DISCIPLINE: TRACK  
SHEET NAME: W1-TRK-PRF - 008

SHEET  
137  
OF  
189

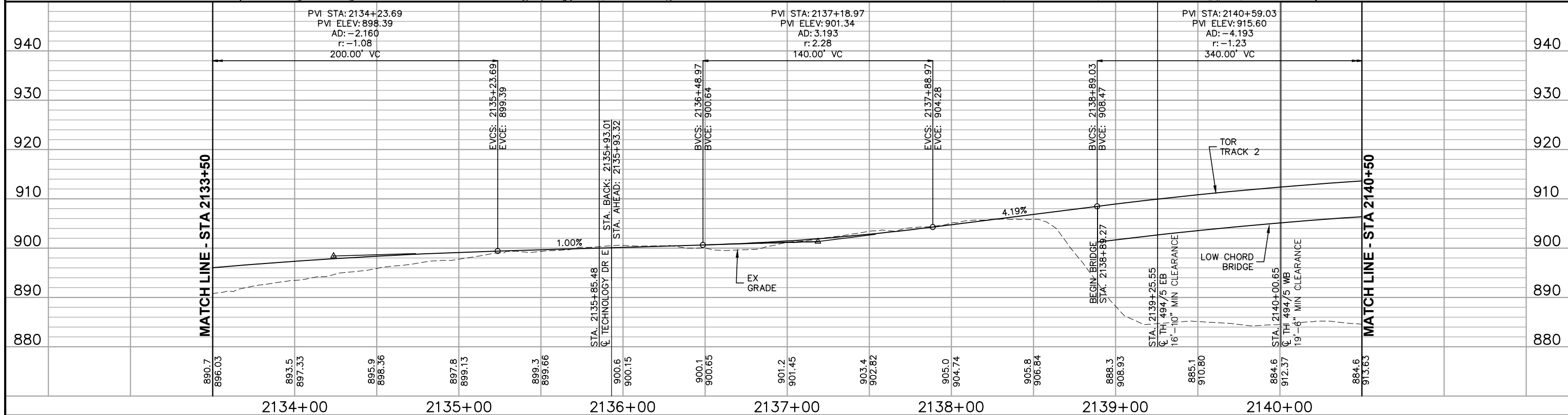
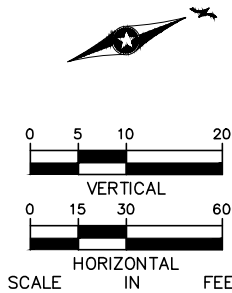


Sep. 21 2015 02:32 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MourisBM



CURVE NO. W1-209
R = 2000.00'
Lc = 1498.32'
Ls = 220.00'
Ea = 1.00"
Eu = 3.95"
V = 50 MPH

CURVE NO. W1-109
R = 2000.00'
Lc = 1498.32'
Ls = 220.00'
Ea = 1.00"
Eu = 3.95"
V = 50 MPH



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



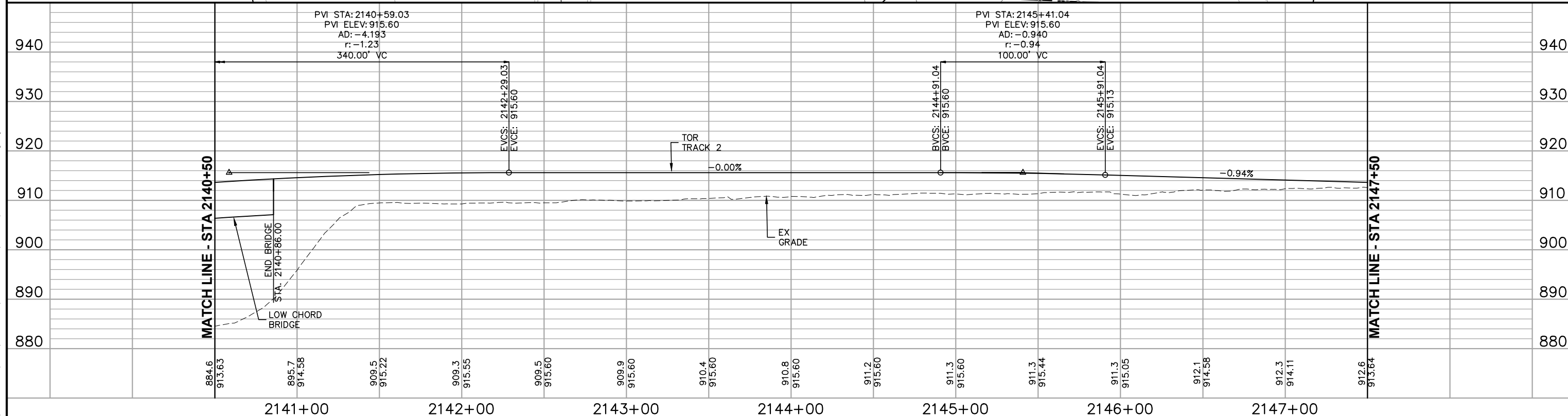
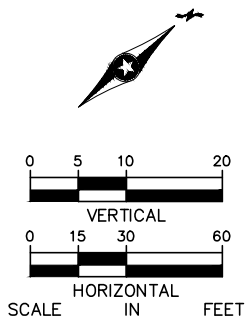
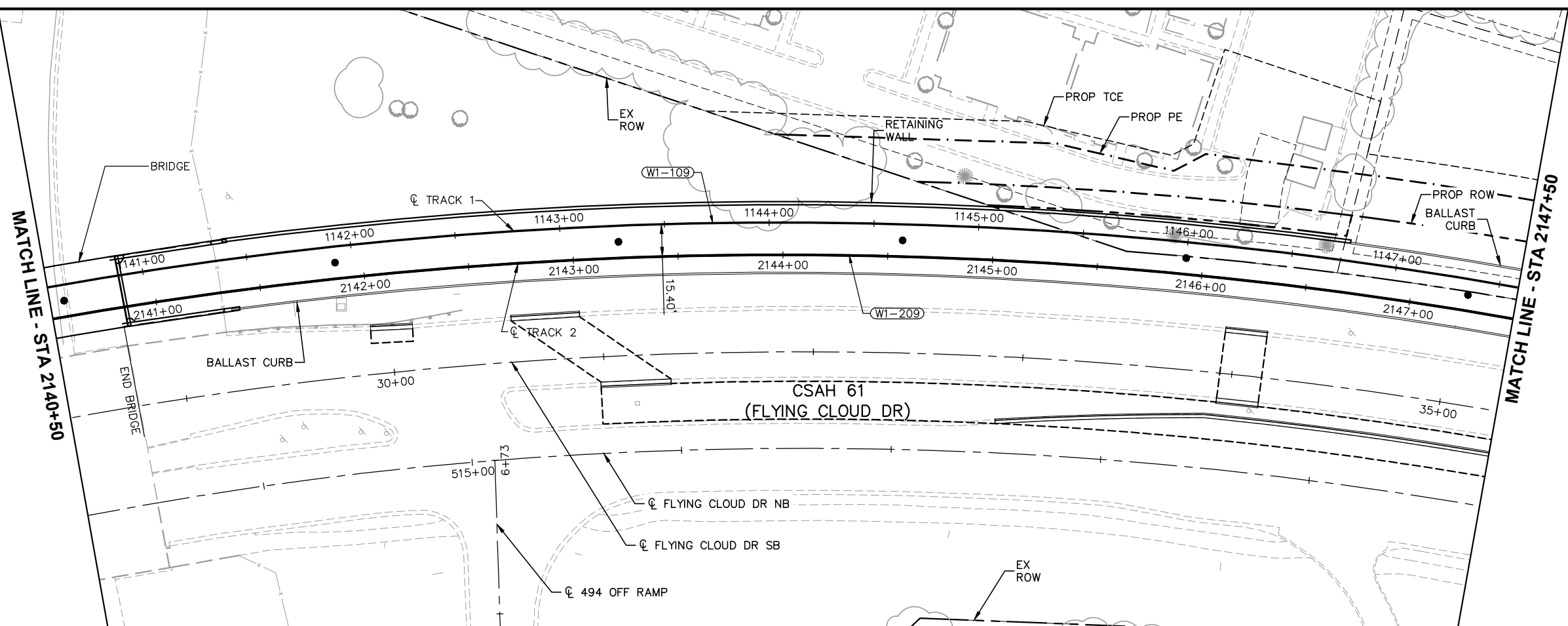

60% SUBMISSION - 09/28/15






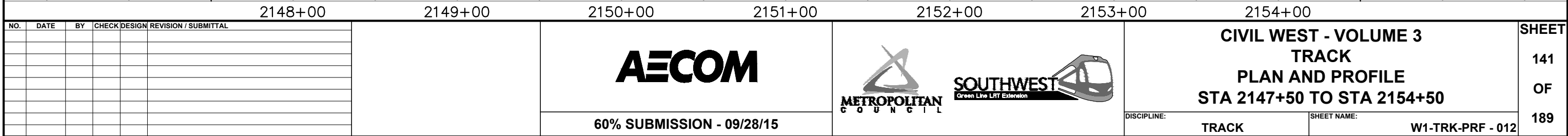
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2133+50 TO STA 2140+50

DISCIPLINE: TRACK  
SHEET NAME: W1-TRK-PRF - 010

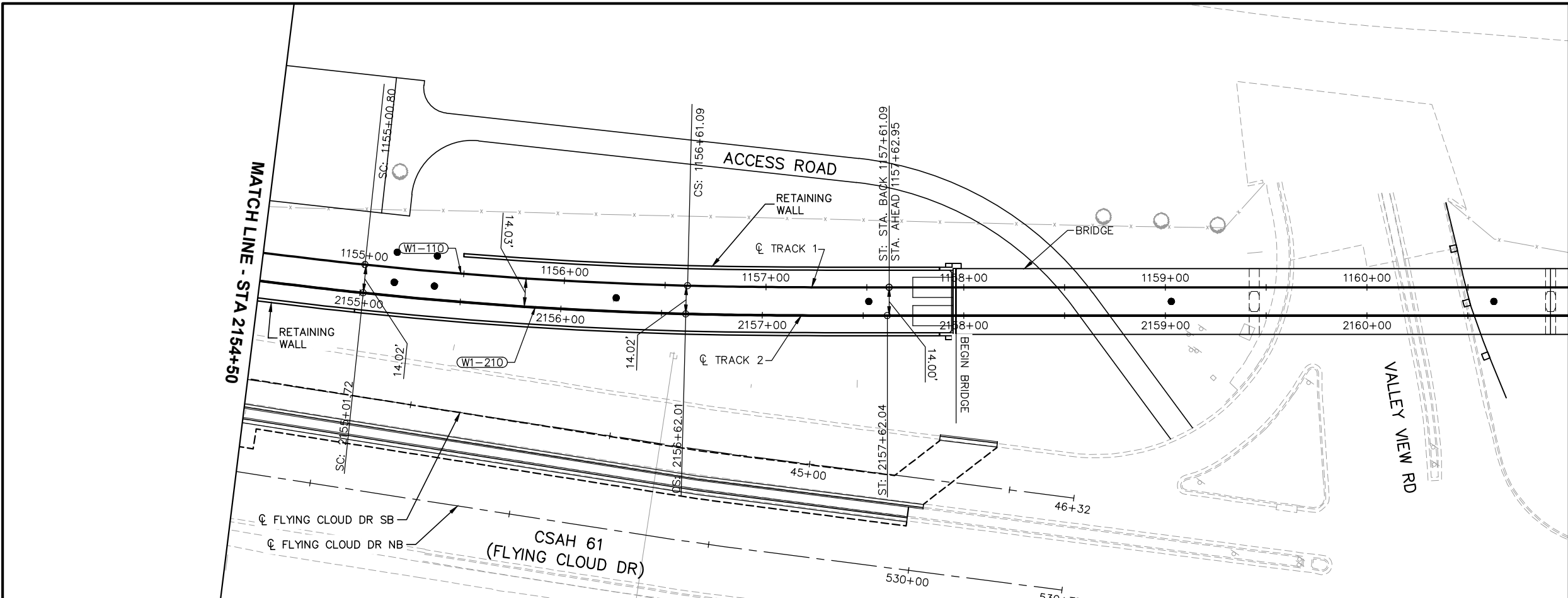
SHEET  
139  
OF  
189



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL			 	CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2140+50 TO STA 2147+50		SHEET 140 OF 189
						60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: W1-TRK-PRF - 011		

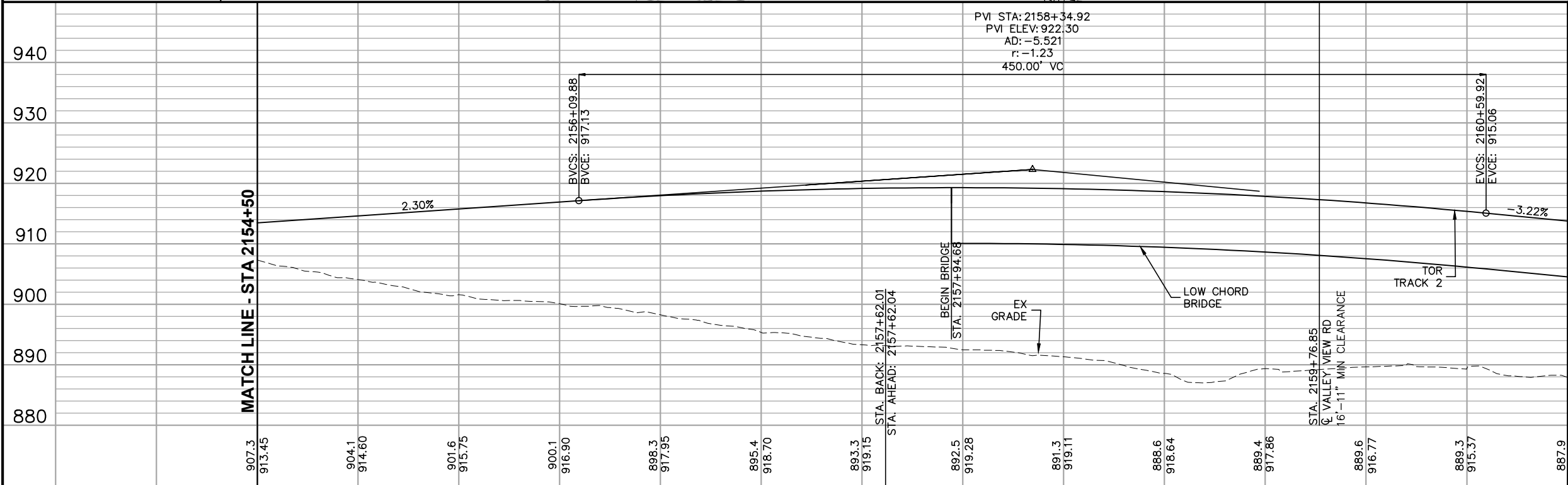
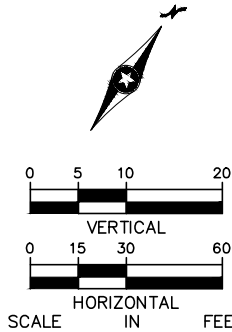


Sep. 21 2015 11:24 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: V-ResuL



CURVE NO. W1-210
R = 2000.00'
Lc = 160.29'
Ls = 100.00'
Ea = 2.00"
Eu = 2.01"
V = 45 MPH

CURVE NO. W1-110
R = 2000.00'
Lc = 160.29'
Ls = 100.00'
Ea = 2.00"
Eu = 2.01"
V = 45 MPH



907.3 913.45	904.1 914.60	901.6 915.75	900.1 916.90	898.3 917.95	895.4 918.70	893.3 919.15	892.5 919.28	891.3 919.11	888.6 918.64	889.4 917.86	889.6 916.77	889.3 915.37	887.9 913.76
2155+00	2156+00	2157+00	2158+00	2159+00	2160+00	2161+00	2162+00	2163+00	2164+00	2165+00	2166+00	2167+00	2168+00

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15



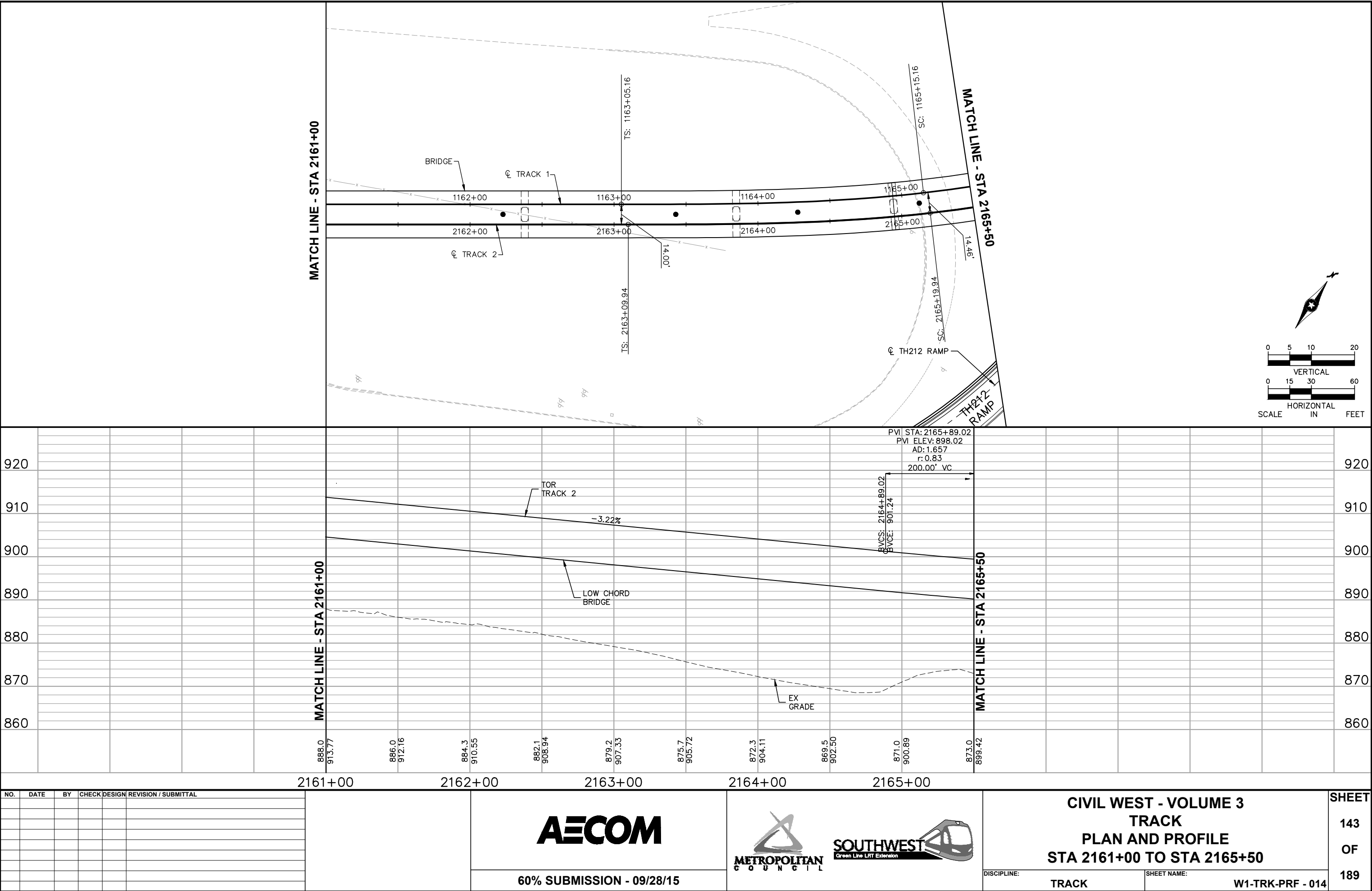
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2154+50 TO STA 2161+00

DISCIPLINE: TRACK  
SHEET NAME: W1-TRK-PRF - 013


SHEET
142
OF
189



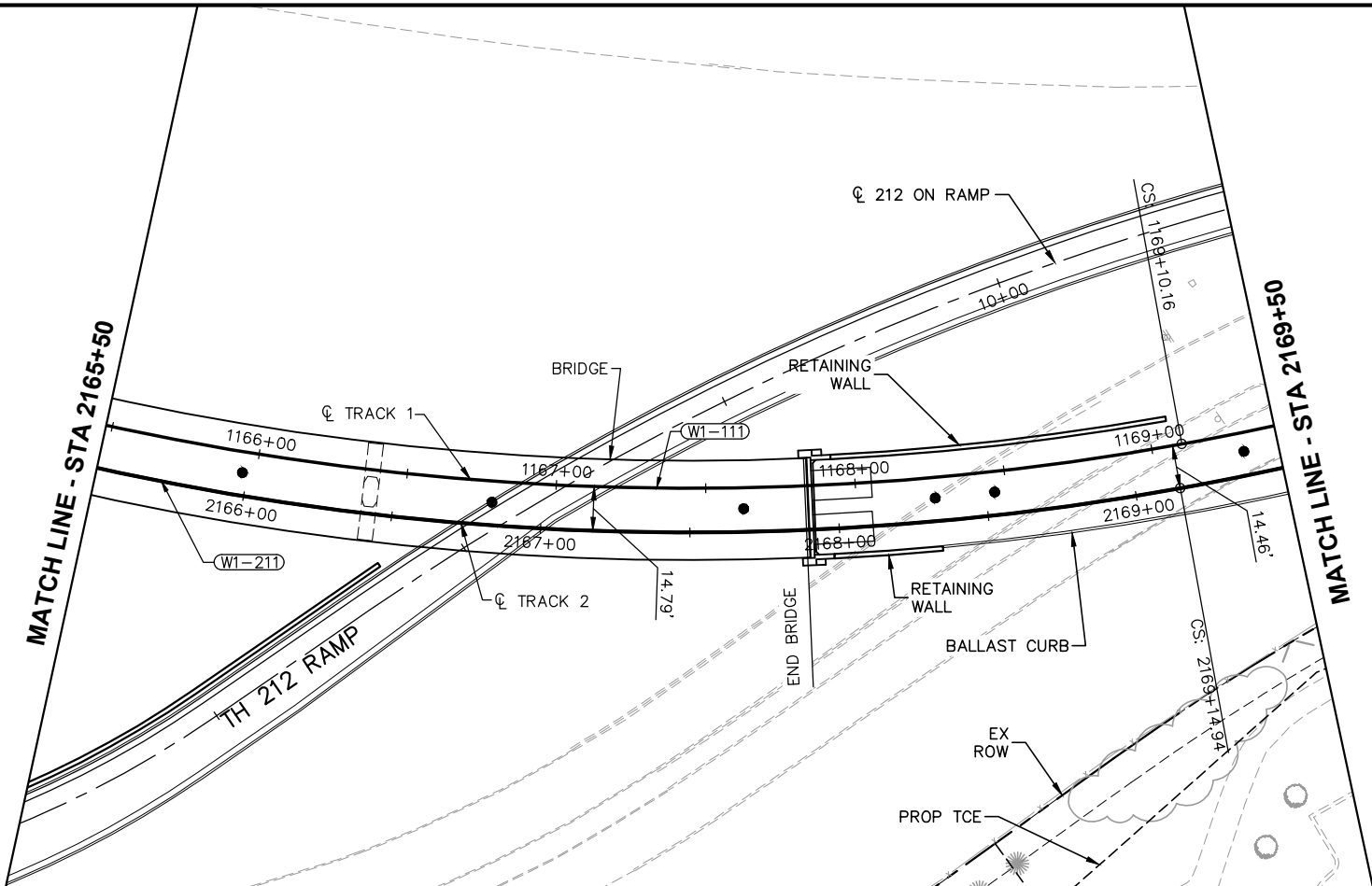
Sep. 21 2015 02:35 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MourisBM



