WKE

DECEMBER 2022

PROJECT ID: 1000-57-70

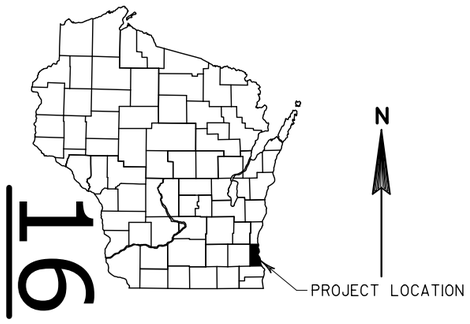
WITH: N/A

COUNTY: MILWAUKEE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
~~Section No.~~	~~8~~	~~Structure Plans~~
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 390



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MILWAUKEE AIRPORT 2ND PLATFORM

RR CROSSING 393023R TO 1200 FT SOUTH

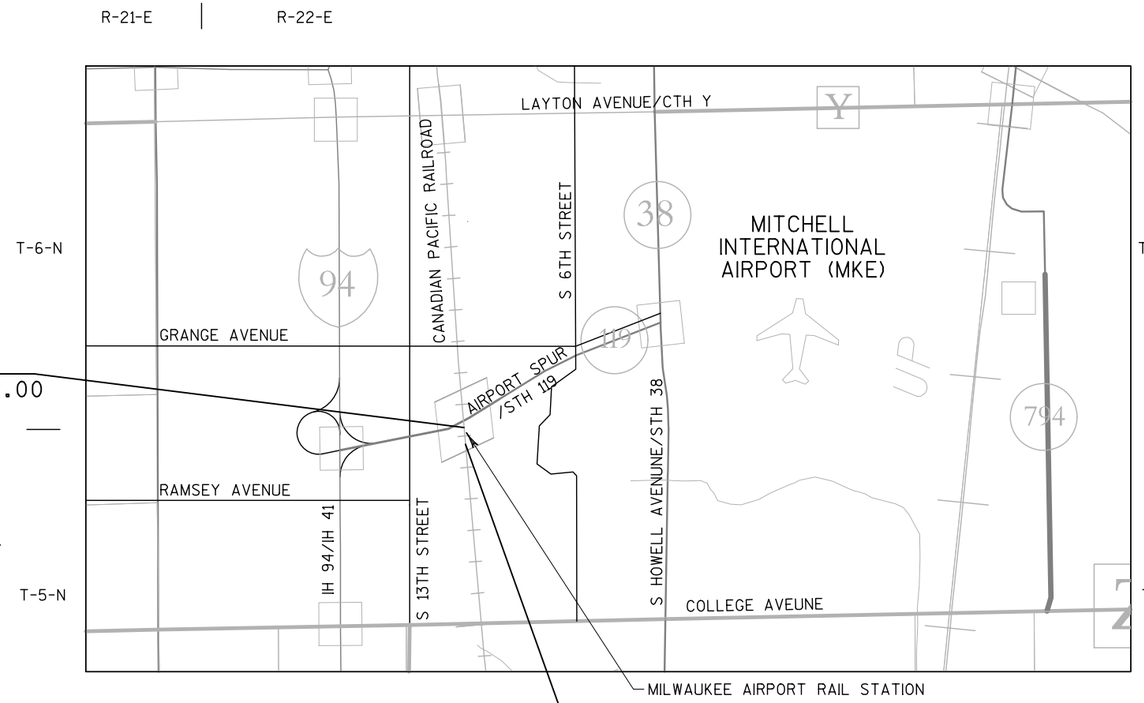
STH 119

MILWAUKEE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1000-57-70	FR-CRS-0068-2	1

STATE PROJECT NUMBER

1000-57-70



END PROJECT
STA. 108+00.00

BEGIN PROJECT
STA. 100+00.00
X=601,814.6260
Y=263,375.2418

LAYOUT SCALE 0 3 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

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, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

AECOM
1555 N River Center Drive, Suite 214
Milwaukee, WI 53212
T 414.944.6080
F 414.944.6081

WISCONSIN PROFESSIONAL ENGINEER
MICHAEL P. PREBOSKE
E-34058
MADISON
WI

Michael P. Preboske

06/01/2022

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	CHRIS HAGER
Regional Examiner	
Regional Supervisor	WILLIAM MOHR

APPROVED FOR THE DEPARTMENT

DATE: 5/31/22 P.E.

(Signature)

E

ORDER OF SECTION 2 SHEETS

CIVIL

-	GENERAL NOTES
-	PROJECT OVERVIEW
-	TYPICAL SECTIONS
-	CONSTRUCTION DETAILS
-	REMOVALS
-	PLAN DETAILS
-	GRADING PLAN
-	EROSION CONTROL
-	DRAINAGE
-	PLANTINGS
-	STAGING PLANS
-	ALIGNMENTS AND CONTROL POINTS

STRUCTURAL

S-001	GENERAL PLAN & ELEVATION
S-002	GENERAL NOTES
S-003	TYPICAL SECTION AND QUANTITIES
S-004	SUBSURFACE EXPLORATION
S-100	FOUNDATION PLAN
S-101	PLATFORM LEVEL
S-102	INTERMEDIATE LEVEL
S-103	PEDESTRIAN BRIDGE LEVEL
S-104	TOP OF PEDESTRIAN BRIDGE LEVEL
S-105	TOWER ROOF LEVEL
S-106	PLATFORM PLAN
S-107 - S-108	PLATFORM CANOPY FRAMING PLAN
S-300	LONGITUDINAL SECTION - GRID B & C
S-301	LONGITUDINAL SECTION - GRID D & F
S-302	LONGITUDINAL SECTION - GRID G & H
S-303	TRANSVERSE SECTION - GRID 1 & 1.5
S-304	TRANSVERSE SECTION - GRID 2, 4 & 6
S-305	TRANSVERSE SECTION - GRID 6.5 & 7
S-500 - S-501	FRAMING CONNECTION DETAILS
S-502	TRUSS FRAMING CONNECTION DETAILS
S-503	TRUSS SPLICE DETAILS
S-504	FLOOR SLAB PLAN & DETAILS
S-505	ROOF SLAB PLAN & DETAILS
S-506 - S-507	DECK DETAILS
S-508	GLASS CURTAINWALL DETAILS
S-509	PIPE RAILING DETAILS
S-510	PLATFORM PILE LAYOUT
S-511	PLATFORM DETAILS
S-512 - S-513	PLATFORM CANOPY STEEL DETAILS
S-514	CANOPY FOUNDATION DETAILS
S-515 - S-517	BUILDING FOUNDATION DETAILS
S-518 - S-521	ELEVATOR PIT DETAILS
S-522	GRADE BEAM REINFORCEMENT PLAN
S-523 - S-524	CONCRETE SLAB DETAILS
S-525 - S-526	WHEELCHAIR LIFT ENCLOSURE (WCLE)
S-527	BRIDGE TRUSS ERECTION CONCEPT

ARCHITECTURAL

G-001	CODE SUMMARY & GENERAL NOTES
G-002	CODE DATA & SCHEDULES
G-003	EGRESS PLAND AND CALCULATION
G-006	ACCESSIBILITY REQUIREMENTS (ADA)
G-010	PARTITION TYPE
G-011	TYPICAL DOOR DETAILS
G-012	CEILING TYPES
A-000	ARCHITECTURAL ABBREVIATIONS AND SYMBOLS
A-100	ARCHITECTURAL SITE PLAN
A-101	FIRST FLOOR SLAB PLAN
A-103	SECOND FLOOR SLAB PLAN
A-104	BRIDGE ROOF SLAB PLAN
A-105	ELEVATOR MACHINE ROOM SLAB PLAN
A-111	FIRST FLOOR CONSTRUCTION PLAN
A-112	INTERMEDIATE LEVEL CONSTRUCTION PLAN
A-113	SECOND FLOOR CONSTRUCTION PLAN
A-114	BRIDGE ROOF LEVEL CONSTRUCTION PLAN
A-115	ELEVATOR MACHINE LEVEL CONSTRUCTION ROOF PLAN
A-120	FIRST FLOOR REFLECTED CEILING PLAN
A-121	INTERMEDIATE LEVEL REFLECTED CEILING PLAN
A-122	SECOND FLOOR REFLECTED CEILING PLAN
A-123	PEDESTRIAN BRIDGE ROOF LEVEL REFLECTED CEILING PLAN
A-126	EAST & WEST TOWERS CONSTRUCTION ROOF PLAN
A-130	FIRST FLOOR FINISH AND FURNISHINGS PLANS
A-131	SECOND FLOOR FINISH AND FURNISHINGS PLANS
A-201	ELEVATIONS
A-202	ELEVATIONS
A-301	SECTIONS
A-302	SECTIONS
A-303	PARTIAL ELEVATION/PLAN
A-304	PARTIAL ELEVATION/PLAN
A-305	TOWER - ENLARGED PLAN ELEVATION AND SECTION
A-306	PARTIAL ELEVATION/PLAN
A-307	PARTIAL ELEVATION/PLAN/SECTION
A-310 - A-316	WALL SECTIONS DETAILS
A-401 - S-402	ENLARGED FIRST FLOOR CONSTRUCTION PLAN
A-403 - A-404	ENLARGED INTERMEDIATE LEVEL CONSTRUCTION PLAN
A-405 - A-406	ENLARGED SECOND FLOOR CONSTRUCTION PLAN
A-407 - A-408	ENLARGED BRIDGE ROOF LEVEL CONSTRUCTION PLAN
A-409 - A-410	ENLARGED ELEVATOR MACHINE LEVEL CONSTRUCTION PLAN
A-500 - A-506	FLOOR PLAN DETAILS
A-510 - A-523	WALL SECTION DETAILS
A-524	ROOF DETAILS
A-535 - A-536	STAIR PLANS, AND SECTIONS
A-601	DOOR AND WINDOW SCHEDULES
A-606 - A-608	CURTAIN WALL TYPES
A-610 - A-611	CURTAIN WALL DETAILS
A-701	SITE SIGNAGE PLAN AND SCHEDULE
A-702	FIRST FLOOR SIGNAGE PLAN & SCHEDULE
A-703	SECOND FLOOR SIGNAGE PLAN & SCHEDULE
A-704	BRIDGE ROOF LEVEL SIGNAGE PLAN & SCHEDULE
A-705	SIGNAGE GRAPHIC STANDARDS
A-706 - A-709	SIGNAGE DETAILS
A-710	STANDARD SIGNAGE MOUNTING HEIGHTS
A-711	SIGNAGE MOUNTING DETAILS
A-800	CANOPY PLAN
A-805	CANOPY REFLECTED CEILING PLAN
A-810	CANOPY ROOF PLAN
A-815	CANOPY SECTION AND DETAIL
A-830	EXTERIOR FENCE PLAN & DETAILS
A-831	PLATFORM FENCE ELEVATION

MECHANICAL

M-001	MECHANICAL LEGEND AND GENERAL NOTES
M-200	MECHANICAL FIRST FLOOR PLAN
M-201	MECHANICAL SECOND FLOOR PLAN
M-202	MECHANICAL ROOF PLAN
M-300	MECHANICAL SCHEDULES
M-400	MECHANICAL DETAILS

ELECTRICAL

E-001	ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
E-100	ELECTRICAL FIRST FLOOR POWER PLAN
E-101	ELECTRICAL INTERMEDIATE LEVEL POWER PLAN
E-102	ELECTRICAL SECOND FLOOR POWER PLAN
E-103	ELECTRICAL ROOF POWER PLAN
E-200	ELECTRICAL FIRST FLOOR LIGHTING PLAN
E-201	ELECTRICAL INTERMEDIATE LEVEL LIGHTING PLAN
E-202	ELECTRICAL SECOND FLOOR LIGHTING PLAN
E-203	ELECTRICAL ROOF LIGHTING PLAN
E-204	ELECTRICAL STAIRS LIGHTING ELEVATION PLAN
E-300	ELECTRICAL FIRST FLOOR CONDUIT ROUTING PLAN
E-301	ELECTRICAL INTERMEDIATE LEVEL CONDUIT ROUTING PLAN
E-302	ELECTRICAL SECOND FLOOR CONDUIT ROUTING PLAN
E-303	ELECTRICAL ROOF CONDUIT ROUTING PLAN
E-400	ELECTRICAL SITE GROUNDING AND POWER PLAN
E-401	ELECTRICAL SITE LIGHTING PLAN
E-501	ELECTRICAL PHOTOMETRICS PLAN
E-600 - E-602	ELECTRICAL SCHEDULES
E-700	ELECTRICAL RISER DIAGRAM
E-800	ELECTRICAL DETAILS
E-900	ELECTRICAL UPPER ROOFS LIGHTNING PROTECTION PLAN
E-901	ELECTRICAL LOWER ROOFS LIGHTNING PROTECTION PLAN
E-902	LIGHTNING PROTECTION DETAILS
EN-001 - EN-003	ELECTRICAL COMCHECK SHEETS

COMMUNICATIONS

T-001	COMMUNICATIONS GENERAL NOTES
T-201	FIRST FLOOR PIDS PLAN
T-203	SECOND FLOOR PIDS PLAN
T-211	FIRST FLOOR CCTV PLAN
T-212	INTERMEDIATE LEVEL CCTV PLAN
T-213	SECOND FLOOR CCTV PLAN
T-221	FIRST FLOOR PA PLAN
T-223	SECOND FLOOR PA PLAN
T-251	FIRST FLOOR PIDS CONDUIT PLAN
T-253	SECOND FLOOR PIDS CONDUIT PLAN
T-261	FIRST FLOOR CCTV CONDUIT PLAN
T-262	INTERMEDIATE LEVEL CCTV CONDUIT PLAN
T-263	SECOND FLOOR CCTV CONDUIT PLAN
T-271	FIRST FLOOR PA CONDUIT PLAN
T-273	SECOND FLOOR PA CONDUIT PLAN
T-701 - T-702	SCHEDULE AND DETAILS
T-711	PIDS BLOCK DIAGRAM
T-712	CCTV BLOCK DIAGRAM

PLUMBING

P-001	COVER SHEET
P-002	LEGEND SHEET
P-111	FIRST FLOOR PROPOSED PLAN
P-210	FIRST FLOOR PART PLAN
P-112	INTERMEDIATE LEVEL PLAN
P-113	SECOND FLOOR PLAN
P-114	PEDESTRIAN BRIDGE ROOF PLAN
P-115	EAST AND WEST TOWERS ROOF PLAN
P-300	PLUMBING SCHEDULE
P-400	DOMESTIC WATER RISER DIAGRAM
P-401	SANITARY RISER DIAGRAM
P-402	STORM RISER DIAGRAM
P-403	FUEL GAS RISER DIAGRAM
P-500 - P-502	PLUMBING DETAILS

FIRE PROTECTION

FP-001	COVER SHEET
FP-111	FIRST FLOOR PROPOSED PLAN
FP-112	INTERMEDIATE FLOOR PROPOSED PLAN
FP-113	SECOND FLOOR PROPOSED PLAN
FP-400	FIRE PROTECTION RISER DIAGRAM
FP-500	FIRE PROTECTION DETAILS

FIRE ALARM

FA-001	FIRE ALARM SYMBOLS, ABBREVIATIONS, MATRIX, AND GENERAL NOTES
FA-100	FIRE ALARM FIRST FLOOR PLAN
FA-101	FIRE ALARM INTERMEDIATE LEVEL PLAN
FA-102	FIRE ALARM SECOND FLOOR PLAN
FA-103	FIRE ALARM ROOF PLAN
FA-600	FIRE ALARM RISER DIAGRAM

VERTICAL TRANSPORTATION

VT-001	ABBREVIATIONS AND GENERAL NOTES
VT-100	ELEVATORS 01-04, SCHEDULE
VT-101	ELEVATORS 01-04, HOISTWAY PLAN-VIEW
VT-102	ELEVATORS 01-04, PIT PLAN VIEW
VT-103	ELEVATORS 01-04, ELEVATION AND CONTROL ROOM
VT-104	ELEVATORS 01-04, MACHINE ROOM PLAN
VT-201	ELEVATORS 01-04, CAB PLAN AND SECTION
VT-202	ELEVATORS 01-04, FIXTURE DETAILS
VT-203	ELEVATORS 01-04, ENTRANCE VIEW
VT-204	ELEVATORS 01-04, MISCELLANEOUS DETAILS

2

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 COVERED WITH EROSION MAT.

THE CONTRACTOR IS RESPONSIBLE FOR RESHAPING ANS SEDDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTRUBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR'S EXPENSE.

MAINTAIN FIRE DEPARTMENT ACCESS TO EXISTING AND PROPOSED BUILDINGS AT ALL TIMES.

NO STOCKPILING OF MATERIALS, EQUIPMENT, OR CONTRACTOR VEHICLES WITHIN 6 FEET OF ANY AIRPORT SECURITY FENCE.

CONTRACTOR TO PROVIDE CUT SHEETS AND ASBUILTS FOR ELECTRICAL INSTALLATIONS AT COMPLETION OF CONSTRUCTION. INCLUDE ALL UNDERGROUND FACILITIES WITH DEPTHS OF INSTALLED CONDUIT.

ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS, AS DIRECTED BY THE ENGINEER.

EROSION CONTROL ITEMS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS TO FIT FIELD CONDITIONS.

WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

DESIGN CONTACTS

AECOM PROJECT MANAGER
MICHAEL PREBOSKE, PE
1555 N RIVERCENTER DRIVE, SUITE 214
MILWAUKEE, WI 53212
414-944-6139
MICHAEL.PREBOSKE@AECOM.COM

WISDOT CONTACTS

WISDOT PROJECT MANAGER
CHRISTOPHER HAGER, PE
141 NW BARSTOW STREET
WAUKESHA, WI 53188
414-750-1487
CHRISTOPHER.HAGER@DOT.WI.GOV

WISDOT RAILROADS AND HARBORS
CHIEF OF RAILROADS AND HARBORS
LISA STERN, PE
PO BOX 7913
4822 MADISON YARDS, 6TH FLOOR SOUTH
MADISON, WI 53705-7913
608-266-1010
608-294-8057 (CELL)
LISA.STERN@DOT.WI.GOV

WISDOT RAILROADS AND HARBORS
PASSENGER RAIL MANAGER
ARUN RAO, AICP
PO BOX 7913
MADISON YARDS, 6TH FLOOR SOUTH
MADISON, WI 53705-7913
608-266-3015
608-267-0294 (FAX)
ARUN.RAO@DOT.WI.GOV

WISDOT - FIBER OPTIC
DONALD SCHELL
433 W ST PAUL AVENUE
MILWAUKEE, WI 53203
414-227-2148
DONALD.SCHELL@DOT.WI.GOV

WISCONSIN DNR

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KRISTINA BETZOLD
2300 N DR MARTIN LUTHER KING JR DRIVE
MILWAUKEE, WI 53212
414-507-4946
KRISTINA.BETZOLD@WISCONSIN.GOV

UTILITY CONTACTS

ATC MANAGEMENT INC. - ELECTRICITY TRANSMISSION
MIKE OLSEN
PO BOX 47
WAUKESHA, WI 53187-0047
MOLSEN@ATCLLC.COM

AT&T WISCONSIN - COMMUNICATION LINE
MATTHEW DINNAUER
2005 PEWAUKEE ROAD
WAUKSHA, WI 53188
(262) 896-7690
MD9542@ATT.COM

GENERAL MITCHELL INTERNATIONAL AIRPORT (GMIA) - COMMUNICATION LINE
GEZ GEBRE - AIRPORT IT
(414) 747-5709
ELECTRICAL SHOP: (414) 747-4517

GENERAL MITCHELL INTERNATIONAL AIRPORT (GMIA) - ELECTRIC
SHERMAK BUGNO
(414) 747-3911
ELECTRICAL SHOP: (414) 747-4517

GENERAL MITCHELL INTERNATIONAL AIRPORT (GMIA) - SANITARY SEWER & WATER
TOM TRAVIA, AIRPORT PLUMBER
(414) 617-1364
PLUMBER SHOP: (414) 747-5330

MCI (VERIZON)- COMMUNICATION LINE
MARC FISHER
15725 WEST RYERSON ROAD
NEW BERLIN, WI 53151
(262) 349-5861
MARC.FISHER@VERIZON.COM

ROGERS TELECOM - COMMUNICATION LINE
VICKIE MORAN
4804 N 40TH ST
SHEBOYGAN, WI 53083
(920) 395-7125
VMORAN@GABES.COM

WE ENERGIES - ELECTRIC
NICOLE SMULLEN
WEC ENERGY GROUP
(414) 221-5617
NICOLE.SMULLEN@WECENERGYGROUP.COM

WE ENERGIES - GAS
NICOLE SMULLEN
WEC ENERGY GROUP
(414) 221-5617
NICOLE.SMULLEN@WECENERGYGROUP.COM

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

DISCIPLINE LEADERS

PLANS PREPARED BY AECOM

WISCONSIN — MICHAEL J. ARNOLD — E-41717 — NEW BERLIN, WI — PROFESSIONAL ENGINEER
06/01/2022
DRAWINGS S-001 THROUGH S-527

WISCONSIN — BRENDAN M. GRADY — 11728-5 — LAKEWOOD, OHIO — ARCHITECT
DRAWINGS G-001 THROUGH A-831

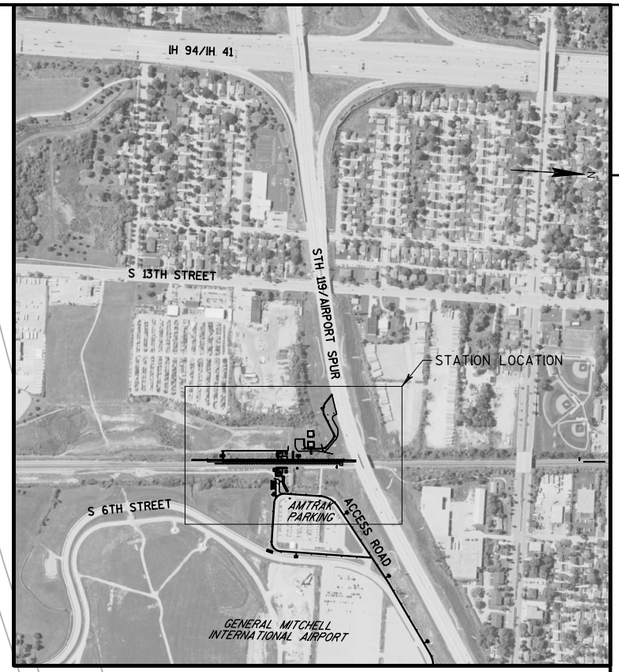
WISCONSIN — KATHRYN J BERTOLDO ZWICKY — M-46941 — MINNEAPOLIS MN — PROFESSIONAL ENGINEER
06/01/2022
DRAWINGS M-001 THROUGH M-400
DRAWINGS P-001 THROUGH P-502
DRAWINGS FP-001 THROUGH FP-500

WISCONSIN — WAYNE L. PODOLAK — E-23175 — SUSSEX WIS. — PROFESSIONAL ENGINEER
DRAWINGS E-001 THROUGH EN-001
DRAWINGS FA-001 THROUGH FA-600
DRAWINGS T-001 THROUGH T-712

WISCONSIN — LIDER I DELGADO — E-46916 — MADISON WI — PROFESSIONAL ENGINEER
06/01/2022
DRAWINGS VT-001 THROUGH VT-204

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	GENERAL NOTES	SHEET 3	E

2



BEGIN PROJECT
STA. 100+00.00

WEST TOWER

PEDESTRIAN BRIDGE

PLATFORM CANOPY

CONCRETE PLATFORM

TO CHICAGO

TO MILWAUKEE

CANADIAN PACIFIC RAILROAD

℄ TRACK 1
℄ TRACK 2

GENERATOR & TRANSFORMER AREAS

EAST TOWER

AMTRAK STATION

CONNECTION FROM EXISTING STATION TO EAST TOWER

END PROJECT
STA. 108+00.00

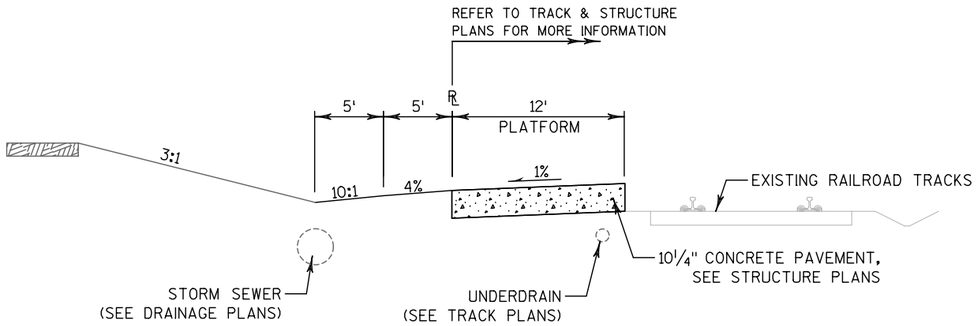
AUTHORIZED PERSONNEL PARKING LOT

ACCESS ROAD

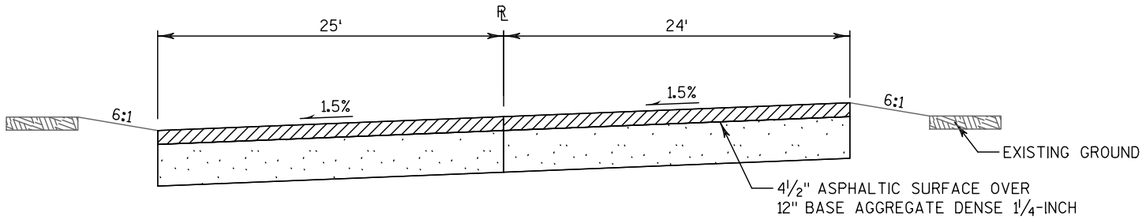
AMTRAK PARKING

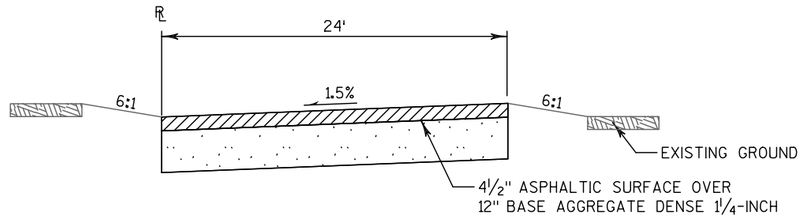
AIRPORT SPUR/STH 119

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 4	E

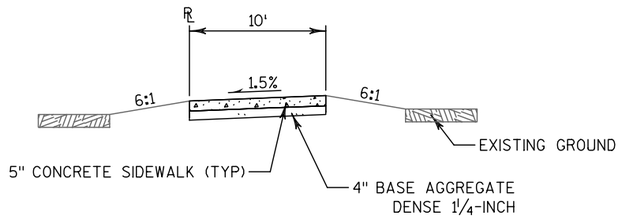


TYPICAL FINISHED SECTION
WEST OF PLATFORM
STA 100+00 - STA 108+00
(LOOKING NORTH)

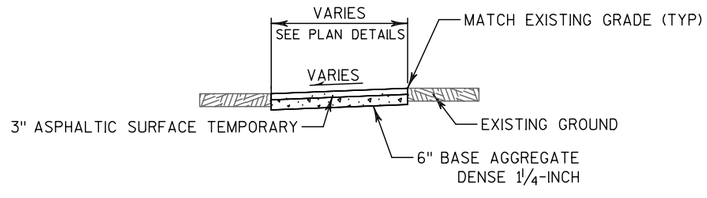




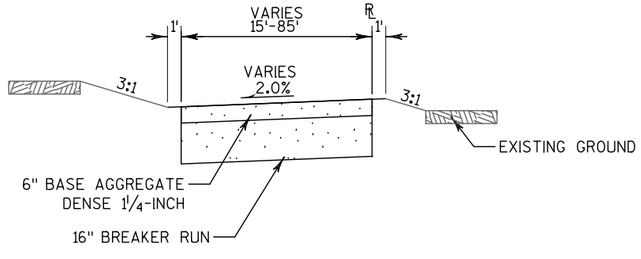
TYPICAL FINISHED SECTION
PARKING AREA
(LOOKING WEST)



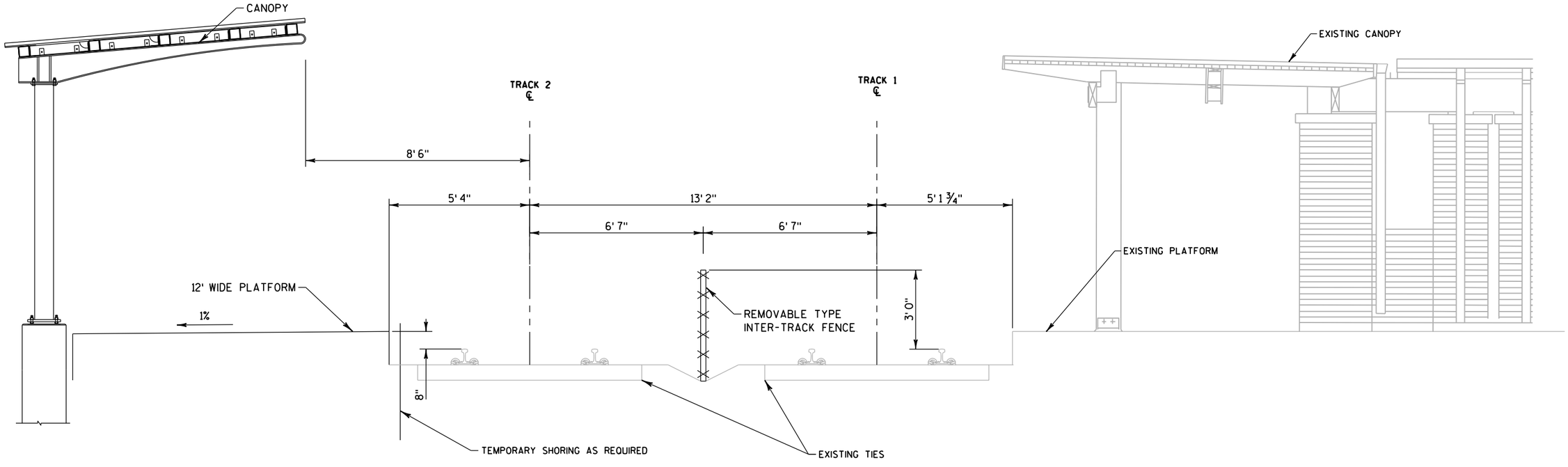
TYPICAL FINISHED SECTION
SIDEWALK SECTION
(LOOKING WEST)



TYPICAL TEMPORARY SECTION
TEMPORARY ACCESS TO 6TH STREET THROUGH PARKING LOT
(LOOKING WEST)



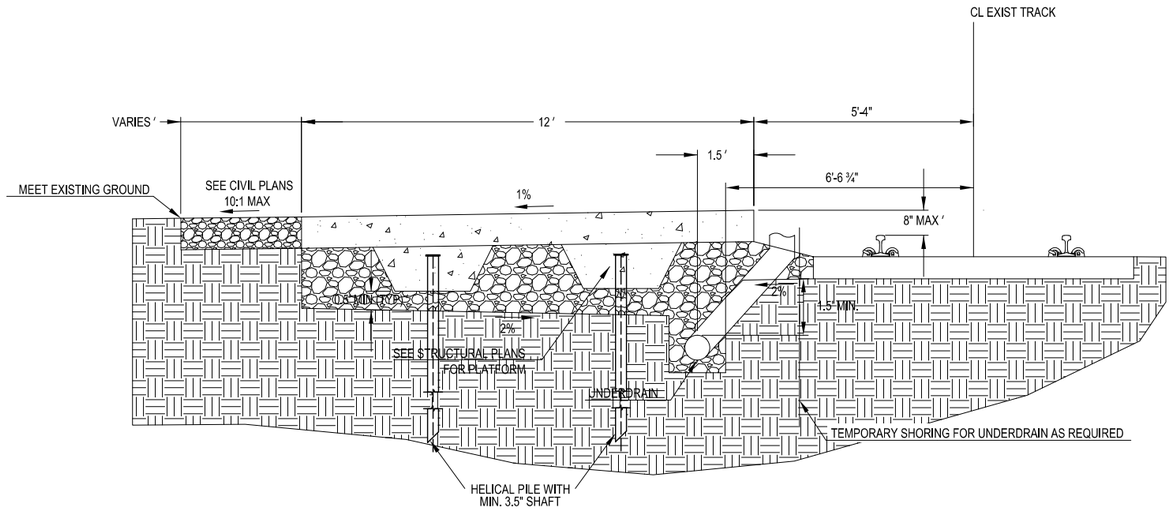
TYPICAL FINISHED SECTION
WEST ACCESS ROAD
(LOOKING EAST)



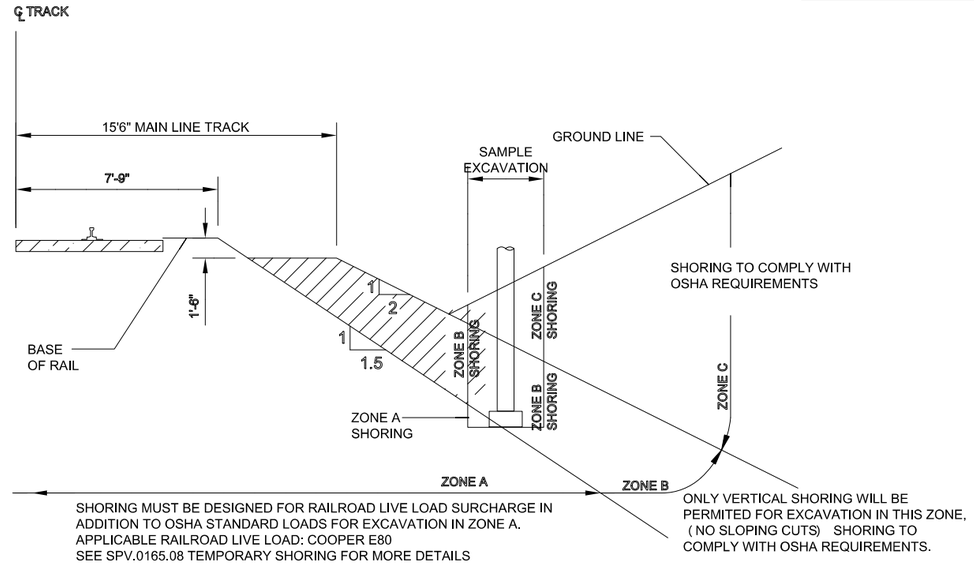
TYPICAL SECTION

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

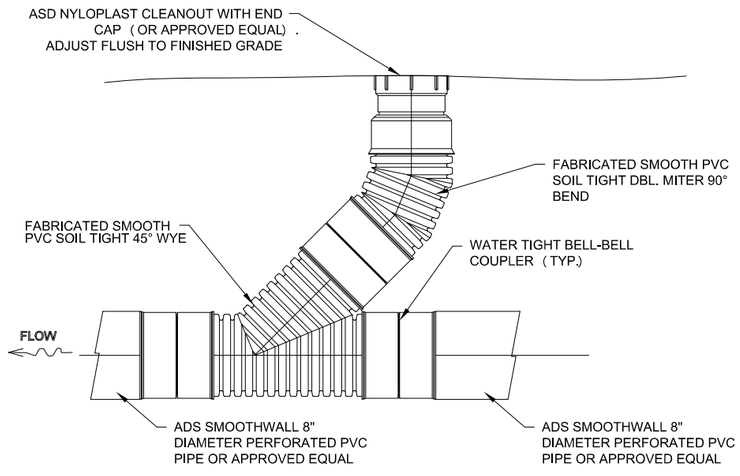
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TYPICAL SECTION	SHEET 6	E



1 PLATFORM SECTION
N.T.S.



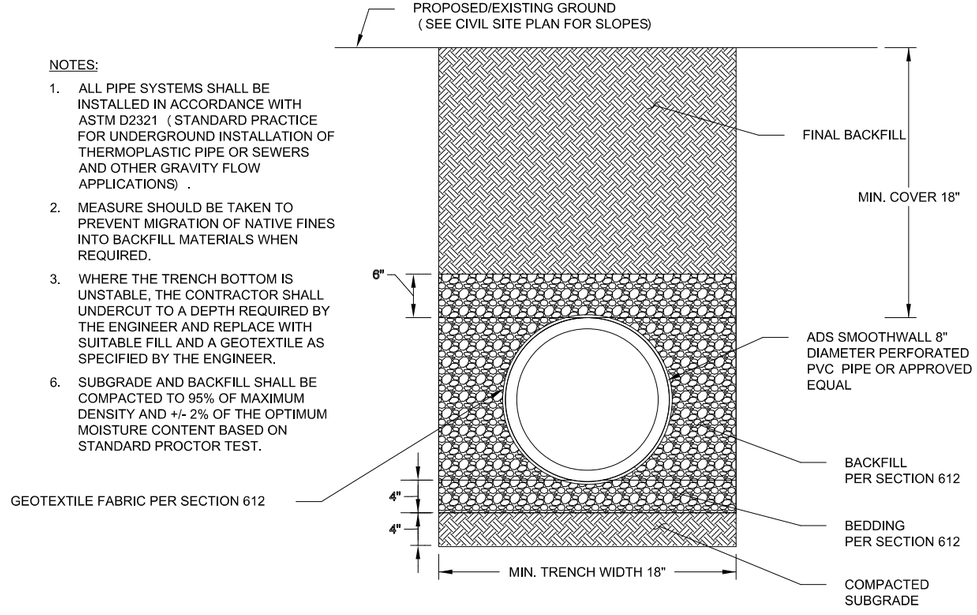
2 TEMPORARY SHORING
N.T.S.



3 CLEAN OUT DETAIL
N.T.S.

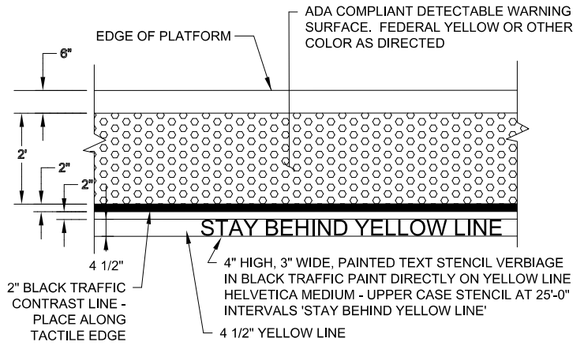
NOTES:

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.



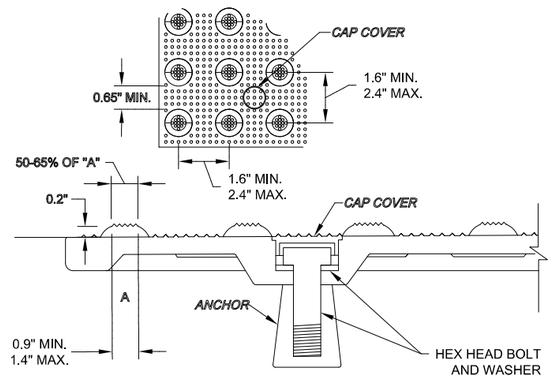
4 UNDERDRAIN TRENCH SECTION
N.T.S.

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	UNDERDRAIN DETAIL SHEET	SHEET 7	E



NOTE:
1. FOLLOW ALL PAINT MANUFACTURERS INSTALLATION AND PREPARATION GUIDELINES.
2. ADD ADDITIONAL 1'-0" TO THE INSIDE EDGE OF 'STAY BEHIND YELLOW LINE' FOR CURVED TRACK.
3. 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.

1 PLATFORM MARKING DETAIL
N.T.S.

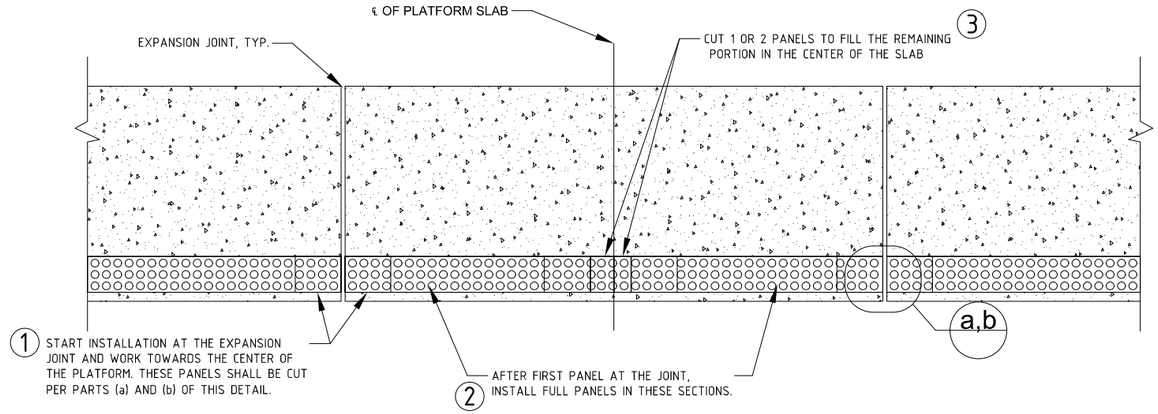


NOTES:
1. CONTRACTOR SHALL USE ADA SOLUTIONS EMBEDDED/REPLACEABLE DETECTABLE WARNING OR APPROVED EQUIVALENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9" MIN TO 1.4" MAX, WITH A TOP DIAMETER OF 50-65% OF THE BASE DIAMETER, A HEIGHT OF 0.2", AND 1.6" MIN./2.4" MAX. CENTER TO CENTER SPACING.
3. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES;
4. REFER TO WISDOT SDD 8D5-20G.

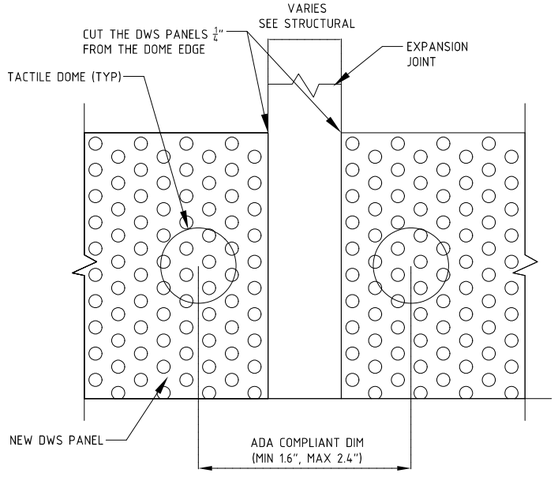
2 EMBEDDED/REPLACEABLE DETECTABLE WARNING SURFACE DETAIL
N.T.S.

STANDARD NOTES:

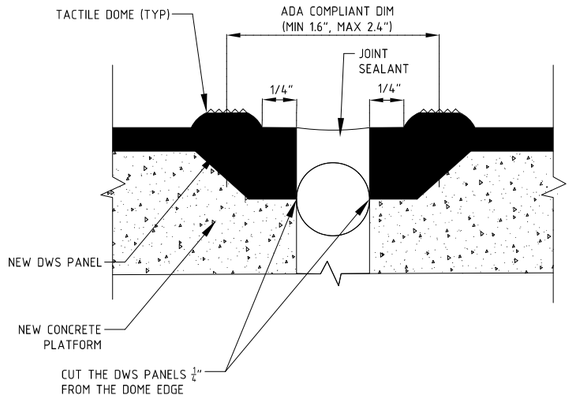
- ALL DOME SPACING BETWEEN ADJACENT PANELS SHALL BE GREATER THAN 1.6" AND LESSER THAN 2.4".
- SEAL ALL EXPANSION JOINTS UNIFORMLY AFTER REINSTALLATION OF DWS.
- CONCRETE EDGE MUST BE TOOLED WITH A 1/4" REVEAL ALONG THE LONGER SIDES OF THE DWS PANEL.
- WHEN DWS PANELS ARE CUT, ANCHORS SHOULD BE WITHIN 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)



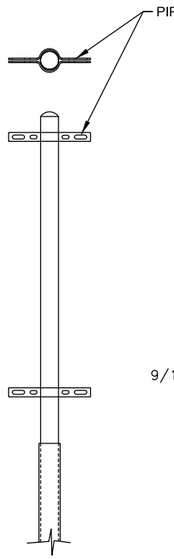
PANELS ADJACENT TO JOINT
PLAN VIEW
(a)

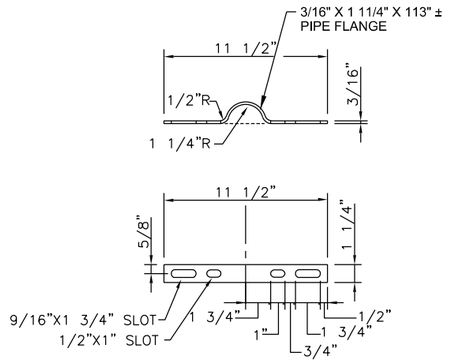


PANELS ADJACENT TO JOINT
SECTION VIEW
(b)

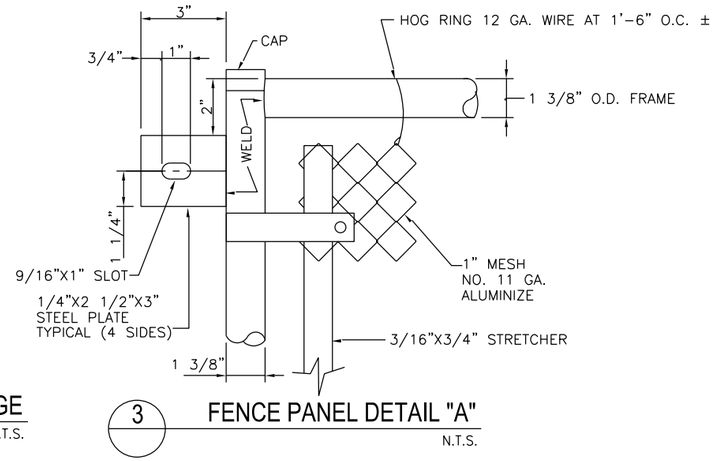
3 DETECTABLE WARNING SURFACE PLACEMENT DETAILS
N.T.S.

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLATFORM DETAIL SHEET	SHEET 8	E





2 MODIFIED PIPE FLANGE
N.T.S.

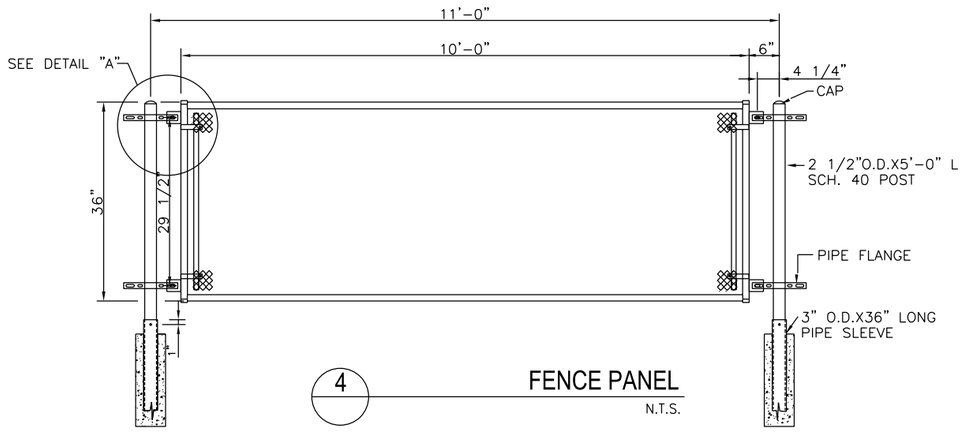


3 FENCE PANEL DETAIL "A"
N.T.S.

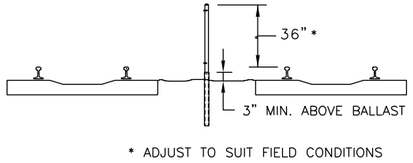
NOTES:

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. FENCE SHALL ENTEND A MINIMUM 50 FT. BEYOND END OF PLATFORMS UNLESS PREVENTED BY PHYSICAL OBSTRUCTION OR CLEARANCE RESTRICTIONS.
5. DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO THE FABRICATION OF ANY MATERIAL.

1 POST LAYOUT
N.T.S.

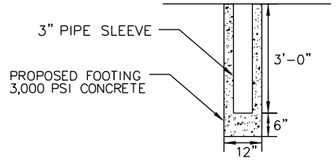


4 FENCE PANEL
N.T.S.



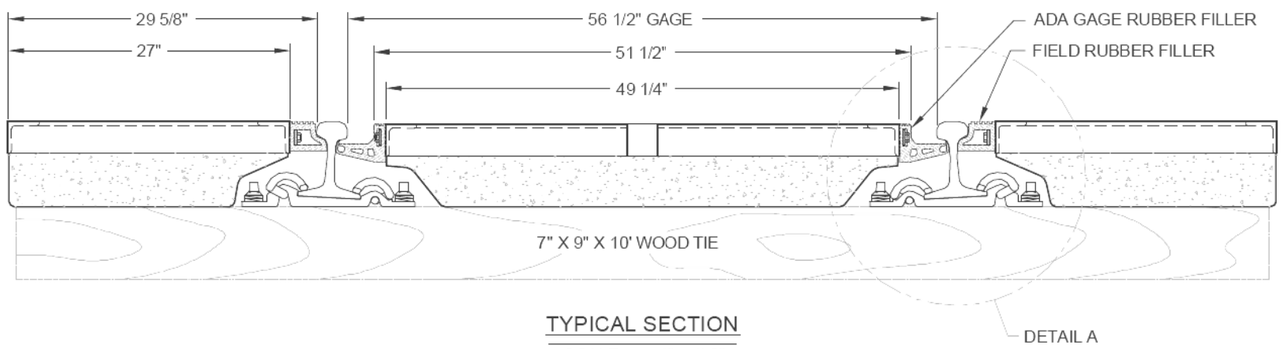
* ADJUST TO SUIT FIELD CONDITIONS

5 TRACK CROSS SECTION
N.T.S.



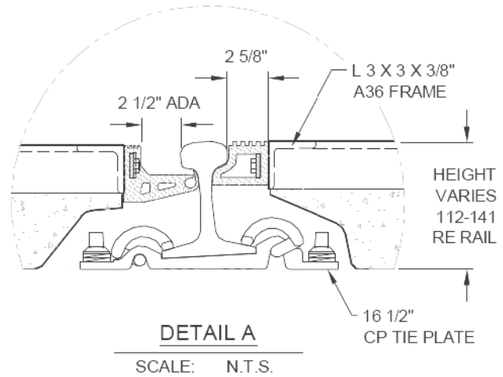
6 FENCE POST FOUNDATION
N.T.S.

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVABLE INTERTRACK FENCE DETAIL SHEET	SHEET 9	E



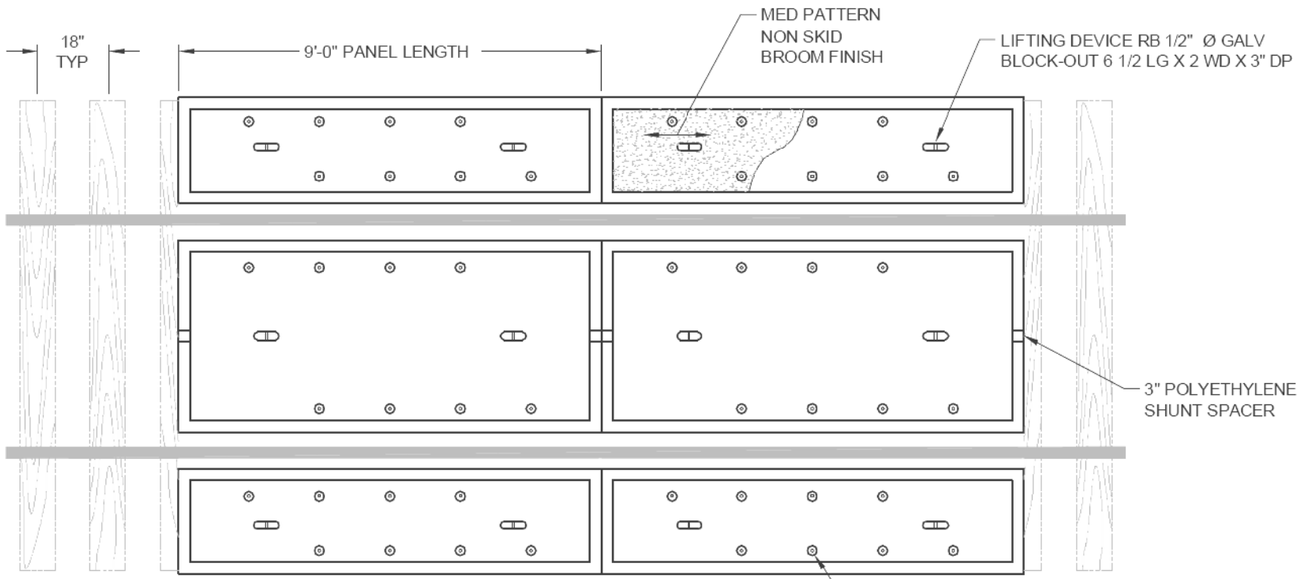
TYPICAL SECTION

SCALE: 1" = 1'-0"



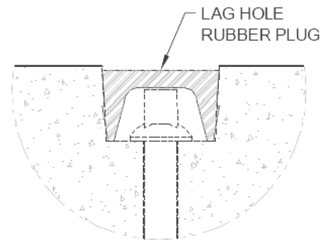
DETAIL A

SCALE: N.T.S.



PLAN VIEW

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

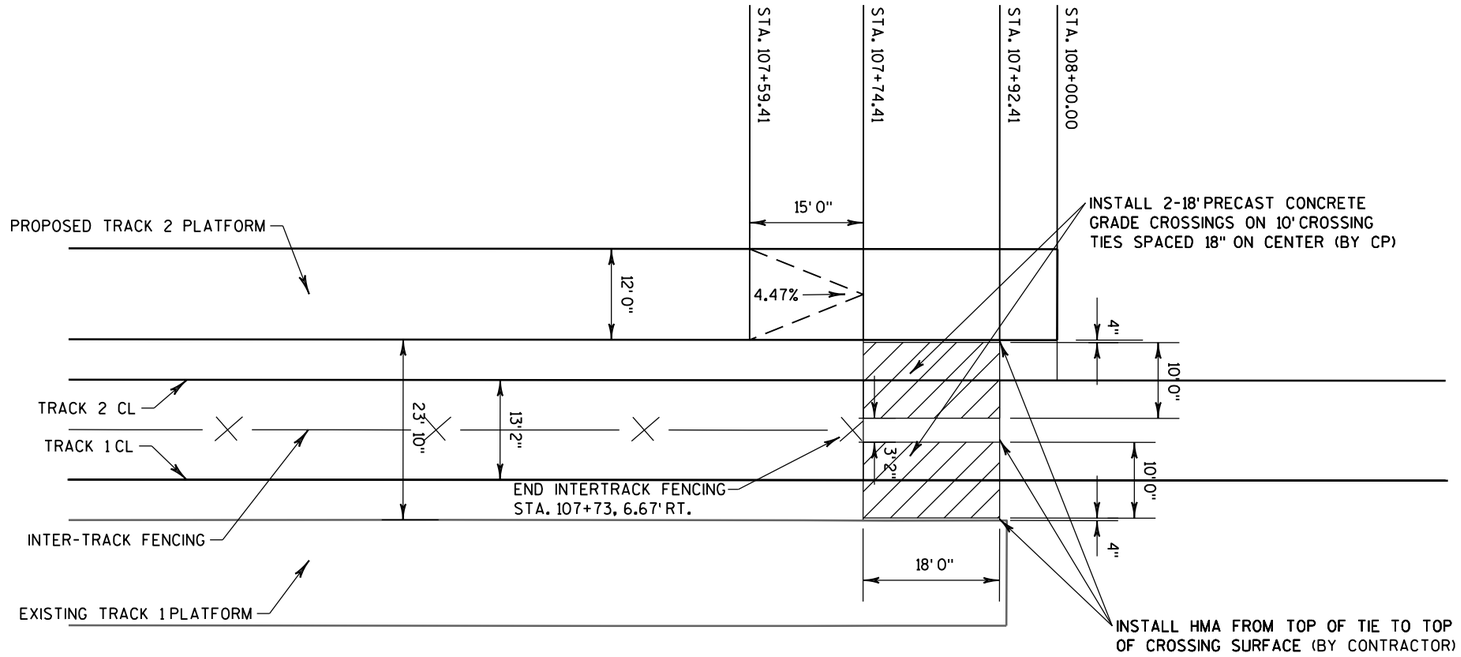


DETAIL B

SCALE: N.T.S.

NOTES:

1. POLY FIBER REINFORCEMENT @ 3 LB. PER CU YD.
2. SEE OMEGA'S MANUAL FOR INSTALLATION INSTRUCTIONS.
3. CROSSING MATERIAL TO BE FURNISHED AND INSTALLED BY CP.

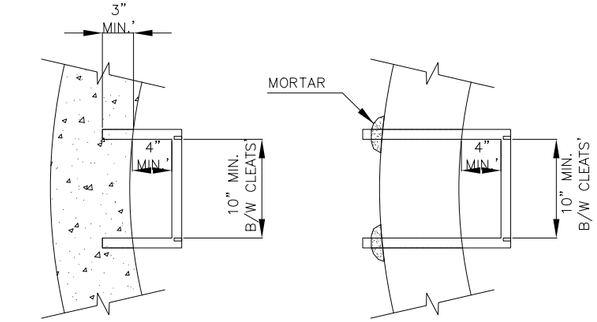


GRADE CROSSING DETAIL PLAN AT NORTH END OF PLATFORM

SCALE: 1":20'

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	GRADE CROSSING DETAIL (SHEET 2 OF 2)	SHEET 11	E

CLEANOUT DETAIL
NOT TO SCALE



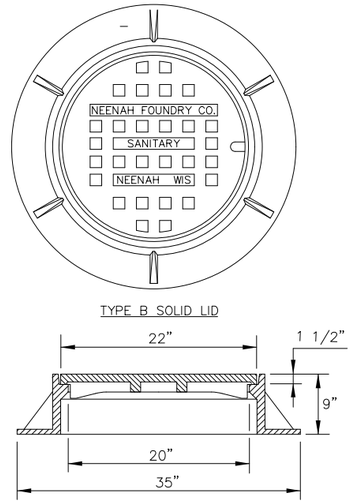
PROVIDE CERTIFIED TEST DATA THAT THE STEPS CAN WITHSTAND AN 800–POUND VERTICAL LOAD WITHOUT MORE THAN 3/8" PERMANENT SET WHEN TESTED IN ACCORDANCE WITH SECTION 10 A.S.T.M. C497.

PROVIDE CERTIFIED TEST DATA THAT THE INSTALLED STEPS CAN WITHSTAND A HORIZONTAL PULLOUT LOAD OF 400–POUNDS WITH THE LOAD APPLIED OVER A WIDTH OF 3–1/2" AND CENTERED ON THE RING.

STEPS MUST BE EQUALLY SPACED VERTICALLY IN THE ASSEMBLED MANHOLE AT A MAXIMUM DESIGN DISTANCE OF 16" ON CENTER.

STEPS SHALL BE FABRICATED OF 1/2" DIA. GRADE 60 STEEL REINFORCING ROD WITH MOLDED PLASTIC COVERING.

MANHOLE STEP DETAIL
NOT TO SCALE



R–1710
SANITARY MANHOLE FRAME, SOLID LID
NOT TO SCALE

ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS – MAXIMUM RING HEIGHT = 12", MINIMUM RING HEIGHT= 4". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RONG. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.

CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO DESIGNATION C–478 REQUIREMENTS OF ASTM SPECIFICATIONS.

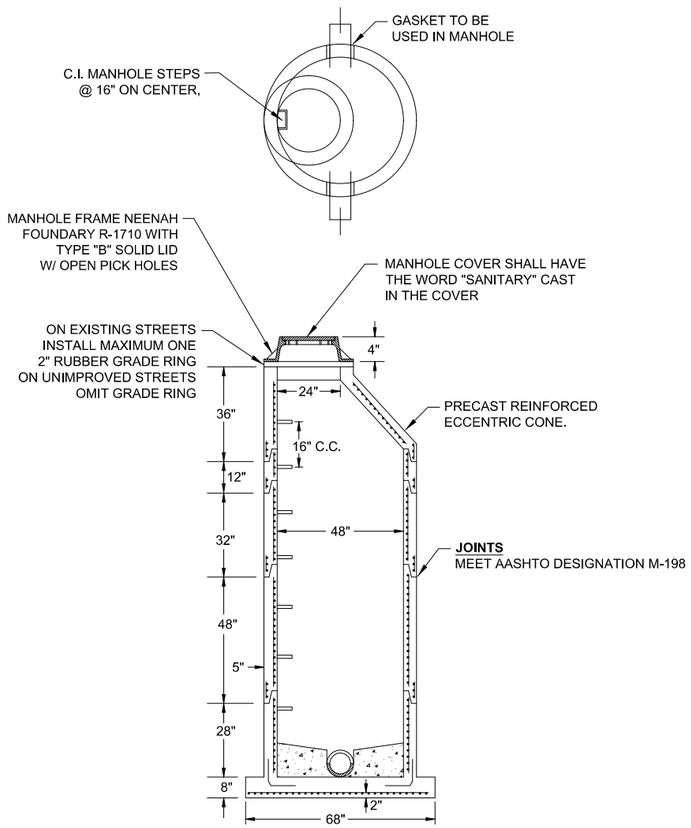
JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING KENT SEAL BUTYL RUBBER SEALANT FOR SANITARY MANHOLES.

AREA OF CIRCUMFERENTIAL STEEL= 0.12 SQ. INCH PER LINEAL FOOT.

THE ANNULAR SPACE BETWEEN THE PIPE AND MANHOLE WALL SHALL BE FILLED WITH FLEXIBLE BUTYL RUBBER GASKET MATERIAL BELOW SURFACE OF BENCH OR SPRINGLINE.

3" STONE CUSHION UNDER BASE IS REQUIRED ONLY ON WET SUB–GRADE.

PROVIDE A MINIMUM 1/2" DIA. HOLE FOR LEAKAGE TEST, NOT GREATER THAN 2" ABOVE LOWEST PIPE.

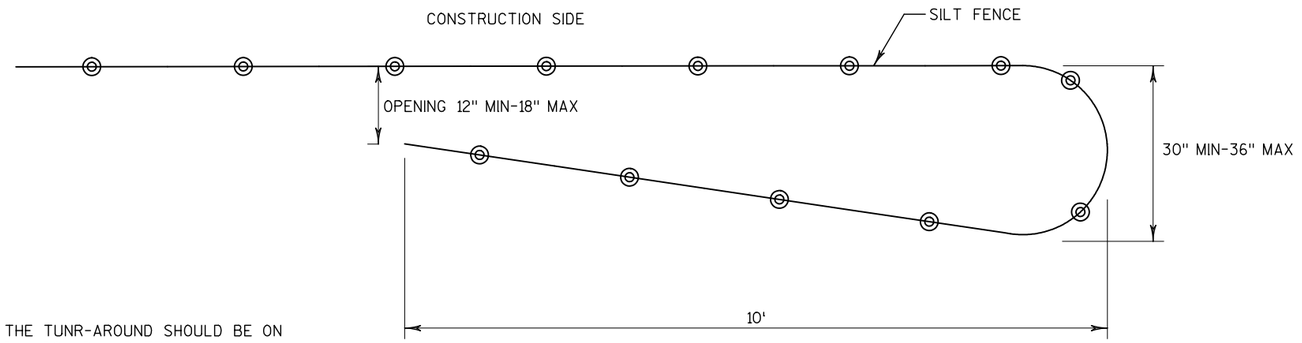


CHANNEL IN MANHOLE FLOOR TO BE BUILT TO SUIT SIZE & SHAPE OF PIPE AND TO A LEVEL 2" ABOVE SPRING LINE OF PIPE.

ASTM C-478-48" DIA. REINFORCED CONCRETE MANHOLE

STANDARD 48" SANITARY MANHOLE

NOT TO SCALE



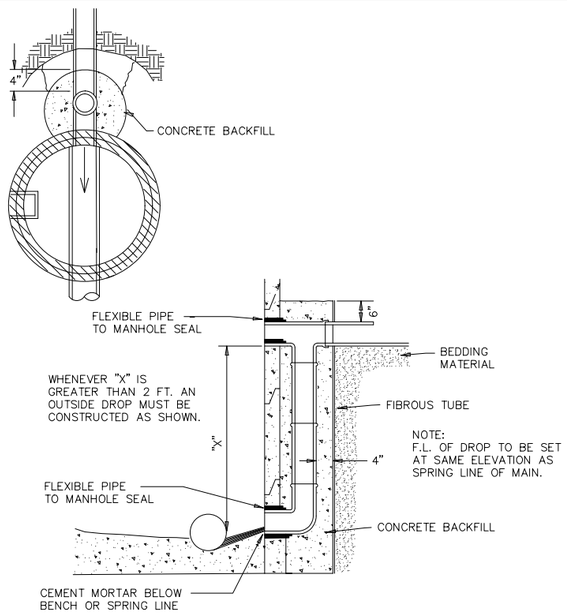
PLAN VIEW

NOTE:
SILT FENCE POSTS FOR THE TUNR-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

SEE EROSION CONTROL PLANS FOR SILT FENCE LOCATIONS. INSTALL TURN-AROUD AT END OF SHOWN FENCING.

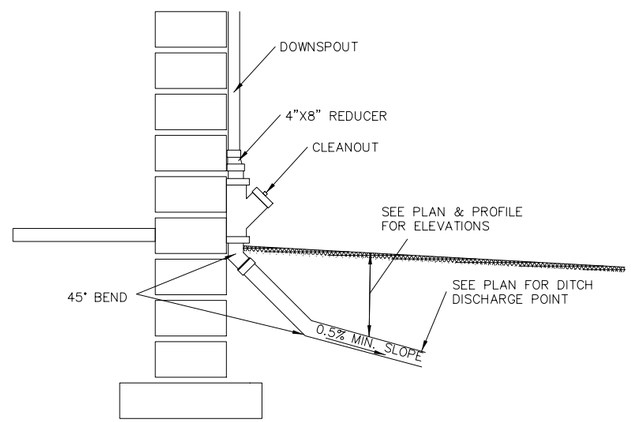
HAZARD OFFSETS DEPENDENT ON LOCATION.

TEMPORARY SMALL ANIMAL TURN-AROUND



OUTSIDE DROP PRECAST MANHOLE

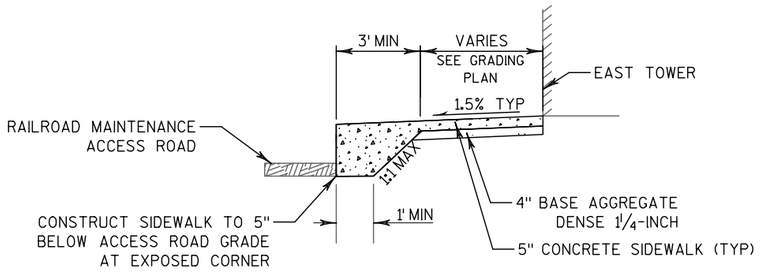
NOT TO SCALE



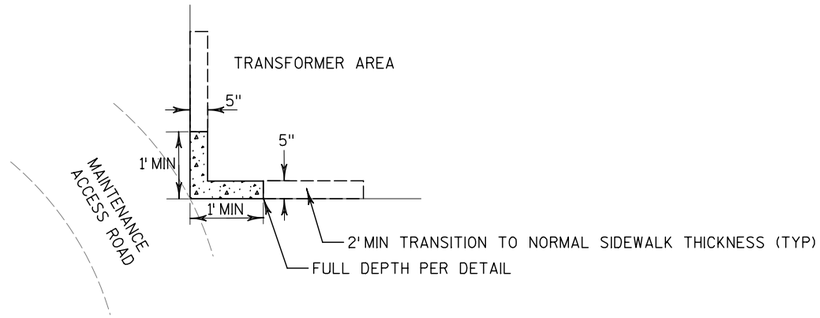
DOWNSPOUT CLEANOUT

NOT TO SCALE

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 13	E



ELEVATION VIEW - LOOKING WEST



PLAN VIEW

EAST TOWER SIDEWALK TRANSITION DETAIL

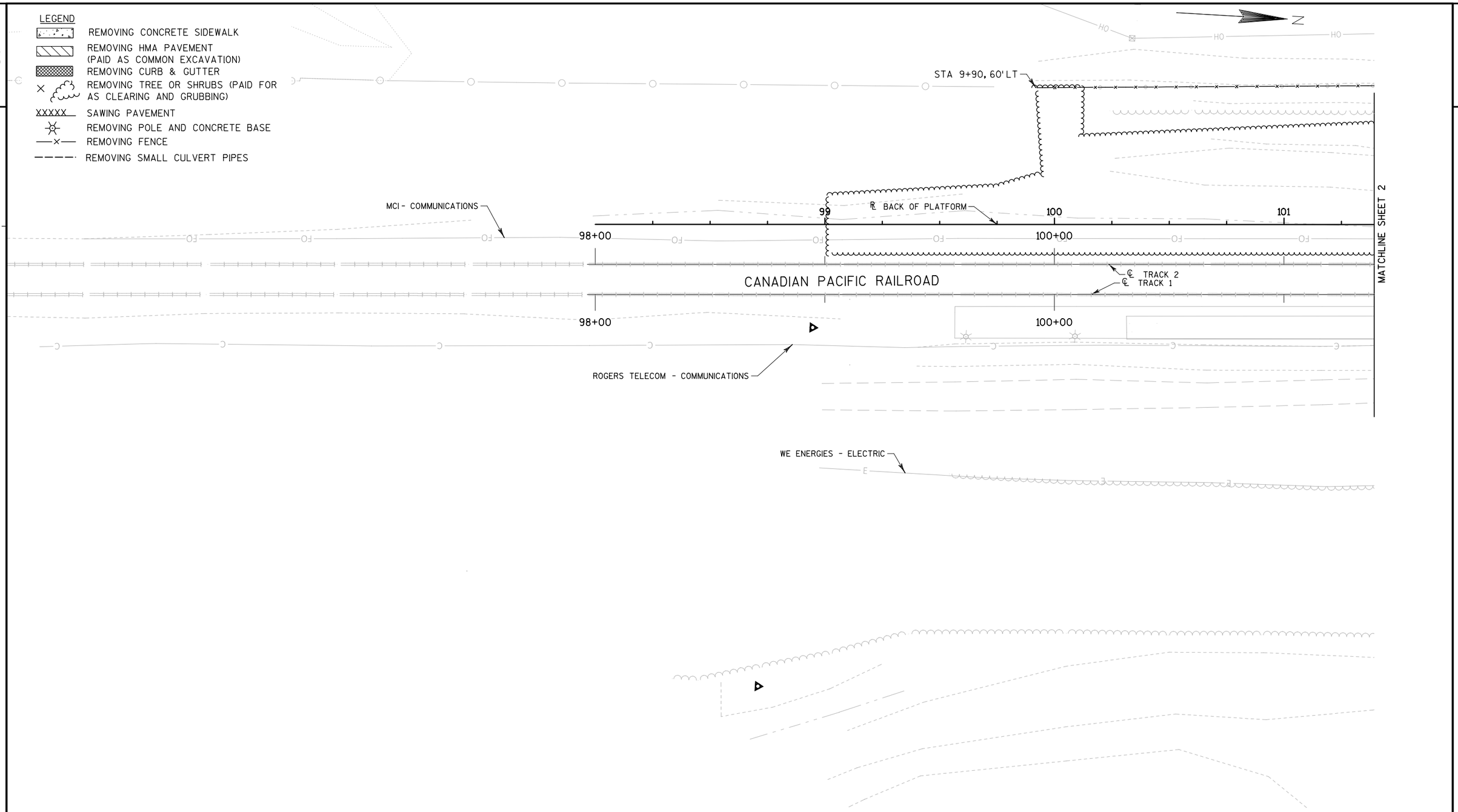
SIDEWALK CORNER AT MAINTENANCE ROAD

PAID INCIDENTAL TO CONCRETE SIDEWALK 5-INCH

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING CURB & GUTTER
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING SMALL CULVERT PIPES



2

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS - 1 OF 5	SHEET 15	E

2

STA 104+34, 92'LT

ATC TRANSMISSION - OVERHEAD

MATCHLINE SHEET 1

MATCHLINE SHEET 3

102 | 103 | 104 | 105 | 106

102+00 | 104+00 | 106+00

MCI - COMMUNICATIONS

℄ BACK OF PLATFORM

CANADIAN PACIFIC RAILROAD

℄ TRACK 2

℄ TRACK 1

10

RELOCATE WHEEL CHAIR LIFT STORAGE, REMOVE CONCRETE SIDEWALK SLAB

WE ENERGIES - ELECTRIC

ROGERS TELECOM - COMMUNICATIONS

ROGERS TELECOM - COMMUNICATIONS

GMIA - ELECTRIC

REMOVE BOULDERS, TYP
FIELD VERIFY LOCATIONS

AMTRAK STATION

WISDOT - FIBER OPTIC

GMIA - COMMUNICATIONS

STA 0+85, 21'LT

STA 0+60, 22'LT

GMIA - ELECTRIC

AT&T - COMMUNICATIONS

GMIA - GAS

MOVING SIGNS TYPE II
"AUTHORIZED VEHICLES ONLY"

STA 30+44, 0'LT

WE ENERGIES - ELECTRIC

WISDOT - FIBER OPTIC

31 | 32 | 33

WISDOT - FIBER OPTIC

℄ ACCESS ROAD

GMIA - SANITARY SEWER

GMIA - WATER

GMIA - ELECTRIC

ACCESS ROAD

STA 30+10, 0'LT

8'

1.5'

REMOVING BOLLARDS

GMIA - COMMUNICATIONS

REMOVING BOLLARDS

MATCHLINE SHEET 4

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING CURB & GUTTER
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING SMALL CULVERT PIPES

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS - 2 OF 5	SHEET 16	E

2

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING CURB & GUTTER
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING SMALL CULVERT PIPES

N

MATCHLINE SHEET 2

107

108

108+00

108+00

MCI - COMMUNICATIONS

℄ BACK OF PLATFORM

℄ TRACK 2

℄ TRACK 1

CANADIAN PACIFIC RAILROAD

ROGERS TELECOM - COMMUNICATIONS

GMIA - ELECTRIC

EXISTING GRADE CROSSING TO BE REMOVED (BY CP)

WISDOT - FIBER OPTIC

AIRPORT SPUR/STH 119

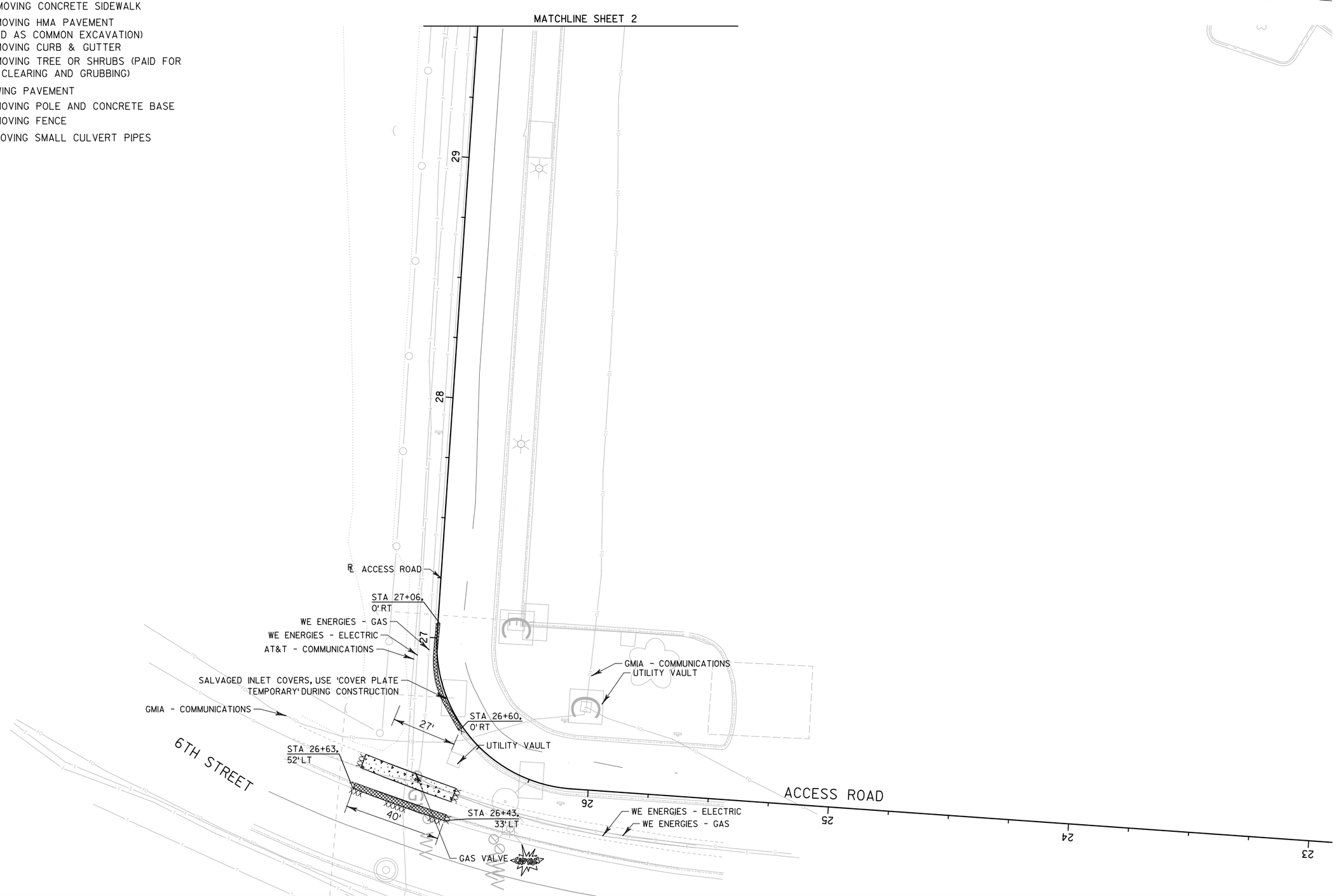
34

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS - 3 OF 5	SHEET 17	E

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING CURB & GUTTER
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING SMALL CULVERT PIPES



PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS - 4 OF 5	SHEET 18	E

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING HMA PAVEMENT (PAID AS COMMON EXCAVATION)
- REMOVING CURB & GUTTER
- REMOVING TREE OR SHRUBS (PAID FOR AS CLEARING AND GRUBBING)
- XXXXX SAWING PAVEMENT
- REMOVING POLE AND CONCRETE BASE
- REMOVING FENCE
- REMOVING SMALL CULVERT PIPES

EB STH 119/AIRPORT SPUR

WB STH 119/AIRPORT SPUR

N

ATC TRANSMISSION - OVERHEAD

ATC TRANSMISSION - OVERHEAD

℄ WEST ACCESS ROAD

WEST ACCESS ROAD

STA 4+30, 27'RT

STA 3+94, 64'LT

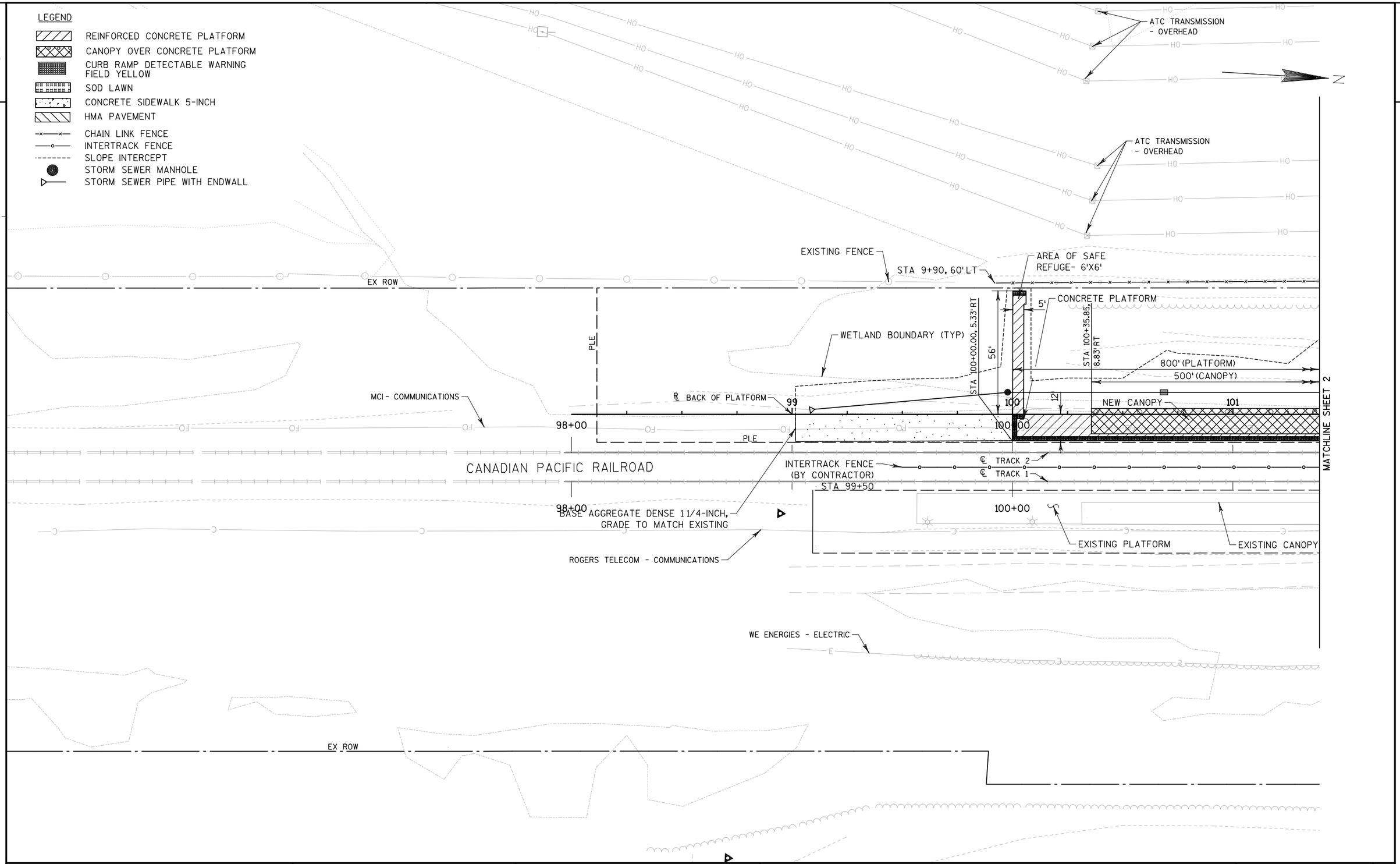
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	REMOVALS - 5 OF 5	SHEET 19	E

2

2

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT
- STORM SEWER MANHOLE
- STORM SEWER PIPE WITH ENDWALL



PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS - 1 OF 5	SHEET 20	E

2

STA 104+34, 92' LT

STA 104+32, 62' LT

EX ROW

WEST TOWER

MCI - COMMUNICATIONS

27.6'

25.2'

56'

5'

AREA OF SAFE REFUGE - 6'X6'

STA 105+35.85, 8.83' RT

800' (PLATFORM)
500' (CANOPY)

12'

102

103

104

105

106

℄ BACK OF PLATFORM

102+00

102+00

104+00

106+00

PLE

ATC TRANSMISSION - OVERHEAD

MATCHLINE SHEET 1

MATCHLINE SHEET 3

N3°16'20"W

℄ TRACK 2

℄ TRACK 1

PEDESTRIAN BRIDGE

PLE

N3°16'20"W

N3°16'20"W

102+00

CANADIAN PACIFIC RAILROAD

104+00

106+00

INTERTRACK FENCE
(BY CONTRACTOR)

EXISTING PLATFORM

WE ENERGIES - ELECTRIC
ROGERS TELECOM - COMMUNICATIONS

TRANSFORMER AND
GENERATOR AREAS

ROGERS TELECOM - COMMUNICATIONS

GMIA - ELECTRIC

EXISTING CANOPY

EAST TOWER

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

RELOCATED WHEEL CHAIR LIFT
STORAGE, SEE STRUCTURE DETAILS

WE ENERGIES - ELECTRIC

EXISTING AMTRAK
STATION BUILDING

℄ SIDEWALK

AMTRAK
STATION

10' (TYP)

10'

WISDOT - FIBER OPTIC

GMIA - COMMUNICATIONS

5'

WETLAND BOUNDARY (TYP)

MARKING PARKING STALL PAINT (TYP)

20'

EX ROW

25'

24'

10'

WISDOT - FIBER OPTIC

GMIA - ELECTRIC

AT&T - COMMUNICATIONS

GMIA - GAS

20' R

WE ENERGIES - ELECTRIC

℄ ACCESS ROAD

31

32

33

WISDOT - FIBER OPTIC

MOVING SIGNS TYPE II
"AUTHORIZED VEHICLES ONLY"

GMIA - SANITARY SEWER

30

GMIA - WATER

GMIA - ELECTRIC

ACCESS ROAD

8'

1.5'

℄ PARKING

PIPE BOLLARDS,
MAINTAIN 4' CLEAR WIDTH

GMIA - COMMUNICATIONS

8'

1.5'

PIPE BOLLARDS,
MAINTAIN 4' CLEAR WIDTH

MATCHLINE SHEET 4

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT
- STORM SEWER MANHOLE
- STORM SEWER PIPE WITH ENDWALL

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS - 2 OF 5	SHEET 21	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_Sd.dgn 5/15/2022 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

2

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT
- STORM SEWER MANHOLE
- STORM SEWER PIPE WITH ENDWALL

N

EX ROW

STA 3+94, 64' LT

EXISTING FENCE

EXISTING BRIDGE RETAINING WALL

PLE

800' (PLATFORM)

℄ BACK OF PLATFORM

STA 108+00.00, 5.32' RT

107

108

12'

108+00

PLE

MCI - COMMUNICATIONS

℄ TRACK 2

℄ TRACK 1

CANADIAN PACIFIC RAILROAD

MATCHLINE SHEET 2

108+00

EMERGENCY CROSSING (BY CP)

GATES - SEE ARCHITECTURAL DRAWINGS (TYP)

BASE AGGREGATE DENSE 1 1/4-INCH, GRADE TO MATCH EXISTING

INTERTRACK FENCE (BY CONTRACTOR)

ROGERS TELECOM - COMMUNICATIONS

GMIA - ELECTRIC

EXISTING BRIDGE RETAINING WALL

EXISTING FENCE

WETLAND BOUNDARY (TYP)

WISDOT - FIBER OPTIC

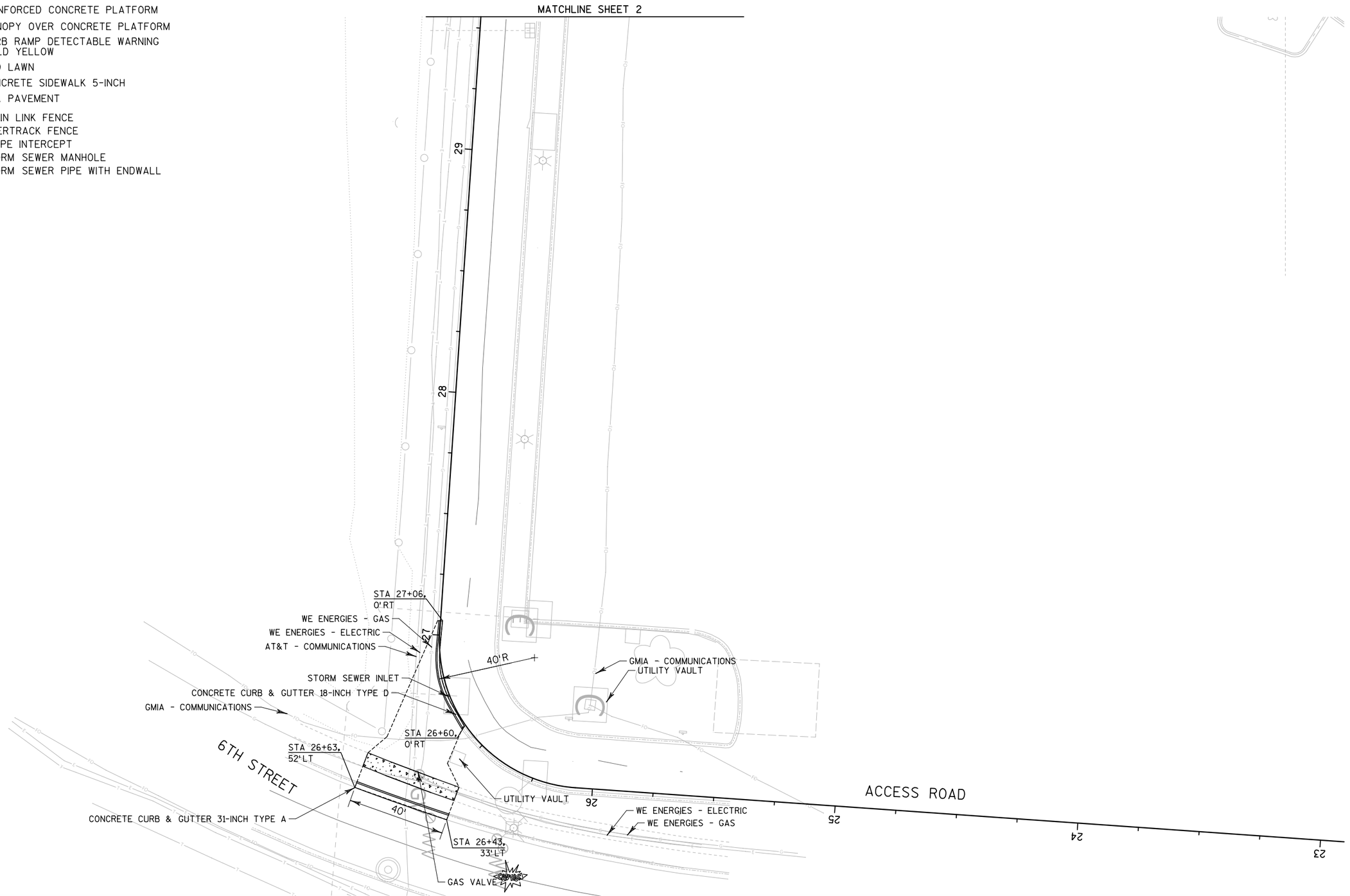
AIRPORT SPUR/STH 119

EX ROW

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS - 3 OF 5	SHEET 22	E

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT
- STORM SEWER MANHOLE
- STORM SEWER PIPE WITH ENDWALL



2

LEGEND

- REINFORCED CONCRETE PLATFORM
- CANOPY OVER CONCRETE PLATFORM
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- SOD LAWN
- CONCRETE SIDEWALK 5-INCH
- HMA PAVEMENT
- CHAIN LINK FENCE
- INTERTRACK FENCE
- SLOPE INTERCEPT
- STORM SEWER MANHOLE
- STORM SEWER PIPE WITH ENDWALL

N

EB STH 119/AIRPORT SPUR

WB STH 119/AIRPORT SPUR

82'

1

2

38'

TLE

TEMPORARY CONCRETE BARRIER, LEFT IN PLACE, 10' OFFSET FROM TOWERS

ATC TRANSMISSION - OVERHEAD

WETLAND BOUNDARY (TYP)

3

4

ATC TRANSMISSION - OVERHEAD

60'

℄ WEST ACCESS ROAD

STA 4+30, 27' RT

WEST ACCESS ROAD

15'

6-INCH BASE AGGREGATE DENSE 1 1/4-INCH OVER 16-INCH BREAKER RUN, ACCESS TO REMAIN AFTER CONSTRUCTION

PLE

SLOPE INTERCEPTS (TYP)

5

20'

CHAIN LINK FENCE 6-FT WITH 22' WIDE GATE OVER ACCESS ROAD

6

WEST TOWER

10+00

EX ROW

PLE

2

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN DETAILS - 5 OF 5	SHEET 24	E

2

N

WEST TOWER

729.71
103+56.19, 46.5'LT

729.78

729.78
103+63.08, 25.2'LT
FACE OF BUILDING AT SIDEWALK

729.68
103+56.19, 20.2'LT

729.71
103+63.08, 20.2'LT

729.62
103+63.08, 10.0'LT

729.21
STRUCTURE W-5
INLET 4-B

729.90
103+63.08, 0'LT
BACK OF PLATFORM

729.78
103+89.20, 25.2'LT

729.68
103+89.20, 20.2'LT

729.51
103+89.20, 10.0'LT

728.44
STRUC. W-6
INLET 4-B

729.71
103+89.20, 0'LT

729.78
104+25.83, 25.2'LT

729.68
104+25.83, 20.2'LT

729.33
104+25.83, 10.0'LT

729.43
104+25.83, 0'LT

SEE DRAINAGE PLANS FOR
ADDITIONAL DETAILS

728.54
STRUCTURE W-7
INLET 4-B

℄ BACK OF PLATFORM

730.02
103+63.08, 12.0'RT
TOP OF PLATFORM

729.83
103+89.20, 12.0'RT

729.55
104+25.83, 12.0'RT

℄ TRACK 2

℄ TRACK 1

PEDESTRIAN BRIDGE

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	GRADING PLAN: WEST TOWER SIDEWALK ELEVATIONS	SHEET 25	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\021301.dgn Last Saved: Apr 15/2022 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 10.0000 sf / in.

2

℄ TRACK 1

N

PEDESTRIAN BRIDGE

730.03
FACE OF BUILDING AT SIDEWALK

730.05
EX. BACK OF PLATFORM (BOP)

729.97
EX. BOP

729.91
EX. BOP

729.65
EX. BOP

729.48
EX. BOP

730.00
STRUCTURE E-3
INLET 4-B

729.95

729.68

729.98

729.78

729.61

729.45
STRUCTURE E-4
INLET 4-B

SEE DRAINAGE
PLANS FOR
ADDITIONAL DETAILS

729.83
STRUCTURE E-5
INLET 4-B
CONNECT TO EXISTING PIPE

24" RCP

729.39

729.61

729.78

729.78

729.78

729.79

GENERATOR LEVELING PAD, PAID
FOR AS CONCRETE SIDEWALK
5-INCH, SEE STRUCTURE PLANS

729.40
STRUCTURE E-2
INLET 4-B

729.61

725.60
STRUCTURE E-1
APRON ENDWALL
FOR CPRC 24-INCH

730.78
EX. BUILDING ELEVATION

729.78

727.93 EX. ELEVATION
ACCESS ROAD

729.39

729.43

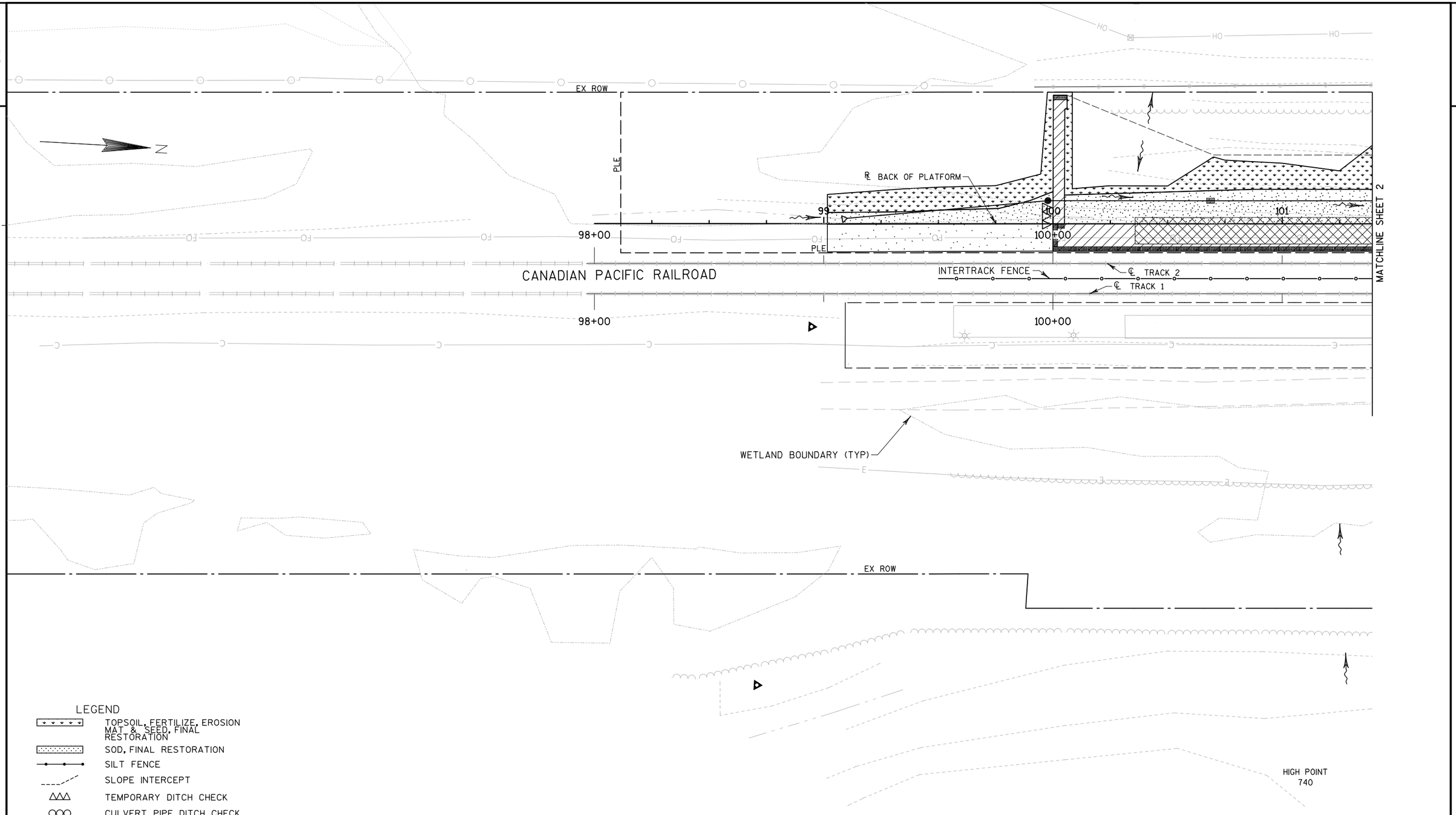
729.43

SEE CONSTRUCTION DETAILS
FOR THICKER SLAB
TRANSITION AT CORNER

TRANSFORMER LEVELING PAD,
PAID FOR AS CONCRETE
SIDEWALK 5-INCH, SEE
STRUCTURE PLANS

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	GRADING PLAN: EAST TOWER SIDEWALK ELEVATIONS	SHEET 26	E

2



LEGEND

- TOPSOIL, FERTILIZE, EROSION MAT & SEED, FINAL RESTORATION
- SOD, FINAL RESTORATION
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	EROSION CONTROL - 1 OF 5	SHEET 27	E

2

MATCHLINE SHEET 1

MATCHLINE SHEET 3

PLE

EX ROW

WEST ACCESS ROAD

102 103 104 105 106

102+00 104+00 106+00

R BACK OF PLATFORM N3°16'20"W ℄ TRACK 2 ℄ TRACK 1 PLE N3°16'20"W INTERTRACK FENCE

N3°16'20"W N3°16'20"W

CANADIAN PACIFIC RAILROAD

102+00 106+00

WETLAND BOUNDARY (TYP)

AMTRAK STATION

EX ROW

31 32 33

℄ ACCESS ROAD

ACCESS ROAD

LEGEND

- TOPSOIL, FERTILIZE, EROSION MAT & SEED, FINAL RESTORATION
- SOD, FINAL RESTORATION
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO:1000-57-70	HWY:N/A	COUNTY:MILWAUKEE	EROSION CONTROL - 2 OF 5	SHEET 28	E

2

2

LEGEND

- TOPSOIL, FERTILIZE, EROSION MAT. & SEED, FINAL RESTORATION
- SOD, FINAL RESTORATION
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

N

EX ROW

PLE

℄ BACK OF PLATFORM

MATCHLINE SHEET 2

107

108

108+00

PLE

INTERTRACK FENCE

℄ TRACK 2
℄ TRACK 1

CANADIAN PACIFIC RAILROAD

108+00

WETLAND BOUNDARY (TYP)

AIRPORT SPUR/STH 119

EX ROW

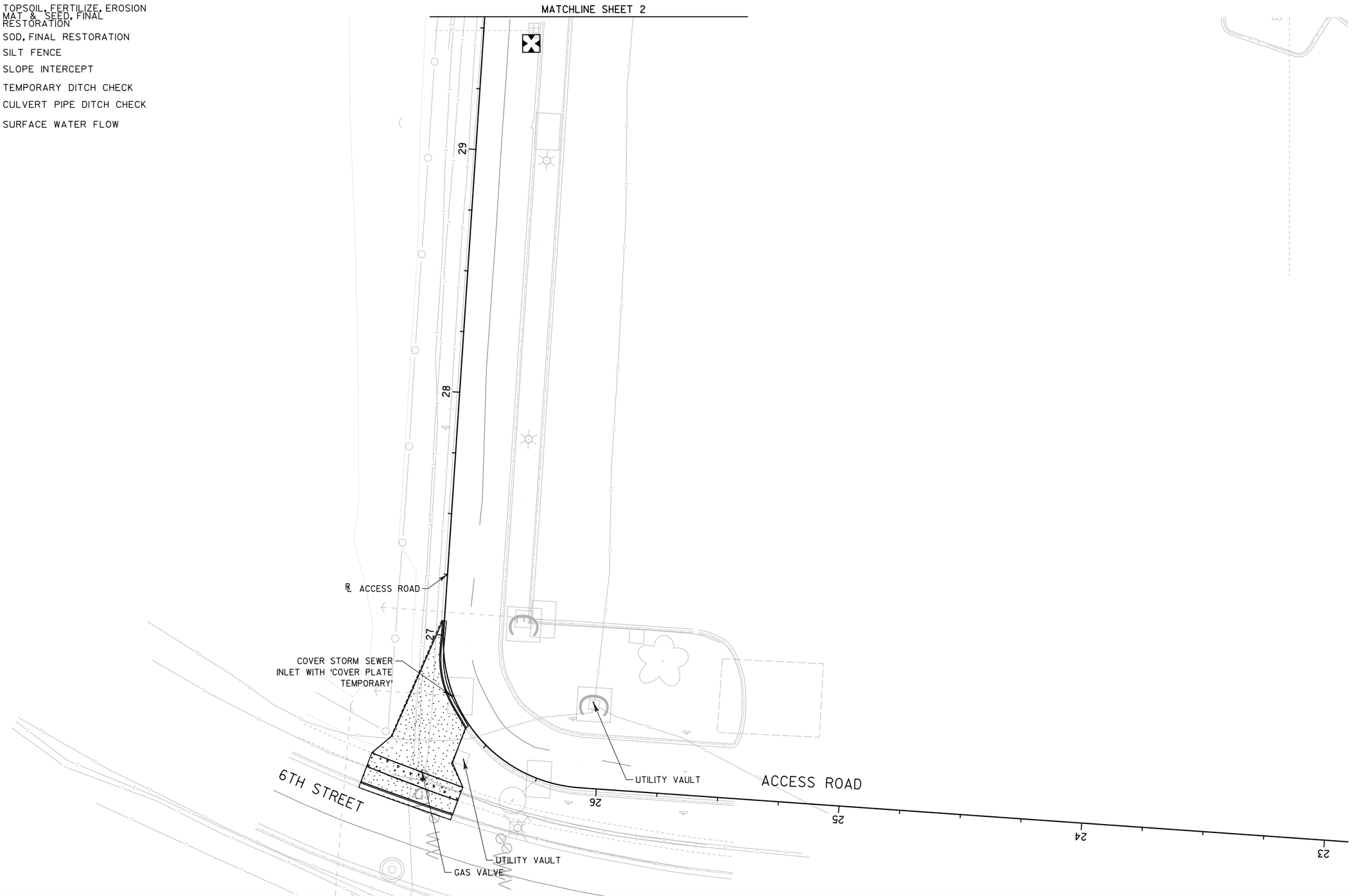
34

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	EROSION CONTROL - 3 OF 5	SHEET 29	E

2

LEGEND

- TOPSOIL, FERTILIZE, EROSION MAT & SEED, FINAL RESTORATION
- SOD, FINAL RESTORATION
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW



2

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	EROSION CONTROL - 4 OF 5	SHEET 30	E

LEGEND

- TOPSOIL, FERTILIZE, EROSION MAT & SEED, FINAL RESTORATION
- SOD, FINAL RESTORATION
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

N

EB STH 119/AIRPORT SPUR

WB STH 119/AIRPORT SPUR

TLE

WETLAND BOUNDARY (TYP)

ATC TRANSMISSION - OVERHEAD

ATC TRANSMISSION - OVERHEAD

℄ WEST ACCESS ROAD

WEST ACCESS ROAD

WEST TOWER

PLE

TOPSOIL AND SEED WEST ACCESS ROAD AFTER CONSTRUCTION IS COMPLETE FROM STH 119 TO THE FENCE LINE

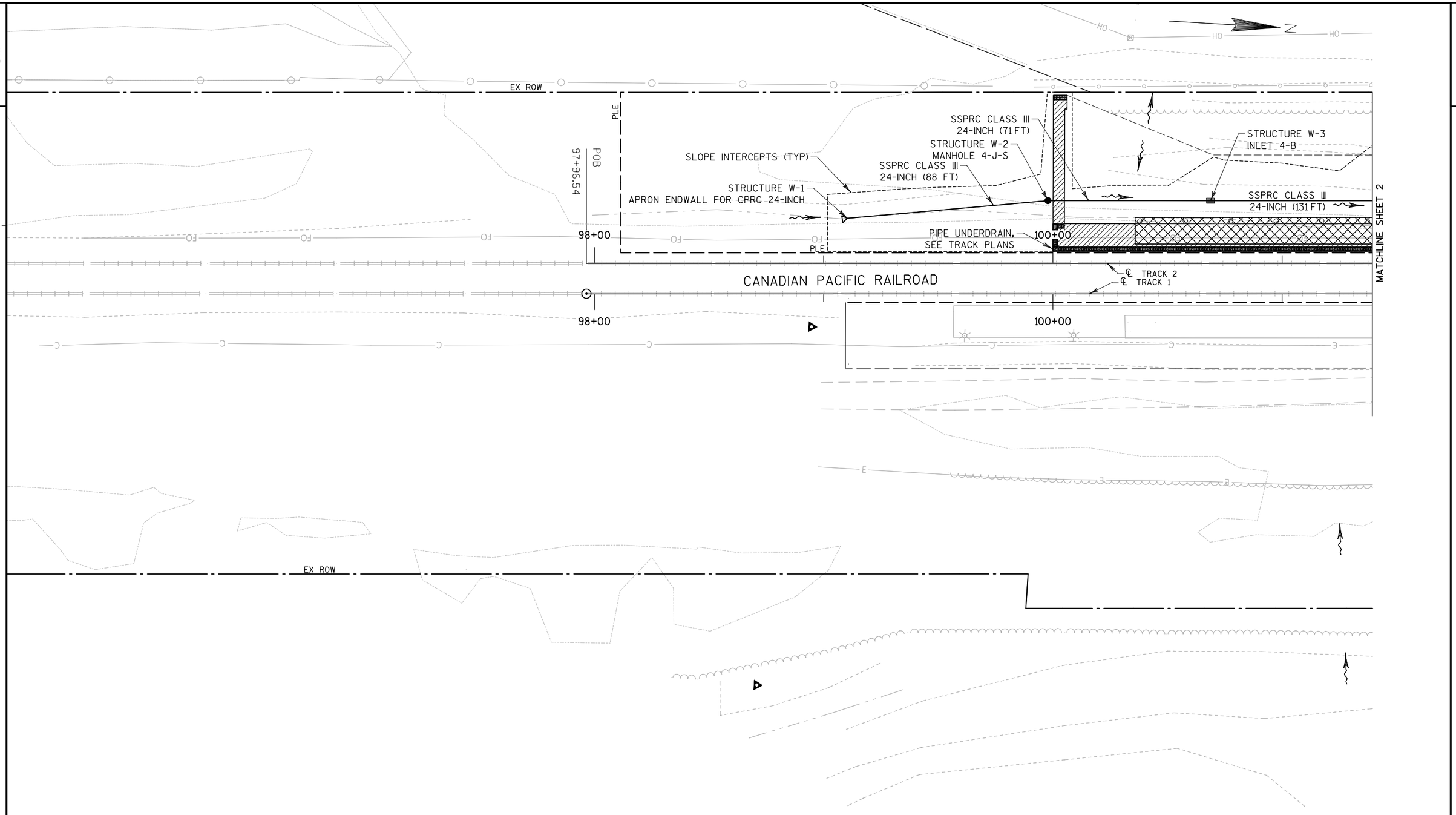
EX ROW

PLE

10+00

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	EROSION CONTROL - 5 OF 5	SHEET 31	E

2



PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE	SHEET 32	E

2

PERFORATED UNDERDRAIN 8-INCH, CONNECT TO MANHOLE (70 FT)

STRUCTURE U-CLEAN 8" CLEANOUT (INCIDENTAL TO UNDERDRAIN)

STRUCTURE U-1 MANHOLE 3-J

UNPERFORATED UNDERDRAIN 8-INCH, CONNECT TO MANHOLE (15 FT)

EX ROW

STRUCTURE U-2 MANHOLE 3-J

UNPERFORATED UNDERDRAIN 8-INCH, CONNECT TO INLET (38 FT)

EXISTING PIPE

SSPRC CLASS III 24-INCH (67 FT)

STRUCTURE W-9 INLET 4-B

STRUCTURE W-6 INLET 4-B

SSPRC CLASS III 24-INCH (30 FT)

STRUCTURE W-4 INLET 4-B

SLOPE INTERCEPTS (TYP)

STRUCTURE W-5 INLET 4-B

SSPRC CLASS III 24-INCH (70 FT)

STRUCTURE W-7 INLET 4-B

STRUCTURE W-8 INLET 4-B

SSPRC CLASS III 24-INCH (131 FT)

SSPRC CLASS III 24-INCH (150 FT)

SSPRC CLASS III 24-INCH (115 FT)

SSPRC CLASS III 24-INCH (102 FT)

MATCHLINE SHEET 1

MATCHLINE SHEET 3

102 103 104 105 106

℄ BACK OF PLATFORM

102+00 104+00 106+00

PLE

PIPE UNDERDRAIN, SEE TRACK PLANS

CANADIAN PACIFIC RAILROAD

N3°16'20"W

℄ TRACK 2

℄ TRACK 1

11+00

STRUCTURE E-3 INLET 4-B

SSPRC CLASS III 24-INCH (88 FT)

STRUCTURE E-4 INLET 4-B

SSPRC CLASS III 24-INCH (33 FT)

SSPRC CLASS III 24-INCH (20 FT)

STRUCTURE E-2 INLET 4-B

SSPRC CLASS III 24-INCH (25 FT)

EXISTING PIPE 24" RCP

EXISTING DETENTION POND

STRUCTURE E-1 APRON ENDWALL FOR CPRC 24-INCH

STRUCTURE E-5 INLET 4-B

EXISTING PIPE

EXISTING DITCH

AMTRAK STATION

UNPERFORATED UNDERDRAIN 8-INCH, CONNECT TO MANHOLE (60 FT), OUTFALL ELEV. 727.5

STRUCTURE U-3 MANHOLE 3-J CONNECT TO BUILDING STORM SEWER

SANITARY SEWER PVC 6-INCH (5 FT) INVERT 722.97 - INVERT 722.92

EX ROW

STRUCTURE SAN-CLEAN 6-INCH CLEANOUT RIM: 723.46

SANITARY SEWER PVC 6-INCH (105 FT) INVERT 722.92 - INVERT 721.83

STRUCTURE SAN-1 MANHOLE 4-J-S RIM: 728.75

SANITARY SEWER PVC 8-INCH (60 FT) INVERT 721.73 - INVERT 721.16

CONNECT TO EXISTING MANHOLE RIM: 728.12

30 31 32 33

℄ ACCESS ROAD

ACCESS ROAD

EXISTING PIPE

EXISTING INLET

EXISTING PIPE 12" RCP

EXISTING INLET

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE & SANITARY SEWER	SHEET 33	E

2

2

N

EX ROW

SLOPE INTERCEPTS

EXISTING PIPE

STRUCTURE W-10
MANHOLE 4-J-S

SSPRC CLASS III
24-INCH (67 FT)

STRUCTURE W-11
APRON ENDWALL FOR CPRC 24-INCH

SSPRC CLASS III
24-INCH (67 FT)

PLE

109+89.94

POE

EXISTING DITCH

108+00

PLE

TRACK 2
TRACK 1

CANADIAN PACIFIC RAILROAD

MATCHLINE SHEET 2

108+00

AIRPORT SPUR/STH 119

EX ROW

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE	SHEET 34	E

2

2

EB STH 119/AIRPORT SPUR

WB STH 119/AIRPORT SPUR

TLE

℄ WEST ACCESS ROAD

STRUCTURE A-1
APRON ENDWALL FOR
CPRC 24-INCH

WEST ACCESS ROAD

SLOPE INTERCEPTS

PLE

SSPRC CLASS III
24-INCH (47 FT)

STRUCTURE A-3
INLET 4-B

STRUCTURE A-2
MANHOLE 4-J-S

EX ROW

CONNECT TO
EXISTING 24" PIPE

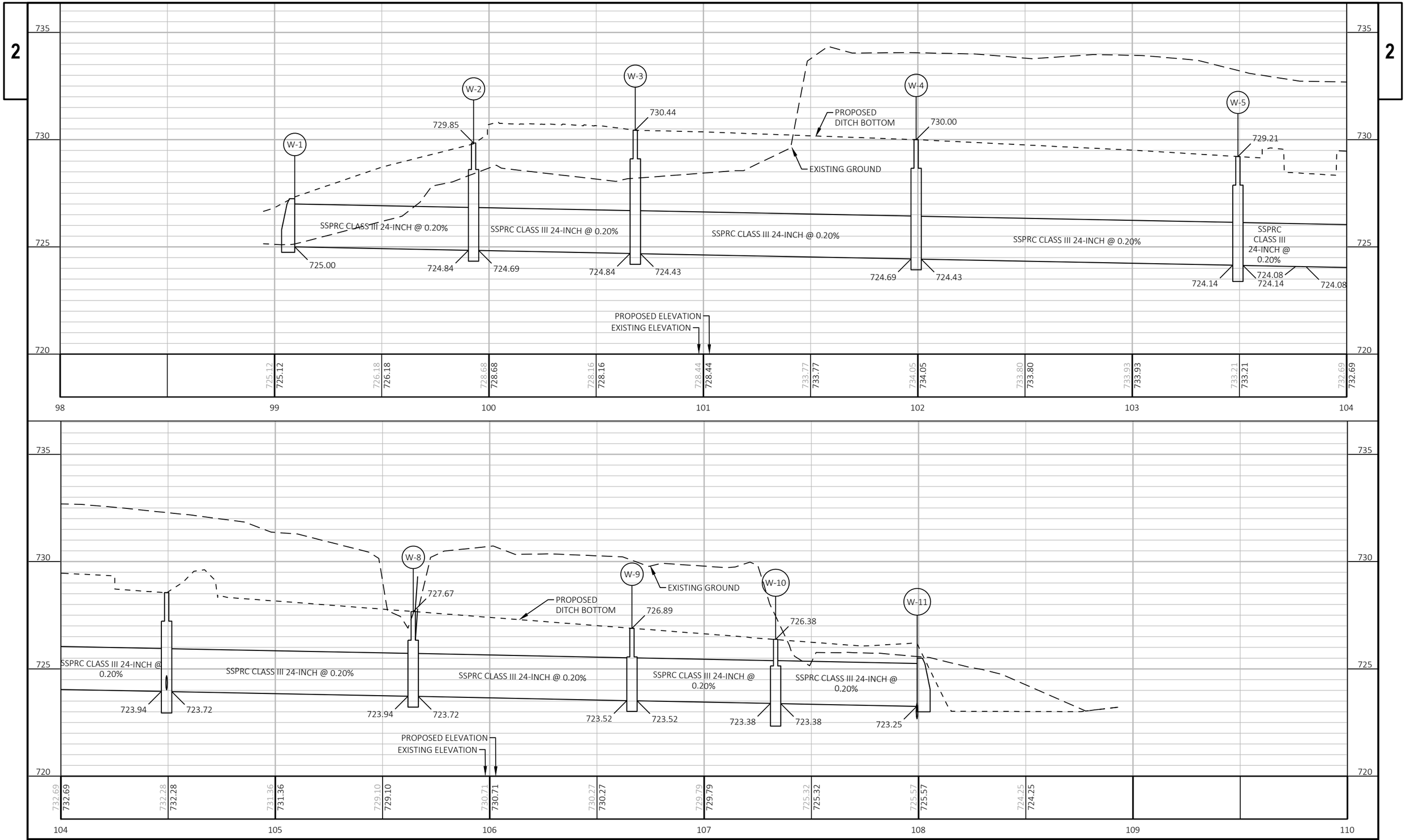
SSPRC CLASS III
18-INCH (70 FT)

100+01 ℄

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	DRAINAGE	SHEET 35	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlanR022504.dgn 8/15/2022 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42

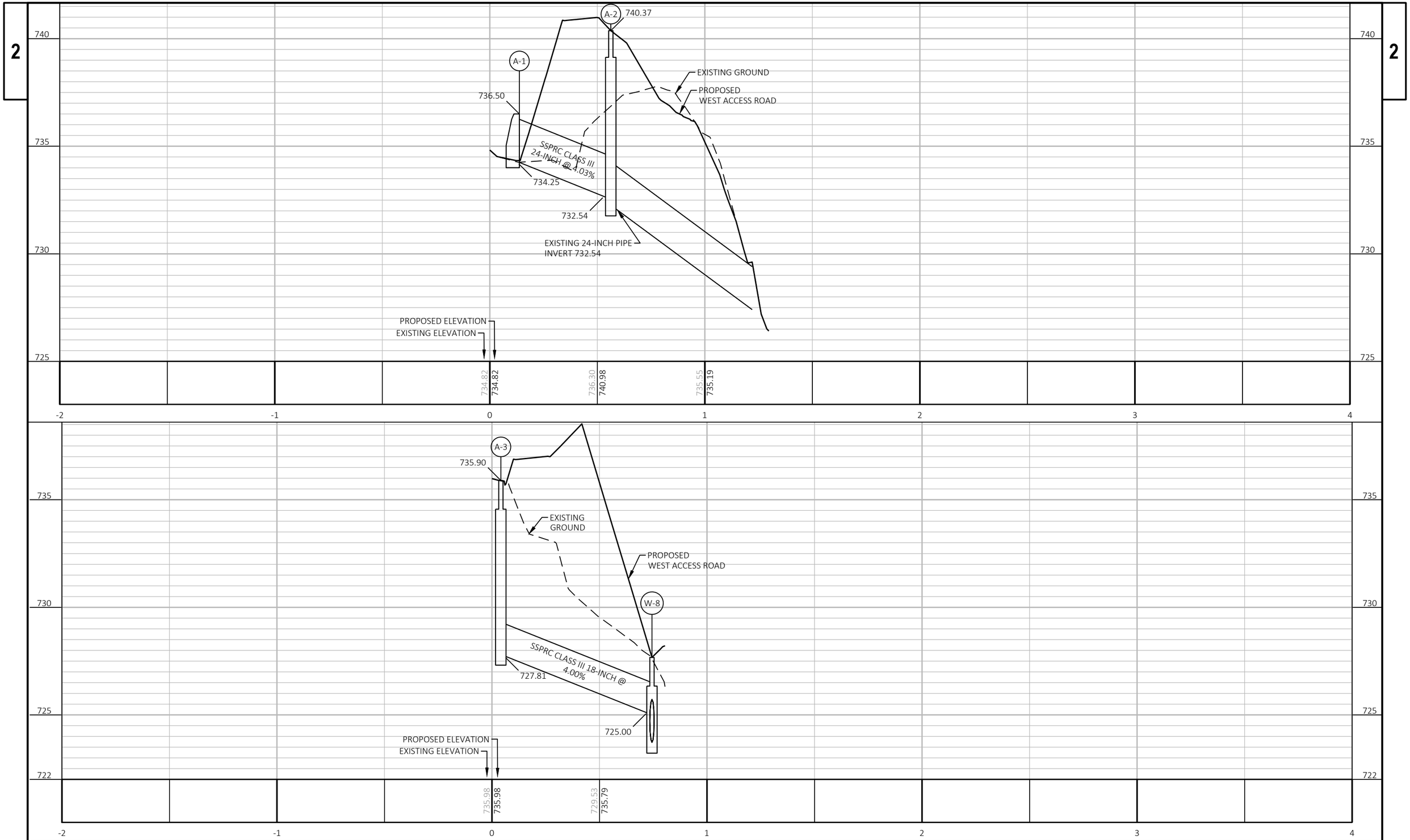


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES WESTERN DITCH STORM SEWER	SHEET 36	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050302_PR.DWG
LAYOUT NAME - WEST DITCH

PLOT DATE : 7/7/2022 10:51 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

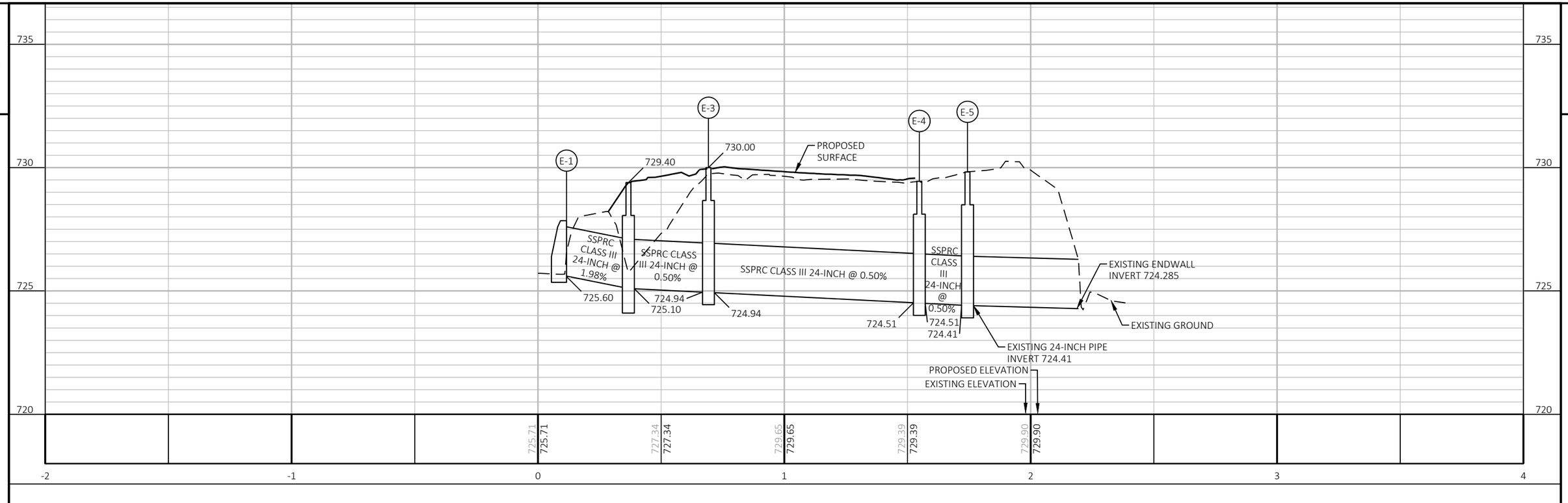


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES WEST ACCES ROAD STORM SEWER	SHEET 37	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050302_PR.DWG
LAYOUT NAME - WEST ACCESS ROAD

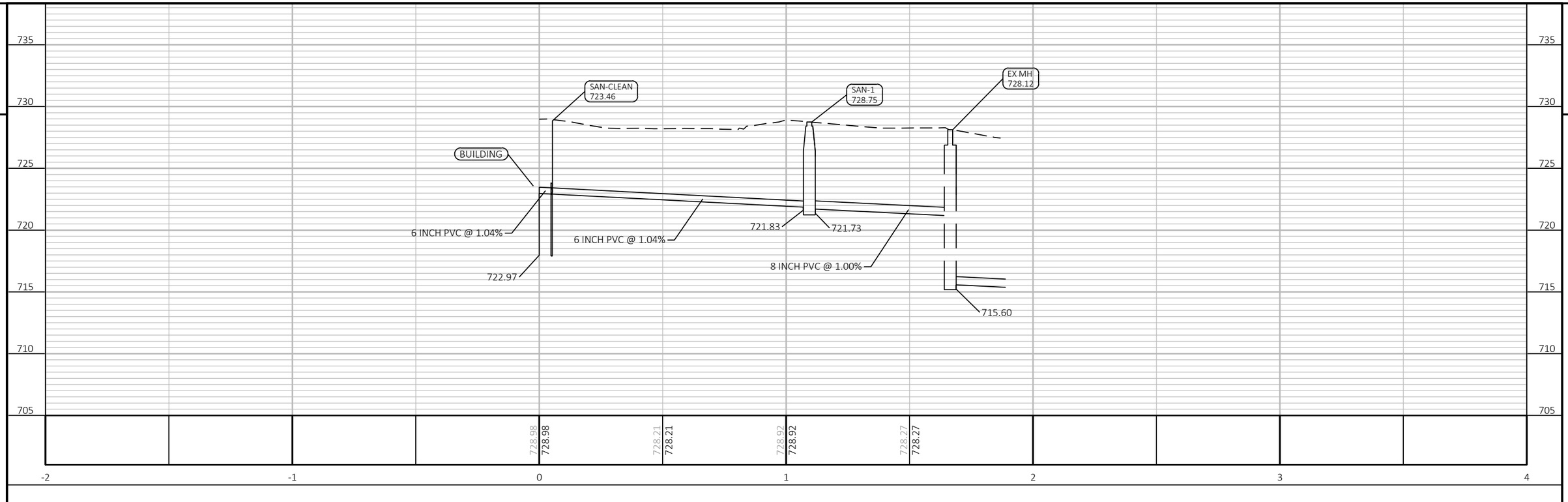
PLOT DATE : 7/7/2022 10:51 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES EASTERN STORM SEWER	SHEET 38	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050302_PR.DWG
LAYOUT NAME - EAST TOWER SS
PLOT DATE : 7/14/2022 11:19 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



PROJECT NO: 1000-57-05	HWY: N/A	COUNTY: MILWAUKEE	PROFILES -SANITARY SEWER	SHEET 39	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19143\PIPE NETWORK_MARS.DWG
LAYOUT NAME - SAN 1 IN 40 FT

PLOT DATE : 7/13/2022 10:34 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

SLOPE INTERCEPTS (TYP)

W-1

W-2

W-3

99+00

99+00

100+00

100+00

101+00

101+00

CANADIAN PACIFIC RAILROAD

1+00

MATCHLINE SHEET 2

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROPOSED CONTOURS	SHEET 40	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\022504_SS_CONTOURS.DWG
LAYOUT NAME - SS 1 IN 40 FT (5)

PLOT DATE : 9/14/2022 5:03 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : ##########

2

2

N

SLOPE INTERCEPTS (TYP)

WEST ACCESS ROAD

WEST TOWER

EAST TOWER

CANADIAN PACIFIC RAILROAD

ACCESS ROAD

MATCHLINE SHEET 1

MATCHLINE SHEET 3

W-4 W-5 W-6 W-7 W-8 W-9

A-1 A-3

E-1 E-2 E-3 E-4 E-5 E-6

SAN-1 SAN-CLEAN

1+00 2+00 3+00 4+00 5+00 6+00 7+00

102+00 103+00 104+00 105+00 106+00

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROPOSED CONTOURS	SHEET 41	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\022504_SS_CONTOURS.DWG
LAYOUT NAME - SS 1 IN 40 FT (3)

PLOT DATE : 10/12/2022 9:17 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 41

2

N

A-2

W-10

W-11

SLOPE INTERCEPTS (TYP)

MATCHLINE SHEET 2

107+00

107+00

108+00

109+00

CANADIAN PACIFIC RAILROAD

8+00

748 746 744 742 740 738 736 735 734 733 732 731 730 725 724

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROPOSED CONTOURS	SHEET 42	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\022504_SS_CONTOURS.DWG
LAYOUT NAME - SS 1 IN 40 FT (4)

PLOT DATE : 9/14/2022 5:03 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : ##########

2

N

EX ROW

WEST TOWER

3 KJ

3 MJ

2 MJ, 3KJ

5 KFG, 2 KDG, 1 BOG
(TYPICAL EACH BED)
(SEE INSET)

3 MJ, 2KJ

3 KJ

3 MJ

3 KJ

PLE

1

102

103

104

105

106

107

℄ BACK OF PLATFORM

102+00

104+00

106+00

PLE

N3°16'20"W

℄ TRACK 2

℄ TRACK 1

PEDESTRIAN BRIDGE

PLE

N3°16'20"W

N3°16'20"W

CANADIAN PACIFIC RAILROAD

MULCHED PLANTING BED

5 KFG
1 BOG
2 KDG

BACK OF PLATFORM
EDGE OF CANOPY

INSET

EAST TOWER

5 MJ

℄ SIDEWALK

3 KFG, 3 KDG, 2 BOG
(TYPICAL EACH BED)

5 KFG, 2 BOG

7 KFG, 8 KDG, 5 BOG

AMTRAK
STATION

WETLAND BOUNDARY (TYP)

EX ROW

℄ ACCESS ROAD

31

32

33

30

ACCESS ROAD

℄ PARKING

LEGEND

-——— MULCHED PLANTING BED

EVERGREEN TREES

KJ JUNIPER, KETELLERI

MJ JUNIPER, MOONGLOW

PERENNIALS & GRASSES - MEDIUM

BOG GRASSES, BLUE OAT

HDG GRASSES, HAMELN DWARF FOUNDATION

PERENNIALS & GRASSES - TALL

KFG GRASSES, KARL FOERSTER REED

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLANTING DETAILS	SHEET 43	E

2

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW: WEST ACCESS FROM STH 119	SHEET 44	E

2

WETLAND BOUNDARIES (TYP)

EXISTING ROW (TYP)

END PROJECT STA. 108+00.00

N

BEGIN PROJECT STA. 100+00.00

WEST TOWER

CONCRETE PLATFORM

TO CHICAGO

TO MILWAUKEE

CANADIAN PACIFIC RAILROAD

℄ TRACK 1

℄ TRACK 2

PEDESTRIAN BRIDGE

EAST TOWER

AMTRAK STATION

EAST SIDE MATERIAL/EQUIPMENT STAGING/LAYDOWN AREAS

S 6TH STREET

CONTRACTOR ONLY ACCESS

AMTRAK PARKING

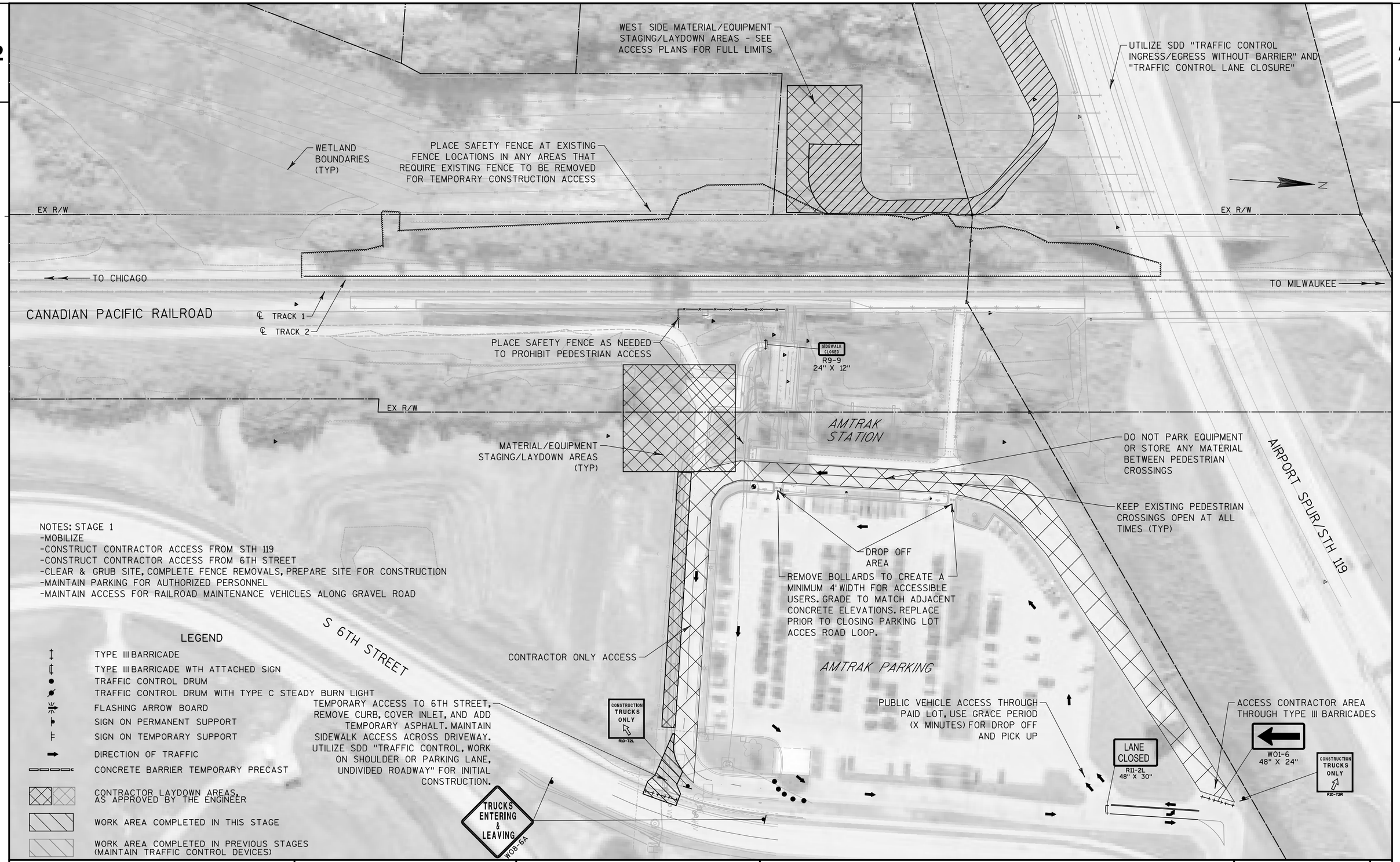
PUBLIC VEHICLE ACCESS THROUGH PAID LOT, USE GRACE PERIOD (X MINUTES) FOR DROP OFF AND PICK UP

ACCESS CONTRACTOR AREA THROUGH TYPE III BARRICADES

TEMPORARY ACCESS TO 6TH STREET

AIRPORT PARKING

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW: EAST ACCESS FROM 6TH STREET	SHEET 45	E



NOTES: STAGE 1
-MOBILIZE
-CONSTRUCT CONTRACTOR ACCESS FROM STH 119
-CONSTRUCT CONTRACTOR ACCESS FROM 6TH STREET
-CLEAR & GRUB SITE, COMPLETE FENCE REMOVALS, PREPARE SITE FOR CONSTRUCTION
-MAINTAIN PARKING FOR AUTHORIZED PERSONNEL
-MAINTAIN ACCESS FOR RAILROAD MAINTENANCE VEHICLES ALONG GRAVEL ROAD

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 1	SHEET 46 E

2

WETLAND BOUNDARIES (TYP)

EX R/W

EX R/W

WEST TOWER

SIDEWALK CLOSED

R9-9 24" X 12"

TO CHICAGO

TO MILWAUKEE

CANADIAN PACIFIC RAILROAD

℄ TRACK 1

℄ TRACK 2

EAST TOWER

CLOSE SOUTH SECTION OF PLATFORM DURING WORK ON EAST TOWER AND PEDESTRIAN BRIDGE

EX R/W

AMTRAK STATION

AMTRAK PARKING

AIRPORT SPUR/STH 119

S 6TH STREET

NOTES: STAGE 2
-MAINTAIN CONTRACTOR STAGING AREAS AND ACCESS
-COMPLETE TOWER FOUNDATIONS AND PILE DRIVING
-COMPLETE TOWER SLABS

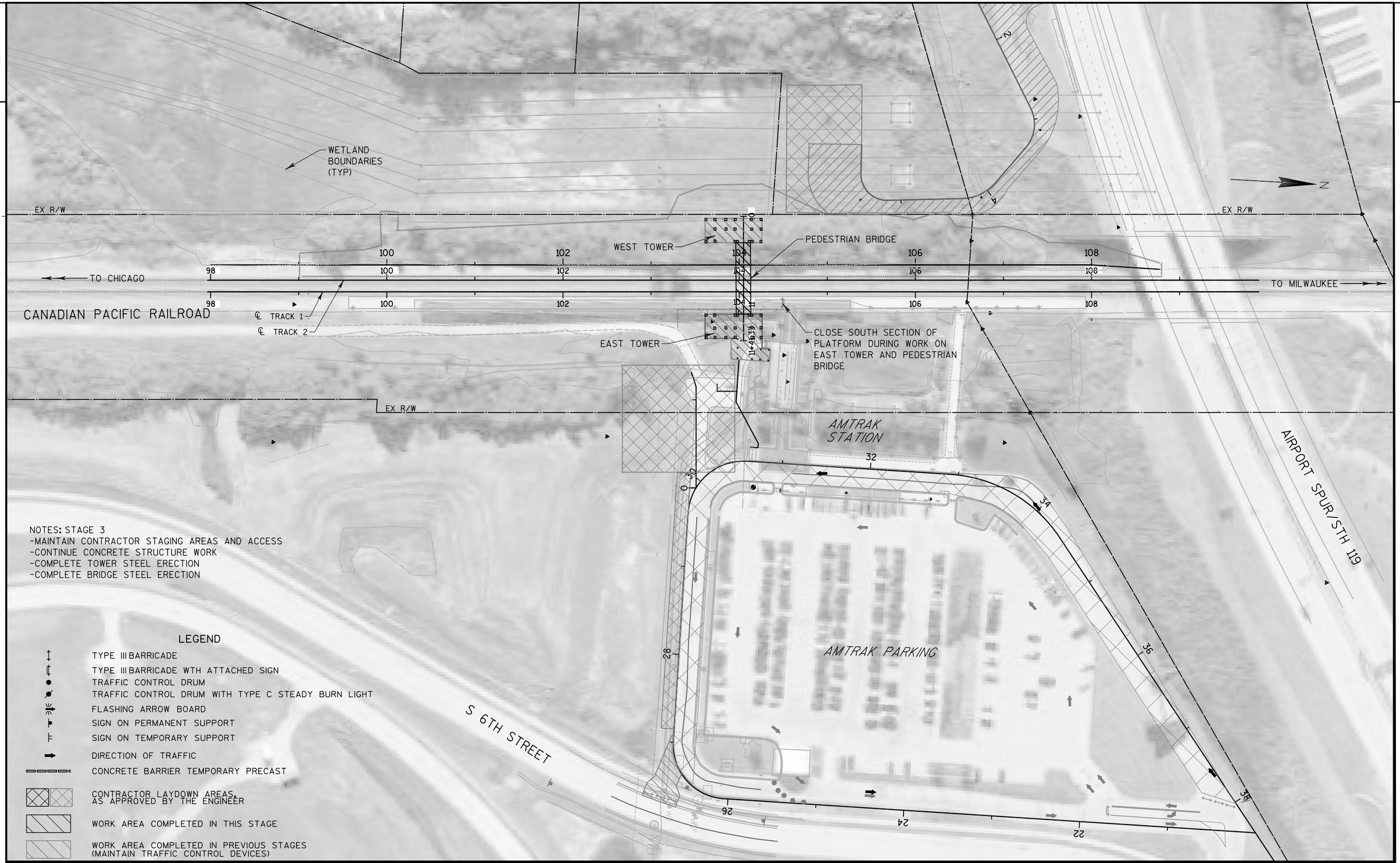
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 2	SHEET 47	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan_025002_S2.dgn 12/12/2022 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 100.0000 sf / in.

2



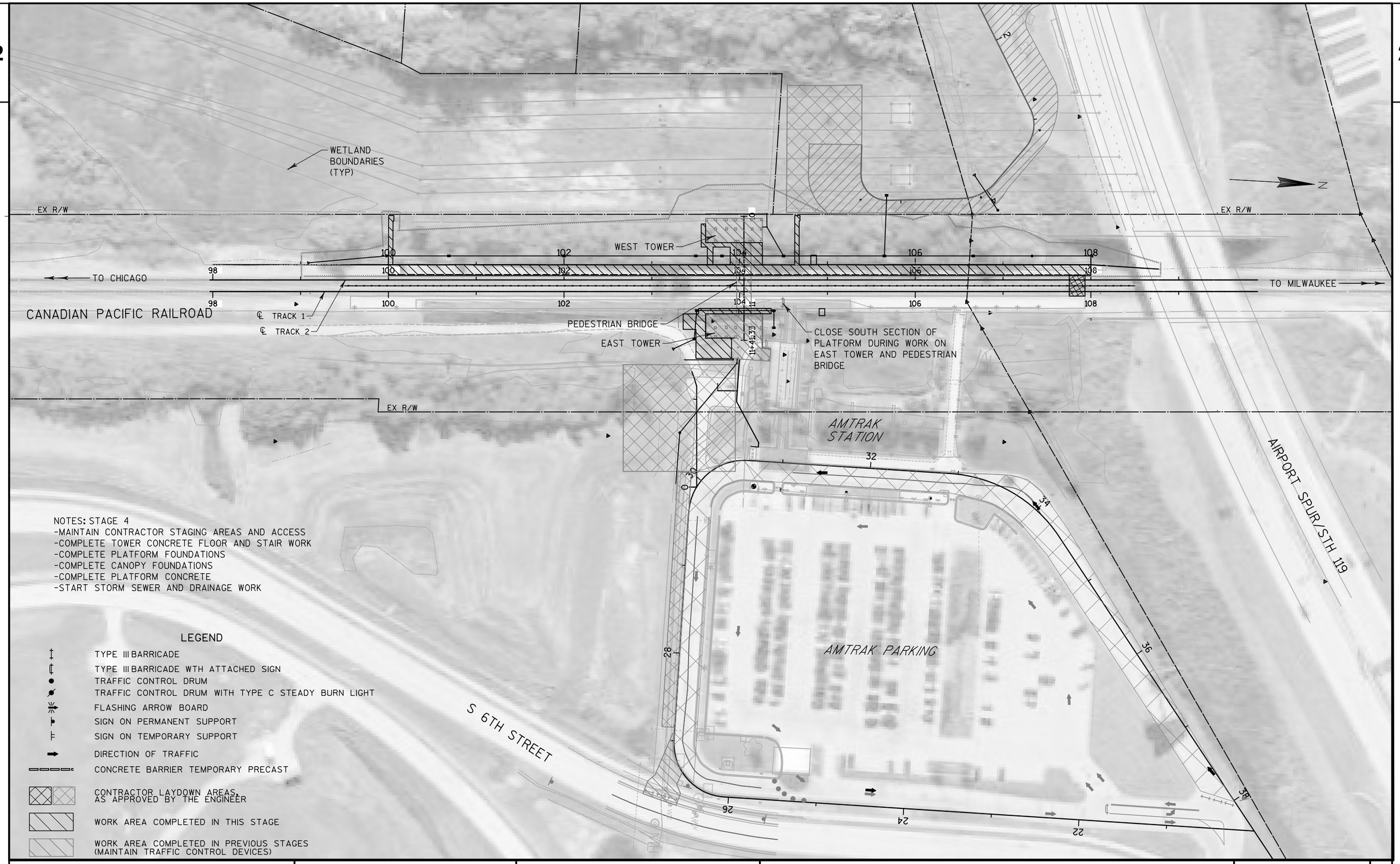
NOTES: STAGE 3
-MAINTAIN CONTRACTOR STAGING AREAS AND ACCESS
-CONTINUE CONCRETE STRUCTURE WORK
-COMPLETE TOWER STEEL ERECTION
-COMPLETE BRIDGE STEEL ERECTION

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 3	SHEET 48	E

2



NOTES: STAGE 4
-MAINTAIN CONTRACTOR STAGING AREAS AND ACCESS
-COMPLETE TOWER CONCRETE FLOOR AND STAIR WORK
-COMPLETE PLATFORM FOUNDATIONS
-COMPLETE CANOPY FOUNDATIONS
-COMPLETE PLATFORM CONCRETE
-START STORM SEWER AND DRAINAGE WORK

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 4	SHEET 49	E

FILE NAME : pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\025004_E4.dgn 12/12/2022 PLOT BY : jessica.lancelle PLOT NAME : PLOT SCALE : 100.0000 sf / in.

2

WETLAND BOUNDARIES (TYP)

EX R/W

EX R/W

EX R/W

WEST TOWER

TO CHICAGO

TO MILWAUKEE

CANADIAN PACIFIC RAILROAD

℄ TRACK 1

℄ TRACK 2

PEDESTRIAN BRIDGE

EAST TOWER

CLOSE SOUTH SECTION OF PLATFORM DURING WORK ON EAST TOWER AND PEDESTRIAN BRIDGE

AMTRAK STATION

AMTRAK PARKING

S 6TH STREET

AIRPORT SPUR/STH 119

NOTES: STAGE 5
-MAINTAIN CONTRACTOR STAGING AREAS AND ACCESS
-COMPLETE STORM SEWER AND DRAINAGE WORK
-COMPLETE TOWER GLASS, BRICK, AND VENEER WORK ON EXTERIORS
-COMPLETE PLATFORM CANOPY
-COMPLETE FINAL GRADING AROUND BUILDINGS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 5	SHEET 50	E

2

REMOVE TEMPORARY ACCESS AND RESTORE AREA

WETLAND BOUNDARIES (TYP)

EX R/W

EX R/W

WEST TOWER

TO CHICAGO

TO MILWAUKEE

CANADIAN PACIFIC RAILROAD

℄ TRACK 1

℄ TRACK 2

EAST TOWER

PEDESTRIAN BRIDGE

EX R/W

AMTRAK STATION

AIRPORT SPUR/STH 119

SIDEWALK CLOSED
R9-9
24" X 12"

AMTRAK PARKING

S 6TH STREET

REMOVE TEMPORARY ACCESS AND RESTORE AREA.
UTILIZE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

NOTES: STAGE 6
-COMPLETE PERSONNEL PARKING AREA
-COMPLETE SIDEWALK CONNECTIONS TO BUILDINGS
-REMOVE TEMPORARY CONTRACTOR ACCESS TO 6TH STREET AND RESTORE AREAS
-CLOSE ACCESS TO WEST ACCESS ROAD AT STH 119
(TOPSOIL AND SEED TO FENCE LINE, REPLACE BARRIER & GAURDRAIL)
-COMPLETE FINAL LANDSCAPING
-COMPLETE INTERIOR FINISHES

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- CONTRACTOR LAYDOWN AREAS, AS APPROVED BY THE ENGINEER
- WORK AREA COMPLETED IN THIS STAGE
- WORK AREA COMPLETED IN PREVIOUS STAGES (MAINTAIN TRAFFIC CONTROL DEVICES)

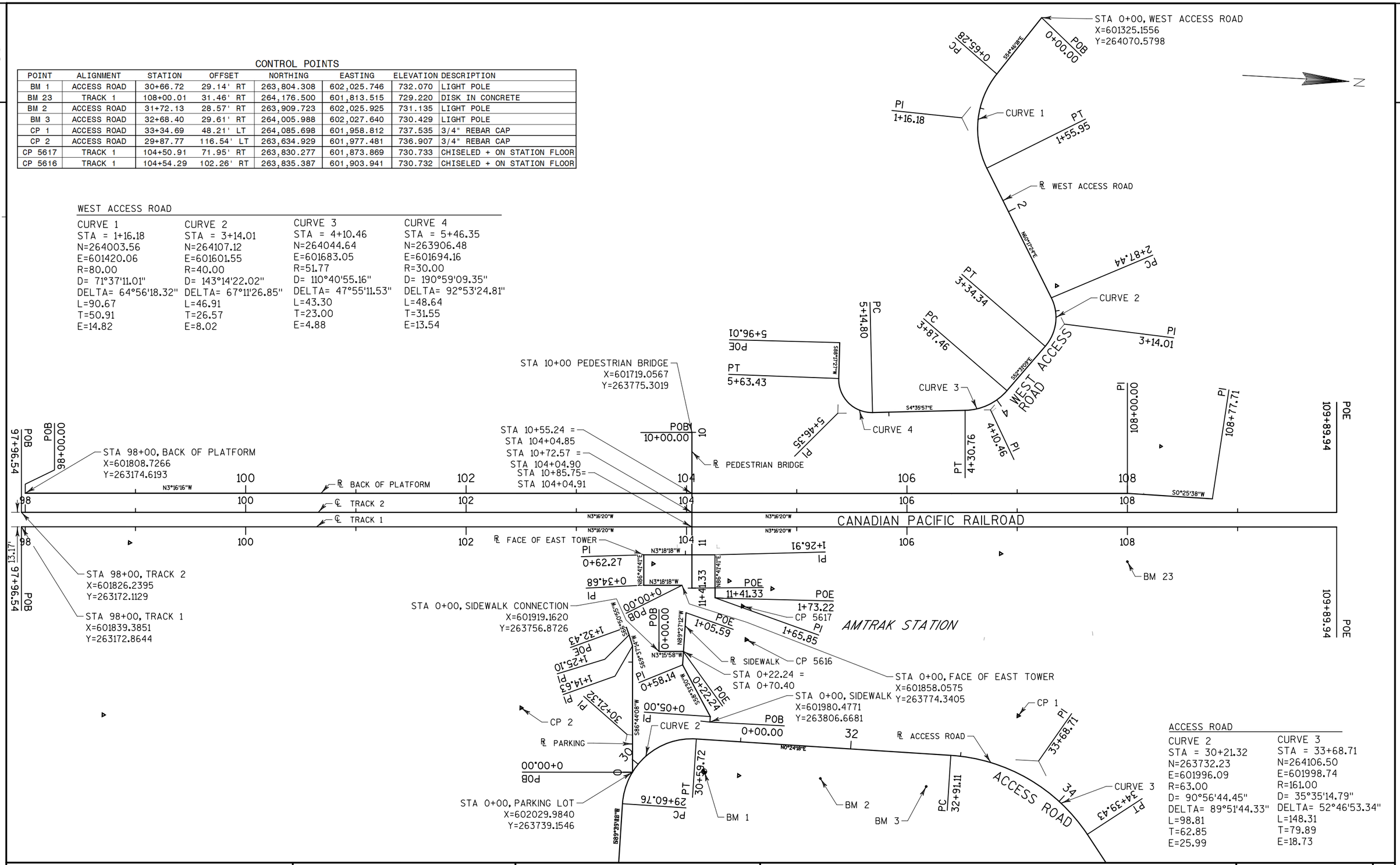
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	TRAFFIC CONTROL: STAGE 6	SHEET 51 E

CONTROL POINTS

POINT	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM 1	ACCESS ROAD	30+66.72	29.14' RT	263,804.308	602,025.746	732.070	LIGHT POLE
BM 23	TRACK 1	108+00.01	31.46' RT	264,176.500	601,813.515	729.220	DISK IN CONCRETE
BM 2	ACCESS ROAD	31+72.13	28.57' RT	263,909.723	602,025.925	731.135	LIGHT POLE
BM 3	ACCESS ROAD	32+68.40	29.61' RT	264,005.988	602,027.640	730.429	LIGHT POLE
CP 1	ACCESS ROAD	33+34.69	48.21' LT	264,085.698	601,958.812	737.535	3/4" REBAR CAP
CP 2	ACCESS ROAD	29+87.77	116.54' LT	263,634.929	601,977.481	736.907	3/4" REBAR CAP
CP 5617	TRACK 1	104+50.91	71.95' RT	263,830.277	601,873.869	730.733	CHISELED + ON STATION FLOOR
CP 5616	TRACK 1	104+54.29	102.26' RT	263,835.387	601,903.941	730.732	CHISELED + ON STATION FLOOR

WEST ACCESS ROAD

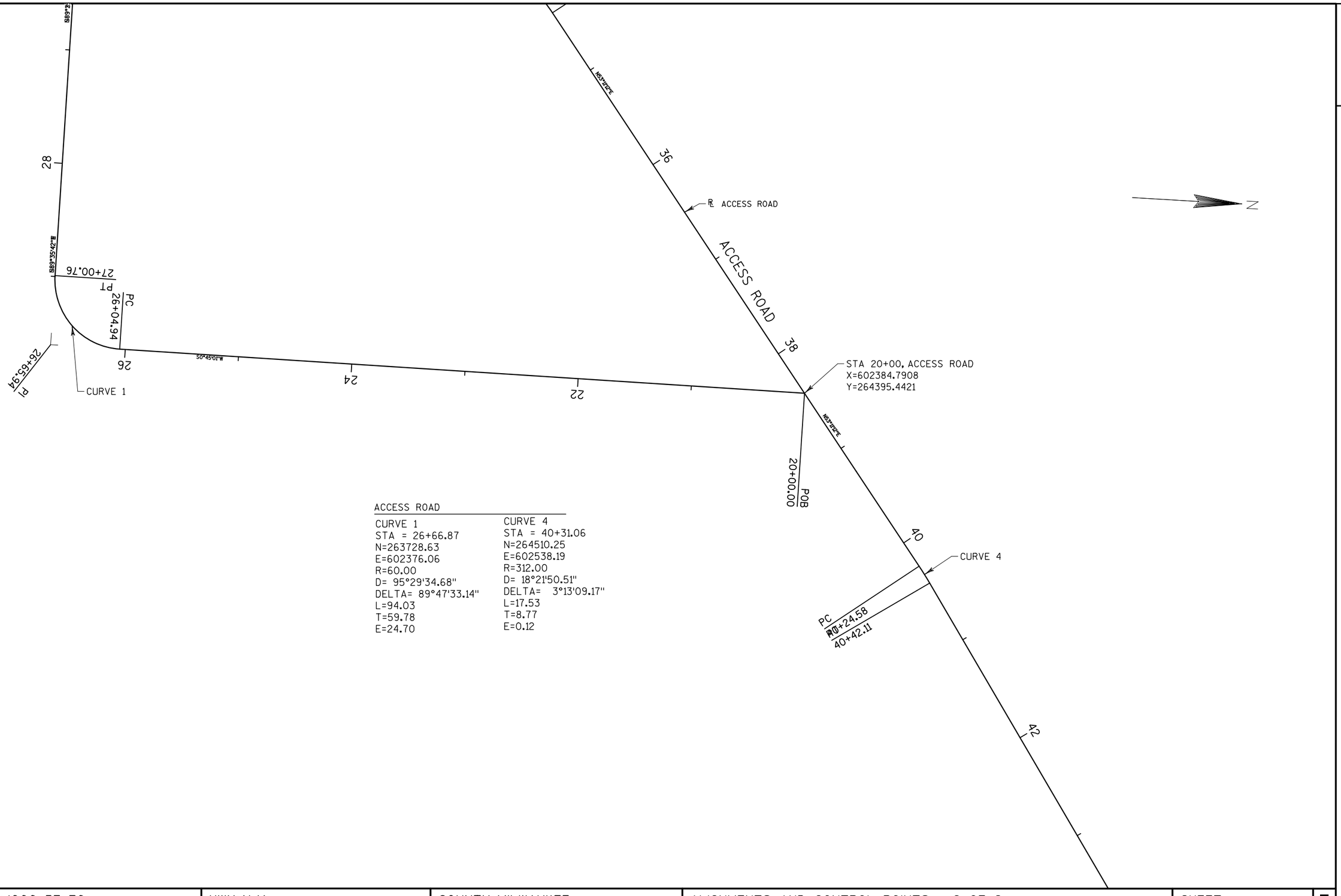
CURVE 1	CURVE 2	CURVE 3	CURVE 4
STA = 1+16.18	STA = 3+14.01	STA = 4+10.46	STA = 5+46.35
N=264003.56	N=264107.12	N=264044.64	N=263906.48
E=601420.06	E=601601.55	E=601683.05	E=601694.16
R=80.00	R=40.00	R=51.77	R=30.00
D= 71°37'11.01"	D= 143°14'22.02"	D= 110°40'55.16"	D= 190°59'09.35"
DELTA= 64°56'18.32"	DELTA= 67°11'26.85"	DELTA= 47°55'11.53"	DELTA= 92°53'24.81"
L=90.67	L=46.91	L=43.30	L=48.64
T=50.91	T=26.57	T=23.00	T=31.55
E=14.82	E=8.02	E=4.88	E=13.54



ACCESS ROAD

CURVE 2	CURVE 3
STA = 30+21.32	STA = 33+68.71
N=263732.23	N=264106.50
E=601996.09	E=601998.74
R=63.00	R=161.00
D= 90°56'44.45"	D= 35°35'14.79"
DELTA= 89°51'44.33"	DELTA= 52°46'53.34"
L=98.81	L=148.31
T=62.85	T=79.89
E=25.99	E=18.73

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	ALIGNMENTS AND CONTROL POINTS - 1 OF 2	SHEET 52	E

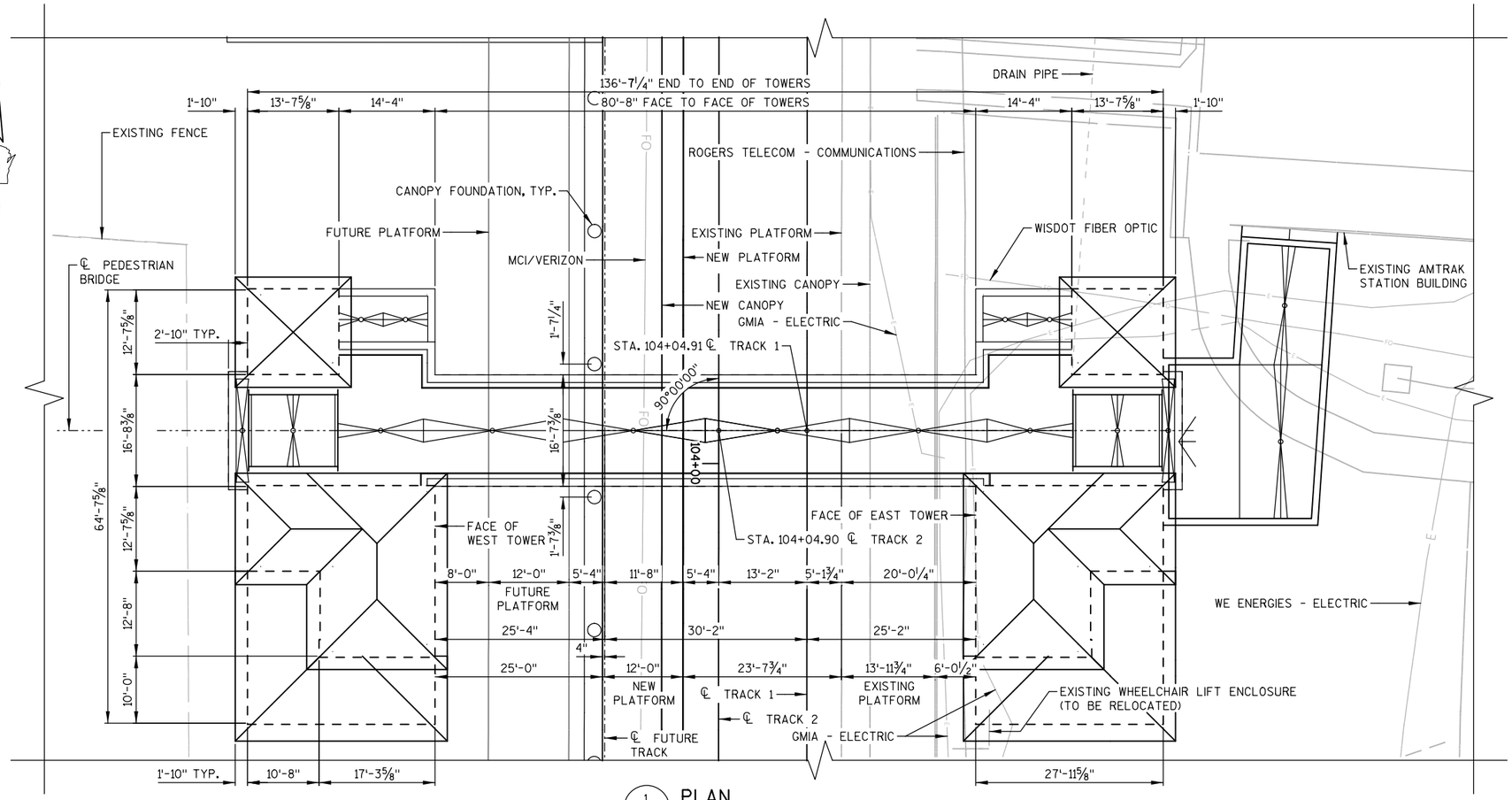


ACCESS ROAD

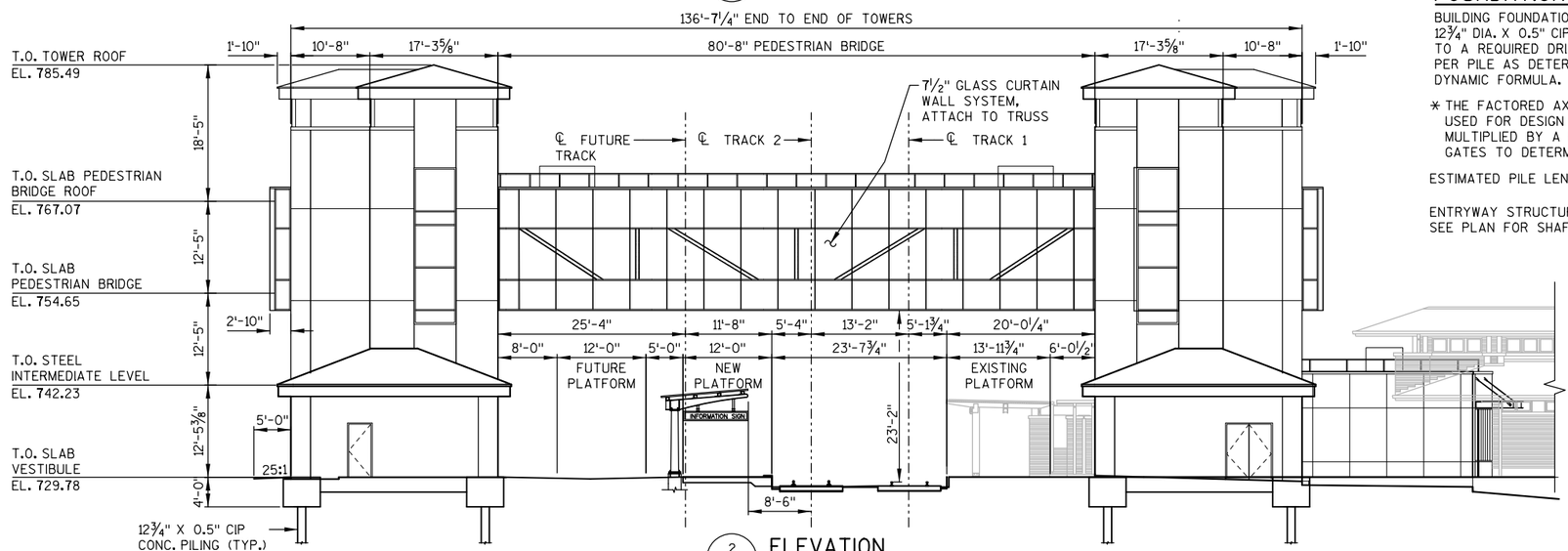
CURVE 1	CURVE 4
STA = 26+66.87	STA = 40+31.06
N=263728.63	N=264510.25
E=602376.06	E=602538.19
R=60.00	R=312.00
D= 95°29'34.68"	D= 18°21'50.51"
DELTA= 89°47'33.14"	DELTA= 3°13'09.17"
L=94.03	L=17.53
T=59.78	T=8.77
E=24.70	E=0.12

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	ALIGNMENTS AND CONTROL POINTS - 2 OF 2	SHEET 53 E

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carl.buschman@aecom.com\vms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\01_General Plan.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:32:14 PM
BATCH PRINT SHEET 1 OF 13



1 S-001 PLAN



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

FOUNDATION DATA

BUILDING FOUNDATIONS SHALL BE SUPPORTED ON 12¾" DIA. X 0.5" CIP CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS* PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

ESTIMATED PILE LENGTH = 50 FT

ENTRYWAY STRUCTURE SUPPORTED ON 24" DIA. DRILLED SHAFTS. SEE PLAN FOR SHAFT DEPTHS.

STRUCTURES DESIGN CONTACT

MICHAEL ARNOLD (414) 559-9885

STATE PROJECT NUMBER

1000-57-70

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:

GROUND SNOW LOAD, Pg	30 PSF
IMPORTANCE FACTOR, Is	1.0
EXPOSURE FACTOR, Ce	1.0
THERMAL FACTOR, Ct	1.0
SLOPE FACTOR, Cs	1.0
FLAT ROOF SNOW LOAD, Pf	21 PSF

LIVE LOADS:

PEDESTRIAN	100 PSF
PARTITION	15 PSF
ROOF	19.8 PSF

MATERIAL PROPERTIES:

CONCRETE MASONRY	
FLOOR SLABS (ELEVATED AND ON GRADE)	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 AND PLATES: ASTM A709, GR 50	fy = 50,000 PSI
HSS: ASTM A1085 (PED. BRIDGE TRUSS)	fy = 50,000 PSI
HSS: ASTM A500, GR C (CANOPY)	fy = 46,000 PSI
STEEL DECKING	fy = 33,000 PSI
WELDED WIRE REINFORCEMENT ASTM 1064	fy = 65,000 PSI

NO.	DATE	REVISION	BY

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

STRUCTURAL

OVER CP RAILWAY AT MKE AIRPORT RAIL STA.

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

DESIGN SPEC. AASHTO LRFD DESIGN SPECIFICATIONS

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

GENERAL PLAN AND ELEVATION

SHEET S-001
54

2

2

PRINTER DRIVER: c:\pwworking\aecom.ds20_na.2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-nar-pw.bentley.com:AECOM.DS20_NA.2019\Documents\AECOM_GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-nar-pw.bentley.com:AECOM.DS20_NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\02_General Notes and Quantities.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:32:22 PM
BATCH PRINT SHEET 2 OF 13

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.

REINFORCED CONCRETE

REINFORCING BARS SHALL CONFORM TO ASTM A615 WITH 60,000 PSI YIELD STRENGTH, AS INDICATED AND SHALL HAVE THE FOLLOWING CONCRETE COVER, UNLESS NOTED OTHERWISE ON THE DRAWINGS:

A. SURFACES PLACED IN CONTACT WITH THE GROUND 3"

B. FORMED SURFACE EXPOSED TO GROUND 2"

C. INSIDE FACE OF FORMED WALL 1 1/2"

D. PIER TIES 1 1/2"

E. SLAB REINFORCING 3/4"

F. TOP REINFORCING STEEL IN FLAT SLABS 1"

G. BEAM STIRRUPS 1 1/2"

WELDED WIRE FABRIC WILL CONFORM TO ASTM 1064; LAP TWO SQUARES AT ALL SPLICES AND TIE AT 3-FOOT CENTERS.

NO CONCRETE SHALL BE CAST BEFORE REVIEW AND APPROVAL OF THE REINFORCING AND EMBEDDED ITEMS HAS BEEN OBTAINED FROM THE ARCHITECT.

CONTRACTOR SHALL SUBMIT DRAWINGS SHOWING INTENDED PLACING SEQUENCES AND LOCATIONS OF CONSTRUCTION JOINTS AND GRADE BEAM JOINTS TO THE ENGINEER FOR APPROVAL.

CAST SLABS AND BEAMS MONOLITHICALLY, UNLESS OTHERWISE INDICATED.

ALL KEYS SHALL BE 2"x4" (NOMINAL) UNLESS SHOWN OTHERWISE ON DRAWINGS.

NOT ALL OPENINGS THROUGH CONCRETE SLABS AND WALLS ARE SHOWN ON STRUCTURAL DRAWINGS. OPENINGS INDICATE, OR ANY ADDITIONAL OPENINGS OR INSERTS REQUIRED, MUST BE VERIFIED WITH RESPECTIVE TRADES BEFORE POURING OF CONCRETE. PROVIDE ALL OPENINGS THROUGH FOUNDATION WALLS AS REQUIRED BY MECHANICAL TRADES. ALL REQUIRED INSERTS, SLEEVES, CONDUITS, EMBEDMENTS, AND PENETRATIONS MUST BE VERIFIED WITH RESPECTIVE TRADES BEFORE CASTING CONCRETE.

PIPES OR CONDUITS SHALL NOT BE PLACED IN SLABS.

SET ANCHOR BOLTS AND EMBEDDED PLATES REQUIRED FOR CONNECTION OF WORK BY OTHERS.

PROVIDE CONCRETE PADS FOR MECHANICAL EQUIPMENT ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND IN ACCORDANCE WITH THE TYPICAL DETAILS. ALWAYS PROVIDE MINIMUM REINFORCEMENT FOR PADS, UNLESS NOTED OTHERWISE. COORDINATE LOCATIONS WITH MECHANICAL DRAWINGS.

ALUMINUM PIPES, CONDUITS, ETC. SHALL NOT BE EMBEDDED IN CAST IN PLACE CONCRETE.

EMBED PLATES AND ANCHOR BOLTS SHALL BE SET WITHIN 1/8" TOLERANCE IN ANY DIRECTION. THE CONTRACTOR SHALL USE TEMPLATES TO PLACE ANCHOR BOLTS AND PROVIDE THE MINIMUM PROJECTION SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL INCLUDE IN THE ESTIMATES AN ALLOWANCE FOR DEFLECTION AND OTHER FACTORS THAT MAY CONTRIBUTE TO CONCRETE QUANTITY.

PROVIDE POCKETS OR RECESSES IN CONCRETE WORK FOR STEEL COLUMNS AND BEAMS AS REQUIRED AND / OR CALLED FOR BY THE SPECIFICATIONS EVEN IF IT IS NOT SHOWN ON THE DRAWINGS. PROVIDE CONCRETE FILL AFTER STEEL ERECTION TO COMPLETE SEAL OF EXPOSED OPENINGS OR RECESSES.

STRUCTURAL STEEL

ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE 2016 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360-16).

ALL DIMENSIONS MUST BE VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO THE FABRICATION OF STEEL.

ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS D1.1, STRUCTURAL WELDING CODE FOR THE TOWER STRUCTURE AND AWS D1.5, BRIDGE WELDING CODE FOR THE BRIDGE TRUSS STRUCTURE.

ALL WELDING ELECTRODES SHALL BE E70XX, EXCEPT FOR WELDING TO EXISTING STEEL MEMBER.

EACH WELDER, TACKER, AND WELDING OPERATOR MUST BE CERTIFIED BY TEST WITHIN THE PAST SIX MONTHS TO PERFORM THE TYPE OF WORK REQUIRED IN CONFORMANCE WITH THE AWS D1.1 AND AWS D1.5 STRUCTURAL WELDING CODE.

FIELD WELDING OF STRUCTURAL MEMBERS THAT IS NOT INDICATED ON THE STRUCTURAL DRAWINGS, IS NOT PERMITTED.

ALL BRIDGE TRUSS FIELD CONNECTIONS SHALL BE BOLTED WITH ASTM A3125 GRADE A325 HIGH-STRENGTH BOLTS. BRIDGE TRUSS CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL.

BRIDGE SHOP CONNECTIONS MAY BE BOLTED WITH A325 HIGH STRENGTH BOLTS OR WELDED IN ACCORDANCE WITH AWS D1.5 BRIDGE WELDING CODE, UNLESS THE CONNECTION METHOD IS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS.

STEEL CONNECTIONS IN THE TOWERS MAY BE MADE WITH ASTM A3125 GRADE A325 OR GRADE F1852 TENSION CONTROL BOLTS, OR FIELD WELDED. TOWER STEEL CONNECTIONS SHALL BE DESIGNED AS BEARING CONNECTIONS.

THE CONTRACTOR SHALL SUPPLY ALL PLATES, CLIPS, SEAT ANGLES, ANGLE BRACKETS, CONNECTIONS, ETCETERA, AS REQUIRED FOR COMPLETION OF THE STRUCTURE, EVEN IF SUCH ITEMS ARE NOT EXPLICITLY CALLED FOR ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS.

THE CONTRACTOR SHALL PROVIDE ALL EMBEDDED PLATES, SLEEVES, BOX OUTS, CONDUITS, ETCETERA, AS REQUIRED BY OTHER TRADES IN THE CONCRETE STRUCTURE.

FURNISH AND INSTALL ONE HARDENED WASHER AND HEAVY HEX NUT WITH ALL STRUCTURAL CONNECTION BOLTS AND ANCHOR BOLTS, UNLESS OTHERWISE INDICATED ON THE DRAWING.

PROVIDE ANCHOR BOLTS, SETTING PLATES AND EMBEDDED PLATES TO BE SET BY OTHERS.

PROVIDE 1/4-INCH THICK LEVELING PLATES FOR USE IN ALIGNING AND SETTING ANCHOR BOLTS AND BASE PLATES.

TOP-OF-STEEL ELEVATIONS INDICATED ON THE DRAWINGS REFER TO TOP OF TOP-BEAM-FLANGE.

CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD FRAME FOR WIND AND CONSTRUCTION LOADS.

MAKE SHOP AND FIELD CONNECTIONS, UNLESS WELDED, WITH 7/8-INCH MINIMUM DIAMETER ASTM A3125 GRADE A325 HIGH STRENGTH BOLTS; AND UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE STRUCTURAL DRAWINGS, WITH HOLES 1/16-INCH LARGER. INSTALL ONE HARDENED WASHER UNDER THE ELEMENT TURNED IN TIGHTENING.

UNLESS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS, ALL SIMPLY SUPPORTED BEAM-TO-COLUMN AND BEAM-TO-BEAM CONNECTIONS SHALL BE DOUBLE ANGLE IN CONFORMANCE WITH THE AISC MANUAL.

CONTRACTOR HAS THE OPTION TO USE TENSION SETS (TS) BOLTS, PROVIDED TS BOLTS ARE NOT FULLY TORQUED FOR SIMPLE BEAM CONNECTIONS, THUS ALLOWING FOR ROTATION OF BEAMS WHEN LOADED.

DESIGN AND DETAIL ALL CONNECTIONS ACCORDING TO AISC. ALL NON-COMPOSITE BEAM CONNECTIONS SHALL BE DESIGNED FOR THE MAXIMUM UNIFORM LOAD-CARRYING CAPACITY OF THE MEMBER. COMPOSITE BEAM CONNECTIONS SHALL BE DESIGNED FOR 1.8 TIMES THE UNIFORM LOAD-CARRYING CAPACITY OF THE MEMBER. COMPOSITE GIRDERS SHALL BE DESIGNED FOR 1.2 TIMES THE UNIFORM LOAD-CARRYING CAPACITY OF THE MEMBER. FOR DETERMINING COMPOSITE FACTORS, A BEAM SHALL BE DEFINED AS ANY MEMBER THAT DOES NOT SUPPORT ANOTHER BEAM. ALL OTHER MEMBERS SHALL BE CONSIDERED GIRDERS, EXCEPT THOSE THAT SUPPORT FRAMING FOR FLOOR OPENINGS, WHICH SHALL BE CONSIDERED BEAMS.

ALL EXPOSED, EXTERIOR STEEL SHALL BE GALVANIZED, PRIMED AND PAINTED WHITE. INTERIOR STEEL THAT IS CONCEALED BY WALLS SHALL BE SHOP-COATED WITH PRIMER. INTERIOR STEEL THAT IS EXPOSED SHALL BE SHOP-COATED WITH PRIMER AND PAINTED WHITE. ANCHOR BOLTS, HEAVY HEX NUTS AND WASHERS SHALL BE GALVANIZED ACCORDING TO ASTM A153.

STEEL ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM F1554 GRADE 55, ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.

BRACING MEMBERS SHALL BE DETAILED TO AVOID ECCENTRIC CONNECTIONS AND DETAILED FOR DRAWING TOGETHER.

ALL BOLTS CONNECTING BRACE FRAME AND MOMENT FRAME MEMBERS SHALL BE SLIP-CRITICAL BOLTS.

ALL COLUMN END SPLICES SHALL BE MILLED IN ACCORDANCE WITH THE TYPICAL DETAILS. BRACED FRAME COLUMN SPLICES SHALL BE DESIGNED IN ACCORDANCE WITH THE TYPICAL DETAILS. MOMENT FRAME COLUMN SPLICES SHALL BE DESIGNED IN ACCORDANCE WITH THE TYPICAL DETAILS.

MOMENT CONNECTIONS BETWEEN BEAMS AND COLUMNS THAT ARE INDICATED BY MOMENT SYMBOLS ON THE DRAWINGS SHALL BE DESIGNED AND DETAILED FOR THE ELASTIC MOMENT CAPACITY OF THE CONNECTING MEMBERS, EXCEPT WHERE THE VALUES OF THE MOMENTS ARE GIVEN ON THE DRAWINGS. IN THE LATTER CASE, THE CONNECTIONS SHALL BE DESIGNED FOR THE VALUES SHOWN ON THE DRAWINGS.

WELDED SHEAR CONNECTORS SHALL HAVE THE FOLLOWING SIZE: 3/4" DIAMETER. THE LENGTH OF SHEAR CONNECTORS SHALL BE 5" AT 6 1/4" SLAB.

THE CONNECTORS SHALL BE EQUALLY SPACED BETWEEN SUPPORTS, UNLESS NOTED OTHERWISE. A MINIMUM OF ONE SHEAR CONNECTOR PER FOOT OF BEAM LENGTH SHALL BE PROVIDED FOR ALL BEAMS AND GIRDERS WITH CONCRETE ON STEEL DECK. WHERE SHEAR CONNECTORS ARE NOT SHOWN, PROVIDE A MINIMUM OF ONE SHEAR CONNECTOR EVERY FOOT OF BEAM SPAN LENGTH.

ALL BEAMS ARE TO BE FABRICATED WITH NATURAL CAMBER UP.

ALL STIFFENER PLATES ARE TO BE PROVIDED IN PAIRS, EACH SIDE OF BEAM OR COLUMN WEB, UON.

PRIOR TO DETAILING STRUCTURAL STEEL THE FABRICATOR SHALL SUBMIT PLANS FOR EACH LEVEL AND CONFIRM ALL DIMENSIONS.

THE FRACTURE CONTROL PLAN IS APPLICABLE TO ALL FRACTURE CRITICAL MATERIAL DESIGNATED "FCM".

COMPOSITE STEEL DECK

STEEL DECK SHALL HAVE A MINIMUM YIELD STRENGTH (Fy) OF 33 KSI. THE DELIVERED THICKNESS IS TO BE DESIGNED BY THE SUPPLIER.

PROVIDE STEEL DECK WITH DEPTH AND MINIMUM THICKNESS INDICATED ON THE DRAWINGS.

THE DESIGN, MANUFACTURE AND ERECTION OF STEEL DECK AND ITS ANCHORAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STEEL DECK INSTITUTE'S (SDI) 'DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS'.

STEEL DECK AND ITS ANCHORAGE SHALL BE DESIGNED AND DETAILED TO SUPPORT THE CONSTRUCTION LOADS FOR THE PROJECT. CONSTRUCTION LOADS FOR WET CONCRETE SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

A. THE CONCRETE INSTALLATION METHODS
B. ADDITIONAL CONCRETE VOLUME OF 15% DUE TO PONDING
C. ADDITIONAL CONCRETE WEIGHT DUE TO DECK DEFLECTION

PROVIDE CHECKED SHOP DRAWINGS SHOWING EXACT LAYOUT OF COMPOSITE BEAM SHEAR CONNECTIONS FOR EACH BEAM, SPAN, AND DECK TYPE.

NO LOADS EXCEEDING 50 LBS SHALL BE PERMITTED TO BE HUNG FROM COMPOSITE DECKING HANGER TABS. HANGER LOADS SHALL BE DISTRIBUTED SUCH THAT THE RESULTING UNIFORM TRIBUTARY LOAD FOR EACH HANGER DOES NOT EXCEED 5 PSF.

STEEL DECK SPANS SHALL BE MINIMUM THREE SPANS CONTINUOUS WHENEVER POSSIBLE.

STEEL DECK SHALL BE WELDED TO THE SUPPORTING STEEL MEMBERS AT A MAXIMUM OF 12" ON CENTER, USING 3/4" PUDDLE WELDS OR BY WELDING OF SHEAR STUDS THROUGH THE STEEL DECK, AND SIDE LAP FASTENERS NOT EXCEEDING 12" ON CENTER U.O.N.

ALL DECKING SHALL BE WELDED TO STRUCTURAL STEEL BY QUALIFIED WELDERS USING PRE-QUALIFIED PROCEDURES. THE ERECTOR SHALL ESTABLISH A WELDING PROCEDURE FOR THE WELD OF THE STEEL DECKING TO THE STRUCTURAL STEEL FOR EACH GAUGE USED. PRIOR TO THE START OF ERECTION OF THE STEEL DECK, EACH WELDER SHALL BE QUALIFIED USING THIS PROCEDURE AS WITNESSED BY THE OWNER'S TESTING AND INSPECTION REPRESENTATIVE.

STATE PROJECT NUMBER

1000-57-70

COLD FORMED METAL FRAMING

THE DESIGN OF THE COLD FORMED METAL FRAMING SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND AS PER SPECIFICATION "GYPSUM BOARD PARTITIONS AND ASSEMBLIES".

CONTRACTOR SHALL SUBMIT SIGNED AND SEALED DESIGN CALCULATIONS FOR COLD FORMED FRAMING TO THE ENGINEER FOR APPROVAL. CALCULATIONS SHALL SHOW THE ADEQUACY OF FRAMING SYSTEM TO WITHSTAND DESIGN LOADS WITHOUT DEFLECTIONS GREATER THAN THE FOLLOWING:

A. EXTERIOR NON LOAD BEARING WALLS; LATERAL DEFLECTION OF 1/240 OF THE WALL HEIGHT

B. EXTERIOR LOAD BEARING WALLS; LATERAL DEFLECTION OF 1/360 OF THE WALL HEIGHT

C. FLOOR JOISTS; VERTICAL DEFLECTION OF 1/360 OF THE SPAN

DELEGATED DESIGN NOTES

DESIGN RESPONSIBILITY FOR THE FOLLOWING ENGINEERED SYSTEMS AND COMPONENTS IS DELEGATED TO A QUALIFIED SPECIALTY STRUCTURAL ENGINEER SELECTED BY THE CONTRACTOR. THESE SYSTEMS AND COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO:

A. STRUCTURAL STEEL CONNECTIONS, INCLUDING BRACED FRAME AND MOMENT FRAME CONNECTIONS, AND WELDED AND BOLTED TRUSS CONNECTIONS
B. COLD-FORMED STEEL FRAMING AND CONNECTIONS
C. STEEL STAIRS
D. PRE-ENGINEERED CANOPY STRUCTURES
E. CURTAIN WALL AND STOREFRONT WALL SYSTEMS
F. SPECIALTY FOUNDATION SYSTEMS SUCH AS HELICAL PILES

DELEGATED ENGINEERED SYSTEMS AND COMPONENTS SHALL SATISFY ASCE 7-10 (OR LATER) LOAD COMBINATIONS.

COORDINATE WITH THE CONTRACT SPECIAL PROVISIONS FOR PROFESSIONAL LICENSURE AND SEALING REQUIREMENTS, DESIGN CRITERIA, DETAILS OF THE SYSTEM/COMPONENT INTERFACE WITH THE PRIMARY STRUCTURE, SUBMITTAL REQUIREMENTS, AND CALCULATION REQUIREMENTS.

FOUNDATION NOTES

FOR FOUNDATION NOTES, SEE SHEET "TYPICAL SECTION AND QUANTITES".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB/DNJ PLANS CK'D. MJA

GENERAL NOTES

SHEET S-002
55

2

2

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljbuschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\03_Quantities and Typical Section
PLOT DATE: 10/14/2022 PLOT TIME: 11:59:35 AM BATCH PRINT SHEET 1 OF 1

STATE PROJECT NUMBER

1000-57-70

FOUNDATION NOTES

PROVIDE SHEETING, BRACING, AND UNDERPINNING TO PRESERVE ADJACENT STRUCTURE, AS REQUIRED.

FOUNDATIONS SHALL NOT BE PLACED IN WATER OR IN FROZEN GROUND.

PROVIDE A WELL COMPACTED SELECT GRAVEL BASE COURSE CONFORMING TO THE SPECIFICATIONS UNDER ALL SLABS ON GRADE.

ALL REQUIRED INSERTS SLEEVES, CONDUITS, EMBEDMENT AND PENETRATIONS MUST BE VERIFIED WITH RESPECTIVE TRADES BEFORE CASTING CONCRETE.

DOWELS FROM FOOTINGS INTO PIERS, COLUMNS, BUTTRESSES OR WALLS SHALL BE THE SAME SIZE AND NUMBER AS REINFORCEMENT IN PIERS, COLUMNS, BUTTRESSES OR WALLS ABOVE, EXCEPT AS OTHERWISE SHOWN.

CONTRACTOR SHALL PROVIDE CONTINUOUS DRAINAGE TO CONTROL SURFACE WATER, AS REQUIRED DURING CONSTRUCTION.

ALL FOOTINGS SHALL BE CENTERED UNDER SUPPORTED MEMBERS, UNLESS NOTED OTHERWISE ON PLANS.

DO NOT PLACE BACKFILL AGAINST WALLS UNTIL ALL SLABS AND WALL BRACING ARE IN PLACE AND AFTER CONCRETE HAS ATTAINED DESIGN STRENGTH. SHORE AND/OR BRACE WALLS AS REQUIRED IF BACKFILLING OPERATIONS ARE TO BE CARRIED OUT PRIOR TO PLACEMENT OF FLOOR SLABS.

PLACE BACKFILL AGAINST RETAINING WALLS - DESIGNED AS CANTILEVERED - AFTER CONCRETE HAS ATTAINED DESIGN STRENGTH AND BEFORE SLABS ARE IN PLACE.

WHERE BACKFILL IS TO BE PLACED ON BOTH SIDES OF FOUNDATIONS WALLS, PROVIDE A BALANCED BACKFILL AGAINST FOUNDATION WALLS TO ELIMINATE LATERAL LOADS EFFECTS, OR PROVIDE NECESSARY TEMPORARY LATERAL SUPPORT TO THE TOP OF THE WALL UNTIL PERMANENT SUPPORT IS INSTALLED.

BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY, AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557), IN LIFTS NOT EXCEEDING 6 INCHES.

BACKFILL MATERIAL AGAINST RETAINING WALLS - DESIGNED AS CANTILEVERS SHALL BE GRANULAR FILL.

HELICAL PILE DESIGN CRITERIA

UNFACTORED AXIAL LOADS:
DL = 10 KIPS
LL = 12 KIPS

MAXIMUM PILE SETTLEMENT = 1/4"

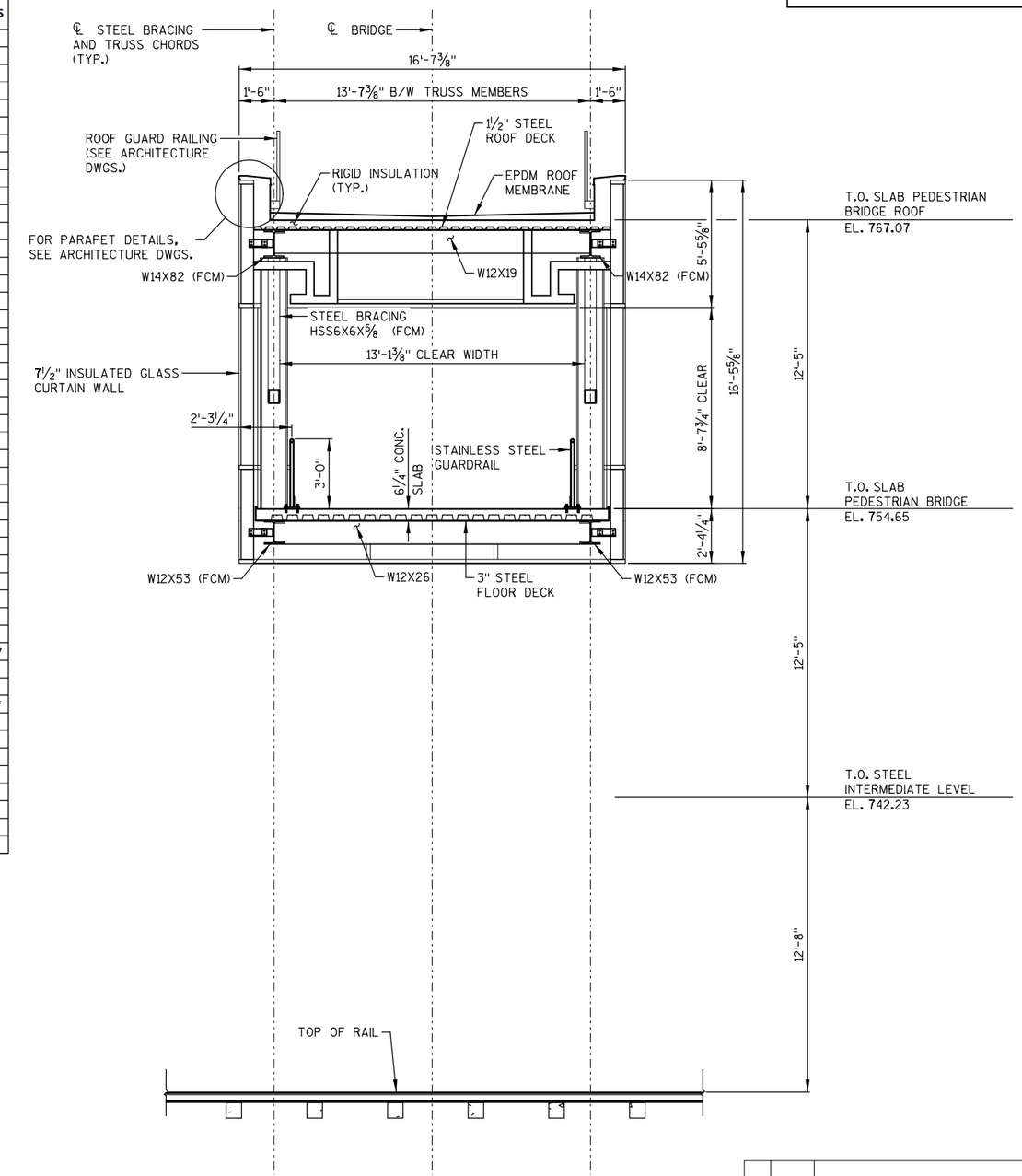
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
206.1001	EXCAVATION FOR STRUCTURES BRIDGES PEDESTRIAN BRIDGE	EACH	1
209.1100	BACKFILL GRANULAR GRADE 1	CY	303
210.1100	BACKFILL STRUCTURE TYPE A	CY	1082
502.0100	CONCRETE MASONRY BRIDGES	CY	718
502.4104	ADHESIVE ANCHORS 1/2-INCH	EACH	136
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	71100
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	56120
506.3009	WELDED STUD SHEAR CONNECTORS 3/4X5-INCH	EACH	679
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	292
517.0601	PAINTING EPOXY SYSTEM	EACH	1
550.2128	PILING CIP CONCRETE 12 3/4 X 0.50-INCH	LF	4600
SPV.0060.01	DIESEL-ENGINE-DRIVEN GENERATOR SETS	EACH	1
SPV.0060.02	CANOPY COLUMN ANCHOR ROD ASSEMBLIES	EACH	26
SPV.0060.03	TOWER COLUMN ANCHOR ROD ASSEMBLIES	EACH	46
SPV.0060.04	SWITCHBOARDS	EACH	1
SPV.0060.05	TRANSFER SWITCHES	EACH	1
SPV.0060.06	TRACTION ELEVATORS	EACH	4
SPV.0060.07	DOORS AND DOOR HARDWARE	EACH	22
SPV.0060.16	FALL RESTRAINT SYSTEM	EACH	1
SPV.0060.17	HVAC WORK	EACH	1
SPV.0060.18	LIGHTING	EACH	1
SPV.0060.19	GENERAL ELECTRICAL WORK	EACH	1
SPV.0060.20	FIRE ALARM SYSTEM	EACH	1
SPV.0060.21	LIGHTNING PROTECTION FOR STRUCTURES	EACH	1
SPV.0060.22	PLUMBING WORK	EACH	1
SPV.0060.23	STAIRS	EACH	1
SPV.0060.24	ROUGH CARPENTRY	EACH	1
SPV.0060.25	METAL FABRICATIONS	EACH	1
SPV.0060.26	GYPSUM BOARD PARTITIONS AND ASSEMBLIES	EACH	1
SPV.0060.27	CEILINGS	EACH	1
SPV.0060.28	INTERIOR AND EXTERIOR SIGNAGE	EACH	1
SPV.0060.29	OTHER ARCHITECTURAL WORK	EACH	1
SPV.0060.30	FIRE SUPPRESSION	EACH	1
SPV.0060.31	PIDS, COMMUNICATIONS, AND SECURITY WORK	EACH	1
SPV.0060.32	WHEELCHAIR LIFT ENCLOSURE, NEW AND RELOCATIONS	EACH	1
SPV.0085.01	STRUCTURAL STEEL	LB	371847
SPV.0090.01	RAILING PIPE	LF	180
SPV.0090.02	DRILLED SHAFT FOUNDATIONS 24-INCH	LF	555
SPV.0090.03	HELICAL PILE	LF	2190**
SPV.0165.01	MASONRY AND CAST STONE WORK	SF	9916
SPV.0165.02	STEEL DECKING	SF	8115
SPV.0165.03	ALUMINUM AND GLASS CURTAINWALLS	SF	7278
SPV.0165.04	ROOFING AND ACCESSORIES	SF	11995
SPV.0165.05	EXTERIOR METAL PANELS	SF	1274
SPV.0165.06	LOUVERS	SF	1278
SPV.0165.07	FINISHES	SF	20373
SPV.0165.08	TEMPORARY SHORING RAILROAD	SF	2400

SEE CIVIL PLANS FOR OTHER BID ITEMS INCLUDED IN THIS CONTRACT.

ALL CONCRETE FOR TOWER FLOOR SLABS (ELEVATED AND ON GRADE), FOOTINGS, BOARDING PLATFORM, AND WHEELCHAIR LIFT ENCLOSURE PADS IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES". CONCRETE FOR DRILLED SHAFTS IS INCLUDED IN THE BID ITEM "DRILLED SHAFT FOUNDATIONS 24-INCH".

** HELICAL PILE QUANTITY IS BASED ON AN ASSUMED LENGTH OF 15'. ACTUAL LENGTH WILL BE BASED ON THE DESIGN BY THE SUPPLIER.



1 / S-002 TYPICAL BRIDGE SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

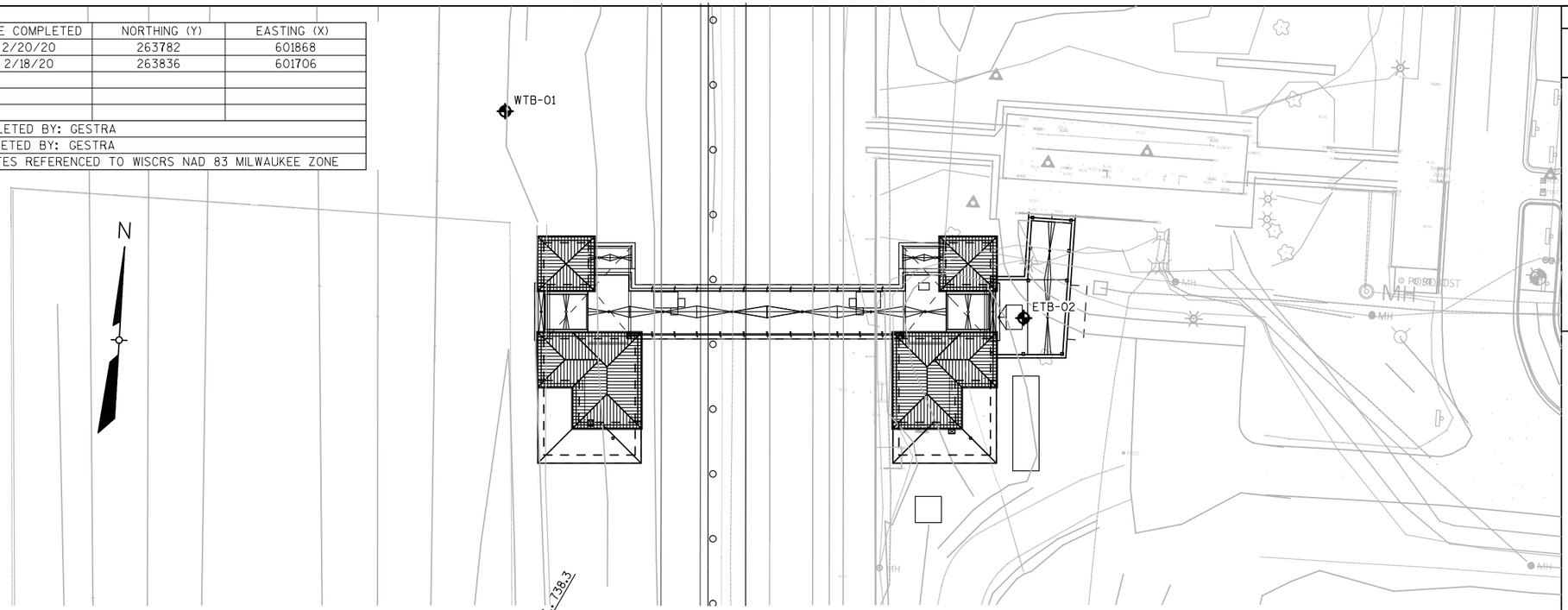
DRAWN BY CEB | PLANS CK'D. MJA

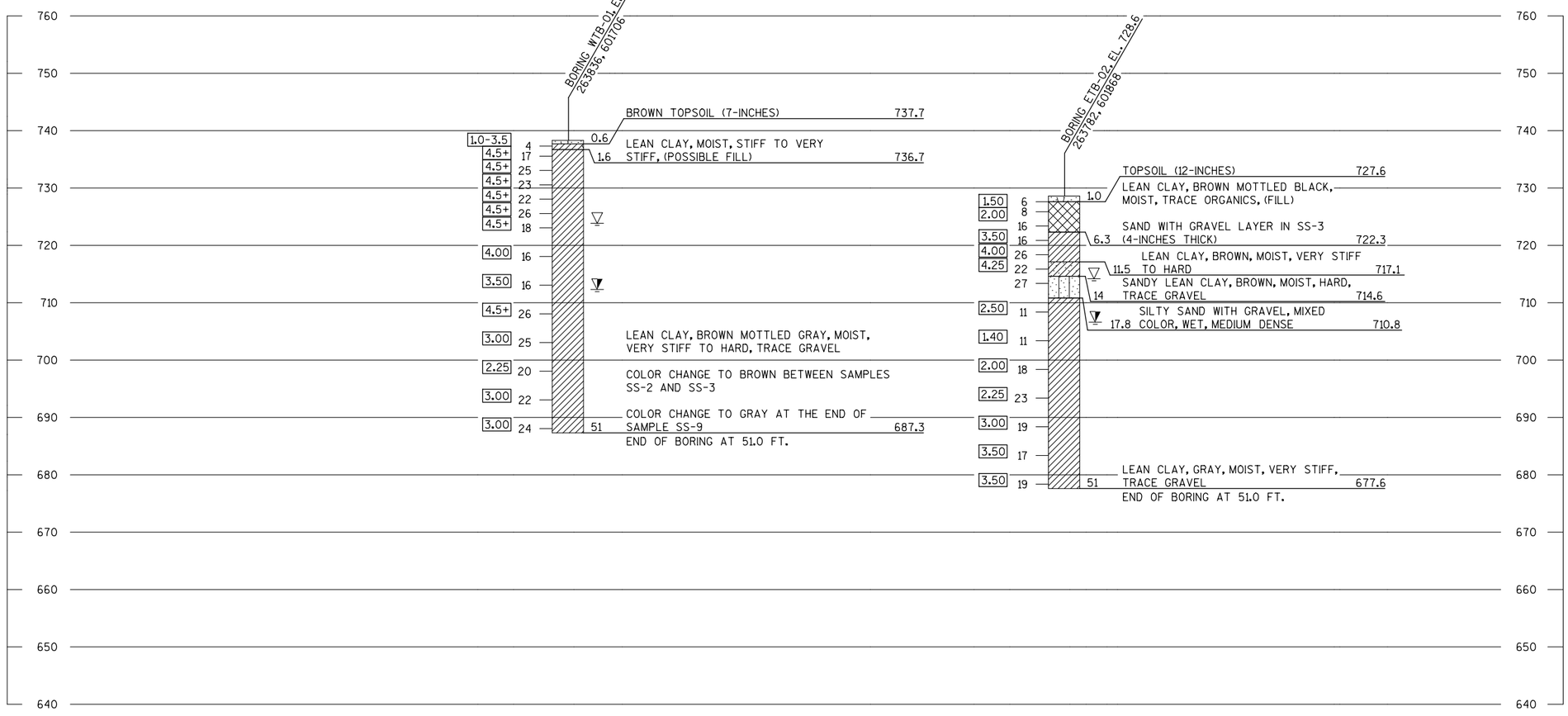
TYPICAL SECTION AND QUANTITIES

SHEET S-003
56

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





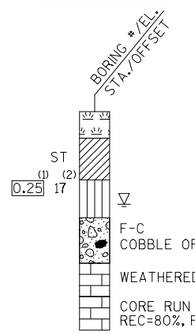
STATE PROJECT NUMBER

1000-57-70

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

PEDESTRIAN BRIDGE

DRAWN BY CEB | PLANS CK'D. MJA

SUBSURFACE EXPLORATION

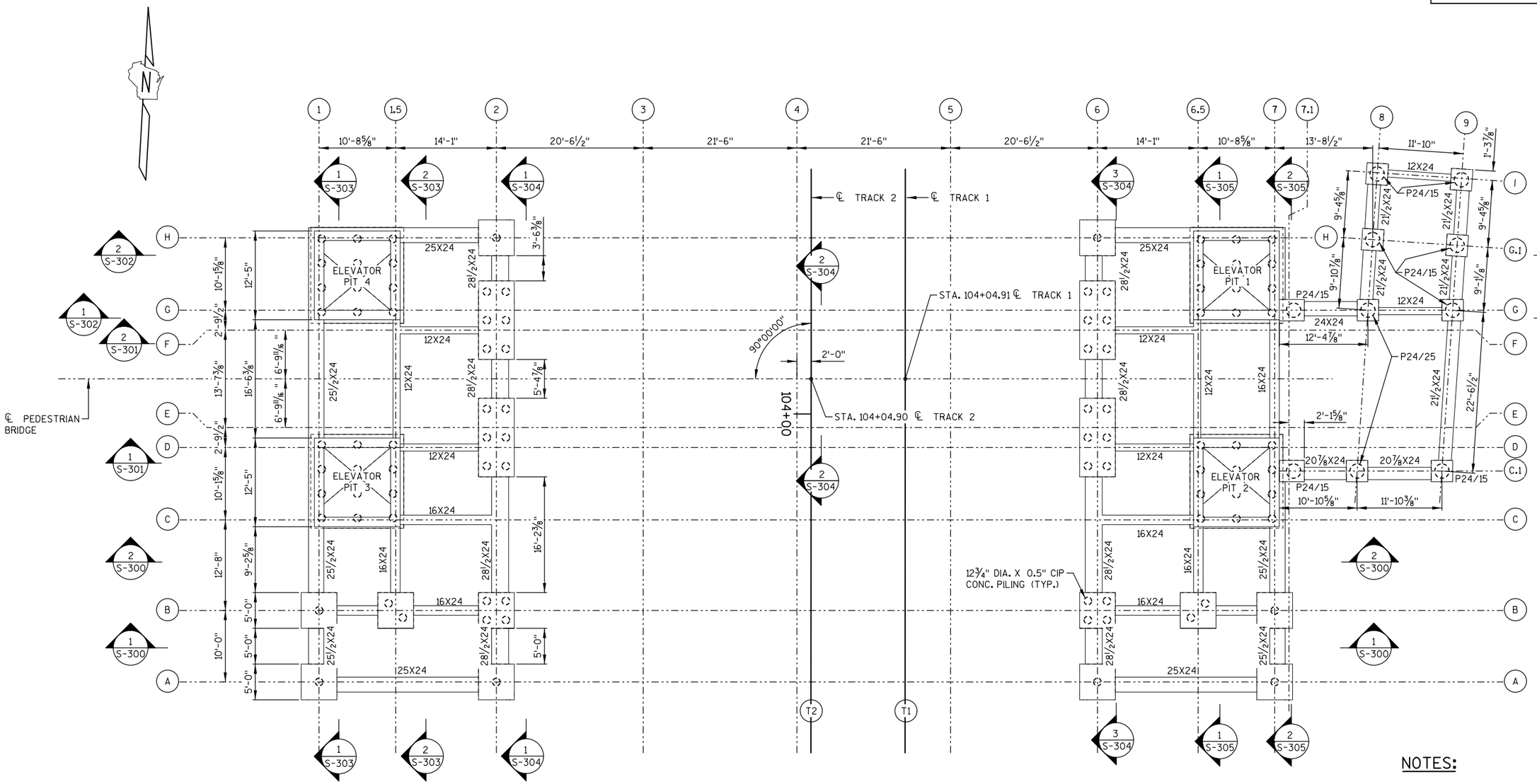
SHEET S-004
57

SCALE =

PRINTER DRIVER: c:\pwworking\aecom.ds20_na.2019\car-lyle.buschman@aecom.com\dms07634\AE_PDF_11.x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\AECOM_GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\04_Foundation Plan.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:32:46 PM
BATCH PRINT SHEET 5 OF 13

STATE PROJECT NUMBER

1000-57-70



1 S-100 FOUNDATION PLAN
NTS

DRILLED SHAFT LEGEND

PXX/XX
DIA. (INCHES) — SHAFT DEPTH (FEET)

FOUNDATION NOTE

PILE CAPS SHALL BE SUPPORTED ON 12¾" DIA. X 0.5" CIP CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED PILE LENGTH = 50 FT

THE ENTRYWAY IS SUPPORTED ON 24" DIA. CONCRETE DRILLED SHAFTS. SEE PLAN FOR SHAFT DEPTHS.

NOTES:

FOR BUILDING FOUNDATION DETAILS, SEE SHEETS "BUILDING FOUNDATION DETAILS TYPE 1", "BUILDING FOUNDATION DETAILS TYPE 2" AND "BUILDING FOUNDATION DETAILS TYPE 3".

FOR ELEVATOR PIT FOUNDATION DETAILS, SEE SHEETS "ELEVATOR PIT 1 DETAILS", "ELEVATOR PIT 2 DETAILS", "ELEVATOR PIT 3 DETAILS" AND "ELEVATOR PIT 4 DETAILS".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

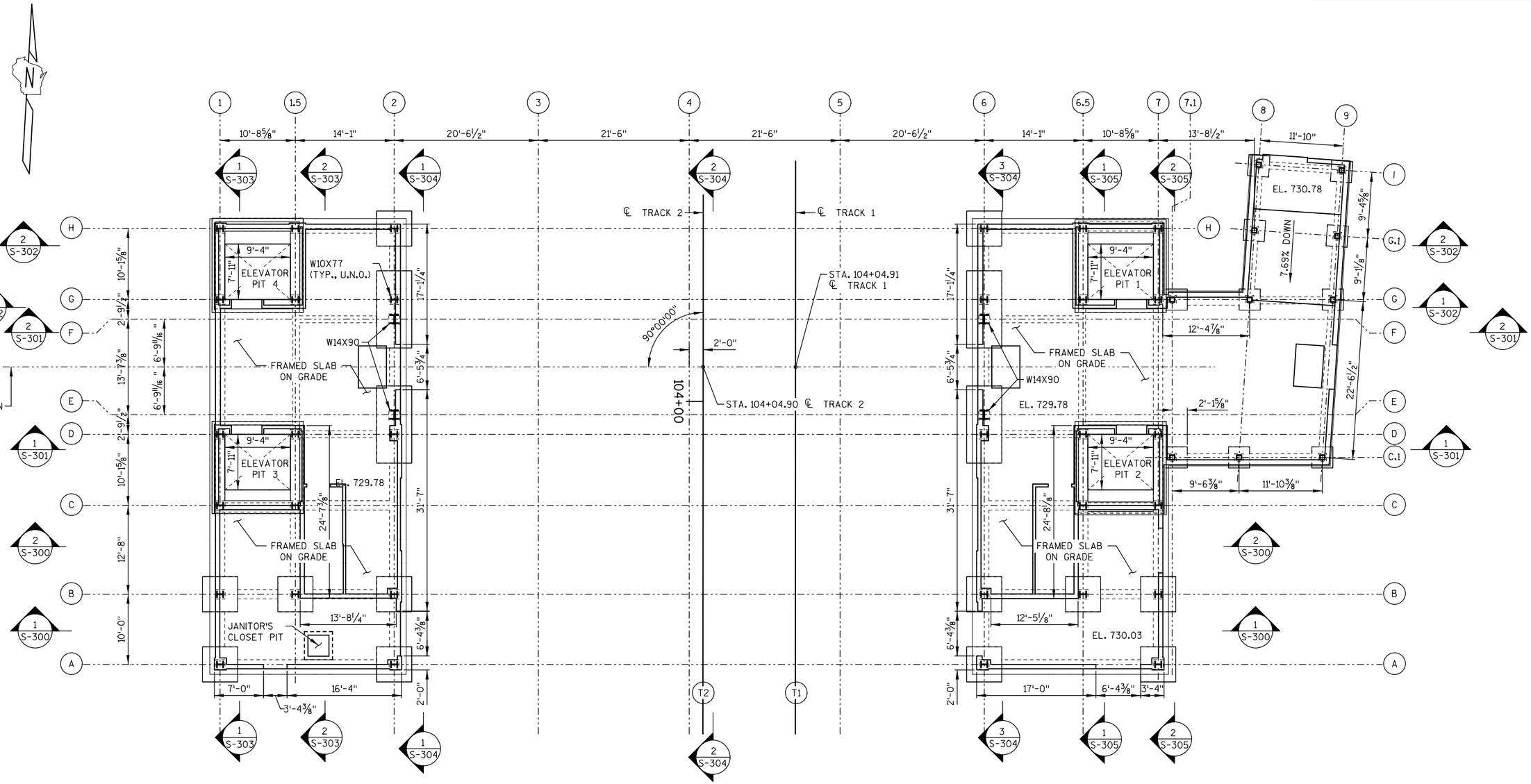
DRAWN BY CEB | PLANS CK'D. MJA

FOUNDATION PLAN

SHEET S-100
58

STATE PROJECT NUMBER

1000-57-70



1 S-101 PLATFORM LEVEL
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

PLATFORM LEVEL

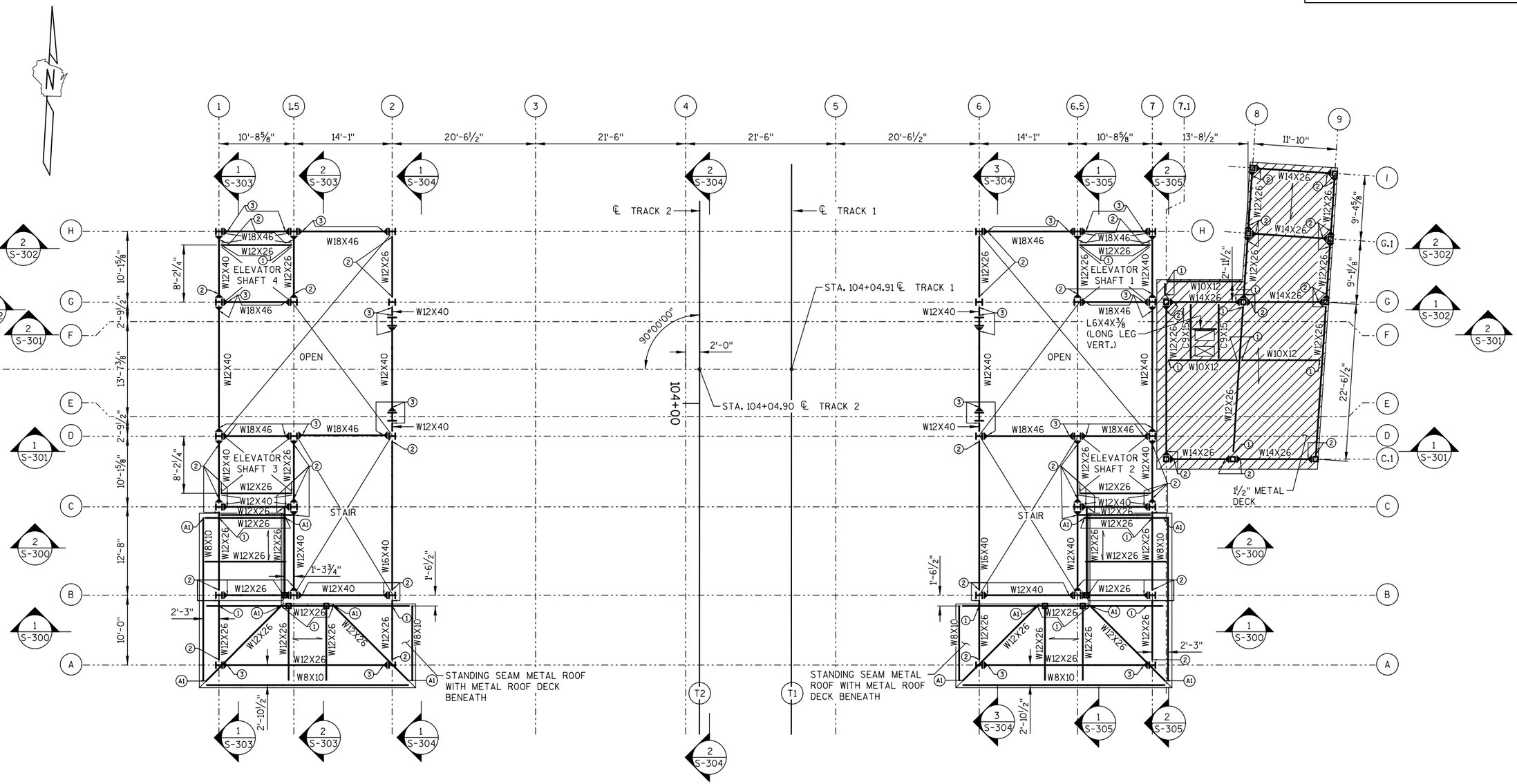
SHEET S-101
59

PRINTER DRIVER: c:\pwworking\aecom.ds20.na.2019\carl.buschman@aecom.com\d0763414\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\05_Platform Level.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:32:54 PM
BATCH PRINT SHEET 6 OF 13

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carly.buschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\aecom-nor-pw.bentley.com:AECOM.DS20_NA_2019\Documents\AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\06_Intermediate Level.dgn
FILE NAME: pw:\aecom-nor-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\06_Intermediate Level.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:33:01 PM
BATCH PRINT SHEET 7 OF 13

STATE PROJECT NUMBER

1000-57-70



1 S-102 INTERMEDIATE LEVEL
NTS

LEGEND:

(1) SHEAR LOAD = 5 KIPS
(2) SHEAR LOAD = 10 KIPS
(3) SHEAR LOAD = 15 KIPS
(4) SHEAR LOAD = 20 KIPS
(5) SHEAR LOAD = 25 KIPS
(A1) WELDED CONNECTION

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

LEGEND

DIRECTION OF METAL ROOF DECKING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

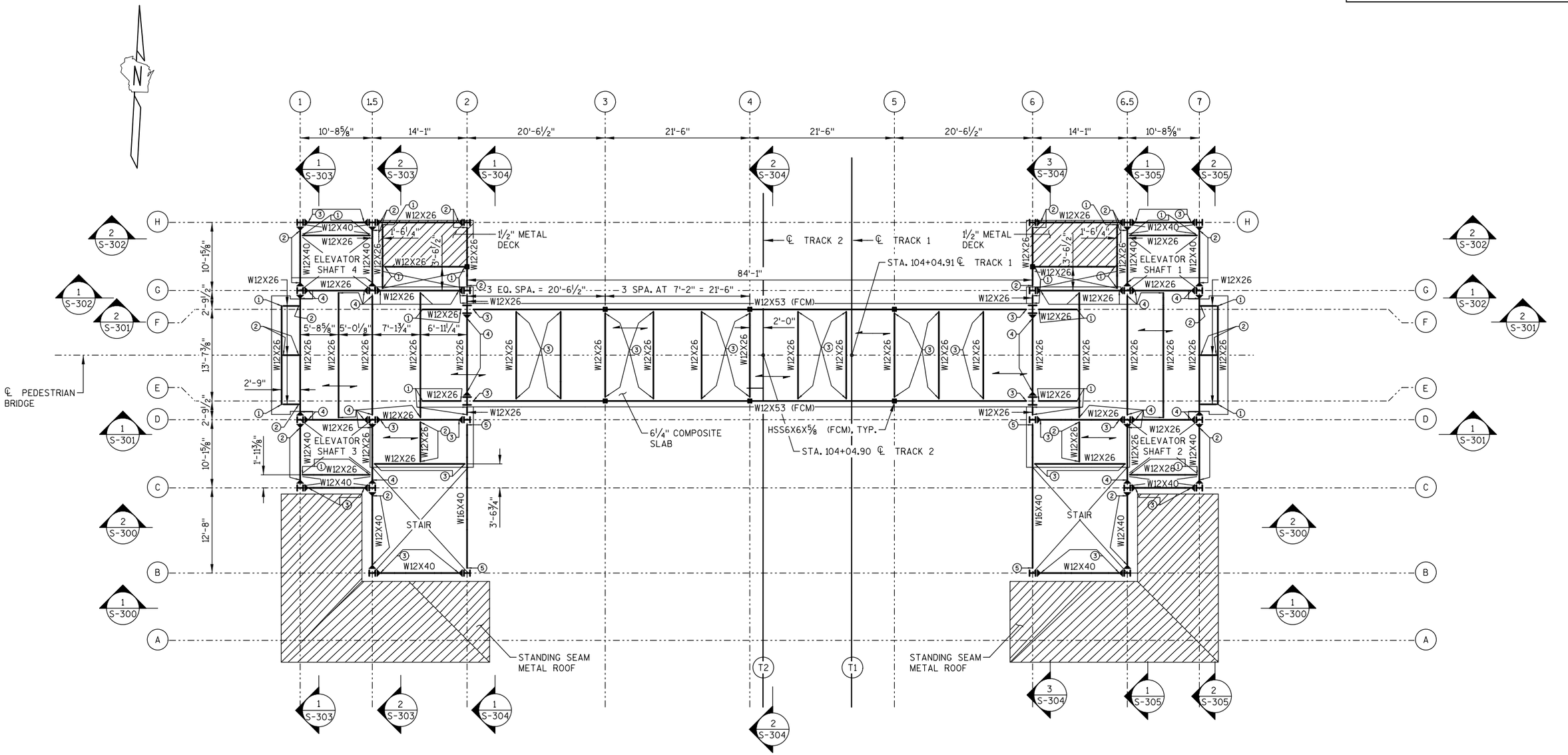
DRAWN BY CEB | PLANS CK'D. MJA

INTERMEDIATE LEVEL

SHEET S-102
60

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_DS20_NA_2019\Documents\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\07_Bridge Level.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:33:09 PM
BATCH PRINT SHEET 8 OF 13

STATE PROJECT NUMBER
1000-57-70



1 S-103 PEDESTRIAN BRIDGE LEVEL
NTS

LEGEND:

(1) SHEAR LOAD = 5 KIPS
(2) SHEAR LOAD = 10 KIPS
(3) SHEAR LOAD = 15 KIPS
(4) SHEAR LOAD = 20 KIPS
(5) SHEAR LOAD = 25 KIPS

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

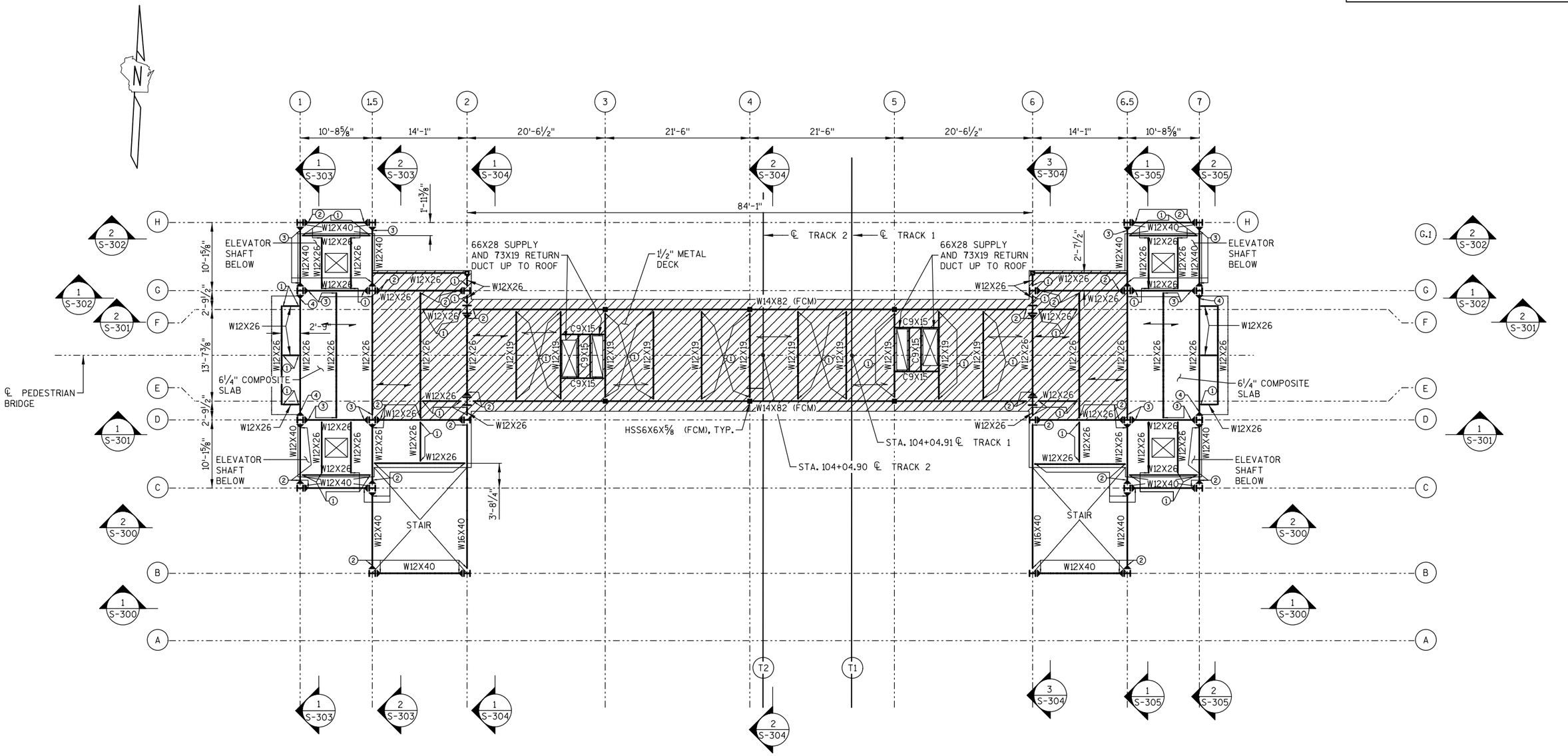
DRAWN BY CEB | PLANS CK'D. MJA

PEDESTRIAN BRIDGE LEVEL

SHEET S-103
61

STATE PROJECT NUMBER

1000-57-70



1 S-104 TOP OF PEDESTRIAN BRIDGE LEVEL
NTS

LEGEND:

(1) SHEAR LOAD = 5 KIPS
(2) SHEAR LOAD = 10 KIPS
(3) SHEAR LOAD = 15 KIPS
(4) SHEAR LOAD = 20 KIPS
(5) SHEAR LOAD = 25 KIPS

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

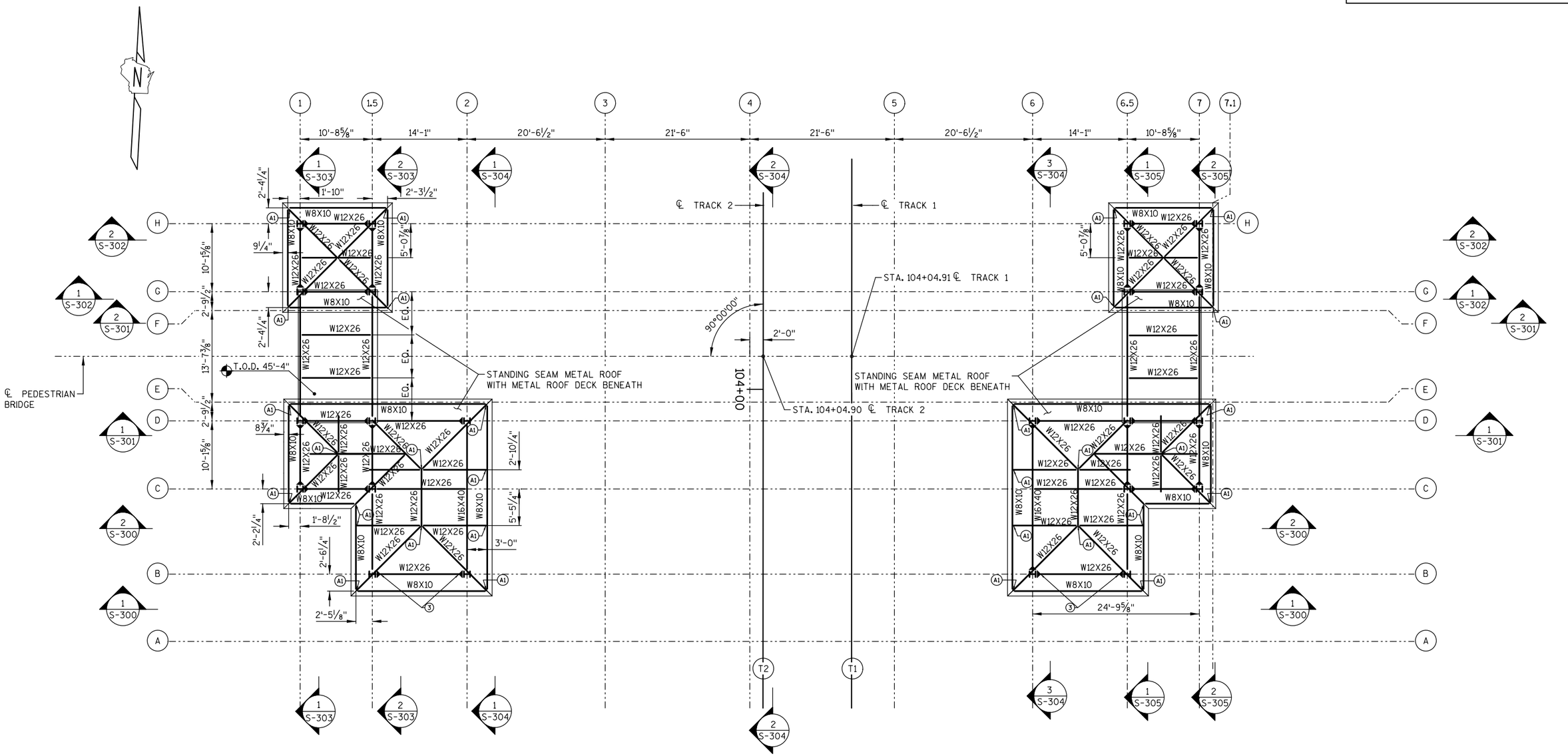
TOP OF PEDESTRIAN BRIDGE LEVEL

SHEET S-104
62

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vdms07634\AE PDF 11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\00_Top of Bridge Level.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:33:17 PM
BATCH PRINT SHEET 9 OF 13

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubuschman@aecom.com\vms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\09_Tower Roof Level.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:33:26 PM
BATCH PRINT SHEET 10 OF 13

STATE PROJECT NUMBER
1000-57-70



1 S-105 TOWER ROOF LEVEL
NTS

LEGEND:

(1) SHEAR LOAD = 5 KIPS
(2) SHEAR LOAD = 10 KIPS
(3) SHEAR LOAD = 15 KIPS
(4) SHEAR LOAD = 20 KIPS
(5) SHEAR LOAD = 25 KIPS
(A1) WELDED CONNECTION

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NOTES:

CONNECTION SHEAR LOAD = 5 KIPS UNLESS SHOWN OTHERWISE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

TOWER ROOF LEVEL

SHEET S-105
63

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carlyj.buschman@aecom.com\dms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\10_Platform General Plan.dgn
PLOT DATE: 7/14/2022 PLOT TIME: 1:15:20 PM BATCH PRINT SHEET 1 OF 1

STATE PROJECT NUMBER

1000-57-70

WEST TOWER

AREA OF SAFE REFUGE

EXISTING FENCE

TREE LINE

STA. 100+00 5.33' LT.

STA. 100+26.05 8.50' LT.

56'-0"

800'-0" (PLATFORM)

500'-0" (CANOPY)

25 SPACES AT 19'-10" = 495'-10" (CANOPY FOUNDATION)

GUTTER

2'-1" TYP.

CANOPY FOUNDATION (TYP.)

100+00

102+00

104+00

10+00

11+00

11+43.33

27'-7⅝"

25'-1¾"

12'-0"

5'-4"

MCI/VERIZON (TO BE RELOCATED)

NEW CANOPY

℄ TRACK 1

℄ TRACK 2

PEDESTRIAN BRIDGE

MATCHLINE STA. 104+26.00

CONCRETE PLATFORM

EXISTING PLATFORM

EXISTING CANOPY

INTERTRACK FENCE

GMIA - ELECTRIC (TO BE RELOCATED)

ROGERS TELECOM - COMMUNICATIONS (TO BE RELOCATED)

EAST TOWER

EXISTING FENCE

TELEPHONE LINE

STA. 108+00 5.33' LT.

AREA OF SAFE REFUGE

STA. 105+26.05 8.50' LT.

TREE LINE

EXISTING RETAINING WALL

56'-0"

800'-0" (PLATFORM)

500'-0" (CANOPY)

25 SPACES AT 19'-10" = 495'-10" (CANOPY FOUNDATION)

GUTTER

MCI/VERIZON (TO BE RELOCATED)

CONCRETE PLATFORM

INTERTRACK FENCE

15'-0" RAMP

18'-0"

6'-7⅝"

CHAIN LINK FENCE AND GATE

108+00

106+00

℄ TRACK 2

EMERGENCY CROSSING

EXP. JT.

NEW WHEELCHAIR LIFT ENCLOSURE

EXPANSION JOINT

MATCHLINE STA. 104+26.00

EXISTING CANOPY

℄ TRACK 1

EXISTING PLATFORM

GMIA - ELECTRIC (TO BE RELOCATED)

CHAIN LINK FENCE AND GATE

EXISTING RETAINING WALL

GMIA - ELECTRIC (TO BE RELOCATED)

WISDOT FIBER OPTIC

EXISTING FENCE

RELOCATED WHEELCHAIR LIFT ENCLOSURE. LOCATE TO AVOID EXISTING CANOPY COLUMNS

ROGERS TELECOM - COMMUNICATIONS (TO BE RELOCATED)

DRAIN PIPE

EXISTING AMTRAK STATION BUILDING

1 S-106 PLATFORM PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY GTS | PLANS CK'D. MJA

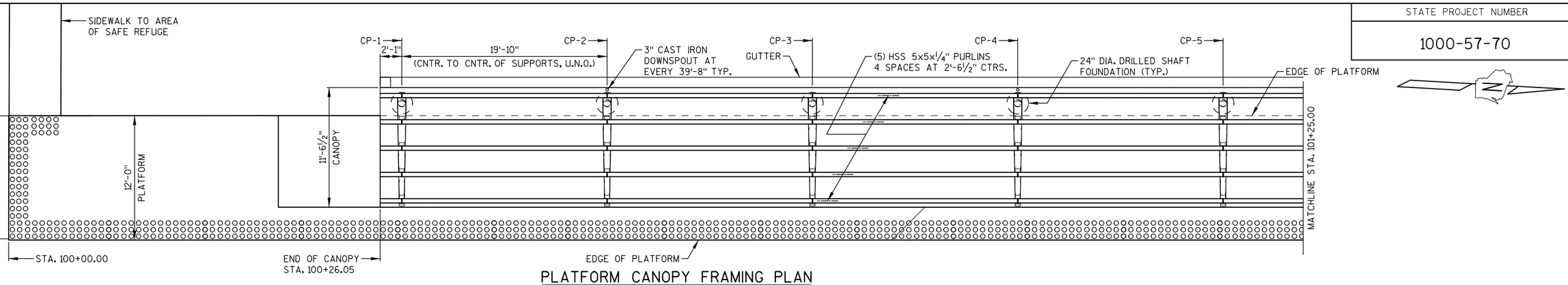
PLATFORM PLAN

SHEET S-106
64

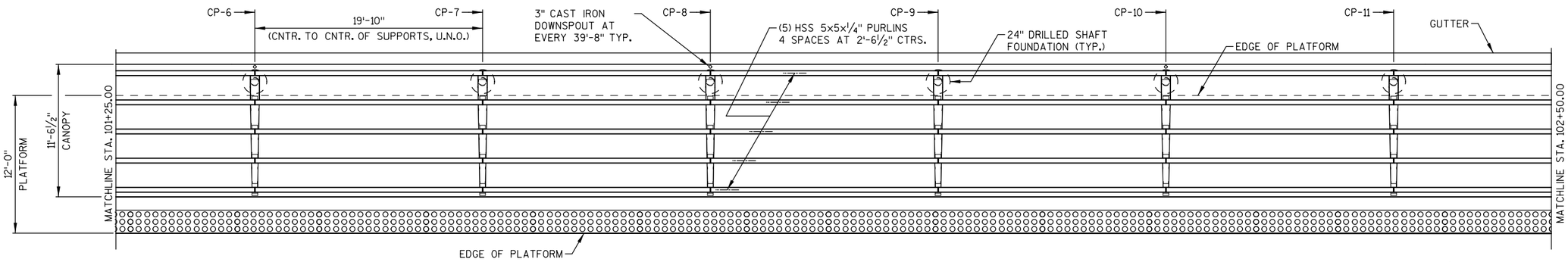
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbuschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\10a_Platform Canopy Framing Plan
PLOT DATE: 7/12/2022 PLOT TIME: 4:34:18 PM
BATCH PRINT SHEET 12 OF 13

STATE PROJECT NUMBER

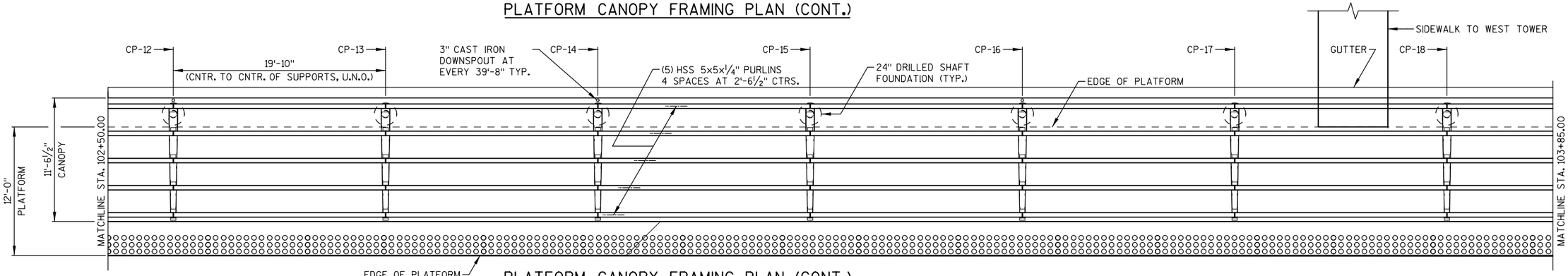
1000-57-70



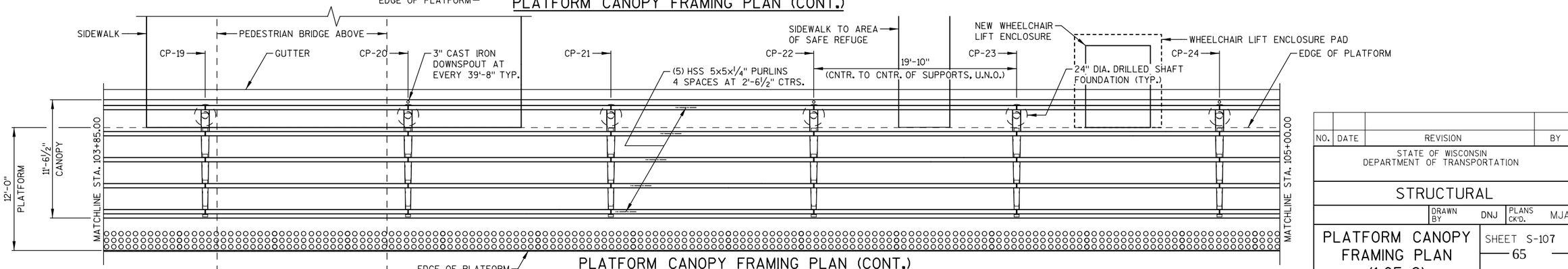
PLATFORM CANOPY FRAMING PLAN



PLATFORM CANOPY FRAMING PLAN (CONT.)



