MILWAUKEE AIRPORT RAIL STATION
SECOND PLATFORM PROJECT

FRA GRANT/COOPERATIVE AGREEMENT
69A36521402380CRSWI

WISDOT PROJECT
#1000-57-05

AUGUST 13, 2021

60% DESIGN SUBMITTAL

PROJECT ID: 1000-57-05
WITH: N/A

COUNTY: MILWAUKEE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1000-57-05		

ORDER OF SHEETS

TOTAL SHEETS =

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

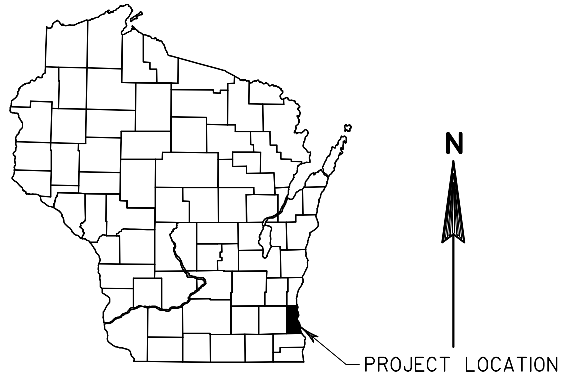
PLAN OF PROPOSED IMPROVEMENT

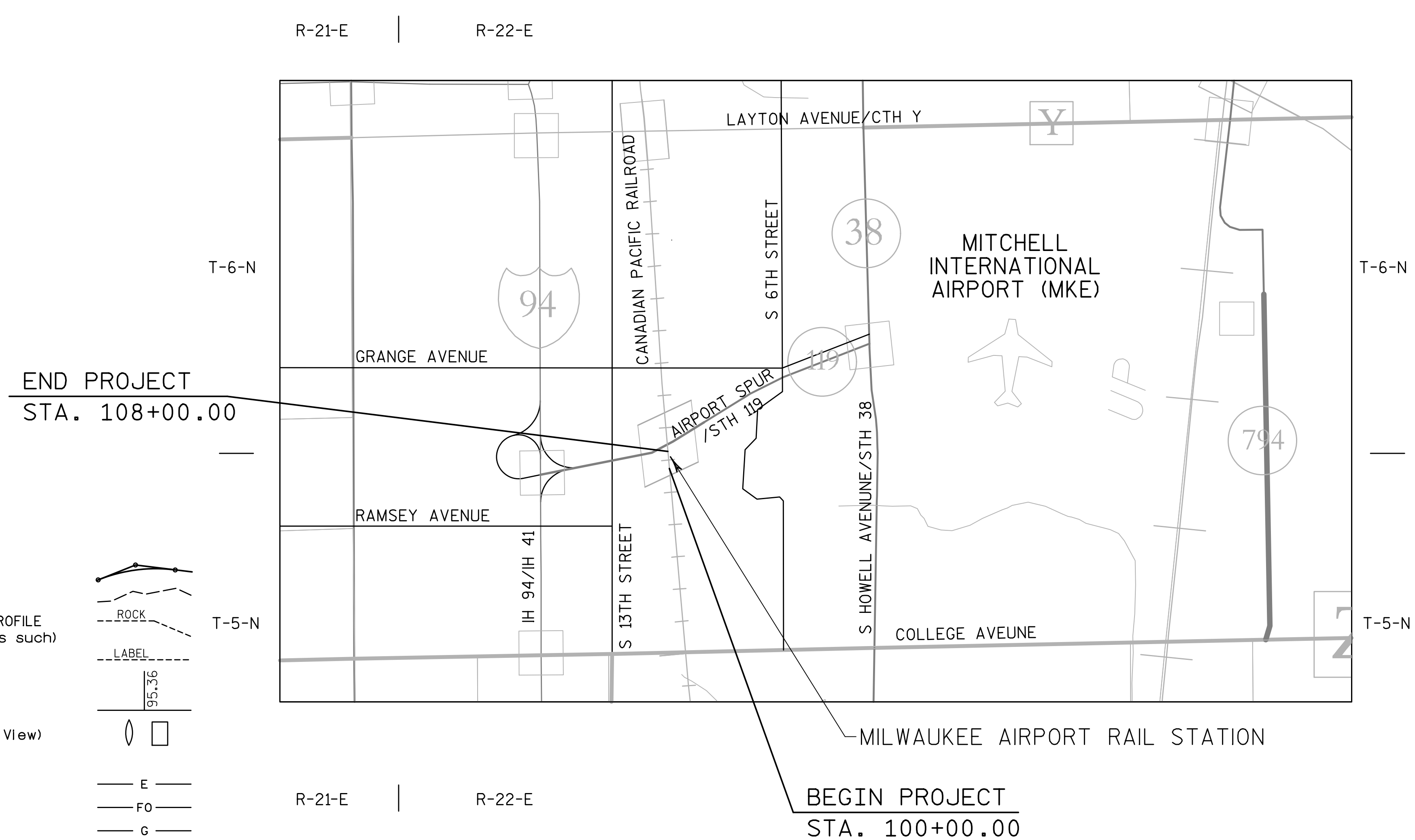
MILWAUKEE AIRPORT 2ND PLATFORM

RR CROSSING 393023R TO 1200 FT SOUTH

EX-RR CROSSING IMPROVEMENT
MILWAUKEE COUNTY

STATE PROJECT NUMBER
1000-57-05





LAYOUT
SCALE 0 3 MI.

TOTAL NET LENGTH OF CENTERLINE = MI.

DESIGN DESIGNATION

A.A.D.T.	= N/A
A.A.D.T.	= N/A
D.H.V.	= N/A
D.D.	= N/A
T.	= N/A
DESIGN SPEED	= N/A
ESALS	= N/A

CONVENTIONAL SYMBOLS

PLAN
CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SLOPE INTERCEPT
REFERENCE LINE
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS — CAUTION
MARSH AREA
WOODED OR SHRUB AREA

PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) — ROCK
SPECIAL DITCH — LABEL
GRADE ELEVATION — 95.36
CULVERT (Profile View)

UTILITIES
ELECTRIC — E
FIBER OPTIC — FO
GAS — G
SANITARY SEWER — SAN
STORM SEWER — SS
TELEPHONE — T
WATER — W
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MILWAUKEE COUNTY, NAD 83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AMD GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2011). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

AECOM
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F 414.944.6081

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

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Designer	AECOM
Project Manager	
Regional Examiner	
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: (Signature)

E

2

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GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTLITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. FIELD VERIFICATION REQUIRED.

DISTRUBED AREAS WITHIN RIGHT-OF-WAY MUST BE FERTILIZED, SEEDED, AND MULCHED.

SECTION 2 SHEETS

DESIGN CONTACTS

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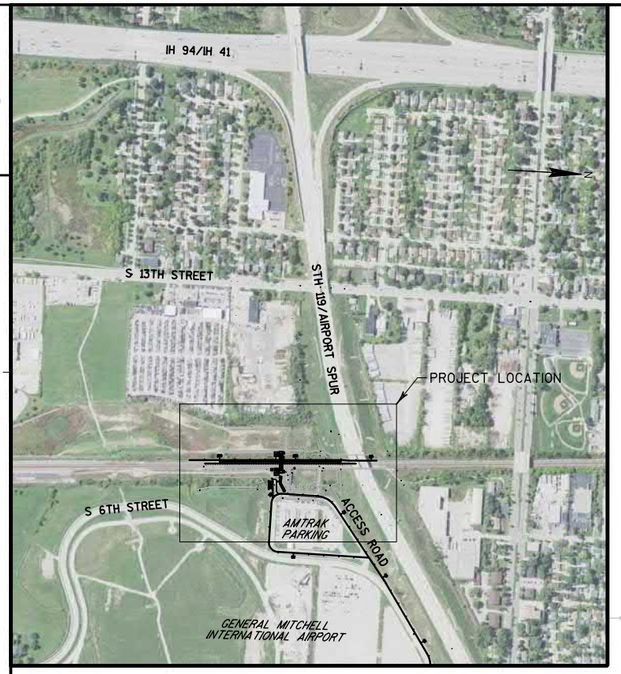


N

BEGIN PROJECT
STA. 100+00.00

WEST TOWER

PLATFORM CANOPY

PEDESTRIAN BRIDGE

CONCRETE PLATFORM

TO CHICAGO

TO MILWAUKEE

℄ TRACK 1
℄ TRACK 2

CANADIAN PACIFIC RAILROAD

EAST TOWER

GENERATOR & TRANSFORMER AREAS

CONNECTION FROM EXISTING STATION TO EAST TOWER

AMTRAK STATION

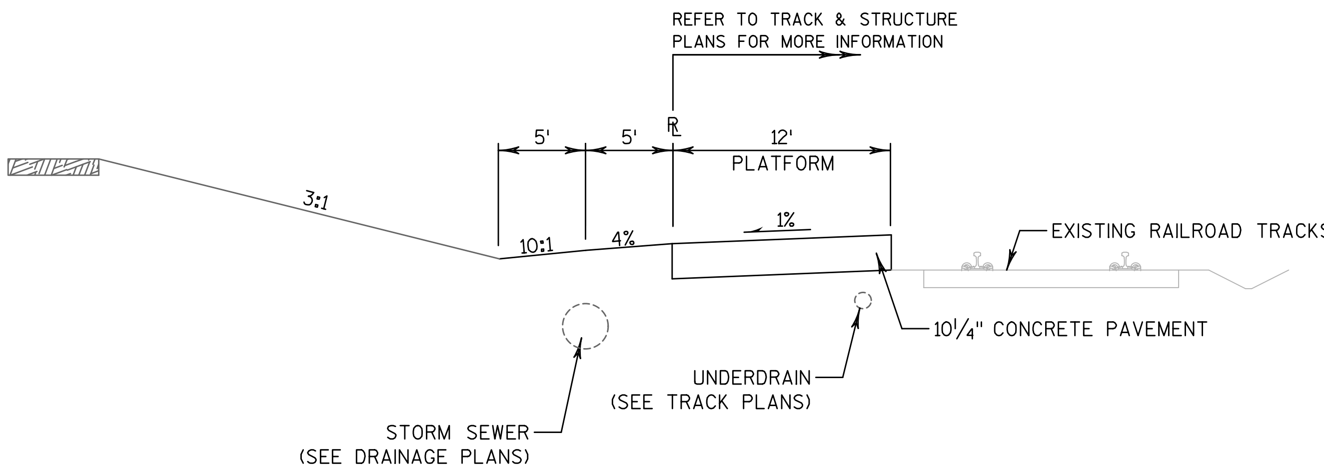
END PROJECT
STA. 108+00.00

AUTHORIZED PERSONNEL PARKING LOT

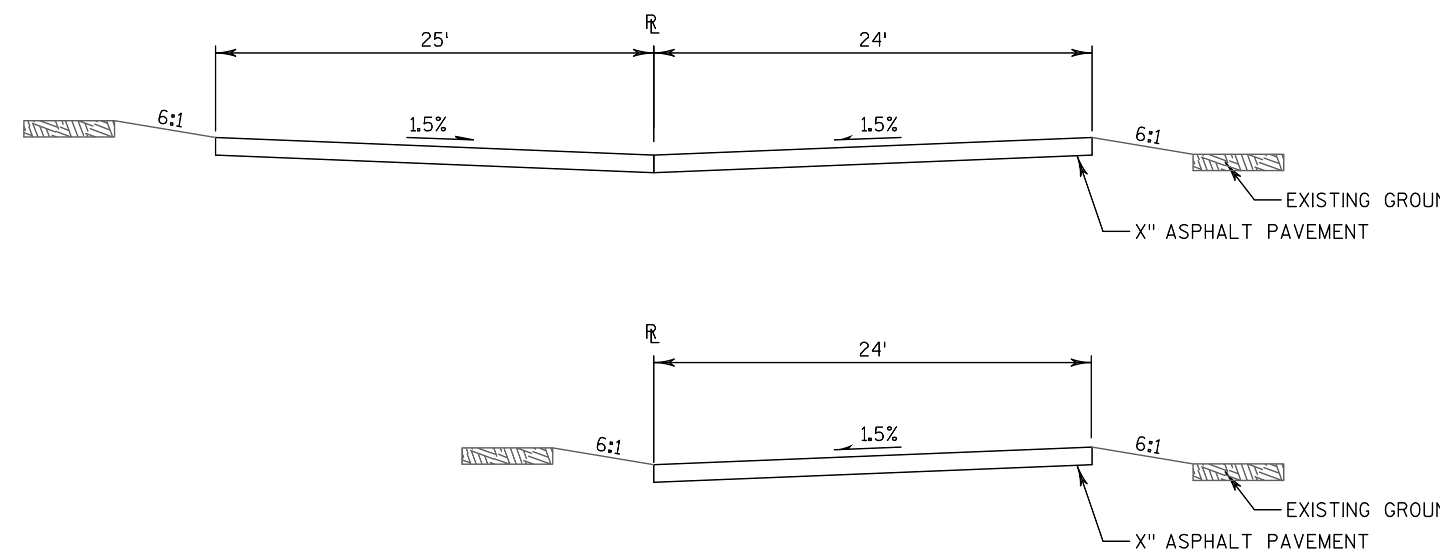
ACCESS ROAD

AMTRAK PARKING

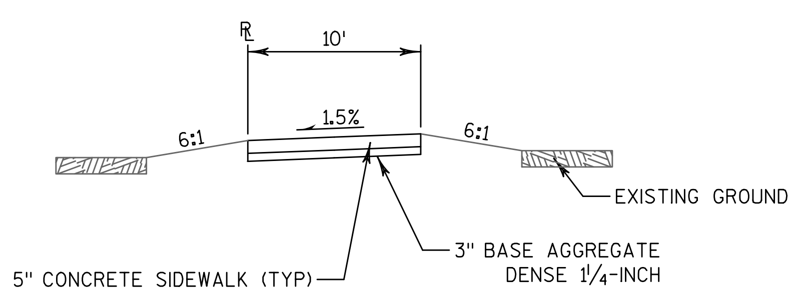
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET	E



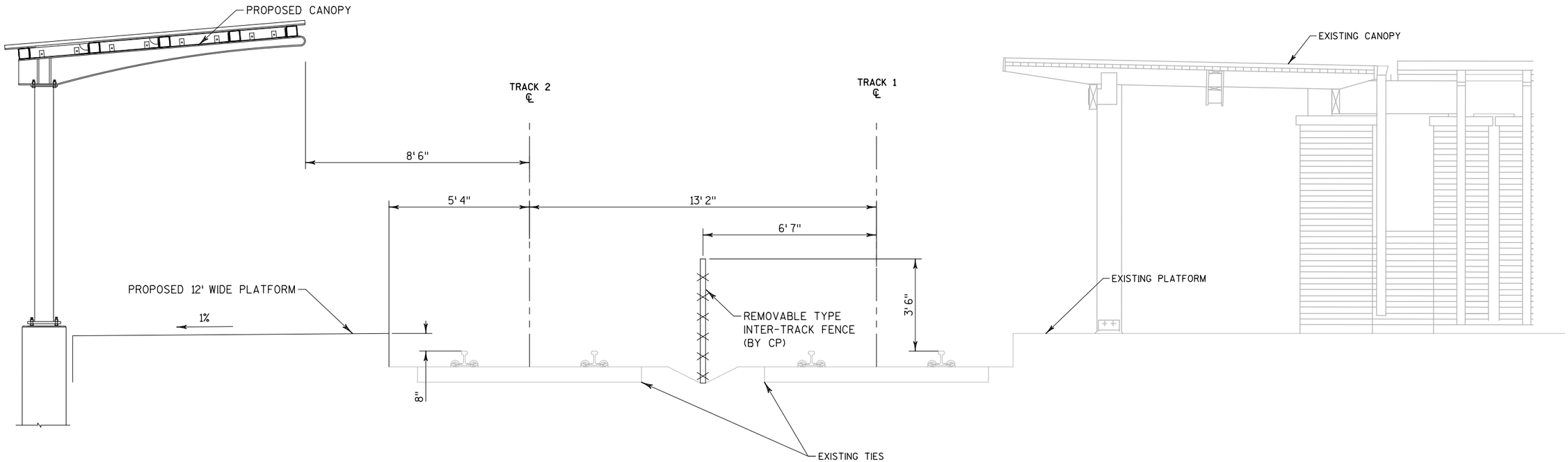
TYPICAL FINISHED SECTION
WEST OF PLATFORM
(LOOKING NORTH)



TYPICAL FINISHED SECTION
PARKING AREA
(LOOKING WEST)



TYPICAL FINISHED SECTION
SIDEWALK SECTION
(LOOKING WEST)



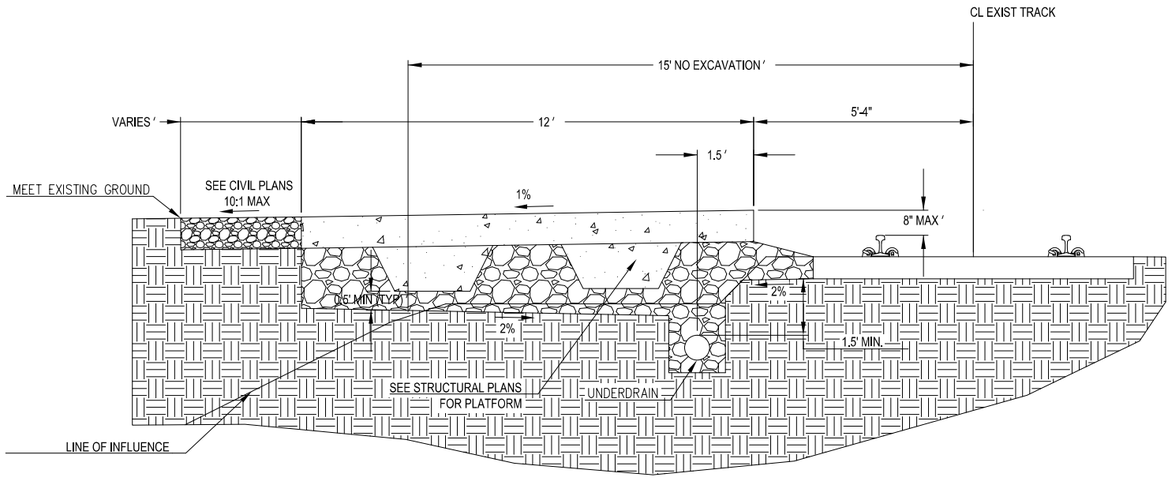
TYPICAL SECTION

STA 100+00 - STA 108+00
LOOKING NORTH
CANOPY STA 100+26 - STA 105+26

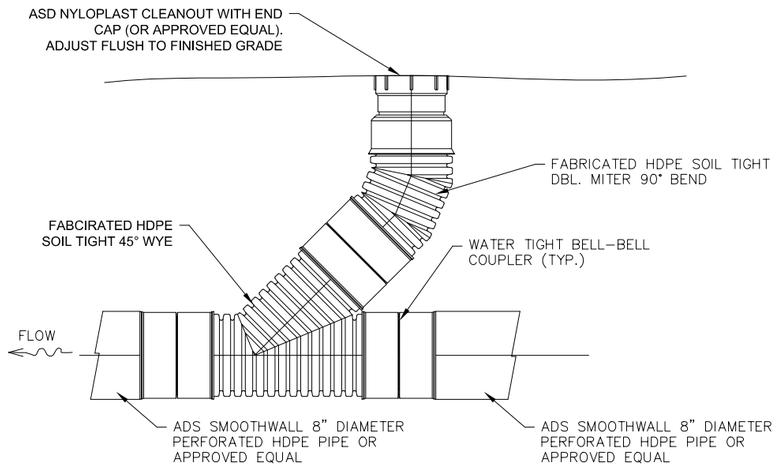
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	TYPICAL SECTION	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



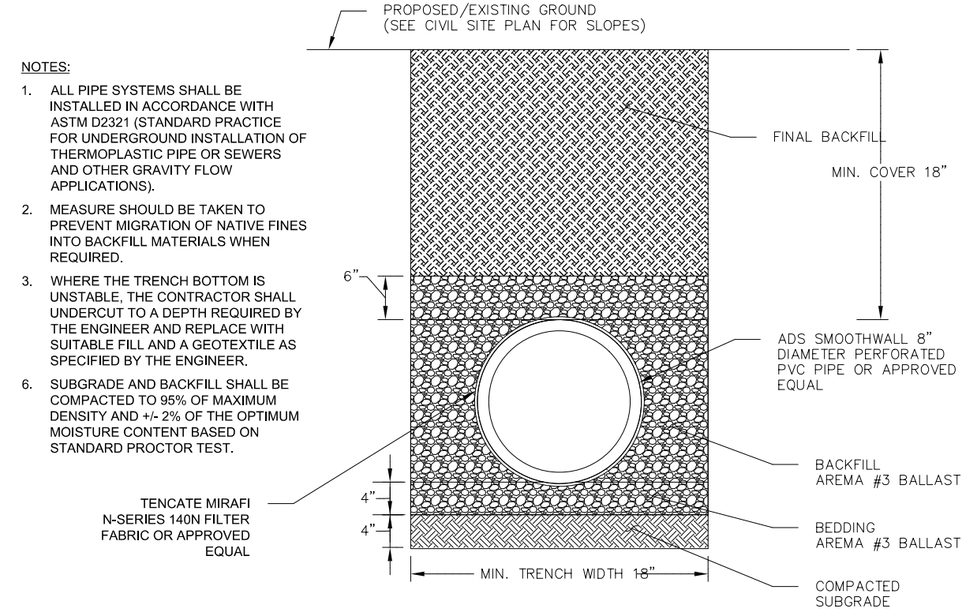
1 PLATFORM SECTION LOOKING NORTH
N.T.S.



2 CLEAN OUT DETAIL
N.T.S.

NOTES:

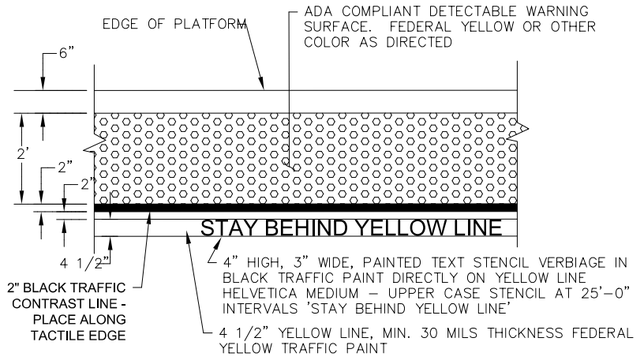
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321 (STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE OR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS).
2. MEASURE SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIALS WHEN REQUIRED.
3. WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL UNDERCUT TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE FILL AND A GEOTEXTILE AS SPECIFIED BY THE ENGINEER.
6. SUBGRADE AND BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AND +/- 2% OF THE OPTIMUM MOISTURE CONTENT BASED ON STANDARD PROCTOR TEST.



3 UNDERDRAIN TRENCH SECTION
N.T.S.

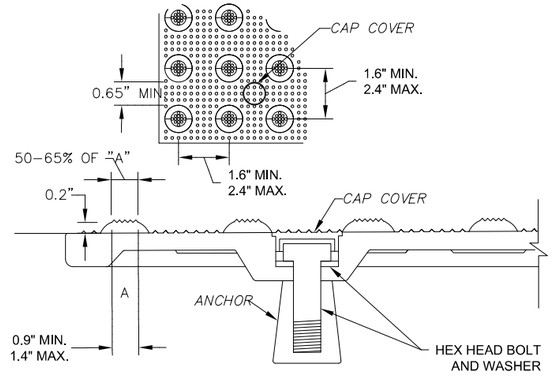
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	DETAIL SHEET 1	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.
WISDOT/CADDS SHEET 42



NOTE:
1. PLATFORM MUST BE PRESSURE WASHED CLEAN PRIOR TO PAINTING, INCLUDING TACTILE.
2. BLACK AND YELLOW LINES MUST BE MASKED OR ANOTHER METHOD MUST BE USED TO PREVENT PAINT OVERFLOW OR OVER SPRAY INTO UNWANTED AREAS, LINES MUST BE CLEAN, STRAIGHT, SHARP AND PARALLEL WITH TACTILE.
3. FOLLOW ALL PAINT MANUFACTURERS INSTALLATION AND PREPARATION GUIDELINES.
4. ADD ADDITIONAL 1'–0" TO THE INSIDE EDGE OF 'STAY BEHIND YELLOW LINE' FOR CURVED TRACK.
5. WHEN DETERMINING DISTANCE FOR THE INSIDE EDGE OF THE YELLOW LINE, TAKE MEASUREMENTS AT THREE DIFFERENT SPOTS FROM THE CENTER OF TRACK OUT 8'–2" AT THREE DIFFERENT SPOTS (ONE AT EACH END AND ONE IN THE MIDDLE). IF THE THREE MEASUREMENTS ARE NOT ALIGNED WITH TACTILE, USE THE FURTHEST MEASUREMENT AS A MINIMUM REQUIREMENT. PAINT YELLOW LINE PARALLEL WITH TACTILE AT THE FURTHEST POINT OF THE THREE MEASUREMENTS.
6. USE ENNIS–FLINT–ES SERIES DURASHEEN TRAFFIC PAINT. PRODUCT CODE 985542 YELLOW AND 985203 BLACK.

1 PLATFORM MARKING DETAIL
N.T.S.

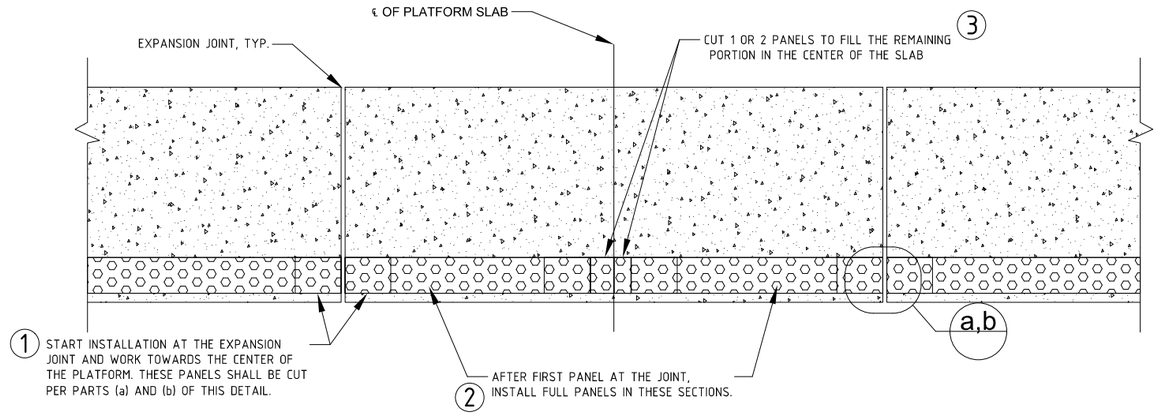


NOTES:
1. CONTRACTOR SHALL USE ADA SOLUTIONS EMBEDDED/REPLACEABLE DETECTABLE WARNING OR APPROVED EQUIVALENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9" MIN TO 1.4" MAX, WITH A TOP DIAMETER OF 50-65% OF THE BASE DIAMETER, A HEIGHT OF 0.2", AND 1.6" MIN./2.4" MAX. CENTER TO CENTER SPACING.
3. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES;

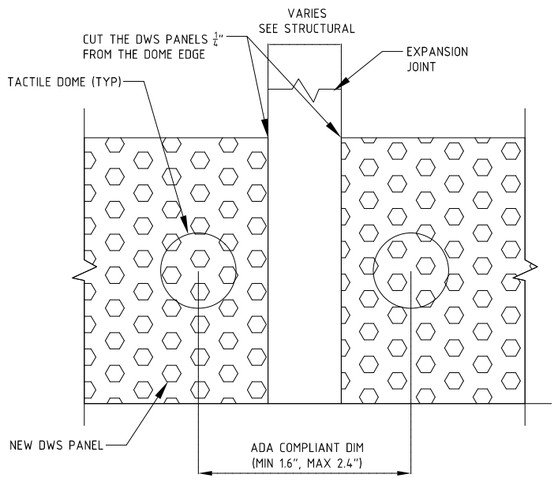
2 EMBEDDED/REPLACEABLE DETECTABLE WARNING SURFACE DETAIL
N.T.S.

STANDARD NOTES:

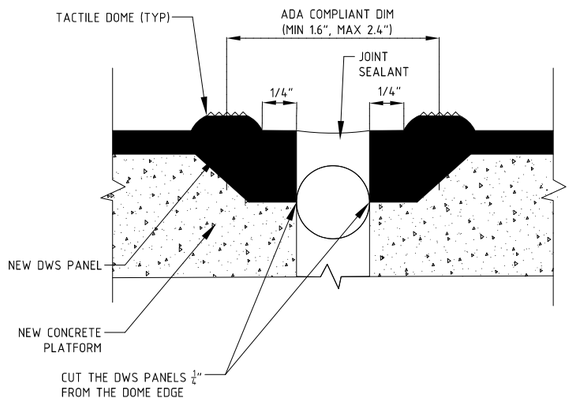
- ALL DOME SPACING BETWEEN ADJACENT PANELS SHALL BE GREATER THAN 1.6" AND LESSER THAN 2.4".
- SEAL ALL EXPANSION JOINTS UNIFORMLY AFTER REINSTALLATION OF DWS.
- CONCRETE EDGE MUST BE TOOLED WITH A 1/4" REVEAL ALONG THE LONGER SIDES OF THE DWS PANEL.
- WHEN DWS PANELS ARE CUT, ANCHORS SHOULD BE WITHIN 4.8" MINIMUM OF THE TILE EDGE. ADDITIONAL SEPARATE ANCHORS CAN BE USED. CONTACT THE MANUFACTURER FOR ADDITIONAL INSTRUCTIONS.
- ALL JOINTS BETWEEN DWS PANELS SHOULD BE MAINTAINED AT 1/8" .
- PROVIDE 1/8" JOINT BETWEEN EACH PANEL. PROVIDE MINIMUM 1/2" JOINT AT ALL EXPANSION JOINTS BETWEEN THE TWO DWS PANELS. THE DWS CAN OVERHANG ON THE EXPANSION JOINT BY 1/4" OR AS REQUIRED WITH AN ANCHOR IN EACH CORNER IN FIRST DOME SPACING FROM THE EDGE.
- VERIFY ALL MEASUREMENTS IN FIELD PRIOR TO INSTALLATION.



PARTIAL PLATFORM PLAN
(c)



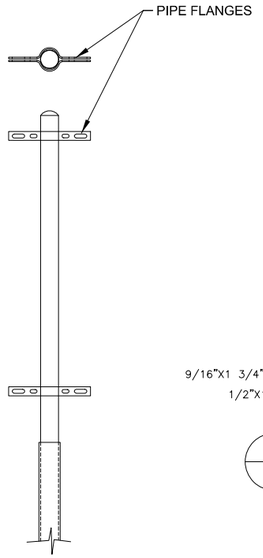
PANELS ADJACENT TO JOINT
PLAN VIEW
(a)

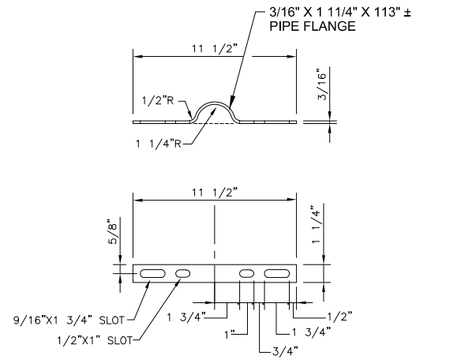


PANELS ADJACENT TO JOINT
SECTION VIEW
(b)

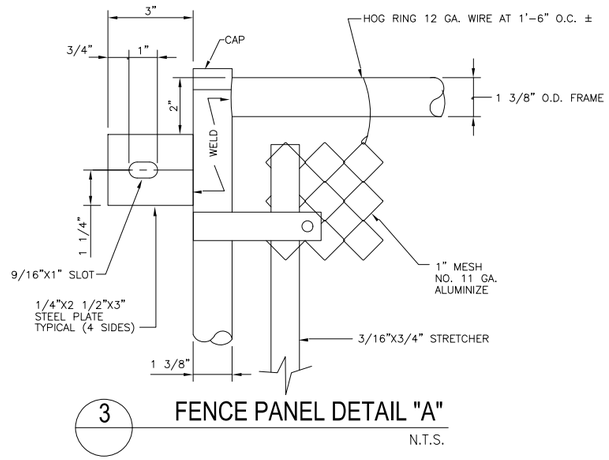
3 DETECTABLE WARNING SURFACE PLACEMENT DETAILS
N.T.S.

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	DETAIL SHEET 2	SHEET	E





2 MODIFIED PIPE FLANGE
N.T.S.

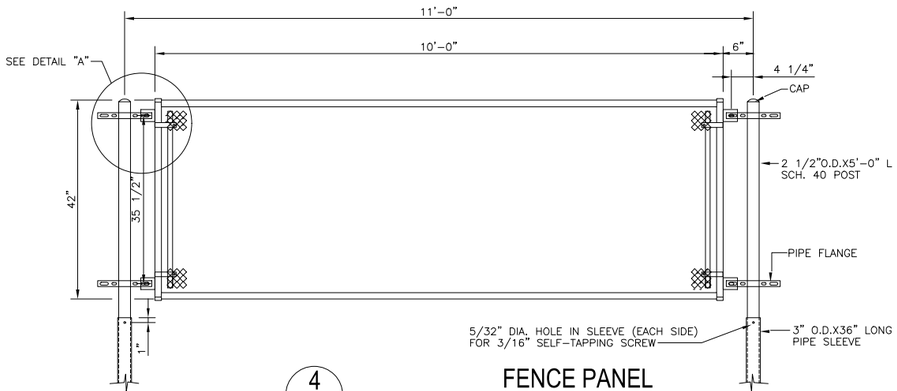


3 FENCE PANEL DETAIL "A"
N.T.S.

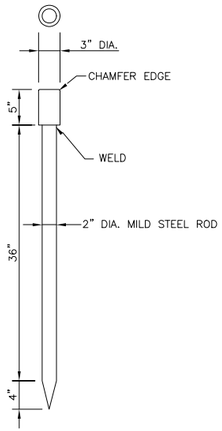
NOTES:

1. USE HEX BOLT 3/8" DIA., 1 1/2" LONG, 1 HEX NUT, ONE FLAT WASHER AND ONE LOCK WASHER PER HOLE.
2. ALL POST, RAILS AND PIPE FLANGES SHALL BE A 120 GALVANIZED AFTER FABRICATION SCH. 40 PIPE.
3. DRESS BALLAST LEVEL BEFORE INSTALLING SLEEVES WITH PD135 "RHINO" POST DRIVER.
4. HEADER CABLE SHALL EXTEND A MIN. OF 20 FT. BEYOND END POST OR 20 FT. OFF STRUCTURE WHEN FENCE IS ON STRUCTURE.
5. INSTALL TWO GROUND RODS, ONE AT EACH END OF THE HEADER CABLE OR AT A SPACING OF 1000 FT. IF INSTALLATION EXCEEDS THAT LENGTH.
6. INSTALL FENCE POST GROUNDING CLAMPS PRIOR TO ERECTION OF FENCE.
7. REMOVAL OF GROUNDING CLAMPS FROM FENCE POST IS FINAL SEQUENCE IN FENCE REMOVAL.
8. FENCE SHALL ENTEND A MINIMUM 200 FT. BEYOND END OF PLATFORMS UNLESS PREVENTED BY PHYSICAL OBSTRUCTION OR CLEARANCE RESTRICTIONS.
9. DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO THE FABRICATION OF ANY MATERIAL.
10. ALL INSTALLATIONS AT NEW LOCATIONS OR EXTENSIONS OF EXISTING MUST BE APPROVED BY THE DIRECTION CLEARANCE, INSPECTION AND TEST.

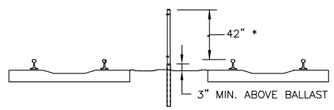
1 POST LAYOUT
N.T.S.



4 FENCE PANEL
N.T.S.



5 DRIVING ROD
N.T.S.



* ADJUST TO SUIT FIELD CONDITIONS

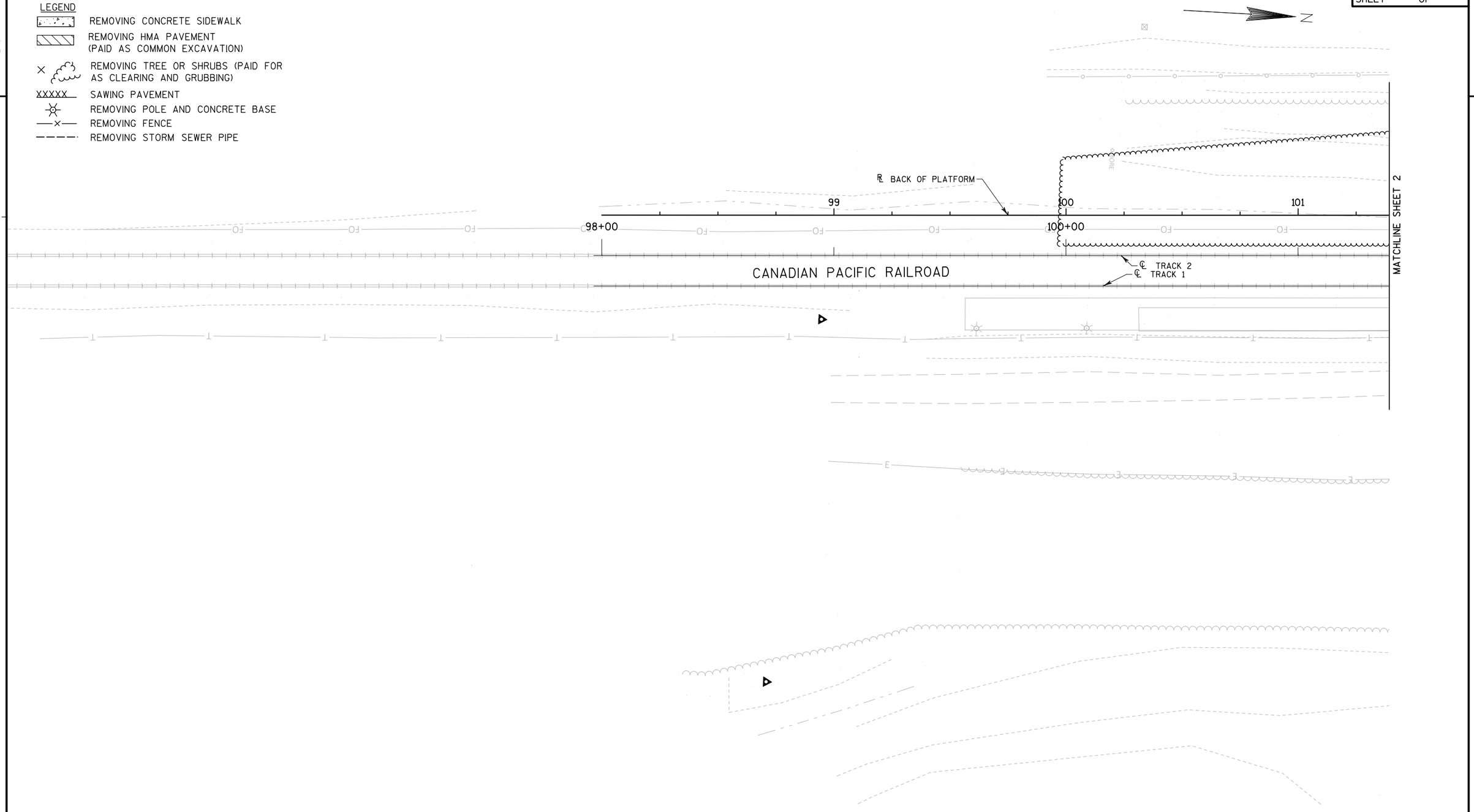
6 TRACK CROSS SECTION
N.T.S.

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	REMOVABLE TYPE INTERTRACK FENCE DETAILS	SHEET	E

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING STORM SEWER PIPE



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PROJECT NO:1000-57-05	HWY:N/A	COUNTY:MILWAUKEE	REMOVALS	SHEET	E

2

2

MATCHLINE SHEET 1

MATCHLINE SHEET 3

102 103 ℞ BACK OF PLATFORM 104 105 106

102+00 104+00 106+00

CANADIAN PACIFIC RAILROAD

℄ TRACK 2
℄ TRACK 1

EXISTING WHEEL CHAIR LIFT STORAGE, RELOCATE TO AVOID STORM SEWER

REMOVE BOULDERS, TYP
FIELD VERIFY LOCATIONS

AMTRAK STATION

MOVING SIGN

31 32 33

℞ ACCESS ROAD

ACCESS ROAD

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING STORM SEWER PIPE

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\021101.dgn PLOT DATE : 8/11/2021 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42

2

2

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)

REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)

XXXXX SAWING PAVEMENT

REMOVING POLE AND CONCRETE BASE

REMOVING FENCE

REMOVING STORM SEWER PIPE

N

MATCHLINE SHEET 2

107

108

108+00

109

110

℄ BACK OF PLATFORM

℄ TRACK 2

℄ TRACK 1

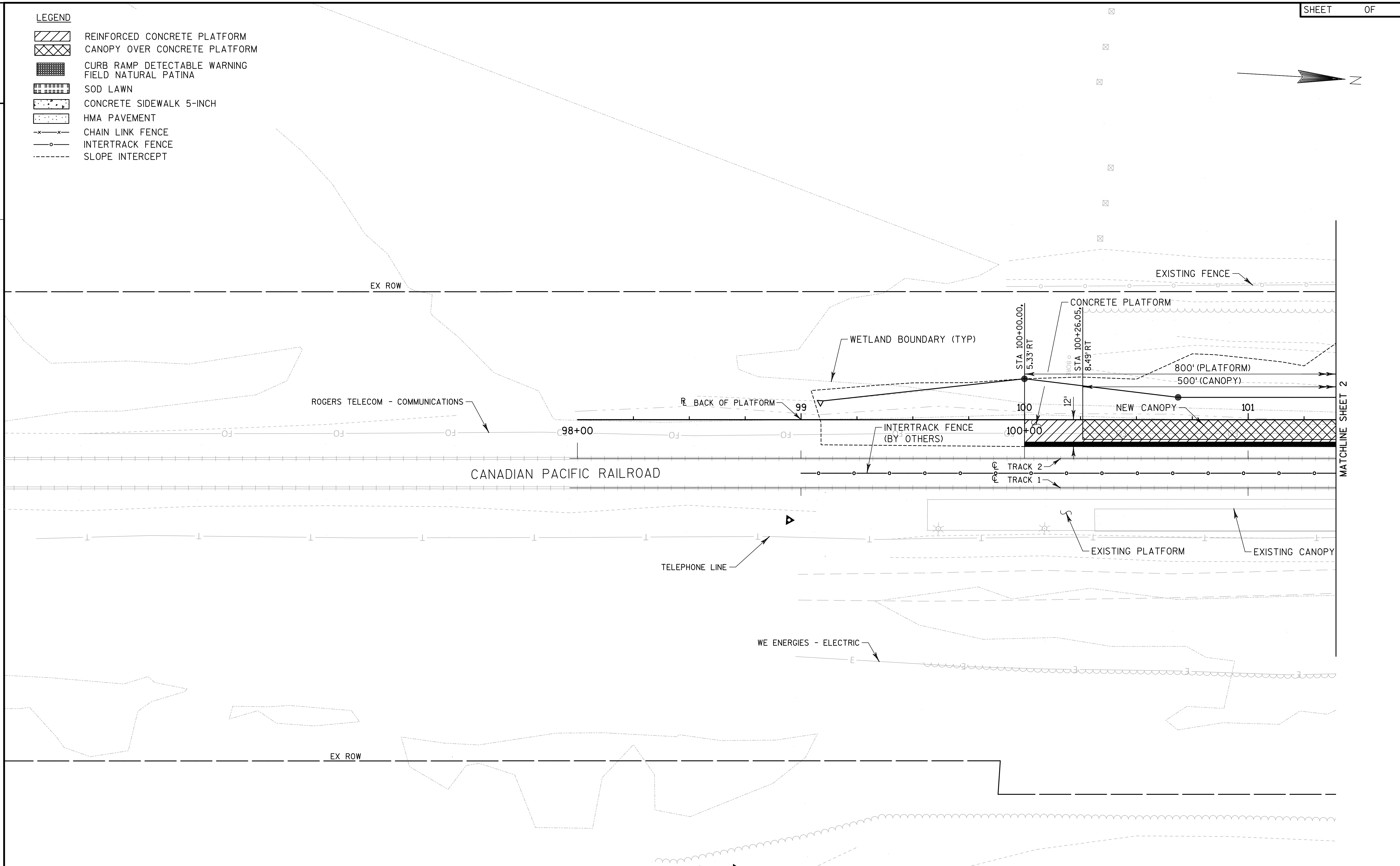
CANADIAN PACIFIC RAILROAD

34

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\02_102.dgn PLOT DATE: 8/11/2021 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42



LEGEND
REINFORCED CONCRETE PLATFORM
CANOPY OVER CONCRETE PLATFORM
CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
SOD LAWN
CONCRETE SIDEWALK 5-INCH
HMA PAVEMENT
CHAIN LINK FENCE
INTERTRACK FENCE
SLOPE INTERCEPT
EX ROW
EXISTING FENCE
CONCRETE PLATFORM
WETLAND BOUNDARY (TYP)
STA 100+00.00, 5.33' RT
STA 100+26.05, 8.49' RT
800' (PLATFORM)
500' (CANOPY)
ROGERS TELECOM - COMMUNICATIONS
℞ BACK OF PLATFORM
99
100
12'
NEW CANOPY
101
98+00
INTERTRACK FENCE (BY OTHERS)
100+00
CANADIAN PACIFIC RAILROAD
℄ TRACK 2
℄ TRACK 1
MATCHLINE SHEET 2
EXISTING PLATFORM
EXISTING CANOPY
TELEPHONE LINE
WE ENERGIES - ELECTRIC
EX ROW

SHEET OF

2

PROJECT NO:1000-57-05	HWY:N/A	COUNTY:MILWAUKEE	PLAN DETAILS	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\021200_pd.dgn PLOT DATE : 8/11/2021 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42

2

2

ATC TRANSMISSION - OVERHEAD

GRADING REQUIRED NEAR TOWER

EX ROW

WEST TOWER

27.6'

STA 105+26.05
8.44' RT

800' (PLATFORM)
500' (CANOPY)

MATCHLINE SHEET 1

12'

102

ROGERS TELECOM
-COMMUNICATIONS

103

25.2'

104

℄ BACK OF PLATFORM

105

106

102+00

104+00

106+00

MATCHLINE SHEET 3

N3°16'20"W

℄ TRACK 2

℄ TRACK 1

PEDESTRIAN BRIDGE

N3°16'20"W

N3°16'20"W

N3°16'20"W

CANADIAN PACIFIC RAILROAD

INTERTRACK FENCE
(BY OTHERS)

EXISTING PLATFORM

TRANSFORMER AND
GENERATOR AREAS

EXISTING CANOPY

EAST TOWER

RELOCATED WHEEL
CHAIR LIFT STORAGE

BASE AGGREGATE DENSE 1 1/4-INCH
REGRADE DRIVEWAY TO MATCH EXISTING
AFTER STORM SEWER WORK

EXISTING AMTRAK
STATION BUILDING

WE ENERGIES - ELECTRIC

℄ SIDEWALK

AMTRAK
STATION

10' (TYP)

5

10'

WETLAND BOUNDARY (TYP)

MARKING PARKING STALL PAINT (TYP)

EX ROW

20'

25'

24'

10'

WE ENERGIES - ELECTRIC

20 R

WE ENERGIES - ELECTRIC

31

32

33

℄ PARKING

℄ ACCESS ROAD

RELOCATING SIGN

ACCESS ROAD

30

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan_021201.dgn

Plotted: 6/16/2021

PLOT BY : carly.buschman

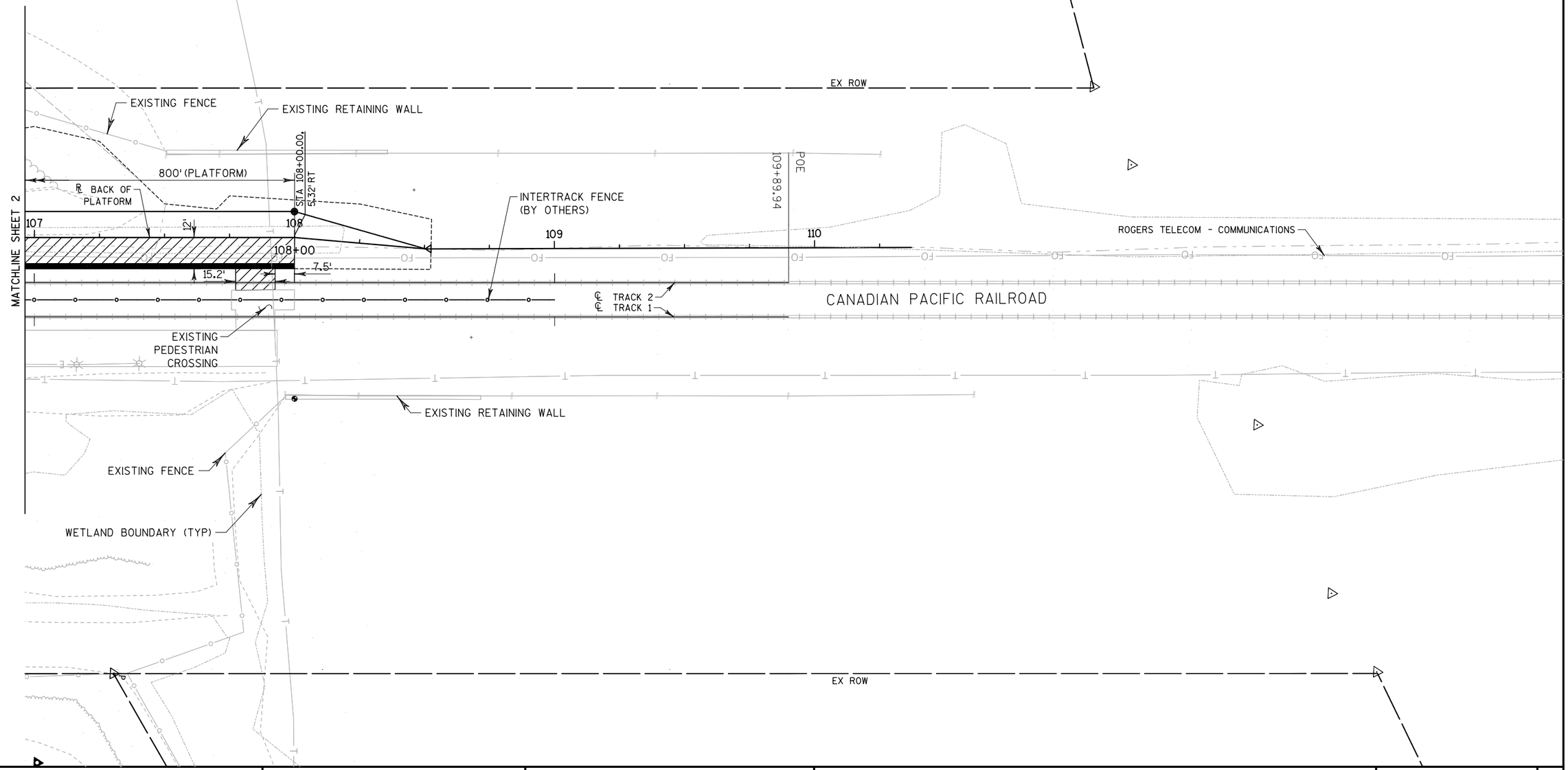
PLOT NAME :

PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

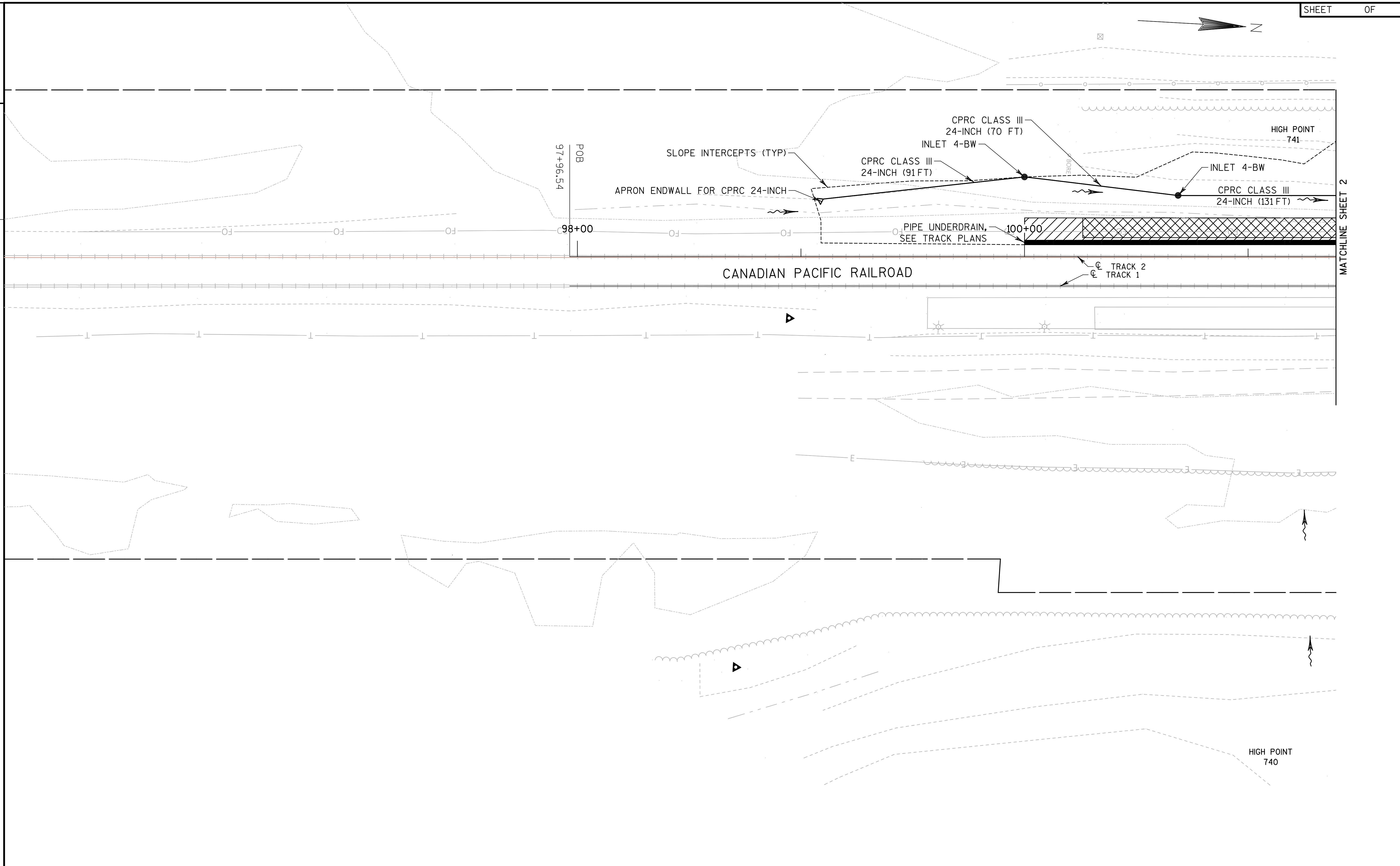
- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT



PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan_021202.dgn Modified: 8/11/2021 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42



PROJECT NO:1000-57-05	HWY:N/A	COUNTY:MILWAUKEE	DRAINAGE	SHEET	E

SHEET OF

2

2

N

EXISTING PIPE

SLOPE INTERCEPTS (TYP)

CPRC CLASS III 24-INCH (100 FT)

INLET 4-BW

INLET 4-BW

INLET 4-BW

INLET 4-BW

CPRC CLASS III 24-INCH (131 FT)

CPRC CLASS III 24-INCH (150 FT)

CPRC CLASS III 24-INCH (150 FT)

CPRC CLASS III 24-INCH (200 FT)

102

103

℄ BACK OF PLATFORM

105

106

102+00

104+00

106+00

MATCHLINE SHEET 1

MATCHLINE SHEET 3

PIPE UNDERDRAIN, SEE TRACK PLANS

CANADIAN PACIFIC RAILROAD

N3°16'20"W

℄ TRACK 2

℄ TRACK 1

N3°16'20"W

N3°16'20"W

N3°16'20"W

INLET 4-BW

INLET 4-BW

CPRC CLASS III 24-INCH (22 FT)

INLET 4-BW

CPRC CLASS III 24-INCH (35 FT)

CPRC CLASS III 24-INCH (30 FT)

APRON ENDWALL FOR CPRC 24-INCH

EXISTING PIPE

INLET 4-BW

EXISTING DITCH

EXISTING PIPE 24" RCP

EXISTING DETENTION POND

AMTRAK STATION

31

32

33

30

℄ ACCESS ROAD

ACCESS ROAD

EXISTING PIPE

EXISTING INLET

EXISTING PIPE 12" RCP

EXISTING INLET

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlanProfiles.dgn

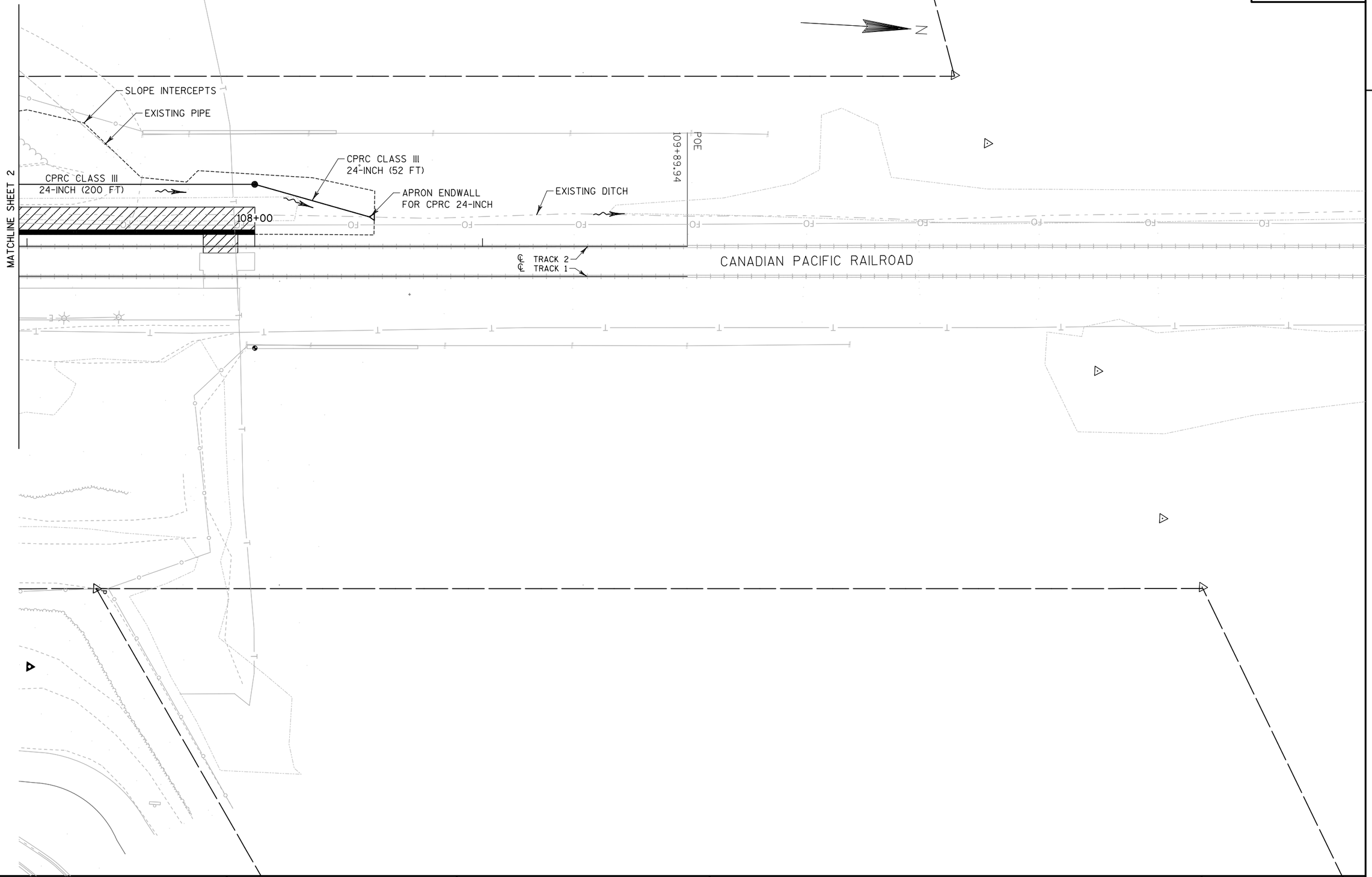
PLOT DATE : 8/16/2021

PLOT BY : carly.buschman

PLOT NAME :

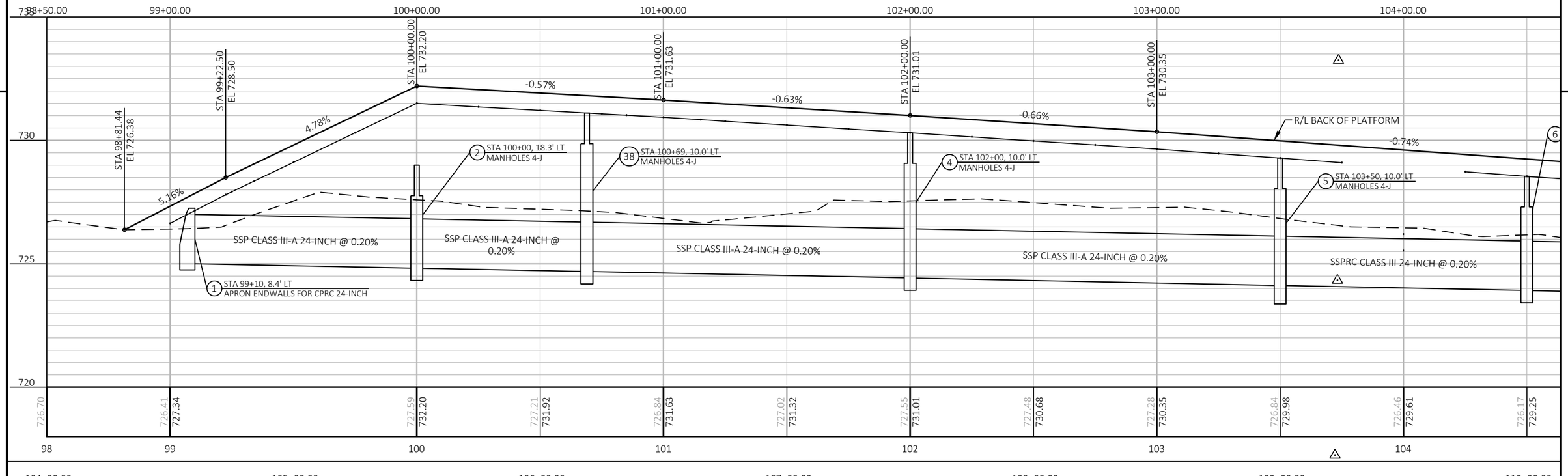
PLOT SCALE : 40.0000 sf / in.

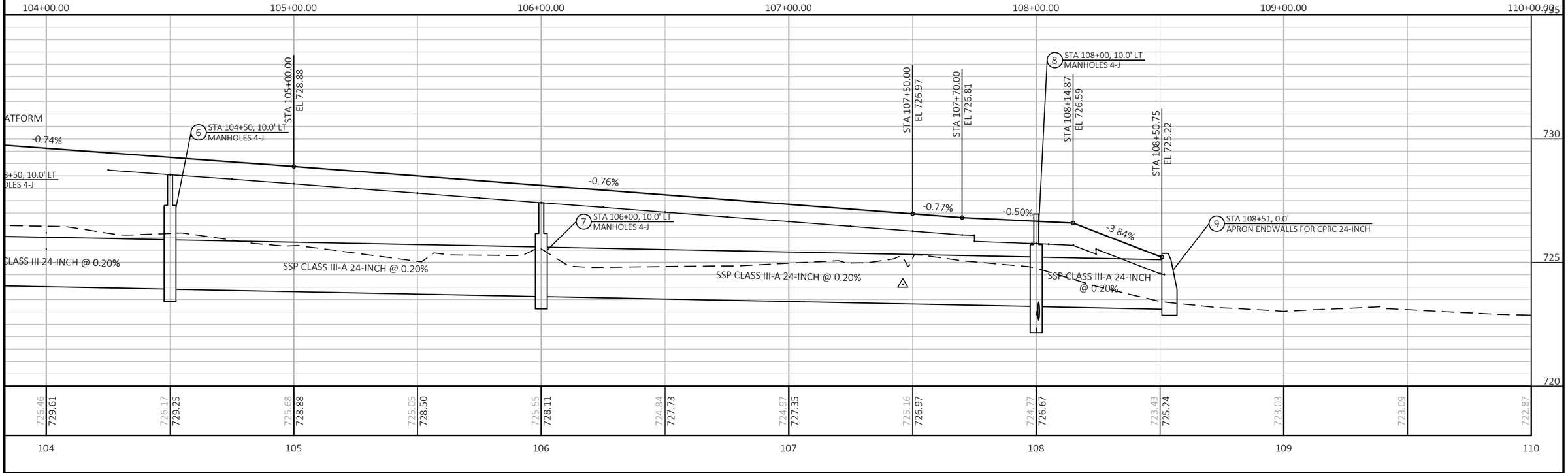
WISDOT/CADDS SHEET 42



PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE	SHEET	E

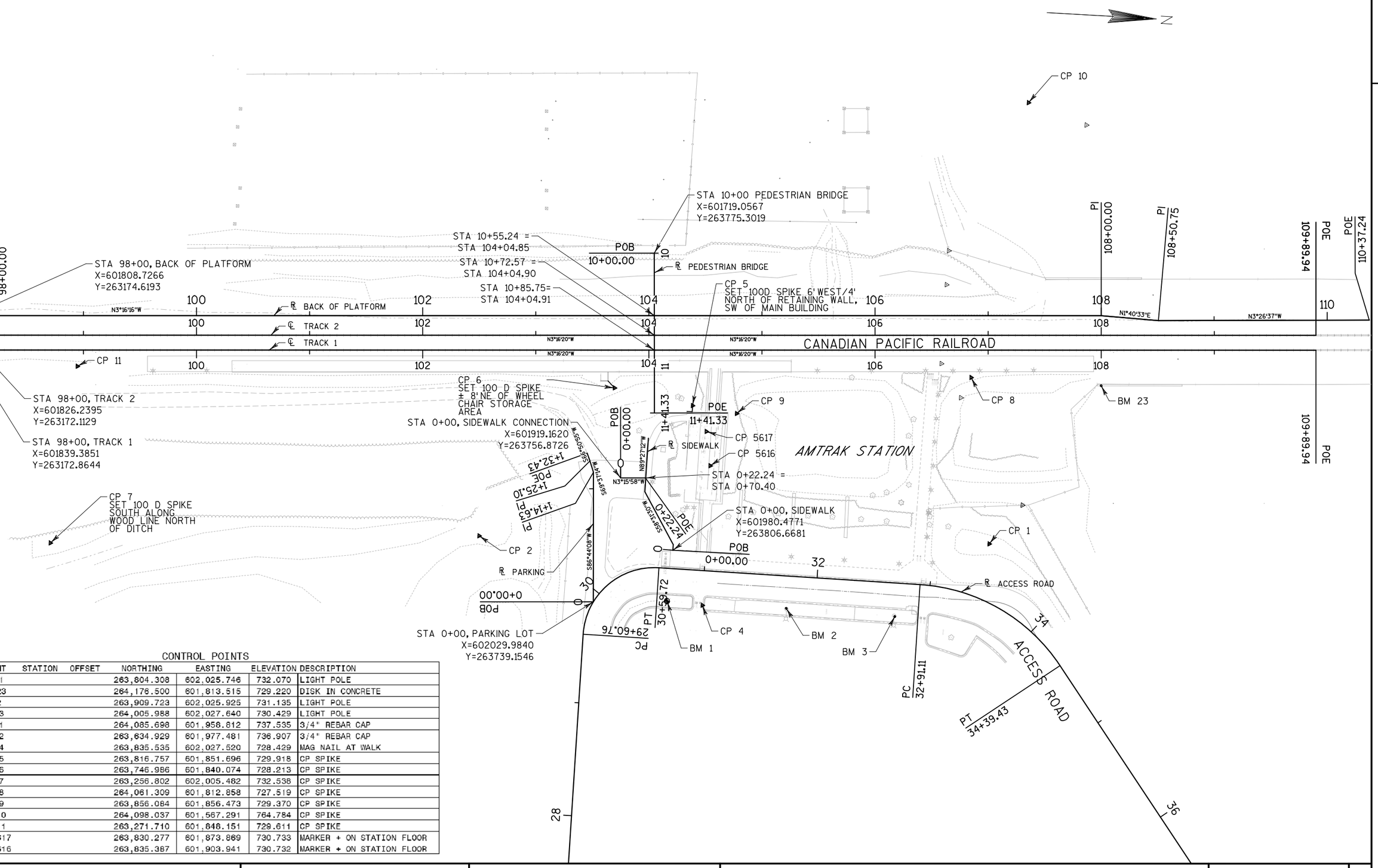
FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan_022502.dgn 6/11/2021 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.
WISDOT/CADDS SHEET 42





PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PROFILES	SHEET	E

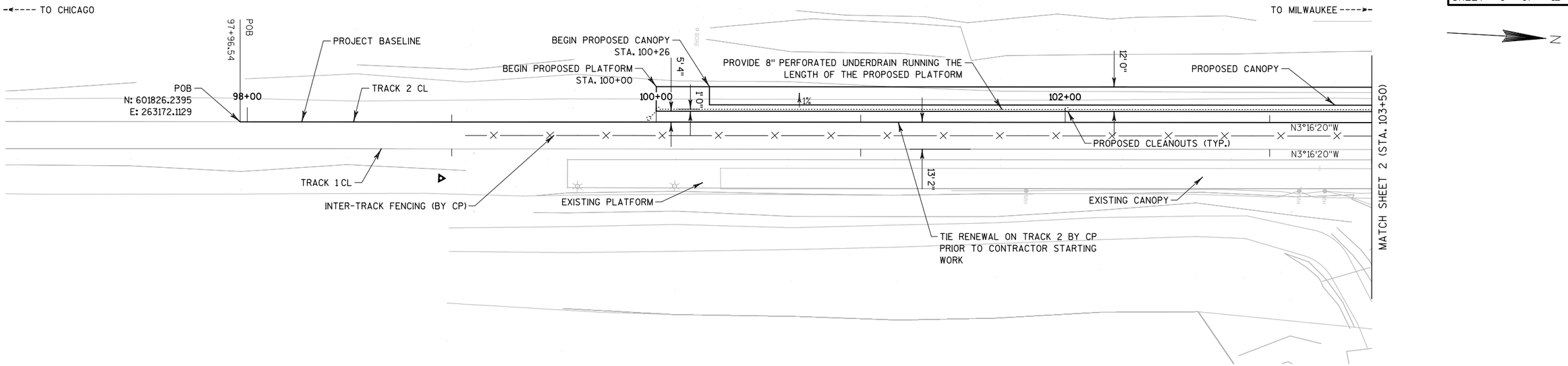
FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19137\CORRIDOR_MARS.DWG
LAYOUT NAME - SS 1 IN 40 FT
PLOT DATE : 8/11/2021 11:58 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM 1			263,804.308	602,025.746	732.070	LIGHT POLE
BM 23			264,176.500	601,813.515	729.220	DISK IN CONCRETE
BM 2			263,909.723	602,025.925	731.135	LIGHT POLE
BM 3			264,005.988	602,027.640	730.429	LIGHT POLE
CP 1			264,085.698	601,958.812	737.535	3/4" REBAR CAP
CP 2			263,634.929	601,977.481	736.907	3/4" REBAR CAP
CP 4			263,835.535	602,027.520	728.429	MAG NAIL AT WALK
CP 5			263,816.757	601,851.696	729.918	CP SPIKE
CP 6			263,746.986	601,840.074	728.213	CP SPIKE
CP 7			263,256.802	602,005.482	732.538	CP SPIKE
CP 8			264,061.309	601,812.858	727.519	CP SPIKE
CP 9			263,856.084	601,856.473	729.370	CP SPIKE
CP 10			264,098.037	601,567.291	764.784	CP SPIKE
CP 11			263,271.710	601,848.151	728.611	CP SPIKE
CP 5617			263,830.277	601,873.869	730.733	MARKER + ON STATION FLOOR
CP 5616			263,835.387	601,903.941	730.732	MARKER + ON STATION FLOOR

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	ALIGNMENTS AND CONTROL POINTS	SHEET	E

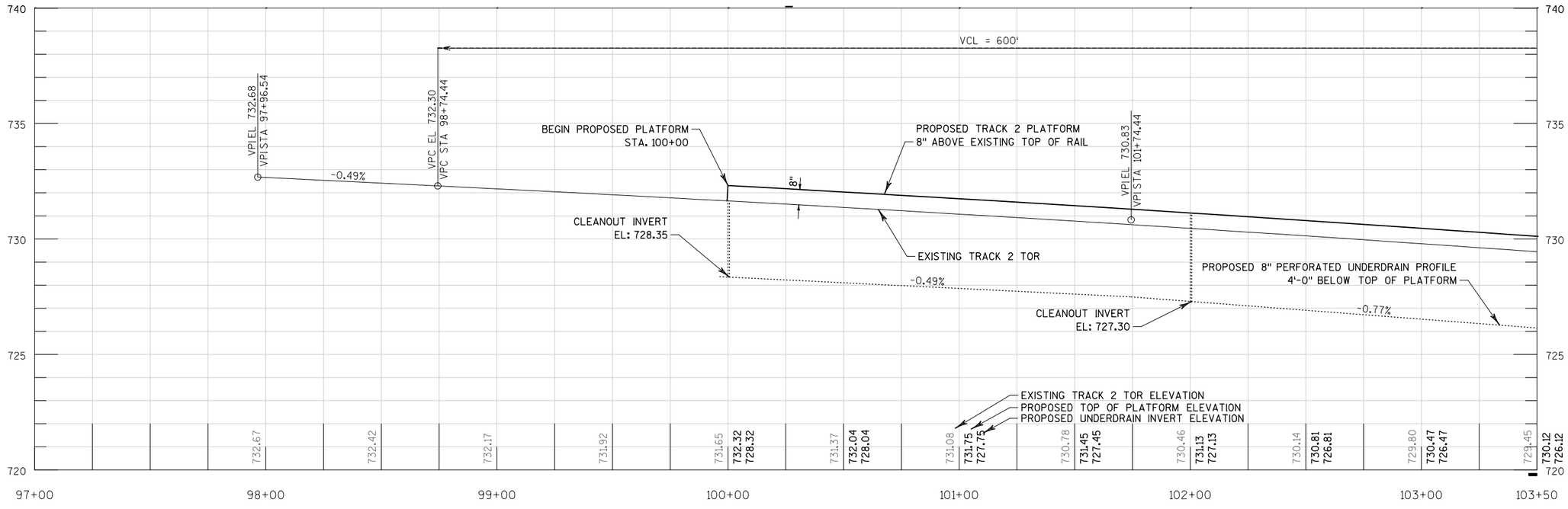


PLAN

SCALE: 1":50'

NOTE:

1. CONTRACTOR TO VERIFY TOP OF RAIL ELEVATIONS PRIOR TO START OF PLATFORM CONSTRUCTION AND PROVIDE TO WISDOT. TOP OF PLATFORM TO BE 8" ABOVE TOP OF RAIL.



