LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE

ISSUED FOR DESIGN DEVELOPMENT SUBMITTAL — DECEMBER 18, 2015 — ELYRIA, OHIO

SYMBOLS AND MATERIALS

Symbol	Description
A03.1	EXTERIOR ELEVATION CALLOUT
A03.1	INTERIOR ELEVATION CALLOUT
A000	SECTION CALLOUT
A000	ENLARGED PLAN CALLOUT
TRUE NORTH	NORTH ARORW
Room name 101 150 SF	ROOM TAG W/ SQ. FT.; SEE ROOM FINISH SCHEDULE
XX#-X/X-# STC - 1hr	WALL TAG W/ SOUND & FIRE RATING
1'-0" ACTX	CEILING TAG
	DOOR TAG W/ HARDWARE DESIGNATION; SEE DOOR SCHEDULE
	WINDOW TAG
	EQUIPMENT TAG
9000	KEYNOTE
#	CODED NOTE

Material	Material
EARTH (UNDISTURBED)	ALUMINUM
EARTH (COMPACT FILL)	SOLID WOOD
STONE/GRAVEL FILL	FINISH WOOD
RIVER ROCK	PLYWOOD
GRADE	GYPSUM WALL BOARD
CONCRETE	RIGID INSULATION
CONCRETE MASONRY UNIT (CMU)	ACOUSTIC CEILING TILE
CMU - SOLID	BATT INSULATION
CMU - HOLLOW	CONTINUOUS WOOD FRAMING
BRICK	WOOD BLOCKING
STUCCO	NOT IN CONTRACT
STEEL	

PROJECT TEAM

OWNER
LORAIN COUNTY COMMISSIONERS
226 MIDDLE AVENUE
ELYRIA, OHIO 44035

STAKEHOLDERS
FEDERAL TRANSIT ADMINISTRATION
REGION 5
200 WEST ADAMS STREET
SUITE 320
CHICAGO, IL 60606

AMTRAK
60 MASSACHUSETTS AVENUE NE
WASHINGTON, DC 20002

NORFOLK SOUTHERN
THREE COMMERCIAL PLACE
NORFOLK, VA 23510

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 3
906 CLARK AVENUE
ASHLAND, OHIO 44805

ARCHITECT
RICHARD L. BOWEN + ASSOCIATES INC.
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CLEVELAND, OHIO 44120

SURVEYOR & CIVIL ENGINEER
KS ASSOCIATES, INC.
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SUITE 100
ELYRIA, OHIO 44035

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MECHANICAL ENGINEER
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ELYRIA, OHIO 44035
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CONTACT: MR. PHILLIP LAHETTA, BUILDING OFFICIAL

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THE CITY OF ELYRIA
FIRE PREVENTION BUREAU
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ELYRIA, OHIO 44035
PHONE: (440) 323-1027
CONTACT: CHIEF CARL KEITH, FIRE MARSHALL

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OHIO EDISON A FIRST ENERGY COMPANY
ELYRIA SERVICE CENTER
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ELYRIA, OHIO 44035
PHONE: (440) 326-3207
CONTACT: MR. JEFFREY HALL, ENGINEERING SERVICES

WATER & SANITARY SEWER
THE CITY OF ELYRIA
UTILITIES DEPARTMENT
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WATER DISTRIBUTION DEPARTMENT
851 GARDEN STREET
ELYRIA, OHIO 44035
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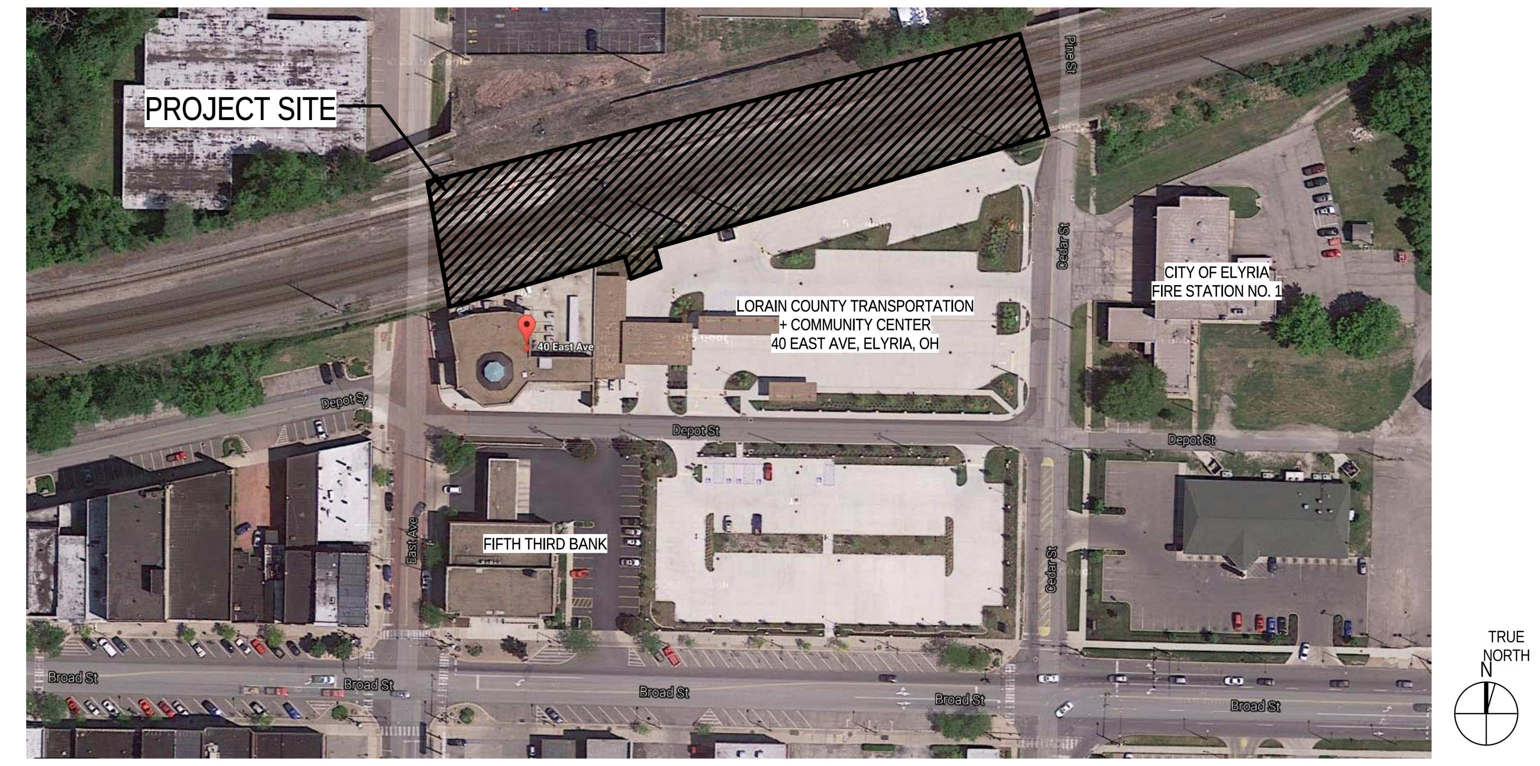
WATER POLLUTION CONTROL DEPARTMENT
1194 GULF ROAD
ELYRIA, OHIO 44035
PHONE: (440) 366-2211

VICINITY MAP



ABBREVIATIONS

&	AND
L	ANGLE
@	AT
X	BY
#	NUMBER
A/C	AIR CONDITION(ER) (ING)
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BR	BRICK
BRG	BEARING
BTM	BOTTOM
BUR	BUILT UP ROOFING
C/C	CENTER TO CENTER
CJ	CONSTRUCTION JOINT
C/L	CENTER LINE
C/L	CENTER LINE
CAR	CARPET (ROLL GOODS/BROADLOOM)
CBB	CEMENTITIOUS BACKER BOARD
CCT	CUBICLE CURTAIN TRACK
CLG	CEILING
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONF	CONFERENCE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR
CPT	CARPET TILE
CRS	COURSE
CT	CERAMIC TILE
DBL	DOUBLE
DEM	DEMISING
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DS	DOWN SPOUT
DP	DEEP
DR	DOOR
DET	DETAIL
DWG	DRAWING
EA	EACH
EF	EACH FACE
E.J.	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATION
ENCL	ENCLOSED (SURE)
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ET CETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FLDR	FOLDING DOOR
FM	FACTORY MUTUAL
F.O.M.	FACE OF MASONRY
FR	FIRE RATED
FRTW	FIRE RETARDANT TREATED WOOD
FSS	FOLDING SHOWER SEAT
FT	FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFCMU	GROUND FACE CONCRETE MASONRY UNITS
GL	GLASS, GLAZING
GLB	GLASS BLOCK
GLCMU	GLAZED FACE CONCRETE MASONRY UNITS
GYPLS	GYPSUM PLASTER
GWB	GYPSUM WALL BOARD
H	HIGH, HEIGHT
HC	HANDICAPPED
HD	HAND DRYER
HDWE	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL(LY)
HR	HOUR
HVAC	HEATING, VENTILATING, AIR CONDITIONING
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
INTMD	INTERMEDIATE
INV	INVERT
IRWC	IMPACT RESISTANT WALLCOVERING
JAN	JANITOR
JB	JUNCTION BOX
JT	JOINT
LAM	LAMINATED
LAV	LAVATORY
LF	LINEAR FEET
LIN	LINOLEUM
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M	MIRROR
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MET	METAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MO	MASONRY OPENING
MOULD	MOULDING
MTD	MOUNTED
NIC	NOT IN CONTRACT
NO.	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	OF
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
PART'N	PARTITION
PERIM	PERIMETER
PL	PLATE
P/L	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLS	PLASTER
PNL	PANEL
PTD	PAINTED (PAINTED FINISH)
PR	PAIR
PROJ	PROJECT
PT	PRESSURE TREATED
PLYWD	PLYWOOD
QT	QUARRY TILE
RAD	RADIUS
RD	ROOF DRAIN
REBAR	REINFORCING BAR
RECT	RECTANGULAR
REINF	REINFORCEMENT
REQ	REQUIRED
REP	REPRESENTATIVE
RFG	RECESSED FOOT GRILLE
RM	ROOM
R/W	RIGHT-OF-WAY
RWC	RAIN WATER CONDUCTOR
S/H	SEALER/HARDENER
SC	SOLID CORE
SF	SQUARE FOOT
SFCMU	SPLIT FACE CONCRETE MASONRY UNITS
SGB	STRUCTURAL GLAZED BLOCK
SIM	SIMILAR
SK	SINK
SOG	SLAB ON GRADE
SPEC	SPECIFICATIONS
SQ	SQUARE
SRGB	SAG-RESISTANT GYPSUM BOARD
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUPPL	SUPPLEMENTARY
SUSP	SUSPENDED
SV	SHEET VINYL
SVT	SOLID VINYL TILE
TEMP	TEMPERED
T/BM	TOP OF BEAM
T&G	TONGUE AND GROOVE
THR	THRESHOLD
T/JST	TOP OF JOIST
TKBD	TACK BOARD
TOM	TOP OF MASONRY
TOS	TOP OF SLAB
T/ST	TOP OF STEEL
TTD	TOILET TISSUE DISPENSER
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VINYL
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
W/	WITH
WC	WATER CLOSET
WD	WOOD
W/O	WITHOUT
WR	WASTE RECEPTACLE
WPT	WOOD - PRESERVATIVE TREATED
WWF	WELDED WIRE FABRIC

NOTES:

1. FOR ADDITIONAL REFERENCE THE CONSTRUCTION INDUSTRY STANDARDS - C.S.I DOCUMENT TD - 2-4 ABBREVIATIONS.
2. THIS LEGEND DOES NOT ASSUME THAT ALL ABBREVIATIONS ARE USED.

GENERAL NOTES

1. ALL EXISTING CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. IN THE EVENT OF ANY DISCREPANCIES, THE CONTRACTOR IS TO REPORT SAID ANOMALIES TO THE OWNER.
2. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES AND SERVICES PRIOR TO START OF WORK.
3. DO NOT SCALE DRAWINGS. DIMENSIONAL DISCREPANCIES AND QUESTIONS SHALL BE DIRECTED TO THE ARCHITECT.
4. ALL DIMENSIONS SHOWN ARE FROM FACE OF FINISH TO FACE OF FINISH UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS. DIMENSIONS NOTED "CLEAR" ARE NOT TO BE ADJUSTED WITHOUT APPROVAL OF ARCHITECT.
5. BASIS OF DESIGN IS GIVEN FOR PARTICULAR ITEMS WHICH ARE GOVERNED BY THE APPLICABLE LOCAL, STATE, AND/OR FEDERAL CODES AND/OR GUIDELINES. APPROVED EQUIVALENTS MUST BE SELECTED BY THE OWNER, AND MUST MEET ALL CRITERIA THAT THE BASIS OF DESIGN SATISFIES. THE ARCHITECT IS NOT RESPONSIBLE FOR CODE/GUIDELINE COMPLIANCE OF ANY ITEM WHICH WAS NOT IDENTIFIED AS THE BASIS OF DESIGN.
6. THE CONTRACTOR IS TO ADHERE TO ALL ACCEPTED INDUSTRY PRACTICES.
7. THE CONTRACTOR IS TO FOLLOW ALL INSTALLATION PROCEDURES PER MANUFACTURER'S INSTRUCTIONS.
8. THE CONTRACTOR IS TO PROVIDE ALL FURRING AND BLOCKING AS NEEDED.
9. ALL WOOD COMPONENTS THAT ARE PART OF EXTERIOR OR INTERIOR CONSTRUCTION ARE TO BE FIRE RETARDANT TREATED.
10. ALL SHELF ANGLES AND LINTELS IN EXTERIOR WALLS ARE TO BE GALVANIZED.
11. ITEMS MARKED AS OWNER FURNISHED OWNER INSTALLED (OFOI) ARE NOT IN CONTRACT; CONTRACTOR TO PROVIDE BLOCKING AS NECESSARY.
12. ALL FURNITURE TO BE OWNER FURNISHED OWNER INSTALLED UNLESS NOTED OTHERWISE.
13. ALL STEEL STRUCTURE MEMBERS SUPPORTING FLOOR OR ROOF SLABS TO BE 1-HOUR RATED. ALL STEEL STRUCTURE MEMBERS SUPPORTING STAIR, ELEVATOR, OR OTHER SHAFTS TO BE 2-HOUR RATED. PROVIDE SOFP UNO.
14. PROVIDE INTUMESCENT COATING IN LIEU OF SOFP ON 6" DEEP STEEL POSTS WITHIN 6" OR 8" STUD FRAMED WALL CONSTRUCTION.
15. ALL CONDITIONS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE.
16. SEE GENERAL NOTES SHEET OF EACH DISCIPLINE FOR ADDITIONAL INSTRUCTIONS.

PROJECT SUMMARY

PROPOSED NEW 1,968 SF TWO-STORY , NON-COMBUSTIBLE, NON-SPRINKLERED, SINGLE-USE, UNOCCUPIED BUILDING TO BE CONSTRUCTED ON A SITE WITH AN EXISTING BUILDING TO REMAIN. THE NEW STRUCTURE WILL EXTEND ACROSS EXISTING RAILWAY TRACKS TO PROVIDE ACCESS TO TWO PROPOSED NEW 6,394 SF AND 6,411 SF NON-COMBUSTIBLE PASSENGER RAIL PLATFORMS VIA A NON–COMBUSTABLE 1,137 SF ELEVATED PEDESTRIAN BRIDGE.

THE 1,968 SF NEW CONSTRUCTION IS DEVELOPED FOR LORAIN COUNTY AS AN AMTRAK PASSENGER RAIL STATION, AND HOUSES UNOCCUPIED CIRCULATION SPACES TO PROVIDE SAFE ACCESS TO THE PLATFORMS AND COVERED WAITING AREAS AS WELL AS NECESSARY SUPPORT SPACES.

PROPOSED NEW CANOPIES AT THE BUILDING ENTRY AND EACH PLATFORM ARE PROVIDED TO ALLOW FOR COVERED EXTERIOR WAITING AREAS.

REFER TO SHEET LS1.1 FOR SPECIFIC BUILDING CODE DATA.

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DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC
	12/18/15 DESIGN DEVLPMT

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

COVER SHEET

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO. G1.0

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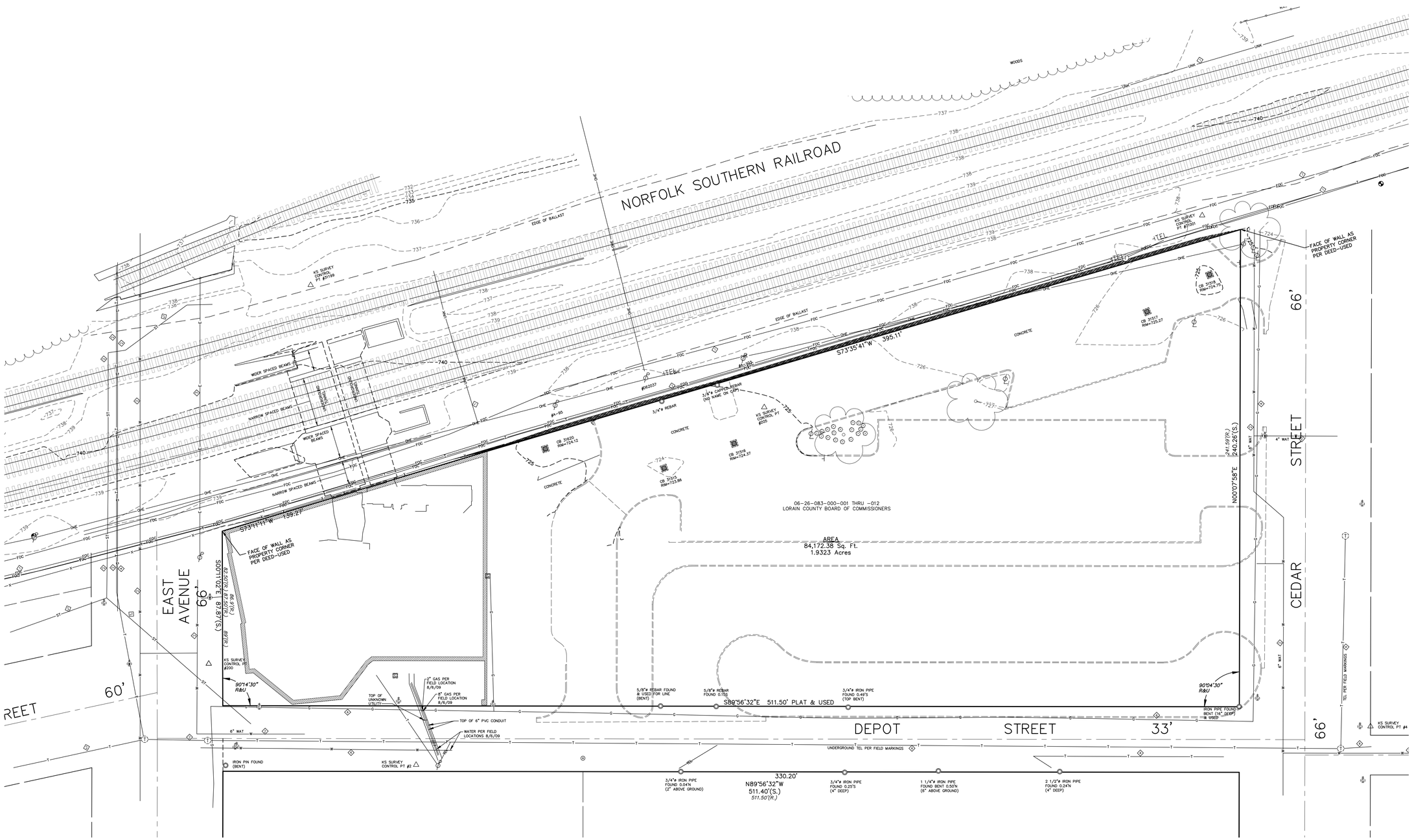

CONTROL POINT TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
2	980.61	519.82	CNPT IPINS
4	1000.00	1000.00	CNPT MAGS
205	1160.68	694.97	CNPT MAGS
2005	1031.54	415.49	CNPT 200
31001	1257.27	915.32	CNPT IPINS
31199	1222.21	466.75	CNPT IPINS
31200	1462.28	1359.89	CNPT IPINS

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DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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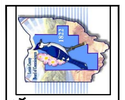

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE

40 EAST AVENUE, ELYRIA, OH 44035

EXISTING CONDITIONS

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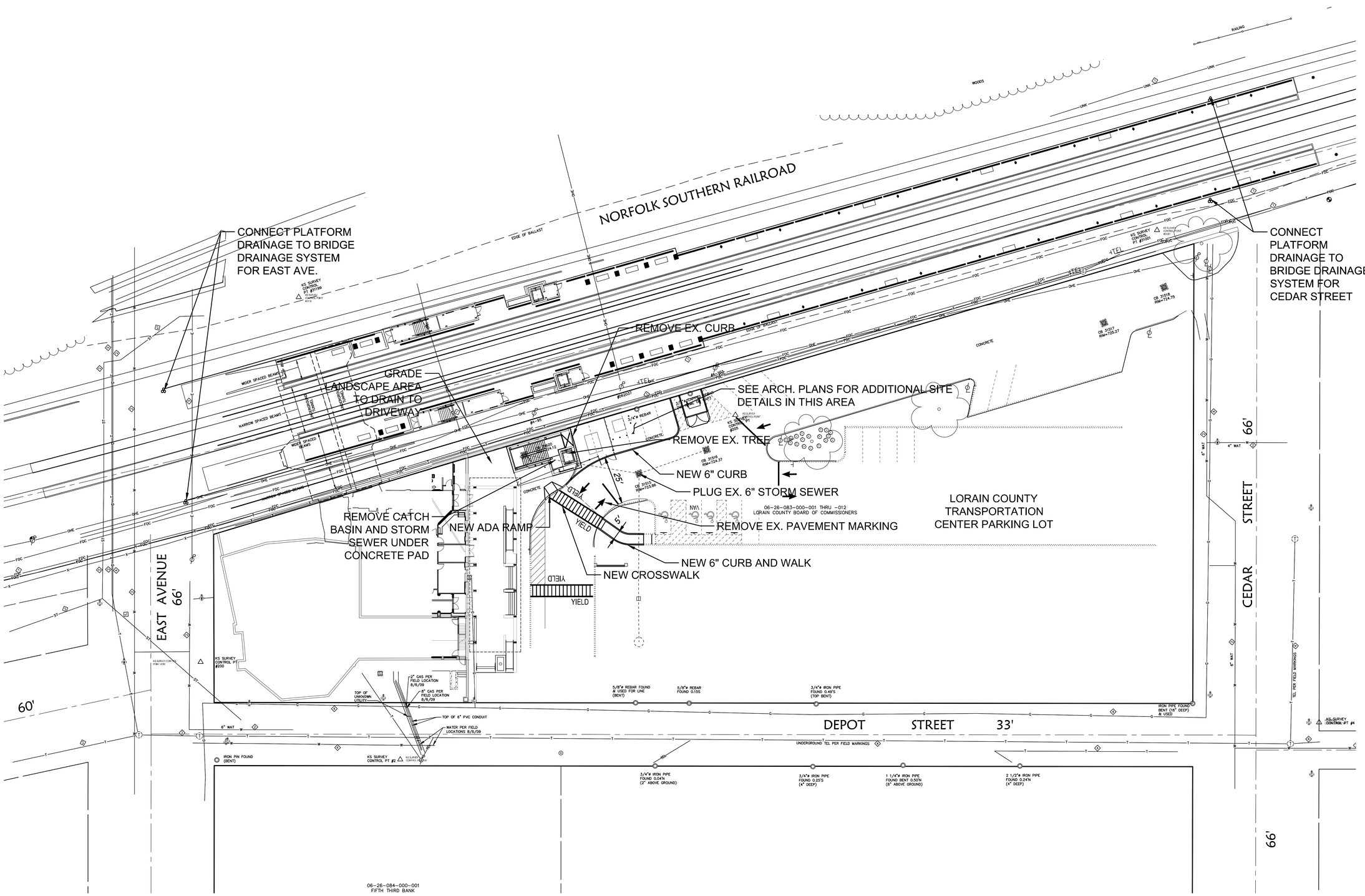
CHECKED BY: MJM
RLB NO.: 8258.01

DRAWING NO.
C1.1



DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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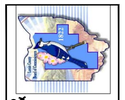

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

CIVIL SITE PLAN

DRAWN BY: MTG
CHECKED BY: CFE
RLB NO.: 8258.01

DRAWING NO.
C1.2

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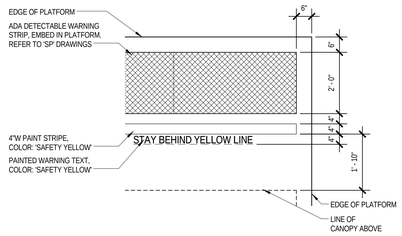
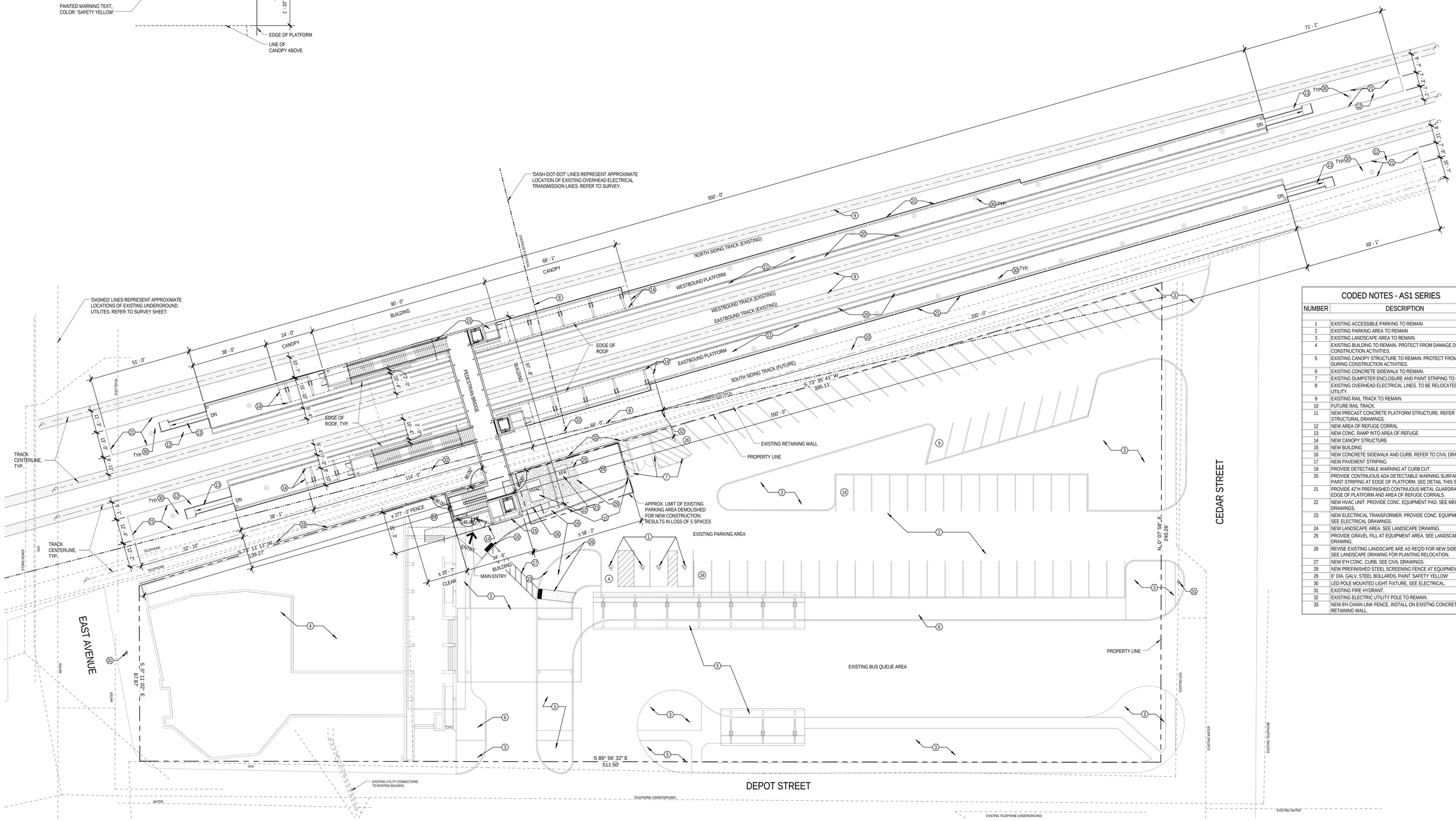


GENERAL NOTES - ARCHITECTURAL SITE PLAN

1. SEE CIVIL AND LANDSCAPING DRAWINGS FOR TYPICAL PAVING AND PLANTING DETAILS.
2. ALL NEW PAVING TO BE CUT AT JOINT OR BLENDED TO CREATE A SEAMLESS TRANSITION TO EXISTING ADJACENT PAVING TO REMAIN.
3. PROVIDE CONTINUOUS CONCRETE CURB AS NEEDED FOR ALL NEW DRIVE AISLES AND PARKING SPACES. PARKING SPACES ARE TO INCLUDE PAINTED STRIPES AND SIGNAGE PER ARCHITECT.
4. ALL EXTERIOR PAVING TO BE SLOPED TO DRAIN AT 1/8" PER 1'-0" MINIMUM.
5. PROVIDE CONTINUOUS SETTING BED AS NEEDED FOR ALL EXTERIOR PAVING TYPES, STAIRS AND BENCHES.
6. PROVIDE REBAR AS NEEDED FOR ALL SITE CONCRETE. SEE STRUCTURAL DRAWINGS FOR TYPICAL DETAILS.
7. SIDEWALK SLABS ON GRADE SHALL BE MINIMUM OF 4" CONCRETE WITH NON-SLIP FINISH ON MINIMUM 4" COMPACTED POROUS FILL. CONTROL JOINTS SHALL BE SPACED APPROX. 5'-0" O.C. IN EACH DIRECTION OR AS SHOWN OTHERWISE. EXPANSION JOINTS SHALL OCCUR AT APPROX. 20'-0" O.C.
8. FIELD CONCRETE TO HAVE ROUGH BROOM FINISH AND NATURAL COLOR.



1 AS1.1 ARCHITECTURAL SITE PLAN
SCALE: 1" = 20'-0"

CODED NOTES - AS1 SERIES

NUMBER	DESCRIPTION
1	EXISTING ACCESSIBLE PARKING TO REMAIN
2	EXISTING PARKING AREA TO REMAIN
3	EXISTING LANDSCAPE AREA TO REMAIN.
4	EXISTING BUILDING TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
5	EXISTING CANOPY STRUCTURE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
6	EXISTING CONCRETE SIDEWALK TO REMAIN.
7	EXISTING DUMPSTER ENCLOSURE AND PAINT STRIPING TO REMAIN.
8	EXISTING OVERHEAD ELECTRICAL LINES. TO BE RELOCATED BY UTILITY.
9	EXISTING RAIL TRACK TO REMAIN.
10	FUTURE RAIL TRACK.
11	NEW PRECAST CONCRETE PLATFORM STRUCTURE. REFER TO STRUCTURAL DRAWINGS.
12	NEW AREA OF REFUGE CORRAL
13	NEW CONC. RAMP INTO AREA OF REFUGE
14	NEW CANOPY STRUCTURE
15	NEW BUILDING
16	NEW CONCRETE SIDEWALK AND CURB. REFER TO CIVIL DRAWINGS
17	NEW PAVEMENT STRIPING.
19	PROVIDE DETECTABLE WARNING AT CURB CUT.
20	PROVIDE CONTINUOUS ADA DETECTABLE WARNING SURFACE AND PAINT STRIPING AT EDGE OF PLATFORM. SEE DETAIL THIS SHEET.
21	PROVIDE 42"H PREFINISHED CONTINUOUS METAL GUARDRAIL AT EDGE OF PLATFORM AND AREA OF REFUGE CORRALS.
22	NEW HVAC UNIT. PROVIDE CONC. EQUIPMENT PAD. SEE MECHANICAL DRAWINGS.
23	NEW ELECTRICAL TRANSFORMER. PROVIDE CONC. EQUIPMENT PAD. SEE ELECTRICAL DRAWINGS.
24	NEW LANDSCAPE AREA. SEE LANDSCAPE DRAWING.
25	PROVIDE GRAVEL FILL AT EQUIPMENT AREA. SEE LANDSCAPE DRAWING.
26	REVISE EXISTING LANDSCAPE ARE AS REQ'D FOR NEW SIDEWALK. SEE LANDSCAPE DRAWING FOR PLANTING RELOCATION.
27	NEW 6'H CONC. CURB. SEE CIVIL DRAWINGS.
28	NEW PREFINISHED STEEL SCREENING FENCE AT EQUIPMENT
29	6" DIA. GALV. STEEL BOLLARDS, PAINT 'SAFETY YELLOW'
30	LED POLE MOUNTED LIGHT FIXTURE. SEE ELECTRICAL.
31	EXISTING FIRE HYDRANT.
32	EXISTING ELECTRIC UTILITY POLE TO REMAIN.
33	NEW 6'H CHAIN LINK FENCE, INSTALL ON EXISTNG CONCRETE RETAINING WALL.

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC
	12/18/15 DESIGN DEVLPMT

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ARCHITECTURAL SITE PLAN

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BUILDING CODE DATA

THE BUILDING DESIGN WILL BE DICTATED BY THE FOLLOWING CODES:

STATE OF OHIO BUILDING CODES

- 2011 (OBC) OHIO BUILDING CODE W/ UPDATES
- 2011 (OMC) OHIO MECHANICAL CODE W/ UPDATES
- 2011 (OPC) OHIO PLUMBING CODE W/ UPDATES
- 2014 (NEC) NATIONAL ELECTRIC CODE
- 2011 (OFC) OHIO FIRE CODE
- 2007 (ASHRAE 90.1) ENERGY CONSERVATION CODE
- 2009 (ANSI A117.1) ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
- 2010 (ASME A17.1) ELEVATOR CODE

CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION

SECTION 303.1 - ASSEMBLY OCCUPANCY - GROUP A-3

ASSEMBLY GROUP A OCCUPANCY INCLUDES, AMONG OTHERS, THE USE OF A BUILDING OR STRUCTURE, OR A PORTION THEREOF, FOR THE GATHERING OF PERSONS FOR PURPOSES SUCH AS CIVIC, SOCIAL OR RELIGIOUS FUNCTIONS; RECREATION, FOOD OR DRINK CONSUMPTION OR AWAITING TRANSPORTATION.

CHAPTER 5 GENERAL BUILDING LIMITATIONS

TABLE 503 ALLOWABLE HEIGHTS AND BUILDING AREAS

TYPE IIB CONSTRUCTION - BUILDING TO BE NON SPRINKLERED

USE GROUP	AREA		HEIGHT	
	ALLOWABLE	ACTUAL	ALLOWABLE	ACTUAL
A-3 ASSEMBLY	9,500 GSF	2,027 GSF	2 STORIES AND 55 FEET	2 STORIES AND 57' -8"
PEDESTRIAN WALKWAY	N/A	1,137 GSF	N/A	52 FEET

TOTAL AREA OF STRUCTURE 3,164 GSF

HEIGHT AND AREA MODIFICATIONS ARE NOT REQUIRED PER SECTION 508.

PEDESTRIAN WALKWAY DOES NOT CONTRIBUTE TO NUMBER OF STORIES OR BUILDING AREA OR HEIGHT ABOVE GRADE PER OBC SECTION 3104.1

SECTION 503.1.2 - BUILDINGS ON THE SAME LOT SHALL BE CONSIDERED AS PORTIONS OF ONE BUILDING IF THE BUILDING HEIGHT OF EACH BUILDING AND THE AGGREGATE BUILDING AREA OF THE BUILDINGS ARE WITHIN THE LIMITATIONS OF TABLE 503.

CHAPTER 6 CONSTRUCTION TYPES

TABLE 601 TYPE II B CONSTRUCTION UNPROTECTED - NON SPRINKLERED

BUILDING ELEMENT	TYPE IIB
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS, TRUSSES	0 HRS.
BEARING WALLS EXTERIOR INTERIOR	 0 HRS. 0 HRS.
NONBEARING WALLS AND PARTITIONS EXTERIOR	0 HRS.
NONBEARING WALLS AND PARTITIONS INTERIOR	0 HRS.
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	0 HRS.
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	0 HRS.

TABLE 602 - FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE (feet)	TYPE OF CONSTRUCTION	GROUP A-3
< 5C	ALL	1
≥ 5 < 10	1A OTHERS	1 1
≥ 10 < 30	1A, IIB IIB, VB OTHERS	1 0 1
≥ 30	ALL	0

ALL EXTERIOR WALLS ARE ≥ 30' FROM EXISTING ADJACENT BUILDING STRUCTURES, THEREFORE ALL EXTERIOR WALLS ARE NON-RATED "0 HOURS" BASED ON FIRE SEPERATION DISTANCE GREATER THAN 30' FOR A USES PER TABLE 602.

CHAPTER 8 INTERIOR FINISHES

TABLE 803.9 MINIMUM INTERIOR FINISH CLASSIFICATION (NON-SPRINKLERED)

USE GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS OR OTHER SPACES
A-3	CLASS A	CLASS A CLASS B IN LOBBY AREAS	CLASS B CLASS C WHERE OCCUPANCY <300

CHAPTER 9 FIRE PROTECTION SYSTEMS

FIRE SUPPRESSION: SECTION 903.2.1.3 GROUP A-3:

EXCEPTION: 1. WHERE FIRE AREAS EXCEED 12,000 SF > ACTUAL AREA 3,164 SF (NOT REQUIRED)
EXCEPTION: 2. WHERE OCCUPANT LOAD EXCEEDS 300 > OCCUPANTS = 81 (NOT REQUIRED)
EXCEPTION: 3. WHERE FIRE AREAS ARE LOCATED ON A FLOOR OTHER THAN A LEVEL OF EXIT DISCHARGE (NOT REQUIRED)

FIRE ALARM & DETECTION: SECTION 907.2.1 GROUP A: PROVIDED.

GENERAL NOTES:

1. PROVIDE A MIN 2A-10 BC FIRE EXTINGUISHERS - 75 FT TRAVEL DISTANCE (1) PER 3000 SQ. FT. FOR STRUCTURE MIN (2) REQUIRED. QUANTITY AND LOCATION AS REQUIRED BY LOCAL FIRE MARSHAL.

VARIANCES

STATE OF OHIO BOARD OF BUILDING APPEALS CASE NO. 15-023
FINAL ORDER, DATED NOVEMBER 10, 2015, PERMITS THE FOLLOWING VARIANCES FROM OHIO BUILDING CODE REQUIREMENTS:
1. ALLOWABLE HEIGHT MAY EXCEED MAXIMUM ALLOWABLE WITHOUT INSTALLATION OF FIRE SUPRESSION SYSTEM.
2.FIRE SEPARATION AT THE PROPERTY LINE MAY BE ELIMINATED.

VARIANCES ARE CONDITIONED UPON THE INSTALLATION AND MAINTENANCE OF A FIRE ALARM SYSTEM COMPRISING OF A REMOTE ANNUNCIATOR AT THE FRONT ENTRANCE, SYSTEM SMOKE DETECTORS WITH INTEGRAL HEAT DETECTORS THROUGHOUT, AUDIBLE/VISUAL DEVICES THROUGHOUT, AND PULL STATIONS AT ALL IDENTIFIED METANS OF EGRESS. FIRE ALARM SYSTEM AND OFF-PREMISE MONITORING SHALL BE MAINTAINED AS REQUIRED SYSTEMS AND LISTED ON THE CERTIFICATE OF OCCUPANCY.

CHAPTER 10 MEANS OF EGRESS
REFER TO LIFE SAFETY PLAN SHEET LS1.1.

TABLE 1004.1.1 - MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT
NOTE: MAXIMUM SF FOR WAITING AREAS AND PEDESTRAIN WALKWAY ARE BASED UPON WAITING AREA (15 GSF) AND CONCOURSE (100 GSF) FOR AIRPORT TERMINALS

OCCUPANT LOAD CALCULATION BASED ON TOTAL BUILDING AREA:

PEDESTRIAN WALKWAY
1,028 GSF / 100 GSF PER OCCUPANT = 11 OCCUPANTS

ENTRY
LOBBY & ELEVATOR NO. 3
182 GSF / 15 GSF PER OCCUPANT = 13 OCCUPANTS
ELECTRICAL/FIRE ALARM CLOSET
119 GSF / 300 GSF PER OCCUPANT = 1 OCCUPANT
STAIR NO. 3
247 GSF / 100 GSF PER OCCUPANT = 3 OCCUPANTS

PLATFORM A:
ELEVATOR & VESTIBULE NO. 1
90 GSF / 15 GSF PER OCCUPANT = 7 OCCUPANTS
STAIR VESTIBULE NO. 1
85 GSF / 15 GSF PER OCCUPANT = 6 OCCUPANTS
STAIR NO. 1
387 GSF / 100 GSF PER OCCUPANT = 4 OCCUPANTS
ELEC/MECH
147 GSF / 300 GSF PER OCCUPANT = 1 OCCUPANT

PLATFORM B:
ELEVATOR VESTIBULE NO. 2
90 GSF / 15 GSF PER OCCUPANT = 7 OCCUPANTS
STAIR VESTIBULE NO. 2
85 GSF / 15 GSF PER OCCUPANT = 6 OCCUPANTS
STAIR NO. 2
387 GSF / 100 GSF PER OCCUPANT = 4 OCCUPANTS
ELEC/MECH
147 GSF / 300 GSF PER OCCUPANT = 1 OCCUPANT

TOTAL = 64 OCCUPANTS

TABLE 1015.1 SPACES WITH ONE MEANS OF EGRESS
TABLE 1015.1 SPACES WITH ONE MEANS OF EGRESS MAXIMUM OCCUPANT LOAD = 49

TABLE 1005.1: EGRESS WITH PER OCCUPANT (WITHOUT SPRINKLER SYSTEM)
USE GROUP A3 - ASSEMBLY STAIRWAY = 0.3 INCHES
DOORS /RAMPS /CORRIDORS = 0.2 INCHES

SECTION 1014.3 COMMON PATH OF EGRESS TRAVEL
THE LENGTH OF COMMON PATH OF EGRESS IN AN OCCUPANCY (ASSEMBLY) SHALL NOT EXCEED 75 FEET.

TABLE 1016.1: LENGTH OF EXIT ACCESS TRAVEL DISTANCE (WITHOUT SPRINKLER SYSTEM)
USE GROUP A3 - ASSEMBLY 200 FT

TABLE 1018.1 CORRIDOR FIRE RESISTANCE RATING
USE GROUP A3 - ASSEMBLY 1-HOUR WITHOUT SPRINKLER SYSTEM

SECTION 1018.2 CORRIDOR WIDTH
THE MINIMUM CORRIDOR WIDTH SHALL BE AS DETERMINED IN SECTION 1003.2.3, BUT NOT LESS THAN 44 INCHES.

SECTION 1018.4 DEAD ENDS
WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT THERE ARE NO DEAD END CORRIDORS MORE THAN 20 FEET IN LENGTH.

TABLE 1021.1 - MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD
1-500 OCCUPANTS: 2 EXITS REQUIRED

SECTION 1027.6 - ACCESS TO PUBLIC WAY
EXCEPTION: WHERE ACCESS TO A PUBLIC WAY CANNOT BE PROVIDED, A SAFE DISPERSAL AREA SHALL BE PROVIDED WHERE ALL OF THE FOLLOWING ARE MET:
(1) AREA SHALL BE OF A SIZE TO ACCOMMODATE AT LEAST 5 SF / PERSON = 400 SF
(2) AREA SHALL BE LOCATED ON SAME LOT AT LEAST 50 FT AWAY FROM BUILDING; ACTUAL = 302 FT
(3) AREA SHALL BE PERMANENTLY MAINTAINED AND IDENTIFIED AS SAFE DISPERSAL AREA.
(4) AREA SHALL BE PROVIDED WITH A SAFE AND UNOBSTRUCTED PATH OF TRAVEL FROM BUILDING.

CHAPTER 11 ACCESSIBILITY
BUILDING TO MEET FEDERAL, STATE AND LOCAL ACCESSIBILITY GUIDELINES.

CHAPTER 29 PLUMBING FIXTURES REQUIRED (PER OBC TABLE 2902.1)

OCCUPANCY AREA	WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
A-3 USE GROUP PASSENGER TERMINALS AND TRANSPORTATION FACILITIES	PER SEX: 1 PER 500	PER SEX: 1 PER 750	1 PER 1,000	1

FIXTURES REQUIRED (PER OBC TABLE 2902.1):

32 OCCUPANTS PER SEX:
- WOMEN'S RESTROOM: (1) WATER CLOSET AND (1) LAVATORIES
- MEN'S RESTROOM: (1) WATER CLOSET (1/2 MAY BE SUBSTITUTED WITH URINALS) AND (1) LAVATORIES
- (1) DRINKING FOUNTAIN
- (1) SERVICE SINK

FIXTURES PROVIDED IN EXISTING BUILDING:

- WOMEN'S EMPLOYEE RESTROOM: (3) WATER CLOSET AND 3 LAVATORIES
- MEN'S EMPLOYEE RESTROOM: (2) WATER CLOSET, (1) URINAL AND (3) LAVATORIES
- (1) JANITOR SINK IN JANITOR'S CLOSET 110

SECTION 2902.3.1 - ACCESS TO PUBLIC TOILET FACILITIES:
ACCESS TO THE FACILITIES SHALL BE FROM WITHIN THE BUILDING OR FROM THE EXTERIOR OF THE BUILDING.
ALL ROUTES SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS.
THE PUBLIC SHALL HAVE ACCESS TO THE REQUIRED TOILET FACILITIES AT ALL TIMES THAT THE BUILDING IS OCCUPIED.
DIRECTIONAL SIGNAGE SHALL BE PROVIDED.

SECTION 2902.3.2 - PATH OF TRAVEL TO PUBLIC TOILET FACILITIES:
SHALL NOT EXCEED 500 FT > ACTUAL TRAVEL DISTANCE = ±354 FT
SHALL NOT BE MORE THAN ONE STORY ABOVE OR BELOW THE SPACES SERVED; ACTUAL LOCATION = 1 STORY BELOW

CHAPTER 31 SPECIAL CONSTRUCTION

SECTION 3104.1 - PEDESTRIAN WALKWAYS
THE PEDESTRIAN WALKWAY SHALL NOT CONTRIBUTE TO THE BUILDING AREA OF THE NUMBER OF STORIES OR HEIGHT OF CONNECTED BUILDINGS.

SECTION 3104.2 - SEPARATE STRUCTURES
CONNECTED BUILDINGS SHALL BE CONSIDERED TO BE SEPARATE STRUCTURES.
EXCEPTION: 1. BUILDINGS ON THE SAME LOT IN ACCORDANCE WITH SECTION 503.1.2.

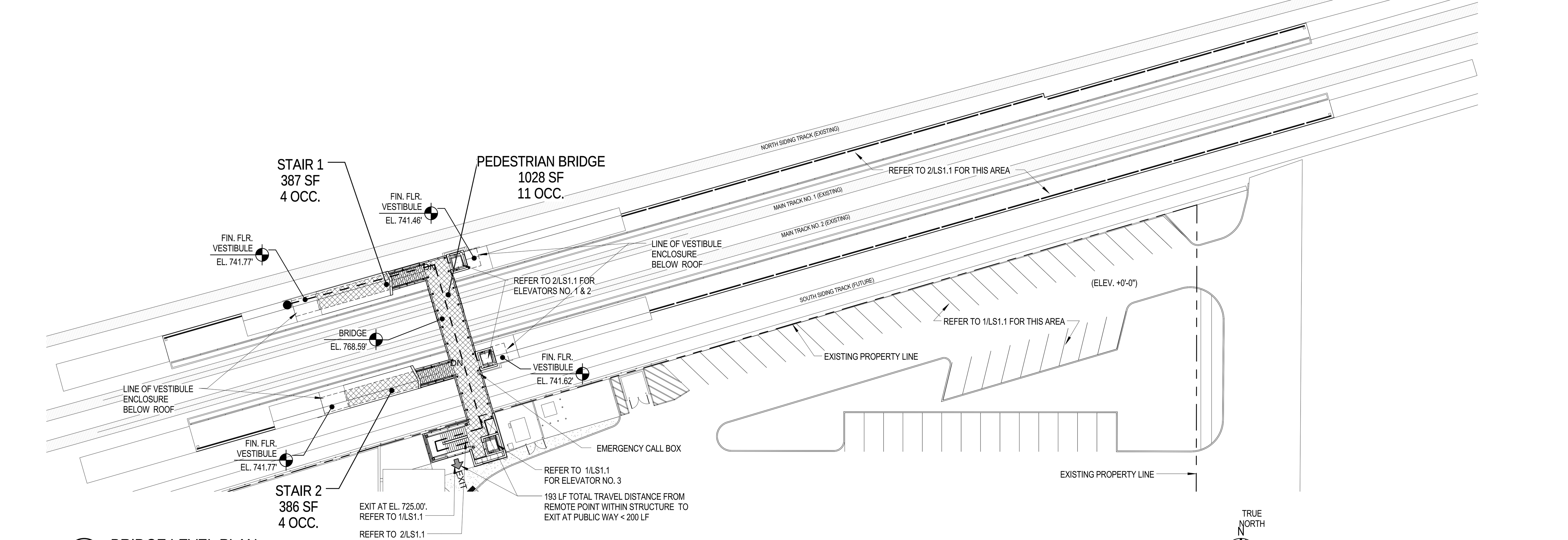
SECTION 3104.5 - FIRE BARRIERS BETWEEN PEDESTRIAN WALKWAYS AND BUILDINGS
WALKWAYS SHALL BE SEPARATED FROM THE INTERIOR OF THE BUILDING BY FIRE-BARRIER WALLS WITH A FIRE-RESISTIVE RATING OF NOT LESS THAN 2-HOURS.

VARIANCE REQUESTED DUE TO NON-OCCUPIED NATURE OF FACILITY.

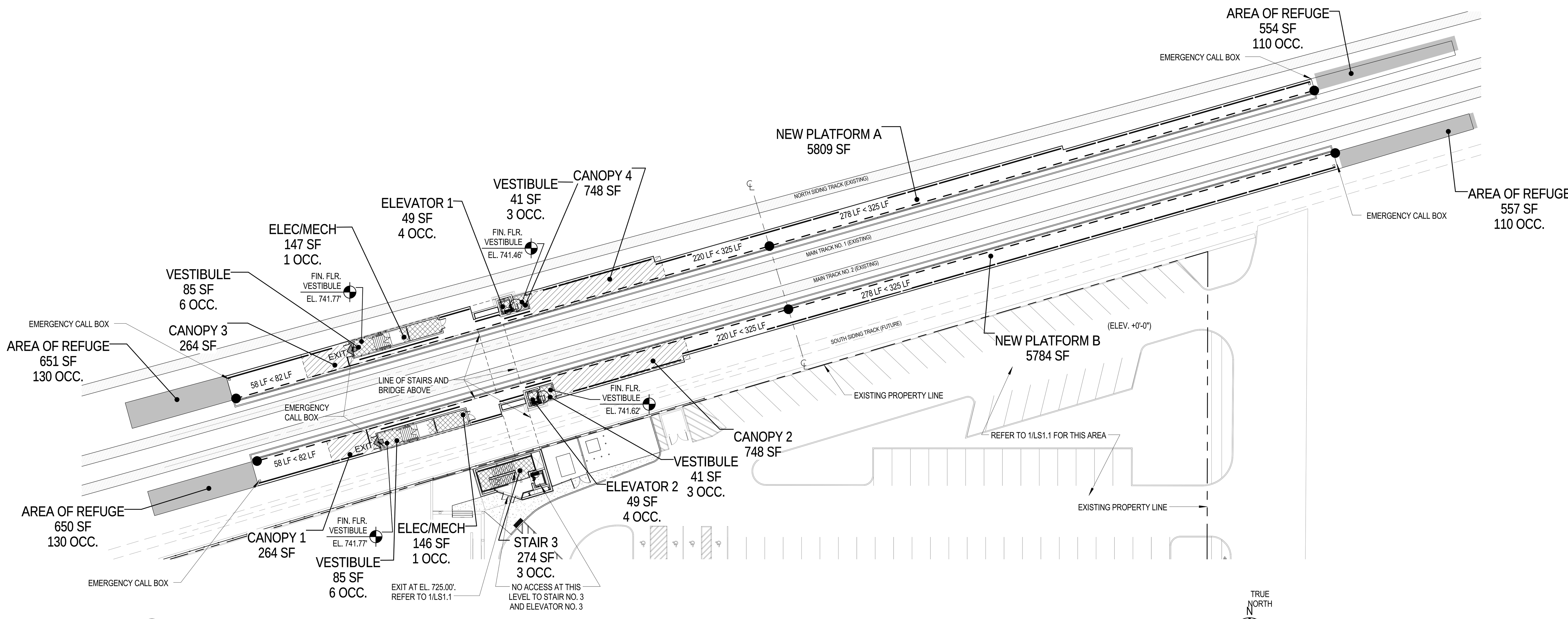
CHAPTER 32 ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY

SECTION 3202.3.3 - ENCROACHMENTS 15 FEET OR MORE ABOVE GRADE
ENCROACHMENTS 15 FEET OR MORE ABOVE GRADE SHALL NOT BE LIMITED.

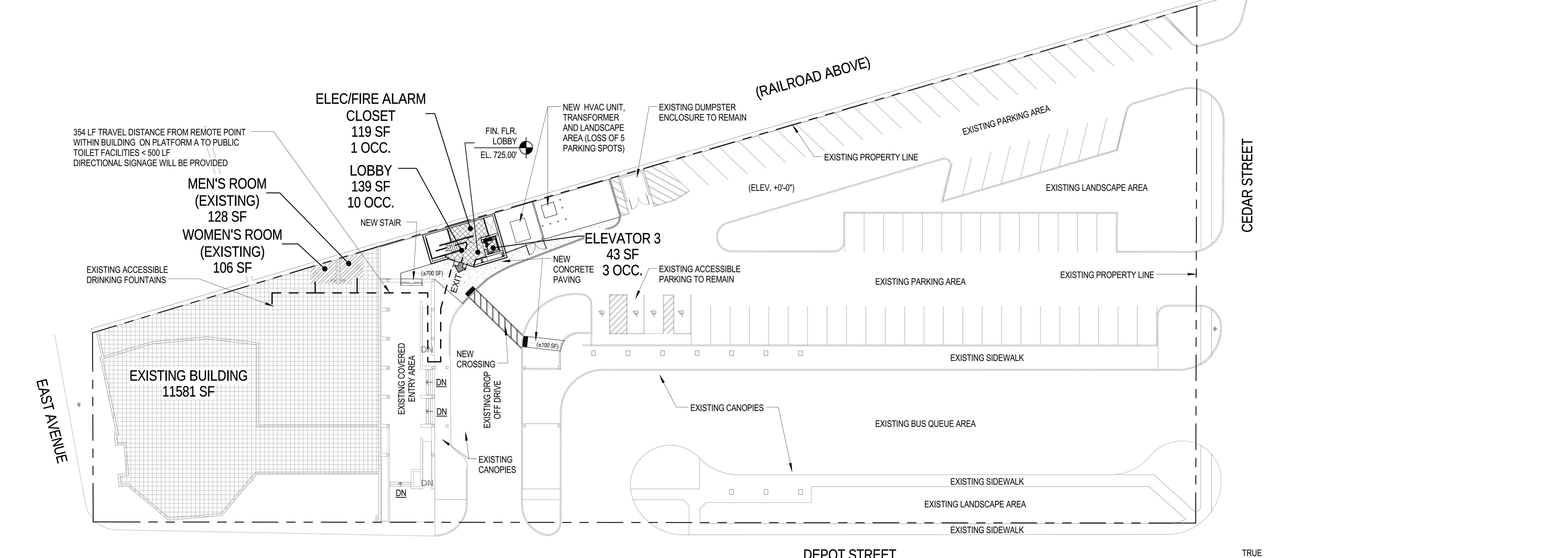
SECTION 3202.3.4 - PEDESTRIAN WALKWAYS
THE VERTICAL CLEARANCE TO THE LOWEST PART OF THE PEDESTRIAN WALKWAY SHALL BE 15 FEET < 23'-6" VERTICAL CLEARANCE REQ'D BY NORFOLK-SOUTHERN



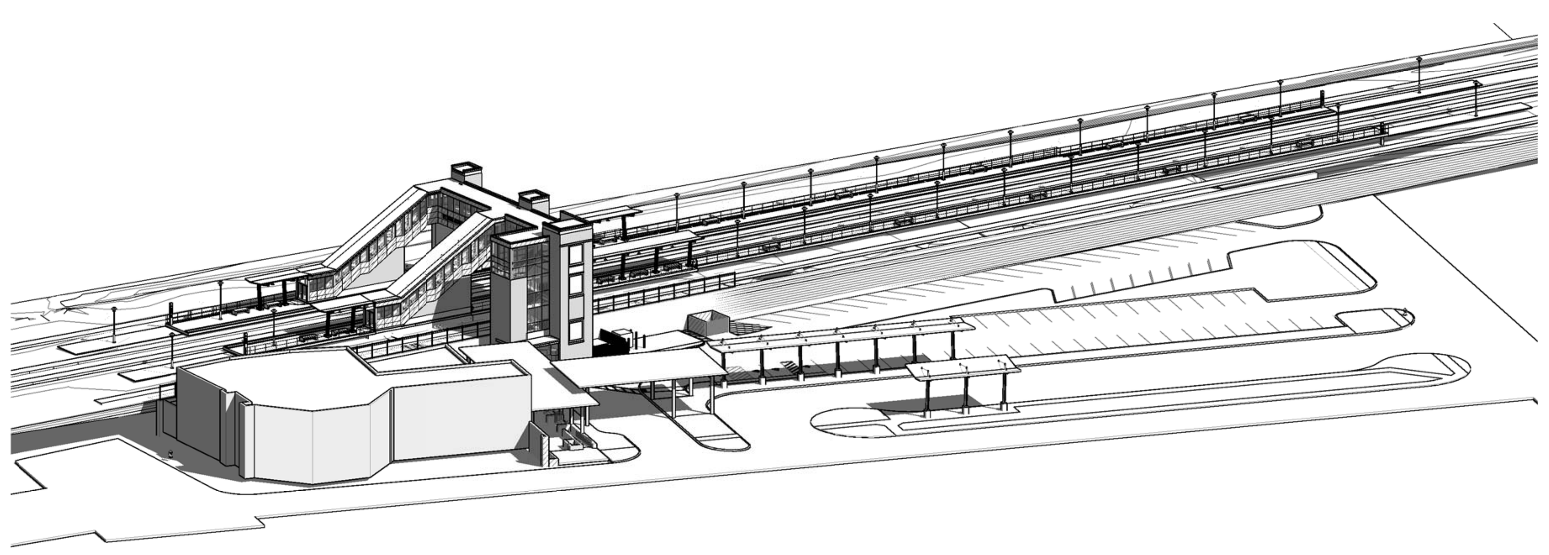
3 BRIDGE LEVEL PLAN
LS1.1 SCALE: 1/32" = 1'-0"



2 PLATFORM LEVEL PLAN
LS1.1 SCALE: 1/32" = 1'-0"



1 GROUND LEVEL PLAN
LS1.1 SCALE: 1/32" = 1'-0"



4 AXONOMETRIC VIEW
LS1.1 NOT TO SCALE

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LIFE SAFETY PLAN

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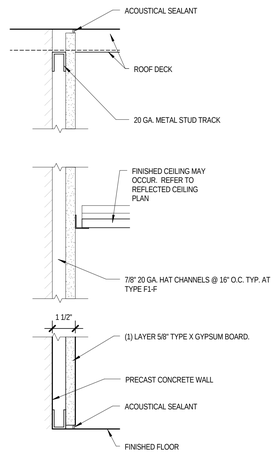
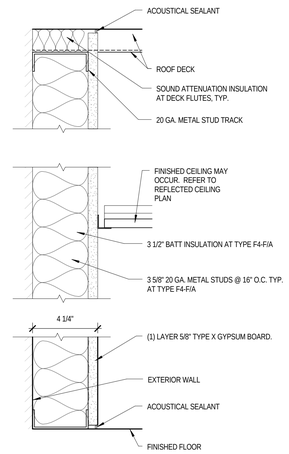
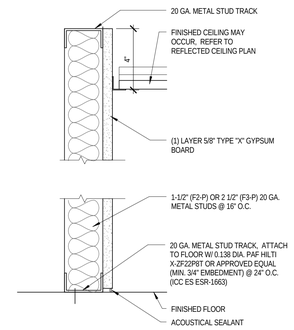


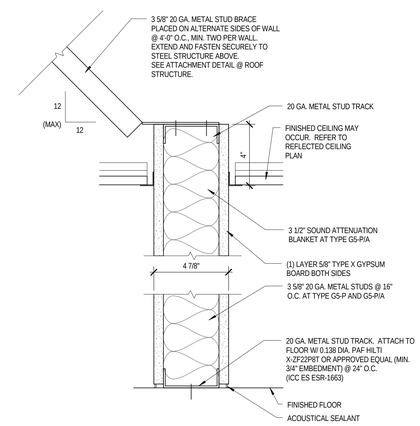
F1-F NON-RATED PARTITION WITHOUT SOUND ATTENUATION



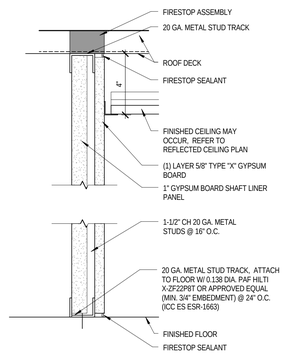
F4-F/A NON-RATED PARTITION WITH/WITHOUT SOUND ATTENUATION



F2-P
F3-P NON-RATED PARTITION WITHOUT SOUND ATTENUATION



G5-P
G5-P/A NON-RATED PARTITION WITH/WITHOUT SOUND ATTENUATION



S3-F/1 1 HR. RATED SHAFTWALL WITHOUT SOUND ATTENUATION

LEGEND

PART'N MATERIAL
- F-FURRING
- G-GYPSUM
- M-MASONRY

NOMINAL HEIGHT
- F-FULL HEIGHT TO STRUCTURE
- P-PARTIAL HEIGHT ABV/E CEILING
- K-KNEEWALL BELOW CEILING
- C-PARTIAL HEIGHT TO CEILING

A-SOUND ATTENUATION OR BATT INSULATION

PARTITION RATING
- 1-ONE HOUR FIRE RATED

PART'N MATERIAL
NOMINAL DEPTH
PART'N HEIGHT

G7-F/A-1

INDICATES RATED/NO. OF HOURS

PARTITION NOTES:

1. PROVIDE MOISTURE AND MOLD RESISTANT GYPSUM BOARD AT ALL TOILET ROOM WALLS WHERE CERAMIC TILE DOES NOT OCCUR.

2. PROVIDE MOISTURE AND MOLD RESISTANT GYPSUM BOARD UP TO 4'-0" A.F.F. ON ALL INSPECTION BAY WALLS.

3. PROVIDE MOISTURE AND MOLD RESISTANT GYPSUM BOARD BEHIND ALL FRP PANELS.

4. PROVIDE CEMENTITIOUS BACKER BOARD IN LIEU OF GYPSUM BOARD WHERE CERAMIC TILE OCCURS.

5. PROVIDE CONTROL JOINTS IN ALL GYPSUM BOARD WALLS THAT EXCEED 30 FEET IN LENGTH. CONTROL JOINTS SHALL BE SPACED NOT MORE THAN 30 FEET ON CENTER.