PLATFORM CANOPY FRAMING PLAN (CONT.)



PLATFORM CANOPY FRAMING PLAN (CONT.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY DNJ | PLANS CK'D. MJA

PLATFORM CANOPY FRAMING PLAN (1 OF 2)

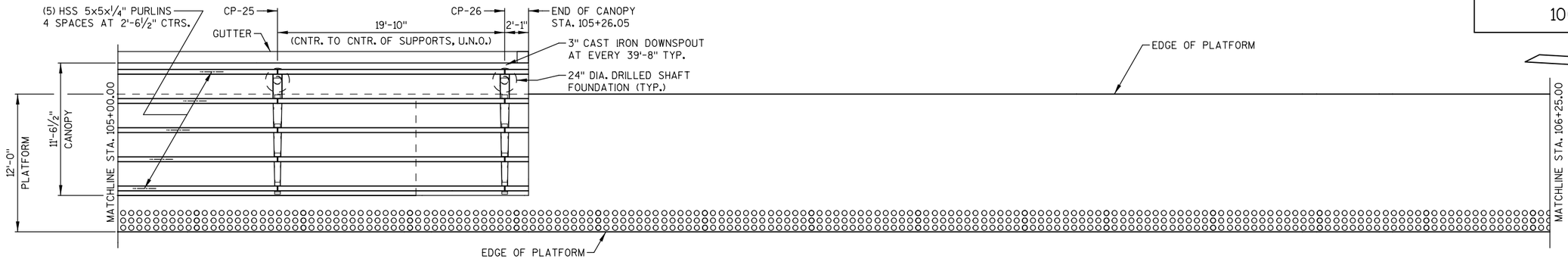
SHEET S-107

65

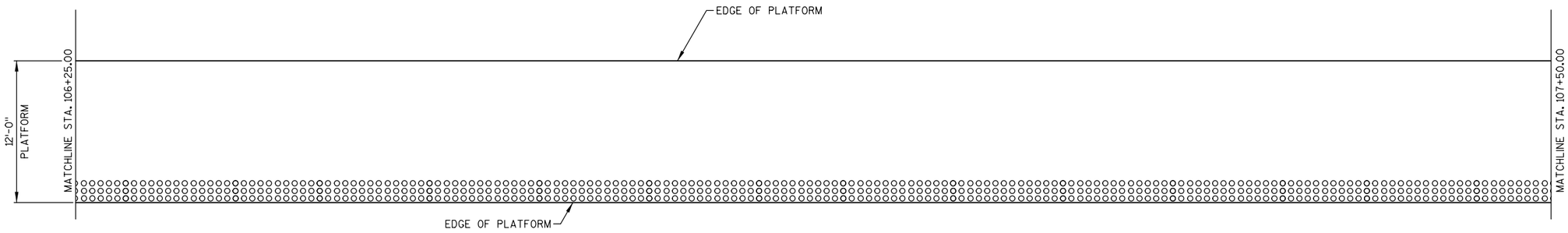
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubuschman@aecom.com\vms077634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\10a_Platform Canopy Framing Plan
PLOT DATE: 7/12/2022 PLOT TIME: 4:34:29 PM
BATCH PRINT SHEET 13 OF 13

STATE PROJECT NUMBER

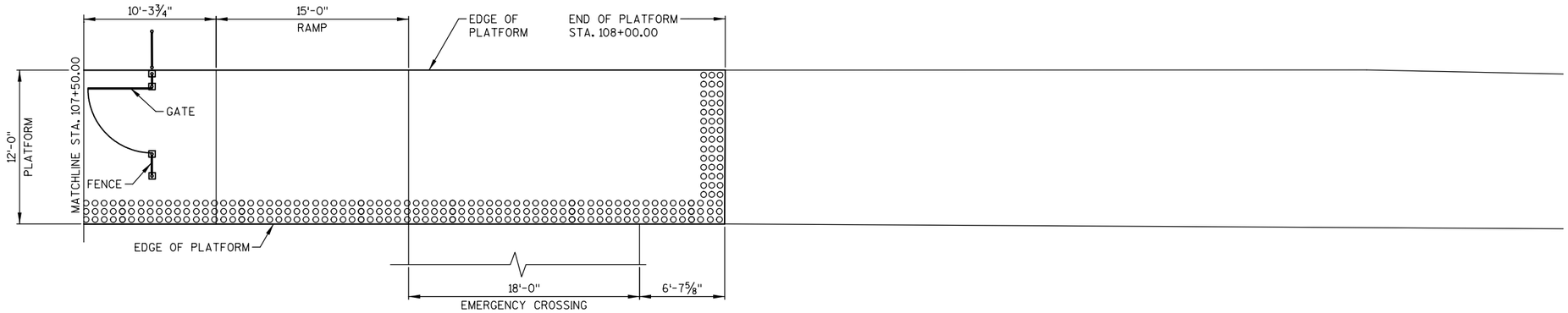
1000-57-70



PLATFORM CANOPY FRAMING PLAN



PLATFORM CANOPY FRAMING PLAN (CONT.)



PLATFORM CANOPY FRAMING PLAN (CONT.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY DNJ | PLANS CK'D. MJA

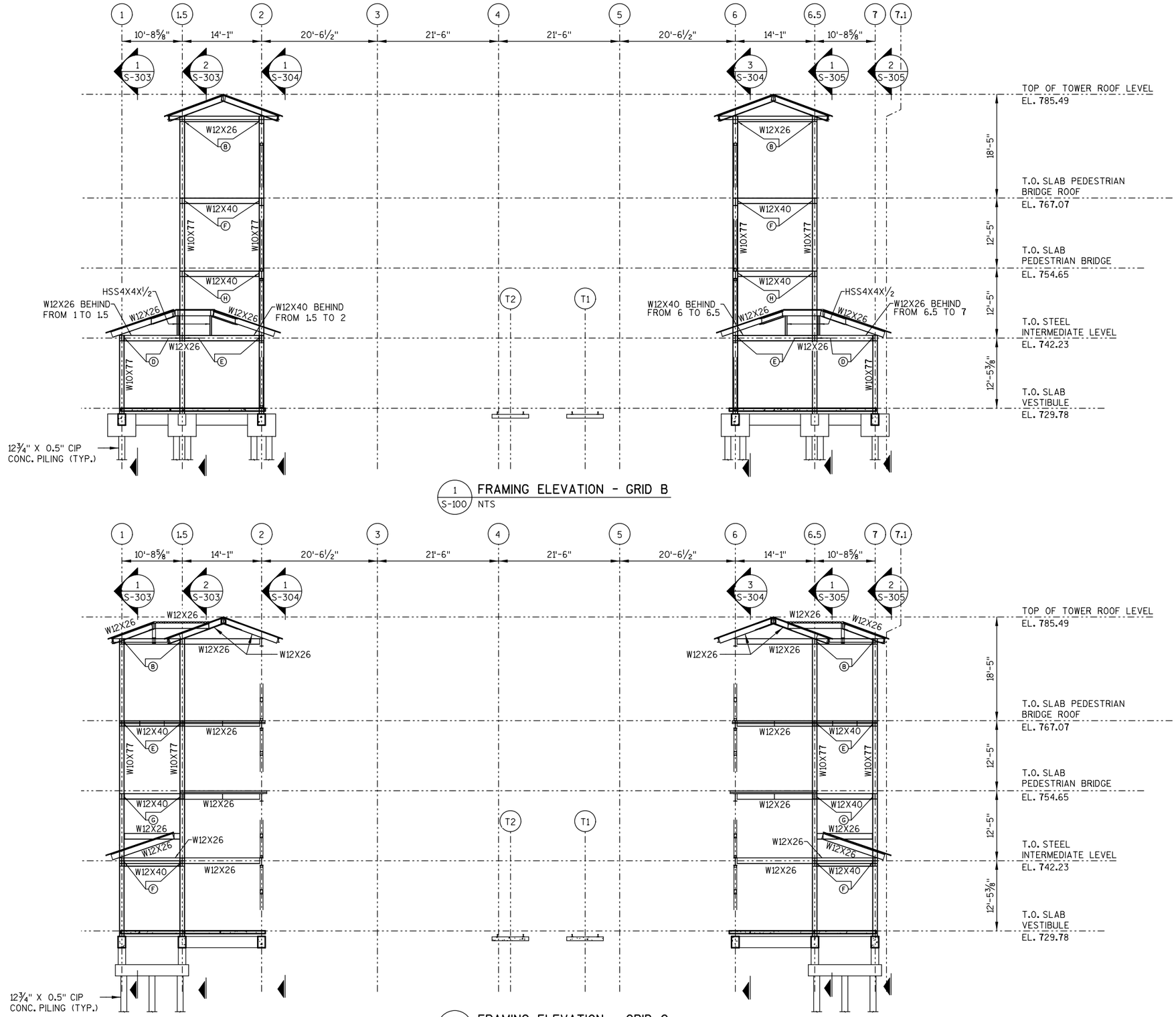
PLATFORM CANOPY FRAMING PLAN (2 OF 2)

SHEET S-108

66

PRINTER DRIVER: c:\pwworking\aecom_ds20_na.2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-nar-pw.bentley.com:AECOM_DS20_NA.2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\aecom-nar-pw.bentley.com:AECOM_DS20_NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\11_Section Grid A B.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:38:53 PM BATCH PRINT SHEET 1 OF 14

STATE PROJECT NUMBER
1000-57-70



1 S-100 FRAMING ELEVATION - GRID B
NTS

2 S-100 FRAMING ELEVATION - GRID C
NTS

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

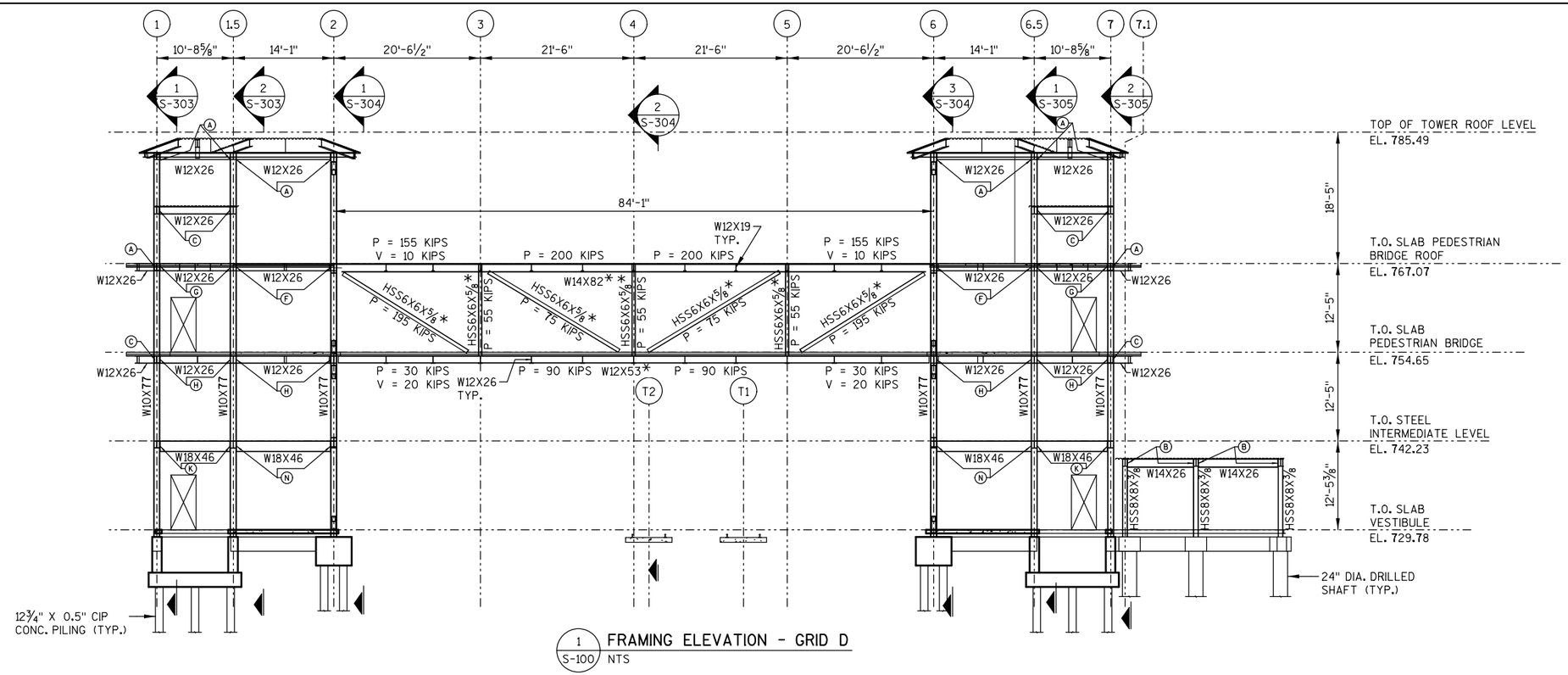
LONGITUDINAL SECTION - GRID B & C

SHEET S-300
67

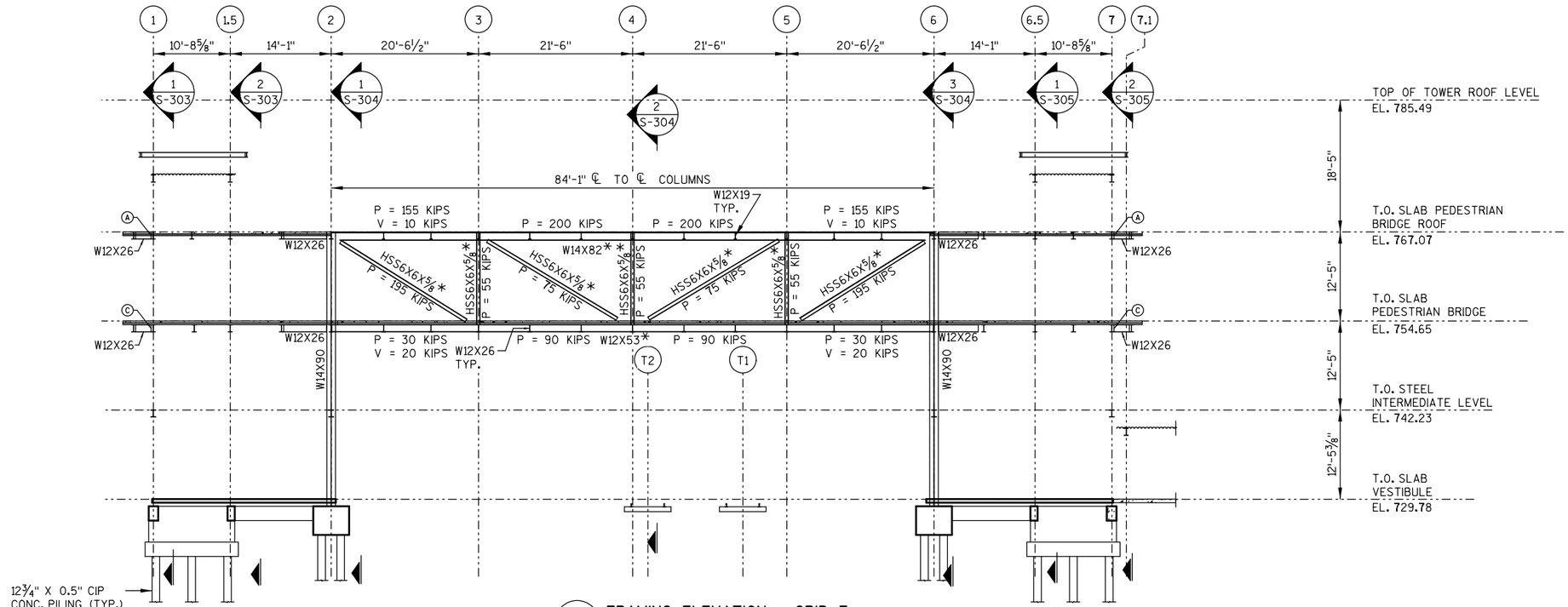
2

2

PRINTER DRIVER: c:\pw\working\aecom_ds20_na_2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\12_Section Grid C E.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:39:04 PM
BATCH PRINT SHEET 2 OF 14



1 S-100 FRAMING ELEVATION - GRID D
NTS



2 S-100 FRAMING ELEVATION - GRID F
NTS

STATE PROJECT NUMBER

1000-57-70

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

* FRACTURE CRITICAL MEMBER (FCM)

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

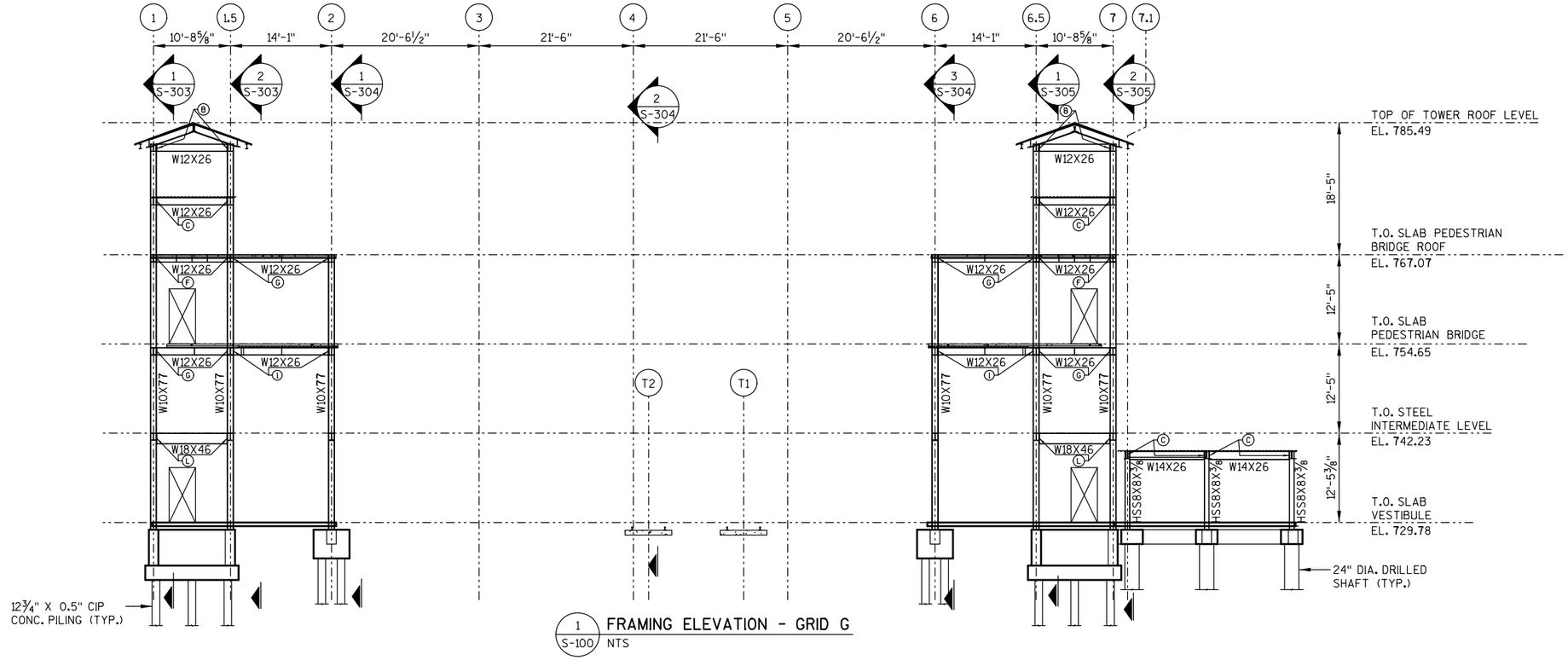
STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

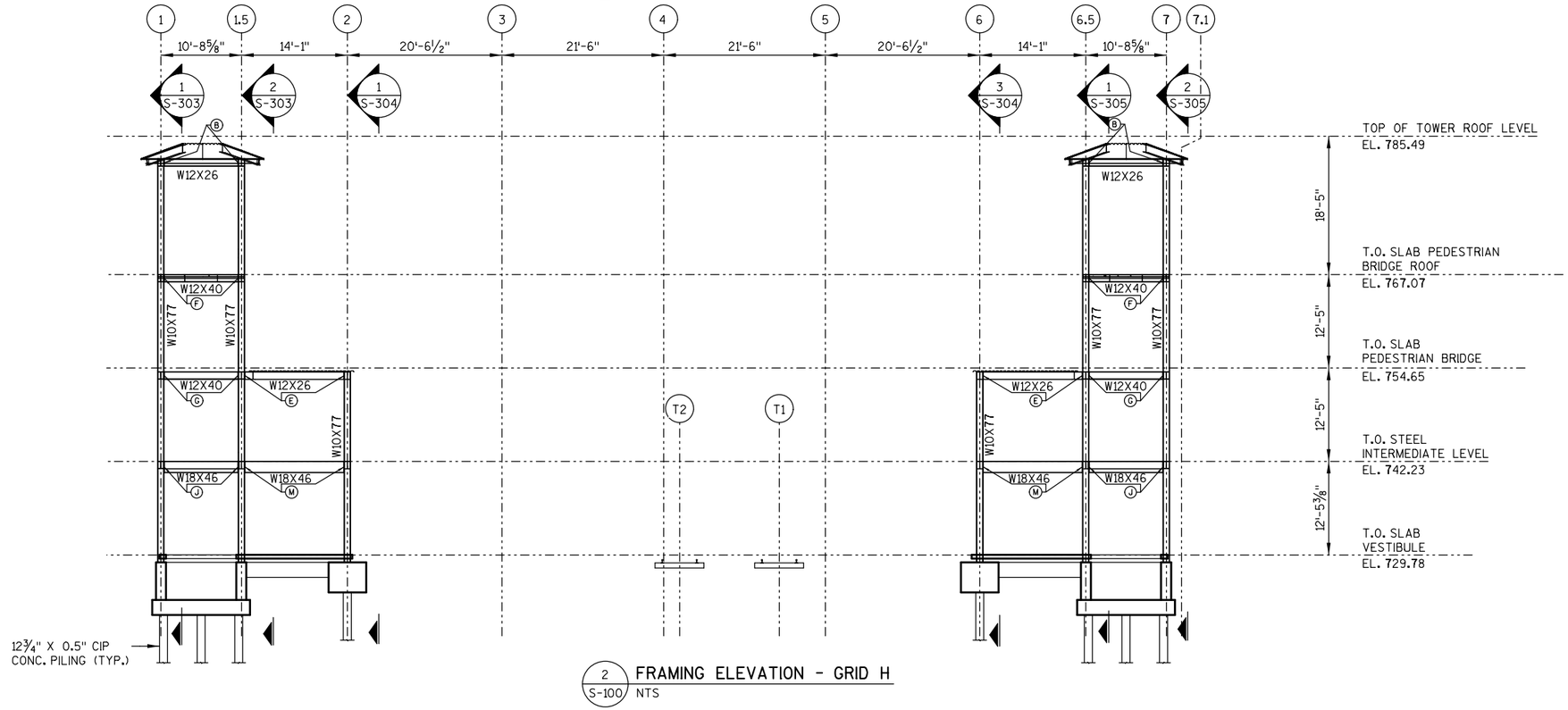
LONGITUDINAL SECTION - GRID D & F

SHEET S-301
68

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carl.jubuschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\13_Section Grid G H.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:39:14 PM
BATCH PRINT SHEET 3 OF 14



1 S-100 FRAMING ELEVATION - GRID G
NTS



2 S-100 FRAMING ELEVATION - GRID H
NTS

STATE PROJECT NUMBER

1000-57-70

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

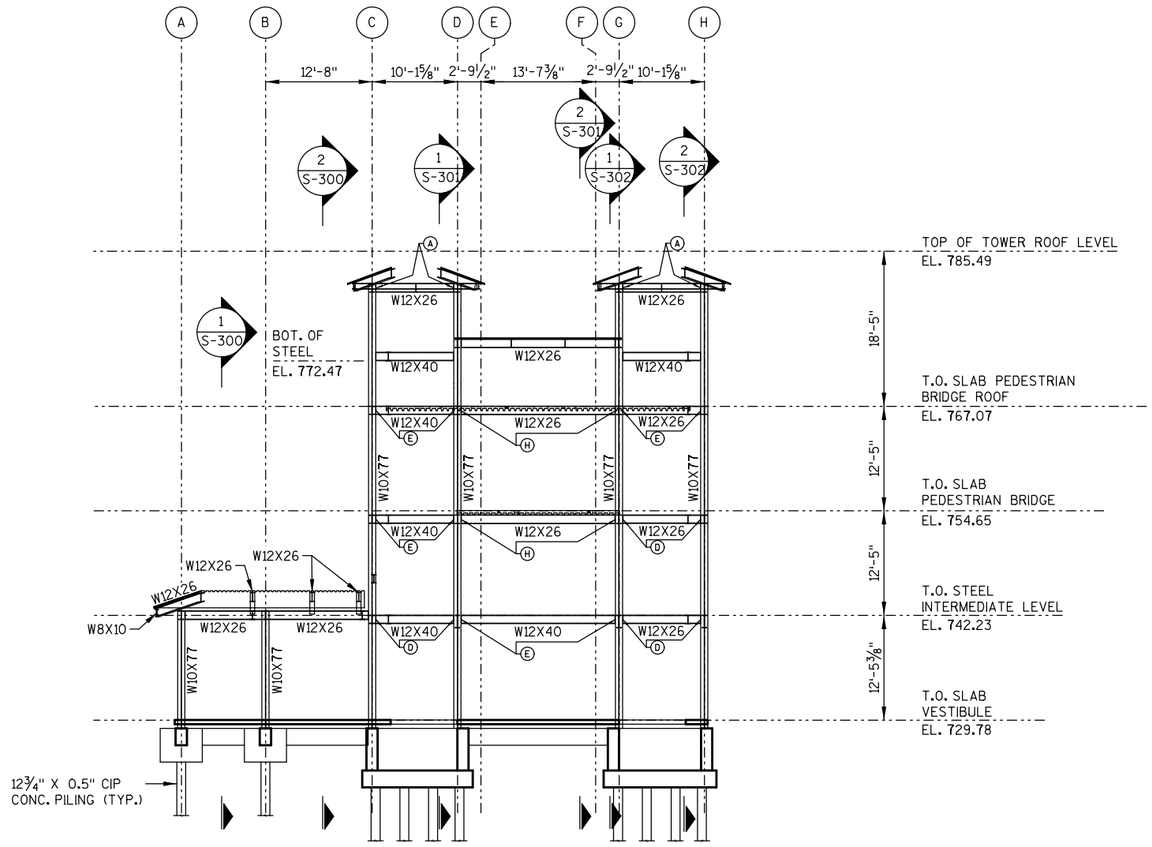
STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

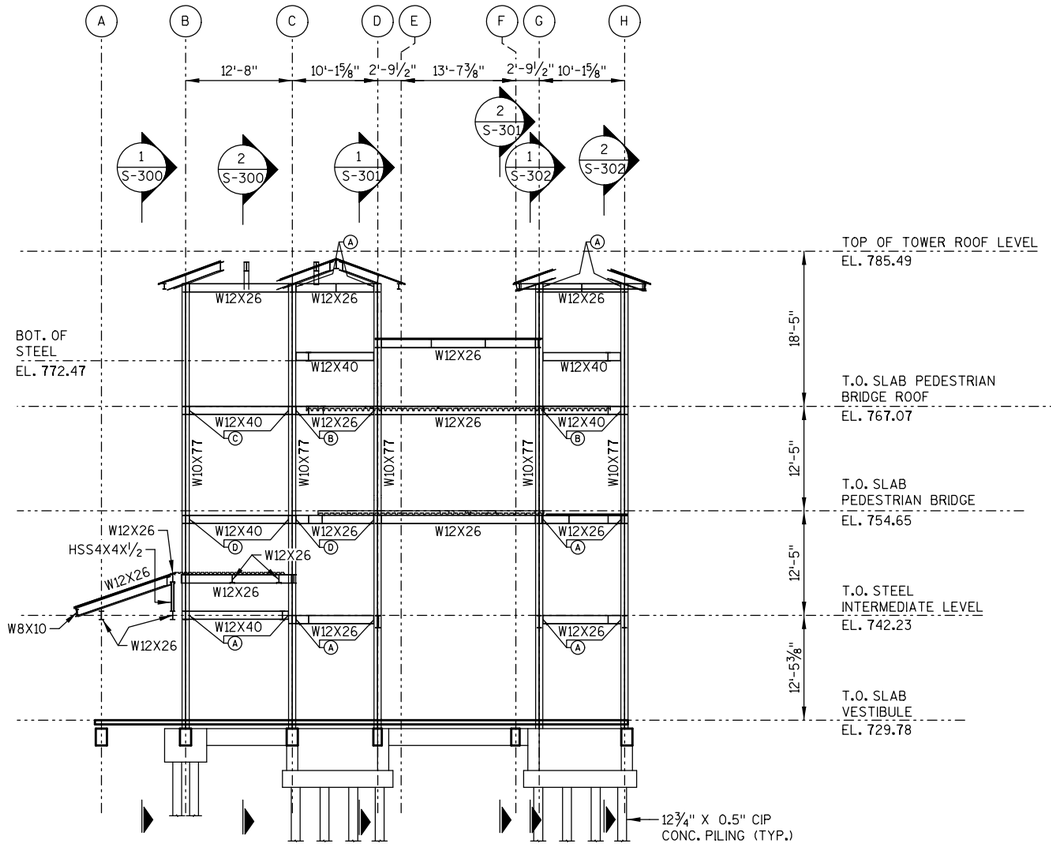
LONGITUDINAL SECTION - GRID G & H

SHEET S-302
69

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbuschman@aecom.com\d0617634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\14_Section Grid 1 1.5.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:34:22 PM
BATCH PRINT SHEET 4 OF 14



1 S-100 FRAMING ELEVATION - GRID 1
NTS



2 S-100 FRAMING ELEVATION - GRID 1.5
NTS

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

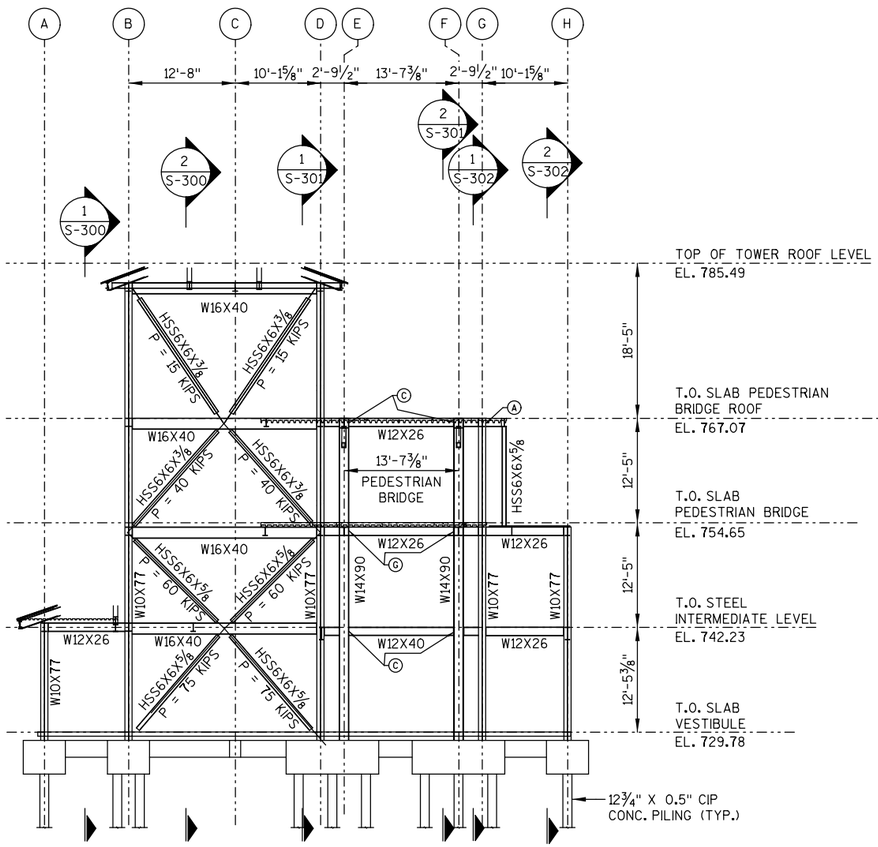
TRANSVERSE SECTION - GRID 1 & 1.5

SHEET S-303
70

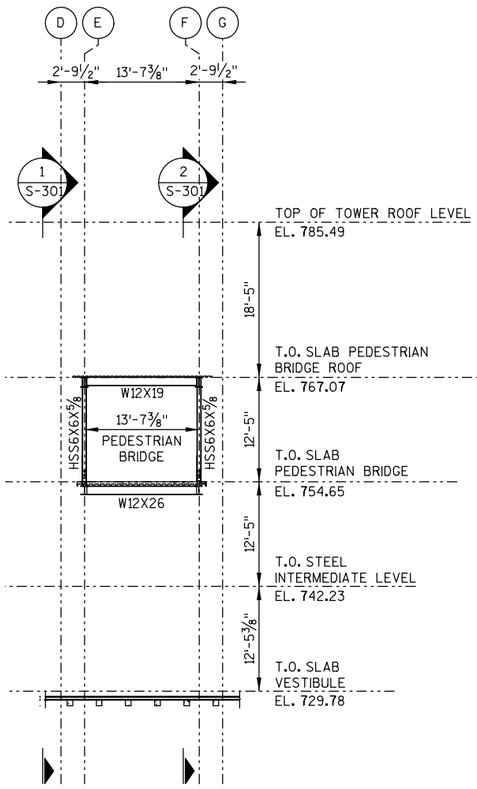
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbuschman@aecom.com\d0763\4\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_GLOBAL_NA\Workspace\\00T\\WisDOT\\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\15_Section Grid 2 6.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:39:30 PM
BATCH PRINT SHEET 5 OF 14

STATE PROJECT NUMBER

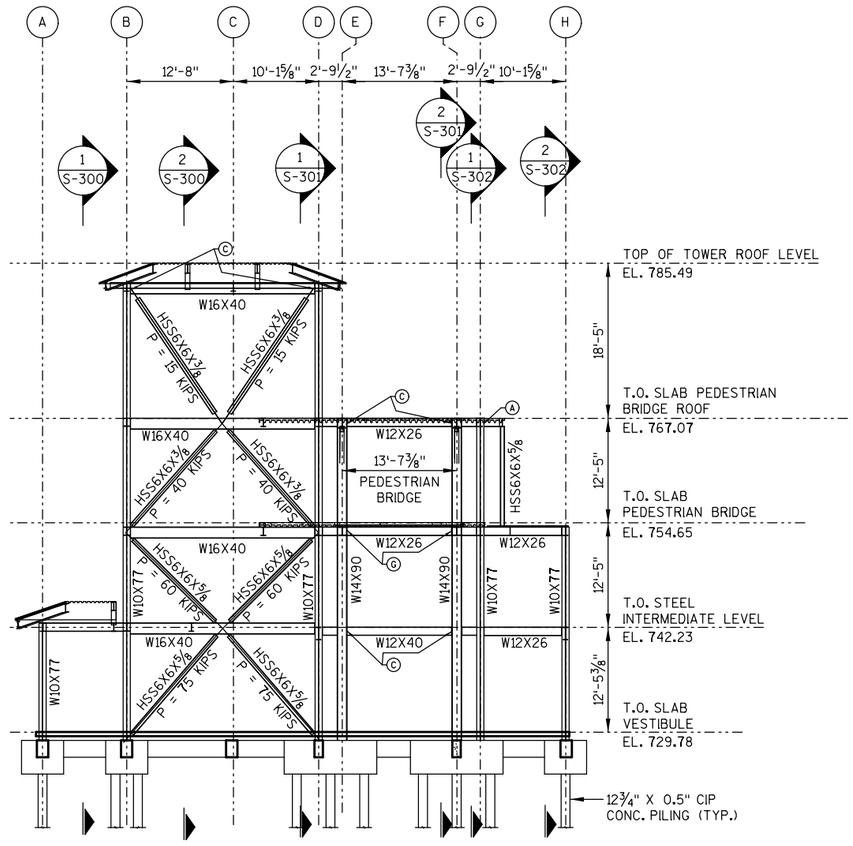
1000-57-70



1 S-100 FRAMING ELEVATION - GRID 2
NTS



2 S-100 FRAMING ELEVATION - GRID 4
NTS



3 S-100 FRAMING ELEVATION - GRID 6
NTS

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

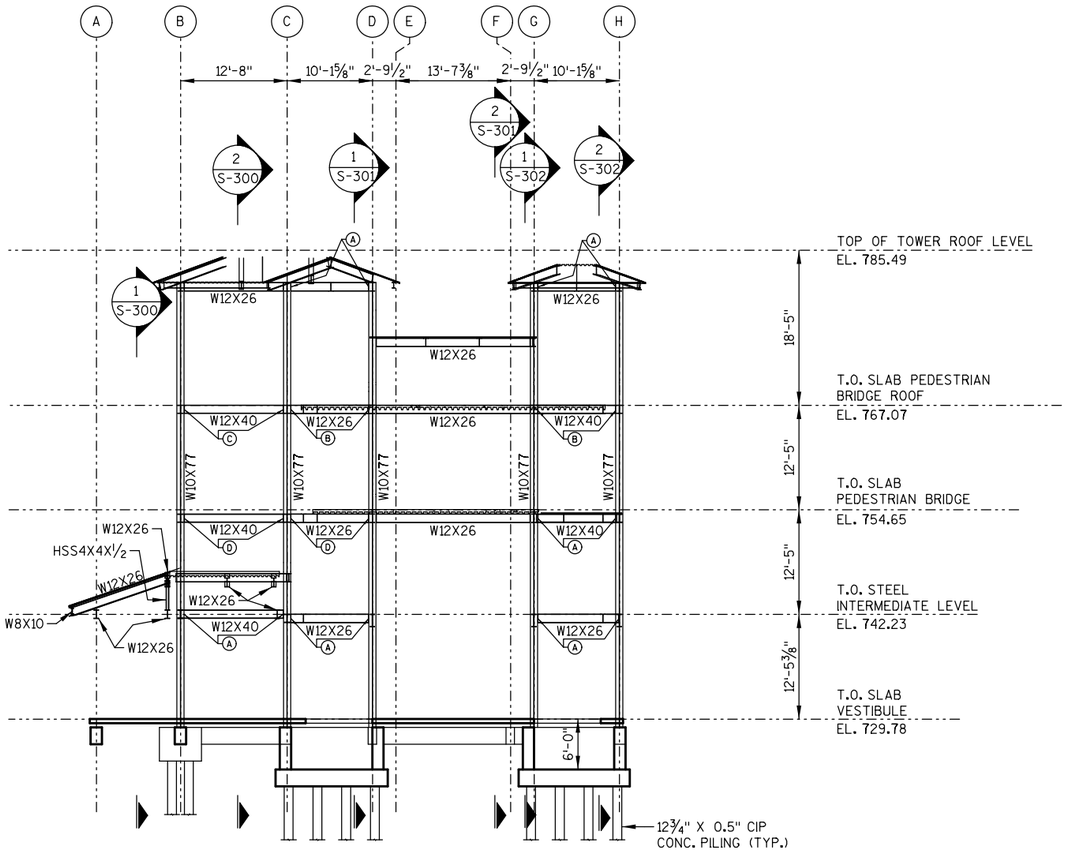
TRANSVERSE SECTION - GRID 2, 4 & 6

SHEET S-304
71

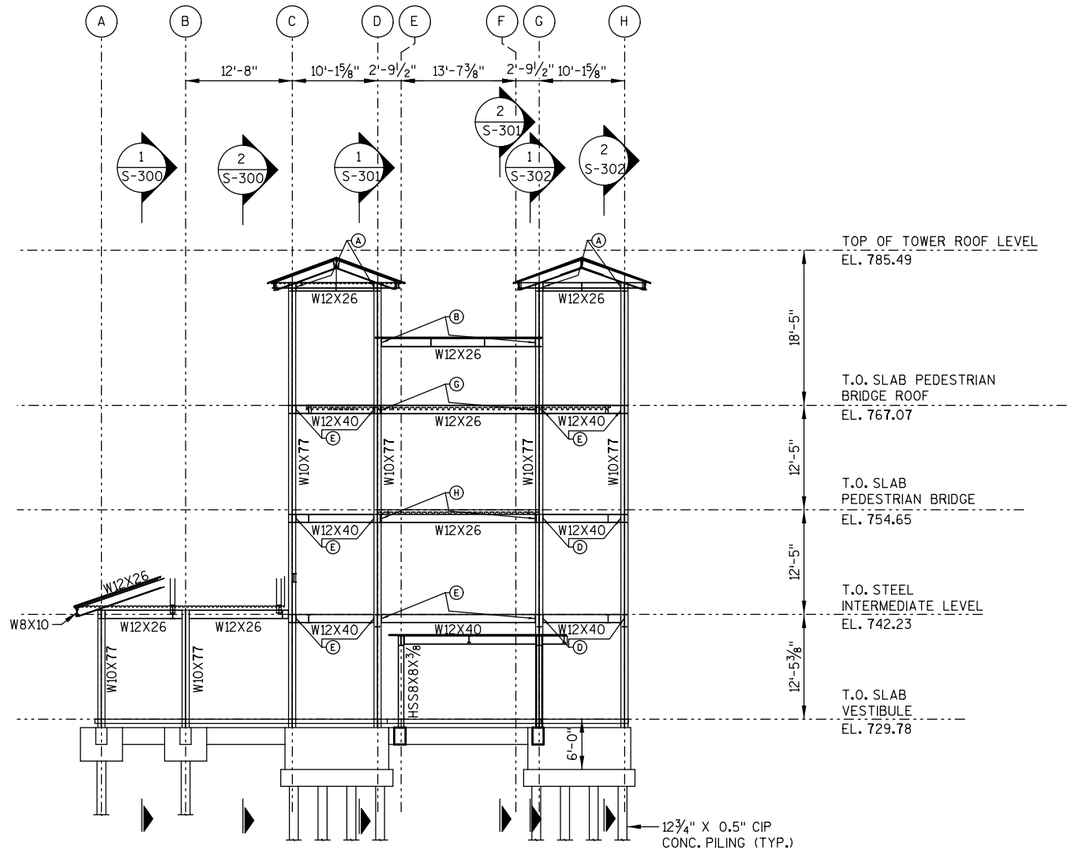
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljbuschman@aecom.com\vms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\Wis DOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\16_Section Grid 6.5 7.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:39:39 PM
BATCH PRINT SHEET 6 OF 14

STATE PROJECT NUMBER

1000-57-70



1 S-100 FRAMING ELEVATION - GRID 6.5
NTS



2 S-100 FRAMING ELEVATION - GRID 7
NTS

LEGEND:

- (A) MOMENT = 10 KIP-FT
- (B) MOMENT = 15 KIP-FT
- (C) MOMENT = 20 KIP-FT
- (D) MOMENT = 25 KIP-FT
- (E) MOMENT = 30 KIP-FT
- (F) MOMENT = 35 KIP-FT
- (G) MOMENT = 40 KIP-FT
- (H) MOMENT = 45 KIP-FT
- (I) MOMENT = 50 KIP-FT
- (J) MOMENT = 55 KIP-FT
- (K) MOMENT = 60 KIP-FT
- (L) MOMENT = 65 KIP-FT
- (M) MOMENT = 70 KIP-FT
- (N) MOMENT = 75 KIP-FT

NOTE: FORCES SHOWN ARE ENVELOPE FORCES OF ALL ASCE7-10 LOAD COMBINATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

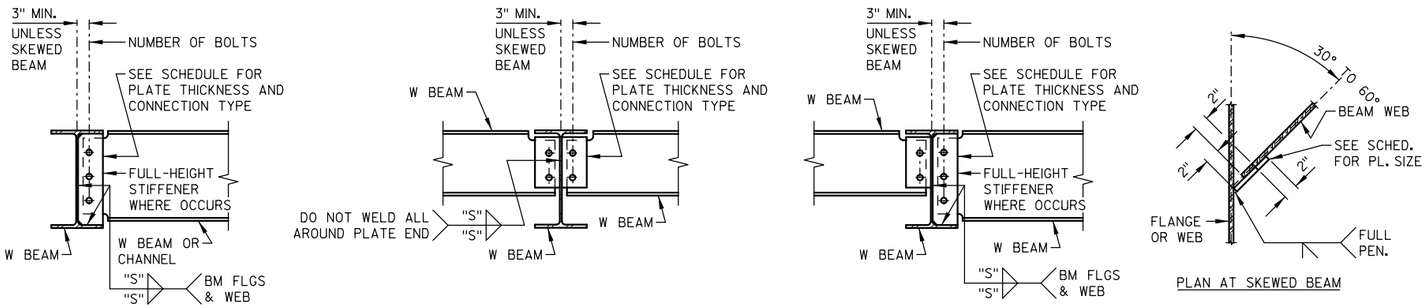
STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

TRANSVERSE SECTION - GRID 6.5 & 7

SHEET S-305
72

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubusman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\17 (A)_Framing Connection Details
PLOT DATE: 7/14/2022
PLOT TIME: 9:10:48 AM
BATCH PRINT SHEET 2 OF 3



BEAM TO BEAM CONNECTION

PLAN AT SKEWED BEAM

NOTES

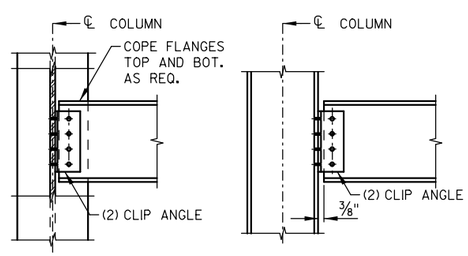
1. BOLTS SPACED @ 3" O.C. TYP. U.N.O. USE 7/8" DIA. A325N BOLTS TYP. U.N.O.
2. TYPICAL BOLTS ARE BEARING (N) TYPE BOLTS WITH THE FOLLOWING EXCEPTIONS: FOR BEAMS AT BRACING CONNECTIONS, MOMENT CONNECTIONS NOT PART OF LATERAL SYSTEM AND COLLECTOR CONNECTIONS, USE SLIP CRITICAL TYPE SC BOLTS.
3. PROVIDE 2" HORIZ. AND 1-3/4" MINIMUM VERTICAL FROM PLATE EDGE AND BEAM WEB EDGE TO CENTERLINE OF BOLT (TYP. U.N.O). FOR W8 BEAMS, 1-1/2" MIN. VERTICAL FROM PLATE EDGE AND BEAM WEB EDGE TO CENTERLINE OF BOLT IS ALLOWED.
4. NUMBER OF BOLTS SHOWN IN THE SCHEDULE ARE TYPICAL. FOR BEAMS SUPPORTED BY A SHALLOWER BEAM, THE NUMBER OF BOLTS REQUIRED MAY BE REDUCED BY ONE (TWO BOLTS MINIMUM) U.N.O.
5. TYPICAL BEAM TO BEAM CONNECTION SHALL BE DESIGNED BY DETAILER ON A CASE BY CASE BASIS. CALCULATIONS SHALL BE SIGNED AND SEALED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN.
6. SEE NOTE 1 FOR TYPICAL BEAM TO BEAM CONNECTION DETAIL.

BEAM TO BEAM CONNECTION SCHEDULE (*)

BEAM SIZE	A36 STEEL PLATE THICKNESS	NUMBER OF BOLTS	WELD SIZE "S"	MINIMUM PLATE HEIGHT
C8, W8, W10	3/8" U.N.O.	(2) 7/8" DIA.	5/16"	6"
C12, W12, W14	3/8"	(3) 7/8" DIA.	5/16"	9 1/2"
W16, W18	3/8"	(4) 7/8" DIA.	5/16"	12 1/2"
W21	3/8"	(5) 7/8" DIA.	5/16"	16"
W24	1/2"	(6) 7/8" DIA.	5/16"	19"
W27	1/2"	(7) 7/8" DIA.	5/16"	22"
W30	1/2"	(8) 7/8" DIA.	3/8"	25"
W33	1/2"	(9) 7/8" DIA.	3/8"	28"
W36	1/2"	(10) 7/8" DIA.	3/8"	28"

(*) - SCHEDULE FOR ESTIMATING PURPOSE ONLY

ALTERNATE BEAM CONNECTION DETAIL

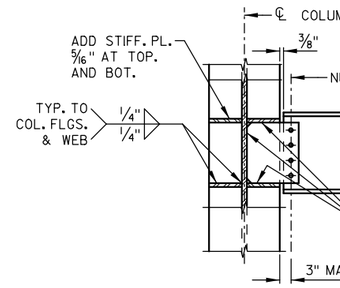


BEAM TO COLUMN WEB CONNECTION

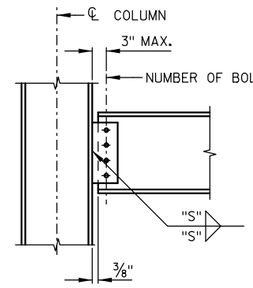
BEAM TO COLUMN FLANGE CONNECTION

NOTES:
1. STEEL FABRICATOR SHALL SUBMIT FOR REVIEW CALCULATIONS FOR BEAM TO COLUMN CONNECTIONS. CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN.
2. IN LIEU OF FIELD-BOLTED CONNECTIONS, CONTRACTOR MAY ELECT TO USE A FIELD WELDED CONNECTION FOR THE BEAM WEB TO SHEAR PLATE CONNECTION. FIELD WELDED CONNECTIONS WILL NOT BE ALLOWED AT THE TRUSS CHORD TO BUILDING COLUMN CONNECTION.

TYPICAL W BEAM TO W COLUMN CONNECTION DETAIL



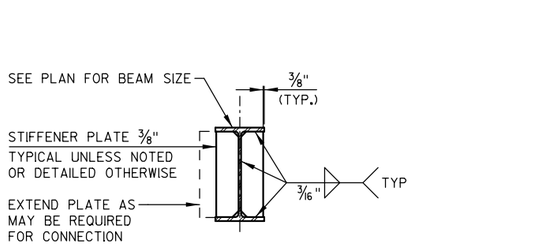
SINGLE PLATE BEAM TO COLUMN WEB CONNECTION



SINGLE PLATE BEAM TO COLUMN FLANGE CONNECTION

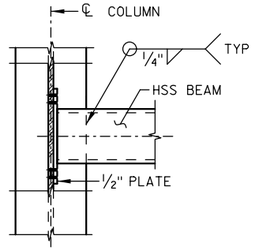
NOTES:
1. FOR CONNECTION SCHEDULE, SEE ALT. BEAM TO BEAM CONNECTION DETAILS.
2. SEE NOTE 1 FOR TYP. BEAM TO COL. CONNECTION.

ALTERNTE W BEAM TO W COLUMN CONNECTION DETAIL

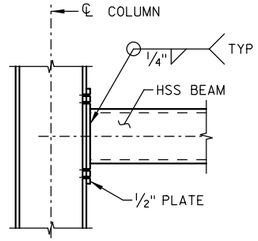


NOTE: USE LARGER PLATE AND WELD AS MAY BE REQUIRED BY BEAM CONNECTION SCHEDULE

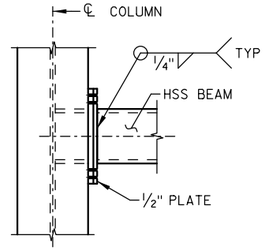
TYPICAL STIFFENER PLATES DETAIL



BEAM TO COLUMN WEB CONNECTION



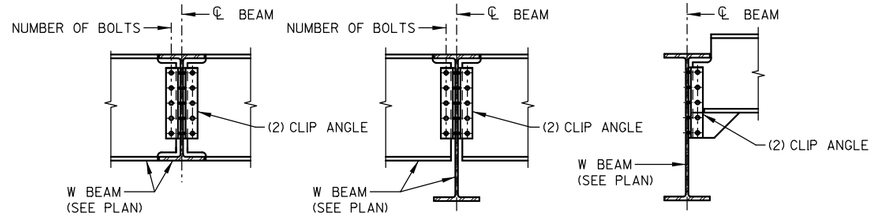
BEAM TO COLUMN FLANGE CONNECTION 1



BEAM TO COLUMN WEB CONNECTION 2

NOTE: SEE TYPICAL W BM. TO W COL. CONNECTION DETAIL.

TYPICAL HSS BEAM TO COLUMN CONNECTION DETAIL



NOTES:
1. STEEL FABRICATOR SHALL SUBMIT FOR REVIEW CALCULATIONS FOR BEAM TO BEAM CONNECTIONS. CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN.
2. IN LIEU OF FIELD-BOLTED CONNECTIONS, CONTRACTOR MAY ELECT TO USE A FIELD WELDED CONNECTION FOR THE BEAM WEB TO SHEAR PLATE CONNECTION.

TYPICAL BEAM BOLTED CONNECTION DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY DNJ | PLANS CK'D. MJA

FRAMING CONNECTION DETAILS (1 OF 2)

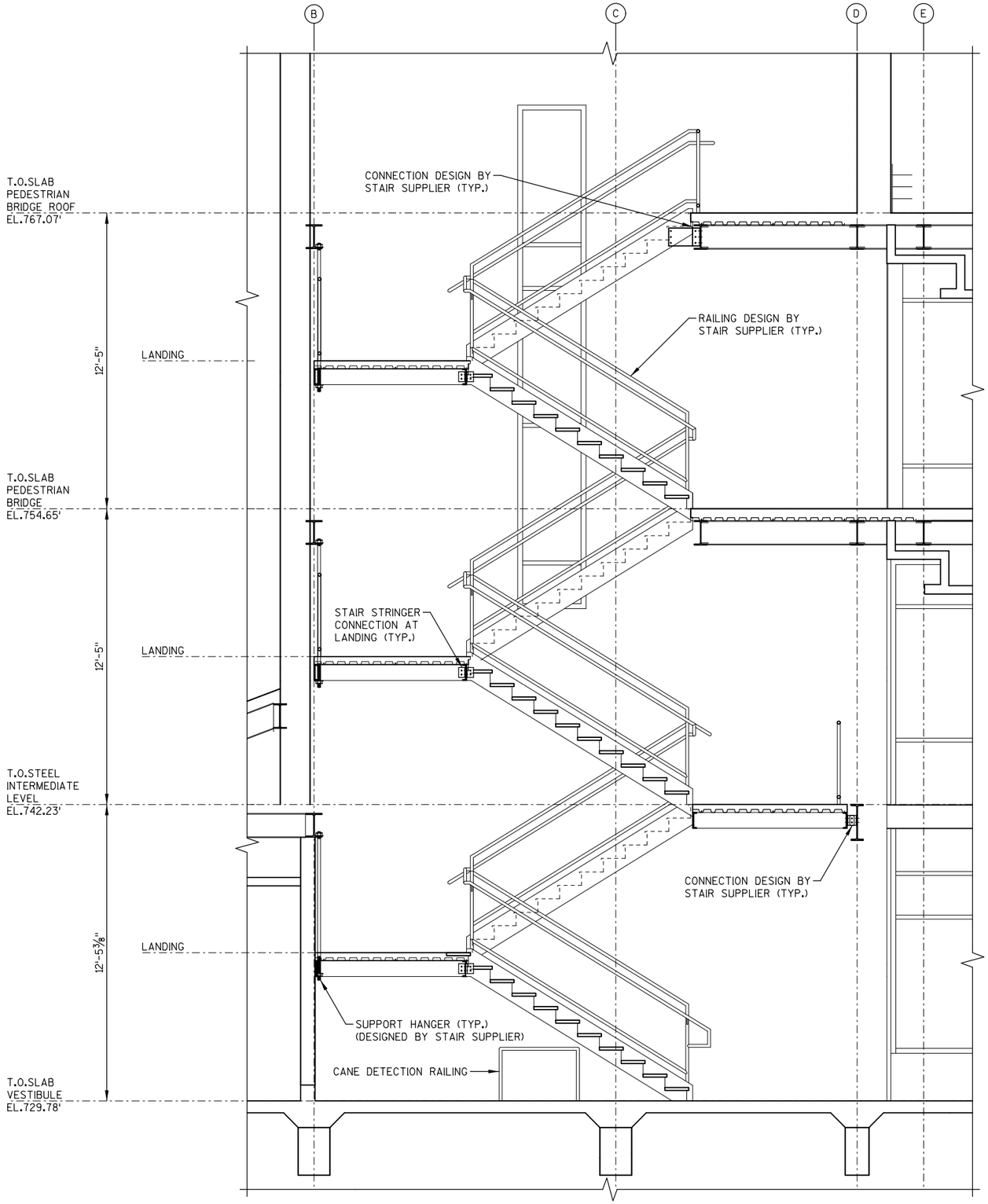
SHEET S-500
73

2

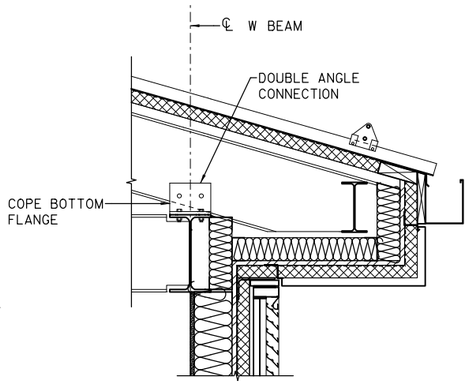
2

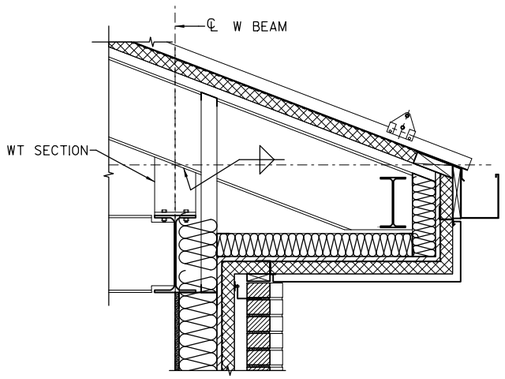
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carl.buschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_ Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\17 (B)_Framing Connection Details.DGN
PLOT DATE: 7/14/2022 PLOT TIME: 9:10:59 AM
BATCH PRINT SHEET 3 OF 3

STATE PROJECT NUMBER
1000-57-70



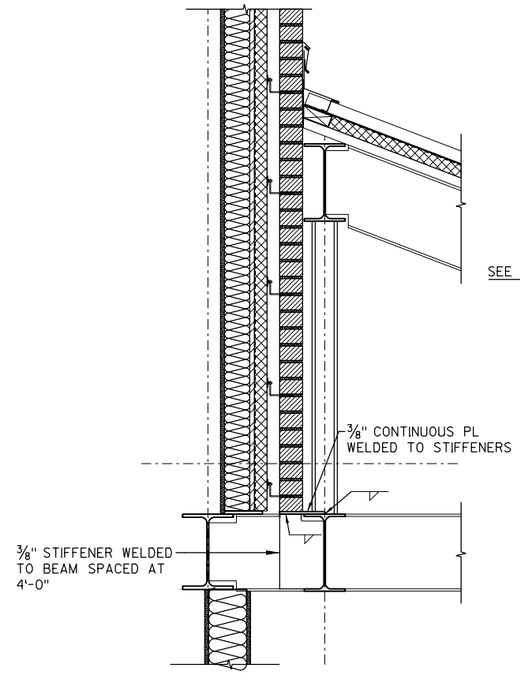
SECTION THRU STAIRS



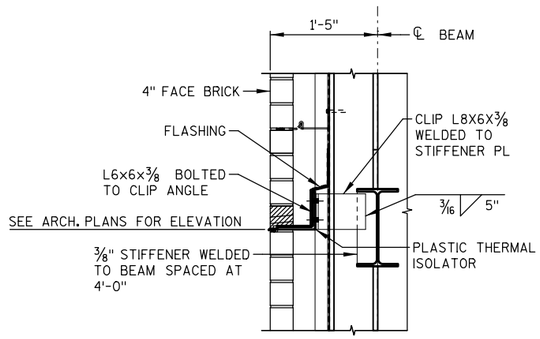


TYPICAL RAFTER CONNECTION DETAILS

NOTE: POSSIBLE RAFTER CONNECTION CONFIGURATION SHOWN.
CONTRACTOR TO DESIGN AND DETAIL FINAL CONFIGURATION.



TYPICAL BRICK SUPPORT PLATE



TYPICAL BRICK SUPPORT ANGLE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB/DNJ | PLANS CK'D. MJA

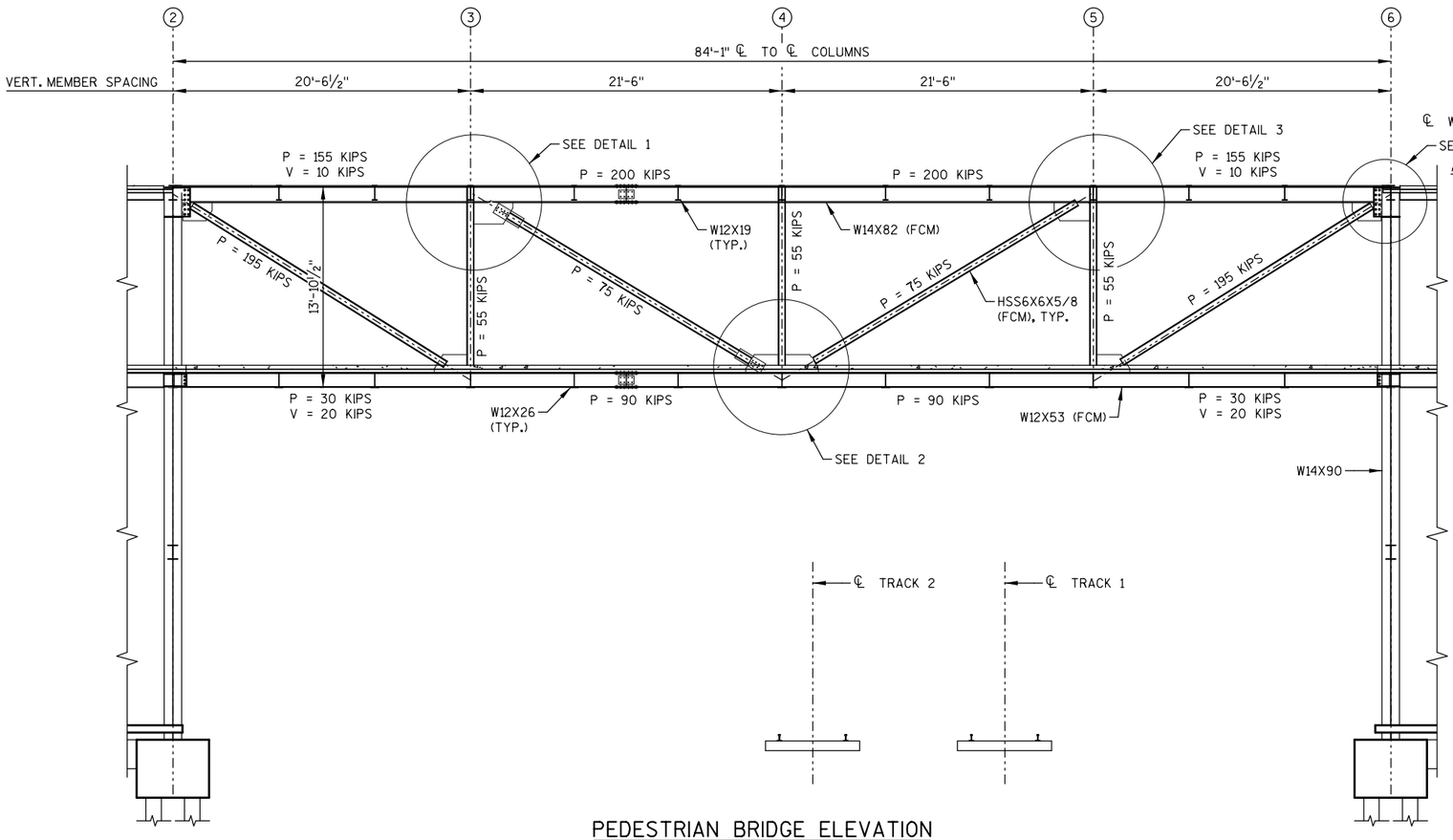
FRAMING CONNECTION DETAILS (2 OF 2)

SHEET S-501
74

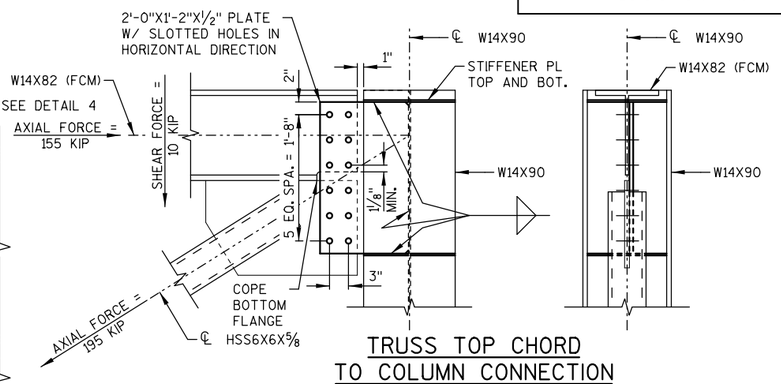
2

2

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljbuschman@aecom.com\vms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\17_Framing Connection Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:40:05 PM
BATCH PRINT SHEET 9 OF 14

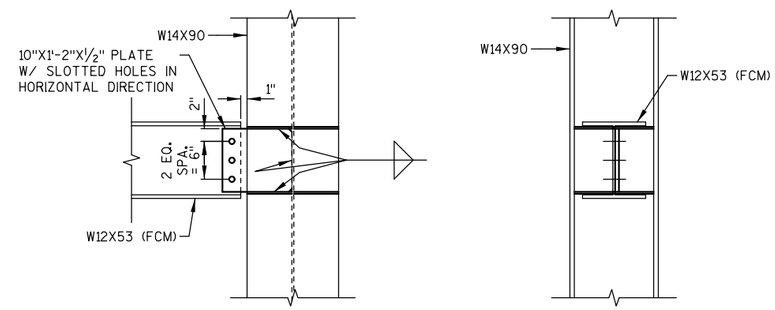


PEDESTRIAN BRIDGE ELEVATION

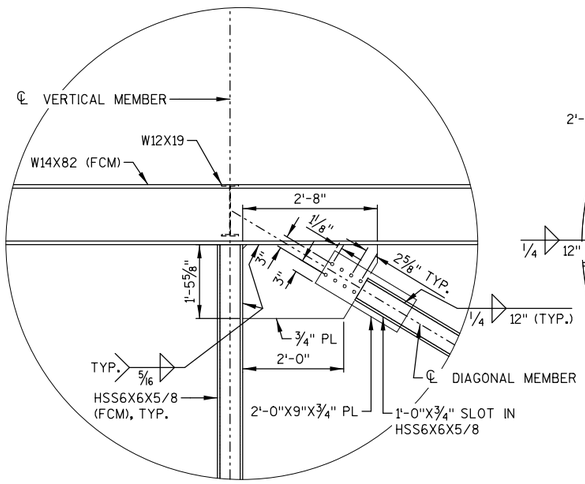


TRUSS TOP CHORD TO COLUMN CONNECTION

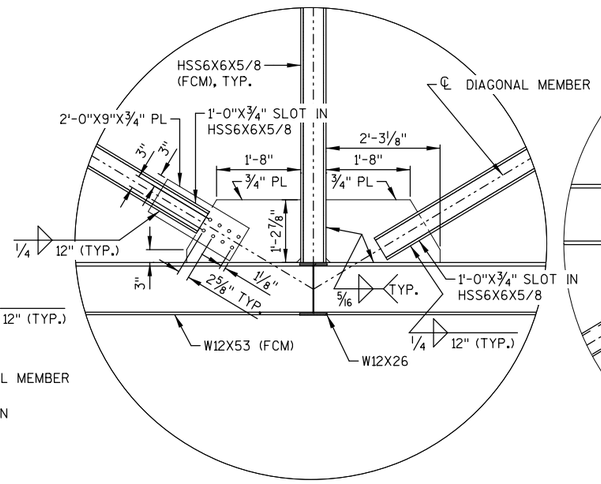
NOTE: POSSIBLE TRUSS TOP CHORD TO COLUMN CONNECTION CONFIGURATION SHOWN, CONTRACTOR TO DESIGN FINAL CONFIGURATION. CONNECTION TO BE DESIGNED AS SLIP CRITICAL.



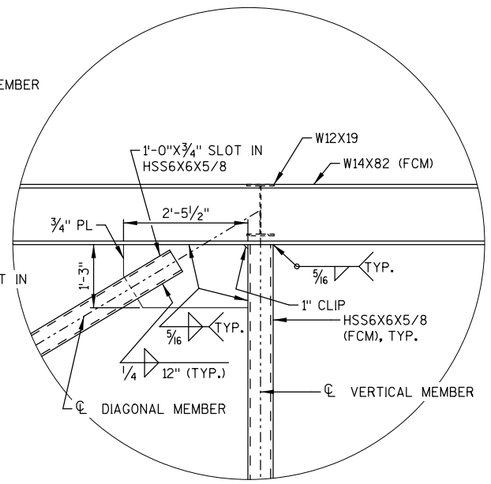
TRUSS BOTTOM CHORD TO COLUMN CONNECTION



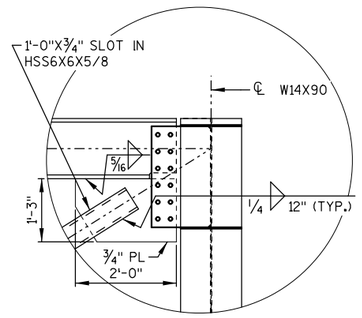
DETAIL 1



DETAIL 2



DETAIL 3



DETAIL 4

NOTES

CONNECTION DETAILS SHOWN ON THIS SHEET ARE CONCEPTUAL. FINAL DESIGN AND DETAILING OF BOLTED AND WELDED TRUSS CONNECTIONS IS INCLUDED AS PART OF DELEGATED DESIGN.

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.

ALL BOLTED BRIDGE TRUSS CONNECTIONS SHALL BE BOLTED WITH ⅞" DIA. ASTM A3125 GRADE A325 HIGH-STRENGTH BOLTS. USE SLIP CRITICAL CONNECTIONS.

FIELD WELDING OF BRIDGE TRUSS CONNECTIONS WILL NOT BE PERMITTED.

CONNECTION PLATES AND GUSSET PLATES CONNECTED TO FRACTURE CRITICAL MEMBERS SHALL ALSO BE CONSIDERED FRACTURE CRITICAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

TRUSS FRAMING CONNECTION DETAILS

SHEET S-502
75

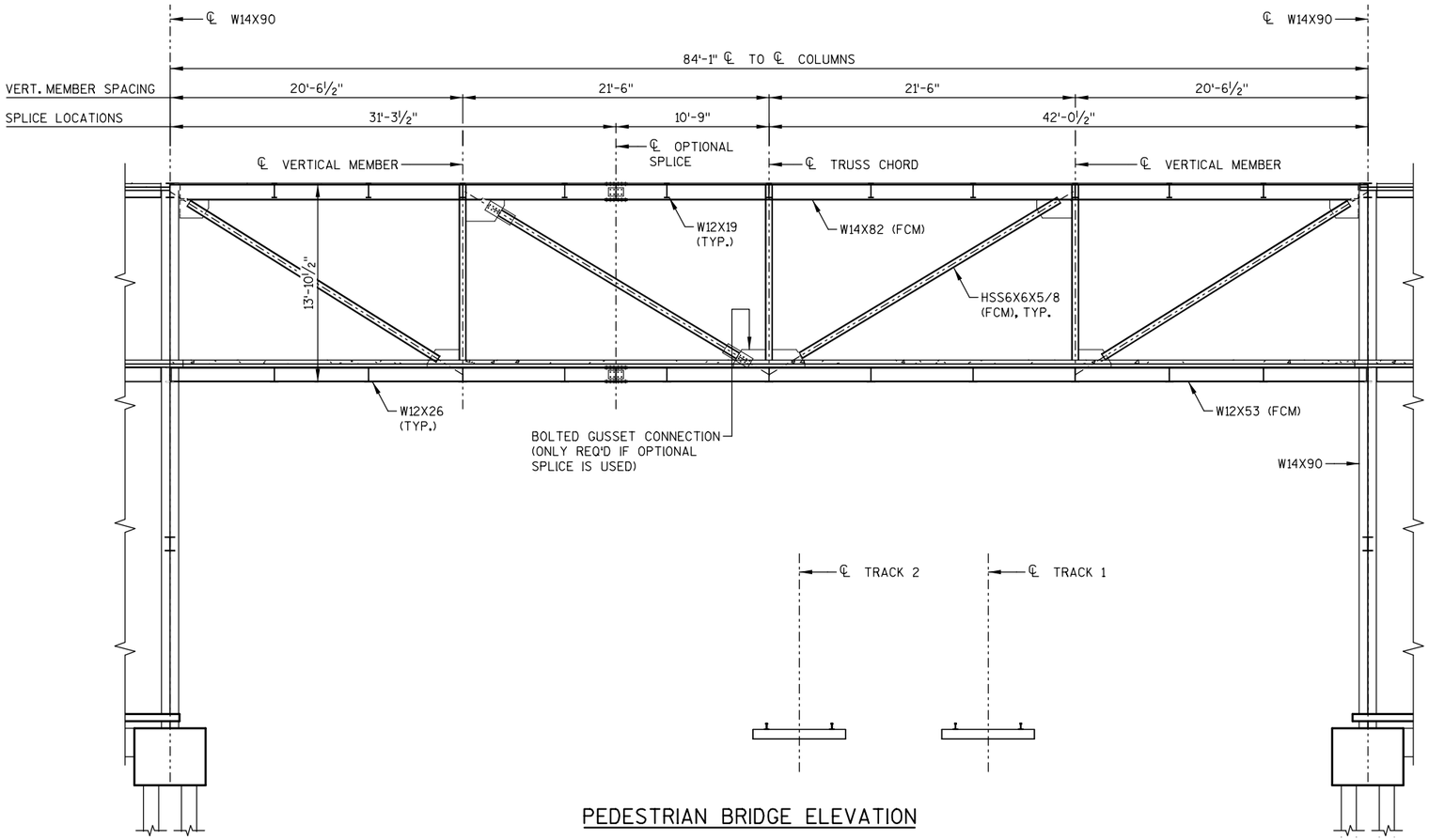
2

2

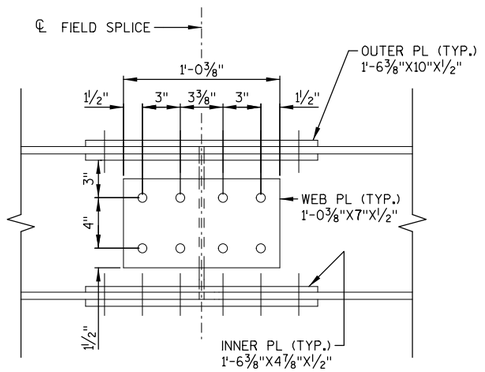
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\18_Truss Splice Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:40:12 PM
BATCH PRINT SHEET 10 OF 14

STATE PROJECT NUMBER

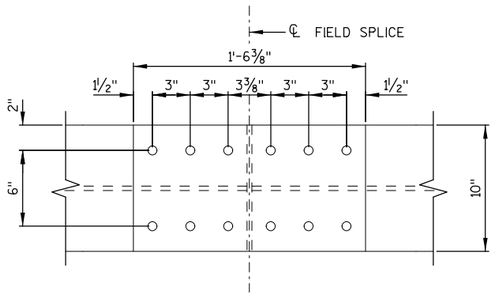
1000-57-70



PEDESTRIAN BRIDGE ELEVATION



TOP & BOTTOM CHORD SPLICE ELEVATION



TOP & 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

TRUSS SPLICE DETAILS

SHEET S-503
76

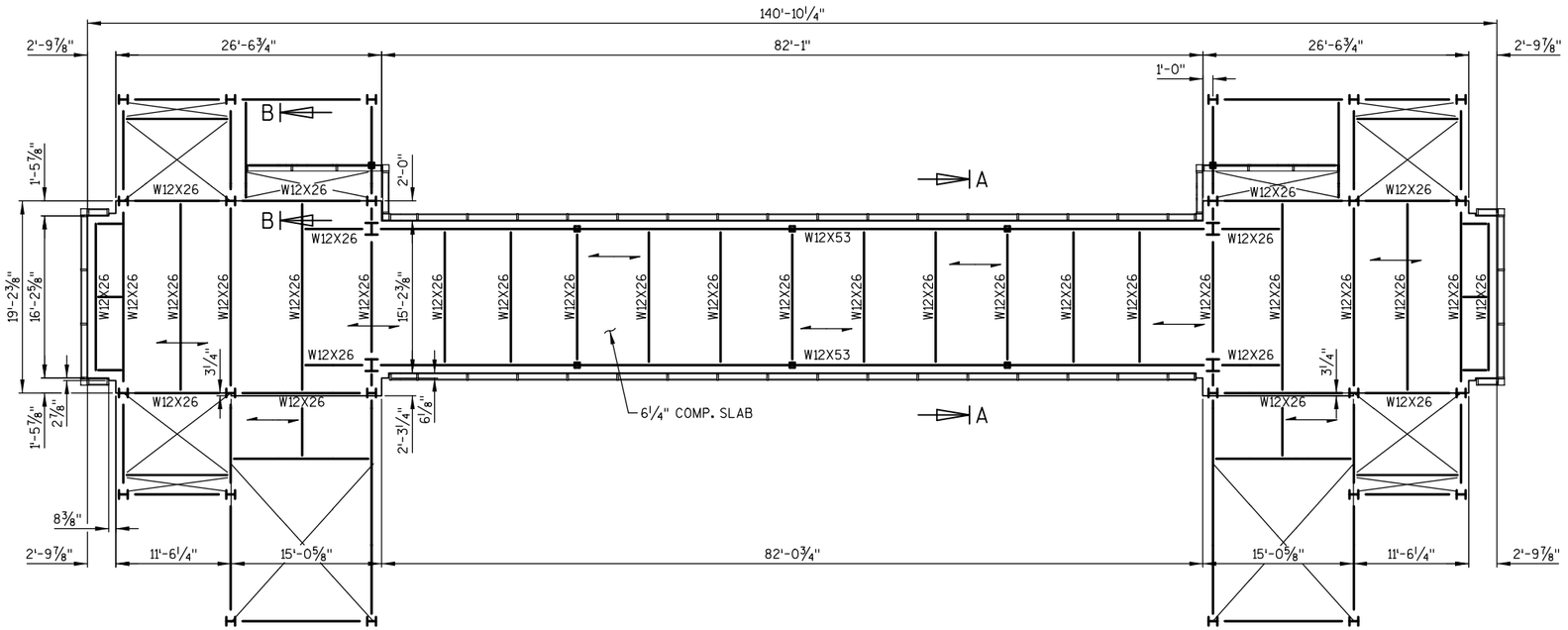
2

2

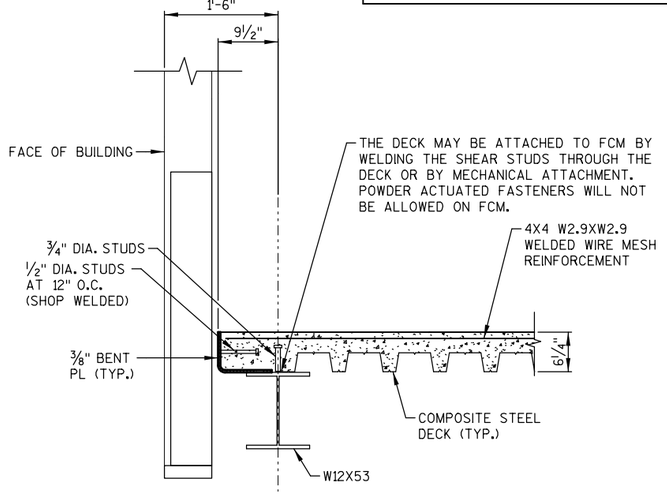
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\wdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-nar-pw.bentley.com:AECOM_GLOBAL_NA\Workspace\UDOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_ Str_Default COLOR.tbl
FILE NAME: pw:\aecom-nar-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\19_Floor Slab Pan.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:48:22 PM
BATCH PRINT SHEET 11 OF 14

STATE PROJECT NUMBER

1000-57-70

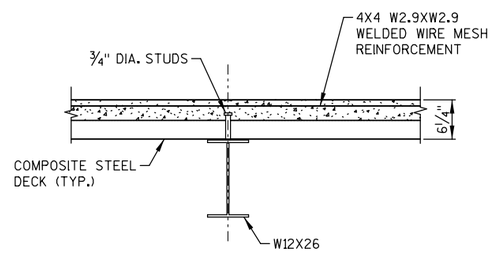


FLOOR SLAB PLAN

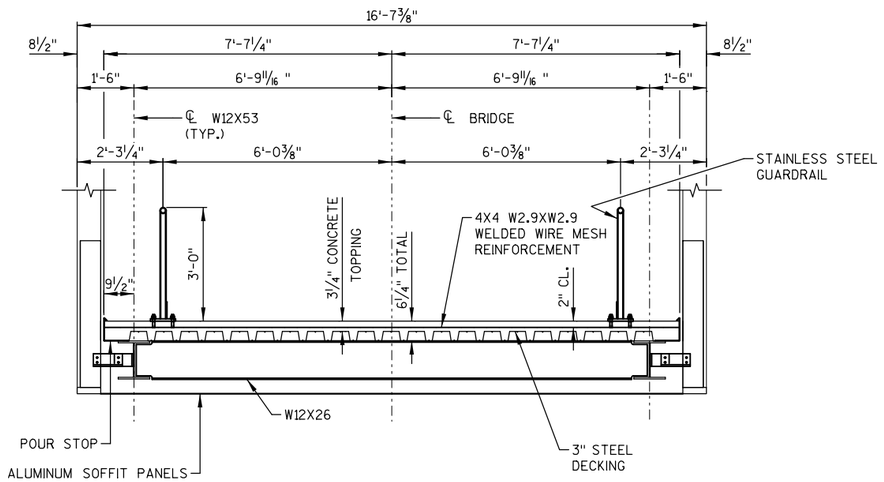


TYPICAL EXTERIOR EDGE OF COMPOSITE SLAB

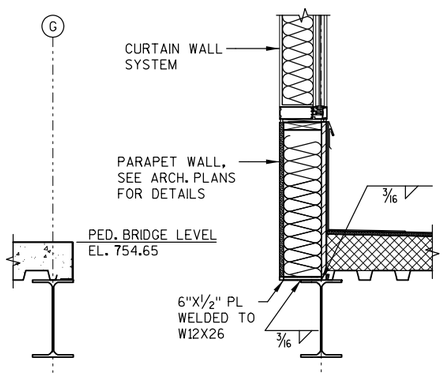
NOTE: DECK ORIENTATION MAY VARY.



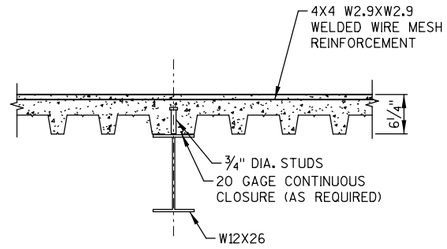
TYPICAL COMPOSITE STEEL DETAIL



SECTION A-A



SECTION B-B



TYPICAL ADDITIONAL SLAB REINFORCEMENT

(DECK SPANNING PARALLEL TO BEAM - SECTION)

NOTE:
DECK RIB VALLEY TO BE CENTERED OVER BEAM WHERE POSSIBLE, OR DECK MUST SPLIT FULL LENGTH OF BEAM TO PROVIDE CONCRETE HAUNCH MINIMUM WIDTH EQUAL TO AVERAGE RIB WIDTH.

LEGEND

⟷ COMPOSITE SLAB SPAN DIRECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

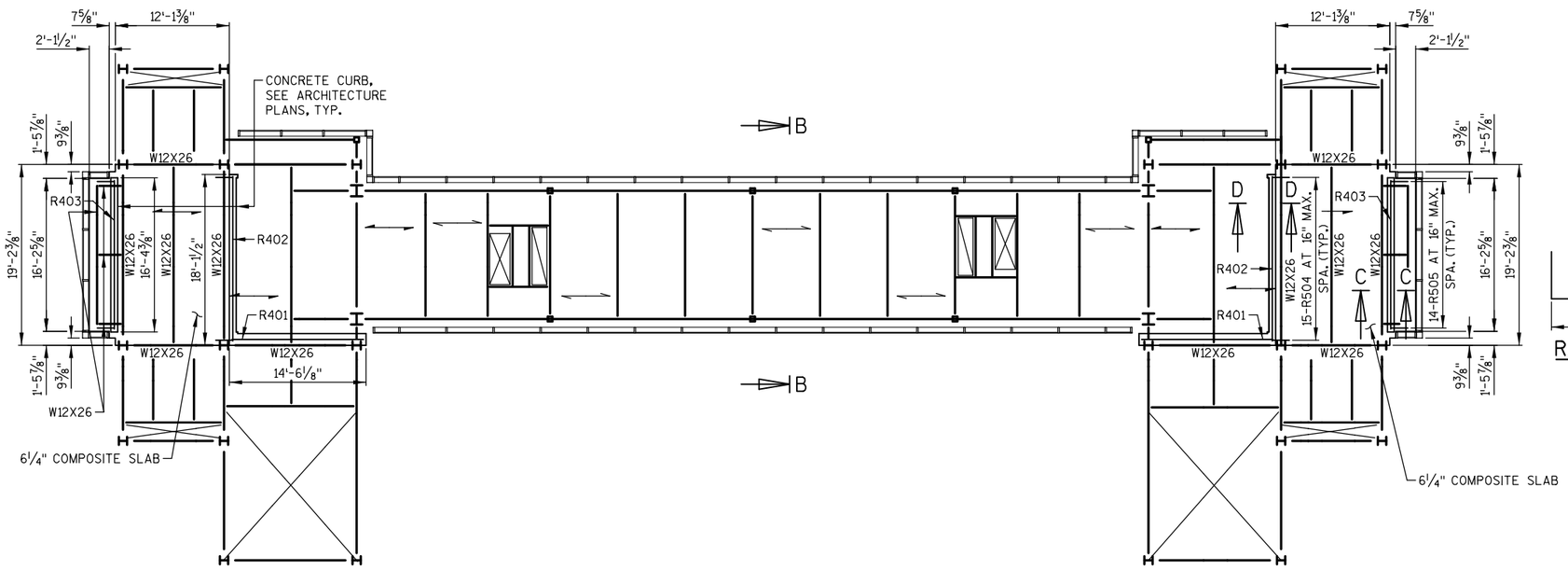
FLOOR SLAB PLAN & DETAILS

SHEET S-504
77

2

2

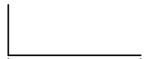
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pwbentley.com:AECOM_GLOBAL_NA\Workspace\DOT\Wis DOT\Wis DOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pwbentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\20_Roof Slab Pan.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:48:31 PM
BATCH PRINT SHEET 12 OF 14



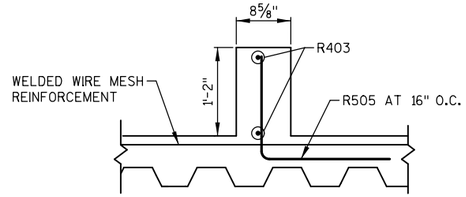
ROOF SLAB PLAN

BILL OF BARS

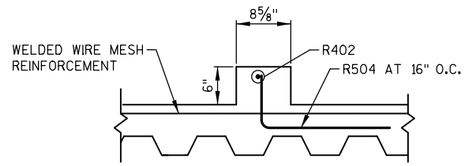
MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 210 LBS	
R401	2	14 - 2			ROOF SLAB CURB	TRANS.
R402	2	17 - 9			ROOF SLAB CURB	LONG.
R403	4	16 - 0			ROOF SLAB CURB	LONG.
R504	30	1 - 8	X		ROOF SLAB CURB	HORIZ
R505	28	2 - 4	X		ROOF SLAB CURB	HORIZ



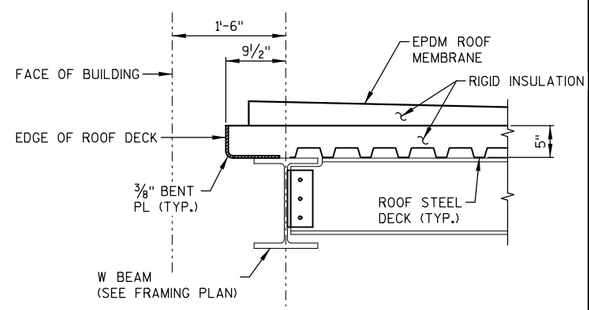
R504, R505



SECTION C-C

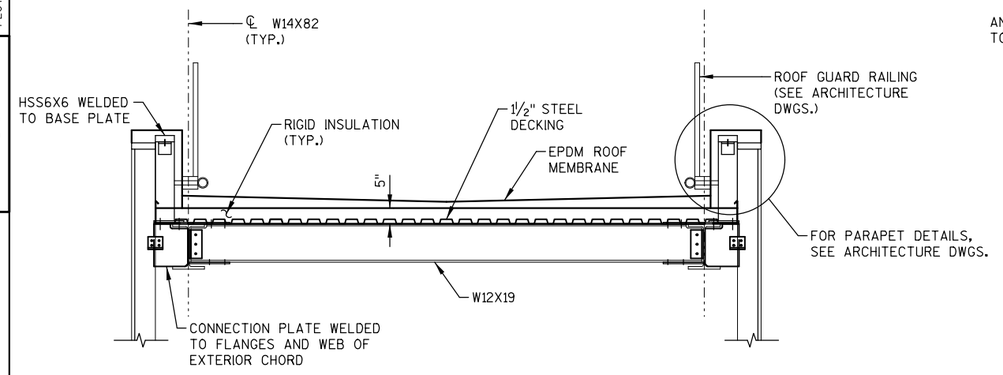


SECTION D-D



TYPICAL EXTERIOR EDGE OF ROOF DECK

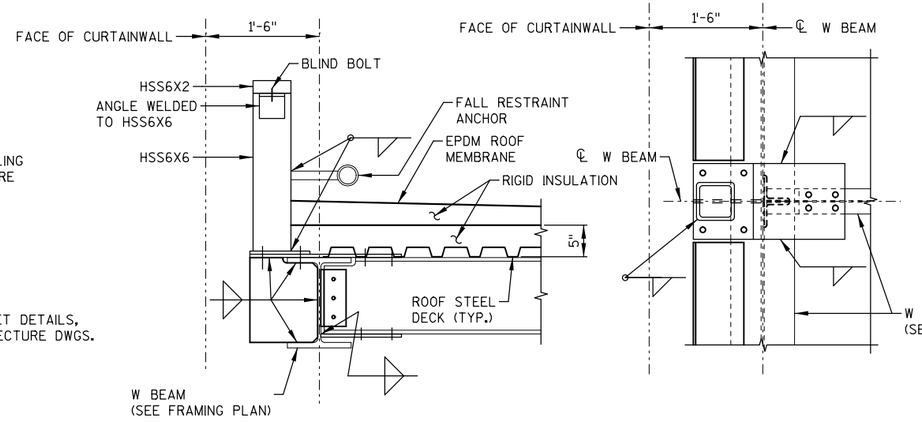
NOTE: DECK ORIENTATION MAY VARY.



SECTION B-B

(SEE ARCHITECTURE PLANS FOR MORE DETAILS)

ELEVATION OF EDGE OF ROOF DECK AT TIE OFF POINT



EDGE OF ROOF DECK AT TIE OFF POINT

PARAPET, RAILING, CURTAINWALL, AND CURTAINWALL SUPPORT CONNECTION DETAIL NOT SHOWN FOR CLARITY.

LEGEND

COMPOSITE SLAB SPAN DIRECTION

NOTE:

THE FALL RESTRAINT DETAILS SHOWN ARE SCHEMATIC. THE DETAILED DESIGN FOR HSS POSTS, HSS TOP CAP, CONNECTION PLATES, BOLTS, WELDS AND FALL RESTRAINT ANCHOR IS INCLUDED IN THE BID ITEM "FALL RESTRAINT SYSTEM".

COORDINATE FALL RESTRAINT CONNECTION DESIGN WITH THE CURTAINWALL SUPPORT CONNECTION WHICH IS SUPPLIER-DESIGNED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

ROOF SLAB PLAN & DETAILS

SHEET S-505
78

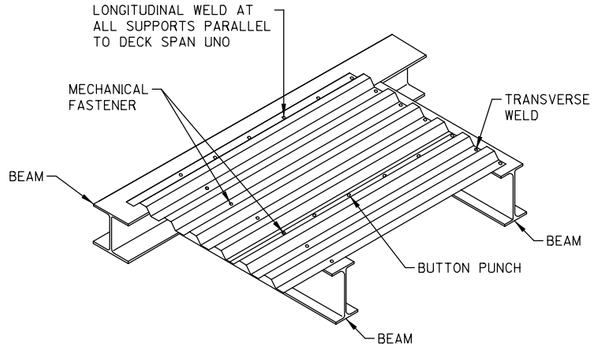
2

2

PRINTER DRIVER: c:\pwworking\aecom.ds20_na.2019\carl.buschman@aecom.com\vdms@7634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-nar.pw.bentley.com:AECOM.GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\aecom-nar.pw.bentley.com:AECOM.DS20.NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\20b_Deck Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:40:38 PM
BATCH PRINT SHEET 13 OF 14

STATE PROJECT NUMBER

1000-57-70



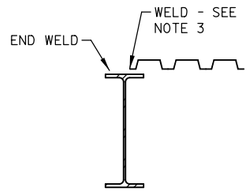
METHOD OF CONNECTIONS

ROOF DECK

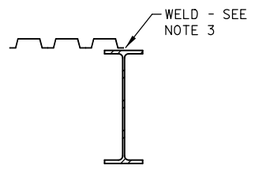
1. MECHANICAL FASTENERS AT EACH TRANSVERSE SUPPORT PER PATTERN SHOWN.
2. LONGITUDINAL ATTACHMENTS USING MECHANICAL FASTENERS AT 6" O.C. AT ALL LONGITUDINAL SUPPORTS.
3. USE HILTI SLC OR APPROVED EQUAL.
4. ALL MECHANICAL FASTENERS SHALL BE HILTI X-ENP-19 L15 OR X-HSN-24 OR APPROVED EQUAL.
5. ATTACH DECK TO ALL TRANSVERSE AND LONGITUDINAL SUPPORT BEAMS OR OPEN WEB JOIST.

FLOOR DECK

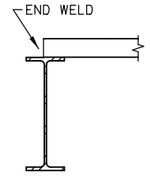
1. 4 PUDDLE WELDS AT EACH TRANSVERSE SUPPORT UNO.
2. LONGITUDINAL WELDS AT 1'-0" O.C. AT ALL LONGITUDINAL SUPPORTS.
3. BUTTON PUNCH AT 36" O.C. AT ALL SEAMS U.N.O.
4. ALL PUDDLE WELDS SHALL BE ½" DIA. EFFECTIVE.
5. WELD DECK TO ALL TRANSVERSE SUPPORT BEAMS.



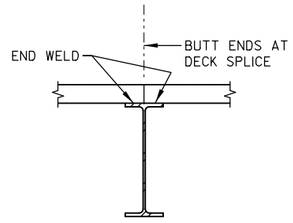
SPLICE AT SPAN DIRECTION SPAN



PARALLEL TO SUPPORT TYPICAL DECK WELDING

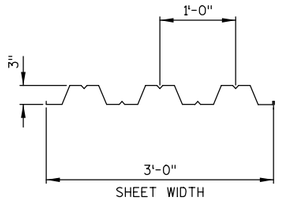


EDGE BEAMS



INTERIOR BEAMS

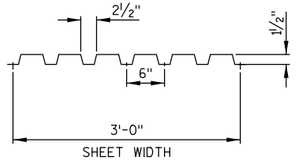
PERPENDICULAR TO SUPPORTS



STEEL UNIT ONLY COMPOSITE DECK

3"X18 GAGE
2.8 PSF MIN.

+I = 1.254 IN⁴
-I = 1.252 IN⁴
+S = 0.777 IN³
-S = 0.797 IN³
T = 0.0474 IN

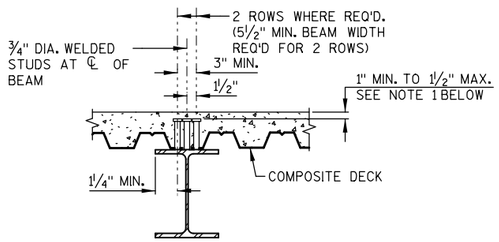


STEEL UNIT ONLY TYPE B ROOF DECK

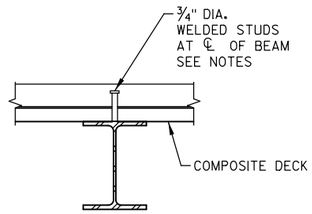
1½"X20 GAGE
2 PSF MIN.

+I = 0.201 IN⁴
-I = 0.222 IN⁴
+S = 0.234 IN³
-S = 0.247 IN³
T = 0.0358 IN

SECTION PROPERTIES
(PER FOOT WIDTH)

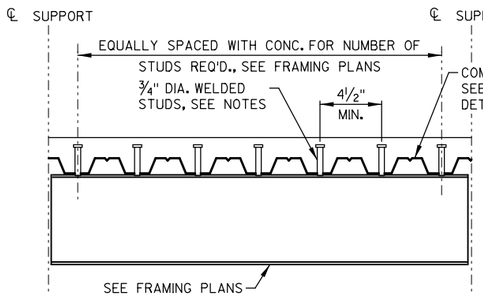


DECK PARALLEL TO BEAM TYPICAL SECTION

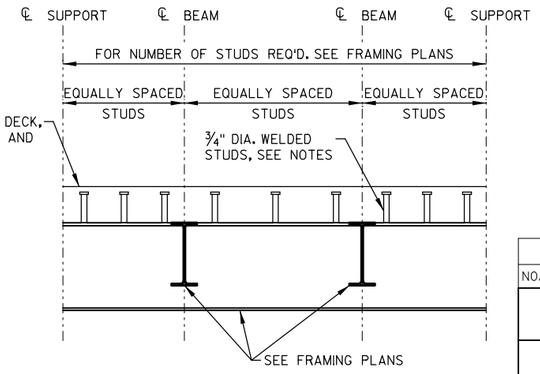


DECK PERPENDICULAR TO BEAM TYPICAL SECTION

NOTES:
1. ALL WELDED STUDS SHALL BE ¾" DIA. HEADED STUDS. STUDS SHALL EXTEND 1½" MINIMUM ABOVE TOP OF STEEL DECK.
2. WHERE THE NUMBER OF STUDS EXCEEDS THE NUMBER OF DECK FLUTES, PROVIDE MIN. ONE STUD PER FLUTE & DOUBLE STUDS AT EACH FLUTE STARTING AT EACH SUPPORT WORKING TOWARD CENTER OF THE BEAM UNTIL THE REQ'D NUMBER OF STUDS ARE PROVIDED. PROVIDE AN EQUAL NUMBER OF STUDS AT EACH SIDE OF BEAM SPAN CENTER LINE.
3. STUDS WELDED THROUGH STEEL DECKING MAY BE SUBSTITUTED FOR A PUDDLE WELD, TYPICAL.
4. PROVIDE STUDS AT 12" O.C. MIN. AT ALL FRAMED BEAMS WHERE NO. OF STUDS IS NOT INDICATED.
5. MAINTAIN 1" CLEARANCE AROUND ALL STUDS.



BEAM ELEVATION



GIRDER ELEVATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

DECK DETAILS (1 OF 2)

SHEET S-506
79

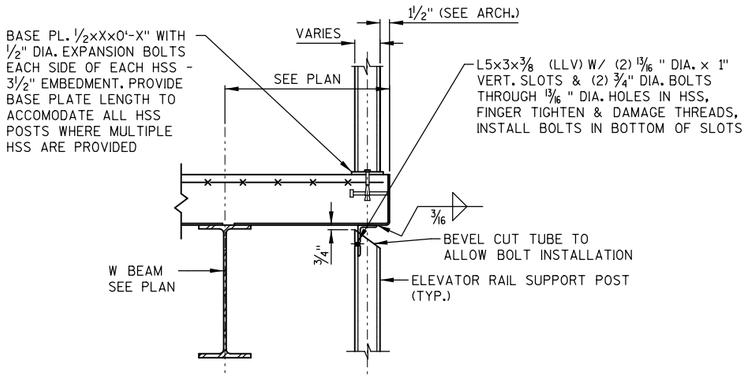
2

2

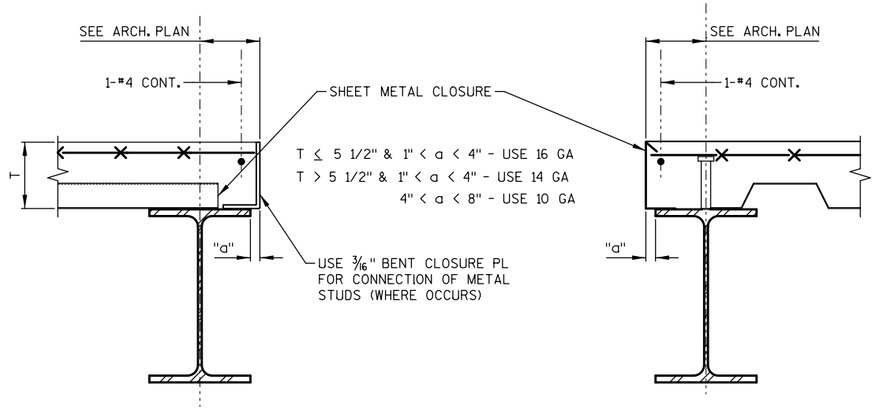
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljubuschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\Wisdot\Wisdot Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\20b_Deck Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:40:45 PM
BATCH PRINT SHEET 14 OF 14

STATE PROJECT NUMBER

1000-57-70



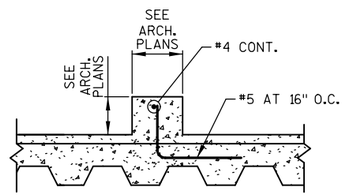
POST TO FLOOR SLAB CONNECTION



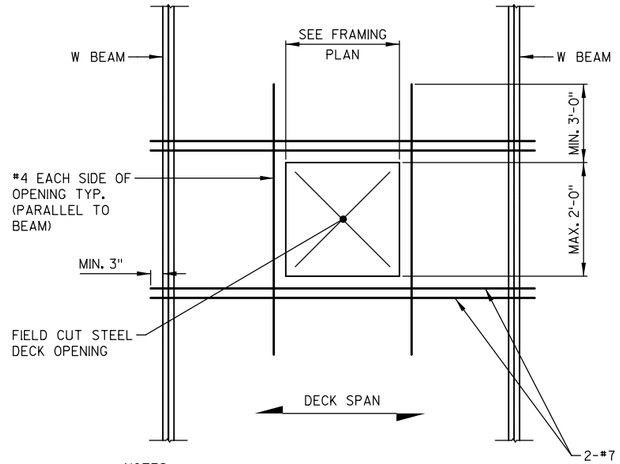
DECK PERPENDICULAR

DECK PARALLEL

EDGE OF DECK AT INTERIOR OPENINGS



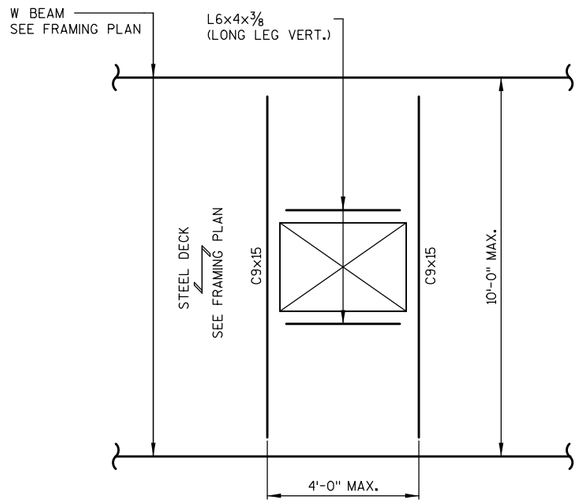
TYPICAL DETAIL OF CONCRETE CURB ON COMPOSITE SLAB



NOTES:

1. DO NOT CUT DECKING UNTIL CONCRETE HAS ATTAINED 75% OF DESIGN STRENGTH.
2. FOR LARGER OPENINGS SEE FRAMING PLANS FOR REQ'D OPENING FRAMING

TYP. REINFORCEMENT IN COMPOSITE SLAB OPENING



ROOF OPENINGS IN STEEL DECK

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

DECK DETAILS (2 OF 2)

SHEET S-507
80

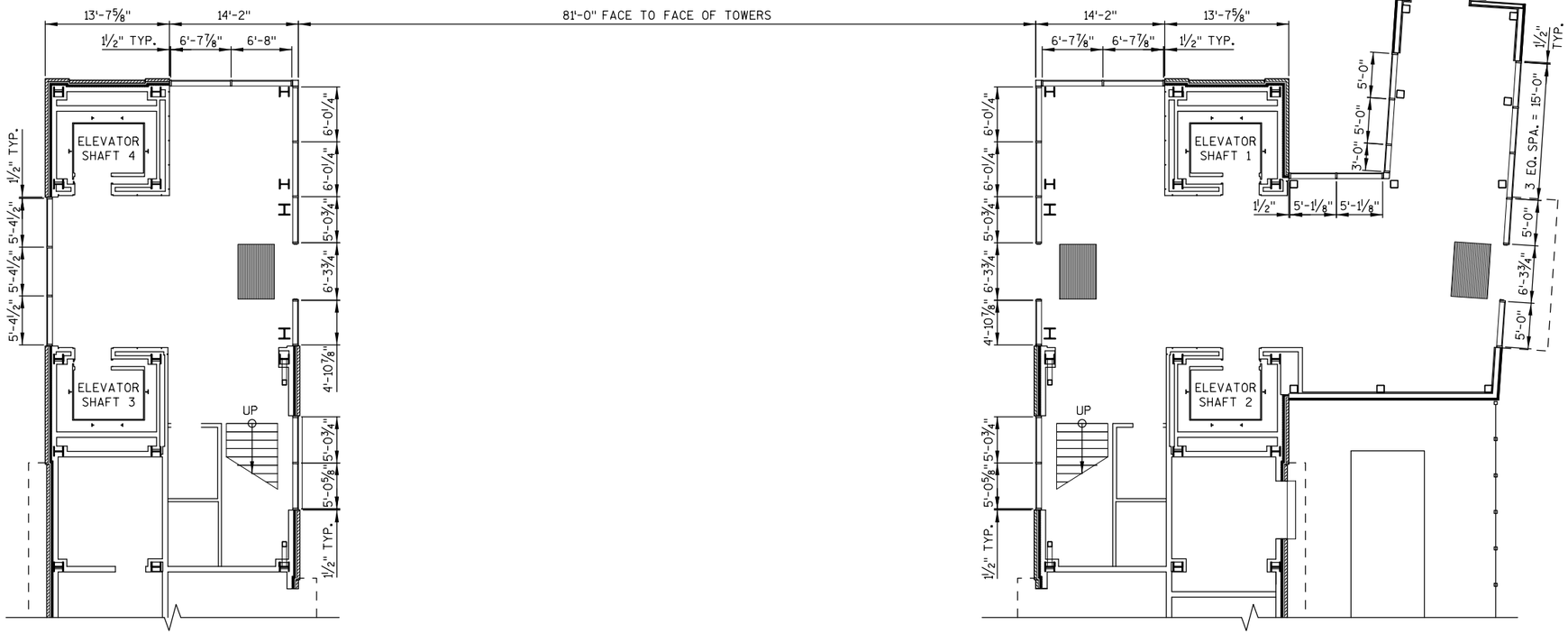
2

2

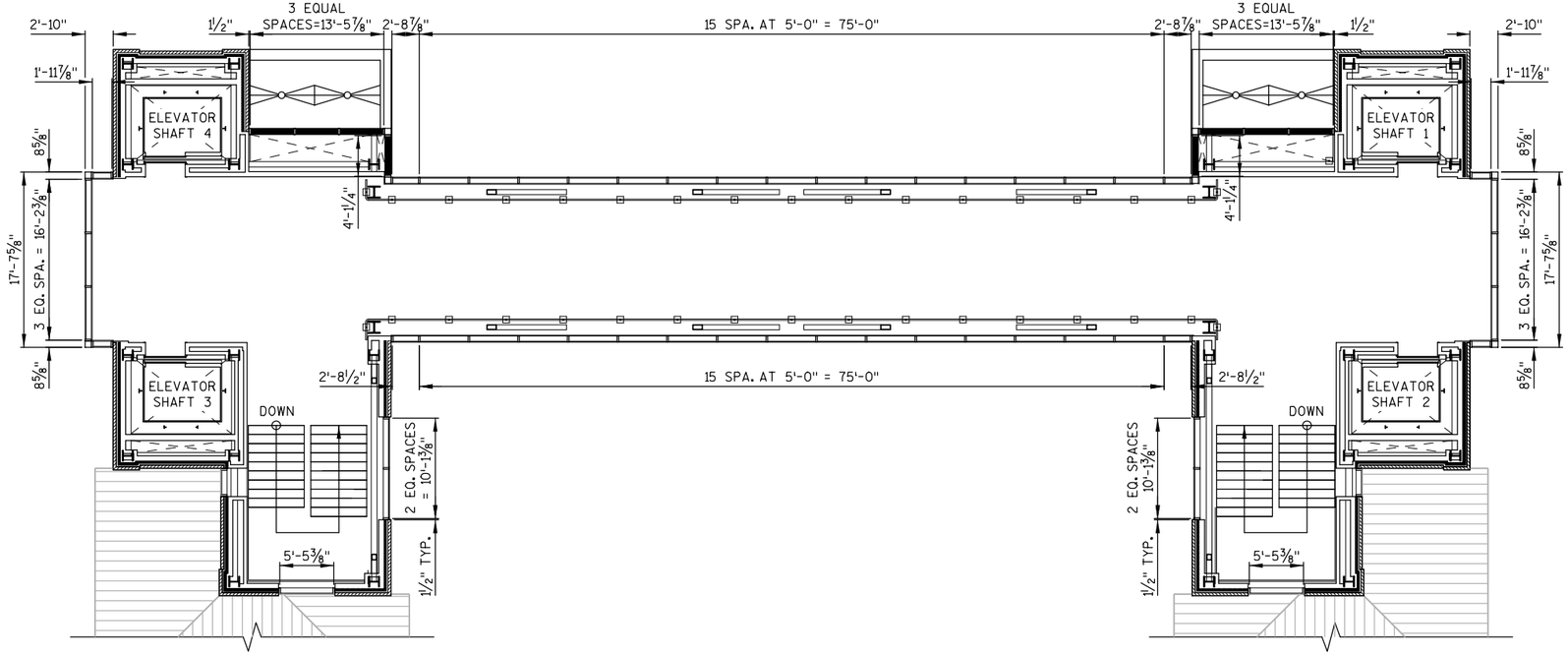
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carly.buschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\Wis DOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\21 Glass Curtainwall Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:11 PM
BATCH PRINT SHEET 1 OF 10

STATE PROJECT NUMBER

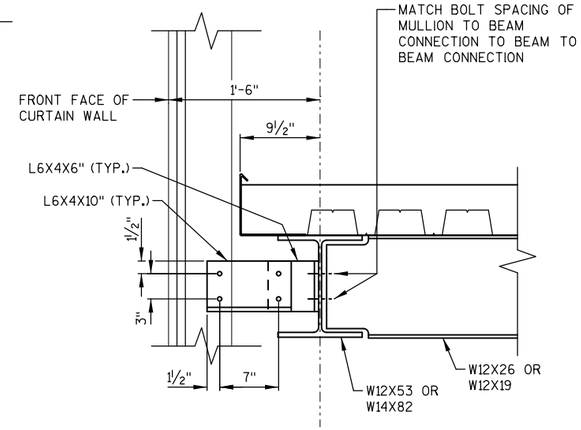
1000-57-70



PLATFORM LEVEL



PEDESTRIAN BRIDGE LEVEL



CURTAIN WALL ANCHOR SYSTEM

NOTE: POSSIBLE CURTAIN WALL CONNECTION CONFIGURATION SHOWN. GLASS CURTAINWALL SUPPLIER TO DESIGN AND DETAIL FINAL CONFIGURATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

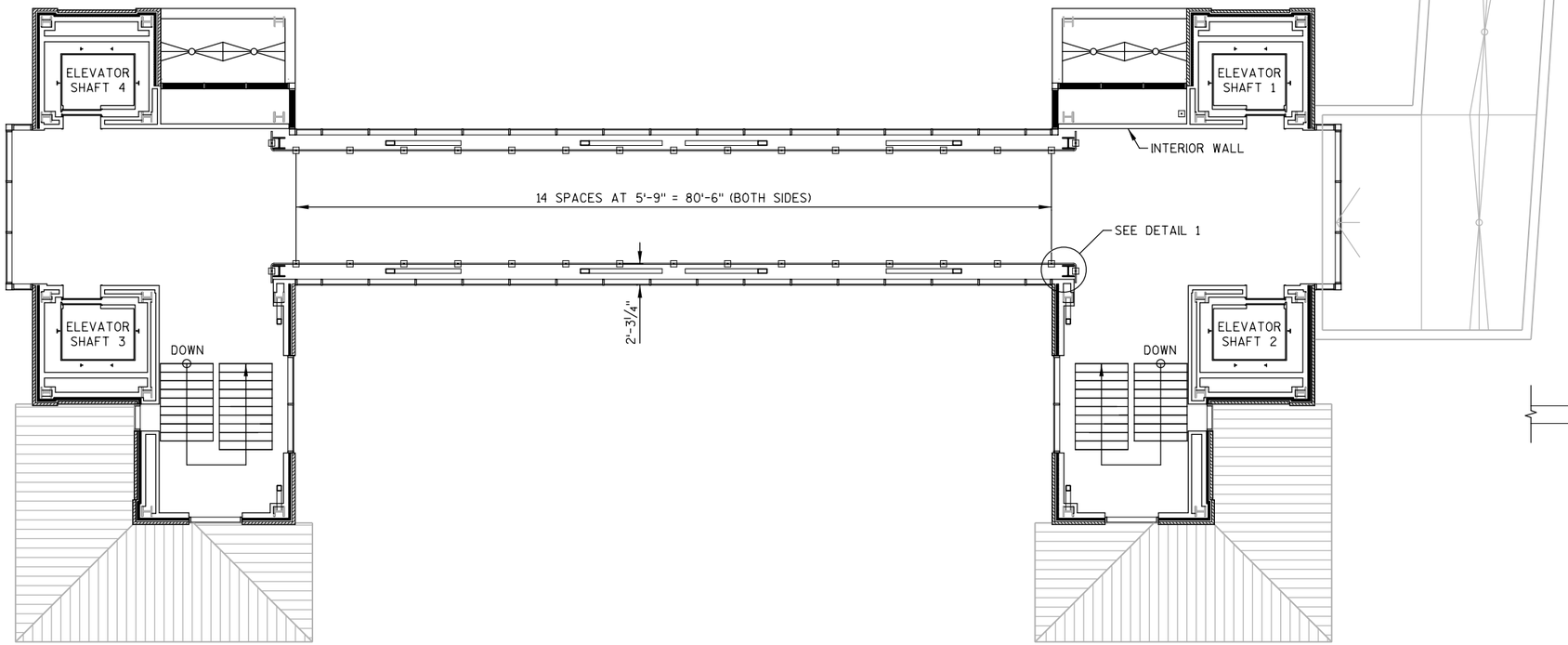
DRAWN BY CEB | PLANS CK'D. MJA

GLASS CURTAINWALL DETAILS

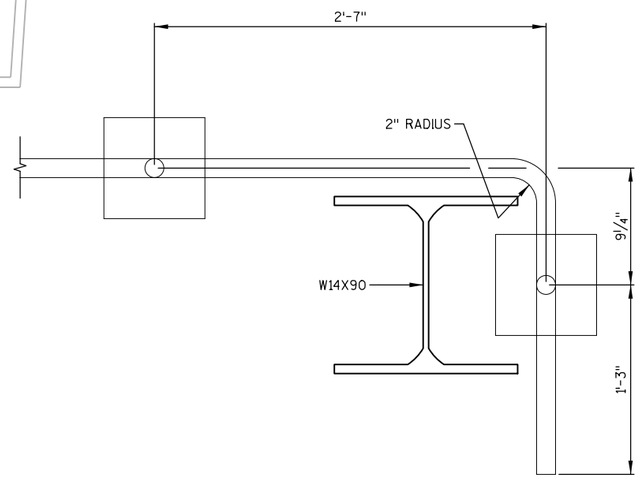
SHEET S-508
81

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\22_Hand Railings.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:22 PM
BATCH PRINT SHEET 2 OF 10

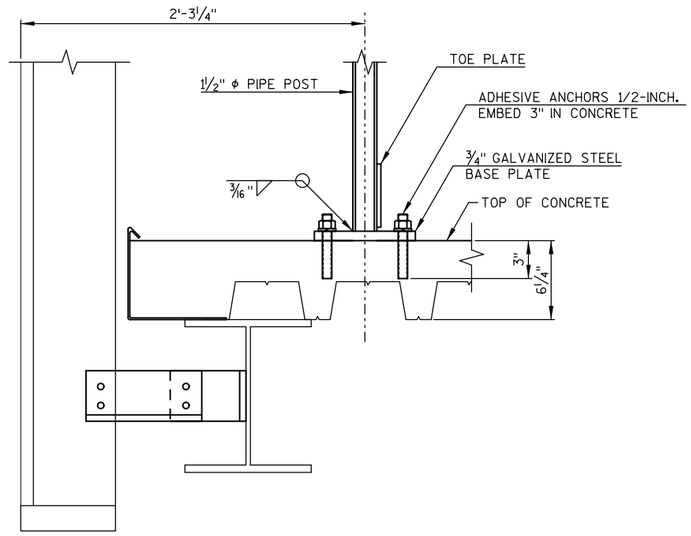
STATE PROJECT NUMBER
1000-57-70



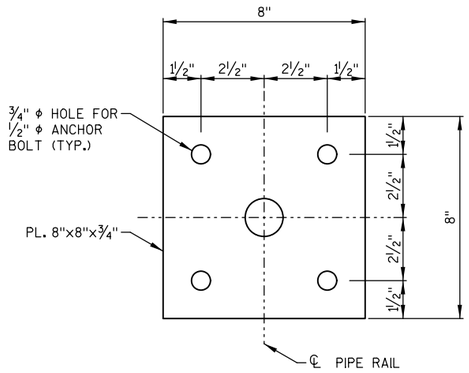
PIPE RAILING PLAN AT BRIDGE LEVEL



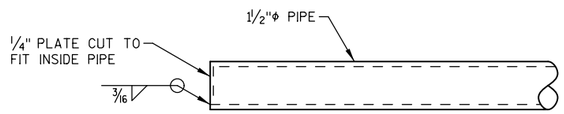
DETAIL 1



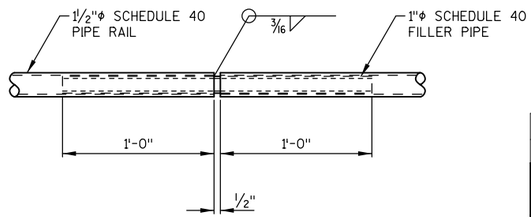
TYPICAL PIPE HANDRAIL POST ATTACHMENT



PIPE HANDRAIL BASE PLATE DETAIL



TYPICAL END CAP DETAIL



PIPE RAIL SPLICE DETAIL

NOTES:

RAILING POSTS, RAILS AND BASE PLATES ARE TO BE STAINLESS STEEL.

COST OF HAND RAILING IS INCLUDED IN THE BID ITEM "RAILING PIPE".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

PIPE RAILING DETAILS

SHEET S-509
82

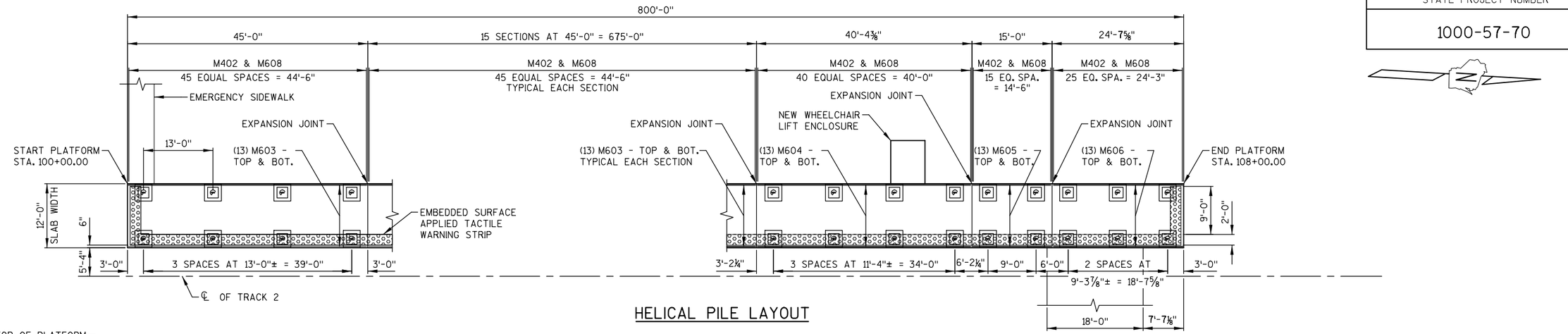
2

2

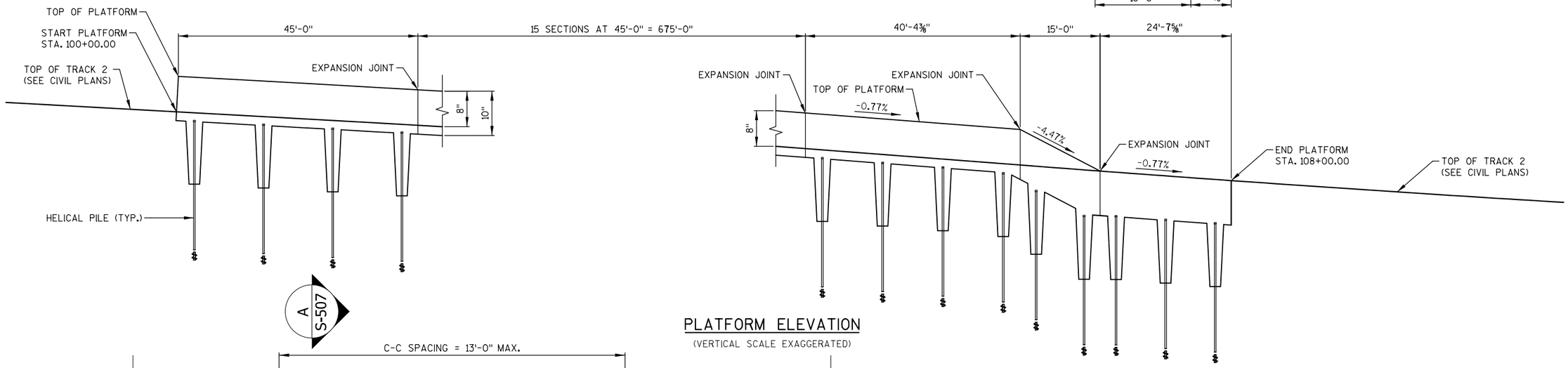
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubusman@aecom.com\vms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\606188829-MKE Rail Station\900-CAD GIS\Structures\Sheets\23_Platform Pile Layout.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:30 PM
BATCH PRINT SHEET 3 OF 10

STATE PROJECT NUMBER

1000-57-70

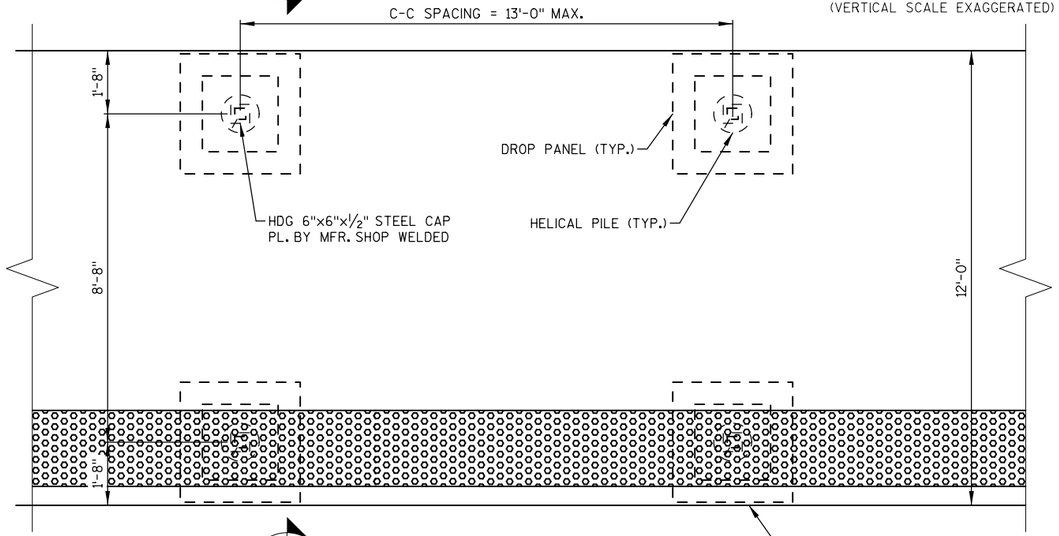


HELICAL PILE LAYOUT



PLATFORM ELEVATION

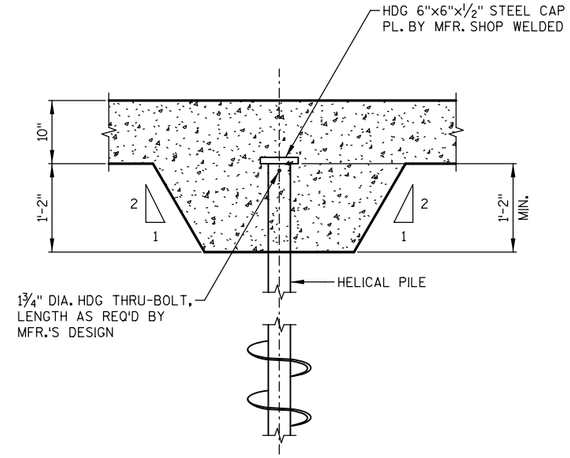
(VERTICAL SCALE EXAGGERATED)



A S-507

PLATFORM PARTIAL PLAN

SCALE ½" = 1'-0"



TYPICAL HELICAL PILE DETAIL

REINFORCEMENT NOT SHOWN FOR CLARITY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB/DNJ | PLANS CK'D. MJA

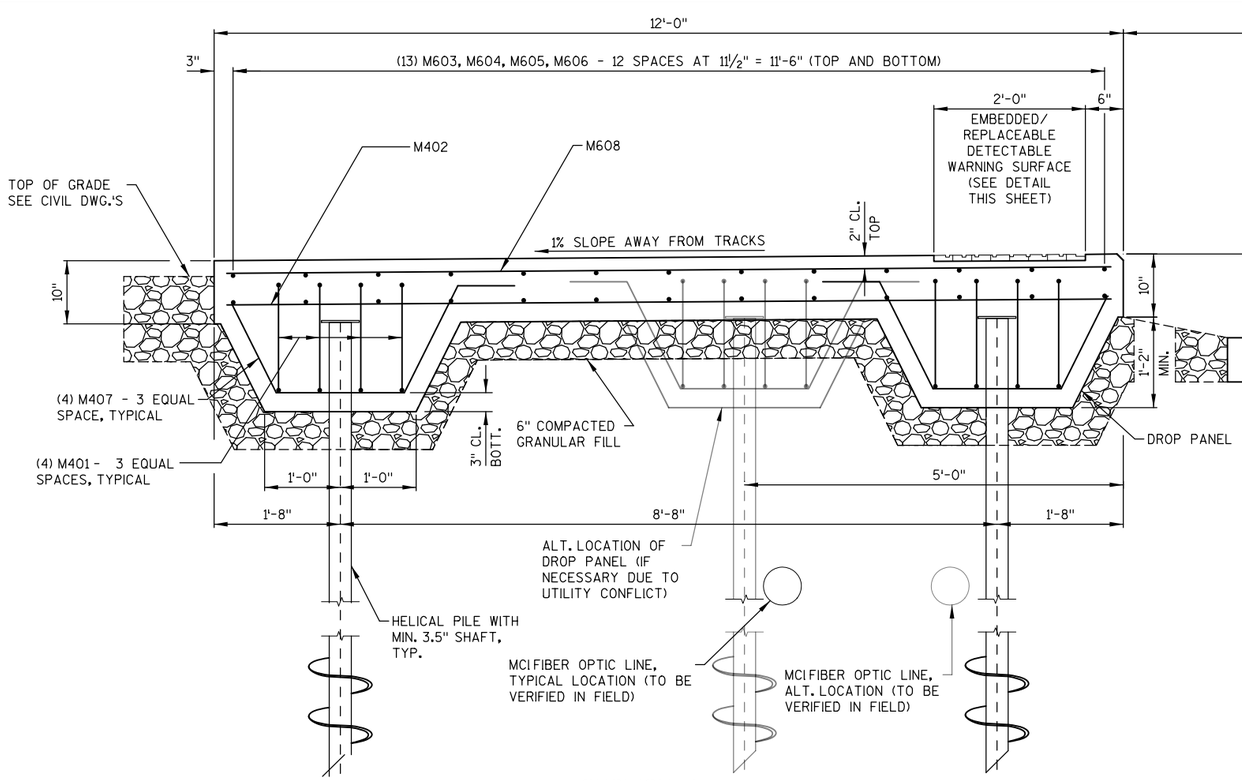
PLATFORM PILE LAYOUT

SHEET S-510
83

2

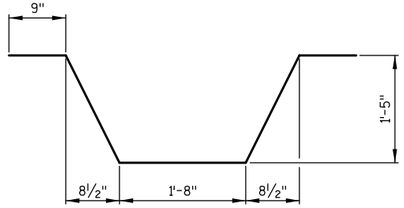
2

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carly.buschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\AECOM.GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\24 Platform Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:38 PM
BATCH PRINT SHEET 4 OF 10

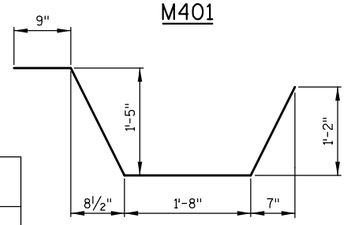


SECTION A

SCALE 1" = 1'-0"



M401



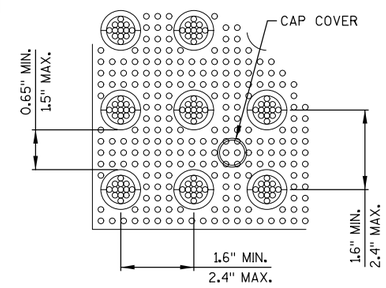
M407

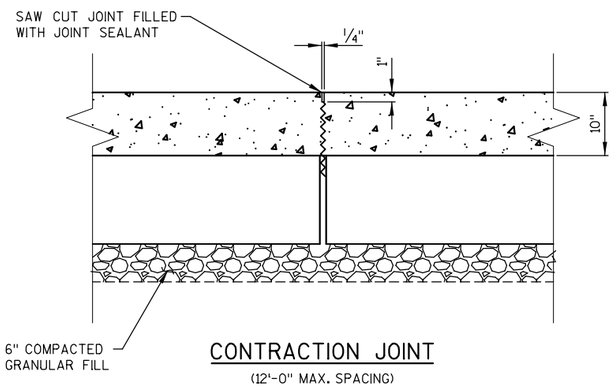
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

BAR MARK	NO. REQ'D	LENGTH	BENT	LOCATION	
COATED BARS				TOTAL WEIGHT = 56,120 LBS	
M401	584	6'-2"	X	SLAB DROP PANEL	VERT.
M402	819	11'-8"		SLAB - BOTTOM	TRANS.
M603	416	44'-8"		SLAB - TOP AND BOTTOM	LONGIT.
M604	26	40'-0"		SLAB - TOP AND BOTTOM	LONGIT.
M605	26	14'-8"		SLAB - TOP AND BOTTOM	LONGIT.
M606	26	24'-3"		SLAB - TOP AND BOTTOM	LONGIT.
M407	584	5'-1"	X	SLAB DROP PANEL - TRANS.	VERT.
M608	819	11'-8"		SLAB - TOP	TRANS.

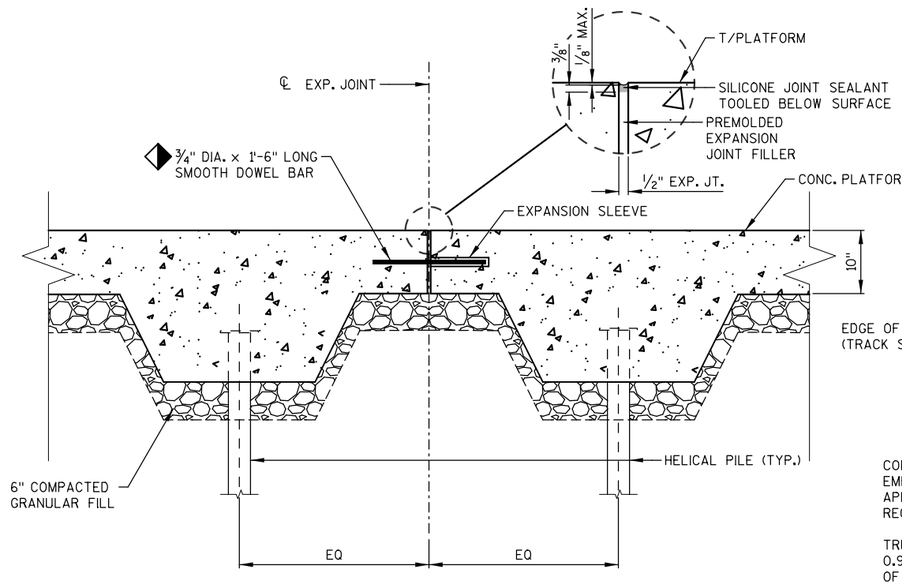
COST OF PLATFORM CONCRETE IS INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".





CONTRACTION JOINT

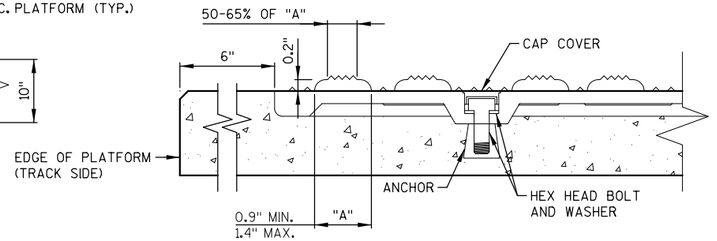
(12'-0" MAX. SPACING)



EXPANSION JOINT

(45'-0" SPACING)

◆ ¾" DIA. SMOOTH DOWEL BARS, 1'-6" LONG, AT EXPANSION JOINTS. EMBED 9". USE APPROVED DEBONDER ON ONE HALF OF BAR LENGTH. COST INCLUDED IN "CONCRETE MASONRY BRIDGES."



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.

FOR MORE DETAILS, SEE SHEET "PLATFORM DETAIL SHEET" IN SECTION 2.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY GTS/DNJ | PLANS CK'D. MJA

PLATFORM DETAILS

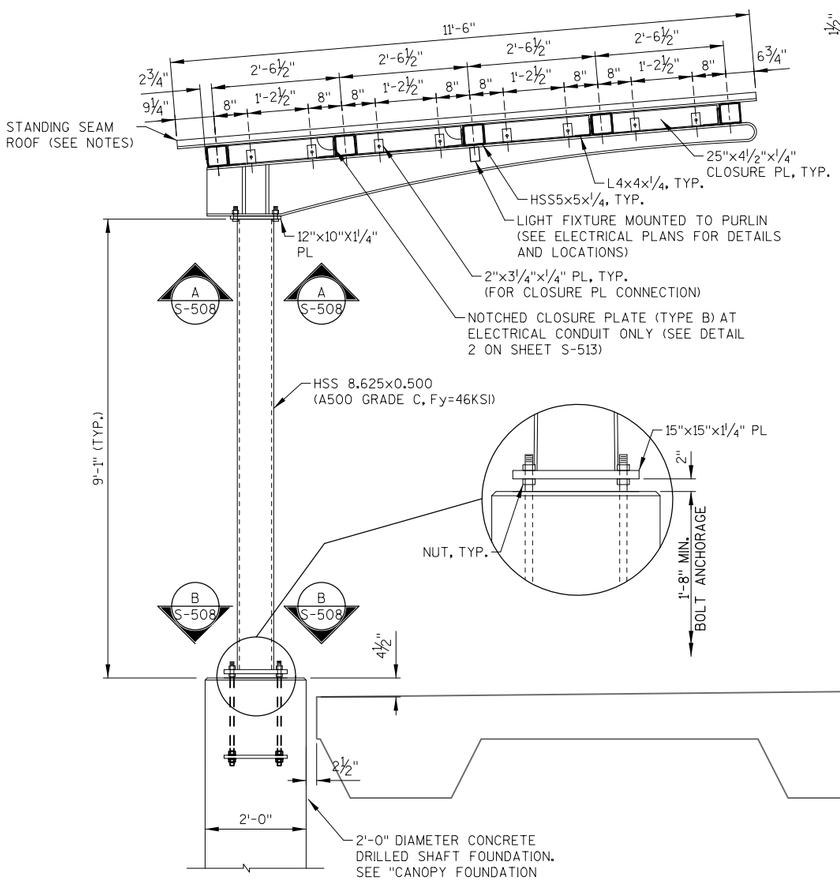
SHEET S-511
84

2

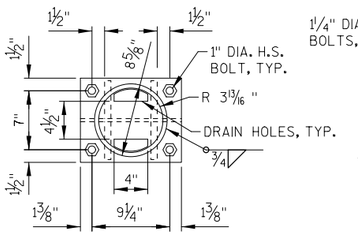
2

PRINTER DRIVER: c:\pwworking\aecom.ds20_na.2019\carlybuschman@aecom.com\vdms@7634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.GLOBAL_NA\Workspaces\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\25 Platform Canopy Steel Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:45 PM BATCH PRINT SHEET 5 OF 10

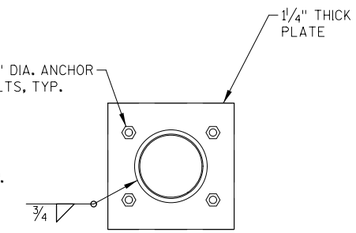
STATE PROJECT NUMBER
1000-57-70



ELEVATION
SCALE: 1" = 2'-0"



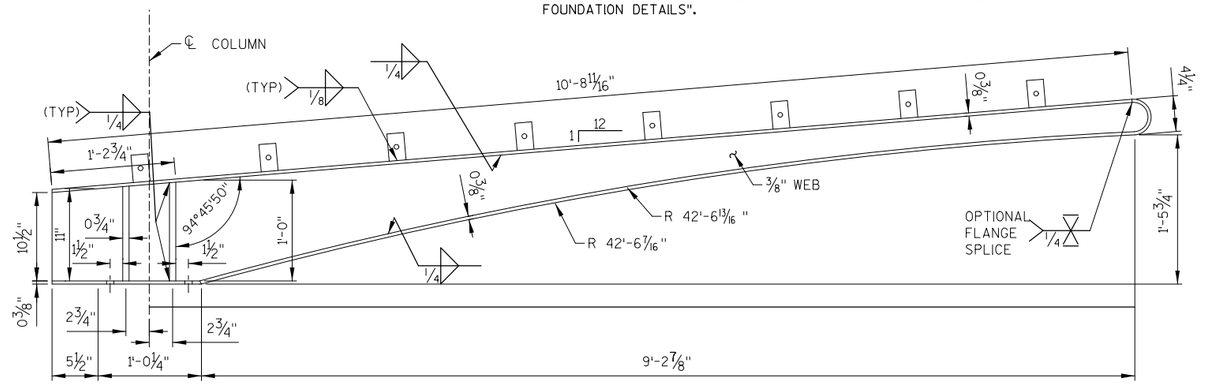
SECTION A-A
N.T.S



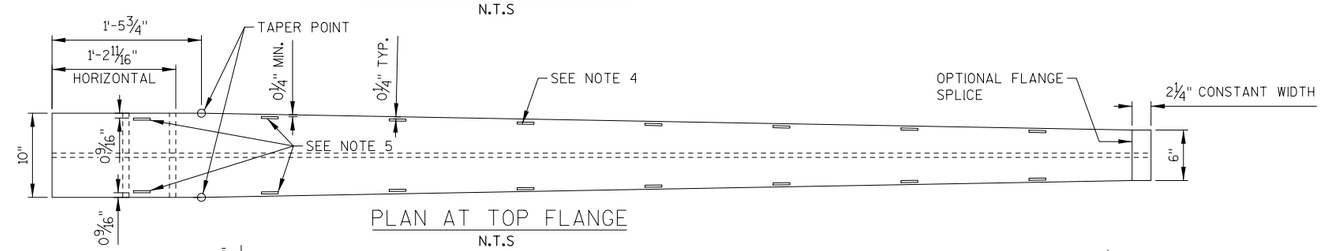
SECTION B-B
N.T.S

NOTES:

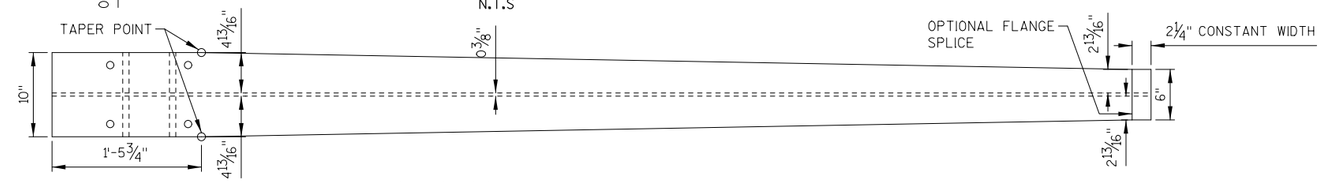
1. ROOF TO BE 20 GAGE, 2" HIGH GALVANIZED STANDING SEAM TYPE WITH 18" WIDE PANELS. COLOR TO BE GRAY OR BROWN.
2. CONCEALED ANCHOR CLIPS FOR STANDING SEAM ROOF TO BE GALVANIZED STEEL WITH A MINIMUM .0598" THICKNESS.
3. FASTEN ANCHOR CLIPS TO STEEL PURLINS USING #14 DIAMETER SELF TAPPING GALVANIZED SCREWS 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.
7. ALL STRUCTURAL STEEL TO BE SHOP PAINTED. COLOR TO BE GRAY OR BROWN.
8. FOR ANCHOR PLATE DETAILS, SEE DETAILS 1 & 2 ON SHEET "CANOPY FOUNDATION DETAILS".



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

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

PLATFORM CANOPY STEEL DETAILS (1 OF 2)

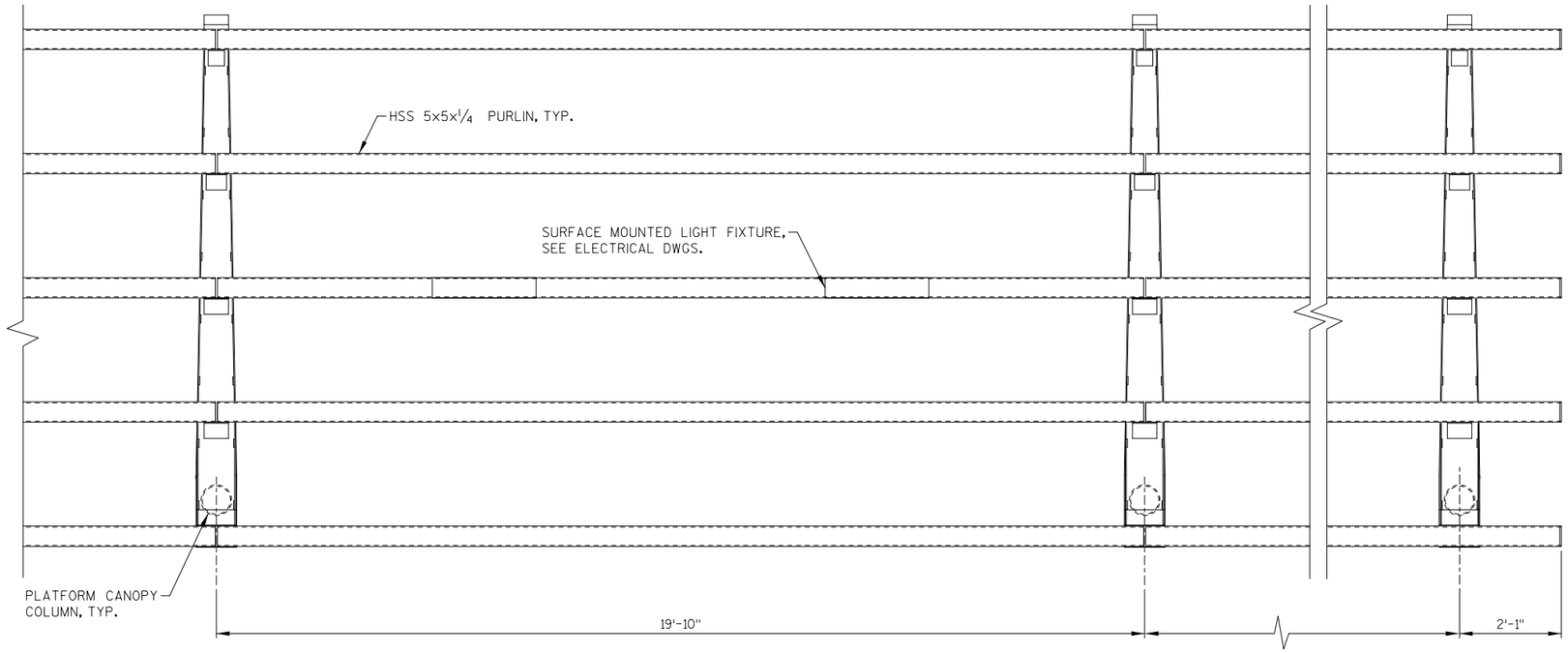
SHEET S-512
85

2

2

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-nar.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-nar.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\26_Platform Canopy Steel Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 45452 PM
BATCH PRINT SHEET 6 OF 10

STATE PROJECT NUMBER
1000-57-70

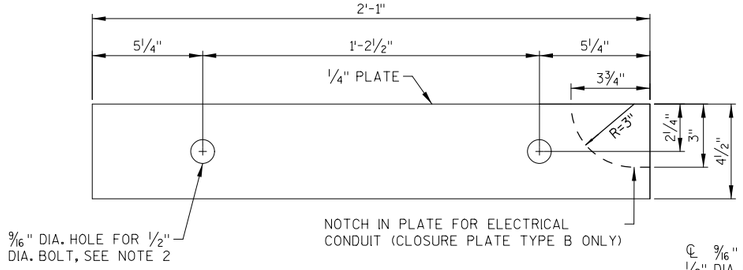


TYPICAL BAY

(ROOFING NOT SHOWN)
SCALE: 1" = 3'-0"

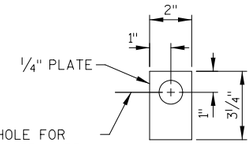
NOTES:

1. PLATFORM NOT SHOWN FOR CLARITY.
2. TACK WELD NUT FOR ½" DIAMETER BOLT TO INSIDE FACE OF ATTACHMENT PLATE.



DETAIL 2

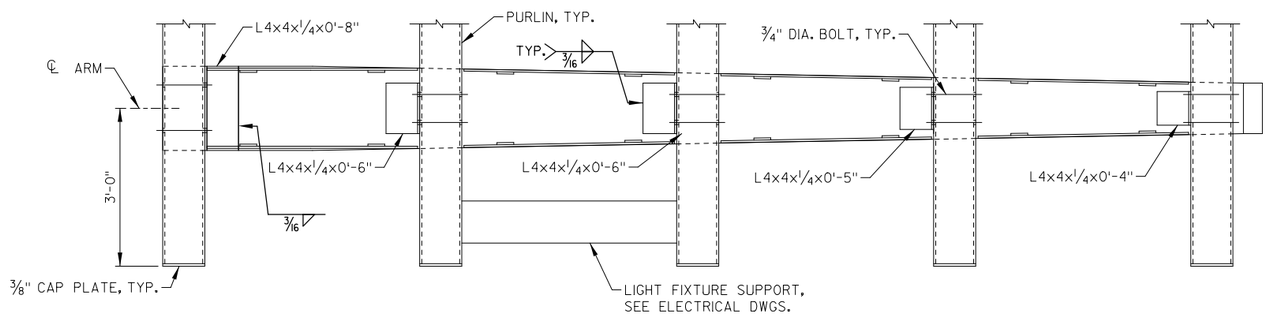
(CLOSURE PLATE TYPE A AND B)
N.T.S.



DETAIL 1

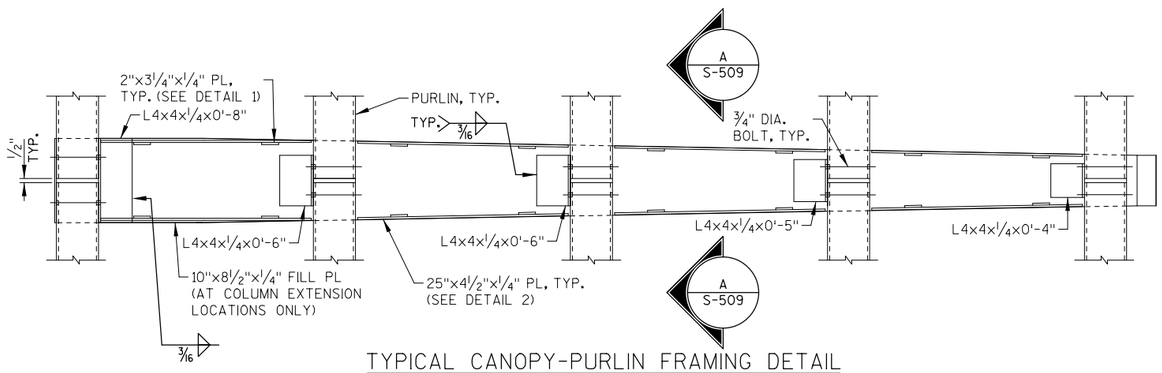
N.T.S.

ROOF OVERHANG



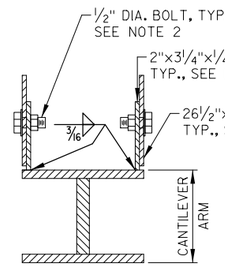
TYPICAL PLAN AT CANOPY OVERHANG

N.T.S.



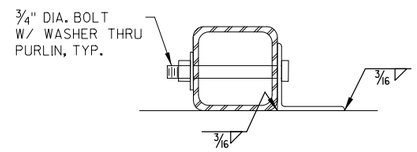
TYPICAL CANOPY-PURLIN FRAMING DETAIL

N.T.S.



SECTION A-A

N.T.S.



TYP. PURLIN CONNECTION DETAIL

N.T.S.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

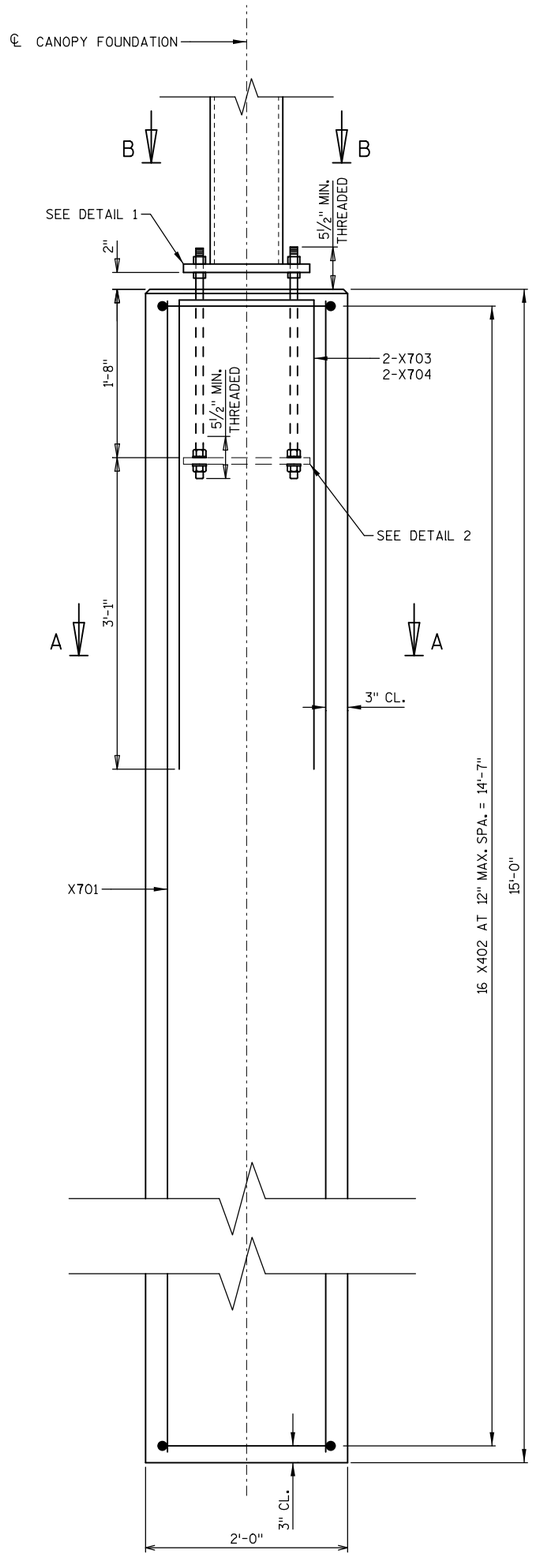
STRUCTURAL

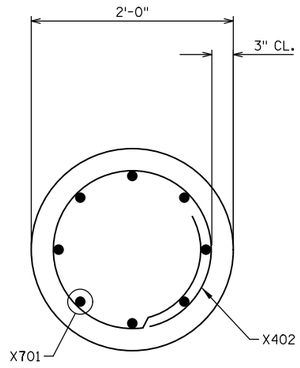
DRAWN BY CEB | PLANS CK'D. MJA

PLATFORM CANOPY STEEL DETAILS (2 OF 2)

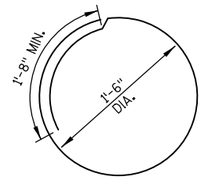
SHEET S-513
86

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbuschman@aecom.com\dm
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\AECOM
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\27_Canopy Foundation Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:54:59 PM
BATCH PRINT SHEET 7 OF 10

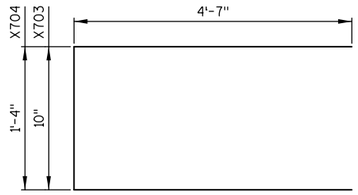




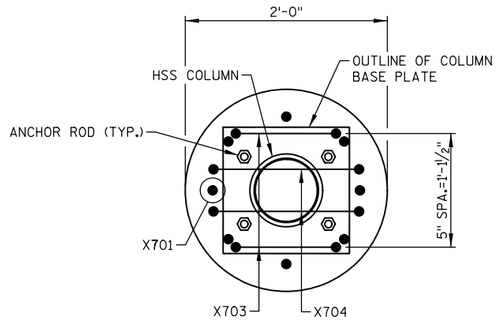
SECTION A-A



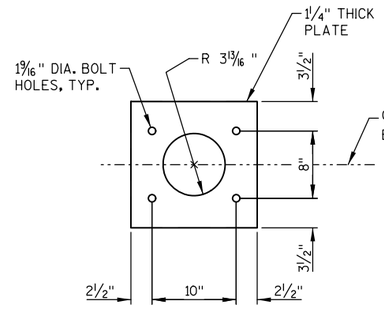
X402



X703, X704



VIEW B-B



DETAIL 1
COLUMN BASE PLATE

DETAIL 2
ANCHOR PLATE

BILL OF BARS

REBAR TOTAL QUANTITY FOR 26 CANOPY FOUNDATIONS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 10,100 LBS	
X701	208	14 - 7			FOOTING	VERT.
X402	416	6 - 5	X		FOOTING STIRRUP	HORIZ.
X703	52	9 - 8	X		FOOTING STIRRUP	HORIZ.
X704	52	10 - 2	X		FOOTING STIRRUP	HORIZ.

NOTES:

SEE BASE PLATE DETAILS ON SHEET "PLATFORM CANOPY STEEL DETAILS (1 OF 2).

DRILLING, FORMING, TEMPORARY CASING (IF NEEDED) AND CONCRETE FOR THE DRILLED SHAFT IS INCLUDED IN THE BID ITEM "DRILLED FOUNDATIONS 24-INCH".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

CANOPY FOUNDATION DETAILS

SHEET S-514
87

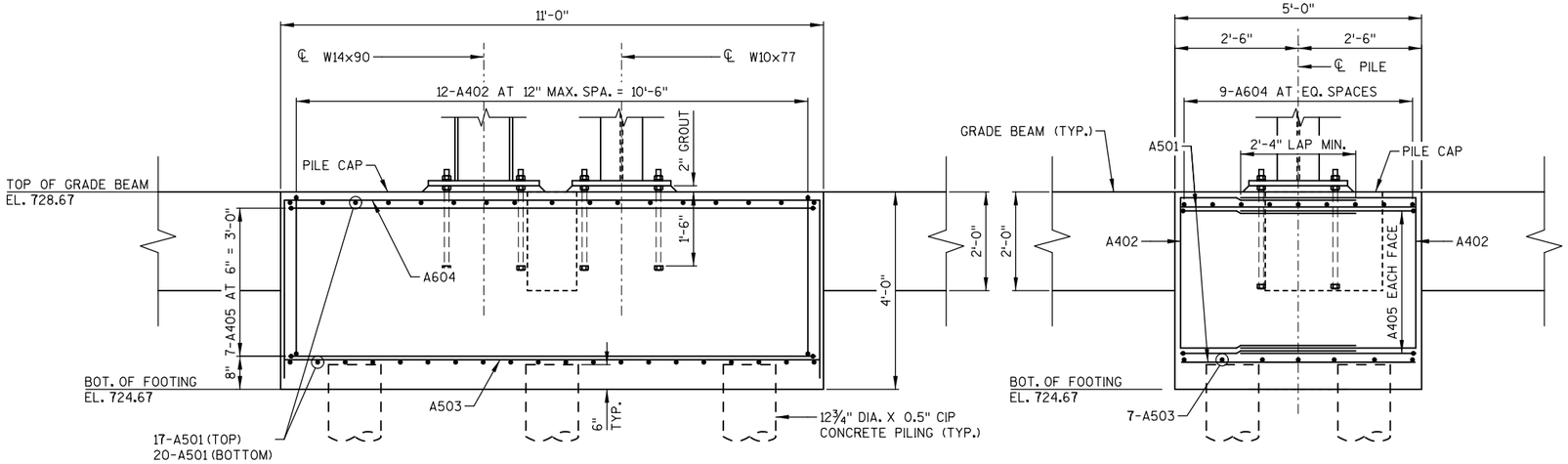
2

2

PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.juhuschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-nar-pw.bentley.com:AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\aecom-nar-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\28_Foundation Details Type 1.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:55:06 PM
BATCH PRINT SHEET 8 OF 10

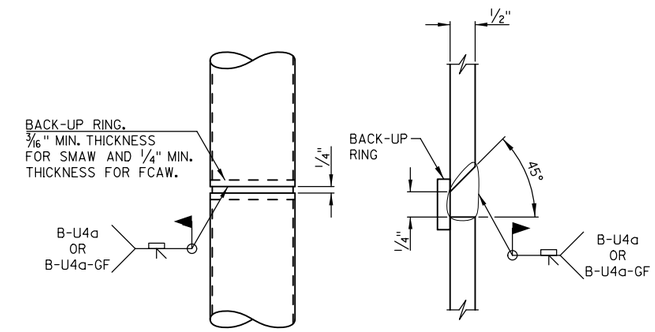
STATE PROJECT NUMBER

1000-57-70



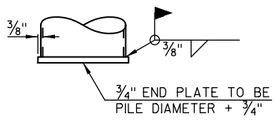
ELEVATION

END VIEW

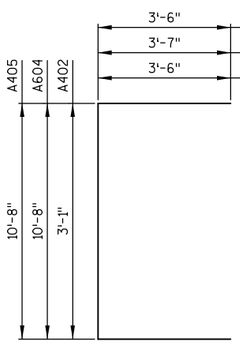


CAST-IN-PLACE 'PIPE PILE' CIP PILE WELD DETAIL

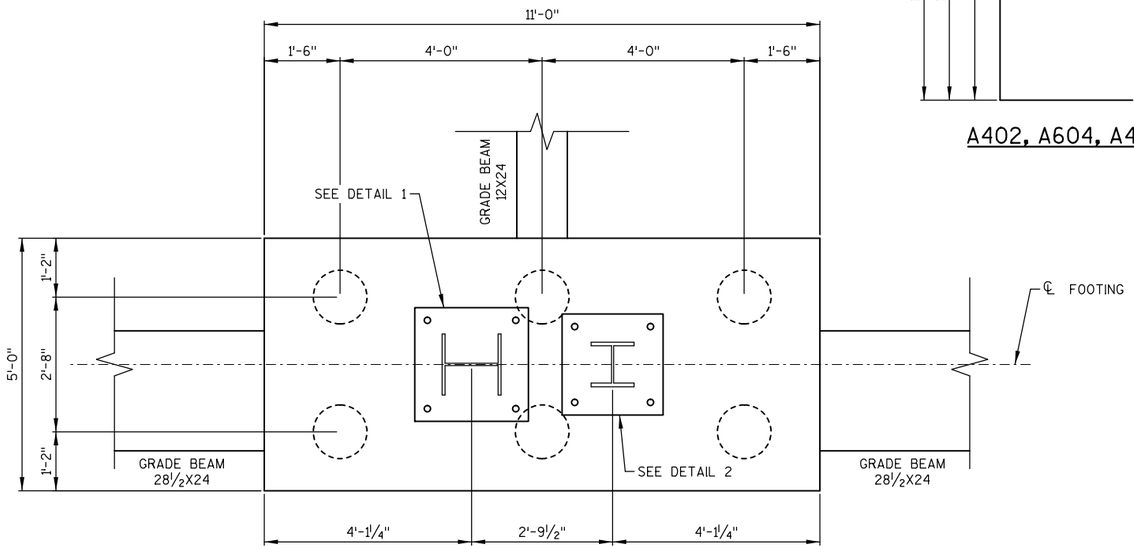
PILE DETAILS



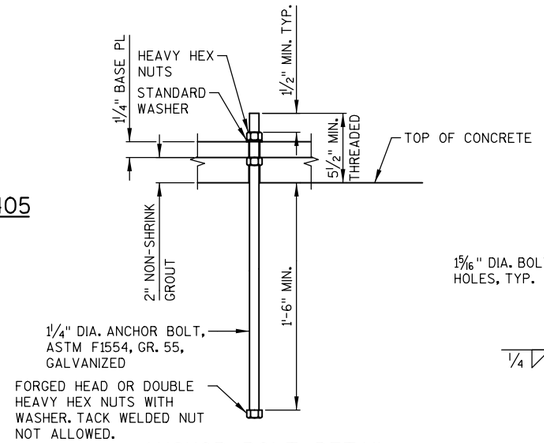
END PLATE DETAIL FOR CIP PILING



A402, A604, A405

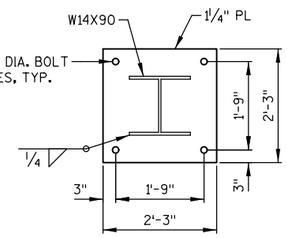


PLAN

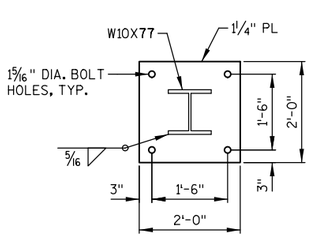


ANCHOR BOLT DETAIL

NOTE: USE 1/4" MIN. TEMPLATE PLATE FOR SETTING THE ANCHOR BOLTS. REMOVE AFTER CONCRETE IS SET.



DETAIL 1



DETAIL 2

BILL OF BARS

REBAR TOTAL QUANTITY FOR 4 TYPE 1 FOUNDATIONS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 3,270 LBS
A501	148	4 - 8			FOOTING	HORIZ.
A402	96	9 - 11	X		FOOTING	VERT.
A503	28	10 - 8			FOOTING	HORIZ.
A604	36	17 - 6	X		FOOTING	HORIZ.
A405	56	17 - 6	X		FOOTING	HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

BUILDING FOUNDATION DETAILS TYPE 1

SHEET S-515
88

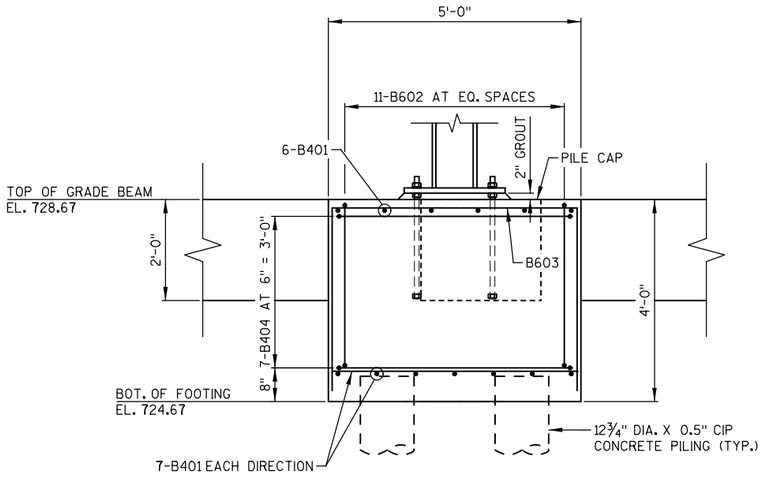
2

2

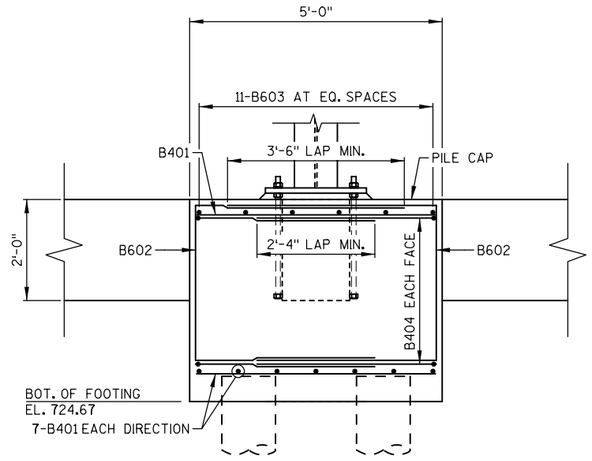
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carl.buschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\aecom-na-pw.bentley.com:AECOM.DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\29_Foundation Details Type 2.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:55:13 PM
BATCH PRINT SHEET 9 OF 10

STATE PROJECT NUMBER

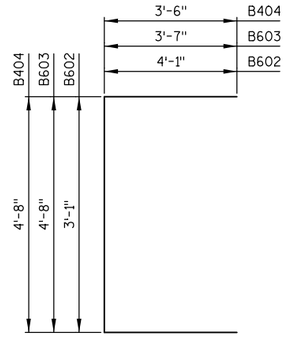
1000-57-70



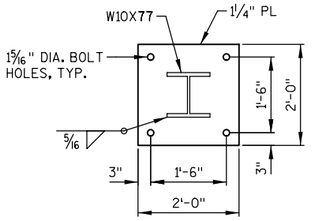
ELEVATION



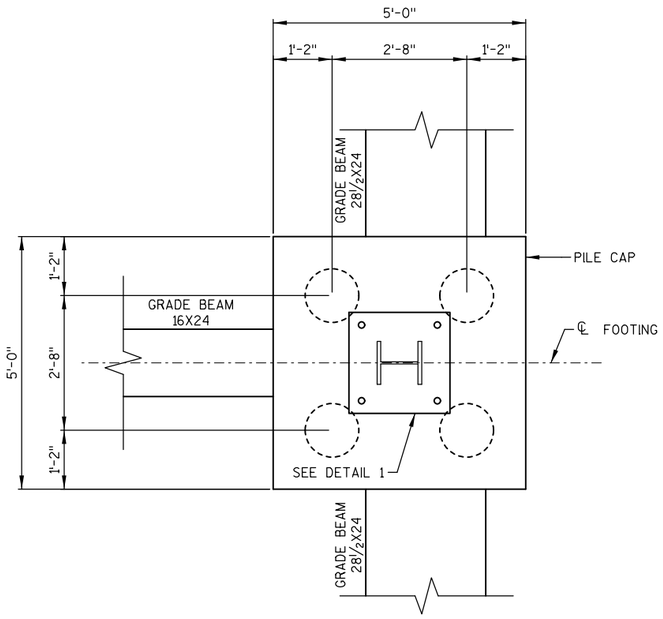
END VIEW



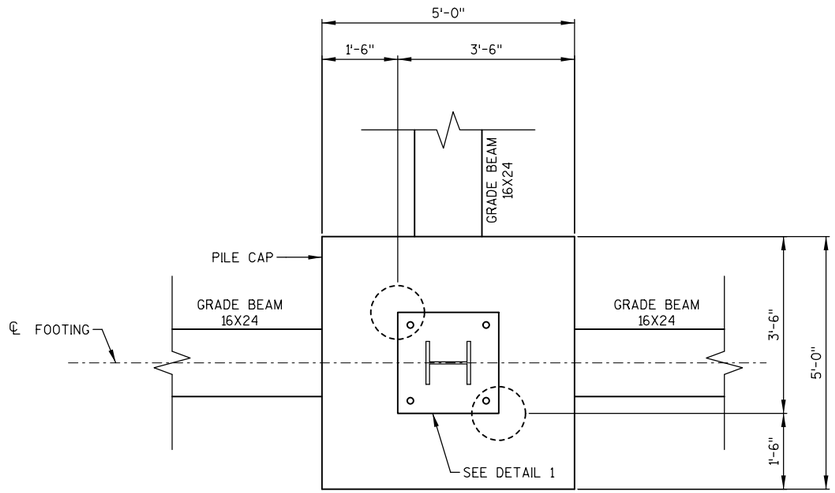
B602, B603, B404



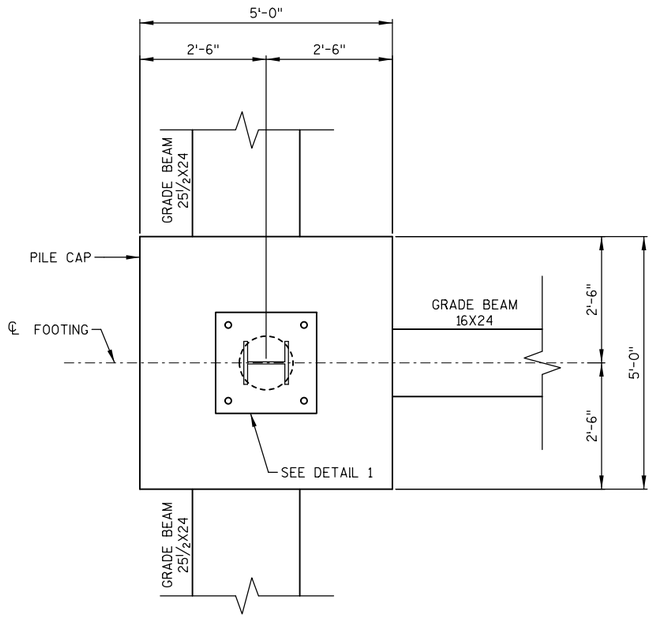
DETAIL 1



PILE LAYOUT 1



PILE LAYOUT 2



PILE LAYOUT 3

BILL OF BARS

REBAR TOTAL QUANTITY FOR 12 TYPE 2 FOUNDATIONS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 8,650 LBS
B401	240	4 - 8			FOOTING	HORIZ.
B602	264	10 - 11	X		FOOTING	VERT.
B603	132	11 - 6	X		FOOTING	HORIZ.
B404	168	11 - 6	X		FOOTING	HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

BUILDING FOUNDATION DETAILS TYPE 2

SHEET S-516
89

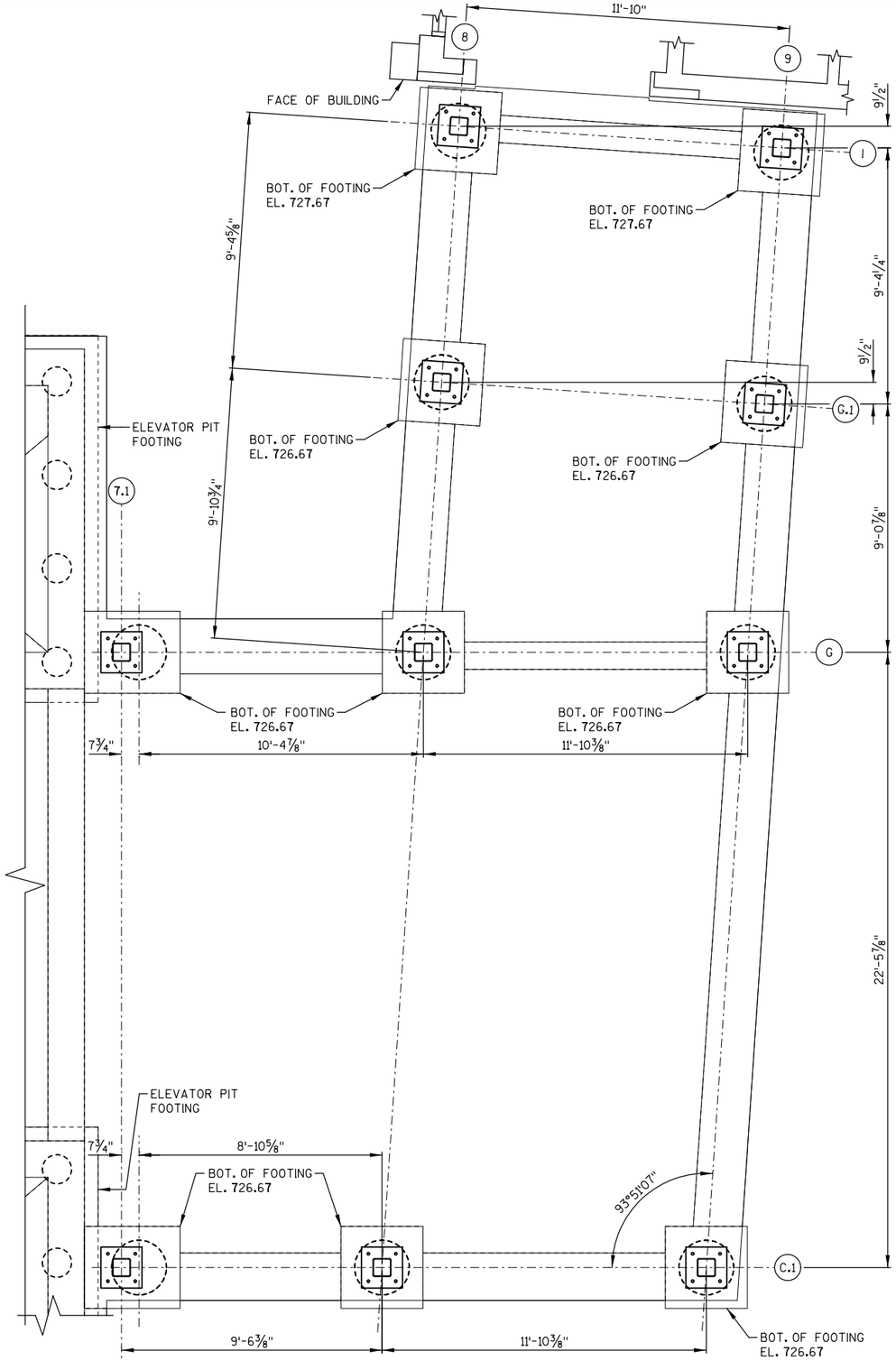
2

2

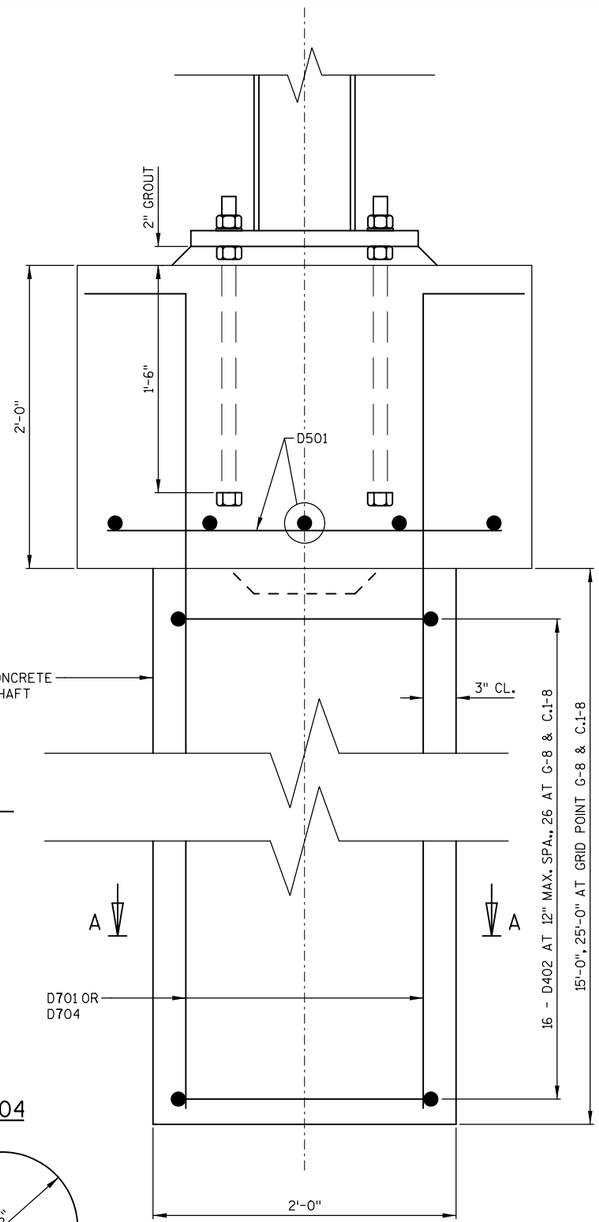
PRINTER DRIVER: c:\pwworking\aecom.ds20_na.2019\carlybuschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\AECOM.GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM.DS20.NA.2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\30 Foundation Details Type 3.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:55:22 PM
BATCH PRINT SHEET 10 OF 10

STATE PROJECT NUMBER

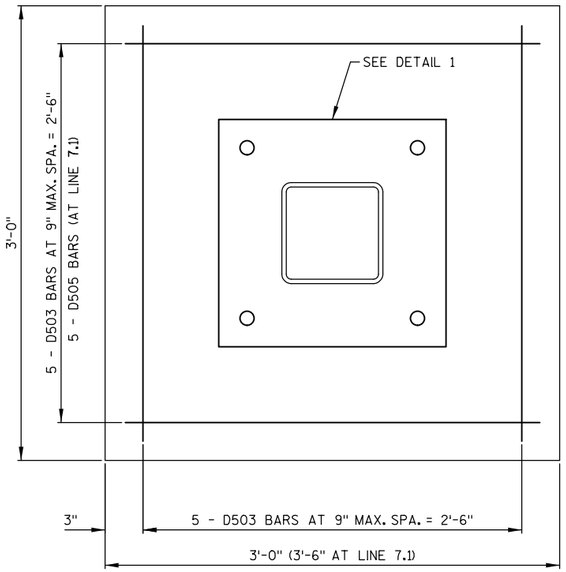
1000-57-70



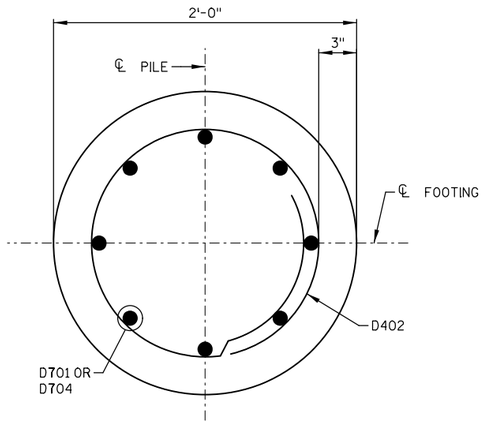
TYPE 3 FOUNDATION LAYOUT



ELEVATION

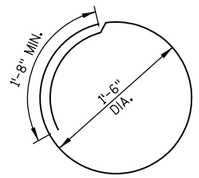


PLAN



SECTION A-A

D701, D704

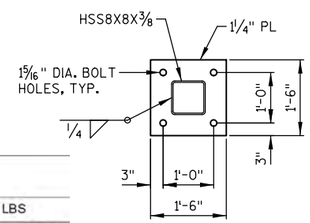


D402

BILL OF BARS

REBAR TOTAL QUANTITY FOR 10 TYPE 3 FOUNDATIONS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 4,260 LBS	
D701	64	17 - 7	X		DRILLED SHAFT	VERT.
D402	180	6 - 5	X		DRILLED SHAFT STIRRUP	HORIZ.
D503	90	2 - 8			FOUNDATION	HORIZ.
D704	16	27 - 7	X		DRILLED SHAFT	VERT.
D505	10	3 - 2			FOUNDATION	HORIZ.



DETAIL 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

BUILDING FOUNDATION DETAILS TYPE 3

SHEET S-517
90

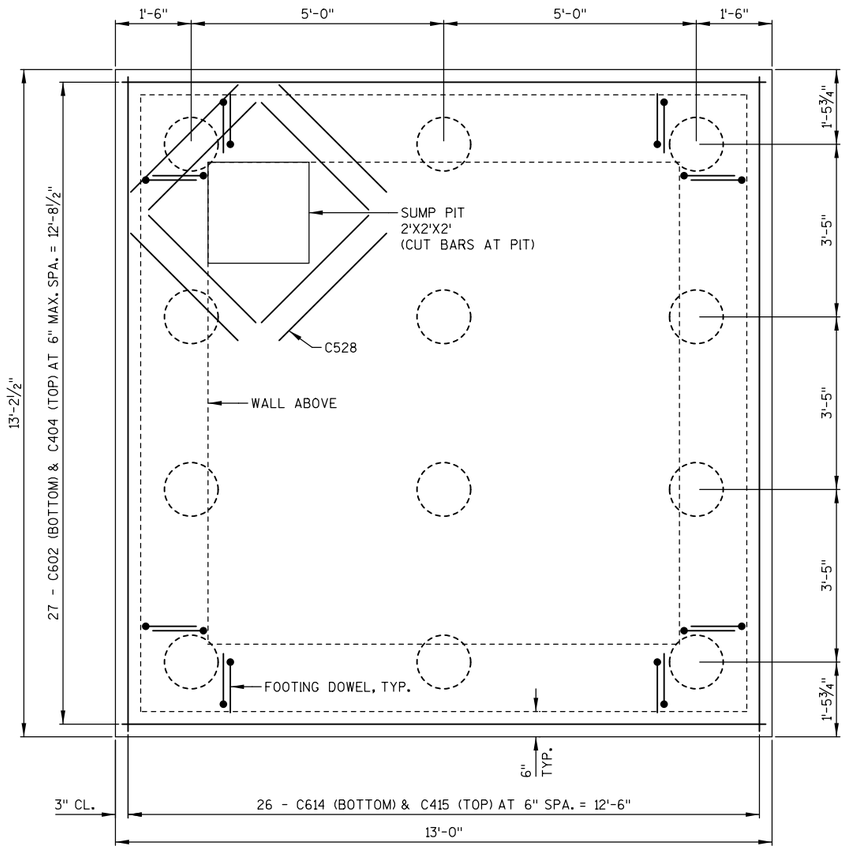
2

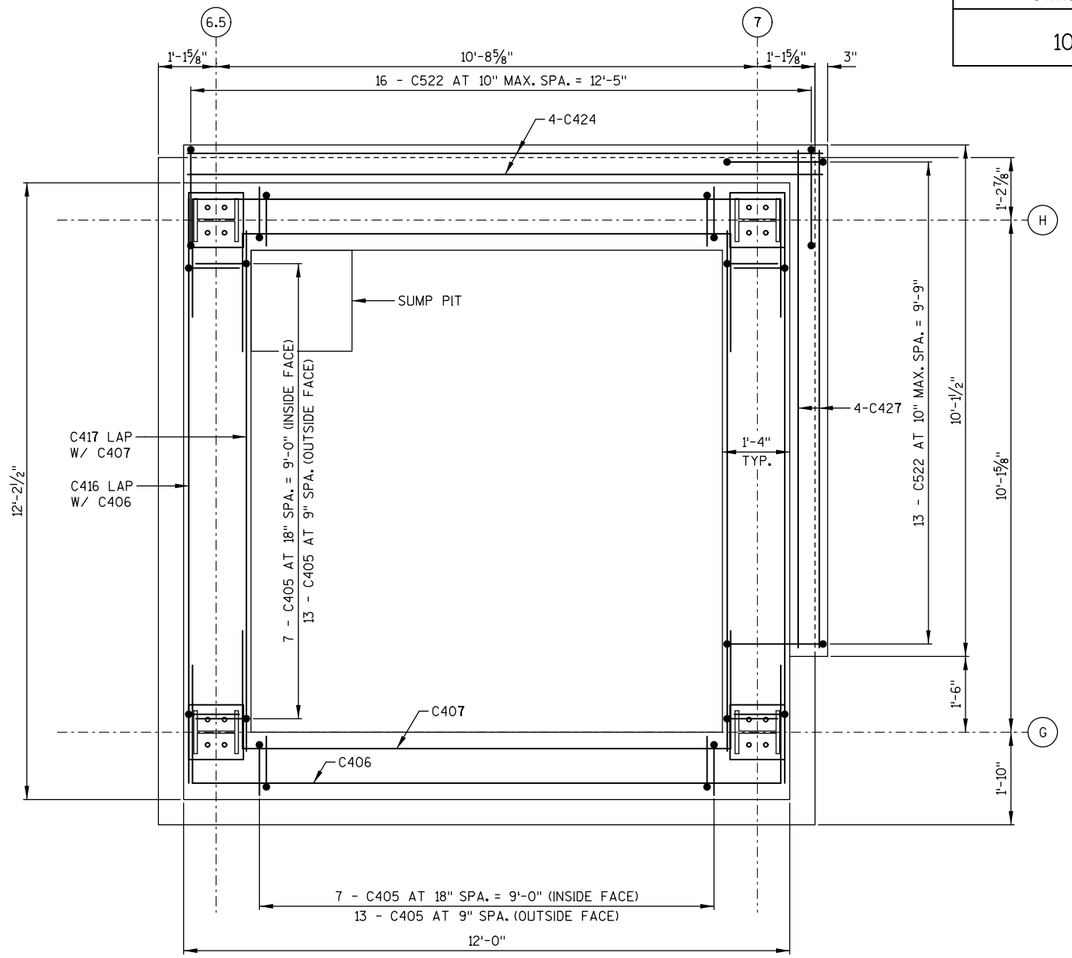
2

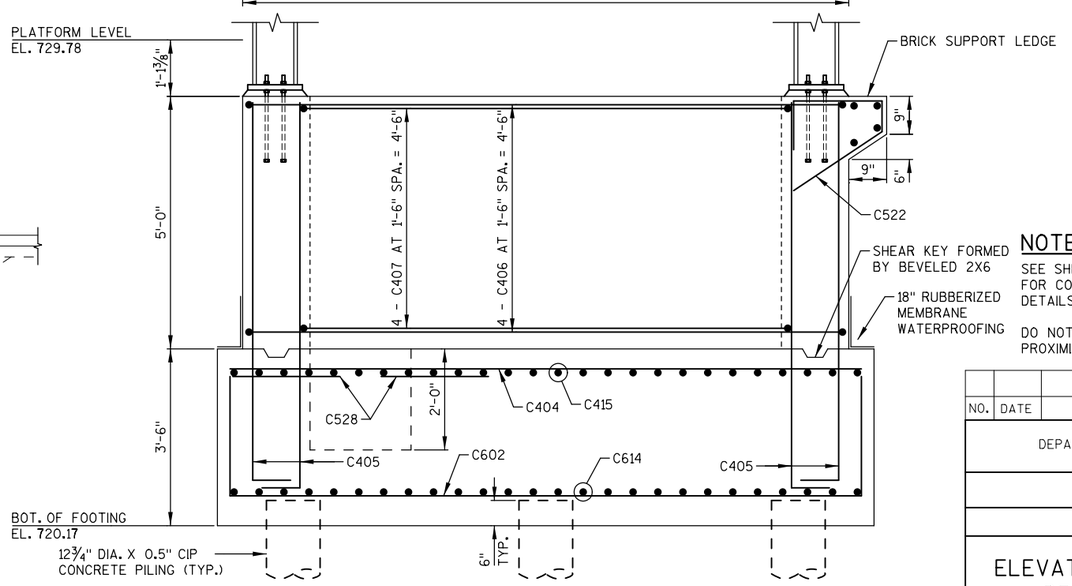
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubuschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM.GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\31_Elevator Pit Details 1.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:59:21 PM BATCH PRINT SHEET 1 OF 10

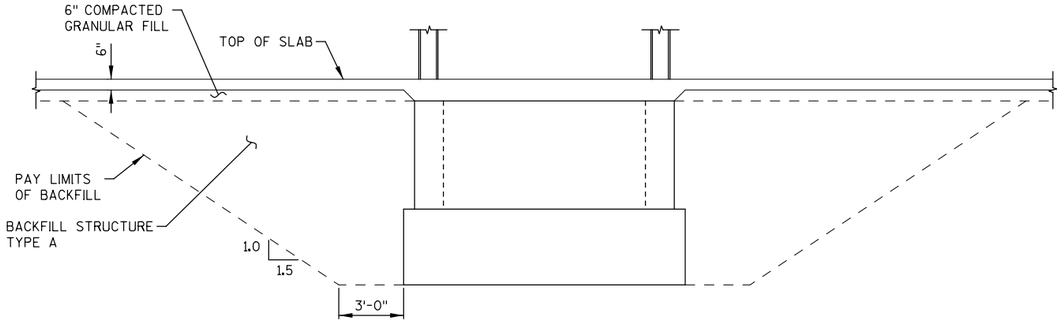
STATE PROJECT NUMBER

1000-57-70









TYPICAL BACKFILL DETAIL

NOTE:

SEE SHEET "ELEVATOR PIT DETAILS (2 OF 4)" FOR COLUMN BASE PLATE AND ANCHOR BOLT DETAILS.

DO NOT OPERATE HEAVY EQUIPMENT IN CLOSE PROXIMITY TO THE ELEVATOR PIT WALLS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

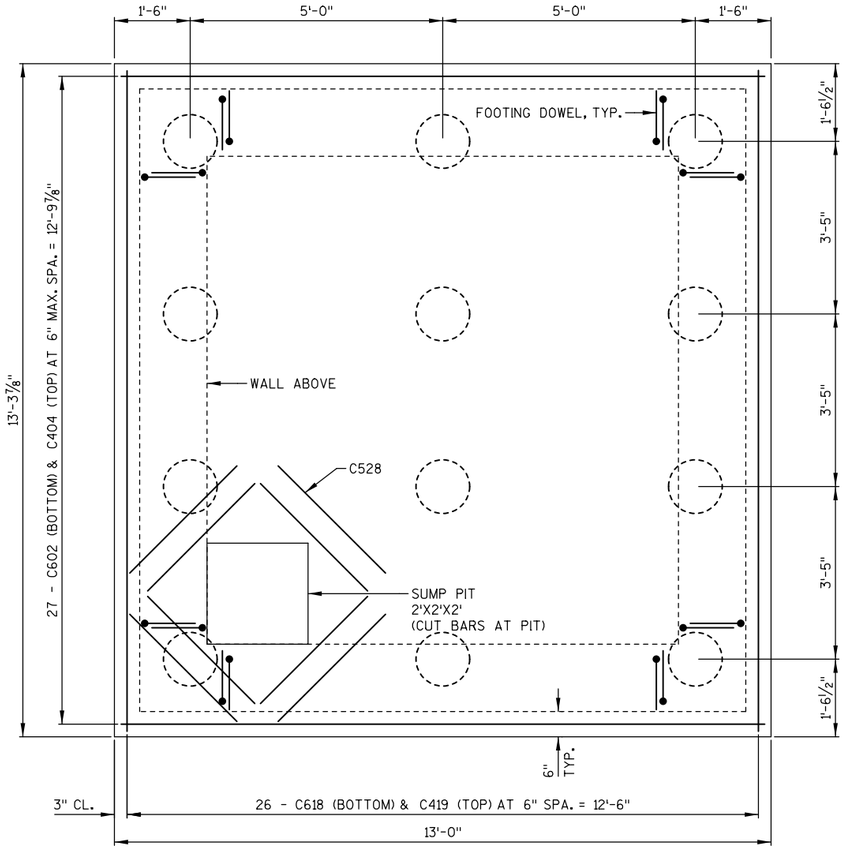
ELEVATOR PIT 1 DETAILS

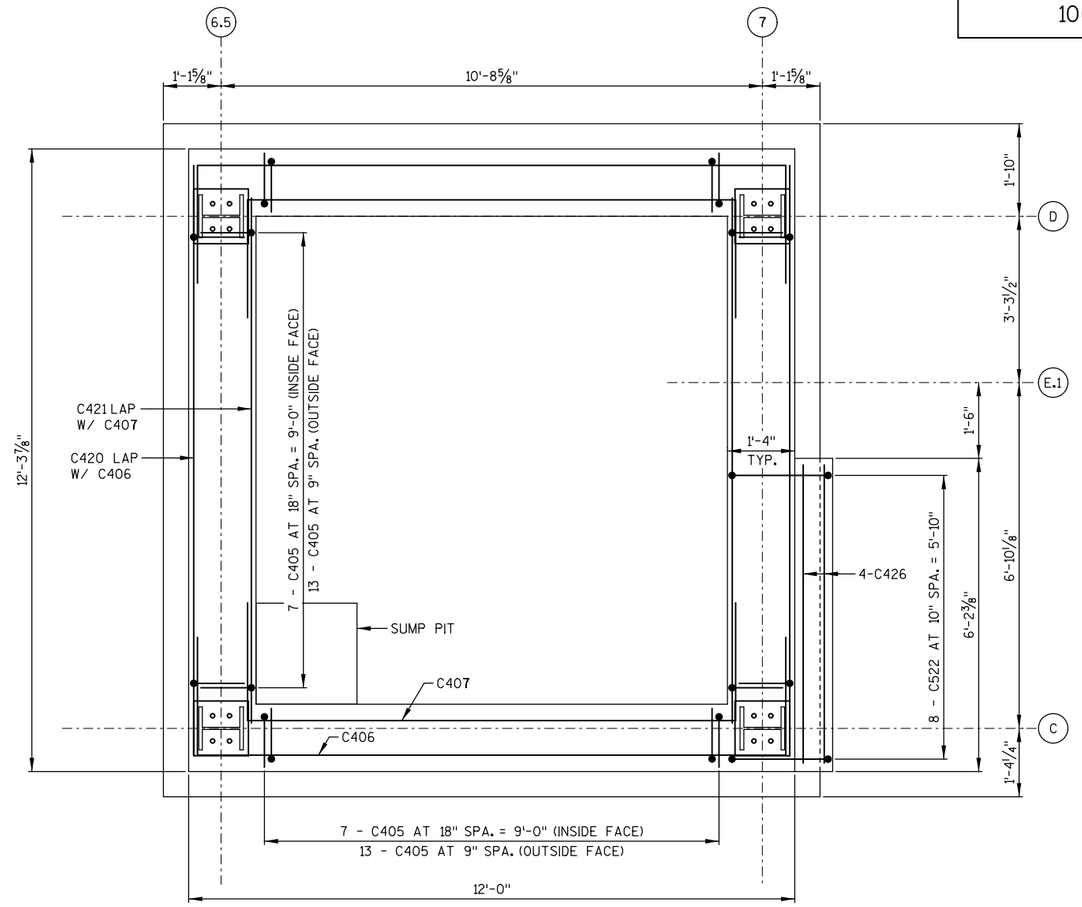
SHEET S-518
91

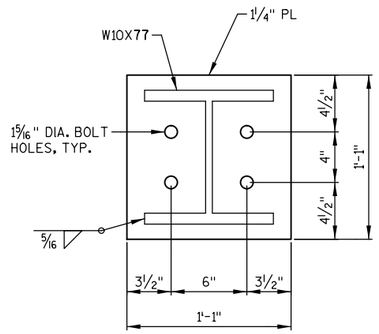
2

2

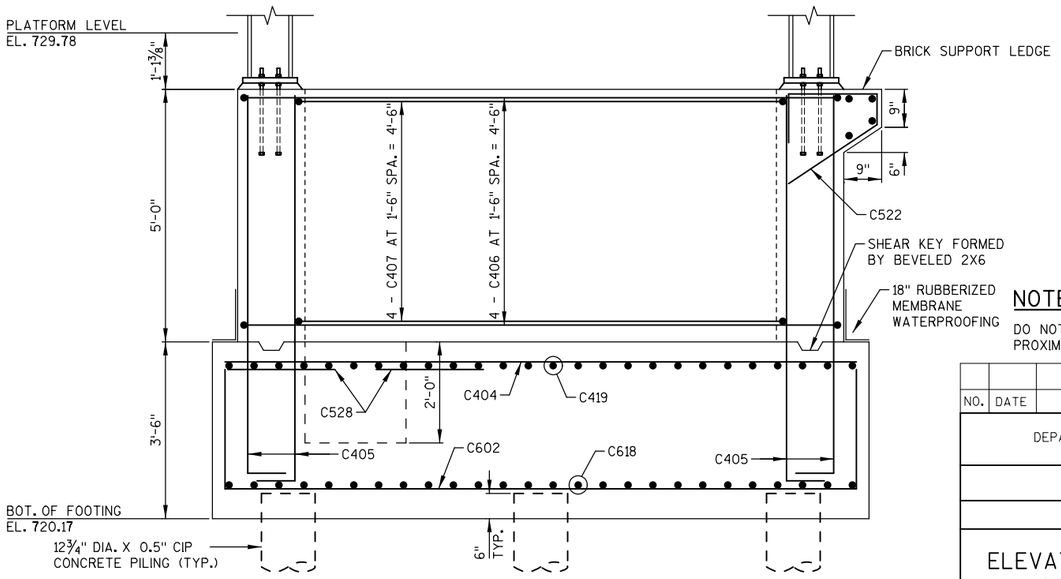
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljubuschman@aecom.com\vms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM.GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\32.Elevator Pit Details 2.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:59:31 PM
BATCH PRINT SHEET 2 OF 10







COLUMN BASE PLATE



NOTE:

DO NOT OPERATE HEAVY EQUIPMENT IN CLOSE PROXIMITY TO THE ELEVATOR PIT WALLS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

ELEVATOR PIT 2 DETAILS

SHEET S-519
92

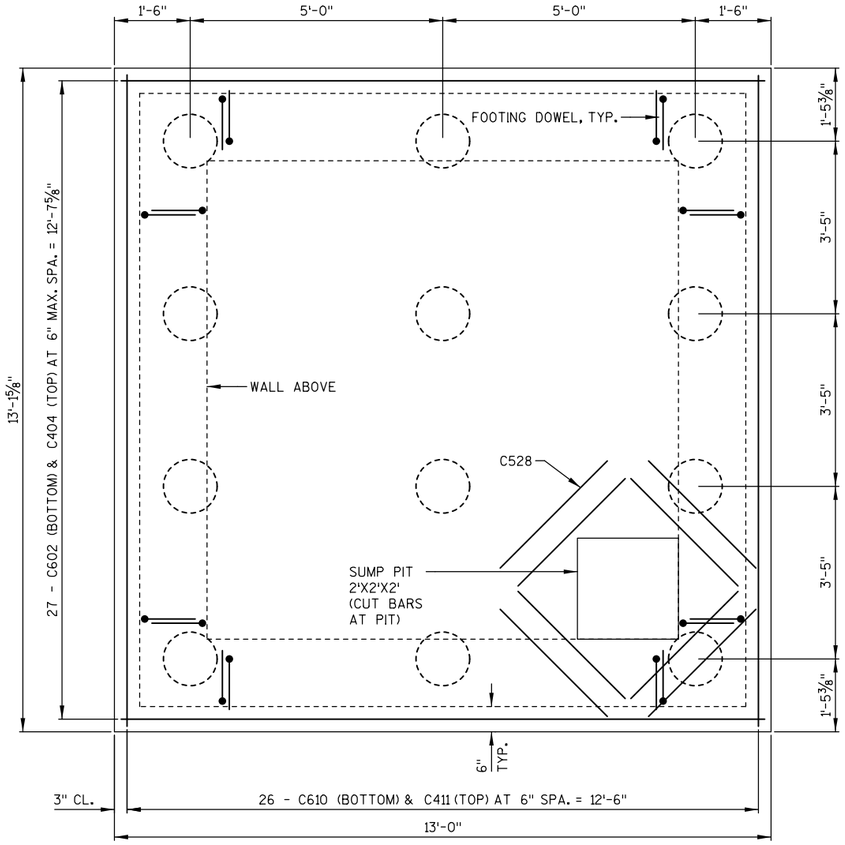
2

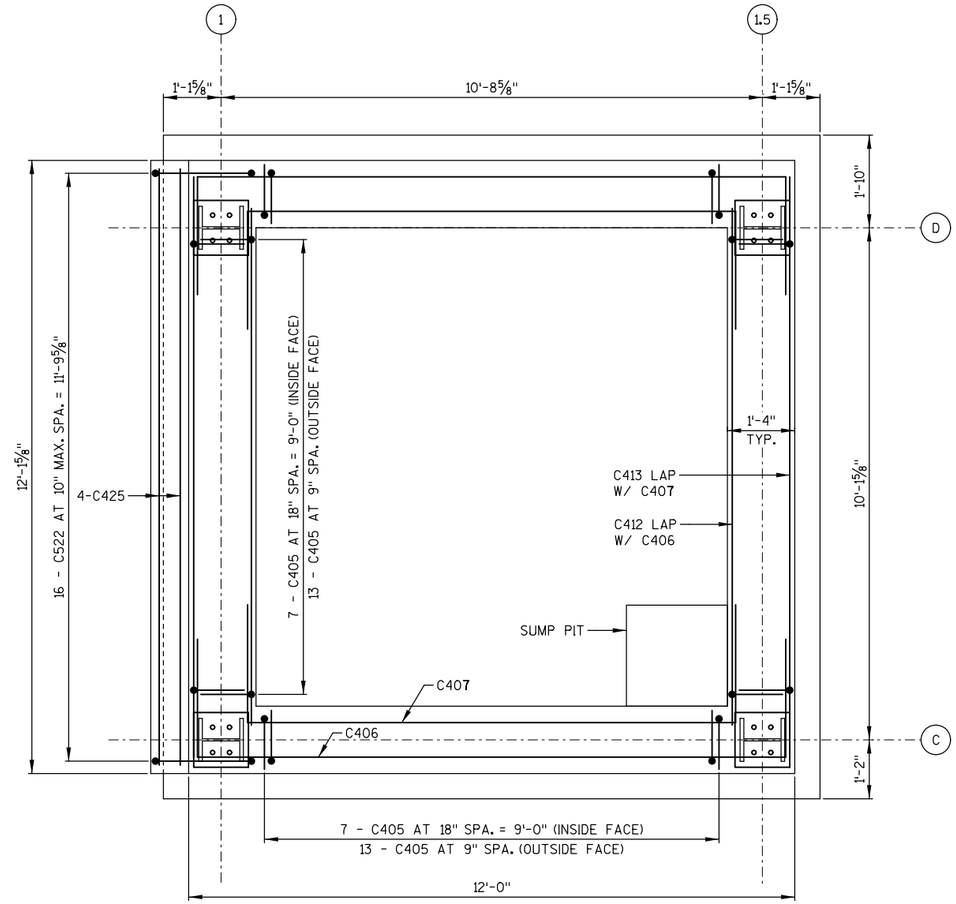
2

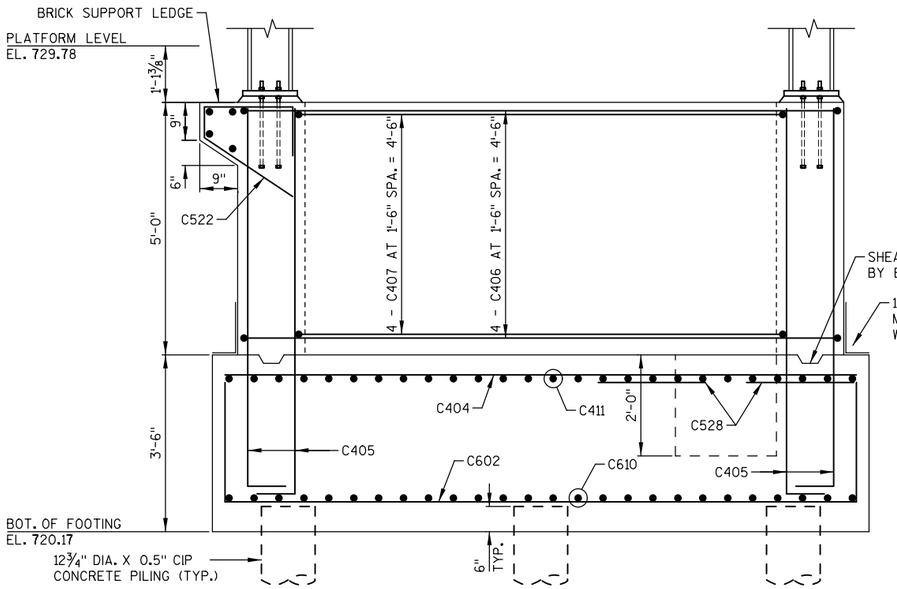
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljubuschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\33.Elevator Pit Details 3.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:59:39 PM
BATCH PRINT SHEET 3 OF 10

STATE PROJECT NUMBER

1000-57-70







NOTE:

SEE SHEET "ELEVATOR PIT DETAILS (2 OF 4)" FOR COLUMN BASE PLATE AND ANCHOR BOLT DETAILS.

DO NOT OPERATE HEAVY EQUIPMENT IN CLOSE PROXIMITY TO THE ELEVATOR PIT WALLS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

ELEVATOR PIT 3 DETAILS

SHEET S-520

93

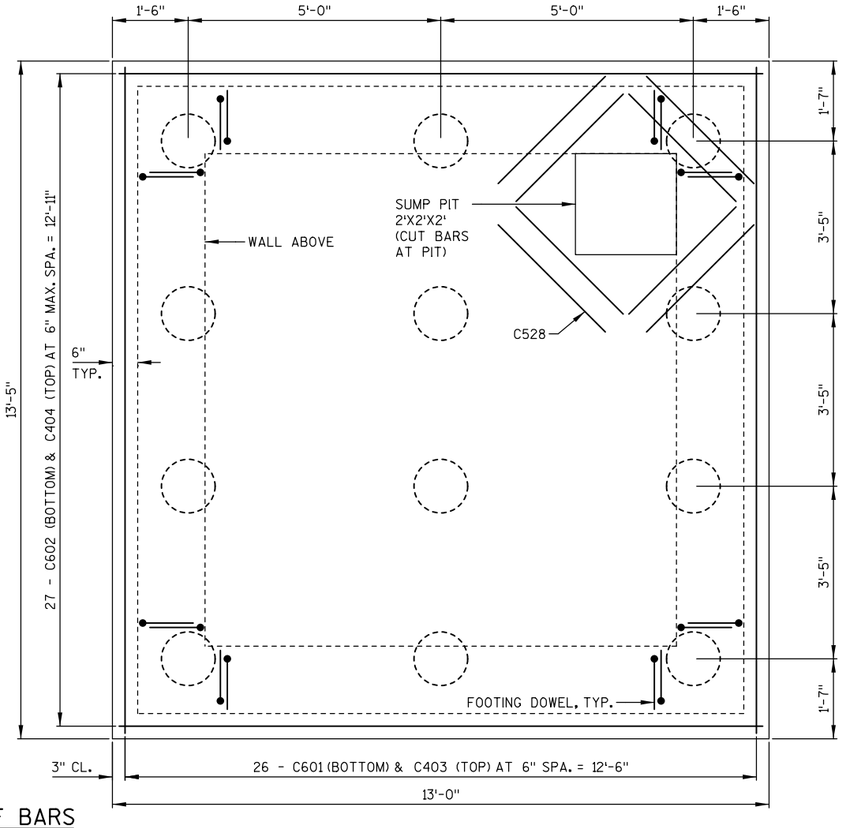
2

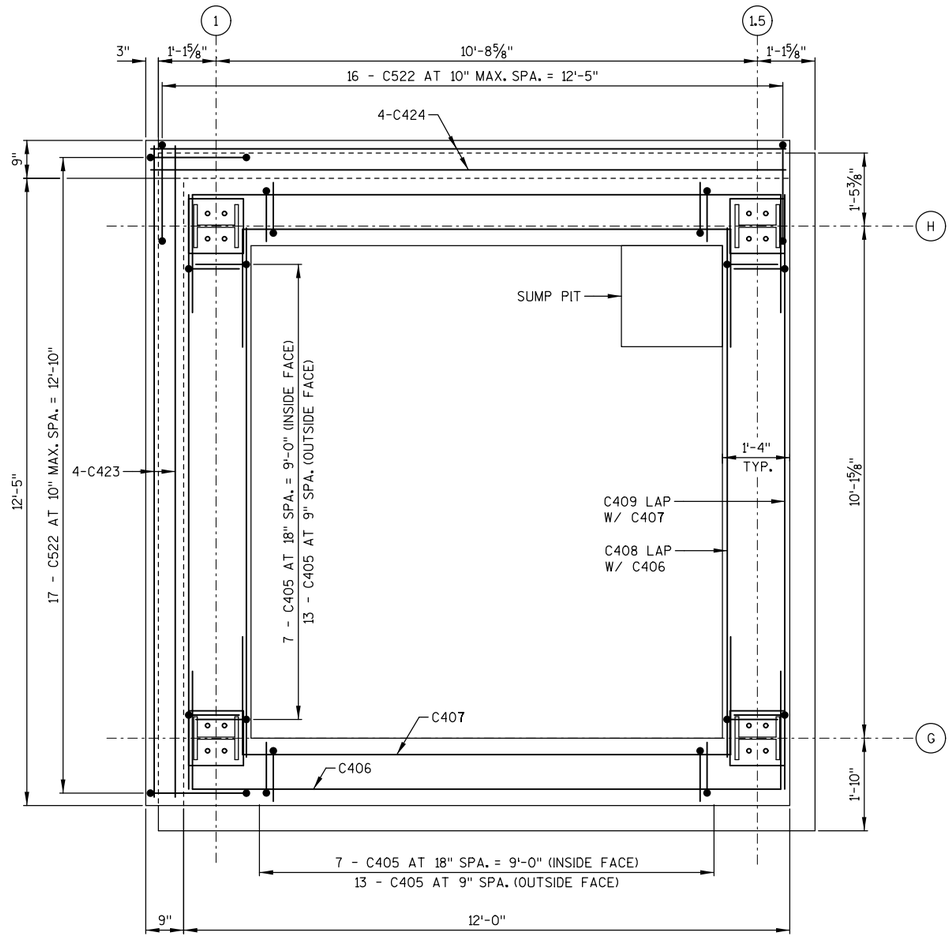
2

PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbus
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_20
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\34 Elevator Pit Details 4.dgn
PLOT DATE: 7/12/2022
PLOT TIME: 4:59:46 PM
BATCH PRINT SHEET 4 OF 10

STATE PROJECT NUMBER

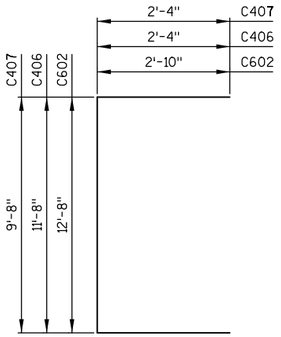
1000-57-70



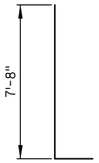


BILL OF BARS

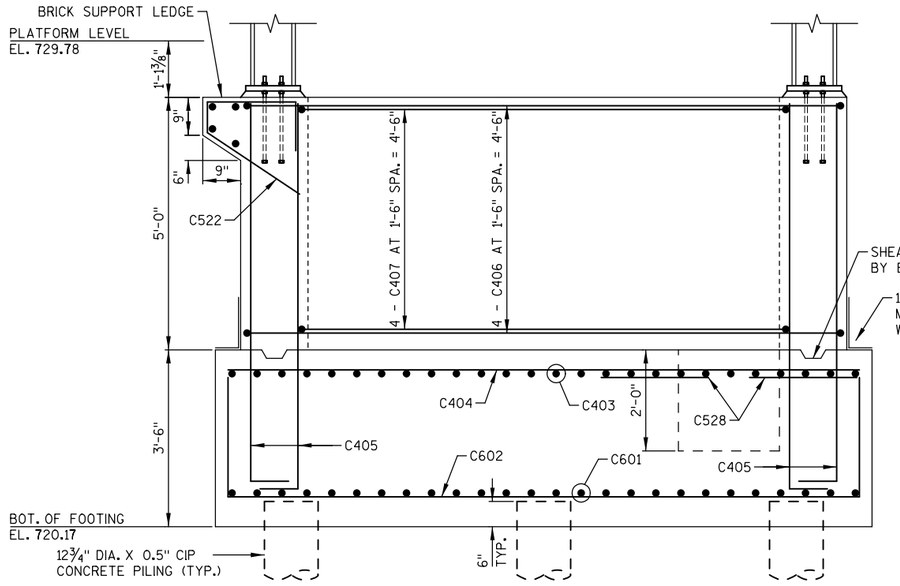
MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 10,290 LBS	
C601	26	13 - 1			FOOTING (BOTTOM)	HORIZ.
C602	108	18 - 0	X		FOOTING (BOTTOM)	HORIZ.
C603	26	13 - 1			FOOTING (TOP)	HORIZ.
C404	108	12 - 8			FOOTING (TOP)	HORIZ.
C405	320	8 - 3	X		FOOTING WALL	VERT.
C406	32	16 - 2	X		FOOTING WALL	HORIZ.
C407	32	14 - 2	X		FOOTING WALL	HORIZ.
C408	8	12 - 1			FOOTING WALL	HORIZ.
C409	8	10 - 1			FOOTING WALL	HORIZ.
C610	26	12 - 9			FOOTING (BOTTOM)	HORIZ.
C411	26	12 - 9			FOOTING (TOP)	HORIZ.
C412	8	11 - 9			FOOTING WALL	HORIZ.
C413	8	9 - 10			FOOTING WALL	HORIZ.
C614	26	12 - 10			FOOTING (BOTTOM)	HORIZ.
C415	26	12 - 10			FOOTING (TOP)	HORIZ.
C416	8	11 - 10			FOOTING WALL	HORIZ.
C417	8	9 - 11			FOOTING WALL	HORIZ.
C618	26	12 - 11			FOOTING (BOTTOM)	HORIZ.
C419	26	12 - 11			FOOTING (TOP)	HORIZ.
C420	8	11 - 11			FOOTING WALL	HORIZ.
C421	8	10 - 0			FOOTING WALL	HORIZ.
C522	86	4 - 4	X		CORBEL	VERT.
C423	4	12 - 10			CORBEL (PIT 4)	HORIZ.
C424	8	12 - 5			CORBEL (PIT 4)	HORIZ.
C425	4	11 - 9			CORBEL (PIT 3)	HORIZ.
C426	4	5 - 10			CORBEL (PIT 2)	HORIZ.
C427	4	9 - 9			CORBEL (PIT 1)	HORIZ.
C528	32	3 - 0			FOOTING (SUMP PIT)	HORIZ.

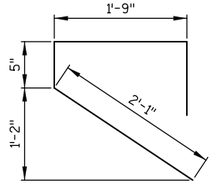


C602, C406, C407



C405





C522

NOTE:

SEE SHEET "ELEVATOR PIT DETAILS (2 OF 4)" FOR COLUMN BASE PLATE AND ANCHOR BOLT DETAILS.

DO NOT OPERATE HEAVY EQUIPMENT IN CLOSE PROXIMITY TO THE ELEVATOR PIT WALLS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

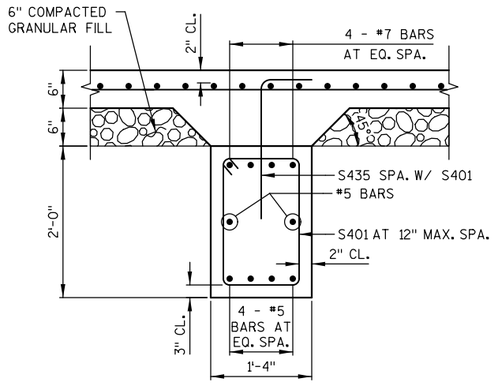
ELEVATOR PIT 4 DETAILS

SHEET S-521
94

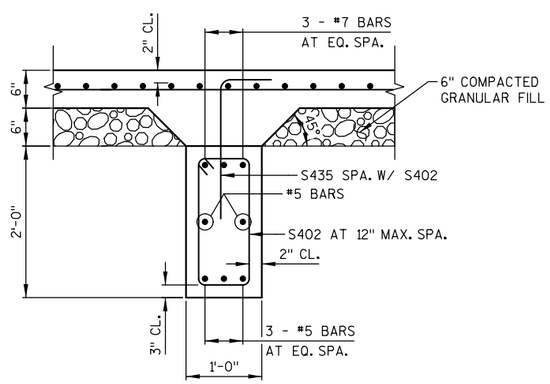
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carljbuschman@aecom.com\d0763414\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pwbentley.com:Documents\AECOM_GLOBAL_NA\Workspace\D0763414\Wis DOT\Wis DOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pwbentley.com:Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\35_Grade Beam Reinforcement.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 4:57:54 PM
BATCH PRINT SHEET 5 OF 10

STATE PROJECT NUMBER

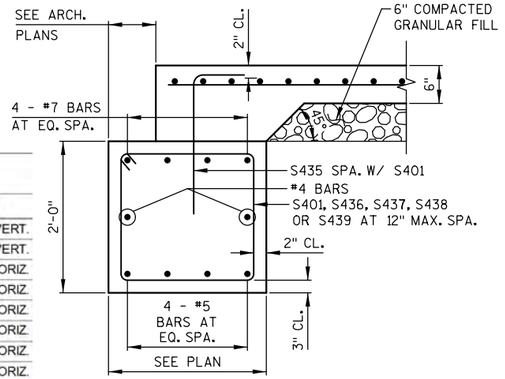
1000-57-70



SECTION A-A



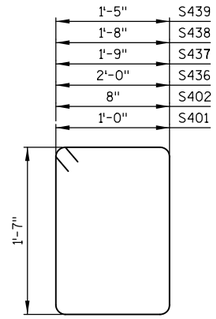
SECTION B-B



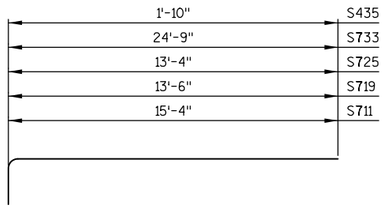
TYPICAL EDGE BEAM

BILL OF BARS

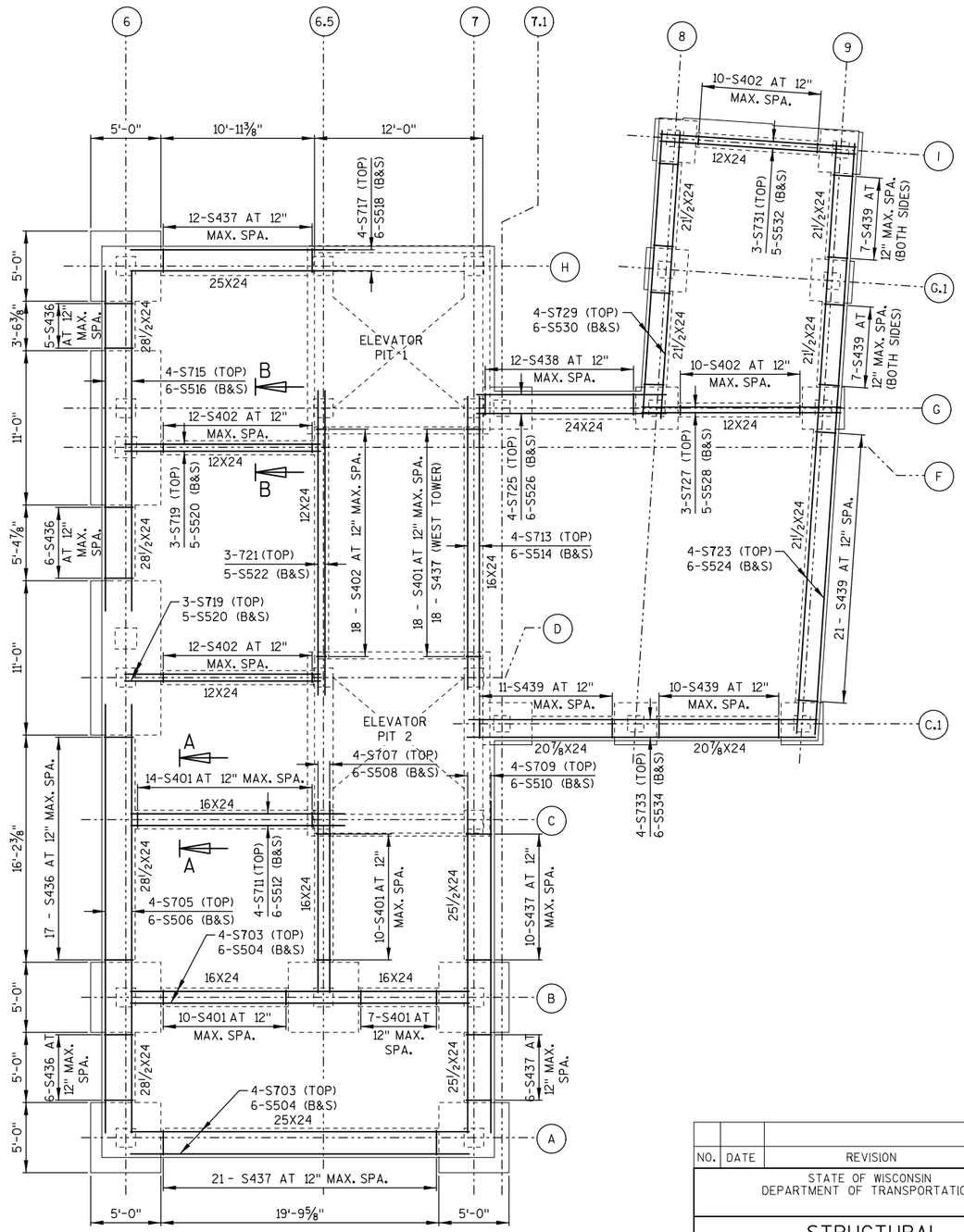
MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 11,010 LBS	
S401	100	5 - 8	X		GRADE BEAM STIRRUP	VERT.
S402	104	5 - 0	X		GRADE BEAM STIRRUP	VERT.
S703	16	24 - 2			TOWER GRADE BEAM (TOP)	HORIZ.
S504	24	22 - 4			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S705	8	30 - 7			TOWER GRADE BEAM (TOP)	HORIZ.
S506	12	28 - 9			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S707	8	13 - 10			TOWER GRADE BEAM (TOP)	HORIZ.
S508	12	12 - 0			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S709	8	23 - 10			TOWER GRADE BEAM (TOP)	HORIZ.
S510	12	22 - 0			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S711	8	17 - 9	X		TOWER GRADE BEAM (TOP)	HORIZ.
S512	12	14 - 1			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S713	8	20 - 11			TOWER GRADE BEAM (TOP)	HORIZ.
S514	12	19 - 1			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S715	8	24 - 4			TOWER GRADE BEAM (TOP)	HORIZ.
S516	12	22 - 6			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S717	8	15 - 4			TOWER GRADE BEAM (TOP)	HORIZ.
S518	12	13 - 6			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S719	12	16 - 9	X		TOWER GRADE BEAM (TOP)	HORIZ.
S520	20	12 - 3			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S721	6	20 - 11			TOWER GRADE BEAM (TOP)	HORIZ.
S522	10	19 - 1			TOWER GRADE BEAM (BOTTOM & SIDES)	HORIZ.
S723	4	42 - 2			VESTIBULE GRADE BEAM (TOP)	HORIZ.
S524	6	40 - 4			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S725	4	16 - 7	X		VESTIBULE GRADE BEAM (TOP)	HORIZ.
S526	6	12 - 2			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S727	3	13 - 3			VESTIBULE GRADE BEAM (TOP)	HORIZ.
S528	5	11 - 5			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S729	4	20 - 6			VESTIBULE GRADE BEAM (TOP)	HORIZ.
S530	6	18 - 8			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S731	3	13 - 2			VESTIBULE GRADE BEAM (TOP)	HORIZ.
S532	5	11 - 4			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S733	4	27 - 4			VESTIBULE GRADE BEAM (TOP)	HORIZ.
S534	6	22 - 11			VESTIBULE GRADE BEAM (BOTTOM & SIDES	HORIZ.
S435	470	2 - 5	X		GRADE BEAM DOWEL	VERT.
S436	68	7 - 8	X		GRADE BEAM STIRRUP	VERT.
S437	116	7 - 2	X		GRADE BEAM STIRRUP	VERT.
S438	12	7 - 0	X		GRADE BEAM STIRRUP	VERT.
S439	70	6 - 6	X		GRADE BEAM STIRRUP	VERT.



S401, S402, S436, S437, S438, S439



S711, S719, S725, S733, S435



PLAN

(EAST TOWER SHOWN, WEST TOWER SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

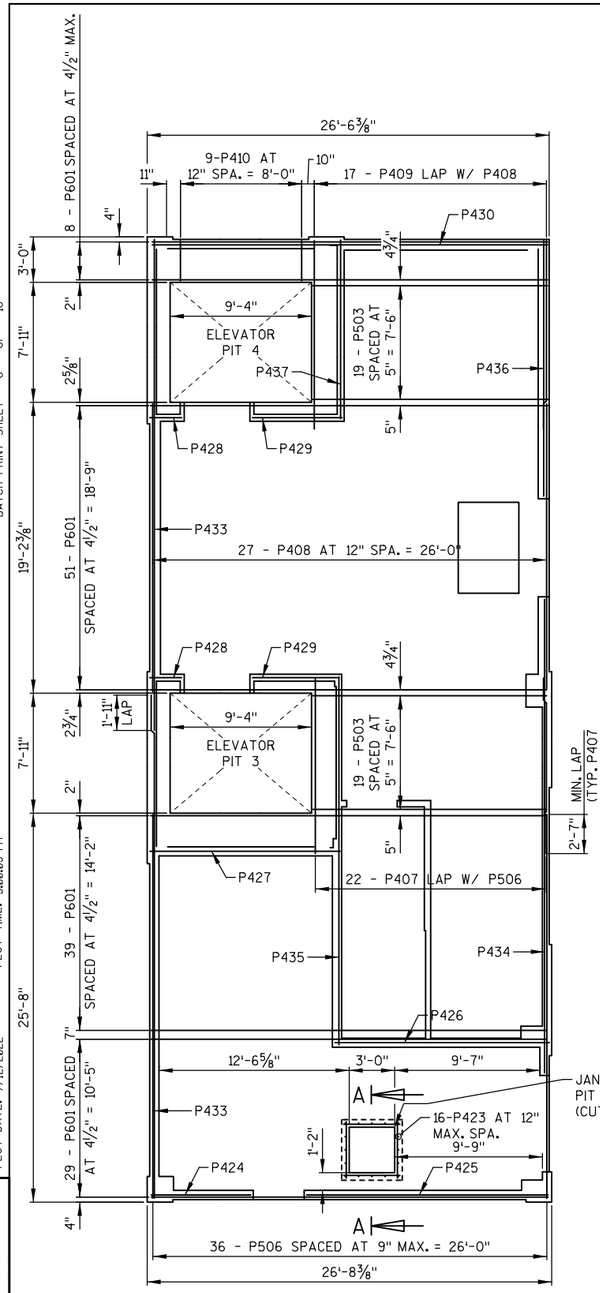
STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

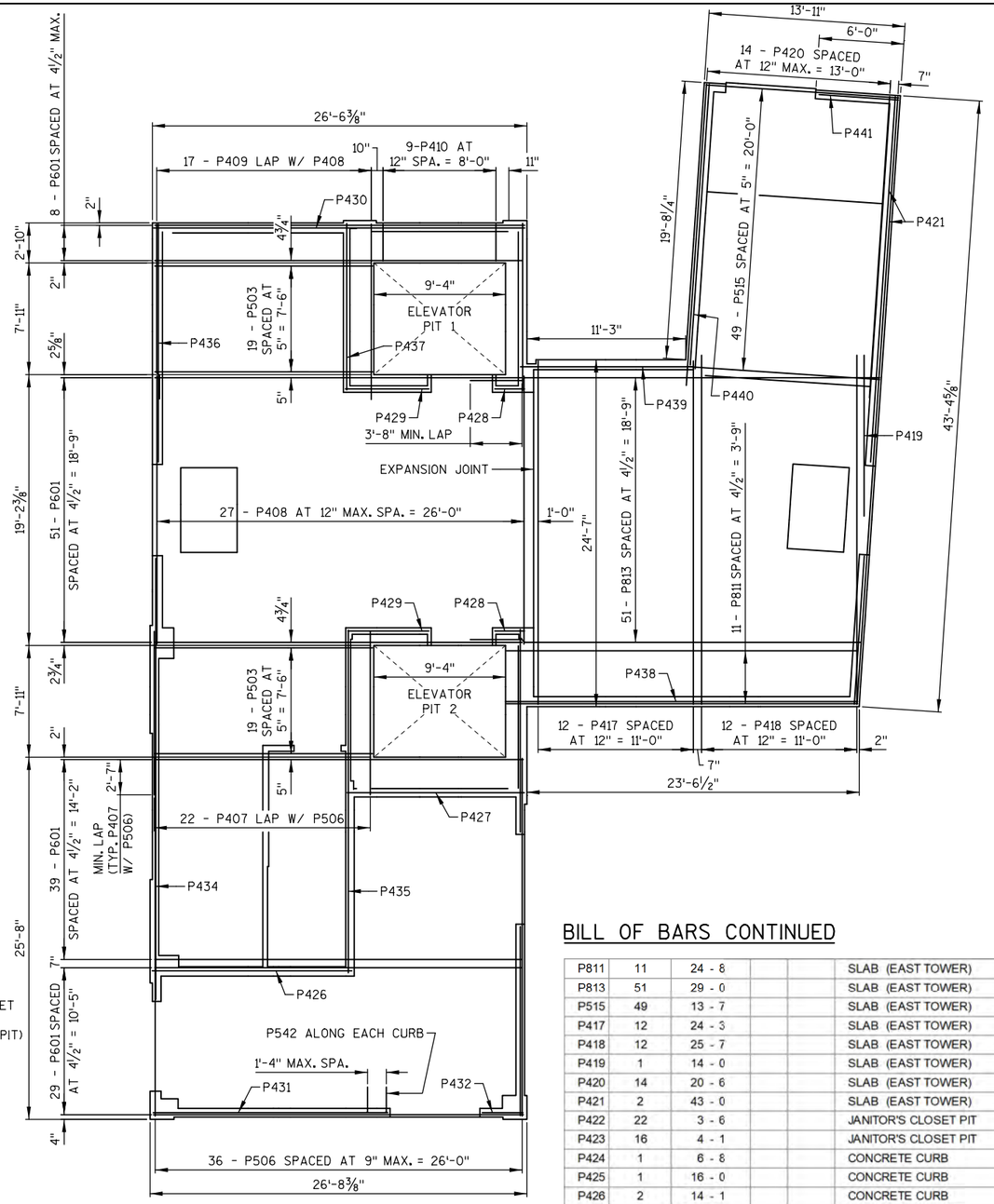
GRADE BEAM REINFORCEMENT PLAN

SHEET S-522
95

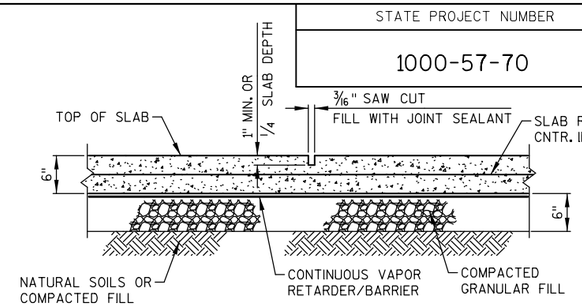
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carljbuschman@aecom.com\vdms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\36_Concrete Slab.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 5:06:03 PM BATCH PRINT SHEET 6 OF 10



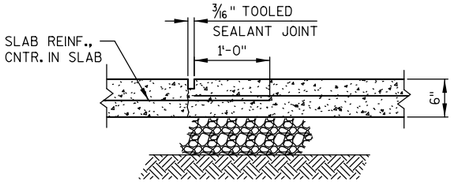
WEST TOWER



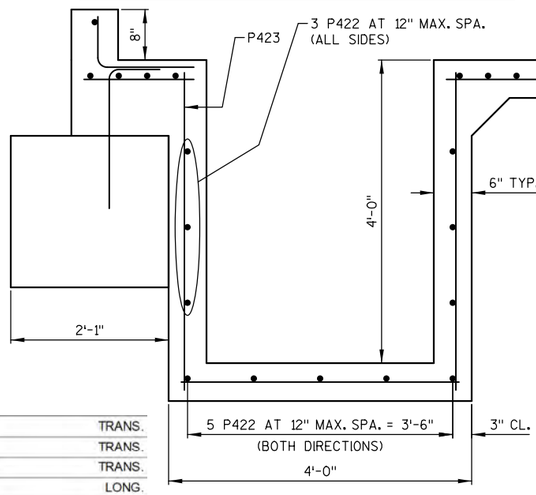
EAST TOWER



SLAB ON GRADE CONSTRUCTION



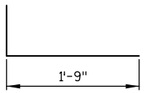
SLAB ON GRADE CONSTRUCTION JOINT



SECTION A-A

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 21,140 LBS	
P601	254	26 - 0			SLAB (EAST & WEST TOWER)	TRANS.
P503	38	15 - 4			SLAB (EAST & WEST TOWER)	TRANS.
P506	72	25 - 2			SLAB (EAST & WEST TOWER)	LONG.
P407	44	11 - 7			SLAB (EAST & WEST TOWER)	LONG.
P408	54	18 - 10			SLAB (EAST & WEST TOWER)	LONG.
P409	34	12 - 3			SLAB (EAST & WEST TOWER)	LONG.
P410	18	2 - 6			SLAB (EAST & WEST TOWER)	LONG.