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

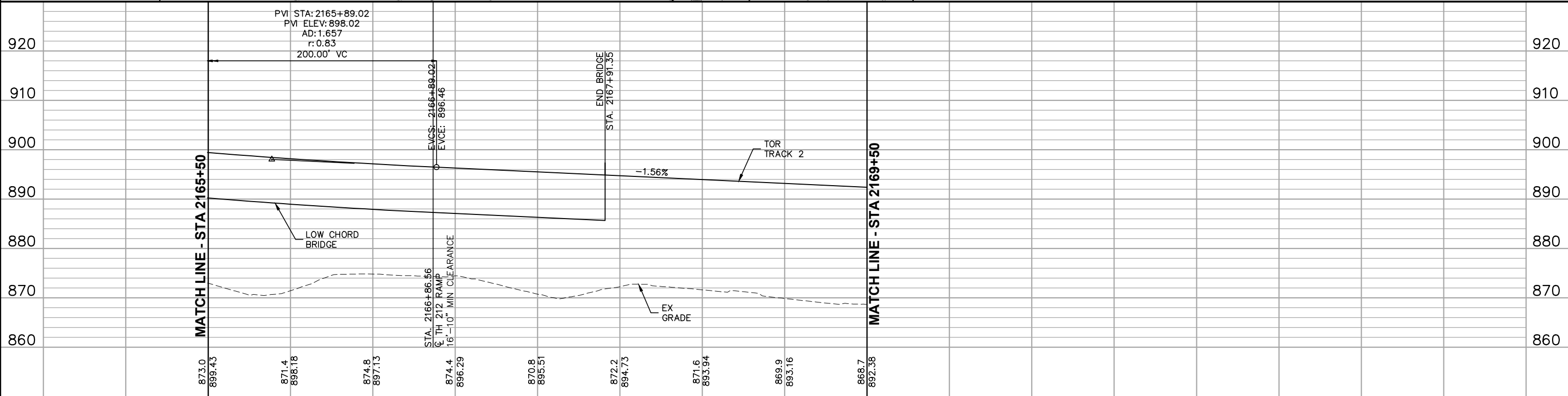
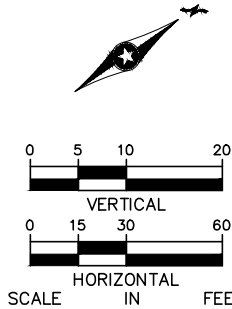
2161+00		2162+00		2163+00		2164+00		2165+00				
				<b>AECOM</b>		 METROPOLITAN COUNCIL		 SOUTHWEST Green Line LRT Extension		<b>CIVIL WEST - VOLUME 3</b> <b>TRACK</b> <b>PLAN AND PROFILE</b> <b>STA 2161+00 TO STA 2165+50</b>		<b>SHEET</b> <b>143</b> <b>OF</b> <b>189</b>
				60% SUBMISSION - 09/28/15						DISCIPLINE: <b>TRACK</b>		SHEET NAME: <b>W1-TRK-PRF - 014</b>



Sep. 21 2015 02:36 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MourisBM



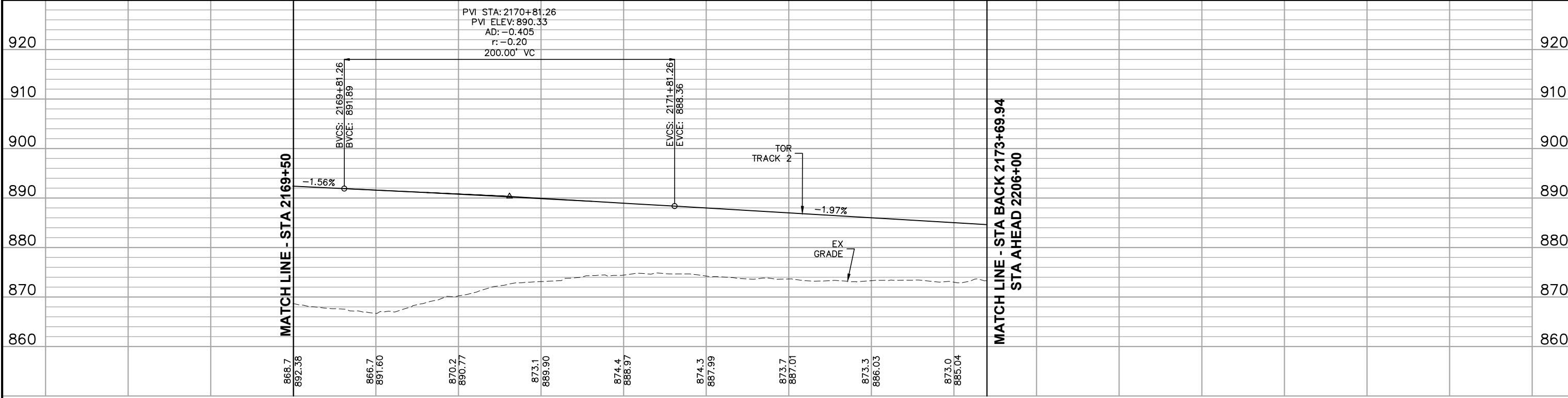
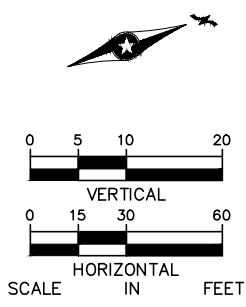
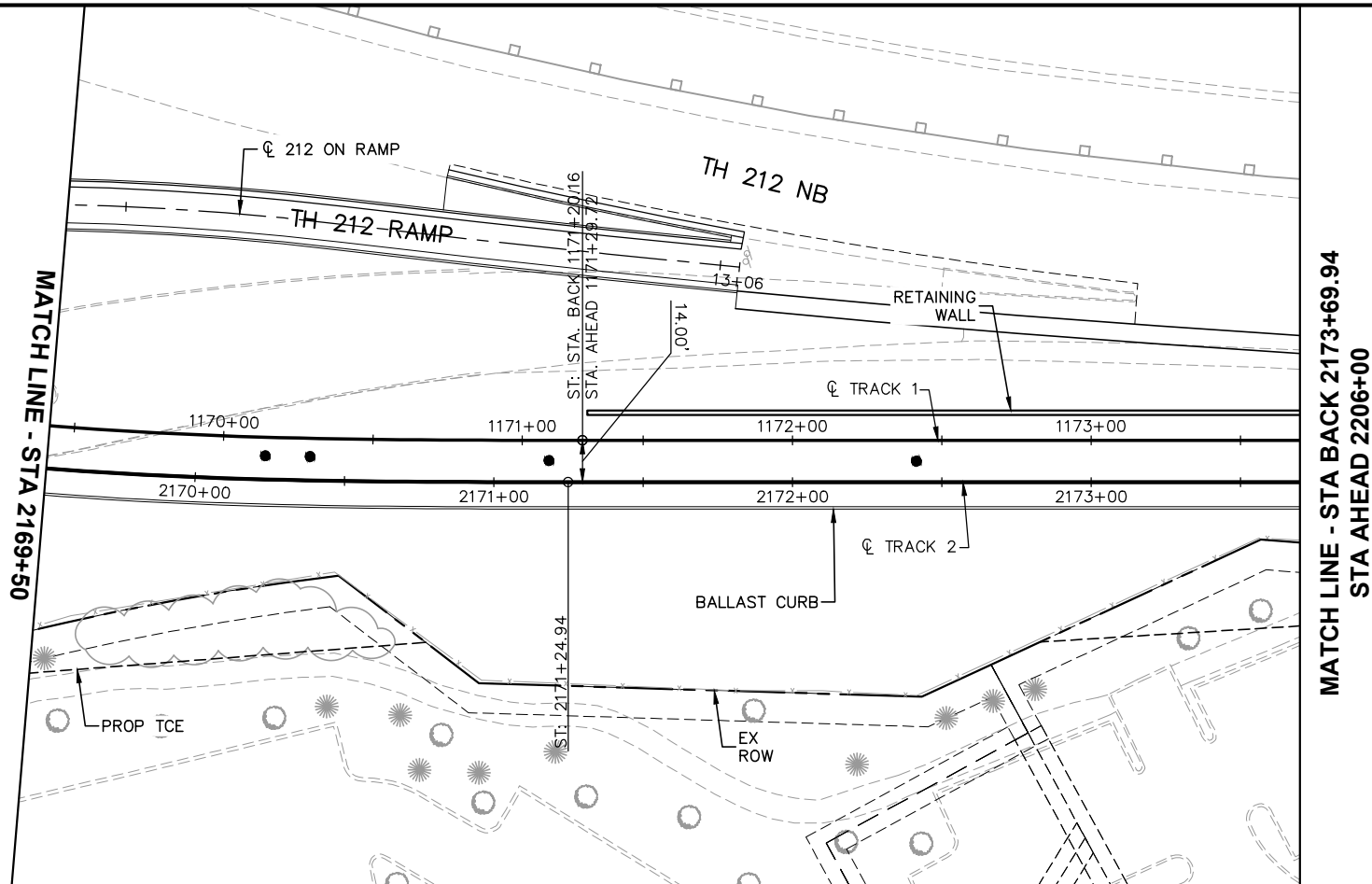
CURVE NO. W1-211
R = 920.00'
Lc = 395.00'
Ls = 210.00'
Ea = 4.50"
Eu = 4.22"
V = 45 MPH

CURVE NO. W1-111
R = 920.00'
Lc = 395.00'
Ls = 210.00'
Ea = 4.50"
Eu = 4.22"
V = 45 MPH



2166+00						2167+00						2168+00						2169+00						<div>CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2165+50 TO STA 2169+50</div> <div>DISCIPLINE: TRACK</div> <div>SHEET NAME: W1-TRK-PRF - 015</div>						SHEET 144 OF 189	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div> <div>60% SUBMISSION - 09/28/15</div>						<div><div> METROPOLITAN COUNCIL</div><div> SOUTHWEST Green Line LRT Extension</div></div>																			

Sep. 21 2015 02:37 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W1-TRK-PRF.dwg By: MourisBM



2170+00 2171+00 2172+00 2173+00

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

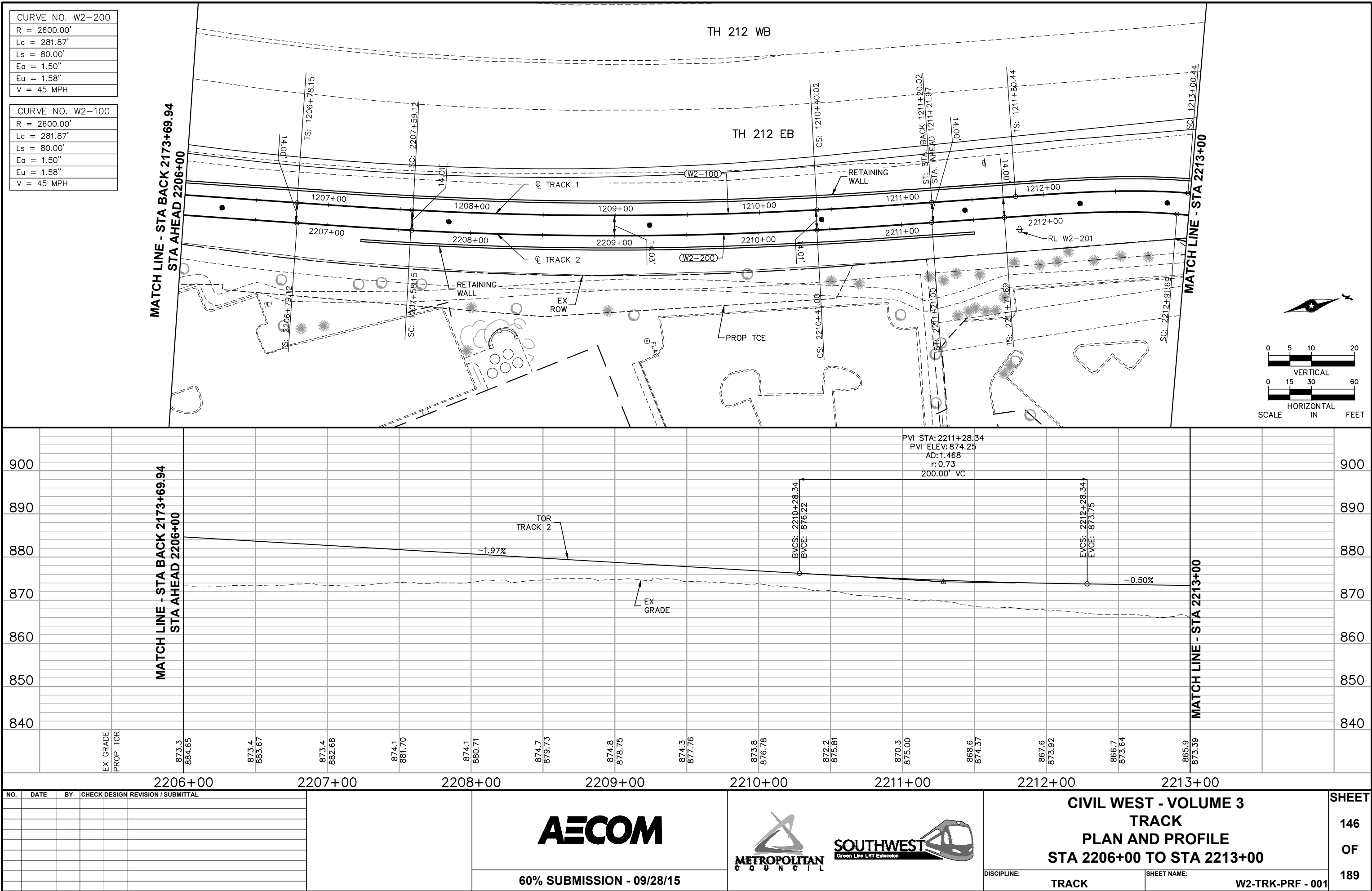


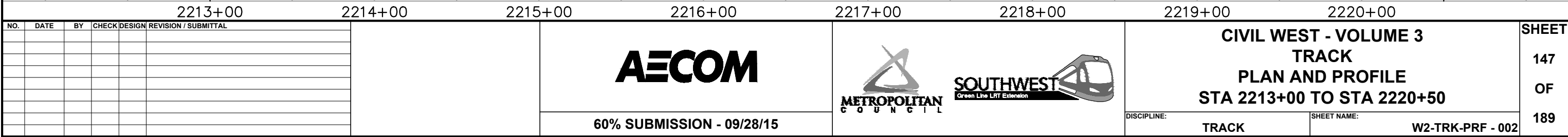
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2169+50 TO STA 2173+69.94

DISCIPLINE: TRACK SHEET NAME: W1-TRK-PRF - 016

SHEET  
145  
OF  
189

Sep. 21 2015 02:40 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM



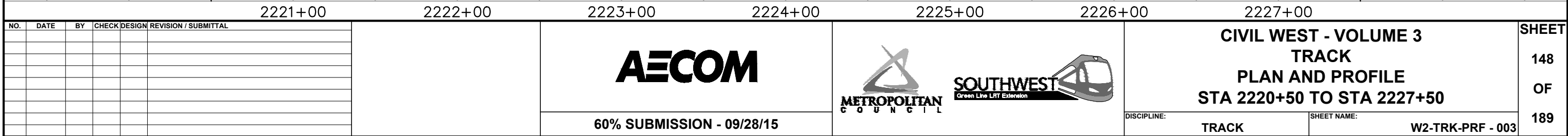
[illegible]

**METROPOLITAN**  
COUNCIL

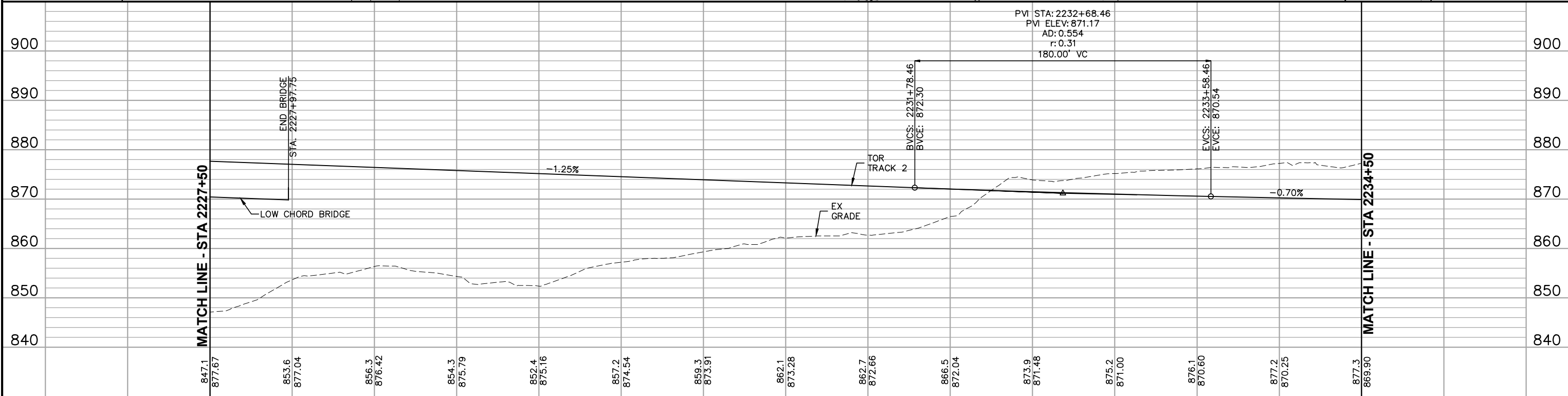
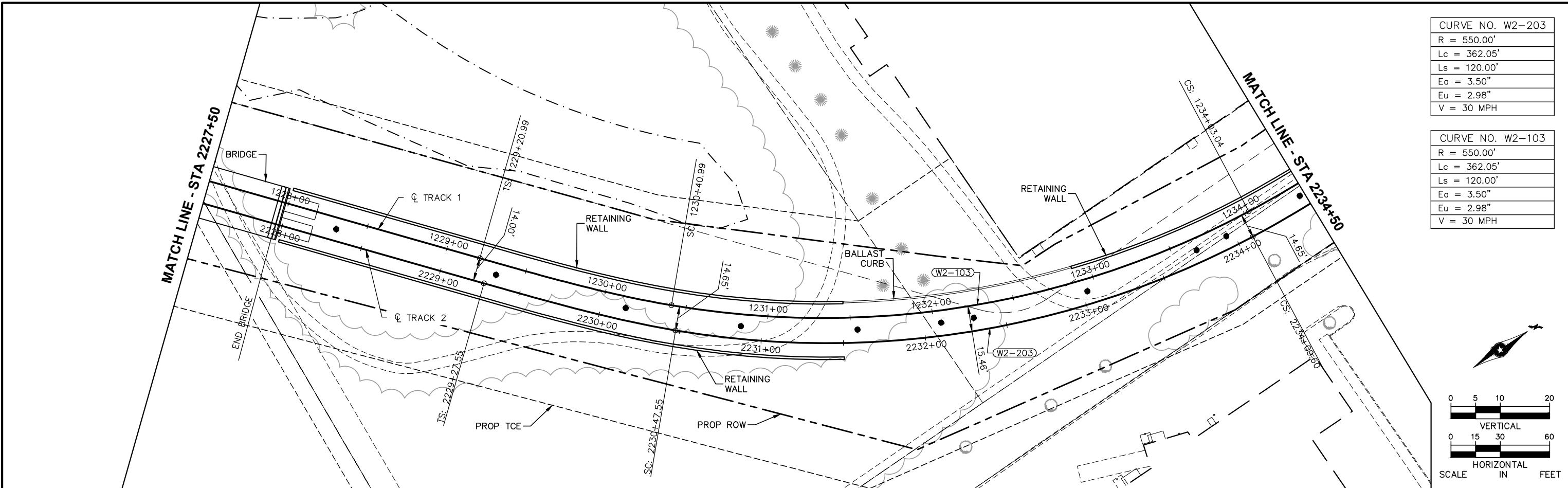
DISCIPLINE: **TRACK**

SHEET NAME: **W2-TRK-PRF - 002**

**SHEET**  
**147**  
**OF**  
**189**



Sep. 21 2015 02:43 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM

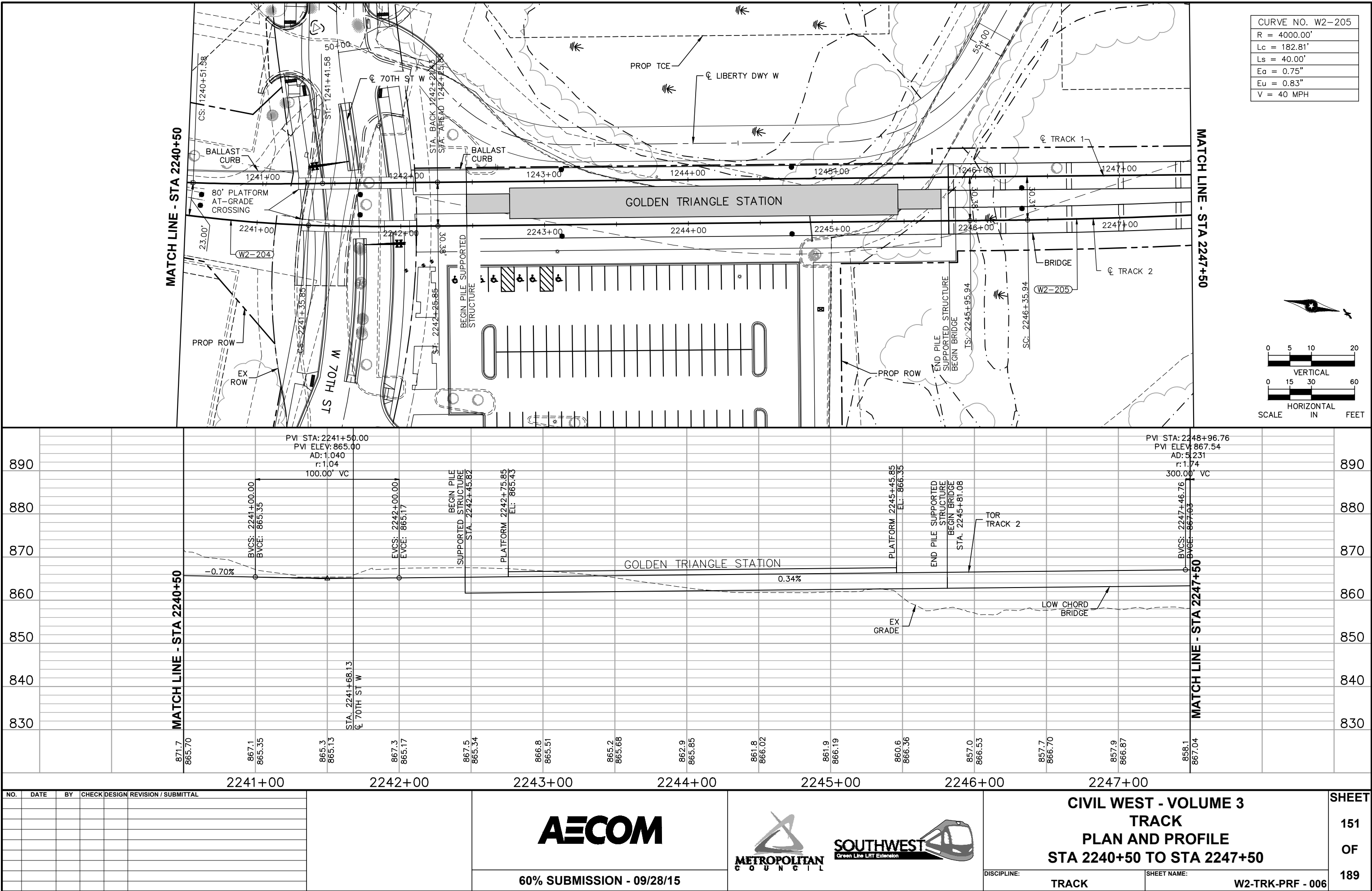


NO. DATE BY CHECK/DESIGN REVISION / SUBMITTAL						2228+002229+002230+002231+002232+002233+002234+00			60% SUBMISSION - 09/28/15		METROPOLITAN C O U N C I L		SOUTHWEST Green Line LRT Extension		CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2227+50 TO STA 2234+50		DISCIPLINE: TRACK SHEET NAME: W2-TRK-PRF - 004		SHEET 149 OF 189	
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Sep. 21 2015 02:44 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM



**AECOM**

60% SUBMISSION - 09/28/15



**SOUTHWEST**  
Green Line LRT Extension



**CIVIL WEST - VOLUME 3**  
**TRACK**  
**PLAN AND PROFILE**  
**STA 2240+50 TO STA 2247+50**

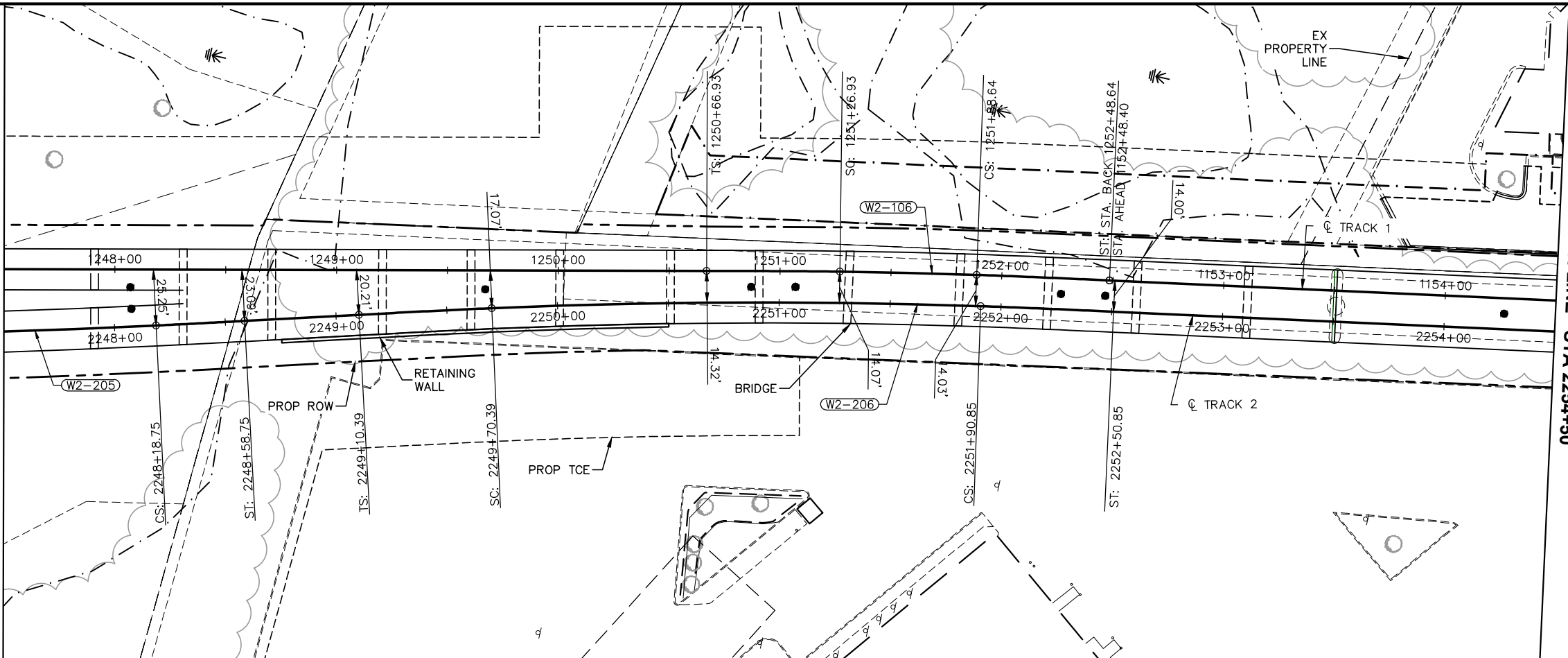
DISCIPLINE:  
**TRACK**

SHEET NAME:  
**W2-TRK-PRF - 006**

**SHEET**  
**151**  
**OF**  
**189**

Sep. 21 2015 02:45 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM

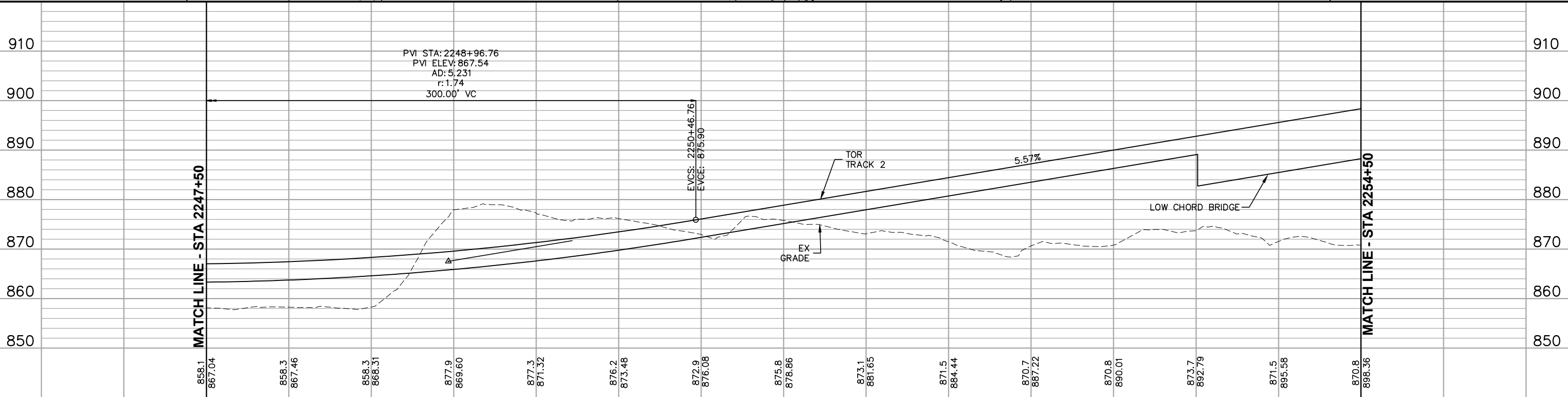
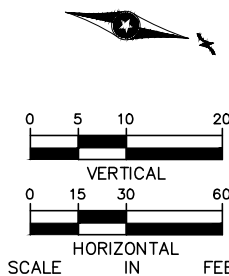
MATCH LINE - STA 2247+50



MATCH LINE - STA 2254+50

CURVE NO. W2-206
R = 2850.00'
Lc = 220.46'
Ls = 60.00'
Ea = 1.00"
Eu = 1.22"
V = 40 MPH

CURVE NO. W2-106
R = 2850.00'
Lc = 61.71'
Ls = 60.00'
Ea = 1.00"
Eu = 1.22"
V = 40 MPH



2248+00	2249+00	2250+00	2251+00	2252+00	2253+00	2254+00
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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15

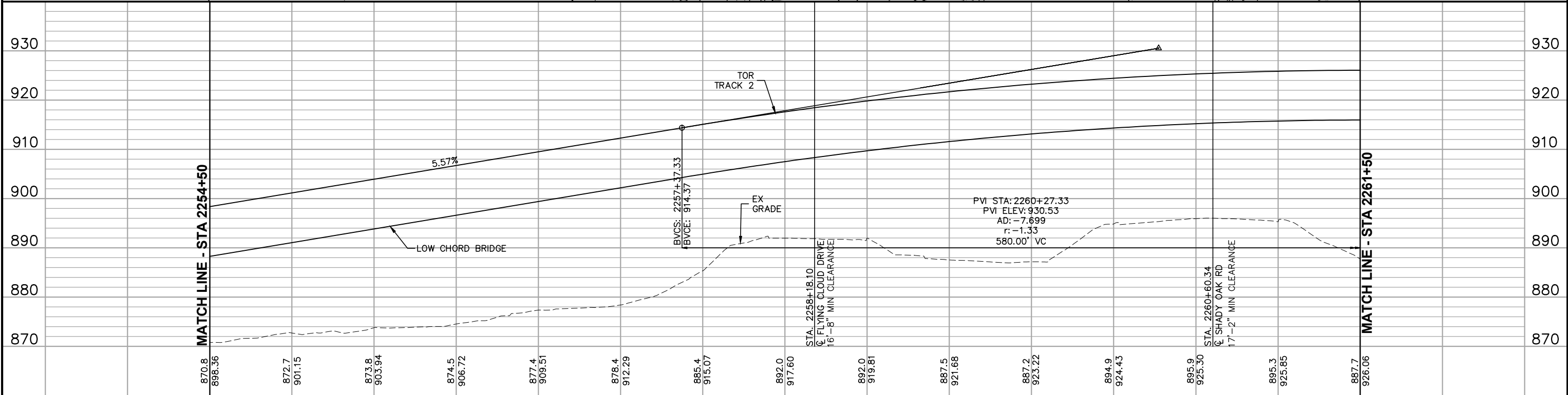
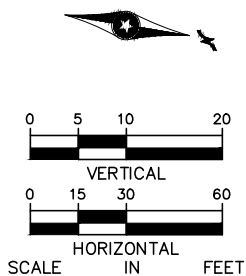
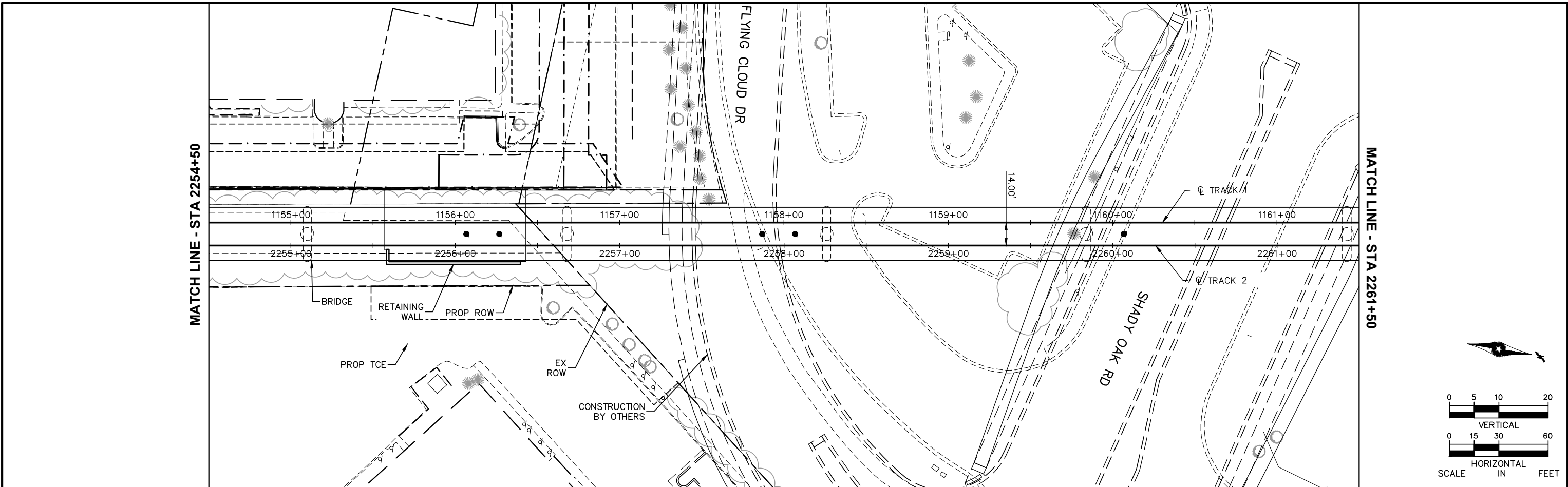




CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2247+50 TO STA 2254+50

DISCIPLINE: TRACK  
SHEET NAME: W2-TRK-PRF - 007

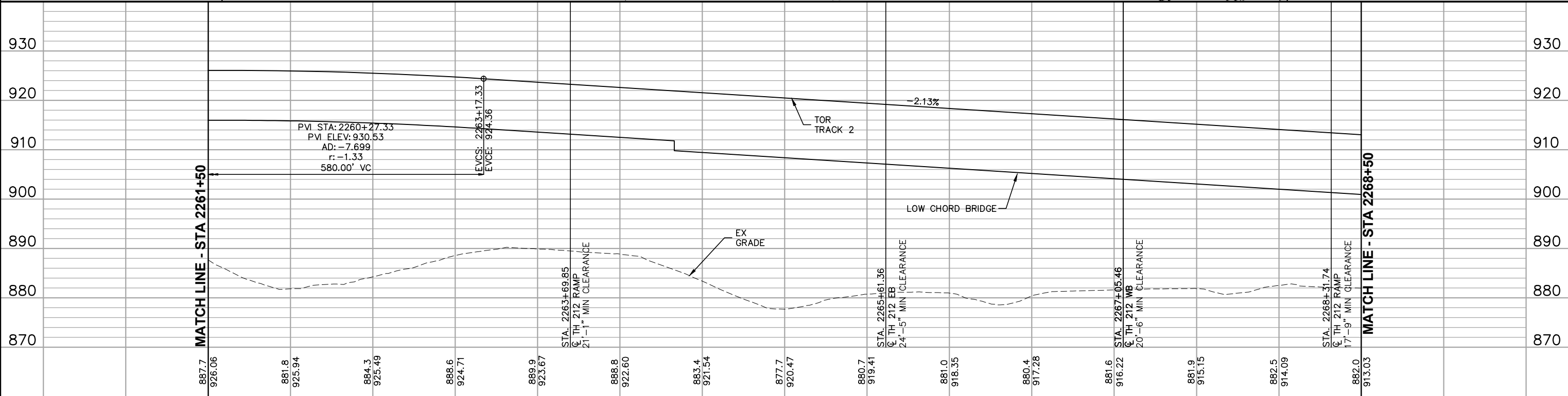
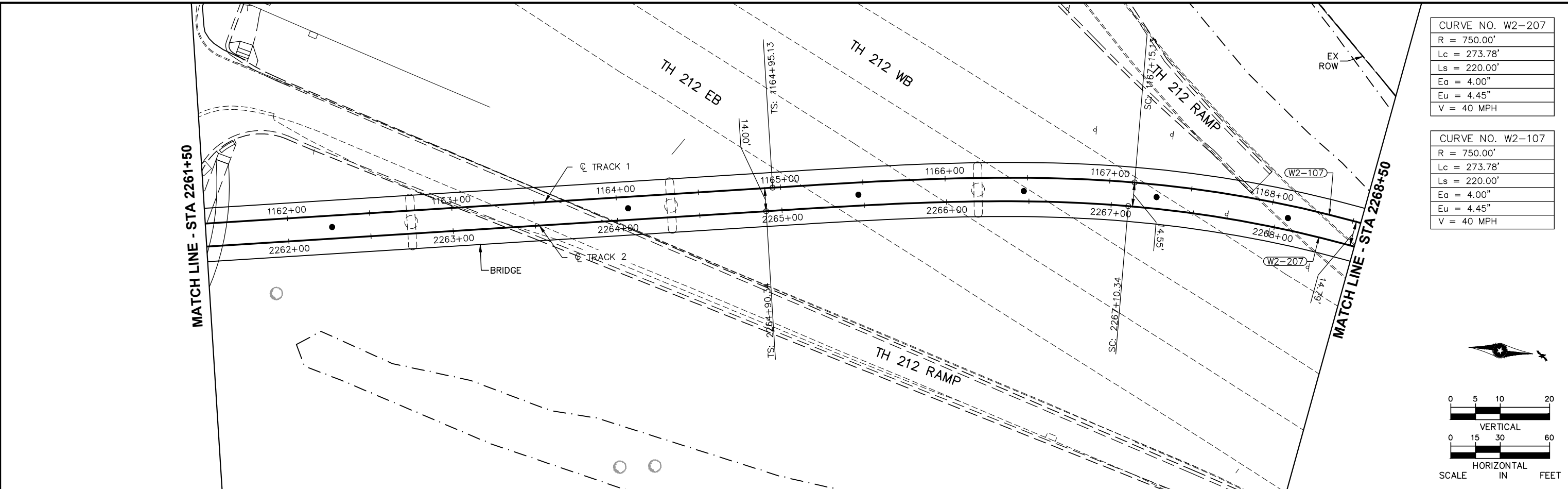
SHEET  
152  
OF  
189

Sep. 21 2015 11:12 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: V-RosJL



2255+00						2256+00						2257+00						2258+00						2259+00						2260+00						2261+00						SHEET 153 OF 189	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>						<div><div>METROPOLITAN COUNCIL</div><div>SOUTHWEST Green Line LRT Extension</div></div>						CIVIL WEST - VOLUME 3						TRACK																			
																														PLAN AND PROFILE						STA 2254+50 TO STA 2261+50							
																		DISCIPLINE:						TRACK						SHEET NAME:						W2-TRK-PRF - 008							

Sep. 21 2015 02:47 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

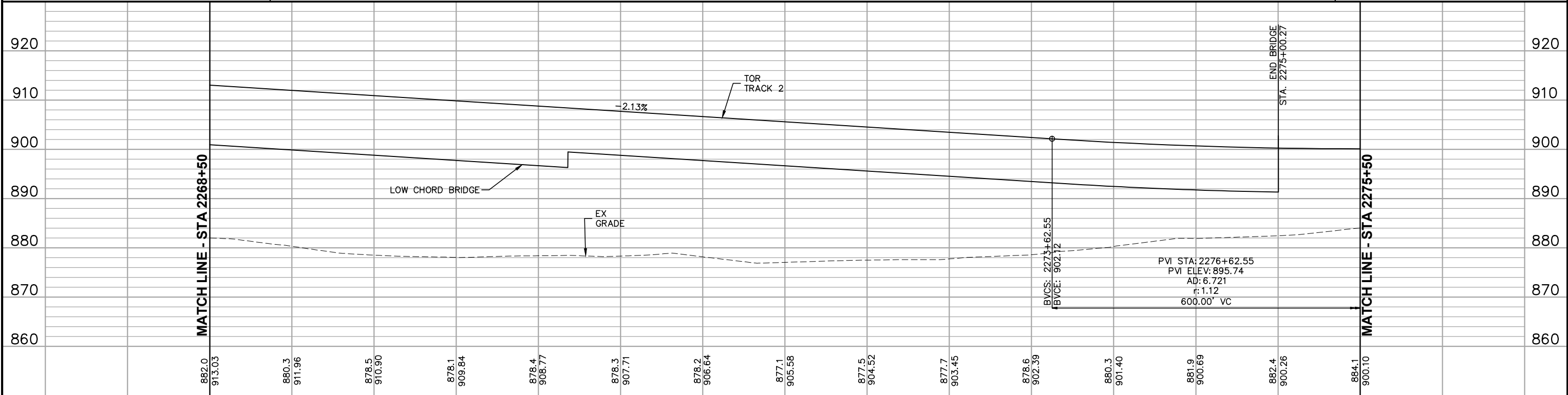
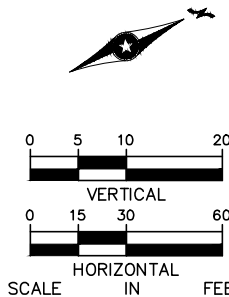
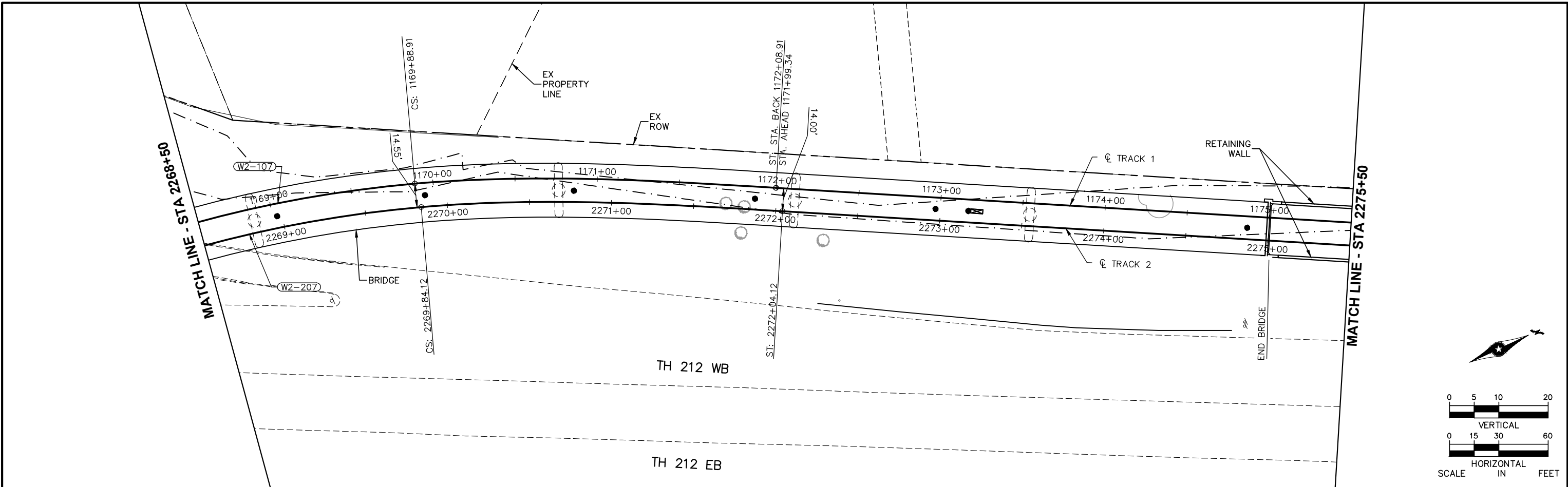
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2261+50 TO STA 2268+50



DISCIPLINE: TRACK  
SHEET NAME: W2-TRK-PRF - 009

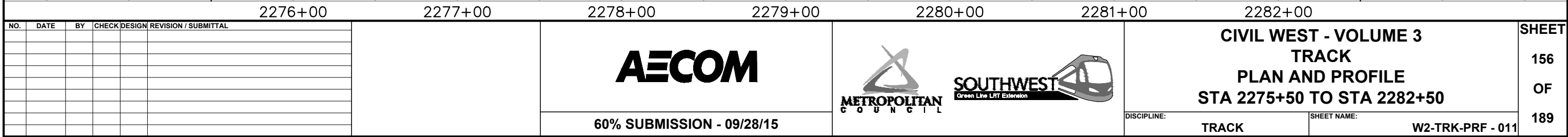
60% SUBMISSION - 09/28/15

SHEET  
154  
OF  
189

Sep. 21 2015 02:48 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM



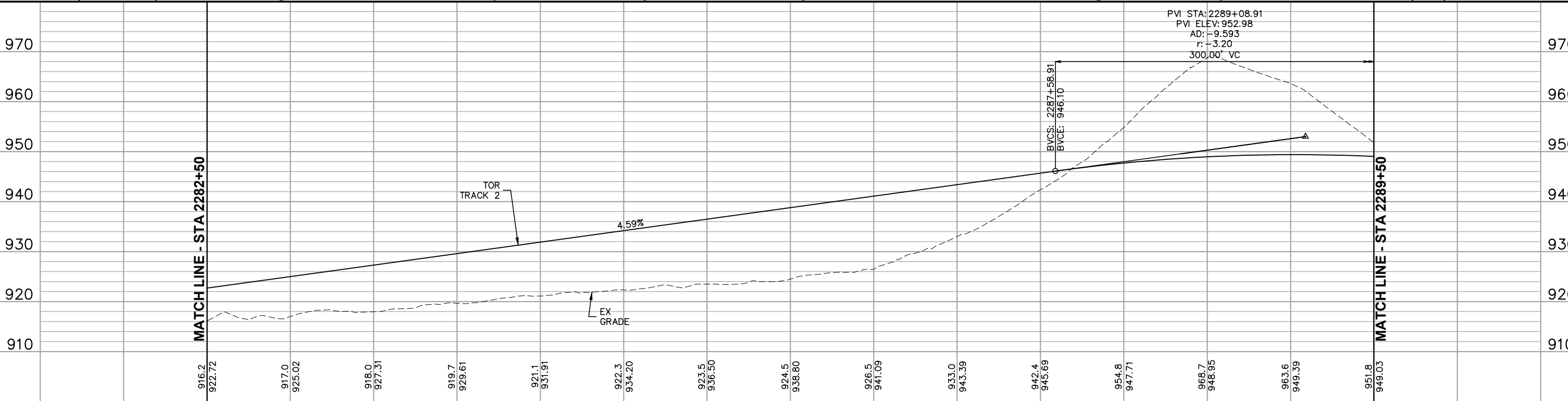
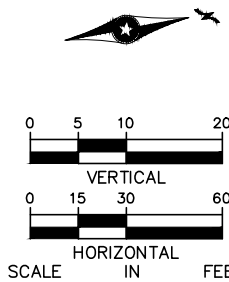
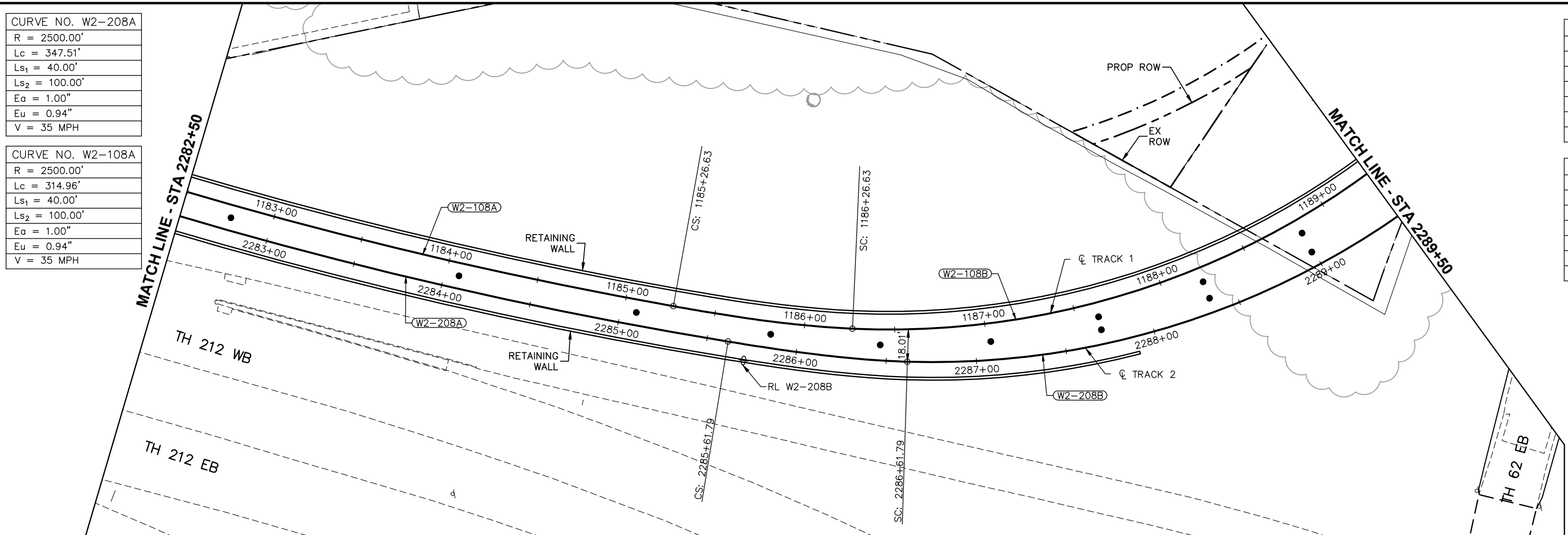
2269+00						2270+00						2271+00						2272+00						2273+00						2274+00						2275+00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>						<div><div></div><div></div></div>						<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>PLAN AND PROFILE</div> <div>STA 2268+50 TO STA 2275+50</div>						<div>SHEET</div> <div>155</div> <div>OF</div> <div>189</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													