6. INTERIOR METAL STUD FRAMING EXTENDING TO ROOF DECK/STRUCTURE AND BRACING FROM ROOF STRUCTURE SHALL NOT BE INSTALLED UNTIL ROOF DEAD LOAD IS IN PLACE.

7. DIAGONAL WALL BRACING IS NOT REQUIRED AT INTERSECTION OF THE SAME HEIGHT WALLS.

8. ALLOW FOR REQUIRED DEFLECTION AT ALL FULL HEIGHT WALLS.

9. DO NOT ALIGN WALLBOARD JOINTS WITH PARTITION OPENINGS UNLESS NOTED OTHERWISE.

DATES AND REVISIONS

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PARTITION TYPES

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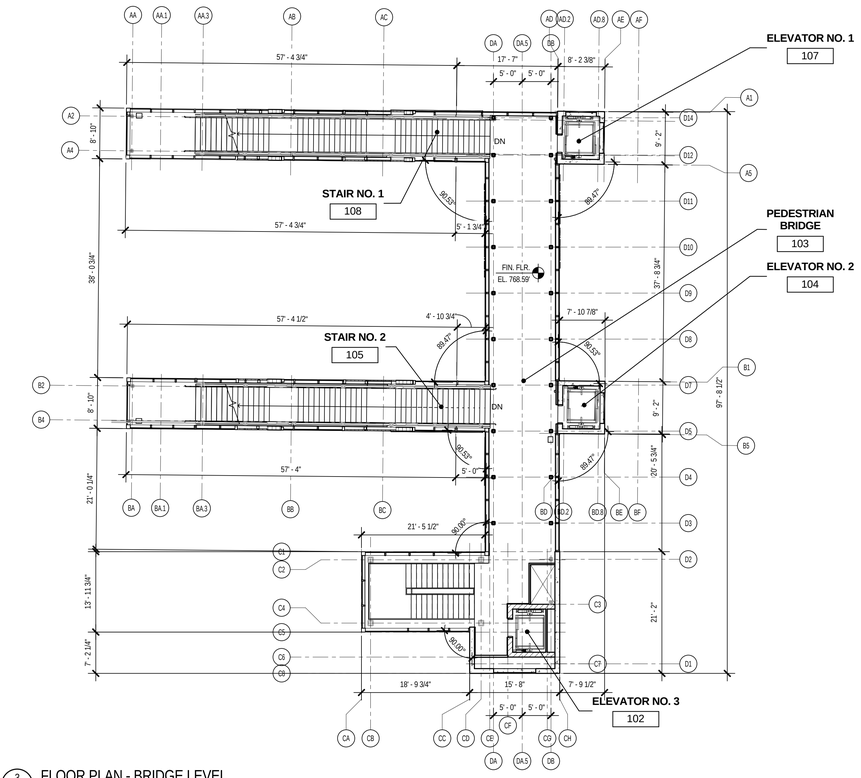
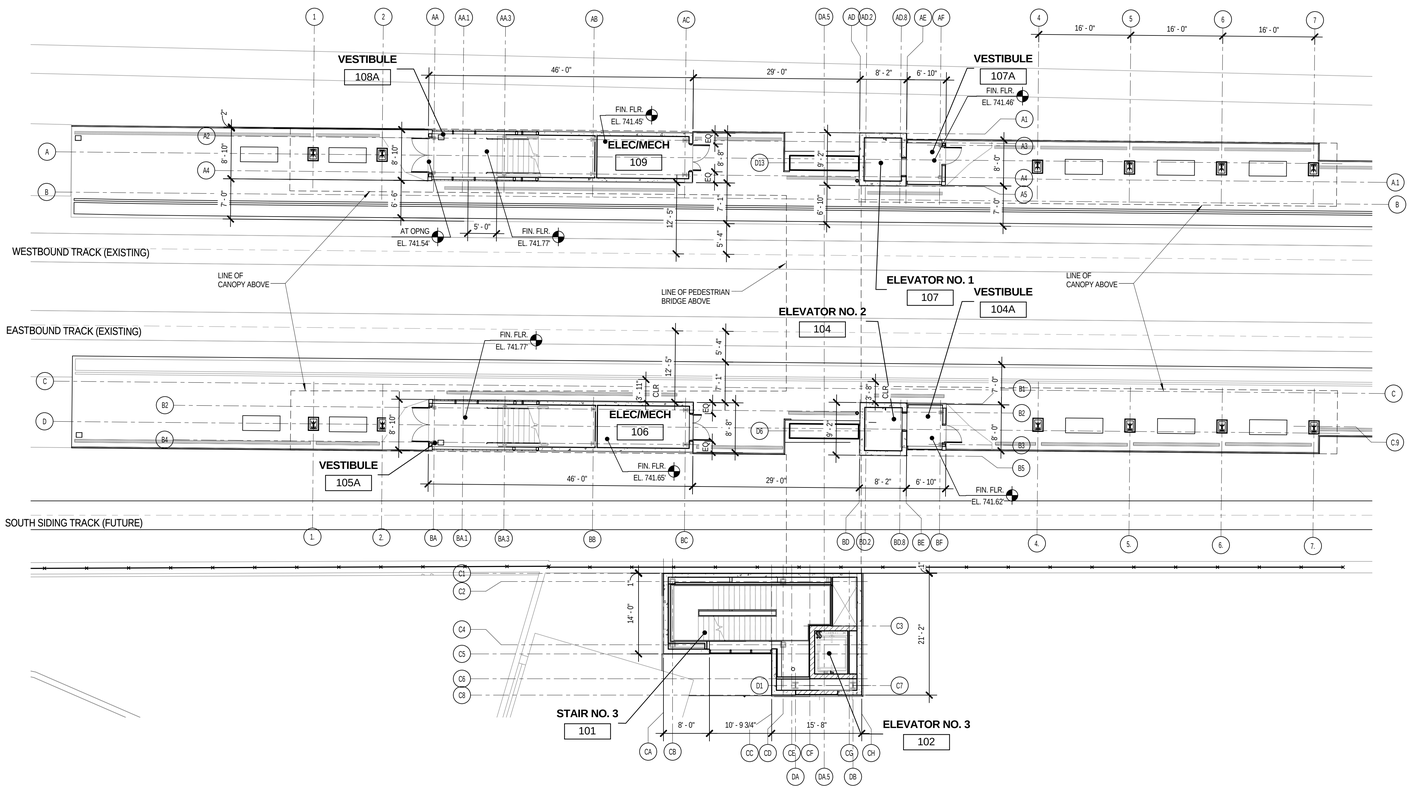


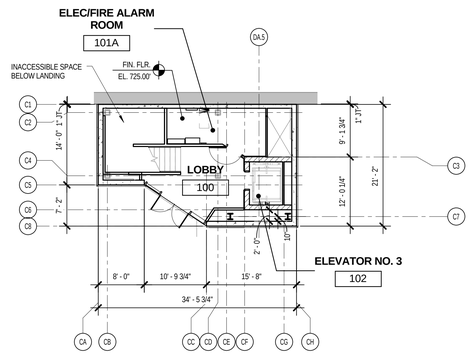
3 A1.1 FLOOR PLAN - BRIDGE LEVEL

SCALE: 3/32" = 1'-0"



2 A1.1 FLOOR PLAN - PLATFORM LEVEL

SCALE: 3/32" = 1'-0"



1 A1.1 FLOOR PLAN - GROUND LEVEL

SCALE: 3/32" = 1'-0"

GENERAL NOTES - ARCHITECTURAL PLANS

1. ALL EXISTING CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. IN THE EVENT OF ANY DISCREPANCIES, THE CONTRACTOR IS TO REPORT SAID ANOMALIES TO THE OWNER.
2. BASIS OF DESIGN IS GIVEN FOR PARTICULAR ITEMS WHICH ARE GOVERNED BY THE APPLICABLE LOCAL, STATE, AND/OR FEDERAL CODES AND/OR GUIDELINES. APPROVED EQUIVALENTS MUST BE SELECTED BY THE OWNER, AND MUST MEET ALL CRITERIA THAT THE BASIS OF DESIGN SATISFIES. THE ARCHITECT IS NOT RESPONSIBLE FOR CODE/GUIDELINE COMPLIANCE OF ANY ITEM WHICH WAS NOT IDENTIFIED AS THE BASIS OF DESIGN.
3. THE CONTRACTOR IS TO ADHERE TO ALL ACCEPTED INDUSTRY PRACTICES.
4. THE CONTRACTOR IS TO FOLLOW ALL INSTALLATION PROCEDURES PER MANUFACTURER'S INSTRUCTION.
5. THE CONTRACTOR IS TO PROVIDE ALL FURRING AND BLOCKING AS NEEDED.
6. THE CONTRACTOR IS TO PROVIDE ALL FLOOR LEVELING AS REQUIRED, PATCH AND REPAIR ALL SUBSTRATES AS REQUIRED PRIOR TO FINISHES.
7. ALL CONDITIONS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE.
8. REFERENCE FINISH FLOOR ELEVATION OF 0'-0". COORDINATE WITH CIVIL DRAWINGS FOR ACTUAL FINISHED FLOOR ELEVATION.
9. COORDINATE ALL METER LOCATIONS WITH CIVIL, PLUMB. AND ELEC. DWGS.
10. COORDINATE BUILDING TRANSFORMER LOCATION WITH CIVIL & ELEC. DWGS.
11. FEC-1 DESIGNATES A SURFACE MOUNTED FIRE EXTINGUISHER CABINET. FEC-2 DESIGNATES A SEMI-RECESSED FIRE EXTINGUISHER CABINET.
12. KNOX BOX, SHALL BE INSTALLED AT DESIGNATED EXTERIOR DOOR LOCATION PER DIRECTION OF FIRE DEPARTMENT.
13. REFER TO SHEET A0.1 FOR PARTITION TYPES.
14. ALL DIMENSIONS ARE SHOWN TO FACE OF PRECAST OR FACE OF METAL STUD, UNO.

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMT

RICHARD L. BOWEN + ASSOCIATES INC.
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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

DIMENSION FLOOR PLANS

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO. A1.1

12/18/2015 12:00:20 PM
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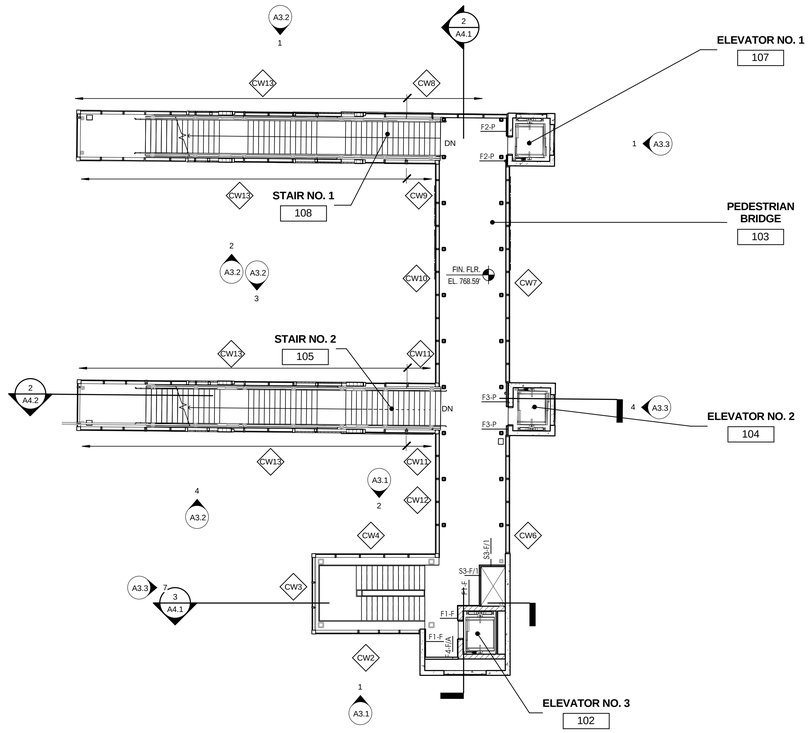
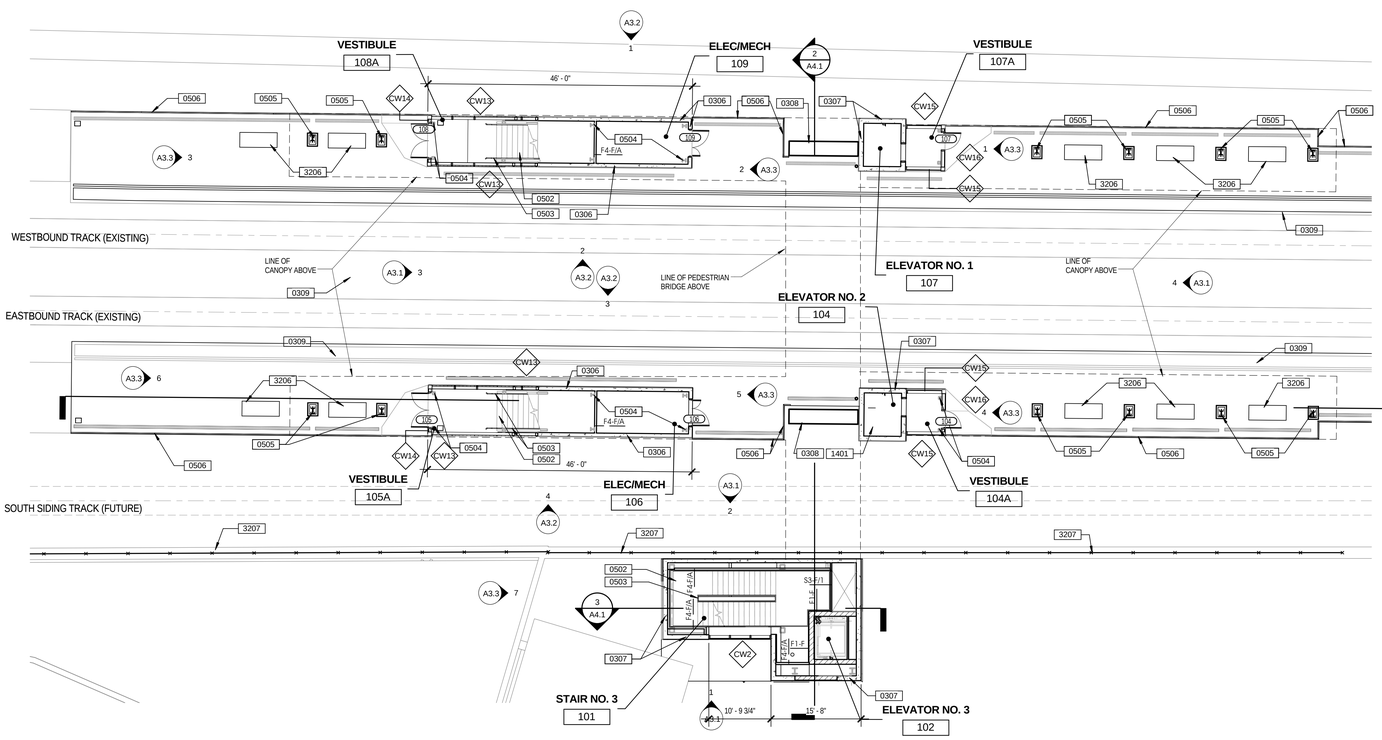


3 A1.2 FLOOR PLAN - BRIDGE LEVEL

SCALE: 3/32" = 1'-0"



2 A1.2 FLOOR PLAN - PLATFORM LEVEL

SCALE: 3/32" = 1'-0"

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0202	EXISTING CONCRETE COVERED PATIO AREA TO REMAIN.
0203	EXISTING BUILDING TO REMAIN.
0204	EXISTING CONCRETE SIDEWALK TO REMAIN.
0205	EXISTING DUMSTER ENCLOSURE TO REMAIN. PROTECT DURING CONSTRUCTION ACTIVITIES.
0206	EXISTING PAVEMENT MARKINGS TO REMAIN.
0304	NEW CONCRETE STAIR INTO EXISTING PATIO AREA.
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0308	CONCRETE BRIDGE PIER. REFER TO STRUCTURAL.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0501	6" DIA. GALVANIZED STEEL BOLLARDS, PAINTED BLACK. REFER TO CIVIL DRAWINGS.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0505	CANOPY FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
1401	MACHINE ROOM-LESS TRACTION ELEVATOR.
2301	NEW HVAC UNIT. REFER TO MECHANICAL DRAWINGS.
2601	NEW TRANSFORMER. REFER TO ELECTRICAL DRAWINGS
3201	CONCRETE SIDEWALK. REFER TO CIVIL DRAWINGS.
3202	CONCRETE CURB. REFER TO CIVIL DRAWINGS.
3204	TACTILE WARNING STRIP AND CURB RAMP.
3205	DECORATIVE METAL SECURITY FENCE AND GATE.
3206	CONCRETE BENCH.
3207	NEW 6'H CHAIN LINK FENCE ON TOP OF EXISTING RETAINING WALL.

GENERAL NOTES - ARCHITECTURAL PLANS

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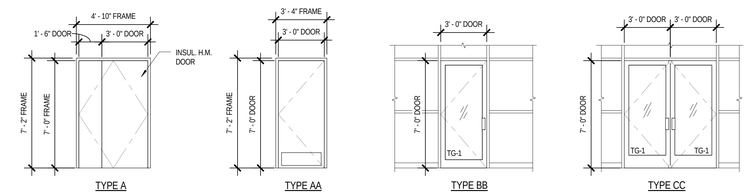
DOOR SCHEDULE

DOOR MARK	HEIGHT	WIDTH	THICKNESS	TYPE MARK	DOOR MATERIAL	FRAME MATERIAL	GLAZING DESIGNATION	FIRE RATING	MARK
100	7' - 0"	6' - 0"	0' - 1 3/4"	CC	ALUM.	ALUMINUM	IG-3	-	100
101	7' - 0"	3' - 0"	0' - 1 3/4"	B	HOLLOW METAL	HOLLOW METAL	-	-	101
104	7' - 0"	3' - 0"	0' - 1 3/4"	BB	ALUMINUM	ALUMINUM	IG-3	-	104
105	7' - 0"	6' - 0"	0' - 1 3/4"	CC	ALUM.	ALUMINUM	IG-3	-	105
106	7' - 0"	4' - 6"	0' - 1 3/4"	AA		HOLLOW METAL		-	106
107	7' - 0"	3' - 0"	0' - 1 3/4"	BB	ALUMINUM	ALUMINUM	IG-3	-	107
108	7' - 0"	6' - 0"	0' - 1 3/4"	CC	ALUM.	ALUMINUM	IG-3	-	108
109	7' - 0"	4' - 6"	0' - 1 3/4"	AA		HOLLOW METAL		-	109

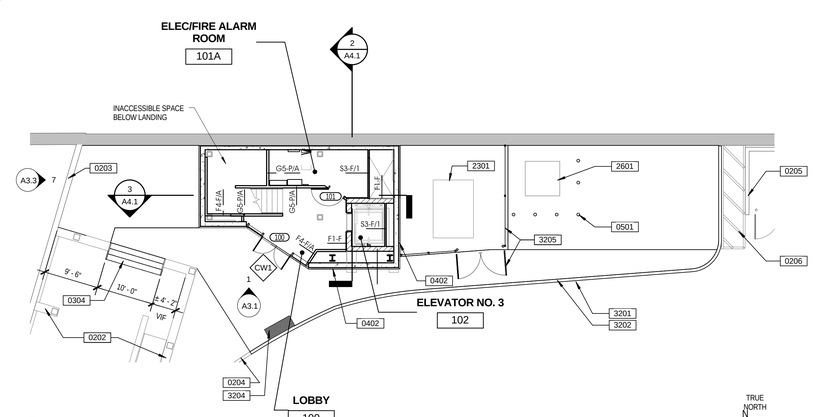


DOOR ELEVATIONS

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

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALL NORTH	WALL EAST	WALL SOUTH	WALL WEST	CEILING MATERIAL	CEILING HEIGHT	REMARKS
100	LOBBY	POLISHED CONCRETE	RUBBER	PT	PT	PT	PT	OPEN/PT		
101	STAIR NO. 3	POLISHED CONCRETE	RUBBER	PT	PT	PT	PT	OPEN/PT		
101A	ELEC/FIRE ALARM ROOM	CONCRETE	NONE	PT	PT	PT	PT	GYP. BD.		
102	ELEVATOR NO. 3	-	-	-	-	-	-	-		
103	PEDESTRIAN BRIDGE	POLISHED CONCRETE	RUBBER	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	OPEN/PT		
104	ELEVATOR NO. 2	-	-	-	-	-	-	-		
104A	VESTIBULE	POLISHED CONCRETE	NONE	STOREFRNT	STOREFRNT	STOREFRNT	STOREFRNT	OPEN/PT		
105	STAIR NO. 2	POLISHED CONCRETE	RUBBER	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	OPEN/PT		
105A	VESTIBULE	POLISHED CONCRETE	NONE	STOREFRNT	STOREFRNT	STOREFRNT	STOREFRNT	OPEN/PT		
106	ELEC/MECH	CONCRETE	NONE	PT	PT	PT	PT	GYP. BD.		
107	ELEVATOR NO. 1	-	-	-	-	-	-	-		
107A	VESTIBULE	POLISHED CONCRETE	NONE	STOREFRNT	STOREFRNT	STOREFRNT	STOREFRNT	OPEN/PT		
108	STAIR NO. 1	POLISHED CONCRETE	RUBBER	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	MTL PNL/PT	OPEN/PT		
108A	VESTIBULE	POLISHED CONCRETE	NONE	STOREFRNT	STOREFRNT	STOREFRNT	STOREFRNT	OPEN/PT		
109	ELEC/MECH	CONCRETE	NONE	PT	PT	PT	PT	GYP. BD.		



1 A1.2 FLOOR PLAN - GROUND LEVEL

SCALE: 3/32" = 1'-0"

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC
	12/18/15 DESIGN DEVLPMT

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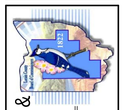

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

CONTROL FLOOR PLANS & SCHEDULES

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO.
A1.2

12/18/2015 12:00:24 PM
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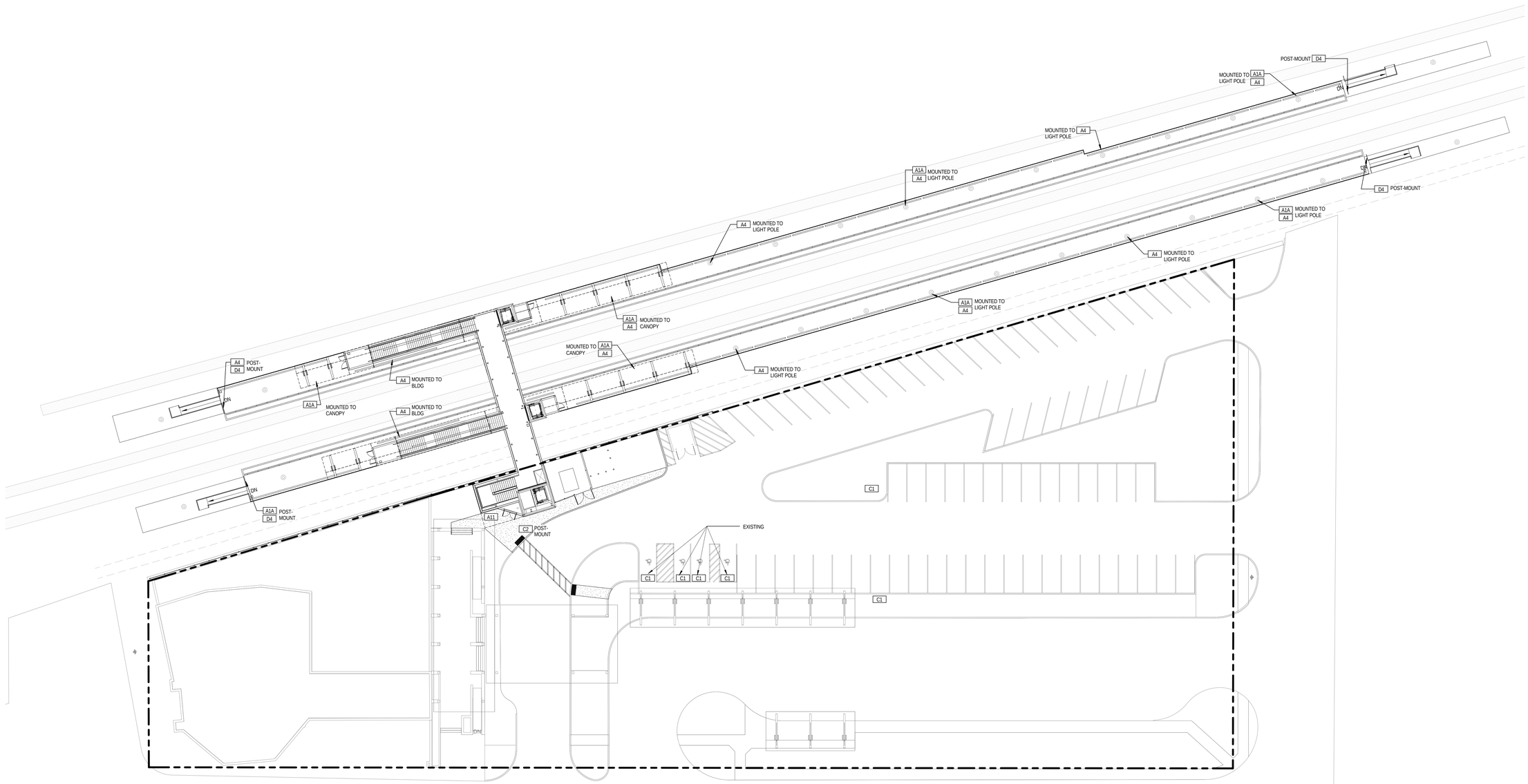
SIGNAGE TYPE SCHEDULE

NOTE:
SIGN TYPE (LII) LABEL CORRESPONDS TO SIGN TYPES IN THE AMTRAK 'GRAPHIC SIGNAGE STANDARDS MANUAL'

SIGN TYPE	DESCRIPTION	DIMENSIONS & COPY	MATERIAL AND FINISH	LOCATION	MOUNTING	REMARKS
A1A	BRANDED CITY IDENTIFIER	"Elyria, OH" WITH AMTRAK LOGO CURVE; 8'-0"L X 1'-0"H	DOUBLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	CANOPY OR LIGHT-POLE MOUNTED	TBD
A4	BOARDING LOCATION MARKER	COPY TBD; 12"W X 16"H	DOUBLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	CANOPY OR LIGHT-POLE MOUNTED	TBD
A11	STATION INFORMATION DISPLAY CASE	SIDE A: DISPLAY CASE, AMTRAK LOGO CURVE, STATION NAME, TWO LETTER STATE DESIGNATION & AMTRAK CONTACT INFO; SIDE B: AMTRAK LOGO CURVE, STATION NAME, TWO LETTER STATE DESIGNATION, AMTRAK CONTACT INFO & THANK YOU MESSAGE	DOUBLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	FREE-STANDING ON CUSTOM POSTS	TBD
A12	ADA CITY IDENTIFIER	"Elyria, OH" WITH BRAILLE; 13-1/2"W X 9"H	SINGLE-FACE	TBD	WALL-MOUNTED	TBD
B#	OVERHEAD DIRECTIONAL SIGNAGE	TBD	DOUBLE-FACE	TBD BASED ON CONTENT REQUIRED. REFER TO SIGN LOCATION PLANS	CEILING OR WALL-MOUNTED	TBD
C1	CURB IDENTIFIER - VISITOR PARKING	"Visitor Parking" WITH PARKING SYMBOL 12"W X 19"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	POST-MOUNTED	TBD
C2	CURBSIDE IDENTIFIER - DROP-OFF	"Passenger Drop-Off and Pick-Up; Driver must remain in Car" 12"W X 25"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	POST-MOUNTED	TBD
C20	ADA STATION ENTRANCE IDENTIFIER	"Elyria Station" WITH BRAILLE; 13-1/2"W X 9"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	WALL-MOUNTED	TBD
D1	REGULATORY SIGN - NO SMOKING	NO SMOKING SYMBOL; 9"W X 9"H	SINGLE-FACE	TBD	WALL-MOUNTED	TBD
D2	REGULATORY SIGN - USE STAIRS	"In the Event of Fire Use Stairs" WITH FIRE STAIR SYMBOL; 9"W X 13-1/2"H	DOUBLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	WALL-MOUNTED	TBD
D4	REGULATORY SIGN - AUTHORIZED PERSONNEL	"Authorized Personnel" WITH BRAILLE AND WARNING SYMBOL; 12"W X 19"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	POST-MOUNTED	TBD



1 A1.7 SIGNAGE SITE PLAN
SCALE: 1" = 20'-0"

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DATES AND REVISIONS	
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RICHARD L. BOWEN + ASSOCIATES INC.
13000 Shaker Boulevard / Cleveland, Ohio 44120
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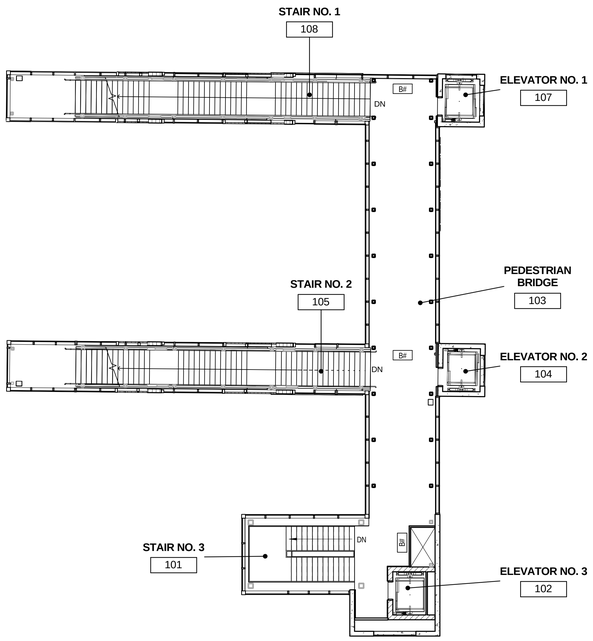
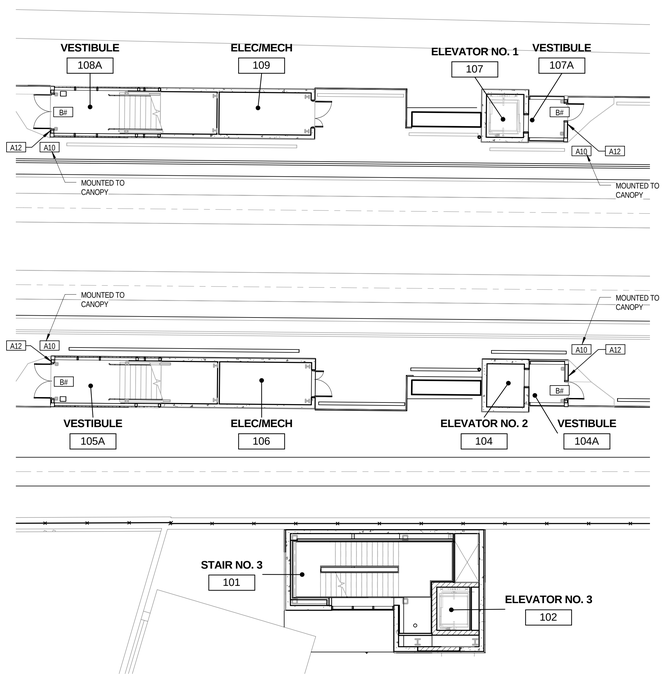
LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035
SITE SIGNAGE LOCATION PLAN

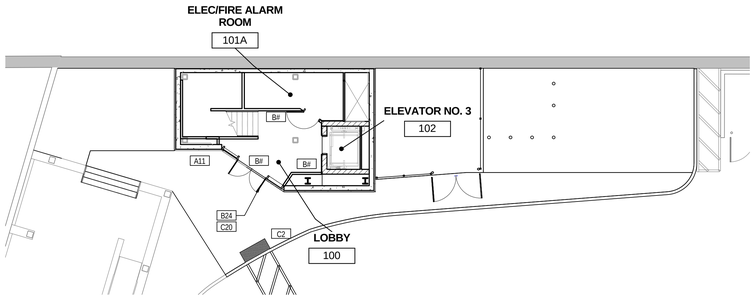
DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01
DRAWING NO. A1.7



3 A1.8 SIGANGE PLAN - BRIDGE LEVEL
SCALE: 3/32" = 1'-0"



2 A1.8 SIGNAGE PLAN - PLATFORM LEVEL
SCALE: 3/32" = 1'-0"



1 A1.8 SIGNAGE PLAN - GROUND LEVEL
SCALE: 3/32" = 1'-0"

SIGNAGE TYPE SCHEDULE

NOTE:
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A12	ADA CITY IDENTIFIER	"Elyria, OH" WITH BRAILLE; 13-1/2"W X 9"H	SINGLE-FACE	TBD	WALL-MOUNTED	TBD
B#	OVERHEAD DIRECTIONAL SIGNAGE	TBD	DOUBLE-FACE	TBD BASED ON CONTENT REQUIRED. REFER TO SIGN LOCATION PLANS	CEILING OR WALL-MOUNTED	TBD
C1	CURB IDENTIFIER - VISITOR PARKING	"Visitor Parking" WITH PARKING SYMBOL 12"W X 19"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	POST-MOUNTED	TBD
C2	CURBSIDE IDENTIFIER - DROP-OFF	"Passenger Drop-Off and Pick-Up; Driver must remain in Car" 12"W X 25"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	POST-MOUNTED	TBD
C20	ADA STATION ENTRANCE IDENTIFIER	"Elyria Station" WITH BRAILLE; 13-1/2"W X 9"H	SINGLE-FACE	LOCATE SIGN WHERE INDICATED. REFER TO SIGNAGE LOCATION PLANS.	WALL-MOUNTED	TBD
D1	REGULATORY SIGN - NO SMOKING	NO SMOKING SYMBOL; 9"W X 9"H	SINGLE-FACE	TBD	WALL-MOUNTED	TBD
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DATES AND REVISIONS

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035
SIGNAGE LOCATION PLANS

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO.
A1.8

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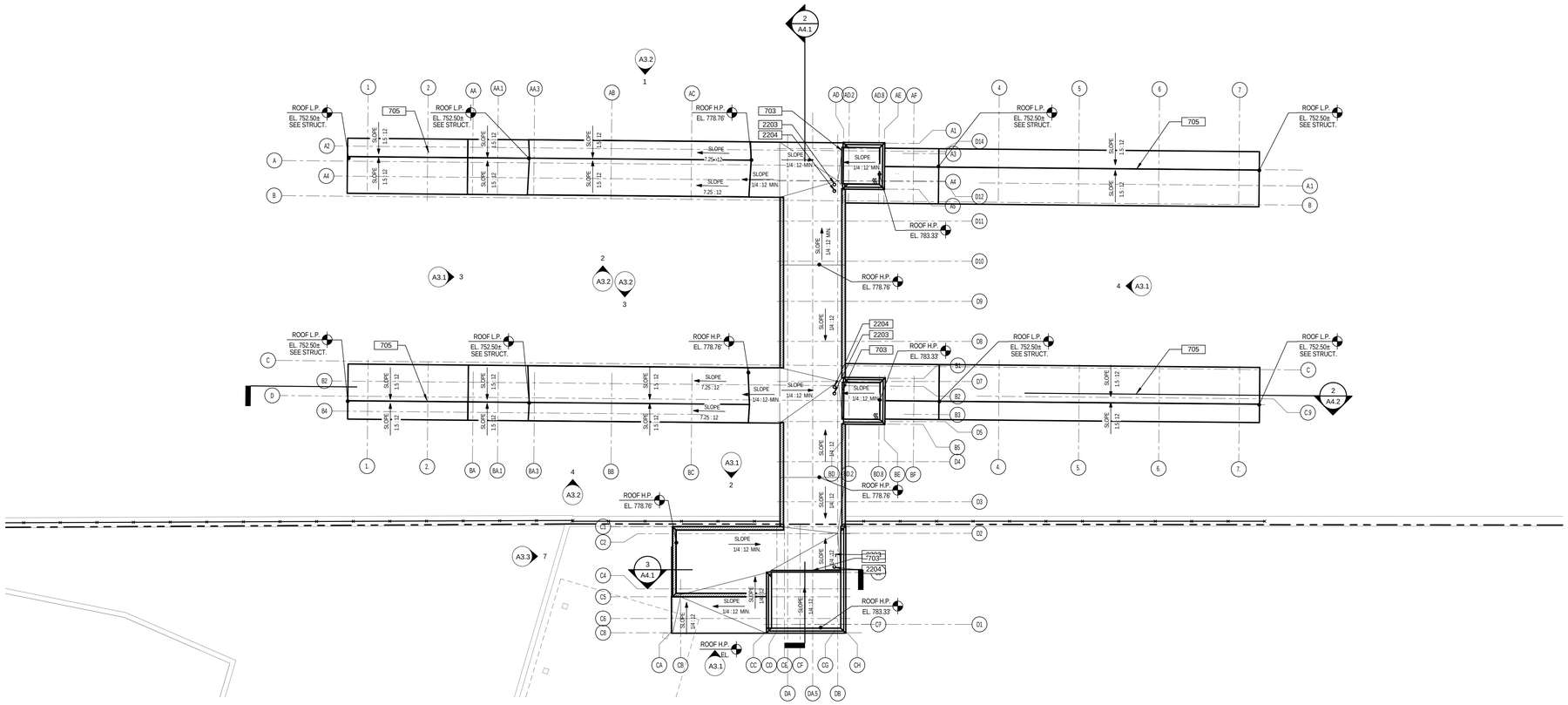

1 / A2.1 ROOF PLAN

SCALE: 3/32" = 1'-0"

TRUE NORTH

GENERAL NOTES - ARCHITECTURAL ROOF PLAN

1. PROVIDE STRUCTURAL FRAMES FOR ROOF OPENINGS.
2. PROVIDE PIPE FLASHING, CONDUIT FLASHINGS AND MANUFACTURED GAS PIPING SUPPORTS.
3. ALL CONCEALED WOOD NAILERS, WOOD BLOCKING AND WOOD FRAMING SHALL BE PRESERVATIVE TREATED MATERIALS.
4. PROVIDE CONCRETE SPLASH BLOCK ON WEARING MEMBRANE PADS AT CONDENSATE DRAINS FOR HVAC AND ACCU UNITS TYPICAL OR PIPE CONDENSATE DRAIN TO ROOF SCUPPERS WERE REQUIRED BY CODE UNLESS NOTED OTHERWISE.
5. DIMENSIONS FOR THE LOCATION OF THE ROOF TOP UNITS ARE TO THE CENTER OF THE CURB OPENING. EXACT LOCATION CURB SIZES ARE TO BE COORDINATED WITH FINAL ROOF TOP UNIT SELECTION. REFER TO MECHANICAL DRAWINGS.
6. REFER TO PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENTRATIONS REQUIRING ROOF FLASHING WORK. ALL ROOF PENETRATIONS FOR MINOR ROOF VENTS AND SIMILAR MAY NOT BE INDICATED ON THIS ROOF PLAN. ALL FLASHING WORK SHALL BE PROVIDED BY THE ROOFING CONTRACTOR PER ROOFING MFG RECOMMENDATIONS TO OBTAIN OR MAINTAIN ROOFING WARRANTIES.
7. REFER TO PLUMBING DRAWINGS FOR ROOF DRAINS AND VENTS.
8. CONTRACTOR SHALL KEEP ROOF CLEAN OF ALL DEBRIS DURING ALL CONSTRUCTION WORK.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
703	PREFINISHED METAL GUTTER W/ DOWNSPOUT TO ROOF BELOW.
705	INTEGRAL GUTTER AT CANOPY ROOF. REFER TO STRUCTURAL.
2203	ROOF DRAIN. REFER TO PLUMBING.
2204	OVERFLOW DRAIN. REFER TO PLUMBING.

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC
	12/18/15 DESIGN DEVLPMT

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

ROOF PLAN & DETAILS

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO. A2.1

12/18/2015 12:00:44 PM
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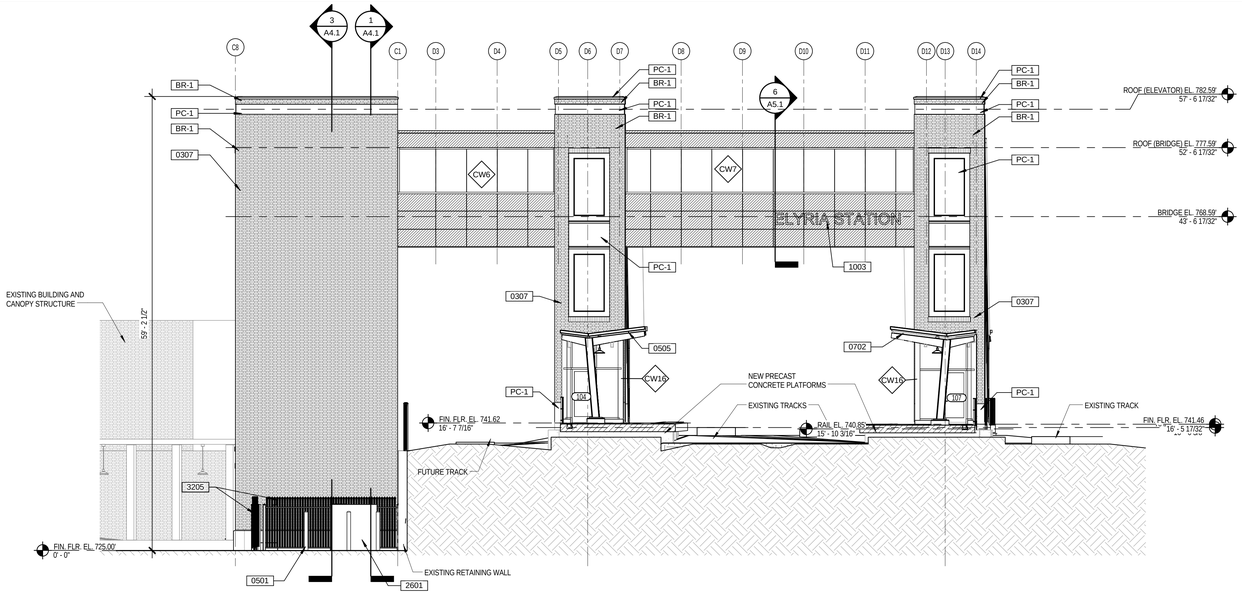
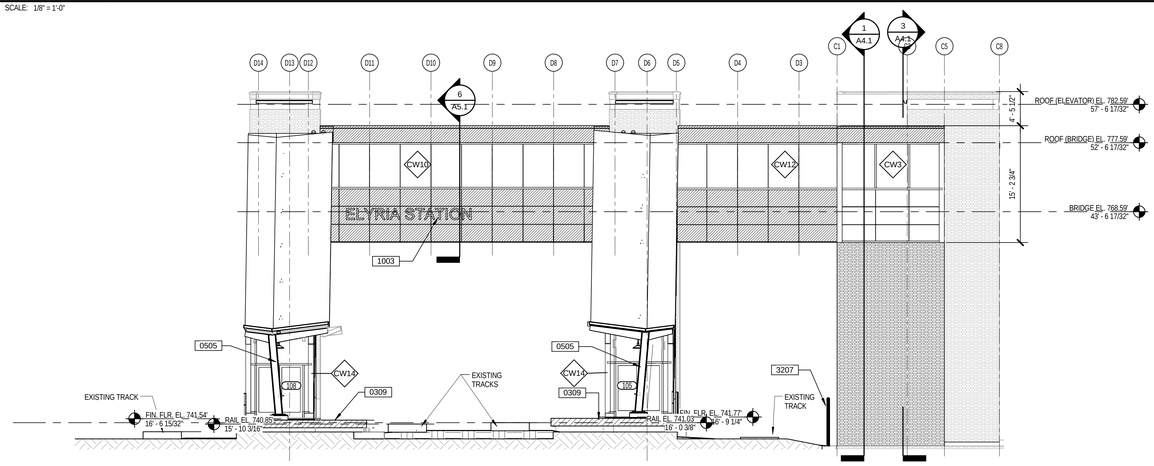


4 A3.1 ELEVATION - EAST
SCALE: 1/8" = 1'-0"



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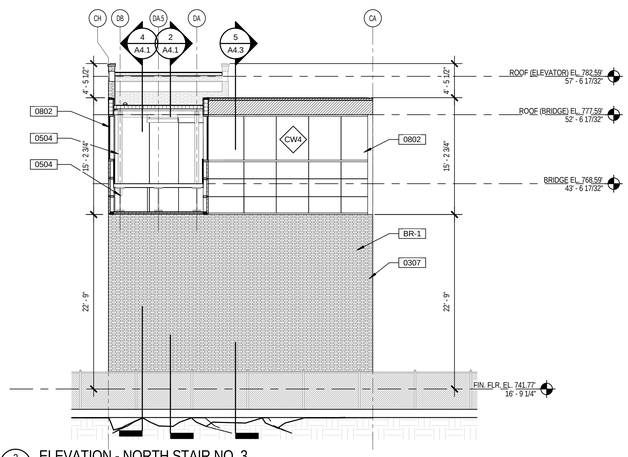
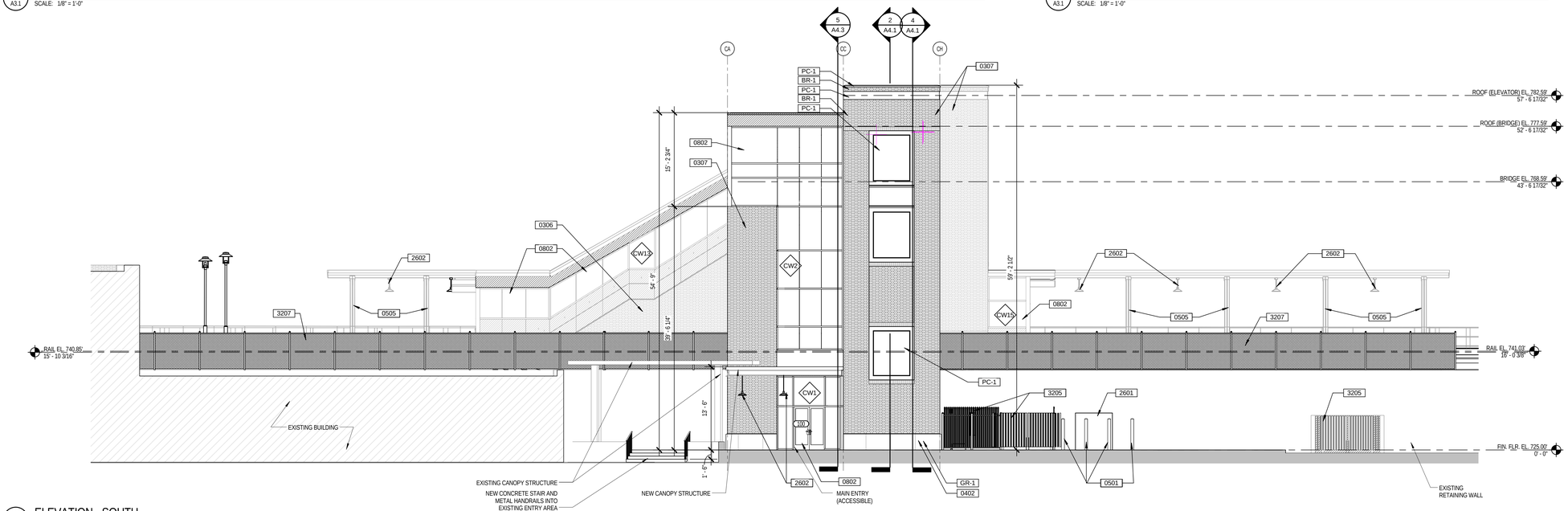


2 A3.1 ELEVATION - NORTH STAIR NO. 3
SCALE: 1/8" = 1'-0"



1 A3.1 ELEVATION - SOUTH
SCALE: 1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS

1. SEE DWG G001 FOR GENERAL NOTES AND EXTERIOR FINISH MATERIAL TYPES.
2. SEE DWGS Axxx FOR EXTERIOR WALL DETAILS.
3. PROVIDE CONCEALED STEEL REINFORCEMENT AS REQUIRED AT EXTERIOR CURTAIN WALL.
4. SEE DWG Axxx FOR SCHEDULE OF WALL PANELS AND PANEL LAYOUT.
5. PROVIDE CONCEALED STEEL REINFORCEMENT OF EXTERIOR MASONRY AS REQUIRED.
6. ALL VISIBLE EXTERIOR CONCRETE TO BE ARCHITECTURAL GRADE.
7. ALL ELEVATIONS INDICATED ARE TOP OF FINISHED FLOOR UNLESS NOTED OTHERWISE.
8. PROVIDE CONTINUOUS FULLY CONCEALED WATERPROOFING SYSTEM WITH INSULATION AND DRAINAGE COMPOSITE AT ALL ROOF AREAS.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0501	6" DIA. GALVANIZED STEEL BOLLARDS, PAINTED BLACK. REFER TO CIVIL DRAWINGS.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0505	CANOPY FRAMING. REFER TO STRUCTURAL.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
1003	BUILDING SIGNAGE ATTACHED TO STRUCTURE.
2301	NEW HVAC UNIT. REFER TO MECHANICAL DRAWINGS.
2601	NEW TRANSFORMER. REFER TO ELECTRICAL DRAWINGS
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS
3205	DECORATIVE METAL SECURITY FENCE AND GATE.
3207	NEW 6'H CHAIN LINK FENCE ON TOP OF EXISTING RETAINING WALL.
BR-1	THIN BRICK ON STRUCTURAL PRECAST WALL PANEL,BRICK COLOR BLEND AND FACE SCRATCH TO MATCH EXISTING STATION.
GR-1	3" THICK GRANITE BASE, COLOR AND FINISH TO MATCH EXISTING STATION
PC-1	PRECAST CONCRETE BAND, COLOR TO MATCH SANDSTONE ON EXISTING BUILDING

DATES AND REVISIONS

No.	Date / Description
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	12/18/15 DESIGN DEVLPMT

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13000 Shaker Boulevard / Cleveland, Ohio 44120
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40 EAST AVENUE, ELYRIA, OHIO 44035

EXTERIOR ELEVATIONS

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DRAWING NO.
A3.1

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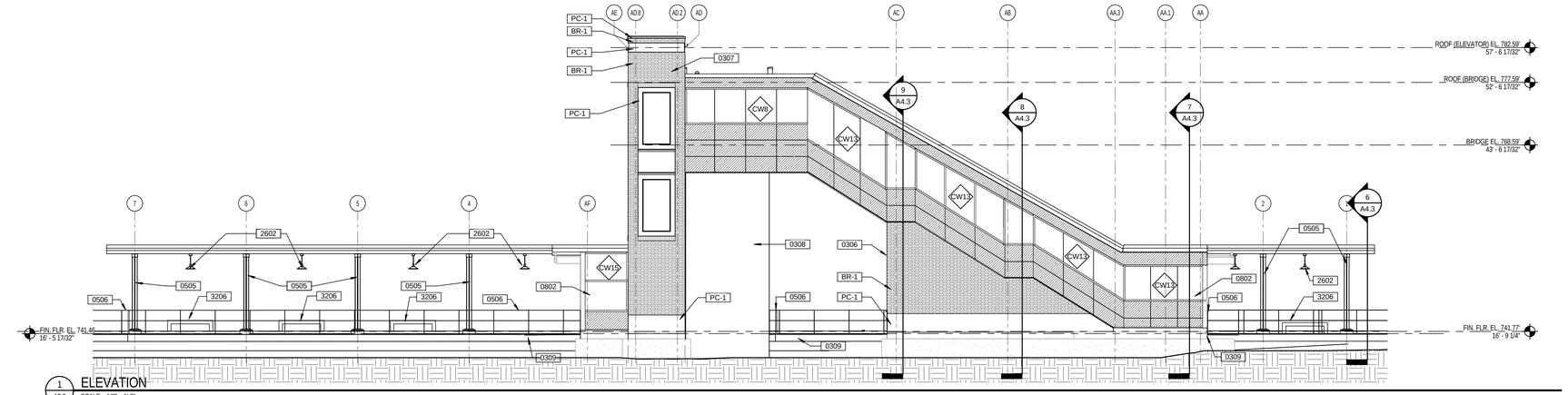
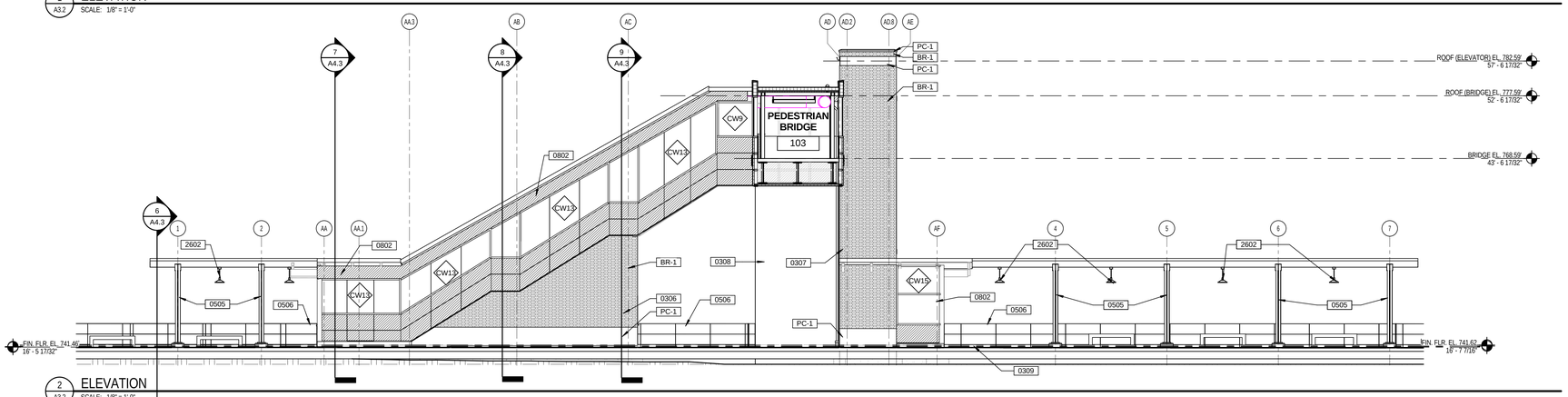


1 ELEVATION
A3.2 SCALE: 1/8" = 1'-0"



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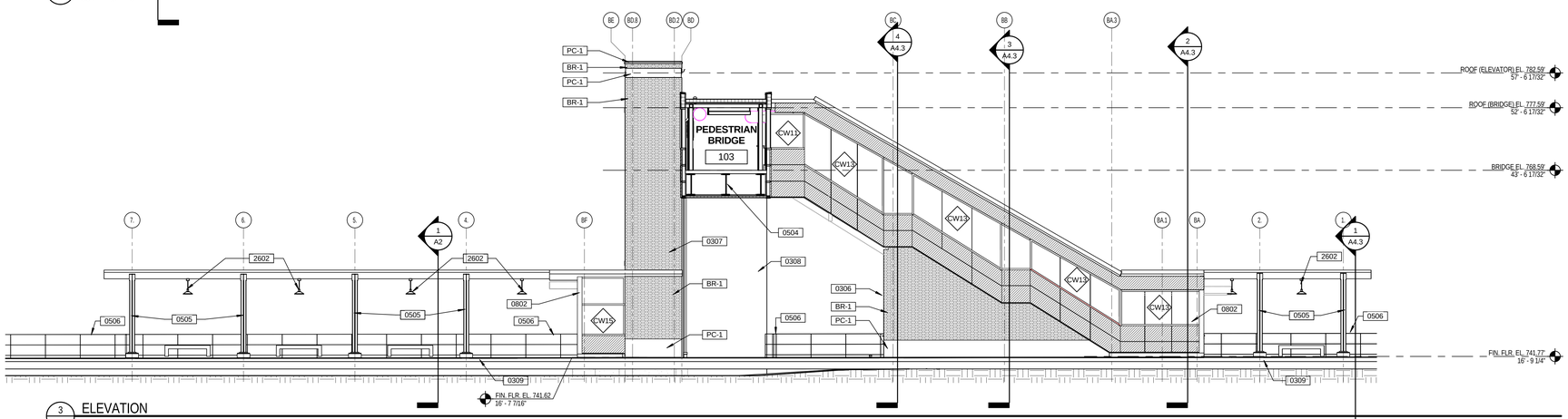
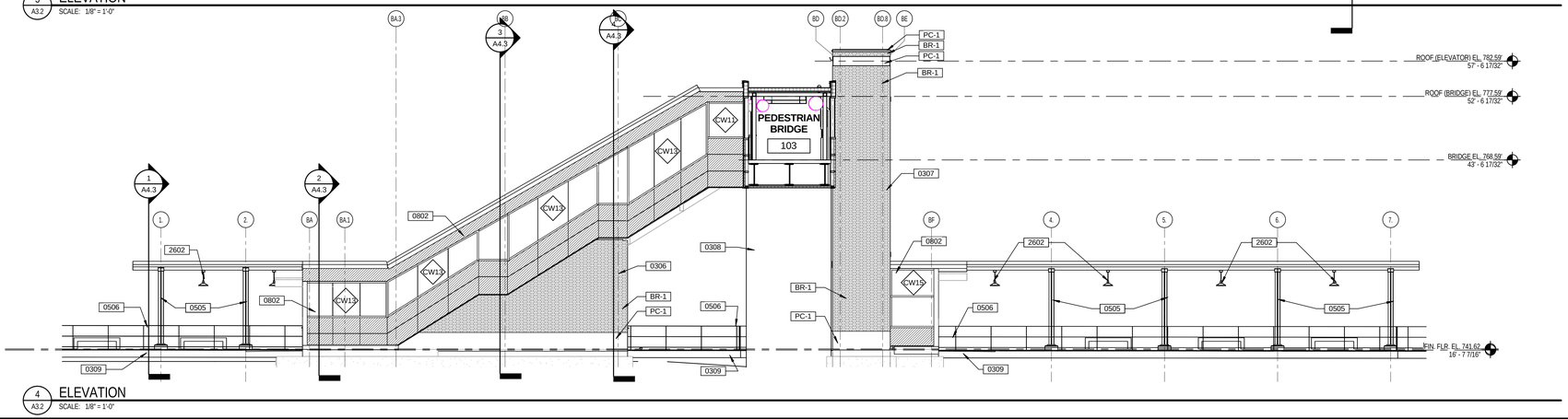


3 ELEVATION
A3.2 SCALE: 1/8" = 1'-0"



4 ELEVATION
A3.2 SCALE: 1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS

1. SEE DWG G001 FOR GENERAL NOTES AND EXTERIOR FINISH MATERIAL TYPES.
2. SEE DWGS Axxx FOR EXTERIOR WALL DETAILS.
3. PROVIDE CONCEALED STEEL REINFORCEMENT AS REQUIRED AT EXTERIOR CURTAIN WALL.
4. SEE DWG Axxx FOR SCHEDULE OF WALL PANELS AND PANEL LAYOUT.
5. PROVIDE CONCEALED STEEL REINFORCEMENT OF EXTERIOR MASONRY AS REQUIRED.
6. ALL VISIBLE EXTERIOR CONCRETE TO BE ARCHITECTURAL GRADE.
7. ALL ELEVATIONS INDICATED ARE TOP OF FINISHED FLOOR UNLESS NOTED OTHERWISE.
8. PROVIDE CONTINUOUS FULLY CONCEALED WATERPROOFING SYSTEM WITH INSULATION AND DRAINAGE COMPOSITE AT ALL ROOF AREAS.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0308	CONCRETE BRIDGE PIER. REFER TO STRUCTURAL.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0505	CANOPY FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS
3206	CONCRETE BENCH.
BR-1	THIN BRICK ON STRUCTURAL PRECAST WALL PANEL;BRICK COLOR BLEND AND FACE SCRATCH TO MATCH EXISTING STATION.
PC-1	PRECAST CONCRETE BAND, COLOR TO MATCH SANDSTONE ON EXISTING BUILDING

DATES AND REVISIONS

No.	Date / Description
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	12/18/15 DESIGN DEVLPMT

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40 EAST AVENUE, ELYRIA, OHIO 44035

EXTERIOR ELEVATIONS

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CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO.
A3.2

12/18/2015 12:01:43 PM
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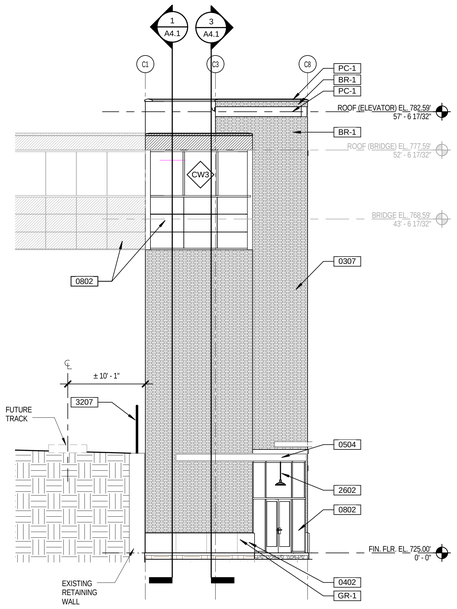
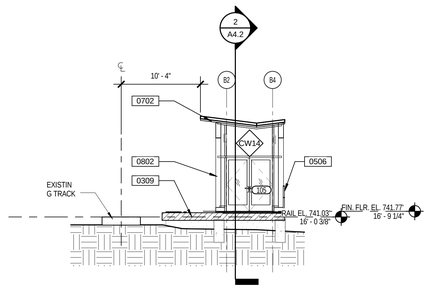


7 A3.3 BUILDING ELEVATION
SCALE: 1/8" = 1'-0"



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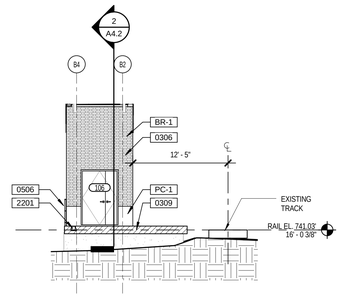

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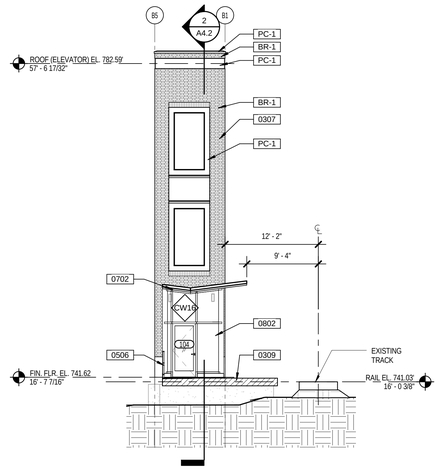

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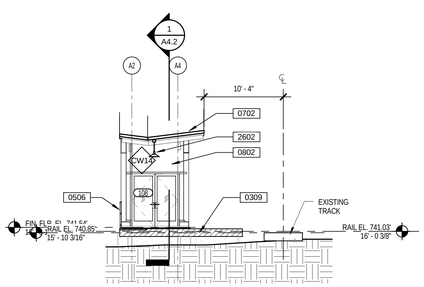

3 A3.3 BUILDING ELEVATION
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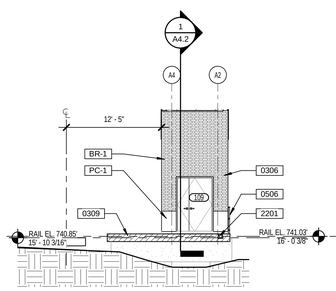

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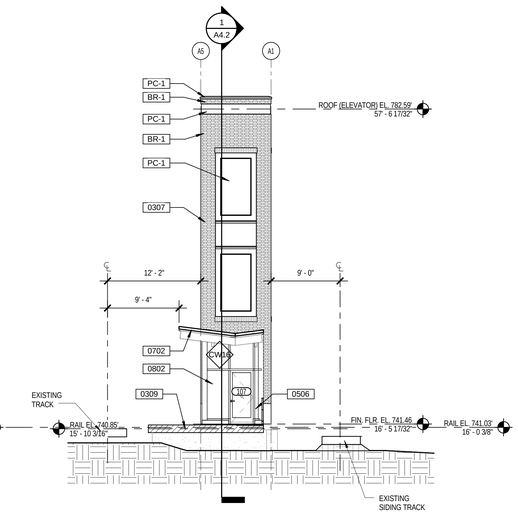
SCALE: 1/8" = 1'-0"



1 A3.3 BUILDING ELEVATION
SCALE: 1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS

1. SEE DWG G001 FOR GENERAL NOTES AND EXTERIOR FINISH MATERIAL TYPES.
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3. PROVIDE CONCEALED STEEL REINFORCEMENT AS REQUIRED AT EXTERIOR CURTAIN WALL.
4. SEE DWG Axxx FOR SCHEDULE OF WALL PANELS AND PANEL LAYOUT.
5. PROVIDE CONCEALED STEEL REINFORCEMENT OF EXTERIOR MASONRY AS REQUIRED.
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KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
2201	TRENCH DRAIN CAST INTO PLATFORM. REFER TO STRUCTURAL.
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS
3207	NEW 6'H CHAIN LINK FENCE ON TOP OF EXISTING RETAINING WALL.
BR-1	THIN BRICK ON STRUCTURAL PRECAST WALL PANEL.BRICK COLOR BLEND AND FACE SCRATCH TO MATCH EXISTING STATION
GR-1	3" THICK GRANITE BASE. COLOR AND FINISH TO MATCH EXISTING STATION
PC-1	PRECAST CONCRETE BAND; COLOR TO MATCH SANDSTONE ON EXISTING BUILDING

DATES AND REVISIONS

No.	Date / Description
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40 EAST AVENUE, ELYRIA, OHIO 44035
EXTERIOR ELEVATIONS

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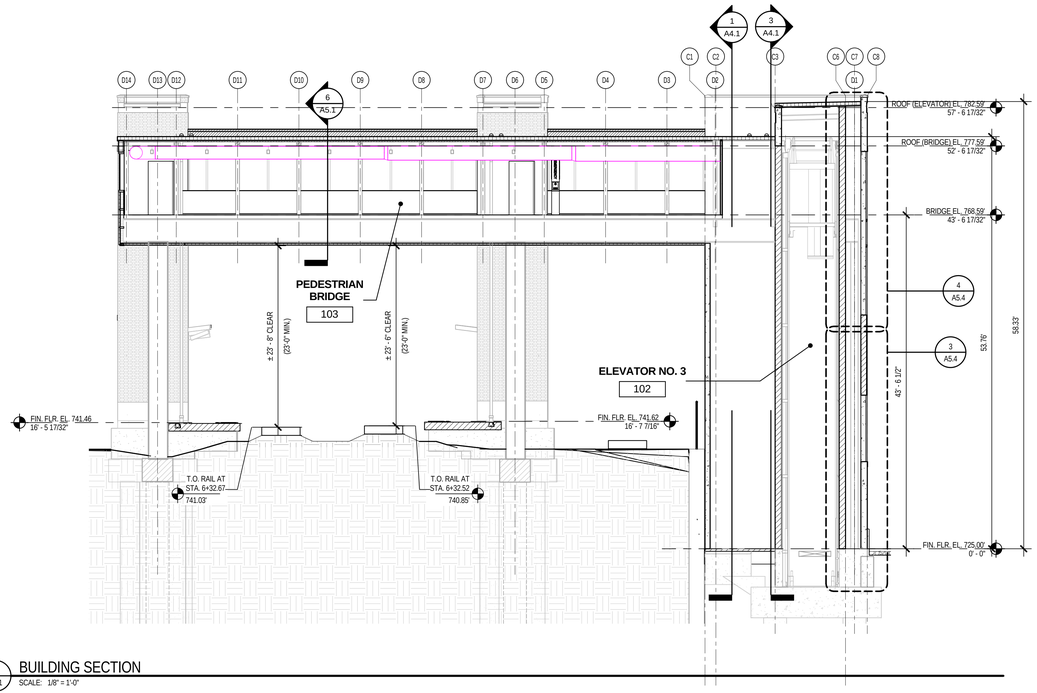
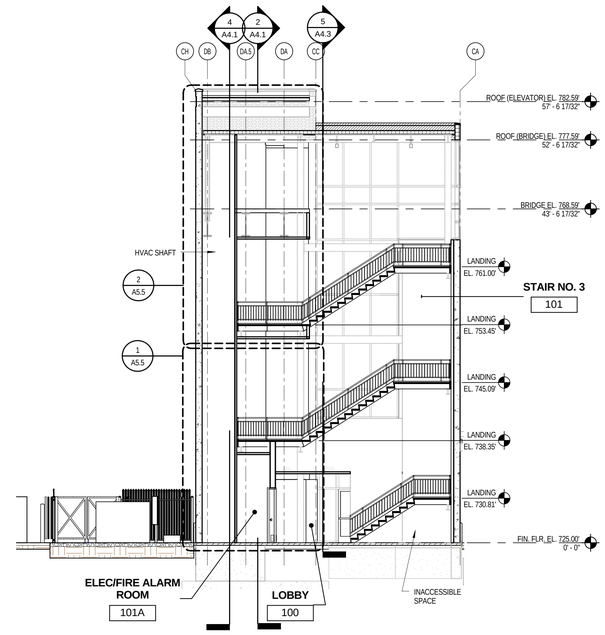
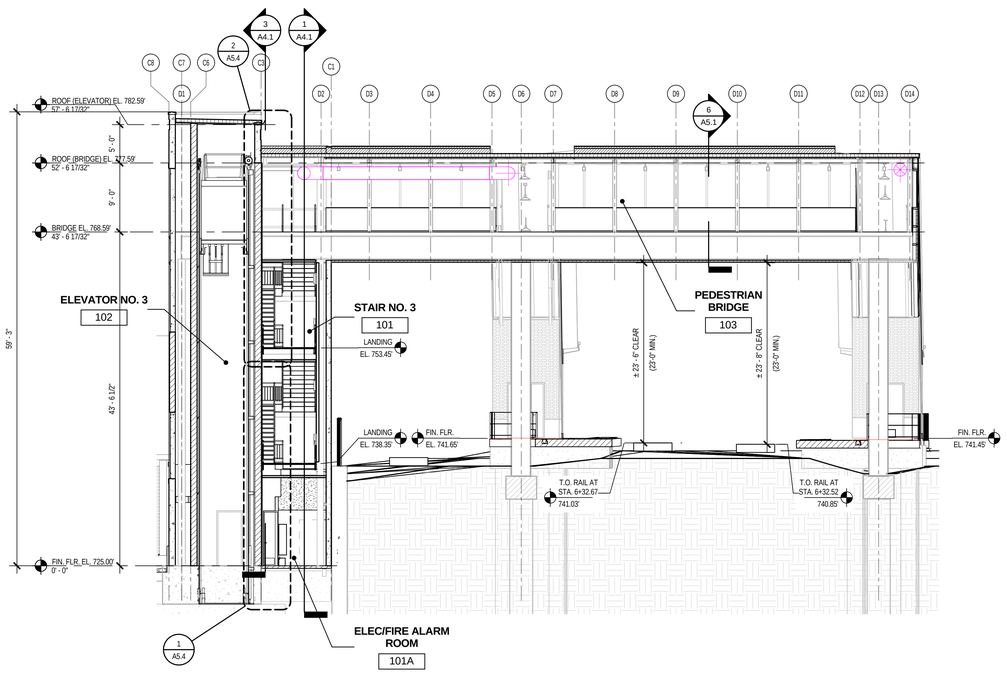


4 A4.1 BUILDING SECTION
SCALE: 1/8" = 1'-0"

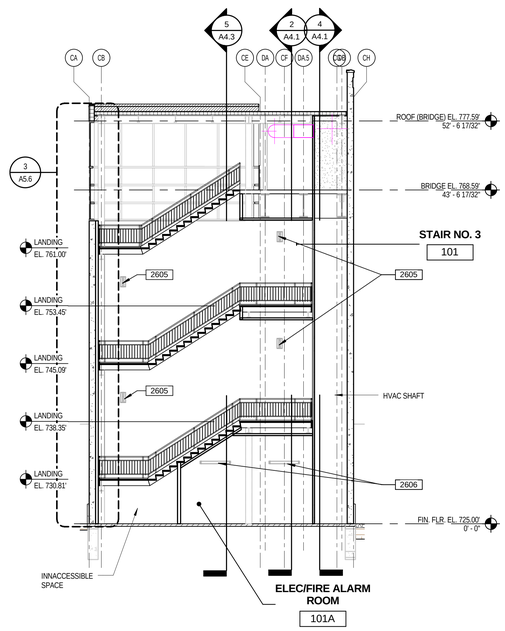


3 A4.1 BUILDING SECTION
SCALE: 1/8" = 1'-0"

# KEYNOTE LEGEND	
KEYNOTE	DESCRIPTION
2605	WALL SCONCE LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
2606	WALL-MOUNTED UTILITY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.