P542

BILL OF BARS CONTINUED

P811	11	24 - 8			SLAB (EAST TOWER)	TRANS.
P813	51	29 - 0			SLAB (EAST TOWER)	TRANS.
P515	49	13 - 7			SLAB (EAST TOWER)	TRANS.
P417	12	24 - 3			SLAB (EAST TOWER)	LONG.
P418	12	25 - 7			SLAB (EAST TOWER)	LONG.
P419	1	14 - 0			SLAB (EAST TOWER)	LONG.
P420	14	20 - 6			SLAB (EAST TOWER)	LONG.
P421	2	43 - 0			SLAB (EAST TOWER)	LONG.
P422	22	3 - 6			JANITOR'S CLOSET PIT	HORIZ.
P423	16	4 - 1			JANITOR'S CLOSET PIT	VERT.
P424	1	6 - 8			CONCRETE CURB	TRANS.
P425	1	16 - 0			CONCRETE CURB	TRANS.
P426	2	14 - 1			CONCRETE CURB	TRANS.
P427	2	12 - 6			CONCRETE CURB	TRANS.
P428	4	2 - 1			CONCRETE CURB	TRANS.
P429	4	5 - 8			CONCRETE CURB	TRANS.
P430	2	26 - 2			CONCRETE CURB	TRANS.
P431	1	16 - 8			CONCRETE CURB	TRANS.
P432	1	3 - 0			CONCRETE CURB	TRANS.
P433	2	32 - 8			CONCRETE CURB	LONG.
P434	2	31 - 3			CONCRETE CURB	LONG.
P435	2	24 - 3			CONCRETE CURB	LONG.
P436	2	16 - 9			CONCRETE CURB	LONG.
P437	2	11 - 10			CONCRETE CURB	LONG.
P438	1	24 - 8			CONCRETE CURB	TRANS.
P441	1	5 - 8			CONCRETE CURB	LONG.
P542	407	2 - 3	X		CONCRETE CURB	HORIZ.

NOTES:

FOR CURB DIMENSIONS, SEE SHEET S-101 AND ARCHITECTURE PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

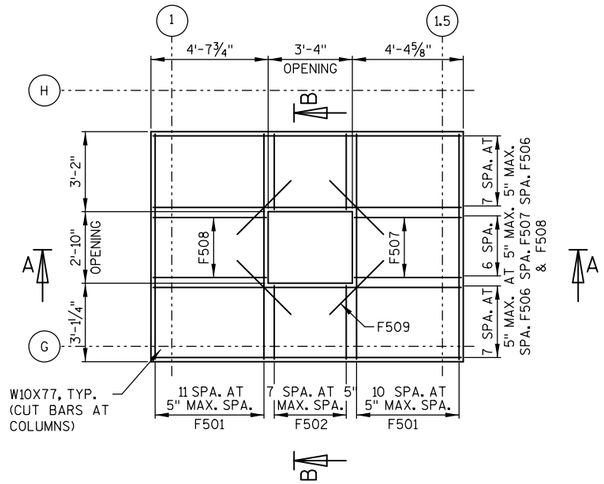
CONCRETE SLAB DETAILS (1 OF 2)

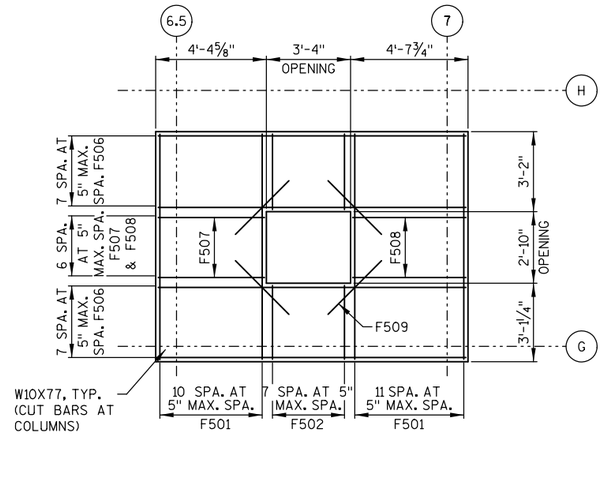
SHEET S-523
96

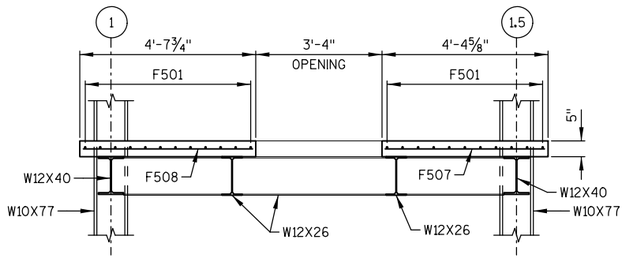
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\corlyubuschman@aecom.com\vms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\37_Concrete Slab 2.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 5:06:11 PM
BATCH PRINT SHEET 7 OF 10

STATE PROJECT NUMBER

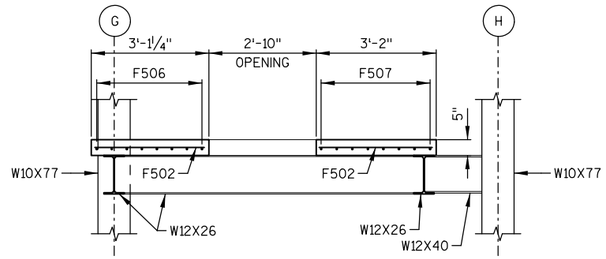
1000-57-70



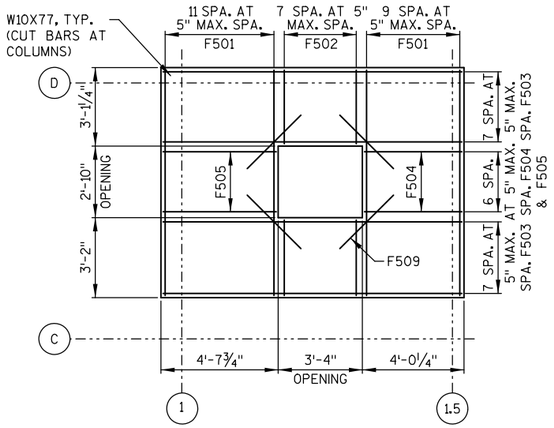




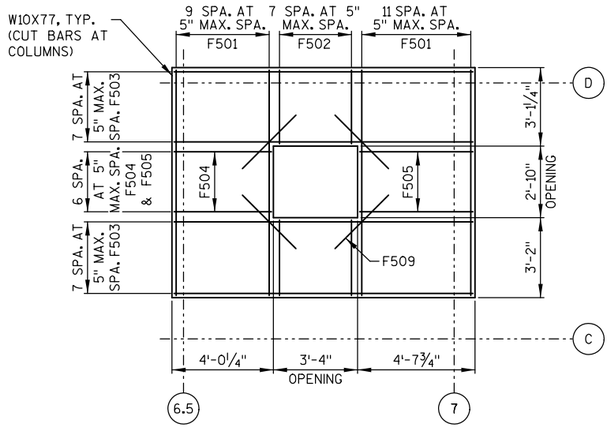
SECTION A-A



SECTION B-B



WEST TOWER MACHINE ROOM FLOOR



EAST TOWER MACHINE ROOM FLOOR

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 2,090 LBS	
F501	90	8 - 9			MACHINE ROOM FLOOR (EAST & WEST TOWER)	LONG.
F502	64	2 - 9			MACHINE ROOM FLOOR (EAST & WEST TOWER)	LONG.
F503	32	11 - 8			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F504	14	3 - 8			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F505	14	4 - 3			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F506	32	12 - 0			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F507	14	4 - 0			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F508	14	4 - 3			MACHINE ROOM FLOOR (EAST & WEST TOWER)	TRANS.
F509	16	3 - 0			MACHINE ROOM FLOOR (EAST & WEST TOWER)	HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

CONCRETE SLAB DETAILS (2 OF 2)

SHEET S-524
97

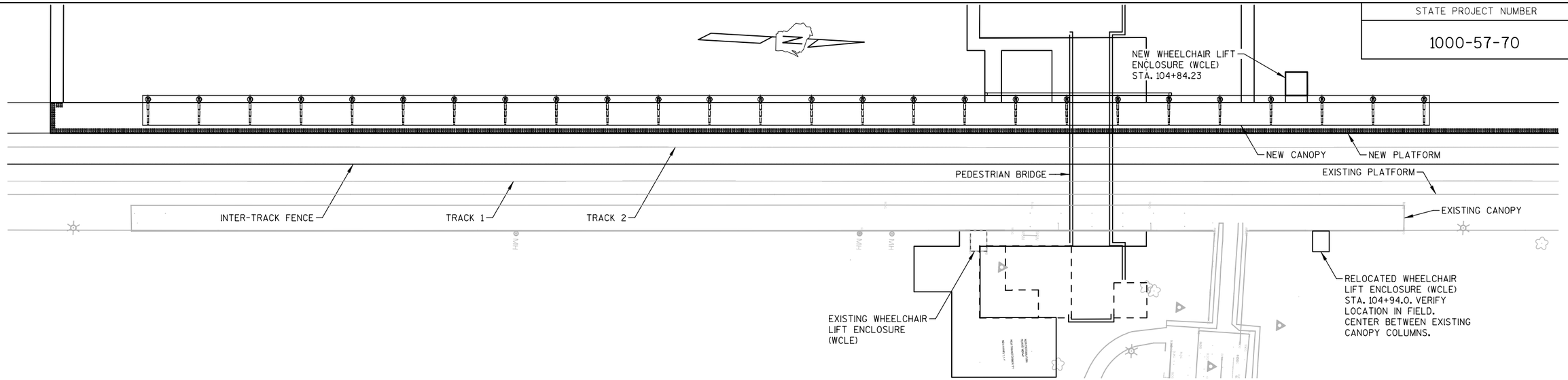
2

2

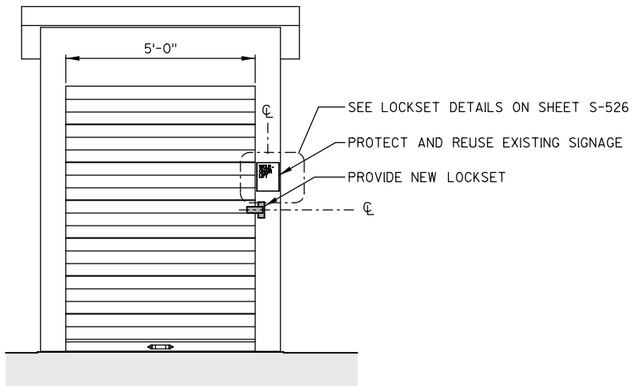
PRINTER DRIVER: c:\pwworking\aecom.ds20_na_2019\carly.buschman@aecom.com\dms07634\AE_PDF_11 x 17.plt
PEN TABLE: pw:\\aecom-na-pwbentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pwbentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\38_WCLE Details
PLOT DATE: 7/12/2022 PLOT TIME: 5:08:20 PM
BATCH PRINT SHEET 8 OF 10

STATE PROJECT NUMBER

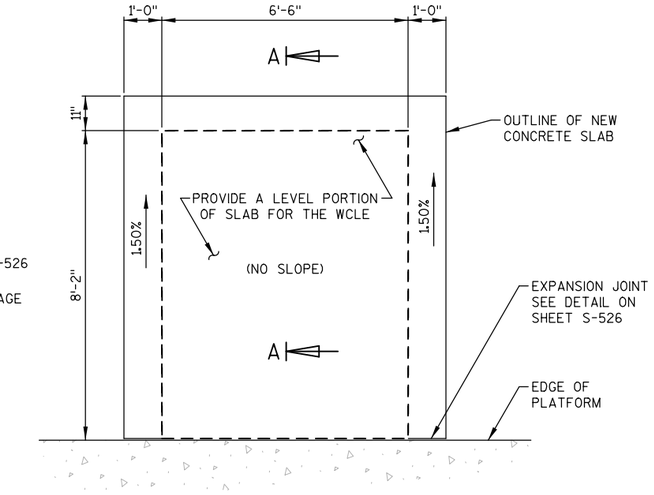
1000-57-70



WCLE RELOCATION PLAN

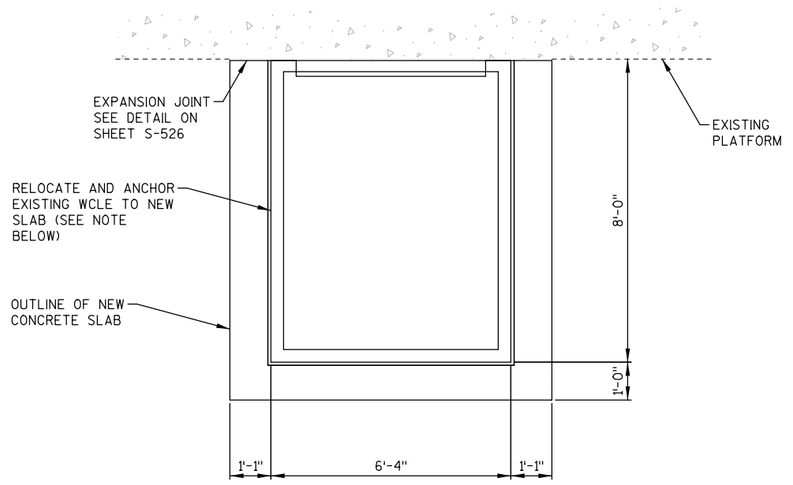


ELEVATION OF WCLE ENTRY



WCLE SLAB PLAN

(SEE SHEET S-526 FOR SECTION A-A)



RELOCATED WCLE PLAN

(NEW WCLE SLAB SIMILAR)

NOTES

RELOCATE EXISTING EAST PLATFORM WHEELCHAIR LIFT ENCLOSURE TO NEW LOCATION AT APPROXIMATE STA. 104+94. REMOVE EXISTING BASE CHANNEL ANCHORS SECURING EXISTING WHEELCHAIR LIFT ENCLOSURE TO THE EXISTING PLATFORM. BRACE AND SECURE STRUCTURE AS REQUIRED TO RELOCATE STRUCTURE TO NEW SLAB. PROVIDE NEW BASE ANCHORS, SEALANT AND FLASHING. REFERENCE DETAILS FOR ADDITIONAL ANCHORAGE INFORMATION.

CONSTRUCT NEW WEST PLATFORM WCLE SLAB AND INSTALL WCLE PROVIDED BY AMTRAK. PROVIDE 2 WEEKS WRITTEN NOTICE TO AMTRAK FOR DELIVERY OF THE WCLE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY DNJ | PLANS CK'D. MJA

WHEELCHAIR LIFT ENCLOSURE (WCLE)

SHEET S-525

98

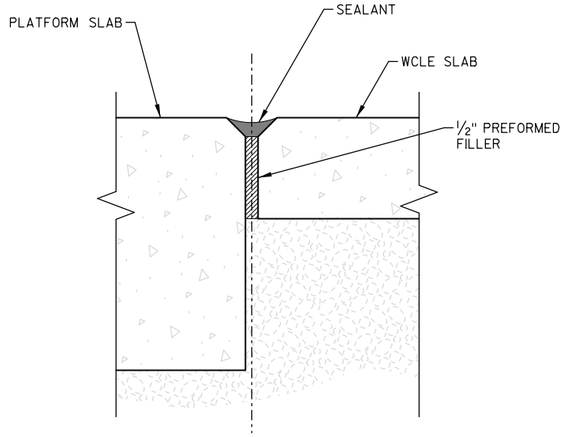
2

2

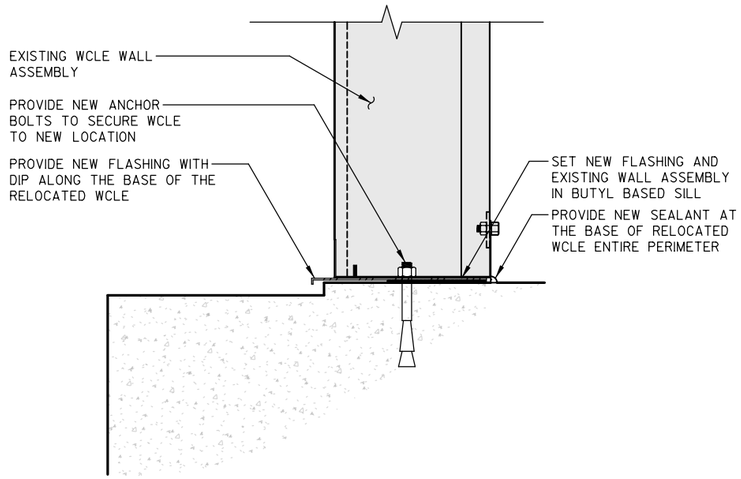
PRINTER DRIVER: c:\pwworking\aecom_ds20_na_2019\carl.buschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\39_WCLE Details.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 5:08:29 PM
BATCH PRINT SHEET 9 OF 10

STATE PROJECT NUMBER

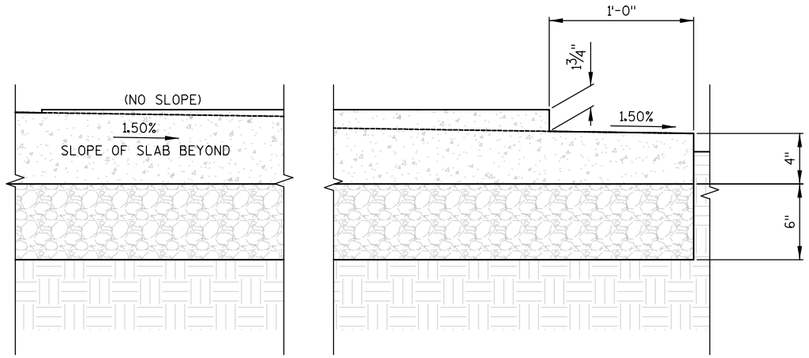
1000-57-70



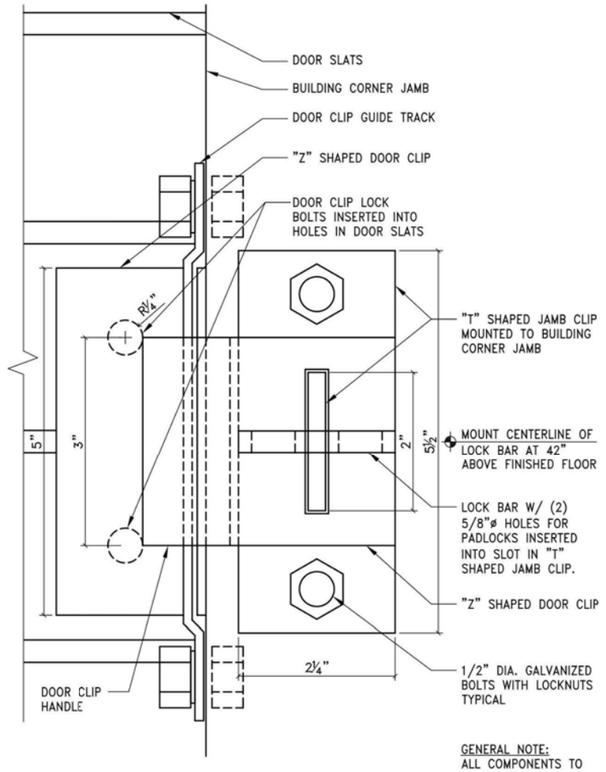
EXPANSION JOINT DETAIL



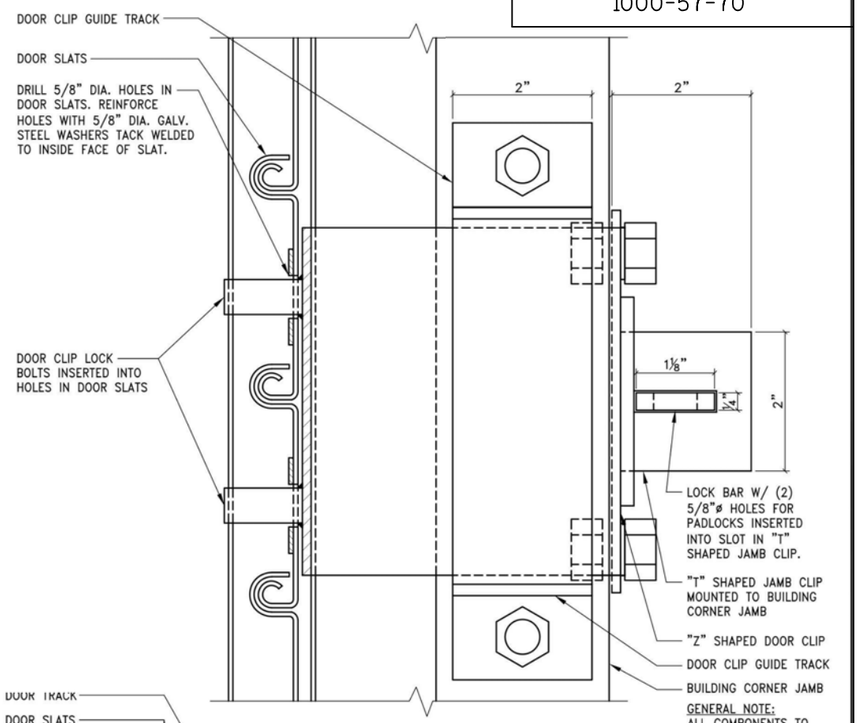
WCLE - BASE CHANNEL DETAIL



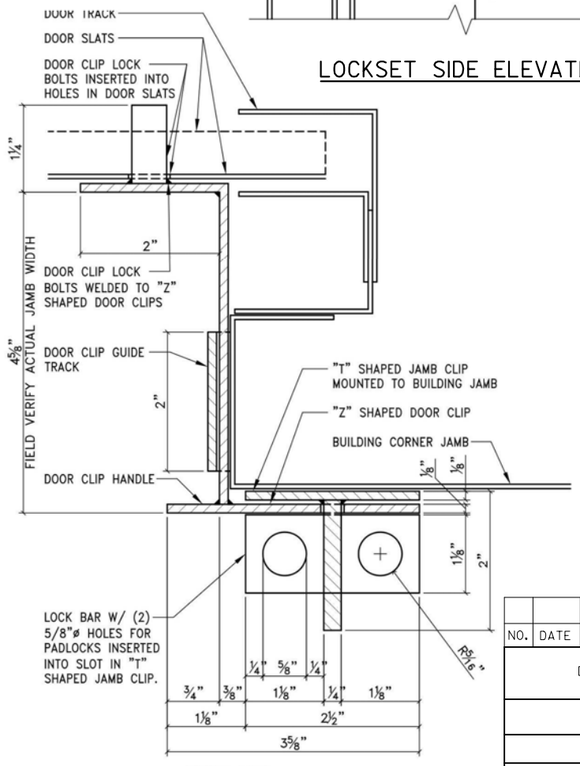
SECTION A-A



LOCKSET FRONT ELEVATION DETAIL



LOCKSET SIDE ELEVATION DETAIL



LOCKSET PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY DNJ | PLANS CK'D. MJA

WHEELCHAIR LIFT ENCLOSURE (WCLE)

SHEET S-526
99

2

2

PRINTER DRIVER: c:\pwworking\aecom.ds20.na.2019\carljubuschman@aecom.com\vdms07634\AE_PDF_11_x_17.plt
PEN TABLE: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\AECOM_GLOBAL_NA\Workspace\DOT\WisDOT\WisDOT Bridge Ver A\Pen Tables\AE_WisDOT_Str_Default COLOR.tbl
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Structures\Sheets\40_MARS Crane Exhibit.dgn
PLOT DATE: 7/12/2022 PLOT TIME: 5:00:43 PM BATCH PRINT SHEET 10 OF 10

STATE PROJECT NUMBER

1000-57-70

65'-0" REACH TO SET TRUSS

AREA OF REFUGE

POTENTIAL WEST CRANE LOCATION

CONSTRUCTION ACCESS ROAD

BRIDGE TRUSS FULLY ASSEMBLED ON GROUND

19'-0"

INTER-TRACK FENCING

℄ TRACK 2

℄ TRACK 1

CANOPY

80'-0" REACH TO PICK TRUSS

11'-0"

BRIDGE TRUSS IN FINAL ERECTED POSITION

46'-0" REACH TO PICK TRUSS

POTENTIAL EAST CRANE LOCATION

70'-0" REACH TO SET TRUSS

NOTES:

SEE SPECIFICATIONS FOR CP RAIL COORDINATION REQUIREMENTS.

PROVIDE A DETAILED, STEP BY STEP BRIDGE ERECTION PLAN TO THE ENGINEER.

STABILITY OF THE BRIDGE TRUSS DURING ERECTION IS THE RESPONSIBILITY OF THE CONTRACTOR. TEMPORARY BRACING MAY BE REQUIRED. COST IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURAL

DRAWN BY CEB | PLANS CK'D. MJA

BRIDGE TRUSS ERECTION CONCEPT

SHEET S-527
100

2

2

CODE SUMMARY AND GENERAL NOTES

STATE PROJECT NUMBER

1000-57-70

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*
PLUMBING 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 DEPARTMENT OF TRANSPORTATION ACCESSIBILITY STANDARDS
ENERGY CODE	2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)*
PLATFORM EGRESS	2020 EDITION NFPA 130

*ASMODIFIED 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
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 OCCUPANCY CLASSIFICATION, SECTION 303.4 ASSEMBLY GROUP A-3
(WAITING SPACE IN TRANSPORTATION TERMINALS)
GROSS WAITING SPACE (INCLUDES VESTIBULES, PASSAGE & PEDESTRIAN BRIDGE) = 4,138 SF.
SECTION 306.3 ASSEMBLY GROUP F-2
(ACCESORY SPACE IN MECHANICAL AND/OR ELECTRICAL)
GROSS ACCESORY SPACE (INCLUDES ELECT. RMS., STORAGE, LIFE SAFETY RM. & ELEVA. MACHENE RMS.) = 1,285 SF.
SECTION 311.3 ASSEMBLY GROUP S-2
(ACCESORY SPACE IN WASHERS/DRYERS)
GROSS ACCESORY SPACE (INCLUDES JT. CLS.) = 98 SF

NUMBER OF OCCUPANTS: (REFER TO TABLES 1,2 & 3 ON G-002)

• WAITING AREA	= 278 OCCUPANTS
• ACESORY	= 8 OCCUPANTS
TOTAL NO. OF OCCUPANTS	= 286

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.
4. A MINIMUM OF 44" SHALL BE PROVIDED ALONG ALL PLATFORMS, CORRIDORS, AND RAMPS SERVING AS A MEANS OF EGRESS.
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 CONTRACTOR'S 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 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.

ENERGY CODE ENVELOPE REQUIREMENTS: (2015 IECC)

1. ALL ENVEOPE COMPONENTS SHALL COMPLY WITH TABLE C402.1.2 CLIMATE ZONE 6 REQUIREMENTS:
2. WALLS: MIN R7.5 CONTINOUS INSULATION + R13 BETWEEN METAL STUDS
3. CURTAIN GLASS REQUIREMENT: U36; SHGC SEW 0.64; N 0.64
4. ALL FLAT ROOF INSULATION ABOVE METAL DECK: R30 CI
5. SLOPED ROOF AREAS CEILINGS WITH ATICS: R49
6. UNDER BRIDGE METAL DECK INSULATION: R13 AND BELOW GROUND SLAB RIGID INSULATION: R10

REQUIRED SPECIAL INSPECTIONS AND TESTS IBC 2015

SPECIAL CASES 1705.1.1
STEEL CONSTRUCTION 1705.2
CONCRETE CONSTRUCTION 1705.3
MASONRY CONSTRUCTION 1705.4
SOILS 1705.6
DRIVEN DEEP FOUNDATIONS 1705.7
CAST-IN-PLACE DEEP FOUNDATIONS 1705.8
HELICAL PILE FOUNDATIONS 1705.9
FABRICATED ITEMS 1705.10
STRUCTURAL STEEL 1705.12.1
SPRAYED FIRE-RESISTANCE MATERIALS 1705.14
MASTIC AND INTUMESCENT FIRE RESISTANT COATINGS 1705.15
FIRE RESISTANT JOINTS 1705.17
TESTING FOR SMOKE CONTROL 1705.18

WIND RESISTANCE
COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION 1705.11.2
WIND-RESISTING COMPONENTS 1705.11.3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CODE SUMMARY & GENERAL NOTES

SHEET G-001
101

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

2

2

CODE DATA AND SCHEDULES

STATE PROJECT NUMBER

1000-57-70

TABLE 1 - EAST TOWER - EGRESS/OCCUPANCY

RM. #	ROOM/SPACE	RM. AREA	OCCUPANCY	OCUPANCY GROUP	OCCUPANT LOAD FACTOR	TOTAL OCCU-PANT LOAD	MAX. PERMITTED COMMON EGRESS TRAVEL (WITHOUT SPRINKLER SYSTEM)	LONGEST COMMON PATH OF EGRESS TRAVEL	EGRESS CAPACITY FACTOR PER OCCUPANT	MIN. WIDTH OF DOOR(S) REQ'D	# OF DOOR(S) PROVIDED	WIDTH OF DOOR(S) PROVIDED	TOTAL DOOR WIDTH PROVIDED	NOTES
100	PASSAGE	779 SF	WAITING	A-3	15 GROSS	52	75'	21'	0.2 "	10.39 "	-	-	-	
101	VESTIBULE	614 SF	WAITING	A-3	15 GROSS	41	75'	23'	0.2 "	8.19 "	-	-	-	
103A	IT RM.	43 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.03	1	34 "	34	
103	ELECT. RM.	166 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.11 "	2	34 "	68 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
104	JT. CL.	75 SF	ACCESSORY	S-2	300 GROSS	1	100'		0.2 "	0.05 "	2	34 "	68 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
105	ATS RM.	122 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.08 "	2	34 "	68 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
300	ELEV. MACHINE RM.	392 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.26 "	1	34 "	34 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
					TOTAL:	98								

TABLE 2 - WEST TOWER - EGRESS/OCCUPANCY

RM. #	ROOM /SPACE	RM. AREA	OCCUPANCY	OCUPANCY GROUP	OCCUPANT LOAD FACTOR	TOTAL OCCU-PANT LOAD	MAX. PERMITTED COMMON EGRESS TRAVEL (WITHOUT SPRINKLER SYSTEM)	LONGEST COMMON PATH OF EGRESS TRAVEL	EGRESS CAPACITY FACTOR PER OCCUPANT	MIN. WIDTH OF DOOR(S) REQ'D	# OF DOOR(S) PROVIDED	WIDTH OF DOOR(S) PROVIDED	TOTAL DOOR WIDTH PROVIDED	NOTES
106	VESTIBULE	603 SF	WAITING	A-3	15 GROSS	40	75'	23'	0.2 "	8.04 "	-	-	-	
108	JT. CL.	122 SF	ACCESSORY	S-2	300 GROSS	1	100'		0.2 "	0.08 "	2	34 "	68 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
109	STORAGE	107 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.07 "	1	34 "	34 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
110	ELECT. RM.	136 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.09 "	1	34 "	34 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
111	STORAGE RM.	43 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.03 "	1	34 "	34	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
300	ELEV. MACHINE RM.	392 SF	ACCESSORY	F-2	300 GROSS	1	75'		0.2 "	0.26 "	1	34 "	34 "	EGRESS DOOR(S) SERVING NON-PUBLIC SPACES
					TOTAL:	45								

TABLE 3 - BRIDGE LEVEL - EGRESS/OCCUPANCY

RM. #	ROOMSPACE	RM. AREA	OCCUPANCY	OCUPANCY GROUP	OCCUPANT LOAD FACTOR	TOTAL OCCU-PANT LOAD	MAX. PERMITTED COMMON EGRESS TRAVEL (WITHOUT SPRINKLER SYSTEM)	LONGEST COMMON PATH OF EGRESS TRAVEL	EGRESS CAPACITY FACTOR PER OCCUPANT	MIN. WIDTH OF DOOR(S) REQ'D	# OF DOOR(S) PROVIDED	WIDTH OF DOOR(S) PROVIDED	TOTAL DOOR WIDTH PROVIDED	NOTES
201	PEDESTRIAN BRIDGE	2240 SF	WATING	A-3	15 GROSS	150	75'	23'	0.2 "	29.87 "	2	146 "	292 "	PROVIDED DOORWAYS INSTEAD DOORS
					TOTAL:	150								

TABLE 4 - EGRESS DOORS SERVING PUBLIC AREAS

STORY	OCCUPANT LOAD	EGRESS CAPACITY FACTOR PER OCCUPANT	MIN. WIDTH OF DOOR(S) REQ'D	# OF DOOR(S) PROVIDED	WIDTH OF DOOR(S) PROVIDED	WIDTH OF DOOR(S) PROVIDED
TRACK LEVEL - WEST						
FROM BRIDGE LEVEL	75					
FROM TRACK LEVEL - WEST	45					
TOTAL	120	0.20	24 "	2	34 "	68 "
TRACK LEVEL - EAST						
FROM BRIDGE LEVEL	75					
FROM TRACK LEVEL - EAST	98					
TOTAL	173	0.20	34.6 "	2	34 "	68 "

TABLE 5 - EGRESS STAIRWAYS

STORY	OCCUPANT LOAD	EGRESS CAPACITY FACTOR PER OCCUPANT	REQ'D EGRESS CAPACITY	# OF STAIR(S) PROVIDED	WIDTH PER STAIRWAY PROVIDED	TOTAL STRIRWAY (S) WIDTH PROVIDED
BRDGE LEVEL	150	0.3	45 "	2	60 "	120 "

TABLE 6 - ACCESS TRAVEL DISTANCE

ROOM/SPACE	OCCUPANT GROUP	MAXIMUM EXIT ACCESS TRAVEL DISTANCE PERMITTED (WITHOUT SPRINKLER SYSTEM)	MAXIMUM EXIT ACCESS TRAVEL DISTANCE PROPOSED	
BRIDGE	A-3	200'	168 '	SEE TABLE 7 FOR MAX. EXIT TRAVEL PRPOSED DISTANCE CALC.
WEST VESTIBULE	A-3	200'	<<200 '	
EAST VESTIBULE	A-3	200'	<<200 '	
ELECT., LIFESAFETY AND STORAGE RMS.	F-2	300'	<<300 '	
JANITOR CLOSETS	S-2	300'	<<300 '	

TABLE 7

SPACE/ROOM	EXIT TRAVEL DISTANCE
BRIDGE LEVEL	63 '
ALOGN STAIR NOSING LINE	11 '
	10 '
	11 '
	10 '
STAIR INTERMEDIATE LANDING	14 '
	14 '
	14 '
TRACK LEVEL	21 '
TOTAL	168 '

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

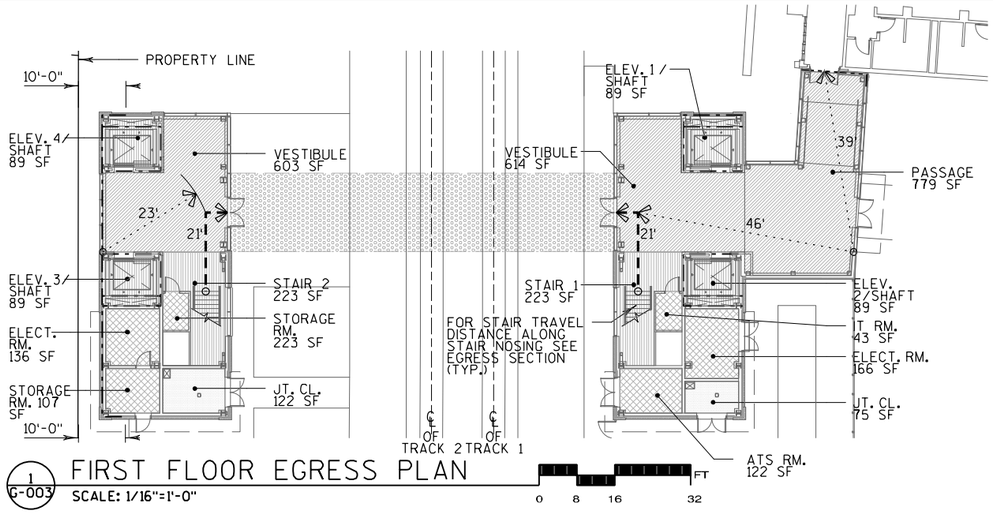
CODE DATA & SCHEDULES

SHEET G-002
102

2

2

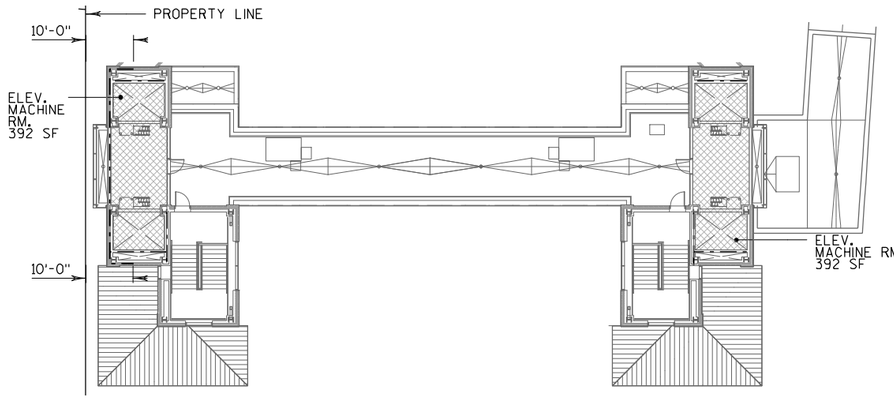
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$



1 G-003 FIRST FLOOR EGRESS PLAN

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

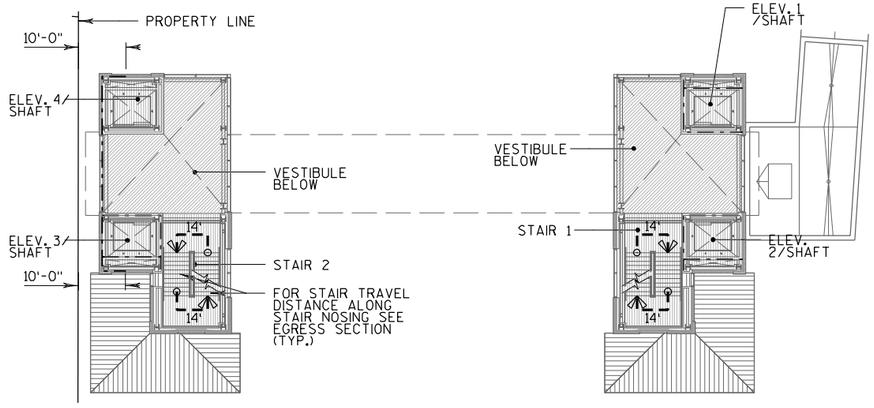
0 8 16 32 FT



4 G-003 PEDESTRIAN BRIDGE ROOF EGRESS PLAN

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

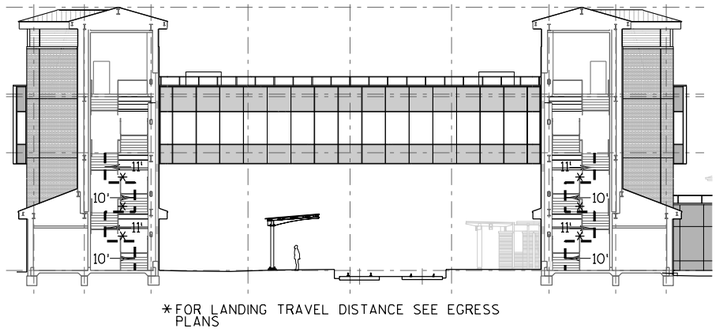
0 8 16 32 FT



2 G-003 INTERMEDIATE LEVEL EGRESS PLAN

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

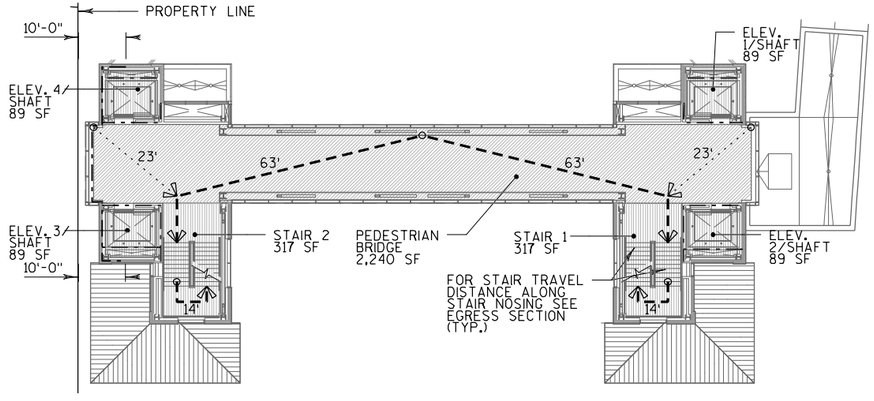
0 8 16 32 FT



5 G-003 EGRESS SECTION

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

0 8 16 32 FT



3 G-003 SECOND FLOOR EGRESS PLAN

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

0 8 16 32 FT

STATE PROJECT NUMBER

1000-57-70

LEGEND:

- OCCUPANCY GROUP A-3 (OCCUPIED PORTION)
- OCCUPANCY GROUP A-3 (CIRCULATION)
- OCCUPANCY GROUP F-2
- OCCUPANCY GROUP S-2
- AREA WITHOUT SURROUNDING WALLS, WITHIN HORIZONTAL PROJECTION OF FLOOR ABOVE
- EXIT ACCESS TRAVEL
- COMMON PATH OF EGRESS TRAVEL
- 1-HOUR EXTERIOR WALL OR FIRE BARRIER
- 2-HOUR FIRE WALL

GENERAL NOTES:

1. SEE DRAWING G-XXX FOR FLOOR AREAS
2. REGARDING TO INTERMEDIATE LEVEL FLOOR AREATHERE IS NO FLOOR AREA AT THIS LEVEL. ALL SPACES ARE OPEN TO OCCUPIED SPACES AT THE LEVEL BELOW, OR ARE SHAFTS WITH NO OPENINGS AT THIS LEVEL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

EGRESS PLANS AND CALCULATION

SHEET G-003
103

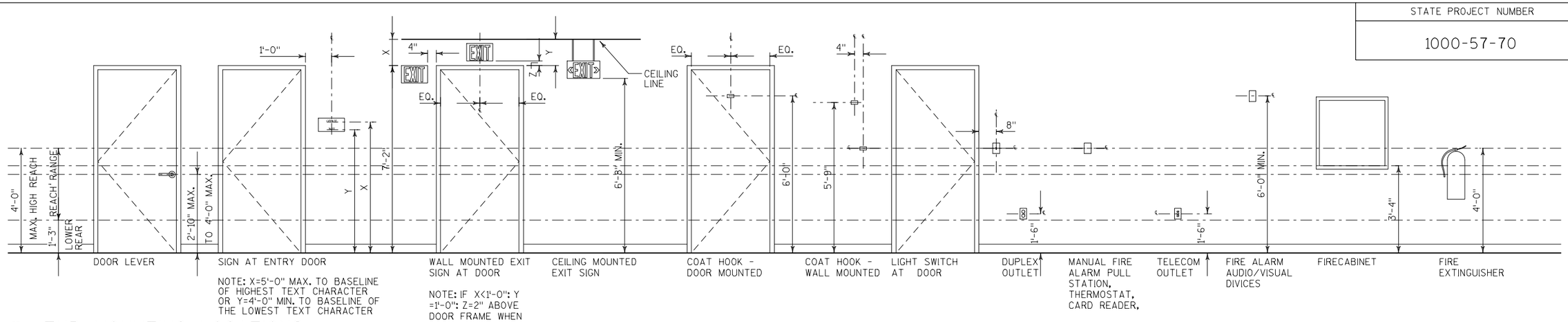
2

2

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

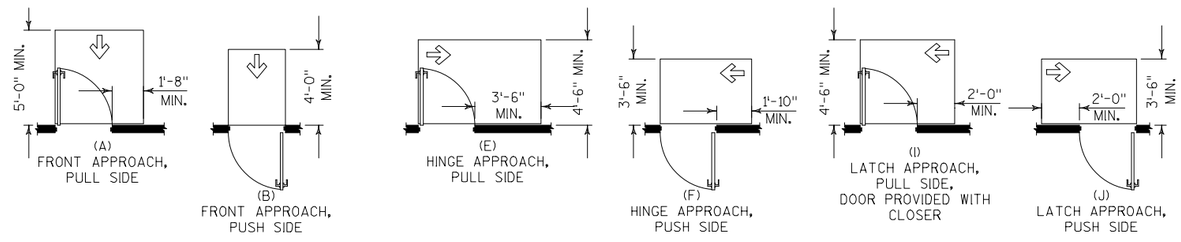
STATE PROJECT NUMBER

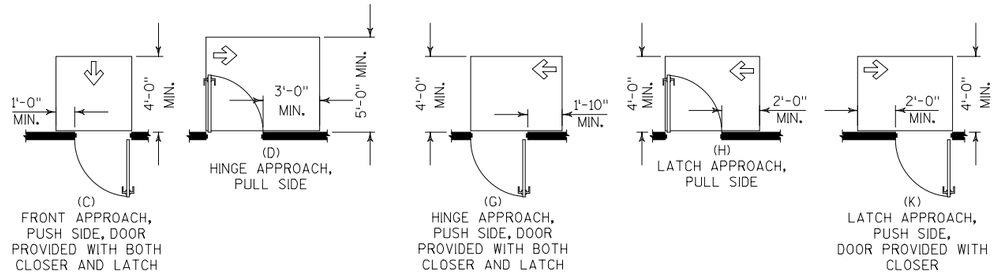
1000-57-70



1 / G-006 TYP. MOUNTING LOCATIONS

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





2 / G-006 CLEARANCES AT MANUAL SWINGING DOOR

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

BATCH PRINT SHEET CSD OF NSD

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

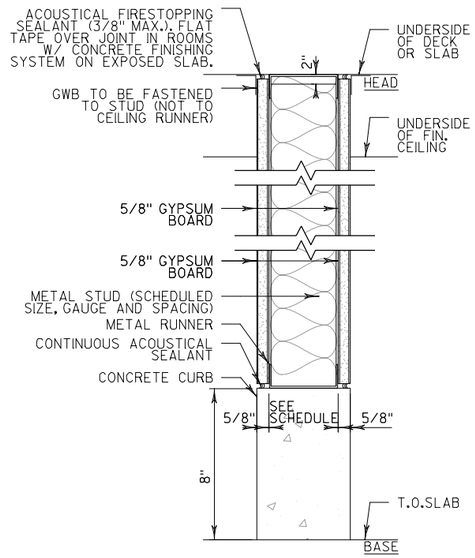
ACCESSIBILITY REQUIREMENTS (ADA)

SHEET G-006

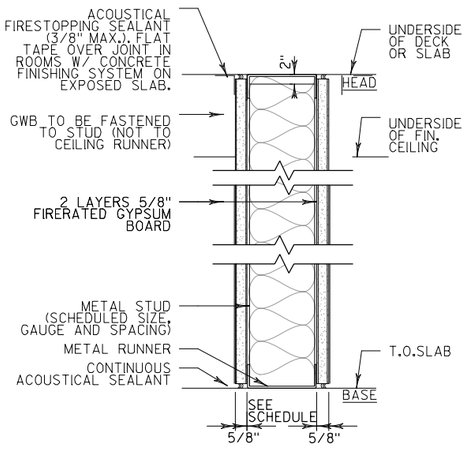
104

STATE PROJECT NUMBER

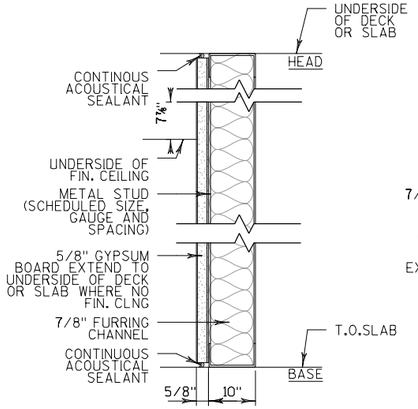
1000-57-70



1 PARTITION TO SLAB ABOVE
SCALE: 3"=1'-0"

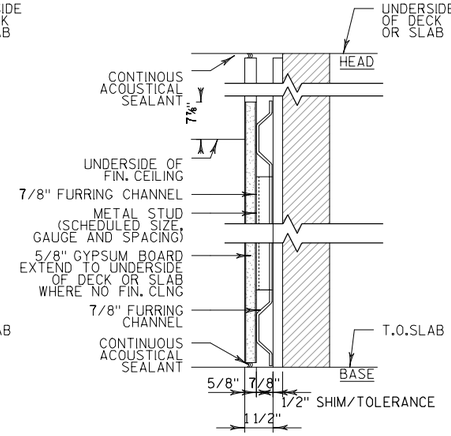


2 PARTITION TO SLAB ABOVE
SCALE: 3"=1'-0"



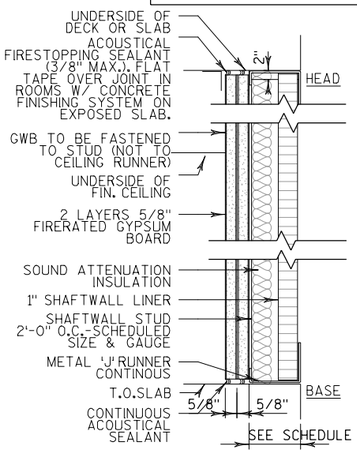
METAL STUD (SCHEDULED SIZE, GAUGE AND SPACING)

3 2 1/2" STUD FURR-OUT TO SLAB ABOVE
SCALE: 3"=1'-0"



METAL STUD (SCHEDULED SIZE, GAUGE AND SPACING)

4 7/8" FURR-OUT
SCALE: 3"=1'-0"



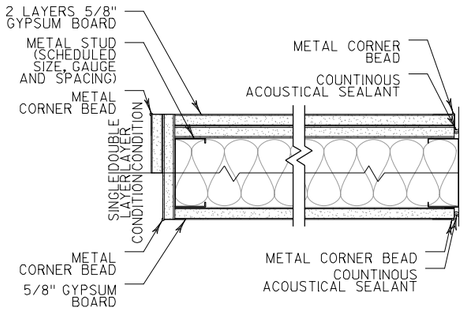
* ACCEPTABLE U.L. H.O.W. ASSEMBLY: HW-D-0194

5R 2HR RATED SHAFWALL PARTITION
SCALE: 3"=1'-0"

TYPICLA PARTITION TYPES & DETAILS

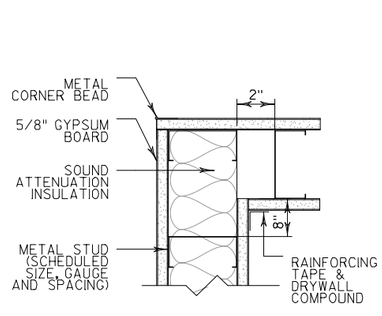
2 / G-010

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

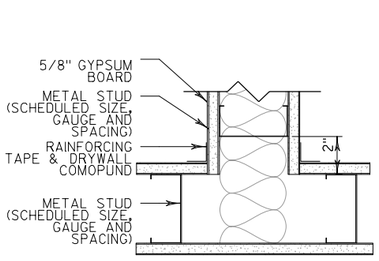


1 PLAN DETAIL
PART. TERMINAL OR FIN. OPNG

2 PLAN DETAIL
DRYWALL PERIMETER RELIEF @ MASONRY OR CONC.WALL

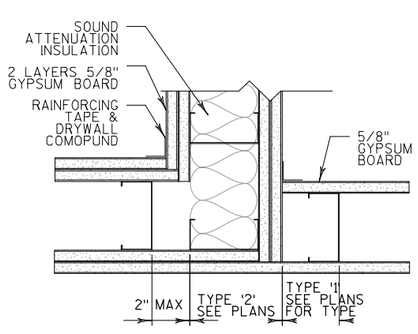


3 PLAN DETAIL
DETAIL AT CHANGE PARTITION TYPES

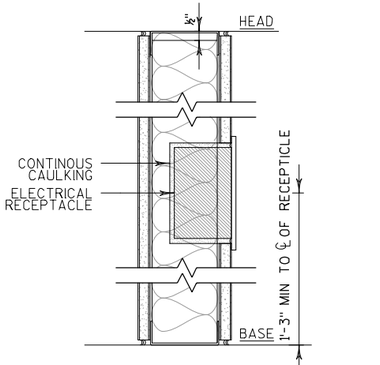


NOTE: MAINTAIN INTEGRITY OF MORE STRINGENT PARTITION TYPE AT INTERSECTION

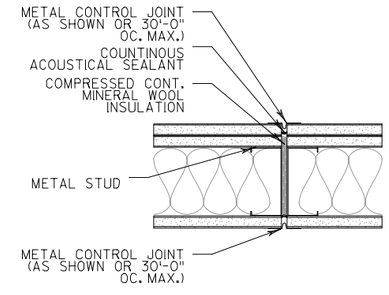
4 PLAN DETAIL
INTERSECTION @ SAME PARTITION TYPES



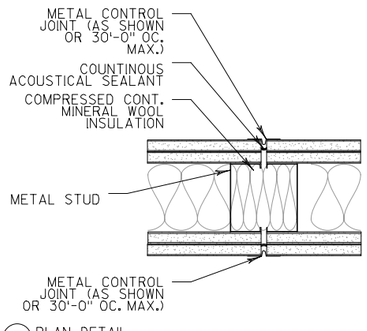
5 PLAN DETAIL
INTERSECTION OF DIFFERENT PARTITION TYPES



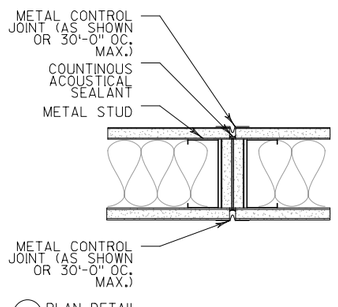
10 DETAIL OF BASE @ ELECTRICAL RECEPTACLES AT DEMISING WALLS ONLY
SCALE: 3"=1'-0"



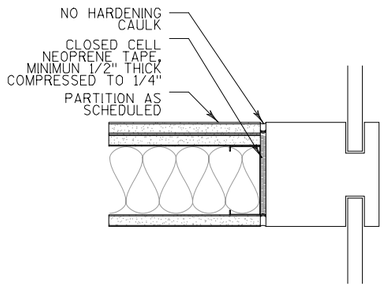
6 PLAN DETAIL
DRYWALL CONTROL JOINT @ TYPE 3 PARTITIONS



7 PLAN DETAIL
DRYWALL CONTROL JOINT @ TYPE 2 PARTITIONS



8 PLAN DETAIL
CONTROL JOINT @ 1HR RATED PARTITIONS



NOTE: IF PARTITION WIDTH IS WIDER THAN MULLION, ADDITIONAL MULLION COVER PIECE MAY BE REQUIRED TO ENSURE A SOLID SURFACE TO FORM A TIGHT SEAL TO PARTITION

9 PLAN DETAIL
DEMISING PARTITION MULLION CONNECTION

TYPICAL DETAILS - DRYWALL PARTITIONS

1 / G-010

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

PARTITION TYPE

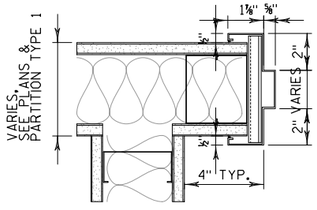
SHEET G-010
105

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

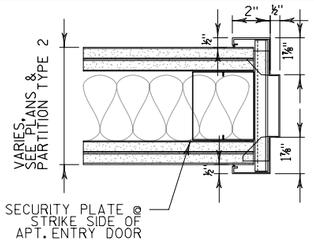
2

2

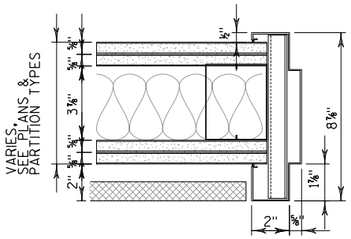
STATE PROJECT NUMBER
1000-57-70



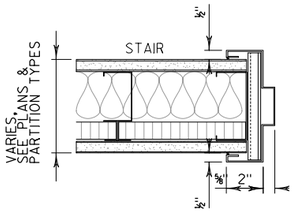
J1 JAMB DETAIL @ NONRATED AND 1 HR RATED PARTITIONS (HEAD DETAIL IS SIMILAR)



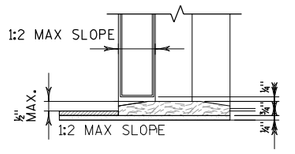
J2 JAMB DETAIL @ CORRIDOR SIDE (HEAD DETAIL IS SIMILAR)



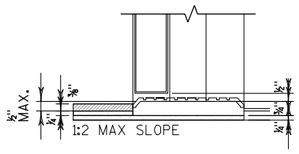
J3 JAMB DETAIL @ CORRIDOR SIDE (HEAD DETAIL IS SIMILAR)



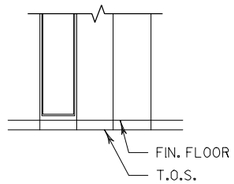
J4 JAMB DETAIL @ CORRIDOR SIDE (HEAD DETAIL IS SIMILAR)



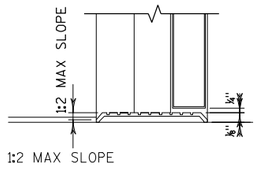
S1 STONE SADDLE @ THIN SET TILE OR TILE TO CONC.



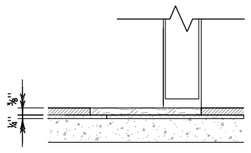
S2 ALUMINUM SADDLE @ TILE TO CONC.



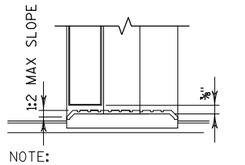
S3 NO SADDLE FLOOR FINISH RUNS THRU



S4 EXTRUDED ALUMINUM SADDLE @ WOOD TO TILE



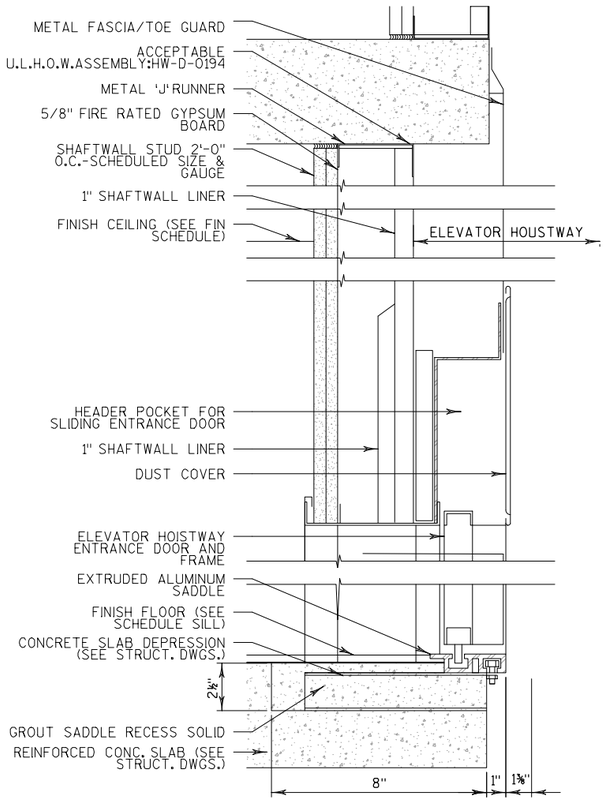
S5 TILE SADDLE (SEE FINISH SCHEDULE) @ TILE TO TILE



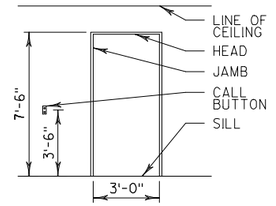
NOTE:
1. ALL SADDLES & THRESHOLDS SHALL COMPLY WITH ADA REQUIREMENTS

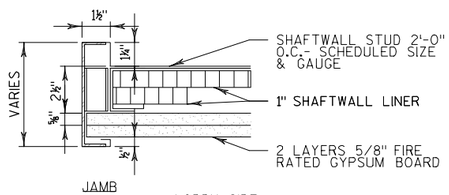
S6 ALUMINUM SADDLE @ CONC. TO CONC.

2 G-011 SADDLE TYPES
SCALE: 3"=1'-0"

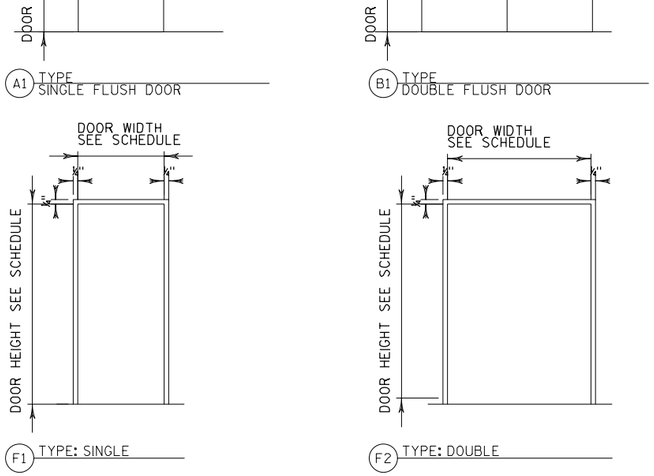


NOTE:
SEE SILL DETAILS ON THE DRAWINGS PROVIDED BY VDA IN THE SPECIFICATIONS





1 G-011 TYPICAL DETAILS - HOISTWAY
SCALE: 3"=1'-0"



A1 TYPE SINGLE FLUSH DOOR

B1 TYPE DOUBLE FLUSH DOOR

F1 TYPE: SINGLE

F2 TYPE: DOUBLE

3 G-011 DOOR HEAD TYPES
SCALE: 1/4"=1'-0"

4 G-011 DOOR HEAD & JAMB DETAILS
SCALE: 3"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

TYPICAL DOOR DETAILS

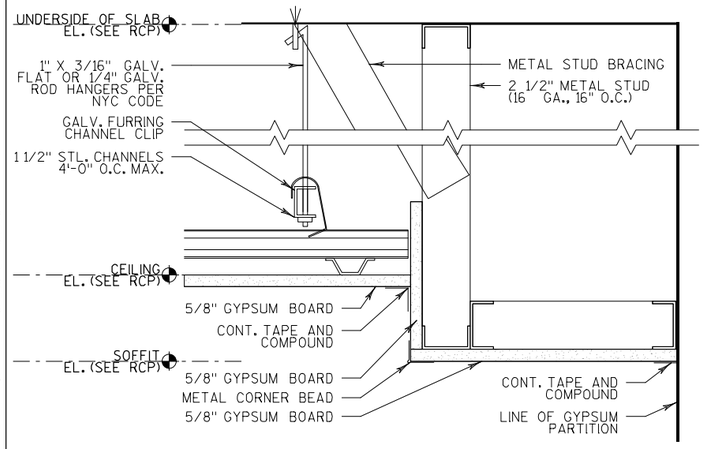
SHEET G-011
106

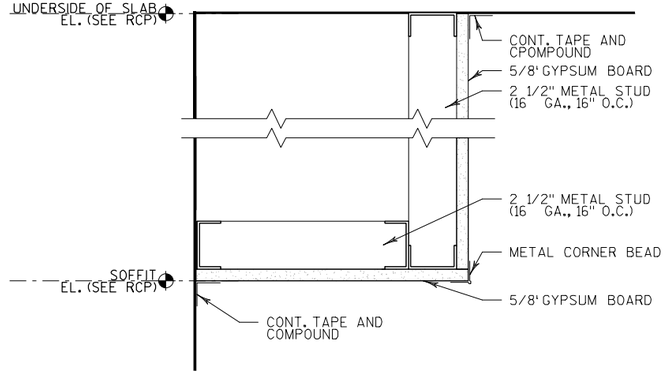
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$ BATCH PRINT SHEET CSD OF NSD

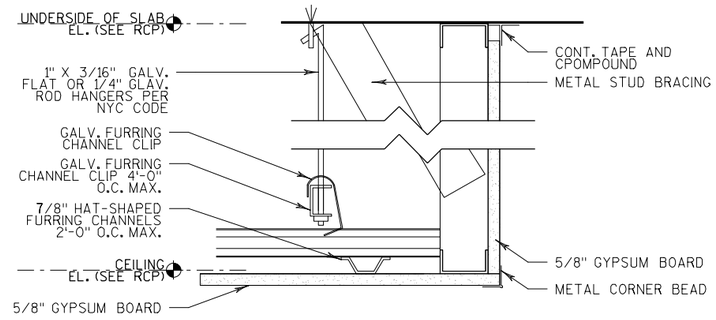
2

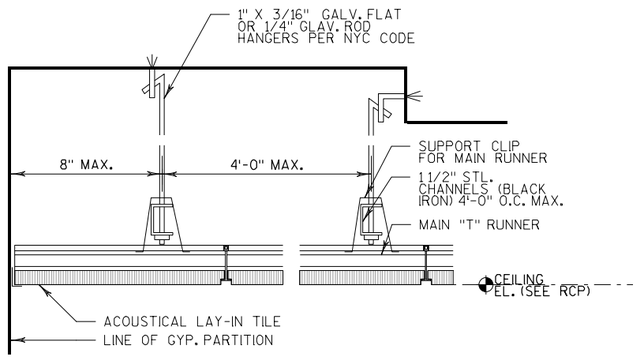
2

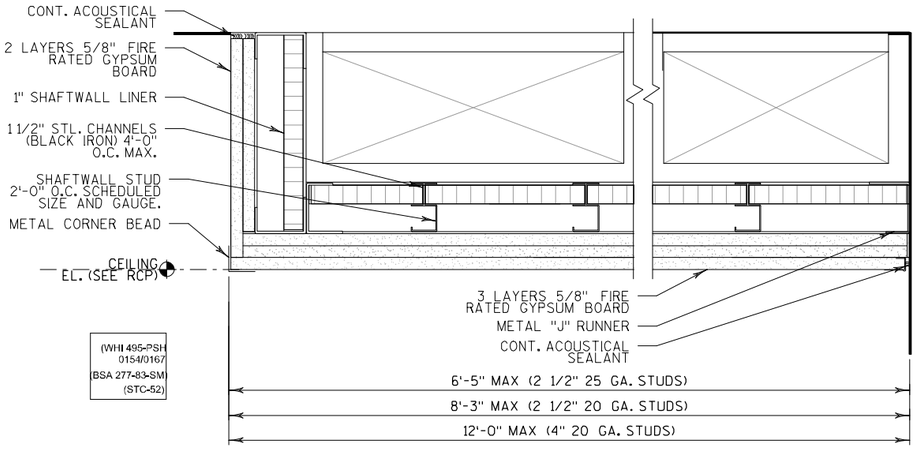
STATE PROJECT NUMBER
1000-57-70



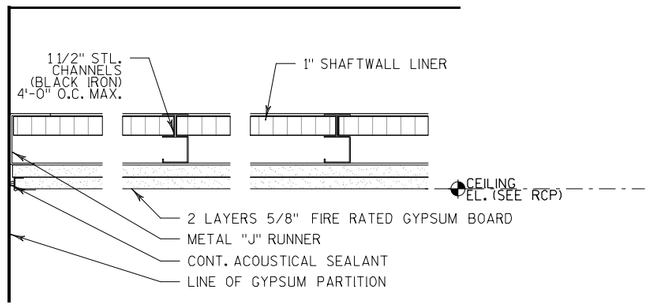








(WHI 495-PSH 0154/0167) (BSA 277-83-SM) (STC-52)



1 G-012 CEILING TYPES
SCALE: 3"=1'-0"

SCHEDULE FOR PARTITION FRAMING

		DRYWALL PARTITION			FURRING			SHAFTWALL PARTITIONS TYPE @ ELEVATOR HOISTWAYS			SHAFTWALL PARTITIONS TYPE @ STAIRWAYS & MECH SHAFTS		
FLOOR	FLOOR HEIGHT	STUD SIZE L/240	STUD GAUGE	STUD SPACING	STUD SIZE L/240	STUD GAUGE	STUD SPACING	STUD SIZE L/240	STUD GAUGE	STUD SPACING	STUD SIZE L/240	STUD GAUGE	STUD SPACING
PLATFORM	12'-5"	3 5/8"	25	16" O.C.	1 5/8"	25	24" O.C. W/ BRACE @ 1/3 POINTS	4"	CH-20	24" O.C.	2 1/2"	CH-20	16" O.C.
INTERMEDIATE	12'-5"	3 5/8"	25	16" O.C.	1 5/8"	25	24" O.C. W/ BRACE @ 1/3 POINTS	4"	CH-20	24" O.C.	2 1/2"	CH-20	16" O.C.
BRIDGE	12'-5"	3 5/8"	25	16" O.C.	1 5/8"	25	24" O.C. W/ BRACE @ 1/3 POINTS	4"	CH-20	24" O.C.	2 1/2"	CH-20	16" O.C.
ROOF	18'-5"	3 5/8"	25	16" O.C.	1 5/8"	25	24" O.C. W/ BRACE @ 1/3 POINTS	4"	CH-20	24" O.C.	2 1/2"	CH-20	16" O.C.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

CEILING TYPES

SHEET G-012
107

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

2

2

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. B	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 ROOFING

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 OF
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 (1 A)
- CENTER LINES (℄)
- MATCH LINE (MATCH LINE SEE X/X-XXX)
- BREAK LINE
- DRAWING REVISION (#)
- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED
- NEW WORK
- DOOR NUMBER (#)
- LOUVER NUMBER (L#)
- 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 FE)
- FIRE EXTINGUISHER CABINET (FEC 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
1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ARCHITECTURAL ABBREVIATIONS & SYMBOLS

SHEET A-000
108

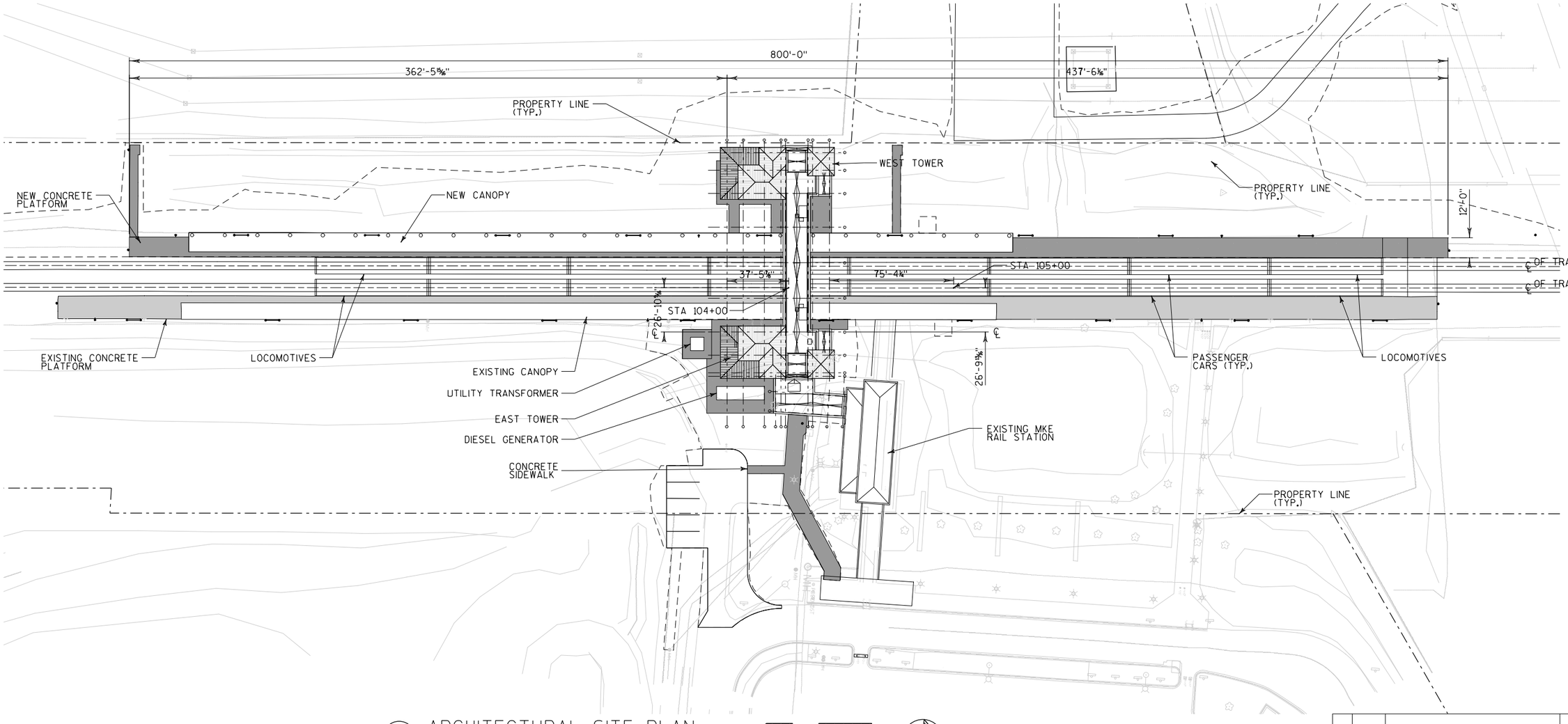
2

2

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

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

STATE PROJECT NUMBER
1000-57-70



1 / A-100 ARCHITECTURAL SITE PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

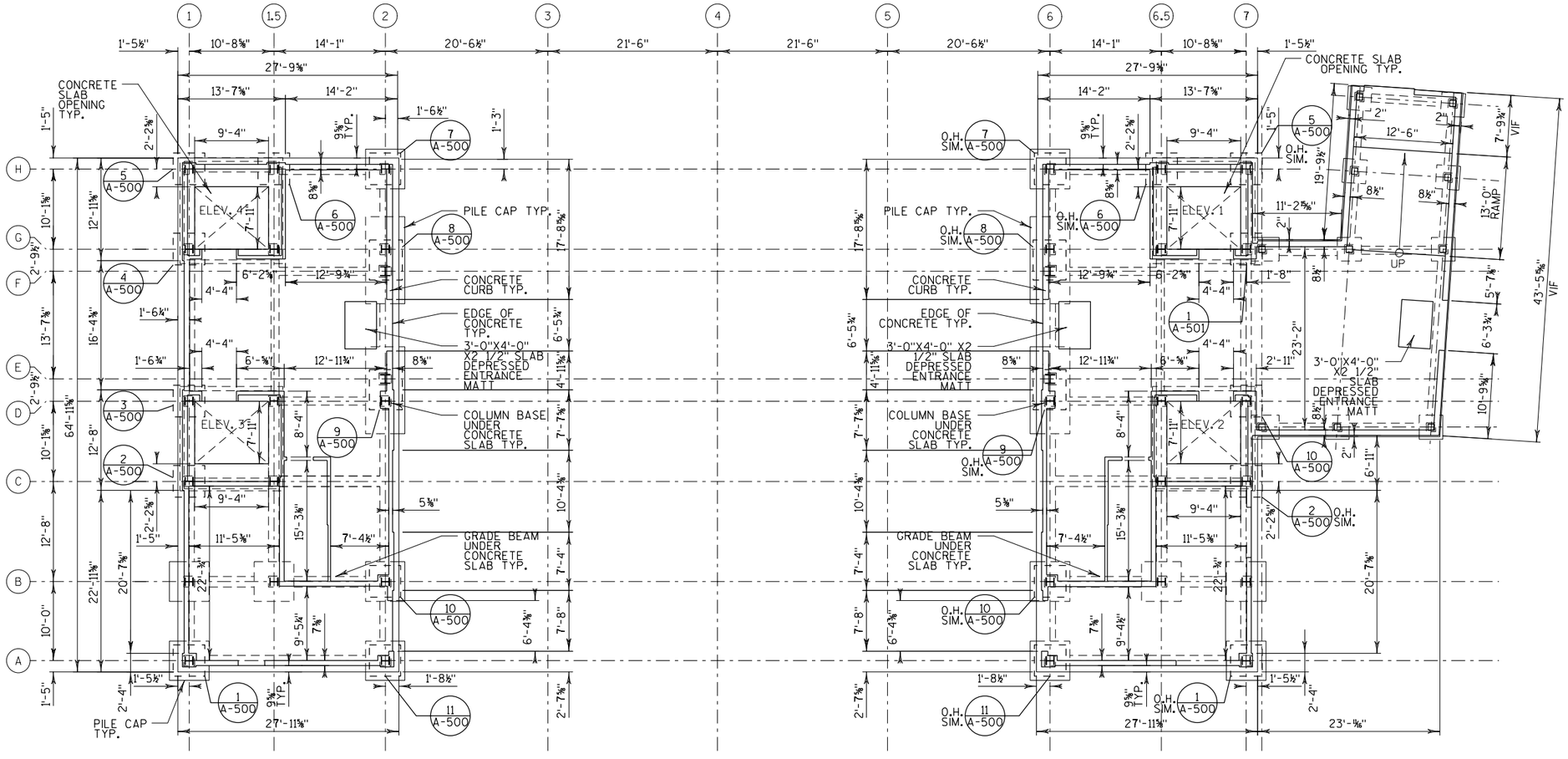
ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ARCHITECTURAL SITE PLAN

SHEET A-100

STATE PROJECT NUMBER
1000-57-70



1 A-101 FIRST FLOOR SLAB PLAN

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

0 4 8 16 FT

N

BATCH PRINT SHEET CSD OF NSD

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

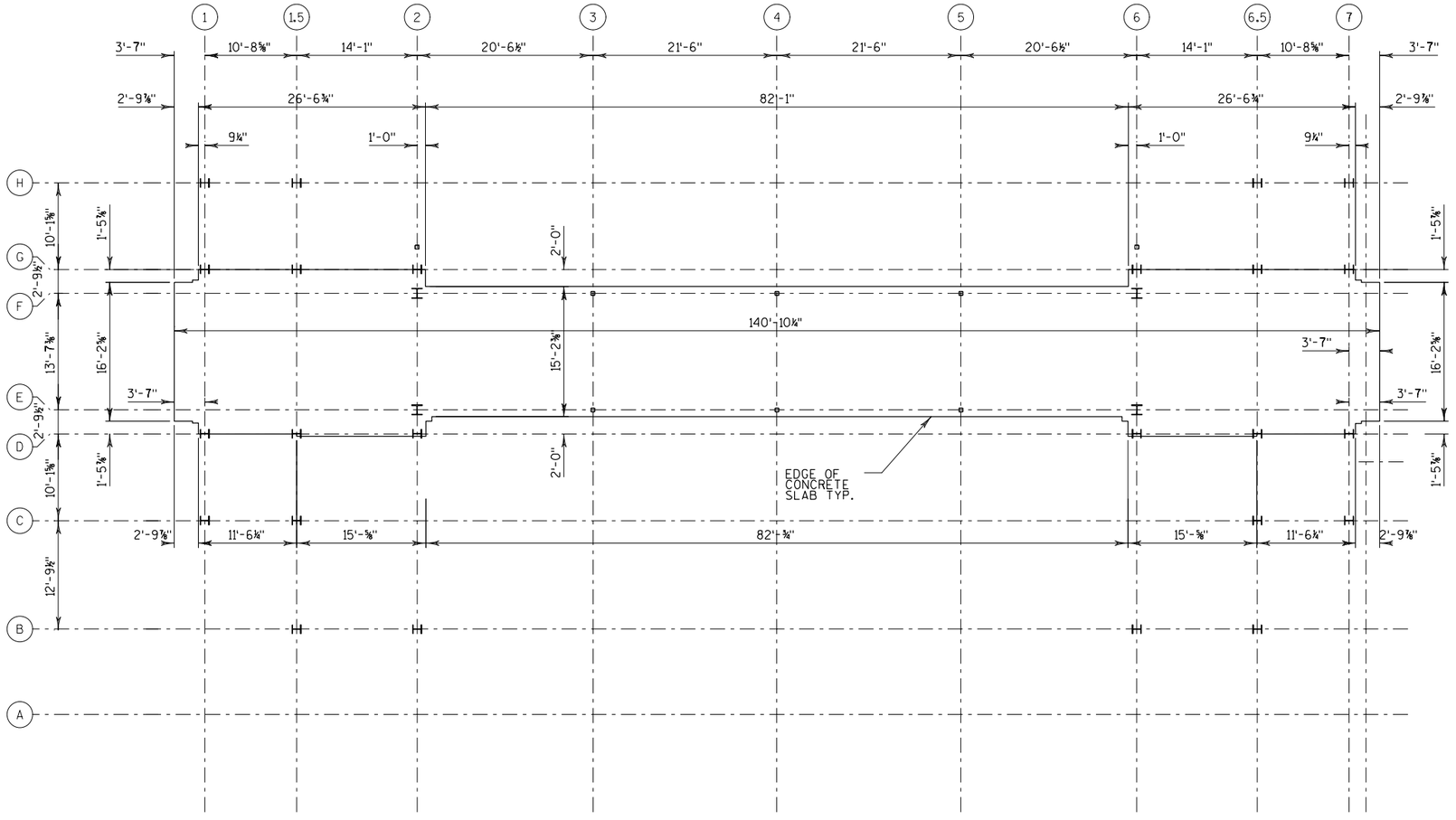
FIRST FLOOR SLAB PLAN

SHEET A-101

110

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

STATE PROJECT NUMBER
1000-57-70



1/A-103 SECOND FLOOR SLAB PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SECOND FLOOR SLAB PLAN

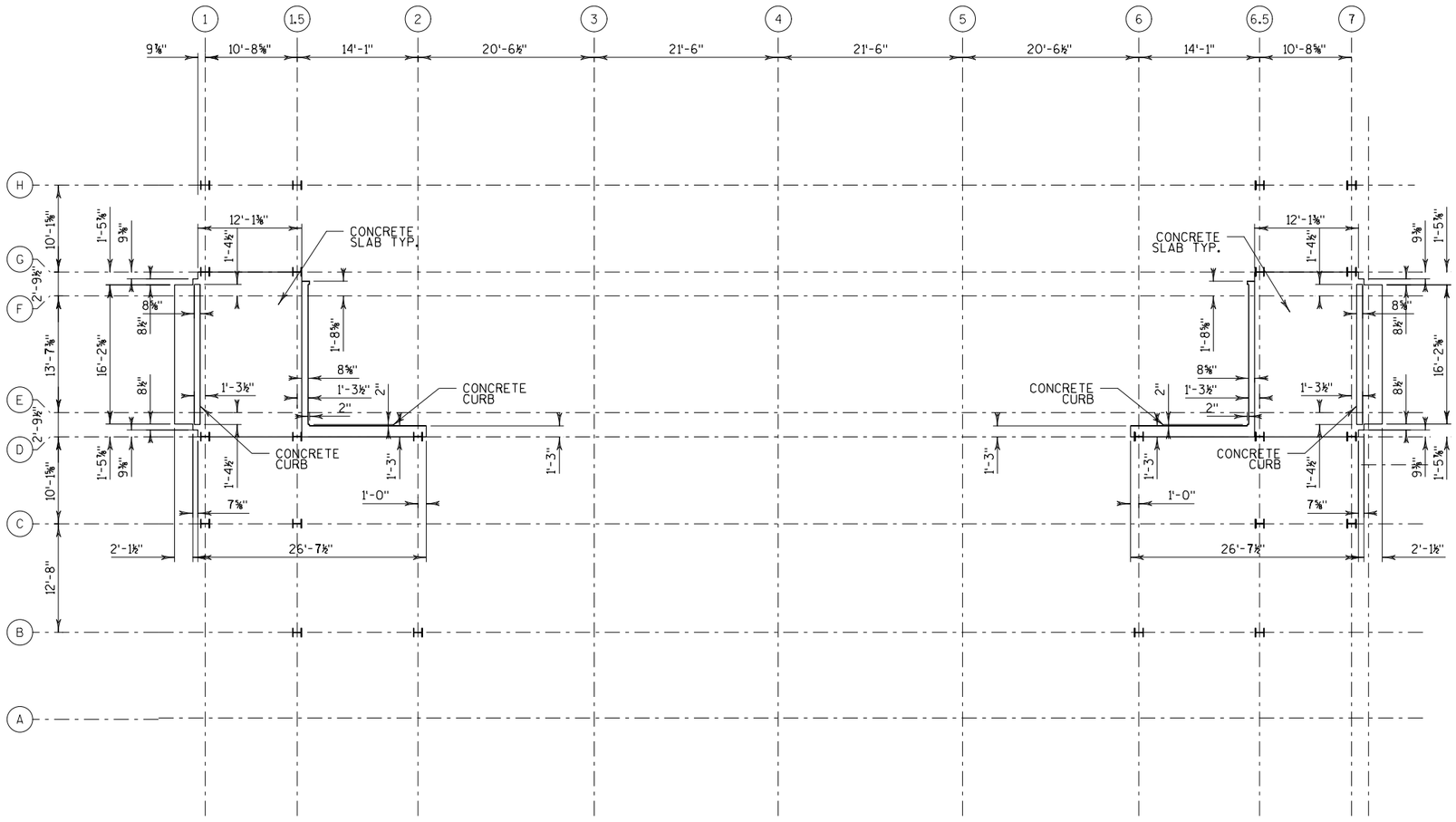
SHEET A-103
111

2

2

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

STATE PROJECT NUMBER
1000-57-70



1 / A-104 BRIDGE ROOF SLAB PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

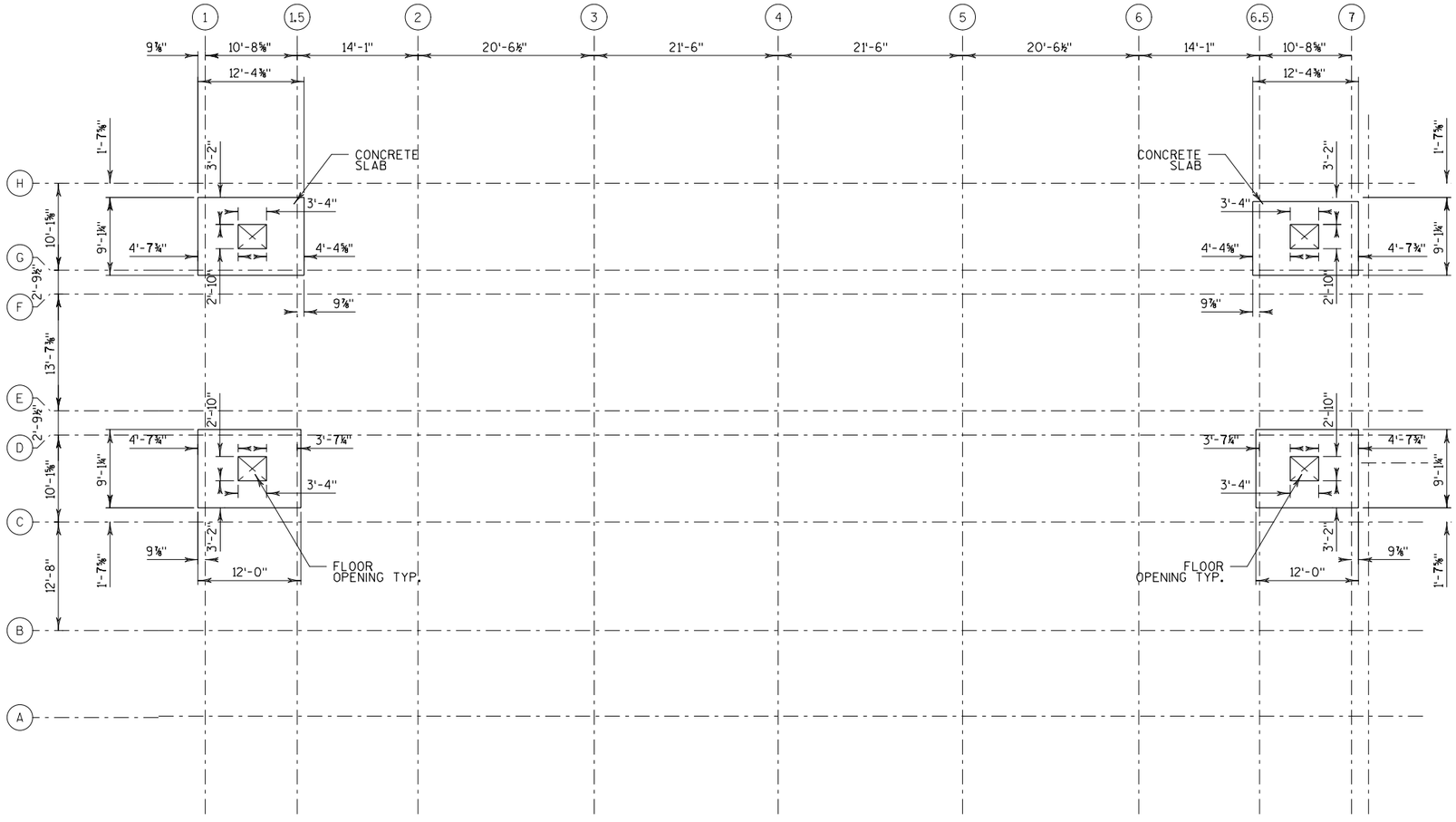
DRAWN BY JR | PLANS CK'D. DK

BRIDGE ROOF SLAB PLAN

SHEET A-104
112

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

STATE PROJECT NUMBER
1000-57-70



1/A-105 ELEVATOR MACHINE RM. SLAB PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ELEVATOR MACHINE RM. SLAB PLAN

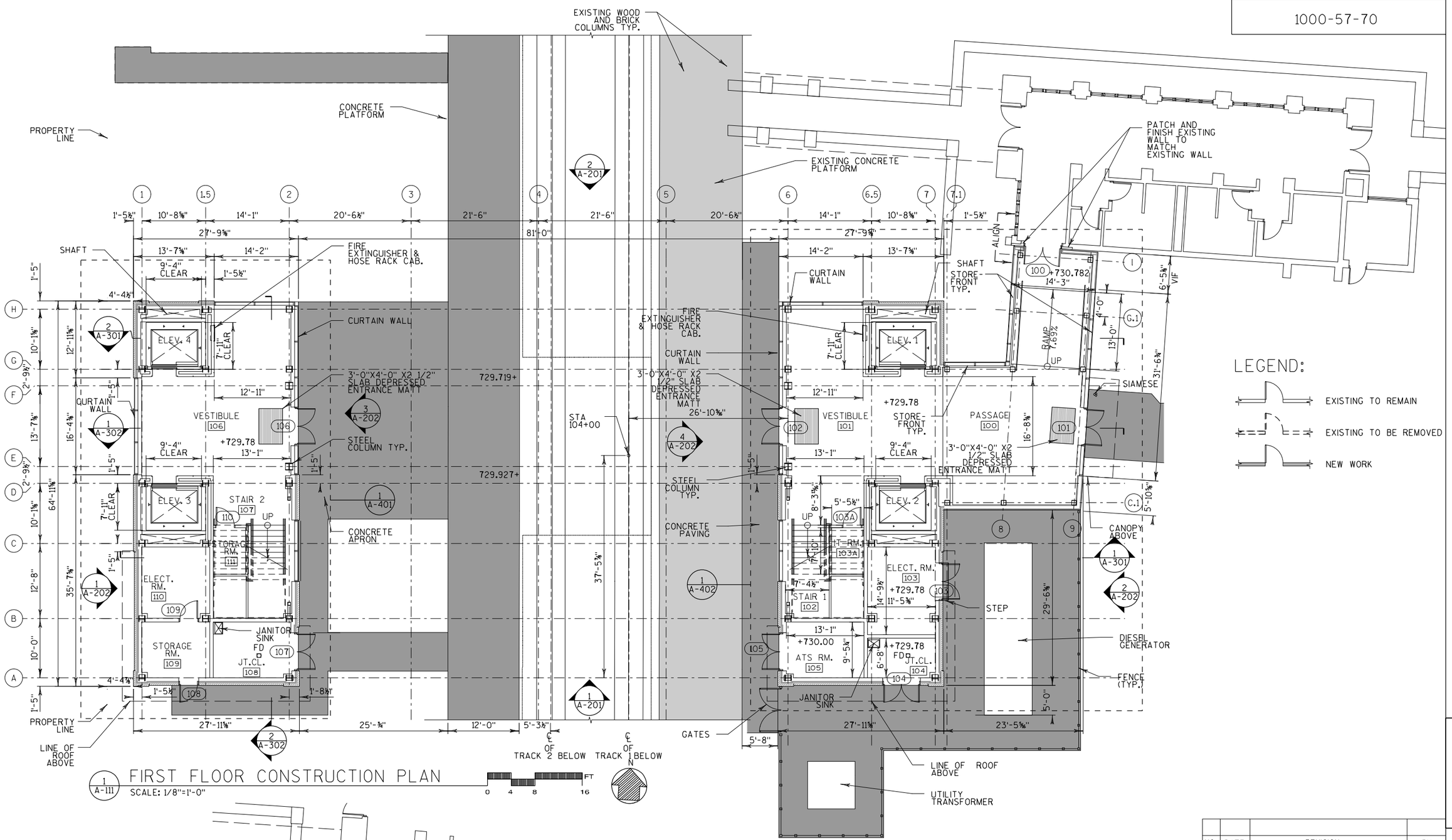
SHEET A-105

2

2

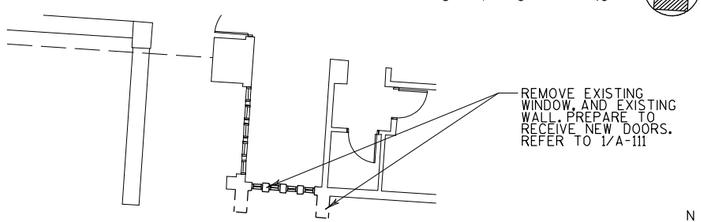
STATE PROJECT NUMBER

1000-57-70



1 A-111 FIRST FLOOR CONSTRUCTION PLAN

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



2 A-111 FIRST FLOOR DEMOLITION PARTIAL PLAN

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

LEGEND:

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FIRST FLOOR CONSTRUCTION PLAN

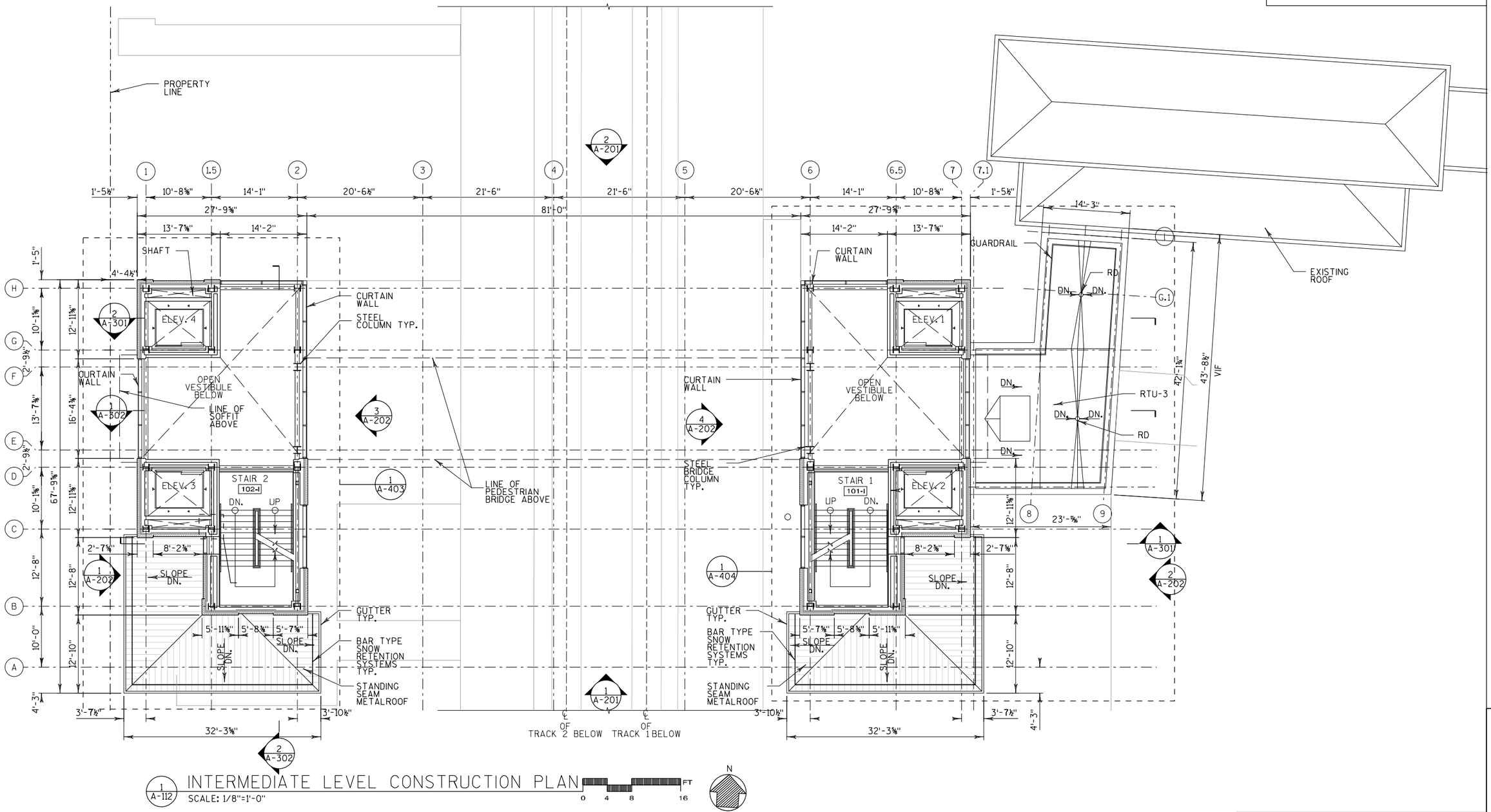
SHEET A-111

114

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

STATE PROJECT NUMBER

1000-57-70



1 A-112 INTERMEDIATE LEVEL CONSTRUCTION PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

INTERMEDIATE LEVEL CONSTRUCTION PLAN

SHEET A-112

115

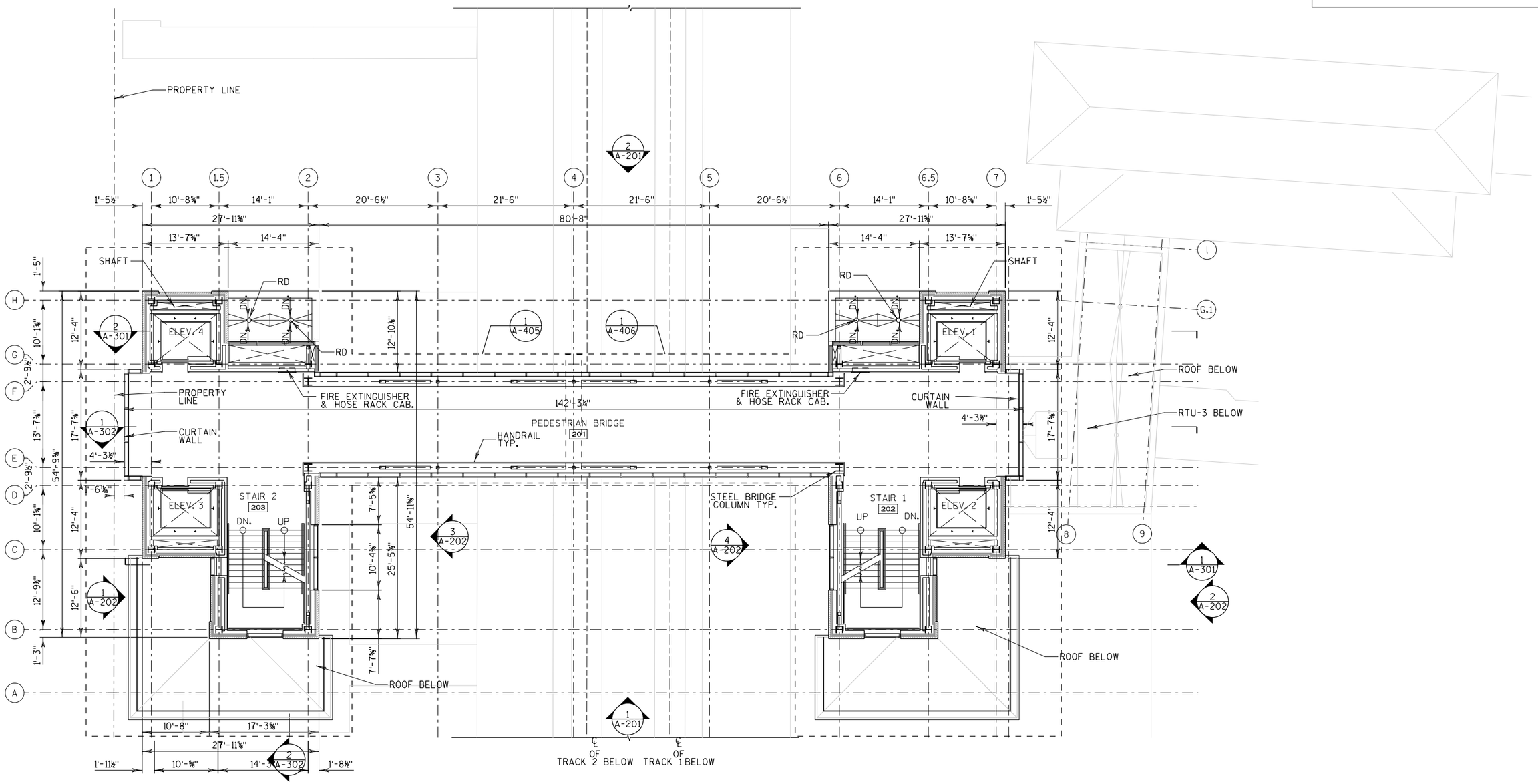
2

2

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

STATE PROJECT NUMBER

1000-57-70



1 A-113 SECOND FLOOR CONSTRUCTION PLAN

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

0 4 8 16 FT

N

℄ OF TRACK 2 BELOW

℄ OF TRACK 1 BELOW

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SECOND FLOOR CONSTRUCTION PLAN

SHEET A-113

116

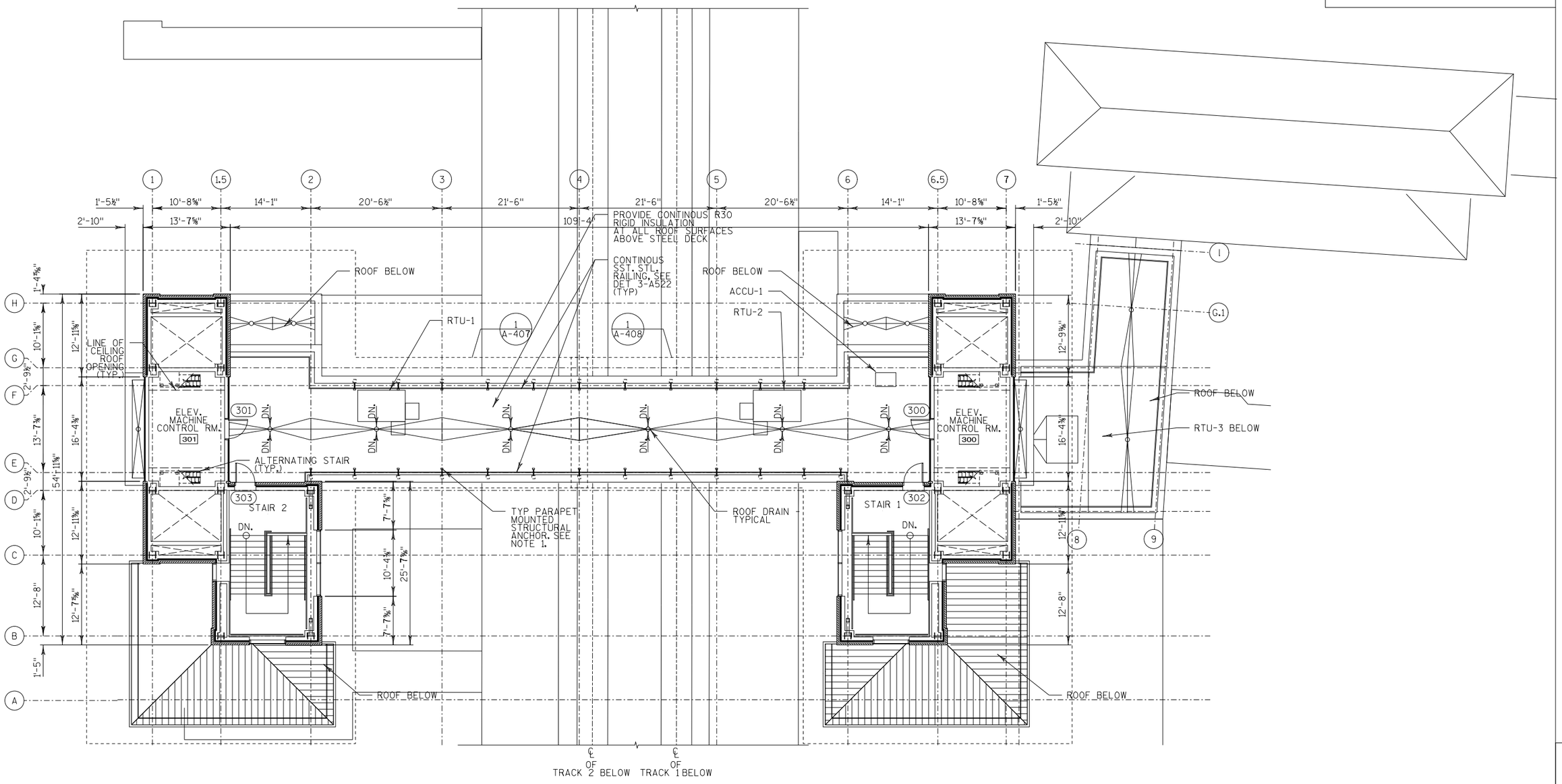
2

2

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

STATE PROJECT NUMBER

1000-57-70



1 / A-114 PEDESTRIAN BRIDGE CONSTRUCTION ROOF PLAN

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

0 4 8 16 FT

N

NOTE 1: CONTRACTOR TO PREPARE FULL SIGNED AND SEALED SHOP DRAWINGS PACKAGE FOR SUSPENDED ACCESS SUPPORT EQUIPMENT. COODINATE THIS PACKAGE WITH BUILDING CURTAIN WALL, PARAPET AND RAILING CONSTRUCTION. SEE DETAIL 3 / A-522 AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR STRUCTURAL REQUIREMENTS

NOTE 2: PROVIDE CONTINOUS R49 RIGID INSULATION AT ALL FLAT ROOFS, MIN 8" @ DRAINS (TYP)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

BRIDGE ROOF LEVEL CONSTRUCTION PLAN

SHEET A-114
117

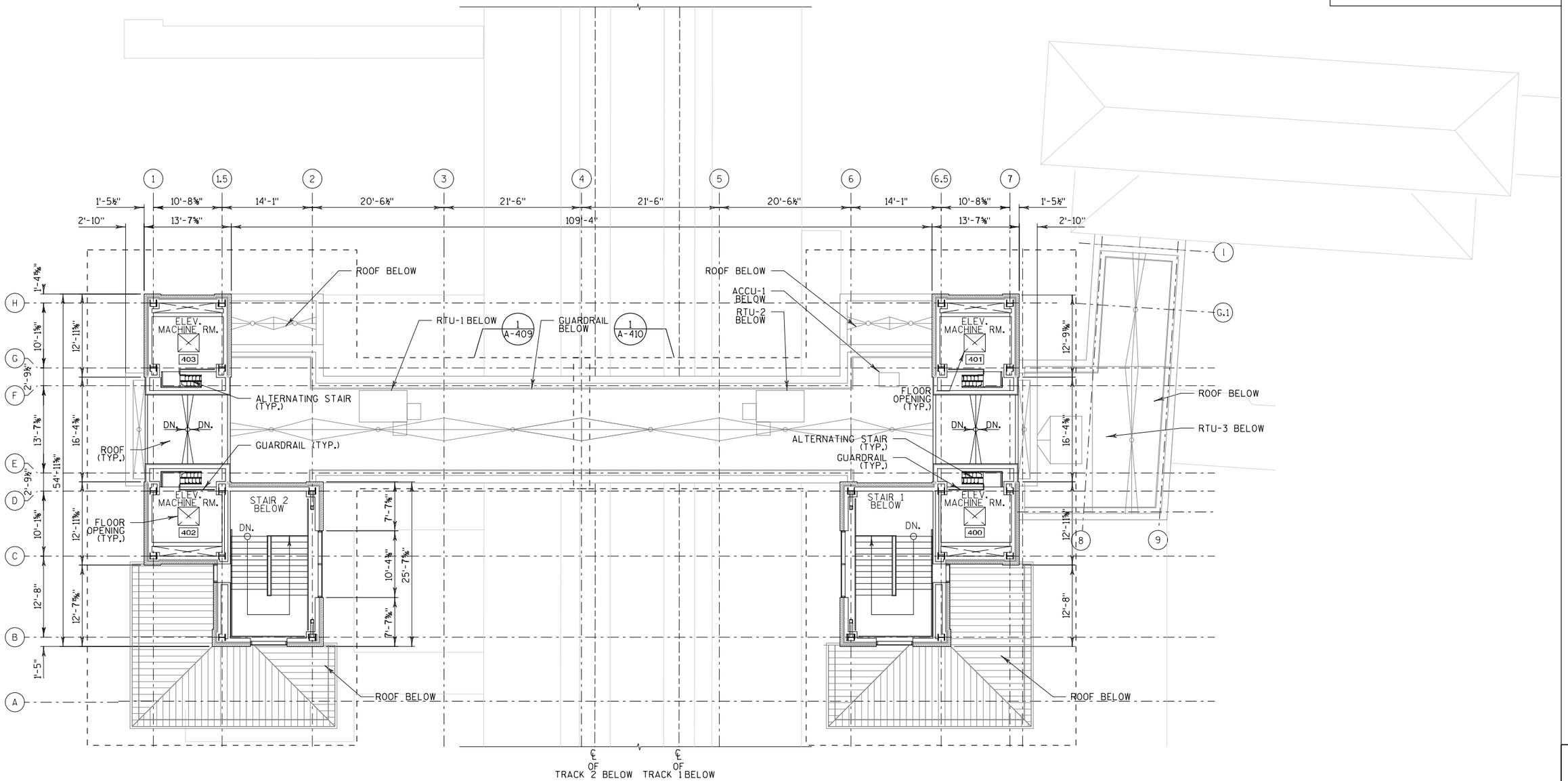
2

2

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

STATE PROJECT NUMBER

1000-57-70



1 A-115 ELEVATOR MACHINE LEVEL CONSTRUCTION ROOF PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ELEVATOR MACHINE LEVEL CONSTRUCTION ROOF PLAN

SHEET A-115

118

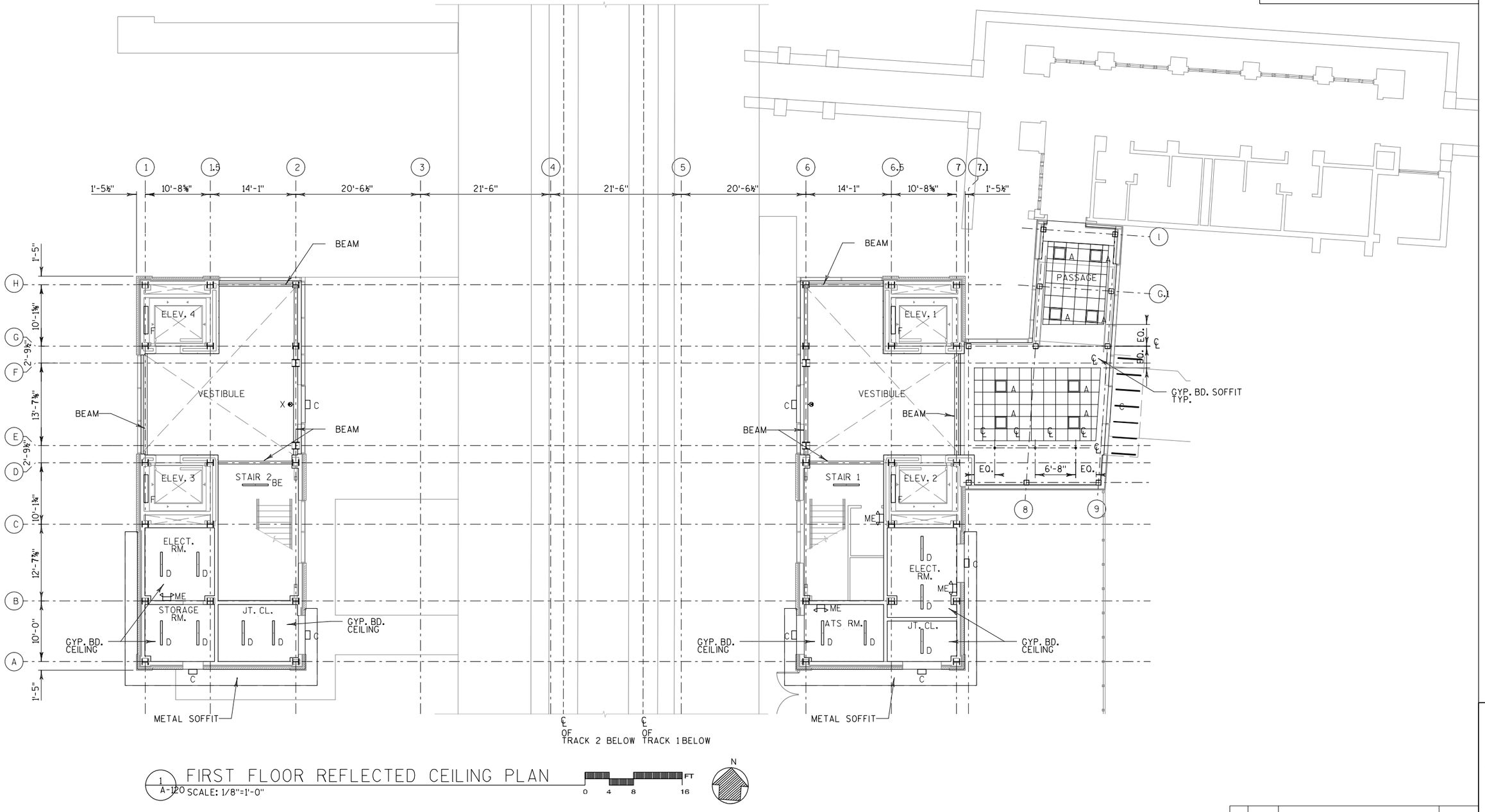
2

2

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

STATE PROJECT NUMBER

1000-57-70



1 / A-120 FIRST 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

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FIRST FLOOR REFLECTED CEILING PLAN

SHEET A-120

119

BATCH PRINT SHEET CSD OF NSD

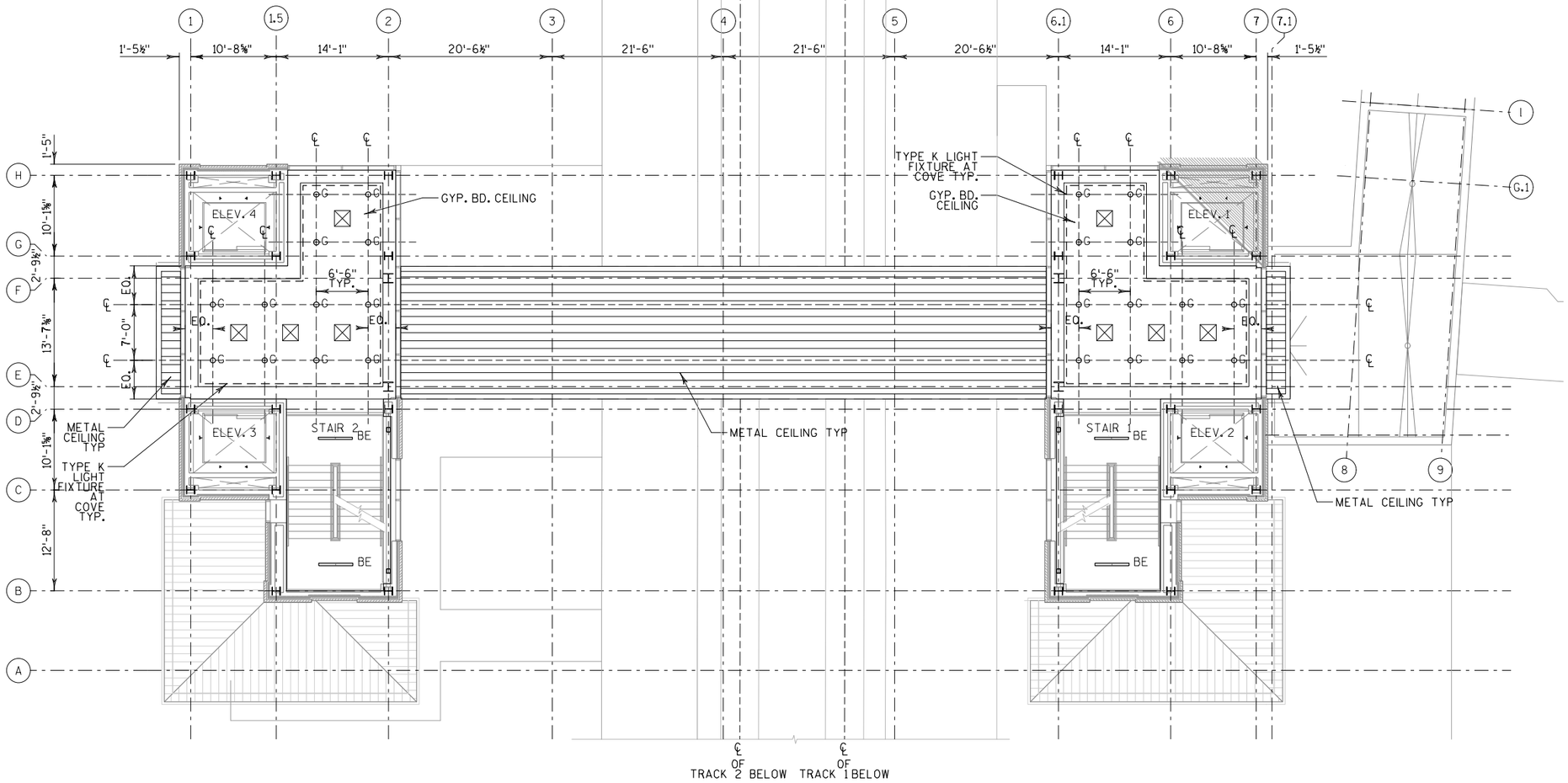
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

2

2

STATE PROJECT NUMBER

1000-57-70



1/A-121 INTERMEDIATE LEVEL REFLECTED CEILING PLAN

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

0 4 8 16 FT

N

BATCH PRINT SHEET CSD OF NSD

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$

FILE NAME: $$....designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

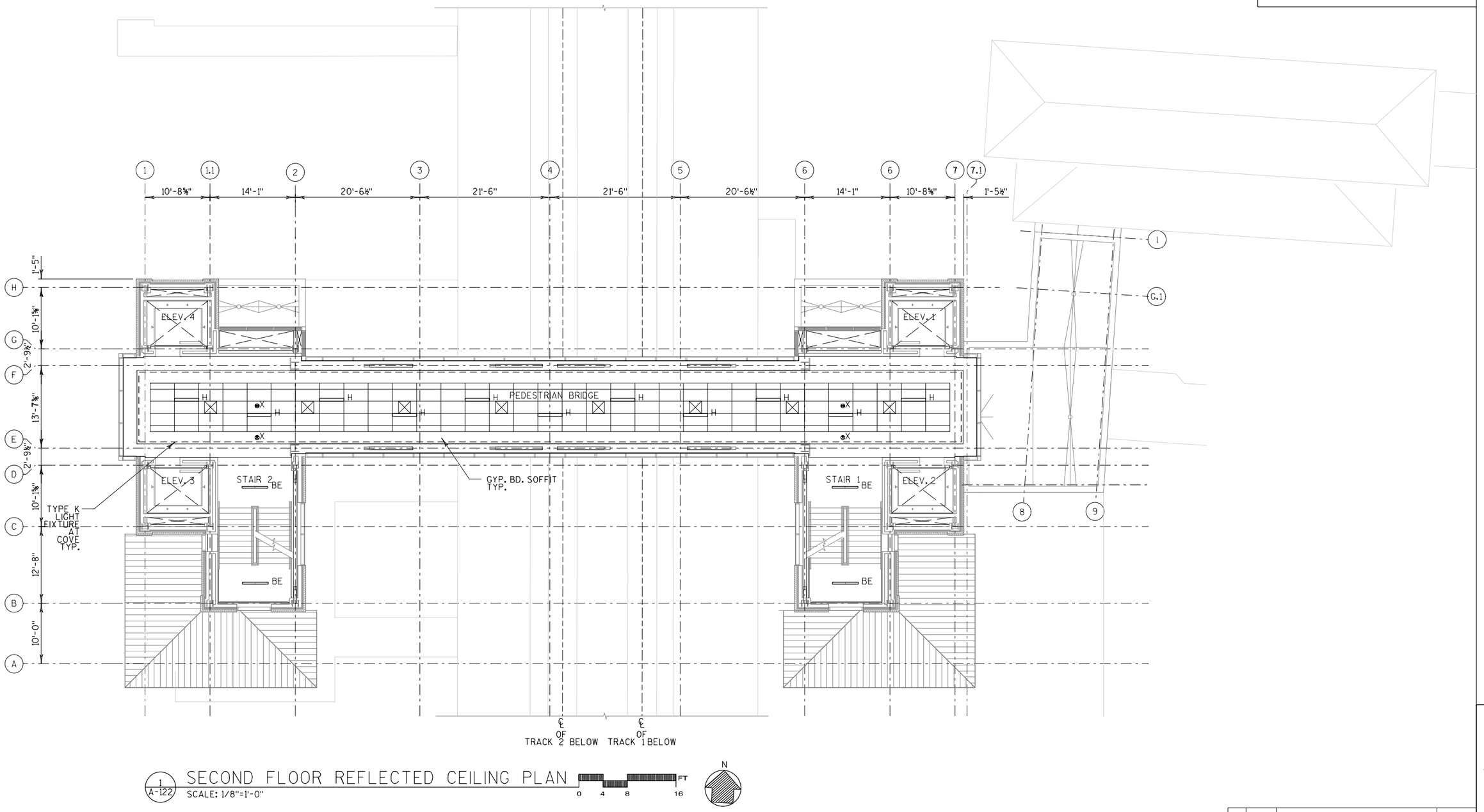
INTERMEDIATE LEVEL REFLECTED CEILING PLAN

SHEET A-121

120

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

STATE PROJECT NUMBER
1000-57-70



1/A-122 SECOND FLOOR REFLECTED CEILING PLAN

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

0 4 8 16 FT

N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

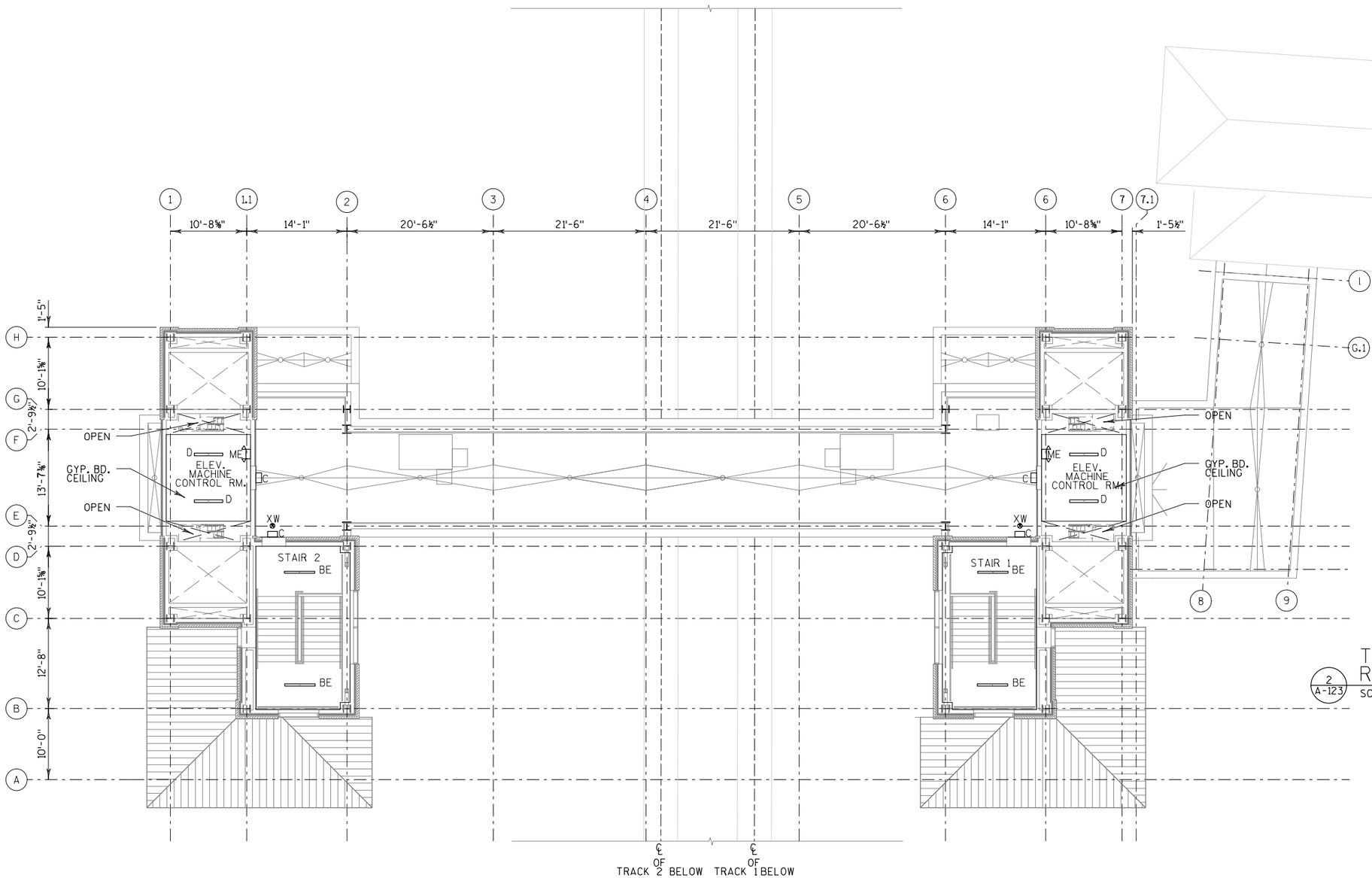
DRAWN BY JR | PLANS CK'D. DK

SECOND FLOOR REFLECTED CEILING PLAN

SHEET A-122
121

STATE PROJECT NUMBER

1000-57-70

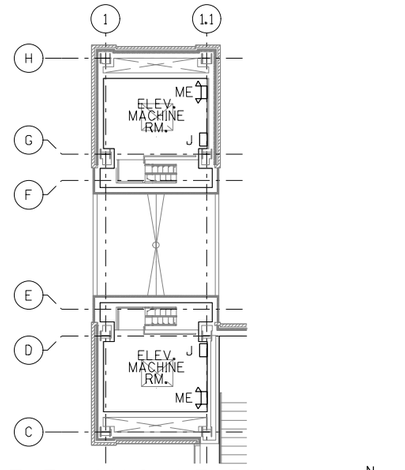


1 / A-123 PEDESTRIAN BRIDGE ROOF LEVEL REFLECTED CEILING PLAN

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

0 4 8 16 FT

N



2 / A-123 TYP. ELEV. MACHINE RM. REFLECTED CEILING PLAN

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

N

BATCH PRINT SHEET CSD OF NSD

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$..pentable..$$

FILE NAME: $$....designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

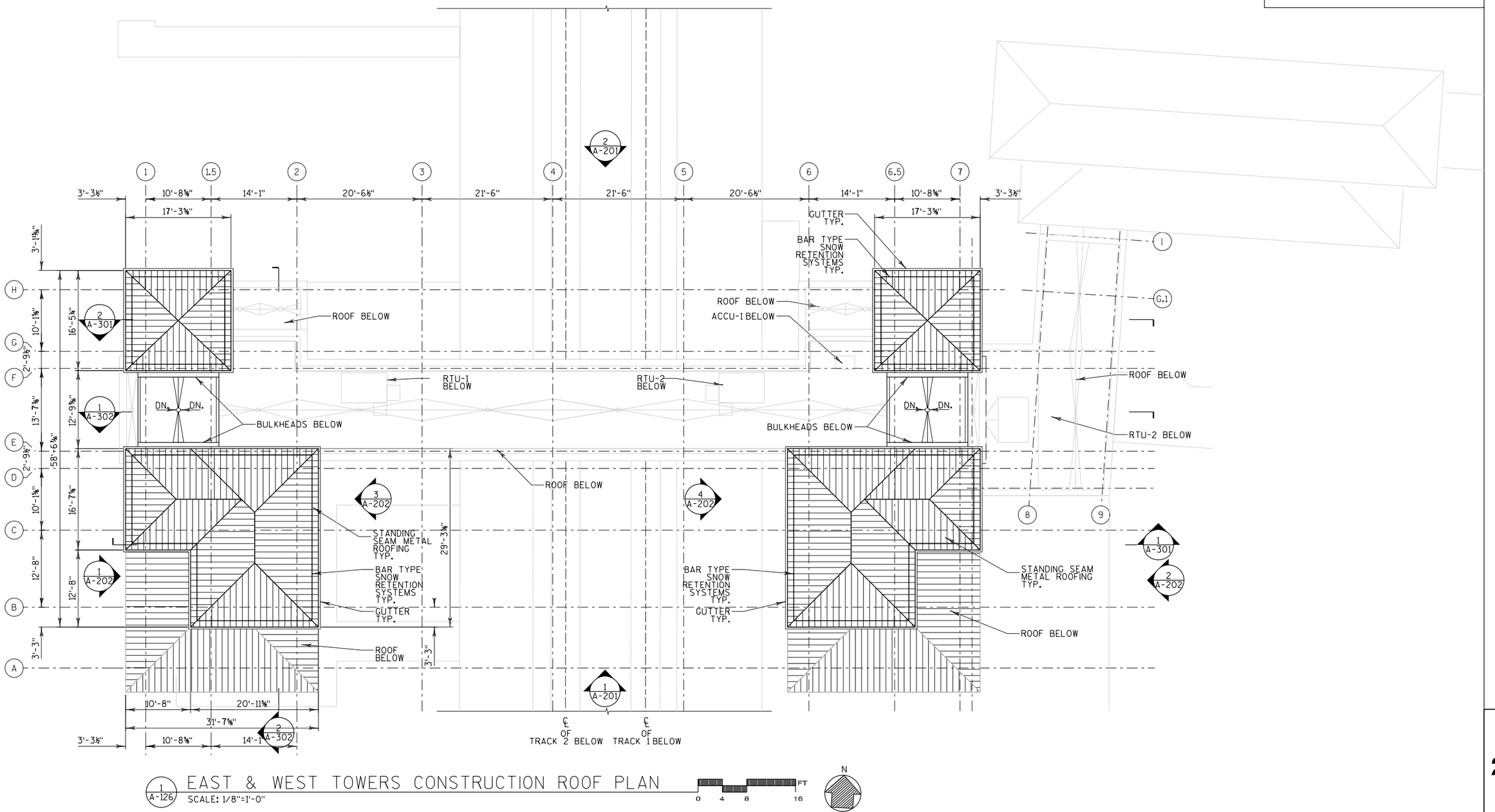
PEDESTRIAN BRIDGE ROOF LEVEL REFLECTED CEILING PLAN

SHEET A-123

122

STATE PROJECT NUMBER

1000-57-70



1 A-126 EAST & WEST TOWERS CONSTRUCTION ROOF PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

EAST & WEST TOWERS CONSTRUCTION ROOF PLAN

SHEET A-126

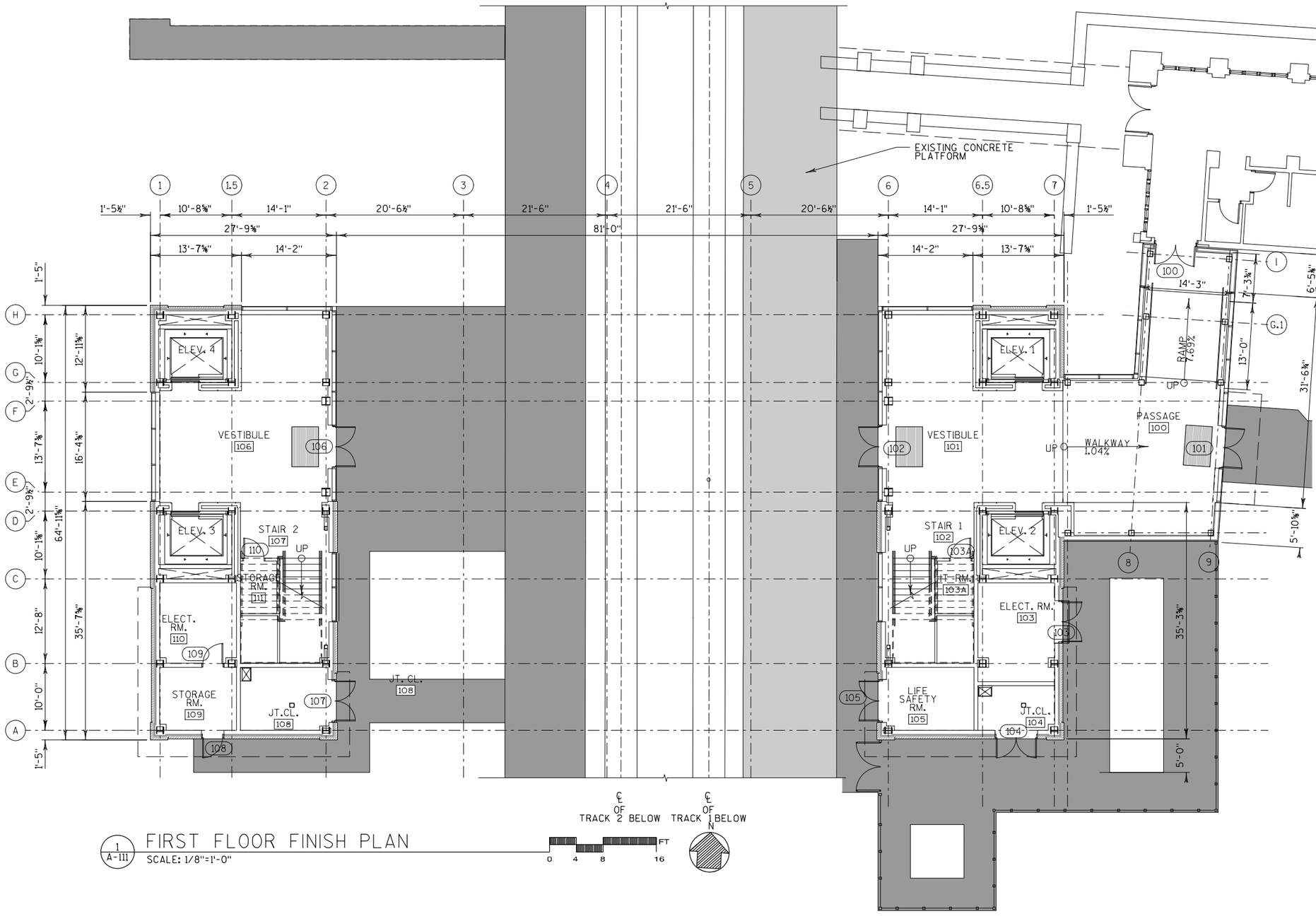
123

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

2

2

STATE PROJECT NUMBER
1000-57-70



1 / A-111 FIRST FLOOR FINISH PLAN
SCALE: 1/8"=1'-0"

NOTES:

1. INTERIOR FINISHES - BASE OF DESIGN (OR APPROVED EQUAL) - SEE DETAILS ON SPECS

   ALL INTERIOR FLOORS, BRIDGE AND STAIRS: CONCRETE EPOXY SEALER SIKA SIKADUR 22 LO-MOD FS, LIGHT COLOR AND FLAKES TO BE SELECTED BY ARCHITECT.

   ALL INTERIOR PUBLIC AREA HIGH WALLS: 7'-6" LAMINATED ALUMIUM PANELS FLAT SHEETS BY AMERICLAD COLOR TO BE SELECTED BY ARCHITECT; PAINTED GYPSUM BOARD ABOVE.

   ALL INTERIOR PUBLIC AREA LOW KNEE WALLS (UNDER CURTAIN WALLS): LAMINATED ALUMINUM PANEL FLAT SHEETS BY AMERICLAD, COLOR TO BE SELECTED BY ARCHITECT.

   ALL INTERIOR PUBLIC SPACE CEILINGS: 2'X2' AND 2'X4' GRID SYSTEM BY AMSTRONG METAL WORKS TEGULAR 9/16 WITH SOUND INFILL -SYSTEM 6641M15 (16") AND 6642M15 (48") COLOR WHITELUME; PAINTED GYPSUM BOARD SOFFITS.

   ALL INTERIOR NONPUBLIC ROOMS: FLOOR: CONCRETE EPOXY SEALER SIKA SIKADUR 22 LO-MOD FS; WALLS: PAINTED GYPSUM BOARD; CEILINGS: PAINTED GYPSUM BOARD. JANITOR CLOSET: FLOOR: DAL TILE 12X12 CERAMIC TILE, WALLS: 7'-6" CONTINUOUS 6" X12 CERAMIC TILE ON WALLS; COLOR TO BE SELECTED BY ARCHITECT; CEILINGS: PAINTED GYPSUM BOARD.

   ALL EXPOSED STRUCTURAL COLUMNS AND BEAMS: PAINTED, COLOR TO BE SELECTED BY ARCHITECT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FIRST FLOOR FINISH AND FURNISHINGS PLANS

SHEET A-130
124

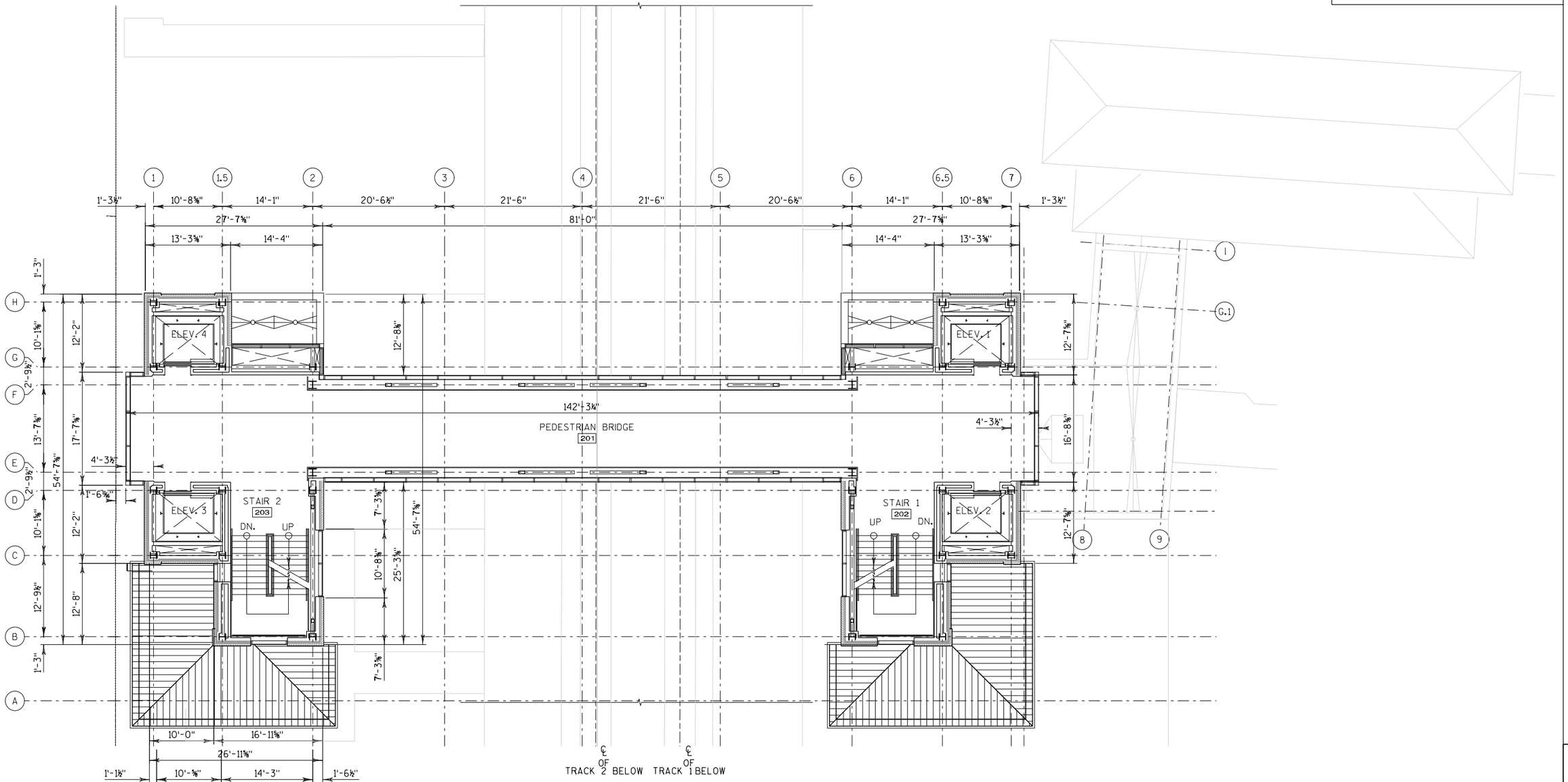
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

2

2

STATE PROJECT NUMBER
1000-57-70

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



1/A-113 SECOND FLOOR FINISH PLAN
SCALE: 1/8"=1'-0"

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

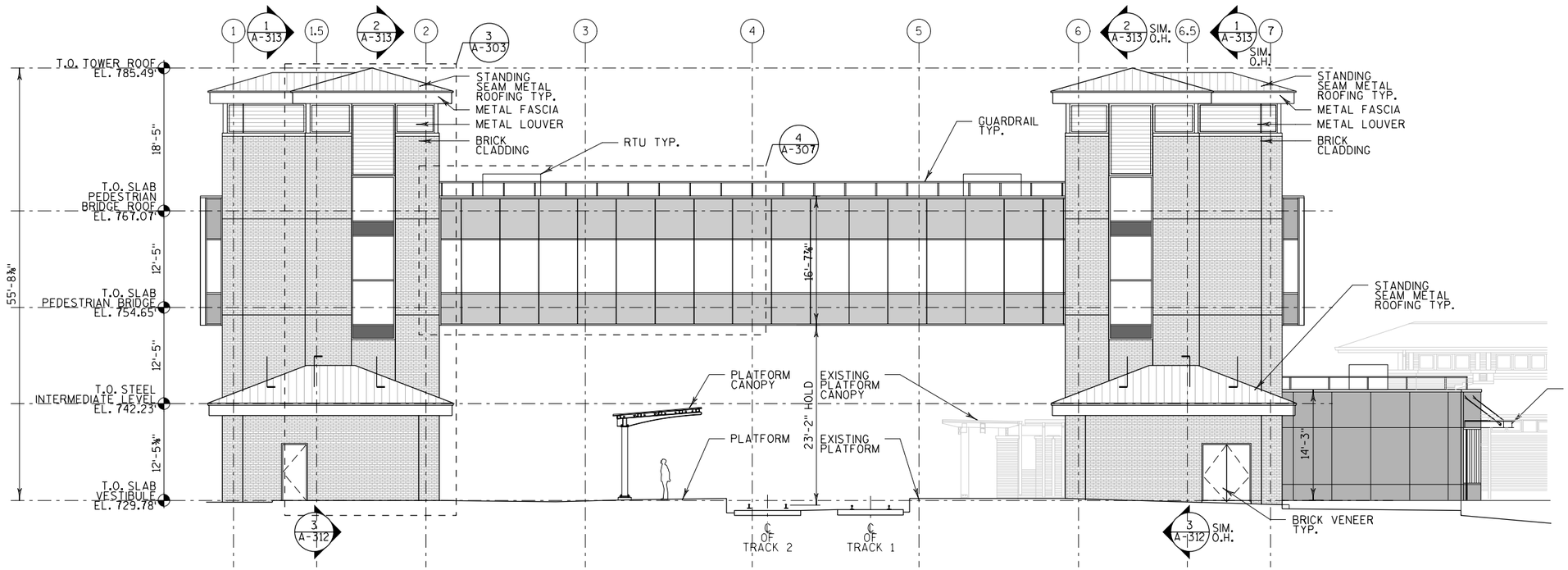
DRAWN BY JR | PLANS CK'D. DK

SECOND FLOOR FINISH AND FURNISHINGS PLANS

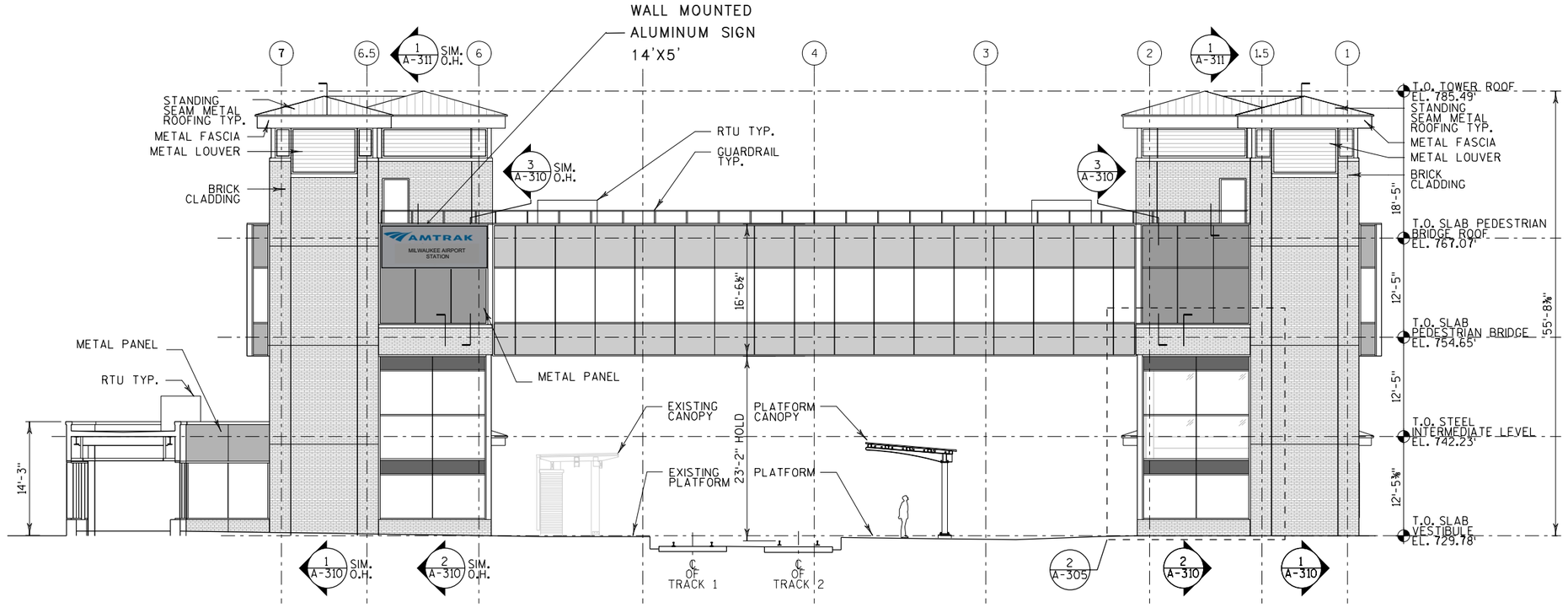
SHEET A-131
125

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

STATE PROJECT NUMBER
1000-57-70



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

NOTES:

1. EXTERIOR BASE OF DESIGN MATERIALS (OR APPROVED EQUAL). SEE SPECS FOR DETAILS.

BRICK:
ACME MODULAR 7 5/8"X3-5/8"X2-1/4" VELOUR FINISH; COLOR TO MATCH EXISTING BUILDING.

CURTAIN WALL:
KAWNEER 120 UT-SSG 7-1/2" FRAMING, 1" INSERT DOUBLE PAGE INSULATED GLASS.

GLASS:
PPG VITOR SOLAR COOL REFLECTIVE GLASS / SOLAR BAN 70 LOWE E GLASS COLOR: AZURIA.

METAL PANEL:
CENTRIA FORMA WALL - SMOOTH SURFACE: FWDS EMBOSSED PLAT - 2" THICK, FINISH KYNAR 500 COLOR ANODIZED.
METAL PANEL @ ELEVATOR MACHINE ROOM: CENTRIA FORMA WALL - RIBBED SURFACE:
DS59 EMBOSSED PLAT - 2" THICK, FINISH KYNAR 500 COLOR ANODIZED.
LOUVERS:
ARCHITECTURAL LOUVERS, 4" DEEP E4WH OH, FINISH KYNAR 500 COLOR DOVE GRAY.

STANDING SEAM ROOFING:
MS METAL SALES -CONCEALED FASTENERS ALUMINUM ROOFING IMAGE II, 1" STANDING SEAM, FINISH MS COLOR FAST 45, COLOR: WEATHERED COPER.
PLATFORM ROOF:
STANDING SEAM STRUCTURAL ROOF SYSTEM BY FABRAL POWE SEAM 16" 22 GAGE COLOR BRONZE.

LEGEND:

- GL-1: VISION GLASS
- GL-2 : TRANSLUCENT GLASS
- GL-3 : SPANDREL GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ELEVATIONS

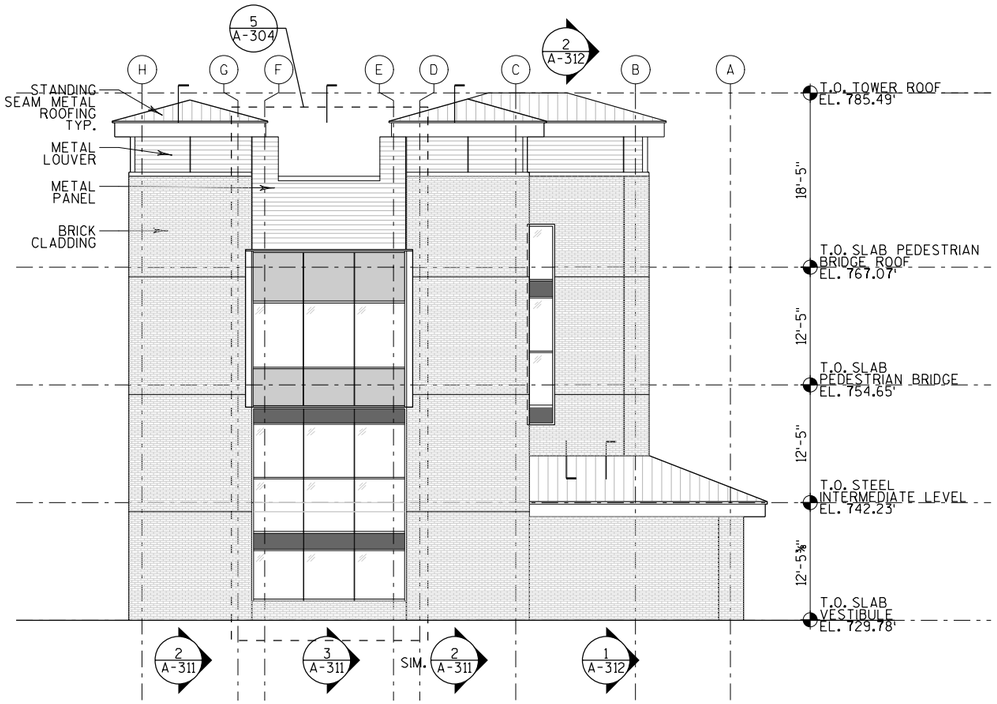
SHEET A-201
126

2

2

STATE PROJECT NUMBER

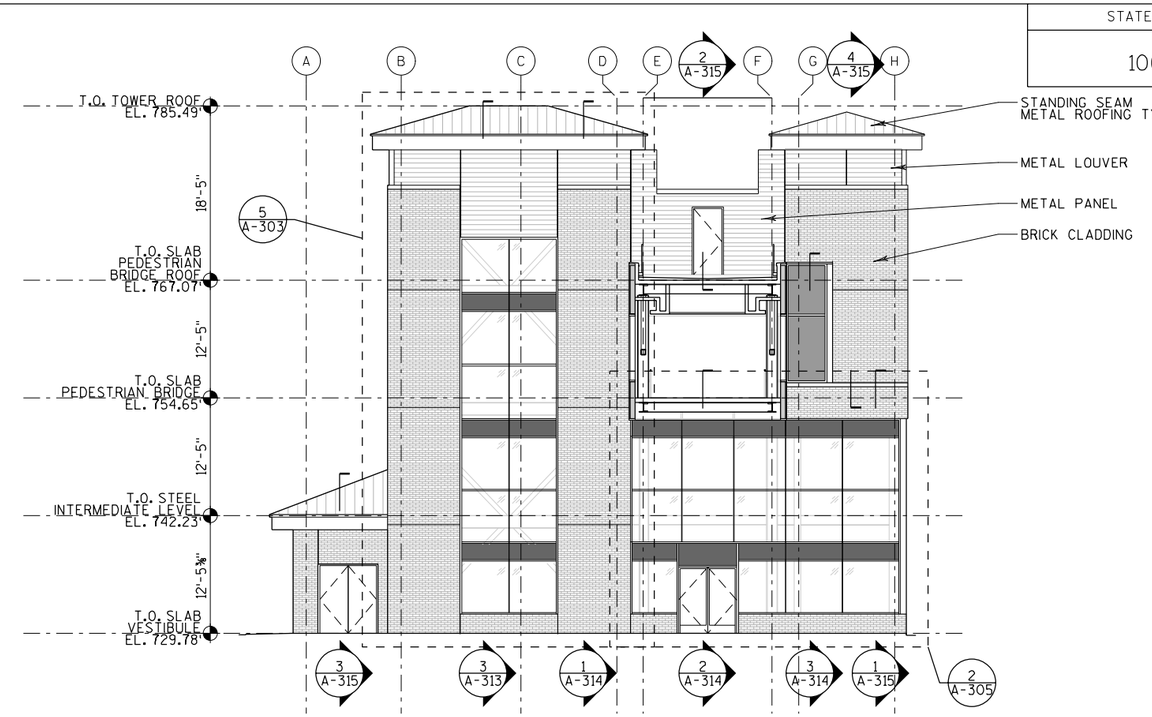
1000-57-70



1 A-202 WEST ELEVATION - WEST TOWER

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

0 4 8 16 FT

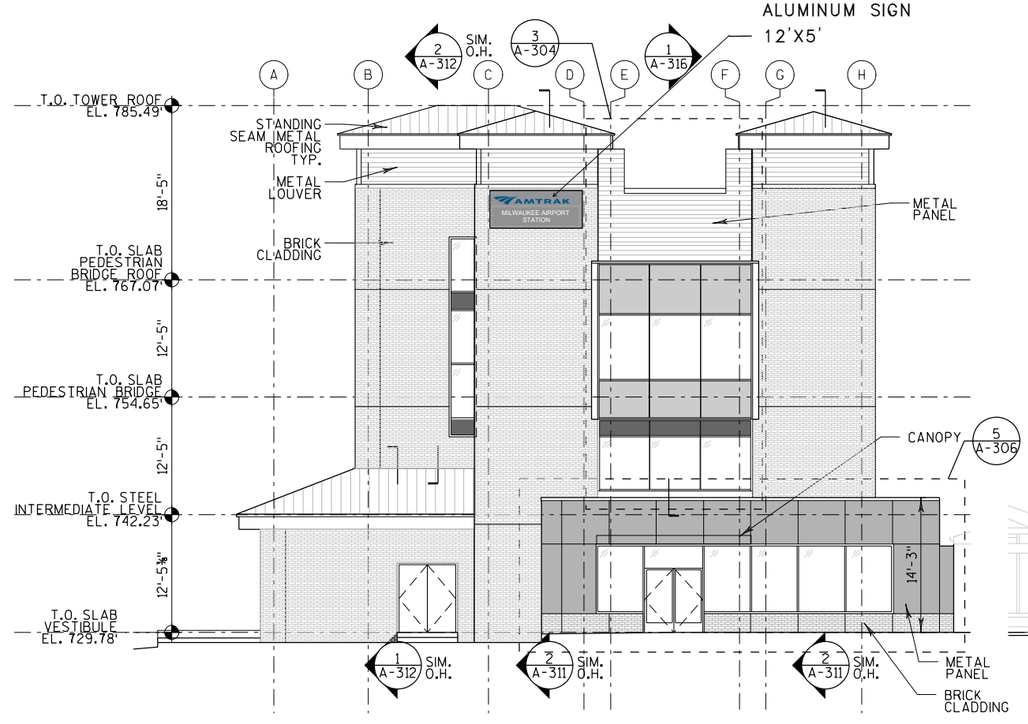


3 A-202 EAST ELEVATION - WEST TOWER

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

0 4 8 16 FT

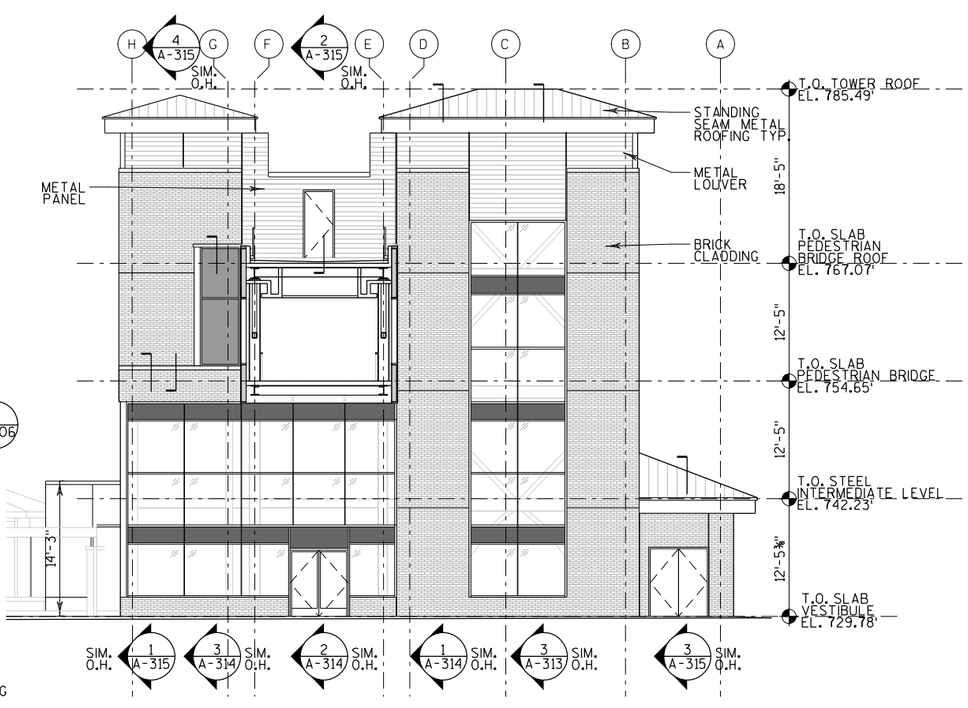
WALL MOUNTED ALUMINUM SIGN 12'X5'



2 A-202 EAST ELEVATION - EAST TOWER

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

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ELEVATIONS

SHEET A-202

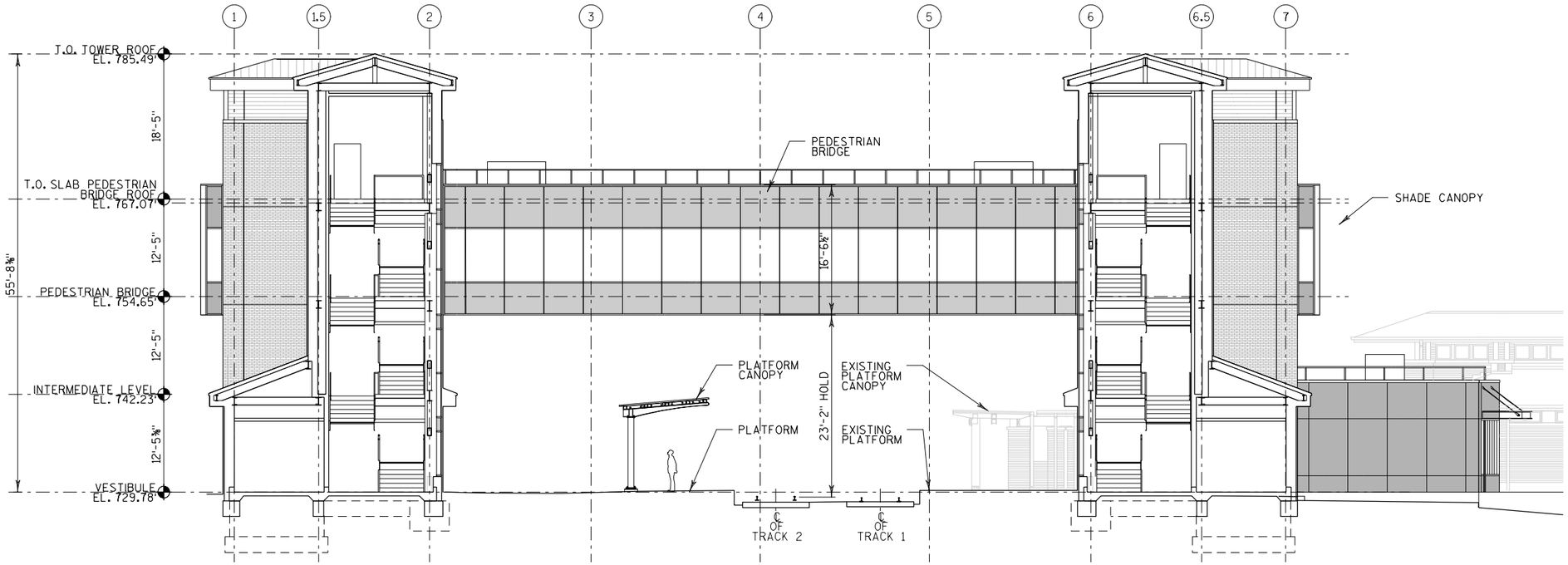
127

2

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

STATE PROJECT NUMBER

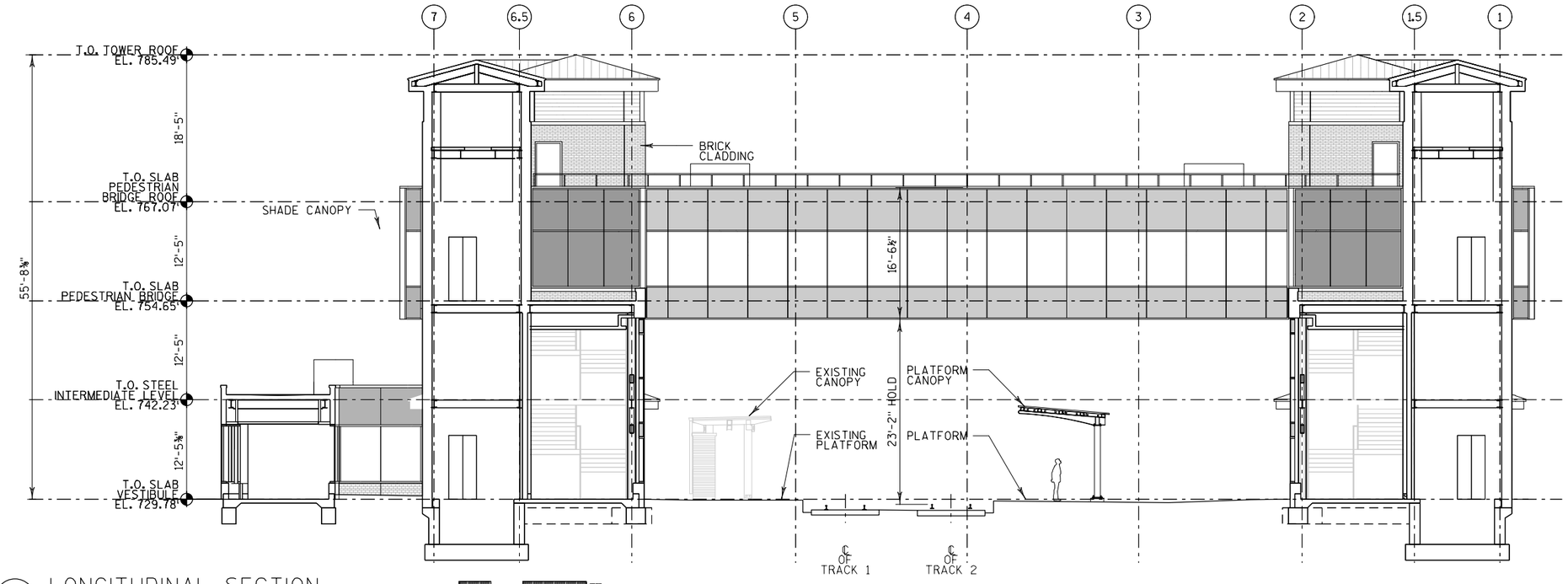
1000-57-70



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

LEGEND:

- GL-1: VISION GLASS
- GL-2 : TRANSLUCENT GLASS
- GL-3 : SPANDREL GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SECTIONS

SHEET A-301

128

2

2

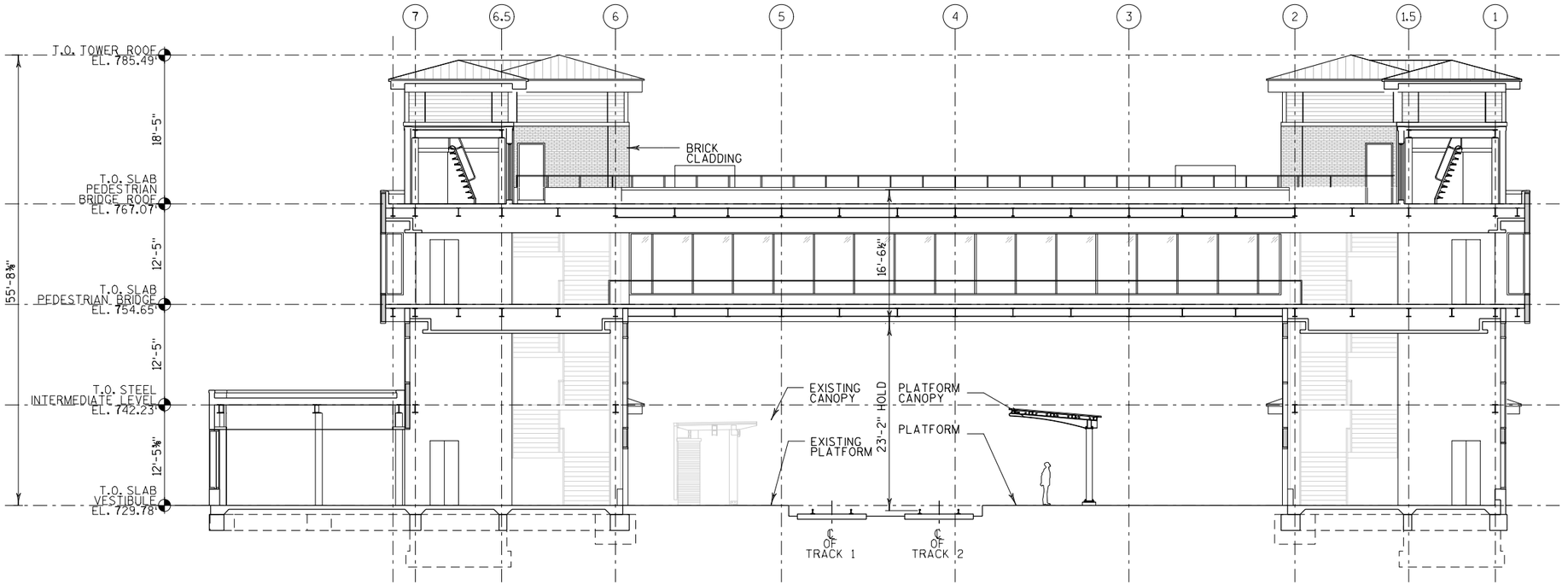
BATCH PRINT SHEET CSD OF NSD

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

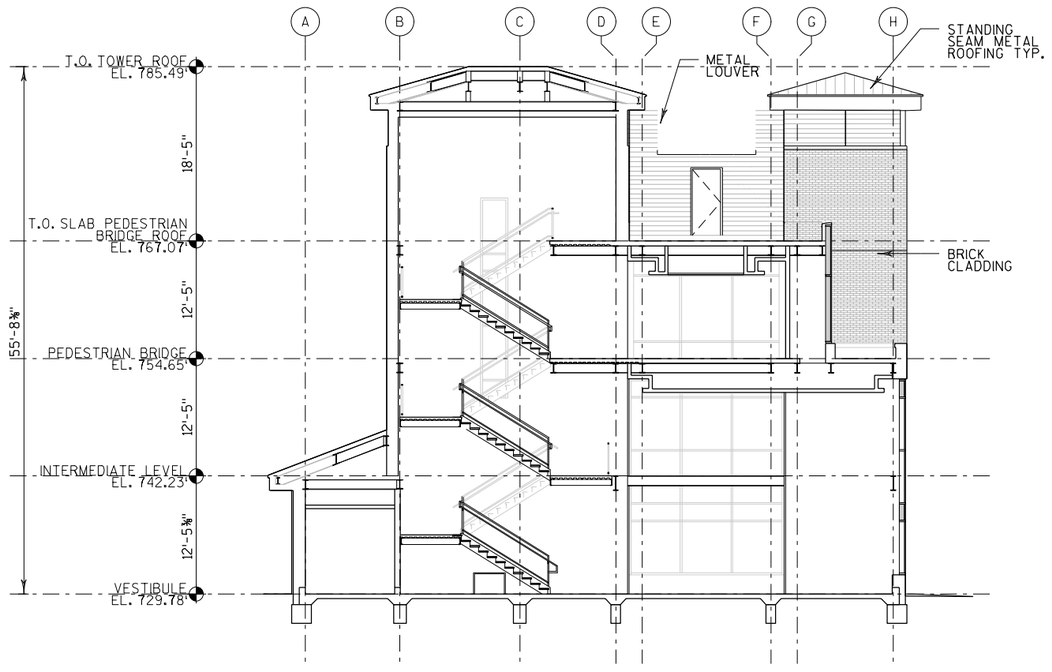
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

STATE PROJECT NUMBER

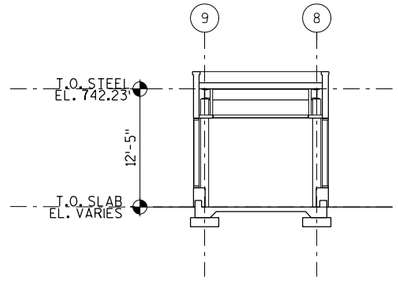
1000-57-70



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



3/A-302 CROSS SECTION
SCALE: 1/8"=1'-0"
0 4 8 16 FT

LEGEND:

- GL-1: VISION GLASS
- GL-2 : TRANSLUCENT GLASS
- GL-3 : SPANDREL GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SECTIONS

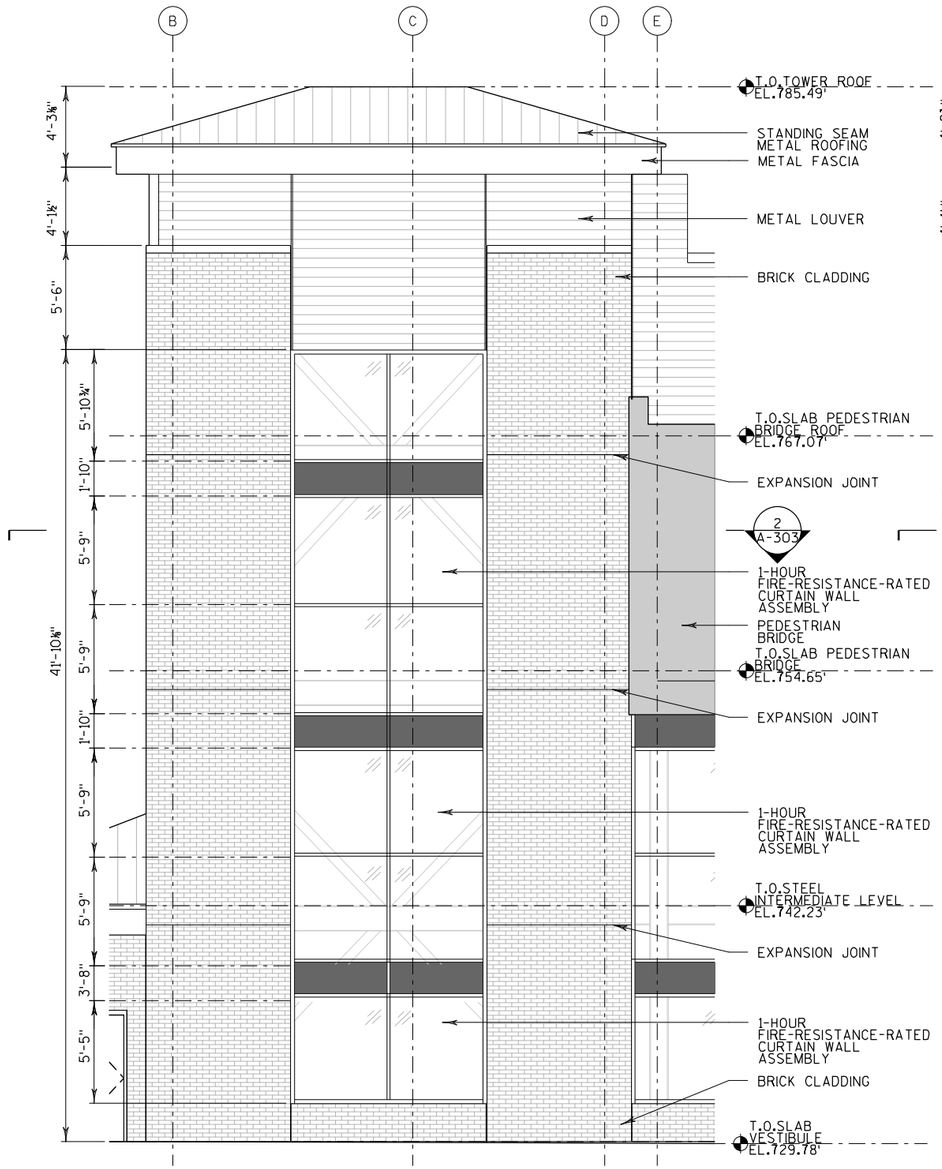
SHEET A-302
129

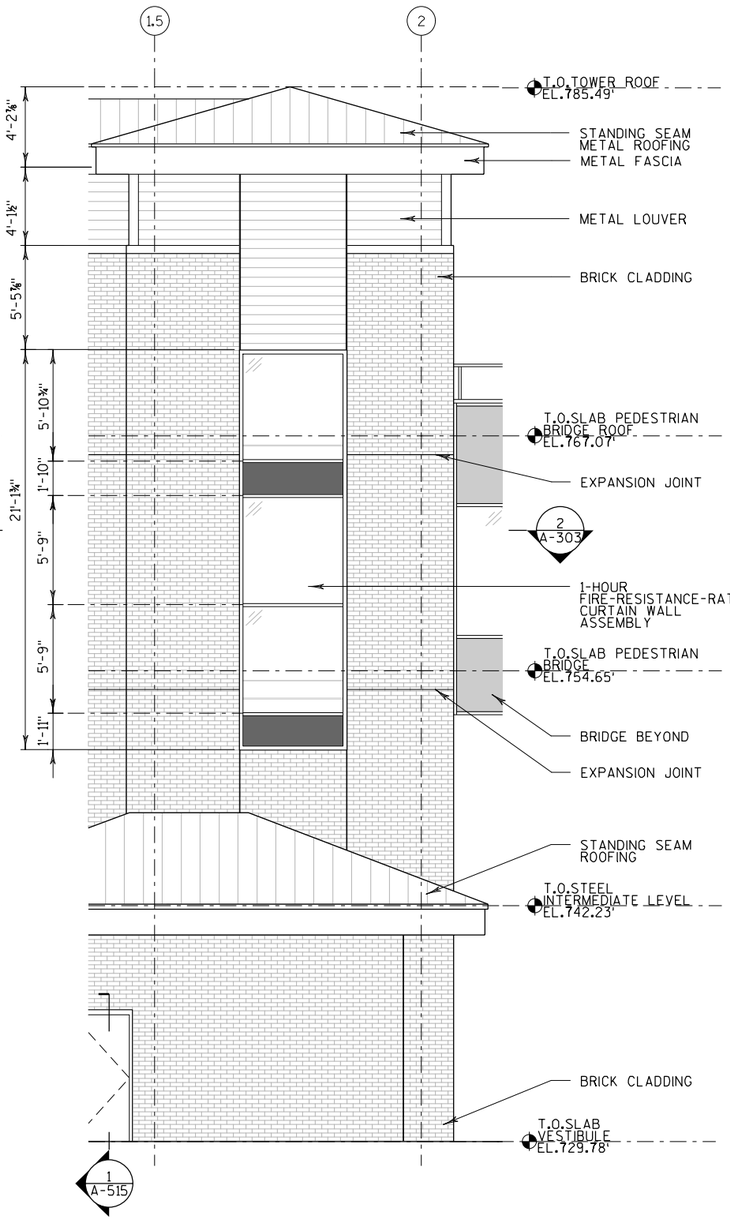
2

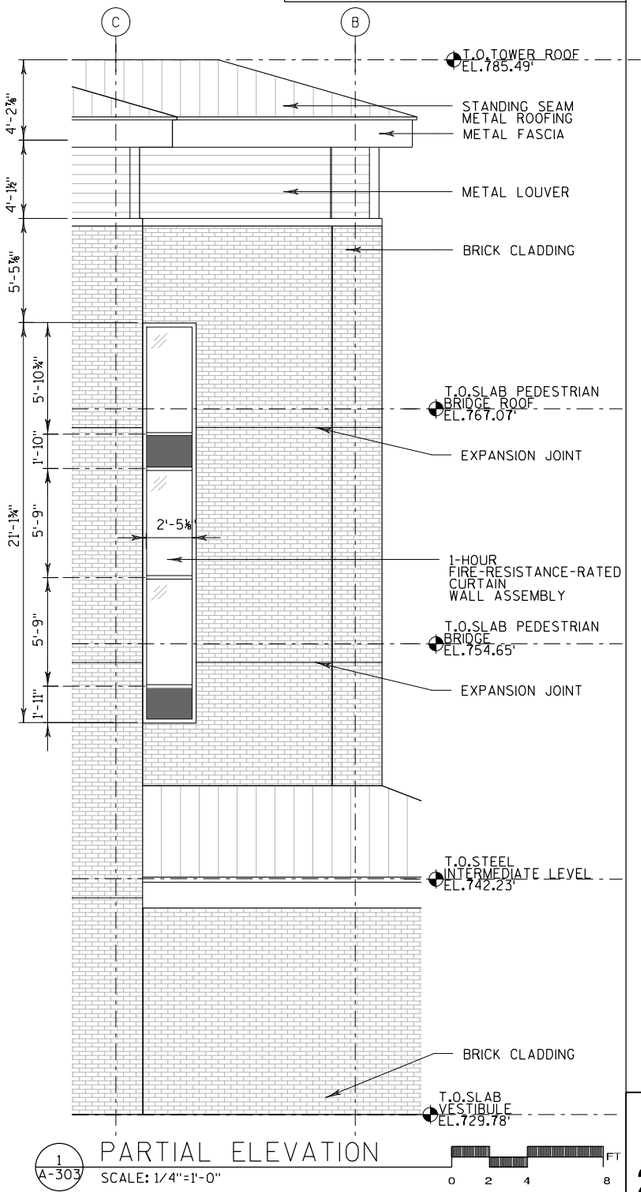
2

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

STATE PROJECT NUMBER
1000-57-70

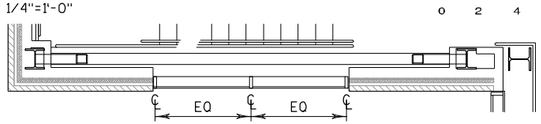






1 A-303 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"
0 2 4 8 FT

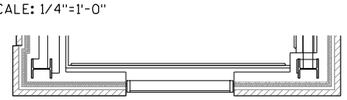
5 A-303 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"
0 2 4 8 FT



5 A-303

4 A-303 PARTIAL PLAN
SCALE: 1/4"=1'-0"
0 2 4 8 FT

3 A-303 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"
0 2 4 8 FT



3 A-303

2 A-303 PARTIAL PLAN
SCALE: 1/4"=1'-0"
0 2 4 8 FT

LEGEND:

- GL-1: VISION GLASS
- GL-2 : SPANDREL GLASS
- GL-3 : TRANSLUCENT GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

PARTIAL ELEVATION/PLAN

SHEET A-303
130

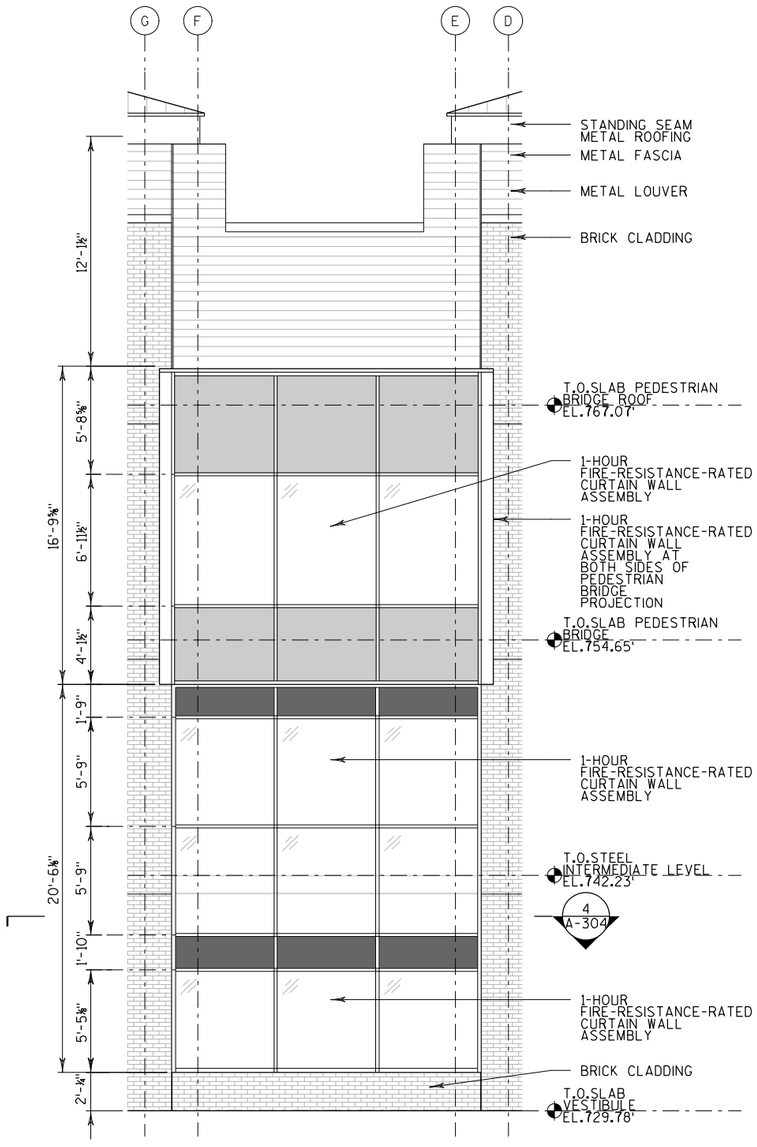
2

2

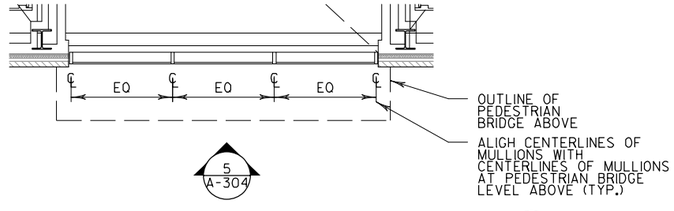
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER

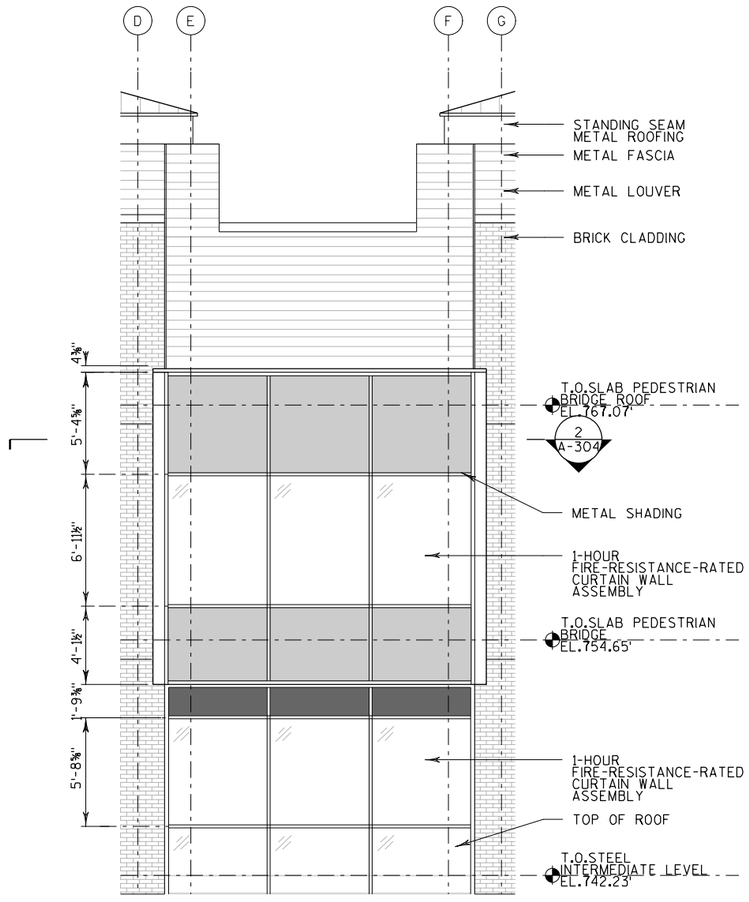
1000-57-70

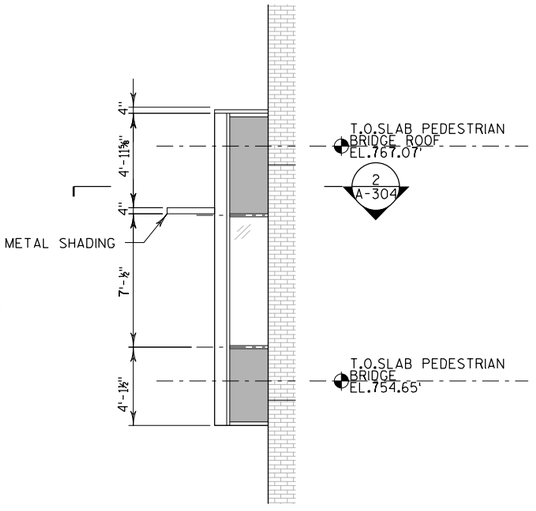


5 A-304 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"



4 A-304 PARTIAL PLAN
SCALE: 1/4"=1'-0"

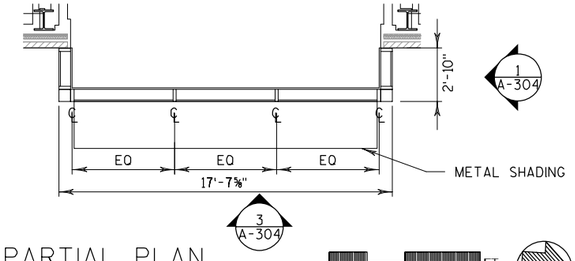




1 A-304 ENLARGED ELEVATION
SCALE: 1/4"=1'-0"

T.O.SLAB VESTIBULE EL.729.78'

3 A-304 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"



2 A-304 PARTIAL PLAN
SCALE: 1/4"=1'-0"

LEGEND:

- GL-1: VISION GLASS
- GL-2 : SPANDREL GLASS
- GL-3 : TRANSLUCENT GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

PARTIAL ELEVATION/PLAN

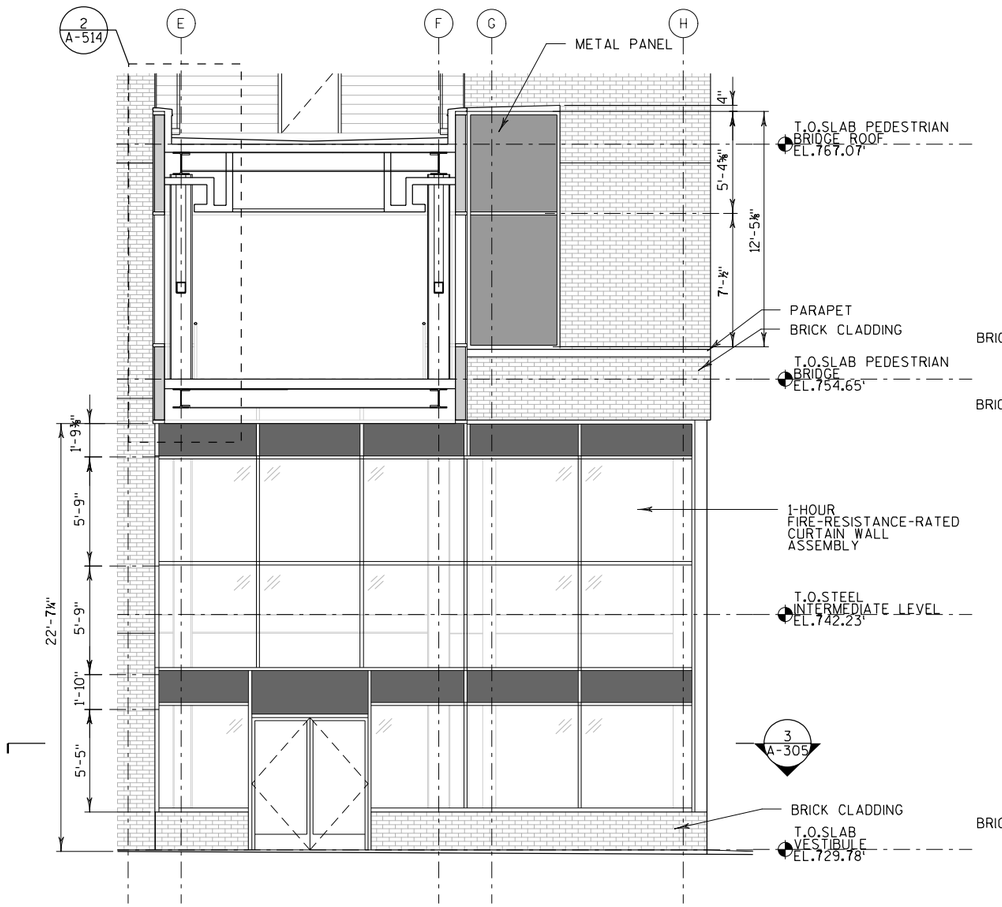
SHEET A-304
131

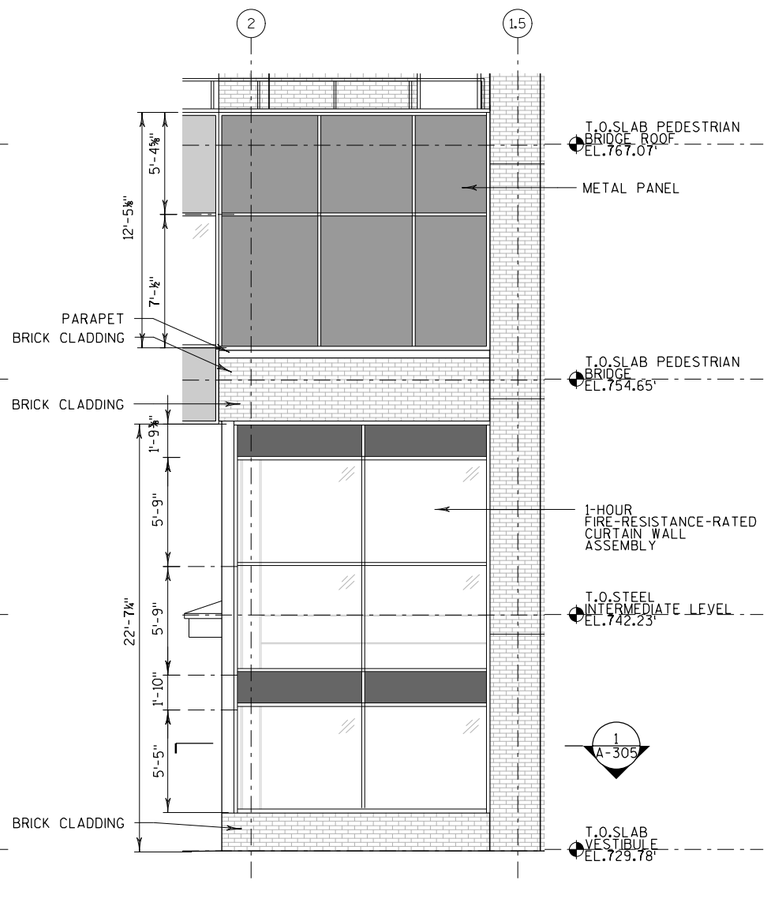
2

2

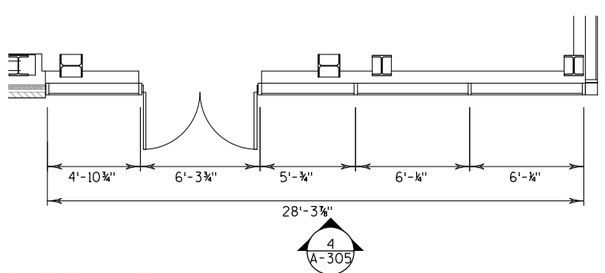
STATE PROJECT NUMBER
1000-57-70

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



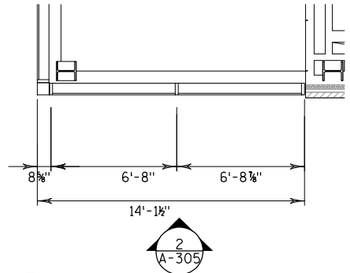


4 A-305 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"



3 A-305 PARTIAL PLAN
SCALE: 1/4"=1'-0"

2 A-305 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"



1 A-305 PARTIAL PLAN
SCALE: 1/4"=1'-0"

0 2 4 8 FT

LEGEND:

- GL-1: VISION GLASS
- GL-2 : SPANDREL GLASS
- GL-3 : TRANSLUCENT GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

TOWER-
ENLARGED PLAN,
ELEV. AND SECTION

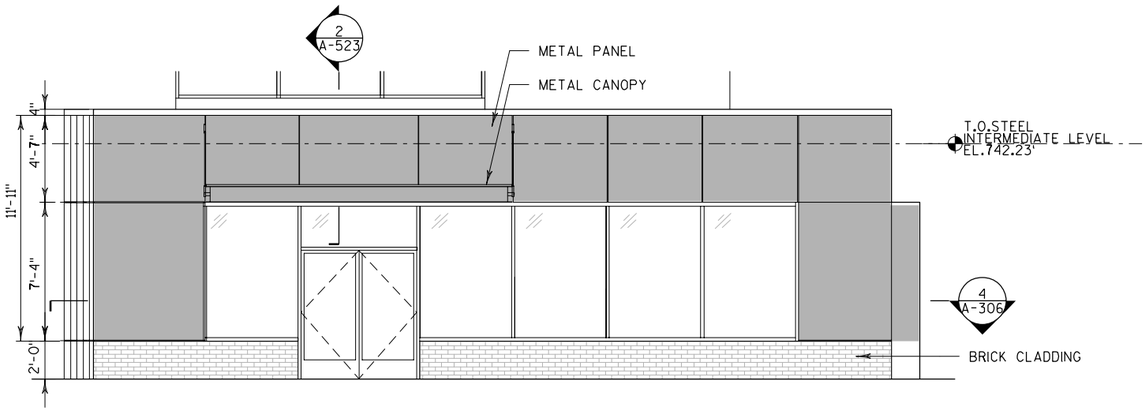
SHEET A-305
132

2

2

STATE PROJECT NUMBER

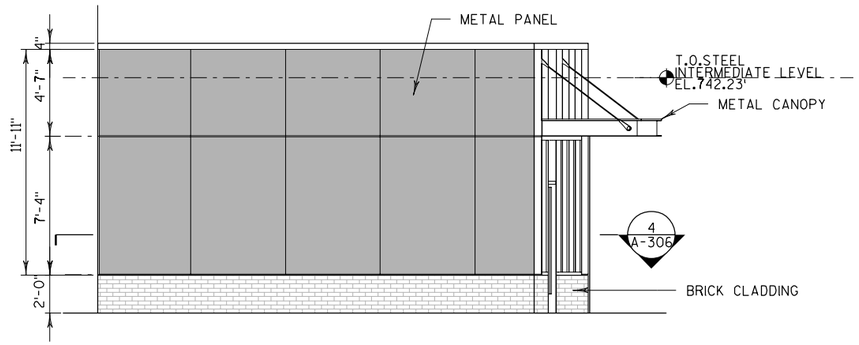
1000-57-70



5 A-306 PARTIAL ELEVATION

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

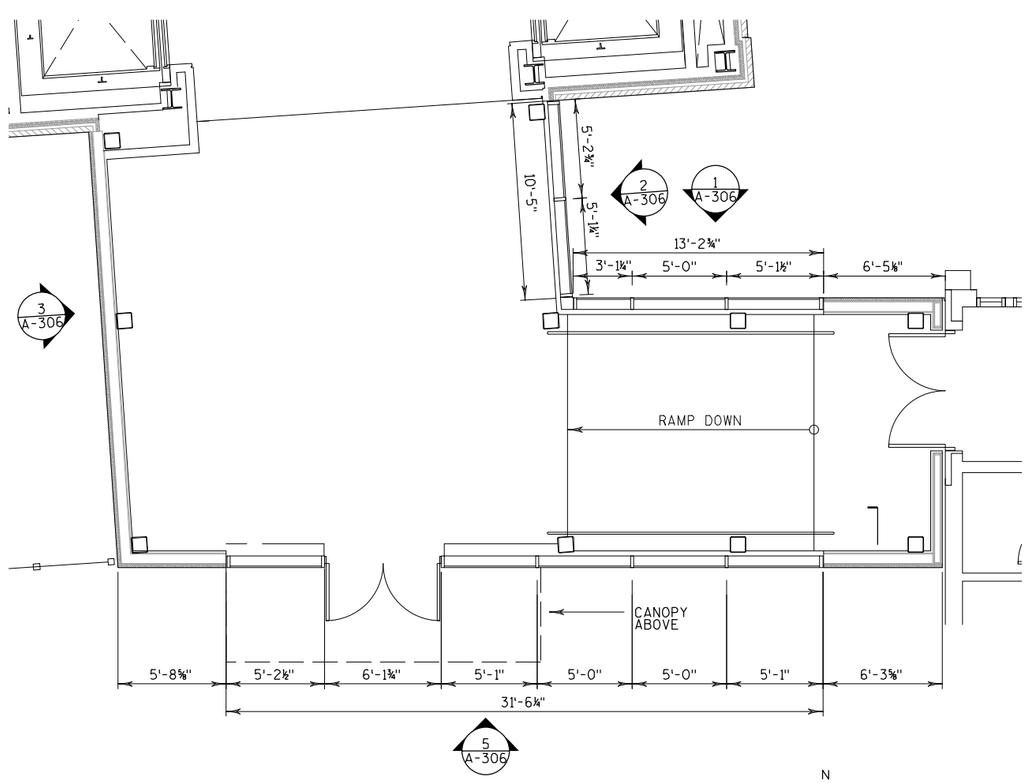
0 2 4 8 FT



3 A-306 PARTIAL ELEVATION

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

0 2 4 8 FT

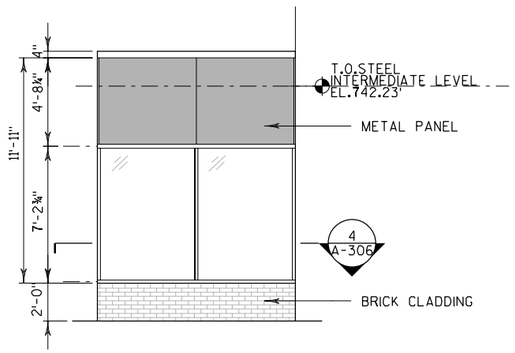


4 A-306 PARTIAL PLAN

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

0 2 4 8 FT

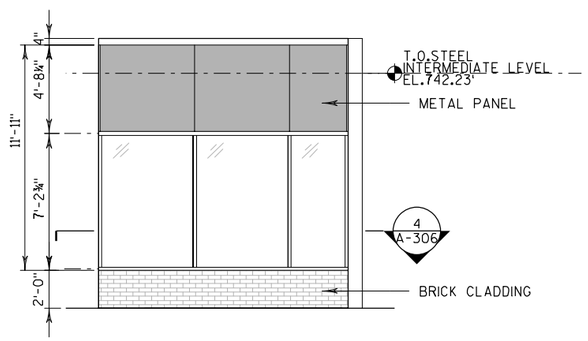
N



2 A-306 PARTIAL ELEVATION

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

0 2 4 8 FT



1 A-306 PARTIAL ELEVATION

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

0 2 4 8 FT

LEGEND:

- GL-1: VISION GLASS
- GL-2 : SPANDREL GLASS
- GL-3 : TRANSLUCENT GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

PARTIAL ELEVATION/PLAN

SHEET A-306

133

2

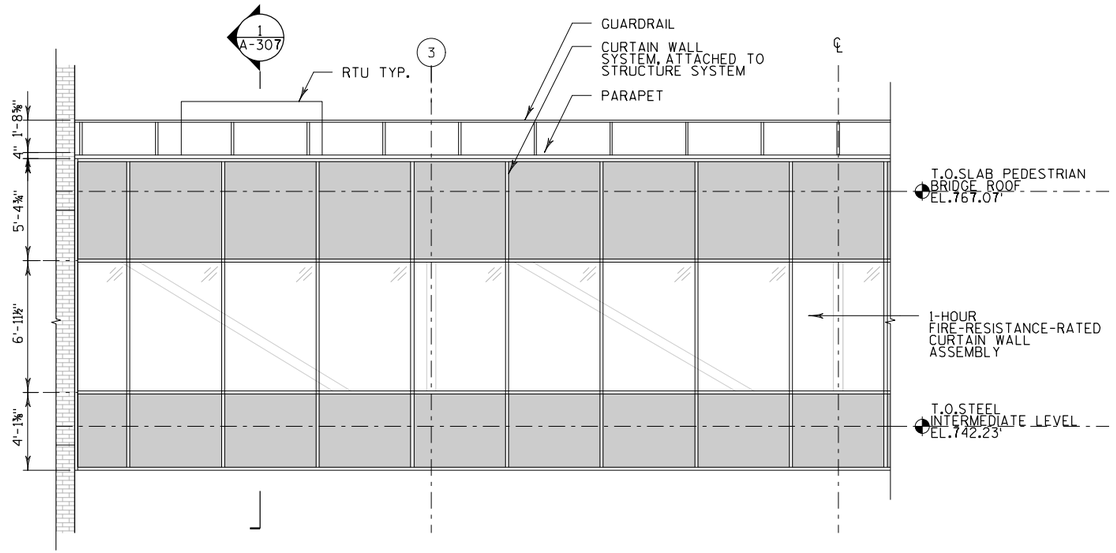
2

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

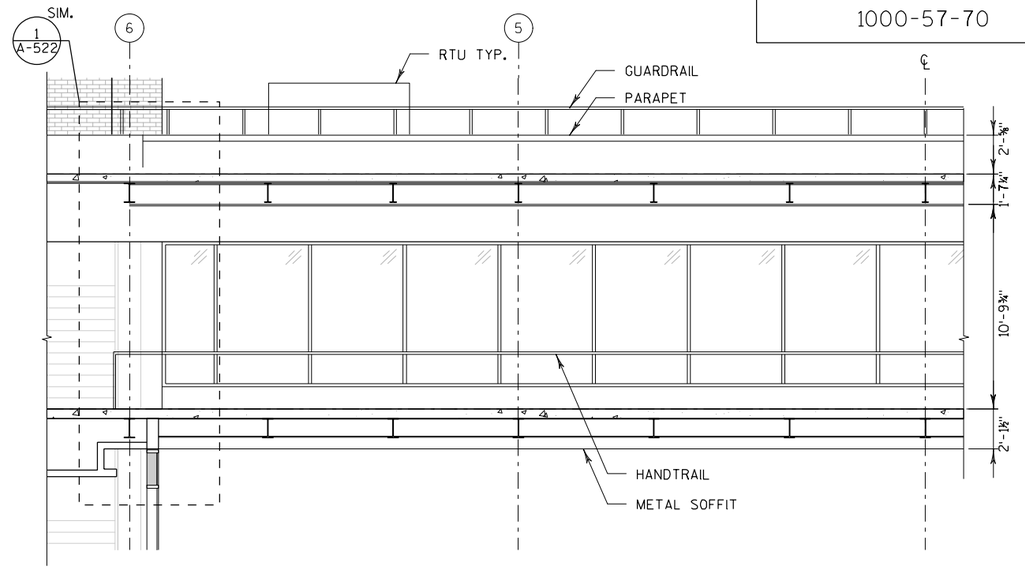
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$ BATCH PRINT SHEET CSD OF NSD

STATE PROJECT NUMBER

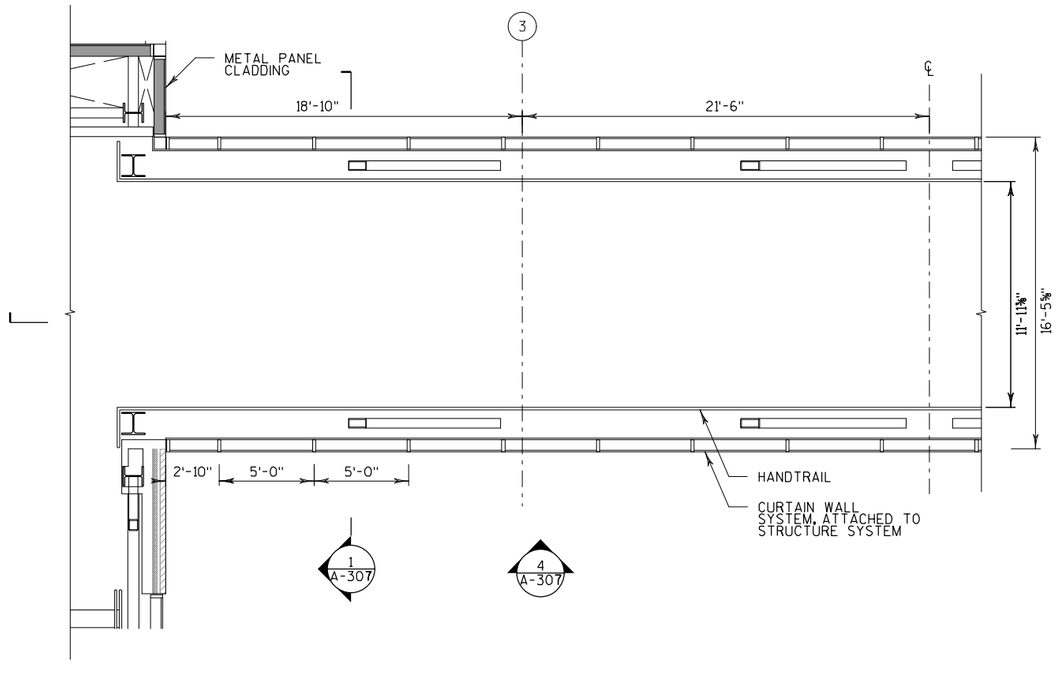
1000-57-70



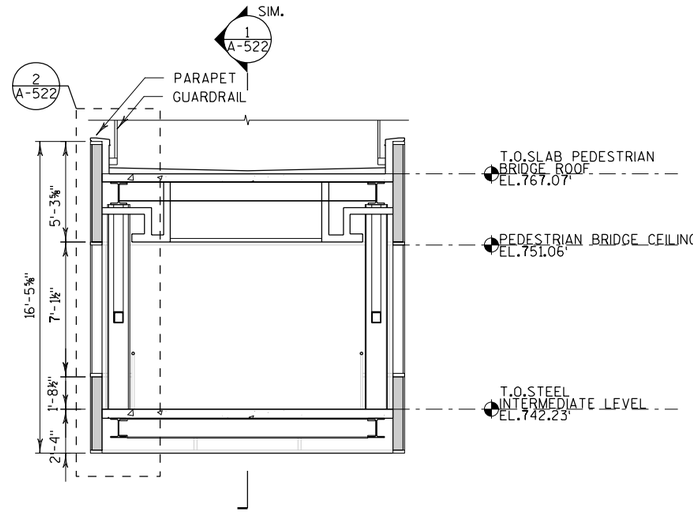
4 A-307 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"
0 2 4 8 FT



2 A-307 PARTIAL ELEVATION
SCALE: 1/4"=1'-0"
0 2 4 8 FT



3 A-307 PARTIAL PLAN
SCALE: 1/4"=1'-0"
0 2 4 8 FT
N



1 A-307 PARTIAL SECTION
SCALE: 1/4"=1'-0"
0 2 4 8 FT

LEGEND:

- GL-1: VISION GLASS
- GL-2 : SPANDREL GLASS
- GL-3 : TRANSLUCENT GLASS
- M-1: METAL PANEL
- L-1: METAL LOUVER
- W-1: BRICK WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

PARTIAL ELEVATION/PLAN /SECTION

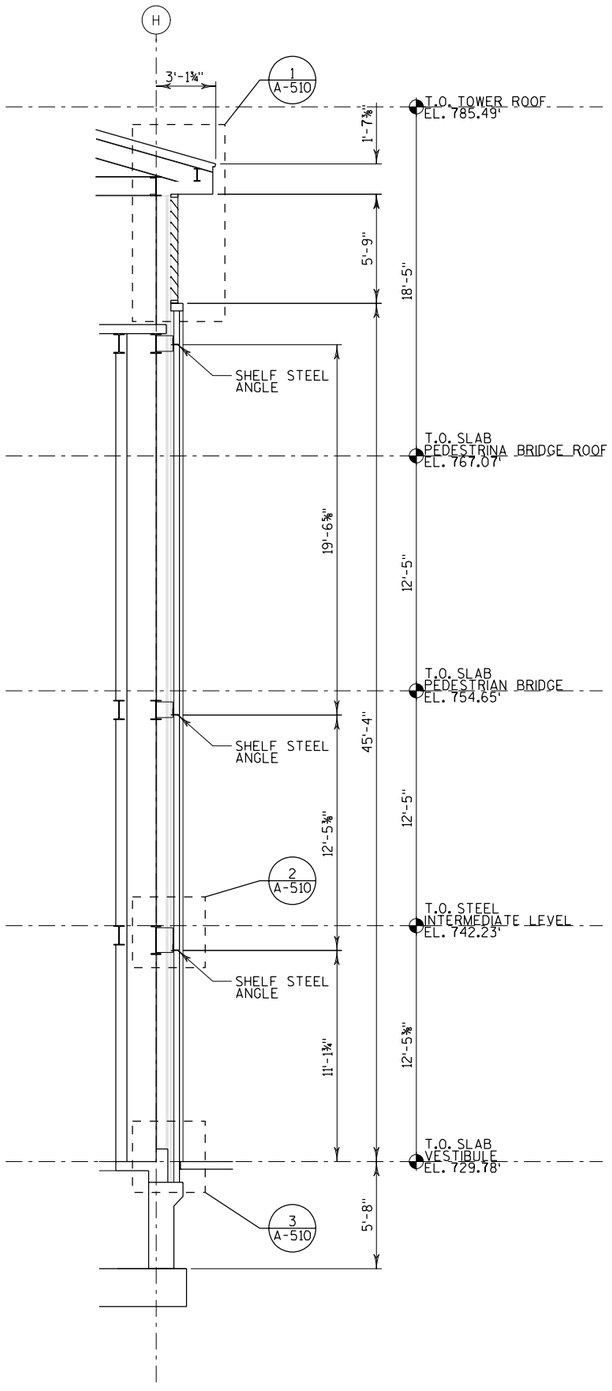
SHEET A-307
134

2

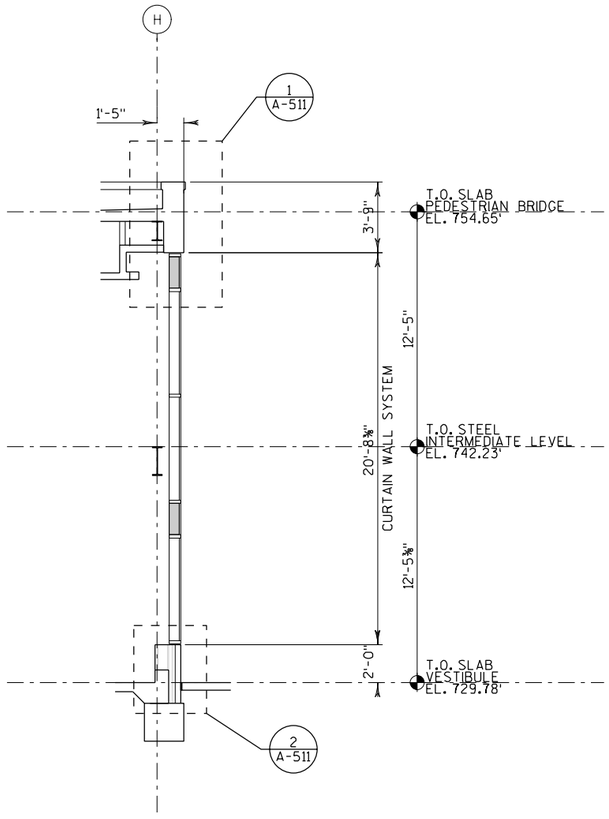
2

STATE PROJECT NUMBER

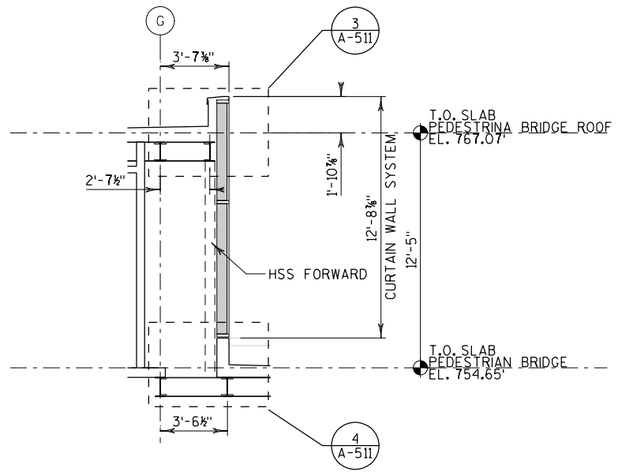
1000-57-70



1 A-310 WALL SECTION
SCALE: 1/4"=1'-0"



2 A-310 WALL SECTION
SCALE: 1/4"=1'-0"



3 A-310 WALL SECTION
SCALE: 1/4"=1'-0"

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

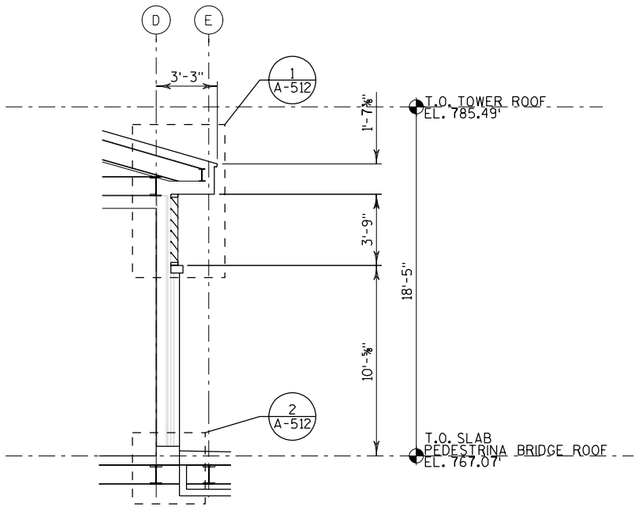
DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

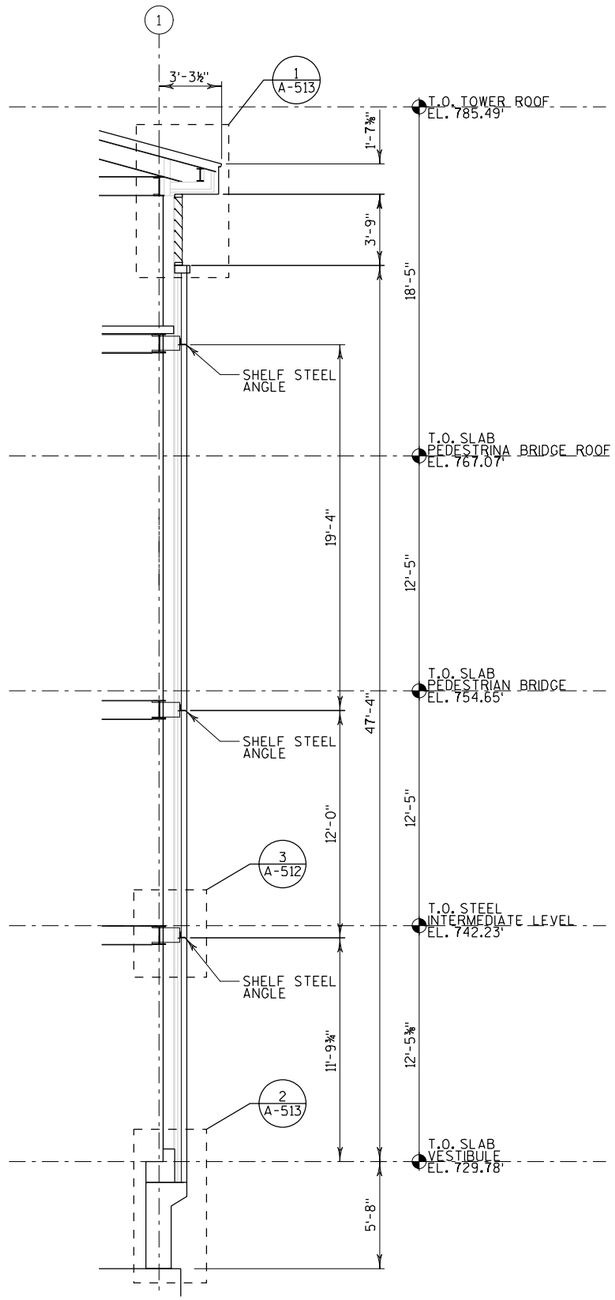
SHEET A-310
135

STATE PROJECT NUMBER

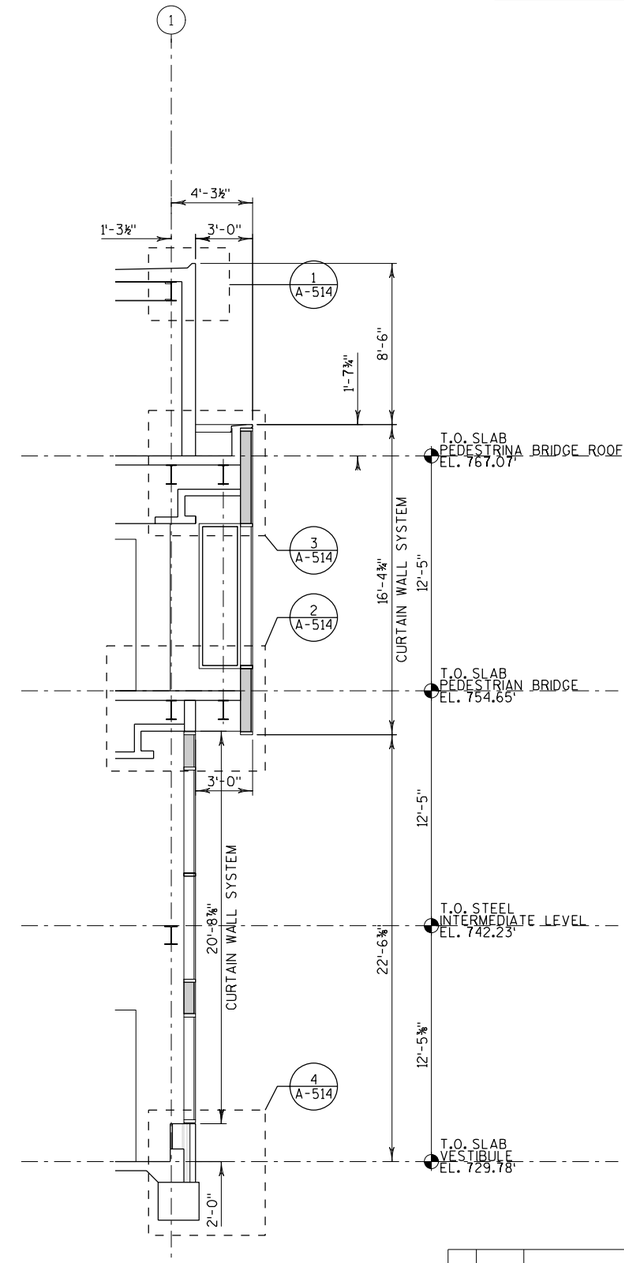
1000-57-70



1 A-311 WALL SECTION
SCALE: 1/4"=1'-0"



2 A-311 WALL SECTION
SCALE: 1/4"=1'-0"



3 A-311 WALL SECTION
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS
DETAILS

SHEET A-311
136

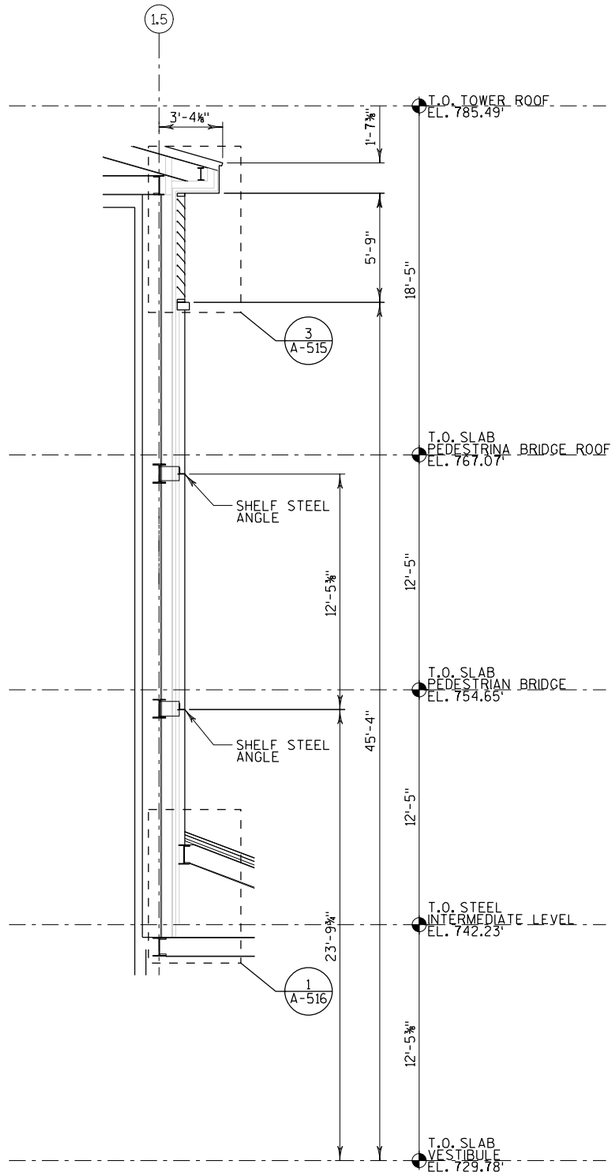
2

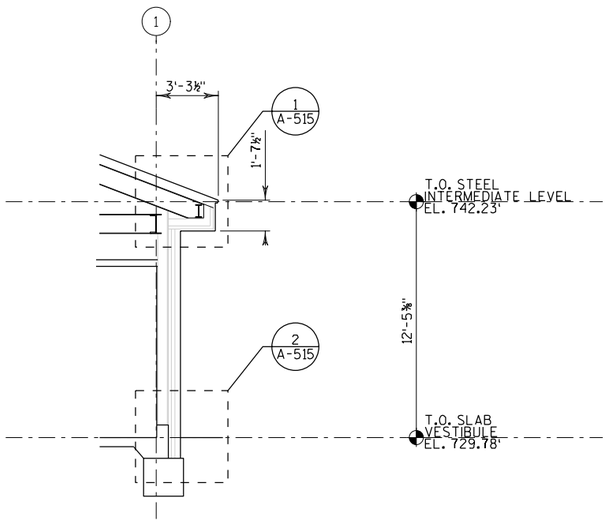
2

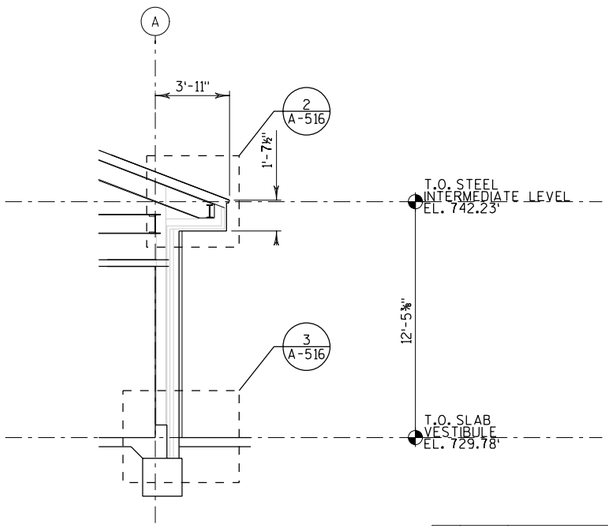
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

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

STATE PROJECT NUMBER
1000-57-70







1/A-312 WALL SECTION
SCALE: 1/4"=1'-0"

2/A-312 WALL SECTION
SCALE: 1/4"=1'-0"

3/A-312 WALL SECTION
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-312
137

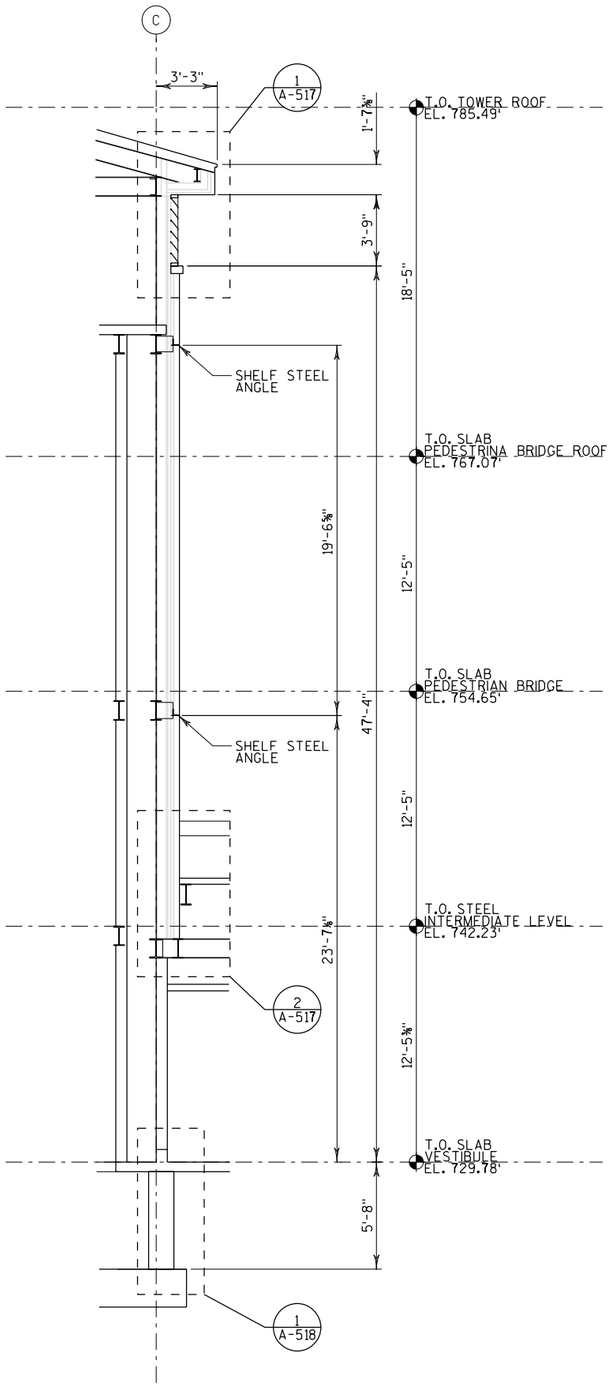
2

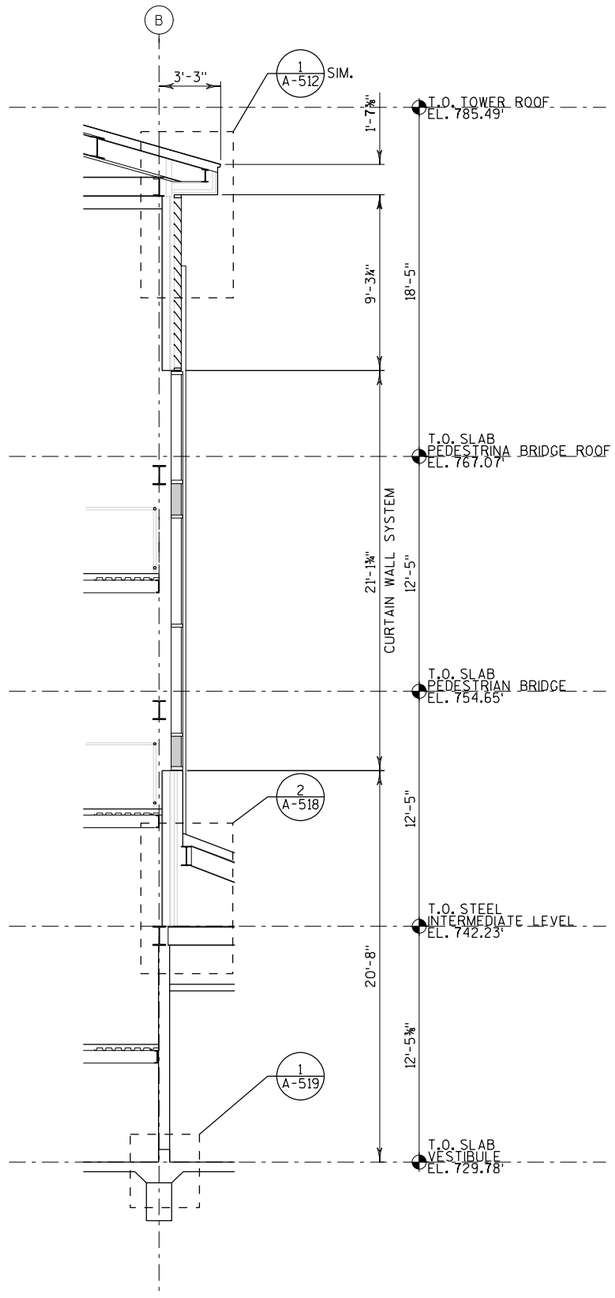
2

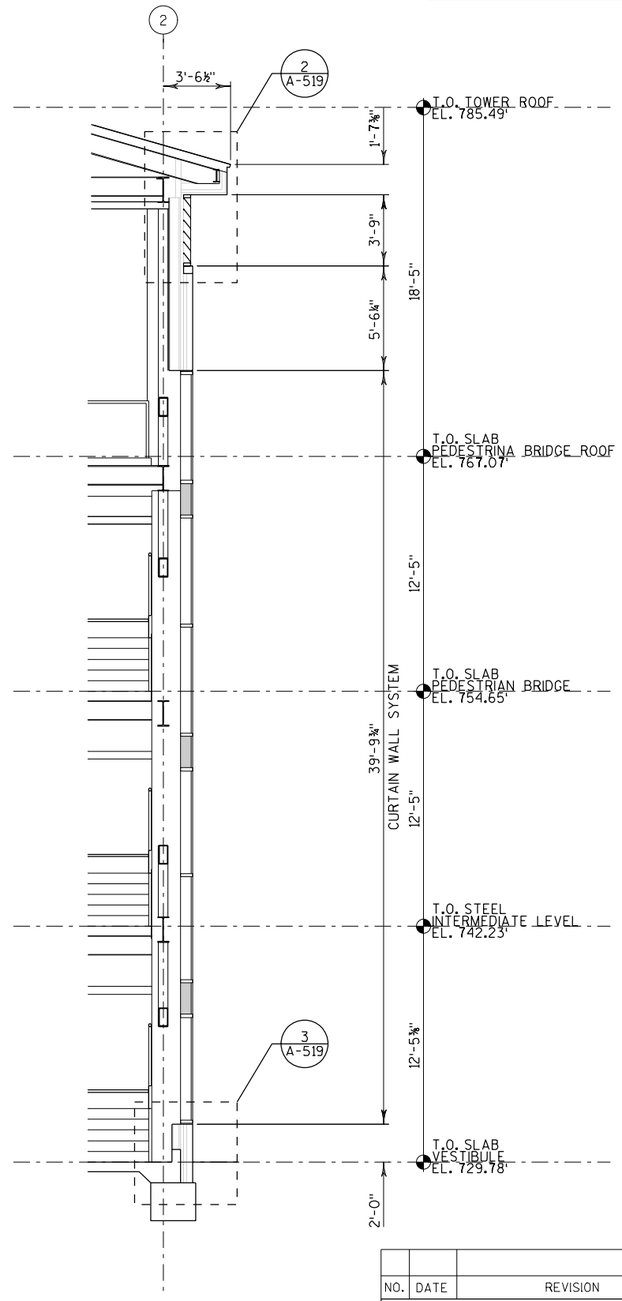
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER

1000-57-70







1 A-313 WALL SECTION
SCALE: 1/4"=1'-0"

2 A-313 WALL SECTION
SCALE: 1/4"=1'-0"

3 A-313 WALL SECTION
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

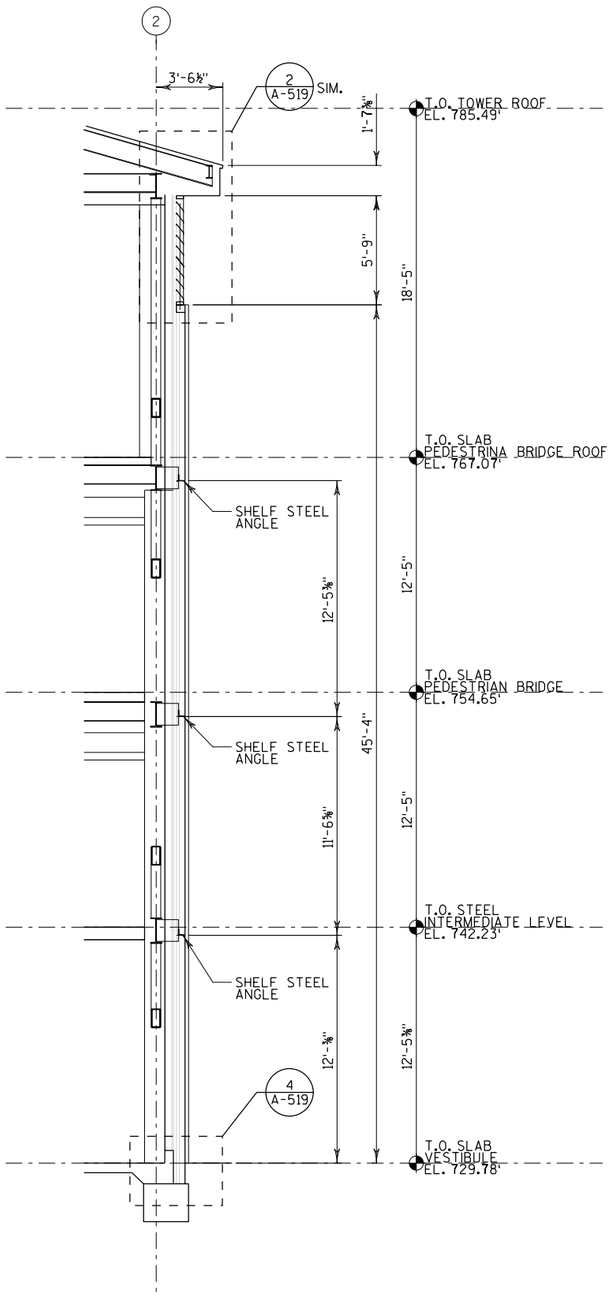
SHEET A-313
138

2

2

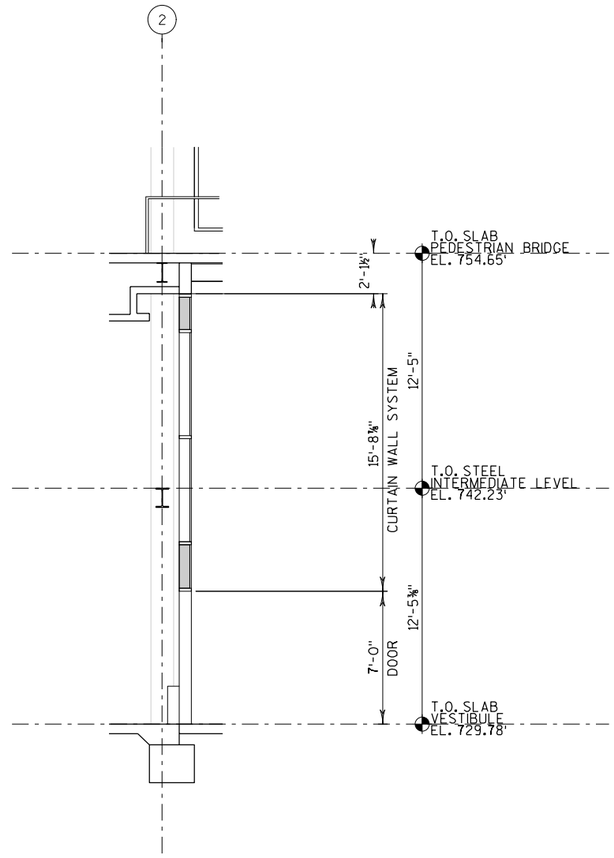
STATE PROJECT NUMBER

1000-57-70



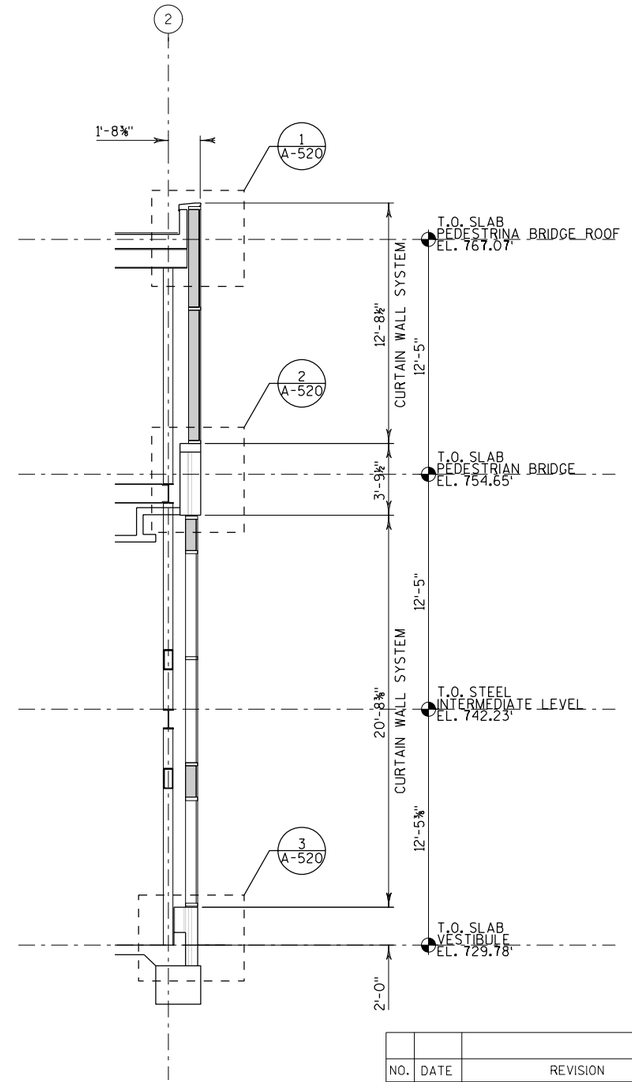
1 A-314 WALL SECTION

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



2 A-314 WALL SECTION

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



3 A-314 WALL SECTION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-314

139

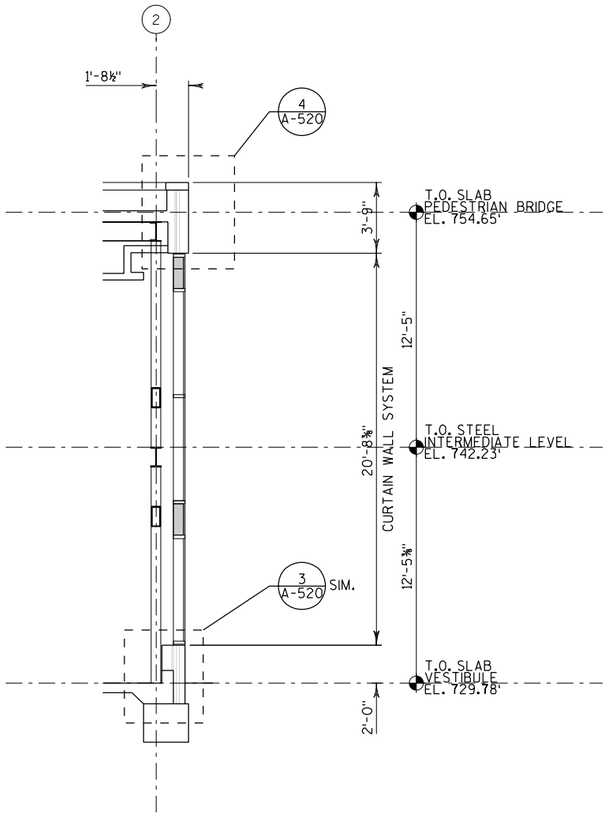
2

2

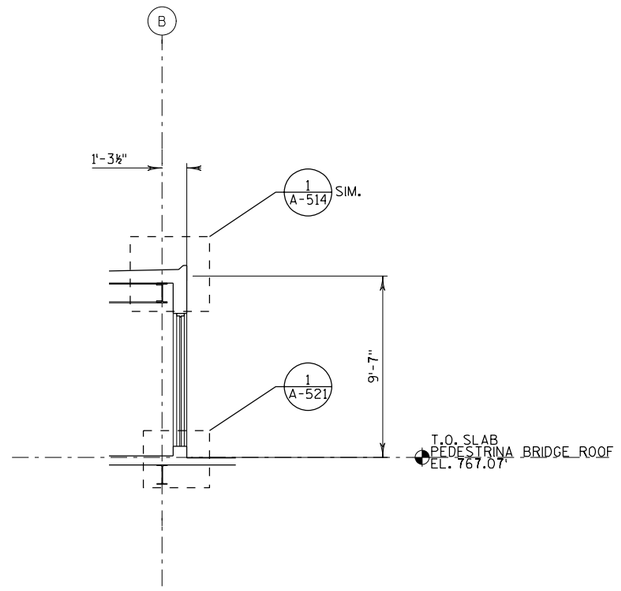
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

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

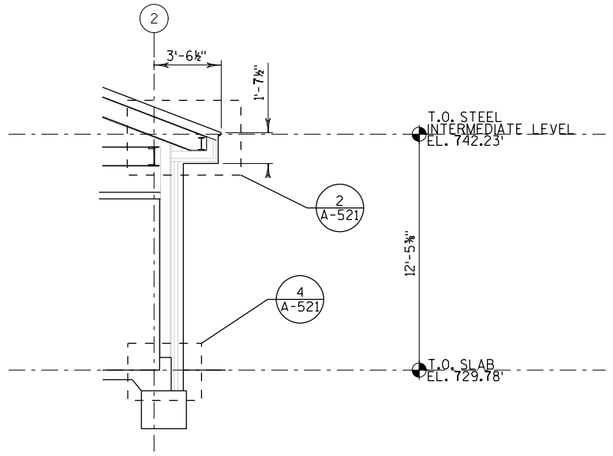
STATE PROJECT NUMBER
1000-57-70



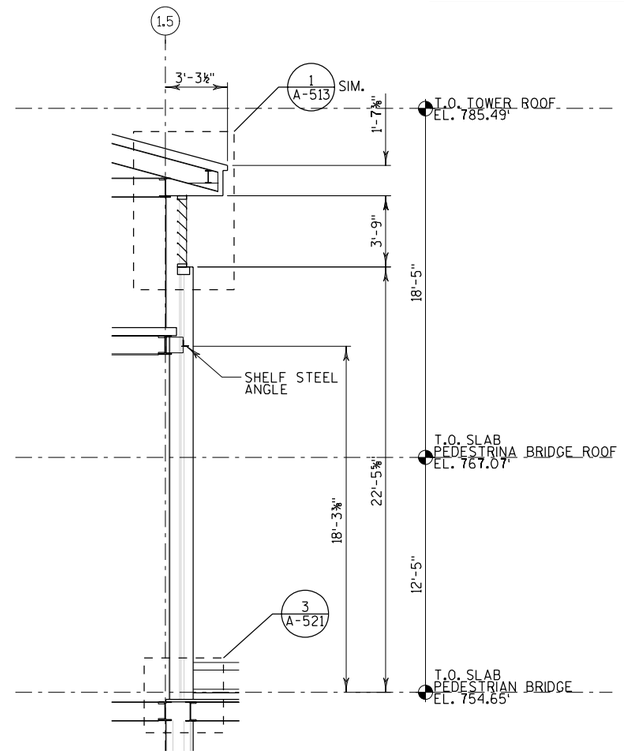
1 A-315 WALL SECTION
SCALE: 1/4"=1'-0"



2 A-315 WALL SECTION
SCALE: 1/4"=1'-0"



3 A-315 WALL SECTION
SCALE: 1/4"=1'-0"



4 A-315 WALL SECTION
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY	JR	PLANS CK'D.	DK

WALL SECTIONS
DETAILS

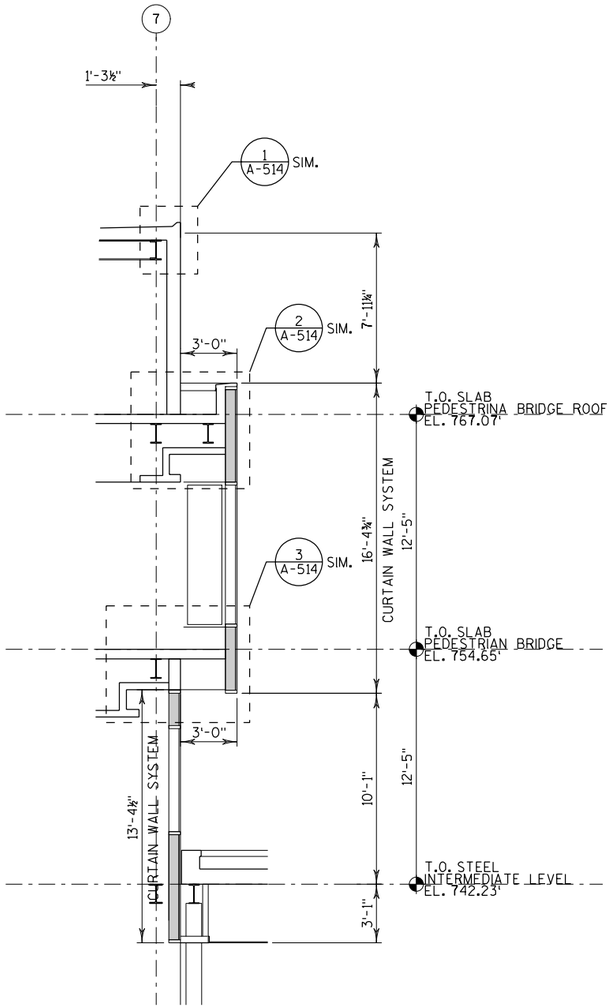
SHEET A-315
140

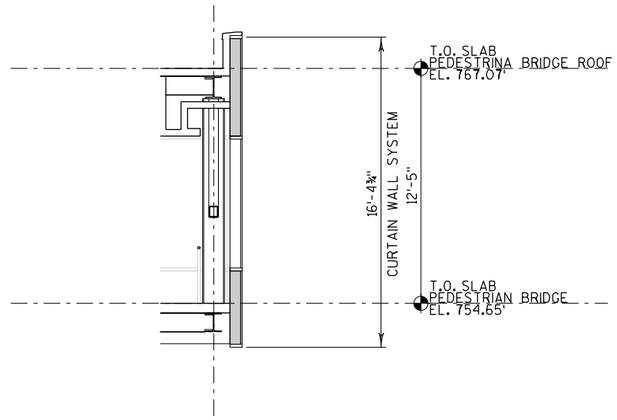
2

2

STATE PROJECT NUMBER

1000-57-70





1/A-316 WALL SECTION
SCALE: 1/4"=1'-0"

2/A-316 WALL SECTION
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-316
141

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

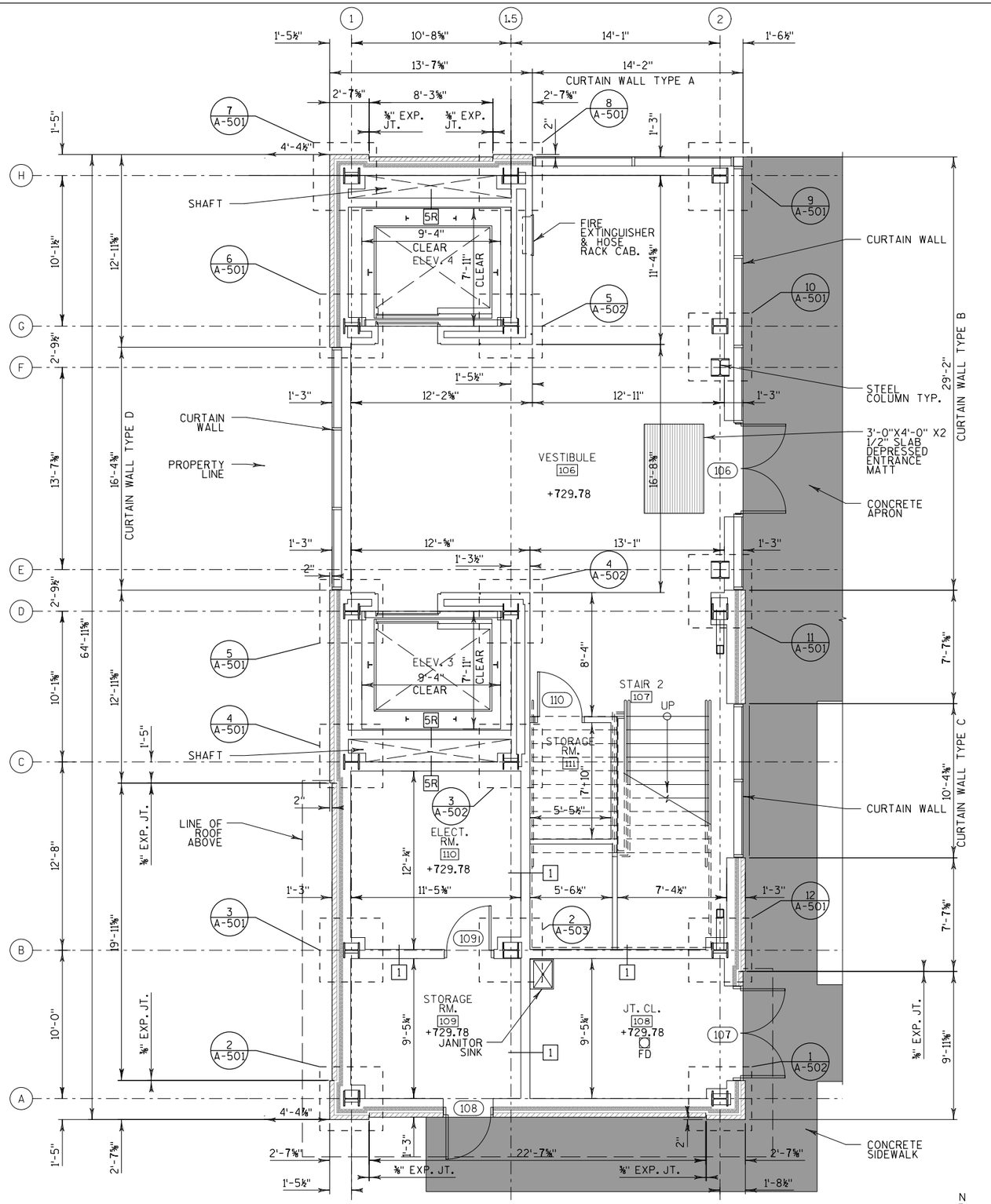
2

2

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

STATE PROJECT NUMBER

1000-57-70



1 A-401 ENLARGED FIRST FLOOR CONSTRUCTION PLAN

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED FIRST FLOOR CONSTRUCTION PLAN

SHEET A-401

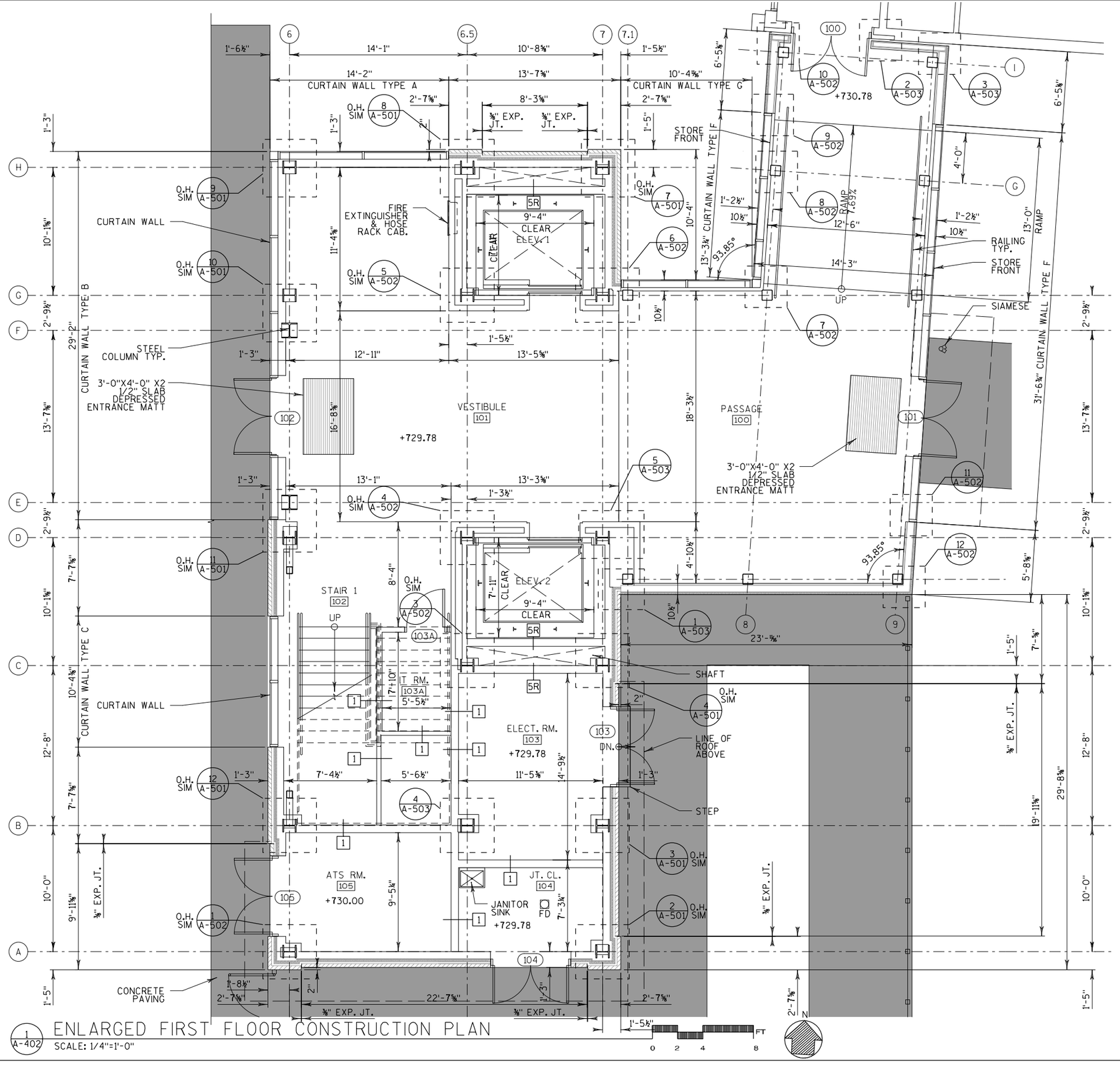
142

2

2

STATE PROJECT NUMBER

1000-57-70



1 A-402 ENLARGED FIRST FLOOR CONSTRUCTION PLAN

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

0 2 4 8 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED FIRST FLOOR CONSTRUCTION PLAN

SHEET A-402
143

2

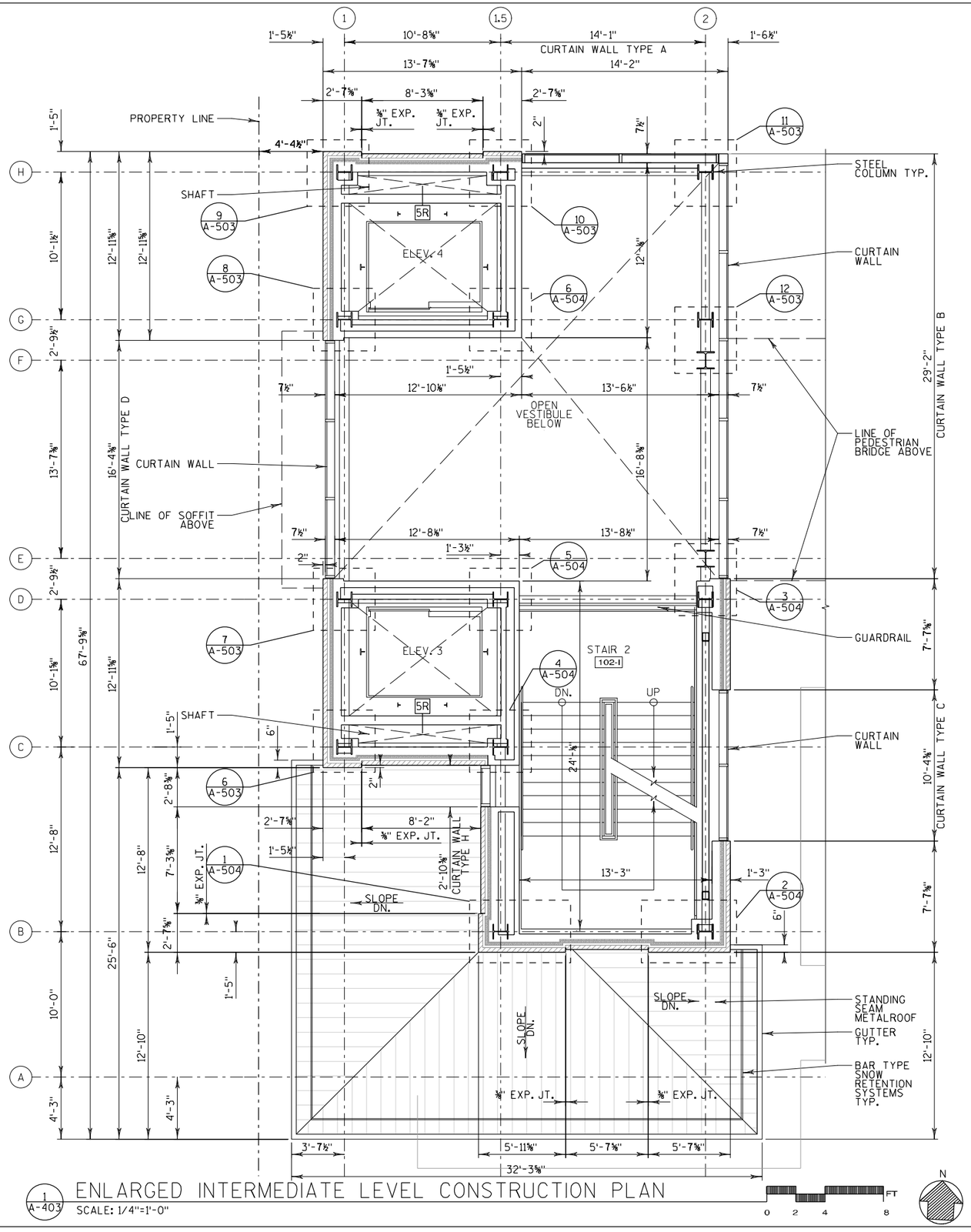
2

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

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

STATE PROJECT NUMBER

1000-57-70



1 A-403 ENLARGED INTERMEDIATE LEVEL CONSTRUCTION PLAN

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

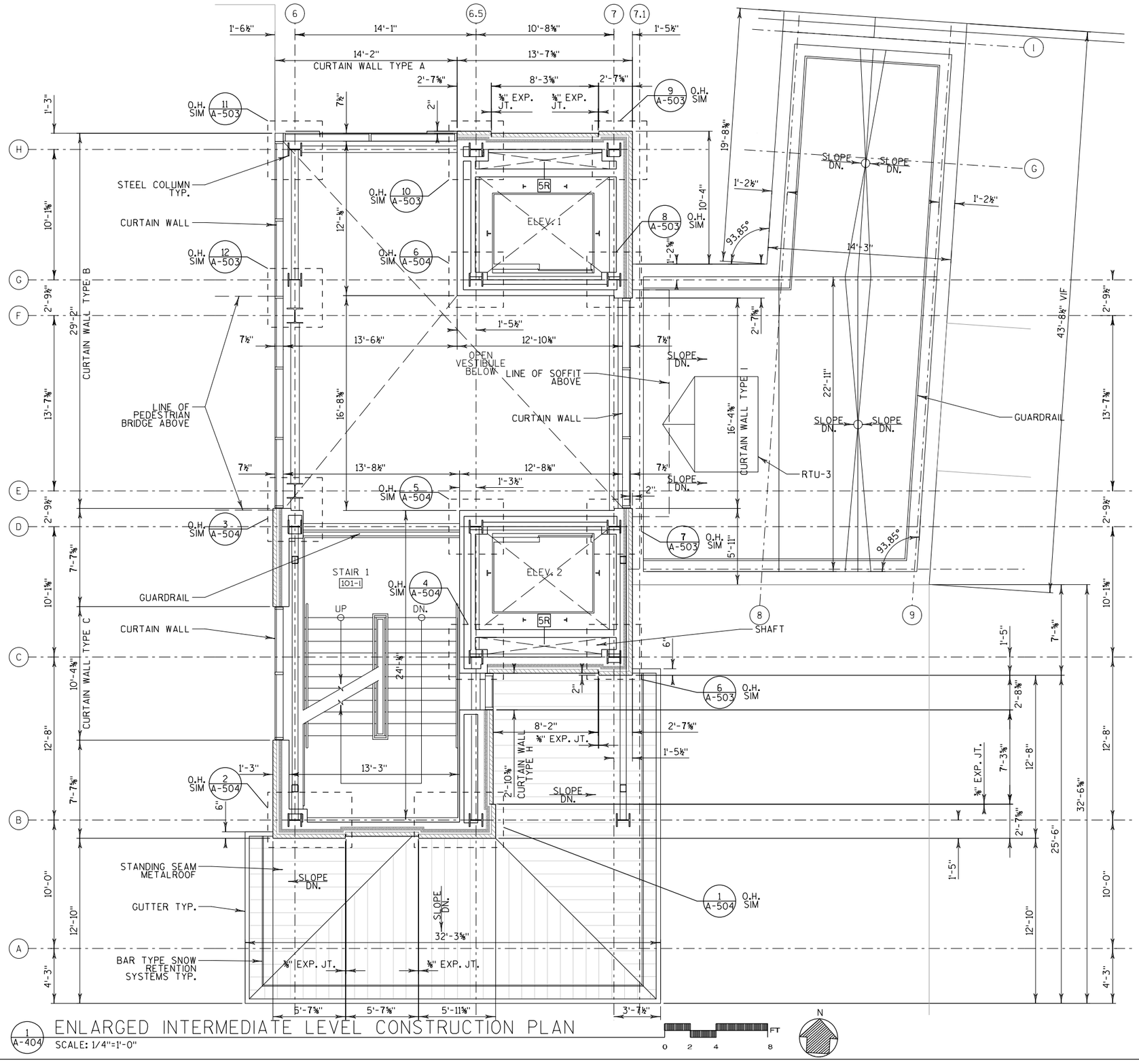
DRAWN BY JR | PLANS CK'D. DK

ENLARGED INTERMEDIATE LEVEL CONSTRUCTION PLAN

SHEET A-403

STATE PROJECT NUMBER

1000-57-70



1 A-404 ENLARGED INTERMEDIATE LEVEL CONSTRUCTION PLAN

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED INTERMEDIATE LEVEL CONSTRUCTION PLAN

SHEET A-404
145

2

2

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

STATE PROJECT NUMBER

1000-57-70

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

2

1 1.5 2 3 4

1'-5½" 10'-8⅝" 14'-1" 20'-6½" 21'-6"

13'-7⅝" 14'-4" CURTAIN WALL TYPE M 80'-8" CURTAIN WALL TYPE O

℄ OF TRACK 2 BELOW

2'-7⅝" 8'-3⅝" 2'-7⅝" 1'-8½"

⅜" EXP. JT. ⅜" EXP. JT.