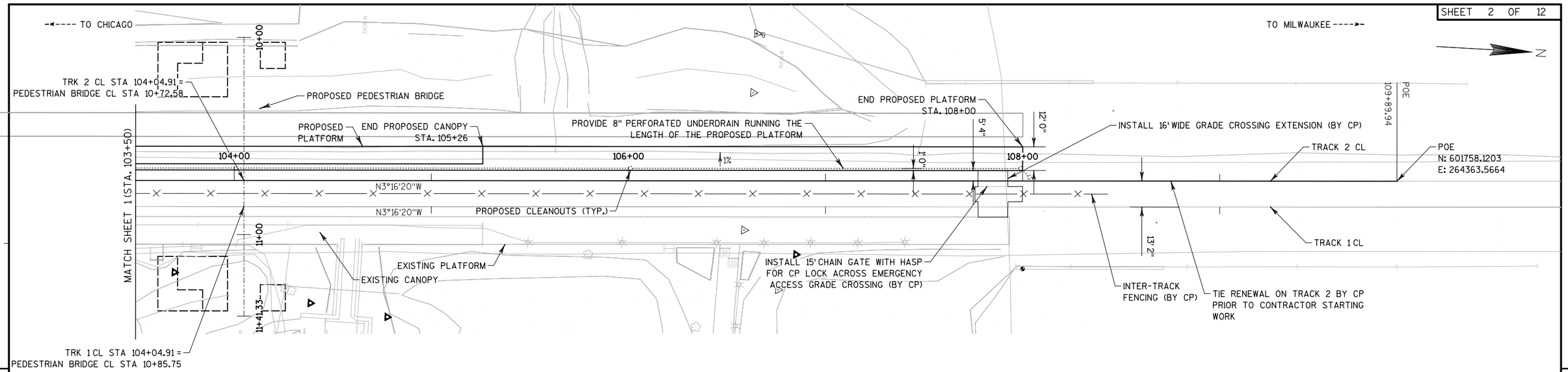
PROFILE LEGEND

EXISTING TOP OF RAIL
PROPOSED TOP OF PLATFORM
PROPOSED UNDERDRAIN INVERT

TRACK 2 PROFILE

SCALE: 1":50'

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 2)	SHEET	E

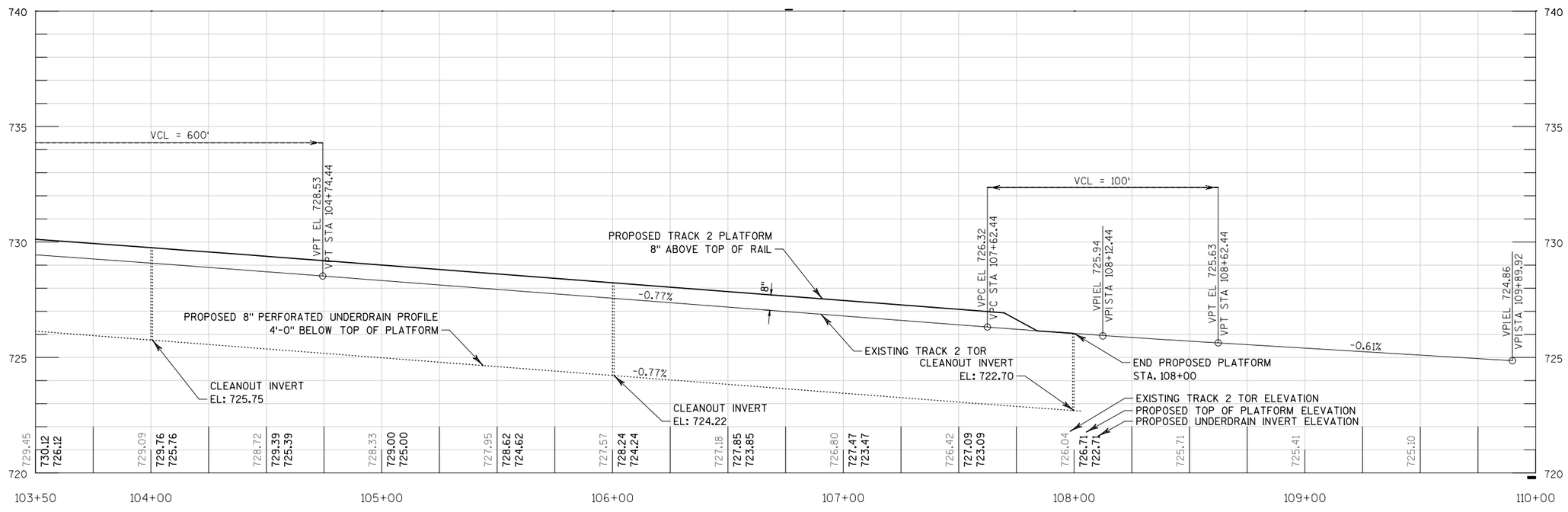


PLAN

SCALE: 1":50'

NOTE:

1. CONTRACTOR TO VERIFY TOP OF RAIL ELEVATIONS PRIOR TO START OF PLATFORM CONSTRUCTION AND PROVIDE TO WISDOT. TOP OF PLATFORM TO BE 8" ABOVE TOP OF RAIL.



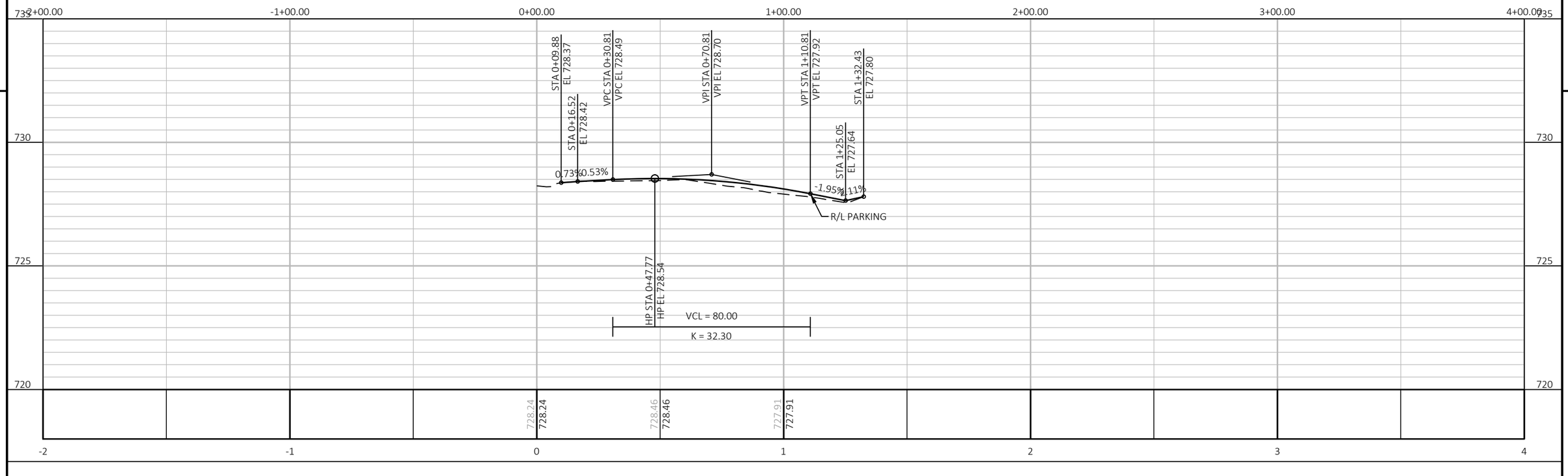
PROFILE LEGEND

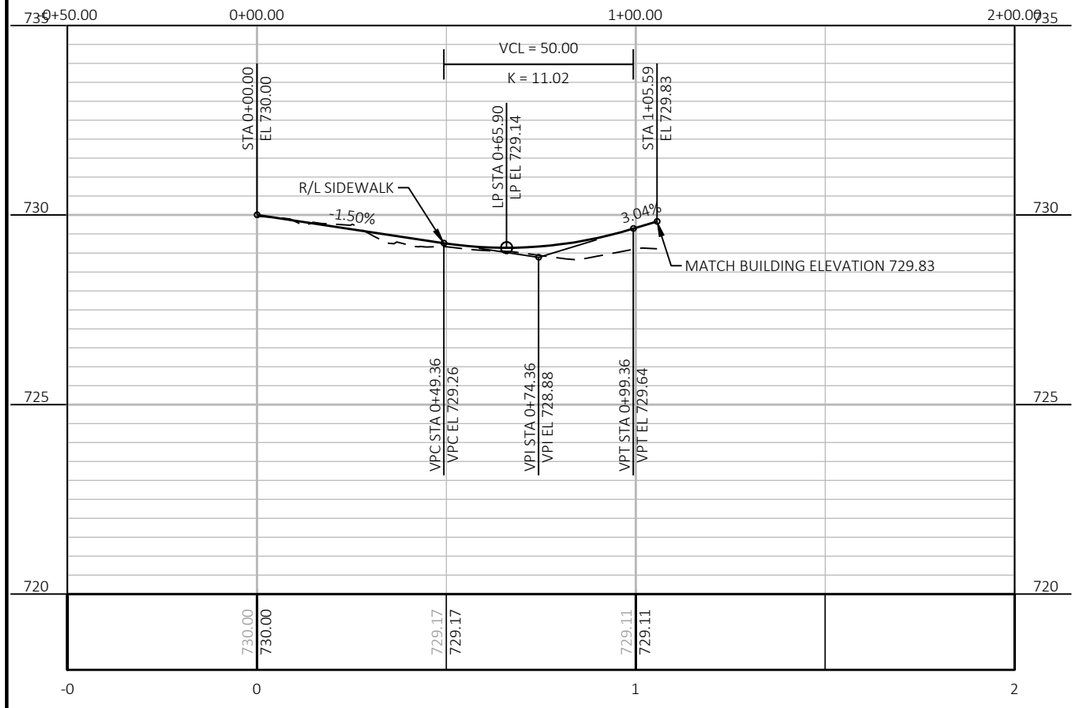
EXISTING TOP OF RAIL
PROPOSED TOP OF PLATFORM
PROPOSED UNDERDRAIN INVERT

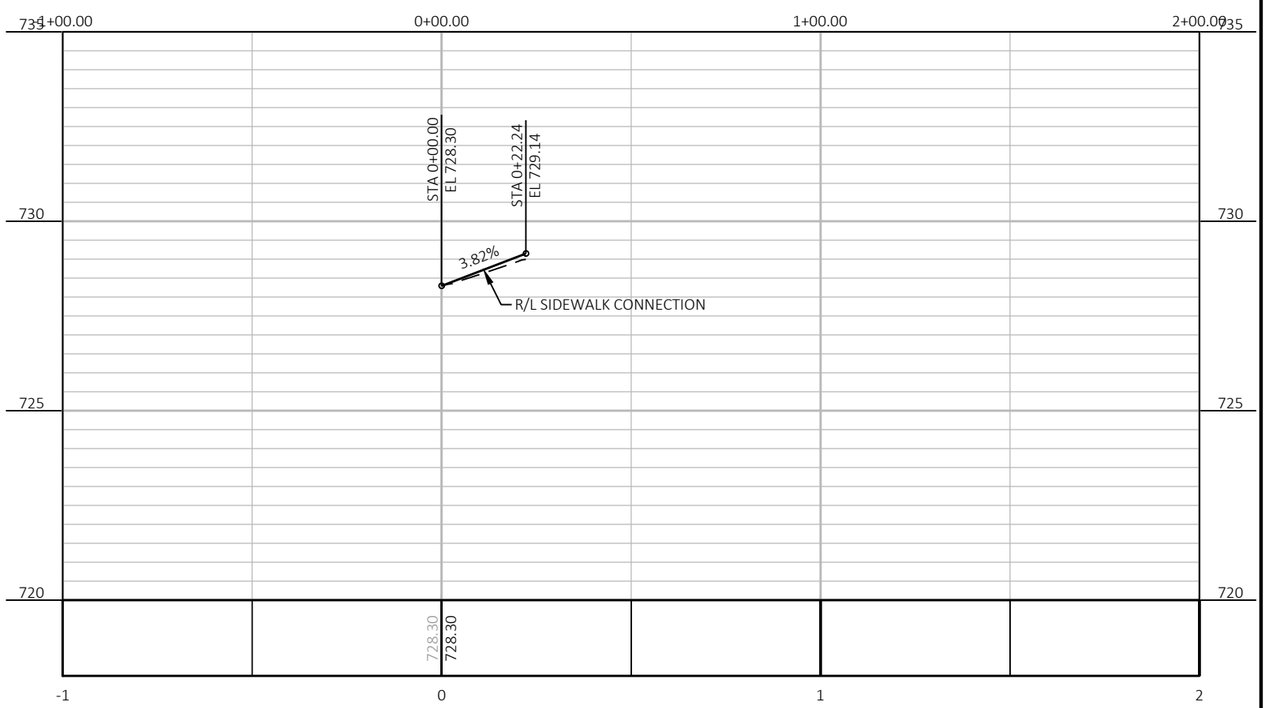
TRACK 2 PROFILE

SCALE: 1":50'

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 2)	SHEET	E





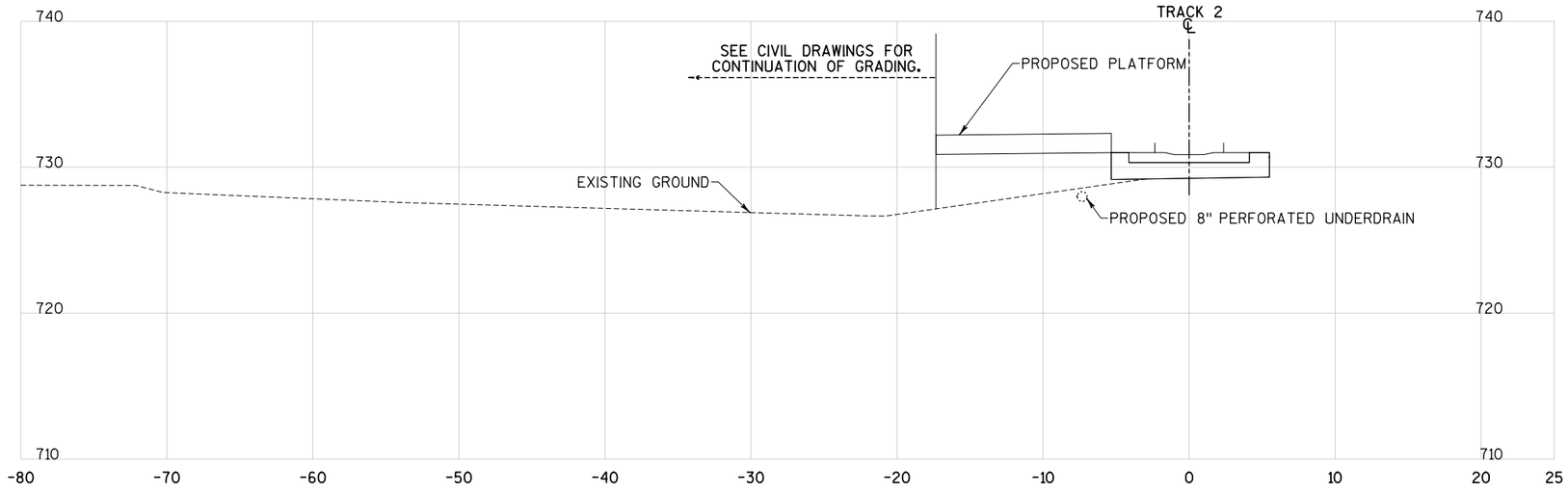


PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PROFILES	SHEET	E

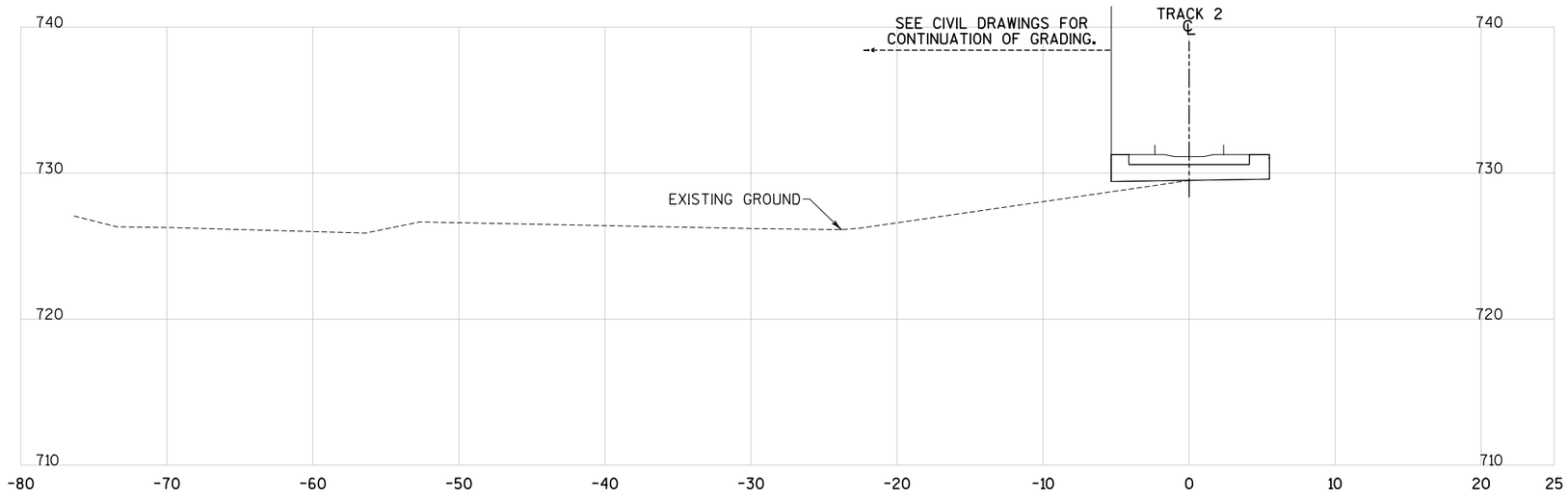
FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19137\CORRIDOR_MARS.DWG
LAYOUT NAME - SS 1 IN 40 FT (3)

PLOT DATE : 8/11/2021 11:58 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



100+00



99+50

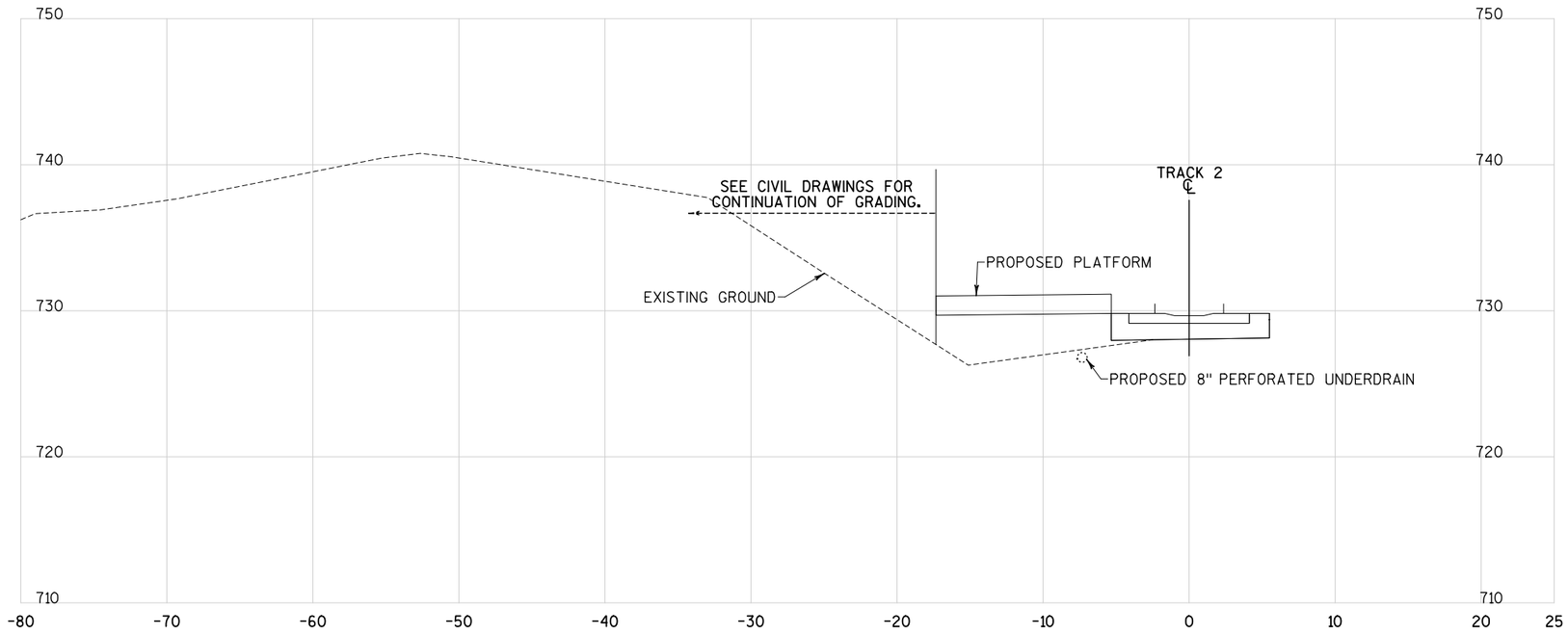
9

9

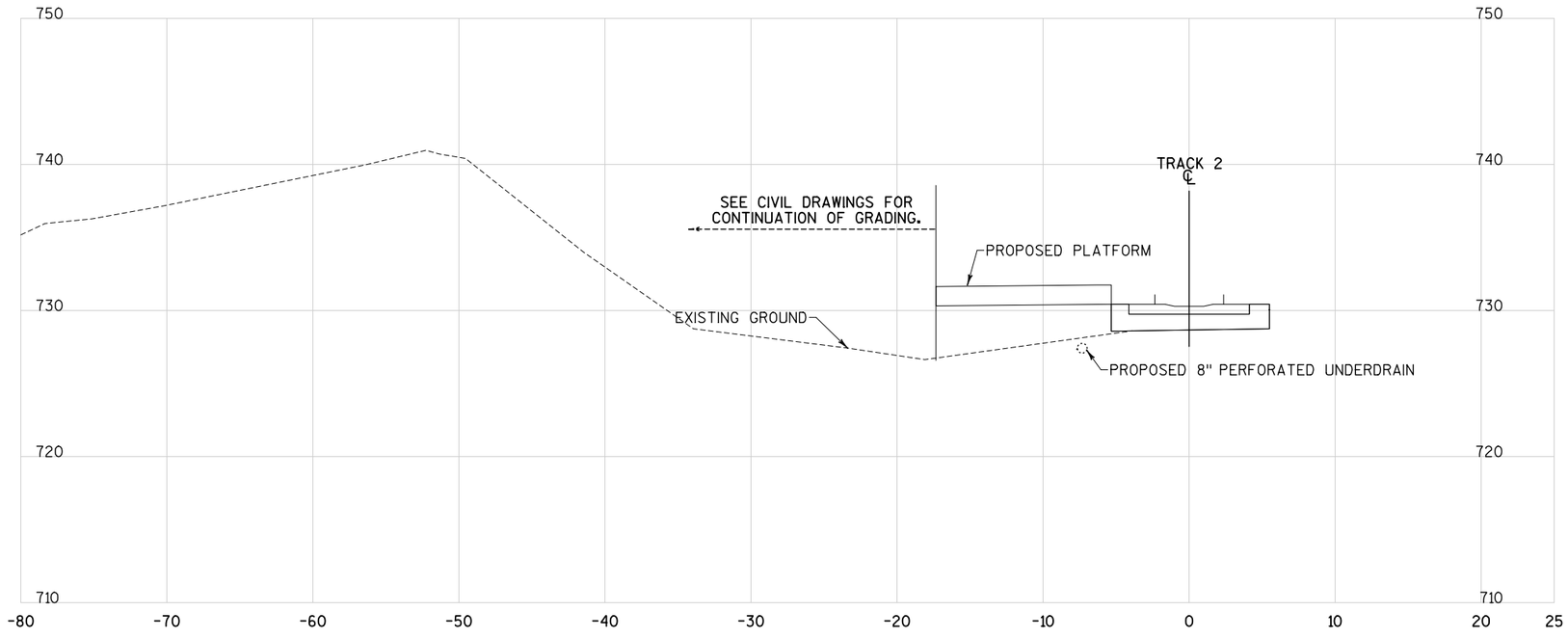
PROJECT NO:1000-57-05	HWY:N/A	COUNTY:MILWAUKEE	CROSS SECTIONS - 99+50 TO 100+00	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



102+00



101+00

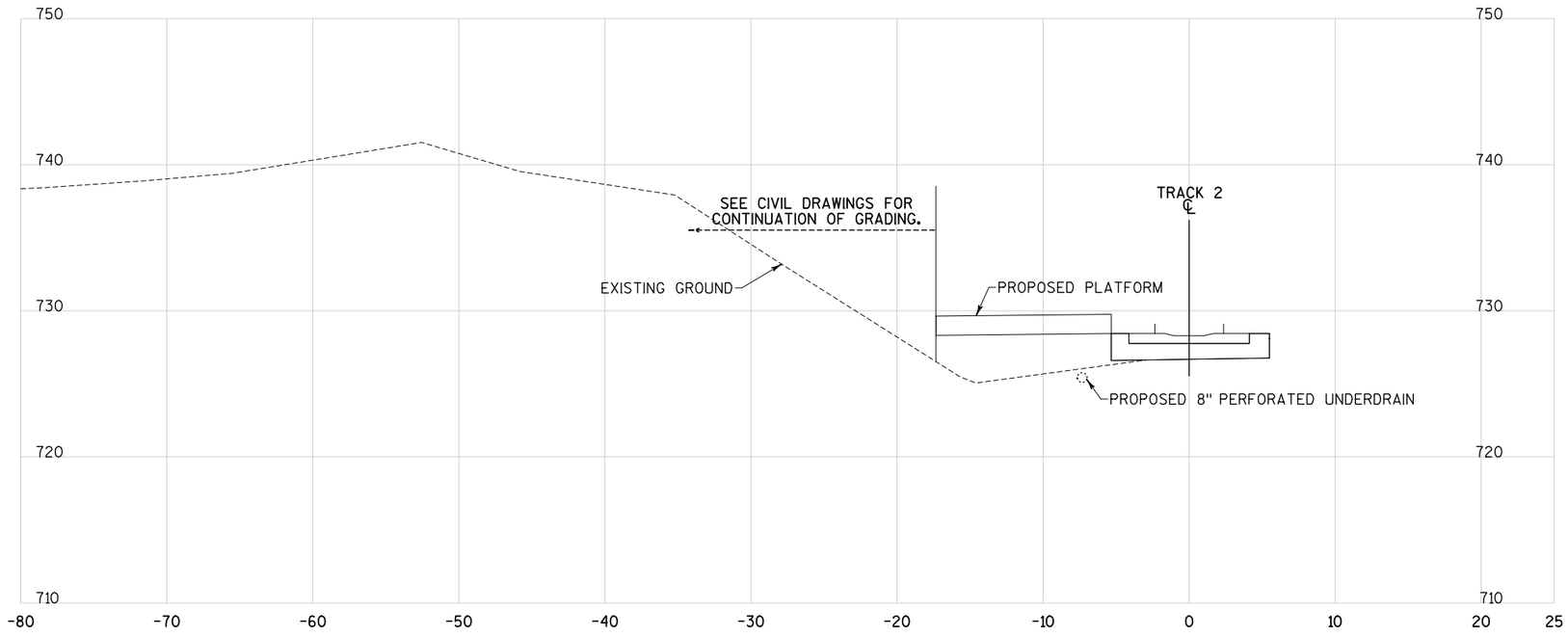
9

9

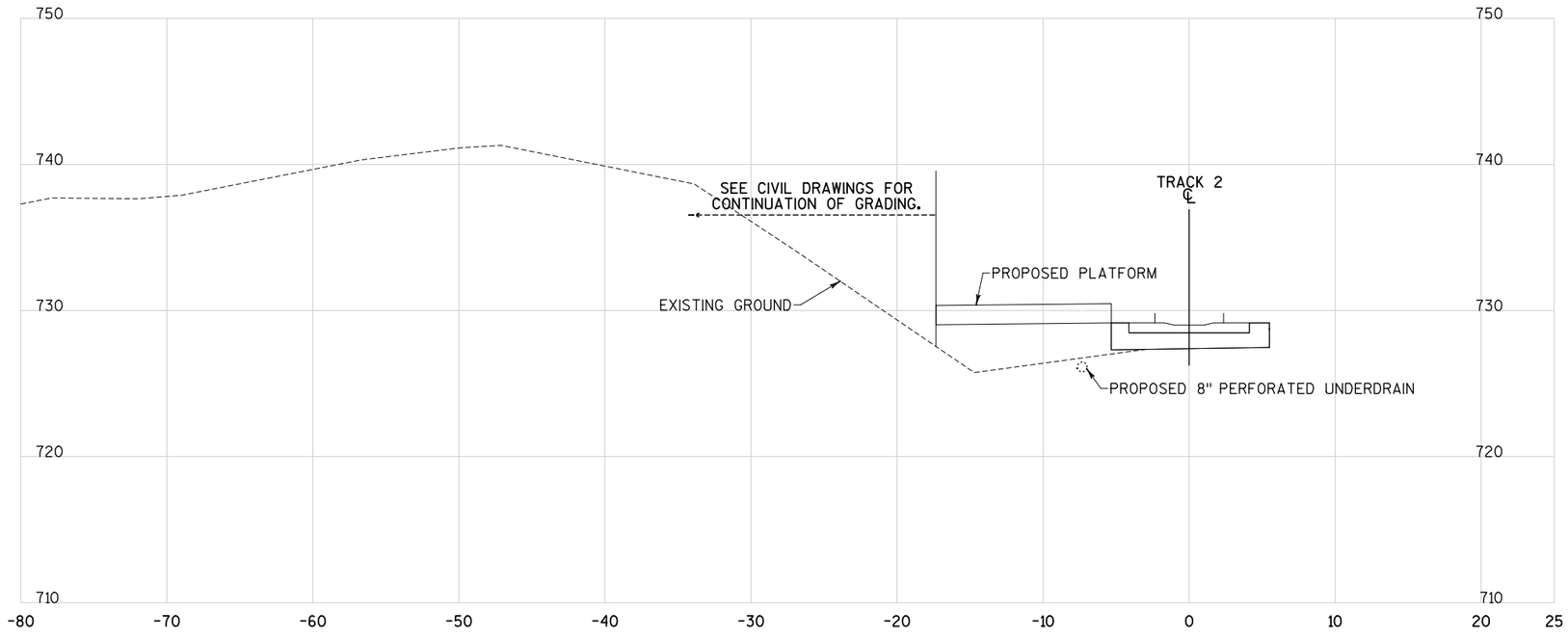
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - 101+00 TO 102+00	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



104+00



103+00

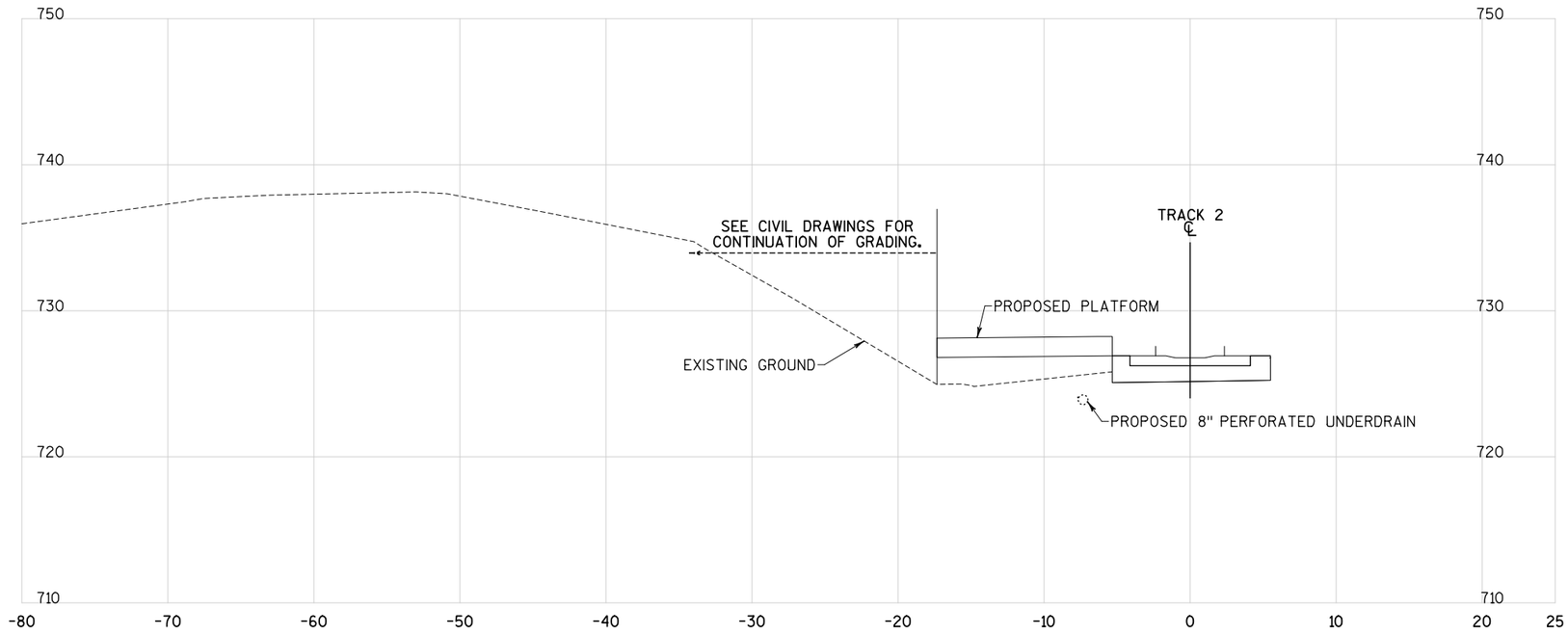
9

9

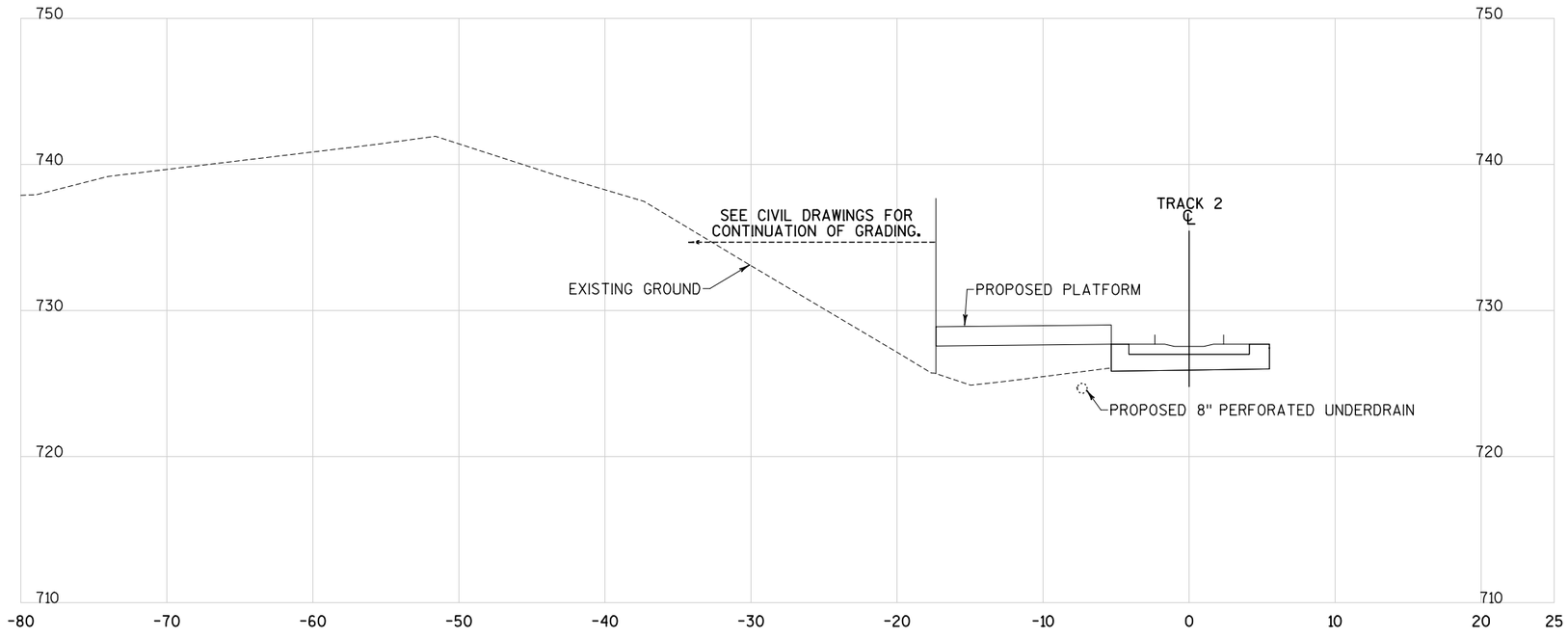
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - 103+00 TO 104+00	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



106+00



105+00

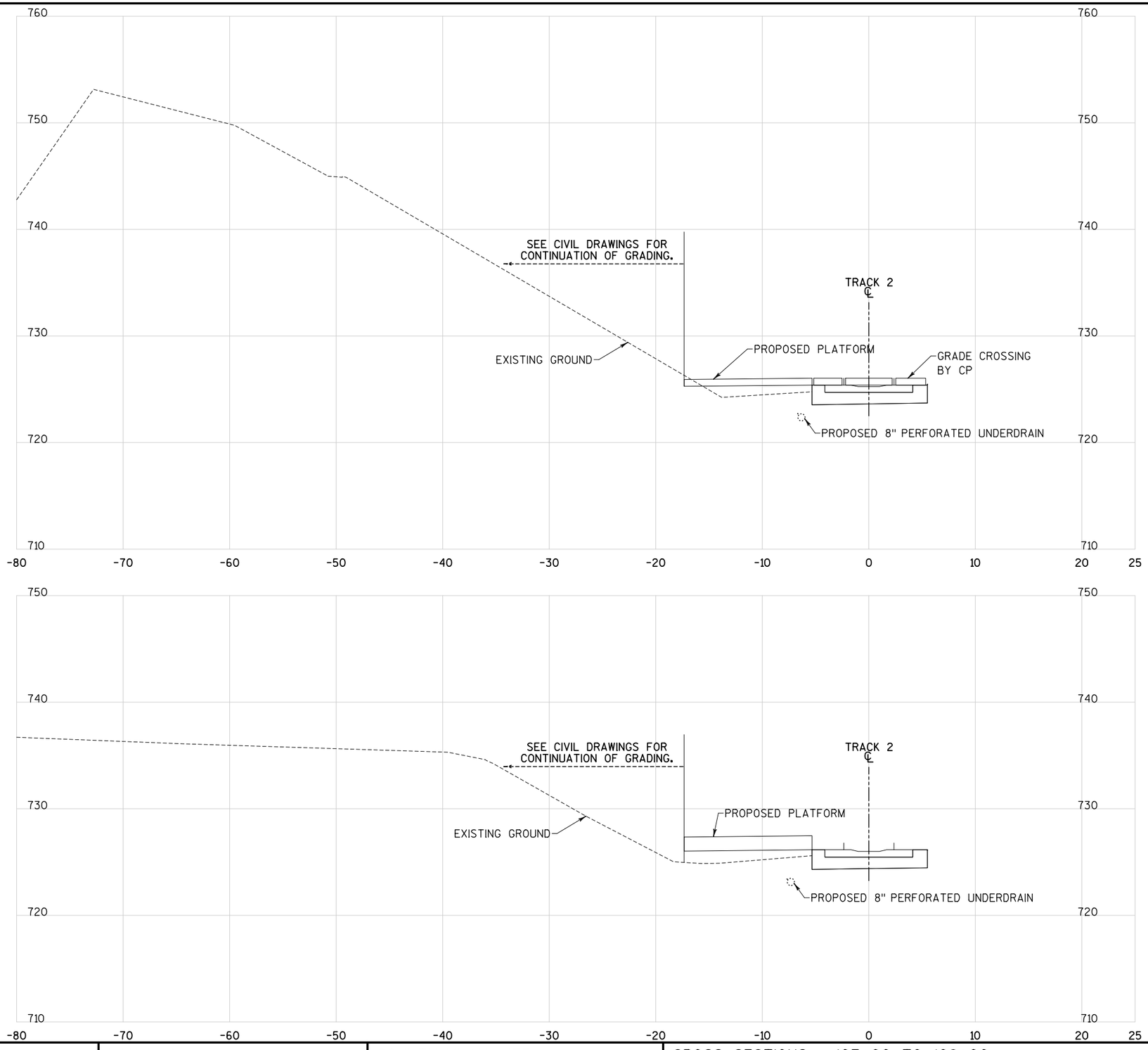
9

9

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - 105+00 TO 106+00	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



108+00 (GRADE CROSSING)

107+00

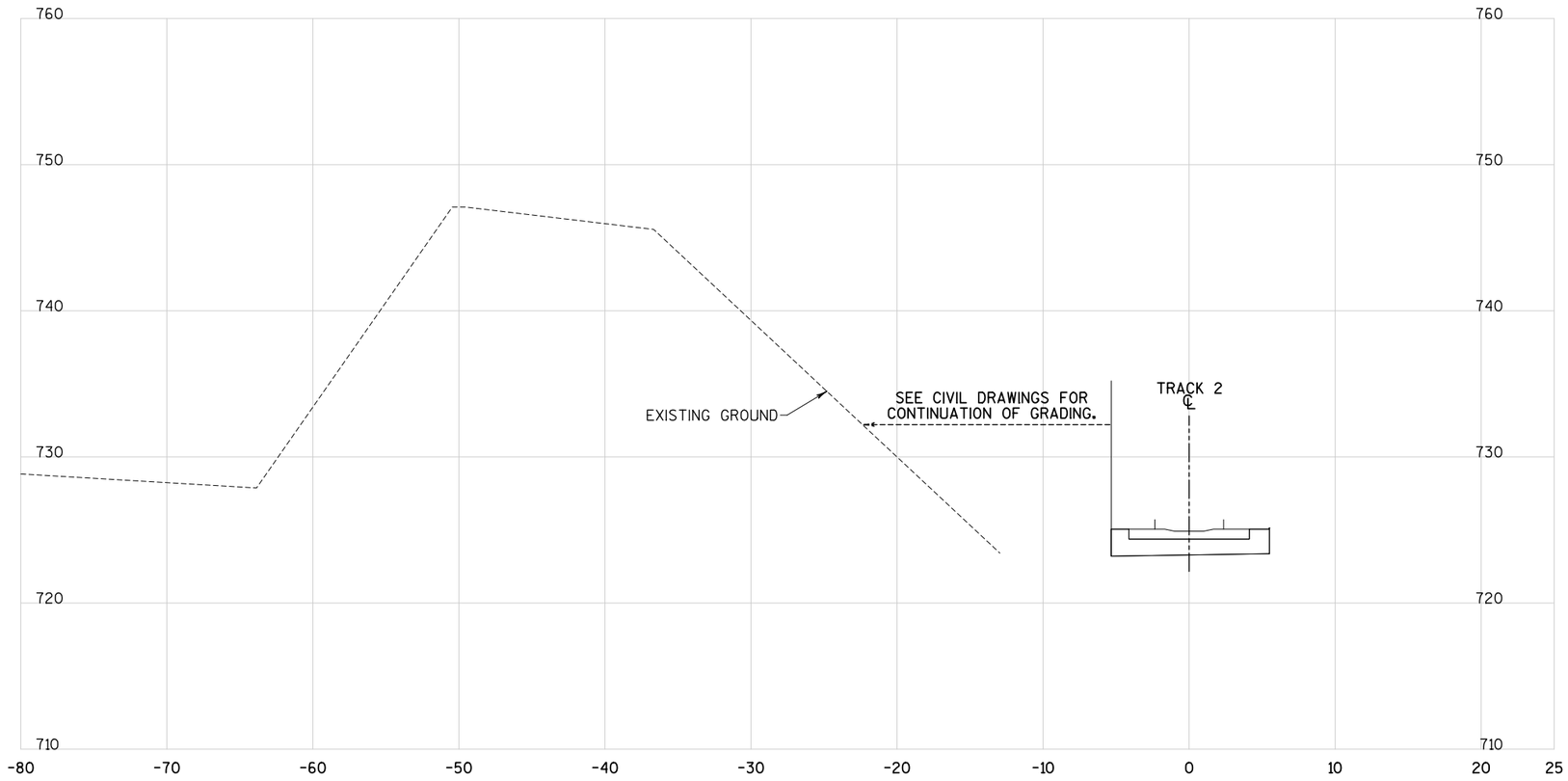
9

9

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - 107+00 TO 108+00	SHEET	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Track\Track Plan Sheet PLOT DATE : 8/13/2021 PLOT BY : gabriel.narbon PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



108+50

9

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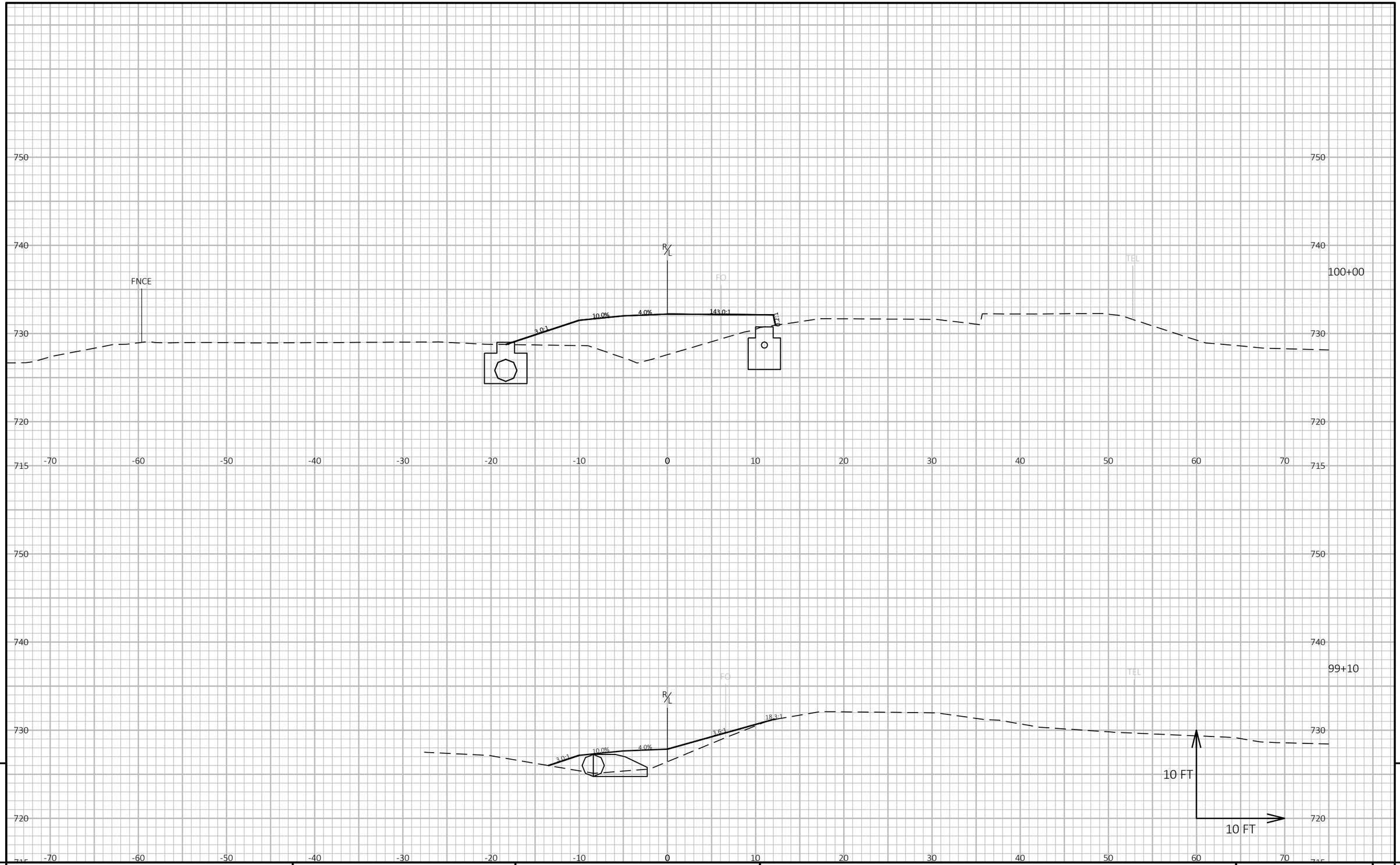
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - 108+50	SHEET	E



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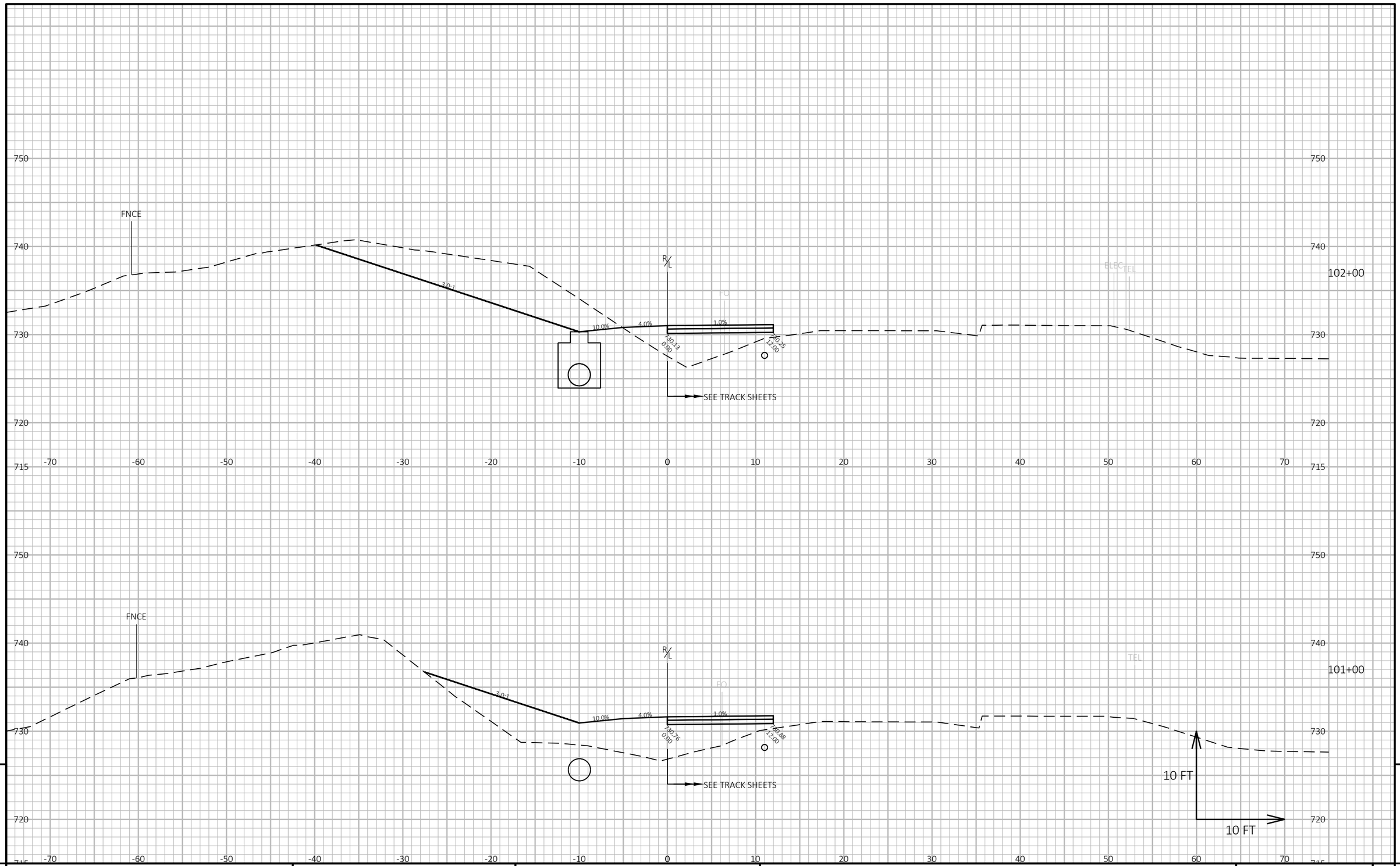
9

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 01

PLOT DATE : 8/11/2021 12:01 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 02

PLOT DATE : 8/11/2021 12:01 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

750
740
730
720
715

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

FNCE

SEE WEST TOWER SHEETS

R/L

FO

1.0%

728.74
0.00

728.86
12.00

SEE TRACK SHEETS

ELEC

TEL

104+00

FNCE

3.0:1

10.0%

4.0%

1.0%

729.47
0.00

729.59
12.00

SEE TRACK SHEETS

ELEC

TEL

10 FT

10 FT

103+00

9

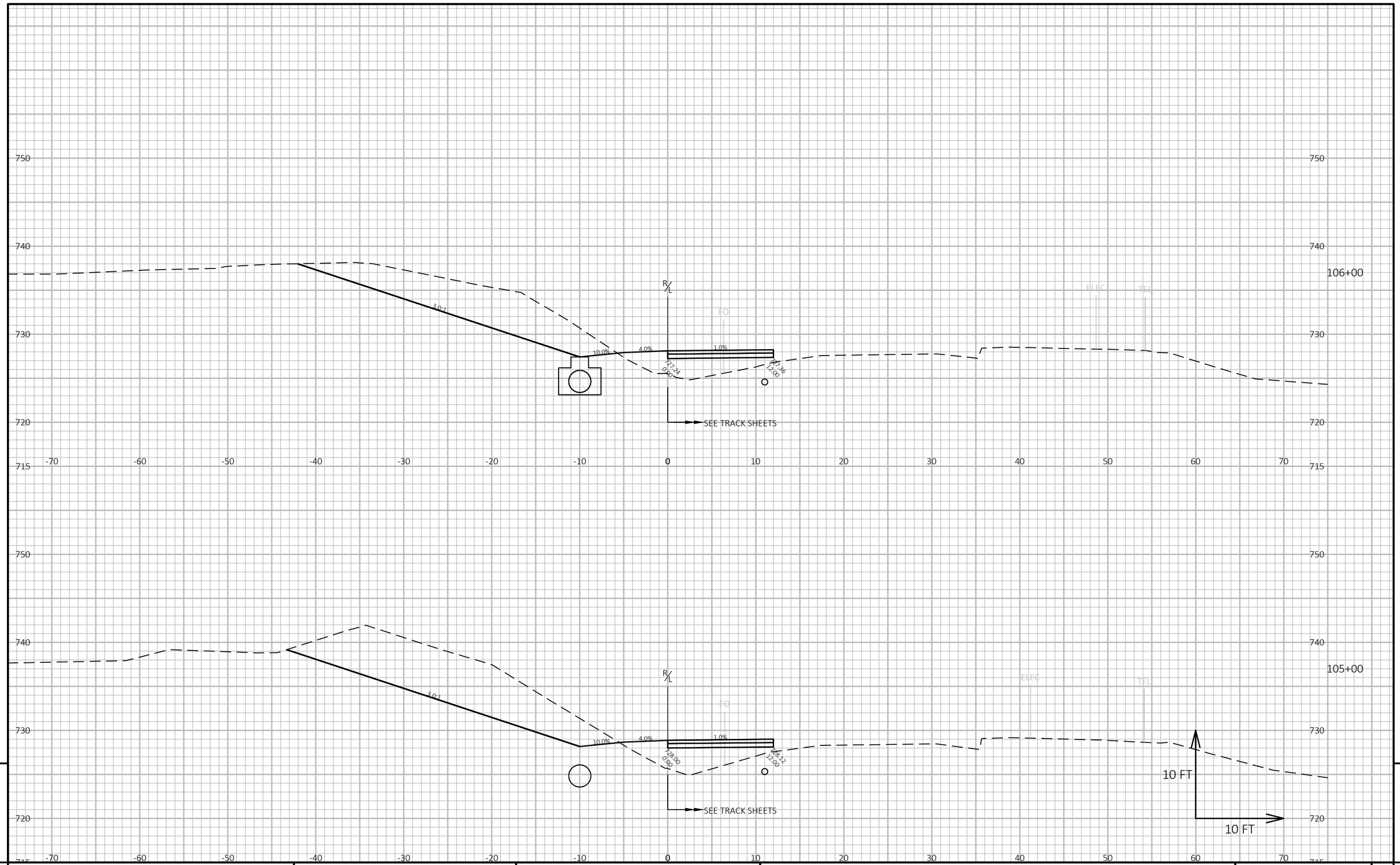
9

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/11/2021 12:01 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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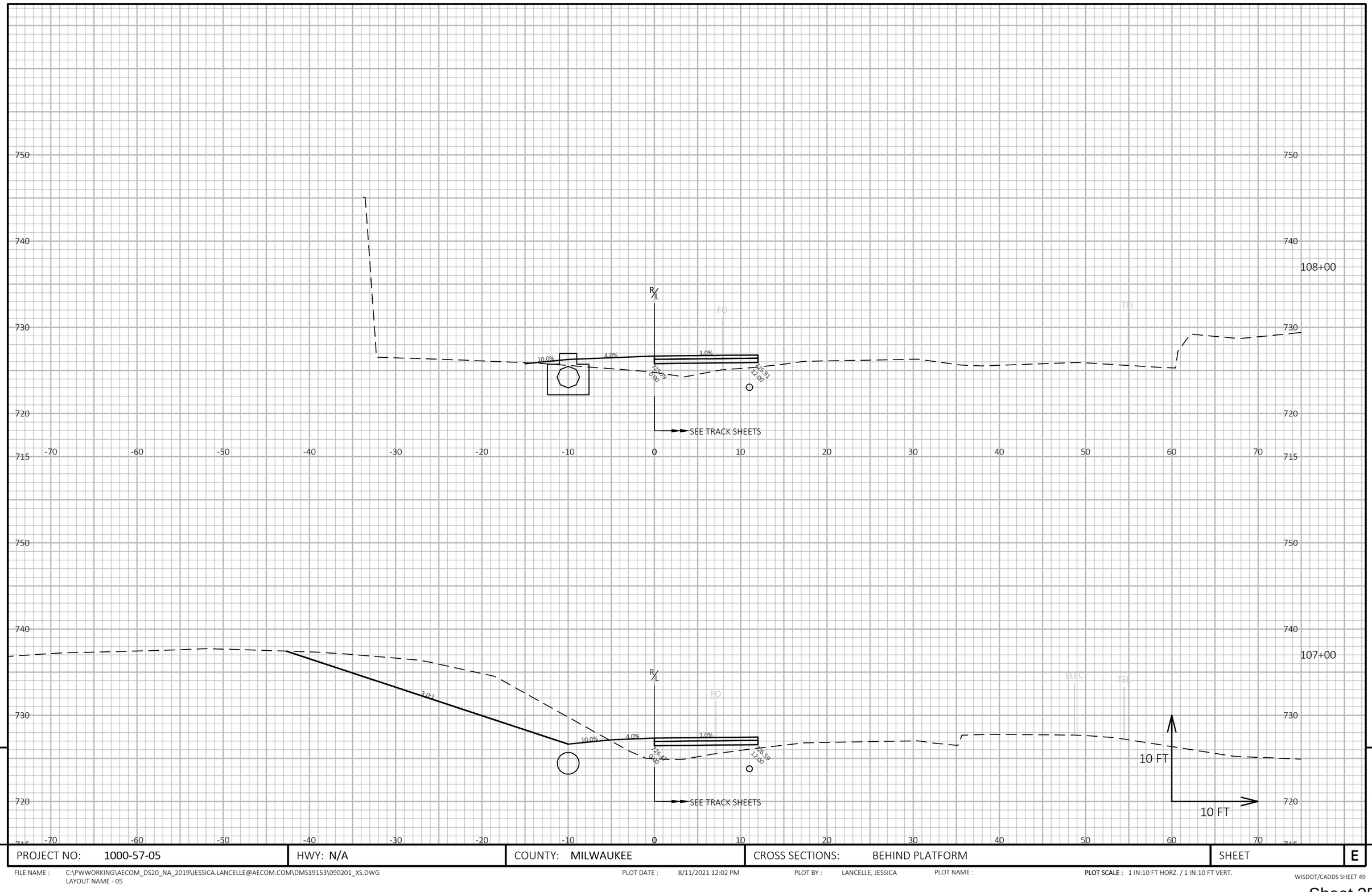
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/11/2021 12:01 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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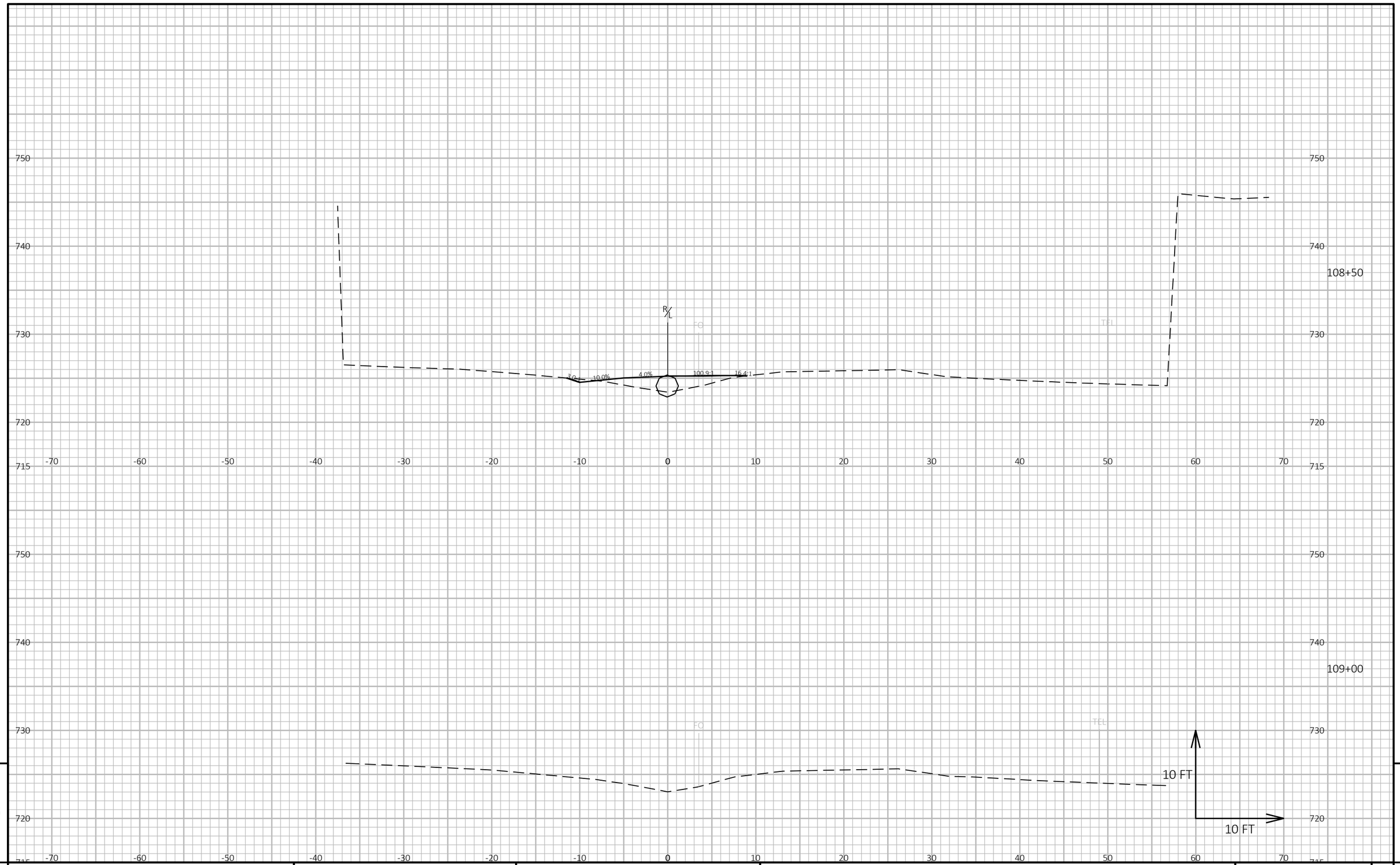
PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 05

PLOT DATE : 8/11/2021 12:02 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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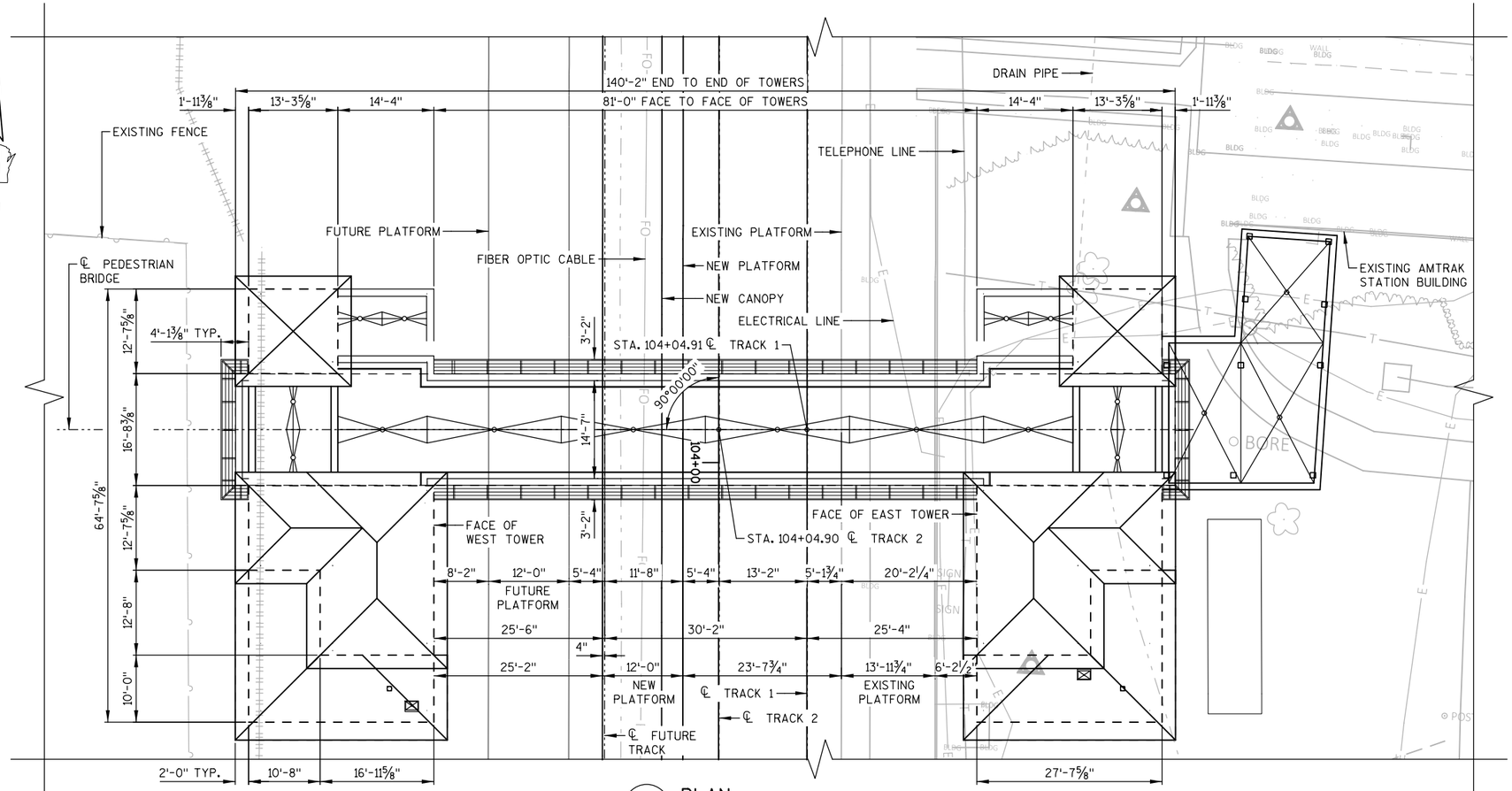
9

PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND PLATFORM	SHEET	E

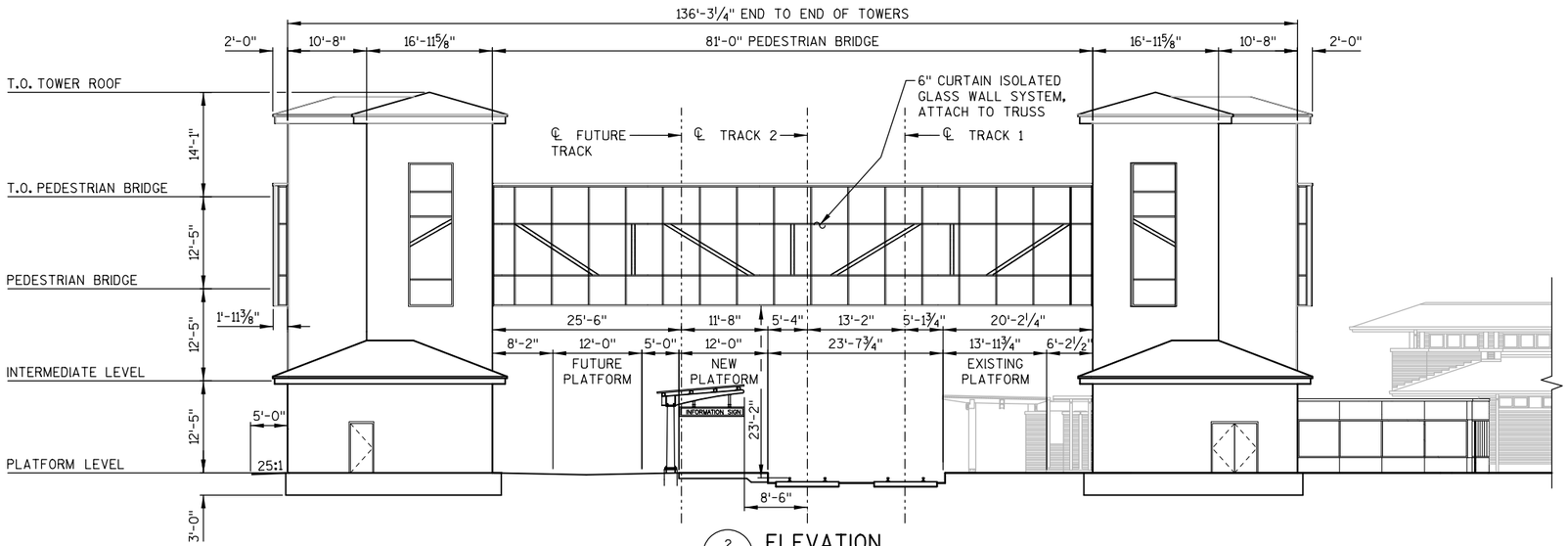
FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/11/2021 12:02 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



1 S-001 **PLAN**



2 S-001 **ELEVATION**
NORMAL TO CP RAILWAY (LOOKING NORTH)

STATE PROJECT NUMBER

1000-57-05

DESIGN DATA

LATERAL ANALYSIS DESIGN PARAMETERS:

1.	THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE7-10	
2.	RISK CATEGORY	II
3.	WIND LOAD	
a.	BASIC WIND SPEED, V (3-SEC GUST)	115 MPH
b.	ENCLOSURE CLASSIFICATION	ENCLOSED BLDG.
c.	EXPOSURE CATEGORY	C
d.	VELOCITY PRESSURE EXPOSURE COEFFICIENT, Kz	0.85 - 1.10
e.	TOPOGRAPHIC FACTOR, Kzt	1.0
f.	WIND DIRECTIONALITY FACTOR, Kd	0.85
g.	GUST EFFECT FACTOR, G	0.85
4.	SEISMIC LOAD	
	THE EQUIVALENT LATERAL FORCE ANALYSIS IS PERMITTED.	
a.	SITE CLASS	D
b.	RESPONSE MODIFICATION FACTOR, R	3.25
c.	DEFLECTION AMPLIFICATION FACTOR, Cd	3.25
d.	SYSTEM OVERSTRENGTH FACTOR, Omega	2.0
e.	DESIGN SPECTRAL ACCELERATION FOR SHORT PERIOD, Sds	0.092
f.	DESIGN SPECTRAL ACCELERATION FOR 1-SEC PERIOD, Sd1	0.074
g.	SEISMIC IMPORTANCE FACTOR, Ie	1.0
h.	SEISMIC DESIGN CATEGORY	A
i.	SEISMIC RESPONSE COEFFICIENT, Cs	0.028

SNOW LOAD DESIGN PARAMETERS:		LIVE LOADS:	
GROUND SNOW LOAD, Pg	30 PSF	PEDESTRIAN	100 PSF
IMPORTANCE FACTOR, Is	1.0	PARTITION	15 PSF
EXPOSURE FACTOR, Ce	1.0	ROOF	19.8 PSF
THERMAL FACTOR, Ct	1.0		
SLOPE FACTOR, Cs	1.0		
FLAT ROOF SNOW LOAD, Pf	21 PSF		

MATERIAL PROPERTIES:

CONCRETE MASONRY	
FLOOR SLABS	f'c = 4,000 PSI
ALL OTHER	f'c = 3,500 PSI
BAR STEEL REINFORCEMENT, HIGH STRENGTH, GRADE 60	fy = 60,000 PSI
STRUCTURAL STEEL	
W SHAPES: ASTM A992, GR 50	fy = 50,000 PSI
L SHAPES: ASTM A572, GR 50	fy = 50,000 PSI
HSS: ASTM A500, GRADE B	fy = 42,000 PSI
ASTM A500, GRADE C	fy = 50,000 PSI
STAY-IN-PLACE FORM PAN ASTM A653	fy = 50,000 PSI
WELDED WIRE REINFORCEMENT ASTM 1064	fy = 65,000 PSI

STRUCTURES DESIGN CONTACTS

CONSULTANT:
MICHAEL DELEMONT (414) 207-4157

NO.	DATE	REVISION	BY

AECOM
1555 North Rivercenter Drive, Suite 214
Milwaukee, WI 53212
(414) 944-6080

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER — DATE

PEDESTRIAN BRIDGE

OVER CP RAILWAY AT MKE AIRPORT RAIL STA.

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC. AASHTO LRFD DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D	DRAWN BY	CEB	PLANS CK'D

GENERAL PLAN AND ELEVATION

SHEET S-001

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

ALL STATIONS ARE IN SURVEY FEET.