2 A4.1 BUILDING SECTION
SCALE: 1/8" = 1'-0"



1 A4.1 BUILDING SECTION
SCALE: 1/8" = 1'-0"

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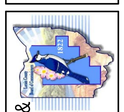

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

BUILDING SECTIONS

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RLB NO.: 8258.01

DRAWING NO.
A4.1

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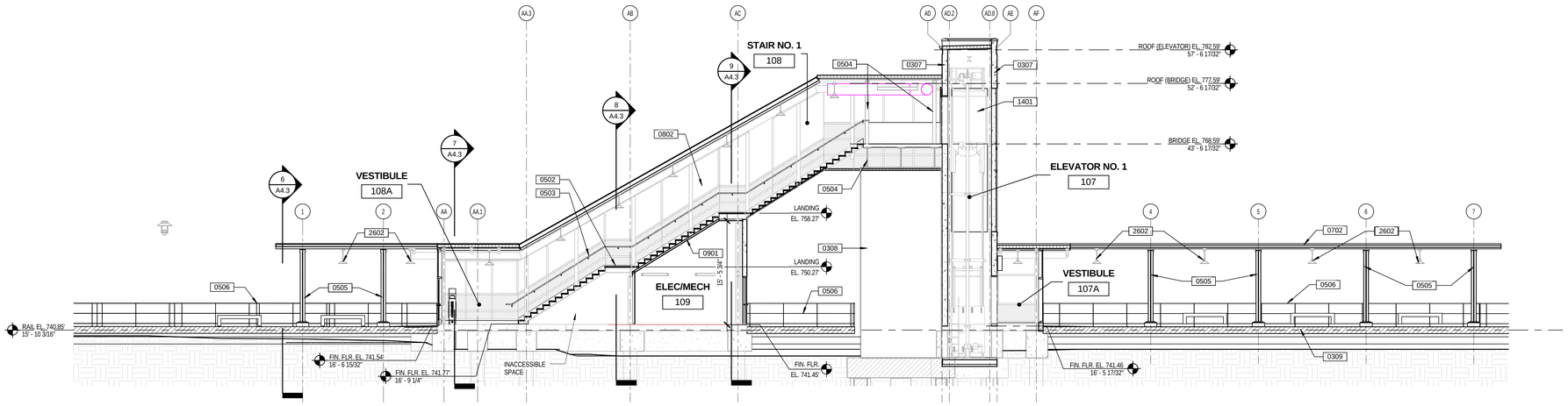
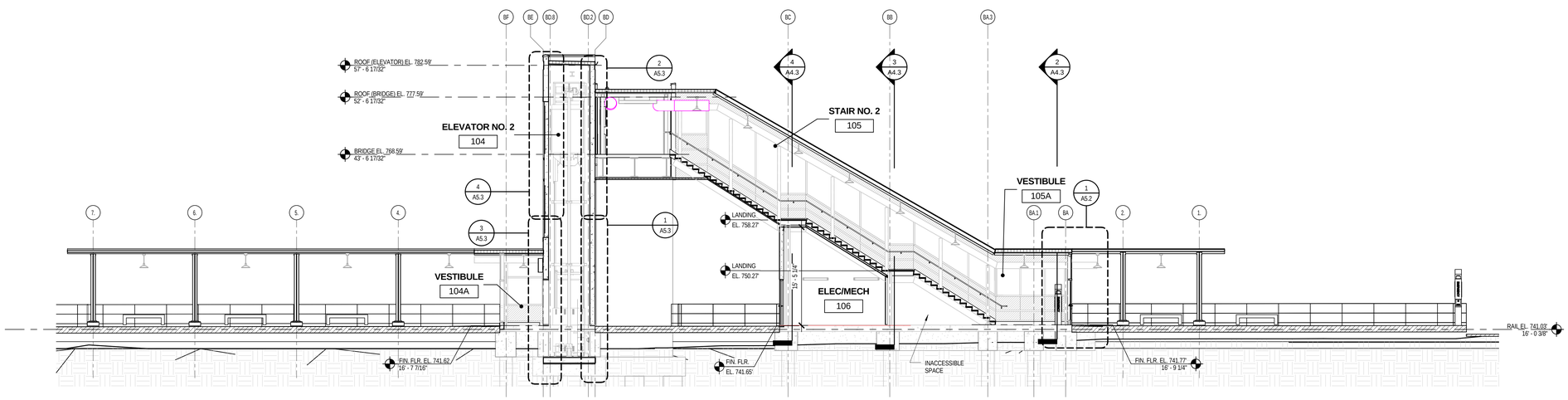


1 A4.2 BUILDING SECTION
SCALE: 1/8" = 1'-0"

KEYNOTE LEGEND	
KEYNOTE	DESCRIPTION
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0308	CONCRETE BRIDGE PIER. REFER TO STRUCTURAL.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0505	CANOPY FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
0901	
1401	MACHINE ROOM-LESS TRACTION ELEVATOR.
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS



2 A4.2 BUILDING SECTION
SCALE: 1/8" = 1'-0"

DATES AND REVISIONS

No.	Date / Description
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13000 Shaker Boulevard Cleveland, Ohio 44120
Phone: (216) 752-8000 Fax: (216) 752-8653
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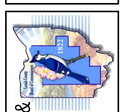

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

BUILDING SECTIONS

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RLB NO.: 8258.01

DRAWING NO.
A4.2

12/18/2015 12:02:13 PM
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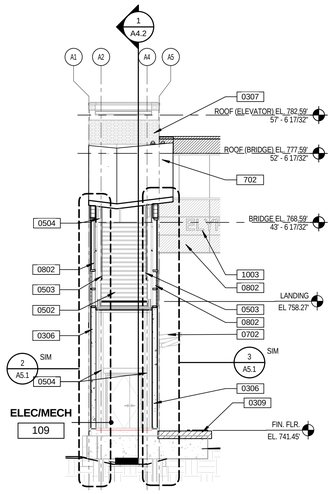
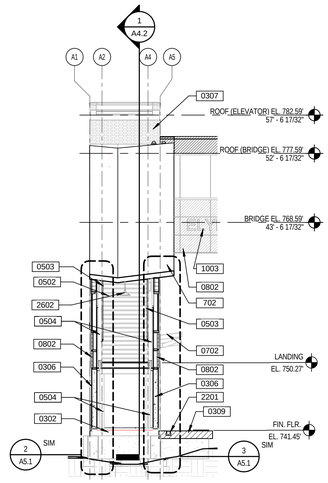
KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0302	CONCRETE FLOOR SLAB. REFER TO STRUCTURAL.
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0505	CANOPY FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
702	MEMBRANE ROOFING OVER RIGID INSULATION.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
1003	BUILDING SIGNAGE ATTACHED TO STRUCTURE.
2201	TRENCH DRAIN CAST INTO PLATFORM. REFER TO STRUCTURAL.
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS



9 A4.3 BUILDING SECTION
SCALE: 1/8" = 1'-0"



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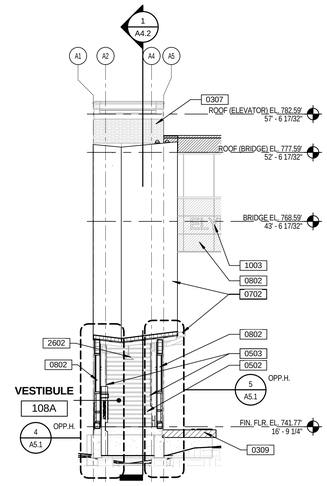

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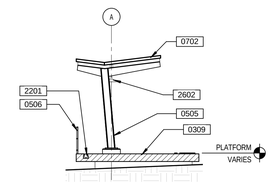

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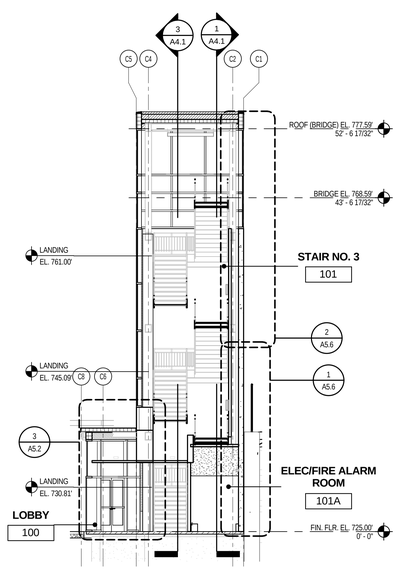

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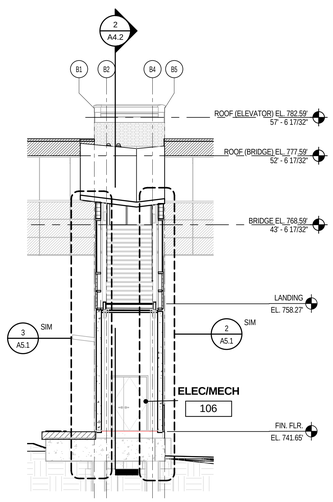

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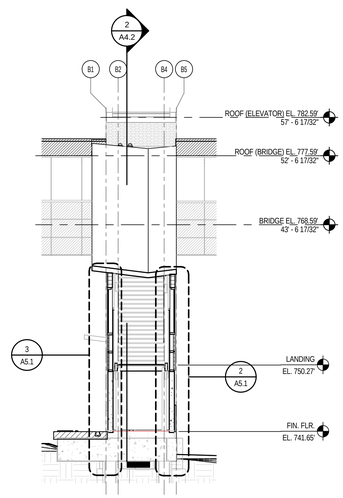

3 A4.3 BUILDING SECTION
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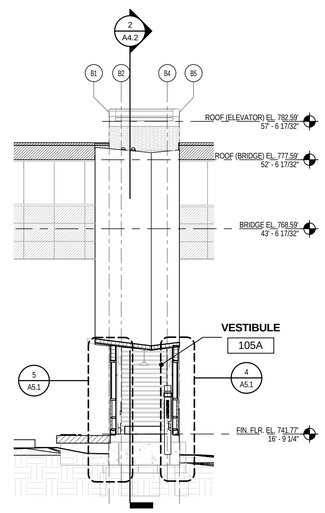

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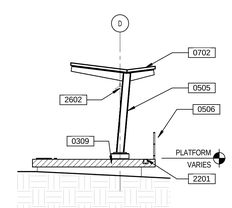

1 A4.3 BUILDING SECTION
SCALE: 1/8" = 1'-0"

DATES AND REVISIONS

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BUILDING SECTIONS

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RLB NO.: 8258.01

DRAWING NO.
A4.3

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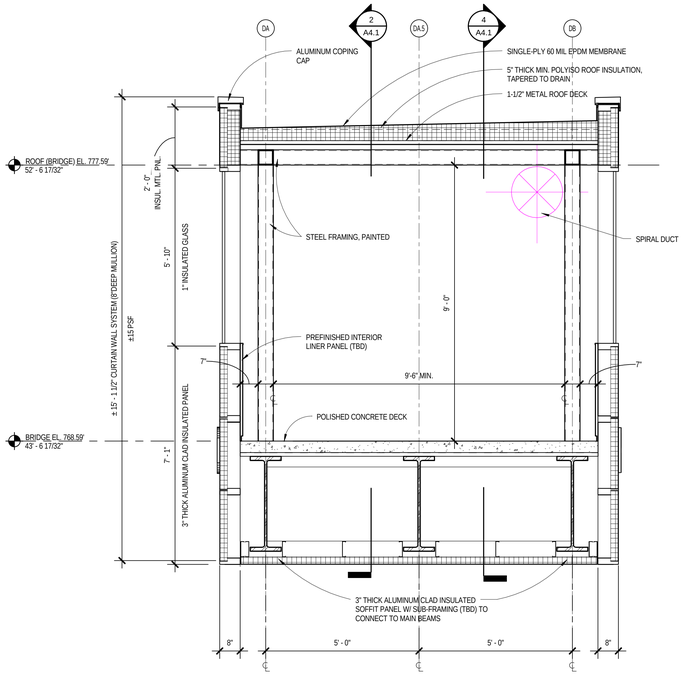

6 A5.1 BUILDING SECTION
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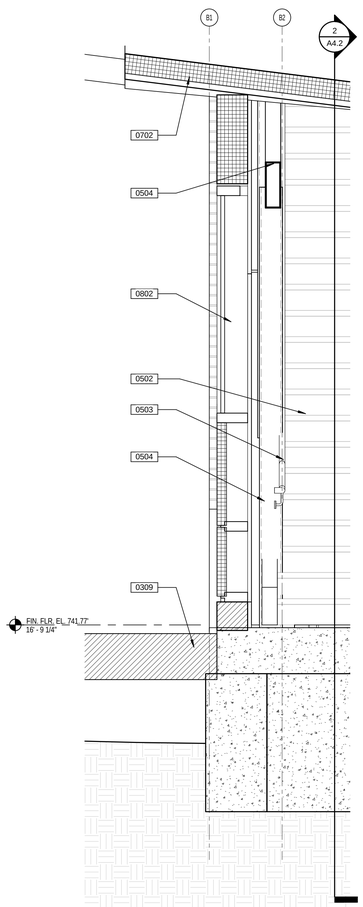

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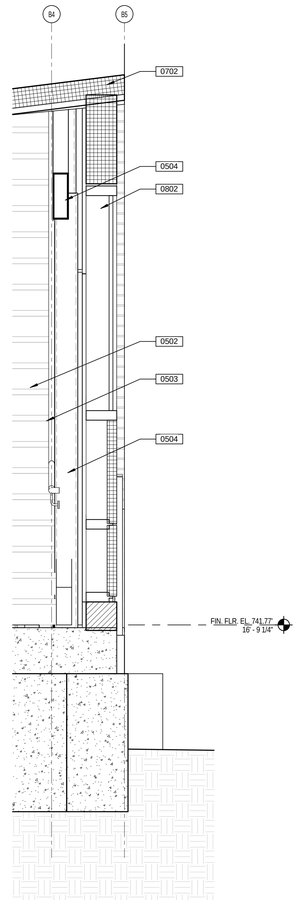
SCALE: 3/4" = 1'-0"



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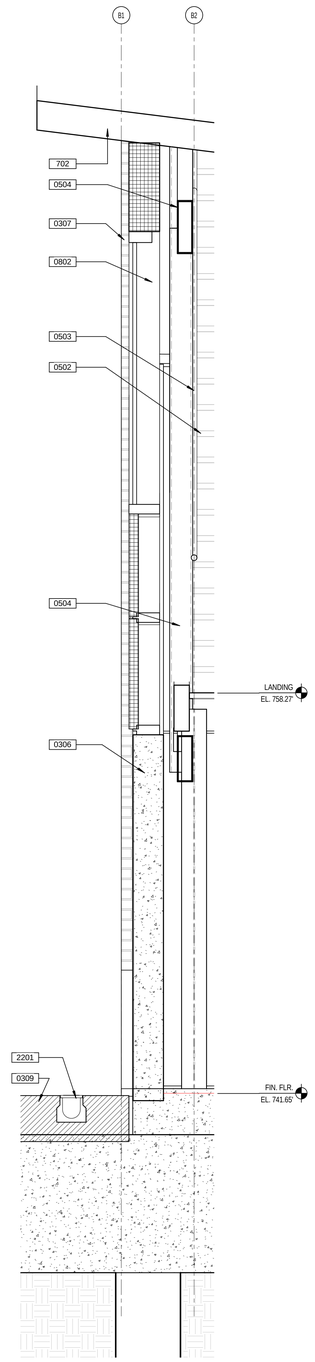
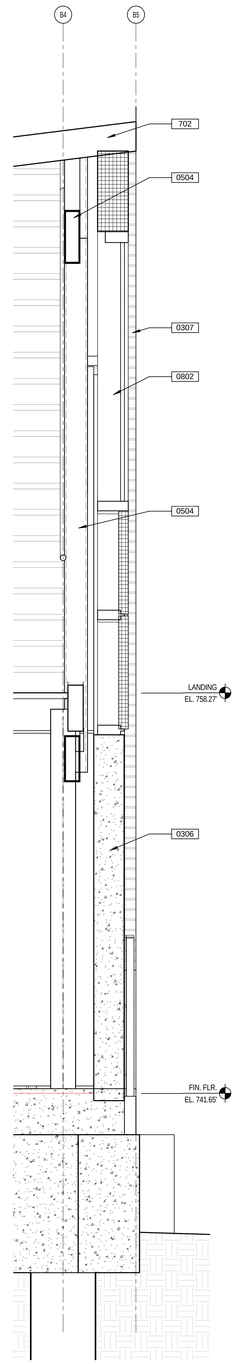
SCALE: 3/4" = 1'-0"



3 A5.1 WALL SECTION
SCALE: 3/4" = 1'-0"



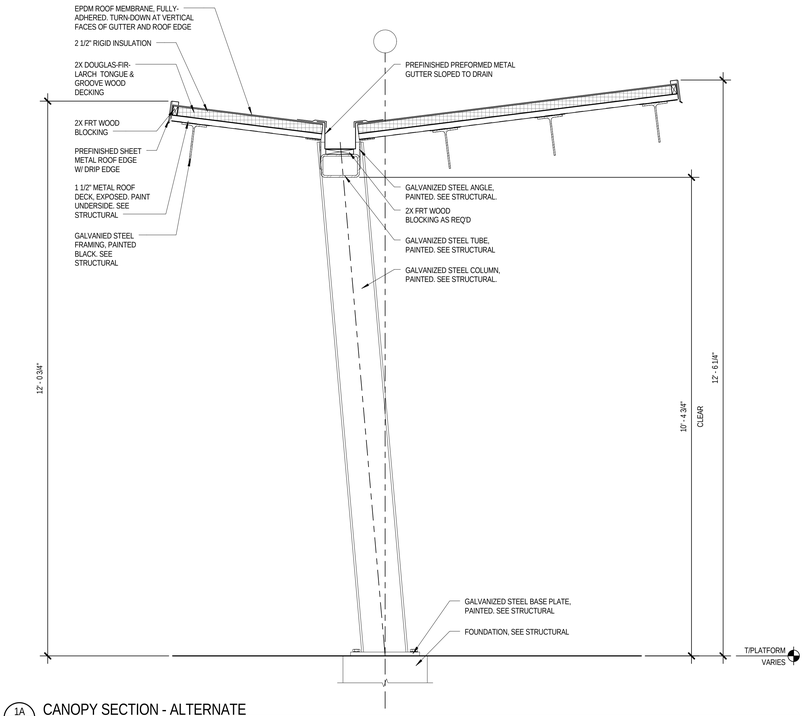
2 A5.1 WALL SECTION
SCALE: 3/4" = 1'-0"

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
702	MEMBRANE ROOFING OVER RIGID INSULATION.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
2201	TRENCH DRAIN CAST INTO PLATFORM. REFER TO STRUCTURAL.

GENERAL NOTES - WALL SECTIONS

1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.



1A A5.1 CANOPY SECTION - ALTERNATE
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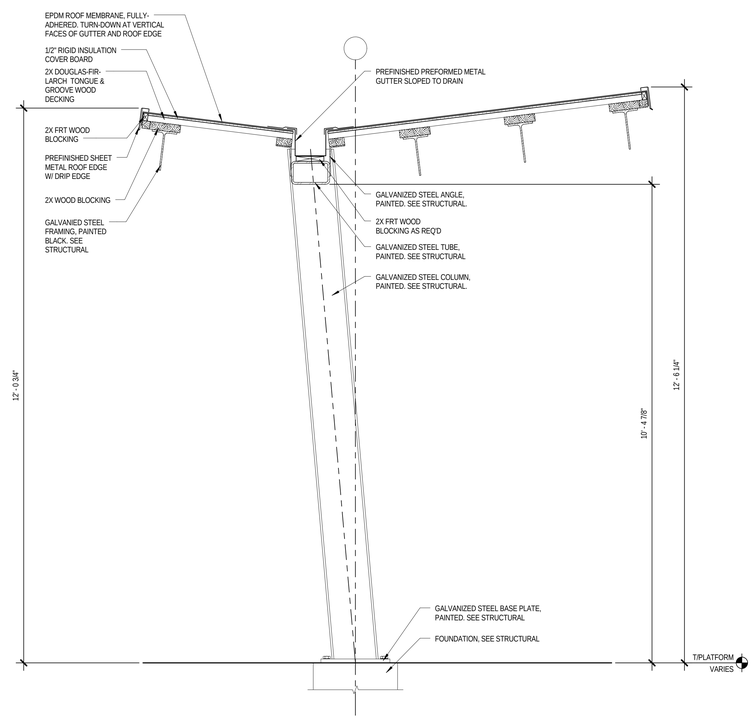

1 A5.1 CANOPY SECTION
SCALE: 3/4" = 1'-0"

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WALL SECTIONS

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RLB NO.: 8258.01

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A5.1

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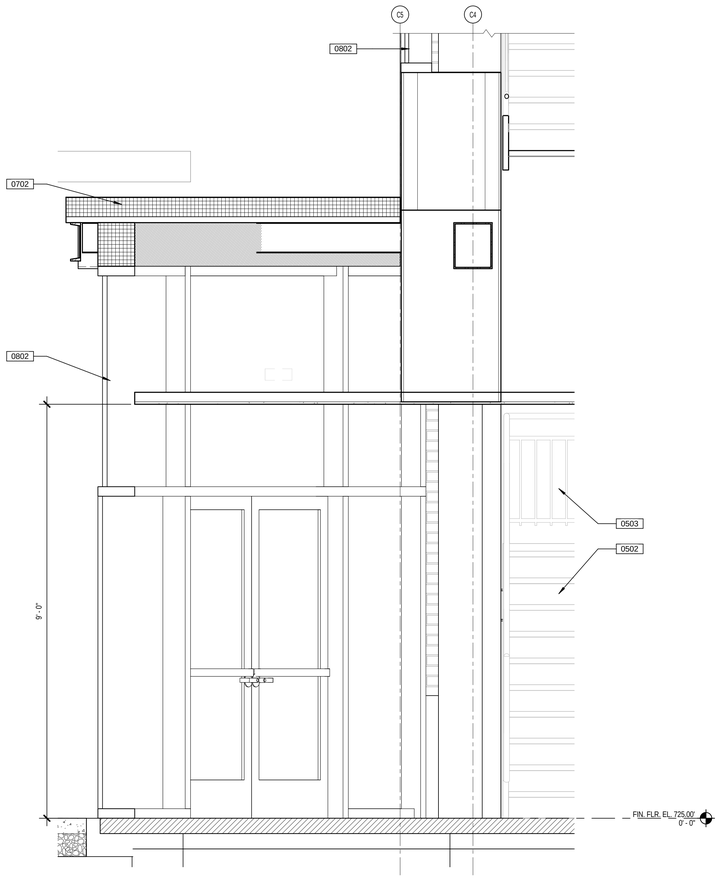
GENERAL NOTES - WALL SECTIONS

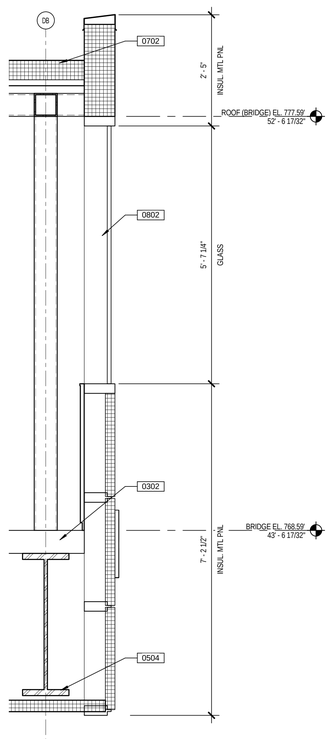
1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.

KEYNOTE LEGEND

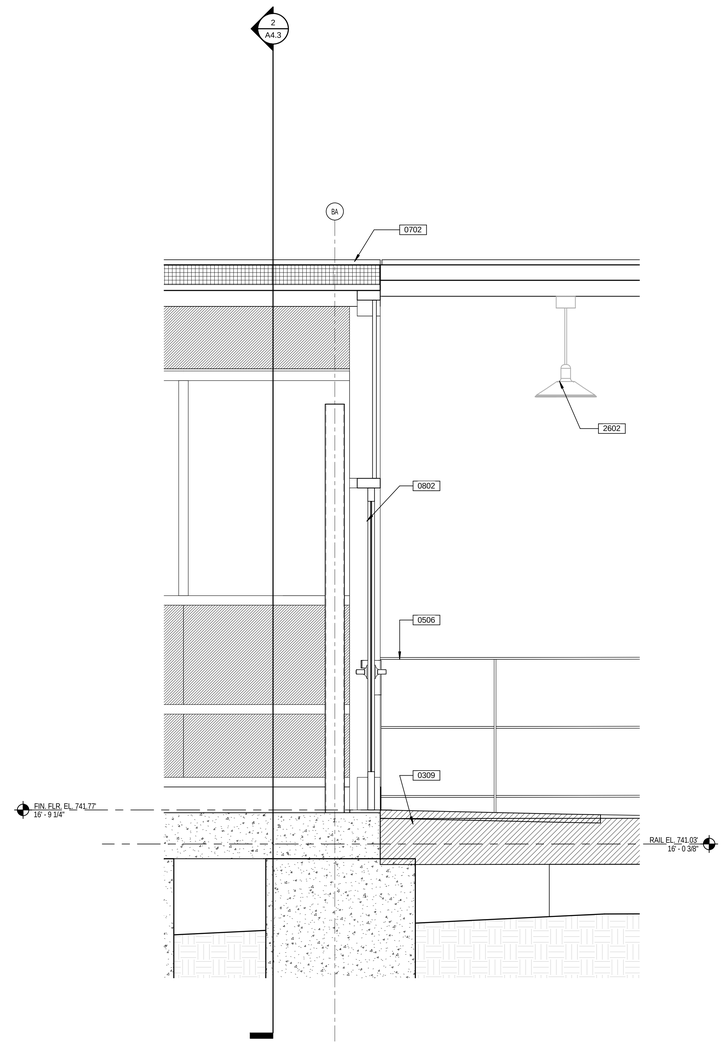
KEYNOTE	DESCRIPTION
0302	CONCRETE FLOOR SLAB. REFER TO STRUCTURAL.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0506	METAL GUARDRAIL.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS



3 A5.2 WALL SECTION
SCALE: 3/4" = 1'-0"



2 A5.2 WALL SECTION
SCALE: 3/4" = 1'-0"



1 A5.2 WALL SECTION
SCALE: 3/4" = 1'-0"

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WALL SECTIONS

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A5.2

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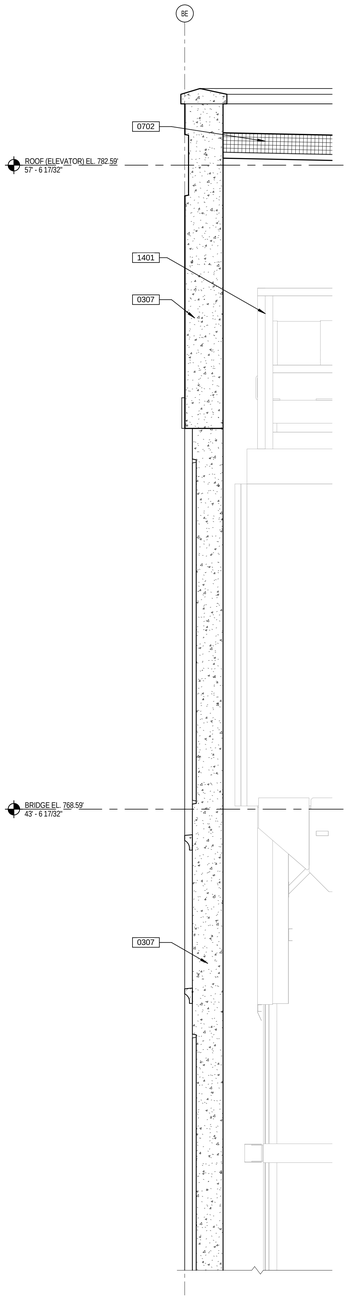
GENERAL NOTES - WALL SECTIONS

1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0301	CONCRETE FOOTING. REFER TO STRUCTURAL.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0309	PRECAST CONCRETE PLATFORM WITH INTEGRAL TACTILE WARNING STRIP. REFER TO STRUCTURAL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0702	
703	PREFINISHED METAL GUTTER W/ DOWNSPOUT TO ROOF BELOW.
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
1401	MACHINE ROOM-LESS TRACTION ELEVATOR.
2606	WALL-MOUNTED UTILITY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.



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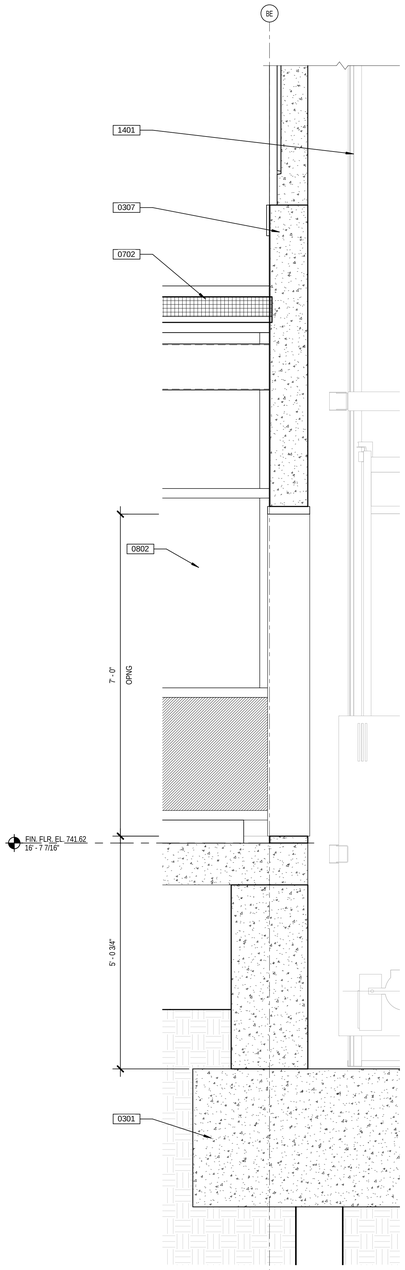

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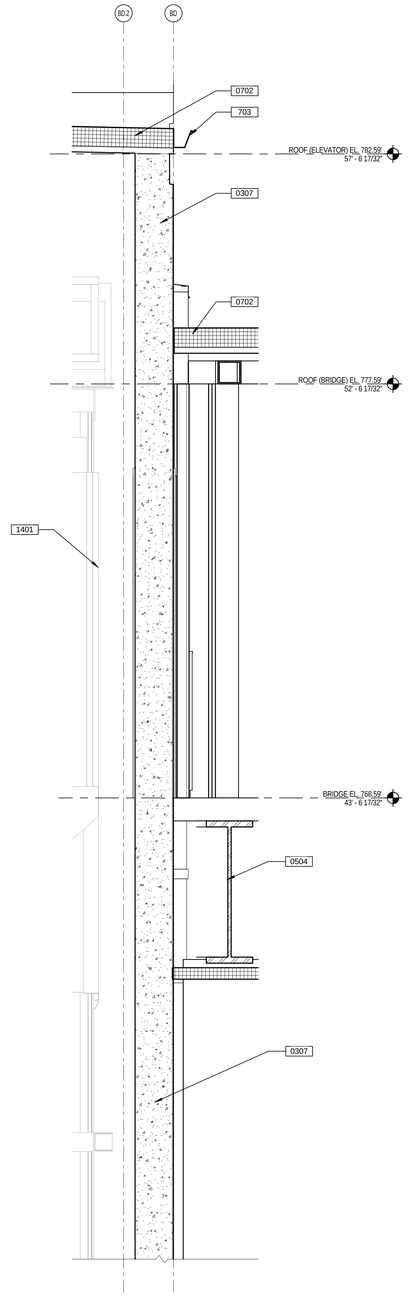

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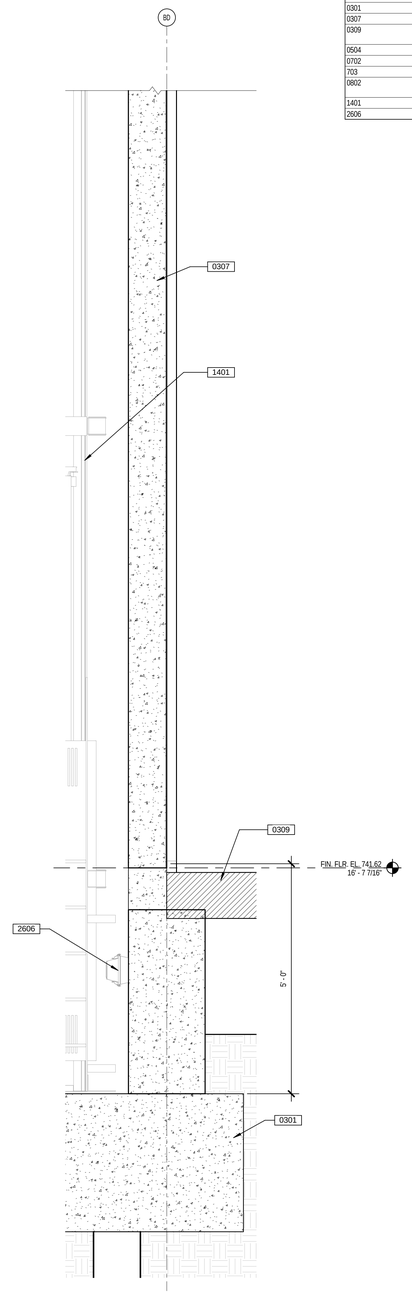

1 A5.3 WALL SECTION
SCALE: 3/4" = 1'-0"

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WALL SECTIONS

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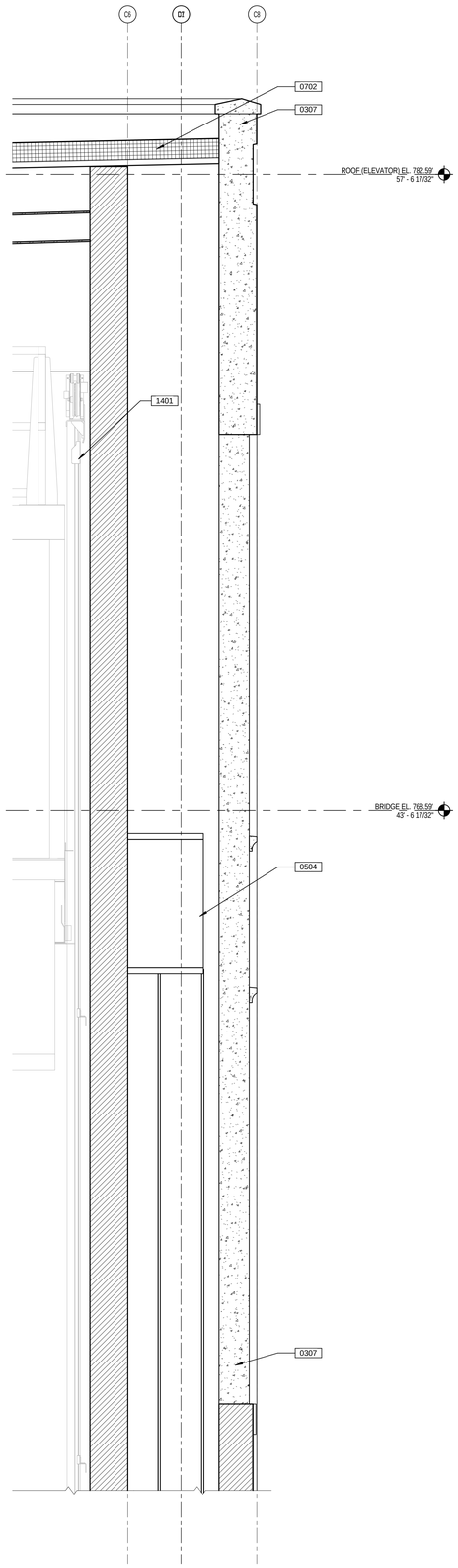

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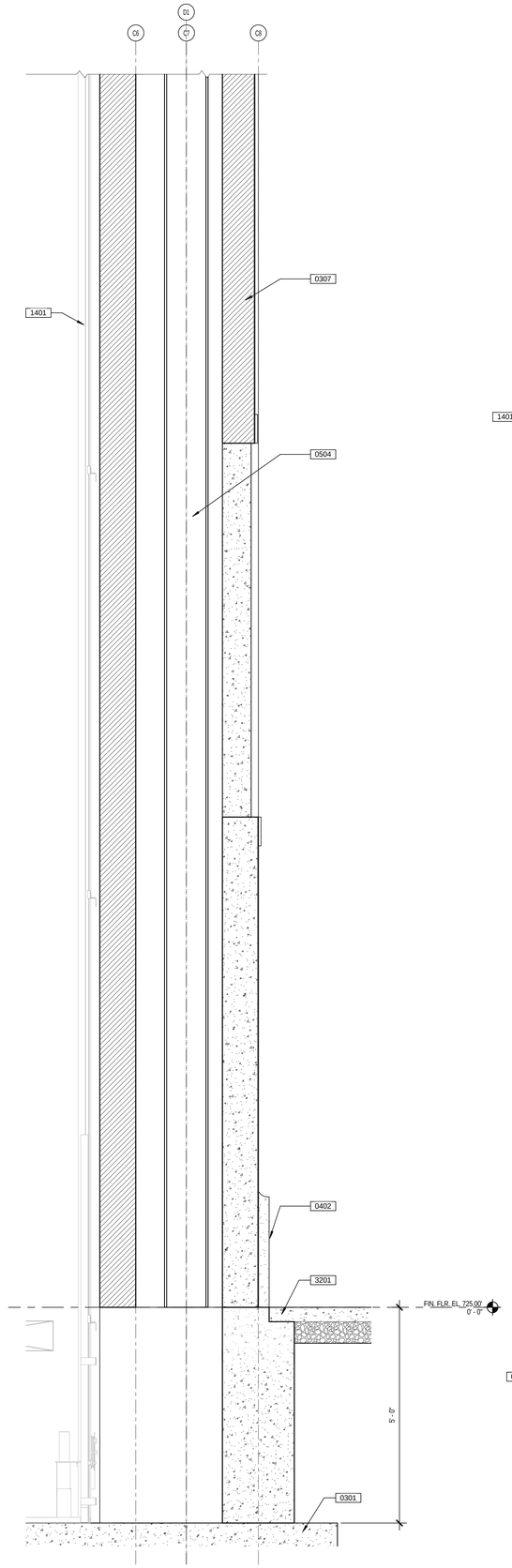

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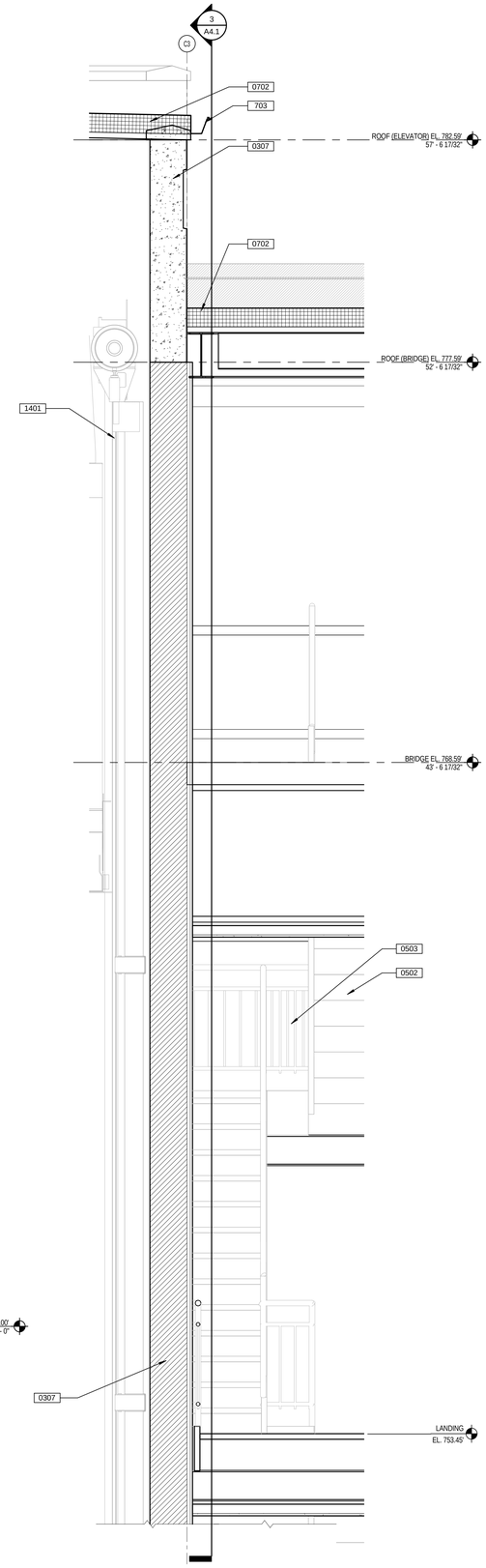

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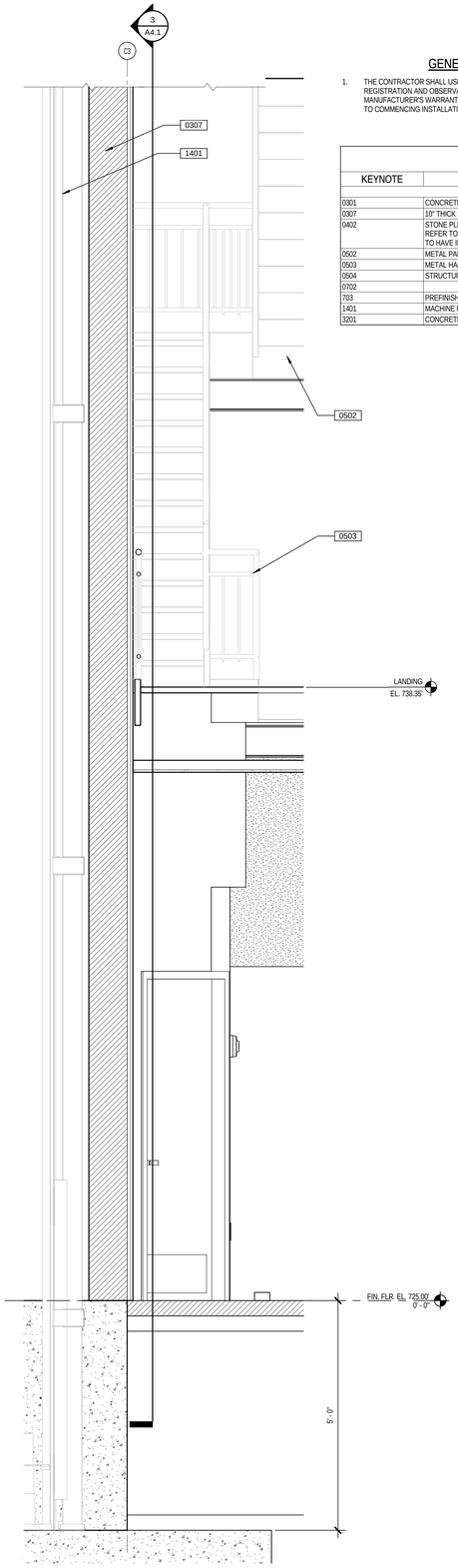

1 A5.4 WALL SECTION
SCALE: 3/4" = 1'-0"

GENERAL NOTES - WALL SECTIONS

1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0301	CONCRETE FOOTING. REFER TO STRUCTURAL.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
0702	
703	PREFINISHED METAL GUTTER W/ DOWNSPOUT TO ROOF BELOW.
1401	MACHINE ROOM-LESS TRACTION ELEVATOR.
3201	CONCRETE SIDEWALK. REFER TO CIVIL DRAWINGS.

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WALL SECTIONS

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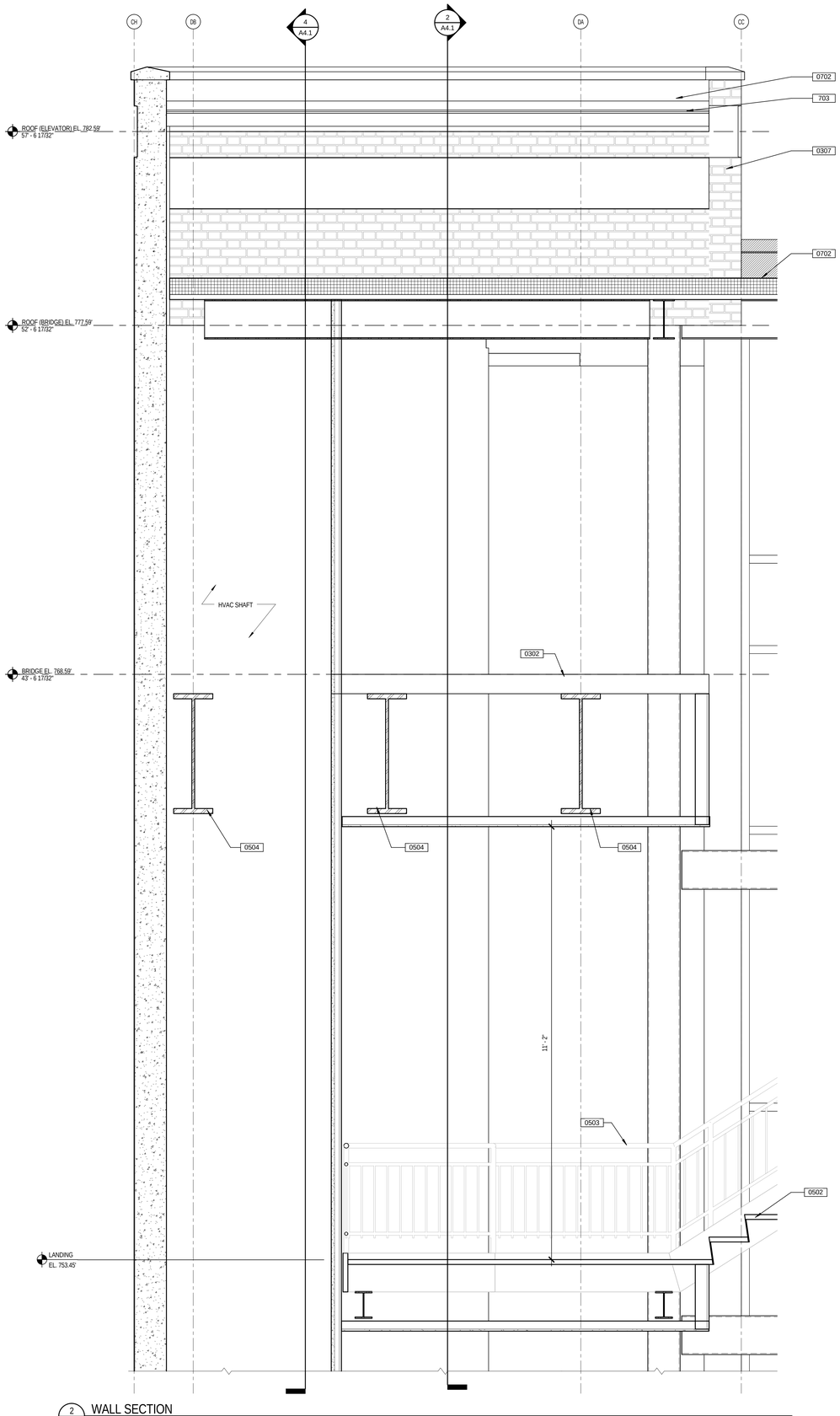
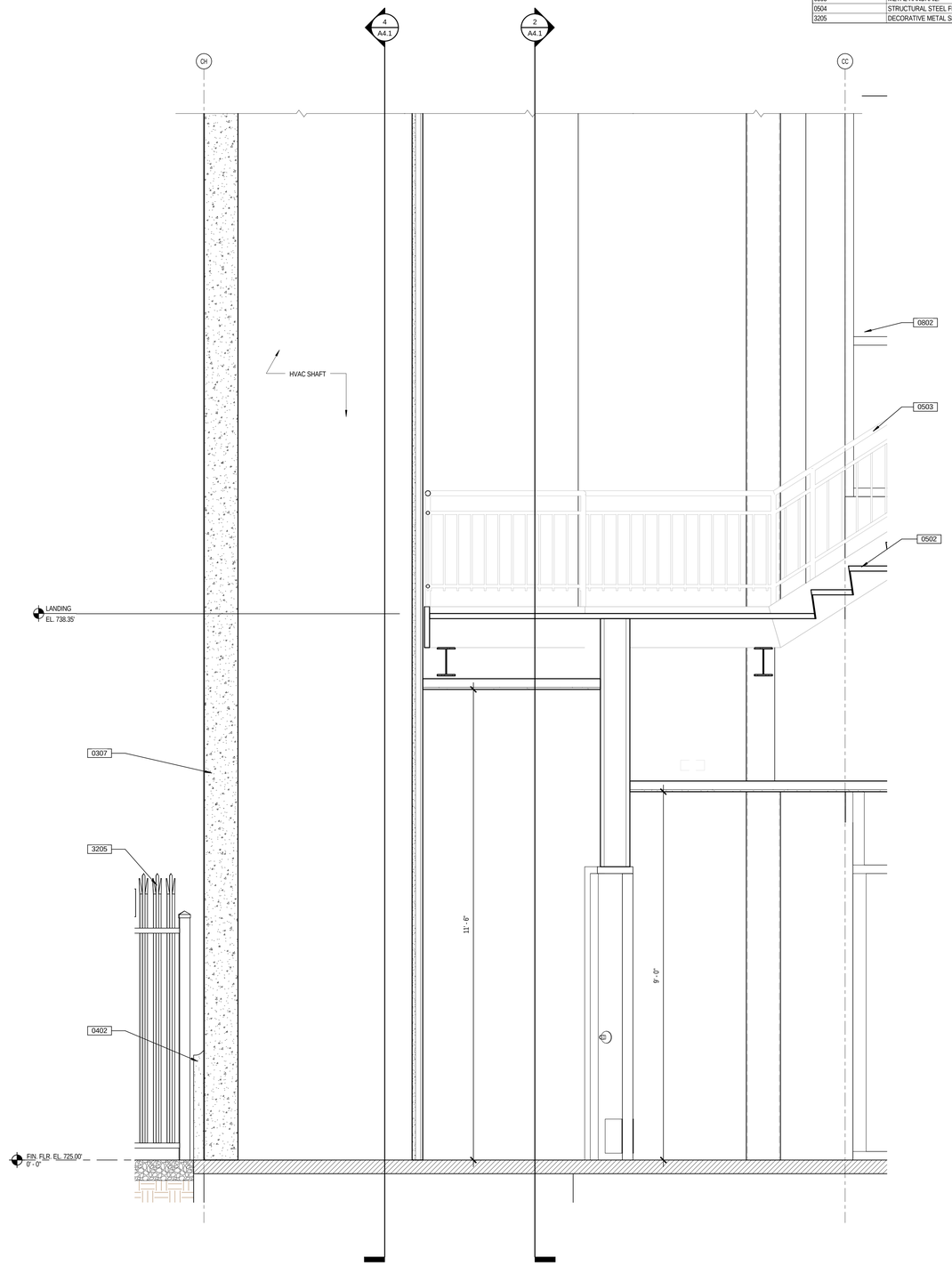


2 A5.5 WALL SECTION
SCALE: 3/4" = 1'-0"



1 A5.5 WALL SECTION
SCALE: 3/4" = 1'-0"

GENERAL NOTES - WALL SECTIONS

1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0302	CONCRETE FLOOR SLAB. REFER TO STRUCTURAL.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0503	METAL HANDRAIL.
0504	STRUCTURAL STEEL FRAMING. REFER TO STRUCTURAL.
3205	DECORATIVE METAL SECURITY FENCE AND GATE.