6 A-505

1'-5" 4'-4½" 1'-5"

H G F E D C B A

SIM. 9 A-503

SHAFT

RD

DN. DN. DN. DN.

5R

2'-10" CURTAIN WALL TYPE N

STEEL COLUMN, TYP

5 A-505

ELEV. 4

7 A-505

8 A-505

BEAM TYP.

SHAFT

10 A-505

7'-11¾"

4'-10⅝" CURTAIN WALL TYPE L

1'-6"

CURTAIN WALL TYP.

HAND RAILING TYP.

7½"

1'-7"

10'-1½" 12'-4" 2'-9½"

PROPERTY LINE

1'-6⅝"

1'-3"

2

9 A-505

FIRE EXTINGUISHER & HOSE RACK CAB.

4'-3½"

13'-7⅝" 17'-7⅝" CURTAIN WALL TYPE J 16'-8¾"

PEDESTRIAN BRIDGE 201

1'-6¼" 11'-11⅜" 12'-2" 2'-4"

3 A-505

1'-6"

1'-7"

2'-9½"

4 A-505

2'-10" CURTAIN WALL TYPE N

ELEV. 3

5R

STAIR 2 203

SIM. 4 A-504

DN. UP

1 A-506

2 A-506

7'-6⅝"

1H FIRE RATED COMPRESS FLOOR SEAL TYP.

HSS COLUMN TYP.

HSS DIAGONAL BRACE TYP.

HSS DIAGONAL BRACE TYP.

67'-9⅝"

10'-1⅝" 12'-4"

80'-8" CURTAIN WALL TYPE P

1'-5"

6"

SIM. 6 A-503

2"

2'-8⅜"

24'-⅛"

10'-4⅜" CURTAIN WALL TYPE C

12'-8" 12'-8"

2'-7⅝" 8'-2" ⅜" EXP. JT.

1'-5½"

7'-3⅜"

⅜" EXP. JT.

2'-10⅜" CURTAIN WALL TYPE H

13'-3" 1'-3"

HSS DIAGONAL BRACE TYP.

7'-7⅝"

6"

2'-7⅝"

25'-6"

1'-5"

1 A-505

2 A-505

10'-0" 12'-10"

⅜" EXP. JT. ⅜" EXP. JT.

4'-3" 4'-3"

3'-7½" 5'-11⅜" 5'-7⅝" 5'-7⅝"

CURTAIN WALL TYPE K 32'-3⅜"

1 A-405 ENLARGED SECOND FLOOR CONSTRUCTION PLAN

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

0 2 4 8 FT

N

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

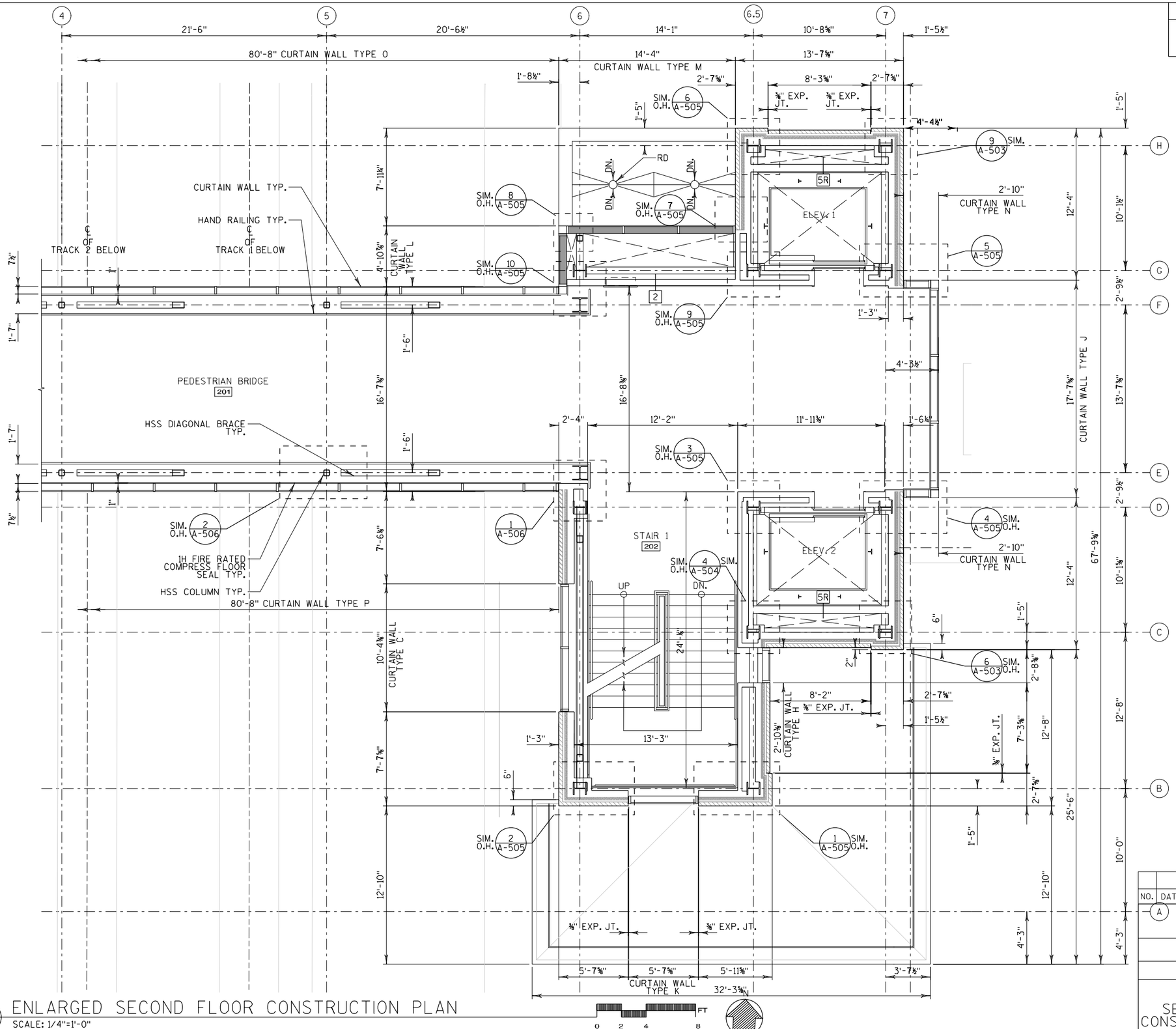
ENLARGED SECOND FLOOR CONSTRUCTION PLAN

SHEET A-405

146

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

STATE PROJECT NUMBER
1000-57-70



1 A-406 ENLARGED SECOND FLOOR CONSTRUCTION PLAN
SCALE: 1/4"=1'-0"

2

2

NO.	DATE	REVISION	BY
A		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

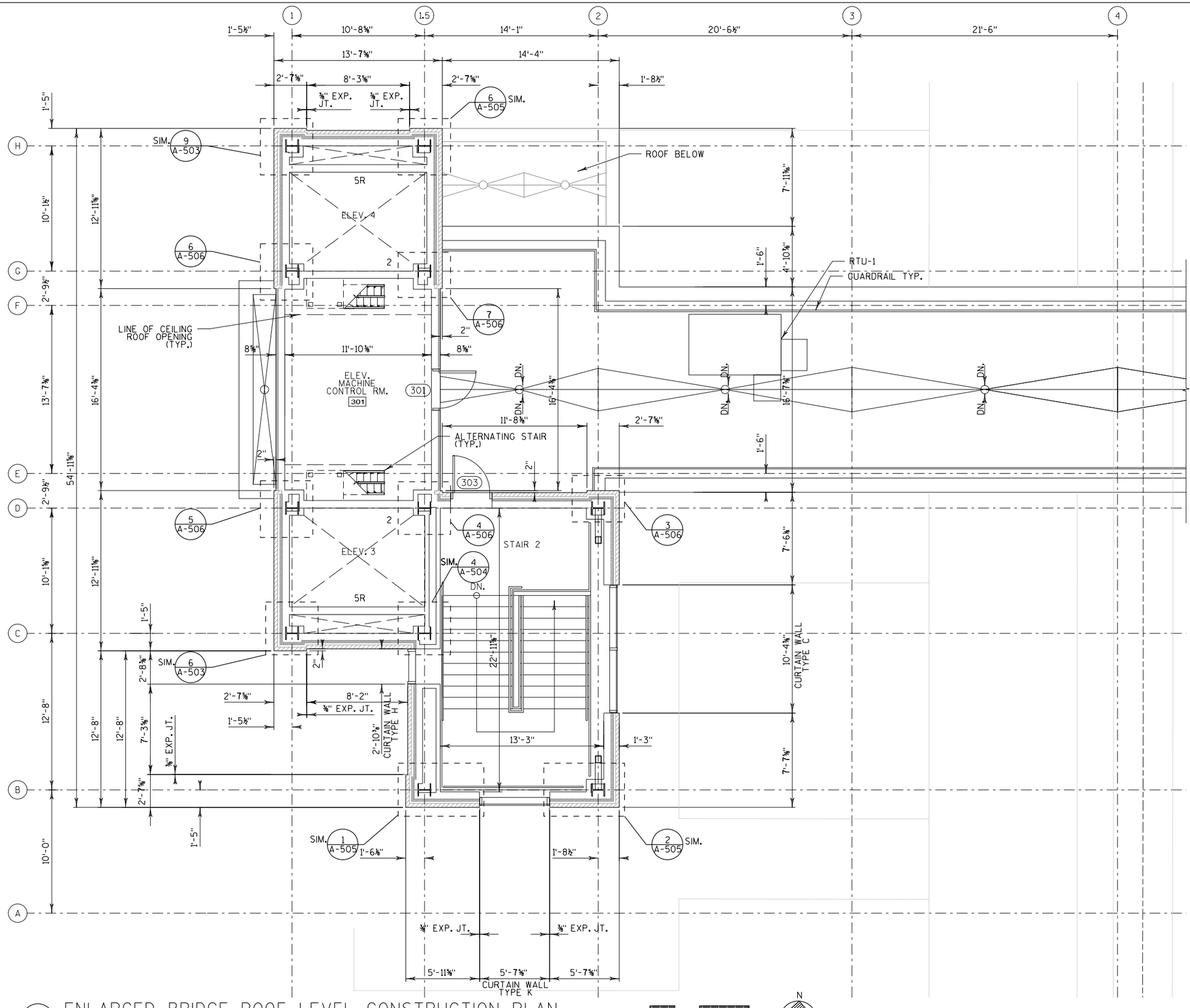
ENLARGED SECOND FLOOR CONSTRUCTION PLAN

SHEET A-406
147

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

STATE PROJECT NUMBER

1000-57-70



1 / A-407 ENLARGED BRIDGE ROOF LEVEL CONSTRUCTION PLAN

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

0 2 4 8 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED BRIDGE ROOF LEVEL CONSTRUCTION PLAN

SHEET A-407

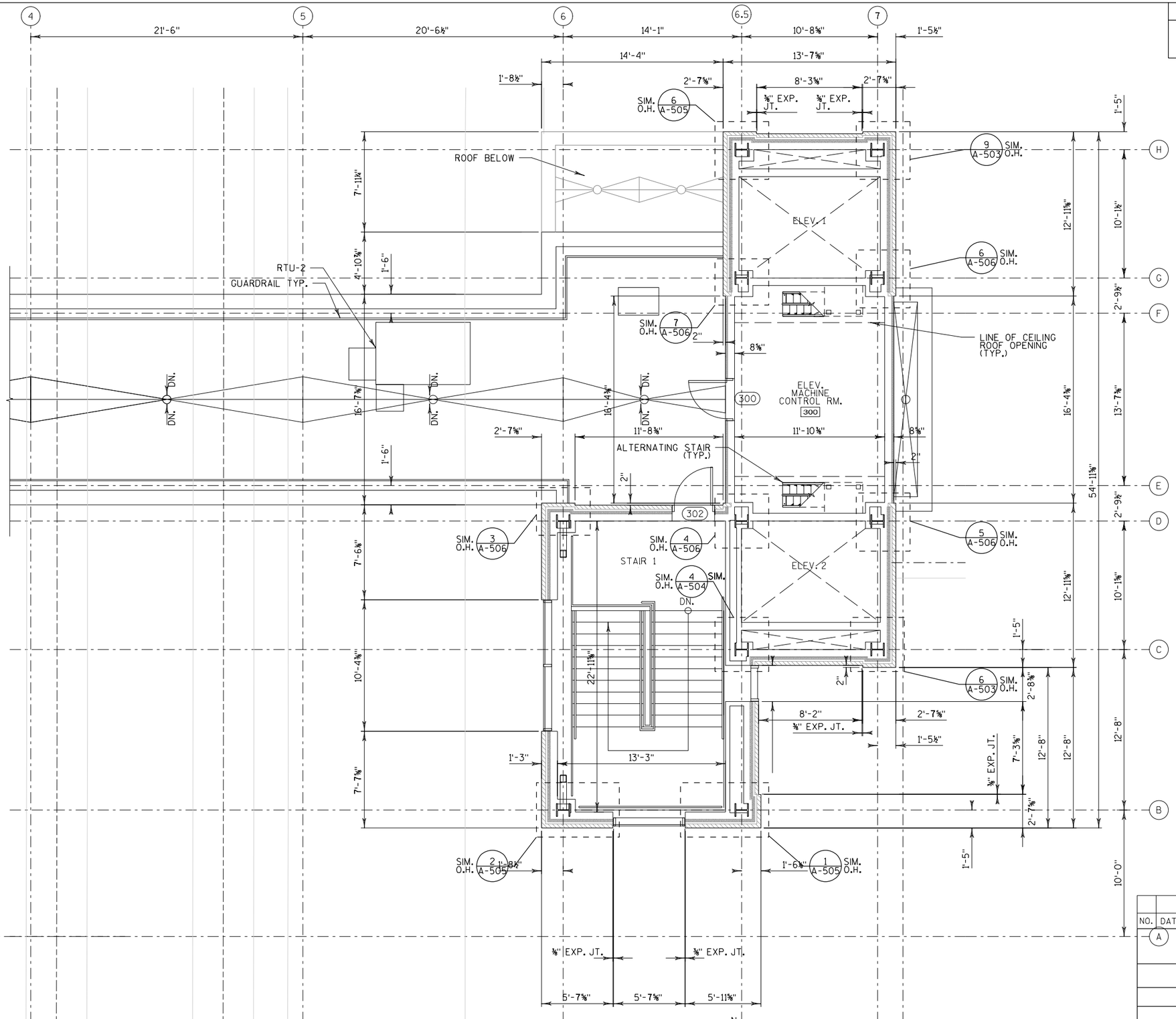
148

2

2

STATE PROJECT NUMBER

1000-57-70



1 A-408 ENLARGED BRIDGE ROOF LEVEL CONSTRUCTION PLAN

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

0 2 4 8 FT

N

NO.	DATE	REVISION	BY
A		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED BRIDGE ROOF LEVEL CONSTRUCTION PLAN

SHEET A-408

149

2

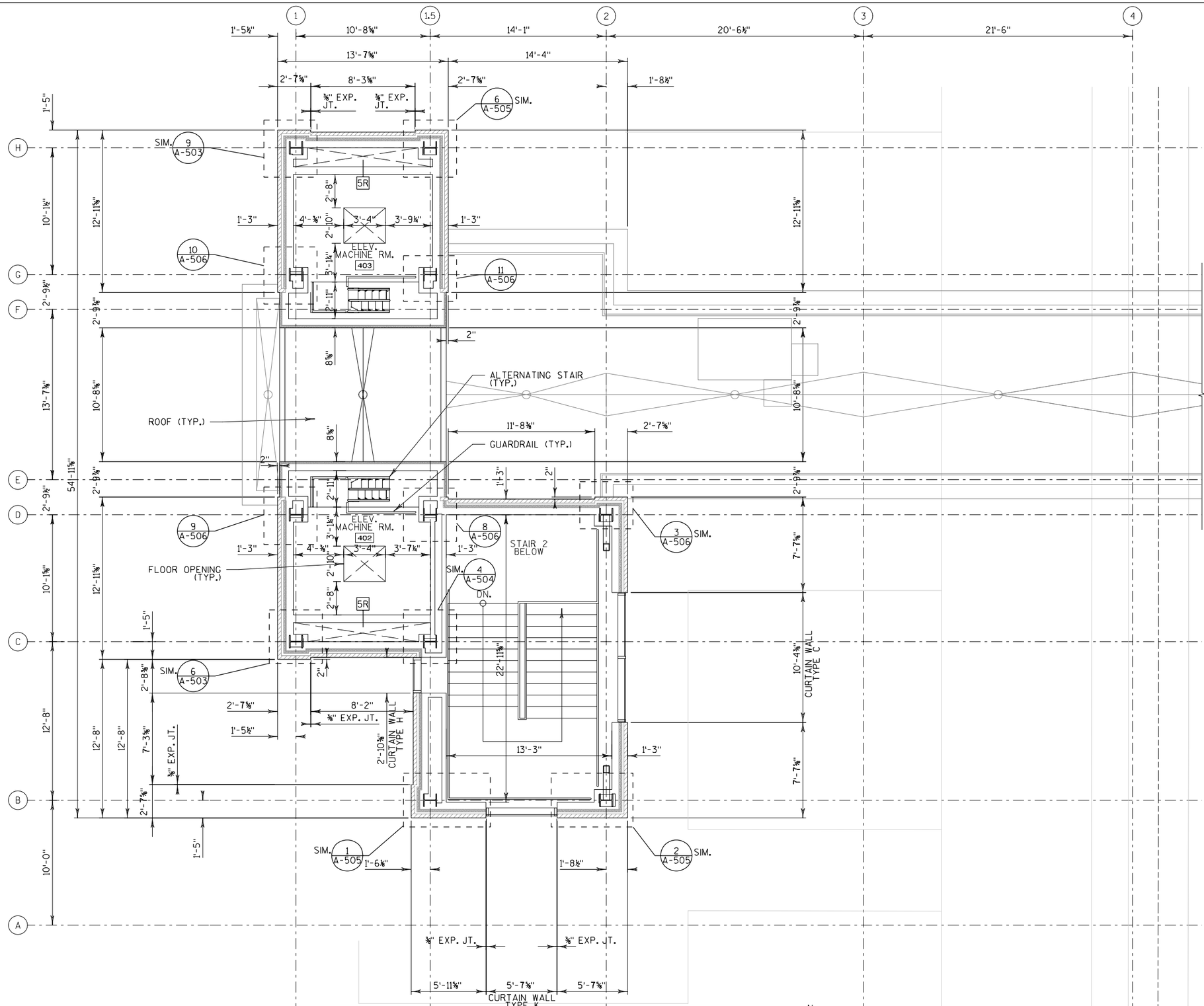
2

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

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

STATE PROJECT NUMBER

1000-57-70



1 A-409 ENLARGED ELEVATOR MACHINE LEVEL CONSTRUCTION PLAN

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

0 2 4 8 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

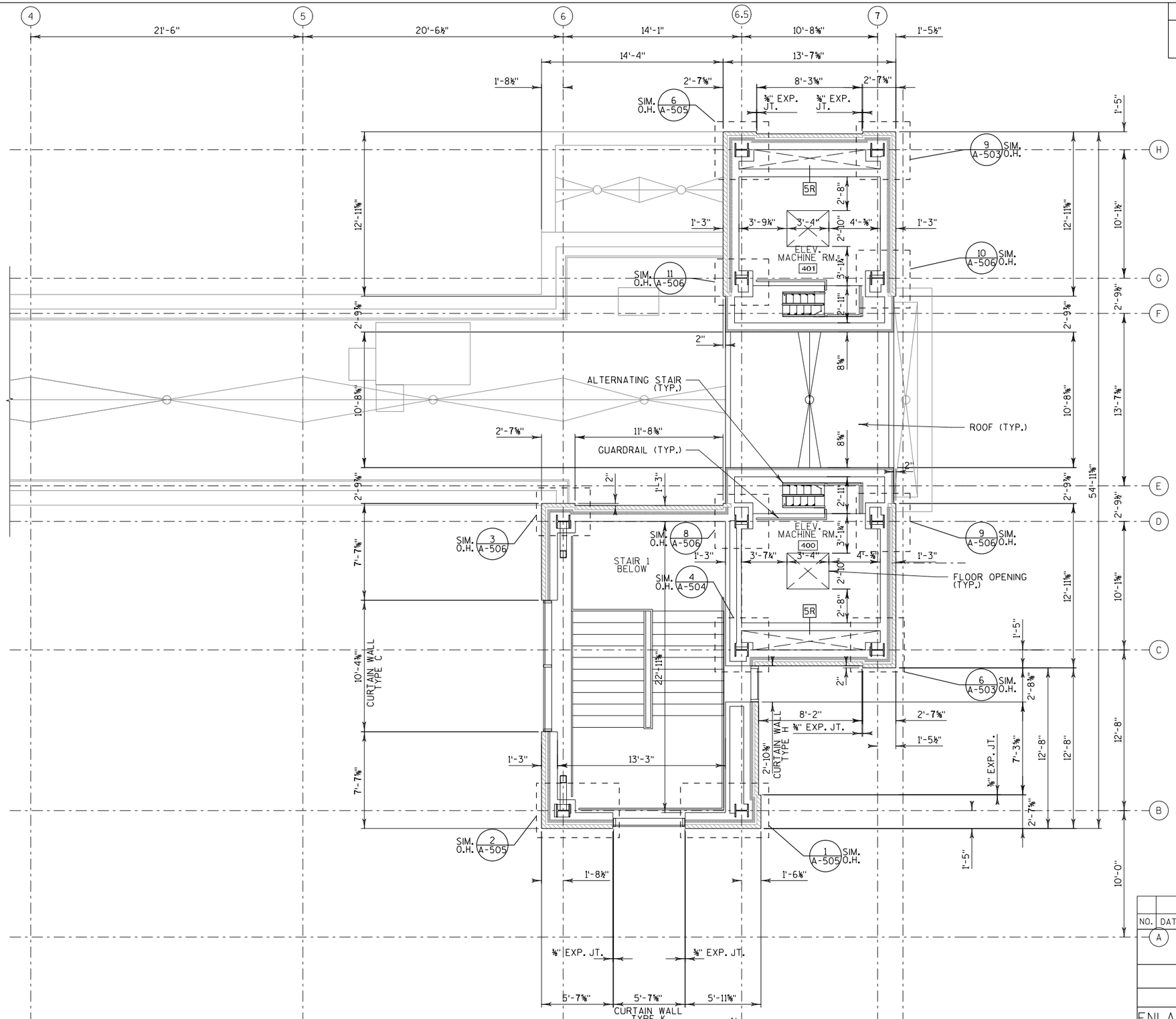
DRAWN BY JR | PLANS CK'D. DK

ENLARGED ELEVATOR MACHINE LEVEL CONSTRUCTION PLAN

SHEET A-409

STATE PROJECT NUMBER

1000-57-70



1 / A-410 ENLARGED ELEVATOR MACHINE LEVEL CONSTRUCTION PLAN

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

0 2 4 8 FT

N

NO.	DATE	REVISION	BY
A		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENLARGED ELEVATOR MACHINE LEVEL CONSTRUCTION PLAN

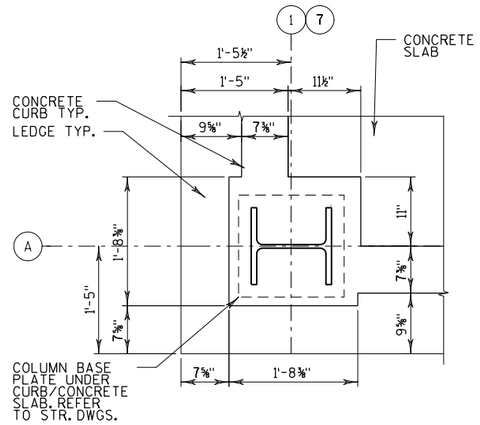
SHEET A-410

151

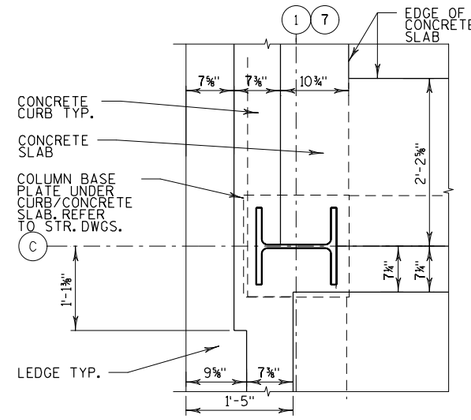
2

2

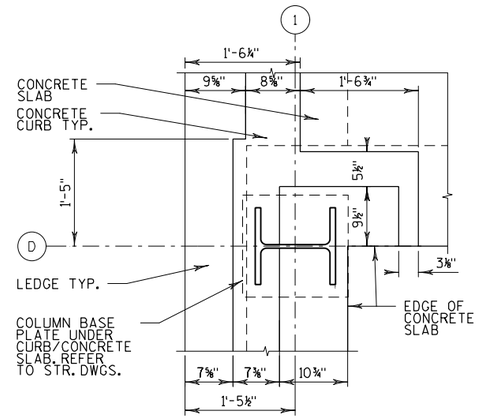
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD



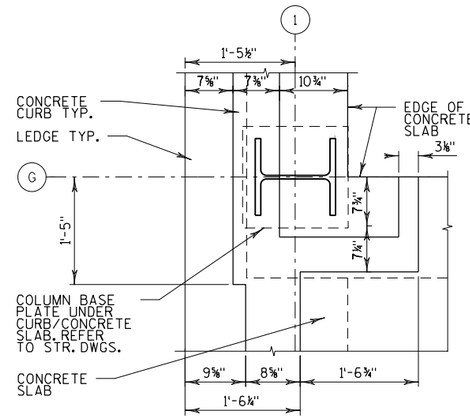
1 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



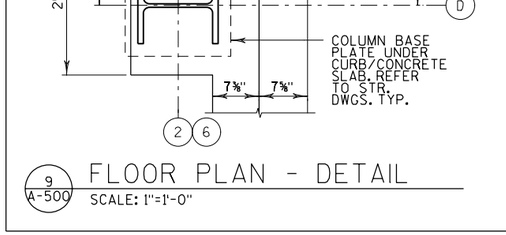
2 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



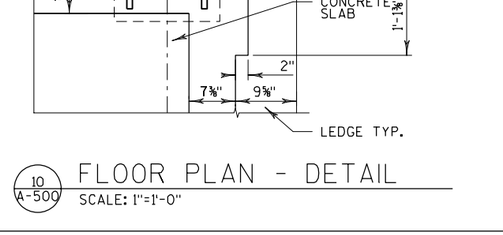
3 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



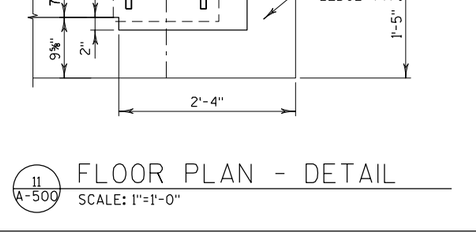
4 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



5 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

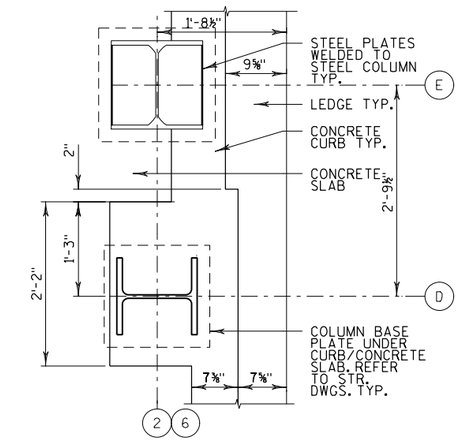


6 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

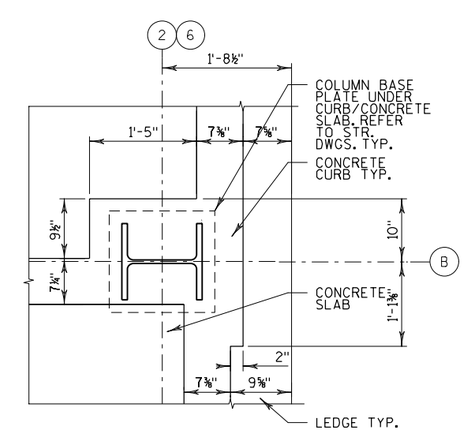


7 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

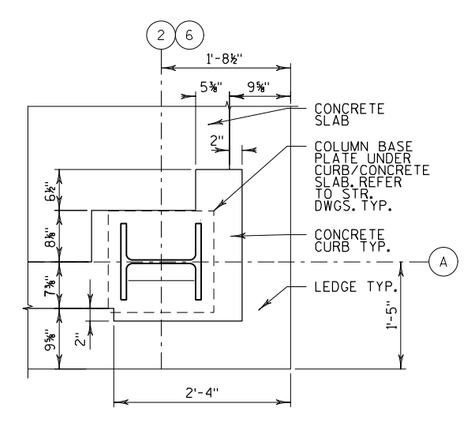
8 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



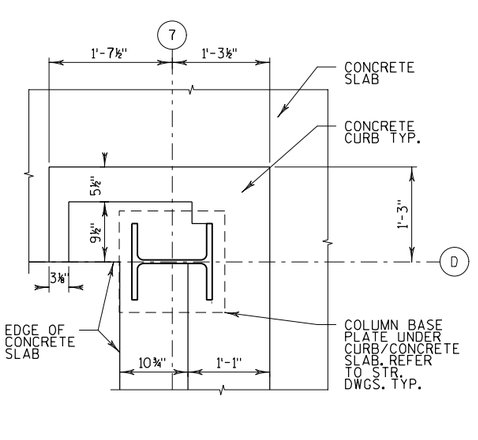
9 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



10 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



11 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



12 A-500 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

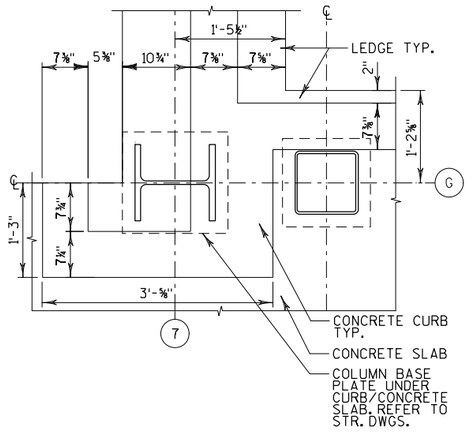
FLOOR PLAN DETAILS

SHEET A-500
152

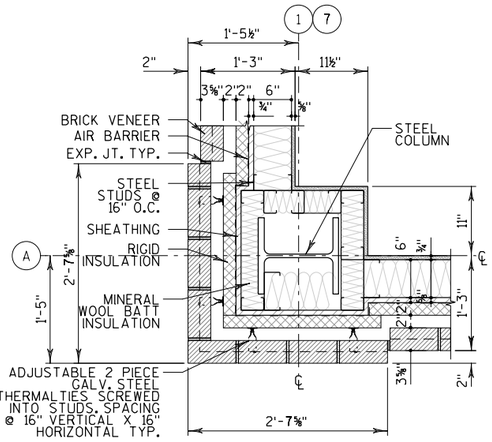
2

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

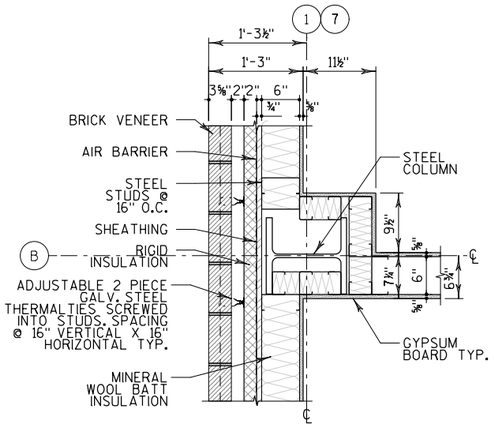
STATE PROJECT NUMBER
1000-57-70



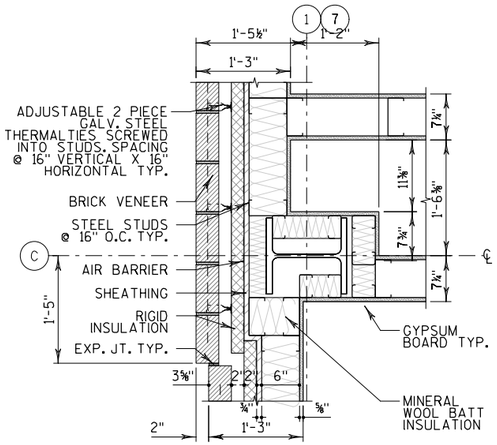
1 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



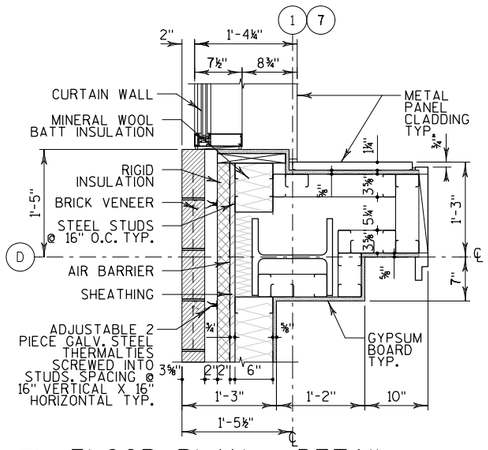
2 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



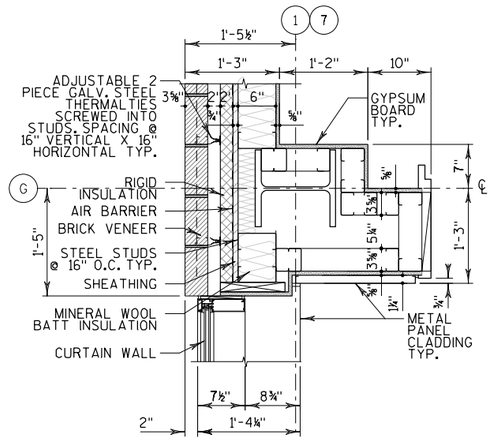
3 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



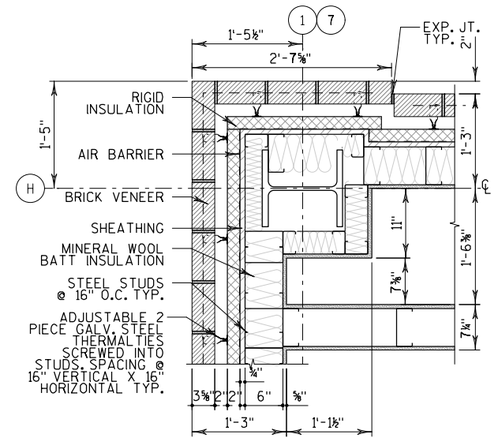
4 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



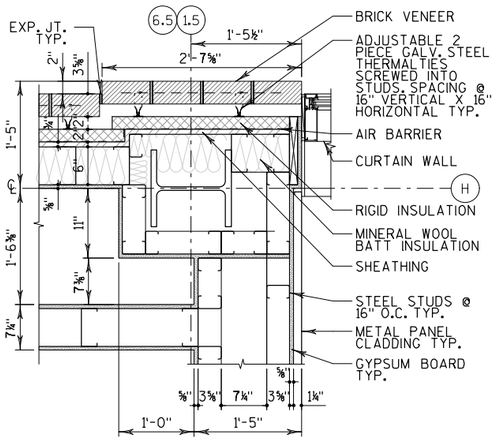
5 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



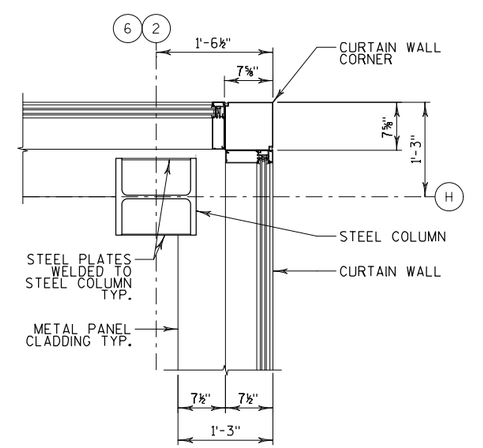
6 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



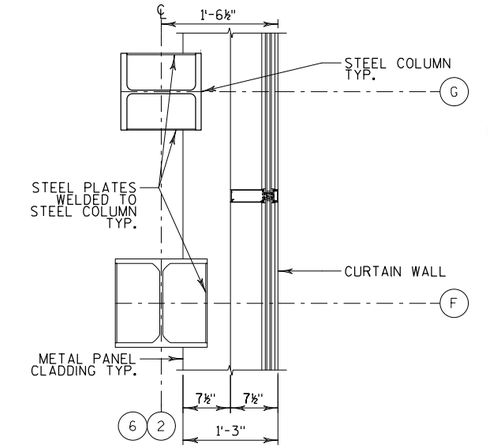
7 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



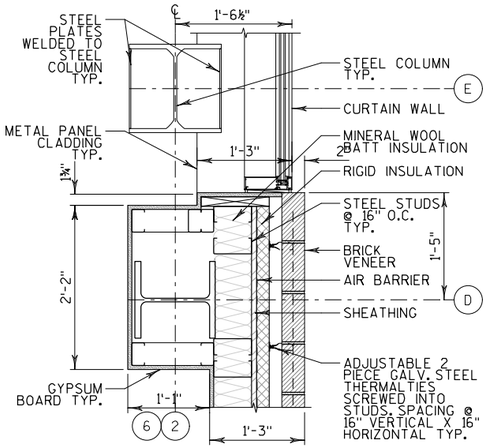
8 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



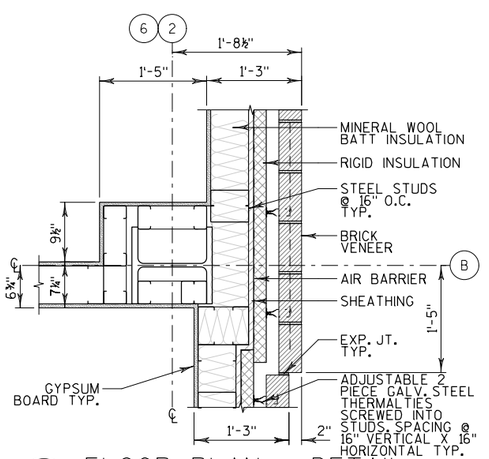
9 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



10 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



11 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



12 A-501 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FLOOR PLAN DETAILS

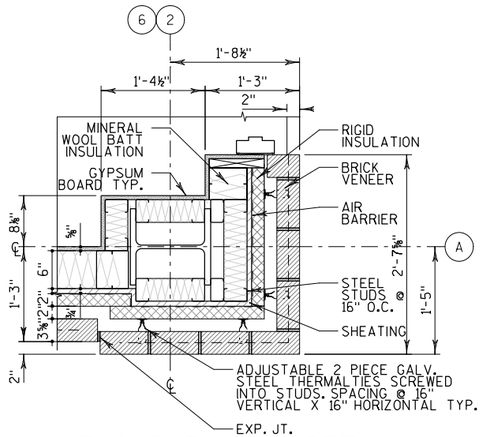
SHEET A-501
153

2

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

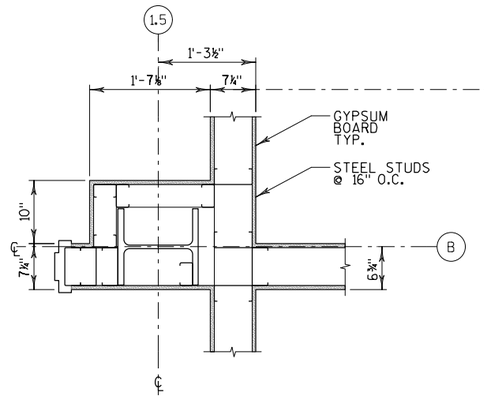
STATE PROJECT NUMBER

1000-57-70



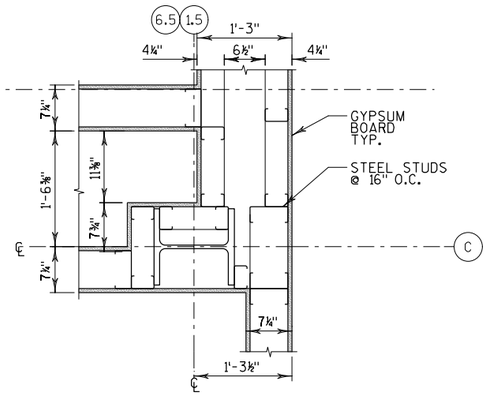
1 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



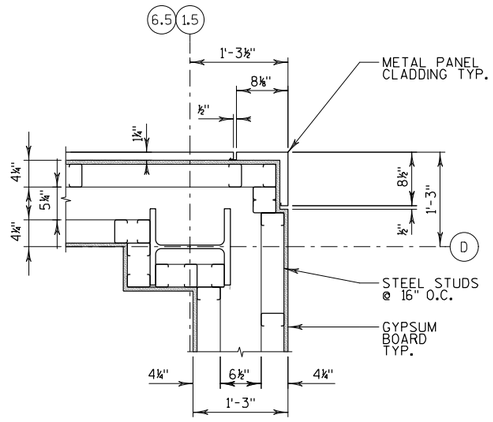
2 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



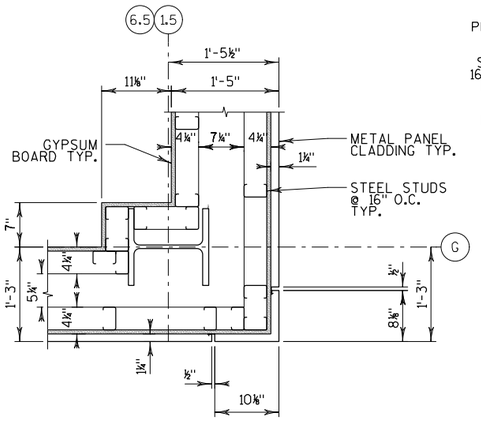
3 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



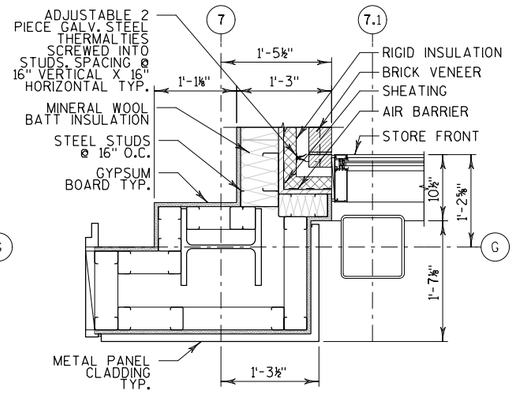
4 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



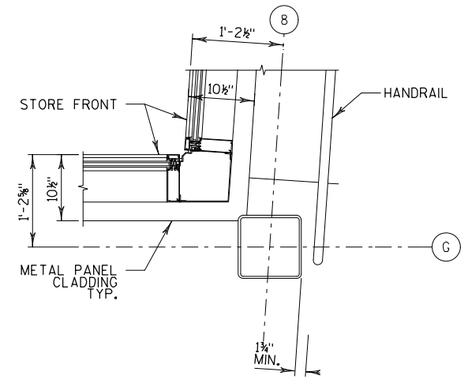
5 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



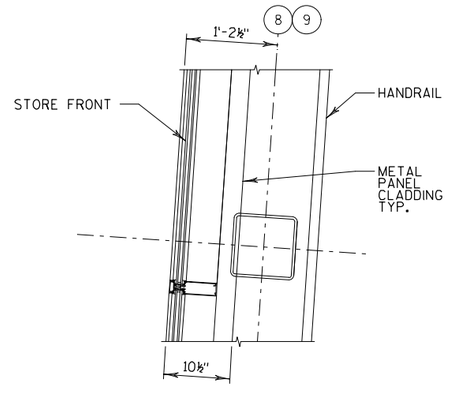
6 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



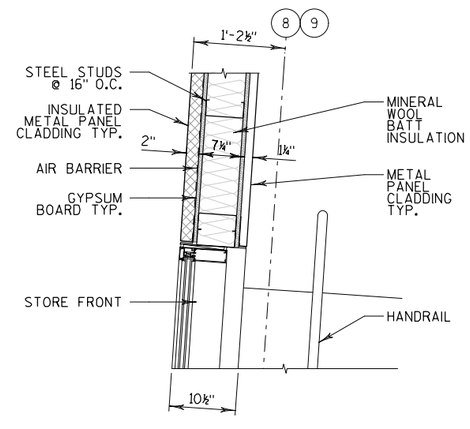
7 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



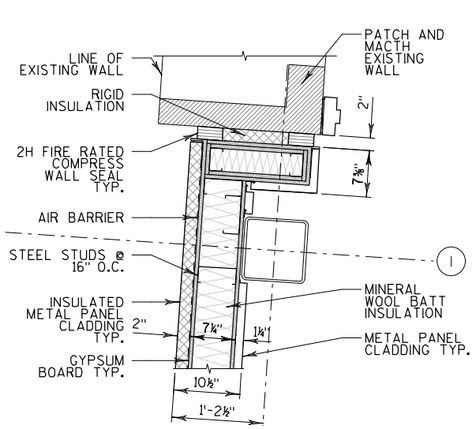
8 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



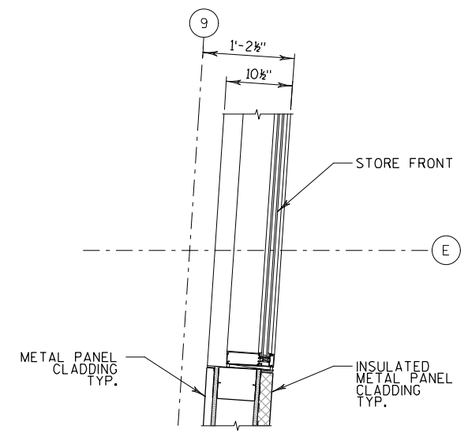
9 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



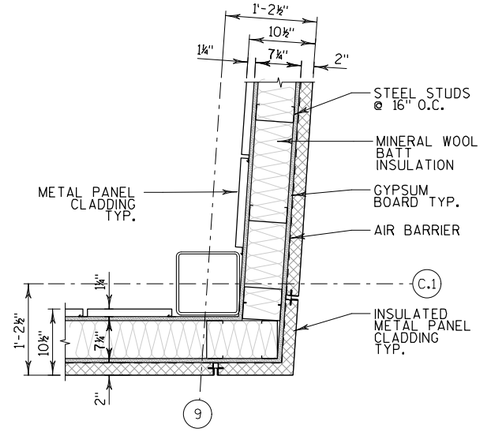
10 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



11 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



12 A-502 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FLOOR PLAN DETAILS

SHEET A-502

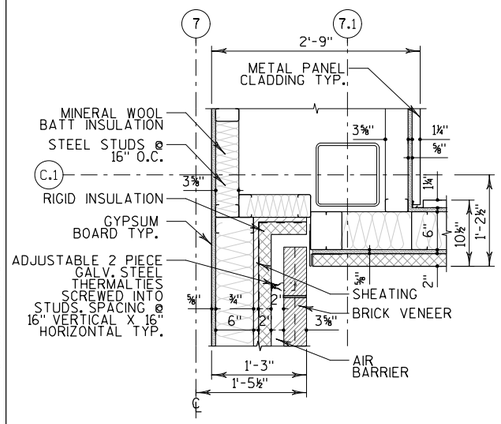
154

2

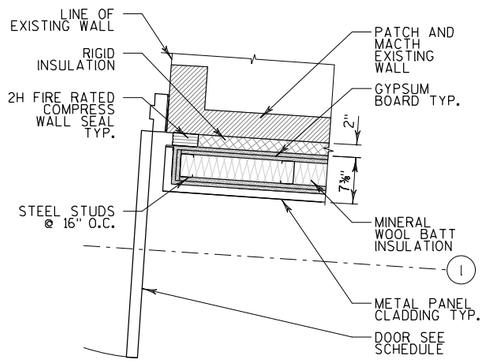
2

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

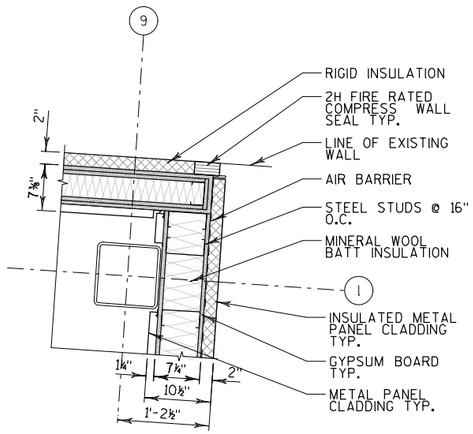
STATE PROJECT NUMBER
1000-57-70



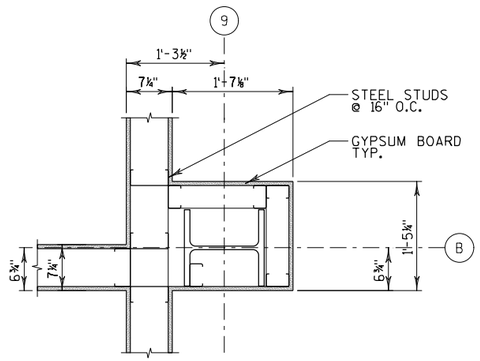
1 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



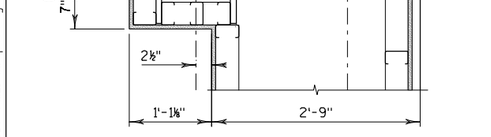
2 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



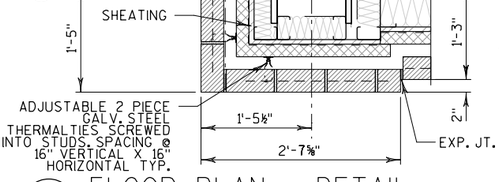
3 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



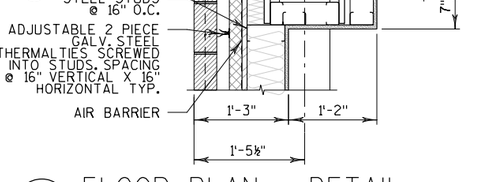
4 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



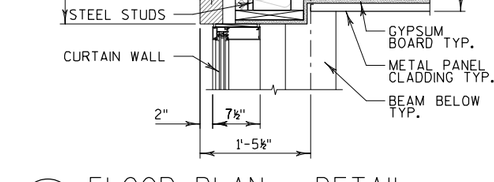
5 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



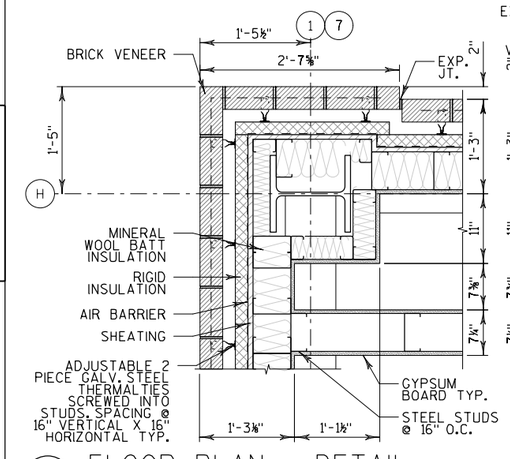
6 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



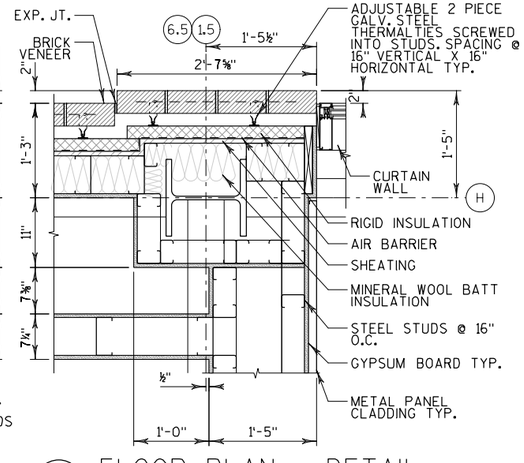
7 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



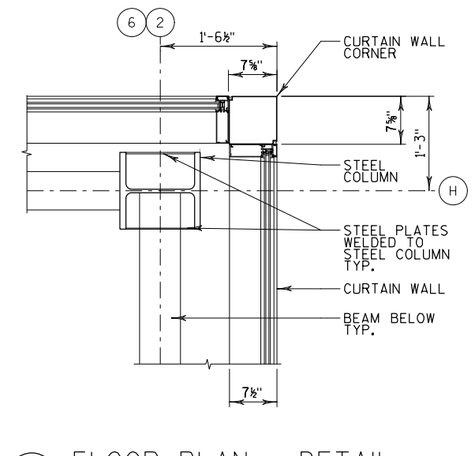
8 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



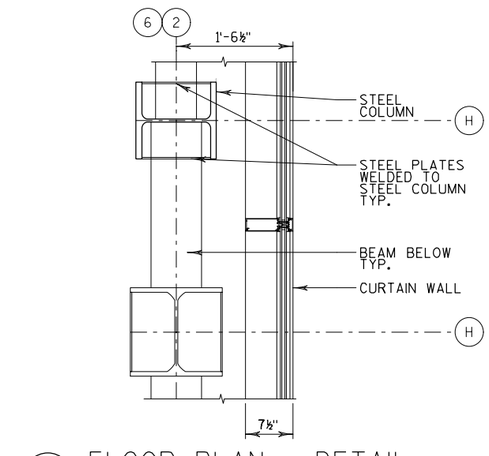
9 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



10 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



11 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



12 A-503 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FLOOR PLAN DETAILS

SHEET A-503
155

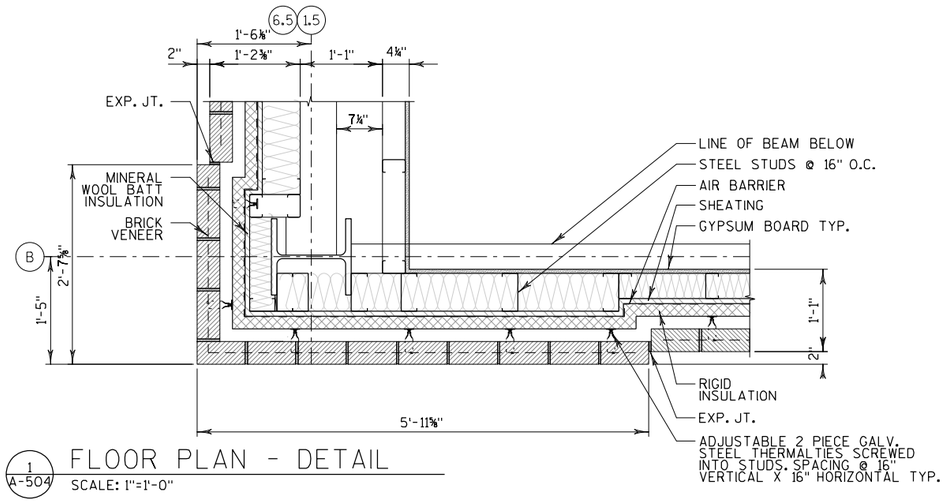
2

2

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

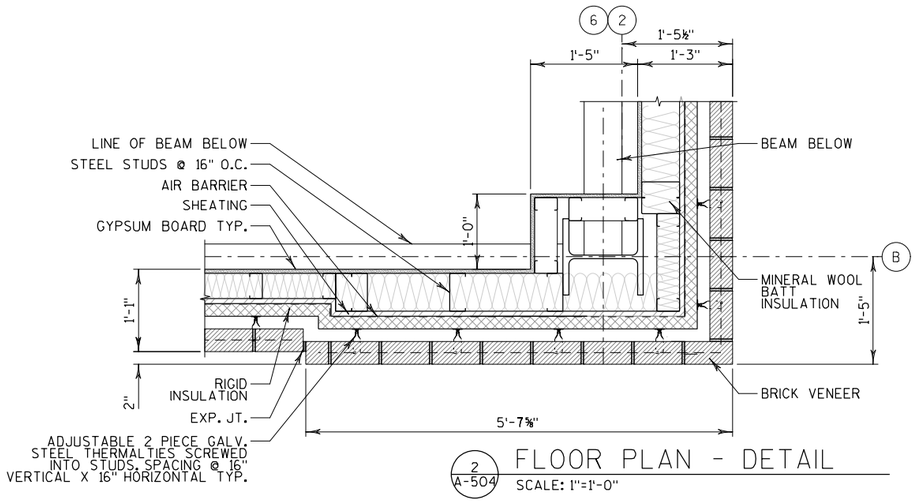
STATE PROJECT NUMBER

1000-57-70



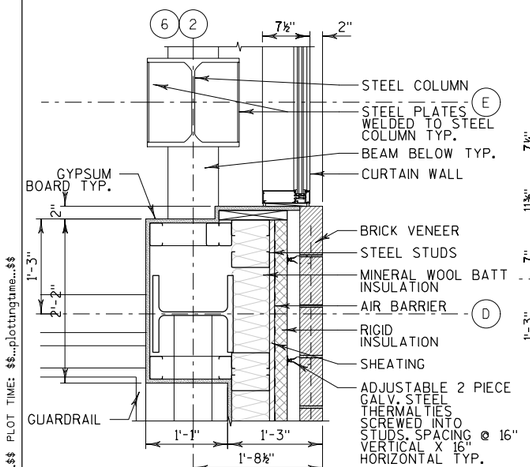
1 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



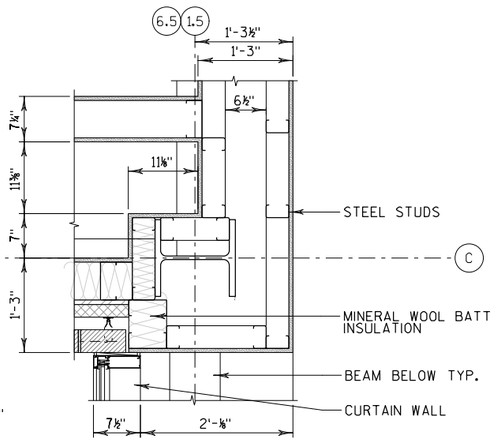
2 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



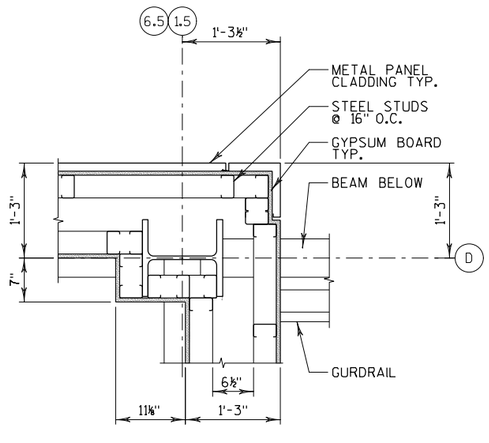
3 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



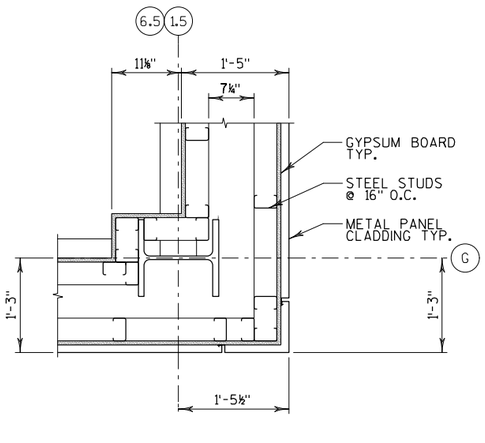
4 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



5 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



6 A-504 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"

BATCH PRINT SHEET CSD OF NSD

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

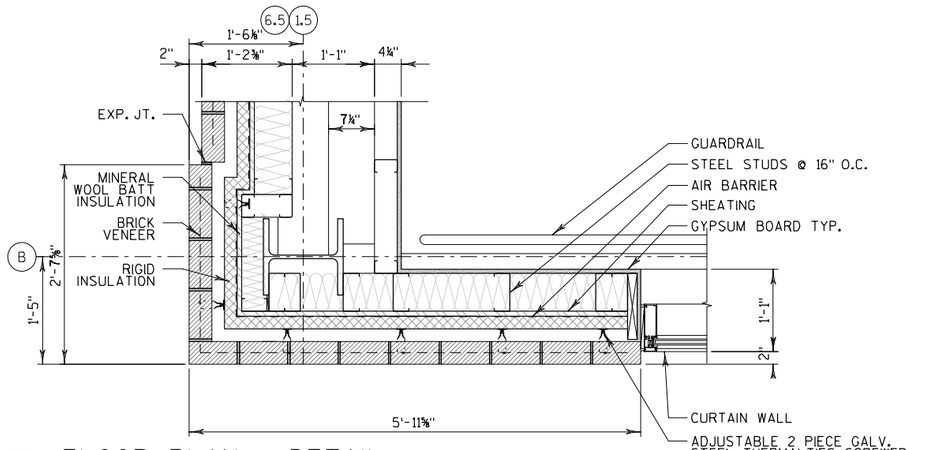
FLOOR PLAN DETAILS

SHEET A-504

156

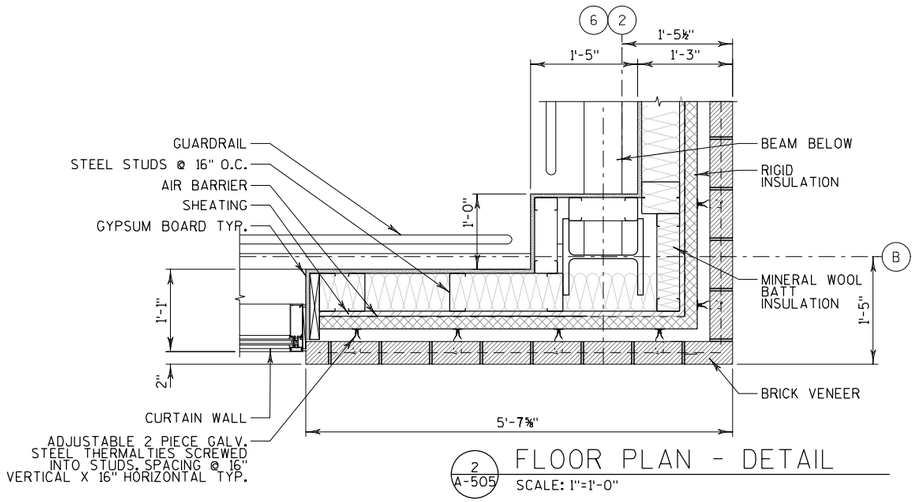
STATE PROJECT NUMBER

1000-57-70



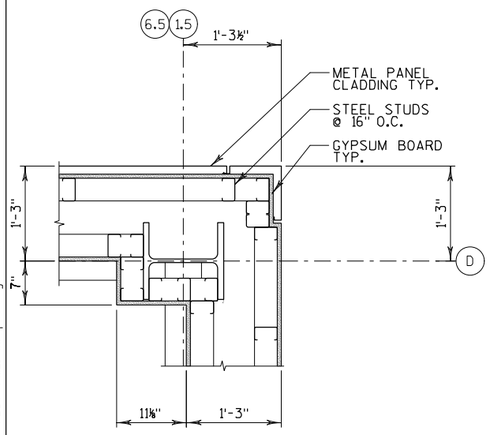
1 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



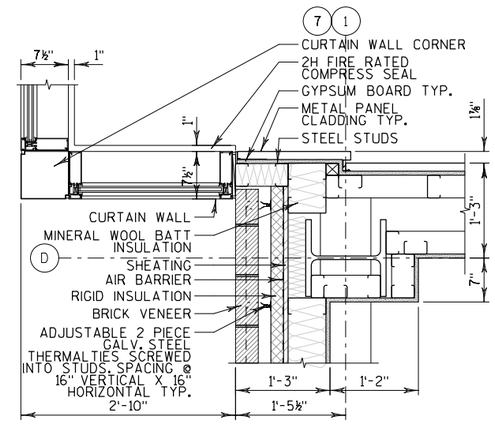
2 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



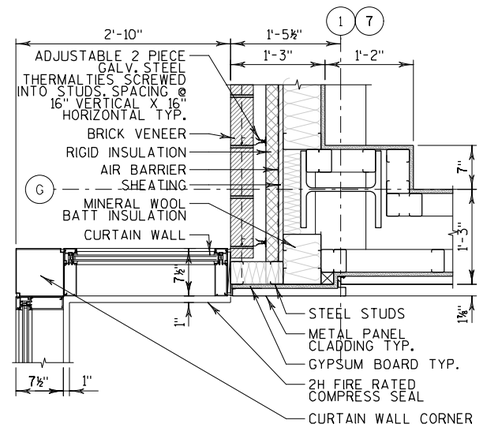
3 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



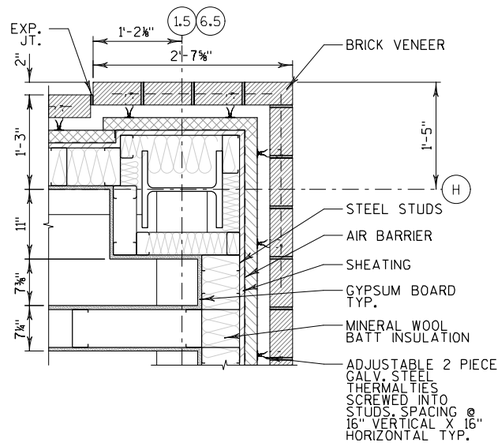
4 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



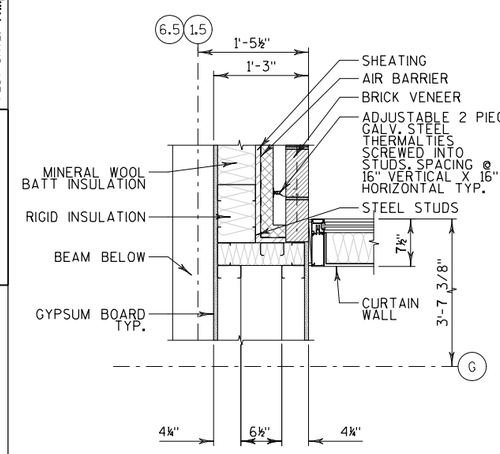
5 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



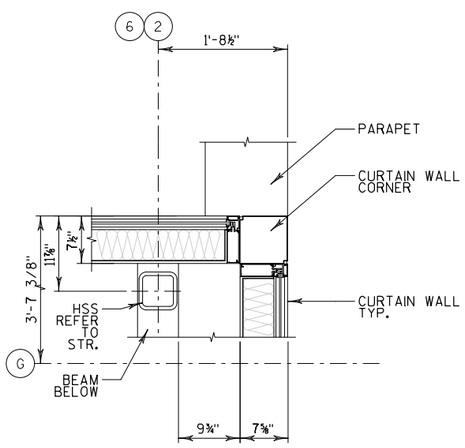
6 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



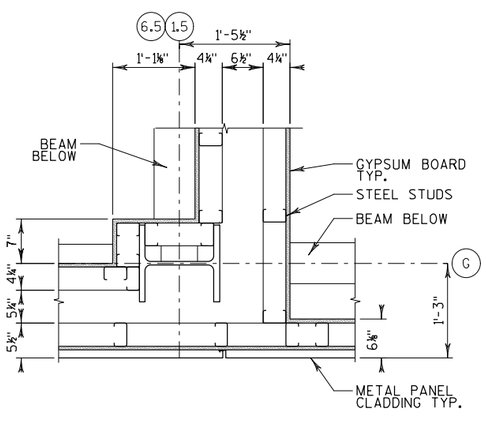
7 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



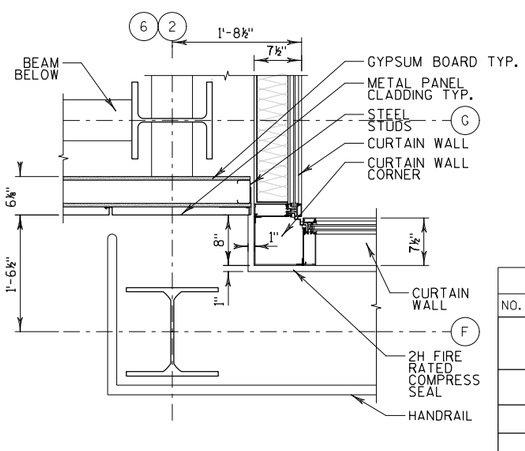
8 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



9 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"



10 A-505 FLOOR PLAN - DETAIL

SCALE: 1"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

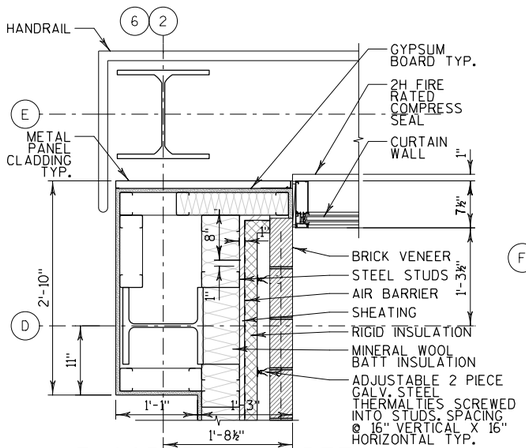
FLOOR PLAN DETAILS

SHEET A-505
157

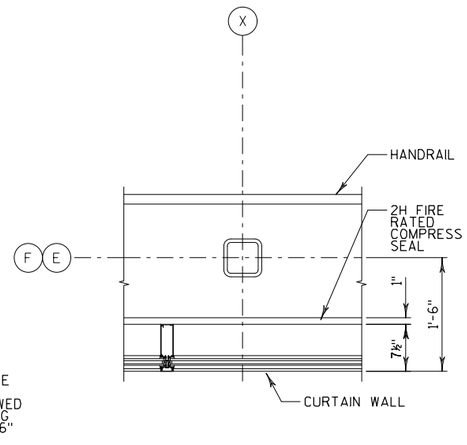
2

2

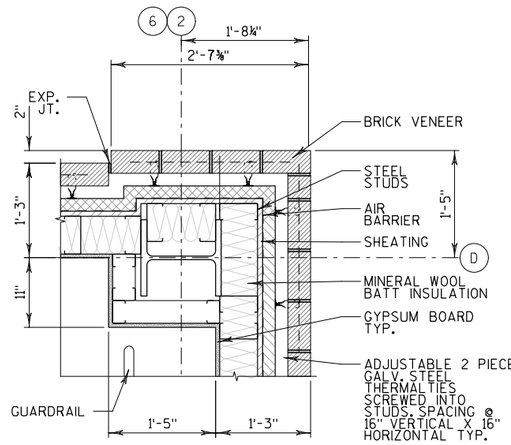
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$..pentable..$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$..plottingdate..$$ PLOT TIME: $$..plottingtime..$$



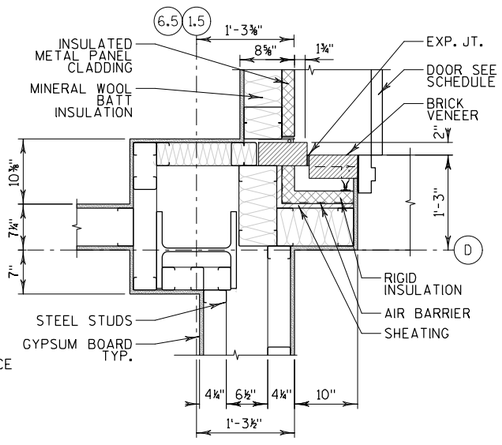
1 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



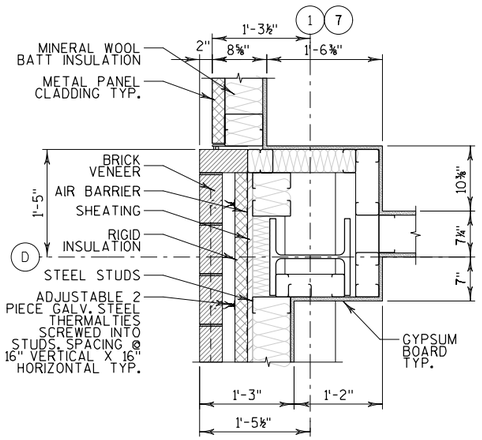
2 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



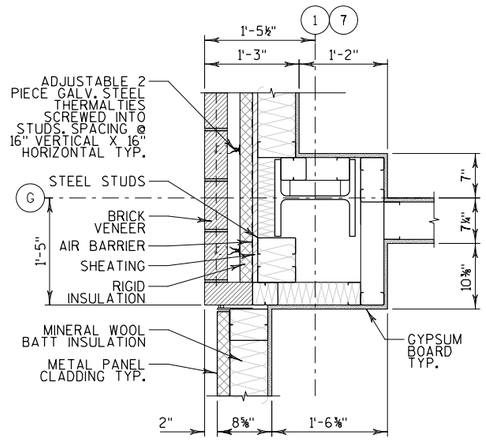
3 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



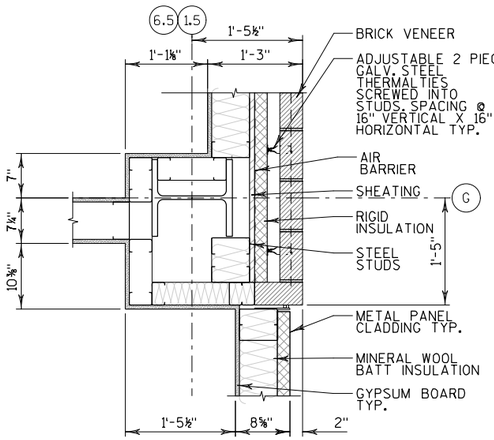
4 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



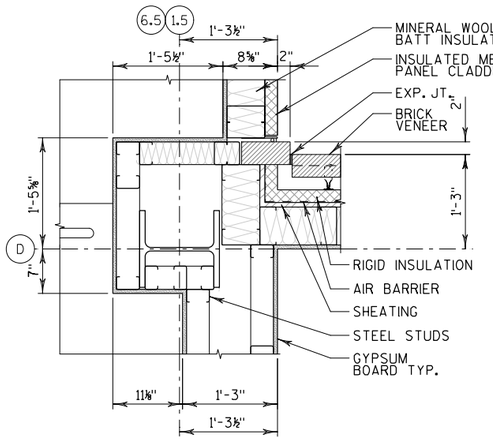
5 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



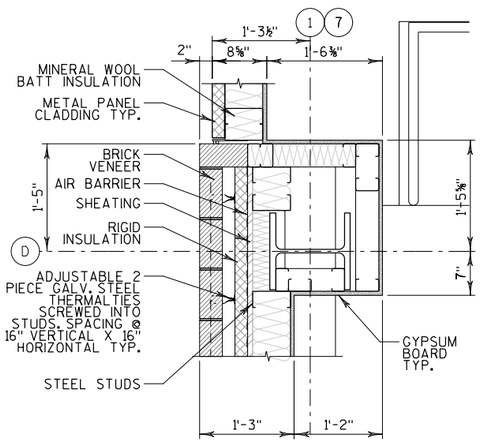
6 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



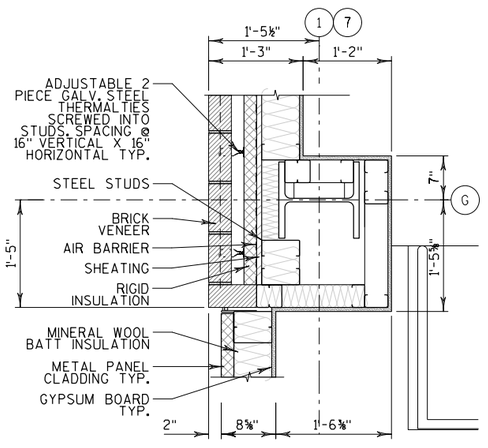
7 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



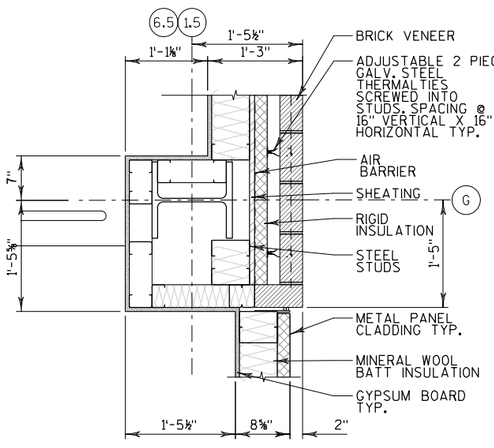
8 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



9 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



10 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"



11 A-506 FLOOR PLAN - DETAIL
SCALE: 1"=1'-0"

STATE PROJECT NUMBER
1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

FLOOR PLAN DETAILS

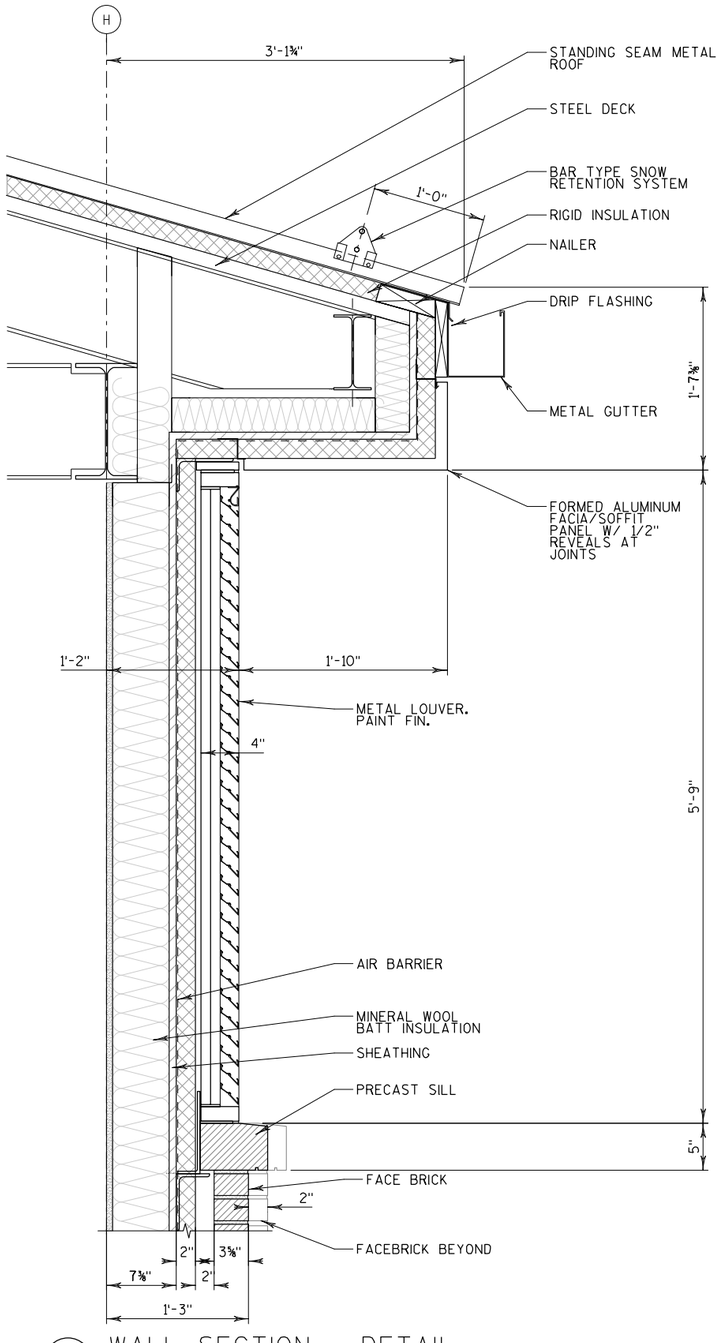
SHEET A-506
158

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

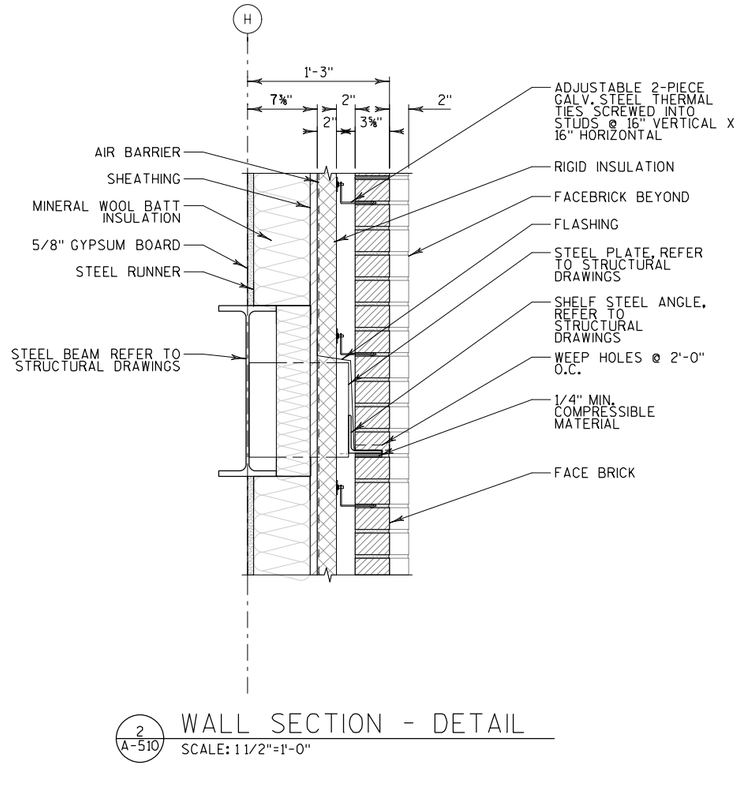
2

2

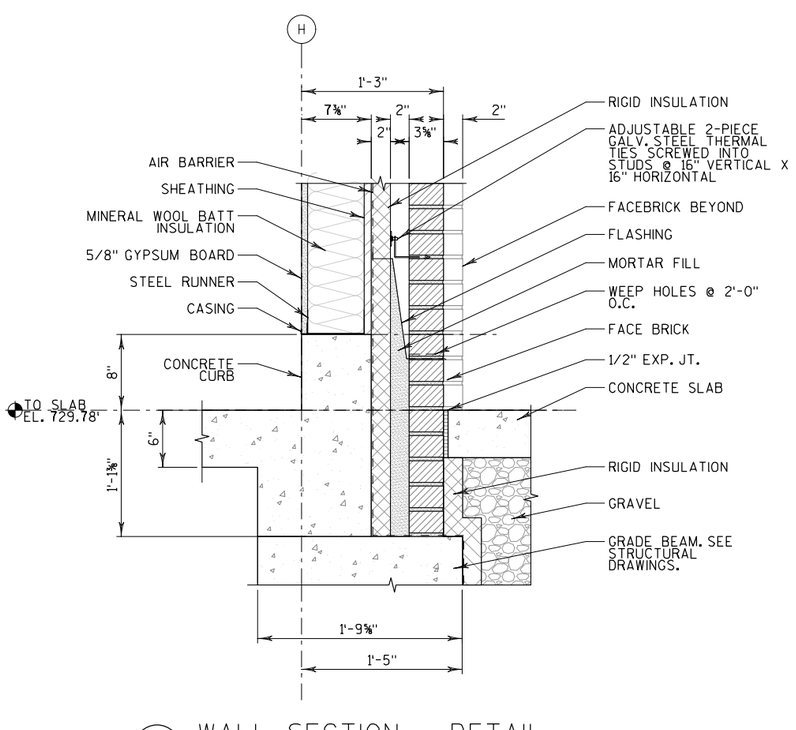
STATE PROJECT NUMBER
1000-57-70



1 A-510 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 A-510 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 A-510 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

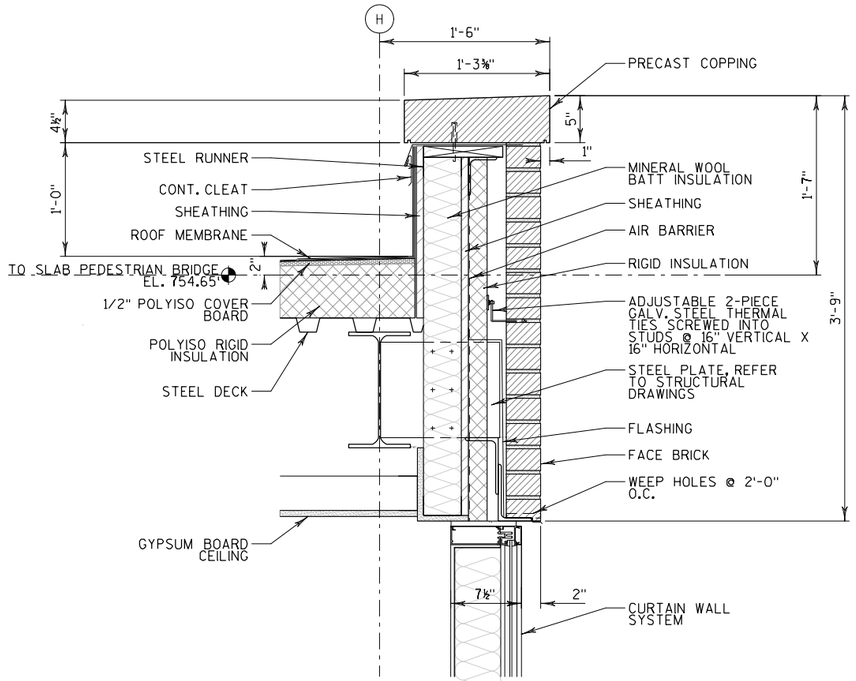
SHEET A-510
159

2

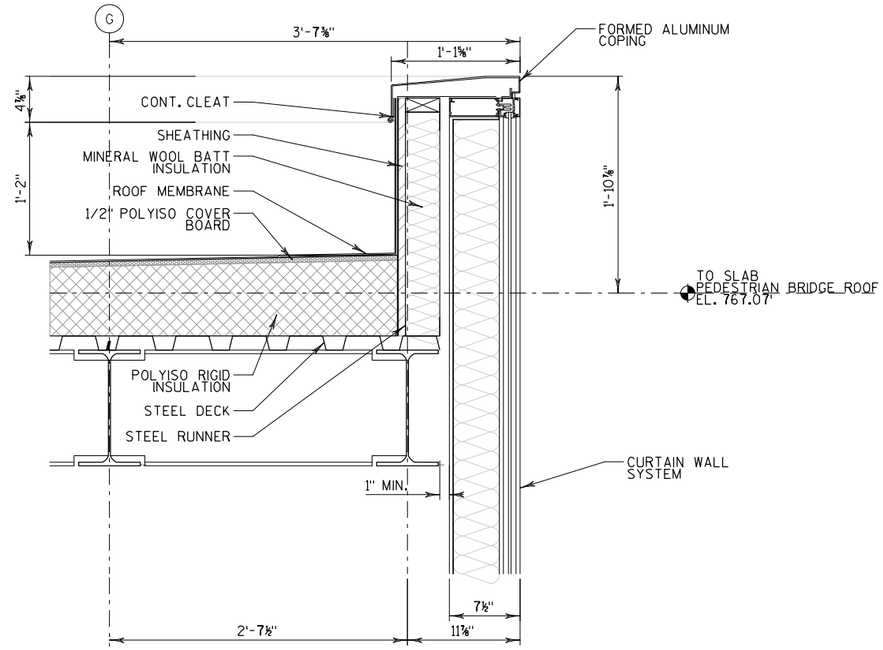
2

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

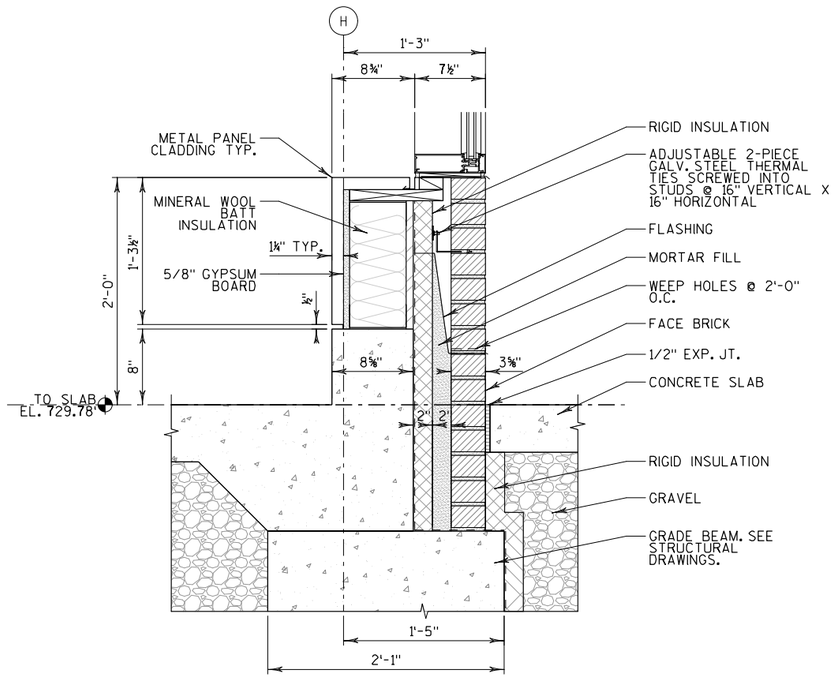
STATE PROJECT NUMBER
1000-57-70



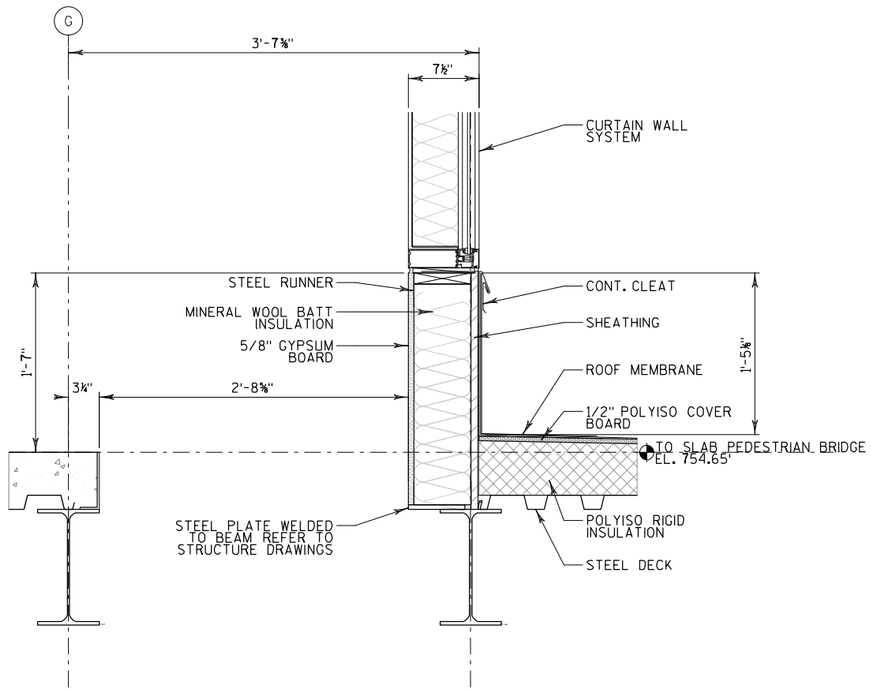
1 A-511 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 A-511 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 A-511 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



4 A-511 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

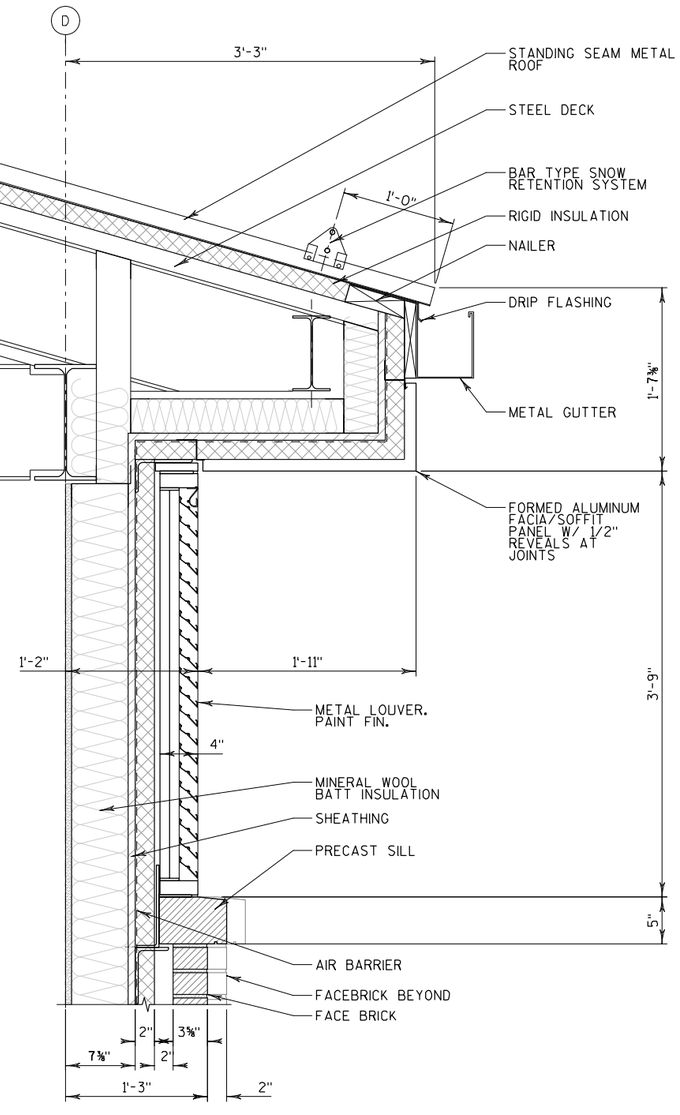
DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

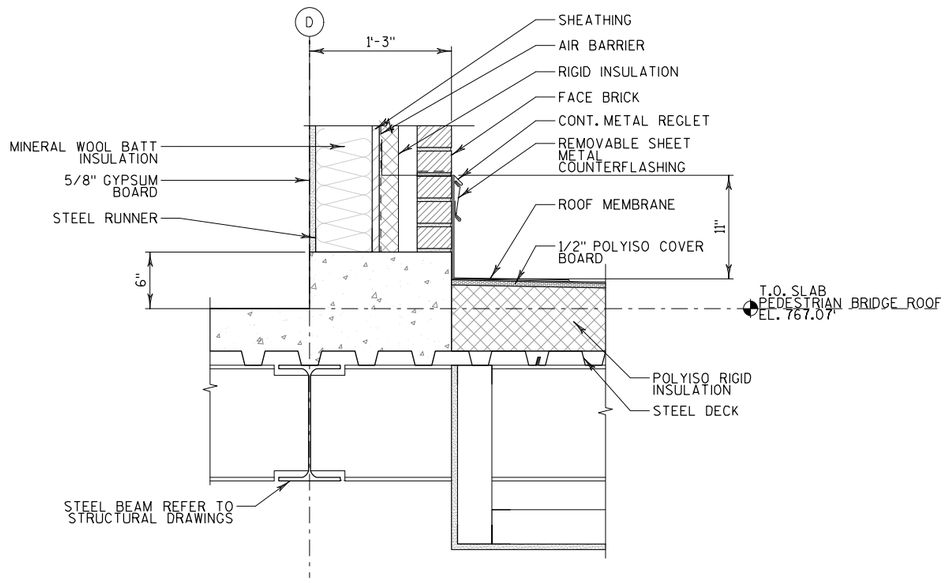
SHEET A-511
160

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

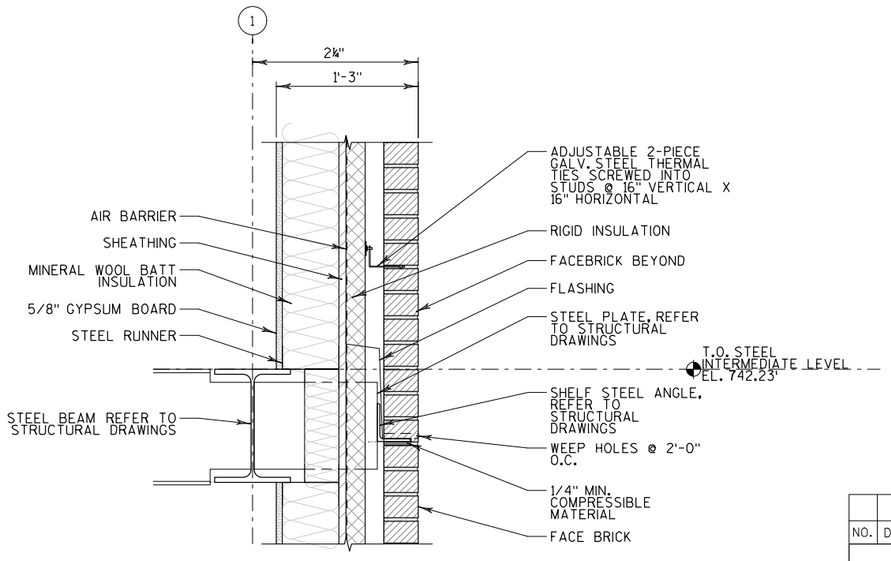
STATE PROJECT NUMBER
1000-57-70



1 A-512 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 A-512 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 A-512 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

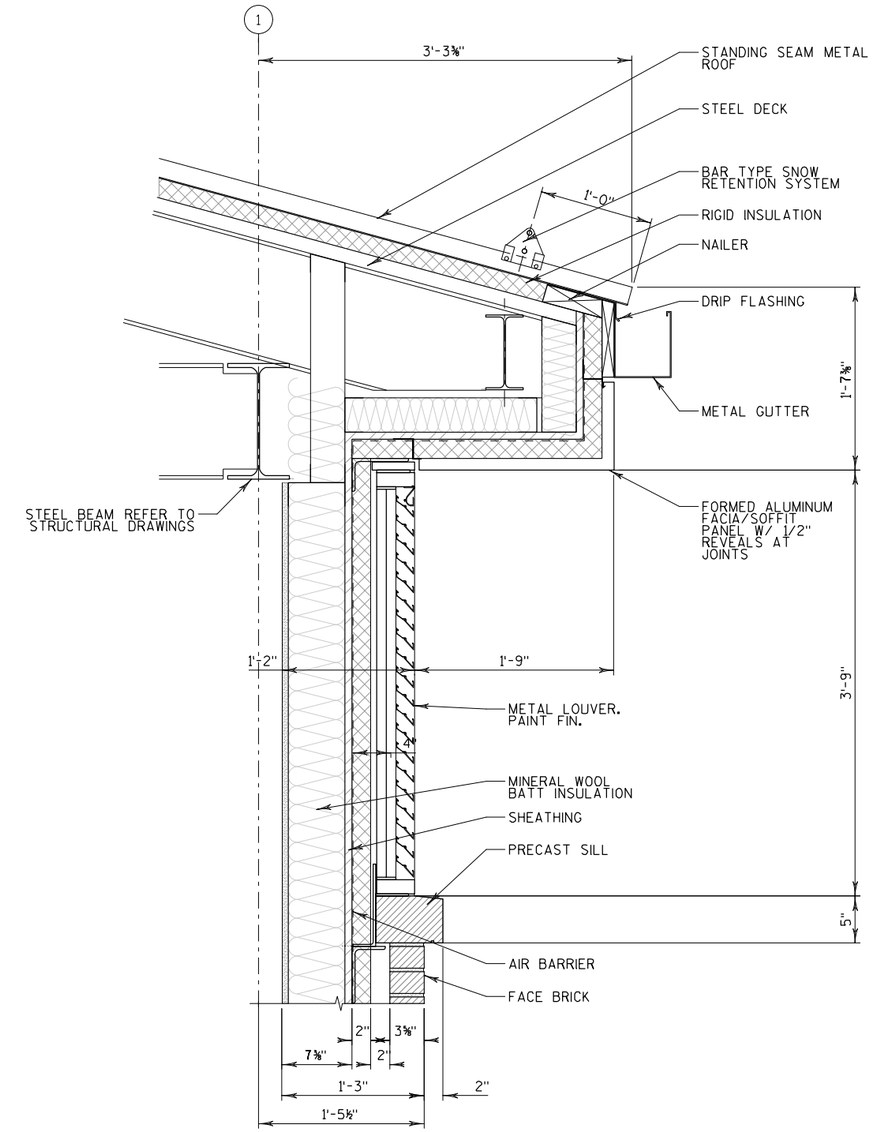
SHEET A-512
161

2

2

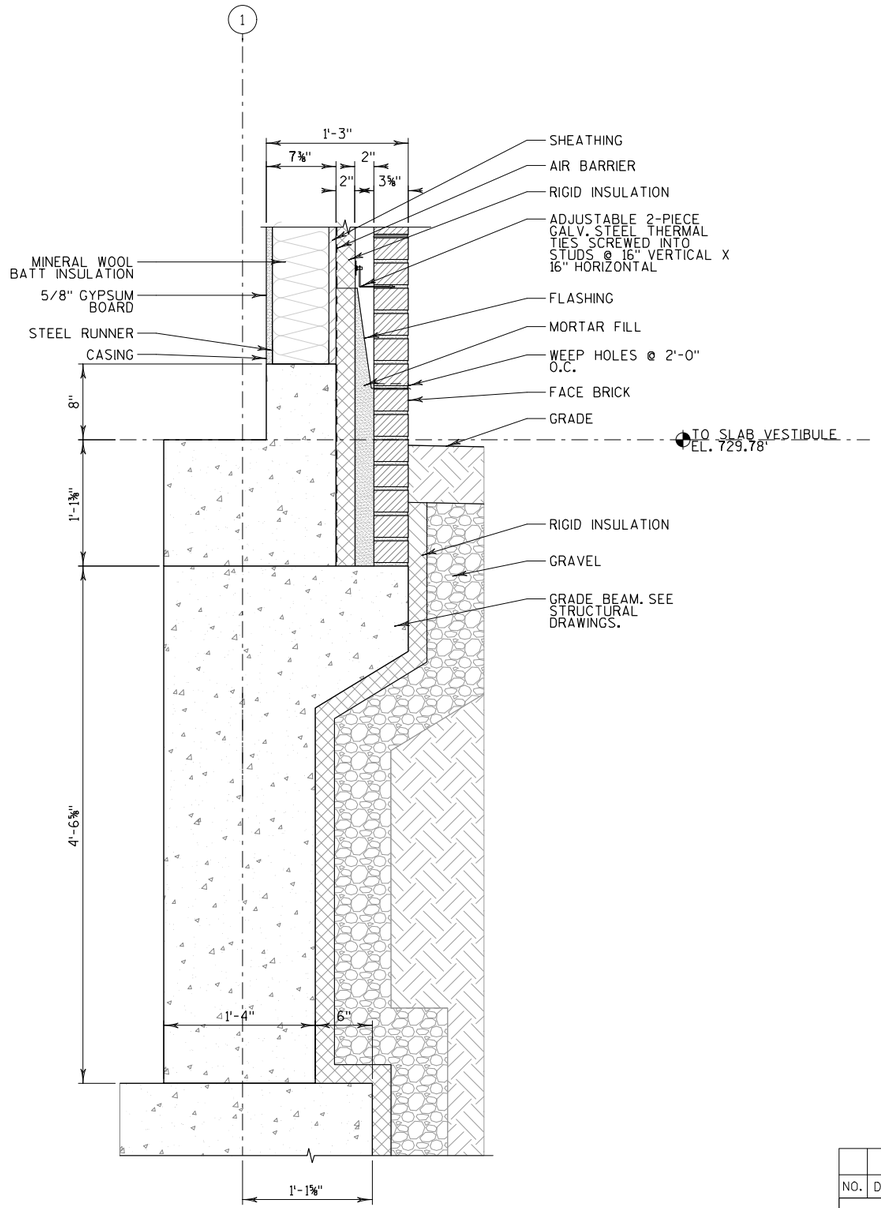
STATE PROJECT NUMBER

1000-57-70



1 A-513 WALL SECTION - DETAIL

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



2 A-513 WALL SECTION - DETAIL

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-513

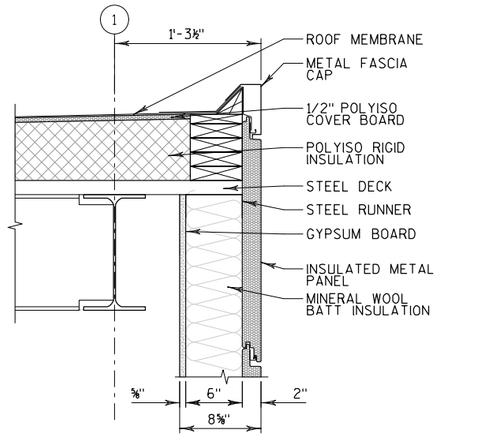
162

2

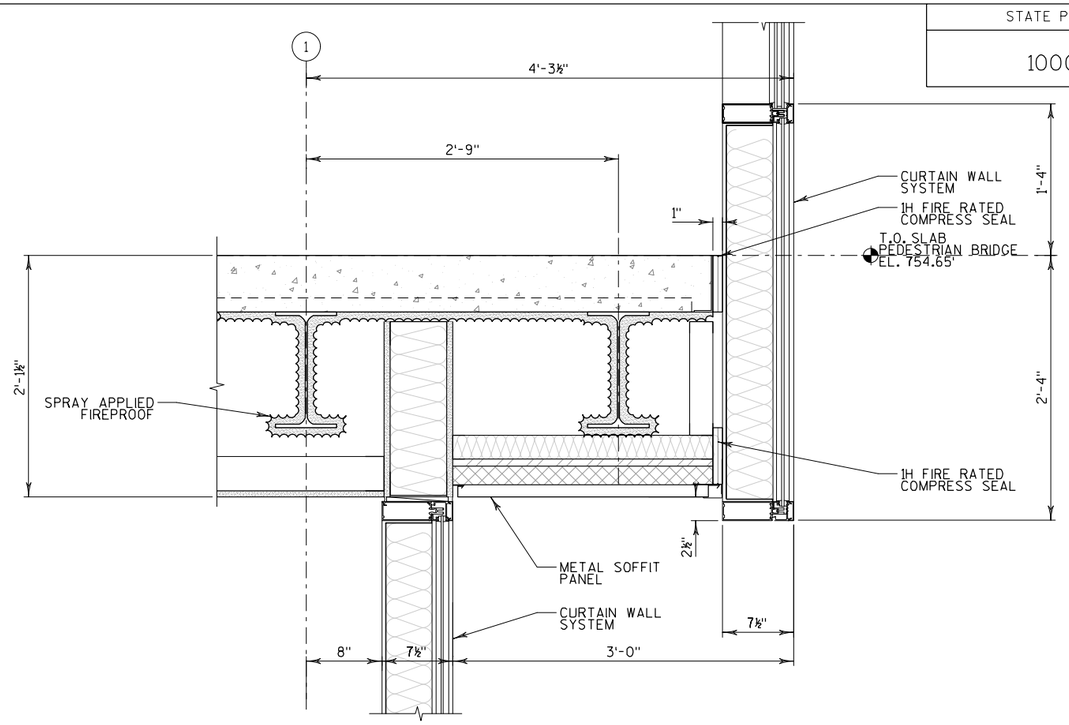
2

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

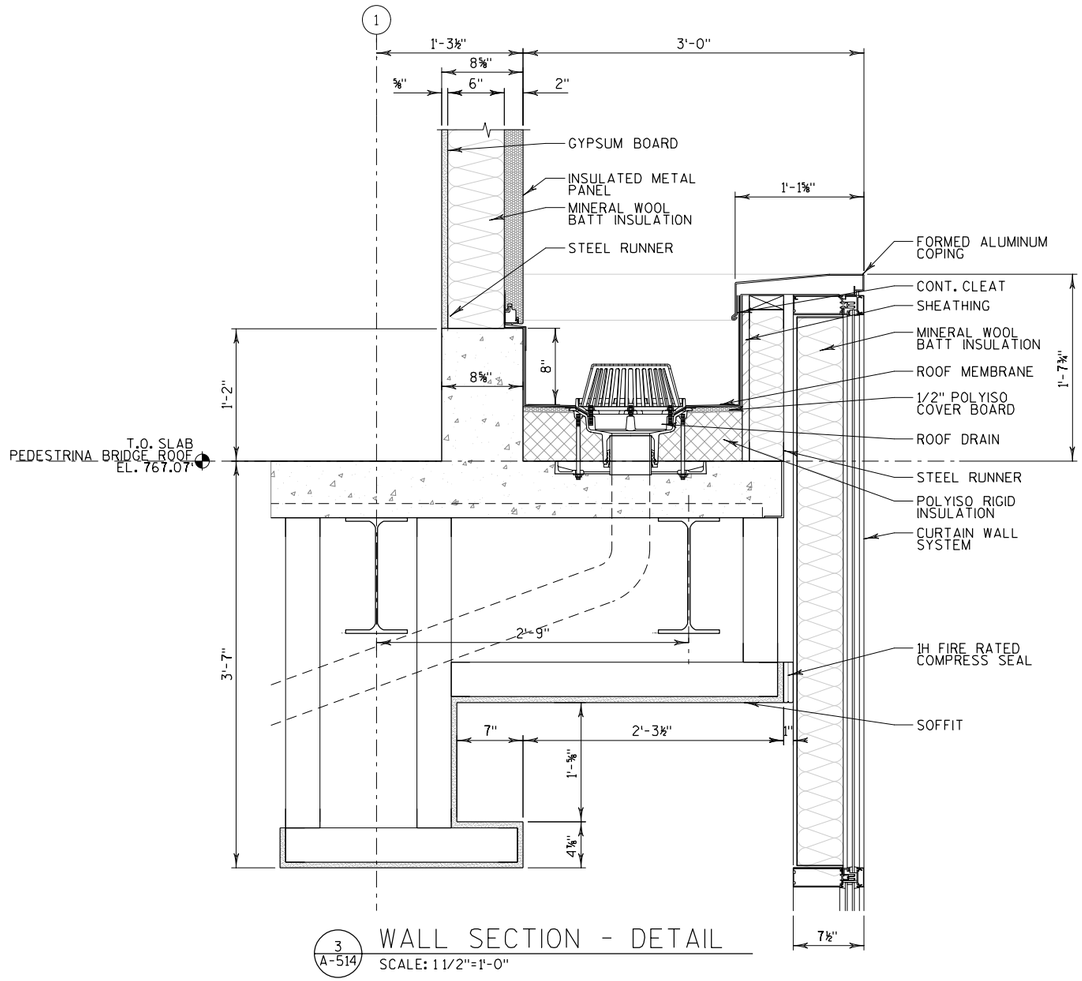
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD



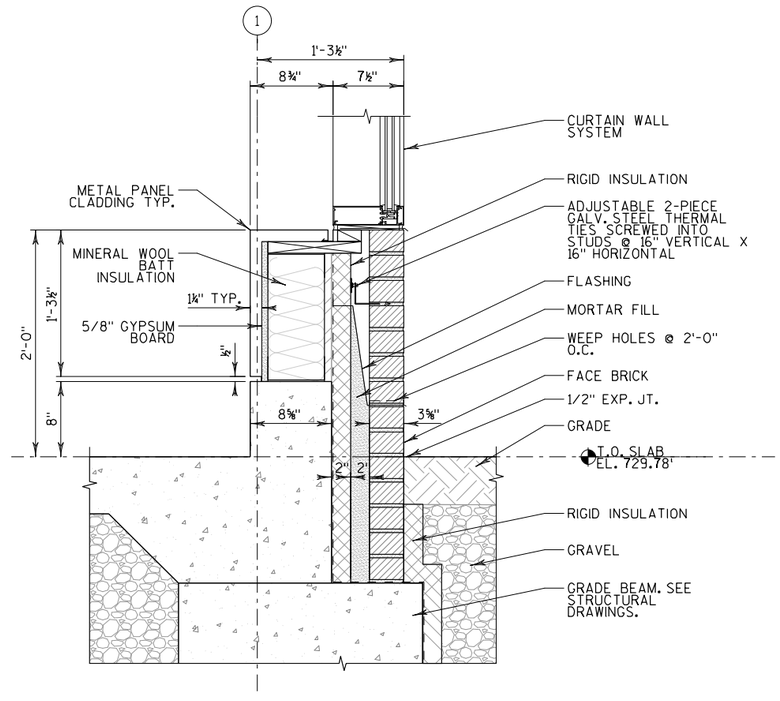
1 / A-514 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 / A-514 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 / A-514 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



4 / A-514 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

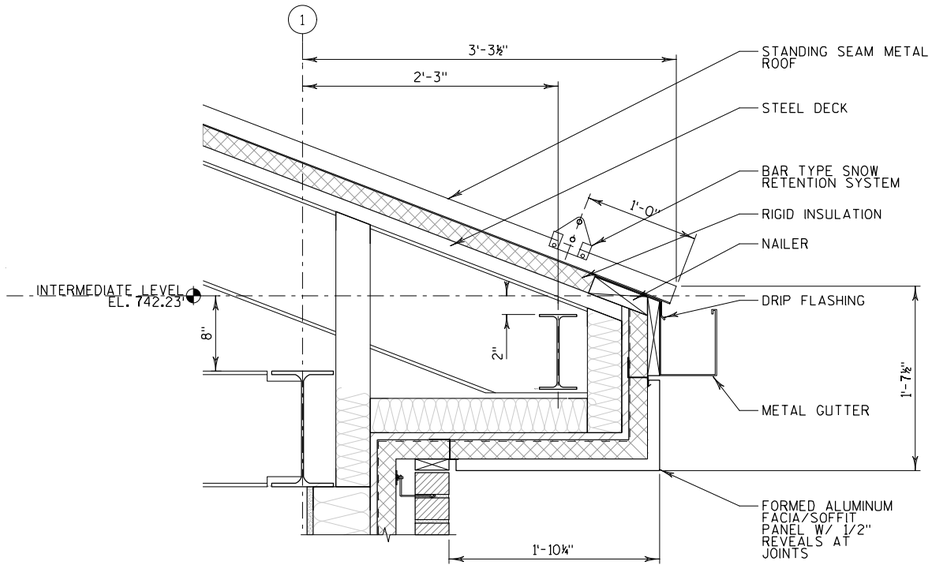
SHEET A-514
163

2

2

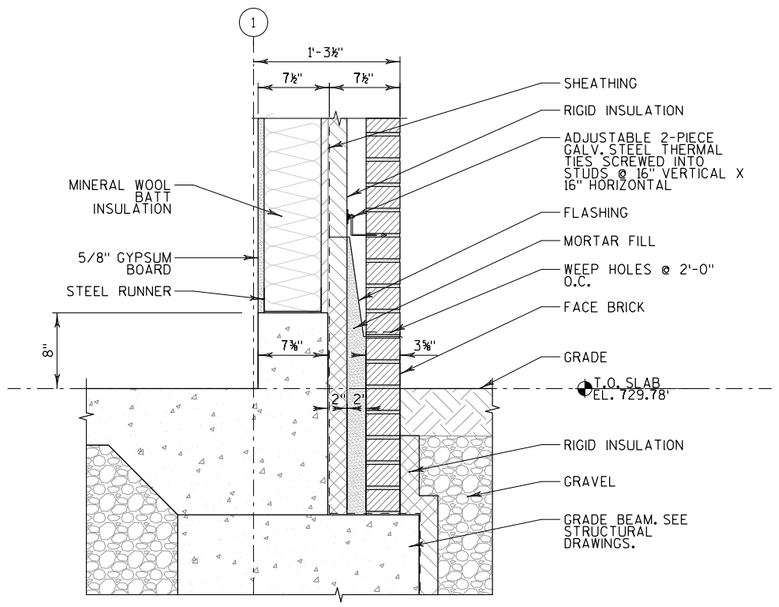
STATE PROJECT NUMBER

1000-57-70



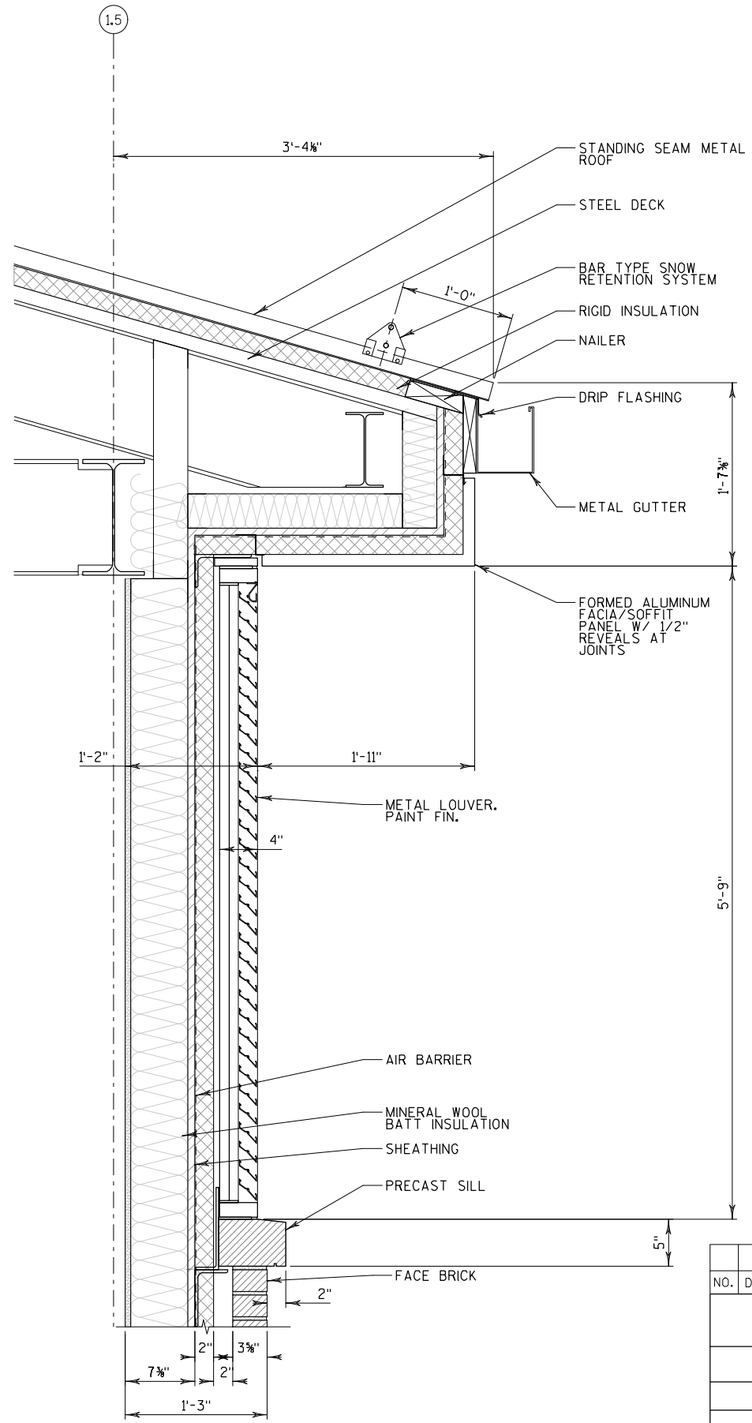
1 A-515 WALL SECTION - DETAIL

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



2 A-515 WALL SECTION - DETAIL

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



3 A-515 WALL SECTION - DETAIL

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

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

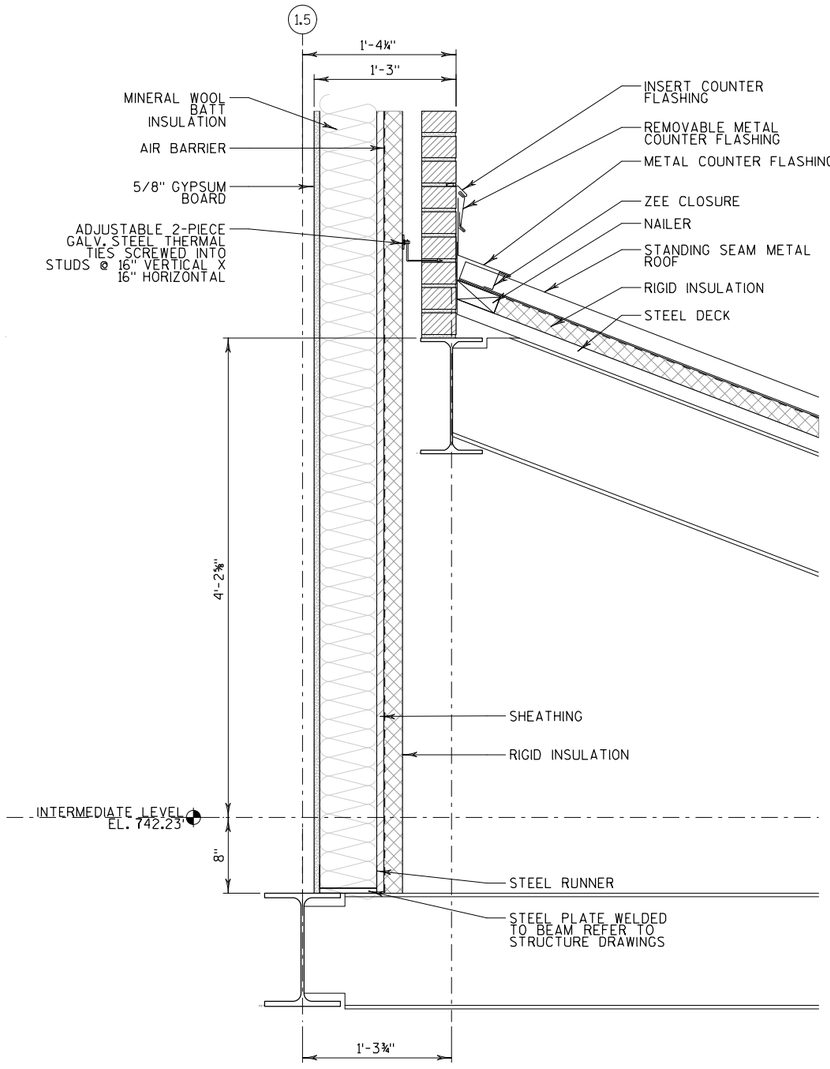
DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-515
164

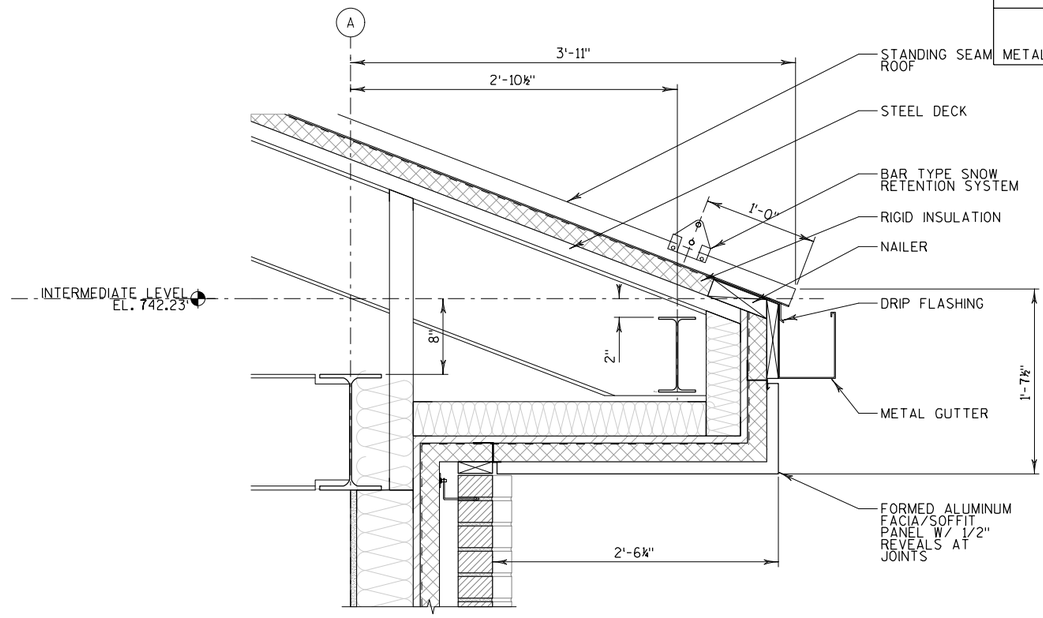
STATE PROJECT NUMBER

1000-57-70



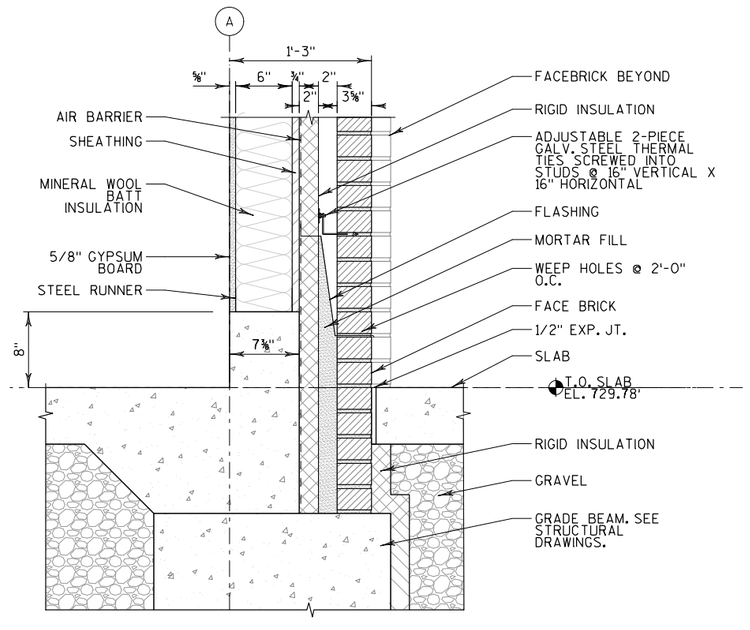
1 A-516 WALL SECTION - DETAIL

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



2 A-516 WALL SECTION - DETAIL

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



3 A-516 WALL SECTION - DETAIL

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-516
165

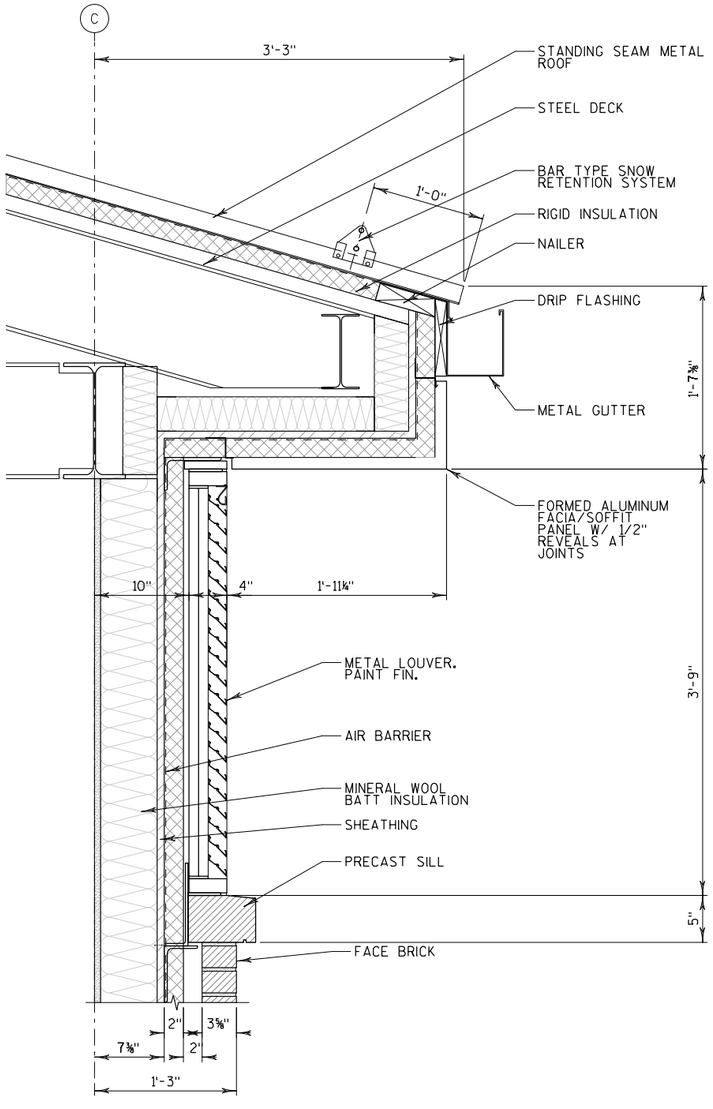
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....desgnfile....$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD

2

2

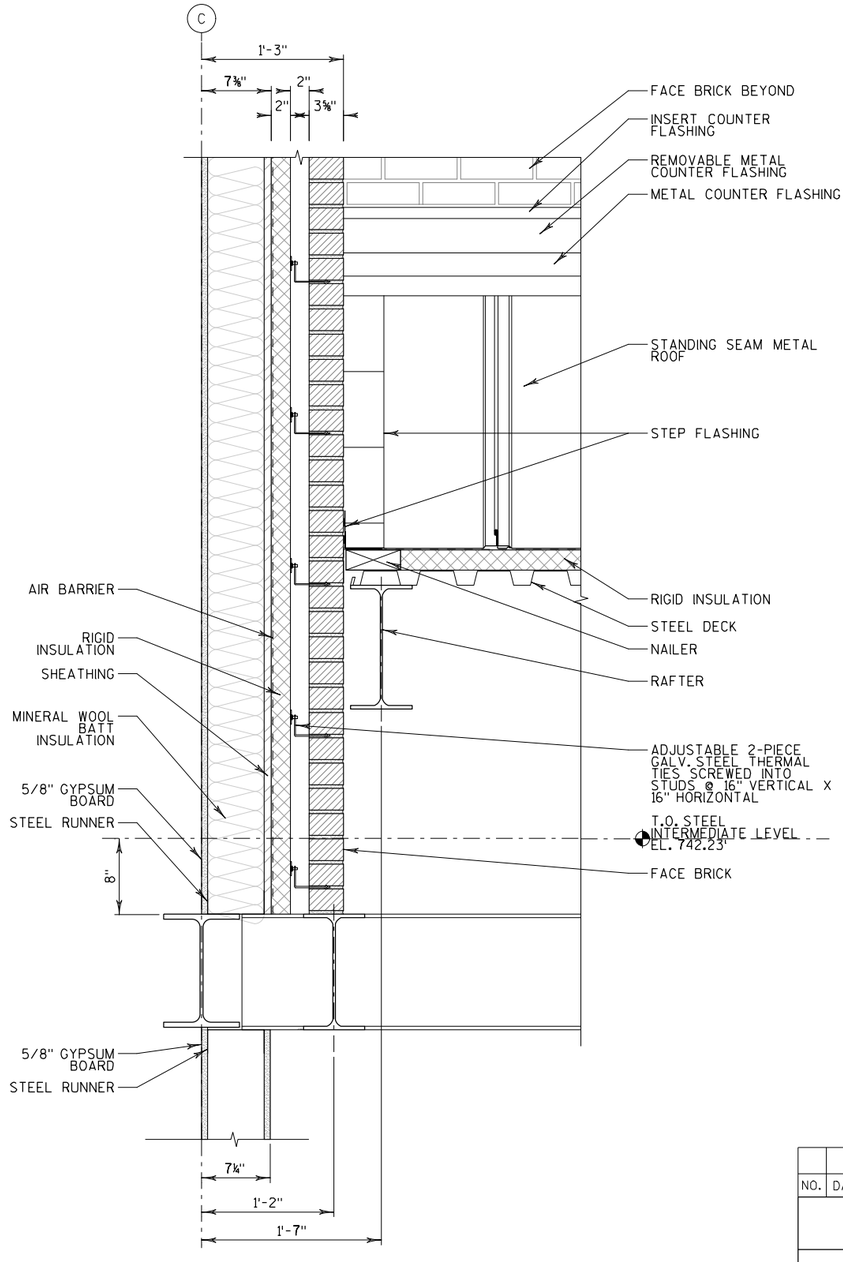
STATE PROJECT NUMBER

1000-57-70



1 A-517 WALL SECTION - DETAIL

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



2 A-517 WALL SECTION - DETAIL

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-517

166

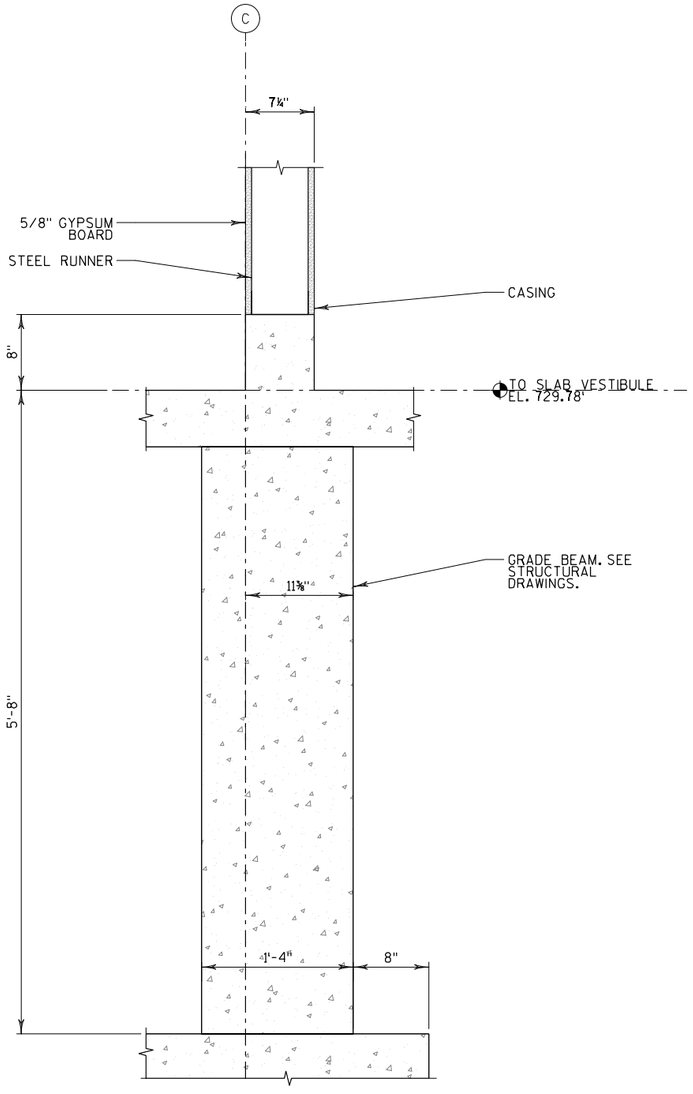
2

2

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

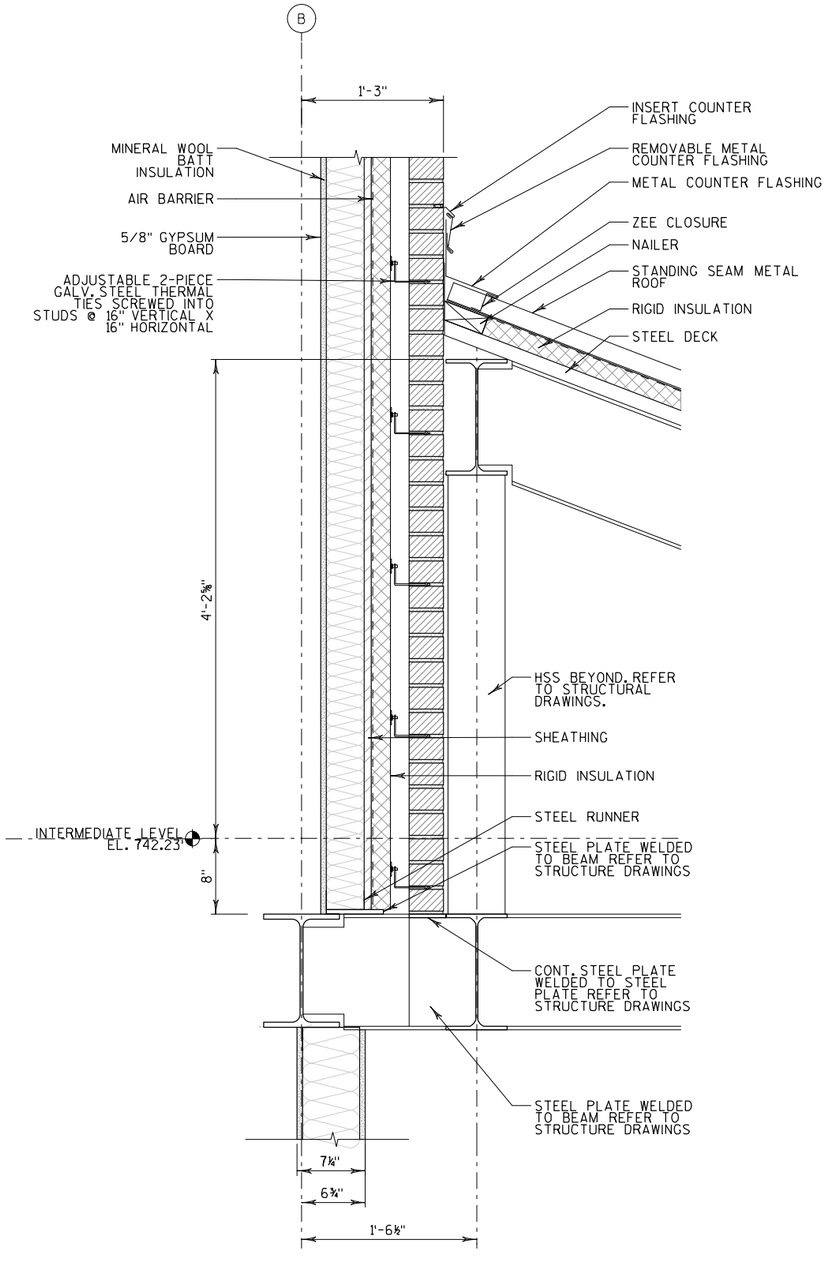
STATE PROJECT NUMBER

1000-57-70



1 A-518 WALL SECTION - DETAIL

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



2 A-518 WALL SECTION - DETAIL

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

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

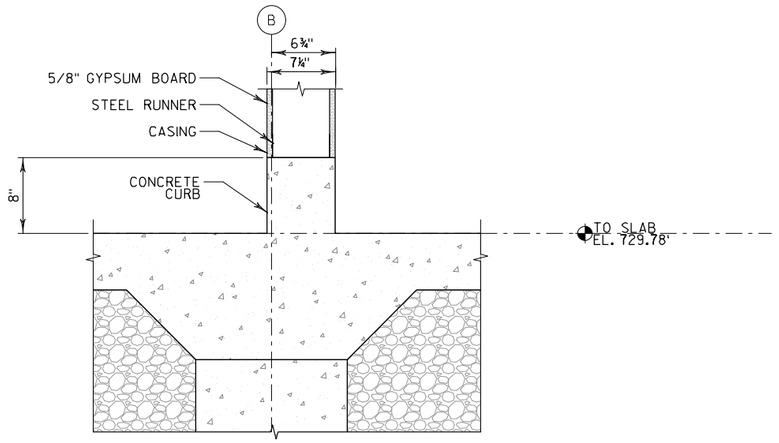
SHEET A-518

167

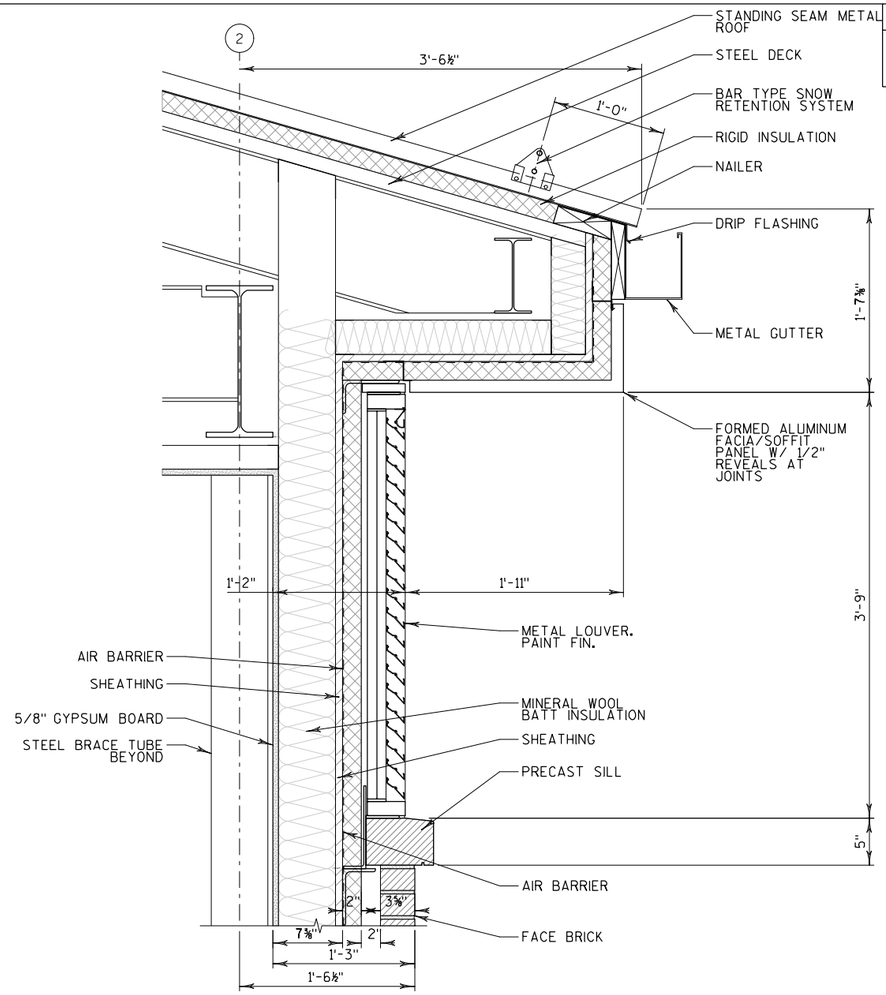
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

STATE PROJECT NUMBER

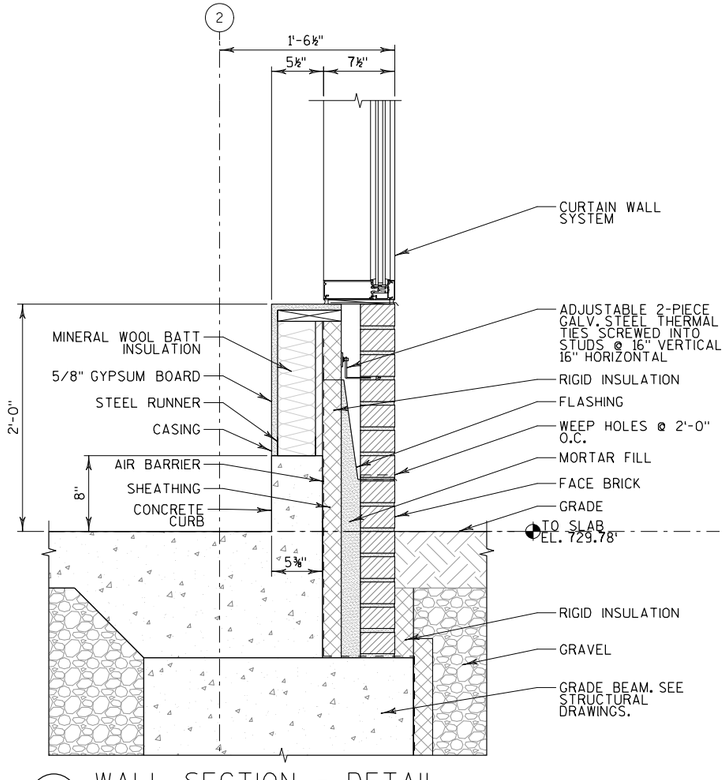
1000-57-70



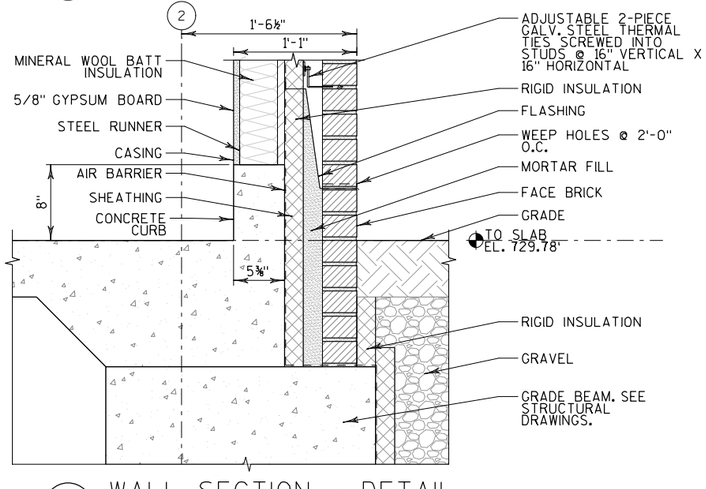
1 / A-519 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 / A-519 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 / A-519 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



4 / A-519 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

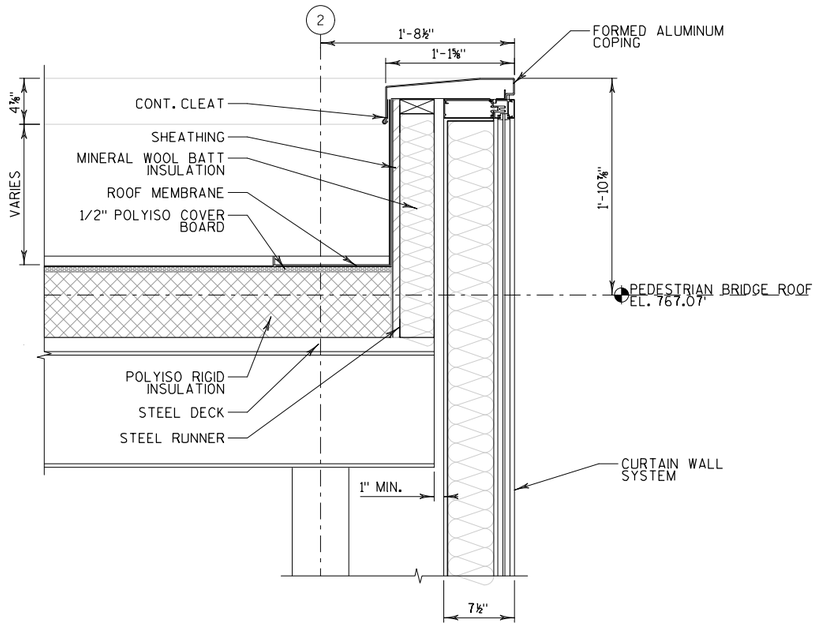
WALL SECTIONS DETAILS

SHEET A-519

2

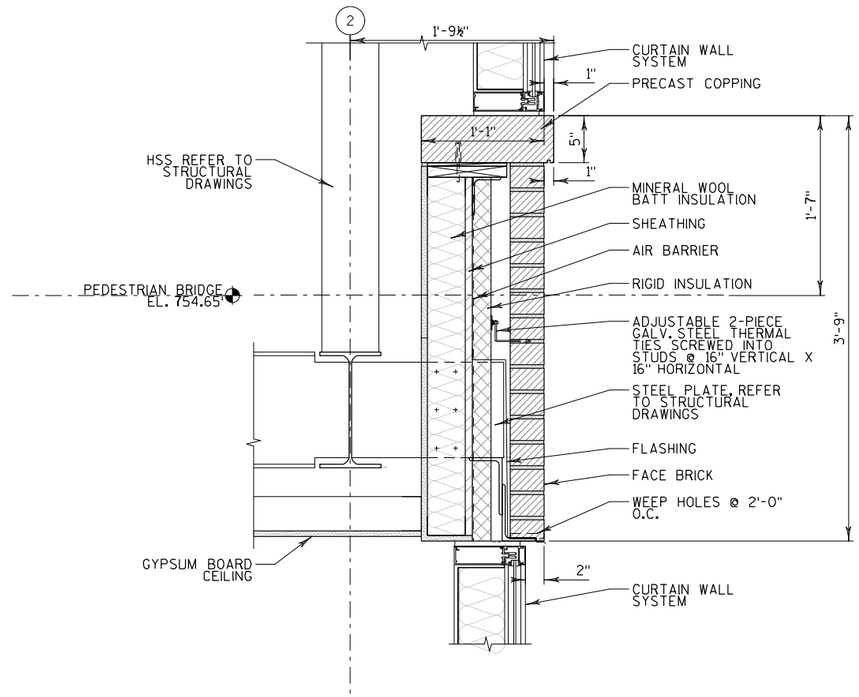
STATE PROJECT NUMBER

1000-57-70



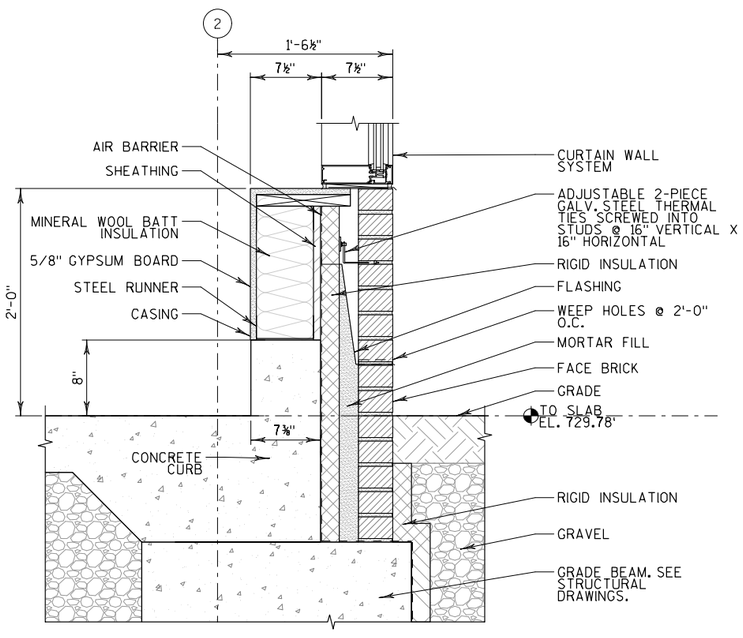
1 A-520 WALL SECTION - DETAIL

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



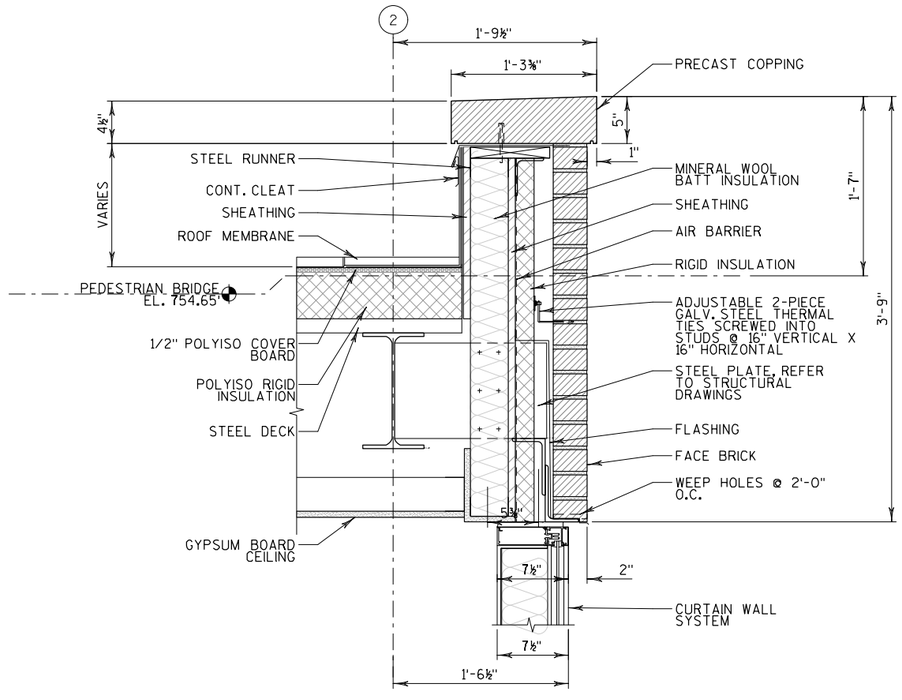
2 A-520 WALL SECTION - DETAIL

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



3 A-520 WALL SECTION - DETAIL

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



4 A-520 WALL SECTION - DETAIL

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-520

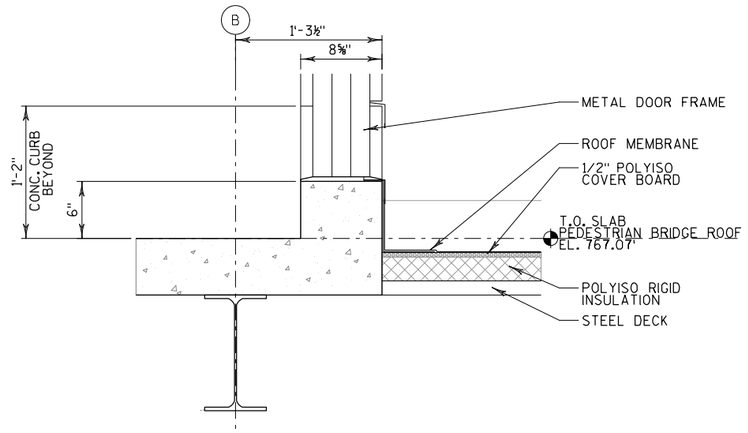
169

2

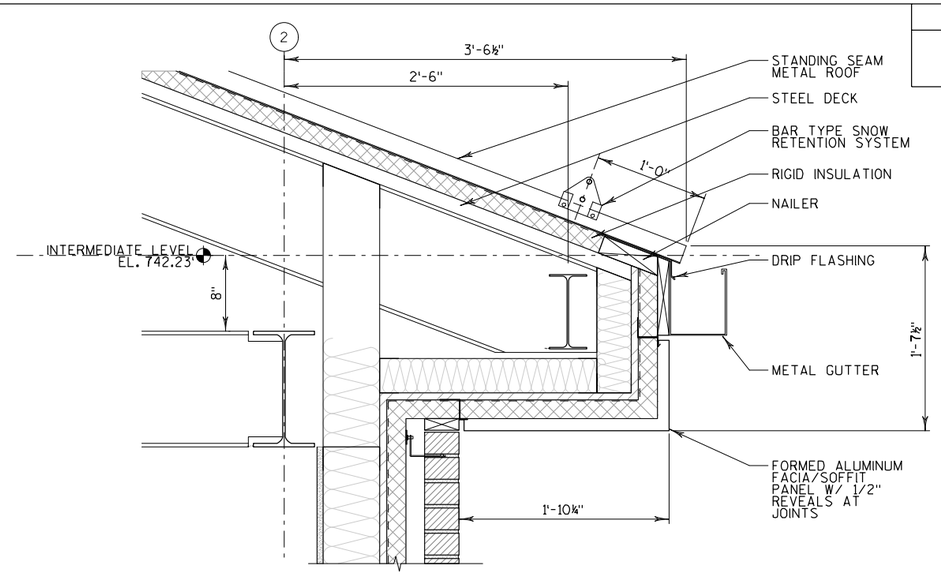
2

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

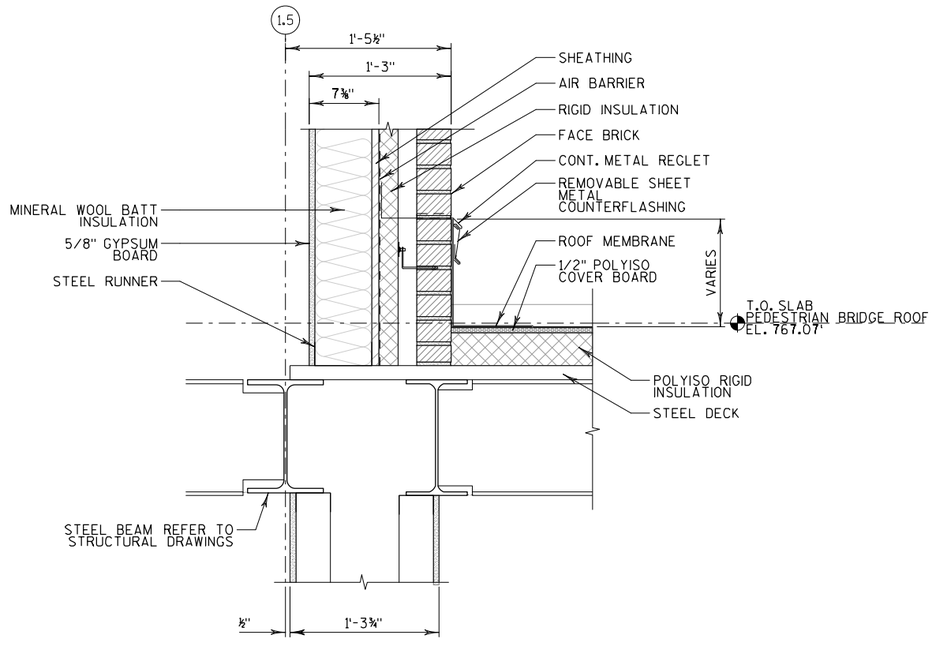
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD



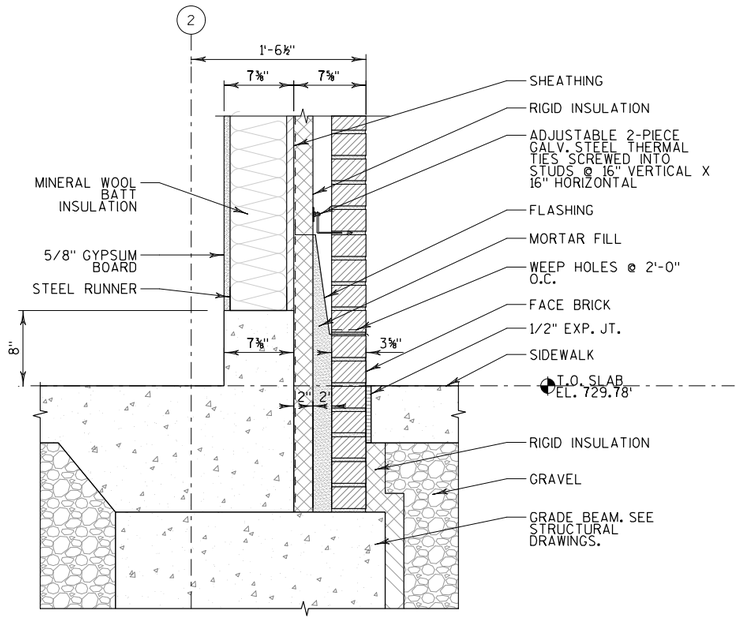
1 A-521 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



2 A-521 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



3 A-521 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"



4 A-521 WALL SECTION - DETAIL
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

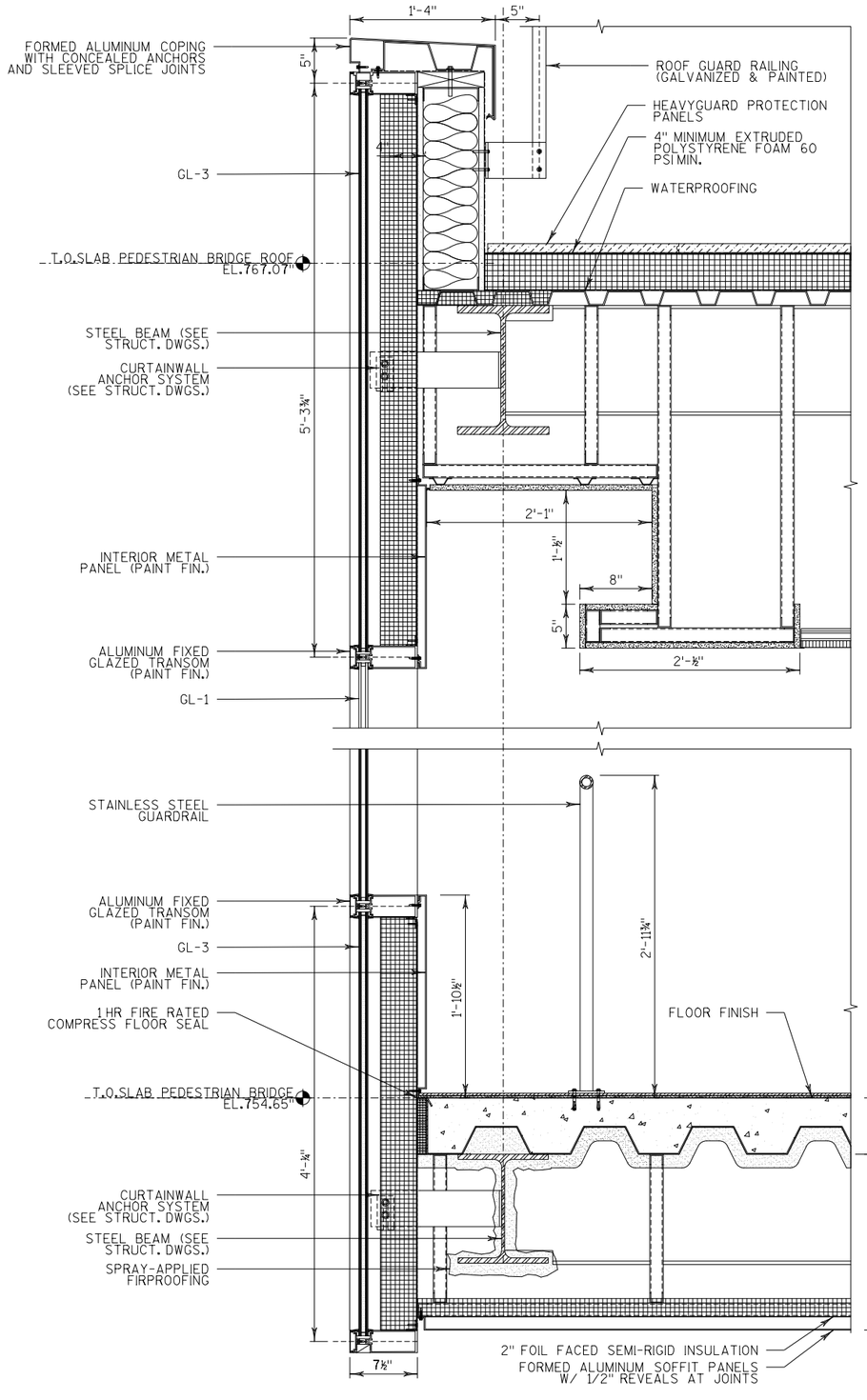
WALL SECTIONS DETAILS

SHEET A-521
170

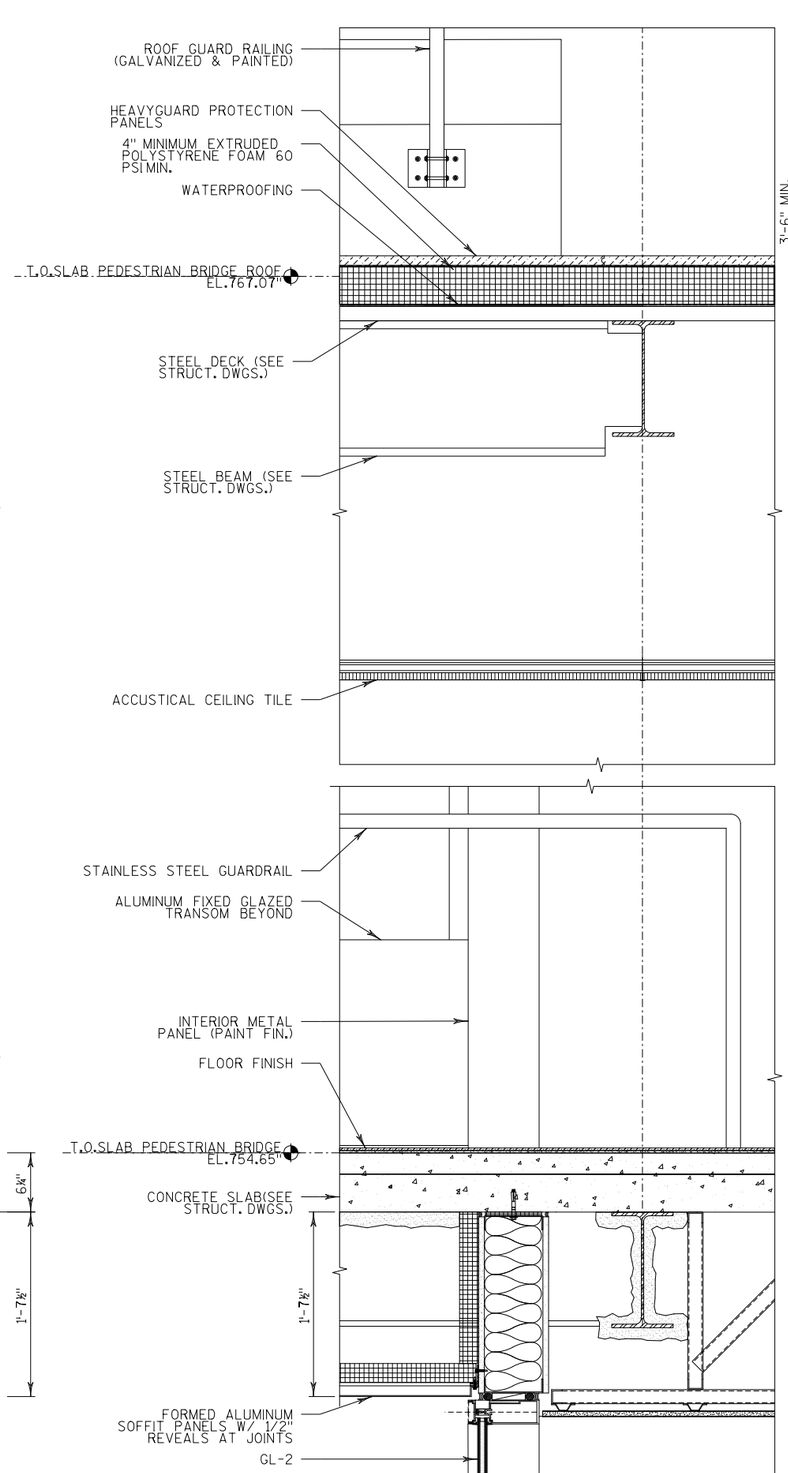
2

2

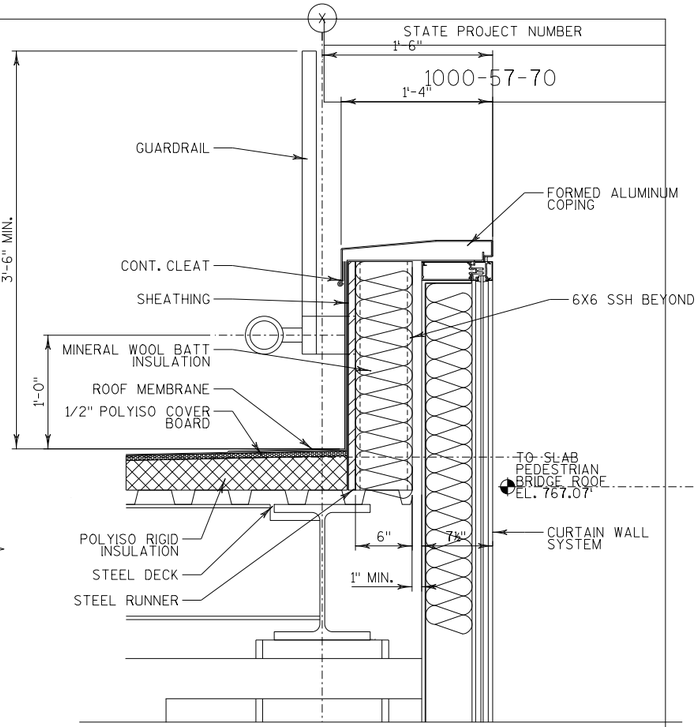
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$



2 A-522 SECTION DETAIL - BRIDGE
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN



1 A-522 SECTION DETAIL - BRIDGE
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN



3 A-522 SECTION DETAIL - BRIDGE
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

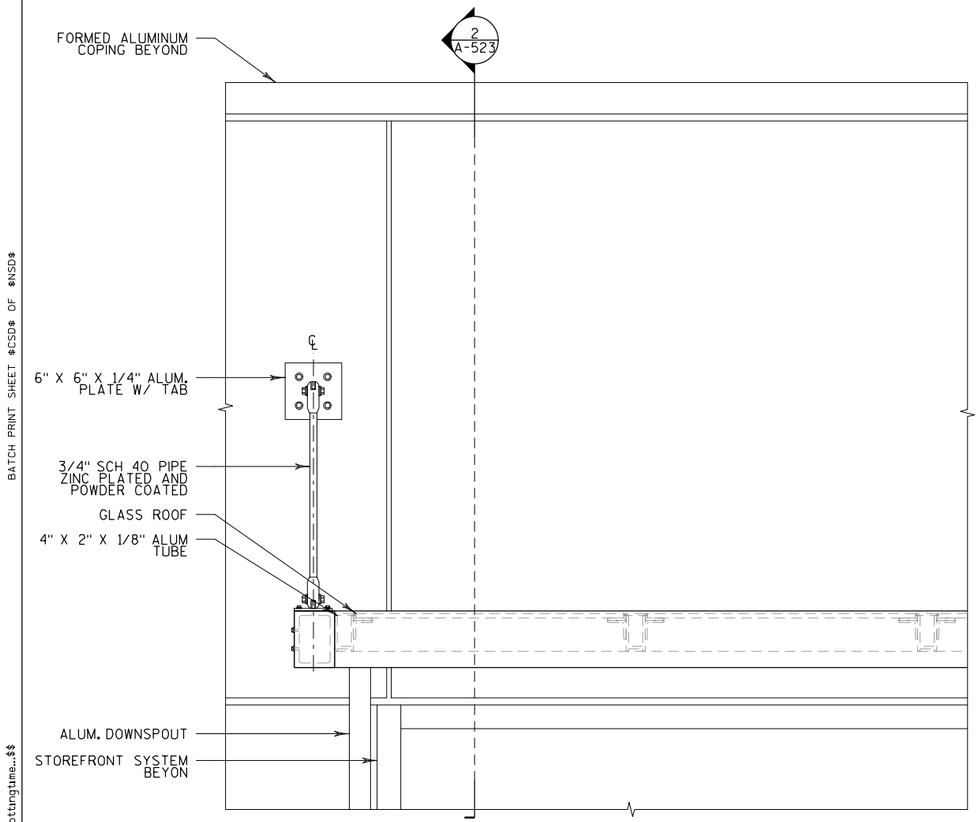
DRAWN BY NA | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-522
171

STATE PROJECT NUMBER

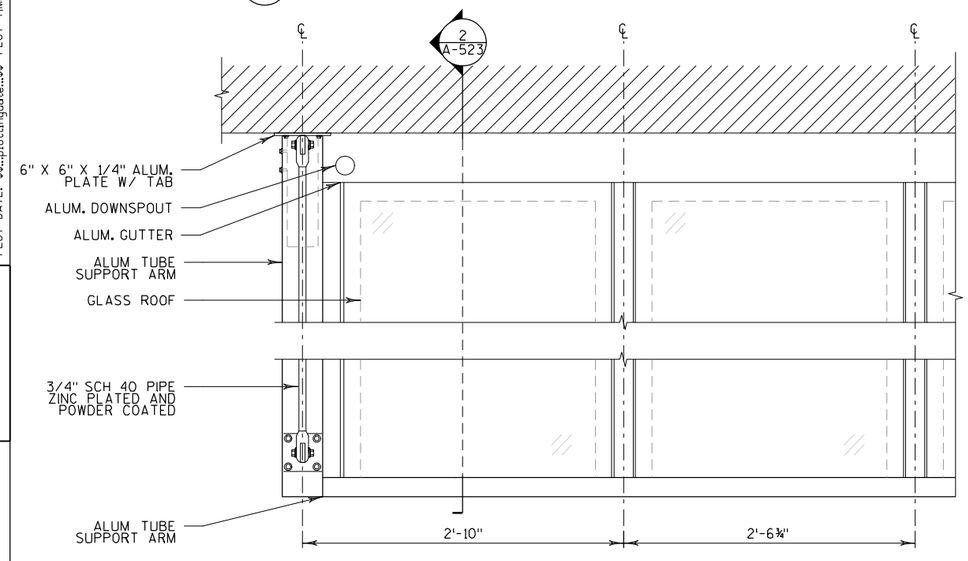
1000-57-70



4 A-523 PARTIAL ELEVATION - CANOPY

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

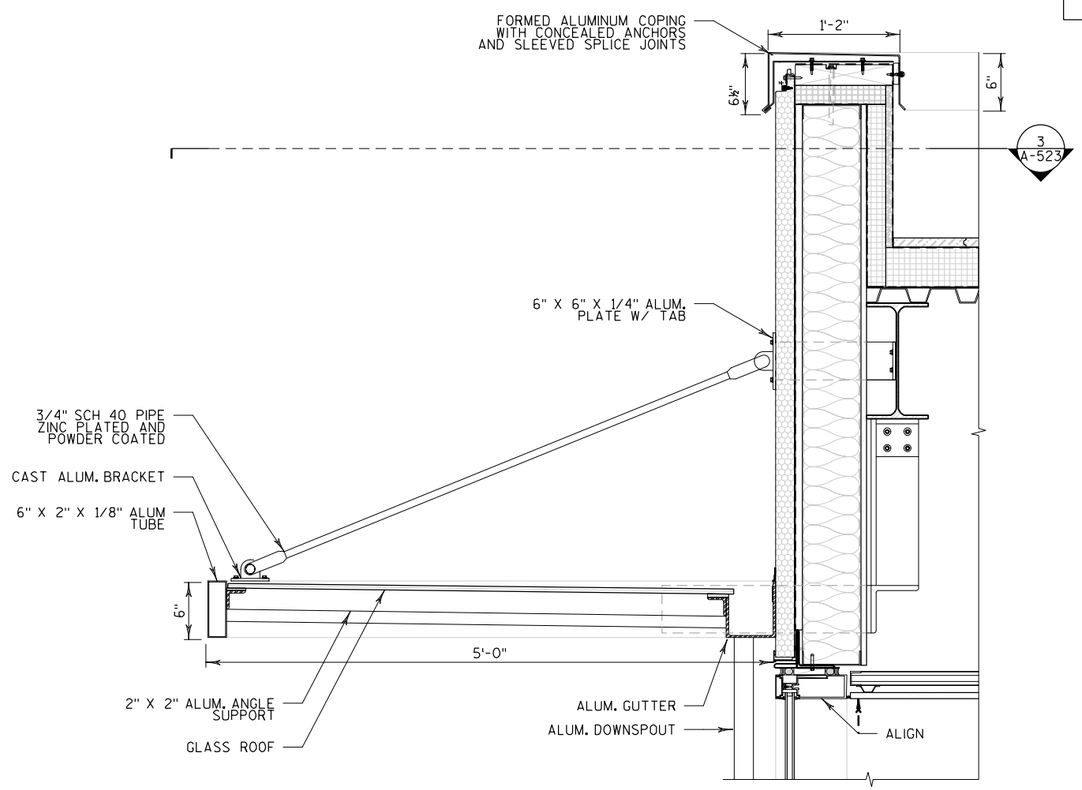
0 4 8 16 IN



3 A-523 PARTIAL PLAN - CANOPY

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

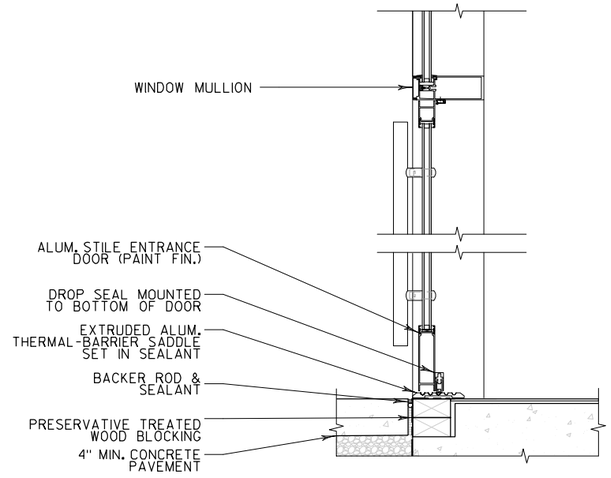
0 4 8 16 IN



2 A-523 WALL SECTION - ENTRY CANOPY

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

0 4 8 16 IN



1 A-523 SECTION DETAIL - ENTRY DOOR

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

0 4 8 16 IN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

WALL SECTIONS DETAILS

SHEET A-523

172

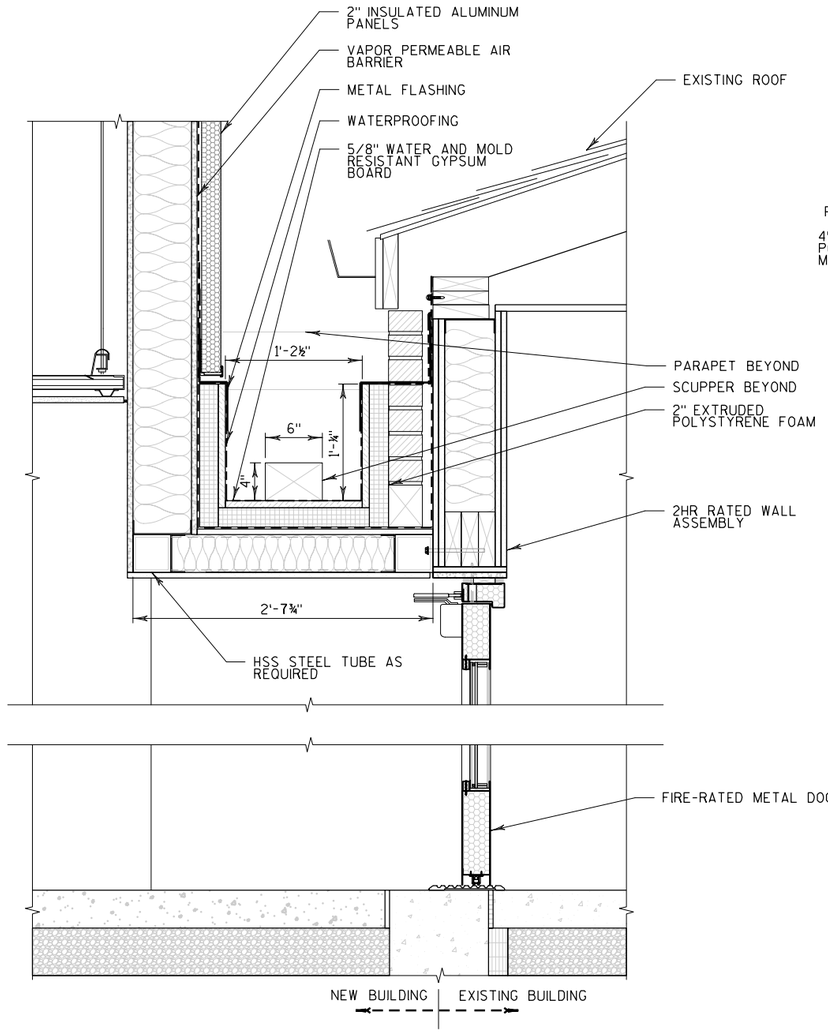
2

2

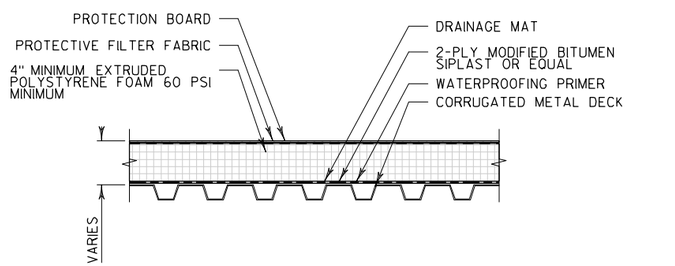
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$
PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER
1000-57-70

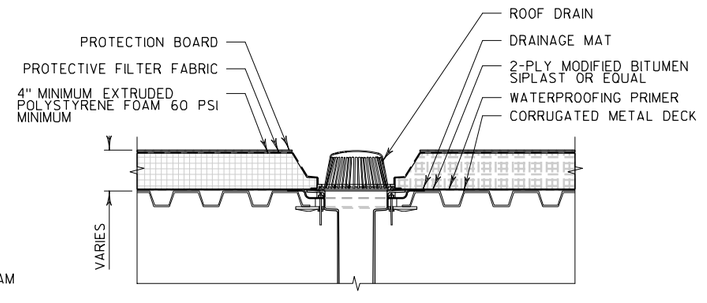
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$..printerdriver...$$
PEN TABLE: $$..pentable...$$
FILE NAME: $$....designfile....$$
PLOT DATE: $$..plottingdate...$$ PLOT TIME: $$..plottingtime...$$



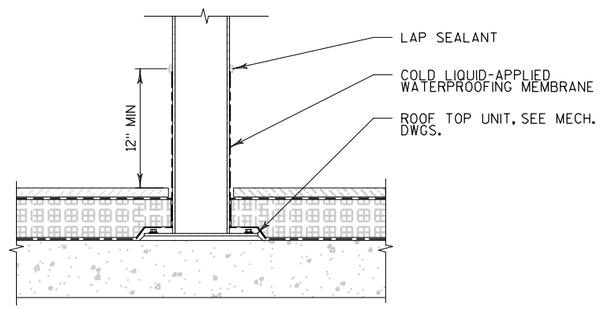
6 A-524 ROOF DETAIL
SCALE: 1 1/2"=1'-0"



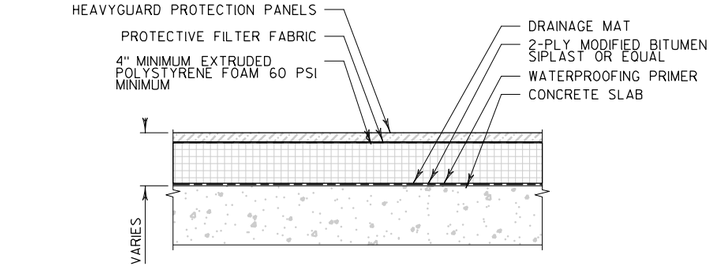
5 A-524 ROOF DETAIL-MTL. DECK
SCALE: 1 1/2"=1'-0" (RF-01)
0 4 8 16 IN



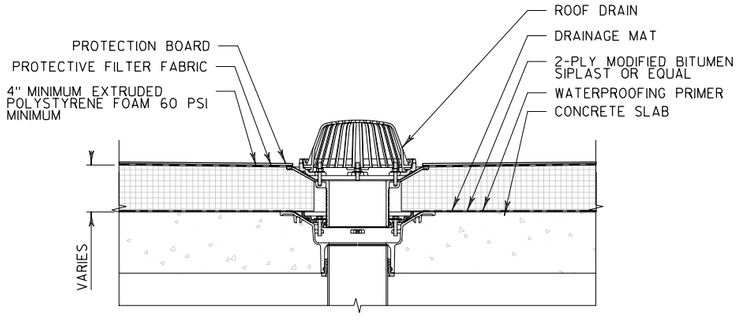
4 A-524 ROOF DRAIN TYPES, TYP.
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN



3 A-524 POST ATTACHEMENT DETAIL, TYP.
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN



2 A-524 ROOF DETAIL-WALKING SURFACE
SCALE: 1 1/2"=1'-0" (RF-02)
0 4 8 16 IN



1 A-524 ROOF DRAIN TYPES, TYP.
SCALE: 1 1/2"=1'-0"
0 4 8 16 IN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

ROOF DETAILS

SHEET A-524
173

2

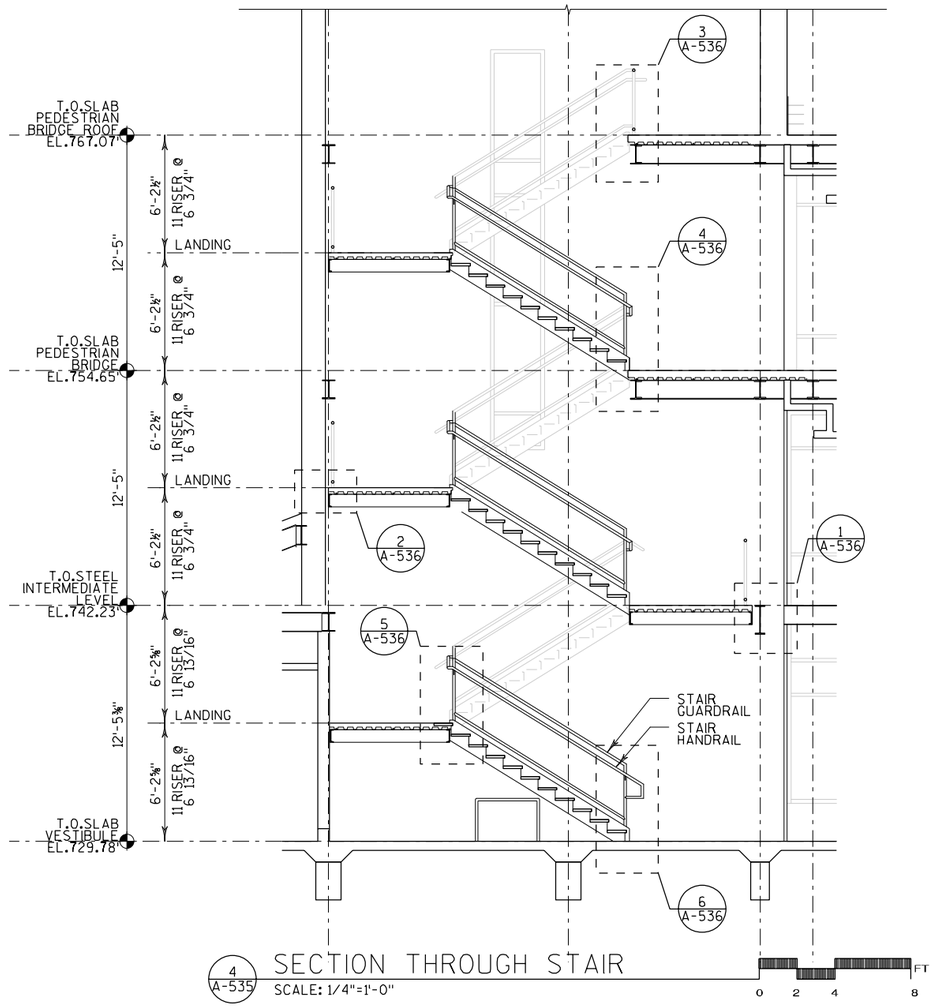
2

STATE PROJECT NUMBER

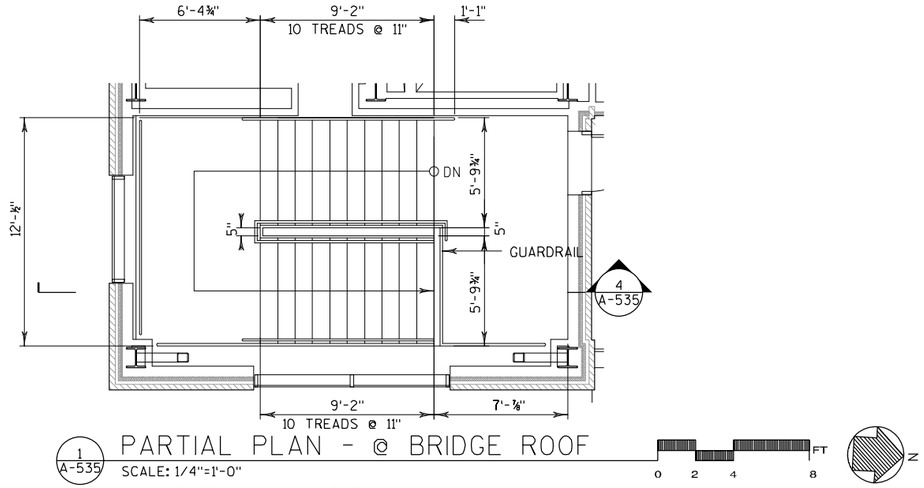
1000-57-70

BATCH PRINT SHEET CSD OF NSD

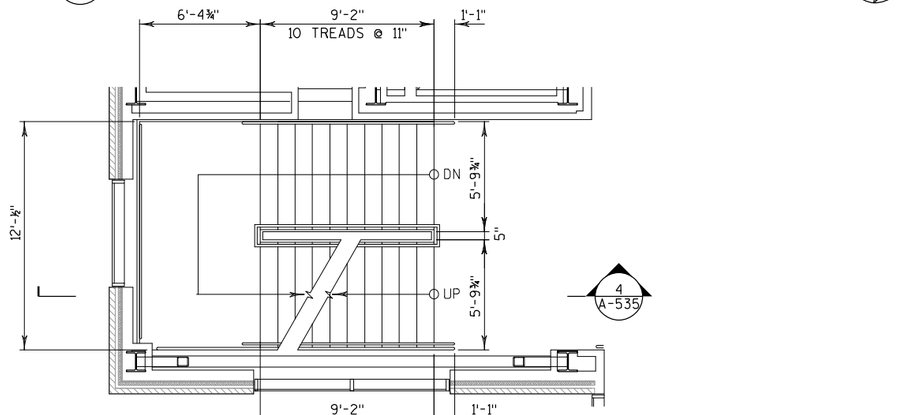
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$



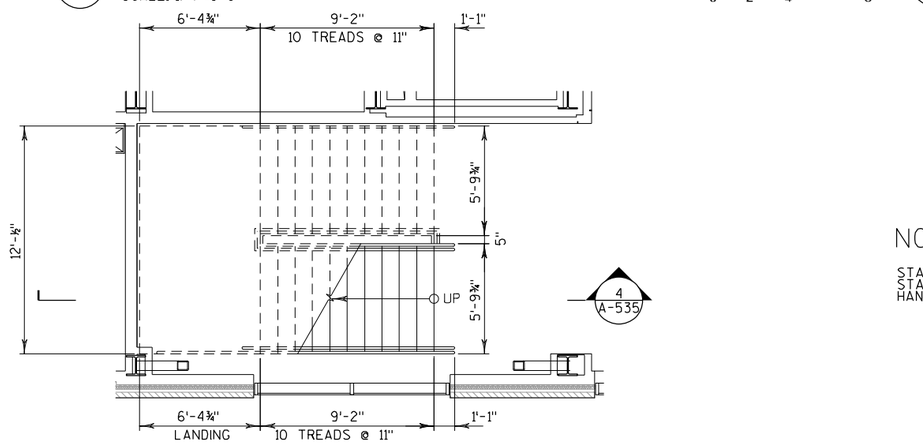
4/A-535 SECTION THROUGH STAIR
SCALE: 1/4"=1'-0"



1/A-535 PARTIAL PLAN - @ BRIDGE ROOF
SCALE: 1/4"=1'-0"



2/A-535 PARTIAL PLAN - @ PEDESTRIAN BRIDGE
SCALE: 1/4"=1'-0"



1/A-535 PARTIAL PLAN - @ GROUND FLOOR
SCALE: 1/4"=1'-0"

NOTE:

STAIR 2 PLANS AND SECTION SHOWN.
STAIR 1 PLANS AND SECTION ARE OPPOSITE HAND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

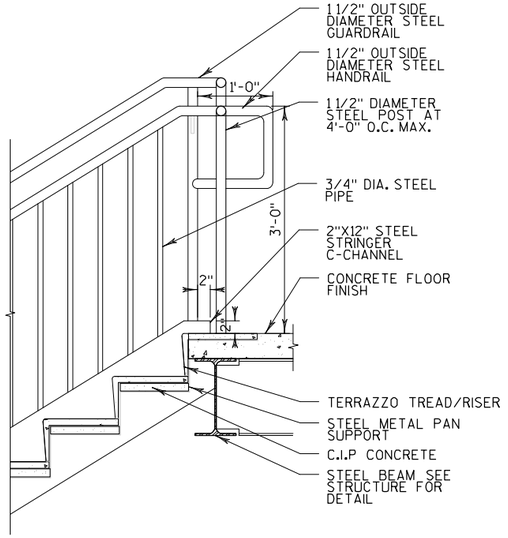
STAIR PLANS, AND SECTIONS

SHEET A-535
174

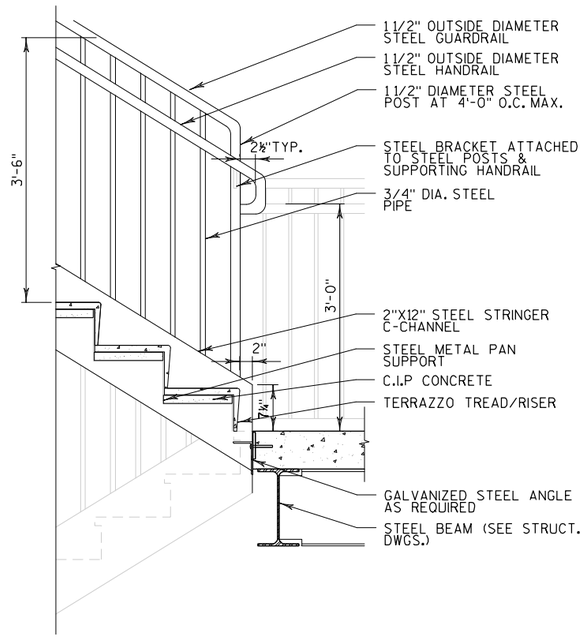
2

STATE PROJECT NUMBER

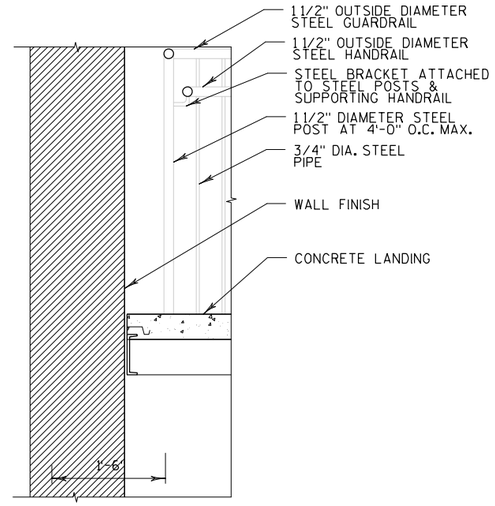
1000-57-70



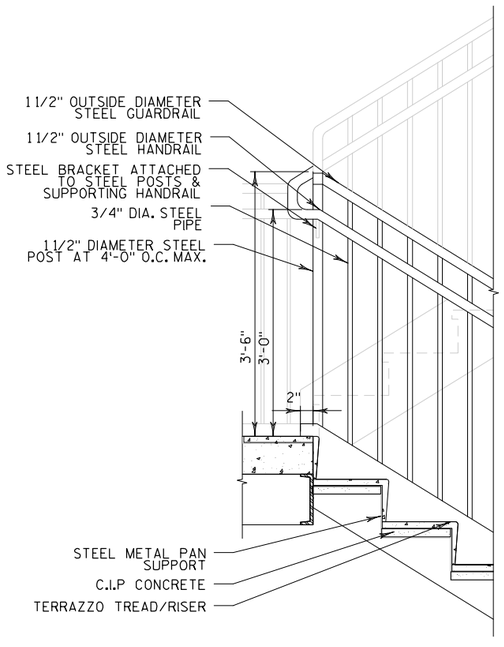
3 A-536 SECTION DETAIL
SCALE: 1"=1'-0"
0 .5 1 2 FT



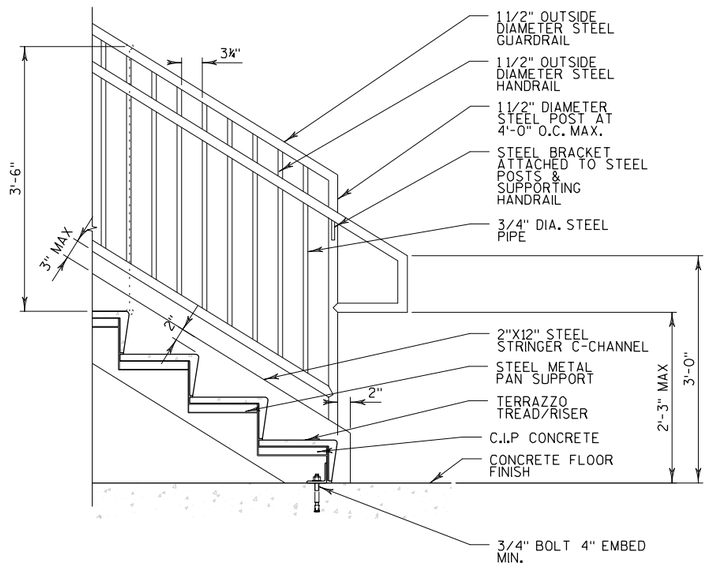
4 A-536 SECTION DETAIL
SCALE: 1"=1'-0"
0 .5 1 2 FT



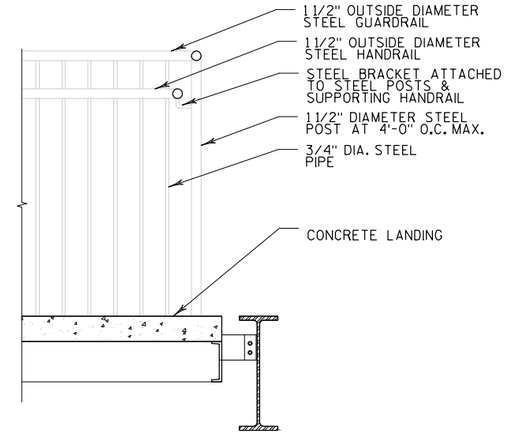
2 A-536 SECTION DETAIL
SCALE: 3"=1'-0"
0 2 4 8 IN



5 A-536 SECTION DETAIL
SCALE: 1"=1'-0"
0 .5 1 2 FT



6 A-536 SECTION DETAIL
SCALE: 1"=1'-0"
0 .5 1 2 FT



1 A-536 SECTION DETAIL
SCALE: 3"=1'-0"
0 2 4 8 IN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

STAIR PLAN, SECTION AND DETAILS

SHEET A-536
175

2

2

BATCH PRINT SHEET CSD OF NSD

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...ploturgtime...$$
PLOT DATE: $$...ploturgdate...$$

STATE PROJECT NUMBER

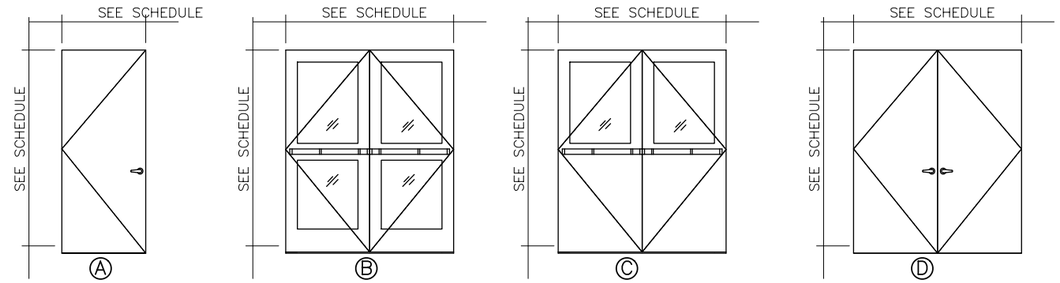
1000-57-70

DOOR SCHEDULE

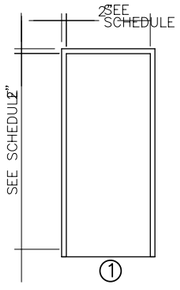
NO.	DOOR TYPE	DOOR SIZE WIDTH	DOOR SIZE HT	DOOR SIZE THK	DOOR MATERIAL	DOOR FINISH	HARDWARE SET	FIRE RATING	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAILS JAMB	DETAILS HEAD	DETAILS SILL	REMARKS
100	C	(2) 3'-0"	7'-0"	1-3/4"	SS	BRONZE	001	1.5 HR	1	SS	BRONZE	1/A-XXX	1/A-XXX	1/A-XXX	
101	B	(2) 3'-0"	7'-0"	1-3/4"	ALUM	BRONZE	002	–	1	ALUM	BRONZE				
102	B	(2) 3'-0"	7'-0"	1-3/4"	ALUM	BRONZE	002	–	1	ALUM	BRONZE				
103	D	(2) 3'-0"	7'-0"	1-3/4"	HM	PTD	003	–	1	HM	PTD				
103A	A	3'-0"	7'-0"	1-3/4"	HM	PTD	004	–	1	HM	PTD				
104	D	(2) 3'-0"	7'-0"	1-3/4"	HM	PTD	005	–	1	HM	PTD				
105	D	(2) 3'-0"	7'-0"	1-3/4"	HM	PTD	005	–	1	HM	PTD				
106	B	(2) 3'-0"	7'-0"	1-3/4"	ALUM	BRONZE	002	–	1	ALUM	BRONZE				
107	D	(2) 3'-0"	7'-0"	1-3/4"	HM	PTD	005	–	1	HM	PTD				
108	A	3'-0"	7'-0"	1-3/4"	HM	PTD	006	–	1	HM	PTD				
109	A	3'-0"	7'-0"	1-3/4"	HM	PTD	007	–	1	HM	PTD				
300	A	3'-0"	7'-0"	1-3/4"	HM	PTD	006	0.5 HR	1	HM	PTD				
301	A	3'-0"	7'-0"	1-3/4"	HM	PTD	006	0.5 HR	1	HM	PTD				
302	A	3'-0"	7'-0"	1-3/4"	HM	PTD	008	–	1	HM	PTD				
303	A	3'-0"	7'-0"	1-3/4"	HM	PTD	008	–	1	HM	PTD				

DOOR AND HARDWARE NOTES

1. ALL DOORS & FRAMES SHALL BE FIELD FINISHED. SEE DOOR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ALL DOOR HARDWARE SHALL COMPLY WITH IBC AND ADA COMPLIANT. ALL DOOR HANDLES SHALL BE LEVER TYPE.