CURVE NO. W2-108A
R = 2500.00'
Lc = 314.96'
LS <sub>1</sub> = 40.00'
LS <sub>2</sub> = 100.00'
Ea = 1.00"
Eu = 0.94"
V = 35 MPH

CURVE NO. W2-208B
R = 450.00'
Lc = 437.37'
Ls <sub>1</sub> = 100.00'
Ls <sub>2</sub> = 90.00'
Ea = 2.50"
Eu = 3.00"
V = 25 MPH

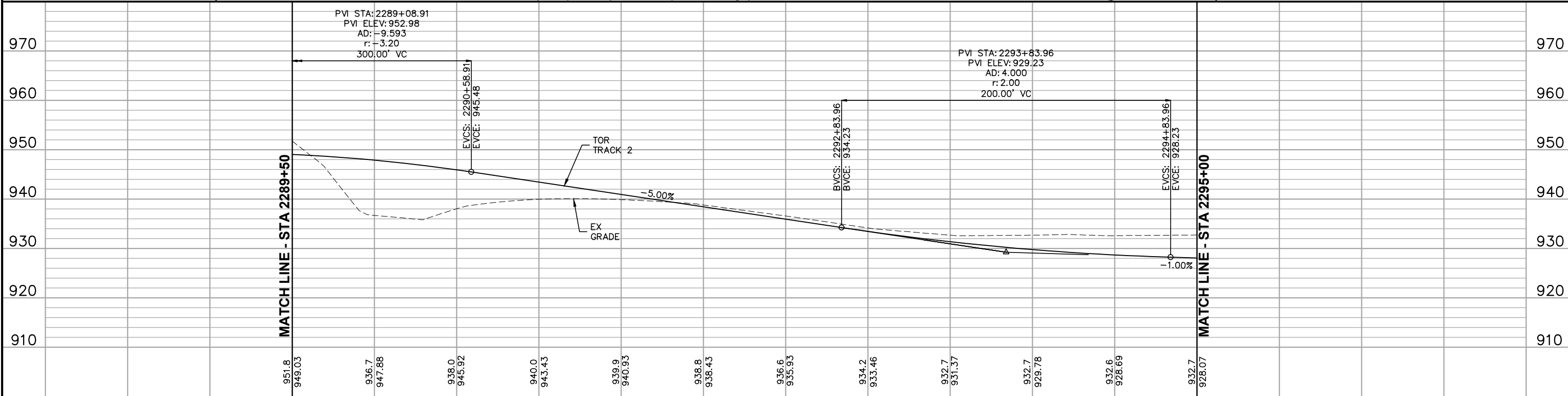
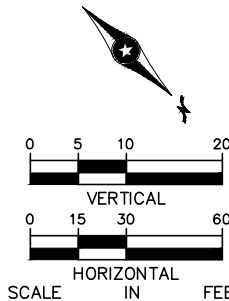
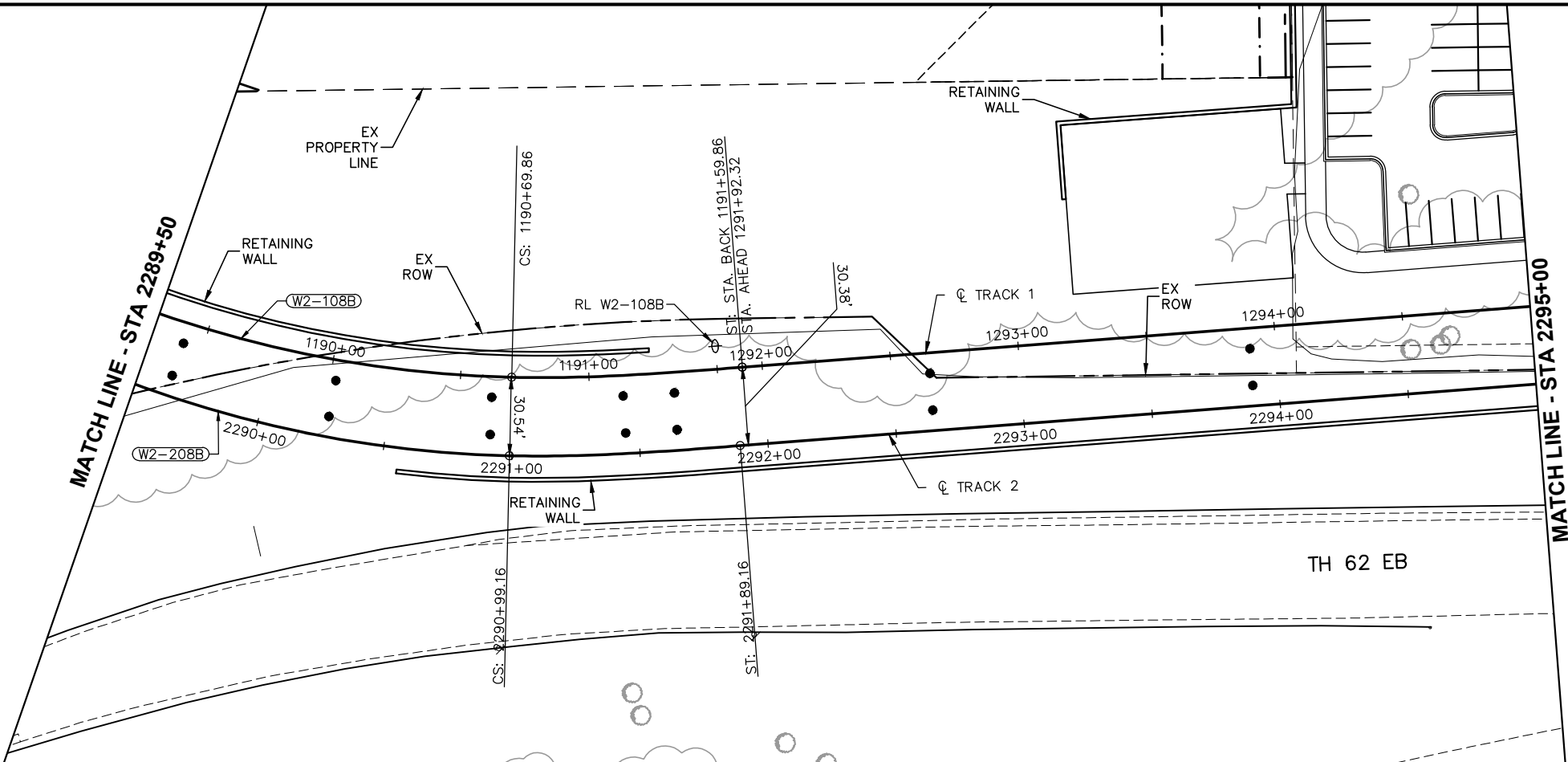
CURVE NO. W2-108B
R = 450.00'
Lc = 443.23'
Ls <sub>1</sub> = 100.00'
Ls <sub>2</sub> = 90.00'
Ea = 2.50"
Eu = 3.00"
V = 25 MPH





2283+00						2284+00						2285+00						2286+00						2287+00						2288+00						2289+00						SHEET NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL							<div></div>						<div></div>						<div>CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2282+50 TO STA 2289+50</div>						157 OF 189																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Sep, 21 2015 02:49 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM

Sep. 21 2015 11:14 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: V-ResuLL



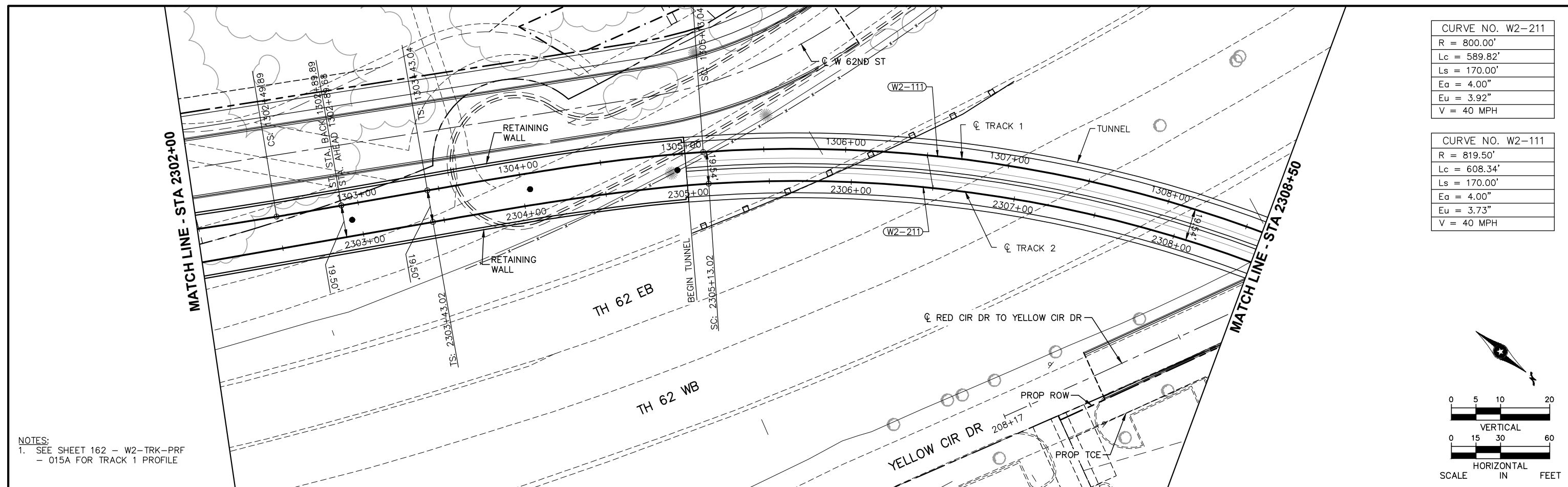
NO.						DATE		BY		CHECK		DESIGN		REVISION / SUBMITTAL	



2290+00		2291+00		2292+00		2293+00		2294+00		2295+00					
				<div>AECOM</div>		<div> METROPOLITAN COUNCIL</div>		<div> SOUTHWEST Green Line LRT Extension</div>		<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>PLAN AND PROFILE</div> <div>STA 2289+50 TO STA 2295+00</div>		SHEET			
				60% SUBMISSION - 09/28/15						DISCIPLINE: TRACK		SHEET NAME: W2-TRK-PRF - 013		158	
														OF	
														189	





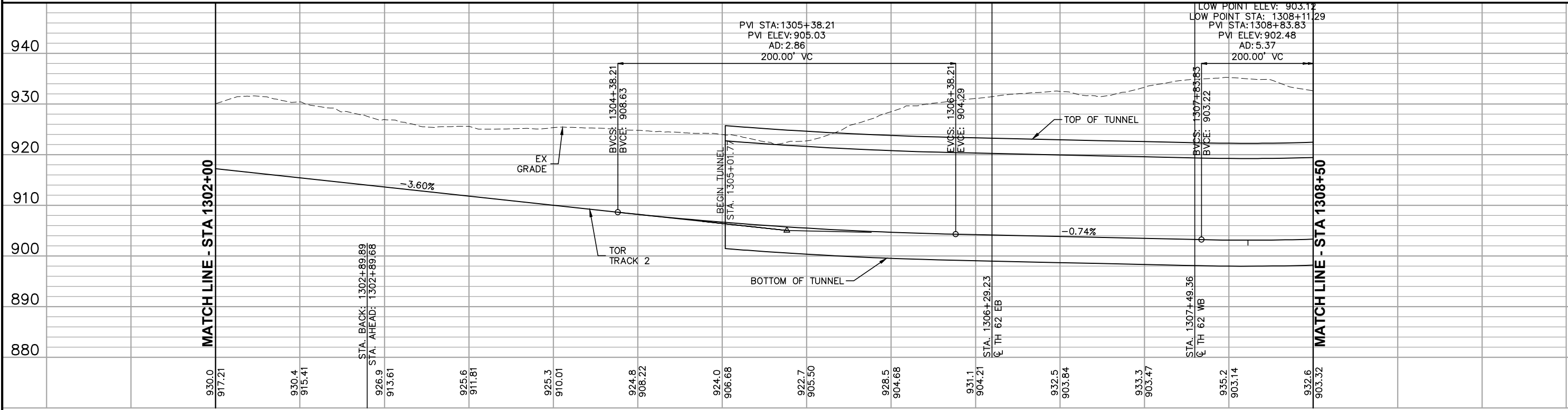
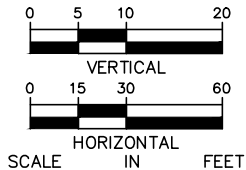






2302+00						2303+00	2304+00	2305+00	2306+00	2307+00	2308+00		SHEET
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>			<div><div></div><div></div></div>		<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>PLAN AND PROFILE</div> <div>STA 2302+00 TO STA 2308+00</div>		161
OF													
189													
						60% SUBMISSION - 09/28/15			DISCIPLINE: TRACK		SHEET NAME: W2-TRK-PRF - 015		

Sep. 21 2015 02:52 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM

SEE SHEET W2-TRK-PRF - 015 FOR PLAN VIEW

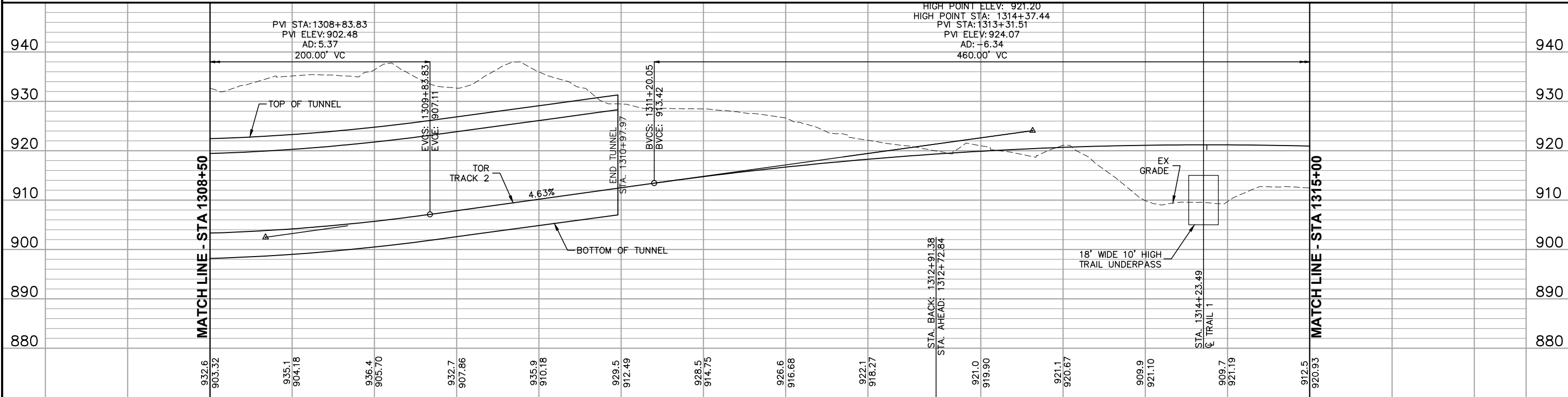
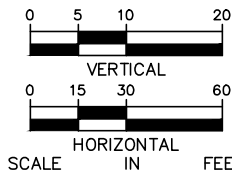




1302+00						1303+00						1304+00						1305+00						1306+00						1307+00						1308+00						MATCH LINE - STA 1308+50					
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL							<div>AECOM</div>						<div><div>METROPOLITAN COUNCIL</div><div>SOUTHWEST Green Line LRT Extension</div></div>						<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>TYPICAL SECTIONS</div> <div>STA 1302+00 TO STA 1308+50</div>						SHEET 162 OF 189																	
												60% SUBMISSION - 09/28/15						<div><div>DISCIPLINE:</div><div>TRACK</div></div> <div><div>SHEET NAME:</div><div>W2-TRK-PRF - 015A</div></div>																													



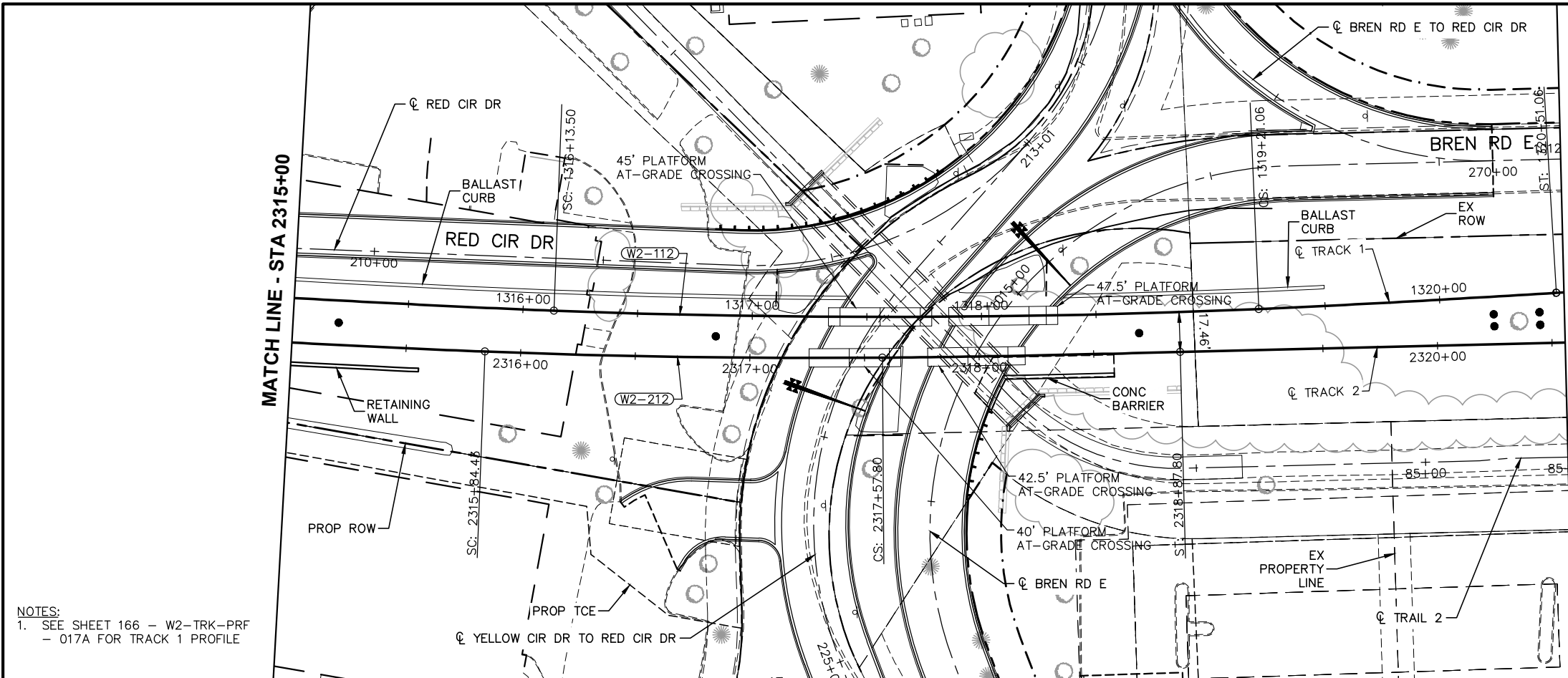
Sep. 21 2015 02:54 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM

SEE SHEET W2-TRK-PRF - 016 FOR PLAN VIEW



1309+00						1310+00						1311+00						1312+00						1313+00						1314+00						1315+00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>						<div><div></div><div></div></div>						<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>TYPICAL SECTIONS</div> <div>STA 1308+50 TO STA 1315+00</div>						SHEET 164 OF 189																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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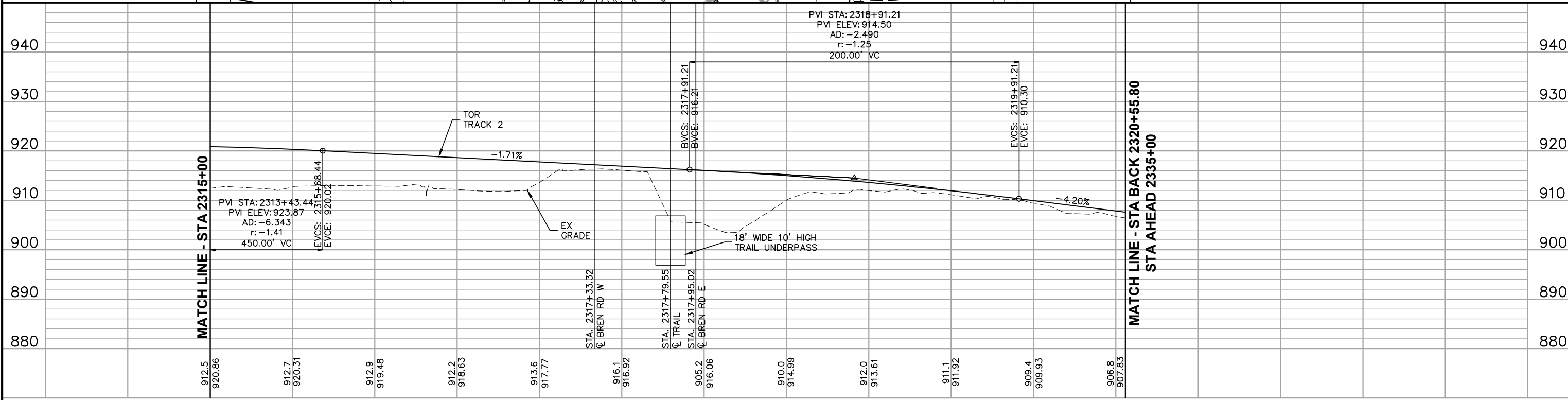
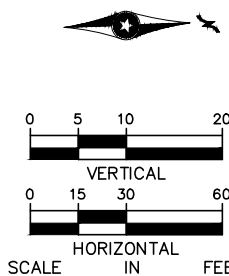
Sep. 21 2015 02:54 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W2-TRK-PRF.dwg By: MaurisBM



NOTES:  
1. SEE SHEET 166 - W2-TRK-PRF  
- 017A FOR TRACK 1 PROFILE

CURVE NO. W2-212
R = 3800.00'
Lc = 173.37'
LS = 130.00'
Ea = 1.00"
Eu = 2.15"
V = 55 MPH

CURVE NO. W2-112
R = 3800.00'
Lc = 307.57'
LS = 130.00'
Ea = 1.00"
Eu = 2.15"
V = 55 MPH



2315+00 2316+00 2317+00 2318+00 2319+00 2320+00

NO.	DATE	BY	CHECK/DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15



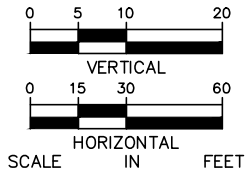
CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2315+00 TO STA 2320+55.80




DISCIPLINE: TRACK SHEET NAME: W2-TRK-PRF - 017

SHEET  
165  
OF  
189

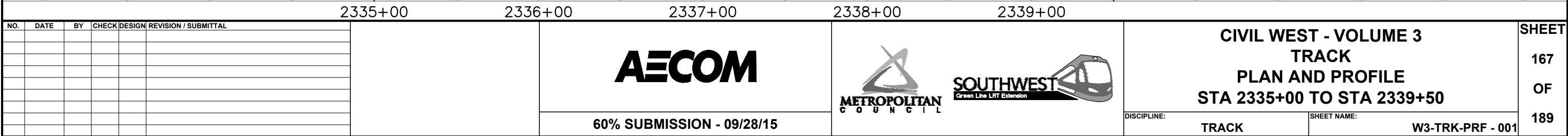
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SEE SHEET W2-TRK-PRF - 017 FOR PLAN VIEW

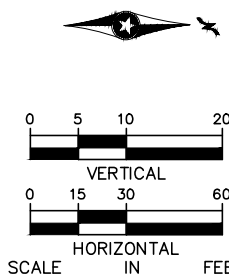


1315+00						1316+00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div></div> <div>60% SUBMISSION - 09/28/15</div>						<div></div>						<div>CIVIL WEST - VOLUME 3</div> <div>TRACK</div> <div>TYPICAL SECTIONS</div> <div>STA 1315+00 TO STA 1316+00</div> <div><div>DISCIPLINE: TRACK</div><div>SHEET NAME: W2-TRK-PRF - 017A</div></div>						SHEET 166 OF 189																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						