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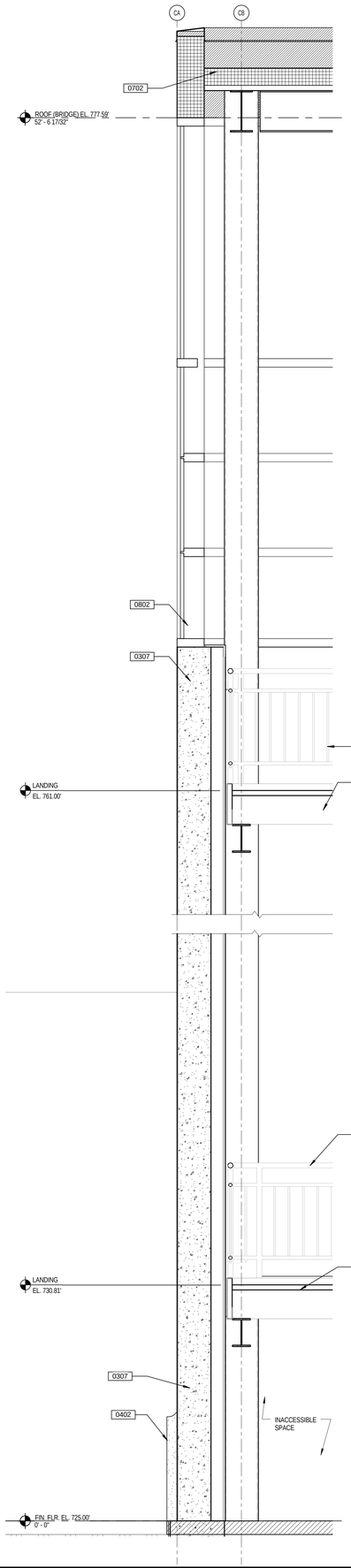
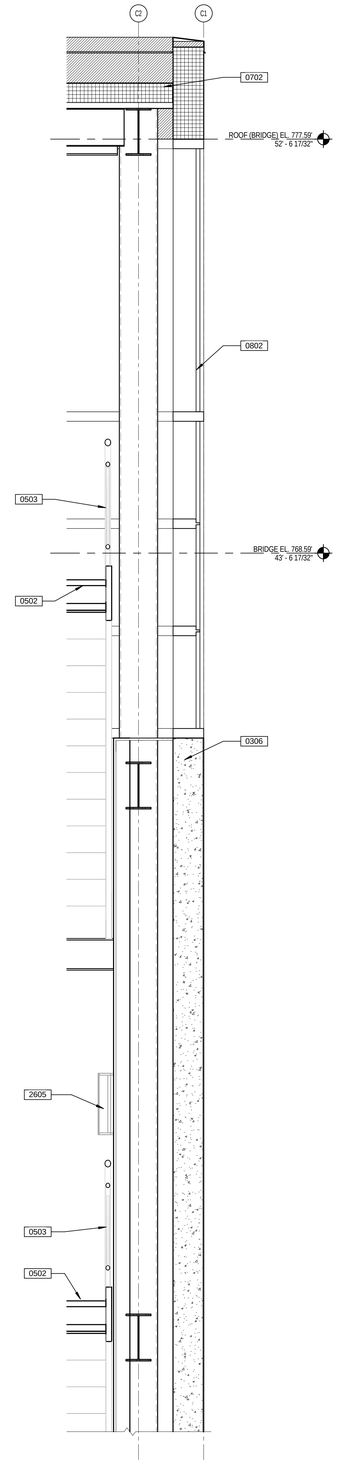
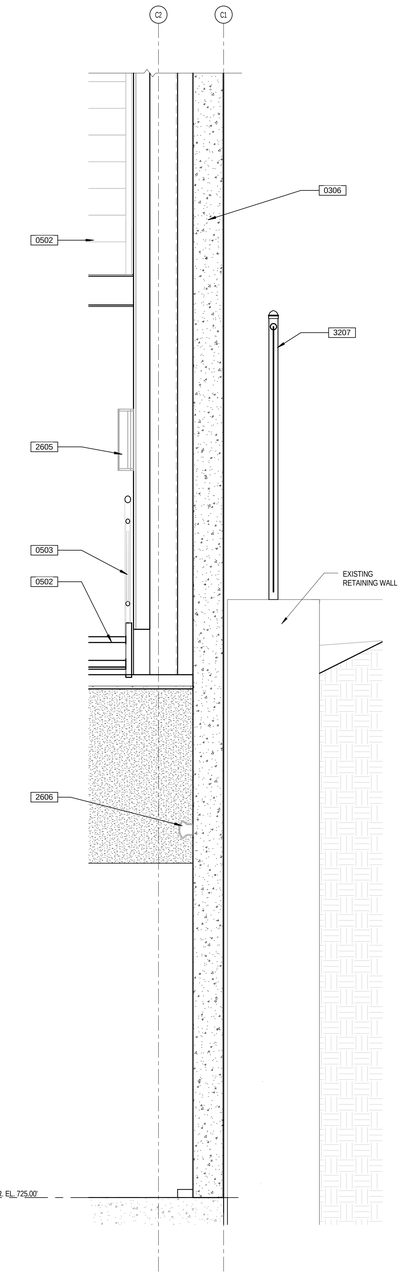


3 A5.6 WALL SECTION
SCALE: 3/4" = 1'-0"



2 A5.6 WALL SECTION
SCALE: 3/4" = 1'-0"



1 A5.6 WALL SECTION
SCALE: 3/4" = 1'-0"

GENERAL NOTES - WALL SECTIONS

1. THE CONTRACTOR SHALL USE BUILDING WRAP AND BUILDING WRAP TAPE MANUFACTURER'S PRODUCT REGISTRATION AND OBSERVATION PROCESS PRIOR TO INSTALLATION TO QUALIFY FOR MANUFACTURER'S WARRANTY. CONTACT MANUFACTURER FOR PROJECT REGISTRATION DETAILS PRIOR TO COMMENCING INSTALLATION.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
0306	8" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0307	10" THICK STRUCTURAL PRECAST CONCRETE WALL PANEL WITH THIN BRICK VENEER.
0402	STONE PLINTH VENEER MECHANICALLY FASTENED TO PRECAST CONCRETE WALL. REFER TO EXTERIOR ELEVATIONS FOR COLOR, TYPE AND STYLE OF STONE. MORTAR TO HAVE INTEGRAL SEALER.
0502	METAL PAN STAIRS, PAINTED, W/CONCRETE TREADS.
0503	METAL HANDRAIL.
0702	
0802	ALUMINUM CURTAIN WALL SYSTEM WITH 1" INSULATING GLASS. GLASS WITHIN 2'-0"ABOVE FINISHED FLOOR SHALL BE TEMPERED.
2605	WALL SCONCE LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
2606	WALL-MOUNTED UTILITY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
3207	NEW 6'H CHAIN LINK FENCE ON TOP OF EXISTING RETAINING WALL.

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMT

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40 EAST AVENUE, ELYRIA, OHIO 44035

WALL SECTIONS

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A5.6

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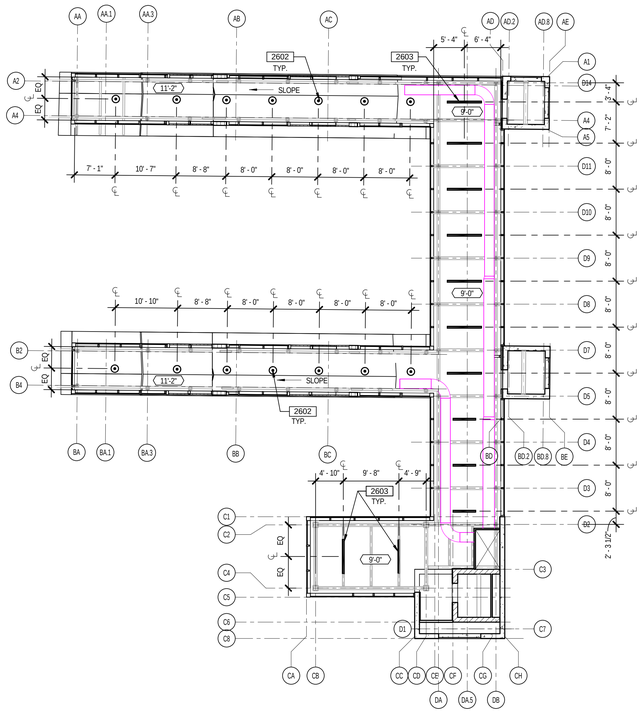
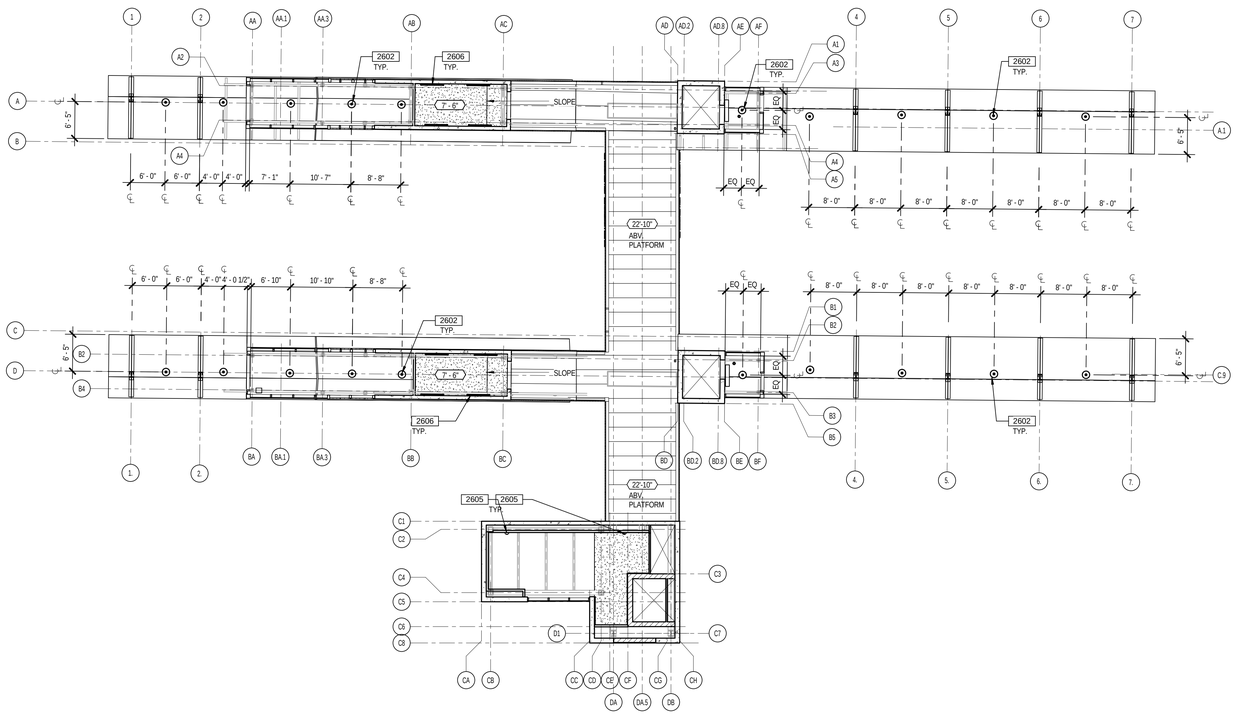


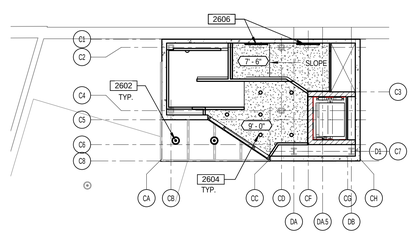
3 A9.1 REFLECTED CEILING PLAN - BRIDGE LEVEL

SCALE: 3/32" = 1'-0"



2 A9.1 REFLECTED CEILING PLAN - PLATFORM LEVEL

SCALE: 3/32" = 1'-0"



1 A9.1 REFLECTED CEILING PLAN - GROUND LEVEL

SCALE: 3/32" = 1'-0"

GENERAL NOTES - ARCHITECTURAL RCP

1. CENTERLINES OF ROOM SHALL BE STARTING POINT OF CEILING GRID LAYOUT, UNLESS NOTED OTHERWISE.
2. ALL SUSPENDED GYPSUM BOARD CEILINGS TO BE 5/8" TYPE "X" GYPSUM BOARD ON 3 5/8" 20 GA. METAL STUDS @ 16" O.C. MAX. WITH 12 GA. WIRE TO JOISTS ABOVE 4'-0" O.C. MAX. BOTH DIRECTIONS UNLESS NOTED OTHER WISE. NOTHING TO BE SUSPENDED FROM THE METAL DECK.
3. COLOR OF METAL SUSPENSION SYSTEM AND METAL EDGE MOLDINGS AND TRIM SHALL BE STANDARD 'WHITE' BY THAT SPECIFIED CEILING MANUFACTURER UNLESS OTHERWISE INDICATED.
4. ALL SOFFITS AND VERTICAL SURFACES CONNECTED CEILINGS AND/OR SOFFITS AT DIFFERENT ELEVATIONS SHALL BE CONSTRUCTED OF STEEL STUDS/FURRING AND GYPSUM WALLBOARD, UNLESS OTHERWISE INDICATED.
5. UNLESS OTHERWISE NOTED; THE UNDERSIDE OF GYP. BD. BULKHEADS AND SOFFITS SHALL RECEIVE THE SAME FINISH AS THEIR VERTICAL SURFACES (OR WALL IN WHICH THEY ARE LOCATED).
6. IF SPRINKLER HEADS ARE REQUIRED, DOWNLIGHTS, DIFFUSERS, ETC., SHALL BE CENTERED IN CEILING PANELS IN BOTH DIRECTIONS, UNLESS OTHERWISE INDICATED. WHERE "SECOND LOOK" (SIMULATED 2X2) CEILING TILE OCCURS, FIXTURES SHALL BE CENTERED IN THE 2'X2' TILE AREA.
7. REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC TYPES AND LOCATIONS OF EXIT LIGHTS AND BATTERY PACKS.

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
2602	PENDANT FIXTURE WITH WAREHOUSE SHADE. REFER TO ELECTRICAL DRAWINGS
2603	LINEAR SUSPENDED LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
2604	RECESSED CAN LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
2605	WALL SCONCE LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
2606	WALL-MOUNTED UTILITY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.

REFLECTED CEILING PLAN LEGEND

- LED SUSPENDED LIGHT FIXTURE; SEE ELECTRICAL DRAWINGS
- 1' X 4' LED LIGHT FIXTURE; SEE ELECTRICAL DRAWINGS
- LED PENDANT LIGHT FIXTURE; SEE ELECTRICAL DRAWINGS
- LED WALL SCONCE LIGHT FIXTURE; SEE ELECTRICAL DRAWINGS
- RECESSED DOWNLIGHT FIXTURES; SEE ELECTRICAL DRAWINGS FOR TYPE
- SUPPLY AIR DIFFUSER; SEE MECHANICAL DRAWINGS
- RETURN AIR GRILLE; SEE MECHANICAL DRAWINGS
- LAY-IN SUSPENSION CEILING SYSTEM (MAY BE IN 2'X2' OR 2'X4' PATTERN)
- CEILING GRID START POINT; CENTER GRID IN ROOM
- CEILING GRID START POINT
- GYP. BD. CEILING, SOFFIT OR BULKHEAD
- 9'-0" FINISHED CEILING ELEVATION

DATES AND REVISIONS

No.	Date / Description
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REFLECTED CEILING PLANS

DRAWN BY: RW
CHECKED BY: KJE
RLB NO.: 8258.01

DRAWING NO. A9.1

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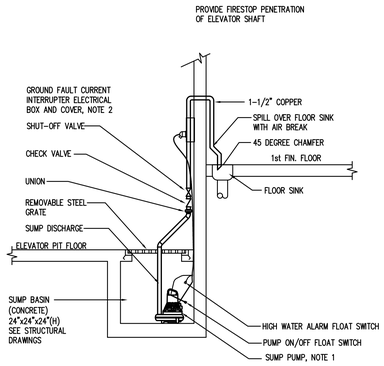
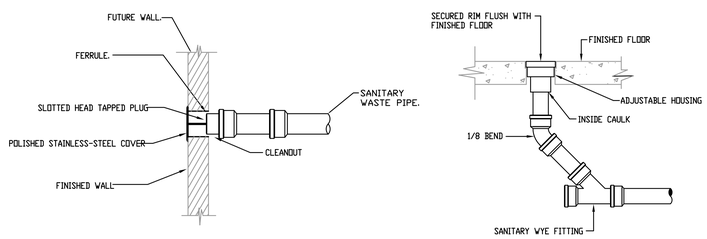


NOTES:

1. SUBMERSIBLE PUMP, SEE SPECIFICATIONS THIS SHEET.
2. LABEL RECEPTACLE "FOR ELEVATOR ALARM/SUMP PUMP ONLY". REFER TO ELECTRICAL DRAWING FOR EXACT LOCATION. (MAY BE IN ELEVATOR SHAFT.)
3. NO PVC PIPING ALLOWED FOR PUMP DISCHARGE PIPING.
4. THE DISCHARGE PIPE SHALL RISE IN THE CORNER OF THE SHAFT TIGHT TO THE WALL.

1 / P0.1 SP-1 ELEVATOR SUMP PUMP DETAIL
SCALE: NO SCALE



2 / P0.1 WALL CLEANOUT AND FLOOR CLEANOUT DETAIL
SCALE: NO SCALE

GENERAL PLUMBING NOTES:

1. THE PLUMBING SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA AND PLUMBING CODE AND ALL LOCAL CODES AND ORDINANCES.
2. DRAWINGS ARE DIAGRAMMATIC. INDICATED POSITIONS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE, EXACT EQUIPMENT LOCATIONS AND PIPING ROUTING SHALL BE SUBJECT TO BUILDING CONSTRUCTION AND INTERFERENCES WITH OTHER TRADES.
3. ALL FIRE-STOPPING SHALL BE PERFORMED BY THE CONTRACTOR PERFORMING THE WORK REQUIRING THE PENETRATION. REFER TO THE DETAILS PERTAINING TO TYPE AND METHOD REQUIRED.
4. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
5. ALL SEWER PIPING SHALL BE SLOPED 1% MINIMUM UNLESS NOTED OTHERWISE. ALL SANITARY SHALL BE SLOPED PER PLUMBING CODE.
6. ALL INVERT ELEVATIONS NOTED ARE FROM TOP OF SLAB. MINIMUM STARTING SANITARY INVERT FOR ANY LATERAL BRANCH DRAIN SHALL BE -(1'-6") BELOW TOP OF SLAB.
7. THE MINIMUM UNDER FLOOR SANITARY SEWER PIPE SIZE SHALL BE 2".
8. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS EXCEPT FOR THOSE INDIRECTLY FED FROM ANOTHER FLOOR DRAIN WITH A TRAP PRIMER OR THOSE RECEIVING A CONTINUOUS WATER SOURCE SUCH AS INDIRECT WASTE FROM COIL CONDENSATE DRAIN WATER.
9. INSTALL TRAP PRIMER VALVES ABOVE CEILING. ALL VALVES SHALL BE ACCESSIBLE.
10. PRIOR TO ANY WORK COORDINATE ALL UTILITIES WITH CIVIL DRAWINGS.
11. PROVIDE CLEANOUTS AS INDICATED ON PLAN AND SANITARY ISOMETRIC.
12. VENT PIPING INDICATED IS ABOVE CEILING. REFER TO INDIVIDUAL STACK DIAGRAMS FOR WASTE AND VENT PIPING RUN WITHIN WALLS/CHASES AND ANY PIPE SIZING NOT INDICATED ON PLANS FOR DRAWING CLARITY. REFER TO THE PLUMBING FIXTURE CONNECTION SCHEDULE FOR FIXTURE WASTE AND VENT PIPE SIZING.
13. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING STORM DOWNSPOUTS DISCHARGING ABOVE GRADE.
14. ALL VALVES MUST BE ACCESSIBLE. IF LOCATED ABOVE DRYWALL CEILING OR BEHIND FINISHED WALLS, PROVIDE ACCESS DOOR. COORDINATE ALL ACCESS DOOR LOCATIONS WITH ARCHITECT.
15. INSTALL BRANCH WATER PIPING HORIZONTALLY WITHIN WALL FOR FIXTURE GROUPINGS. REFER TO FIXTURE CONNECTION SCHEDULE FOR SIZING REQUIREMENTS.
16. UNLESS NOTED OTHERWISE ALL VERTICAL PIPING DROPS TO FIXTURES, FAUCETS, ETC. MUST BE CONCEALED IN THE WALL.
17. INSTALLATION OF WATER PIPING IN EXTERIOR BUILDING WALLS SHOULD BE AVOIDED. IF NECESSARY, INSTALL PIPING ON BUILDING SIDE OF WALL INSULATION. INSULATED PIPING PER THE SPECIFICATIONS. COORDINATE ANY/ALL INSTALLATIONS WITH ARCHITECT/ENGINEER.
18. ALL HW TO PUBLIC TOILET ROOM LAVATORIES SHALL BE TEMPERED TO 105°F MAX VIA LOCAL MIXING VALVE (ASSE 1070) INSTALLED IN SAME ROOM.
19. DO NOT SUPPORT PIPING FROM ANOTHER PIPE, DUCTWORK OR CONDUIT. DO NOT SUPPORT ANY ITEM FROM METAL ROOF DECK.
20. NO EXPOSED PIPING SHALL BE INSTALLED BELOW CEILING.
21. ATTENTION IS CALLED TO ROUGH-IN REQUIREMENTS FOR FIXTURES INSTALLED IN CASEWORK FURNISHED BY ANOTHER DIVISION. THE PC SHALL PROVIDE ROUGH-INS OUT OF WALL WITH ENOUGH LENGTH TO ALLOW FOR SUPPLY STOPS AND WASTES TO HAVE ESCUTCHEONS AT THE REAR BACKING OF THE CASEWORK AND NOT AT THE WALL ACCESSIBLE THROUGH FIELD CUT HOLES IN THE CASEWORK BACKING.

ELEVATOR SUMP PUMP
ZOELLER MODEL M163 SUBMERSIBLE SUMP PUMP, DURABLE CAST IRON CONSTRUCTION, AUTOMATIC RESET THERMAL OVERLOAD PROTECTION, EPOXY FINISH, PLUG-IN POWER CORD, 1-1/2" NPT DISCHARGE, INTEGRAL FLOAT SWITCH, #10-0623 HIGH WATER ALARM, 59 GPM @ 20 FT HEAD, 115/60/1, 0.5 HP, 15 AMPS.
REFER TO DETAIL 1/P0.1 FOR ADDITIONAL INFORMATION.
REFER TO STRUCTURAL DRAWINGS FOR CONCRETE SUMP PIT.

PLUMBING SYMBOLS & ABBREVIATIONS

SYMBOL	DESCRIPTION
	BACKFLOW PREVENTER
	CHECK VALVE
	PRESSURE REDUCING VALVE
	SHUT OFF VALVE
	STRAINER W/BLOWDOWN
CO	CLEANOUT IN FLOOR OR AT GRADE
WCO	CLEANOUT IN WALL
	FLOOR DRAIN
	PIPE BRANCH TAKE-OFF FROM BOTTOM
	PIPE BRANCH TAKE-OFF FROM TOP
	PIPE DROP
	PIPE RISE
	ROOF DRAIN/SANITARY VENT
ST	ROOF DRAIN ABOVE
V	VENT THRU ROOF
	HOSE BIB
	PRESSURE GAUGE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	THERMOMETER
	SQUARE FEET
CW	COLD WATER PIPING
SAN	SANITARY SEWER (ABOVE GROUND)
SAN	SANITARY SEWER (UNDERGROUND/UNDERFLOOR)
V	VENT PIPING
ST	STORM (UNDERGROUND/UNDERFLOOR)
PD	PUMP DISCHARGE PIPING
AFF	ABOVE FINISHED FLOOR
BFF	BELOW FINISHED FLOOR
CI	CAST IRON
CO	CLEANOUT
DS	DOWNSPOUT (BUILDING EXTERIOR)
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
FD	FLOOR DRAIN
FPC	FIRE PROTECTION CONTRACTOR
FLA	FULL LOAD AMPACITY
HB	HOSE BIB
INV	INVERT
IW	INDIRECT WASTE
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
PVC	POLYVINYL CHLORIDE
PSI	POUNDS PER SQUARE INCH
RLA	RATED LOAD AMPACITY
RPM	REVOLUTIONS PER MINUTE
SF	SQUARE FEET
TPV	TRAP PRIMER VALVE
VTR	VENT THRU ROOF
W.C.	WATER COLUMN

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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40 EAST AVENUE, ELYRIA, OH 44035
PLUMBING LEGEND, SYMBOLS, ABBREVIATIONS & SCHEDULES

DRAWN BY: KAF
CHECKED BY: KAF
RLB NO.: 8258.01
DRAWING NO. P0.1

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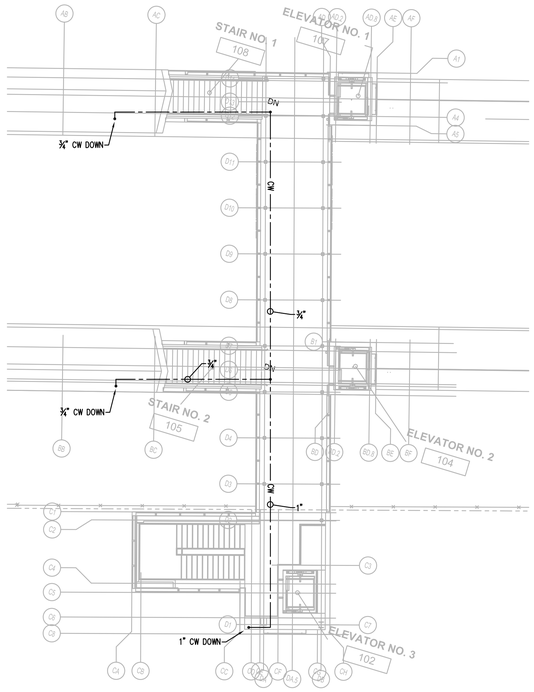
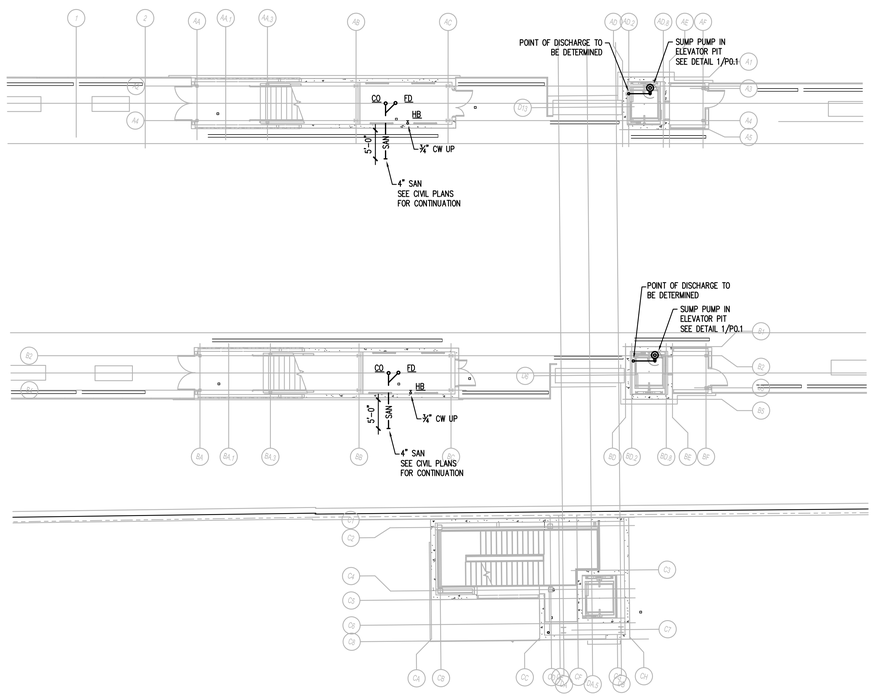


3 / M1.1 BRIDGE LEVEL PLUMBING PLAN
SCALE: 3/32" = 1'-0"
0 2' 4' 8' 16'
TRUE NORTH



2 / M1.1 PLATFORM LEVEL PLUMBING PLAN
SCALE: 3/32" = 1'-0"
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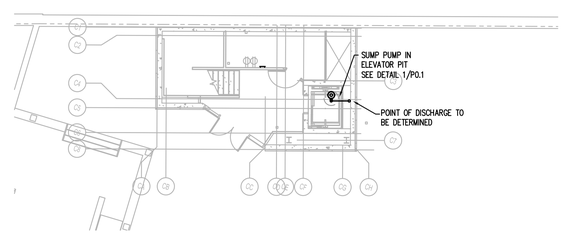
TRUE NORTH



1 / M1.1 GROUND LEVEL PLUMBING PLAN
SCALE: 3/32" = 1'-0"
0 2' 4' 8' 16'
TRUE NORTH

DATES AND REVISIONS	
No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
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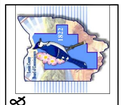

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

PLUMBING FLOOR PLANS

DRAWN BY:	KAF
CHECKED BY:	KAF
RLB NO.:	8258.01

DRAWING NO.
P1.1

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PACKAGED HEAT PUMP SCHEDULE

MARK	MANUF. MODEL NO.	NOMINAL TONS	SUPPLY CFM	MIN. O.A. CFM	ESP	RPM	BHP	MHP	VOLTAGE	GROSS COOLING CAPACITY				HEAT PUMP HEATING CAPACITY			ELECTRIC HEAT CAPACITY			COMPRESSORS			CONDENSER FANS			EFFICIENCY		MCA	MOCP	WEIGHT LBS.	REMARKS
										TOTAL MBH	SENSIBLE MBH	EAT (DB/WB)	AMBIENT	MBH	EAT (DB)	AMBIENT	KW	MBH	STAGES	QTY	RLA	LRA	QTY	HP	FLA	EER	COP				
HP 1	TRANE WSH240E3	20	8000	1200	1.50	854	6.25	7.5	208V/60/3ø	259.0	198.9	79.3/65.2	95°F	135.7	60	17°F	54.0	184.3	2	2	39.1	267	2	1 (EACH)	5.0 (EACH)	9.7	3.2	275	300	2300	

NOTES:
1. PROVIDE WITH PROGRAMMABLE 7-DAY ELECTRONIC ROOM THERMOSTAT.
2. PROVIDE WITH RETURN AIR SMOKE DETECTOR FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR.

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE - INDOOR UNITS

MARK	MANUF. MODEL NO.	TYPE	MIN. O.A. CFM	SA CFM (WET COIL) LOW-MED-HIGH	FAN POWER	GROSS COOLING CAPACITY				HEAT PUMP HEATING CAPACITY			SYSTEM EFFICIENCY		ELECTRICAL		COND. DRAIN	WEIGHT LBS.	REMARKS
						TOTAL MBH	SENSIBLE MBH	EAT (DB/WB)	AMBIENT	MBH	EAT (DB)	AMBIENT	SEER	HSPF(IV)	VOLTAGE	MCA			
FCU 1, FCU 2, FCU 3	MITSUBISHI "MR. SLIM" PKA-A18HA	WALL MOUNTED	–	290-335-380	30 WATTS	17.5	11.5	75/64	95°F	12.0	68	14°F	15.3	9.5	208V/60/1ø	1	5/8" OD	29	1

NOTES:
1. PROVIDE WITH HARD-WIRED UNIT CONTROLLER.

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE - OUTDOOR UNITS

MARK	MANUF. MODEL NO.	COMPRESSOR			CONDENSER FANS			ELECTRICAL				REFRIGERANT CONNECTIONS		WEIGHT LBS.	REMARKS
		QTY	RLA	LRA	QTY	WATTS	FLA	VOLTAGE	MCA	MOCP		LIQUID (OD)	GAS (OD)		
HP 1, HP 2, HP 3	MITSUBISHI "MR. SLIM" PUZ-A18NHA5	1	12	14	1	40	0.35	208V/60/3ø	13	20		3/8"	3/8"	165	

ELECTRIC HEATER SCHEDULE

MARK	TYPE	INLET/OUTLET ARRANGEMENT	MANUFACTURER & MODEL NO.	CFM	RPM	HP	HEATING CAPACITY		FLA	MOP	VOLTAGE	REMARKS
							KW	MBH				
CUH 1, CUH 2	HORIZONTAL CABINET UNIT HEATER	FRONT INLET FRONT OUTLET	Q-MARK CU-958	750 HIGH 600 LOW	1550 HIGH 1450 LOW	1/8	10.0	34.1	29.0	30 A	208V/60/3ø	2,3
CUH 3	VERTICAL CABINET UNIT HEATER	FRONT INLET FRONT OUTLET	Q-MARK CU-935	250 HIGH 200 LOW	1550 HIGH 1450 LOW	1/8	5.0	17.1	15.0	20 A	208V/60/3ø	1,2,3
CUH 4, CUH 5	VERTICAL CABINET UNIT HEATER	BOTTOM INLET FRONT OUTLET	Q-MARK CU-945	500 HIGH 400 LOW	1550 HIGH 1450 LOW	1/8	10.0	34.1	29.0	30 A	208V/60/3ø	2,3

1. FURNISH WITH RECESS TRIM KIT.
2. DEAD FRONT DISCONNECT SWITCH
3. SINGLE STAGE BUILT-IN THERMOSTAT.

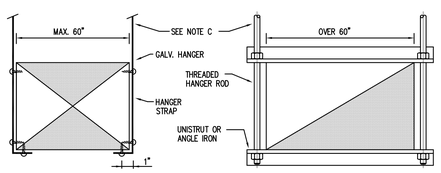
AIR DISTRIBUTION SCHEDULE

TAG	MANUFACTURER	MODEL	NECK SIZE	CFM	NC LEVEL	DIFFUSER FACE	CEILING TYPE	REMARKS
A	PRICE	SPD	AS NOTED	AS NOTED	30 MAX	24x24	SURFACE MOUNT	2
S.R.	PRICE	520D	AS NOTED	AS NOTED	30 MAX	–	SURFACE MOUNT	1,2
R.G.	PRICE	95 SERIES	22x22	AS NOTED	30 MAX	24x24	SURFACE MOUNT	2

REMARKS:
1. OPPOSED BLADE DAMPER.
2. ACCEPTABLE ALTERNATE MANUFACTURERS: TITUS, KRUEGER

GENERAL HVAC NOTES:

1. THE HVAC SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA, OHIO AND INTERNATIONAL CODES AND ALL LOCAL CODES AND ORDINANCES.
2. DRAWINGS ARE DIAGRAMMATIC. INDICATED POSITIONS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE, EXACT EQUIPMENT LOCATIONS AND DUCTWORK AND PIPING ROUTING SHALL BE SUBJECT TO BUILDING CONSTRUCTION AND INTERFERENCES WITH OTHER TRADES.
3. ALL CUTTING AND PATCHING, OF WALLS AND FLOORS, SHALL BE PERFORMED BY THE CONTRACTOR PERFORMING THE WORK REQUIRING THE PENETRATION. ALL PATCHING MATERIALS SHALL MATCH THE NEW CONDITIONS. ALL FINISH PAINTING TO BE BY THE GENERAL CONTRACTOR.
4. ALL FIRE-STOPPING SHALL BE PERFORMED BY THE CONTRACTOR PERFORMING THE WORK REQUIRING THE PENETRATION. REFER TO THE DETAILS PERTAINING TO TYPE AND METHOD REQUIRED.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING DIFFUSERS AND GRILLES.
6. OUTSIDE AIR INTAKES MUST BE LOCATED AT LEAST 10 FEET FROM NEW AND EXISTING EXHAUST AIR TERMINATIONS, PLUMBING VENTS OR APPLIANCE FLUES. OUTSIDE AIR INTAKES MUST BE LOCATED AT LEAST 6 FEET ABOVE GRADE AND/OR 3 FEET ABOVE ROOF.
7. ALL EQUIPMENT, DAMPERS AND VALVES MUST BE ACCESSIBLE. IF LOCATED ABOVE DRYWALL CEILING OR BEHIND FINISHED WALLS, PROVIDE ACCESS DOOR. COORDINATE ALL ACCESS DOOR LOCATIONS WITH ARCHITECT.
8. PROVIDE DUCTWORK ACCESS DOORS FOR ALL AUTOMATIC DAMPERS. IMPORTANT THAT ALL DUCTWORK ACCESS DOORS ARE ACCESSIBLE. IF LOCATED ABOVE DRYWALL CEILING OR BEHIND FINISHED WALLS, PROVIDE ACCESS DOOR. COORDINATE ALL ACCESS DOOR LOCATIONS WITH ARCHITECT.
9. INSTALL AND PROPERLY SUPPORT FLEXIBLE DUCTWORK TO AVOID ANY AIRFLOW RESTRICTIONS, NO KINKS OR CRIMPS ARE PERMITTED.
10. PROVIDE VOLUME DAMPER HANDLE EXTENSIONS FOR VOLUME DAMPERS INSTALLED IN INSULATED DUCTWORK.
11. DO NOT SUPPORT DUCTWORK OR PIPING FROM ANOTHER DUCT, PIPE OR CONDUIT. DO NOT SUPPORT ANY ITEM FROM METAL ROOF DECK.
12. DURING CONSTRUCTION, PROVIDE COVERS FOR ALL SUPPLY, RETURN AND EXHAUST DUCTWORK OPENINGS TO PREVENT CONSTRUCTION DUST FROM ENTERING THE DUCTWORK. IF DUST COLLECTS INSIDE DUCTWORK, DUCTWORK MUST BE CLEANED PRIOR TO PROJECT TURNOVER.
13. PROVIDE TRAPPED AIR CONDITIONING CONDENSATE DRAIN SYSTEM FOR ALL DX COOLING COILS. SIZE TRAPS PER UNIT MANUFACTURER'S RECOMMENDATIONS. PIPE ALL COOLING COIL CONDENSATE DRAIN PIPING TO NEAREST FLOOR DRAIN OR MOP BASIN PITCHED PER OHIO MECHANICAL CODE. PROVIDE AIR GAP AT TERMINATION.



NOTES:
1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ FT, DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.
2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. DUCT SIZEXS THAT EXCEED A 2:1 RATIO OF WIDTH VERSES DEPTH SHALL BE REINFORCED PER SMACNA.
4. SUPPORTS SHALL BE SPACED AND SIZED AS PER SMACNA.

2 / M0.1 DUCT HANGER SUPPORT (RECTANGULAR)
SCALE: NO SCALE

HVAC SYMBOLS AND ABBREVIATION

SYMBOL	DESCRIPTION
	TURNING VANES
	VOLUME DAMPER
F	FIRE DAMPER
S	SMOKE DAMPER
	SMOKE DETECTOR (BY EC)
	MOTOR OPERATED DAMPER
	SUPPLY DUCT
	RETURN OR EXHAUST DUCT
	FLEXIBLE CONNECTION
	ACOUSTICALLY LINED DUCTWORK
	PIPE DROP
	PIPE RISE
CD	A/C CONDENSATE DRAIN PIPING
OD	CONDENSATE AUXILIARY OVERFLOW DRAIN PIPING
PD	PUMP DISCHARGE PIPING
RL	REFRIGERANT LIQUID PIPING
RS	REFRIGERANT SUCTION PIPING
T	THERMOSTAT
UCD	UNDERCUT DOOR
	AIRFLOW DIRECTION
(L)	INTERNALLY LINED DUCT
AFF	ABOVE FINISHED FLOOR
CA	COMBUSTION AIR
CU	CONDENSING UNIT
DWI	DOUBLE-WALL INSULATED (DUCT)
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECH	ELECTRIC CEILING HEATER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
EUH	ELECTRIC UNIT HEATER
EW	EXTERNALLY WRAPPED (DUCT)
EWH	ELECTRIC WALL HEATER
GRV	GRAVITY ROOF VENTILATOR
IRH	INFRARED RADIANT HEATER
IW	INDIRECT WASTE
LAT	LEAVING AIR TEMPERATURE
MA	MIXED AIR
MC	MECHANICAL CONTRACTOR
MOD	MOTOR OPERATED DAMPER
MOCP	MAXIMUM OVER CURRENT PROTECTION
MCA	MINIMUM CIRCUIT AMPACITY
OA	OUTSIDE AIR
PRV	POWER ROOF VENTILATOR
RA	RETURN AIR
RG	RETURN GRILLE
SA	SUPPLY AIR
SR	SUPPLY REGISTER
TG	TRANSFER GRILLE

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
HVAC LEGEND, SYMBOLS, ABBREVIATIONS & SCHEDULES

DRAWN BY: –
CHECKED BY: KAF
RLB NO.: 8258.01
DRAWING NO. M0.1

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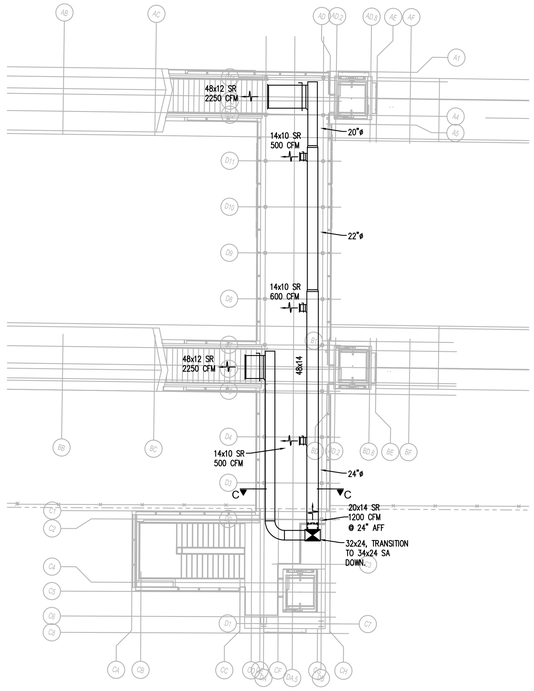
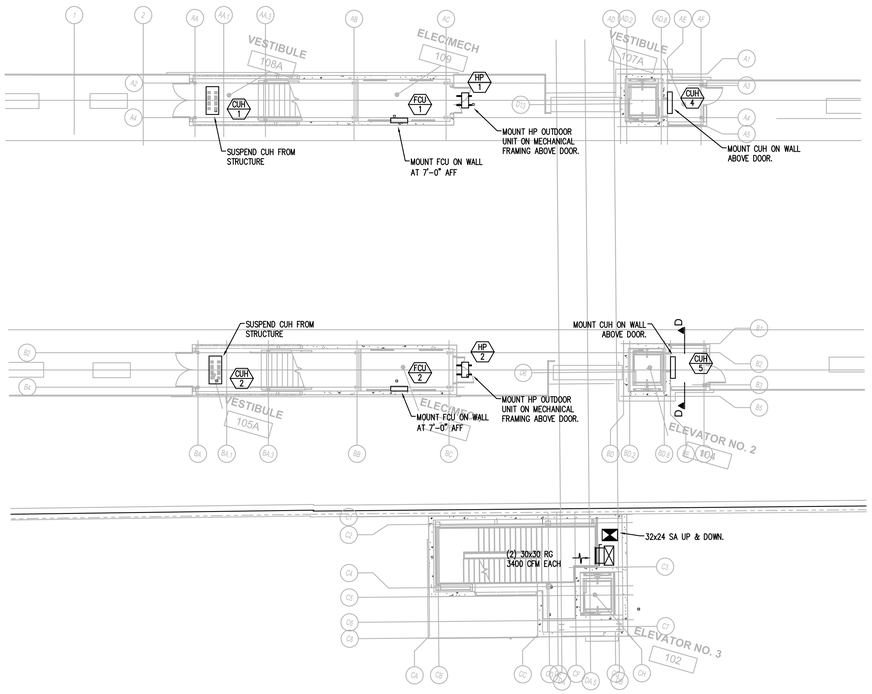
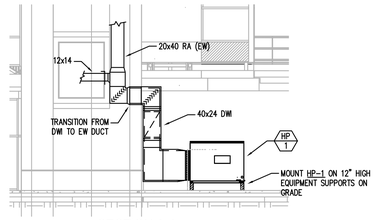


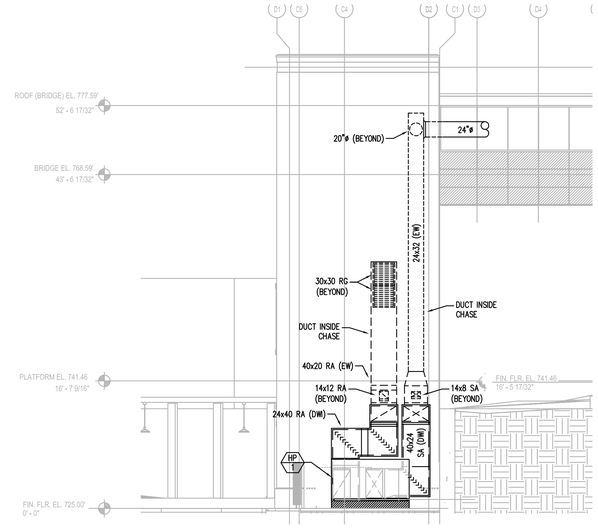
3 M1.1 BRIDGE LEVEL HVAC PLAN
SCALE: 3/32" = 1'-0"
0 2' 4' 8' 16'
TRUE NORTH



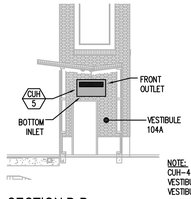
2 M1.1 PLATFORM LEVEL HVAC PLAN
SCALE: 3/32" = 1'-0"
0 2' 4' 8' 16'
TRUE NORTH



4 M1.1 SECTION A-A
SCALE: 1/8" = 1'-0"
0 1' 2' 4' 8'

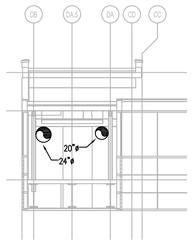


5 M1.1 SECTION B-B
SCALE: 1/8" = 1'-0"
0 1' 2' 4' 8'

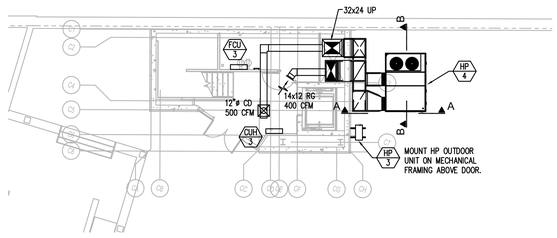


NOTE:
CUH-4 INSTALLATION IS SIMILAR.
VESTIBULE 107A IS A MIRROR IMAGE OF
VESTIBULE 104A.

7 M1.1 SECTION D-D
SCALE: 1/8" = 1'-0"
0 1' 2' 4' 8'



6 M1.1 SECTION C-C
SCALE: 1/8" = 1'-0"
0 1' 2' 4' 8'



1 M1.1 GROUND LEVEL HVAC PLAN
SCALE: 3/32" = 1'-0"
0 2' 4' 8' 16'
TRUE NORTH

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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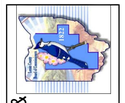

LORAIN COUNTY PLATFORMS &
PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

HVAC FLOOR PLANS

DRAWN BY: KAF
CHECKED BY: KAF
RLB NO.: 8258.01

DRAWING NO.
M1.1

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GENERAL

1. COORDINATE WITH ALL DRAWINGS FOR INFORMATION RELATED TO STRUCTURAL WORK. ANY CHANGES TO THE BUILDING STRUCTURAL SYSTEM SHALL BE REDESIGNED ONLY BYRICHARD L. BOWEN + ASSOCIATES, INC. ALL CHANGES MUST HAVE PRIOR AUTHORIZATION OF THE OWNER AND RICHARD L. BOWEN + ASSOCIATES, INC.
2. ALL CONTRACTORS SHALL COORDINATE WITH ALL DRAWINGS WITHIN THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS RELATED TO EXISTING CONSTRUCTION, EXISTING SERVICES, AND THE SITE BEFORE BEGINNING WORK.
4. BUILDING CODE: 2011 OHIO BUILDING CODE (OBC)
5. DESIGN LOADS:

FLOOR LIVE LOAD.................................... 100 PSF
ROOF DEAD LOAD.................................... 20 PSF
ROOF LIVE LOAD.................................... 30 PSF

ROOF SNOW LOAD:
GROUND SNOW LOAD .... Pg=20.0 PSF
FLAT ROOF SNOW LOAD .... Pf=22.0 PSF

WIND DESIGN DATA:
WIND LOADS:
BASIC WIND SPEED (3 SECOND GUST) .... 90 MPH
IMPORTANCE FACTOR: Iw 1.0
OCCUPANCY CATEGORY .... CATEGORY II
WIND EXPOSURE CATEGORY .... B
INTERNATIONAL PRESSURE COEFFICIENT, GCpi .... ±0.18

M.W.F.R.S. (h≤60)

HORIZ. LOADS (WALLS)		VERT. LOADS (ROOF)	
INTERIOR ZONE	END ZONE	INTERIOR ZONE	END ZONE
10.4 PSF	15.6 PSF	-13.1 PSF	-18.8 PSF

HORIZ. LOADS (PARAPET)

WINDWARD	LEEWARD
27.4 PSF	-16.9 PSF

COMPONENT AND CLADDING (h<60)

ROOF

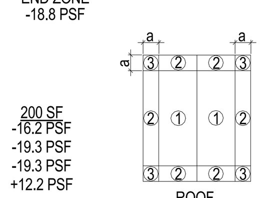
WIND AREA:	10 SF	20 SF	50 SF	100 SF	200 SF
NEG. ZONE 1	-17.8 PSF	-17.3 PSF	-16.7 PSF	-16.2 PSF	-16.2 PSF
NEG. ZONE 2	-29.8 PSF	-26.6 PSF	-22.5 PSF	-19.3 PSF	-19.3 PSF
NEG. ZONE 3	-44.9 PSF	-37.2 PSF	-27.0 PSF	-19.3 PSF	-19.3 PSF
POS. ALL ZONES	+12.2 PSF	+12.2 PSF	+12.2 PSF	+12.2 PSF	+12.2 PSF

WALLS

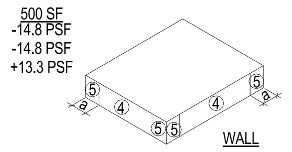
WIND AREA:	10 SF	20 SF	50 SF	100 SF	500 SF
NEG. ZONE 4	-19.3 PSF	-18.4 PSF	-17.5 PSF	-16.6 PSF	-14.8 PSF
NEG. ZONE 5	-23.8 PSF	-22.2 PSF	-20.2 PSF	-18.4 PSF	-14.8 PSF
POS. ZONES 4&5	+17.8 PSF	+17.0 PSF	+15.9 PSF	+15.1 PSF	+13.3 PSF

PARAPET

WIND AREA:	10 SF	100 SF	500 SF
POS. INTERIOR ZONE	+59 PSF	+49 PSF	+42 PSF
POS. CORNER ZONE	+ 75 PSF	+64 PSF	+54 PSF
NEG. INTERIOR ZONE	-38 PSF	-32 PSF	-27 PSF
NEG. CORNER ZONE	-43 PSF	-35 PSF	-27 PSF



ROOF



WALL

PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD & AWAY FROM BUILDING SURFACES.
COMPONENT AND CLADDING LOADS MAY BE INTERPOLATED BETWEEN THE WIND AREAS.
SEE ABOVE NOTES FOR NET UPLIFT LOADS ON JOIST AND JOIST GIRDERS.
(a) = 10'-3" - SEE DIAGRAMS ABOVE.

SEISMIC DESIGN DATA:
SEISMIC IMPORTANCE FACTOR .... Ie=1.0
OCCUPANCY CATEGORY.................................... II
Ss 0.164
S1 .... 0.051
SITE CLASS .... D
SPECTRAL RESPONSE COEFFICIENTS .... Sds=0.175 Sd=0.081
SEISMIC DESIGN CATEGORY .... B
BASIC SEISMIC-FORCE-RESISTING SYSTEM ....STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE

DESIGN BASE SHEAR .... V=X.X KIPS
SEISMIC RESPONSE COEFFICIENT .... Cs=0.058
RESPONSE MODIFICATION FACTOR .... R=3.0
ANALYIS PROCEDURE .... EQUIVALENT LATERAL FORCE

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND THE FINAL CLEARANCE OF ANY TEMPORARY NEEDLING, UNDERPINNING, SHORING, OR BRACING OF EXISTING STRUCTURES.
7. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT USED IN CONSTRUCTING THIS PROJECT. SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. IF THE FABRICATOR HAS BEEN AUTHORIZED TO USE THE ARCHITECT AND ENGINEER'S DRAWINGS AS ERECTION DRAWINGS, THE FABRICATOR MUST REMOVE ALL TITLE BLOCKS, PROFESSIONAL SEALS AND ANY OTHER REFERENCES TO THE ARCHITECT AND ENGINEER FROM THAT ERECTION DRAWING. THE FABRICATOR'S NAME AND TITLE SHALL BE PLACED ON THE ERECTION DRAWINGS.

FOUNDATIONS

1. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SURVEY AND GEOTECHNICAL ENGINEERING REPORT BEFORE BEGINNING CONSTRUCTION.
2. FOUNDATION DESIGN IS BASED ON A GEOTECHNICAL REPORT PREPARED BY SOLAR TESTING LABORATORIES, INC. DATED NOVEMBER 4, 2015.
3. DESIGN SOIL BEARING PRESSURE IS 3000 PSF AT PARKING LOT LEVEL AND 1500 PSF AT RAILROAD LEVEL.
4. DRILLED SHAFTS SHALL BEAR A MINIMUM 2 FEET IN COMPETENT SANDSTONE (FROM APPROX. 24' TO 29' BELOW EXISTING GRADE). DRILLED SHAFTS ARE DESIGNED FOR END BEARING CAPACITY OF 35.0 KSF. SIDE FRICTION NEGLECTED DUE TO UNKNOWN EXISTING FILL.
5. SOIL SUITABILITY AND BEARING CAPACITY SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
6. DESIGN PRESSURES FOR WALLS BELOW GRADE:
   SOIL WEIGHT.................................... 100 PCF
   AT REST.................................... 53 PSF/FT
   AT ACTIVE.................................... 36 PSF/FT
7. NOTIFY THE ARCHITECT AS SOON AS POSSIBLE OF ANY UNUSUAL SOIL CONDITIONS IN WITH VARIANCE THE TEST BORINGS.
8. SET FOUNDATIONS AT ELEVATIONS SHOWN, OR ON FIRM MATERIAL OF DESIGN BEARING CAPACITY, WHICHEVER IS LOWER. THE GEOTECHNICAL ENGINEER SHALL VERIFY THAT EACH FOOTING PLACED IS BEARING ON DESIGN MATERIAL.
   A. ALL SOIL SURROUNDING AND UNDER ALL FOOTINGS, FLOOR SLABS, ETC. SHALL BE PROTECTED FROM FREEZING AND FROST ACTION DURING CONSTRUCTION.
   B. WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SEWERS, DRAINS, CONDUITS, UNDERFLOOR PIPES, ETC., BOTTOM OF ALL FOOTINGS SHALL BE AT OR BELOW INVERT ELEVATIONS OF ELEMENTS NOTED HEREIN.
9. STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'-0", UNLESS NOTED OTHERWISE.
10. BACKFILLING AGAINST FOUNDATION OR PIT WALLS SHALL NOT BE PERMITTED UNTIL THE SUPPORTING FLOORS ARE IN PLACE AND ARE ABLE TO RESIST THE IMPOSED LATERAL FORCES. EXCEPT FOR CANTILEVER RETAINING WALLS OR UNLESS NOTED OTHERWISE ON DRAWINGS, THE WALLS ARE SUPPORTED BY THE FLOOR ABOVE AND BELOW. PROPER TEMPORARY BRACING MAY BE USED IN LIEU OF THE FLOOR SUPPORT BASED UPON THE DESIGN BY A PROFESSIONAL ENGINEER. THE DESIGN OF TEMPORARY BRACING IS THE TOTAL RESPONSIBILITY OF THE CONTRACTOR.

CAST-IN-PLACE CONCRETE

1. CAST IN PLACE CONCRETE SHALL CONFORM TO THE LATEST ACI 318 & 350 CODE, STANDARDS AND ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE", EXCEPT AS MODIFIED HEREIN.
2. SUBMIT LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND PROPOSED MIX DESIGN TESTS AND DATA.
3. MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE IN 28 DAYS SHALL BE:
   3000 PSI - COLUMN AND WALL SPREAD FOOTINGS: MINIMUM CEMENT CONTENT OF 470 LB/CUBIC YARD; WC .50
   3500 PSI - INTERIOR SLAB: MINIMUM CEMENT CONTENT OF 517 LB/CUBIC YARD; WC .44
   4000 PSI - ALL OTHER CONCRETE MINIMUM CEMENT CONTENT OF 564 LB/CUBIC YARD; WC .44
4. REINFORCING BARS: A615 GRADE 60 KSI YIELD STRENGTH, UNLESS NOTED OTHERWISE. WELDING OR TACK WELDING A615 BARS SHALL NOT BE PERMITTED.
5. REINFORCING BARS FOR WELDED APPLICATIONS SHALL CONFORM WITH A706, 60 KSI YIELD STRENGTH.
6. WELDED WIRE FABRIC: ASTM A185, FLAT SHEET. ROLLED WWF SHALL NOT BE PERMITTED.
7. CALCIUM CHLORIDE SHALL NOT BE PERMITTED NOR SHALL ANY ADMIXTURE CONTAINING CALCIUM CHLORIDE BE PERMITTED.
8. ALL CONCRETE SHALL CONTAIN A WATER REDUCING ADMIXTURE CONFORMING TO ASTM C494, TYPE A, F OR G.
9. ALL CONCRETE EXPOSED TO THE WEATHER OR IN A LOCATION VULNERABLE TO DEICERS SHALL CONTAIN AN AIR-ENTRAINED ADMIXTURE CONFORMING TO ASTM C260. THE AMOUNT OF ENTRAINED AIR SHALL BE 6% ± 1%.
10. CONCRETE SHALL BE DISCHARGED AT THE SITE WITHIN 1 1/2 HOURS AFTER WATER HAS BEEN ADDED TO THE CEMENT AND AGGREGATES. ADDITION OF WATER TO THE MIX AT THE PROJECT SITE WILL NOT BE PERMITTED. ALL WATER MUST BE ADDED AT THE BATCH PLANT. SLUMP MAY BE ADJUSTED ONLY THROUGH THE USE OF ADDITIONAL WATER REDUCING ADMIXTURE OR HIGH RANGE WATER REDUCING ADMIXTURE.
11. PRECAST CONCRETE CUBES OR SAND PLATE CHAIRS SHALL BE USED FOR THE SUPPORT OF REINFORCING ON GRADE. CONCRETE BLOCK OR CLAY MASONRY BRICK ARE NOT PERMITTED.
12. CONSTRUCTION JOINTS SHALL BE SUBJECT TO REVIEW BY RICHARD L. BOWEN + ASSOCIATES, INC., AND SHALL BE LOCATED AND DETAILED AS SPECIFIED ON THE DRAWINGS OR AS NOTED.
    A. FRAMED SLABS AND WALLS - LOCATE AT MIDSPAN. PROVIDE ONE CONTINUOUS HORIZONTAL SHEAR KEY 1 1/2" DEEP x 1/3 THE DEPTH OF THE SLAB OR WALL.
    B. BEAMS - LOCATE AT MIDSPAN. PROVIDE TWO HORIZONTAL SHEAR KEYS 1 1/2" DEEP x 1/6 THE DEPTH OF THE MEMBER AT EACH MEMBER.
13. ALL WELDED WIRE FABRIC SHALL BE CHAIRED TO ITS PROPER HEIGHT AND MAINTAINED AT THE PROPER HEIGHT THROUGHOUT THE CONCRETE PLACING OPERATION. LIFTING OF WELDED WIRE FABRIC WITH A HOOK DURING CONCRETE PLACEMENT SHALL NOT BE PERMITTED.
14. OPENINGS SHALL NOT BE PROVIDED IN FRAMED SLABS, BEAMS, COLUMNS, OR WALLS UNLESS SHOWN ON THE STRUCTURAL DRAWINGS, OR APPROVED IN WRITING PRIOR TO PLACING CONCRETE. CUTTING HOLES THROUGH BEAMS OR COLUMNS SHALL NOT BE PERMITTED. CUTTING HOLES LARGER THAN 10" SQUARE OR ROUND THROUGH SLABS SHALL NOT BE PERMITTED.
15. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", UNLESS NOTED OTHERWISE.
16. PROVIDE CONTROL JOINTS IN ALL SLABS ON GRADE AS SHOWN ON DRAWINGS.
17. TOP LAYER OF REINFORCING STEEL IN BEAMS, SLABS, WALLS AND FOOTINGS SHALL BE CONSIDERED TOP BARS REGARDLESS OF THICKNESS OF CONCRETE BELOW THE BARS.
18. ALL WALL FOOTING REINFORCING SHALL RUN CONTINUOUS THROUGH COLUMN FOOTINGS.
19. BEND ALL HORIZONTAL WALL AND BEAM BARS AROUND ADJACENT CORNERS AND LAP ACCORDING TO TABLE #1.
20. BONDBREAKER MATERIAL SHALL BE 15 POUND FELT PAPER.
21. DETERMINE SIZE AND LOCATION OF MECHANICAL EQUIPMENT AND MAKE PROVISIONS FOR BOLTS, SLEEVES, PADS, ETC., IN ACCORDANCE WITH THE MANUFACTURER'S CERTIFIED DRAWINGS. THIS WORK SHALL BE COORDINATED WITH THE TRADES INVOLVED PRIOR TO ANY CONCRETE PLACEMENT.
22. PROVIDE 3" MINIMUM CONCRETE COVER FOR ALL STRUCTURAL STEEL BELOW GRADE.

24. REINFORCING BAR LAP SPLICES AND ANCHORAGE LENGTH SHALL CONFORM WITH "MINIMUM LAP SPLICE AND ANCHORAGE DIMENSION TABLE #1" UNLESS NOTED OTHERWISE ON THE DRAWINGS.

MINIMUM LAP SPLICE AND ANCHORAGE DIMENSION TABLE #1
Fy = GRADE 60, NON-COATED BARS

3000 PSI CONCRETE

BAR SIZE	TOP BARS LAP	ANCHORAGE	BAR SIZE	OTHER BARS LAP	ANCHORAGE
#3	21"	16"	#3	16"	13"
#4	29"	22"	#4	22"	17"
#5	42"	32"	#5	33"	26"
#6	56"	43"	#6	43"	34"
#7	91"	69"	#7	70"	53"
#8	112"	87"	#8	87"	66"
#9	136"	104"	#9	104"	80"

4000 PSI CONCRETE

BAR SIZE	TOP BARS LAP	ANCHORAGE	BAR SIZE	OTHER BARS LAP	ANCHORAGE
#3	18"	14"	#3	16"	12"
#4	25"	19"	#4	20"	15"
#5	37"	29"	#5	29"	21"
#6	48"	38"	#6	38"	29"
#7	79"	60"	#7	60"	47"
#8	96"	75"	#8	75"	57"
#9	117"	91"	#9	91"	69"

1. WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE SMALLER BAR OR THE ANCHORAGE DIMENSION OF THE LARGER BAR. USE WHICHEVER DIMENSIONIS LARGER.

TYPICAL REINFORCING BAR CLEARANCE TABLE.

LOCATION CLEARANCE

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH....................................3"
BEAMS (LONGITUDINAL REINFORCING PARALLEL TO SPAN OF SLAB)....................................3"
BEAMS (LONGITUDINAL REINFORCING PERPENDICULAR TO SPAN OF SLAB)....................................2"
BEAM STIRRUPS....................................1 1/2"
COLUMNS AND PIERS (VERTICAL REINFORCING)....................................2"
COLUMN TIES....................................1 1/2"
WALLS INTERIOR FACE NOT EXPOSED TO SLUDGE, LIQUIDS, ETC. ....1"
WALLS INTERIOR FACE EXPOSED TO SLUDGE, LIQUIDS, ETC. ....2"
WALLS EXTERIOR FACE #5 AND SMALLER....................................1 1/2"
WALLS EXTERIOR FACE #6 AND LARGER....................................2"
SLABS (INTERIOR INCLUDING STAIRS) NOT EXPOSED TO SLUDGE LIQUIDS, ETC....................................1"
SLABS INTERIOR EXPOSED TO SLUDGE, LIQUIDS, ETC....................................2"
SLABS (EXTERIOR INCLUDING STAIRS)....................................1 1/2"
STRUCTURAL SLABS ON GRADE (BOTTOM REINFORCING)....................................2"
SLABS ON GRADE (WELDED WIRE FABRIC)....................................1/3 SLAB THICKNESS FROM TOP OF SLAB

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC SPECIFICATIONS (ASD) AND CODES OF STANDARD PRACTICE, AWS D1.1 (STRUCTURAL WELDING CODE - STEEL), AND THE THE CONTRACT DOCUMENTS.
2. THE LOCATION, SIZE AND CONDITION OF EXISTING STRUCTURES, EQUIPMENT, UTILITIES, SERVICES AND OTHER RELEVANT ENGINEERING FEATURES SHALL BE VERIFIED PRIOR TO FABRICATION OR ERECTION TO DETERMINE CLEARANCES, DIMENSIONS AND FABRICATION OR ERECTION PROCEDURES. ADEQUATE BRACING AND TEMPORARY SUPPORTS FOR THE STABILITY OF ALL EXISTING RELEVANT FEATURES SHALL BE PROVIDED BY THE CONTRACTOR.
3. STRUCTURAL STEEL: ASTM A36; SHAPES (EXCEPT WIDE FLANGE), PLATES, BARS, AND ROD
   ASTM A992, GRADE 50, WIDE FLANGE SHAPES
   ASTM A500, GRADE B, STEEL TUBING
   ASTM A53, TYPE E OR S, GRADE B, STEEL PIPE.
4. BOLTS: 3/4" DIAMETER MINIMUM, UNLESS NOTED OTHERWISE
   ASTM A325, TYPE 1, FOR ALL BEAM AND COLUMN CONNECTIONS. CONNECTIONS DESIGNED AS BEARING TYPE, WITH THREADS INCLUDED IN THE SHEAR PLANE.
   ASTM F1554 GRADE 36 FOR ALL ANCHOR RODS.
5. WELDING SHALL CONFORM WITH AWS E-70 ELECTRODES, MINIMUM.
6. PROVIDE ANGLE WALL ANCHORS, IN ACCORDANCE WITH PART 4, AISC MANUAL OF STEEL CONSTRUCTION, FOR BEAMS BEARING ON MASONRY WALLS. ANGLE ANCHORS SHALL BE WELDED TO BEAMS.
7. STEEL BEAMS SHALL BEAR A MINIMUM OF 8" ON MASONRY, UNLESS NOTED OTHERWISE.
8. CONNECTIONS: WELD OR BOLT CONNECTIONS, AS INDICATED.
   A. CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL CONFORM TO THE REQUIREMENTS OF THE AISC SPECIFICATIONS.
   B. WHERE THE REACTION VALUES OF BEAMS AND GIRDERS ARE NOT SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE END REACTION DERIVED FROM THE ALLOWABLE UNIFORM LOAD TABLE IN PART 2, NINTH EDITION, OF THE AISC ASD MANUAL OF STEEL CONSTRUCTION FOR THE GIVEN MEMBER SIZE, SPAN, AND YIELD STRENGTH.
   C. THE MINIMUM LENGTH OF CONNECTION ANGLES SHALL BE EQUAL TO ONE-HALF THE DEPTH OF THE MEMBER TO BE SUPPORTED
   D. ONE-SIDED CONNECTIONS WILL NOT BE PERMITTED, UNLESS SPECIFICALLY DETAILED ON THE DRAWINGS.
   E. THE MINIMUM NUMBER OF BOLTS IN BOLTED CONNECTIONS SHALL BE 2.
   F. DO NOT FINAL WELD OR BOLT UNTIL MEMBERS ARE IN PROPER ALIGNMENT.
9. ANY MEMBER LOADS INDICATED ON THE DRAWINGS ARE SERVICE LOADS. CONNECTIONS SHALL BE DESIGNED AND DETAILED USING AISC ALLOWABLE STRESS DESIGN. A 1/3 STRESS INCREASE MAY NOT BE USED ON ANY MEMBER LOADS INDICATED.
10. MEMBER LOADS INDICATED +/- ARE MEMBERS THAT WILL ACT WITH EITHER TENSION OR COMPRESSION LOADS. DOUBLE ANGLES WITH LOADS INDICATED +/- SHALL BE DETAILED WITH INTERMITTENT FILLERS (STITCH FASTENERS OR WELDED FILLS) PER AISC SPECIFICATIONS.
11. NON-METALLIC, NON-SHRINK, NON-STAINING GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES SHALL CONSIST OF A PREMIXED PRODUCT COMPLYING WITH ALL REQUIREMENTS OF CRD-C621, ASTM C827, AND C109.