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



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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

DOOR AND WINDOW SCHEDULES

SHEET A-601

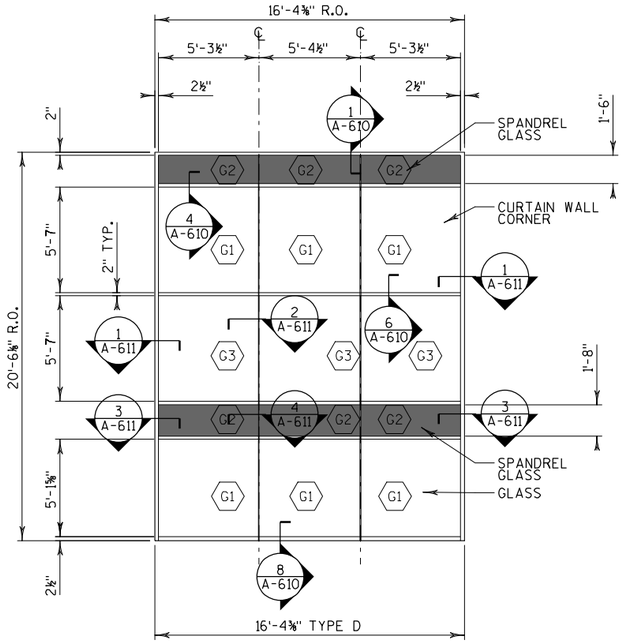
176

2

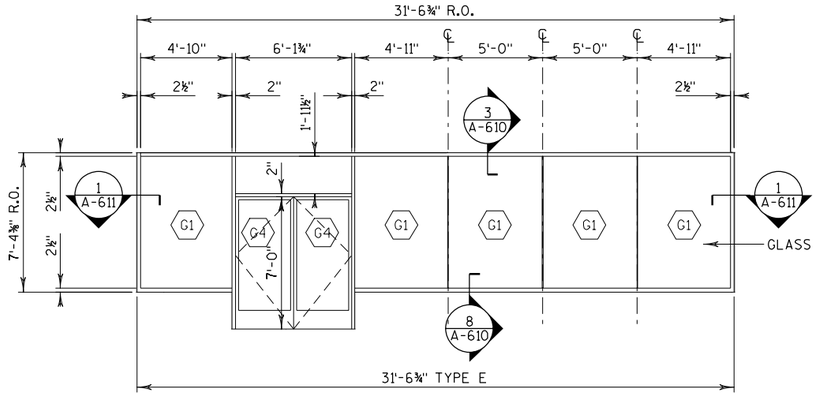
2

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

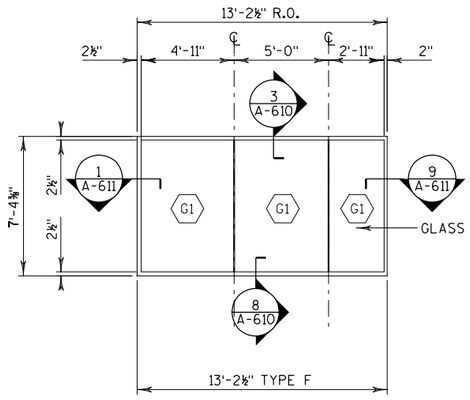
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$
PLOT DATE: $$...plotingdate...$$ PLOT TIME: $$...plotingtime...$$



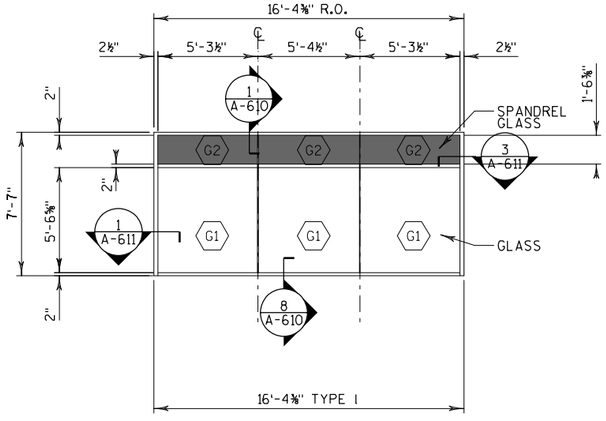
1 A-606 CURTAIN WALL TYPE D
SCALE: 1/4"=1'-0"



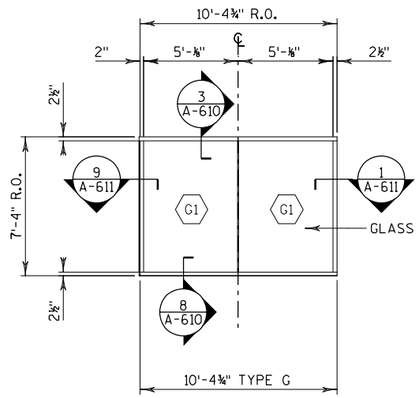
1 A-606 CURTAIN WALL TYPE E
SCALE: 1/4"=1'-0"



1 A-606 CURTAIN WALL TYPE F
SCALE: 1/4"=1'-0"



2 A-605 CURTAIN WALL TYPE I
SCALE: 1/4"=1'-0"



3 A-605 CURTAIN WALL TYPE G
SCALE: 1/4"=1'-0"

NOTES:

1. G1,G2 AND G3 INSULATED TEMPERED. GLASS COLOR TBD BY ARCHITECT.
2. G4 SINGLE PANE TEMPERED AND LAMINATED GLASS. COLOR TBD BY ARCHITECT.
3. G5 AND G6 TEMPERATED AND LAMINATED 1" INSULATED. COLOR TBD BY ARCHITECT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CURTAIN WALL TYPES

SHEET A-606
177

2

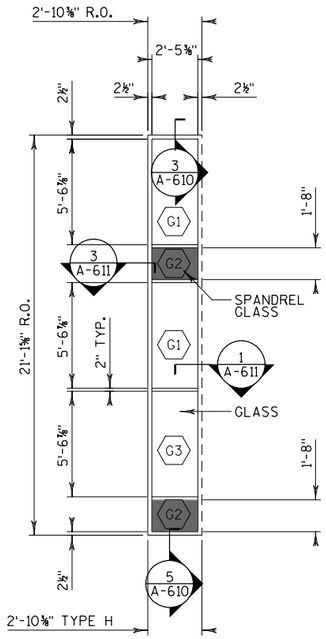
2

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

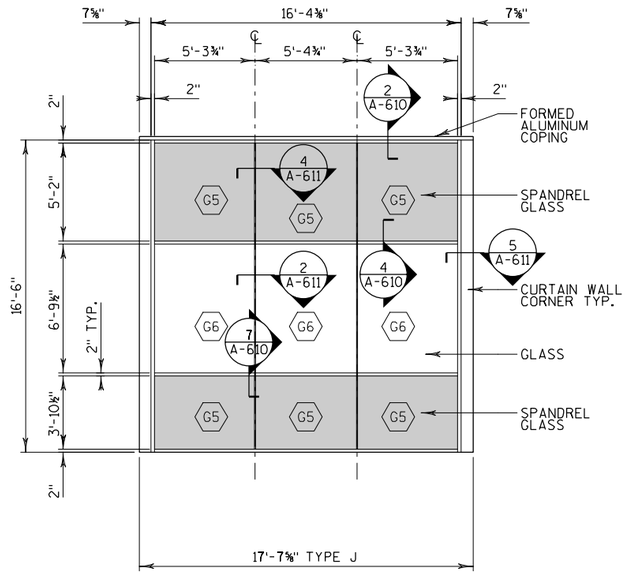
STATE PROJECT NUMBER
1000-57-70

NOTES:

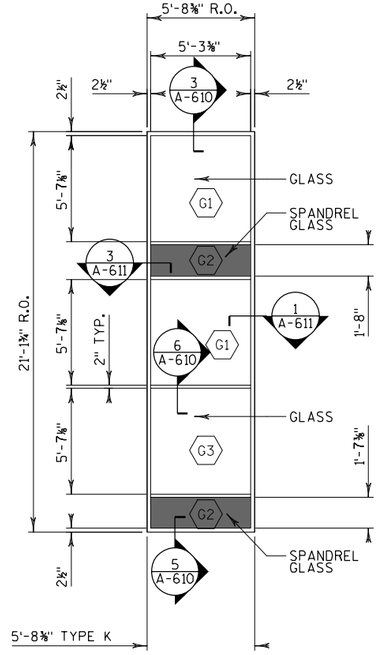
1. G1,G2 AND G3 INSULATED TEMPERED. GLASS COLOR TBD BY ARCHITECT.
2. G5 AND G6 TEMPERATED AND LAMINATED 1" INSULATED. COLOR TBD BY ARCHITECT.



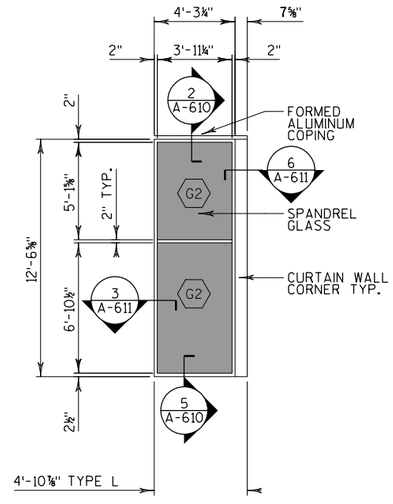
1 A-607 CURTAIN WALL TYPE H
SCALE: 1/4"=1'-0"



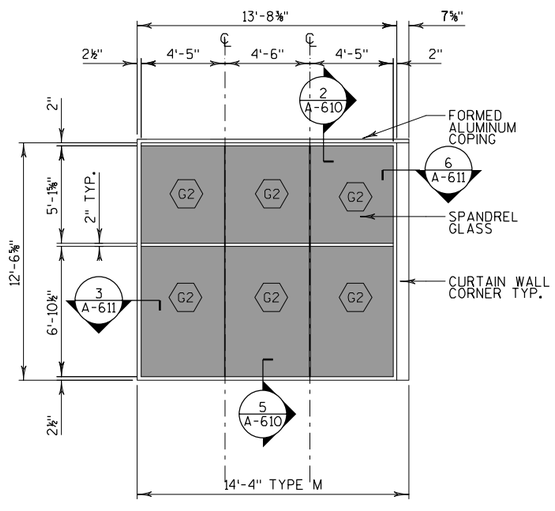
2 A-607 CURTAIN WALL TYPE J
SCALE: 1/4"=1'-0"



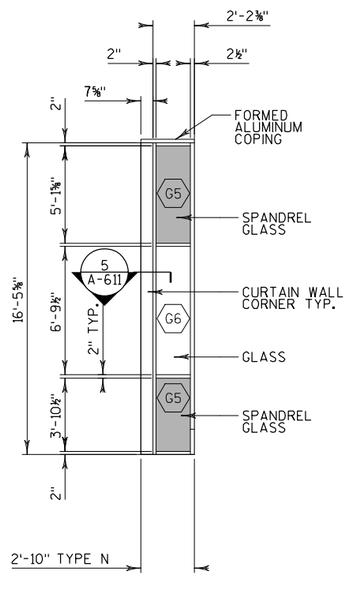
3 A-607 CURTAIN WALL TYPE K
SCALE: 1/4"=1'-0"



4 A-607 CURTAIN WALL TYPE L
SCALE: 1/4"=1'-0"



5 A-607 CURTAIN WALL TYPE M
SCALE: 1/4"=1'-0"



6 A-607 CURTAIN WALL TYPE N
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

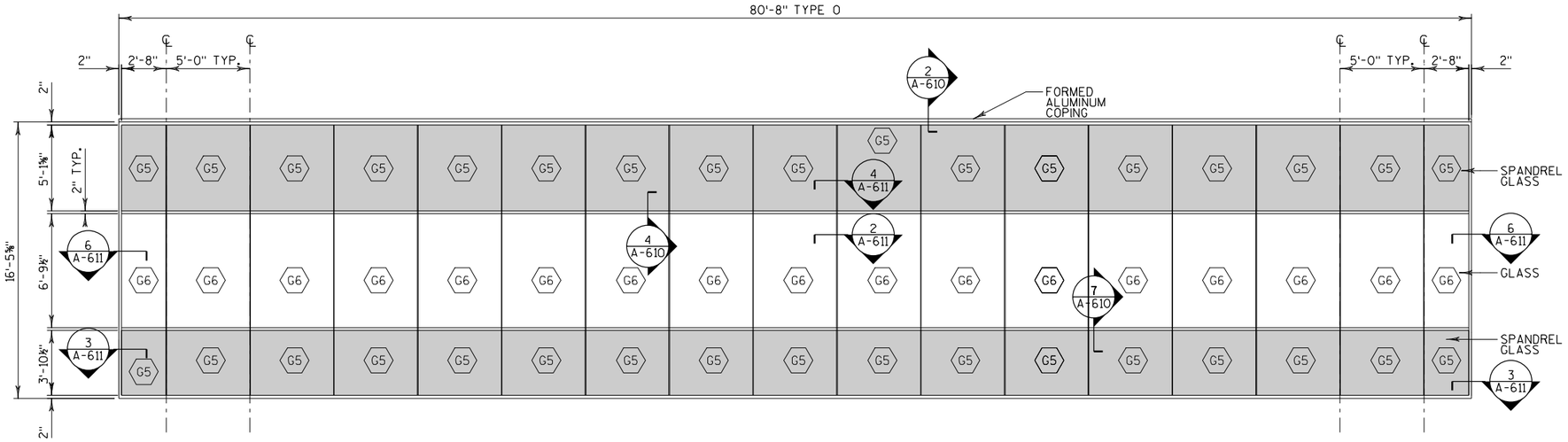
CURTAIN WALL TYPES

SHEET A-607
178

2

2

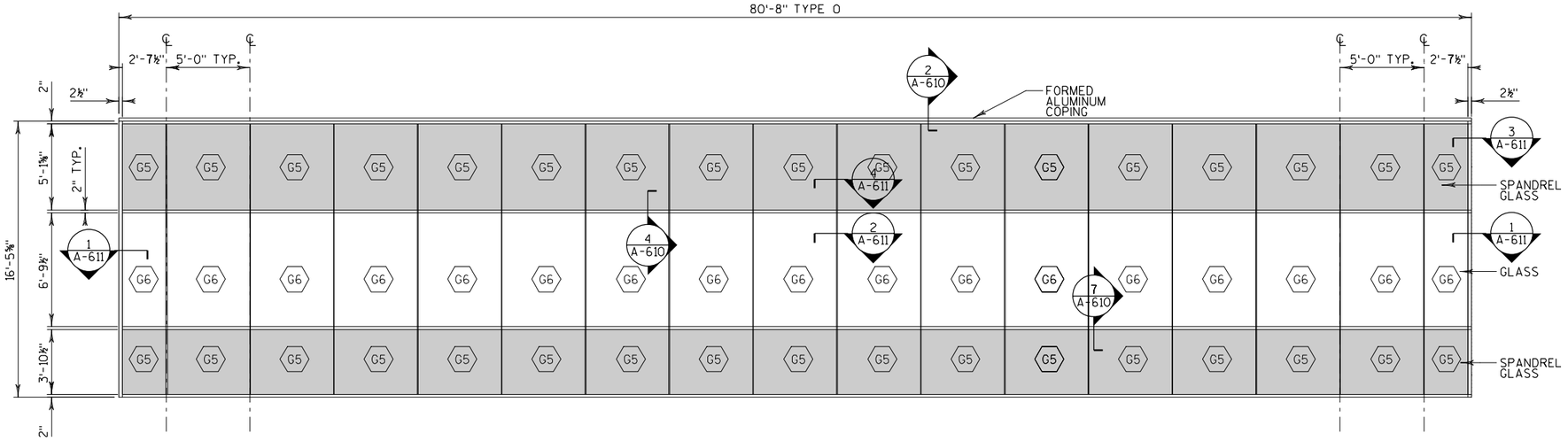
STATE PROJECT NUMBER
1000-57-70



1 A-608 CURTAIN WALL TYPE O
SCALE: 1/4"=1'-0"

NOTES:

1. G1,G2 AND G3 INSULATED TEMPERED. GLASS COLOR TBD BY ARCHITECT.
2. G5 AND G6 TEMPERATED AND LAMINATED 1" INSULATED. COLOR TBD BY ARCHITECT.



2 A-608 CURTAIN WALL TYPE P
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CURTAIN WALL TYPES

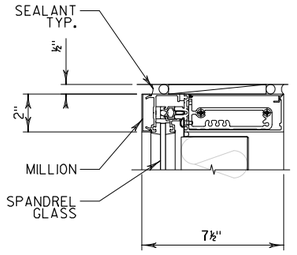
SHEET A-608
179

2

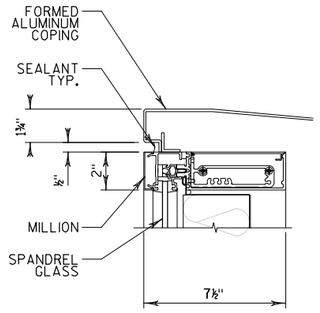
2

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

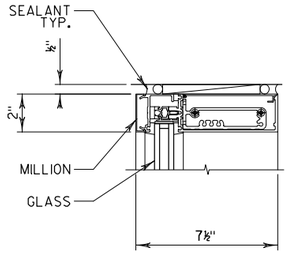
STATE PROJECT NUMBER
1000-57-70



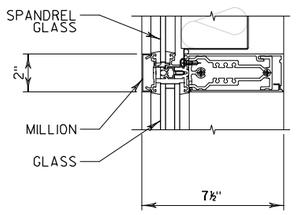
1 A-610 HEAD SPANDREL DETAIL
SCALE: 3"=1'-0"



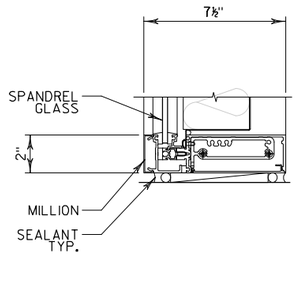
2 A-610 HEAD SPANDREL DETAIL
SCALE: 3"=1'-0"



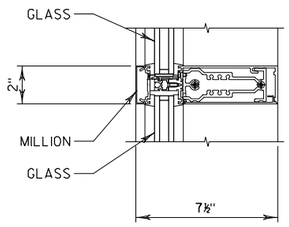
3 A-610 HEAD DETAIL
SCALE: 3"=1'-0"



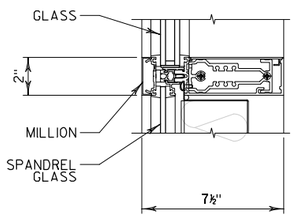
4 A-610 SPANDREL SECTION DETAIL
SCALE: 3"=1'-0"



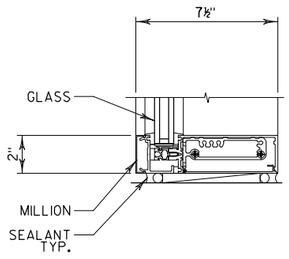
5 A-610 SILL SPANDREL DETAIL
SCALE: 3"=1'-0"



6 A-610 SECTION DETAIL
SCALE: 3"=1'-0"



7 A-610 SPANDREL SECTION DETAIL
SCALE: 3"=1'-0"



8 A-610 SILL DETAIL
SCALE: 3"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CURTAIN WALL DETAILS

SHEET A-610
180

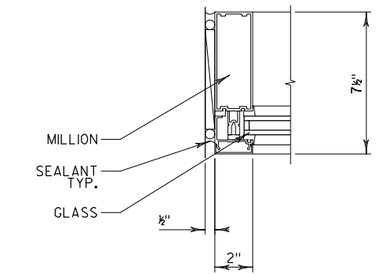
2

2

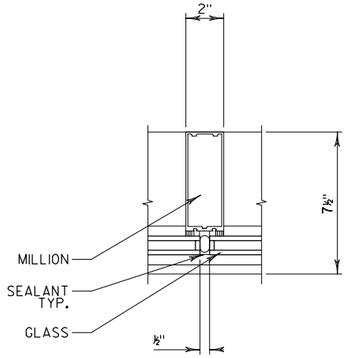
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$..pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottime...$$
PLOT DATE: $$...plottingdate...$$

STATE PROJECT NUMBER

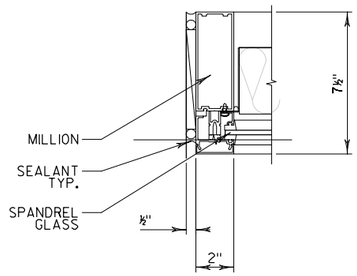
1000-57-70



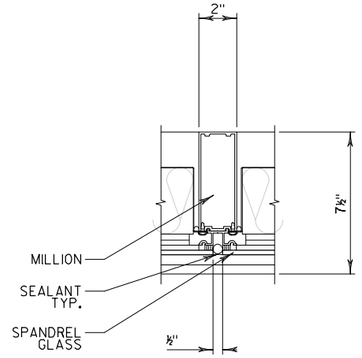
1 A-611 PLAN DETAIL
SCALE: 3"=1'-0"



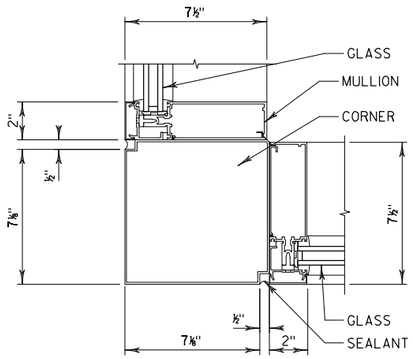
2 A-611 PLAN INTERMIDIATE DETAIL
SCALE: 3"=1'-0"



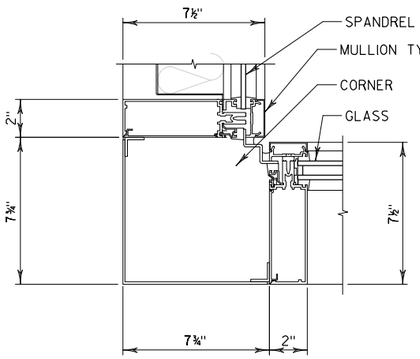
3 A-611 PLAN SPANDREL DETAIL
SCALE: 3"=1'-0"



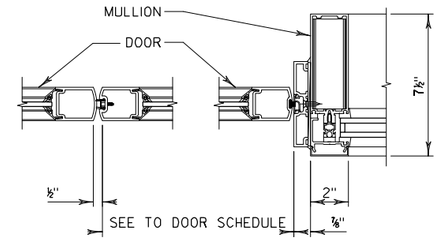
4 A-611 PLAN SPANDREL INT. DETAIL
SCALE: 3"=1'-0"



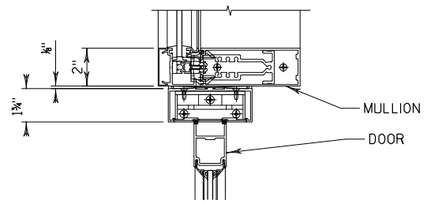
5 A-611 OUTSIDE CORNER DETAIL
SCALE: 3"=1'-0"



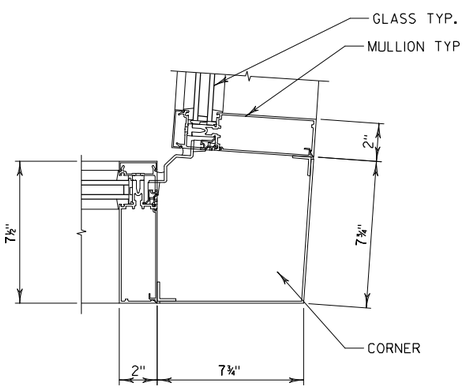
6 A-611 INSIDE CORNER DETAIL
SCALE: 3"=1'-0"



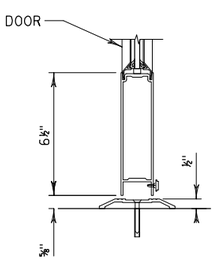
7 A-611 DOOR JAMB DETAIL
SCALE: 3"=1'-0"



6 A-611 DOOR HEAD DETAIL
SCALE: 3"=1'-0"



9 A-611 OUTSIDE CORNER DETAIL
SCALE: 3"=1'-0"



10 A-611 DOOR BOTTOM DETAIL
SCALE: 3"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CURTAIN WALL DETAILS

SHEET A-611
181

2

2

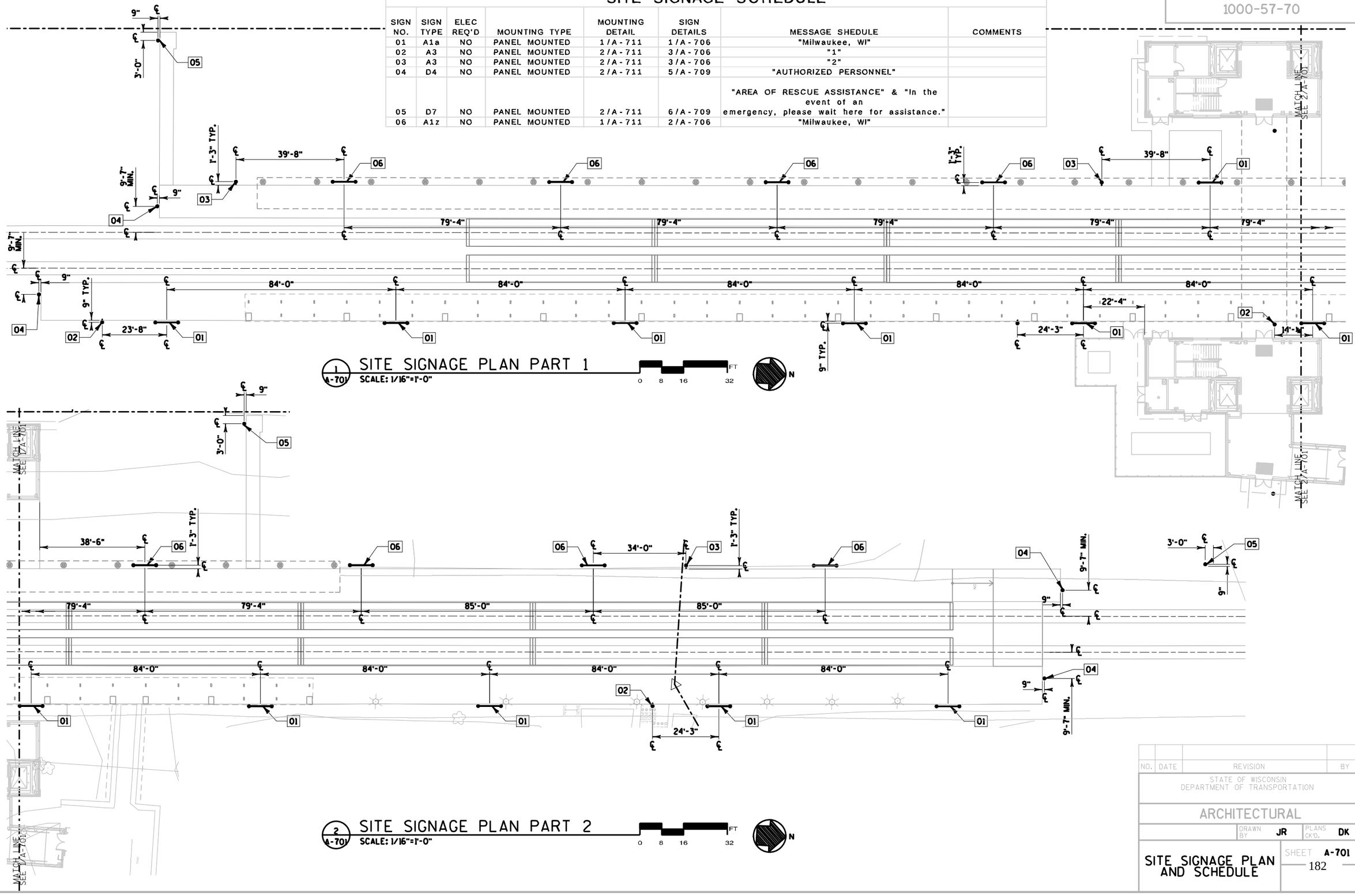
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER

1000-57-70

SITE SIGNAGE SCHEDULE

SIGN NO.	SIGN TYPE	ELEC REQ'D	MOUNTING TYPE	MOUNTING DETAIL	SIGN DETAILS	MESSAGE SHEDULE	COMMENTS
01	A1a	NO	PANEL MOUNTED	1/A-711	1/A-706	"Milwaukee, WI"	
02	A3	NO	PANEL MOUNTED	2/A-711	3/A-706	"1"	
03	A3	NO	PANEL MOUNTED	2/A-711	3/A-706	"2"	
04	D4	NO	PANEL MOUNTED	2/A-711	5/A-709	"AUTHORIZED PERSONNEL"	
05	D7	NO	PANEL MOUNTED	2/A-711	6/A-709	"AREA OF RESCUE ASSISTANCE" & "In the event of an emergency, please wait here for assistance."	
06	A1z	NO	PANEL MOUNTED	1/A-711	2/A-706	"Milwaukee, WI"	



1/A-701 SITE SIGNAGE PLAN PART 1

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

0 8 16 32 FT

N

2/A-701 SITE SIGNAGE PLAN PART 2

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

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

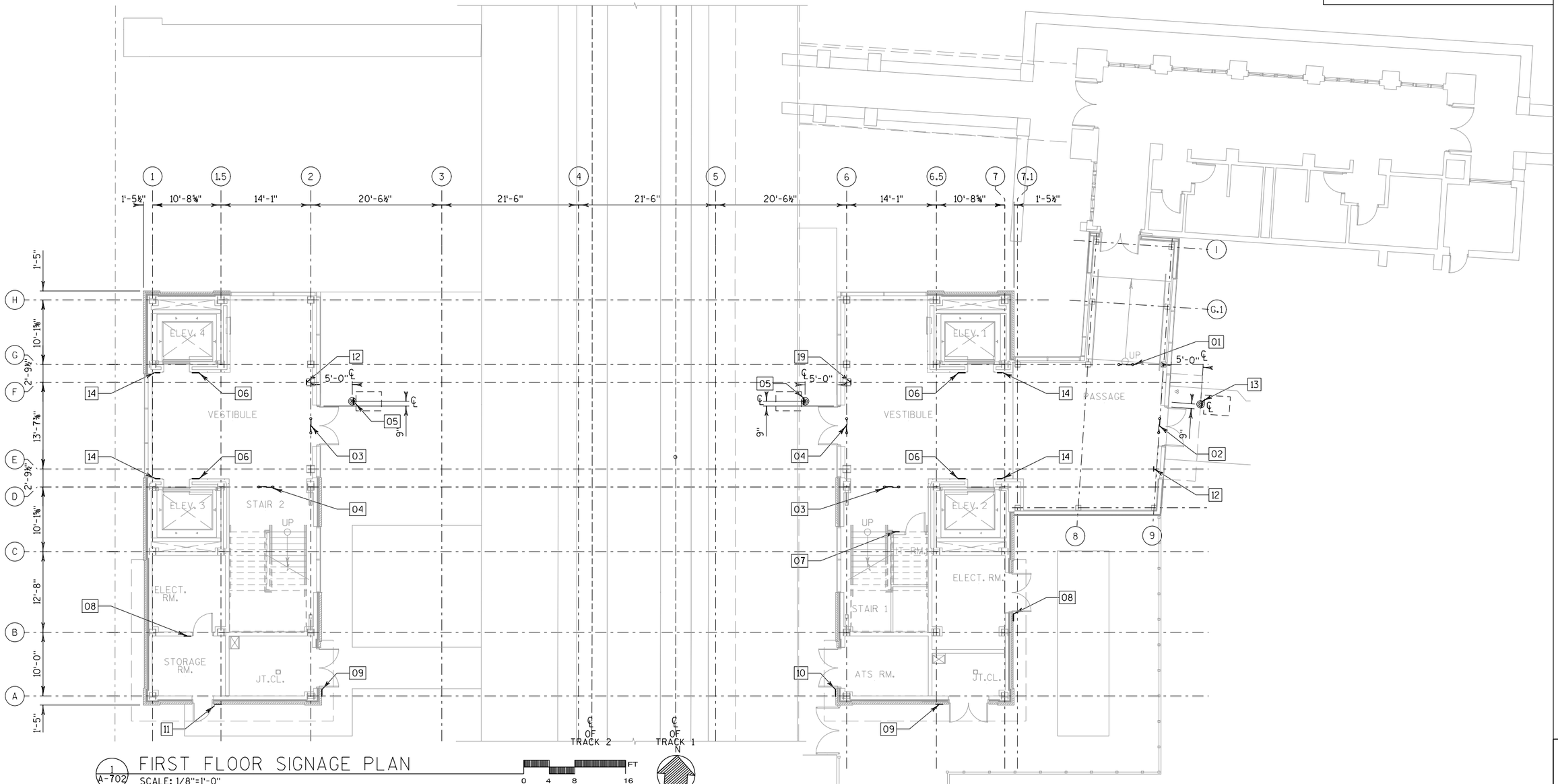
SITE SIGNAGE PLAN AND SCHEDULE

SHEET A-701

PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\606188829-MKE Rail Station\900-CAD GIS\Architectural\Sheets\A-701.dgn
PLOT DATE: 10/17/2022
PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD

STATE PROJECT NUMBER
1000-57-70

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



1 A-702 FIRST FLOOR SIGNAGE PLAN
SCALE: 1/8"=1'-0"
0 4 8 16 FT

2

FIRST FLOOR SIGNAGE SCHEDULE

SIGN NO.	SIGN TYPE	ELEC REQ'D	MOUNTING TYPE	MOUNTING DETAIL	SIGN DETAILS	MESSAGE SHEDULE	COMMENTS
01	A10	NO	USPENDED MOUNTED	4/A-711	4/A-706	SIDE A: UP ARROW, "Restrooms"; SIDE B: RIGHT ARROW "Trains"	
02	A10	NO	USPENDED MOUNTED	4/A-711	5/A-706	UP ARROW, "Parking"	
03	A10	NO	USPENDED MOUNTED	4/A-711	6/A-706	UP ARROW, "Track 2"	
04	A10	NO	USPENDED MOUNTED	4/A-711	1/A-707	UP ARROW, "Track 1"	
05	A12	NO	PANEL MOUNTED	2/A-711	4/A-707	"MILWAUKEE, WI"	
06	B21	NO	PANEL MOUNTED	6/A-711	1/A-708	"ELEVATOR"	
07	B21	NO	PANEL MOUNTED	6/A-711	2/A-708	"IT ROOM"	
08	B21	NO	WALL MOUNTED	6/A-711	3/A-708	"ELECTRICAL ROOM"	
09	B21	NO	WALL MOUNTED	5/A-711	4/A-708	"JANITOR'S CLOSET"	
10	B21	NO	WALL MOUNTED	5/A-711	5/A-708	"LIFE SAFETY ROOM"	
11	B21	NO	WALL MOUNTED	6/A-711	6/A-708	"STORAGE"	
12	B19	NO	WALL MOUNTED	5/A-711	5/A-707	"EXIT"	
13	C20	NO	PANEL MOUNTED	2/A-711	3/A-709	"MILWAUKEE AIRPORT RAILROAD STATION"	
14	D2	NO	WALL MOUNTED	6/A-711	4/A-709	"In the Event of Fire Use Stairs	

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

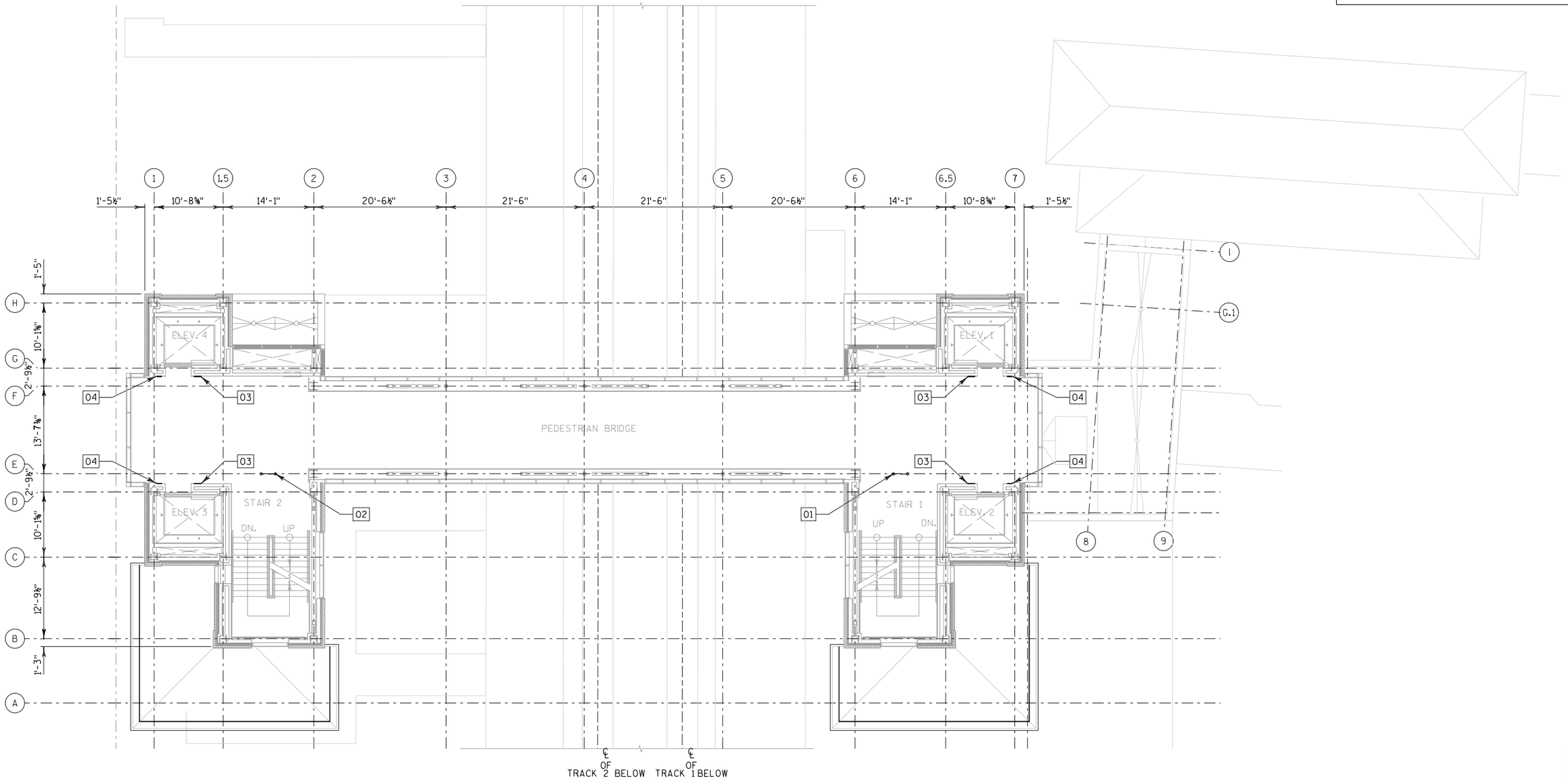
DRAWN BY JR | PLANS CK'D. DK

FIRST FLOOR SIGNAGE PLAN & SCHEDULE

SHEET A-702
183

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

STATE PROJECT NUMBER
1000-57-70



1/A-703 SECOND FLOOR SIGNAGE PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

SECOND FLOOR SIGNAGE SCHEDULE

SIGN NO.	SIGN TYPE	ELEC REQ'D	MOUNTING TYPE	MOUNTING DETAIL	SIGN DETAILS	MESSAGE SHEDULE	COMMENTS
01	A10	NO	USPENDED MOUNTED	4/A-711	2/A-707	SIDE A: LEFT ARROW, "Track 2"; SIDE B: DOWN ARROW "Track 1"	
02	A10	NO	USPENDED MOUNTED	4/A-711	3/A-707	SIDE A: RIGHT ARROW, "Track 1"; SIDE B: DOWN ARROW "Track 2"	
03	B21	NO	WALL MOUNTED	6/A-711	1/A-708	"ELEVATOR"	
04	D2	NO	WALL MOUNTED	6/A-711	4/A-709	"In the Event of Fire Use Stairs	

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SECOND FLOOR SIGNAGE PLAN & SCHEDULE

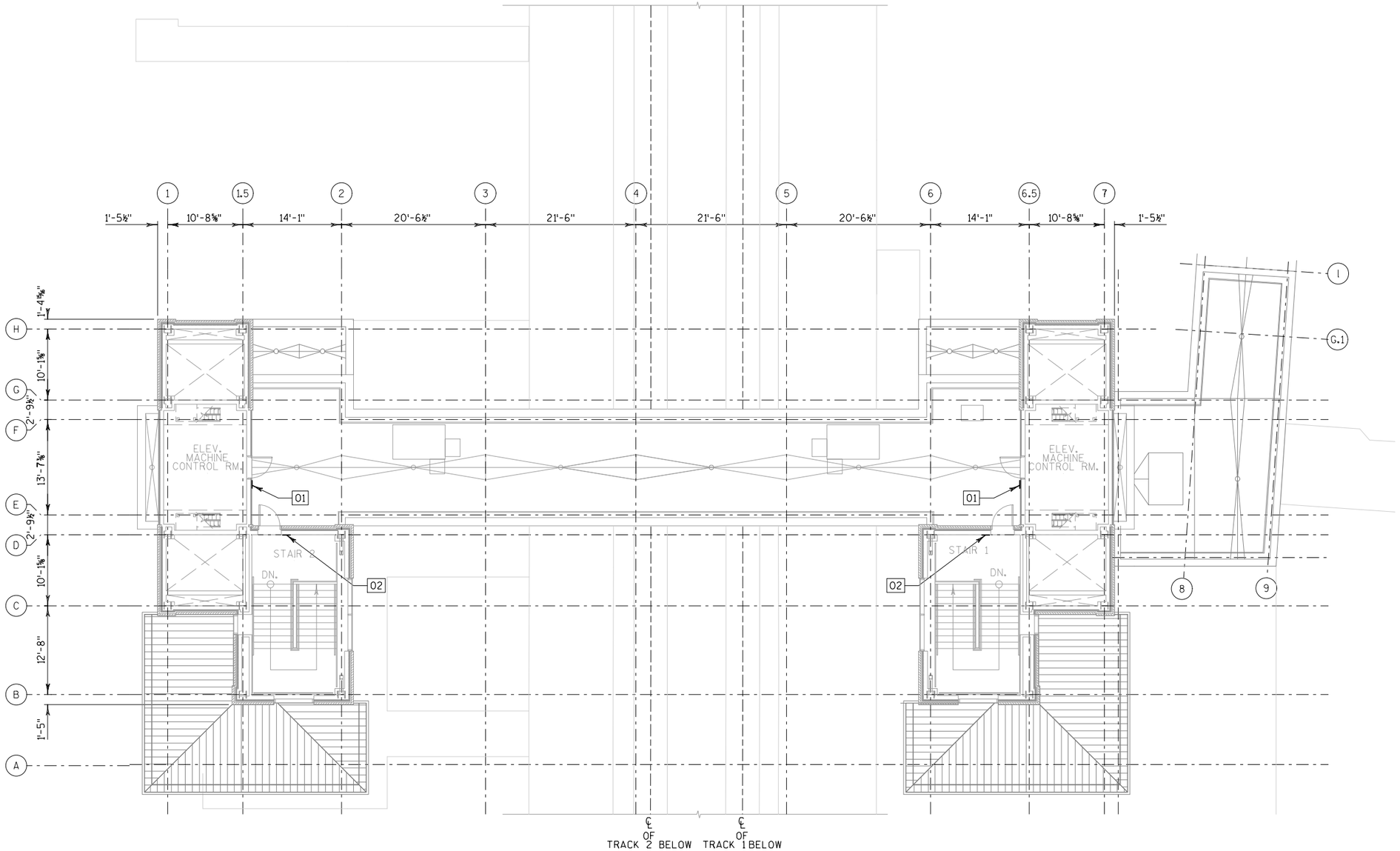
SHEET A-703
184

2

2

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

STATE PROJECT NUMBER
1000-57-70



1 / A-704 PEDESTRIAN BRIDGE CONSTRUCTION ROOF PLAN

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

0 4 8 16 FT

N

PEDESTRIAN BRIDGE ROOF SIGNAGE SCHEDULE

SIGN NO.	SIGN TYPE	ELEC REQ'D	MOUNTING TYPE	MOUNTING DETAIL	SIGN DETAILS	MESSAGE SHEDULE	COMMENTS
01	B21	NO	WALL MOUNTED	5/A-711	1/A-709	"ELEVATOR MACHINE CONTROL ROOM"	
02	B21	NO	WALL MOUNTED	6/A-711	2/A-709	"AUTHORIZED PERSONNEL ONLY"	

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

BRIDGE ROOF LEVEL SIGNAGE PLAN & SCHEDULE

SHEET A-704

185

2

2

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

STANDARD SIGNAGE TEXT STYLES

FRUTIGER 55 ROMAN STYLE

ABCDEFGHIJKLMN

OPQRSTUVWXYZ

abcdefghijklmnop

qrstuvwxyz

1234567890

FRUTIGER 65 BOLD STYLE

ABCDEFGHIJKLMN

OPQRSTUVWXYZ

abcdefghijklmnop

qrstuvwxyz

1234567890

NOTE:
THE ALPHABETS SHOWN HERE ARE FOR REFERENCE ONLY, IT SHOULD NOT BE USED FOR ARTWORK.

SIGNAGE SYSTEM COLORS

AMT BLUE
MATTHEWS PAINT
SATIN VOC* SV0C1142SP

AVERY ULTIMATE CAST
OPAQUE FILM
MAJESTIC BLUE
UC 900-625-0

ARLON CALON SERIES
2500 TRANSLUCENT
VINYL FILM
2051 BLUE

BLACK
MATTHEWS PAINT
SATIN VOC* SV923SP

3M SCOTCHCAL
ELECTROCUT FILM
BLACK 7725-12
(OPAQUE FILM)

3M SCOTCHLITE
REFLECTIVE VINYL
BLACK 680-85

CLEAR COAT
MATTHEWS PAINT
VOC* SATIN CLEAR
281228

SILVER
MATTHEWS PAINT
LVS SATIN PAINT MP 18073

3M SCOTCHCAL
CONTROLTAC FILM
LIGHT SILVER METALLIC
180C-220 (OPAQUE FILM)

SCARLET RED
MATTHEWS PAINT
SATIN VOC* SV0C1340SP

3M SCOTCHCAL
ELECTROCUT FILM
GERANIUM 7725-63
(OPAQUE FILM)

3M SCOTCHLITE
REFLECTIVE VINYL
RUBY RED 680-82

WHITE
MATTHEWS PAINT
SATIN VOC* SV202SP

3M SCOTCHCAL
ELECTROCUT FILM
WHITE 7725-10
(OPAQUE FILM)

3M SCOTCHLITE
REFLECTIVE VINYL
WHITE 680-10

NOTE:
PAINT MANUFACTURERS AND MODEL NUMBERS ARE LISTED AS BASELINE PRODUCT. SEE SPECIFICATIONS FOR ALTERNATE MANUFACTURERS.

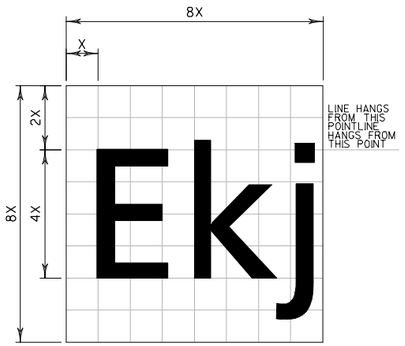
SIGNAGE GENERAL NOTES:

1. PRIOR TO FABRICATION OF ANY SIGNAGE THAT INCORPORATES THE TRAVEL MARK, DESIGN AND SHOP DRAWINGS MUST BE SUBMITTED TO SIGNAGE BRAND MANAGEMENT (SIGNAGEBRANDMANAGEMENT@AMTRAK.COM OR THROUGH THE AMTRAK PROJECT MANAGER WHO DISTRIBUTES REVIEW DOCUMENTS) FOR FINAL AMTRAK PROJECT MANAGER WHO DISTRIBUTES REVIEW DOCUMENTS) FOR FINAL APPROVAL. "NON-BRANDED" SIGNAGE WILL ALSO BE REVIEWED BY AMTRAK. TEXT THAT APPEARS ON SIGNAGE (STATION NAME, TRACK NUMBER AND LOCATION, ETC.) IS TO BE CONFIRMED WITH AMTRAK. BRAND MANAGEMENT'S REVIEW WILL BE LIMITED TO CHECKING THAT THE SUBMISSION COMPLIES WITH ARTWORK USAGE AND LAYOUT REQUIREMENTS. ARTWORK FOR BRANDED SIGNAGE, INCLUDING FOR POSITION ONLY ARTWORK, IS AVAILABLE FOR USE BY CONTACTING SIGNAGEBRANDMANAGEMENT@AMTRAK.COM BRAND MANAGEMENT WILL ISSUE THE FINAL ARTWORK FILES AND THE LICENSE TO USE THE TRAVEL MARK UPON APPROVAL OF SHOP DRAWINGS.
2. ALL EXISTING CONDITIONS INCLUDING DIMENSIONS SHALL BE VERIFIED IN FIELD PRIOR TO PROCEEDING WITH WORK. ANY DIMENSIONS OR CONDITIONS NOT CONSISTENT WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED IN WRITING TO THE PROJECT ENGINEER.
3. CONTRACT DOCUMENTS SHALL NOT BE SCALED. IF DIMENSIONS ARE MISSING, COORDINATE THROUGH SHOP DRAWINGS.
4. PROVIDE MATERIAL AND COLOR SAMPLES FOR APPROVAL. THE SIGNS SHALL COMPLY WITH THE GRAPHIC STANDARDS PROVIDED HEREIN.
5. PREPARE DETAILED AND DIMENSIONED DRAWINGS FOR THE SIGN GRAPHICS FOR APPROVAL BY THE PROJECT ENGINEER.
6. PATCH AND REPAIR ALL FLOORS, WALLS, CEILINGS, ETC. DAMAGED OR EXPOSED DUE TO WORK OR REMOVALS AND FINISHED TO MATCH ADJOINING SURFACES. SPOT PAINTING WILL NOT BE PERMITTED. ALL PAINTING SHALL BE EDGE TO EDGE OVER THE ENTIRE SURFACE.
7. INFORM THE PROJECT ENGINEER OF ANY CONFLICT BETWEEN NEW SIGNS AND EXISTING UTILITIES THAT ARE WITHIN 24" OF EACH OTHER. CONTRACTOR SHALL RELOCATE SIGN OR UTILITY AS DIRECTED BY THE PROJECT ENGINEER.
8. PROVIDE PROTECTION OR TEMPORARILY REMOVE AND RELOCATE EXISTING SIGNS INDICATED TO REMAIN AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WORK.

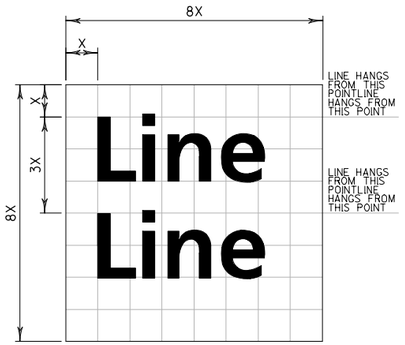
STATE PROJECT NUMBER

1000-57-70

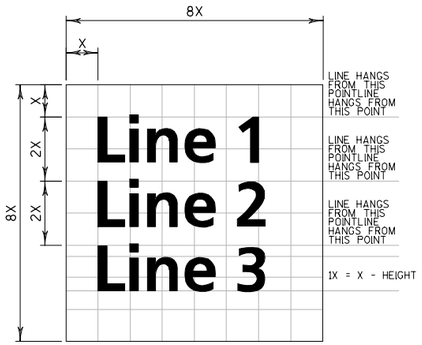
STANDARD SIGNAGE TEXT MODULES



TEXT MODULE: ONE LINE MESSAGE

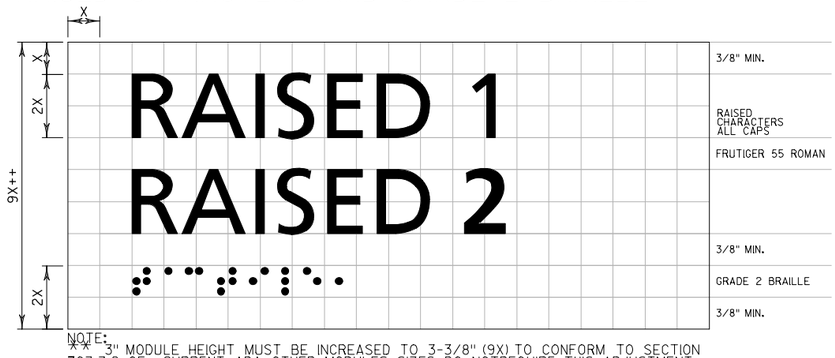


TEXT MODULE: TWO LINE MESSAGE



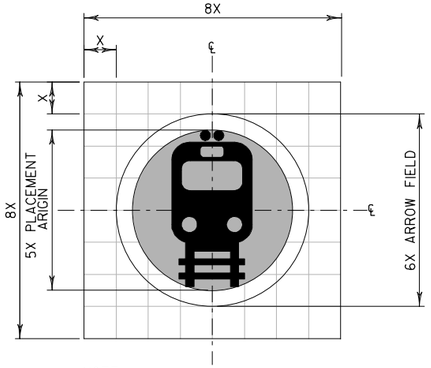
TEXT MODULE: THREE LINE MESSAGE

RAISED CHARACTERS AND GRADE 2 BRAILLE



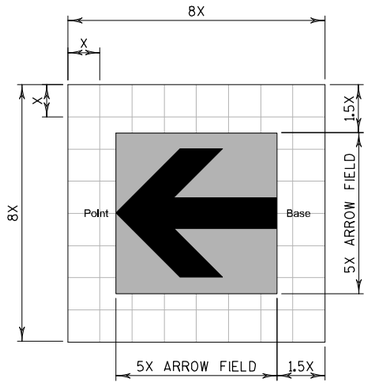
NOTE:
** 3" MODULE HEIGHT MUST BE INCREASED TO 3-3/8" (9X) TO CONFORM TO SECTION 703.3.2 OF CURRENT ADA. OTHER MODULES SIZES DO NOTREQUIRE THIS ADJUSTMENT

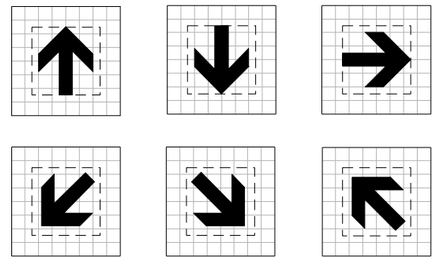
STANDARD SIGNAGE SYMBOLS



NOTE:
* PUBLIC SERVICE SYMBOLS DISPLAYED WITHOUT ACCOMPANYING TEXT

STANDARD ARROW SYMBOLS





NOTE:
THE VARIOUS POSITIONS FOR POSSIBLE USE OF THE ARROW ARE SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SIGNAGE GRAPHIC STANDARDS

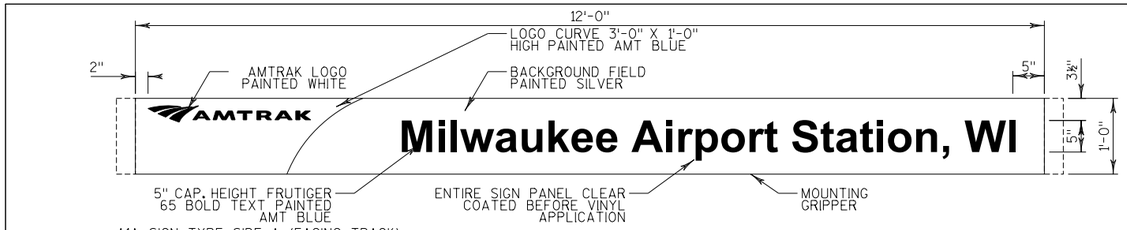
SHEET A-705
186

2

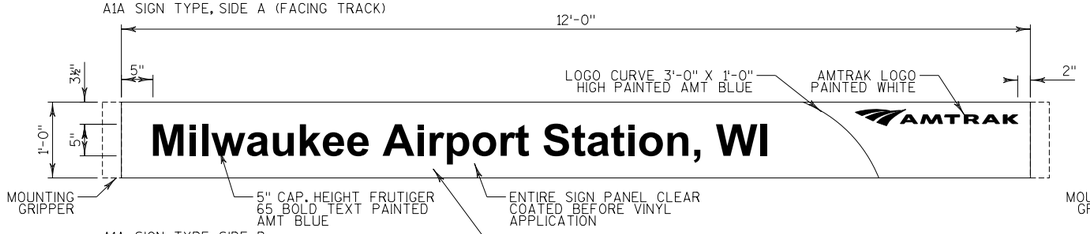
2

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

STATE PROJECT NUMBER
1000-57-70

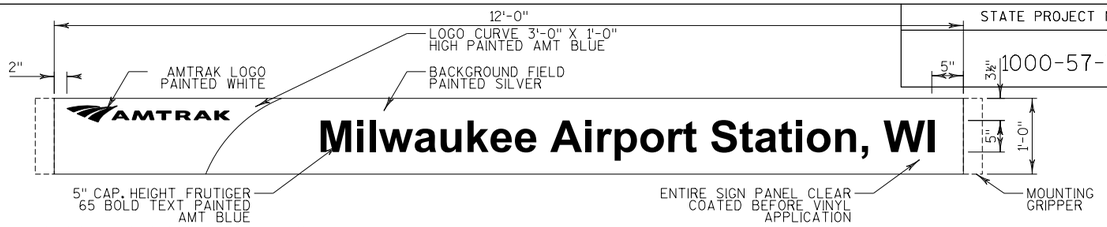


A1A SIGN TYPE, SIDE A (FACING TRACK)

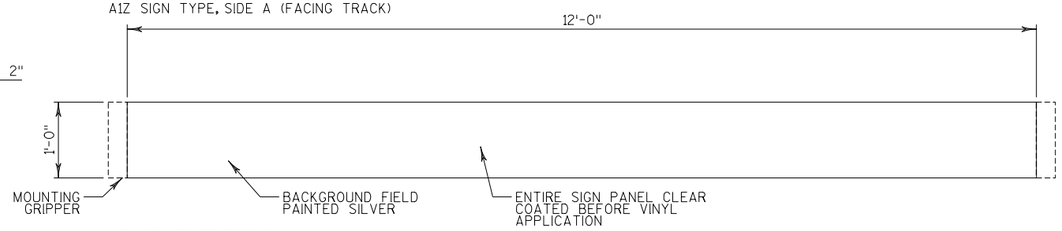


A1A SIGN TYPE, SIDE B

1 A-706 SIGN A1A
SCALE: 1"=1'-0"

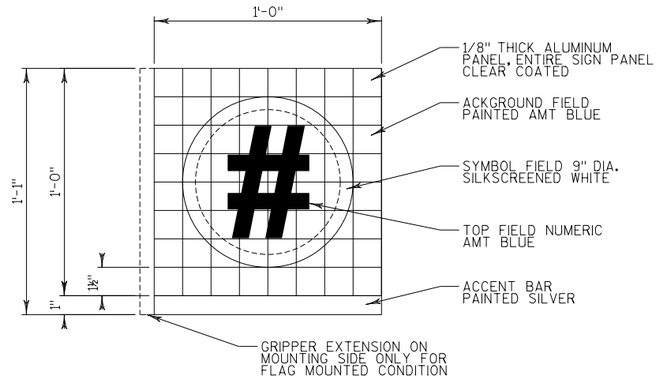


A1Z SIGN TYPE, SIDE A (FACING TRACK)

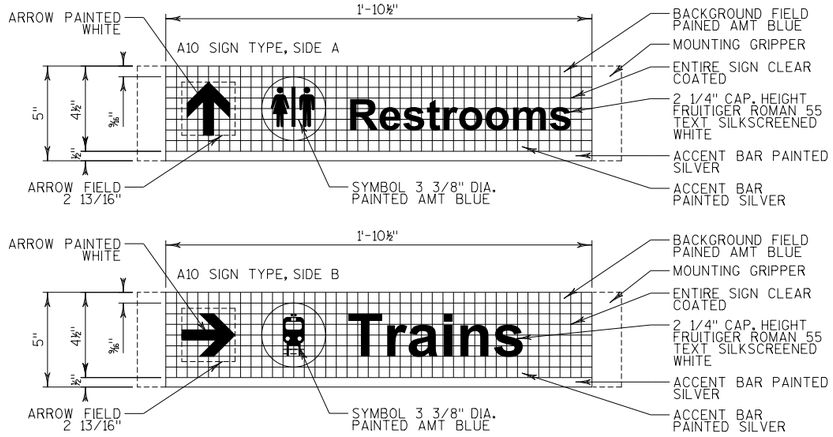


A1Z SIGN TYPE, SIDE B

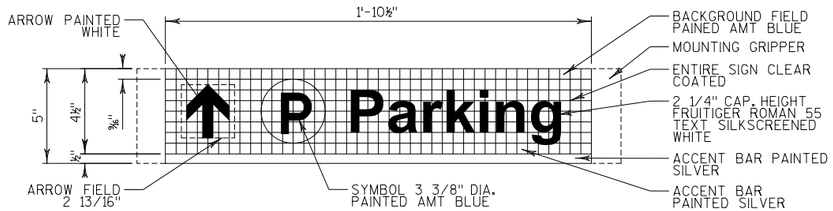
2 A-706 SIGN A1Z
SCALE: 1"=1'-0"



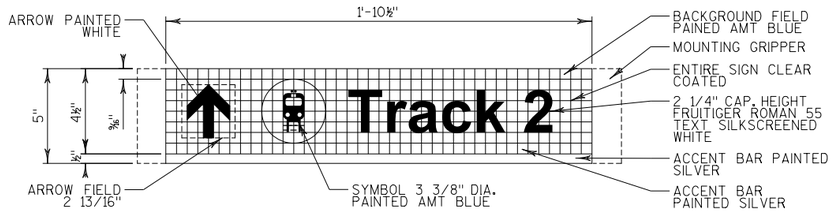
3 A-706 SIGN A3
SCALE: 3"=1'-0"



4 A-706 SIGN A10
SCALE: 3"=1'-0"



5 A-706 SIGN A10
SCALE: 3"=1'-0"



6 A-706 SIGN A10
SCALE: 3"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SIGNAGE DETAILS 1

SHEET A-706
187

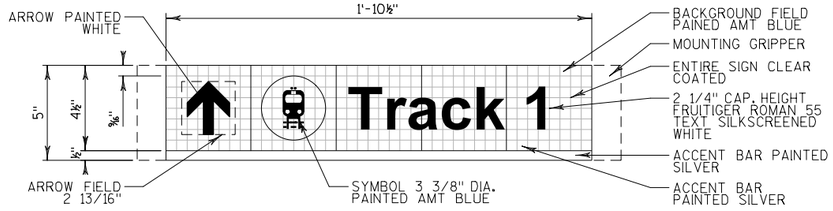
2

2

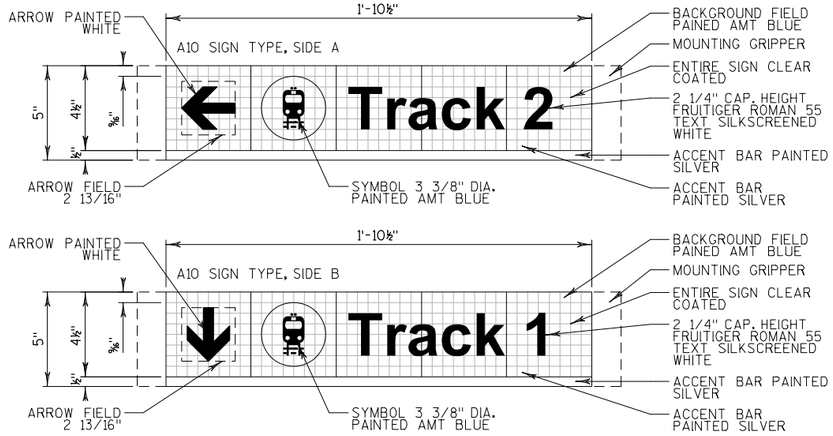
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$...designfile...$$ PLOT TIME: $$...plottingtime...$$
PLOT DATE: $$...plottingdate...$$

STATE PROJECT NUMBER

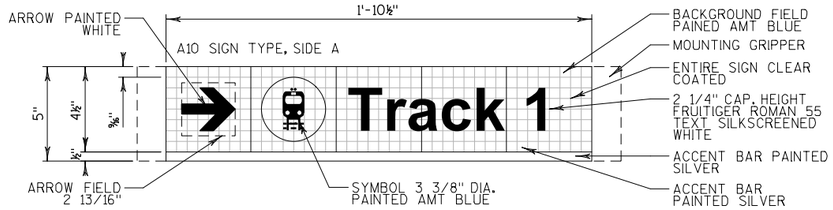
1000-57-70

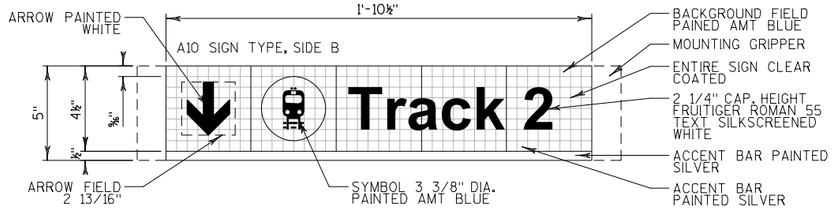


1 A-707 SIGN A10
SCALE: 1"=1'-0"

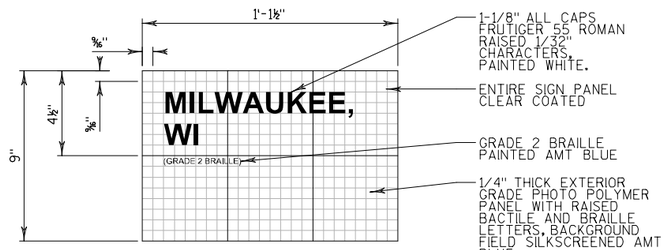


2 A-707 SIGN A10
SCALE: 1"=1'-0"

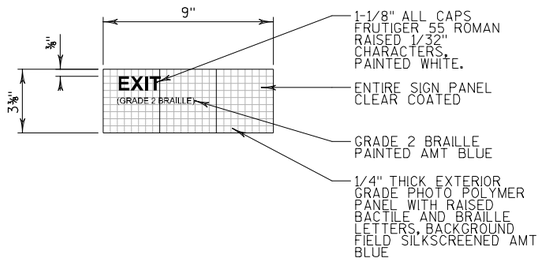




3 A-707 SIGN A10
SCALE: 3"=1'-0"



4 A-707 SIGN A12
SCALE: 3"=1'-0"



5 A-707 SIGN B19
SCALE: 3"=1'-0"

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

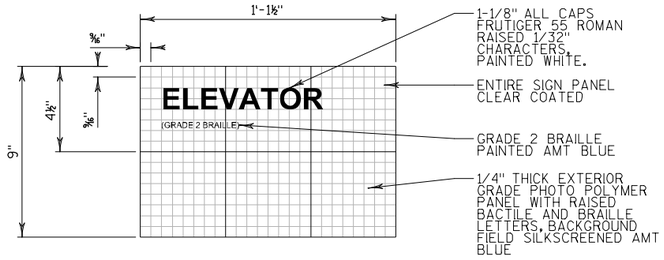
SIGNAGE DETAILS 2

SHEET A-707
188

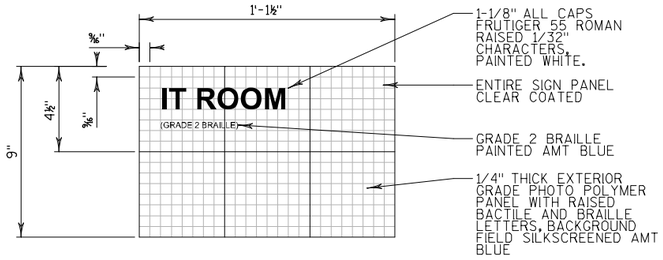
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile....$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$
BATCH PRINT SHEET CSD OF NSD

STATE PROJECT NUMBER

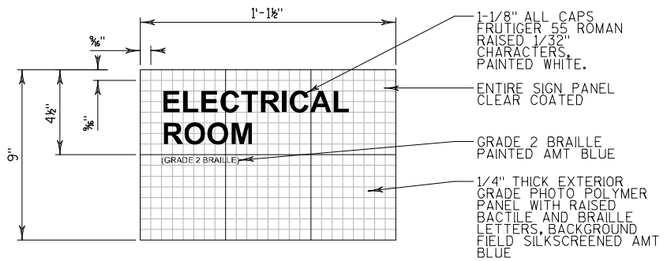
1000-57-70



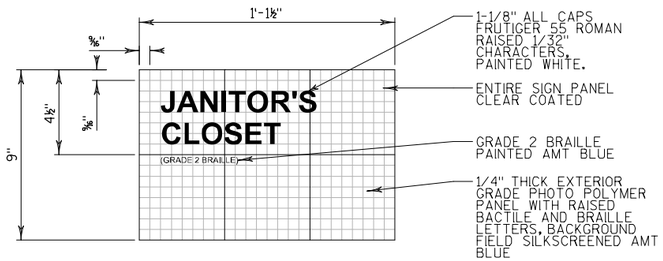
1 A-708 SIGN B21
SCALE: 1"=1'-0"



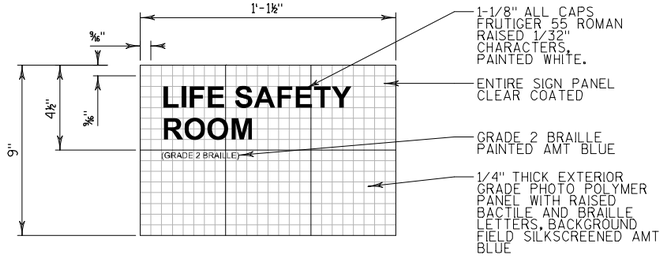
2 A-708 SIGN B21
SCALE: 1"=1'-0"



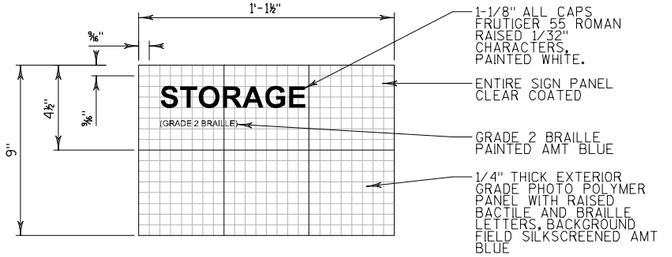
3 A-708 SIGN B21
SCALE: 3"=1'-0"



4 A-708 SIGN B21
SCALE: 3"=1'-0"



5 A-708 SIGN B21
SCALE: 3"=1'-0"



6 A-708 SIGN B21
SCALE: 3"=1'-0"

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

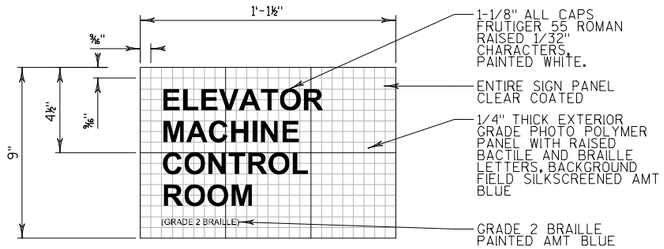
DRAWN BY JR | PLANS CK'D. DK

SIGNAGE DETAILS 3

SHEET A-708
189

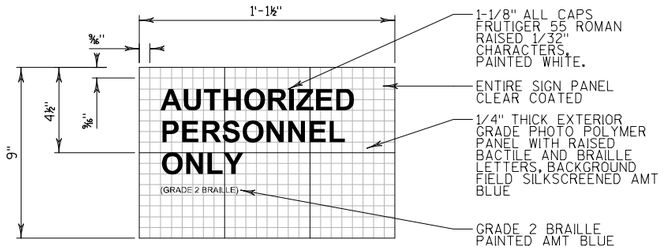
STATE PROJECT NUMBER

1000-57-70



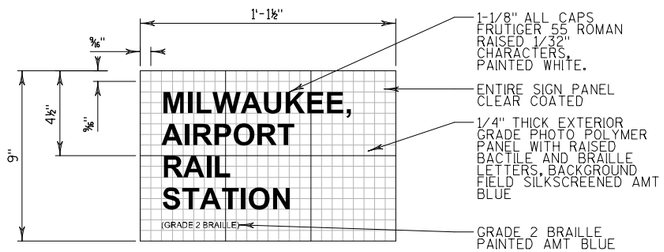
1 A-709 SIGN B21

SCALE: 1"=1'-0"



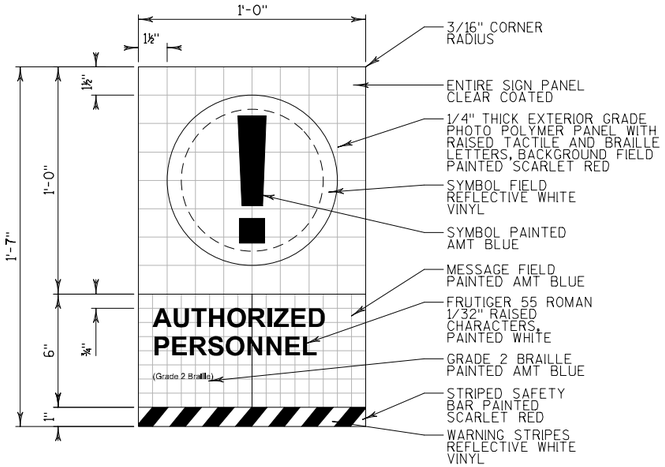
2 A-709 SIGN B21

SCALE: 1"=1'-0"



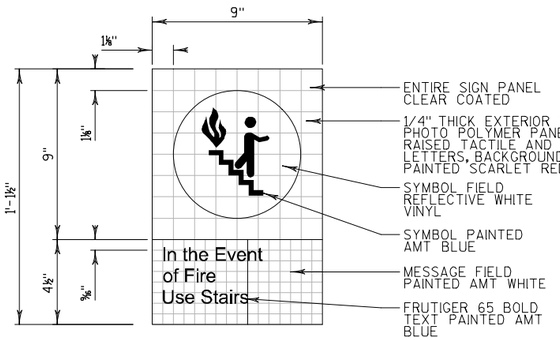
3 A-709 SIGN C20

SCALE: 3"=1'-0"



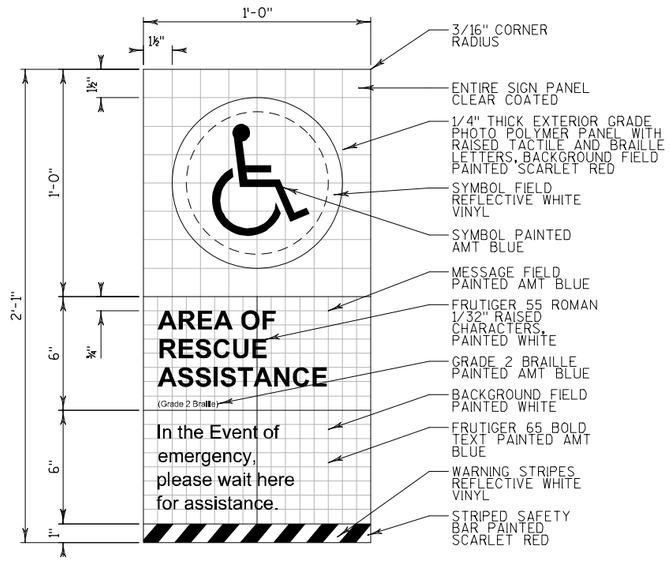
5 A-709 SIGN D4

SCALE: 3"=1'-0"



4 A-709 SIGN D2

SCALE: 3"=1'-0"



6 A-709 SIGN D7

SCALE: 3"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SIGNAGE DETAILS 4

SHEET A-709

190

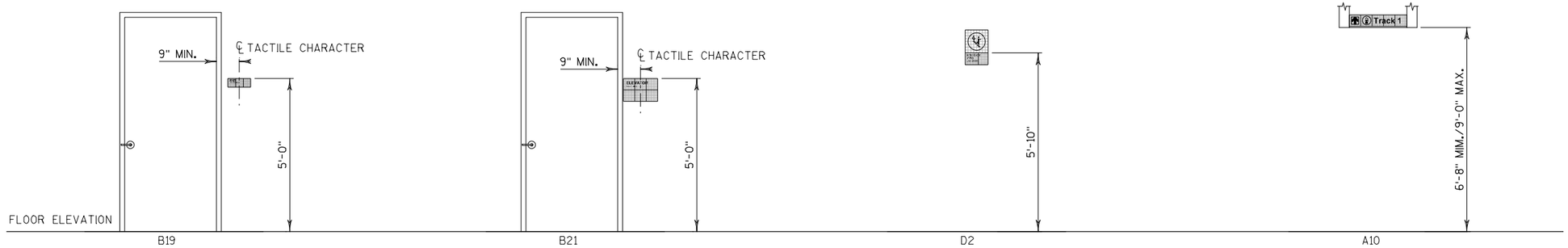
2

2

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

STATE PROJECT NUMBER

1000-57-70

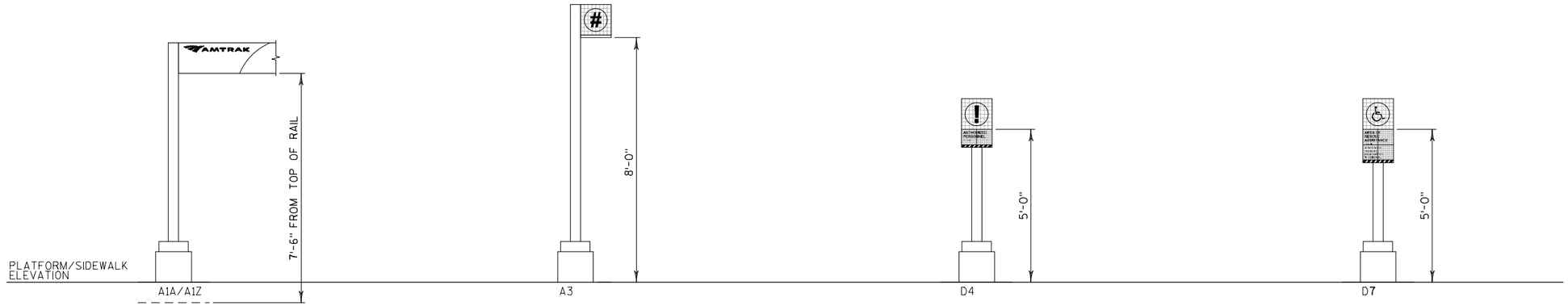


1 A-710 WALL MOUNTED
SCALE: 1/2"=1'-0"

1 A-710 WALL MOUNTED
SCALE: 1/2"=1'-0"

1 A-710 WALL MOUNTED
SCALE: 1/2"=1'-0"

1 A-710 SUSPENDED
SCALE: 1/2"=1'-0"

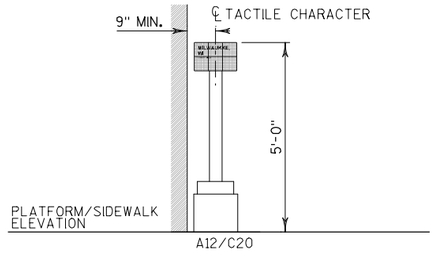


3 A-710 POST MOUNTED
SCALE: 1/2"=1'-0"

3 A-710 POST MOUNTED
SCALE: 1/2"=1'-0"

3 A-710 POST MOUNTED
SCALE: 1/2"=1'-0"

3 A-710 POST MOUNTED
SCALE: 1/2"=1'-0"



3 A-710 POST MOUNTED
SCALE: 1/2"=1'-0"

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

2

2

NO.	DATE	REVISION	BY

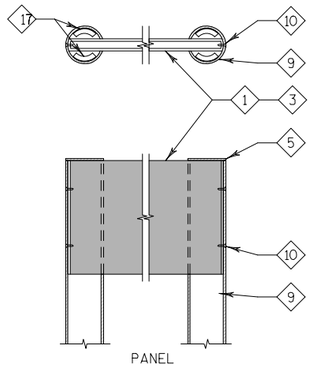
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

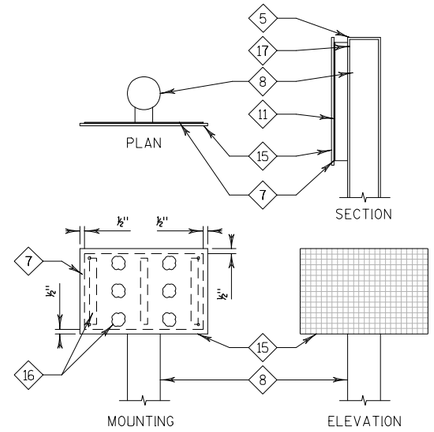
DRAWN BY JR | PLANS CK'D. DK

STANDARD SIGNAGE MOUNTING HEIGHTS

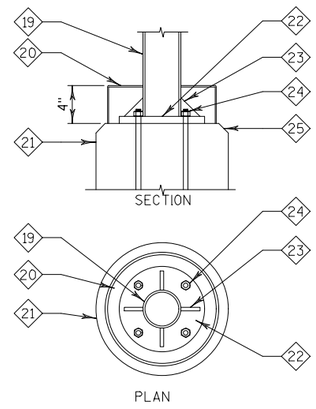
SHEET A-710
191



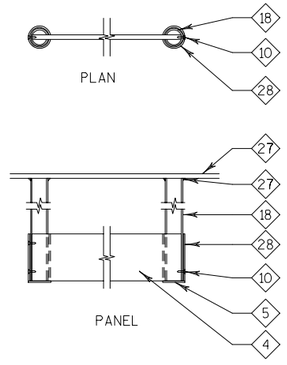
1 A-711 PANEL MOUNTING ELEVATION
SCALE: 1 1/2"=1'-0"



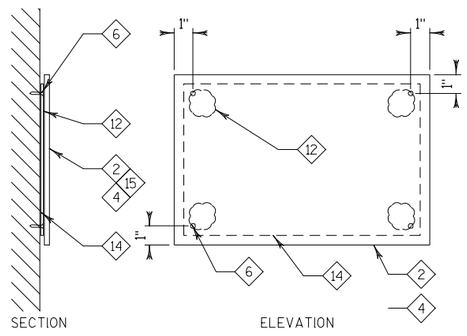
2 A-711 PANEL MOUNTING DETAIL
SCALE: 1 1/2"=1'-0"



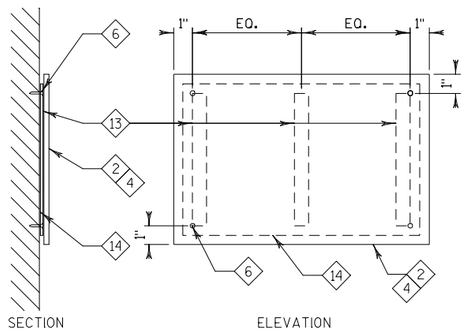
3 A-711 BASE COVER DETAIL
SCALE: 1 1/2"=1'-0"



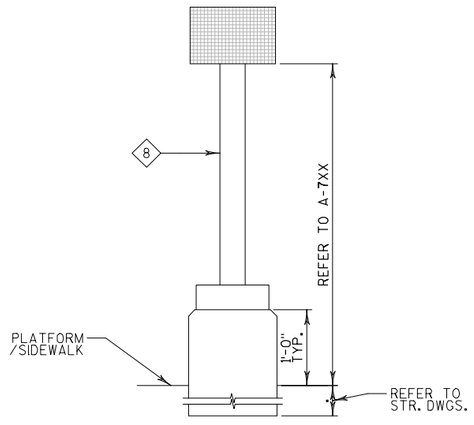
4 A-711 SUSPENDED MOUNTING DET.
SCALE: 1 1/2"=1'-0"



5 A-711 EXTERIOR MOUNTING DETAIL
SCALE: 3"=1'-0"



6 A-711 INTERIOR MOUNTING DETAIL
SCALE: 3"=1'-0"



7 A-711 POST MOUNTING ELEVATION
SCALE: 1"=1'-0"

KEY NOTES:

1. 1" DEEP ALUMINUM PANEL BOX SIGN; SEE SIGNAGE SCHEDULE FOR SIGNAGE DETAIL REFERENCE.
2. 1/4" THICK EXTERIOR GRADE PHOTO POLYMER PANEL SIGN.
3. FACE OF SIGN ORIENTED PARALLEL TO RAIL, LEGNTH OF TRAIN, TYP.
4. 1/8" THICK ALUMINUM SIGN; SEE SIGNAGE SCHEDULE FOR SIGNAGE DETAIL REFERENCE.
5. 1/8" ALLUMINUM CAP FASTENED TO POST WITH VANDAL RESISTANT STAINLESS STEEL SCREWS; PAINTED SILVER. (MATTHEWS PAINT MP18073)
6. MECHANICAL FASTENERS AS REQUIRED BY MANUFACTURER.
7. 1/8" THICK ALUMINUM BACKPLATE; BACK AND EDGES PAINTED AMTRAK BLUE (MATTHEWS PAINT SV0C 1142SP) MOUNT SIGNAGE PLAQUE WITH 1/2" INSET ON ALL FOUR SIDES.
8. 3" (3.5" O.D.) SCH 40 6063-T6 ALUMINUM PIPE WELDED TO BASE PLATE WITH ALUMINUM CAP. POST TO BE PAINTED SILVER. (MATTHEWS PAINT MP18073)
9. 3 1/2" (4" O.D.) SCH 40 6063-T6 ALUMINUM PIPE WELDED TO BASE PLATE. POST TO BE PAINTED SILVER. (MATTHEWS PAINT MP18073)
10. VANDAL RESISTANT STAINLESS STEEL SCREWS.
11. 2" X 1-1/2" X 1/8" ALUMINUM BRACKET; BRACKET CONTINUOUSLY WELDED TO POST AND BACKPLATE. BRACKET PAINTED SILVER. (MATTHEWS PAINT MP18073)
12. EXTERIOR GRADE EPOXY.
13. DOUBLE-SIDED INDUSTRIAL STRENGTH TAPE.
14. 1/8" THICK ALUMINUM BACKER.
15. 1/8" THICK ETCHED ZINC SIGN; SEE SIGNAGE SCHEDULE FOR SIGNAGE DETAIL REFERENCE.
16. SECURE SIGN PANEL WITH VHB TAPE AND EXTERIOR GRADE EPOXY (TYP.)
17. (2) 5/8" X 5/8" X 1/8" ALUM. ANGLE RING SECTION FOR CAP CONNECTION, LEG IN, OUTSIDE ARC LENGTH TO BE 1/4 OF PIPE INTERIOR CIRCUMFERENCE. TACK WELD, MIN. 3 LOCATIONS.
18. 1 1/2" (1.9" O.D.) SCH 40 6063-T6 ALUMINUM PIPE WITH ALUMINUM CAP. POST TO BE PAINTED SILVER. (MATTHEWS PAINT MP18073)
19. ALUM POST
20. ONE PIECE SPUN ALUM BASE COVER, PAINTED SILVER.
21. CONC FOOTING BELOW, TOP CASTING TO BE LEVEL & SMOOTH; REFER TO STRUCTURAL FOR ALL REINFORCING
22. 9" DIA. 3/4" THICK, ALUM. BASE PLATE.
23. (4) TRIANGULAR ALUMINUM STIFFENER PLATES, EACH 2" X 2" X 3/8" THICK. WELD TO POST, USE 3/16" FILLET WELDS.
24. (4) LEVELING NUT & WASHER TYP. REFER TO STRUCT.
25. 1" CHAMFER TYP.
26. 1/4" WELD CONNECTION OF POST TO STEEL BEAM
27. STEEL BEAM
28. 2" (2.375" O.D.) SCH 40 6063-T6 ALUMINUM PIPE WITH ALUMINUM CAP. POST TO BE PAINTED SILVER. (MATTHEWS PAINT MP18073)

GENERAL NOTES:

1. SEE SITE PLAN FOR SIGN LOCATIONS. VERIFY ALL LOCATIONS IN FIELD. LOCATIONS ARE A GENERAL REPRESENTATION AND SHALL REQUIRE CONSULTATION W/ PROJECT ARCHITECT/ENGINEER IF UNCLEAR OF REQUIREMENTS.
2. MOUNTING LOCATIONS, TYPES, AND CONNECTIONS MAY VARY. VERIFY IN FIELD ANY OBSTACLES AND SITE CONDITIONS.
3. PROTECT ALL EXISTING SIGNS NOT BEING REMOVED, INCLUDING KIOSKS.
4. FASTENERS SHALL BE CORROSION RESISTANT, SUCH AS GRADE 304 STAINLESS STEEL.
5. SUBMIT SHOP DRAWINGS FOR ALL SIGN ASSEMBLIES TO PROJECT ARCHITECT/ENGINEER FOR APPROVAL.
6. CONTRACTOR TO VERIFY FROST DEPTH BEFORE CONSTRUCTION.
7. ALUMINUM SHALL BE ISOLATED FROM CONTACT WITH CONCRETE, USE BITUMINOUS PAINT OR EQUAL.
8. ALL PAINTED SURFACES OF SIGNAGE ARE TO BE CLEAR COATED WITH: MATTHEWS VOC.
9. SATIN CLEAR COAT (#281228).
10. ALL ALUMINUM WELDING SHALL BE PERFORMED BY A CERTIFIED ALUMINUM WELDER IN ACCORDANCE WITH AWS D1.2
    DESIGN CRITERIA:
    - WIND SPEED = 140 MPH
    - IMPORTANCE FACTOR=1.0
    - KZT = 1.0
    - EXPOSURE = C
    - KD = 0.85
11. PRIOR TO FABRICATION OF ANY SIGNAGE, DESIGN AND SHOP DRAWINGS MUST BE SUBMITTED TO SIGNAGE BRAND MANAGEMENT (SIGNAGEBRANDMANAGEMENT@AMTRAK.COM) FOR FINAL APPROVAL. BRAND MANAGEMENT WILL ISSUE THE FINAL ARTWORK FILE AND THE LICENCE TO USE THE TRAVEL MARK UPON APPROVAL OF SHOP DRAWINGS.

STATE PROJECT NUMBER

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

SIGNAGE MOUNTING DETAILS

SHEET A-711
192

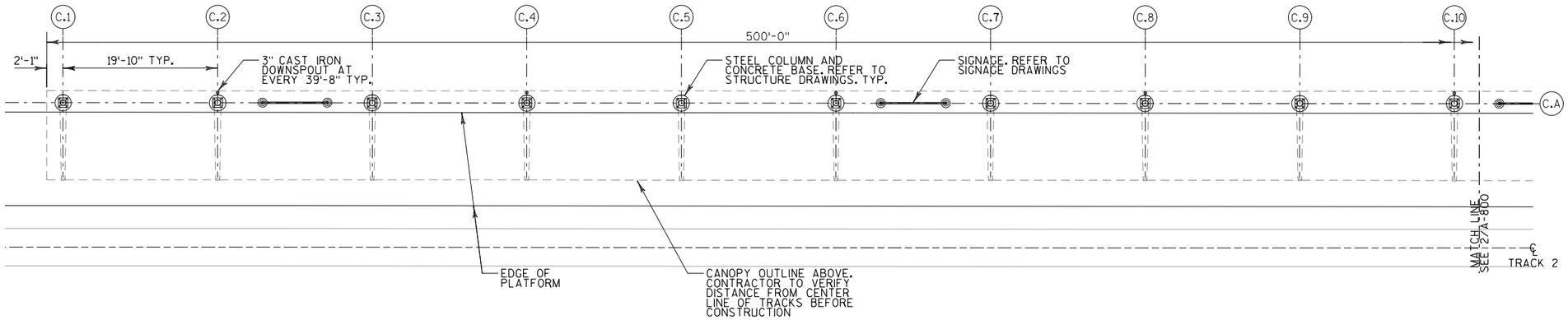
BATCH PRINT SHEET CSD OF NSD
PRINTER DRIVER: $$...printerdriver...$$
PEN TABLE: $$...pentable...$$
FILE NAME: $$....designfile...$$
PLOT DATE: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

2

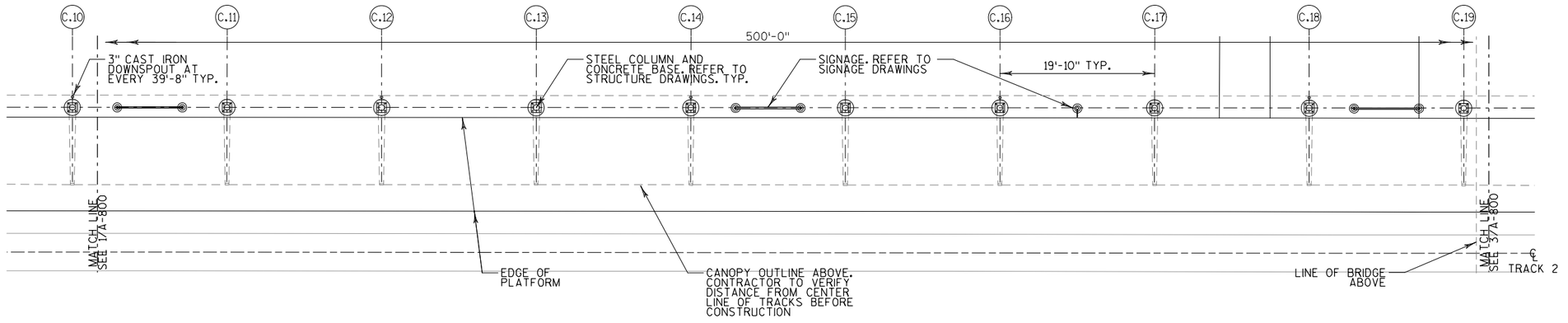
2

STATE PROJECT NUMBER

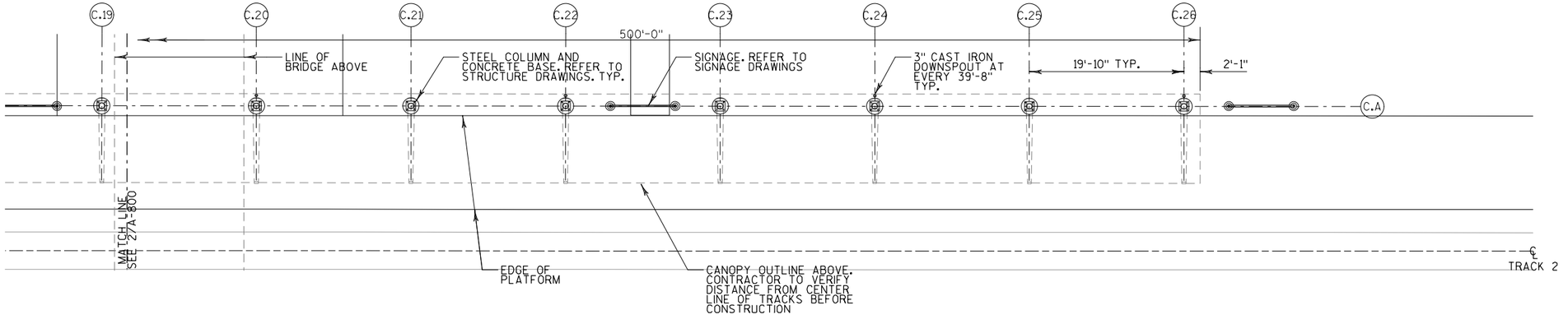
1000-57-70



1 A-800 CANOPY PLAN
SCALE: 1/8"=1'-0"
0 4 8 16 FT
N



2 A-800 CANOPY PLAN
SCALE: 1/8"=1'-0"
0 4 8 16 FT
N



3 A-800 CANOPY PLAN
SCALE: 1/8"=1'-0"
0 4 8 16 FT
N

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

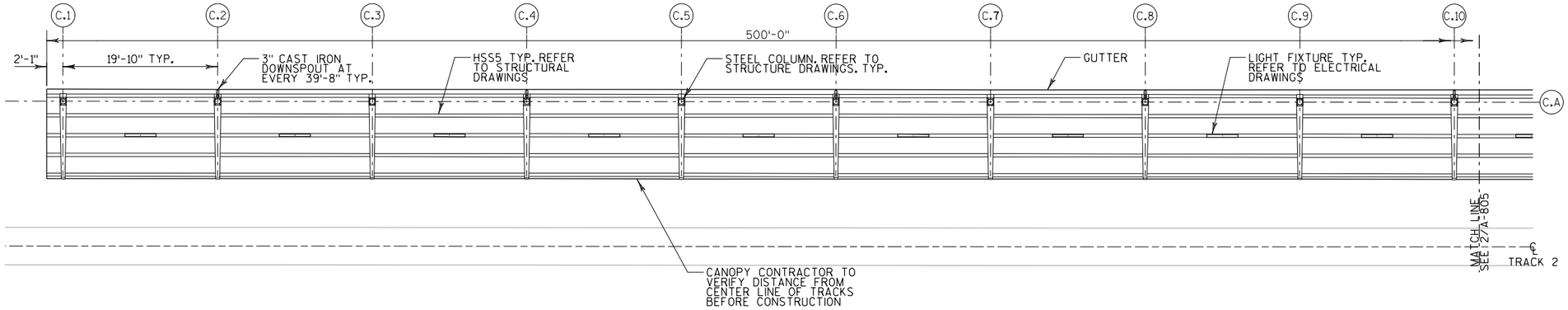
DRAWN BY JR | PLANS CK'D. DK

CANOPY PLAN

SHEET A-800
193

STATE PROJECT NUMBER

1000-57-70

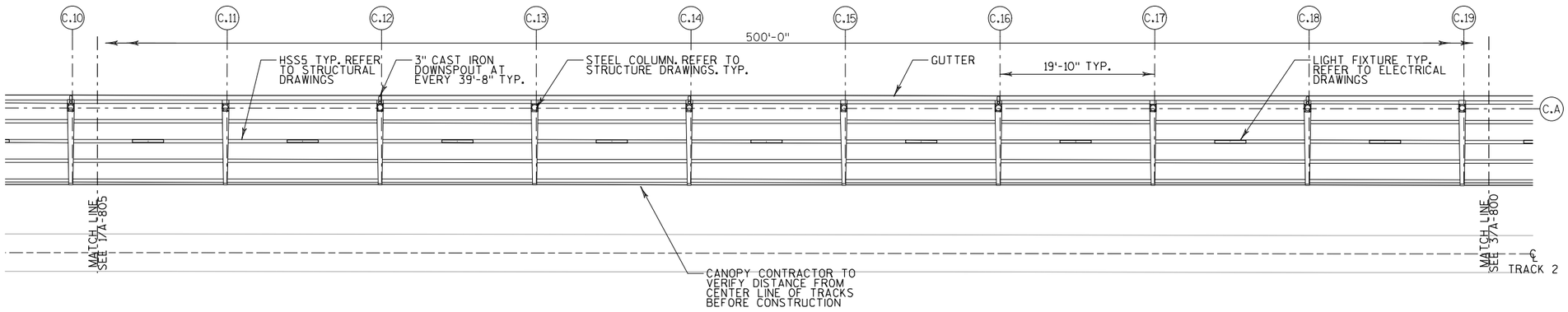


1 A-805 CANOPY REFLECTED CEILING PLAN

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

0 4 8 16 FT

N

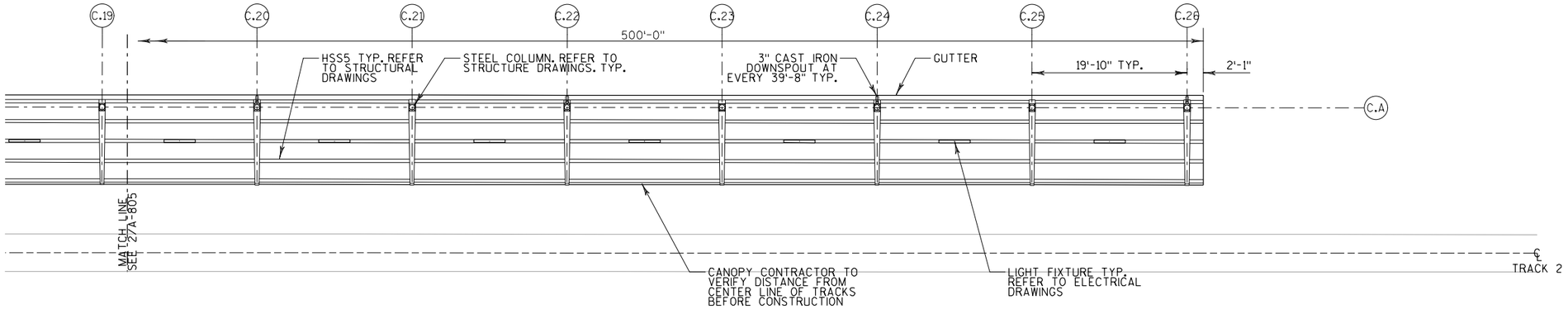


2 A-805 CANOPY REFLECTED CEILING PLAN

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

0 4 8 16 FT

N



3 A-805 CANOPY REFLECTED CEILING PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CANOPY REFLECTED CEILING PLAN

SHEET A-805

194

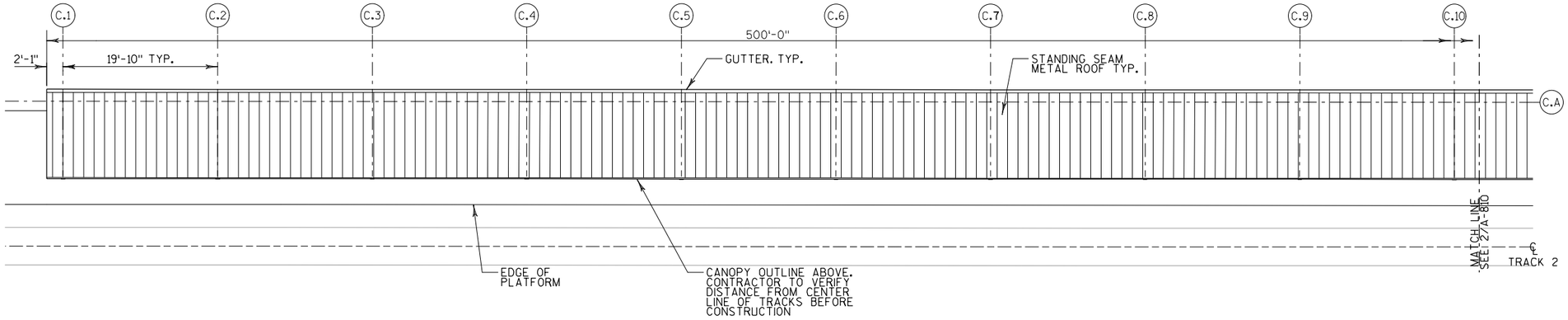
2

2

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

STATE PROJECT NUMBER

1000-57-70

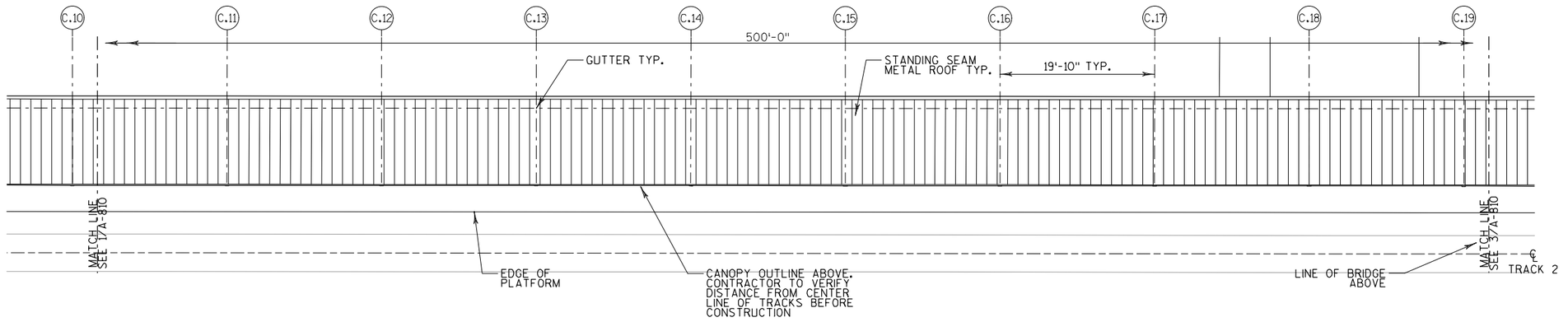


1 A-810 CANOPY ROOF PLAN

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

0 4 8 16 FT

N

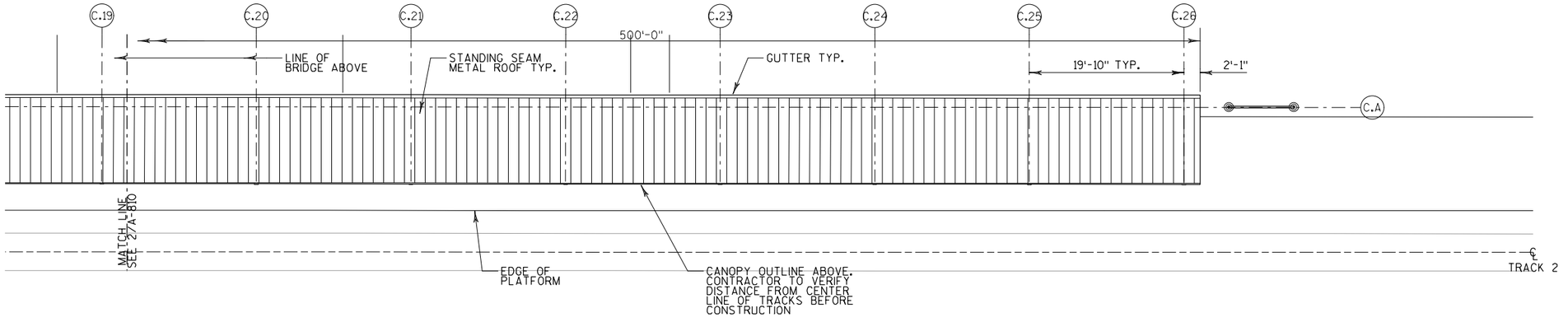


2 A-810 CANOPY ROOF PLAN

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

0 4 8 16 FT

N



3 A-810 CANOPY ROOF PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

CANOPY ROOF PLAN

SHEET A-810

195

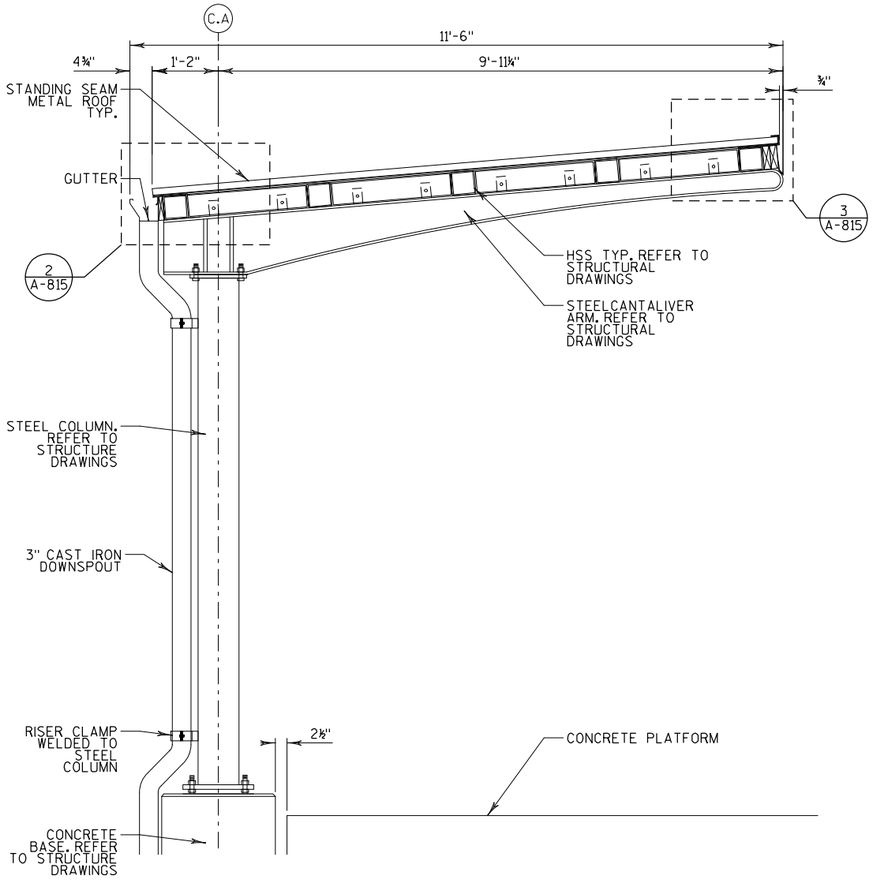
2

2

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

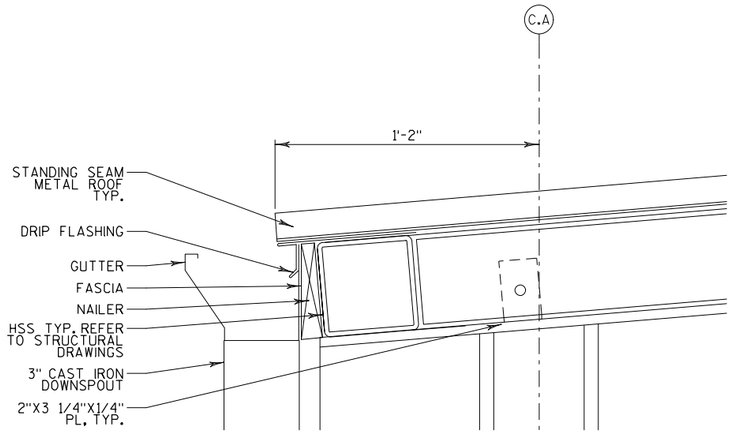
STATE PROJECT NUMBER

1000-57-70



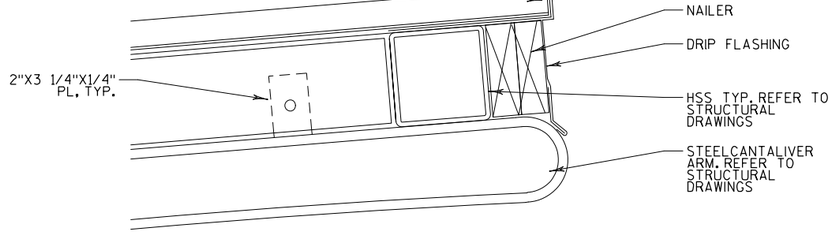
1 A-815 CANOPY CROSS SECTION

SCALE: 3/4"=1'-0"



2 A-815 CANOPY COPING DETAIL

SCALE: 6"=1'-0"



3 A-815 CANOPY COPING DETAIL

SCALE: 6"=1'-0"

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

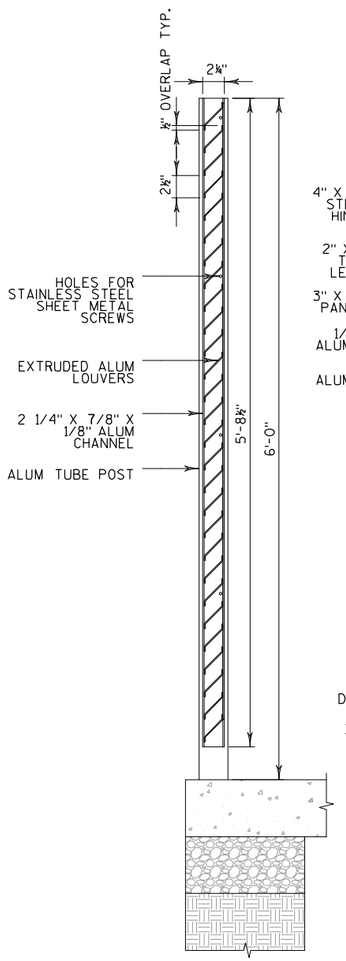
DRAWN BY JR | PLANS CK'D. DK

CANOPY SECTION AND DETAIL

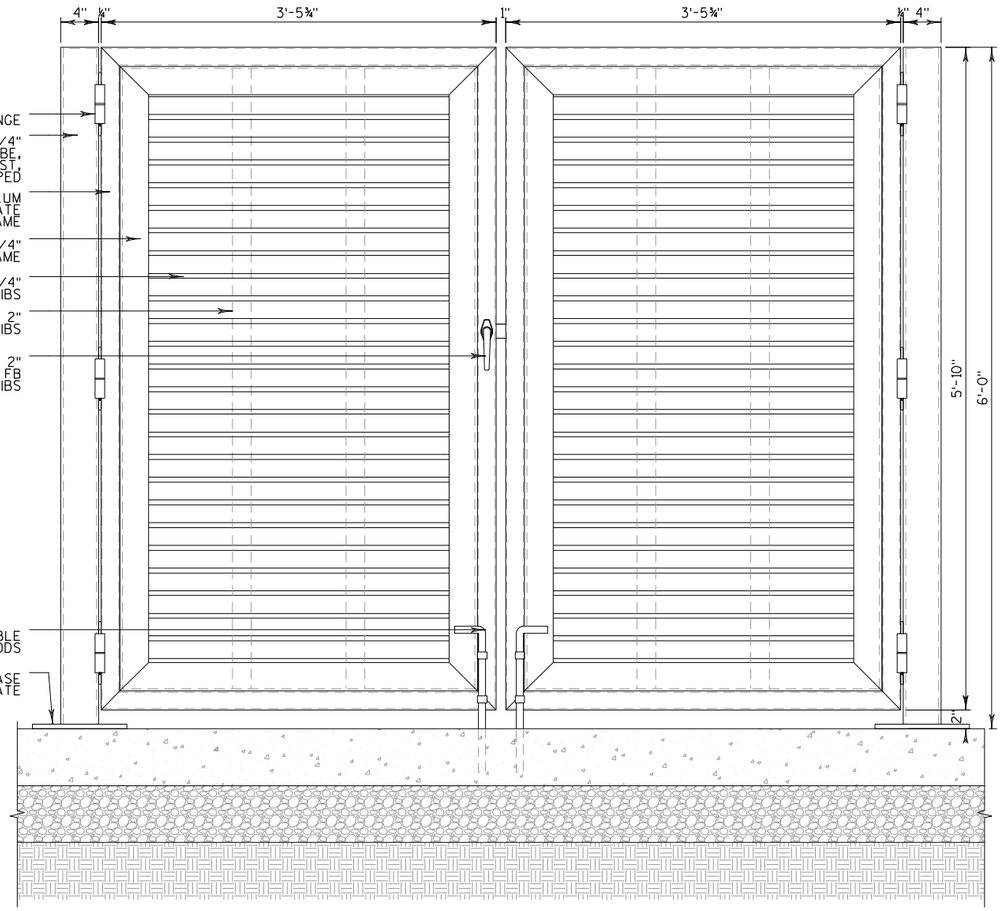
SHEET A-815

STATE PROJECT NUMBER

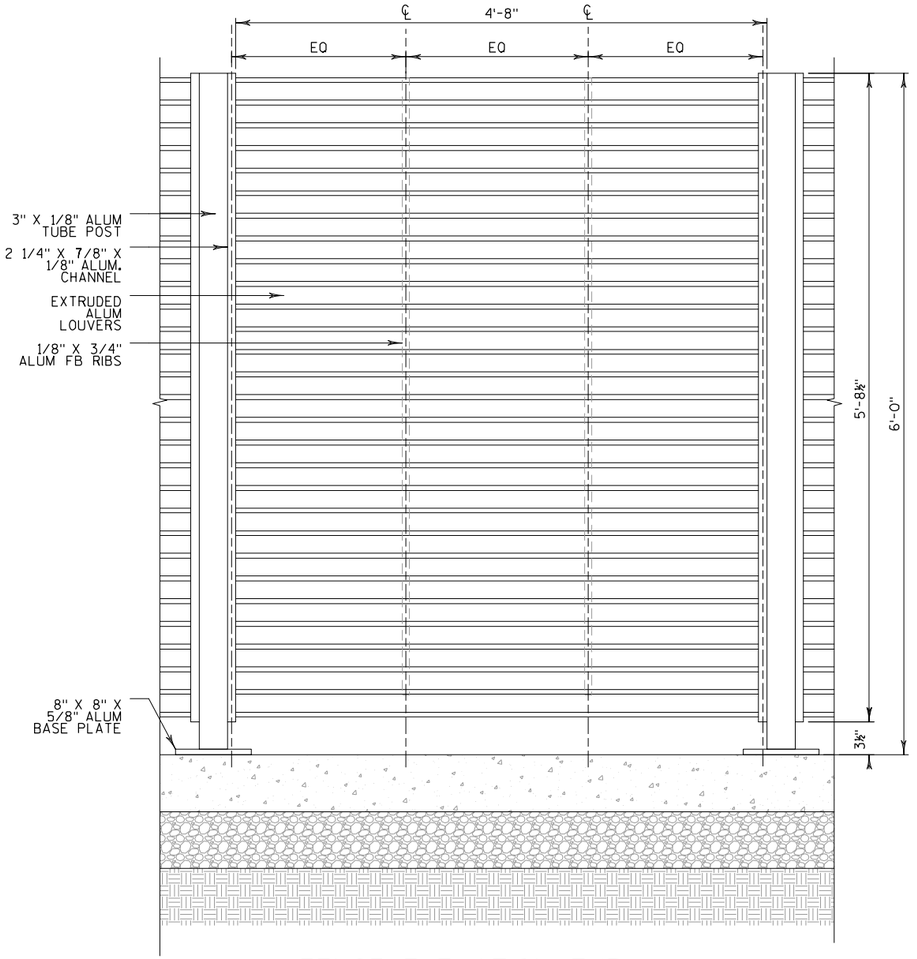
1000-57-70



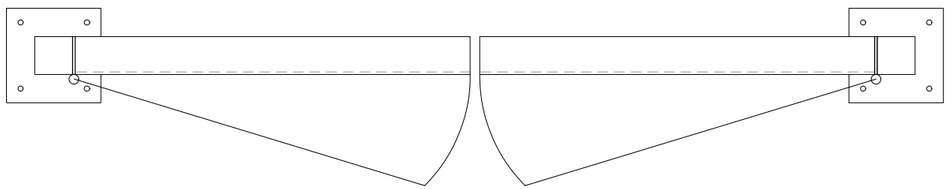
5 A-521 FENCE PANEL SECTION TYP.
SCALE: 1 1/2"=1'-0"



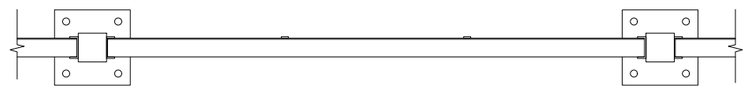
4 A-521 FENCE GATE ELEVATION
SCALE: 1 1/2"=1'-0"



2 A-521 FENCE ELEVATION TYP.
SCALE: 1 1/2"=1'-0"



3 A-521 FENCE GATE PLAN
SCALE: 1 1/2"=1'-0"



1 A-521 FENCE PLAN TYP.
SCALE: 1 1/2"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY NA | PLANS CK'D. DK

EXTERIOR FENCE PLAN & DETAILS

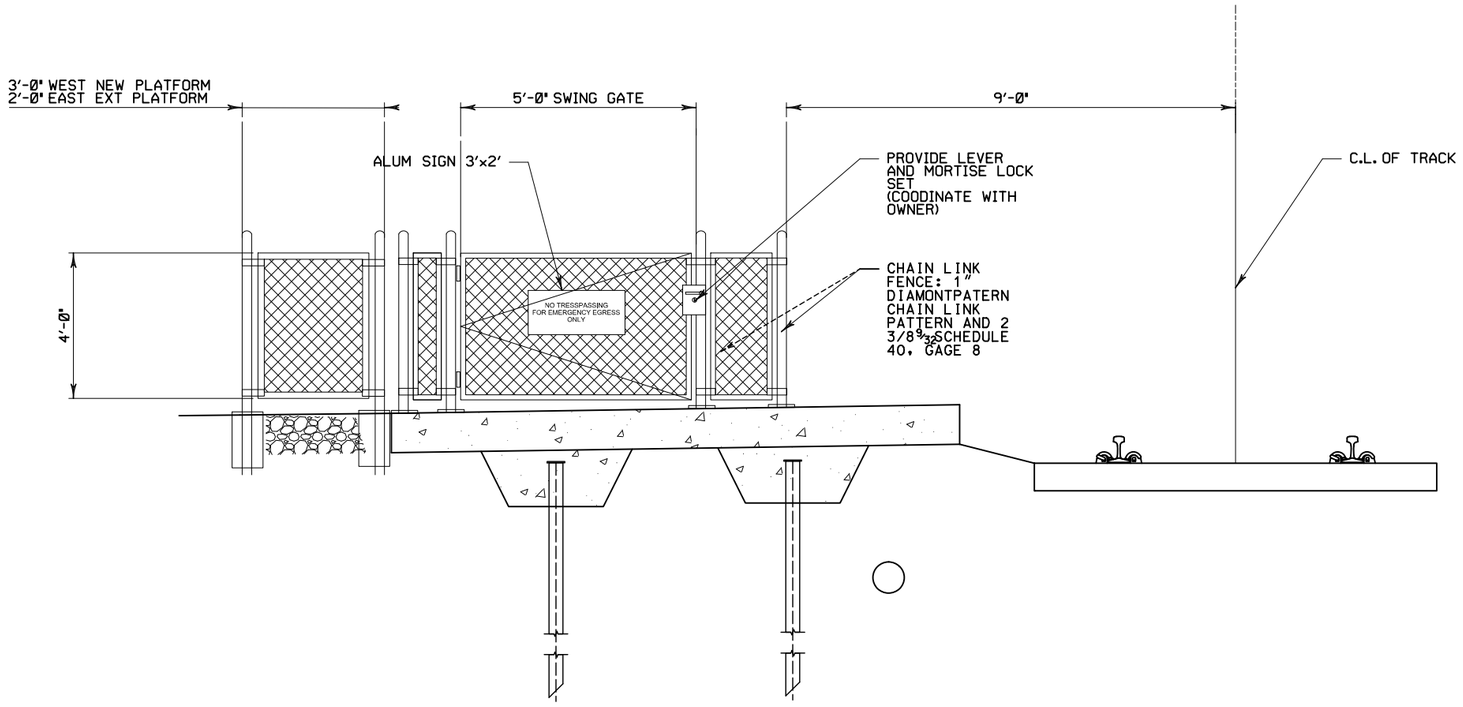
SHEET A-830
197

2

2

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

STATE PROJECT NUMBER
1000-57-70



1 A-831 TYP. PLATFORM FENCE ELEVATION

SCALE: 3"=1'-0"

0 1 2 4 IN

BATCH PRINT SHEET#CSD# OF #NSD#

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

ARCHITECTURAL

DRAWN BY HR | PLANS CK'D. DP

PLATFORMS FENCE ELEVATION

SHEET A-831

198

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

STATE PROJECT NUMBER

1000-57-70

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20221007
Location: Milwaukee, Wisconsin
Climate Zone: 6a
Project Type: New Construction
Vertical Glazing / Wall Area: 30%

Construction Site: 5601 S. 6th Street, Milwaukee, Wisconsin
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)
Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Building Area	Floor Area
1-Pedestrian Bridge (Transportation) : Nonresidential	1186
2-East Tower (Transportation) : Nonresidential	1796
3-Passage (Transportation) : Nonresidential	870
4-West Tower (Transportation) : Nonresidential	1796

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Standing Seam Mtl. Roof: Metal Building, Standing Seam, Double Insulation Layer with Thermal Blocks (e), [Bldg. Use 4 - West Tower]	1634	6.0	32.0	0.030	0.031
Roof: Attic Roof, Steel Joists, [Bldg. Use 4 - West Tower]	524	0.0	31.5	0.031	0.021
Floor: Unheated Slab-On-Grade, Horizontal with vertical 4 ft., [Bldg. Use 4 - West Tower] (d)	1796	---	12.0	0.636	0.540
Floor: Steel Joist, [Bldg. Use 4 - West Tower]	35	11.0	4.0	0.059	0.033
Standing Seam Mtl. Roof: Attic Roof, Steel Joists, [Bldg. Use 2 - East Tower]	1634	6.0	32.0	0.026	0.021
Roof: Insulation Entirely Above Deck, [Bldg. Use 2 - East Tower]	524	---	31.5	0.031	0.032
Floor: Unheated Slab-On-Grade, Horizontal with vertical 4 ft., [Bldg. Use 2 - East Tower] (d)	1796	---	12.0	0.636	0.540
Floor: Steel Joist, [Bldg. Use 2 - East Tower]	35	0.0	0.0	0.350	0.033
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Pedestrian Bridge]	1185	---	31.5	0.031	0.032
Floor: Other (U-Factor option), [Bldg. Use 1 - Pedestrian Bridge] (b)	1253	---	---	0.150	0.033
Roof: Insulation Entirely Above Deck, [Bldg. Use 3 - Passage]	721	---	31.5	0.031	0.032
Floor: Unheated Slab-On-Grade, Horizontal with vertical 4 ft., [Bldg. Use 3 - Passage] (d)	870	---	12.0	0.636	0.540
NORTH					
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	832	---	---	0.038	0.051

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Door: Insulated Metal, Swinging, [Bldg. Use 4 - West Tower]	22	---	---	0.032	0.370
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	339	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 4 - West Tower] (c)	300	---	---	0.100	0.360
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	300	---	---	0.051	0.051
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	827	---	---	0.038	0.051
Door: Insulated Metal, Swinging, [Bldg. Use 2 - East Tower]	22	---	---	0.032	0.370
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	340	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 2 - East Tower] (c)	300	---	---	0.100	0.360
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 1 - Pedestrian Bridge] (b)	1342	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 1 - Pedestrian Bridge] (c)	1000	---	---	0.100	0.360
Ext. Metal Wall: Other Metal Building Wall, [Bldg. Use 3 - Passage] (b)	64	---	---	0.051	0.052
Vision Glass: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 3 - Passage] (c)	60	---	---	0.100	0.360
EAST					
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	1075	---	---	0.038	0.051
Door: Other (U-Factor option), Swinging, [Bldg. Use 4 - West Tower]	63	---	---	0.167	0.370
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	980	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 4 - West Tower] (c)	800	---	---	0.100	0.360
Glass Door: Other (U-Factor option), Swinging, [Bldg. Use 4 - West Tower]	46	---	---	0.280	0.370
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	422	---	---	0.051	0.051
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	1821	---	---	0.038	0.051
Door: Insulated Metal, Swinging, [Bldg. Use 2 - East Tower]	44	---	---	0.032	0.370
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	484	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 2 - East Tower] (c)	400	---	---	0.100	0.360
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	150	---	---	0.051	0.051
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	302	---	---	0.051	0.051
Ext. Wall: Other Steel Framed Wall, [Bldg. Use 3 - Passage] (b)	100	---	---	0.150	0.064
Glass Door: Other (U-Factor option), Swinging, [Bldg. Use 3 - Passage]	46	---	---	0.280	0.370
SOUTH					
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	1016	---	---	0.038	0.051
Door: Insulated Metal, Swinging, [Bldg. Use 4 - West Tower]	22	---	---	0.032	0.370
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 4 - West Tower] (c)	102	---	---	0.100	0.360
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	165	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 4 - West Tower] (c)	100	---	---	0.100	0.360
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	993	---	---	0.038	0.051
Door: Insulated Metal, Swinging, [Bldg. Use 2 - East Tower]	43	---	---	0.032	0.370

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	167	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 2 - East Tower] (c)	100	---	---	0.100	0.360
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	136	---	---	0.051	0.051
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 1 - Pedestrian Bridge] (b)	1342	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 1 - Pedestrian Bridge] (c)	1000	---	---	0.100	0.360
Ext. Metal Wall: Other Metal Building Wall, [Bldg. Use 3 - Passage] (b)	323	---	---	0.051	0.052
Glass Door: Other (U-Factor option), Swinging, [Bldg. Use 3 - Passage]	46	---	---	0.280	0.370
WEST					
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	1807	---	---	0.038	0.051
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	686	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 4 - West Tower] (c)	600	---	---	0.100	0.360
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 - West Tower] (b)	292	---	---	0.051	0.051
Ext. Brick Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	1111	---	---	0.038	0.051
Door: Insulated Metal, Swinging, [Bldg. Use 2 - East Tower]	63	---	---	0.032	0.370
Curtain Wall System: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	980	---	---	0.360	0.051
Window: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 2 - East Tower] (c)	800	---	---	0.100	0.360
Glass Door: Other (U-Factor option), Swinging, [Bldg. Use 2 - East Tower]	45	---	---	0.280	0.370
Ext. Metal Wall: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - East Tower] (b)	422	---	---	0.051	0.051
Ext. Metal Wall: Other Metal Building Wall, [Bldg. Use 3 - Passage] (b)	157	---	---	0.051	0.052
Vision Glass: Other Window: Fixed, Perf. Specs.: Product ID NA, SHGC 0.09, [Bldg. Use 3 - Passage] (c)	100	---	---	0.100	0.360

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.
(e) Thermal spacer block with minimum R-3.5 must be installed above the purlin/batt, and the roof deck secured to the purlins.

Envelope PASSES: Design 12% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20221007
Project Type: New Construction

Construction Site: 5601 S. 6th Street, Milwaukee, Wisconsin
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)
Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Pedestrian Bridge (Transportation)	1186	0.63	747
2-East Tower (Transportation)	1796	0.63	1131
3-Passage (Transportation)	870	0.63	548
4-West Tower (Transportation)	1796	0.63	1131
		Total Allowed Watts =	3558

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Pedestrian Bridge (Transportation)				
LED: Other:	1	11	30	330
LED: Other:	1	4	4	16
2-East Tower (Transportation)				
LED: Other:	1	12	32	384
LED: Other:	1	7	50	350
LED: Other:	1	2	33	66
LED: Other:	1	12	17	204
LED: Other:	1	2	4	8
LED: Other:	1	4	17	68
LED: Other:	1	26	15	390
3-Passage (Transportation)				
LED: Other:	1	8	22	176
LED: Other:	1	1	4	4
LED: Other:	1	4	10	40
4-West Tower (Transportation)				
LED: Other:	1	12	32	384
LED: Other:	1	7	50	350
LED: Other:	1	2	33	66

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: Other:	1	12	17	204
LED: Other:	1	2	4	8
LED: Other:	1	4	17	68
LED: Other:	1	26	15	390
			Total Proposed Watts =	3506

Interior Lighting PASSES: Design 1% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20221007
Project Type: New Construction
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site: 5601 S. 6th Street, Milwaukee, Wisconsin
Owner/Agent:
Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Main entry	5 ft of door	30	Yes	150
Other door (not main entry)	50 ft of	20	Yes	1000
Entry canopy	430 ft2	0.4	Yes	172
Entry canopy	730 ft2	0.4	Yes	292
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	50 ft of	20	Yes	1000
			Total Tradable Watts (a) =	3314
			Total Allowed Watts =	3314
			Total Allowed Supplemental Watts (b) =	750

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Main entry (5 ft of door width): Tradable Wattage				
LED: Other:	1	1	30	30
Other door (not main entry) (50 ft of door width): Tradable Wattage				
LED: Other:	1	1	70	70
Entry canopy (430 ft2): Tradable Wattage				
LED: Other:	1	6	22	132
Entry canopy (730 ft2): Tradable Wattage				
LED: Other:	1	10	22	220
Other door (not main entry) (5 ft of door width): Tradable Wattage				
LED: Other:	1	1	30	30

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENERGY CODE ANALYSIS 1

SHEET A-900
199

2

2

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
Other door (not main entry) (50 ft of door width): Tradable Wattage				
LED: Other:	1	1	70	70
	Total Tradable Proposed Watts =			732

Exterior Lighting PASSES: Design 82% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title | Signature | Date

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20221007
Location: Milwaukee, Wisconsin
Climate Zone: 6a
Project Type: New Construction

Construction Site: 5601 S. 6th Street Milwaukee, Wisconsin
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Mechanical Systems List

Quantity System Type & Description

1 HVAC System (Single Zone w/ PerimeterSystem):
Heating: 1 each - Central Furnace, Gas, Capacity = 180 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 78% AFUE
Cooling: 1 each - Packaged Terminal Unit, Capacity = 106 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.20 EER, Required Efficiency = 9.50 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

1 HVAC System (Single Zone w/ PerimeterSystem):
Heating: 1 each - Central Furnace, Gas, Capacity = 180 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 78% AFUE
Cooling: 1 each - Packaged Terminal Unit, Capacity = 106 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.20 EER, Required Efficiency = 9.50 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

1 HVAC System (Single Zone w/ PerimeterSystem):
Heating: 1 each - Central Furnace, Gas, Capacity = 180 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 78% AFUE
Cooling: 1 each - Packaged Terminal Unit, Capacity = 106 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.20 EER, Required Efficiency = 9.50 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title | Signature | Date

COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 84.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1][3]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR2][3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR4][3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C402.4.1 [PR10][1]	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C402.4.1 [PR11][3]	The skylight area <= 3 percent of the gross roof area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C406 [PR5][3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4][3]	Slab edge insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.2.1 [FO6][3]	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C104 [FO3][3]	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.6 [FO12][3]	Radiant heating systems panels insulated to >=R-3.5 on face opposite space being heated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C403.2.4.5, C403.2.4.6 [FO9][3]	Snow/ice melting system sensors for future connection to controls. Freeze protection systems have automatic controls installed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12][3]	Fenestration products rated in accordance with NFRC.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Default values are used.
C303.1.3 [FR13][3]	Fenestration products are certified as to performance labels or certificates provided.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C402.4.3 [FR10][3]	Vertical fenestration SHGC value.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.4.3, C402.4.3.4 [FR8][3]	Vertical fenestration U-Factor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.4.4 [FR14][3]	U-factor of opaque doors associated with the building thermal envelope meets requirements.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1.1, 2.2 [FR20][3]	The building envelope contains a continuous air barrier that is sealed in an approved manner and average assembly air leakage <= 0.04 cfm/ft2 Air barrier penetrations are sealed in an approved manner.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C402.5.2, C402.5.4 [FR18][3]	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Doors that comply with special International Building Code requirements.
C402.5.7 [FR17][3]	Vestibules are installed on all building entrances. Doors have self-closing devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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

2

STATE PROJECT NUMBER

1000-57-70

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENERGY CODE ANALYSIS 2

SHEET A-901
200

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.7 [PL8][3]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C404.7 [PL8][3]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.7 [PL8][3]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C402.5.5, C403.2.4.3 [ME3][3]	Stair and elevator shaft vents have motorized dampers that automatically close.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C402.5.5, C403.2.4.3 [ME58][3]	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.12.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.2.12.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.2.12.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.2.12.3 [ME117][3]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Single fans with motor nameplate horsepowerof = 5 hp.
C403.2.12.3 [ME117][3]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Single fans with motor nameplate horsepowerof = 5 hp.
C403.2.12.3 [ME117][3]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Single fans with motor nameplate horsepowerof = 5 hp.
C403.2.13 [ME71][3]	Unenclosed spaces that are heated use only radiant heat.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.3 [ME55][3]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.4.7 [ME113][3]	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.2.4.7 [ME113][3]	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.6.1 [ME59][3]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >2,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.6.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.7 [ME57][3]	Exhaust air energy recovery on systems meeting Table C403.2.7(1) and C403.2.7(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.8 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.9 [ME60][3]	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.9 [ME10][3]	Ducts and plenums sealed based on static pressure and location.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.9.1.3 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.9.1.3 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.9.1.3 [ME11][3]	Ductwork operating >3 in. water column requires air leakage testing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.3 [ME62][3]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.3 [ME62][3]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.3 [ME62][3]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.4.6 [ME110][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply. *See the Mechanical Systems list for values.*
C403.4.4.6 [ME110][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply. *See the Mechanical Systems list for values.*
C403.4.4.6 [ME110][3]	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply. *See the Mechanical Systems list for values.*
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15][3]	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1 [EL18][3]	Occupancy sensors installed in required spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.2.3 [EL23][3]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2.1 [EL22][3]	Automatic controls to shut off all building lighting installed in all buildings.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3 [EL16][3]	Daylight zones provided with individual controls that control the lights independent of general area lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.2 [EL20][3]	Primary sidelighted areas are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.3 [EL21][3]	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL4][3]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL8][3]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL25][3x3]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.3 [EL6][3]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

STATE PROJECT NUMBER

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENERGY CODE ANALYSIS 3

SHEET A-902
201

2

2

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

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C202.1 [IN3]¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.1 [IN10]²	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.2 [IN7]³	Above-grade wall insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.2, C402.2.4 [IN9]⁴	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C303.2.1 [IN14]⁵	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C402.2.1 [IN17]⁶	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C104 [IN6]¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C104 [IN8]²	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.6 [IN18]⁵	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C104 [IN2]¹	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1.1 [IN1]⁵	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Project Title: MKE 20221007 Report date: 10/07/22
Data filename: Page 19 of 22

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.2, C408.2.5.2 [FI17]³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2, C408.2.5.3 [FI18]³	Furnished O&M manuals for HVAC systems within 30 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C402.5.3 [FI51]³	Where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening are located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms are sealed and insulated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
C402.5.6 [FI37]³	Weatherseals installed on all loading dock cargo doors.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C402.5.8 [FI26]³	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.2 [FI27]³	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.2 [FI38]³	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.3 [FI20]³	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Project Title: MKE 20221007 Report date: 10/07/22
Data filename: Page 20 of 22

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.2.4.2 [FI39]³	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Zones operated continuously.
C403.2.4.2.1, C403.2.4.2.2 [FI40]³	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18]³	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19]³	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.2.1 [FI28]³	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.1 [FI31]³	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.2 [FI10]³	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.3 [FI32]³	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.4 [FI29]³	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI7]³	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16]³	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.3 [FI43]³	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Project Title: MKE 20221007 Report date: 10/07/22
Data filename: Page 21 of 22

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5.4 [FI30]³	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33]³	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Project Title: MKE 20221007 Report date: 10/07/22
Data filename: Page 22 of 22

STATE PROJECT NUMBER

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL

DRAWN BY JR | PLANS CK'D. DK

ENERGY CODE ANALYSIS 4

SHEET A-903
202

2

2

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

STATE PROJECT NUMBER

1000-57-70

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
ARC	AIR CURTAIN
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
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
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
SR	SUPPLY REGISTER
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
WMS	WIRE MESH SCREEN
WPD	WATER PRESSURE DROP

MECHANICAL SHEET INDEX

SHEET NUMBER	SHEET TITLE
M-001	MECHANICAL LEGEND AND GENERAL NOTES
M-200	MECHANICAL FIRST FLOOR PLAN
M-201	MECHANICAL SECOND FLOOR PLAN
M-202	MECHANICAL ROOF PLAN
M-300	MECHANICAL SCHEDULES
M-400	MECHANICAL DETAILS

GENERAL NOTES

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

2. ALL LEGEND SYMBOLS AND ABBREVIATIONS DO NOT NECESSARILY APPEAR IN THESE CONTRACT DOCUMENTS. SEE 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. 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

17. 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 3/8" SCALE OR THE SCALE SHOWN ON THE DRAWINGS; AND CONTROL WIRING SCHEMATICS APPROVED BY THE AIR CONDITIONING EQUIPMENT MANUFACTURER.

18. 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.

19. 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.

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

21. 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.

22. 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.

23. DRAWINGS FOR WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. 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.

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

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

26. 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.

27. 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.

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

29. 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.

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
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT
12x5 8x8	TRANSITION
	ELBOW WITH TURNING VANES
	POINT OF DISCONNECTION / POINT OF CONNECTION
T	WALL MOUNTED THERMOSTAT OR TEMPERATURE SENSOR
	ACCESS DOOR
	AIR OUTLETS
U# "	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
MD	MOTORIZED DAMPER
CO	WALL MOUNTED CARBON MONOXIDE SENSOR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

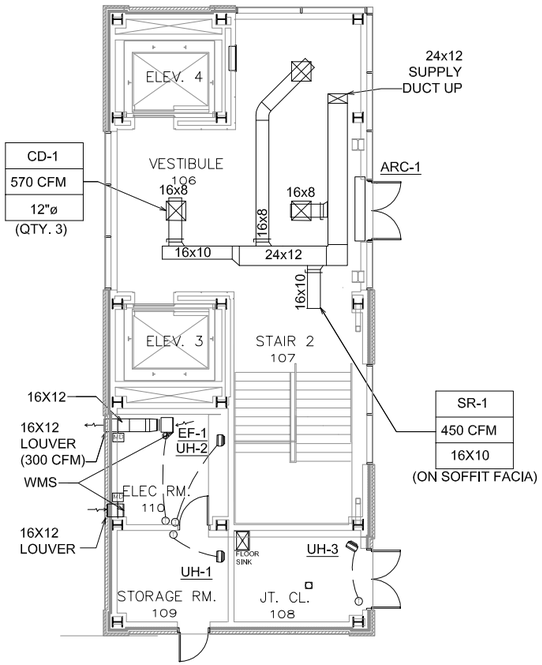
MECHANICAL

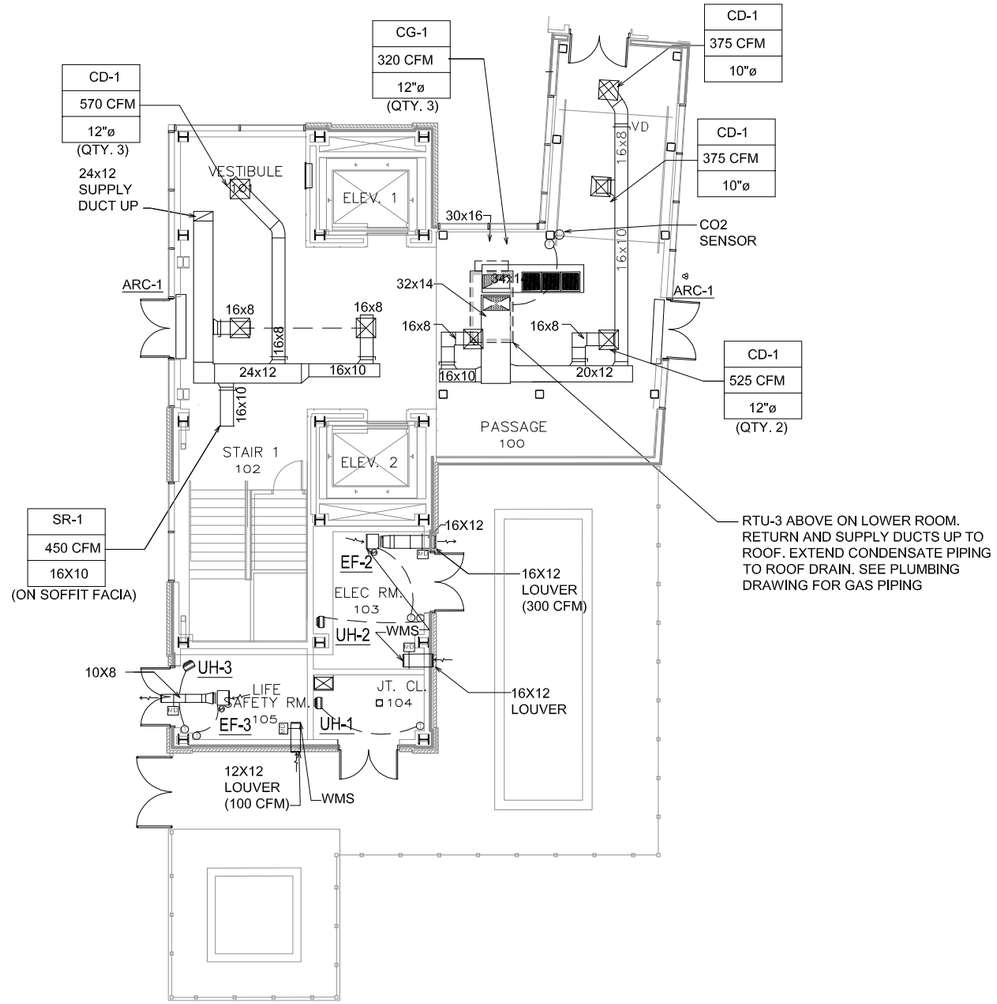
DRAWN BY:	PLANS CK'D. BY:	SHEET
DT	FA	

MECHANICAL LEGEND & GENERAL NOTES

SHEET 203 M-001

STATE PROJECT NUMBER
1000-57-70





1 M-200 **WEST TOWER FIRST FLOOR PLAN**
SCALE: 1/16"=1'-0"
0 8 16 32 FT
N

2 M-200 **EAST TOWER FIRST FLOOR PLAN**
SCALE: 1/16"=1'-0"
0 8 16 32 FT
N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

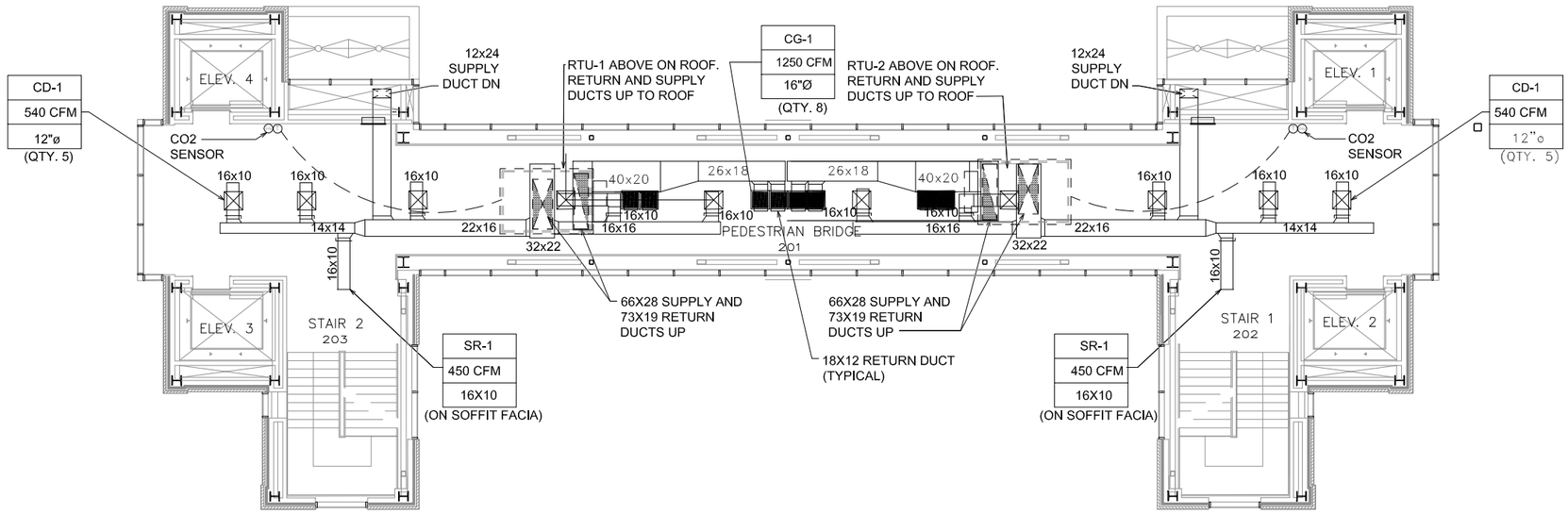
MECHANICAL

DRAWN BY:	PLANS CK'D. BY:	SHEET
DT	FA	M-200

MECHANICAL FIRST FLOOR PLANS

204

STATE PROJECT NUMBER
1000-57-70



1 M-201 **SECOND FLOOR PLAN**

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

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

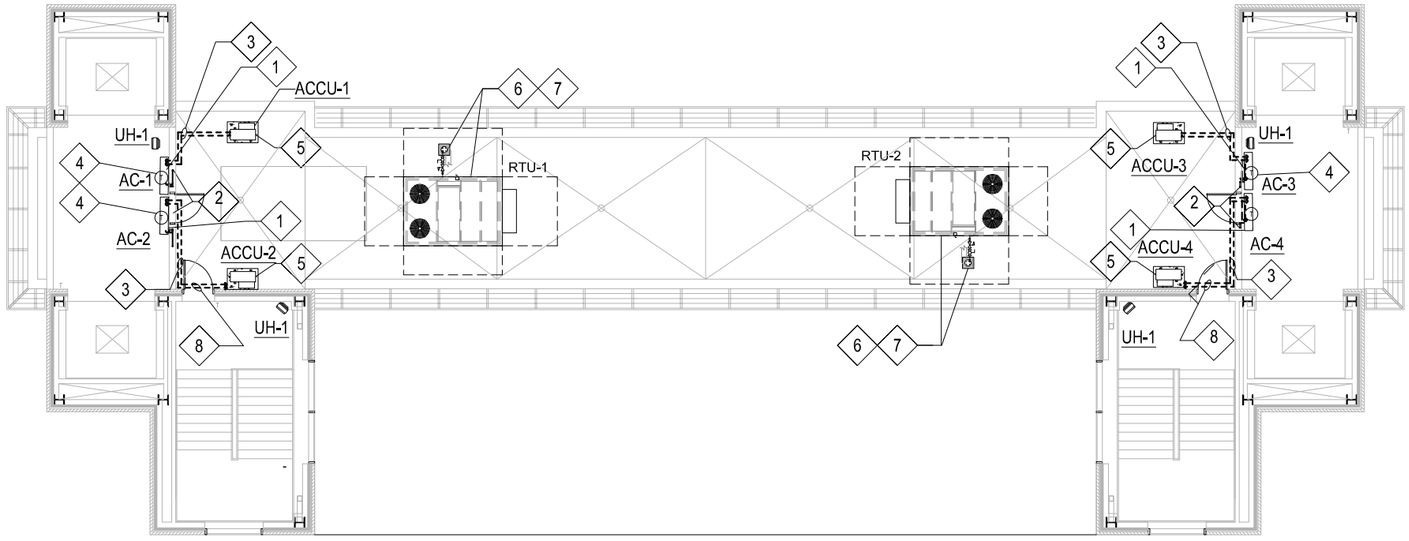
MECHANICAL

DRAWN BY:	PLANS CK'D. BY:	SHEET
DT	FA	M-201

MECHANICAL SECOND FLOOR PLAN

205

STATE PROJECT NUMBER
1000–57–70



1 M-202 **ROOF PLAN**
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

SHEETNOTES - MECHANICAL CONSTRUCTION PLAN

NO.	DESCRIPTION
1	WALL MOUNTED AC UNIT. MOUNT ABOVE DOOR LEVEL USING MFGR SUPPLIED WALL BRACKET, KINDORFS AND WALL ANCHORS. COORDINATE FINAL LOCATION WITH ELEVATOR CONTRACTOR.
2	EVAPORATOR CONDENSATE DRAIN TO SPILL ON ROOF. 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. PROVIDE VIBRATION ISOLATION.
6	EXTEND CONDENSATE PIPING TO NEAREST ROOF DRAIN
7	GAS PIPING TO RTU, REFER TO PLUMBING DRAWINGS.
8	RUN REFRIGERANT PIPING ABOVE STAIRWAY EXIT DOOR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

MECHANICAL

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

MECHANICAL ROOF PLAN

206 M-202

STATE PROJECT NUMBER

1000-57-70

ROOFTOP AC UNIT SCHEDULE

GENERAL DATA					SUPPLY FAN						DX COOLING						GAS HEATING					ELECTRICAL			WEIGHT
UNIT NO.	SERVICE	LOCATION	MFGR.	MODEL NO.	O.A. CFM	TOTAL CFM	ESP IN WC	FAN SPEED MAX. REQ'D. RPM	FAN SPEED MAX. REQ'D. BHP	FAN SPEED MAX. REQ'D. HP	TC MBH	SC MBH	EER	EAT F, DB/WB	LAT F, DB/WB	REFRIG.	INPUT MBH	OUTPUT MBH	SSE %	EAT ℉, DB	LAT ℉, DB	VOLTAGE	MCA	MOCP	TOTAL LBS
RTU-1	BRIDGE LEVEL WEST TOWER/VESTIBULE	ROOF	TRANE	YHD180	450	5400	1.0	675	2.26	3	177.5	137.2	12.1	80/67	55.4/54.0	R-410A	250	200	80	60	95	460V-3PH	33	45	2795
RTU-2	BRIDGE LEVEL EAST TOWER/VESTIBULE	ROOF	TRANE	YHD180	450	5400	1.0	675	2.26	3	177.5	137.2	12.1	80/67	55.4/54.0	R-410A	250	200	80	60	95	460V-3PH	33	45	2795
RTU-3	EAST TOWER/VESTIBULE	LOWER ROOF	TRANE	YHC067	250	1800	1.0	990	0.69	1	60.1	51.4	13.0	80/67	55.4/54.0	R-410A	130	104	80	60	95	460V-3PH	16	20	850

NOTES:
1. TWO STAGE COOLING
2. SCROLL COMPRESSORS
3. MERV 13 FILTERS
4. SINGLE-PONT POWER CONNECTION
5. ECONOMIZER
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. BMS NETWORK COMMUNICATION CARD COMPATIBLE WITH JOHNSON CONTROLS N2
11. SUPPLY AND RETURN SMOKE DETECTORS
12. 14" HIGH ROOF CURB
13. DEHUMIDIFICATION CONTROLS
14. HAIL GUARDS

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			COMPRESSOR		ELECTRICAL			WEIGHT LBS.	MANUFACTURER AND MODEL NO.
UNIT NO.	NOMINAL TONS	SEER	REFR.	TYPE	VOLTAGE	AMPS MCA	AMPS MOCP		
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	480	1	5	11	45	90	27	MUH0581	MARLEY OR APPROVED EQUAL	CLG. MOUNTED, FURNISH WITH THERMOSTAT, HANGERS
UH-2	END PLATFORM - ELEVATOR VESTIBULE	350	1/6	480	1	3.7	9	45	80	27	MUH0521	MARLEY OR APPROVED EQUAL	CLG. MOUNTED, FURNISH WITH THERMOSTAT, HANGERS
UH-3	END PLATFORM - ELEVATOR VESTIBULE	350	1/6	480	1	2.2	7	45	65	27	MUH0321	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
ARC-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

TAG	CFM RANGE	NOMINAL NECK SIZE	FACE SIZE	MODEL	MANUFACTURER	REMARKS
SR-1	0-500	SEE PLANS	16"x6"	300RL	TITUS	SURFACE MOUNTED SUPPLY GRILLE
CG-1	0-2400	SEE PLANS	24"x20"	350RS	TITUS	SURFACE MOUNTED EXHAUST GRILLE
CG-2	0-300	SEE PLANS	12"x12"	350RS	TITUS	SURFACE MOUNTED EXHAUST GRILLE
CG-3	0-10	SEE PLANS	6"x6"	350RS	TITUS	SURFACE MOUNTED EXHAUST GRILLE
CD-1	0-600	SEE PLANS	24"x24"	OMNI	TITUS	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 DEFLECTION TYPE, VERTICAL FRONT BLADES

EXHAUST FAN SCHEDULE

DESIGNATION	EF-1	EF-2	EF-3
MANUFACTURER	PENN BARRY	PENN BARRY	PENN BARRY
TYPE	CABINET	CABINET	CABINET
MODEL	Z8H (TDA)	Z8H (TDA)	Z5H (TDA)
CFM	300	300	100
STATIC PRESSURE	0.375"WG	0.375"WG	0.375"WG
RPM	1550	1550	1550
ELECTRICAL	115/1/60	115/1/60	115/1/60
WATTAGE	132	132	83
STYLE	TDA	TDA	TDA
OPTIONS	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5
SERVICE	ELECTRICAL RM	ELECTRICAL RM	LIFE SAFETY RM

1. SPEED CONTROL
2. VIBRATION ISOLATORS
3. DISCONNECT SWITCH
4. COOLING ONLY THERMOSTAT
5. MOTORIZED DAMPER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

MECHANICAL

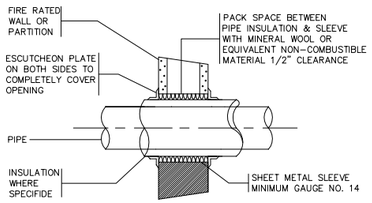
DRAWN BY:	PLANS CK'D. BY:	SHEET
DT	FA	M-300

MECHANICAL SCHEDULES

207

STATE PROJECT NUMBER

1000-57-70

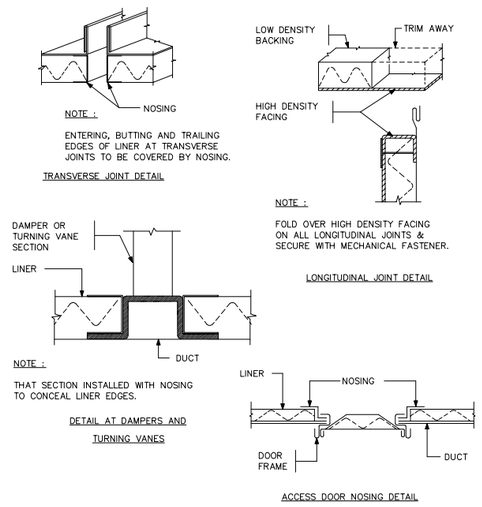


NOTE:

1.) THE INSTALLATION OF FIRE STOPPING MATERIALS SHALL BE SUBJECT TO CONTROLLED INSPECTION IN ACCORDANCE WITH C26-106.3.

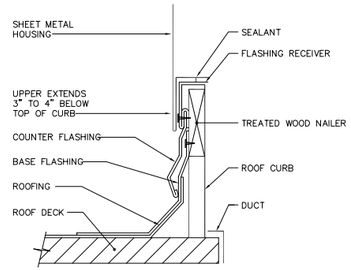
1 M-400 PIPE SLEEVE THRU RATED WALL

SCALE: NTS



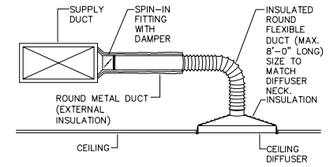
2 M-400 SOUND LINING NOSING DETAIL

SCALE: NTS



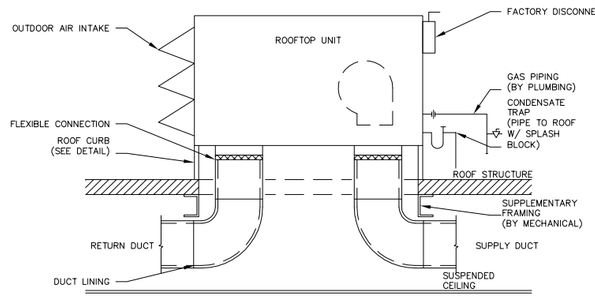
3 M-400 ROOF CURB DETAIL

SCALE: NTS



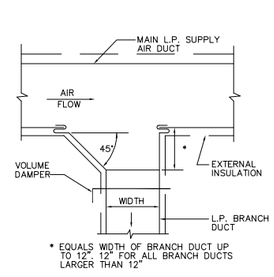
4 M-400 CEILING DIFUUSER RUNOUT DETAIL

SCALE: NTS



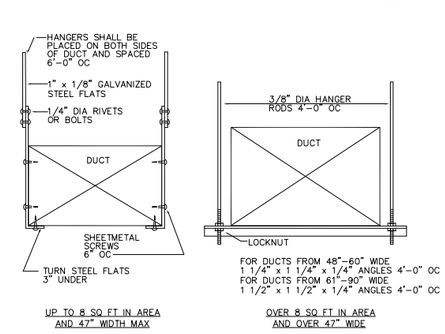
5 M-400 ROOFTOP UNIT INSTALLATION DETAIL

SCALE: NTS



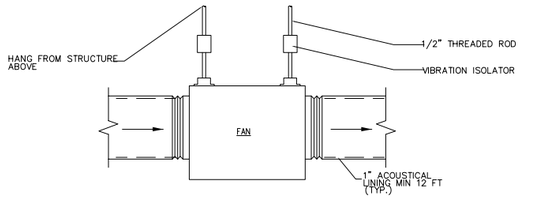
6 M-400 SUPPLY L.P. BRANCE DUCT DETAIL

SCALE: NTS



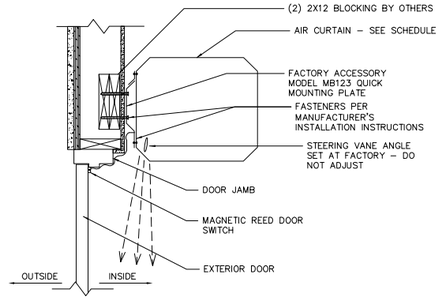
7 M-400 METHOD OF SUPPORTING DUCTS

SCALE: NTS



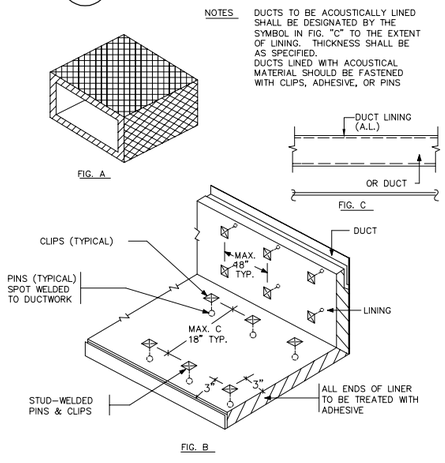
8 M-400 FAN INSTALLATION DETAIL

SCALE: NTS



9 M-400 AIR CURTAIN DETAIL

SCALE: NTS



10 M-400 ACOUSTICAL TREATMENT DUCT LINING

SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

MECHANICAL

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

MECHANICAL DETAILS

M-400

208

STATE PROJECT NUMBER
1000–57–70

ELECTRICAL SYMBOLS

CIRCUITING AND WIRING

- LA#1 — HOME RUN TO PANEL WITH CIRCUIT NUMBERS INDICATED. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. SEE NOTE 2.
- CONDUIT STUB UP.
- CONDUIT STUB DOWN.
- UNDERGROUND CONDUIT
- G — UNDERGROUND GROUNDING CABLE

LIGHTING

- NORMALLY OFF EMERGENCY WALL PACK LIGHT WITH BATTERY PACK.
- LED EXIT LIGHT WITH BATTERY PACK.
- COMBINATION LED EXIT LIGHT WITH BATTERY AND EMERGENCY LIGHT HEADS.
- A # / EM a — LIGHTING FIXTURE
  A = LUMINAIRE TYPE
  a = SWITCH LEG/SWITCHING SCHEME
  # = CIRCUIT NUMBER
- A # / EM a — HATCH = EMERGENCY BATTERY INTEGRAL TO FIXTURE.
  EM = EMERGENCY BATTERY INTEGRAL TO FIXTURE.
- $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
  "TM" DENOTES TIMER SWITCH
  "K" DENOTES KEYED OVERRIDE SWITCH WITH BYPASS SWITCH
  "LV" DENOTES LOW VOLTAGE
- (OS) DUAL TECHNOLOGY OCCUPANCY SENSOR
- (VS) DUAL TECHNOLOGY VACANCY SENSOR
- (PS) PHOTOCELL SENSOR FOR DAYLIGHT DIMMING

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.
- G — DUPLEX WALL MOUNTED RECEPTACLE. NEMA 5–20R, 20A, 125V, 3 WIRE, "G" DENOTES GROUND FAULT CIRCUIT INTERRUPTER.
- U — QUADRUPLEX RECEPTACLE, NEMA 5–20R, 20A, 125V, 3 WIRE. "U" DENOTES 4–PORT USB RECEPTACLE.
- 30A/3P/30A — FUSED DISCONNECT SWITCH. ADJACENT TEXT DENOTES AMP FRAME/POLES/FUSE 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
- SPD — SURGE PROTECTION DEVICE

SYMBOLS/ABBREVIATIONS NOTES

1. NOT ALL DEVICES, ABBREVIATIONS, AND EQUIPMENT INDICATED ON THIS SYMBOL LIST MAY NECESSARILY BE APPLICABLE TO THE PROJECT.
2. 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.
3. 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 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
CU	COPPER
DISC	DISCONNECT
DWG	DRAWING
EF	EXHAUST FAN
ELEC	ELECTRICAL
(E)	EXISTING EQUIPMENT (TO REMAIN)
(ER)	EXISTING EQUIPMENT TO BE RELOCATED (NOTE 3)
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
N/L	NIGHT LIGHT (ON 24/7)
NEC	NATIONAL ELECTRICAL CODE
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 3)
(RE)	RELOCATED EXISTING EQUIPMENT (NOTE 3)
RGS	RIGID GALVANIZED STEEL
SCR	SHORT CIRCUIT RATING
SW	SWITCH
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)	VENDOR SUPPLIED
V	VOLTAGE
VA	VOLT–AMPERE
W	WIRE
WP	WEATHER PROOF

GENERAL NOTES

ELECTRICAL

A. ALL WORK SHALL COMPLY WITH THE 2017 NATIONAL ELECTRICAL CODE, IECC 2015, AND ALL LOCAL CODES AND STANDARDS.

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 BYTHIS 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.

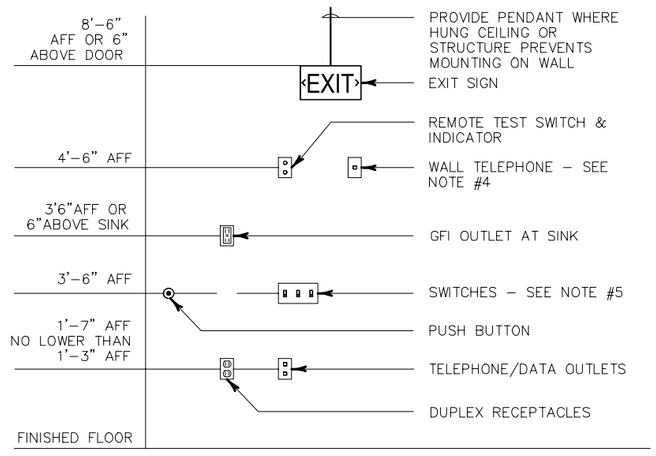
M. ALL EQUIPMENT SHALL HAVE ITS MANUFACTURER'S NAMEPLATE SECURELY ATTACHED GIVING DESIGN AND OPERATING CHARACTERISTICS. NAMEPLATES SHALL NOT BE COVERED OR OBSTRUCTED FROM VIEW.

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

O. PROVIDE CUT SHEETS AND AS–BUILT DRAWINGS AT CLOSE OF PROJECT. AS–BUILTS SHOULD SHOW ALL UNDERGROUND CONDUITS WITH DEPTH INDICATED.

P. **ALL EQUIPMENT AND DEVICES FURNISHED FOR PROJECT SHALL COMPLY WITH BUY AMERICA ACT.**

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.
5. 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. SWITCHES SHALL BE NO HIGHER THAN 42" AFF AND NO LOWER THEN 36" AFF.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

SHEET E–001
209

SCALE = NONE

GENERAL NOTES – POWER PLAN

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

2 REFER TO IT/SECURITY/AV DRAWINGS FOR ADDITIONAL SCOPE OF WORK. COORDINATE WORK WITH OTHER TRADES/CONTRACTORS.

3 REFER TO RISER DIAGRAM ON DRAWING E–700 FOR TRANSFORMER SIZES.

4 REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT EQUIPMENT LOCATIONS.

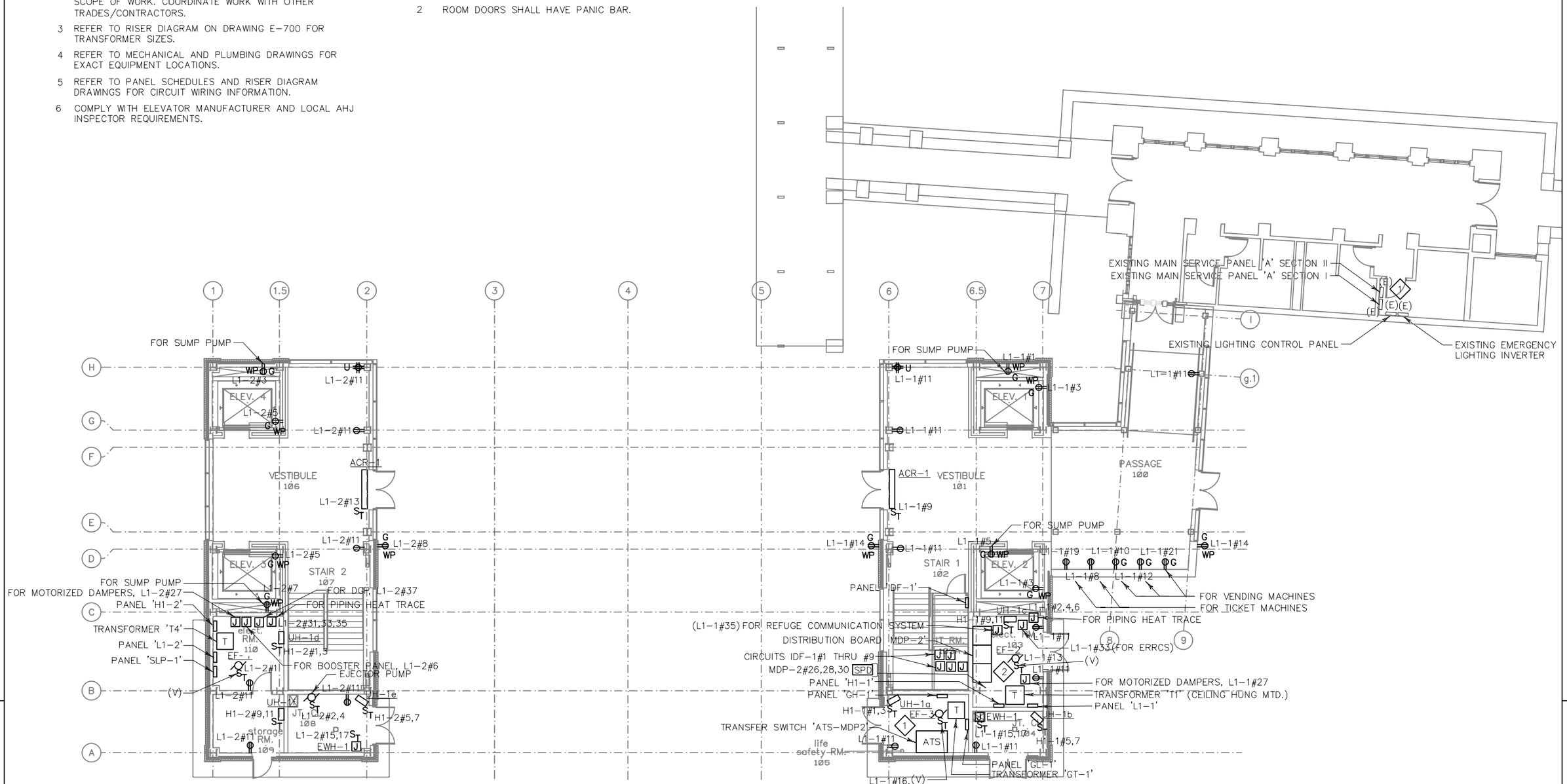
5 REFER TO PANEL SCHEDULES AND RISER DIAGRAM DRAWINGS FOR CIRCUIT WIRING INFORMATION.

6 COMPLY WITH ELEVATOR MANUFACTURER AND LOCAL AHJ INSPECTOR REQUIREMENTS.

KEYED NOTES – POWER PLAN

NO.	DESCRIPTION
1	PROVIDE SIGNAGE INDICATING MULTIPLE SERVICES AS REQUIRED AND IN COMPLIANCE WITH NEC 230.2.
2	ROOM DOORS SHALL HAVE PANIC BAR.

STATE PROJECT NUMBER
1000–57–70



1 / E–100 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

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL FIRST FLOOR POWER PLAN

SHEET E–100
210

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – POWER PLAN

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

2 REFER TO IT/SECURITY/AV DRAWINGS FOR ADDITIONAL SCOPE OF WORK. COORDINATE WORK WITH OTHER TRADES/CONTRACTORS.

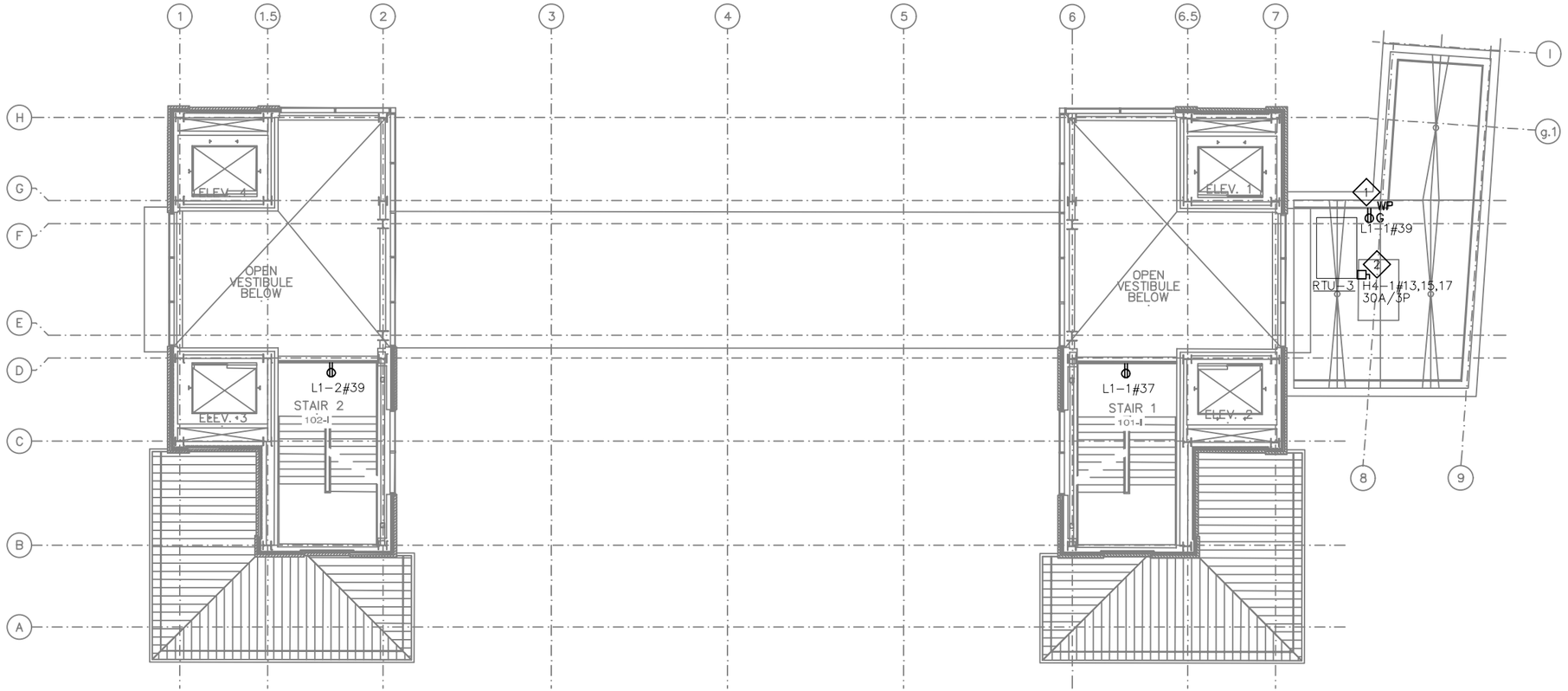
3 REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT EQUIPMENT LOCATIONS.

4 REFER TO PANEL SCHEDULES AND RISER DIAGRAM DRAWINGS FOR CIRCUIT WIRING INFORMATION.

5 COMPLY WITH ELEVATOR MANUFACTURER AND LOCAL AHJ INSPECTOR REQUIREMENTS.

KEYED NOTES – POWER PLAN

NO.	DESCRIPTION
1	RECEPTACLE SHALL BE INSTALLED WITHIN 25' OF RTU.
2	PROVIDE FUSES IF SHORT CIRCUIT RATING, BASED ON SHORT CIRCUIT STUDY, EXCEEDS 5K AIC FOR ROOF MECHANICAL UNIT DISCONNECT.



1/E-101 ELECTRICAL INTERMEDIATE LEVEL PLAN

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL INTERMEDIATE LEVEL POWER PLAN

SHEET E-101
211

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

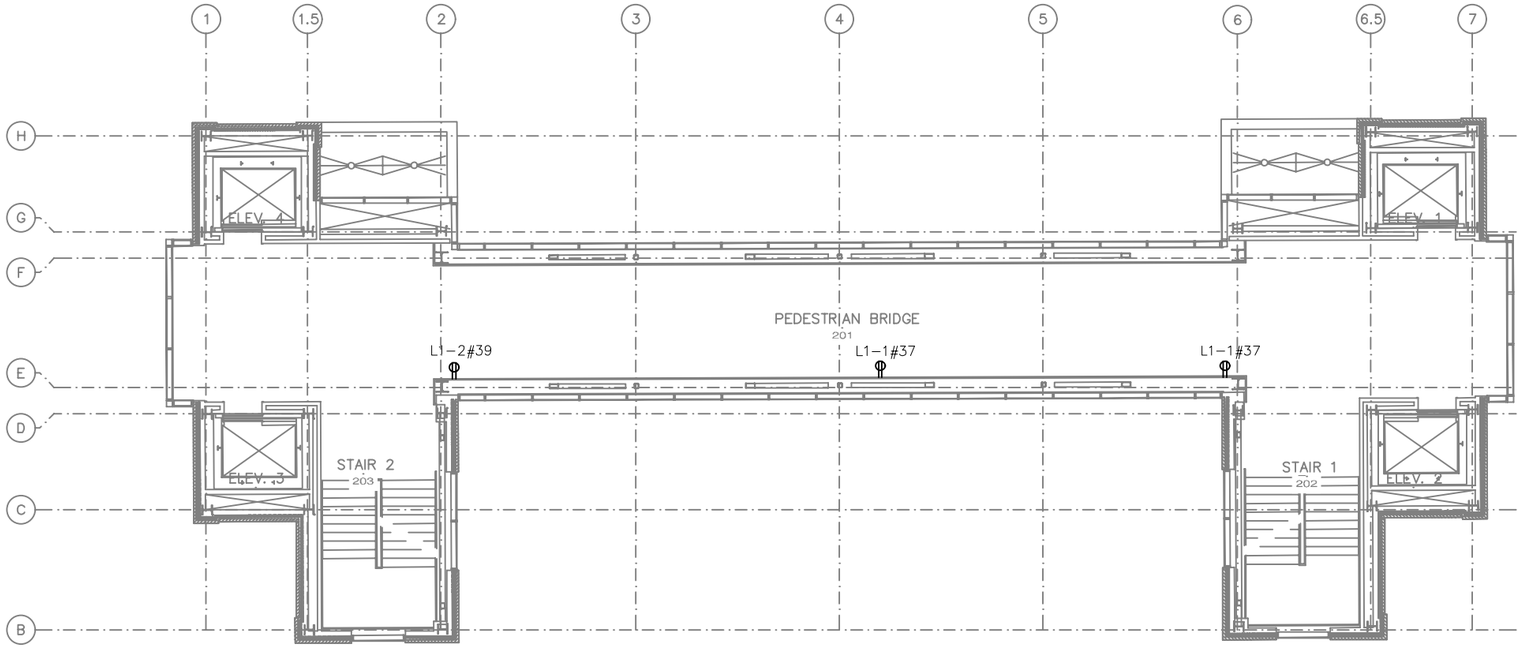
GENERAL NOTES – POWER PLAN

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

2 REFER TO IT/SECURITY/AV DRAWINGS FOR ADDITIONAL SCOPE OF WORK. COORDINATE WORK WITH OTHER TRADES/CONTRACTORS.

3 REFER TO PANEL SCHEDULES AND RISER DIAGRAM DRAWINGS FOR CIRCUIT WIRING INFORMATION.

4 COMPLY WITH ELEVATOR MANUFACTURER AND LOCAL AHJ INSPECTOR REQUIREMENTS.



1 / E-102 ELECTRICAL SECOND FLOOR POWER PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL SECOND FLOOR POWER PLAN

SHEET E-102
212

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – POWER PLAN

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

2 REFER TO IT/SECURITY/AV DRAWINGS FOR ADDITIONAL SCOPE OF WORK. COORDINATE WORK WITH OTHER TRADES/CONTRACTORS.

3 REFER TO RISER DIAGRAM ON DRAWING E-700 FOR TRANSFORMER SIZES.

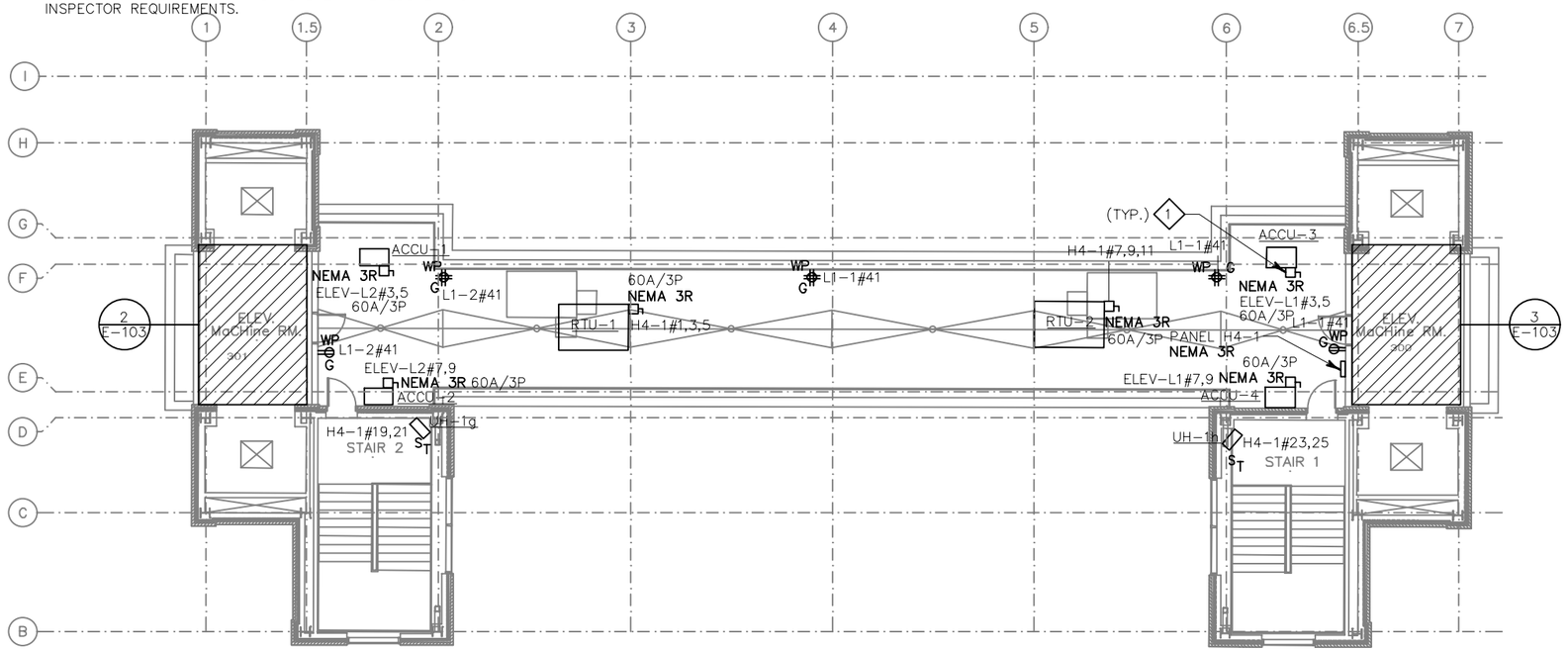
4 COMPLY WITH ELEVATOR MANUFACTURER AND LOCAL AHJ INSPECTOR REQUIREMENTS.

4 REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT EQUIPMENT LOCATIONS.

5 REFER TO PANEL SCHEDULES AND RISER DIAGRAM DRAWINGS FOR CIRCUIT WIRING INFORMATION.

KEYED NOTES – POWER PLAN

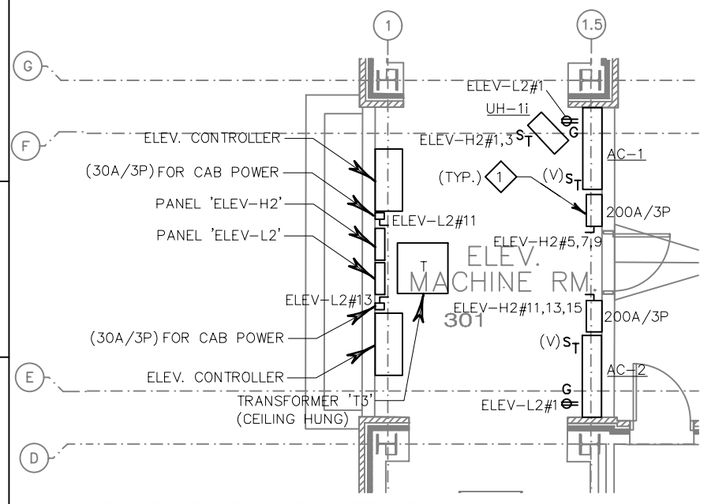
NO.	DESCRIPTION
1	PROVIDE FUSES IF SHORT CIRCUIT RATING, BASED ON SHORT CIRCUIT STUDY, EXCEEDS 5K AIC FOR ALL ROOF MECHANICAL UNIT AND ELEVATOR DISCONNECTS.



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

0 8 16 32 FT

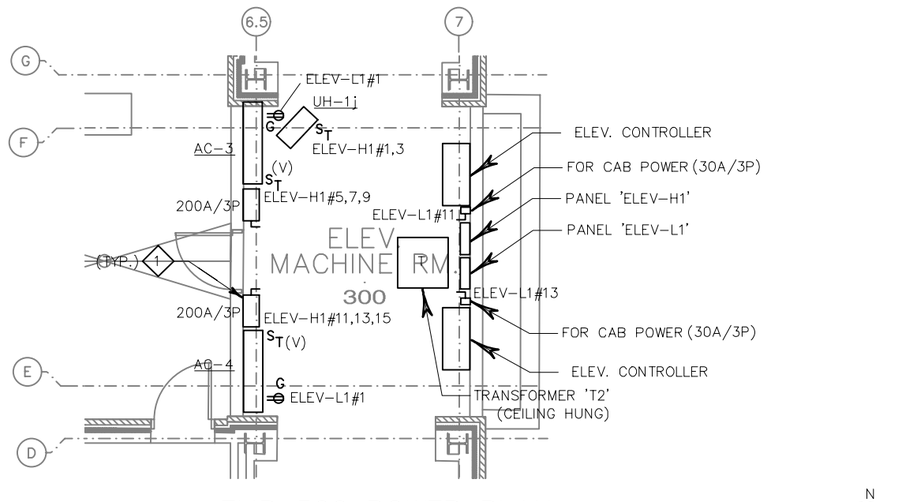
N



2 E-103 EMR 301 POWER PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N



3 E-103 EMR 300 POWER PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL ROOF POWER PLAN

SHEET E-103
213

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

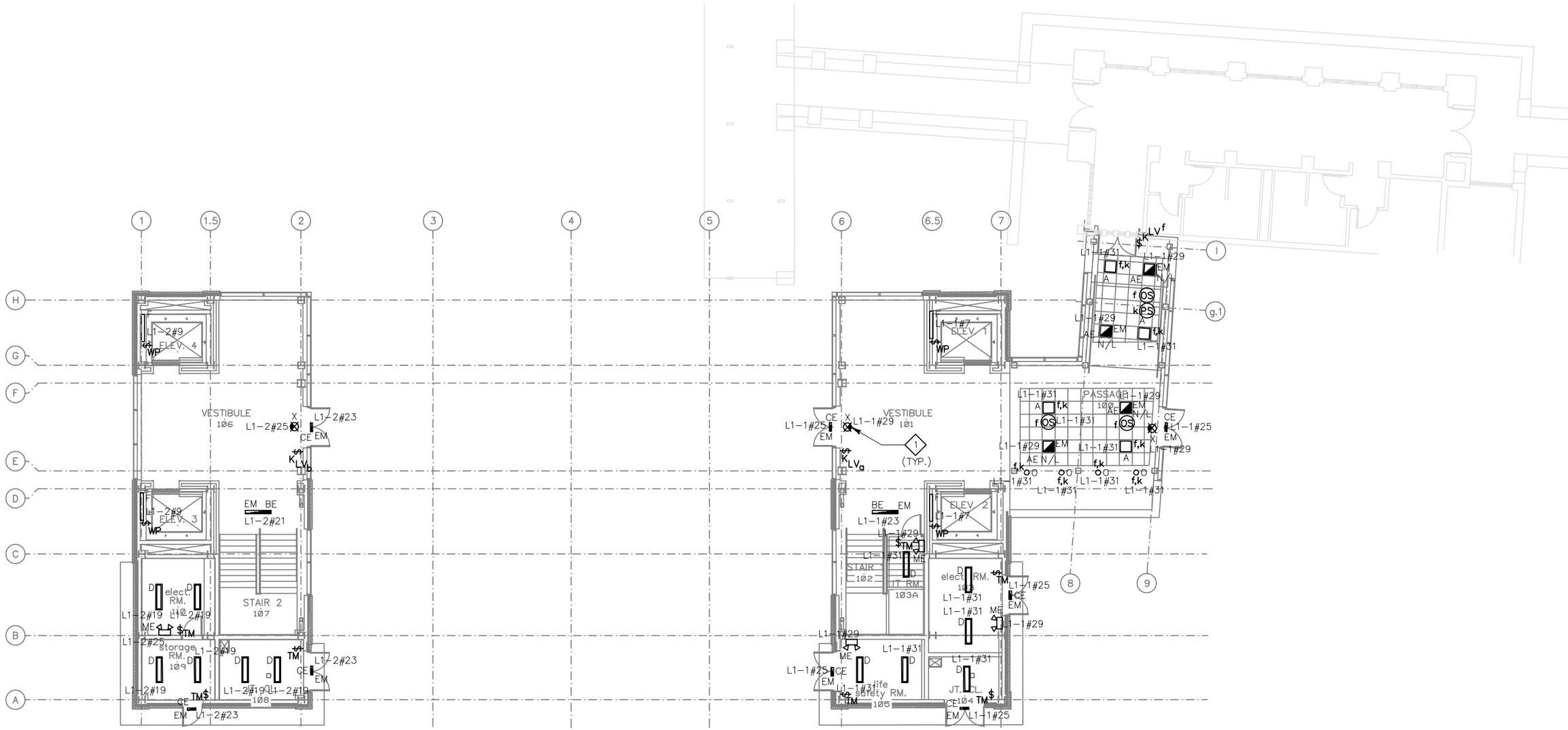
GENERAL NOTES – LIGHTING PLAN

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

2 REFER TO PANEL SCHEDULES DRAWINGS FOR CIRCUIT WIRING INFORMATION.

KEYED NOTES – LIGHTING PLAN

NO.	DESCRIPTION
1	EXIT SIGNS SHALL BE UNSWITCHED (ON 24/7).



1 E-200 ELECTRICAL FIRST FLOOR LIGHTING PLAN

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

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PLANS CK'D.
PH	FC

ELECTRICAL FIRST FLOOR LIGHTING PLAN

SHEET E-200
214

SCALE = AS NOTED

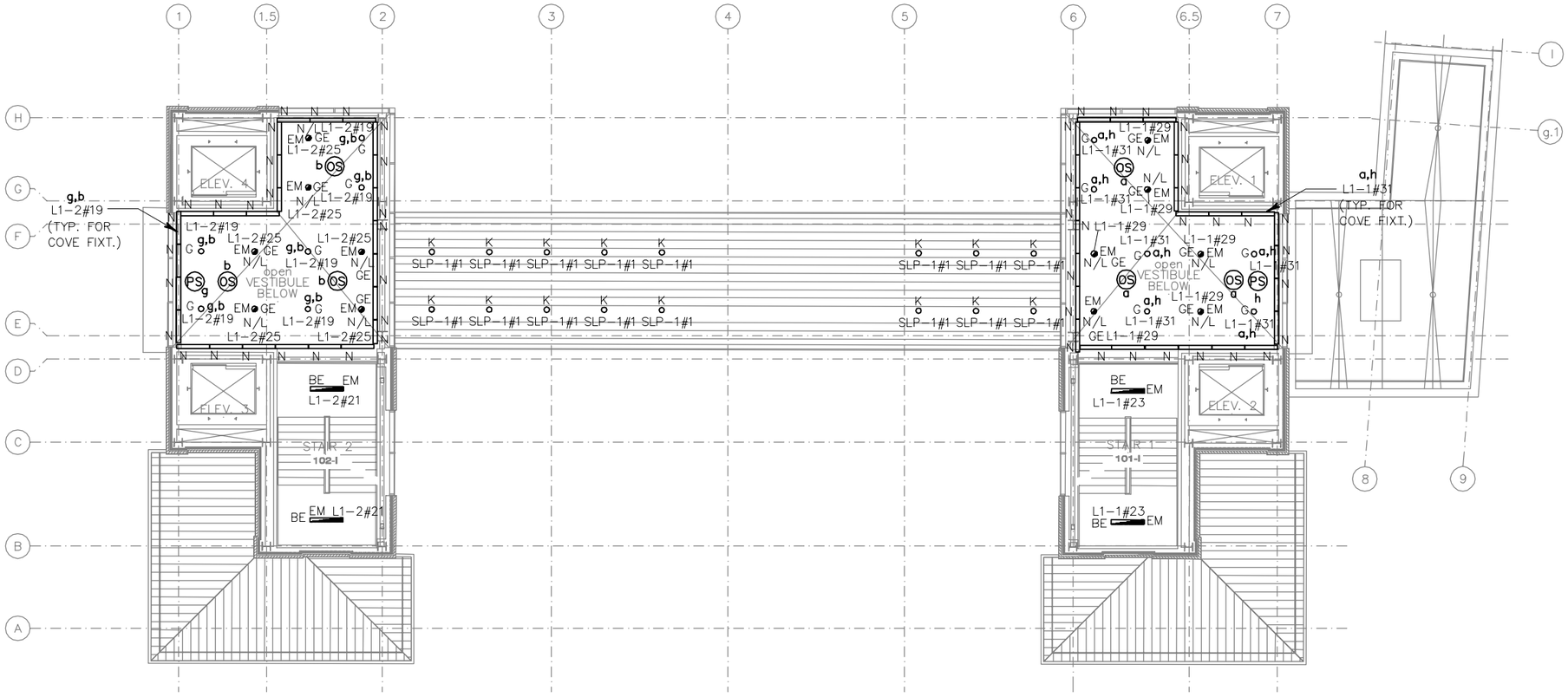
GENERAL NOTES – LIGHTING PLAN

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

2 REFER TO PANEL SCHEDULES DRAWINGS FOR CIRCUIT WIRING INFORMATION.

3 EXTERIOR CANOPY LIGHTING SHALL BE CONTROLLED BY PHOTOCELL VIA SMART (CONTROLLABLE BREAKERS) PANEL.

STATE PROJECT NUMBER
1000–57–70



1 E–201 ELECTRICAL INTERMEDIATE LEVEL LIGHTING PLAN

SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL INTERMEDIATE LEVEL LIGHTING PLAN

SHEET E–201
215

SCALE = AS NOTED

GENERAL NOTES – LIGHTING PLAN

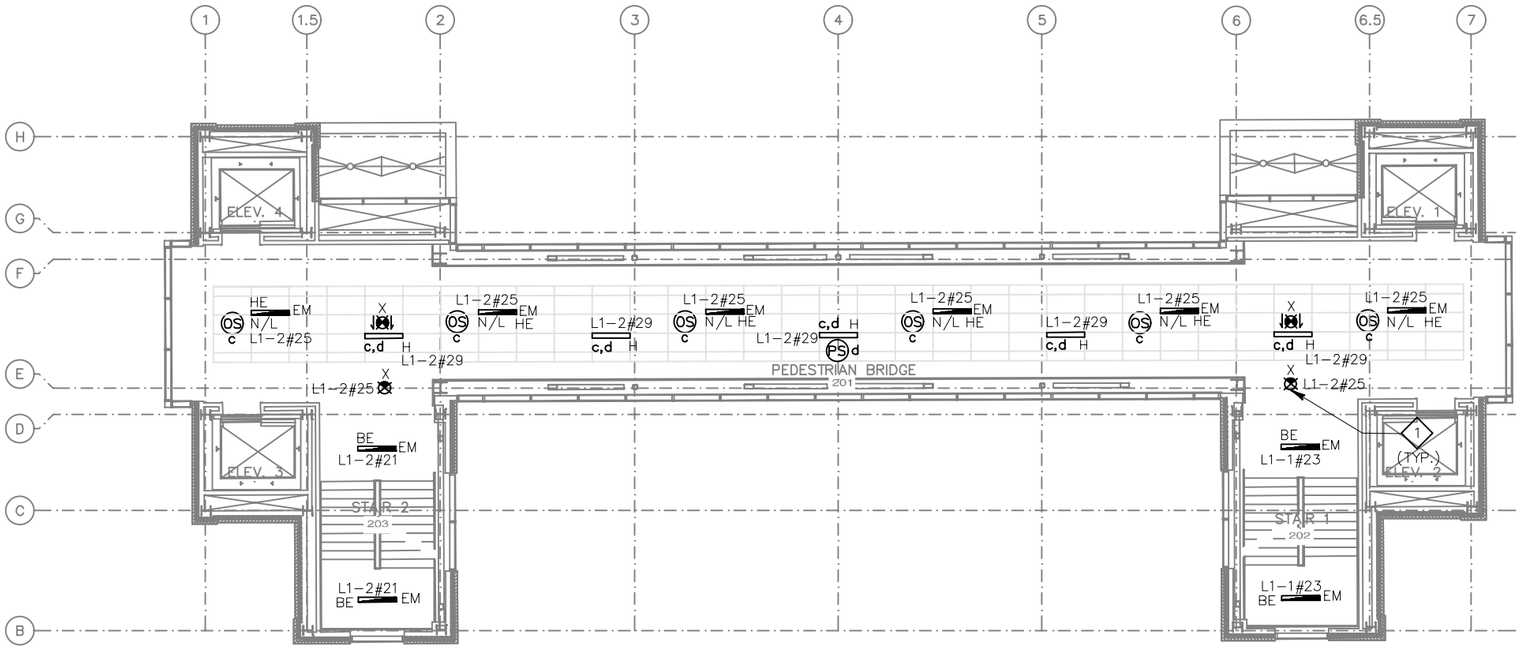
1 REFER TO DRAWING E–001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 REFER TO PANEL SCHEDULES DRAWINGS FOR CIRCUIT WIRING INFORMATION.

KEYED NOTES – LIGHTING PLAN

NO.	DESCRIPTION
1	EXIT SIGNS SHALL BE UNSWITCHED (ON 24/7).

STATE PROJECT NUMBER
1000–57–70



1 / E–202 ELECTRICAL SECOND FLOOR LIGHTING PLAN

SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SECOND FLOOR LIGHTING PLAN

SHEET E–202
216

SCALE = AS NOTED

GENERAL NOTES – LIGHTING PLAN

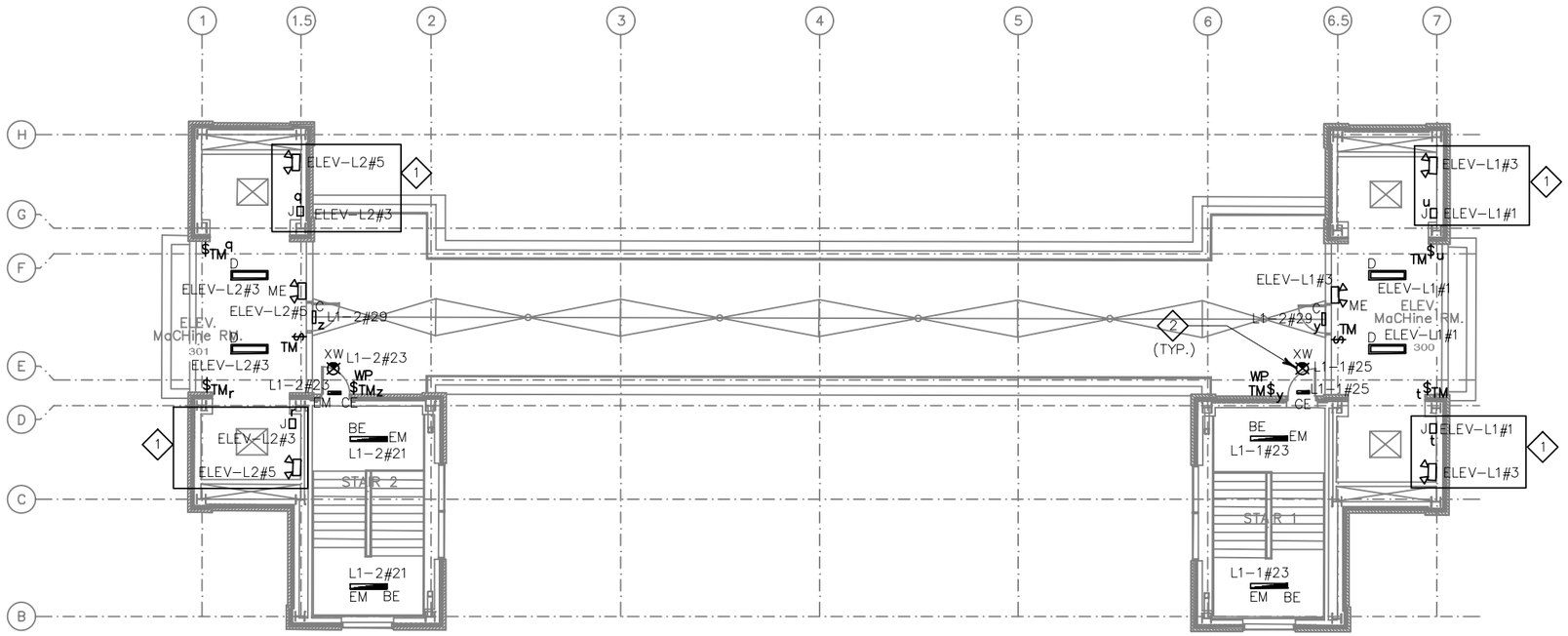
1 REFER TO DRAWING E–001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 REFER TO PANEL SCHEDULES DRAWINGS FOR CIRCUIT WIRING INFORMATION.

KEYED NOTES – LIGHTING PLAN

NO.	DESCRIPTION
1	FIXTURES LOCATED IN MACHINE ROOM ON LEVEL ABOVE.
2	EXIT SIGNS SHALL BE UNSWITCHED (ON 24/7).

STATE PROJECT NUMBER
1000–57–70



1 E–203 ELECTRICAL ROOF LIGHTING PLAN

SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL ROOF LIGHTING PLAN

SHEET E–203
217

SCALE = AS NOTED

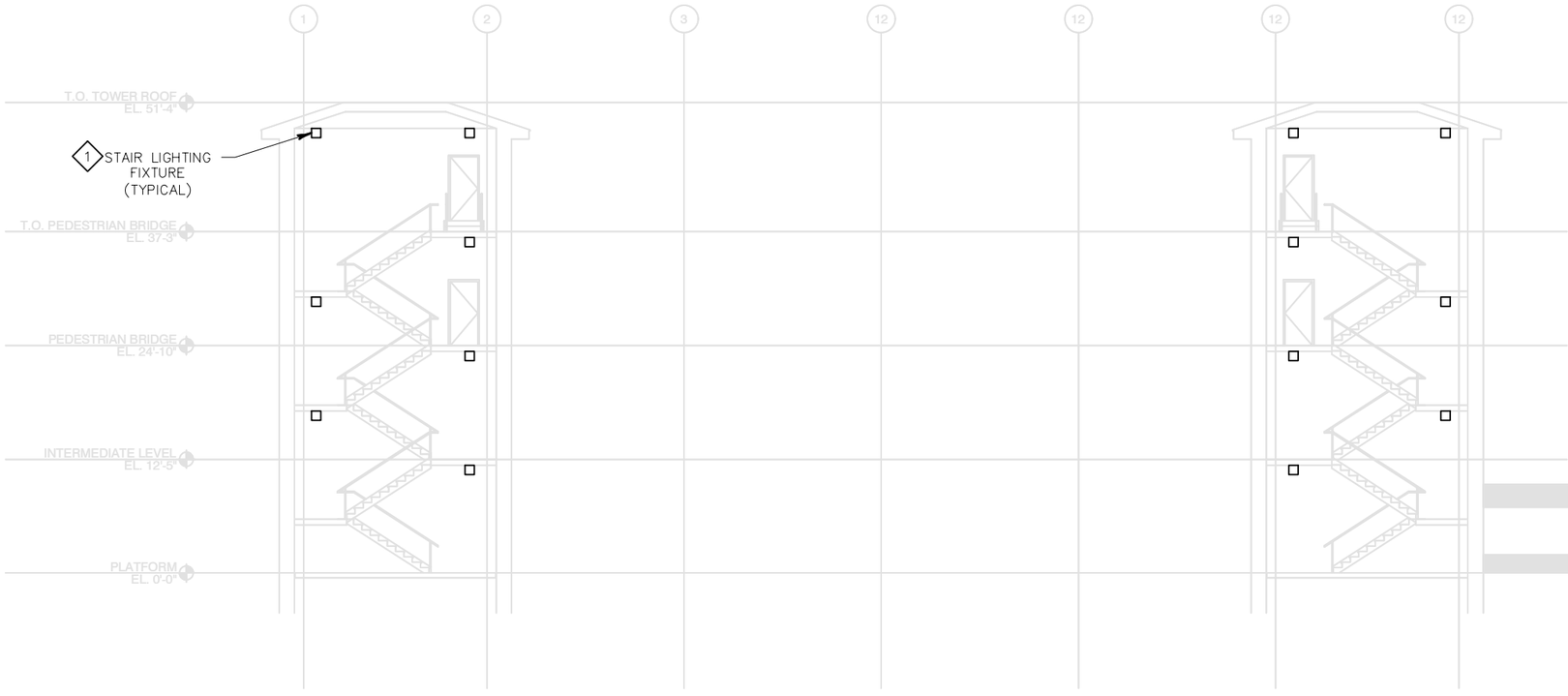
GENERAL NOTES – POWER PLAN

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

KEYED NOTES – LIGHTING PLAN

NO.	DESCRIPTION
1	LIGHTING FIXTURES SHALL BE SURFACE MOUNTED TO UNDERSIDE OF DECK.

STATE PROJECT NUMBER
1000–57–70



1 / E–204 ELECTRICAL STAIRS LIGHTING ELEVATION PLAN

SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL STAIRS LIGHTING ELEVATION PLAN

SHEET E–204

218

SCALE = AS NOTED

2

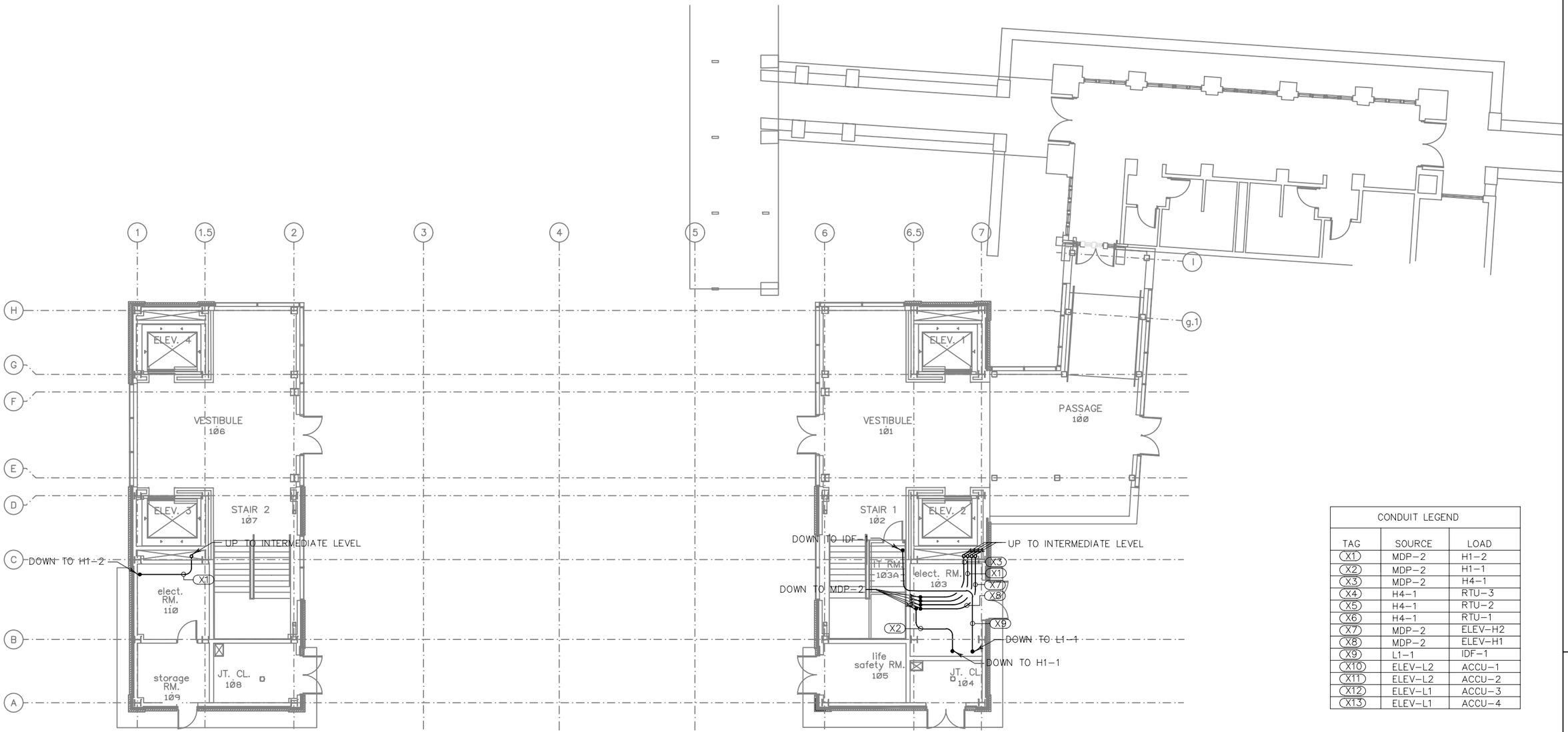
2

GENERAL NOTES – POWER PLAN

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

2 PROVIDE AND SIZE PULL BOXES AS REQUIRED, PER NEC.

STATE PROJECT NUMBER
1000–57–70



CONDUIT LEGEND		
TAG	SOURCE	LOAD
X1	MDP–2	H1–2
X2	MDP–2	H1–1
X3	MDP–2	H4–1
X4	H4–1	RTU–3
X5	H4–1	RTU–2
X6	H4–1	RTU–1
X7	MDP–2	ELEV–H2
X8	MDP–2	ELEV–H1
X9	L1–1	IDF–1
X10	ELEV–L2	ACCU–1
X11	ELEV–L2	ACCU–2
X12	ELEV–L1	ACCU–3
X13	ELEV–L1	ACCU–4

1 / E–100 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

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL FIRST FLOOR CONDUIT ROUTING PLAN

SHEET E–300
219

SCALE = AS NOTED

2

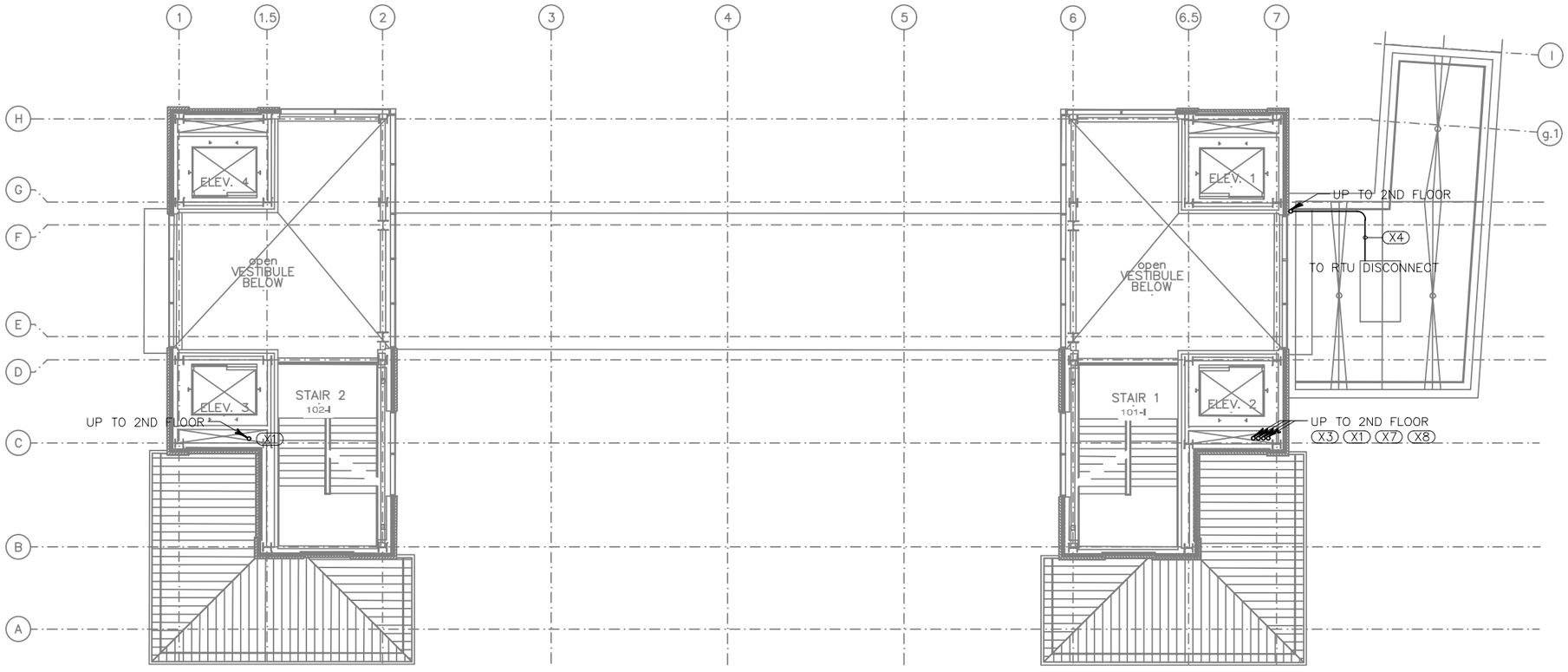
2

STATE PROJECT NUMBER
1000–57–70

GENERAL NOTES – POWER PLAN

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

2 PROVIDE AND SIZE PULL BOXES AS REQUIRED, PER NEC.



1 / E–101 ELECTRICAL INTERMEDIATE LEVEL PLAN

SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

CONDUIT LEGEND		
TAG	SOURCE	LOAD
X1	MDP–2	H1–2
X2	MDP–2	H1–1
X3	MDP–2	H4–1
X4	H4–1	RTU–3
X5	H4–1	RTU–2
X6	H4–1	RTU–1
X7	MDP–2	ELEV–H2
X8	MDP–2	ELEV–H1
X9	L1–1	IDF–1
X10	ELEV–L2	ACCU–1
X11	ELEV–L2	ACCU–2
X12	ELEV–L1	ACCU–3
X13	ELEV–L1	ACCU–4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL INTERMEDIATE LEVEL CONDUIT ROUTING PLAN

SHEET E–301
220

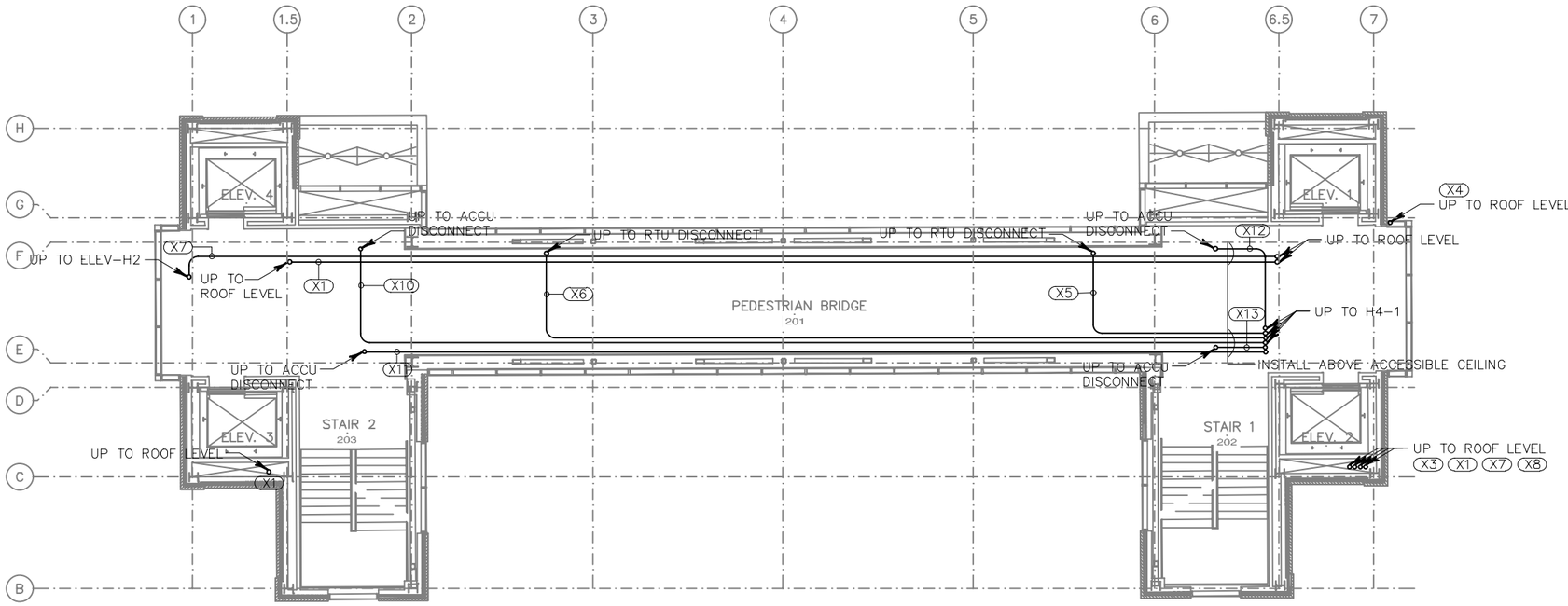
SCALE = AS NOTED

STATE PROJECT NUMBER
1000–57–70

GENERAL NOTES – POWER PLAN

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

2 PROVIDE AND SIZE PULL BOXES AS REQUIRED, PER NEC.



CONDUIT LEGEND		
TAG	SOURCE	LOAD
X1	MDP–2	H1–2
X2	MDP–2	H1–1
X3	MDP–2	H4–1
X4	H4–1	RTU–3
X5	H4–1	RTU–2
X6	H4–1	RTU–1
X7	MDP–2	ELEV–H2
X8	MDP–2	ELEV–H1
X9	L1–1	IDF–1
X10	ELEV–L2	ACCU–1
X11	ELEV–L2	ACCU–2
X12	ELEV–L1	ACCU–3
X13	ELEV–L1	ACCU–4

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

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SECOND FLOOR CONDUIT ROUTING PLAN

SHEET E–302
221

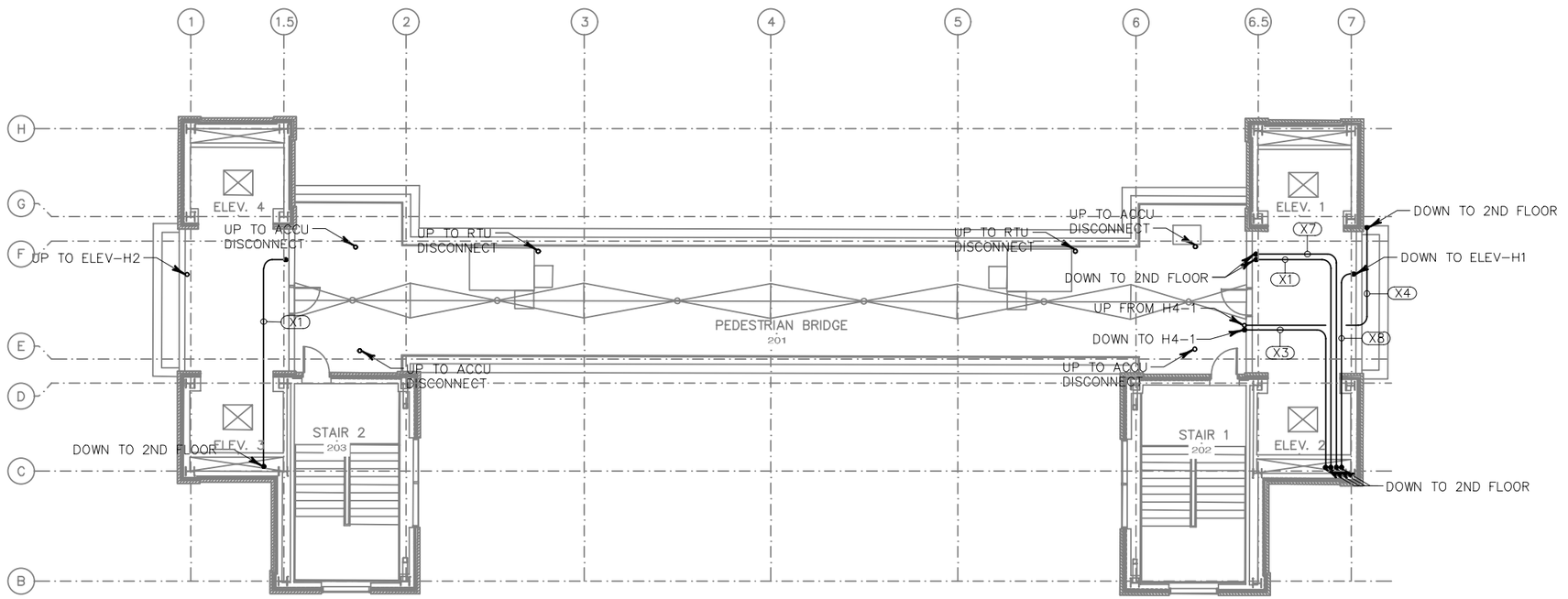
SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – POWER PLAN

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

2 PROVIDE AND SIZE PULL BOXES AS REQUIRED, PER NEC.



CONDUIT LEGEND		
TAG	SOURCE	LOAD
X1	MDP-2	H1-2
X2	MDP-2	H1-1
X3	MDP-2	H4-1
X4	H4-1	RTU-3
X5	H4-1	RTU-2
X6	H4-1	RTU-1
X7	MDP-2	ELEV-H2
X8	MDP-2	ELEV-H1
X9	L1-1	IDF-1
X10	ELEV-L2	ACCU-1
X11	ELEV-L2	ACCU-2
X12	ELEV-L1	ACCU-3
X13	ELEV-L1	ACCU-4

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

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL ROOF CONDUIT ROUTING PLAN

SHEET E-303
222

SCALE = AS NOTED

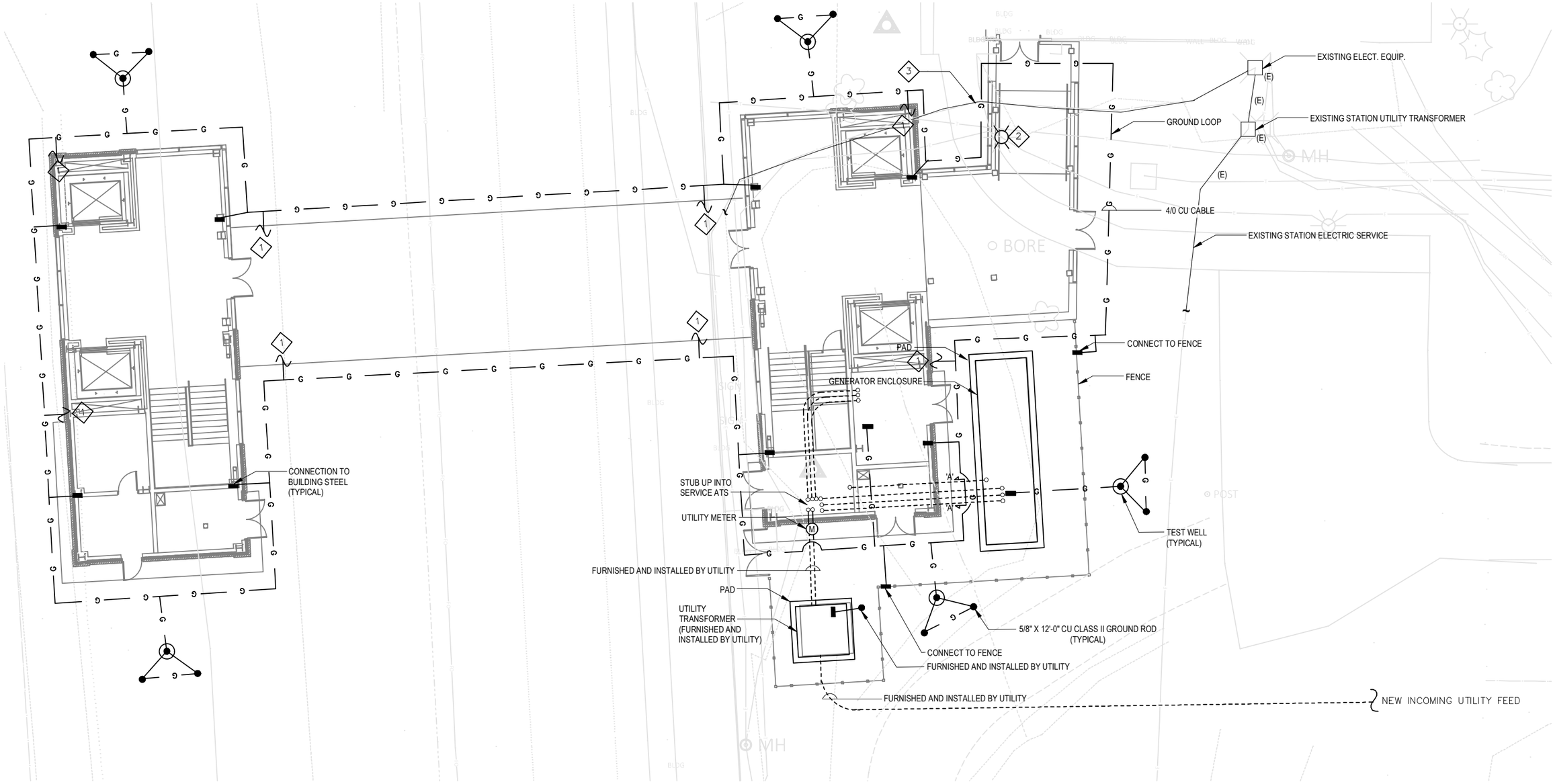
STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – SITE PLAN

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

KEYED NOTES – SITE PLAN

NO.	DESCRIPTION
1	CABLE DROP FROM ROOF LIGHTNING PROTECTION SYSTEM. REFER TO DRAWINGS E-900 AND E-901 FOR FURTHER INFORMATION.
2	REMOVE EXISTING SITE LIGHTING FIXTURE THAT FALLS IN NEW BUILDING FOOTPRINT. REPLACE WITH 12"X12" HANDHOLE OUTSIDE BUILDING FOOTPRINT. RE-ROUTE ASSOCIATED CONDUIT AND WIRING OUTSIDE BUILDING FOOTPRINT TO MAINTAIN CONTINUITY OF OTHER LIGHTING ON SAME CIRCUIT.
3	RE-ROUTE CONDUIT AND WIRING ASSOCIATED WITH EXISTING PLATFORM CANOPY LIGHTING OUTSIDE BUILDING FOOTPRINT. ONCE NEW BUILDING POWER IS COMPLETE, RELOCATE EXISTING CANOPY LIGHTING CIRCUITS TO PANEL SLP-1.



1 / E-300 ELECTRICAL SITE GROUNDING AND POWER PLAN

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

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL SITE GROUNDING AND POWER PLAN

SHEET E-400

223

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – SITE PLAN

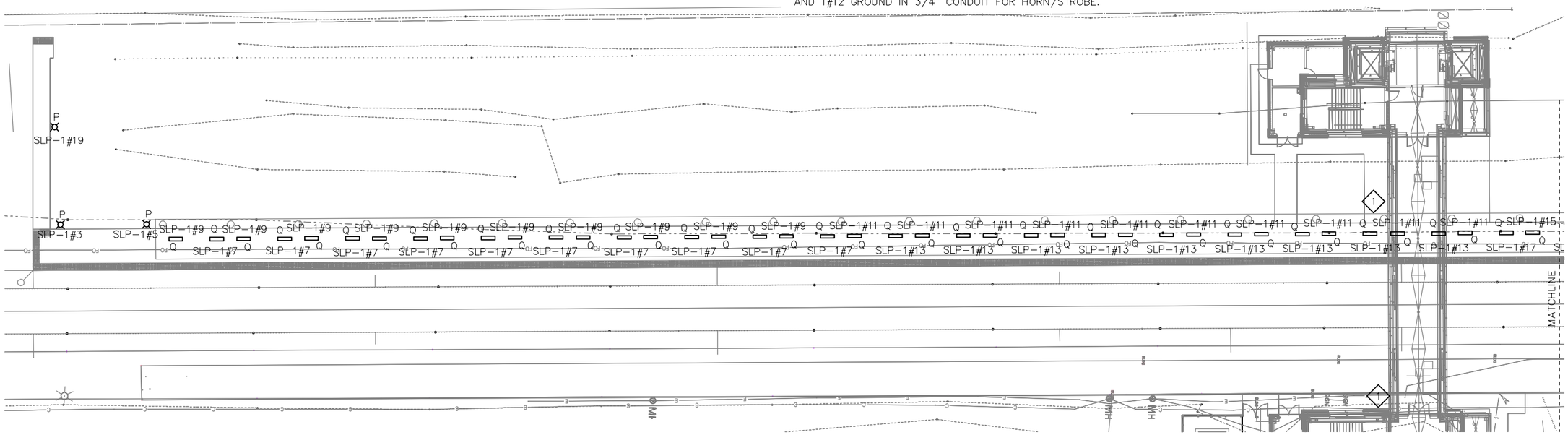
1 REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

2 REFER TO PANEL SCHEDULES DRAWINGS FOR CIRCUIT WIRING INFORMATION.

3 PLATFORM POLE AND CANOPY LIGHTING SHALL BE CONTROLLED BY PHOTOCELL AND TIMECLOCK VIA SMART (CONTROLLABLE BREAKER) PANEL. HALF OF FIXTURES (EVERY OTHER ONE) SHALL BE CONTROLLED VIA PHOTOCELL AND HALF CONTROLLED BY TIMECLOCK. POLE FIXTURES ON WALKWAYS SHALL BE CONTROLLED VIA PHOTOCELL.

KEYED NOTES – POWER PLAN

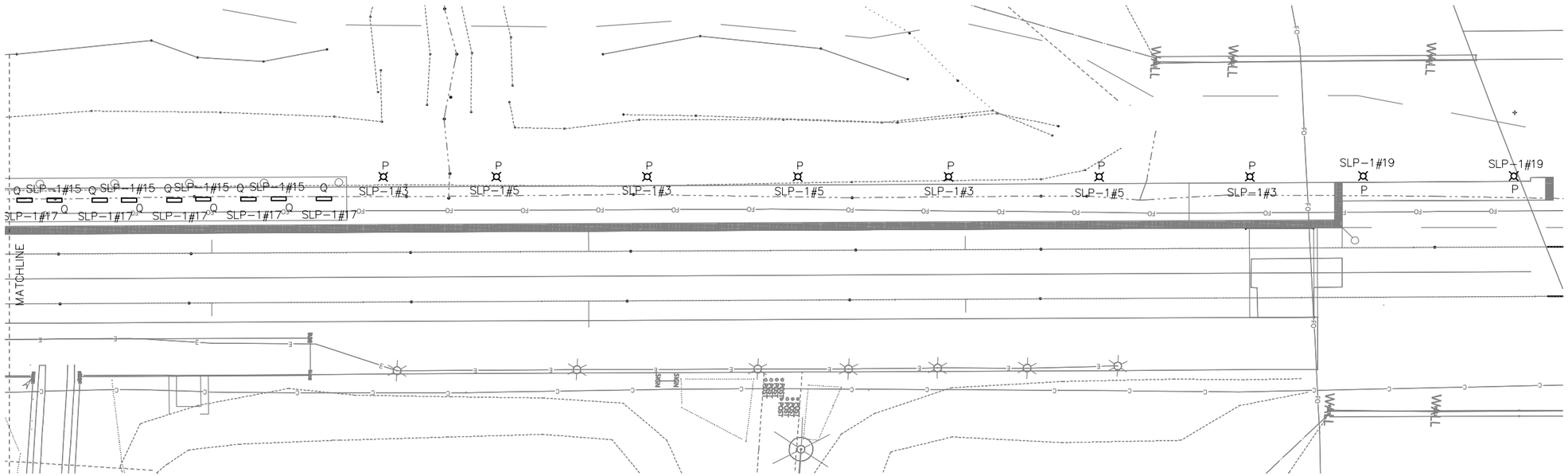
NO.	DESCRIPTION
1	PROVIDE WEATHERPROOF ELECTRONIC HORN AND STROBE (W.L. JENKINS CAT. NO. AMT-12-WH-VNW OR APPROVED EQUAL) AT NORTH AND SOUTH PLATFORMS. HORN/STROBE SHALL ALARM WHEN ELEVATOR FAILS. INTERCONNECT WITH ELEVATOR CONTROLLER. FURNISH AND INSTALL MINIMUM 2#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR HORN/STROBE.