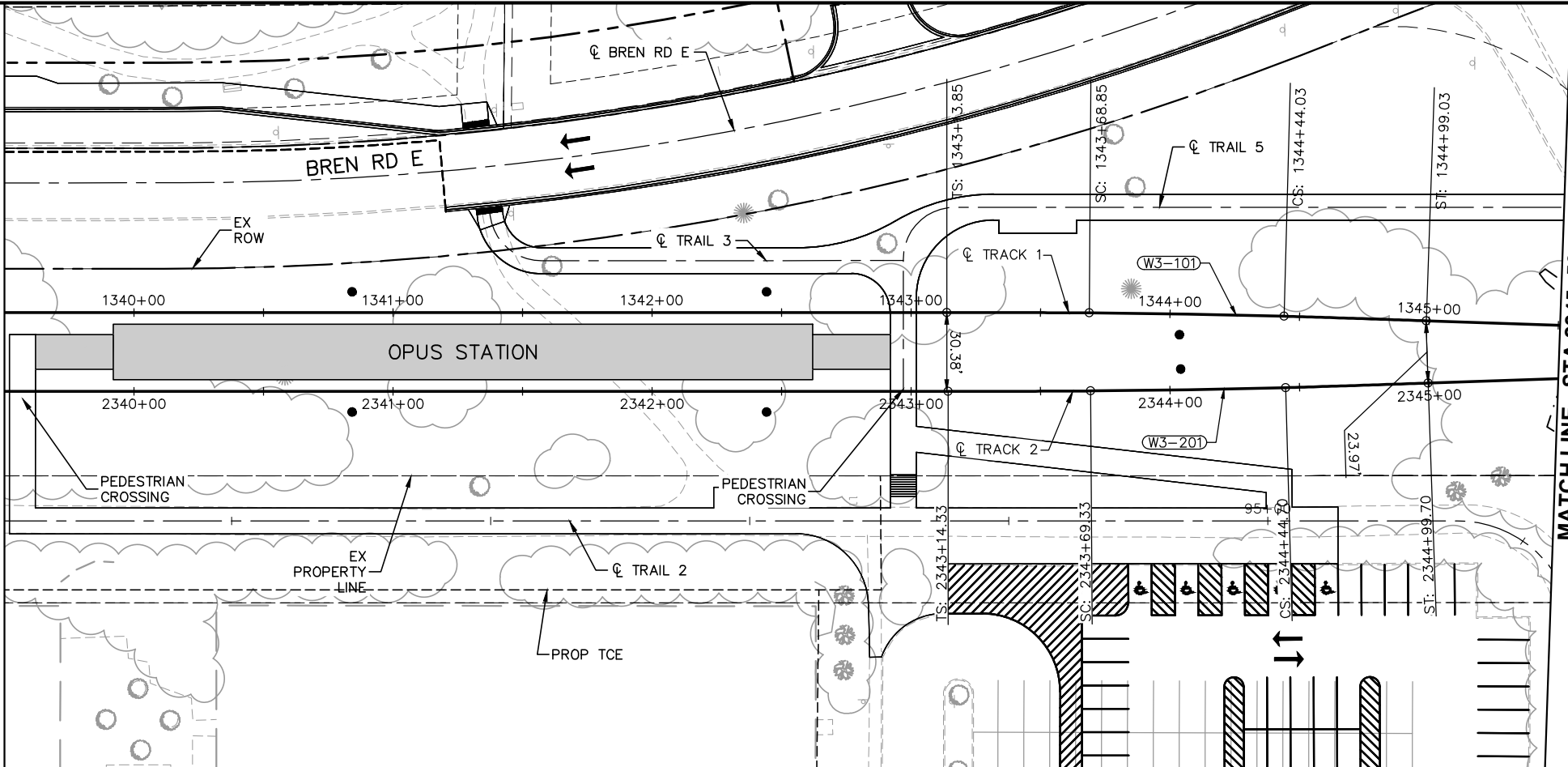


CURVE NO. W3-100
R = 4700.00'
Lc = 85.98'
Ls = 80.00'
Ea = 1.25"
Eu = 1.30"
V = 55 MPH



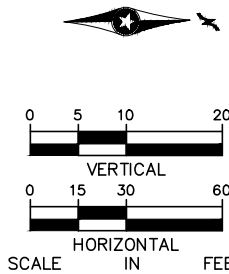
Sep. 21 2015 02:59 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM

MATCH LINE - STA 2339+50



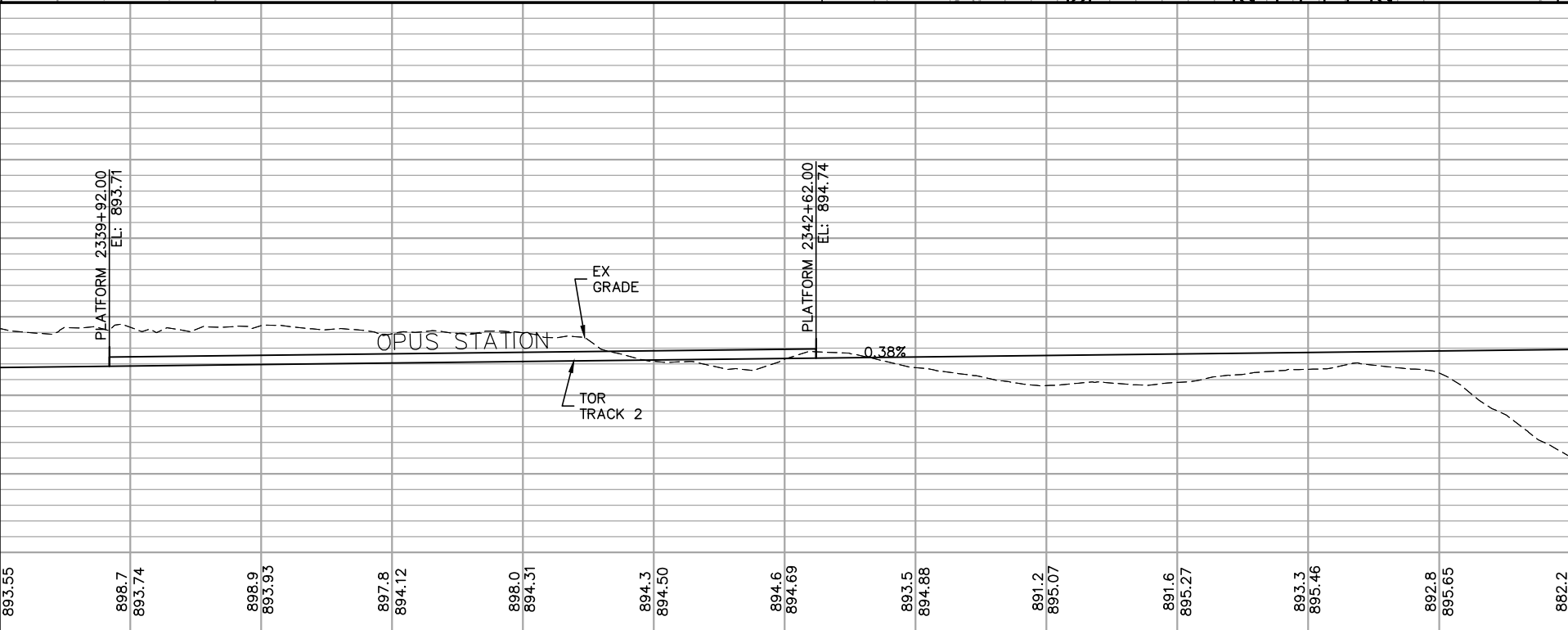
CURVE NO. W3-201
R = 3800.00'
Lc = 75.38'
Ls = 55.00'
Ea = 1.00"
Eu = 1.11"
V = 45 MPH

CURVE NO. W3-101
R = 3800.00'
Lc = 75.19'
Ls = 55.00'
Ea = 1.00"
Eu = 1.11"
V = 45 MPH



MATCH LINE - STA 2345+50

MATCH LINE - STA 2339+50



MATCH LINE - STA 2345+50

2340+00

2341+00

2342+00

2343+00

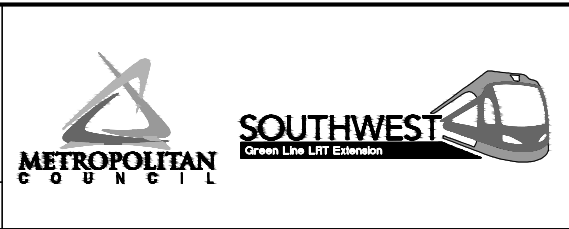
2344+00

2345+00

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2339+50 TO STA 2345+50  
DISCIPLINE: TRACK  
SHEET NAME: W3-TRK-PRF - 002

SHEET  
168  
OF  
189

**CURVE NO. W3-202**  
R = 3800.00'  
Lc = 75.38'  
Ls = 55.00'  
Ea = 1.00"  
Eu = 1.11"  
V = 45 MPH

**CURVE NO. W3-102**  
R = 3800.00'  
Lc = 75.19'  
Ls = 55.00'  
Ea = 1.00"  
Eu = 1.11"  
V = 45 MPH

**CURVE NO. W3-103**  
R = 3800.00'  
Lc = 75.19'  
Ls = 55.00'  
Ea = 1.00"  
Eu = 1.11"  
V = 45 MPH

**CURVE NO. W3-203**  
R = 3800.00'  
Lc = 75.19'  
Ls = 55.00'  
Ea = 1.00"  
Eu = 1.11"  
V = 45 MPH

**MATCH LINE - STA 2345+50**

**BREN RD W**

**TRAIL 5**

**TRAIL 4**

**TRAIL 6**

**TRAIL UNDERPASS**

**RETAINING WALL**

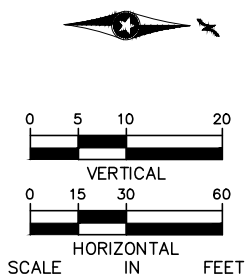
**PROP ROW**




**EX PROPERTY LINE**

**PROP TCE**

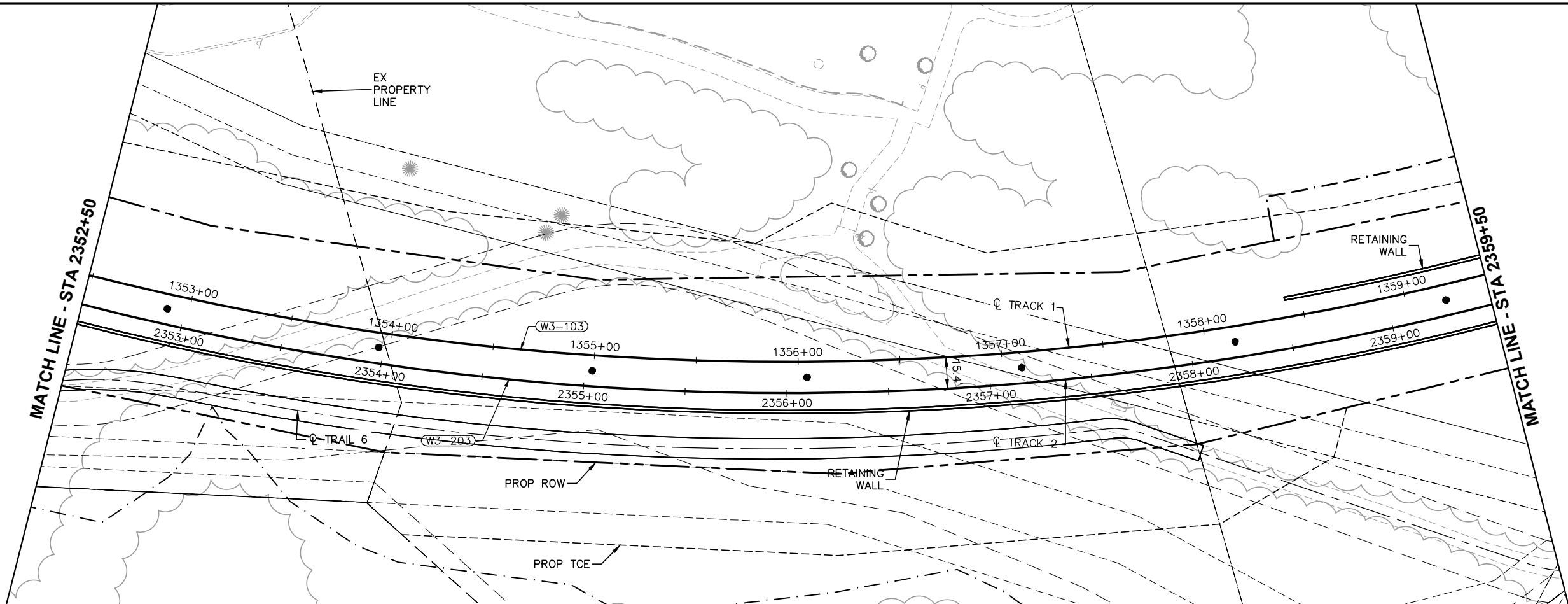
**MATCH LINE - STA 2352+50**

**0 5 10 20**  
**VERTICAL**  
**0 15 30 60**  
**HORIZONTAL**  
**SCALE IN FEET**



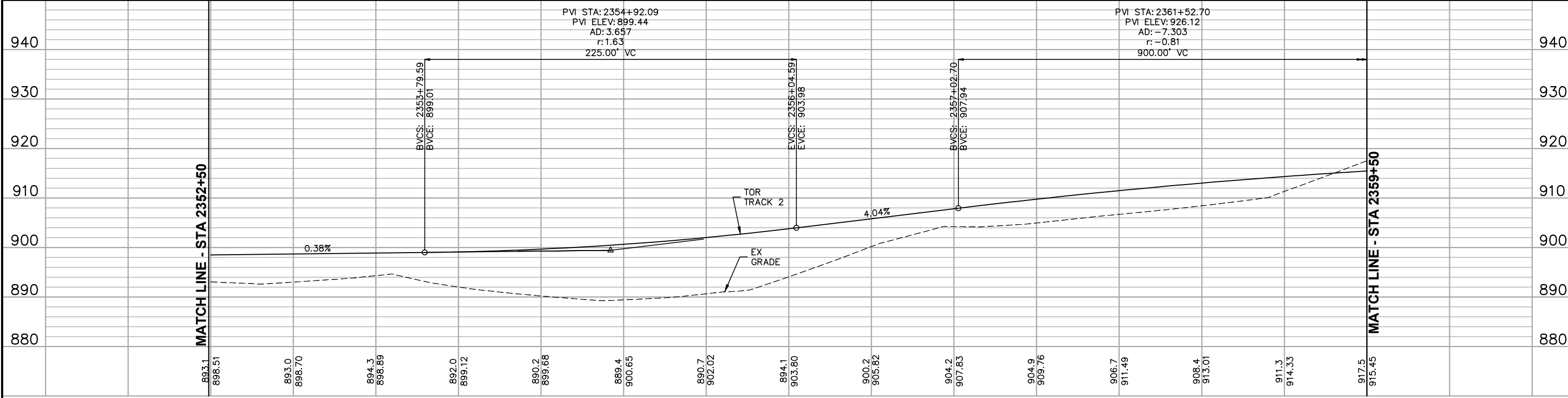
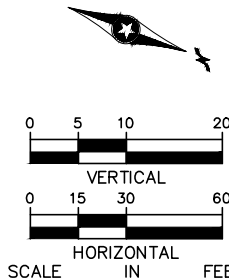
2346+00						2347+00						2348+00						2349+00						2350+00						2351+00						2352+00						SHEET 169 OF 189	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL							 						CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2345+50 TO STA 2352+50																									
																								60% SUBMISSION - 09/28/15						DISCIPLINE: TRACK						SHEET NAME: W3-TRK-PRF - 003							

Sep. 21 2015 03:01 am v:\3400\_ADC\CAD\CAD\_00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MourisBM



CURVE NO. W3-103
R = 1400.00'
Lc = 1052.18'
Ls = 140.00'
Ea = 3.00"
Eu = 2.73"
V = 45 MPH

CURVE NO. W3-103
R = 1400.00'
Lc = 1052.18'
Ls = 140.00'
Ea = 3.00"
Eu = 2.73"
V = 45 MPH



										2353+00		2354+00		2355+00		2356+00		2357+00		2358+00		2359+00							
893.1	898.51	893.0	898.70	894.3	898.89	892.0	899.12	890.2	899.68	889.4	900.65	890.7	902.02	894.1	903.80	900.2	905.82	904.2	907.83	904.9	909.76	906.7	911.49	908.4	913.01	911.3	914.33	917.5	915.45

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15

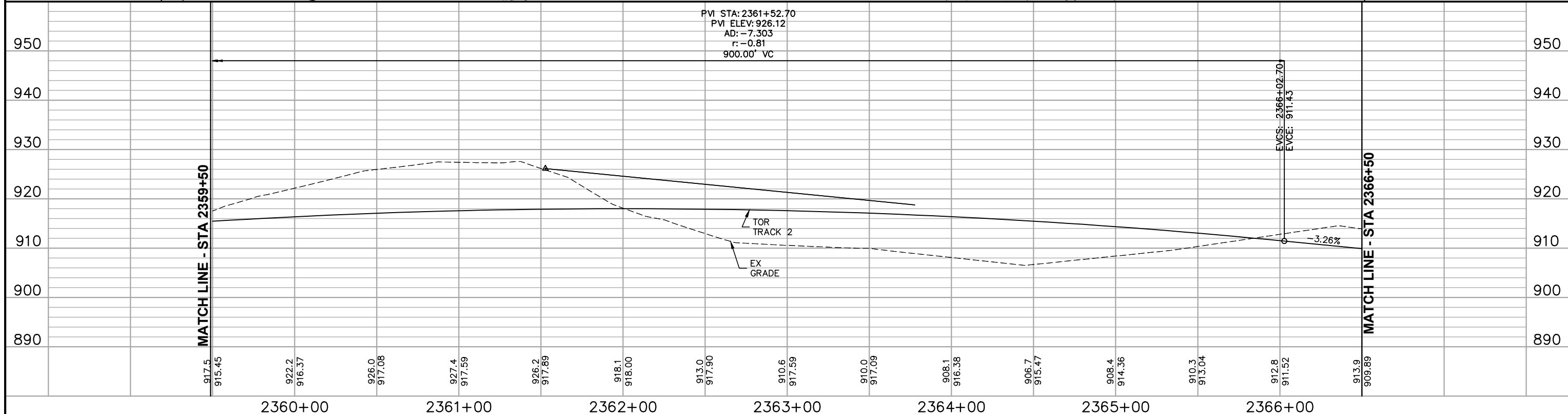
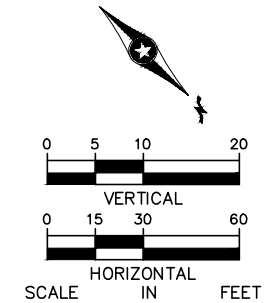
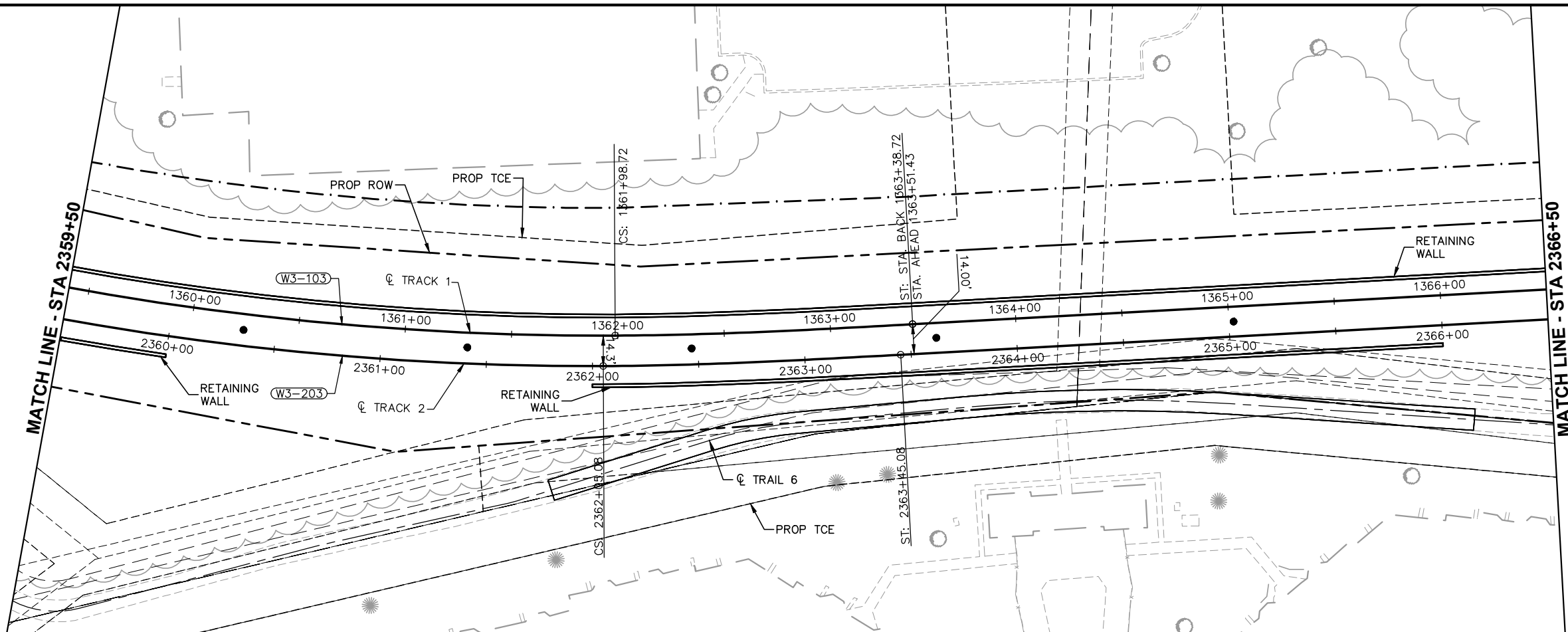


CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2352+50 TO STA 2359+50

DISCIPLINE: TRACK  
SHEET NAME: W3-TRK-PRF - 004

SHEET  
170  
OF  
189

Sep. 21 2015 03:02 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM



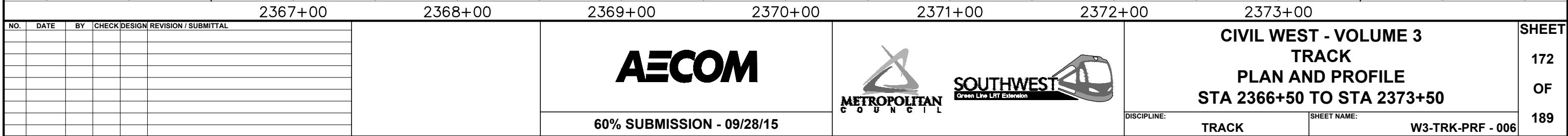
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



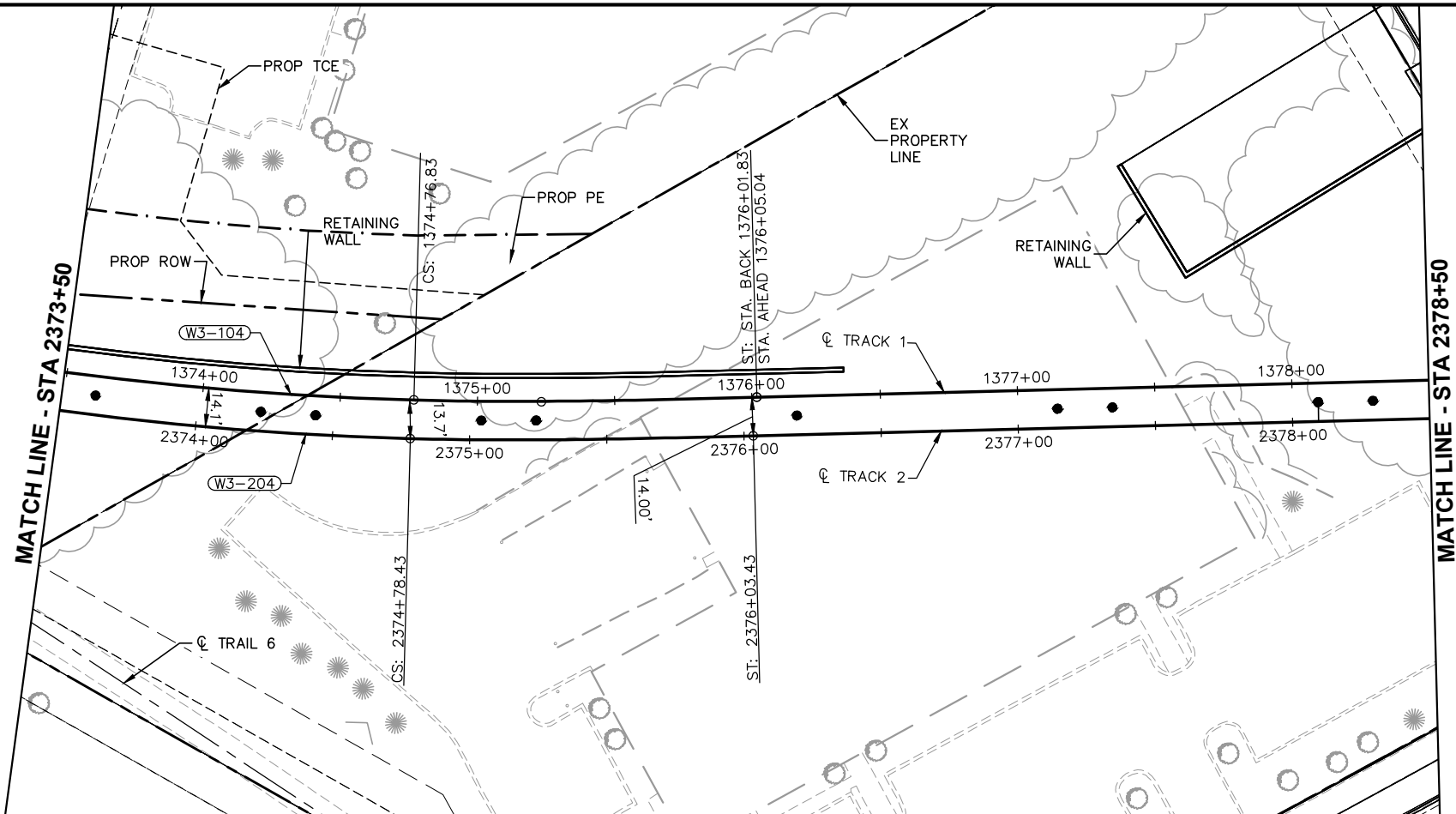
60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2359+50 TO STA 2366+50		SHEET 171 OF 189
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-PRF - 005	