METAL ROOF AND FLOOR DECK

1. UNLESS OTHERWISE NOTED, FABRICATE AND FASTEN ALL DECK UNITS IN ACCORDANCE WITH THE CURRENT SPECIFICATION OF THE STEEL DECK INSTITUTE.
2. NO MECHANICAL, ELECTRICAL, OR OTHER EQUIPMENT SHALL BE SUSPENDED FROM THE METAL DECK.
3. ALL FLOOR DECK SHALL BE GALVANIZED, SEE SPECIFICATIONS. ALL ROOF DECK SHALL BE PAINTED, SEE SPECIFICATIONS.
4. DECK SHALL HAVE A MINIMUM YIELD STRESS OF 33 KSI.
5. MATERIAL FOR ROOF AND FLOOR DECK SHALL CONFORM WITH ASTM A611 GRADES C, D, OR E.
6. ROOF AND FLOOR DECK SHALL BE AS INDICATED ON THE DRAWINGS.
7. CLEAN AND TOUCH UP ALL WELDS WITH ZINC RICH PRIMER.
8. FASTENING FOR ROOF DECK SHALL BE PER THE ROOF DECK PLAN.
9. MINIMUM FASTENING FOR FLOOR DECK SHALL BE AS RECOMMENDED BY THE MANUFACTURER, UNLESS A MORE STRINGENT REQUIREMENT IS SHOWN ON THE DRAWINGS.

LIGHT GAUGE METAL FRAMING

1. ALL LIGHT GAGE METAL FRAMING AND CONNECTIONS SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS" AND NAAMM ML/SFA 540, "LIGHTWEIGHT STEEL FRAMING SYSTEMS MANUAL."
2. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION RESISTANT STEEL, ASTM A653-94, WITH A YIELD STRENGTH OF 33 KSI FOR MEMBERS 18 GAGE AND LIGHTER, AND 50 KSI FOR MEMBERS 16 GAGE AND HEAVIER.
3. ALL LIGHT GAGE MEMBERS AND ACCESSORIES SHALL BE ZINC COATED MEETING ASTM A924.
4. ALL CONNECTIONS ARE TO BE SCREWED WITH A MINIMUM OF (4) #12-14 CADMIUM PLATED SCREWS OR EQUIVALENT WELDS.
5. DIAGONAL STRAP BRACING SHALL BE CONNECTED TO ALL CROSSING MEMBERS.
6. WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.3-89, STRUCTURAL WELDING CODE, SHEET STEEL.
7. SEQUENCING OF WELDS SHALL BE SUCH TO AVOID DISTORTION OF MEMBERS. REPLACE ALL MEMBERS WHICH ARE BURNED THROUGH OR DISTORTED DURING WELDING OPERATIONS.
8. PROVIDE CLIP ANGLES OR OTHER ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
9. CLEAN AND TOUCH UP ALL WELDS WITH ZINC RICH PRIMER.

DEFERRED STRUCTURAL SUBMITTALS

1. DRAWINGS AND CALCULATIONS FOR DEFERRED SUBMITTALS SHALL BE STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF OHIO AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO SUBMISSION TO THE BUILDING DEPARTMENT FOR REVIEW. DEFERRED SUBMITTALS SHALL INCLUDE THE FOLLOWING STRUCTURAL COMPONENTS:
   -LIGHT GAUGE METAL FRAMING

SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS IN ACCORDANCE WITH THE BUILDING CODE SHALL BE PROVIDED FOR THE FOLLOWING:
   -CONCRETE
   -BOLTS IN CONCRETE
   -REINFORCING STEEL
   -STRUCTURAL WELDING
   -HIGH STRENGTH BOLTING
   -STRUCTURAL MASONRY
   -EXPANSION AND EPOXY ANCHORS
   -EXCAVATION AND FILLING

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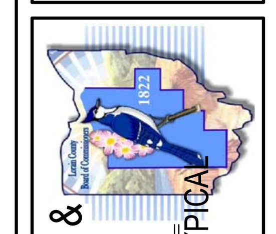

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035
SHEET INDEX, GENERAL NOTES AND TYPICAL DETAILS

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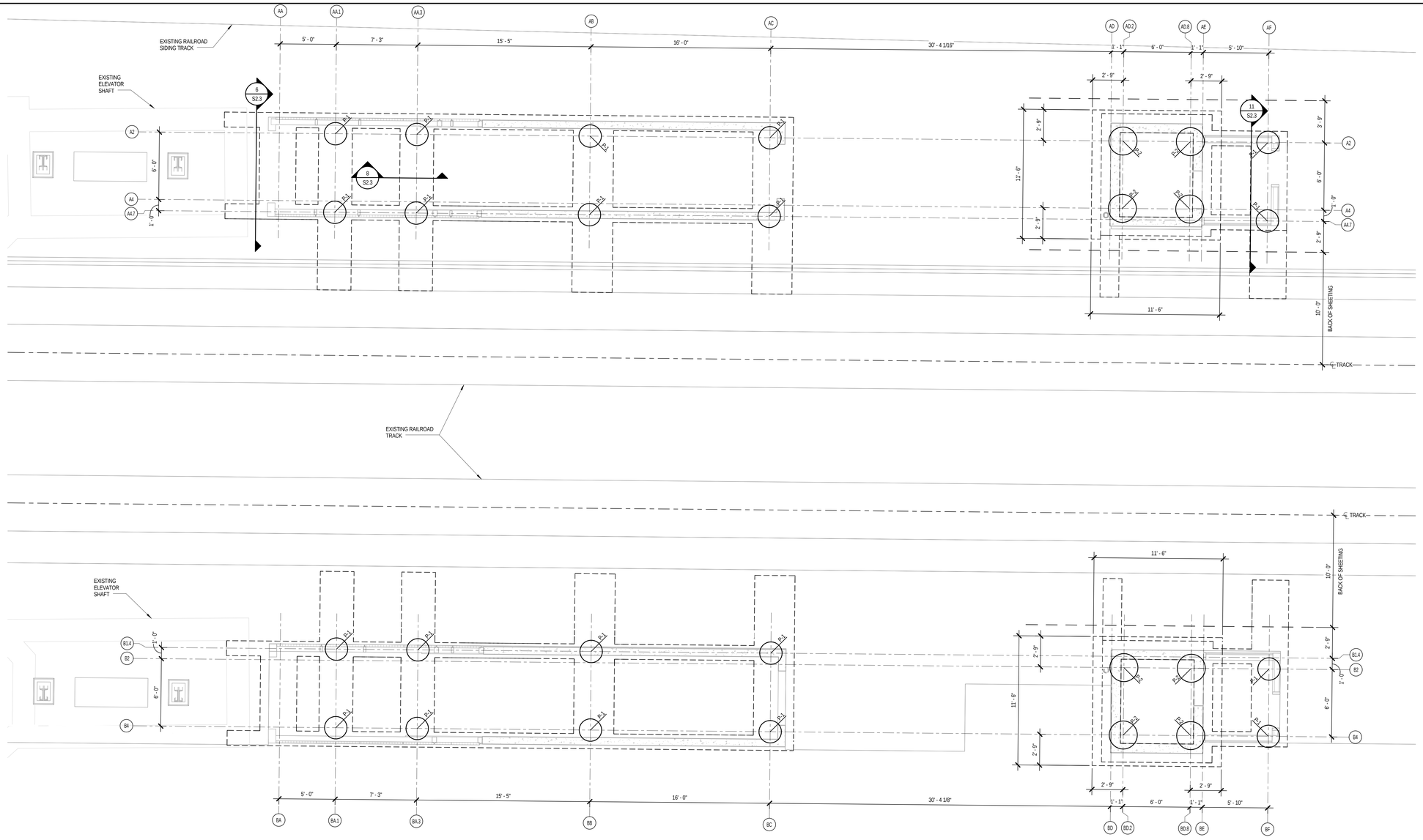

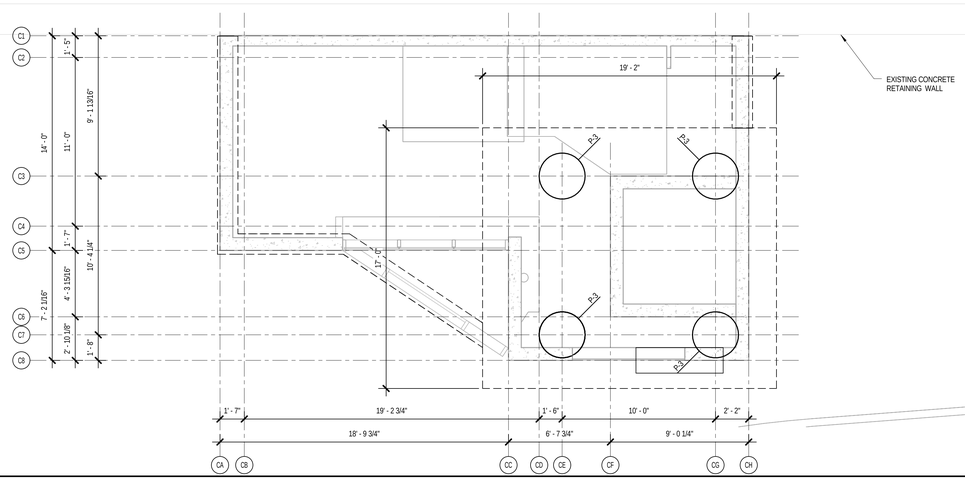

1 / S1.1 CAISSON PLAN
SCALE: 1/4" = 1'-0"

TRUE NORTH

PIER SCHEDULE				
MARK	SIZE	VERT. REINFORCING	TIES	REMARKS
P-1	24"			
P-2	30"			
P-3	36"			

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CAISSON PLAN

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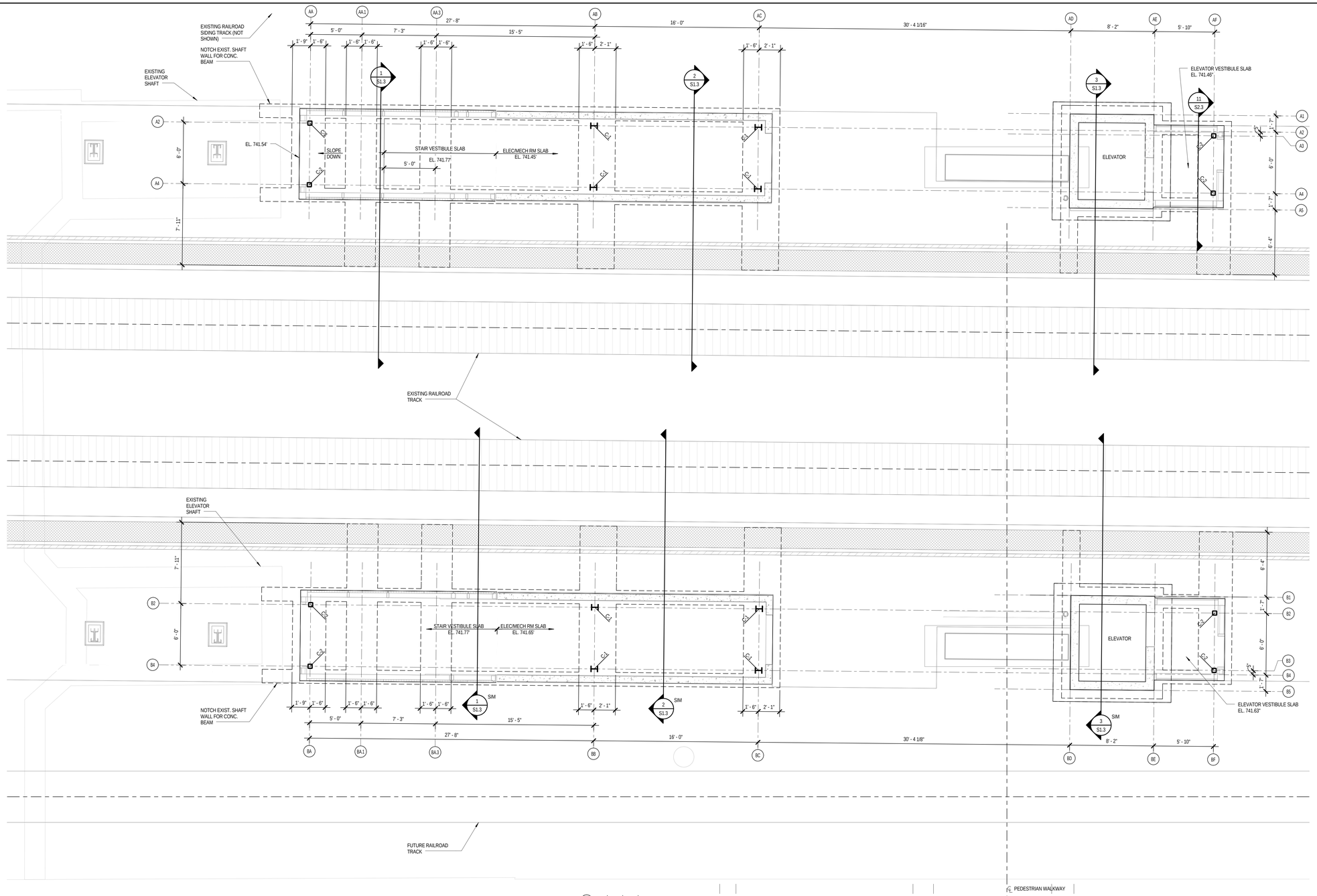

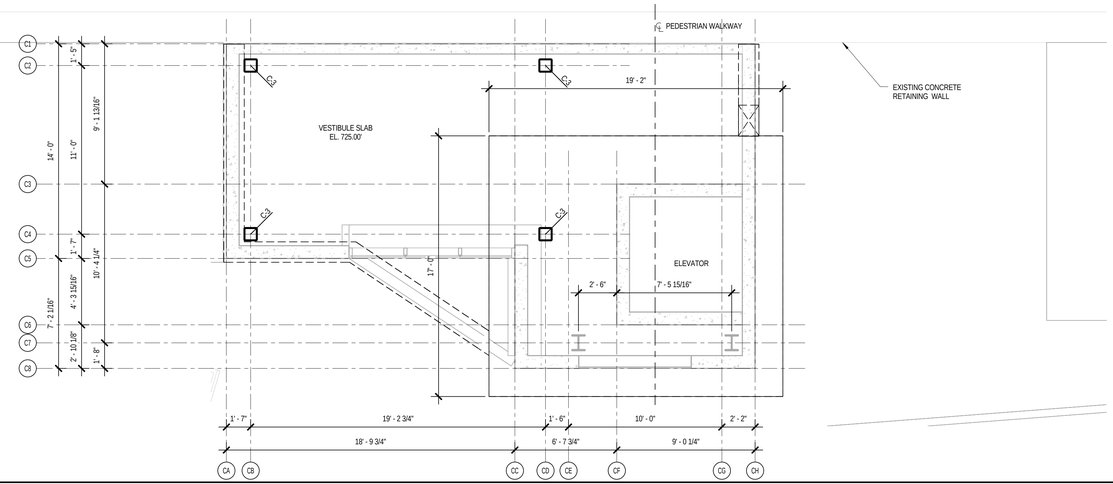

COLUMN SCHEDULE				
MARK	SIZE	BASE PLATE	ANCHOR RODS	REMARKS
C-1	W8X24			
C-2	HSS5X5X1/4			
C-3	HSS10X10X3/8			

NOTES:
1. TOP OF FOOTING -1'-0" FROM SLAB ELEVATION.
2. TOP OF ELEVATOR PIT SLAB -5'-0" FROM ADJACENT VESTIBULE SLAB ELEVATION.
3. SLAB IN STAIR AND ELEVATOR VESTIBULE AND ELEC/MECH ROOM IS 4" SLAB ON GRADE w/ 6x6 W1.4xW1.4 WWF OVER VAPOR BARRIER OVER PROOF ROLLED SUBGRADE.

TRUE NORTH

1 / S1.2 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

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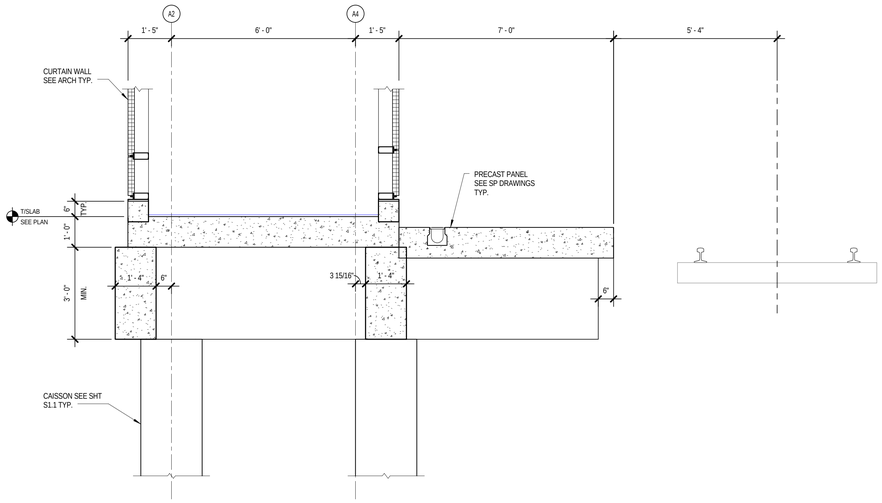

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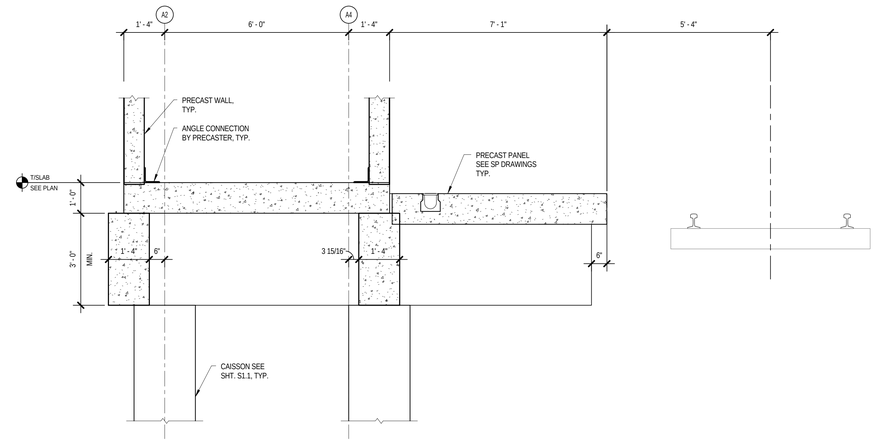

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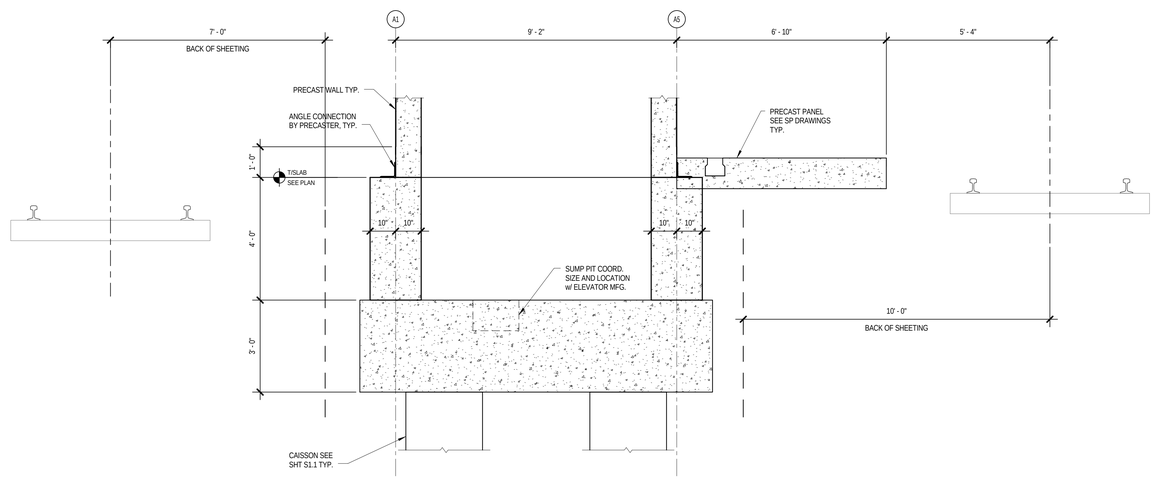

3 S1.3 SECTION
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FOUNDATION SECTIONS

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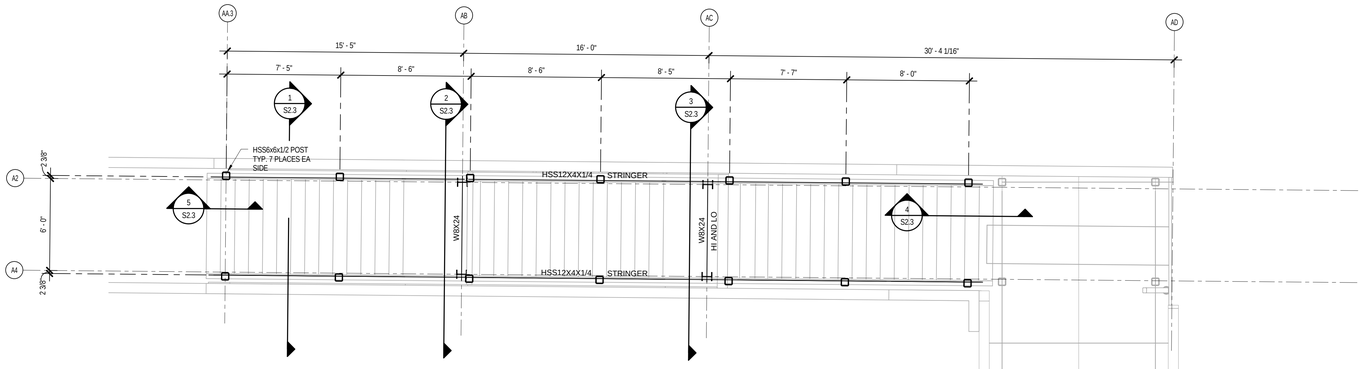

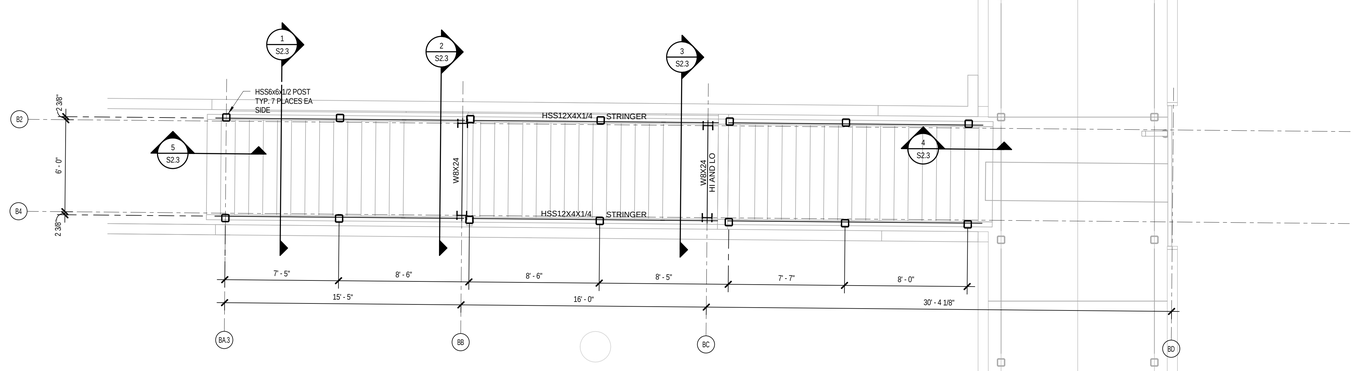

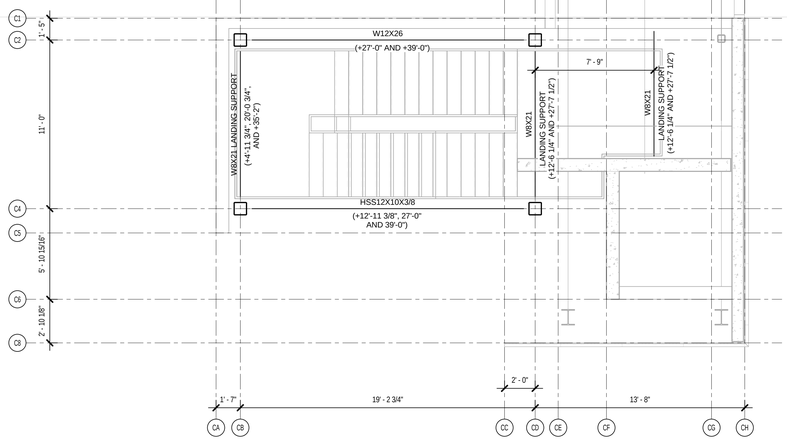

1 / S2.1 STAIR STRINGER FRAMING PLAN

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

TRUE NORTH

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STAIR STRINGER FRAMING PLAN

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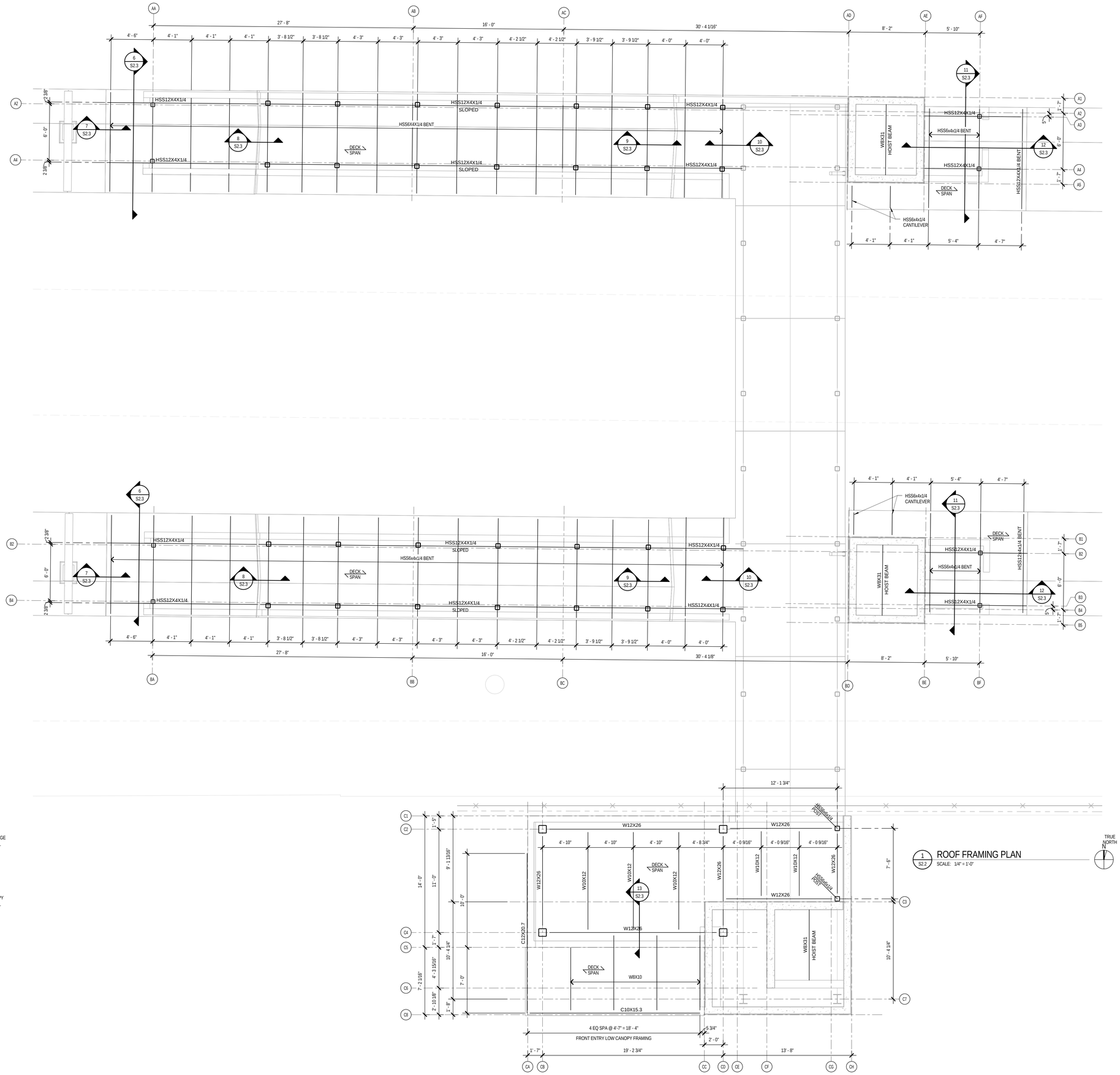

1 S2.2 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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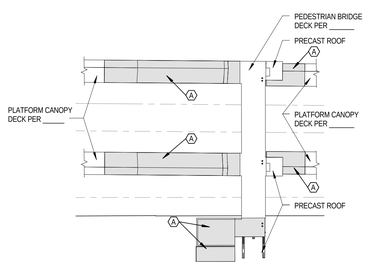

ZONE A:
1 1/2" 22 GA (TYPE B) WIDE RIB METAL ROOF DECK
-WELD ALL SUPPORTS w/ 5/8"Ø PUDDLE WELDS AT SDI 36/7 PATTERN
-FASTEN SIDELAPS w/ (4) #10 TEK SCREWS PER SPAN

ROOF DECK KEY PLAN

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ROOF FRAMING PLAN

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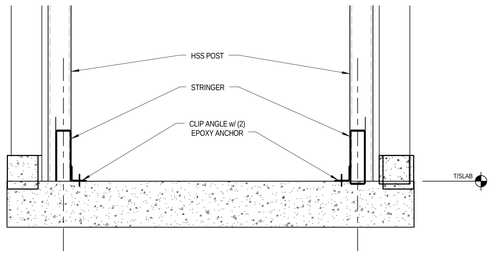

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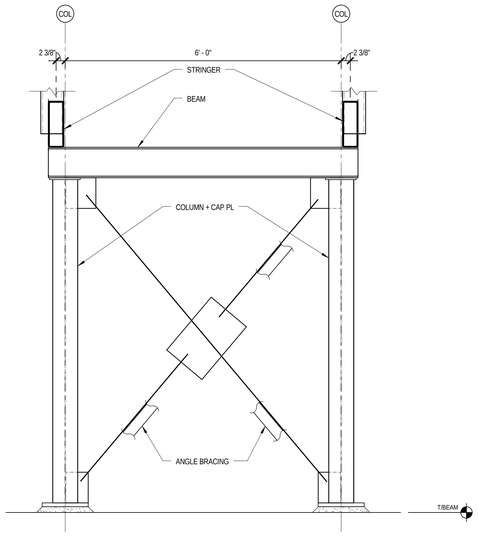

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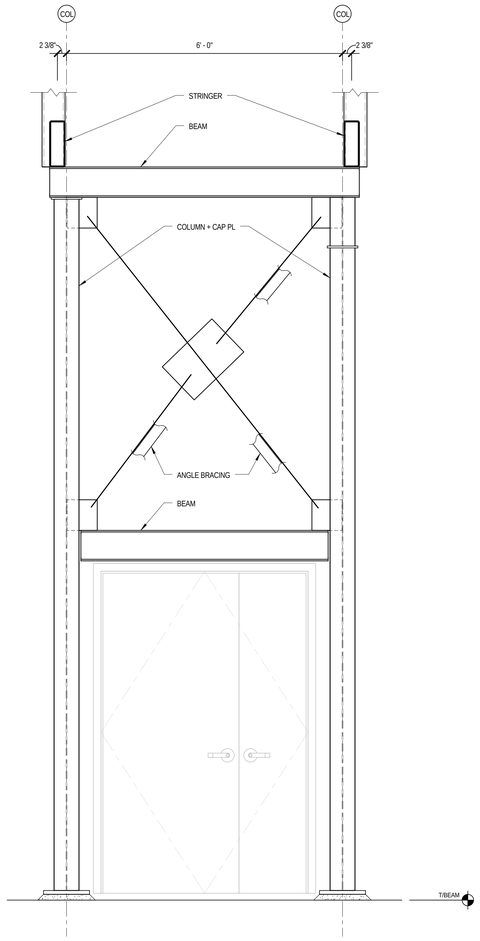

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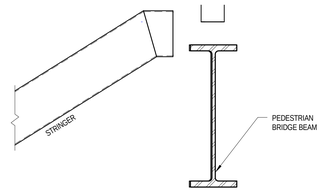

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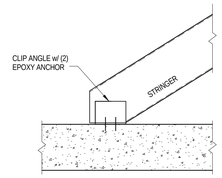

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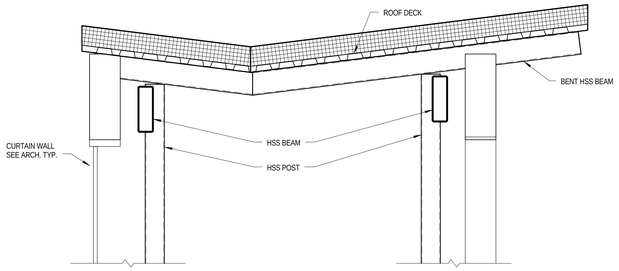

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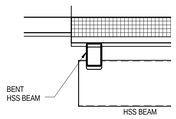

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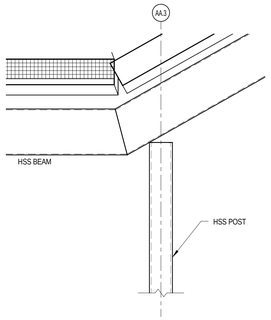

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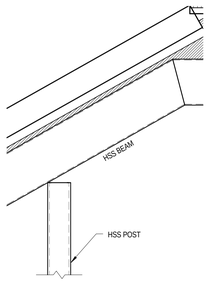

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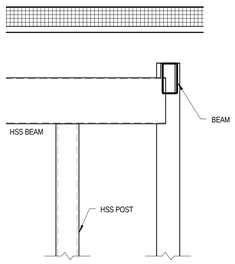
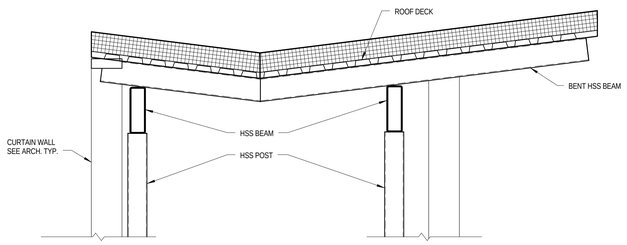
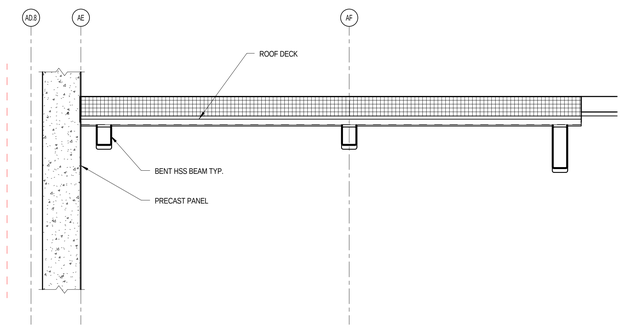


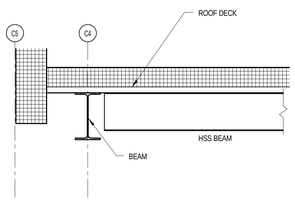
10 S2.3 SECTION
SCALE: 3/4" = 1'-0"



11 S2.3 SECTION
SCALE: 3/4" = 1'-0"



12 S2.3 SECTION
SCALE: 3/4" = 1'-0"



13 S2.3 SECTION
SCALE: 3/4" = 1'-0"

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMT

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LORAIN COUNTY PLATFORMS &
PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

STAIR & ROOF FRAMING SECTIONS

DRAWN BY: BWE
CHECKED BY: DET
RLB NO.: 8258.01

DRAWING NO.
S2.3

12/15/2015 1:36:17 PM
C:\RAM Projects\8258\01 Lorain Cty Amtrak Station Stair Jewels.rvt

BENCHMARK DATA

BM #1 STA. _____, ELEV. _____, OFFSET ____, ___
BM #2 STA. _____, ELEV. _____, OFFSET ____, ____

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND

✧ BORING LOCATION

0 10
5 20
HORIZONTAL SCALE IN FEET

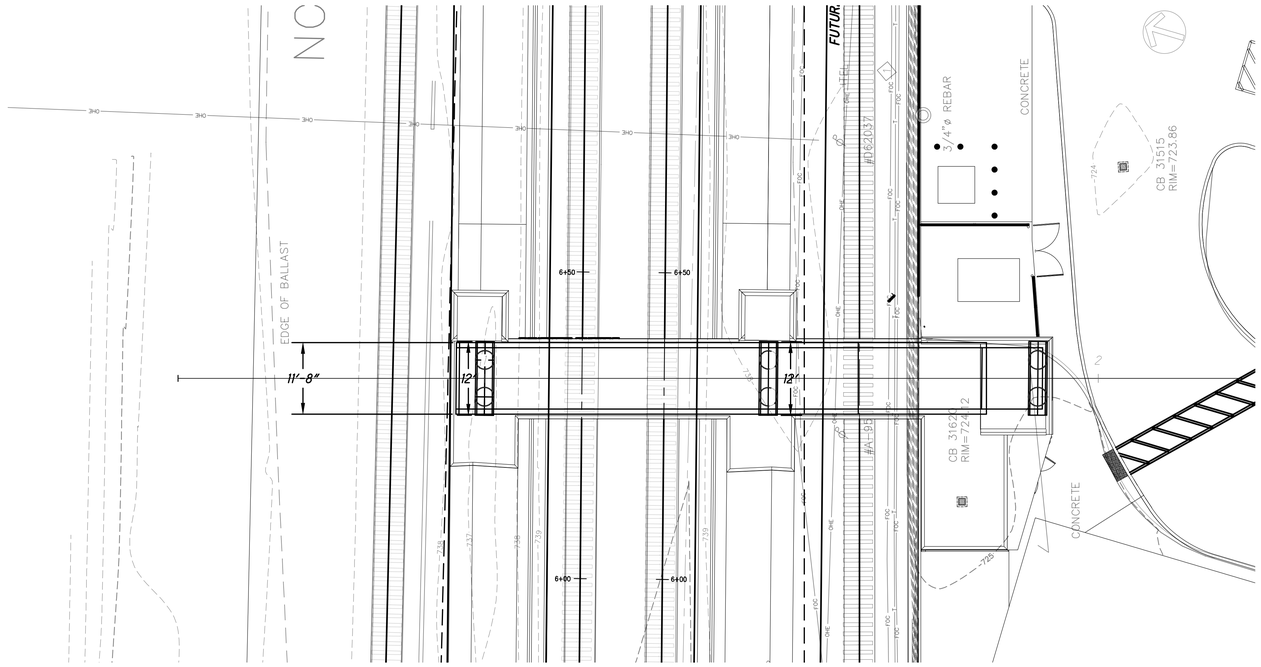
● 23'-0" REQUIRED MINIMUM VERTICAL CLEARANCE
23'-6" ACTUAL MINIMUM VERTICAL CLEARANCE

HYDRAULIC DATA

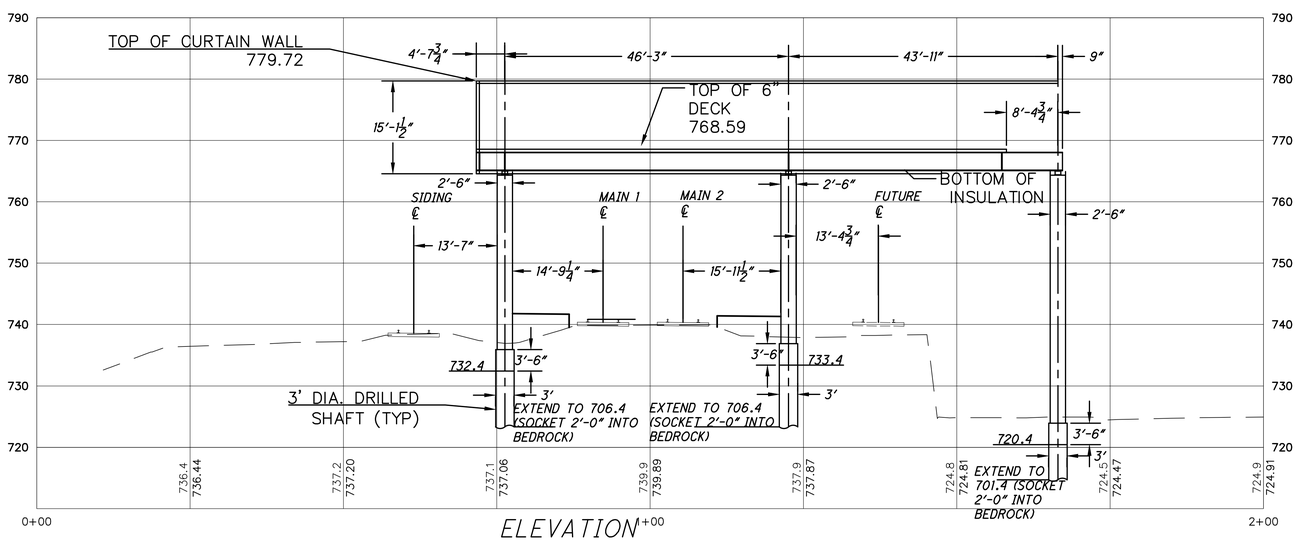
DRAINAGE AREA = N/A

EXISTING STRUCTURE

TYPE: NONE



PLAN



ELEVATION

PROPOSED STRUCTURE

TYPE: PEDESTRIAN BRIDGE
CONTINUOUS STEEL BEAM BRIDGE

SPANS: 46'-3", 43'-11"
WALKWAY 9'-6" F/F COLUMNS
LOADING: AASHTO LRFD PEDESTRIAN BRIDGE LOADING 90 PSF
SKEW: 0°-31'-53.04" LT
APPROACH SLABS: N/A
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
COORDINATES: LATITUDE 41° 22' 7.51" N
LONGITUDE 82° 06' 11.24" W

DATES AND REVISIONS

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
BRIDGE SITE PLAN

DRAWN BY: MTG
CHECKED BY: MJM
RLB NO.: 8258.01

DRAWING NO.
SB1.1

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DESIGN LOADING

DESIGN LOADING: AASHTO LRFD PEDESTRIAN BRIDGE LOADING 90PSF

DESIGN DATA

DESIGN DATA:
CONCRETE CLASS (1) - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS (2) - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.0 KSI (DRILLED SHAFT)
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
STRUCTURAL STEEL - ASTM A709 GRADE 50W - YIELD STRENGTH 50 KSI

DRILLED SHAFTS

DRILLED SHAFTS:
THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS ____* KIPS AT THE ABUTMENTS AND ____* KIPS AT THE PIERS. THIS LOAD IS RESISTED BY SIDE RESISTANCE WITHIN A PORTION OF THE BEDROCK SOCKET AND ALSO BY TIP RESISTANCE. THE FACTORED RESISTANCE DEVELOPED BY SIDE RESISTANCE IS ____* KIPS, ASSUMED TO ACT ALONG THE BOTTOM ____* FEET OF THE BEDROCK SOCKET FOR THE ABUTMENTS AND ____* FEET OF THE BEDROCK SOCKET FOR THE PIERS. THE FACTORED RESISTANCE PROVIDED BY THE DRILLED SHAFT TIP IS ____* KIPS.

CONSTRUCTION CLEARANCE

CONSTRUCTION CLEARANCE: MAINTAIN A CONSTRUCTION CLEARANCE OF 9 FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 22 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 9 FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

BRIDGE SEAT REINFORCING, SETTING ANCHORS

BRIDGE SEAT REINFORCING, SETTING ANCHORS: ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.

INTERMEDIATE DIAPHRAGMS

INTERMEDIATE DIAPHRAGMS: DO NOT PLACE THE DECK CONCRETE UNTIL ALL INTERMEDIATE DIAPHRAGMS HAVE BEEN PROPERLY INSTALLED.

ELASTOMERIC BEARINGS

ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.

BEARING SEAT ADJUSTMENTS

THE PIER AND ABUTMENT BEAM SEAT ELEVATIONS ARE BASED ON BEARING HEIGHTS PROVIDED IN THE TABLE BELOW. IF THE CONTRACTOR'S SELECTED BEARING MANUFACTURER HAS A DESIGN THAT DOES NOT CONFORM TO THE HEIGHTS PROVIDED IN THE TABLE, ADJUST THE BEARING SEAT ELEVATIONS AT NO ADDITIONAL COST TO THE OWNER. ADJUST THE LOCATION OF REINFORCING STEEL HORIZONTALLY AS NECESSARY TO AVOID INTERFERENCE WITH THE BEARING ANCHOR BOLTS. MAINTAIN THE MINIMUM CONCRETE COVER AND MINIMUM SPACING REQUIRED BY THE PROJECT PLANS. IF THE REINFORCING STEEL CANNOT BE MOVED TO PROVIDE THE REQUIRED POSITION FOR THE ANCHOR BOLTS, THE CONTRACTOR'S BEARING MANUFACTURER SHALL RE-DESIGN THE BEARINGS TO ACCOMMODATE AN ACCEPTABLE ANCHOR BOLT CONFIGURATION.

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
BRIDGE GENERAL NOTES

DRAWN BY: MTG
CHECKED BY: MJM
RLB NO.: 8258.01

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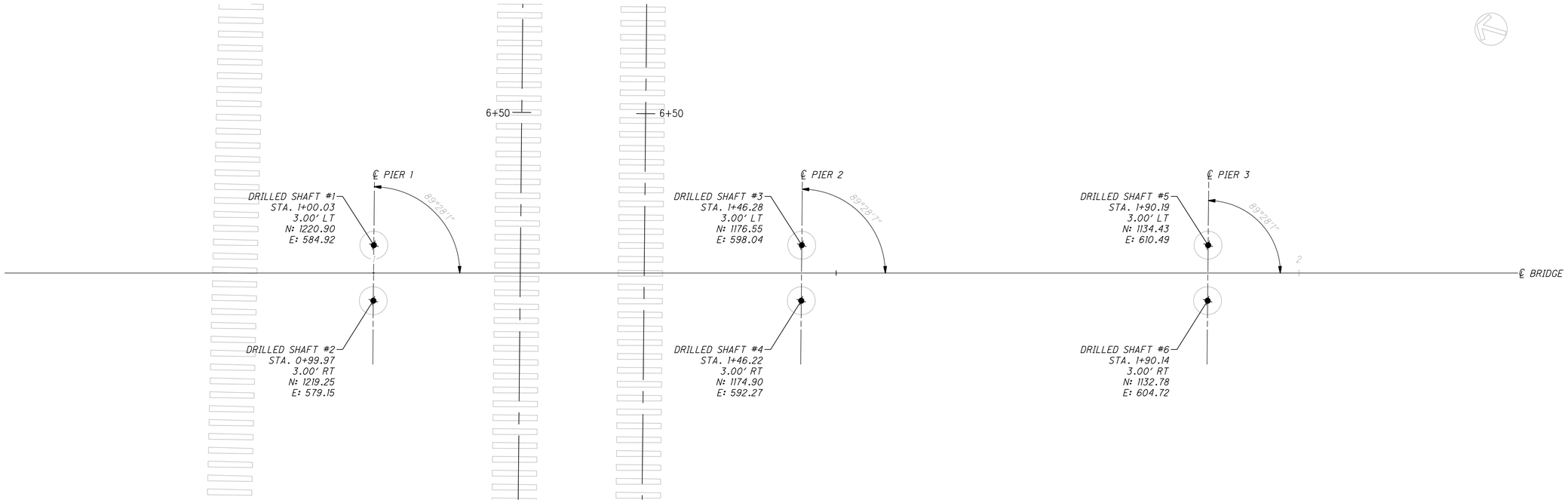

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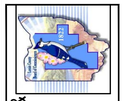

LORAIN COUNTY PLATFORMS &
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40 EAST AVENUE, ELYRIA, OH 44035

BRIDGE FOUNDATION PLAN

DRAWN BY: MTG
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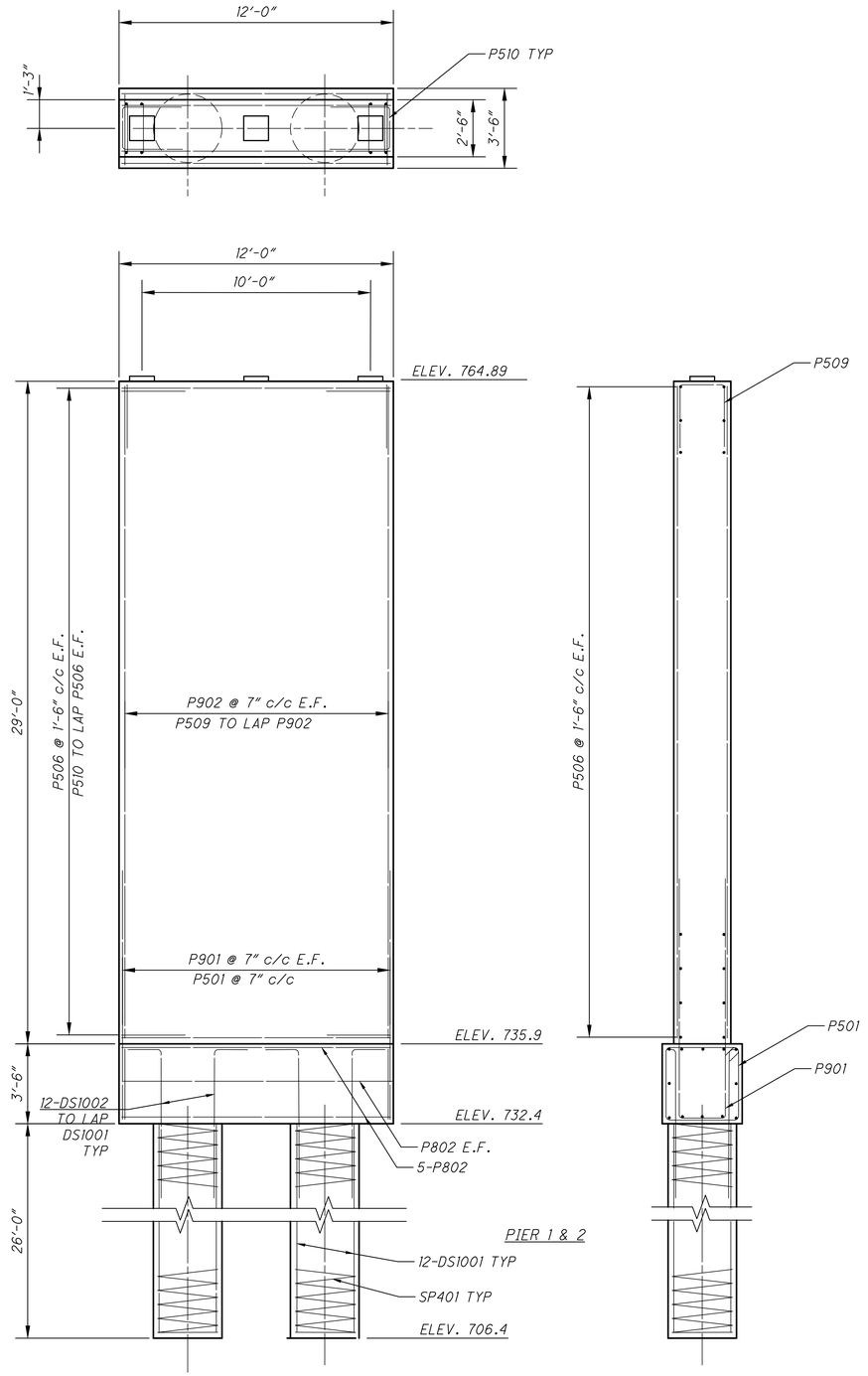
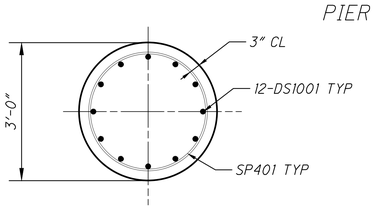
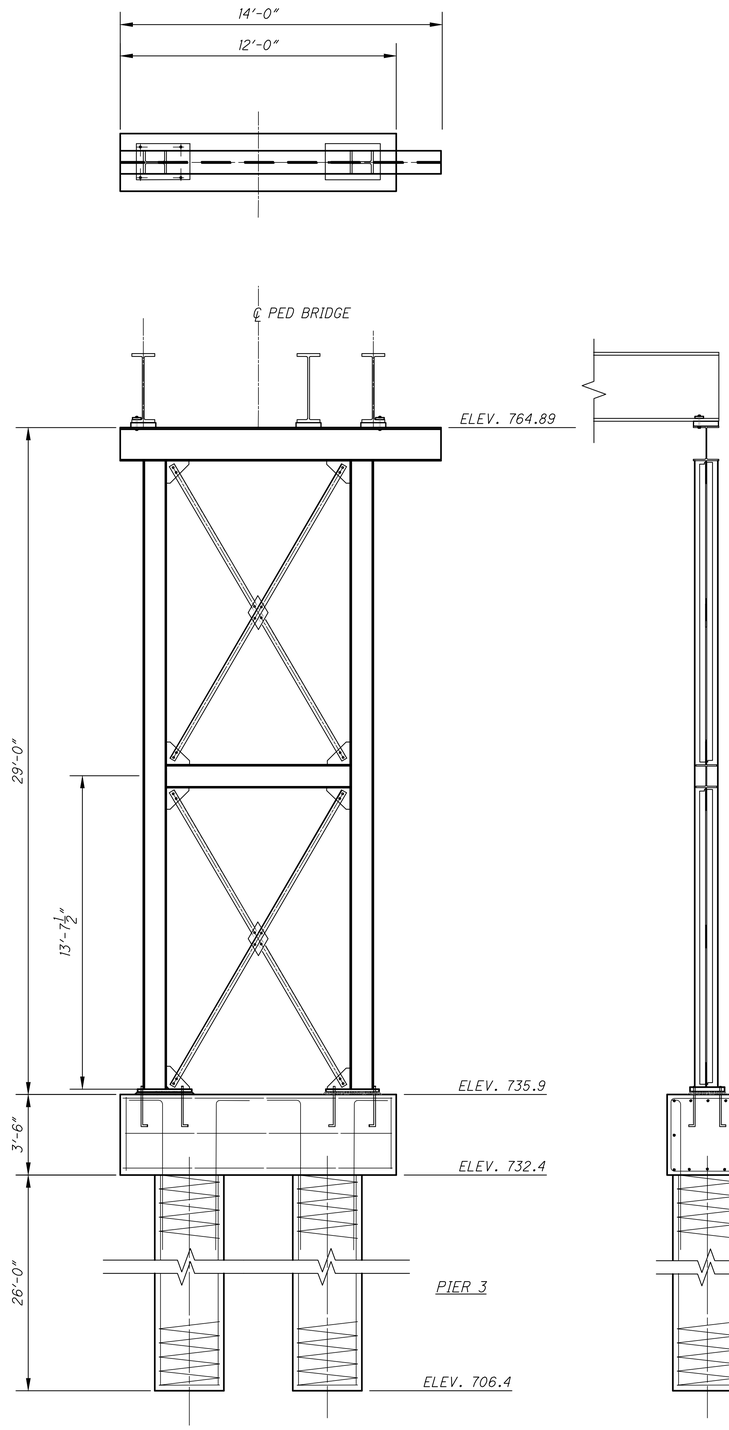
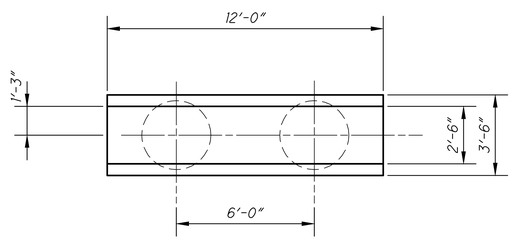


PIER 1 AND 2 DETAILS



DRILLED SHAFT SECTION





PIER 3 DETAILS

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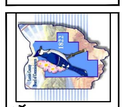

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

BRIDGE PIER DETAILS

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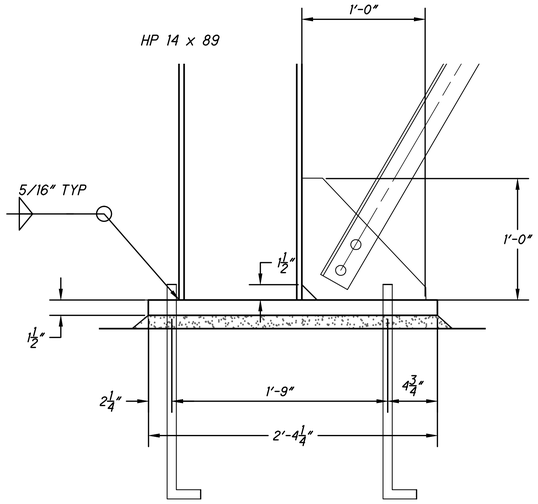

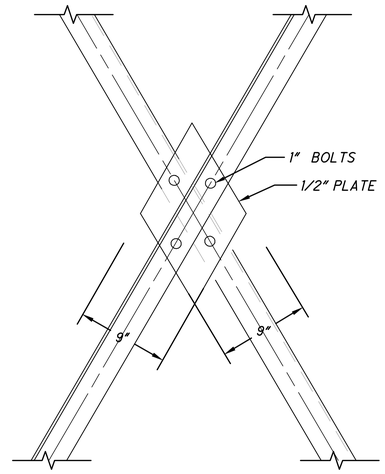

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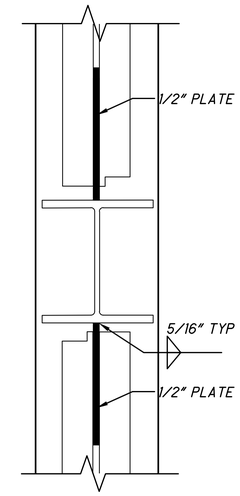
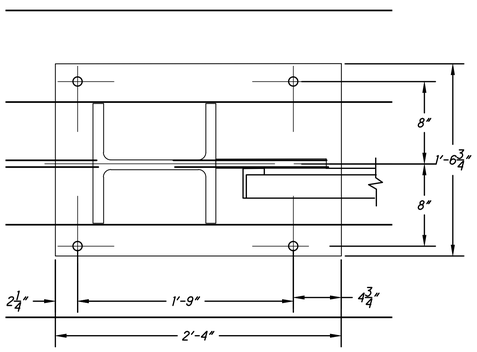
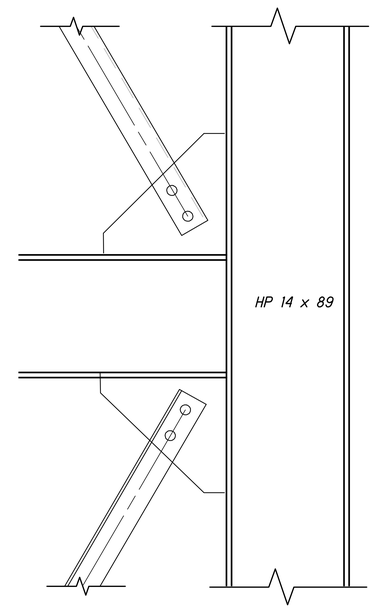
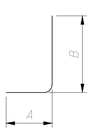




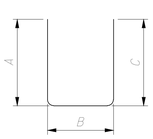
PIER 3 BASE PLATE DETAIL



PIER 3 CROSSFRAME DETAIL



TYPE-1



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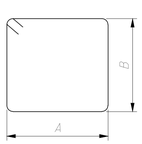

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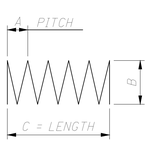

TYPE-27

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	PIER		TOTAL				A	B	C	D	E	R	INC.
SUBSTRUCTURE													
P501	45			2'- 8"	545	3	2'- 8"	2'- 8"					
P502						STR							
P503	106			7'- 3"	800	2	2'- 8"	2'- 2"	2'- 8"				
P801	36			11'- 6"	1105	STR							
P901	42			16'- 8"	5984	2	7'- 6"	2'- 2"	7'- 6"				
P902	84			31'- 6"	8996	STR							
P903	60			7'- 2"	1415	2	2'- 8"	2'- 2"	2'- 8"				
P904	45			11'- 6"	1760	STR							
SP401	6				2195	27	0'- 4.5"	2'- 6"	25'- 6"				
DS1001	72			25'- 6"	9914	STR							
DS1002	72			11'- 2"	3465	1	1'- 6"	10'- 0"					
TOTAL													

NOTES:

1. ALL DIMENSIONS ARE OUT TO OUT OF BARS.

2. ALL REINFORCING IS TO BE EPOXY COATED.

3. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGITS OF A THREE DIGIT NUMBER OR THE FIRST TWO DIGITS OF A FOUR DIGIT NUMBER INDICATE THE BAR SIZE. THE LAST TWO DIGITS INDICATE SEQUENCE NUMBER. THE INITIAL LETTER INDICATES LOCATION:

   A - ABUTMENT (FA-FORWARD, RA-REAR)
   P - PIER
   S - SUPERSTRUCTURE
   SP- SPIRAL
   DS- DRILLED SHAFT
   DG- DIAPHRAGM GUIDE

4. "R" INDICATES INSIDE RADIUS, UNLESS NOTED OTHERWISE.

5. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.

6. STRAIGHT BARS ARE INDICATED AS "STR".

DATES AND REVISIONS

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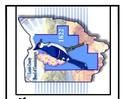

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
BRIDGE PIER DETAILS

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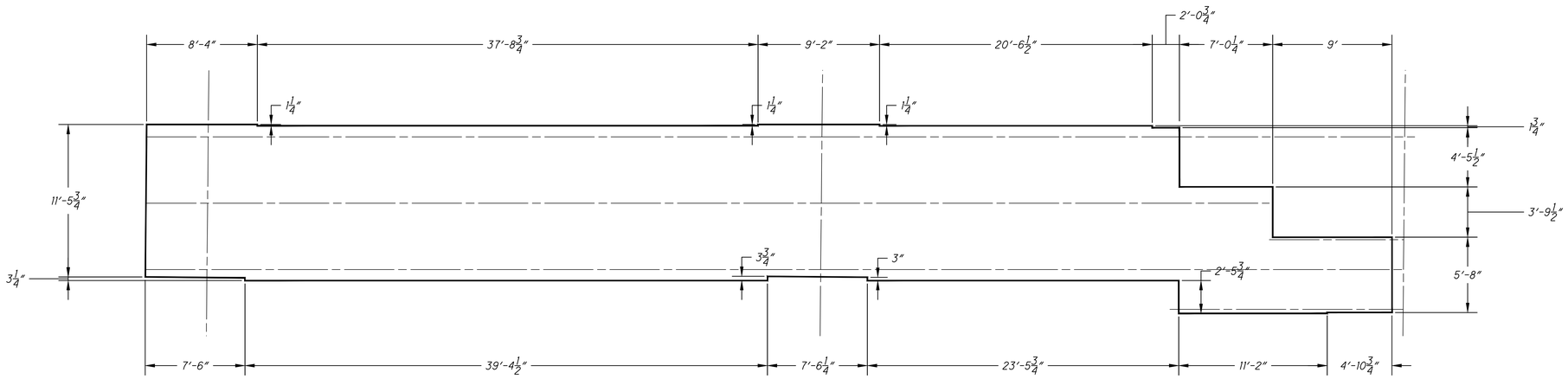

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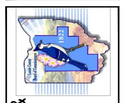

LORAIN COUNTY PLATFORMS &
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40 EAST AVENUE, ELYRIA, OH 44035

BRIDGE DECK PLAN

DRAWN BY: MTG
CHECKED BY: M.M
RLB NO.: 8258.01

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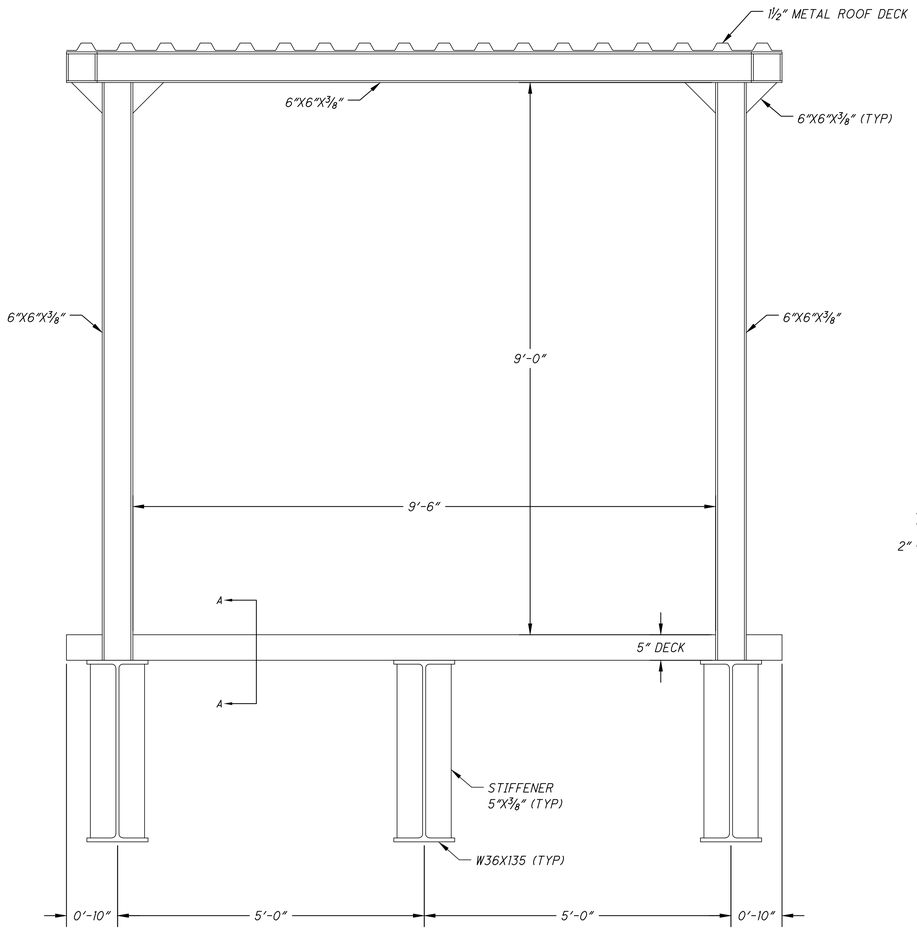

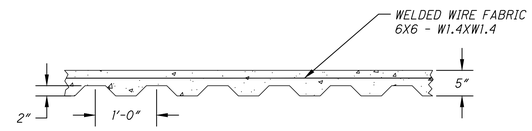

SECTION A-A

FLOOR DECK SECTION PROPERTIES

I_p	I_n	S_p	S_n	V_q	F_y
in^4/ft	in^4/ft	in^3/ft	in^3/ft	lbs/ft	ksi
0.409	0.406	0.341	0.346	2698	50

DATES AND REVISIONS

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	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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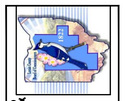

LORAIN COUNTY PLATFORMS &
PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

BRIDGE TRANSVERSE SECTION

DRAWN BY: MTG
CHECKED BY: MJM
RLB NO.: 8258.01

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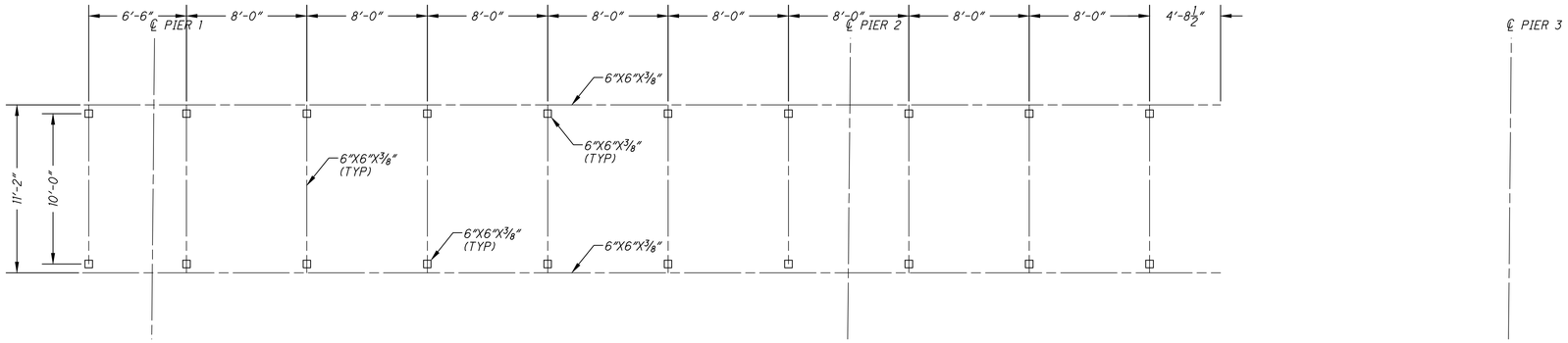
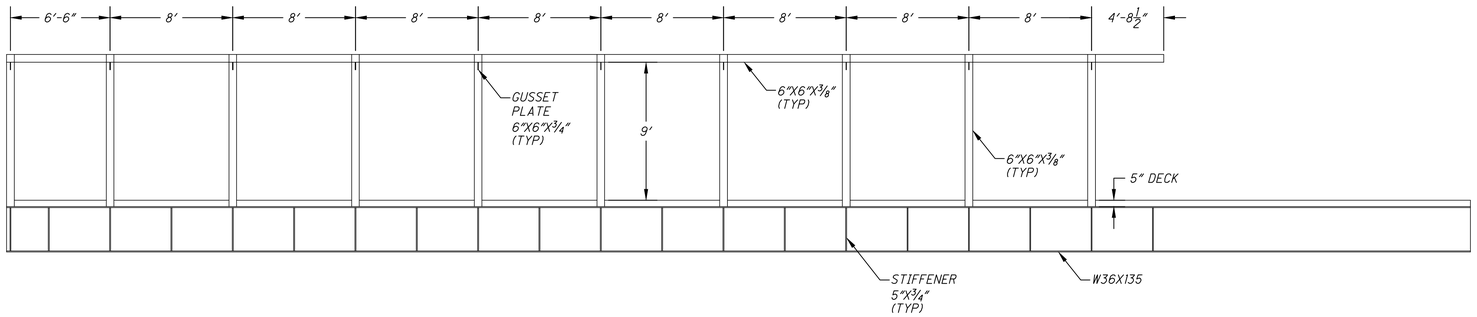
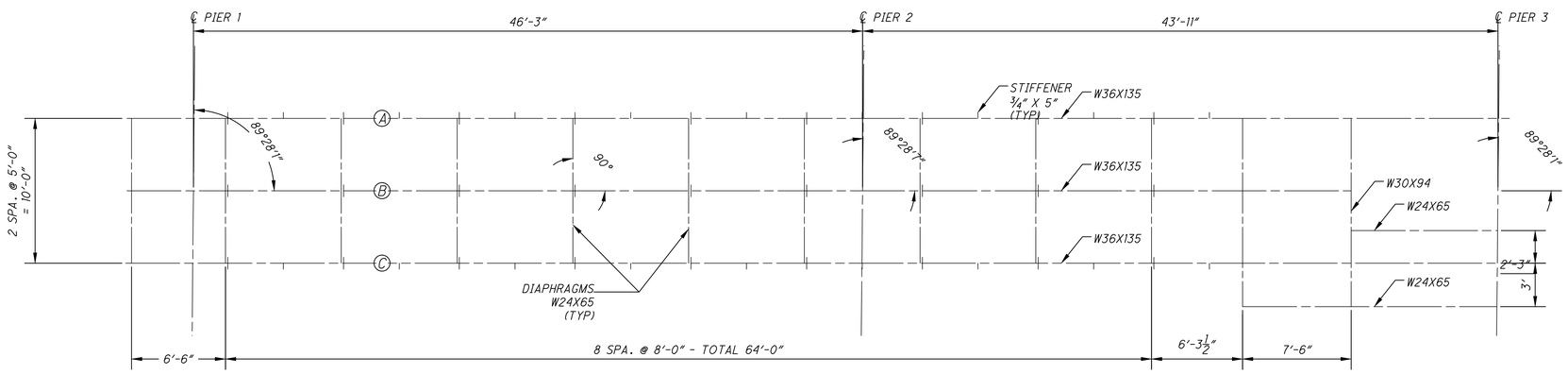


FRAMING PLAN - ROOF



FRAMING PLAN - ELEVATION VIEW



FRAMING PLAN - DECK

Shop Camber

	Cantilever		Span 1										Span 2							
	End		P1		1/4		1/2		3/4		P2		1/4		1/2		3/4		P3	
Distanace from P1	-6'-6"		0		11'-6.75"		23'-1.5"		34'-8.25"		46'-3"		57'-2.75"		68'-2.5"		79'-2.25"		90'-2"	
Beam	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B	A/C	B
Deflection (Total DL)	-1/16"	-1/16"	0"	0"	-1/8"	-1/8"	-1/4"	-1/4"	-1/8"	-1/8"	0"	0"	-1/8"	-1/8"	-1/4"	-1/4"	-1/8"	-1/8"	0"	N/A
Shop Camber	1/16"	1/16"	0"	0"	1/8"	1/8"	1/4"	1/4"	1/8"	1/8"	0"	0"	1/8"	1/8"	1/4"	1/4"	1/8"	1/8"	0"	N/A

DATES AND REVISIONS

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	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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40 EAST AVENUE, ELYRIA, OH 44035
BRIDGE FRAMING PLAN

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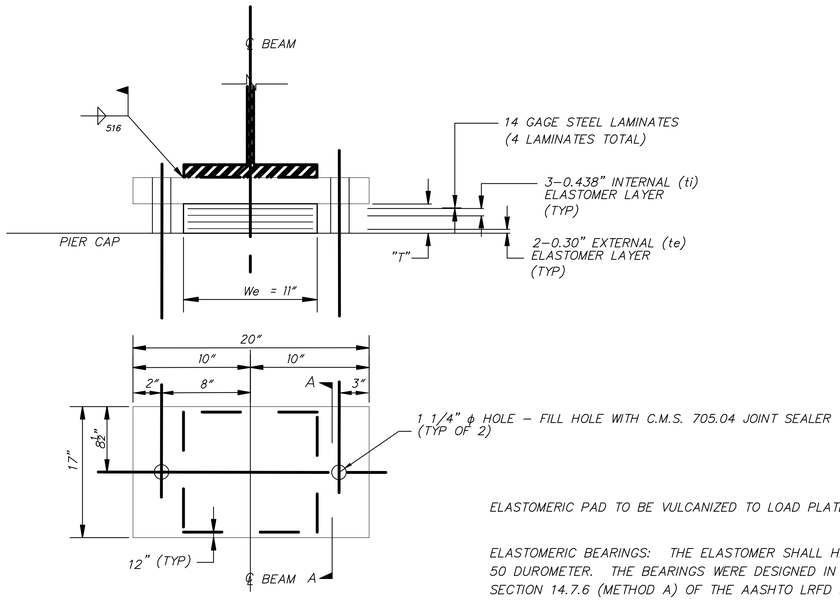
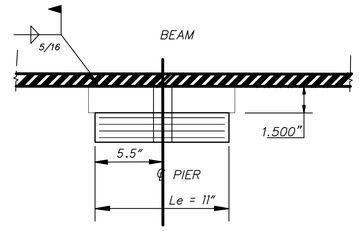


BEARING DETAIL



SECTION A–A

PIER 2 SHOWN
(PIER 1 OPPOSITE HAND)

ELASTOMERIC PAD TO BE VULCANIZED TO LOAD PLATE (TYPICAL).

ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG–TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.^

ELASTOMERIC BEARING REQUIREMENTS

BEARING LOCATION	BEARING TYPE	NO. REQ'D.	(DL) KIPS UNFACTORED	(LL) KIPS UNFACTORED	TOTAL KIPS (DL+LL+I) FACTORED	Le IN.	We IN.	ti NO.–THICK. IN.	te NO.–THICK. IN.	NO. OF INTERNAL LAMINATES	T IN.	LOAD PLATE IN.×IN.×IN.
PIER 1	EXP.	3	34.50	25.60	80.0	11	11	5–0.30	2–0.18	6 – 0.0747	2.31	12x20 X 1.500"
PIER 2	FIXED	3	71.4	55.1	150.2	11	11	5–0.30	2–0.18	6 – 0.0747	2.31	12x20 X 1.500"
PIER 3	EXP.	2	18.39	23.94	65.2	11	11	5–0.30	2–0.18	6 – 0.0747	2.31	12x20 X 1.500"

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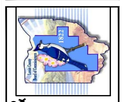

LORAIN COUNTY PLATFORMS &
PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
BRIDGE BEARING DETAILS

DRAWN BY: MEM
CHECKED BY: M.M
RLB NO.: 8258.01

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GENERAL STRUCTURAL NOTES

1. DESIGN CODES AND SPECIFICATIONS:
   - A. 2009 INTERNATIONAL BUILDING CODE (IBC), INCLUDING OHIO AMENDMENTS THRU 2011.
   - B. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) – STEEL CONSTRUCTION MANUAL, 13TH EDITION, AND THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360–05).
   - C. AMERICAN IRON AND STEEL INSTITUTE (AISI) – SPECIFICATION FOR THE DESIGN OF COLD–FORMED STEEL STRUCTURAL MEMBERS, 2007 EDITION.
   - D. AMERICAN WELDING SOCIETY (AWS) – AWS D1.1 – STRUCTURAL WELDING CODE – STEEL, 2004 EDITION.
   - E. AMERICAN CONCRETE INSTITUTE (ACI) – BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318) AND COMMENTARY (ACI 318R), 2008 EDITION.
   - F. AMERICAN CONCRETE INSTITUTE (ACI) – ACI DETAILING MANUAL – 2004 (SP–66(04)).
   - G. AMERICAN CONCRETE INSTITUTE (ACI), THE MASONRY SOCIETY (TMS) AND AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) – BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530–08/TMS 402–08/ASCE 5–08 AND THE SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1–08/TMS 602–08/ASCE 6–08) AND COMMENTARIES.

2. DESIGN DATA

A. DESIGN LOADS

	PLATFORM	CANOPY	
1. LIVE LOAD DATA			
a. PLATFORM LIVE LOAD, psf	100	–	PSF
b. ROOF LIVE LOAD, psf	–	20	PSF
2. SNOW LOAD DATA			
a. GROUND SNOW LOAD, Pg, psf	20	20	PSF
b. FLAT–ROOF SNOW LOAD, Pf, psf	–	20	PSF
c. SNOW EXPOSURE FACTOR, Ce	–	1.0	
d. SNOW LOAD IMPORTANCE FACTOR, Is	–	1.0	
e. THERMAL FACTOR, Ct	–	1.0	
3. RAIN LOAD DATA			
a. RAIN LOAD	–	36	PSF
4. ICE LOAD DATA			
a. ICE LOAD	–	7	PSF
5. WIND LOAD DATA			
a. BASIC WIND SPEED, mph	90	90	MPH
b. WIND IMPORTANCE FACTOR, Iw	1.0	1.0	
c. WIND EXPOSURE CATEGORY	C	C	
d. INTERNAL PRESSURE COEFFICIENT	±0.18	±0.18	
e. COMPONENT AND CLADDING WIND PRESSURES:	SEE TABLE	SEE TABLE	
f. END ZONE STRIP WIDTH	3'–0"	4'–4"	
g. CORNER ZONE SQUARE AREA	3'–0"x3'–0"	4'–4"x4'–4"	
6. SEISMIC LOAD DATA			
a. SEISMIC IMPORTANCE FACTOR, Ie	1.0	1.0	
b. MAPPED SPECTRAL RESPONSE ACCELERATIONS			
Ss	0.164	0.164	
S1	0.051	0.051	
c. SITE CLASS	D	D	
d. SEISMIC RESPONSE COEFFICIENTS			
SDS	0.175	0.175	
SD1	0.081	0.081	
e. SEISMIC DESIGN CATEGORY	–	B	
f. BASIC SEISMIC–FORCE RESISTING SYSTEM	–	NOTE 1	
g. DESIGN BASE SHEAR, V	–	0.86	KIPS
h. SEISMIC RESPONSE COEFFICIENT, Cs	–	0.14	
i. SEISMIC RESPONSE MODIFICATION FACTOR, R	–	1.25	
j. ANALYSIS PROCEDURE USED	–	NOTE 2	
7. GEOTECHNICAL DATA			
a. MIN. REQUIRED SOIL BEARING CAPACITY	3.0	3.0	KSF
b. FROST DEPTH	42	42	INCHES

DESIGN DATA NOTES:

1. CANTILEVER COLUMN SYSTEMS DETAILED AS ORDINARY STEEL MOMENT FRAMES
2. EQUIVALENT LATERAL FORCE ANALYSIS.

CANOPY – COMPONENTS AND CLADDING WIND FORCES

	ROOF (PSF)			WALL (PSF)	
ZONE	1 INTERIOR	2 END	3 CORNER	4 INTERIOR	5 END
POSITIVE PRESSURE	10	10	10	–	–
NEGATIVE PRESSURE	–10	–10	–10	–	–

B. MATERIALS.

- a. CONCRETE: f'c = 4,000 PSI FOR C.I.P. CONCRETE.
- b. MASONRY: f'm = 2000 PSI
- c. REINFORCING STEEL–ASTM A615, GRADE 60.
- d. STRUCTURAL STEEL–ASTM A36 FOR SHAPES & PLATE.
  - ASTM A 992 FOR W SHAPE, WT SHAPE
  - ASTM A 500 GRADE B FOR HSS SHAPES.
- e. WELDED WIRE FABRIC–ASTM A185.
- f. BOLTS TO BE HIGH STRENGTH–ASTM A325–SC, 3/4" ø UNLESS OTHERWISE NOTED.
- g. NUTS TO BE HIGH STRENGTH – ASTM A563 UNLESS OTHERWISE NOTED. SIZED TO MATCH BOLT.
- h. WASHERS TO BE HARDENED HIGH STRENGTH – ASTM F436 UNLESS OTHERWISE NOTED. SIZED TO MATCH BOLT.
- i. ANCHOR RODS: ASTM F–1554. GRADE 36.
- j. WELD ELECTRODES: E70 SERIES, LOW HYDROGEN.

3. STRUCTURAL STEEL NOTES:
   - B. ALL CONNECTIONS SHALL BE DESIGNED FOR THE SIZE MEMBERS INDICATED ON THE PLANS OR AS DETAILED, USING A325–SC H.S. BOLTS, 3/4" DIAMETER UNLESS OTHERWISE NOTED.
   - C. ALL STEEL FOR ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36 UNLESS OTHERWISE NOTED.
   - D. ALL STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH ALL THE APPLICABLE PROVISIONS OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" UNLESS OTHERWISE MODIFIED IN THE SPECIFICATIONS.
   - E. ALL FILLET WELD SIZES SHALL COMPLY WITH THE MINIMUM SIZE REQUIREMENTS OF AISC "SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," UNLESS OTHERWISE NOTED.
4. CAST–IN–PLACE CONCRETE NOTES:
   - A. DETAILING OF CONCRETE REINFORCING SHALL BE IN ACCORDANCE WITH ACI 315.
   - B. CONCRETE COVER FOR STEEL REINFORCEMENT SHALL BE PROVIDED IN ACCORDANCE WITH ACI 318.
   - C. CONCRETE REINFORCEMENT TO BE EPOXY–COATED.
   - D. CONSTRUCTION JOINTS IN CONCRETE STRUCTURES OTHER THAN SHOWN ON THE PLANS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.
   - E. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED WITH ¾"x¾" CHAMFERS UNLESS OTHERWISE NOTED.
   - F. FOR DETAILS OF ALL EMBEDDED ITEMS AND OPENINGS, SEE ARCHITECTURAL, CIVIL, UTILITY, ELECTRICAL AND MECHANICAL DRAWINGS.
   - G. FOR CONCRETE FINISHES, SEE SPECIFICATIONS.
   - H. ALL REINFORCING STEEL LAP SPLICES NOT DETAILED ON DRAWINGS SHALL BE CLASS "B" TENSION SPLICES UNLESS OTHERWISE NOTED. WHERE EMBEDMENT LENGTH IS NOT SHOWN USE ACI TENSION DEVELOPMENT LENGTH. ALL BENDS OR HOOKS SHOWN ARE ACI STANDARD UNLESS OTHERWISE NOTED.
5. MASONRY NOTES
   - A. CENTER REINFORCING IN BLOCK CELL UNLESS OTHERWISE NOTED. FILL BLOCK SOLID WITH GROUT AT REINFORCING.
   - B. PROVIDE DOWELS TO MATCH WALL REINFORCING SIZE AND SPACING. PLACE VERTICAL DOWEL IN THE SAME BLOCK CELL AS VERTICAL REINFORCING (DOWEL AND VERTICAL REINFORCING MUST OCCUPY THE SAME CELL.)
   - C. PROVIDE LAPPED BAR SPLICES IN ACCORDANCE WITH TMS 402–08/ACI 530–08/ASCE 5–08.
   - D. UTILIZE HIGH–LIFT OR LOW–LIFT GROUTING TECHNIQUES IN ACCORDANCE WITH THE SPECIFIED CODES WHERE GROUTING IS NECESSARY OR CALLED FOR.
6. FOR LOCATION AND SIZE OF OPENINGS, SLEEVES, PIPES DRAINS, AND EMBEDDED ITEMS ON FLOORS, ROOFS, AND WALLS NOT INDICATED – SEE ARCHITECTURAL, PLUMBING, HVAC, AND ELECTRICAL EQUIPMENT DRAWINGS.
7. CONSTRUCTION NOTES:
   - A. TEMPORARY BRACING DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. SOIL NOTES:
   - A. ALL FOUNDATIONS SHALL REST ON UNDISTURBED SOIL OR ENGINEER–CONTROLLED COMPACTED FILL OF 3,000 POUNDS PER SQ. FT. MINIMUM BEARING CAPACITY. FIELD VERIFY ASSUMED SITE CONDITIONS WITH SOIL TESTING. NO FOOTINGS SHALL BE PLACED UNTIL THE GEOTECHNICAL ENGINEER HAS APPROVED THE SITE SOIL CONDITIONS.
   - B. THE BOTTOM OF ALL FOUNDATIONS SHALL BE A MINIMUM OF 3'–6" BELOW GRADE FOR FROST PROTECTION.
   - C. ALL FILLED AREAS SHALL BE COMPACTED LAYER BY LAYER TO NOT LESS THAN 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557, LATEST REVISION.
   - D. CONTRACTOR SHALL PROTECT ALL EXCAVATIONS, INCLUDING STRUCTURES, WHICH MAY BE INVOLVED, WITH PROPER SAFEGUARDS, INCLUDING BRACING AND SHORING AS NECESSARY. ANY ENGINEERING REQUIRED FOR PROTECTION OF EXCAVATION AND STRUCTURES IS THE CONTRACTORS RESPONSIBILITY.
   - E. CONTRACTOR SHALL DE–WATER THE SITE AS NECESSARY TO PROPERLY INSTALL FOUNDATION AND PREVENT UPLIFT PRESSURE, WHICH WOULD CAUSE FLOATATION OR OTHER DAMAGE TO FOUNDATION STRUCTURES.
   - F. BOTTOM OF EXCAVATION SHALL BE PROTECTED FROM WEATHER.
9. PRECAST CONCRETE
   - A. THE PRECAST CONCRETE FABRICATOR SHALL MEET THE REQUIREMENTS OUTLINED IN THE PRECAST STRUCTURAL CONCRETE SPECIFICATION.
   - B. INSTALLATION OF PRECAST CONCRETE ELEMENTS SHALL MEET THE REQUIREMENTS OUTLINED IN THE PRECAST STRUCTURAL CONCRETE SPECIFICATION.
   - C. PRECAST CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT MEMBERS ARE DESIGNED FOR LIFTING FORCES ENCOUNTERED DURING MANUFACTURING, SHIPPING, AND ERECTION. SHOP DRAWINGS AND ANALYSIS DATA SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO AND SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   - D. CONCRETE SHALL BE F'C = 5,000 PSI @ 28 DAYS.
   - E. FINISHES FOR ALL PRECAST MEMBERS EXPOSED TO VIEW SHALL BE PER ARCHITECTURAL DRAWINGS.
   - F. THE PRECAST MANUFACTURER SHALL PROVIDE ALL OPENINGS, BLOCKOUTS, INSERTS, ETC. REQUIRED BY OTHER TRADES IN THE PRECAST MEMBERS.
   - G. ALL REINFORCEMENT TO BE EPOXY–COATED.
   - H. WELDING OF REINFORCING BARS SHALL ONLY TAKE PLACE AS NOTED ON THE PLANS OR BY WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER. ALL REINFORCEMENT WELDING SHALL CONFORM TO AWS D1.4.
   - I. PROVIDE ¾" CHAMFER ON ALL EXPOSED EDGES, UNO.
   - J. LIFTING LUGS SHALL BE DAYTON SUPERIOR OR APPROVED EQUAL. LIFTING LUGS SHALL NOT PROJECT BEYOND FINISHED CONCRETE SURFACE.
   - K. PROVIDE CLOSED STIRRUPS WHENEVER STIRRUPS ARE CALLED–OUT ON DRAWINGS.

STRUCTURAL ABBREVIATIONS & SYMBOLS

BLDG.	BUILDING	N.T.S.	NOT TO SCALE
BM.	BEAM	OC	ON CENTER
BOT.	BOTTOM	OF	OUTSIDE FACE
B/S	BOTTOM OF STEEL	PEB	PRE–ENGINEERED BUILDING
BRCG.	BRACING	PG	PLATE GIRDER
CCJ	CRACK CONTROL JOINT	PJF	PREFORMED JOINT FILLER
CJ	CONSTRUCTION JOINT	PROV.	PROVIDE
CTJ	CONTRACTION JOINT	REINF.	REINFORCEMENT/REINFORCING
C.O.	CLEAR OPENING	SC	SLIP CRITICAL CONNECTION
COL.	COLUMN	SLV	SHORT LEG VERTICAL
CONC.	CONCRETE	STIFF.	STIFFENER
CONN.	CONNECTION	STL	STEEL
CONT.	CONTINUOUS	THK	THICK
CONTR.	CONTRACTOR	T/S	TOP OF STEEL
CWR	CONTINUOUS WELDED RAIL	T/C	TOP OF CONCRETE
DET.	DETAIL	T/	TOP OF
DIA.	DIAMETER	T	TRUSS
DWL.	DOWEL	TG	JACK TRUSS
DN.	DOWN	TYP	TYPICAL
DWG.	DRAWING	UNO	UNLESS NOTED OTHERWISE
EA	EACH	WWF	WELDED WIRE FABRIC
EF	EACH FACE	W/	WITH
EW	EACH WAY	W/O	WITHOUT
EL.	ELEVATION	←	SLOPE DOWN
EJ	EXPANSION JOINT		DIRECTION OF METAL DECK/GRATING
FF	FINISHED FLOOR	⇌	SPAN OR REINFORCING STEEL DIRECTION
FDN.	FOUNDATION	℄	CENTER LINE
FRP	FIBERGLASS REINFORCED PLASTIC	@	AT
FS	FAR SIDE	PL	PLATE
GALV.	GALVANIZED	(A)	COLUMN LINE
HGR.	HANGER		
HORZ.	HORIZONTAL	⊠	OPENING
HP	HIGH POINT	XX	SECTION OR DETAIL NUMBER
K	KIPS	XX.XX	DRAWING ON WHICH DETAIL IS LOCATED
LB.	POUND		
LLV	LONG LEG VERTICAL		
LP	LOW POINT		
MAX.	MAXIMUM		
M.B.M.	METAL BUILDING MANUFACTURER	[0.00]	TOP OF PIER ELEVATION
MIN.	MINIMUM	(0.00)	BOTTOM OF FOOTING ELEVATION
M.O.	MASONRY OPENING	⌖	TOP OF CONCRETE SPOT ELEVATION
M.D.	MANDOOR		
N.A.	NEUTRAL AXIS		
NS	NEAR SIDE		

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMNT

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DESIGN CRITERIA, GENERAL NOTES AND ABBREVIATIONS

DRAWN BY: VKW
CHECKED BY: TFS
RLB NO.: 8258.01

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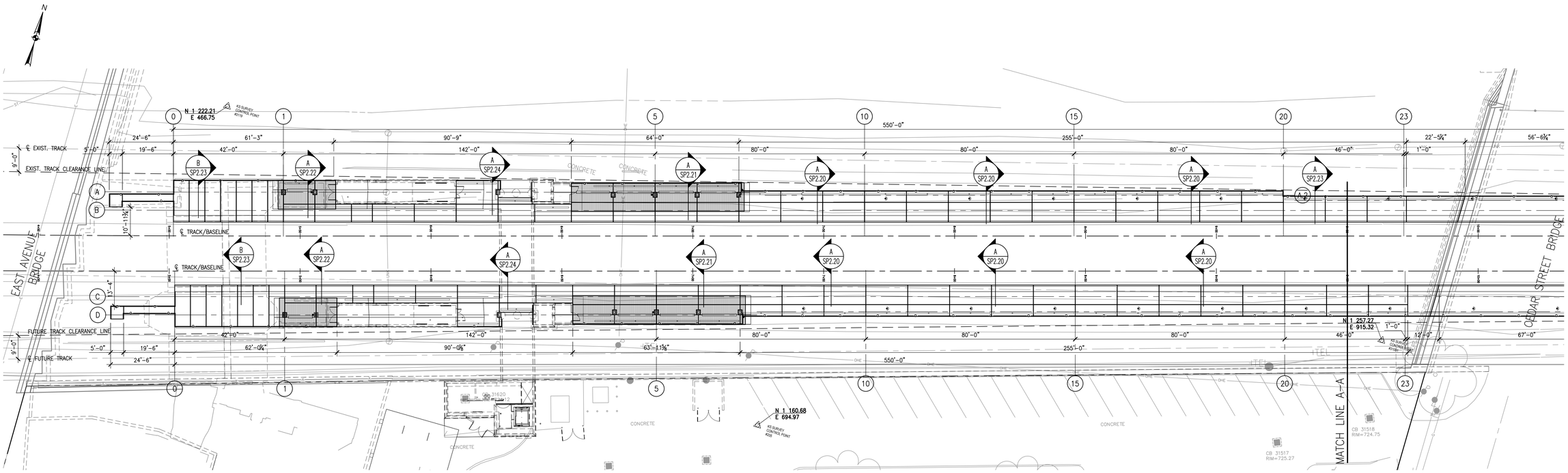
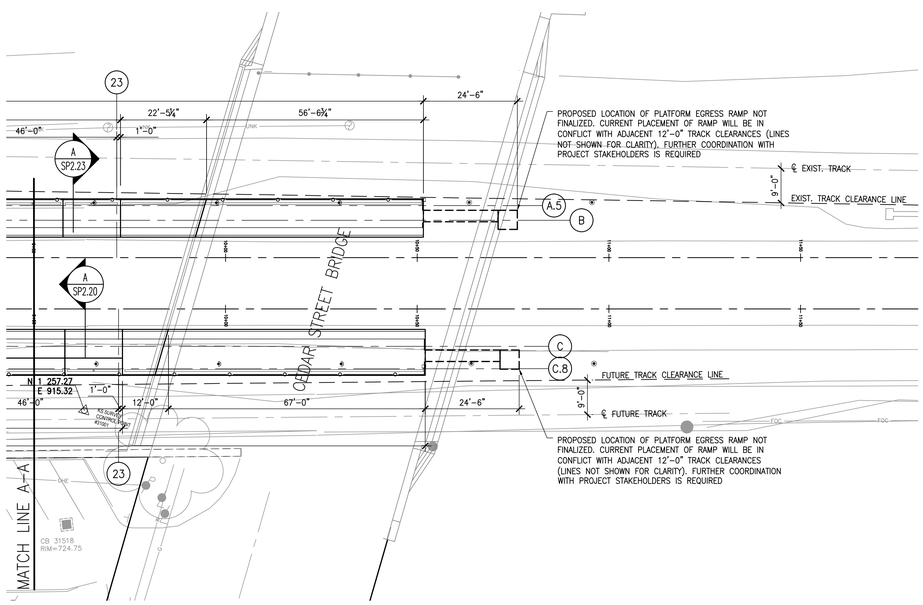
SPN.00

T:\20145301100 LORAIN COUNTY PLATFORMS\DRAWINGS\SUBM\STRUCT\SPN.00 DESIGN CRITERIA, GENERAL NOTES AND ABBREVIATIONS.DWG | PLOTTED 12.15.2015 11:56AM BY VERONIQUE WILLIAMS





1 SP1.10 SITE PLAN

16 0 8 16 32 FEET

1/16"

DATES AND REVISIONS	
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40 EAST AVENUE, ELYRIA, OH 44035

SITE LAYOUT PLAN

DRAWN BY:	VKW
CHECKED BY:	TFS
RLB NO.:	8258.01

DRAWING NO.
SP1.10

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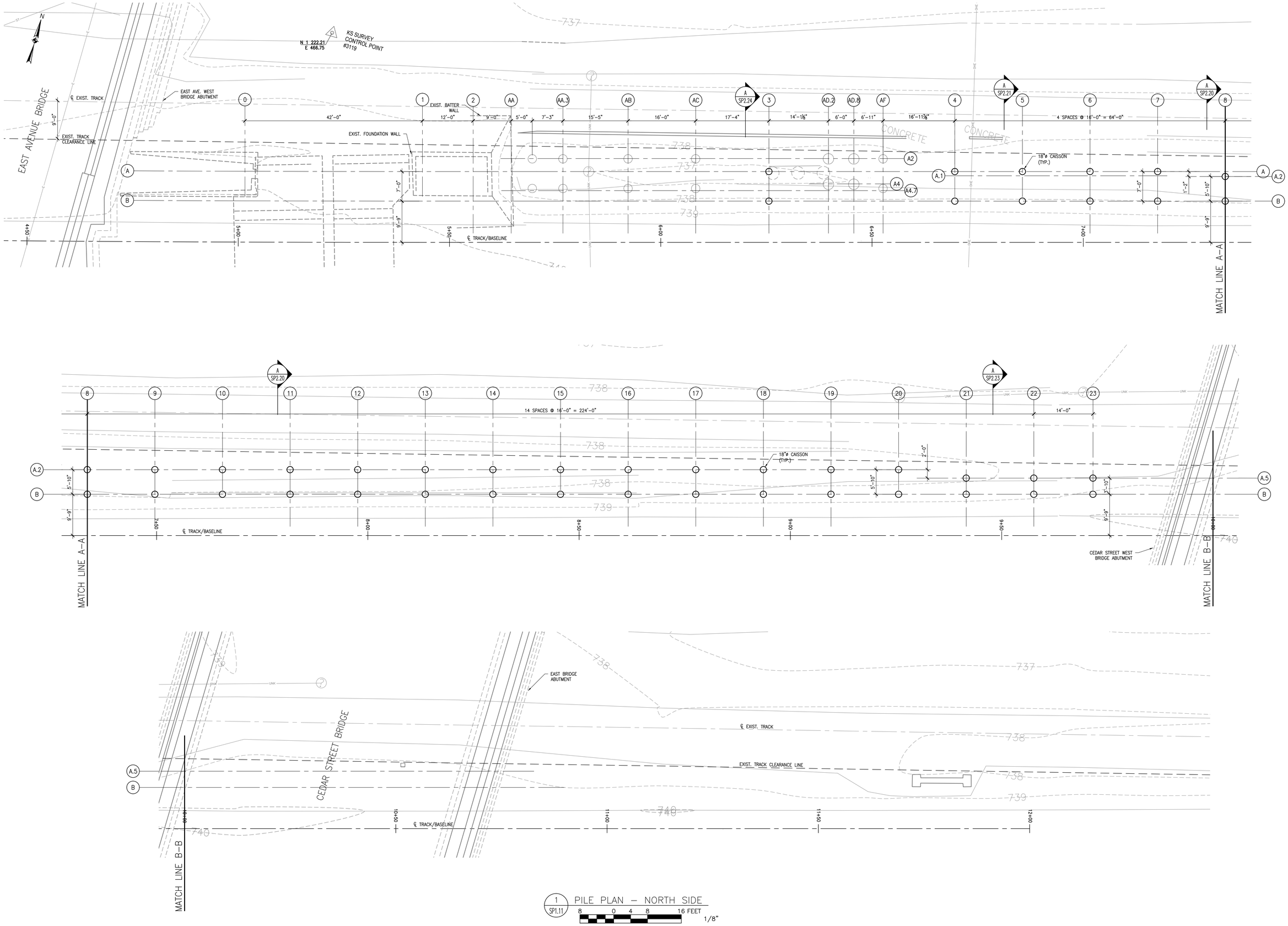

1 SP1.11 PILE PLAN – NORTH SIDE

8 0 4 8 16 FEET

1/8"

DATES AND REVISIONS

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FOUNDATION AND PILE PLAN - NORTH SIDE

DRAWN BY:	VKW
CHECKED BY:	TFS
RLB NO.:	8258.01

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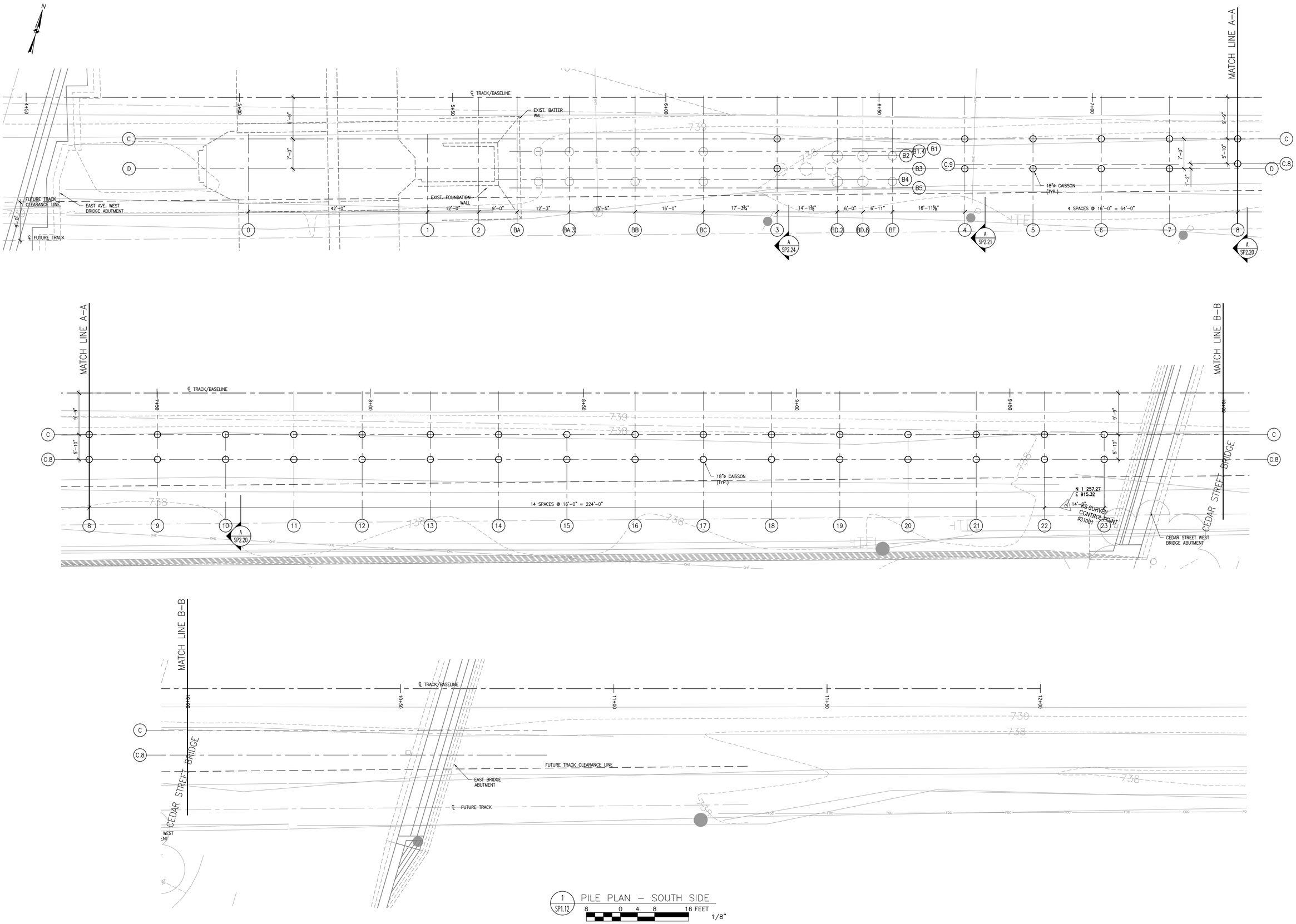

1 SP1.12 PILE PLAN – SOUTH SIDE

8 0 4 8 16 FEET

1/8"

DATES AND REVISIONS

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FOUNDATION AND PILE PLAN - SOUTH SIDE

DRAWN BY:	VKW
CHECKED BY:	TFS
RLB NO.:	8258.01

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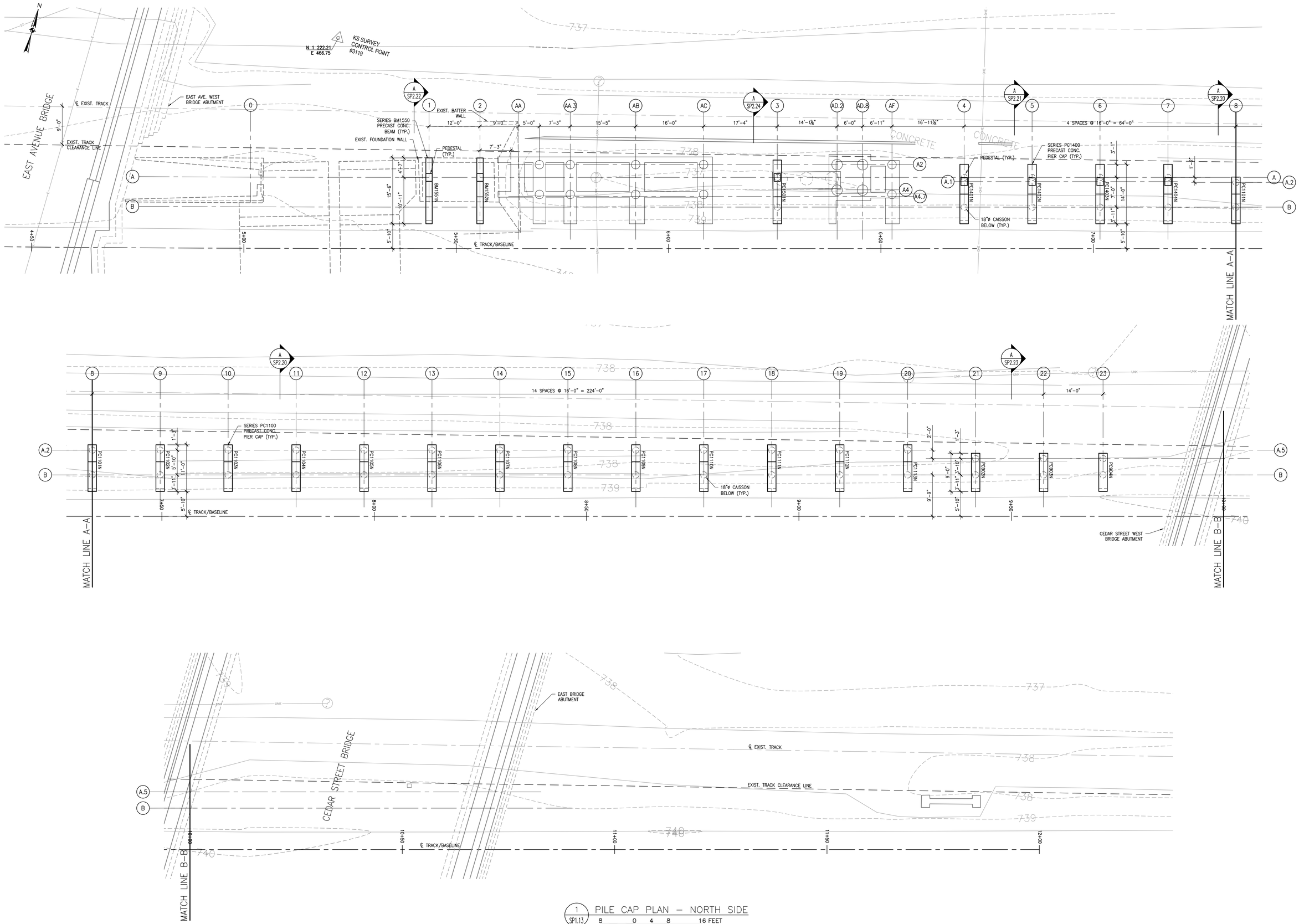

1 SP1.13 PILE CAP PLAN – NORTH SIDE

8 0 4 8 16 FEET 1/8"

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PIER CAP PLAN - NORTH SIDE

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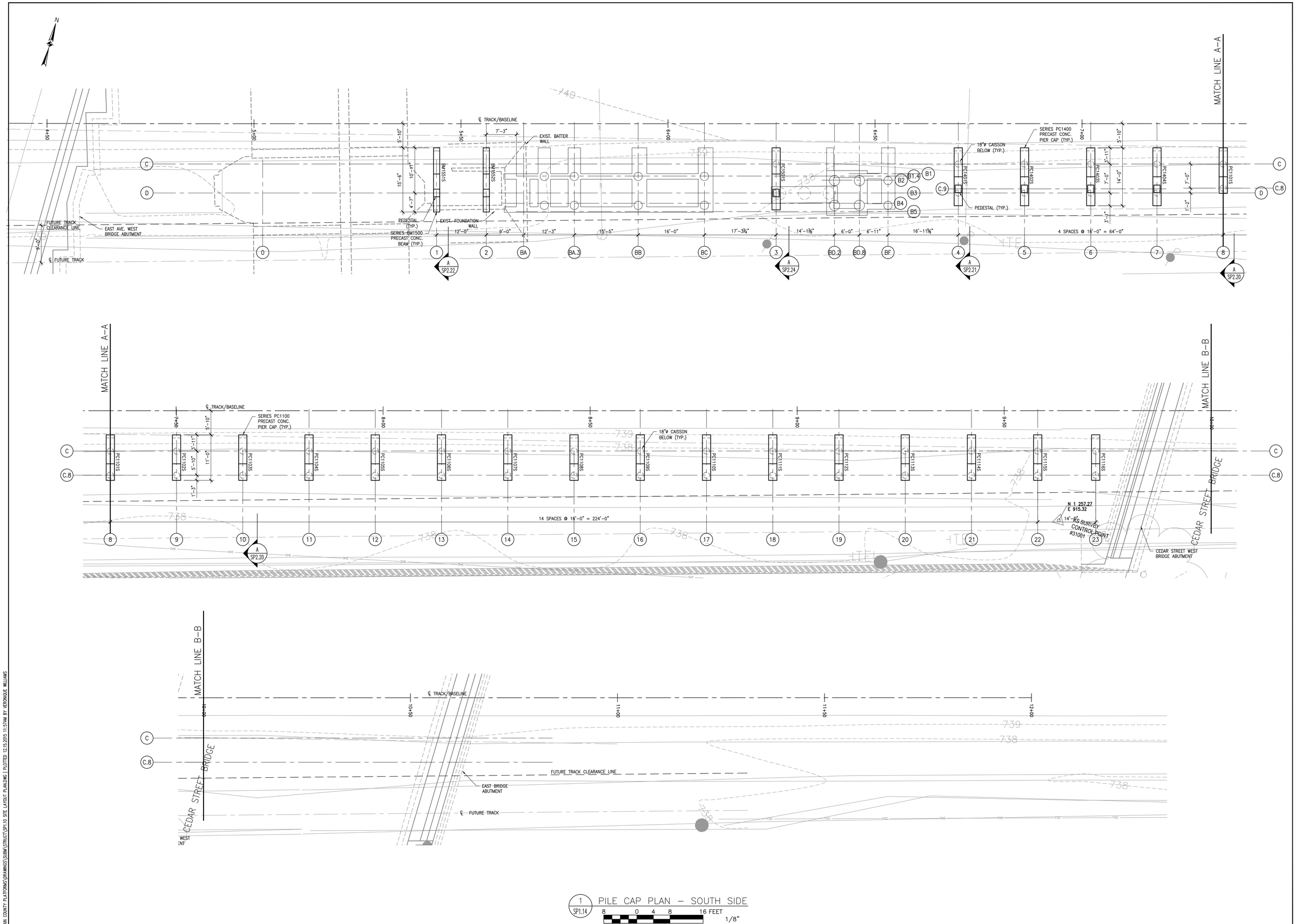

1 SP1.14 PILE CAP PLAN – SOUTH SIDE

8 0 4 8 16 FEET

1/8"

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PIER CAP PLAN - SOUTH SIDE

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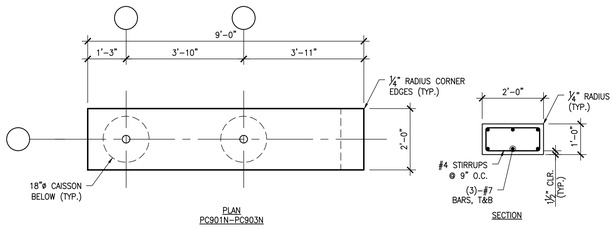
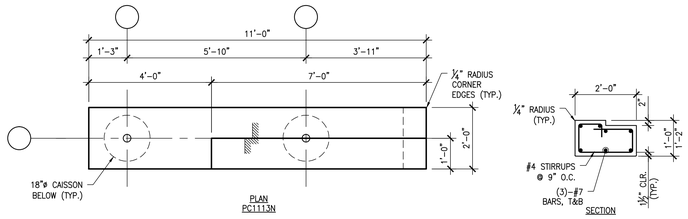
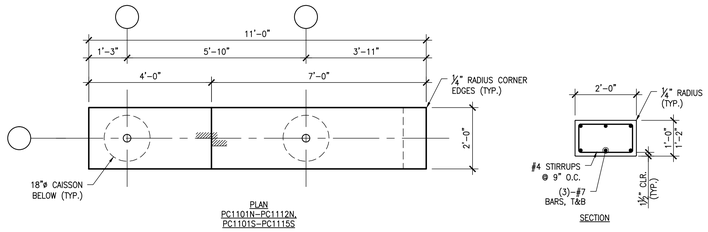
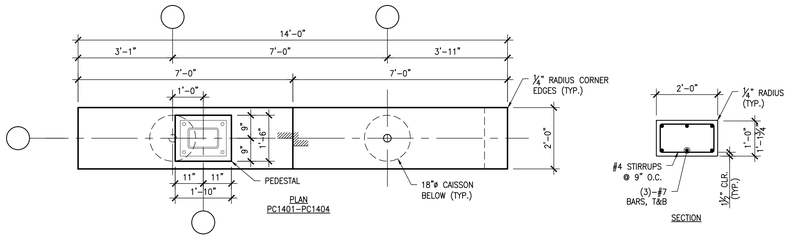
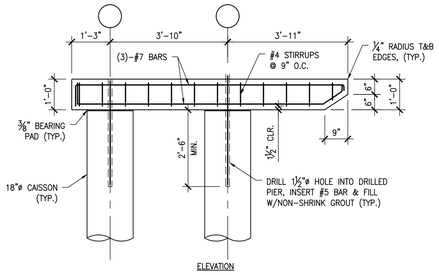




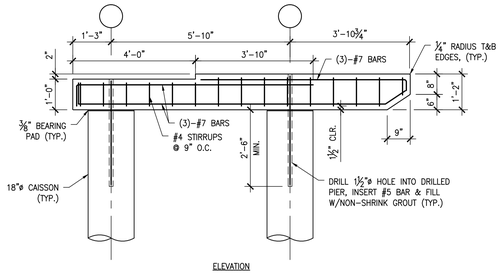






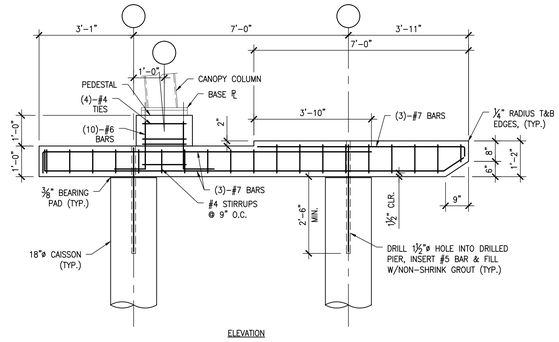
1 SP1.40 PC900 SERIES PILE CAP DETAILS

2 0 2 4 FEET 1/2"



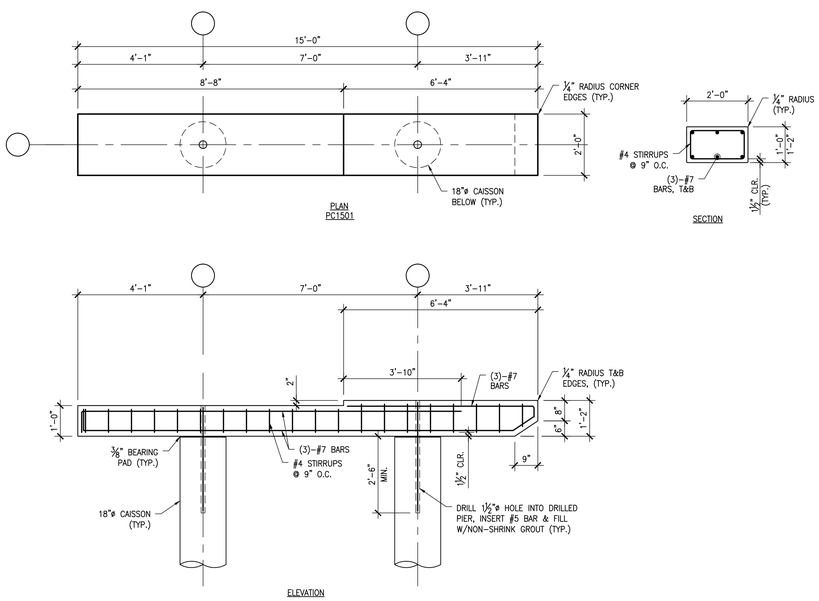
2 SP1.40 PC1100 SERIES PILE CAP DETAILS

2 0 2 4 FEET 1/2"



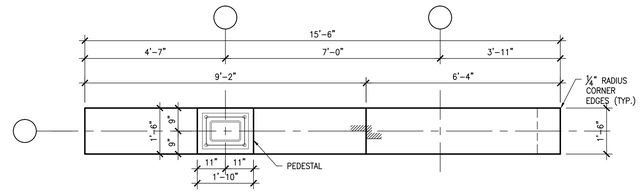
3 SP1.40 PC1400 SERIES PILE CAP DETAILS

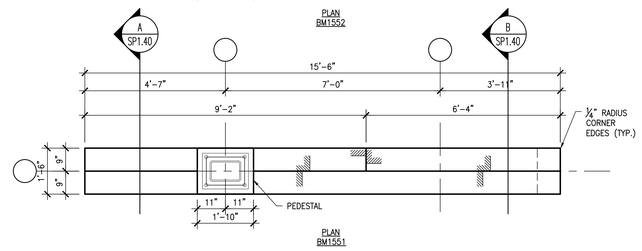
2 0 2 4 FEET 1/2"

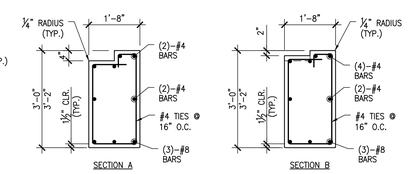


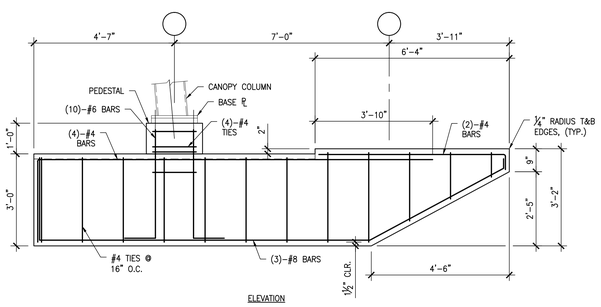
4 SP1.40 PC1500 SERIES PILE CAP DETAILS

2 0 2 4 FEET 1/2"









5 SP1.40 BM1550 SERIES CAST–IN–PLACE BEAM DETAILS

2 0 2 4 FEET 1/2"

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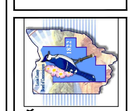

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40 EAST AVENUE, ELYRIA, OH 44035

PRECAST PIER CAP SECTIONS AND DETAILS

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CHECKED BY: TFS
RLB NO.: 8258.01

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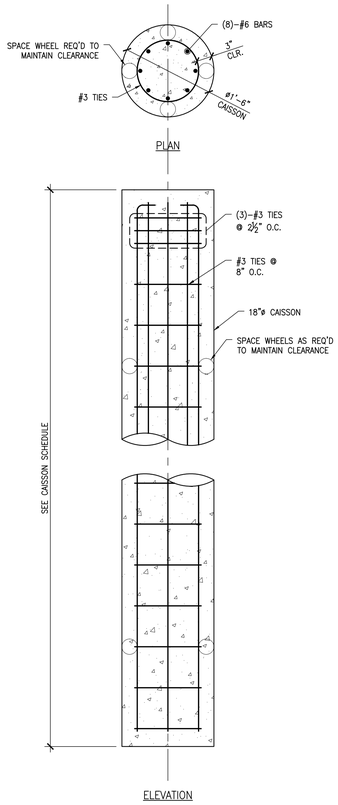

1 / SP1.41 TYPICAL CAISSON DETAIL

1 0 1 2 FEET
1"

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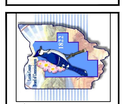

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CAISSON DETAILS

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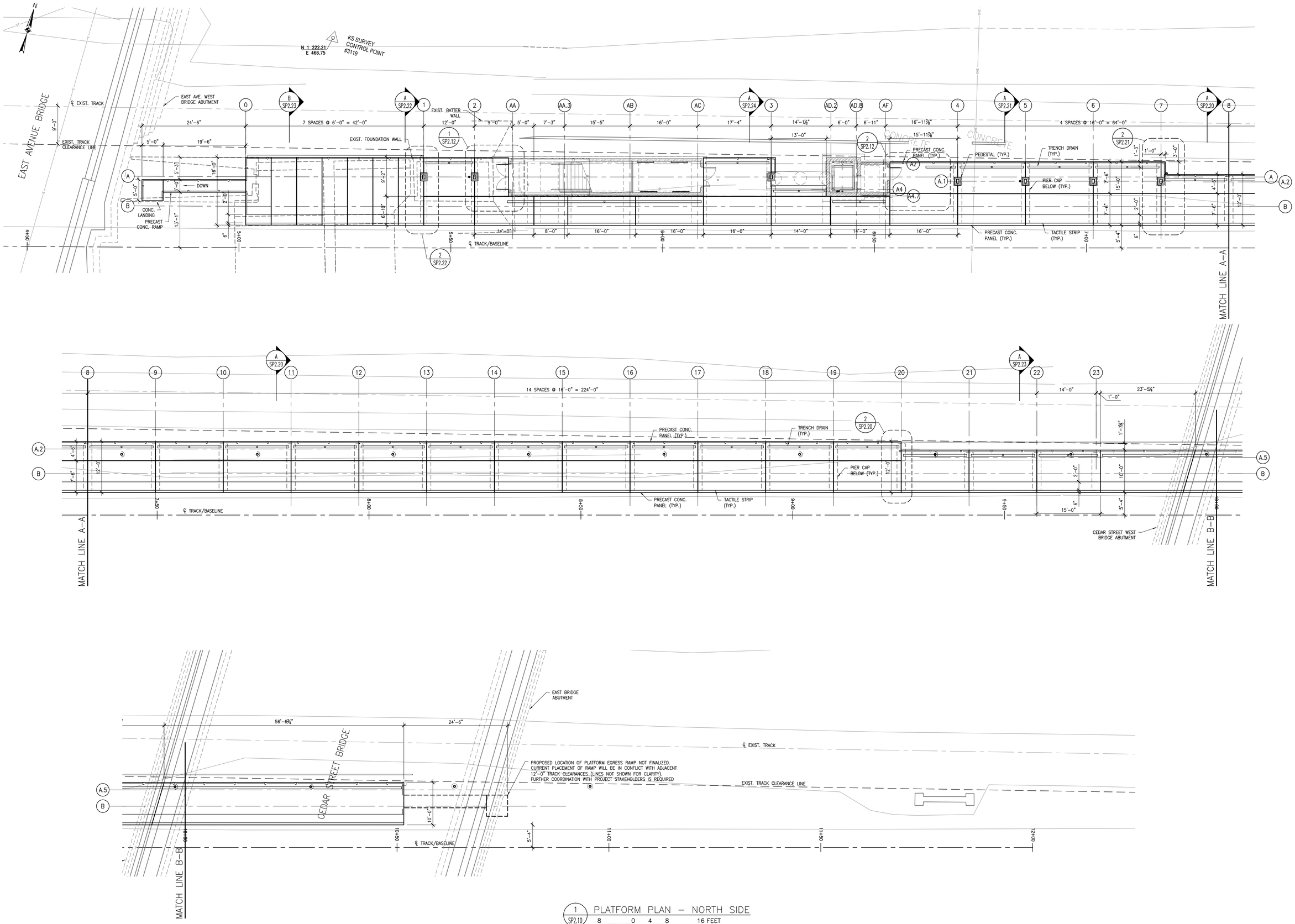

1 SP2.10 PLATFORM PLAN – NORTH SIDE

8 0 4 8 16 FEET
1/8"

DATES AND REVISIONS	
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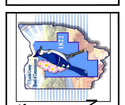

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035
PRECAST PLATFORM PANEL PLAN - NORTH SIDE

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CHECKED BY:	TFS
RLB NO.:	8258.01

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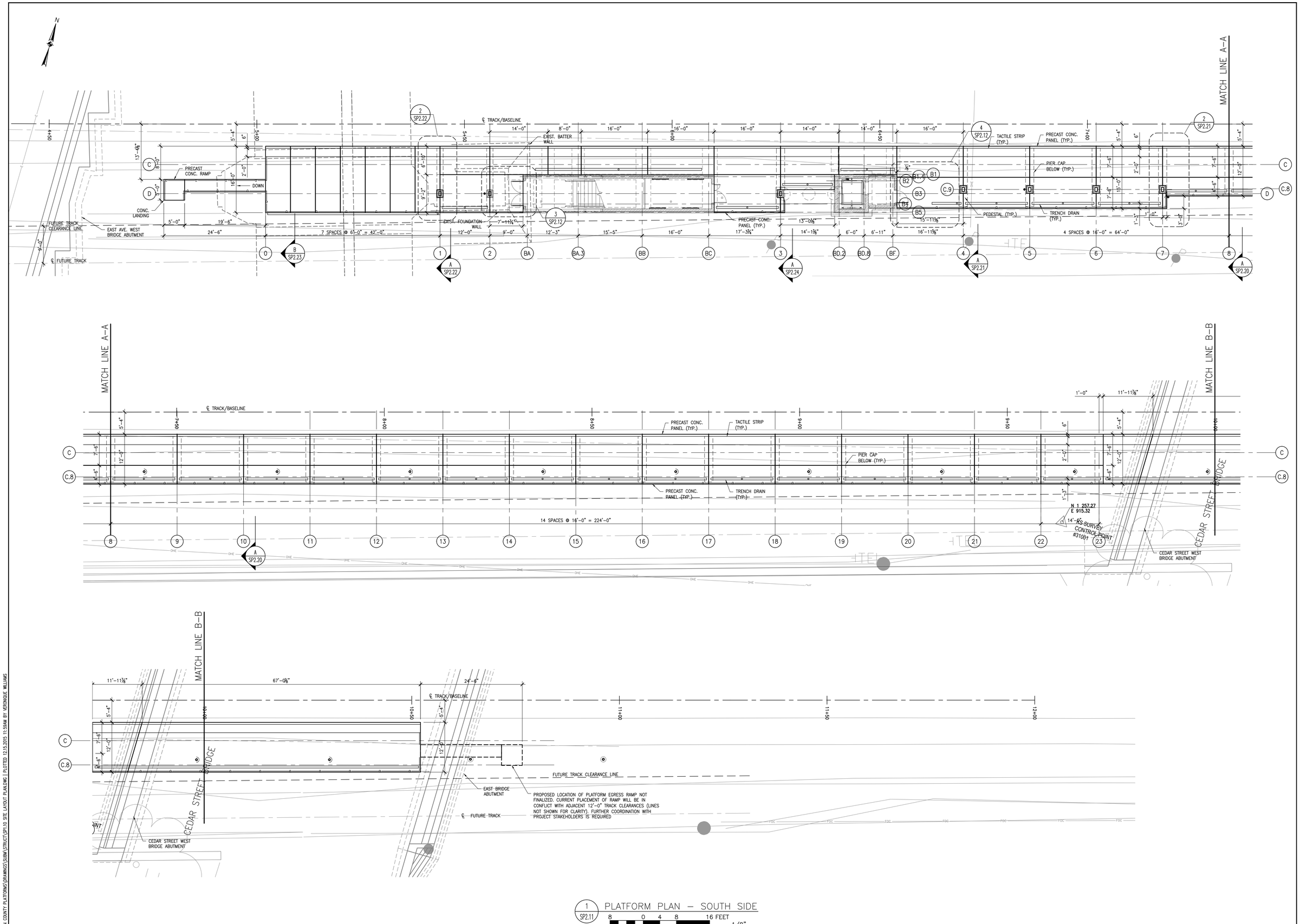

1 SP2.11 PLATFORM PLAN – SOUTH SIDE

8 0 4 8 16 FEET

1/8"

DATES AND REVISIONS	
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PRECAST PLATFORM PANEL PLAN - SOUTH SIDE

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RLB NO.:	8258.01

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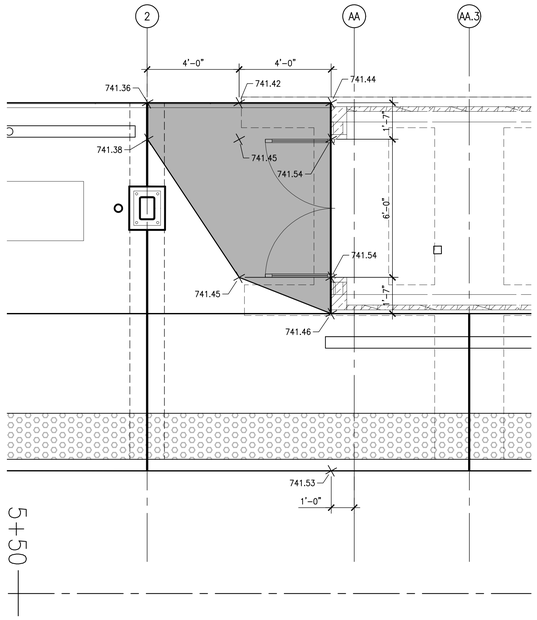
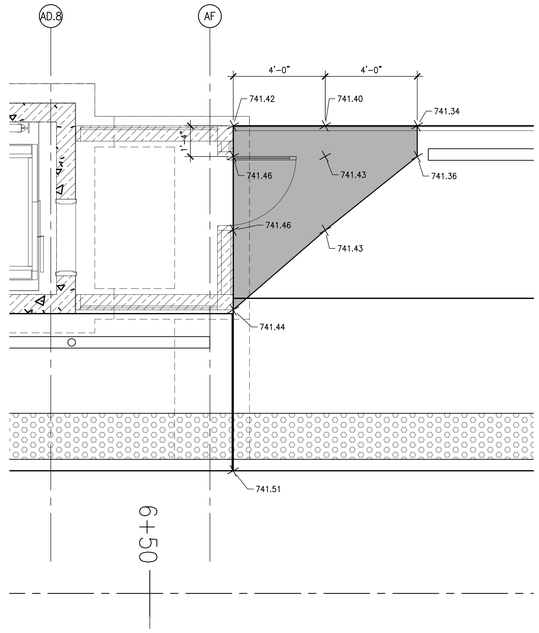


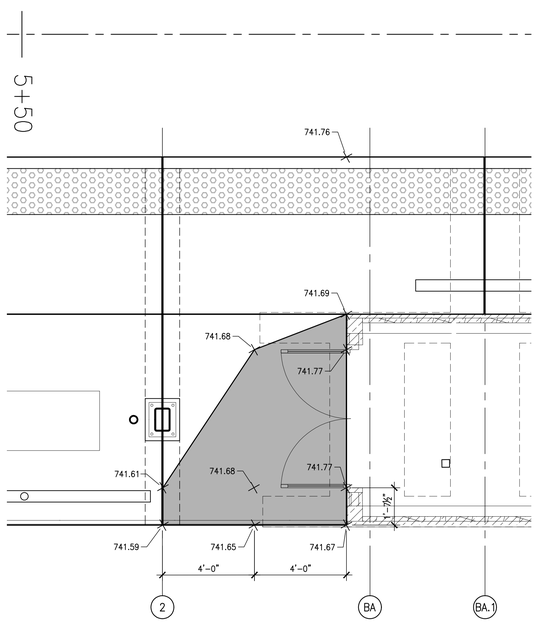
1 SP2.12 WESTBOUND PLATFORM GRADING AT STAIR VESTIBULE ENTRY

2 0 2 4 6 FEET 3/8"



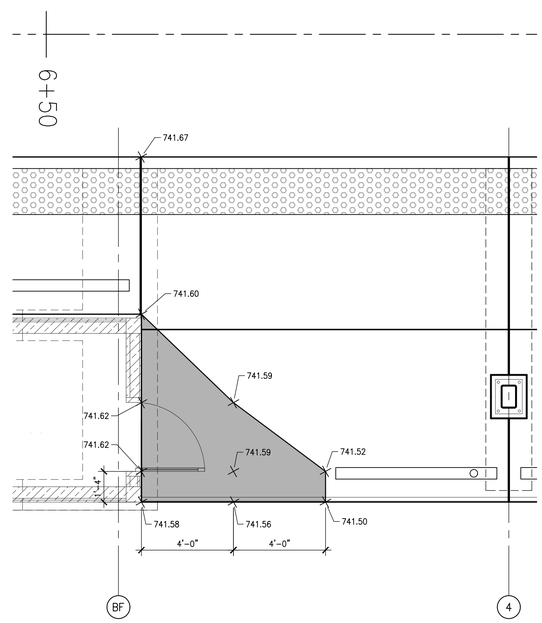
2 SP2.12 WESTBOUND PLATFORM GRADING AT ELEVATOR VESTIBULE ENTRY

2 0 2 4 6 FEET 3/8"



3 SP2.12 EASTBOUND PLATFORM GRADING AT STAIR VESTIBULE ENTRY

2 0 2 4 6 FEET 3/8"



4 SP2.12 EASTBOUND PLATFORM GRADING AT ELEVATOR VESTIBULE ENTRY

2 0 2 4 6 FEET 3/8"

DATES AND REVISIONS

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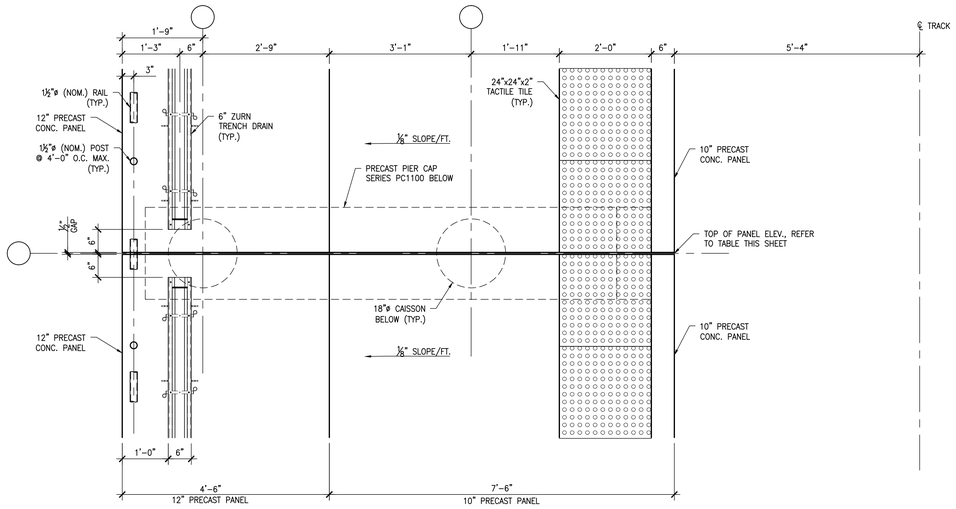
40 EAST AVENUE, ELYRIA, OH 44035

ENLARGED PLATFORM GRADING PLANS

DRAWN BY: VKW
CHECKED BY: TFS
RLB NO.: 8258.01

DRAWING NO.
SP2.12

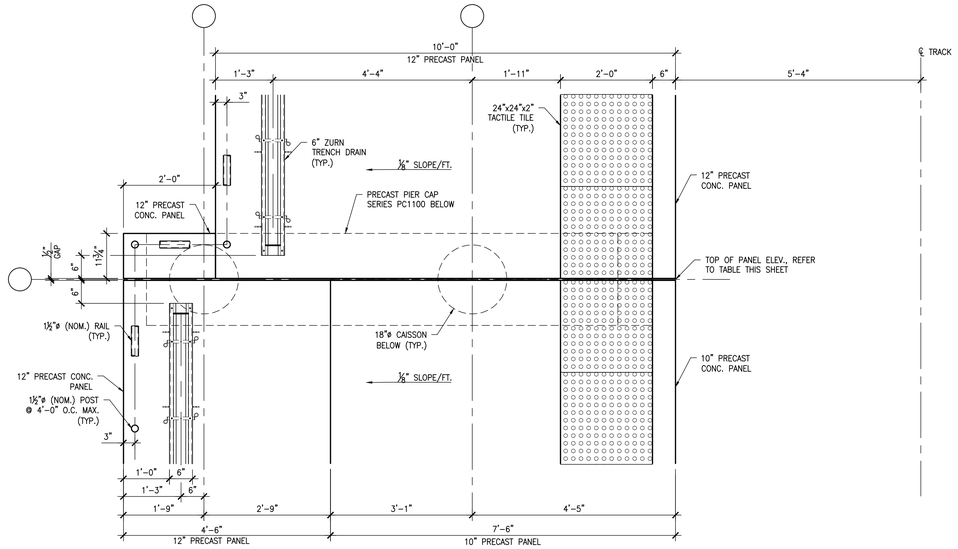
T:\2014530100 LORAIN COUNTY PLATFORMS\DRAWINGS\SUBM\STRUCT\SP1.12 ENLARGED PLATFORM PLANS.DWG | PLOTTED 12.15.2015 11:59AM BY VERONIQUE WILLIAMS



1 SP2.20 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

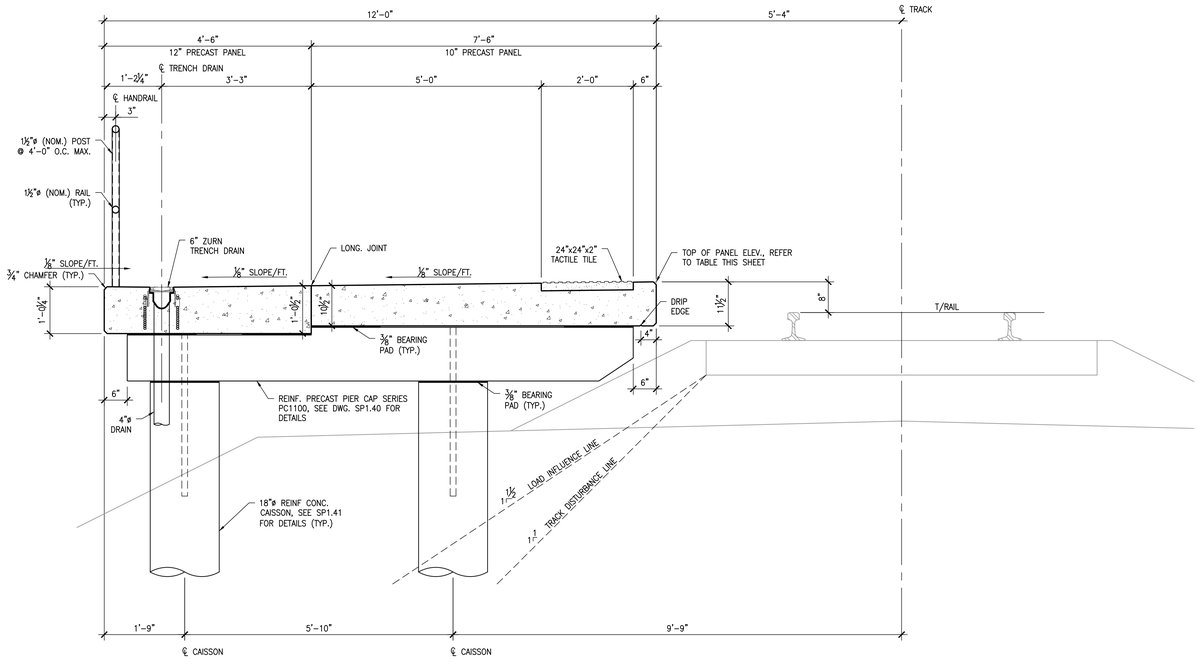
PC1101N–PC1112N, PC1101S–PC1115S



2 SP2.20 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

PC1113N



A SP2.20 PLATFORM SECTION

1 0 1 2 3 FEET 3/4"

PC1101N–PC1112N, PC1101S–PC1115S

	GRIDLINE	STATION	REFERENCE PILE CAP OR CONCRETE BEAM	TOP OF RAIL ELEV. (FEET)	TOP OF CAISSON ELEV. (FEET)	TOP OF PIER CAP ELEV. (FEET)	TOP OF PLATFORM ELEV. (FEET)	REFERENCE SECTION
WESTBOUND PLATFORM	0	5+01.61	-	740.883	-	-	741.550	B/S2.23
	1	5+43.61	BM1551N	740.873	-	740.550	741.540	A/S2.22
	2	5+55.61	BM1552N	740.873	-	740.550	741.540	A/S2.22
	AA	5+64.61		740.863	739.339	740.540	741.530	
	AA.3	5+76.86		740.863	739.339	740.540	741.530	
	AB	5+92.28		740.863	739.339	740.540	741.530	
	AC	6+08.28		740.853	739.329	740.530	741.520	
	3	6+25.61	PC1501N	740.853	739.329	740.530	741.520	A/S2.24
	AD.2	6+39.70		740.853	739.329	740.530	741.520	
	AD.8	6+45.70		740.843	739.319	740.520	741.510	
	AF	6+52.62		740.843	739.319	740.520	741.510	
	4	6+69.61	PC1401N	740.843	739.319	740.520	741.510	A/S2.21
	5	6+85.61	PC1402N	740.833	739.309	740.510	741.500	A/S2.21
	6	7+01.61	PC1403N	740.833	739.309	740.510	741.500	A/S2.21
	7	7+17.61	PC1404N	740.833	739.309	740.510	741.500	A/S2.21
	8	7+33.61	PC1101N	740.823	739.299	740.500	741.490	A/S2.20
	9	7+49.61	PC1102N	740.823	739.299	740.500	741.490	A/S2.20
	10	7+65.61	PC1103N	740.813	739.289	740.490	741.480	A/S2.20
	11	7+81.61	PC1104N	740.813	739.289	740.490	741.480	A/S2.20
	12	7+97.61	PC1105N	740.813	739.289	740.490	741.480	A/S2.20
	13	8+13.61	PC1106N	740.803	739.279	740.480	741.470	A/S2.20
	14	8+29.61	PC1107N	740.803	739.279	740.480	741.470	A/S2.20
	15	8+45.61	PC1108N	740.793	739.269	740.470	741.460	A/S2.20
	16	8+61.61	PC1109N	740.793	739.269	740.470	741.460	A/S2.20
	17	8+77.61	PC1110N	740.793	739.269	740.470	741.460	A/S2.20
	18	8+93.61	PC1111N	740.783	739.259	740.460	741.450	A/S2.20
	19	9+09.61	PC1112N	740.783	739.259	740.460	741.450	A/S2.20
	20	9+25.61	PC1113N	740.773	739.249	740.450	741.440	A/S2.20
	21	9+41.61	PC901N	740.773	739.114	740.315	741.440	A/S2.23
	22	9+57.61	PC902N	740.773	739.114	740.315	741.440	A/S2.23
	23	9+71.61	PC903N	740.763	739.104	740.305	741.430	A/S2.23

	GRIDLINE	STATION	REFERENCE PILE CAP OR CONCRETE BEAM	TOP OF RAIL ELEV. (FEET)	TOP OF CAISSON ELEV. (FEET)	TOP OF PIER CAP ELEV. (FEET)	TOP OF PLATFORM ELEV. (FEET)	REFERENCE SECTION
EASTBOUND PLATFORM	0	5+02.11	-	741.153	-	-	741.820	B/S2.23
	1	5+44.11	BM1551S	741.113	-	740.790	741.780	A/S2.22
	2	5+56.11	BM1552S	741.103	-	740.780	741.770	A/S2.22
	BA	5+65.13		741.093	739.569	740.770	741.760	
	BA.3	5+77.38		741.083	739.559	740.760	741.750	
	BB	5+92.80		741.073	739.549	740.750	741.740	
	BC	6+08.80		741.053	739.529	740.730	741.720	
	3	6+26.11	PC1501S	741.033	739.509	740.710	741.700	A/S2.24
	BD.2	6+40.22		741.023	739.499	740.700	741.690	
	BD.8	6+46.22		741.013	739.489	740.690	741.680	
	BF	6+53.14		741.013	739.489	740.690	741.680	
	4	6+70.11	PC1401S	740.993	739.469	740.670	741.660	A/S2.21
	5	6+86.11	PC1402S	740.973	739.449	740.650	741.640	A/S2.21
	6	7+02.11	PC1403S	740.963	739.439	740.640	741.630	A/S2.21
	7	7+18.11	PC1404S	740.943	739.419	740.620	741.610	A/S2.21
	8	7+34.11	PC1101S	740.933	739.409	740.610	741.600	A/S2.20
	9	7+50.11	PC1102S	740.913	739.389	740.590	741.580	A/S2.20
	10	7+66.11	PC1103S	740.903	739.379	740.580	741.570	A/S2.20
	11	7+82.11	PC1104S	740.883	739.359	740.560	741.550	A/S2.20
	12	7+98.11	PC1105S	740.863	739.339	740.540	741.530	A/S2.20
	13	8+14.11	PC1106S	740.853	739.329	740.530	741.520	A/S2.20
	14	8+30.11	PC1107S	740.833	739.309	740.510	741.500	A/S2.20
	15	8+46.11	PC1108S	740.823	739.299	740.500	741.490	A/S2.20
	16	8+62.11	PC1109S	740.803	739.279	740.480	741.470	A/S2.20
	17	8+78.11	PC1110S	740.793	739.269	740.470	741.460	A/S2.20
	18	8+94.11	PC1111S	740.773	739.249	740.450	741.440	A/S2.20
	19	9+10.11	PC1112S	740.753	739.229	740.430	741.420	A/S2.20
	20	9+26.11	PC1113S	740.743	739.219	740.420	741.410	A/S2.20
	21	9+42.11	PC1114S	740.723	739.199	740.400	741.390	A/S2.20
	22	9+58.11	PC1115S	740.713	739.189	740.390	741.380	A/S2.20
	23	9+72.11	PC1116S	740.693	739.169	740.370	741.360	A/S2.20

DATES AND REVISIONS

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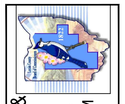

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

PRECAST CONCRETE PLATFORM PANEL SECTIONS AND DETAILS

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CHECKED BY: TFS
RLB NO.: 8258.01

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SP2.20

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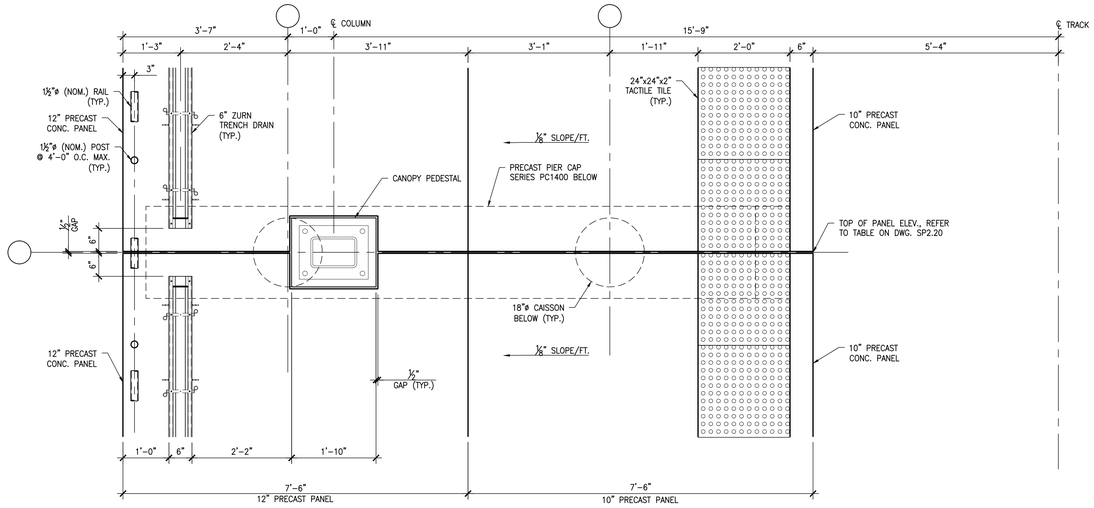
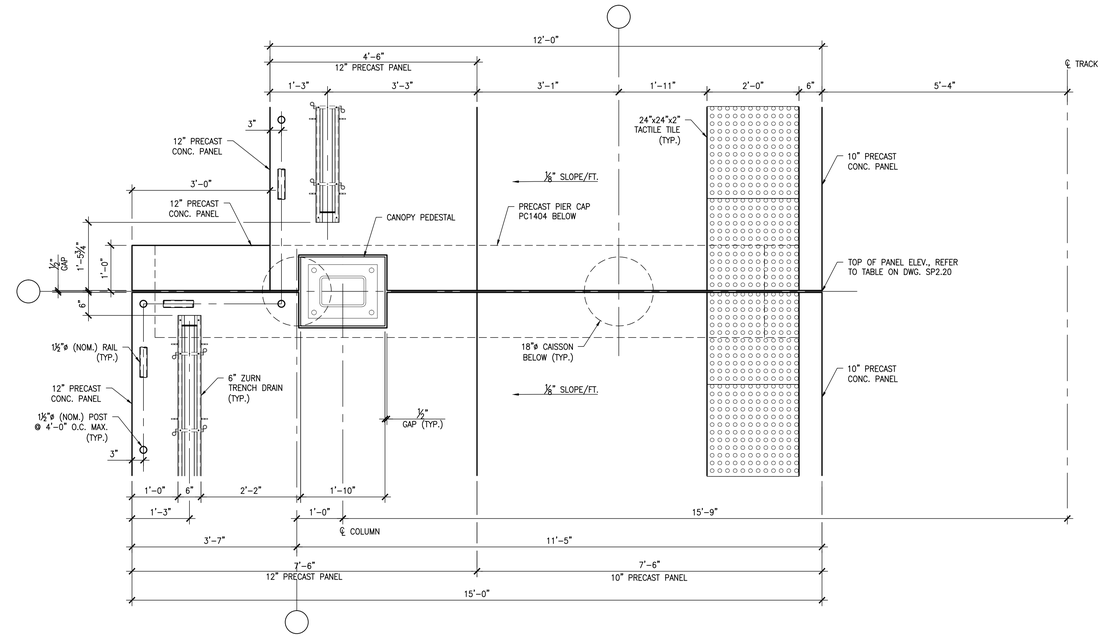


1 SP2.21 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

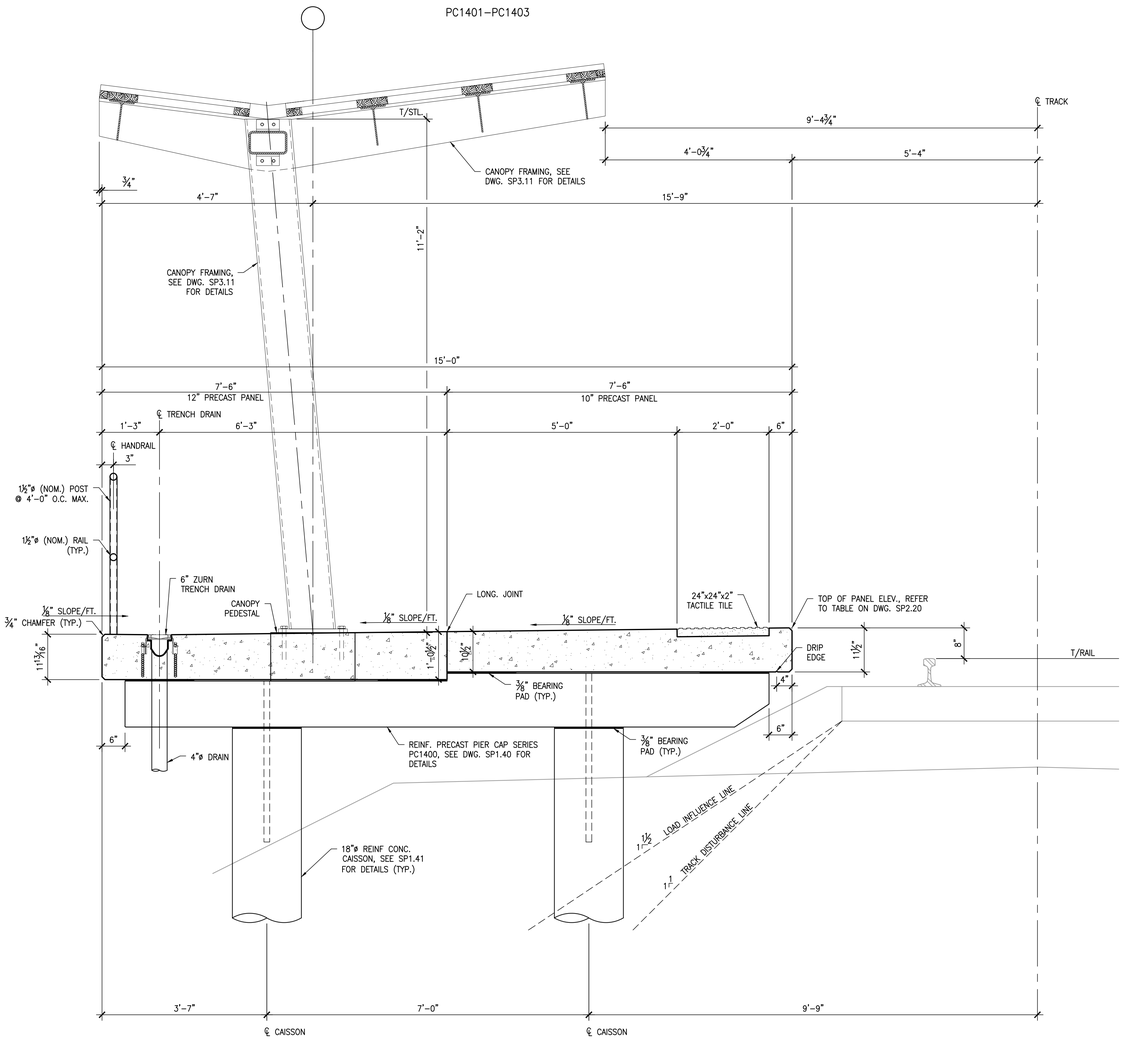
PC1401–PC1403



2 SP2.21 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

PC1404



A SP2.21 PLATFORM SECTION

1 0 1 2 3 FEET 3/4"

PC1401–PC1403

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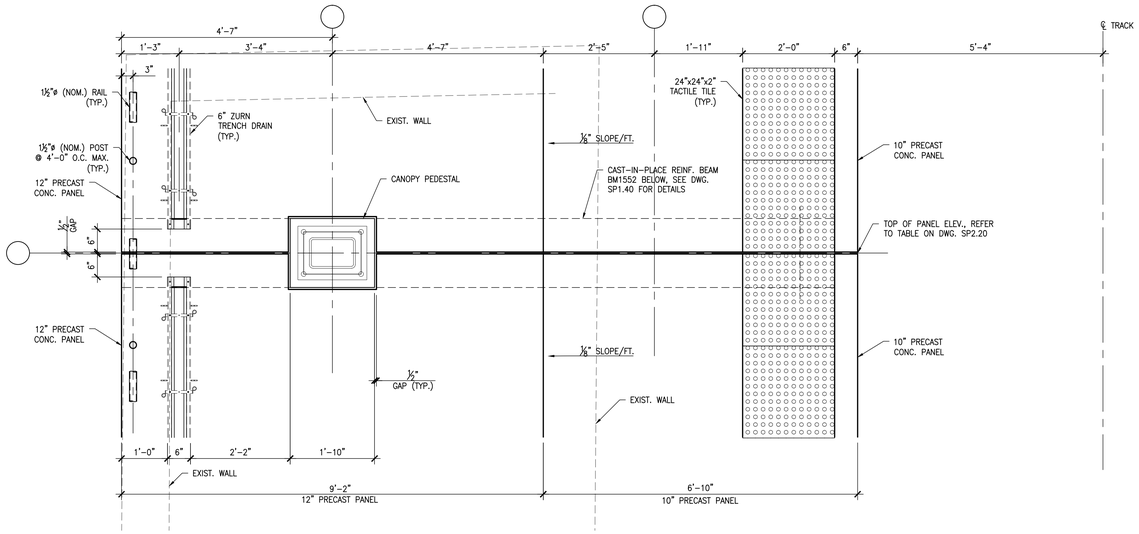
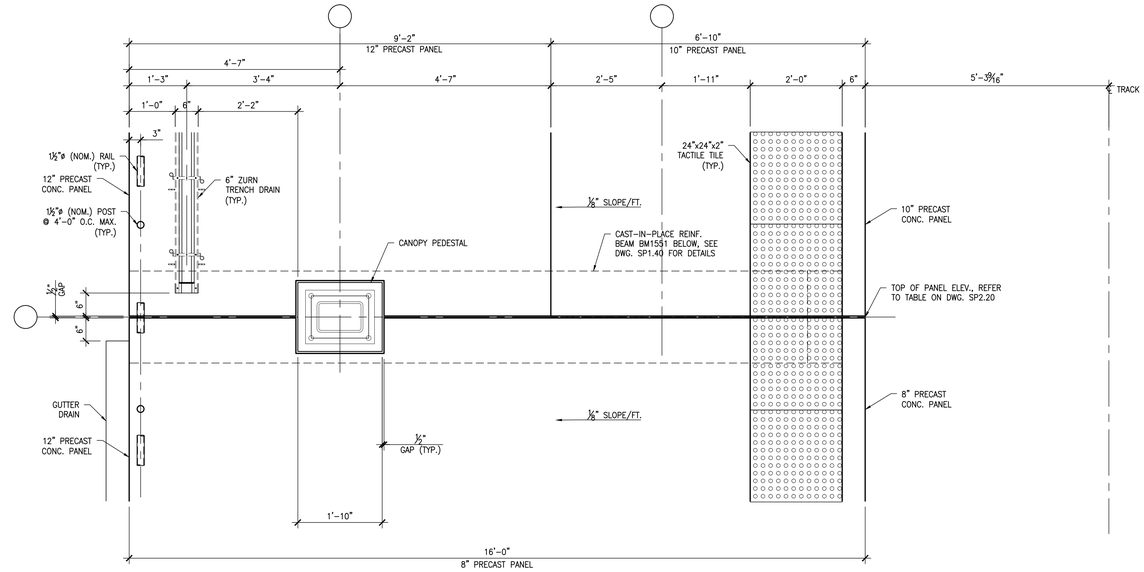


1 SP2.22 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

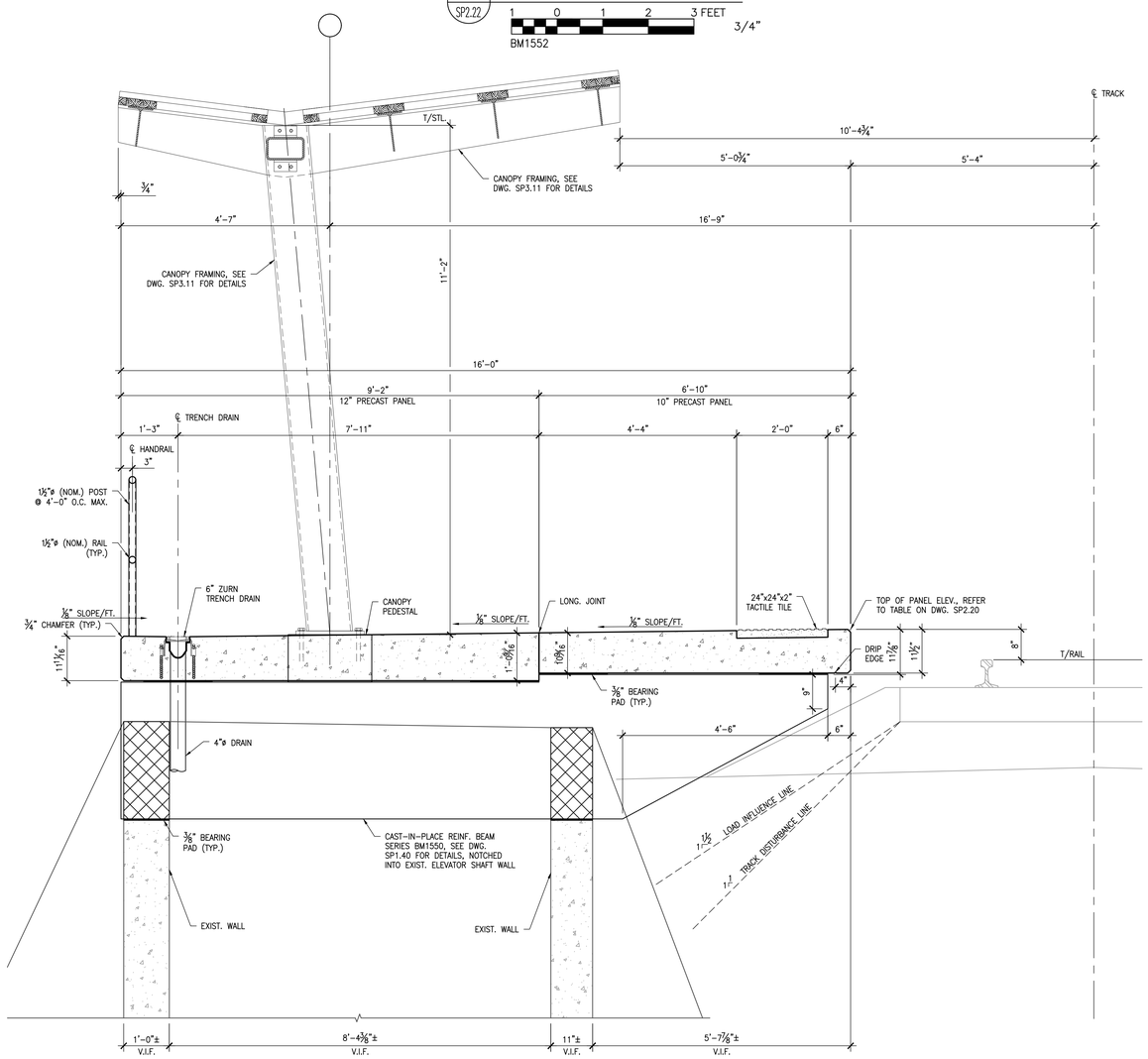
BM1552



2 SP2.22 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

BM1551



A SP2.22 PLATFORM SECTION

1 0 1 2 3 FEET 3/4"

BM1551, BM1552

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PRECAST CONCRETE PLATFORM PANEL SECTIONS AND DETAILS

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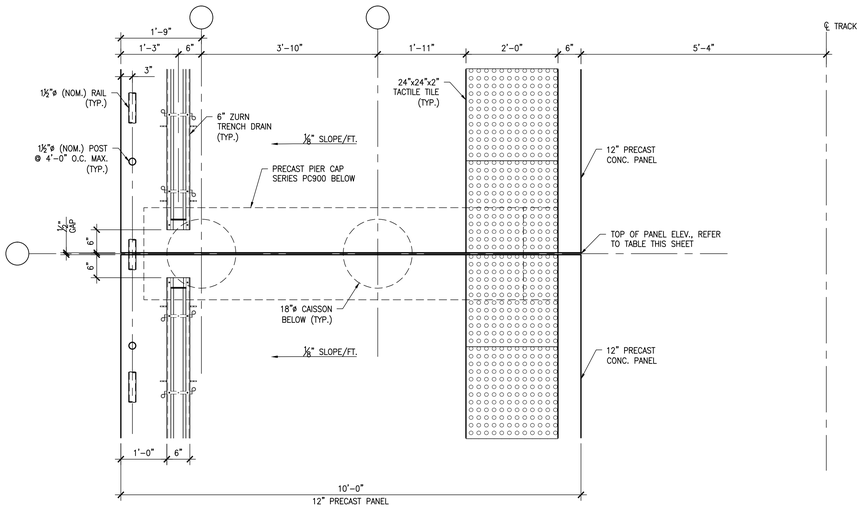
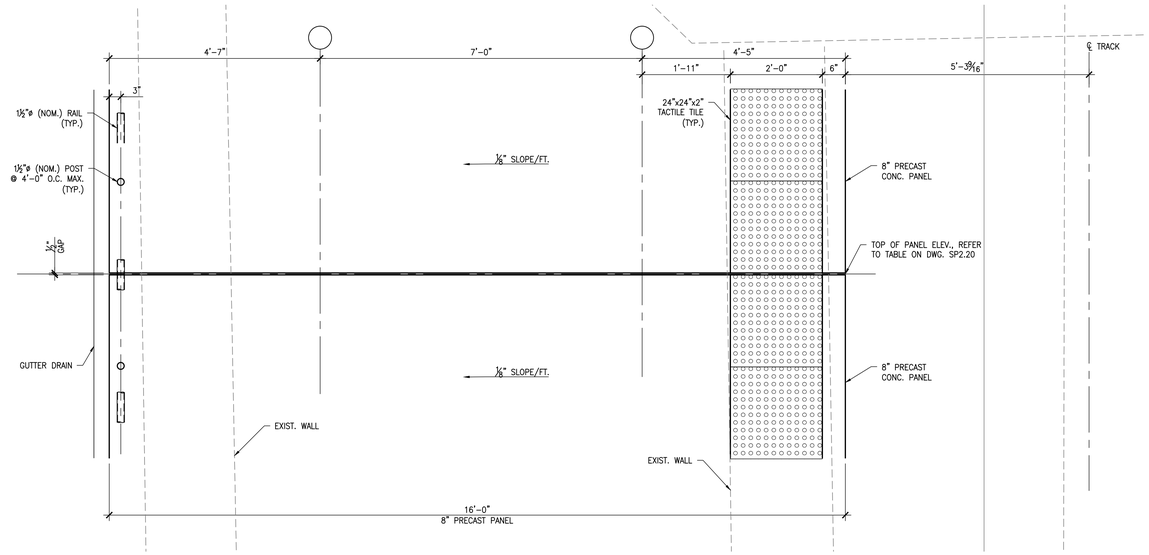


1 SP2.23 PLATFORM PLAN

1 0 1 2 3 FEET 3/4"

PC901N–PC903N



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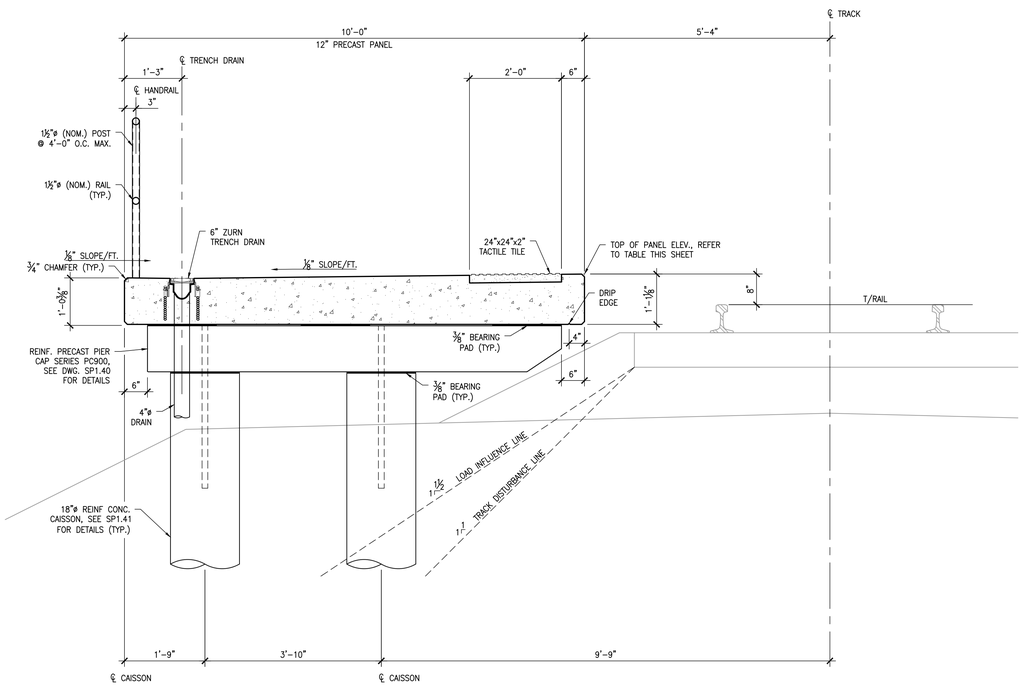
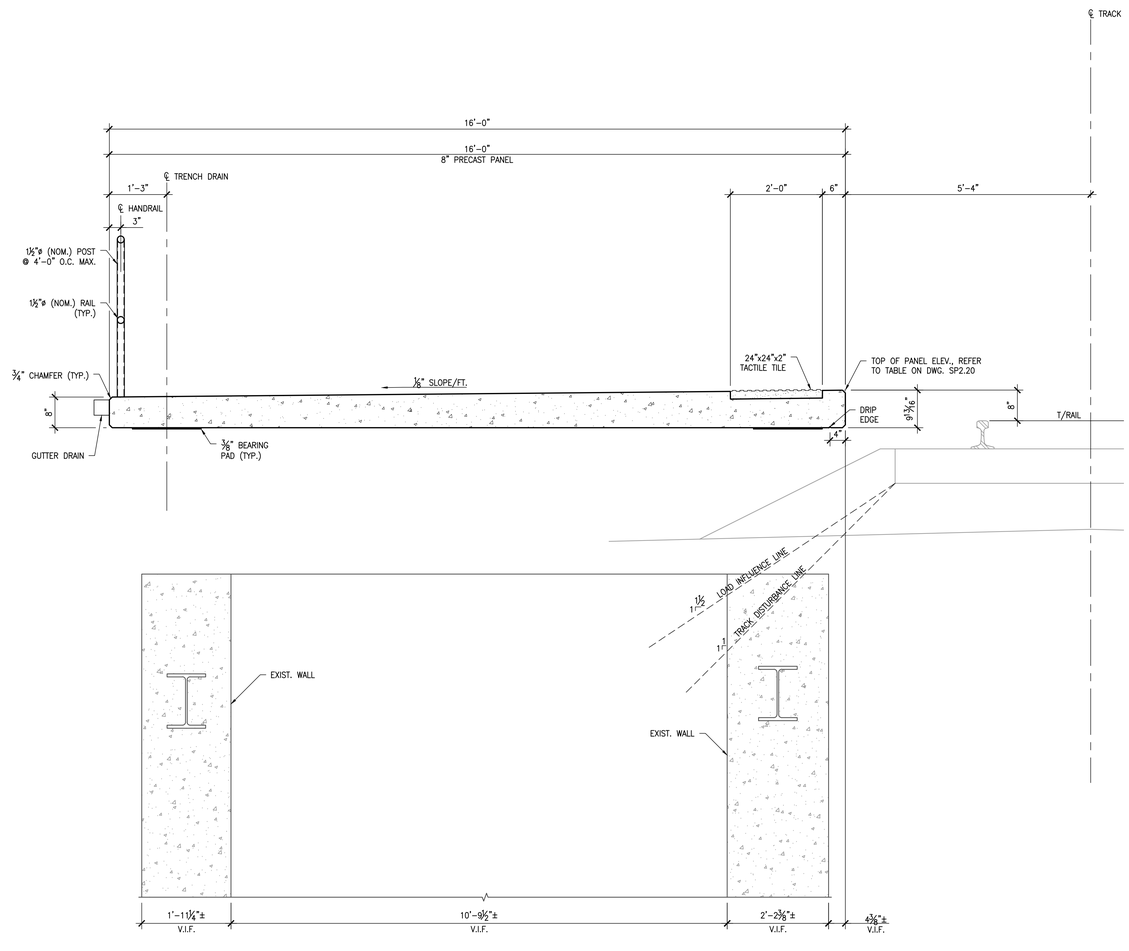
1 0 1 2 3 FEET 3/4"



A SP2.23 PLATFORM SECTION

1 0 1 2 3 FEET 3/4"

PC901N–PC903N



B SP2.23 PLATFORM SECTION – WEST OF EXISTING ELEVATOR SHAFT

1 0 1 2 3 FEET 3/4"

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PRECAST CONCRETE PLATFORM PANEL SECTIONS AND DETAILS

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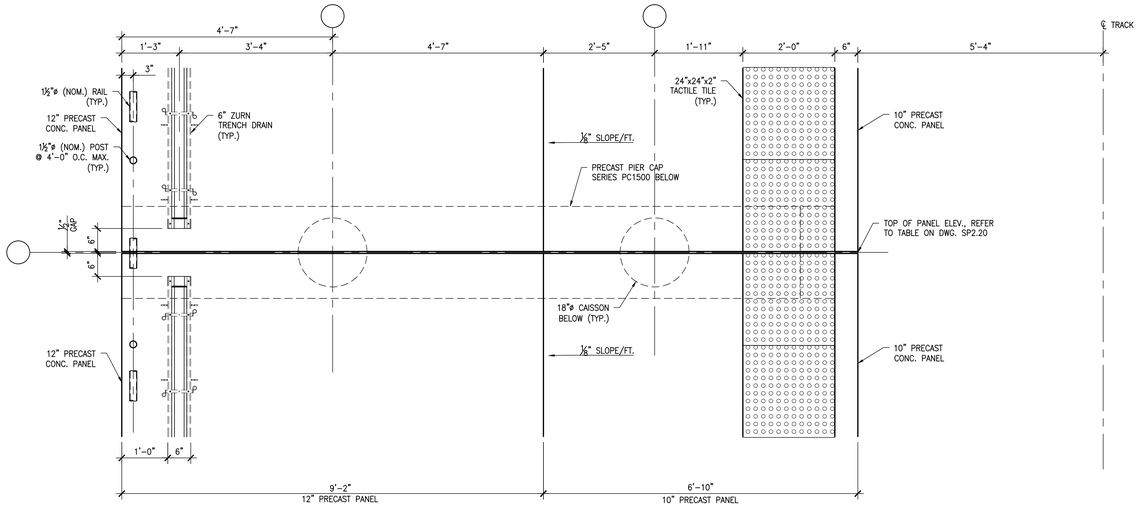
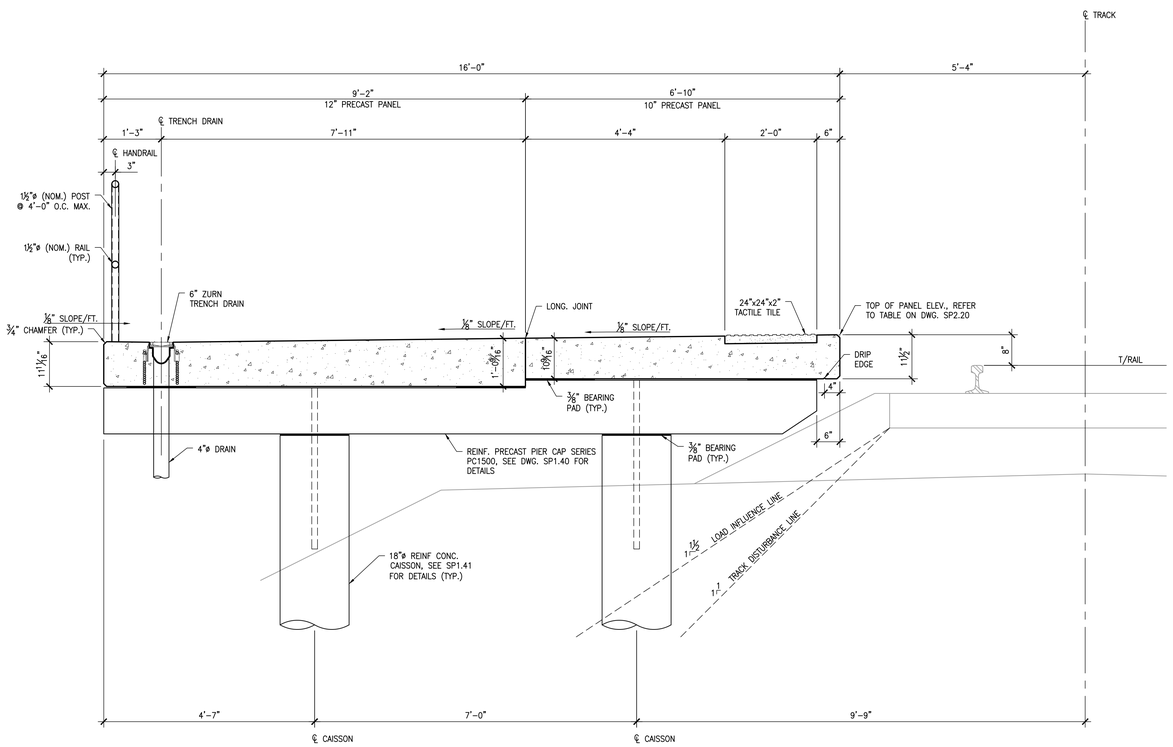


1 SP2.24 PLATFORM PLAN

1 0 1 2 3 FEET

3/4"

PC1501



A SP2.24 PLATFORM SECTION

1 0 1 2 3 FEET

3/4"

PC1501

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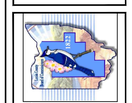

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PRECAST CONCRETE PLATFORM PANEL SECTIONS AND DETAILS

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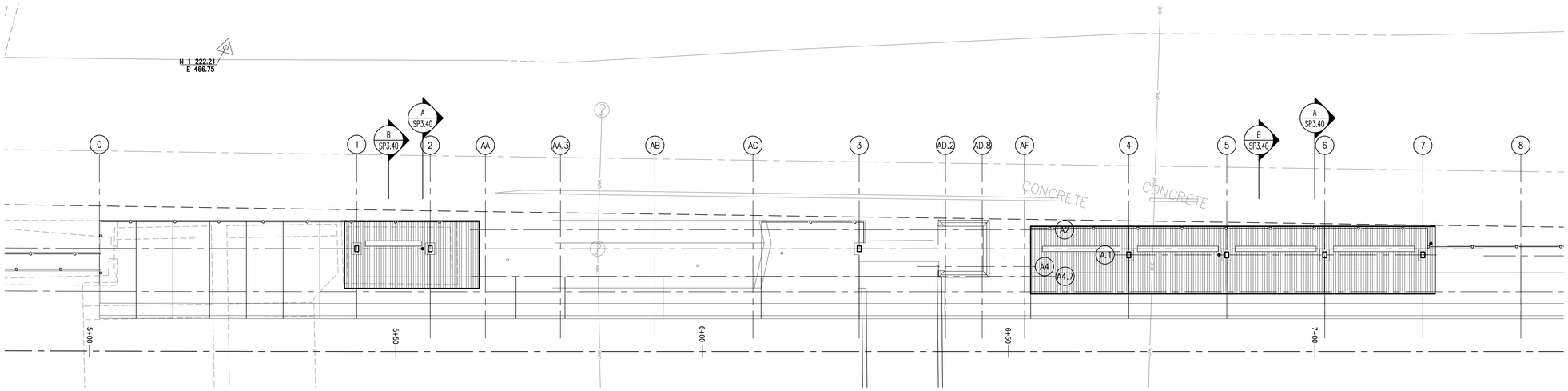
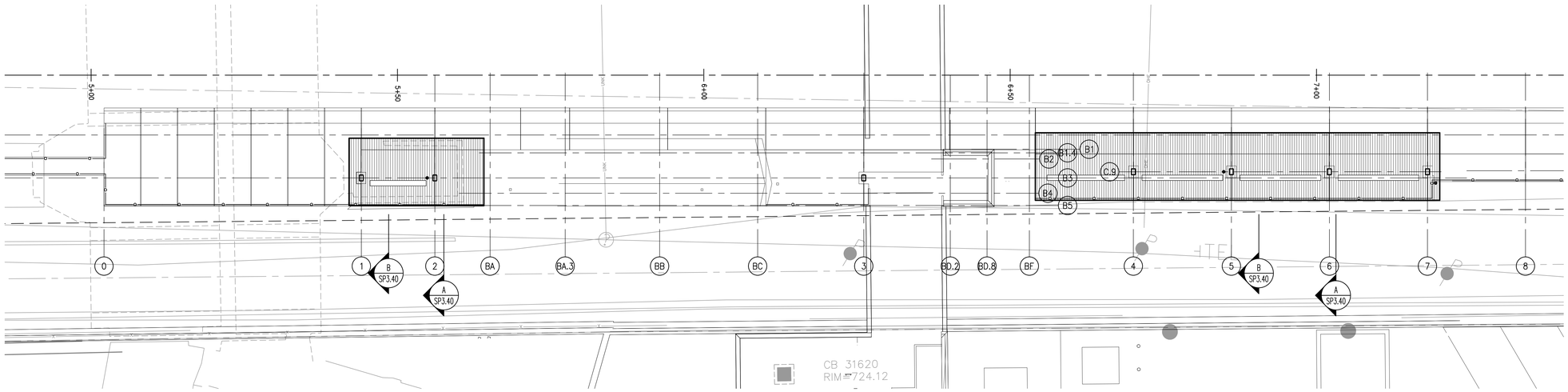


1 SP3.10 CANOPY PLAN – NORTH SIDE

8 0 4 8 16 FEET 1/8"



2 SP3.10 CANOPY PLAN – SOUTH SIDE

8 0 4 8 16 FEET 1/8"

DATES AND REVISIONS

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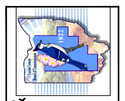


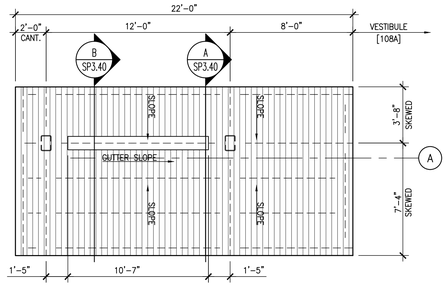
LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

CANOPY PLAN - NORTH AND SOUTH SIDE

DRAWN BY:	VKW
CHECKED BY:	TFS
RLB NO.:	8258.01

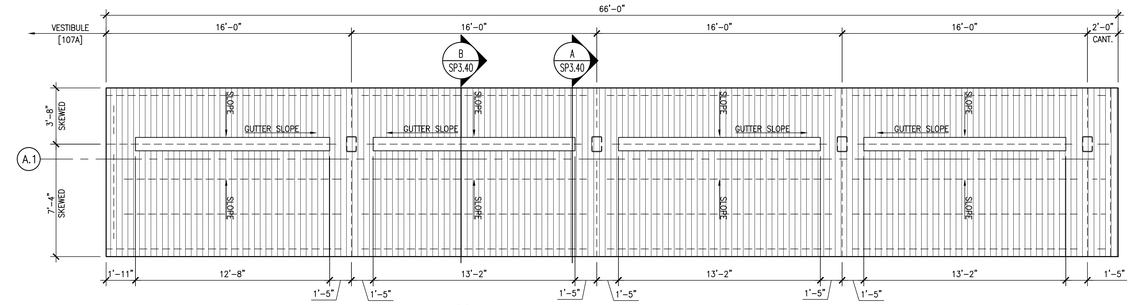
DRAWING NO.
SP3.10

T:\2014530100_LORAIN COUNTY PLATFORMS\DRAWINGS\SIBM\STRUCT\SP1.10 SITE LAYOUT PLAN.DWG | PLOTTED 12.15.2015 12:02PM BY: VERONIQUE WILLIAMS



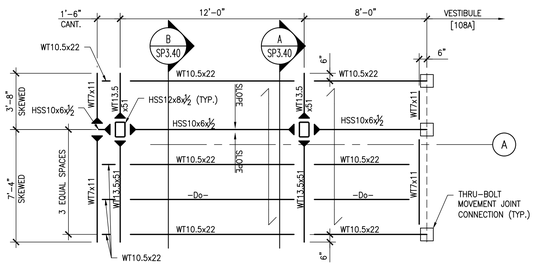
1 SP3.11 WESTBOUND – WEST ROOF PLAN

4 0 2 4 8 FEET 1/4"



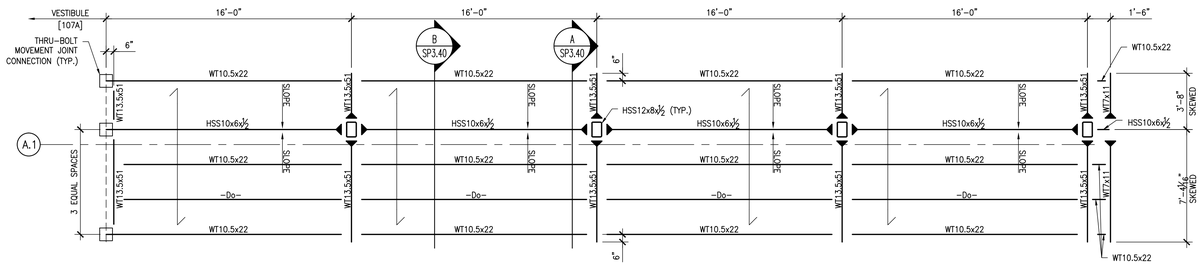
2 SP3.11 WESTBOUND – EAST ROOF PLAN

4 0 2 4 8 FEET 1/4"



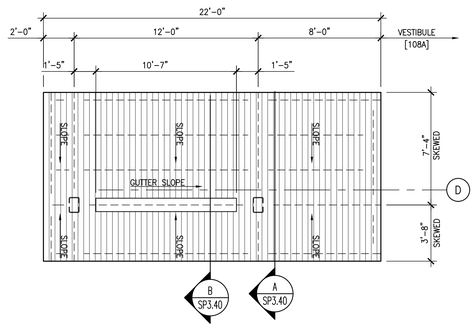
3 SP3.11 WESTBOUND – WEST FRAMING PLAN

4 0 2 4 8 FEET 1/4"



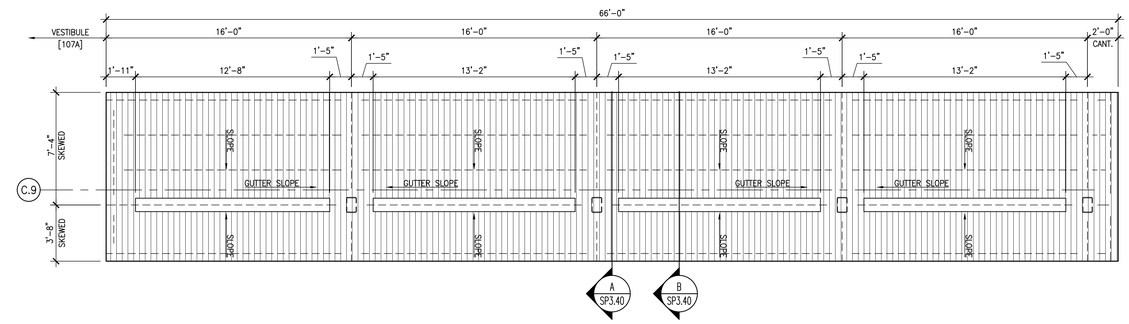
4 SP3.11 WESTBOUND – EAST FRAMING PLAN

4 0 2 4 8 FEET 1/4"



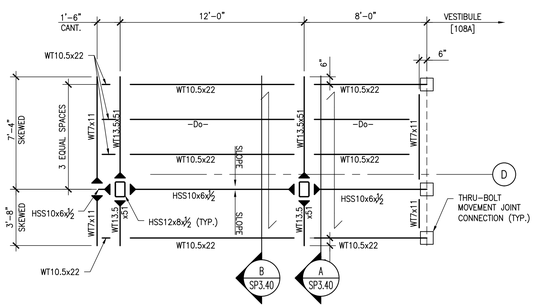
5 SP3.11 EASTBOUND – WEST ROOF PLAN

4 0 2 4 8 FEET 1/4"



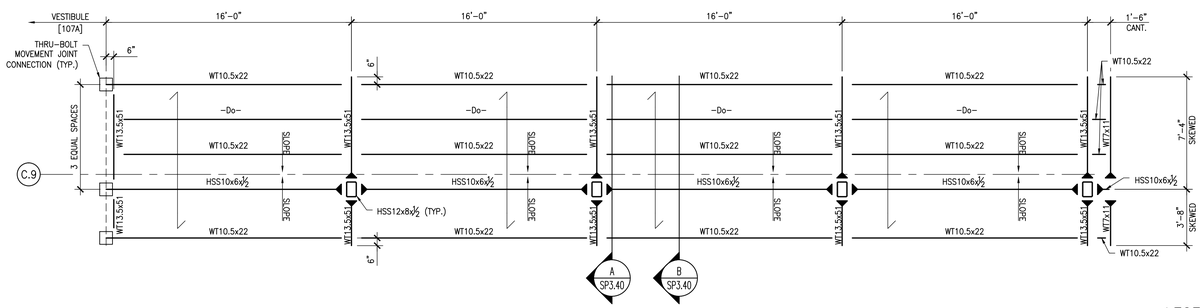
6 SP3.11 EASTBOUND – EAST ROOF PLAN

4 0 2 4 8 FEET 1/4"



7 SP3.11 EASTBOUND – WEST FRAMING PLAN

4 0 2 4 8 FEET 1/4"



8 SP3.11 EASTBOUND – EAST FRAMING PLAN

4 0 2 4 8 FEET 1/4"

LEGEND:

SPAN DIRECTION OF STRUCTURAL DECKING

MOMENT CONNECTION

NOTES:

1. FOR STRUCTURAL NOTES, SEE DWG. SPN.00
2. ALL STEEL, INCLUDING PLATES, ANGLES, ANCHOR BOLTS, NUTS AND WASHERS TO BE GALVANIZED.

DATES AND REVISIONS

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	12/18/15 DESIGN DEVLPMNT

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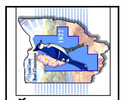

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

CANOPY FRAMING PLAN, ROOF PLAN

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RLB NO.:	8258.01

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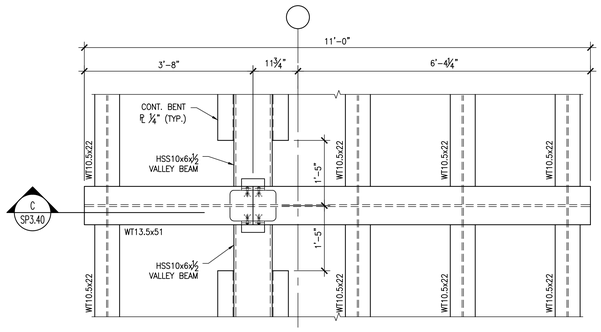
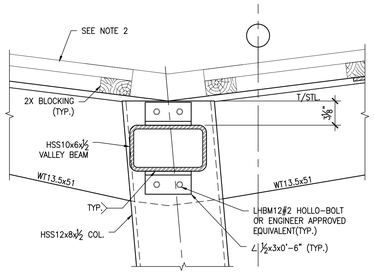
SP3.11

T:\2014530100_LORAIN COUNTY PLATFORMS\DRAWINGS\SIBM\STRUCT\SP3.11 CANOPY FRAMING PLAN, ROOF PLAN AND SECTIONS.DWG | PLOTTED 12.15.2015 12:03PM BY VERONIQUE WILLIAMS

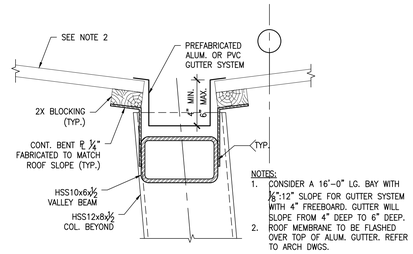


PLAN



1 SP3.40 DETAIL

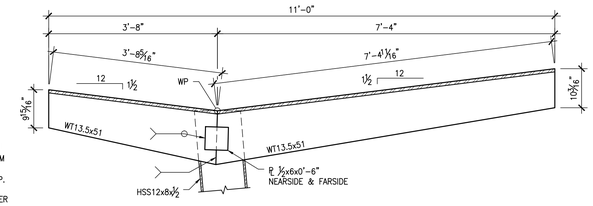
1/2 0 1/2 1 1 1/2 FEET
1 1/2"



NOTES:
1. CONSIDER A 16'-0" LG. BAY WITH ⅛":12" SLOPE FOR GUTTER SYSTEM WITH 4" FREEBOARD. GUTTER WILL SLOPE FROM 4" DEEP TO 6" DEEP.
2. ROOF MEMBRANE TO BE FLASHED OVER TOP OF ALUM. GUTTER. REFER TO ARCH DWGS.

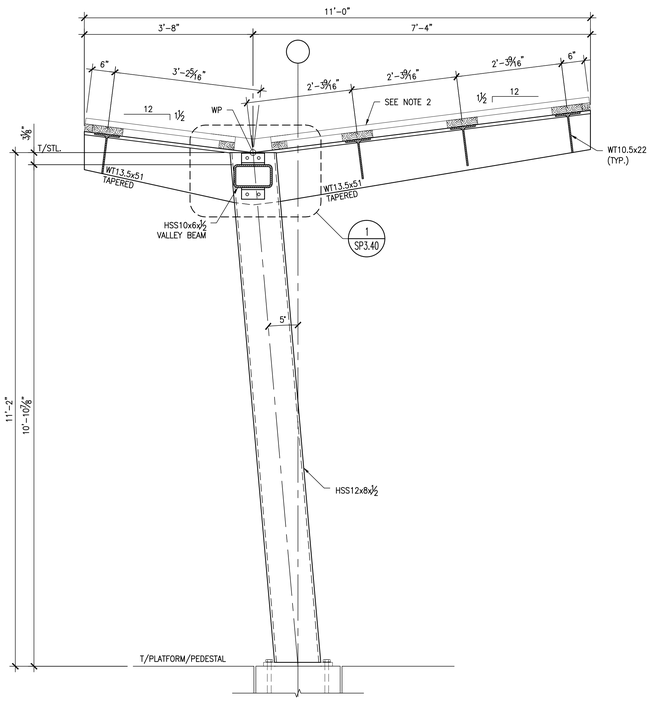
2 SP3.40 DETAIL

1/2 0 1/2 1 1 1/2 FEET
1 1/2"



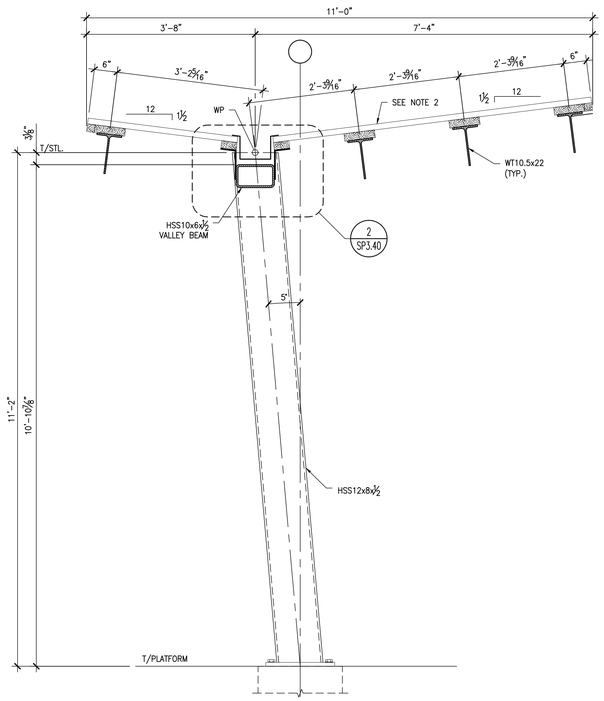
C SP3.40 SECTION

1 0 1 2 3 FEET
3/4"



A SP3.40 SECTION AT COLUMN

1 0 1 2 3 FEET
3/4"



B SP3.40 SECTION AT GUTTER

1 0 1 2 3 FEET
3/4"

NOTES:

1. FOR STRUCTURAL NOTES, SEE DWG. SPN.00.
2. ROOF DECKING SYSTEM OPTIONS:
   a. OPTION 1 – TONGUE AND GROOVE WOOD DECKING
   b. OPTION 2 – 1½" 18 GAGE TYPE B GALVANIZED (G90) STEEL ROOF DECK.
3. ALL STEEL, INCLUDING PLATES, ANGLES, ANCHOR BOLTS, NUTS AND WASHERS TO BE GALV.

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40 EAST AVENUE, ELYRIA, OH 44035

CANOPY SECTIONS AND DETAILS

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CHECKED BY:	TFS
RLB NO.:	8258.01

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SYMBOLS LEGEND

POWER

	WALL MTD GROUNDED DUPLEX RECEPTACLE
C	WALL MTD GFCI TYPE DUPLEX RECEPTACLE. "C" INDICATES ABOVE COUNTER.
WP	DUPLEX RECEPTACLE IN WEATHER PROOF BOX
NSA	HUBBELL NSAV62M TWO GANG IN-WALL AV ENCLOSURE WITH NSOKPTR STANDARD POWER KIT. INSTALL AT ALL FLAT SCREEN DISPLAY LOCATIONS.
	DUPLEX RECEPTACLE IN WEATHER PROOF BOX
	QUAD RECEPTACLE
	SPECIAL RECEPTACLE - TYPE AS NOTED ON DRAWING
	FLOOR MOUNTED GROUNDED DUPLEX RECEPTACLE
	FLOOR MOUNTED GROUNDED QUAD RECEPTACLE
CLG	CEILING MOUNTED GROUNDED DUPLEX RECEPTACLE
CLG	CEILING MOUNTED GROUNDED QUAD RECEPTACLE
CLG T	TELECOMMUNICATIONS OUTLET LOCATION. SEE TELECOMMUNICATIONS DRAWINGS FOR DETAILS.
CLG T CLG	CEILING MOUNTED GROUNDED DUPLEX RECEPTACLE WITH DATA/TEL. OUTLET
CLG T CLG	CEILING MOUNTED GROUNDED QUAD RECEPTACLE WITH DATA/TEL. OUTLET
J	WALL MOUNTED JUNCTION BOX
J CLG	CEILING MOUNTED JUNCTION BOX
X	FLEX CONDUIT CONNECTION TO EQUIPMENT
P3	THREE-GANG SHALLOW FLUSH FLOOR BOX
P2	TWO-GANG SHALLOW FLUSH FLOOR BOX
P1	ONE-GANG SHALLOW FLUSH FLOOR BOX
C2	SIMILAR TO "P2" EXCEPT EACH GANG SHALL CONTAIN AN ACTIVATION BRACKET THAT PROVIDES FOUR CAT5e RJ-45 COMMUNICATION JACKS.
C1	SIMILAR TO C2 FLOOR BOX BUT ONLY ONE GANG.
PC	SIMILAR TO P2 AND C2 EXCEPT ONE GANG HAS NEMA 5-20 DECORATIVE DUPLEX RECEPTACLE AND THE SECOND GANG CONTAINS AN ACTIVATION BRACKET FOR FOUR(4) RJ-45 CAT5e JACKS.
AV	AUDIO/VISUAL MULTI-SERVICE FLOORBOX
T	WALL MOUNTED THERMOSTAT

LIGHTING

	NORMAL LIGHT FIXTURE
	EM LIGHT FIXTURE
$	LIGHT SWITCH
$3	3-WAY LIGHT SWITCH
$EM	EMERGENCY LIGHT SWITCH
$3EM	EMERGENCY 3-WAY LIGHT SWITCH
$a	SINGLE POLE SWITCH. LOWER CASE LETTER DENOTES LIGHTING FIXTURES GROUP CONTROL
$P	SINGLE POLE SWITCH WITH PILOT LIGHT
$D	DIMMER LIGHT SWITCH
$OS	WALL MOUNTED ON & OFF OCCUPANCY SENSOR, OVERRIDE SWITCH
EM/NL	EM/NL DENOTES NIGHT-LIGHT (NOT CONTROLLED) AND FIXTURE FURNISHED WITH 90 MINUTES BATTERY BACK UP.
EM	EM DENOTES EMERGENCY-LIGHT CONNECTED TO EMERGENCY CIRCUIT.
	CEILING MTD. DIRECTIONAL EXIT SIGN. PROVIDE WITH 90 MINUTE BATTERY BACK-UP
	WALL MTD. EXIT SIGN. PROVIDE WITH 90 MINUTE BATTERY BACK-UP
S	CEILING MOUNTED ON & OFF OCCUPANCY SENSOR
SV	CEILING MOUNTED OFF OCCUPANCY SENSOR

CONDUIT & GROUNDING

	CONDUIT STUBBED TO ACCESSIBLE LOCATION. PROVIDE BUSHING AT END, SUPPORT WITHIN 6" OF END
	NEW CONDUIT/EQUIPMENT
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
F	FUTURE FEEDER
	GROUND BUS BAR
	GROUNDING ELECTRODE

DISTRIBUTION

T	TRANSFORMER
	WIRING TROUGH
	PULLBOX
	SWITCH
	FUSE
	CIRCUIT BREAKER
	AUTOMATIC TRANSFER SWITCH
VFD	MOTOR CONTROLLER (V-DENOTES VARIABLE SPEED DRIVE)
	BATTERY
	PANELBOARD, 208Y/120V
	PANELBOARD, 480Y/277V
X	MOTOR (X - DENOTES HORSEPOWER)

ELECTRICAL CODE DATA

DRAWING INDEX

SHEET NUMBER	SHEET NAME
E0.1	SHEET INDEX, GENERAL NOTES, SYMBOLS & ABBREVIATIONS
E1.1	ELECTRICAL PLANS
E1.2	ELECTRICAL PLANS
E1.4	ELECTRICAL PLANS
E3.1	ELECTRICAL DETAILS AND LEGENDS
E4.1	SCHEDULES
ES1.1	ELECTRICAL SITE PLAN

GENERAL ELECTRICAL NOTES

ELECTRICAL NOTES:

1.THE FOLLOWING NOTES ARE FOR ALL ELECTRICAL DETAILS & PLANS IN THIS SET. THE CONTRACTOR SHALL REVIEW THEM CAREFULLY AND SHALL APPLY TO THE ELECTRICAL WORK ON THE PROJECT.

2.CONTRACTORS AND SUB-CONTRACTORS SHALL 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.

3.COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE PIPE RISES, DROPS, AND OFFSETS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY CONSTRUCTION MANAGER OF DISCREPANCIES BEFORE STARTING WORK.

4.DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PIPING, CONNECTIONS, FITTINGS, OFFSETS, ETCETERA AND ALL MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

5.ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY AND THE AUTHORITY HAVING JURISDICTION. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.

6.USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN THE RETURN AIR PLENUM. MATERIALS USED IN THE PLENUM SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84. ALL EXPOSED WIRING IN THE PLENUM SHALL BE PLENUM RATED.

ABBREVIATIONS

1PH SINGLE PHASE
3PH THREE PHASE
AFF ABOVE FINISHED FLOOR
AFG ABOVE FINAL GRADE
AHJ AUTHORITY HAVING JURISDICTION
BFG BELOW FINAL GRADE
BRKR CIRCUIT BREAKER
C CONDUIT
CKT CIRCUIT
COORD COORDINATE
CLG CEILING
EC ELECTRICAL CONTRACTOR
EMT ELECTRICAL METALLIC TUBING
ETR EXISTING TO REMAIN
EWC ELECTRIC WATER COOLER
EWH ELECTRIC WATER HEATER
EXIST EXISTING
FLR FLOOR
FMC FLEXIBLE METAL CONDUIT
GC GENERAL CONTRACTOR
GND GROUND
HGT HEIGHT
IG ISOLATED GROUND
LL LANDLORD
MC MECHANICAL CONTRACTOR
MCT MOUNTED/MOUNTING
NL NIGHT LIGHT
PNL PANELUPANELBOARD
REC RECEPTACLE
REL RELOCATE EXISTING DEVICE
REM REMOVE EXISTING DEVICE COMPLETE
RGS RIGID GALVANIZED STEEL CONDUIT
RR REMOVE AND RELOCATE
UNO UNLESS NOTED OTHERWISE
WP WEATHERPROOF
XFMR TRANSFORMER

DATES AND REVISIONS

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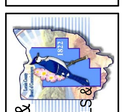

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035
SHEET INDEX, GENERAL NOTES, SYMBOLS & ABBREVIATIONS

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RLB NO.: 8258.01

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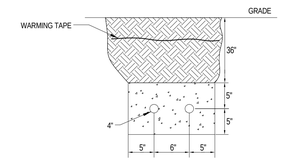
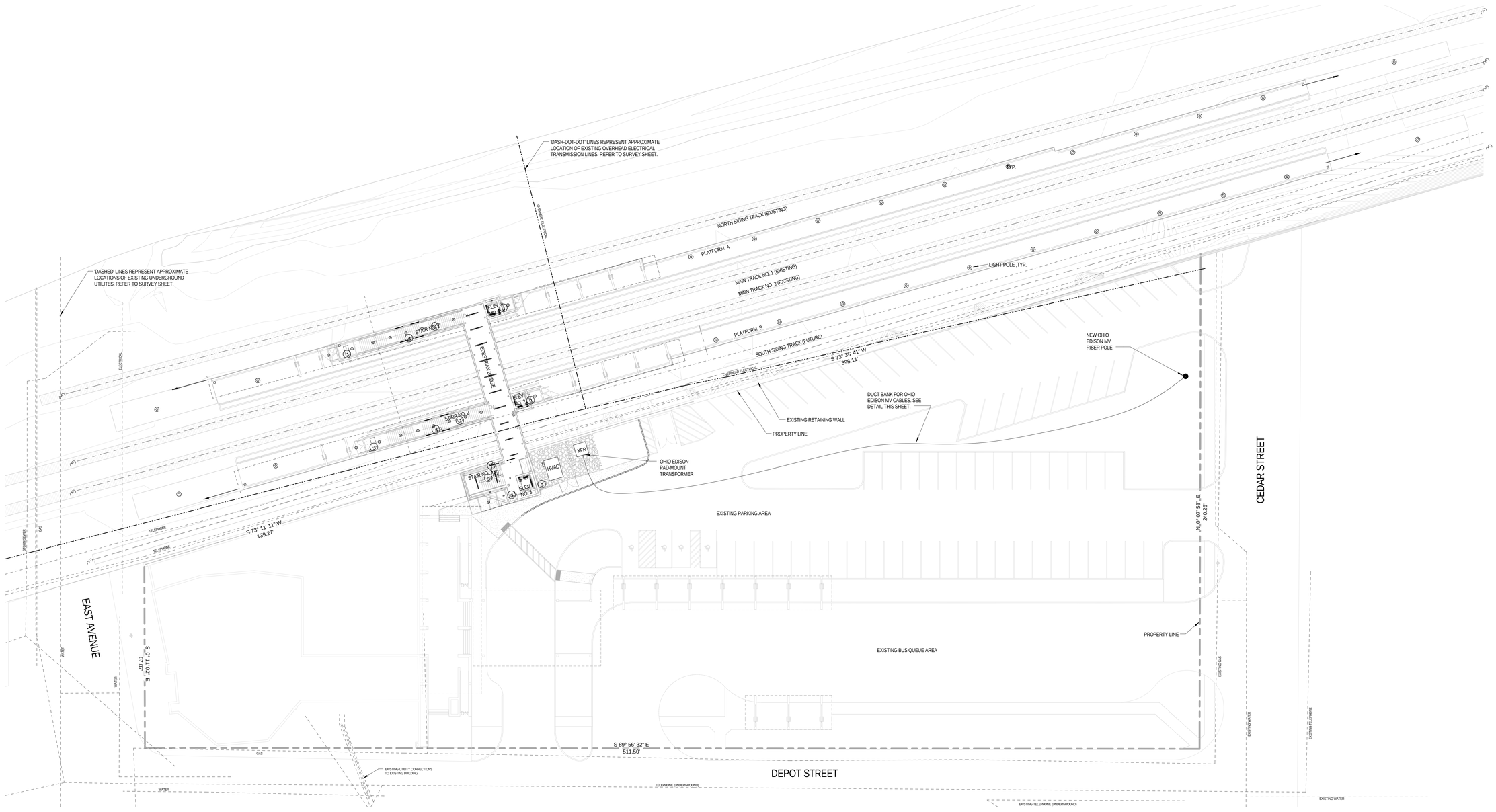
SEE SHEET AS1.1 FOR ARCHITECTURAL SITE PLAN AND GENERAL SITE NOTES.





1 / ES1.1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

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40 EAST AVENUE, ELYRIA, OHIO 44035

ELECTRICAL SITE PLAN

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RLB NO.: 8258.01

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ES1.1

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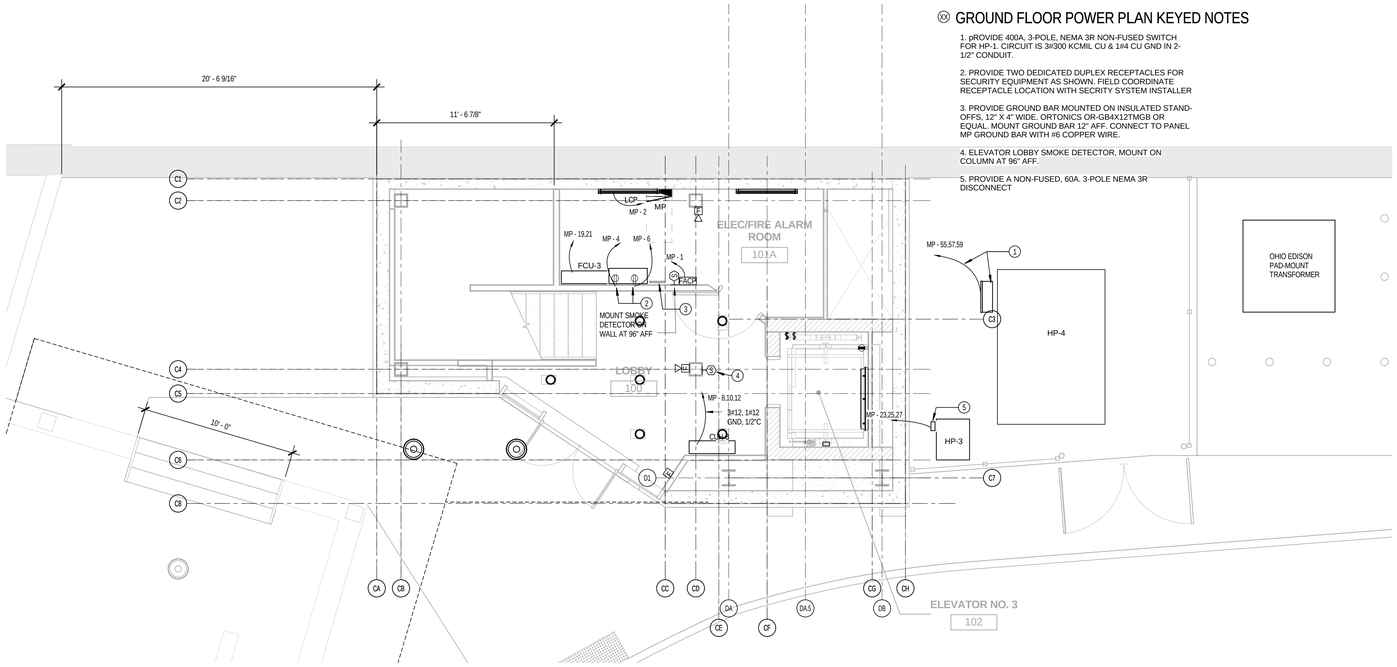


GROUND FLOOR POWER PLAN KEYED NOTES

1. pROVIDE 400A, 3-POLE, NEMA 3R NON-FUSED SWITCH FOR HP-1. CIRCUIT IS 3#300 KCMIL CU & 1#4 CU GND IN 2-1/2" CONDUIT.

2. PROVIDE TWO DEDICATED DUPLEX RECEPTACLES FOR SECURITY EQUIPMENT AS SHOWN. FIELD COORDINATE RECEPTACLE LOCATION WITH SECRITY SYSTEM INSTALLER

3. PROVIDE GROUND BAR MOUNTED ON INSULATED STAND-OFFS, 12" X 4" WIDE. ORTONICS OR-GB4X12TMGB OR EQUAL. MOUNT GROUND BAR 12" AFF. CONNECT TO PANEL MP GROUND BAR WITH #6 COPPER WIRE.

4. ELEVATOR LOBBY SMOKE DETECTOR, MOUNT ON COLUMN AT 96" AFF.

5. PROVIDE A NON-FUSED, 60A. 3-POLE NEMA 3R DISCONNECT

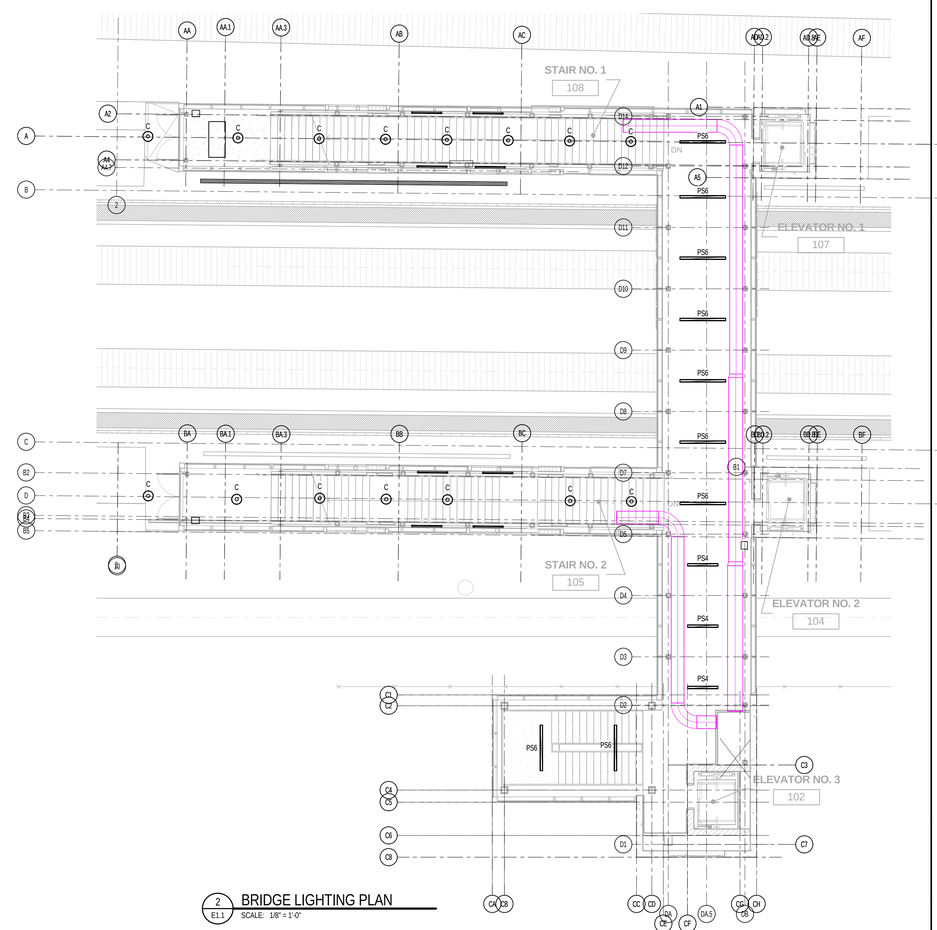
3 / E1.1 GROUND FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

CODED NOTES - E1 SERIES

NUMBER	DESCRIPTION
1	ELECTRICAL POWER CODED NOTE #1

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION



2 / E1.1 BRIDGE LIGHTING PLAN
SCALE: 1/8" = 1'-0"

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ELECTRICAL PLANS

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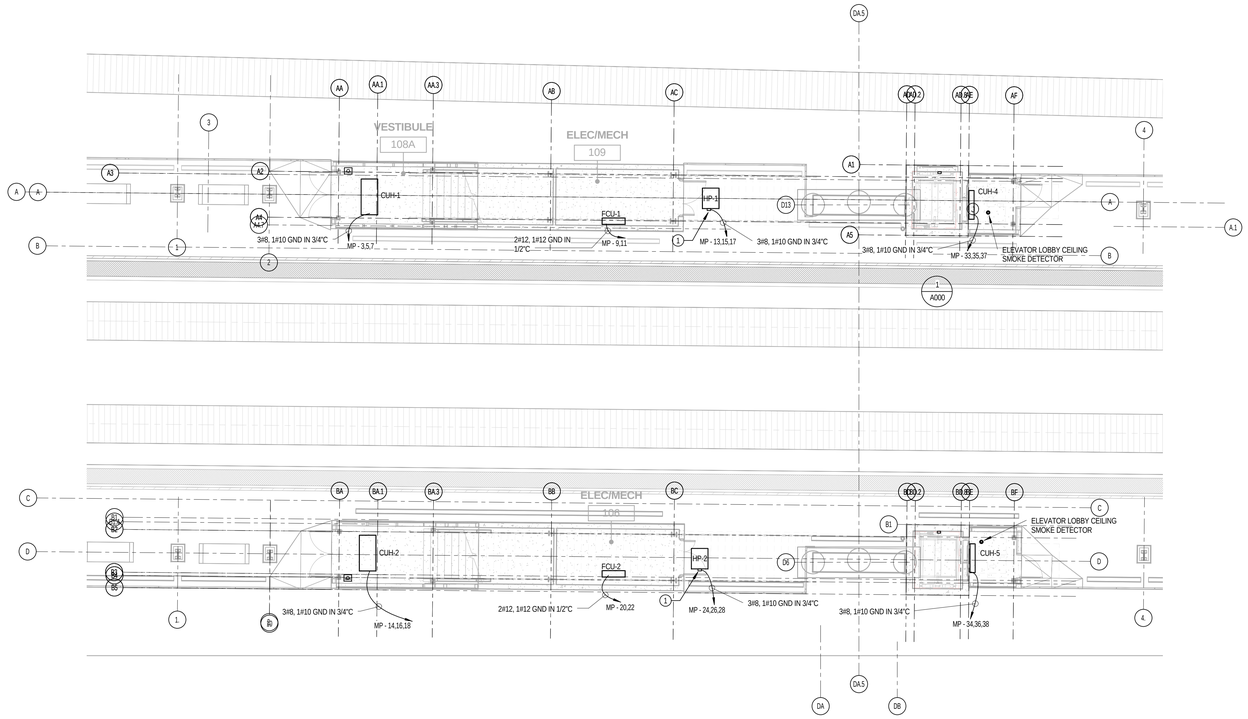
(XX) PLATFORM LEVEL POWER PLAN WEST - KEYED NOTES

1. PROVIDE A NON-FUSED, 60A, 3-POLE NEMA 3R DISCONNECT.



1 / E1.2 PLATFORM LEVEL POWER PLAN WEST

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

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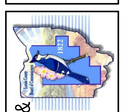

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

ELECTRICAL PLANS

DRAWN BY:	JEM
CHECKED BY:	AMM
RLB NO.:	8258.01

DRAWING NO.

E1.2

12/18/2015 11:41:13 AM
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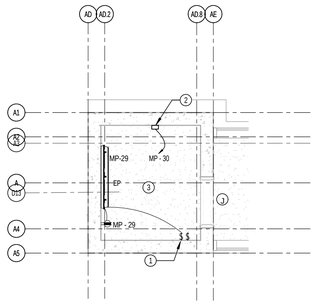
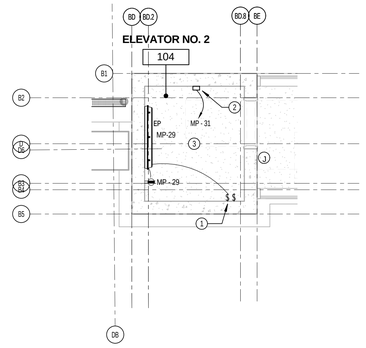
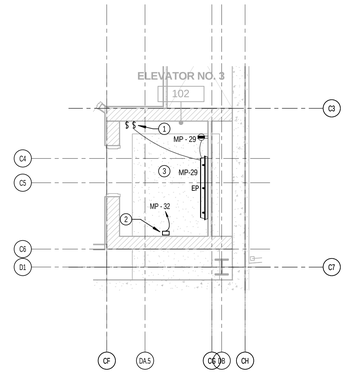


1 / E1.3 ELEVATOR PIT #1 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



2 / E1.3 ELEVATOR PIT #2 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



3 / E1.3 ELEVATOR PIT #3 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

XX ELEVATOR PIT ELECTRICAL PLAN KEYED NOTES

1. SWITCH FOR ELEVATOR PIT LIGHT "EP". LOCATE ADJACENT TO ELEVATOR STOP SWITCH.

2. PROVIDE 30A, 120V NEMA 3R DISCONNECT FOR SUMP PUMP. MAKE HARDWIRED CONNECTION TO PUMP CORD. CIRCUIT IS 2#10, 1#10 GND IN 1/2"C.

3. ALL ELECTRICAL WORK IN THE ELEVATOR PITS SHALL BE FIELD COORDINATED FOR LOCATION WITH THE ELEVATOR INSTALLER TO AVOID INTERFERENCES.

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMT

RICHARD L. BOWEN + ASSOCIATES INC.
13000 Shaker Boulevard / Cleveland, Ohio 44120
Phone: (216) 491-0300 Fax: (216) 491-0653
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40 EAST AVENUE, ELYRIA, OHIO 44035

ELECTRICAL PLANS

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E1.3

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1 / E1.4 PLATFORM LEVEL ELECTRICAL PLAN

SCALE: 1" = 20'-0"

DATES AND REVISIONS

No.	Date / Description

RICHARD L. BOWEN + ASSOCIATES INC.

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40 EAST AVENUE, ELYRIA, OHIO 44035

ELECTRICAL PLANS

DRAWN BY: Author
CHECKED BY: Checker
RLB NO.: 8258.01

DRAWING NO. E1.4

12/18/2015 11:41 AM
C:\Revit Projects\82580\1 Lorain Cty Avenue Station_jhcrawly.rvt

Branch Panel: MP

Location: ELEC/FIRE ALARM ROO...
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 65 KAIC
Mains Type: MCB
Mains Rating: 800 A
MCB Rating: 800 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	FIRE ALARM CONTROL PANEL (BL)	20 A	1	100	150					1	20 A	LIGHTING CONTROL PANEL	2
3	NW CABINET UNIT HEATER CUH-1	40 A	3			3333	600			1	20 A	REC SECURITY EQUIP	4
5	--	--	--					3333	600	1	20 A	REC SECURITY EQUIP	6
7	--	--	--	3333	1800					3	30 A	MAIN LOBBY CABINET HEATER CUH-3	8
9	INDOOR UNIT N. ELEC/MECH RM, FCU-1	15 A	2			104	1800			--	--	--	10
11	--	--	--					104	1800	--	--	--	12
13	OUTDOOR UNIT N. ELEC.MECH RM,...	30 A	3	1560	3333					3	40 A	SW CABINET UNIT HEATER CUH-2	14
15	--	--	--			1560	3333			--	--	--	16
17	--	--	--					1560	3333	--	--	--	18
19	LOBBY INDOOR UNIT FCU-3	15 A	2	104	104					2	15 A	INDOOR UNIT S. ELEC/MECH RM, FCU-2	20
21	--	--	--			104	104			--	--	--	22
23	LOBBY OUTDOOR UNIT, HP-3	30 A	3					1560	1560	3	30 A	OUTDOOR UNIT S. ELEC.MECH RM,...	24
25	--	--	--	1560	1560					--	--	--	26
27	--	--	--			1560	1560			--	--	--	28
29	ELEV. 1,2,3 PIT LT & REC	20 A	1					723	1700	1	20 A	ELEVATOR #1 SUMP PUMP	30
31	ELEVATOR #2 SUMP PUMP	20 A	1	1700	1700					1	20 A	ELEVATOR #3 SUMP PUMP	32
33	CABINET UNIT HEATER CUH-4	40 A	3			3333	3333			3	20 A	CABINET UNIT HEATER CUH-5	34
35	--	--	--					3333	3333	--	--	--	36
37	--	--	--	3333	3333					--	--	--	38
39													40
41													42
43													44
45													46
47													48
49													50
51													52
53													54
55	HP-4	300 A	3	28800									56
57	--	--	--			28800							58
59	--	--	--					28800					60
		Total Load:		52471 VA		49525 VA		51740 VA					
		Total Amps:		440 A		413 A		434 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	20000 VA	100.00%	20000 VA		
Other	283 VA	100.00%	283 VA	**Total Conn. Load:**	153737 VA
Power	131714 VA	100.00%	131714 VA	**Total Est. Demand:**	153737 VA
				Total Conn. Current:	427 A
				Total Est. Demand...	427 A

Notes:

DATES AND REVISIONS

No.	Date / Description
	12/18/15 DESIGN DEVLPMT

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OHIO 44035

SCHEDULES

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12/18/2015 11:42:12 AM
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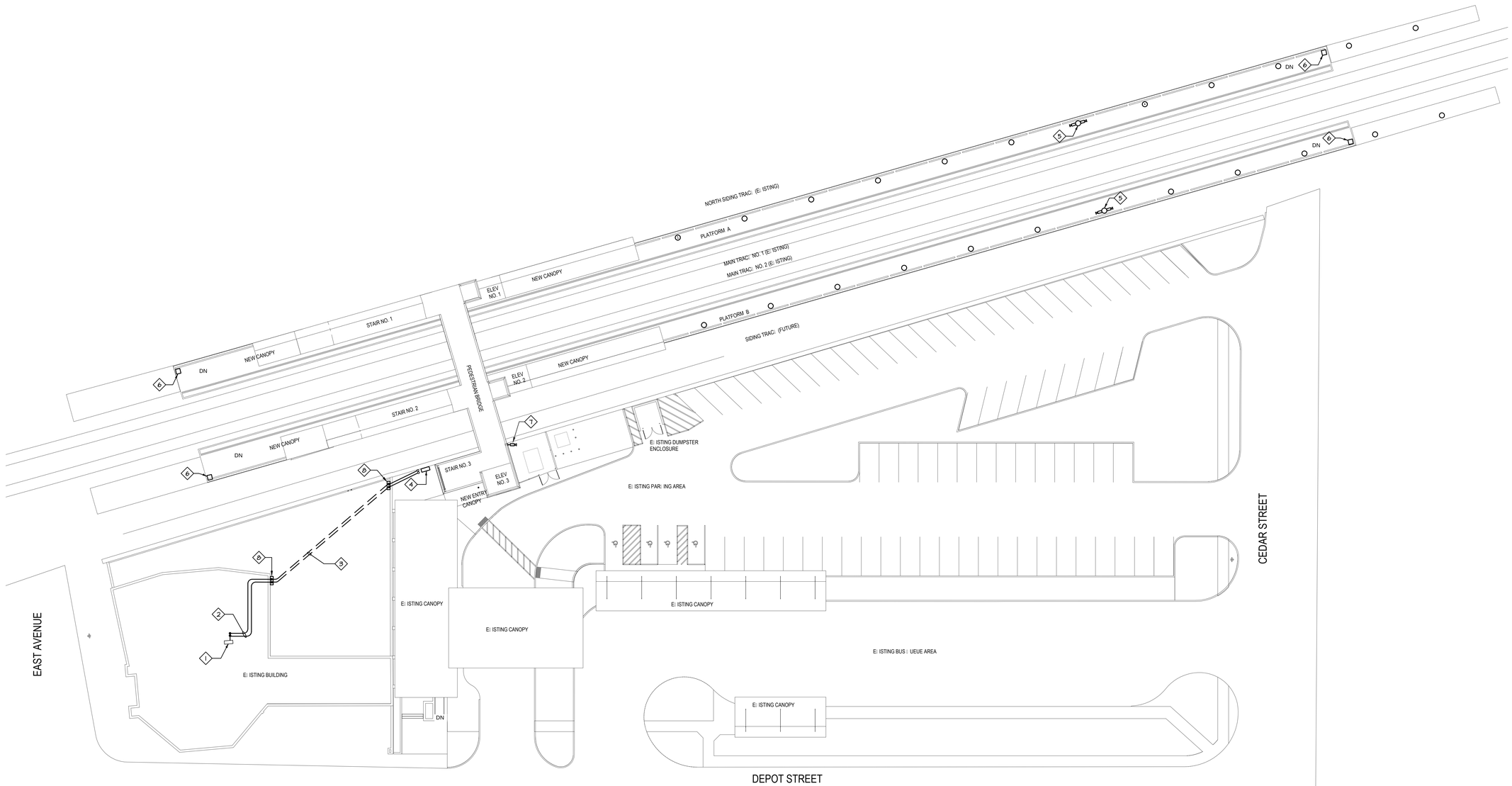
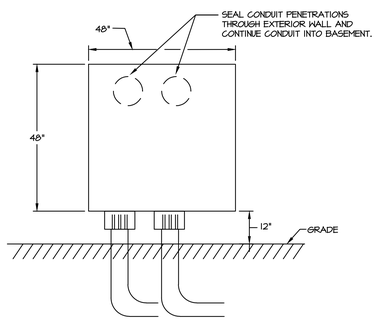


TECHNOLOGY SITE PLAN

SCALE: 1" = 20'-0"

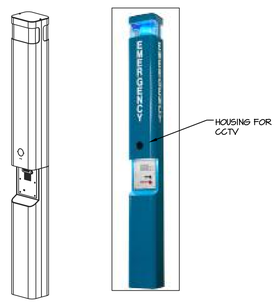
◇ PLAN NOTES

1. EXISTING COUNTY SECURITY SYSTEM.
2. ROUTE CONDUIT DOWN TO BASEMENT LEVEL THEN OUT.
3. NEW (2) 4" UNDERGROUND CONDUIT. SEE SECURITY/PHONE DIAGRAM ON SHEET T1.1 FOR ADDITIONAL INFORMATION.
4. NEW SECURITY PANEL CABINET.
5. CAMERA TO BE MOUNTED ON LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR CONDUIT LAYOUT AND POLE TYPE.
6. EMERGENCY CALL STATION. REFER TO CALL BOX DETAIL ON SHEET E1.1.
7. WALL MOUNTED SECURITY CAMERA.
8. 48"x48"x8" EXTERNAL PULLBOX. SEE DETAIL ON SHEET FOR ADDDTIONAL INFORMATION.



CONDUIT ENTERANCE DETAIL

SCALE: NONE



EMERGENCY BLUE LIGHT CALL BOX DETAIL

SCALE: NONE

GENERAL NOTES:

1. IMAGES ARE SHOWN FOR REFERENCE ONLY. PROVIDE TWO BUTTON SPEAKER PHONE AND CAMERA.
2. REFER TO MANUFACTURER INSTALLATION FOR INSTALL.

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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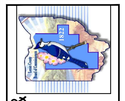

LORAIN COUNTY PLATFORMS &
PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

TECHNOLOGY SITE PLAN

DRAWN BY:	JDC
CHECKED BY:	TGP
RLB NO.:	8258.01

DRAWING NO.

TS1.1

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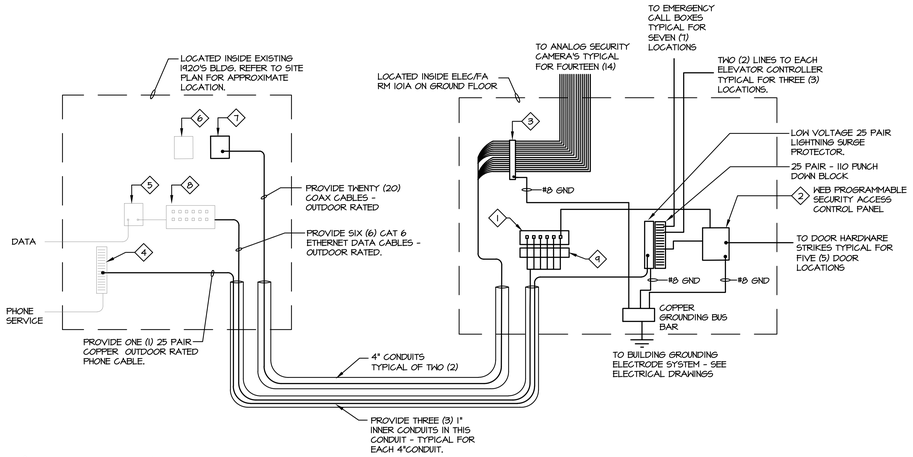
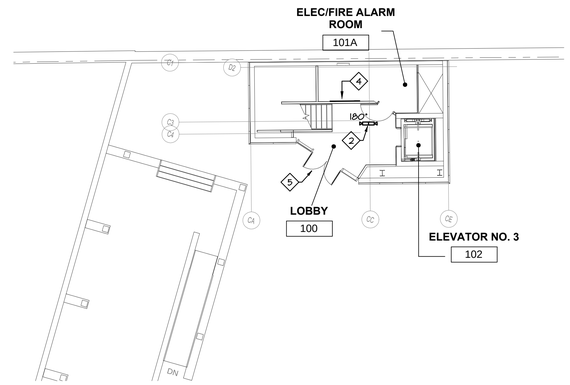


SECURITY/PHONE LINE DIAGRAM

SCALE: NONE

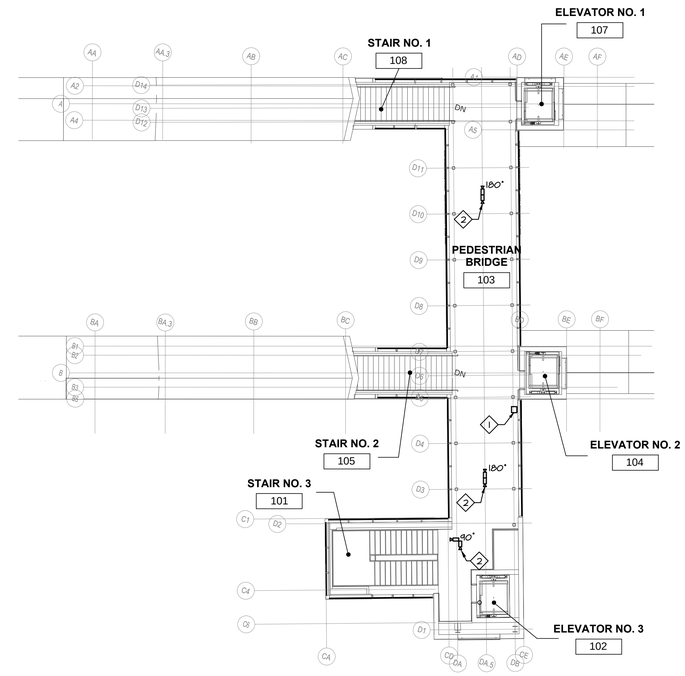
◇ PLAN NOTES

1. NEW 6 PORT CATEGORY 6 PATCH PANEL
2. NEW SECURITY PANEL
3. NEW TWENTY PORT COAX PUNCH DOWN BLOCK
4. EXISTING PHONE SERVICE 110 PUNCH DOWN BLOCK
5. EXISTING ROUTER AND ETHERNET SWITCH
6. EXISTING DVR TO REMAIN.
7. NEW DVR FOR ADDITIONAL CAMERA'S. EITHER WATCHDOG-VMAXAI-16CH-960H-AHD-TVI-4T/REG OR BOSCH-DIVR-3000-960H-RT-REC-16-VID/16-AUD-2TB/REG. TIE INTO EXISTING CAMERA MONITORING COMPUTER SYSTEM FOR REMOTE CAMERA VIEWING.
8. EXISTING CATEGORY 6 DATA PATCH PANEL.
9. CAT6 ETHERNET SURGE PROTECTION DEVICE.



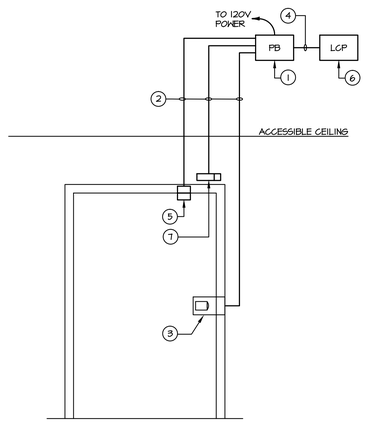
TECHNOLOGY FLOOR PLAN - GROUND LEVEL

SCALE: 3/32" = 1'-0"



TECHNOLOGY FLOOR PLAN - BRIDGE LEVEL

SCALE: 3/32" = 1'-0"

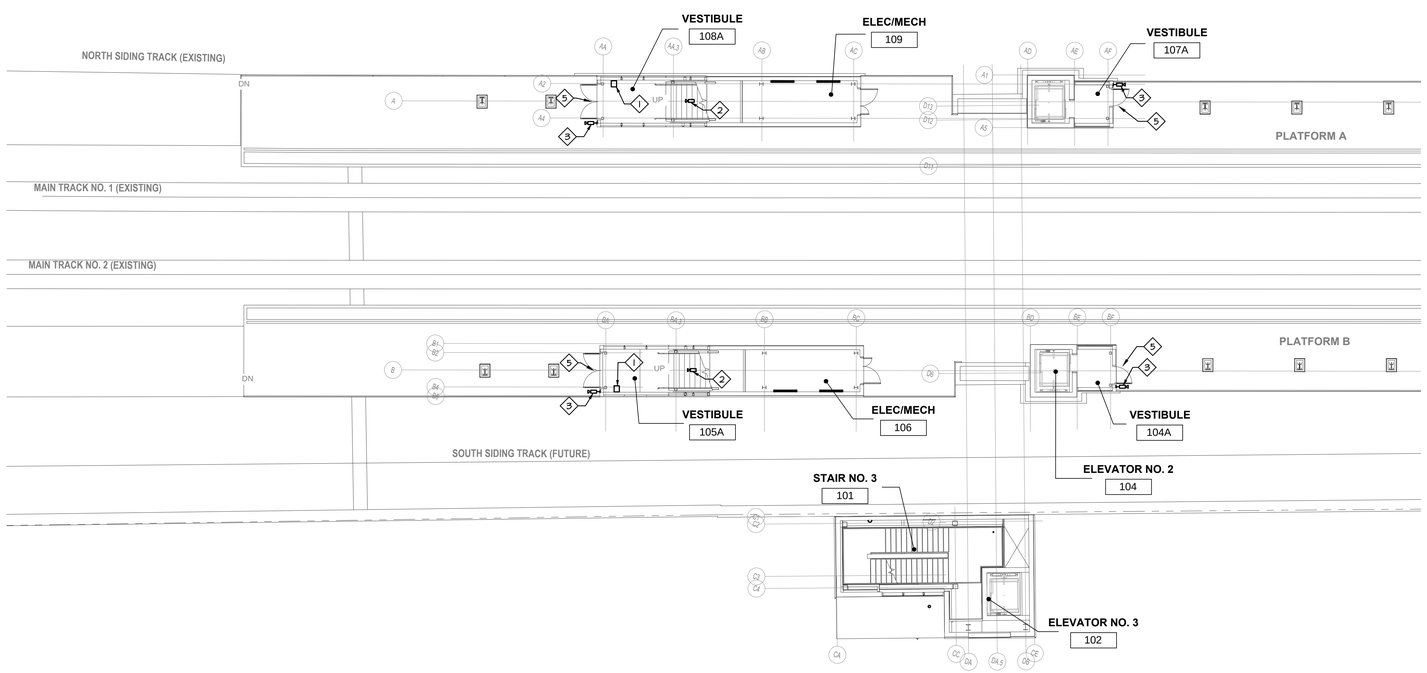


TYPICAL SECURITY DOOR DETAIL

NO SCALE

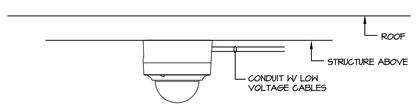
◯ SECURITY DOOR DETAIL NOTES

1. PROVIDE THE JUNCTION BOX ON THE SECURE SIDE OF THE DOOR AND IN A LOCATION THAT PROVIDES EASY ACCESS FOR CONNECTING AND SERVICE.
2. PROVIDE 1" CONDUIT INTO JUNCTION BOX.
3. ELECTRIC STRIKE BY DOOR HARDWARE SUPPLIER.
4. PROVIDE 1-1/4" CONDUIT WHEREVER CABLE MUST BE ROUTED ABOVE AN INACCESSIBLE CEILING OR UNSECURE PATHWAY.
5. INSTALL DOOR POSITION SWITCH IN DOOR FRAME. NOTE: INSTALLATIONS ON DOORS WITH CONCRETE FILLED HEADERS WILL REQUIRE A SEPARATE PENETRATION (FROM THE DOOR LOCK) FOR THE DOOR SWITCH.
6. LOCAL CONTROL PANEL LOCATED ABOVE CEILING INSIDE SECURED AREA.
7. REQUEST TO EXIT MOTION DETECTOR.



TECHNOLOGY FLOOR PLAN - PLATFORM LEVEL

SCALE: 3/32" = 1'-0"



CCTV MOUNTING DETAIL

SCALE: NONE

GENERAL NOTES:

1. CAMERA SHALL BE MOUNTED TO UNDER SIDE OF STRUCTURAL.
2. REFER TO MANUFACTURER INSTALLATION FOR INSTALL.

◇ PLAN NOTES

1. EMERGENCY CALL STATION. REFER TO CALL BOX DETAIL ON SHEET.
2. SECURITY CAMERA. REFER TO CCTV DETAIL ON SHEET FOR ADDITIONAL INFORMATION. IF MULTIPLE CAMERAS ARE SHOWN IT'S FOR VIEWING ANGLE REFERENCE ONLY, THERE SHOULD ONLY BE (1) CAMERA TOTAL AT THESE LOCATIONS.
3. WALL MOUNTED SECURITY CAMERA.
4. REFER TO SECURITY/PHONE LINE DIAGRAM ON SHEET FOR EQUIPMENT AND ADDITIONAL INFORMATION.
5. REFER TO SECURITY DOOR DETAIL ON SHEET.

GENERAL NOTES

1. ALL CONDUIT AND WIRING SHALL BE HIDDEN AS MUCH AS POSSIBLE, TUCKED IN STRUCTURAL COLUMNS, MOUNTED TIGHT TO DECK WHERE POSSIBLE, ETC.

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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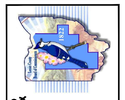

LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE

40 EAST AVENUE, ELYRIA, OH 44035

TECHNOLOGY FLOOR PLANS

DRAWN BY: JDC

CHECKED BY: TGP

RLB NO.: 8258.01

DRAWING NO.

T1.1

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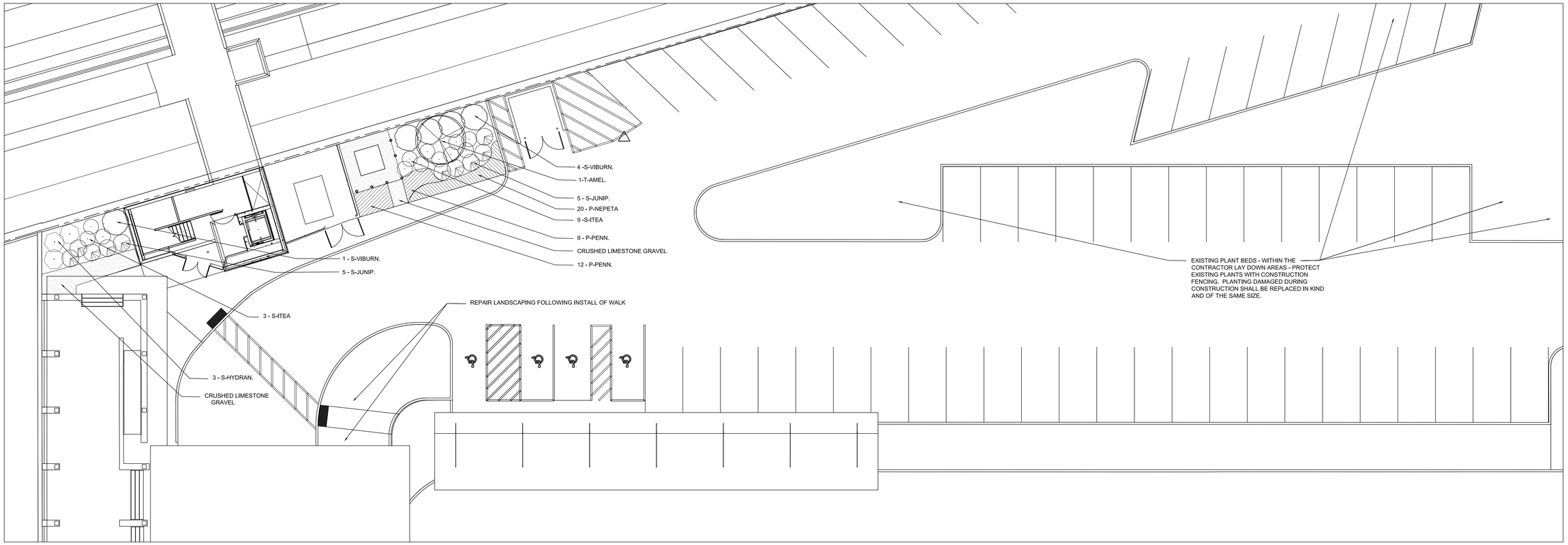


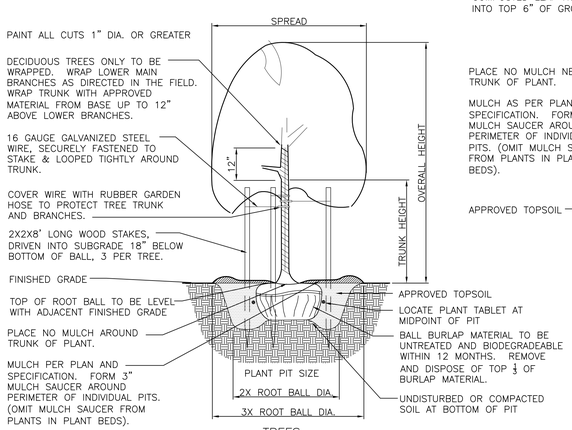
PLANTING PLAN

0 5' 10' 20' 30'
PLAN SCALE: 1" = 10'

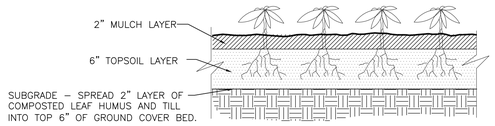
N

PLANTING NOTES

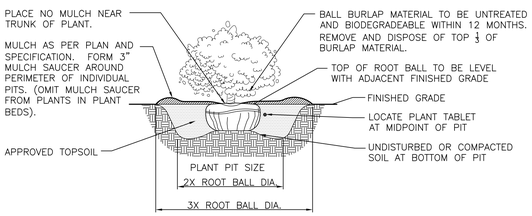
1. TOPSOIL BACKFILL FOR SHRUBS AND TREES SHALL BE WELL–MIXED WITH COARSE PEAT MATERIAL, 50% BY VOLUME AS APPROVED BEFORE PLANTING.
2. PLANT FERTILIZER – SHALL BE PLANT TABLETS (AGRIFORM 20–10–5 OR APPROVED EQUAL). USE (1) 21 TABLET FOR EACH ½" CAL. OF TREE SIZE AND EACH 1' HEIGHT OR SPREAD OF SHRUB SIZE.
3. ALL PLANTS TO CONFORM TO ANSI Z 60.1 (LATEST EDITION).



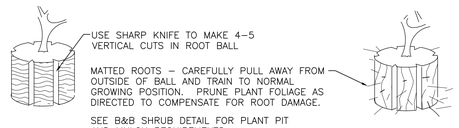
TREES



GROUND COVERS & VINES



BALL & BURLAP SHRUBS



CONTAINER GROWN PLANTS

PLANTING DETAILS

SCALE: NOT TO SCALE

CONTRACTOR SHALL EXERCISE CAUTION DURING ALL CONSTRUCTION OPERATIONS IN VICINITY OF UNDERGROUND PIPES, CABLES AND DUCTS. CONTRACTOR SHALL INFORM AND COORDINATE WORK IN SUCH AREAS WITH PROPER UTILITY COMPANY OR MUNICIPAL AUTHORITY. CALL O.U.P.S. 1–800–362–2764

NOTES

1. DATA NOT SHOWN - FOR ALL PERTINENT DATA NOT SHOWN, SEE APPLICABLE CONTRACT DOCUMENTS.
2. MEASUREMENTS - CONTRACTOR SHALL VERIFY ALL MEASUREMENTS IN THE FIELD. NOTIFY ARCHITECT AND OWNER OF ANY DISCREPANCY UNCOVERED IN THE FIELD IMMEDIATELY.
3. EXISTING UTILITIES - THE EXISTING UTILITY DATA SHOWN IS FOR REFERENCE INFORMATION ONLY AND MAY NOT SHOW ALL EXISTING UTILITY DATA.
4. BENCHMARK - SEE EXISTING CONDITIONS PLAN.
5. DISTURBED AREAS - CONTRACTOR SHALL REPAIR ALL AREAS DISTURBED OR DAMAGED DURING CONSTRUCTION PROCEDURES TO PRE-CONSTRUCTION CONDITIONS. CONTRACTOR SHALL EXTEND SEEDING AREAS AND LAWNS TO COVER ALL AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES AND NOT OTHERWISE OCCUPIED BY PAVEMENTS, STRUCTURES AND PLANT BEDS.
6. NEW PLANTINGS - CONTRACTOR SHALL LOCATED PLANT MATERIALS IN LOCATIONS AS SHOWN ON THE DRAWING FOR APPROVAL BY ARCHITECT. PRIOR TO DIGGING HOLES. ADJUST FINAL LOCATIONS TO AVOID UTILITIES, TUNNEL AND LIGHTING AND AS DIRECTED. ALL TREES SHALL BE A MINIMUM OF 10' FROM FINAL LOCATIONS OF LIGHT POLES.
7. MULCH - ALL NEW TREES AND SHRUB BEDS SHALL RECEIVE A MINIMUM OF 2" OF DOUBLE SHREDDED BARK MULCH , PER DETAILS AND SPECIFICATIONS.
8. TOPSOIL - ALL LAWN AREAS SHALL RECEIVE A MIN. OF 6" OF APPROVED TOPSOIL. ALL SHRUB BEDS SHALL RECEIVE A MINIMUM OF 12" OF APPROVED PLANT BED SOIL MIX.

LEGEND

- PROPOSED TREE
- PROPOSED SHRUBS
- PROPOSED ORNAMENTAL GRASSES / PERENNIALS
- PROPOSED GRAVEL - INSTALL METAL EDGING WHERE GRAVEL AREAS ARE NOT BORDERED BY CONCRETE

PLANT SCHEDULE

ABBREVIATION	PLANT SCIENTIFIC NAME	PLANT COMMON NAME	PLANTED SIZE	QUANTITY
FLOWERING TREE				
T-AMELAN.	AMELANCHIER	SERVICEBERRY	9' HT. B&B, CLUMP FORM	1
SHRUBS				
S-HYDRAN.	HYDRANGEA MACROPHYLLA 'ALL SUMMER BEAUTY'	ALL SUMMER BEAUTY HYDRANGEA	18" NO. 3 CONT.	3
S-ITEA.	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPIRE	18" NO. 3 CONT.	12
S-JUNIP.	JUNIPERUS CONFERTA 'BLUE PACIFIC'	BLUE PACIFIC JUNIPER	15" NO. 3 CONT.	10
S-VIBURN.	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	24" NO. 3 CONT.	5
PERENNIALS / ORNAMENTAL GRASS				
P-NEPETA	NEPETA X FAASSENII 'WALKER'S LOW'	WALKERS LOW CATMINT	CLUMP NO. 2 CONT.	20
P-PENN.	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	CLUMP NO. 2 CONT.	21

C:\USERS\KATHY\DOCUMENTS_PROJECTS\516 - AMTRAK STATION - LORAIN\DD\825801 LORAIN CITY AMTRAK STATION - PLANTING PLAN.DWG | PLOTTED 12.7.2015 12:17PM BY KATHY

DATES AND REVISIONS

No.	Date / Description
	5/8/15 SCHEMATIC DESIGN
	12/18/15 DESIGN DEVLPMNT

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LORAIN COUNTY PLATFORMS & PEDESTRIAN BRIDGE
40 EAST AVENUE, ELYRIA, OH 44035

PLANTING PLAN

DRAWN BY: KAJ
CHECKED BY: KAJ
RLB NO.: 8258.01

DRAWING NO.
L1.1