1 E-301 ELECTRICAL SITE LIGHTING PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

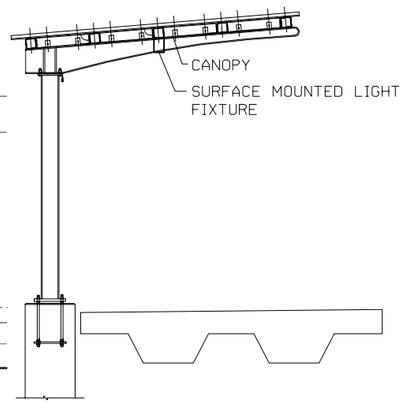
N



2 E-301 ELECTRICAL SITE LIGHTING PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

N



1 E-401 CANOPY FIXTURE MOUNTING DETAIL
SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SITE LIGHTING PLAN

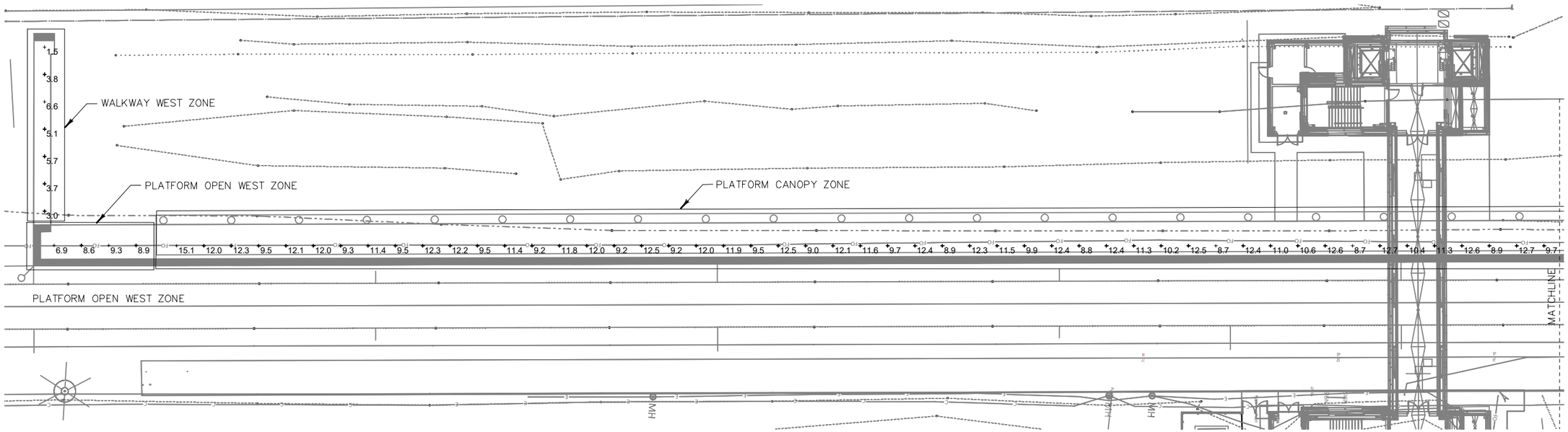
SHEET E-401
224

SCALE = AS NOTED

GENERAL NOTES – PHOTOMETRICS PLAN

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

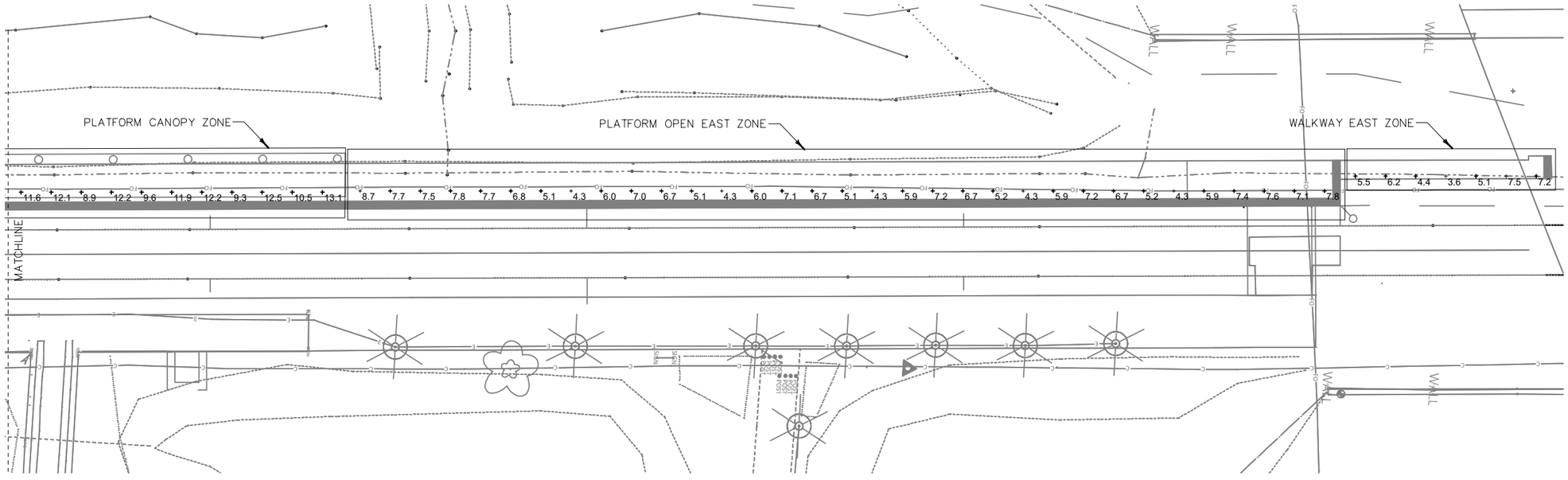
STATE PROJECT NUMBER
1000-57-70



1 / E-401 ELECTRICAL PHOTOMETRICS PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

N



2 / E-401 ELECTRICAL PHOTOMETRICS PLAN
SCALE: 1/32"=1'-0"

0 16 32 64 FT

N

PHOTOMETRIC STATISTICS*					
DESCRIPTION	AVG	MAX	MIN	MAX /MIN	AVG /MIN
PLATFORM CANOPY	9.4 fc	17.0 fc	3.4 fc	5.0:1	2.8:1
PLATFORM OPEN WEST	7.6 fc	11.0 fc	1.7 fc	6.5:1	4.5:1
PLATFORM OPEN EAST	5.5 fc	9.9 fc	1.1 fc	9.0:1	5.0:1
WALKWAY WEST	4.3 fc	7.4 fc	0.8 fc	9.3:1	5.4:1
WALKWAY EAST	5.4 fc	8.4 fc	2.7 fc	3.1:1	2.0:1

*TABLE CALCS DONE AT 2' X 2' SPACING. PLAN CALCS DONE AT 8' X 8' FOR CLARITY PURPOSES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL PHOTOMETRICS PLAN

SHEET E-501

225

SCALE = AS NOTED

1 SCR: 65K AIC

MDP-2

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
27724			H4-1		150A-3	1	2	400A-3	
	25224					3	4		
		25224				5	6		
20000			H1-1		100A-3	7	8	100A-3	
	20000					9	10		
		20000				11	12		
20000			H1-2		100A-3	13	14		
	20000					15	16		
		20000				17	18		
10000			GH-1		50A-3	19	20		
	10000					21	22		
		10000				23	24		
55178			ELEV-H1		400A-3	25	26	20A-3	
	55178					27	28		
		52676				29	30		

277/480 V, 3 PH., 4 W., 1200 A BUS, 1200 A MCB

DESCRIPTION	WATTS A	WATTS B	WATTS C
ELEV-H2	55178		
		55178	
			52676
SPARE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
SPD	600		
		500	
			500
New Connect	188580	186080	181080
Connect Amps		868	Amps
Demand Amps		868	Amps

1 SCR: 22K AIC

ELEV-L1

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
360			MACHINE RM. RECEPT.		20A-1	1	2		
	2600		ACCU-3/AC-3		40A-2	3	4		
6		2600				5	6		
2600			ACCU-4/AC-4		40A-2	7	8		
6	2600					9	10		
		1920	N. ELEV. CAB POW.		20A-1	11	12		
1920			S. ELEV. CAB POW.		20A-1	13	14		
			SPARE		20A-1	15	16		
			SPARE		20A-1	17	18		
			SPARE		20A-1	19	20		
			SPARE		20A-1	21	22		
			SPARE		20A-1	23	24		
			SPARE		20A-1	25	26		
			SPARE		20A-1	27	28		
			SPARE		20A-1	29	30		

120/208 V, 3 PH., 4 W., 100 A BUS, 100 A MCB

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
New Connect	4880	5200	4520
Connect Amps		41	Amps
Demand Amps		41	Amps

1 SCR: 10K AIC

ELEV-L2

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
360			MACHINE RM. RECEPT.		20A-1	1	2		
	2600		ACCU-1/AC-1		40A-2	3	4		
6		2600				5	6		
2600			ACCU-2/AC-2		40A-2	7	8		
6	2600					9	10		
		1920	N. ELEV. CAB POW.		20A-1	11	12		
1920			S. ELEV. CAB POW.		20A-1	13	14		
			SPARE		20A-1	15	16		
			SPARE		20A-1	17	18		
			SPARE		20A-1	19	20		
			SPARE		20A-1	21	22		
			SPARE		20A-1	23	24		
			SPARE		20A-1	25	26		
			SPARE		20A-1	27	28		
			SPARE		20A-1	29	30		

120/208 V, 3 PH., 4 W., 100 A BUS, 100 A MCB

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
New Connect	4880	5200	4520
Connect Amps		41	Amps
Demand Amps		41	Amps

GENERAL NOTES – PANEL SCHEDULES

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

2 PROVIDE AND INSTALL MINIMUM 2#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 1P AND 2P 20A AND 15A CIRCUITS, U.O.N.

3 PROVIDE AND INSTALL MINIMUM 3#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 3P 20A CIRCUITS, U.O.N.

1 SCR: 10K AIC — **2**

SLP-1

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
352			BRIDGE CANOPY LTG.		20A-1	1	2	20A-1	
	375		PLATFORM LIGHTING		20A-1	3	4	20A-1	
		300	PLATFORM LIGHTING		20A-1	5	6	20A-1	
250			PLAT. CANOPY LTG.		20A-1	7	8	20A-1	
	250		PLAT. CANOPY LTG.		20A-1	9	10	20A-1	
		250	PLAT. CANOPY LTG.		20A-1	11	12	20A-1	
225			PLAT. CANOPY LTG.		20A-1	13	14	20A-1	
	125		PLAT. CANOPY LTG.		20A-1	15	16	20A-1	
		150	PLAT. CANOPY LTG.		20A-1	17	18	20A-1	
75			PLAT. EGRESS LTG.		20A-1	19	20	20A-1	
	450		EX. CANOPY LTG.		20A-1	21	22	20A-1	
		450	EX. CANOPY LTG.		20A-1	23	24	20A-1	
450			EX. CANOPY LTG.		20A-1	25	26	20A-1	
	450		EX. CANOPY LTG.		20A-1	27	28	20A-1	
		450	EX. CANOPY LTG.		20A-1	29	30	20A-1	
450			EX. CANOPY LTG.		20A-1	31	32	20A-1	
	450		EX. CANOPY LTG.		20A-1	33	34	20A-1	
		450	EX. CANOPY LTG.		20A-1	35	36	20A-1	
450			EX. CANOPY LTG.		20A-1	37	38	20A-1	
	450		EX. CANOPY LTG.		20A-1	39	40	20A-1	
			SPARE		20A-1	41	42	20A-1	

120/208 V, 3 PH., 4 W., 100 A BUS, MLO

DESCRIPTION	WATTS A	WATTS B	WATTS C
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
New Connect	2252	2550	2050
Connect Amps		19	Amps
Demand Amps		19	Amps

1 SCR: 10K AIC

IDF-1

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
1000			IT EQUIPMENT		20A-1	1	2		
	1000		IT EQUIPMENT		20A-1	3	4		
		1000	IT EQUIPMENT		20A-1	5	6		
1000			IT EQUIPMENT		20A-1	7	8		
	1000		IT EQUIPMENT		20A-1	9	10		
			SPARE		20A-1	11	12		
			SPARE		20A-1	13	14		
			SPARE		20A-1	15	16		
			SPARE		20A-1	17	18		
			SPARE		20A-1	19	20		
			SPARE		20A-1	21	22		
			SPARE		20A-1	23	24		
			SPARE		20A-1	25	26		
			SPARE		20A-1	27	28		
			SPARE		20A-1	29	30		
			SPARE		20A-1	31	32		
			SPARE		20A-1	33	34		
			SPARE		20A-1	35	36		
			SPARE		20A-1	37	38		
			SPARE		20A-1	39	40		
			SPARE		20A-1	41	42		

120/208 V, 3 PH., 4 W., 100 A BUS, 50 A MCB

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
New Connect	2000	2000	1000
Connect Amps		14	Amps
Demand Amps		14	Amps

1 SCR: 22K AIC

L1-1

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
560			N. PIT SUMP PUMP (4)		20A-1	1	2		
	180		N. PIT REC.		20A-1	3	4	30A-3	
		960	S. PIT SUMP PUMP (4)		20A-1	5	6		
33			S. PIT LTG.		20A-1	7	8	20A-1	
	1320		ACR-1		15A-1	9	10	20A-1	
		1764	1ST FL. E. RECEPT.		20A-1	11	12	20A-1	
132			EF-2		20A-1	13	14	20A-1	
	750		EWH-1		20A-2	15	16	20A-1	
		750				17	18	20A-1	
1900			TICKET MACHINE		20A-1	19	20	20A-1	
	1000		VENDING MACHINE		20A-1	21	22	20A-1	
		350	STAIR LIGHTING		20A-1	23	24	20A-1	
180			EXTERIOR EMG. LTG.		20A-1	25	26	20A-1	
	500		MOTORIZED DAMPERS		20A-1	27	28	20A-1	
		286	INTERIOR EMG. LTG.		20A-1	29	30	20A-1	
603			NORMAL LIGHTING		20A-1	31	32	20A-1	
	1920		ERRCS PANEL (3)		20A-1	33	34	20A-1	
		1920	REFUGE COMM. SYS. (3)		20A-1	35	36	20A-1	
540			CONV. RECEPTACLES		20A-1	37	38		
	180		INT. ROOF RECEPT.		20A-1	39	40	50A-3	
		900	ROOF RECEPTACLES		20A-1	41	42		

120/208 V, 3 PH., 4 W., 150 A BUS, 150 A MCB

DESCRIPTION	WATTS A	WATTS B	WATTS C
PIPING HEAT TRACE (7)	2882		
		2882	
			2882
TICKET MACHINE	1000		
VENDING MACHINE		1000	
VENDING MACHINE			1000
EXT. RECEPTACLES	360		
EXHAUST FAN		83	
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
IDF-1	2000		
		2000	
			1000
New Connect	5890	11815	11812
Connect Amps		93	Amps
Demand Amps		93	Amps

STATE PROJECT NUMBER

1000–57–70

KEYED NOTES – PANEL SCHEDULES

NO. DESCRIPTION

1 SHORT CIRCUIT RATING BASED ON PRELIMINARY CALCULATIONS AND ASSUMPTIONS. ACTUAL SHORT CIRCUIT RATING SHALL BE BASED ON CONTRACTOR SUBMITTED SHORT CIRCUIT STUDY, PER SPECIFICATIONS.

2 INDICATED PANEL SHALL BE A SMART PANEL (CONTROLLABLE CIRCUIT BREAKERS) WITH INTEGRAL TIMECLOCK, EXTERNAL PHOTOCELL, AND MANUAL OVERRIDE SWITCH: EATON POW–R–COMMAND OR APPROVED EQUAL.

3 CIRCUIT BREAKER SHALL BE LOCKABLE TYPE.

4 GFCI TYPE CIRCUIT BREAKER FOR PUMP.

5 COORDINATE EXACT IT EQUIPMENTS REQUIREMENTS WITH LOW VOLTAGE CONTRACTOR.

6 PROVIDE 2#8 & 1#10 GND. IN 3/4" CONDUIT FOR OUTDOOR UNIT AND 2#12 & 1#12 GND. IN 3/4" CONDUIT BETWEEN INDOOR AND OUTDOOR UNITS.

7 PROVIDE 3#10 & 1#10 GND. IN 3/4" CONDUIT FOR CIRCUIT.

8 CIRCUITS FOR RELOCATION OF EXISTING CANOPY LIGHT CIRCUITS UPON COMPLETION OF BUILDING POWER. REFER TO SITE PLAN ON DRAWING E–400 FOR FURTHER INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SCHEDULES

SHEET E–600
226

SCALE = NONE

1 SCR: 10K AIC

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
132			EF-1		20A-1	1	2	20A-2	
	960		N. PIT SUMP PUMP (2)		20A-1	3	4		
		180	N. PIT REC.		20A-1	5	6	20A-1	
960			S. PIT SUMP PUMP (2)		20A-1	7	8	20A-1	
	33		S. PIT LTG.		20A-1	9	10	20A-1	
		1224	1ST FL. W. RECEPT.		20A-1	11	12	20A-1	
1320			ACR-1		15A-1	13	14	20A-1	
	750		EWH-1		20A-2	15	16	20A-1	
		750				17	18	20A-1	
570			NORMAL LIGHTING		20A-1	19	20	20A-1	
	350		STAIR LIGHTING		20A-1	21	22	20A-1	
		120	EXTERIOR EMG. LTG.		20A-1	23	24	20A-1	
287			INTERIOR EMG. LTG.		20A-1	25	26	20A-1	
	500		MOTORIZED DAMPERS		20A-1	27	28	20A-1	
		260	2ND FL. COR. & RF LTG.		20A-1	29	30	20A-1	
2882			PIPING HEAT TRACE		30A-3	31	32	20A-1	
	2882					33	34	20A-1	
(5)		2882				35	36	20A-1	
500			DATA GATHERING PNL. (3)		20A-1	37	38		
	360		CONV. RECEPT.		20A-1	39	40	50A-1	
		540	ROOF RECEPTACLES		20A-1	41	42		

L1-2

DESCRIPTION	WATTS A	WATTS B	WATTS C
SEWAGE EJ. PUMP	832		
		832	(2)
BOOSTER PNL.			500 (3)
EXT. RECEPTACLE	180		
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SPARE			
SLP-1	902		
		750	
			700
New Connect	5565	7417	7186
Connect Amps		64	Amps
Demand Amps		64	Amps

120/208 V, 3 PH., 4 W., 150 A BUS, 150 A MCB

1 SCR: 42K AIC

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
2500			UH-1a		20A-2	1	2		
	2500					3	4		
		2500	UH-1b		20A-2	5	6		
2500						7	8		
	2500		UH-1c		20A-2	9	10		
		2500				11	12		
			SPARE		20A-1	13	14		
			SPARE		20A-1	15	16		
			SPARE		20A-1	17	18		
			SPARE		20A-1	19	20		
			SPARE		20A-1	21	22		
			SPARE		20A-1	23	24		
			SPARE		20A-1	25	26		
			SPARE		20A-1	27	28		
			SPARE		20A-1	29	30		
			SPARE		20A-1	31	32		
			SPARE		20A-1	33	34		
			SPARE		20A-1	35	36		
			SPARE		20A-1	37	38		
			SPARE		20A-1	39	40	70A-3	
			SPARE		20A-1	41	42		

H1-1

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
TRANSFORMER 'T1'	15000		
		15000	
			15000
New Connect	20000	20000	20000
Connect Amps		72	Amps
Demand Amps		72	Amps

277/480 V, 3 PH., 4 W., 100 A BUS, MLO

1 SCR: 42K AIC

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
2500			UH-1d		20A-2	1	2		
	2500					3	4		
		2500	UH-1e		20A-2	5	6		
2500						7	8		
	2500		UH-1f		20A-2	9	10		
		2500				11	12		
			SPARE		20A-1	13	14		
			SPARE		20A-1	15	16		
			SPARE		20A-1	17	18		
			SPARE		20A-1	19	20		
			SPARE		20A-1	21	22		
			SPARE		20A-1	23	24		
			SPARE		20A-1	25	26		
			SPARE		20A-1	27	28		
			SPARE		20A-1	29	30		
			SPARE		20A-1	31	32		
			SPARE		20A-1	33	34		
			SPARE		20A-1	35	36		
			SPARE		20A-1	37	38		
			SPARE		20A-1	39	40	70A-3	
			SPARE		20A-1	41	42		

H1-2

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
TRANSFORMER 'T4'	15000		
		15000	
			15000
New Connect	20000	20000	20000
Connect Amps		72	Amps
Demand Amps		72	Amps

277/480 V, 3 PH., 4 W., 100 A BUS, 100 A MCB

1 SCR: 42K AIC

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
2500			UH-1i		20A-2	1	2		
	2500					3	4		
		21339	ELEV. N.		200A-3	5	6		
(6) 21339						7	8		
	21339					9	10		
		21339	ELEV. S.		200A-3	11	12		
(6) 21339						13	14		
	21339					15	16		
			BUSSED SPACE			17	18		
			BUSSED SPACE			19	20		
			BUSSED SPACE			21	22		
			BUSSED SPACE			23	24		
			BUSSED SPACE			25	26		
			BUSSED SPACE			27	28	50A-3	
			BUSSED SPACE			29	30		

ELEV-H1

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
TRANSFORMER 'T2'	10000		
		10000	
			10000
New Connect	55178	55178	52678
Connect Amps		196	Amps
Demand Amps		196	Amps

277/480 V, 3 PH., 4 W., 400 A BUS, MLO

1 SCR: 42K AIC

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ
2500			UH-1j		20A-2	1	2		
	2500					3	4		
		21339	ELEV. N.		200A-3	5	6		
(6) 21339						7	8		
	21339					9	10		
		21339	ELEV. S.		200A-3	11	12		
(6) 21339						13	14		
	21339					15	16		
			BUSSED SPACE			17	18		
			BUSSED SPACE			19	20		
			BUSSED SPACE			21	22		
			BUSSED SPACE			23	24		
			BUSSED SPACE			25	26		
			BUSSED SPACE			27	28	50A-3	
			BUSSED SPACE			29	30		

ELEV-H2

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
TRANSFORMER 'T3'	10000		
		10000	
			10000
New Connect	55178	55178	52678
Connect Amps		196	Amps
Demand Amps		196	Amps

277/480 V, 3 PH., 4 W., 400 A BUS, MLO

(1) (4)

SCR: 42K AIC

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

GH-1

DESCRIPTION	WATTS A	WATTS B	WATTS C
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
BUSSED SPACE			
TRANSFORMER 'GT-1'	5000		
		5000	
			5000
New Connect	5000	5000	5000
Connect Amps		18	Amps
Demand Amps		18	Amps

277/480 V, 3 PH., 4 W., 100 A BUS, 50 A MCB

STATE PROJECT NUMBER

1000-57-70

GENERAL NOTES – PANEL SCHEDULES

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

2 PROVIDE AND INSTALL MINIMUM 2#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 1P AND 2P 20A AND 15A CIRCUITS, U.O.N.

3 PROVIDE AND INSTALL MINIMUM 3#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 3P 20A CIRCUITS, U.O.N.

KEYED NOTES – PANEL SCHEDULES

NO.	DESCRIPTION
1	SHORT CIRCUIT RATING BASED ON PRELIMINARY CALCULATIONS AND ASSUMPTIONS. ACTUAL SHORT CIRCUIT RATING SHALL BE BASED ON CONTRACTOR SUBMITTED SHORT CIRCUIT STUDY, PER SPECIFICATIONS.
2	GFCI TYPE CIRCUIT BREAKER FOR PUMP.
3	CIRCUIT BREAKER SHALL BE LOCKABLE TYPE.
4	PANEL FOR GENERATOR ENCLOSURE AND AUXILIARY GENERATOR EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH GENERATOR MANUFACTURER.
5	PROVIDE 3#10 & 1#10 GND. IN 3/4" CONDUIT FOR CIRCUIT.
6	PROVIDE 3#3/0 & 1#6 GND. IN 2" CONDUIT FOR CIRCUIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SCHEDULES

SHEET E-601
227

SCALE = NONE

LIGHTING FIXTURE SCHEDULE

TYPE	LAMP TYPE	WATTS	VOLTS	DESCRIPTION	CATALOG NUMBERS	COLOR TEMP. °K	MANUFACTURERS	NOTES
A	LED	22	UNV	2' X 2' RECESSED GRID LED FIXTURE WITH 0 – 10 V DIMMING	WHSPR–LCTR–2X2–80CRI–40K–2000LM –MIN10–MVOLT–SWC–ZT	4000K	MARK LIGHTING OR APPROVED EQUAL	(NOTE 2)
AE	LED	22	UNV	SAME AS TYPE 'A' EXCEPT WITH BATTERY PACK	WHSPR–LCTR–2X2–80CRI–40K–2000LM –MIN10–MVOLT–SWC–E10WLCP–ZT	4000K	MARK LIGHTING OR APPROVED EQUAL	(NOTE 2)
BE	LED	50	UNV	4" X 52" SURFACE MOUNTED LED STAIR FIXTURE WITH INTEGRAL MOTION SENSOR, BI–LEVEL DIMMER, AND BATTERY PACK	ESL–4–40HL–FAW–EDU–U–ELL14–NXOS	4000K	COLUMBIA LIGHTING OR APPROVED EQUAL	(NOTE 2)
C	LED	70	UNV	EXTERIOR LED WALL PACK FIXTURE	TRP2–24L–70–3K8–4–UNV–FINISH	4000K	HUBBELL LIGHTING OR APPROVED EQUAL	(NOTE 2)
CE	LED	30	UNV	EXTERIOR LED WALL PACK FIXTURE WITH INTEGRAL MOTION SENSOR DIMMING AND LOW TEMP RATED BATTERY PACK	TRP2–24L–30–3K8–3–UNV–FINISH–SCP–EH	4000K	HUBBELL LIGHTING OR APPROVED EQUAL	(NOTE 2)
D	LED	32	UNV	5" X 45" LINEAR INDUSTRIAL CHAIN HUNG LED FIXTURE WITH 0 – 10 V DIMMING	FSI–440L–840–UNV–DIM	4000K	DAY–BRITE OR APPROVED EQUAL	CHAIN HUNG MTD. AT 9' A.F.F. (NOTE 2)
F	LED	33	UNV	5" X 55" LINEAR INDUSTRIAL WET LOCATION LED FIXTURE	VAP–4000LM–FST–MD–MVOLT–GZ10–40K–80CRI	4000K	LITHONIA LIGHTING OR APPROVED EQUAL	SURF. MTD. IN ELEV. PIT (NOTE 2)
G	LED	18	UNV	7" ROUND LED RECESSED DOWNLIGHT	7RN–BAC–C6L–20–835–W–Z10–U–BAC–C7–R–DL–W–WH–BAC	4000K	LIGHTOLIER OR APPROVED EQUAL	(NOTE 2)
GE	LED	18	UNV	SAME AS TYPE 'G' EXCEPT WITH BATTERY PACK	7RN–EM–BAC–C6L–20–835–W–Z10–U–BAC–C7–R–DL–W–WH–BAC	4000K	LIGHTOLIER OR APPROVED EQUAL	(NOTE 2)
H	LED	30	UNV	6" X 48" RECESSED GRID LED FIXTURE WITH 0 – 10 V DIMMING	6L–GRID–D–4–SOF–C1–40K–D085–D01–1C–UNV	4000K	LITECONTROL OR APPROVED EQUAL	(NOTE 2)
HE	LED	30	UNV	SAME AS TYPE 'H' EXCEPT WITH BATTERY PACK	6L–GRID–D–4–SOF–C1–40K–D085–D01–1C–UNV–EF	4000K	LITECONTROL OR APPROVED EQUAL	(NOTE 2)
J	LED	15	UNV	8" X 48" LED SURFACE MOUNTED FIXTURE	4764–LED–40K–MVOLT–VCNP–MOUNT	4000K	HYDREL OR APPROVED EQUAL	(NOTE 2)
K	LED	22	UNV	7" ROUND LED WET LOCATION RECESSED DOWNLIGHT	7RN–BAC–C6L–25–830–W–Z10–U–BAC–C7–R–DL–W–BK–P–BAC	4000K	LIGHTOLIER OR APPROVED EQUAL	(NOTE 2)
ME	LED	17	UNV	NORMALLY OFF INTERIOR LED EMERGENCY WALL PACK	CZQ6L	–	HOLOPHANE OR APPROVED EQUAL	(NOTE 2)
N	LED	15	UNV	4" X 48" LED COVE FIXTURE	MCV504–LLP–4'–MCFMC–80CRI–40K–400LMF–ASYM–DARK–MVOLT–SGW–ZT	4000K	MARK LIGHTING OR APPROVED EQUAL	(NOTE 2)
O	LED	10	UNV	2" ROUND LED RECESSED DOWNLIGHT	AX2 D G2–08LM–40K–80CRI–45D–ZT–MVOLT–2DP–W	4000K	ACULUX OR APPROVED EQUAL	(NOTE 2)
P	LED	75	UNV	ROUND POST TOP LED AREA POLE FIXTURE WITH 4" ROUND ALUMINUM POLE AT 150 MPH WIND RATING	FIXTURE: MRP LED–42C–530–30K–SR2–MVOLT–FINISH POLE: RSA–10–4–5G	4000K	LITHONIA LIGHTING APPROVED EQUAL	(NOTE 2)
Q	LED	25	UNV	3" X 48" LINEAR LED CANOPY WET LOCATION FIXTURE	RN–D–4–5–3K8–AS–DL–UNV–FINISH–EMF	4000K	ARCHITECTURAL AREA LIGHTING OR APPROVED EQUAL	(NOTE 2)
X	LED	3	UNV	LED EDGE LIT EXIT SIGN WITH BATTERY PACK	EDG–W–FACES–RED–EL–SD–BAA	–	LITHONIA LIGHTING OR APPROVED EQUAL	(NOTE 2)
XW	LED	4	UNV	LED WET LOCATION EXIT SIGN WITH BATTERY PACK	DLTLX–S–W–W–R–120/277–EL N–CW–SD–BAA	–	HOLOPHANE OR APPROVED EQUAL	(NOTE 2)

NOTES:

1. ALL FIXTURES SHALL COMPLY WITH BUY AMERICA ACT.
2. PROVIDE AN ADDITIONAL TWO FIXTURES OF EACH FIXTURE TYPE FOR BUILDING STOCK PURPOSES.

KEYED NOTES – PANEL SCHEDULES

NO.	DESCRIPTION
1	SHORT CIRCUIT RATING BASED ON PRELIMINARY CALCULATIONS AND ASSUMPTIONS. ACTUAL SHORT CIRCUIT RATING SHALL BE BASED ON CONTRACTOR SUBMITTED SHORT CIRCUIT STUDY, PER SPECIFICATIONS.
2	PANEL FOR GENERATOR ENCLOSURE AND AUXILIARY GENERATOR EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH GENERATOR MANUFACTURER.

STATE PROJECT NUMBER

1000–57–70

GENERAL NOTES – PANEL SCHEDULES

1. REFER TO DRAWING E–001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.
2. PROVIDE AND INSTALL MINIMUM 2#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 1P AND 2P 20A AND 15A CIRCUITS, U.O.N.
3. PROVIDE AND INSTALL MINIMUM 3#12 AND 1#12 GROUND IN 3/4" CONDUIT FOR ALL 3P 20A CIRCUITS, U.O.N.

1 SCR: 22K AIC — GL-1 — 120/208 V, 3 PH., 4 W., 100 A BUS, 50 A MCB

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

1 SCR: 42K AIC — H4-1 — 277/480 V, 3 PH., 4 W., 150 A BUS, 150 A MCB

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
9145			RTU-1		45A-3	1	3			BUSSED SPACE			
	9145					3	4			BUSSED SPACE			
		9145				5	6			BUSSED SPACE			
9145			RTU-2		45A-3	7	8			BUSSED SPACE			
	9145					9	10			BUSSED SPACE			
		9145				11	12			BUSSED SPACE			
4434			RTU-3		20A-3	13	14			BUSSED SPACE			
	4434					15	16			BUSSED SPACE			
		4434				17	18			BUSSED SPACE			
2500			UH-1g		20A-2	19	20			BUSSED SPACE			
	2500					21	22			BUSSED SPACE			
		2500	UH-1h		20A-2	23	24			BUSSED SPACE			
2500						25	26			BUSSED SPACE			
			SPARE		20A-1	27	28			BUSSED SPACE			
			SPARE		20A-1	29	30			BUSSED SPACE			
			SPARE		20A-1	31	32			BUSSED SPACE			
			SPARE		20A-1	33	34			BUSSED SPACE			
			SPARE		20A-1	35	36			BUSSED SPACE			
			SPARE		20A-1	37	38			BUSSED SPACE			
			SPARE		20A-1	39	40			BUSSED SPACE			
			SPARE		20A-1	41	42			BUSSED SPACE			
										New Connect	27724	25224	25224
										Connect Amps		94	Amps
										Demand Amps		94	Amps

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL SCHEDULES

SHEET E–602
228

SCALE = NONE

GENERAL NOTES – RISER PLAN

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

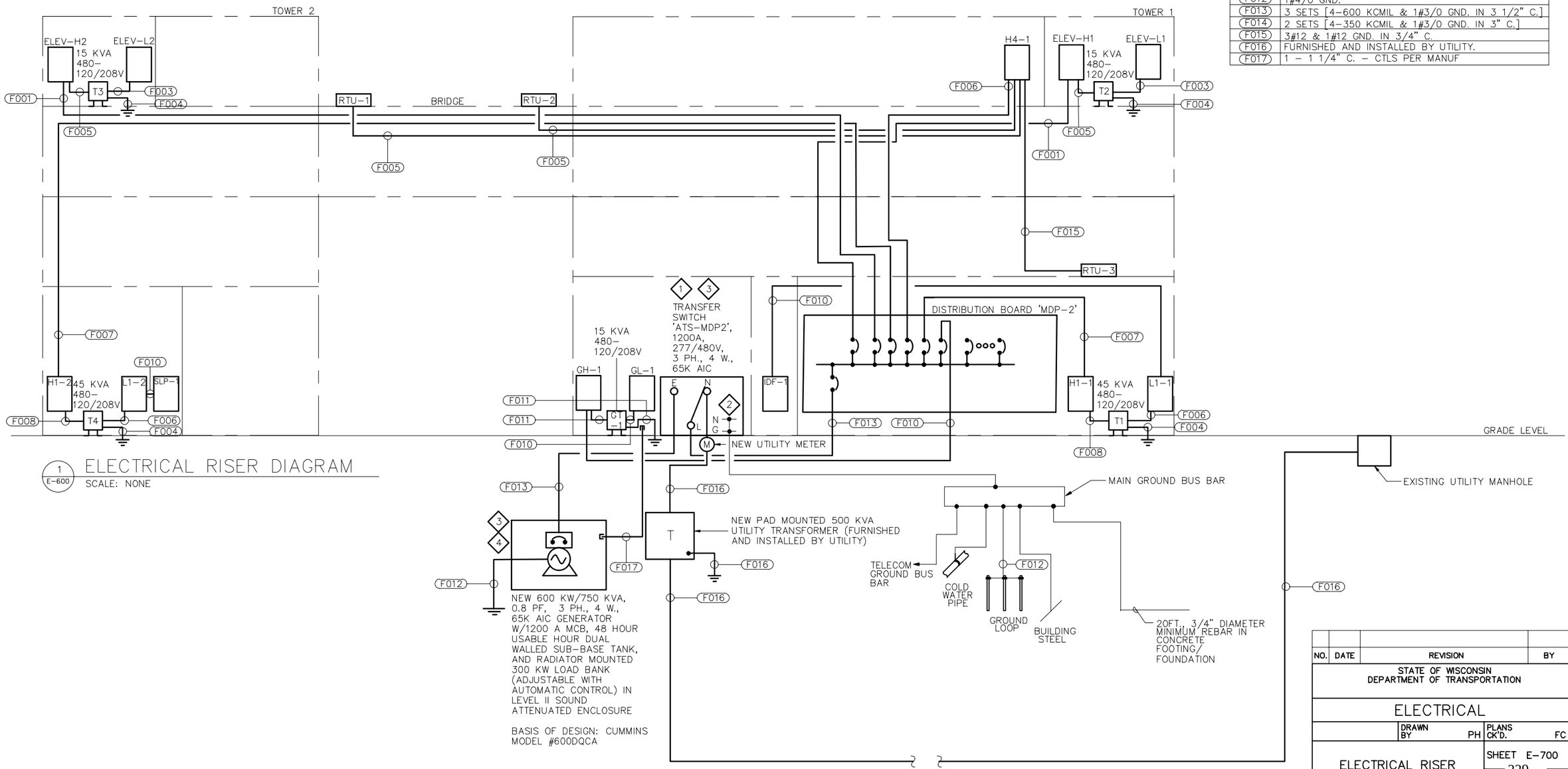
KEYED NOTES – RISER PLAN

NO.	DESCRIPTION
1	EQUIPMENT SHALL BE SERVICE RATED. PROVIDE WITH BYPASS ISOLATION AND DEADFRONT OPTIONS.
2	GROUND TO GROUNDING ELECTRODE SYSTEM PER NEC 250.50.
3	SHORT CIRCUIT RATING BASED ON PRELIMINARY CALCULATIONS AND ASSUMPTIONS. ACTUAL SHORT CIRCUIT RATING SHALL BE BASED ON CONTRACTOR SUBMITTED SHORT CIRCUIT STUDY, PER SPECIFICATIONS.
4	GENERATOR SHALL COMPLY WITH BUY AMERICA ACT.

STATE PROJECT NUMBER

1000–57–70

FEEDER SCHEDULE	
FEEDER TAG	FEEDER SIZE
F001	4–600KCMIL & 1#2 G. IN 3 1/2" C.
F002	NOT USED.
F003	4#1 & 1#1#6 GND. IN 1 1/2" C.
F004	1#6 GND. IN 3/4" C.
F005	3#6 & 1#10 GND. IN 1" C.
F006	4#1/0 & 1#6 GND. IN 2" C.
F007	4#1 & 1#8 GND. IN 1 1/2" C.
F008	3#4 & 1#8 GND. IN 1" C.
F009	NOT USED.
F010	4#6 & 1#10 GND. IN 1" C.
F011	4#10 & 1#10 GND. IN 3/4" C.
F012	1#4/0 GND.
F013	3 SETS [4–600 KCMIL & 1#3/0 GND. IN 3 1/2" C.]
F014	2 SETS [4–350 KCMIL & 1#3/0 GND. IN 3" C.]
F015	3#12 & 1#12 GND. IN 3/4" C.
F016	FURNISHED AND INSTALLED BY UTILITY.
F017	1 – 1 1/4" C. – CTLS PER MANUF



1 / E–600 ELECTRICAL RISER DIAGRAM

SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL RISER DIAGRAM

SHEET E–700

229

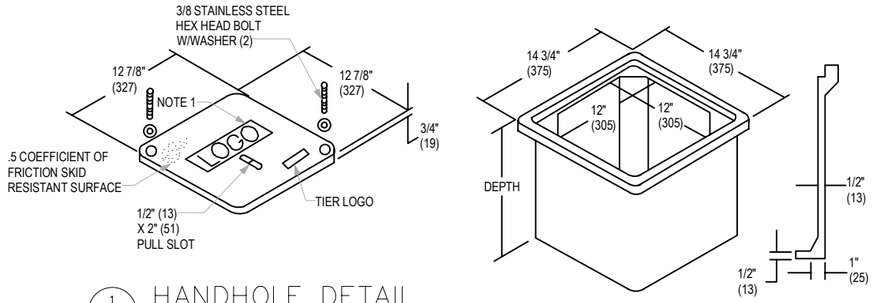
SCALE = NONE

2

2

STATE PROJECT NUMBER

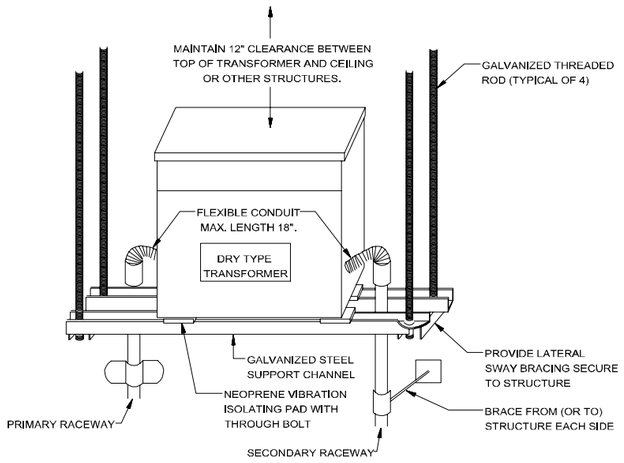
1000-57-70



1 E-800 HANDHOLE DETAIL

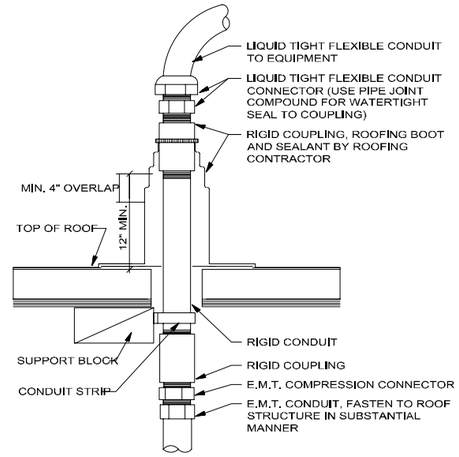
SCALE: NONE

NOTE:
1. PROVIDE IDENTIFICATION OF HANDHOLE TYPE ON COVER (ELECTRIC, TELECOM, ETC.).



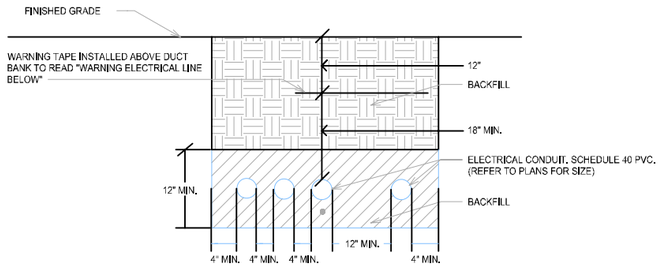
4 E-800 SUSPENDED TRANSFORMER SUPPORT DETAIL

SCALE: NONE



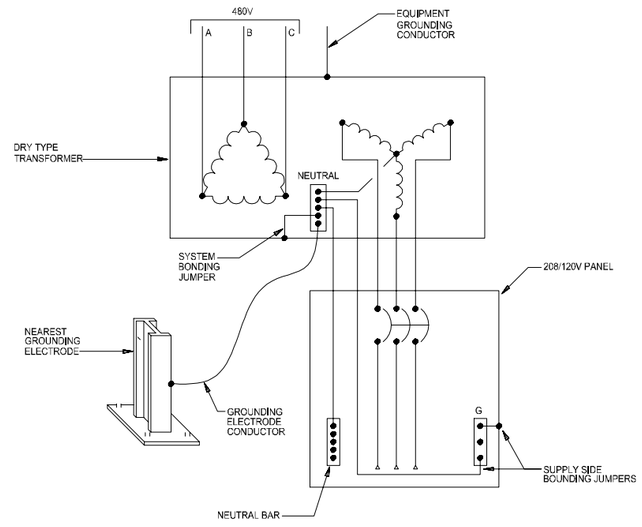
6 E-800 CONDUIT THRU ROOF DETAIL

SCALE: NONE



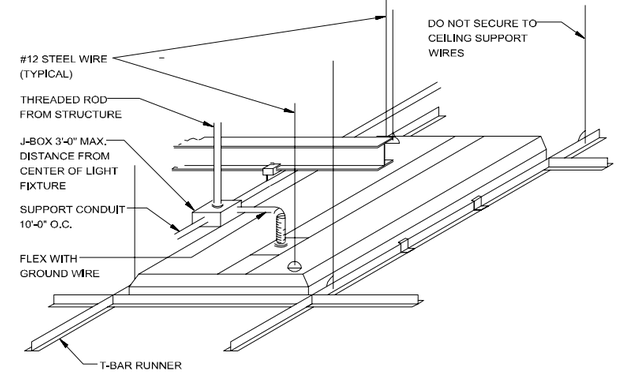
2 E-800 DUCT BANK DETAIL

SCALE: NONE



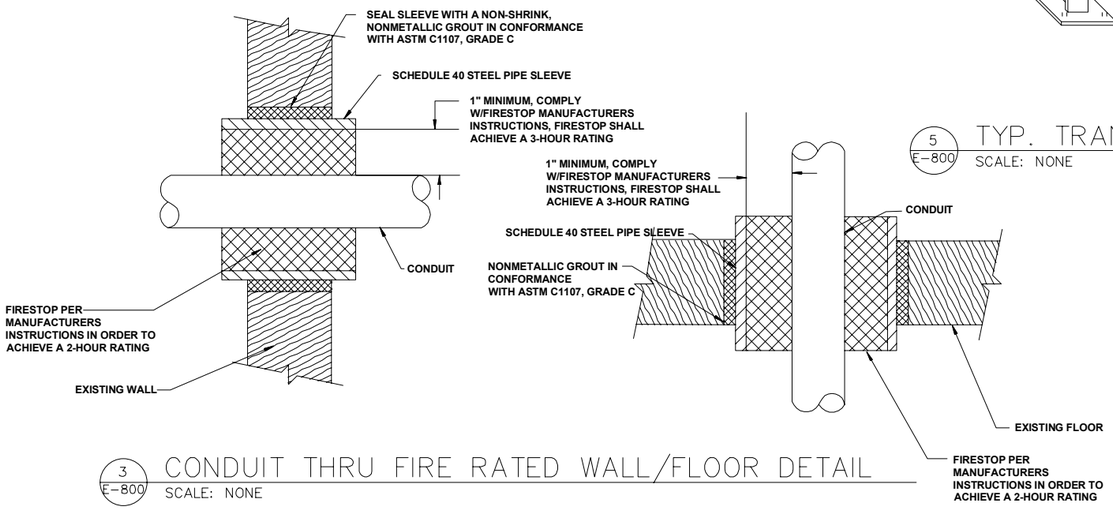
5 E-800 TYP. TRANSFORMER GROUNDING DETAIL

SCALE: NONE



7 E-800 RECESSED LAY-IN FIXTURE MOUNTING DETAIL

SCALE: NONE



3 E-800 CONDUIT THRU FIRE RATED WALL/FLOOR DETAIL

SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

ELECTRICAL DETAILS

SHEET E-800
230

SCALE = AS NOTED

STATE PROJECT NUMBER
1000-57-70

GENERAL NOTES – LIGHTNING PLAN

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

2 REFER TO DRAWING E-902 FOR LIGHTNING PROTECTION DETAILS.

3 THE DESIGN & DETAILS SHOWN WILL MEET THE REQUIREMENTS OF UNDERWRITERS LABORATORY CODE 96/96A, NATIONAL FIRE PROTECTION ASSOCIATION CODE 780 & THE LIGHTNING PROTECTION INSTITUTE CODE 175 FOR LIGHTNING PROTECTION SYSTEMS

4 A CONDUCTOR BEND SHALL NOT FORM A SHARPER ANGLE THAN 90 DEGREES OR HAVE A RADIUS LESS THAN 8 INCHES.

5 METAL BODIES OF INDUCTANCE LOCATED WITHIN 6' OF A MAIN LIGHTNING COMPONENT SHALL BE BONDED TO THE LIGHTNING PROTECTION SYSTEM (INCLUDING BUT NOT LIMITED TO METAL VENTS, FLASHING, LOUVERS & ROOF DRAINS).

6 CONNECTIONS TO GROUND AND/OR COUNTERPOISE SHALL BE MADE AT A POINT NOT LESS THAN 2'-0 BELOW GRADE AND 3'-0 TO 8'-0 AWAY FROM FOUNDATION WALL.

7 AIR TERMINAL SHALL BE PLACED AT THE LOCATIONS INDICATED, NOT MORE THAN 2'-0 FROM THE ENDS OF RIDGES, OUTSIDE CORNERS, OR OUTSIDE EDGES OF MAIN ROOFS, AND MUST EXTEND A MINIMUM OF 10" ABOVE THE OBJECT TO BE PROTECTED.

8 MID-ROOF AIR TERMINALS SHALL BE SPACED AT 50'-0" O.C. MAX. SPACING.

9 PERIMETER AIR TERMINALS THAT ARE LESS THAN 24" IN HEIGHT SHALL BE SPACED AT 20'-0" O.C. MAX. PERIMETER AIR TERMINALS THAT ARE 24" IN HEIGHT OR GREATER SHALL BE SPACED AT 25'-0" O.C. MAX.

10 JOB CONDITIONS MAY DICTATE SLIGHT VARIATIONS IN AIR TERMINAL AND GROUND ROD LOCATIONS, BUT IN NO INSTANCE SHALL A VARIATION BREAK COMPLIANCE WITH THESE NOTES AND REQUIREMENTS.

11 CONDUCTORS SHALL MAINTAIN A HORIZONTAL OR DOWNWARD PATH FREE FROM "U" AND "V" POCKETS. ANY RISE IN CONDUCTOR SHALL BE NO STEEPER THAN 3" OF RISE PER 12" OF RUN.

12 COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE PLACED ON ALUMINUM, GALVALUM, OR BARE GALVANIZED STEEL SURFACES. ALUMINUM MATERIALS SHALL NOT BE PLACED ON COPPER SURFACES.

13 FOR THE SAKE OF CLARITY EACH INDIVIDUAL ITEM OF LIGHTNING PROTECTION MATERIALS ON THE ROOF PLAN HAS NOT BEEN CALLED OUT. INSTEAD TYPICAL DETAILS ARE SHOWN.

14 ALL MISCELLANEOUS STEEL INCLUDING BUT NOT LIMITED TO STRUCTURAL STEEL, REBAR, FRAMING & RAILINGS, SHALL BE MADE ELECTRICALLY CONTINUOUS THROUGH CONSTRUCTION.

15 ELECTRIC, TELEPHONE, ANTENNA SYSTEM, AND OTHER MISCELLANEOUS GROUNDS SHALL BE CONNECTED WITH MAIN SIZED CONDUCTOR TO ANY LIGHTNING PROTECTION GROUND.

16 A LIGHTNING ARRESTOR, PROTECTOR, OR ANTENNA-DISCHARGE UNIT MUST BE INSTALLED ON EACH ELECTRIC AND TELEPHONE SERVICE ENTRANCE AND RADIO AND TELEVISION ANTENNA LEAD IN.

17 BOND ALL METAL PIPES SUCH AS WATER, GAS, FIRE, STORM, SEWER WHICH ENTER THE STRUCTURE TO THE NEAREST DOWNLEAD, GROUND ROD OR COUNTERPOISE.

18 SEAL THE ENDS OF CONDUIT MOISTURE TIGHT WITH DUCT SEAL, SILICONE OR LEAD WEDGES.

19 CABLE MUST BE FASTENED EVERY 3'-0" O.C. MAXIMUM.

20 THE LIGHTNING PROTECTION INSTALLER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE THE WORK IS STARTED. INSTALLERS WHO FAIL TO VERIFY, REVIEW, AND COORDINATE THE WORK SHALL TAKE FULL RESPONSIBILITY FOR THE WORK AND ANY PORTION OF THE WORK THAT IS IMPROPERLY INSTALLED OR LOCATED. THE INSTALLER SHALL NOTIFY ENGINEER IF DIMENSIONAL ERRORS OR DESIGN CONFLICTS OCCUR.

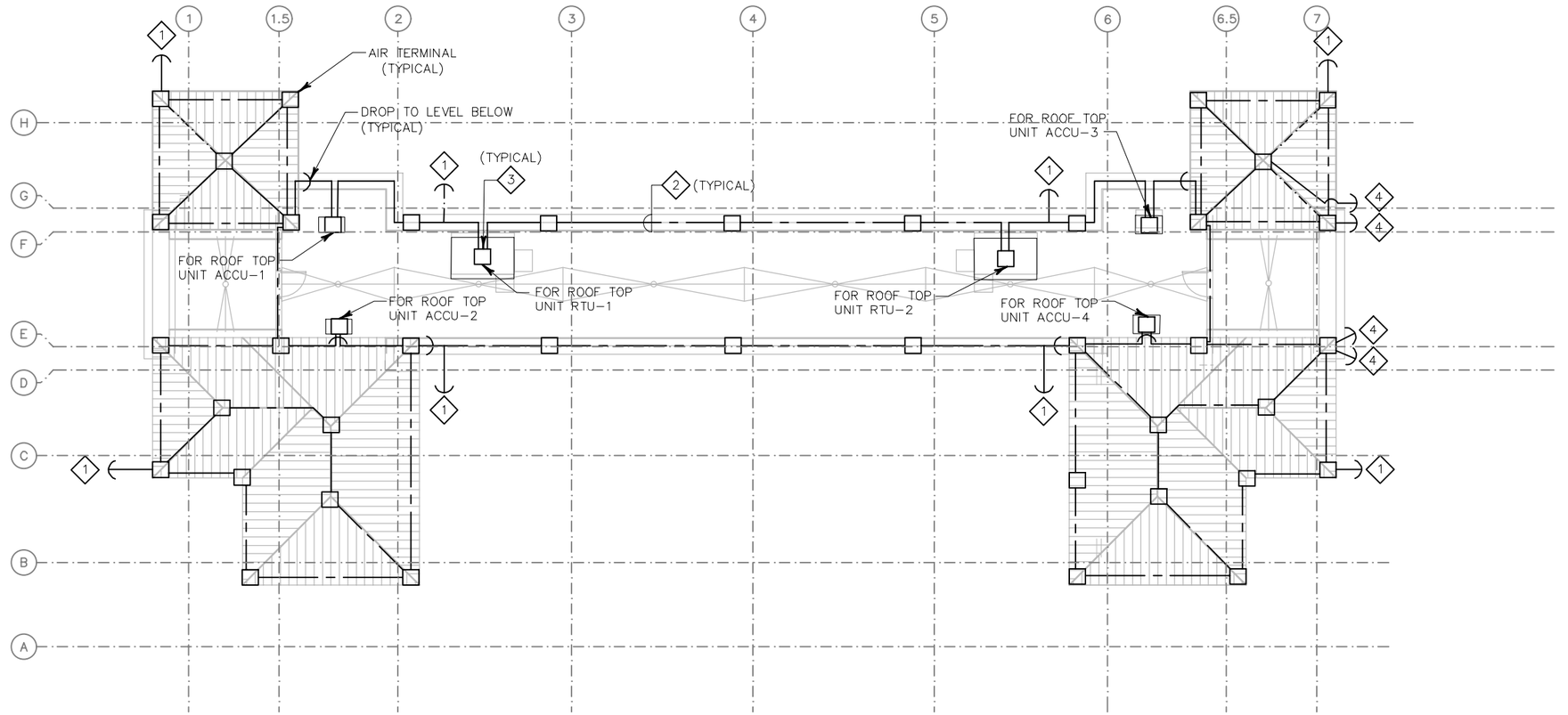
21 ALL LIGHTNING PROTECTION SYSTEMS REQUIRE PROPERLY INSTALLED SURGE PROTECTIVE DEVICES AS OUTLINED IN PARAGRAPH 13 OF UL 96A.

22 WHERE POSSIBLE, SECURELY INSERT CABLE INTO EXISTING SPLICER OR POINT BASE TO CONSERVE SPLICERS.

23 PICTURES SHALL BE TAKEN WHERE BONDS ARE CONCEALED OR BURIED (SUCH AS WATER, GAS, AND ELECTRIC BONDS, GROUND RODS, THRU WALLS AND THRU ROOFS, (INTERIOR PICTURES)).

KEYED NOTES – LIGHTNING PLAN

NO.	DESCRIPTION
1	DOWN TO BUILDING GROUNDING LOOP. CONNECT TO GROUNDING LOOP. REFER TO DRAWING E-400 FOR FURTHER INFORMATION.
2	28 STRANDS OF 0.066 GAUGE CLASS II ROPE LAY COPPER CABLE.
3	REFER TO DETAIL 5 ON DRAWING E-902 FOR FURTHER INFORMATION.
4	DOWN TO LOWER ROOF. REFER TO DRAWING E-901 FOR FURTHER INFORMATION.



1 / E-103 UPPER ROOFS LIGHTNING PROTECTION PLAN
SCALE: 1/16"=1'-0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL UPPER ROOFS LIGHTNING PROTECTION PLAN

SHEET E-900
231

SCALE = AS NOTED

GENERAL NOTES – LIGHTNING PLAN

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

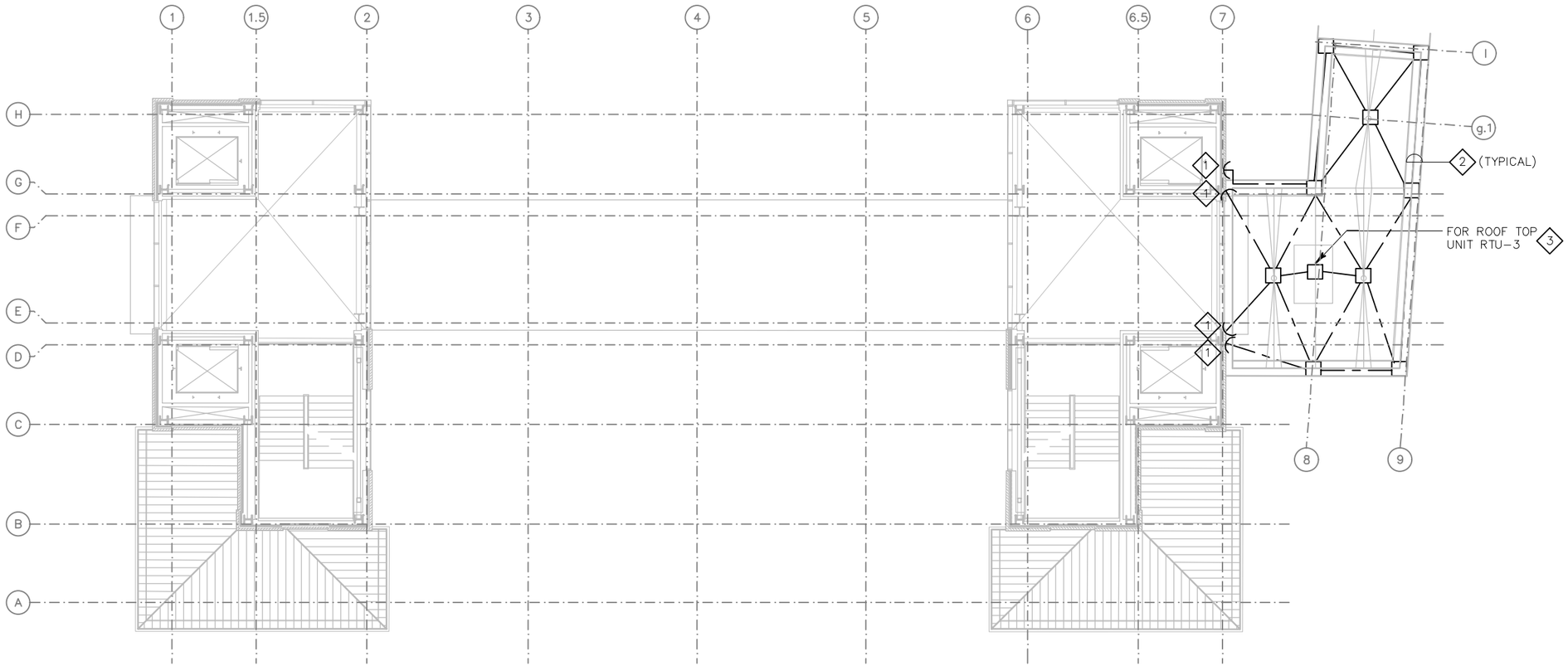
2 REFER TO DRAWING E–902 FOR LIGHTNING PROTECTION DETAILS.

3 REFER TO DRAWING E–900 FOR LIGHTNING PROTECTION NOTES.

KEYED NOTES – LIGHTNING PLAN

NO.	DESCRIPTION
1	FROM UPPER ROOF. REFER TO DRAWING E–900 FOR FURTHER INFORMATION.
2	28 STRANDS OF 0.066 GAUGE CLASS II ROPE LAY COPPER CABLE.
3	REFER TO DETAIL 5 ON DRAWING E–902 FOR FURTHER INFORMATION.

STATE PROJECT NUMBER
1000–57–70



1 / E–103 LOWER ROOFS LIGHTNING PROTECTION PLAN
SCALE: 1/16"=1'–0"

0 8 16 32 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. FC

ELECTRICAL LOWER ROOFS LIGHTNING PROTECTION PLAN

SHEET E–901
232

SCALE = AS NOTED

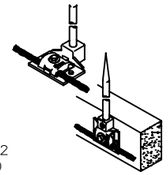
2

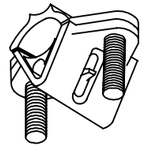
2

STATE PROJECT NUMBER
1000-57-70

28 STRANDS OF .066 GAUGE (1.68MM) ROPE LAY COPPER CABLE. 385 POUNDS PER THOUSAND FEET (573 GRAM/METER). 121,968 CIRCULAR MILS (61.5MM) OF CONDUCTIVITY. EXCEEDS CLASS II REQUIREMENTS.

DUAL THREAD A CAST BRONZE BASE WITH A 2-WAY CABLE HOLDER. THREADED FOR TOP OR SIDE MOUNTING. 5/16-18 STAINLESS STEEL BOLT AND WASHER. 2-13/16" X 2-15/16" (71.44MM X 74.61MM). APPROXIMATELY 9.3 OZ. (263 GRAMS). USE SUFFIX 3/8 OR 1/2 TO DENOTE AIR TERMINAL THREAD SIZE.

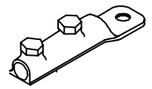




MEDIUM PIPE CLAMP LEADED CAST BRONZE PIPE CLAMP. FITS UP TO 2" (5.1CM) O.D. PIPE. STAINLESS STEEL BOLTS. APPROXIMATELY 14 OZ. (398 GRAMS).

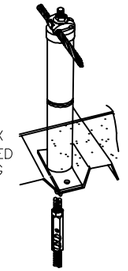
* 1/4" HOLE, LARGEST STAMPED COPPER LOOP. * USE WITH CLASS II CONDUCTORS.

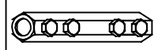
CLASS II - 5/8" (15.9MM) DIAMETER, THREADED BASE, UL LISTED. COPPER 5/8" X 12" (15.9MM X 305MM)



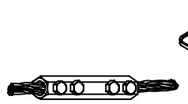
MINI BONDING LUG CAST BRONZE SECONDARY CABLE TO METAL SURFACE BONDING LUG. STAINLESS STEEL BOLTS. 3-1/2" X 9/16" (8.9CM X 1.4CM); APPROXIMATELY 3 OZ. (85 GRAMS).

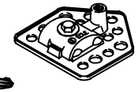
RECTANGLE MOUNT - CABLE TO VERTICAL CABLE ASSEMBLY SUPPLIED WITH 18" (45.7CM) OF 1/2-13 THREADED ROD, 12" (30.5CM) OF SCHEDULE 40 PVC TUBING, STAINLESS STEEL HARDWARE, AND 2" X 4" (5.1CM X 10.2CM) MOUNT TO FIT CORRUGATED STEEL DECKING OR FOR FASTENING TO ANY FLAT DECKING.



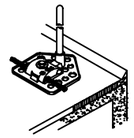


STRAIGHT 4-BOLT HEX BRASS STRAIGHT SPLICER. STAINLESS STEEL BOLTS. 3-1/2" X 3/4" (8.9CM X 1.9CM) HEX; APPROXIMATELY 6 OZ. (170 GRAMS).

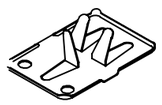




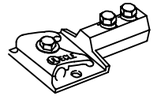
ADHESIVE BASE A CAST BRONZE BASE WITH 2-WAY BOLT PRESSURE CABLE HOLDER. CAP CAN BE ROTATED 90 DEGREES. SUITABLE FOR USE ON BUILT-UP, SINGLE MEMBRANE, OR OTHER ROOF SURFACES WHERE ALL MECHANICAL PENETRATIONS MUST BE AVOIDED. FOR USE WITH ADHESIVES COMPATIBLE TO ROOF SURFACE. 5/16-18 STAINLESS STEEL BOLT AND WASHER. 4-1/4" X 4" (10.8CM X 10.2CM); APPROXIMATELY 16 OZ. (454 GRAMS). USE SUFFIX 3/8, 1/2 OR 5/8 TO DENOTE AIR TERMINAL THREAD SIZE.



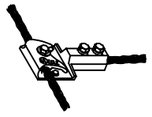
2-BOLT PARALLEL CAST BRONZE CLAMP FOR SPLICING OR CONNECTING TWO RODS, TWO CABLES OR ROD TO CABLE. STAINLESS STEEL CARRIAGE BOLTS WITH NUTS AND WASHERS. 2" X 1-5/8" (5.1CM X 4.13CM); APPROXIMATELY 8 OZ. (227 GRAMS).

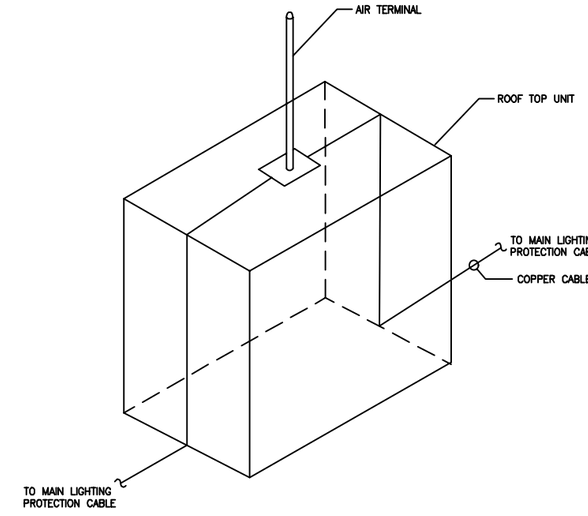


STAMPED ADHESIVE CRIMP COPPER LOOP. FOR USE ON BUILT-UP, SINGLE MEMBRANE OR OTHER FLAT ROOF SURFACES WHERE MECHANICAL PENETRATIONS MUST BE AVOIDED. USE WITH ADHESIVES COMPATIBLE TO ROOF SURFACE. 2-1/4"X3-1/2" (5.7CMX8.9CM); APPROXIMATELY 1.4 OZ (40 GRAMS).

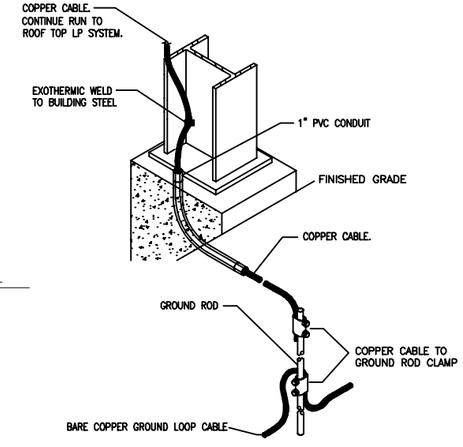


TEE CAST BRONZE PRESSURE "TEE" SPLICER. STAINLESS STEEL BOLTS AND WASHER. 2-1/4" X 2" X 5" (5.7CM X 5.1CM X 12.7CM); APPROXIMATELY 10 OZ. (284 GRAMS).

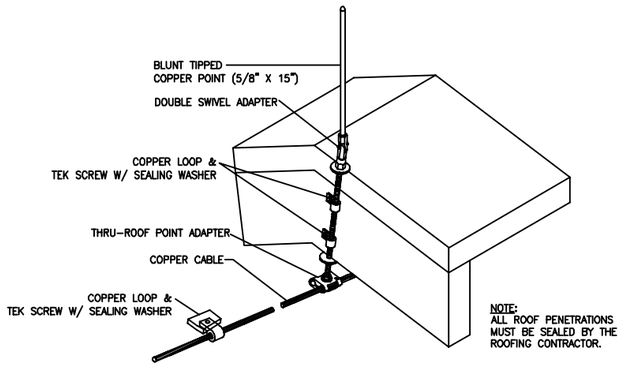




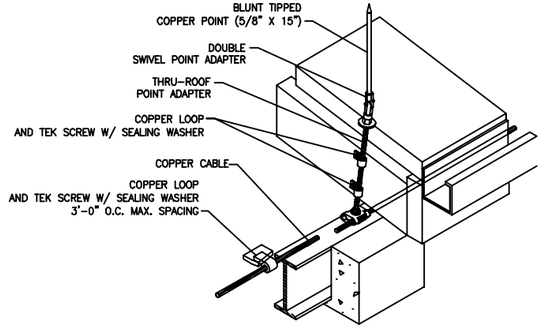
5 E-801 TYP. ROOF TOP UNIT BASED AIR TERMINAL
SCALE: NONE



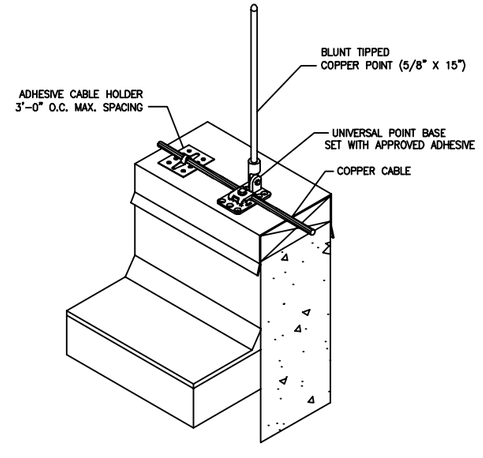
4 E-801 TYP. STEEL COLUMN BOND TO GROUND CONNECTION
SCALE: NONE



1 E-801 TYP. CONCEALED AIR TERMINAL
SCALE: NONE



2 E-801 TYP. CONCEALED AIR TERMINAL
SCALE: NONE



3 E-801 TYP. ADHESIVE BASED AIR TERMINAL
SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY	PH	PLANS CK'D.	FC

LIGHTNING PROTECTION DETAILS

SHEET E-902
233

SCALE = AS NOTED

2

2

STATE PROJECT NUMBER

1000–57–70

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20210830
Project Type: New Construction

Construction Site:
5601 S. 6th Street
Milwaukee, Wisconsin

Owner/Agent:

Designer/Contractor:

Additional Efficiency Package(s)
Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Pedestrian Bridge (Transportation)	1346	0.63	848
2-East Tower (Transportation)	1817	0.63	1145
3-Passage (Transportation)	785	0.63	495
4-West Tower (Transportation)	1817	0.63	1145
		Total Allowed Watts =	3632

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Pedestrian Bridge (Transportation)				
LED: Other:	1	11	30	330
LED: Other:	1	4	4	16
2-East Tower (Transportation)				
LED: Other:	1	12	32	384
LED: Other:	1	7	50	350
LED: Other:	1	2	33	66
LED: Other:	1	12	17	204
LED: Other:	1	2	4	8
LED: Other:	1	4	17	68
3-Passage (Transportation)				
LED: Other:	1	8	22	176
LED: Other:	1	1	4	4
4-West Tower (Transportation)				
LED: Other:	1	9	32	288
LED: Other:	1	7	50	350
LED: Other:	1	2	33	66
LED: Other:	1	12	17	204
LED: Other:	1	2	17	34

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: Other:	1	1	4	4
			Total Proposed Watts =	2552

Interior Lighting PASSES: Design 30% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the inspection Checklist.

Name - Title Signature Date

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: MKE 20210830
Project Type: New Construction
Exterior Lighting Zone 3 (Other (LZ3))

Construction Site:
5601 S. 6th Street
Milwaukee, Wisconsin

Owner/Agent:

Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Roof (Plaza area)	1435 ft2	0.16	Yes	230
Main entry	5 ft of door	30	Yes	150
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Other door (not main entry)	5 ft of door	20	Yes	100
Entry canopy	730 ft2	0.4	Yes	292
Entry canopy	430 ft2	0.4	Yes	172
			Total Tradable Watts (a) =	1544
			Total Allowed Watts =	1544
			Total Allowed Supplemental Watts (b) =	750

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Roof (Plaza area, 1435 ft2): Tradable Wattage				
LED: Other:	1	5	15	75
Main entry (5 ft of door width): Tradable Wattage				
LED: Other:	1	1	30	30
Other door (not main entry) (5 ft of door width): Tradable Wattage				
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30
LED: Other:	1	1	30	30

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. SK

ELECTRICAL COMCHECK SHEETS

SHEET EN–001
234

SCALE = NONE

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: Other:	1	1	30	30
Entry canopy (730 ft2): Tradable Wattage				
LED: Other:	1	10	22	220
Entry canopy (430 ft2): Tradable Wattage				
LED: Other:	1	6	22	132
	Total Tradable Proposed Watts =			667

Exterior Lighting PASSES: Design 71% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

COM*check* Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 75.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15][1]	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Areas such as security or emergency areas that need continuous lighting.
C405.2.1 [EL18][1]	Occupancy sensors installed in required spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Automatic-on controls are allowed in corridors, stairways, restrooms, primary building entrance areas and lobbies, and areas where manual-on controls could impact safety or security.
C405.2.1, C405.2.2.3 [EL23][2]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Areas such as security or emergency areas that need continuous lighting.
C405.2.2.1 [EL22][2]	Automatic controls to shut off all building lighting installed in all buildings.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Areas such as security or emergency areas that need continuous lighting.
C405.2.3 [EL16][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Lighting required to have specific application controls.
C405.2.3, C405.2.3.1, C405.2.3.2 [EL20][1]	Primary sidelighted areas are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.3, C405.2.3.1, C405.2.3.3 [EL21][1]	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.4 [EL4][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL8][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.5 [EL25][1,2]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

STATE PROJECT NUMBER

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. SK

ELECTRICAL COMCHECK SHEETS

SHEET EN-002
235

SCALE = NONE

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][1]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

STATE PROJECT NUMBER

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ELECTRICAL

DRAWN BY PH | PLANS CK'D. SK

ELECTRICAL COMCHECK SHEETS

SHEET EN-003
236

SCALE = NONE

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

COMMUNICATIONS NOTES:

1. PROVIDE FACTORY ACCEPTANCE TESTING PRIOR TO SHIPPING EQUIPMENT TO THE SITE. PERFORM INTEGRATION AND TESTING ON-SITE TO ENSURE FUNCTIONALITY. A THIRD-PARTY COMMISSIONING AGENT SHALL VERIFY THE SYSTEM IS OPERATING AND FUNCTIONING PER CONTRACT REQUIREMENTS.
2. ALL DISPLAYS AND EQUIPMENT RACKS/CABINETS (WALL AND FLOOR MOUNTED) SHALL BE PROPERLY SECURED AND ANCHORED AS PER MANUFACTURER RECOMMENDATIONS.
3. COMMUNICATIONS CONDUITS:
   - 3.1 EXTERIOR (ABOVE GROUND)
     - 3.1.1 GALVANIZED RIGID CONDUIT (GRC)
     - 3.1.2 LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LFMC)
   - 3.2 INTERIOR
     - 3.2.1 ELECTRICAL METAL TUBING (EMT)
     - 3.2.2 LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LFMC)
4. COMMUNICATIONS CONDUIT PLACEMENT:
   - 4.1 LFMC – MAXIMUM LENGTH OF RUN IS 18 INCHES. IF A RUN REQUIRES IN EXCESS OF 18 INCHES SUBMIT SHOP DRAWINGS OF PROPOSED METHOD FOR APPROVAL PRIOR TO IMPLEMENTATION.
   - 4.2 MINIMUM BEND RADIUS FOR 90 DEGREE BENDS FOR ALL TYPE CONDUITS IS 12 INCHES.
   - 4.3 FOR CONDUITS WITH SPARE CAPACITY PROVIDE AN END-TO-END 600 LBS RATED PULL STRING, SECURED AT BOTH ENDS.
5. PROVIDE INSULATED BUSHING ON OPEN ENDS OF ALL COMMUNICATIONS CONDUITS.
6. COMMUNICATIONS CONDUIT RUNS FOR CAT6 CABLING NOT TO EXCEED 270 FEET. IF THE CONDUIT RUN EXCEEDS 270 FEET 50UM MM (OM-3) FIBER SHALL BE IMPLEMENTED.
   - 6.1 PROVIDE 19 INCH RACK MOUNTABLE UL LISTED 50UM MM FIBER TO ETHERNET CONVERTER
   - 6.2 CHASSIS (TRANSITION NETWORKS ION SERIES OR APPROVED EQUAL) CAPABLE OF PROVIDING ADEQUATE NUMBER OF PORT FOR PID'S PLUS 20% SPARE.
7. PROVIDE UL LISTED CAT6 ETHERNET TO 50UM MM (OM-3) FIBER MODULES FOR THE NUMBER OF PIDS THAT REQUIRE FIBER CONNECTIONS PLUS 20% SPARE MODULES.
8. CAT6 CABLE TO BE NEC RATED FOR THAT ENVIRONMENT THAT IT IS ROUTED OR TRAVERSES. FOR EXAMPLE CAT6 CABLE RUN UNDER SLAB ON GRADE SHALL BE RATED FOR WET LOCATIONS. CAT6 CABLE RUN IN PLENUM AREA SHALL BE PLENUM RATED.
9. EXTERIOR CAT6 CABLE TERMINATIONS: PROVIDE WEATHER TIGHT BACK BOX AND IP67 RATED SIEMON ZMAX RUGGEDIZED OR APPROVED EQUAL.
10. EXTERIOR 50UM MM FIBER CABLE TERMINATIONS: PROVIDE WEATHER TIGHT BACK BOX AND SIMPLEX SC TYPE OUTLET, SIEMON LIGHTSYSTEM OR APPROVED EQUAL.
11. EXTERIOR PATCH CABLES CAT6 AND 50UM SC TO SC FIBER: PROVIDE IP67 PATCH CORDS MATED FOR THE CONNECTOR TYPE AT THE OUTLET. PROVIDE 25% SPARE LENGTH IN PATCH CORD WHEN MEASURED FROM THE OUTLET TO THE DEVICE INTERFACE INPUT.
12. INTERIOR PATCH CABLES CAT6 AND 50UM MM SC TO SC FIBER: PROVIDE 1 METER PATCH CORDS FOR THE REQUIRED NUMBER OF CONNECTIONS PLUS 20% SPARE.
13. TEST ALL CAT6 CABLES PER TIA-568-C-2 STANDARD. SUBMIT COMPLETED TEST DATA TO RESIDENT ENGINEER IN STANDARD ELECTRONIC FILE FORMAT.
14. TEST ALL 50 UM MM FIBER CABLES PER TIA-568-C-3 STANDARD. SUBMIT COMPLETED TEST DATA TO RESIDENT ENGINEER IN STANDARD ELECTRONIC FILE FORMAT.
15. FIRE STOP ALL WALL PENETRATIONS PER DIV 7 REQUIREMENTS. USE EQUALLY RATED ASSEMBLIES TO REPAIR PENETRATIONS IN RATED WALLS.
16. USE WEATHER RATED JUNCTION AND BACK BOXES FOR ALL EXTERIOR LOCATIONS.
17. INTERIOR JUNCTION AND BACK BOXES SHALL BE 4 INCHES SQUARE AND 2 1/8 INCHES DEEP MINIMUM.
18. PERFORM ALL WORK AND PROVIDE ALL MATERIAL IN ACCORDANCE WITH THE OREGON ELECTRICAL SPECIALTY CODE, PORTLAND CITY CODES, AND AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

FIBER OPTIC CABLING SELECTION AND INSTALLATION NOTES:

APPROVED OPTICAL FIBER MEDIA

1. HORIZONTAL OPTICAL FIBER CABLING SHALL BE MULTI-MODE FIBER (MMF), GRADED INDEX OPTICAL FIBER QAVEGUIDE WITH NOMINAL 50/125MM CORE/CLADDING DIAMETER OF 62.5/125MM CORE/CLADDING DIAMETER (WHEN PERMITTED).
2. NEW INSTALLATIONS 50/125MM MMF SHALL BE USED FOR ALL NEW CONSTRUCTION WHERE 62.5/125MM IS NOT PRESENT.

HORIZONTAL FIBER DESIGN CONSIDERATIONS

1. THE HORIZONTAL LINK SHOULD NOT CONTAIN SINGLE-MODE AND MULTI-MODE CABLE COMBINED INTO A SINGLE JACKET OR SHEATH.
2. THE MAXIMUM LENGTH OF HORIZONTAL MMF IS 2,000 METERS (6,560 FT).
3. BOTH MMF AND SMF SHOULD HAVE DESIGNATED DISTANCE MARKERS AT LEAST EVERY FIVE FEET OR ONE METER INCREMENTS.

CONDUITS FOR FIBER-OPTIC CABLE

1. CONDUIT TO BE RUN IN THE MOST DIRECT ROUTE POSSIBLE ALONG BUILDING LINES OR PERPENDICULAR TO BUILDING LINES.
2. CONDUITS WILL HAVE A PULL BOX EVERY 150 FEET (18 IN. X 18 IN. X 4 IN.).
3. CONDUITS WILL HAVE NO MORE THAN TWO 90 DEGREE BENDS WITHOUT PULL BOX. THE 90 DEGREE BENDS SHALL NOT HAVE LESS THAN A 12 INCH BEND RADIUS.

AUDIO NOTES:

1. SPEAKER LOCATIONS SHALL BE DETERMINED BASED UPON SPEECH-TO-NOISE RATIOS AND GUIDED BY 28 CFR PART 36. SPEAKERS SHALL BE AUDIBLE WHERE SIGNS ARE VISIBLE.
2. SPEAKER-TO-SPEAKER DISTANCE SHALL BE BASED UPON SOUND PRESSURE LEVEL OF 87DB. 87DB LEVEL IS BASED ON NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH RECOMMENDATIONS AND ON STANDARD PUBLISHED SOUND LEVELS.
3. IF AMBIENT MICS ARE PRESENT, THE SIGNAL-TO-NOISE RATIO SHALL BE 10DB. IF NO AMBIENT MICS ARE PRESENT, THE PREFERRED SPL IS 70-75DB INSIDE THE STATION AND 80-85DB OUT ON THE PLATFORMS (TO BE FIELD VERIFIED).

DATA CABLING SELECTION AND INSTALLATION NOTES:

HORIZONTAL CABLING SYSTEMS

APPROVED COPPER MEDIA (COMMSCOPE)

1. UNSHIELDED TWISTED PAIR (UTP), 4-PAIR, SOLID CORE, 22 TO 24 AWG CABLE WILL BE INSTALLED FOR VOICE AND DATA SERVICES IN THE HORIZONTAL CABLING SYSTEMS.
2. NEW INSTALLATIONS: CATEGORY 6 UTP COMMSCOPE.
3. EXISTING INSTALLATIONS: CATEGORY 5E COMMSCOPE MAY BE SPECIFIED WHEN ADDING ADDITIONAL HORIZONTAL LINKS IN AN EXISTING CATEGORY 5E INSTALLATION OR FOR EXTENSION OF T -1 OR POTS LINES.

HORIZONTAL CABLING SYSTEMS CONSIDERATION

1. MAXIMUM LENGTH OF HORIZONTAL DISTRIBUTION CABLE IS 90M (295 FT) FROM THE CROSS-CONNECT TO THE OUTLET/CONNECTOR.

COPPER INSTALLATION PRACTICES

1. FACTORY OR FIELD SPLICES OF THE INSULATED CONDUCTORS SHALL NOT BE ALLOWED ON ANY PORTION OF THE CABLE.
2. CABLE SLACK (SERVICE LOOP) SHALL BE PROVIDED AT EACH END OF INSTALLED HORIZONTAL CABLE PLANT. THE RECOMMENDED MINIMUM AMOUNT OF SLACK FOR ALL CABLING IN THE TELECOMMUNICATIONS ROOM SHOULD BE 3M (10 FT). SERVICE LOOP SHOULD BE 1 M (3.3 FT) FOR OPTICAL FIBER AND 30CM (12 IN.) FOR TWISTED-PAIR AT THE OUTLET. INCLUDE THE SLACK IN ALL LENGTH CALCULATIONS TO ENSURE CABLE DOES NOT EXCEED 90M (295 FT).
3. INSTALLERS MUST ADHERE TO MINIMUM BEND RADII DEFINED FOR CATEGORY CABLES (BEND RADII SHOULD BE NO LESS THAN FOUR-TIMES THE DIAMETER OF THE 4 PAIR CABLE).
4. AVOID SHARP BENDS (90 DEGREES) WHEN INSTALLING CABLE. TOTAL BENDS IN A SINGLE CONDUIT RUN SHALL NOT EXCEED 360 DEGREES.

SPECIAL CONDITIONS. IF A CONDUIT:

1. EXCEEDS 100 FEET (30 M) IN A CONTINUOUS RUN, A PULL BOX MUST BE INSTALLED.
2. REQUIRES MORE THAN TWO 90 DEGREE BENDS, THEN A PULL BOX MUST BE PROVIDED BETWEEN THE SECTIONS.
3. REQUIRES A REVERSE BEND (BETWEEN 100 DEGREE AND 180 DEGREE), THEN A PULL BOX MUST BE PROVIDED AT EACH BEND HAVING AN ANGLE FROM 100 DEGREE TO 180 DEGREE.
4. REQUIRES A THIRD 90 DEGREE BEND (BETWEEN PULL POINTS OR PULL BOXES) AND ONE OF THE FOLLOWING IS TRUE:
   - A) THE TOTAL RUN IS NO LONGER THAN 33 FEET.
   - B) THE CONDUIT IS INCREASED BY ONE TRADE SIZE.
   - C) ONE OF THE BENDS IS LOCATED WITHIN 12 INCH OF THE CABLE FEED END.

   THEN AN ADDITIONAL PULL BOX IS NOT REQUIRED. FURNISH AND INSTALL EXPANSION JOINTS FOR CONDUITS.

SPEAKER CABLING SELECTION AND INSTALLATION NOTES:

HORIZONTAL CABLING SYSTEMS

APPROVED COPPER MEDIA FOR NEW INSTALLATIONS

1. CL3 RATED 14 AWG SPEAKER WIRE FOR RUNS EXCEEDING 50 FEET.
2. CL3 RATED 16 AWG SPEAKER WIRE FOR RUNS SHORTER THAN 50 FEET.

COPPER INSTALLATION PRACTICES

1. CABLE SLACK (SERVICE LOOP) SHALL BE PROVIDED AT EACH END OF INSTALLED HORIZONTAL CABLE PLANT. THE RECOMMENDED MINIMUM AMOUNT OF SLACK FOR ALL CABLING IN THE TELECOMMUNICATIONS ROOM SHOULD BE 3M (10 FT). SERVICE LOOP SHALL BE 30CM (12 IN.) AT THE OUTLET. INCLUDE THE SLACK IN ALL LENGTH CALCULATIONS.
2. INSTALLERS MUST ADHERE TO MINIMUM BEND RADII DEFINED FOR CABLES.
3. AVOID SHARP BENDS (90 DEGREES) WHEN INSTALLING CABLE. TOTAL BENDS IN A SINGLE CONDUIT RUN SHALL NOT EXCEED 360 DEGREES.

SPECIAL CONDITIONS. IF A CONDUIT:

1. EXCEEDS 100 FEET (30 M) IN A CONTINUOUS RUN, A PULL BOX MUST BE INSTALLED.
2. REQUIRES MORE THAN TWO 90 DEGREE BENDS, THEN A PULL BOX MUST BE PROVIDED BETWEEN THE SECTIONS.
3. REQUIRES A REVERSE BEND (BETWEEN 100 DEGREE AND 180 DEGREE), THEN A PULL BOX MUST BE PROVIDED AT EACH BEND HAVING AN ANGLE FROM 100 DEGREE TO 180 DEGREE.
4. REQUIRES A THIRD 90 DEGREE BEND (BETWEEN PULL POINTS OR PULL BOXES) AND ONE OF THE FOLLOWING IS TRUE:
   - A) THE TOTAL RUN IS NO LONGER THAN 33 FEET.
   - B) THE CONDUIT IS INCREASED BY ONE TRADE SIZE.
   - C) ONE OF THE BENDS IS LOCATED WITHIN 12 INCH OF THE CABLE FEED END.

   THEN AN ADDITIONAL PULL BOX IS NOT REQUIRED. FURNISH AND INSTALL EXPANSION JOINTS FOR CONDUITS.

SPEAKER CONSIDERATIONS

1. SPEAKERS MUST BE AUDIBLE WHERE SIGNS ARE VISIBLE.
2. SOUND PRESSURE LEVEL FOR EXTERIOR SPEAKERS SHALL BE 87 DB AT A HEIGHT OF 4 FEET FOR SPEAKERS MOUNTED 14 FEET ABOVE FINISHED FLOOR. SOUND PRESSURE LEVEL FOR INTERIOR SPEAKERS SHALL BE 10 DB ABOVE AMBIENT AS MEASURED BY AMBIENT NOISE SENSOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

GENERAL NOTES

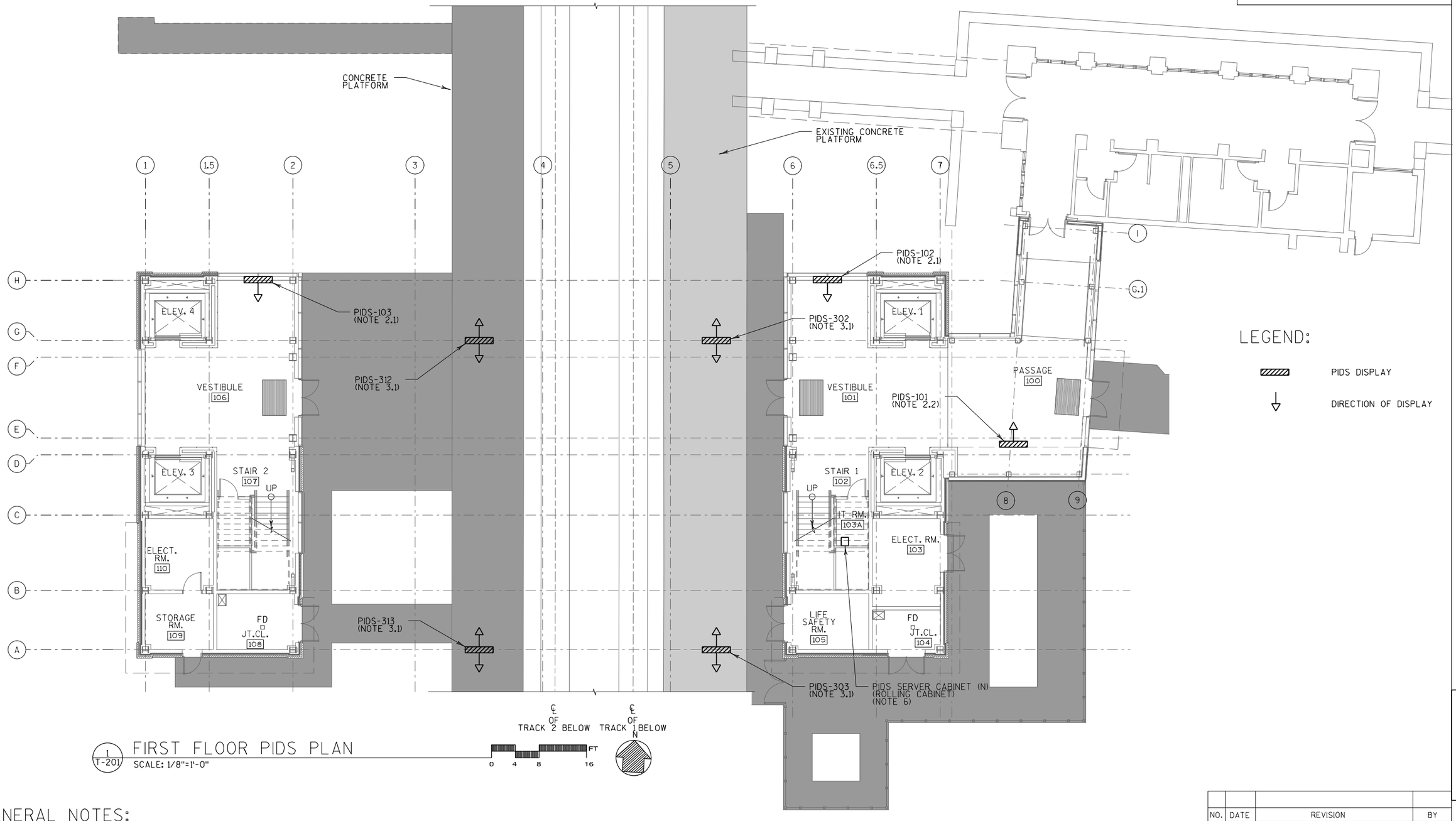
SHEET T-001
237

2

2

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/T-201 FIRST FLOOR PIDS PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

LEGEND:

PIDS DISPLAY

DIRECTION OF DISPLAY

GENERAL NOTES:

1. FURNISH AND INSTALL ONE (1) PIDS SERVER IN CABINET LOCATED IN IT ROOM. (103A) AS SHOWN. AMTRAK PERSONNEL CABINET DIMENTIONS ARE 2'X 3'.
2. INTERIOR PIDS DISPLAY LOCATIONS:
   - 2.1 FURNISH AND INSTALL TWO (2) E1149-11-TM LCD AS SHOWN.
   - 2.2 FURNISH AND INSTALL ONE (1) E1149-11-TM LCD ABOVE ALCOVE VENDING AREA.
3. EXTERIOR PIDS DISPLAY LOCATIONS:
   - 3.1 FURNISH AND INSTALL FOUR (4) E2448-11-T1 LED AS SHOWN.
   - 3.2 FURNISH AND INSTALL SIX (6) ADDITIONAL E2450-12-T1 LED (THREE ON EACH PLATFORM). DISPLAYS SHALL UTILIZE EXISTING COMMUNICATION OUTLET FOR MESSAGE BOARD ON EXISTING PLATFORM. LOCATIONS OF DISPLAYS ON NEW PLATFORM SHALL MIRROR LOCATIONS ON EXISTING PLATFORM.
4. WORKSTATION AND CONTROLS SHALL BE CONTROLLED REMOTELY FROM THE DOWNTOWN MILWAUKEE STATION (MKE).
5. FOR COMPLETE ROSTER OF DISPLAYS, SEE DWG. T-711.
6. FURNISH AND INSTALL ONE (1) ROLLING PIDS SERVER CABINET IN THE IT ROOM AS SHOWN. CABINET DIMENTIONS ARE 2'X3'. ALLOW FOR MANUFACTURER'S RECOMMENDED CLEARANCES NEEDED ON EITHER SIDE OF THE NEW CABINET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY	MC	PLANS CK'D.	TS

FIRST FLOOR PIDS PLAN

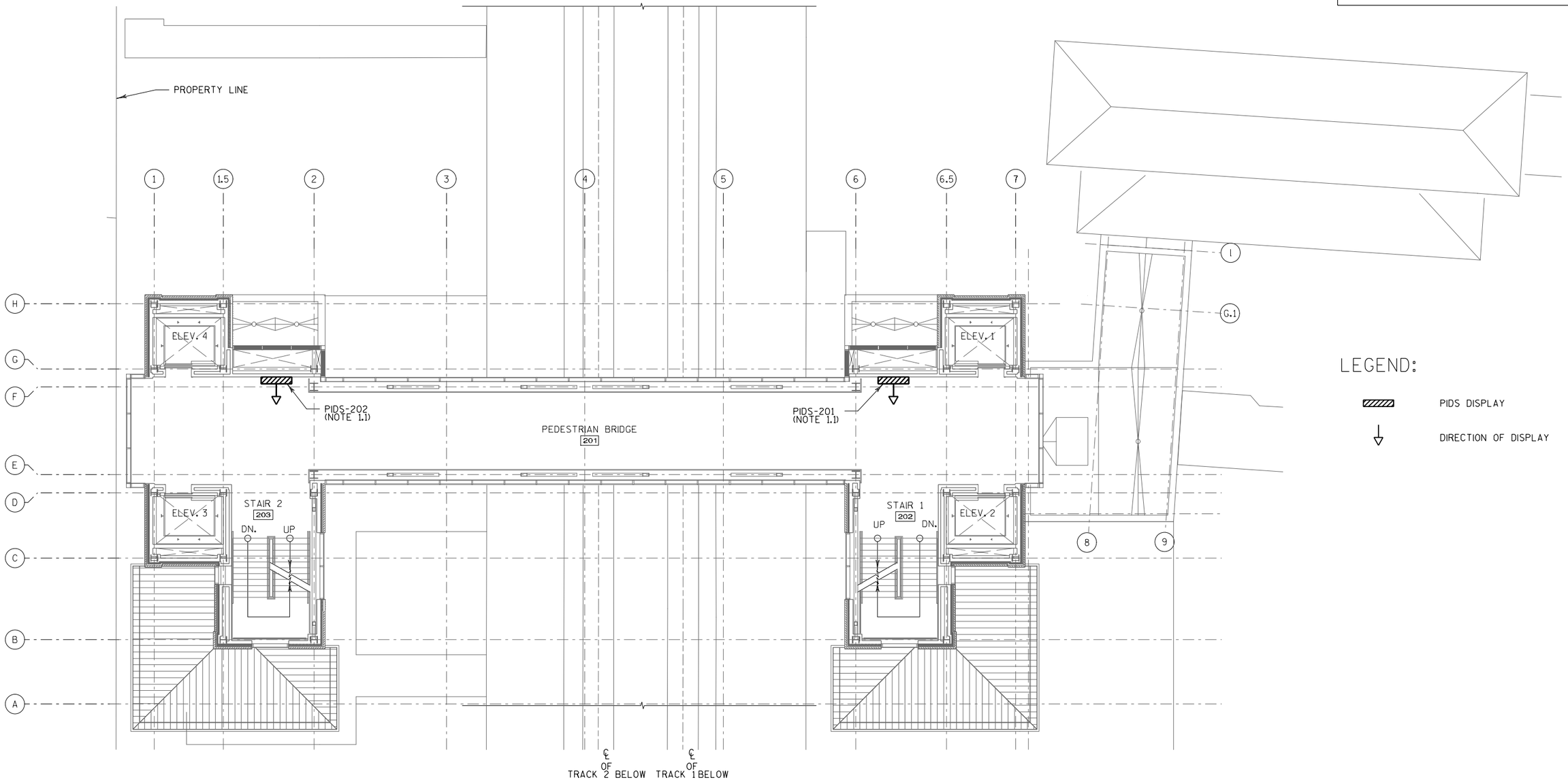
SHEET T-201
238

2

2

STATE PROJECT NUMBER

1000-57-05



LEGEND:

PIDS DISPLAY

DIRECTION OF DISPLAY

1 / T-203 SECOND FLOOR PIDS PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. INTERIOR PIDS DISPLAY LOCATIONS:

   1.1 FURNISH AND INSTALL TWO (2) E1149-11-TM LCD AS SHOWN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

SECOND FLOOR PIDS PLAN

SHEET T-203

239

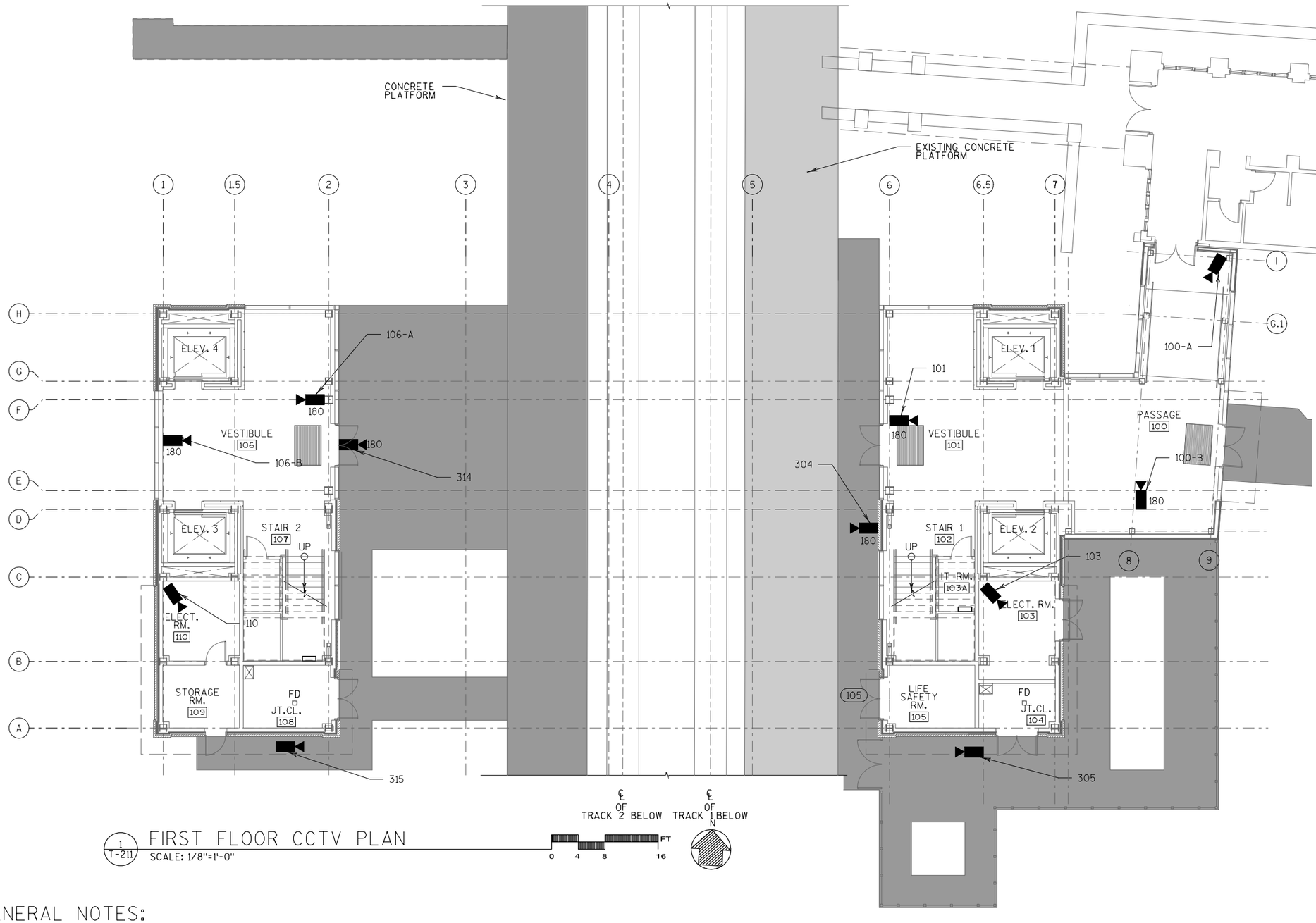
2

2

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: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER
1000-57-05



1 / T-211 FIRST FLOOR CCTV PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

LEGEND:

- CCTV CAMERA (PTZ)
- 180 — CCTV CAMERA (180 DEGREE VIEW)
- 360 — CCTV CAMERA (360 DEGREE VIEW)

GENERAL NOTES:

1. NEW PTZ CAMERAS SHALL BE AXIS Q6075-E PTZ OR APPROVED EQUAL. NEW 180 CAMERAS SHALL BE P3807-PVE OR APPROVED EQUAL. NEW 360 CAMERAS SHALL BE AXIS P3719-PLE OR APPROVED EQUAL.
2. INTERIOR CCTV CAMERA LOCATIONS:
   2.1 MOUNT CAMERA TO WALL LOCATION AS INDICATED. FINAL LOCATION SHALL BE DETERMINED IN FIELD SURVEY.
3. EXTERIOR CCTV CAMERA LOCATIONS:
   3.1 MOUNT CAMERA TO WALL LOCATION AS INDICATED. FINAL LOCATION SHALL BE DETERMINED IN FIELD SURVEY.
   3.2 THREE CAMERAS ON THE EXISTING PLATFORM (NORTH, MIDDLE, AND SOUTH) SHALL BE INCORPORATED INTO THE DESIGN.
   3.3 THREE CAMERAS SHALL BE INSTALLED ON THE NEW PLATFORM. THE NEW CAMERAS SHALL MIRROR THE LAYOUT OF THE EXISTING PLATFORM.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO NETWORK SWITCHES INTO THE IT ROOM.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

FIRST FLOOR CCTV PLAN

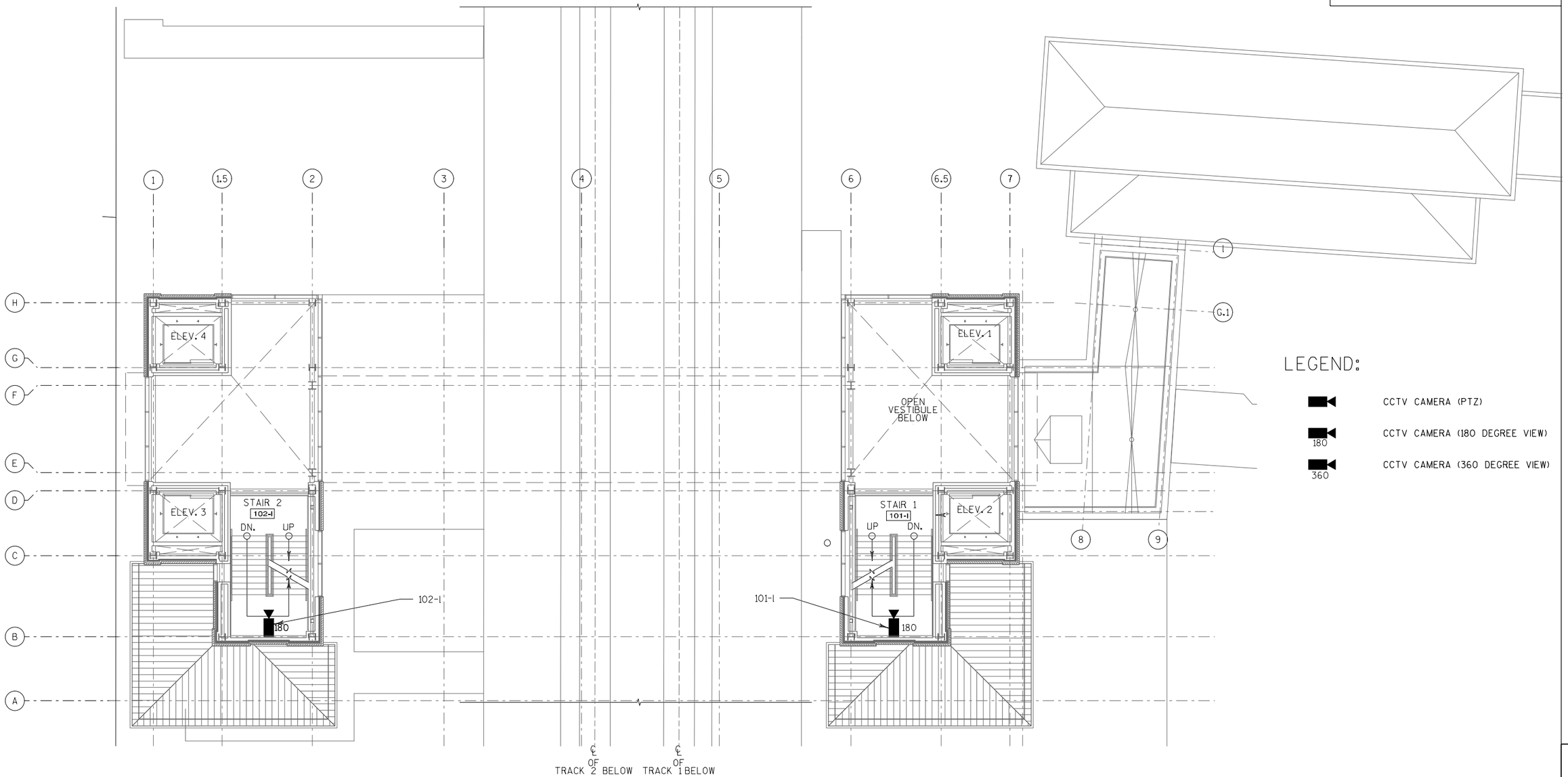
SHEET T-211
240

2

2

STATE PROJECT NUMBER

1000-57-05



LEGEND:

- CCTV CAMERA (PTZ)
- 180 — CCTV CAMERA (180 DEGREE VIEW)
- 360 — CCTV CAMERA (360 DEGREE VIEW)

1 / T-212 INTERMEDIATE LEVEL CCTV PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. NEW PTZ CAMERAS SHALL BE AXIS Q6055-E PTZ OR APPROVED EQUAL. NEW 180 CAMERAS SHALL BE P3807-PVE OR APPROVED EQUAL. NEW 360 CAMERAS SHALL BE AXIS P3719-PLE OR APPROVED EQUAL.
2. INTERIOR CCTV CAMERA LOCATIONS:

   2.1 MOUNT CAMERA TO WALL LOCATION AS INDICATED. FINAL LOCATION SHALL BE DETERMINED IN FIELD SURVEY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

INTERMEDIATE LEVEL CCTV PLAN

SHEET T-212

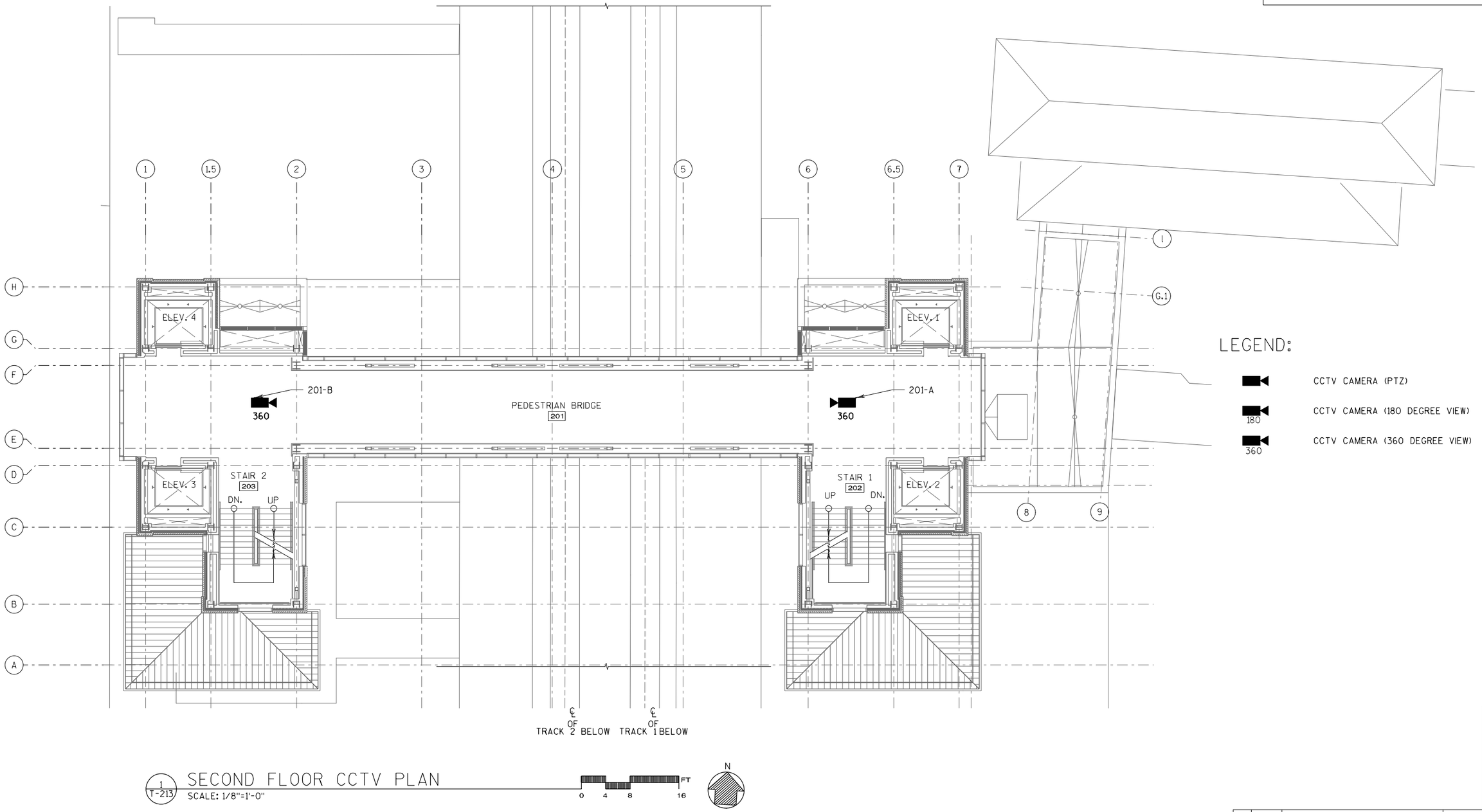
241

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

2

2

STATE PROJECT NUMBER
1000-57-05



LEGEND:

- CCTV CAMERA (PTZ)
- 180 — CCTV CAMERA (180 DEGREE VIEW)
- 360 — CCTV CAMERA (360 DEGREE VIEW)

1 / T-213 SECOND FLOOR CCTV PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. NEW PTZ CAMERAS SHALL BE AXIS Q6075-E PTZ OR APPROVED EQUAL. NEW 180 CAMERAS SHALL BE P3807-PVE OR APPROVED EQUAL. NEW 360 CAMERAS SHALL BE AXIS P3719-PLE OR APPROVED EQUAL.
2. INTERIOR CCTV CAMERA LOCATIONS:

   2.1 MOUNT CAMERA TO WALL LOCATION AS INDICATED. FINAL LOCATION SHALL BE DETERMINED IN FIELD SURVEY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

SECOND FLOOR CCTV PLAN

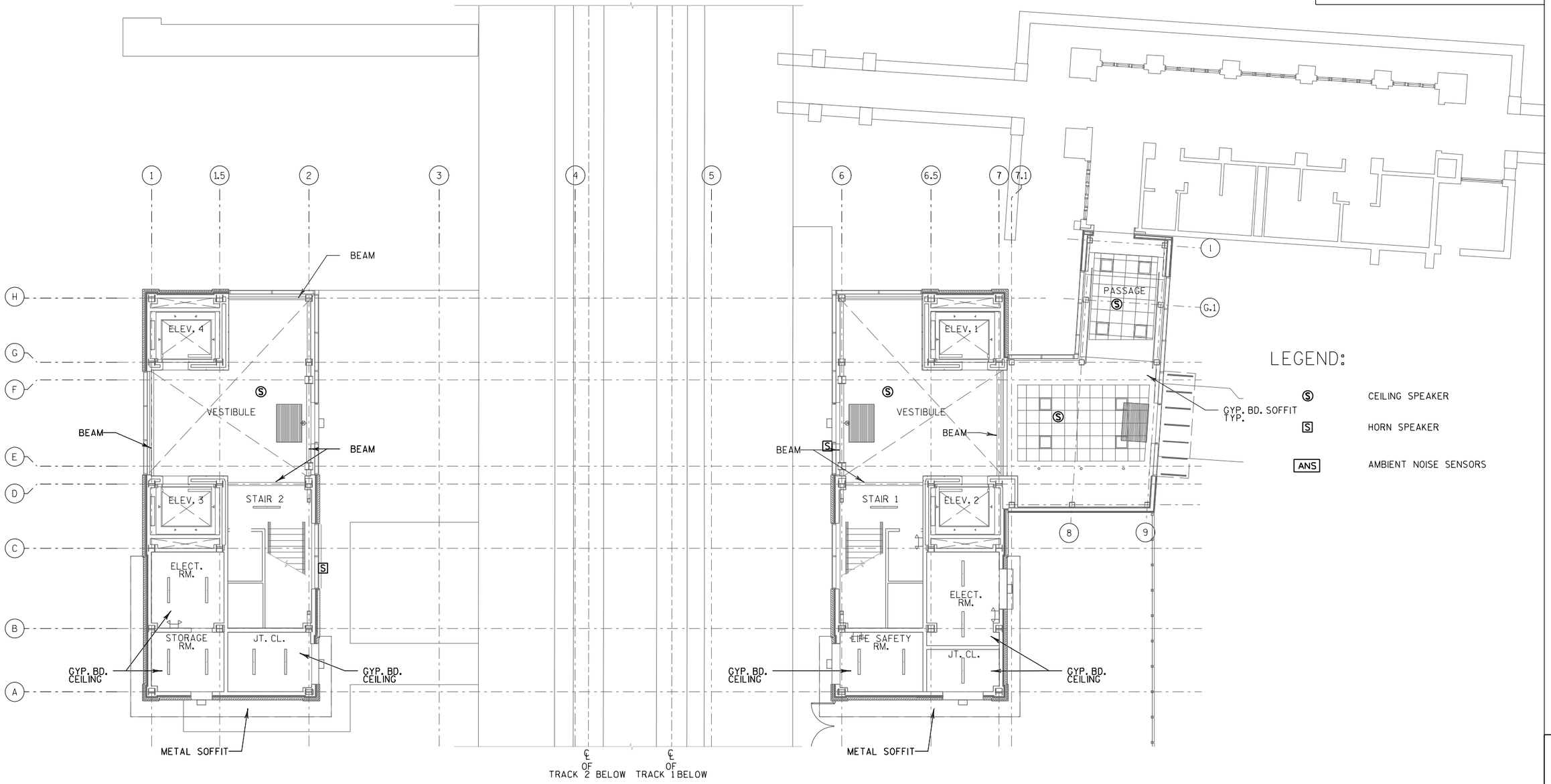
SHEET T-213
242

2

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



LEGEND:

Ⓢ	CEILING SPEAKER
[S]	HORN SPEAKER
ANS	AMBIENT NOISE SENSORS

1 / T-221 FIRST FLOOR PA PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. FURNISH AND INSTALL FOUR (4) INTERIOR CEILING SPEAKERS AND TWO (2) EXTERIOR HORN SPEAKERS.
2. FURNISH AND INSTALL TWO (2) AMBIENT NOISE SENSORS AS SHOWN. SENORS TO BE INSTALLED ON CANOPY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

FIRST FLOOR PA PLAN

SHEET T-221

243

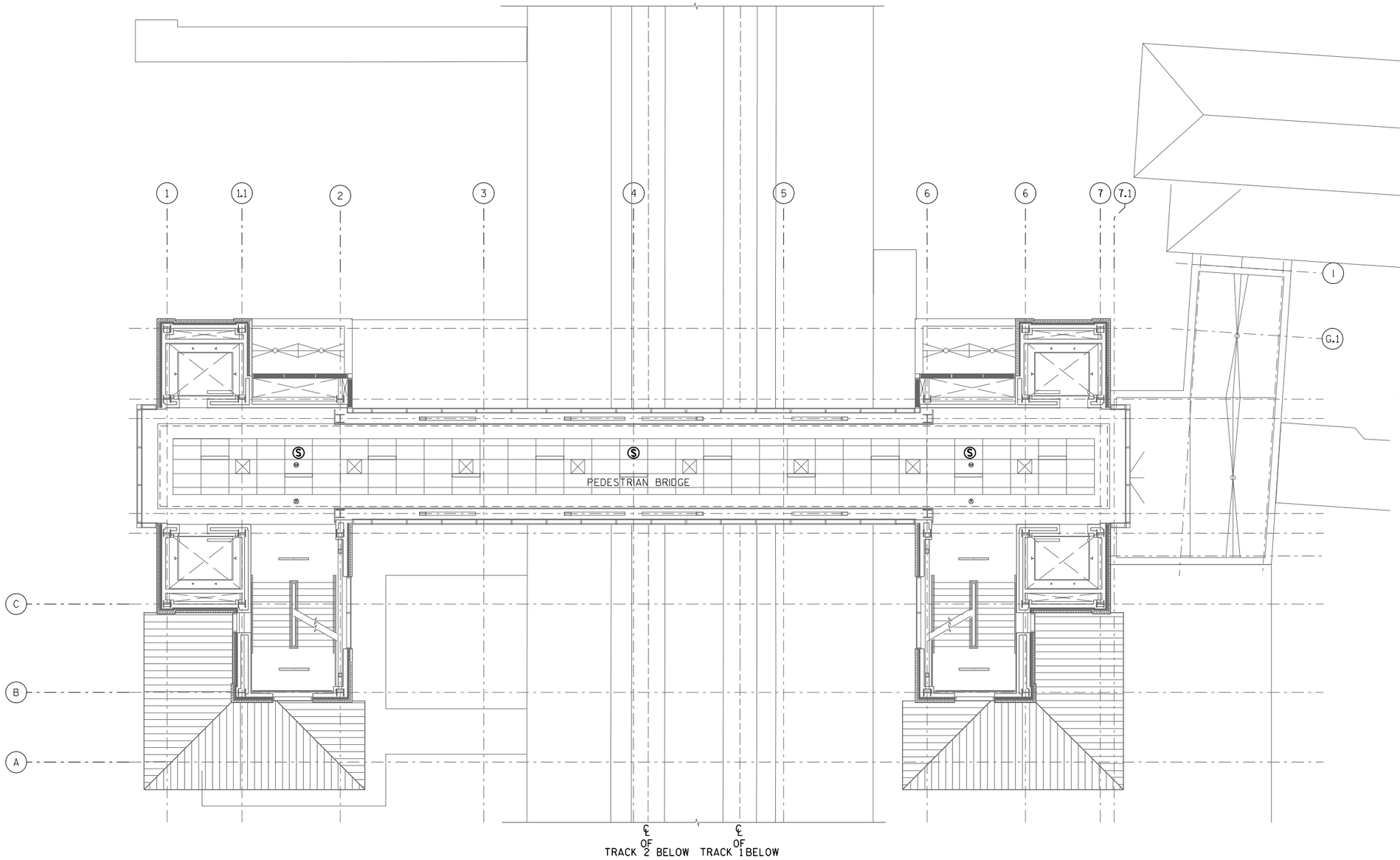
2

2

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



LEGEND:

Ⓢ CEILING SPEAKER

Ⓢ HORN SPEAKER

1 / T-223 SECOND FLOOR PA PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. FURNISH AND INSTALL THREE (3) INTERIOR CEILING SPEAKERS AS SHOWN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

SECOND FLOOR PA PLAN

SHEET T-223

244

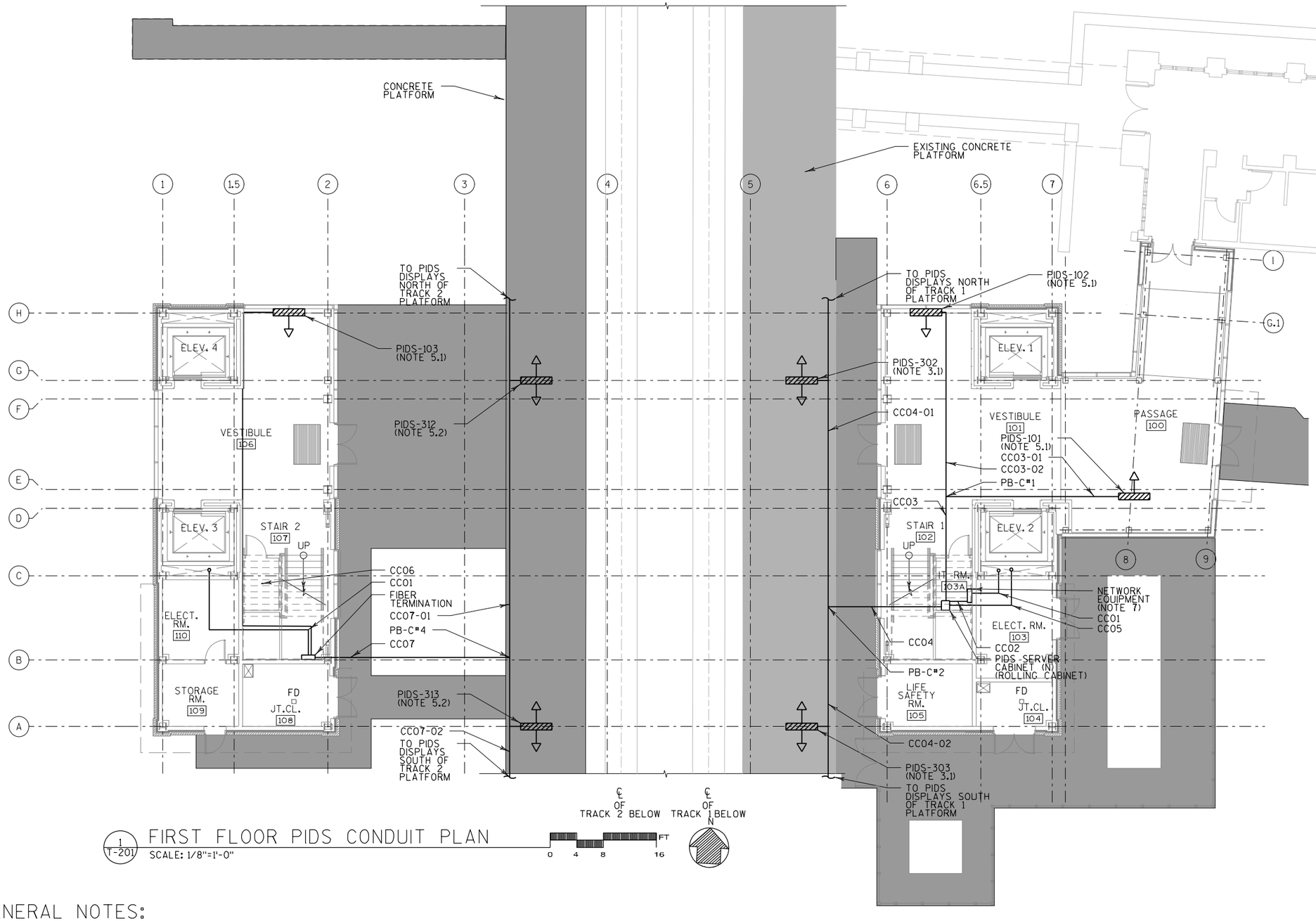
2

2

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: $$...plottingdate...$$ PLOT TIME: $$...plottingtime...$$

STATE PROJECT NUMBER
1000-57-05



1 / T-201 FIRST FLOOR PIDS CONDUIT PLAN
SCALE: 1/8"=1'-0"

LEGEND:

- PIDS DISPLAY
- DIRECTION OF DISPLAY
- CONDUIT UP

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE DISPLAY.
   - 5.2 OUTDOOR CONDUITS SHALL RUN UNDER THE PLATFORM CANOPY BEFORE TERMINATING ABOVE THE CAMERA.
6. CONTRACTOR SHALL COORDINATE WITH AMTRAK, GMIA, AND WISDOT REGARDING RELOCATION OF NETWORK DEVICES FROM EXISTING BUILDING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

FIRST FLOOR PIDS CONDUIT PLAN

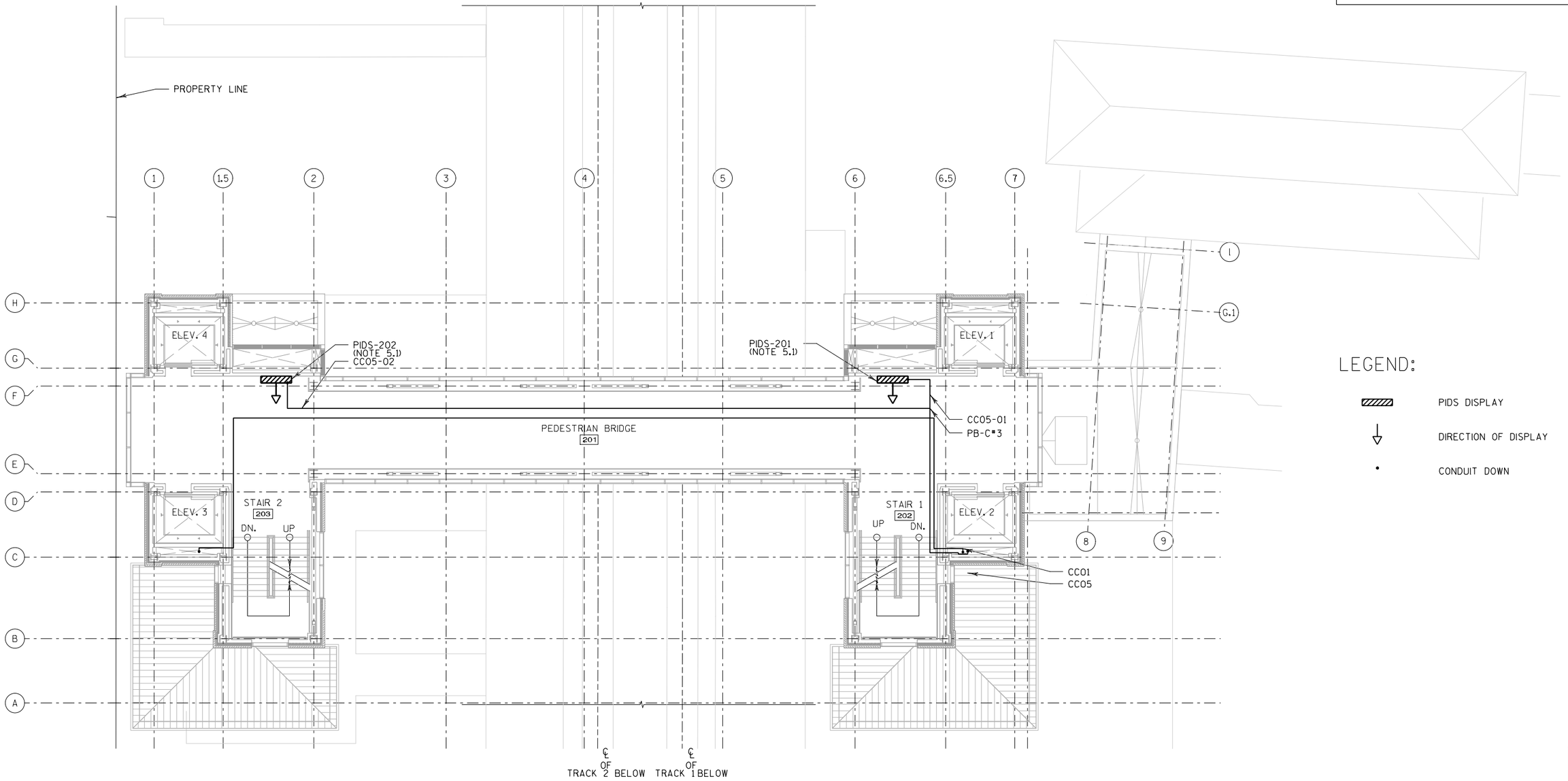
SHEET T-251
245

2

2

STATE PROJECT NUMBER
1000-57-05

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



LEGEND:

- PIDS DISPLAY
- DIRECTION OF DISPLAY
- CONDUIT DOWN

1 / T-203 SECOND FLOOR PIDS CONDUIT PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE DISPLAY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

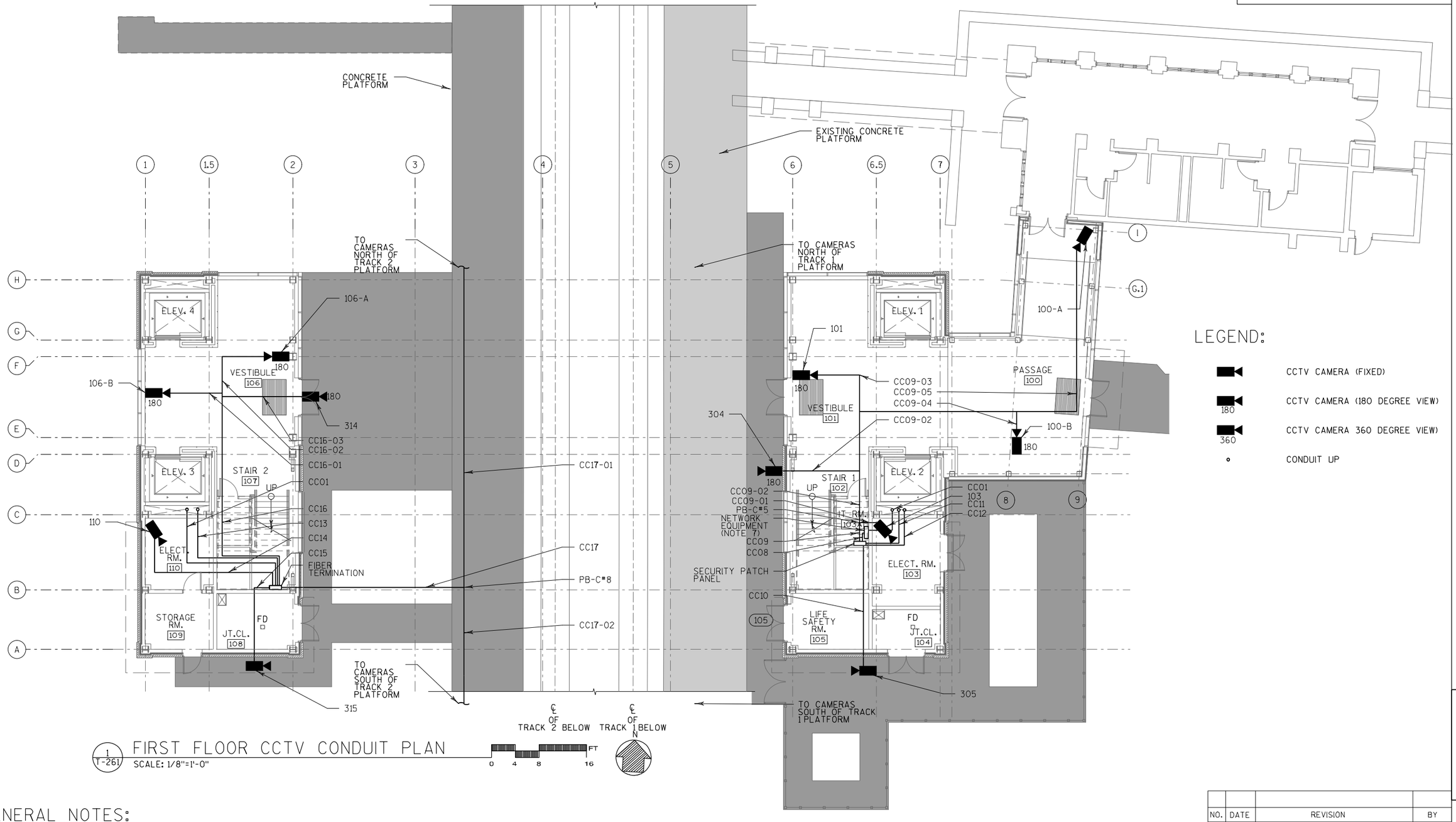
COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

SECOND FLOOR PIDS CONDUIT PLAN

SHEET T-253
246

STATE PROJECT NUMBER
1000-57-05



1 / T-261 FIRST FLOOR CCTV CONDUIT PLAN

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

LEGEND:

- CCTV CAMERA (FIXED)
- 180 — CCTV CAMERA (180 DEGREE VIEW)
- 360 — CCTV CAMERA 360 DEGREE VIEW)
- CONDUIT UP

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE CAMERA.
   - 5.2 OUTDOOR CONDUITS SHALL RUN UNDER THE PLATFORM CANOPY BEFORE TERMINATING ABOVE THE CAMERA.
6. VERIFY CONNECTIVITY, WIRING, AND FUNCTIONAL CONDITION OF ALL EXISITNG SPEAKERS ON TRACK 1 PLATFORM, AND REPLACE ANY SPEAKERS AND/OR WIRING THAT ARE NON-FUNCTIONAL.
7. CONTRACTOR SHALL COORDINATE WITH AMTRAK, GMIA, AND WISDOT REGARDING RELOCATION OF NETWORK DEVICES FROM EXISTING BUILDING
8. CONTRACTOR SHALL INSTALL A PATCH PANEL THAT SHALL BE CONNECTED TO THE NETWORK EQUIPMENT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY	MC	PLANS CK'D.	TS

FIRST FLOOR CCTV CONDUIT PLAN

SHEET T-261

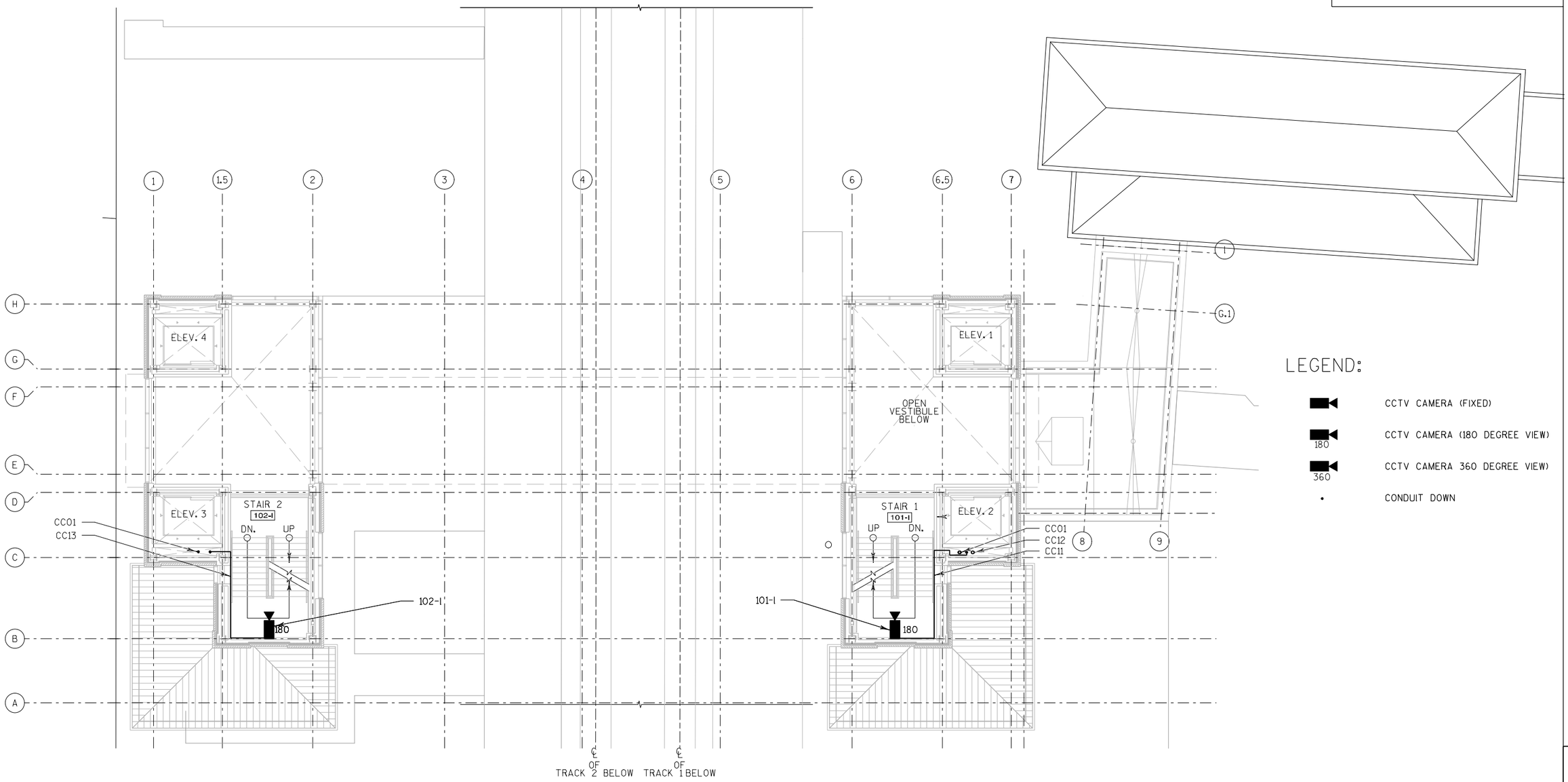
247

2

2

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

STATE PROJECT NUMBER
1000-57-05



LEGEND:

- CCTV CAMERA (FIXED)
- 180 — CCTV CAMERA (180 DEGREE VIEW)
- 360 — CCTV CAMERA 360 DEGREE VIEW)
- • — CONDUIT DOWN

1 / T-262 INTERMEDIATE LEVEL CCTV CONDUIT PLAN

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

0 4 8 16 FT

N

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN ALONG WALLS BEFORE TERMINATING AT THE CAMERA.
6. VERIFY CONNECTIVITIY, WIRING, AND FUNCTIONAL CONDITION OF ALL EXISITNG SPEAKERS ON TRACK 1 PLATFORM, AND REPLACE ANY SPEAKERS AND/OR WIRING THAT ARE NON-FUNCTIONAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

INTERMEDIATE LEVEL CCTV CONDUIT PLAN

SHEET T-262

248

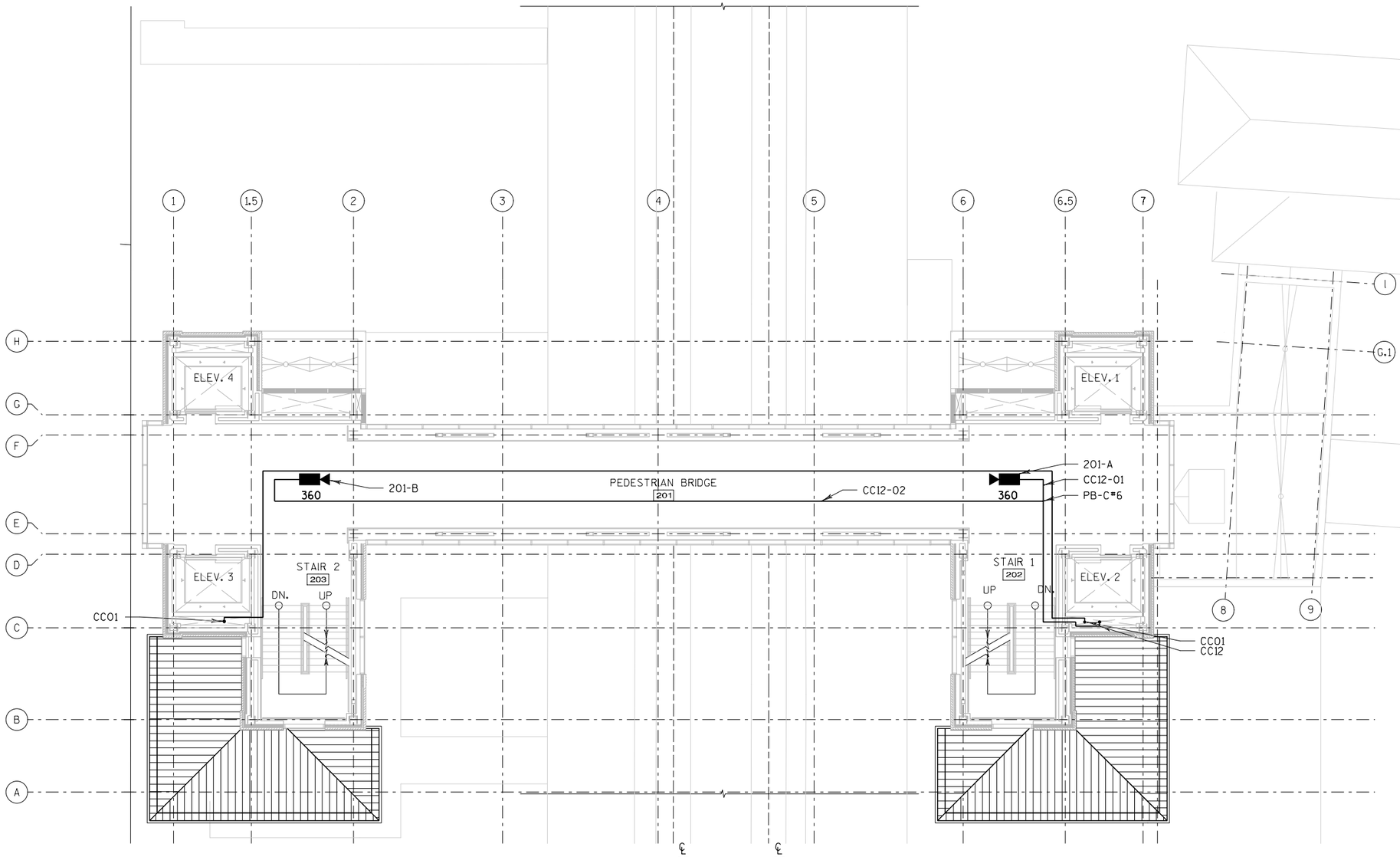
2

2

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

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



1 / T-213 SECOND FLOOR CCTV CONDUIT PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

LEGEND:

- CCTV CAMERA (FIXED)
- 180 CCTV CAMERA (180 DEGREE VIEW)
- 360 CCTV CAMERA 360 DEGREE VIEW)
- • CONDUIT DOWN

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUITS SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE CAMERA.
6. VERIFY CONNECTIVITIY, WIRING, AND FUNCTIONAL CONDITION OF ALL EXISITNG SPEAKERS ON TRACK 1 PLATFORM, AND REPLACE ANY SPEAKERS AND/OR WIRING THAT ARE NON-FUNCTIONAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY	MC	PLANS CK'D.	TS

SECOND FLOOR CCTV CONDUIT PLAN

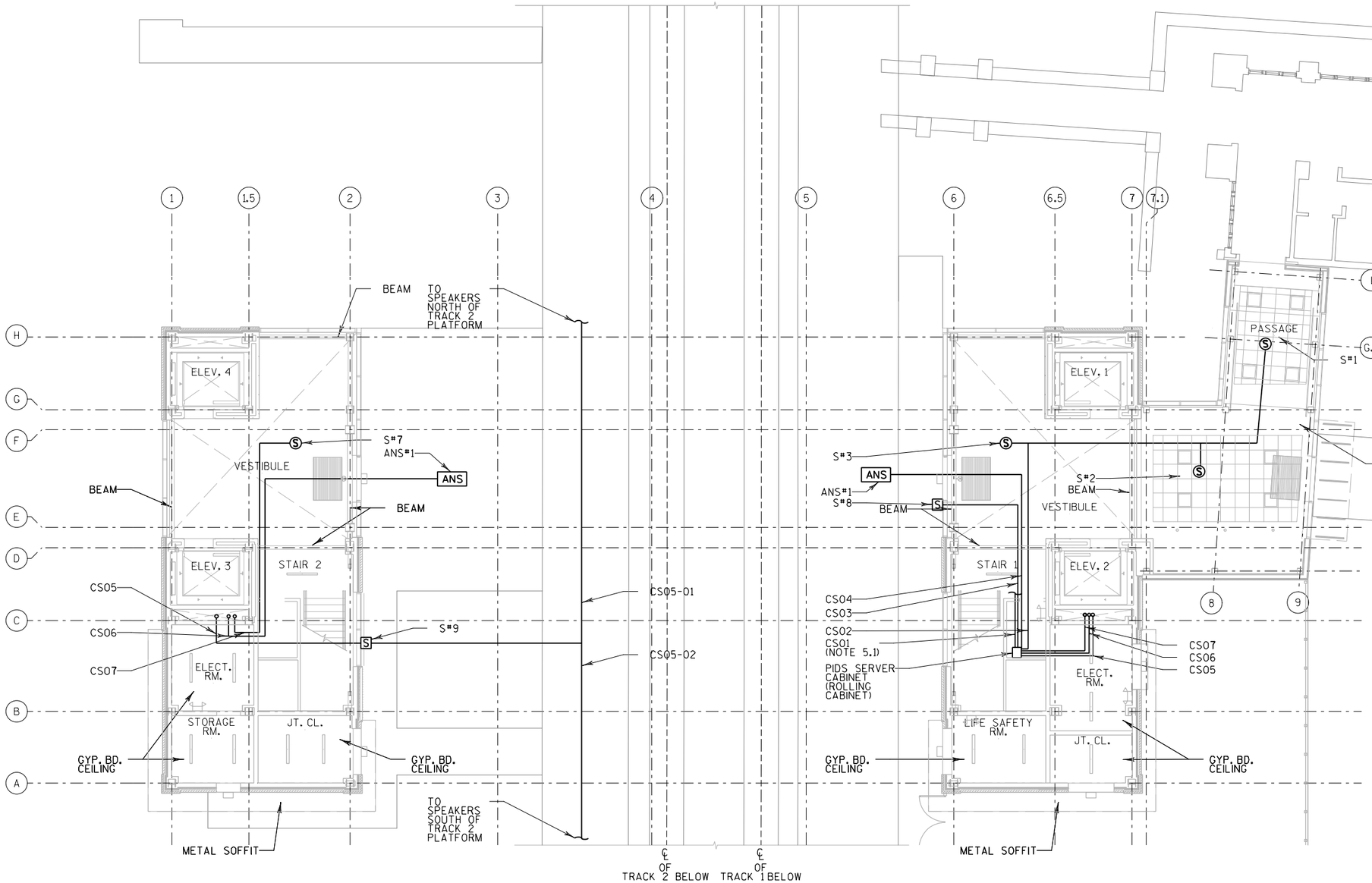
SHEET T-263
249

2

2

STATE PROJECT NUMBER
1000-57-05

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



LEGEND:

Ⓢ	CEILING SPEAKER
[S]	HORN SPEAKER
ANS	AMBIENT NOISE SENSORS
°	CONDUIT UP

1 / T-271 FIRST FLOOR PA CONDUIT PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN TO EXISTING PA SYSTEM TO TIE OVER EXISTING SPEAKERS.
   - 5.2 CONSUITS SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE SPEAKER.
   - 5.3 OUTDOOR CONDUITS SHALL RUN UNDER THE PLATFORM CANOPY BEFORE TERMINATING ABOVE THE SPEAKER.
6. VERIFY CONNECTIVITIY, WIRING, AND FUNCTIONAL CONDITION OF ALL EXISITNG SPEAKERS ON TRACK 1 PLATFORM, AND REPLACE ANY SPEAKERS AND/OR WIRING THAT ARE NON-FUNCTIONAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

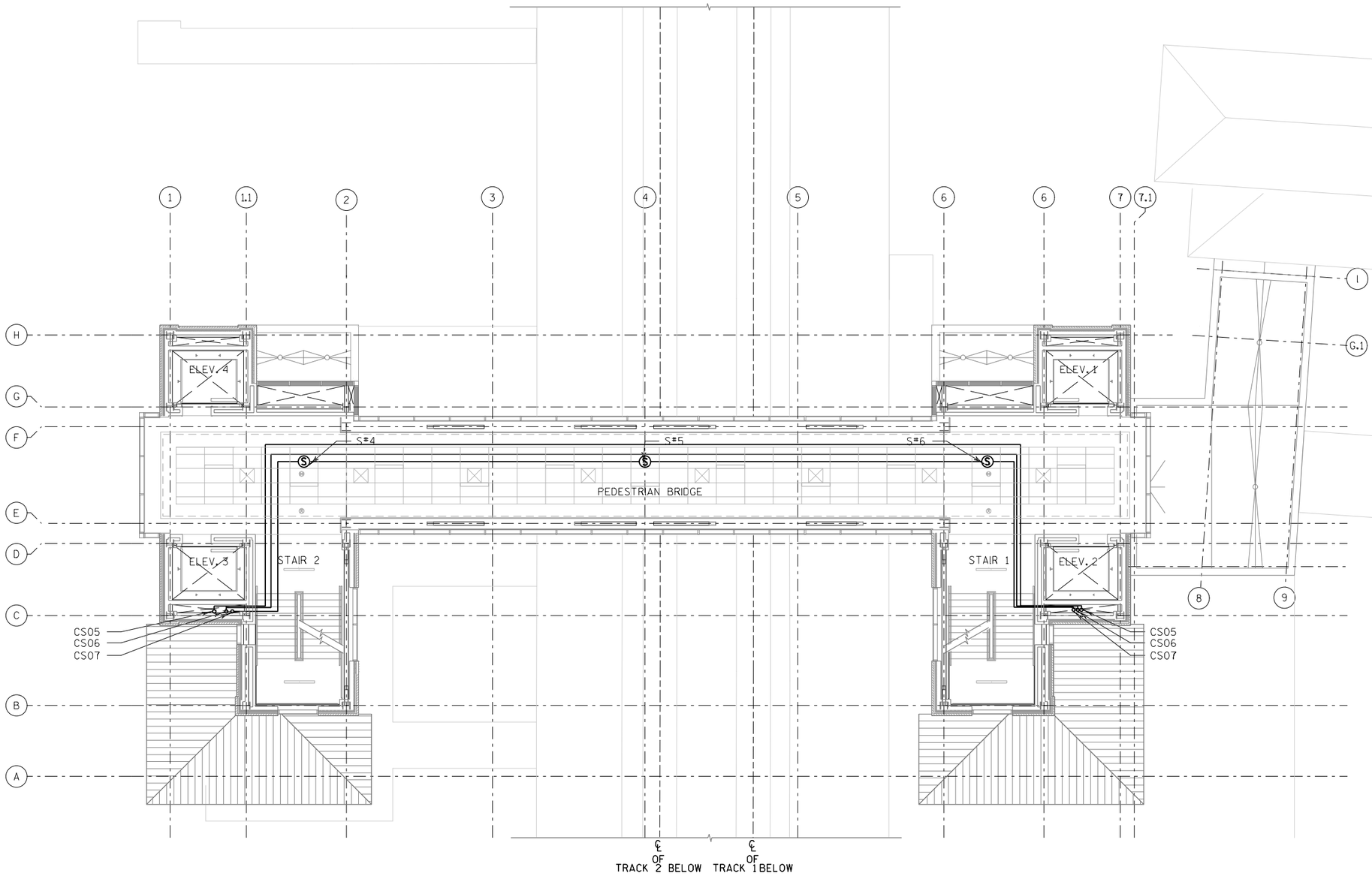
DRAWN BY MC | PLANS CK'D. TS

FIRST FLOOR PA CONDUIT PLAN

SHEET T-271
250

STATE PROJECT NUMBER
1000-57-05

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



LEGEND:

- Ⓢ CEILING SPEAKER
- [S] HORN SPEAKER
- ∘ CONDUIT DOWN

1 / T-273 SECOND FLOOR PA CONDUIT PLAN
SCALE: 1/8"=1'-0"

0 4 8 16 FT

N

GENERAL NOTES:

1. CONDUIT ROUTING SHOWN IS SCHEMATIC ONLY. CONTRACTOR SHALL VERIFY FINAL CONDUIT ROUTING IN FIELD.
2. CONDUIT INSIDE THE BUILDING IS CONCEALED ABOVE CEILING.
3. SEE T-701 FOR CONDUIT AND CABLE SCHEDULE.
4. SEE T-711 FOR COMMUNICATIONS BLOCK DIAGRAMS AND EQUIPMENT CONNECTIONS.
5. CONDUIT RUN DESCRIPTIONS:
   - 5.1 CONDUIT SHALL RUN ABOVE CEILING BEFORE TERMINATING ABOVE THE SPEAKER.
6. VERIFY CONNECTIVITIY, WIRING, AND FUNCTIONAL CONDITION OF ALL EXISITNG SPEAKERS ON TRACK 1 PLATFORM, AND REPLACE ANY SPEAKERS AND/OR WIRING THAT ARE NON-FUNCTIONAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

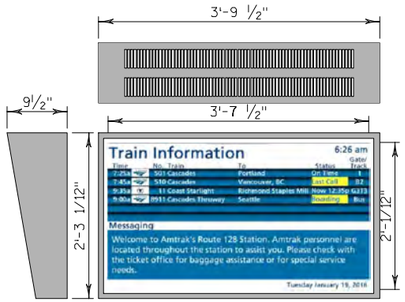
DRAWN BY MC | PLANS CK'D. TS

SECOND FLOOR PA CONDUIT PLAN

SHEET T-273
251

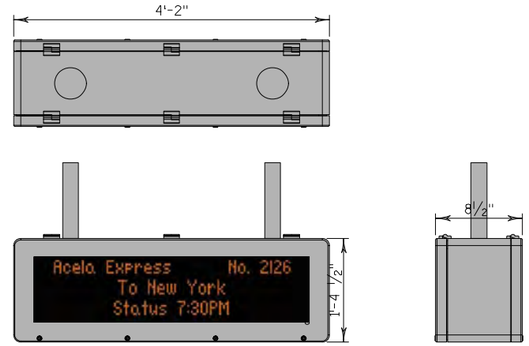
2

2



E1149-11-TM - TRAIN INFORMATION/MESSAGING LED DISPLAY WALL-MOUNTED (HIGH)

1 / T-701 NOT TO SCALE



E2450-12-T1 - TRAIN INFORMATION/MESSAGING LED DISPLAY CANOPY-MOUNTED

2 / T-701 NOT TO SCALE

GENERAL NOTES:

1. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR MOUNTING HEIGHT AND DETAILS.
2. GRAPHICS SHOWN ARE SAMPLES TO SHOW INTENDED SCREEN USE ONLY AND DO NOT NECESSARILY REPRESENT FINAL GRAPHICS.
3. USE MANUFACTURER RECOMMENDED MOUNTING BRACKET/HARDWARE TO ATTACH DISPLAY TO WALL.
4. POWER AND COMMUNICATIONS WIRING SHALL BE CONCEALED INSIDE STRUCTURE SYSTEM.
5. CHARACTER HEIGHTS ON DISPLAYS SHALL COMPLY WITH REQUIREMENTS OF USDOT ACCESSIBILITY STANDARDS (2006 DOTAS) AND 2017 ICC A117.1 (ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES).

ELECTRONIC SIGNAGE: "E" SIGN TYPES

SIGN TYPE	USE/DESCRIPTION	REFERENCE	CONTENT	DISPLAY FORMAT	MOUNTING	COMMUNICATION CABLE REQUIREMENTS
E1149-11-TM	TRAIN INFORMATION AND VARIABLE MESSAGING (ONE MONITOR)	AMTRAK SIGNAGE STANDARDS CHAPTER 8.32	SPLIT SCREEN WITH INFORMATION LIST FOR MULTIPLE DEPARTURES AND ARRIVALS MIXED IN TIME ORDER ON A DEDICATED TRAIN LIST SCREEN, PLUS A VISUAL MESSAGING SECTION	LANDSCAPE	STRUCTURE-MOUNTED	3-CATEGORY 6
E2450-12-T1	NEXT TRAIN INFORMATION AND VARIABLE MESSAGING	AMTRAK NATIONAL PIDS DESIGN GUIDE	LED DISPLAY ALTERNATING BETWEEN NEXT TRAIN ARRIVAL INFORMATION (WHEN REQUIRED) AND VISUAL MESSAGING	LANDSCAPE	CANOPY HUNG	2-CATEGORY 6 OR FIBER OPTIC CABLE

EQUIPMENT	MANUFACTURER	MODEL NUMBER	DESCRIPTION
TRAIN INFORMATION AND VISUAL MESSAGING			
49" LCD DISPLAY	NEC	P495	DEPATURE/MESSAGING DISPLAY (SINGLE-SIDED)
NEXT TRAIN INFORMATION AND VISUAL MESSAGING			
LED MATRIX DISPLAY	DAKTRONICS	AF-6700 32X144-8-A-DF	E2450-12 TRAIN INFORMATION DISPLAY (DOUBLE-SIDED)
SPEAKERS			
INTERIOR SPEAKERS	JBL	CONTROL 24C	CEILING SPEAKER
EXTERIOR SPEAKERS	JBL	CSS-H30	PAGING HORN
AMBIENT NOISE SENSOR			
AMBIENT NOISE SENSOR	AKG	PZM-11LLWR	OUTDOOR AMBIENT NOISE SENSOR
PIDS SERVER CABINET			
ENCLOSURE	MIDDLE ATLANTIC	WR-24-32	WR ROLL-OUT ROTATING RACK 24RU X 32" DEEP
COOLING FAN	MIDDLE ATLANTIC	MW-10FT-FC	10-INCH FAN UNIT
FAN GIRLL COVER	MIDDLE ATLANTIC	VMK-S42	MAGNETIC GRILL COVER
UPS	APC	SUA1500RM2U	1500 VA USB & SERIAL RM 2U 120V
DIGITAL SIGNAL PROCESSOR	BSS	BLU-100	SIGNAL PROCESSOR
AMPLIFIER	BSS	DCI 2 | 300N	2 CHANNEL 300W AMPLIFIER
SERVER	HP	RP5810	RACKMOUNT SERVER
KVM	TRIPP-LITE	B040-008-17	17" VGA CONSOLE KVM SWITCH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY MC | PLANS CK'D. TS

SCHEDULE AND DETAILS SHEET 1 OF 2

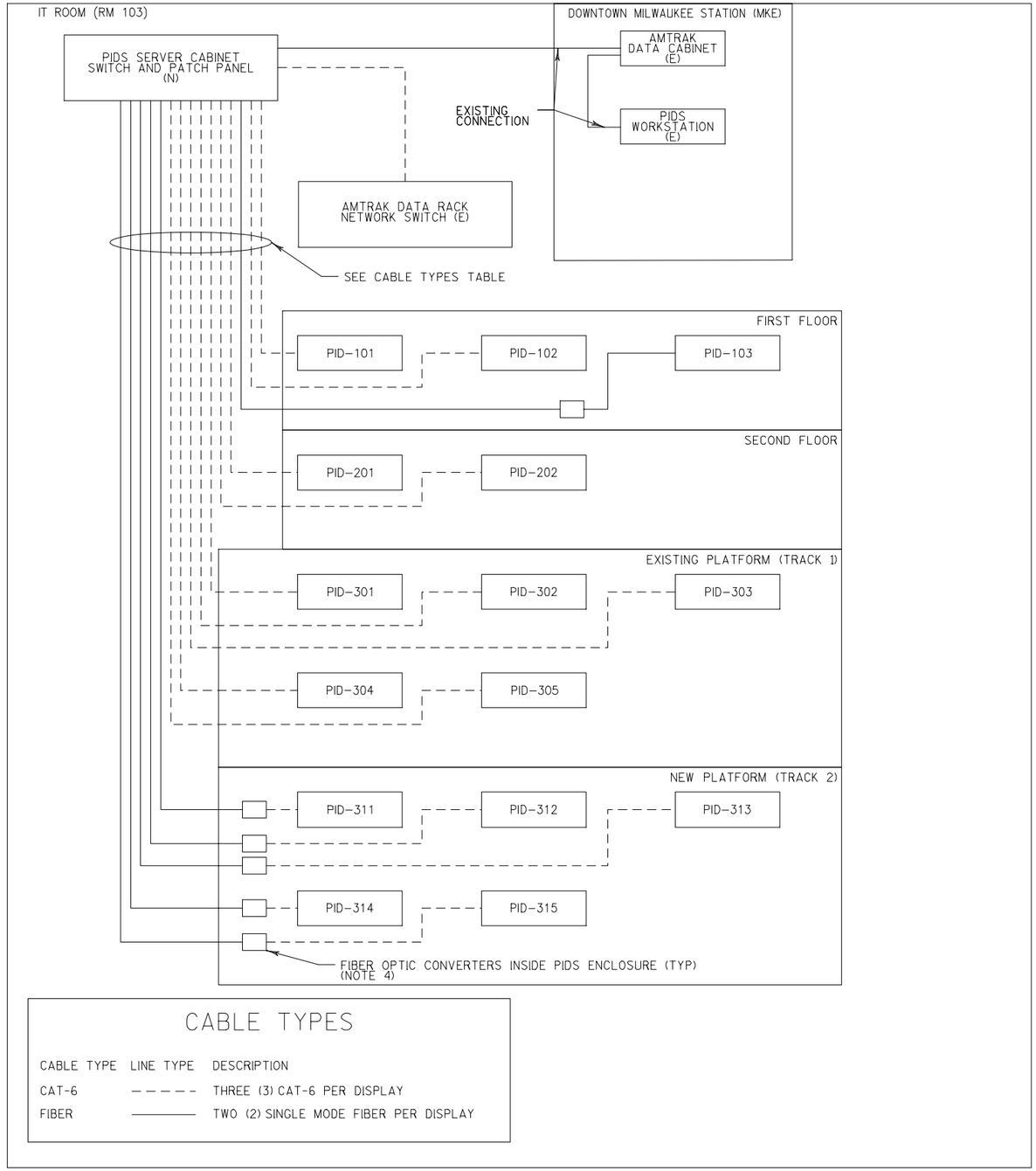
SHEET T-701

252

2

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

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



CABLE TYPES

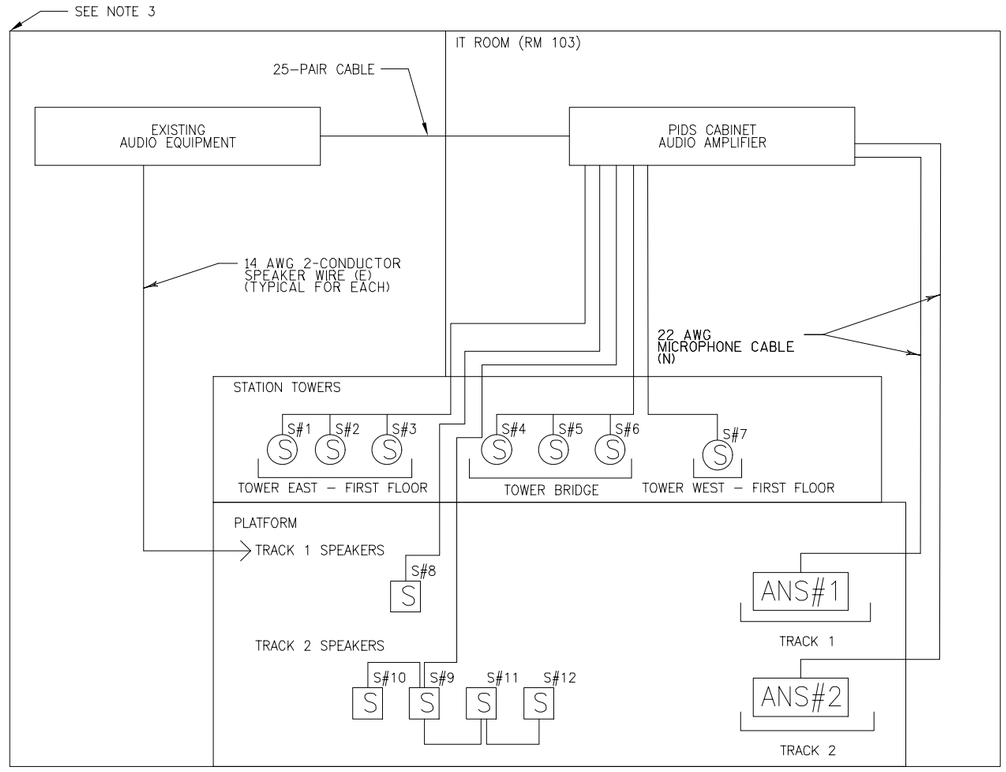
CABLE TYPE	LINE TYPE	DESCRIPTION
CAT-6	– – – – –	THREE (3) CAT-6 PER DISPLAY
FIBER	———	TWO (2) SINGLE MODE FIBER PER DISPLAY

1 T-711 VIDEO BLOCK DIAGRAM
SCALE: NTS

GENERAL NOTES:

1. EXISTING SPEAKER WIRES ARE TO BE DISCONNECTED FROM THE EXISTING AUDIO SYSTEM, TERMINATED AT THE SAME POINT IN THE BAGGAGE SERVICE ROOM, AND BE SPLICED WITH THE 25-PAIR FOR CONNECTION TO THE NEW PIDS AUDIO EQUIPMENT.
2. TERMINATION POINTS OF FIBER SHALL BE 24-STRANDED FIBER FROM THE AMTRAK DATA CABINET. CONTRACTOR SHALL COORDINATE WITH AMTRAK FOR FINAL RESPONSIBILITY.
3. ALL SPEAKERS, WIRING, AND CONDUIT SHOWN ARE EXISTING AND SHALL REMAIN FOR INTEGRATION INTO NEW PIDS AUDIO SYSTEM. ANY SPEAKER TESTED BY THE CONTRACTOR TO BE NON FUNCTIONAL, SAID SPEAKER SHALL BE REPLACED.
4. FIBER OPTIC MEDIA CONVERTERS SHALL BE MOUNTED INSIDE EACH PIDS DISPLAY ENCLOSURE.

STATE PROJECT NUMBER
1000-57-05



2 T-711 AUDIO BLOCK DIAGRAM
SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY	MC	PLANS CK'D.	TS

PIDS BLOCK DIAGRAM

SHEET T-711
253

2

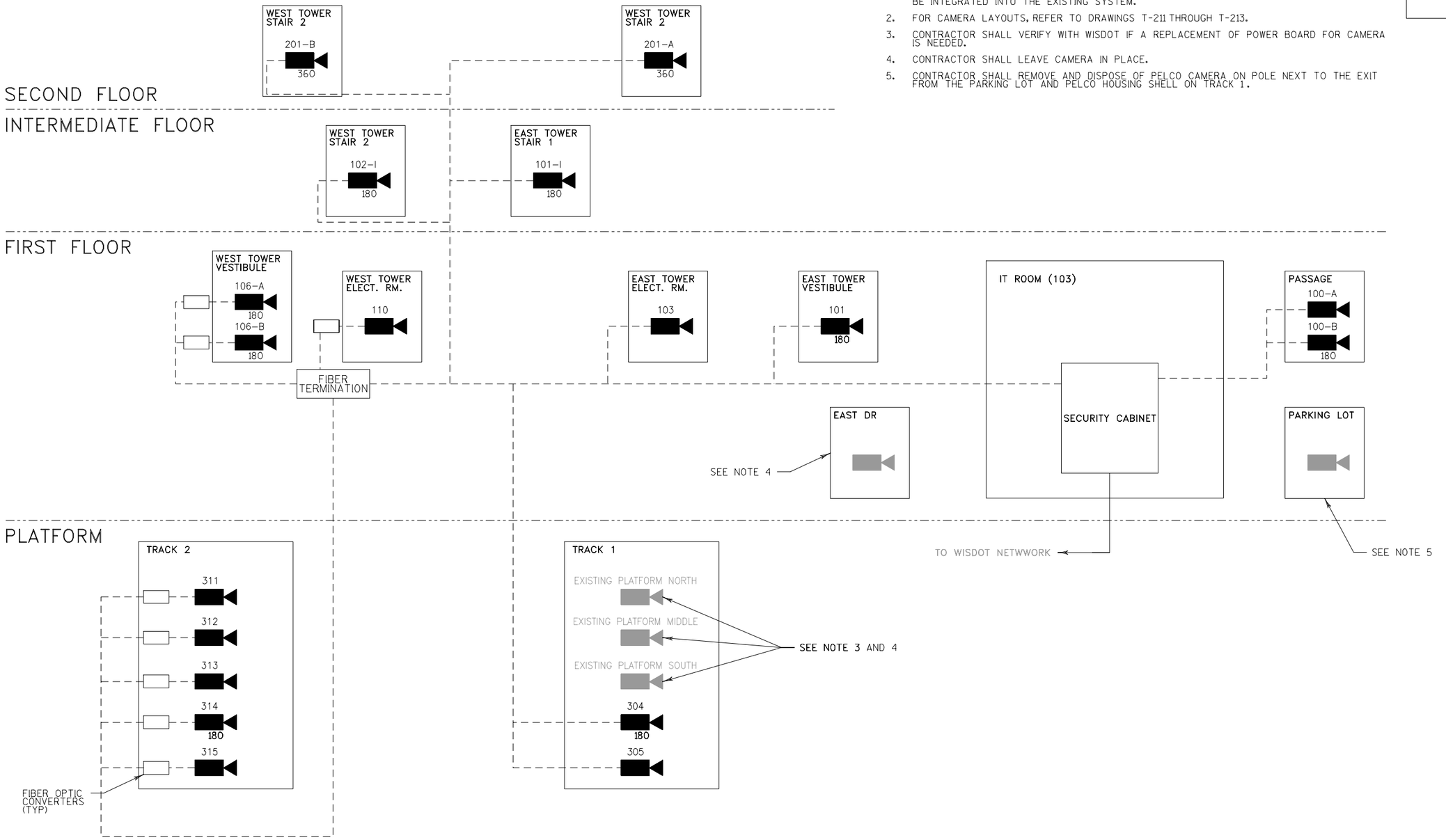
2

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

GENERAL NOTES:

1. ALL NEW CAMERAS AND WIRING SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR AND BE INTEGRATED INTO THE EXISTING SYSTEM.
2. FOR CAMERA LAYOUTS, REFER TO DRAWINGS T-211 THROUGH T-213.
3. CONTRACTOR SHALL VERIFY WITH WISDOT IF A REPLACEMENT OF POWER BOARD FOR CAMERA IS NEEDED.
4. CONTRACTOR SHALL LEAVE CAMERA IN PLACE.
5. CONTRACTOR SHALL REMOVE AND DISPOSE OF PELCO CAMERA ON POLE NEXT TO THE EXIT FROM THE PARKING LOT AND PELCO HOUSING SHELL ON TRACK 1.



1/T-712 VIDEO BLOCK DIAGRAM
SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS

DRAWN BY	MC	PLANS CK'D.	TS

CCTV BLOCK DIAGRAM

SHEET T-712
254

STATE PROJECT NUMBER
1000-57-70

GENERAL PLUMBING NOTES

1. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT AND INDICATE REQUIRED SIZE AND POINTS OF TERMINATION OF THE PIPING AND SUGGEST PROPER ROUTES OF PIPING. HOWEVER, IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER CONSTRUCTION OR COST.

2. THE CONTRACTOR SHALL VISIT THE PREMISES OF HIS PROPOSED WORK AND SHALL CAREFULLY EXAMINE THE EXISTING CONDITIONS AND LIMITATIONS THEREOF. VERIFICATION SHALL BE MADE AS TO THE ACTUAL LOCATIONS WHERE NEW PIPE RUNS WILL TIE INTO EXISTING WORK AND CLEARANCES WITH STRUCTURAL MEMBERS. THE CONTRACTOR SHALL INCLUDE ALL COSTS OF ANY KIND WHATSOEVER WHICH ARE INCURRED THROUGH LIMITATIONS OF THE EXISTING CONDITIONS.

3. THE DRAWINGS ON THESE PLANS ARE DIAGRAMMATIC. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH OTHER TRADES AND THE BUILDING STRUCTURE. NO EXTRA PAYMENTS WILL BE AUTHORIZED FOR REROUTING OR REMOVAL OF INSTALLED WORK DUE TO LACK OF COORDINATION WITH OTHER SYSTEMS.

4. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF HIS WORK AND SHALL MEET ALL CURRENT FIRE CODES AT NO ADDITIONAL CHARGE TO THE RAILROAD.

5. THIS CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS AS REQUIRED WHERE ACCESSIBILITY TO COMPONENTS (VALVES, TRAPS, CLEANOUTS, ETC.) IS REQUIRED FOR MAINTENANCE AND/OR SYSTEM OPERATION AT NO ADDITIONAL CHARGE TO THE RAILROAD.

6. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND OR SYSTEM IN ACCORDANCE WITH CURRENT PLUMBING CODES.

7. ALL PENETRATIONS THROUGH FOUNDATIONS AND EXTERIOR WALLS SHALL BE PACKED WITH OAKUM AND SEALED WITH A WATERPROOF, NON–HARDENING SEALANT.

8. COORDINATE FIXTURE ROUGH–INS AND INSTALLATIONS WITH THE ARCHITECTURAL PLANS.

9. ALL EXPOSED DOMESTIC WATER DISTRIBUTION PIPING IS TO BE INSULATED.

10. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH ELECTRICAL CONTRACTOR.

12. COORDINATE ALL WORK WITH AUTHORITIES HAVING JURISDICTION AND LOCAL UTILITY COMPANIES, INCLUDING BUT NOT LIMITED TO APPLICATIONS, PERMITS, FEES, APPROVALS, AND SIGN OFFS.

13. ALL PLUMBING WORK SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE 2015 OF WISCONSIN AND INTERNATIONAL PLUMBING CODE (2015).

14. ALL FUEL GAS WORK SHALL MEET THE REQUIREMENTS OF THE 2015 WISCONSIN FUEL GAS CODE.

15. ALL EXISTING SYSTEMS SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF ALL NEW WORK.

16. PROVIDE PIPE SUPPORTS, RISER CLAMPS, HANGERS TO SUPPORT PIPES EQUIPMENT & ACCESSORIES FROM THE STRUCTURE. CONTRACTOR SHALL PROVIDE REQUIRED SUPPLEMENT STEEL TO ACCOMPLISH A SAFE AND SOUND INSTALLATION.

17. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEERS FOR APPROVAL, PRIOR TO INSTALLATION, COMPLETE LAYOUT DRAWINGS INDICATING ALL PIPING SIZING.

GENERAL PLUMBING NOTES (CONT.)

18. ALL EQUIPMENT AND INSTALLATIONS MUST BE EQUAL TO THE STANDARDS OF THE BASE BUILDING. ANY DEVIATION FROM BUILDING STANDARDS WILL BE PERMITTED ONLY IF INDICATED OR SPECIFIED ON THESE PLANS AND SPECIFICATIONS, AND APPROVED.

19. TO INSURE CONTINUOUS OPERATION, MAKE ALL NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK. ALL COSTS RESULTING FROM TEMPORARY SHUTDOWNS SHALL BE BORNE BY THIS CONTRACTOR.

20. ANY PART OF WORK WHICH INTERFERES WITH COMUTER DAILY ACTIVITIES, OR CREATES DUST, FUME, NOISE ETC. MUST BE PERFORMED AT OFF HOURS OR WEEKEND AT NO EXTRA COST TO CUSTOMER.

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

COVER SHEET

SHEET
255
P-001

STATE PROJECT NUMBER

1000-57-70

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
CO	CLEANOUT
CODP	CLEANOUT DECK PLATE
CONT.	CONTINUATION
CV	CHECK VALVE
CW	COLD WATER
D	DRAIN
DFU	DRAINAGE FIXTURE UNIT
DN	DOWN
DR	DRAIN
DS	DOWNSPOUT
DSN	DOWNSPOUT NOZZLE
ETR	EXISTING TO REMAIN
EWH	ELECTRIC WATER HEATER
F	FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FL	FLOOR
FT	FEET
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HOT WATER
HZ	HERTZ
IN, "	INCHES
INV	INVERT ELEVATION
IW	INDIRECT WASTE
MIN	MINIMUM
MS	MOP SINK
MX	MIXING VALVE
N	NORTH
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
OD	OVERFLOW FLOW DRAIN
OF	OVERFLOW FLOW PIPING
PD	PUMP DISCHARGE
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RD	ROOF DRAIN
REF	REFERENCE
RTU	ROOF TOP UNIT (HVAC)
SAN	SANITARY
SE	SEWAGE EJECTOR
SF	SQUARE FEET
SHT	SHEET
SK	SINK
SP	SUMP PUMP
ST	STORM
TEMP	TEMPERATURE
TYP	TYPICAL
V	VENT
VTR	VENT THRU ROOF
W/	WITH
W	WASTE
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WSFU	WATER SUPPLY FIXTURE UNIT

PLUMBING SYMBOL LIST

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

GENERAL

- CONTINUATION
- DETAIL NUMBER AND SHEET LOCATION (X / X)
- EQUIPMENT IDENTIFICATION (XX-X / LOCATION)
- POINT OF CONNECTION

PIPING FITTINGS

- ACCESS PANEL (AP)
- CAP
- FLOOR CLEANOUT (FCO)
- FLOOR DRAIN (FD)
- FLOW DIRECTION
- WALL HYDRANT
- OVERFLOW ROOF DRAIN (OD)
- PIPE DROP
- PIPE RISE
- PUMP
- ROOF DRAIN (RD)
- T&P RELIEF VALVE WITH PIPE TO DRAIN
- TEE DOWN ON PIPE
- TEE UP ON PIPE
- VENT THROUGH ROOF (VTR)
- WALL CLEANOUT (WCO)
- CLEANOUT
- UNION
- GAS METER

PIPING SYSTEMS

- COLD WATER PIPING
- HOT WATER PIPING
- SANITARY PIPING (SAN)
- VENT PIPING
- STORM PIPING (ST)
- OVERFLOW PIPING (OF)
- SUMP PUMP DISCHARGE (PD)
- GAS (G)
- UNDERSLAB PIPING

VALVES

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

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

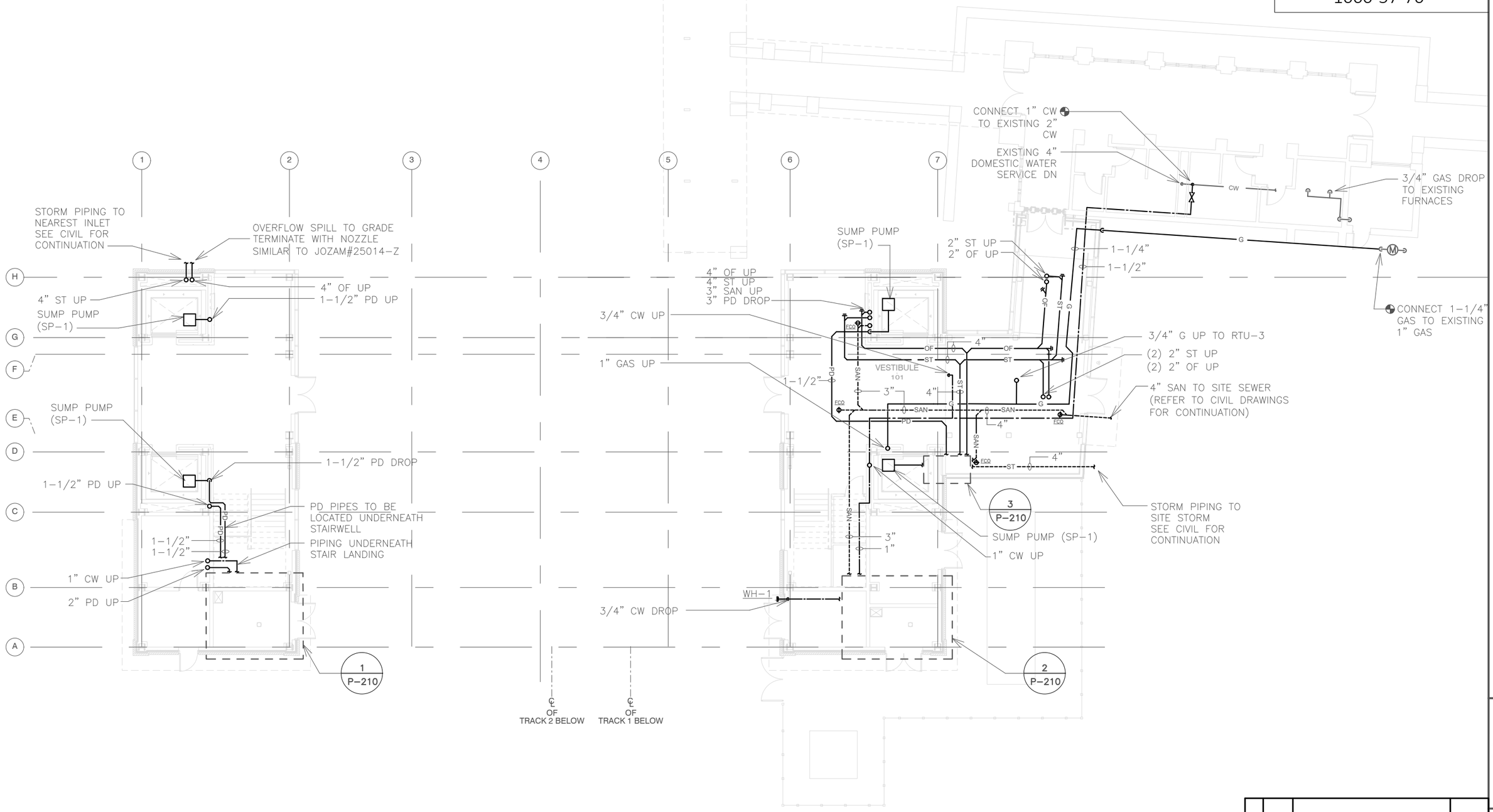
DRAWN BY ZB | PLANS CK'D. IK

LEGEND SHEET

SHEET 256
P-002

STATE PROJECT NUMBER

1000-57-70



1 P-111 FIRST FLOOR PROPOSED PLAN

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

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

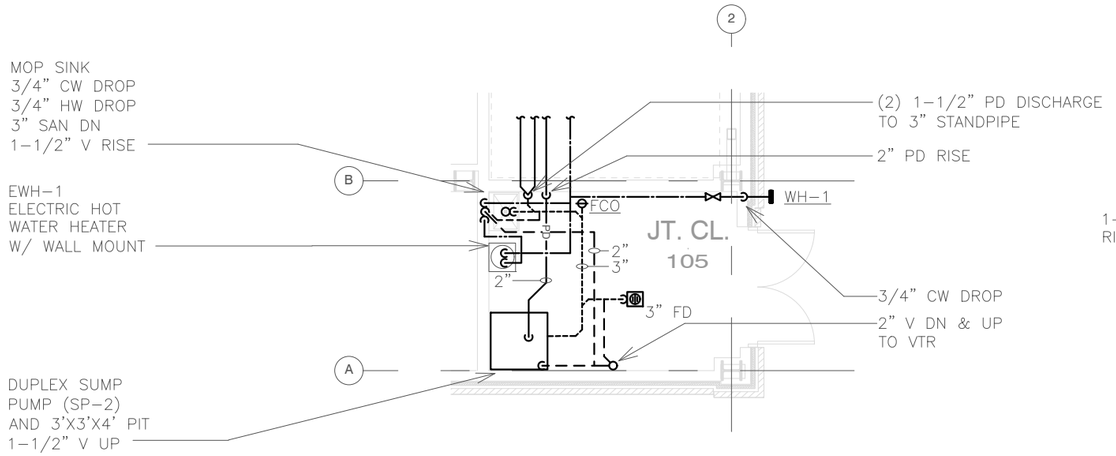
DRAWN BY ZB | PLANS CK'D. IK

FIRST FLOOR PROPOSED PLAN

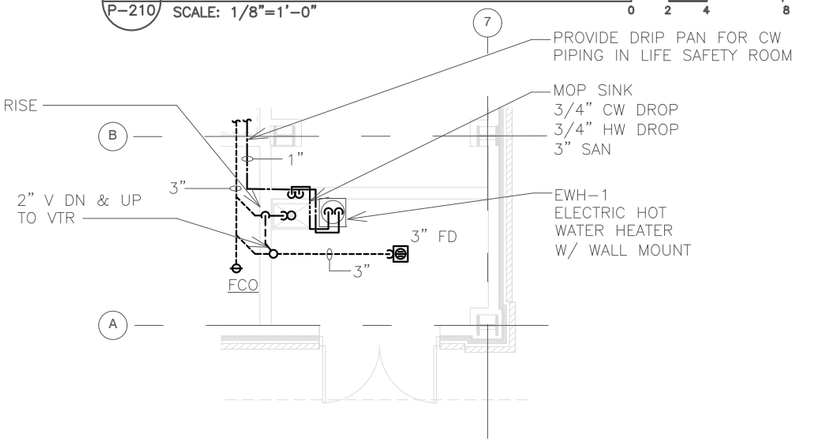
SHEET 257 P-111

STATE PROJECT NUMBER

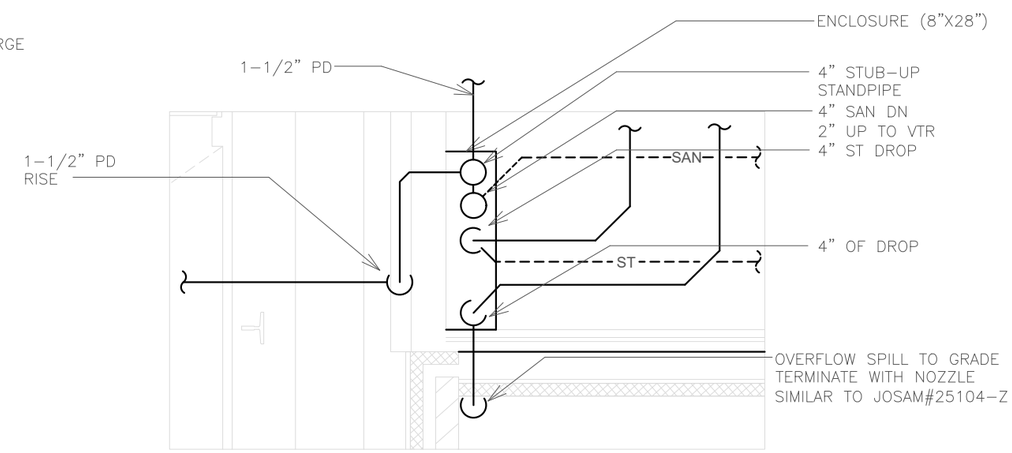
1000-57-70



1 P-210 WEST JANITORS CLOSET PLAN
SCALE: 1/8"=1'-0"
0 2 4 8 FT



2 P-210 EAST JANITORS CLOSET PLAN
SCALE: 1/8"=1'-0"
0 2 4 8 FT



3 P-210 PIPE ENCLOSURE DETAIL
SCALE: 1/2"=1'-0"
0 1/2 1 2 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

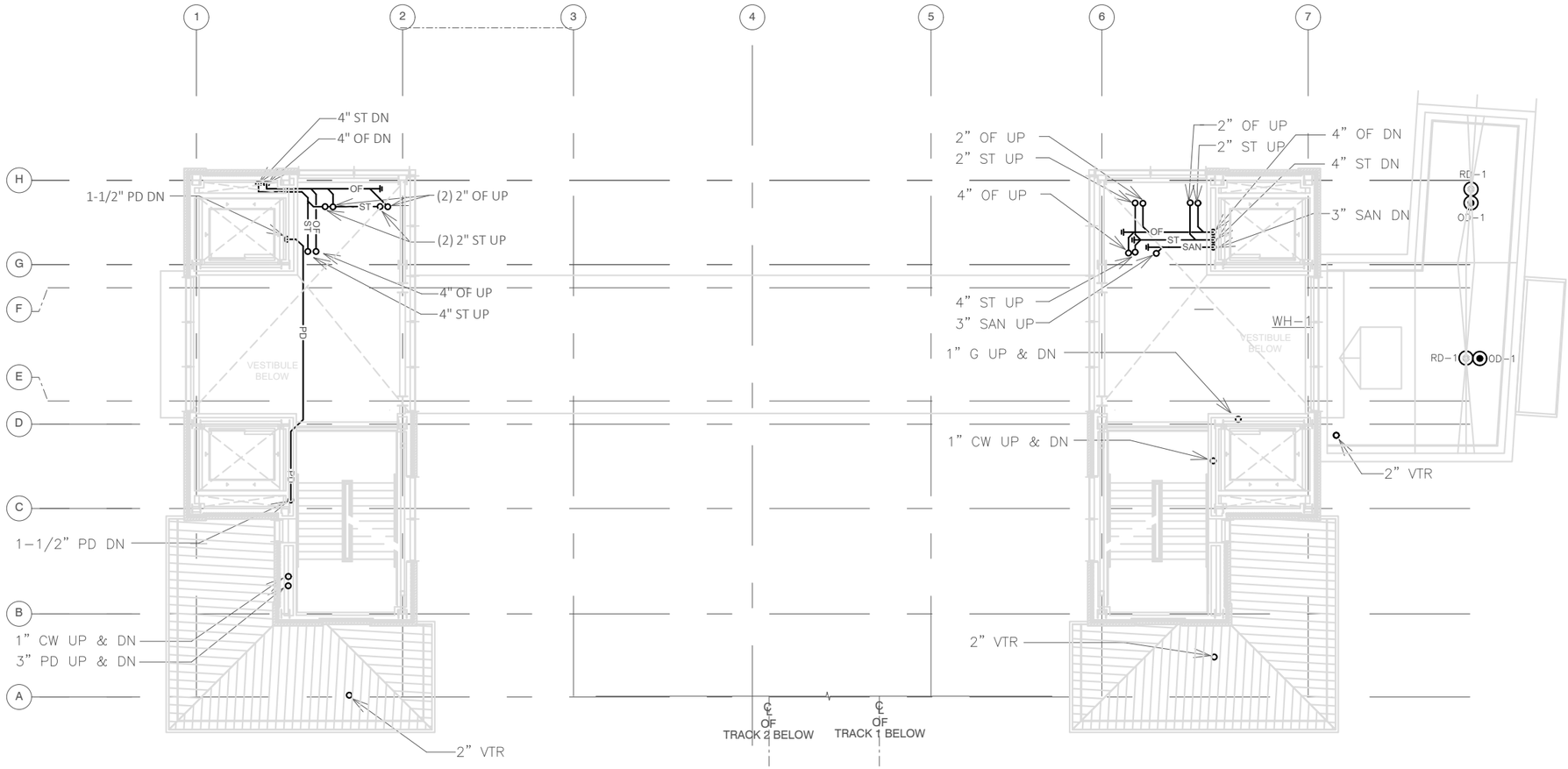
DRAWN BY ZB | PLANS CK'D. IK

FIRST FLOOR
PART PLAN

SHEET
258
P-210

STATE PROJECT NUMBER

1000-57-70



1 P-112 INTERMEDIATE LEVEL PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

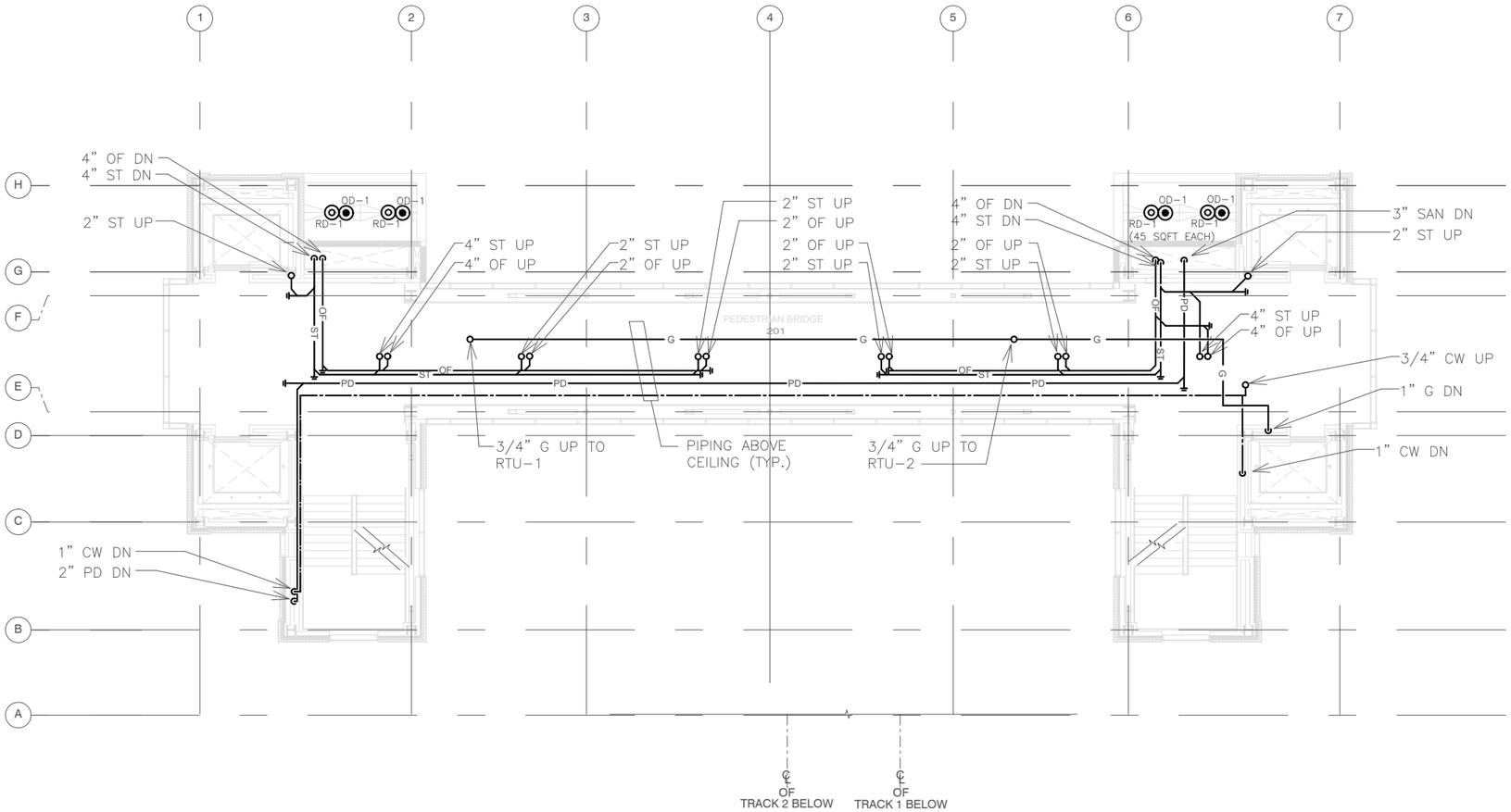
DRAWN BY ZB | PLANS CK'D. IK

INTERMEDIATE LEVEL PLAN

SHEET 259 P-112

STATE PROJECT NUMBER

1000-57-70



1 P-113 SECOND FLOOR PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

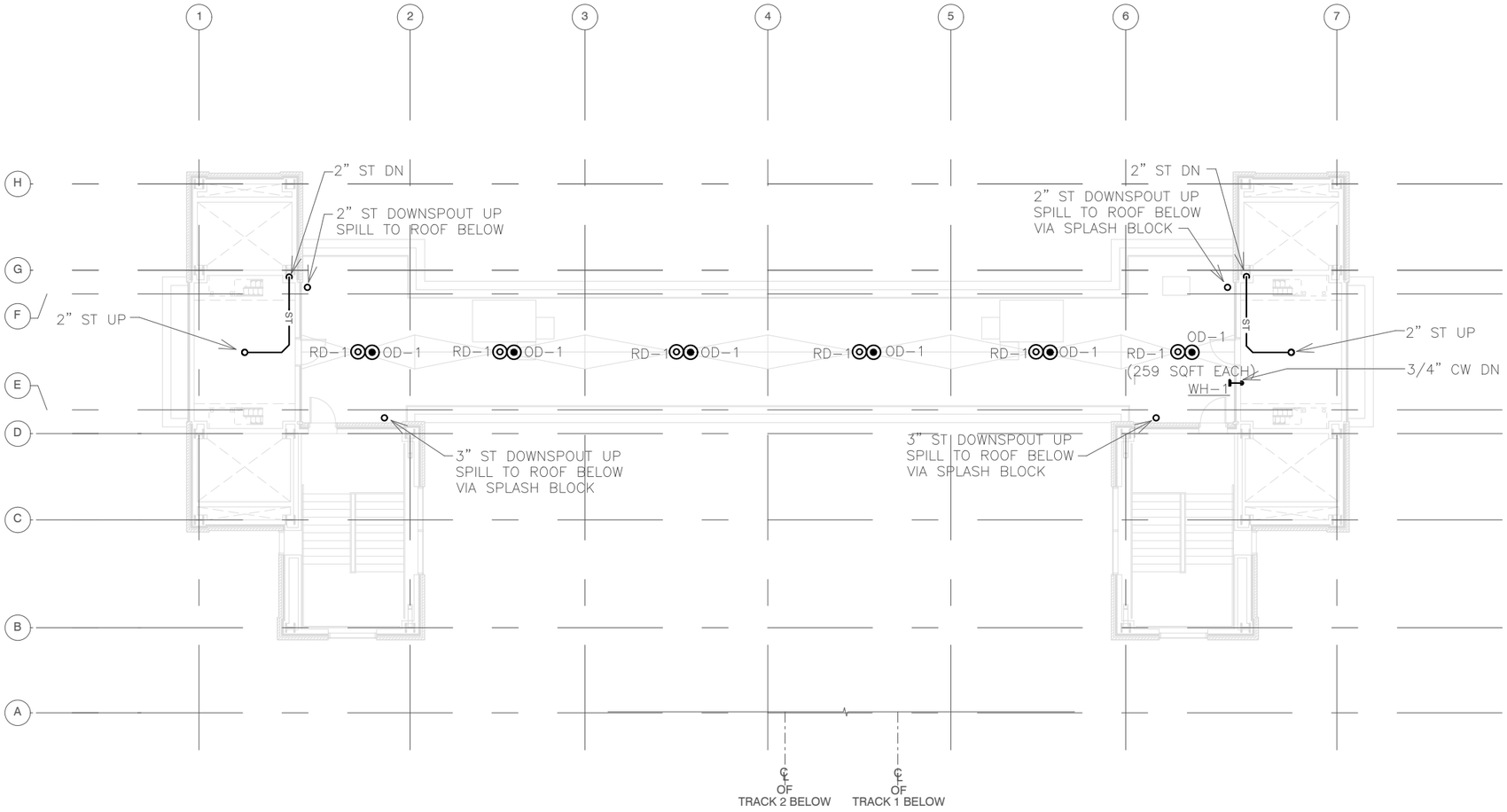
DRAWN BY ZB | PLANS CK'D. IK

SECOND FLOOR PLAN

SHEET 260 P-113

STATE PROJECT NUMBER

1000-57-70



1 P-114 PEDESTRIAN BRIDGE ROOF PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

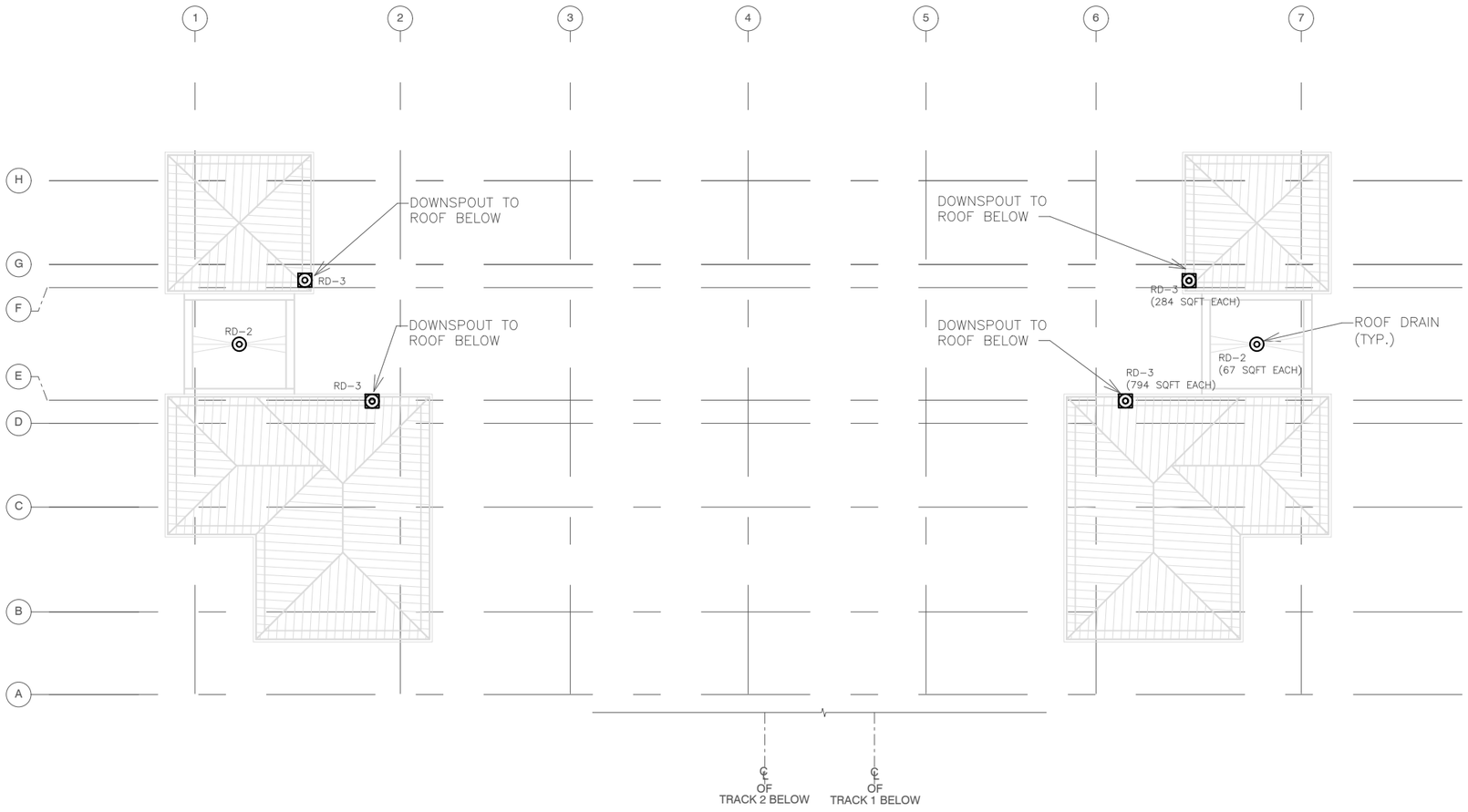
PEDESTRIAN BRIDGE ROOF PLAN

S 261

P-114

STATE PROJECT NUMBER

1000-57-70



1 P-115 EAST AND WEST TOWERS ROOF PLAN

SCALE: 1/16" = 1'-0

0 4 8 16 FT

N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

EAST AND WEST TOWERS ROOF PLAN

SHEET 262 P-115

STATE PROJECT NUMBER

1000-57-70

PLUMBING FIXTURE SCHEDULE						
TAG	ITEM	MANUFACTURER	MODEL	QUANTITY	FINISHES	REMARKS
P–1	MOP SINK	ELKAY	FLR–1X	2		FAUCET: CHICAGO 897 SERIES

PLUMBING FLOOR DRAIN SCHEDULE					
TAG	ITEM	MANUFACTURER	MODEL	FINISHES	REMARKS
FD–1	FLOOR DRAIN	J.R. SMITH	2005Y–B	POLISHED BRONZE	POLISHED BRONZE SQUARE STRAINER
RD/OD–1	ROOF DRAIN	J.R. SMITH	1850–CID	CAST IRON	COMBINATION ROOF AND OVERFLOW DRAIN
RD–2	ROOF DRAIN	J.R. SMITH	1330Y–CID	CAST IRON	
RD–3	GUTTER DRAIN				SEE ARCHITECTURAL DRAWINGS

PLUMBING EQUIPMENT SCHEDULE						
TAG	ITEM	MANUFACTURER	MODEL	QTY.	FINISHES	REMARKS
EWH–1	ELECTRIC HOT WATER HEATER	BRADFORD WHITE	M–2–WH30L6SS	1		30 GAL, 7 GPH, 208 V, 1500 W
SP–1	SUMP PUMP	LIBERTY PUMPS	PC237–441–10A	4		20 GPM, $\frac{1}{3}$ HP
SP–2	SUMP PUMP (DUPLEX)	ZOELLER PUMP CO	4163	1	CAST IRON	20 GPM, 55' HEAD 1 HP, 208 V CONTROLLER W/ PUMP COVER
WH–1	WALL HYDRANT	WOODFORD	MB67K	4	S.S.	FREEZELESS

PLUMBING PIPE SCHEDULE					
ITEM	MANUFACTURER	MATERIAL	LINEAR FEET	INSULATION	REMARKS
COLD WATER PIPING	————	HARD COPPER TUBE: ASTM B 88, TYPE L	————	————	
HOT WATER PIPING	————	HARD COPPER TUBE: ASTM B 88, TYPE L	————	————	
STORM PIPING	CHARLOTTE	CAST IRON	————	YES	INSULATION FOR ALL HORIZONTAL PIPING AND ROOF DRAINS
PUMP DISCHARGE PIPING	————	GALVANIZED STEEL	————	NONE	
SANITARY PIPING	CHARLOTTE	PVC SCHEDULE 40	————	NONE	
SANITARY VENT PIPING	CHARLOTTE	PVC SCHEDULE 40	————	NONE	
GAS PIPING PIPING	————	BLACK STEEL SCHEDULE 40		NONE	

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

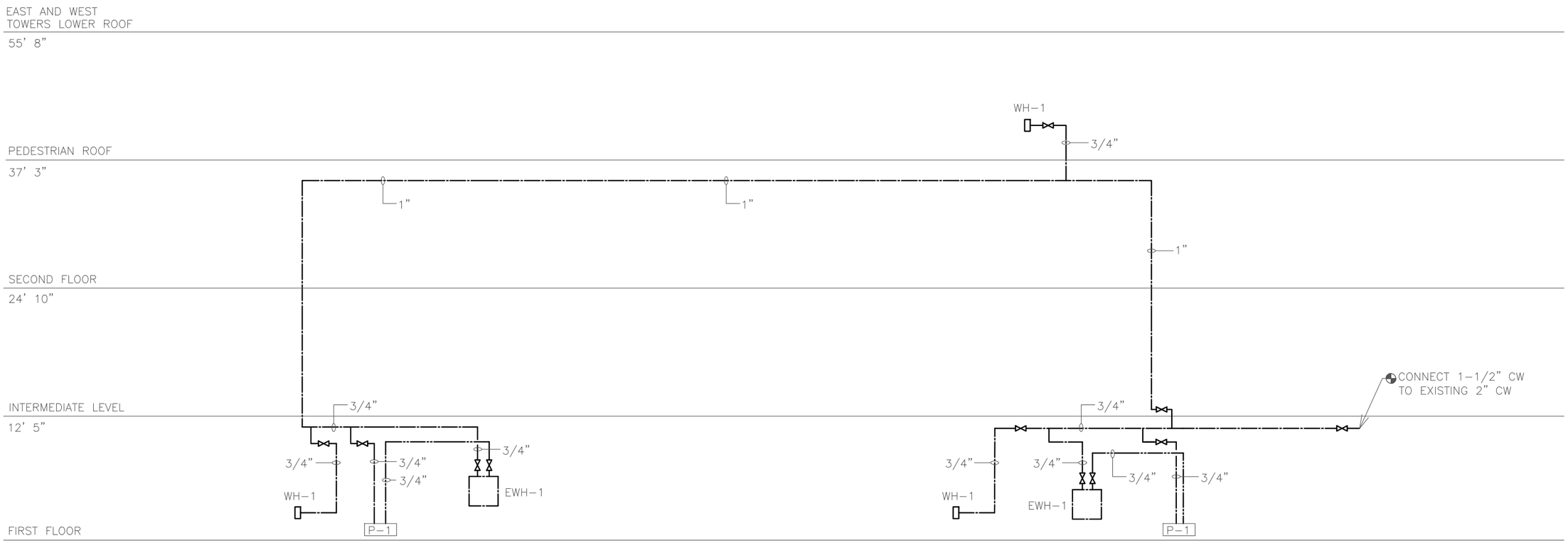
DRAWN BY ZB | PLANS CK'D. IK

PLUMBING SCHEDULE

SHEET 263
P-300

STATE PROJECT NUMBER

1000-57-70



1 / P-400 DOMESTIC WATER RISER DIAGRAM

SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

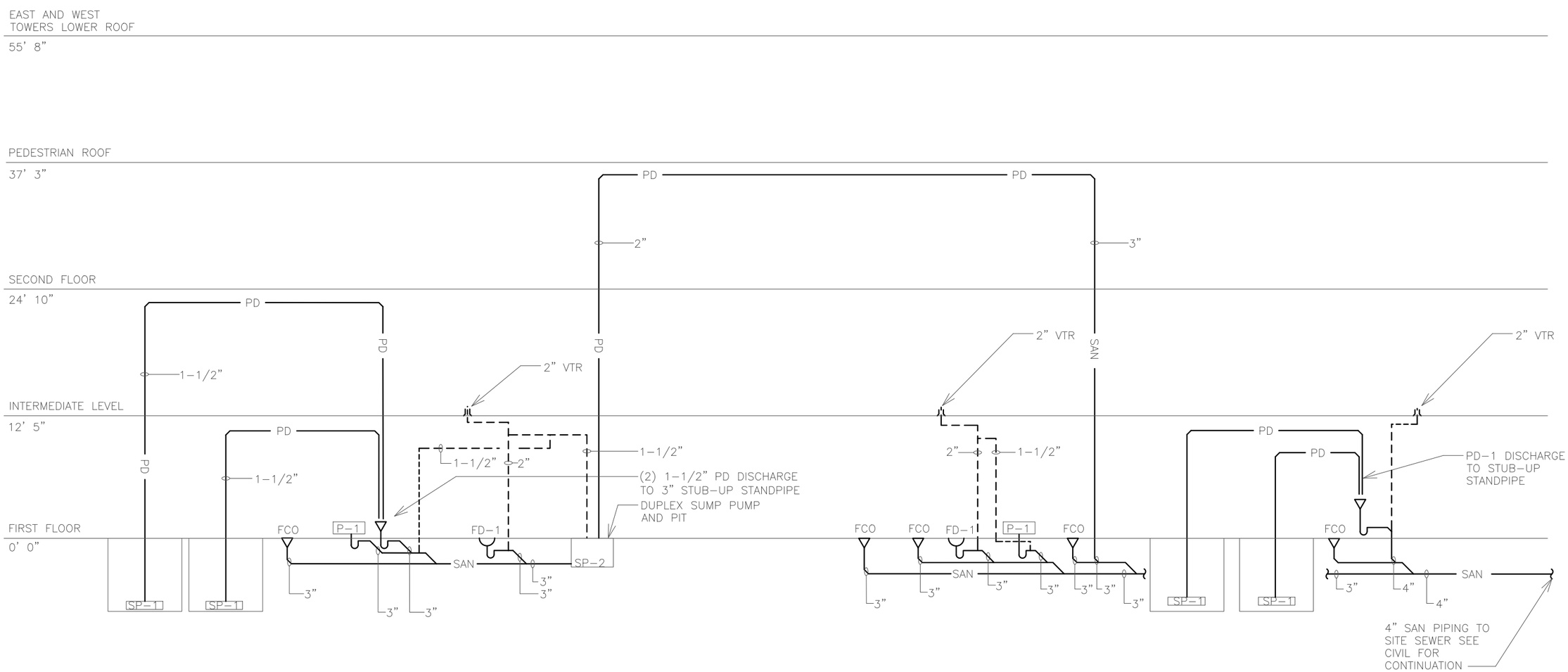
DRAWN BY ZB | PLANS CK'D. IK

DOMESTIC WATER RISER DIAGRAM

SHEET 264 P-400

STATE PROJECT NUMBER

1000-57-70



1 P-401 SANITARY RISER DIAGRAM

SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

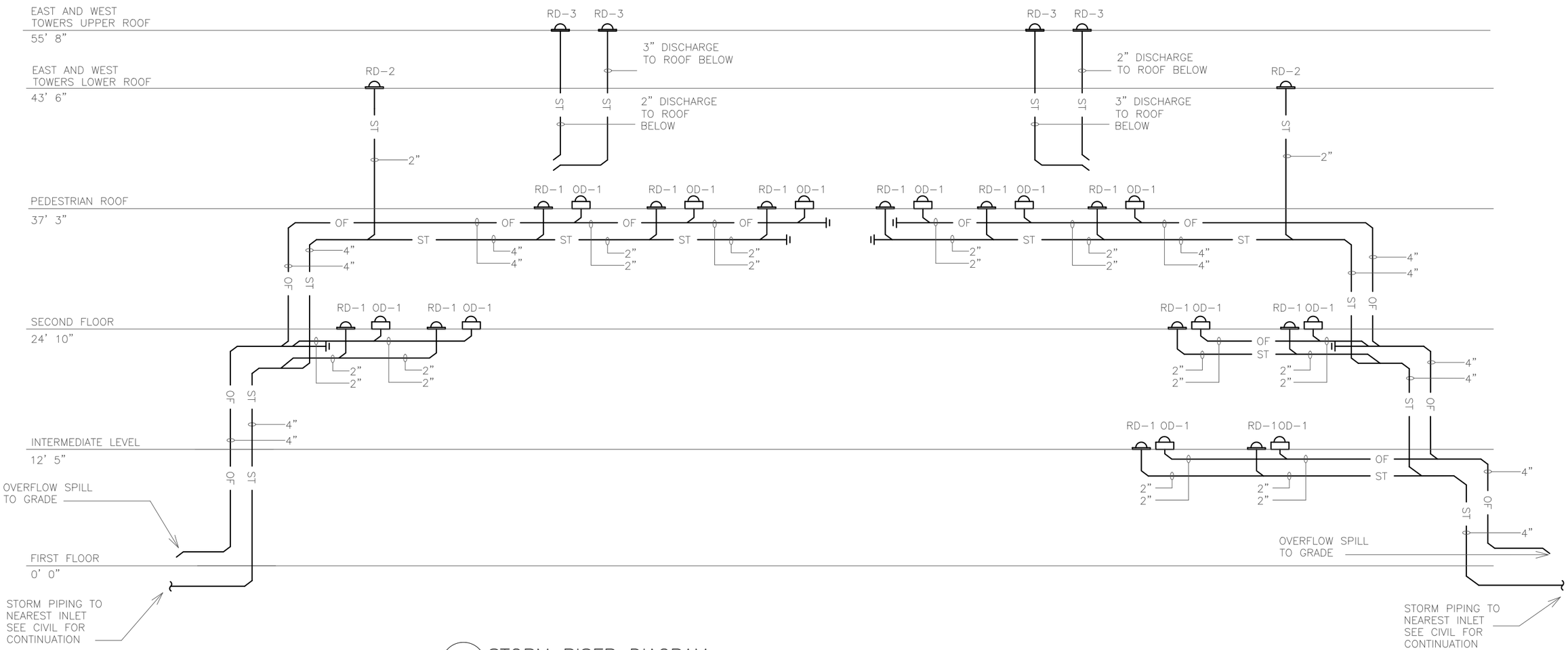
PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

SANITARY RISER DIAGRAM

SHEET 265 P-401

STATE PROJECT NUMBER
1000-57-70



1 P-402 STORM RISER DIAGRAM
SCALE: NTS

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

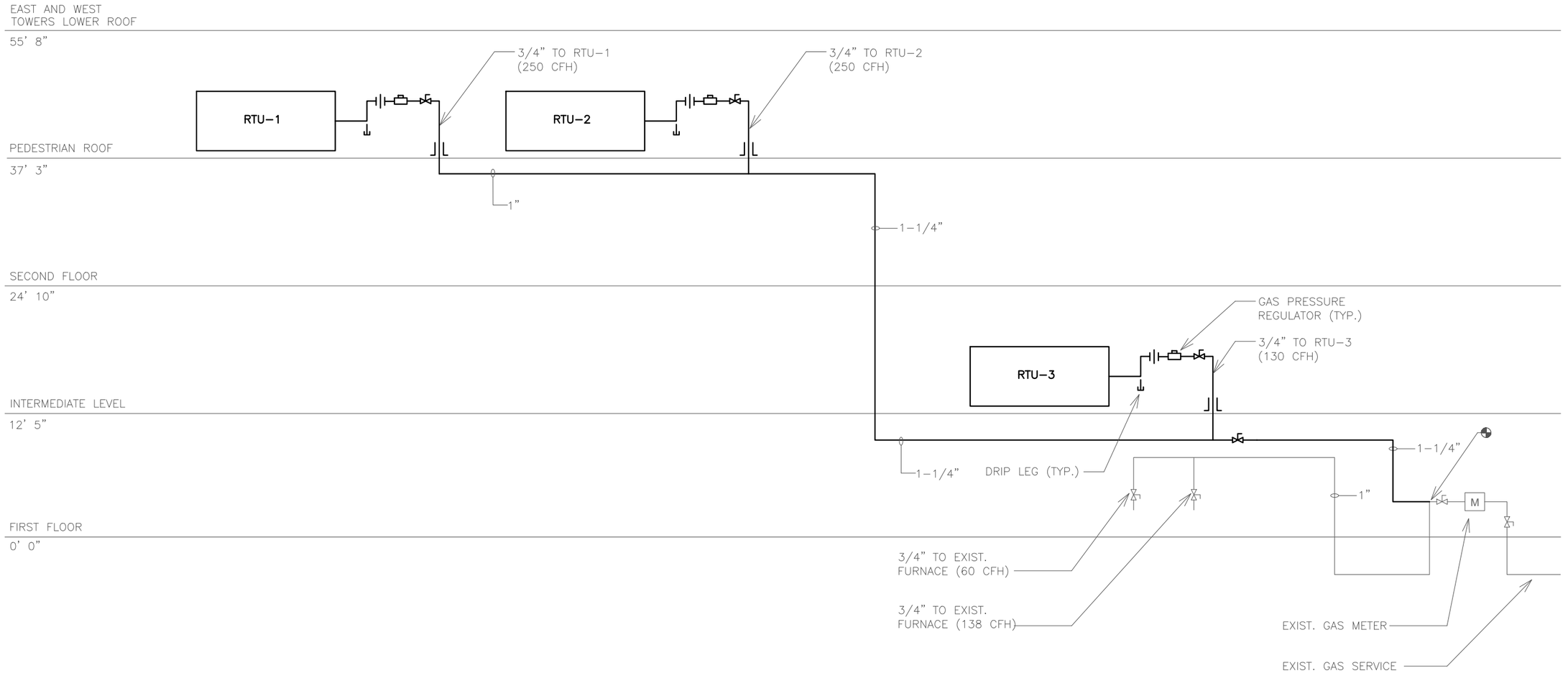
PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

STORM RISER DIAGRAM

SHEET
266
P-402

STATE PROJECT NUMBER
1000-57-70



1 PL-403 FUEL GAS RISER DIAGRAM
SCALE: NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

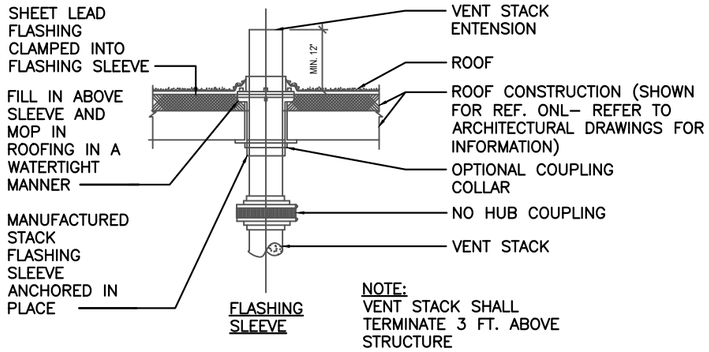
DRAWN BY	ZB	PLANS CK'D.	IK

FUEL GAS RISER DIAGRAM

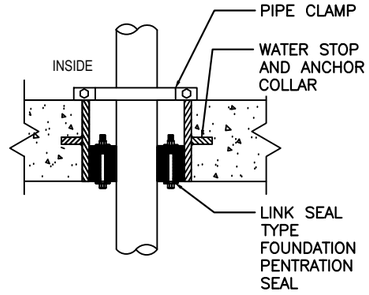
SHEET
267
P-403

STATE PROJECT NUMBER

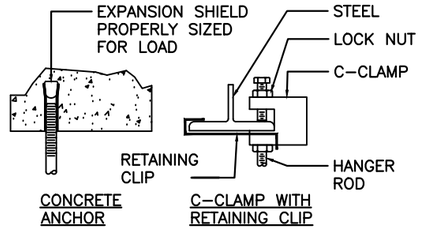
1000-57-70



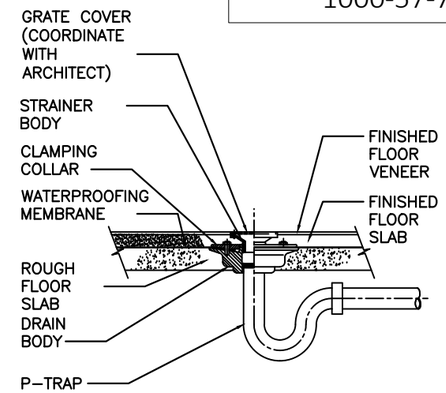
1 VENT THRU ROOF DETAIL
NTS



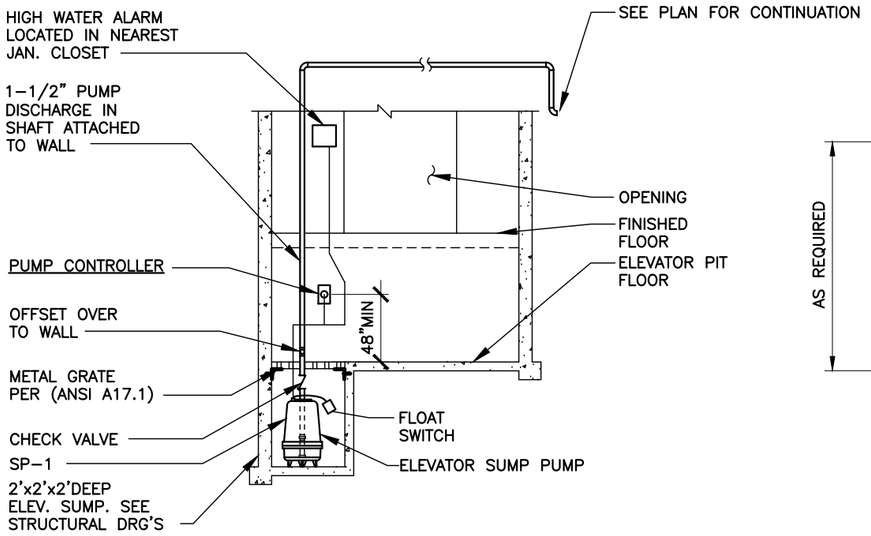
2 PIPE PENETRATION DETAIL
FOUNDATION WALL BELOW GRADE
NTS



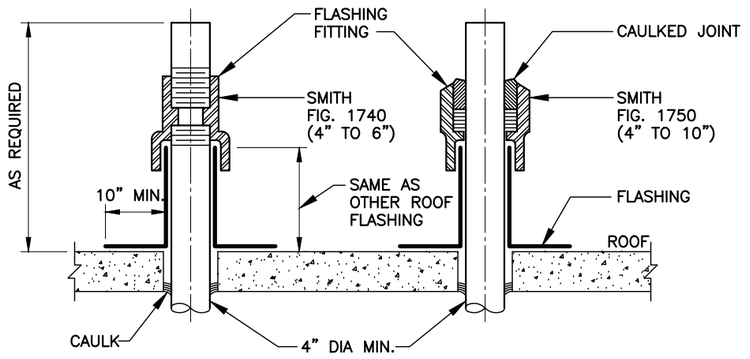
3 PIPE SUPPORT DETAIL
(UPPER ATTACHMENT DEVICES)
NTS



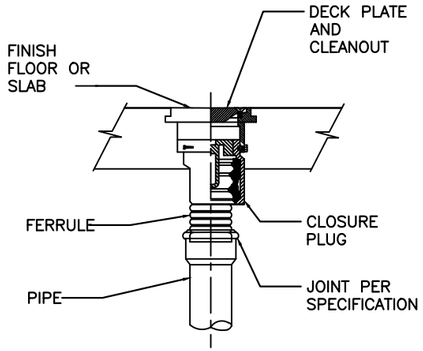
4 FLOOR DRAIN DETAIL
NTS



5 ELEVATOR SUMP PUMP DETAIL
NTS



6 TYPICAL FLASHING DETAIL
NTS



7 GRADE CLEANOUT W/ DECKPLATE DETAIL
NTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

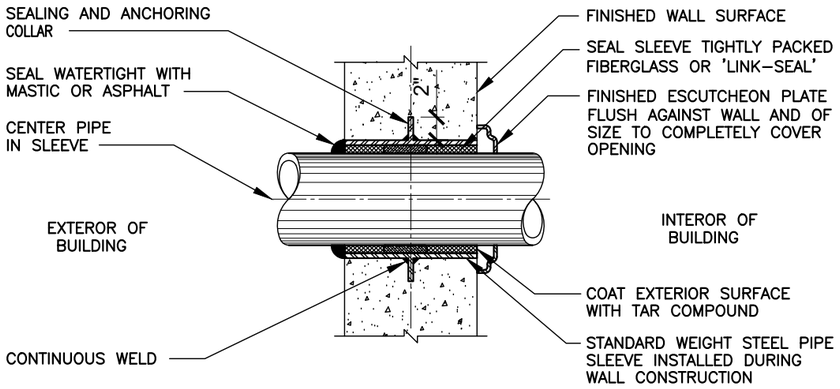
DRAWN BY ZB | PLANS CK'D. IK

PLUMBING DETAILS

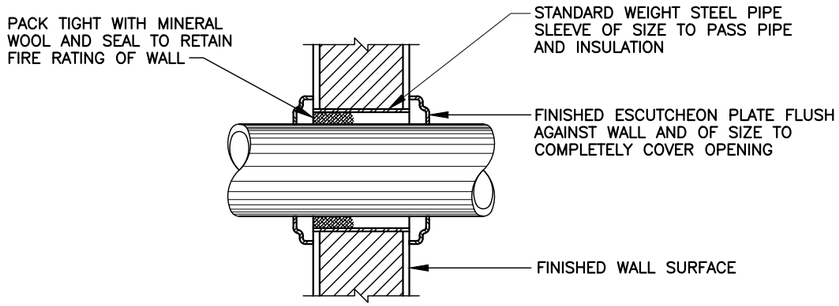
SHEET 268
P-500

STATE PROJECT NUMBER

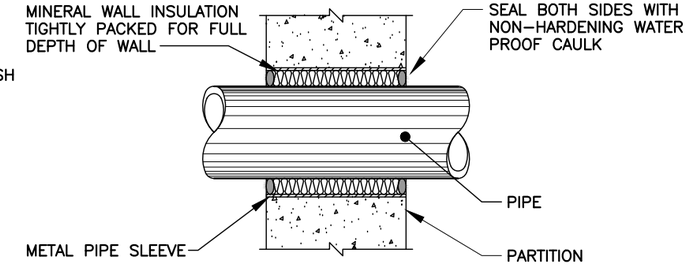
1000-57-70



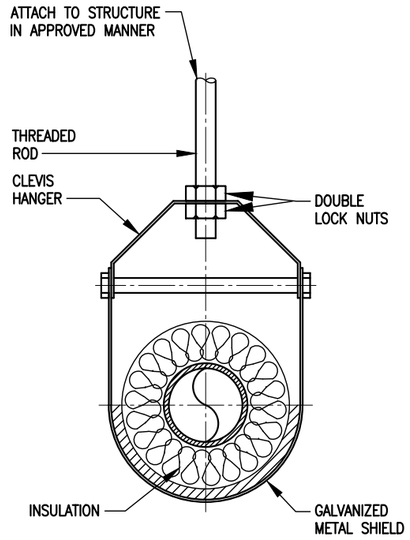
1 PIPE THRU EXTERIOR WALL DETAIL
NTS



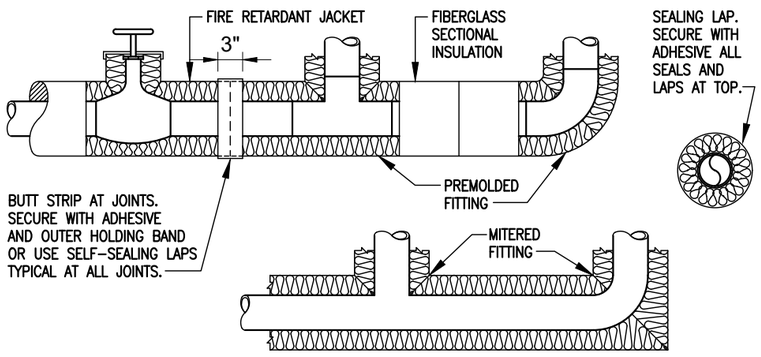
2 PIPE THRU FIRE RATED WALL OR FLOOR DETAIL
NTS



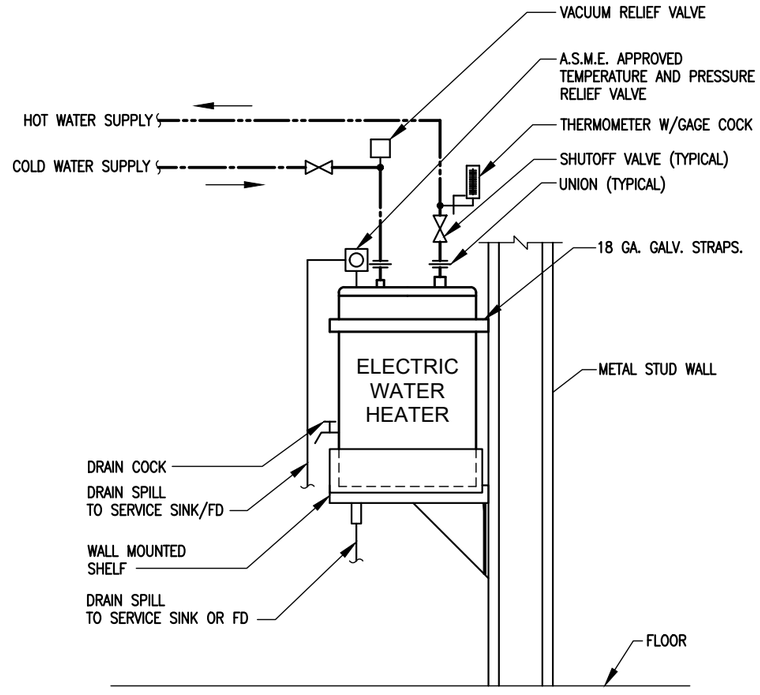
3 PIPE PENETRATION THRU NON FIRE RATED WALL DETAIL
NTS



4 HANGER DETAIL
NTS



5 TYPICAL PIPE INSULATION DETAIL
NTS



6 ELECTRIC WATER HEATER DETAIL
NTS

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

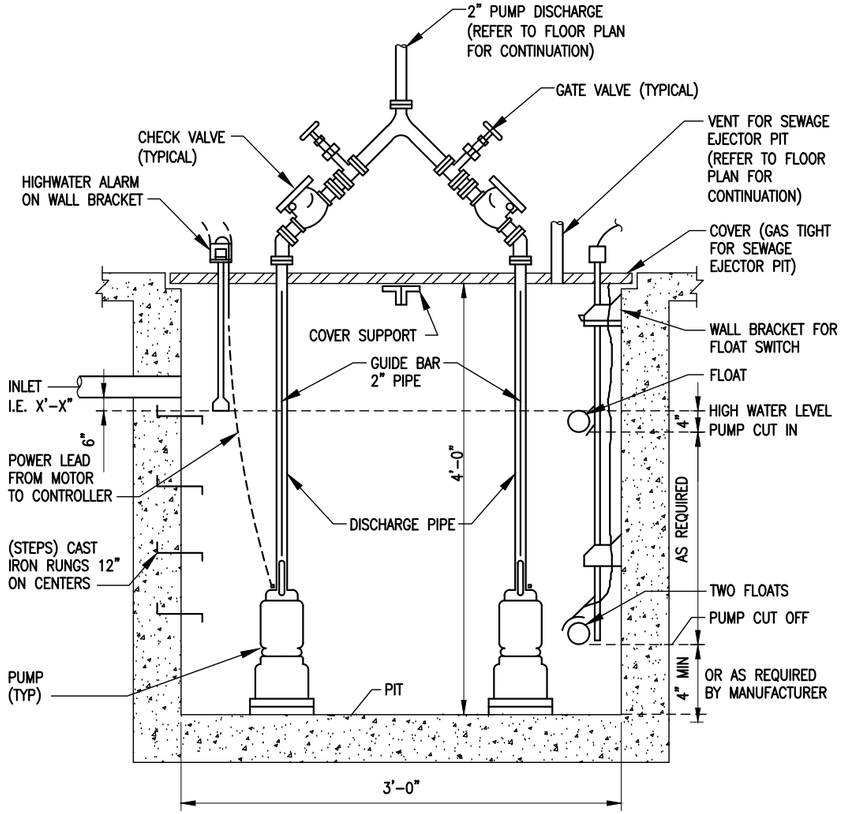
DRAWN BY ZB | PLANS CK'D. IK

PLUMBING DETAILS

SHEET 269
P-501

STATE PROJECT NUMBER

1000-57-70



1 DUPLEX SUBMERSIBLE PUMPS
NTS

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLUMBING

DRAWN BY ZB | PLANS CK'D. IK

PLUMBING DETAILS

SHEET
270
P-502

STATE PROJECT NUMBER
1000-57-70

GENERAL FIRE PROTECTION NOTES

1. THESE GENERAL NOTES ARE APPLICABLE TO ALL FIRE PROTECTION DESIGN DRAWINGS.
2. ALL DIMENSIONS SHOWN ON THE DESIGN DRAWINGS, INCLUDING GRID DIMENSIONING, ARE APPROXIMATE.
3. PIPE SIZES SHOWN ARE FOR REFERENCE ONLY. FINAL SIZING SHALL BE AS PER APPROVED HYDRAULIC CALCULATIONS AND SHOP DRAWINGS.
4. CONSTRUCTION SHOP AND WORKING DRAWINGS SHALL USE FIELD VERIFIED EXISTING CONDITION INFORMATION AND DIMENSIONS ONLY.
5. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL INTENT OF WORK. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL FIRE PROTECTION WORK. ADDITIONAL PIPING MAY BE REQUIRED TO ACCOMODATE CONDITIONS SUCH AS SOFFITS, DUCTWORK, STRUCTURE, LIGHTING, EQUIPMENT, ETC. THE CONTRACTOR SHALL PROVIDE A COMPLETE INSTALLATION IN CONFORMANCE WITH ALL APPLICABLE CODES AND STANDARDS AND AHJ REQUIREMENTS.
6. THE CONTRACTOR SHALL COORDINATE ALL DISCIPLINES AND TRADES IN THE DESIGN AND IMPLEMENTATION OF THE WORK. THE CONTRACTOR SHALL CORRECT ANY AND ALL WORK ARISING FROM A FAILURE TO COORDINATE THE WORK TO THE SATISFACTION OF THE OWNER.
7. FOR ALL ITEMS THAT ARE REQUIRED TO HAVE SEISMIC BRACING OR RESTRAINTS, SEISMIC PLANS, AND SEISMIC CALCULATIONS SHALL BE PREPARED, SEALED, AND SUBMITTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WISCONSIN ENGAGED BY THE CONTRACTOR. THE REGISTERED PROFESSIONAL ENGINEER SHALL SUBMIT SIGNED AND SEALED AFFIDAVIT AND AS BUILT DOCUMENTS STATING THAT THE INSTALLATION IS IN FULL COMPLIANCE WITH THE SIGNED/SEALED SHOP DRAWINGS.
8. THE CONTRACTOR SHALL COMPLY WITH THE BUILDING CODES. ALL WORK SHALL MEET THE REQUIREMENTS OF NFPA STANDARDS. INSTALLATION PROCEDURES SHALL COMPLY WITH THE SAFETY RULES OF OSHA, AND THE REQUIREMENTS OF THE OFFICE OF THE STATE FIRE MARSHAL.
9. THE CONTRACTOR SHALL MAKE PROVISIONS FOR DRAINING THE ENTIRE SYSTEM PER NFPA 14 AND 25.
10. THE CONTRACTOR SHALL PROVIDE ANY AND ALL PERMITS REQUIRED FOR COMPLETE PERFORMANCE OF WORK.
11. THE FIRE PROTECTION WORK IS TO BE DONE BY A LICENSED MASTER FIRE SUPPRESSION PIPING FITTER.
12. 15. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFEGUARDS NECESSARY TO PROTECT PERSONS AND PROPERTY FROM INJURY OR DAMAGE DURING PERFORMANCE OF THE WORK.