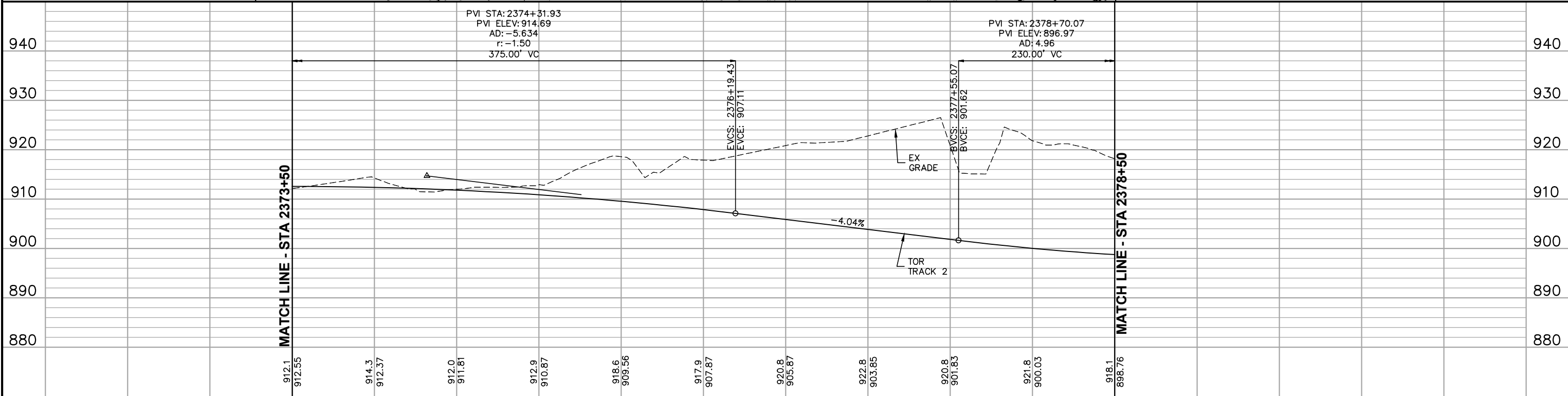
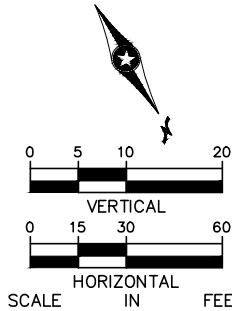




Sep. 21 2015 03:03 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM



CURVE NO. W3-204
R = 1200.00'
Lc = 149.68'
Ls = 125.00'
Ea = 3.00"
Eu = 2.28"
V = 40 MPH

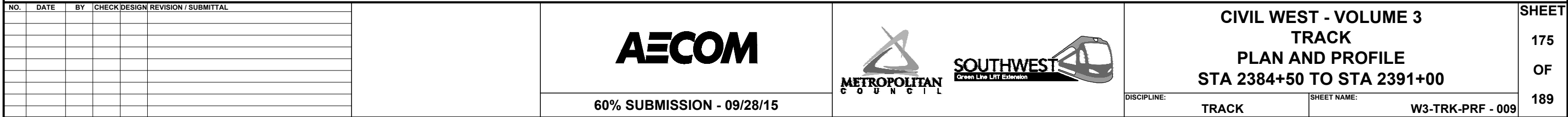
CURVE NO. W3-104
R = 1200.00'
Lc = 149.68'
Ls = 125.00'
Ea = 3.00"
Eu = 2.28"
V = 40 MPH

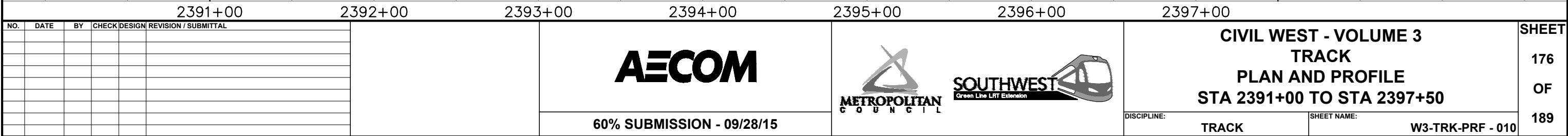


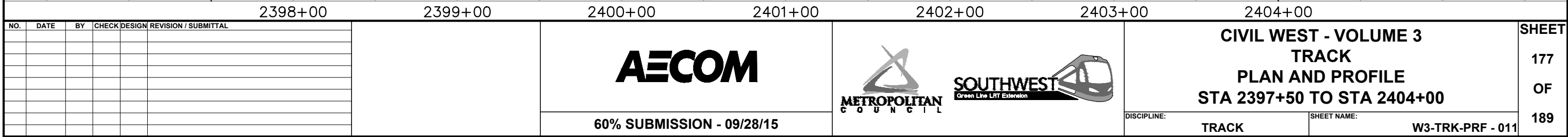
2374+00						2375+00						2376+00						2377+00						2378+00						CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2373+50 TO STA 2378+50						SHEET 173 OF 189	
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	<div>AECOM</div>						<div><div></div><div></div></div>						DISCIPLINE: TRACK						SHEET NAME: W3-TRK-PRF - 007													
						60% SUBMISSION - 09/28/15																															



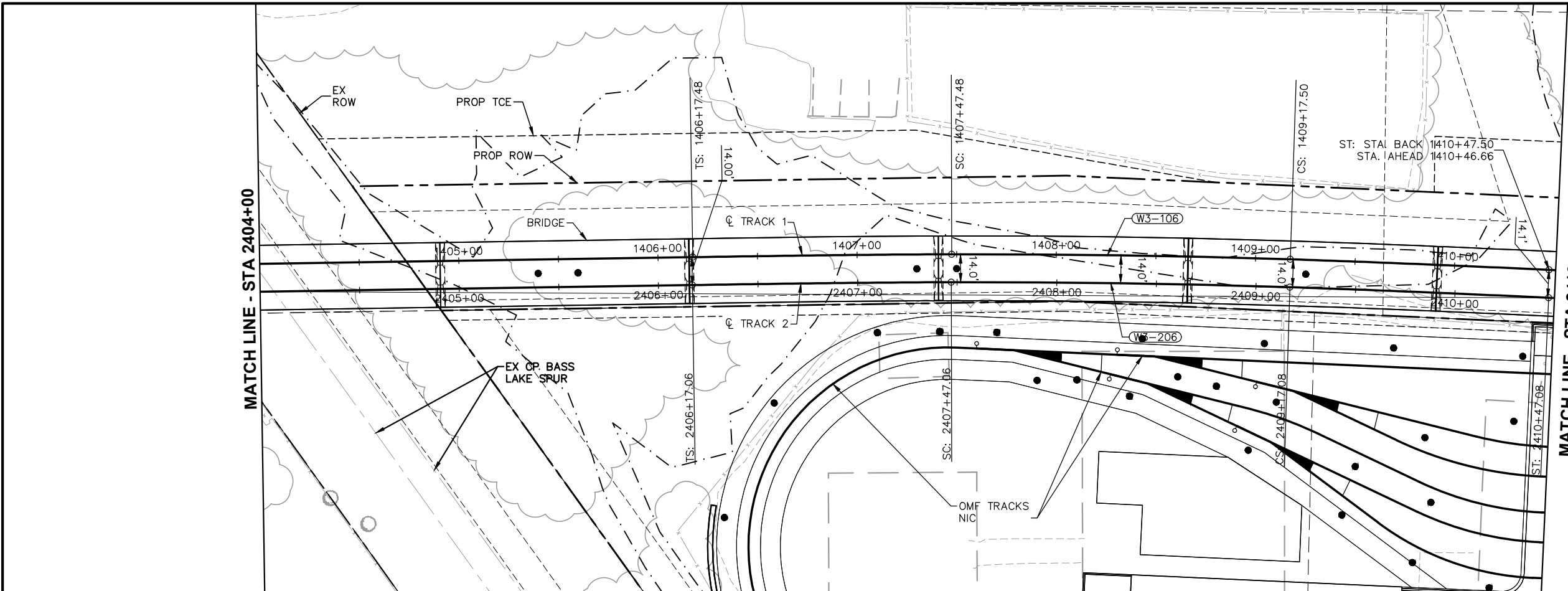






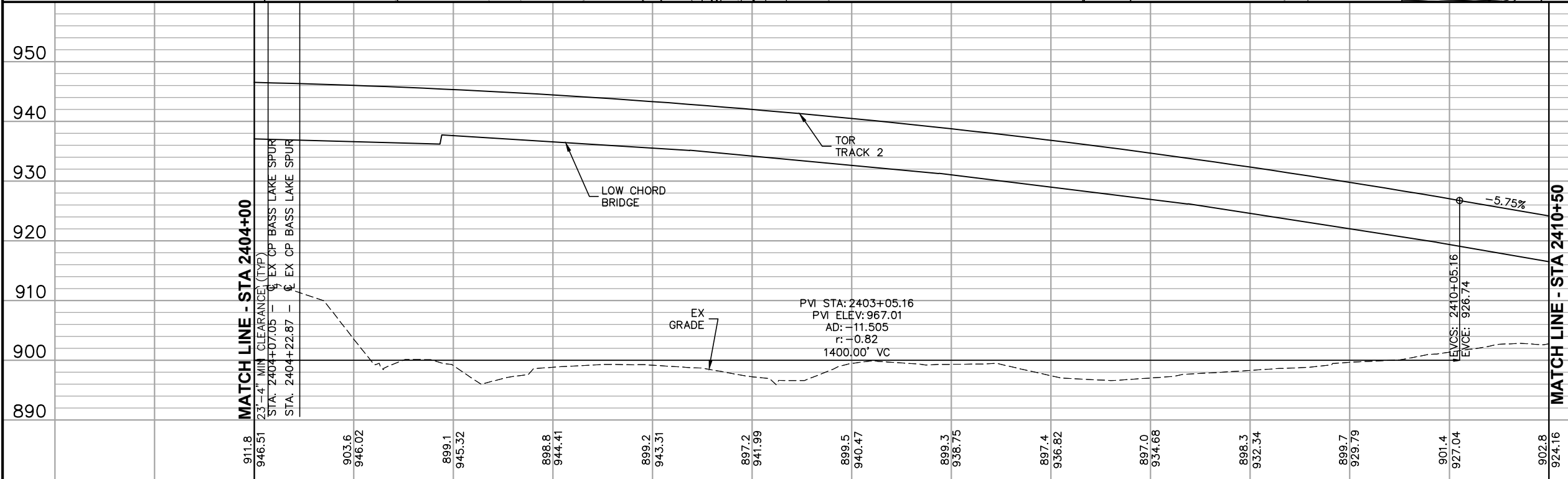
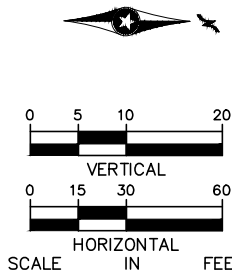


Sep. 21 2015 03:08 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM



CURVE NO. W3-206
R = 5000.00'
Lc = 170.02'
La = 130.00'
Ea = 1.75"
Eu = 1.60"
V = 65 MPH

CURVE NO. W3-106
R = 5000.00'
Lc = 170.02'
La = 130.00'
Ea = 1.75"
Eu = 1.60"
V = 65 MPH



2404+00	2405+00	2406+00	2407+00	2408+00	2409+00	2410+00	2410+50
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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL




60% SUBMISSION - 09/28/15

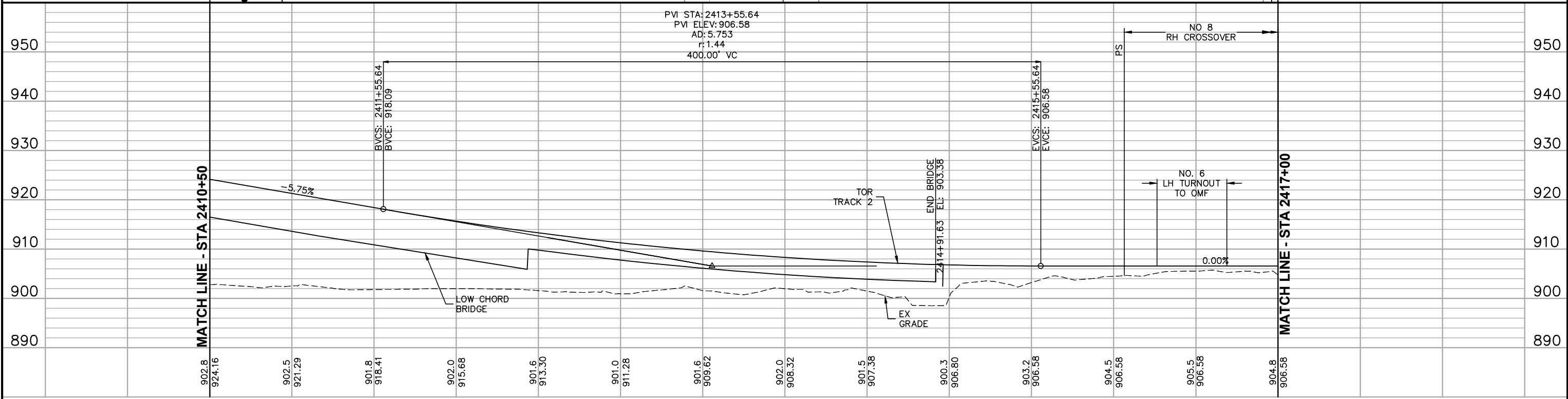
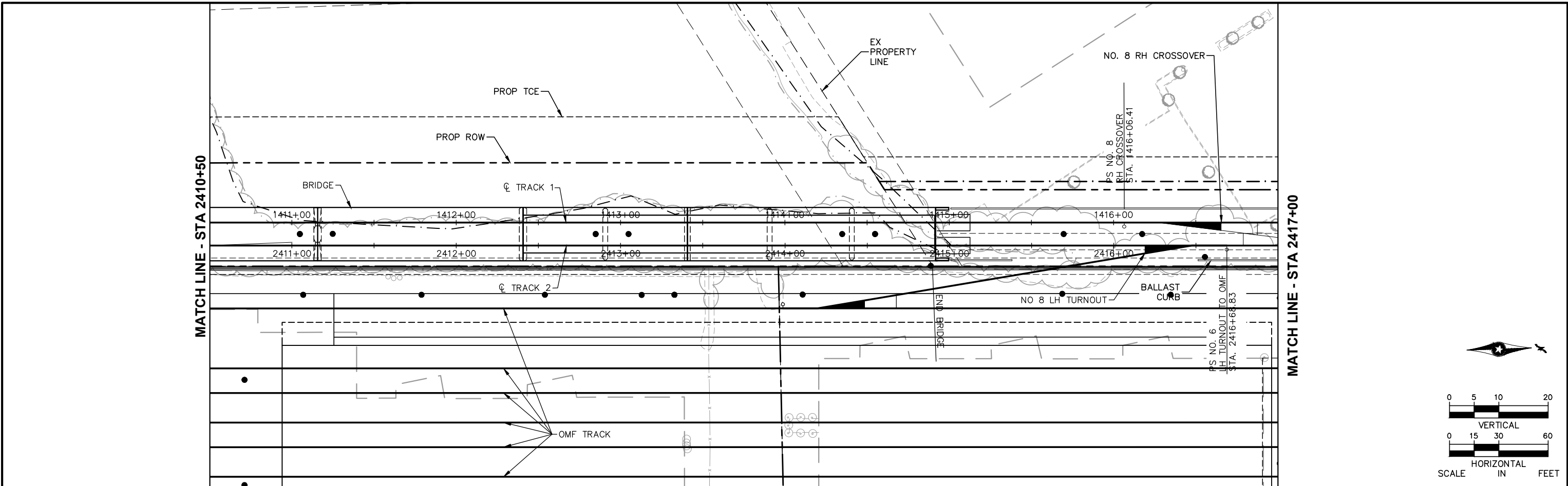


CIVIL WEST - VOLUME 3  
TRACK  
PLAN AND PROFILE  
STA 2404+00 TO STA 2410+50

DISCIPLINE: TRACK  
SHEET NAME: W3-TRK-PRF - 012

SHEET
178
OF
189


Sep. 21 2015 03:09 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM




NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

**AECOM**

60% SUBMISSION - 09/28/15

**METROPOLITAN  
COUNCIL**

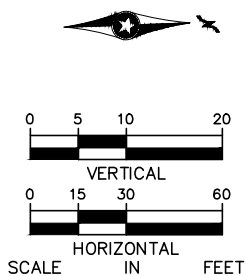
**SOUTHWEST  
Green Line LRT Extension**

**CIVIL WEST - VOLUME 3**  
**TRACK**  
**PLAN AND PROFILE**  
**STA 2410+50 TO STA 2417+00**

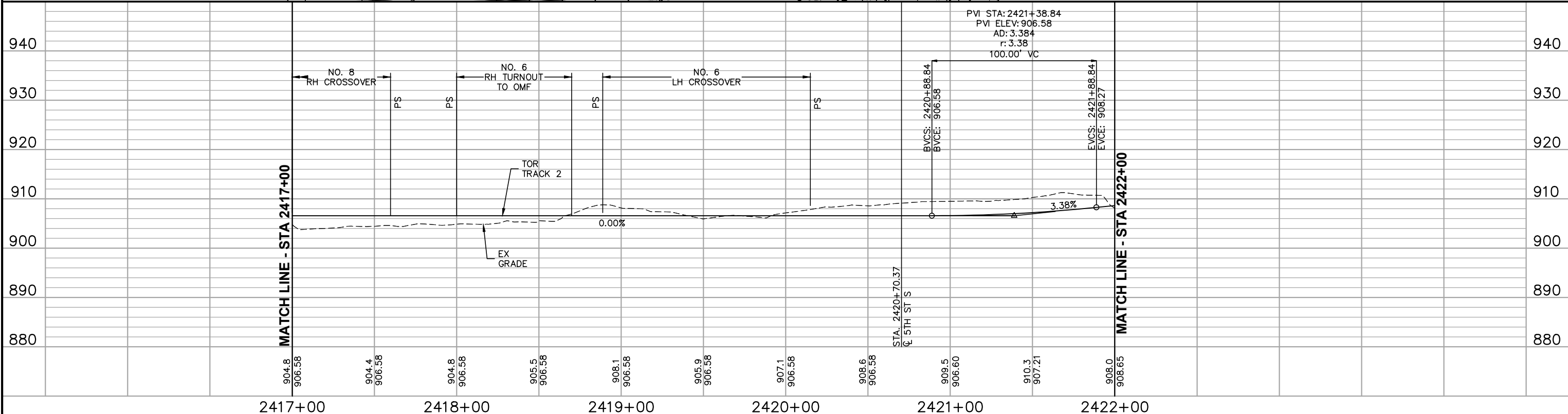
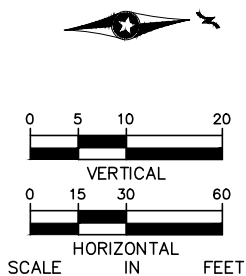
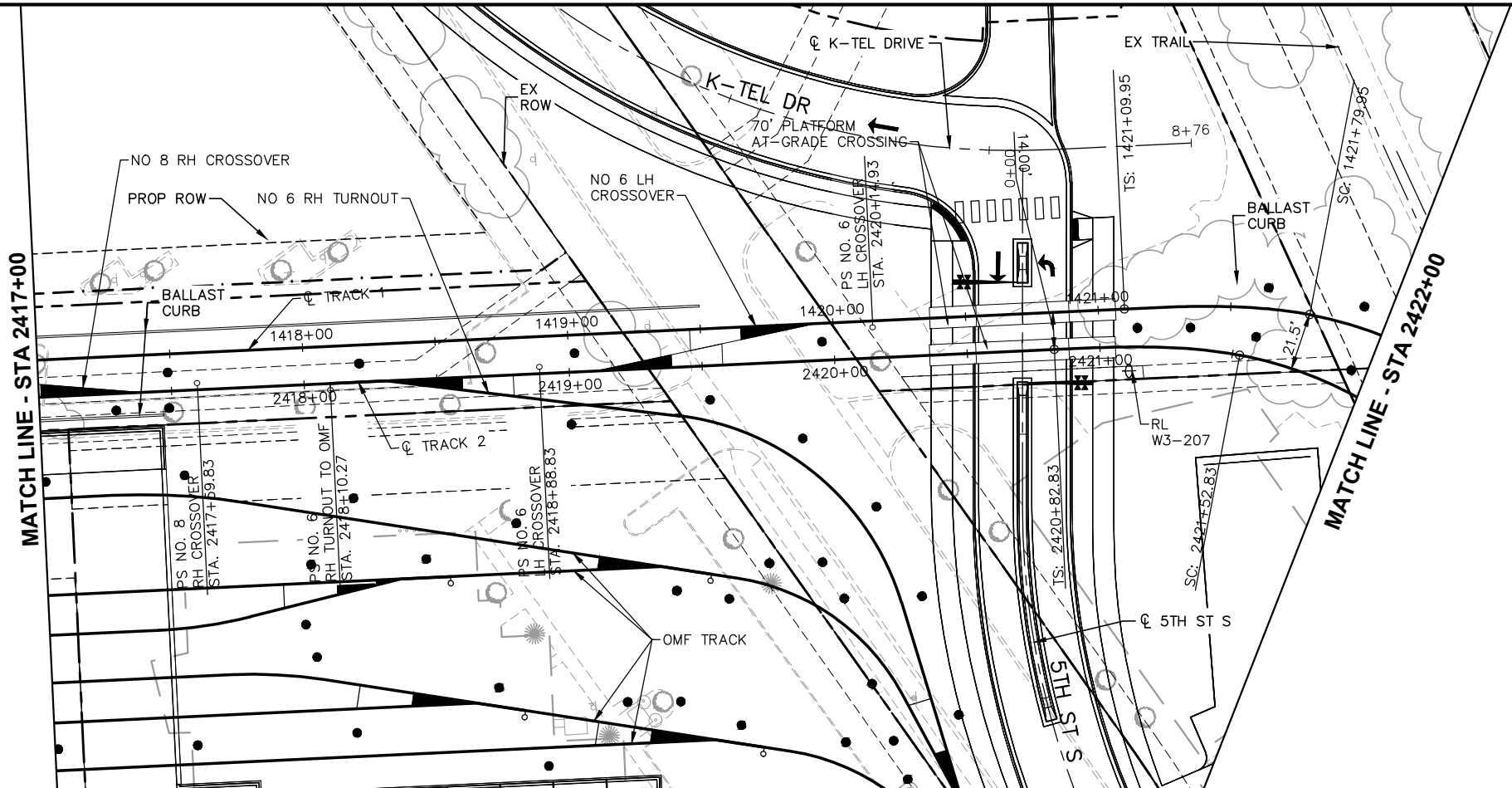
DISCIPLINE: **TRACK**

SHEET NAME: **W3-TRK-PRF - 013**

**179**  
**OF**  
**189**



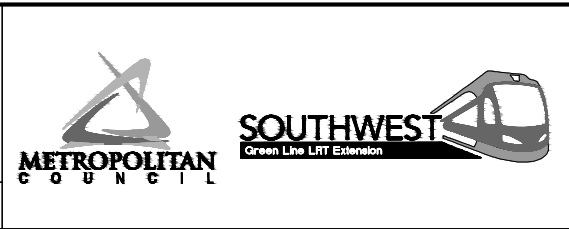
Sep. 21 2015 03:09 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MaurisBM



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

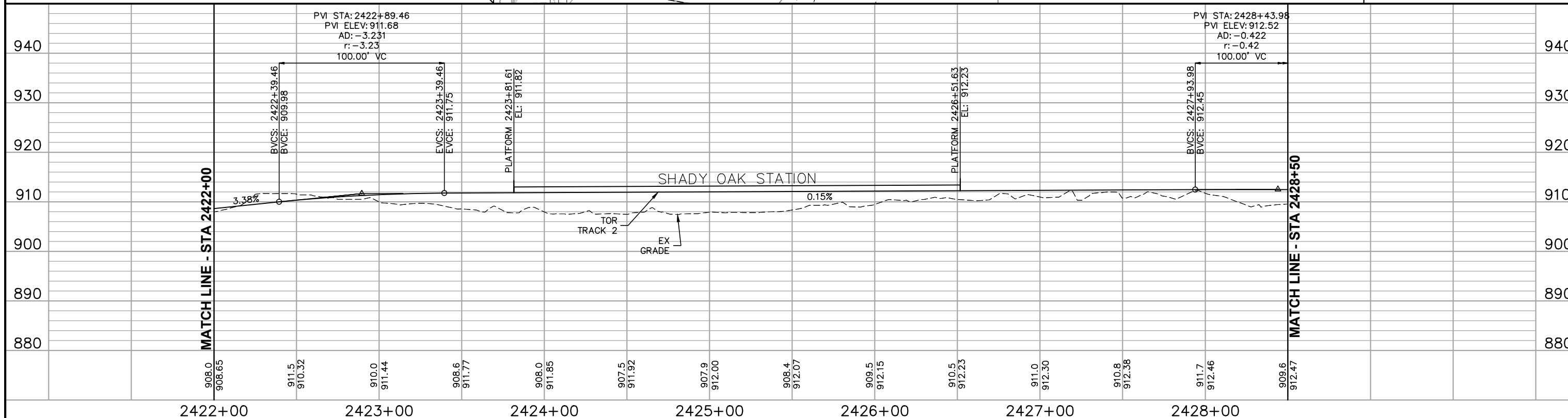
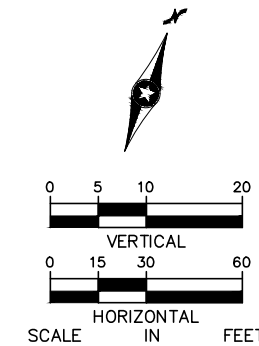
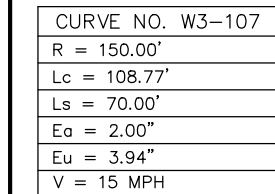
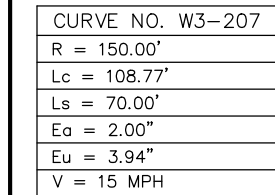


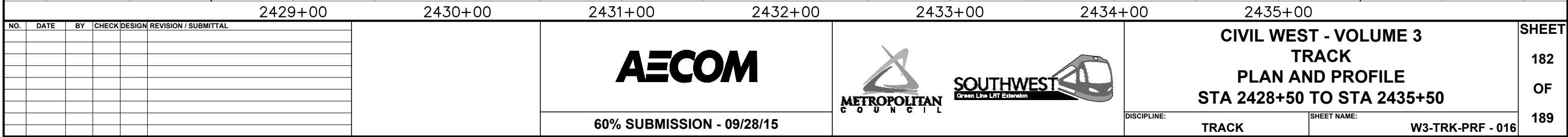
60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2417+00 TO STA 2422+00		SHEET 180 OF 189
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-PRF - 014	

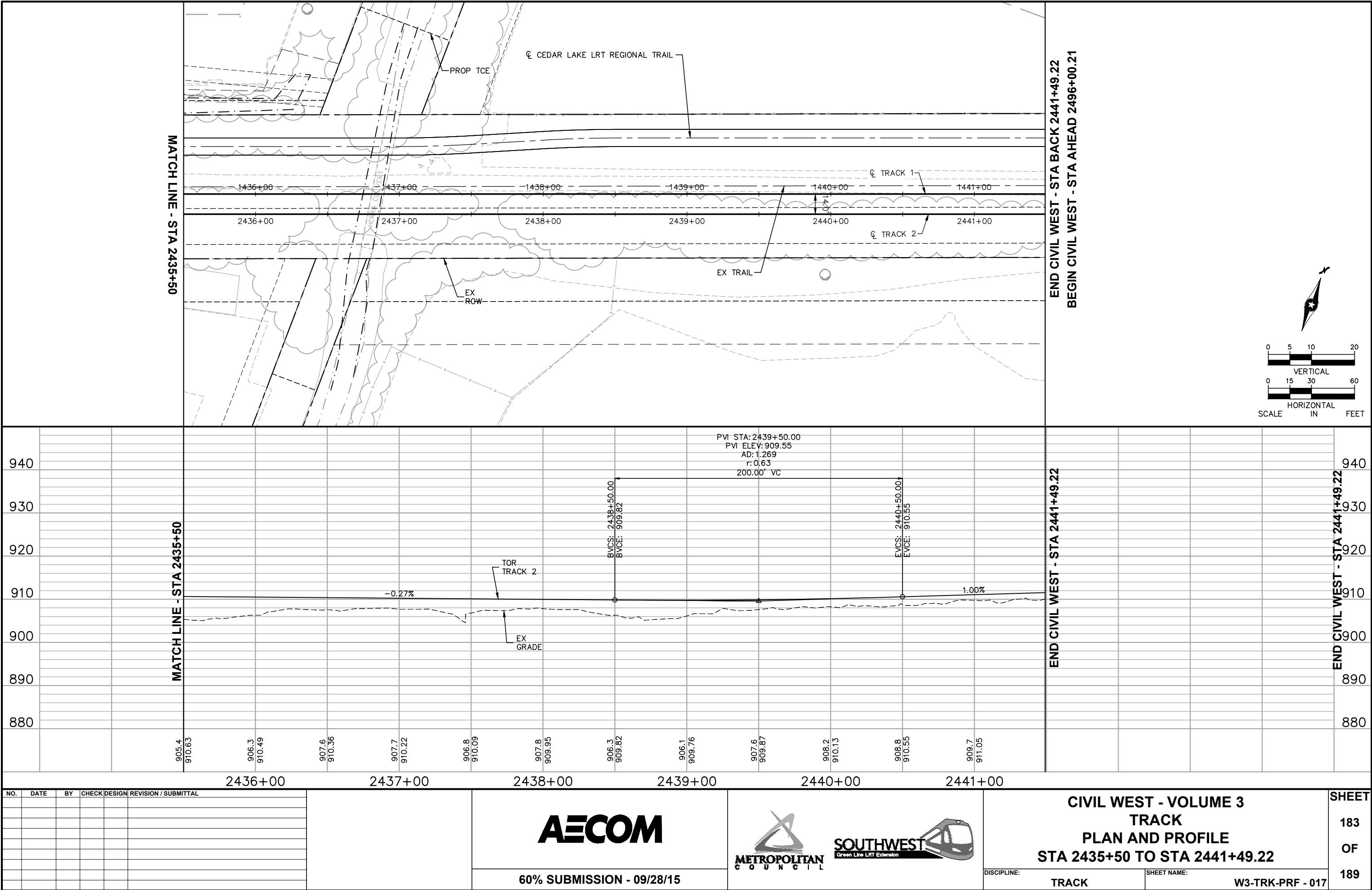
CURVE NO. W3-108
R = 4100.00'
Lc = 90.99'
Ls = 90.00'
Ea = 1.50"
Eu = 1.42"
V = 55 MPH

[illegible]





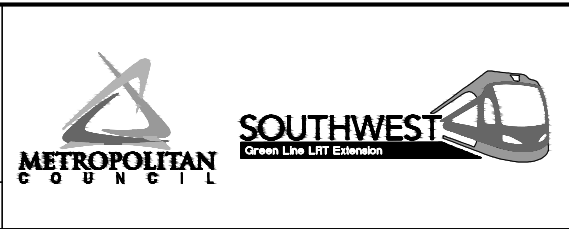
Sep. 21 2015 03:12 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W3-TRK-PRF.dwg By: MourisBM



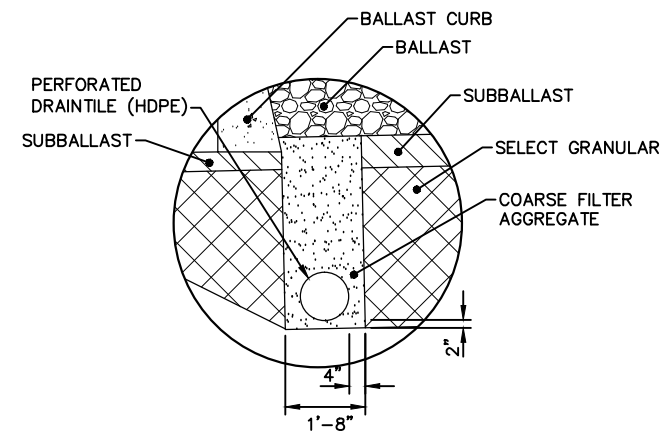
NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

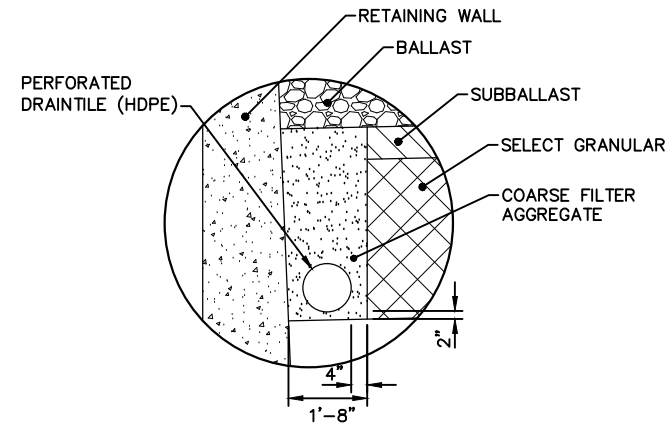


CIVIL WEST - VOLUME 3 TRACK PLAN AND PROFILE STA 2435+50 TO STA 2441+49.22		SHEET 183 OF 189
DISCIPLINE: TRACK	SHEET NAME: W3-TRK-PRF - 017	



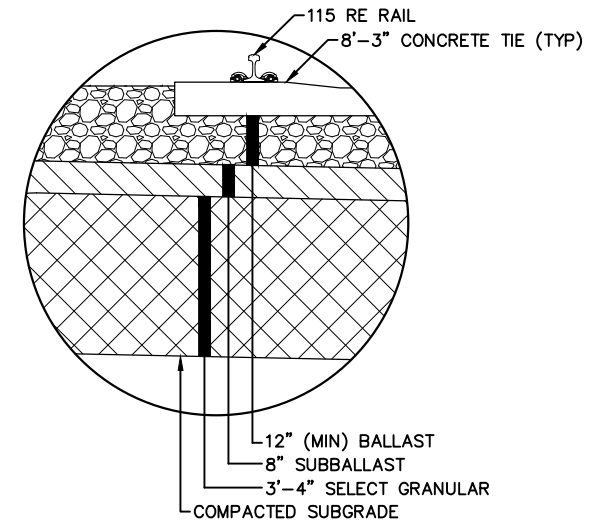
**INSET A – BALLAST CURB INTERFACE**

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED.  
FOR RIGHT SIDE, MIRROR SECTION.

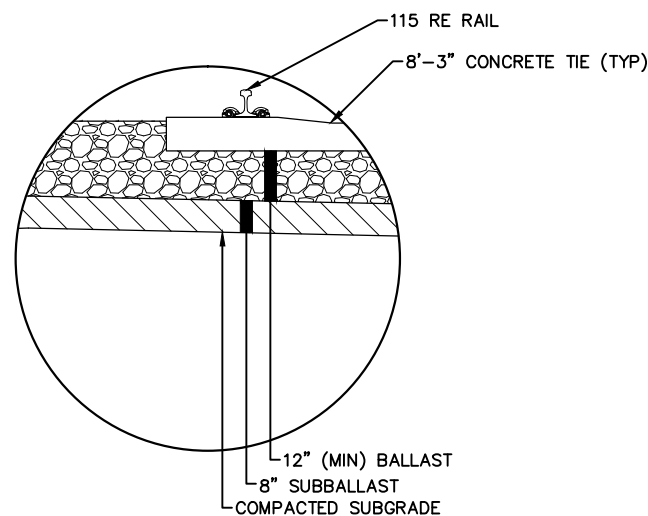


**INSET B – CIP RETAINING WALL INTERFACE**

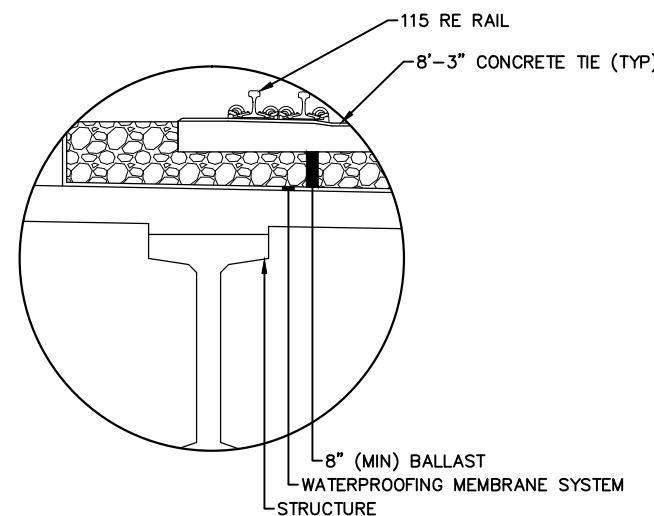
NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED.  
FOR RIGHT SIDE, MIRROR SECTION.



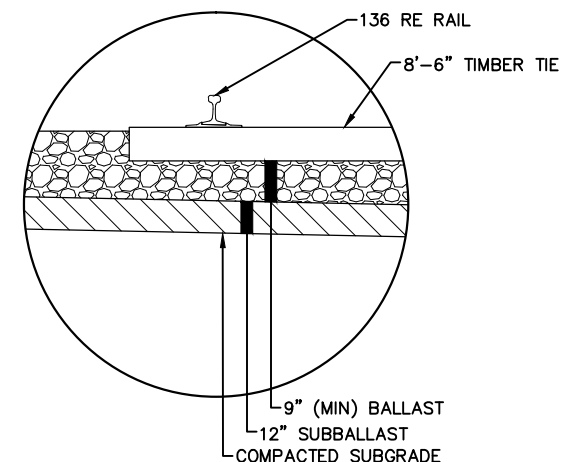
**INSET C – TYPICAL BALLASTED LRT TRACK**



**INSET D – TYPICAL BALLASTED  
LRT TRACK ON EXISTING SUBGRADE**






**INSET E – BALLASTED LRT TRACK ON STRUCTURE**

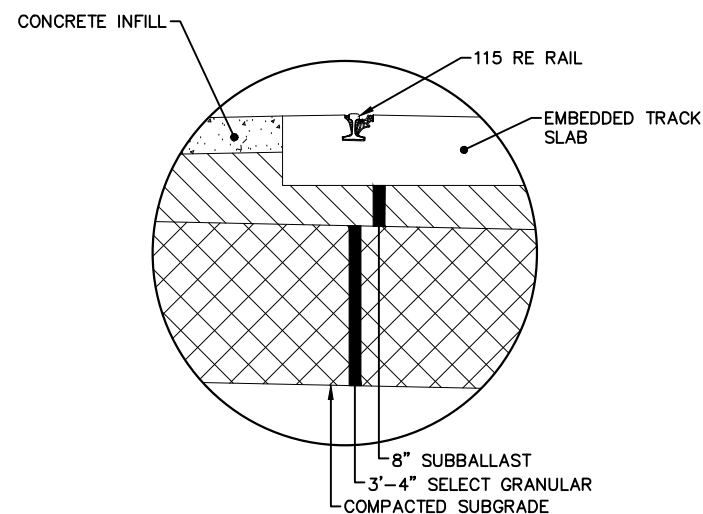


**INSET F – TYPICAL BALLASTED FREIGHT TRACK – A**

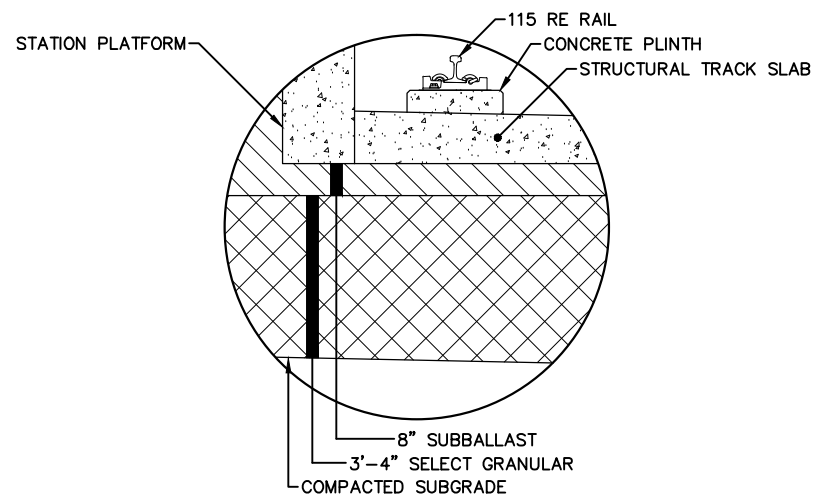
Sep. 21 2015 03:13 am V:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W0-TRK-INS.dwg By: MaurisBM

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL			 		<b>CIVIL WEST - VOLUME 3</b> <b>TRACK DETAILS</b> <b>TYPICAL SECTIONS INSETS</b>		<b>SHEET</b> 184 OF 189
						60% SUBMISSION - 09/28/15				DISCIPLINE:	SHEET NAME:	
										TRACK	W0-TRK-DTL-001	

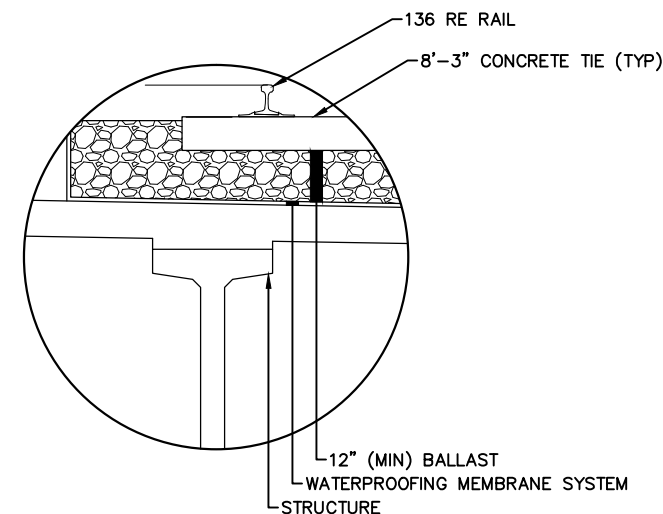
Sep. 21 2015 03:13 am V:\3400\_ADC\CAD\CAD\_00\_WEST\PLANSHEETS\TRACK\W0-TRK-INS.dwg By: MaurisBM



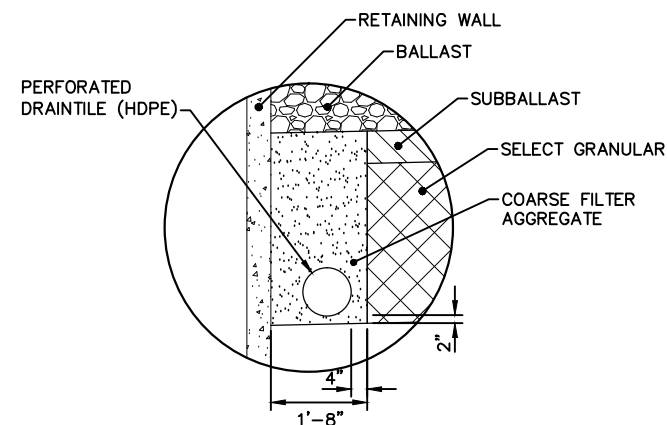
INSET G – TYPICAL EMBEDDED TRACK



INSET H – TYPICAL DIRECT FIXATION INTERFACE  
AT STATION PLATFORM

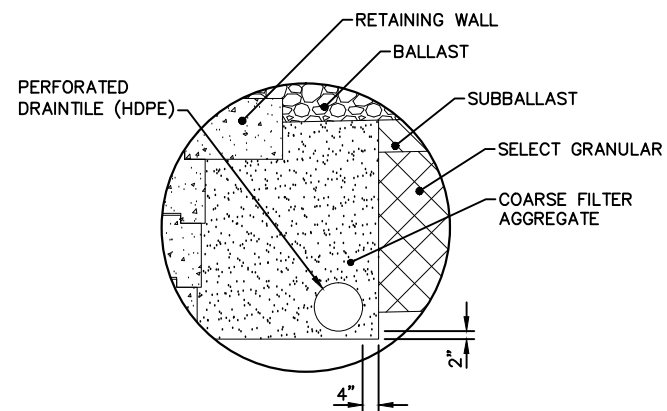


INSET I – BALLASTED FREIGHT TRACK ON STRUCTURE



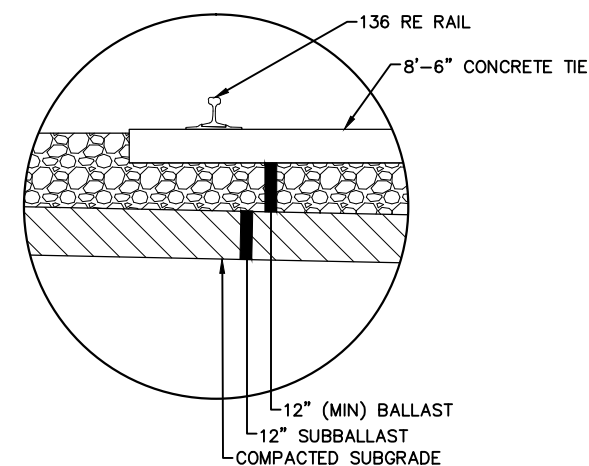
INSET J – MSE RETAINING WALL INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED.  
FOR RIGHT SIDE, MIRROR SECTION.



INSET K – PMBW RETAINING WALL INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED.  
FOR RIGHT SIDE, MIRROR SECTION.