COORDINATES SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MILWAUKEE COUNTY, NAD 83 (2011), IN U.S. SURVEY FEET.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

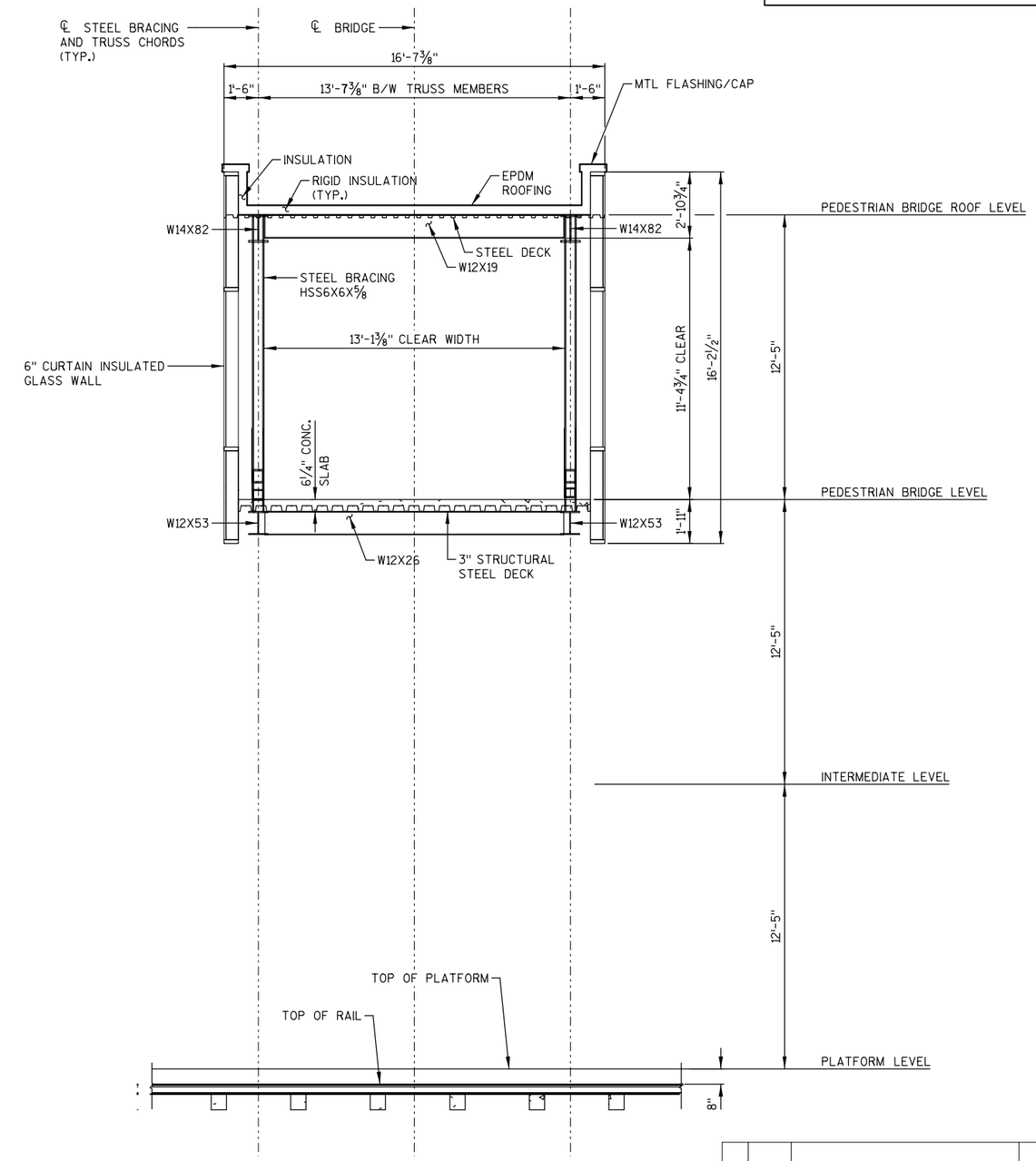
USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER DRAWINGS.

CONCRETE NOTES

FOUNDATION NOTES

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE)	LS	-
209.1100	BACKFILL GRANULAR GRADE 1	CY	-
210.1100	BACKFILL STRUCTURE TYPE A	CY	-
502.0100	CONCRETE MASONRY BRIDGES	CY	-
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	-
511.1100	TEMPORARY SHORING	SF	-
513.2001	RAILING PIPE	LF	-
SPV.0105.03	PAINTING EPOXY SYSTEM PEDESTRIAN BRIDGE	LS	-
SPV.0105.04	DRILLED CAISSONS	LF	-
SPV.0105.05	HELICAL PILE 3.5-INCH	LF	-
SPV.0105.06	STANDING SEAM ROOF	SF	-
SPV.0105.07	GLASS CURTAINWALL	SF	-
SPV.0105.08	SITE FURNISHINGS	EACH	-
SPV.0105.09	SIGNAGE	EACH	-
SPV.0105.10	INSULATION	SF	-
SPV.0105.11	RIGID INSULATION	SF	-
SPV.0105.12	EPDM ROOFING	CY	-
SPV.0105.13	HVAC WORK	LS	-
SPV.0105.14	ELECTRICAL WORK	LS	-
SPV.0105.15	PLUMBING WORK	LS	-
SPV.0105.16	MASONRY WORK	LS	-
SPV.0105.17	EMERGENCY DIESEL GENERATOR	EACH	-
SPV.0105.18	COLUMN ANCHOR ROD ASSEMBLIES	EACH	-
SPV.0105.19	STRUCTURAL STEEL	LB	-
SPV.0105.20	PLATFORM CANOPY	LB	-



1 S-002 TYPICAL BRIDGE SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

GENERAL NOTES AND QUANTITIES

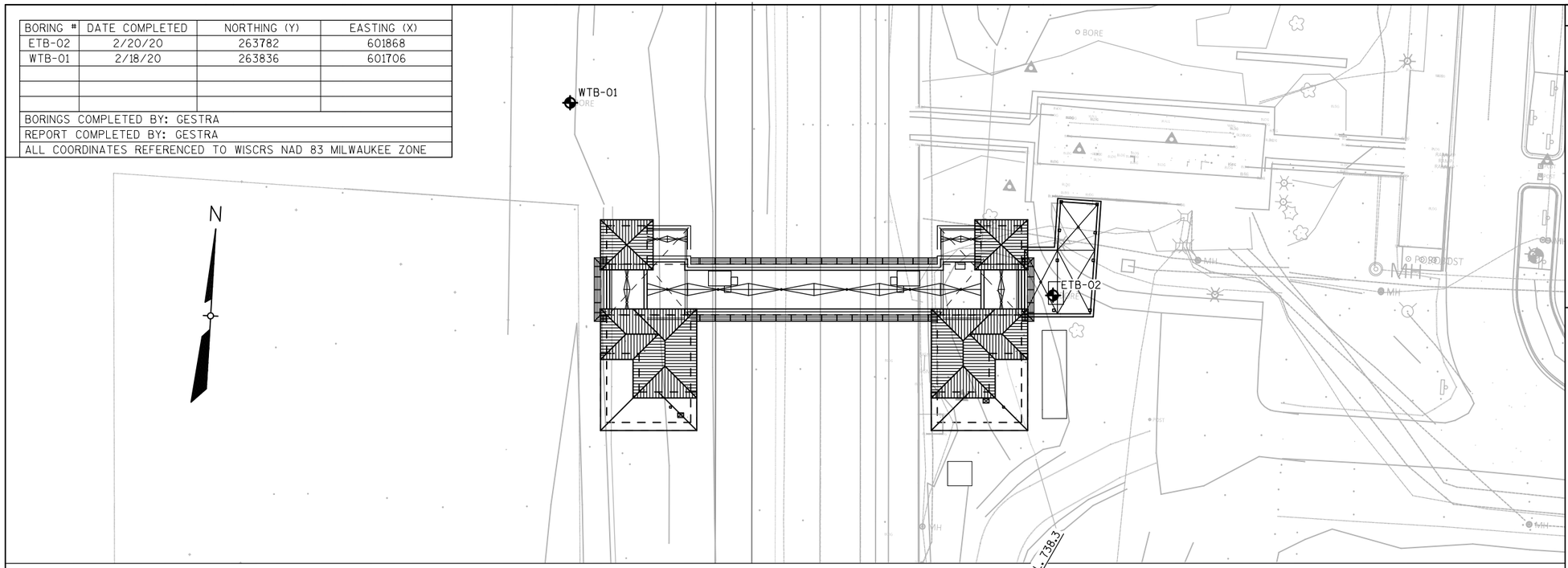
SHEET S-002

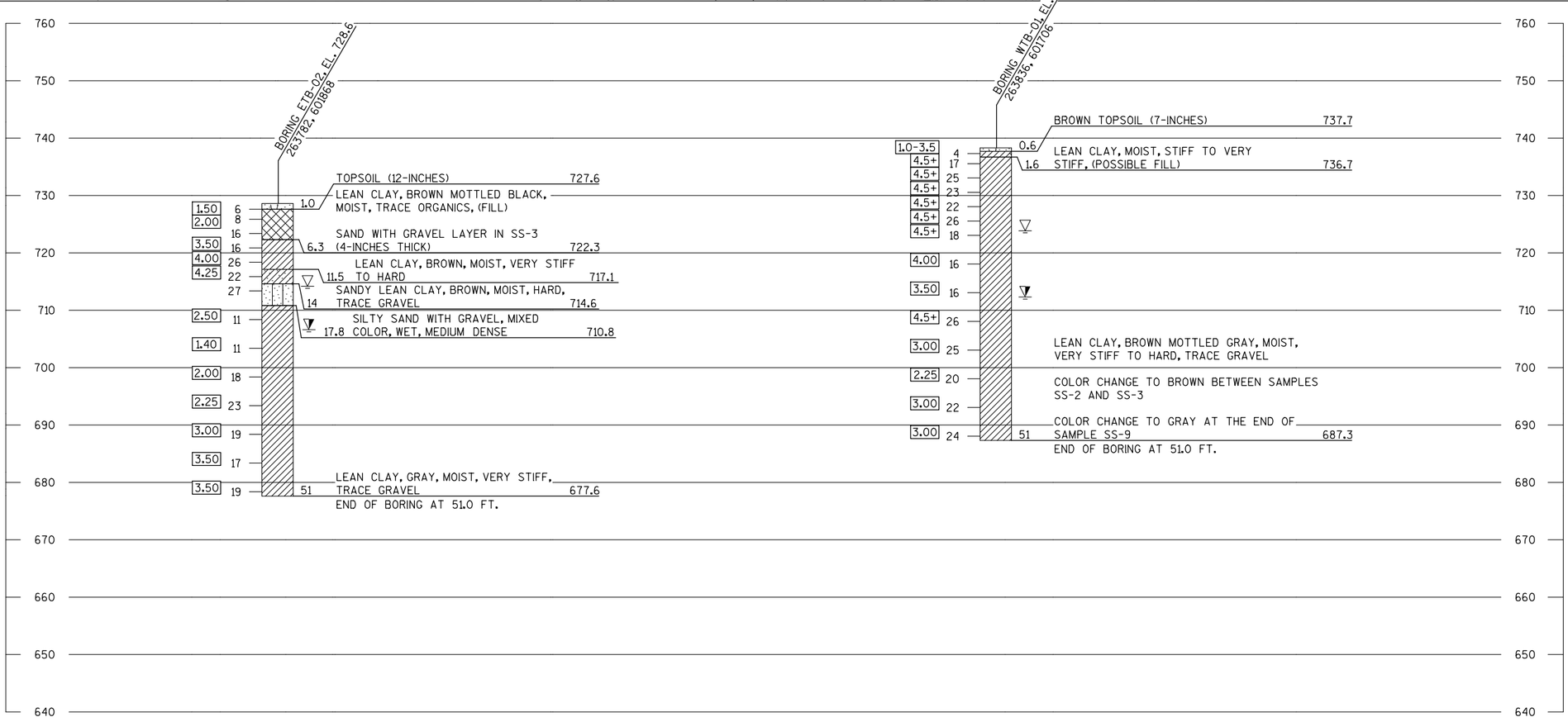
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
ETB-02	2/20/20	263782	601868
WTB-01	2/18/20	263836	601706

BORINGS COMPLETED BY: GESTRA

REPORT COMPLETED BY: GESTRA

ALL COORDINATES REFERENCED TO WISCRS NAD 83 MILWAUKEE ZONE





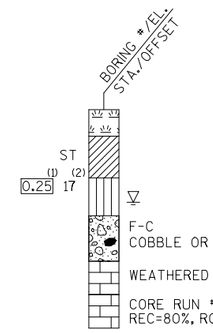
STATE PROJECT NUMBER

0385-57-05

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB PLANS CK'D.

SUBSURFACE EXPLORATION

SHEET S-003

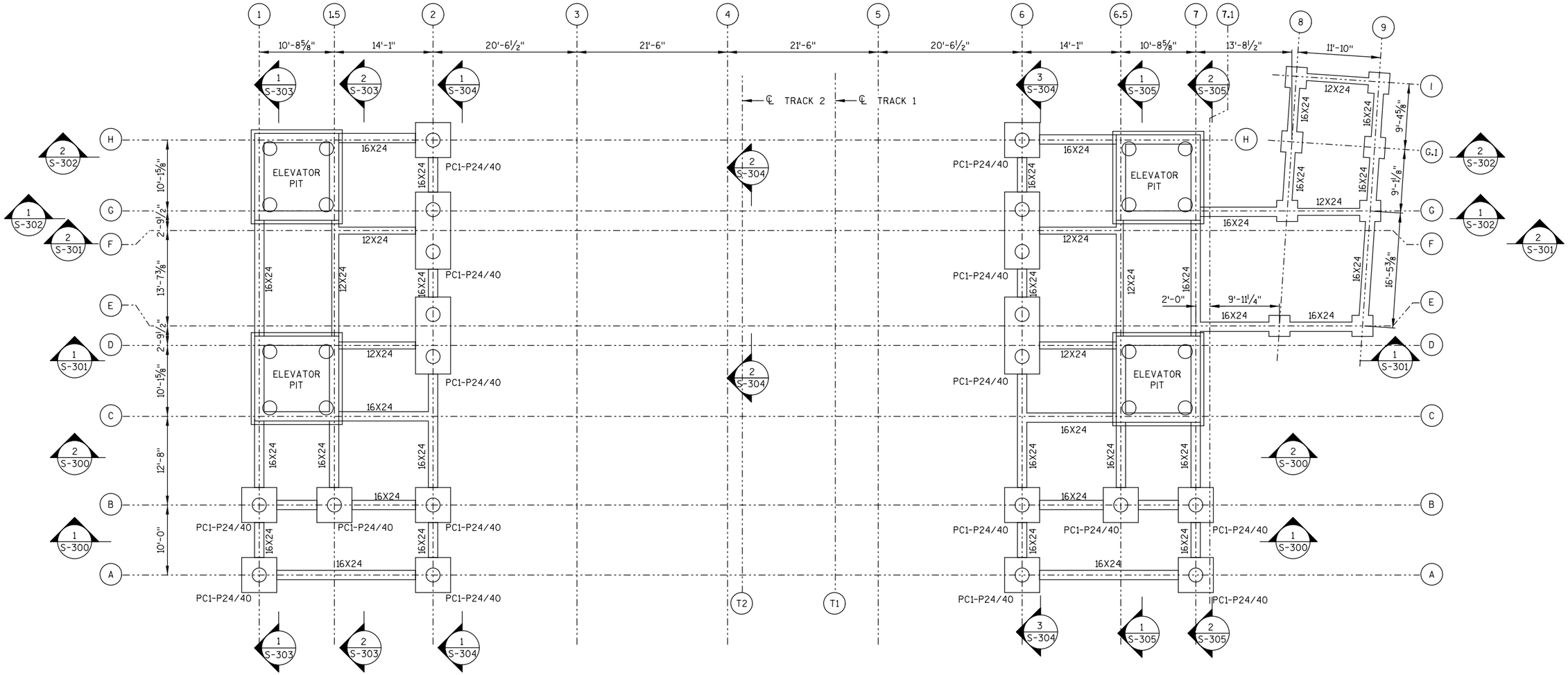
SCALE =

8

8

STATE PROJECT NUMBER

1000-57-05



1 S-100 FOUNDATION PLAN
NTS

LEGEND

PC1-PXX/XX
DIA. (INCHES) — SHAFT DEPTH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

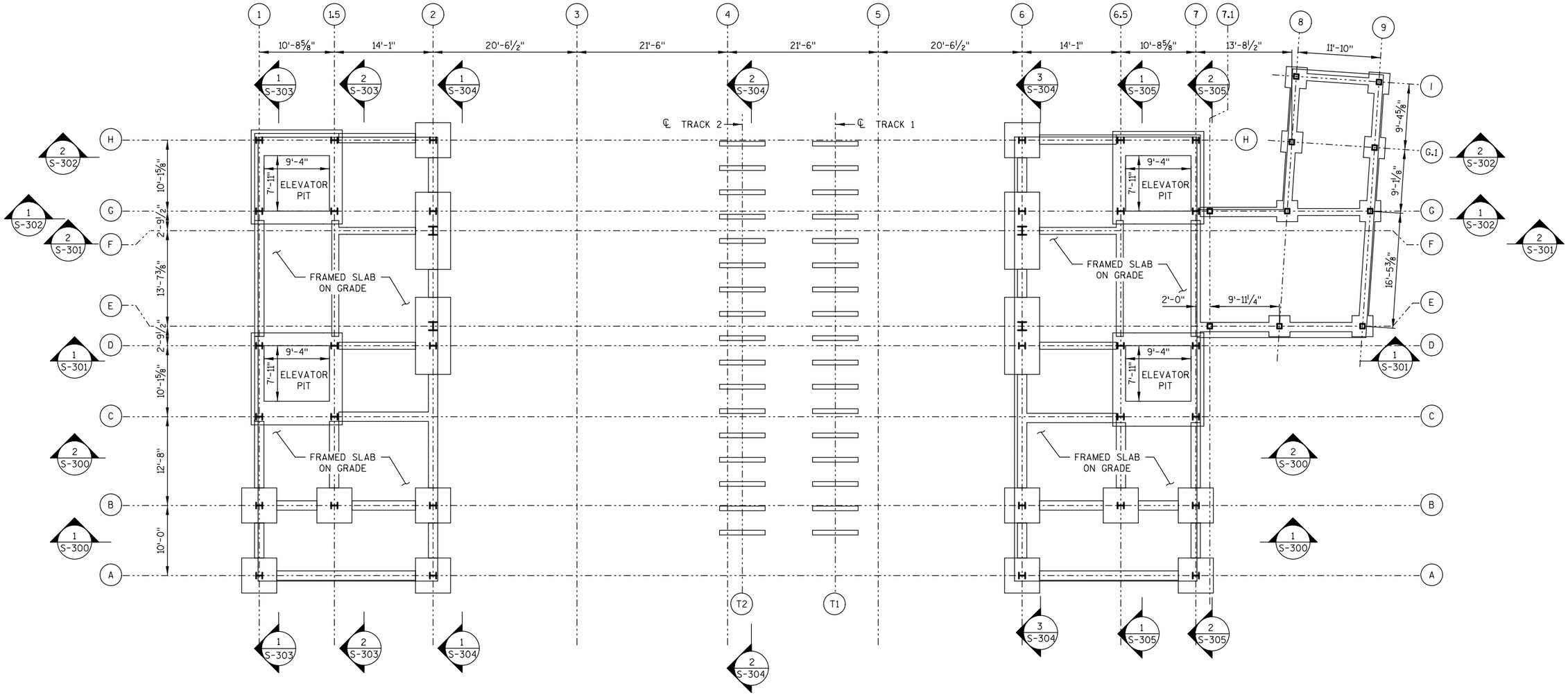
DRAWN BY CEB | PLANS CK'D. ---

FOUNDATION PLAN

SHEET S-100

STATE PROJECT NUMBER

1000-57-05



1 S-101 PLATFORM LEVEL
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

PLATFORM LEVEL

SHEET S-101

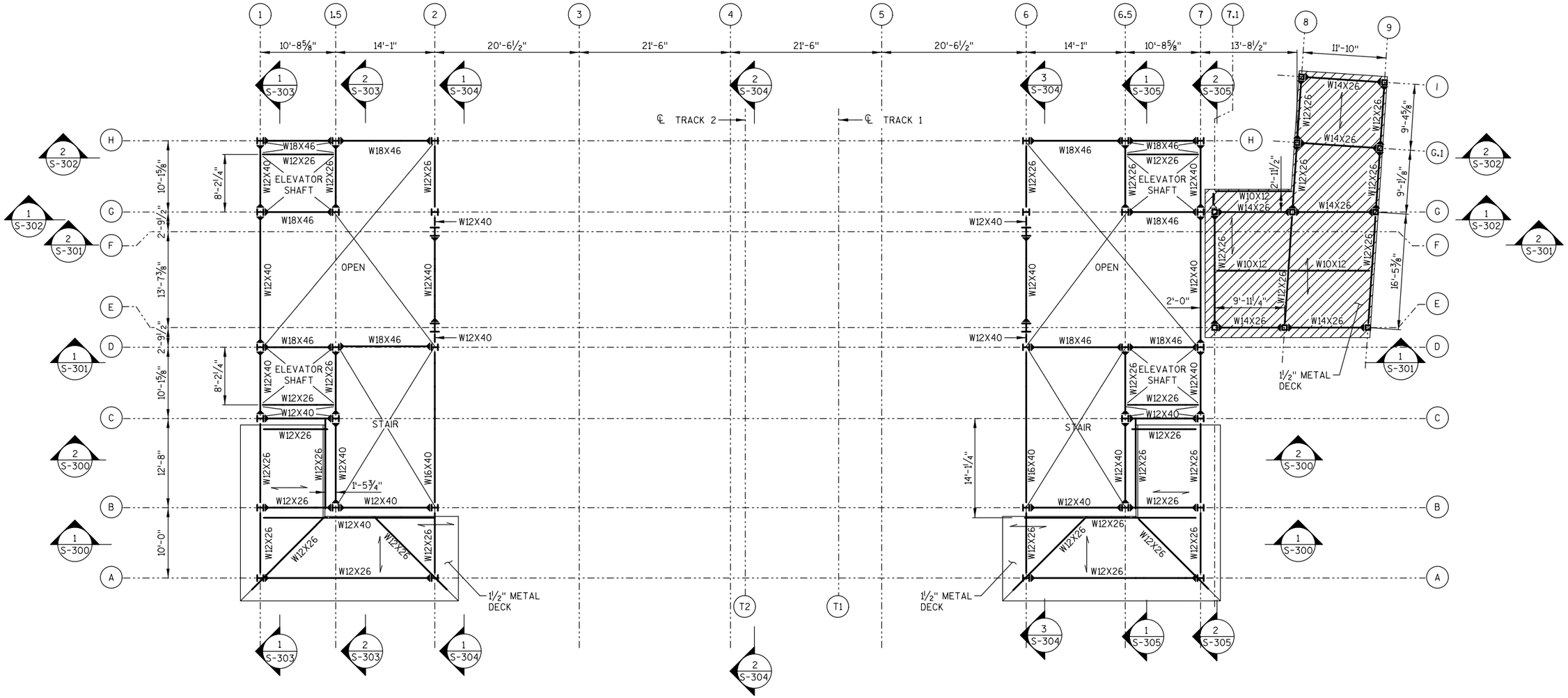
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD

8

8

STATE PROJECT NUMBER

1000-57-05



1 S-102 INTERMEDIATE LEVEL
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

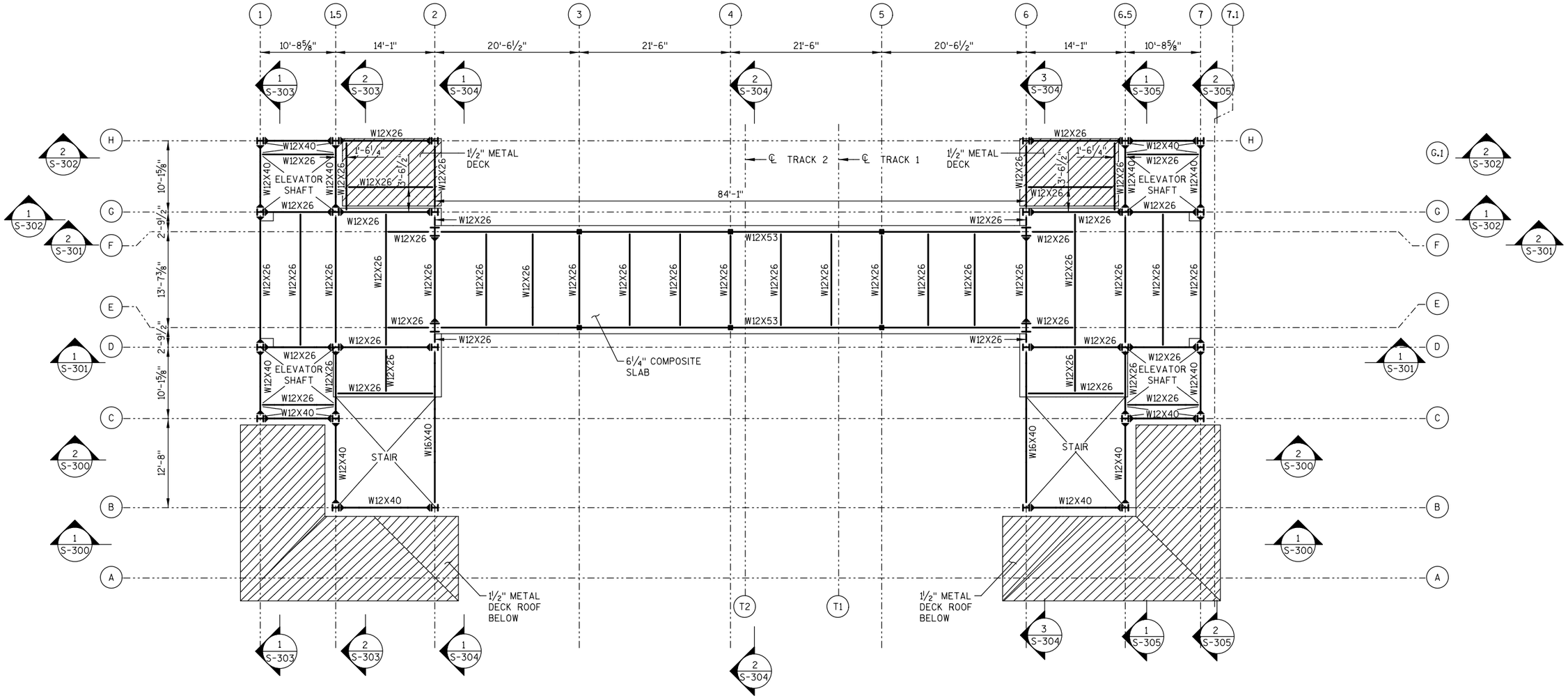
DRAWN BY CEB | PLANS CK'D. ---

INTERMEDIATE LEVEL

SHEET S-102

STATE PROJECT NUMBER

1000-57-05



1 S-103 PEDESTRIAN BRIDGE LEVEL

NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

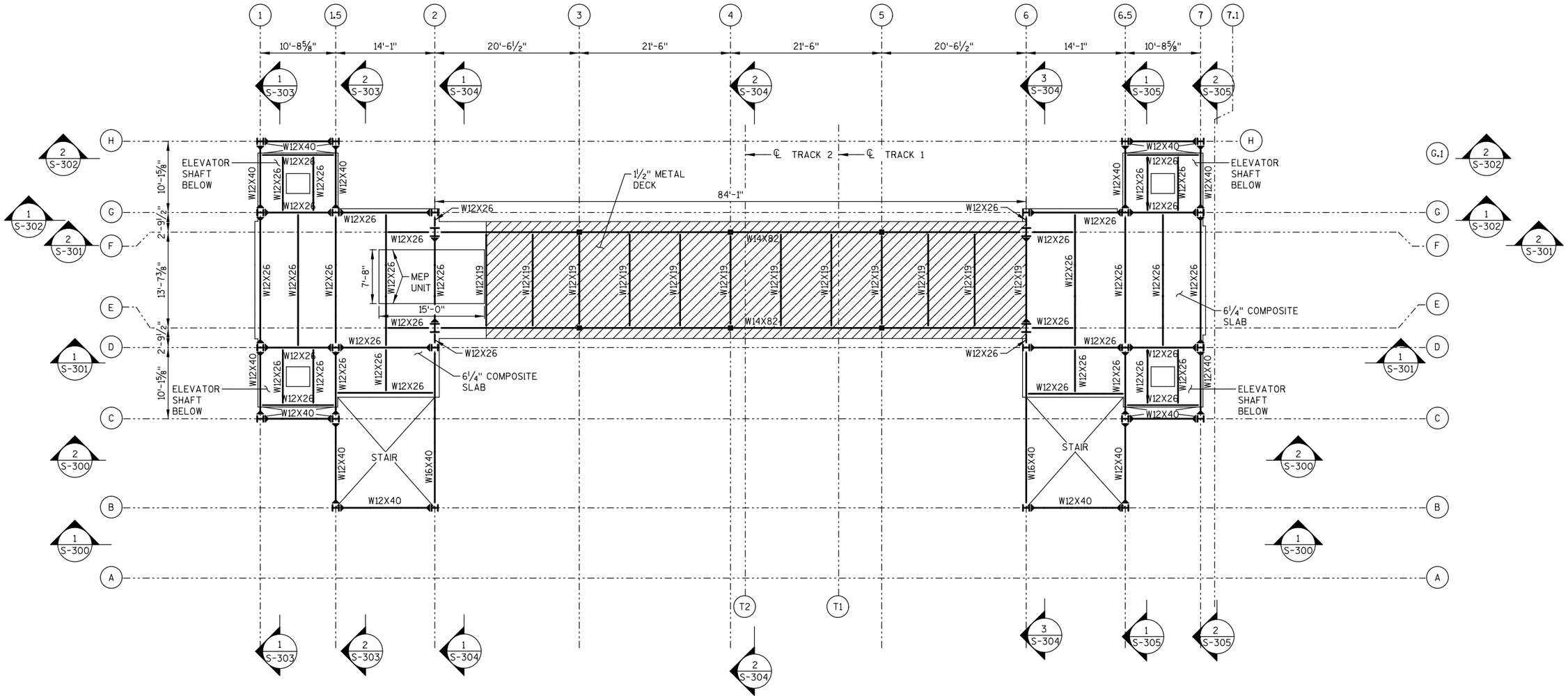
PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

PEDESTRIAN BRIDGE LEVEL

SHEET S-103

STATE PROJECT NUMBER
1000-57-05



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

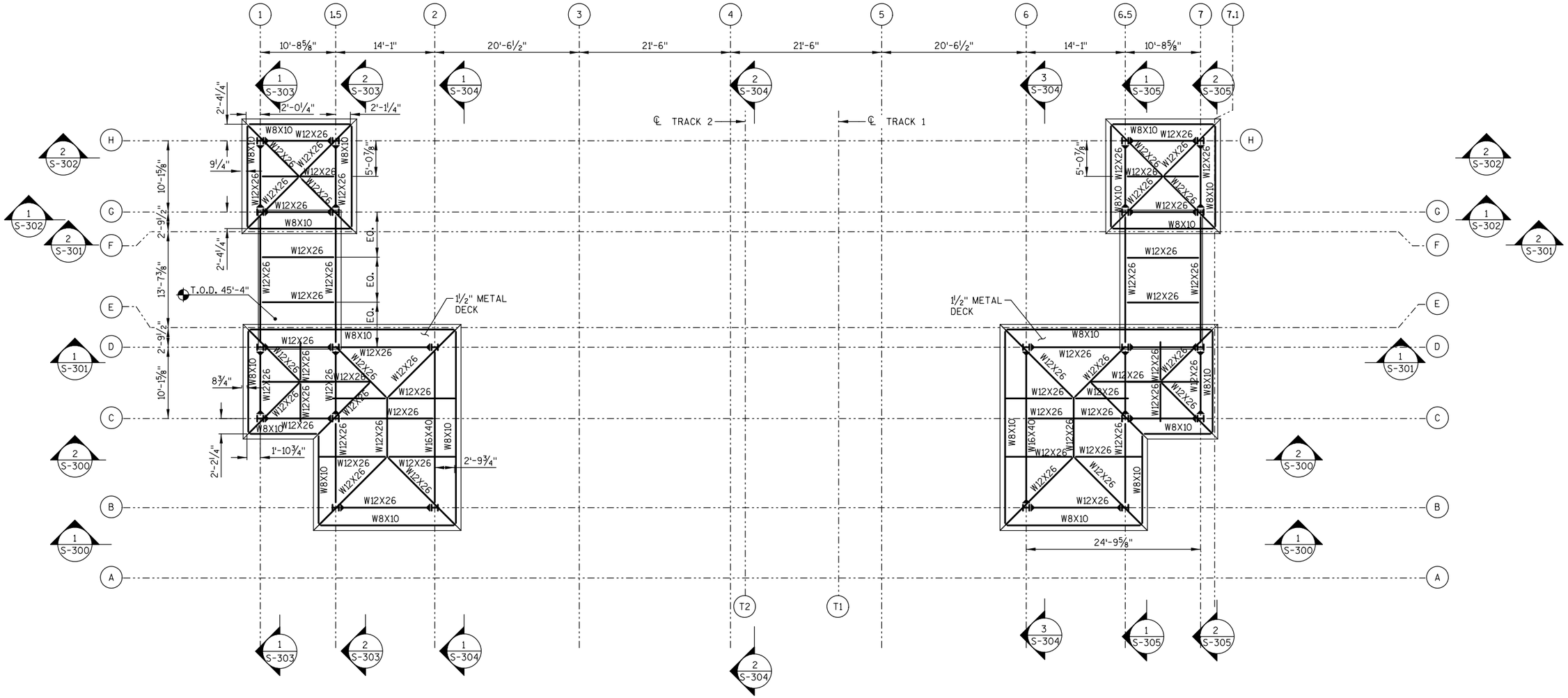
DRAWN BY CEB | PLANS CK'D. ---

TOP OF PEDESTRIAN BRIDGE LEVEL

SHEET S-104

STATE PROJECT NUMBER

1000-57-05



1 S-105 TOWER ROOF LEVEL
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

TOWER ROOF LEVEL

SHEET S-105

8

8

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD

7'-8"

STATE PROJECT NUMBER

1000-57-05

EXISTING FENCE

STA. 100+00
5.33' LT.

STA. 100+26.05
8.50' LT.

371'-1¾" (PLATFORM)

399'-4⅝" (CANOPY)

FIBER OPTIC LINE

WEST TOWER

27'-7⅝"

54'-3"
(PLATFORM)

25'-2"

12'-0"

104+00

102+00

100+00

PEDESTRIAN
BRIDGE

5'-4"

CONCRETE PLATFORM

EXISTING PLATFORM

NEW CANOPY

℄ TRACK 1

℄ TRACK 2

EXISTING CANOPY

TELEPHONE LINE

EAST TOWER

MATCHLINE

EXISTING FENCE

TELEPHONE LINE

STA. 105+26.05
8.56' LT.

STA. 108+00
5.33' LT.

EXISTING RETAINING
WALL

374'-7¼" (PLATFORM)

100'-7⅜" (CANOPY)

CONCRETE PLATFORM

15'-2"

7'-6¼"

FIBER OPTIC LINE

106+00

108+00

℄ TRACK 2

EXISTING PEDESTRAIN
CROSSING

N3°16'20"W

EXISTING CANOPY

℄ TRACK 1

EXISTING PLATFORM

ELECTRICAL LINE

N3°16'20"W

EXISTING RETAINING
WALL

ELECTRICAL LINE

EXISTING FENCE

EXISTING AMTRAK
STATION BUILDING

DRAIN PIPE

TELEPHONE LINE

MATCHLINE

1
S-106
PLATFORM PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY GTS | PLANS CK'D. ---

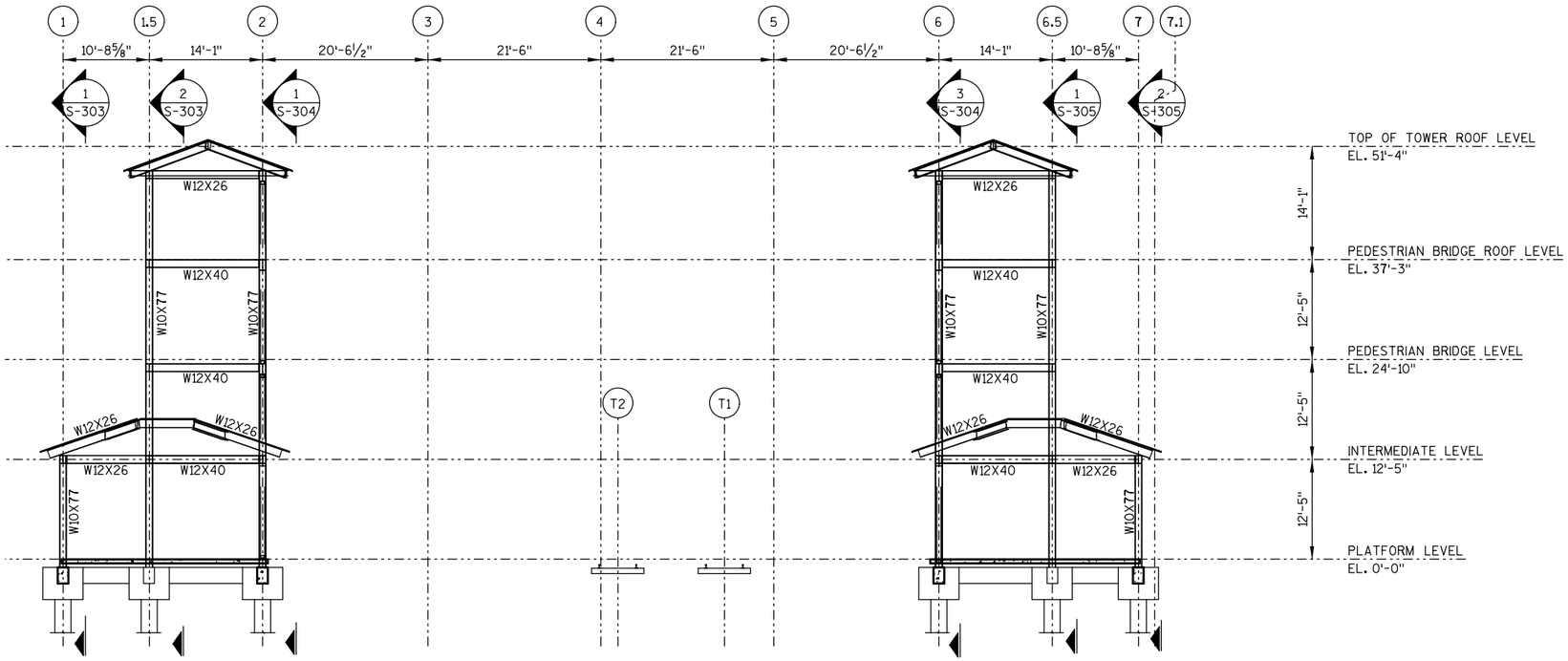
PLATFORM PLAN

SHEET
S-106

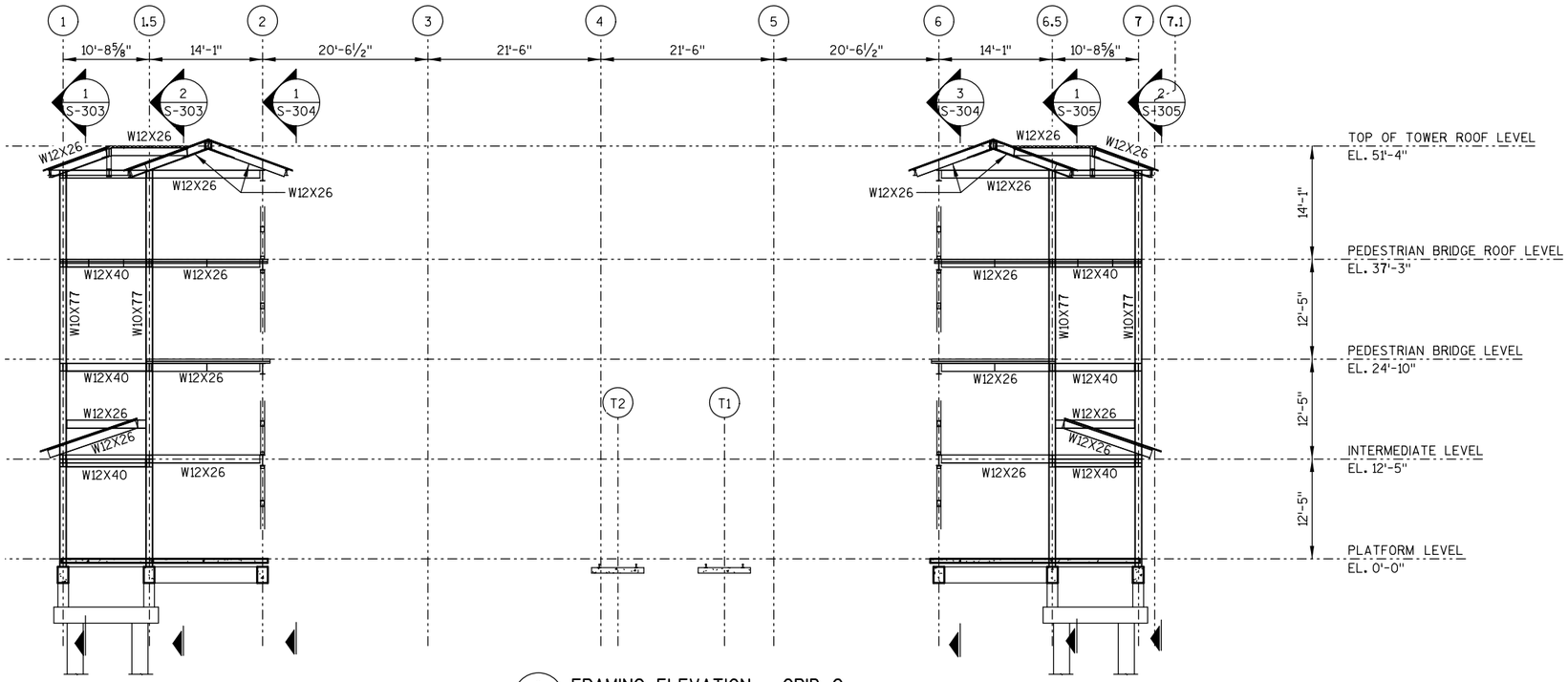
BATCH PRINT SHEET CSD OF NSD

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER
1000-57-05



1 S-300 FRAMING ELEVATION - GRID B
NTS



2 S-300 FRAMING ELEVATION - GRID C
NTS

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

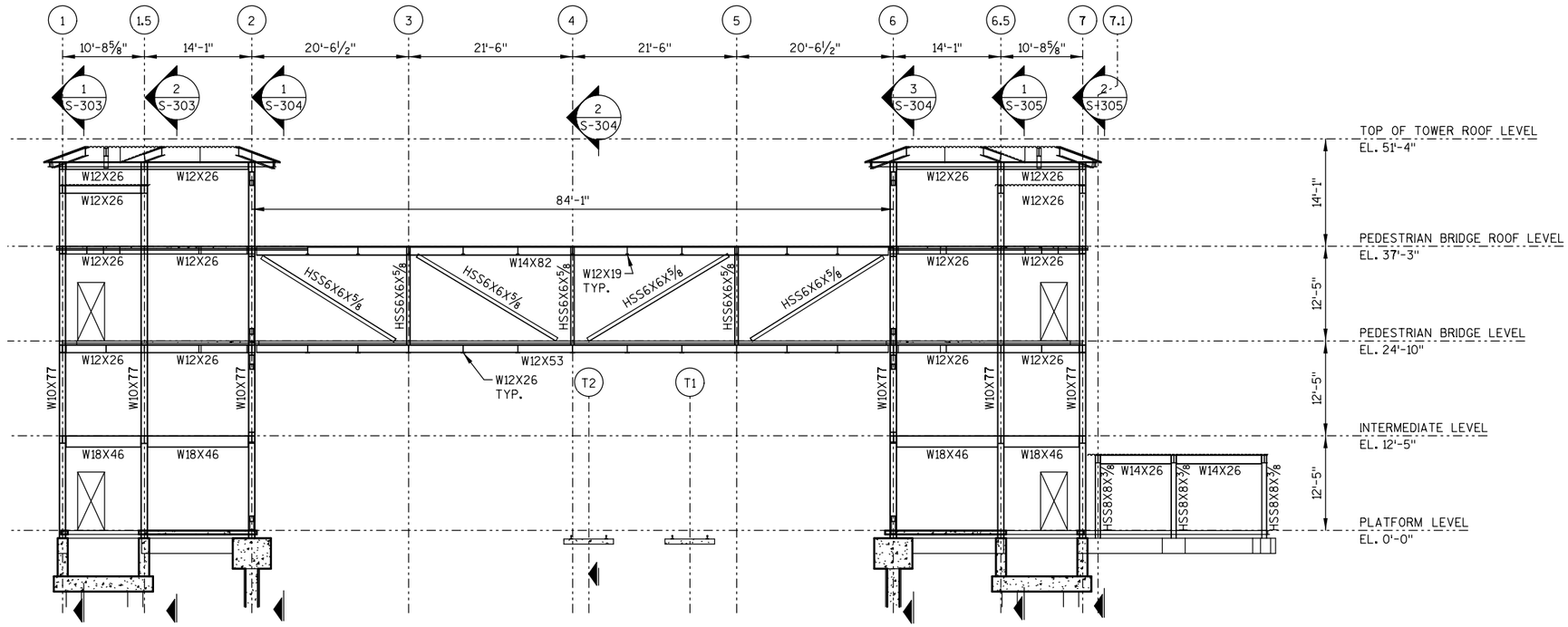
DRAWN BY CEB | PLANS CK'D. ---

LONGITUDINAL SECTION - GRID B & C

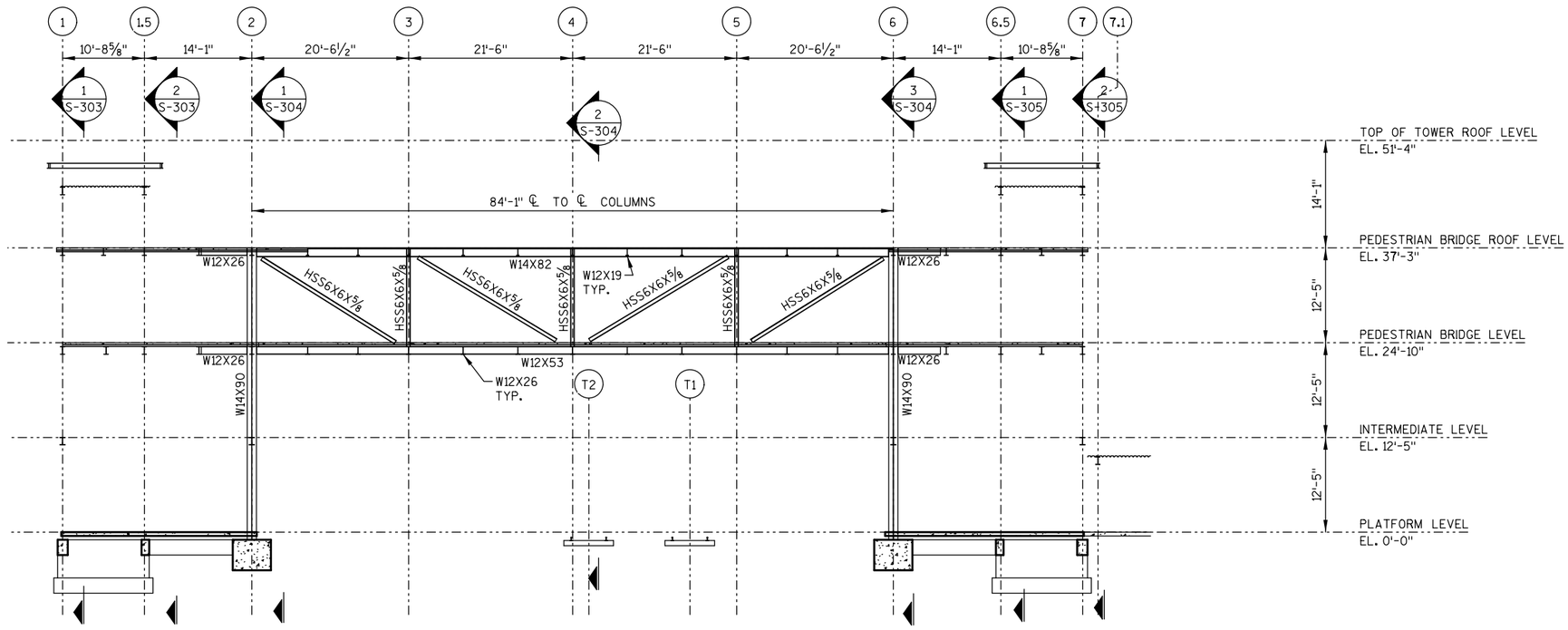
SHEET S-300

STATE PROJECT NUMBER

1000-57-05



1 S-301 FRAMING ELEVATION - GRID D
NTS



2 S-301 FRAMING ELEVATION - GRID F
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

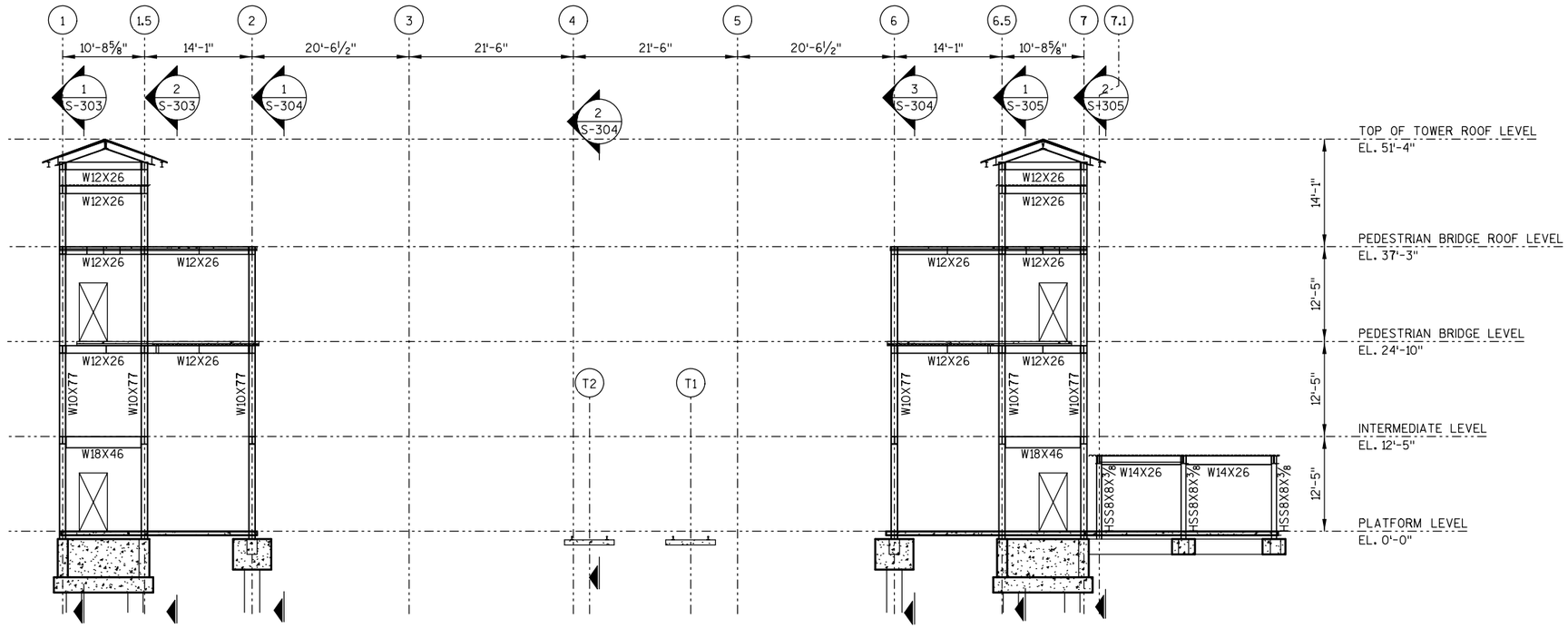
DRAWN BY CEB | PLANS CK'D. ---

LONGITUDINAL SECTION - GRID D & F

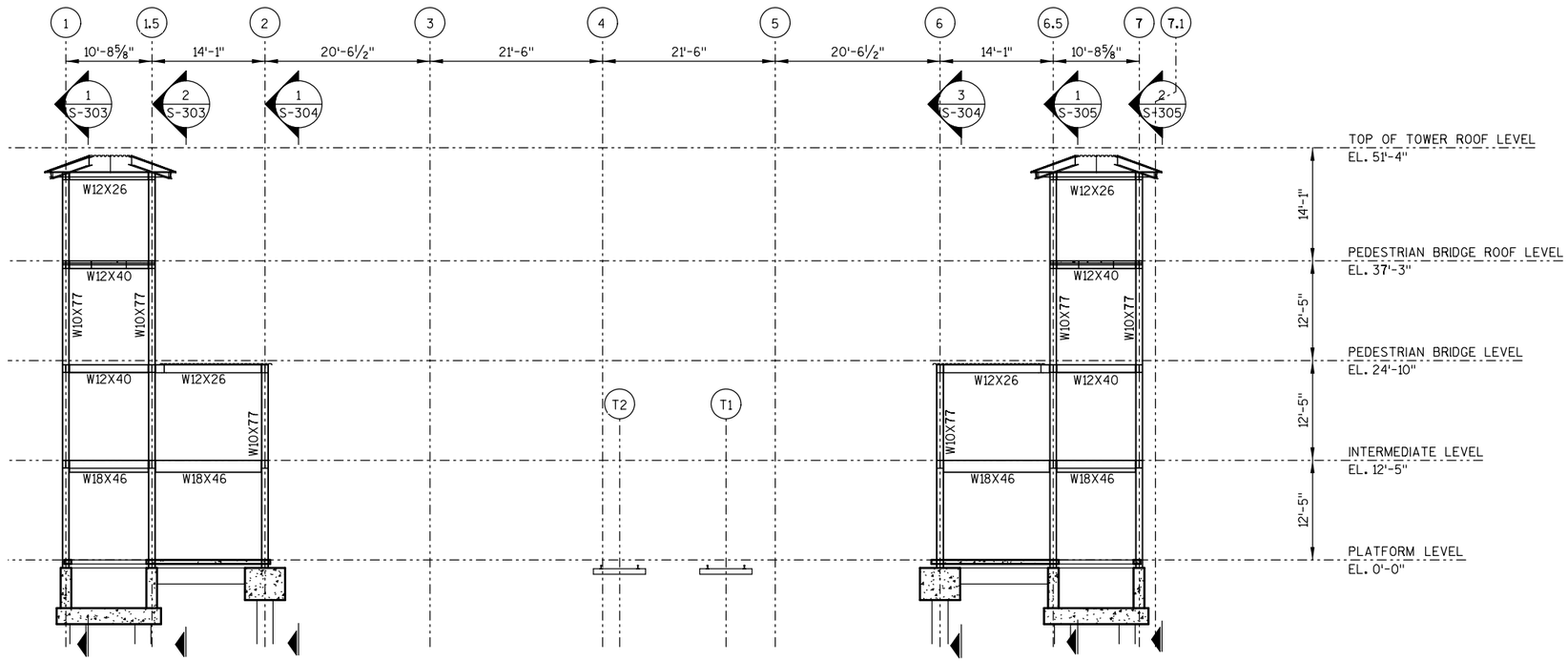
SHEET S-301

STATE PROJECT NUMBER

1000-57-05



1 / S-302 FRAMING ELEVATION - GRID G
NTS



2 / S-302 FRAMING ELEVATION - GRID H
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

LONGITUDINAL SECTION - GRID G & H

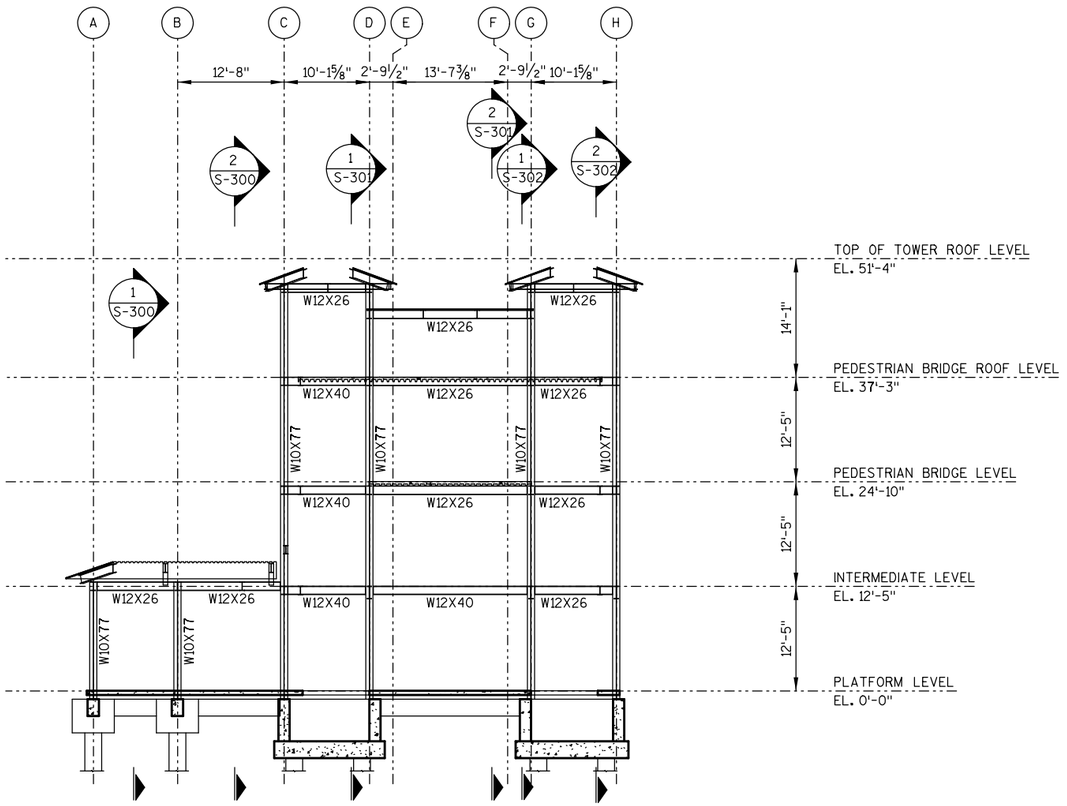
SHEET S-302

8

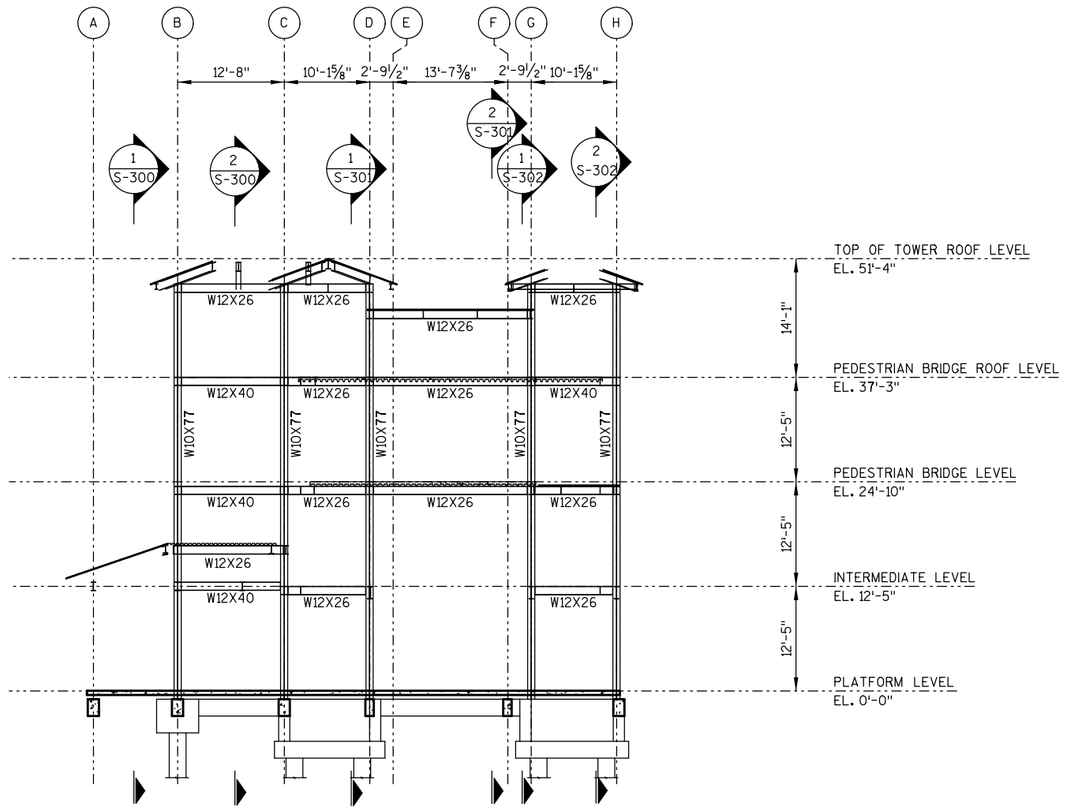
8

STATE PROJECT NUMBER

1000-57-05



1 S-303 FRAMING ELEVATION - GRID 1
NTS



2 S-303 FRAMING ELEVATION - GRID 1.5
NTS

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

8

8

NO.	DATE	REVISION	BY

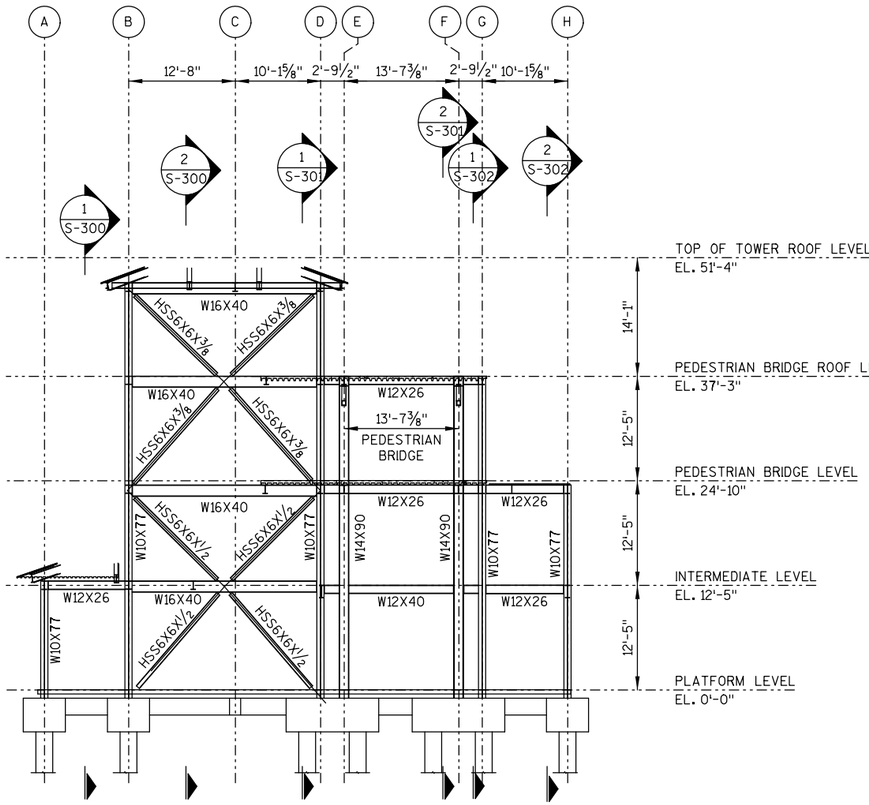
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

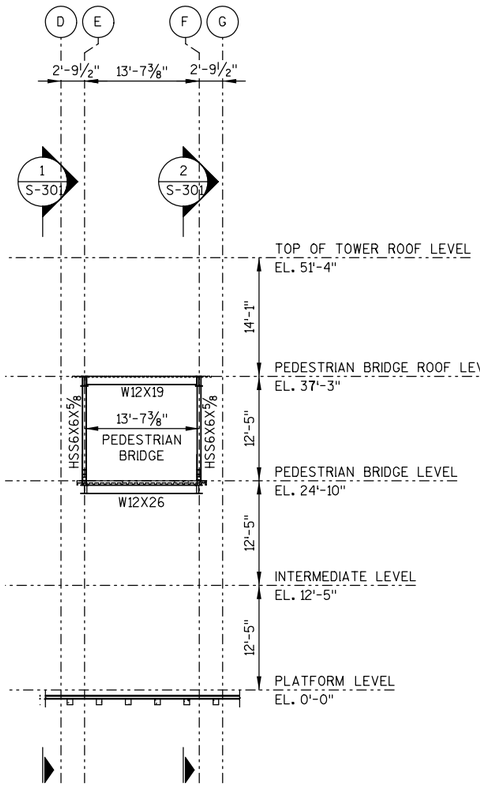
DRAWN BY CEB | PLANS CK'D. ---

TRANSVERSE SECTION - GRID 1 & 1.5

SHEET S-303



1 S-304 FRAMING ELEVATION - GRID 2
NTS



2 S-304 FRAMING ELEVATION - GRID 4
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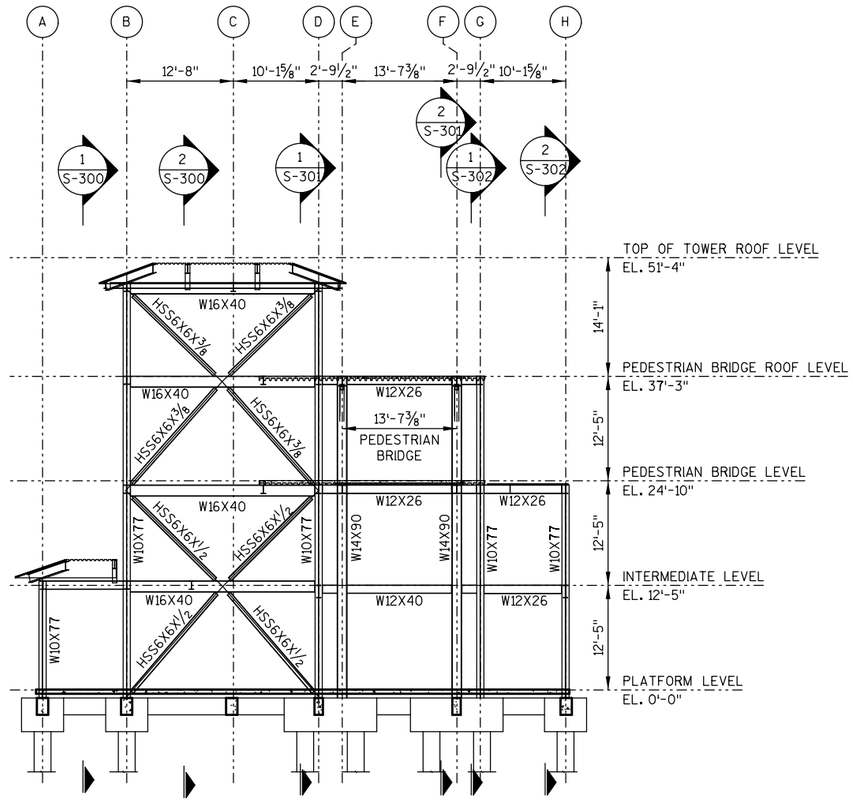


3 S-304 FRAMING ELEVATION - GRID 6
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

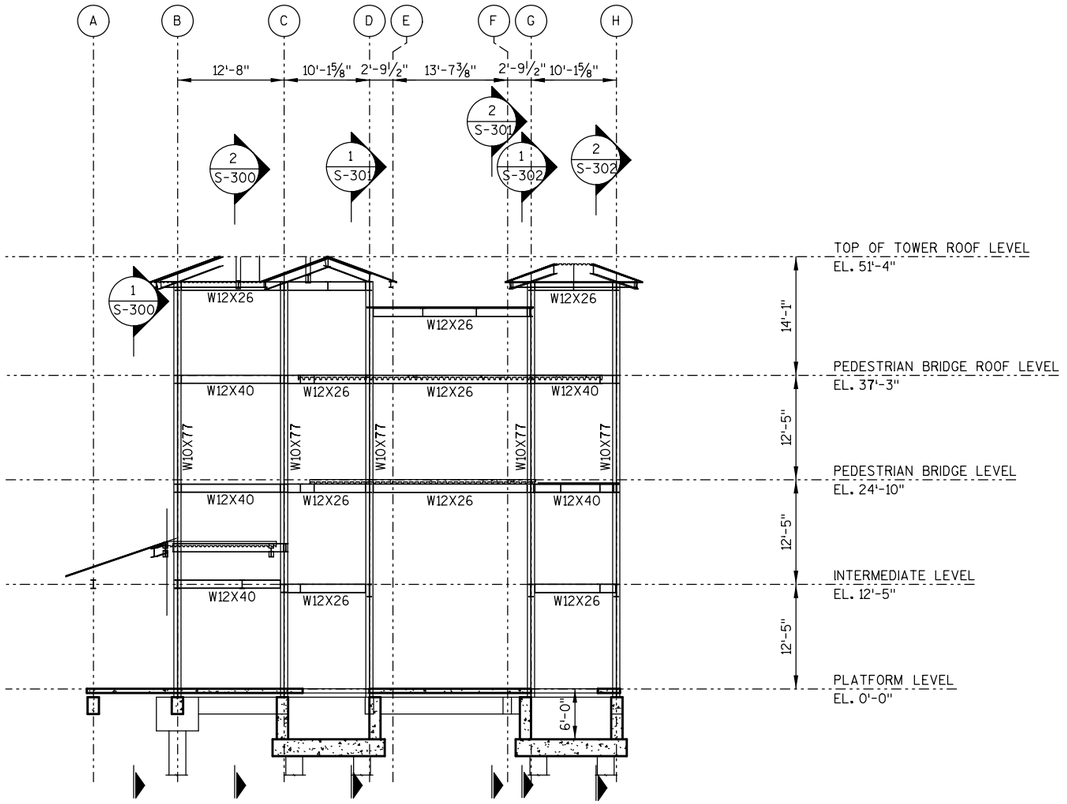
DRAWN BY CEB | PLANS CK'D. ---

TRANSVERSE SECTION - GRID 2, 4 & 6

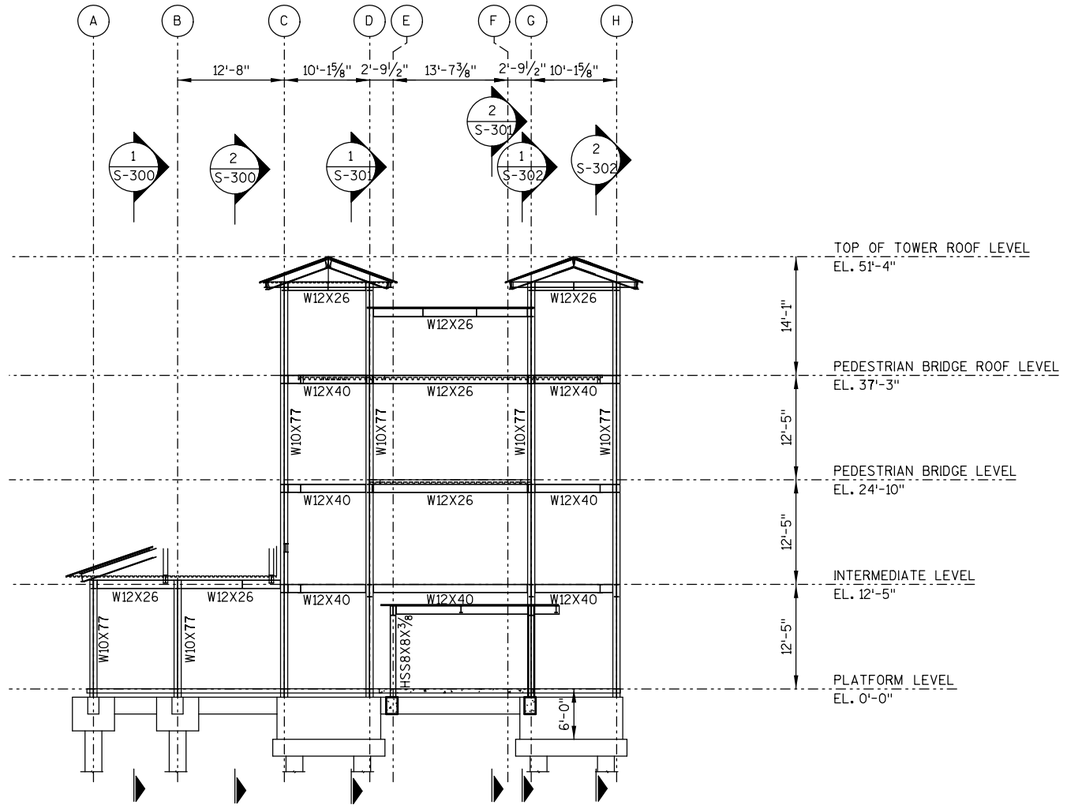
SHEET S-304

STATE PROJECT NUMBER

1000-57-05



1 S-305 FRAMING ELEVATION - GRID 6.5
NTS



2 S-305 FRAMING ELEVATION - GRID 7
NTS

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

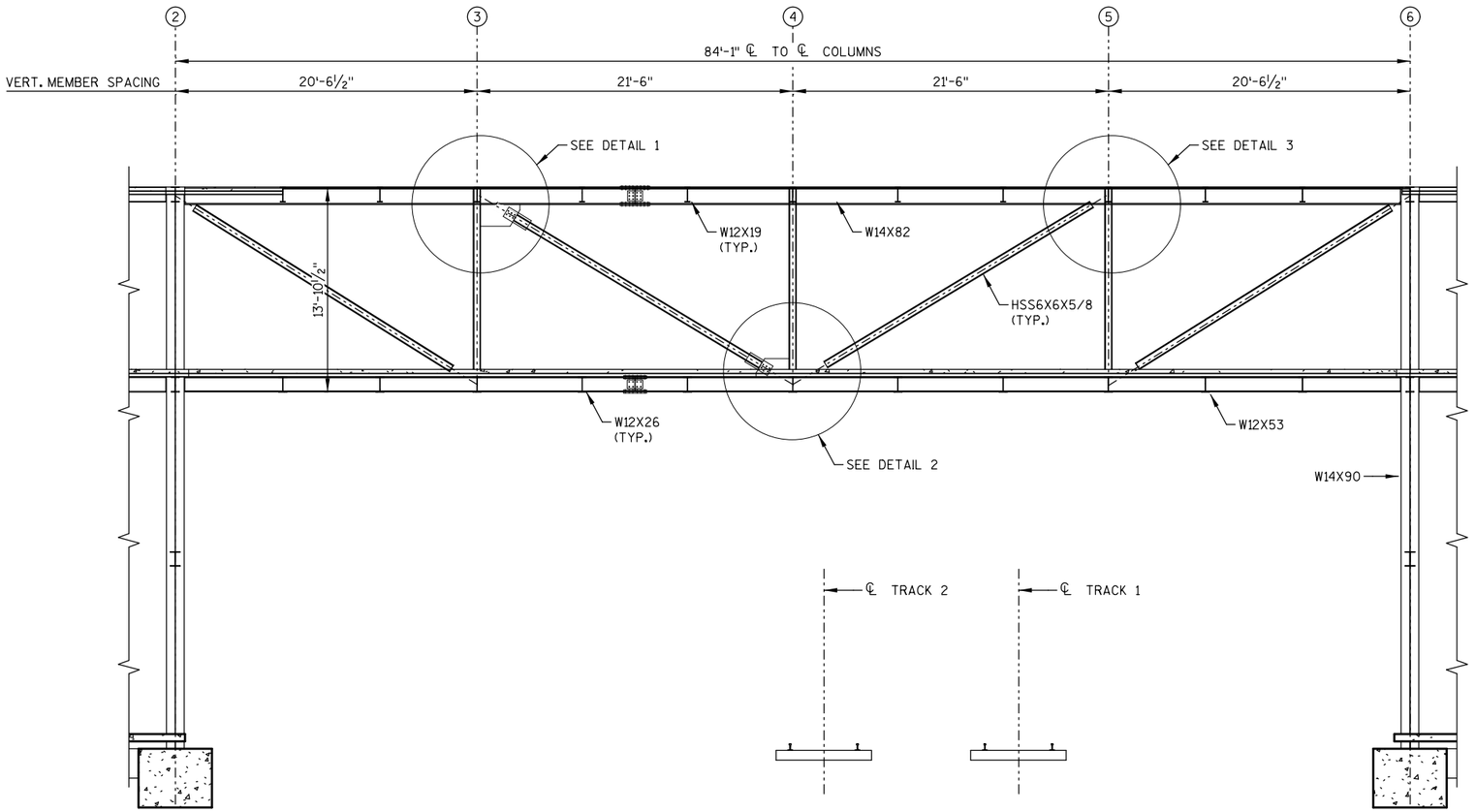
TRANSVERSE SECTION - GRID 6.5 & 7

SHEET S-305

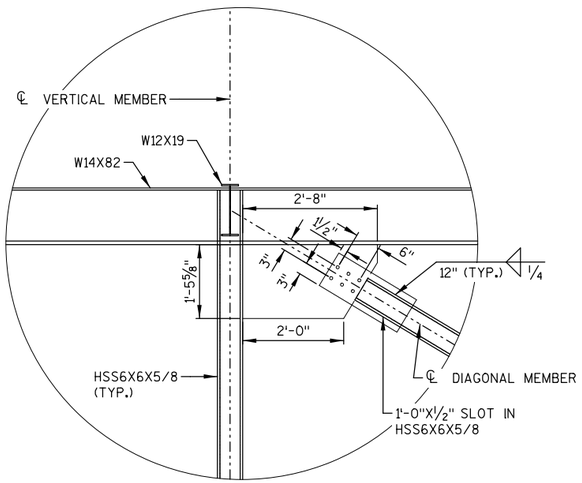
8

STATE PROJECT NUMBER

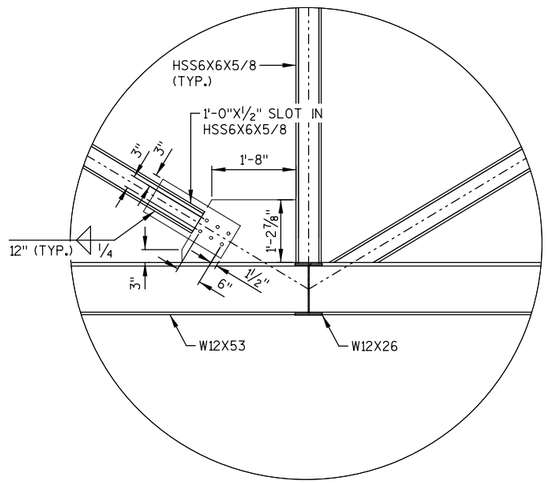
1000-57-05



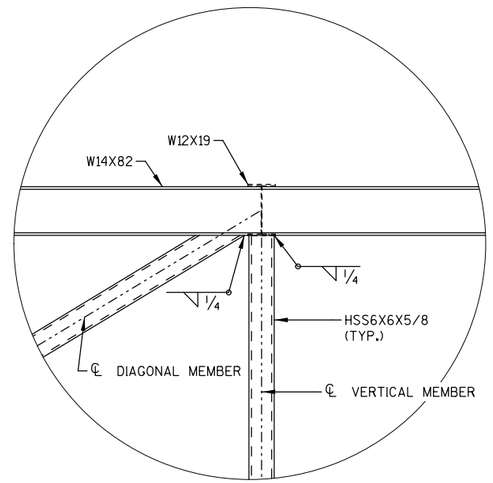
PEDESTRIAN BRIDGE ELEVATION



DETAIL 1



DETAIL 2



DETAIL 3

NOTES

IF OPTIONAL SPLICE IS UTILIZED, REFER TO DETAILS 1 & 2 FOR DIAGONAL TRUSS MEMBER CONNECTION. IF OPTIONAL SPLICE IS NOT UTILIZED, REFER TO DETAIL 3 FOR TYPICAL DIAGONAL TRUSS MEMBER CONNECTION.