GENERAL FIRE PROTECTION NOTES (CONT.)

13. UPON COMPLETION OF SYSTEM INSTALLATION, PERFORM A HYDROSTATIC TEST ON ALL PIPING AND ATTACHED APPURTENANCES IN THE PRESENCE OF A REPRESENTATIVE OF THE LOCAL FIRE MARSHAL AND THE OWNER. THE SYSTEM SHALL BE HYDROSTATICALLY TESTED AS PER NFPA REQUIREMENTS. LOSS SHALL BE DETERMINED BY A DROP IN GAUGE PRESSURE OR VISUAL LEAKAGE. THE TEST PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE SYSTEM OR PORTION BEING TESTED. ALL SYSTEM TESTING SHALL BE IN ACCORDANCE WITH NFPA 14 AND NFPA 25. ALL WITNESSES SHALL BE NOTIFIED 24 HOURS BEFORE THE TEST.
14. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN PROTECTING AND MAINTAINING ITEMS TO REMAIN ADJACENT TO AND WITHIN THE CONSTRUCTION SITE, AND SHALL FULLY PROTECT THEM FROM DAMAGE RESULTING FROM CONTRACTOR WORKMEN, SUBCONTRACTORS, OR AGENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAINTING, CLEANING, OR REPLACING ANY SUCH DAMAGE AS PART OF THE WORK.
15. PROVIDE A FIRE WATCH WHENEVER ANY WELDING IS DONE WITHIN THE AREA BEING WORKED, DURING THE WELDING OPERATION, AND FOR ONE HOUR AFTER WELDING IS COMPLETE.
16. PROVIDE PIPE SUPPORTS, RISER CLAMPS AND HANGERS TO SUPPORT PIPING, EQUIPMENT AND ACCESSORIES INDEPENDENTLY FROM THE STRUCTURE. THE CONTRACTOR SHALL PROVIDE REQUIRED SUPPLEMENTARY STEEL TO ACCOMPLISH A SAFE AND SOUND INSTALLATION.
17. ALL PIPING SHALL BE LOCATED IN HUNG CEILING, INSIDE SOFFIT OR IN PIPE CHASES.
18. PROVIDE FIRE STOPPING MATERIAL FOR ALL PENETRATIONS THROUGH FIRE WALLS AND FIRE RATED SEPARATIONS EQUAL TO THE RATING OF RESPECTIVE PARTITION. COORDINATE WITH ARCHITECT LOCATIONS AND RATINGS OF ALL FIRE RATED SEPARATIONS AND BARRIERS. INSTALLATION OF FIRE STOPPING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
19. ALL NEW AND MODIFIED SYSTEMS SHALL BE FULLY TESTED IN ACCORDANCE WITH WISCONSIN FIRE AND BUILDING CODES, NFPA 13, NFPA 14, AND NFPA 25.

SYMBOLS

FP	FIRE STANDPIPE PIPING
	PIPE DROP OR DOWN
	PIPE UP OR RISE
	CAPPED OUTLET
	PIPE BREAK
	FIRE HOSE VALVE IN CAB.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
CAB	CABINET
DN	DOWN
FDC	FIRE DEPARTMENT CONNECTION
FHV	FIRE HOSE VALVE
FP	FIRE PROTECTION
TYP	TYPICAL

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE PROTECTION

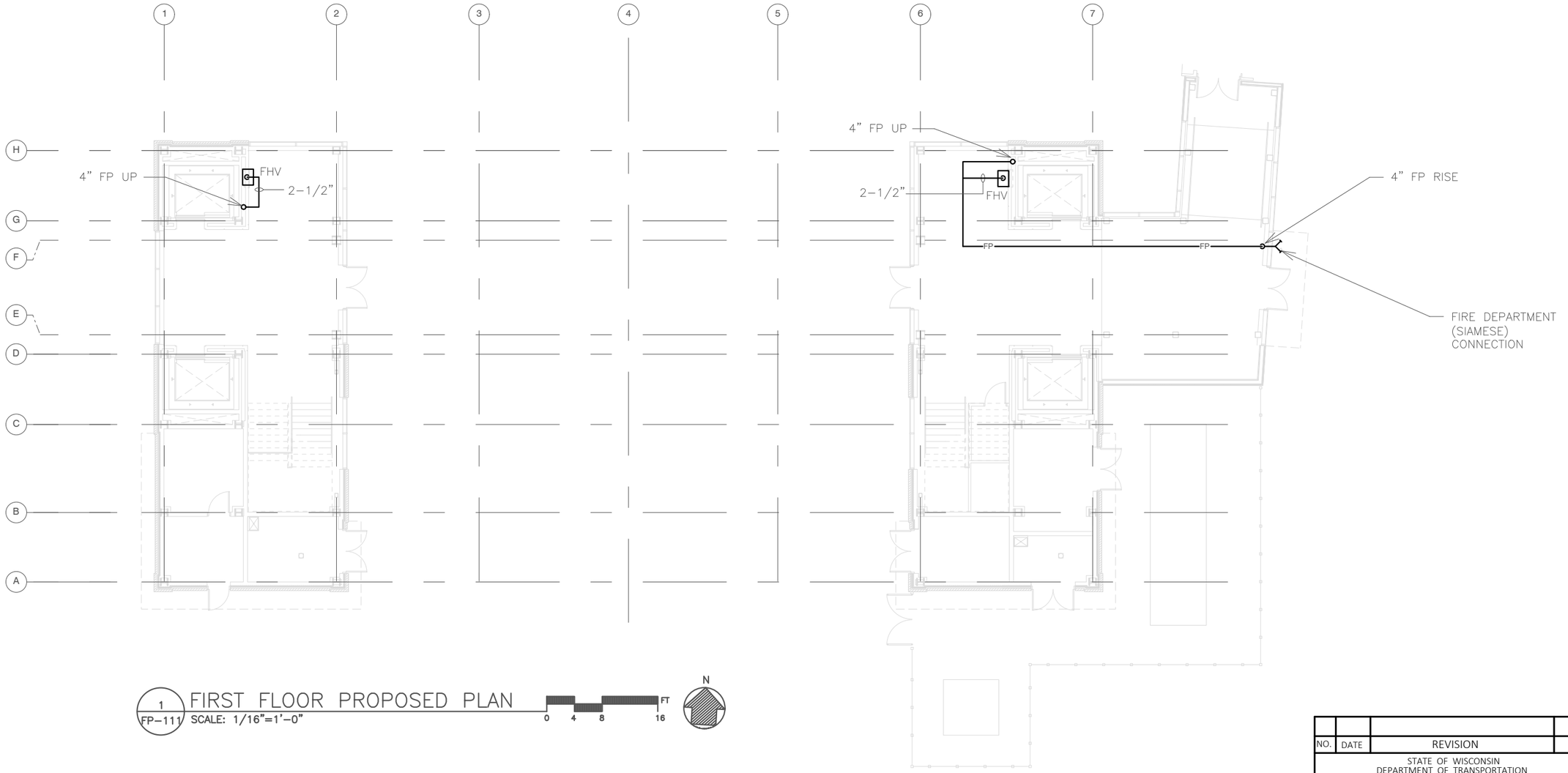
DRAWN BY ZB | PLANS CK'D. IK

COVER SHEET

SHEET
271
FP-001

STATE PROJECT NUMBER

1000-57-70



1 / FP-111 FIRST FLOOR PROPOSED PLAN

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

0 4 8 16 FT

N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

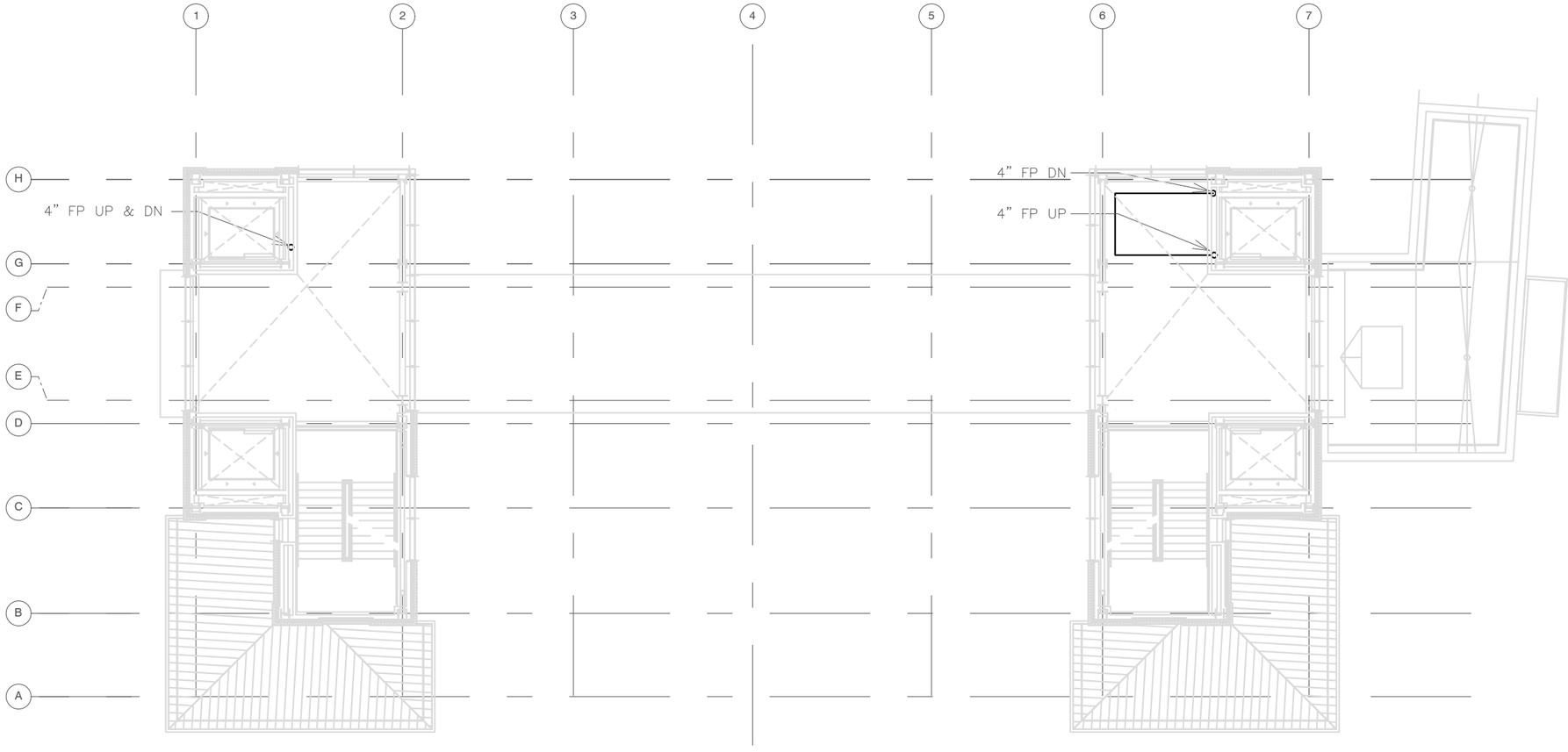
FIRE PROTECTION

DRAWN BY ZB | PLANS CK'D. IK

FIRST FLOOR PROPOSED PLAN

SHEET 272 FP-111

STATE PROJECT NUMBER
1000-57-70



1 FP-112 INTERMEDIATE FLOOR PROPOSED PLAN
SCALE: 1/16"=1'-0"
0 4 8 16 FT
N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

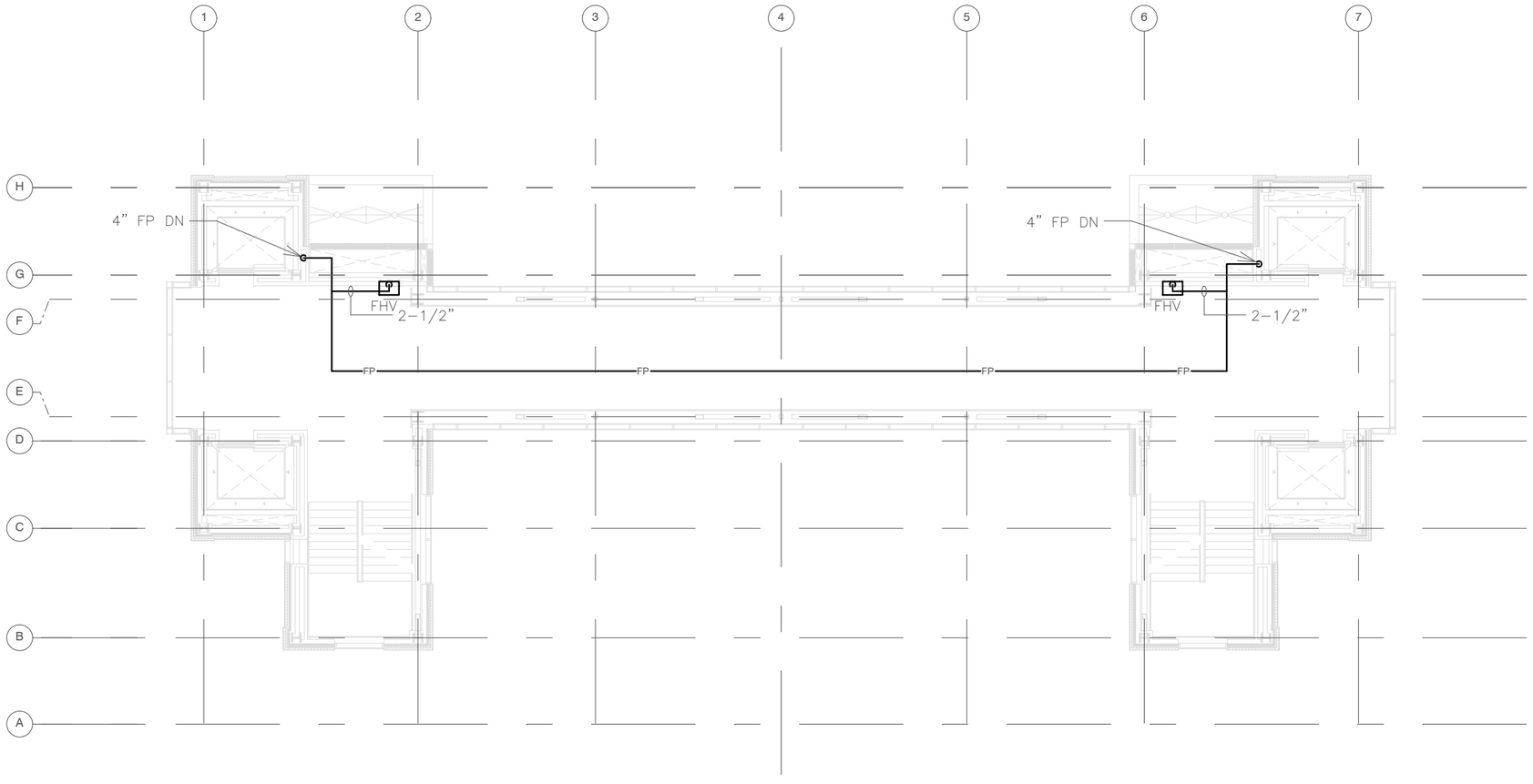
FIRE PROTECTION

DRAWN BY ZB | PLANS CK'D. IK

INTERMEDIATE FLOOR PROPOSED PLAN

SHEET
273
FP-112

STATE PROJECT NUMBER
1000-57-70



1 FP-113 SECOND FLOOR PROPOSED PLAN
SCALE: 1/16"=1'-0"
0 4 8 16 FT
N

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE PROTECTION

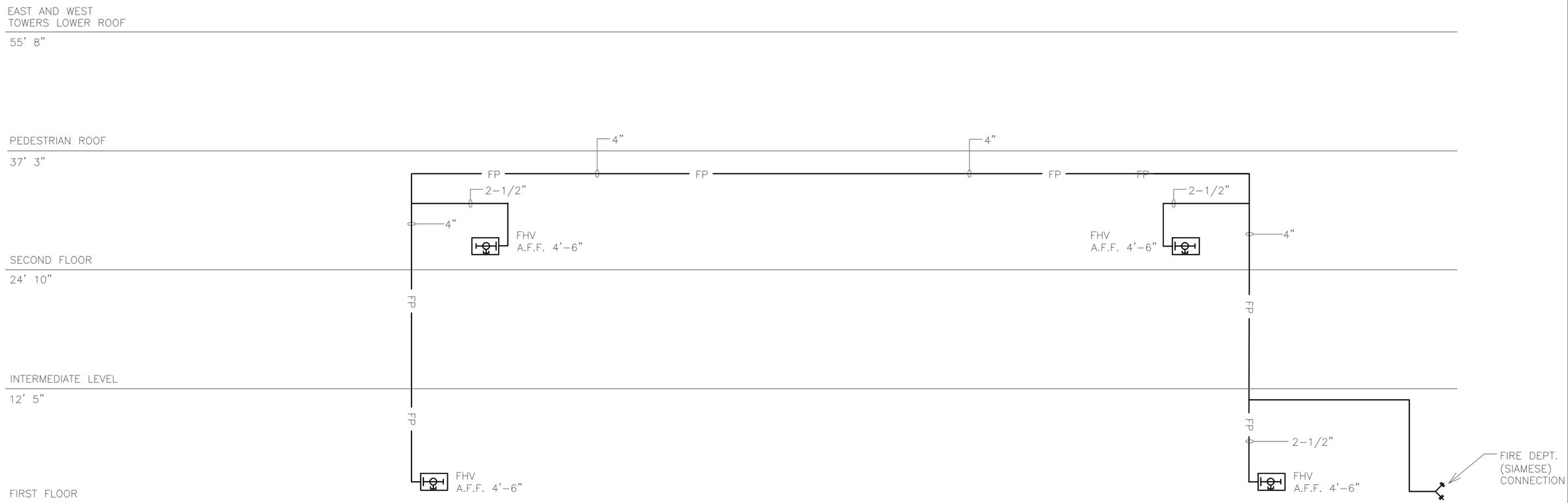
DRAWN BY	ZB	PLANS CK'D.	IK

SECOND FLOOR PROPOSED PLAN

SHEET 274 FP-113

STATE PROJECT NUMBER

1000-57-70



1 FP-400 FIRE PROTECTION RISER DIAGRAM

SCALE: NTS

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE PROTECTION

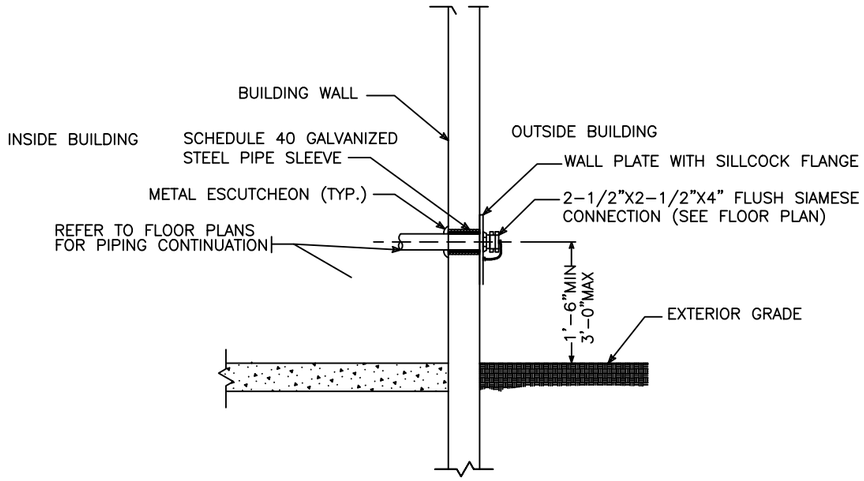
DRAWN BY ZB | PLANS CK'D. IK

FIRE PROTECTION
RISER DIAGRAM

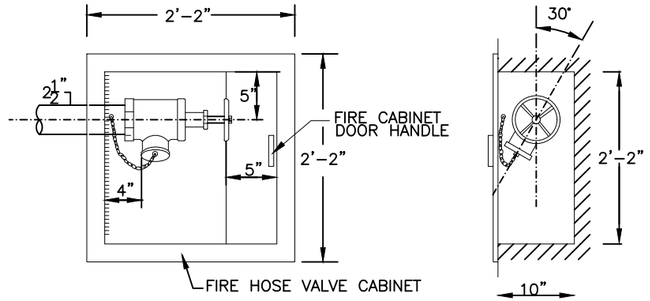
SHEET
275
FP-400

STATE PROJECT NUMBER

1000-57-70



1 STANDPIPE SIAMESE CONNECTION DETAIL
NTS

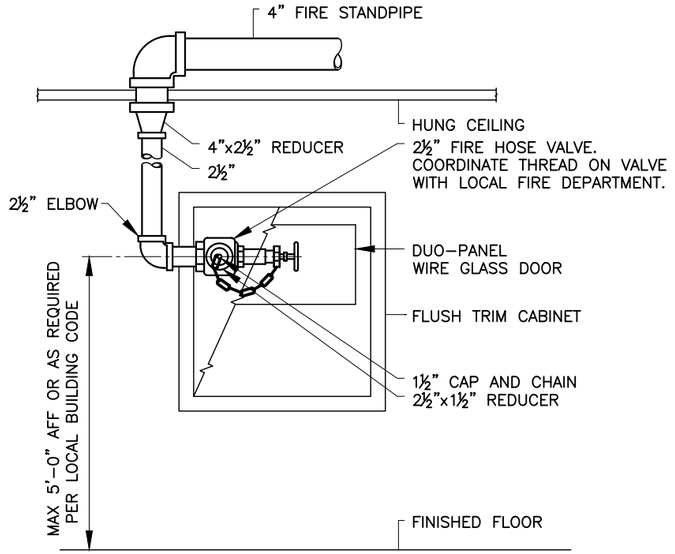


NOTES:

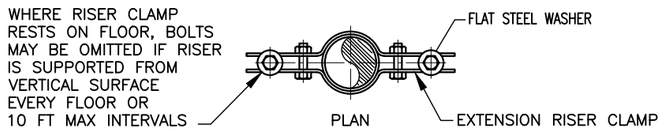
1. FOR LOCATION OF FIRE HOSE CABINETS, SEE ARCHITECTURAL AND FIRE PROTECTION DRAWINGS.
2. FIRE HOSE VALVE SHALL BE TILTED AT 30 DEGREE ANGLE INSIDE THE CABINET TO FACILITATE CONNECTION WITH FDNY STANDARD HOSE THREAD.

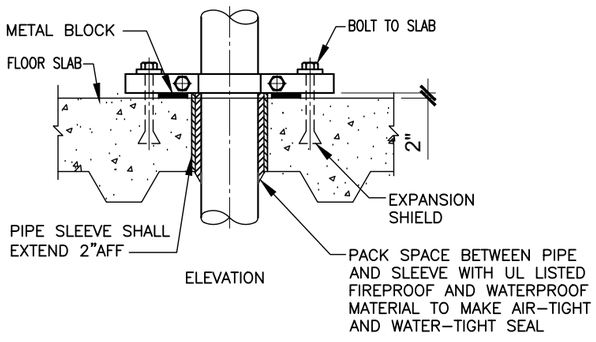
   FIRE HOSE VALVE SHALL NOT BE OBSTRUCTED FROM USE OR OBSCURED FROM VIEW.

2 FIRE HOSE VALVE CABINET DETAIL
NTS



3 FIRE HOSE CABINET DETAIL
NTS





4 RISER SUPPORT TYPICAL FOR WATERPROOF FLOORS
NTS

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE PROTECTION

DRAWN BY ZB | PLANS CK'D. IK

FIRE PROTECTION DETAILS

SHEET 276
FP-500

FIRE ALARM SYMBOLS

- (SD) ELEV — SMOKE DETECTOR; ELEV INDICATES ELEVATOR RECALL
- (HD) ELEV — HEAT DETECTOR; ELEV INDICATES ELEVATOR RECALL
- BR — RECEIVER FOR BEAM SMOKE DETECTOR
- BD ELEV — TRANSMITTER FOR BEAM SMOKE DETECTOR. ELEV INDICATES ELEVATOR RECALL.
- (DD) — DUCT SMOKE DETECTOR
- P — MANUAL PULL STATION
- 15cd ▽ F — HORN/STROBE WITH CANDELA RATING
- 15cd ▽ L F — STROBE ONLY WITH CANDELA RATING
- FACP — FIRE ALARM CONTROL PANEL
- RA — FIRE ALARM REMOTE ANNUNCIATOR
- DH — MAGNETIC DOOR HOLD
- TS — TAMPER SWITCH
- FS — FLOW SWITCH
- SB — STROBE BOOSTER PANEL
- ADR — ADDRESSABLE RELAY MODULE
- ADM — ADDRESSABLE MONITOR MODULE
- DGP — DATA GATHERING PANEL

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.

GENERAL NOTES (CONT.)

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.

FIRE ALARM INPUT/OUTPUT MATRIX

EVENT (DEVICE ACTIVATED)	TRANSMIT ALARM TO CENTRAL SUPERVISING STATION	ACTIVATE HORNS	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
	CONTROLLED RESPONSE									
"GENERAL"										
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				
"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"				X						
CENTRAL CONTROL EQUIPMENT DOOR OPEN				X						X
FCC DRILL SWITCH				X						X
ELEVATOR CONTACTOR LOSS OF VOLTAGE				X						X
SUPERVISED DEVICE/WIRING DISARRANGEMENT				X						X

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

1000-57-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE ALARM

DRAWN BY PH | PLANS CK'D. FC

FIRE ALARM SYMBOLS, ABBREVIATIONS, MATRIX, AND GENERAL NOTES

SHEET FA-001
277

SCALE = NONE

2

2

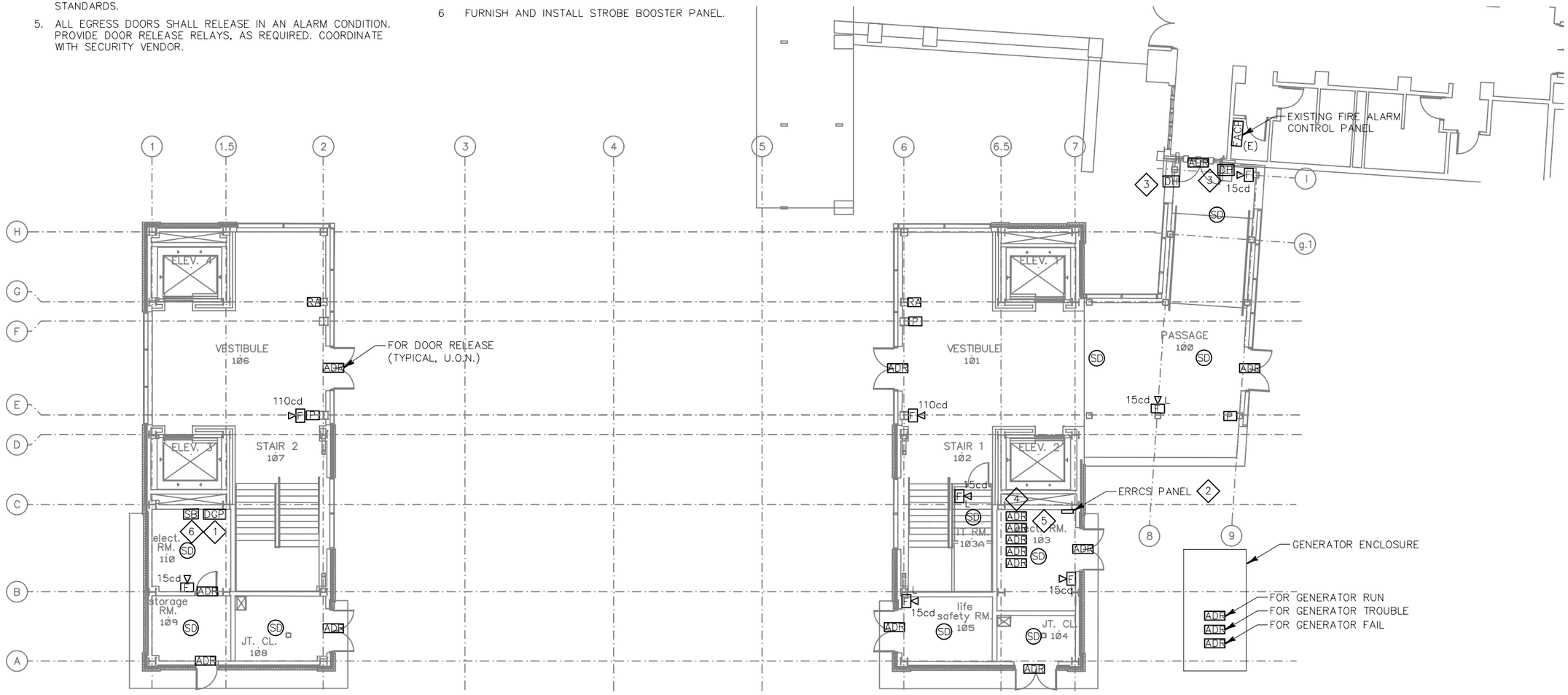
STATE PROJECT NUMBER
1000-57-70

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 (EDWARDS EST2) AND BE UL LISTED.
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 DATA GATHERING PANEL.
2	FURNISH AND INSTALL EMERGENCY RESPONDER RADIO COVERAGE SYSTEM IN ACCORDANCE WITH IFC SECTION 510. PROVIDE SIGNAL BOOSTER COMPONENTS AND MONITORING PANELS FOR COVERAGE OF BUILDINGS AND TOWERS. COORDINATE COMPONENT EXACT LOCATIONS WITH MANUFACTURER RECOMMENDATIONS.
3	DOOR HOLDS SHALL RELEASE IN EVENT OF FIRE CONDITION.
4	FIVE RELAYS ARE FOR ERRCS FAIL, TROUBLE, POWER LOSS, CHARGER TROUBLE, AND LOW BATTERY.
5	PROVIDE BASE TWO-WAY COMMUNICATION SYSTEM FOR AREAS OF REFUGE. PROVIDE BATTERY BACKUP WITH POWER SUPPLY MONITORING. SYSTEM SHALL CONNECT TO MONITORING COMPANY.
6	FURNISH AND INSTALL STROBE BOOSTER PANEL.



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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE ALARM

DRAWN BY	PH	PLANS CK'D.	FC

FIRE ALARM FIRST FLOOR PLAN

SHEET FA-100
278

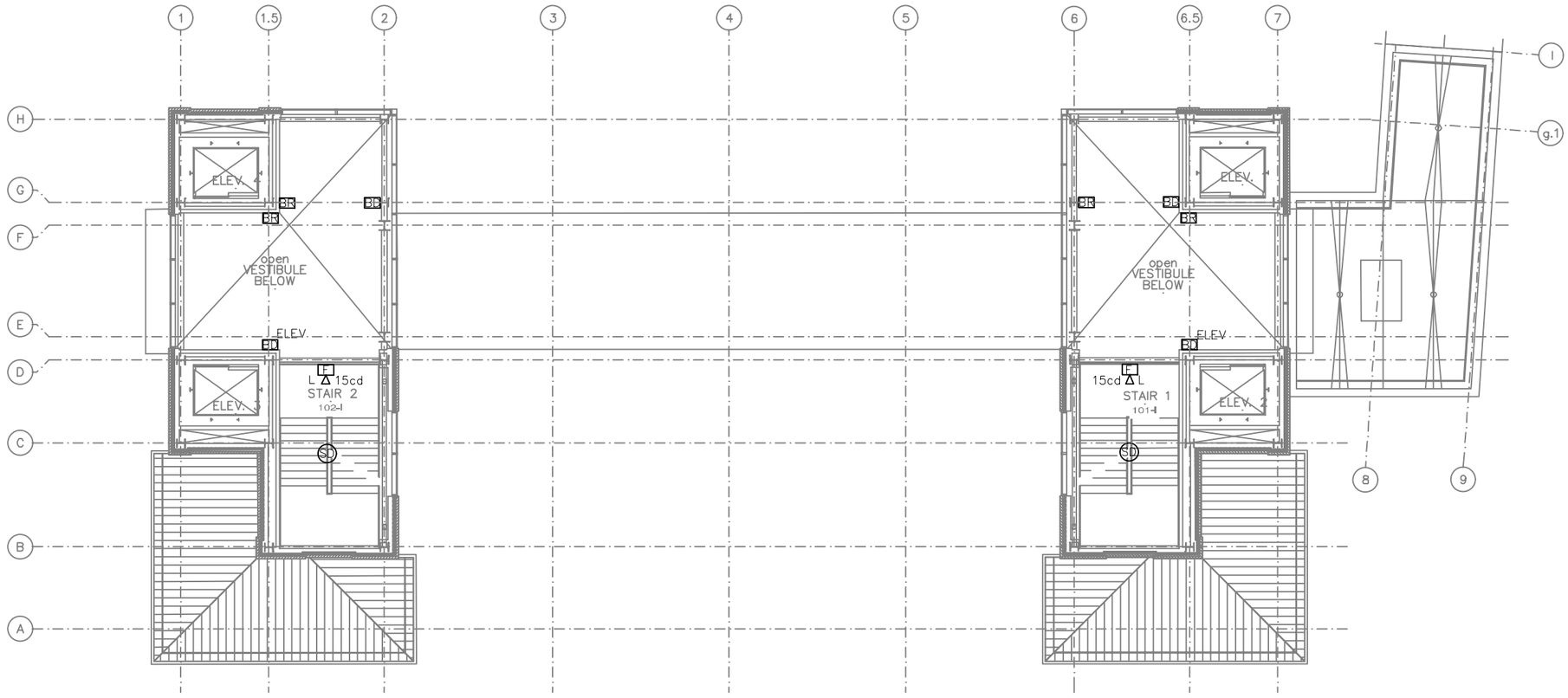
SCALE = AS NOTED

2

2

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

FIRE ALARM

DRAWN BY PH | PLANS CK'D. FC

FIRE ALARM INTERMEDIATE LEVEL PLAN

SHEET FA–101
279

STATE PROJECT NUMBER
1000–57–70

SCALE = AS NOTED

2

2

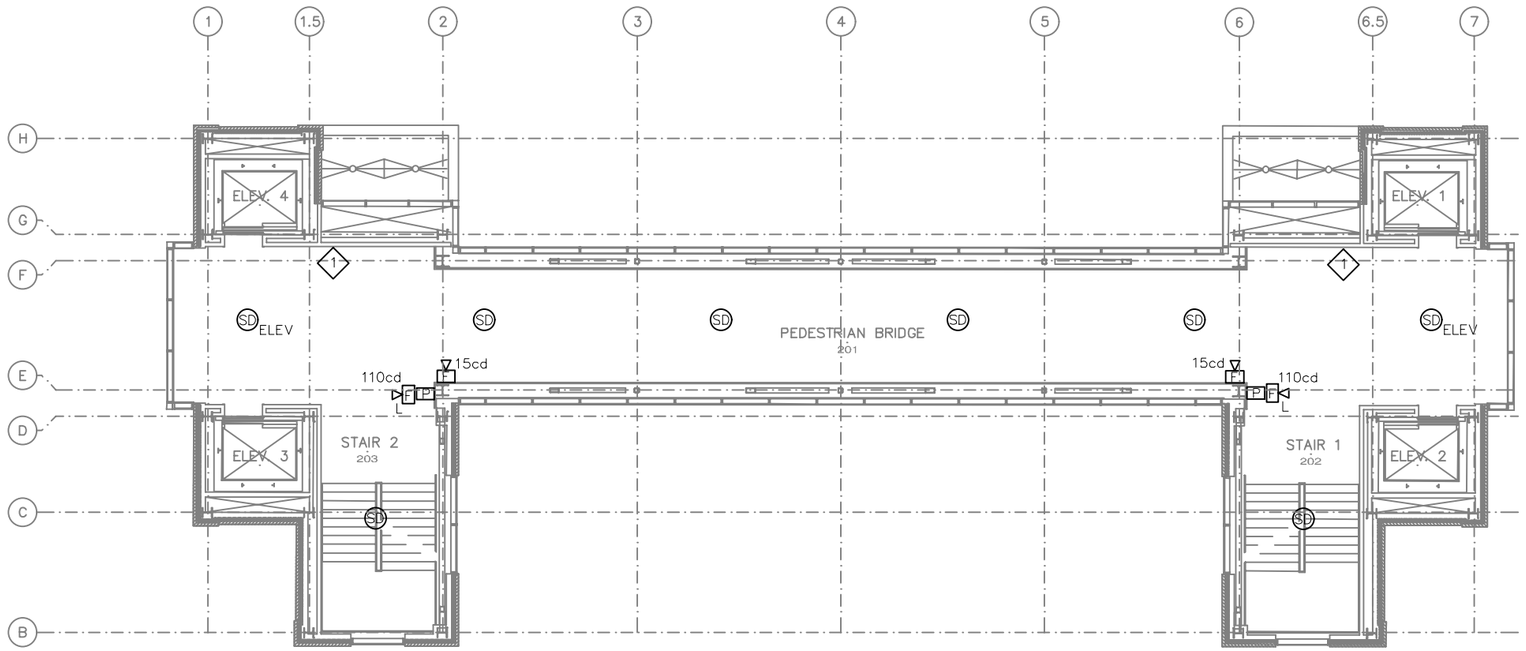
STATE PROJECT NUMBER
1000–57–70

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 – LIGHTING PLAN

NO.	DESCRIPTION
1	PROVIDE TWO–WAY VOICE COMMUNICATION CALL BOX FOR AREAS OF REFUGE.



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

FIRE ALARM

DRAWN BY	PH	PLANS CK'D.	SK

FIRE ALARM SECOND FLOOR PLAN

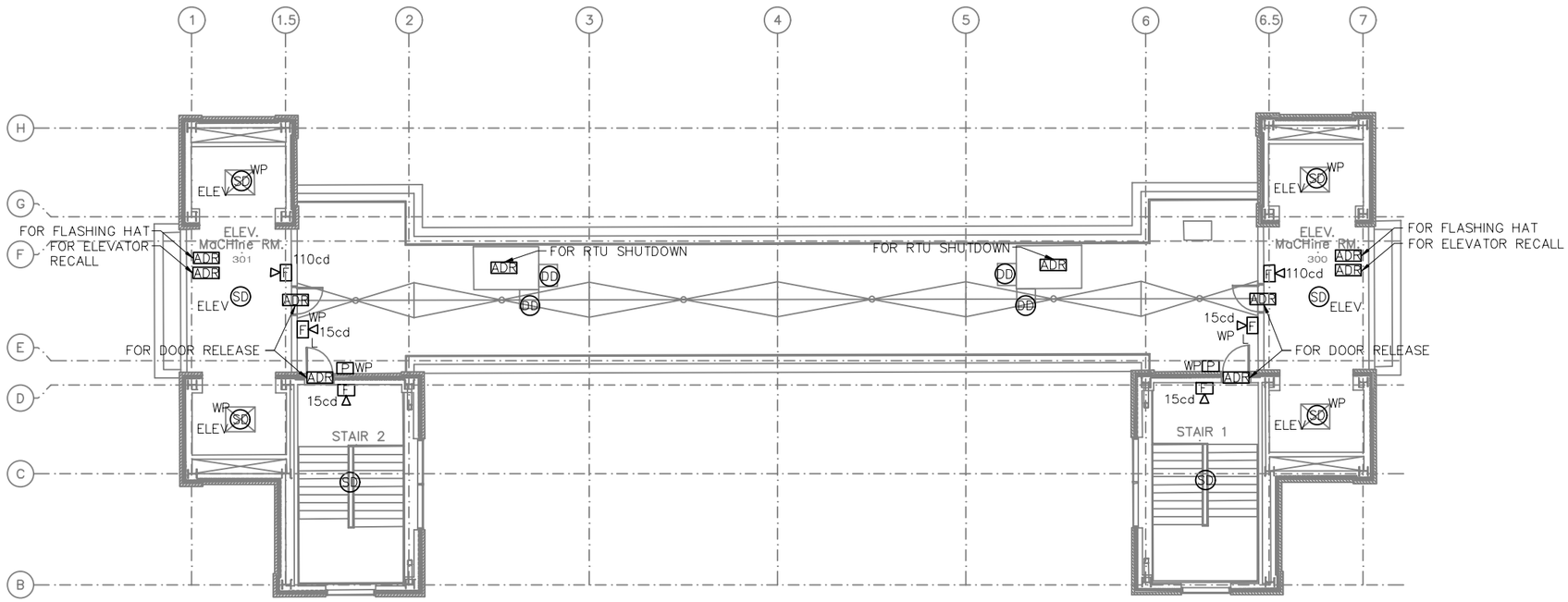
SHEET FA–102
280

SCALE = AS NOTED

STATE PROJECT NUMBER
1000–57–70

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

FIRE ALARM

DRAWN BY PH | PLANS CK'D. FC

FIRE ALARM ROOF PLAN

SHEET FA–103
281

SCALE = AS NOTED

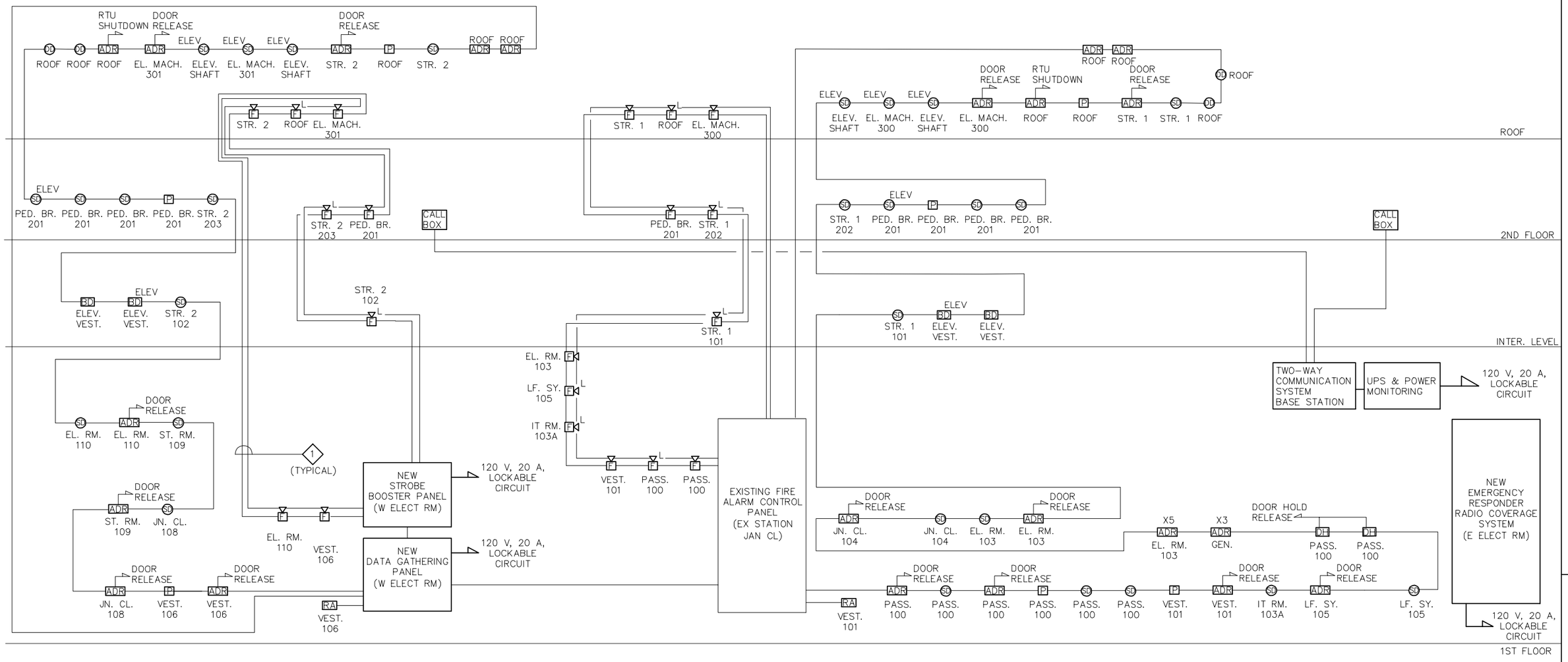
STATE PROJECT NUMBER
1000–57–70

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 (EDWARDS EST2) AS REQUIRED TO ACCEPT INSTALLATION OF NEW DEVICES. EXISTING VENDOR CONTACT INFO: GUETZKE & ASSOCIATES, INC. (262) 548–0100.
4. FURNISH AND INSTALL ALL FIRE ALARM COMPONENTS AND ASSOCIATED WIRING IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS.

KEYED NOTES – FIRE ALARM PLAN

NO.	DESCRIPTION
1	PROVIDE AND INSTALL DEVICE WIRING PER VENDOR RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. WIRING SHALL MEET NFPA SURVIVABILITY REQUIREMENTS.



1 FA–600 FIRE ALARM RISER DIAGRAM
SCALE: NONE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FIRE ALARM

DRAWN BY PH | PLANS CK'D. FC

FIRE ALARM RISER DIAGRAM

SHEET FA–600
282

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-70

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	GROUND FAULT CIRCUIT INTERRUPTER
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 (SPV.0060.06) - 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 DIFFERENCES 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 ASME A17.1.

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ABBREVIATIONS AND GENERAL NOTES

SHEET VT-001
283

SCALE = AS NOTED

STATE PROJECT NUMBER

1000-57-70

ELEVATOR SCHEDULE													
ELEVATOR NO	CATEGORY	TYPE	A17.1 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 3/8"	2	2 (2F / 0R)	PLATFORM & OVERPASS	60	150	75	42,000

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

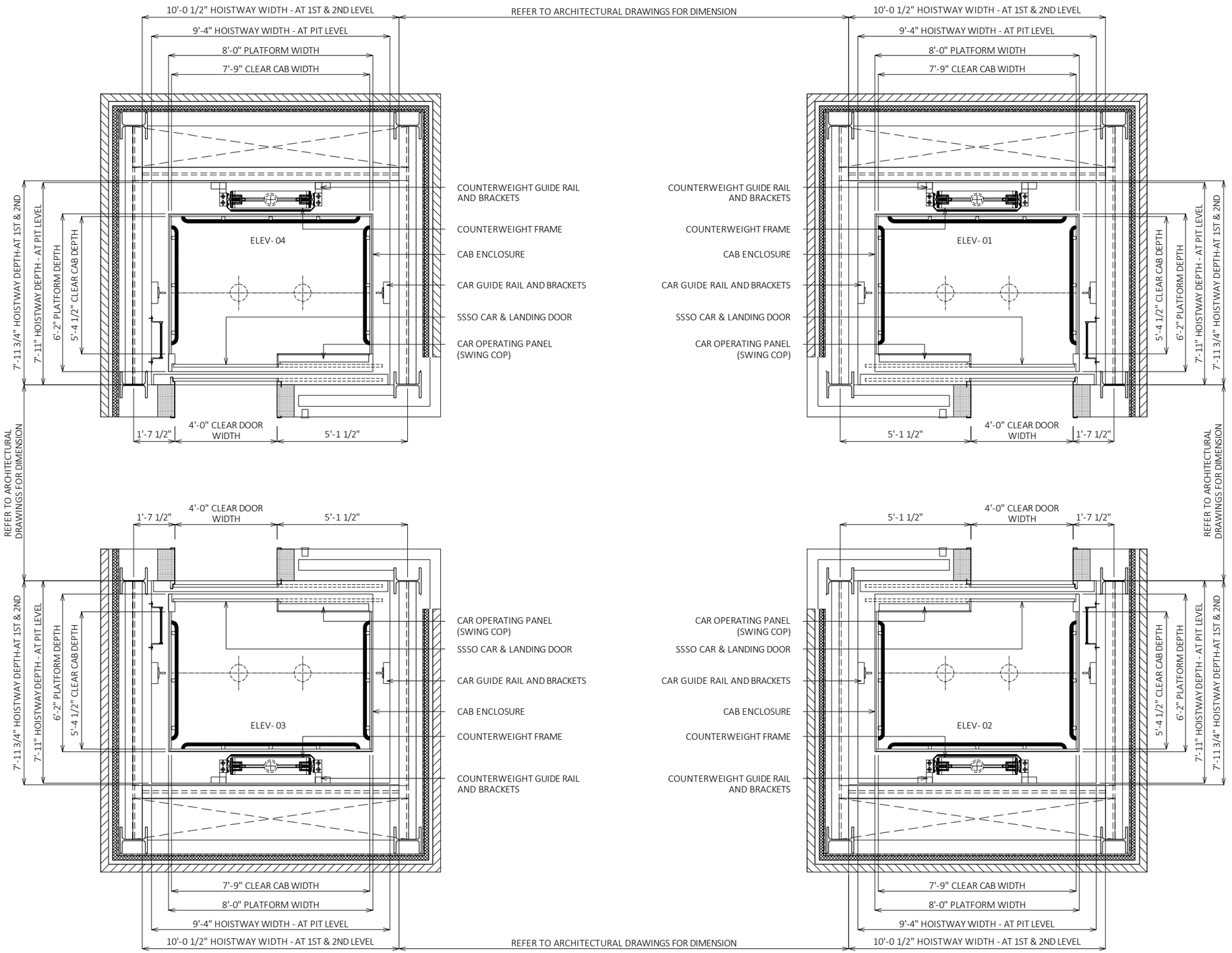
ELEV. 01-04, SCHEDULE

SHEET VT-100
284

SCALE = AS NOTED

STATE PROJECT NUMBER

1000–57–70



1 VT-101 ELEVATORS 01-04 - HOISTWAY PLAN

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

0 2 4 8 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01–04, HOISTWAY PLAN VIEW

SHEET VT–101

285

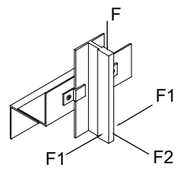
SCALE = AS NOTED

2

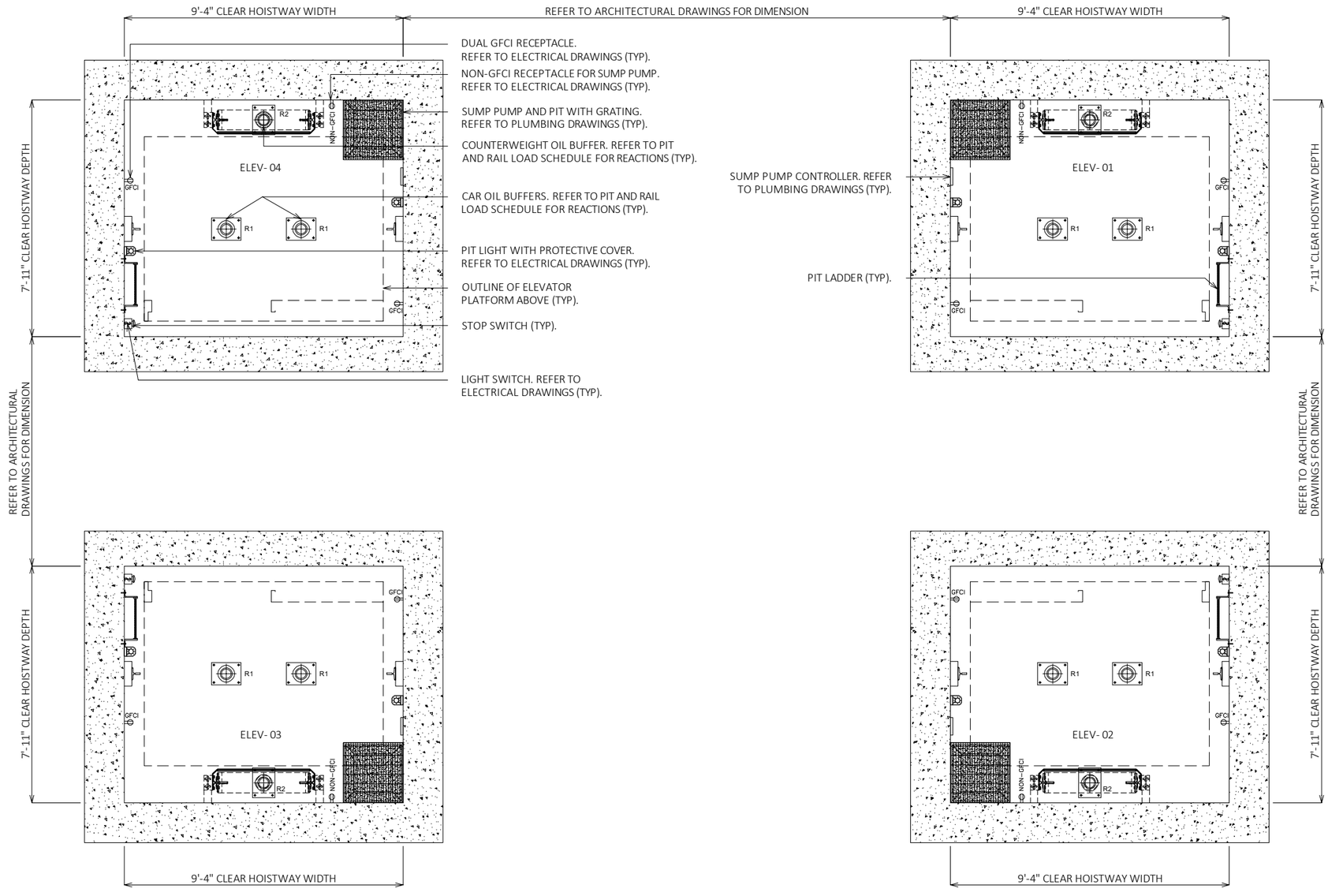
2

STATE PROJECT NUMBER
1000-57-70

ELEVATOR STRUCTURAL REACTIONS - EACH CAR						
PIT LOADS (DOUBLED FOR IMPACT)		GUIDE RAIL LOADS				
R1 (NOTE 1) (CAR BUFFER)	R2 (NOTE 1) (CWT BUFFER)	NORMAL FORCES (EACH RAIL)			SEISMIC FORCES (EACH RAIL)	
		F1	F2	F (NOTE 1&2)	F1	F2
27,300 lbf. (PER BUFFER)	41,400 lbf. (PER BUFFER)	500 lbf.	200 lbf.	14,000 lbf.	N/A	N/A
NOTE 1: LOADS SHOWN DO NOT ACT SIMULTANEOUSLY.						
NOTE 2: "F" LOAD AT PIT UNDER GUIDE RAILS INCLUDES IMPACT LOAD DUE TO SAFETY APPLICATION.						



RAIL LOAD DIAGRAM



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

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

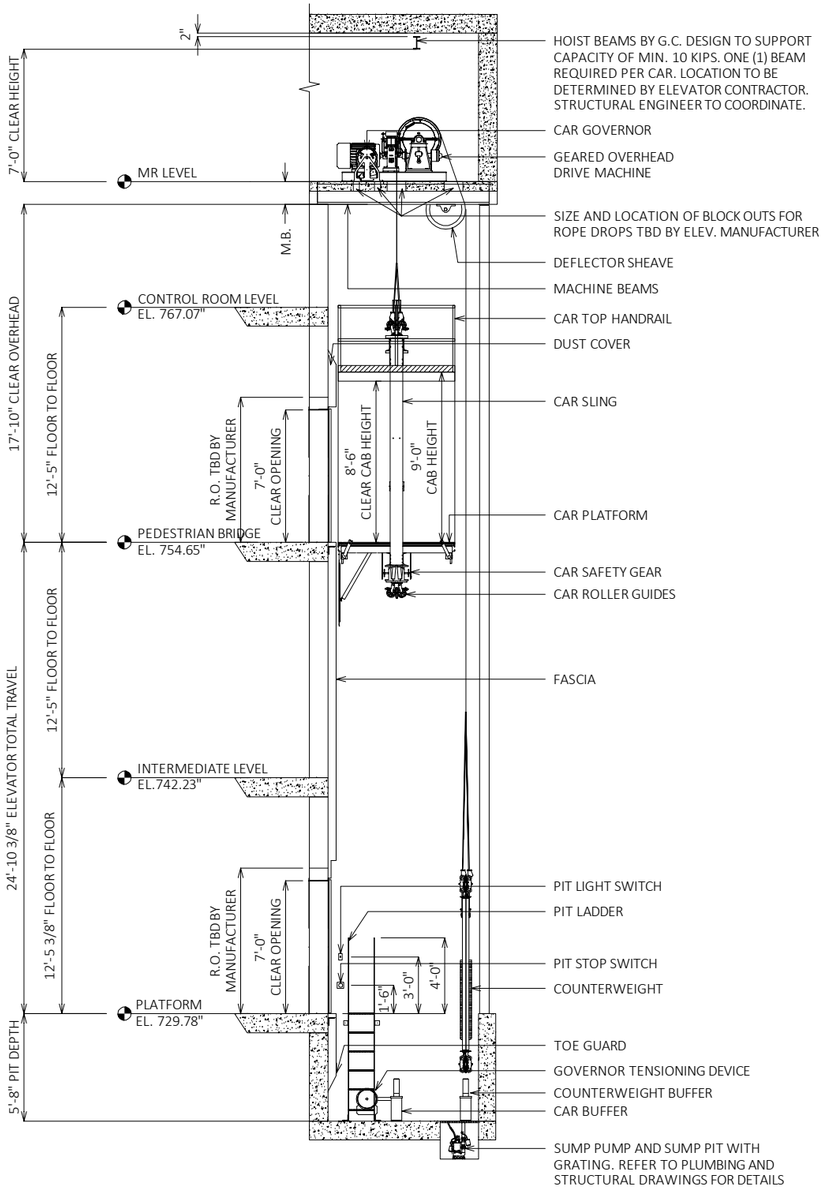
ELEV. 01-04, PIT PLAN VIEW

SHEET VT-102
286

SCALE = AS NOTED

STATE PROJECT NUMBER

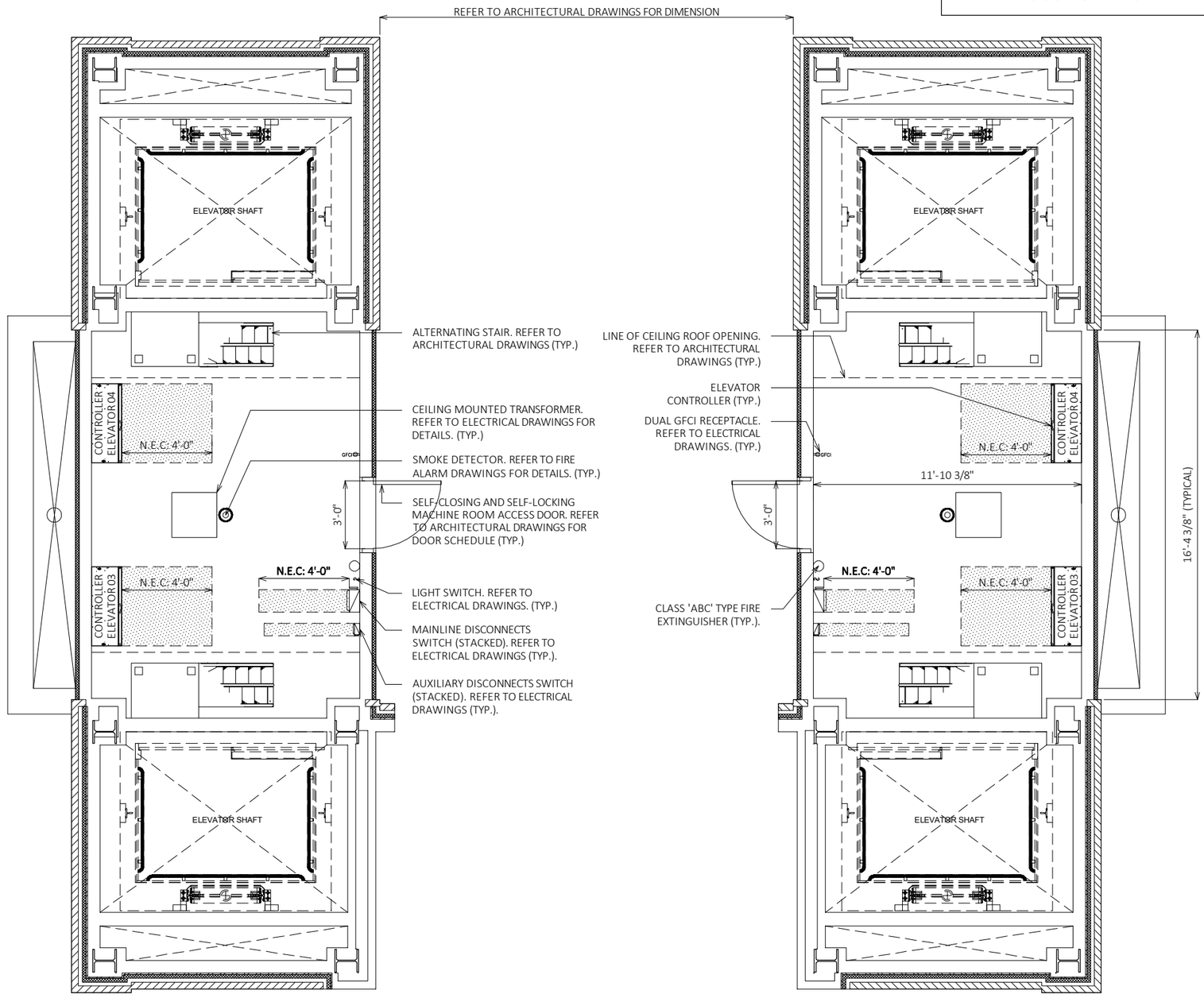
1000-57-70



2 VT-103 **ELEVATORS 01-04, HOISTWAY ELEVATION**

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

0 4 8 16 FT



1 VT-103 **ELEVATORS 01-04, CONTROL ROOM PLAN**

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

0 2 4 8 FT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01-04, ELEVATION & CONTROL ROOM

SHEET VT-103

287

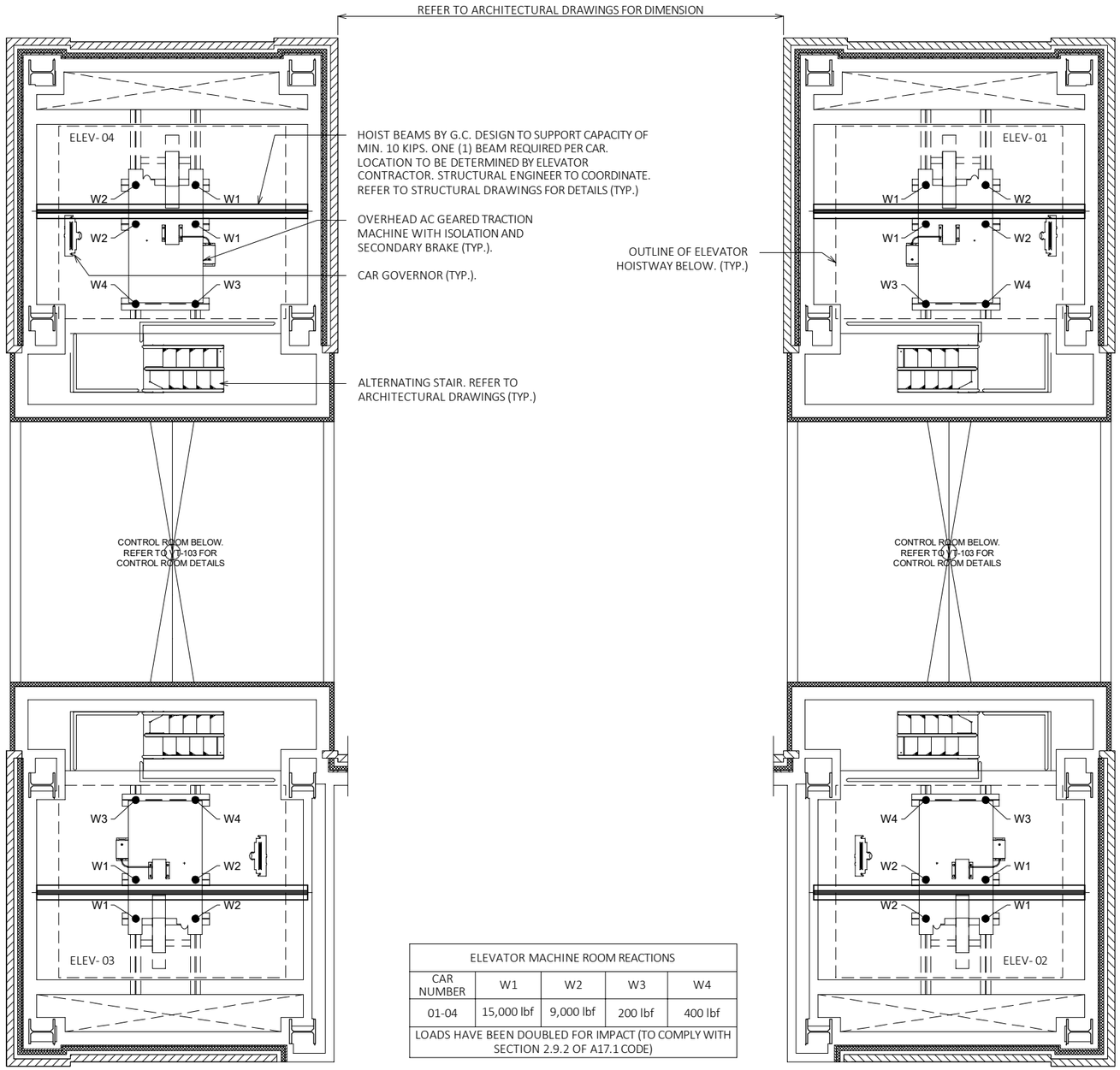
SCALE = AS NOTED

2

2

STATE PROJECT NUMBER

1000-57-70



ELEVATOR MACHINE ROOM REACTIONS				
CAR NUMBER	W1	W2	W3	W4
01-04	15,000 lbf	9,000 lbf	200 lbf	400 lbf
LOADS HAVE BEEN DOUBLED FOR IMPACT (TO COMPLY WITH SECTION 2.9.2 OF A17.1 CODE)				

1 / VT-104 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

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01-04, MACHINE ROOM PLAN

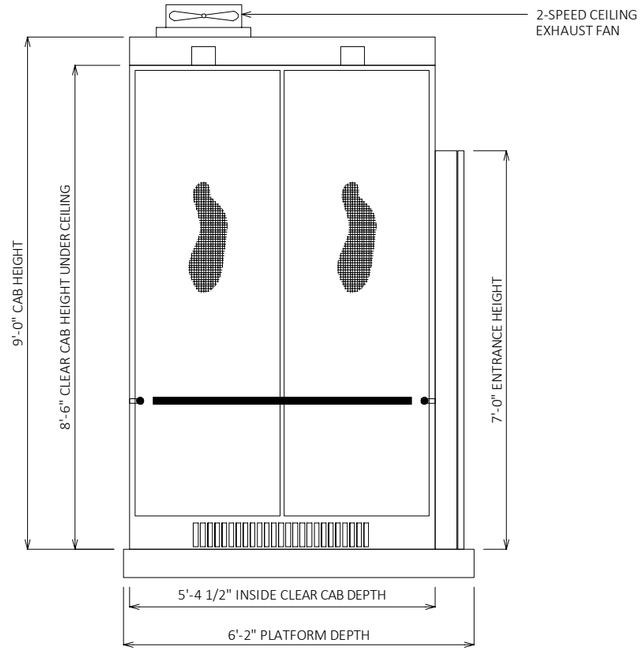
SHEET VT-104

288

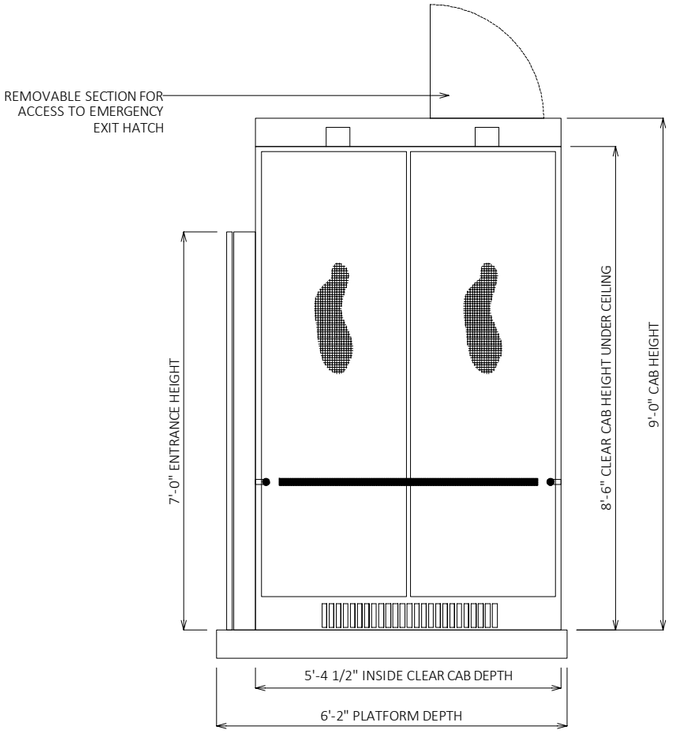
SCALE = AS NOTED

STATE PROJECT NUMBER

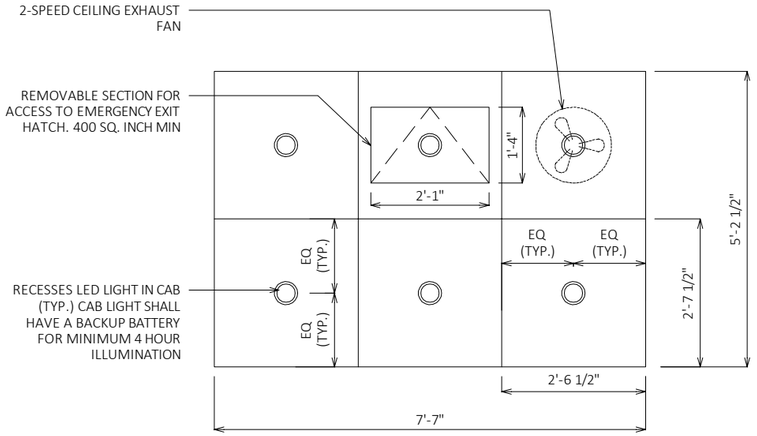
1000-57-70



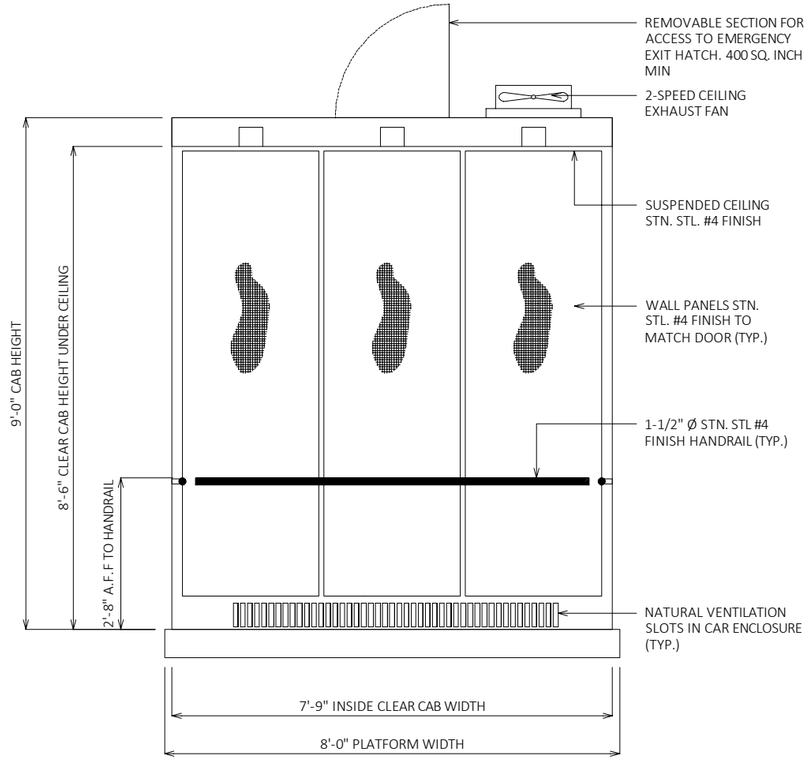
4 VT-201 **CAB ELEVATION "C"**
SCALE: 3/8"=1'-0" 0 1 2 4 FT



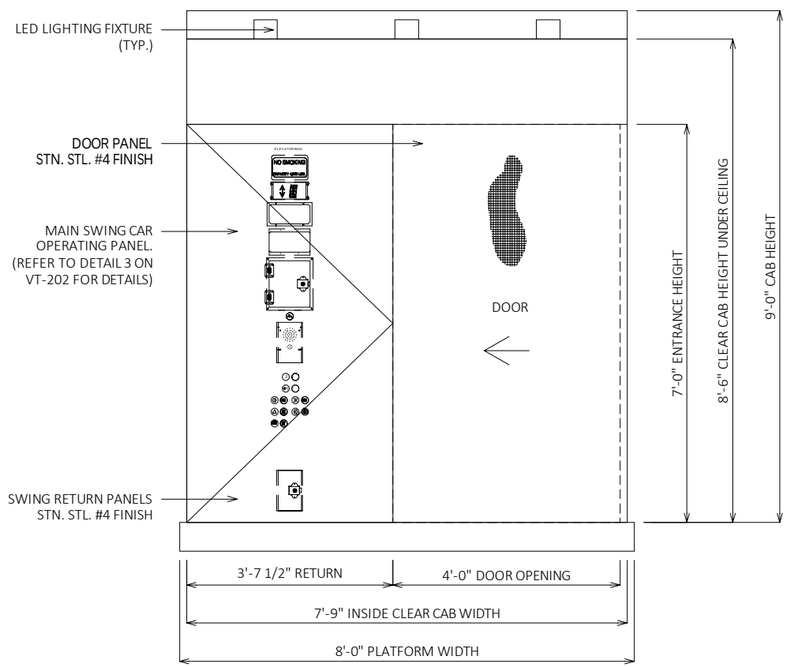
5 VT-201 **CAB ELEVATION "A"**
SCALE: 3/8"=1'-0" 0 1 2 4 FT



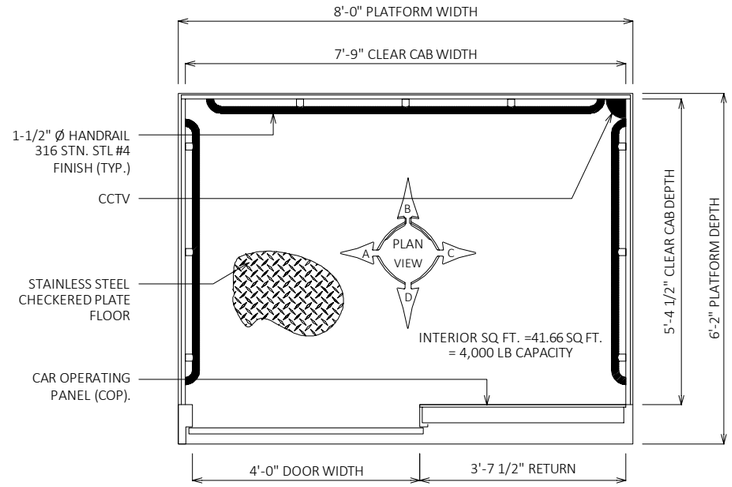
6 VT-201 **REFLECTED CEILING PLAN**
SCALE: 3/8"=1'-0" 0 1 2 4 FT



3 VT-201 **CAB ELEVATION "B"**
SCALE: 3/8"=1'-0" 0 1 2 4 FT



2 VT-201 **CAB ELEVATION "D"**
SCALE: 3/8"=1'-0" 0 1 2 4 FT



1 VT-201 **ELEVATORS 02 & 04 (01 & 02 MIRRORED) CAB PLAN**
SCALE: 3/8"=1'-0" 0 1 2 4 FT

2

2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

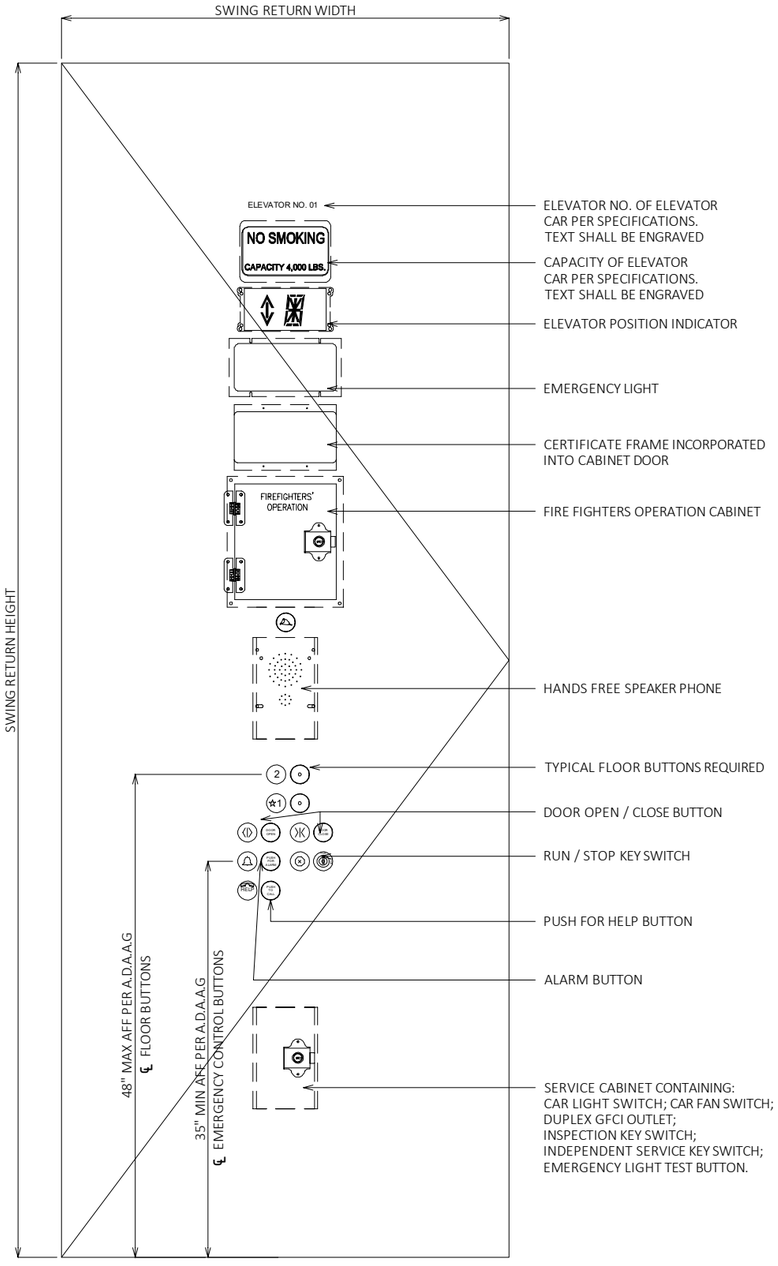
VERTICAL TRANSPORTATION

	DRAWN BY	LD	PLANS CK'D. SY
ELEV. 01-04, CAB PLAN AND SECTION			SHEET VT-201 289

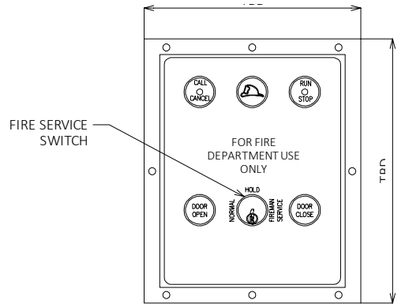
SCALE = AS NOTED

STATE PROJECT NUMBER

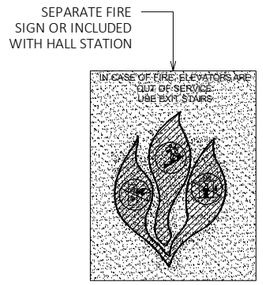
1000-57-70



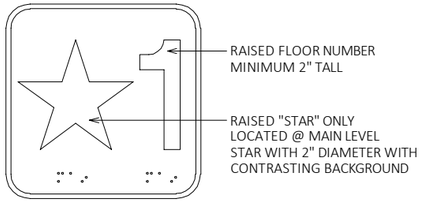
3 VT-202 **MAIN CAR OPERATING PANEL (SWING COP)**
SCALE: N.T.S



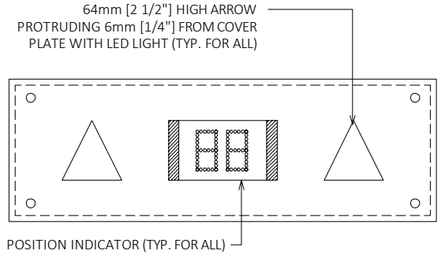
6 VT-202 **FIRE SERVICE SUB-PANEL DETAIL**
SCALE: N.T.S



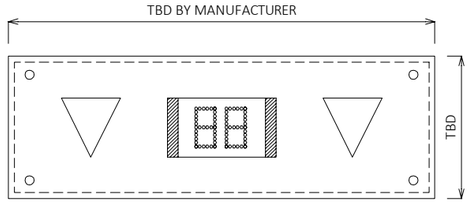
7 VT-202 **FIRE SIGN DETAIL**
SCALE: N.T.S



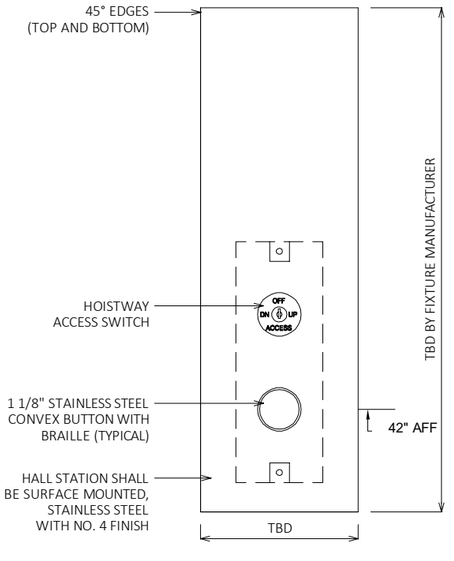
8 VT-202 **JAMB TAGS DETAIL**
SCALE: N.T.S



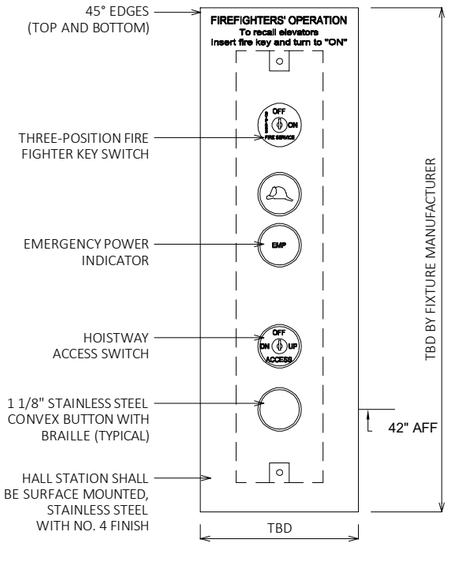
4 VT-202 **HALL LANTERN AT PLATFORM LEVEL**
SCALE: N.T.S



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

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01-04, FIXTURE DETAILS

SHEET VT-202
290

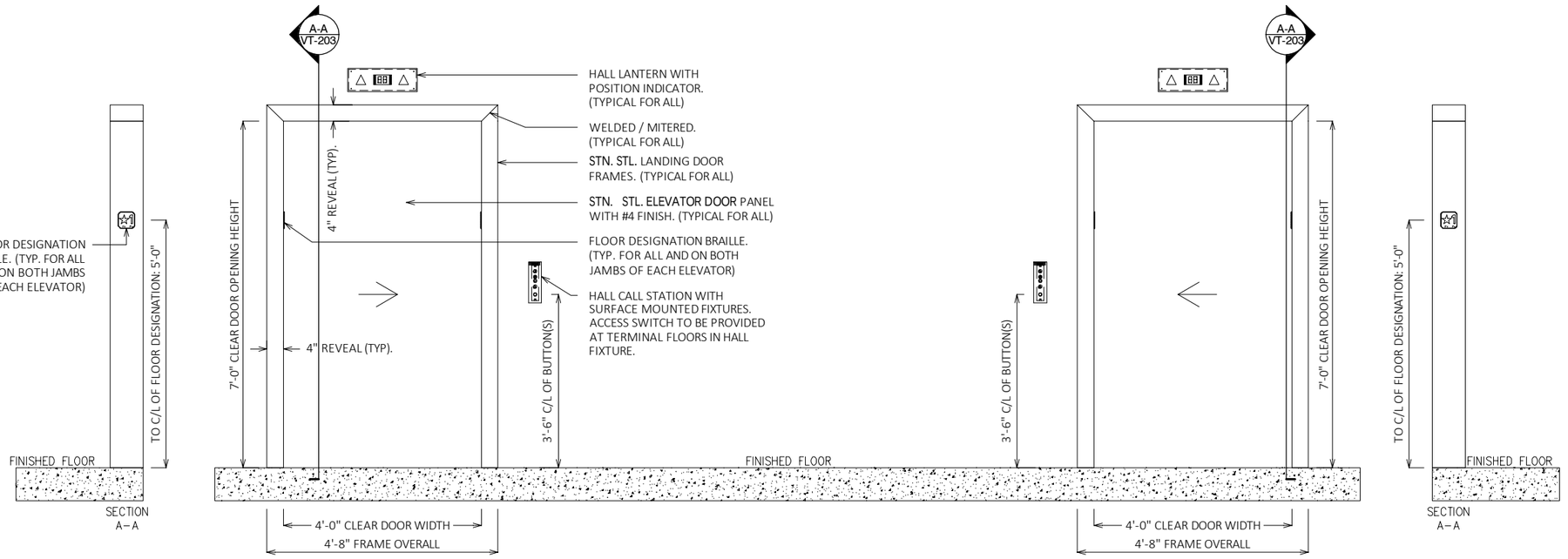
SCALE = AS NOTED

2

2

STATE PROJECT NUMBER

1000-57-70



3 VT-203 ELEVATOR 04 - ENTRANCE ELEVATION VIEW

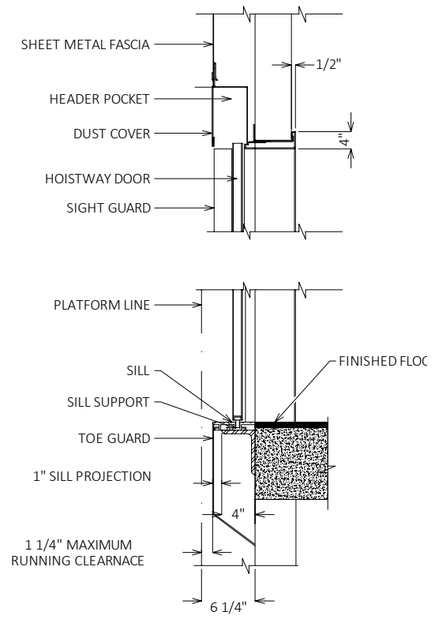
SCALE: 3/8"=1'-0"

0 1 2 4 FT

4 VT-203 ELEVATOR 01 - ENTRANCE ELEVATION VIEW

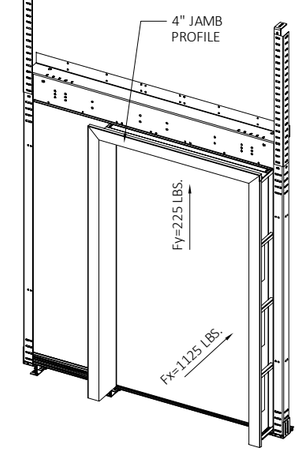
SCALE: 3/8"=1'-0"

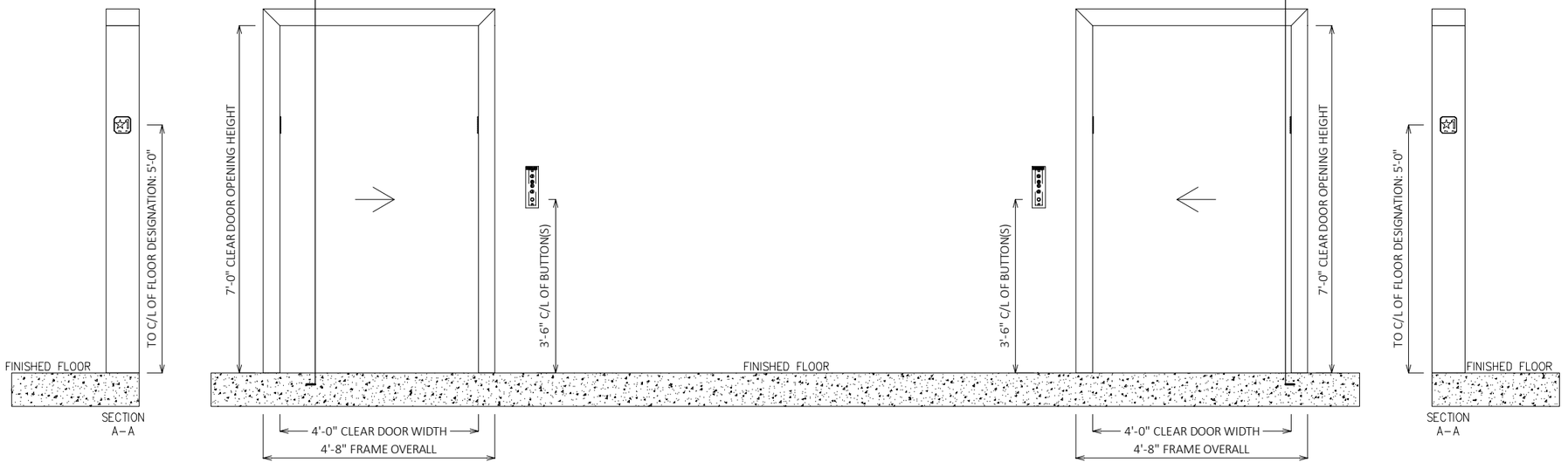
0 1 2 4 FT



5 VT-203 ENTRANCE TYP.

SCALE: N.T.S





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

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01-04, ENTRANCE VIEW

SHEET VT-203

291

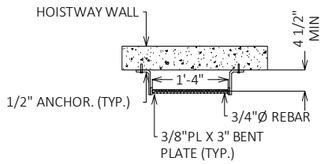
SCALE = AS NOTED

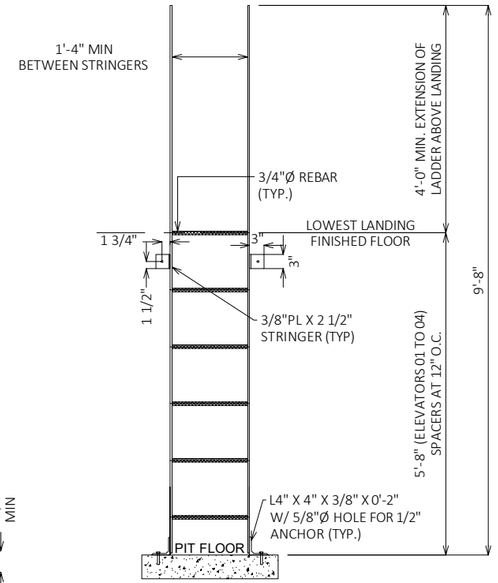
2

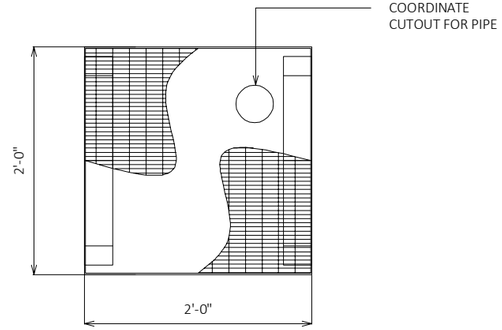
2

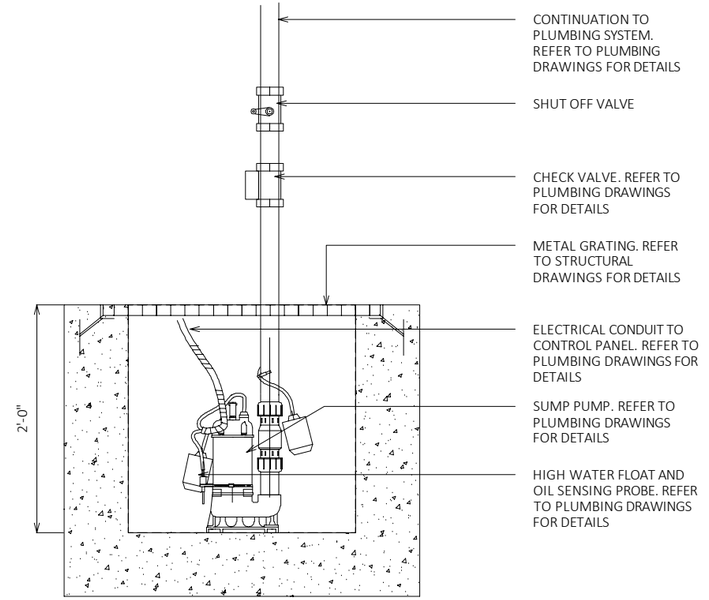
STATE PROJECT NUMBER

1000-57-70







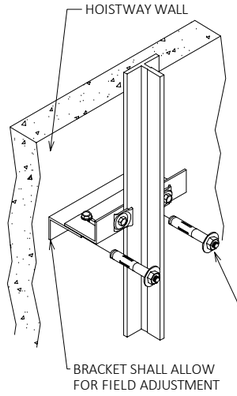


3 VT-204 **PIT LADDER DETAIL**
SCALE: 3/8"=1'-0"

4 VT-204 **PIT LADDER ELEVATION DETAIL**
SCALE: 3/8"=1'-0"

5 VT-204 **TYPICAL PLAN OF SUMP PIT**
SCALE: N.T.S

6 VT-204 **SIMPLEX SUMP PIT DETAIL**
SCALE: N.T.S

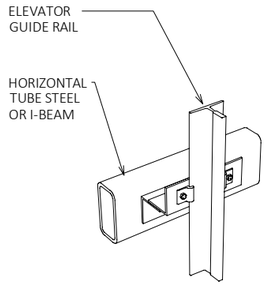


NOTES:

RAIL BRACKET FASTENING SURFACE SHALL WITHSTAND THE RAIL FORCES SHOWN IN THE REACTION TABLE ON PAGE VT-102.

BRACKET SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED STEEL.

BRACKET LOCATIONS SHALL BE COORDINATED BETWEEN ALL CONTRACTORS.



NOTES:

RAIL BRACKET FASTENING SURFACE SHALL WITHSTAND THE RAIL FORCES SHOWN IN THE REACTION TABLE ON PAGE VT-102.

BRACKET SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED STEEL.

BRACKET LOCATIONS SHALL BE COORDINATED BETWEEN ALL CONTRACTORS.

RAIL BRACKETS TO BE FIELD WELDED TO BUILDING BEAM IN LOCATION SHOWN IN STRUCTURAL DRAWINGS.

2 VT-204 **RAIL BRACKET FASTENING DETAIL (CONCRETE WALL)**
SCALE: 3/8"=1'-0"

1 VT-204 **RAIL BRACKET FASTENING DETAIL (STEEL BEAM)**
SCALE: 3/8"=1'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

VERTICAL TRANSPORTATION

DRAWN BY LD | PLANS CK'D. SY

ELEV. 01-04, MISCELLANEOUS DETAILS

SHEET VT-204
292

SCALE = AS NOTED

1000-57-70

Line	Item	Item Description	Unit	Total	Qty
0002	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0004	201.0105	Clearing	STA	14.000	14.000
0006	201.0120	Clearing	ID	28.000	28.000
0008	201.0205	Grubbing	STA	14.000	14.000
0010	201.0220	Grubbing	ID	28.000	28.000
0012	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0014	204.0150	Removing Curb & Gutter	LF	86.000	86.000
0016	204.0155	Removing Concrete Sidewalk	SY	93.000	93.000
0018	204.0170	Removing Fence	LF	610.000	610.000
0020	204.0195	Removing Concrete Bases	EACH	2.000	2.000
0022	204.9060.S	Removing (item description) 01. Landscaping Boulders	EACH	6.000	6.000
0024	204.9060.S	Removing (item description) 02. Removing Bollards	EACH	4.000	4.000
0026	205.0100	Excavation Common	CY	7,620.000	7,620.000
0028	205.0400	Excavation Marsh	CY	26.000	26.000
0030	206.1001	Excavation for Structures Bridges (structure) 01. Pedestrian Bridge & Towers	EACH	1.000	1.000
0032	208.0100	Borrow	CY	158.000	158.000
0034	208.1100	Select Borrow	CY	163.000	163.000
0036	209.1100	Backfill Granular Grade 1	CY	303.000	303.000
0038	210.1100	Backfill Structure Type A	CY	1,082.000	1,082.000
0040	213.0100	Finishing Roadway (project) 01. 1000-57-70	EACH	1.000	1.000
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,350.000	1,350.000
0044	311.0115	Breaker Run	CY	1,090.000	1,090.000
0046	416.0610	Drilled Tie Bars	EACH	16.000	16.000
0048	450.4000	HMA Cold Weather Paving	TON	30.000	30.000
0050	455.0605	Tack Coat	GAL	72.000	72.000
0052	465.0105	Asphaltic Surface	TON	118.000	118.000
0054	465.0125	Asphaltic Surface Temporary	TON	25.000	25.000
0056	502.0100	Concrete Masonry Bridges	CY	718.000	718.000
0058	502.4104	Adhesive Anchors 1/2-inch	EACH	136.000	136.000
0060	505.0400	Bar Steel Reinforcement HS Structures	LB	71,100.000	71,100.000
0062	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	56,120.000	56,120.000
0064	506.3009	Welded Stud Shear Connectors 3/4x5-Inch	EACH	679.000	679.000
0066	516.0500	Rubberized Membrane Waterproofing	SY	292.000	292.000
0068	517.0601	Painting Epoxy System (structure) 01. Pedestrian Bridge & Towers	EACH	1.000	1.000
0070	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0072	550.2128	Piling CIP Concrete 12 3/4 X 0.50-Inch	LF	4,600.000	4,600.000
0074	601.0331	Concrete Curb & Gutter 31-Inch	LF	40.000	40.000
0076	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	46.000	46.000
0078	602.0410	Concrete Sidewalk 5-Inch	SF	5,710.000	5,710.000
0080	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	1,680.000	1,680.000
0082	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	70.000	70.000
0084	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,104.000	1,104.000
0086	611.0530	Manhole Covers Type J	EACH	3.000	3.000
0088	611.0535	Manhole Covers Type J-Special	EACH	3.000	3.000
0090	611.0606	Inlet Covers Type B	EACH	11.000	11.000
0092	611.0610	Inlet Covers Type BW	EACH	1.000	1.000
0094	611.2003	Manholes 3-FT Diameter	EACH	3.000	3.000
0096	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000
0098	611.3004	Inlets 4-FT Diameter	EACH	12.000	12.000

1000-57-70

Line	Item	Item Description	Unit	Total	Qty
0100	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000
0102	611.9710	Salvaged Inlet Covers	EACH	1.000	1.000
0104	612.0108	Pipe Underdrain 8-Inch	LF	870.000	870.000
0106	612.0208	Pipe Underdrain Unperforated 8-Inch	LF	113.000	113.000
0108	616.0204	Fence Chain Link 4-FT	LF	14.000	14.000
0110	616.0206	Fence Chain Link 6-FT	LF	637.000	637.000
0112	616.0329	Gates Chain Link (width) 01. 5-FT	EACH	2.000	2.000
0114	616.0329	Gates Chain Link (width) 02. 22-FT	EACH	1.000	1.000
0116	616.0700.S	Fence Safety	LF	1,000.000	1,000.000
0118	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1000-57-70	EACH	1.000	1.000
0120	619.1000	Mobilization	EACH	1.000	1.000
0122	624.0100	Water	MGAL	26.000	26.000
0124	625.0100	Topsoil	SY	5,680.000	5,680.000
0126	628.1504	Silt Fence	LF	820.000	820.000
0128	628.1520	Silt Fence Maintenance	LF	820.000	820.000
0130	628.1905	Mobilizations Erosion Control	EACH	20.000	20.000
0132	628.1910	Mobilizations Emergency Erosion Control	EACH	13.000	13.000
0134	628.2006	Erosion Mat Urban Class I Type A	SY	5,680.000	5,680.000
0136	628.2021	Erosion Mat Class II Type A	SY	2,530.000	2,530.000
0138	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0140	628.7504	Temporary Ditch Checks	LF	60.000	60.000
0142	628.7555	Culvert Pipe Checks	EACH	3.000	3.000
0144	629.0210	Fertilizer Type B	CWT	4.200	4.200
0146	630.0120	Seeding Mixture No. 20	LB	110.000	110.000
0148	630.0200	Seeding Temporary	LB	110.000	110.000
0150	630.0500	Seed Water	MGAL	2,076.000	2,076.000
0152	631.0300	Sod Water	MGAL	58.000	58.000
0154	631.1000	Sod Lawn	SY	2,515.000	2,515.000
0156	632.0101	Trees (species) (size) (root) 01. Juniperus Chinensis 'Ketelleri', B&B, 6' HT	EACH	15.000	15.000
0158	632.0101	Trees (species) (size) (root) 02. Juniperus Scopoulorum 'Moonglow', B&B, 6' HT	EACH	15.000	15.000
0160	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	13.000	13.000
0162	638.2102	Moving Signs Type II	EACH	1.000	1.000
0164	642.5201	Field Office Type C	EACH	1.000	1.000
0166	643.0300	Traffic Control Drums	DAY	9,519.000	9,519.000
0168	643.0420	Traffic Control Barricades Type III	DAY	3,718.000	3,718.000
0170	643.0715	Traffic Control Warning Lights Type C	DAY	2,782.000	2,782.000
0172	643.0800	Traffic Control Arrow Boards	DAY	284.000	284.000
0174	643.0900	Traffic Control Signs	DAY	4,681.000	4,681.000
0176	643.5000	Traffic Control	EACH	1.000	1.000
0178	646.1005	Marking Line Paint 4-Inch	LF	100.000	100.000
0180	646.8305	Marking Parking Stall Paint	LF	80.000	80.000
0182	650.4000	Construction Staking Storm Sewer	EACH	35.000	35.000
0184	650.5000	Construction Staking Base	LF	706.000	706.000
0186	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	86.000	86.000
0188	650.6501	Construction Staking Structure Layout (structure) 01. Pedestrian Bridge & Towers	EACH	1.000	1.000
0190	650.8501	Construction Staking Electrical Installations (project) 01. 1000-57-70	EACH	1.000	1.000
0192	650.9500	Construction Staking Sidewalk (project) 01. 1000-57-70	EACH	1.000	1.000
0194	650.9911	Construction Staking Supplemental Control (project) 01. 1000-57-70	EACH	1.000	1.000
0196	650.9920	Construction Staking Slope Stakes	LF	1,676.000	1,676.000

1000-57-70

Line	Item	Item Description	Unit	Total	Qty
0198	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	2.000	2.000
0200	690.0150	Sawing Asphalt	LF	96.000	96.000
0202	690.0250	Sawing Concrete	LF	66.000	66.000
0204	715.0502	Incentive Strength Concrete Structures	DOL	4,494.000	4,494.000
0206	801.0117	Railroad Flagging Reimbursement	DOL	285,660.000	285,660.000
0208	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,000.000	4,000.000
0210	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	13,500.000	13,500.000
0212	SPV.0060	Special 01. Diesel-Engine-Driven Generator Sets	EACH	1.000	1.000
0214	SPV.0060	Special 02. Canopy Column Anchor Rod Assemblies	EACH	26.000	26.000
0216	SPV.0060	Special 03. Tower Column Anchor Rod Assemblies	EACH	46.000	46.000
0218	SPV.0060	Special 04. Switchboards	EACH	1.000	1.000
0220	SPV.0060	Special 05. Transfer Switches	EACH	1.000	1.000
0222	SPV.0060	Special 06. Traction Elevators	EACH	4.000	4.000
0224	SPV.0060	Special 07. Doors And Door Hardware	EACH	22.000	22.000
0226	SPV.0060	Special 08. Utility Line Opening (ULO)	EACH	20.000	20.000
0228	SPV.0060	Special 09. Marking Line Paint Text 4-Inch Black	EACH	32.000	32.000
0230	SPV.0060	Special 10. Pipe Bollard	EACH	4.000	4.000
0232	SPV.0060	Special 11. Sanitary Manhole 4-Foot Diameter	EACH	1.000	1.000
0234	SPV.0060	Special 12. Grass, Blue Oat	EACH	17.000	17.000
0236	SPV.0060	Special 13. Grass, Hameln Dwarf Foundation	EACH	21.000	21.000
0238	SPV.0060	Special 14. Grass, Karl Foerster Reed	EACH	36.000	36.000
0240	SPV.0060	Special 15. Remove and Salvage Lighting Equipment	EACH	2.000	2.000
0242	SPV.0060	Special 16. Fall Restraint System	EACH	1.000	1.000
0244	SPV.0060	Special 17. HVAC Work	EACH	1.000	1.000
0246	SPV.0060	Special 18. Lighting	EACH	1.000	1.000
0248	SPV.0060	Special 19. General Electrical Work	EACH	1.000	1.000
0250	SPV.0060	Special 20. Fire Alarm System	EACH	1.000	1.000
0252	SPV.0060	Special 21. Lightning Protection For Structures	EACH	1.000	1.000
0254	SPV.0060	Special 22. Plumbing Work	EACH	1.000	1.000
0256	SPV.0060	Special 23. Stairs	EACH	1.000	1.000
0258	SPV.0060	Special 24. Rough Carpentry	EACH	1.000	1.000
0260	SPV.0060	Special 25. Metal Fabrications	EACH	1.000	1.000
0262	SPV.0060	Special 26. Gypsum Board Partitions And Assemblies	EACH	1.000	1.000
0264	SPV.0060	Special 27. Ceilings	EACH	1.000	1.000
0266	SPV.0060	Special 28. Interior And Exterior Signage	EACH	1.000	1.000
0268	SPV.0060	Special 29. Other Architectural Work	EACH	1.000	1.000
0270	SPV.0060	Special 30. Fire Suppression	EACH	1.000	1.000
0272	SPV.0060	Special 31. Pids, Communications, And Security Work	EACH	1.000	1.000
0274	SPV.0060	Special 32. Wheelchair Lift Enclosure, New and Relocations	EACH	1.000	1.000
0276	SPV.0085	Special 01. Structural Steel	LB	371,847.000	371,847.000
0278	SPV.0090	Special 01. Railing Pipe	LF	180.000	180.000
0280	SPV.0090	Special 02. Drilled Shaft Foundations 24-Inch	LF	555.000	555.000
0282	SPV.0090	Special 03. Helical Pile	LF	2,190.000	2,190.000
0284	SPV.0090	Special 04. Marking Line Paint 4.5-Inch Yellow	LF	800.000	800.000
0286	SPV.0090	Special 05. Marking Line Contrast Paint 2-Inch Black	LF	800.000	800.000
0288	SPV.0090	Special 06. Removable Intertrack Fence	LF	825.000	825.000
0290	SPV.0090	Special 07. Sanitary Sewer PVC 6-Inch	LF	110.000	110.000
0292	SPV.0090	Special 08. Sanitary Sewer PVC 8-Inch	LF	60.000	60.000
0294	SPV.0090	Special 09. Concrete Barrier Temporary Precast Left In Place	LF	300.000	300.000

1000-57-70

Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0090	Special 10. Construction Staking Fence	LF	651.000	651.000
0298	SPV.0165	Special 01. Masonry And Cast Stone Work	SF	9,916.000	9,916.000
0300	SPV.0165	Special 02. Steel Decking	SF	8,115.000	8,115.000
0302	SPV.0165	Special 03. Aluminum And Glass Curtainwalls	SF	7,278.000	7,278.000
0304	SPV.0165	Special 04. Roofing And Accessories	SF	11,995.000	11,995.000
0306	SPV.0165	Special 05. Exterior Metal Panels	SF	1,274.000	1,274.000
0308	SPV.0165	Special 06. Louvers	SF	1,278.000	1,278.000
0310	SPV.0165	Special 07. Finishes	SF	20,373.000	20,373.000
0312	SPV.0165	Special 08. Temporary Shoring Railroad	SF	2,400.000	2,400.000

3

CLEARING AND GRUBBING

LOCATION	ALI	STATION	-	STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	201.0120 CLEARING ID	201.0220 GRUBBING ID
WEST OF RR	WEST ACCESS	99+50		108+50	9	9	-	-
WEST ACCESS		0+00		4+00	4	4	28	28
PROPOSED EAST TOWER		103+45		104+36	1	1	-	-
		TOTAL			14	14	28	28

REMOVING PIPE

ALI	- STATION	OFFSET	SIZE (IN)	TYPE	LENGTH (FT)	203.0100 REMOVING SMALL PIPE CULVERTS EACH
TRACK 2	103+38	61' RT	24	CULVERT	24	1
TRACK 2	104+26	40' RT	24	CULVERT	25	1
WEST ACCESS	4+06	10' LT	24	CULVERT	18	1
TOTAL						3

3

REMOVALS

LOCATION	ALI	STA	STA	OFF	SIDE	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0170 REMOVING FENCE LF	204.0195 REMOVING CONCRETE BASES EACH	204.9060.S.01 REMOVING LANDSCAPING BOULDERS EACH	204.9060.S.02 REMOVING BOLLARDS EACH	611.9710 SALVAGED INLET COVERS EACH	SPV.0060.15 REMOVE AND SALVAGE LIGHTING EQUIPMENT EACH	659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
PARKING LOT TEMP ACCESS - 6TH ST	ACCESS ROAD	26+45	27+00	0-52'	LT	86	27	-	-	-	-	-	-	-
PARKING LOT DROP OFF AREA	ACCESS ROAD	30+90	30+98	28'	RT	-	-	-	-	-	4	1	-	-
PARKING LOT SIDEWALK	TRACK 2	103+95	104+34	132-57'	RT	-	60	-	-	-	-	-	-	-
WHEELCHAIR LIFT STORAGE	TRACK 2	103+57	103+64	19'	RT	-	6	-	-	-	-	-	-	-
PARKING LOT	PARKING LOT	0+60	0+85	20'	LT	-	-	25	-	-	-	-	-	-
WEST TOWER BACKSLOPE	FRONT OF WEST PLATFORM	99+92	104+35	60-92'	LT	-	-	470	-	-	-	-	-	-
PROPOSED EASTTOWER	TRACK 2	103+80	140+20	27-65'	RT	-	-	-	-	6	-	-	-	-
ALONG EXISTING SIDEWALK	TRACK 2	104+03	-	116'	RT	-	-	-	1	-	-	-	1	1
ALONG EXISTING SIDEWALK	TRACK 2	104+20	-	66'	RT	-	-	-	1	-	-	-	1	1
WEST ACCESS	WEST ACCESS ROAD	3+94	4+30		LT	-	-	115	-	-	-	-	-	-
TOTAL						86	93	610	2	6	4	1	2	2

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

3

EARTHWORK

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0400 MARSH EXCAVATION (6)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	(CY) 208.1100 SELECT BORROW
DIVISION 1											
WEST ACCESS	00+00/5+96	1,703	0	1,703	4	1,074	1,340	364	364	0	4
EAST TOWER AREA	00+00/08+36.696	13	0	13	0	0	171	-158	0	158	0
EAST TOWER FILL	103+61/104+26	0	0	0	22	137	137	-137	0	0	159
WEST TOWER AREA AND DITCH	98+00/110+37.1	5,672	0	5,672	0	1,601	2,001	3,671	3,671	0	0
PERSONNEL PARKING	00+00/01+32.428	213	0	213	0	0	0	213	213	0	0
SIDEWALKS TO PARKING	00+00/01+05.593	19	0	19	0	4	5	14	14	0	0
DIVISION 1 SUBTOTAL		7,620	0	7,620	26	2,816	3,654	3,966	4,261	158	163
GRAND TOTAL		7,620	0	7,620	26	2,816	3,654	3,966	4,261	158	163
	TOTAL COMMON EXC	7,620									

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR =1.25

DEPENDING ON SELECTION **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR**

EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR

EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR

EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx

ORIGINATOR: JESSICA LANCELLE

PLOTTED DATE: 10/12/2022 12:30 PM

PAVING ITEMS

STATION	-	STATION	ALI	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0115 BREAKER RUN CY	602.0410 CONCRETE SIDEWALK 5-INCH SF	624.0100 WATER MGAL	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0331 CONCRETE CURB & GUTTER 31-INCH TYPE D LF	416.0610 DRILLED TIE BARS EACH
26+45		27+00	ACCESS ROAD	PARKING LOT TEMP ACCESS - 6TH ST	53	-	240	1	-	10	-	25	46	40	16
0+15		1+25	PARKING	PERSONNEL PARKING	298	-	-	5	30	62	118	-	-	-	-
0+00		5+96	WEST ACCESS	WEST ACCESS ROAD	818	1,090	-	13	-	-	-	-	-	-	-
103+35		104+35	TRACK 1	SIDEWALK - EAST TOWER	49	-	1,960	1	-	-	-	-	-	-	-
103+40		103+50	TRACK 1	GENERATOR LEVELING PAD	-	-	100	-	-	-	-	-	-	-	-
103+55		103+86	TRACK 1	TRANSFORMER LEVELING PAD	-	-	320	-	-	-	-	-	-	-	-
0+00		1+05	SIDEWALK	SIDEWALK - PARKING	30	-	1,180	1	-	-	-	-	-	-	-
99+00		100+00	BACK OF WEST PLATFORM	SOUTH END OF PLATFORM - DITCH	29	-	-	1	-	-	-	-	-	-	-
100+00		100+05	BACK OF WEST PLATFORM	SIDEWALK - SOUTH EMERGENCY REFUGE	8	-	290	1	-	-	-	-	-	-	-
103+56		104+26	BACK OF WEST PLATFORM	SIDEWALK - WEST TOWER	33	-	1,330	1	-	-	-	-	-	-	-
106+05		106+10	BACK OF WEST PLATFORM	SIDEWALK - NORTH EMERGENCY REFUGE	8	-	290	1	-	-	-	-	-	-	-
108+00		108+80	BACK OF WEST PLATFORM	NORTH END OF PLATFORM - DITCH	24	-	-	1	-	-	-	-	-	-	-
TOTAL					1,350	1,090	5,710	26	30	72	118	25	46	40	16

FINISHING ROADWAY

LOCATION	213.0100 FINISHING ROADWAY 1000-57-70 EACH
PROJECT	1

DETECTABLE WARNING FIELDS

LOCATION	ALI	STA	STA	SIDE	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
EAST TRACK	BACK OF WEST PLATFORM	100+00	108+00	LT	1600
SAFE REFUGE - SOUTH	BACK OF WEST PLATFORM	100+00	-	LT/RT	38
SAFE REFUGE - NORTH	BACK OF WEST PLATFORM	108+00	108+56	RT	32
PERSONNEL PARKING	SIDEWALK TO PARKING	0+00	0+02	LT/RT	10
TOTAL					1680

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx
ORIGINATOR: JESSICA LANCELLE
PLOTTED DATE: 10/12/2022 12:30 PM

STORM & SANITARY SEWER PIPES

STA	STA	ALI	STRUCTURE FROM	-	TO	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	SPV.0090.07 SANITARY SEWER PVC 6-INCH LF	SPV.0090.08 SANITARY SEWER PVC 8-INCH LF	UPSTREAM ELEVATION	DOWNSTREAM ELEVATION	SLOPE %
99+10	99+96	WEST PLATFORM	W-1		W-2	-	88	1	-	-	725.00	724.84	0.0020
99+96	100+67		W-2		W-3	-	71	-	-	-	724.84	724.69	0.0020
100+67	102+00		W-3		W-4	-	131	-	-	-	724.69	724.42	0.0020
102+00	103+50		W-4		W-5	-	150	-	-	-	724.42	724.12	0.0020
103+50	103+82		W-5		W-6	-	30	-	-	-	724.12	724.06	0.0020
103+82	104+50		W-6		W-7	-	70	-	-	-	724.06	723.95	0.0015
104+50	105+65		W-7		W-8	-	115	-	-	-	723.95	723.72	0.0020
105+65	106+67		W-8		W-9	-	102	-	-	-	723.72	723.52	0.0020
106+67	107+33		W-9		W-10	-	67	-	-	-	723.52	723.38	0.0020
107+33	108+00		W-10		W-11	-	67	1	-	-	723.38	723.25	0.0020
103+26	103+48	TRACK 1	E-1		E-2	-	25	1	-	-	725.60	725.10	0.0198
103+48	103+51		E-2		E-3	-	33	-	-	-	725.10	724.94	0.0050
103+51	104+39		E-3		E-4	-	88	-	-	-	724.94	724.51	0.0050
104+39	104+39		E-4		E-5	-	20	-	-	-	724.51	724.41	0.0050
4+30		WEST ACCESS	A-1		A-2	-	47	1	-	-	734.25	733.83	0.0090
5+16			A-3		W-8	70	-	-	-	-	730.00	729.50	0.0071
0+03	0+62	PARKING LOT	BUILDING		SAN-CLEAN	-	-	-	-	60	722.97	722.92	1.0000
0+62			SAN-CLEAN		SAN-1	-	-	-	105		722.92	721.88	
0+62	1+30		SAN-1		EX MH	-	-	-	5	-	716.25	715.68	1.0000
			TOTAL			70	1104	4	110	60			

CONCRETE BARRIER

LOCATION	SPV.0090.09 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF
WEST ACCESS - AROUND TOWERS	300
TOTAL	300

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

STORM & SANITARY SEWER STRUCTURES

STRUCTURE		STATION	OFFSET	ALI	611.0530 MANHOLE COVERS TYPE J EACH	611.0535 MANHOLE COVERS TYPE J SPECIAL EACH	611.0610 INLET COVERS TYPE BW EACH	611.0606 INLET COVERS TYPE B EACH	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	SPV.0060.11 SANITARY MANHOLES 4-FT DIAMETER EACH	RIM ELEVATION
W-1	ENDWALL	99+10	LT	WEST PLATFORM	-	-	-	-	-	-	-	-	-
W-2		99+96	LT		-	1	-	-	-	1	-	-	730.02
W-3		100+67	LT		-	-	-	1	-	-	1	-	730.44
W-4		102+00	LT		-	-	-	1	-	-	1	-	730.00
W-5		103+50	LT		-	-	-	1	-	-	1	-	729.21
W-6		103+82	LT		-	-	-	1	-	-	1	-	728.45
W-7		104+50	LT		-	-	-	1	-	-	1	-	728.54
W-8		105+65	LT		-	-	-	1	-	-	1	-	727.67
W-9		106+67	LT		-	-	-	1	-	-	1	-	726.89
W-10		107+33	LT		-	1	-	-	-	1	-	-	726.38
W-11	ENDWALL	108+00	LT		-	-	-	-	-	-	-	-	-
E-1	ENDWALL	103+26	RT	TRACK ONE	-	-	-	-	-	-	-	-	-
E-2		103+48	RT		-	-	-	1	-	-	1	-	728.66
E-3		103+51	RT		-	-	-	1	-	-	1	-	730.00
E-4		104+39	RT		-	-	-	1	-	-	1	-	729.45
E-5		104+83	RT		-	-	-	1	-	-	1	-	729.83
A-2		4+30	LT	WEST ACCESS	-	1	-	-	-	1	-	-	737.57
A-3		5+16	RT	WEST ACCESS	-	-	1	-	-	-	1	-	735.89
SAN-1		0+62	LT	PARKING LOT	-	-	-	-	-	-	-	1	728.75
U-3		1+29	RT	PARKING LOT	1	-	-	-	1	-	-	-	729.94
U-1		104+31	LT	WEST PLATFORM	1	-	-	-	1	-	-	-	729.30
U-2		104+31	LT	WEST PLATFORM	1	-	-	-	1	-	-	-	729.29
TOTAL					3	3	1	11	3	3	12	1	

PIPE UNDERDRAIN

FROM	-	TO	LOCATION	612.0108 PIPE UNDERDRAIN 8-INCH LF	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF
103+35		103+92	EAST TOWER STORM OUTLET	-	60
103+56		104+26	BEHIND WEST TOWER	70	-
104+26		104+50	BEHIND WEST TOWER	-	53
100+00		108+00	UNDER PLATFORM	800	-
TOTAL				870	113

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx
ORIGINATOR: JESSICA LANCELLE
PLOTTED DATE: 10/12/2022 12:30 PM

3

FENCE SAFETY

LOCATION	616.0700.S FENCE SAFETY LF
PARKING LOT PLATFORM	60
SOUTH OF EXISTING BUILDING	220
NORTH OF EXISTING BUILDING	220
UNDISTRIBUTED	500
TOTAL	1,000

FENCE

LOCATION	ALI	STATION	OFFSET	STATION	OFFSET	616.0204 FENCE CHAIN LINK 4-FT LF	616.0206 FENCE CHAIN LINK 6-FT LF	616.0329.01 GATES CHAIN LINK 5-FT (WIDTH) EACH	616.0329.02 GATES CHAIN LINK 22-FT (WIDTH) EACH
PARKING LOT	PARKING LOT	0+60	30' LT	1+35	27' LT	-	67	-	-
WEST TOWER	FRONT OF WEST PLATFORM	99+92	-	104+35	60-92' LT	-	470	-	-
WEST ACCESS	WEST ACCESS	4+30	27' LT	3+94	63' LT	-	100	-	1
WEST PLATFORM	TRACK 2	107+55	9' LT	107+55	21' LT	7	-	1	-
EAST PLATFORM	TRACK 1	107+75	22' RT	107+75	34' RT	7	-	1	-
TOTAL						14	637	2	1

3

MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS EACH
1000-57-70	1
TOTAL	**1**

MOBILIZATION

PROJECT	619.1000 MOBILIZATION EACH
1000-57-70	1
TOTAL	1

EROSION CONTROL MOBILIZATION

PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
1000-57-70	20	13
TOTAL	**20**	**13**

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx
ORIGINATOR: JESSICA LANCELLE
PLOTTED DATE: 10/12/2022 12:30 PM

3

3

LANDSCAPING

LOCATION	STATION	-	STATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2021 EROSION MAT CLASS II TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	631.1000 SOD LAWN SY	631.0300 SOD WATER MGAL	630.0500 SEED WATER MGAL
WEST OF RR - SEED	99+00		108+50	2329	2,329	-	1.47	42.0	42.0	-	-	837
WEST OF RR - SOD	99+00		108+50	-	-	1,848	-	-	30.7	1,848	42	39
WEST ACCESS - SEED - CONSTRUCTION	0+00		5+96	1097	1,097	-	0.69	19.8	5.9	-	-	395
WEST ACCESS - SEED - FINAL	0+00		4+23	1727	1,727	-	1.09	31.1	9.3	-	-	621
PROPOSED EAST TOWER	103+00		104+25	-	-	438	-	-	7.9	438	10	10
UNDISTRIBUTED	1000-57-70			522	522	235	0.99	8.9	8.9	229	6	174
TOTAL				5,680	5,680	2,530	4.2	110.0	110.0	2,515	58	2,076

EROSION CONTROL

LOCATION	STATION	-	STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7010 INLET PROTECTION TYPE B EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	611.8120.S COVER PLATES TEMPORARY EACH
WEST OF RR	99+00		108+50	-	-	-	60	-	-
PROPOSED EAST TOWER	103+00		104+25	-	-	-	-	2	-
PERSONNEL PARKING	102+85		103+45	175	175	-	-	-	-
NORTH OF EXISTING BUILDING	104+75		105+90	500	500	-	-	-	-
ACCESS ROAD	26+00		32+90	-	-	2	-	-	1
WEST ACCESS ROAD	0+00		5+96	145	145	-	-	1	-
TOTAL				820	820	2	60	3	1

PLANTING

SYMBOL	ITEM NUMBER	ITEM DESCRIPTION	SCIENTIFIC NAME	COMMON NAME	ROOT ZONE MODE	SIZE WHEN PLANTED	UNIT	QUANTITY	TOTAL
KJ	632.0101.01	TREES	JUNIPERUS CHINENSIS	'KETELEERI'	B&B	6' HT	EACH	15	15
MJ	632.0101.02	TREES	JUNIPERUS SCOPOULORUM	'MOONGLOW'	B&B	6' HT	EACH	15	15
BOG	SPV.0060.12	PERENNIALS & GRASSES - SHORT	HELICTOTRICHON SEMPERVIRENS	'GRASS, BLUE OAT'	CONTAINER	6"	EACH	17	17
HDG	SPV.0060.13	PERENNIALS & GRASSES - SHORT	PENNISETUM ALOPECUROIDES	'GRASS, HAMELN DWARF FOUNDATION'	CONTAINER	6"	EACH	21	21
KFG	SPV.0060.14	PERENNIALS & GRASSES -TALL	CALAMAGROSTIS-X ACUTIFLORA	'GRASS, KARL FOERSTER REED'	CONTAINER	6"	EACH	36	36
-	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES					EACH	13	13

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

3

MOVING SIGNS

LOCATION	STA	SIGN CODE	SIGN MESSAGE	638.2102 MOVING SIGNS TYPE II EACH
PARKING AREA	30+26 LT	R-SERIES	AUTHORIZED VEHICLES ONLY	1
TOTAL				1

FIELD OFFICE

PROJECT	642.5201 TYPE C EACH
1000-57-70	1
TOTAL	1

3

TRAFFIC CONTROL

PROJECT	643.5000 TRAFFIC CONTROL EACH
1000-57-70	1
TOTAL	1

TRAFFIC CONTROL

STAGE	DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS NO.	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS NO.	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS DAY
1 - SHLDR CLOSURE	14	10	140	-	-	-	-	-	-	5	70
1	42	5	210	8	336	-	-	-	-	7	294
STH 119	14	67	938	2	28	26	364	2	28	13	182
2	90	5	450	9	810	-	-	-	-	8	720
STH 119	21	67	1407	2	42	26	546	2	42	13	273
3	120	5	600	9	1,080	-	-	-	-	8	960
STH 119	30	67	2010	2	60	26	780	2	60	13	390
4	42	5	210	9	378	-	-	-	-	8	336
STH 119	14	67	938	2	28	26	364	2	28	13	182
5	60	5	300	9	540	-	-	-	-	8	480
STH 119	14	67	938	2	28	26	364	2	28	13	182
6	60	5	300	6	360	-	-	-	-	6	360
STH 119	14	67	938	2	28	26	364	2	28	13	182
6- SHLDR CLOSURE 6TH STREET	14	10	140	-	-			5	70	5	70
TOTAL			9,519		3,718		2,782		284		4,681

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx
ORIGINATOR: JESSICA LANCELLE
PLOTTED DATE: 10/12/2022 12:30 PM

3

3

MARKING ITEMS

STATION	-	STATION	TYPE/LOCATION	646.1005 MARKING LINE PAINT 4-INCH WHITE LF	SPV.0090.04 MARKING LINE PAINT 4.5-INCH YELLOW LF	SPV.0090.05 MARKING LINE CONTRAST PAINT 2-INCH BLACK LF	SPV.0060.09 MARKING LINE PAINT TEXT 4-INCH BLACK EACH	646.8305 MARKING PARKING STALL PAINT LF	NOTES
0+65		1+15	PARKING AREA	-	-	-	-	80	
100+00		108+00	NEW PLATFORM	-	800	800	32	-	STAY BEHIND YELLOW LINE'
29+50		30+50	ACCESS ROAD - UNDISTRIBUTED	100	-	-	-	-	
TOTAL				100	800	800	32	80	

CONSTRUCTION STAKING

STATION	-	STATION	ALI	LOCATION	650.4000 STORM SEWER EACH	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.6501 STRUCTURE LAYOUT (PEDESTRIAN BRIDGE & TOWERS) EACH	650.8501 ELECTRICAL INSTALLATIONS 1000-57-70 EACH	650.9500 SIDEWALK 1000-57-70 EACH	650.9911 SUPPLEMENTAL CONTROL 1000-57-70 EACH	650.9920 SLOPE STAKES LF	SPV.0090.10 FENCE LF
				PROJECT	30	-	-	1	1	1	1	-	651
0+15		1+25	PARKING	PARKING LOT	-	110	86	-	-	-	-	110	-
99+00		108+70	BACK OF WEST PLATFORM	GRADING BEHIND TOWER	-	-	-	-	-	-	-	970	-
0+00		5+96		WEST ACCESS	5	596	-	-	-	-	-	596	-
TOTAL					35	706	86	1	1	1	1	1,676	651

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx

ORIGINATOR: JESSICA LANCELLE

PLOTTED DATE: 10/12/2022 12:30 PM

3

3

SAWING

LOCATION		ALI	STA	STA	OFF	SIDE	690.0250 SAWING CONCRETE LF	690.0150 SAWING ASPHALT LF
PARKING LOT TEMP ACCESS - 6TH ST	CURB & SIDEWALK	ACCESS ROAD	26+45	27+00	0-52'	LT	60	-
PARKING LOT	EDGE OF LOT & BOLLARDS	ACCESS ROAD	30+00	30+47	0'	LT/RT	-	96
CONNECTION TO EXISTING BUILDING	SIDEWALK	TRACK 2	104+34	-	57-63'	RT	6	-
TOTAL							66	96

SPECIAL PROVISIONS

ALIGNMENT	FROM STATION	TO STATION	SPV.0090.06 REMOVABLE INTERTRACK FENCE LF	SPV.0060.08 UTILITY LINE OPENING (ULO) EACH	SPV.0060.10 PIPE BOLLARD EACH
TRACK 1	99+50	107+75	825	-	-
ACCESS ROAD	30+90	30+98	-	-	2
ACCESS ROAD	32+89	32+97	-	-	2
	PROJECT		-	20	-
TOTAL			825	20	4

ALL ITEMS ARE CATEGORY **0010** UNLESS OTHERWISE SPECIFIED.

FILE NAME: pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60618829-MKE Rail Station\900-CAD GIS\Road\60618829\SheetsPlan\030201_MQ.pptx
ORIGINATOR: JESSICA LANCELLE
PLOTTED DATE: 10/12/2022 12:30 PM

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MILWAUKEE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

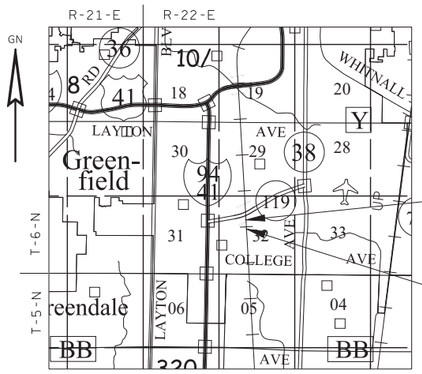
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

PLE COURSE TABLE		
Point - Point	Bearing	Distance
201 - 202	N86° 43' 40"E	70.00'
202 - 203	S03° 16' 42"E	512.00'
203 - 204	N86° 43' 40"E	21.67'
204 - 205	S03° 17' 04"E	30.00'
205 - 206	S86° 43' 40"W	21.67'
206 - 207	S03° 16' 42"E	578.00'
207 - 200	S86° 43' 40"W	70.00'
200 - 201	N03° 16' 42"W	1120.00'
211-208	S03° 16' 42"E	227.31'
208-209	N89° 30' 18"W	25.05'
209-210	N03° 16' 42"W	218.49'
210-211	N70° 42' 27"E	26.01'
200-208	N03° 16' 42"W	626.37'
201-211	S03° 16' 42"E	266.32'



EXISTING MONUMENTS			
POINT	Y	X	DESCRIPTION
100	264113.401	601923.193	2" IRON PIPE
102	264034.913	601702.134	2" IRON PIPE

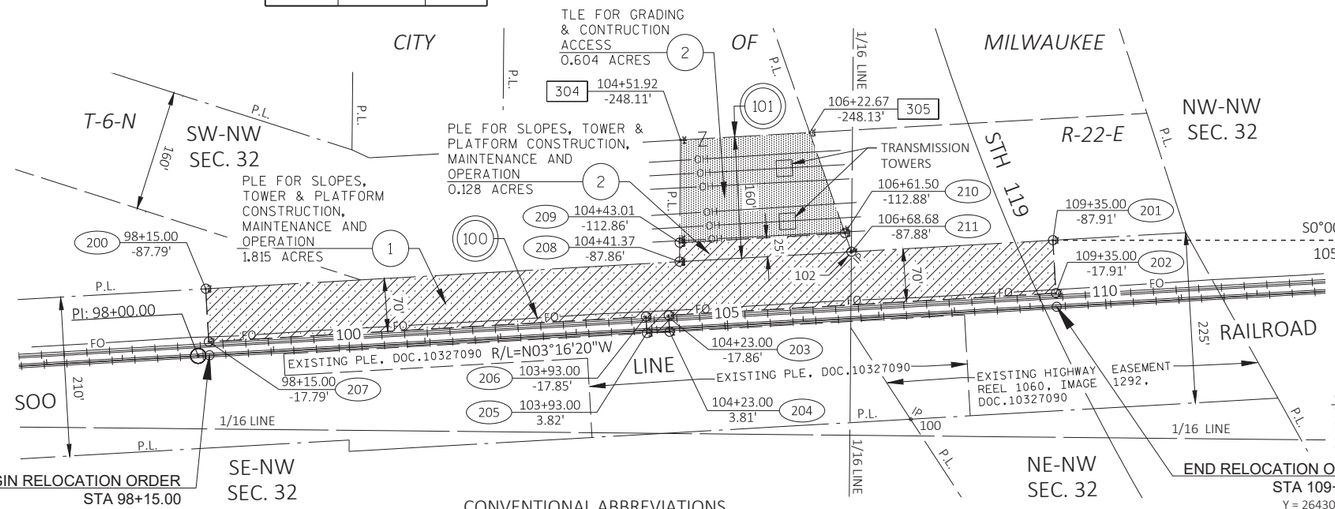
END RELOCATION ORDER
STA 109+35.00
1056.41' SOUTH AND 1138.05' EAST OF THE NORTHWEST CORNER OF SECTION 32, T6N, R22E.

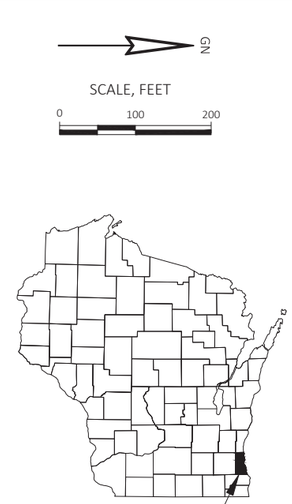
BEGIN RELOCATION ORDER
STA 98+15.00
2174.58' SOUTH AND 1201.98' EAST OF THE NORTHWEST CORNER OF SECTION 32, T6N, R22E.

BASIS OF EXISTING RIGHT OF WAY			
ROAD NAME	PROJECT/SURVEY	VOL. PAGE	DOC.
SOO LINE RAILROAD	0385-56-72		
STH 119	2015-1-21		

TLE COURSE TABLE		
Point - Point	Bearing	Distance
209-304	N89° 30' 18"W	135.55'
304-305	N03° 16' 42"W	170.75'
305-210	N70° 42' 27"E	140.71'

PI STA. 98+00.00
Y = 263,172.864
X = 601,839.385





R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1000-57-20		
FEDERAL PROJECT NUMBER	4.01	

PLAT OF RIGHT-OF-WAY REQUIRED FOR
GENERAL MITCHELL INTERNATIONAL AIRPORT
RAIL PASSENGER STATION (MARS)
PLATFORM EXTENSION
SOO LINE RAILROAD CO. MILWAUKEE COUNTY

CONSTRUCTION PROJECT NUMBER
1000-57-05

CONVENTIONAL UTILITY SYMBOLS

WATER — W
GAS — G
TELEPHONE — T
OVERHEAD TRANSMISSION LINES — OH
ELECTRIC — E
CABLE TELEVISION — TV
FIBER OPTIC — FO
SANITARY SEWER — SAN
STORM SEWER — SS
ELECTRIC TOWER

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) — IP
OFF-PREMISE SIGN (91-25)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25) UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE ACRES	PLE ACRES
1 (3)	SOO LINE RAILROAD COMPANY	PLE	-----	1.815
2 (2)	THE CHARLES P. PURPERO LIVING TRUST	PLE, TLE	0.604	0.128

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	MCI COMMUNICATIONS SERVICES LLC (FIBER OPTIC)	RELEASE OF RIGHTS
101	AMERICAN TRANSMISSION COMPANY LLC (ELECTRIC)	RELEASE OF RIGHTS

(100) MCI COMMUNICATIONS SERVICES LLC NO RECORDED EASEMENT FOR PARCEL 1

(101) WISCONSIN ELECTRIC POWER COMPANY EASEMENT IN VOL.3441, PG.597, DOC.3399080 AND EASEMENT ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC IN REEL 4989, IMAGE 2041, DOC.8013166

ORIGINAL PLAT PREPARED BY
AECOM

WISCONSIN LAND SURVEYOR
DONALD J. BUZA
S-2338
CUSTER, WI

SIGNATURE: Donald J Buza
DATE: 2/14/22

CAUTION:
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

REVISION DATE
5/26/22
9/12/22

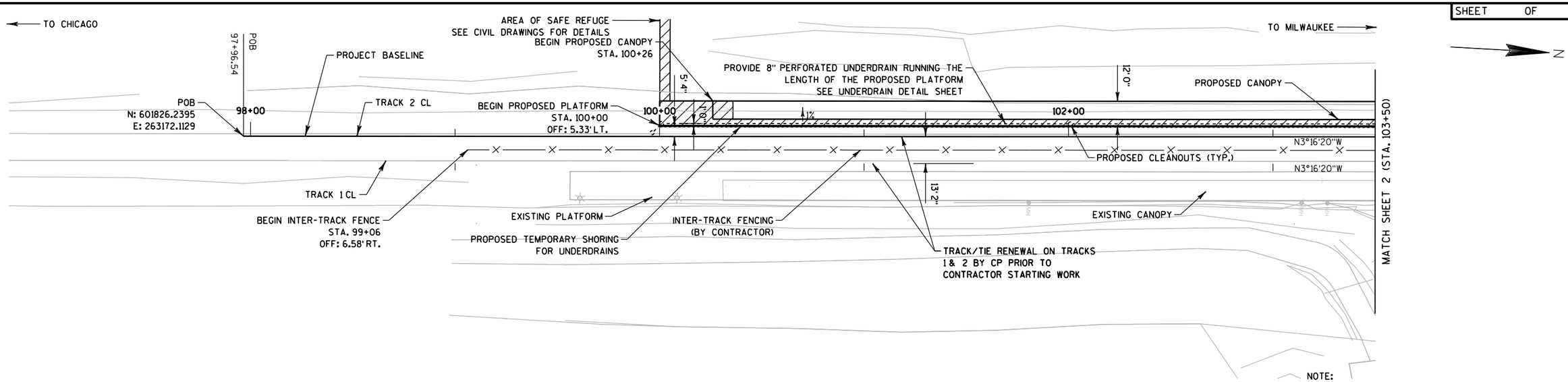
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

SIGNATURE: _____ DATE: 02/24/22

PRINT NAME: Robert L. Duffeck

FILE NAME : 4.01.DWG PLOT DATE : 8/16/2022 4:48 PM PLOT BY : BUZA, DONALD



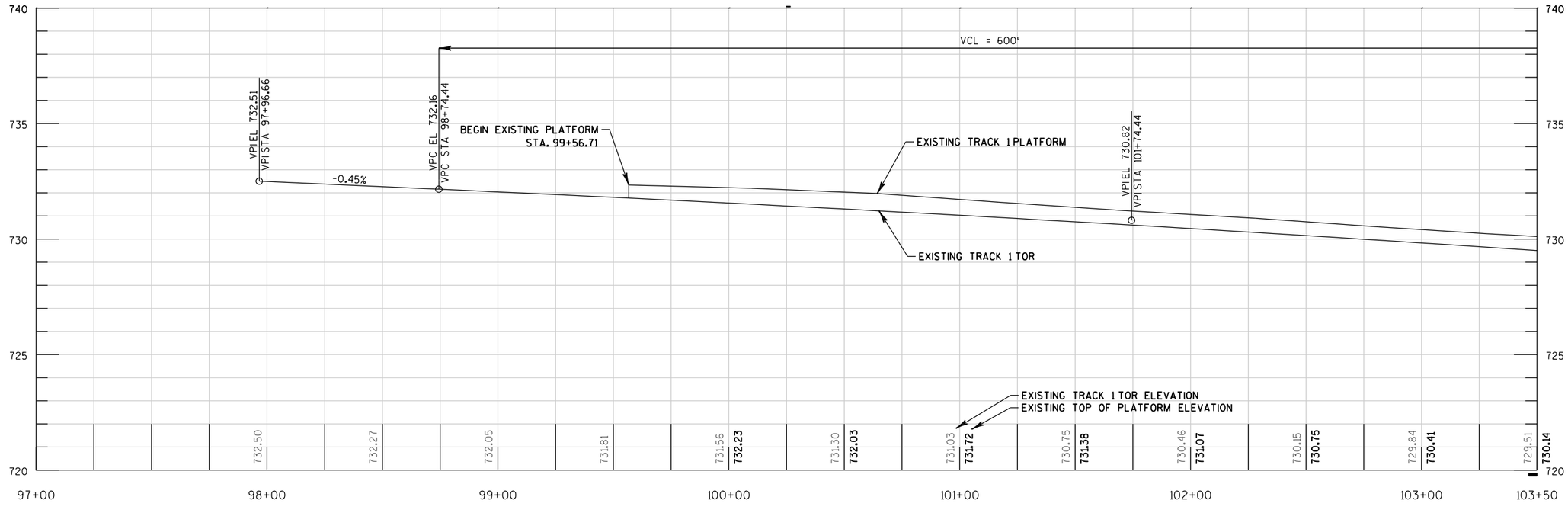
PLAN

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.

2. CONSTRUCTION WILL OCCUR WITHIN A CP FORM B PROTECTION AND WORK ADJACENT TO THE TRACK WILL HAVE TO BE PLANNED AROUND TRAIN OPERATIONS.



TRACK 1 PROFILE

SCALE: 1":50'

PROFILE LEGEND

EXISTING TOP OF RAIL

EXISTING TOP OF PLATFORM

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 1)	SHEET 308	E

SHEET OF

TO CHICAGO

TO MILWAUKEE

N

TRK 2 CL STA 104+04.91 =
PEDESTRIAN BRIDGE CL STA 10+72.58

TRK 1 CL STA 104+04.91 =
PEDESTRIAN BRIDGE CL STA 10+85.75

MATCH SHEET 1 (STA. 103+50)

10+00

11+00

11+41.33

PROPOSED PEDESTRIAN BRIDGE

PROPOSED PLATFORM

AREA OF SAFE REFUGE. SEE CIVIL DRAWINGS FOR DETAILS

WCLE. SEE CIVIL DRAWINGS FOR DETAILS

END PROPOSED CANOPY
STA. 105+26

PROVIDE 8" PERFORATED UNDERDRAIN RUNNING THE LENGTH OF THE PROPOSED PLATFORM SEE UNDERDRAIN DETAIL SHEET

END PROPOSED PLATFORM
STA. 108+00
OFF: 5.33' LT.

5'4"

12'0"

104+00

106+00

108+00

1%

N3°16'20"W

N3°16'20"W

PROPOSED CLEANOUTS (TYP.)

PROPOSED TEMPORARY SHORING FOR UNDERDRAINS

END PROPOSED INTER-TRACK FENCE
STA. 107+73
OFF: 6.67' RT.

END PROPOSED GRADE CROSSING
STA. 107+92.41

TRACK 2 CL

POE
109+89.94

POE
N: 601758.1203
E: 264363.5664

13'2"

TRACK 1 CL

EXISTING PLATFORM

WCLE. SEE CIVIL DRAWINGS FOR DETAILS

EXISTING CANOPY

INTER-TRACK FENCING (BY CONTRACTOR)

BEGIN PROPOSED GRADE CROSSING
STA. 107+74.41

GATE. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.

REMOVE EXISTING GRADE CROSSINGS (BY CP)

INSTALL TWO 18' WIDE GRADE CROSSINGS (BY CP).
SEE GRADE CROSSING DETAIL SHEETS

TRACK/TIE RENEWAL ON TRACKS 1 & 2 BY CP PRIOR TO CONTRACTOR STARTING WORK

BASE AGGREGATE DENSE 1¼",
GRADE TO MATCH EXISTING

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.

2. CONSTRUCTION WILL OCCUR WITHIN A CP FORM B PROTECTION AND WORK ADJACENT TO THE TRACK WILL HAVE TO BE PLANNED AROUND TRAIN OPERATIONS.

740
735
730
725
720

VCL = 600'

VPT EL 728.64
VPT STA 104+74.44

-0.72%

EXISTING TRACK 1 PLATFORM

EXISTING TRACK 1 TOR

VCL = 100'

VPC EL 726.55
VPC STA 107+62.44

VPI EL 726.19
VPI STA 108+12.44

VPT EL 725.88
VPT STA 108+62.44

-0.62%

VPI EL 725.09
VPI STA 109+89.94

END OF EXISTING PLATFORM
STA. 107+92.41

EXISTING TRACK 1 TOR ELEVATION

EXISTING TOP OF PLATFORM ELEVATION

729.51	**730.14**	729.17	**729.78**	728.82	**729.44**	728.46	**729.07**	728.09	**728.76**	727.73	**728.41**	727.37	**728.05**	727.01	**727.70**	726.65	**727.39**	726.29		725.96		725.65		725.34	

103+50 104+00 105+00 106+00 107+00 108+00 109+00 110+00

PROFILE LEGEND

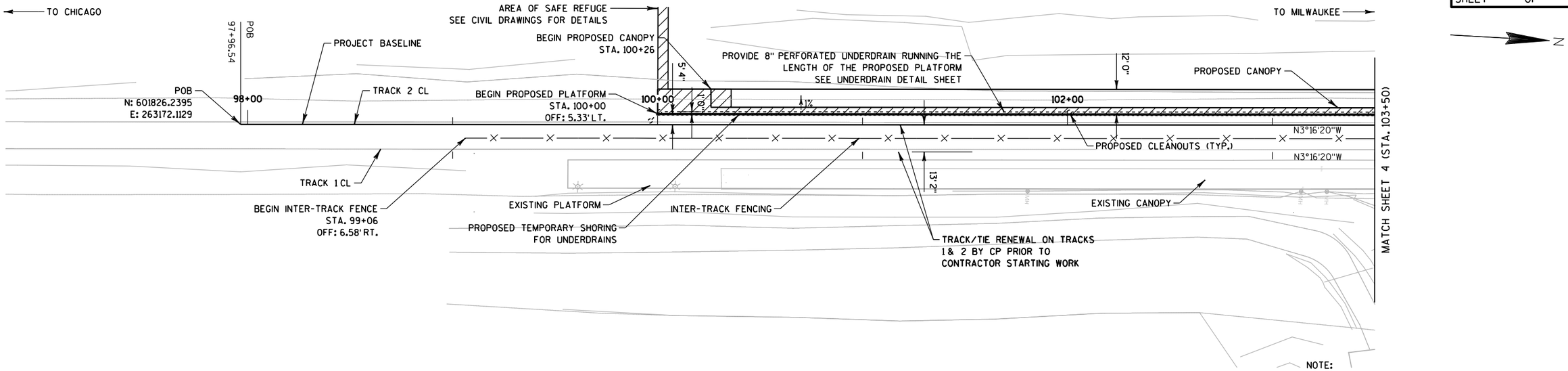
EXISTING TOP OF RAIL
EXISTING TOP OF PLATFORM

TRACK 1 PROFILE

SCALE: 1":50'

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 1)	SHEET 309 E

SHEET OF



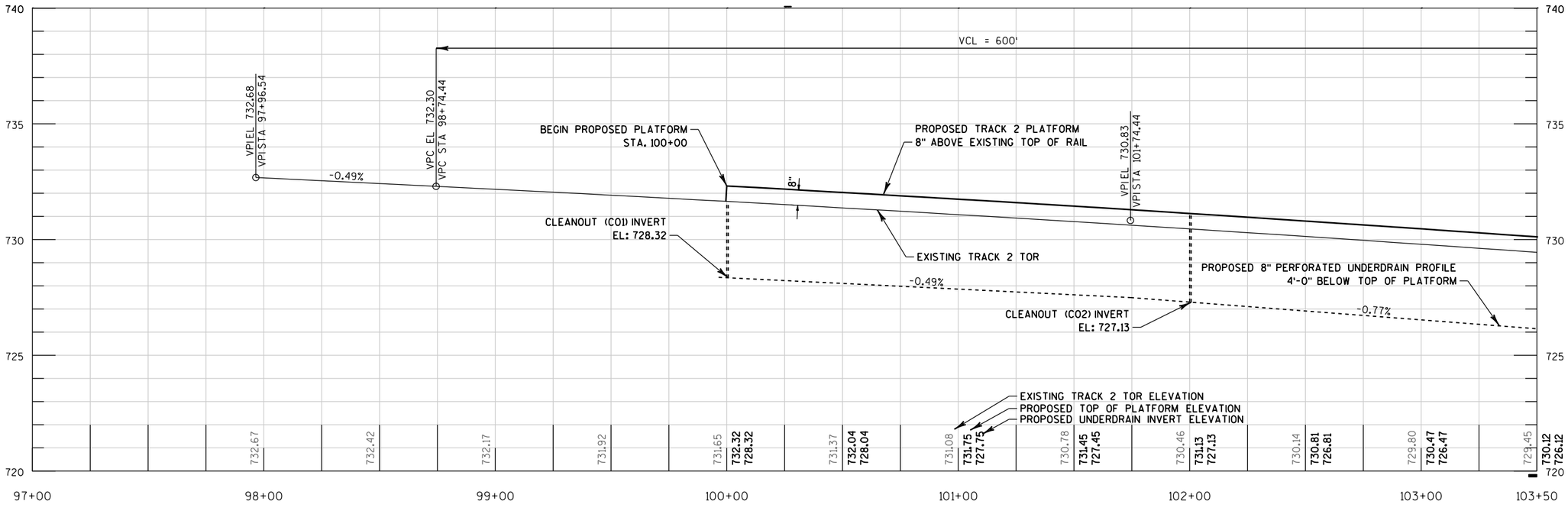
PLAN

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.

2. CONSTRUCTION WILL OCCUR WITHIN A CP FORM B PROTECTION AND WORK ADJACENT TO THE TRACK WILL HAVE TO BE PLANNED AROUND TRAIN OPERATIONS.



TRACK 2 PROFILE

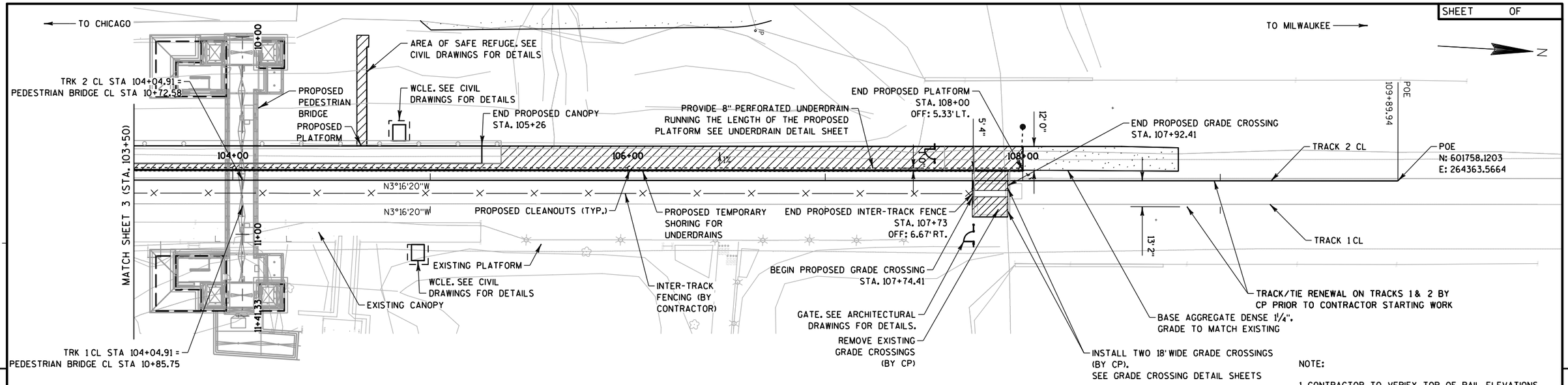
SCALE: 1":50'

PROFILE LEGEND

EXISTING TOP OF RAIL
PROPOSED TOP OF PLATFORM
PROPOSED UNDERDRAIN INVERT

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 2)	SHEET 310 E

SHEET OF



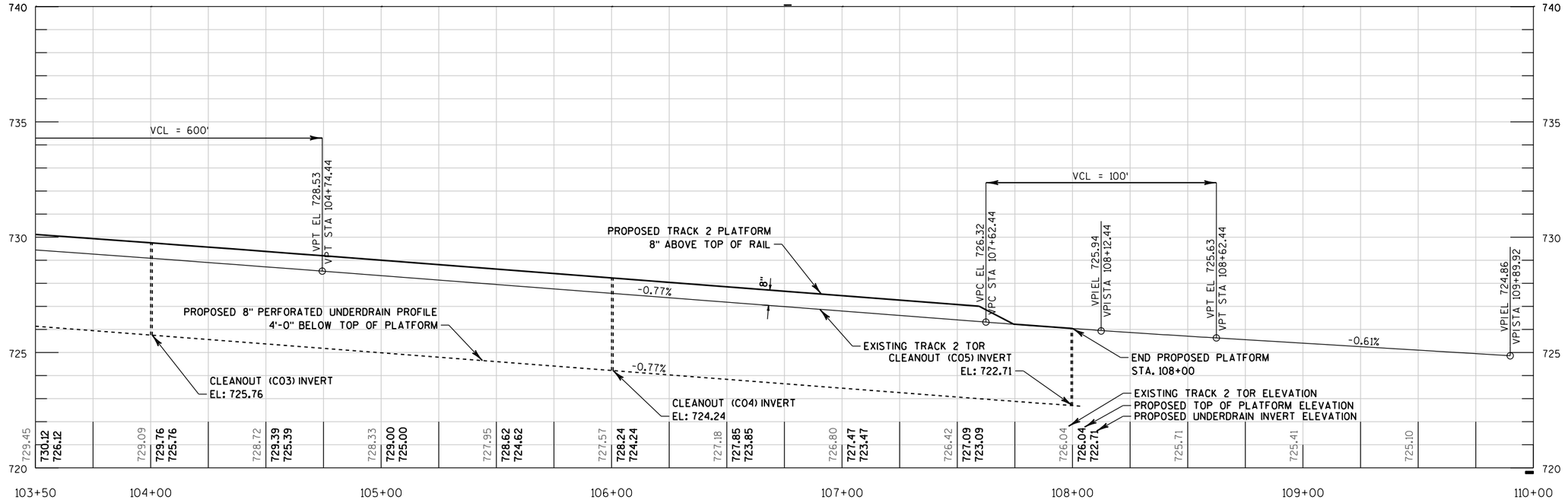
PLAN

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.

2. CONSTRUCTION WILL OCCUR WITHIN A CP FORM B PROTECTION AND WORK ADJACENT TO THE TRACK WILL HAVE TO BE PLANNED AROUND TRAIN OPERATIONS.



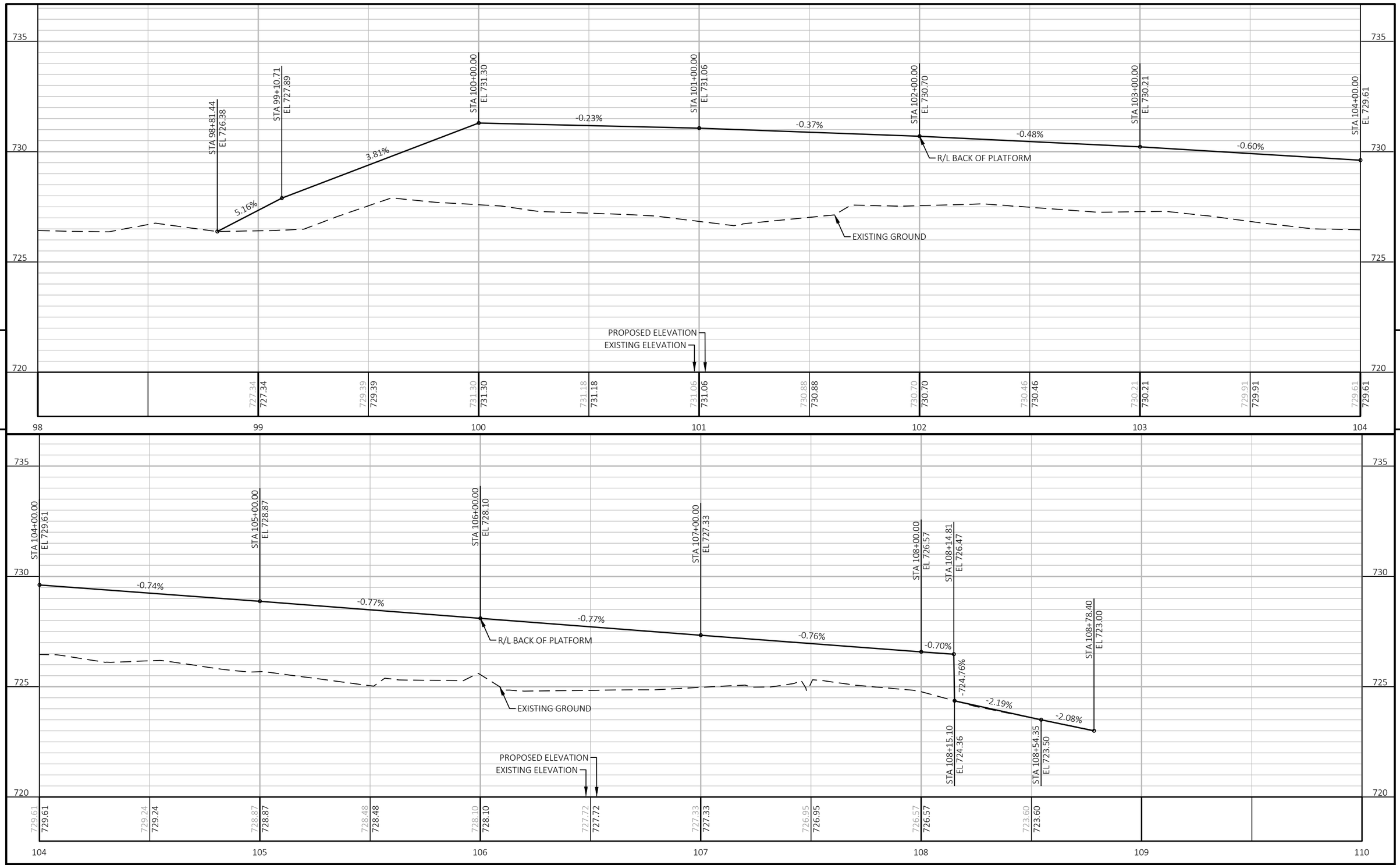
TRACK 2 PROFILE

SCALE: 1":50'

PROFILE LEGEND

EXISTING TOP OF RAIL
PROPOSED TOP OF PLATFORM
PROPOSED UNDERDRAIN INVERT

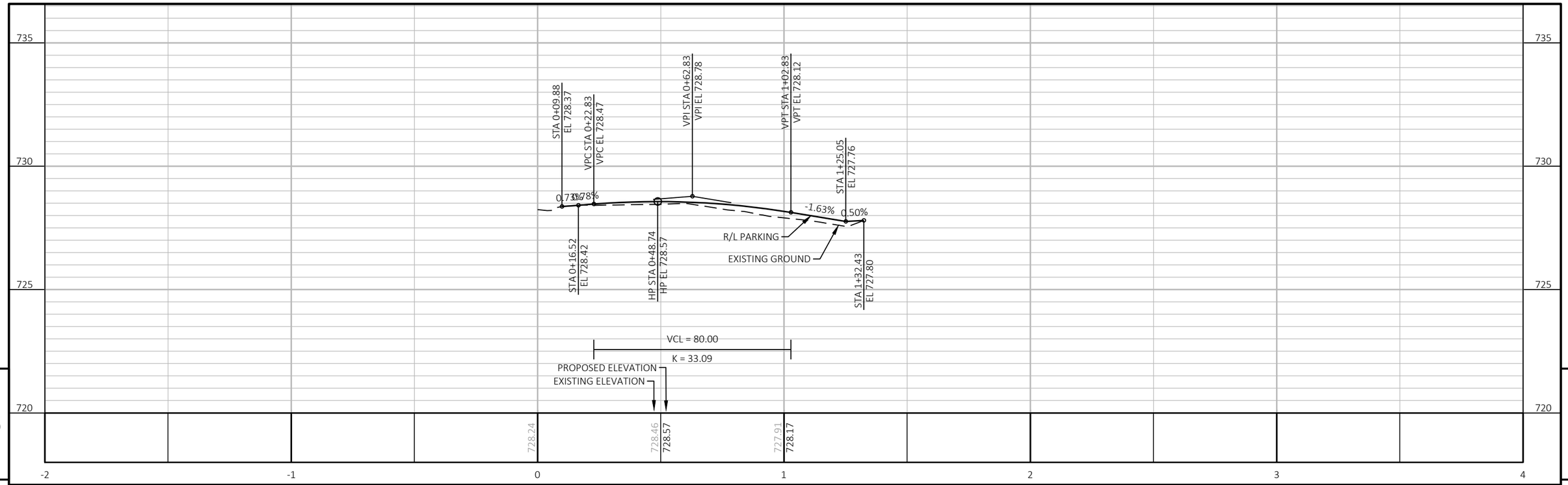
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PLAN AND PROFILE (TRACK 2)	SHEET 311 E

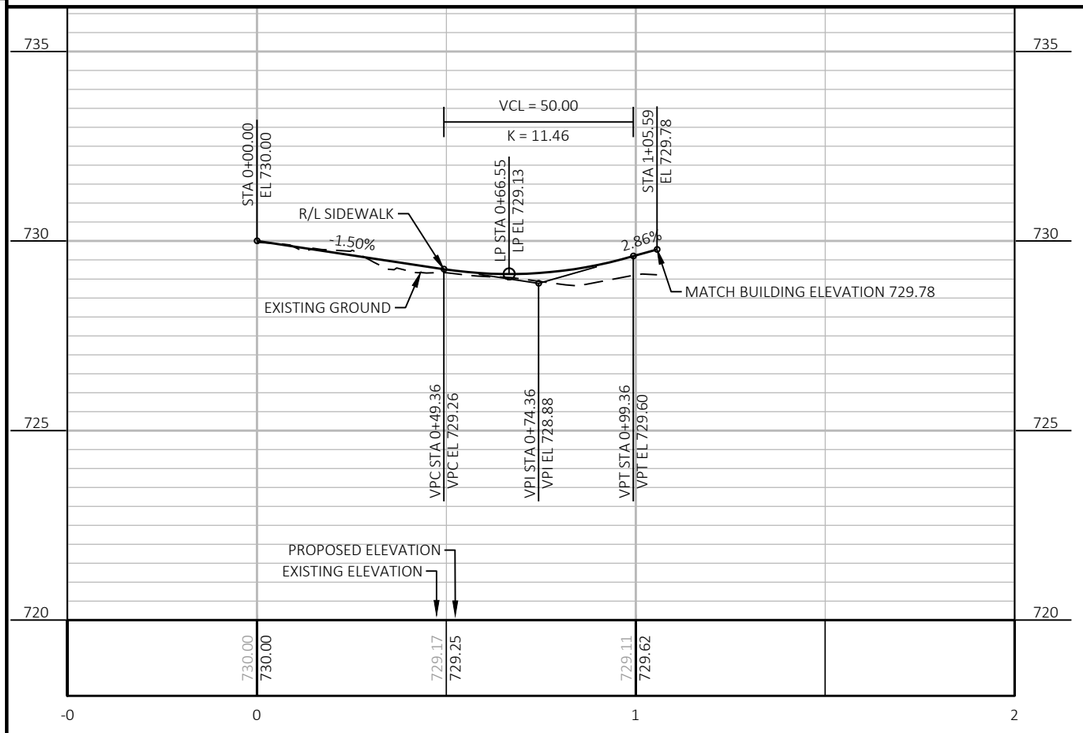


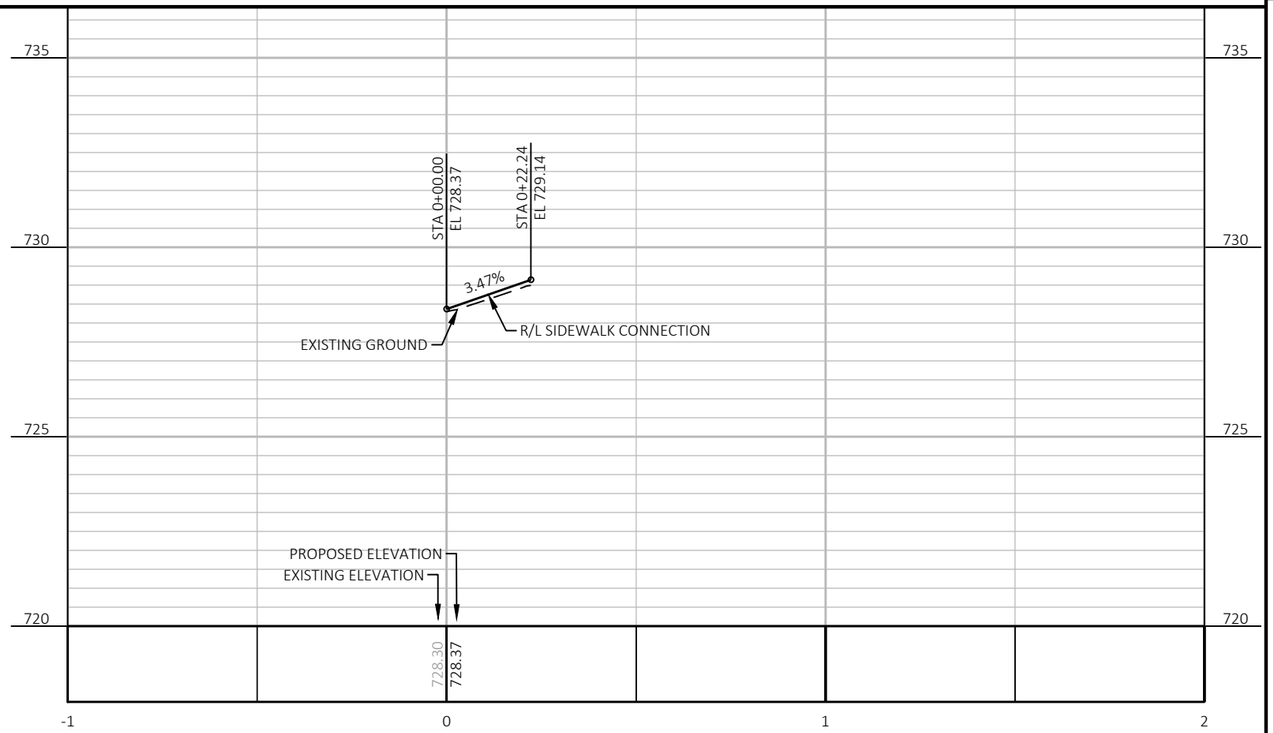
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES BACK OF WEST PLATFORM	SHEET 312	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050302_PR.DWG
LAYOUT NAME - BOP

PLOT DATE : 7/7/2022 10:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT



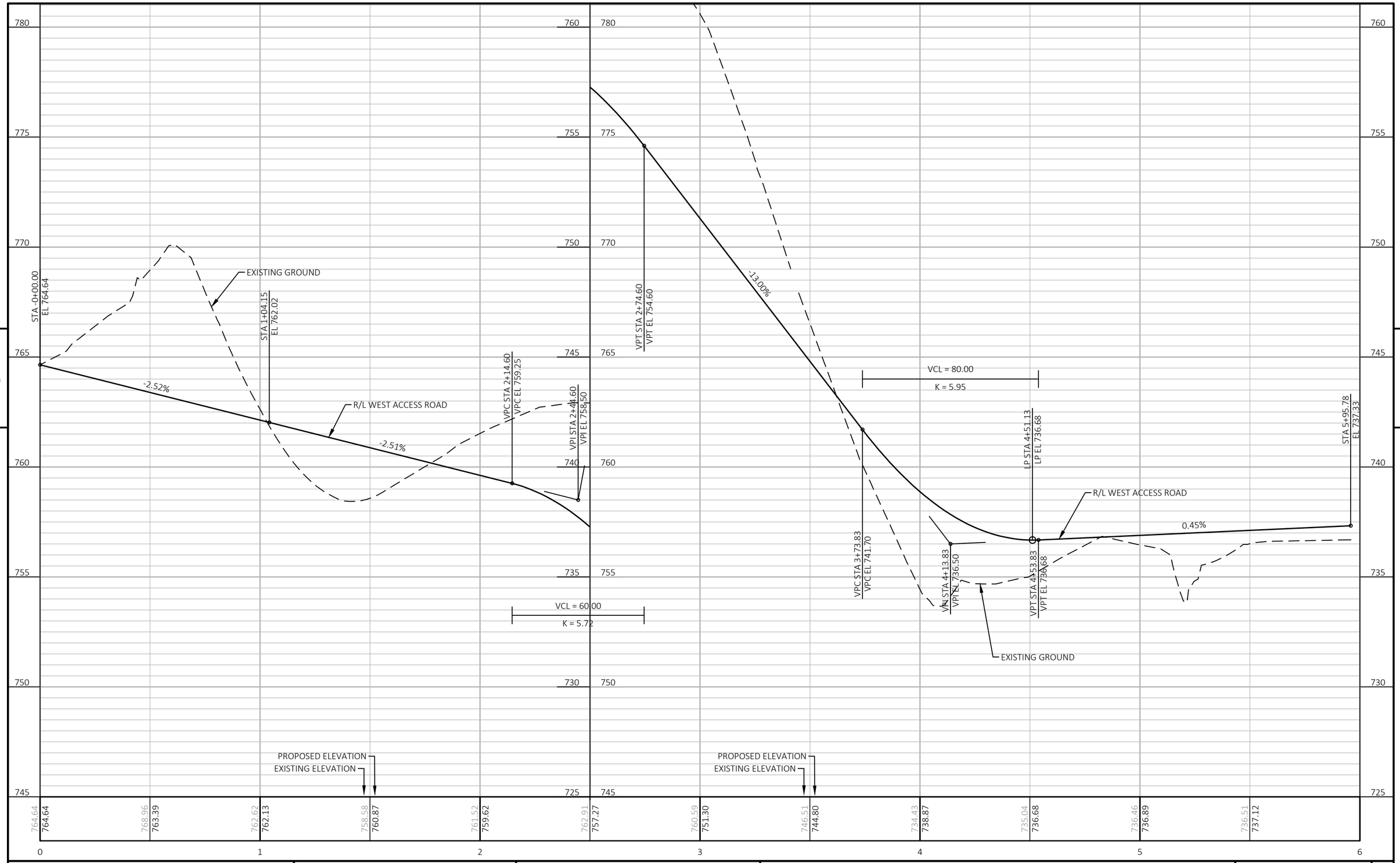




PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES	SHEET 313	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050301_PR.DWG
LAYOUT NAME - Prof1

PLOT DATE : 7/12/2022 10:59 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT



5

5

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	PROFILES	SHEET 314	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\050301_PR.DWG
LAYOUT NAME - Prof2 (2)

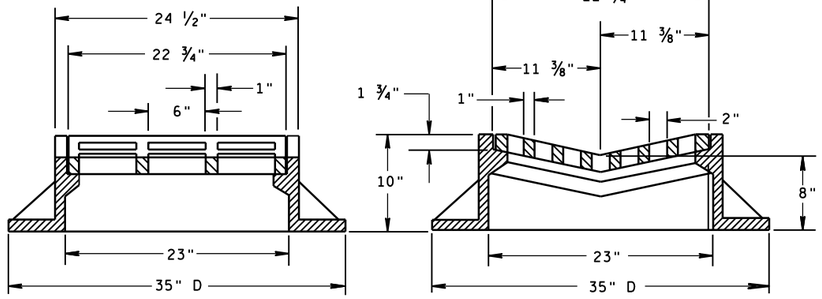
PLOT DATE : 9/14/2022 5:08 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:40 FT

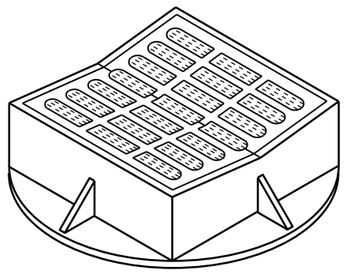
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

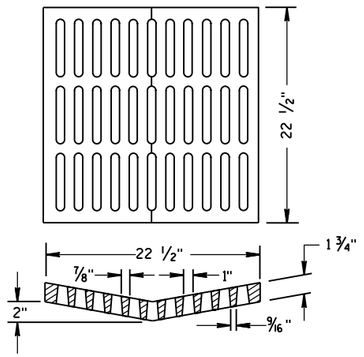
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
14A01-03	TREE PRESERVATION DETAILS
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-10A	TRAFFIC CONTROL, LANE CLOSURE
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D47-02B	TRAFFIC CONTROL, INGRESS/EGRESS WITHOUT BARRIER

6



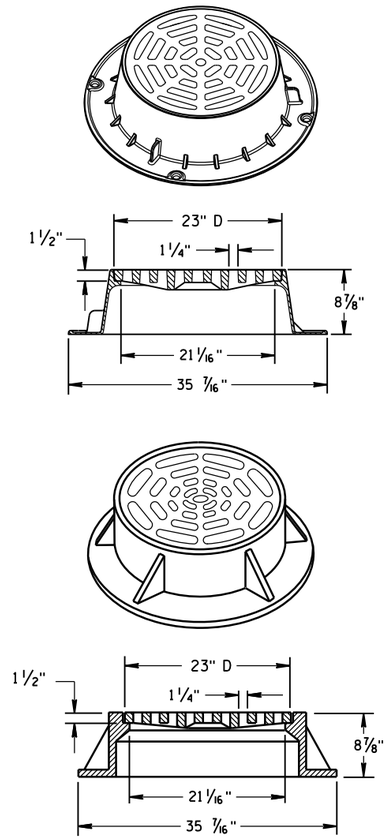


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

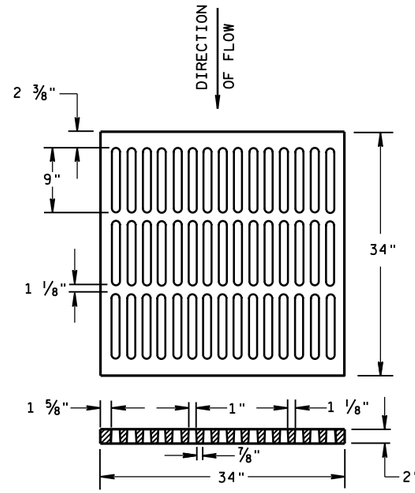
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

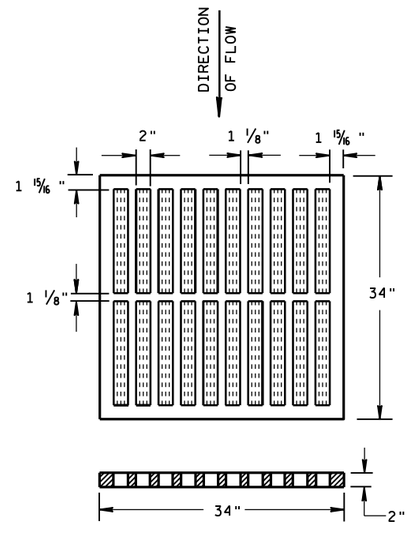
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



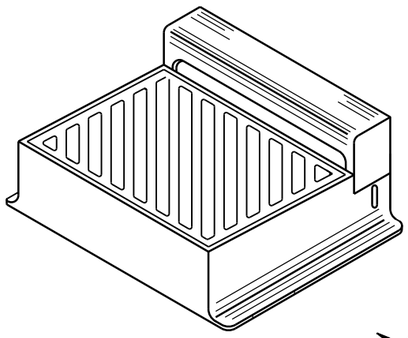
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

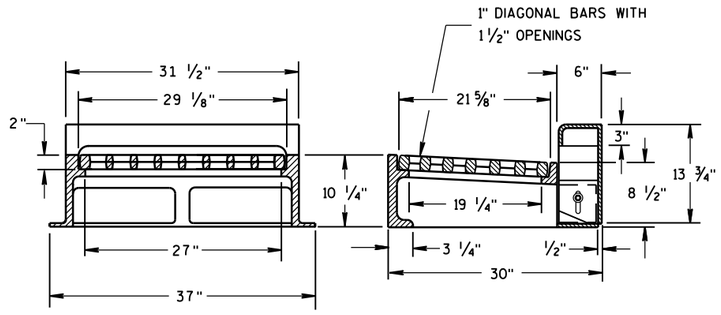


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

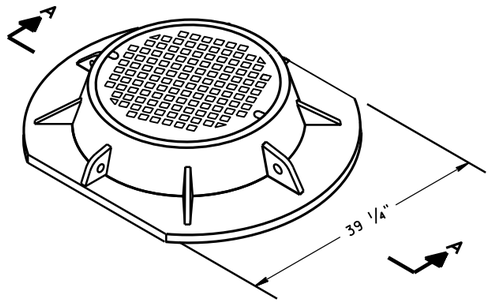
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

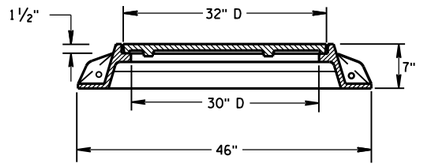
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

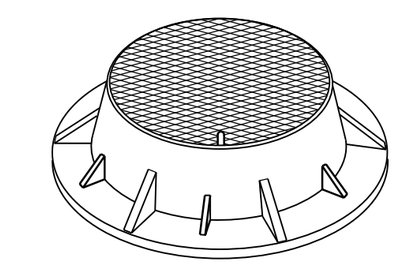
6

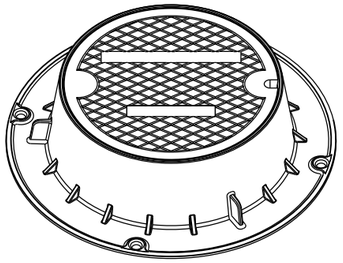
S.D.D. 8 A 5-19b

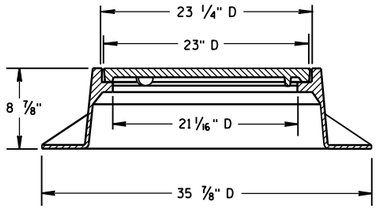


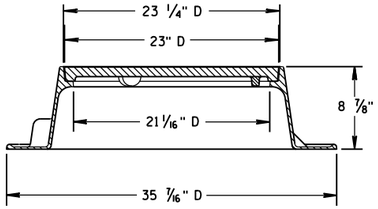


SECTION A-A
TYPE "K"









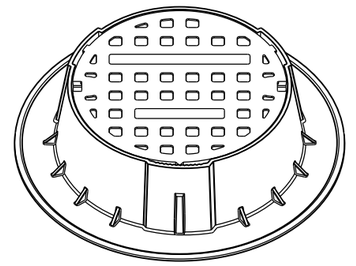
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

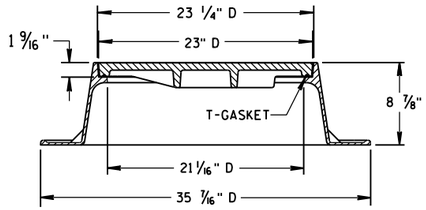
GENERAL NOTES

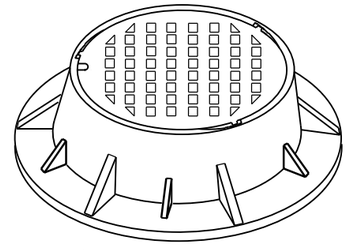
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

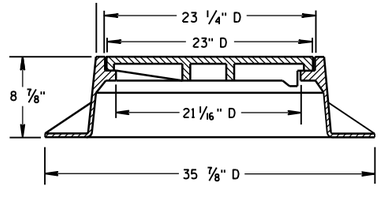
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

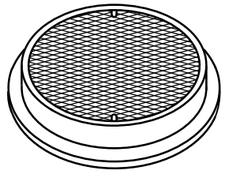


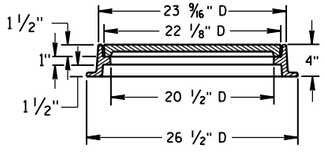




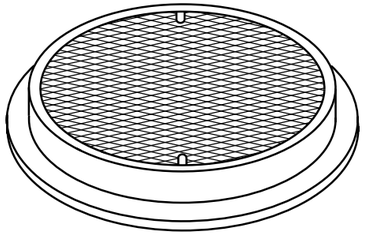


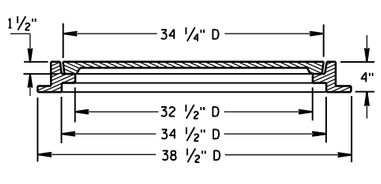
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



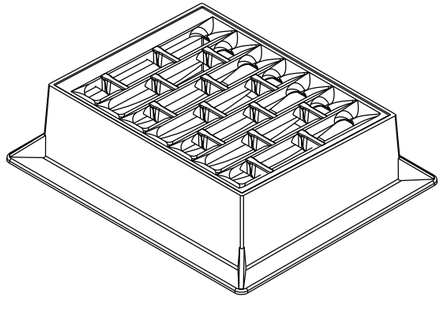


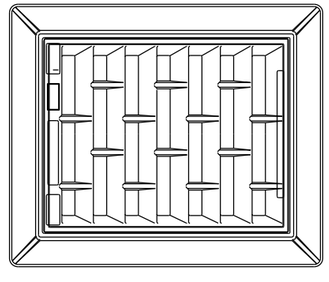
TYPE "L"

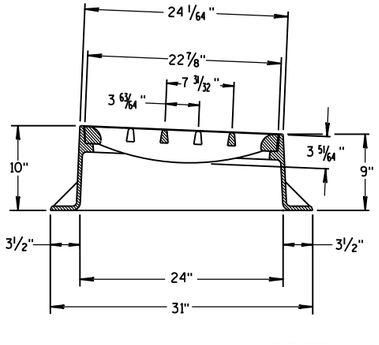


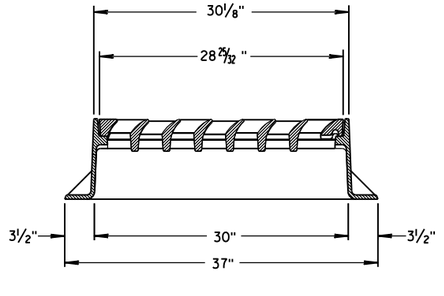


TYPE "M"









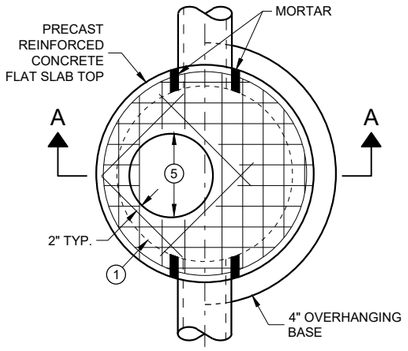
INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

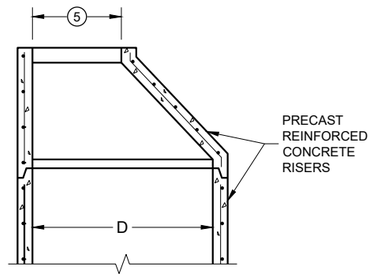
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

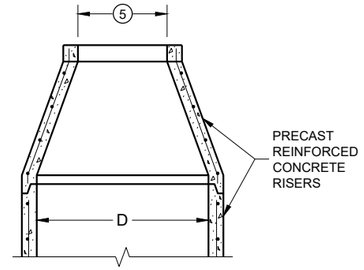
6
S.D.D. 8 A 5-19d



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

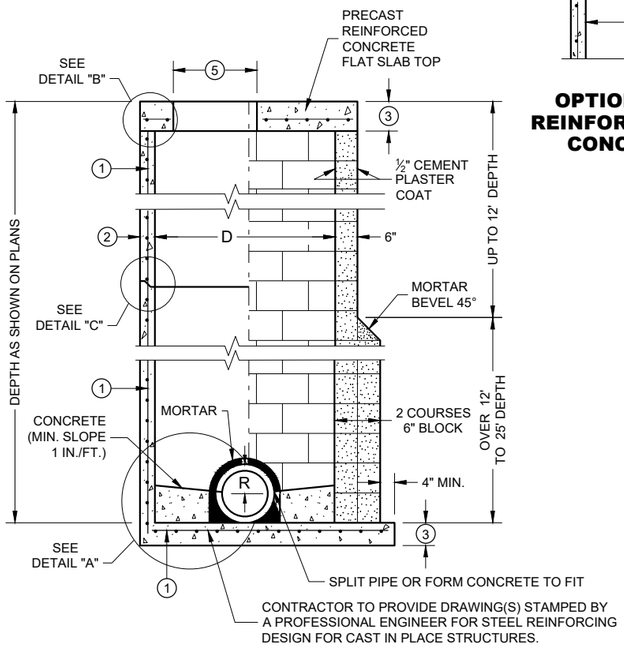
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

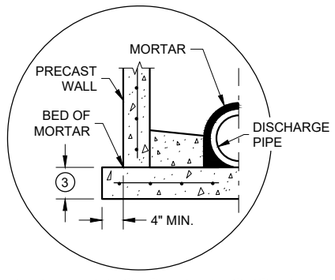
(5) SEE MANHOLE COVER OPENING MATRIX.



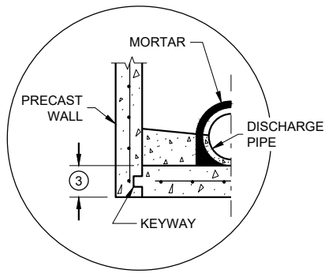
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

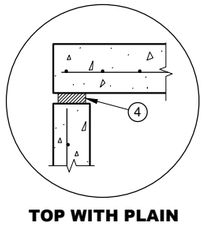


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

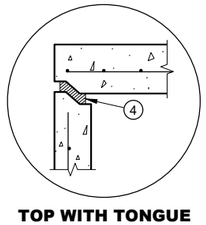


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

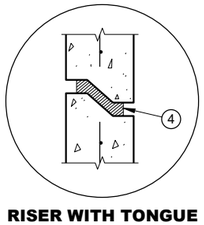


TOP WITH PLAIN END JOINT



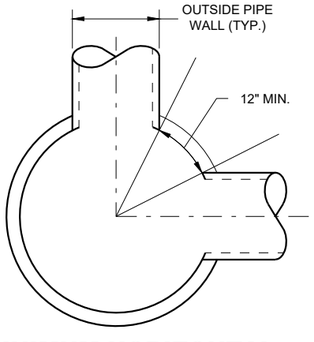
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"



MINIMUM HORIZONTAL PIPE SEPARATION

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

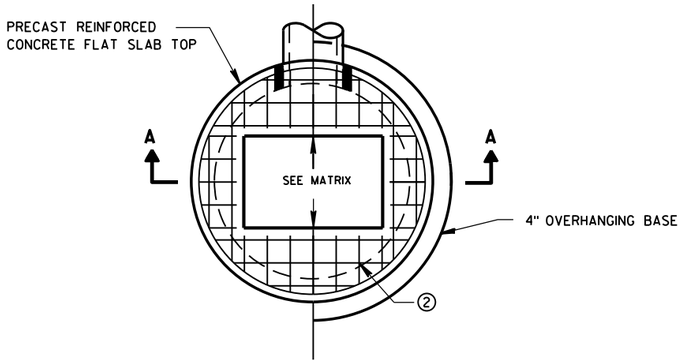
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

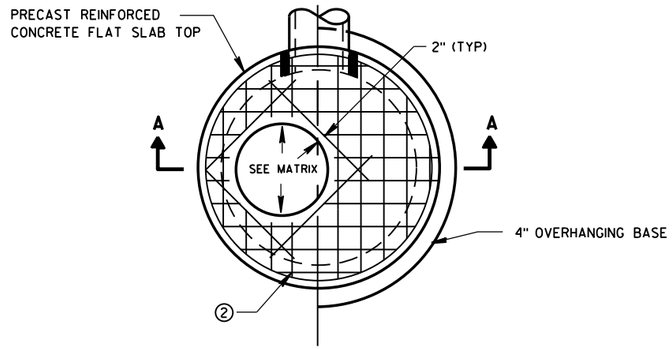
FHWA

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

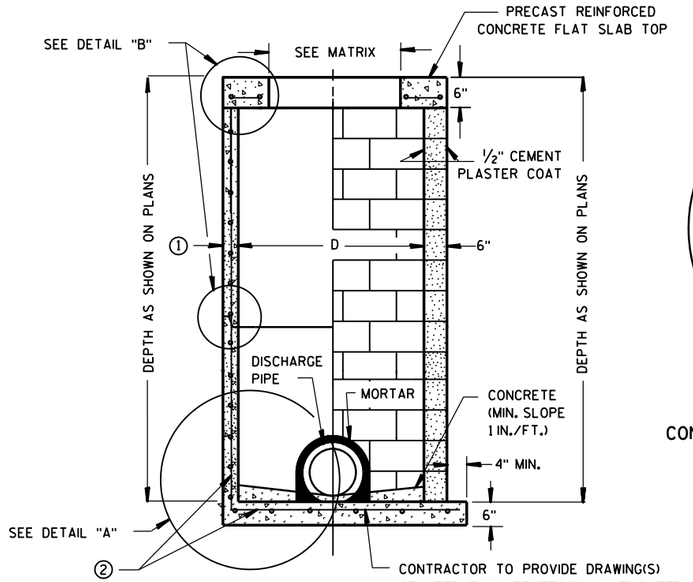
6
SDD 08B09 - 03



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

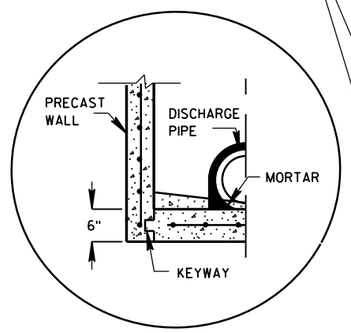


SECTION A-A

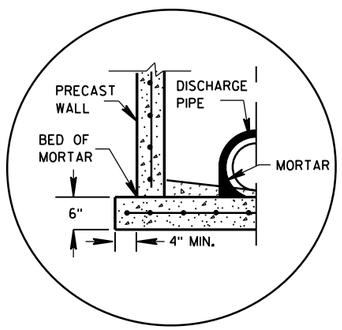
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

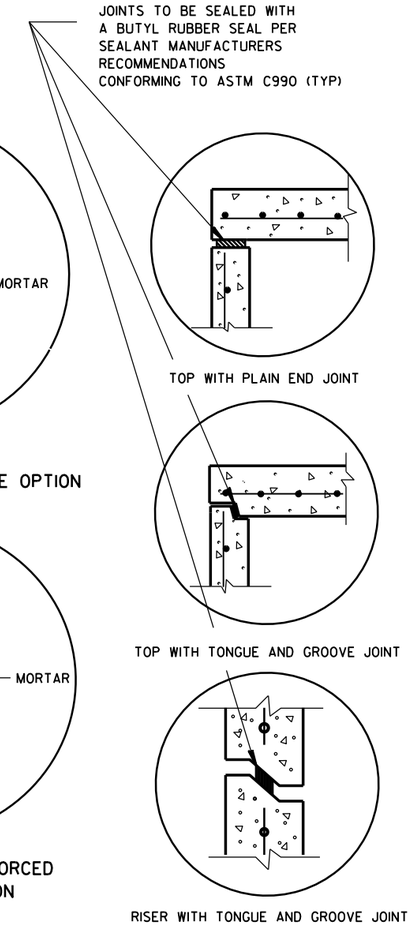


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

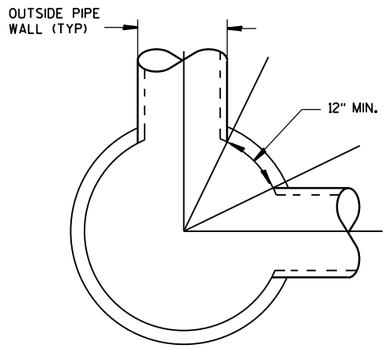
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

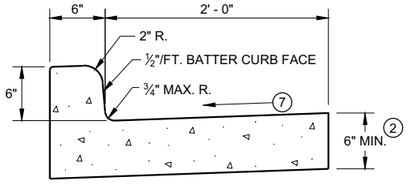
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | ENT UNIT SUPERVI
FHWA

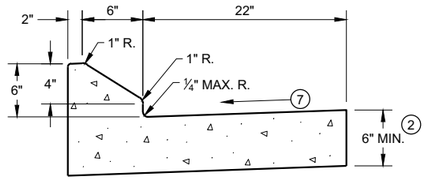
INLETS 3-FT AND 4-FT DIAMETER

6

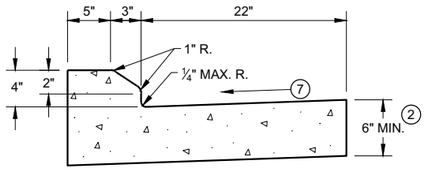
S.D.D. 8 C 6-2



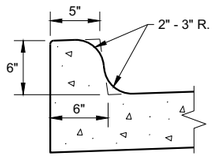
TYPES A (1) & D



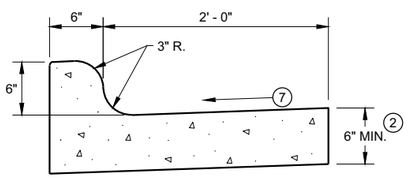
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

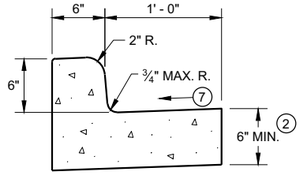


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



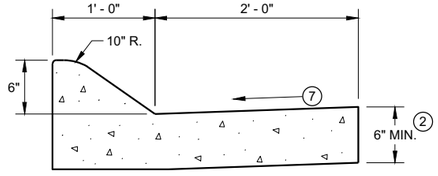
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

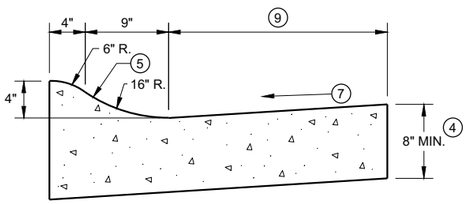
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

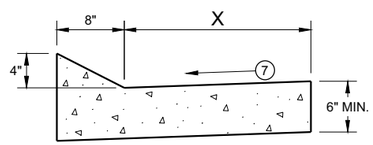
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

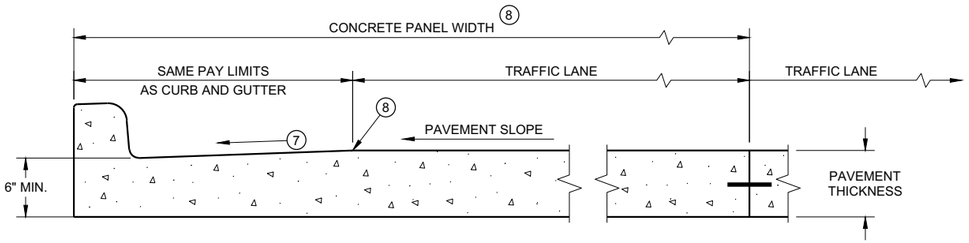


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

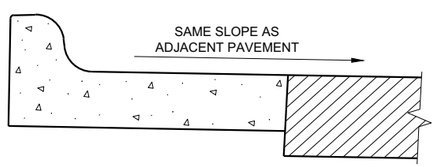
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

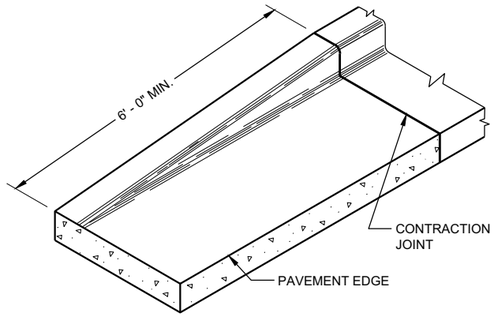
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

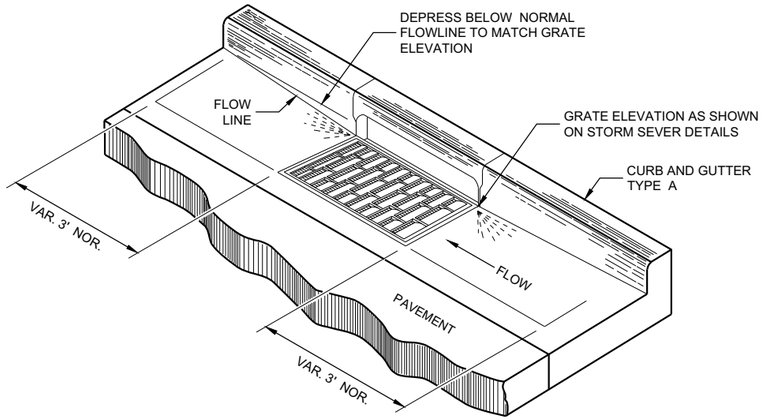
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

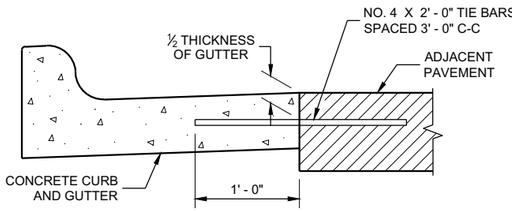
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

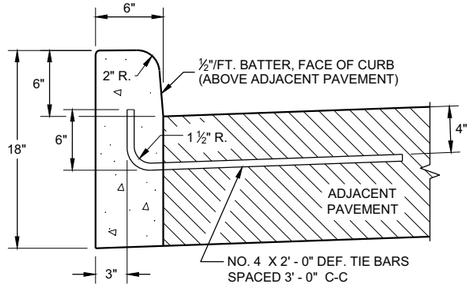
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

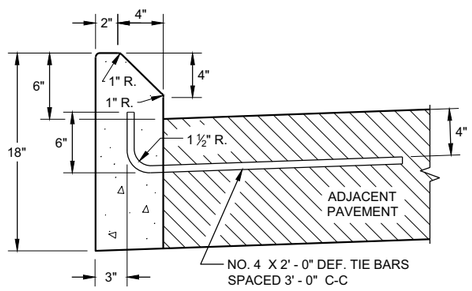
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

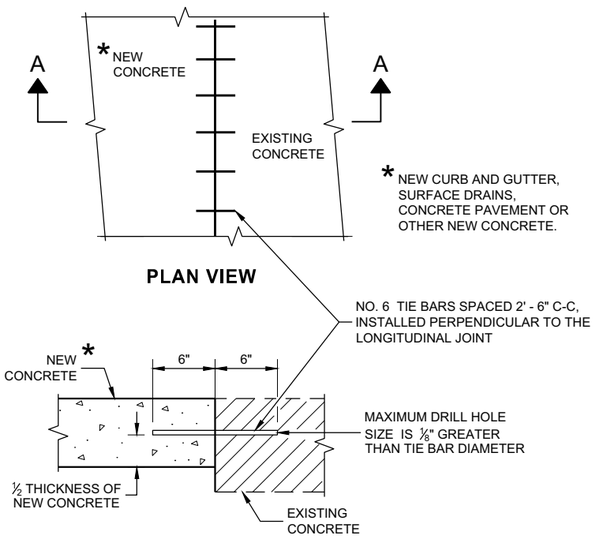


TYPES A (1) & D



TYPES G (1) & J

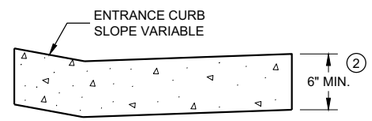
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

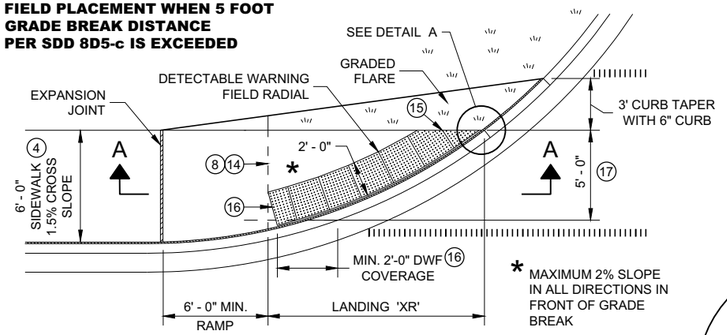
APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD08D01 - 22b

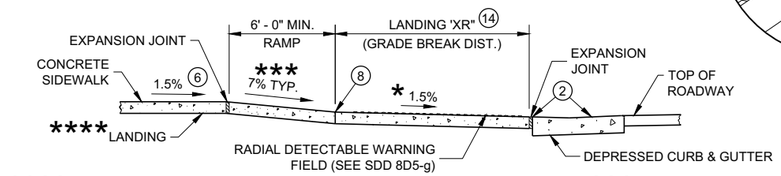
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

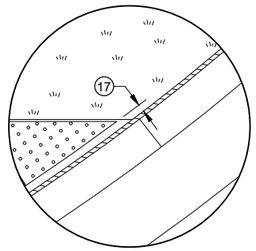
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

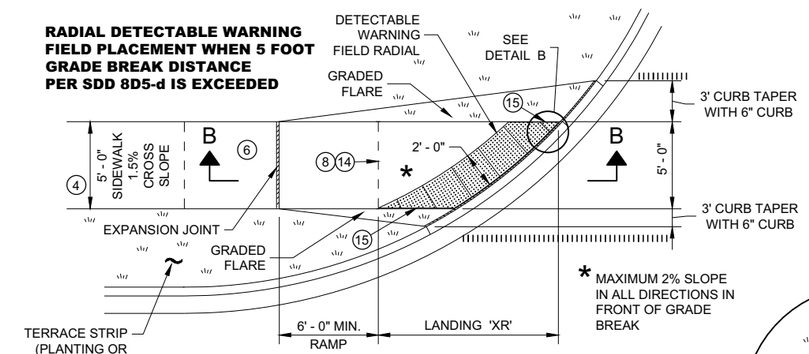
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

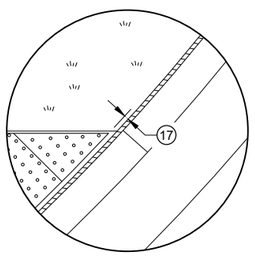
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



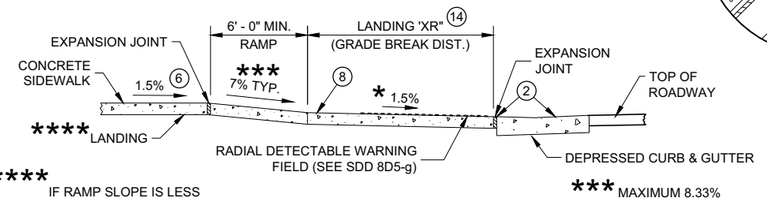
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

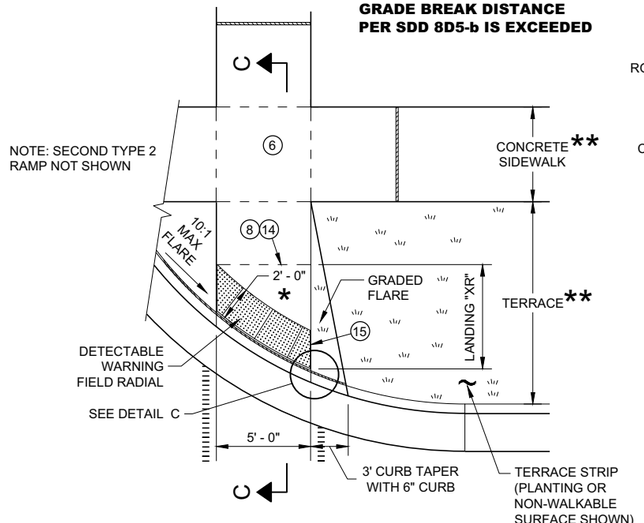


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

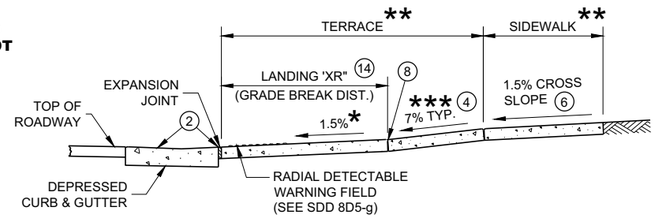


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

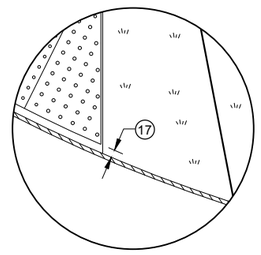


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

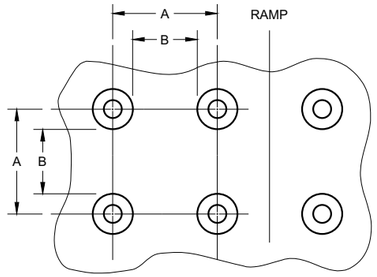
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

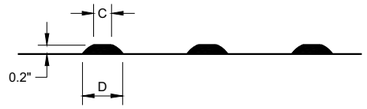
SDD 08D05 - 20f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

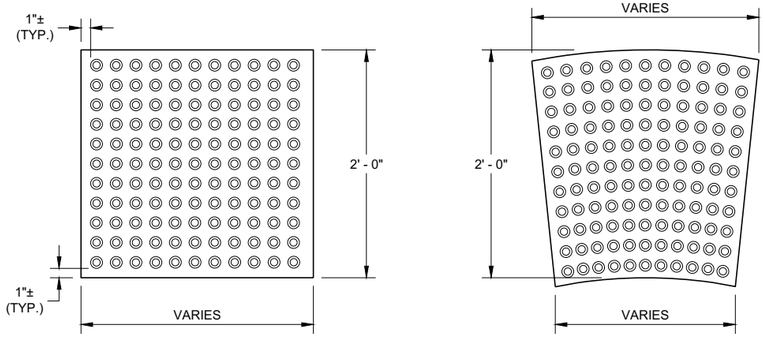


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

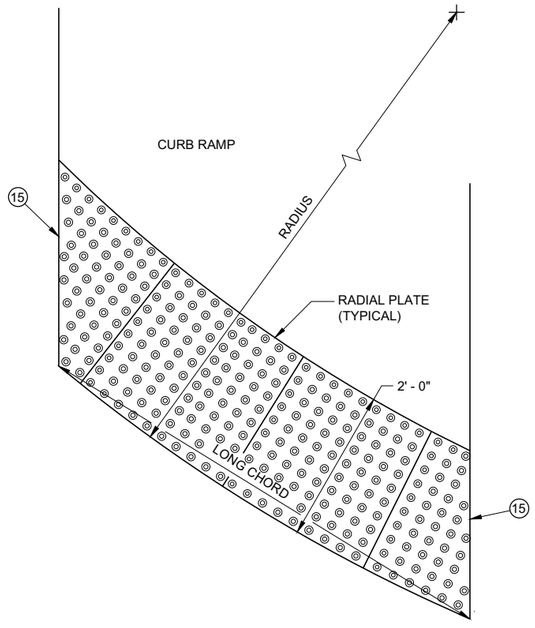
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

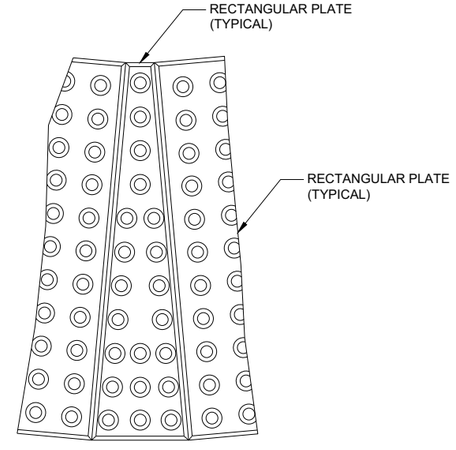
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

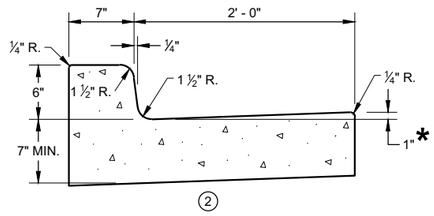
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

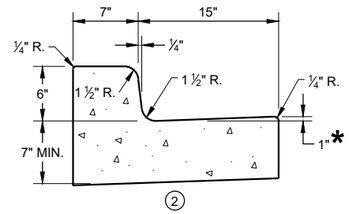
6

SDD 08D05 - 20g

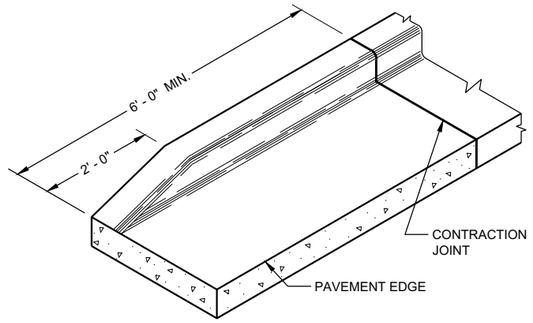


CONCRETE CURB AND GUTTER 31" ①

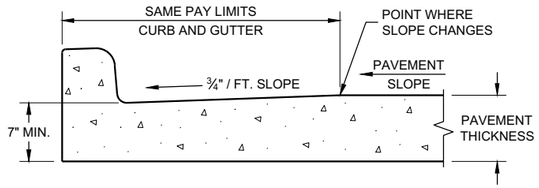
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



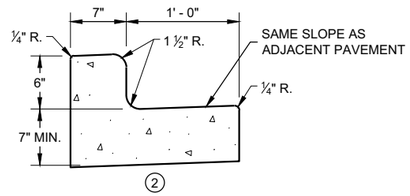
CONCRETE CURB AND GUTTER 22" ①



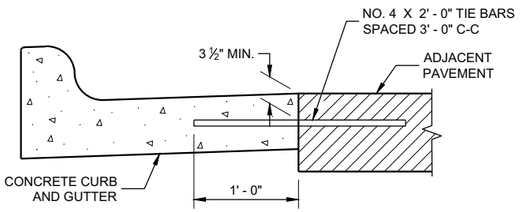
END SECTIONCURB AND GUTTER



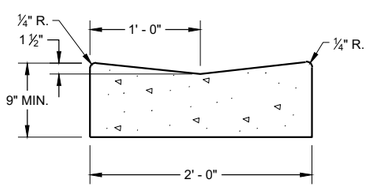
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



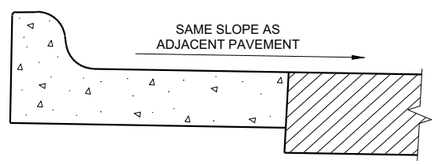
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

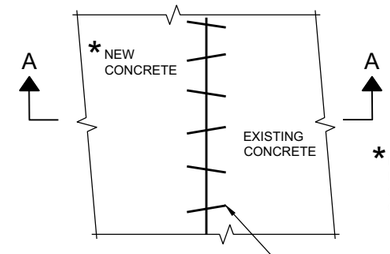
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

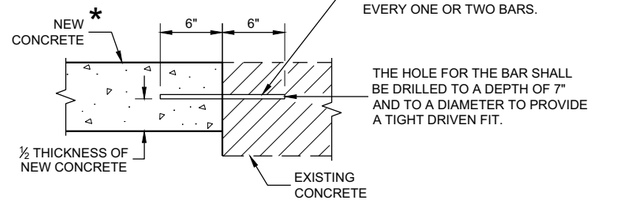
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

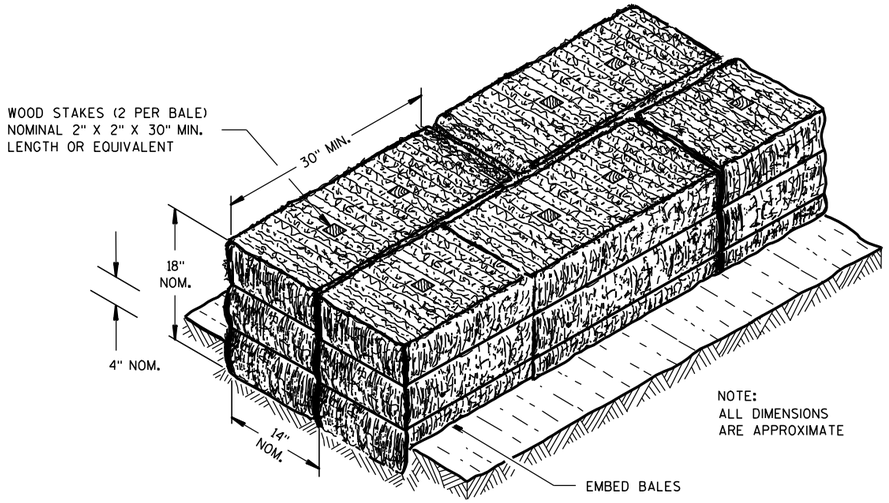
(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

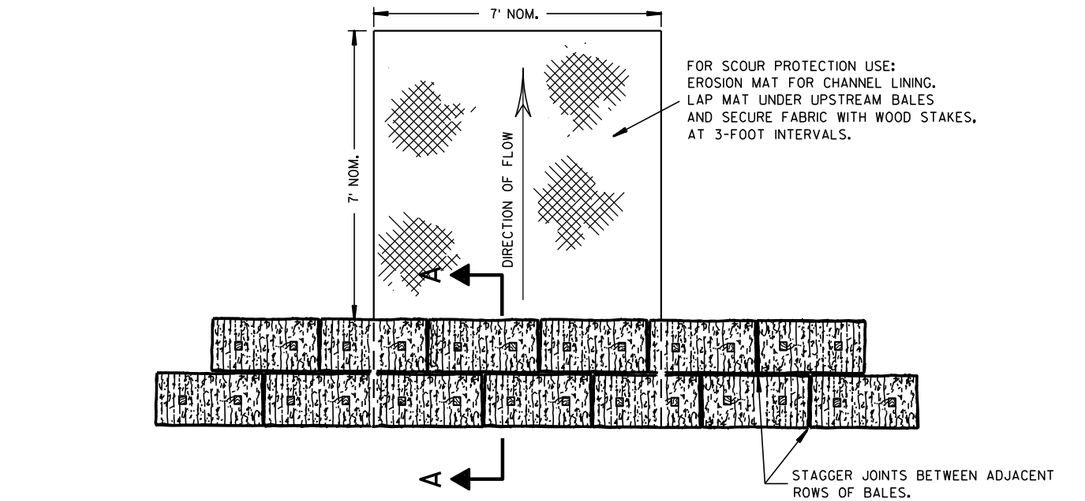
APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

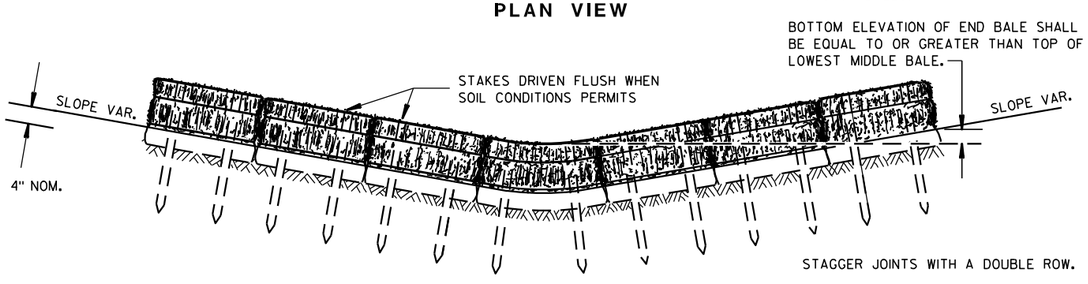
SDD 08D16 - 11
SDD 08D16 - 11



SECTION A-A



PLAN VIEW



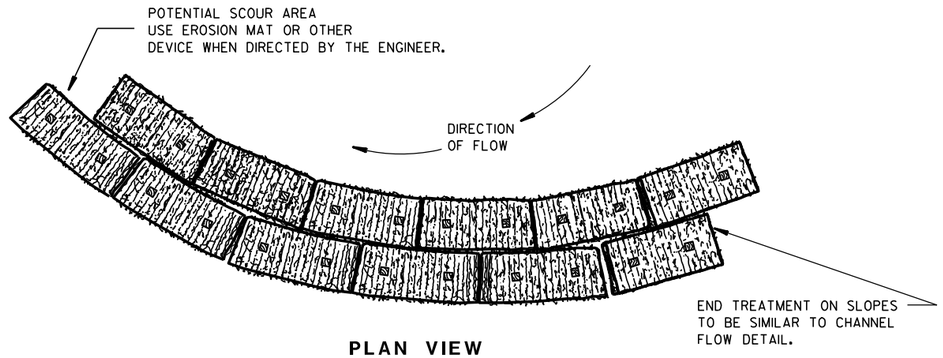
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

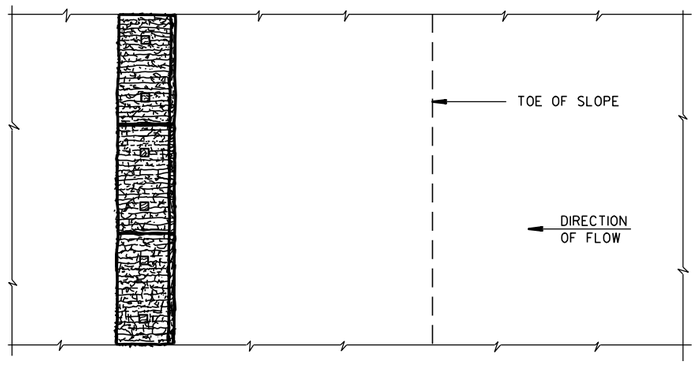
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

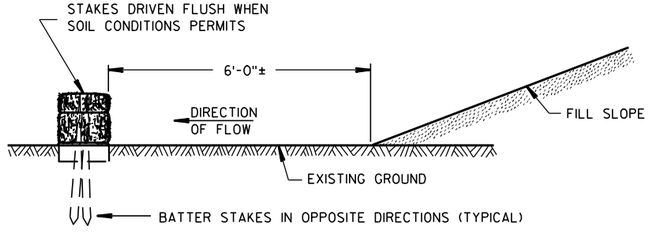


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

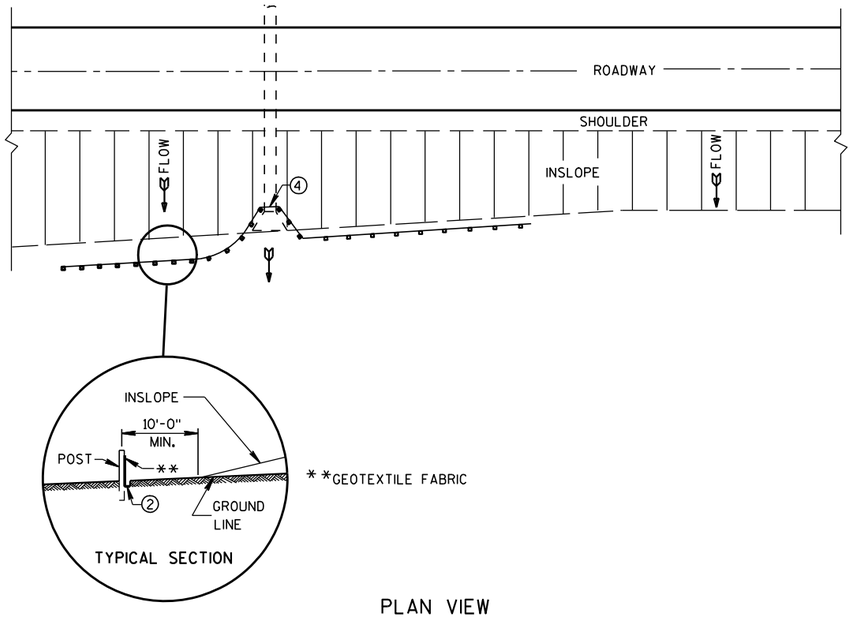
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

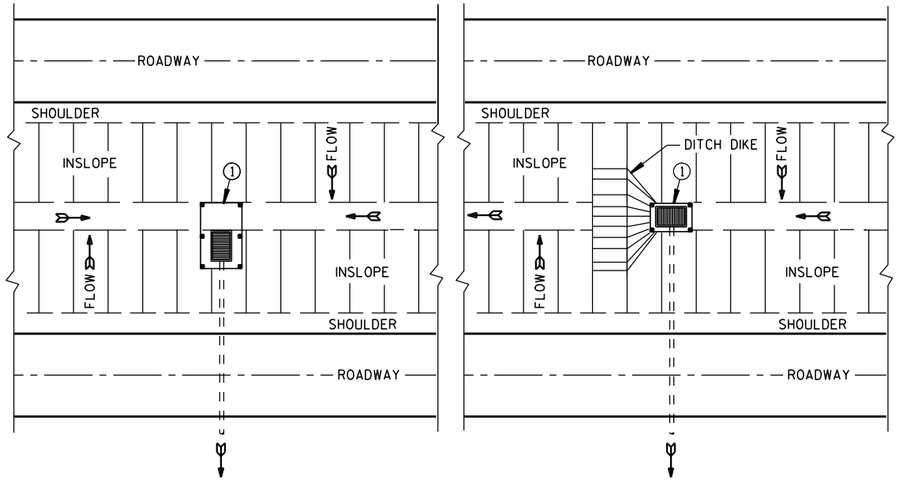
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

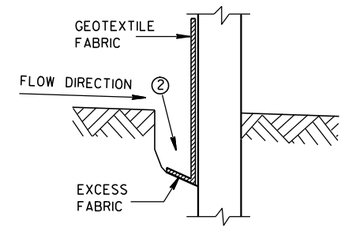
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

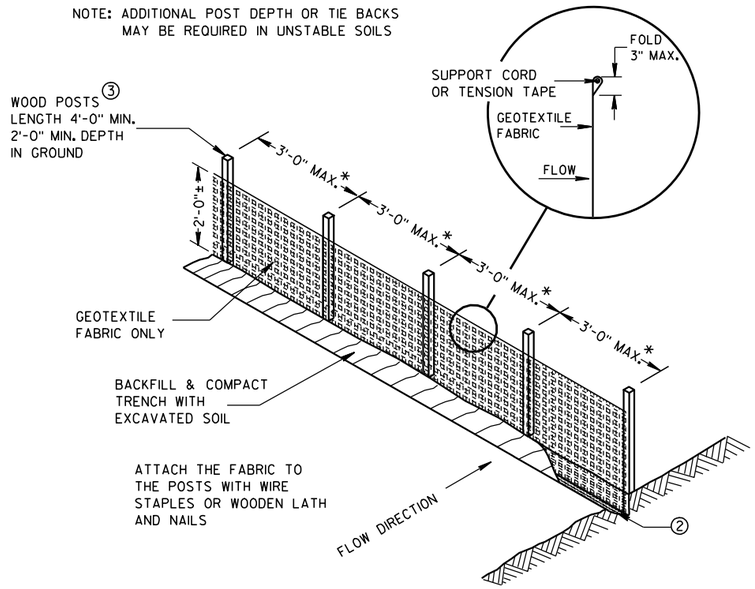
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

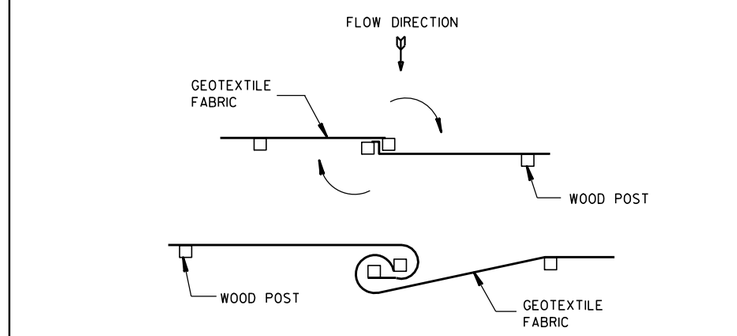
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



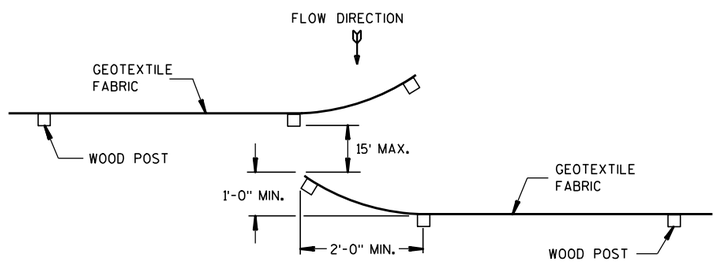
TRENCH DETAIL



SILT FENCE

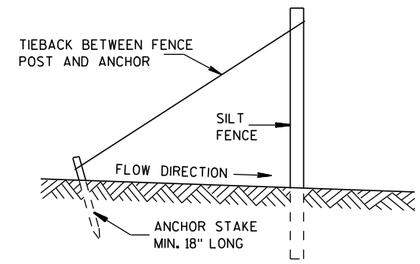


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

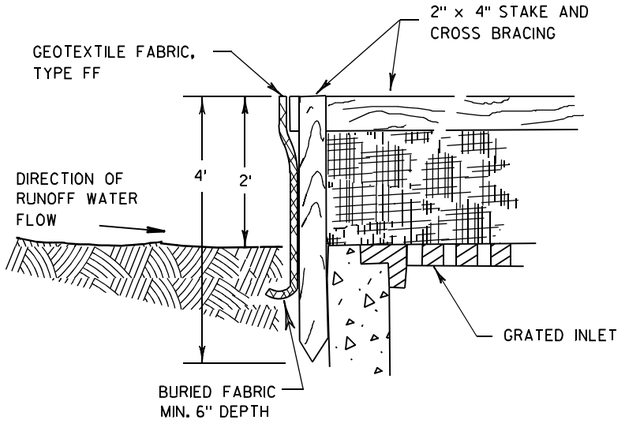
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

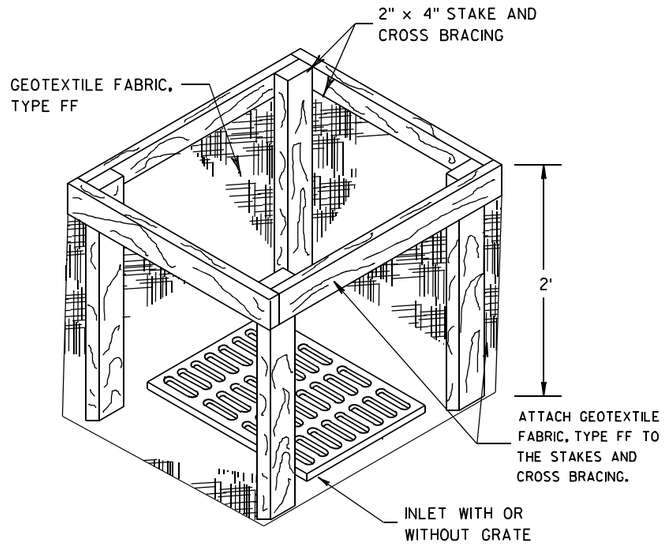
6

S.D.D. 8 E 9-6

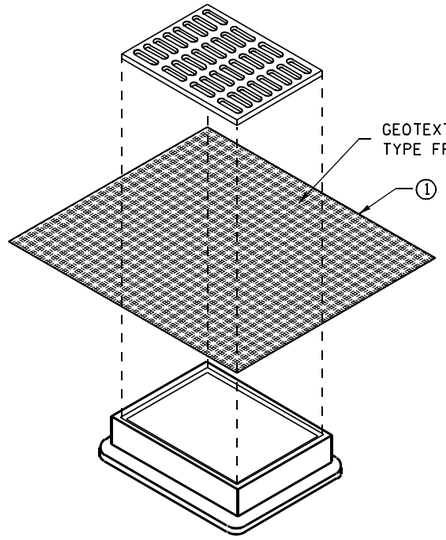
6

S.D.D. 8 E 9-6



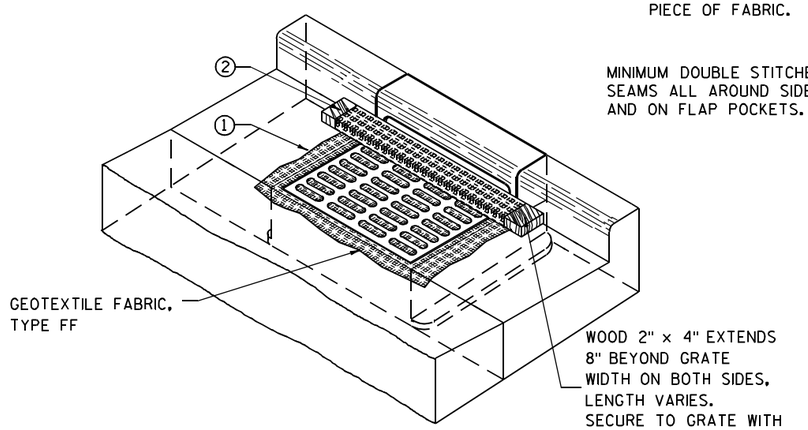


INLET PROTECTION, TYPE A

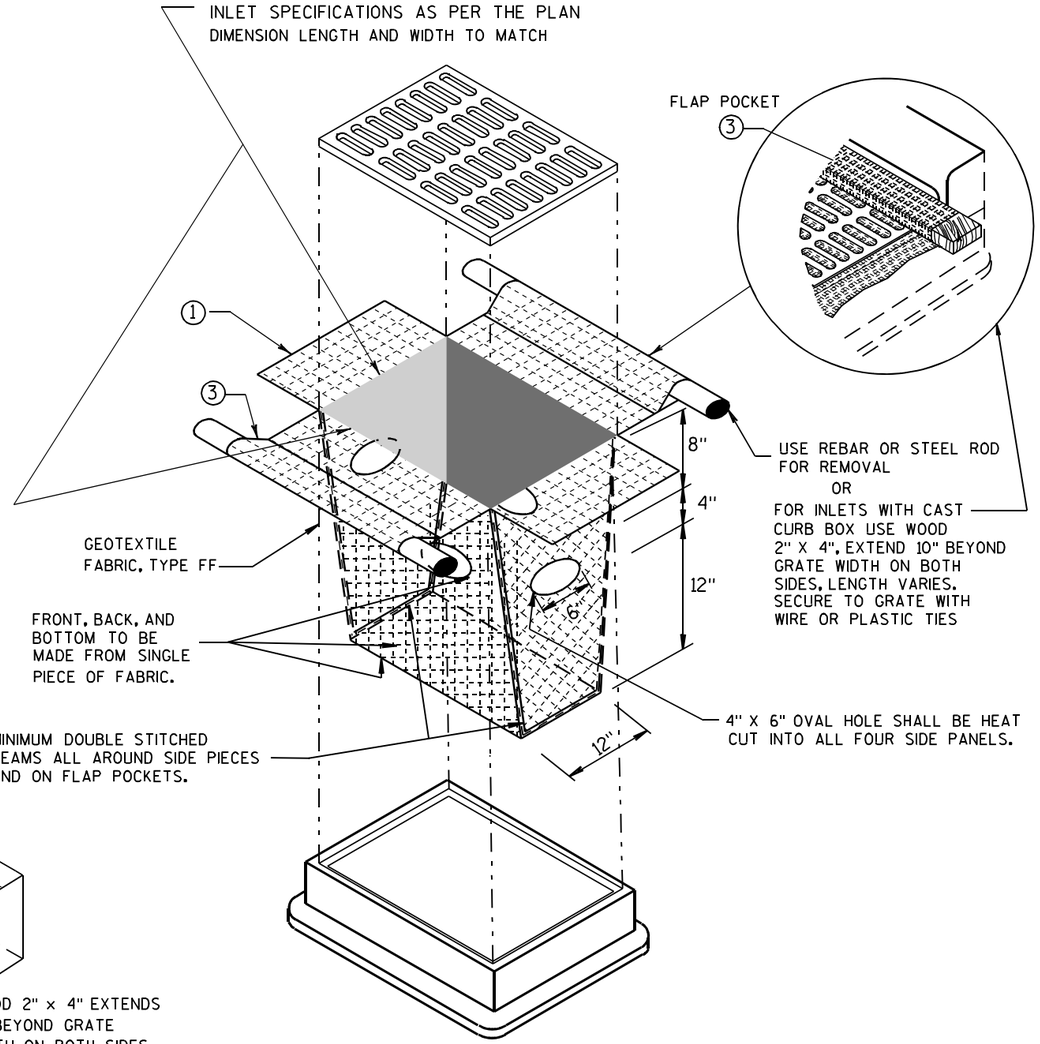


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

METAL APRON ENDWALLS

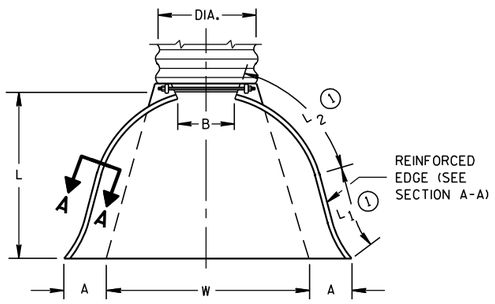
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

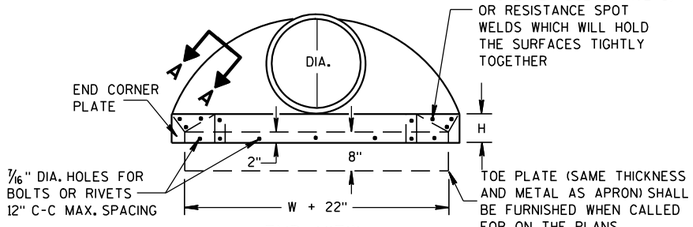
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

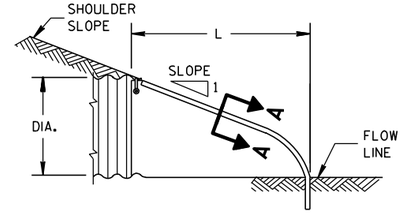
*MINIMUM
**MAXIMUM



PLAN VIEW

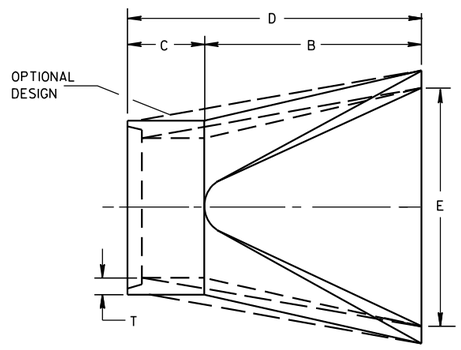


END VIEW

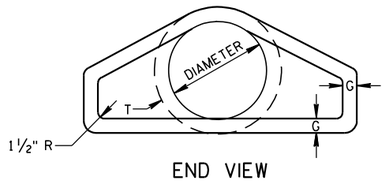


SIDE ELEVATION

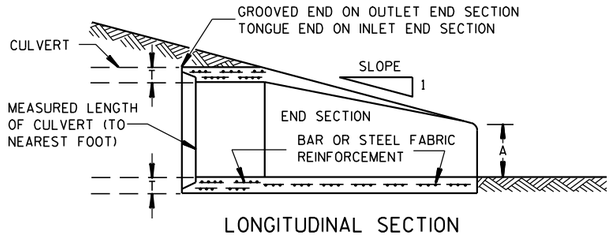
METAL ENDWALLS



PLAN

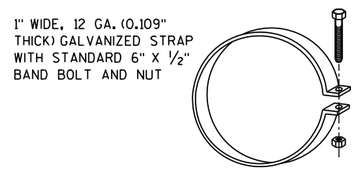


END VIEW



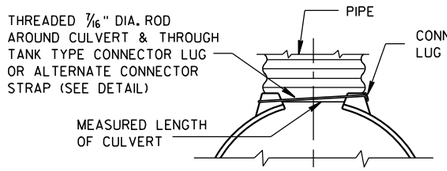
LONGITUDINAL SECTION

CONCRETE ENDWALLS

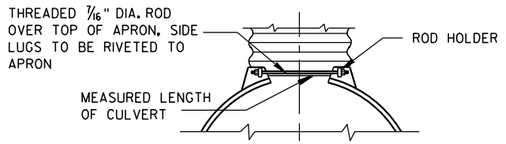


ALTERNATE FOR TYPE 1 CONNECTION

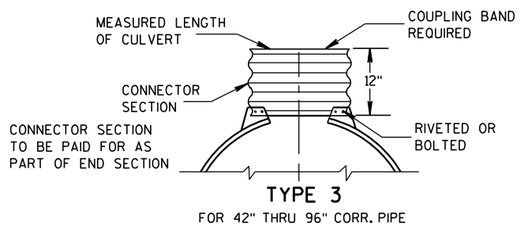
END SECTION CONNECTOR STRAP



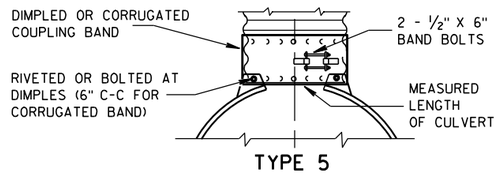
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

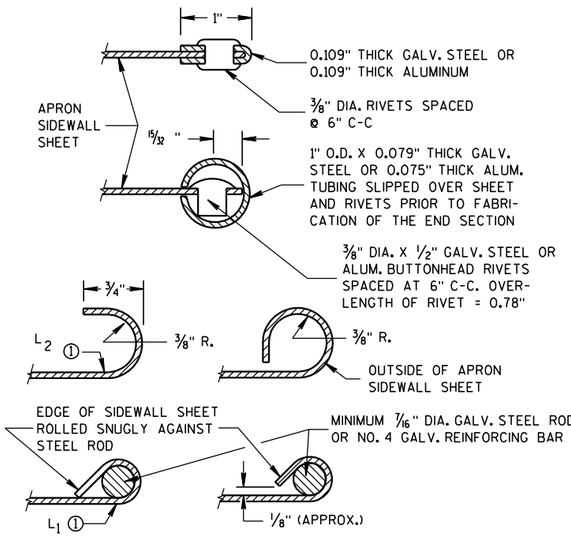
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

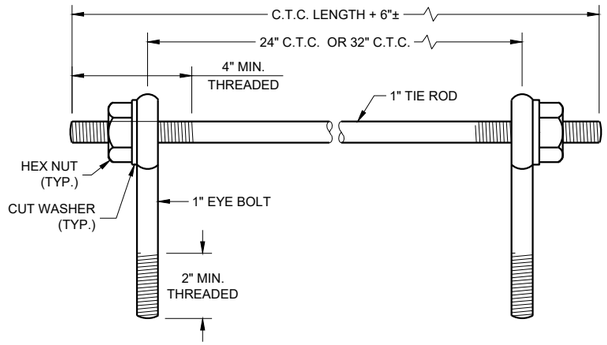
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

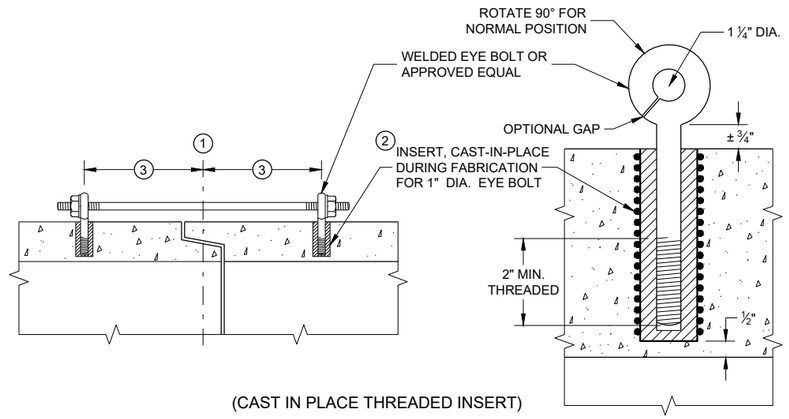
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

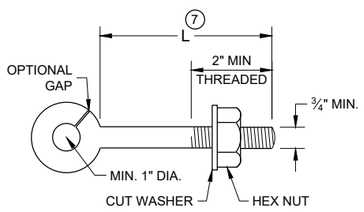
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

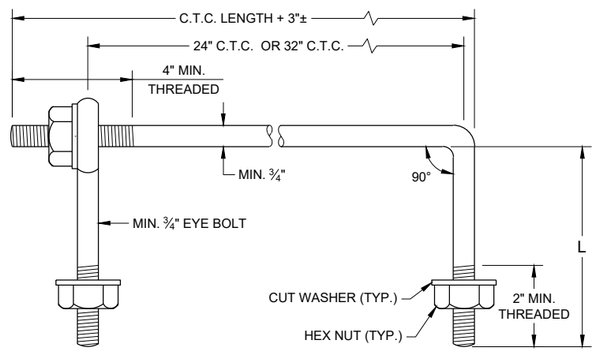
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

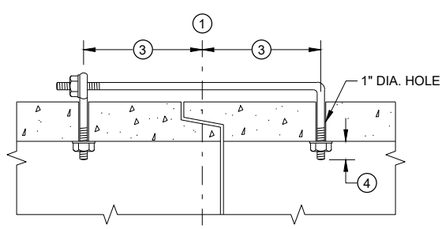


EYE BOLT (7)

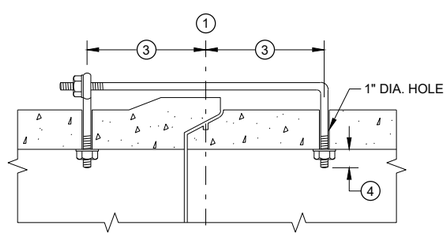
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

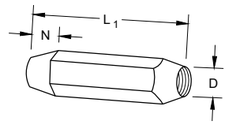
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

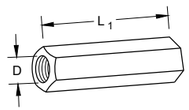
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



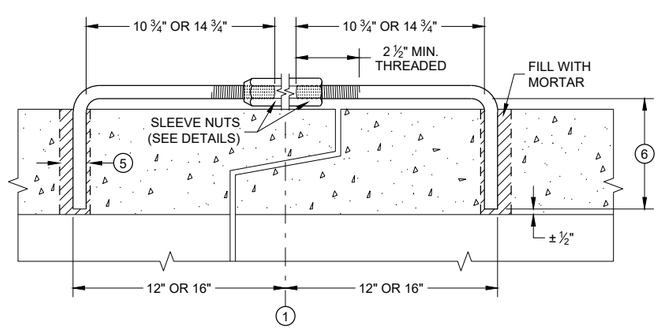
TAPERED



PLAIN

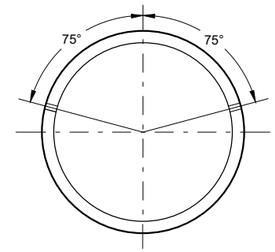
RIGHT AND LEFT THREADS

SLEEVE NUTS



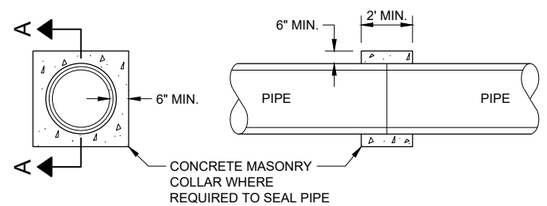
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

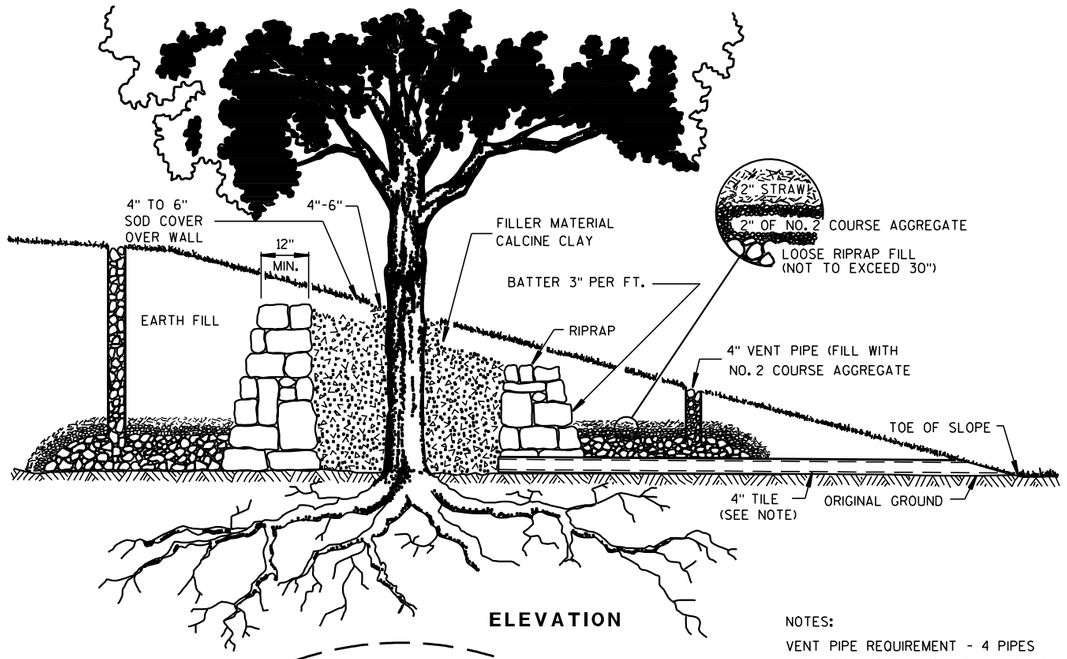
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

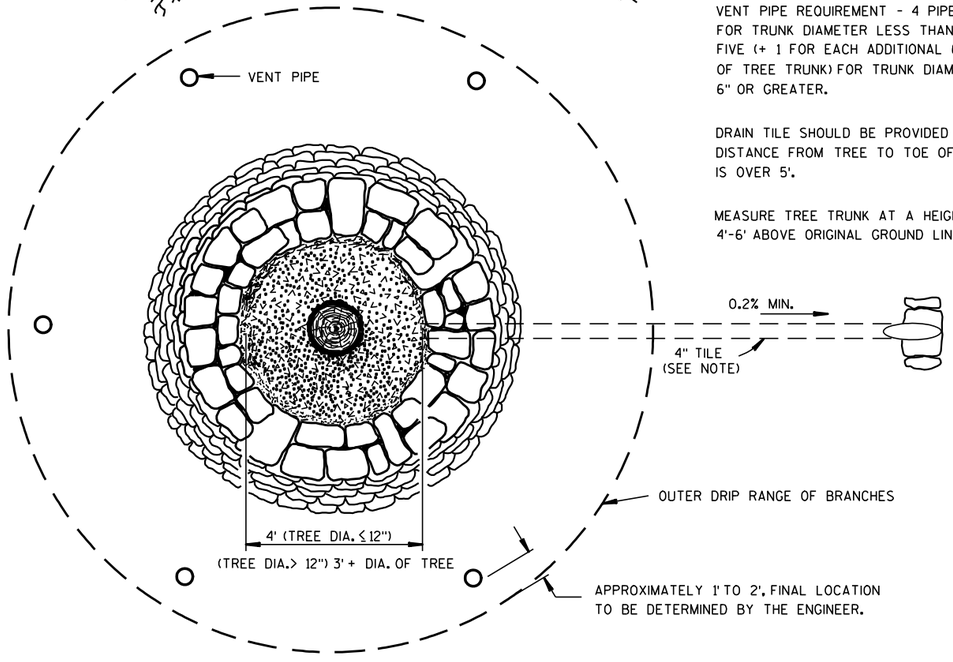
FHWA

SDD 08F04 - 08

SDD 08F04 - 08



ELEVATION



PLAN

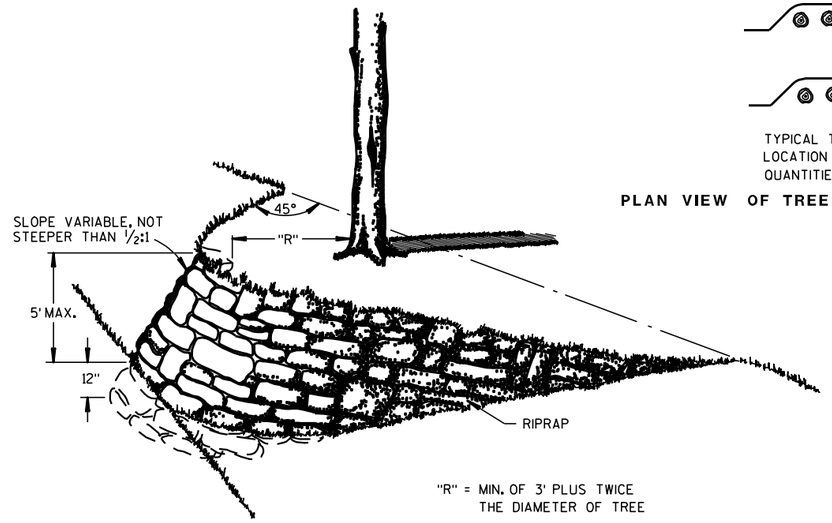
FULL TREE WELL WITH RIPRAP WALL

NOTES:

VENT PIPE REQUIREMENT - 4 PIPES FOR TRUNK DIAMETER LESS THAN 6". FIVE (+ 1 FOR EACH ADDITIONAL 6" OF TREE TRUNK) FOR TRUNK DIAMETER 6" OR GREATER.