INSET L – TYPICAL BALLASTED FREIGHT TRACK – B

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

**AECOM**

60% SUBMISSION - 09/28/15



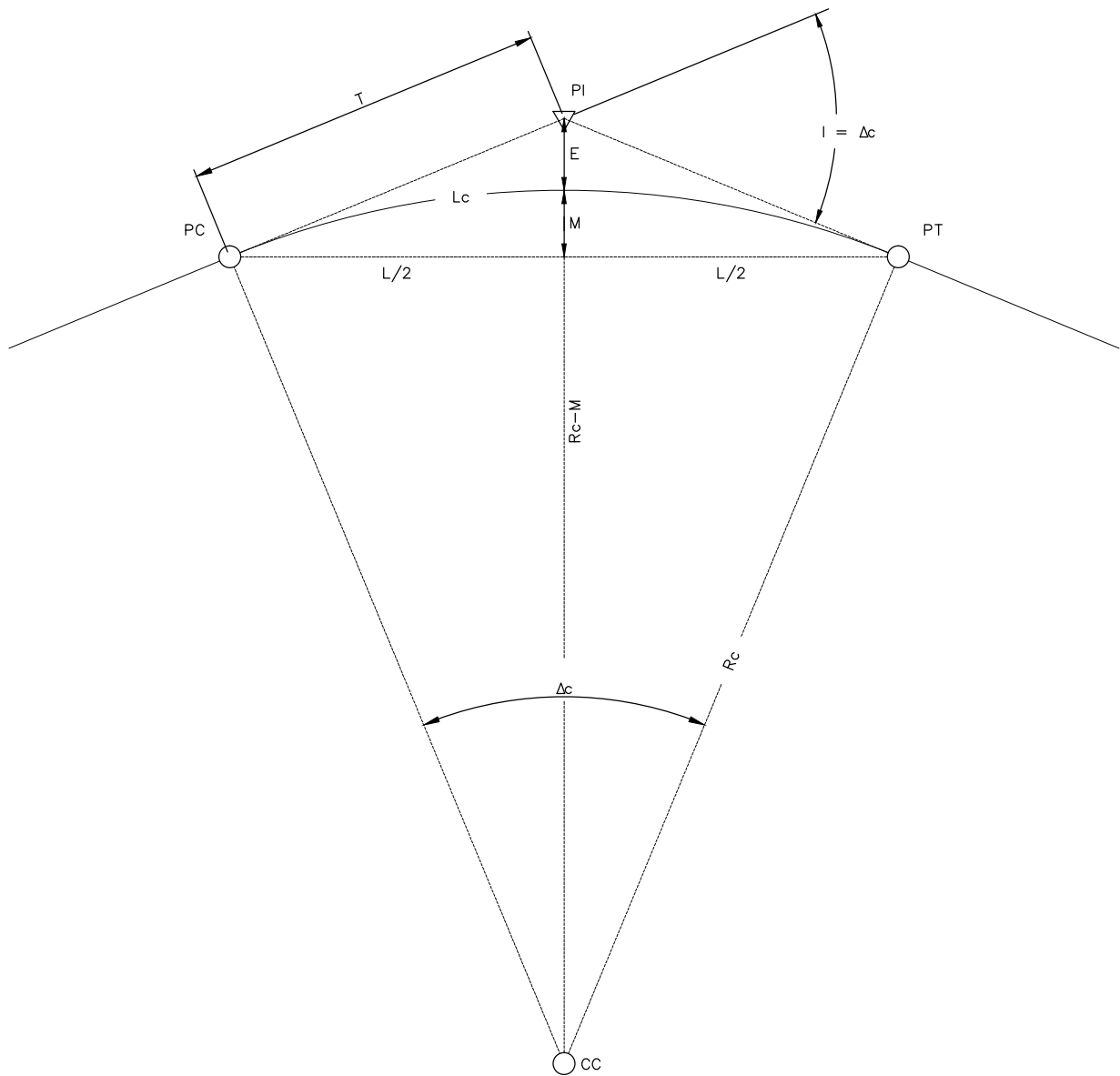
**CIVIL WEST - VOLUME 3  
TRACK DETAILS  
TYPICAL SECTIONS INSETS**

DISCIPLINE:  
**TRACK**

SHEET NAME:  
**W0-TRK-DTL-002**

**SHEET**  
**185**  
**OF**  
**189**

Sep. 21 2015 06:52 am v:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W0-TRK-DTL.dwg By: MourisBM



NOTES :

1. THIS DRAWING IS APPLICABLE TO SIMPLE CURVES WITHOUT TRANSITION SPIRALS AND SHALL ONLY BE USED ON NON-REVENUE TRACK.
2. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

DEFINITIONS :

D<sub>c</sub> = DEGREE OF CURVE IN ARC DEFINITION (DECIMAL DEGREES)  
R<sub>c</sub> = RADIUS OF CURVE  
L<sub>c</sub> = LENGTH OF CURVE ALONG THE ARC  
Δ<sub>c</sub> = CENTRAL ANGLE OF CURVE (DECIMAL DEGREES)  
E = EXTERNAL DISTANCE  
T = TANGENT DISTANCE  
M = MIDDLE ORDINATE  
L = CHORD LENGTH  
I = DEFLECTION ANGLE (DECIMAL DEGREES)  
PC = POINT OF CURVE  
PT = POINT OF TANGENT  
PI = POINT OF INTERSECTION  
CC = CENTER OF CURVE

SIMPLE CURVE FORMULAS :

$$\frac{D_c}{360^\circ} = \frac{100}{2\pi R_c}$$

$$D_c = \frac{5729.58'}{R_c}$$

$$L_c = \frac{\pi R_c \Delta_c}{180}$$

$$T = R_c \tan \frac{1}{2} \Delta_c$$

$$E = R_c \sec \frac{1}{2} \Delta_c - R_c$$

$$M = R_c - R_c \cos \frac{1}{2} \Delta_c$$

$$L = 2 R_c \sin \frac{1}{2} \Delta_c$$

SIMPLE CURVE DIAGRAM  
N.T.S.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

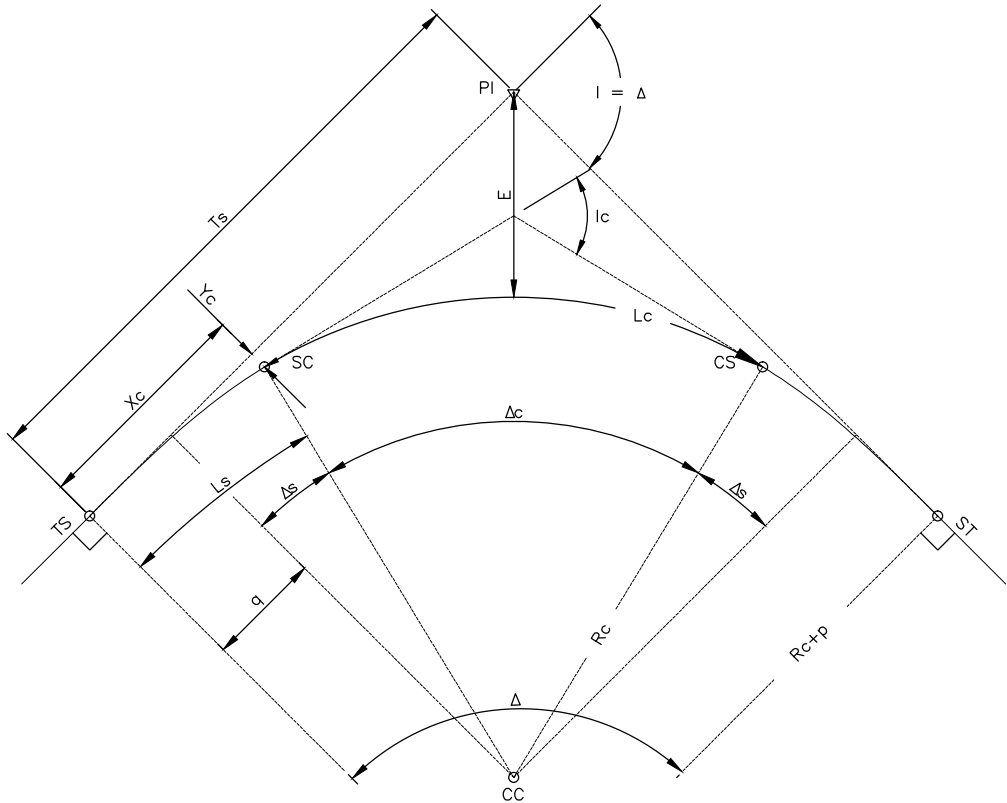


CIVIL WEST - VOLUME 3  
TRACK DETAILS  
SIMPLE CURVE DIAGRAM

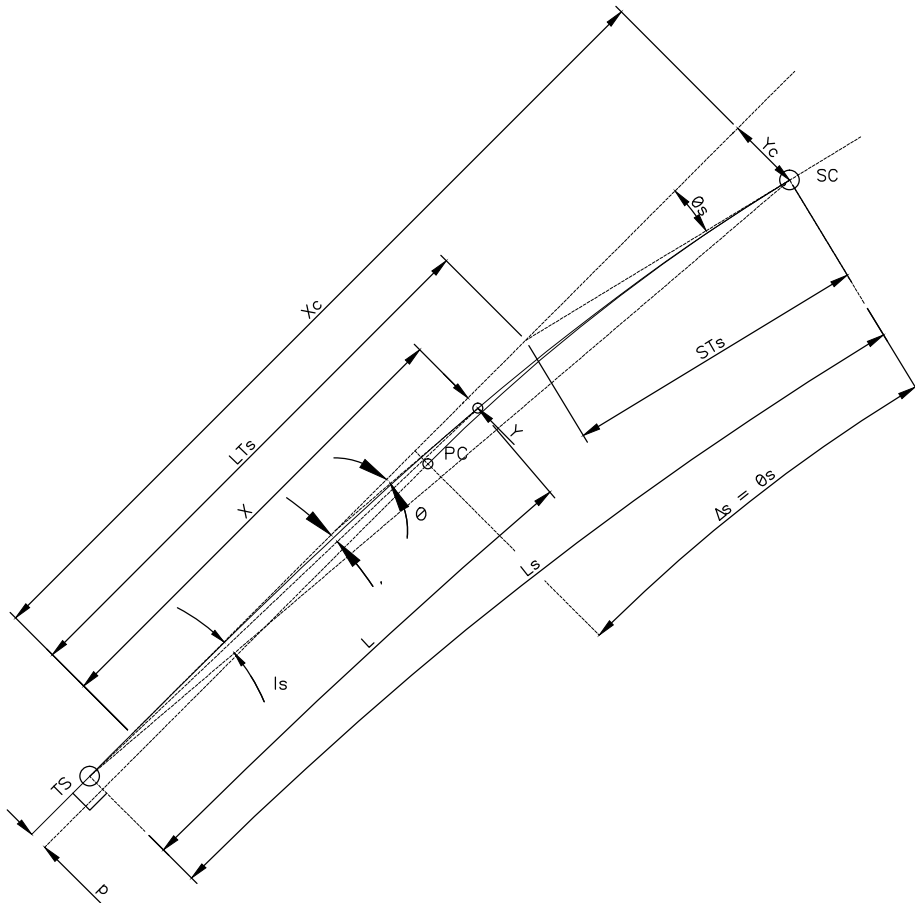
DISCIPLINE: TRACK SHEET NAME: W0-TRK-DTL-010

SHEET  
186  
OF  
189

Sep. 21 2015 06:53 am V:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\WO-TRK-DTL.dwg By: MourisBM



SPIRAL CURVE DIAGRAM  
N.T.S.



SPIRAL DIAGRAM  
N.T.S.

NOTES :

1. SPIRALS ARE TALBOT (CLOTHOID) SPIRALS.
2. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

DEFINITIONS :

D<sub>c</sub> = DEGREE OF SIMPLE CURVE IN ARC DEFINITION (DEGREES)  
R<sub>c</sub> = RADIUS OF CURVE  
Δ = TOTAL CENTRAL ANGLE OF CURVE (DEGREES)  
Δ<sub>c</sub> = CENTRAL ANGLE OF SIMPLE CURVE (DEGREES)  
Δ<sub>s</sub> = CENTRAL ANGLE OF SPIRAL (RADIAN)  
E = EXTERNAL DISTANCE OF THE SIMPLE CURVE  
T<sub>s</sub> = TOTAL TANGENT DISTANCE  
L<sub>s</sub> = LENGTH OF SPIRAL  
L<sub>c</sub> = LENGTH OF THE SIMPLE CURVE ARC  
L = LENGTH FROM TS TO ANY POINT ALONG THE SPIRAL  
I = TOTAL DEFLECTION ANGLE (DEGREES)  
I<sub>c</sub> = DEFLECTION ANGLE OF THE SIMPLE CURVE (DEGREES)  
I<sub>s</sub> = DEFLECTION ANGLE OF THE SPIRAL (DEGREES)  
i = DEFLECTION ANGLE FROM TS TO ANY POINT ON THE SPIRAL  
p = LENGTH OF THROW, OFFSET DISTANCE FROM TANGENT TO PC/PT  
q = DISTANCE FROM TS/ST TO THE OFFSET TC/CT  
X<sub>c</sub> = DISTANCE ALONG TANGENT FROM TS/ST TO THE SC/CS  
Y<sub>c</sub> = OFFSET DISTANCE FROM TANGENT TO SC/CS  
X = DISTANCE ALONG TANGENT FROM TS/ST TO ANY POINT ON THE SPIRAL  
Y = OFFSET DISTANCE FROM TANGENT TO ANY POINT ON THE SPIRAL  
θ<sub>s</sub> = SPIRAL ANGLE FROM TANGENT TO SC  
θ = SPIRAL ANGLE FROM TANGENT TO ANY POINT ON THE SPIRAL  
LT<sub>s</sub> = LONG TANGENT OF SPIRAL  
ST<sub>s</sub> = SHORT TANGENT OF SPIRAL  
TS = POINT OF TANGENT TO SPIRAL CURVE  
SC = POINT OF SPIRAL CURVE TO SIMPLE CURVE  
CS = POINT OF SIMPLE CURVE TO SPIRAL CURVE  
ST = POINT OF SPIRAL CURVE TO TANGENT  
PC = POINT OF CURVE  
PT = POINT OF TANGENT  
PI = POINT OF INTERSECTION  
CC = CENTER OF CURVE

SPIRAL CURVE FORMULAS :

$$\begin{aligned} \Delta &= \Delta_c + 2\Delta_s & Y_c &= \frac{L_s^2}{6R_c} & ST_s &= \frac{Y_c}{\sin \Delta_s} \\ \Delta_s &= \frac{L_s}{2R_c} & q &= X_c - R_c \sin \Delta_s & \frac{D_c}{360^\circ} &= \frac{100}{2\pi R_c} \\ i &= \frac{\theta}{3} & p &= \frac{1}{4}Y_c = \frac{L_s^2}{24R_c} & D_c &= \frac{5729.58'}{R_c} \\ X &= L - \frac{L^3}{40R_c^2 L_s^2} & T_s &= (R_c + p) \tan \frac{\Delta}{2} + q & L_c &= \frac{\pi R_c \Delta_c}{180} \\ L &= L_s - \frac{L_s^3}{40R_c^2} & E &= \frac{R_c + p}{\cos \frac{\Delta}{2}} - R_c \\ Y &= \frac{L^3}{6R_c L_s} & LT_s &= X_c - \frac{Y_c}{\tan \Delta_s} \end{aligned}$$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

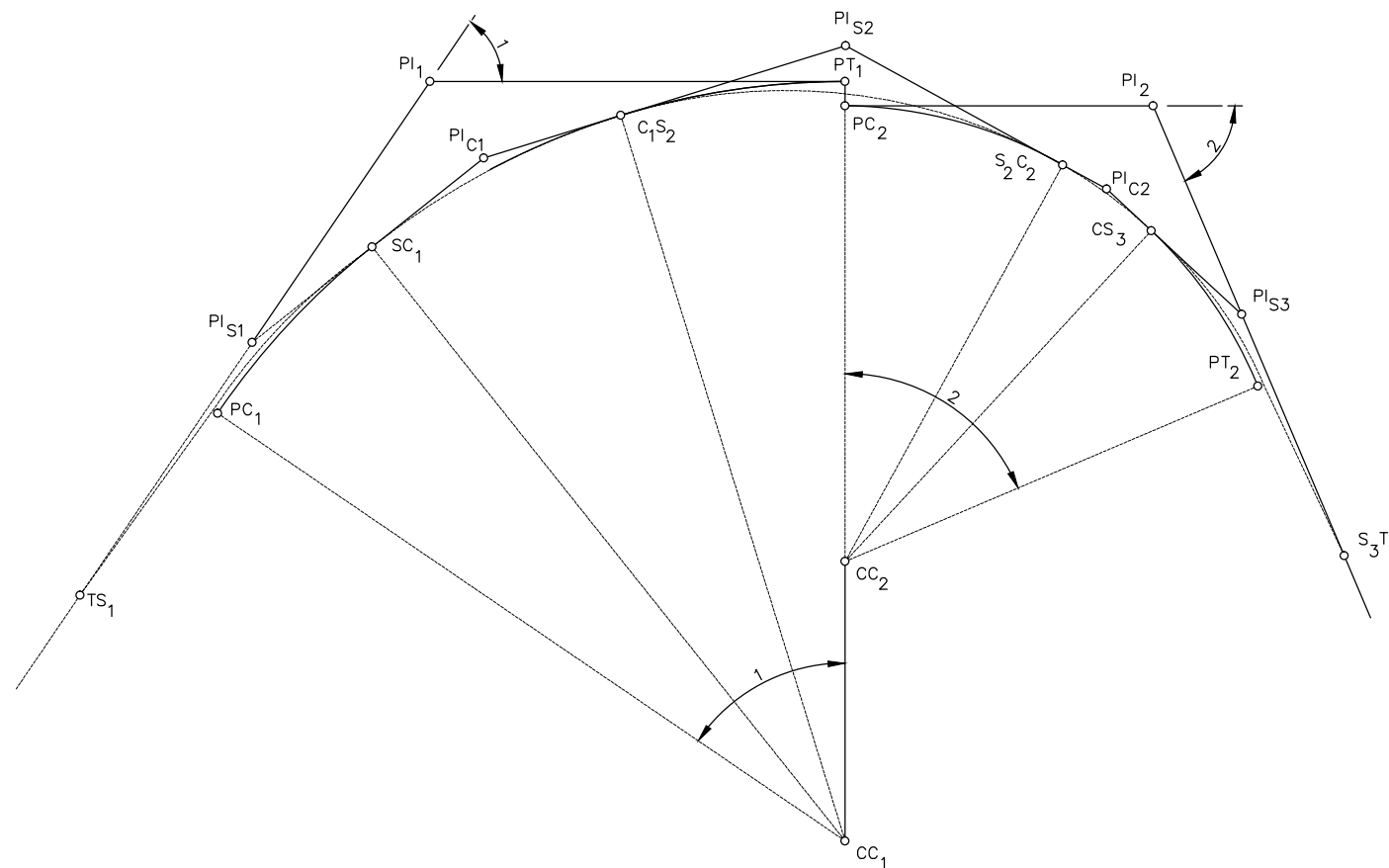


CIVIL WEST - VOLUME 3  
TRACK DETAILS  
SPIRAL CURVE DIAGRAMS

DISCIPLINE: TRACK SHEET NAME: W0-TRK-DTL-011

SHEET  
187  
OF  
189

Sep. 21 2015 06:54 am v:\3400\_ADC\CAD\CAD\00\_WEST\PLANSHEETS\TRACK\W0-TRK-DTL.dwg By: MourisBM



TWO CENTERED COMPOUND CURVES WITH SPIRALS  
N.T.S.

- NOTES :
1. SPIRALS ARE TALBOT (CLOTHOID) SPIRALS.
  2. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

- DEFINITIONS :
- TS = POINT OF TANGENT TO SPIRAL CURVE  
SC = POINT OF SPIRAL CURVE TO SIMPLE CURVE  
CS = POINT OF SIMPLE CURVE TO SPIRAL CURVE  
ST = POINT OF SPIRAL CURVE TO TANGENT  
PC = POINT OF CURVE  
PT = POINT OF TANGENT  
PI = POINT OF INTERSECTION  
CC = CENTER OF CURVE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL





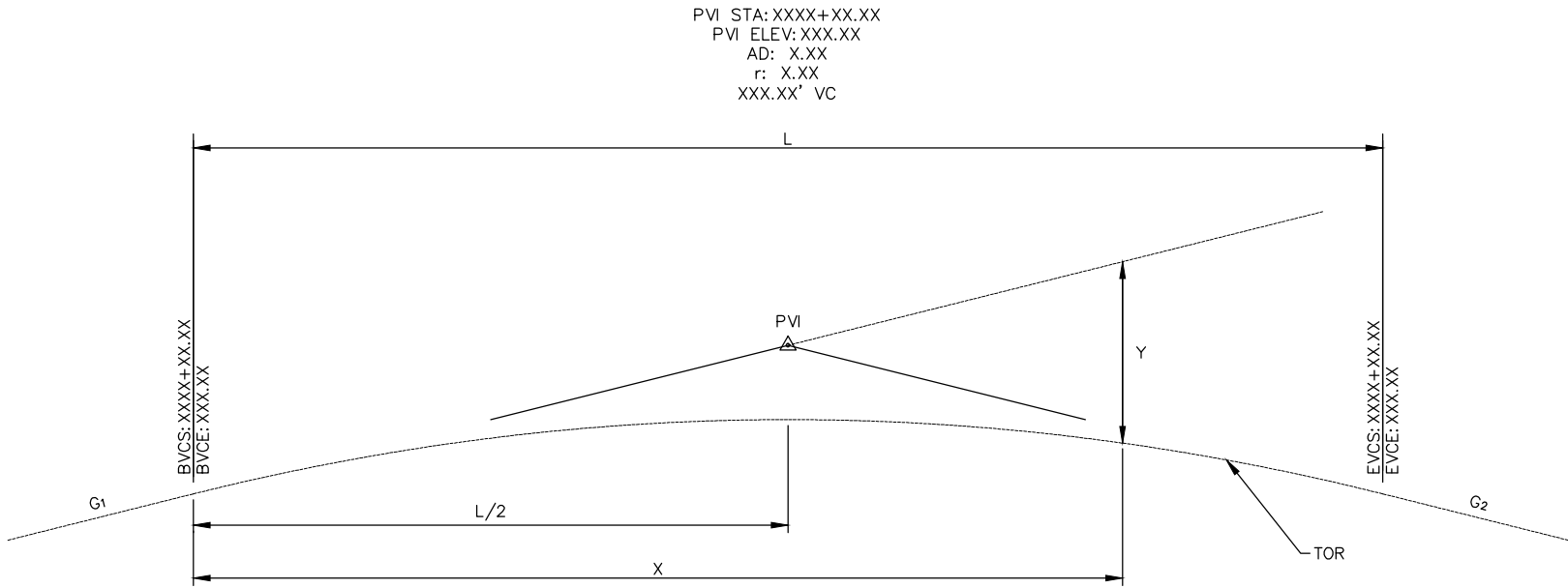
60% SUBMISSION - 09/28/15



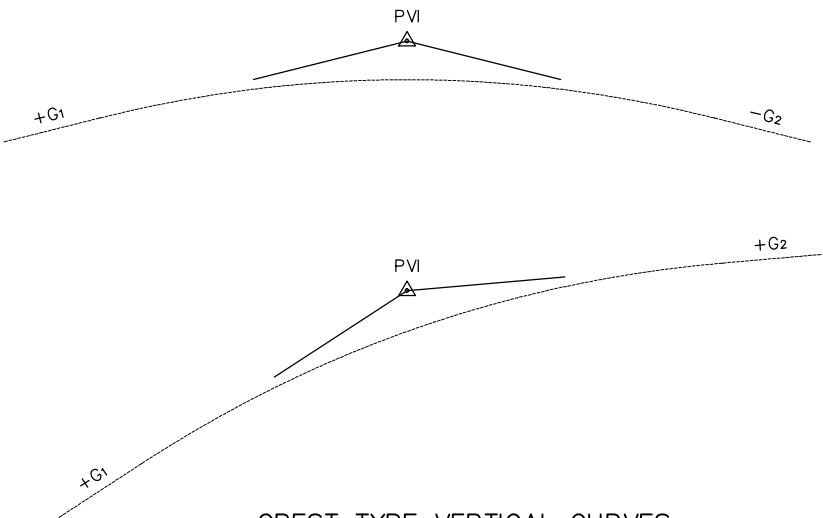
CIVIL WEST - VOLUME 3  
TRACK DETAILS  
COMPOUND CURVE WITH SPIRALS

DISCIPLINE: TRACK SHEET NAME: W0-TRK-DTL-012

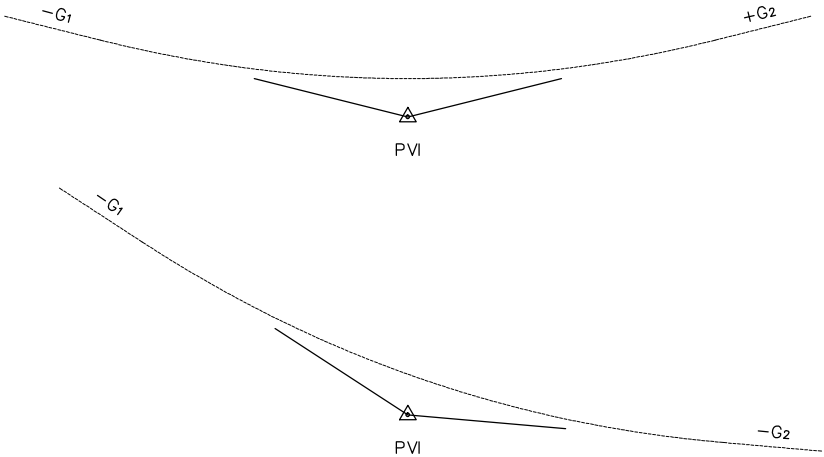
Sep. 21 2015 06:55 am v:\3400\_ADC\CAD\00\_WEST\PLANSHEETS\TRACK\W0-TRK-DTL.dwg By: MourisBM



STANDARD VERTICAL CURVE  
N.T.S.



CREST TYPE VERTICAL CURVES  
N.T.S.



SAG TYPE VERTICAL CURVES  
N.T.S.

- NOTES :
1. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

- DEFINITIONS :
- G1 = ENTRY GRADE %
  - G2 = DEPARTING GRADE %
  - PVI = POINT OF VERTICAL INTERSECTION
  - AD = ALGEBRAIC DIFFERENCE
  - r = RATE OF CHANGE OF GRADE
  - L = LENGTH OF VERTICAL CURVE
  - BVCS =BEGIN VERTICAL CURVE STATION
  - BVCE =BEGIN VERTICAL CURVE ELEVATION
  - EVCS =END VERTICAL CURVE STATION
  - EVCE =END VERTICAL CURVE ELEVATION
  - X = HORIZONTAL DISTANCE FROM BVC
  - Y = ELEVATION OF PARABOLA BELOW G1
  - Rv = EQUIVALENT RADIUS OF VERTICAL CURVE

VERTICAL CURVE FORMULAS :

$$a = \frac{G_2 - G_1}{2L}$$

$$Y = BVCE + GX + ax^2$$

$$AD = G_2 - G_1$$

$$r = \frac{100 \cdot AD}{L}$$

$$Rv = \frac{L}{0.01 \cdot AD}$$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 3  
TRACK DETAILS  
VERTICAL CURVE GEOMETRY

DISCIPLINE: TRACK

SHEET NAME: W0-TRK-DTL-013

SHEET

189

OF

189