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

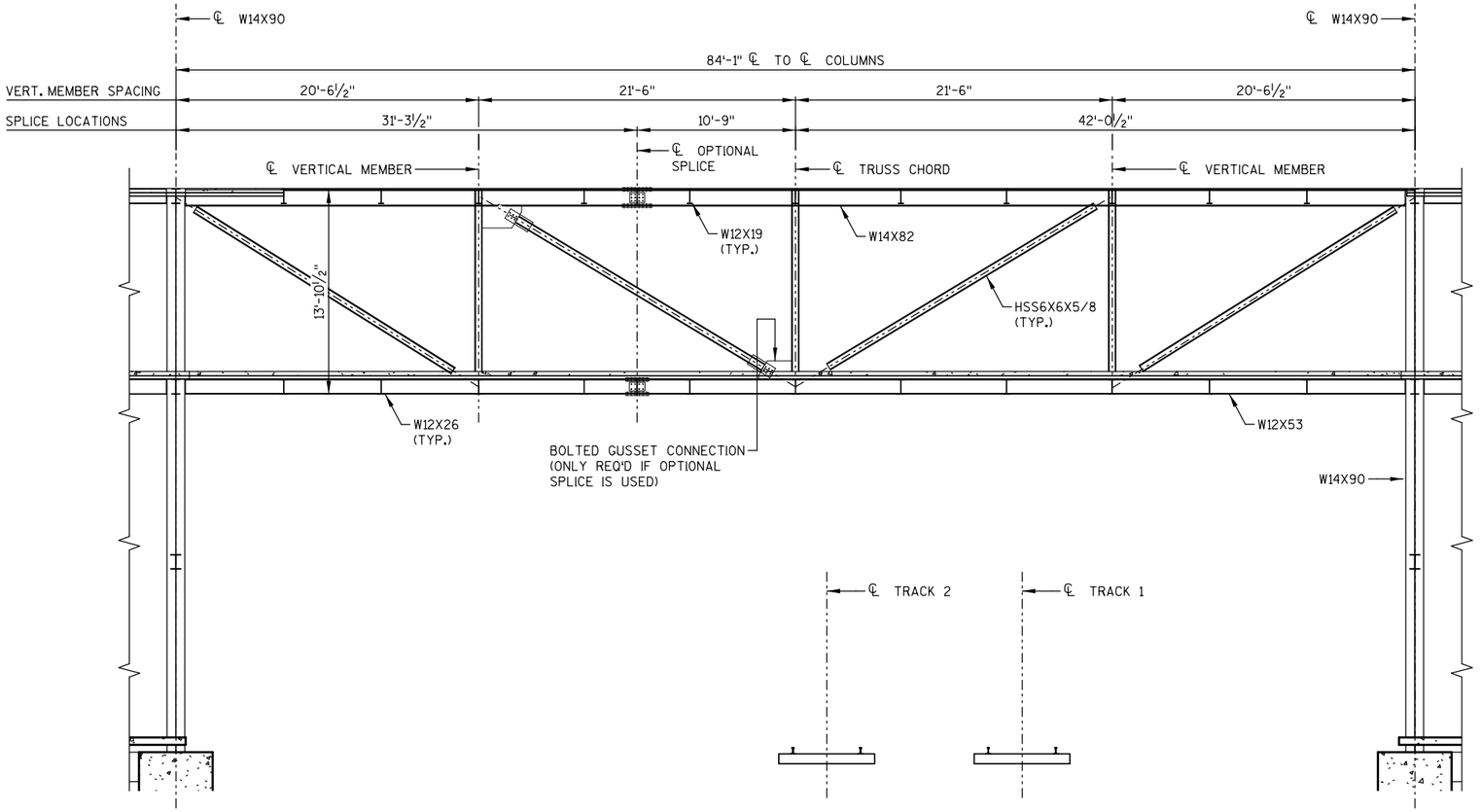
DRAWN BY: CEB | PLANS CK'D.: ---

FRAMING CONNECTION DETAILS

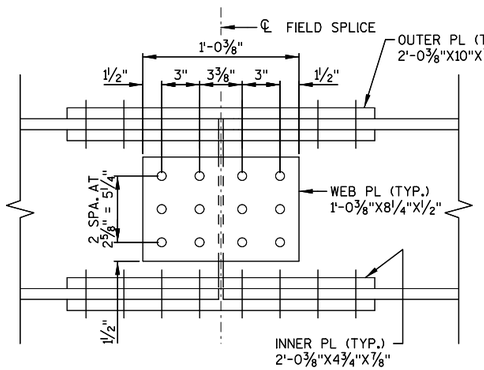
SHEET S-500

8

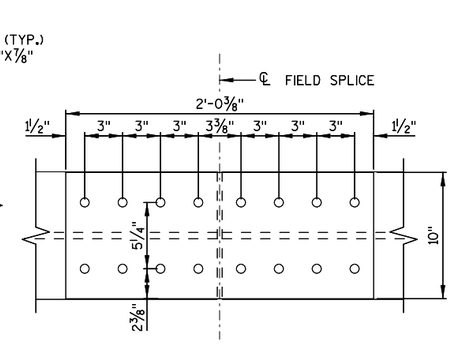
8



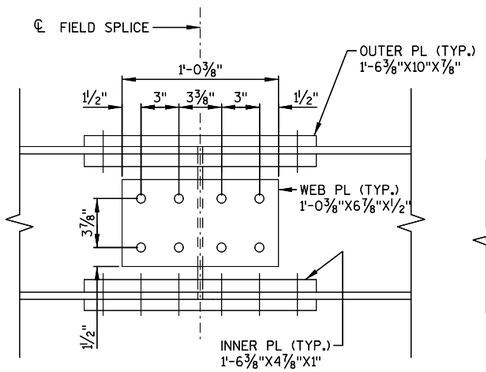
PEDESTRIAN BRIDGE ELEVATION



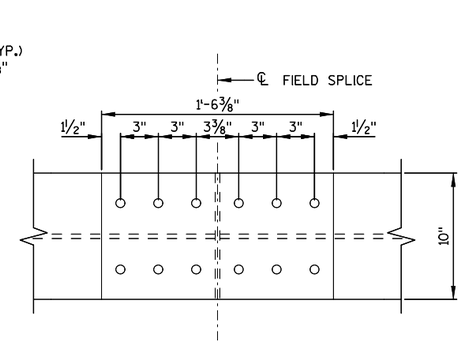
TOP CHORD SPLICE ELEVATION



TOP CHORD FLANGE SPLICE PLAN



BOTTOM CHORD SPLICE ELEVATION



BOTTOM CHORD FLANGE SPLICE PLAN

NOTES

SEE DETAILS 1 AND 2 ON SHEET "FRAMING CONNECTION DETAILS" FOR DIAGONAL MEMBER CONNECTION IF OPTIONAL SPLICE IS UTILIZED.

NO.	DATE	REVISION	BY

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PEDESTRIAN BRIDGE

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TRUSS SPLICE DETAILS

SHEET S-501

8

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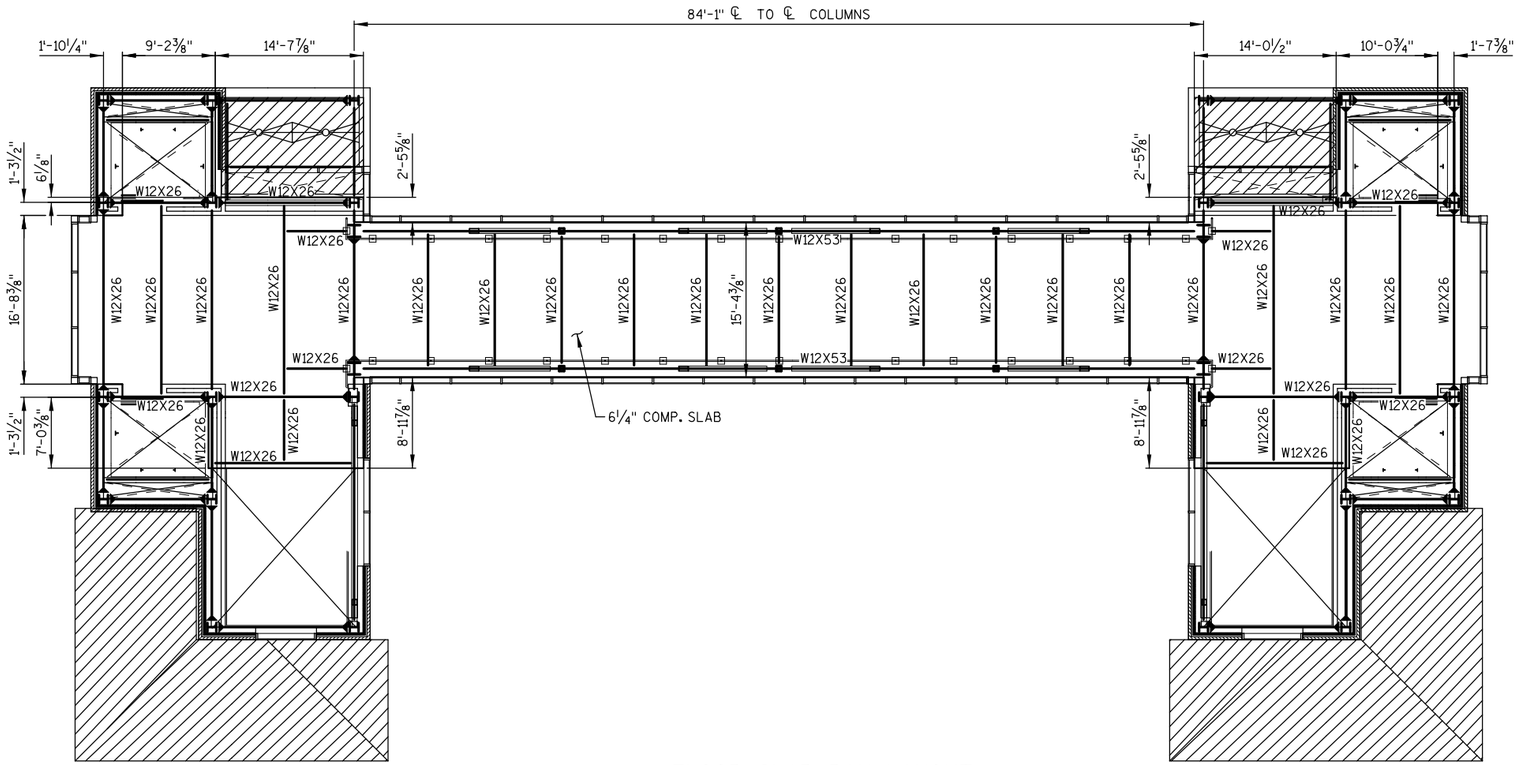
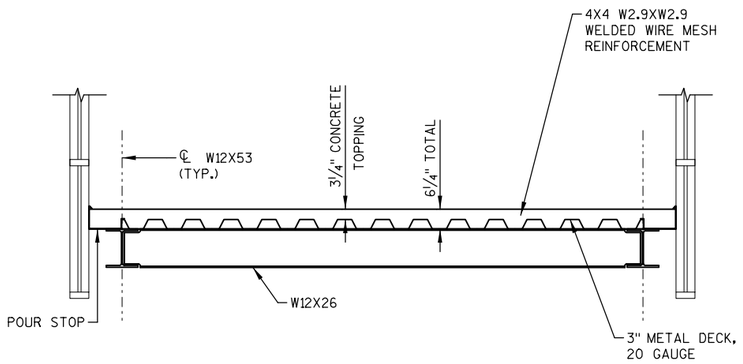
1000-57-05



FLOOR SLAB PAN LAYOUT



SECTION CUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

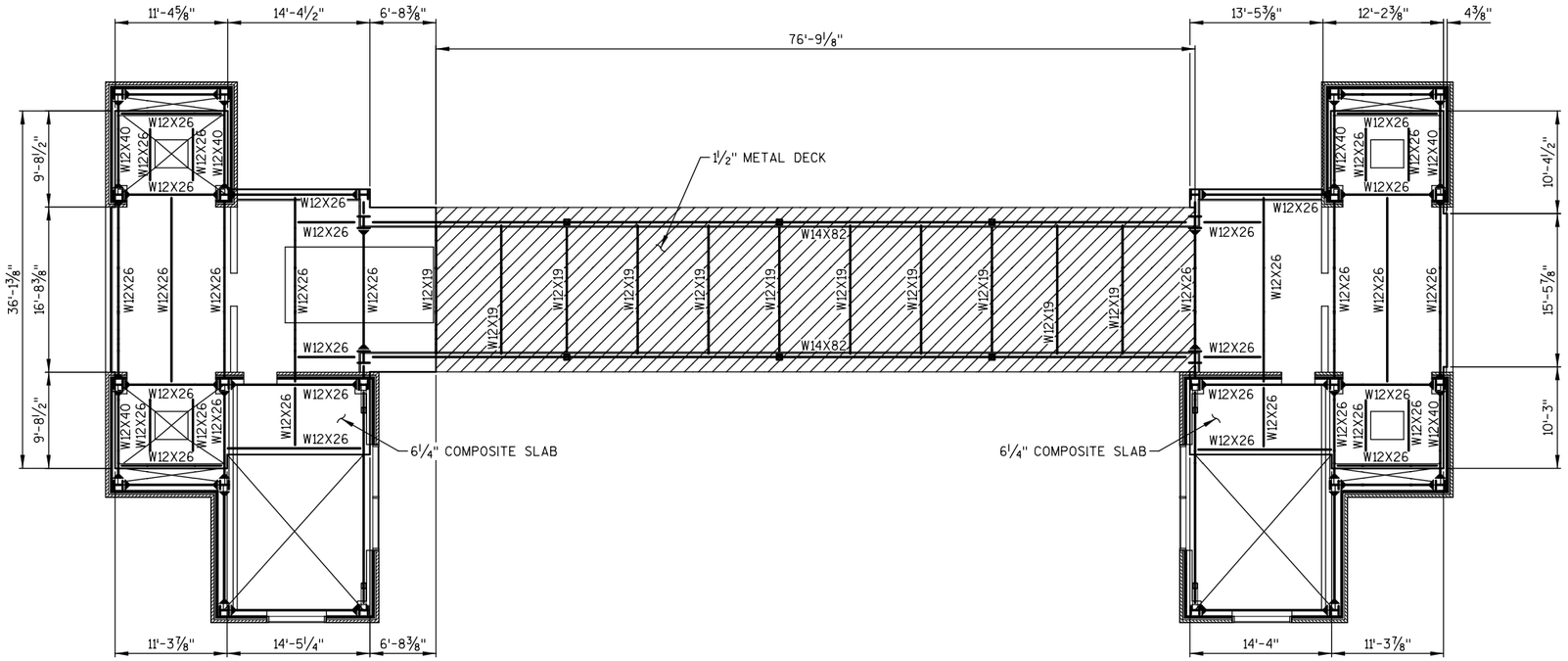
FLOOR SLAB
PAN DETAILS

SHEET
S-502

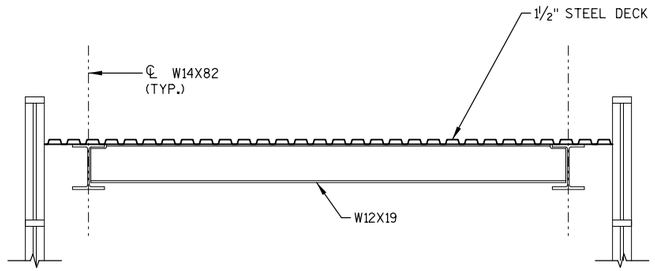
8

8

STATE PROJECT NUMBER
1000-57-05



ROOF SLAB PAN LAYOUT



SECTION CUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

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ROOF SLAB PAN DETAILS

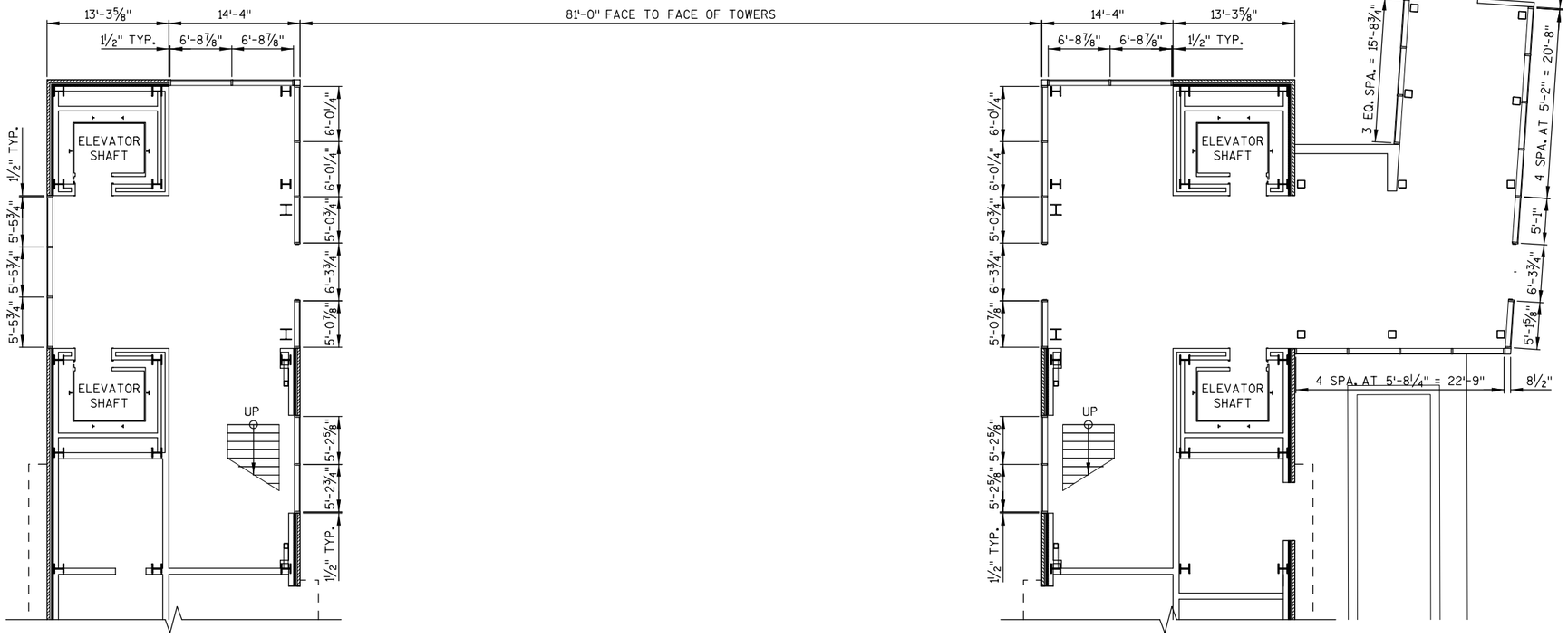
SHEET S-503

8

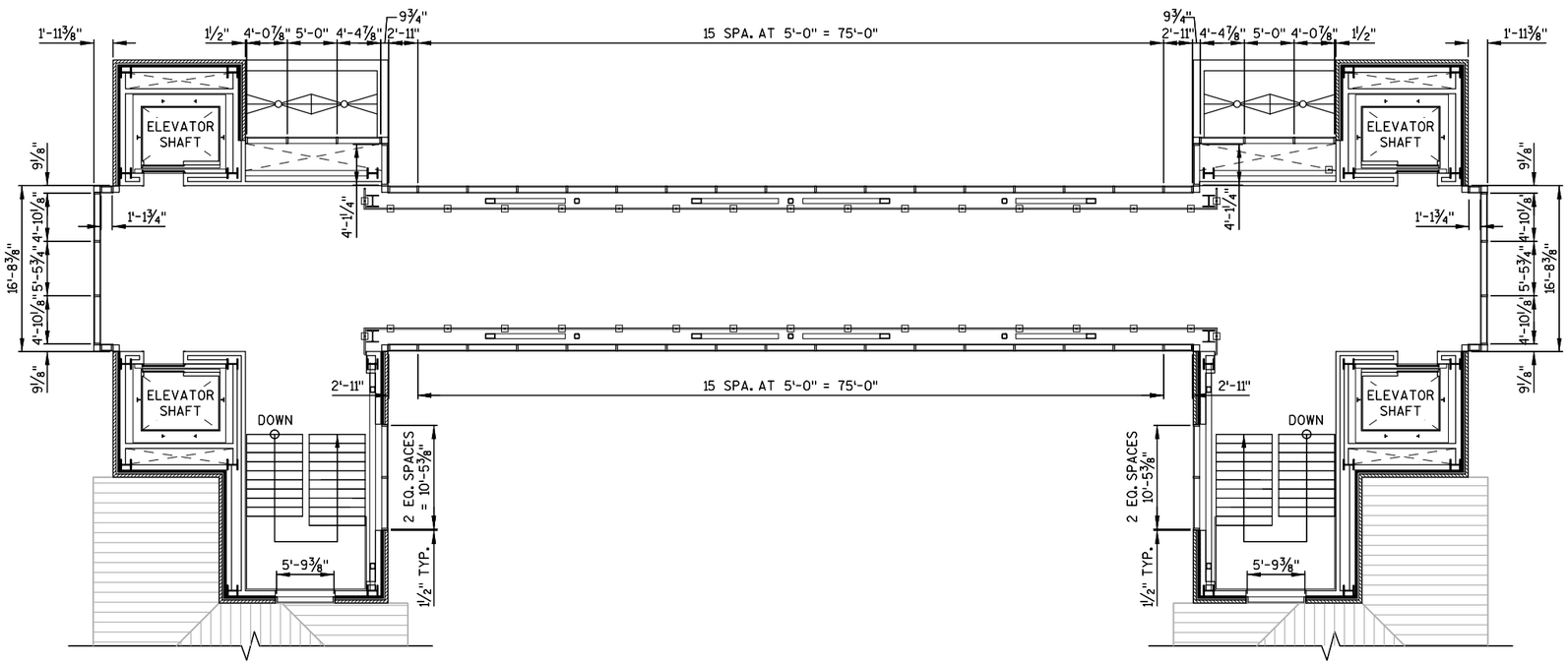
8

STATE PROJECT NUMBER

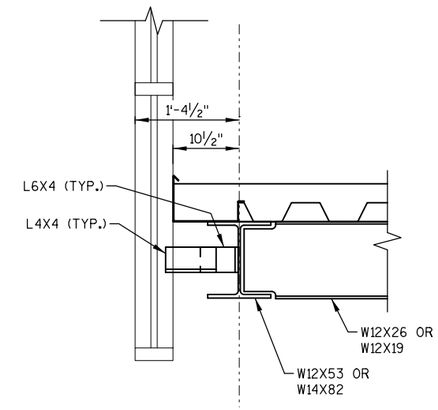
1000-57-05



PLATFORM LEVEL



PEDESTRIAN BRIDGE LEVEL



MULLION CONNECTION DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

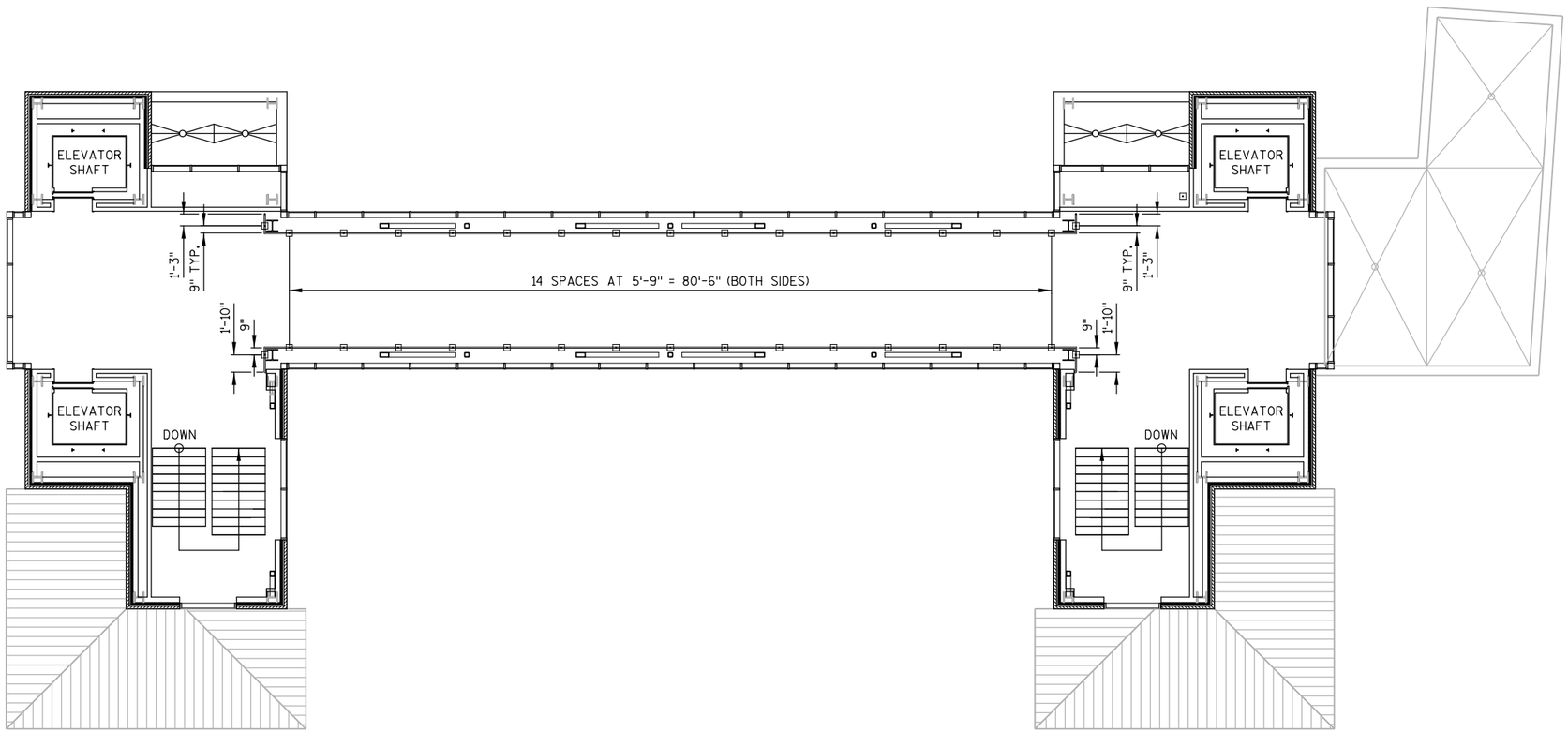
PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

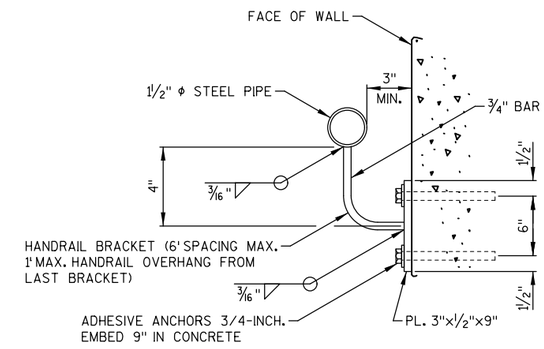
GLASS CURTAINWALL DETAILS

SHEET S-504

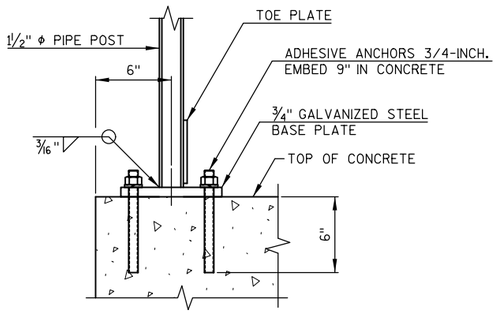
STATE PROJECT NUMBER
1000-57-05



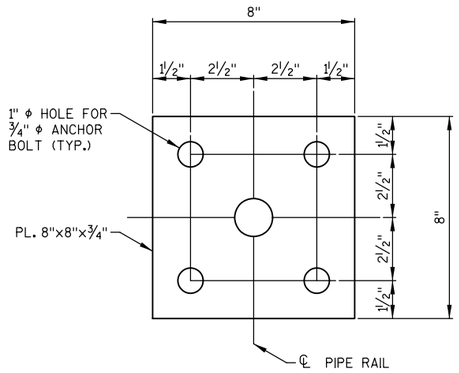
PIPE RAILING PLAN AT BRIDGE LEVEL



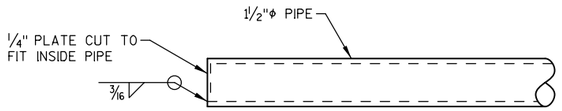
HANDRAIL DETAIL



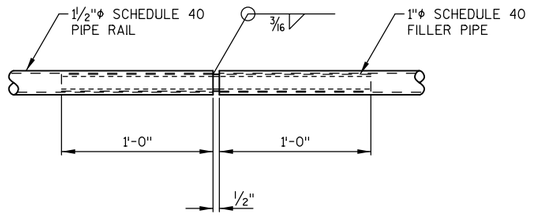
TYPICAL PIPE HANDRAIL POST ATTACHMENT



PIPE HANDRAIL BASE PLATE DETAIL



TYPICAL END CAP DETAIL



PIPE RAIL SPLICE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. ---

PIPE RAILING DETAILS

SHEET S-505

8

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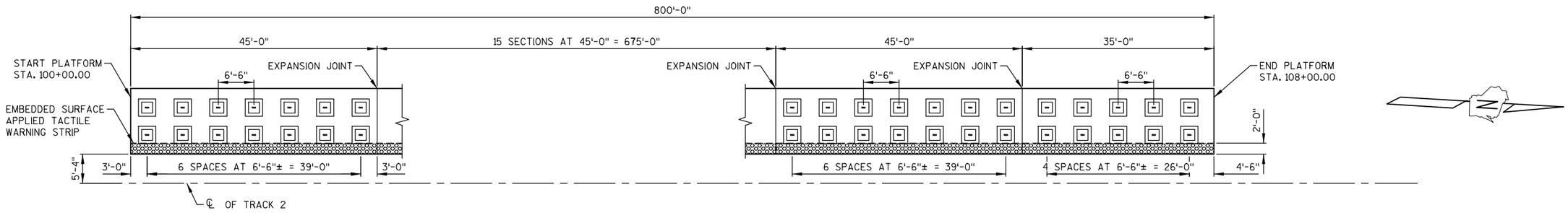
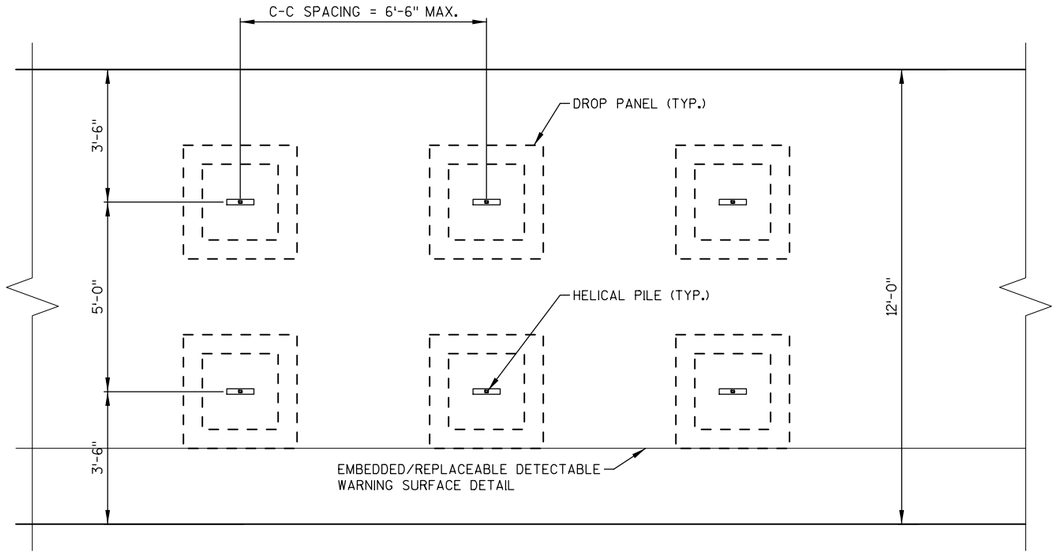


HELICAL PILE LAYOUT



PLATFORM PARTIAL PLAN

SCALE 1/2" = 1'-0"

A S-507

8

8

NO.	DATE	REVISION	BY

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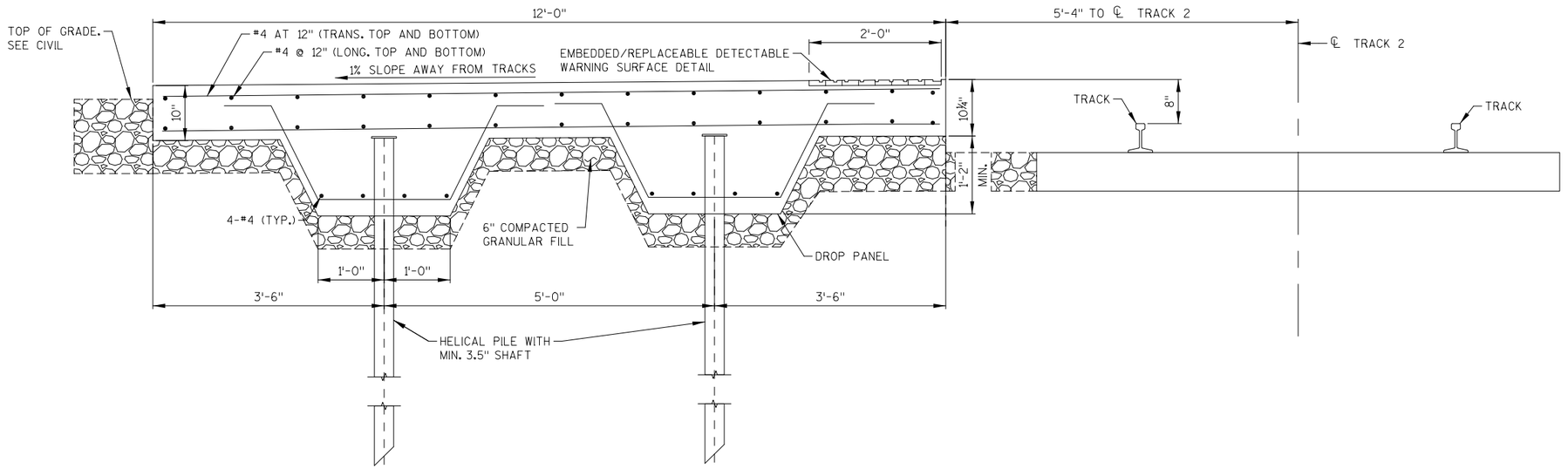
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY GTS | PLANS CK'D. ---

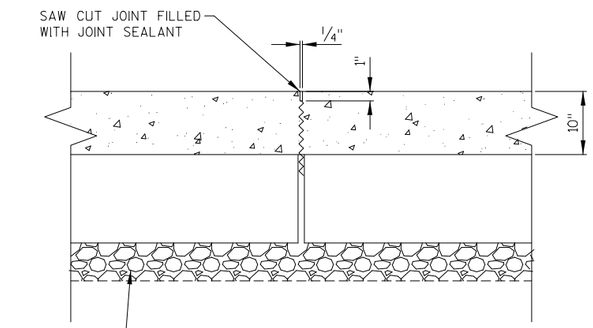
PLATFORM PILE LAYOUT

SHEET S-506



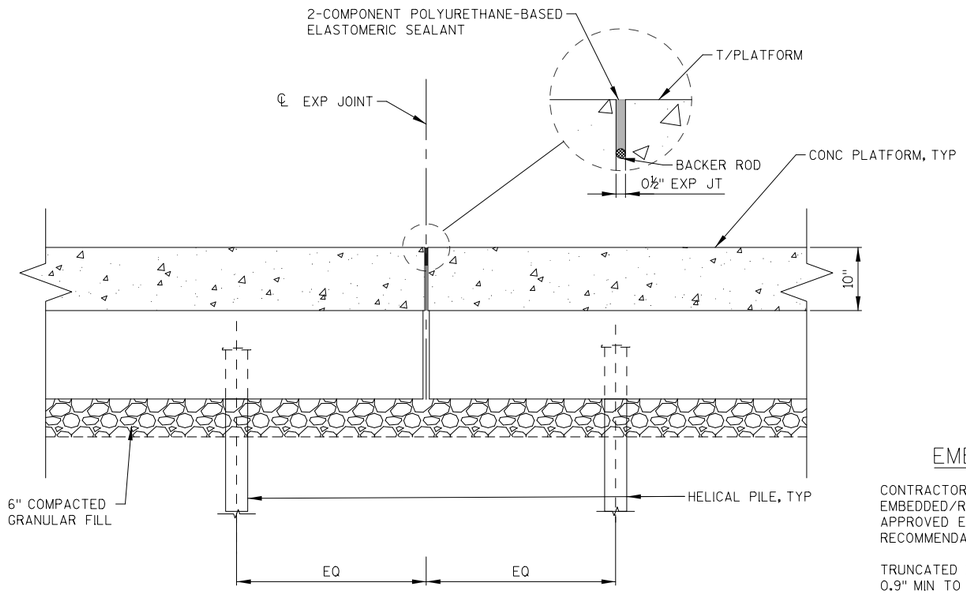
SECTION A

SCALE 1" = 1'-0"

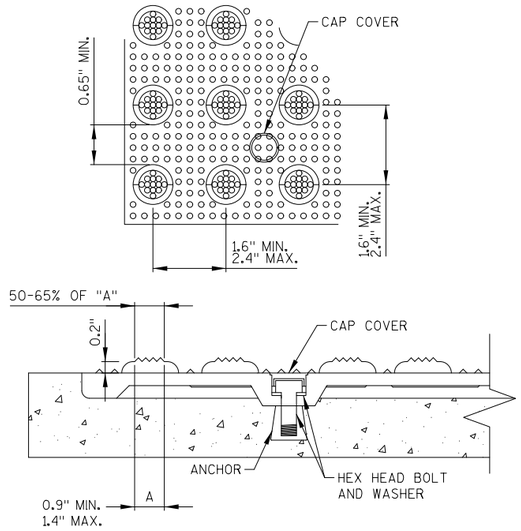


CONTRACTION JOINT

(12' MAX. SPACING)



EXPANSION JOINT



EMBEDDED/REPLACEABLE DETECTABLE WARNING SURFACE DETAIL

CONTRACTOR SHALL USE ADA SOLUTIONS EMBEDDED/REPLACEABLE DETECTABLE WARNING OR APPROVED EQUIVALENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9" MIN TO 1.4" MAX. WITH A TOP DIAMETER OF 50-65% OF THE BASE DIAMETER, A HEIGHT OF 0.2", AND 1.6"MIN/2.4" MAX. CENTER TO CENTER SPACING.

DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES; COLOR TO BE APPROVED BY AMTRAK.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

DRAWN BY GTS | PLANS CK'D. ---

PLATFORM DETAILS

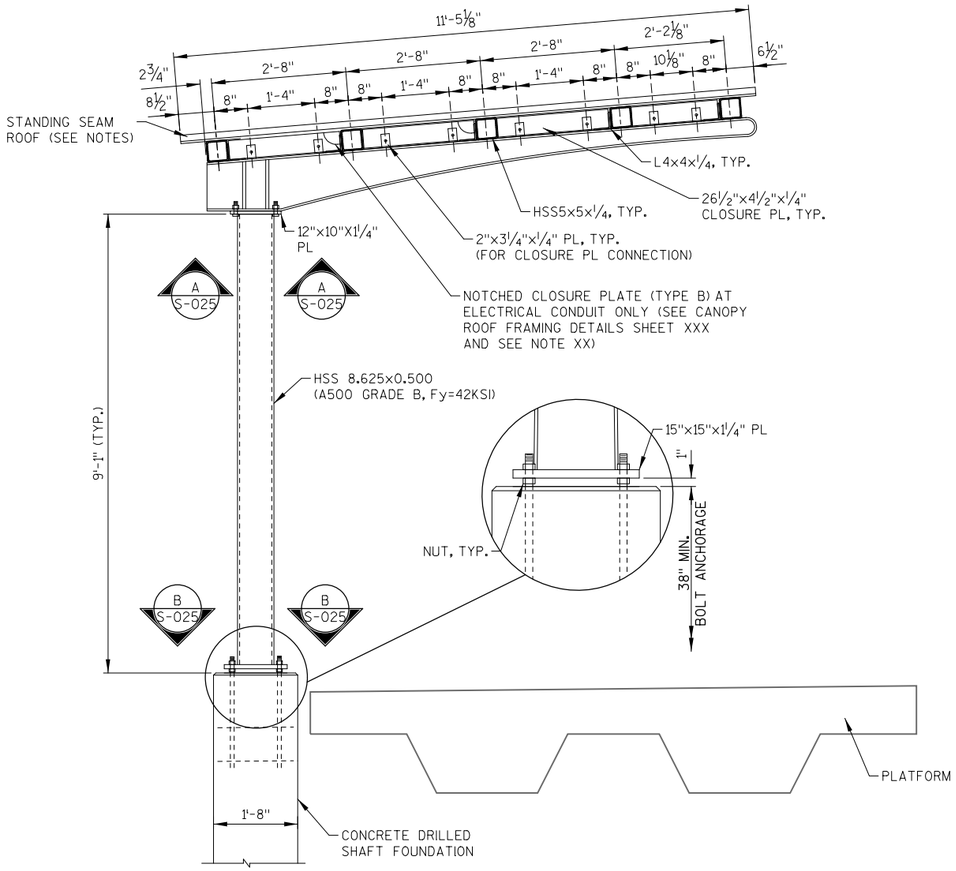
SHEET S-507

8

8

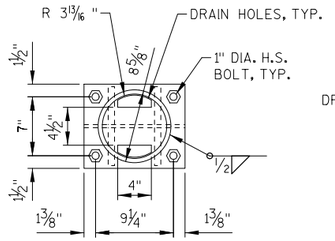
STATE PROJECT NUMBER

1000-57-05



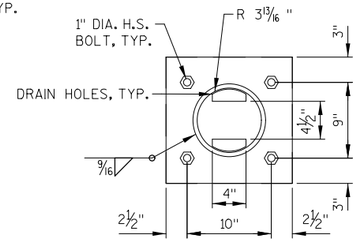
ELEVATION

SCALE: 1" = 2'-0"



SECTION A-A

N.T.S

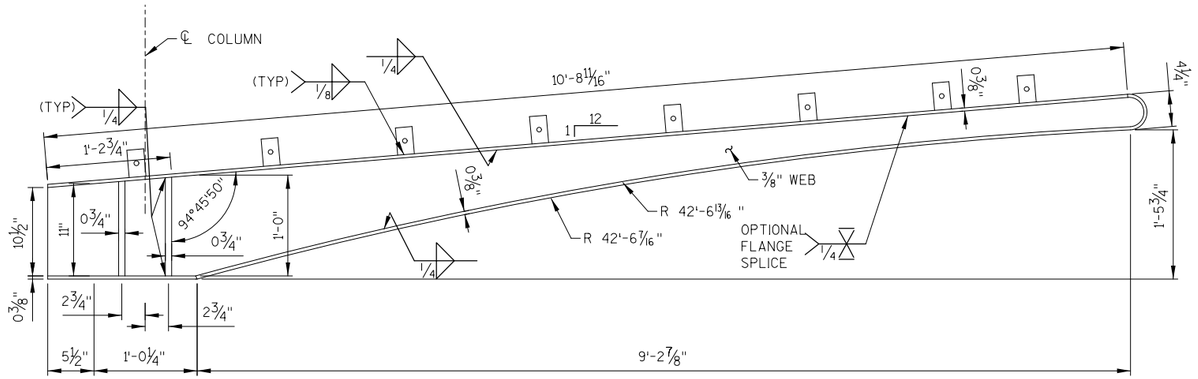


SECTION B-B

N.T.S

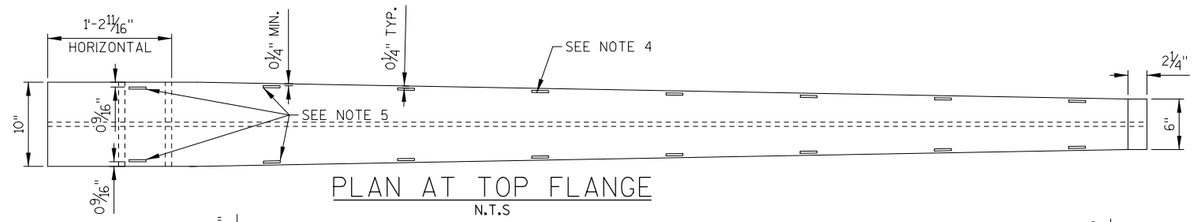
NOTES:

1. ROOF TO BE 20 GAGE, 2" HIGH GALVANIZED STANDING SEAM TYPE WITH 18" WIDE PANELS.
2. CONCEALED ANCHOR CLIPS FOR STANDING SEAM ROOF TO BE GALVANIZED STEEL WITH A MINIMUM .0598" THICKNESS.
3. FASTEN ANCHOR CLIPS TO STEEL PURLINS USING #14 DIAMETER SELF TAPPING GALVANIZED SCREWS AT EACH HSS PURLIN AND PANEL SEAM.
4. PLATES TO BE WELDED TO TOP OF FLANGE OF CANTILEVER ARM SO THAT THEY ARE PARALLEL TO THE TAPERED EDGE OF THE FLANGE.
5. ATTACHMENT PLATES AT NON-TAPERED SECTION OF CANTILEVER ARM TOP FLANGE TO BE PLACED SO THAT THEY ARE PARALLEL TO THE NON-TAPERED EDGE OF THE TOP FLANGE. ADJACENT ATTACHMENT PLATES TO BE PLACED PARALLEL WITH THESE PLATES TO FACILITATE PROPER FIT OF CLOSURE PLATES.
6. SEAL ALL OPENINGS BETWEEN CONDUIT AND CLOSURE PLATE TO PREVENT BIRD ACCESS.



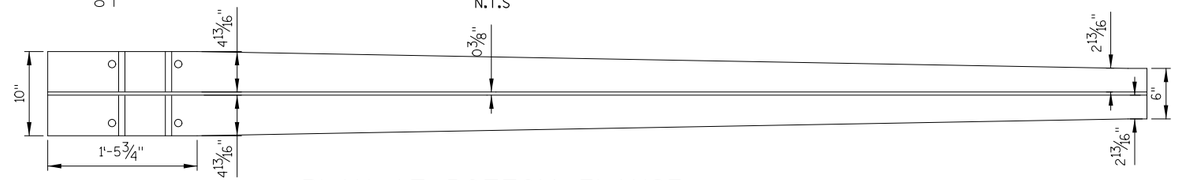
CANTILEVER ARM DETAIL

N.T.S



PLAN AT TOP FLANGE

N.T.S



PLAN AT BOTTOM FLANGE

N.T.S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

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PLATFORM CANOPY STEEL DETAILS

SHEET S-508

8

8

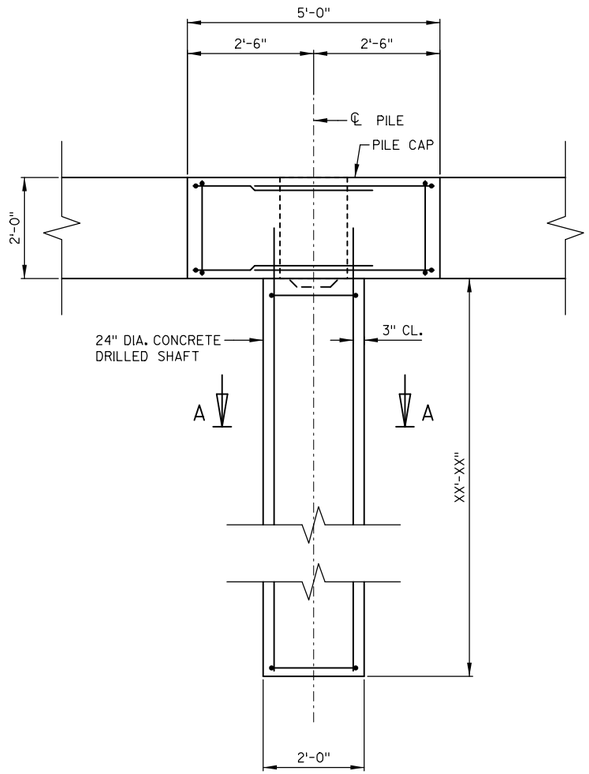
BATCH PRINT SHEET CSD OF NSD

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

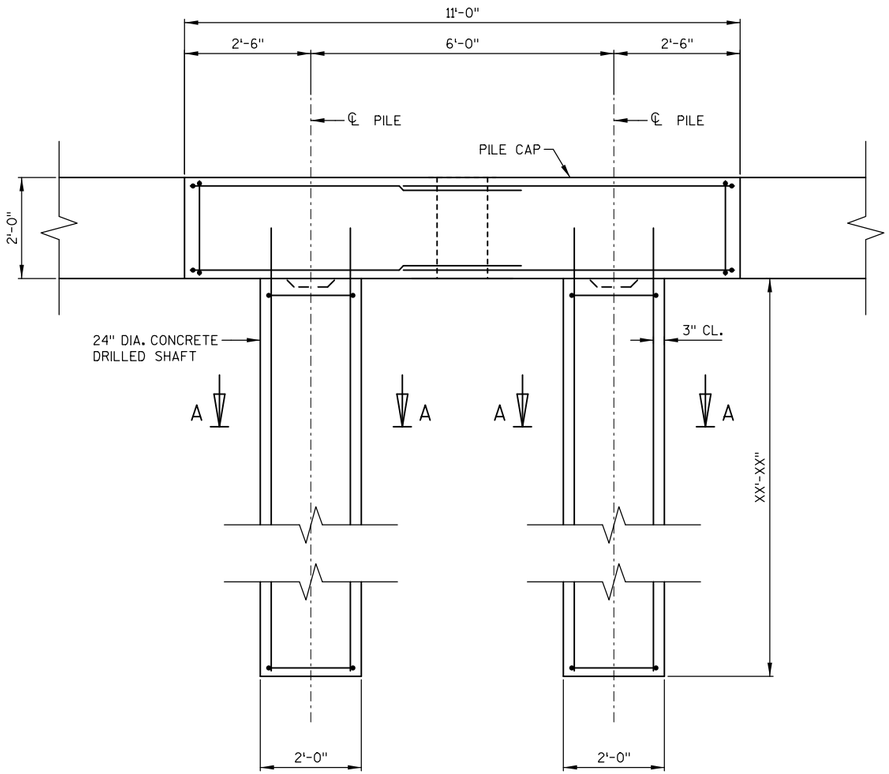
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plotingdate...$$ PLOT TIME: $$...plotingtime...$$

STATE PROJECT NUMBER

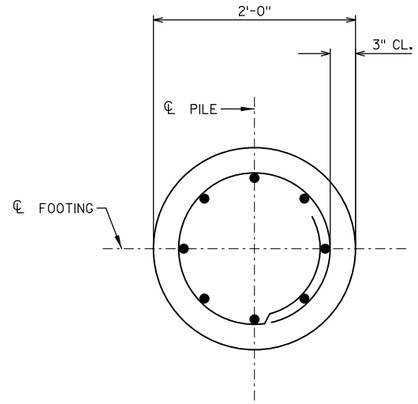
1000-57-05



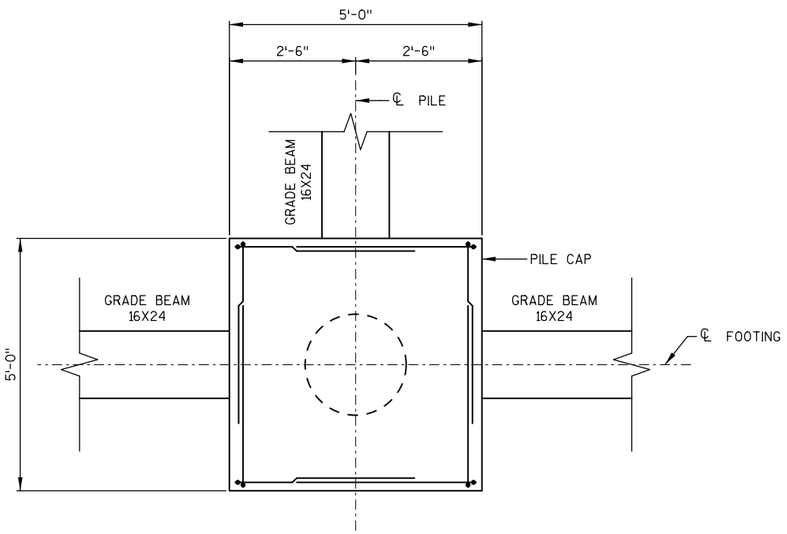
FOUNDATION TYPE 1
ELEVATION



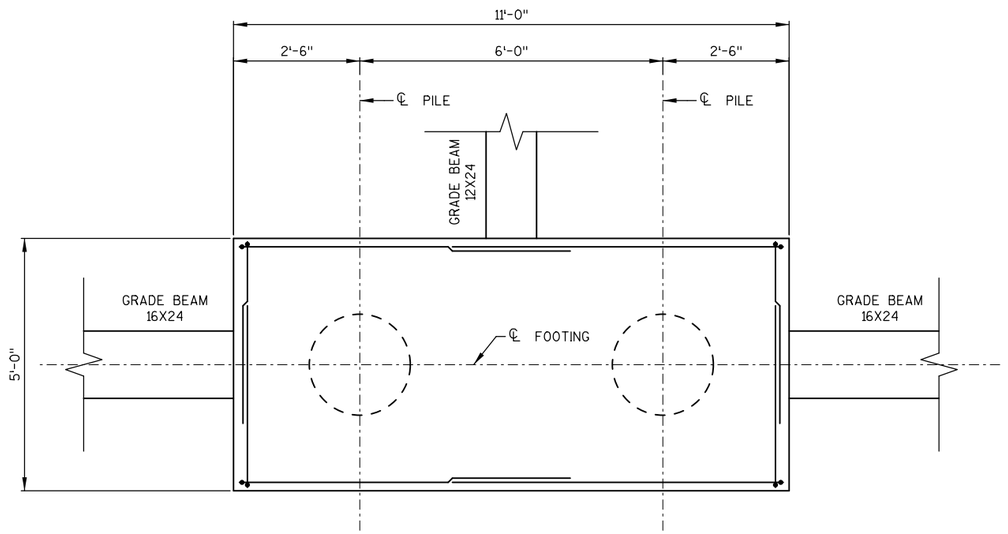
FOUNDATION TYPE 2
ELEVATION



SECTION A-A



FOUNDATION TYPE 1
PLAN



FOUNDATION TYPE 2
PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PEDESTRIAN BRIDGE

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BUILDING FOUNDATION DETAILS

SHEET S-509

8

8

CODE SUMMARY AND GENERAL NOTES

STATE PROJECT NUMBER

1000-57-05

A. STATE: WISCONSIN _____ MUNICIPALITY: MILWAUKEE
ADDRESS: 5601 S. 6TH STREET MILWAUKEE, WI
_____
THIS LIST IS PROVIDED FOR INFORMATION ONLY AND SHALL NOT BE CONSIDERED FINAL.
IDENTIFY AND COMPLY WITH ALL APPLICABLE CODES. REFER TO CHAPTER 34 (EXISTING STRUCTURES) OF THE IBC WHERE APPLICABLE.
BUILDING CODE 2015 INTERNATIONAL BUILDING CODE WISCONSIN ADMINISTRATIVE CODE CHAPTERS SPS 380 THROUGH SPS 387 MECHANICAL CODE 2015 INTERNATIONAL MECHANICAL CODE ELECTRICAL CODE 2017 NATIONAL ELECTRICAL CODE FUEL GAS CODE 2015 INTERNATIONAL FUEL GAS CODE
FIRE CODE 2015 NATIONAL FIRE CODE•
ACCESSIBILITY CODE 2006 US DEPARTMENT OF TRANSPORTATION ACCESSIBILITY STANDARDS
ENERGY CODE 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)•
PLATFORM EGRESS 2020 EDITION NFPA 130
•AS MODIFIED BY WISCONSIN ADMINISTRATIVE CODE

CODE ABBREVIATIONS:
ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
ASCE - AMERICAN SOCIETY OF CIVIL ENGINEERS
ASME - AMERICAN SOCIETY OF MECHANICAL ENGINEERS
CABO - COUNCIL OF AMERICAN BUILDING OFFICIALS
DOTAS - DEPARTMENT OF TRANSPORTATION ACCESSIBILITY STANDARDS
IBC - INTERNATIONAL BUILDING CODE
IFGC - INTERNATIONAL FUEL GAS CODE
IFC - INTERNATIONAL FIRE CODE
IMC - INTERNATIONAL MECHANICAL CODE
IPC - INTERNATIONAL PLUMBING CODE
IRC - INTERNATIONAL RESIDENTIAL CODE
MF/IC - MOBILITY FIRST/INTER-CITY
NEC - NATIONAL ELECTRIC CODE
UPC - UNIFORM PLUMBING CODE

B. CODE SUMMARY - STATION BUILDING
EXISTING BUILDING CONSTRUCTION TYPE: VB (NO CHANGE TO USE, OCCUPANCY OR EGRESS) BASED ON EXISTING DRAWINGS)
NEW BUILDING CONSTRUCTION TYPE: IIB
OCCUPANCY CLASSIFICATION, SECTION 303.4 ASSEMBLY GROUP A-3
(WAITING AREAS IN TRANSPORTATION TERMINALS)
GROSS WAITING AREA (INCLUDES WAITING AREA COUNCOURSE AND CORRIDOR) = 9,162 SF
NUMBER OF OCCUPANTS:
11/32 WAITING AREA CONCOURSE (NET) = 6427 / 15 SF PP = 429 OCCUPANTS
11/32 FIXED SEATING = 292 LF / 1.5 FT/PERSON = 195 OCCUPANTS
TOTAL NO. OF OCCUPANTS = 624

NO WORK IN STATION BUILDING

C. PLUMBING FIXTURE COUNTS (CODE AND DESIGNATION) PER TABLE 2902.1
N/A
AUTOMATIC SPRINKLER SYSTEMS: no
FIRE ALARM SYSTEMS: YES
PARKING SPACE ANALYSIS PER TABLE 1106.1
NOT REQUIRED

D. EGRESS REQUIREMENTS FOR PLATFORM:
1. THE MAXIMUM TRAVEL DISTANCE ON THE PLATFORM TO A POINT AT WHICH A MEANS OF EGRESS ROUTE LEAVES THE PLATFORM SHALL NOT EXCEED 325'. PROPOSED MAXIMUM = 293'.
2. A COMMON PATH OF TRAVEL FROM THE ENDS OF THE PLATFORM SHALL NOT EXCEED 82' OR ONE CAR LENGTH, WHICHEVER IS GREATER. PROPOSED COMMON PATH = 0'-0" AT BOTH ENDS
3. AT LEAST TWO MEANS OF EGRESS REMOTE FROM EACH OTHER SHALL BE PROVIDED FROM EACH STATION PLATFORM. THREE MEANS OF EGRESS PROPOSED - TWO RAMPS AT EACH END OF PLATFORM AND ONE STAIR TO THE EXISTING BRIDGE
4. A MINIMUM OF 44" SHALL BE PROVIDED ALONG ALL PLATFORMS, CORRIDORS, AND RAMPS SERVING AS A MEANS OF EGRESS. PROPOSED RAMP WIDTH = 8'-0" (6'-4 1/2" CLEAR)
5. STAIRS IN THE MEANS OF EGRESS SHALL BE A MINIMUM OF 44" WIDE. PROPOSED STAIR WIDTH = 6'-2 1/2" CLEAR

E. TOLERANCE NOTES:
NOTES ON THE ACCESSIBLE STATIONS DEVELOPMENT PROGRAM:
1. IT IS THE EXPRESS PURPOSE OF ALL WORK UNDER THIS CONTRACT TO BRING THE STATION INTO COMPLIANCE WITH THE 2006 DEPARTMENT OF TRANSPORTATION ACCESSIBILITY STANDARDS (DOTAS)
2. IT SHALL BE THE DUTY OF THE CONTRACTOR TO PROMPTLY NOTIFY THE PROGRAM ENGINEER OF ANY CONDITION WHERE IT IS NOT POSSIBLE TO COMPLY WITH THE DESIGN FIELD CONDITIONS
3. ALL WORK THAT FAILS TO COMPLY WITH THE DESIGN INTENT GIVEN IN THE CONTRACT DOCUMENTS SHALL BE REPLACED AT NO ADDITIONAL COST BY THE CONTRACTOR.

F. DIMENSIONING NOTES:
1. DIMENSIONS INDICATED AS "HOLD" ARE CRITICAL FOR DOTAS COMPLIANCE AND MAY NOT BE REDUCED OR ENLARGED.
2. DIMENSIONS INDICATED AS "MIN" ARE CRITICAL FOR DOTAS COMPLIANCE AND MAY NOT BE REDUCED.
3. DIMENSIONS INDICATED AS "MAX" ARE CRITICAL FOR DOTAS COMPLIANCE AND MAY NOT BE ENLARGED.
4. ANY DEVIATION FROM ITEMS 1 THROUGH 3 ABOVE MUST BE APPROVED PRIOR TO CONSTRUCTION.

G. TYPICAL GRADING NOTES:
1. IT SHALL BE THE CONTRACTOR5/32S RESPONSIBILITY TO DEMONSTRATE THAT ALL ROUGH GRADING AND FORMWORK WILL RESULT IN FINISHED GRADES THAT COMPLY WITH THE CONSTRUCTION TOLERANCES LISTED IN THIS SECTION.
2. THE CONTRACTOR SHALL USE THE FOLLOWING CRITERIA AT ALL NEW PAVED AREAS.
3. WALKWAYS:
a. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 1:22 (4.5%).
b. MAXIMUM CROSS SLOPE SHALL NOT EXCEED 1:60 (1.67%).
4. RAMPS, STAIRS, AND LANDINGS:
a. MAXIMUM SLOPE AT STAIR TREADS AND LANDINGS SHALL NOT EXCEED 1:60 (1.67%) IN ANY DIRECTION.
b. MAXIMUM RUNNING SLOPE AT RAMPS SHALL NOT EXCEED 1:13 (7.69%).
c. MAXIMUM CROSS SLOPES AT RAMPS SHALL NOT EXCEED 1:60 (1.67%).
5. MAXIMUM SLOPE AT ADA PARKING STALLS SHALL NOT EXCEED 1:60 (1.67%) IN ANY DIRECTION.
6. CONTRACTOR SHALL ADJUST DIMENSIONS AS REQUIRED IN THE FIELD SUCH THAT TOLERANCES AS STATED ABOVE ARE ACHIEVED AND EDGES AT ALL TRANSITIONS BETWEEN NEW AND EXISTING PAVEMENTS OR SIDEWALKS SHALL BE FULL THICKNESS AND SET FLUSH WITH EXISTING PAVEMENT OR SIDEWALKS AND MEET THE ABOVE CRITERIA.
7. IF THESE TOLERANCES CANNOT BE ACHIEVED DUE TO EXISTING CONDITIONS DISCREPANCIES, CONTRACTOR SHALL NOTIFY PROJECT ENGINEER IMMEDIATELY.

H. GENERAL NOTES:
1. DRAWINGS ARE NOT TO BE SCALED. USE DIMENSIONS ONLY. ALL DIMENSIONS AND CONDITIONS SHOWN AND ASSUMED ON THE DRAWINGS MUST BE VERIFIED AT THE SITE BY THE CONTRACTOR BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK. ANY DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS SHALL BE REPORTED TO THE AUTHORITY. NO CHANGE IN DRAWINGS OR SPECIFICATIONS IS PERMISSIBLE WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT/ENGINEER. NO WORK SHALL PROCEED UNTIL SUCH DISCREPANCY HAS BEEN RECTIFIED.
2. ALL WORK ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK WHETHER STATED OR NOT EXCEPT WHERE SPECIFICALLY NOTED AS "EXISTING TO REMAIN".
3. ALL WORK MUST BE COORDINATED WITH THE AMTRAK STATION PERSONNEL SO AS NOT TO INTERFERE WITH THE NORMAL OPERATIONS OF THE EXISTING FACILITIES.
4. CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES UNDER THIS CONTRACT.
5. THE CONTRACTOR SHALL DISCONNECT AND/OR REMOVE EXISTING PLUMBING, ELECTRICAL FIXTURES, WIRE, CONDUITS, DUCTWORK, OR OTHER WORK WHICH MIGHT INTERFERE WITH THE WORK OF THIS CONTRACT. AFTER NEW WORK IS COMPLETED, THE DISCONNECTED OR REMOVED ITEMS SHALL BE REINSTALLED BY THE CONTRACTOR AT THE SAME LOCATION UNLESS DIRECTED OTHERWISE. FURNISH NEW MATERIALS AND HARDWARE AS REQUIRED FOR COMPLETION OF WORK.
6. THE CONTRACTOR SHALL PATCH AND REPAIR ALL WORK DAMAGED DUE TO THIS CONTRACT. ALL NEWLY INSTALLED AND/OR PATCHED WORK AT ALL AFFECTED AREAS SHALL BE PAINTED. ALL PAINTING WORK SHALL BE PERFORMED TO COVER THE ENTIRE HORIZONTAL OR VERTICAL SURFACE TO THE CLOSEST CORNER IN ALL FOUR DIRECTIONS. COLOR TO MATCH EXISTING CONDITIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTIONS AND OFF ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.
8. THE CONTRACTOR SHALL INCLUDE ALL PREPARATORY AND ASSOCIATED SUPPLEMENTARY WORK TO PROVIDE A COMPLETE AND FINISHED INSTALLATION.
9. WHERE MANUFACTURER'S NAMES AND PRODUCT NUMBERS ARE INDICATED ON DRAWINGS, IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHMENT OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS. ALL OTHER PRODUCTS MUST BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE THEY SHALL BE DEEMED EQUAL.
10. FIRESTOPPING SHALL BE INSTALLED AT ALL PENETRATIONS OF FIRE RATED CONSTRUCTION AS PER SPECIFICATIONS.
11. SIZE OF MASONRY UNITS AND WOOD MEMBERS ON PLANS, BUILDING ELEVATIONS AND SECTIONS ARE SHOWN AS NOMINAL SIZE.
12. DIMENSIONS ON PLANS ARE INDICATED FROM SURFACE TO SURFACE BETWEEN WALLS, PARTITIONS AND OTHER ITEMS EXCLUSIVE OF FINISHES.
13. THE CONTRACTOR SHALL KEEP WORK SITE FREE FROM DEBRIS AND ACCUMULATED REFUSE AND SHALL HAVE SOLE RESPONSIBILITY FOR PROTECTING ALL DANGEROUS AREAS FROM ENTRY BY UNAUTHORIZED PARTIES. SITE SHALL BE LEFT BROOM CLEAN AT THE END OF EACH WORKING DAY.
14. THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR REQUIRED INSPECTIONS, PERMIT(S), FEES, LICENSE AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
15. THERE WILL BE NO CHANGE IN USE, EGRESS OR OCCUPANCY BECAUSE OF THE WORK OF THIS CONTRACT.
16. ADDITIONAL NOTES WHICH ARE APPLICABLE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

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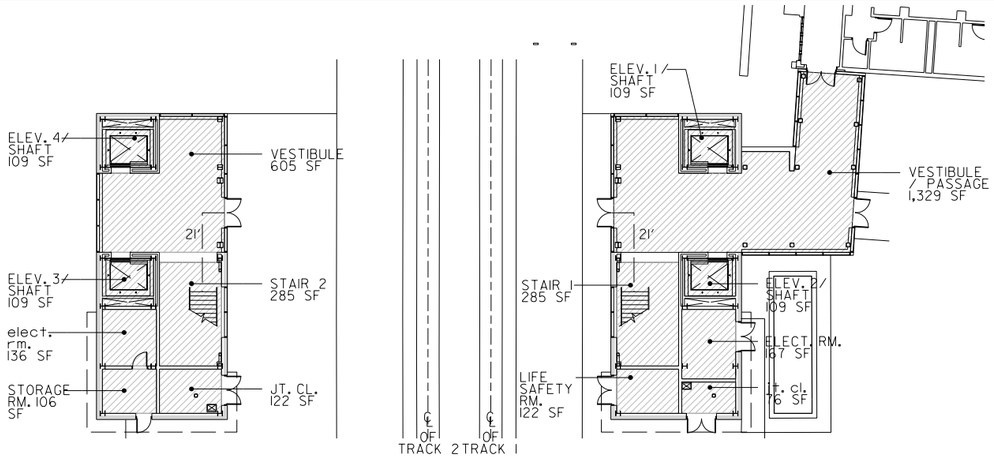
CODE SUMMARY & GENERAL NOTES

SHEET
G-001

SCALE = AS NOTED

STATE PROJECT NUMBER

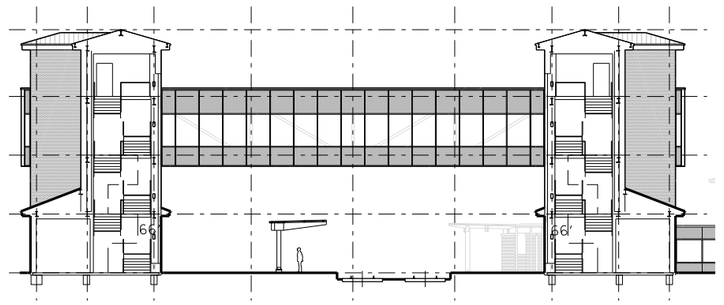
1000-57-05



1 G-002 FIRST FLOOR EGRESS PLAN

SCALE: 1/16"=1'-0"

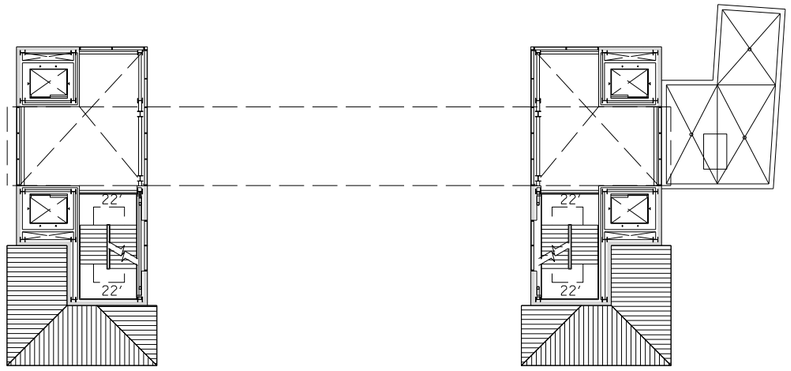
0 8 16 32 FT



4 G-002 EGRESS SECTION

SCALE: 1/16"=1'-0"

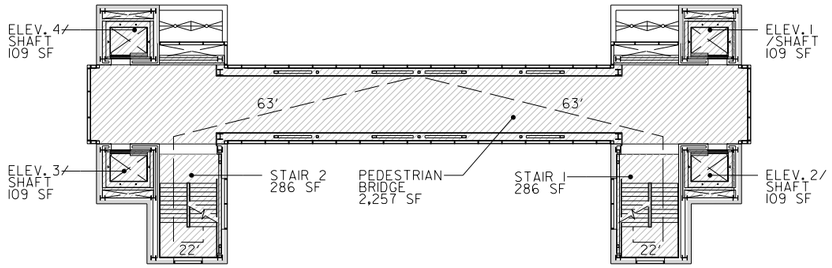
0 8 16 32 FT



2 G-002 INTERMEDIATE LEVEL EGRESS PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT



3 G-002 SECOND FLOOR EGRESS PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

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EGRESS PLANS AND CALCULATION

SHEET G-002

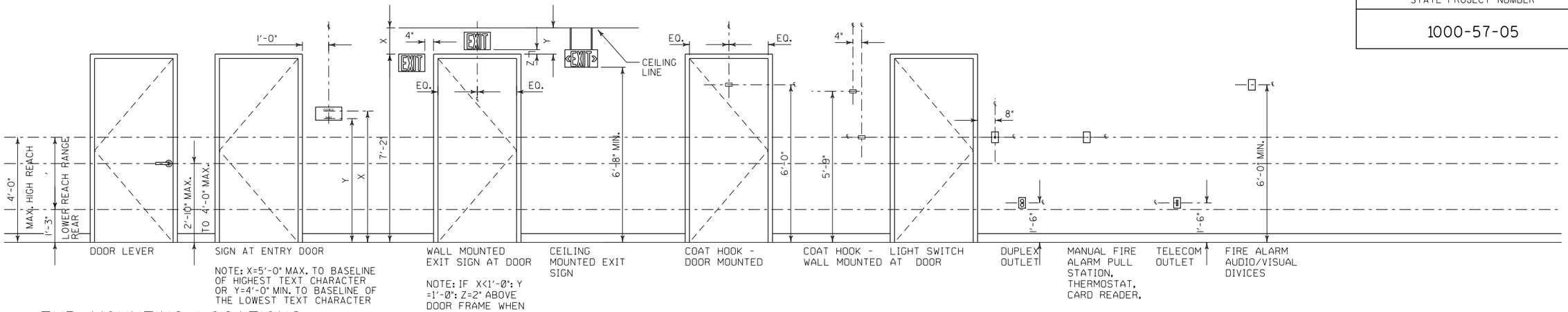
SCALE = AS NOTED

8

8

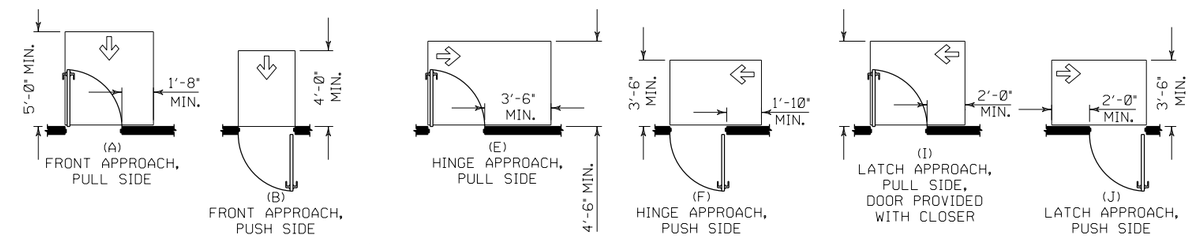
STATE PROJECT NUMBER

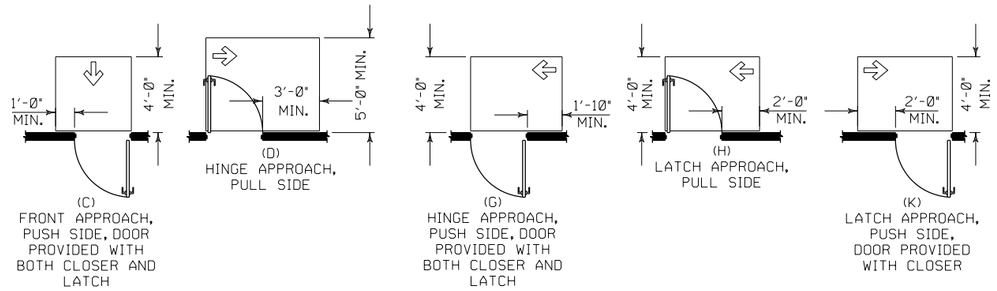
1000-57-05



1 G-003 TYP. MOUNTING LOCATIONS

SCALE: 1/2"=1'-0"





2 G-003 CLEARANCES AT MANUAL SWINGING DOOR

SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

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ACCESSIBILITY REQUIREMENTS (ADA)

SHEET G-003

SCALE = AS NOTED

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
#	POUND OR NUMBER
ACT	ACOUSTIC CEILING TILE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJACENT OR ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
AMT	AMTRAK
ANOD	ANODIZED
APPROX	APPROXIMATELY
ARCH	ARCHITECT(URAL)
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATR	ABOVE TOP OF
AUTO	AUTOMATIC
BD	BOARD
BL	BUILDING LINE
BLDG	BUILDING
BLKG	BLOCKING
BO	BOTTOM OF
BOC	BOTTOM OF CURB
BOW	BOTTOM OF WALL
BSMT	BASEMENT
BYND	BEYOND
CAB	CABINET
CB	CATCH BASIN
CF	CUBIC FEET
CH	COAT HOOK
CHNL	CHANNEL
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CL. / CLOS.	CLOSET
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT, CASED OPENING
COL	COLUMN
COMPR	COMPRESSIBLE
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONV	CONVECTOR
CORR	CORRIDOR
CPT	CARPET
CPU	CENTRAL PROCESSING UNIT
CT	CERAMIC TILE
CTR	CENTER
CTY	COURTYARD
D	DEEP, DEPTH
D.C.	DUST CHUTE
DB. / DISP. BD	DISPLAY BOARD
DB.S.	DISPLAY BOARD SURFACE
DBL	DOUBLE
DEMO	DEMOLITION
DEP.	DEPRESSED
DEPT.	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMEMSION
DISP	DISPENSER
DISP CAB	DISPLAY CABINET
DIV	DIVIDE, DIVISION
DN	DOWN
DR	DOOR
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
ENCL	ENCLOSE, ENCLOSURE
EP	ELECTRIC PANEL
EPDM	ETHYLENE PROPYLENE PROPYLENE DIENE M-CLASS ROOFI

ABBREVIATIONS CONT.

ABBREVIATION	DESCRIPTION
EQ	EQUAL
EQUIP	EQUIPMENT
ESCAL	ESCALATOR
EX	EXISTING
EXH	EXHAUST
EXP	EXPANSION, EXPOSED
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH, FINISHED
FIXT	FIXTURE
FLOUR	FLUORESCENT
FLR	FLOOR, FLOORING
FM	FILLED METAL
FO	FACE OF, FINISH OPENING
FP	FIRE PROTECTION, FIREPROOF
FR	FRAME.FIRE
GA	GAUGE
GALV	GALVANIZED
GB	GLAZED BLOCK
GC	GENERAL CONTRACTOR
GL	GLASS
GR ELEV	GRADE ELEVATION
GV	GAS VALVE
GWB	GYPSUM BOARD
H	HIGH
H.	HIGH
H.P.	HIGH POINT
H.R.	HAND RAIL
HC	HOLLOW CORE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
ILO	IN LIEU
INFO	INFORMATION
INSUL	INSULATED
INT	INTERIOR
IRGWB	IMPACT RESISTANT GYPSUM WALL
JT	JOINT
LAV	LAVATORY
LCD	LIQUID
LED	LIGHT EMITTING
LP	LOW POINT
LT	LIGHT
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMBR	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MO	MASONRY
MPH	MILES PER
MRGWB	MOISTURE- RESISTANT GYPSUM WALL BOARD
MTD	MOUNTED
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OAI	OUTSIDE AIR INTAKE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND / OVEREHEAD
OPP	OPPOSITE
OZ	OUNCE
P	PAINT
PCC	PRE-CAST CONCRETE
PLUMB	PLUMBING

ABBREVIATIONS CONT.

ABBREVIATION	DESCRIPTION
PLYD	PLYWOOD
PNT	PRESSURE TREATED POINT OF TANGENT
PSF	POUNDS PER SQUARE FOOT
PT	PAINT/PAINTED
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RADIUS
RAD	RADIATOR
RB	RESILIENT BASE (VINYL OR RUBBER)
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCING
REQ	REQUIRED
RET	RETAINING
RI	RESCUE INTERCOM
RM	ROOM
RO	ROUGH OPENING
RPZ	REDUCED PRESSURE ZONE
RT	RUBBER TILE
RUB	RUBBER
RW	RESILIENT WOOD
SAD	SADDLE
SAN	SANITARY
SECT	SECTION
SF	SQUARE FEET
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPRINKLER
SS	STAINLESS STEEL
ST PL	STEEL PLATE
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STO	STORAGE
STRUCT	STRUCTURAL
T&G	TONGUE AND GROOVE
T/D	TELEPHONE/DATA
TBD	TO BE DETERMINED
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICKNESS
TLT	TOILET
TO	TOP OF
TOC	TOP OF CONCRETE
TOP	TOP OF PLATFORM
TOR	TOP OF RAIL
TOS	TOP OF STEEL
TOSB	TOP OF SLAB
TYP	TYPICAL
U/S	UNDERSIDE
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VENT	VENTILATOR
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFIY IN FIELD
VIN	VINYL
VOC	VOLATILE ORGANIC COMPOUND
VP	VISION PANEL
W/	WITH
WAINS.	WAINSCOT
WARD	WARDROBE
WC	WATER CLOSET
WD	WOOD
WH	WEEPHOLE
WI	WROUGHT IRON
WM	WIRE MESH
WP	WATERPROOFING
WT.	WEIGHT
WWF	WELDED WIRE FABRIC
WXHXL	WIDTH BY HEIGHT BY LENGTH

SYMBOLS

- COLUMN GRIDLINE
- CENTER LINES
- MATCH LINE (SEE X/X-XXX)
- MATCH LINE
- BREAK LINE
- DRAWING REVISION
- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED
- NEW WORK
- DOOR NUMBER
- LOUVER NUMBER
- FINISH SYMBOL (PT-X)
- WALL PARTITION TYPE
- ELECTRICAL PANEL (EP)
- FLOOR DRAIN (FD)
- KEYNOTE
- ACCESSORY
- ROOM TAG (ROOM NAME, ###)
- WINDOW NUMBER (W#)
- SIGNAGE TYPE
- DATUM (ELEVATION EL. X'-X")
- NORTH ARROW SYMBOL (N)
- FIRE ALARM - MANUAL PULL (F)
- FIRE EXTINGUISHER (FE)
- FIRE EXTINGUISHER CABINET (FEC)
- WALL-MOUNTED LIGHT
- DOWNLIGHT
- WALL-MOUNTED EXIT LIGHT
- CEILING-MOUNTED EXIT LIGHT
- CEILING HEIGHT INDICATOR (XX'-XX")
- CEILING MOUNTED LIGHTING
- HVAC DIFFUSERS
- HVAC RETURNS
- LINEAR DIFFUSER
- CEILING-MOUNTED ACCESS PANEL
- ROOF DRAIN (RD)

DETAIL DESIGNATOR
ELEVATION DESIGNATION
DRAWING NUMBER OR WHICH DETAIL IS SHOWN

ELEVATION DESIGNATOR
ELEVATION DESIGNATION
DRAWING NUMBER OR WHICH DETAIL IS SHOWN

SECTION DESIGNATOR
ELEVATION DESIGNATION
DRAWING NUMBER OR WHICH DETAIL IS SHOWN

SYMBOLS

- BRICK
- CONCRETE
- CMU
- RIGID INSULATION
- GRAVEL
- EARTH

STATE PROJECT NUMBER
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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

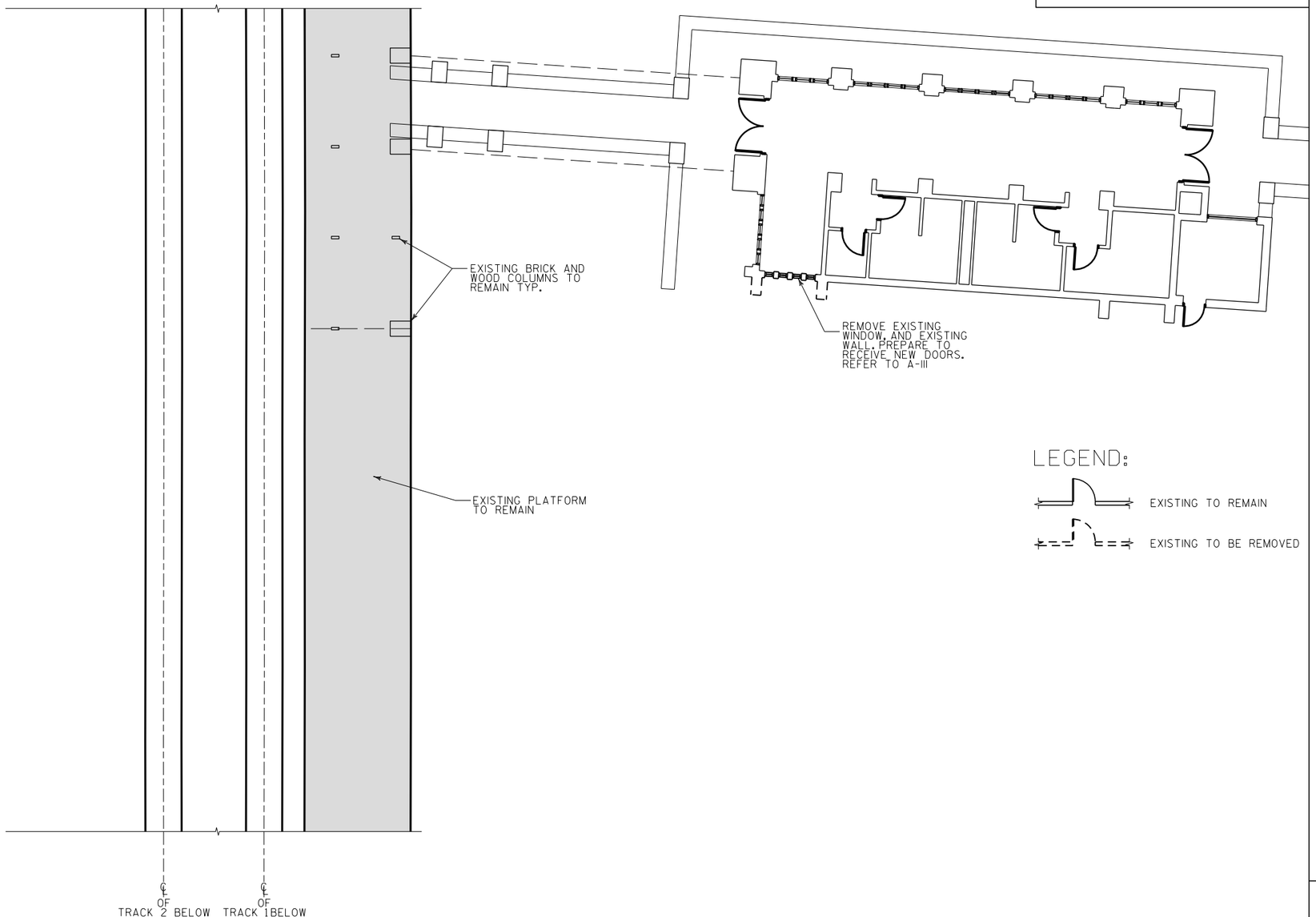
DRAWN BY JR | PLANS CK'D. --

ARCHITECTURAL ABBREVIATIONS & SYMBOLS

SHEET
A-000

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-05



LEGEND:

EXISTING TO REMAIN

EXISTING TO BE REMOVED

1 / A-100 AREA OF DEMOLITION

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

8

8

NO.	DATE	REVISION	BY

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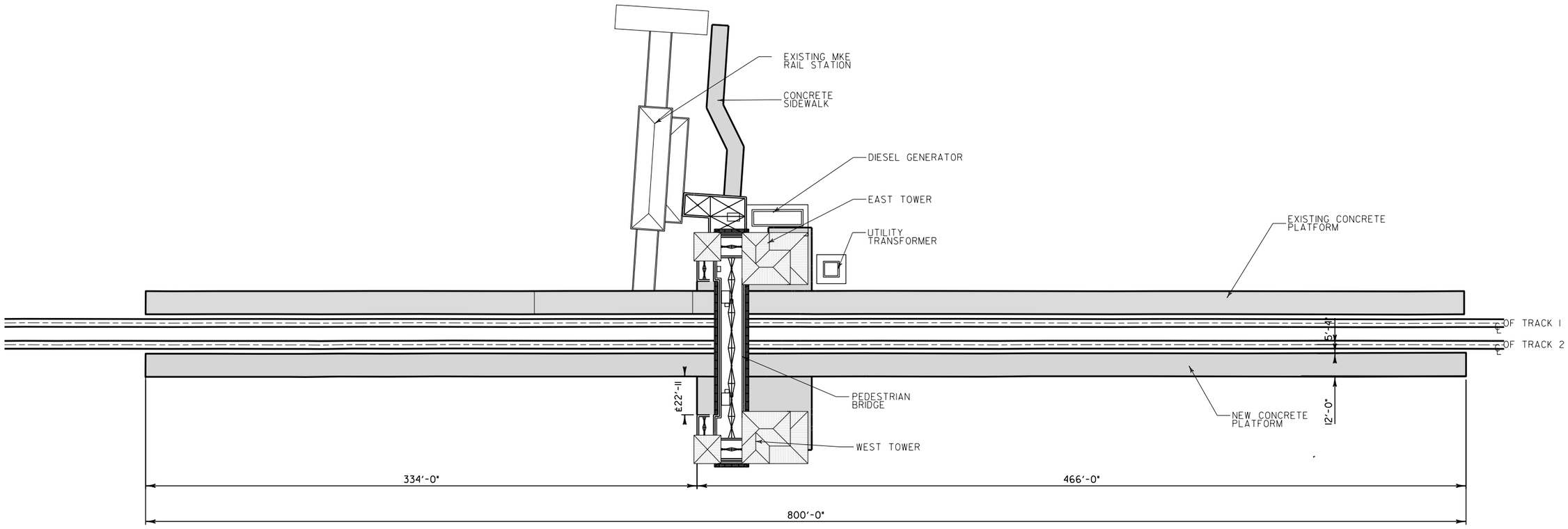
AREA OF DEMOLITION

SHEET A-100

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-05



1 A-106 OVERALL PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

N

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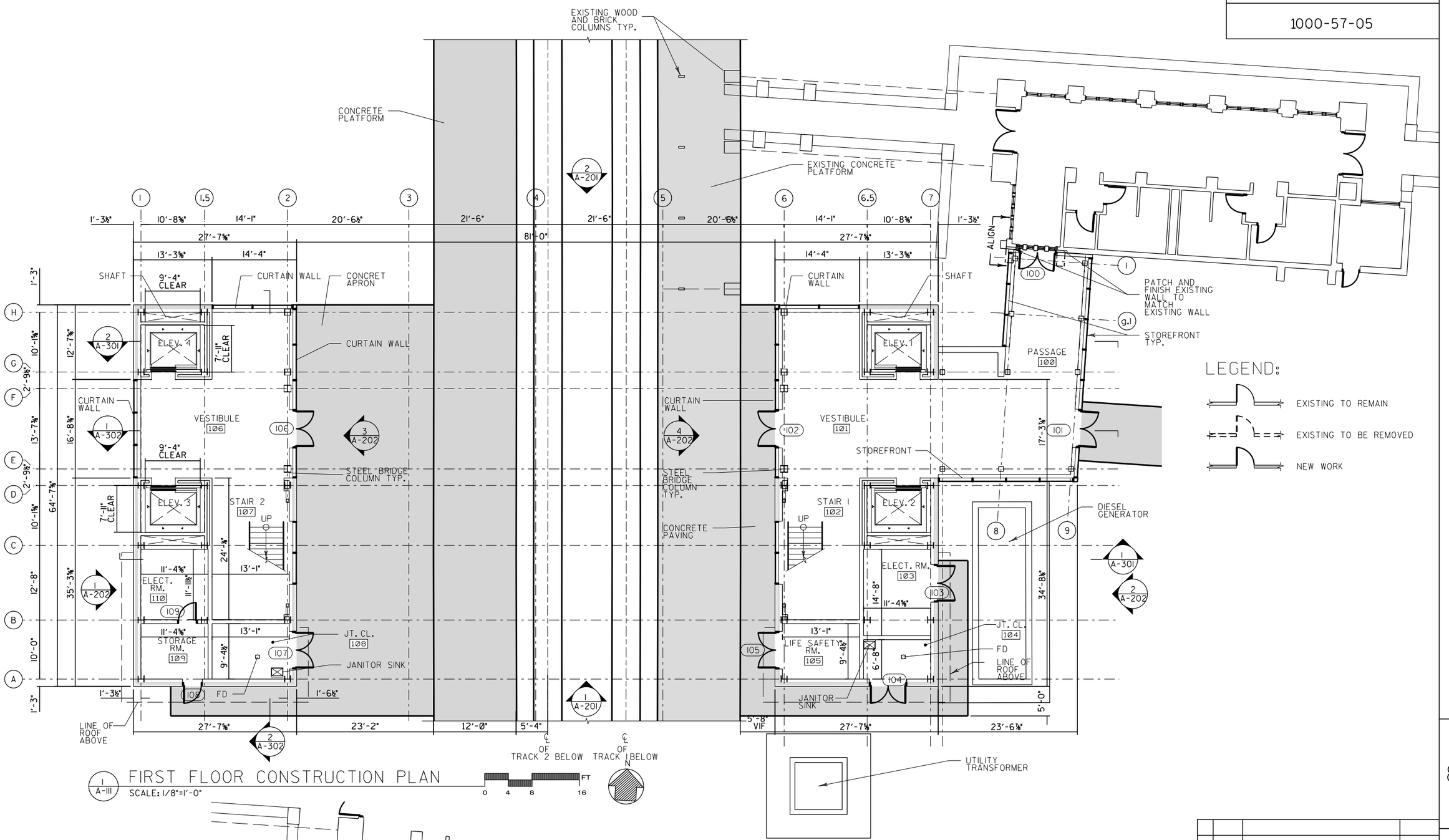
OVERALL PLAN

SHEET
A-106

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



LEGEND:

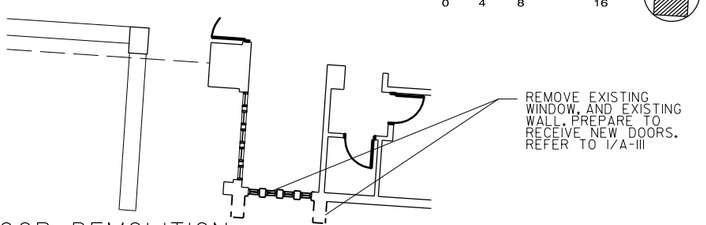
- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- NEW WORK

1 A-111 FIRST FLOOR CONSTRUCTION PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N



2 A-111 FIRST FLOOR DEMOLITION PARTIAL PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

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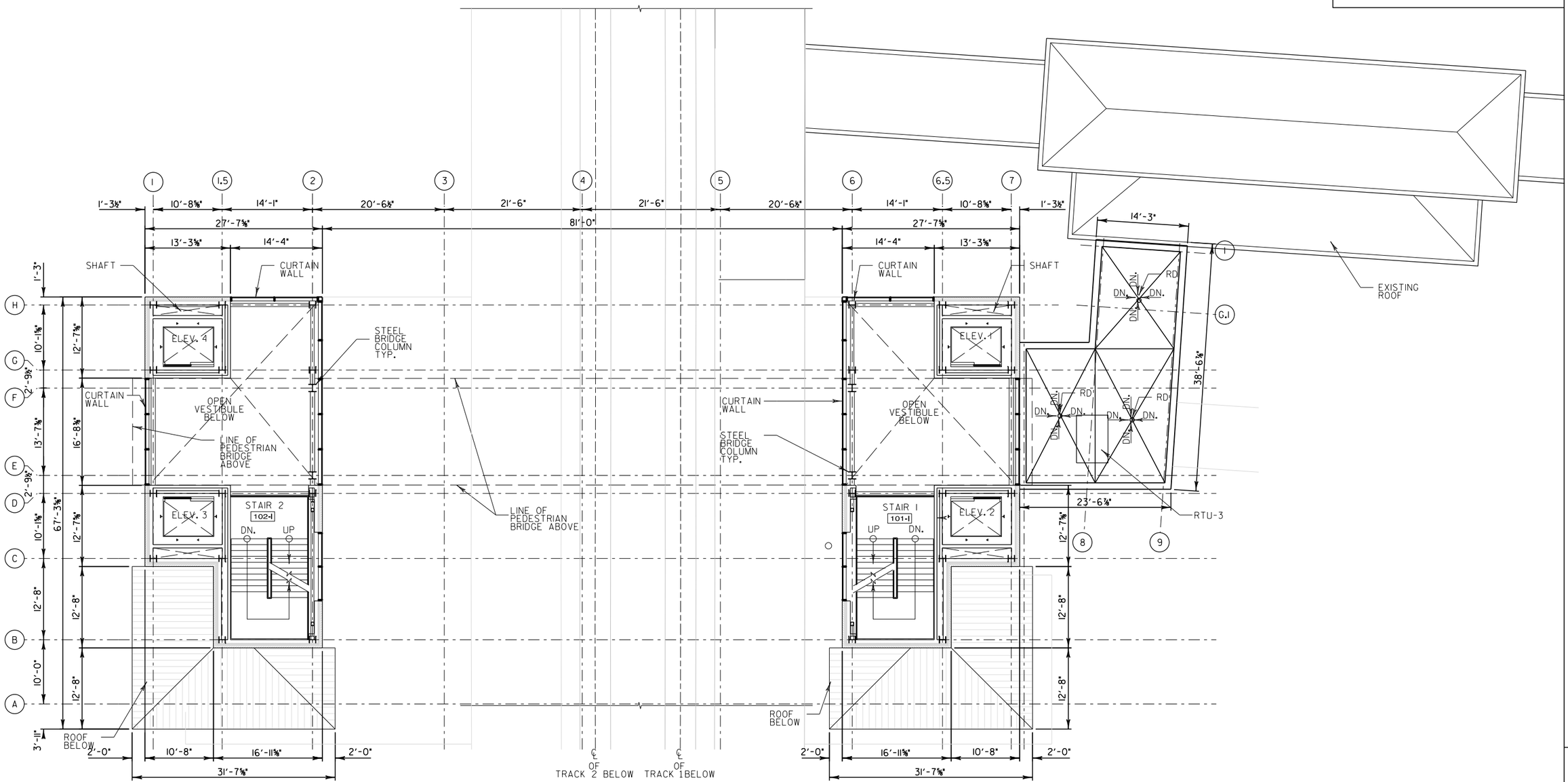
FIRST FLOOR CONSTRUCTION PLAN

SHEET A-111

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-112 INTERMEDIATE LEVEL CONSTRUCTION PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

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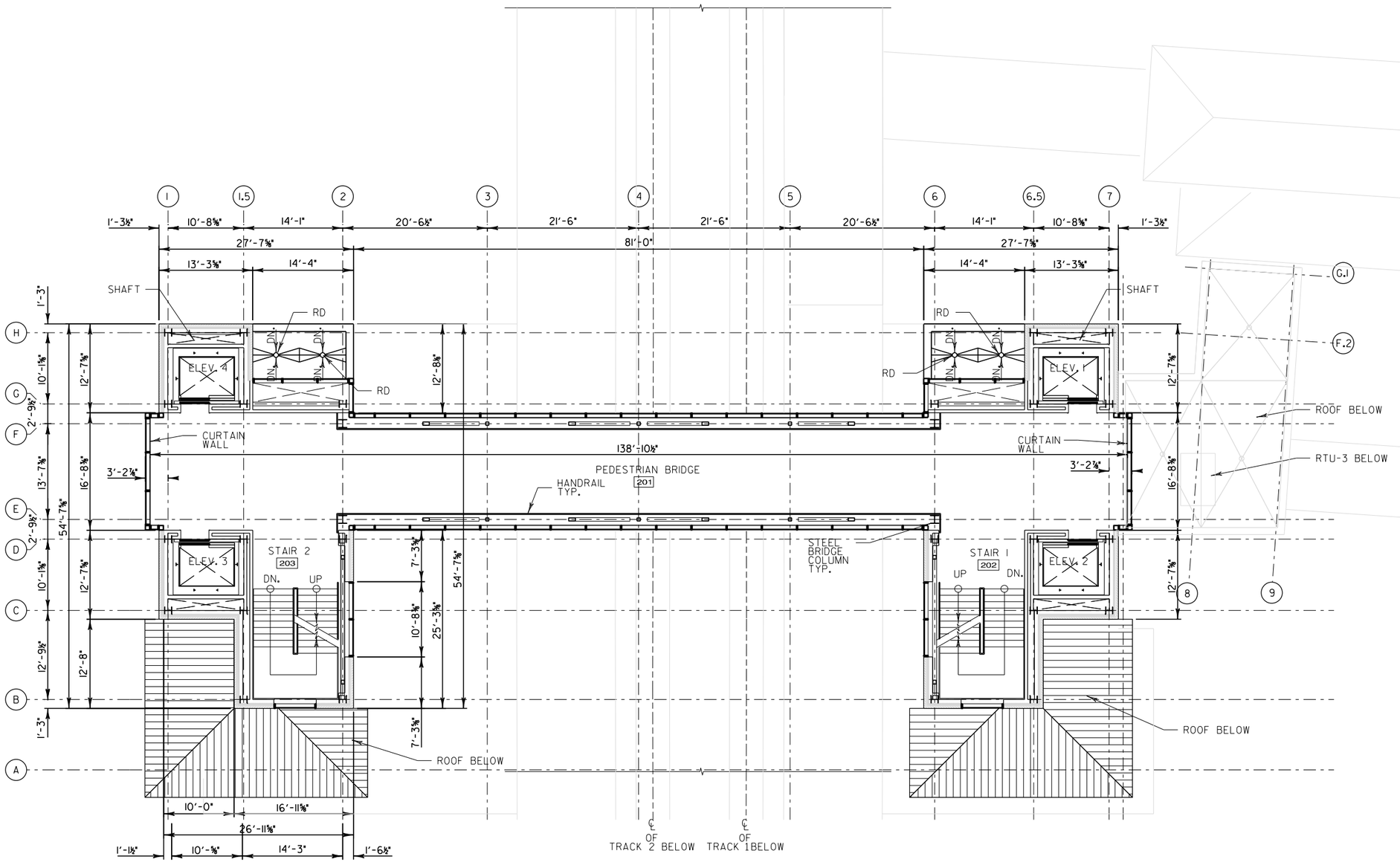
INTERMEDIATE LEVEL CONSTRUCTION PLAN

SHEET A-112

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-113 SECOND FLOOR CONSTRUCTION PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

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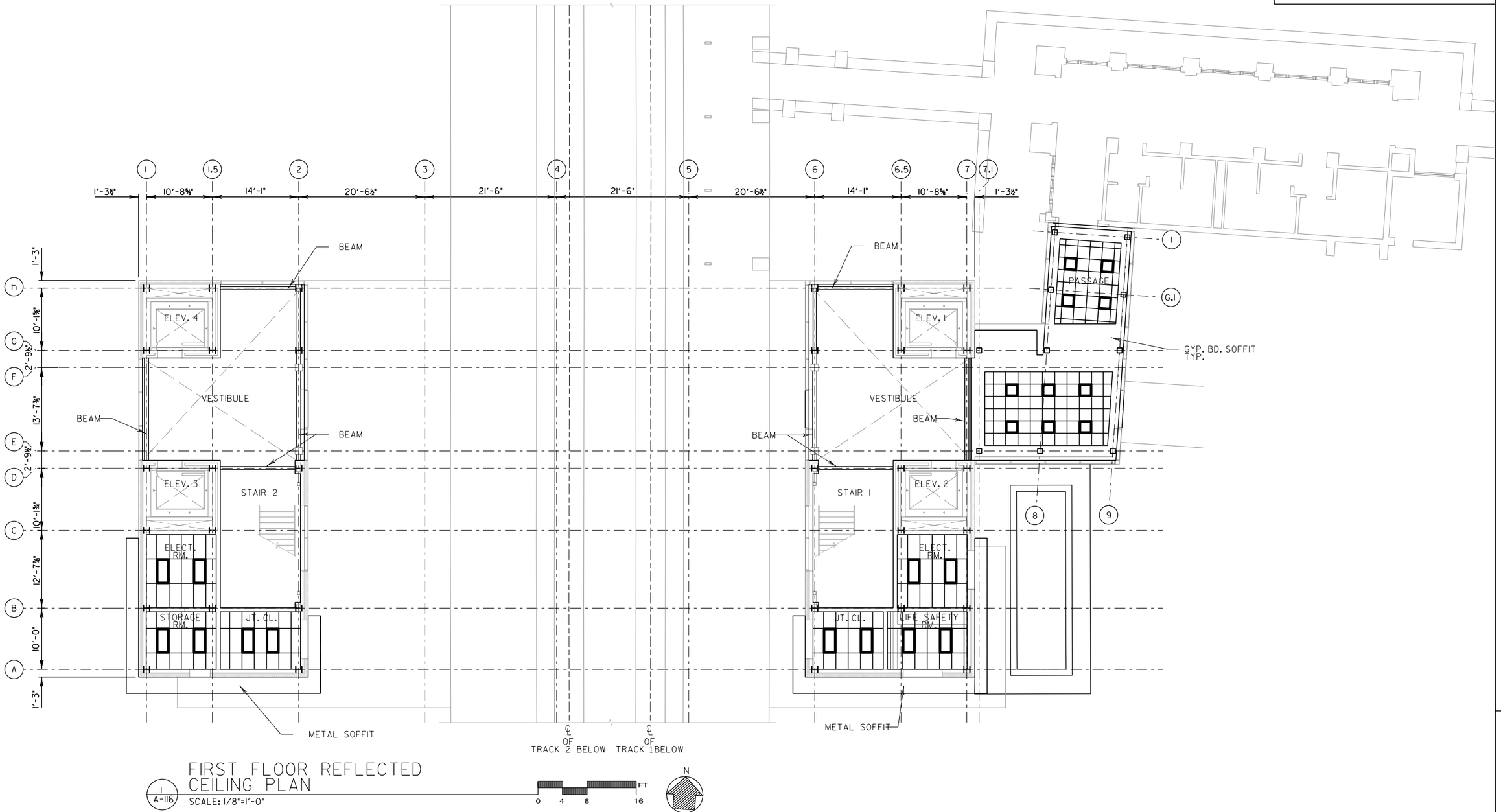
SECOND FLOOR CONSTRUCTION PLAN

SHEET A-113

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-116 FIRST FLOOR REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

8

8

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
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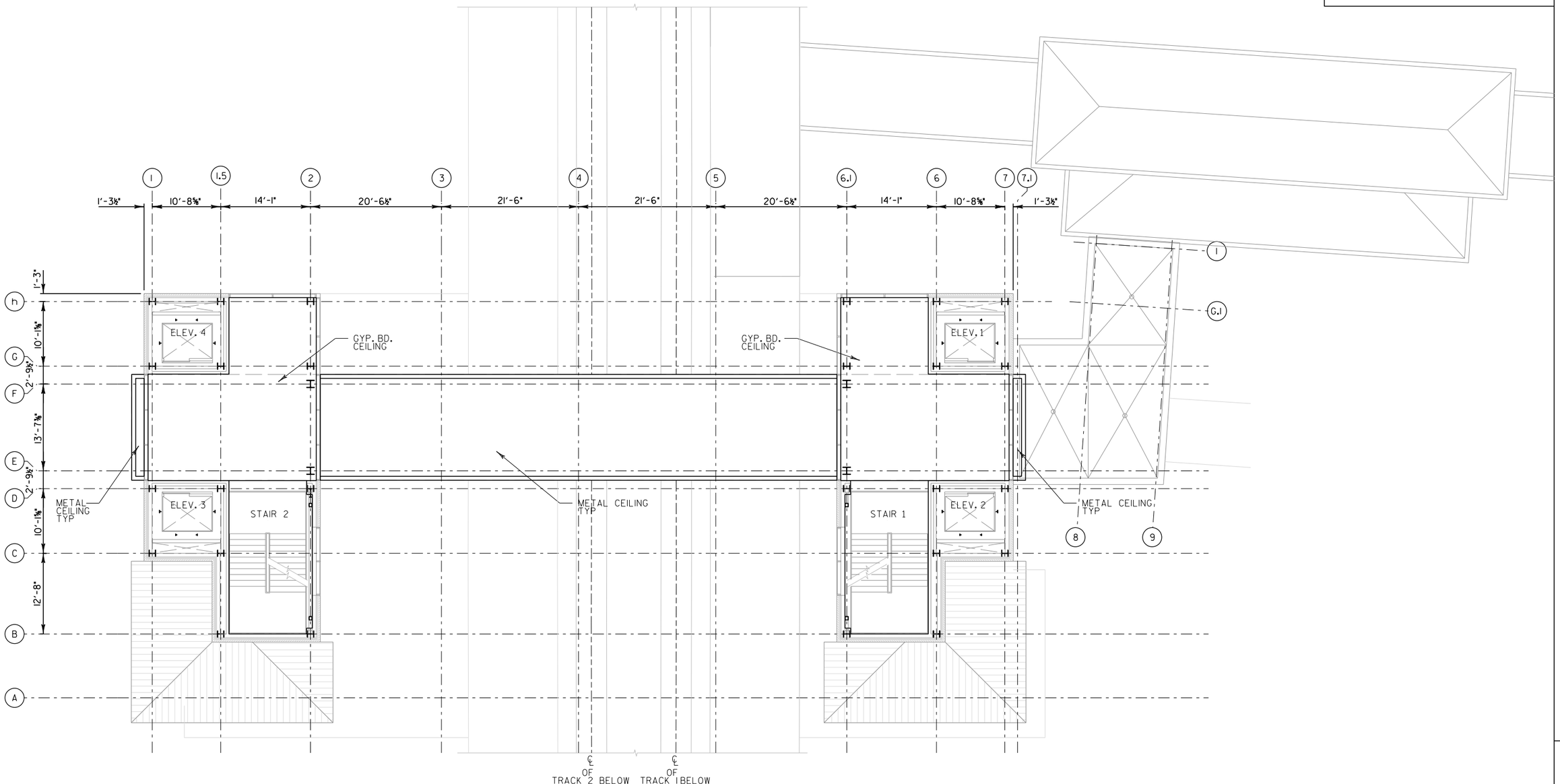
FIRST FLOOR REFLECTED CEILING PLAN

SHEET A-116

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-117 INTERMEDIATE LEVEL REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

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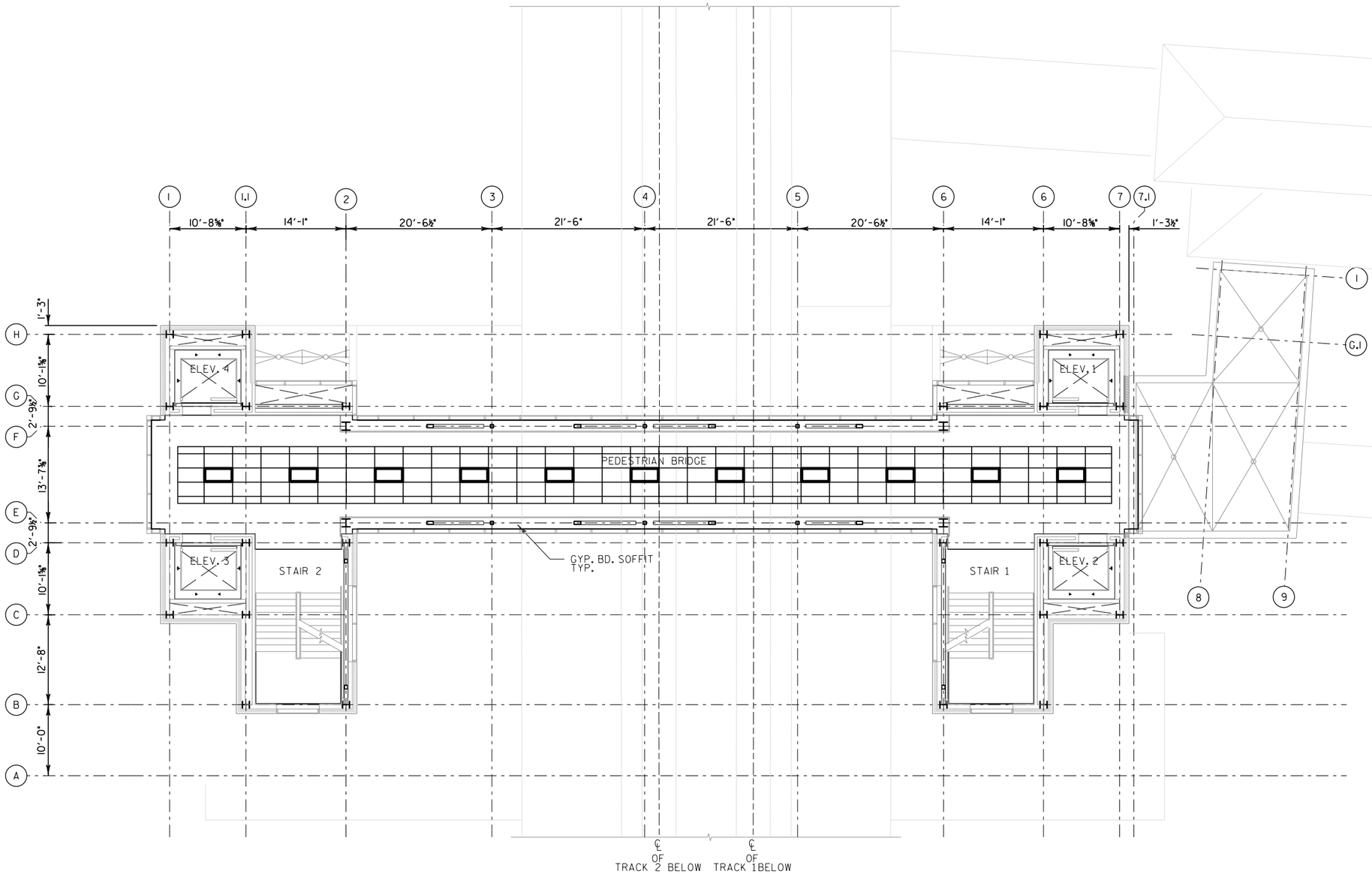
INTERMEDIATE LEVEL REFLECTED CEILING PLAN

SHEET A-117

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 A-118 SECOND FLOOR REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
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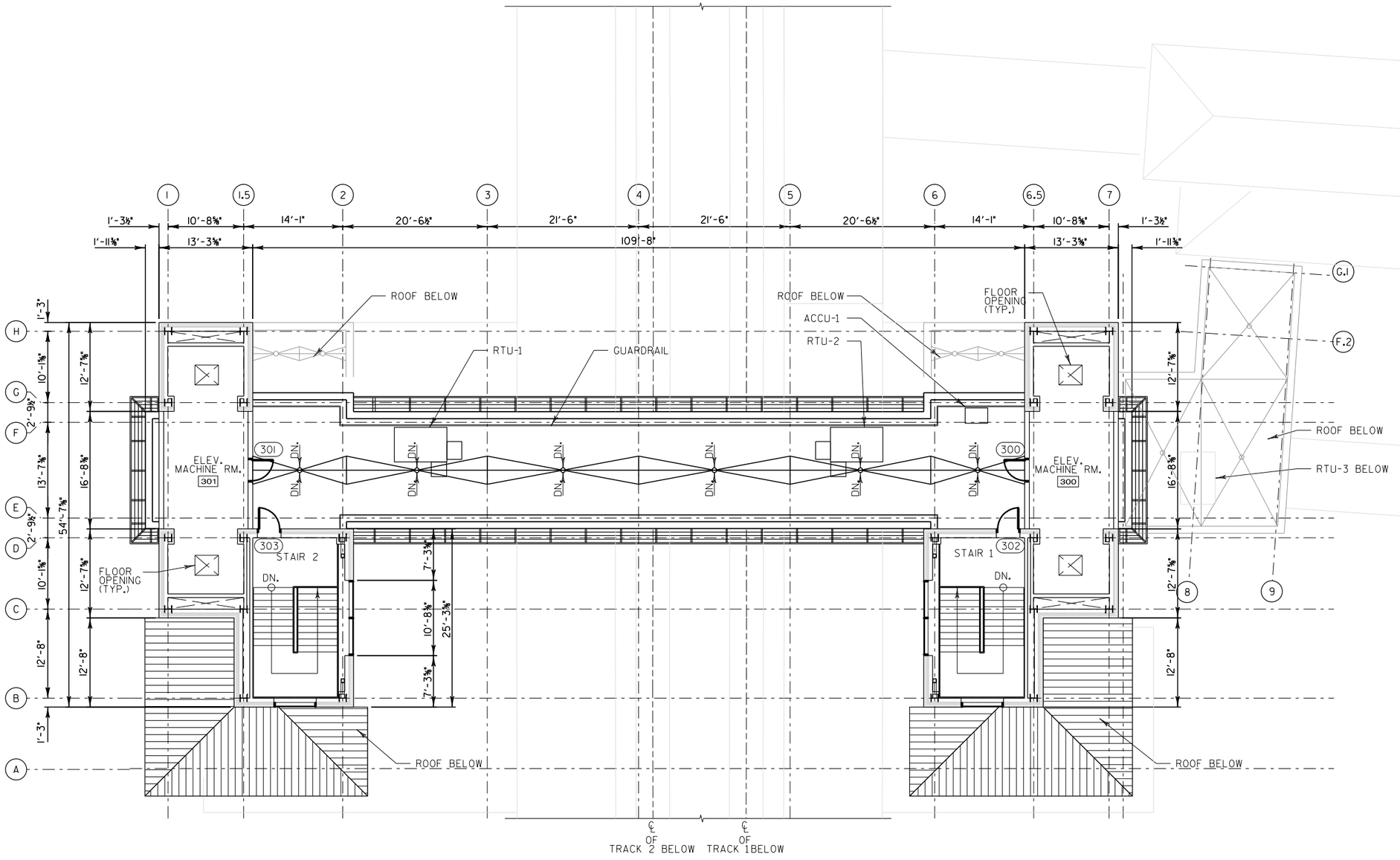
SECOND FLOOR REFLECTED CEILING PLAN

SHEET A-118

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-120 PEDESTRIAN BRIDGE CONSTRUCTION ROOF PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

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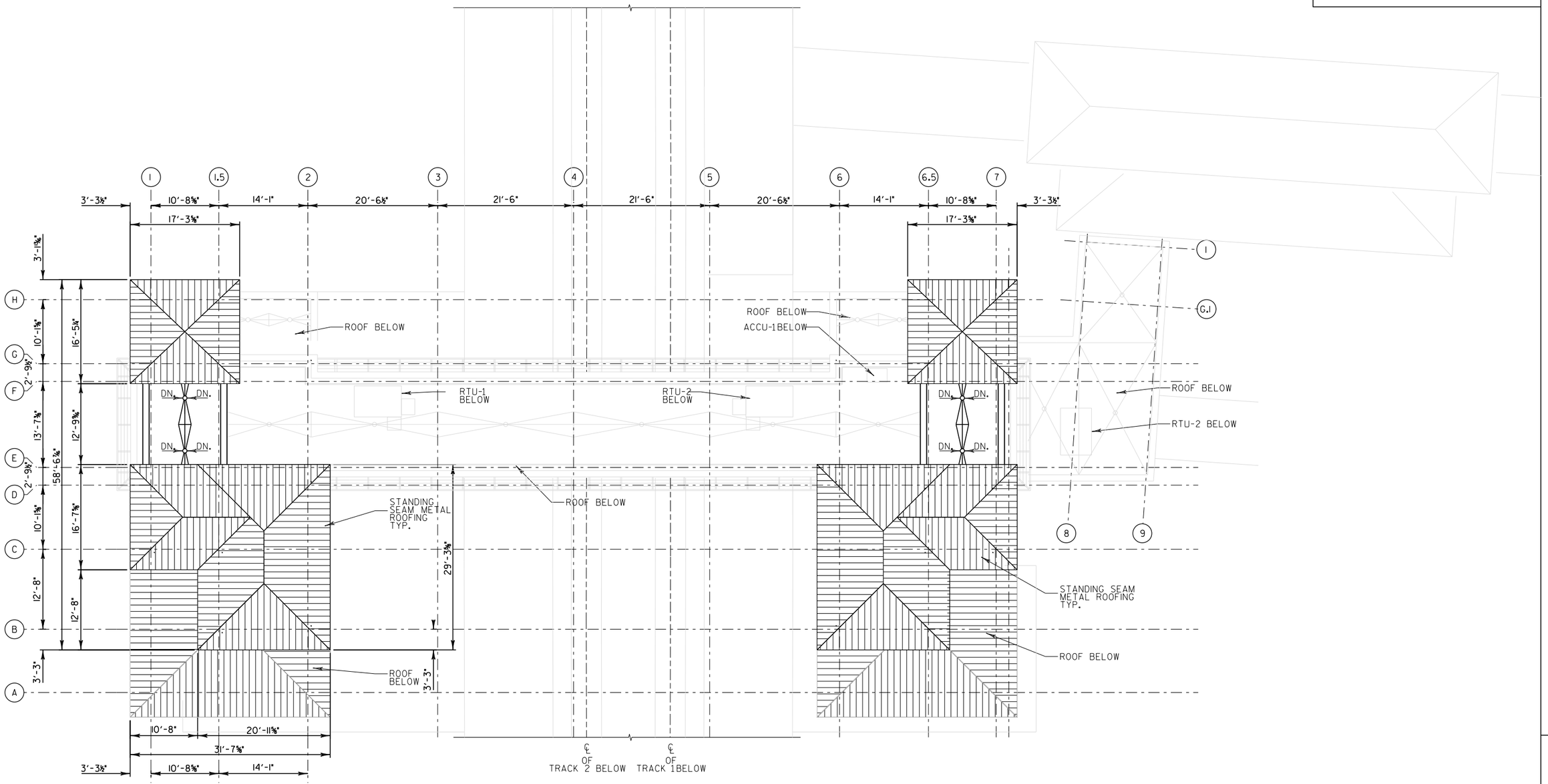
PEDESTRIAN BRIDGE CONSTRUCTION ROOF PLAN

SHEET A-120

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 / A-121 EAST & WEST TOWERS CONSTRUCTION ROOF PLAN

SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
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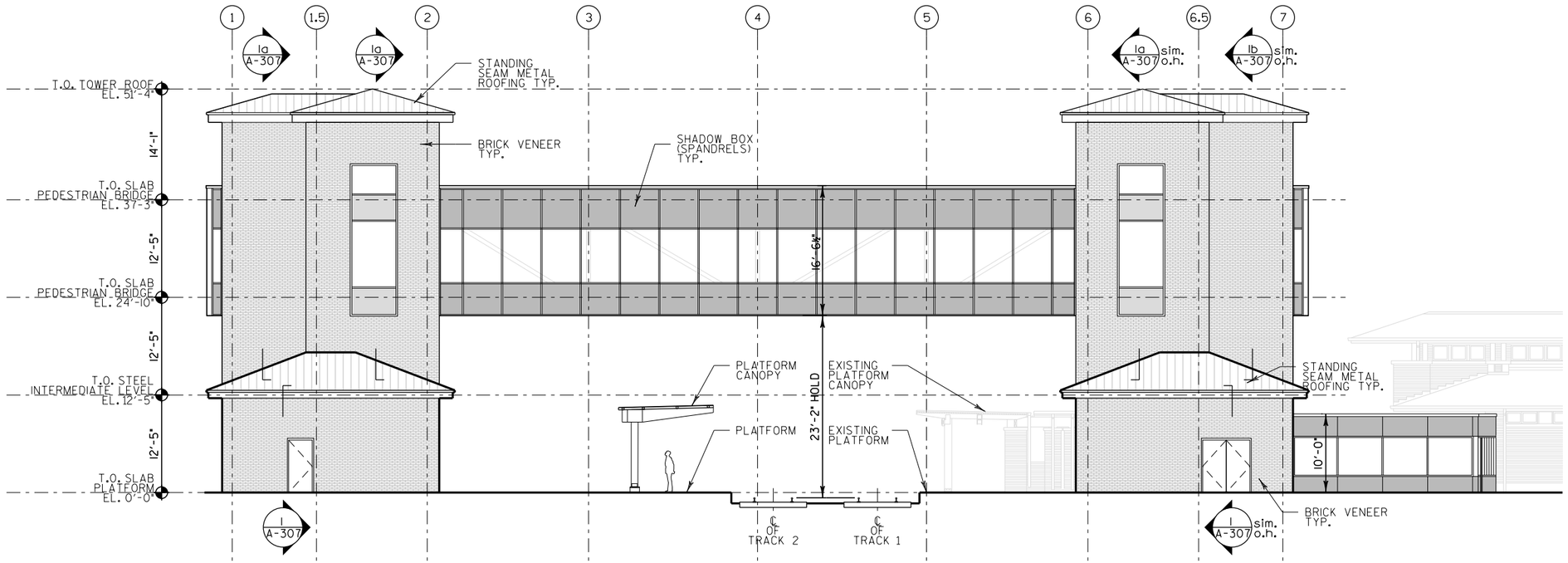
EAST & WEST TOWERS CONSTRUCTION ROOF PLAN

SHEET A-121

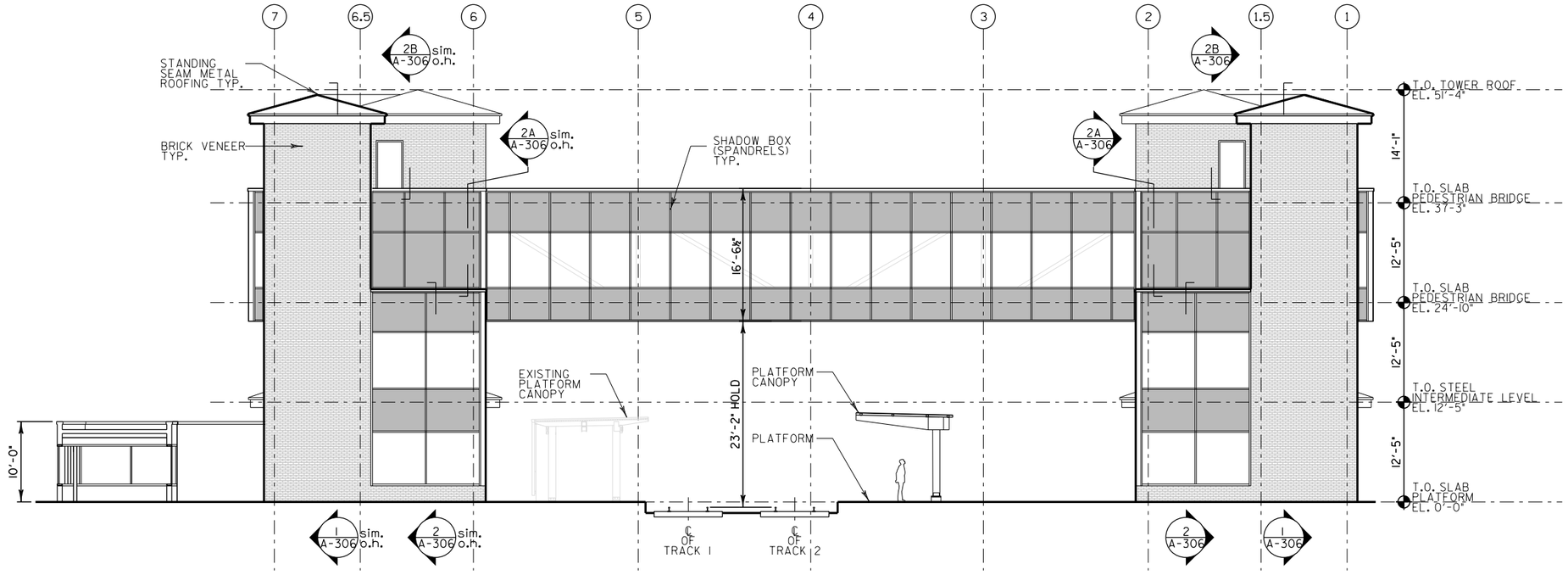
SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-05



1 A-201 SOUTH ELEVATION
SCALE: 1/8"=1'-0"

0 4 8 16 FT



2 A-201 NORTH ELEVATION
SCALE: 1/8"=1'-0"

0 4 8 16 FT

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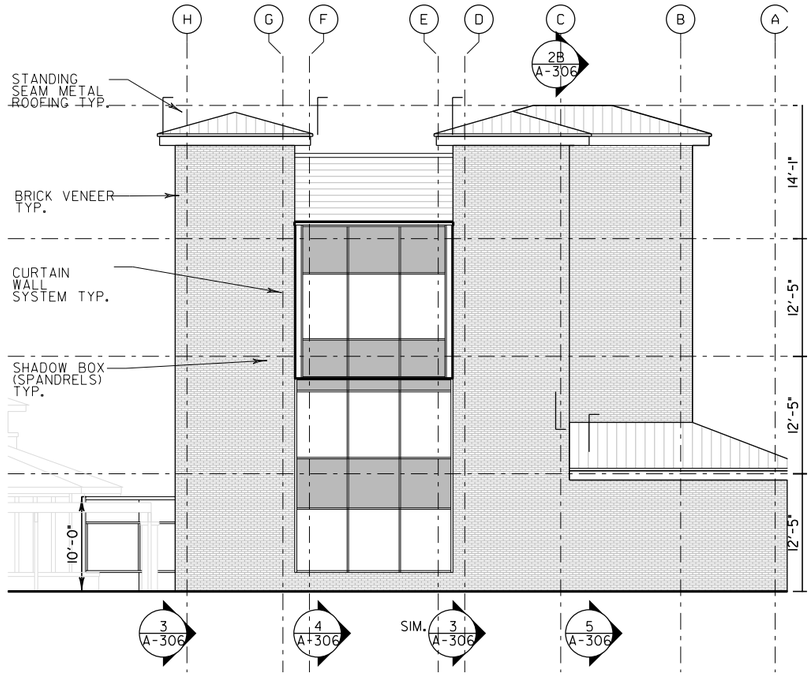
ELEVATIONS

SHEET A-201

SCALE = AS NOTED

STATE PROJECT NUMBER

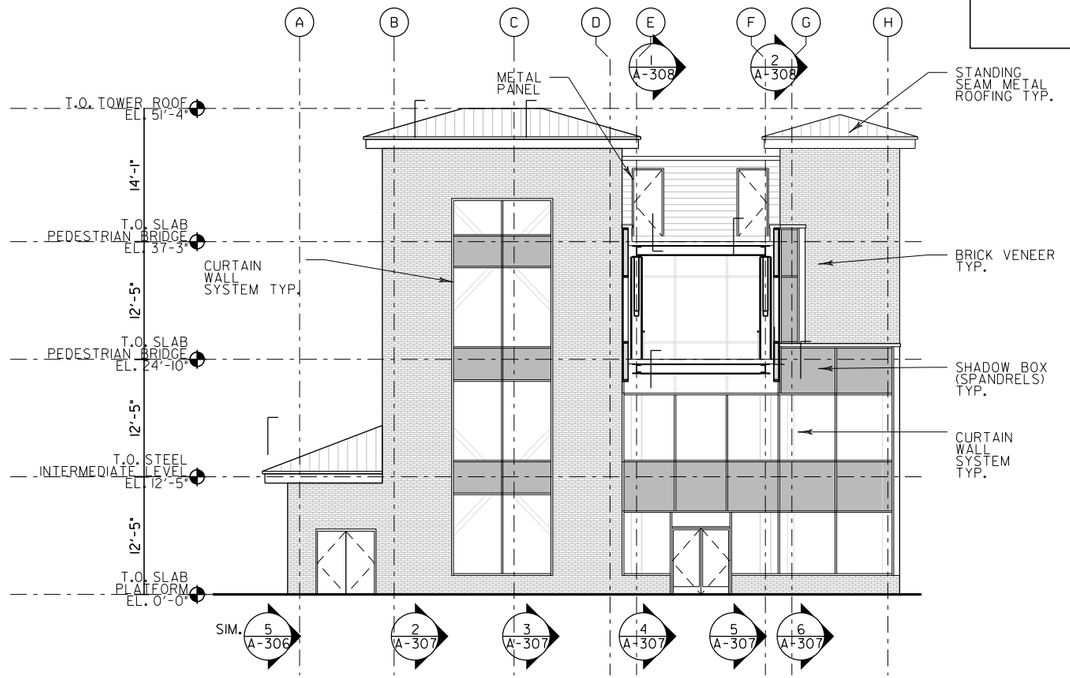
1000-57-05



1 A-202 WEST ELEVATION

SCALE: 1/8"=1'-0"

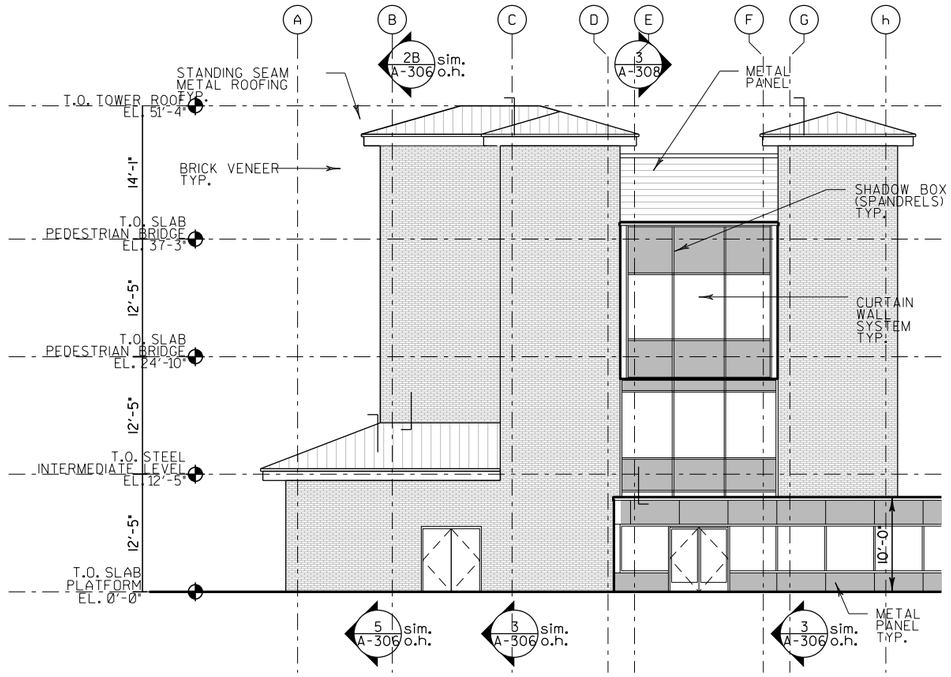
0 4 8 16 FT



3 A-202 EAST ELEVATION - WEST TOWER

SCALE: 1/8"=1'-0"

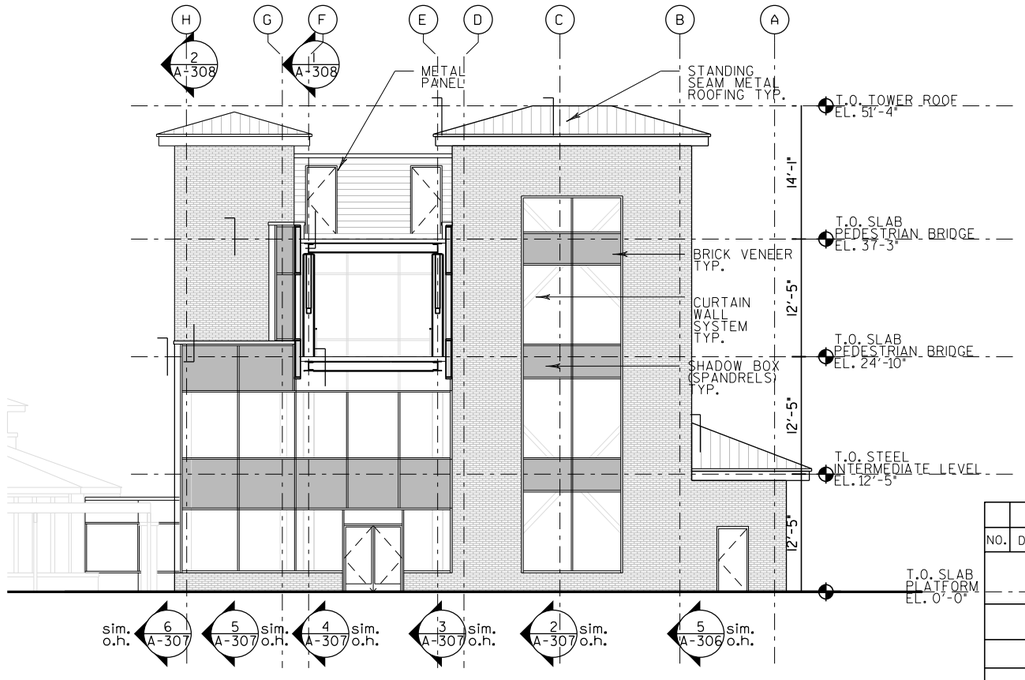
0 4 8 16 FT



2 A-202 EAST ELEVATION

SCALE: 1/8"=1'-0"

0 4 8 16 FT



4 A-202 WEST ELEVATION - EAST TOWER

SCALE: 1/8"=1'-0"

0 4 8 16 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

DRAWN BY JR | PLANS CK'D. --

ELEVATIONS

SHEET A-202

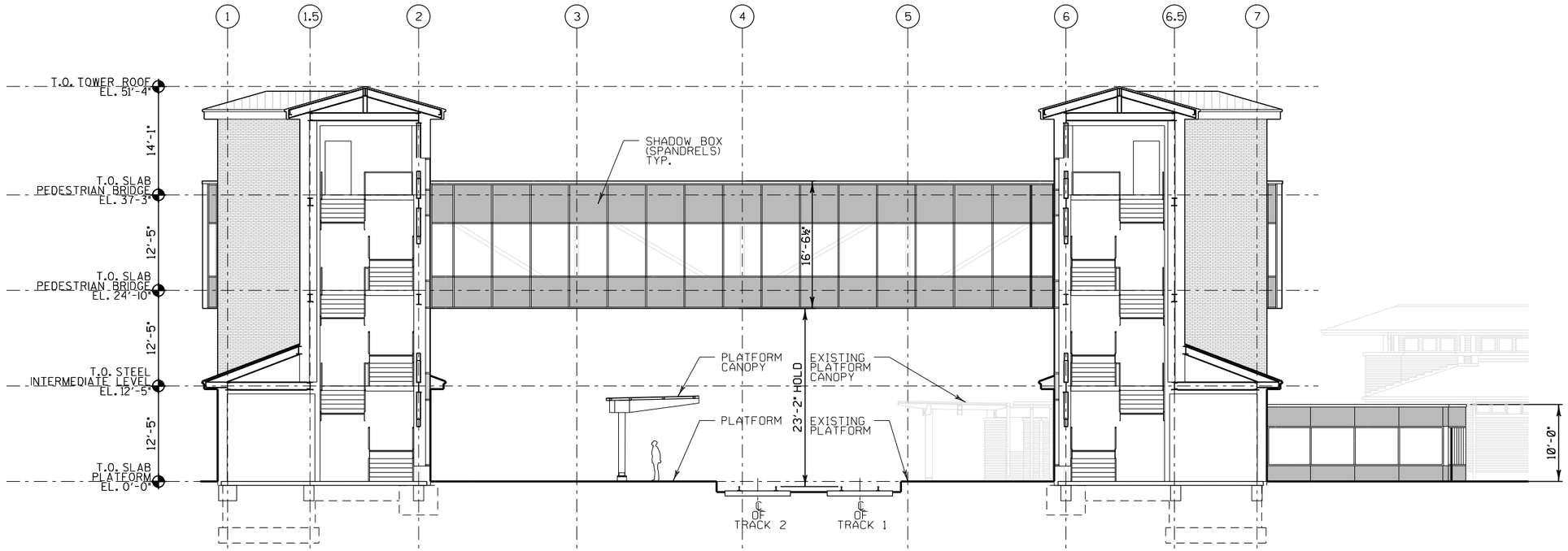
SCALE = AS NOTED

8

8

STATE PROJECT NUMBER

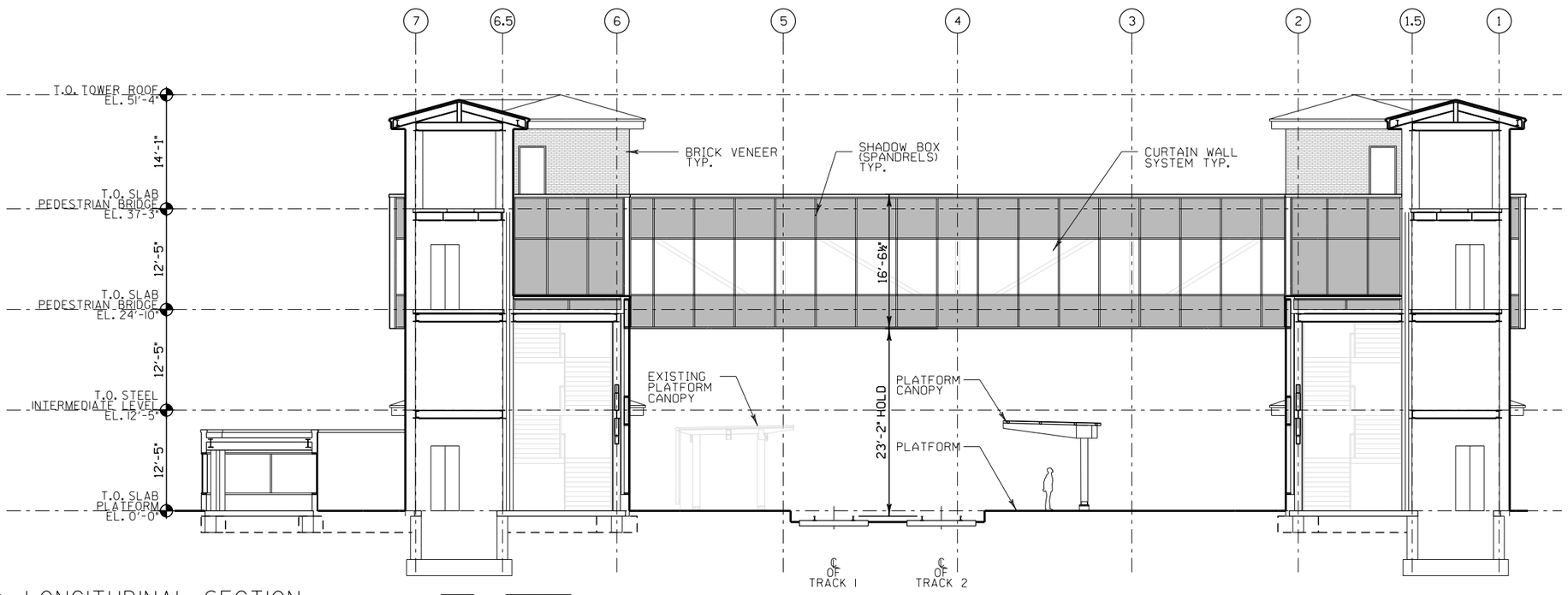
1000-57-05



1/A-301 LONGITUDINAL SECTION

SCALE: 1/8"=1'-0"

0 4 8 16 FT



2/A-301 LONGITUDINAL SECTION

SCALE: 1/8"=1'-0"

0 4 8 16 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

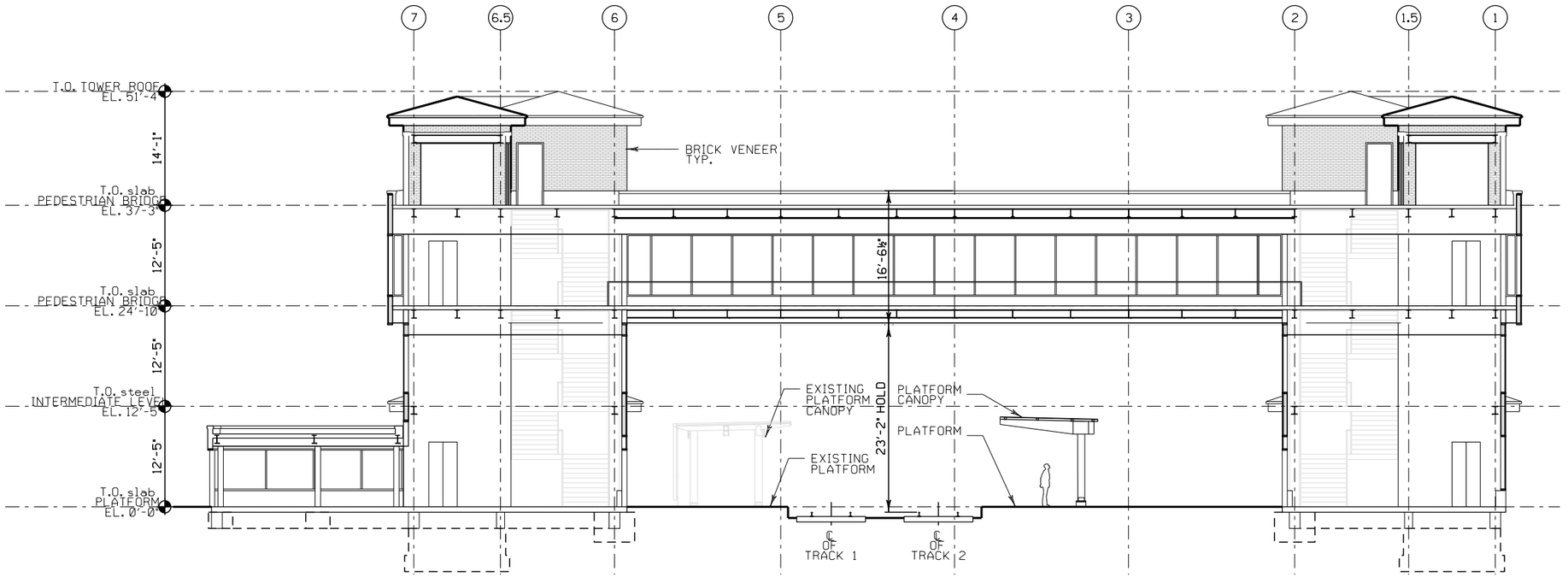
DRAWN BY JR | PLANS CK'D. --

SECTIONS

SHEET A-301

SCALE = AS NOTED

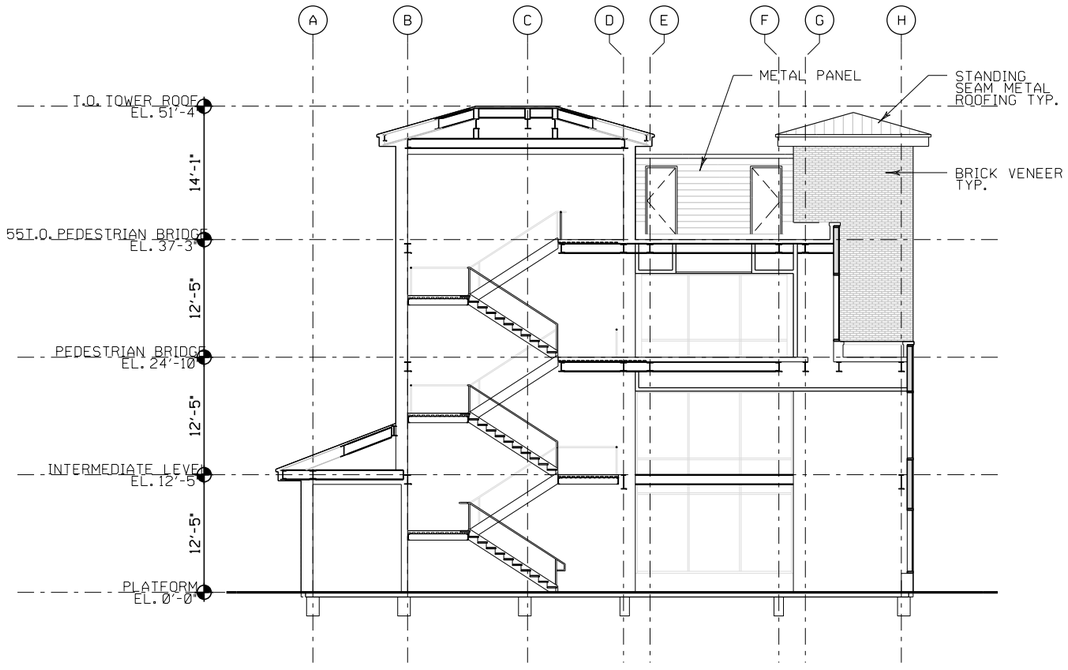
STATE PROJECT NUMBER
1000-57-05



1 / A-302 LONGITUDINAL SECTION

SCALE: 1/8"=1'-0"

0 4 8 16 FT



2 / A-302 CROSS SECTION

SCALE: 1/8"=1'-0"

0 4 8 16 FT

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ARCHITECTURE

DRAWN BY JR | PLANS CK'D. --

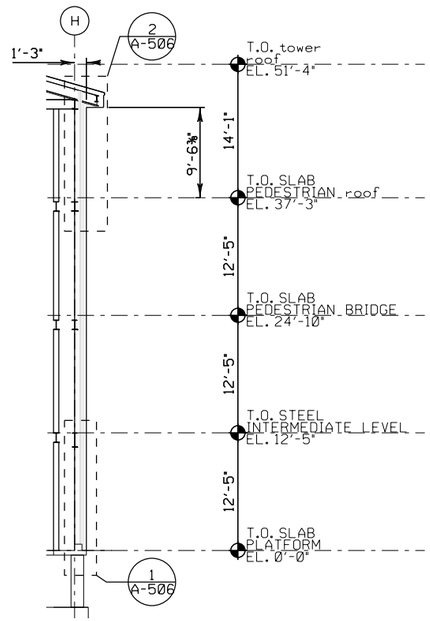
SECTIONS

SHEET A-302

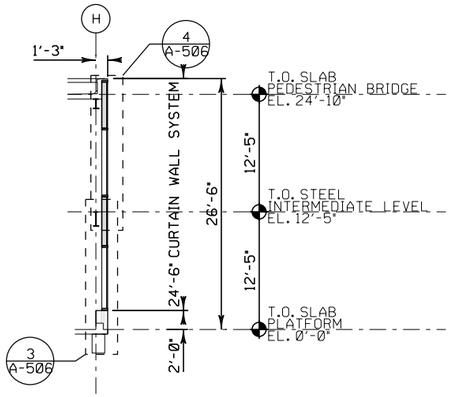
SCALE = AS NOTED

STATE PROJECT NUMBER

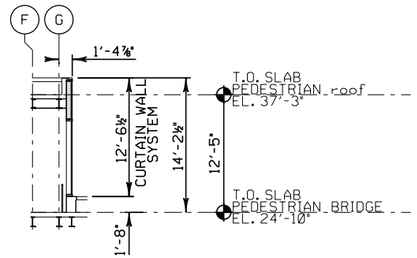
1000-57-05



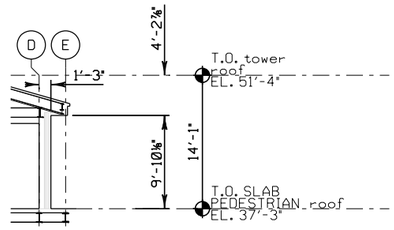
1 A-306 WALL SECTION
SCALE: 1/8"=1'-0"



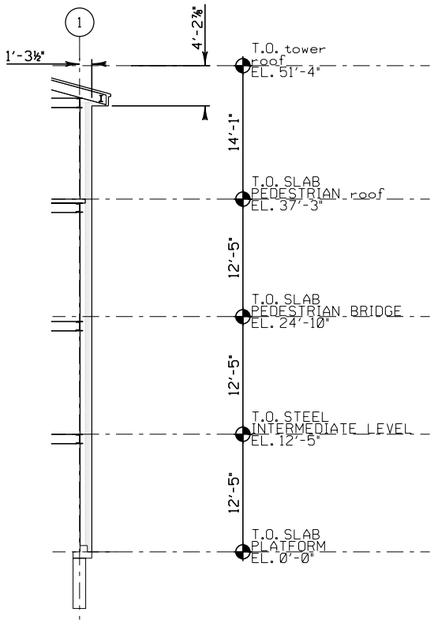
2 A-306 WALL SECTION
SCALE: 1/8"=1'-0"



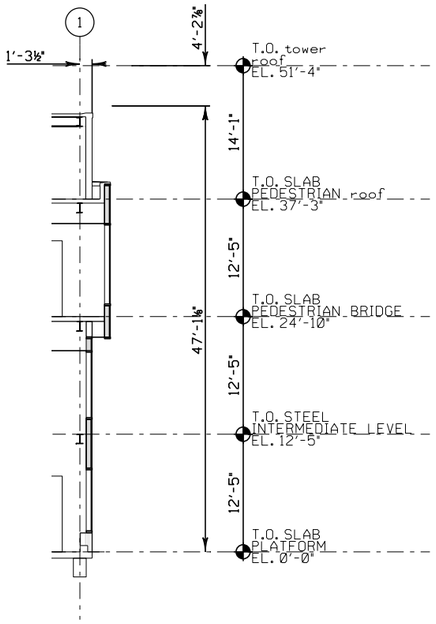
2A A-306 WALL SECTION
SCALE: 1/8"=1'-0"



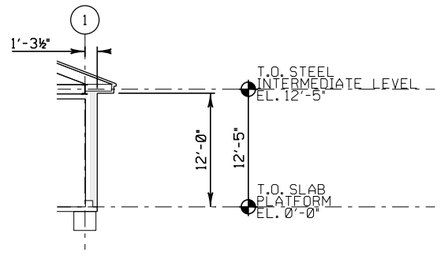
2B A-306 WALL SECTION
SCALE: 1/8"=1'-0"



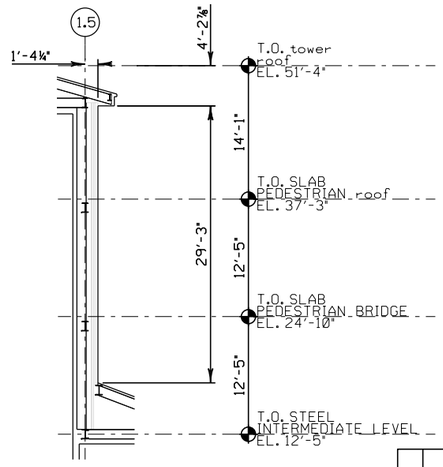
3 A-306 WALL SECTION
SCALE: 1/8"=1'-0"



4 A-306 WALL SECTION
SCALE: 1/8"=1'-0"



5 A-306 WALL SECTION
SCALE: 1/8"=1'-0"



5A A-306 WALL SECTION
SCALE: 1/8"=1'-0"

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WALL SECTIONS

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A-306

SCALE = AS NOTED

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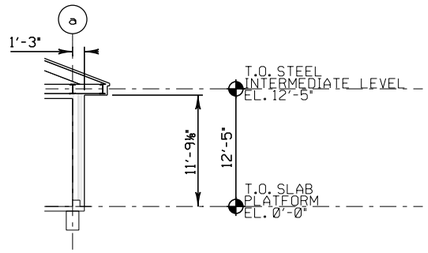

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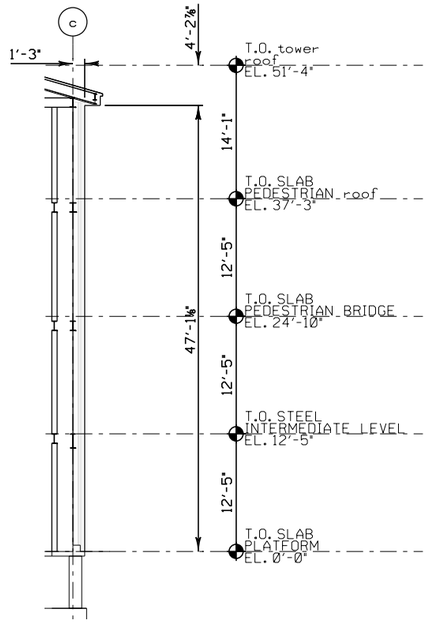

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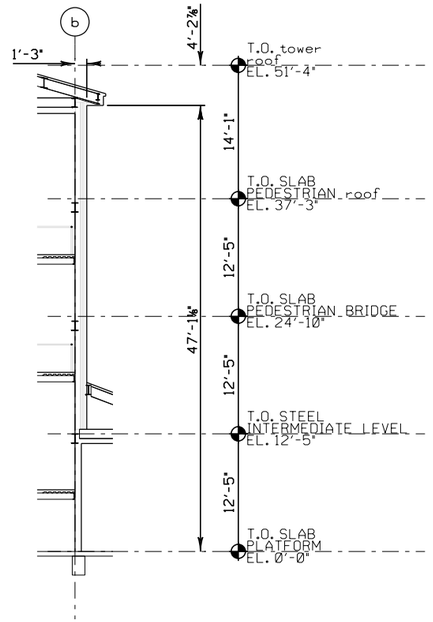

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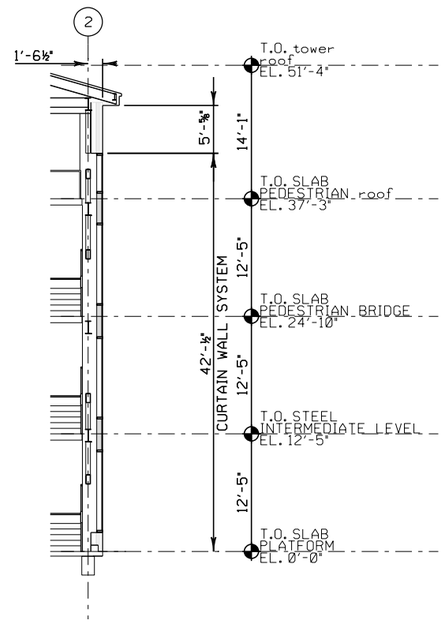

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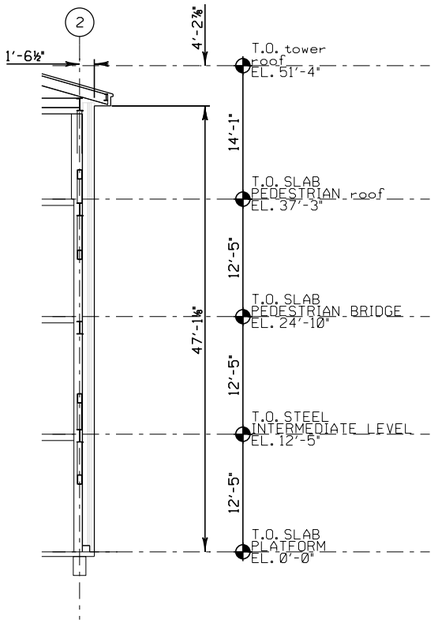

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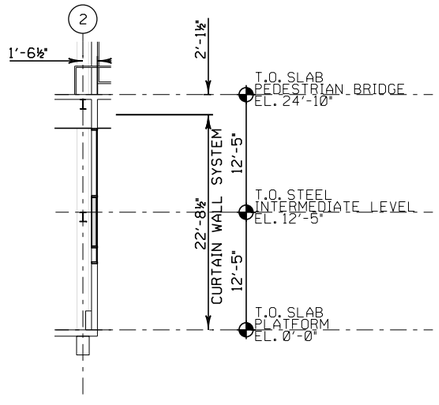

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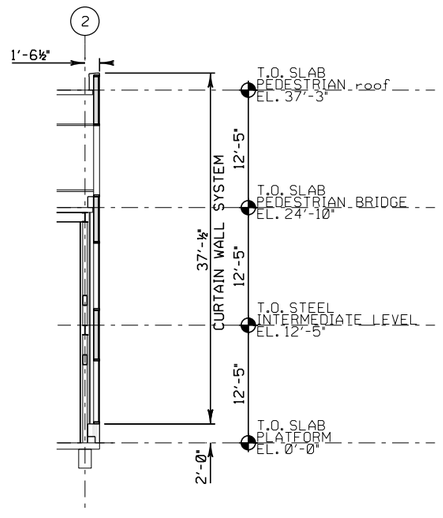

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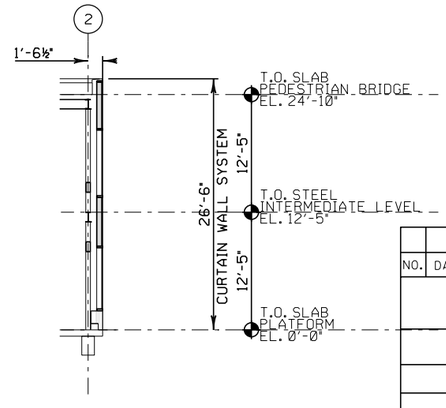

6 A-307 WALL SECTION
SCALE: 1/8"=1'-0"

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WALL SECTIONS

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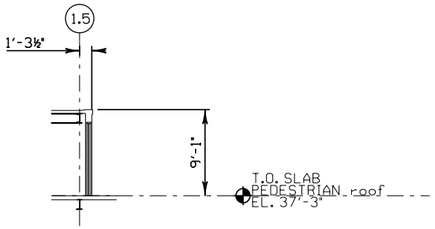

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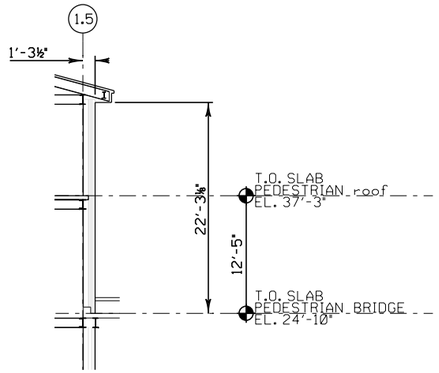

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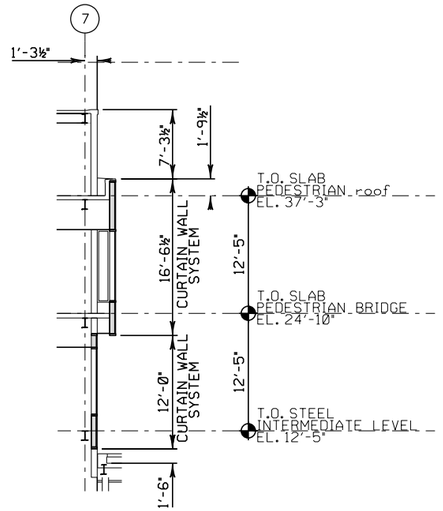

3 A-308 WALL SECTION
SCALE: 1/8"=1'-0"

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WALL SECTIONS

SHEET
A-308

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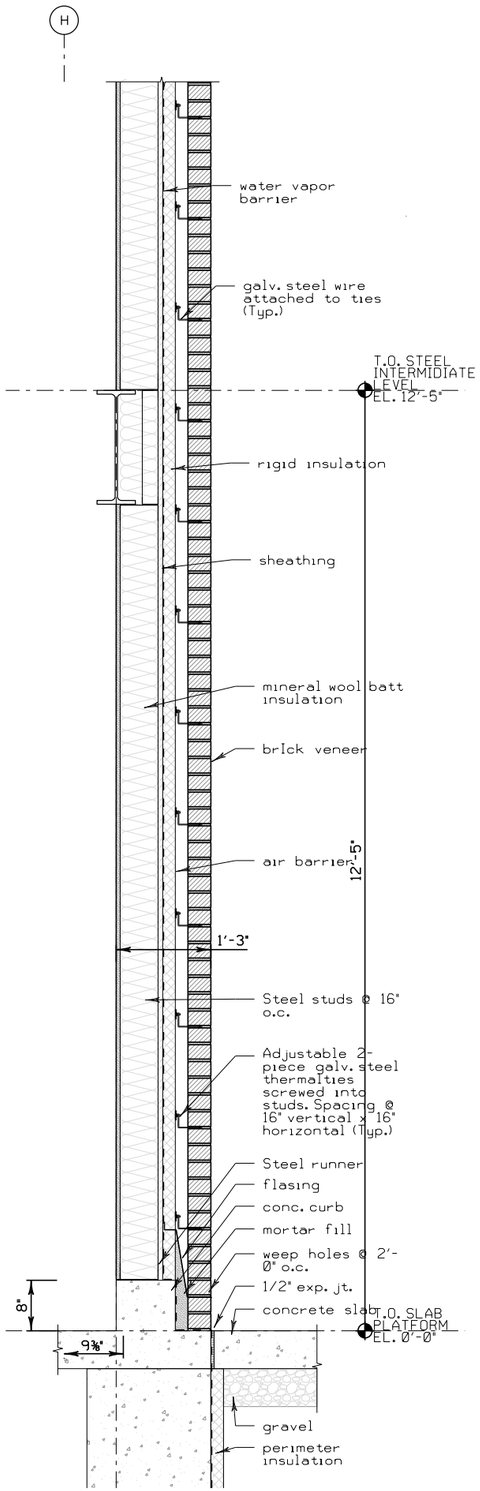

1 A-506 WALL SECTION - DETAIL

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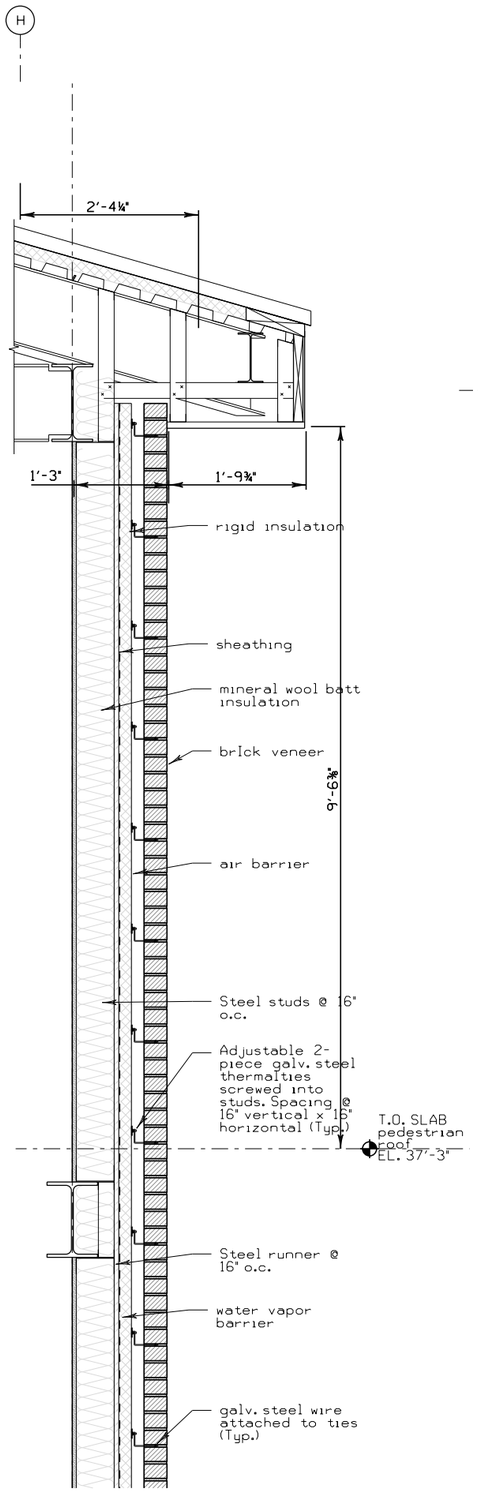

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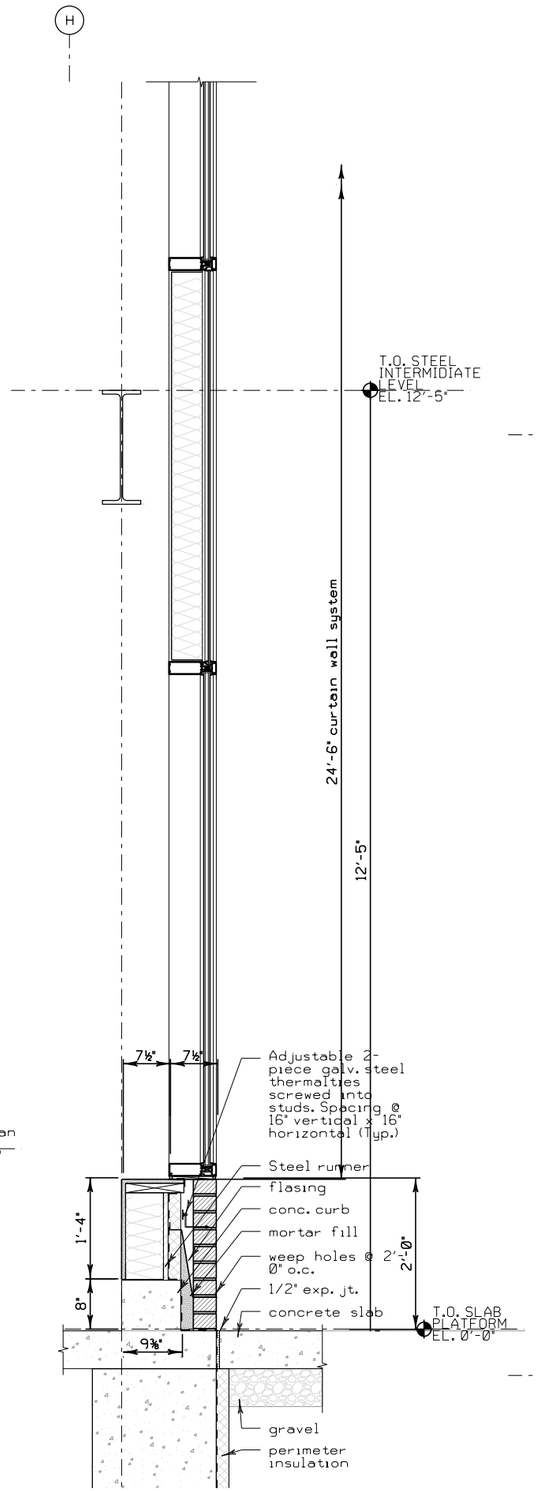

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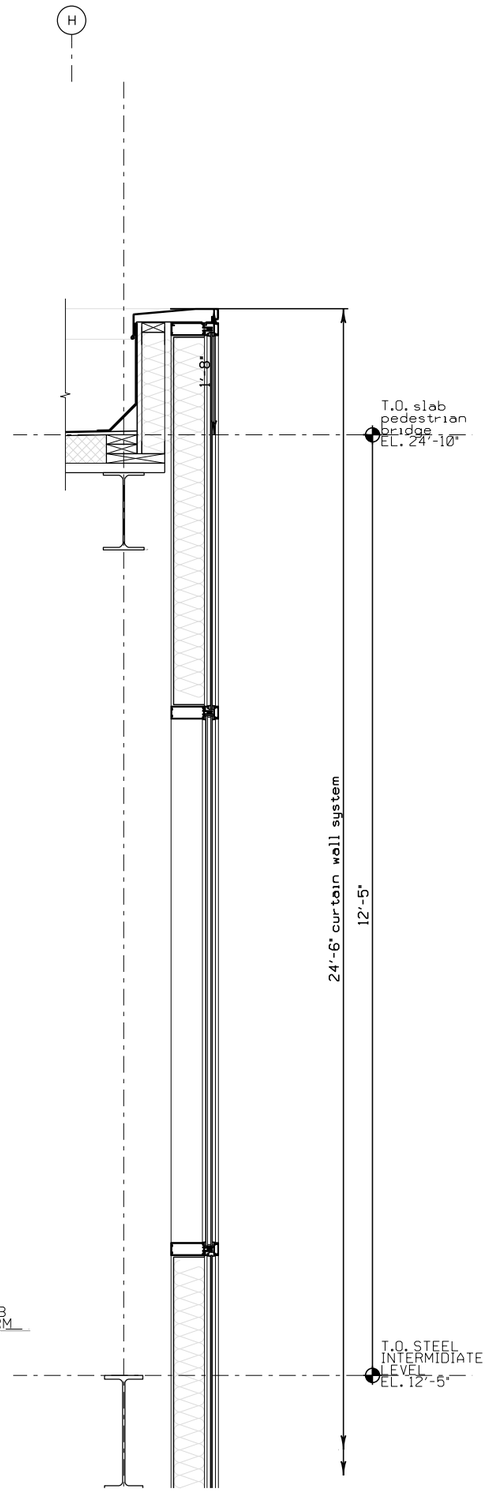

4 A-506 WALL SECTION - DETAIL

SCALE: 1"=1'-0"

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WALL SECTIONS - DETAILS

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STATE PROJECT NUMBER

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DOOR SCHEDULE

DOOR									FRAME			DETAIL			
NO.	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	HARDWARE SET	FIRE RATING	TYPE	MATERIAL	FINISH	JAMB	HEAD	SILL	REMARKS
100	A	(2)3'-0"	7'-0"	1-3/4"	--		1	1.5 HR	A			1/A-XXX	1/A-XXX	1/A-XXX	
101	A	(2)3'-0"	7'-0"	1-3/4"	--			1.5 HR	A						
102	A	(2)3'-0"	7'-0"	1-3/4"	--			1.5 HR	A						
103	A	(2)3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
104	A	(2)3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
105	A	(2)3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
106	A	(2)3'-0"	7'-0"	1-3/4"	--			1.5 HR	A						
107	A	(2)3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
108	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
109	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
300	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
301	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
302	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				
303	A	3'-0"	7'-0"	1-3/4"	HM	PTD		1.5 HR	A	HM	PTD				

WINDOW SCHEDULE

WINDOW							DETAIL					
NO.	TYPE	WIDTH	HEIGHT	GLAZING	MATERIAL	FIRE RATING	JAMB	HEAD	SILL	HORIZ MULL	VERT MULL	REMARKS
1	A	3'-0"	7'-0"			1.5 HR	1/A-XXX	1/A-XXX	1/A-XXX			

8

8

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STRUCTURES DESIGN SECTION

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DOOR AND WINDOW SCHEDULES

SHEET A-601

SCALE = AS NOTED

STATE PROJECT NUMBER

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MECHANICAL ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS MAY BE USED.

ABBREVIATION	DESCRIPTION
(D)	EXISTING TO BE DEMOLISHED
(E)	EXISTING TO REMAIN
(F)	FUTURE
AFF	ABOVE FINISHED FLOOR
AMB	AMBIENT
APD	AIR PRESSURE DROP
BAS	BUILDING AUTOMATION SYSTEM
BFP	BACKFLOW PREVENTOR
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTUH	BRITISH THERMAL UNITS PER HOUR
CFM	CUBIC FEET PER MINUTE
CL	CENTER LINE
CO	CLEAN OUT
COMPR	COMPRESSOR
COP	COEFFICIENT OF PERFORMANCE
CV	CONSTANT VOLUME
DB	DRY BULB
DIA	DIAMETER
DN	DOWN
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
EG	ETHYLENE GLYCOL
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
FLA	FULL LOAD AMPS
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET
GAL	GALLONS
GPM	GALLONS PER MINUTE
HD	HEAD
HP	HORSEPOWER
ID	INNER DIAMETER
IPLV	INTEGRATED PART LOAD VALUE
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTUH
MCA	MINIMUM CIRCUIT AMPACITY
MFR	MANUFACTURER
MOCP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NOX	NITROUS OXIDE
NPLV	NON-STANDARD PART LOAD VALUE
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PD	PRESSURE DROP
PG	PROPYLENE GLYCOL
PPH	POUNDS PER HOUR
PPM	PARTS PER MILLION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
REFRIG	REFRIGERANT
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REFRIGERANT FLOW
W	WATTS
WB	WET BULB
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

MECHANICAL SHEET INDEX

GENERAL NOTES

1. LEGENDS, SYMBOLS NOTES AND ABBREVIATIONS PERTAIN TO MECHANICAL AND PLUMBING DRAWINGS ONLY.

2. ALL LEGEND SYMBOLS AND ABBREVIATIONS DO NOT NECESSARILY APPEAR IN THESE CONTRACT DOCUMENTS. SEE PLUMBING DRAWINGS FOR ADDITIONAL SYMBOLS, ABBREVIATIONS AND NOTES.

3. THOROUGHLY INVESTIGATE AND VERIFY ALL EXISTING FIELD CONDITIONS PRIOR TO THE START OF CONSTRUCTION.

4. PROVIDE ALL NECESSARY AND SHOWN MATERIAL, EQUIPMENT OR WORK SHOWN ON DOCUMENTS UNLESS SPECIFICALLY INVOKED TO BE OTHERS.

5. COORDINATE INSTALLATION OF NEW PIPING AND DUCTWORK WITH ALL OTHER TRADES PRIOR TO THE FABRICATION AND INSTALLATION OF ALL SYSTEMS.

6. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND, DUE TO THE SCALE OF DRAWINGS IT IS NOT FEASIBLE TO SHOW ALL OFFSETS, FITTINGS AND OTHER APPURTENANCES NECESSARY TO MEET THE ACTUAL FIELD CONDITIONS. PROVIDE ALL OFFSETS, FITTINGS, VALVES, TRAPS AND OTHER MATERIAL AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM WITHOUT ADDITIONAL COST TO THE OWNER.

7. COORDINATE WITH THE ELECTRICAL CONTRACTOR ALL ELECTRICAL REQUIREMENTS FOR EQUIPMENT PROVIDED, INCLUDING STARTERS, DISCONNECTS, FUSES, TRANSFORMERS, ETC.

8. ALL OPENINGS (FLOOR, WALLS AND ROOF), LOCATIONS OF EQUIPMENT, DUCT AND PIPE, ETC. ARE SIZED IN ACCORDANCE WITH SCHEDULED EQUIPMENT. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR THE ACTUAL EQUIPMENT SIZES AND REVISION OF LOCATION FOR ANY EQUIPMENT AS REQUIRED TO SUIT PROJECT CONDITIONS. THE LISTED SCHEDULES FORM THE BASIS OF DESIGN.

9. REFER TO MECHANICAL DRAWINGS, PLUMBING DRAWINGS, AND BUILDING CODES PROVISIONS FOR REQUIREMENTS AND METHODS OF INSTALLATION, PRODUCTS AND GENERAL PROVISIONS PERTAINING TO THE CONTRACT REQUIREMENTS.

10. ALL DUCT DIMENSIONS SHOWN ARE CLEAR OPEN, INSIDE FREE AREA. OVERSIZE DUCTS TO ACCOMMODATE LINER, AS REQUIRED. UON, CONSTRUCT DUCTS TO 2" ± STATIC PRESSURE WITH CLASS A SEALING.

11. CONTRACTOR TO PROVIDE DUCTWORK STATIC PRESSURE CALCULATION FOR EXHAUST FAN SYSTEM TO ENSURE PROPER OPERATION.

12. ALL NECESSARY CUTTING AND PATCHING IN FLOOR SLABS, WALLS, CEILINGS AND ROOF, FOR THE HVAC WORK SHALL BE PERFORMED BY THIS CONTRACTOR. RESTORE TO MATCH EXISTING CONDITIONS.

13. CUTTING AND DRILLING:

A. PERFORM CUTTING AND DRILLING OF EXISTING FLOORS, WALLS, PARTITIONS, CEILINGS, ROOFS AND THE LIKE FOR INSTALLATION OF NEW WORK SHOWN, INCLUDING CUTTING OF HOLES AND OTHER OPENINGS FOR NEW PIPES, DUCTS, CONDUITS, FITTINGS, EQUIPMENT AND OTHER WORK.
B. PERFORM CUTTING BY HAND OR WITH SMALL POWER TOOLS WHEREVER POSSIBLE. CUT HOLES AND SLOTS NEATLY TO SIZE REQUIRED, WITH MINIMUM DISTURBANCE OF ADJACENT WORK. CUT ROUND HOLES IN CONCRETE SLABS, FLOORS AND WALLS FOR PIPES AND CONDUIT WITH CORE DRILLS OR REQUIRED SIZES AND TYPES. CUT SQUARE AND RECTANGULAR HOLES BY LINE DRILLING AND USING CHIPPING HAMMERS TO REMOVE MATERIAL BETWEEN DRILL HOLES. LARGE AIR HAMMERS WILL NOT BE PERMITTED.
C. DRILLING OR CUTTING OF COLUMNS, BEAMS, JOIST, GIRDERS, OR OTHER STRUCTURAL SUPPORTING ELEMENTS WILL NOT BE PERMITTED, UNLESS SPECIFICALLY APPROVED IN EACH CASE.
D. COVER OPENINGS TEMPORARILY WHEN NOT IN USE AND PATCH AS SOON AS WORK IS INSTALLED.
E. PROVIDE SLEEVES FOR ALL PIPES AND ALL CONDUIT PENETRATING EXISTING WALLS, CEILINGS, FLOORS, ROOFS, AND FOUNDATIONS. SLEEVES ARE NOT REQUIRED FOR CORE DRILLED HOLES.
F. PROPERLY CLOSE, FIRESTOP AND PATCH HOLES IN EXISTING FLOORS, WALLS, CEILINGS, AND ROOFS RESULTING FROM THE WORK, MATCH ADJACENT UNDISTURBED SURFACES.

14. CONNECTIONS TO EXISTING WORK:

A. THE CONTRACTOR SHALL PLAN INSTALLATION OF NEW WORK AND CONNECTION TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH THE ENGINEER.
B. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER, RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ENGINEER.

15. REMOVAL AND RELOCATION OF EXISTING WORK:

A. DISCONNECT AND REMOVE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM(S). CUT AND CAP PIPING AND DUCTWORK AS REQUIRED.
B. ALL CONSTRUCTION DEBRIS INCLUDING BUT NOT LIMITED TO BRICKWORK, MORTAR, CONCRETE, RUBBLE, REINFORCING BARS, LATHING AND EARTH SHALL BE REMOVED FROM THE PREMISES AND DISPOSED BY THE CONTRACTOR AWAY FROM THE SITE LEGALLY.
C. ALL EXISTING CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK.

16. ACCESS DOORS, TO BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR CONSTRUCTION TRADE WHICH WILL BE REQUIRED FOR PROPER OPERATION AND MAINTENANCE OF ALL CONCEALED HVAC EQUIPMENT, DAMPERS, AIR VENTS, AIR TERMINALS, CONTROLS, VALVES AND OTHER SIMILAR DEVICES. PREPARE A LIST AND SUBMIT TO THE GENERAL CONTRACTOR FOR HIS INSTALLATION. COORDINATE LOCATIONS WITH PROJECT ENGINEER.

17. PRIOR TO PURCHASING ANY MATERIALS OR STARTING ANY WORK, FIELD VERIFY ALL EXISTING CONDITIONS, DUCTWORK SIZES AND LOCATIONS, EQUIPMENT, ETC. SHOWN ON THE DRAWINGS OR AFFECTING THIS WORK AND SHALL REPORT ANY DEVIATIONS TO THE PROJECT ENGINEER.

18. SHOP DRAWINGS SHALL BE SUBMITTED AND REVIEWED PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY MECHANICAL EQUIPMENT. SHOP DRAWINGS SHALL INCLUDE: ALL EQUIPMENT SCHEDULED OR SPECIFIED ON THE DRAWINGS; DUCTWORK DRAWN TO 1/4" SCALE OR THE SCALE SHOWN ON THE DRAWINGS (1/8" SCALE MINIMUM); AND CONTROL WIRING SCHEMATICS APPROVED BY THE AIR CONDITIONING EQUIPMENT MANUFACTURER.

19. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT OR SUBMITTING SHOP DRAWINGS, AND FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.

20. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH FUSIBLE DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE WITH EQUIPMENT CHARACTERISTICS AND ELECTRICAL DRAWINGS.

21. ALL REQUIRED CONTROL WIRING NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK.

22. CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

23. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE OFFSETS IN DUCTWORK AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES BEFORE STARTING WORK.

24. DRAWINGS FOR WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS, REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

25. UNLESS NOTED OTHERWISE, STARTERS, SMOKE DETECTORS, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

26. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

27. ANY EXISTING WALL, FLOOR, OR CEILING SURFACE THAT IS DISTURBED DURING THE COURSE OF THE HVAC WORK SHALL BE REPAIRED TO MATCH NEW AND/OR EXISTING CONDITIONS.

28. COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE PROJECT ENGINEER.

29. LOCATIONS OF GRILLES, REGISTERS, & DIFFUSERS SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE EXACT LOCATIONS WITH LIGHTS, CEILING GRID, REFLECTED CEILING PLAN ETC.

30. ALL WORK SHALL COMPLY WITH AMTRAK DESIGN STANDARDS AND STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING APPLICABLE SECTIONS OF ANY INTERIM AMENDMENTS.

31. REFER TO HVAC KEY NOTES ON ALL DRAWINGS REGARDING SCOPES OF WORK.

HVAC SYMBOLS

SYMBOL	DESCRIPTION
	EXISTING DUCTWORK, PIPING OR EQUIPMENT TO BE REMOVED
	EXISTING DUCT TO BE REMOVED
	DUCT DIRECTION OF AIR FLOW
12x10	DUCT SIZE, FIRST FIGURE IS SIDE DOWN
	CONNECT NEW WORK TO EXISTING
W	FLEXIBLE CONNECTION
	FLEXIBLE DUCT
12x6 8x6	TRANSITION
	ELBOW WITH TURNING VANES
	POINT OF DISCONNECTION / POINT OF CONNECTION
T	WALL MOUNTED THERMOSTAT OR TEMPERATURE SENSOR
	ACCESS DOOR
# "	DOOR UNDERCUT
	UNION JOINT
	TEE-UP, BRANCH OUT OF TOP
	TEE-DOWN, BRANCH OUT OF BOTTOM
	ELBOW-UP
	ELBOW-DOWN
BDD	BACKDRAFT DAMPER
	GATE VALVE
	CLEANOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

MECHANICAL

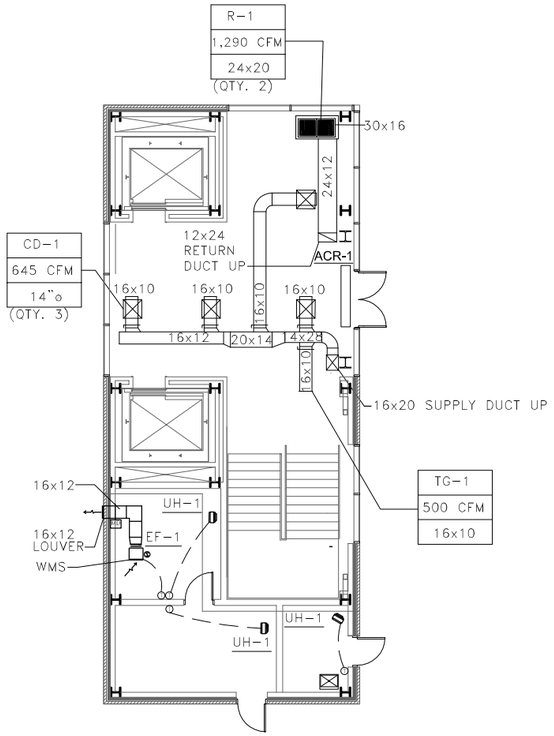
DESINED BY:	DRAWN BY:	PLANS CK'D. BY:
DT	DT	FA

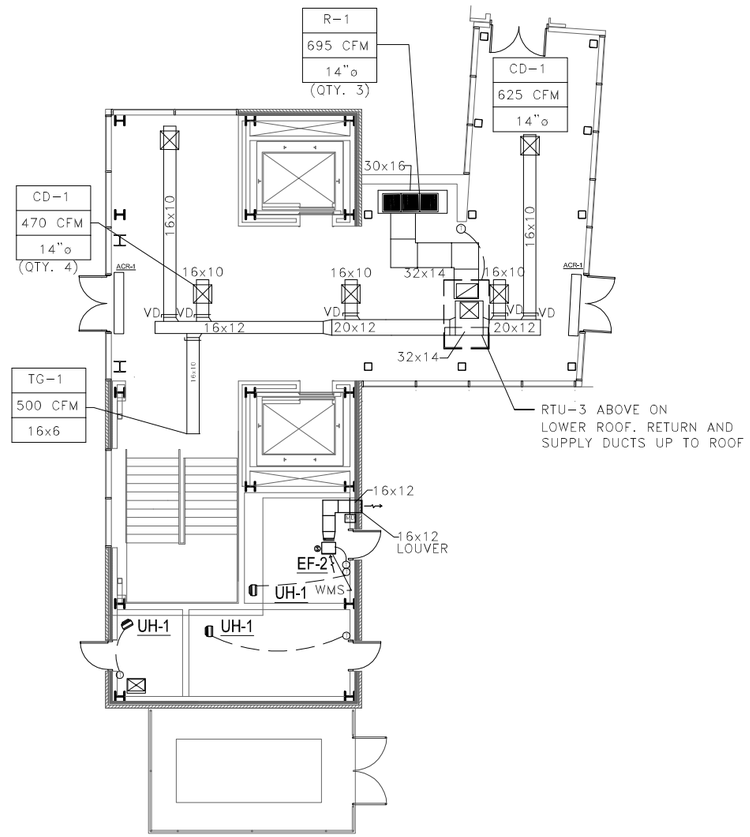
MECHANICAL LEGEND & GENERAL NOTES

SHEET M-001

STATE PROJECT NUMBER

1000-57-05





1 M-200 WEST TOWER FIRST FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

2 M-200 EAST TOWER FIRST FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

MECHANICAL

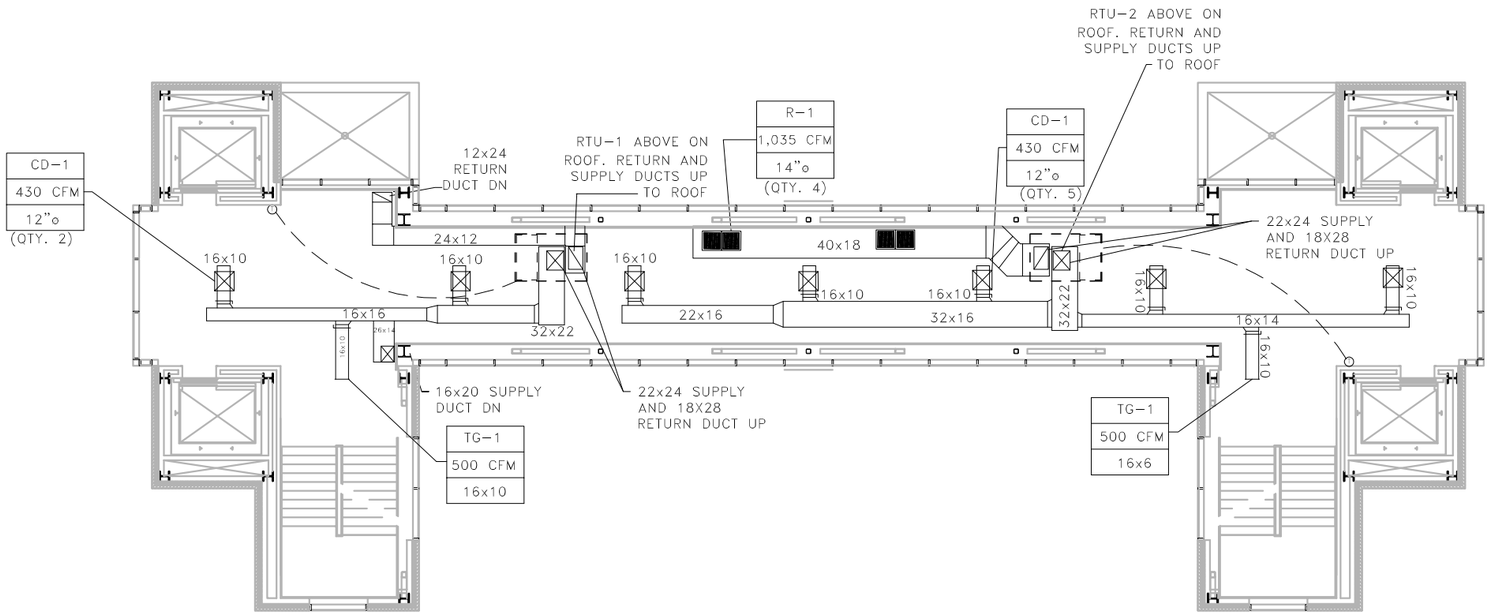
DESINED BY:	DRAWN BY:	PLANS CK'D. BY:
DT	DT	FA

MECHANICAL FIRST FLOOR PLAN

SHEET M-200

STATE PROJECT NUMBER

1000-57-05



1 M-201 SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

MECHANICAL

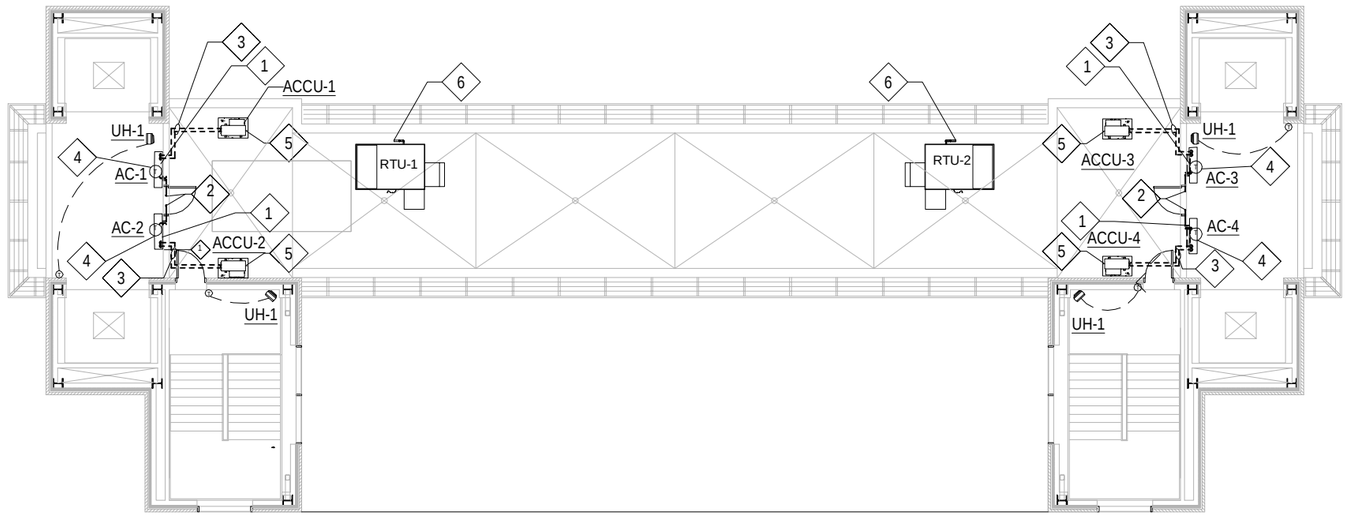
DESINED BY:	DRAWN BY:	PLANS CK'D. BY:
DT	DT	FA

MECHANICAL SECOND FLOOR PLAN

SHEET M-201

STATE PROJECT NUMBER

1000-57-05



1 M-202 ROOF PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

SHEETNOTES - MECHANICAL CONSTRUCTION PLAN

NO.	DESCRIPTION
1	WALL MOUNTED AC UNIT. MOUNT ABOVE DOOR LEVEL ON COLUMN FACE USING MFGR SUPPLIED WALL BRACKET, KINDORFS AND WALL ANCHORS. COORDINATE FINAL LOCATION WITH ELEVATOR CONTRACTOR.
2	EVAPORATOR CONDENSATE DRAIN TO BELOW PLATFORM. SPILL BELOW PLATFORM. COORDINATE ROUTING WITH ELEVATOR CONTRACTOR TO ENSURE NOT CROSSING OVER EQUIPMENT.
3	REFRIGERANT PIPING BETWEEN INDOOR EVAPORATOR AND OUTDOOR CONDENSING UNIT. ROUTE AND SIZE AS PER MANUFACTURER'S RECOMMENDATION. COORDINATE ROUTING WITH ELEVATOR CONTRACTOR TO ENSURE NOT CROSSING OVER EQUIPMENT.
4	WALL MOUNTED THERMOSTAT FOR SPLIT SYSTEM.
5	OUTDOOR CONDENSING UNIT MOUNTED ON HOUSEKEEPING PAD ON ROOF OF MACHINE ROOM. PROVIDE VIBRATION ISOLATION.
6	EXTEND CONDENSATE PIPING TO NEAREST ROOF DRAIN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

MECHANICAL

DESINED BY:	DRAWN BY:	PLANS CK'D. BY:
DT	DT	FA

MECHANICAL ROOF PLAN

SHEET M-202

STATE PROJECT NUMBER

1000-57-05

ROOFTOP AC UNIT SCHEDULE

GENERAL DATA					SUPPLY FAN								DX COOLING						GAS HEATING						ELECTRICAL			CONDENSER FAN			ELECTRICAL			WEIGHT
UNIT NO.	SERVICE	LOCATION	MFGR.	MODEL NO.	O.A. CFM	TOTAL CFM	TYPE	ESP IN WC	FAN SPEED MAX. REQ'D. RPM	FAN SPEED MAX. REQ'D. BHP	MOTOR DATA HP	MOTOR DATA V/PH/HZ	TC MBH	SC MBH	EER	EAT ℉. DB/WB	LAT ℉. DB/WB	REFRIG.	INPUT MBH	OUTPUT MBH	SSE %	EAT ℉. DB	LAT ℉. DB	VOLTAGE	MCA	MOCP	EAT °F	FAN MOTOR NO.	FAN MOTOR HP	VOLTAGE	MCA	MOCP	TOTAL LBS
RTU-1	BRIDGE LEVEL WEST TOWER/VESTIBULE	ROOF	JCI	J08ZRN	600	3000	-	1.0	1725	1.74	3	208V-3PH	106.5	75.3	11.2	80/67	55.4/54.0	R-410A	180	144	80	60	95	208V-3PH	59.1	70	92	-	-	208V-3PH	59.1	70	1460
RTU-2	BRIDGE LEVEL EAST TOWER/VESTIBULE	ROOF	JCI	J08ZRN	600	3000	-	1.0	1725	1.74	5	208V-3PH	106.5	75.3	11.2	80/67	55.4/54.0	R-410A	180	144	80	60	95	208V-3PH	59.1	70	92	-	-	208V-3PH	59.1	70	1460
RTU-3	EAST TOWER/VESTIBULE	LOWER ROOF	JCI	J08ZRN	600	3000	-	1.0	1725	1.74	5	208V-3PH	106.5	75.3	11.2	80/67	55.4/54.0	R-410A	180	144	80	60	95	208V-3PH	59.1	70	92	-	-	208V-3PH	59.1	70	1460

NOTES:
1. TWO STAGE COOLING
2. SCROLL COMPRESSORS
3. MERV 13 FILTERS
4. SINGLE-PONT POWER CONNECTION
5. ECONOMIZER WITH POWER EXHAUST
6. HOT GAS REHEAT
7. SINGLE ZONE VAV FAN OPERATION
8. SMART BAS EQUIPMENT CONTROLLER WITH DISCHARGE AIR, RETURN AIR AND OA TEMPERATURE SENSORS
9. DEMAND CONTROLLED VENTILATION WITH CO2 SENSOR
10. DUAL ENTHALPY SENSORS
11. SUPPLY AND RETURN SMOKE DETECTORS
12. 14" HIGH ROOF CURB
13. DEHUMIDIFICATION CONTROLS

AIR COOLED SPLIT HEAT PUMP SYSTEM

INDOOR EVAPORATOR- WALL MOUNTED

UNIT NO.	SERVICE	CFM	COOLING CAPACITY	HEATING CAPACITY	VOLTAGE	FLA	WEIGHT LBS.	MANUFACTURER AND MODEL NO.
AC-1/AC-2 AC-3/AC-4	ELEV. MACHINE RM.	736	30 MBH	32 MBH	208V-1PH	1.0	60	MITSUBISHI ELECTRIC - PKA-A30KA7 OR APPROVED EQUAL

NOTES:
1. WALL MOUNT BRACKET AND MOUNTING BASE
2. FURNISH WITH WALL THERMOSTAT.
3. DISCONNECT

OUTDOOR CONDENSING UNIT- HEAT PUMP

GENERAL UNIT NO.	GENERAL NOMINAL TONS	GENERAL SEER	COMPRESSOR REFR.	COMPRESSOR TYPE	ELECTRICAL VOLTAGE	ELECTRICAL AMPS MCA	ELECTRICAL AMPS MOCP	WEIGHT LBS.	MANUFACTURER AND MODEL NO.
ACCU-1 ACCU-2 ACCU-3 ACCU-4	2.5	18.0	R-410A	SCROLL-DC INVERTER	208V-1PH	24	40	170	MITSUBISHI ELECTRIC - PUZA30NHA6 OR APPROVED EQUAL

NOTES:
1. HOUSEKEEPING PAD AND MOUNTING BASE

UNIT HEATER SCHEDULE

UNIT TAG	SERVICE	CFM	HP	ELEC V	ELEC Ø	ELEC KW	ELEC AMPS	AIR ENT.°F	AIR LVG.°F	WEIGHT (LBS)	MODEL NO.	MANUFACTURER.	REMARKS
UH-1	END PLATFORM - ELEVATOR VESTIBULE	350	1/6	208	1	5	14.5	45	90	27	MUH0581	MARLEY OR APPROVED EQUAL	CLG. MOUNTED, FURNISH WITH THERMOSTAT, HANGERS

AIR CURTAIN SCHEDULE

UNIT NO.	MANUFACTURER	MODEL	SERVES.	AIRFLOW	HP	ELECTRICAL VOLTAGE	ELECTRICAL MCA	ELECTRICAL MOCP	ACCESS.	NOTES
ACR-1	MARS AIR	QP1096-3U A-AL	PLATFORM STAIR ENTRANCE	VARIABLE	0.5	120V / 1PH	10.2	15	2-4	1,2

ACCESSORIES:
1. NSF LISTING
2. DOOR SWITCH
3. DELAY TIMER
4. MOUNTING BRACKET

NOTES:
1. SET DELAY TIMER TO 30 SECONDS
2. MAINTAIN 7" CLEARANCE FOR MOTOR ACCESS ON SIDE OF AIR CURTAIN.

CEILING DIFFUSERS/RETURN GRILLES

MFR.: TITUS OR APPROVED EQUAL

TAG	CFM RANGE	NOMINAL NECK SIZE	FACE SIZE	MODEL	REMARKS
TG-1	0-1000	-	16"x6"	300RL	SURFACE MOUNTED SUPPLY GRILLE
R-1	0-2400	-	24"x20"	350RS	SURFACE MOUNTED EXHAUST GRILLE
R-2	0-300	-	12"x12"	350RS	SURFACE MOUNTED EXHAUST GRILLE
R-3	0-10	-	6"x6"	350RS	SURFACE MOUNTED EXHAUST GRILLE
CD-1	0-330	10"DIA.	24"x24"	OMNI	LAY-IN DIFFUSER

1. COORDINATE EXACT LOCATION AND COLOR WITH ARCHITECTS DRAWINGS.
2. FOR 2-WAY OR 3-WAY BLOW, BLANK OFF NECK (NECK TO BE NEXT SIZE).
3. ALL SUPPLY REGISTERS SHALL BE DOUBLE DEFLECTING TYPE, VERTICAL FRONT BLADES

EXHAUST FAN SCHEDULE

DESIGNATION	EF-1	EF-2	
MANUFACTURER	PENN BARRY	PENN BARRY	
TYPE	CABINET	CABINET	
MODEL	Z10H (TDA)	Z10H (TDA)	
CFM	500	500	
STATIC PRESSURE	0.375"WG	0.375"WG	
RPM	1550	1550	
ELECTRICAL	115/1/60	115/1/60	
WATTAGE	372	372	
STYLE	TDA	TDA	
OPTIONS	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	
SERVICE	ELECTRICAL RM	ELECTRICAL RM	

1. SPEED CONTROL
2. VIBRATION ISOLATORS
3. DISCONNECT SWITCH
4. COOLING ONLY THERMOSTAT
5. SWITCHED THROUGH BREAKER ONLY - 24 HOUR OPERATION
6. BACKDRAFT DAMPER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

MECHANICAL

DESINED BY:	DRAWN BY:	PLANS CK'D. BY:
DT	DT	FA

MECHANICAL SCHEDULES

SHEET M-300

SCALE =

STATE PROJECT NUMBER
1000–57–05

ELECTRICAL SYMBOLS

CIRCUITING AND WIRING

LA-2,4 — HOME RUN TO PANEL WITH CIRCUIT NUMBERS INDICATED. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. SEE NOTE 3.

CONDUIT STUB UP.

CONDUIT STUB DOWN.

LIGHTING

EMERGENCY EGRESS FLOOD LIGHT WITH BATTERY PACK.

EXIT LIGHT WITH BATTERY PACK.

COMBINATION EXIT LIGHT WITH BATTERY AND EMERGENCY LIGHT HEADS.

REMOTE EMERGENCY HEAD, LOW VOLTAGE.

B # / a — EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK UP.

A # / a — LIGHTING FIXTURE
A = LUMINAIRE TYPE
a = SWITCH LEG/SWITCHING SCHEME
# = CIRCUIT NUMBER
HATCH = EMERGENCY BATTERY INTEGRAL TO FIXTURE.

S_a — WALL SWITCH, SPST, 120V GROUNDED VERTICALLY MOUNTED. SUBSCRIPT INDICATES:
"a" CONTROLS LOAD "a"
"3" DENOTES THREE-WAY SWITCH
"T" DENOTES MOTOR RATED THERMAL SWITCH
"P" DENOTES PILOT LIGHT SWITCH
"OS" DENOTES OCCUPANCY SENSOR SWITCH WITH BYPASS SWITCH
"WP" DENOTES WEATHER PROOF SWITCH

OS — MOTION (VACANCY) SENSOR WITH BY PASS SWITCH - CEILING MOUNTED

MISCELLANEOUS

J/J — WALL/CEILING MOUNTED JUNCTION BOX.

C — CLOCK HANGER AND CLOCK RECEPTACLE

TELEPHONE / OUTLET WITH 1" EC WITH DRAG LINE AND BUSHED 90 DEGREE ELBOW TERMINATED IN ACCESSIBLE CEILING.

WP — PUSH PLATE WP INDICATES WEATHER PROOF

POWER

SIMPLEX WALL RECEPTACLE. NEMA 5-20R, 20A, 125V, 3W, GND. "C" INDICATES CLOCK HANGAR AND RECEPTACLE.

GFCI — DUPLEX WALL MOUNTED GROUNDED RECEPTACLE. NEMA 5-20R, 20A, 125V, 3 WIRE, "GFCI" DENOTES GROUND FAULT CIRCUIT INTERRUPTER.

QUADRUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V, 3 WIRE.

30A/2P/30A — FUSED DISCONNECT SWITCH. ADJACENT TEXT DENOTES AMP FRAME/POLES/FUSE OR CB SIZE.

DISCONNECT SWITCH, NON FUSED

PANELBOARD, FLUSH MOUNTED.

PANELBOARD, SURFACE MOUNTED.

S_T — MOTOR WITH LOCAL DISCONNECT SWITCH. S_T - INDICATES THERMAL SWITCH.

ENCLOSED CIRCUIT BREAKER

SYMBOLS/ABBREVIATIONS NOTES

1. NOT ALL DEVICES, ABBREVIATIONS, AND EQUIPMENT INDICATED ON THIS SYMBOL LIST MAY NECESSARILY BE APPLICABLE TO THE PROJECT.
2. REFER TO ELECTRICAL SPECIFICATIONS ON DRAWING E-002.
3. U.O.N, PROVIDE 20 AMP BRANCH CIRCUITS WITH A MINIMUM 2#12, 1#12G, 3/4" CONDUIT. ROUTING OF NEW RACEWAY SYSTEMS TO BE FIELD COORDINATED WITH EXISTING CONDITIONS. WHEREVER POSSIBLE, RACEWAYS TO BE INSTALLED CONCEALED IN WALLS AND ABOVE FINISHED CEILINGS.
4. FOR ALL EXISTING CIRCUITS THE ELECTRICAL CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE ENTIRE CIRCUIT, AND MAKE ANY CORRECTIONS NECESSARY FOR THAT CIRCUIT TO MEET THE NEC. EXISTING TW, THW, OR THWN WIRE IN GOOD CONDITION MAY REMAIN FOR EXISTING BRANCH CIRCUIT WIRING. EXISTING THW OR THWN WIRE IN GOOD CONDITION MAY REMAIN FOR FEEDERS.

ABBREVIATIONS

ABBR.	DESCRIPTION
A	AMPERES
ADA	AMERICANS WITH DISABILITIES ACT
A/E	ARCHITECT/ENGINEER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COMM	COMMUNICATIONS
DISC	DISCONNECT
DWG	DRAWING
EF	EXHAUST FAN
EHWH	ELECTRIC HOT WATER HEATER
ELEC	ELECTRICAL
(E)	EXISTING EQUIPMENT (TO REMAIN)
(ER)	EXISTING EQUIPMENT TO BE RELOCATED (NOTE 4)
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
GND	GROUND, GROUND WIRE
GFCI, GFI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSEPOWER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING DIVISION OF WORKS
JB	JUNCTION BOX
KVA	KILOVOLT AMPS
KW	KILOWATT
LTG	LIGHTING
MANUF	MANUFACTURER
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
N	NEUTRAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OS	OCCUPANCY SENSOR
Ø	PHASE
PB	PULL BOX
PVC	POLYVINYL CHLORIDE
PIDS	PASSENGER INFORMATION DISPLAY SYSTEM
(R)	EXISTING EQUIPMENT SHALL BE REMOVED (NOTE 4)
(RE)	RELOCATED EXISTING EQUIPMENT (NOTE 4)
RGS	RIGID GALVANIZED STEEL
SW	SWITCH
SPST	SINGLE POLE SINGLE THROW
TBD	TO BE DETERMINED
TYP	TYPICAL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
U/G	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
U.O.N	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTAGE
VA	VOLT-AMPERE
W	WIRE
WP	WEATHER PROOF

GENERAL NOTES

ELECTRICAL

A. ALL WORK SHALL COMPLY WITH THE 2017 NATIONAL ELECTRICAL CODE, ASHRAE 90.1-2010, AND ALL LOCAL CODES AND STANDARDS. REFER TO THE SPECIFICATIONS ON DRAWING E-002.

B. ALL WORK IS NEW UNLESS OTHERWISE NOTED. THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALE DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND ELEVATION OF ALL RECEPTACLES AND TELEPHONE/DATA OUTLETS, ETC., SHALL BE DETERMINED FROM THE ARCHITECT'S DRAWINGS, U.O.N.

C. TRACE OUT AND DOCUMENT EXISTING CIRCUITS OF SCOPE OF WORK AREAS. ALL ELECTRIC POWER MUST BE DISCONNECTED AND MAKE SAFE BEFORE STARTING DEMOLITION.

D. COORDINATE WORK WITH OTHER TRADES AND CONFER WITH OTHER TRADES WHOSE WORK MIGHT AFFECT THIS INSTALLATION. VERIFY ALL LOCATIONS FOR DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN INSTALLATION.

E. PANEL DIRECTORIES SHALL BE UPDATED TO CONFORM TO WORK COMPLETED PER NEC ARTICLE 408.4. TEST AND TRACE ALL CIRCUITS IN CONTRACT AREA.

F. ELECTRIC PANEL COVERS ARE NOT TO BE LEFT OFF THE PANELS AT ANY TIME UNLESS MEN ARE WORKING ON SAME. COVERS SHALL BE REPLACED EACH NIGHT BEFORE LEAVING JOB SITE.

G. ALL NEW MATERIALS REQUIRED SHALL CONFORM WITH THE STANDARDS OF THE UNDERWRITERS LABORATORIES, INC. IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR TYPE OF MATERIAL IN QUESTION, U.O.N.

H. VISIT AND EXAMINE CAREFULLY THE EXISTING AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THE WORK. PERFORM THIS, PRIOR TO SUBMITTING THE PROPOSAL. SUBMISSION OF PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.

I. ALL EQUIPMENT AND DEVICES MOUNTING HEIGHT SHALL COMPLY WITH ADA REQUIREMENTS. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

J. MAINTAIN CONTINUITY OF SERVICE ON ALL CIRCUITS WHICH ALSO SERVE AREAS NOT AFFECTED BY THESE CHANGES. WHENEVER IT IS REQUIRED THAT AN EXISTING CIRCUIT BE REVISED, DISCONNECTED OR REMOVED, IT SHALL BE UNDERSTOOD THAT THE CIRCUIT SHALL BE RECONNECTED AND SERVICE RE-ESTABLISHED IN THE REMAINING PORTION OF THE CIRCUIT WHICH IS OUTSIDE OF THE AREA AFFECTED BY THIS ALTERATION.

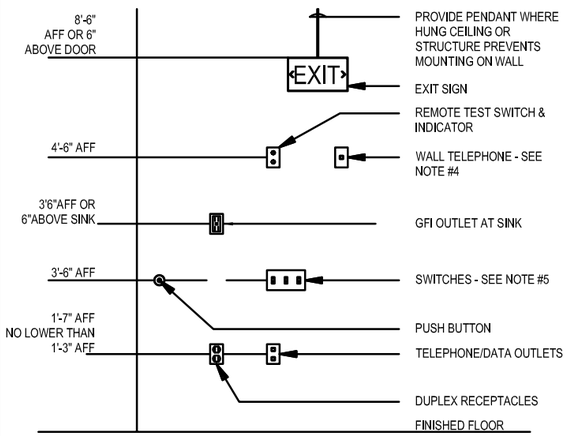
K. CUT BACK TO THE FLOOR, WALL OR CEILING, REMOVE WIRING AND PLUG BOTH ENDS OF CONCEALED CONDUITS MADE OBSOLETE BY THIS ALTERATION. EXPOSED CONDUITS, WIREWAYS, OUTLET BOXES, PULL BOXES, HANGERS, ETC. MADE OBSOLETE BY THE ALTERATION WORK SHALL BE REMOVED, U.O.N.

L. PROVIDE GROUND WIRES IN ALL BRANCH CIRCUITS AND FEEDERS.

M. ALL EQUIPMENT SHALL HAVE ITS MANUFACTURER'S NAMEPLATE SECURELY ATTACHED GIVING DESIGN AND OPERATING CHARACTERISTICS. NAMEPLATES SHALL NOT BE COVERED OR OBSTRUCTED FROM VIEW.

N. EACH TRADE SHALL PROVIDE AN APPROVED FIRE STOP SEALANT, TOTALLY ENCLOSING ALL PENETRATIONS THROUGH CEILINGS, WALLS, ROOFS AND FLOORS.

A.D.A. MOUNTING HEIGHTS DETAIL



MOUNTING HEIGHT NOTES:

1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT EXIT SIGNS.
2. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
3. MOUNTING HEIGHTS TO BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWINGS OR SPECIFICATIONS. LIGHT FIXTURE MOUNTING HEIGHTS ARE GOVERNED BY THE LIGHTING FIXTURE SCHEDULE.
4. TELEPHONE OUTLET MOUNTING HEIGHTS:
   FORWARD REACH:
   MAXIMUM HIGH FORWARD REACH SHALL BE 48" AFF.
   MINIMUM LOW REACH SHALL BE 15" AFF.
   FORWARD REACH OVER OBSTRUCTION:
   WHEN LENGTH OF OBSTRUCTION IS LESS THAN 20", FORWARD REACH SHALL BE 48" AFF MAXIMUM.
   WHEN LENGTH OF OBSTRUCTION IS BETWEEN 20" AND 25", FORWARD REACH SHALL BE 44" MAXIMUM.
   SIDE REACH:
   MAXIMUM HIGH SIDE REACH SHALL BE 54" AFF.
   LOW SIDE SIDE REACH SHALL BE NO LESS THAN 9" AFF.
   SIDE REACH OVER OBSTRUCTION:
   WHEN THE OBSTRUCTION IS 24" WIDE, THE SIDE REACH SHALL BE A MAXIMUM OF 46" AFF WITH A MINIMUM OF 34" AFF.
5. SWITCHES SHALL BE NO HIGHER THAN 42" AFF AND NO LOWER THEN 36" AFF.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

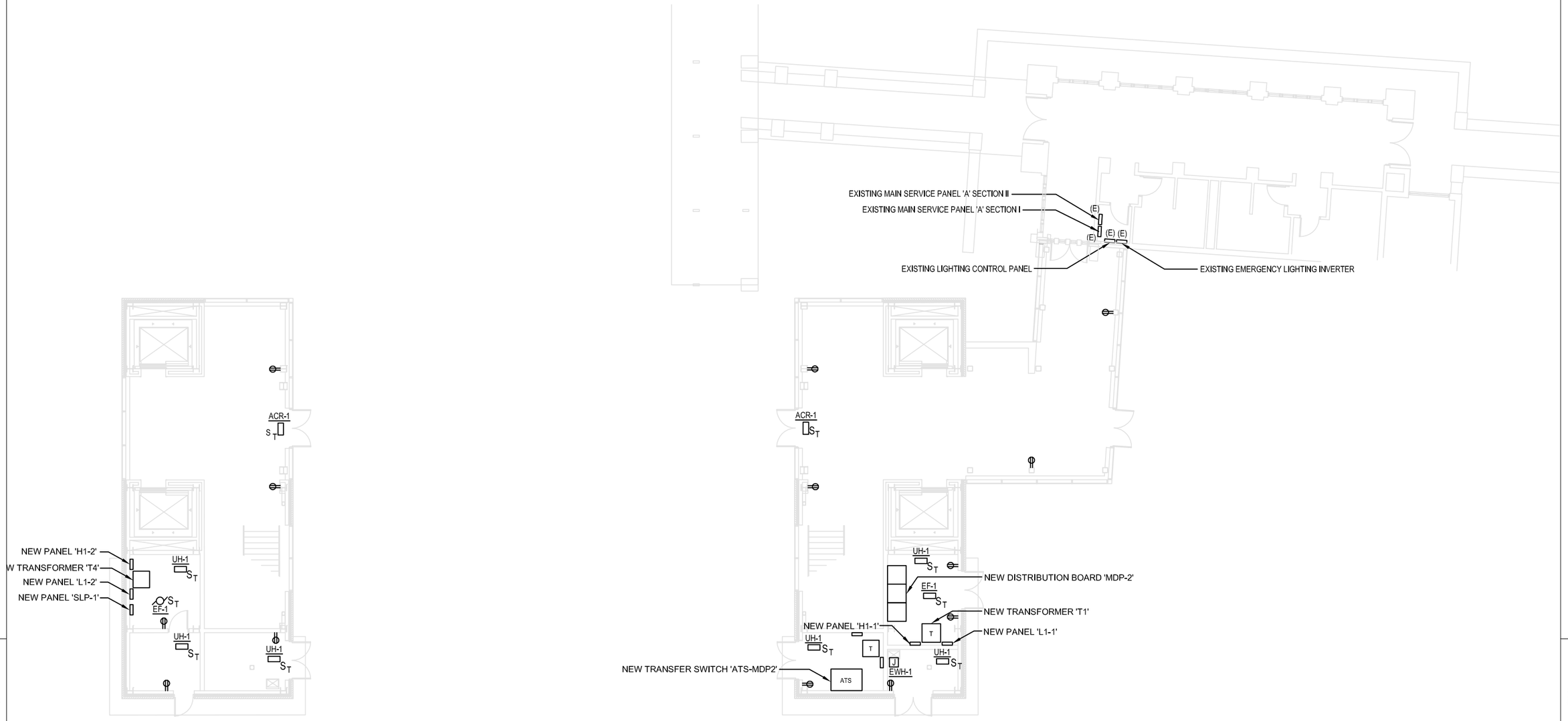
SHEET E–001

SCALE = NONE

GENERAL NOTES - POWER PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-100 ELECTRICAL FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL FIRST FLOOR POWER PLAN

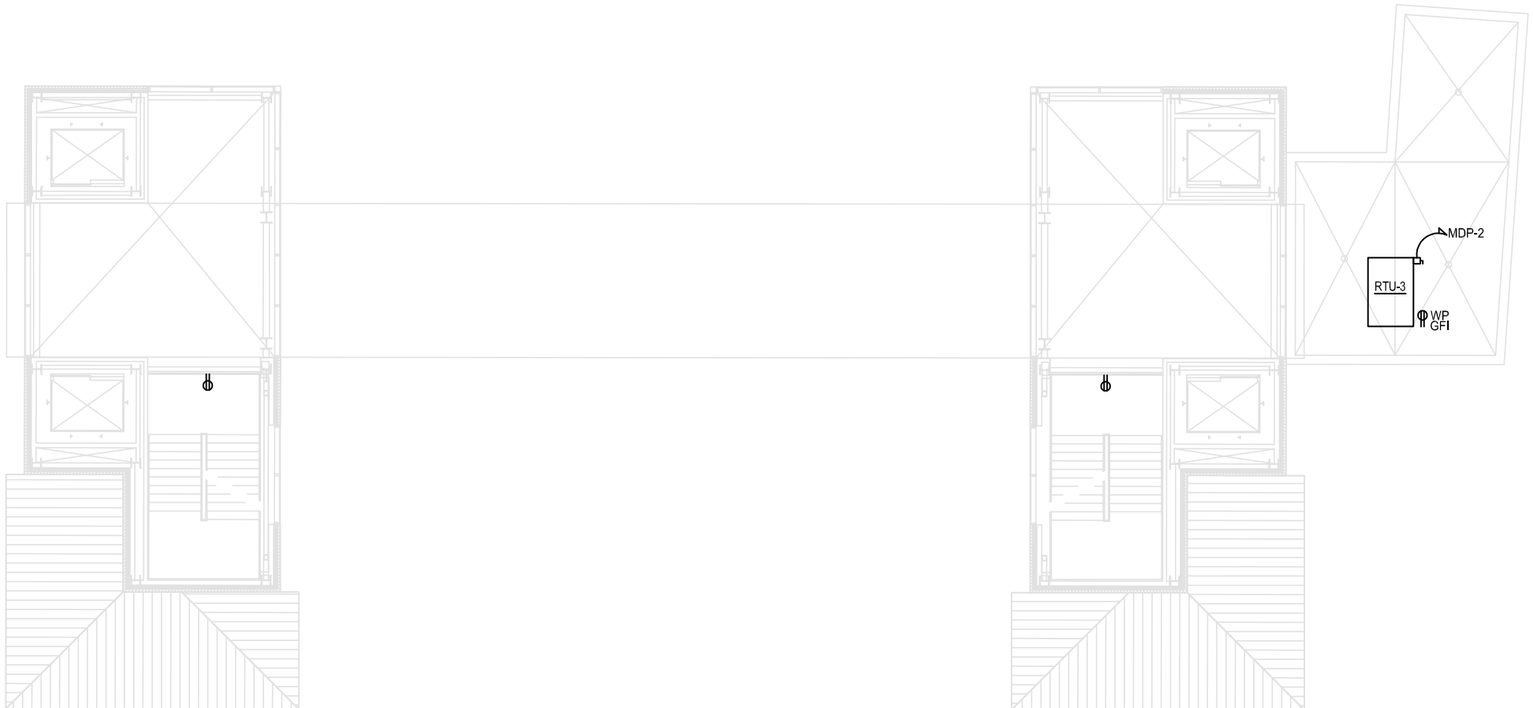
SHEET
E–100

SCALE = AS NOTED

GENERAL NOTES - POWER PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-101 ELECTRICAL INTERMEDIATE LEVEL PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL
INTERMEDIATE LEVEL
POWER PLAN

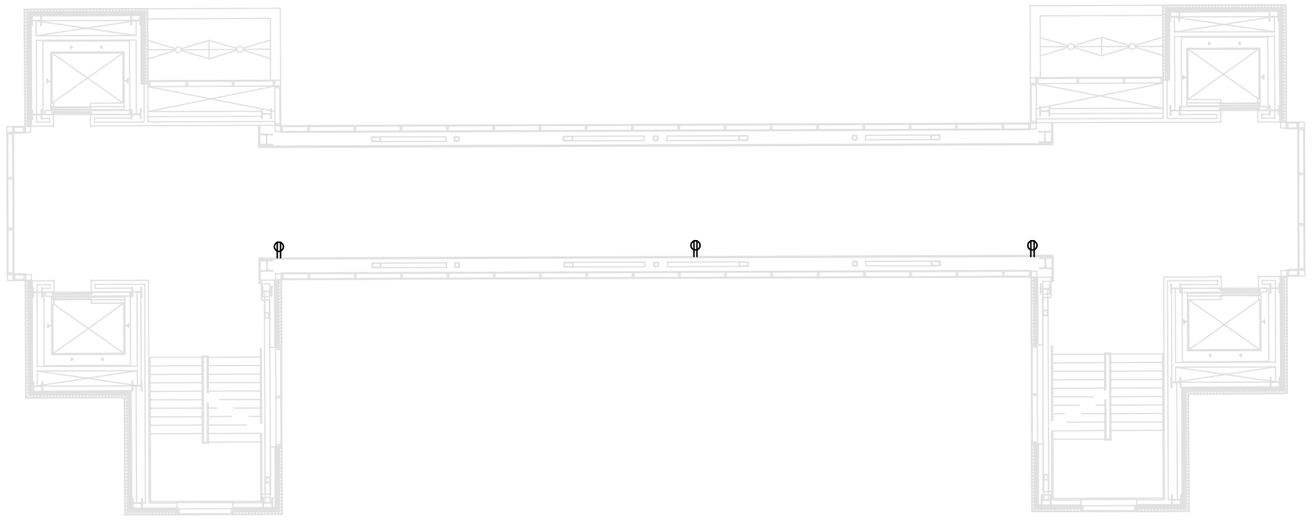
SHEET
E–101

SCALE = AS NOTED

GENERAL NOTES - POWER PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-102 ELECTRICAL SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL SECOND FLOOR LIGHTING PLAN

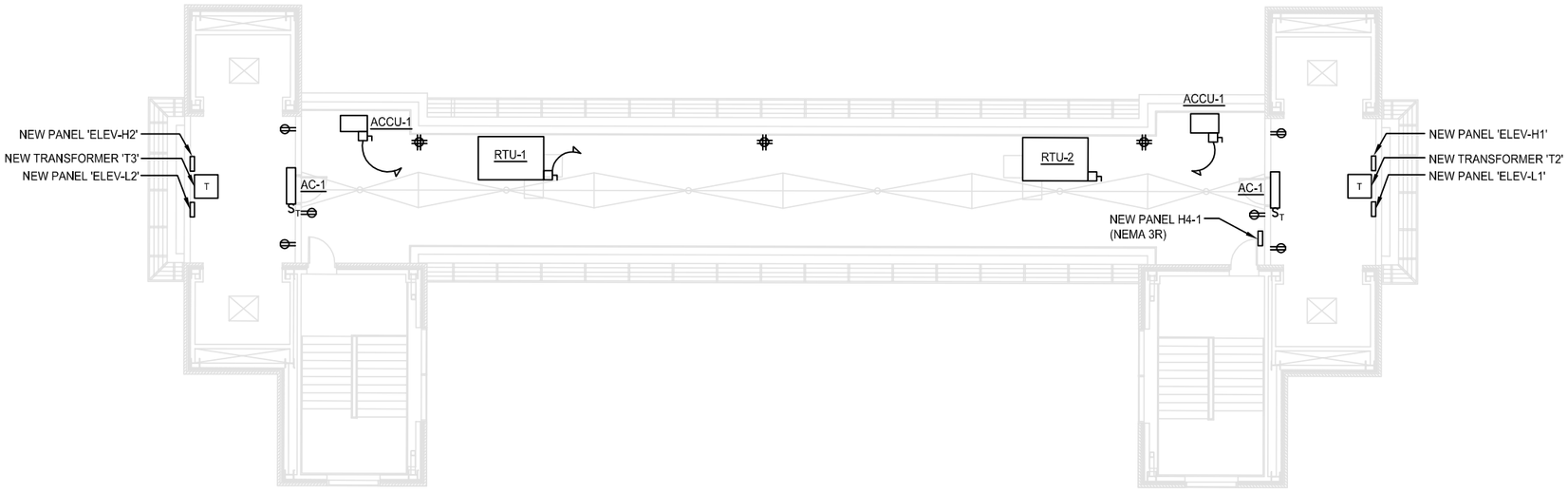
SHEET E–102

SCALE = AS NOTED

STATE PROJECT NUMBER
1000–57–05

GENERAL NOTES - POWER PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.



1 E-103 ELECTRICAL ROOF PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL ROOF POWER PLAN

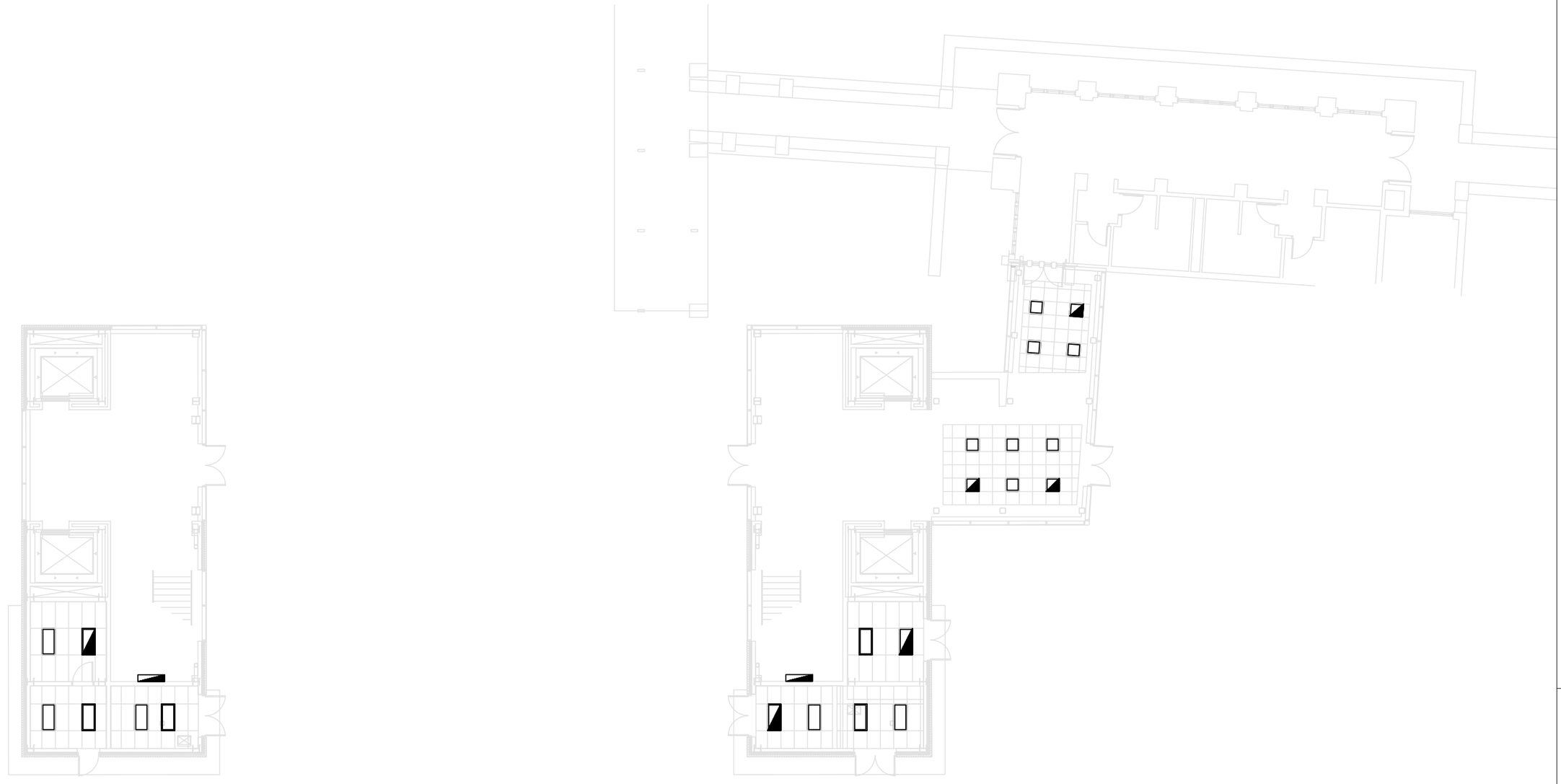
SHEET
E–103

SCALE = AS NOTED

GENERAL NOTES - LIGHTING PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-200 ELECTRICAL FIRST FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL FIRST FLOOR LIGHTING PLAN

SHEET E–200

SCALE = AS NOTED

GENERAL NOTES - LIGHTING PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05

1 / E-201 ELECTRICAL INTERMEDIATE LEVEL PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL
INTERMEDIATE LEVEL
LIGHTING PLAN

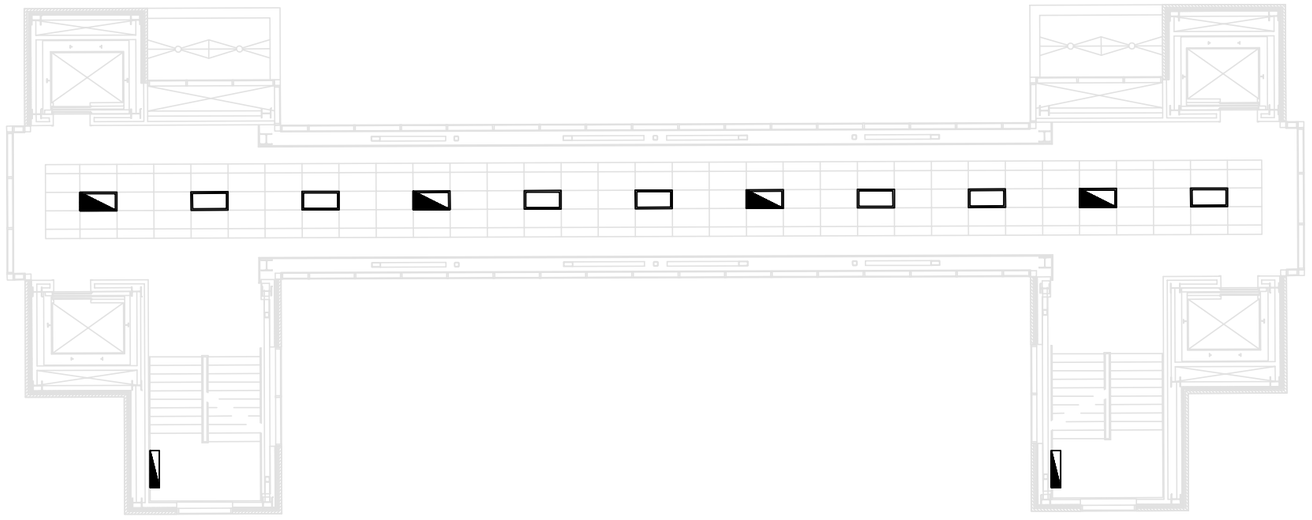
SHEET
E–201

SCALE = AS NOTED

GENERAL NOTES - LIGHTING PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-202 ELECTRICAL SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL SECOND FLOOR LIGHTING PLAN

SHEET

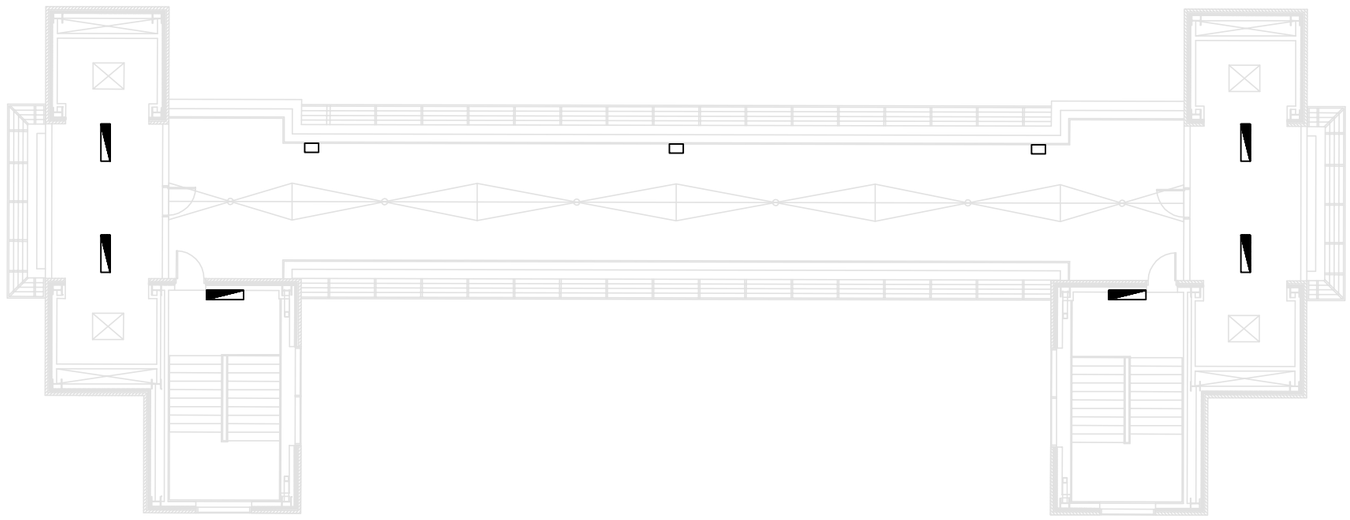
E–202

SCALE = AS NOTED

GENERAL NOTES - LIGHTING PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-203 ELECTRICAL ROOF PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL ROOF LIGHTING PLAN

SHEET
E–203

SCALE = AS NOTED

GENERAL NOTES - LIGHTING PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05

1/E-204 ELECTRICAL STAIRS LIGHTING PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL STAIRS LIGHTING ELEVATION PLAN

SHEET

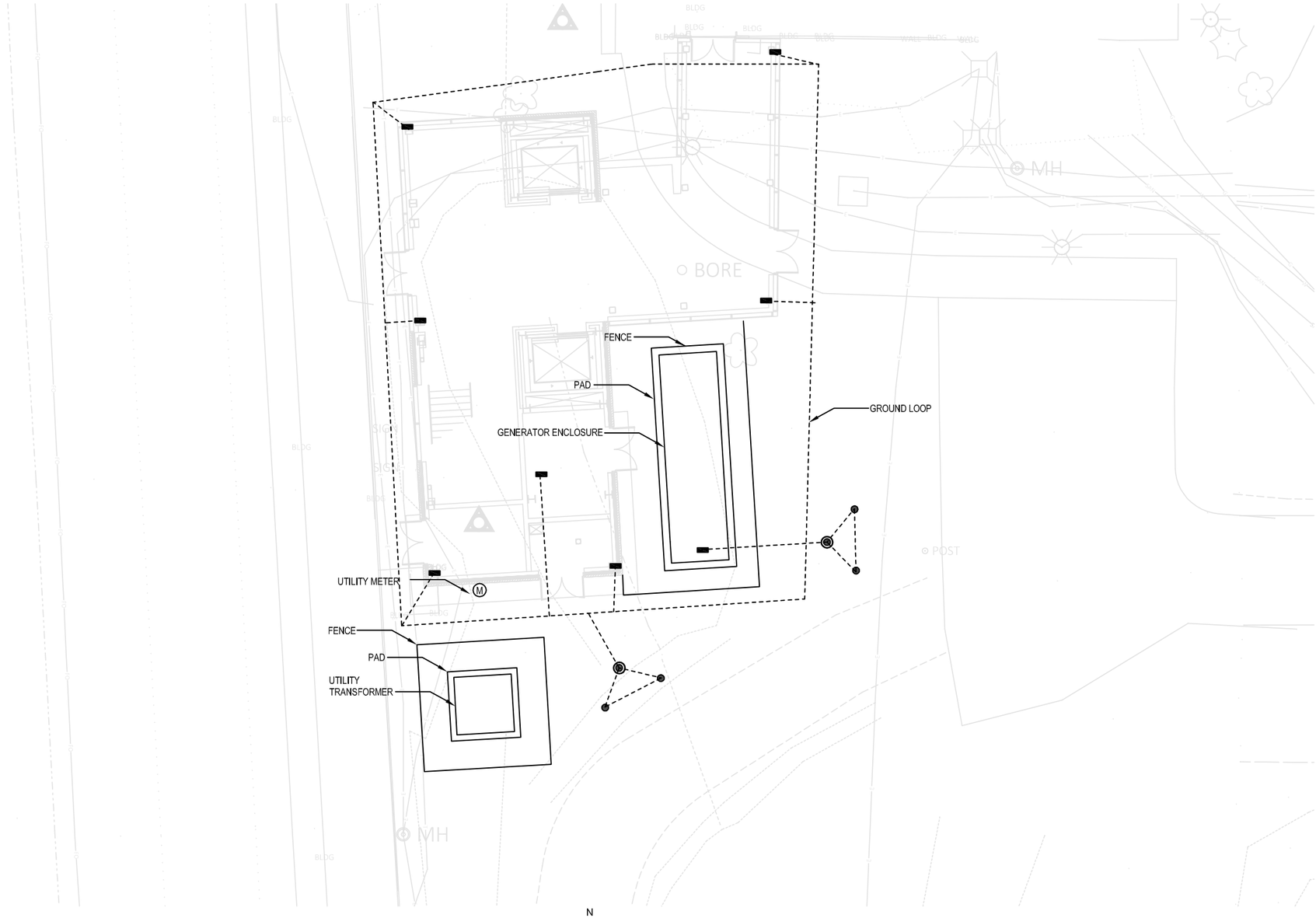
E–204

SCALE = AS NOTED

GENERAL NOTES - POWER PLAN

1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

STATE PROJECT NUMBER
1000–57–05



1 / E-300 ELECTRICAL SITE POWER PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL SITE POWER PLAN

SHEET E–300

SCALE = AS NOTED

				H4-1									
WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			RTU-1		20A-3	1	2	20A-1		SPARE			
						3	4	20A-1		SPARE			
						5	6	20A-1		SPARE			
			ACCU-1A		20A-2	7	8	20A-1		SPARE			
						9	10	20A-1		SPARE			
			ACCU-1B		20A-2	11	12	20A-1		SPARE			
						13	14	20A-1		SPARE			
			AC-1A		20A-1	15	16	20A-1		SPARE			
			AC-1B		20A-1	17	18	20A-1		SPARE			
			ROOF LIGHTING		20A-1	19	20	20A-1		SPARE			
			SPARE		20A-1	21	22	20A-1		SPARE			
			SPARE		20A-1	23	24	20A-1		SPARE			
			SPARE		20A-1	25	26	20A-1		SPARE			
			SPARE		20A-1	27	28	20A-1		SPARE			
			SPARE		20A-1	29	30	20A-1		SPARE			
			SPARE		20A-1	31	32	20A-1		SPARE			
			SPARE		20A-1	33	34	20A-1		SPARE			
			SPARE		20A-1	35	36	20A-1		SPARE			
			SPARE		20A-1	37	38	20A-1		SPARE			
			SPARE		20A-1	39	40	20A-1		SPARE			
			SPARE		20A-1	41	42	20A-1		SPARE			
										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			SPARE		20A-1	1	2	20A-1		SPARE			
			SPARE		20A-1	3	4	20A-1		SPARE			
			SPARE		20A-1	5	6	20A-1		SPARE			
			SPARE		20A-1	7	8	20A-1		SPARE			
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			SPARE		20A-1	13	14	20A-1		SPARE			
			SPARE		20A-1	15	16	20A-1		SPARE			
			SPARE		20A-1	17	18	20A-1		SPARE			
			SPARE		20A-1	19	20	20A-1		SPARE			
			SPARE		20A-1	21	22	20A-1		SPARE			
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			SPARE		20A-1	31	32	20A-1		SPARE			
			SPARE		20A-1	33	34	20A-1		SPARE			
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			SPARE		20A-1	39	40	20A-1		SPARE			
			SPARE		20A-1	41	42	20A-1		SPARE			
										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			SPARE		20A-1	1	2	20A-1		SPARE			
			SPARE		20A-1	3	4	20A-1		SPARE			
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			SPARE		20A-1	41	42	20A-1		SPARE			
										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			SPARE		20A-1	1	2	20A-1		SPARE			
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			SPARE		20A-1	15	16	20A-1		SPARE			
			SPARE		20A-1	17	18	20A-1		SPARE			
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			SPARE		20A-1	31	32	20A-1		SPARE			
			SPARE		20A-1	33	34	20A-1		SPARE			
			SPARE		20A-1	35	36	20A-1		SPARE			
			SPARE		20A-1	37	38	20A-1		SPARE			
			SPARE		20A-1	39	40	20A-1		SPARE			
			SPARE		20A-1	41	42	20A-1		SPARE			
										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			SPARE		20A-1	1	2	20A-1		SPARE			
			SPARE		20A-1	3	4	20A-1		SPARE			
			SPARE		20A-1	5	6	20A-1		SPARE			
			SPARE		20A-1	7	8	20A-1		SPARE			
			SPARE		20A-1	9	10	20A-1		SPARE			
			SPARE		20A-1	11	12	20A-1		SPARE			
			SPARE		20A-1	13	14	20A-1		SPARE			
			SPARE		20A-1	15	16	20A-1		SPARE			
			SPARE		20A-1	17	18	20A-1		SPARE			
			SPARE		20A-1	19	20	20A-1		SPARE			
			SPARE		20A-1	21	22	20A-1		SPARE			
			SPARE		20A-1	23	24	20A-1		SPARE			
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			SPARE		20A-1	27	28	20A-1		SPARE			
			SPARE		20A-1	29	30	20A-1		SPARE			
			SPARE		20A-1	31	32	20A-1		SPARE			
			SPARE		20A-1	33	34	20A-1		SPARE			
			SPARE		20A-1	35	36	20A-1		SPARE			
			SPARE		20A-1	37	38	20A-1		SPARE			
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			SPARE		20A-1	41	42	20A-1		SPARE			
										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

WATTS				BRKR	TRIP	CCT	CCT	TRIP	BRKR		WATTS		
A	B	C	DESCRIPTION	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C
			SPARE		20A-1	1	2	20A-1		SPARE			
			SPARE		20A-1	3	4	20A-1		SPARE			
			SPARE		20A-1	5	6	20A-1		SPARE			
			SPARE		20A-1	7	8	20A-1		SPARE			
			SPARE		20A-1	9	10	20A-1		SPARE			
			SPARE		20A-1	11	12	20A-1		SPARE			
			SPARE		20A-1	13	14	20A-1		SPARE			
			SPARE		20A-1	15	16	20A-1		SPARE			
			SPARE		20A-1	17	18	20A-1		SPARE			
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			SPARE		20A-1	33	34	20A-1		SPARE			
			SPARE		20A-1	35	36	20A-1		SPARE			
			SPARE		20A-1	37	38	20A-1		SPARE			
			SPARE		20A-1	39	40	20A-1		SPARE			
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										New Connect	0	0	0
										Connect Amps		0	Amps
										Demand Amps		0	Amps

8

8

STATE PROJECT NUMBER

1000-57-05

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY: P. HUMMEL
DRAWN BY: P. HUMMEL
PLANS CK'D. BY: F. CONSTANTINOPLE

ELECTRICAL SCHEDULES

SHEET
E-500

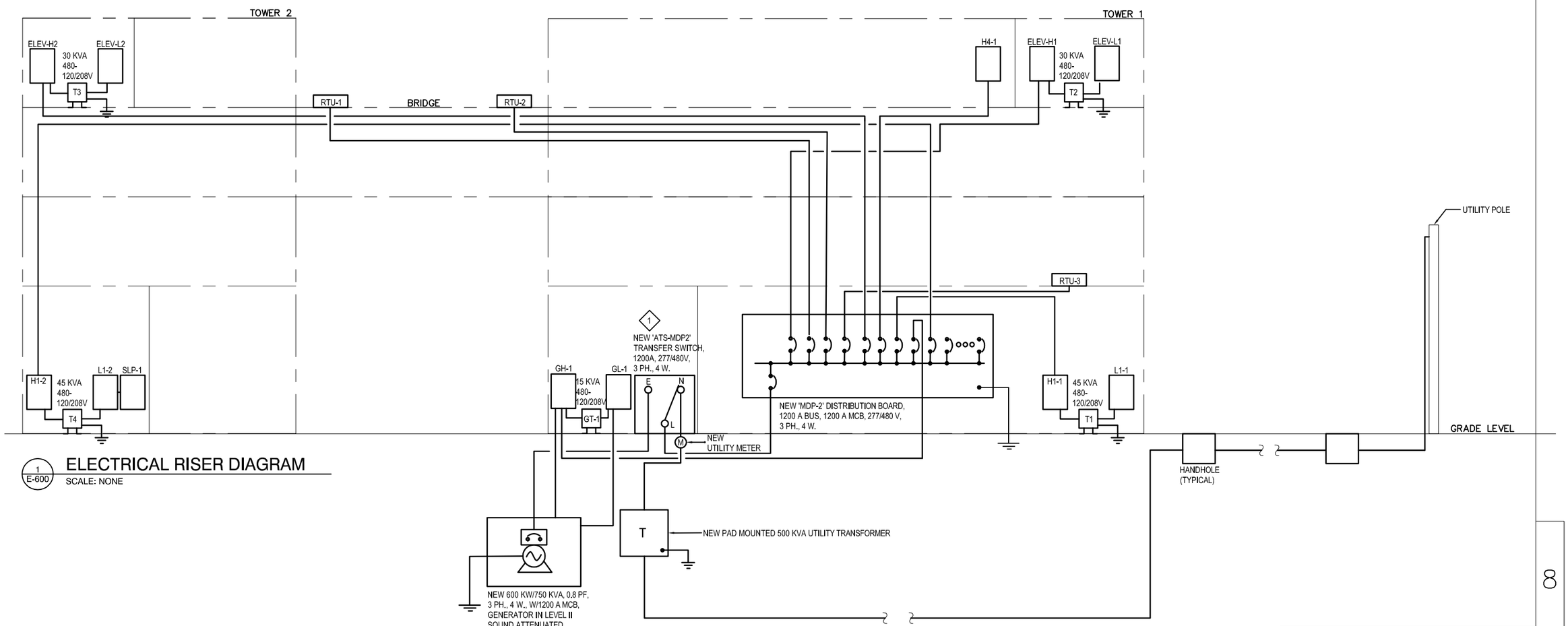
SCALE = AS NOTED

STATE PROJECT NUMBER
1000–57–05

KEYED NOTES - RISER DIAGRAM

NO.	DESCRIPTION
1	EQUIPMENT SHALL BE SERVICE RATED. PROVIDE WITH BYPASS ISOLATION AND DEADFRONT OPTIONS.

FEEDER SCHEDULE	
FEEDER TAG	FEEDER SIZE
F001	3#8 & 1#10 G. IN 3/4" C.
F002	3#8 & 1#10 G. IN 3/4" C.
F003	4#1 & 1#6 G. IN 1 1/2" C.
F004	4#1 & 1#6 G. IN 1 1/2" C.
F005	3#4/0 & 1#4 G. IN 2 1/2" C.
F006	4#4/0 & 1#4 G. IN 2 1/2" C.



1 / E-600 ELECTRICAL RISER DIAGRAM
SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

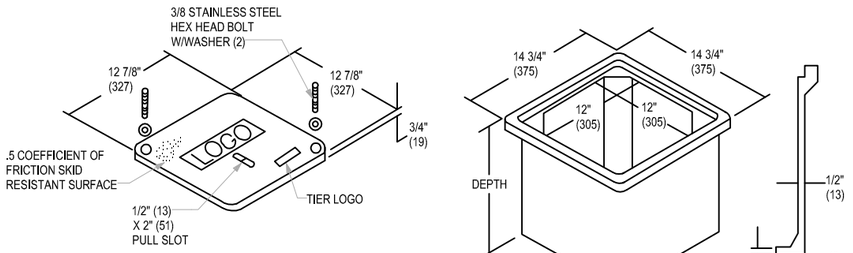
DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL RISER DIAGRAM

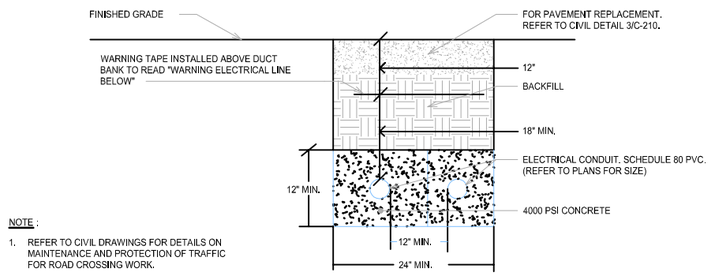
SHEET E–600

SCALE = AS NOTED

STATE PROJECT NUMBER
1000–57–05



1 E-700 **HANDHOLE DETAIL**
SCALE: NONE



NOTE :

1. REFER TO CIVIL DRAWINGS FOR DETAILS ON MAINTENANCE AND PROTECTION OF TRAFFIC FOR ROAD CROSSING WORK.

2 E-700 **DUCT BANK DETAIL**
SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ELECTRICAL

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

ELECTRICAL DETAILS

SHEET
E–700

SCALE = AS NOTED

FIRE ALARM SYMBOLS

(SD)	SMOKE DETECTOR
(HD)	HEAT DETECTOR
P	MANUAL PULL STATION
15cd F	SPEAKER/STROBE WITH CANDELA RATING
15cd F L	STROBE ONLY WITH CANDELA RATING
FACP	FIRE ALARM CONTROL PANEL
RA	FIRE ALARM REMOTE ANNUNCIATOR
K	KNOX BOX
TS	TAMPER SWITCH
FS	FLOW SWITCH
ADR	ADDRESSABLE RELAY MODULE
ADM	ADDRESSABLE MONITOR MODULE

ABBREVIATIONS

ABBR.	DESCRIPTION
ADDR	ADDRESSABLE
ADR	ADDRESSABLE RELAY MODULE
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CL	CLOSET
CM	CONSTRUCTION MANAGEMENT
COND	CONDUCTOR
EC	ELECTRICAL CONTRACTOR
DWG	DRAWING
ELEC	ELECTRICAL
EMR	ELEVATOR MACHINE ROOM
EX	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FCS	FIRE COMMAND STATION
FL	FLOOR
FT	FEET
MM	ADDRESSABLE MONITOR MODULE
PR	PAIR
TP	TWISTED PAIR
TSP	TWISTED SHIELDED PAIR
WP	WEATHERPROOF

GENERAL NOTES

1. ALL ROUTING OF CABLES TO FACP SHALL BE APPROVED BY BUILDING MANAGER.
2. COORDINATE EXACT LOCATION OF ALL FIRE ALARM SYSTEM DEVICES (SPEAKERS, STROBE LIGHTS, ETC.) WITH ARCHITECT AND OTHER TRADES PRIOR TO INSTALLATION. REFER TO FLOOR PLANS FOR NUMBER OF DEVICES.
3. WALL MOUNTED STROBES SHALL HAVE NO OTHER APPURTENANCES WITHIN 5 FEET OF THE STROBE. THEY SHALL BE A MINIMUM OF 80 INCHES ABOVE THE FLOOR OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER.
4. WHERE DEMOLITION IS TO TAKE PLACE IN THE AREA OF THE BUILDING, WHERE FIRE SAFETY EQUIPMENT SUCH AS ALARMS, SPEAKERS, SMOKE DETECTORS, FLOOR WARDEN STATIONS, ETC. ARE LOCATED, BUILDING MANAGEMENT MUST BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF DEMOLITION SO THE EQUIPMENT MAY BE PROTECTED OR REMOVED.
5. THIS BUILDING MUST REMAIN IN A STATE OF SAFE CONDITION WITH REGARD TO FIRE SAFETY PERSONNEL WORKING ON THE BUILDING. ALL FIRE STAIRS, ALARMS, SPEAKERS, ETC., MUST REMAIN ACCESSIBLE AND OPERABLE AT ALL TIMES. CONTRACTOR SHALL MAINTAIN CONTINUITY OF SERVICE TO EXISTING BUILDING FIRE ALARM SYSTEM.
6. ANY EXISTING FIRE SAFETY EQUIPMENT AND ASSOCIATED CONDUIT AND WIRING SHALL NOT BE HARMED DURING DEMOLITION AND/OR CONSTRUCTION AND SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
7. PROTECT EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING DURING CONSTRUCTION. ANY DAMAGE IS THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING FIRE WATCH AS REQUIRED UNTIL DAMAGE IS REPAIRED TO THE OWNER'S SATISFACTION.
8. ALL CEILING MOUNTED DEVICES (SMOKE DETECTORS, SPEAKERS, ETC.) SHALL BE REMOVED PRIOR TO DEMOLITION AND STORED AND PROTECTED UNTIL THEY CAN BE REINSTALLED IN THE LOCATIONS SHOWN ON PLANS.
9. PROVIDE VOLTAGE DROP AND BATTERY CAPACITY CALCULATIONS BY A REGISTERED PROFESSIONAL ENGINEER.
10. THE FIRE ALARM RISER DIAGRAM SHOWN IS AN INDICATION OF THE WORK REQUIRED AND SHALL BE USED FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL OBTAIN A POINT-TO-POINT WIRING DIAGRAM FROM THE BUILDING FIRE ALARM MAINTENANCE CONTRACTOR AND PERFORM ALL WORK IN ACCORDANCE WITH THAT DIAGRAM.
11. THE OPERATION OF THE FIRE ALARM INSTALLATION DOES NOT CONSTITUTE AN ACCEPTANCE OF THE WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND UL.
12. THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE.
13. ACTIVATION OF A FIRE ALARM INITIATING DEVICE (MANUAL PULL STATION, SMOKE DETECTOR, HEAT DETECTOR, ETC.) SHALL PROVIDE THE FOLLOWING OPERATIONS AS LISTED AND AS DEFINED BY CITY LOCAL LAW BUT NOT LIMITED TO THE FOLLOWING:
    - A. TRANSMIT FIRE ALARM SIGNAL TO BUILDING FIRE ALARM SYSTEM.
    - B. AN INITIATING SIGNAL/CIRCUITRY FROM BUILDING FIRE ALARM SYSTEM SHALL BE TRANSMITTED TO THE STROBE PANEL TO ACTIVATE THE STROBE LIGHTS.
    - C. THE STROBE PANEL SHALL BE ACTIVATED BY THE INITIATING CIRCUITS OR SIGNAL FROM THE BUILDING FIRE ALARM SYSTEM.

SEQUENCE OF OPERATION

ACTIVATION OF A FIRE ALARM INITIATING DEVICE (MANUAL PULL STATION, SMOKE DETECTOR, HEAT DETECTOR, ETC.,) SHALL PROVIDE THE FOLLOWING OPERATIONS AS LISTED AND AS DEFINED BY CITY LOCAL LAW BUT NOT LIMITED TO THE FOLLOWING:

- A. TRANSMIT FIRE ALARM SIGNAL TO BUILDING FIRE ALARM SYSTEM.
- B. AN INITIATING SIGNAL/CIRCUITRY FROM BUILDING FIRE ALARM SYSTEM SHALL BE TRANSMITTED TO THE STROBE PANEL TO ACTIVATE THE STROBE LIGHTS.
- C. THE STROBE PANEL SHALL BE ACTIVATED BY THE INITIATING CIRCUITS OR SIGNAL FROM THE BUILDING FIRE ALARM SYSTEM.

STATE PROJECT NUMBER

1000-57-05

FIRE ALARM INPUT/OUTPUT MATRIX.

EVENT (DEVICE ACTIVATED)	CONTROLLED RESPONSE: TRANSMIT ALARM TO CENTRAL SUPERVISING STATION	ACTIVATE SPEAKERS	ACTIVATE VISUAL ALARM	INDICATE TIME & EVENT ON SYSTEM PRINTER	RELEASE HOLD OPEN FIRE AND SMOKE DOORS	RELEASE SECURITY DOOR LOCKS	SHUT DOWN AHU SUPPLY AND RETURN FANS	CAPTURE ALL ELEVATORS ON ALARM FLOOR & RETURN TO APPROVED LEVEL	CAPTURE ALL ELEVATORS & RETURN TO ALTERNATE LEVEL	TRANSMIT TROUBLE SIGNAL TO FACILITY CENTRAL CONTROL DEVICES
"GENERAL"										
SPRINKLER WATERFLOW SWITCH	X	X	X	X	X	X				
SMOKE DETECTOR	X	X	X	X	X	X				
HEAT DETECTOR	X	X	X	X	X	X				
MANUAL PULL STATION	X	X	X	X	X	X				
LOCAL AUTOMATIC DETECTORS	X	X	X	X	X	X				
LOCAL SPRINKLER WATERFLOW SWITCH	X	X	X	X	X	X				
MANUAL FCC CONTROL										
"AIR HANDLING EQUIPMENT"										
AHU SUPPLY DUCT TYPE SMOKE DETECTOR	X	X	X	X	X	X	X			
AHU RETURN DUCT TYPE SMOKE DETECTOR	X	X	X	X	X	X	X			
"ELEVATOR EQUIPMENT"										
ELEVATOR LOBBY SMOKE DETECTOR	X	X	X	X	X	X		X		
ELEVATOR SHAFT SMOKE DETECTOR	X	X	X	X	X	X		X		
ELEVATOR MACHINE ROOM SMOKE DETECTOR	X	X	X	X	X	X		X		
GRADE LEVEL ELEVATOR LOBBY SMOKE DETECTOR	X	X	X	X	X	X			X	
ELEVATOR SHAFT HEAT DETECTOR	X	X	X	X	X	X				
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X	X	X	X				
"STAIR DETECTION"										
STAIR SMOKE DETECTOR	X	X	X	X	X	X				
"SUPERVISORY OPERATIONS"										
CENTRAL CONTROL EQUIPMENT DOOR OPEN				X						X
FCC DRILL SWITCH				X						X
SPRINKLER VALVE TAMPER SWITCH				X						X
ELEVATOR CONTACTOR LOSS OF VOLTAGE				X						X
SUPERVISED DEVICE/WIRING DISARRANGEMENT				X						X

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM SYMBOLS, ABBREVIATIONS, MATRIX, AND GENERAL NOTES

SHEET FA-001

SCALE = NONE

GENERAL NOTES - FIRE ALARM PLAN

1 REFER TO DRAWING FA-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 CONFIRM STROBES AND SPEAKERS FINISHES WITH ARCHITECT, PRIOR TO ORDERING.

3 FIRE ALARM SYSTEM EXPANSION SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM EQUIPMENT AND BE UL LISTED APPROVED.

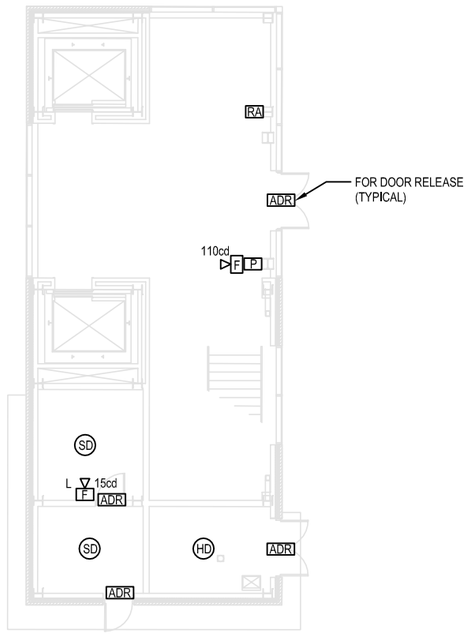
4 THE FIRE ALARM SYSTEM DRAWING IS SCHEMATIC IN NATURE AND SHOWS A MINIMAL QUANTITY OF DEVICES. FIRE ALARM SUBCONTRACTOR SHALL DETERMINE THE FINAL QUANTITY AND LOCATION OF ALL DEVICES IN ACCORDANCE WITH SPECIFICATIONS, CONTRACT DRAWINGS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. LAYOUT TO BE COMPLIANT WITH APPLICABLE CODES AND STANDARDS. ADDITIONAL DEVICES SHALL BE PROVIDED TO MAKE A FULLY FUNCTIONING FIRE ALARM SYSTEM UNDER ALL APPLICABLE CODES AND STANDARDS.

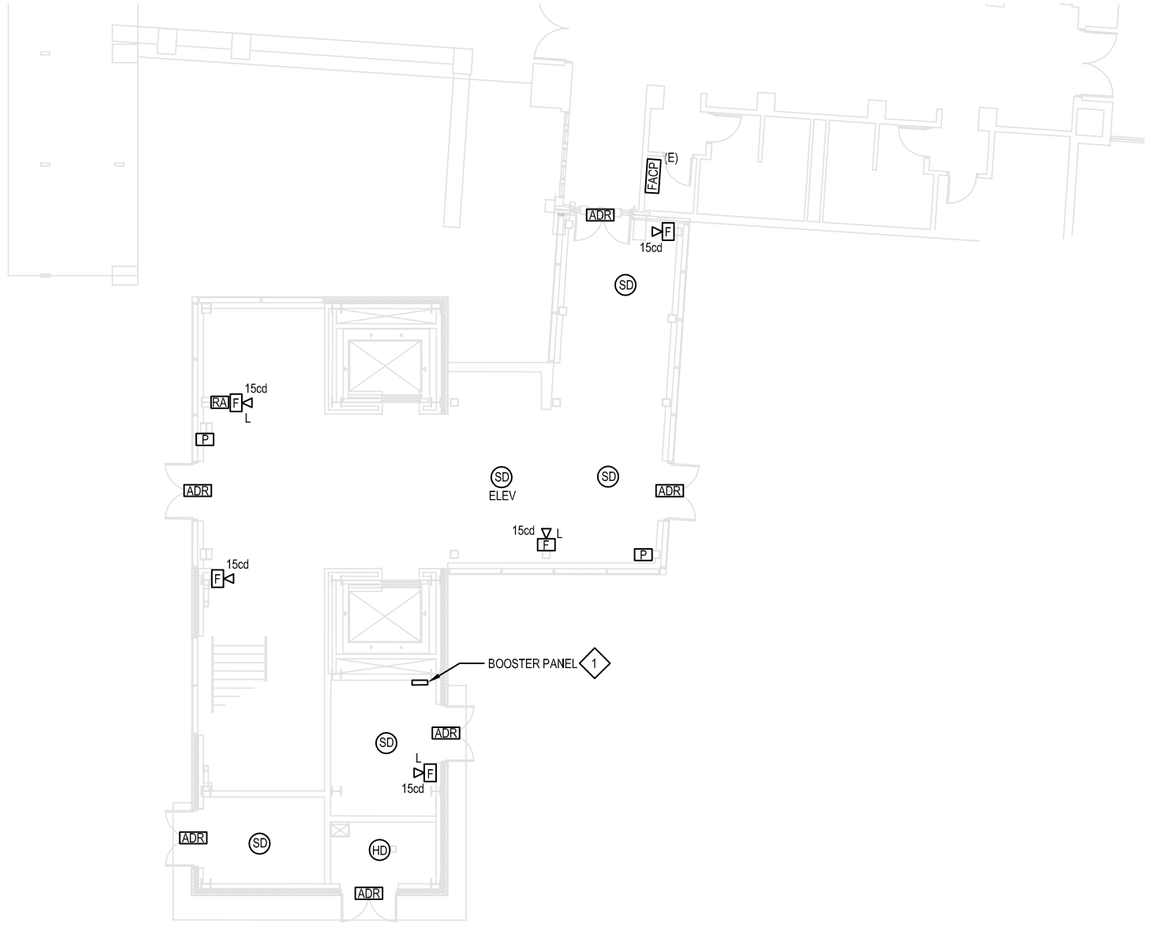
5 ALL EGRESS DOORS SHALL RELEASE IN AN ALARM CONDITION. PROVIDE DOOR RELEASE RELAYS, AS REQUIRED. COORDINATE WITH SECURITY VENDOR.

KEYED NOTES - FIRE ALARM PLAN

NO.	DESCRIPTION
1	FURNISH AND INSTALL NEW FIRE ALARM BOOSTER PANEL.

STATE PROJECT NUMBER
1000–57–05





1 FA-100 FIRE ALARM FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM FIRST FLOOR PLAN

SHEET
FA–100

SCALE = AS NOTED

GENERAL NOTES - FIRE ALARM PLAN

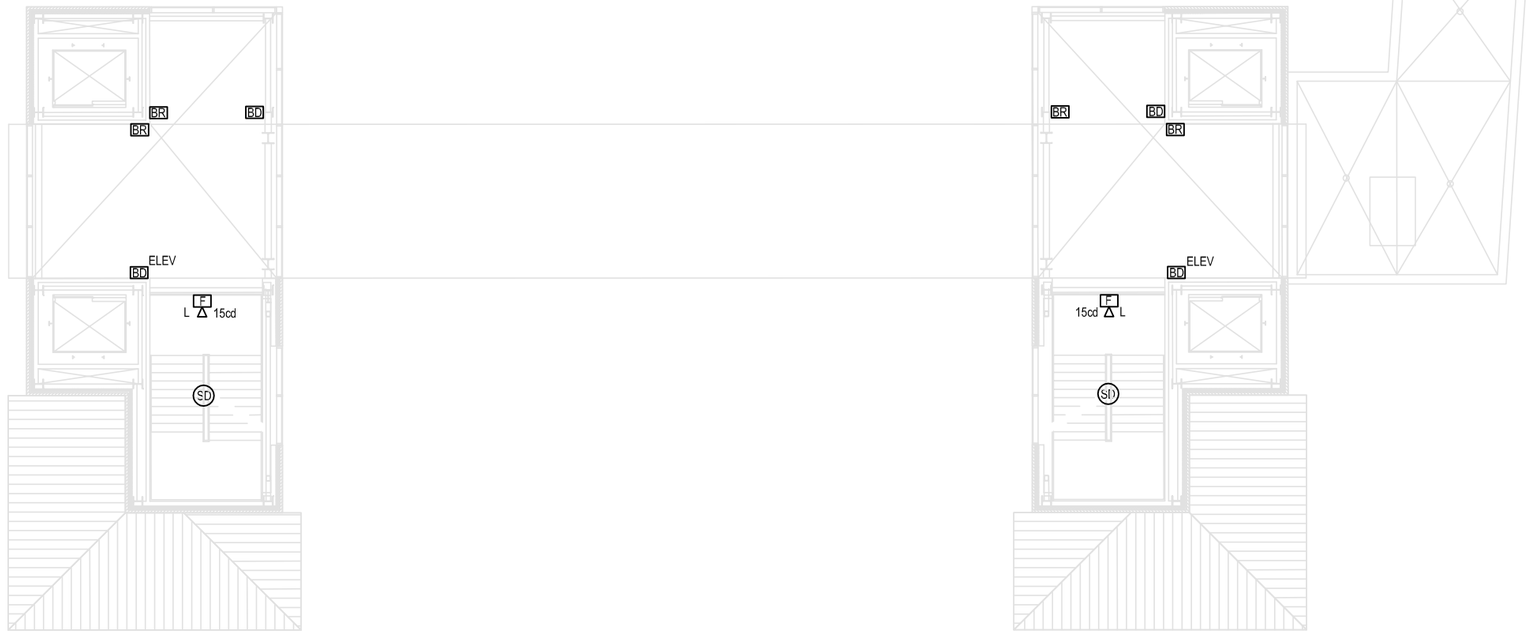
1 REFER TO DRAWING FA-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 CONFIRM STROBES AND SPEAKERS FINISHES WITH ARCHITECT, PRIOR TO ORDERING.

3 FIRE ALARM SYSTEM EXPANSION SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM EQUIPMENT AND BE UL LISTED APPROVED.

4 THE FIRE ALARM SYSTEM DRAWING IS SCHEMATIC IN NATURE AND SHOWS A MINIMAL QUANTITY OF DEVICES. FIRE ALARM SUBCONTRACTOR SHALL DETERMINE THE FINAL QUANTITY AND LOCATION OF ALL DEVICES IN ACCORDANCE WITH SPECIFICATIONS, CONTRACT DRAWINGS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. LAYOUT TO BE COMPLIANT WITH APPLICABLE CODES AND STANDARDS. ADDITIONAL DEVICES SHALL BE PROVIDED TO MAKE A FULLY FUNCTIONING FIRE ALARM SYSTEM UNDER ALL APPLICABLE CODES AND STANDARDS.

5 ALL EGRESS DOORS SHALL RELEASE IN AN ALARM CONDITION. PROVIDE DOOR RELEASE RELAYS, AS REQUIRED. COORDINATE WITH SECURITY VENDOR.



1 FA-101 FIRE ALARM INTERMEDIATE LEVEL PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM INTERMEDIATE LEVEL PLAN

SHEET FA–101

SCALE = AS NOTED

STATE PROJECT NUMBER

1000–57–05

GENERAL NOTES - FIRE ALARM PLAN

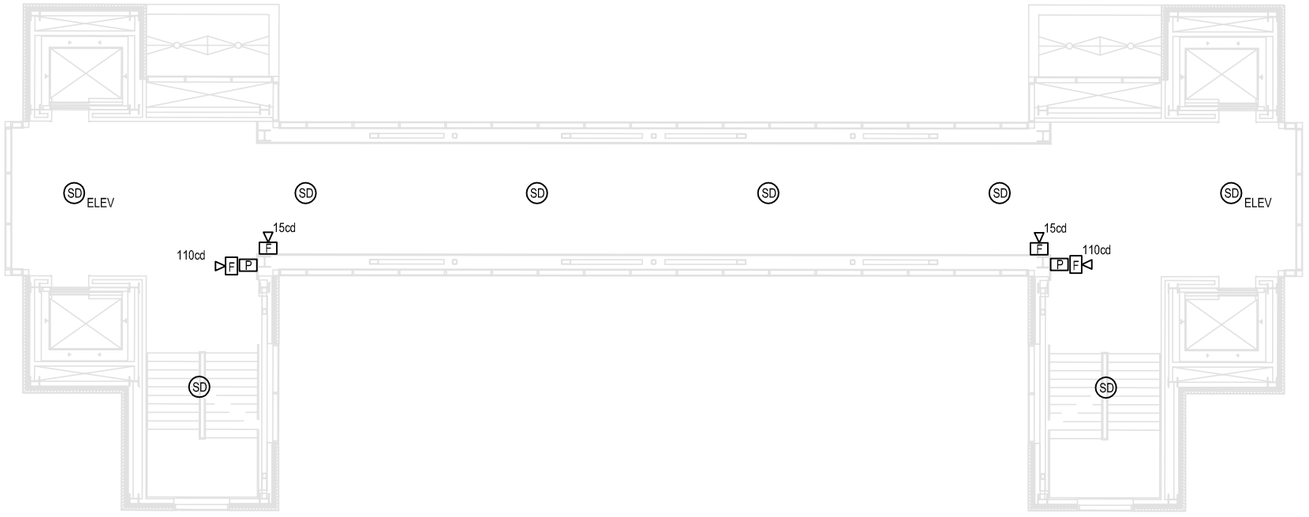
1 REFER TO DRAWING FA-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 CONFIRM STROBES AND SPEAKERS FINISHES WITH ARCHITECT, PRIOR TO ORDERING.

3 FIRE ALARM SYSTEM EXPANSION SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM EQUIPMENT AND BE UL LISTED APPROVED.

4 THE FIRE ALARM SYSTEM DRAWING IS SCHEMATIC IN NATURE AND SHOWS A MINIMAL QUANTITY OF DEVICES. FIRE ALARM SUBCONTRACTOR SHALL DETERMINE THE FINAL QUANTITY AND LOCATION OF ALL DEVICES IN ACCORDANCE WITH SPECIFICATIONS, CONTRACT DRAWINGS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. LAYOUT TO BE COMPLIANT WITH APPLICABLE CODES AND STANDARDS. ADDITIONAL DEVICES SHALL BE PROVIDED TO MAKE A FULLY FUNCTIONING FIRE ALARM SYSTEM UNDER ALL APPLICABLE CODES AND STANDARDS.

5 ALL EGRESS DOORS SHALL RELEASE IN AN ALARM CONDITION. PROVIDE DOOR RELEASE RELAYS, AS REQUIRED. COORDINATE WITH SECURITY VENDOR.



1 FA-102 FIRE ALARM SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM SECOND FLOOR PLAN

SHEET FA–102

STATE PROJECT NUMBER 1000–57–05

SCALE = AS NOTED

GENERAL NOTES - FIRE ALARM PLAN

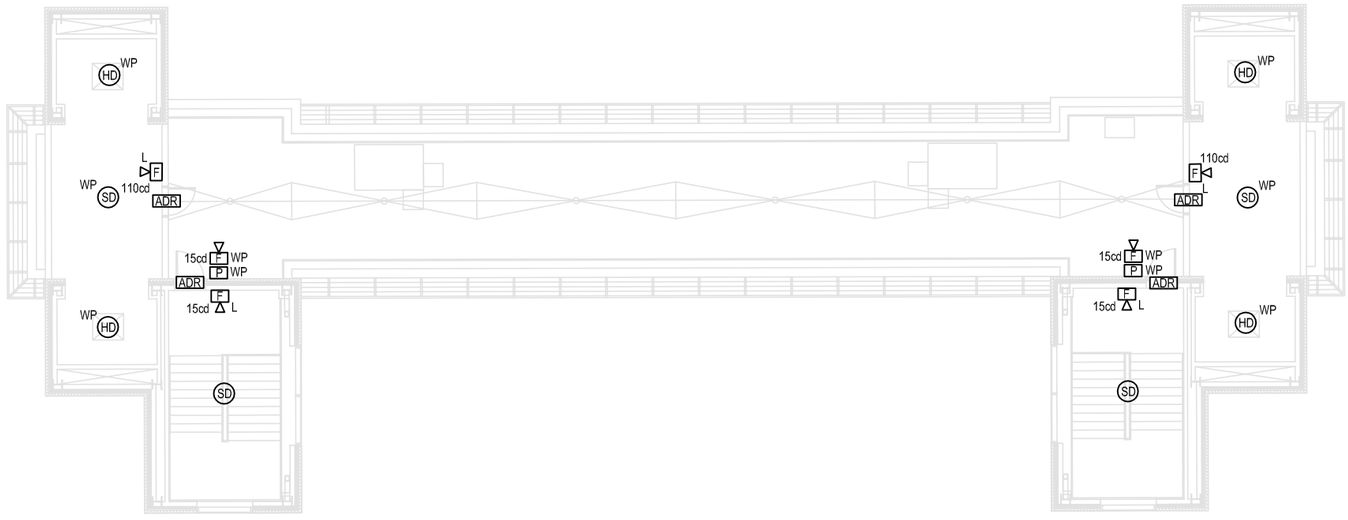
1 REFER TO DRAWING FA-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 CONFIRM STROBES AND SPEAKERS FINISHES WITH ARCHITECT, PRIOR TO ORDERING.

3 FIRE ALARM SYSTEM EXPANSION SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM EQUIPMENT AND BE UL LISTED APPROVED.

4 THE FIRE ALARM SYSTEM DRAWING IS SCHEMATIC IN NATURE AND SHOWS A MINIMAL QUANTITY OF DEVICES. FIRE ALARM SUBCONTRACTOR SHALL DETERMINE THE FINAL QUANTITY AND LOCATION OF ALL DEVICES IN ACCORDANCE WITH SPECIFICATIONS, CONTRACT DRAWINGS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. LAYOUT TO BE COMPLIANT WITH APPLICABLE CODES AND STANDARDS. ADDITIONAL DEVICES SHALL BE PROVIDED TO MAKE A FULLY FUNCTIONING FIRE ALARM SYSTEM UNDER ALL APPLICABLE CODES AND STANDARDS.

5 ALL EGRESS DOORS SHALL RELEASE IN AN ALARM CONDITION. PROVIDE DOOR RELEASE RELAYS, AS REQUIRED. COORDINATE WITH SECURITY VENDOR.



1 FA-103 FIRE ALARM ROOF PLAN

SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM ROOF PLAN

SHEET FA–103

SCALE = AS NOTED

STATE PROJECT NUMBER

1000–57–05

STATE PROJECT NUMBER
1000–57–05

GENERAL NOTES - FIRE ALARM PLAN

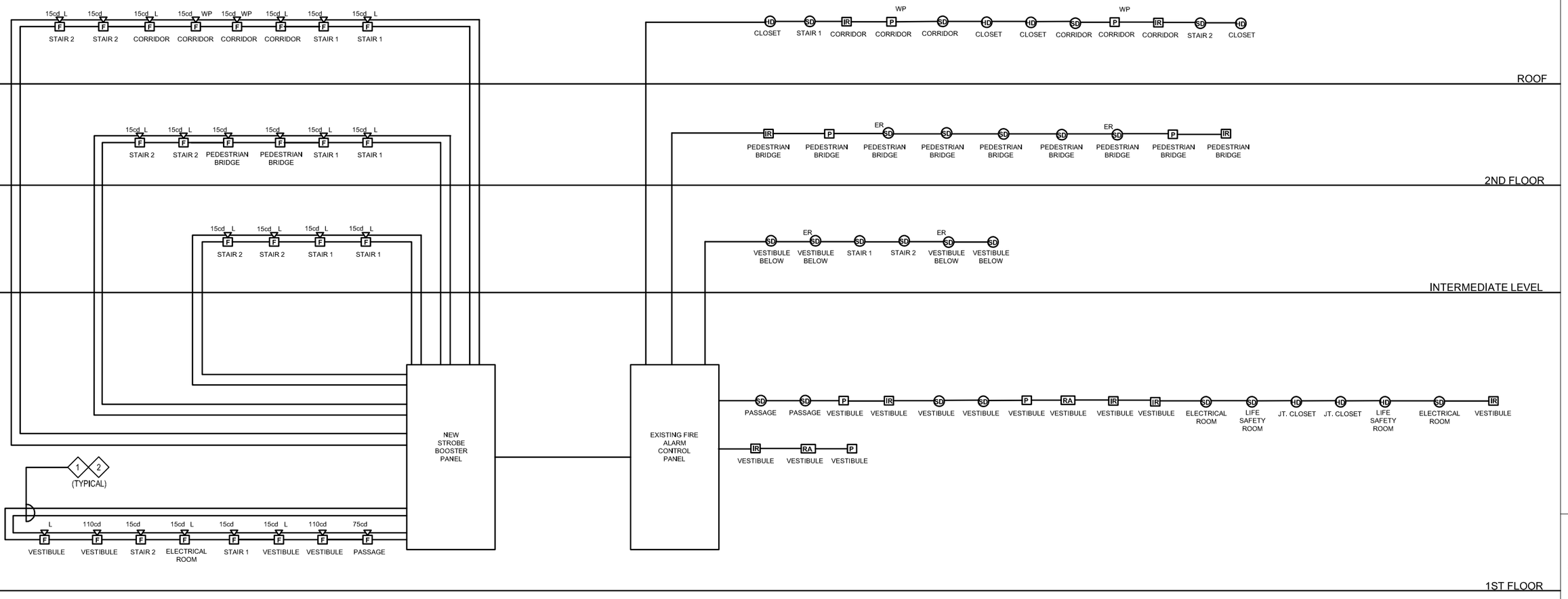
1 REFER TO DRAWING FA-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 FOR FIRE ALARM SYSTEM LAYOUT WITH CANDELA RATINGS (AND EXACT DEVICE QUANTITIES), REFER TO FIRE ALARM FLOOR PLANS.

3 CONTRACTOR SHALL REPROGRAM EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCEPT INSTALLATION OF NEW DEVICES.

KEYED NOTES - FIRE ALARM PLAN

NO.	DESCRIPTION
1	FURNISH AND INSTALL ALL FIRE ALARM COMPONENTS AND ASSOCIATED WIRING IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS.
2	PROVIDE AND INSTALL DEVICE WIRING PER VENDOR RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.



1 FA-600 FIRE ALARM RISER DIAGRAM

SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

FIRE ALARM

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
P. HUMMEL	P. HUMMEL	F. CONSTANTINOPLE

FIRE ALARM RISER DIAGRAM

SHEET FA–600

SCALE = NONE

STATE PROJECT NUMBER
1000-57-05

PLUMBING ABBREVIATIONS

NOTE: THIS IS A STANDARD SYMBOL LIST AND NOT ALL ITEMS LISTED MAY BE USED.

#	NUMBER
&	AND
@	AT
'	FOOT, FEET
A	AQUASTAT, ARCHITECT, ANCHOR, AMPHERE
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CFS	CUBIC FEET PER SECOND
CO	CLEANOUT
CODP	CLEANOUT DECK PLATE
CONT.	CONTINUATION
CV	CHECK VALVE
CW	COLD WATER
D	DRAIN
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DET	DOMESTIC EXPANSION TANK
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DN	DOWN
DR	DRAIN
DS	DOWNSPOUT
DSN	DOWNSPOUT NOZZLE
DW	DISHWASHER, DOMESTIC WATER
DWV	DRAINAGE, WASTE AND VENT
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
F	FIRE, FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FL	FLOOR
FT	FEET
FV	FLUSH VALVE
GPM	GALLONS PER MINUTE
GWH	GAS WATER HEATER
HB	HOSE BIBB
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HOT WATER
HWFU	HOT WATER FIXTURE UNIT
HWR	HOT WATER RETURN
HZ	HERTZ
IN, "	INCHES
INV	INVERT ELEVATION
IW	INDIRECT WASTE
L	LAVATORY
MIN	MINIMUM
MS	MOP SINK
MX	MIXING VALVE
N	NORTH
NIC	NOT IN CONTRACT
NO.	NUMBER
NPCW	NON POTABLE COLD WATER
NTS	NOT TO SCALE
OD	OVERFLOW DRAIN, OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
P	PLUMBING, PUMP
PD	PUMP DISCHARGE
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RD	ROOF DRAIN
REF	REFERENCE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RTU	ROOF TOP UNIT (HVAC)
RWL	RAINWATER LEADER
SA	SHOCK ARRESTOR
SAN	SANITARY
SB	SERVICE BOX
SD	STORM DRAIN OR SCRUBBER DRAIN
SE	SEWAGE EJECTOR
SF	SQUARE FEET
SHT	SHEET
SK	SINK
SOV	SHUT OFF VALVE
SP	SUMP PUMP, STATIC PRESSURE
ST	STORM
TEMP	TEMPERATURE
TP	TRAP PRIMER, TOTAL PRESSURE
TYP	TYPICAL
U, UR	URINAL
V	VACUUM, VENT, VOLT
VTR	VENT THRU ROOF
W/	WITH
W	WASTE
WC	WATER COLUMN, WATER CLOSET
WCO	WALL CLEANOUT
WH	WATER HEATER, WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WSFU	WATER SUPPLY FIXTURE UNIT

PLUMBING SYMBOL LIST

NOTE: THIS IS A STANDARD SYMBOL LIST AND NOT ALL ITEMS LISTED MAY BE USED.

GENERAL

- PIPE OR CONDUIT BELOW GRADE
- CONTINUATION
- DETAIL NUMBER AND SHEET LOCATION (X / X)
- EQUIPMENT IDENTIFICATION (XX-X, LOCATION)
- EXTENT OF DEMOLITION
- FIXTURE TAG (LEVEL BELOW FIXTURE) (X)
- KEYED NOTE (X)
- POINT OF CONNECTION

PIPING FITTINGS

- ACCESS PANEL (AP)
- AQUASTAT
- BLIND FLANGE
- CAP
- CLEANOUT TO GRADE (COTG)
- CONCENTRIC REDUCER
- DOWNSPOUT NOZZLE (DSN)
- ECCENTRIC REDUCER
- FLOOR CLEANOUT (FCO)
- FLOOR DRAIN (FD)
- FLOOR SINK (FS)
- FLOW DIRECTION
- HOSE BIBB / WALL HYDRANT
- OVERFLOW ROOF DRAIN (OD)
- PIPE DROP
- PIPE RISE
- PUMP
- ROOF DRAIN (RD)
- SHOCK ABSORBER / WATER HAMMER ARRESTOR
- STRAINER
- T&P RELIEF VALVE WITH PIPE TO DRAIN
- TEE DOWN ON PIPE
- TEE UP ON PIPE
- VENT THROUGH ROOF (VTR)
- WALL CLEANOUT (WCO)

PIPING SYSTEMS

- COLD WATER PIPING (CW)
- HOT WATER PIPING
- HOT WATER RETURN PIPING (HWR)
- SANITARY PIPING (SAN)
- SEWAGE EJECTOR PIPING (SE)
- VENT PIPING
- STORM PIPING (ST)
- PUMP DISCHARGE (PD)
- NATURAL GAS PIPING (G)
- TRAP PRIMER PIPING (TP)

VALVES

- BACKFLOW PREVENTER (BFP)
- CHECK VALVE
- SHUTOFF VALVE, GENERAL
- BALANCING VALVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PLUMBING

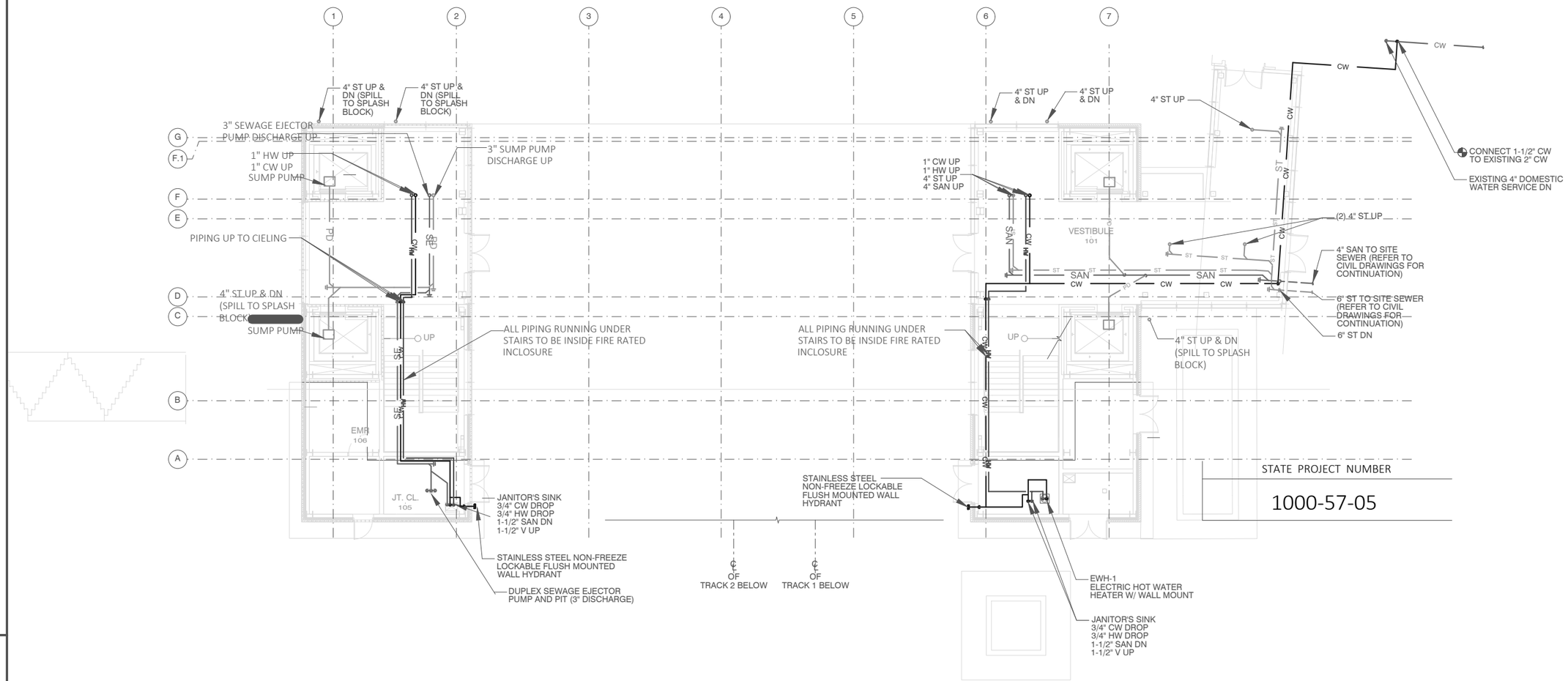
DRAWN BY	PLANS CK'D.
ZB	JH

COVER SHEET

SHEET P-001

STATE PROJECT NUMBER

1000-57-05



1 P-111 FIRST FLOOR PROPOSED PLAN

SCALE: 1/16"=1'-0"

0 4 8 16 FT

N

STATE PROJECT NUMBER

1000-57-05

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PLUMBING

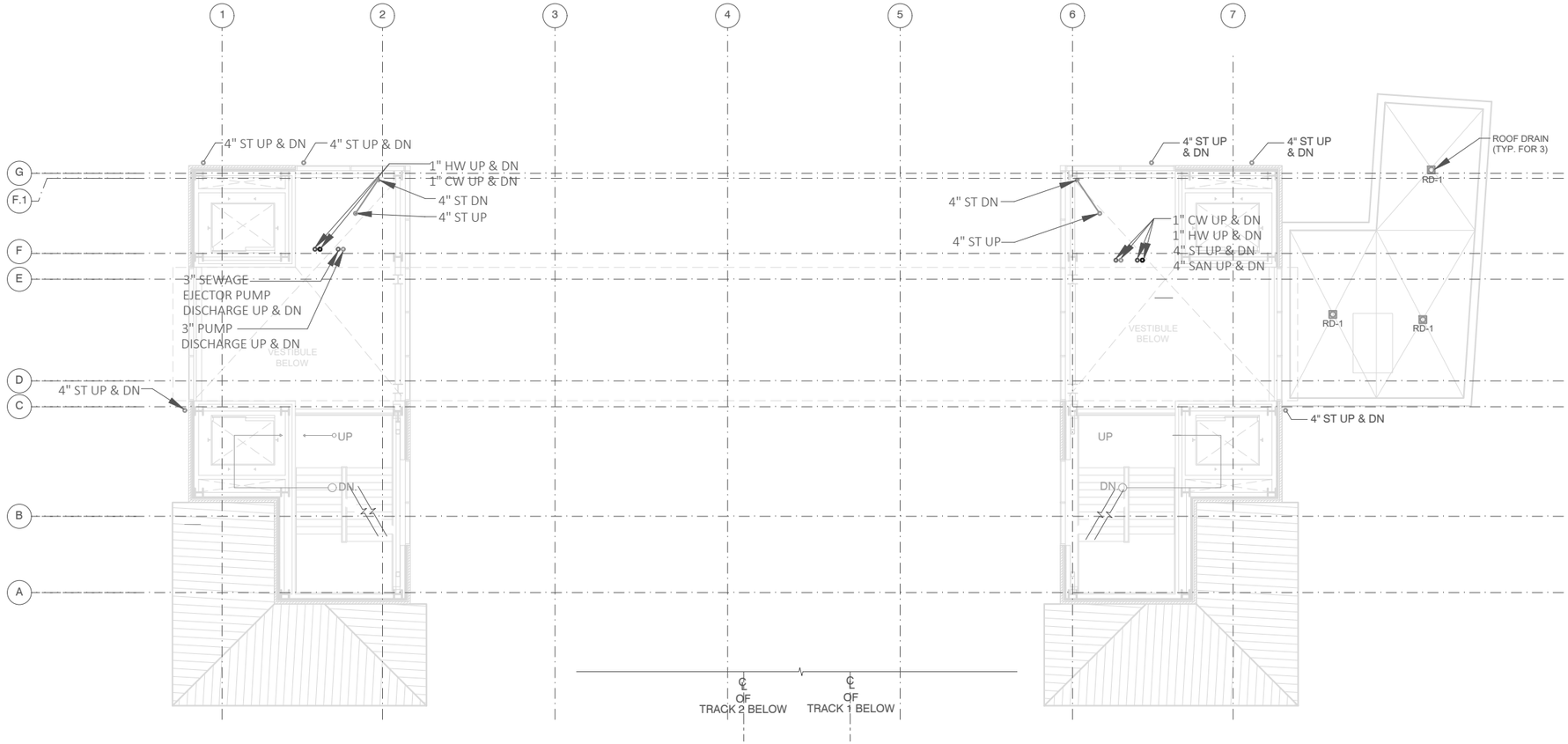
DRAWN BY ZB | PLANS CK'D. JH

FIRST FLOOR PROPOSED PLAN

SHEET P-111

STATE PROJECT NUMBER

1000-57-05



1 PL-112 INTERMEDIATE LEVEL PROPOSED PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PLUMBING

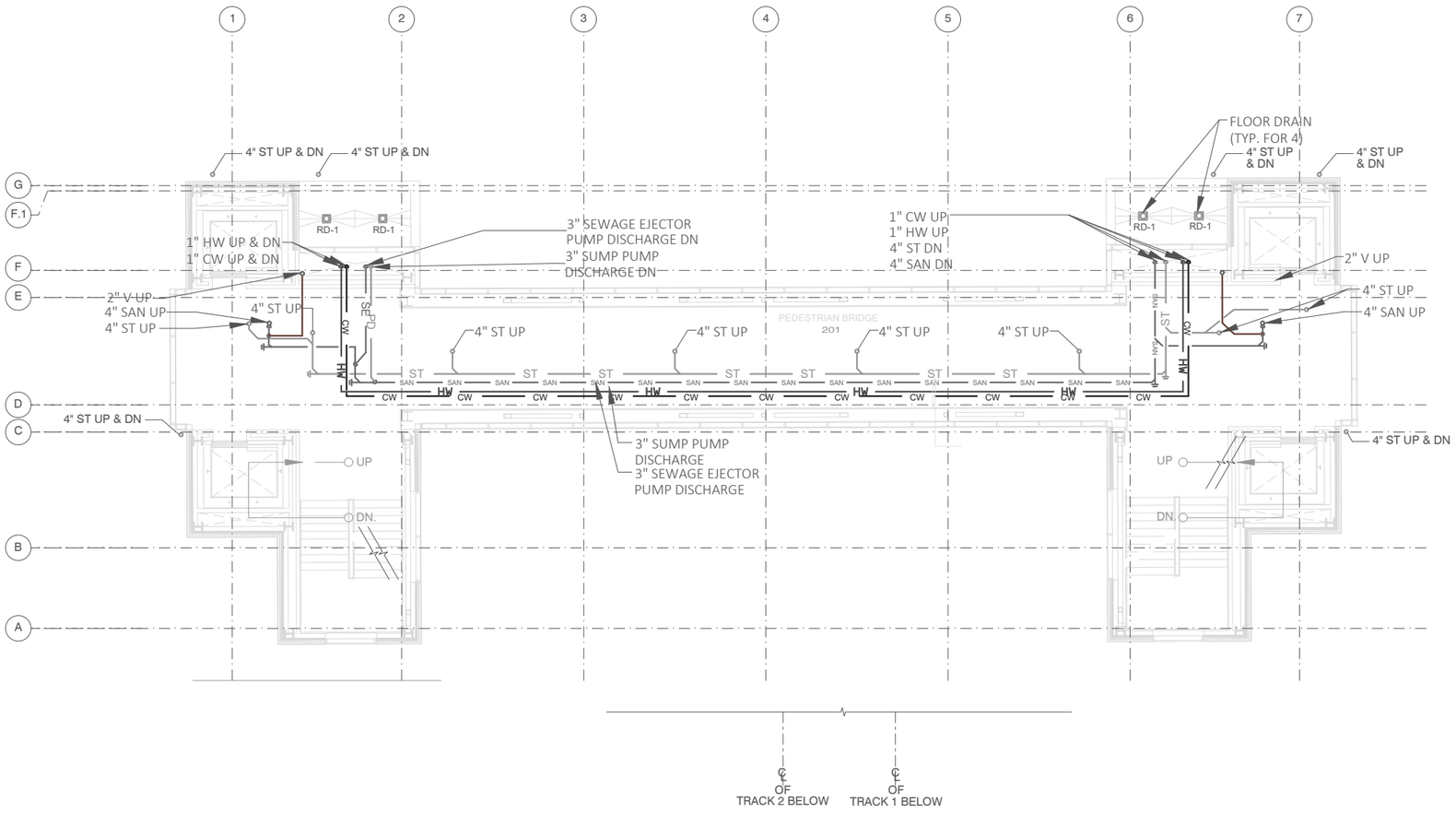
DRAWN BY ZB | PLANS CK'D. JH

INTERMEDIATE LEVEL PROPOSED PLAN

SHEET P-112

STATE PROJECT NUMBER

1000-57-05



1 PL-113 SECOND FLOOR PROPOSED PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

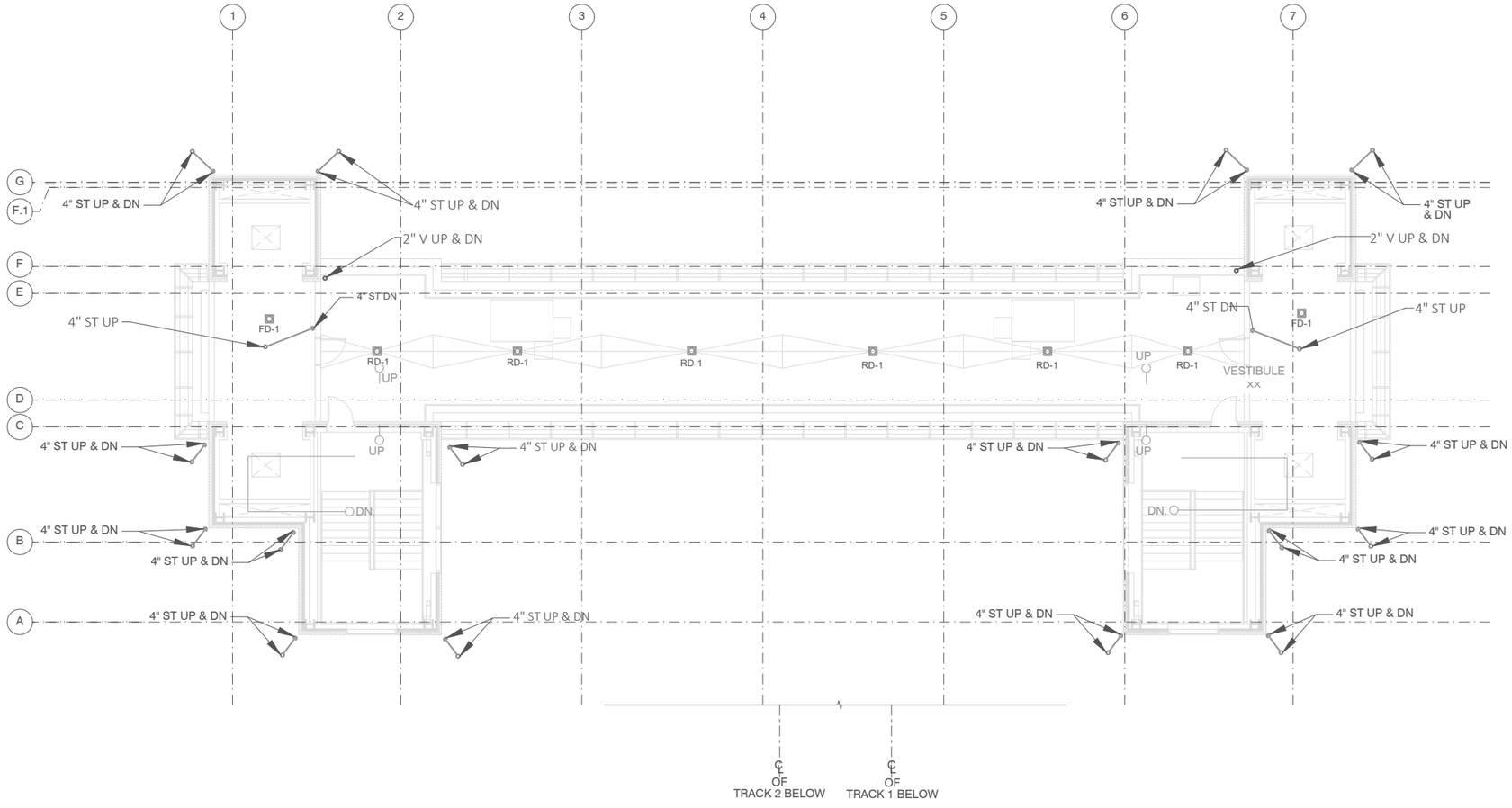
PLUMBING

DRAWN BY ZB | PLANS CK'D. JH

SECOND FLOOR PROPOSED PLAN

SHEET P-113

STATE PROJECT NUMBER
1000-57-05



1 PL-120 PEDESTRIAN BRIDGE PROPOSED ROOF PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PLUMBING

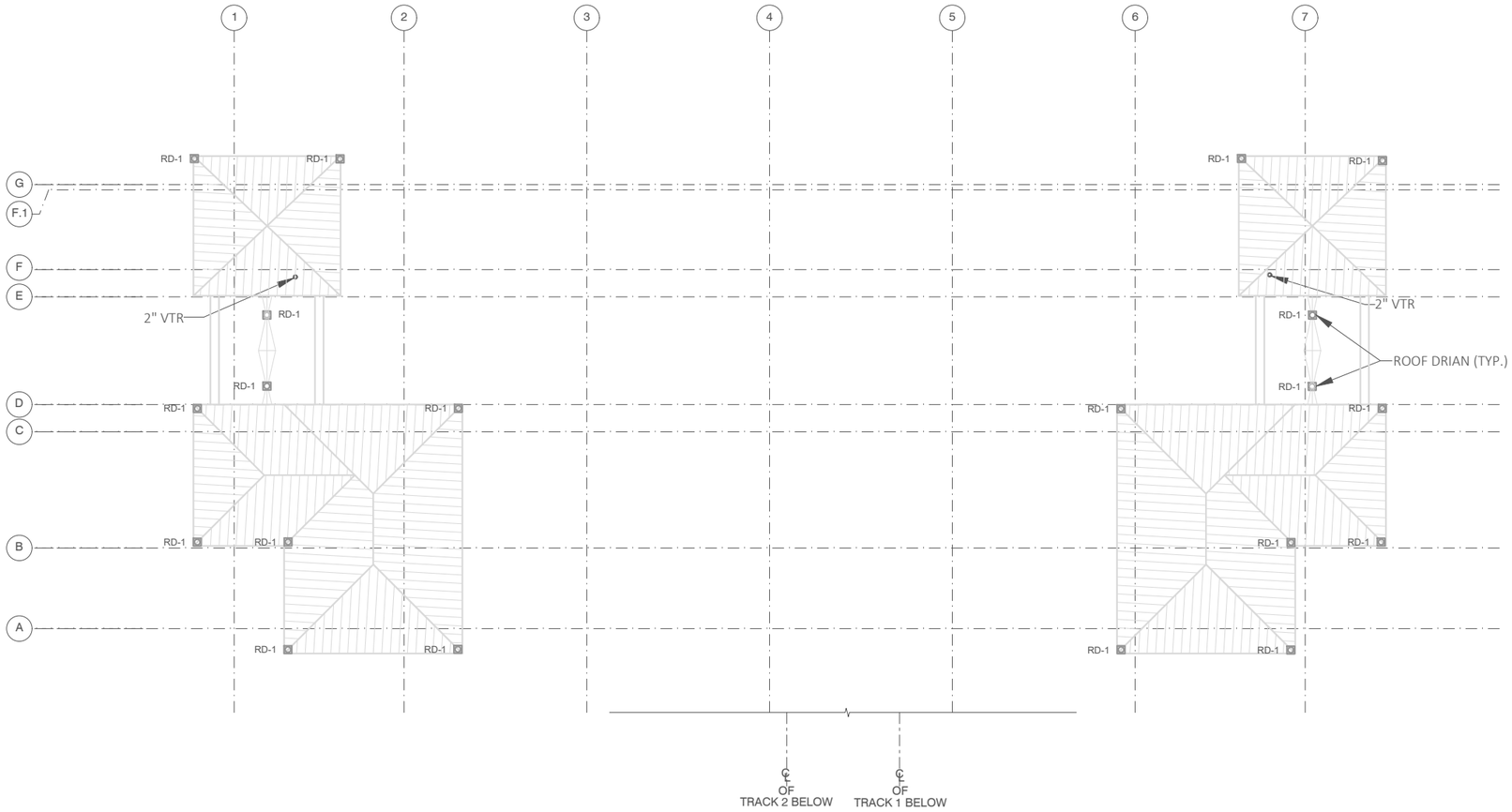
DRAWN BY ZB | PLANS CK'D. JH

PEDESTRIAN BRIDGE PROPOSED ROOF PLAN

SHEET P-120

STATE PROJECT NUMBER

1000-57-05



1 PL-121 EAST AND WEST TOWERS PROPOSED ROOF PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

PLUMBING

DRAWN BY ZB | PLANS CK'D. JH

EAST AND WEST TOWERS PROPOSED ROOF PLAN

SHEET P-121

ABBREVIATIONS

&	AND
@	AT
±	PLUS/MINUS
2SSO	TWO SPEED SIDE OPENING
ADAAG	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
AUX	AUXILLARY
BMS	BUILDING MANAGEMENT SYSTEM
C/L	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.P	CAR OPERATING PANEL
CWT	COUNTERWEIGHT
DWG	DRAWING
ELEV.	ELEVATOR
EQPT	EQUIPMENT
EX.	EXISTING
FC	FOOT CANDLE
FIN	FINISH, FINISHED
FFL	FINISHED FLOOR LEVEL
FPM	FEET PER MINUTE
FT	FEET
GC	GENERAL CONTRACTOR
GFCI INTERRUPTER	GROUND FAULT CIRCUIT
GOV.	GOVERNOR
HD	HEAT DETECTOR
HP	HORSEPOWER
LBS	POUNDS
LS	LIGHT SWITCH
LX	LUX
MAX.	MAXIMUM
MIN.	MINIMUM
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
N.T.S	NOT TO SCALE
NO.	NUMBER
O.C	OFF CENTER
O.D.	OVERHEAD DEFLECTOR
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
PH	PHASE
PL	PLATE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
SD	SMOKE DETECTOR
SIM	SIMILAR
SP	SPRINKLER
SPEC	SPECIFICATION(S)
SS	STAINLESS STEEL
SSSO	SINGLE SPEED SIDE OPENING
STP	STOP
SUSP.	SUSPENDED
SW.	SWITCH
TBD	TO BE DETERMINED
TEMP	TEMPORARY
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
V	VOLT / VOLTAGE
V.I.F	VERIFY-IN-FIELD
VT	VERTICAL TRANSPORTATION
W/	WITH
W/O	WITHOUT
WPF	WATERPROOF

APPLICABLE CODES

1. ALL WORK SHALL CONFORM TO THE FOLLOWING:
   - 1.1. INTERNATIONAL BUILDING CODE 2015 AS ADOPTED UNDER SPS 361.05 AND MODIFIED IN CHAPTERS SPS 361 TO 366.
   - 1.2. ASME A17.1/2016 - SAFETY CODE FOR ELEVATORS AND ESCALATORS AS ADOPTED UNDER CHAPTERS SPS 318.
   - 1.3. NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.
   - 1.5. NFPA 70 - NATIONAL ELECTRICAL CODE.
   - 1.6. NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE.
2. THE ELEVATOR CONTRACTOR SHALL ADVISE THE OWNER OF PENDING CODE CHANGES THAT COULD BE APPLICABLE TO THIS PROJECT OR PROPERTY AND PROVIDE QUOTATIONS FOR COMPLIANCE WITH RELATED COSTS.

GENERAL NOTES

1. REFER TO ELEVATOR SPECIFICATION 142100 - OVERHEAD ELECTRIC TRACTION PASSENGER ELEVATOR FOR FULL DETAILS.
2. KEEP ALL EQUIPMENT, PARTS, AND AREAS OF THE BUILDING, EXTERIOR SPACES, ROADWAYS, AND SIDEWALKS FREE FROM MATERIALS AND DEBRIS RESULTING FROM THE EXECUTION OF ALL WORK. EXCESS MATERIALS SHALL NOT BE PERMITTED TO ACCUMULATE EITHER IN THE INTERIOR OR EXTERIOR OF THE BUILDING.
3. UNLESS OTHERWISE INDICATED ON THE CONTRACT DRAWINGS OR SPECIFICATIONS, AT THE CONCLUSION OF WORK EACH DAY, OR NIGHT AS APPLICABLE, ALL PUBLIC SPACES SHALL BE RETURNED TO THEIR ORIGINAL STATE TO PERMIT UNIMPEDED PUBLIC ACCESS.
4. VERIFY THE FLOOR TO FLOOR ELEVATION DIFFERENCE IN FIELD.
5. IN THE EVENT OF ANY SURVEYED DIMENSION DISCREPANCY, NOTIFY THE ENGINEER AND DO NOT PROCEED WITH AFFECTED WORK UNTIL THE DISCREPANCY HAS BEEN FULLY RESOLVED.
6. UNLESS OTHERWISE STATED, CONTRACTOR IS RESPONSIBLE FOR THE FULL AND COMPLETE INSTALLATION OF ALL EQUIPMENT, INCLUDING CONDUIT AND WIRING, NECESSARY FOR PROPER OPERATION OF THE EQUIPMENT.
7. THERE SHALL BE NO MANUFACTURER'S IDENTIFYING SIGNAGE DISPLAYED ON INSTALLED ELEVATORS.

ELECTRICAL

1. ONLY MACHINERY AND EQUIPMENT USED DIRECTLY IN CONNECTION WITH THE ELEVATOR SHALL BE PERMITTED IN ELEVATOR HOISTWAYS AND MACHINE ROOMS. (ASME A17.1 §2.8.1)
2. ALL ELECTRICAL EQUIPMENT PLACEMENT AND INSTALLATION SHALL BE COORDINATED WITH THE ELEVATOR CONTRACTOR AND SHALL NOT BE LOCATED UNTIL ELEVATOR EQUIPMENT IS INSTALLED OR COORDINATION HAS BEEN ARRANGED WITH CONTRACTOR'S EQUIPMENT PLACEMENT.
3. THE MINIMUM CLEAR HEADROOM IN ANY ELEVATOR MACHINE ROOM SHALL BE NO LESS THAN 84". (ASME 17.1 §2.7.4.1)
4. ELEVATOR, ELECTRICAL ENCLOSURES: ALL ELECTRICAL EQUIPMENT, LOCATED LESS THAN 48 IN. ABOVE THE PIT FLOOR, SHALL:
   - BE WEATHERPROOF (NEMA 4).
   - HAVE WIRING IDENTIFIED FOR USE IN WET LOCATIONS IN ACCORDANCE WITH THE REQUIREMENTS IN NFPA 70
5. ELEVATOR, MAINLINE DISCONNECT / BREAKER: A SINGLE MEANS FOR DISCONNECTING THE MAIN POWER SUPPLY FOR EACH UNIT SHALL BE PROVIDED. THE DISCONNECTING MEANS SHALL BE A LISTED DEVICE; EITHER AN ENCLOSED EXTERNALLY OPERABLE FUSED MOTOR CIRCUIT SWITCH OR A CIRCUIT BREAKER CAPABLE OF BEING LOCKED IN THE OPEN POSITION AND SHALL BE LOCATED ADJACENT TO THE MACHINE ROOM ACCESS DOOR. A LABEL ON THE DISCONNECT IS REQUIRED TO SHOW THE LOCATION OF THE OVERCURRENT PROTECTION. (NEC §620.51).
6. ELEVATOR, AUXILIARY DISCONNECT: A SEPARATE BRANCH CIRCUIT (SINGLE PHASE) SHALL SUPPLY THE CAR LIGHTS, RECEPTACLES, EMERGENCY LIGHTING, AND VENTILATION IN EACH ELEVATOR CAR. IT SHALL BE A LOCKABLE FUSED SWITCH / BREAKER AND SHALL BE LOCATED IN THE ELEVATOR MACHINE ROOM. A LABEL ON THE DISCONNECT IS REQUIRED TO SHOW THE LOCATION OF THE OVERCURRENT PROTECTION. SHOW ON ELECTRICAL DRAWINGS. (NEC §620.22(A)).
7. ELEVATOR, GFCI RECEPTACLES: GFCI RECEPTACLES SHALL BE REQUIRED IN ALL ELEVATOR MACHINE ROOMS AND ELEVATOR PIT AREAS. (N.E.C, §620.23(C) & §620.24(C)).
8. ELEVATOR, MACHINE ROOM LIGHTING: PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE PROVIDED IN ALL ELEVATOR MACHINE ROOMS. MINIMUM ILLUMINATION SHALL BE NOT LESS THAN 200LX (19FC) AT THE FLOOR LEVEL, AND SHALL BE ADEQUATE TO WORK ON ALL EQUIPMENT WITHOUT SHADOWING. LIGHT SWITCH SHALL BE LOCATED INSIDE THE ROOM, NEAR THE ACCESS DOOR. (ASME A17.1, §2.7.5.1).
9. ELEVATOR, MACHINE ROOM LIGHT SWITCH: LIGHT SWITCHES FOR ALL ELEVATOR MACHINE ROOMS, MACHINERY SPACES, AND CONTROL ROOM SHALL BE LOCATED TO THE JAMB STRIKE SIDE OF THE MACHINE ROOM ENTRY DOOR. (N.E.C §620.23(B)).
10. ELEVATOR, PIT LIGHTING: PERMANENTLY INSTALLED LIGHTING SHALL BE PROVIDED IN EACH ELEVATOR PIT. MINIMUM ILLUMINATION SHALL BE NOT LESS THAN 100LX (10FC) AT THE PIT FLOOR. BULB(S) SHALL BE EXTERNALLY GUARDED TO PREVENT CONTACT AND ACCIDENTAL BREAKAGE. LOCATIONS SHALL BE COORDINATED WITH ELEVATOR CONTRACTOR SO THAT FIXTURE(S) ARE OUT OF THE WAY OF ALL ELEVATOR EQUIPMENT. (ASME A17.1, §2.2.5).
11. ELEVATOR, PIT LIGHT SWITCH: THE ELEVATOR PIT LIGHT SWITCH SHALL BE A MINIMUM OF 18" TO 36" ABOVE THE LOWEST LANDING DOOR SILL AND ADJACENT TO (NOT BEHIND) THE PIT LADDER. FOR PITS THAT ARE ACCESSED VIA A PIT ACCESS DOOR, THE PIT LIGHT SWITCH SHALL BE READILY ACCESSIBLE FROM THE ACCESS DOOR. (N.E.C §620.24(D)).
12. ELEVATOR, SEPARATE CIRCUITS (PIT): THE ELEVATOR PIT SHALL HAVE A SEPARATE BRANCH CIRCUIT SUPPLYING THE PIT LIGHTING AND RECEPTACLES. REQUIRED LIGHTING SHALL NOT BE CONNECTED TO THE LOAD SIDE OF A GROUND-FAULT INTERRUPTER. (N.E.C §620-24(A))
13. ELEVATOR, SEPARATE CIRCUITS (MACHINE ROOM): A SEPARATE BRANCH CIRCUIT SHALL SUPPLY THE ELEVATOR MACHINE ROOM LIGHTING AND RECEPTACLES. (N.E.C §620-23(A)).
14. ELEVATOR, EMERGENCY POWER: EMERGENCY POWER SHALL BE PROVIDED TO ALL ELEVATOR MACHINE ROOM LIGHTING CIRCUITS AND TO ALL ELEVATOR CAR LIGHTING DISCONNECTS IN THE ELEVATOR MACHINE ROOMS. IF THE ELEVATOR IS TO BE CONNECTED TO FACILITY EMERGENCY POWER, THE HVAC UNIT (IF APPLICABLE) SHALL ALSO BE PROVIDED WITH FACILITY EMERGENCY POWER, TO PROVIDE A PROPER TEMPERATURE ENVIRONMENT FOR THE CONTROLLER.
15. ELEVATOR, FIRE ALARM: A SMOKE DETECTOR SHALL BE PROVIDED INSIDE THE ELEVATOR MACHINE ROOM(S) AS WELL AS AT EACH ELEVATOR LOBBY. IF AMBIENT CONDITIONS PRECLUDE THE USE OF A SMOKE DETECTOR, OTHER DETECTION MEANS MAY BE USED (HEAT DETECTORS). (ASME A17.1, §2.27.3.2.2)
16. ELEVATOR, CONDUIT RUNS: ALL ELECTRICAL CONDUIT SHALL BE RUN OVERHEAD OR IN A MANNER WHICH DOES NOT RESTRICT ACCESS TO OR AROUND ANY EQUIPMENT.
17. ELEVATOR, PHONE AND DATA: CONDUIT SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR IN ALL ELEVATOR MACHINE ROOM TO THE ELEVATOR CONTROLLERS. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FOR BOTH EMERGENCY ELEVATOR PHONE AND REQUIRED DATA LINE TO THE MACHINE ROOM, TO THE CONTROLLERS, AND TERMINATED ON THE ELEVATOR CONTROLLERS IN COORDINATION WITH THE ELEVATOR CONTRACTOR.
18. ELEVATOR, MACHINE ROOM HVAC: ELEVATOR MACHINE ROOM(S) ENVIRONMENT SHALL BE MAINTAINED BETWEEN 50°F - 104°F WITH NO MORE THAN 95% HUMIDITY NON CONDENSING. TEMPERATURE SHALL BE CONTROLLED BY MEANS OF AN INDEPENDENT AIR-CONDITIONING SYSTEM. EQUIPMENT SHALL NOT BE INSTALLED DIRECTLY ABOVE ELEVATOR EQUIPMENT.
19. ELEVATOR, ACCESS LADDER (PIT): THERE SHALL BE INSTALLED IN THE PIT OF EACH ELEVATOR, WHERE THE PIT EXTENDS MORE THAN 35" BELOW THE SILL OF THE PIT ACCESS DOOR (LOWEST HOISTWAY DOOR OR SEPARATE PIT ACCESS DOOR), A FIXED VERTICAL LADDER OF NONCOMBUSTIBLE MATERIAL, LOCATED WITHIN REACH OF THE ACCESS DOOR. THE LADDER SHALL EXTEND NOT LESS THAN 48" ABOVE THE SILL OF THE ACCESS DOOR OR HANDGRIPS SHALL BE PROVIDED TO THE SAME HEIGHT. THE LADDER RUNGS, CLEATS, OR STEPS SHALL BE SPACED 12" ON CENTER, SHALL BE PROVIDED TO NOT LESS THAN THE HEIGHT OF THE DOOR ACCESS SILL, AND SHALL BE DESIGNED TO MINIMIZE SLIPPING (E.G., KNURLING, DIMPLING, COATING WITH SKID RESISTANT MATERIAL, ETC.). ACCESS BY A LADDER SHALL NOT BE PERMITTED WHEN THE PIT FLOOR IS MORE THAN 120 IN. BELOW THE SILL OF THE ACCESS DOOR. (ASME A17.1 §2.2.4.2)

ELEVATOR INSPECTION NOTE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING AND COMMISSIONING OF THE ELEVATORS IN ACCORDANCE WITH THE WISCONSIN STATE BUILDING CODE, AND A17.1.

STATE PROJECT NUMBER

1000-57-05

INDEX OF DRAWINGS

DWG #	DRAWING NAME	DATE ISSUED: 30% CD - 10/30/2020	60% CD - 08/13/2021			
VERTICAL TRANSPORTATION		30%	60%			
VT-001	ABBREVIATIONS AND GENERAL NOTES	x	x			
VT-100	ELEV. 01-04, SCHEDULE	x	x			
VT-101	ELEV. 01-04, HOISTWAY PLAN VIEW	x	x			
VT-102	ELEV. 01-04, PIT PLAN VIEW	x	x			
VT-103	ELEV. 01-04, HOISTWAY ELEVATION & MR	x	x			
VT-201	ELEV. 01-04, CAB PLAN AND SECTION		x			
VT-202	ELEV. 01-04, FIXTURE DETAILS		x			
VT-203	ELEV. 01-04, ENTRANCE VIEW		x			
VT-204	ELEV. 01-04, MISCELLANEOUS DETAILS		x			

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
LIDER DELGADO	LIDER DELGADO	SEAN YAGHOBI

ABBREVIATIONS AND GENERAL NOTES

SHEET

VT–001

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05

ELEVATOR SCHEDULE

ELEVATOR NO	CATEGORY	TYPE	CAPACITY (LBS.)	APTA CAPACITY (LBS.)	RATED SPEED (FPM)	PIT DEPTH	CLEAR OVERHEAD	CLEAR HOISTWAY WIDTH	CLEAR HOISTWAY DEPTH	PLATFORM WIDTH	PLATFORM DEPTH	CAR INSIDE WIDTH	CAR INSIDE DEPTH
ELEV. 01, 02, 03, 04	PASSENGER CLASS A	OVERHEAD TRACTION	4,000	6,000	350	5'-8"	17'-10"	9'-4"	7'-11"	8'-0"	6'-2"	7'-9"	5'-4 1/2"

ELEVATOR SCHEDULE (CONTINUED)

	DOOR			CAR TYPE	TRAVEL	NUMBER OF STOPS	NUMBER OF OPENINGS	LEVELS SERVED	POWER (HP)	STARTING CURRENT 480V, 3PH, 60Hz (A)	RUNNING CURRENT 480V, 3PH, 60Hz (A)	HEAT RELEASE AT CONTROL ROOM (BTU/HR/UNIT)
ELEVATOR NO	DOOR WIDTH	DOOR HEIGHT	TYPE									
ELEV. 01, 02, 03, 04	4'-0"	7'-0"	SINGLE SPEED SIDE OPENING	FRONT OPENING	24'-10"	2	2 (2F / 0R)	PLATFORM & OVERPASS	60	150	75	42,000

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
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ELEV. 01–04, SCHEDULE

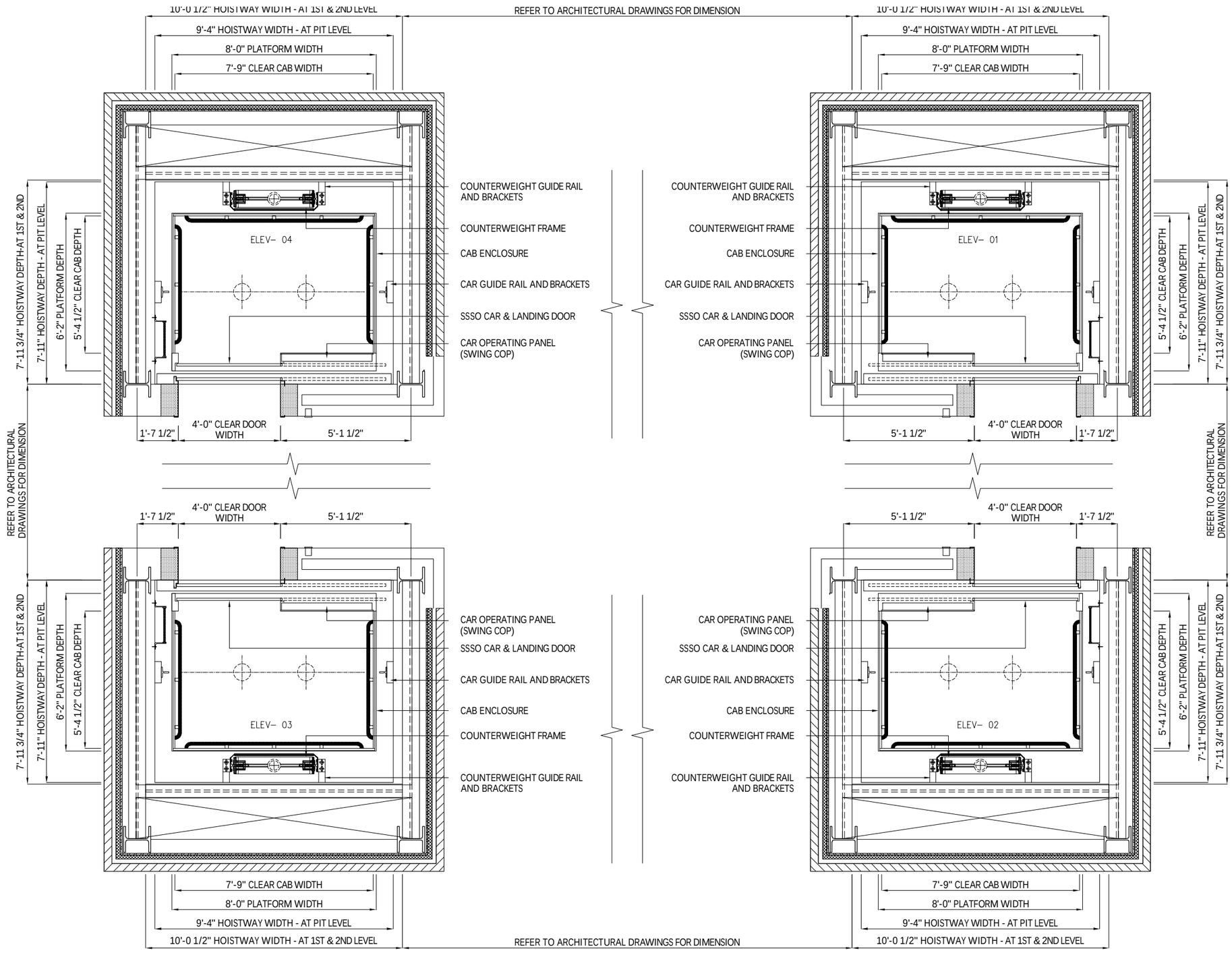
SHEET

VT–100

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-05



1 VT-101 ELEVATORS 01-04 - HOISTWAY PLAN

SCALE: 1/4"=1'-0"

FT 0 2 4 8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
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ELEV. 01–04, HOISTWAY PLAN VIEW

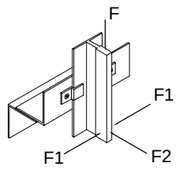
SHEET

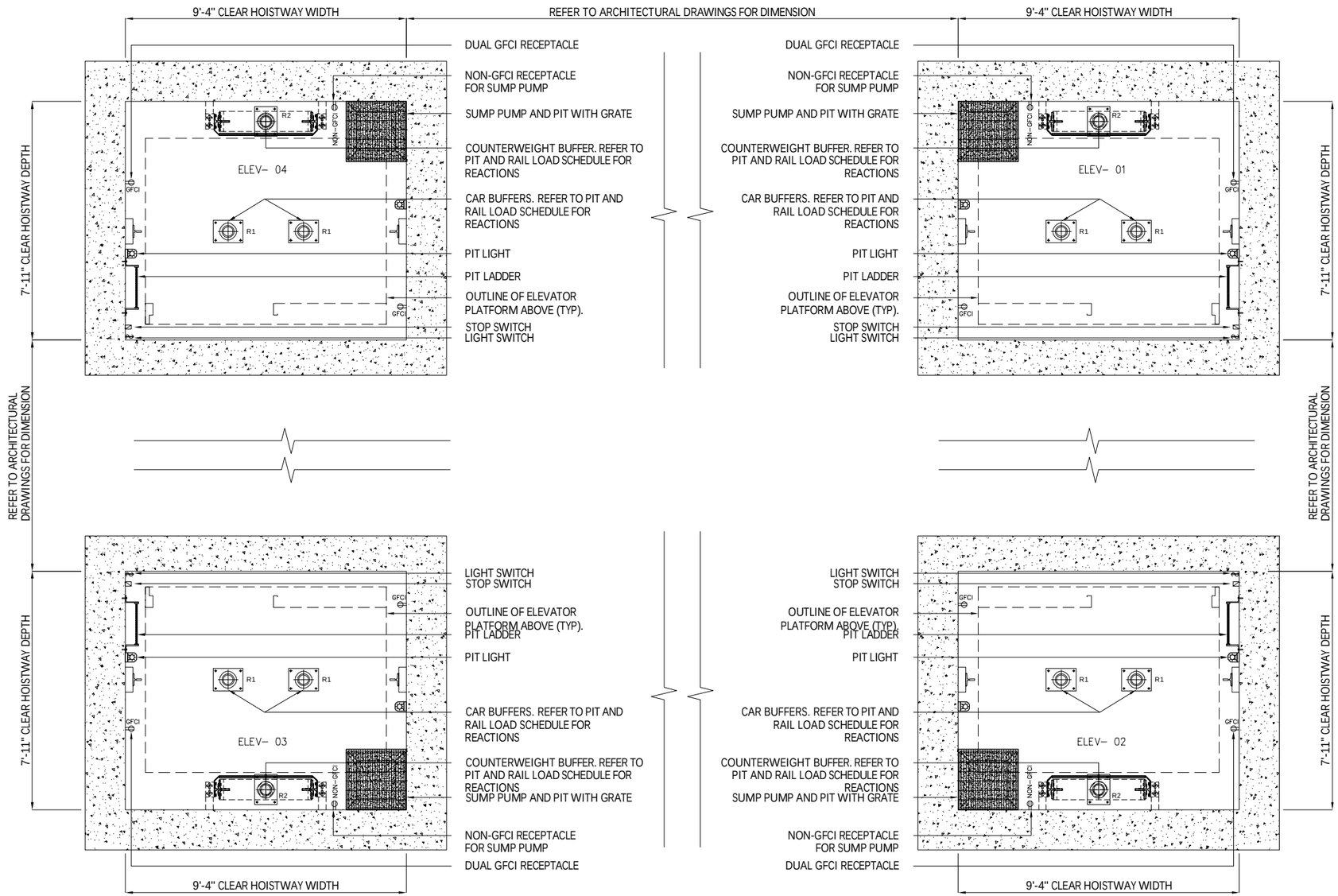
VT–101

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-05

ELEVATOR STRUCTURAL REACTIONS - EACH CAR						
PIT LOADS (DOUBLED FOR IMPACT)		GUIDE RAIL LOADS				
		NORMAL FORCES (EACH RAIL)			SEISMIC FORCES (EACH RAIL)	
R1 (CAR BUFFER)	R2 (CWT BUFFER)	F1	F2	F **	F1	F2
27,300 lbf.	41,400 lbf.	500 lbf.	200 lbf.	14,000 lbf.	1,400 lbf.	700 lbf.
** "F" LOAD AT PIT UNDER GUIDE RAILS INCLUDES IMPACT LOAD DUE TO SAFETY APPLICATION.						





1 VT-102 ELEVATORS 01-04 - PIT PLAN

SCALE: 1/4"=1'-0"

0 2 4 8 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
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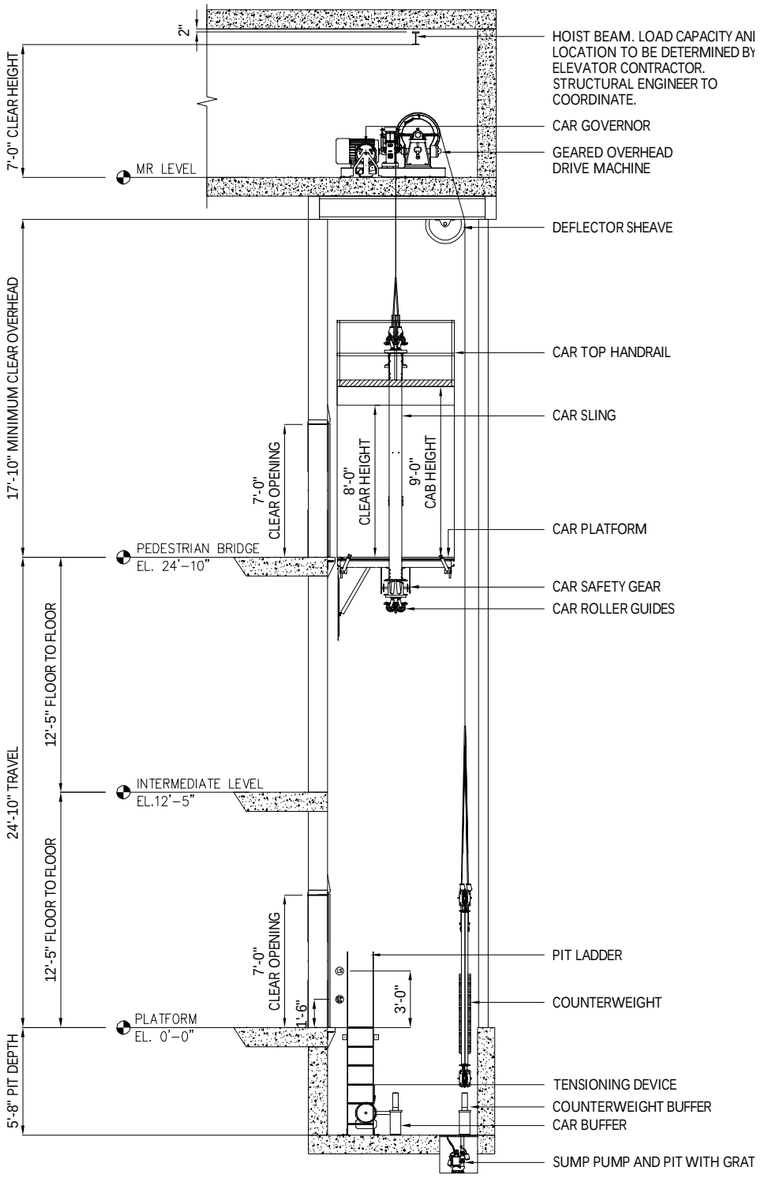
ELEV. 01–04, PIT PLAN VIEW

SHEET VT–102

SCALE = AS NOTED

STATE PROJECT NUMBER

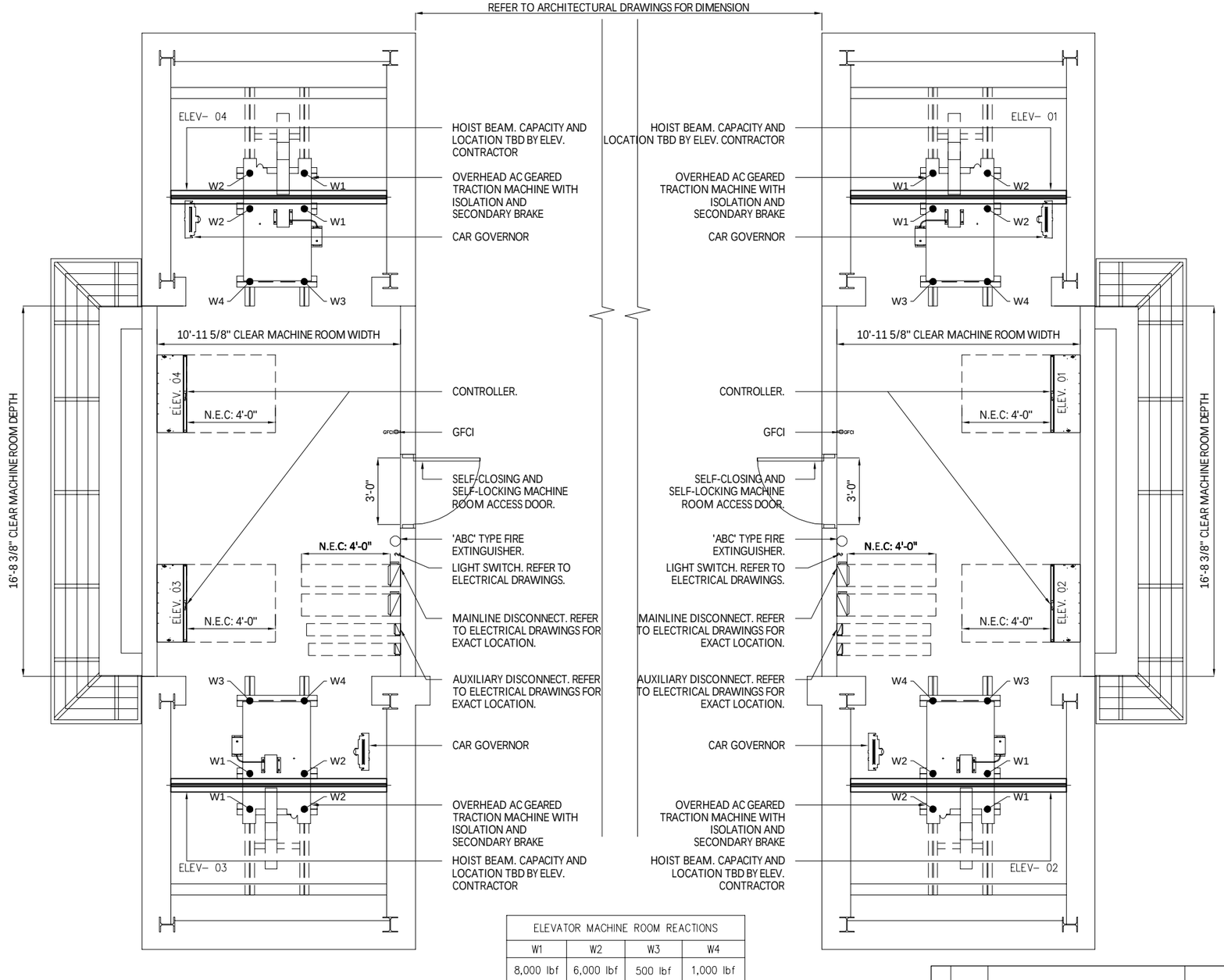
1000-57-05



2 VT-103 ELEVATORS 01-04, HOISTWAY ELEVATION

SCALE: 1/8"=1'-0"

0 4 8 16 FT



ELEVATOR MACHINE ROOM REACTIONS			
W1	W2	W3	W4
8,000 lbf	6,000 lbf	500 lbf	1,000 lbf

1 VT-103 ELEVATORS 01-04, MACHINE ROOM PLAN

SCALE: 3/16"=1'-0"

0 2 4 8 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

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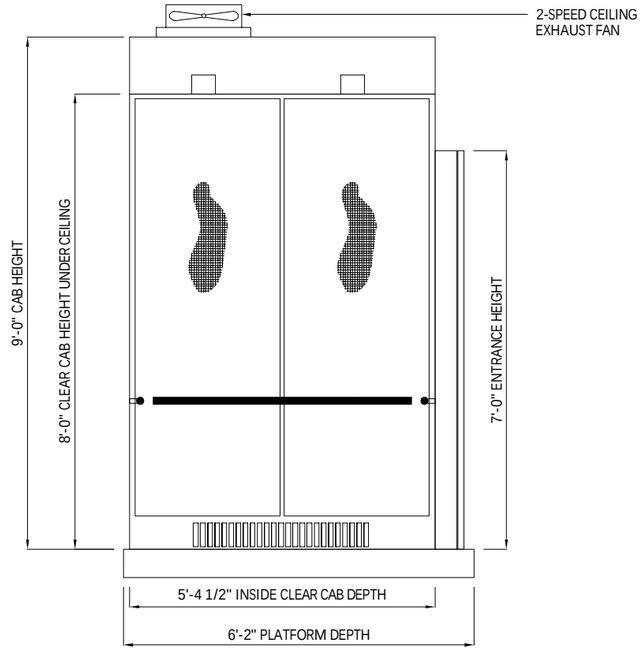
ELEV. 01–04, HOISTWAY ELEVATION & MR

SHEET VT–103

SCALE = AS NOTED

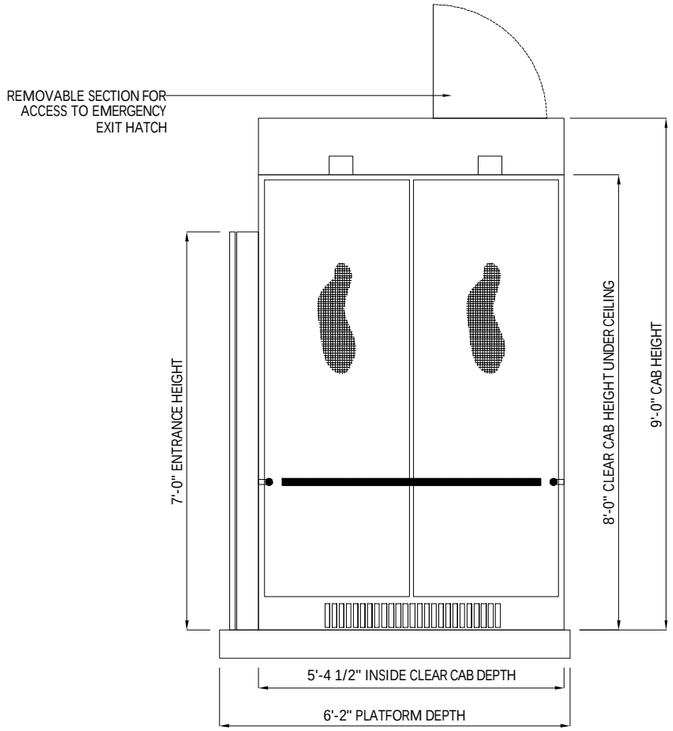
STATE PROJECT NUMBER

1000-57-05



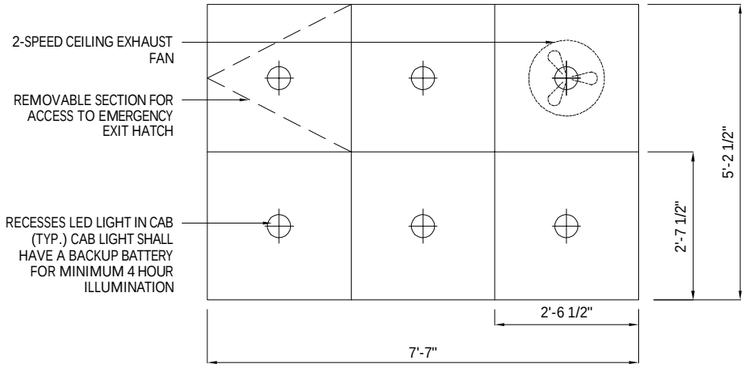
4 VT-201 CAB ELEVATION "C"

SCALE: 3/8"=1'-0"



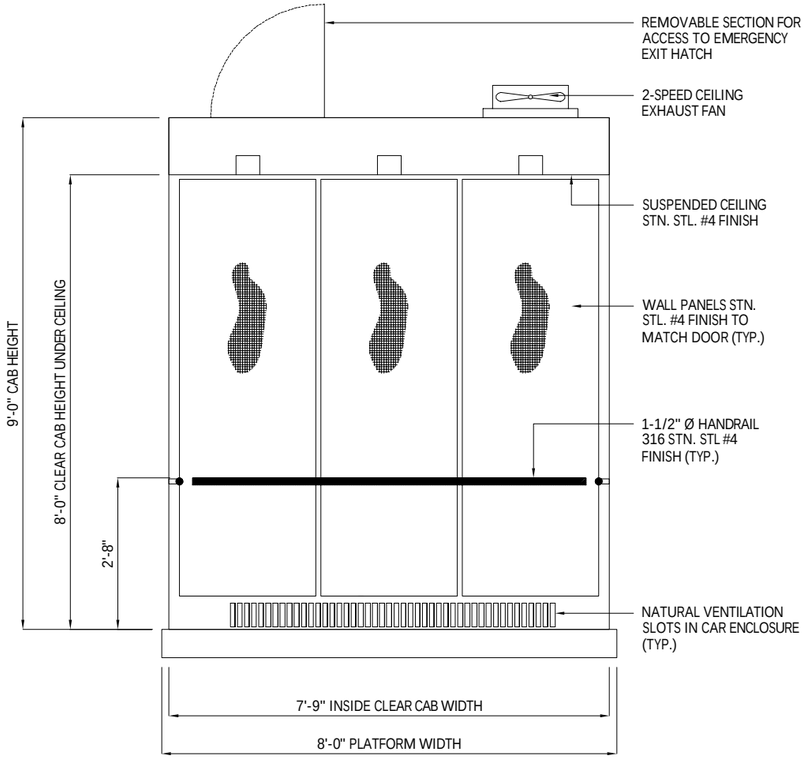
5 VT-201 CAB ELEVATION "A"

SCALE: 3/8"=1'-0"



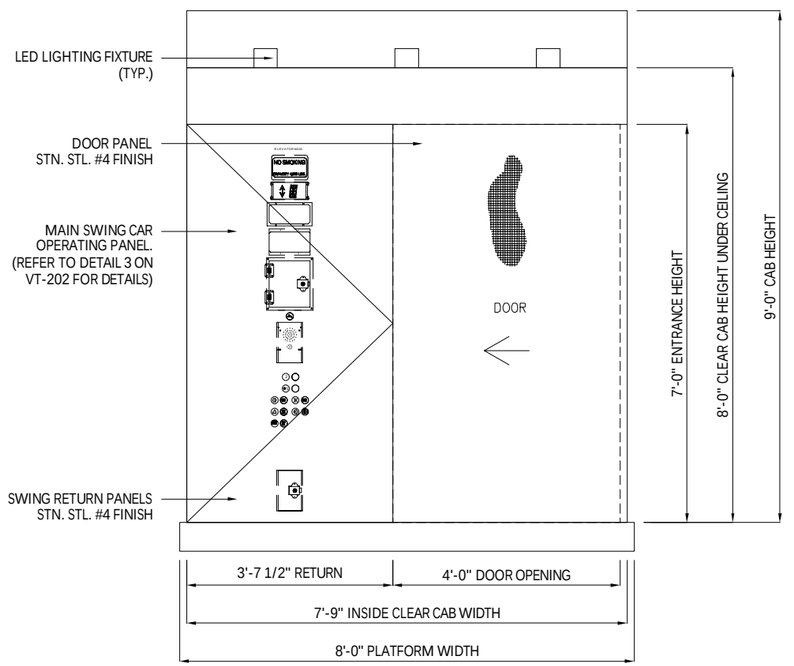
6 VT-201 REFLECTED CEILING PLAN

SCALE: 3/8"=1'-0"



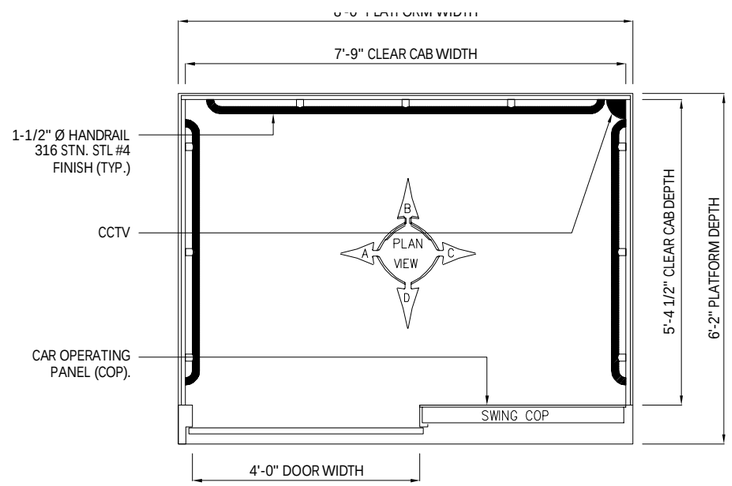
3 VT-201 CAB ELEVATION "B"

SCALE: 3/8"=1'-0"



2 VT-201 CAB ELEVATION "D"

SCALE: 3/8"=1'-0"



1 VT-201 ELEVATORS 02 & 04 (01 & 02 MIRRORED) CAB PLAN

SCALE: 3/8"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
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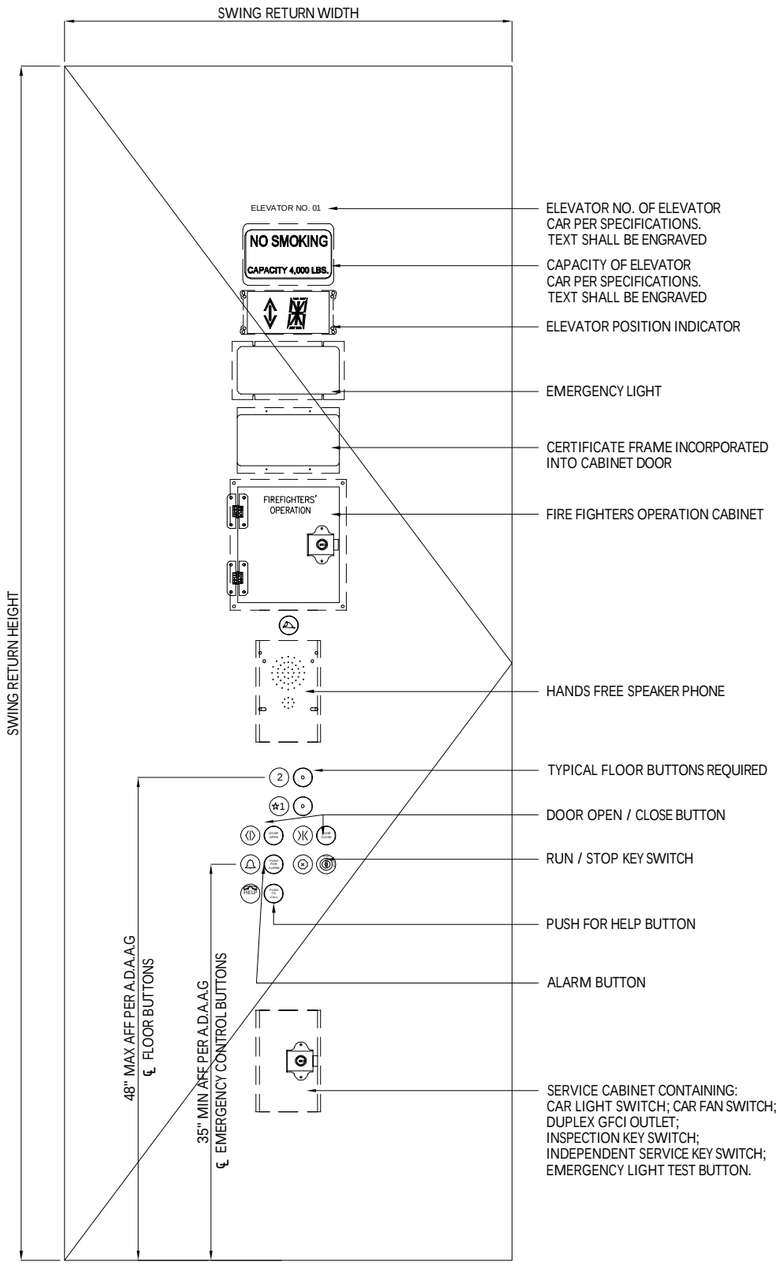
ELEV. 01–04, CAB PLAN AND SECTION

SHEET VT–201

SCALE = AS NOTED

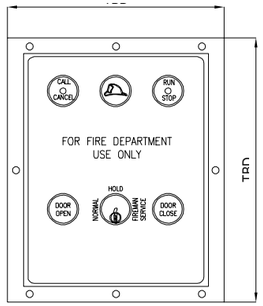
STATE PROJECT NUMBER

1000-57-05



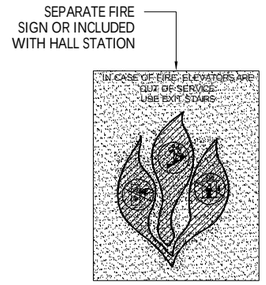
3 VT-202 MAIN CAR OPERATING PANEL (SWING COP)

SCALE: N.T.S



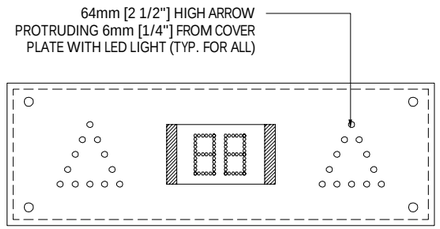
6 VT-202 FIRE SERVICE SUB-PANEL DETAIL

SCALE: N.T.S



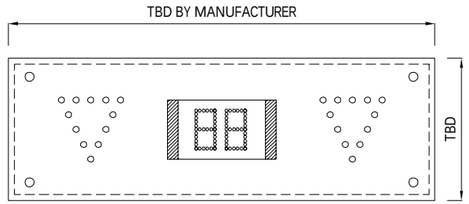
7 VT-202 FIRE SIGN DETAIL

SCALE: N.T.S



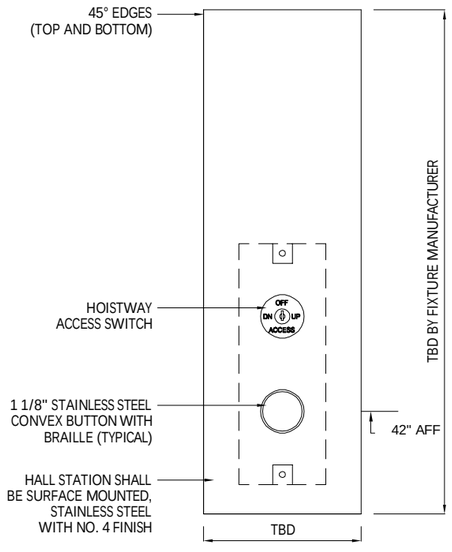
4 VT-202 HALL LANTERN AT PLATFORM LEVEL

SCALE: N.T.S



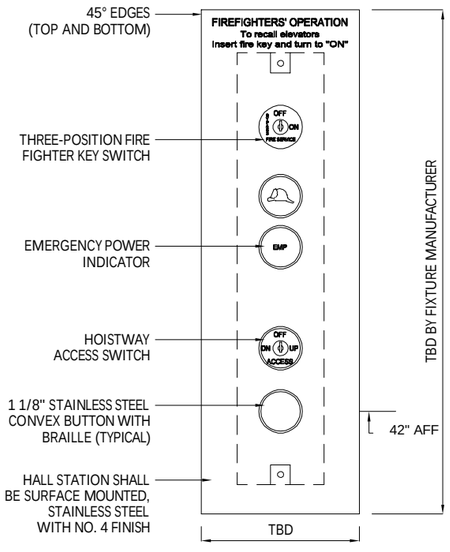
5 VT-202 HALL LANTERN AT PEDESTRIAN BRIDGE LEVEL

SCALE: N.T.S



2 VT-202 HALL CALL STATION AT PEDESTRIAN BRIDGE LEVEL

SCALE: N.T.S



1 VT-202 HALL CALL STATION AT PLATFORM LEVEL

SCALE: N.T.S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
LIDER DELGADO	LIDER DELGADO	SEAN YAGHOBI

ELEV. 01–04, FIXTURE DETAILS

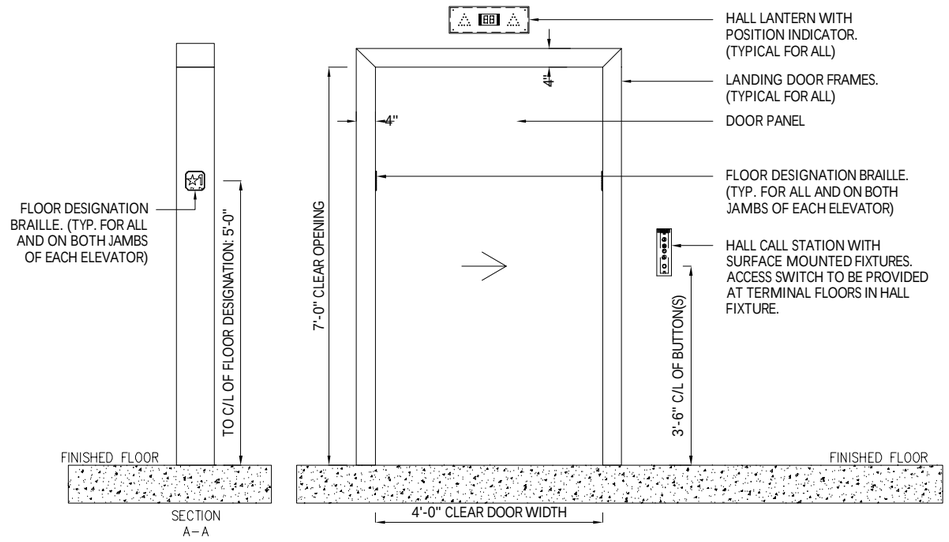
SHEET

VT–202

SCALE = AS NOTED

STATE PROJECT NUMBER

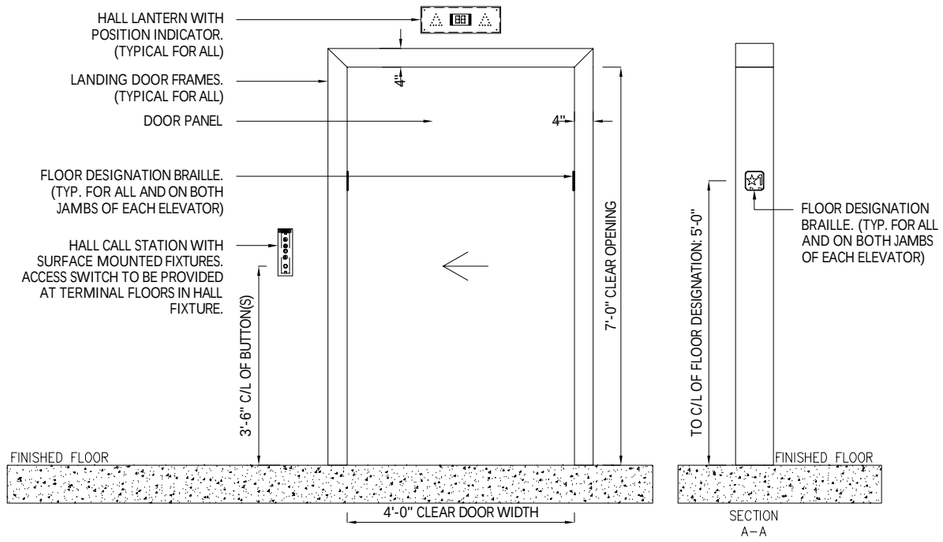
1000-57-05



3 VT-203 ELEVATOR 04 - ENTRANCE ELEVATION VIEW

SCALE: 3/8"=1'-0"

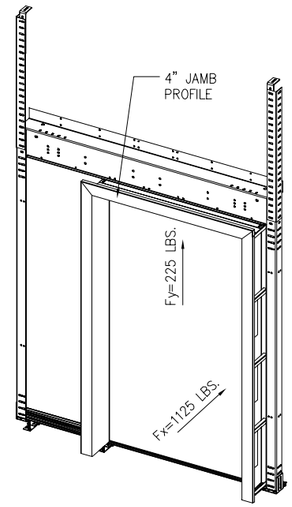
0 1 2 4 FT

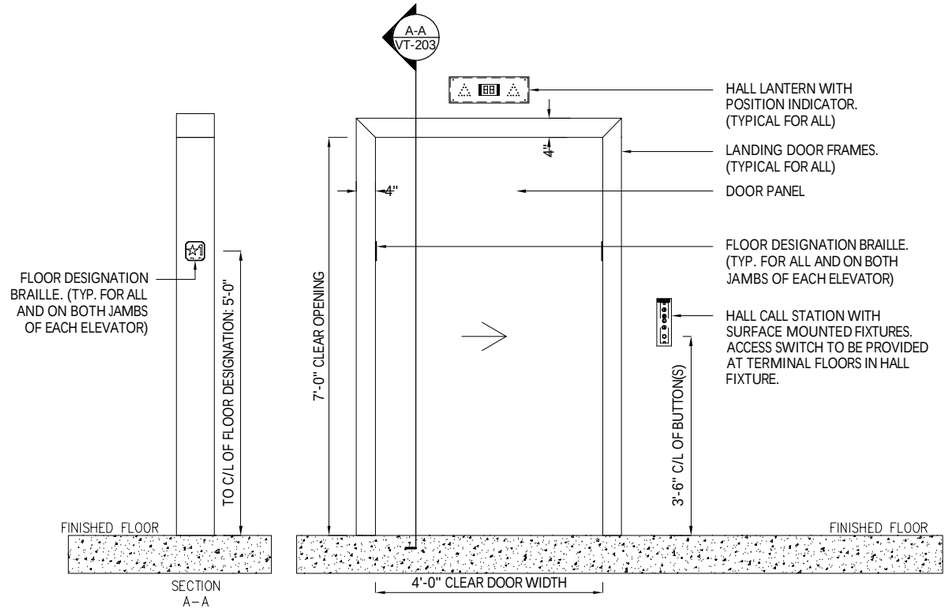


4 VT-203 ELEVATOR 01 - ENTRANCE ELEVATION VIEW

SCALE: 3/8"=1'-0"

0 1 2 4 FT

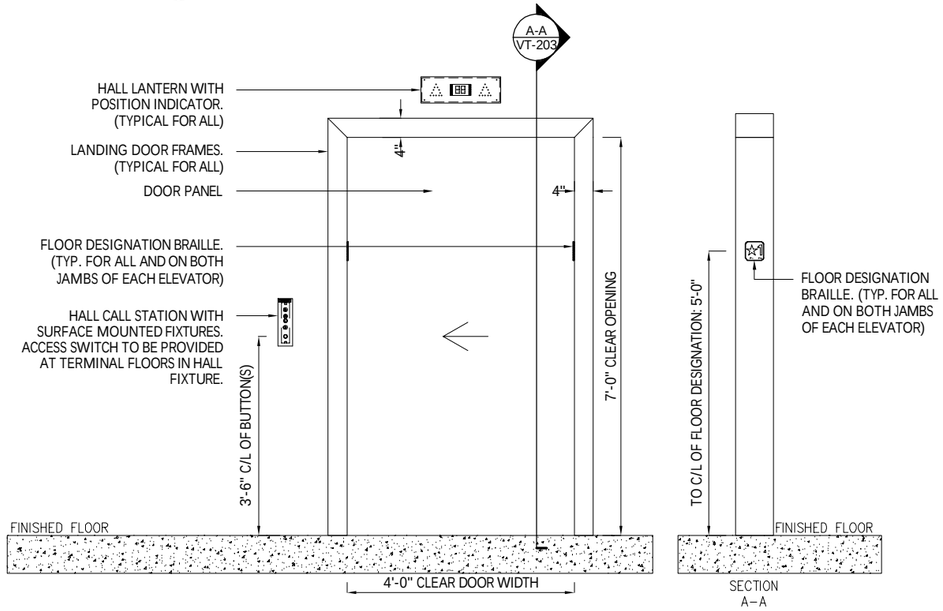




2 VT-203 ELEVATOR 02 - ENTRANCE ELEVATION VIEW

SCALE: 3/8"=1'-0"

0 1 2 4 FT



1 VT-203 ELEVATOR 03 - ENTRANCE ELEVATION VIEW

SCALE: 3/8"=1'-0"

0 1 2 4 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
LIDER DELGADO	LIDER DELGADO	SEAN YAGHOBI

ELEV. 01–04, ENTRANCE VIEW

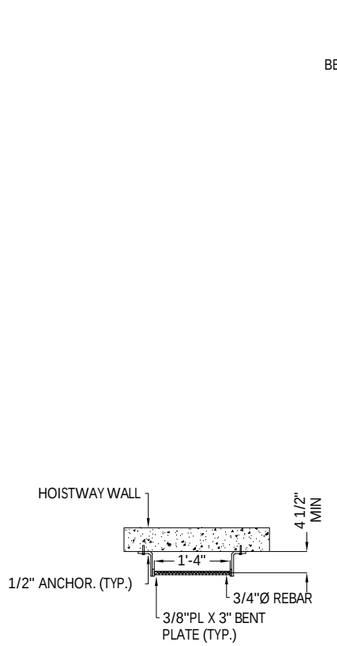
SHEET

VT–203

SCALE = AS NOTED

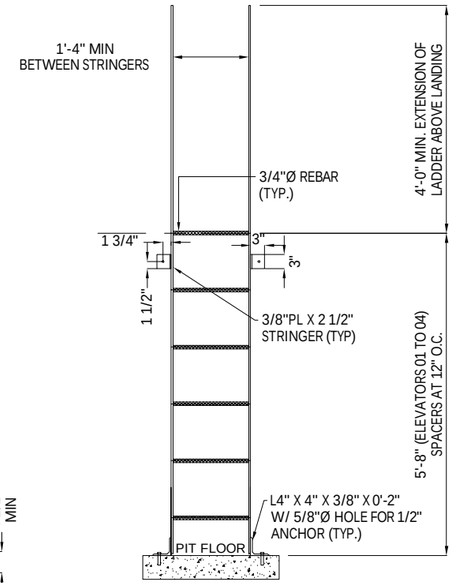
STATE PROJECT NUMBER

1000-57-05



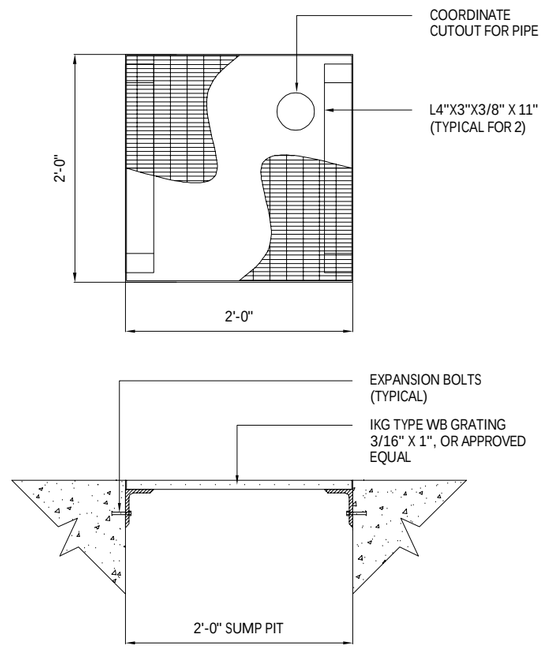
4 VT-204 PIT LADDER DETAIL

SCALE: 3/8"=1'-0"



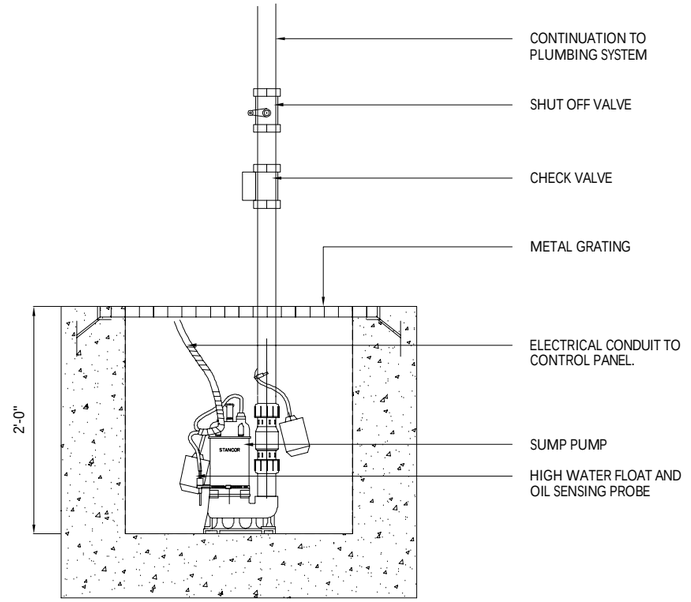
3 VT-204 PIT LADDER ELEVATION DETAIL

SCALE: 3/8"=1'-0"



2 VT-204 TYPICAL PLAN AND SECTION OF SUMP PIT

SCALE: N.T.S



1 VT-204 SIMPLEX SUMP PIT DETAIL

SCALE: N.T.S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

VERTICAL TRANSPORTATION

DESIGNED BY:	DRAWN BY:	PLANS CK'D. BY:
LIDER DELGADO	LIDER DELGADO	SEAN YAGHOBI

ELEV. 01–04, MISCELLANEOUS DETAILS

SHEET

VT–204

SCALE = AS NOTED