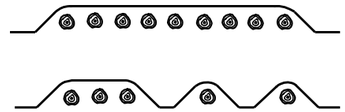
DRAIN TILE SHOULD BE PROVIDED IF DISTANCE FROM TREE TO TOE OF SLOPE IS OVER 5'.

MEASURE TREE TRUNK AT A HEIGHT 4'-6' ABOVE ORIGINAL GROUND LINE.



"R" = MIN. OF 3' PLUS TWICE THE DIAMETER OF TREE

DETAILS OF TREE ISLAND AND ROOT PROTECTION



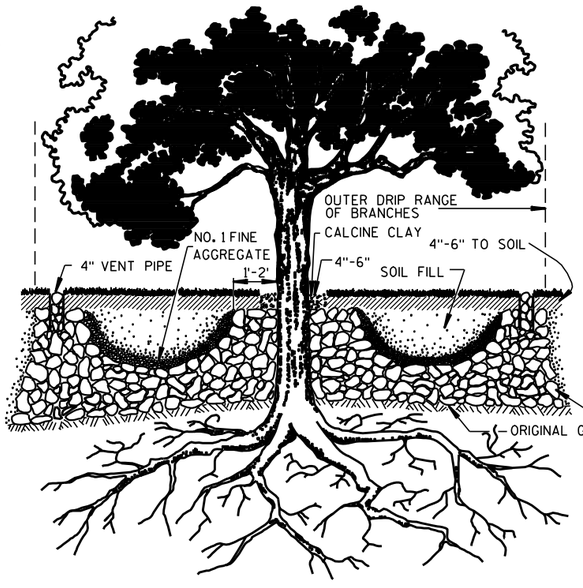
TYPICAL TREATMENTS OF ROOT PROTECTION. LOCATION SHOWN ON MISCELLANEOUS QUANTITIES SHEET.

PLAN VIEW OF TREE ISLANDS FOR ONE OR MORE TREES

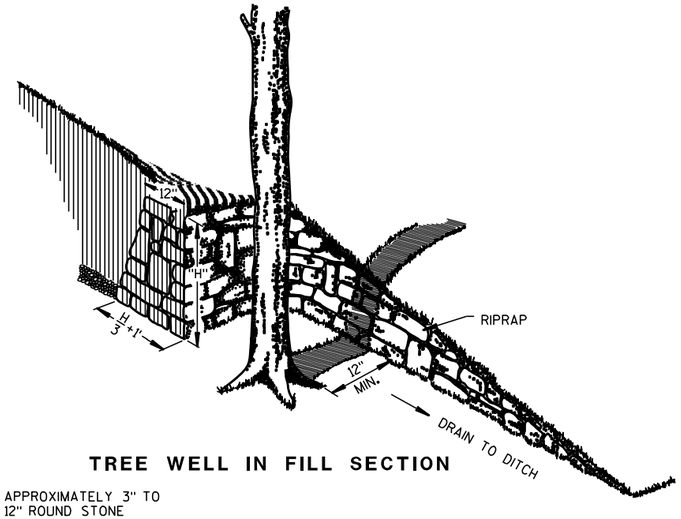
GENERAL NOTES

WALLS TO BE BUILT TO APPROXIMATE SHAPE AND DIMENSIONS SHOWN. STONE TO CONFORM TO SPECIFICATIONS FOR RIPRAP.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



TREE WELL WITHOUT WALL



TREE WELL IN FILL SECTION

DETAILS FOR TREE WELLS

TREE PRESERVATION DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

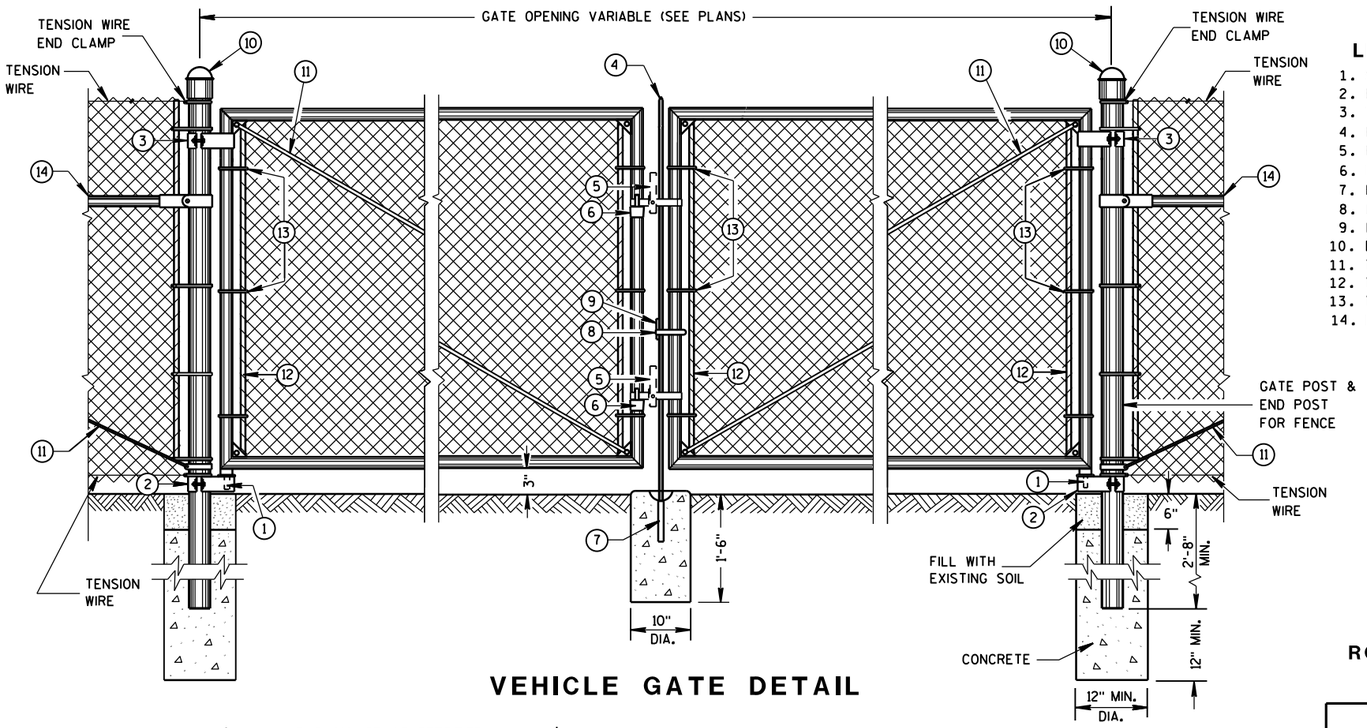
APPROVED
8/25/76 DATE
/S/ D. L. Strand STATE DESIGN ENGINEER
330 WYS
FHWA

6

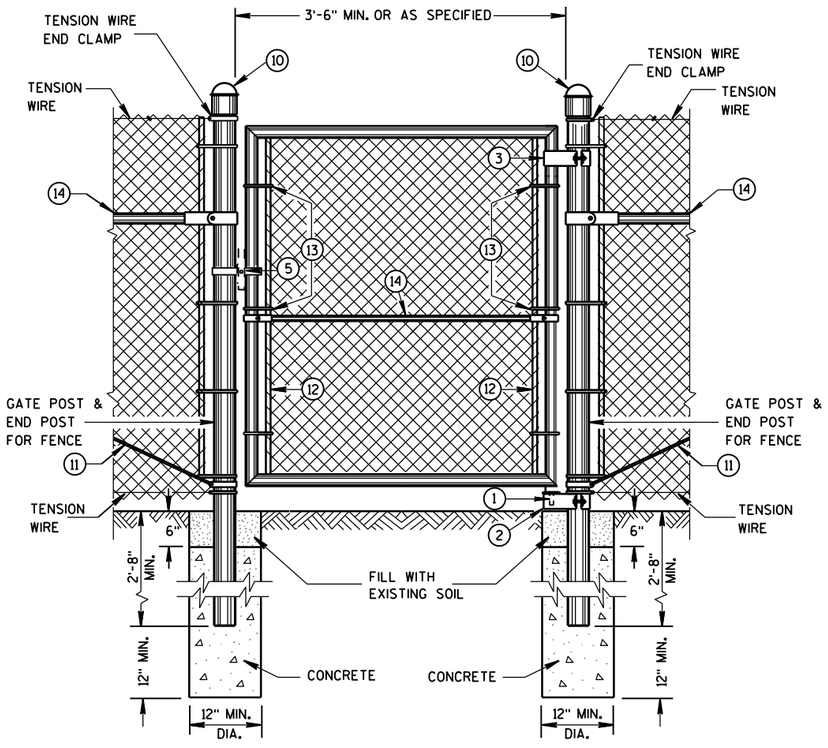
S.D.D. 14 A 1-3

6

S.D.D. 14 A 1-3



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

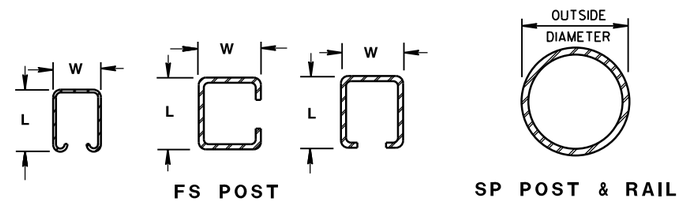
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST — SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

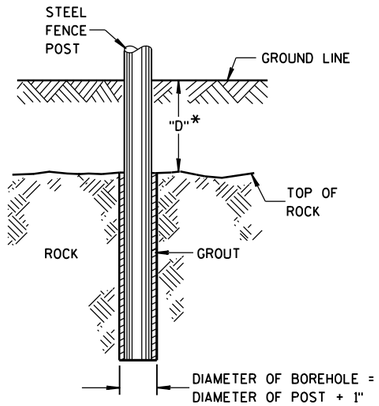
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

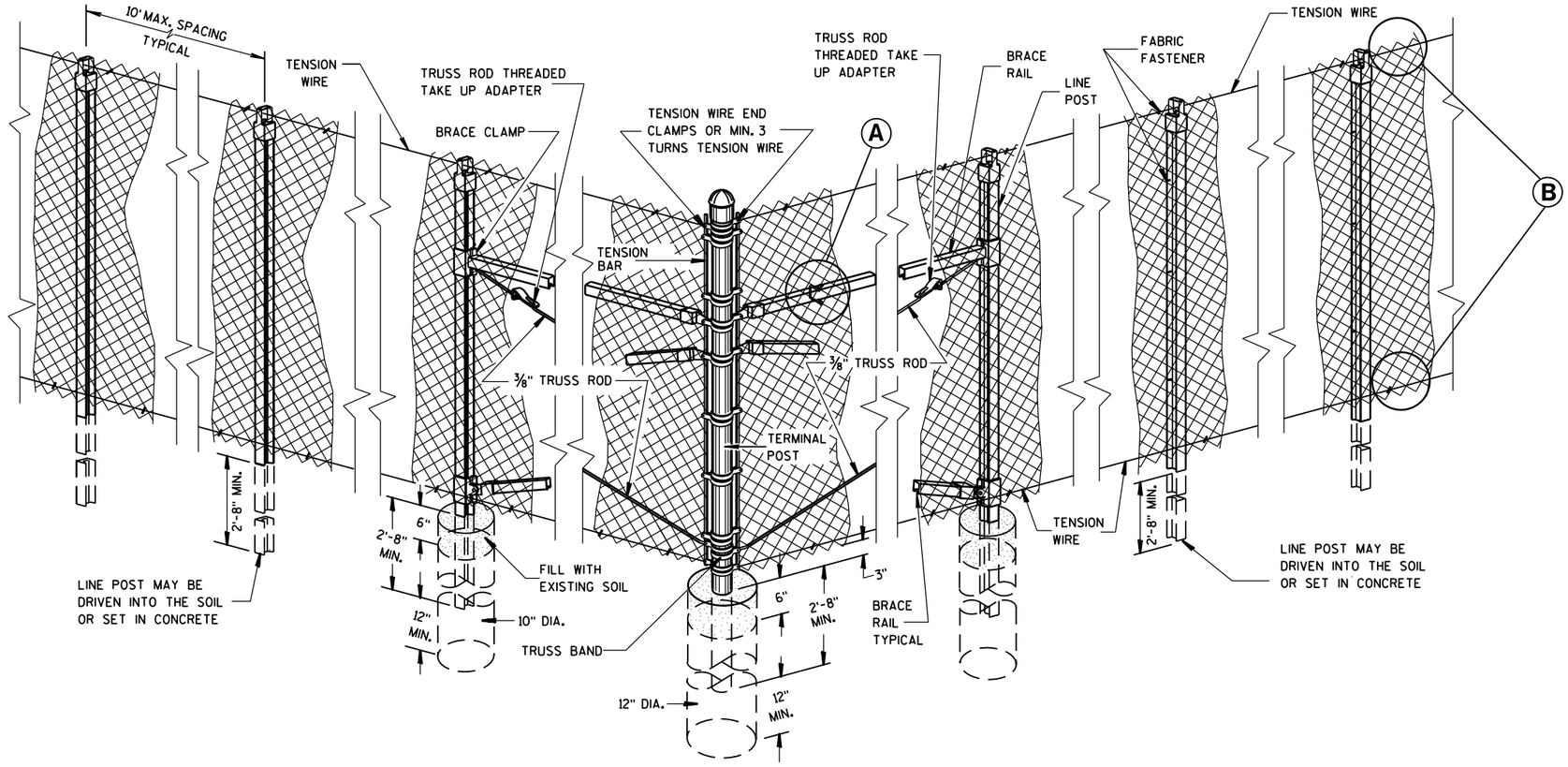
6

S.D.D. 15 B 3-15a

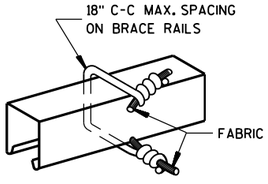


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



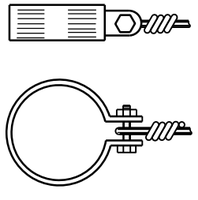
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



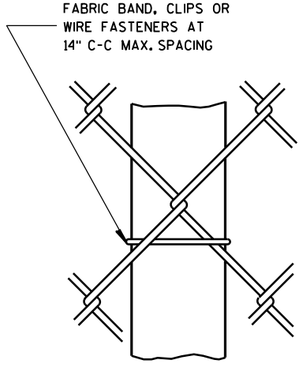
BRACE RAIL

FABRIC FASTENER

Ⓐ



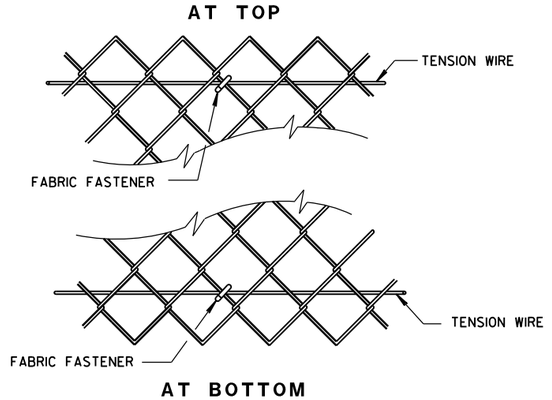
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

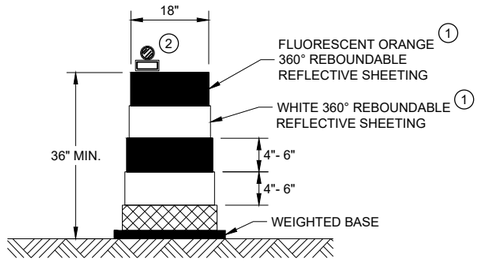
S.D.D. 15 B 3-15b

6

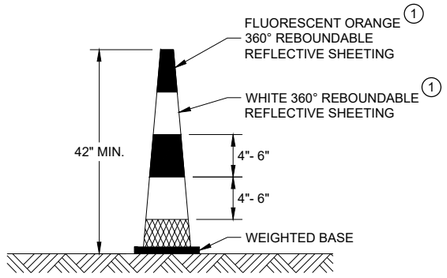
S.D.D. 15 B 3-15b

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

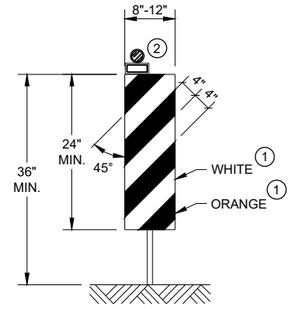


DRUM



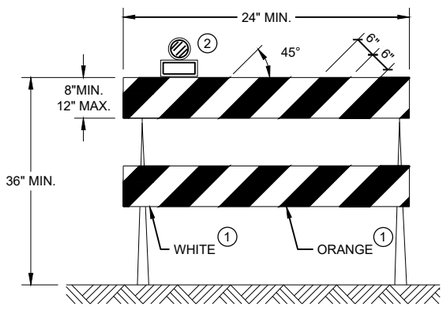
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



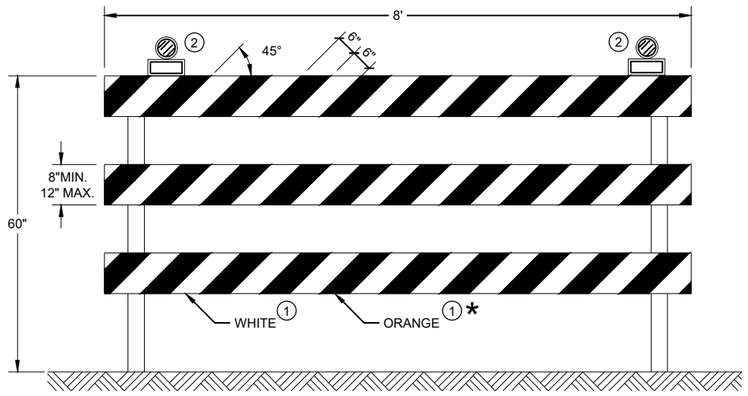
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

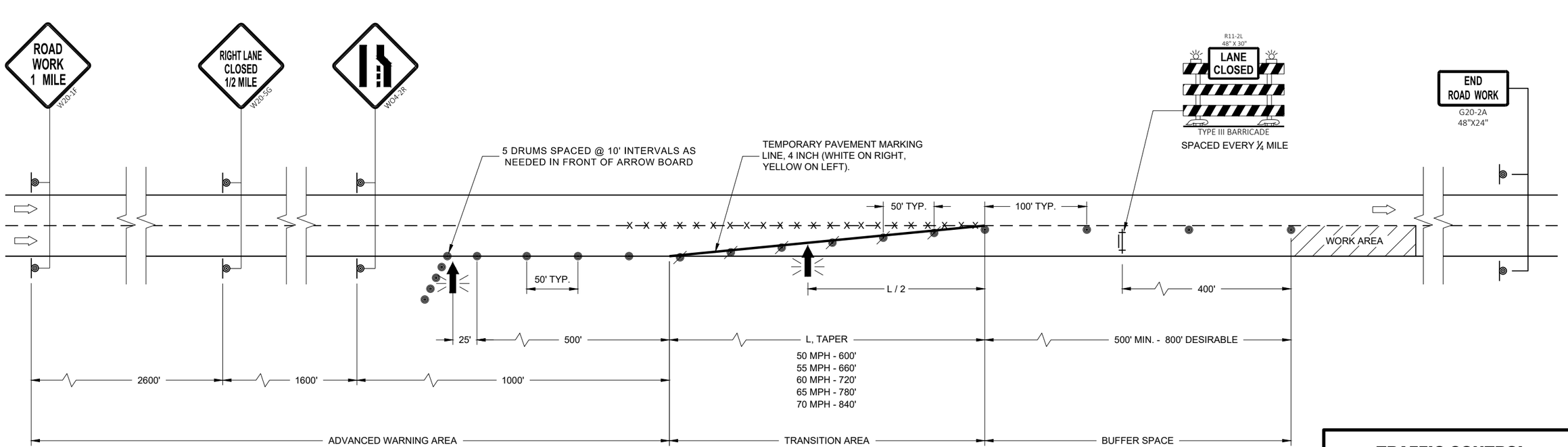
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 10a

6

SDD 15D12 - 10a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

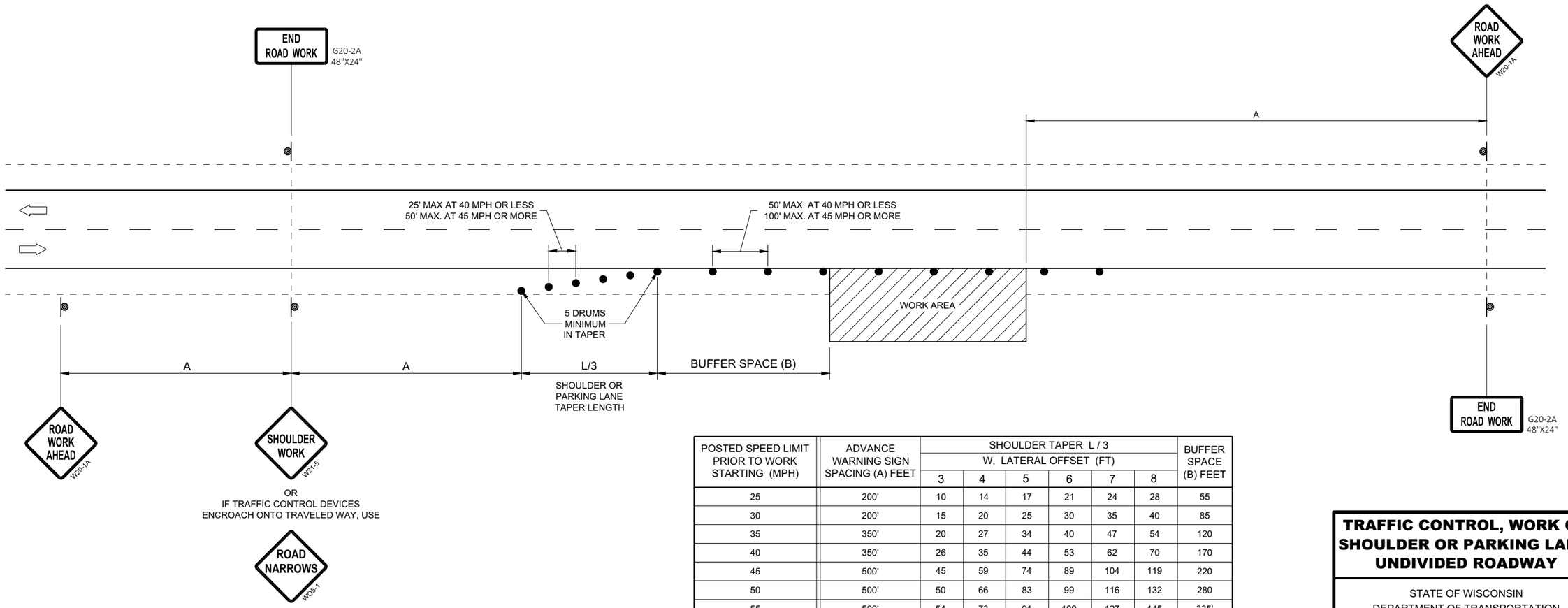
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

335

6

SDD 15D28 - 04

6

SDD 15D28 - 04

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

DIRECTION OF TRAFFIC

CONSTRUCTION TRAFFIC

WORK AREA

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'

LEGEND

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

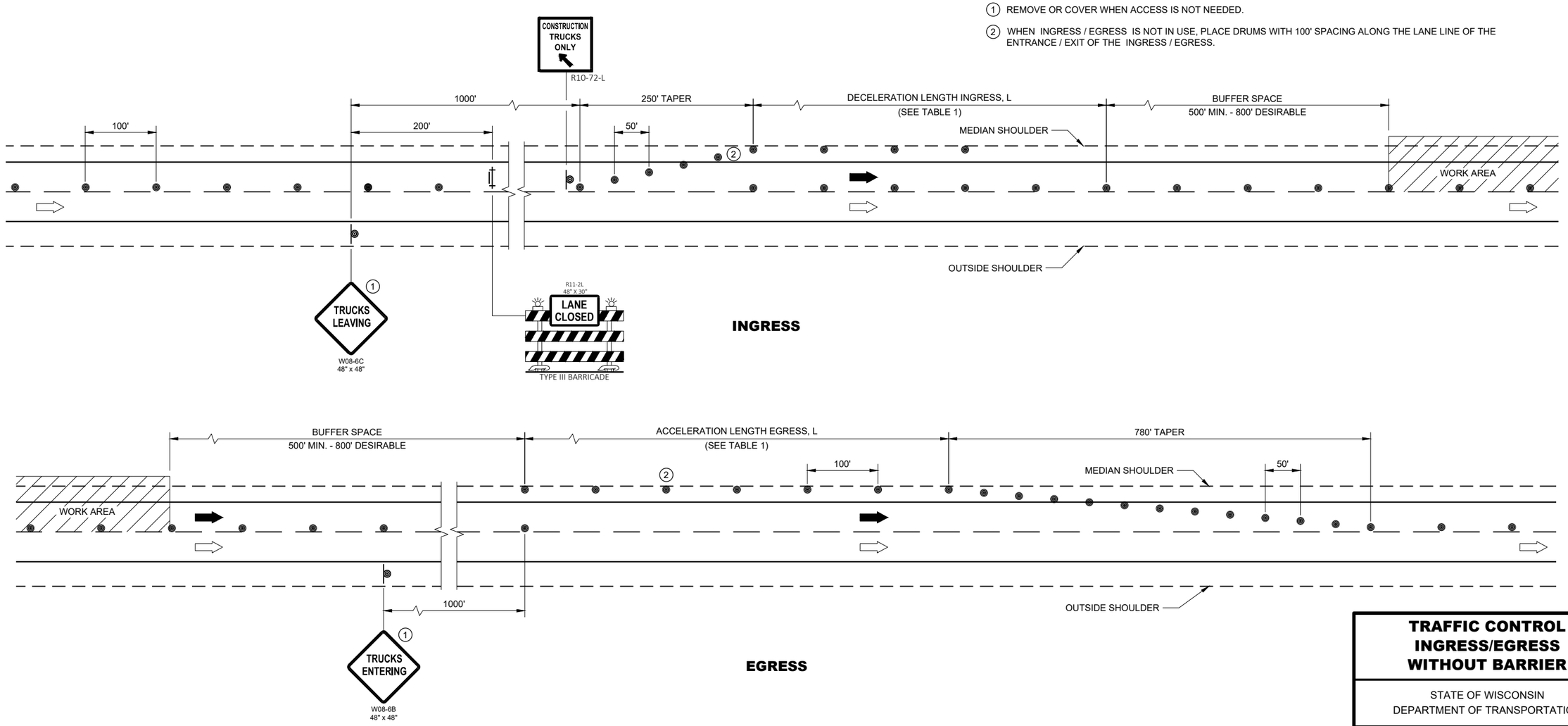
THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

(1) REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

(2) WHEN INGRESS / EGRESS IS NOT IN USE, PLACE DRUMS WITH 100' SPACING ALONG THE LANE LINE OF THE ENTRANCE / EXIT OF THE INGRESS / EGRESS.



TRAFFIC CONTROL INGRESS/EGRESS WITHOUT BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

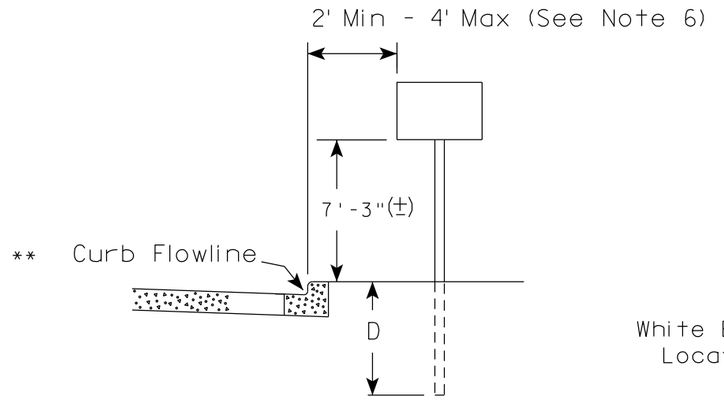
6

SDD 15D47 - 02b

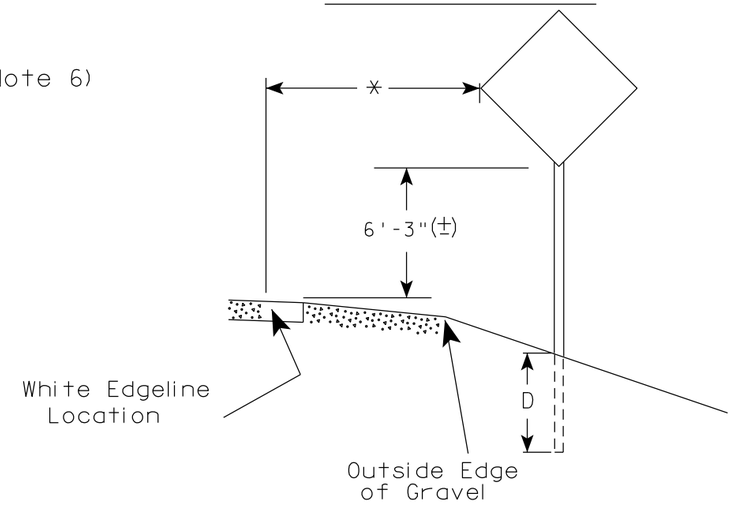
6

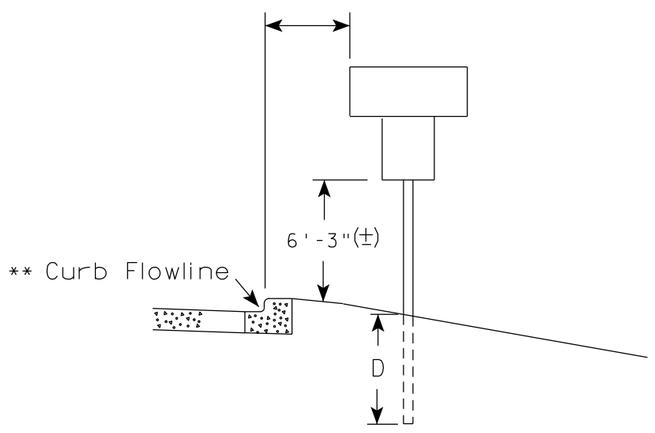
SDD 15D47 - 02b

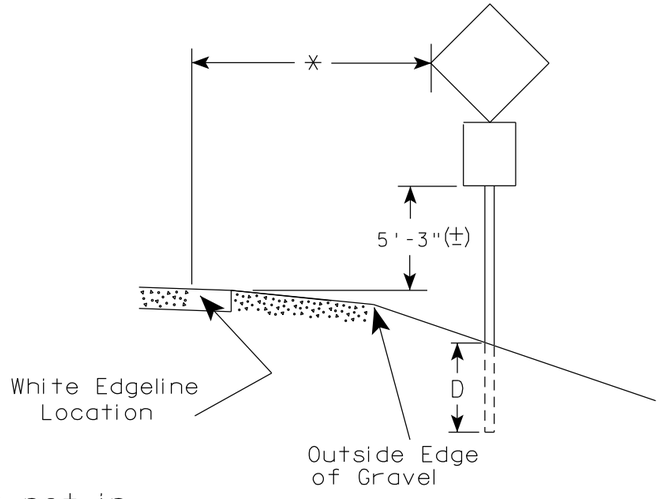
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

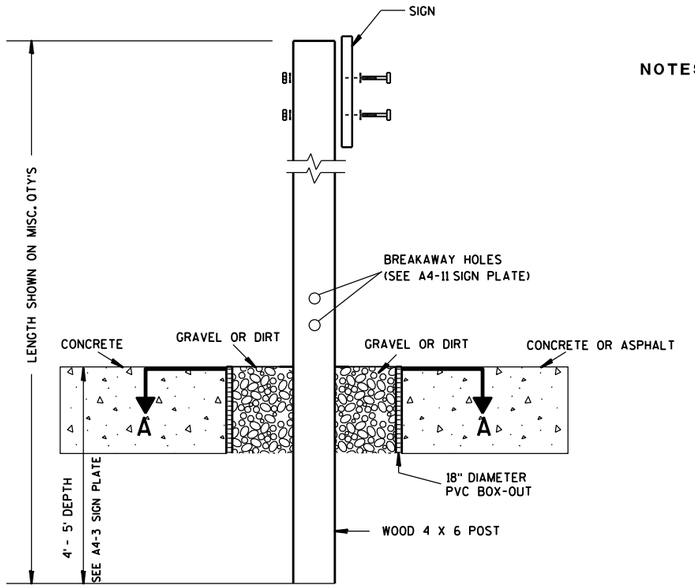
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

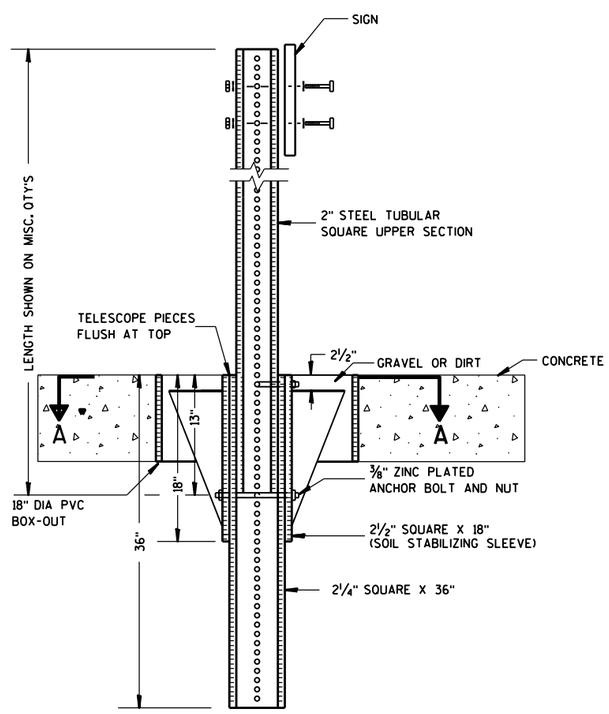
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 337	E



ELEVATION VIEW

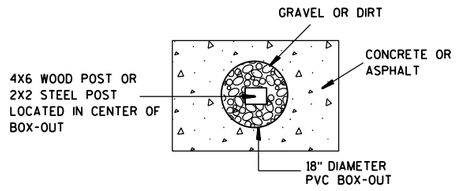
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

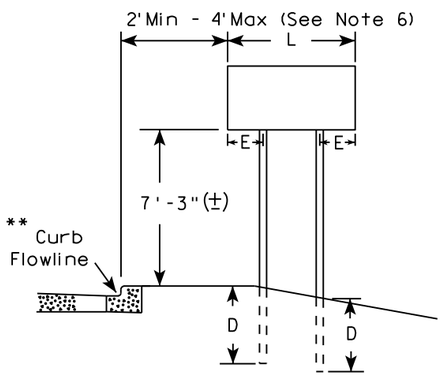
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

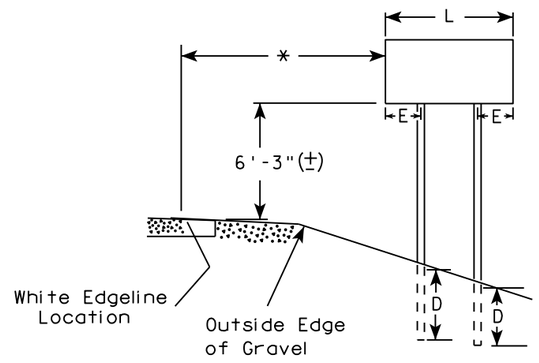
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

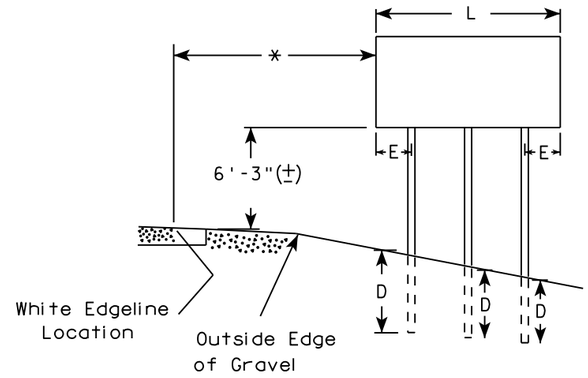
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

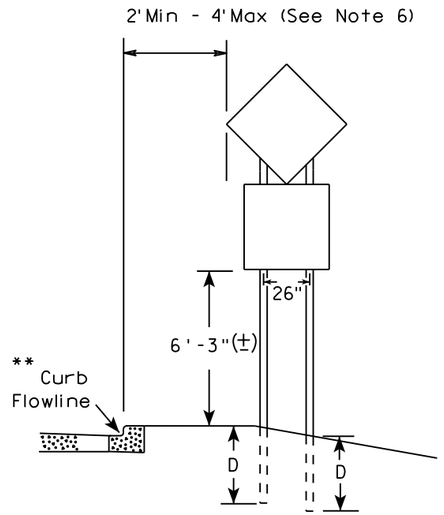
URBAN AREA



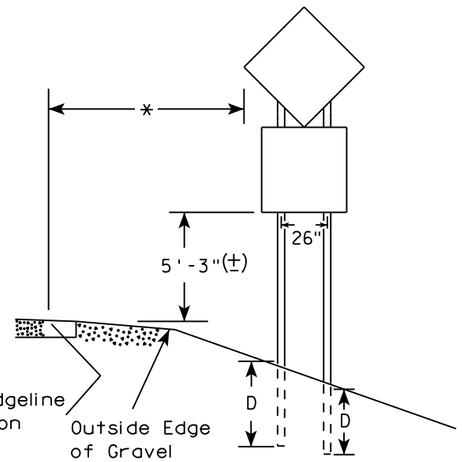
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

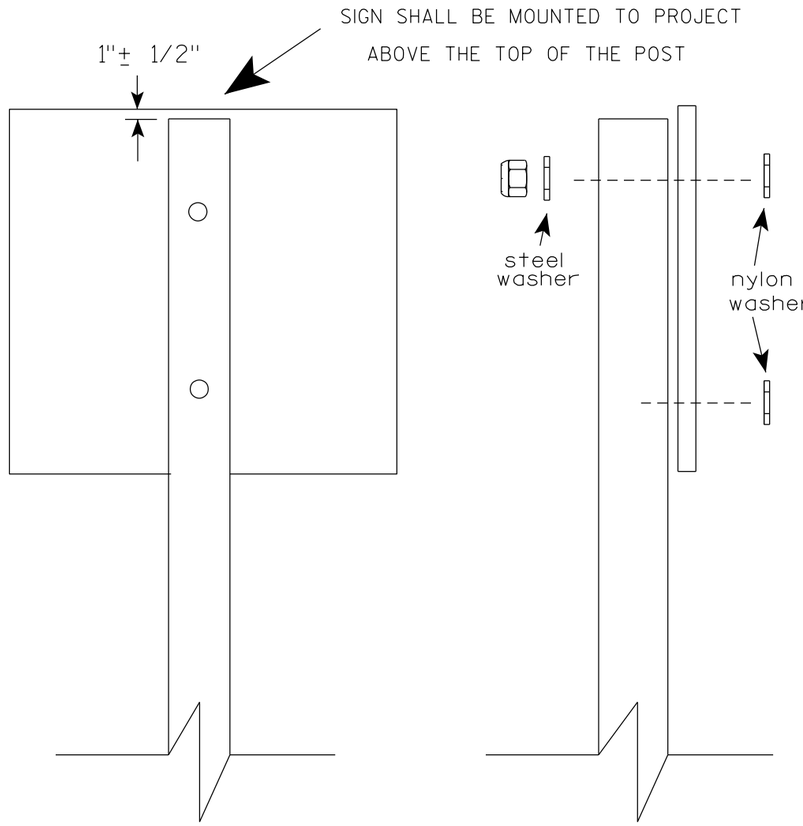
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

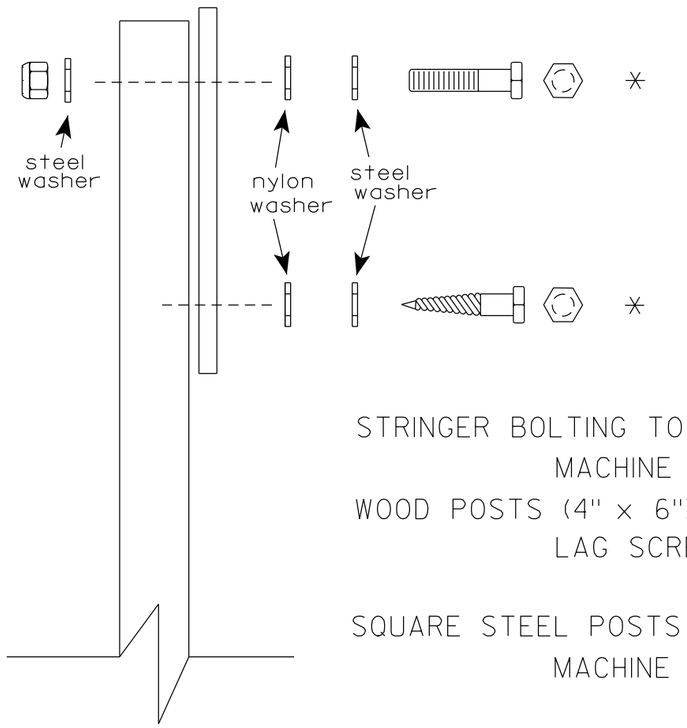
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 339	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

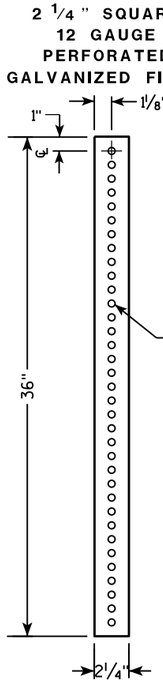
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

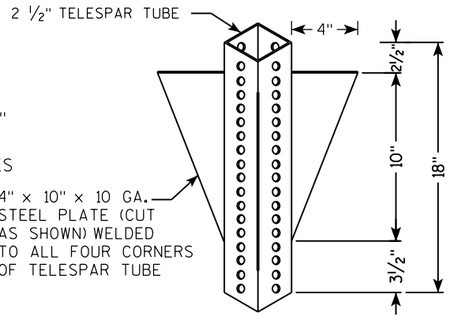
SHEET NO: 340 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

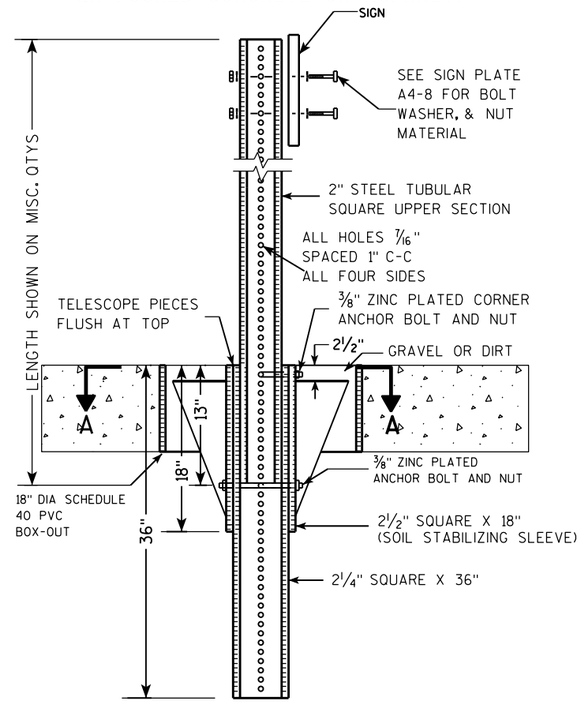
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



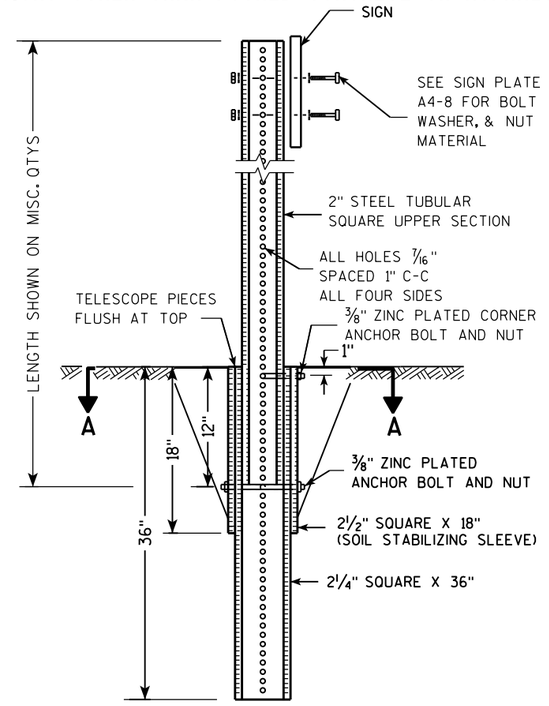
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

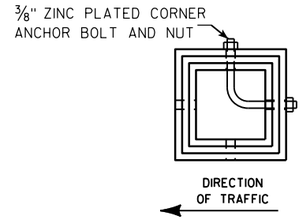


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

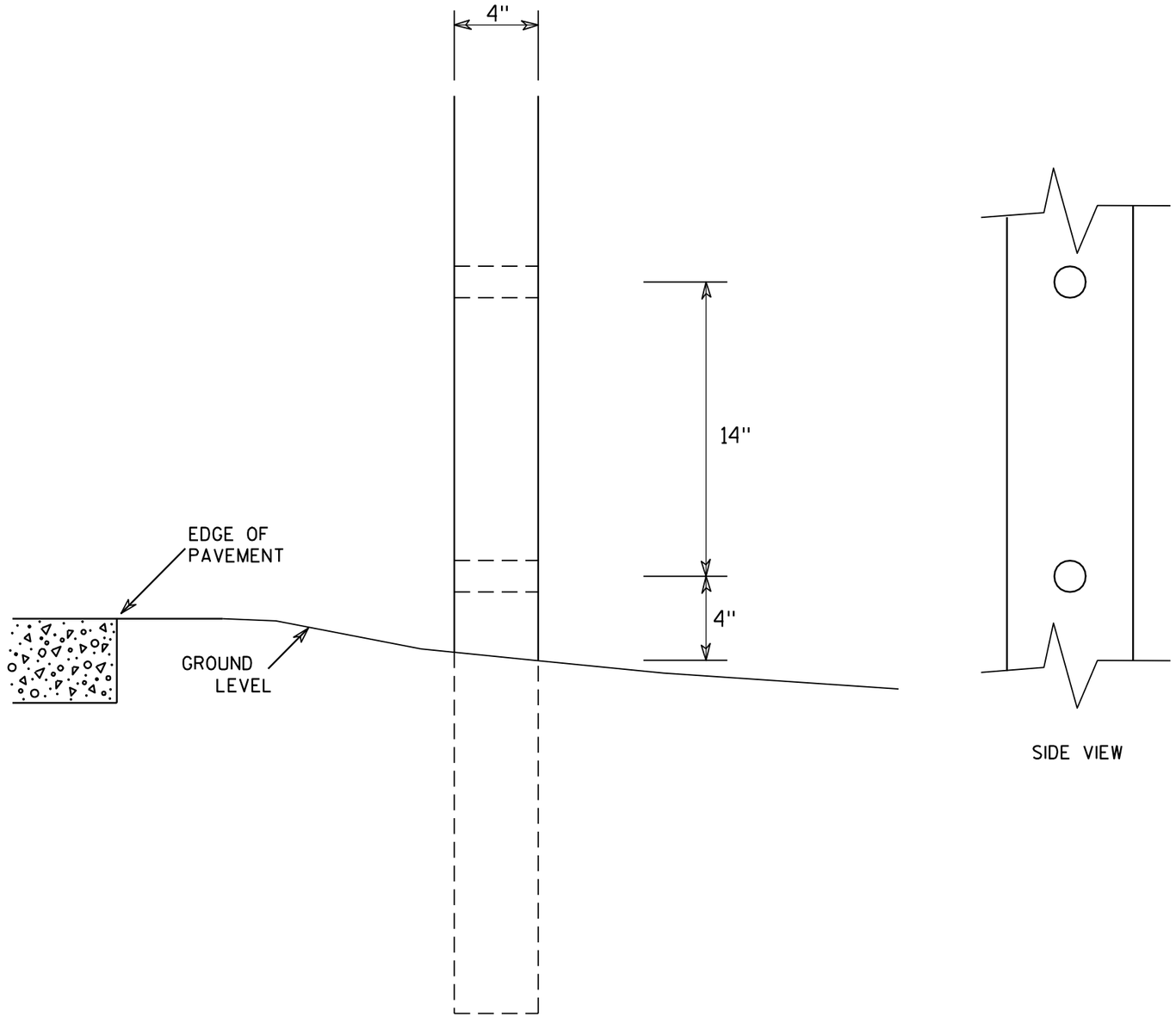
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

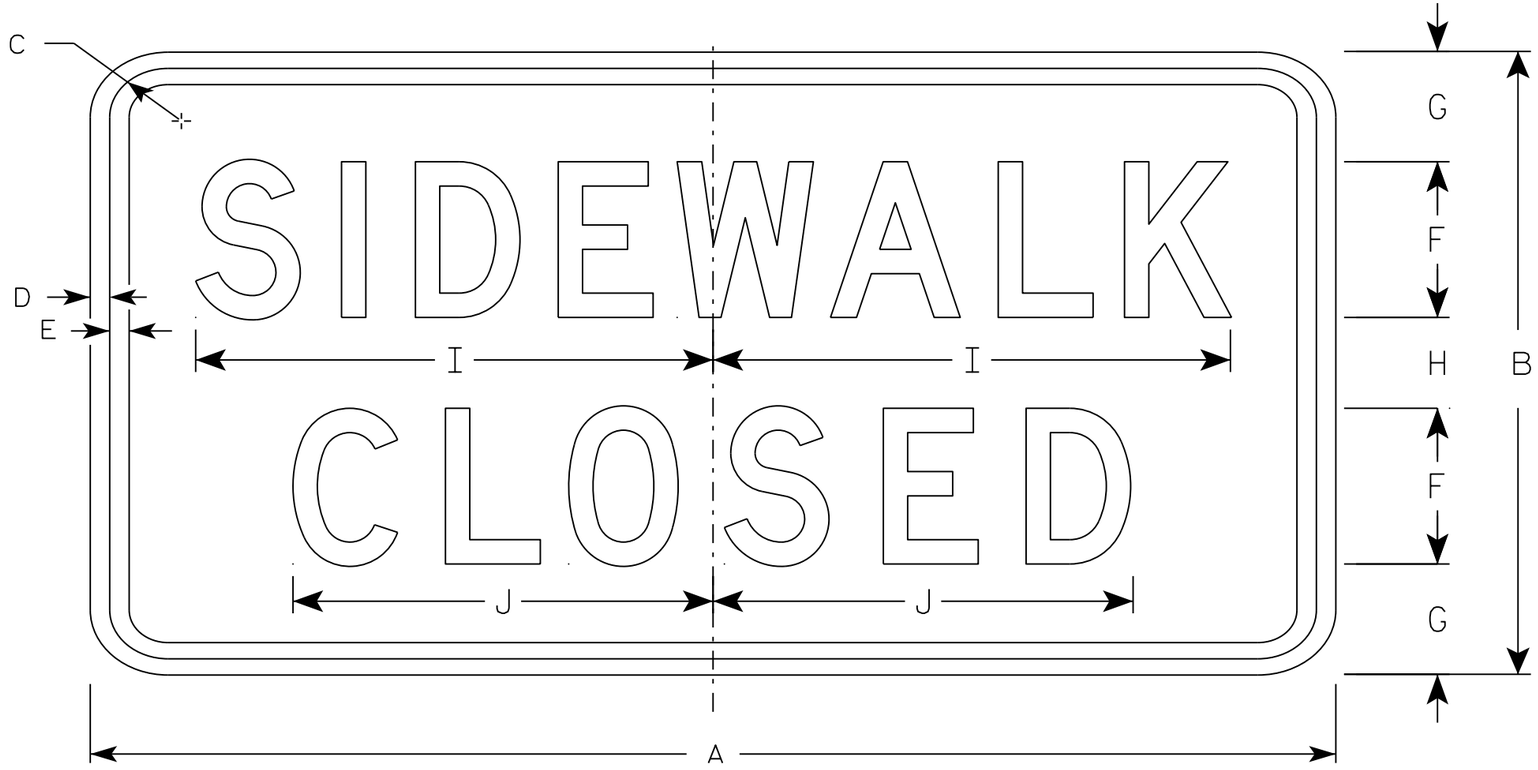
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 342	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

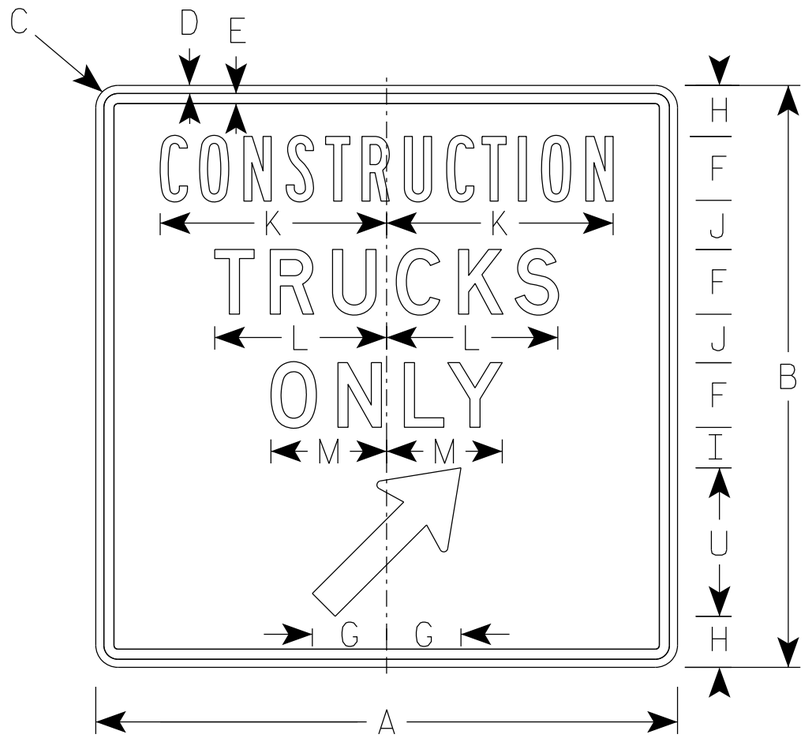
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 343 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

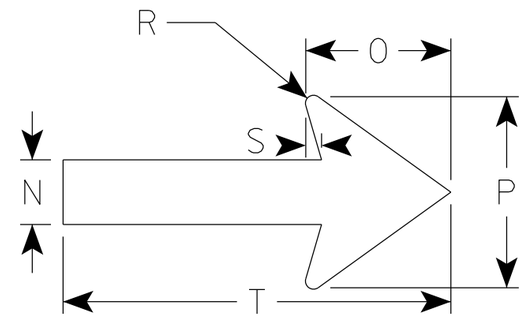
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R10-72R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 Series B Line 2-3 Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R10-72L is same as R10-72R except arrow is reversed



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	36	1 3/8	1/2	5/8	4	4 5/8	3 1/8	2 1/2	3	14	10 5/8	7 1/8	2	4 1/2	6		1/2	1/2	12	9 1/4						9.0
2M																											
3																											
4																											
5																											

STANDARD SIGN
R10-72

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/4/2020 PLATE NO. R10-72.1

PROJECT NO:

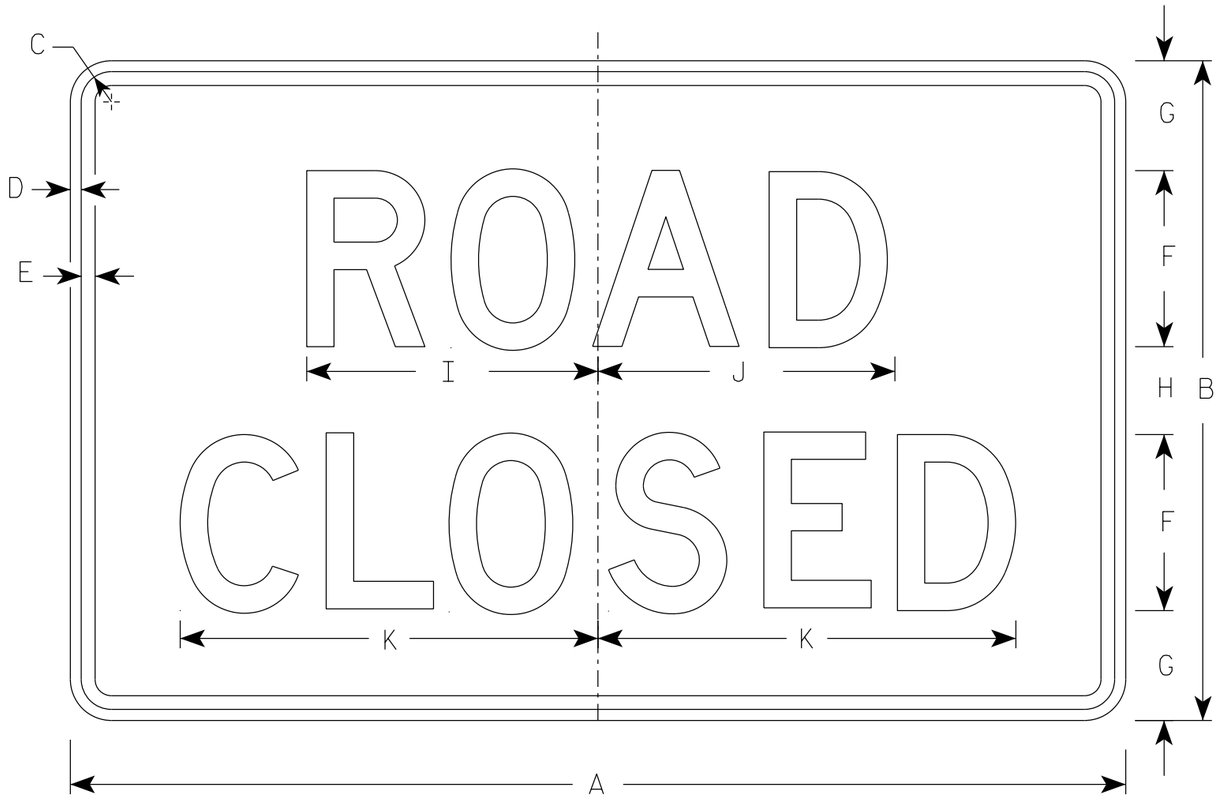
SHEET NO: 344 **E**

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R1072.dgn PLOT DATE : 5-MAY 2020 10:40 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

7

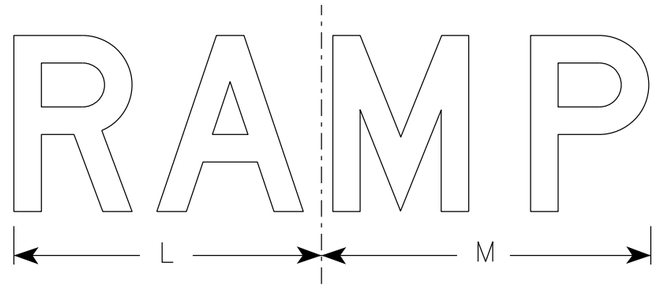
7



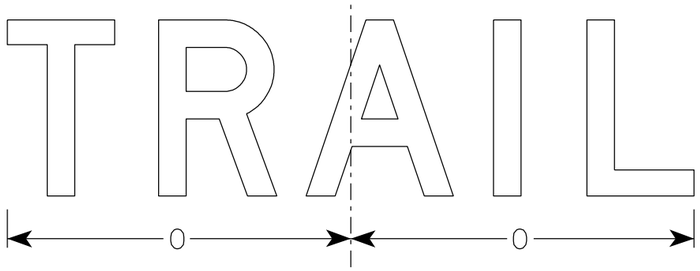
R11-2

NOTES

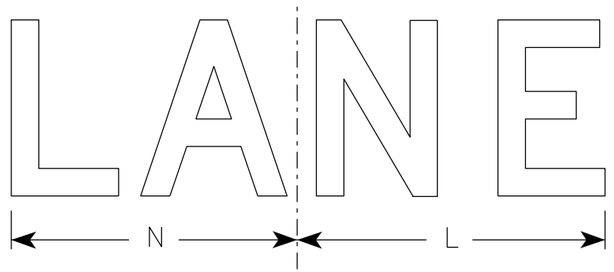
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

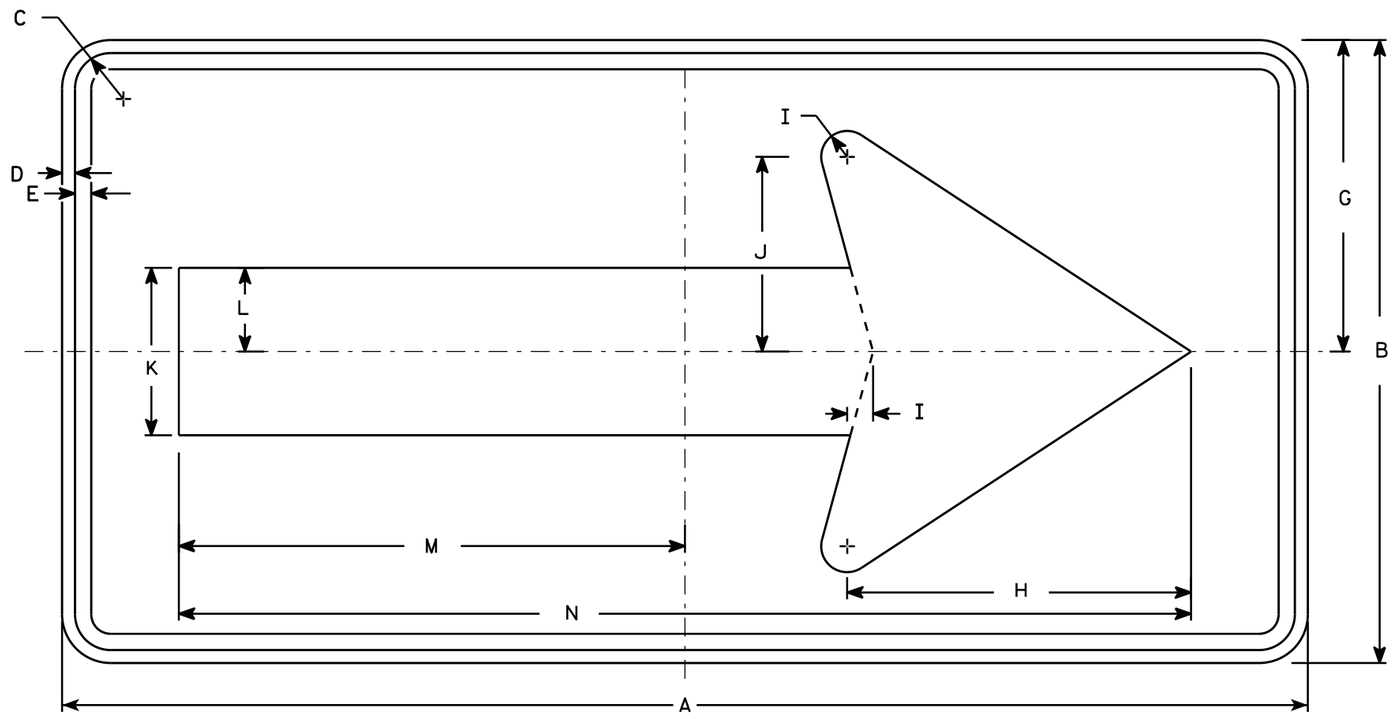
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 345	E



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

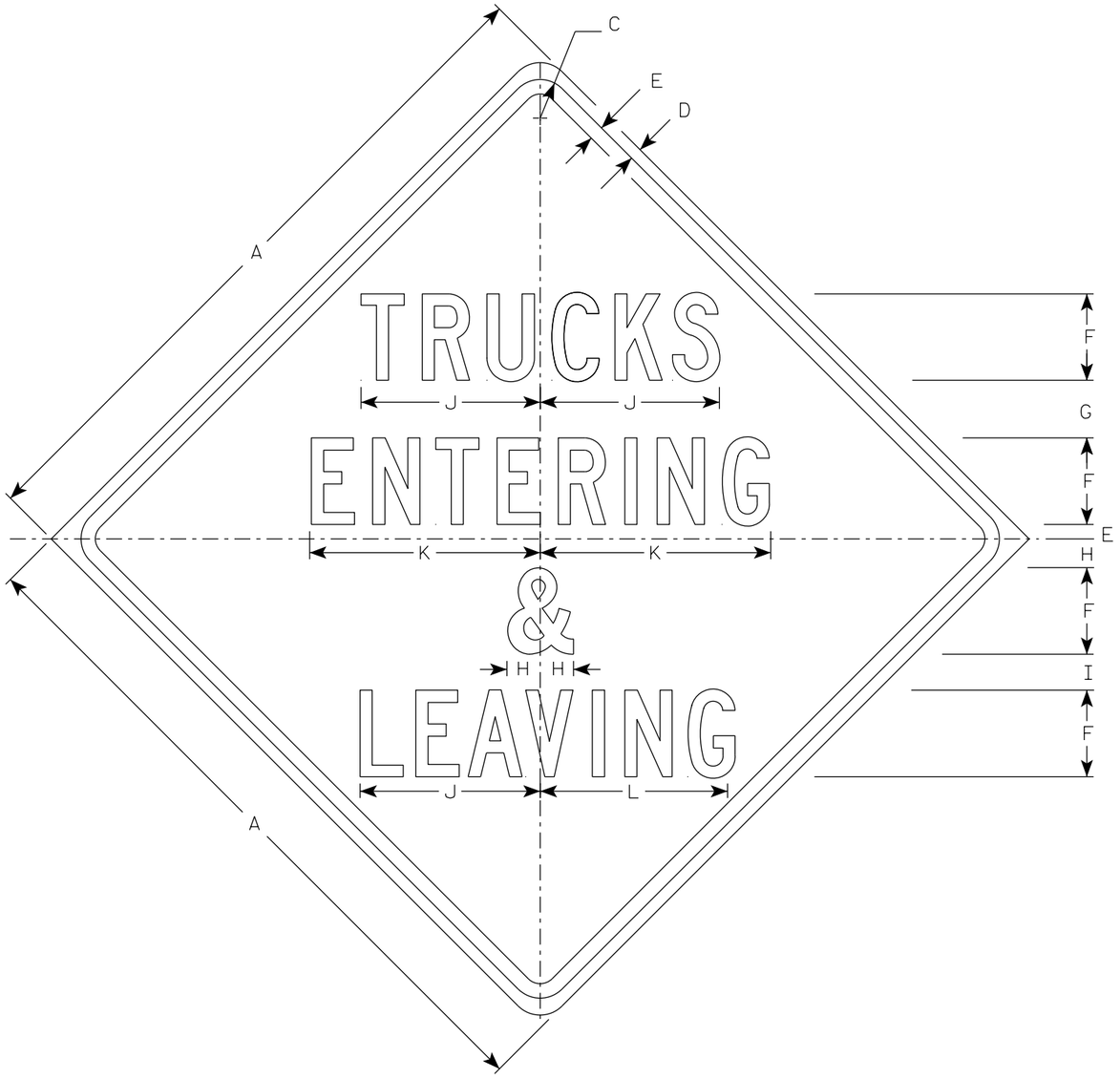
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W08-6A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	4 1/2	3	1 1/2	1 7/8	9 3/8	12	9 3/4															9
2S	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
2M	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
3	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
4	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16
5	48		2 1/4	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16

STANDARD SIGN
W08-6A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/15/2020 PLATE NO. W08-6A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 347 E

EAST TOWER AREA

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
00+00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
00+50	50.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
01+00	100.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
01+50	150.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
02+00	200.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
02+50	250.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
03+00	300.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
03+50	350.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
03+75	375.00	25.00	0.17	0.00	7.59	0	0	4	0	5	-5
04+00	400.00	25.00	4.72	0.00	91.19	2	0	46	2	63	-61
04+25	425.00	25.00	2.26	0.00	48.24	3	0	65	5	144	-139
04+50	450.00	25.00	2.80	0.00	0.00	2	0	22	7	171	-164
04+75	475.00	25.00	5.17	0.00	0.00	4	0	0	11	171	-160
05+00	500.00	25.00	0.00	0.00	0.00	2	0	0	13	171	-158
05+50	550.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
06+00	600.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
06+50	650.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
07+00	700.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
07+50	750.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
08+00	800.00	50.00	0.00	0.00	0.00	0	0	0	13	171	-158
08+36	836.70	36.70	0.00	0.00	0.00	0	0	0	13	171	-158
				TOTAL		13	0	137			

WEST TOWER AREA AND DITCH

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
98+00	9800.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
98+50	9850.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
99+00	9900.00	50.00	0.02	0.00	22.71	0	0	21	0	26	-26
99+50	9950.00	50.00	0.00	0.00	46.28	0	0	64	0	106	-106
100+00	10000.00	50.00	1.86	0.00	112.21	2	0	147	2	290	-288
100+50	10050.00	50.00	1.13	0.00	74.00	3	0	172	5	505	-500
101+00	10100.00	50.00	0.00	0.00	92.95	1	0	155	6	699	-693
101+50	10150.00	50.00	139.65	0.00	39.86	129	0	123	135	853	-718
102+00	10200.00	50.00	126.03	0.00	34.87	246	0	69	381	939	-558
102+50	10250.00	50.00	151.13	0.00	34.18	257	0	64	638	1,019	-381
103+00	10300.00	50.00	161.94	0.00	37.31	290	0	66	928	1,101	-173
103+50	10350.00	50.00	647.50	0.00	35.74	749	0	68	1,677	1,186	491
104+00	10400.00	50.00	634.64	0.00	37.89	1,187	0	68	2,864	1,271	1,593
104+50	10450.00	50.00	632.68	0.00	35.55	1,173	0	68	4,037	1,356	2,681
105+00	10500.00	50.00	176.22	0.00	40.74	749	0	71	4,786	1,445	3,341
105+50	10550.00	50.00	23.86	0.00	78.52	185	0	110	4,971	1,583	3,389
106+00	10600.00	50.00	112.95	0.00	33.10	127	0	103	5,098	1,711	3,387
106+14	10614.02	14.02	124.06	0.00	32.05	62	0	17	5,160	1,733	3,428
106+32	10632.46	18.44	122.28	0.00	31.90	84	0	22	5,244	1,760	3,484
106+50	10650.00	17.54	115.35	0.00	30.97	77	0	20	5,321	1,785	3,536
107+00	10700.00	50.00	115.39	0.00	24.18	214	0	51	5,535	1,849	3,686
107+50	10750.00	50.00	0.01	0.00	31.09	107	0	51	5,642	1,913	3,730
108+00	10800.00	50.00	10.38	0.00	22.61	10	0	50	5,652	1,975	3,677
108+50	10850.00	50.00	11.36	0.00	0.59	20	0	21	5,672	2,001	3,671
				TOTAL		5,672	0	1,601			

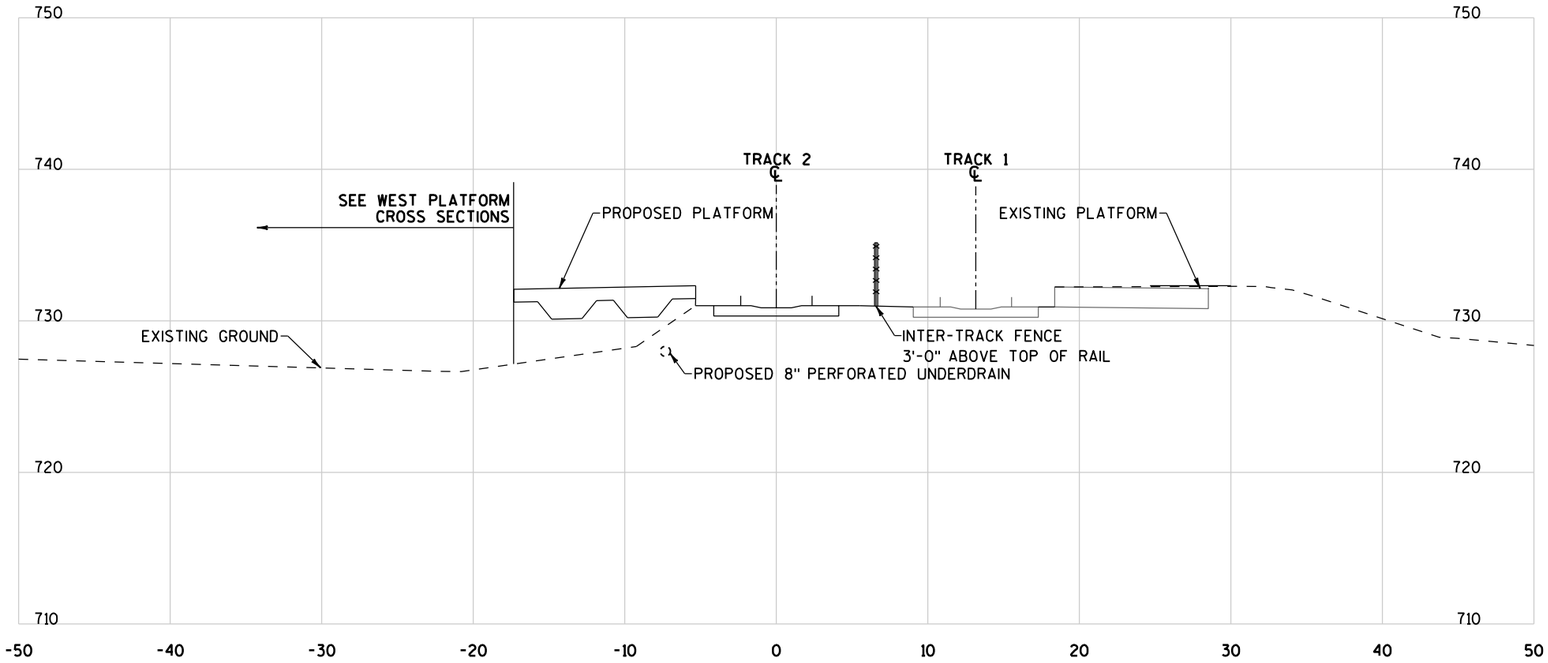
PERSONNEL PARKING

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
00+00	0.00	0.00	3.61	0.00	0.67	0	0	0	0	0	0
00+25	25.00	25.00	26.22	0.00	0.06	14	0	0	14	0	14
00+50	50.00	25.00	30.20	0.00	0.00	26	0	0	40	0	40
00+75	75.00	25.00	77.45	0.00	0.89	50	0	0	90	0	90
01+00	100.00	25.00	81.24	0.00	0.01	73	0	0	163	0	163
01+32.428	132.43	32.43	1.81	0.00	0.62	50	0	0	213	0	213
				TOTAL		213	0	0			

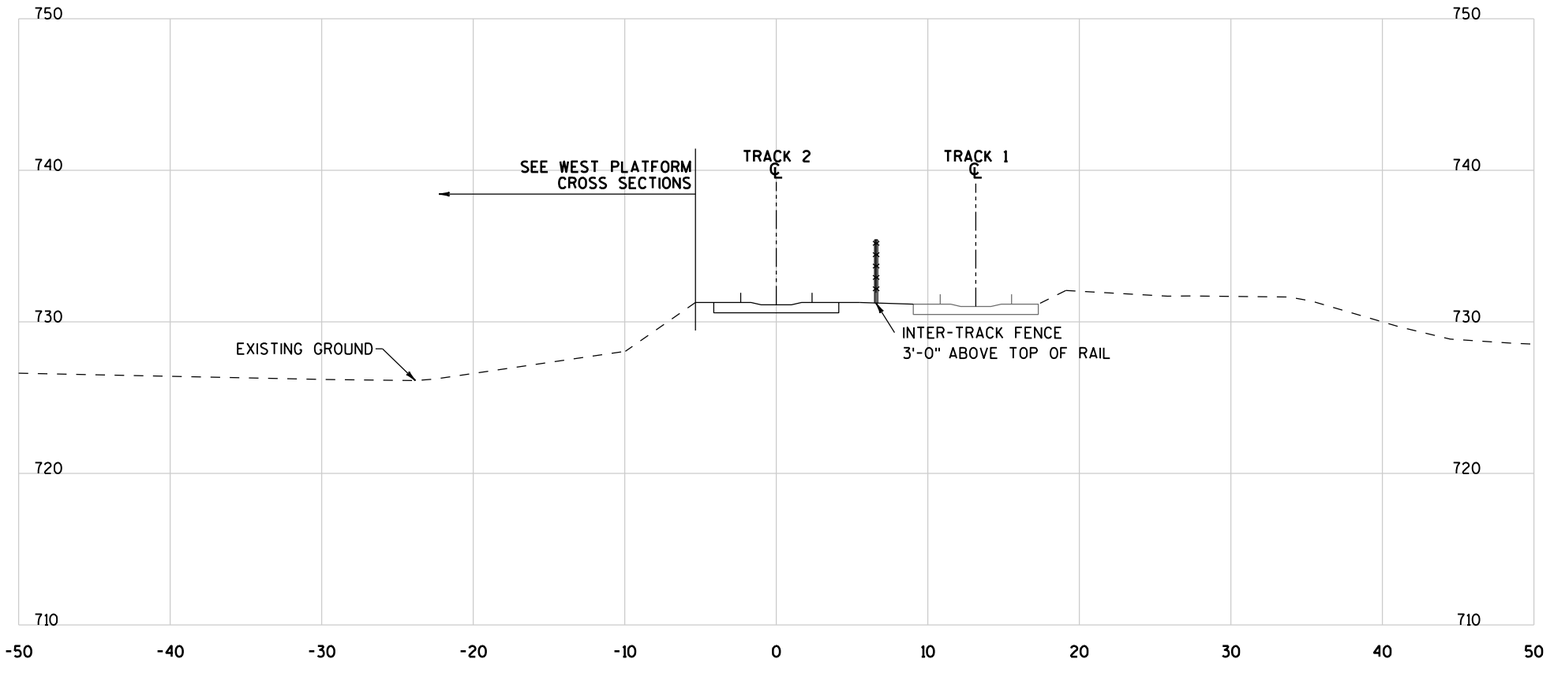
SIDEWALKS TO PARKING

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
00+00	0.00	0.00	0.13	0.00	0.04	0	0	0	0	0	0
00+25	25.00	25.00	1.65	0.00	0.00	1	0	0	1	0	1
00+50	50.00	25.00	8.02	0.00	0.14	4	0	0	5	0	5
00+75	75.00	25.00	10.21	0.00	0.87	8	0	0	13	0	13
01+00	100.00	25.00	1.22	0.00	3.58	5	0	2	18	3	16
01+05.593	105.59	5.59	3.82	0.00	16.59	1	0	2	19	5	14
				TOTAL		19	0	4			

SHEET OF



100+00



99+50

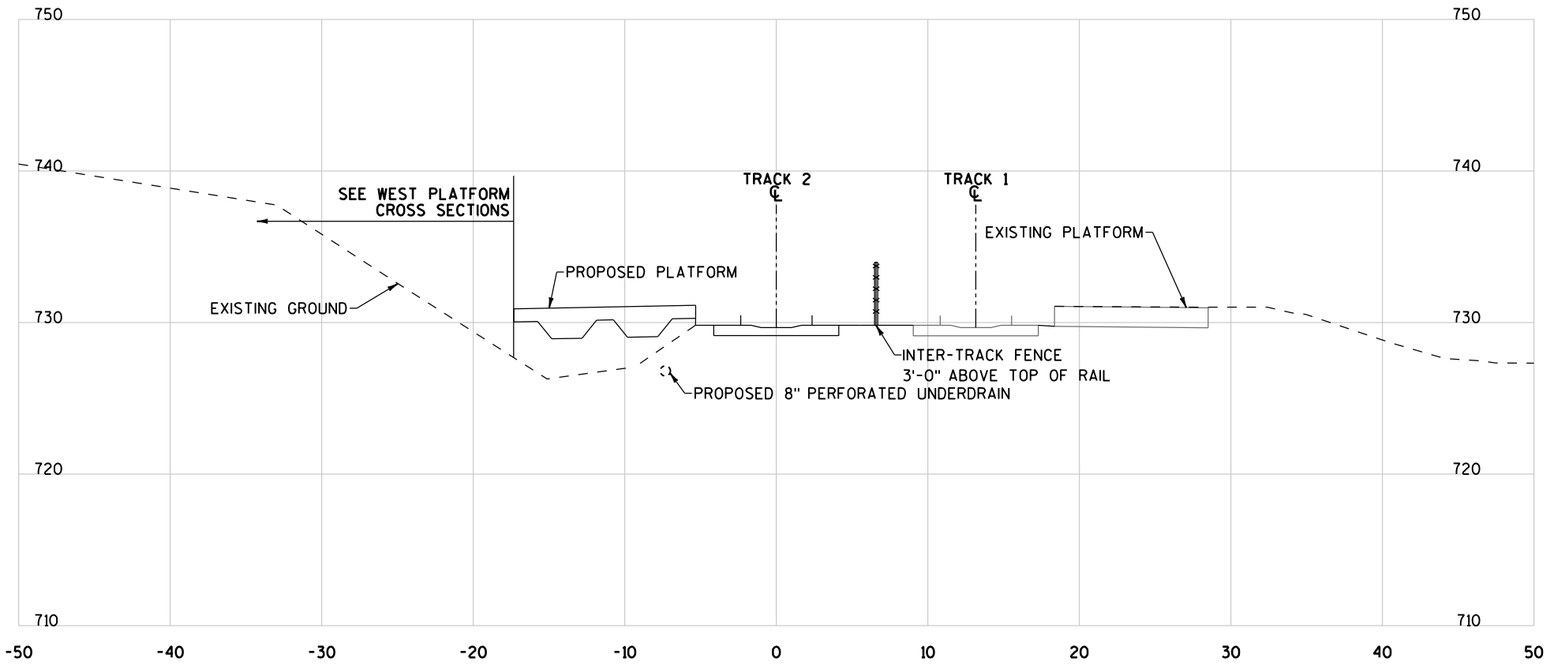
9

9

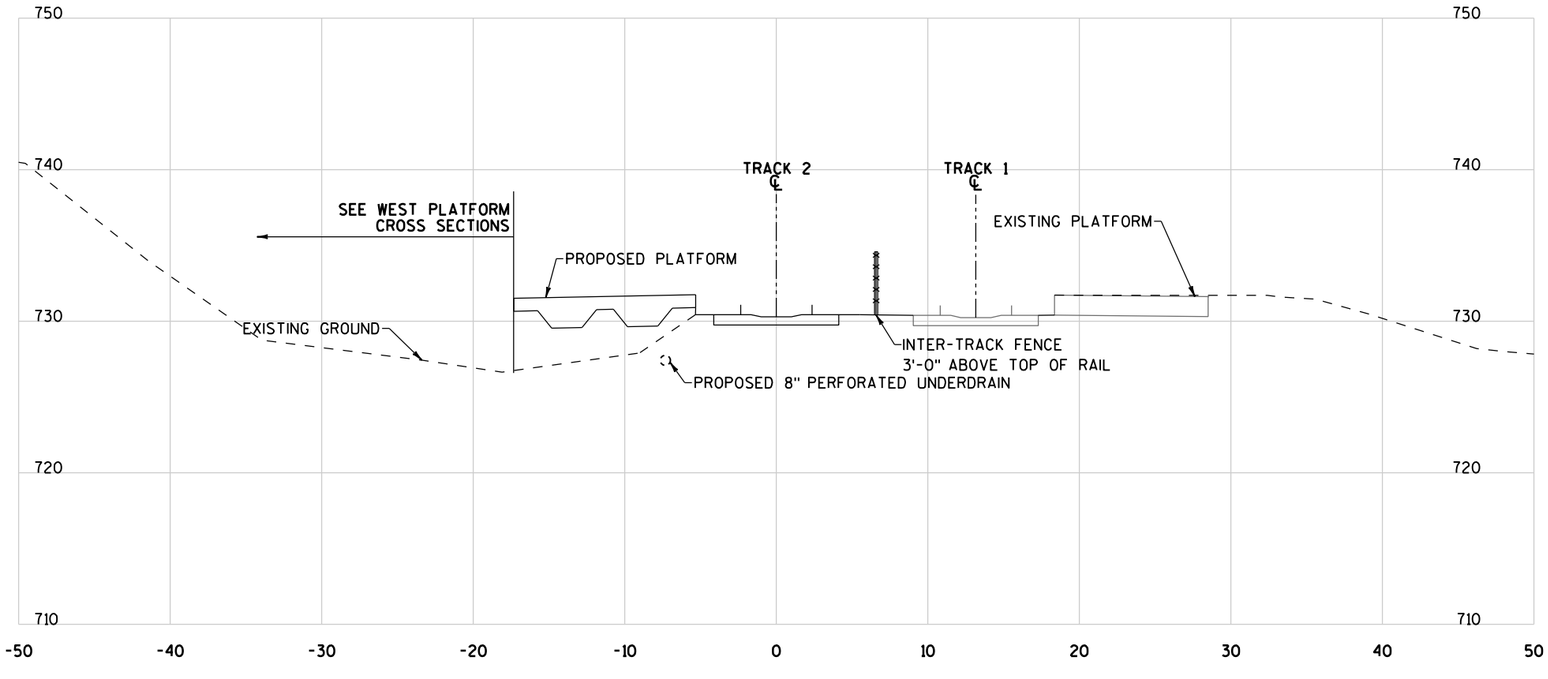
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 99+50 TO 100+00	SHEET 351	E

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 : 7/14/2022 PLOT BY : RamehA PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



102+00



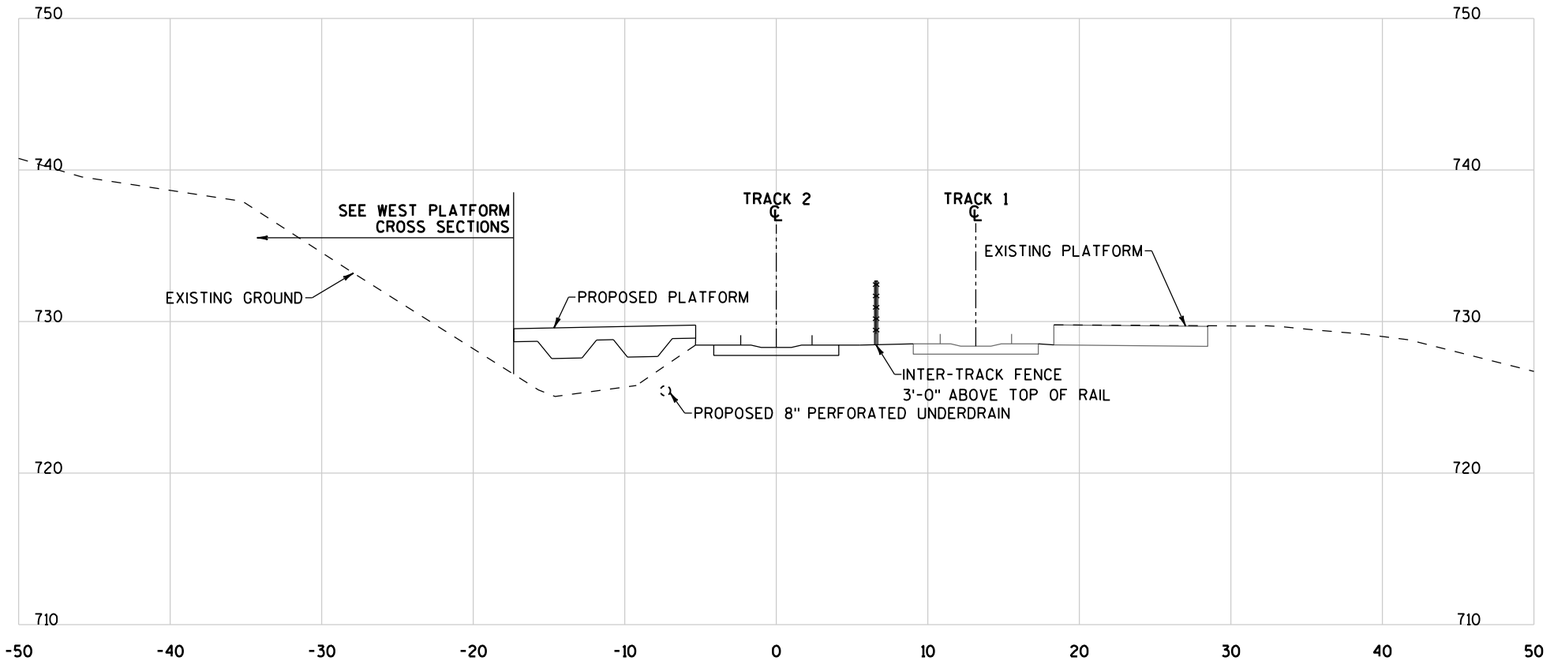
101+00

9

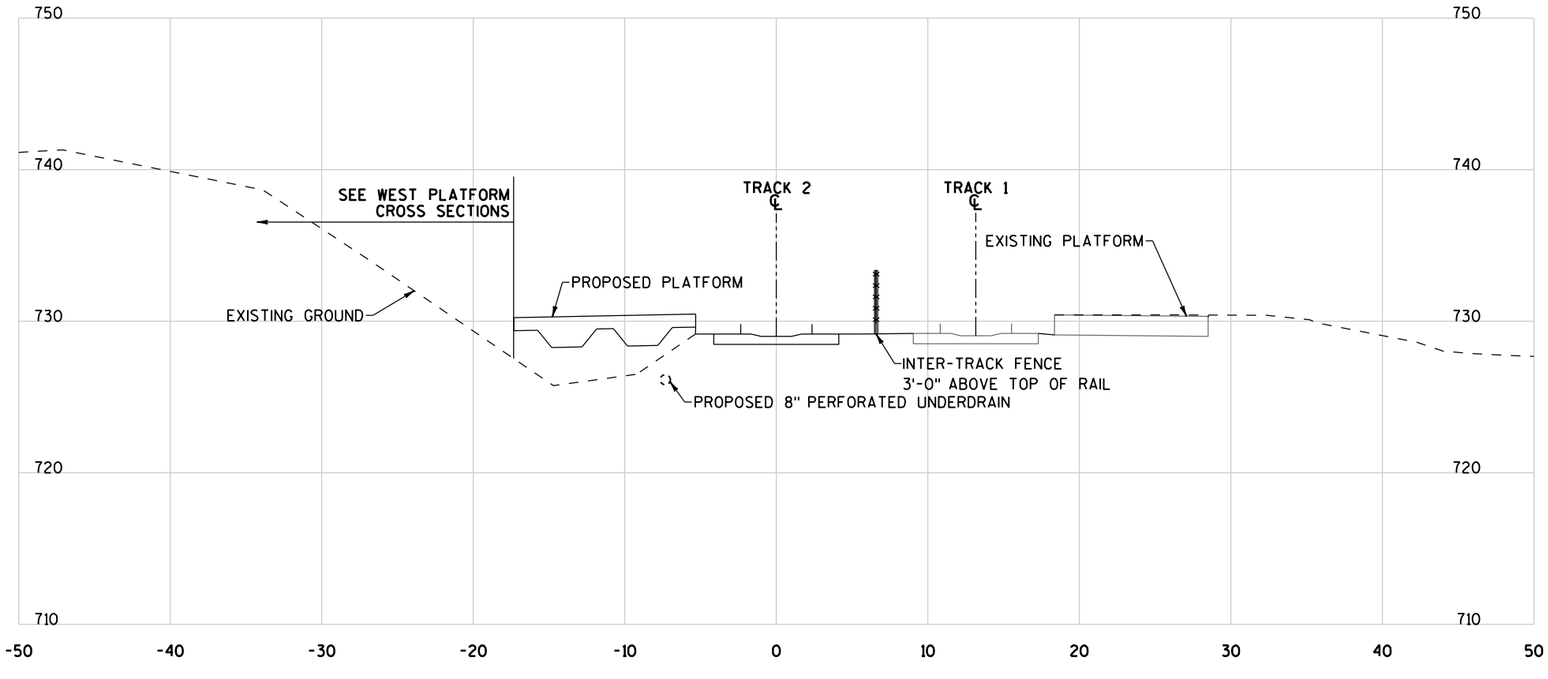
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 101+00 TO 102+00	SHEET 352	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 : 7/14/2022 PLOT BY : RamehA PLOT NAME : PLOT SCALE : 100.0000 sf / in.
WISDOT/CADDS SHEET 42



104+00

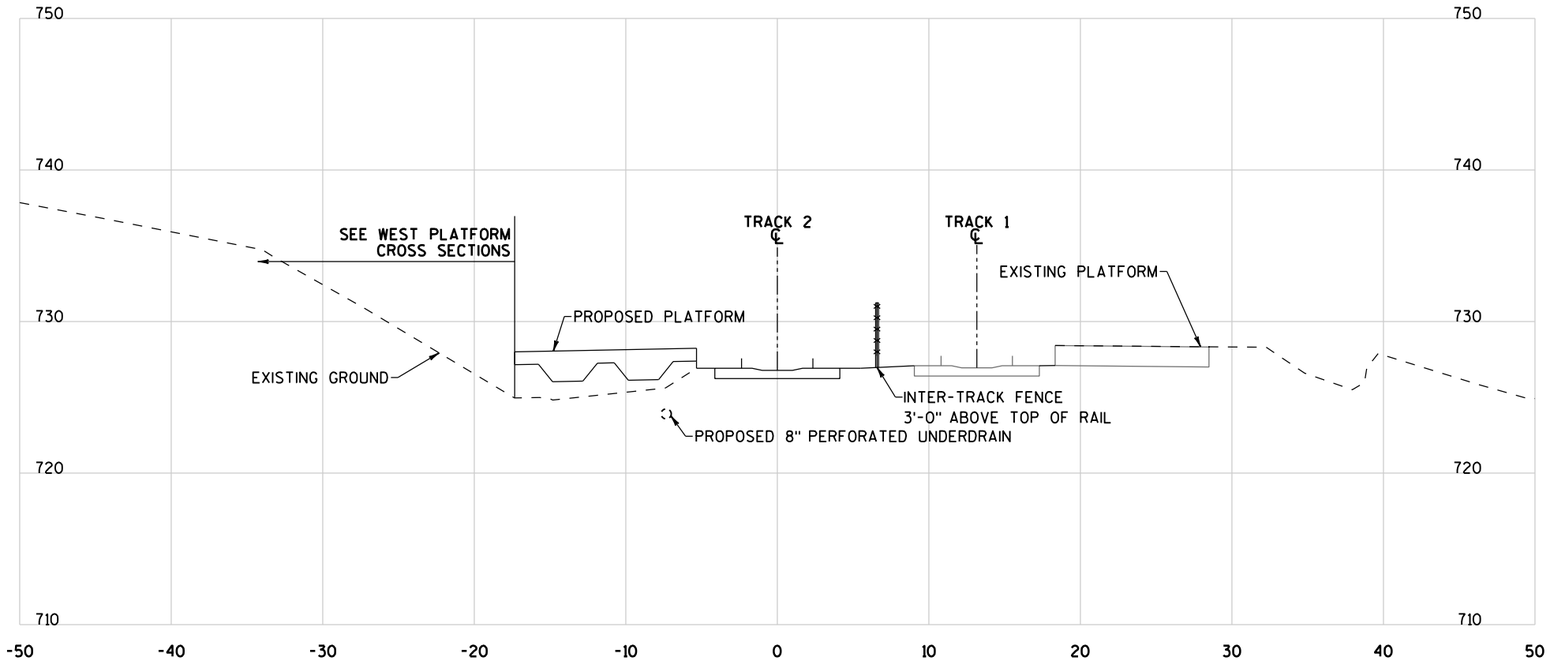


103+00

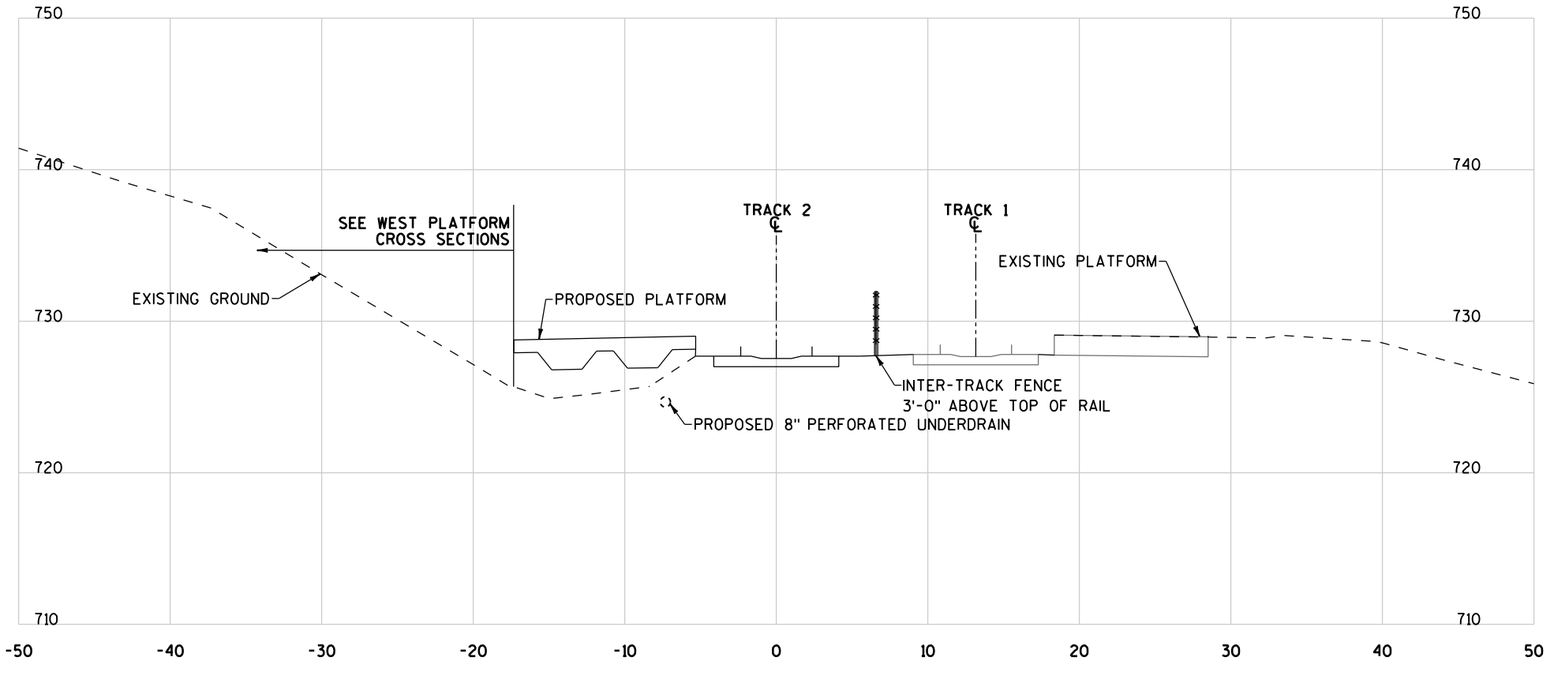
9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 103+00 TO 104+00	SHEET 353	E



106+00

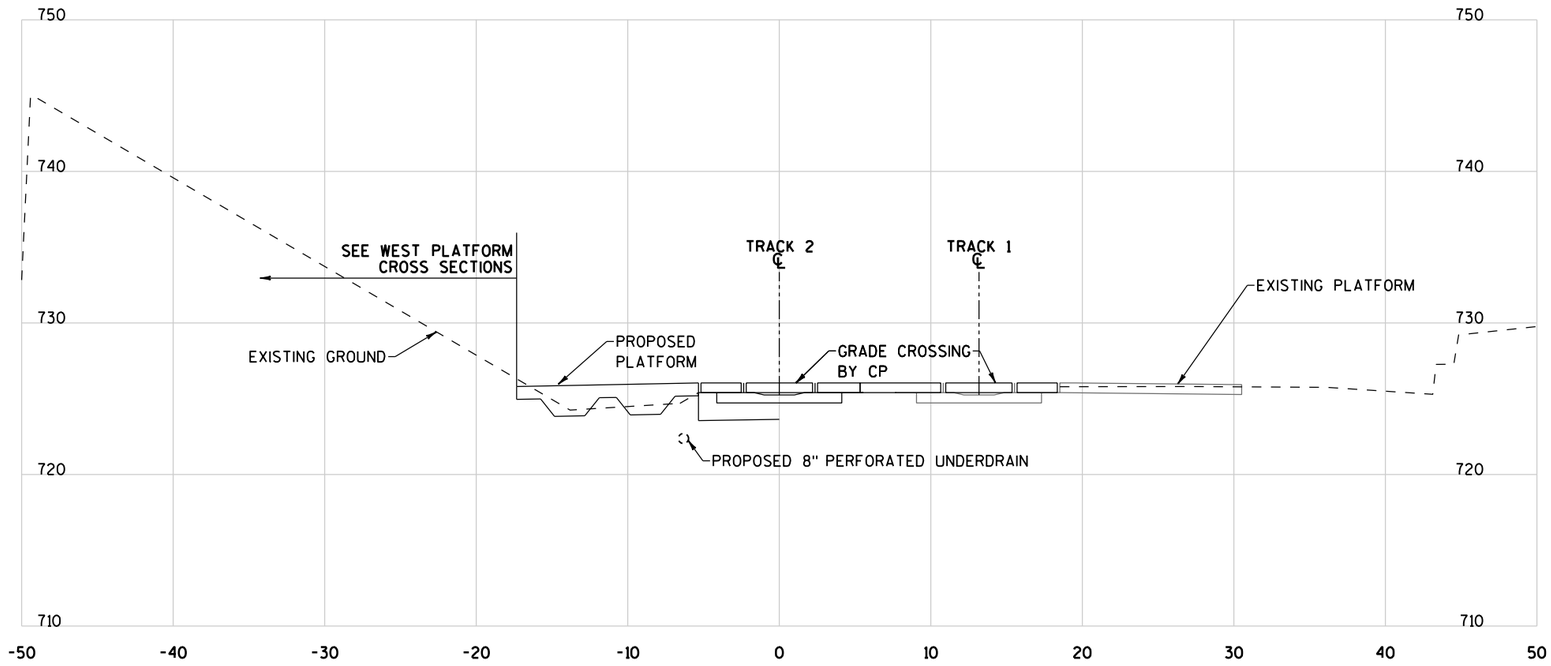


105+00

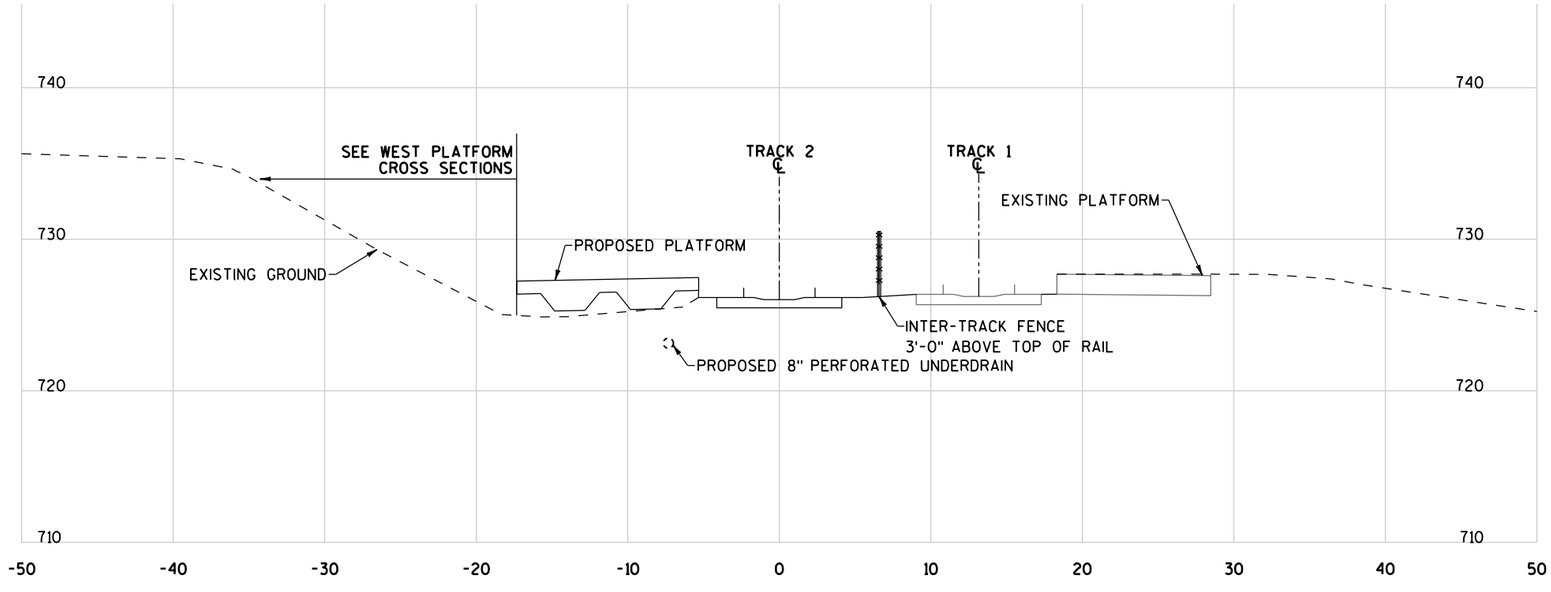
9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 105+00 TO 106+00	SHEET 354	E



107+90

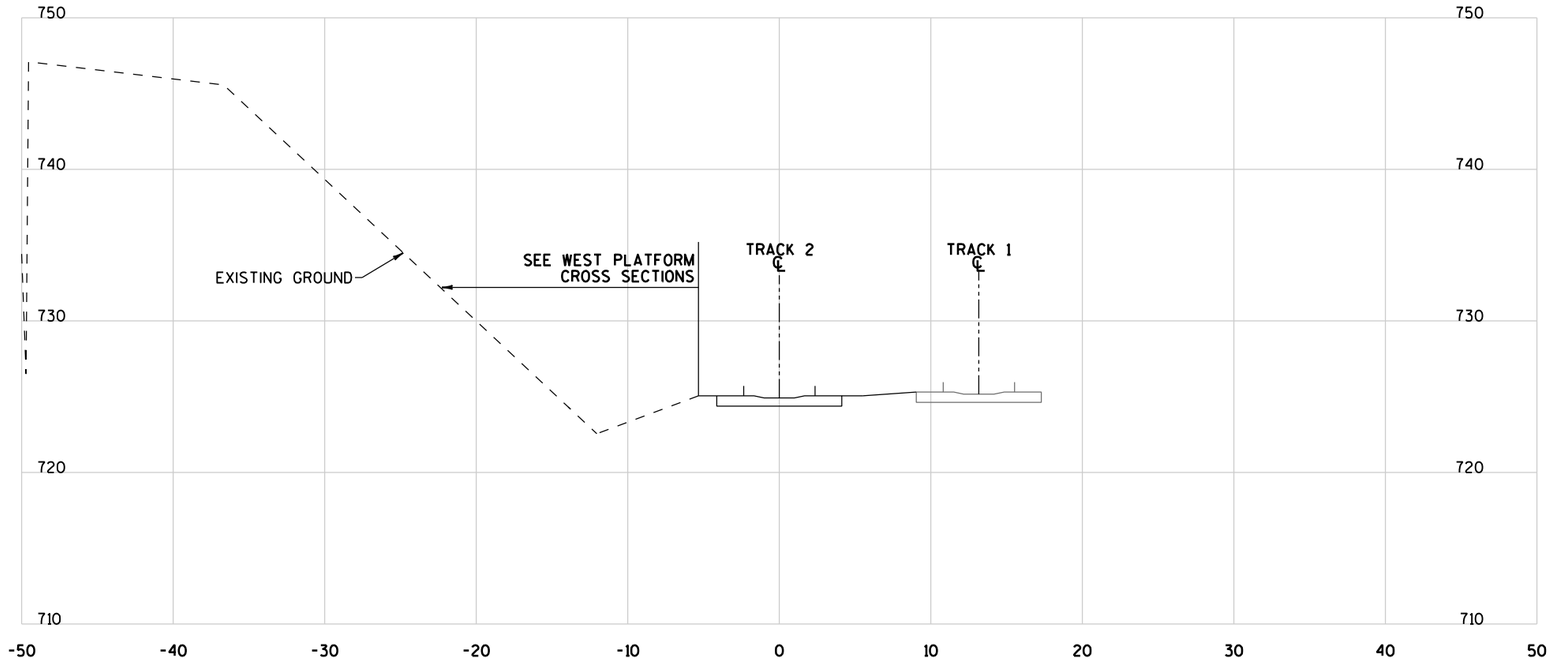


107+00

9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 107+00 TO 107+90	SHEET 355	E



108+50

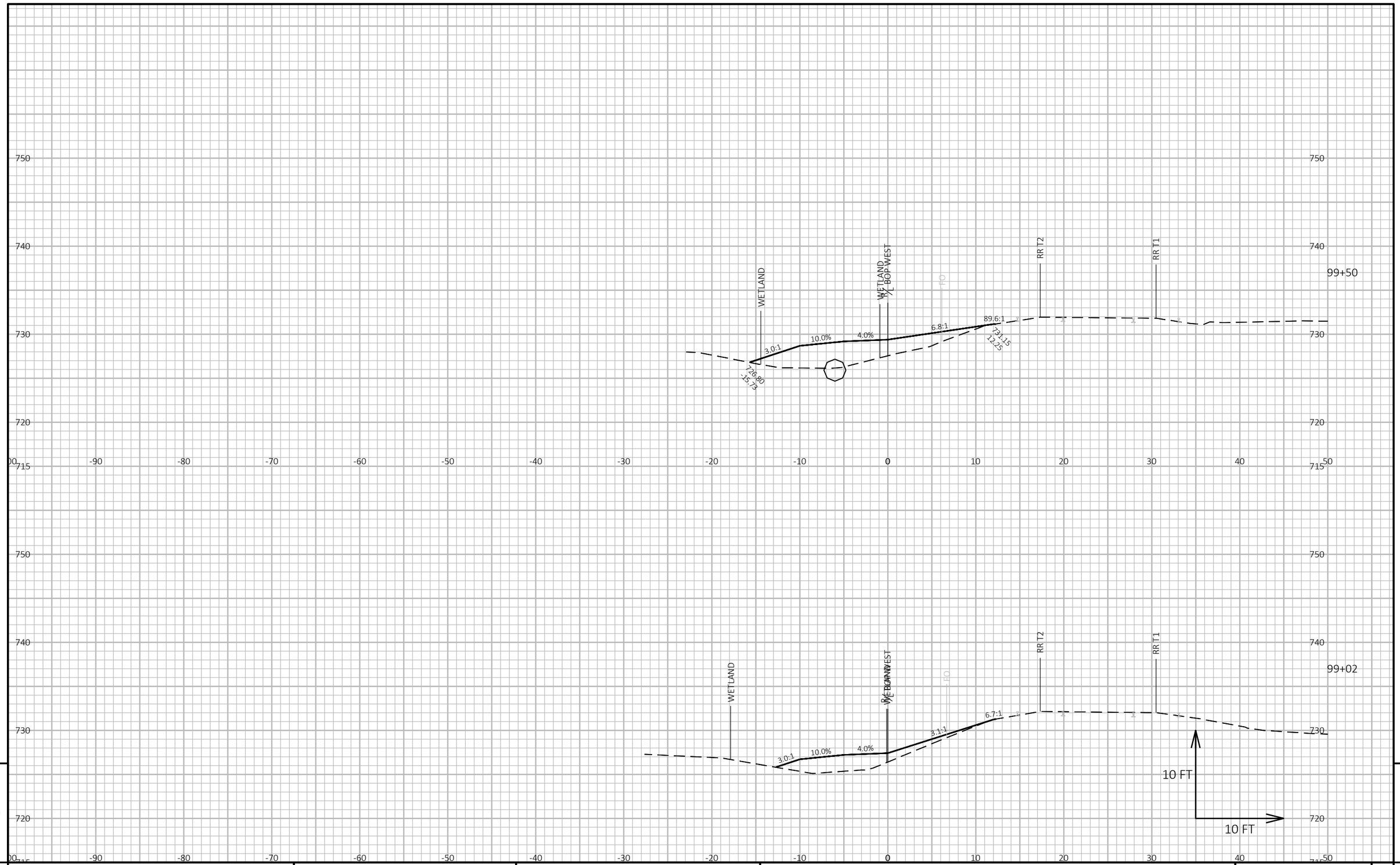
9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS - TRACK 108+50	SHEET 356	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 : 7/14/2022 PLOT BY : RamehA PLOT NAME : PLOT SCALE : 100.0000 sf / in.

WISDOT/CADDS SHEET 42



9

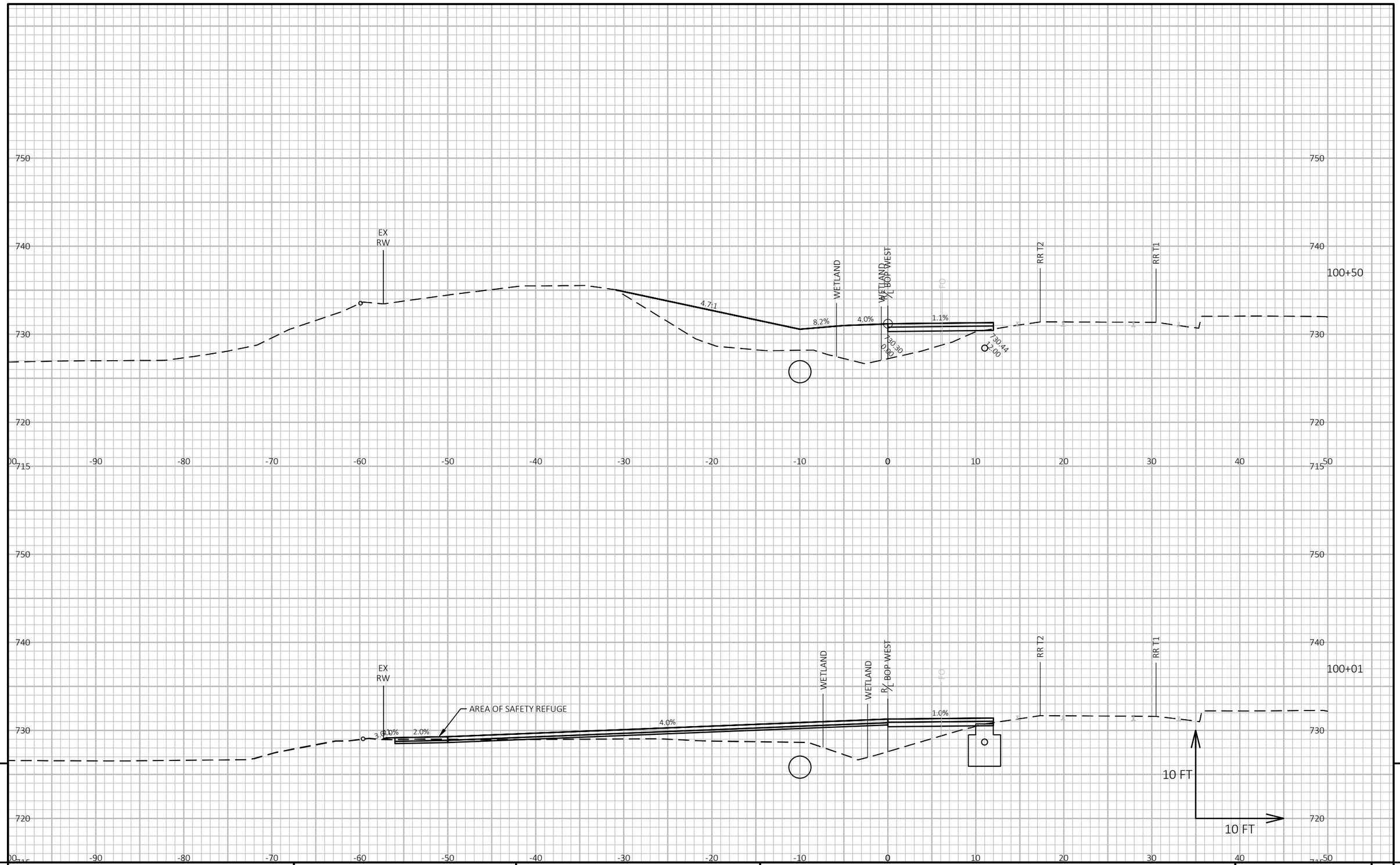
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 357	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

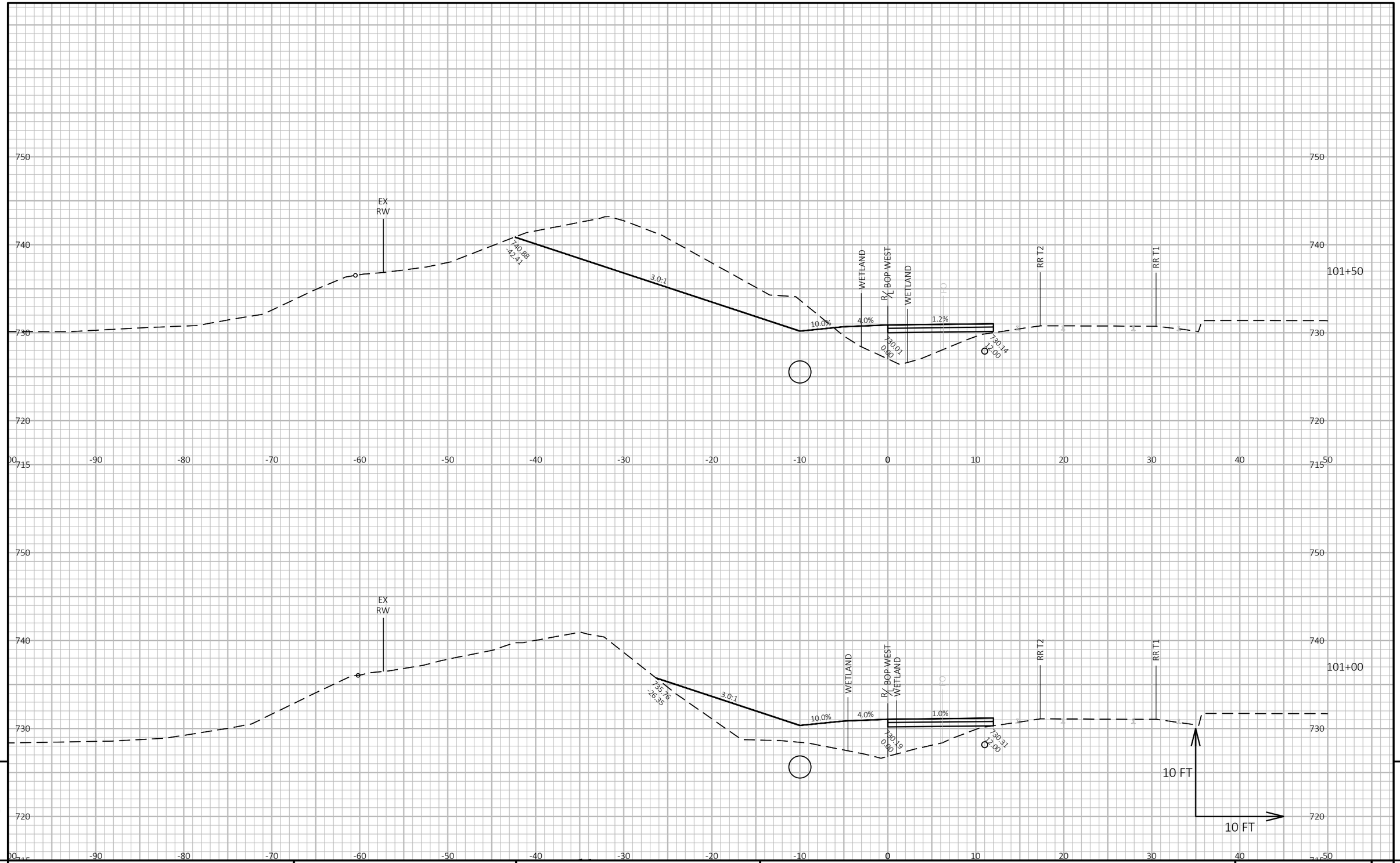


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 358	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

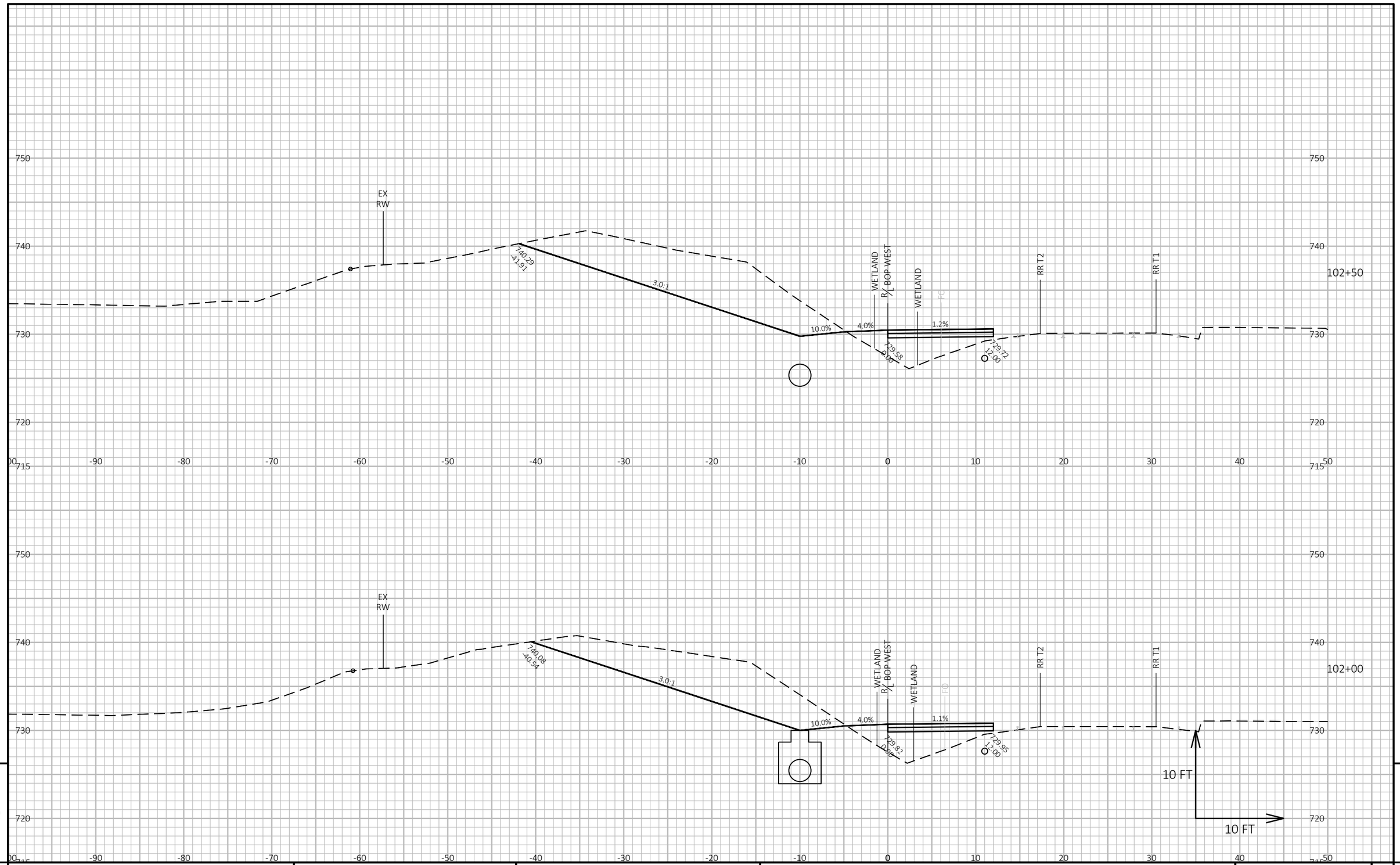
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 359	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

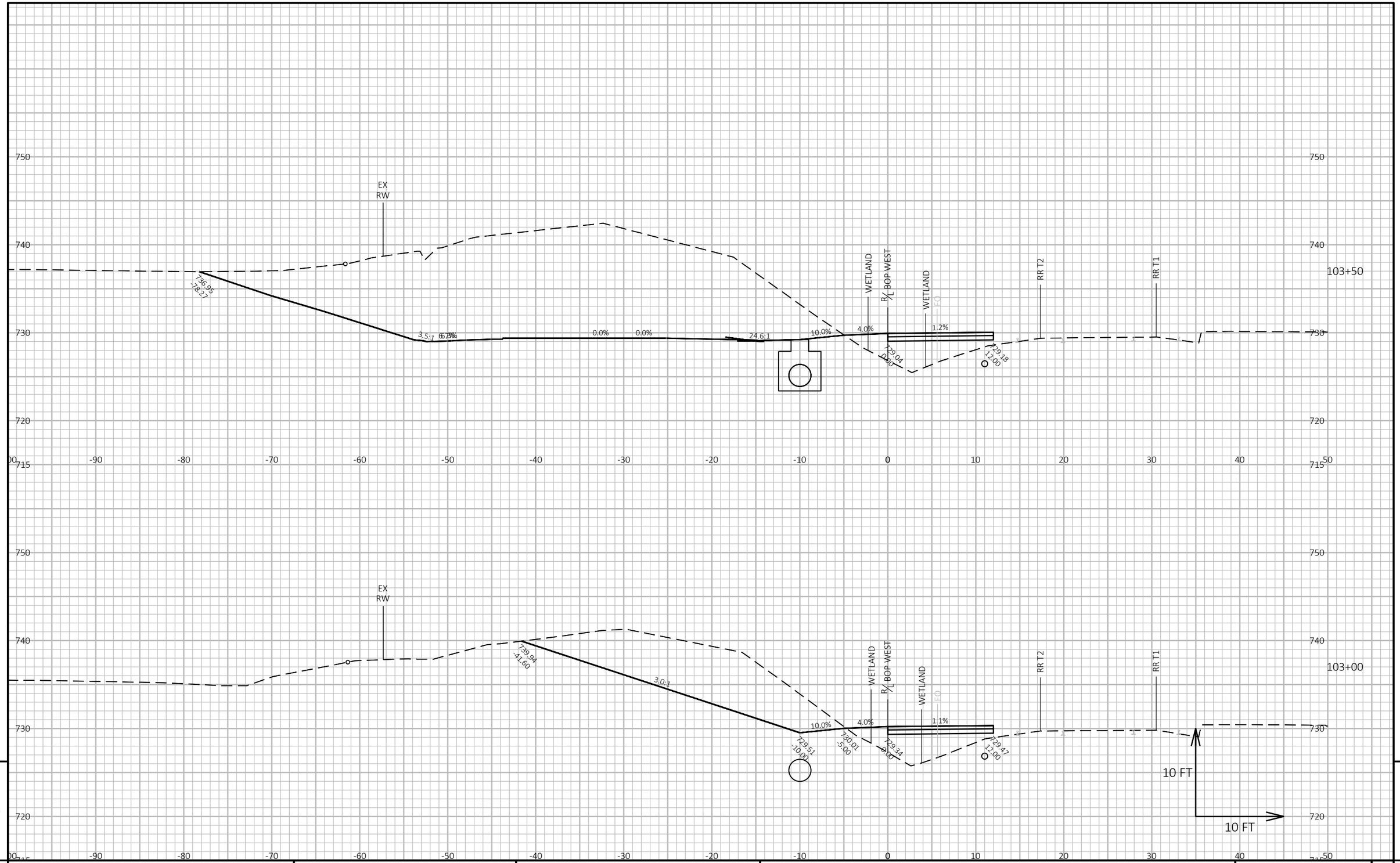


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 360	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

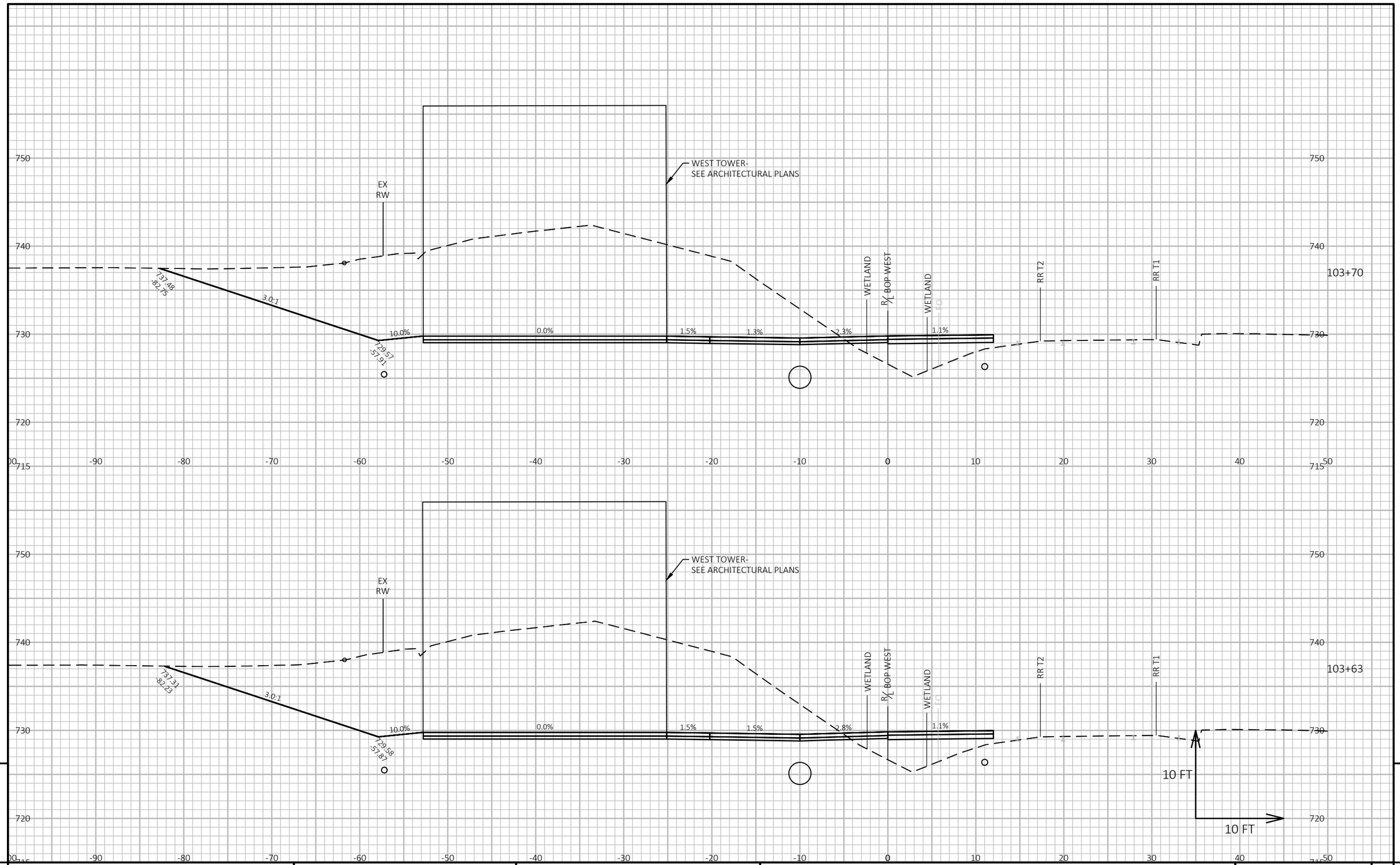
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 361	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

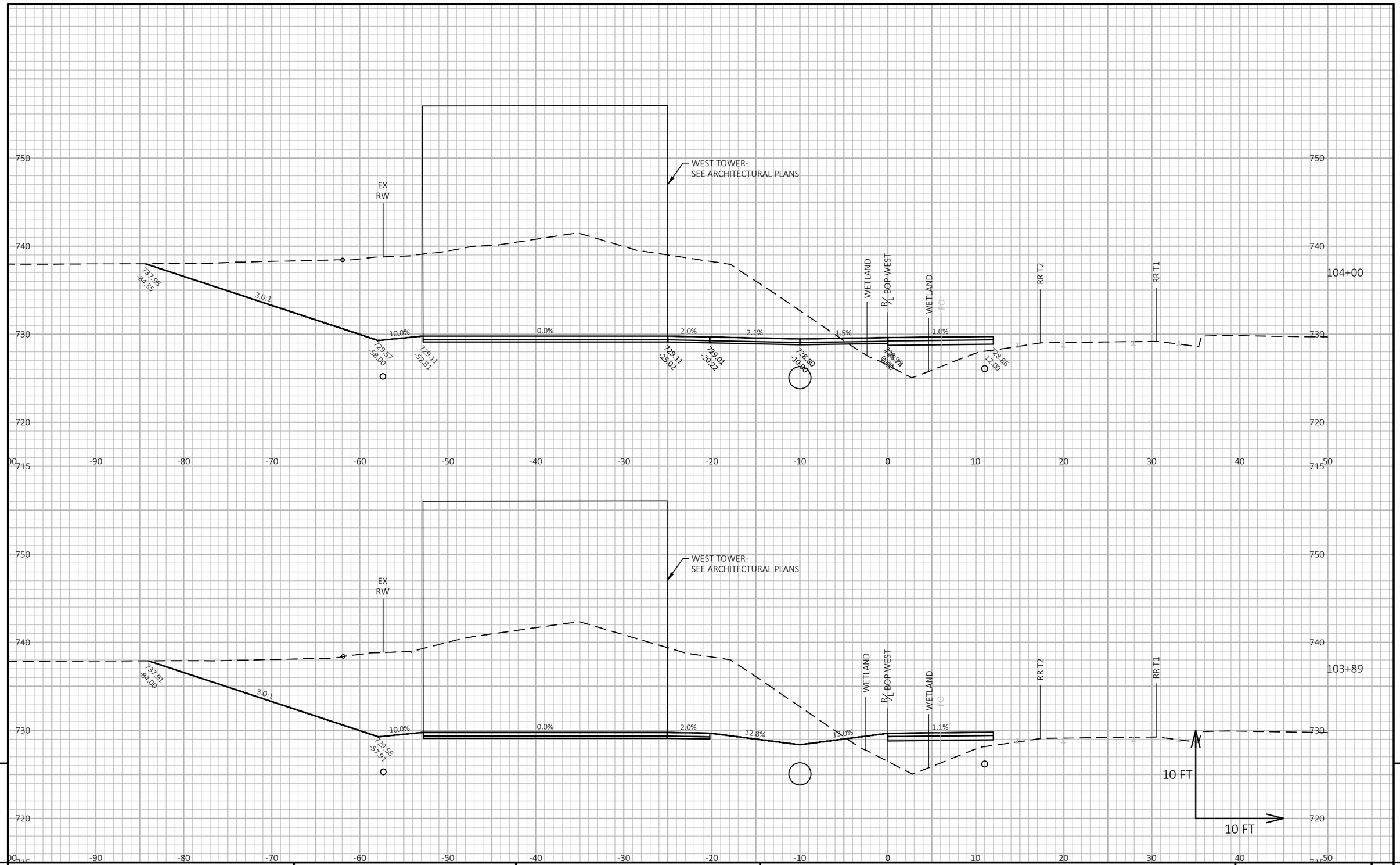
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 362	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

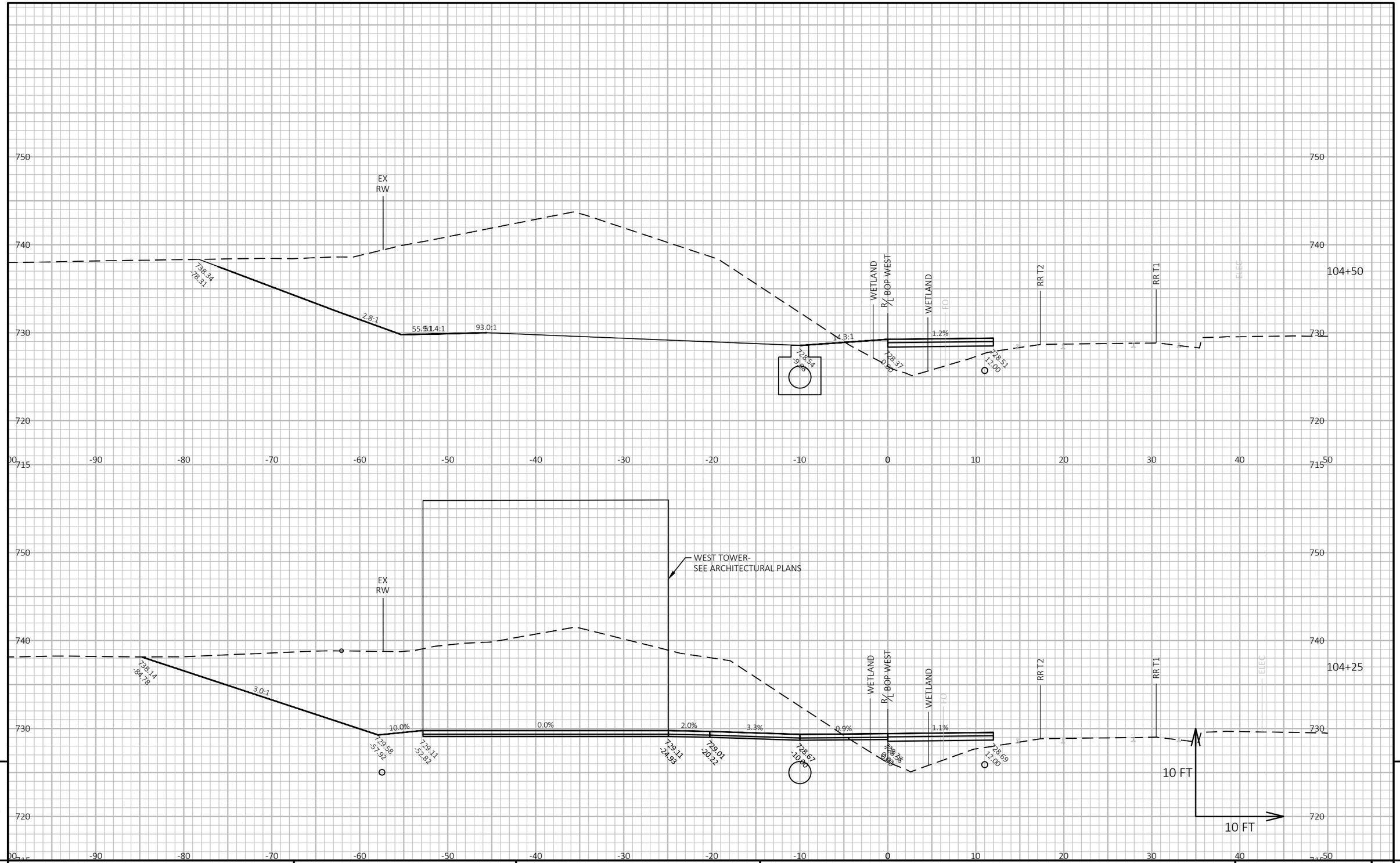


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 363 E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

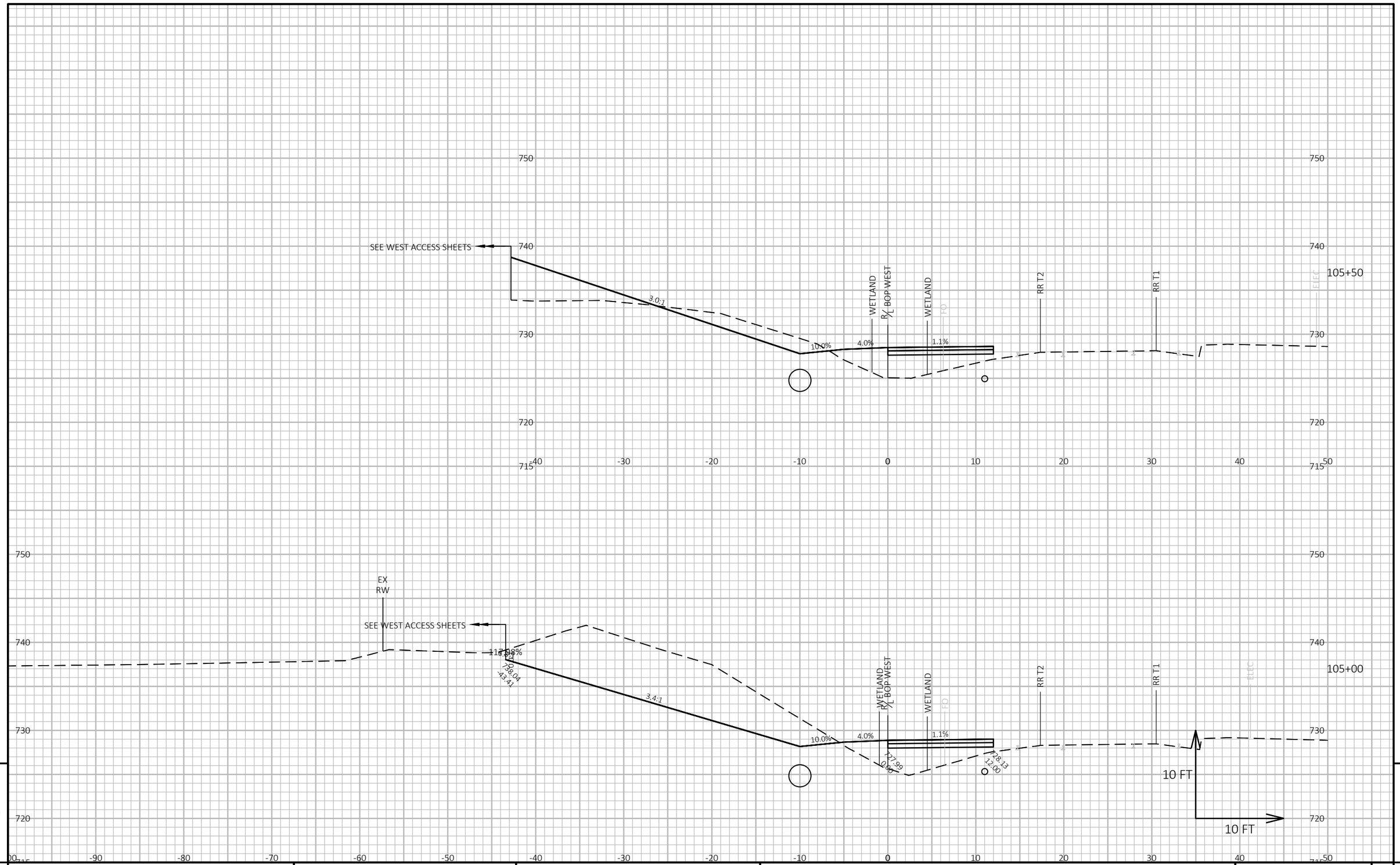
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 364	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/12/2022 12:41 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

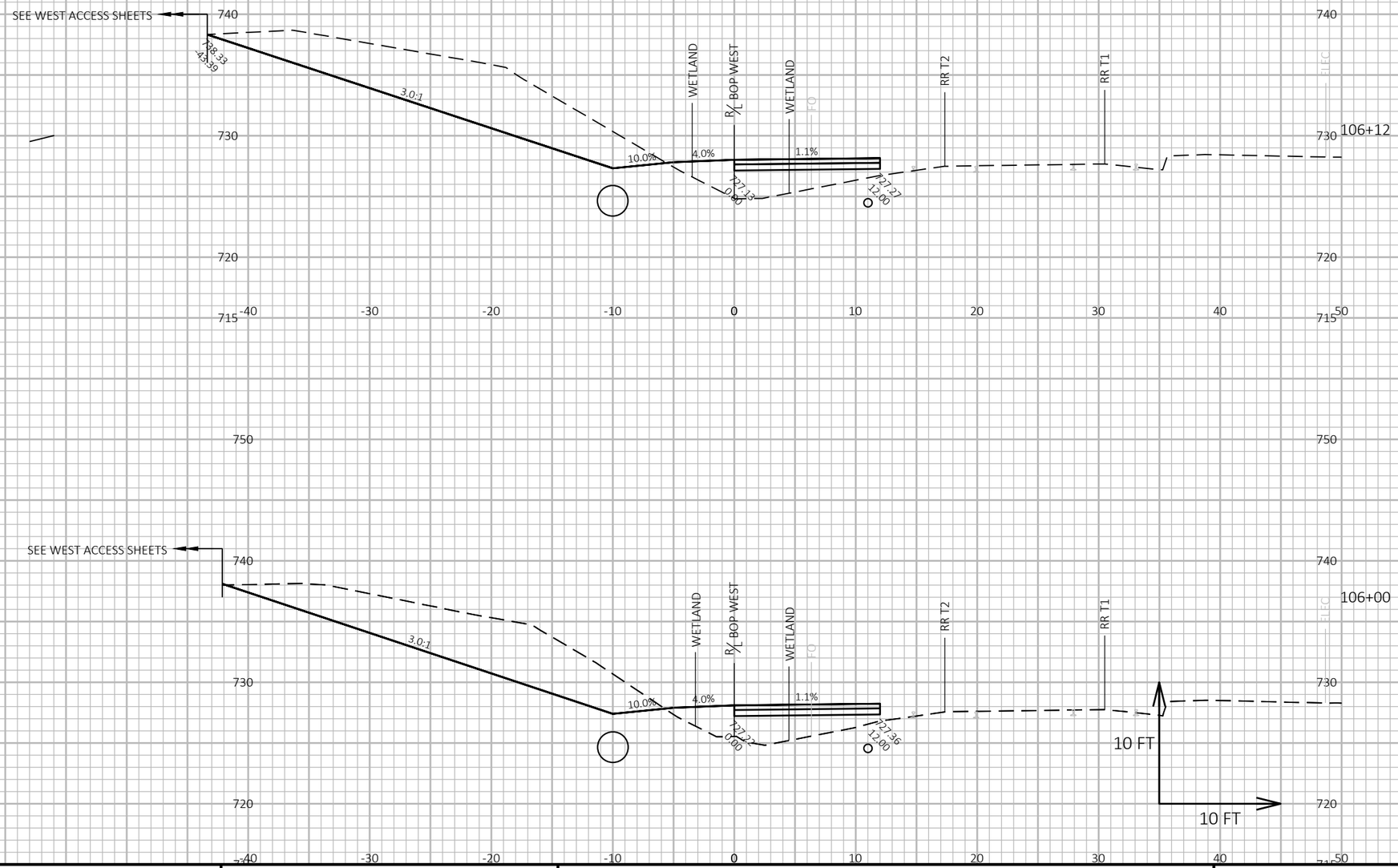
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 365	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

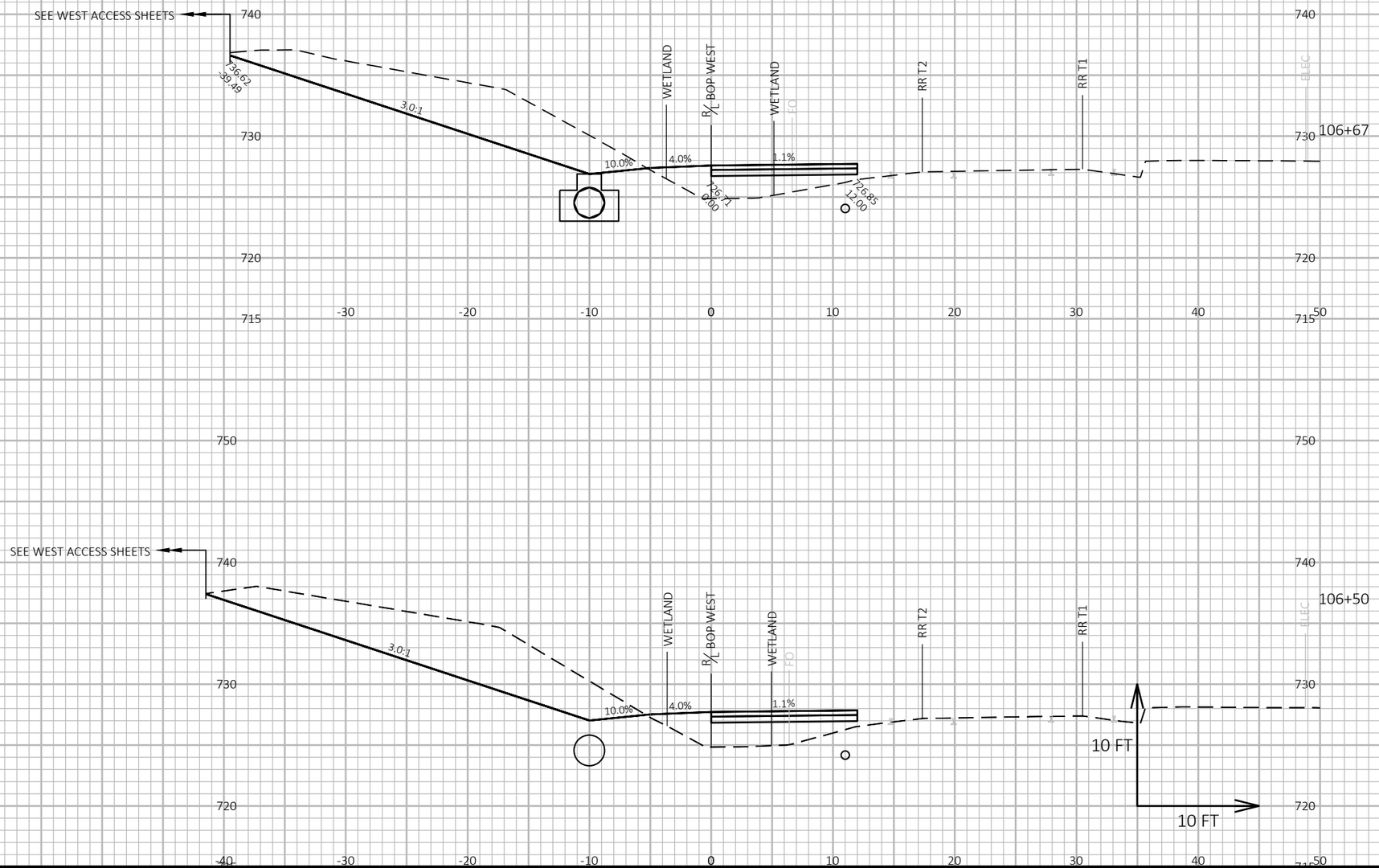


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 366 E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 16

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

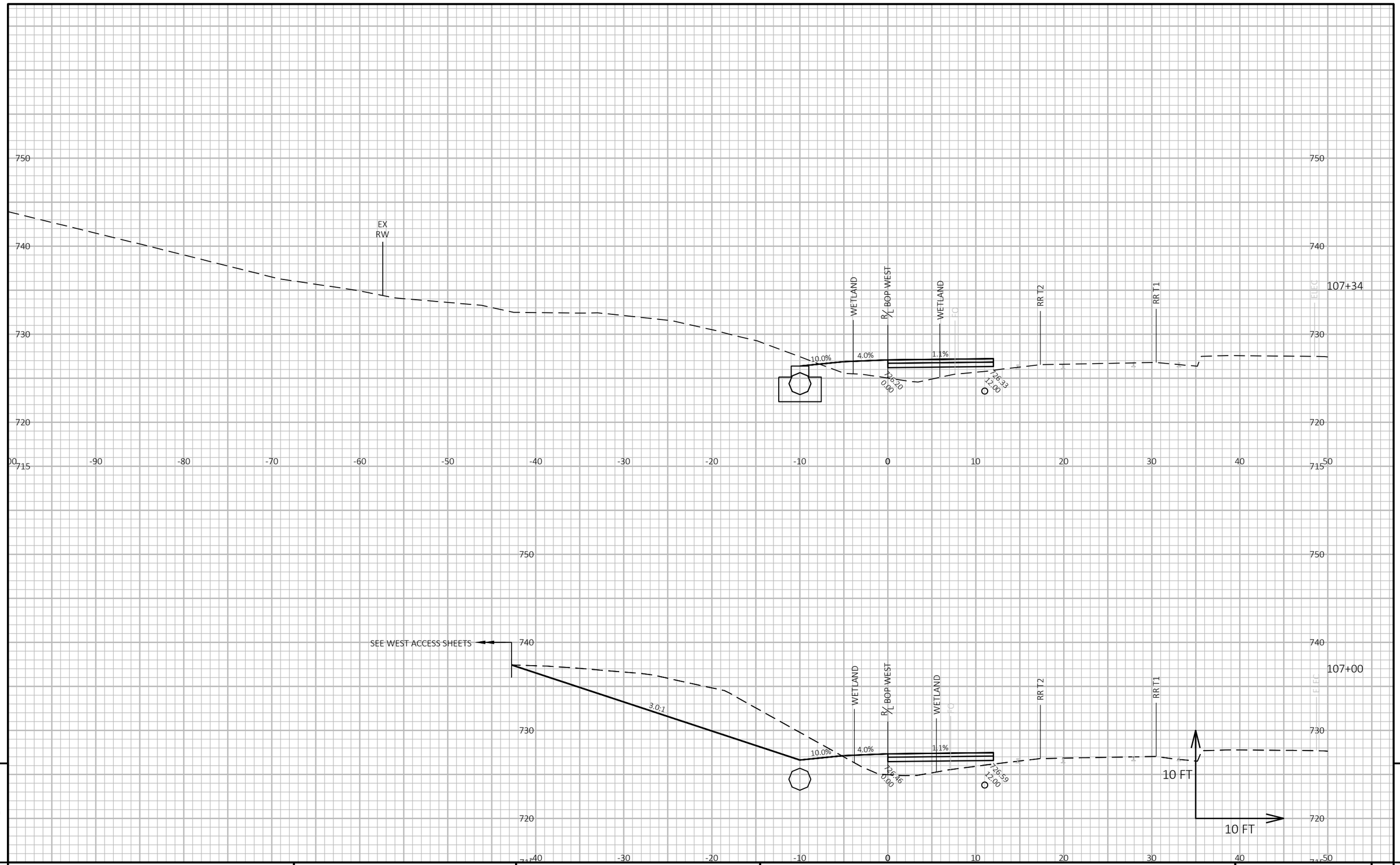
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 367	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

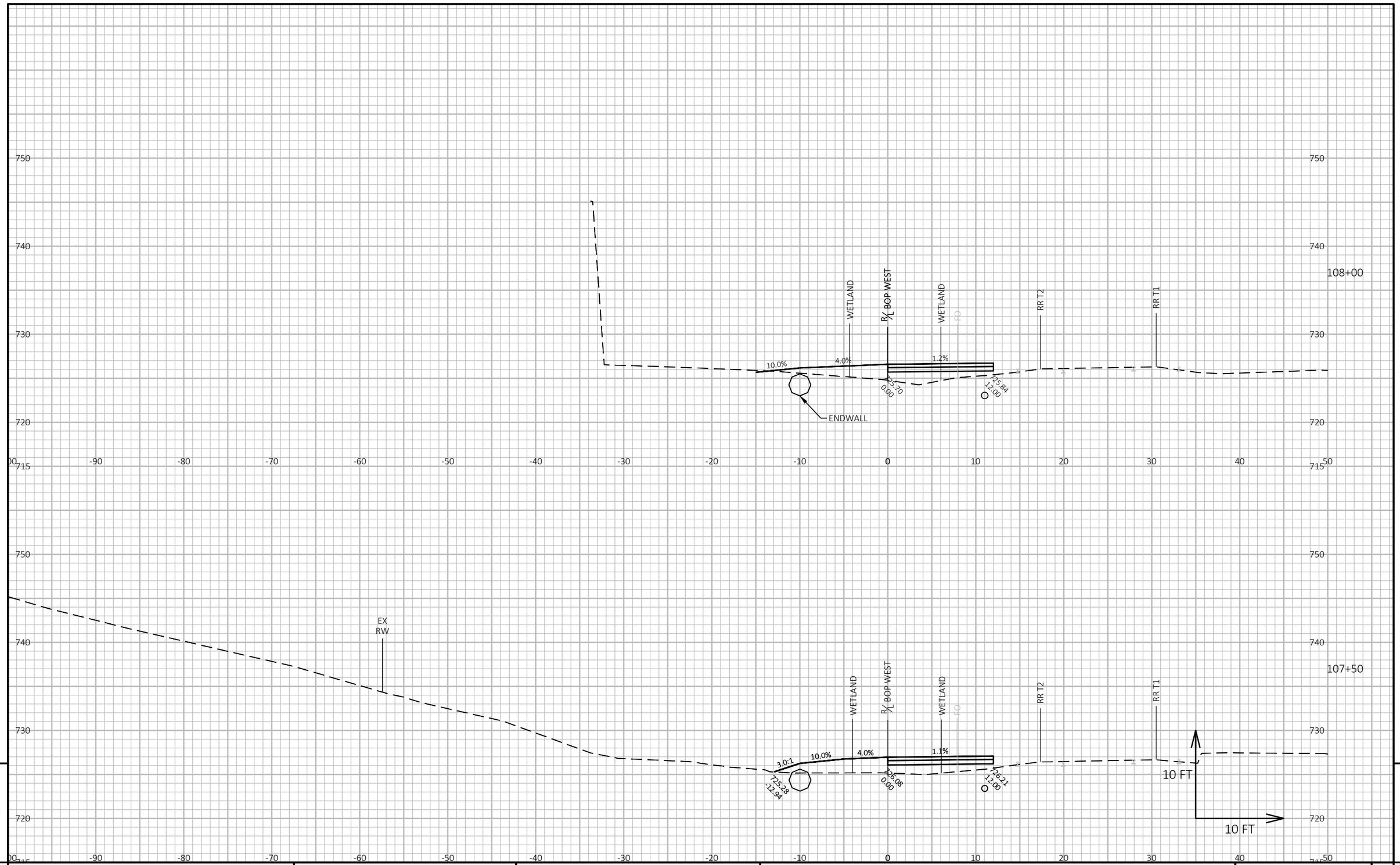
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 368	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

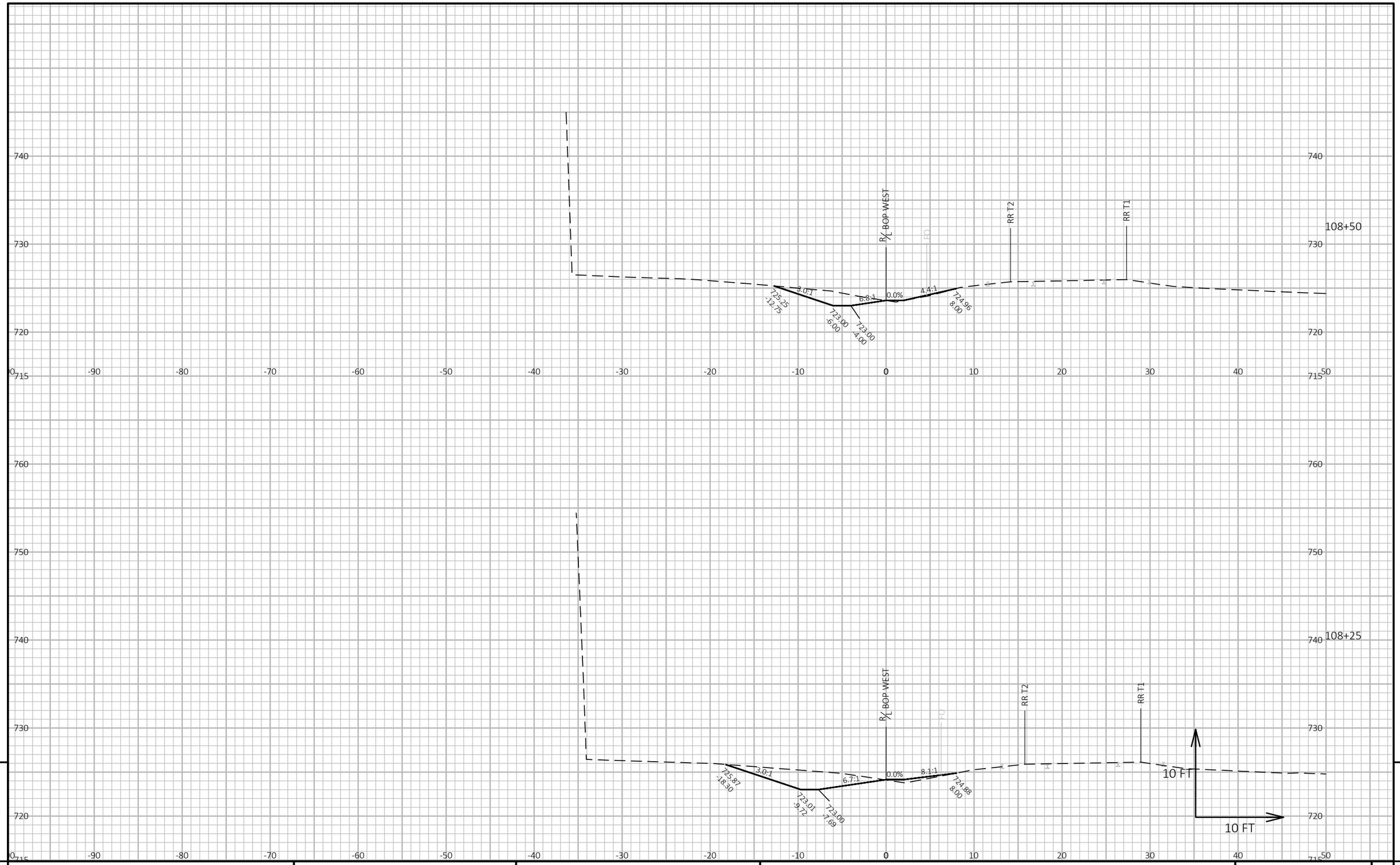


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 369 E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

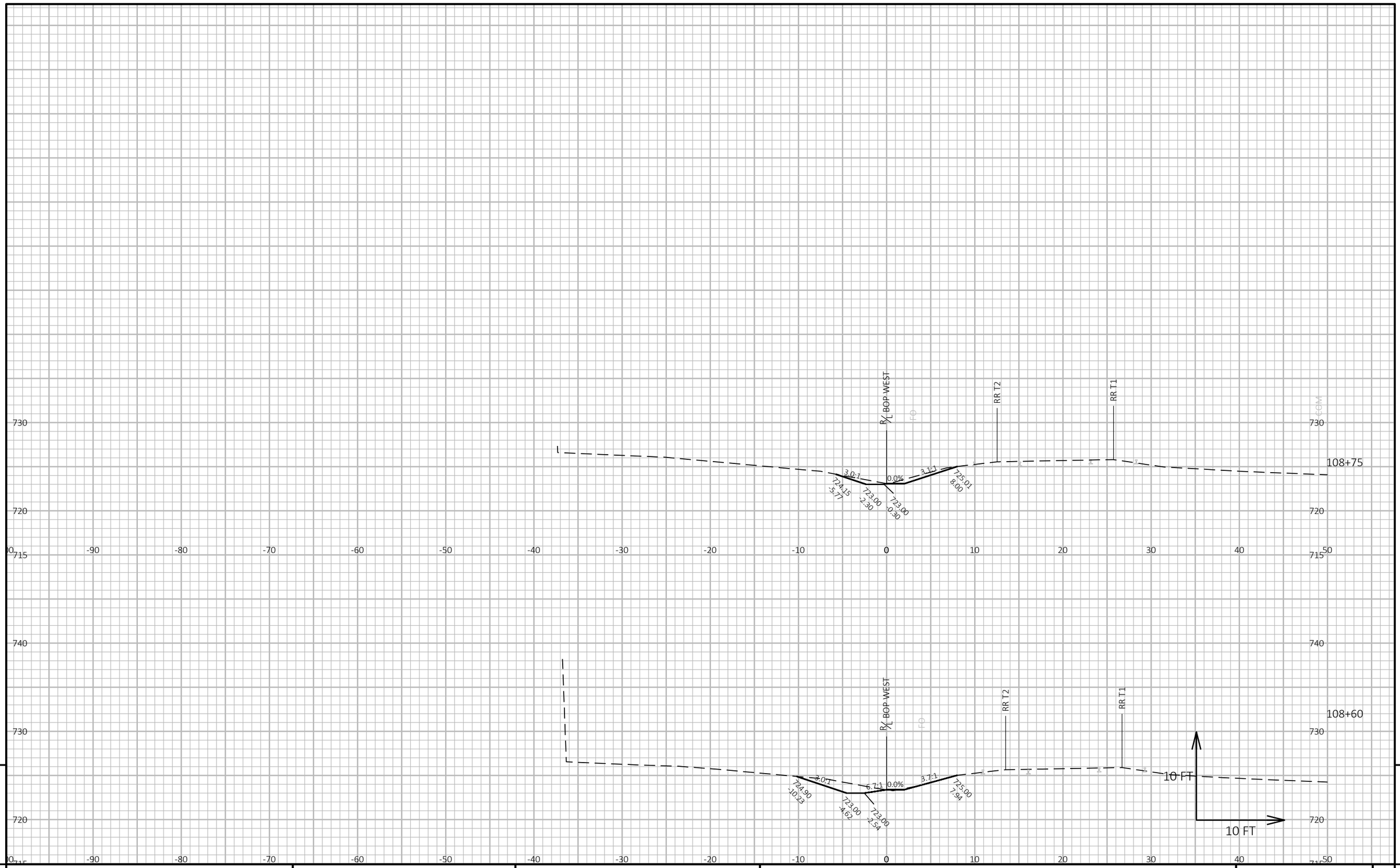
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 370	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 19 (2)

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

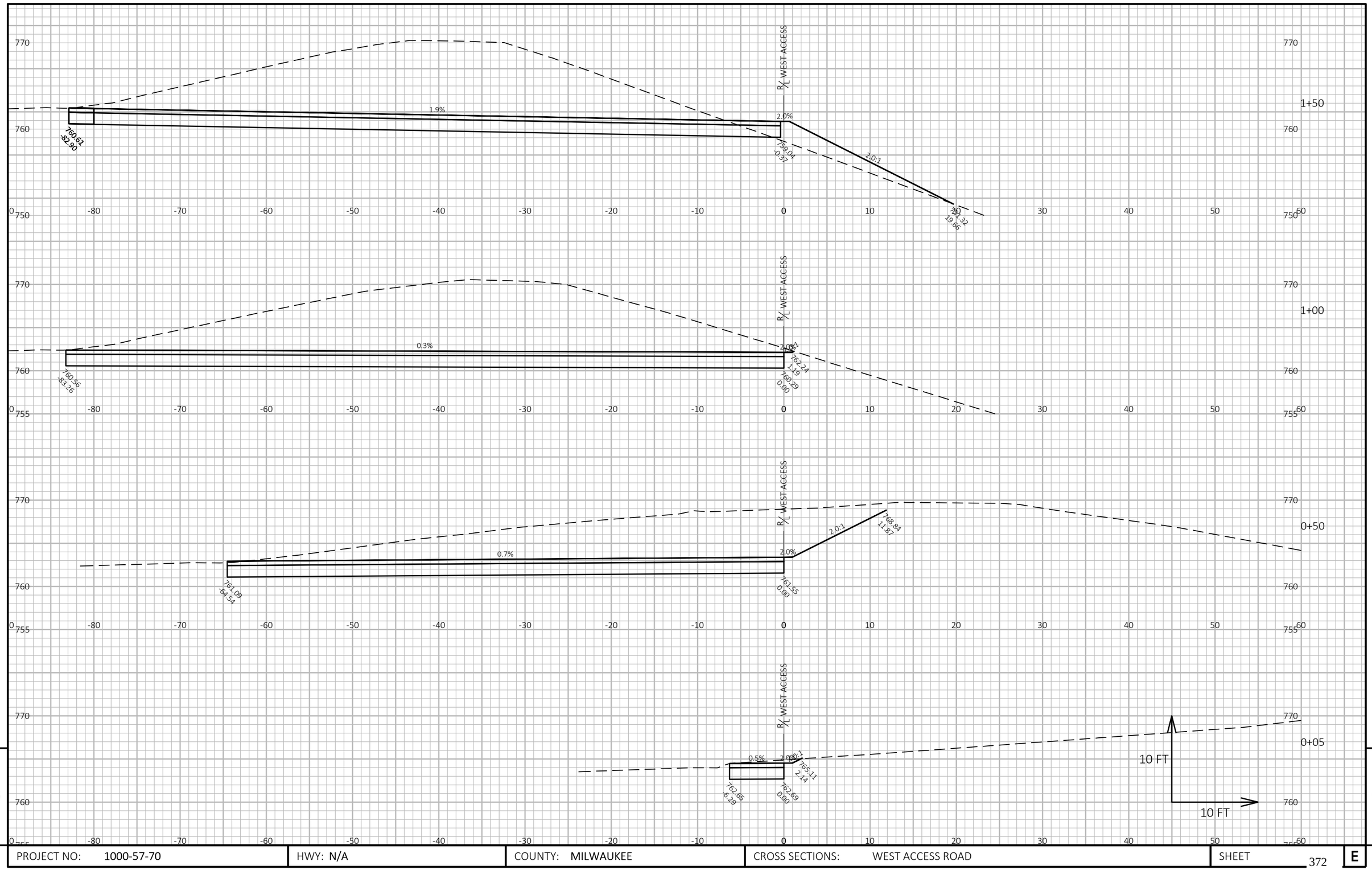
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND WEST PLATFORM	SHEET 371	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - 19 (3)

PLOT DATE : 7/12/2022 12:42 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



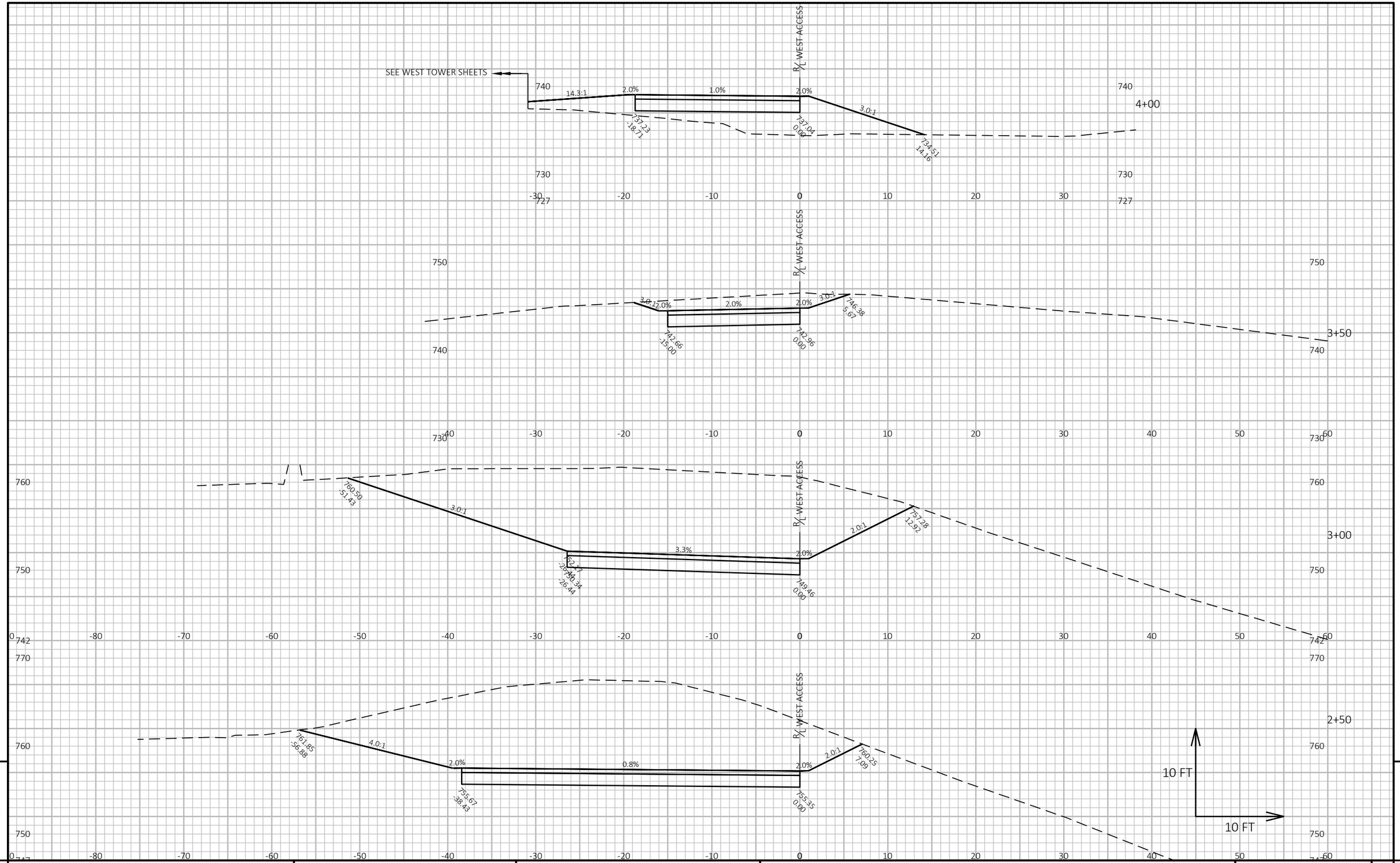
9 9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: WEST ACCESS ROAD	SHEET 372	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - WAR-20

PLOT DATE : 9/15/2022 10:30 AM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

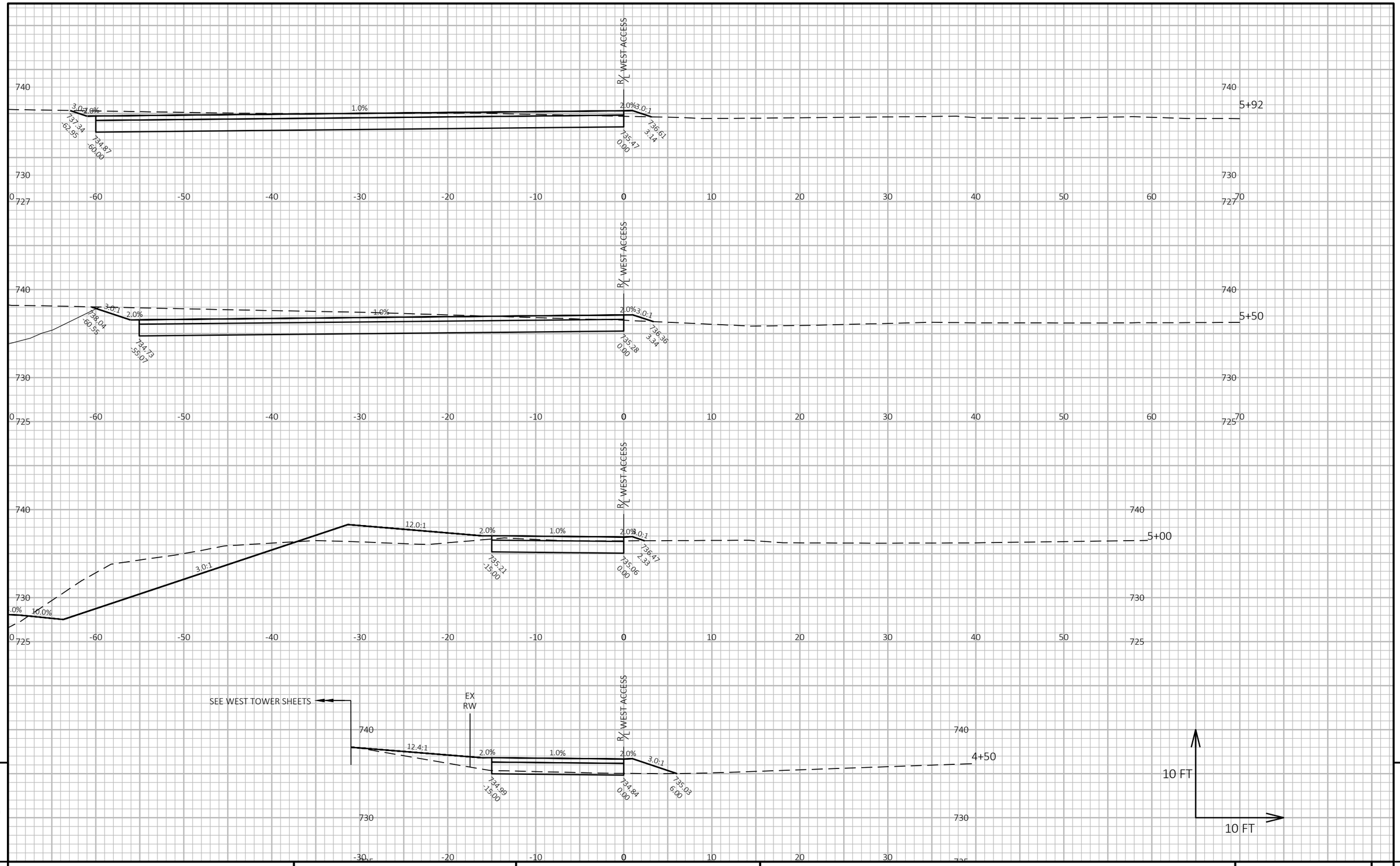
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: WEST ACCESS ROAD	SHEET 373	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - WAR-21

PLOT DATE : 9/13/2022 5:35 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

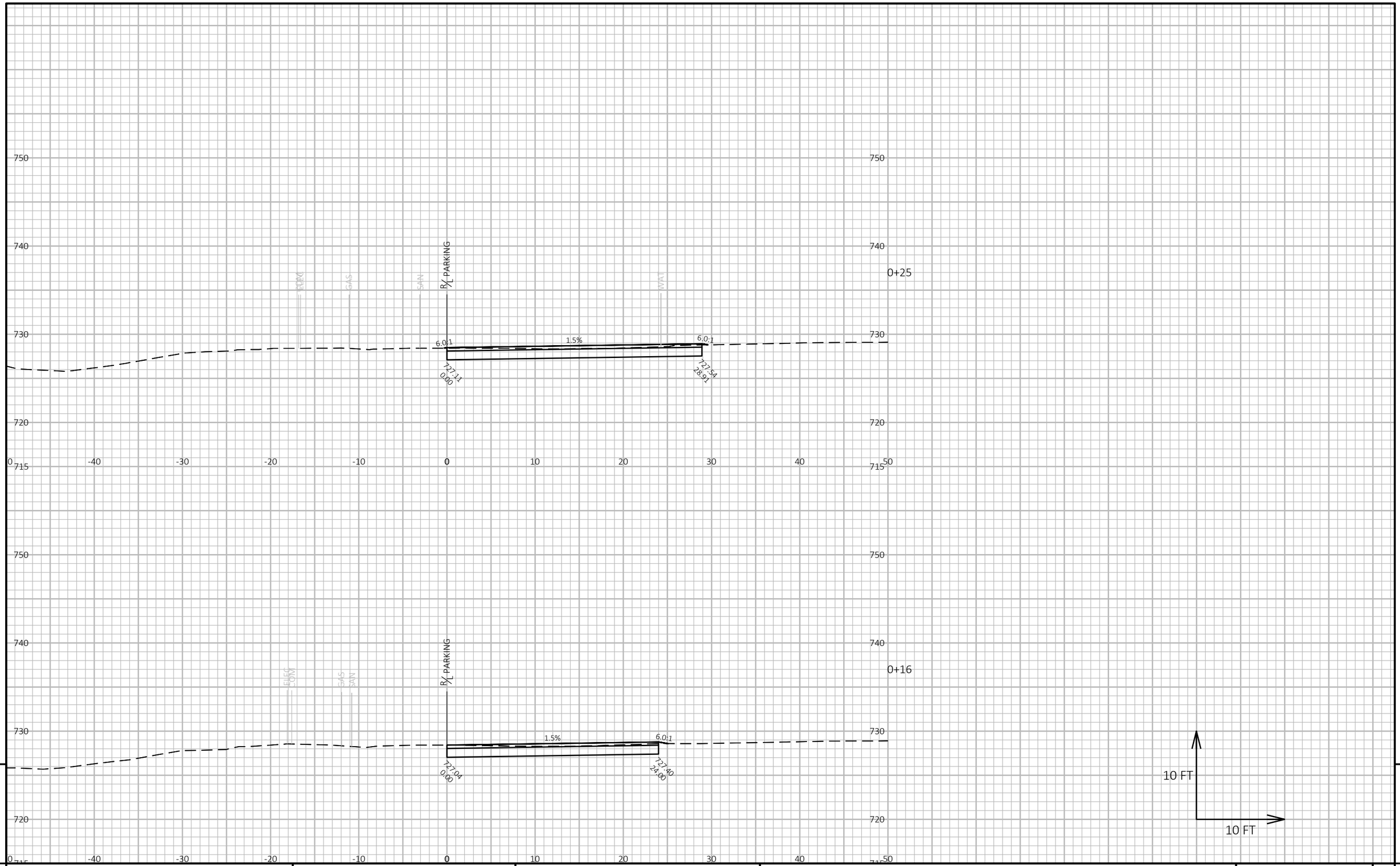
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: WEST ACCESS ROAD	SHEET 374	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090201_XS.DWG
LAYOUT NAME - WAR-22

PLOT DATE : 9/13/2022 5:35 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

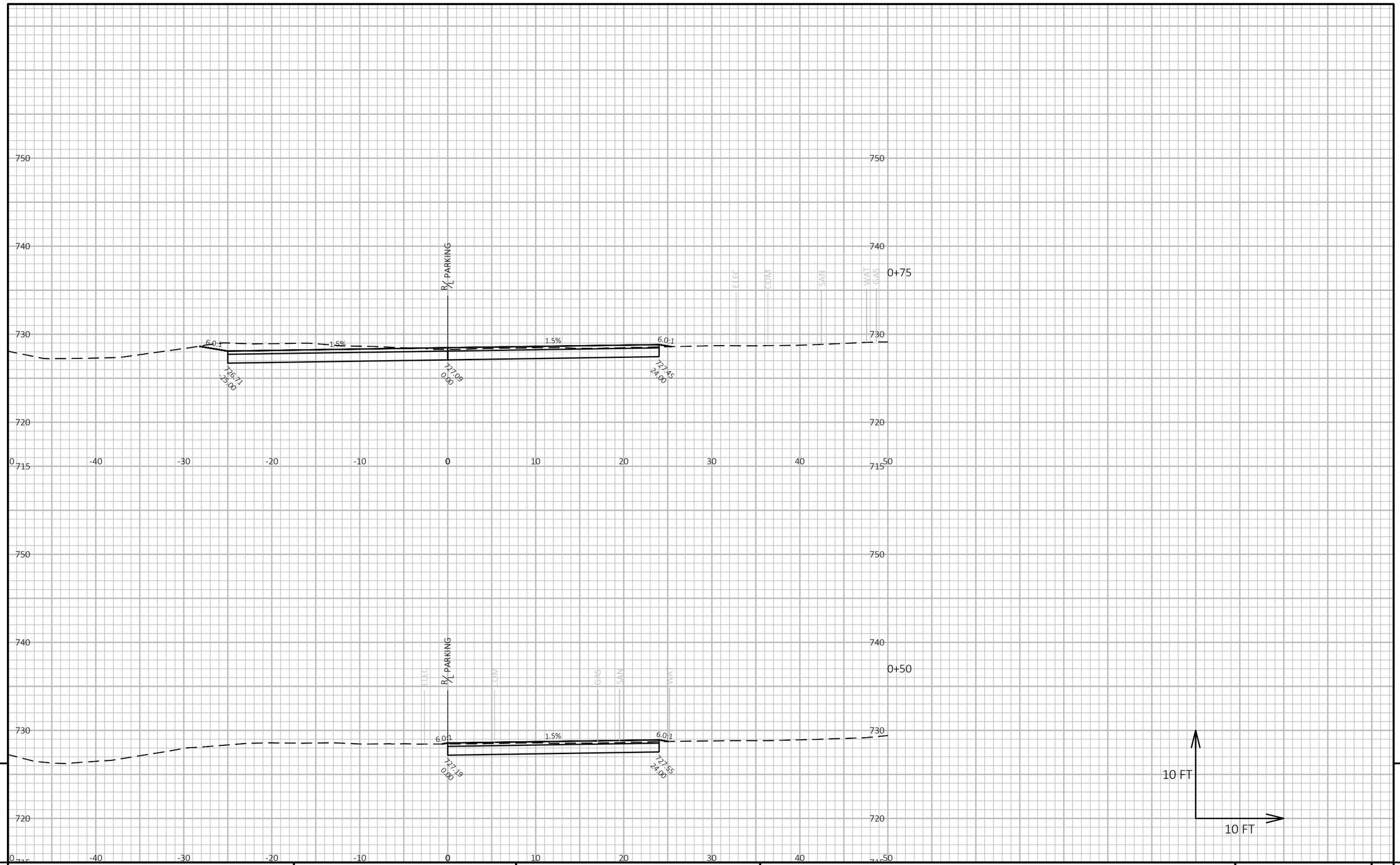
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: PERSONNEL PARKING	SHEET 375	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

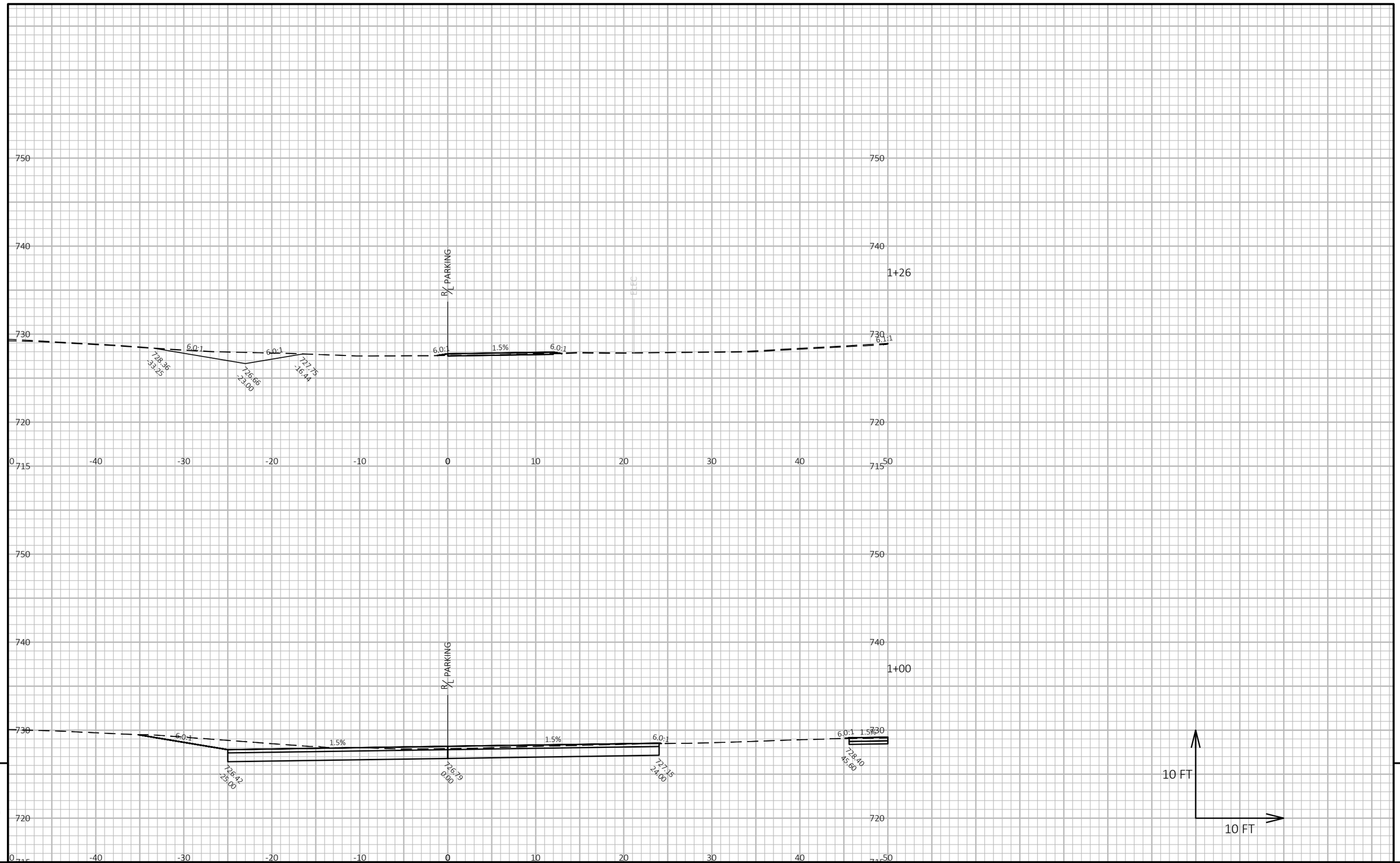
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: PERSONNEL PARKING	SHEET 376	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

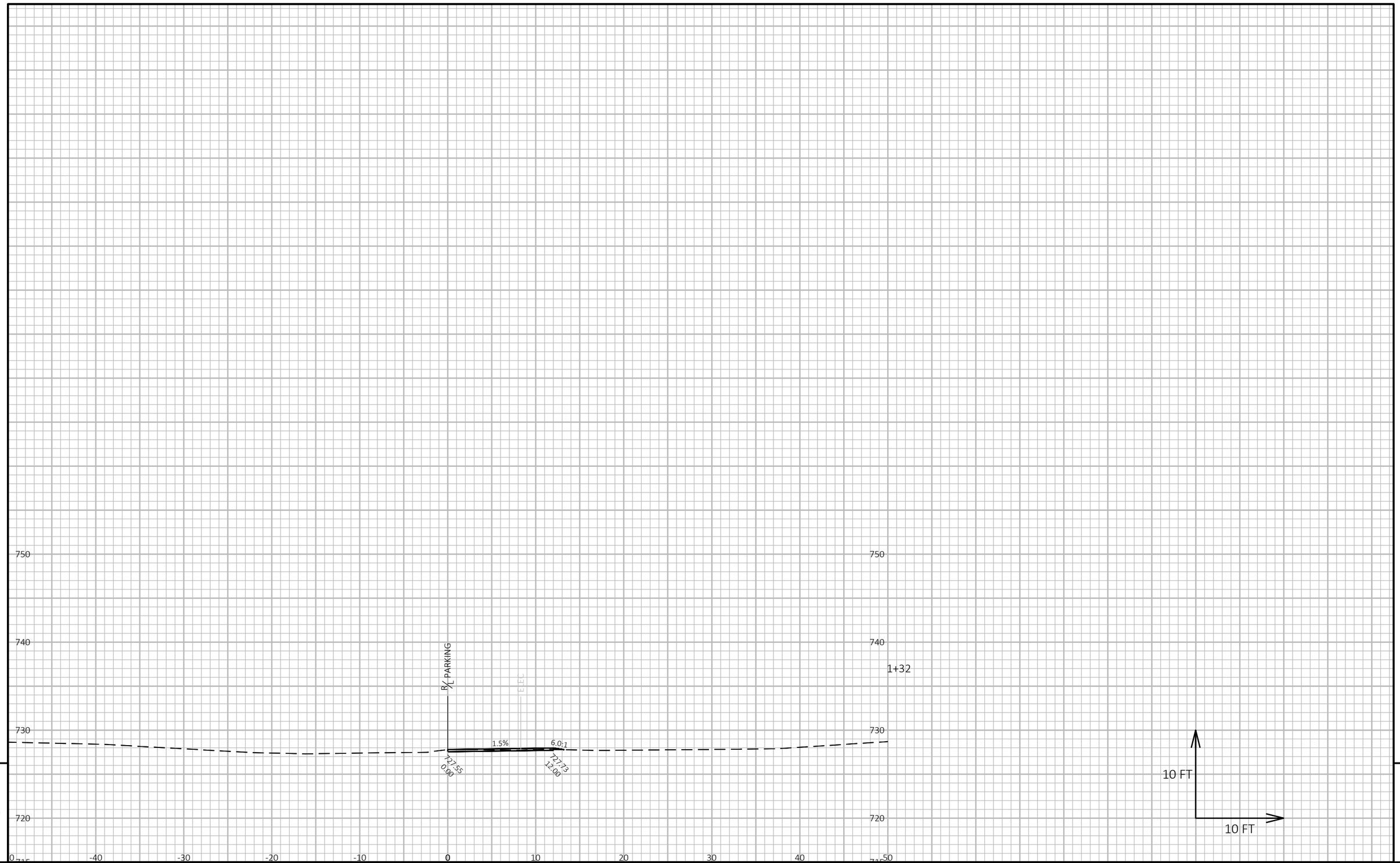
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: PERSONNEL PARKING	SHEET 377	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 16

PLOT DATE : 7/14/2022 12:13 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



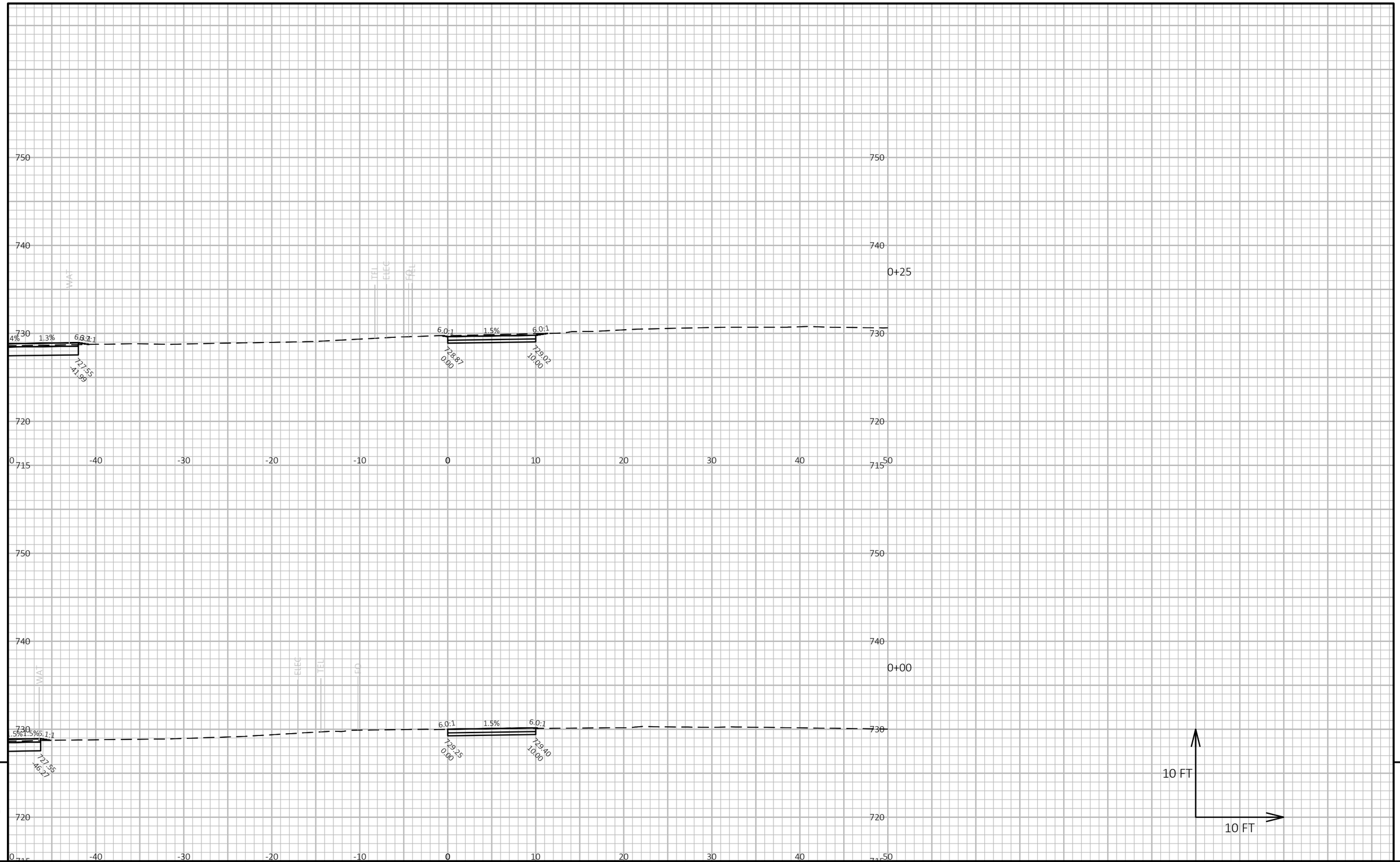
9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: PERSONNEL PARKING	SHEET 378	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

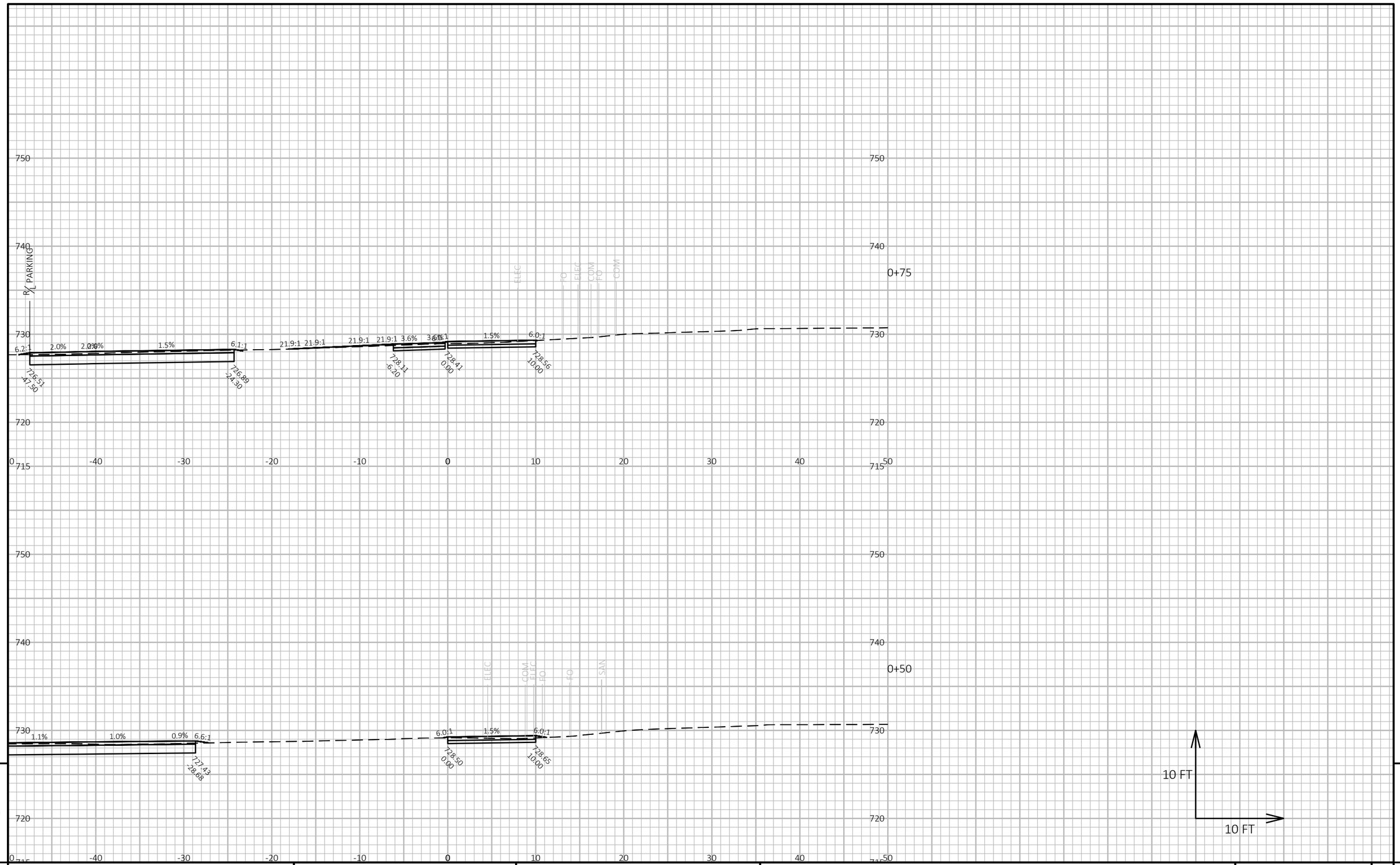
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: SIDEWALK TO PARKING AREA	SHEET 379	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

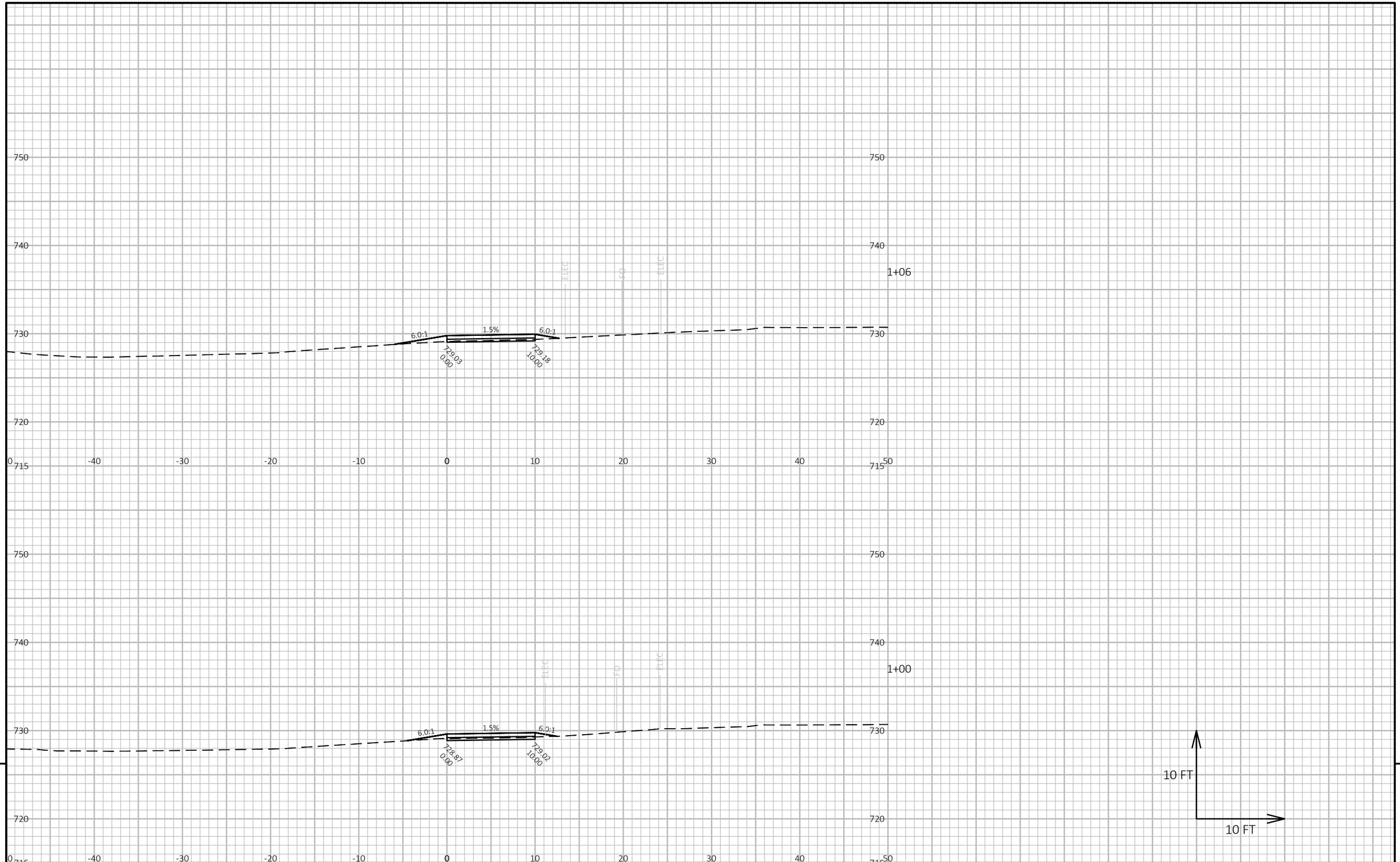
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: SIDEWALK TO PARKING AREA	SHEET 380	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

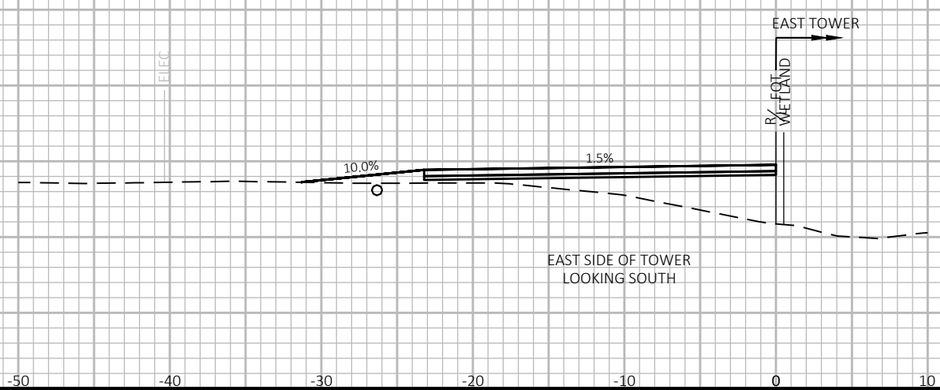
9

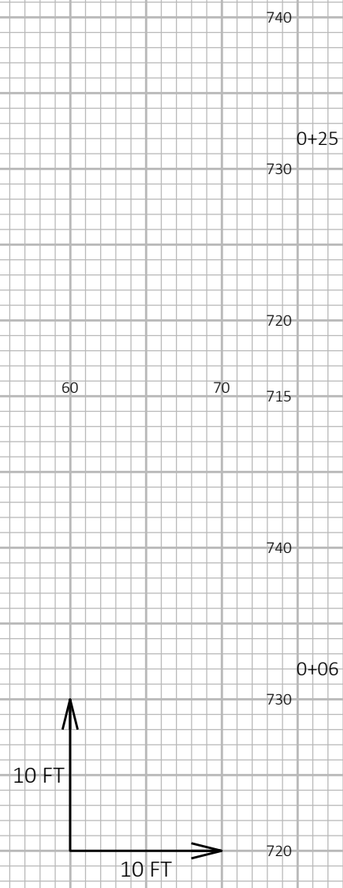
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: SIDEWALK TO PARKING AREA	SHEET 381	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090202_XS.DWG
LAYOUT NAME - 20

PLOT DATE : 7/12/2022 2:32 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

9

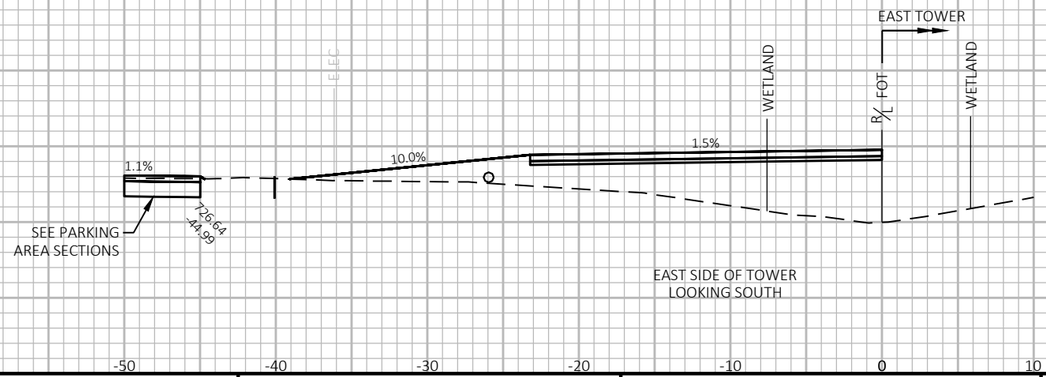
PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: EAST TOWER	SHEET 382	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 24

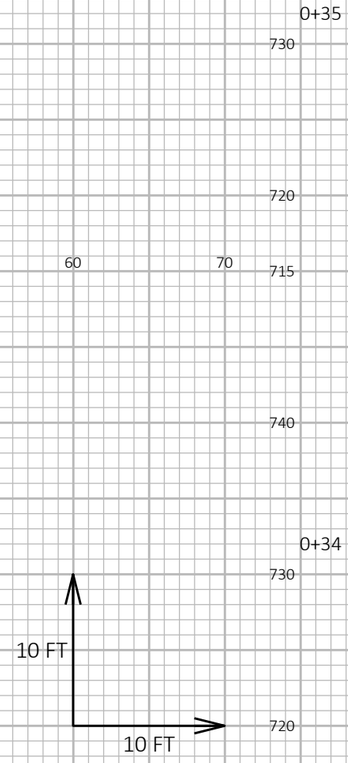
PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SOUTHEAST CORNER
OF TOWER LOOKING
SOUTHWEST



EAST SIDE OF TOWER
LOOKING SOUTH



9

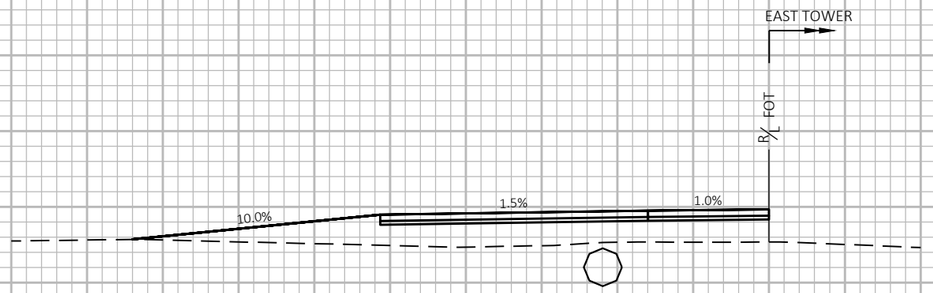
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: EAST TOWER	SHEET 383	E

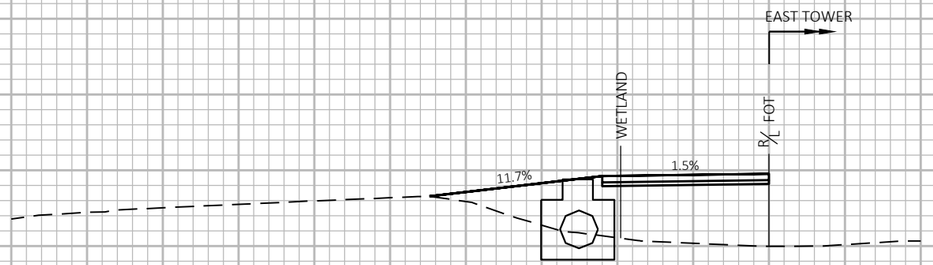
FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 25

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

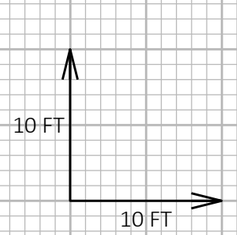
WISDOT/CADDS SHEET 49



SOUTH SIDE OF TOWER
LOOKING WEST



SOUTH SIDE OF TOWER
LOOKING WEST

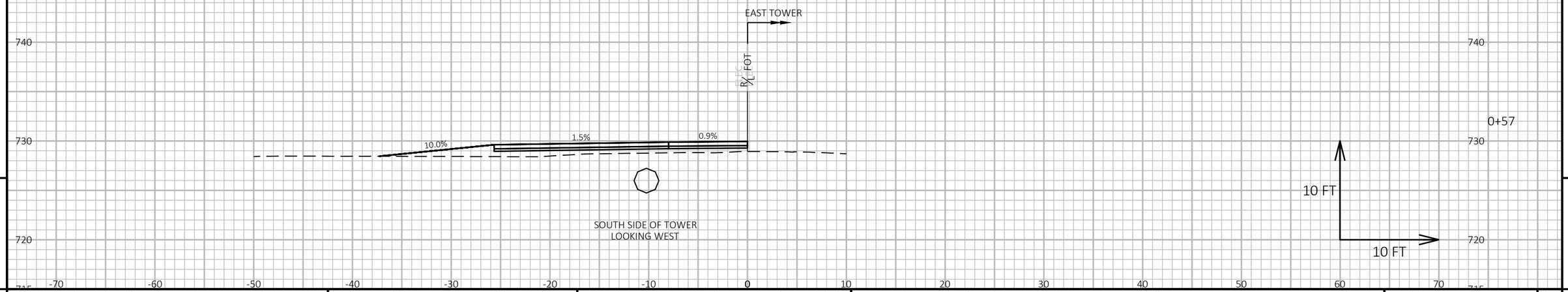


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: EAST TOWER	SHEET 384	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 26

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

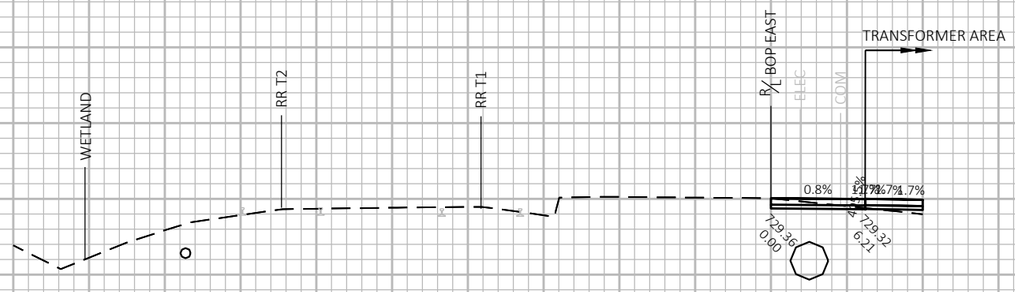
9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: EAST TOWER	SHEET 385	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 27

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



WEST SIDE OF TOWER
LOOKING NORTH

4+00

3+79

10 FT

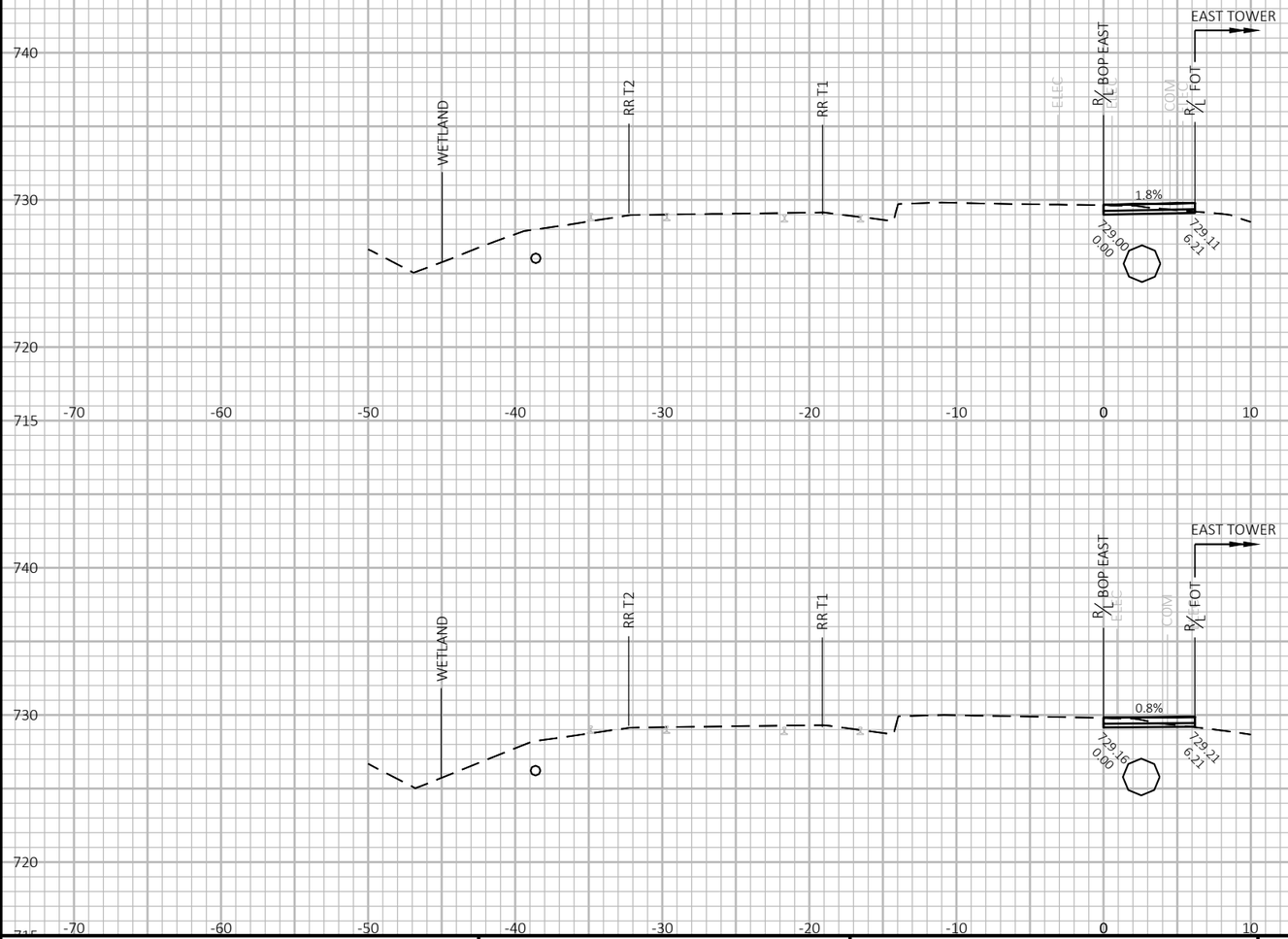
10 FT

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND EAST PLATFORM	SHEET 386	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 21

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

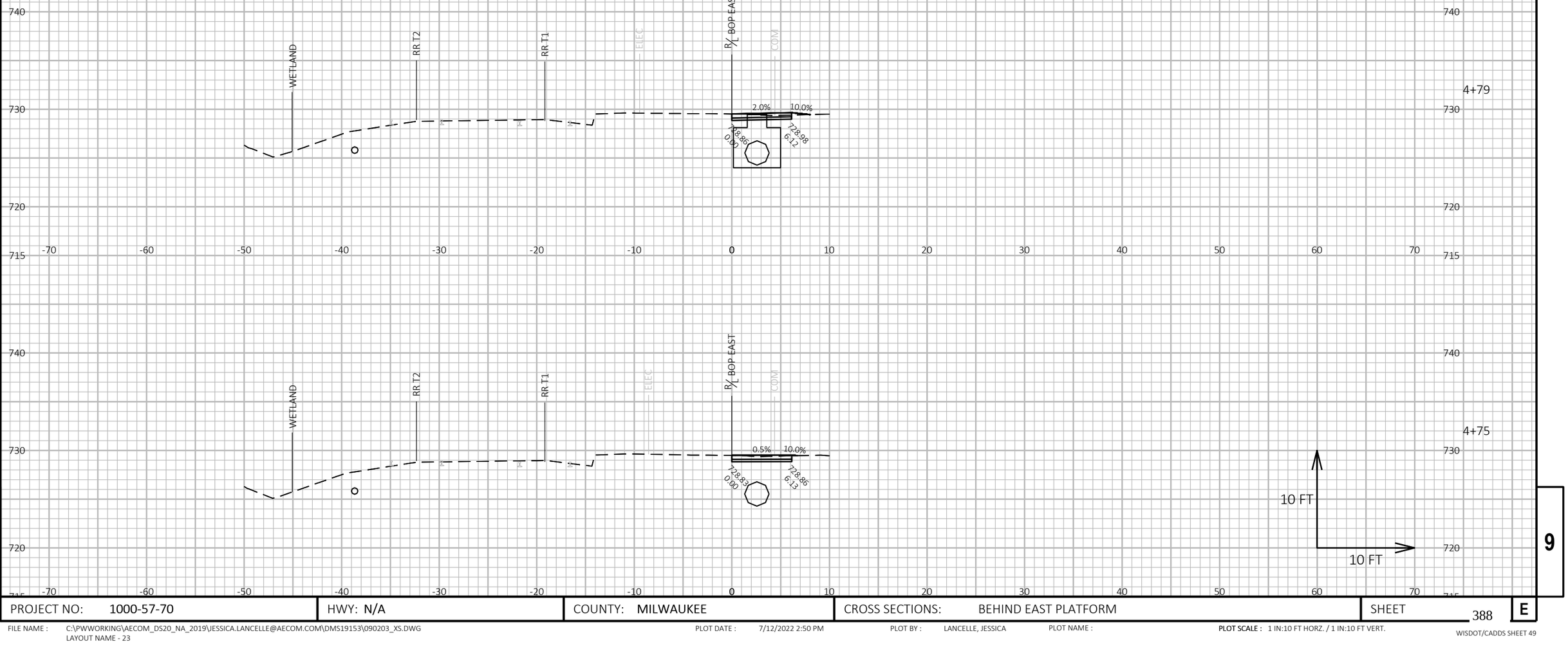


PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND EAST PLATFORM	SHEET 387	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 22

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1000-57-70	HWY: N/A	COUNTY: MILWAUKEE	CROSS SECTIONS: BEHIND EAST PLATFORM	SHEET 388	E

FILE NAME : C:\PWWORKING\AECOM_DS20_NA_2019\JESSICA.LANCELLE@AECOM.COM\DMS19153\090203_XS.DWG
LAYOUT NAME - 23

PLOT DATE : 7/12/2022 2:50 PM PLOT BY : LANCELLE, JESSICA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov