

CIVIL / TRACK / STRUCTURAL GUIDANCE DRAWINGS

MARCH 2024

GUIDANCE DRAWINGS ARE FOR USE BY DESIGN TEAMS AS REPRESENTATIONS OF THE ARRANGEMENT OR CONFIGURATION OF SPECIFIC COMPONENTS OR THE WAY ACCEPTABLE SOLUTIONS TO CERTAIN DESIGN CHALLENGES HAVE BEEN ADDRESSED. THE GUIDANCE DRAWINGS ARE STARTING POINT OF DESIGN SOLUTIONS AND ARE INTENDED TO BE MODIFIED FOR APPLICATION TO PROJECT CONDITIONS.

THE DESIGNER OF RECORD SHALL REVIEW GUIDANCE DRAWINGS IN CONJUNCTION WITH OTHER CONTRACT DOCUMENTS AND SELECT APPLICABLE GUIDANCE DRAWINGS TO DEVELOP, STAMP, SIGN AND FINALIZE AS PROJECT CONTRACT DOCUMENTS.

SOUND TRANSIT MAKES THE GUIDANCE DRAWINGS AVAILABLE ON AN AS-IS BASIS AND THEY SHALL NOT BE DEEMED TO BE "DESIGN FURNISHED" BY SOUND TRANSIT.

CIVIL / TRACK / STRUCTURAL GUIDANCE DRAWINGS
APPLICABILITY OF CURRENT VERSION
SUPERSEDES AUGUST 2019 VERSION
FOR PROJECTS THAT ARE BASELINED AFTER MARCH 29, 2024



**DISCLAIMER FOR
Design and Engineering Design Standards Documents**

Sound Transit makes these documents available on an "as is" basis. By accepting receipt of the documents, the receiver agrees to the following:

- The documents are provided for information only;
- The receiver will not utilize the documents in any way that violates or infringes on Sound Transit's intellectual property rights in such documents;
- The provided documents should not be construed to represent formal design guidance and/or direction for any project;
- Sound Transit makes no representation or warranty that the provided data is complete, appropriate, or fit for any particular purpose, stated or otherwise;
- All documents provided by Sound Transit, including any revisions, shall remain the personal and intellectual property of Sound Transit; and
- To indemnify, defend, and hold harmless Sound Transit, its consultants, and agent(s) from any and all damages and claims arising from the receiver's use of these documents.

**APPLICABILITY FOR
Design and Engineering Design Standards Documents**

Project teams shall refer to their executed project contracts for applicable document versions/revisions.

INDEX OF DRAWINGS

DRAWING INDEX		
DRAWING NUMBER	REV	TITLE
GENERAL		
GUI-GZT001	4	COVER SHEET
GUI-GZI001	4	INDEX OF DRAWINGS
RIGHT OF WAY		
GUI-REX101	1	PERMANENT EASEMENTS 1 OF 6
GUI-REX102	1	PERMANENT EASEMENTS 2 OF 6
GUI-REX103	1	PERMANENT EASEMENTS 3 OF 6
GUI-REX104	1	PERMANENT EASEMENTS 4 OF 6
GUI-REX105	1	PERMANENT EASEMENTS 5 OF 6
GUI-REX106	1	PERMANENT EASEMENTS 6 OF 6
GUI-REX201	1	TEMPORARY EASEMENTS
TRACKWORK		
GUI-KZN001	2	ABBREVIATIONS, SYMBOLS & GENERAL NOTES
GUI-KAX060	2	BALLASTED DOUBLE MAIN TRACK TYPICAL SECTIONS
GUI-KAX061	2	TYPICAL GUIDEWAY SECTIONS
GUI-KAX065	2	BALLASTED TRACK TYPICAL SECTION DETAILS
GUI-KAX200	2	EMBEDDED TRACK CONSTRUCTION DOUBLE MAINLINE TRACKS TYPICAL SECTIONS (115RE)
GUI-KAD140	2	DIRECT FIXATION TRACK CONSTRUCTION MAINTENANCE WALKWAY PEDESTRIAN CROSSING PRECAST CONCRETE PANEL
GUI-KAD210	2	EMBEDDED TRACK CONSTRUCTION TYPICAL TRACK SECTIONS ROAD INTERSECTIONS (115RE)
GUI-KAD211	2	EMBEDDED TRACK CONSTRUCTION TYPICAL TRACK SECTION EMERGENCY VEHICLES & PEDESTRIAN CROSSINGS (115RE)
GUI-KAD215	2	EMBEDDED TRACK CONSTRUCTION TYPICAL TRACK SECTIONS ROAD INTERSECTIONS (115RE)
GUI-KAD220	2	EMBEDDED TRACK CONSTRUCTION TYPICAL TRACK SECTIONS MIDBLOCK ROAD SECTION (115RE)
GUI-KAD225	2	EMBEDDED TRACK CONSTRUCTION RAIL FIXATION DETAILS (115RE)
GUI-KAD230	2	EMBEDDED TRACK CONSTRUCTION RAIL BOOT GENERAL DETAILS (115RE)
GUI-KAD235	2	EMBEDDED TRACK CONSTRUCTION TYPICAL NON-INSULATED TRACK RAIL FIXATION DETAIL
GUI-KAD236	2	EMBEDDED TRACK CONSTRUCTION TYPICAL NON-INSULATED TRACK RAIL FIXATION DETAIL
GUI-KAD240	2	LIGHT RAIL EMBEDDED TRACK CONSTRUCTION TRACK SLAB JOINT DETAILS
GUI-KAD245	2	EMBEDDED TRACK CONSTRUCTION PLASTIC BEAM AND ANCHOR PLATE ASSEMBLY (115RE)
GUI-KAD250	2	EMBEDDED TRACK CONSTRUCTION MIDBLOCK TRACK SLAB TRACK DRAIN (115RE)
GUI-KAD427	1	TRANSITION SLAB HIGH RESILIENT FASTENER DIRECT FIXATION TRACK TO STANDARD DIRECT FIXATION TRACK
CIVIL		
GUI-CZN001	2	NOTES & SYMBOLS
UTILITY		
GUI-UZN001	1	NOTES & SYMBOLS
GUI-UCD101	0	TYPICAL UNDERGROUND UTILITY CONFIGURATION


03/29/24 | 11:10 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-GZI001.DWG

No.	DATE	DSN	CHK	APP	REVISION
4	2/2024	----	----	----	2024 REVISED GUIDANCE DRAWINGS
3	8/2019	----	----	----	REVISED - DIRECTIVE AND STANDARD DRAWINGS
2	10/2017	----	----	----	NEW - CIVIL DIRECTIVE AND STANDARD DWGS
1	9/2014	----	----	----	GUIDANCE DRAWINGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	2/2024

LINE IS 1" AT FULL SCALE



SOUNDTRANSIT

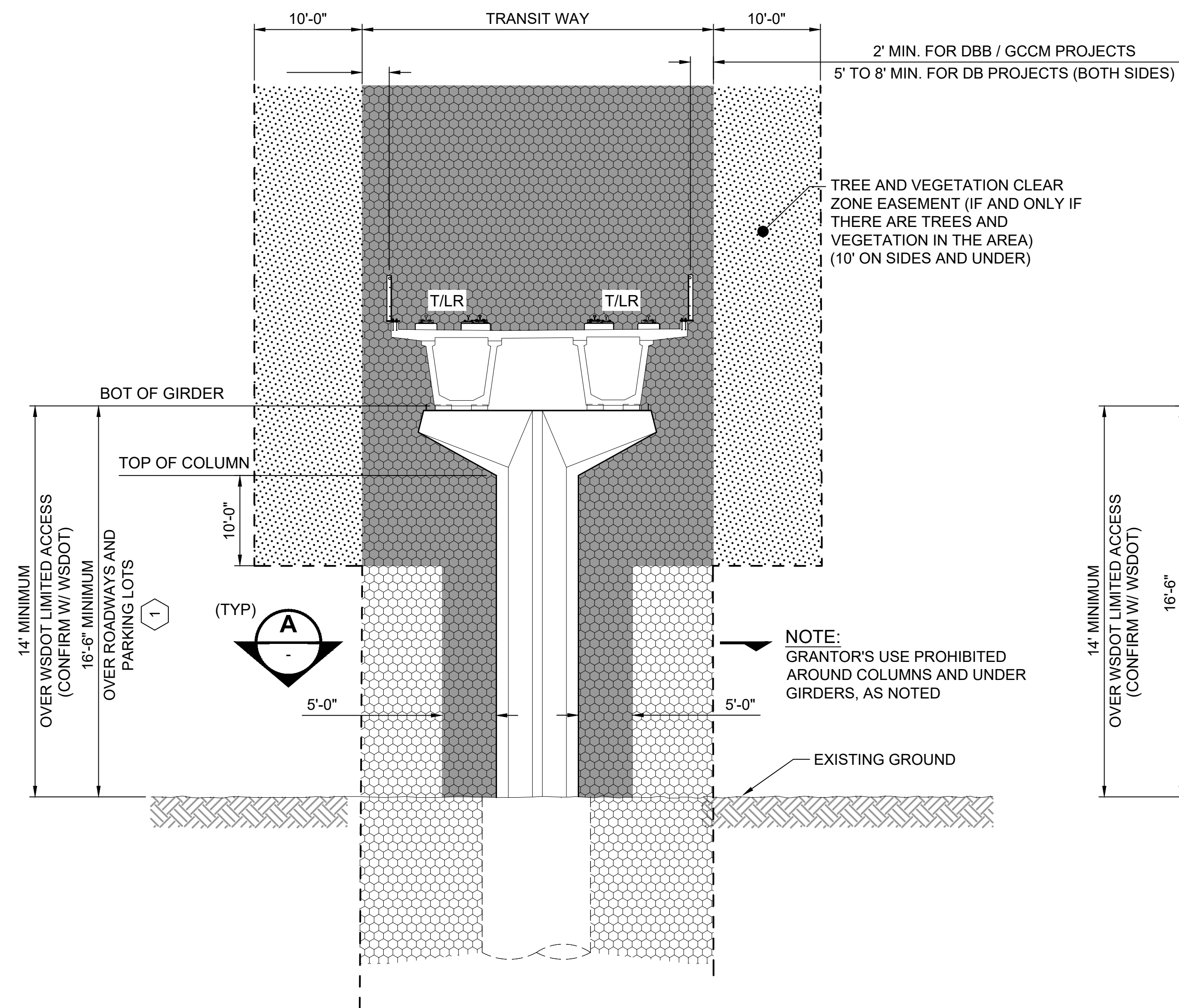
SCALE:	NTS
FILENAME:	GUI-GZI001
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS
TRACKWORK**

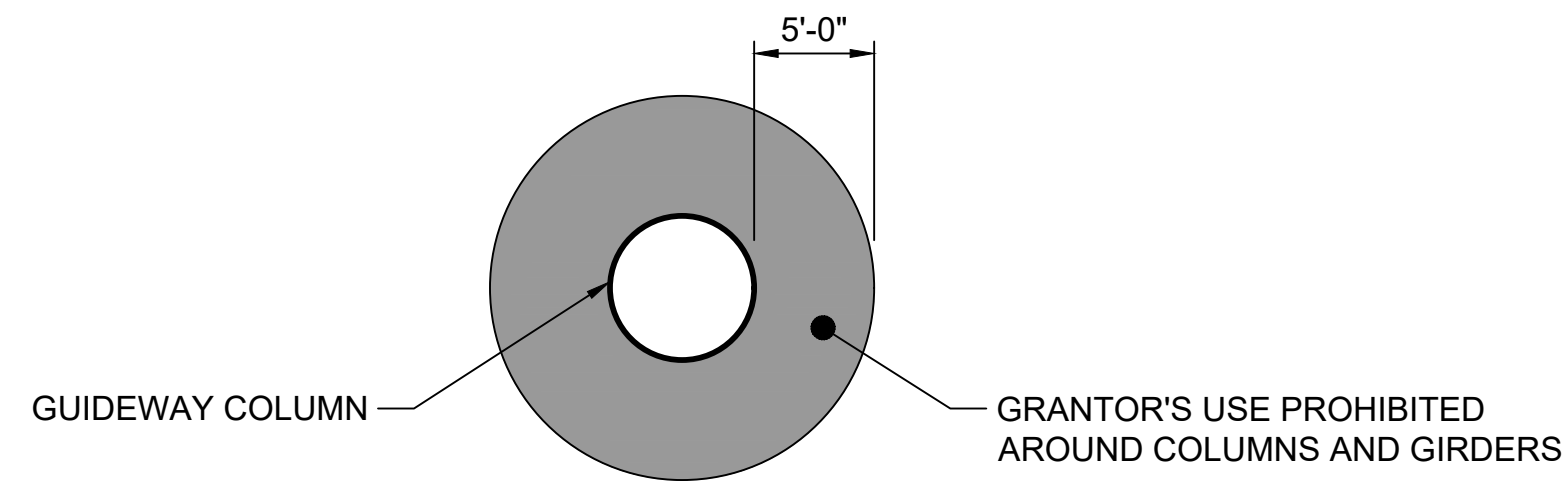
INDEX OF DRAWINGS

DRAWING No.:	GUI-GZI001
FACILITY ID:	
SHEET No.:	4

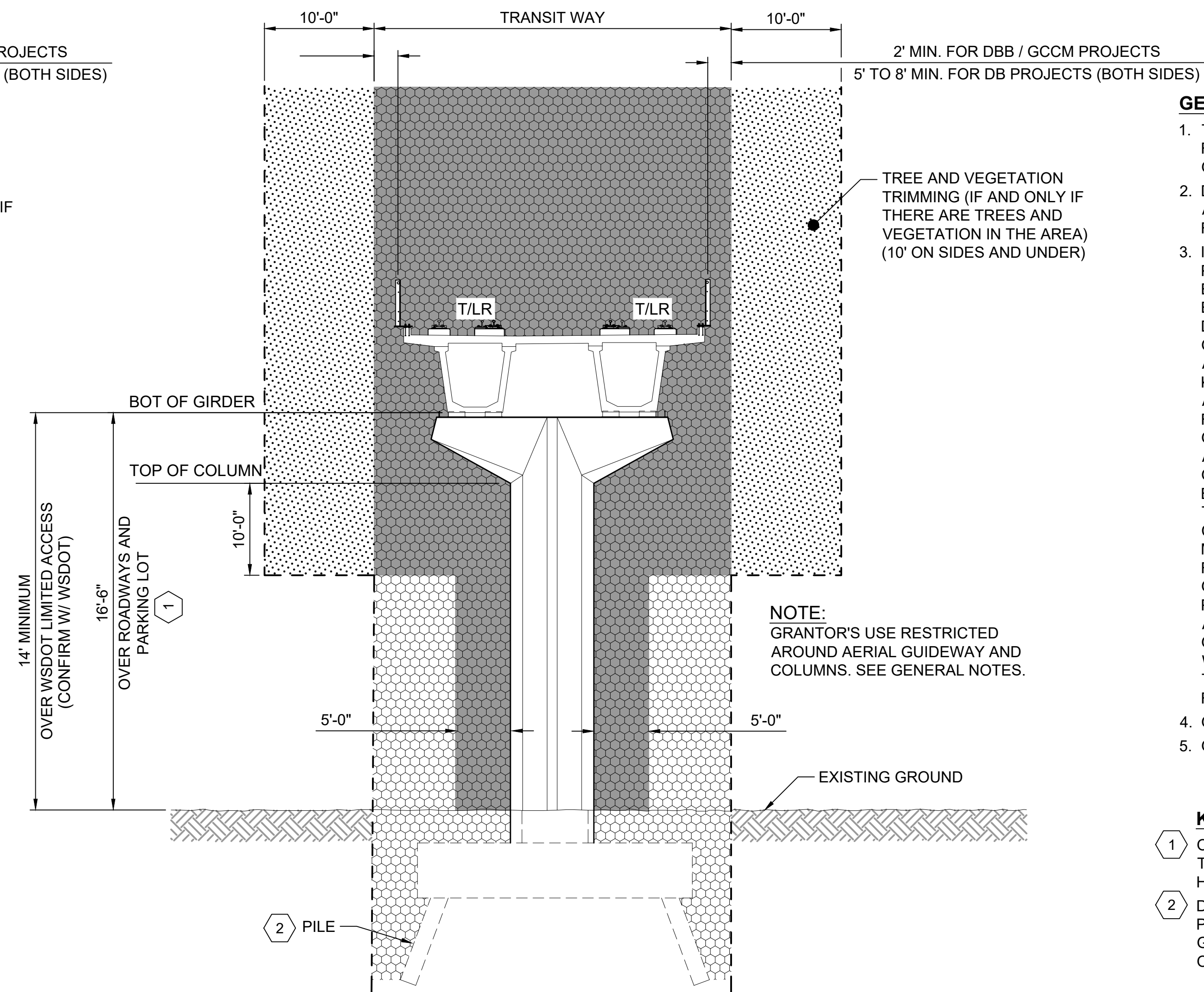
03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX101.DWG



GUIDEWAY EASEMENT (AT COLUMNS)
(DRILLED SHAFT FOUNDATION)
NTS



GUIDEWAY COLUMN SECTION
NTS



GUIDEWAY EASEMENT (AT COLUMNS)
(SPREAD FOOTING OR PILE FOUNDATION)
NTS

GENERAL NOTES:

1. THESE SECTIONS ARE PROVIDED AS A DIRECTION FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.
3. IN NO EVENT MAY GRANTOR CONSTRUCT PERMANENT STRUCTURES OR STORE FLAMMABLE, EXPLOSIVE, OR HAZARDOUS MATERIALS WITHIN THE EASEMENT AREA. IN THE EVENT GRANTEE DISCOVERS SUCH ITEMS IN THE EASEMENT AREA, GRANTEE MAY IMMEDIATELY REMOVE SUCH ITEMS AT GRANTOR'S EXPENSE. NO OBSTRUCTIONS OF ANY KIND WHATSOEVER, OTHER THAN THOSE IDENTIFIED ABOVE IN THIS SECTION 2 WILL BE ALLOWED WITHIN FIVE FEET OF THE AERIAL GUIDEWAY COLUMNS. GRANTOR MAY NOT USE THE EASEMENT AREA FOR ANY PURPOSE IN THE AREA ABOVE THE AERIAL GUIDEWAY OR THE AREA TEN FEET BELOW THE BOTTOM OF THE AERIAL GUIDEWAY GIRDERS AND TEN FEET BELOW THE TOP OF THE AERIAL GUIDEWAY COLUMN. VEHICLES CARRYING FLAMMABLE MATERIALS OTHER THAN WITHIN THE VEHICLE'S OWN FUEL TANK, MAY NOT PARK UNDER THE AERIAL GUIDEWAY. GRANTOR MAY OTHERWISE USE THE PROPERTY WITHIN THE EASEMENT AREA, SO LONG AS THE GRANTOR'S USE DOES NOT INTERFERE WITH GRANTEE'S USE OF THE EASEMENT AREA WITHOUT WRITTEN PERMISSION OF THE GRANTEE. REVIEW THE GUIDEWAY EASEMENT STANDARD TEMPLATE FOR ADDITIONAL INFORMATION.
4. GRANTOR - PRIVATE PROPERTY OWNER OR AHJ.
5. GRANTEE - SOUND TRANSIT

KEY NOTES:

1. OVERSIZE HAUL ROUTE MAY REQUIRE GREATER THAN 16'-6" DEPENDING ON THE AUTHORITY HAVING JURISDICTION.
2. DESIGNER TO CONFIRM THAT FULL EXTENT OF ALL PILES AND PILE CAP MUST FALL WITHIN 2' OR GREATER OF THE TRANSIT WAY. ADJUST WIDTH OUT IF NECESSARY.

LEGEND:

- GUIDEWAY EASEMENT (TRANSIT WAY / ST RIGHT-OF-WAY)
- GRANTOR'S USE LIMITS
- PERMANENT EASEMENT

ABBREVIATIONS:

- DB: DESIGN BUILD
- DDB: DESIGN BID BUILD
- GCCM: GENERAL CONTRACTOR CONSTRUCTION MANAGEMENT
- AHJ: AUTHORITY HAVING JURISDICTION.

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

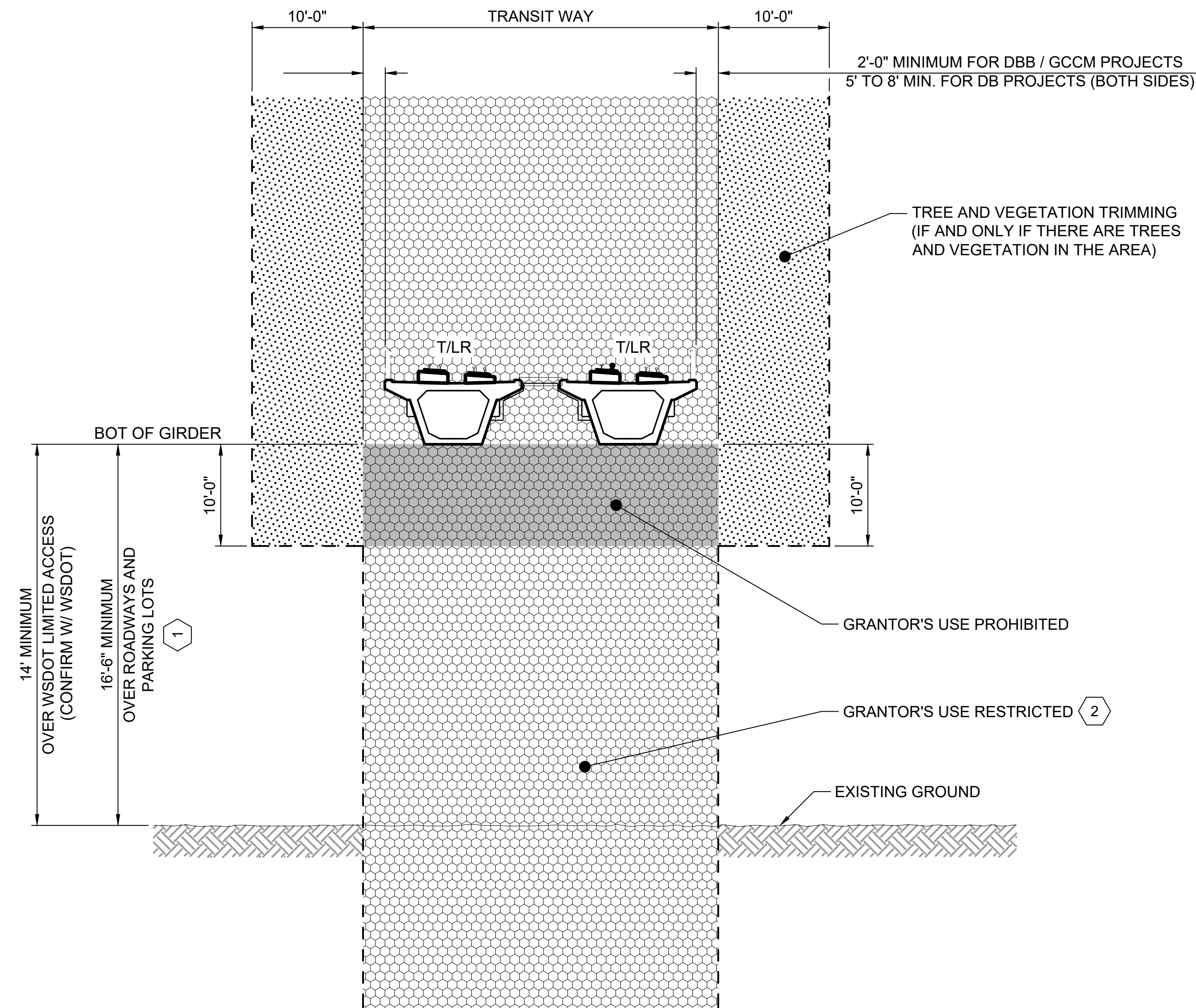
LINE IS 1" AT FULL SCALE

SCALE: NTS
FILENAME: GUI-REX101
CONTRACT No.: RTA/LR -
DATE: 2/2024

SOUND TRANSIT GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
1 OF 6

DRAWING No.: GUI-REX101
FACILITY ID:
SHEET No.: 1

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX102.DWG



AERIAL GUIDEWAY EASEMENT (BETWEEN COLUMNS)
NTS

- GENERAL NOTES:**
1. THESE SECTIONS ARE PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
 2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.
 3. WHEN UTILITIES OR OTHER APPURTENANCES EXTEND BELOW THE GUIDEWAY, ADDITIONAL GRANTOR'S USE PROHIBITIONS MAY BE REQUIRED. COORDINATE WITH ROW ENGINEER.

- KEY NOTES:**
1. OVERSIZE HAUL ROUTE MAY REQUIRE GREATER THAN 16.5'-0" DEPENDING ON THE AUTHORITY HAVING JURISDICTION.
 2. IN NO EVENT MAY GRANTOR CONSTRUCT PERMANENT STRUCTURES OR STORE FLAMMABLE, EXPLOSIVE, OR HAZARDOUS MATERIALS WITHIN THE EASEMENT AREA. IN THE EVENT GRANTEE DISCOVERS SUCH ITEMS IN THE EASEMENT AREA, GRANTEE MAY IMMEDIATELY REMOVE SUCH ITEMS AT GRANTOR'S EXPENSE. NO OBSTRUCTIONS OF ANY KIND WHATSOEVER, OTHER THAN THOSE IDENTIFIED ABOVE IN THIS SECTION 2 WILL BE ALLOWED WITHIN FIVE FEET OF THE AERIAL GUIDEWAY COLUMNS. GRANTOR MAY NOT USE THE EASEMENT AREA FOR ANY PURPOSE IN THE AREA ABOVE THE AERIAL GUIDEWAY, OR THE AREA FIVE FEET BELOW THE BOTTOM OF THE AERIAL GUIDEWAY. VEHICLES CARRYING FLAMMABLE MATERIALS OTHER THAN WITHIN THE VEHICLE'S OWN FUEL TANK, MAY NOT PARK UNDER THE AERIAL GUIDEWAY. GRANTOR MAY OTHERWISE USE THE PROPERTY WITHIN THE EASEMENT AREA, SO LONG AS THE GRANTOR'S USE DOES NOT INTERFERE WITH GRANTEE'S USE OF THE EASEMENT AREA WITHOUT WRITTEN PERMISSION OF THE GRANTEE.

- LEGEND:**
- GUIDEWAY EASEMENT (TRANSIT WAY / ST RIGHT-OF-WAY)
 - GRANTOR'S USE LIMITS
 - PERMANENT EASEMENT

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	2/2024

LINE IS 1" AT FULL SCALE

SCALE: NTS
FILENAME: GUI-REX102
CONTRACT No.: RTA/LR -
DATE: 2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
2 OF 6**

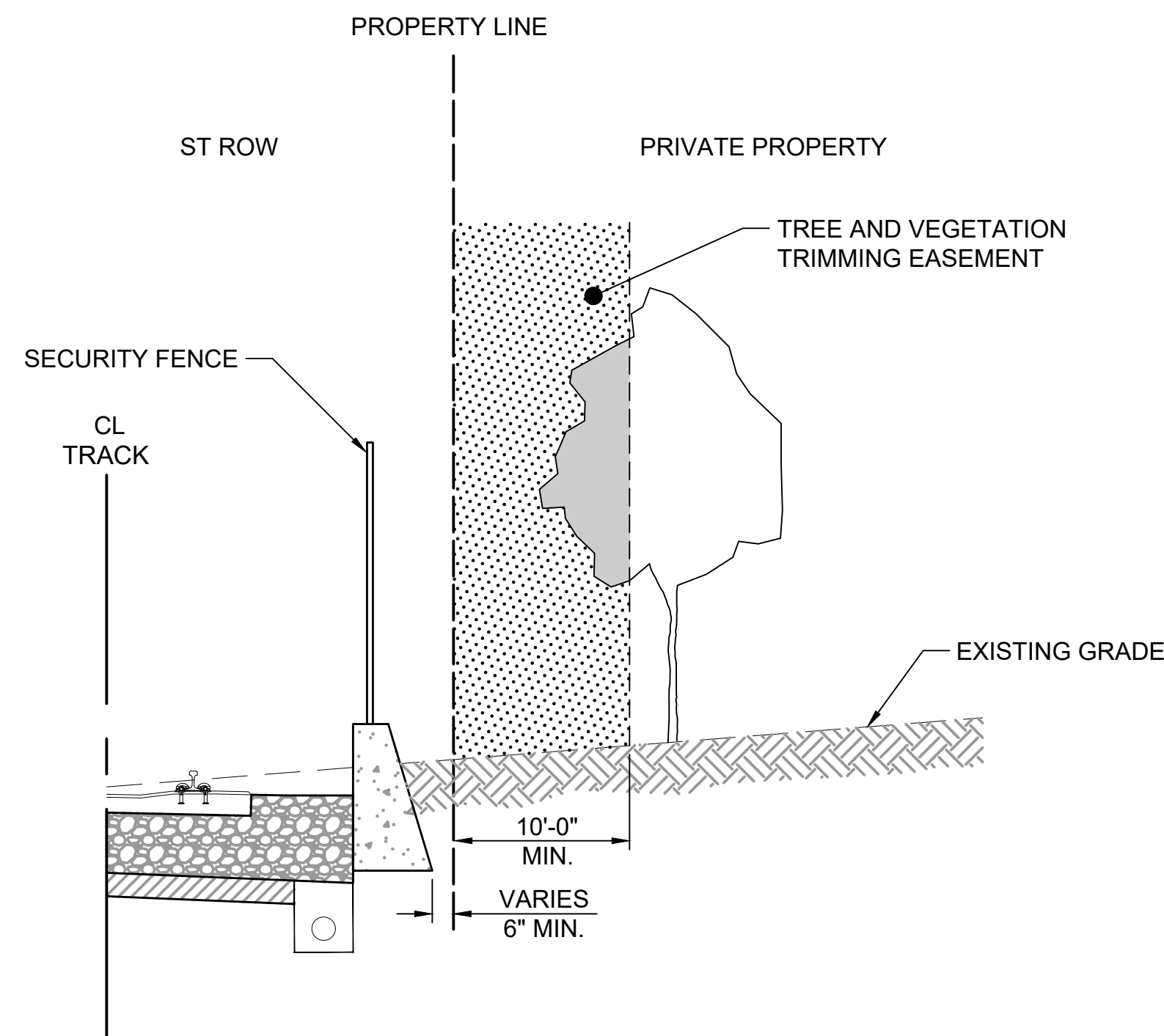
DRAWING No.:	GUI-REX102
FACILITY ID:	
SHEET No.:	REV: 1

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX103.DWG

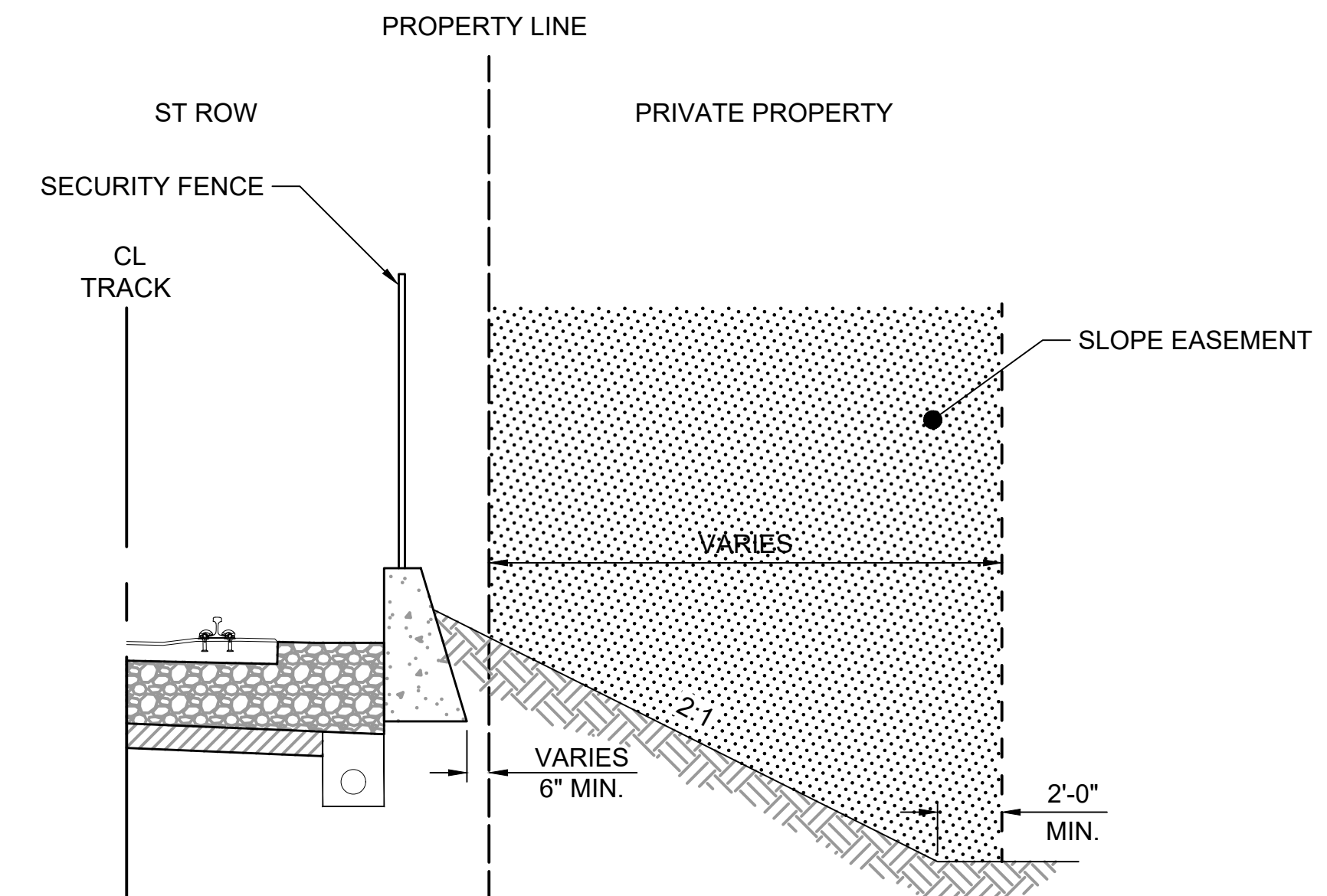
GENERAL NOTES:

1. THIS SECTION IS PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.

LEGEND:



TREE AND VEGETATION TRIMMING EASEMENT
(FEE TAKE / AT GRADE)
NTS



FILL SLOPE EASEMENT
NTS

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

LINE IS 1" AT FULL SCALE

SCALE:	NTS
FILENAME:	GUI-REX103
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
3 OF 6**

DRAWING No.:	GUI-REX103
FACILITY ID:	
SHEET No.:	REV:
	1

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX104.DWG

GENERAL NOTES:

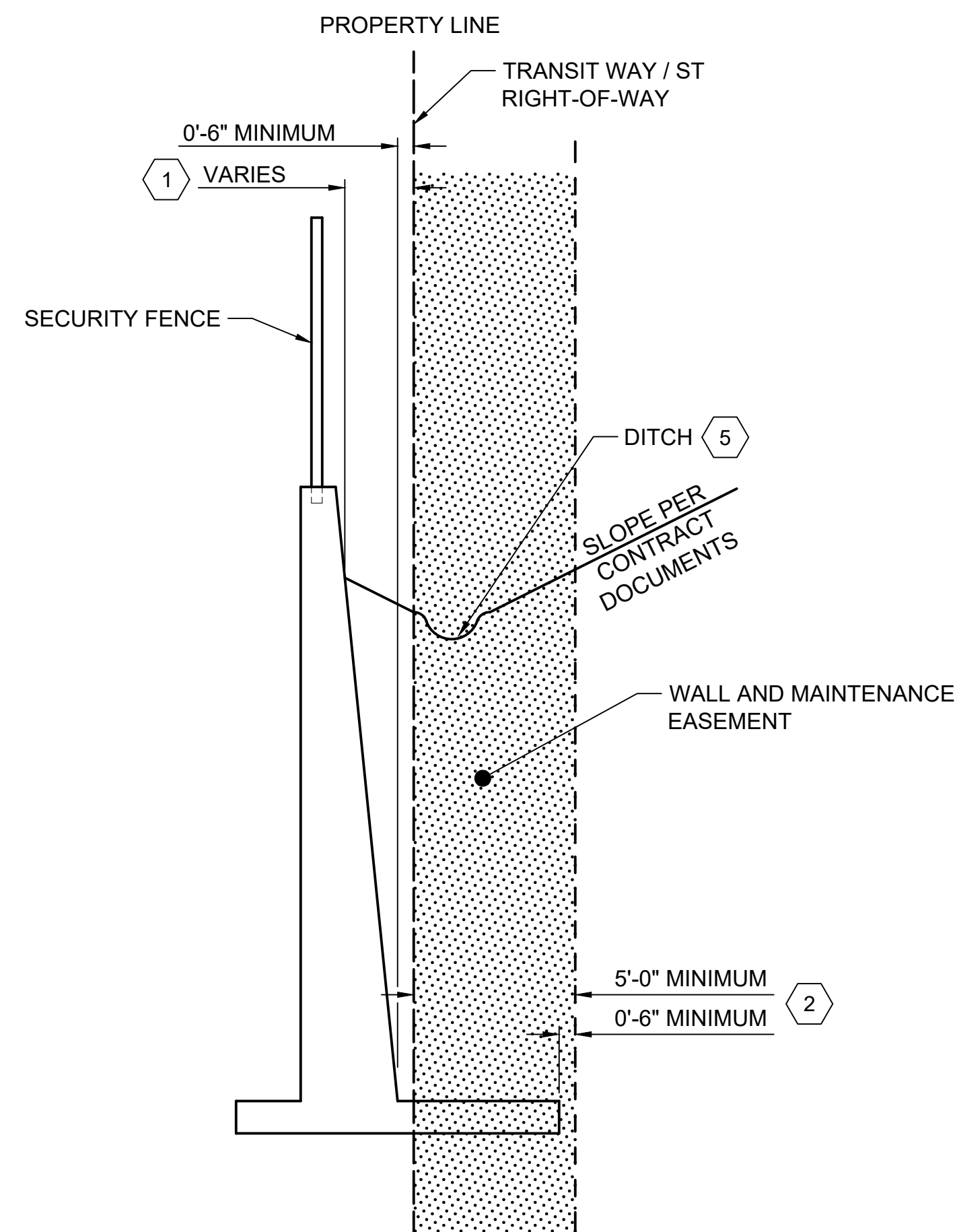
1. THESE SECTIONS ARE PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.

KEY NOTES:

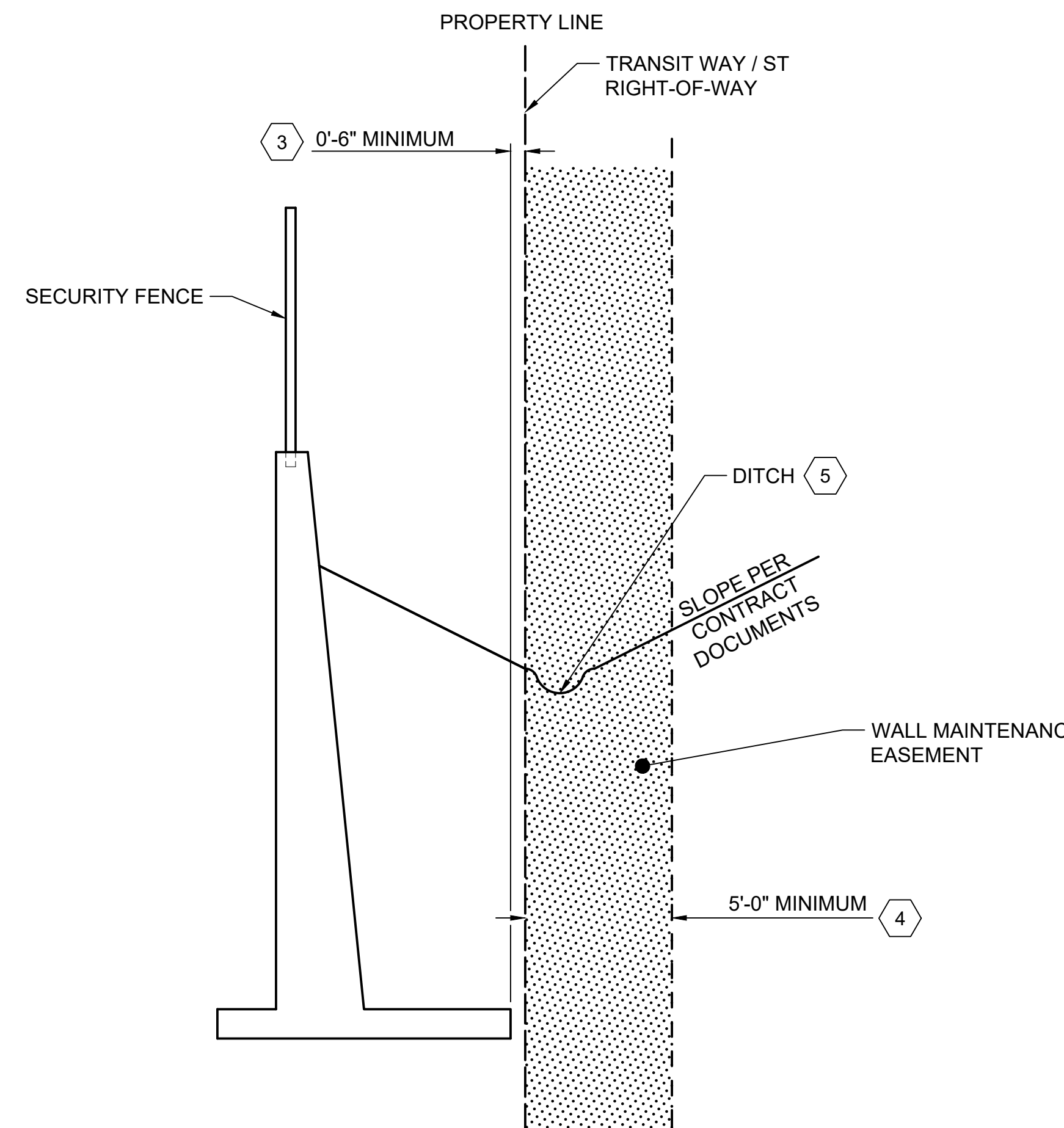
- 1 FOR DBB/ GCCM PROJECTS, ROW LIMIT SHALL START AT THE GREATER OF:
 - 2'-0" MINIMUM FROM FURTHEST EXPOSED POINT OF THE WALL
 - 0'-6" MINIMUM BEYOND THE FURTHEST POINT OF THE WALL.
 FOR DB PROJECTS, ROW LIMIT SHALL START AT THE GREATER OF:
 - 5' TO 8' MINIMUM FROM FURTHEST EXPOSED POINT OF THE WALL.
 - 0'-6" MINIMUM BEYOND THE FURTHEST POINT OF THE WALL.
- 2 EASEMENT SHALL EXTEND THE GREATER OF:
 - 5'-0" MINIMUM FROM THE ST ROW LIMIT
 - 0'-6" MINIMUM BEYOND THE FURTHEST EDGE OF THE FOOTING
- 3 ROW LIMIT SHALL START AT:
 - 0'-6" MINIMUM BEYOND THE FURTHEST EDGE OF THE FOOTING
- 4 EASEMENT SHALL EXTEND:
 - 5'-0" MINIMUM FROM THE ROW LIMIT
- 5 DITCH TO BE LOCATED IN THE EASEMENT AREA

LEGEND:

PERMANENT EASEMENT



WALL MAINTENANCE EASEMENT
(NON-GUIDEWAY / RESIDENTIAL)
NTS



WALL MAINTENANCE EASEMENT
(GUIDEWAY / COMMERCIAL)
NTS

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

LINE IS 1" AT FULL SCALE

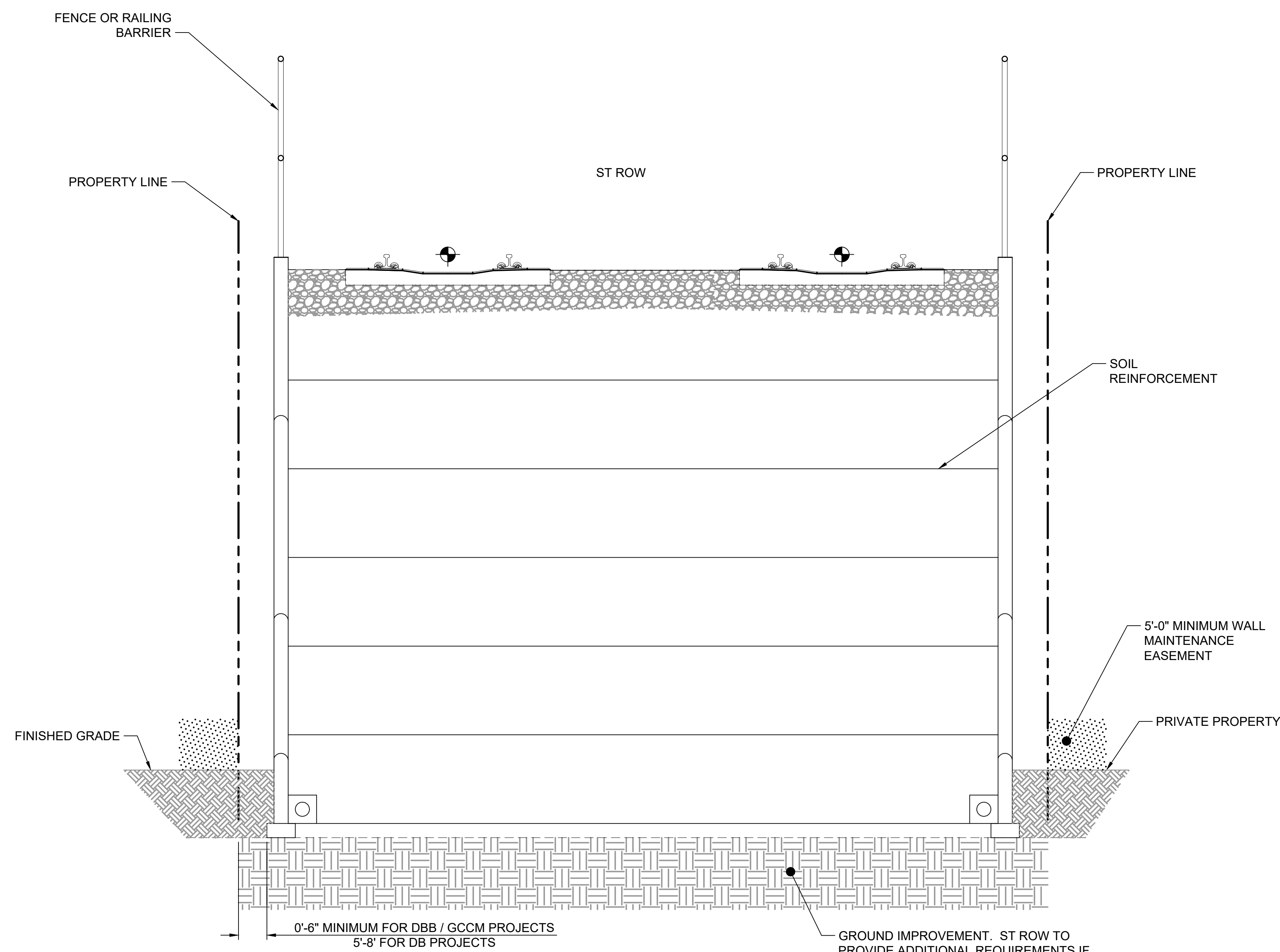
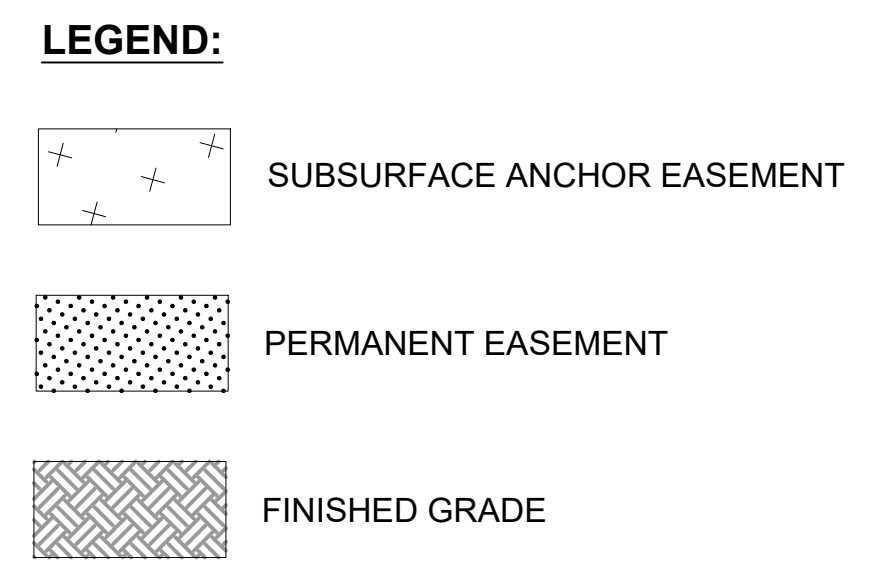
SCALE:	NTS
FILENAME:	GUI-REX104
CONTRACT No.:	RTA/LR -
DATE:	2/2024

SOUND TRANSIT
GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
4 OF 6

DRAWING No.:	GUI-REX104
FACILITY ID:	
SHEET No.:	REV: 1

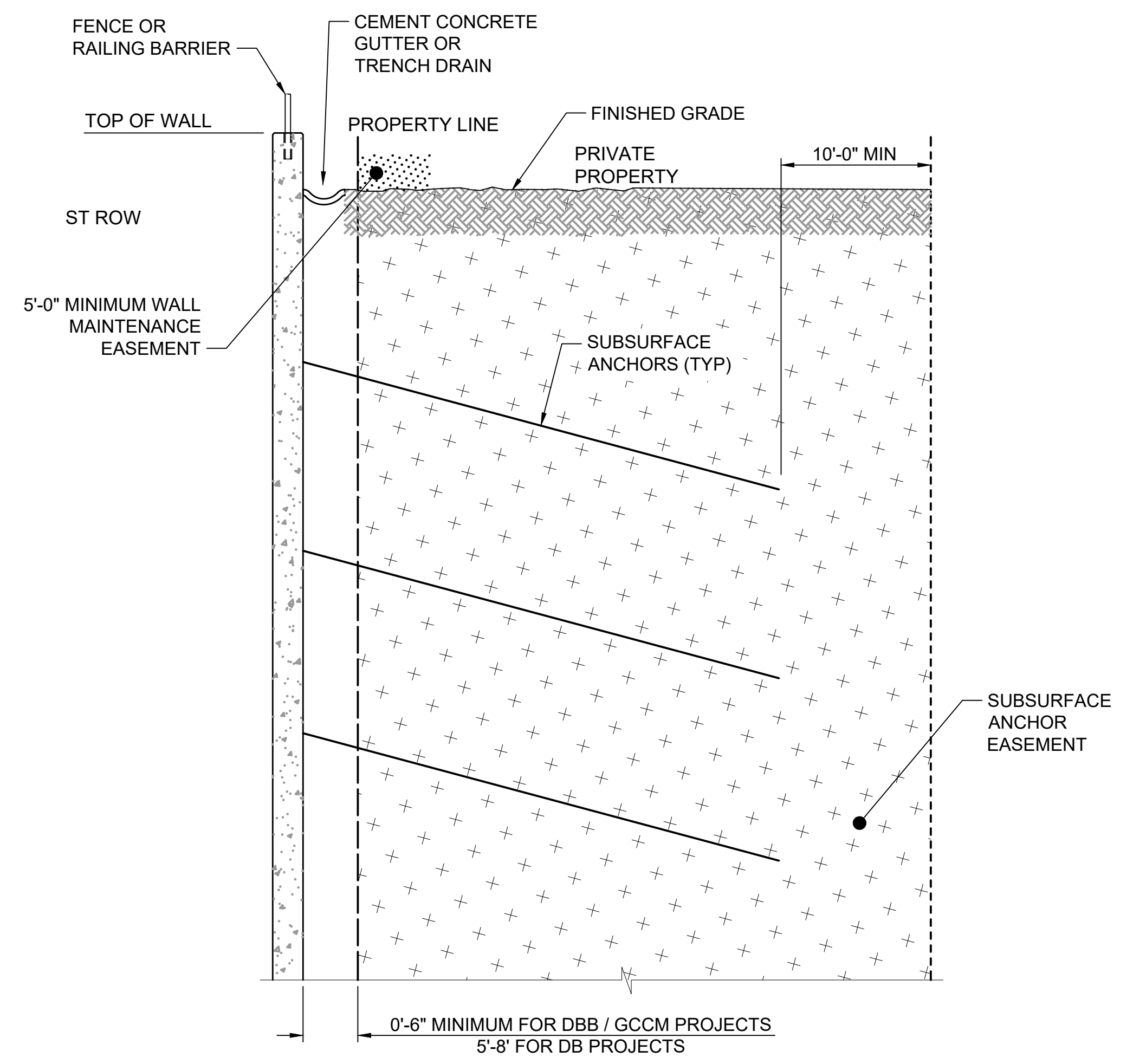
03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX105.DWG

- GENERAL NOTES:**
1. THESE SECTIONS ARE PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
 2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.
 3. DESIGNERS TO OBTAIN PERMISSION FROM AHJ BEFORE FINALIZING DESIGN.



MSE WALL EASEMENT
NTS

GROUND IMPROVEMENT. ST ROW TO PROVIDE ADDITIONAL REQUIREMENTS IF GROUND IMPROVEMENT OR BENCH AND SLOPE SUPPORTING MSE WALL EXISTS



SUBSURFACE ANCHORS EASEMENT
NTS

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

LINE IS 1" AT FULL SCALE

SCALE: NTS
FILENAME: GUI-REX105
CONTRACT No.: RTA/LR -
DATE: 2/2024

SOUND TRANSIT GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
5 OF 6

DRAWING No.:	GUI-REX105
FACILITY ID:	
SHEET No.:	REV: 1

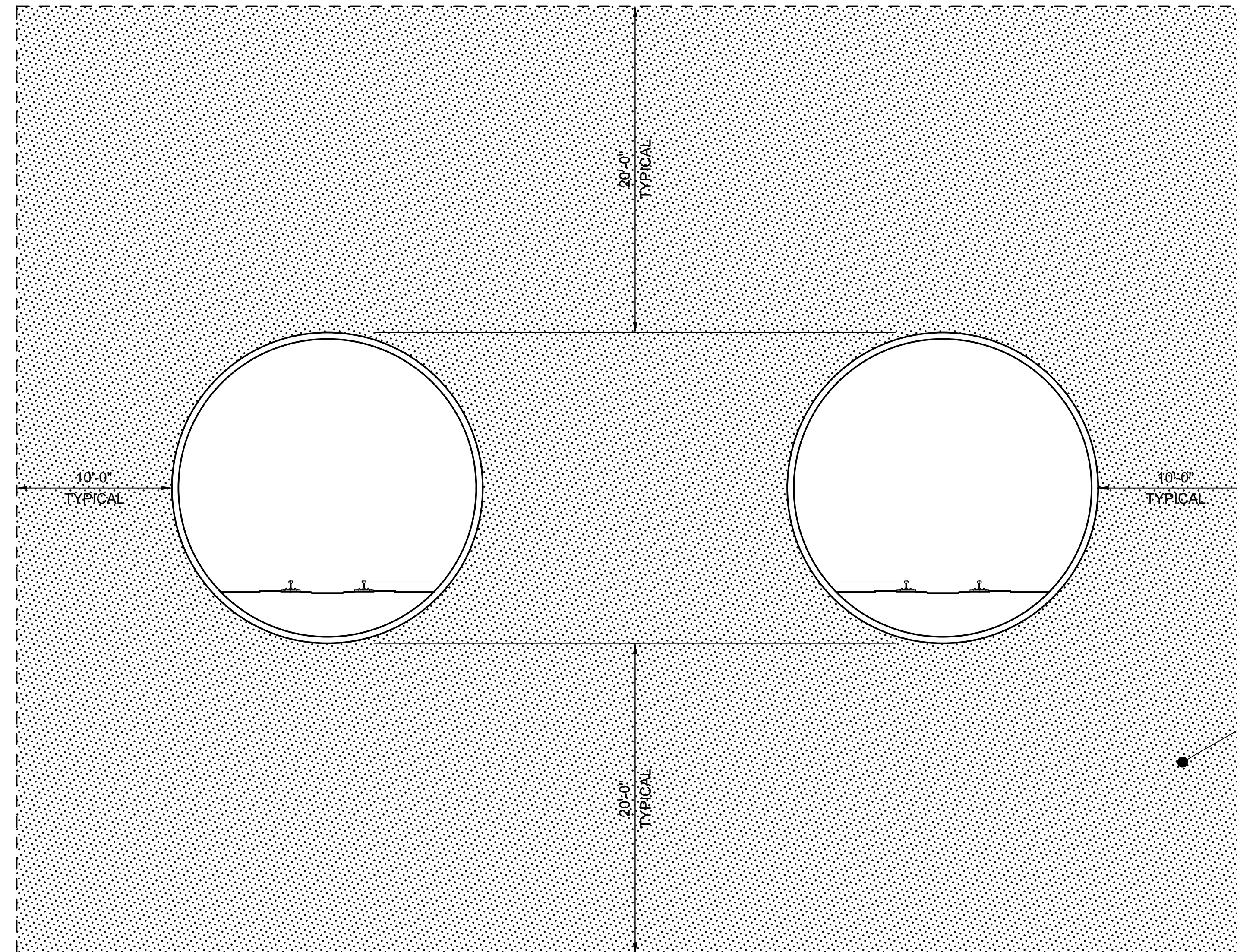
03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX106.DWG

GENERAL NOTES:

1. THIS SECTION IS PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.
3. FOR STATION BOXES, CLEARANCES VARY. SEE ROW ENGINEER.

LEGEND:

 PERMANENT EASEMENT




TUNNEL EASEMENT
NTS

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

LINE IS 1" AT FULL SCALE



SCALE:	NTS
FILENAME:	GUI-REX106
CONTRACT No.:	RTA/LR -
DATE:	2/2024

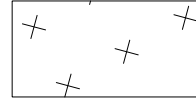
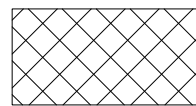
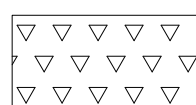

**SOUND TRANSIT
GUIDANCE DRAWINGS
RIGHT OF WAY
PERMANENT EASEMENTS
6 OF 6**

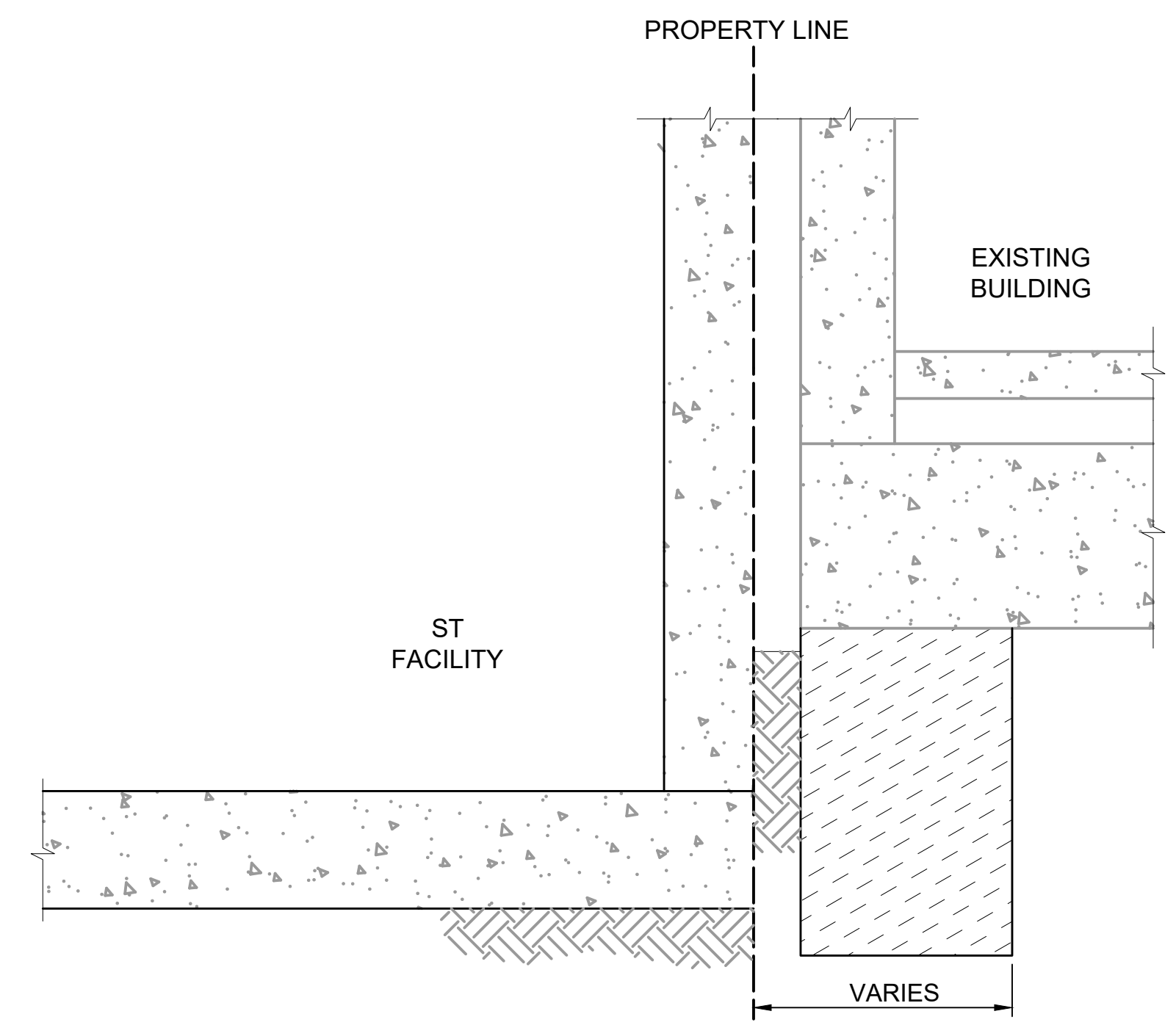
DRAWING No.:	GUI-REX106
FACILITY ID:	
SHEET No.:	1

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-REX201.DWG

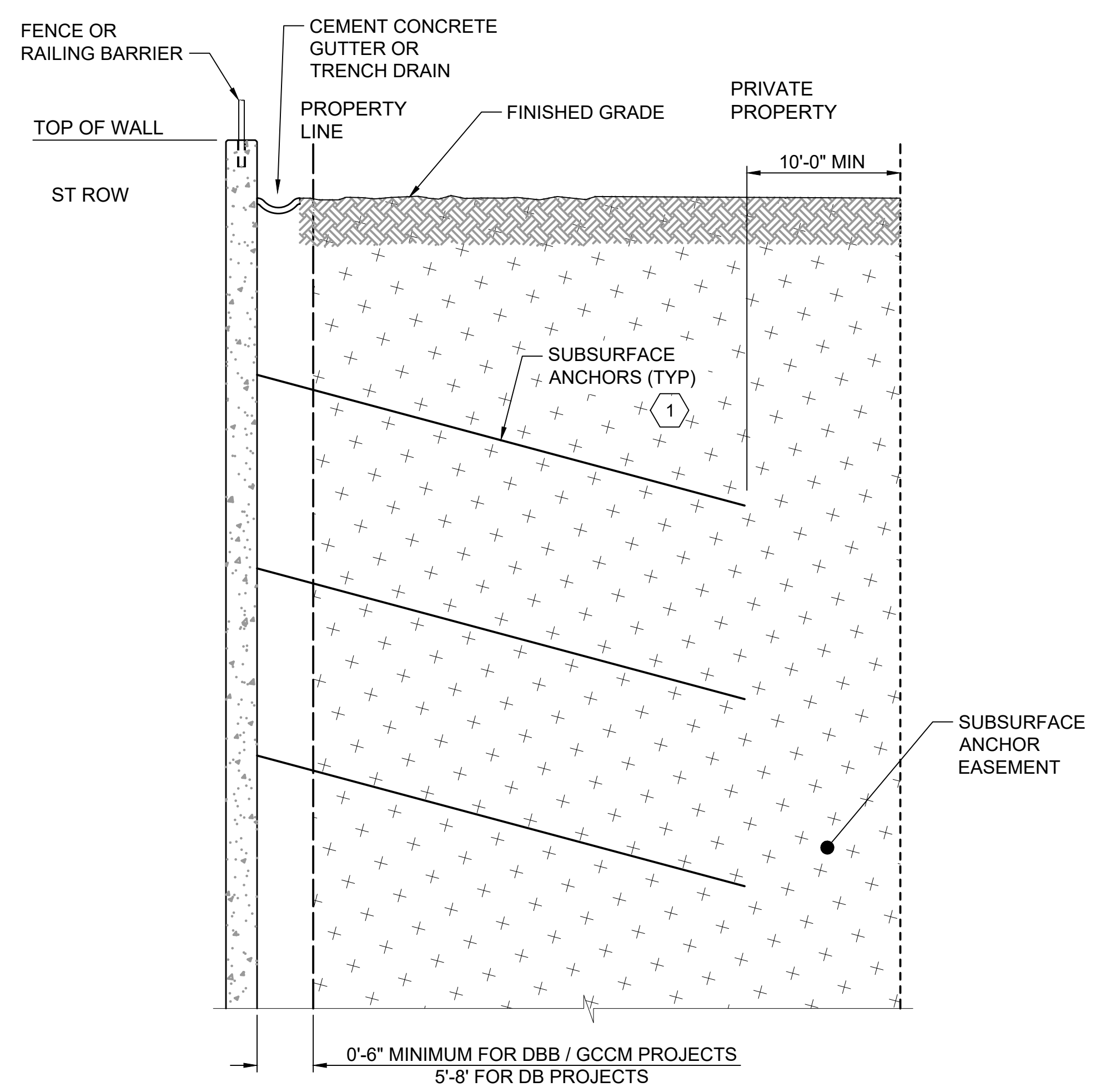
- GENERAL NOTES:**
1. THESE SECTIONS ARE PROVIDED AS A GUIDE FOR ESTABLISHING MINIMUM RIGHT-OF-WAY LIMITS ONLY.
 2. DIMENSIONS SHOWN ARE FOR GENERAL CONDITIONS AND SHALL BE MODIFIED WHERE ENGINEERING OR REAL ESTATE REQUIREMENTS DICTATE.
 3. DESIGNER TO OBTAIN PERMISSION FROM AHJ BEFORE FINALIZING DESIGN.

- KEY NOTES:**
- 1 ANCHORS CAN BE SEMI-PERMANENT FOR THE CITY OF SEATTLE REQUIREMENT

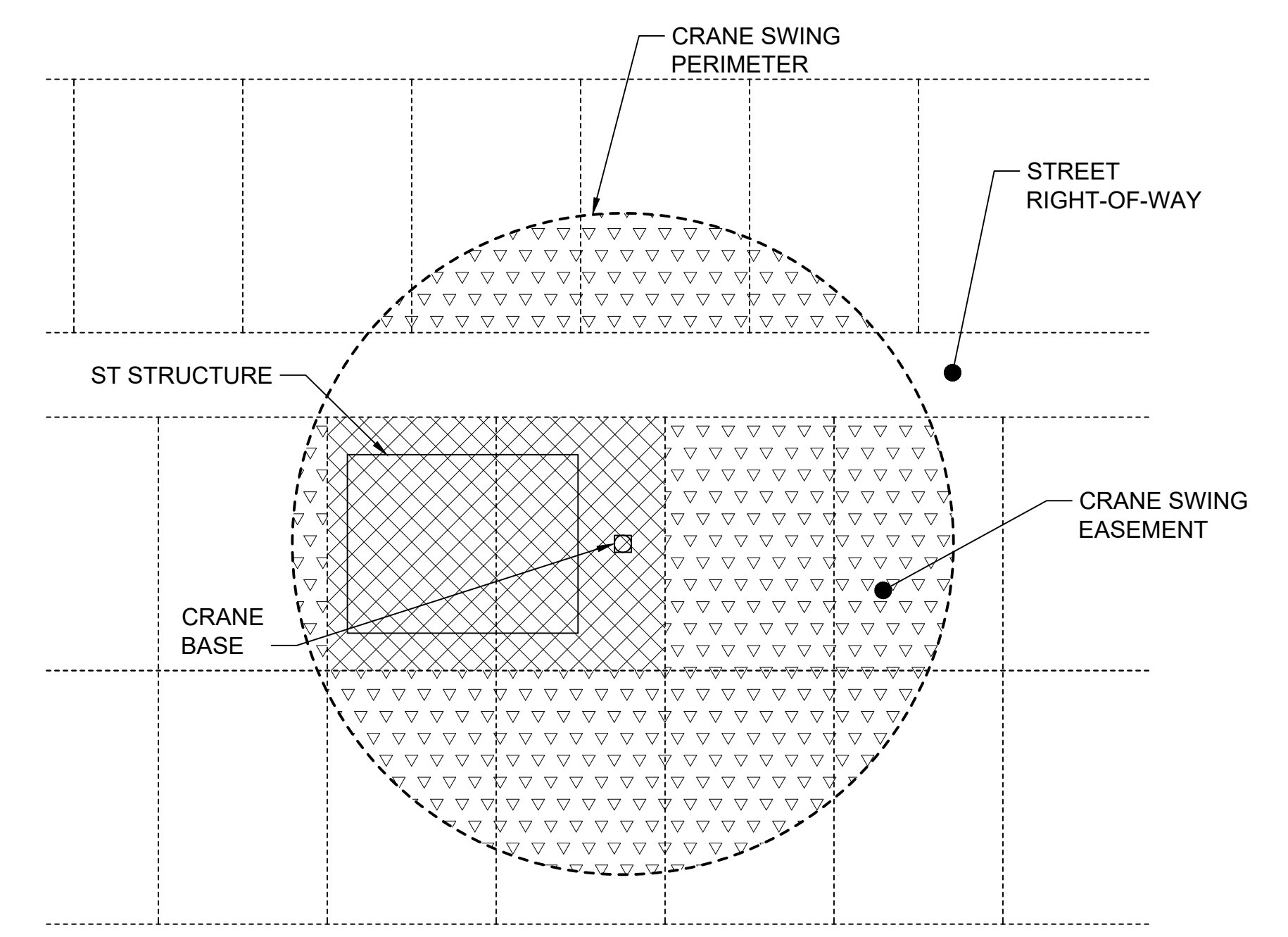
- LEGEND:**
-  SUBSURFACE ANCHOR EASEMENT
 -  FEE TAKE
 -  CRANE SWING EASEMENT
 -  TEMPORARY EASEMENT



UNDERPINNING DETAIL
NTS



SUBSURFACE ANCHORS EASEMENT
NTS




TEMPORARY CRANE SWING EASEMENT
NTS

No.	DATE	DSN	CHK	APP	REVISION
1	2/2024				2024 REVISED GUIDANCE DRAWINGS
0	8/2019				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

LINE IS 1" AT FULL SCALE

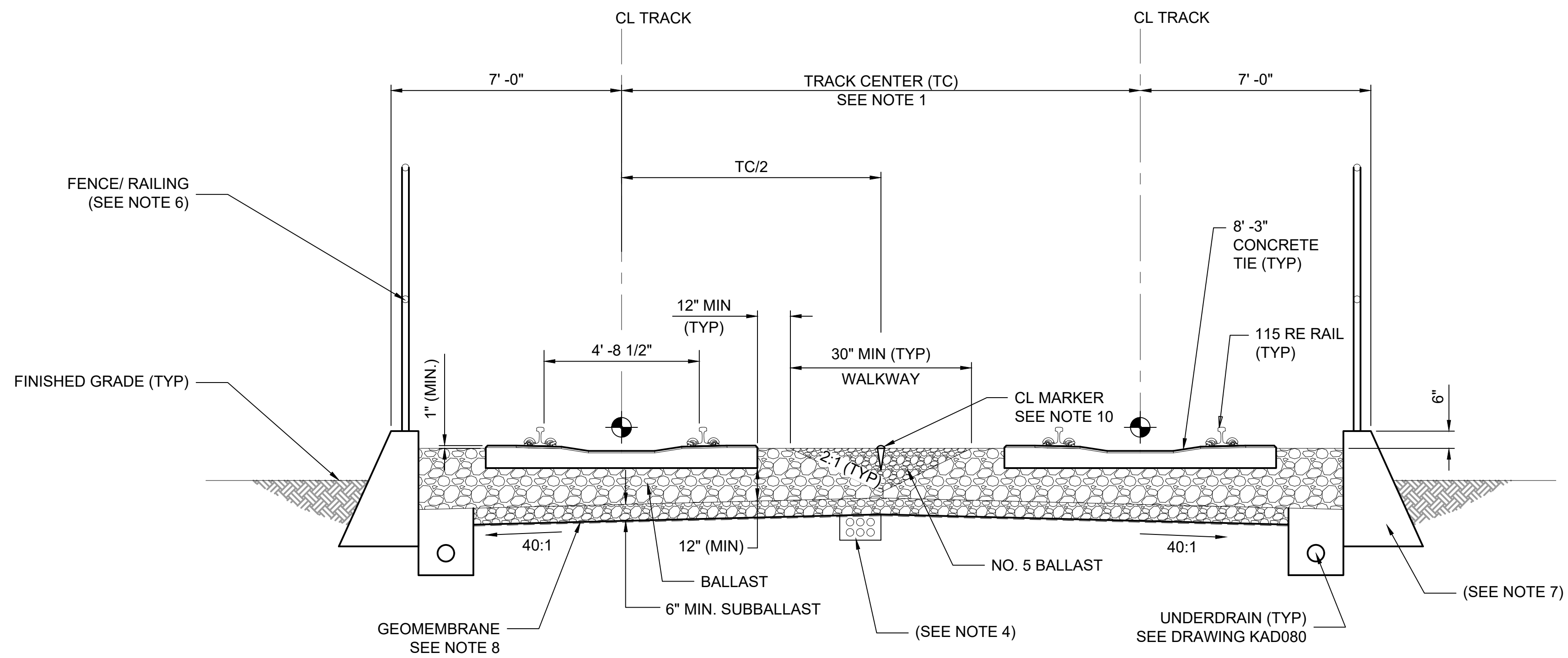


SCALE: NTS
FILENAME: GUI-REX201
CONTRACT No.: RTA/LR -
DATE: 2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS
RIGHT OF WAY
TEMPORARY EASEMENTS**

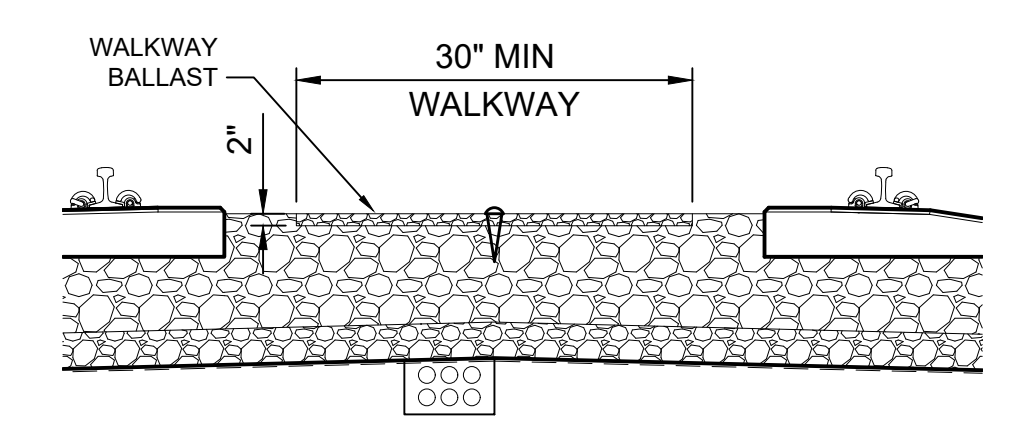
DRAWING No.:	GUI-REX201
FACILITY ID:	
SHEET No.:	REV: 1

03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAX060.DWG

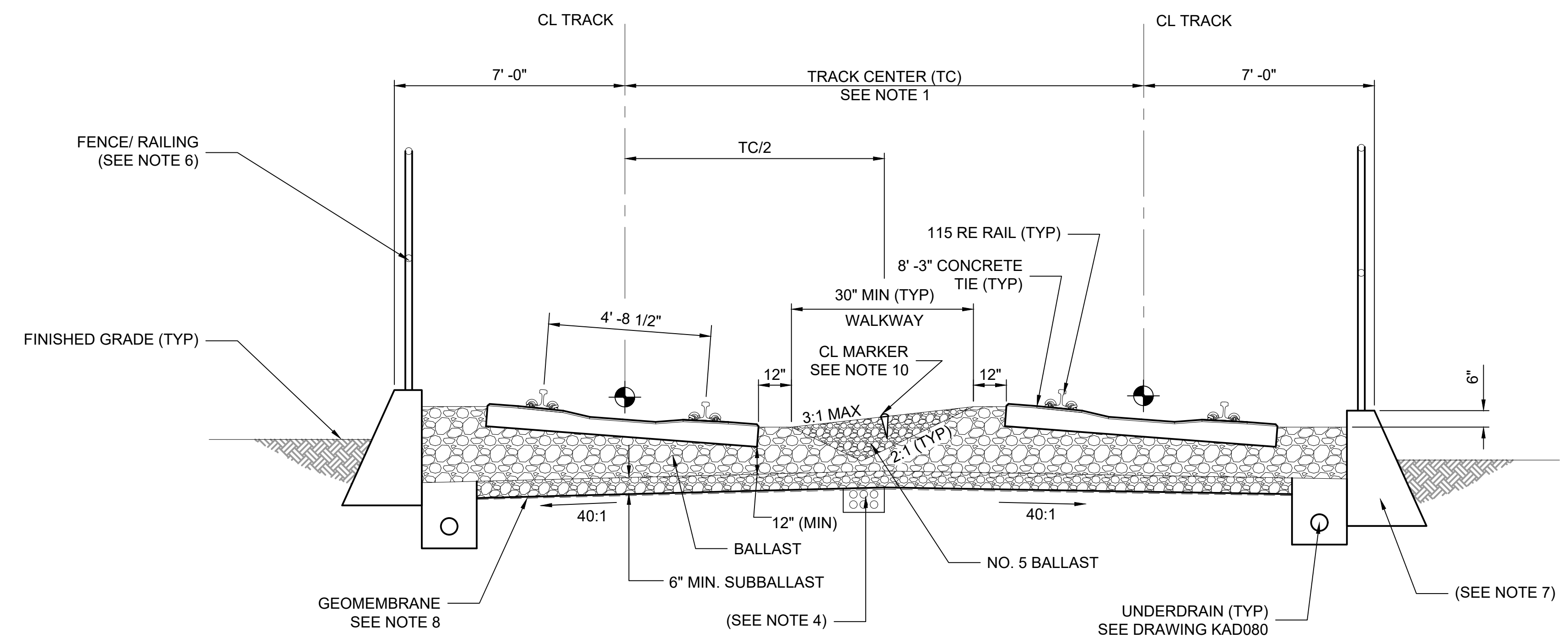


TANGENT DOUBLE TRACK
NTS

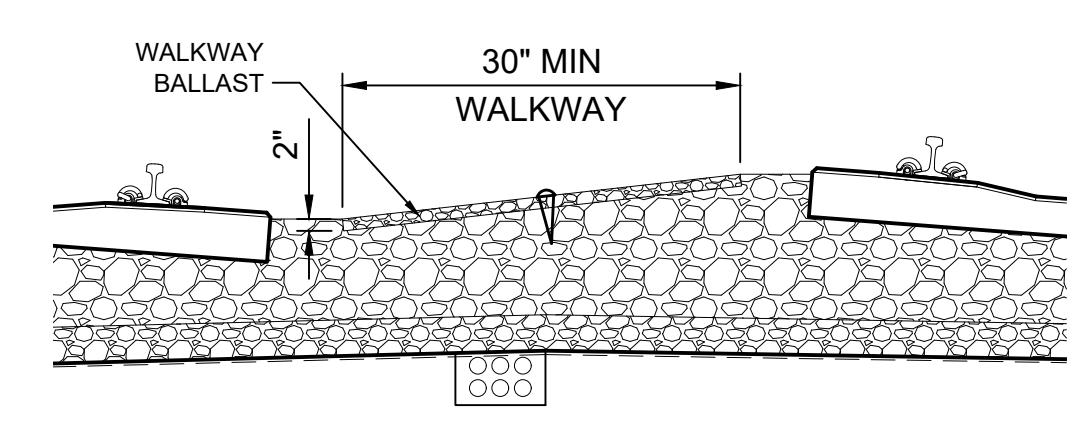
- GENERAL NOTES:**
1. SEE DRAWING GUI-KAX061 FOR TRACK CENTER SPACING REQUIREMENTS.
 2. AT DESIGNATED WALKWAY, WALKWAY BALLAST SHALL BE PLACED MINIMUM OF 12" FROM END OF CONCRETE TIE.
 3. 12" BALLAST SHOULDER MINIMUM.
 4. DUCTBANK/ CONDUIT LOCATION VARIES. SEE STANDARD SYSTEM PLANS AND CONTRACT DRAWINGS FOR DETAILS.
 5. FOR CONCRETE TIE DETAILS SEE STD-KAD050.
 6. FOR FENCE AND RAILING SEE CONTRACT DRAWING FOR TYPE AND HEIGHT.
 7. FOR BALLAST CURB AND WALLS DETAILS SEE STANDARD PLANS AND CONTRACT DRAWINGS.
 8. SEE CONTRACT DRAWINGS FOR LIMITS OF GEOMEMBRANE.
 9. FOR WALKWAY AND CROSSING DETAILS SEE GUIDANCE DRAWING STD-KAD066 AND STD-KAD070.
 10. YELLOW CENTERLINE WALKWAY MARKER EQUALLY SPACED BETWEEN OCS POLES. MAXIMUM SPACING IS 50 FEET BETWEEN MARKERS.
 11. NO. 5 BALLAST IS REQUIRED WITHIN THE LIMITS OF WALKWAY. WHERE NO WALKWAY IS PRESENT, USE NO. 4 BALLAST.



ALTERNATE TANGENT DOUBLE TRACK WALKWAY
NTS



SUPERELEVATED BALLASTED TRACK SECTION
NTS




ALTERNATE SUPERELEVATED BALLASTED TRACK SECTION
NTS

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

SCALE: NTS
FILENAME: GUI-KAX060
CONTRACT No.: RTA/LR -
DATE: 2/2024



LINE IS 1" AT FULL SCALE

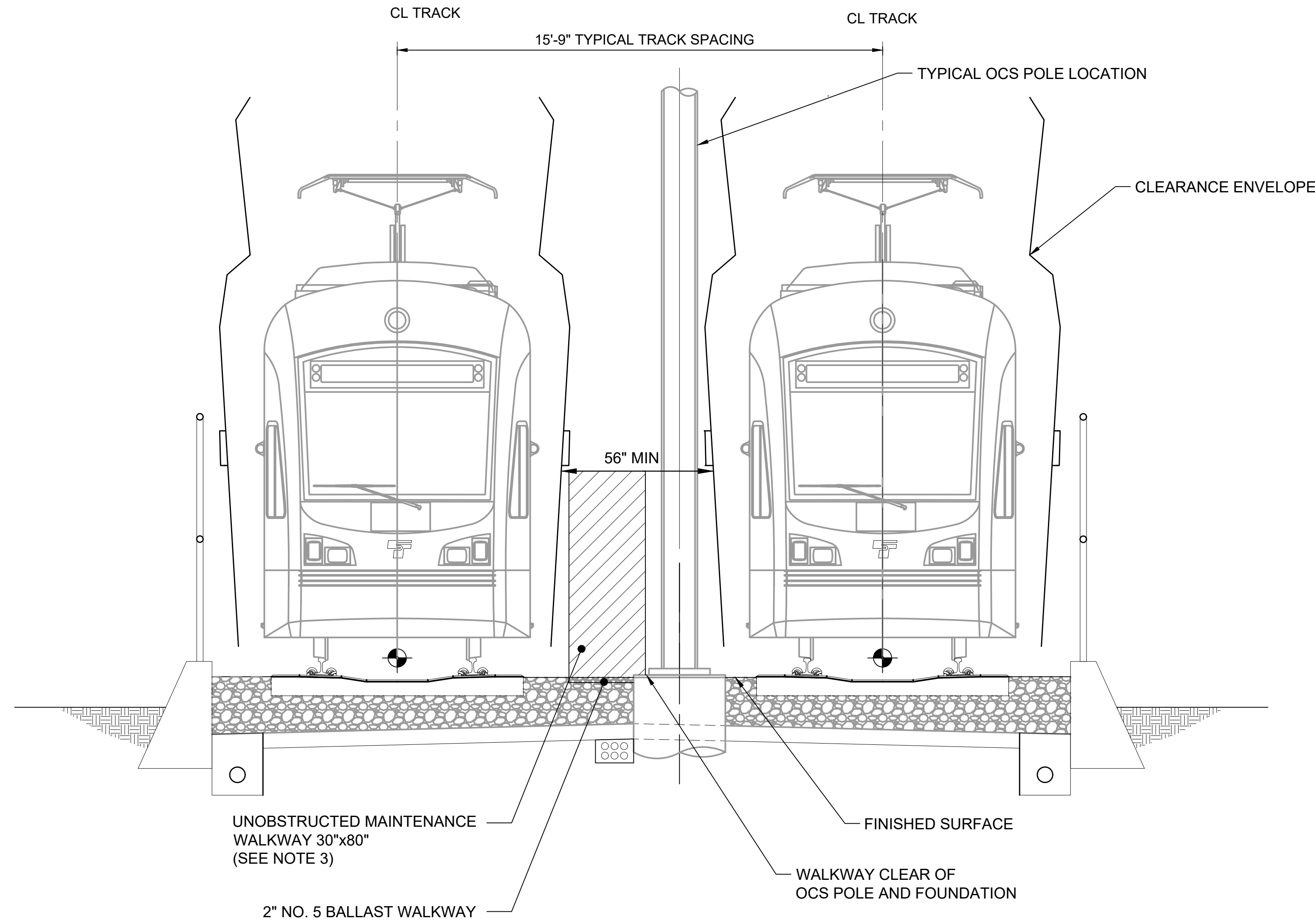
SOUND TRANSIT
GUIDANCE DRAWINGS
TRACKWORK
BALLASTED DOUBLE MAIN TRACK
TYPICAL SECTIONS

DRAWING No.:	GUI-KAX060
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAX061.DWG

GENERAL NOTES:

1. THE TYPICAL MAINLINE TRACK SPACING IS 15'-9". TRACK SPACING MAY VARY DEPENDING UPON PROJECT SPECIFIC CONDITIONS. THE DESIGNER OF RECORD SHALL DEMONSTRATE THE FOLLOWING MINIMUM CONDITIONS ARE MET.
 - THE MAINTENANCE WALKWAY AND OBSTRUCTIONS SHALL NOT INTRUDE INTO THE CLEARANCE ENVELOPE.
 - THE MINIMUM DIMENSION BETWEEN LRV CLEARANCE ENVELOPES, AS MEASURED AT 80" ABOVE THE FINISHED SURFACE, SHALL BE 56 INCHES.
2. TYPICAL SECTION DIMENSION AND CLEARANCE REQUIREMENTS APPLY TO ALL TRACK TYPES: BALLASTED, EMBEDDED AND DIRECT FIXATION.
3. EMERGENCY EGRESS LOCATION SHALL COINCIDE WITH THE MAINTENANCE WALKWAY. THE MAINTENANCE WALKWAY MUST MEET THE MINIMUM REQUIREMENTS FOR EMERGENCY EGRESS AS DEFINED IN THE SOUND TRANSIT REQUIREMENTS MANUAL.




LIGHT RAIL GUIDEWAY SECTION
NTS

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	-

LINE IS 1" AT FULL SCALE



SCALE: NTS
 FILENAME: GUI-KAX061
 CONTRACT No.: RTA/LR -
 DATE: 2/2024

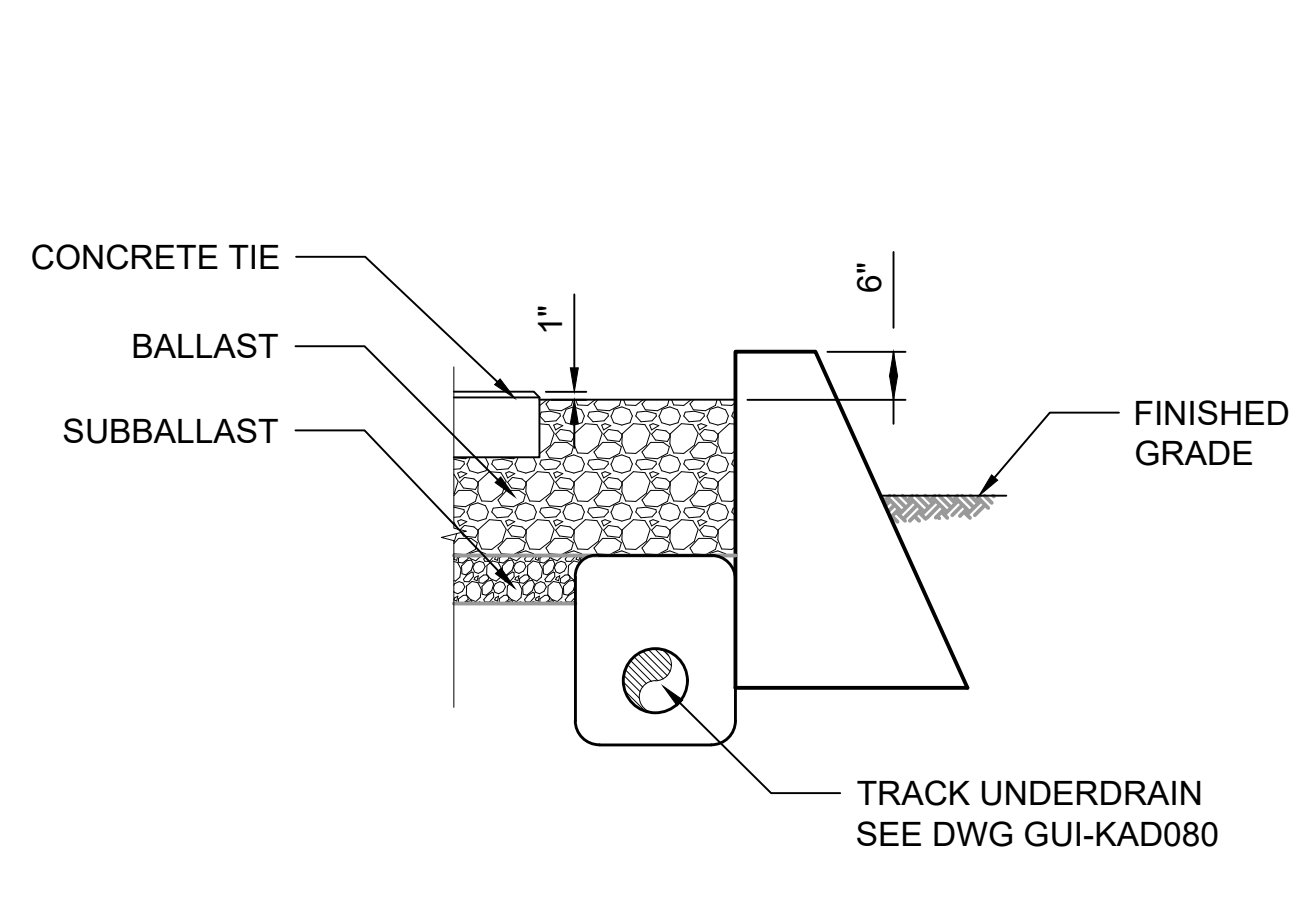
**SOUND TRANSIT
 GUIDANCE DRAWINGS
 TRACKWORK**

TYPICAL GUIDEWAY SECTIONS

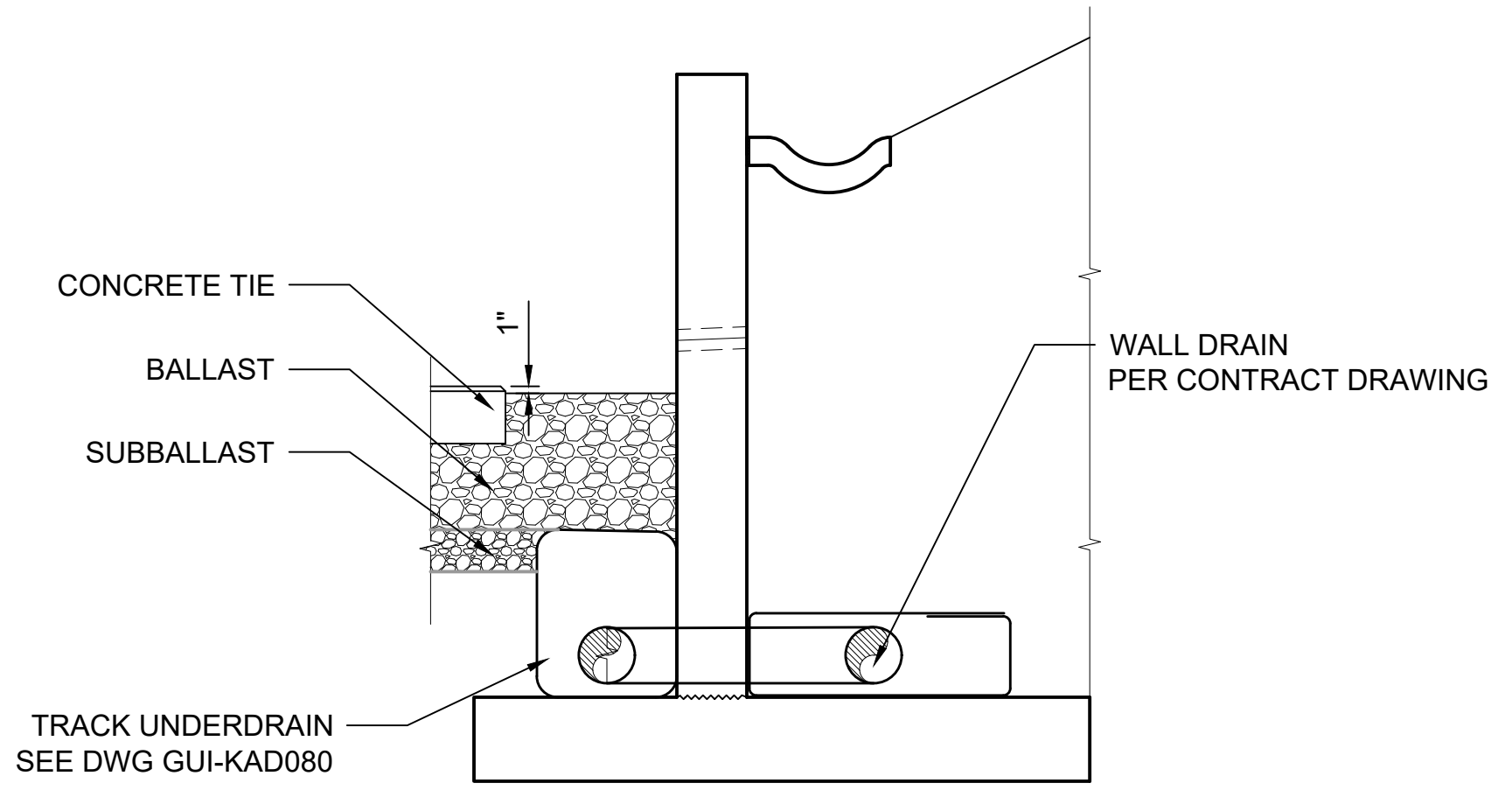
DRAWING No.:	GUI-KAX061
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAX065.DWG

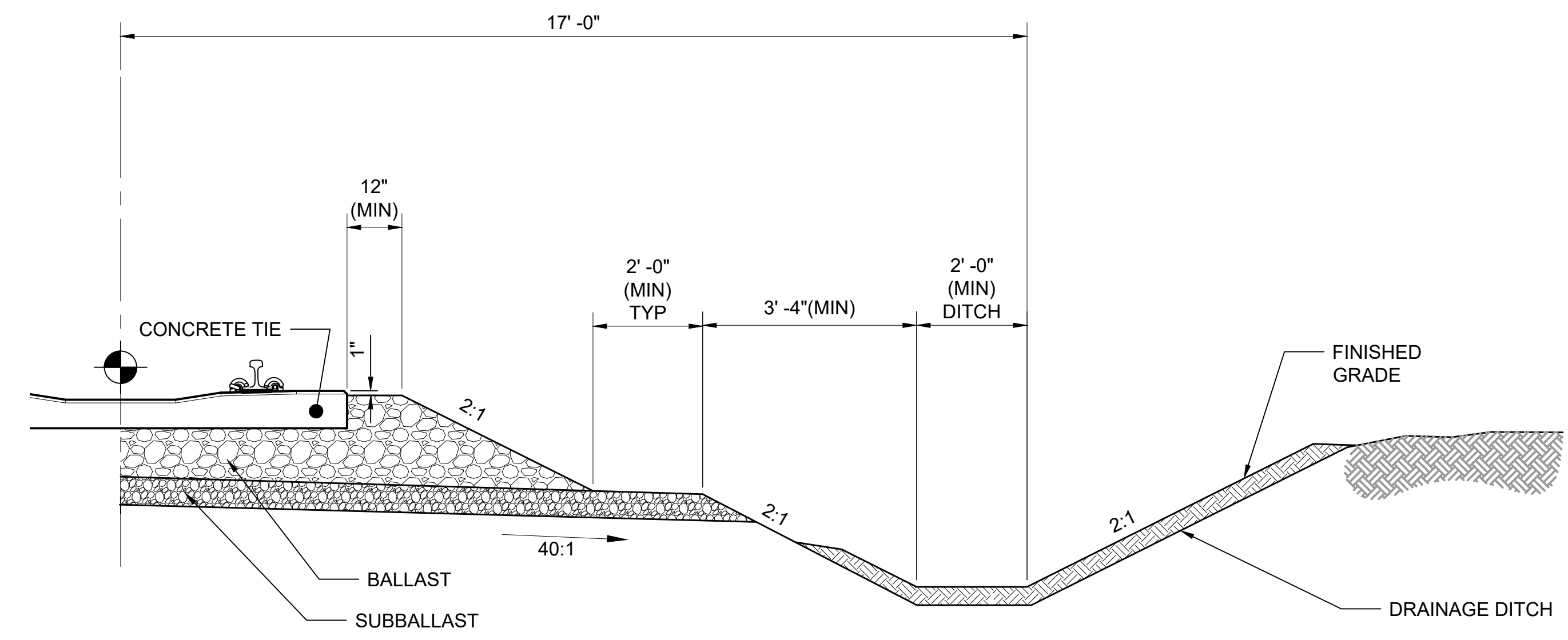
- GENERAL NOTES:**
- SEE CONTRACT DRAWINGS FOR WALL TYPE, LOCATION, AND DETAILS.
 - THE FIRST LAYER OF MSE SOIL REINFORCEMENT SHALL BE PLACED BELOW THE TRACK DRAINAGE.



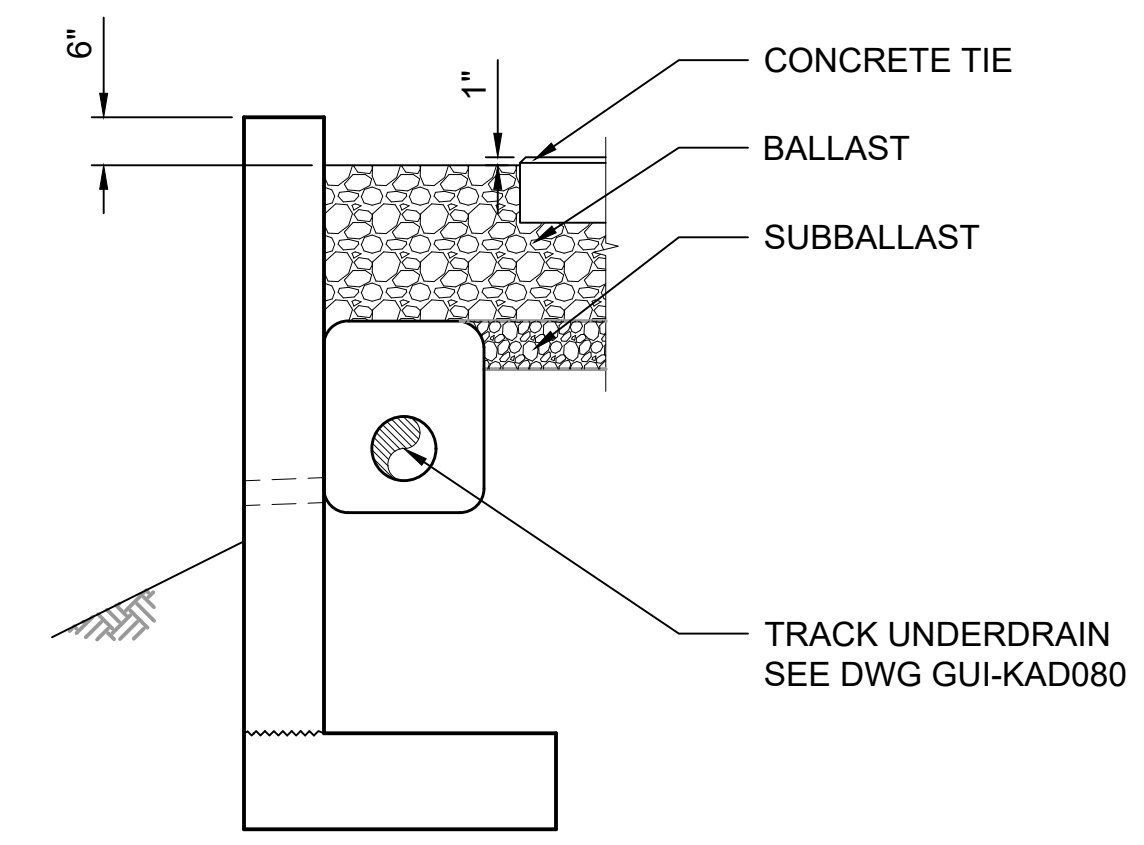
TYPE A: BALLAST CURB TYPE 1 1
NTS



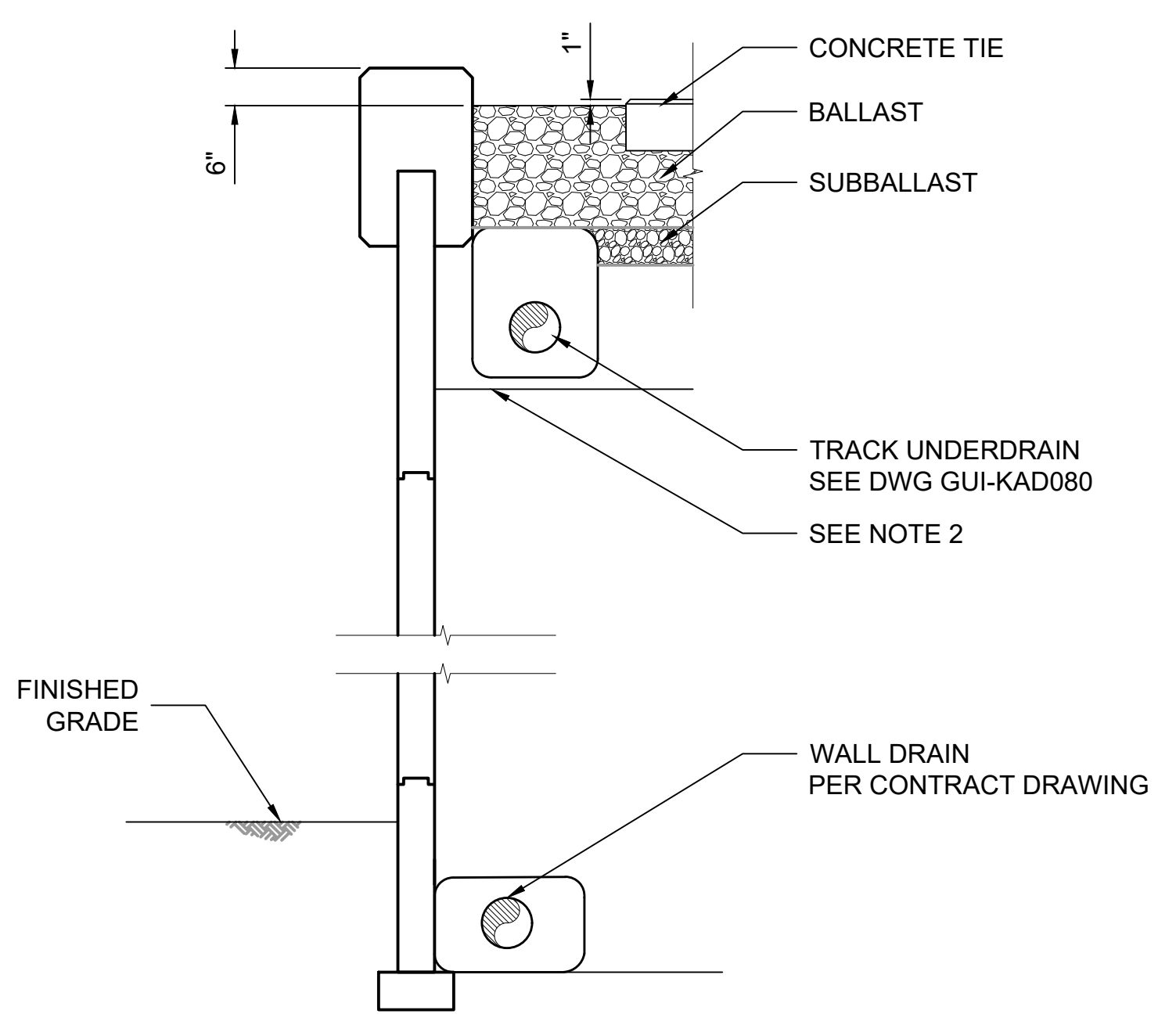
TYPE C 2
NTS



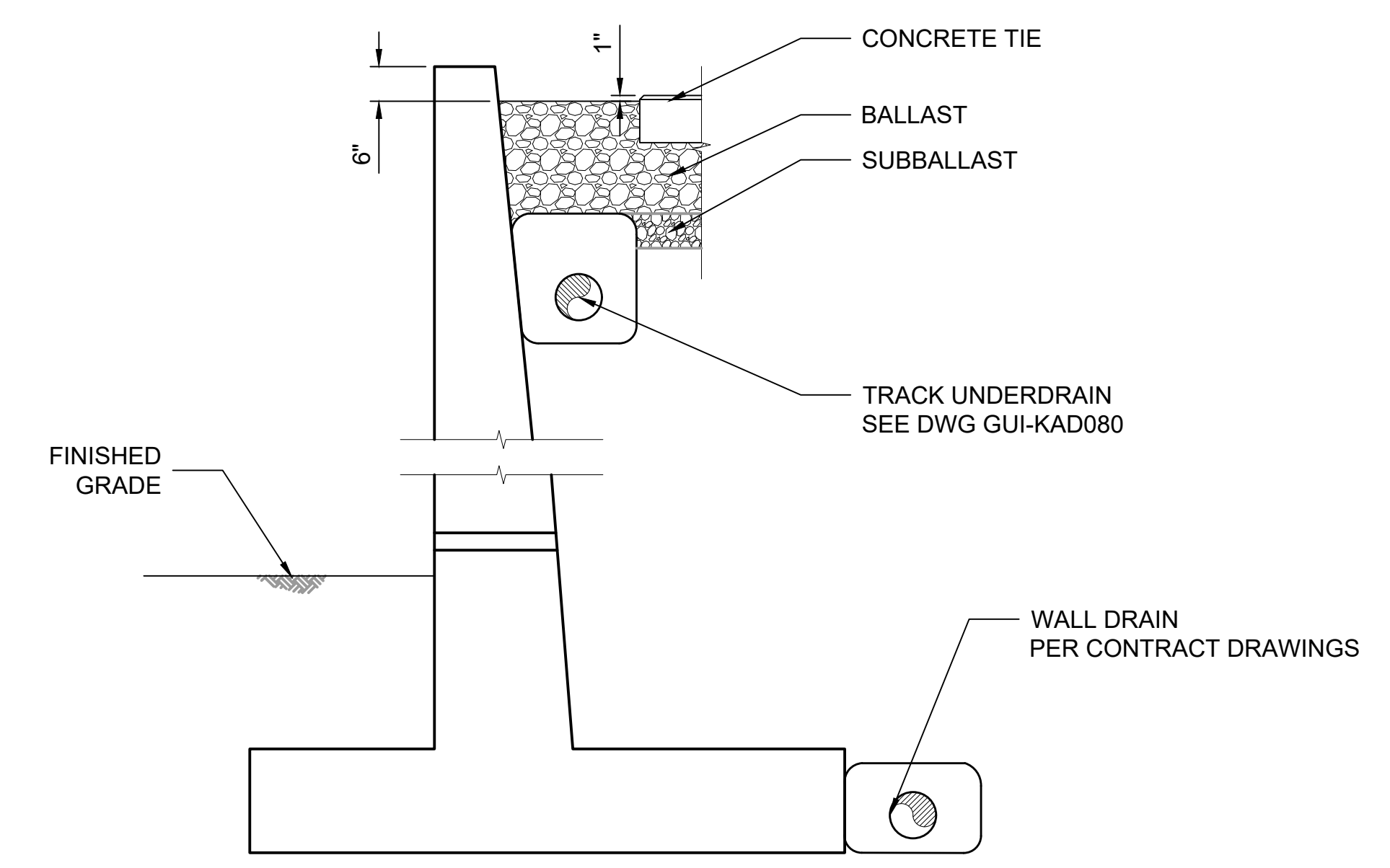
TYPE E 3
NTS



TYPE B 4
NTS



TYPE D: MSE WALL 5
NTS



TYPE F: CIP FILL WALL 6
NTS

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

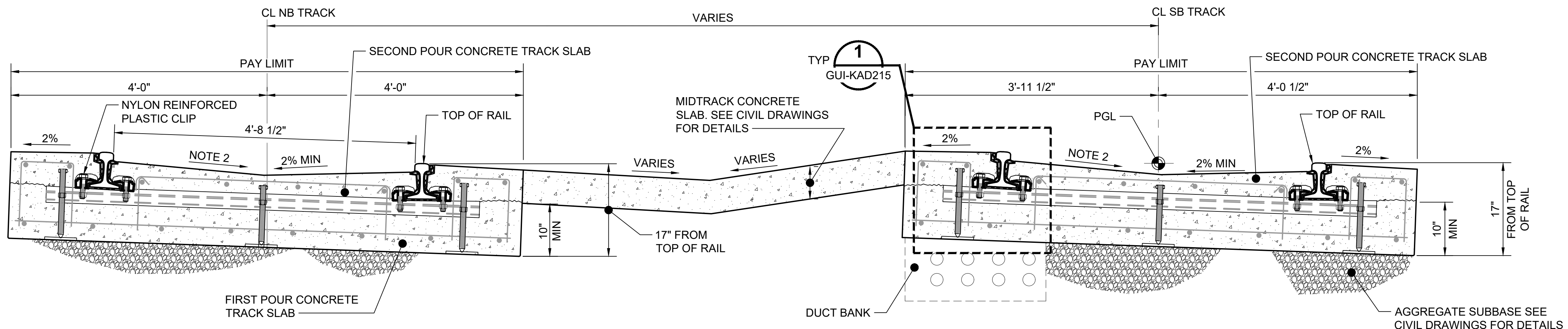
SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

SCALE:	NTS
FILENAME:	GUI-KAX065
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK
BALLASTED TRACK
TYPICAL SECTION DETAILS

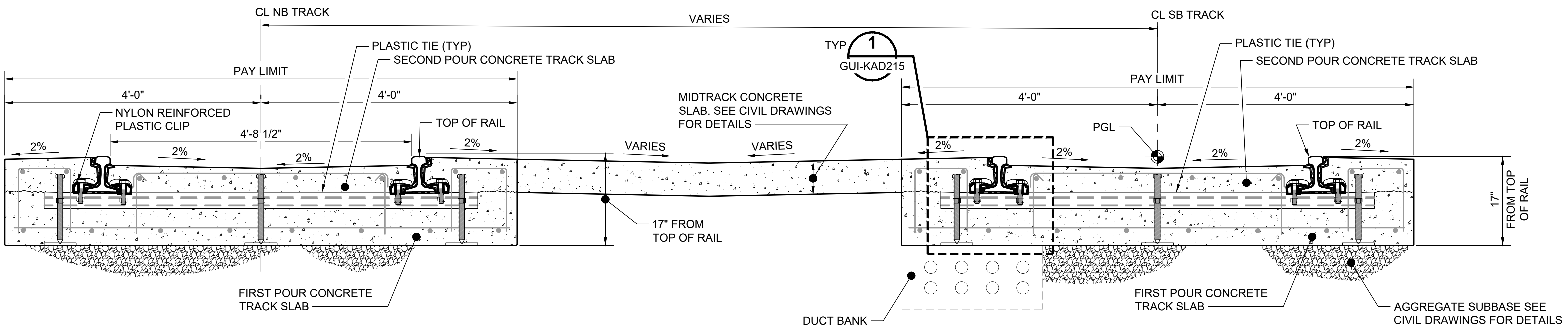
DRAWING No.:	GUI-KAX065
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\Technical Standards and Requirements Projects - Drawings Update 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAX200.DWG



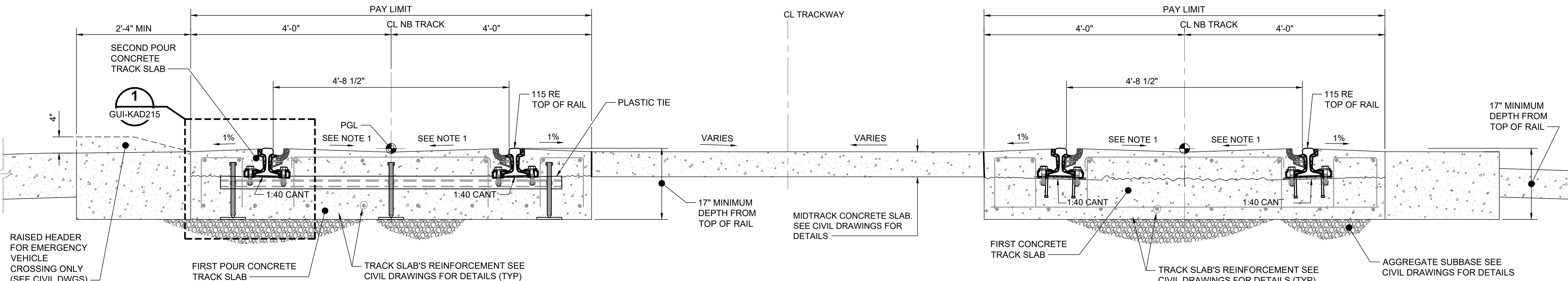
TYPICAL TRACK SECTION AT MIDBLOCK ROAD SECTION (SUPERELEVATED)

SCALE: 1" = 1'-0"



TYPICAL TRACK SECTION AT MIDBLOCK ROAD SECTION (SUPERELEVATED 0")

SCALE: 1" = 1'-0"



TYPICAL TRACK SECTION AT ROAD INTERSECTION, AT MIDBLOCK EMERGENCY VEHICLES CROSSING AND AT PEDESTRIAN CROSSING (SUPERELEVATED 0")

SCALE: 1" = 1'-0"

GENERAL NOTES:

1. TOP OF SECOND POUR CONCRETE TRACK SLAB SHOULD BE SLOPED 0% AT ROAD INTERSECTION.
2. SLOPE VARIES W/ SUPERELEVATION

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL DIRECTIVE AND STANDARD DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

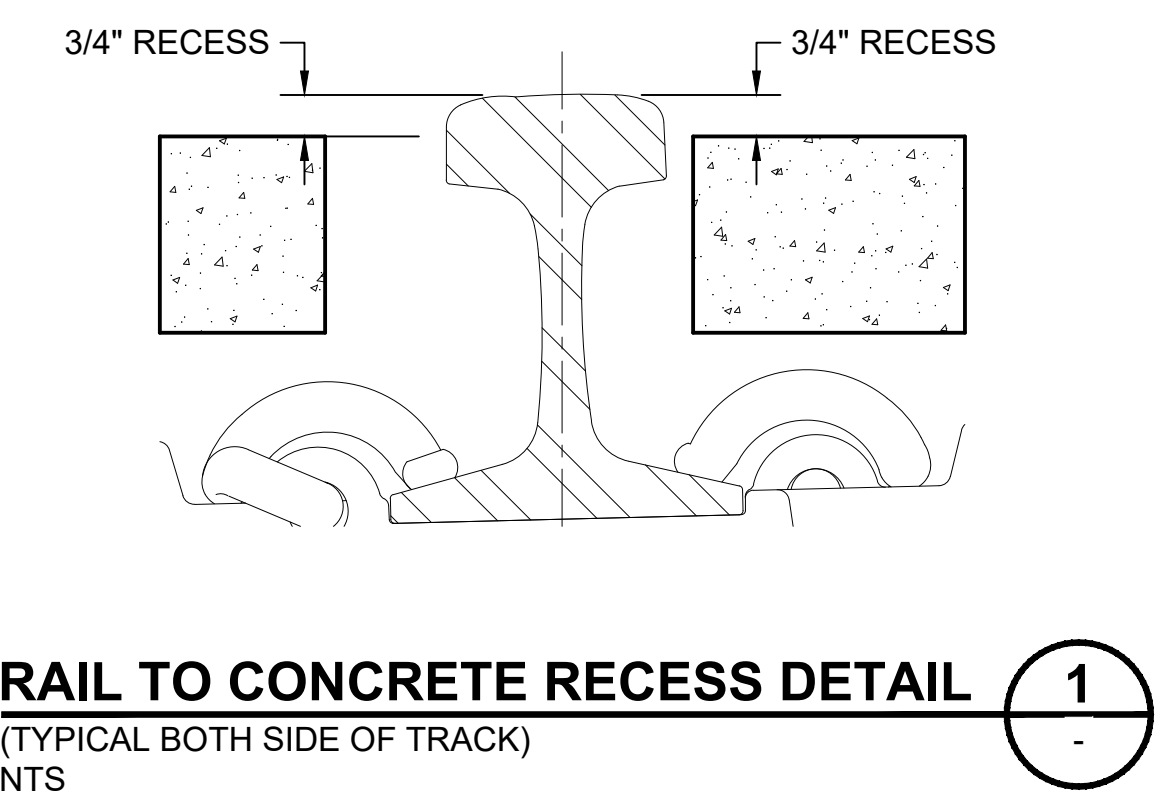
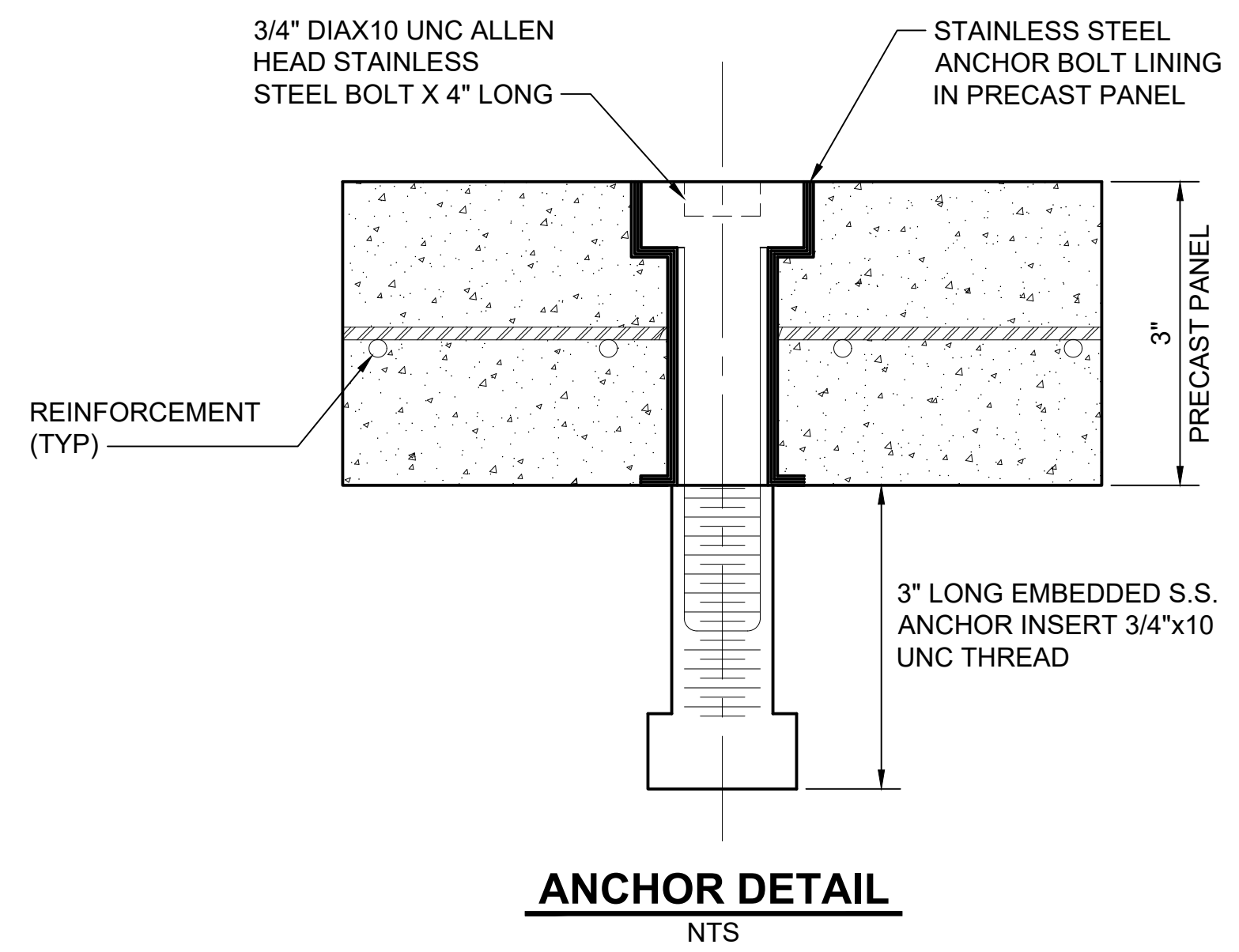
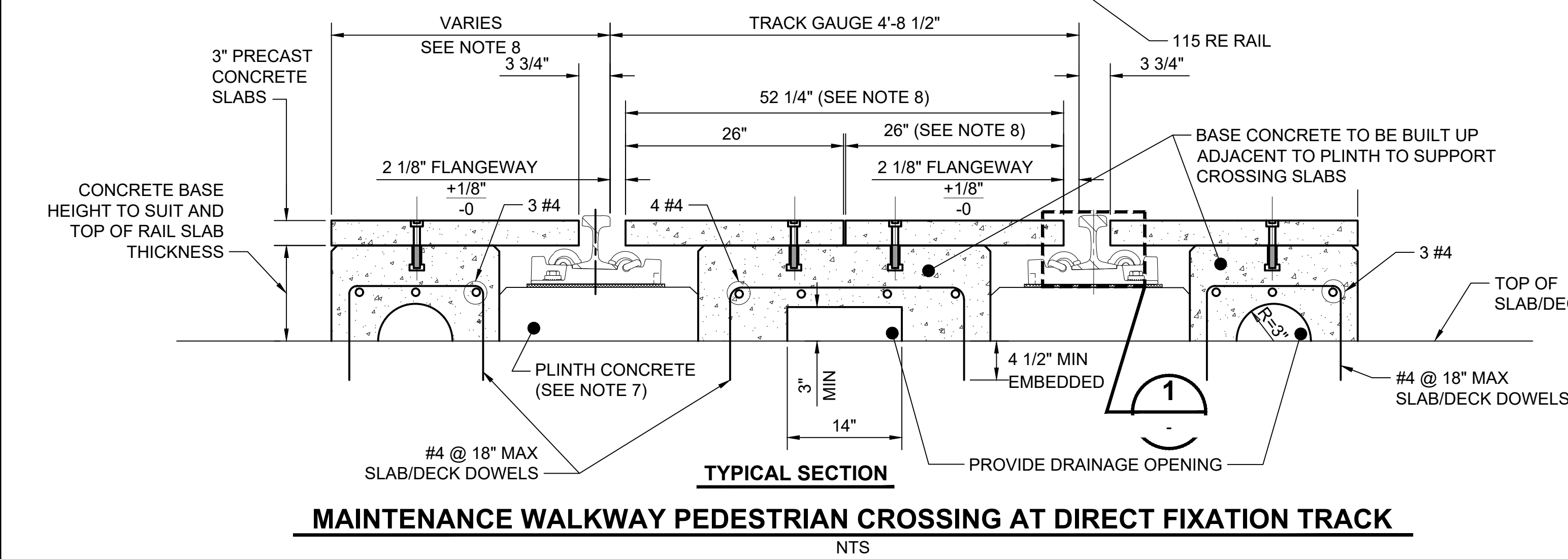
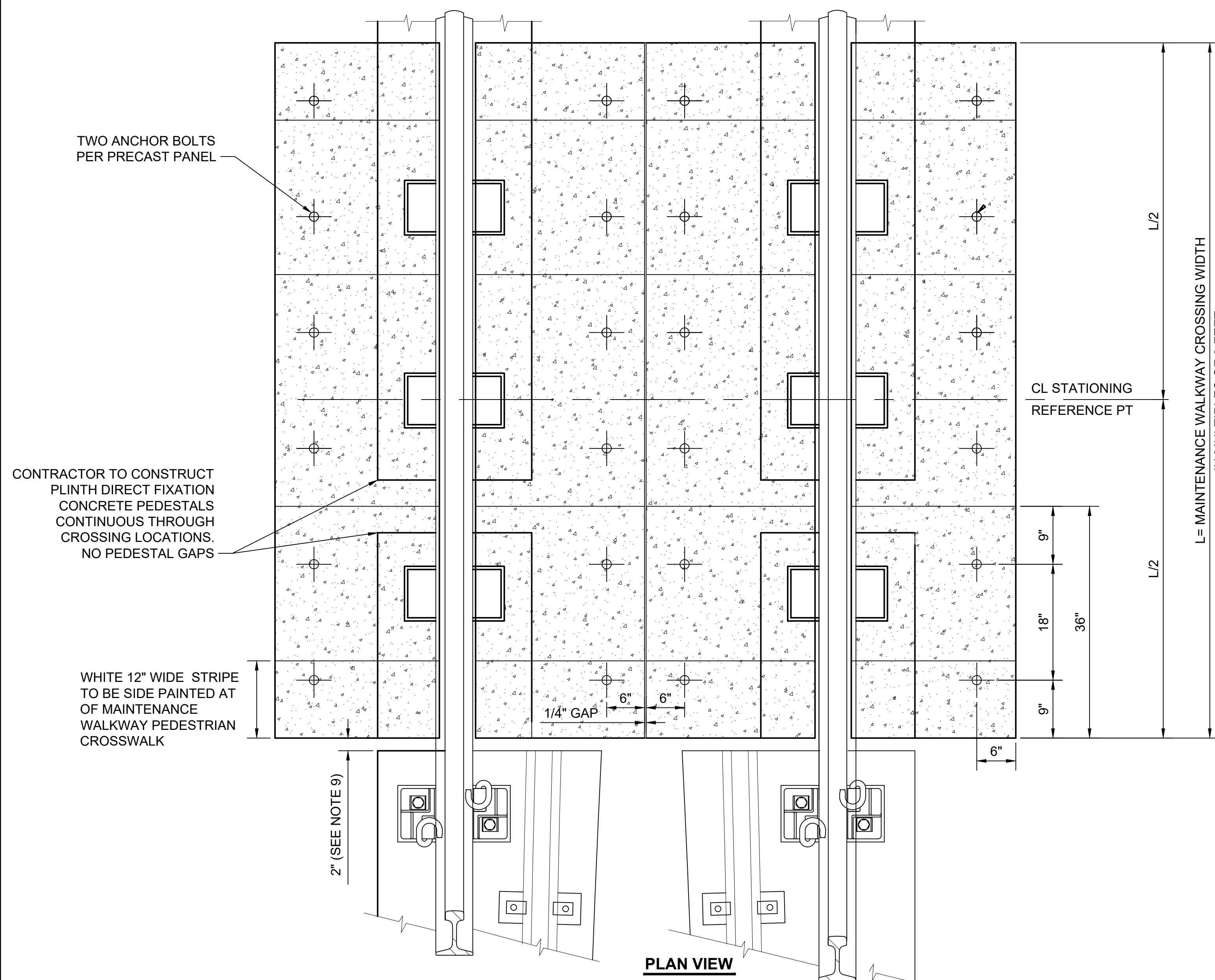
SCALE:	1" = 1'-0"
FILENAME:	GUI-KAX200
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

EMBEDDED TRACK CONSTRUCTION
DOUBLE MAINLINE TRACKS TYPICAL SECTIONS
(115RE)

DRAWING No.:	GUI-KAX200
FACILITY ID:	
SHEET No.:	REV:
	2

03/20/24 | 12:20 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\Technical Standards and Requirements Projects - Drawings Update 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD140.DWG



- GENERAL NOTES:**
1. FASTENER SPACING 30" ON TANGENT STATION TRACK.
 2. PLINTH CONCRETE SHALL BE PLACED IN SEGMENTS. SEGMENTS SHALL BE 4, 5 OR 6 FASTENER LENGTHS.
 3. PLINTH SHALL NOT OVERLAP ANY STRUCTURAL JOINTS.
 4. OTHER GAPS IN PLINTH SHALL BE LOCATED AS REQUIRED FOR STRUCTURAL JOINTS, DRAINAGE AND PASSAGE OF SIGNAL OR OTHER CABLES.
 5. PLINTH GAPS SHALL NOT BE LOCATED WITHIN THE MAINTENANCE WALKWAY PEDESTRIAN CROSSING LOCATION.
 6. PRECAST CONCRETE PANELS SHALL BE DESIGNED BY THE CONTRACTOR (UNIFORM LL=100PSF). SURFACE FINISH SHALL MATCH FINISH AND COLOR OF STATION WALKWAY AREA.
 7. SEE DIRECT FIXATION TRACK INSTALLATION DRAWING STD-KAD120 TO STD-KAD128.
 8. CENTER PANEL SURFACE AREA VARIES DEPENDING ON INSTALLATION OF RESTRAINING RAILS BETWEEN RUNNING RAILS. FIELD PANEL SURFACE AREA VARIES DEPENDING ON LOCATION OF MAINTENANCE WALKWAY PEDESTRIAN CROSSING INSTALLATION BETWEEN TRACKS. FOR LOCATION AND LIMITS OF MAINTENANCE WALKWAY PEDESTRIAN CROSSING INSTALLATION SEE TRACK CHART DRAWINGS.
 9. EMERGENCY GAURD RAIL MUST BE INTERRUPTED 2" FROM THE ENDS OF THE PEDESTRIAN CROSSING PANEL.

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

LINE IS 1" AT FULL SCALE

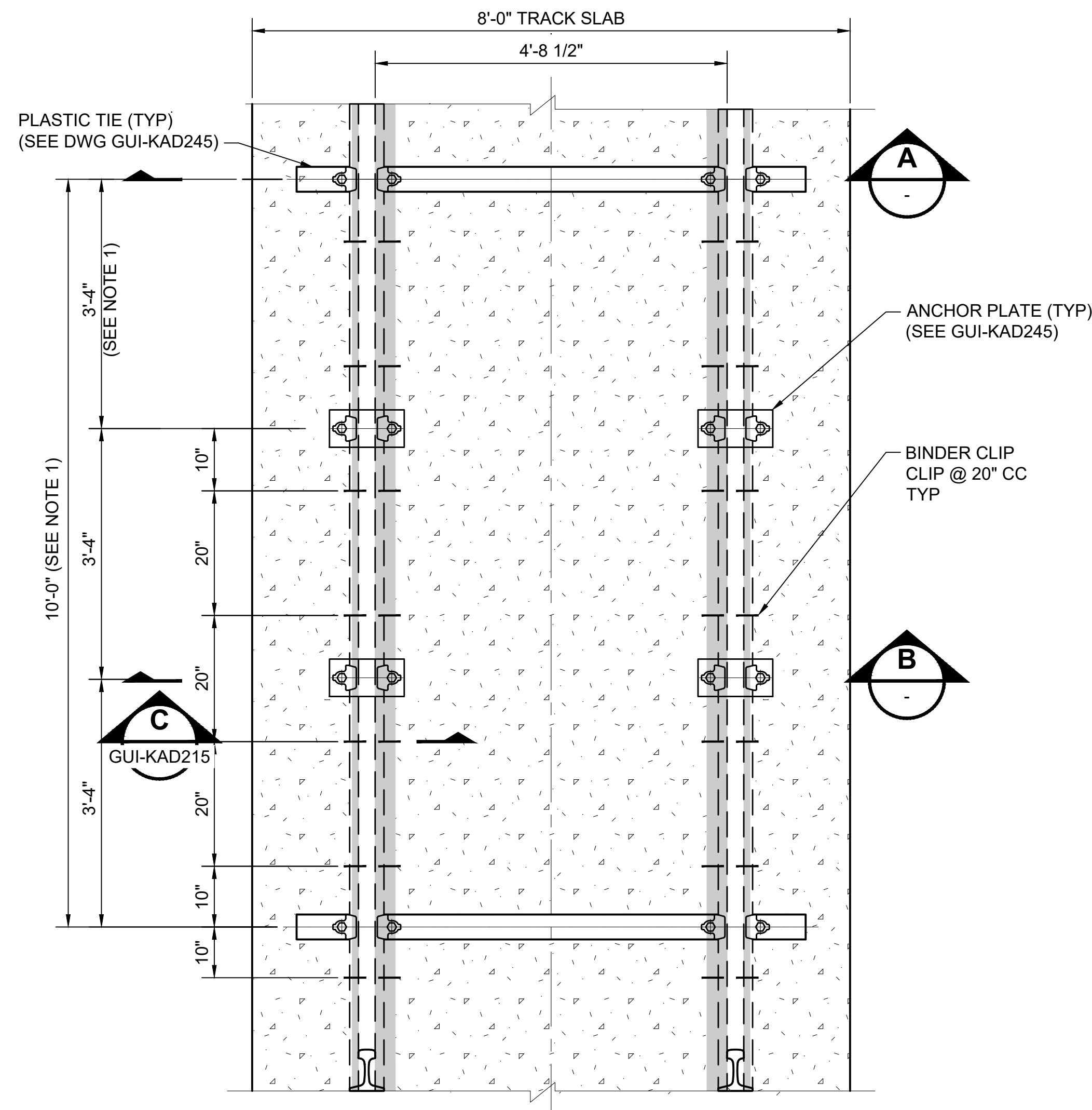
SCALE: NTS
FILENAME: GUI-KAD140
CONTRACT No.: RTA/LR -
DATE: 2/2024

SOUND TRANSIT GUIDANCE DRAWINGS TRACKWORK

DIRECT FIXATION TRACK CONSTRUCTION
MAINTENANCE WALKWAY PEDESTRIAN CROSSING
PRECAST CONCRETE PANEL

DRAWING No.:	GUI-KAD140
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:20 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD210.DWG



PLAN VIEW

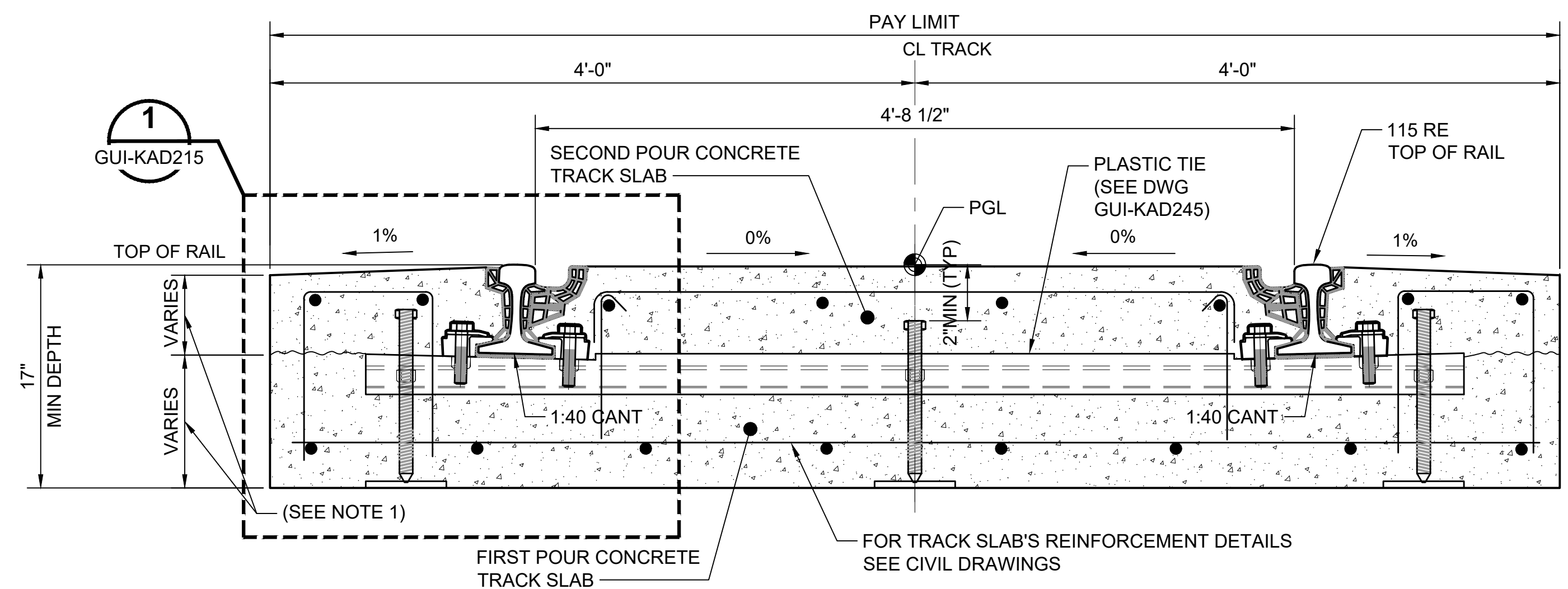
115 RE EMBEDDED TRACK INSTALLATION AT ROAD INTERSECTIONS

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

BILL OF MATERIAL		
ITEM	DESCRIPTION	QUANTITY
1	115 RE RAIL	AS REQUIRED
2	115 RE RAIL BOOT	AS REQUIRED
3	RUBBER FLANGEWAY FORMER	AS REQUIRED
4	CONCRETE SLAB INCLUDING REINFORCING STEEL (1ST AND 2ND POUR)	AS REQUIRED
5	ANCHOR PLATES (SEE DWG GUI-KAD245)	4 OR 2 BETWEEN BEAMS
6	PLASTIC TIE (SEE DWG GUI-KAD245)	10' CTRS (OR LESS)
7	PLASTIC CLIPS COMPLETE WITH BOLTS, STEEL WASHER AND PLASTIC SHEET COVER	4/BEAM, 2/ANCHOR PLATE
8	BINDER CLIPS	AS REQUIRED

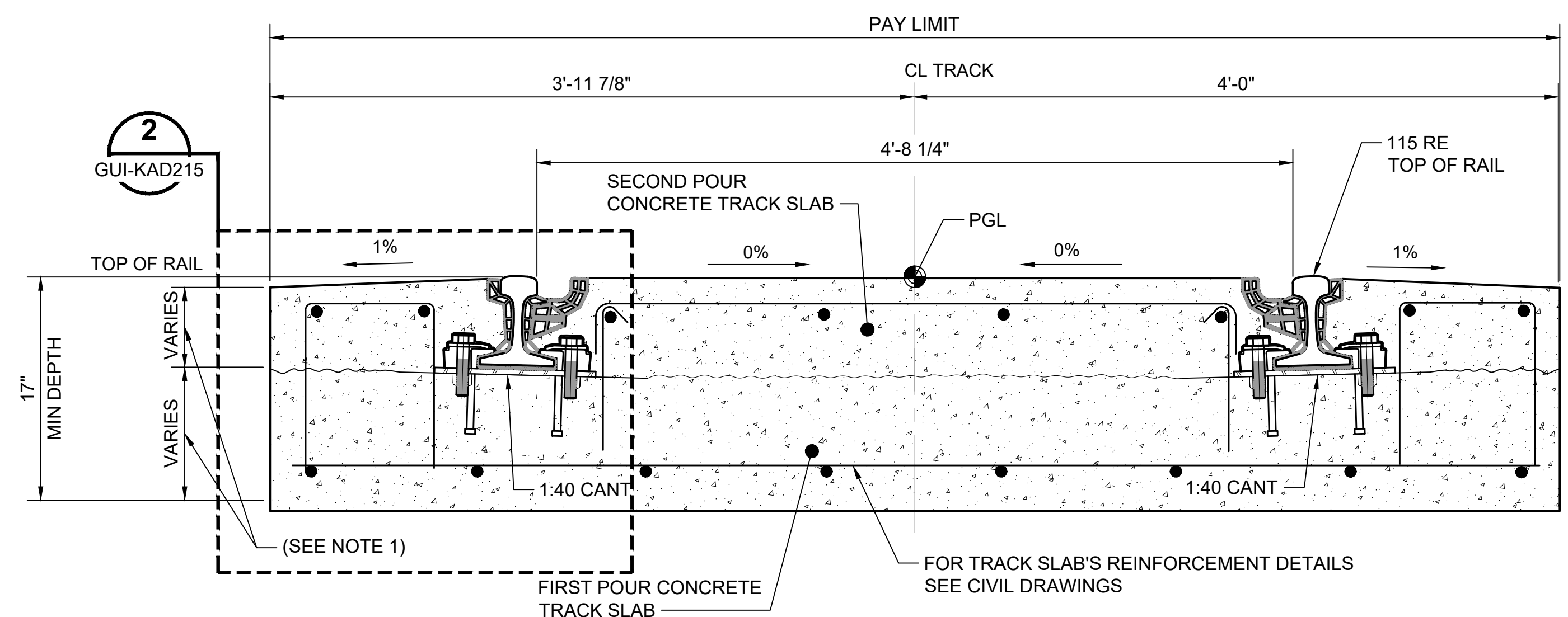
GENERAL NOTE:

- FOR TRACK SLAB CONSTRUCTION GENERAL NOTES SEE DWG GUI-KAD220.



TYPICAL SECTION AT ROAD INTERSECTION A

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



TYPICAL SECTION AT ROAD INTERSECTION B

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

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

LINE IS 1" AT FULL SCALE

SCALE:	AS NOTED
FILENAME:	GUI-KAD210
CONTRACT No.:	RTA/LR -
DATE:	2/2024

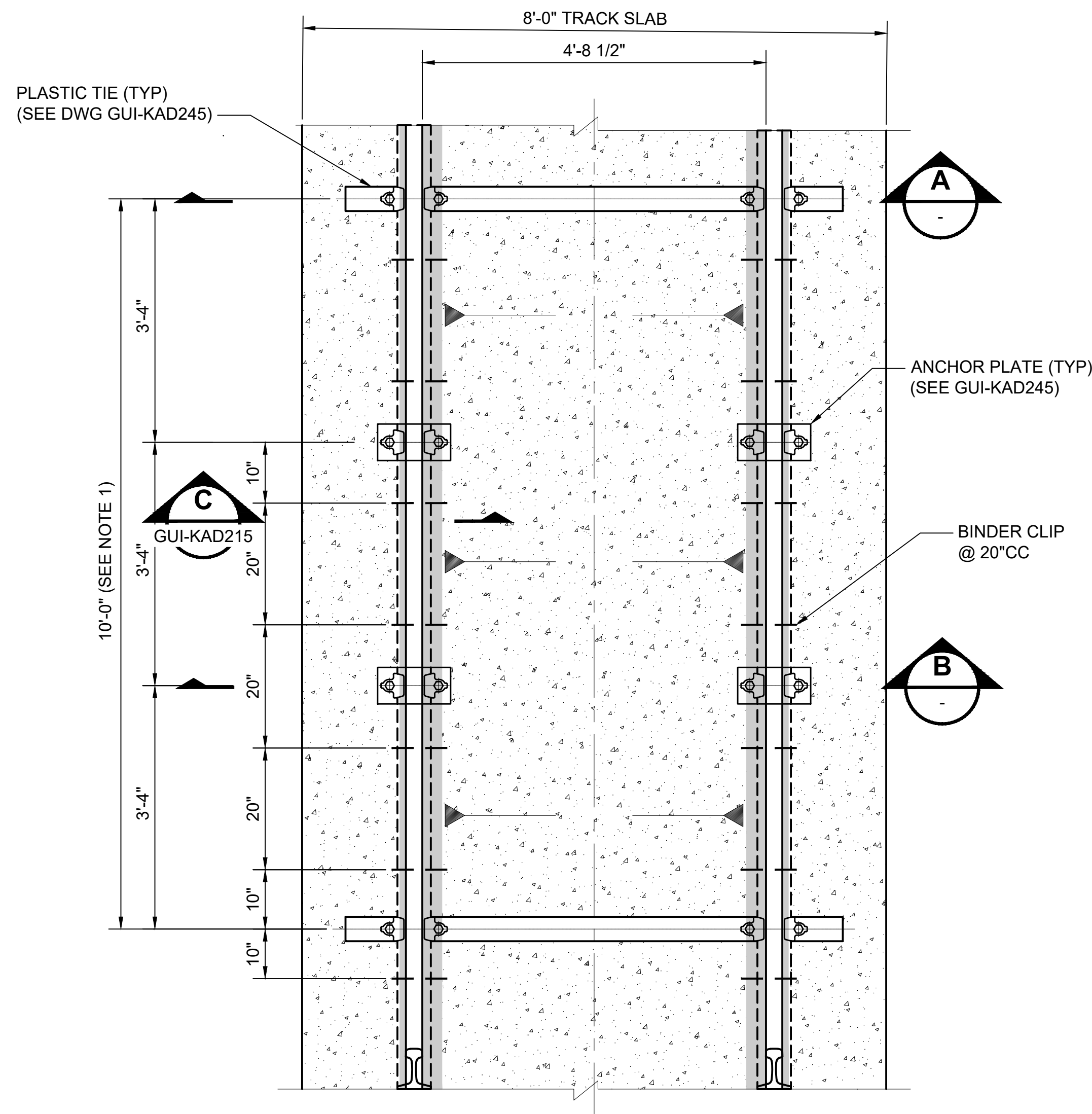
**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

EMBEDDED TRACK CONSTRUCTION
TYPICAL TRACK SECTIONS ROAD INTERSECTIONS
(115RE)

DRAWING No.:	GUI-KAD210
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:20 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS\UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD211.DWG

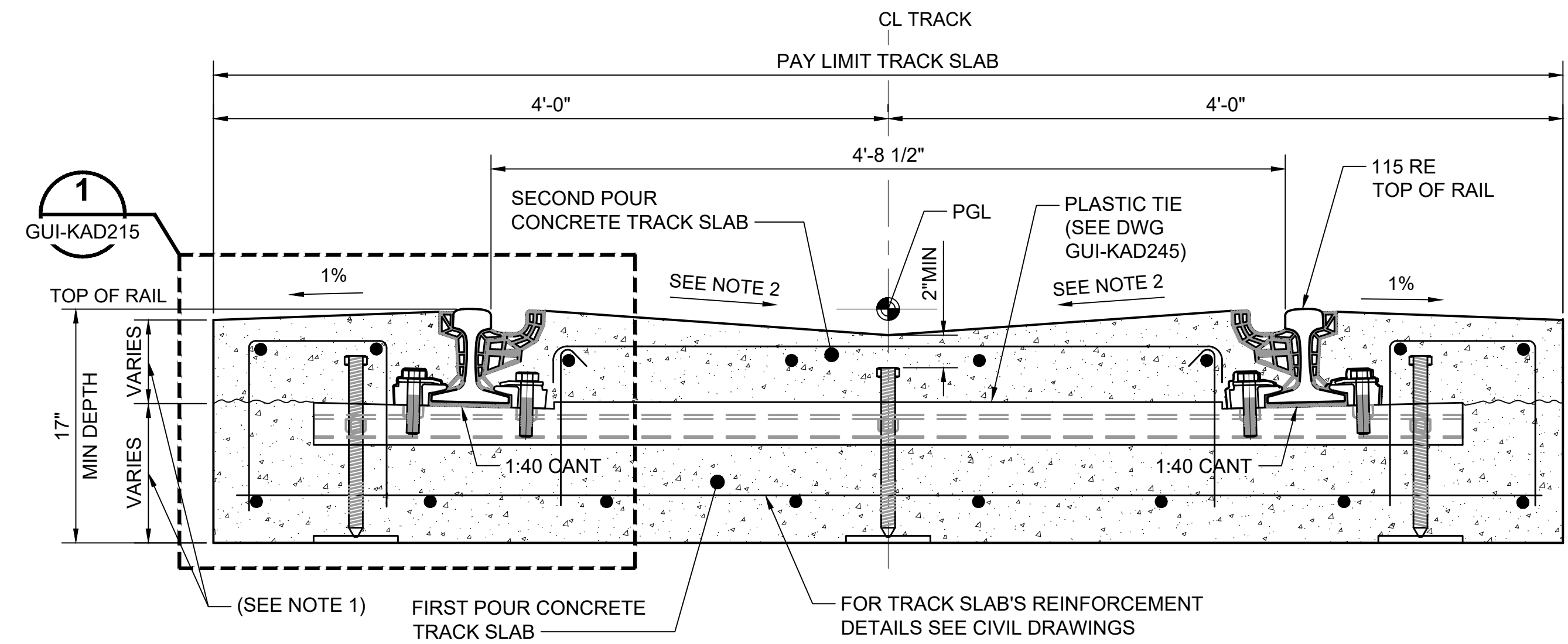
- GENERAL NOTES:**
- FOR TRACK SLAB CONSTRUCTION GENERAL NOTES SEE DWG GUI-KAD220.
 - TOP OF SECOND POUR CONCRETE TRACK SLAB CROSS-SLOPE PER CIVIL DRAWING.



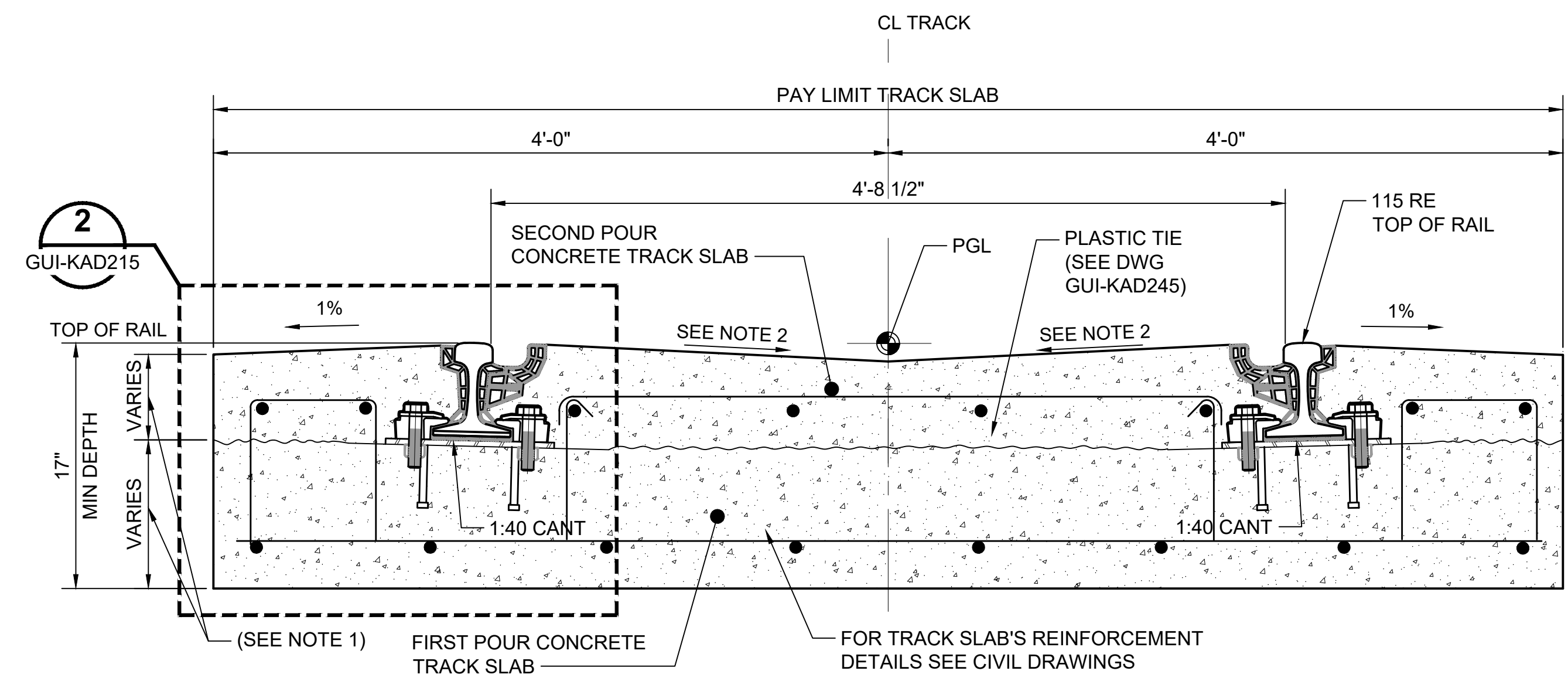
PLAN VIEW

115 RE EMBEDDED TRACK INSTALLATION AT EMERGENCY VEHICLES CROSSING AND AT PEDESTRIAN CROSSING
SCALE: 3/4" = 1'-0"

BILL OF MATERIAL		
ITEM	DESCRIPTION	QUANTITY
1	115 RE RAIL	AS REQUIRED
2	115 RE RAIL BOOT	AS REQUIRED
3	RUBBER FLANGEWAY FORMER	AS REQUIRED
4	CONCRETE SLAB INCLUDING REINFORCING STEEL (1ST AND 2ND POUR)	AS REQUIRED
5	ANCHOR PLATES (SEE DWG GUI-KAD245)	4 OR 2 BETWEEN BEAMS
6	PLASTIC TIE (SEE DWG GUI-KAD245)	10' CTRS (OR LESS)
7	PLASTIC CLIPS W/ STEEL WASHER	4/BEAM, 2/ANCHOR PLATE
8	BINDER CLIPS	AS REQUIRED



TYPICAL SECTION - TANGENT TRACK AT PLASTIC TIE (A)
SCALE: 1 1/2" = 1'-0"



TYPICAL SECTION - TANGENT TRACK AT ANCHOR PLATES (B)
SCALE: 1 1/2" = 1'-0"

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED- CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

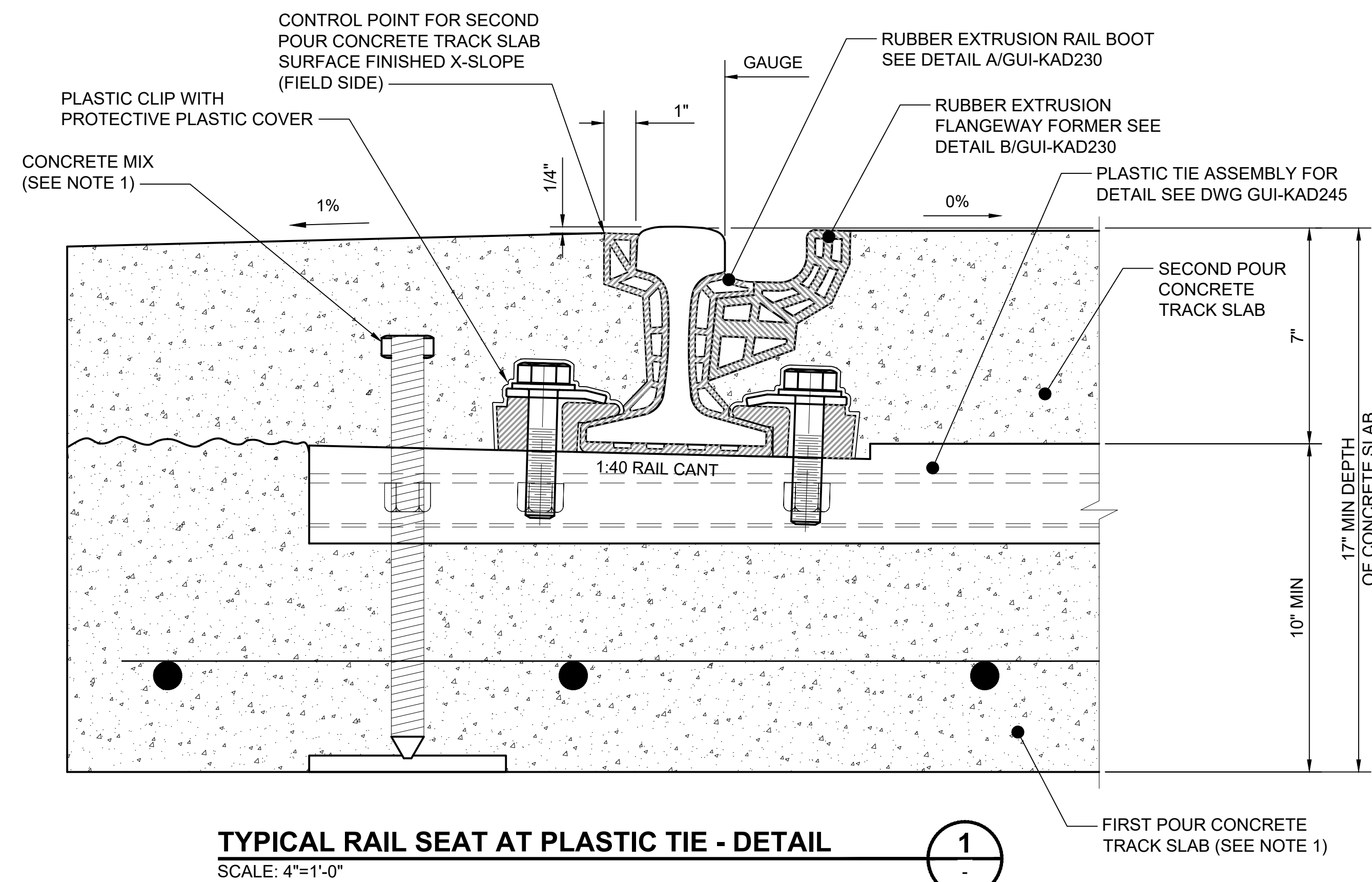
SCALE: AS NOTED
FILENAME: GUI-KAD211
CONTRACT No.: RTA/LR -
DATE: 2/2024

SOUND TRANSIT GUIDANCE DRAWINGS TRACKWORK

EMBEDDED TRACK CONSTRUCTION TYPICAL TRACK SECTION EMERGENCY VEHICLES & PEDESTRIAN CROSSINGS (115RE)

DRAWING No.:	GUI-KAD211
FACILITY ID:	
SHEET No.:	REV:
	2

03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\Technical Standards and Requirements Projects - Drawings Update 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD215.DWG

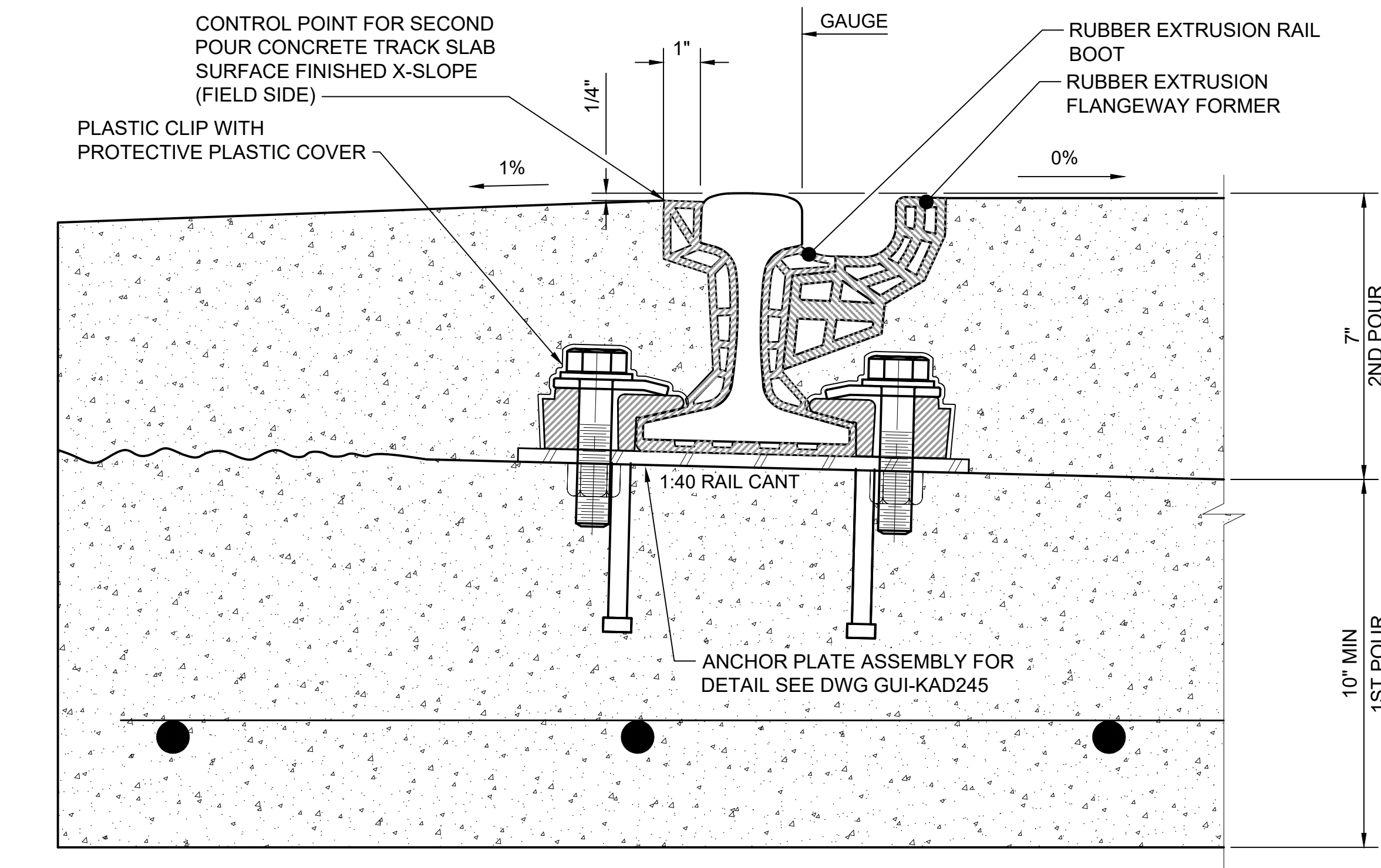


TYPICAL RAIL SEAT AT PLASTIC TIE - DETAIL
SCALE: 4"=1'-0"

1

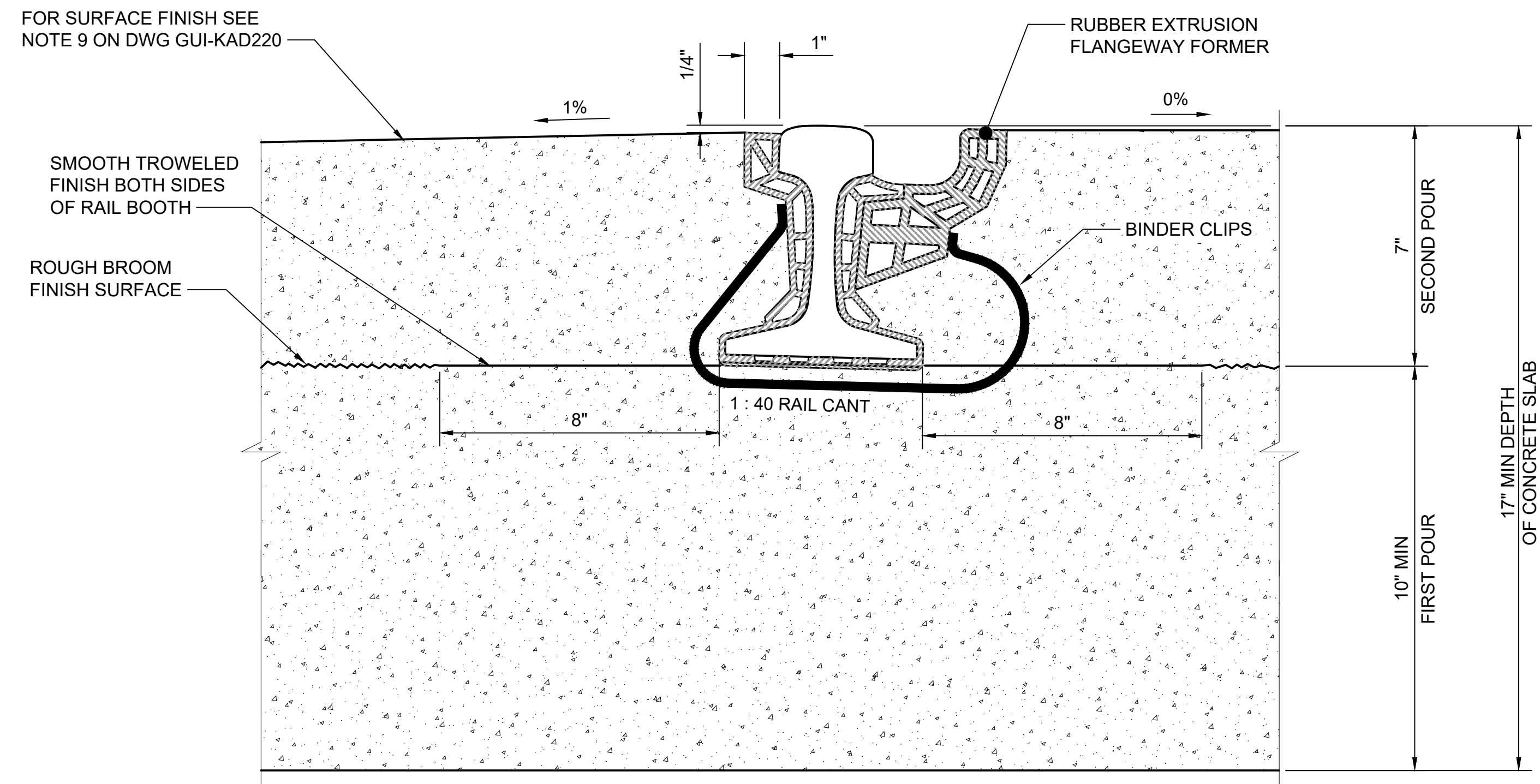
FIRST POUR CONCRETE TRACK SLAB (SEE NOTE 1)

GUI-KAD210
GUI-KAD211



TYPICAL RAIL SEAT AT ANCHOR PLATES - DETAIL
SCALE: 4"=1'-0"

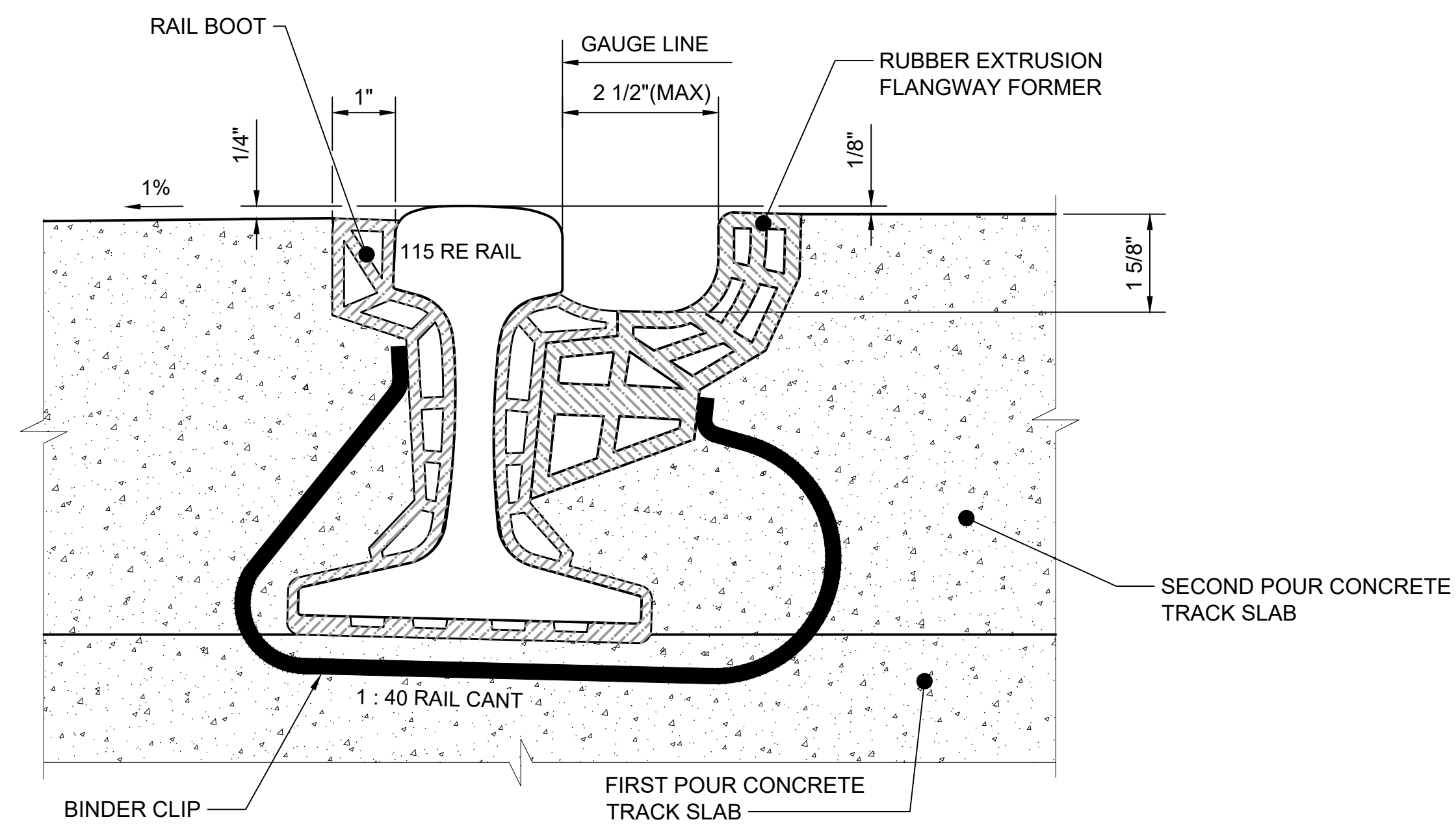
2



TYPICAL RAIL SEAT - SECTION C
BETWEEN PLASTIC TIE AND ANCHOR PLATE
SCALE: 4"=1'-0"

C

GUI-KAD211



FLANGEWAY FORMER DETAIL
SCALE: 6"=1'-0"

GENERAL NOTE:

- FOR TRACK SLAB CONSTRUCTION GENERAL NOTES SEE DWG GUI-KAD220.

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:

DATE:

REVIEWED BY:

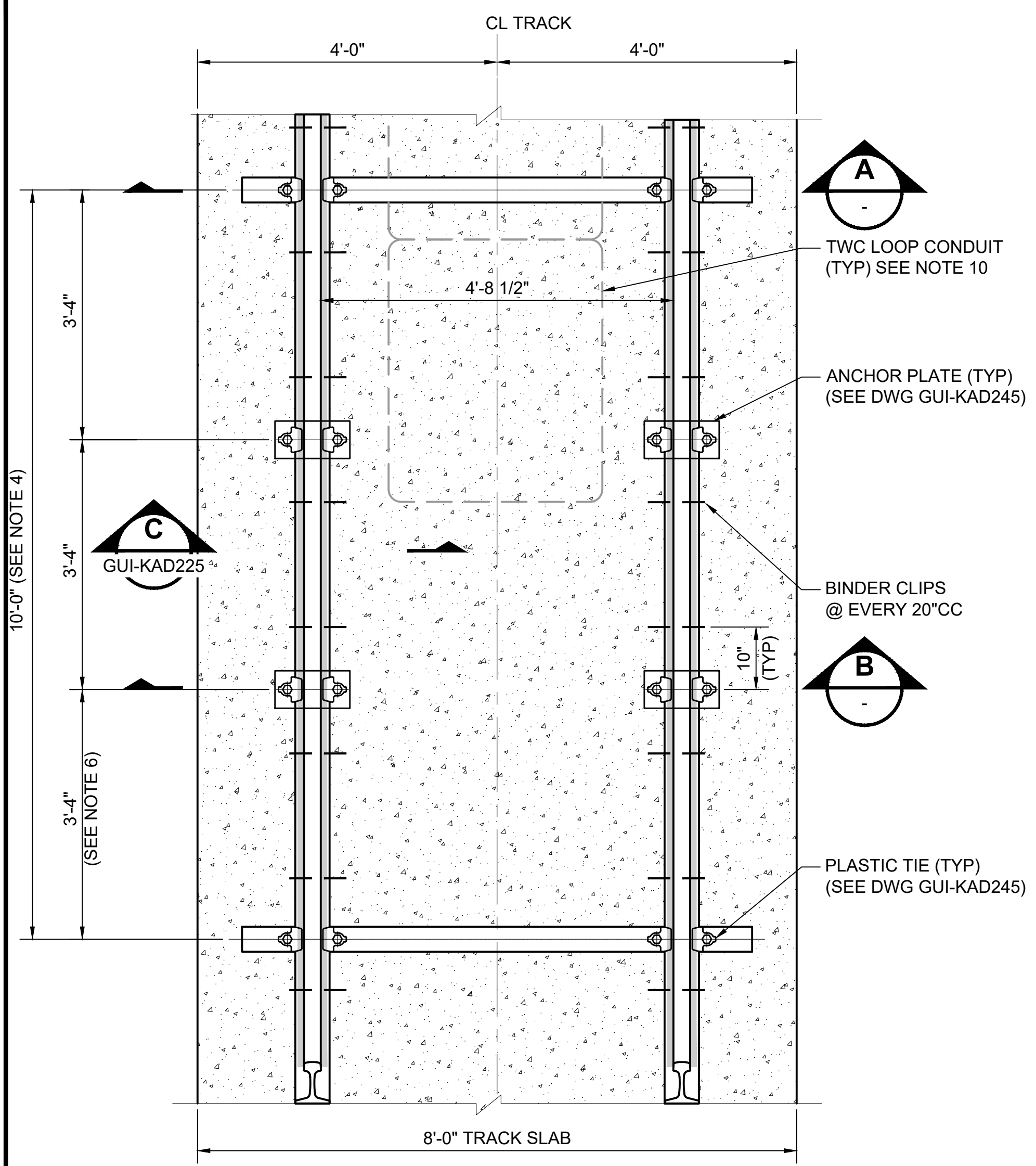
DATE:

SCALE: AS NOTED
FILENAME: GUI-KAD215
CONTRACT No.: RTA/LR -
DATE: 2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK
EMBEDDED TRACK CONSTRUCTION
TYPICAL TRACK SECTIONS ROAD INTERSECTIONS
(115RE)

DRAWING No.:	GUI-KAD215
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD220.DWG



PLAN VIEW

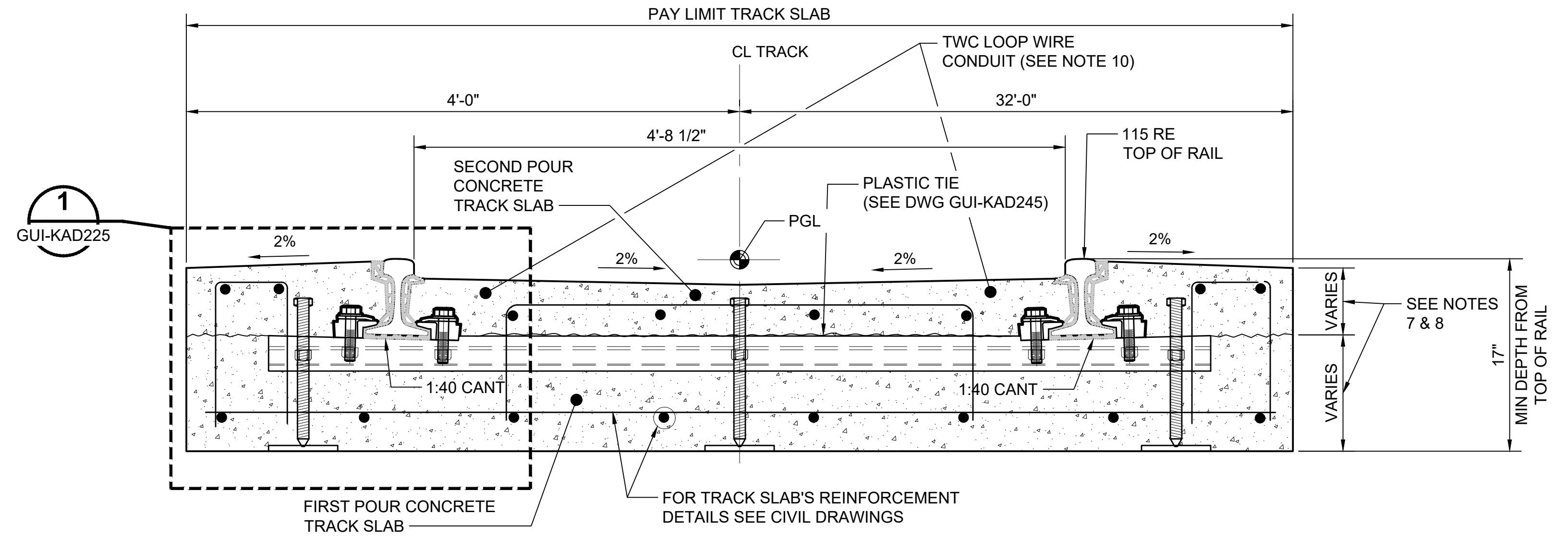
115 RE EMBEDDED TRACK INSTALLATION MID-BLOCK ROAD SECTION

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

BILL OF MATERIAL		
ITEM	DESCRIPTION	QUANTITY
1	115 RE RAIL	AS REQUIRED
2	115 RE RAIL BOOT	AS REQUIRED
3	CONCRETE SLAB INCLUDING REINFORCING STEEL (1ST AND 2ND POUR)	AS REQUIRED
4	ANCHOR PLATES (SEE DWG GUI-KAD245)	4 OR 2 BETWEEN TIES (SEE NOTE 6)
5	PLASTIC TIE (SEE DWG GUI-KAD245)	10' CTRS (OR LESS) (SEE NOTE 4)
6	PLASTIC CLIP COMPLETE W/ BOLTS STEEL WASHER AND PLASTIC SHEET COVER	4/BEAM, 2/ANCHOR PLATE
7	BINDER CLIPS	@ EVERY 20" CC

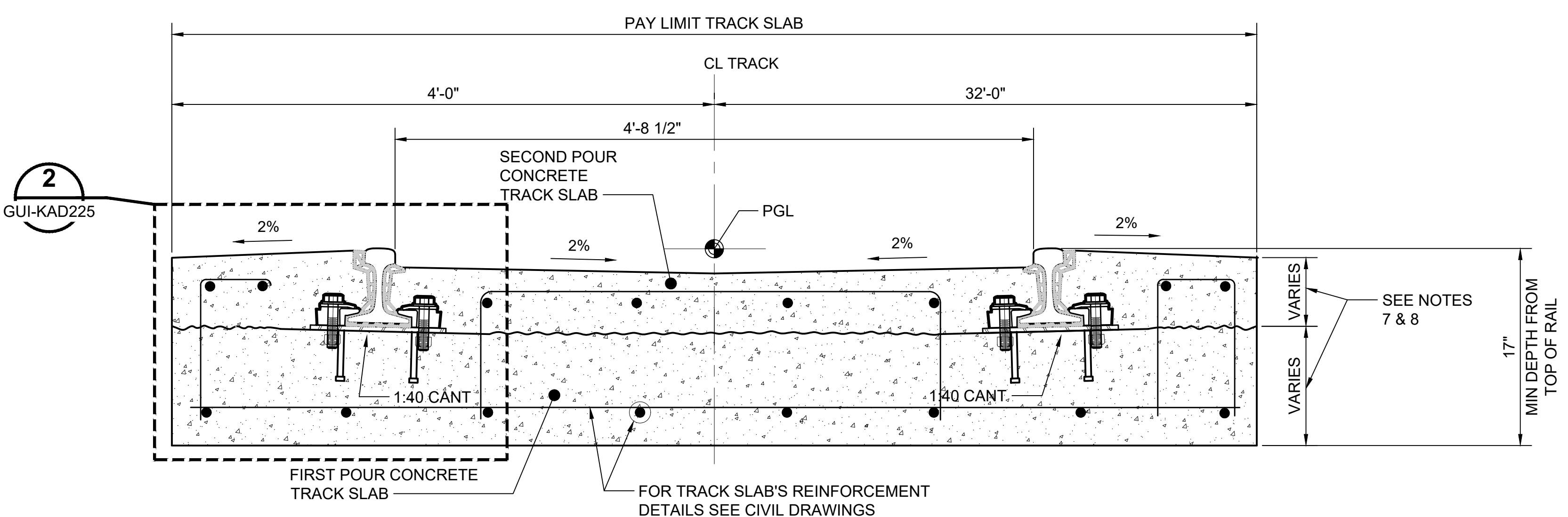
GENERAL NOTES:

- CONTROL POINTS FOR PROFILE GRADE IS SET TO TOP OF LOW RAIL ELEVATION.
- RAIL WELDS SHALL NOT BE MADE LESS THAN 3" FROM THE EDGE OF ANCHOR PLATE OR PLASTIC BEAM.
- CONCRETE MIX SHALL BE 5000 PSI. REINFORCING SHALL BE GRADE 60 ASTM A615 DEFORMED BARS.
- PLASTIC TIES ARE TO BE SPACED AT 10'-0" O.C. IN TANGENT AND FOR CURVES > 500' RADIUS. SPACING SHALL BE 5'-0" O.C. BEGINNING 10' PRIOR TO TS AND ENDING 10' AFTER ST FOR CURVES ≤ 500.
- GRADING TRANSITION OF INFILL CONCRETE AT CROSSWALKS FOR SURFACE FLATS TO VALLEY PROFILE SHALL BE MADE OVER A DISTANCE OF 5'-0" OR TO THE DRAIN - WHICHEVER IS CLOSEST.
- TWO PAIRS OF ANCHOR PLATES ARE TO BE SPACED (3.33') BETWEEN PLASTIC TIES IN TANGENT TRACK AND FOR CURVES GREATER THEN 500' RADIUS. FOR CURVED TRACKS WITH RADIUS LESS THAN OR EQUAL TO 500' RADIUS, SPACE ONE PAIR OF ANCHOR PLATES BETWEEN PLASTIC TIES.
- FIRST POUR CONCRETE BASE SLAB SHALL BE AT TOP OF PLASTIC TIE AND SLIGHTLY RAISED TO BOTTOM OF RAIL BASE BOOT BETWEEN THE PLASTIC TIES TO LOCK THE RAIL IN PLACE.
- FIRST POUR CONCRETE BASE SLAB TO BE ROUGH BROOM FINISHED EXCEPT FOR SMOOTH TROWEL FINISH (8" WIDE) EITHER SIDE OF RAIL BOOT.
- SECOND POUR CONCRETE TOP SLAB TO BE STAMPED OR COLORED AND SKID RESISTANT FINISH, FOR DETAILS SEE URBAN DESIGN DRAWINGS.
- FOR LOCATION OF CONDUITS, STUB UP AND BLOCKOUTS FOR SYSTEM CONNECTIONS TO RAIL AND FOR TWC LOOP WIRES SEE DUCTBANK/CONDUIT, REQUIREMENTS DRAWINGS.
- REINFORCING STEEL IN THE TRACK SLAB SHALL BE ELECTRICALLY BONDED AS INDICATED IN THE CORROSION CONTROL DRAWINGS.



TYPICAL SECTION - TANGENT TRACK AT PLASTIC TIE (A)

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

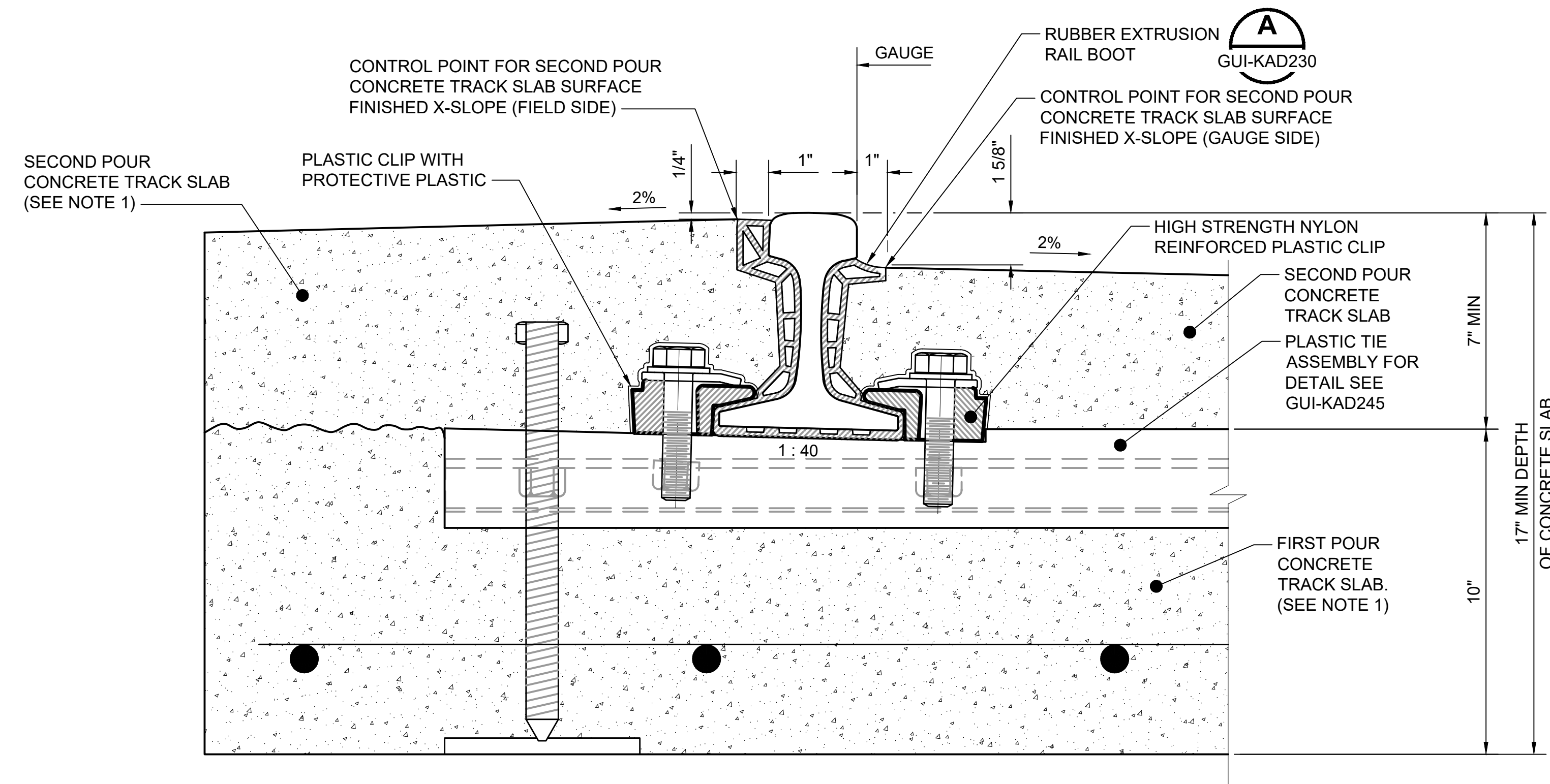


TYPICAL SECTION - TANGENT TRACK AT ANCHOR PLATES (B)

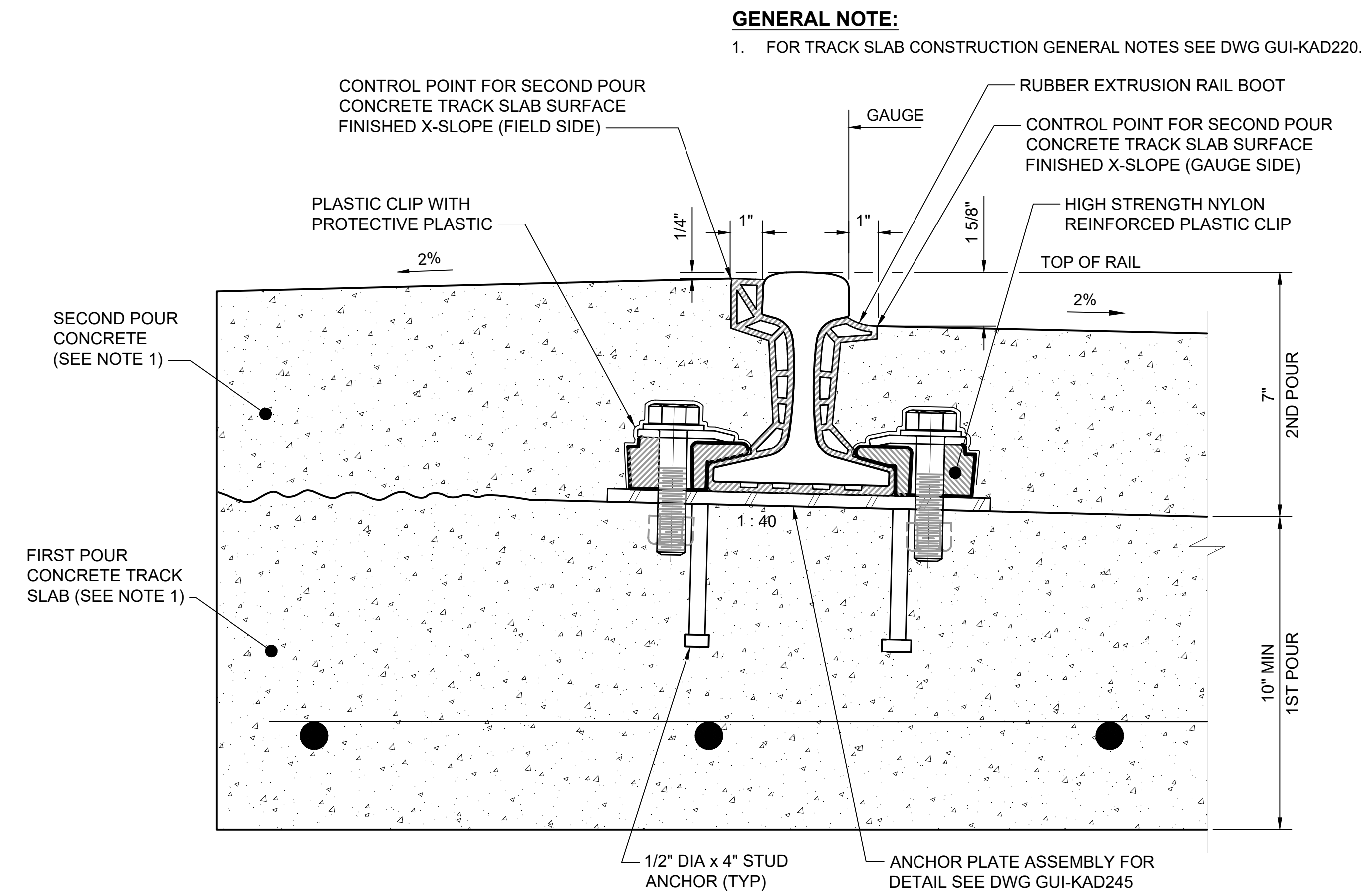
SCALE: 1 1/2" = 1'-0"

DESIGNED BY:			SCALE: AS NOTED	<p>SOUND TRANSIT GUIDANCE DRAWINGS</p> <p>TRACKWORK</p> <p>EMBEDDED TRACK CONSTRUCTION</p> <p>TYPICAL TRACK SECTIONS MIDBLOCK ROAD SECTION (115RE)</p>	DRAWING No.: GUI-KAD220				
DRAWN BY:			FILENAME: GUI-KAD220		FACILITY ID:				
CHECKED BY:			CONTRACT No.: RTA/LR -		SHEET No.:				
APPROVED BY:			DATE: 2/2024		REV: 2				
NO.	DATE	DSN	CHK	APP	REVISION	SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
2	2/2024				2024 REVISED GUIDANCE DRAWINGS				
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS				
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS				

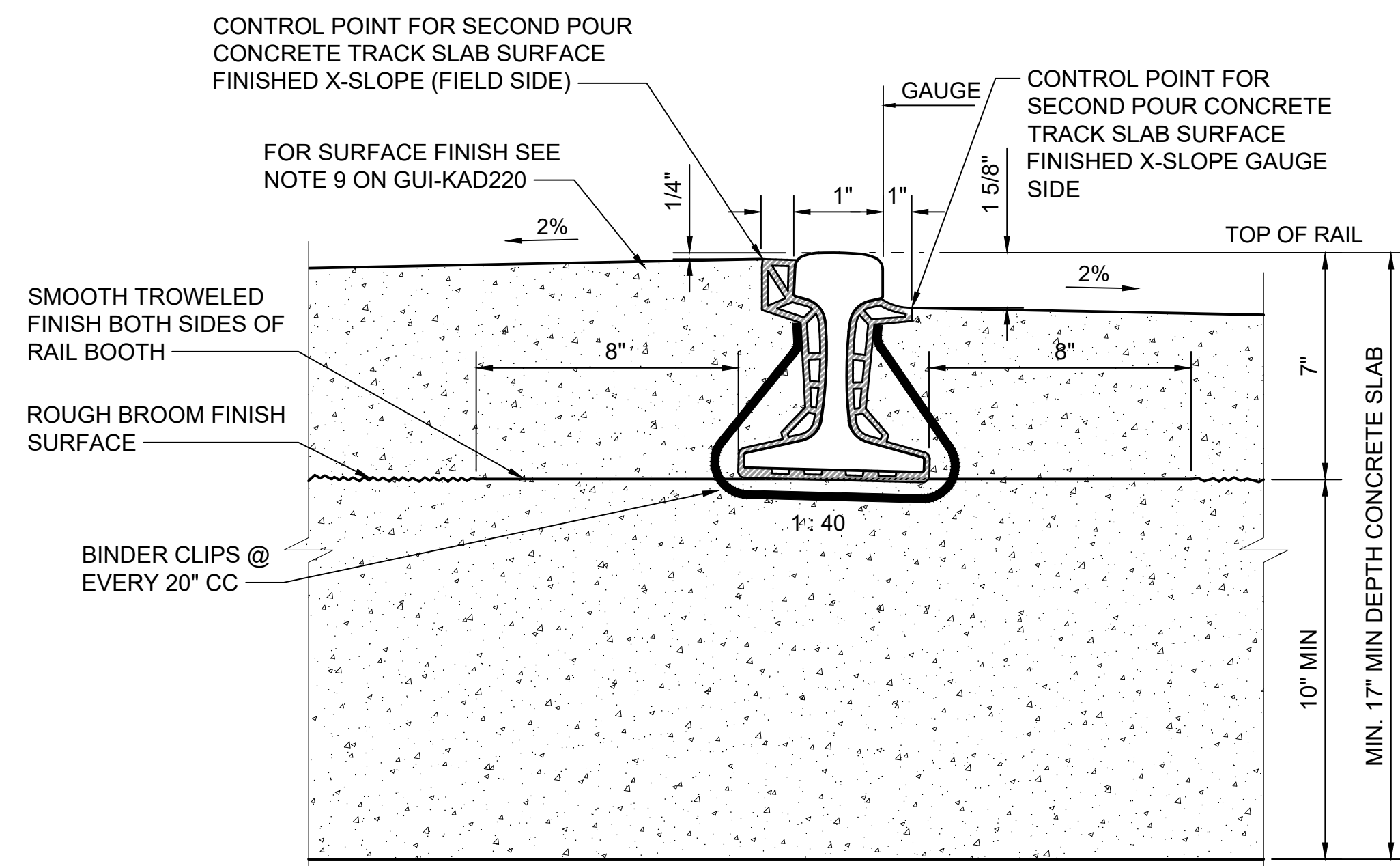
03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD225.DWG



TYPICAL RAIL SEAT ON PLASTIC TIE - DETAIL A
 SCALE: 4" = 1'-0"
 GUI-KAX200
 GUI-KAD220



TYPICAL RAIL SEAT ON ANCHOR PLATES - DETAIL B
 SCALE: 4" = 1'-0"
 GUI-KAD220



TYPICAL RAIL SEAT - SECTION C
 BETWEEN PLASTIC TIE AND ANCHOR PLATE
 SCALE: 3" = 1'-0"
 GUI-KAD220

GENERAL NOTE:
 1. FOR TRACK SLAB CONSTRUCTION GENERAL NOTES SEE DWG GUI-KAD220.

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

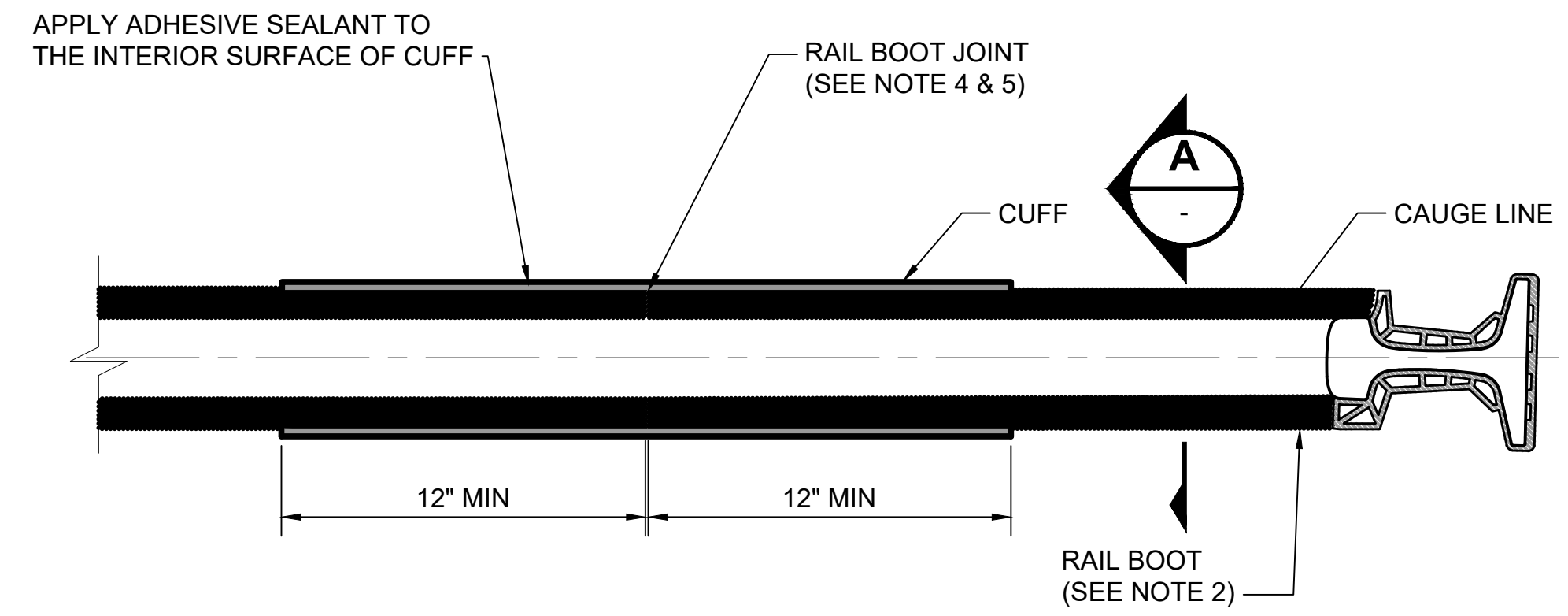
SCALE:	AS NOTED
FILENAME:	GUI-KAD225
CONTRACT No.:	RTA/LR -
DATE:	2/2024

SOUND TRANSIT
GUIDANCE DRAWINGS
 TRACKWORK

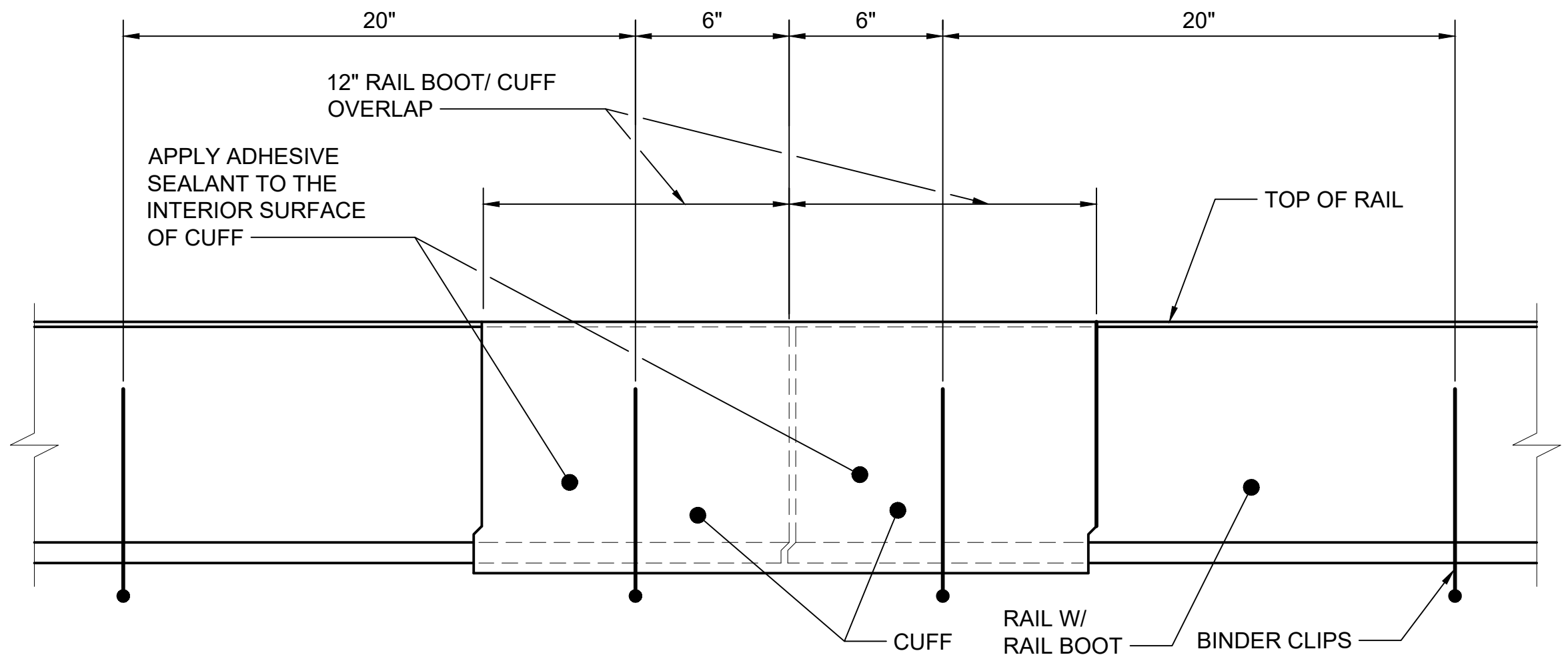
EMBEDDED TRACK CONSTRUCTION
 RAIL FIXATION DETAILS
 (115RE)

DRAWING No.:	GUI-KAD225
FACILITY ID:	
SHEET No.:	REV:
	2

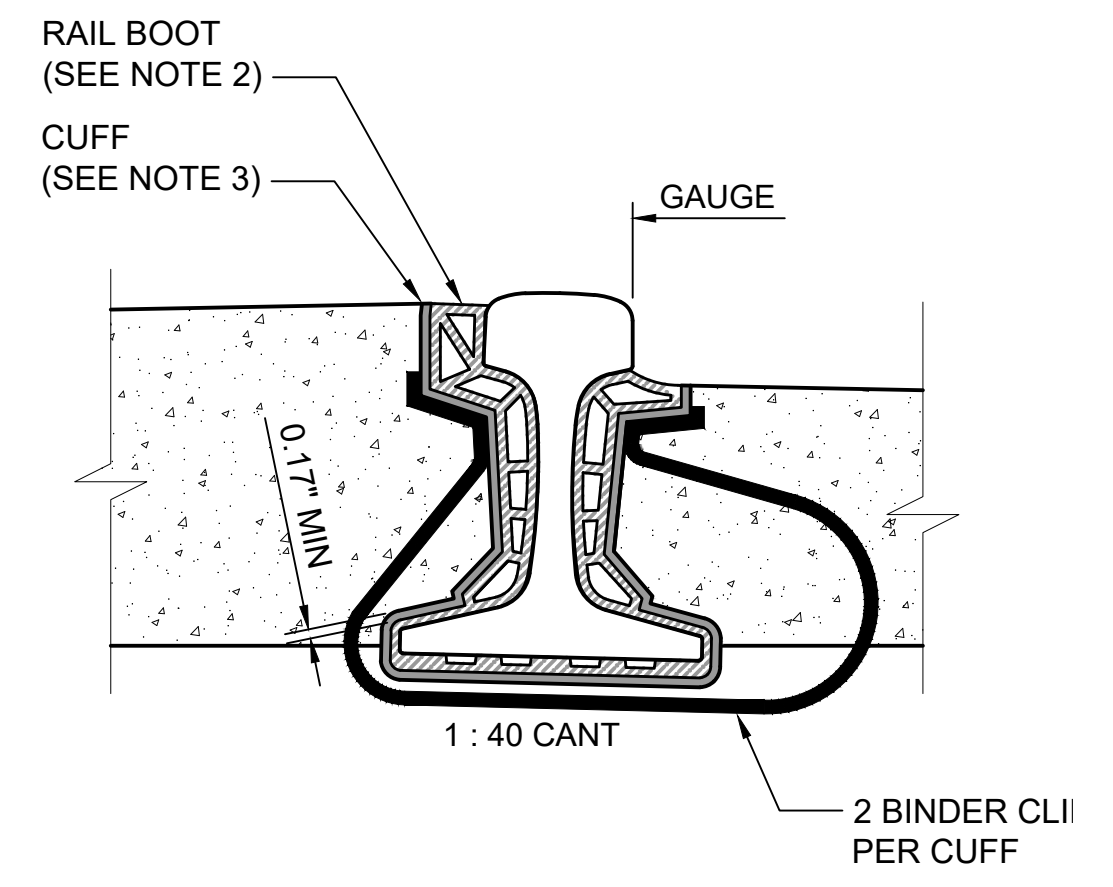
03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\DRAWINGS\PROJECTS AND REQUIREMENTS\PROJECTS - DRAWINGS\UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD230.DWG



PLAN VIEW



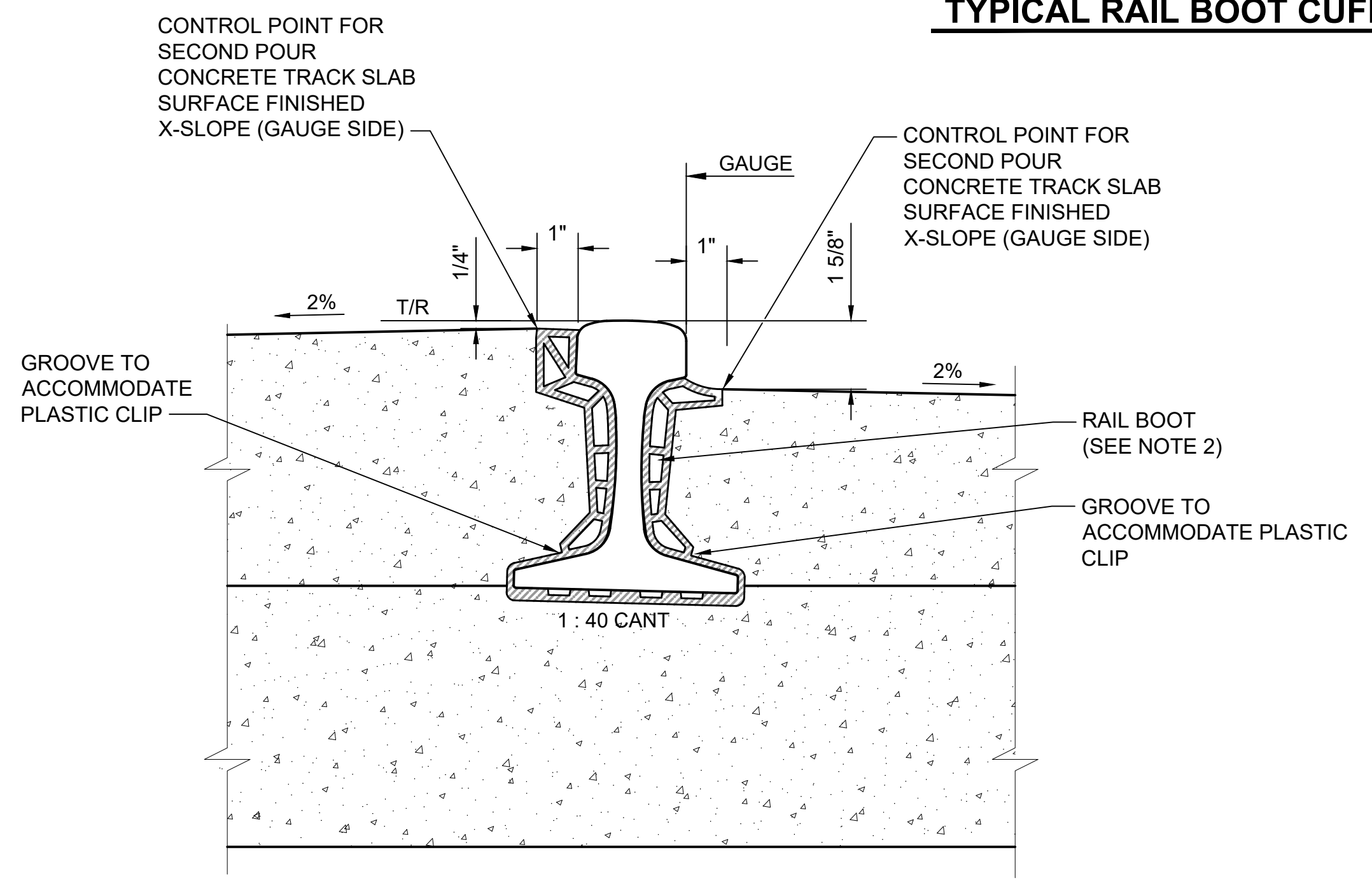
ELEVATION VIEW



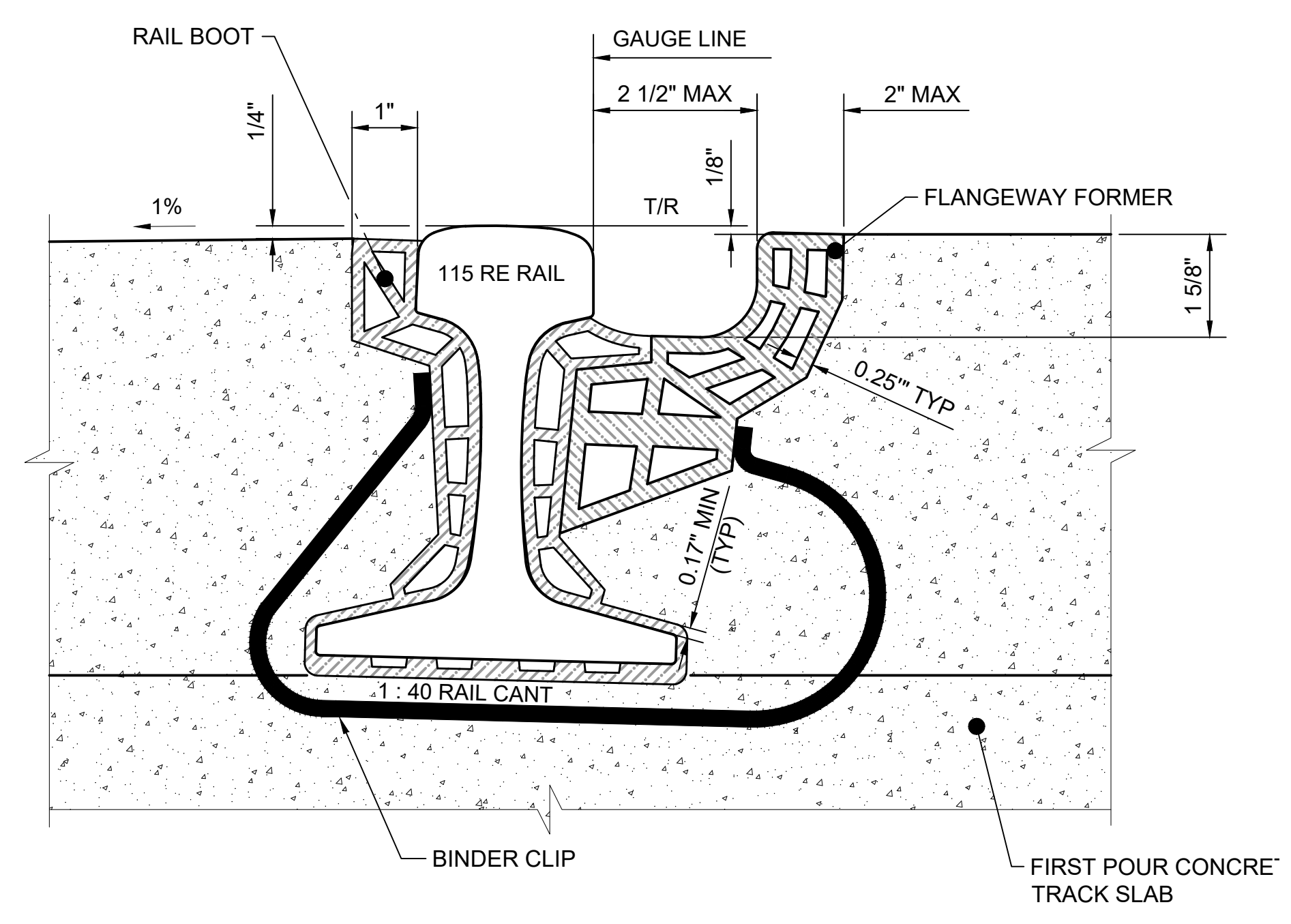
SECTION VIEW

- GENERAL NOTES:**
1. ALLOW FOR DRAINAGE TO PASS THROUGH RAIL BOOT SPLICE.
 2. SHAPE OF EXTRUDED RAIL RUBBER BOOT IS APPROXIMATE. FINAL SHAPE SHALL BE DESIGNED BY BOOT SUPPLIER.
 3. INTERIOR SECTION OF CUFF SHALL CONFORM TO EXTERIOR SECTION OF BOOT.
 4. RAIL BOOT ENDS TO BE CUT SQUARE AND TWO SECTIONS BUTTED TOGETHER.
 5. NO RAIL BOOT JOINT WILL BE ALLOWED ON TRACKS AT ROAD INTERSECTIONS, AT EMERGENCY VEHICLES CROSSING AND AT PEDESTRIAN CROSSINGS. RAIL BOOT SHALL BE CONTINUOUS THROUGHOUT THE LENGTH OF THE CROSSINGS WHERE FLANGEWAY FORMERS ARE TO BE INSTALLED.

TYPICAL RAIL BOOT CUFF FOR SPLICE AND DRAINAGE
NTS



RAIL BOOT
NTS
A
GUI-KAD215
GUI-KAD220



RAIL BOOT / FLANGEWAY FORMER
SCALE: 6" = 1'-0"
B
GUI-KAD230
GUI-KAD225

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013	NEW	CIVIL	ARCH	SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

SCALE:	AS NOTED
FILENAME:	GUI-KAD230
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

EMBEDDED TRACK CONSTRUCTION
RAIL BOOT GENERAL DETAILS
(115RE)

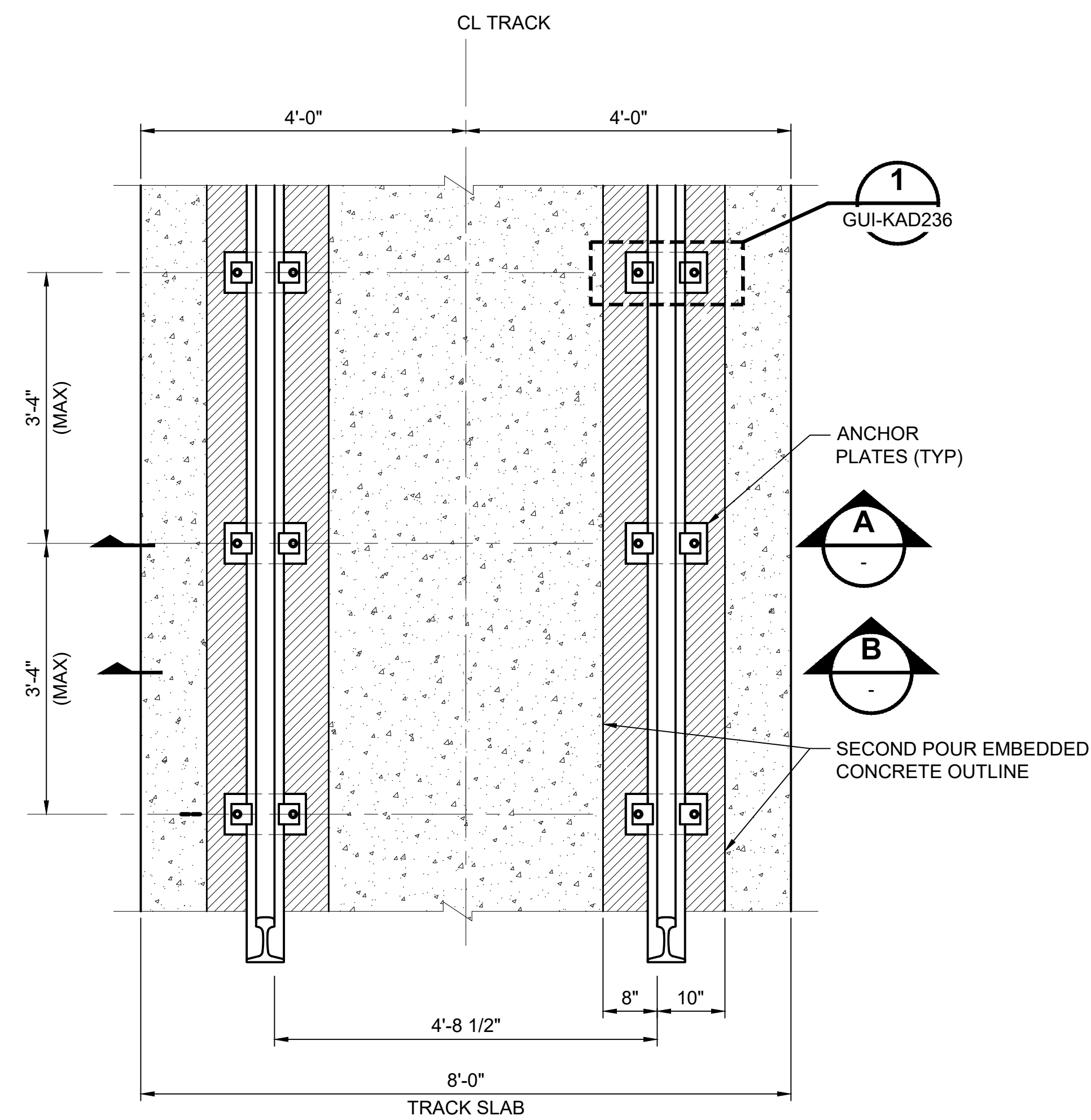
DRAWING No.:	GUI-KAD230
FACILITY ID:	
SHEET No.:	REV: 2

03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD235.DWG

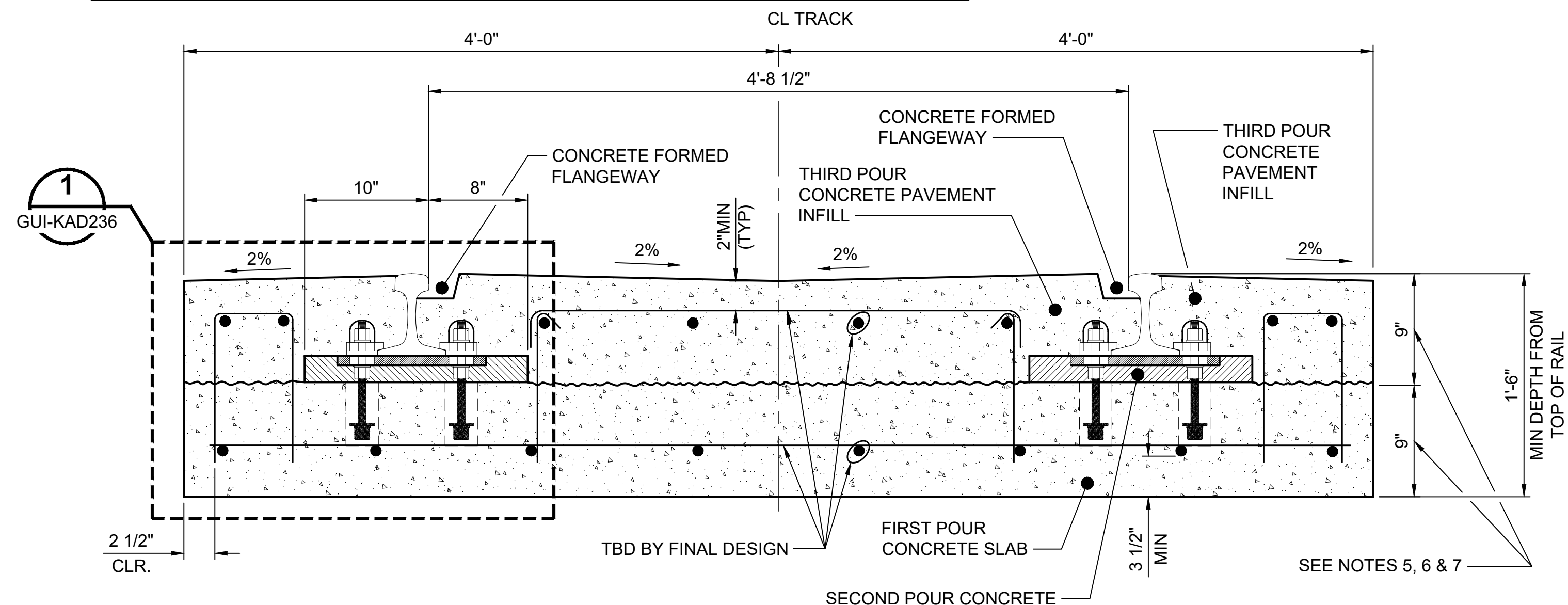
BILL OF MATERIAL		
ITEM	DESCRIPTION	QUANTITY
1	115 RE TEE RAIL	AS REQUIRED
2	FIRST POUR CONCRETE SLAB	AS REQUIRED
3	SECOND POUR CONCRETE CEMENTITIOUS GROUT	AS REQUIRED
4	THIRD POUR CONCRETE PAVEMENT INFILL	AS REQUIRED
5	ANCHOR PLATES (3/4"x6"x12")	AS REQUIRED
6	RAIL CLIPS	AS REQUIRED
7	PROTECTIVE PLASTIC CAP	AS REQUIRED
8	EPOXY GROUT	AS REQUIRED
9	3/4" ANCHOR BOLT COMPLETE	AS REQUIRED

GENERAL NOTES:

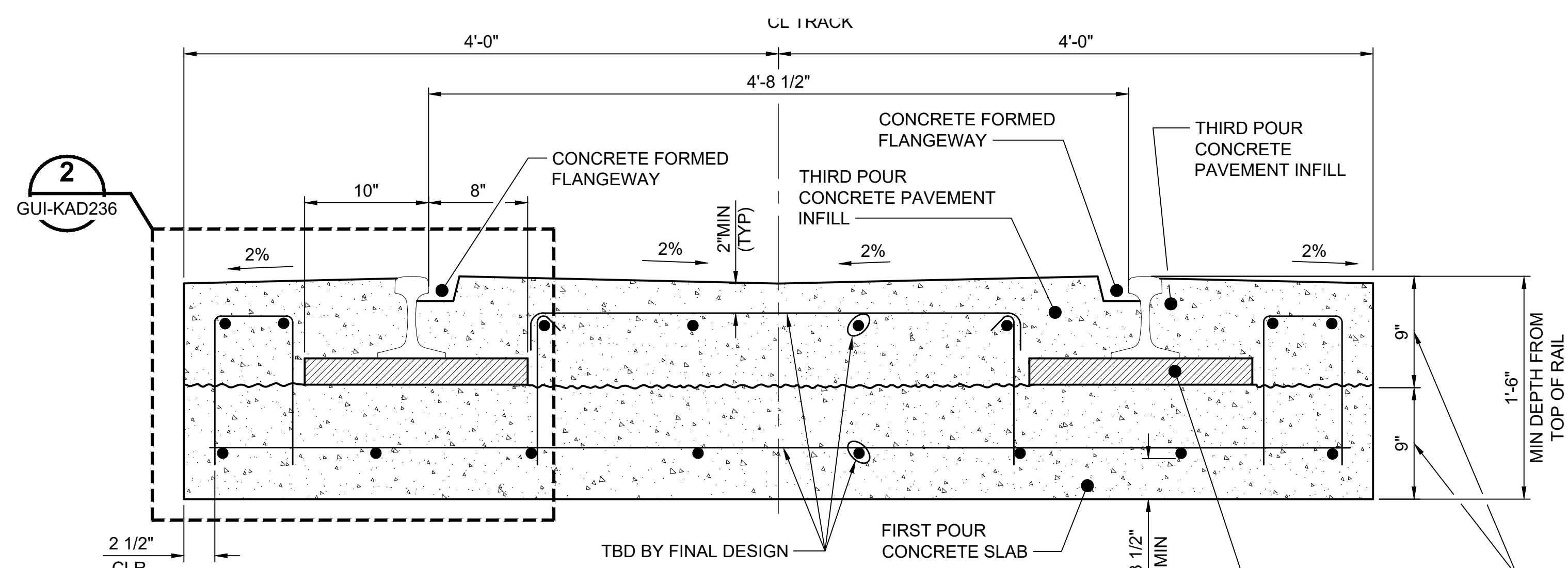
- CONTROL POINTS FOR PROFILE GRADE IS SET TO TOP OF LOW RAIL ELEVATION.
- RAIL WELDS SHALL NOT BE MADE LESS THAN 3" FROM THE EDGE OF ANCHOR PLATE.
- GRADING TRANSITION OF INFILL CONCRETE AT CROSSWALKS FOR SURFACE FLATS TO VALLEY PROFILE SHALL BE MADE OVER A DISTANCE OF 5'-0" OR TO THE DRAIN -WHICHEVER IS CLOSEST.
- ANCHOR PLATES ARE TO BE SPACED AT EVERY 3'-4" C.C.
- FIRST POUR CONCRETE SHALL BE 9" THICK, SECOND POUR CONCRETE SHALL BE AT TOP OF ANCHOR PLATES, AND SHALL BE JUST UNDER BASE OF RAIL AT LOCATION BETWEEN ANCHOR PLATES.
- FIRST POUR CONCRETE BASE SLAB TO BE BROOM FINISHED EXCEPT FOR SMOOTH TROWEL FINISH (8" WIDE) EITHER SIDE OF THE RAIL.
- THIRD POUR CONCRETE TOP SLAB FINISHED TO BE DETERMINED BY FINAL DESIGN.
- FOR LOCATION OF CONDUITS, STUB UP AND BLOCK OUT FOR SYSTEM CONNECTIONS TO RAIL, SEE DUCTBANK/CONDUITS REQUIREMENT DRAWINGS.



NON-INSULATED TRACK INSTALLATION PLAN VIEW
SCALE: 3/4" = 1'-0"



TYPICAL SECTION - TANGENT TRACK (A)
SCALE: 1 1/2" = 1'-0"



TYPICAL SECTION - TANGENT TRACK (B)
SCALE: 1 1/2" = 1'-0"

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

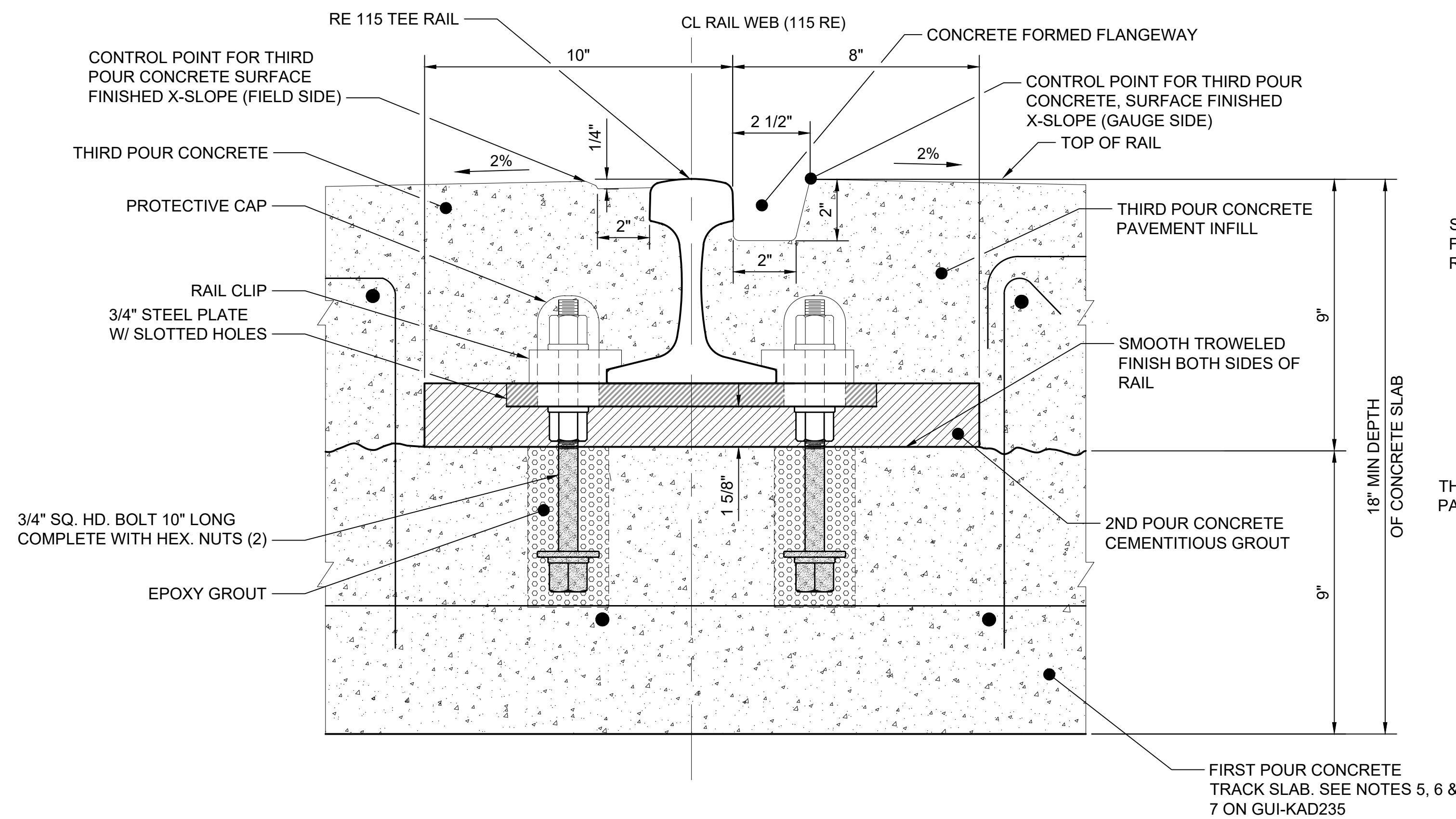
SCALE:	AS NOTED
FILENAME:	GUI-KAD235
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

EMBEDDED TRACK CONSTRUCTION
TYPICAL NON-INSULATED TRACK RAIL FIXATION DETAIL

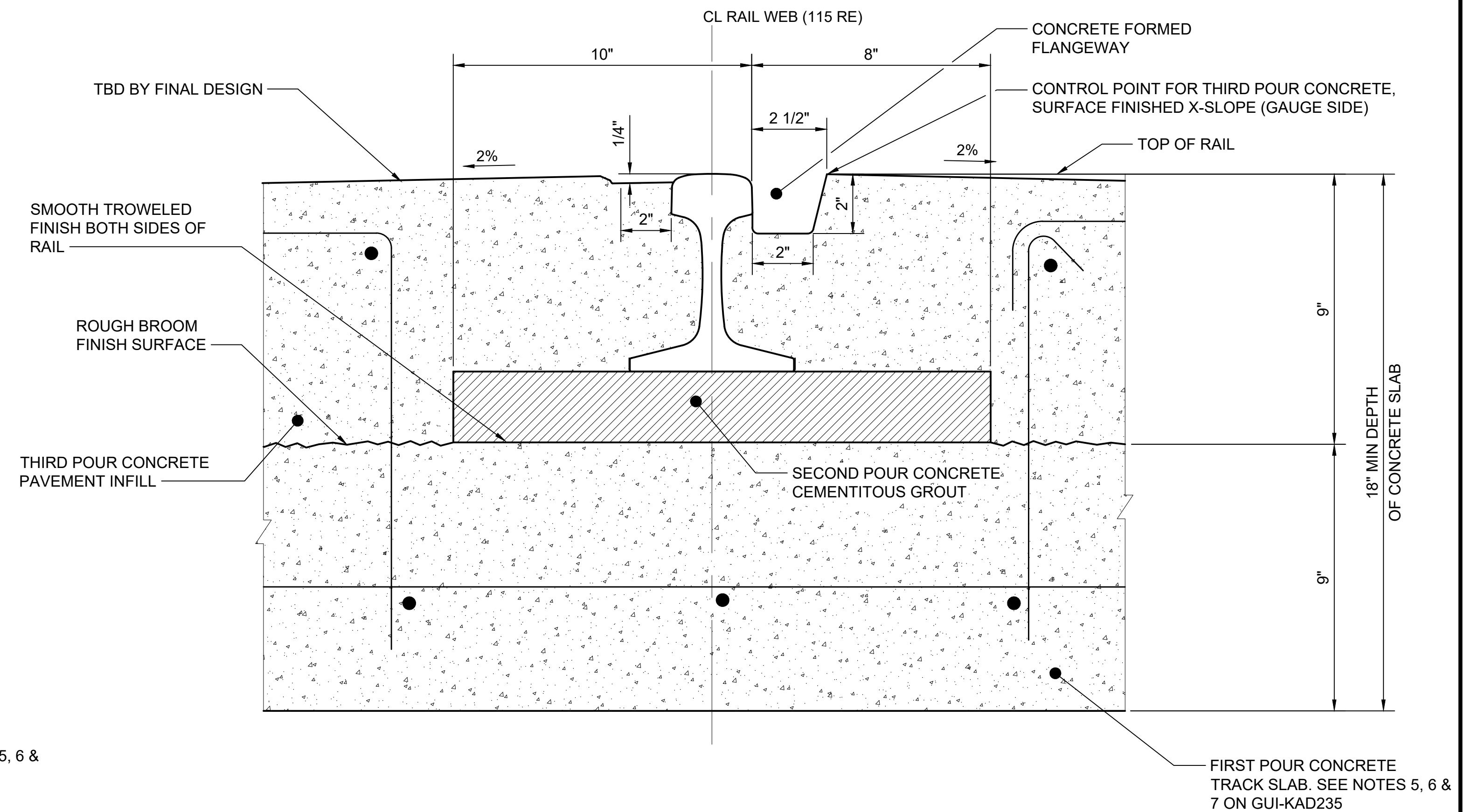
DRAWING No.:	GUI-KAD235
FACILITY ID:	
SHEET No.:	REV:
	2

03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD236.DWG



TYPICAL RAIL SEAT ON ANCHOR PLATE 115 RE RAIL - DETAIL
SCALE: 4" = 1'-0"

1
GUI-KAD235



TYPICAL RAIL SEAT BETWEEN ANCHOR PLATES - DETAIL
SCALE: 4" = 1'-0"

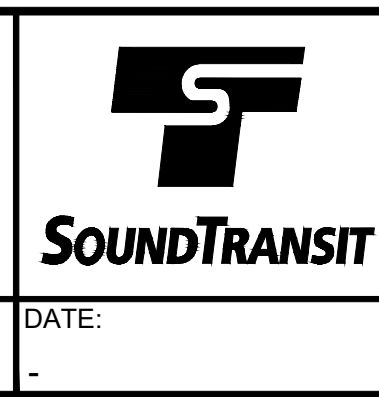
2
GUI-KAD235

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:
-	-

REVIEWED BY:	DATE:
-	-

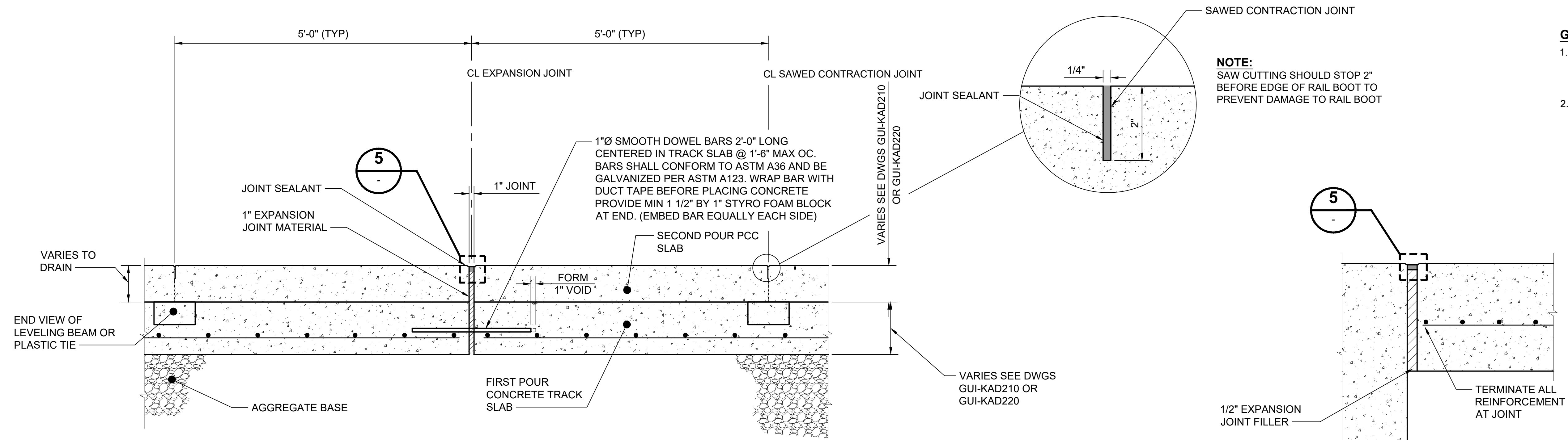


SCALE:	4" = 1'-0"
FILENAME:	GUI-KAD236
CONTRACT No.:	RTA/LR -
DATE:	2/2024

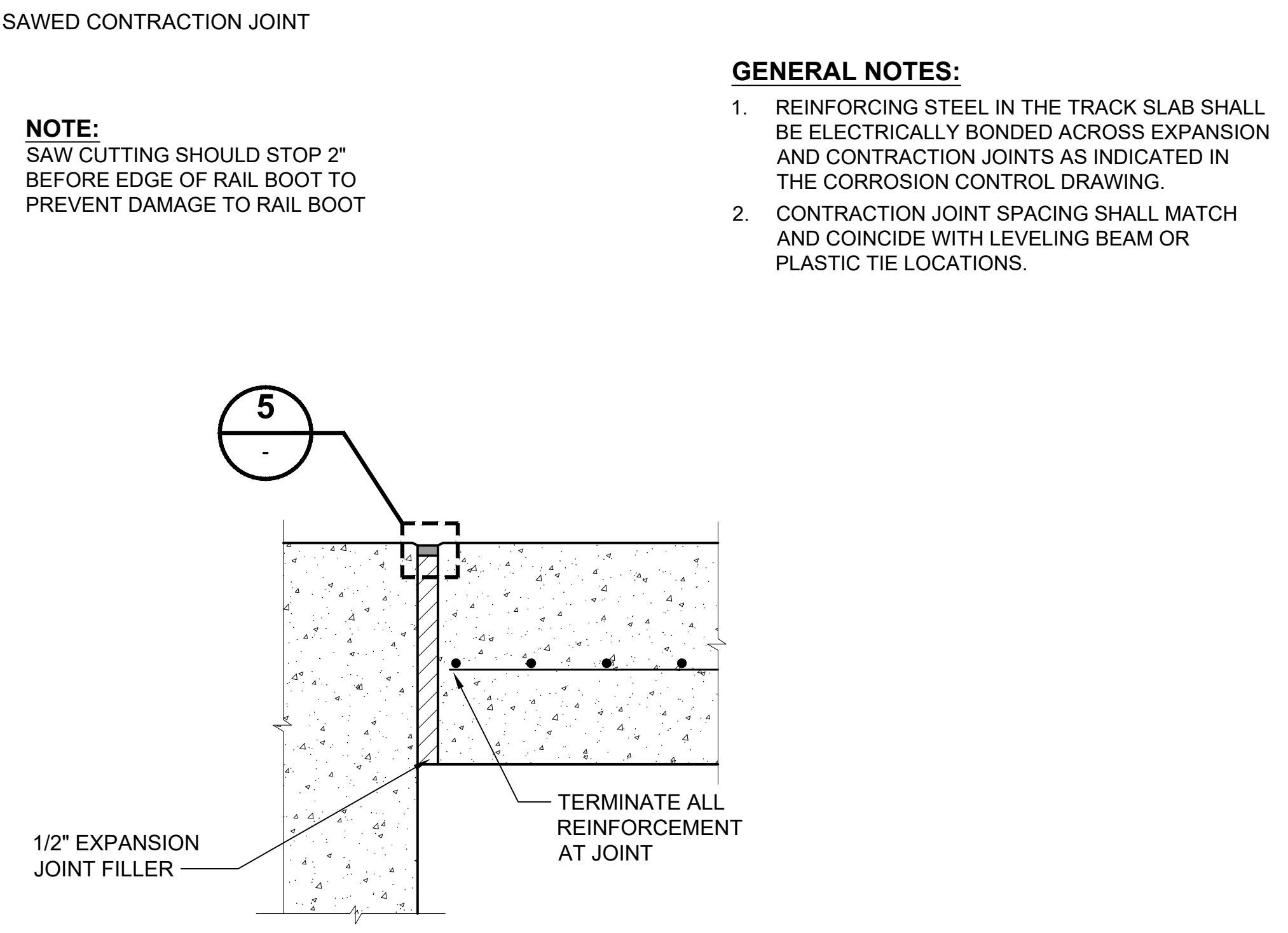
SOUND TRANSIT GUIDANCE DRAWINGS TRACKWORK	
EMBEDDED TRACK CONSTRUCTION TYPICAL NON-INSULATED TRACK RAIL FIXATION DETAIL	

DRAWING No.:	GUI-KAD236
FACILITY ID:	
SHEET No.:	2

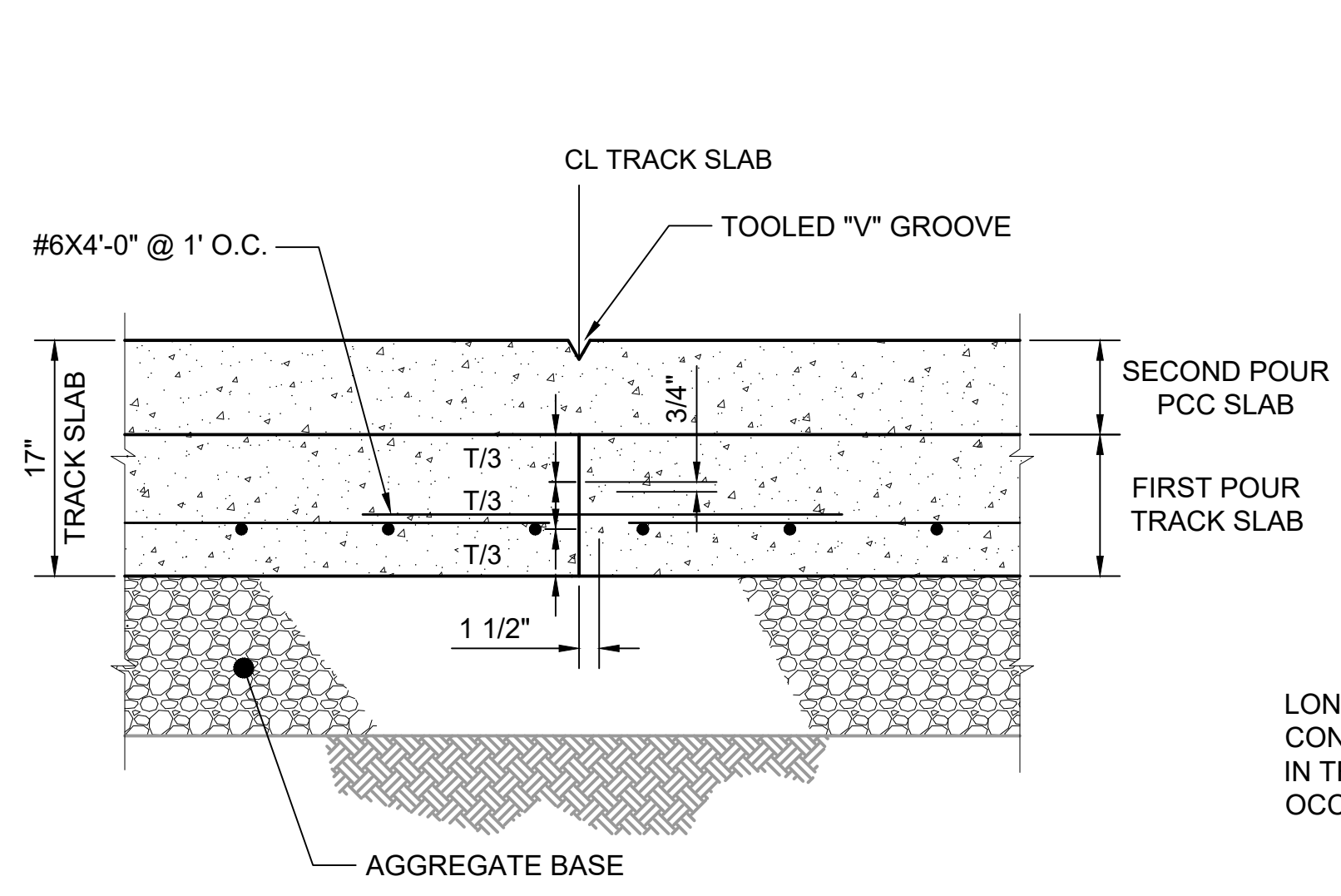
03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\Technical Standards and Requirements Projects - Drawings Update 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD240.DWG



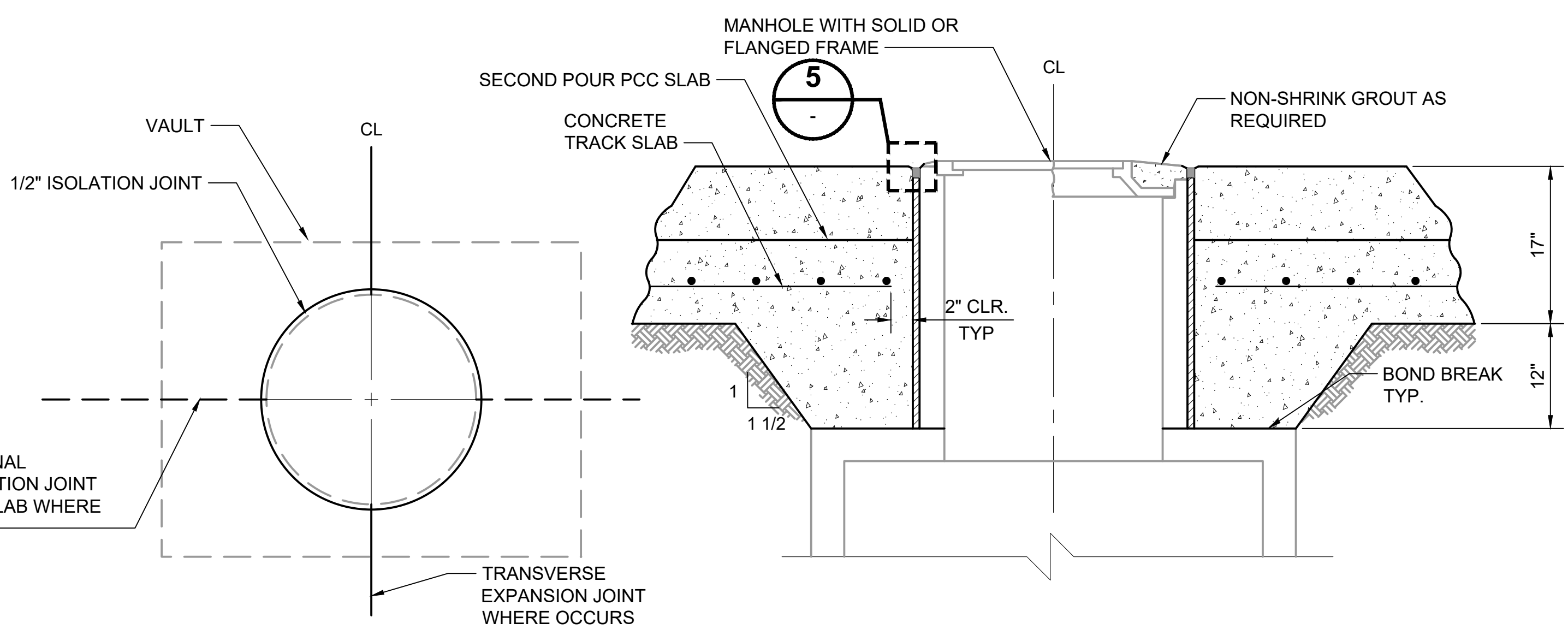
EXPANSION AND CONTRACTION JOINT IN TRACK SLAB 1
SCALE: 1" = 1'-0"



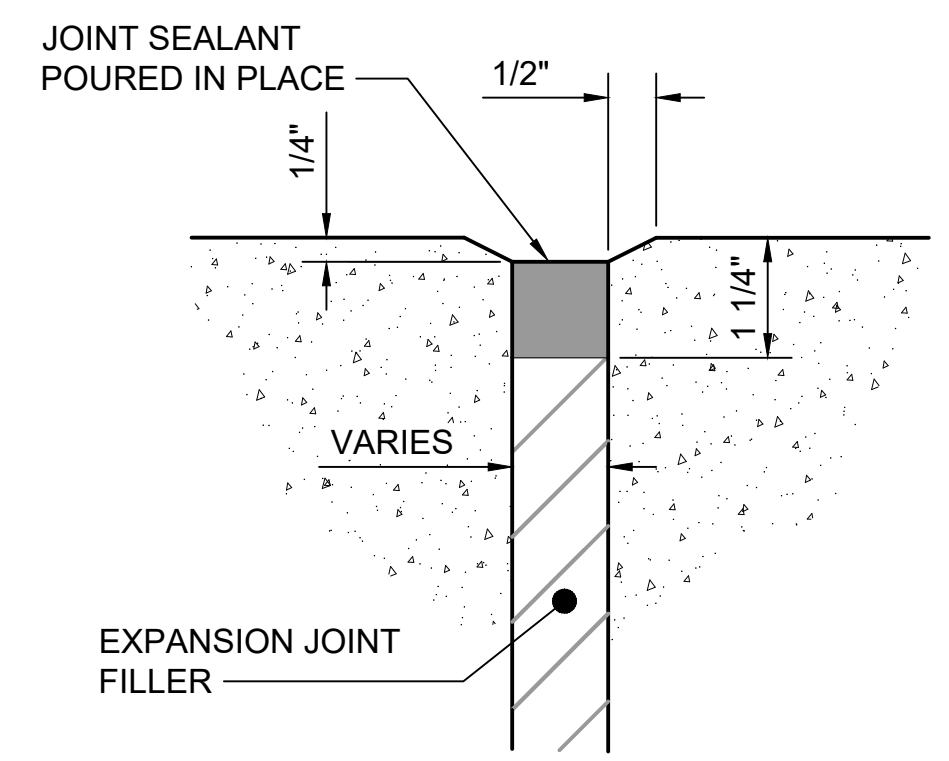
ISOLATION JOINT IN TRACK SLAB 2
NTS



CONSTRUCTION JOINT IN TRACK SLAB 3
SCALE: 1" = 1'-0"



ISOLATION JOINT AT MANHOLE OR OCS FOUNDATION 4
SCALE: 1" = 1'-0"



JOINT SEALANT DETAIL 5
NTS

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

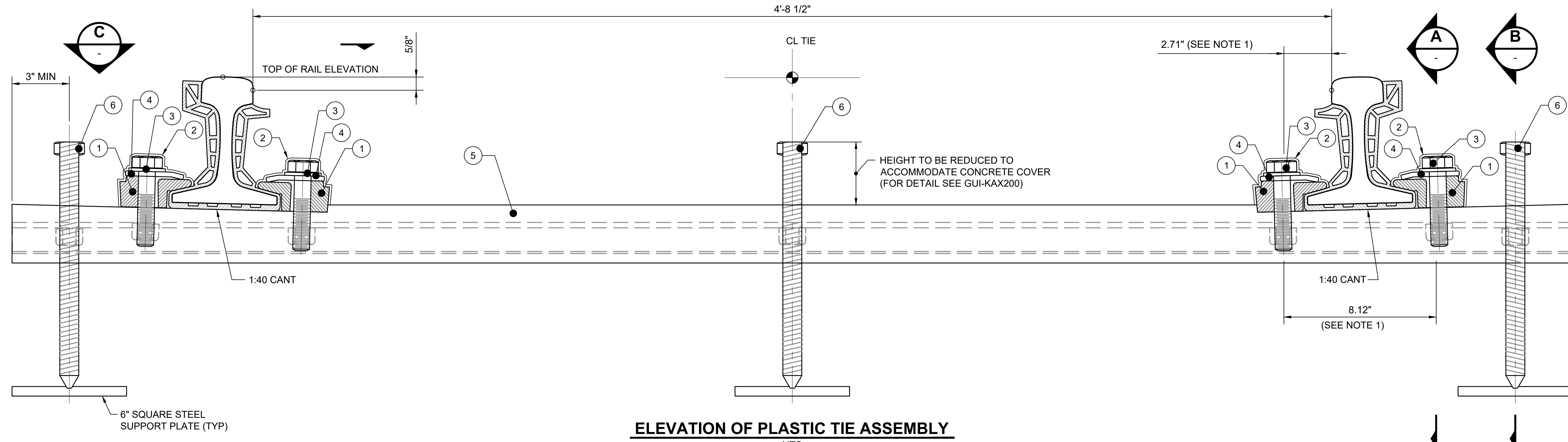
SCALE:	AS NOTED
FILENAME:	GUI-KAD240
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

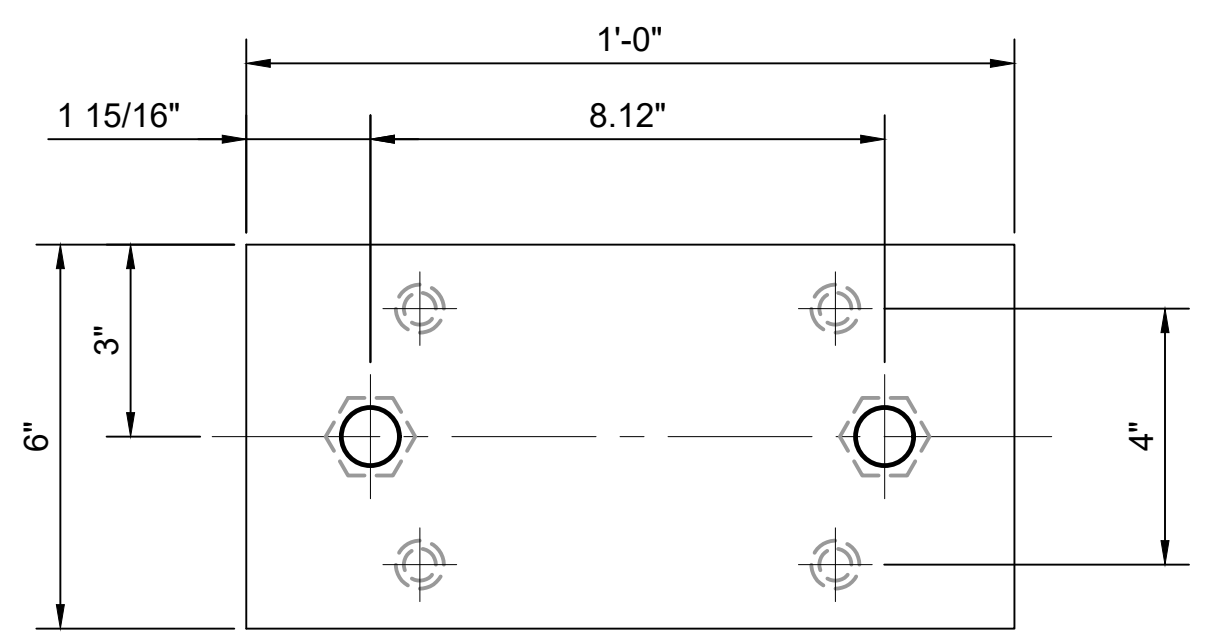
LIGHT RAIL EMBEDDED TRACK CONSTRUCTION
TRACK SLAB JOINT DETAILS

DRAWING No.:	GUI-KAD240
FACILITY ID:	
SHEET No.:	REV:
	2

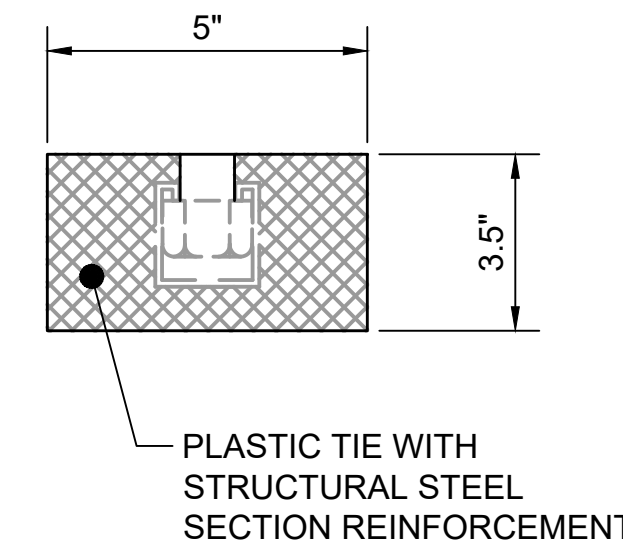
03/20/24 | 12:19 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD245.DWG



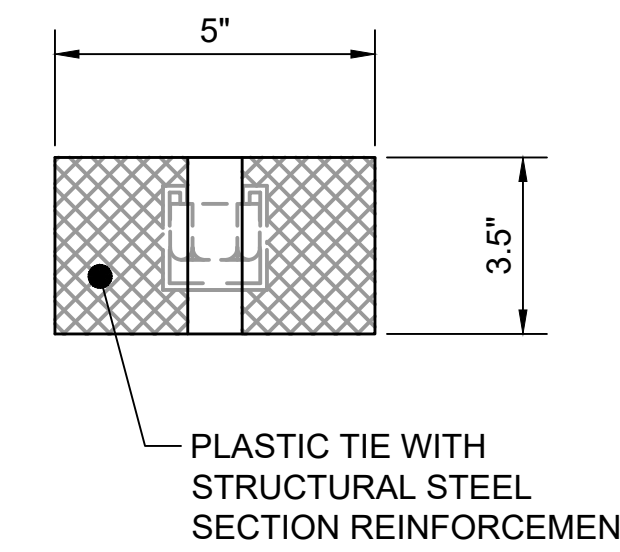
ELEVATION OF PLASTIC TIE ASSEMBLY
NTS



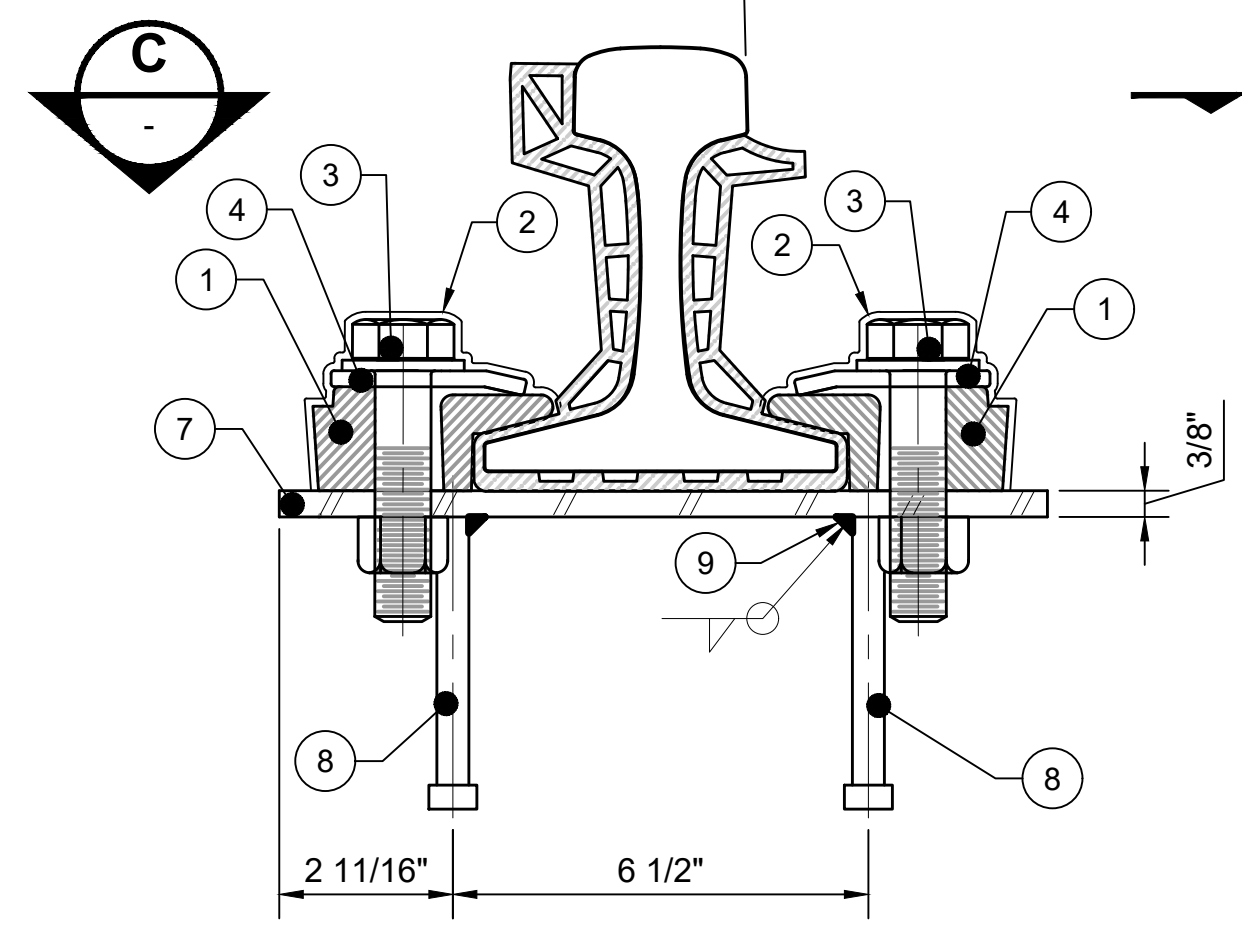
PLAN VIEW
GAUGE



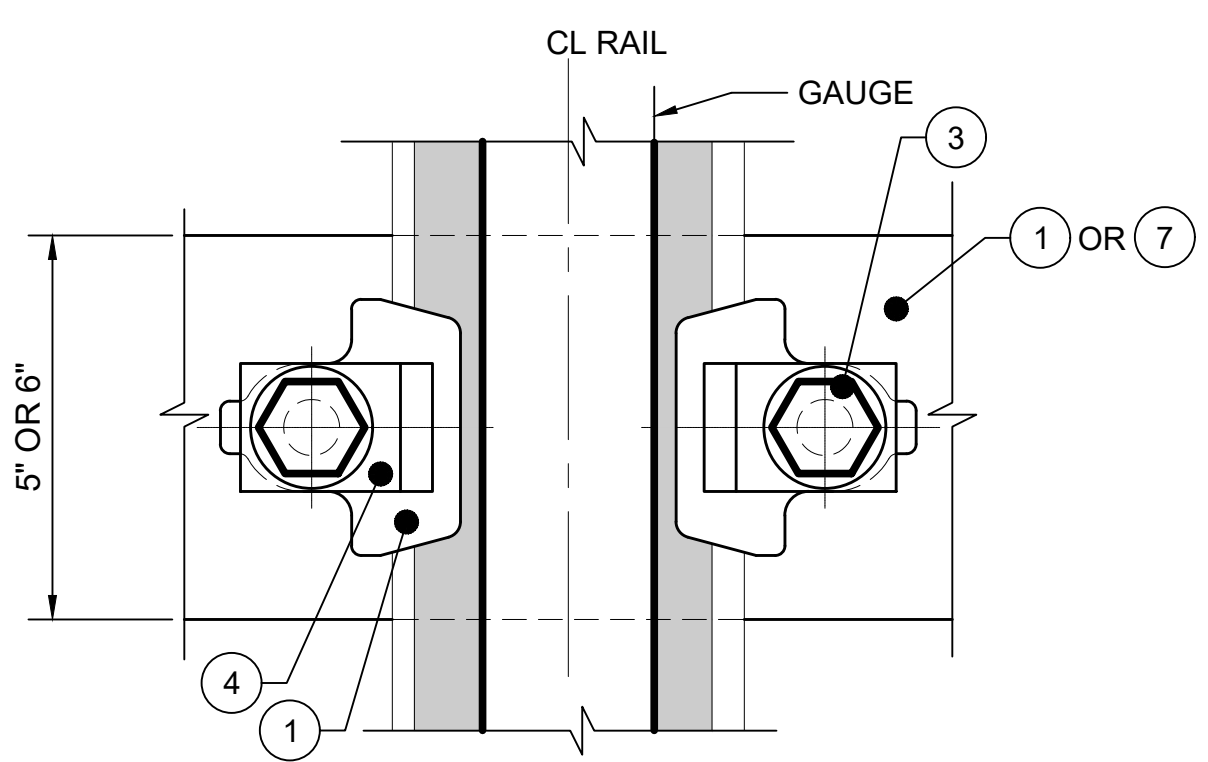
SECTION A
NTS



SECTION B
NTS



ELEVATION VIEW
ANCHOR PLATE
NTS



SECTION C
NTS

- GENERAL NOTES:**
- DIMENSION IS DEPENDENT UPON RAIL BOOT, PLASTIC CLIP AND BOLT TO BE USED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE RESIDENT ENGINEER PRIOR TO FABRICATION OF PLASTIC TIES AND ANCHOR PLATES.
 - DETAILS OF PLASTIC TIE AND ANCHOR PLATE ON THIS DRAWING ARE PROVIDED AND PROPERTY OF IRON HORSE ENGINEERING COMPANY.

PLASTIC TIE ASSEMBLY / MATERIAL LIST				
KEY	QTY	DESCRIPTION	SIZE	FAB. NOTES
1	4	NYLON REINFORCED PLASTIC CLIP	4.00 x 3.75	2-PLASTIC CLIP TO MATCH RAIL BOOT DIM (SEE NOTE 1)
2	4	PROTECTIVE COVER	4 MIL	PLASTIC SHEET OR TAPE
3	4	7/8" UNC BOLT COMBINED WITH UNC HEX NUT AND FLAT WASHER	---	---
4	4	STEEL CLIP WASHER	3" x 2" x 1/4"	GALVANIZED STEEL
5	1	RECYCLED PLASTIC BEAM WITH STRUCTURAL STEEL SECTION REINFORCEMENT	5"x3.5"x6'-0"	MAIN COMPONENT
6	3	1" UNC BOLT COMBINED WITH UNC HEX NUT AND SUPPORT PLATE	---	---

ANCHOR PLATE ASSEMBLY / MATERIAL LIST				
KEY	QTY	DESCRIPTION	SIZE	FAB. NOTES
1	2	NYLON REINFORCED PLASTIC CLIP	4.00 x 3.75	2-PLASTIC CLIP TO MATCH RAIL BOOT DIM (SEE NOTE 1)
2	2	PROTECTIVE COVER	4 MIL	PLASTIC SHEET OR TAPE
3	2	7/8" UNC BOLT COMBINED WITH UNC HEX NUT AND FLAT WASHER	---	---
4	2	STEEL CLIP WASHER	3" x 2" x 1/4"	GALVANIZED STEEL
7	1	3/8" STEEL PLATE	6" x 12"	DRILL HOLES PER PLAN
8	4	1/2" DIA STUD	0'-4"	WELDED TO UNDERSIDE OF PLATE
9	LOT	WELD	---	---

No.	DATE	DSN	CHK	APP	REVISION
2	2/2024	----	----	----	2024 REVISED GUIDANCE DRAWINGS
1	8/2019	----	----	----	REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013	----	----	----	NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

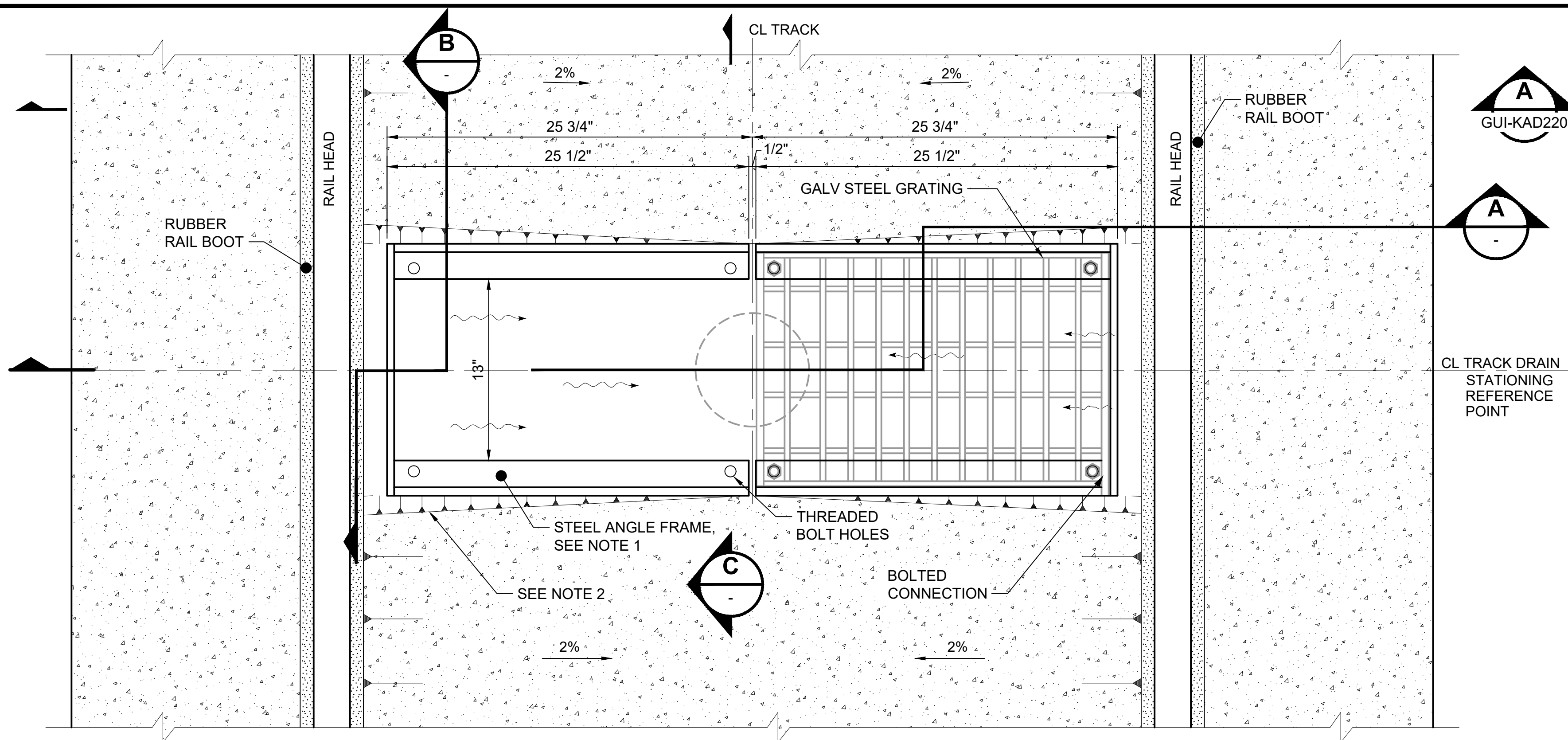
SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

SCALE: NTS
FILENAME: GUI-KAD245
CONTRACT No.: RTA/LR -
DATE: 2/2024

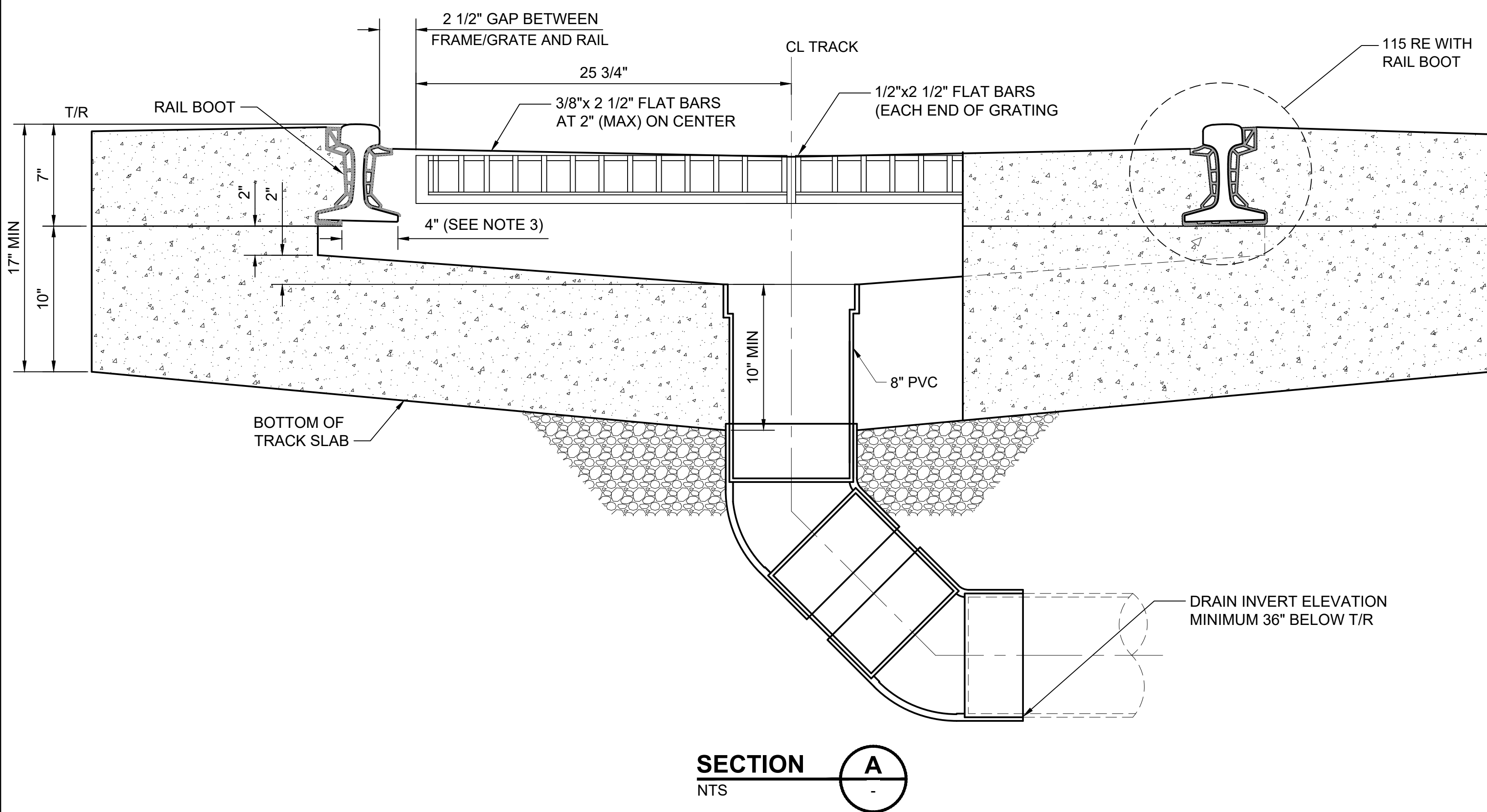
SOUND TRANSIT
GUIDANCE DRAWINGS
TRACKWORK
EMBEDDED TRACK CONSTRUCTION
PLASTIC BEAM AND ANCHOR PLATE ASSEMBLY
(115RE)

DRAWING No.:	GUI-KAD245
FACILITY ID:	
SHEET No.:	REV:
	2

03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD250.DWG

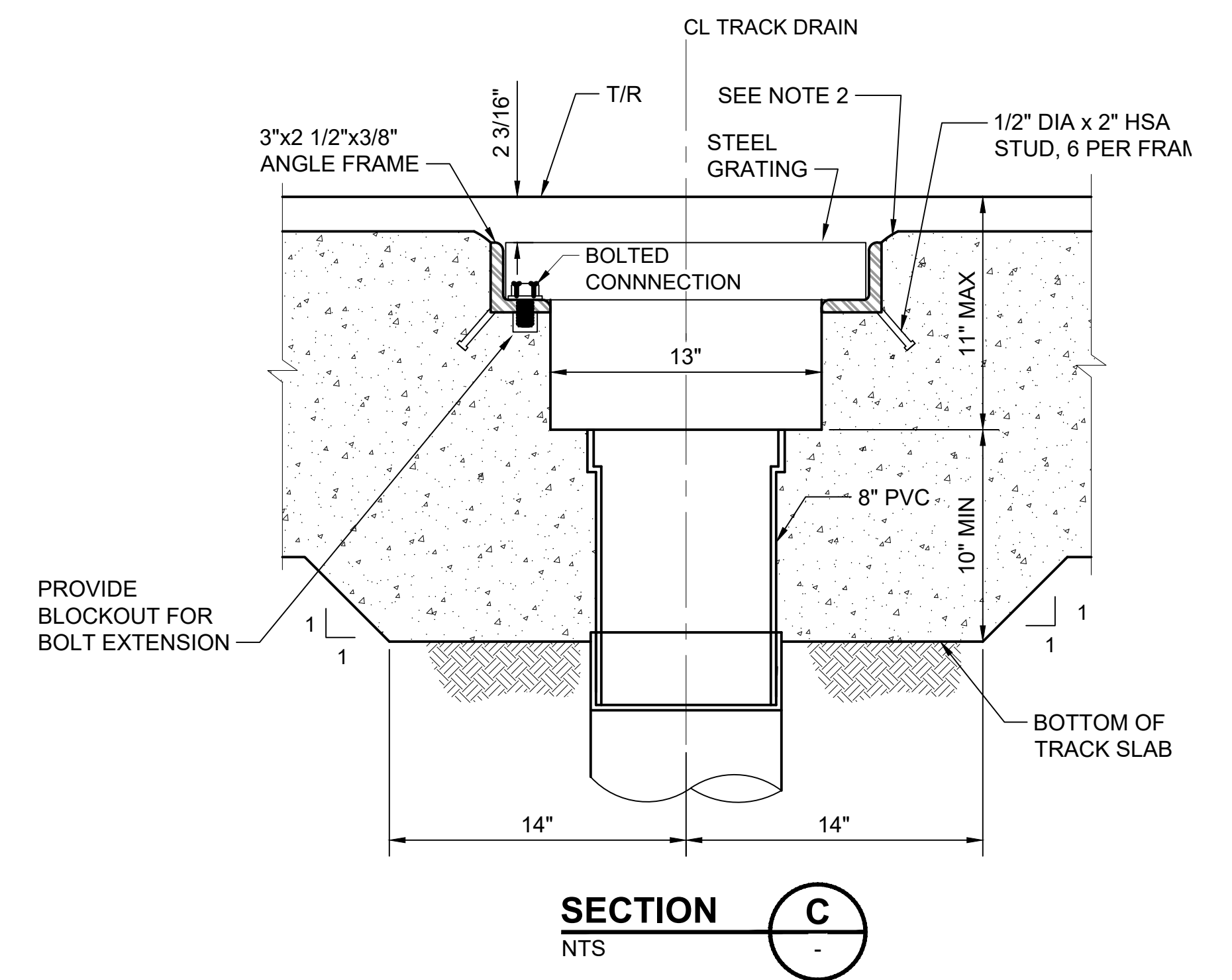
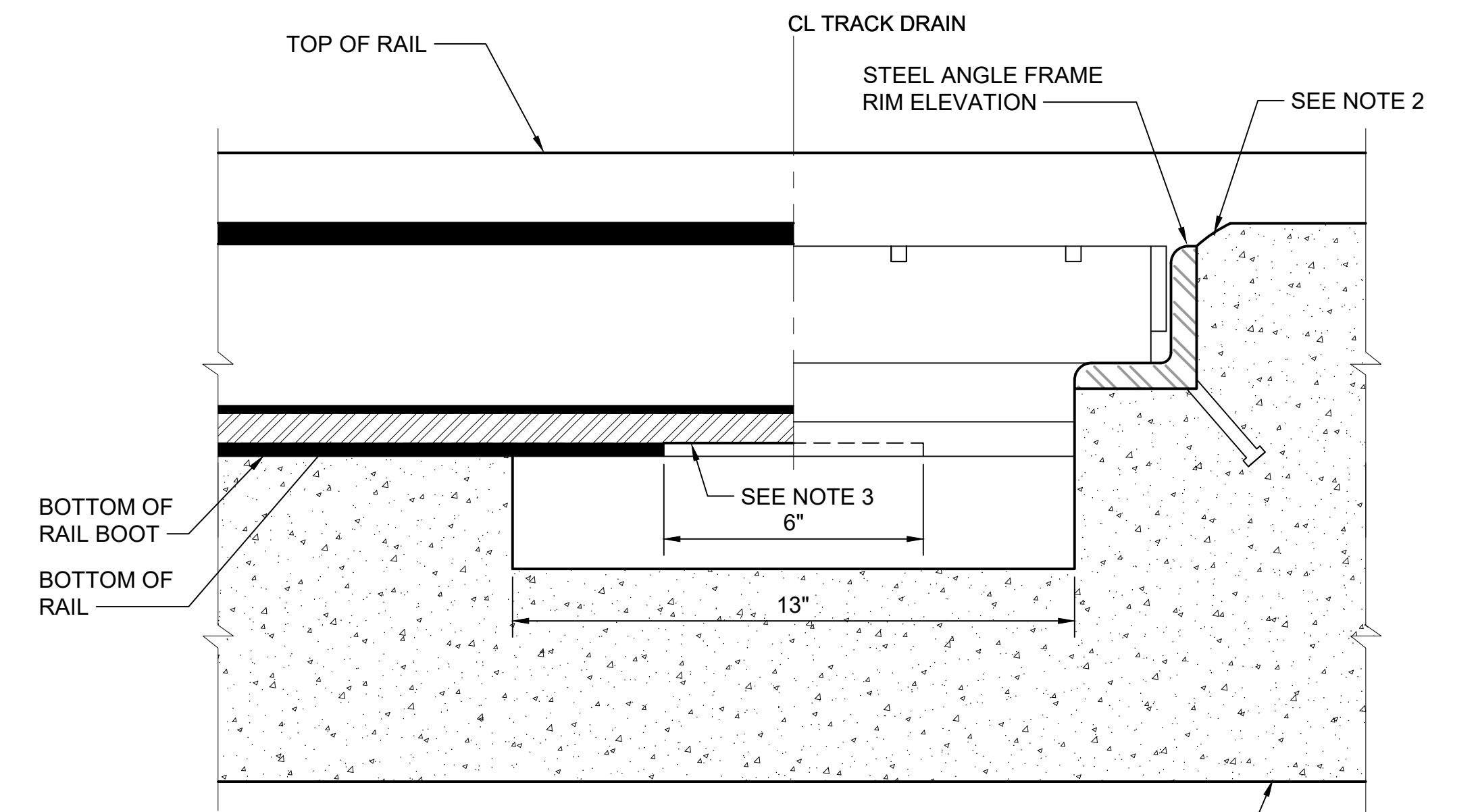


TRACK DRAIN DETAIL
NTS



GENERAL NOTES:

- SUBMIT SHOP DRAWINGS OF STEEL ANGLE FRAME AND GRATING PRIOR TO FABRICATION. FRAME AND GRATE SHALL BE GALVANIZED STEEL.
- CONCRETE SURFACE SHALL BE SLOPED AND SHAPED LOCALLY TO MATCH TOP OF STEEL GRATING'S ANGLE SUPPORT FRAMING.
- SLOT BOTTOM OF BOOT AT CENTER OF DRAIN TO ALLOW BOOT DRAINAGE. SLOT SHALL BE 6" LONG BY 4" WIDE AT GAUGE SIDE. SEAL WITH ELASTOMERIC GROUT OR SEALANT THE OPEN CAVITIES OF THE RAIL BOOT IN THE DOWNSTREAM SIDE OF THE SLOT.
- BOLT GRATES TO FRAME.



No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:

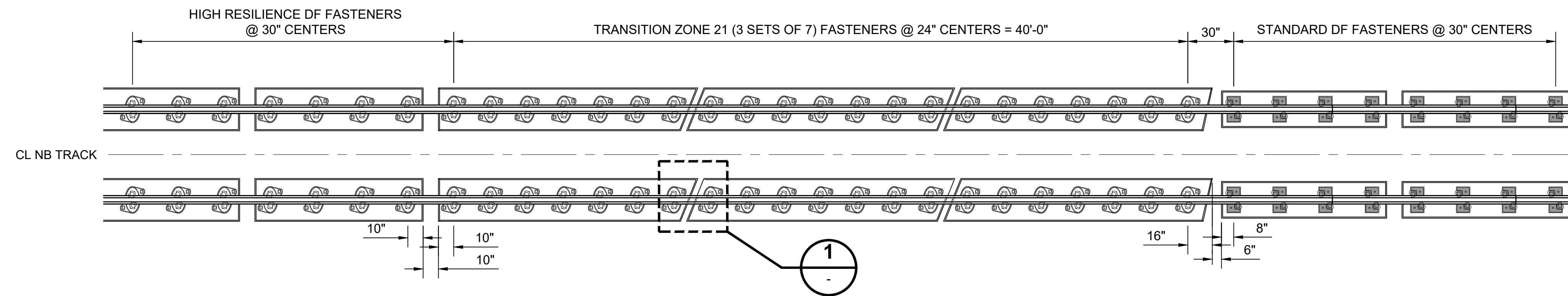
SCALE: NTS	
FILENAME: GUI-KAD250	
CONTRACT No.: RTA/LR -	
DATE: 2/2024	

SOUND TRANSIT GUIDANCE DRAWINGS TRACKWORK	
EMBEDDED TRACK CONSTRUCTION MIDBLOCK TRACK SLAB TRACK DRAIN (115RE)	

DRAWING No.:	GUI-KAD250
FACILITY ID:	
SHEET No.:	REV:
	2

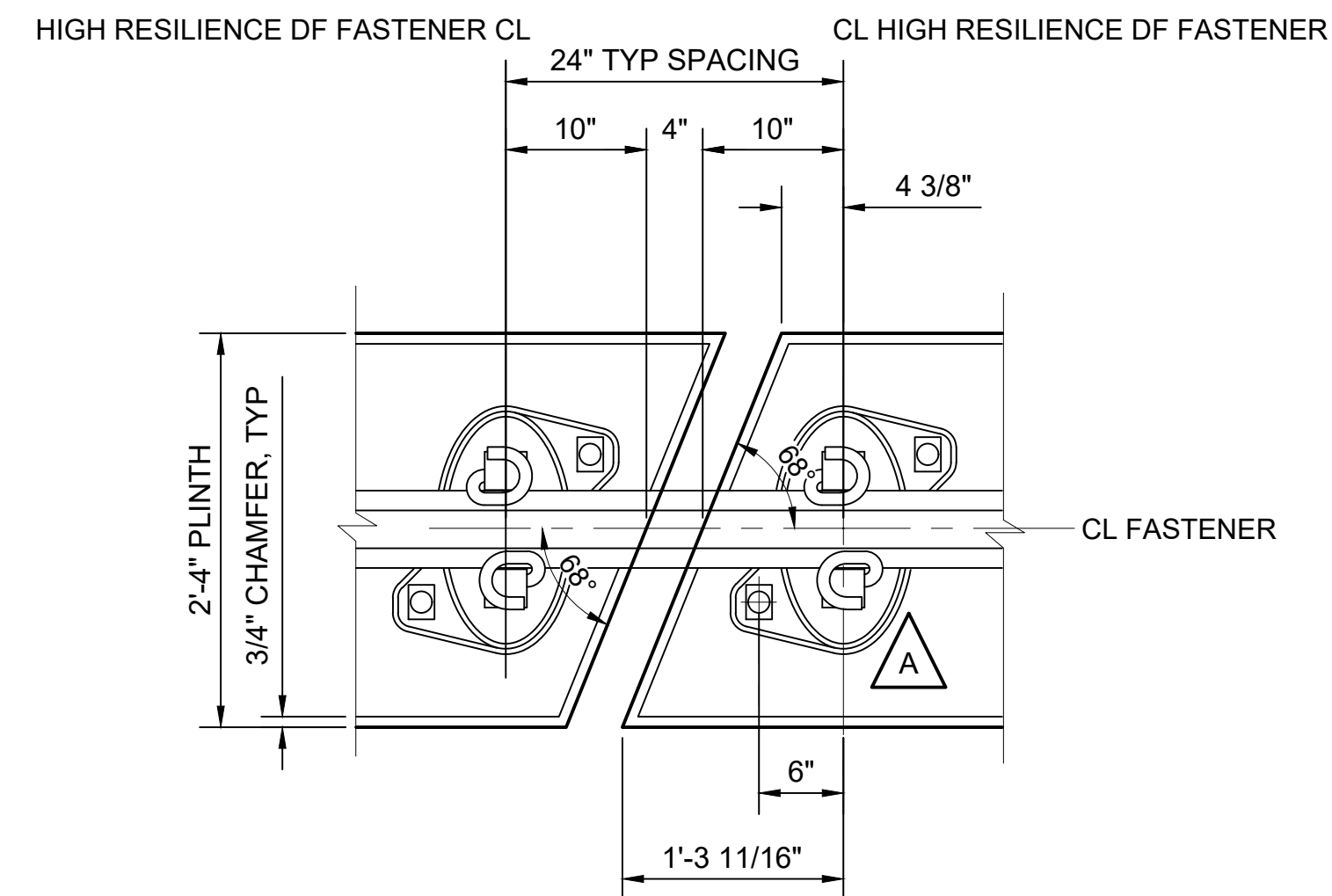
GENERAL NOTE:

- FOR DF TRACKS UNDER HIGH RESILIENT FASTENER AND STANDARD FASTENER SEE DWGS STD-KAD100 AND STD-KAD102.



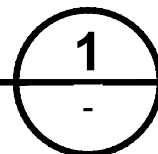
**TRANSITION PLAN FROM HIGH RESILIENCE FASTENER
DF TRACK TO STANDARD FASTENER DF TRACK**

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



TRANSITION ZONE PLINTH GAP

SCALE: 1" = 1'-0"



03/20/24 | 12:18 PM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-KAD427.DWG

----	----	----	----	----	----
1	2/2024	----	----	----	2024 REVISED GUIDANCE DRAWINGS
0	8/2019	----	----	----	NEW - CIVIL DIRECTIVE AND STANDARD DWGS
No.	DATE	DSN	CHK	APP	REVISION

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	2/2024

LINE IS 1" AT FULL SCALE

SCALE:	AS NOTED
FILENAME:	GUI-KAD427
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
TRACKWORK

TRANSITION SLAB
HIGH RESILIENT FASTENER DIRECT FIXATION
TRACK TO STANDARD DIRECT FIXATION TRACK

DRAWING No.:	GUI-KAD427
FACILITY ID:	
SHEET No.:	REV: 1

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-CZN001.DWG

GENERAL NOTES

ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88). TO CONVERT TO CITY OF SEATTLE DATUM, REFER TO HORIZONTAL AND VERTICAL CONTROL DIAGRAMS.

ALL COORDINATES, BEARINGS OR AZIMUTHS AND DISTANCES SHOWN ON THE PLANS ARE BASED ON FOUR LOCAL DATUM PLANES. NORTH, CENTRAL, SOUTH AND TACOMA, AS ESTABLISHED FOR THE PROJECT. TO CONVERT COORDINATES FROM THE LOCAL DATUM PLANES TO NAD83:

NORTH: SUBTRACT 300,000 FROM THE NORTHING AND EASTING COORDINATES AND APPLY THE COMBINATION FACTOR OF 0.999965007.

CENTRAL: SUBTRACT 200,000 FROM THE NORTHING AND EASTING COORDINATES AND APPLY THE COMBINATION FACTOR OF 0.999979745.

SOUTH: SUBTRACT 100,000 FROM THE NORTHING AND EASTING COORDINATES AND APPLY THE COMBINATION FACTOR OF 0.999997515.

TACOMA: SUBTRACT 100,000 FROM THE NORTHING AND EASTING COORDINATES AND APPLY THE COMBINATION FACTOR OF 0.999978298.

EAST: SUBTRACT 328083.333 FROM THE NORTHING AND EASTING COORDINATES AND APPLY THE COMBINATION FACTOR OF 0.999976415.

KEY TO LOCAL DATA PLANE ZONES AND DESIGN UNITS:

NORTH: U-LINK, N-LINK

CENTRAL: C510, C700, C10, C735, C810

SOUTH: C755, C440

TACOMA: C910

ALL HORIZONTAL AND VERTICAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED.

STATIONS, OFFSETS AND PROFILES INDICATE THE CONTROL TRACK TOP OF RAIL UNLESS OTHERWISE NOTED. THE CONTROL TRACK IS THE RIGHT TRACK WHEN VIEWED IN THE DIRECTION OF INCREASING STATIONING UNLESS OTHERWISE NOTED.

NON-CONTROL TRACK TOP OF RAIL ELEVATION SHALL BE EQUAL TO THE ADJACENT CONTROL TRACK TOP OF RAIL UNLESS OTHERWISE NOTED. THE PROFILE GRADE OF THE NON-CONTROL TRACK IS PROJECTED RADIALLY IN CURVED SECTIONS AND PERPENDICULAR IN TANGENT SECTIONS FROM THE PROFILE GRADE OF THE CONTROL TRACK.

ALL GRADIENTS ARE IN PERCENT, EXCEPT AS NOTED OTHERWISE.

TOP OF RAIL SHALL MEAN TOP OF LOW RAIL IN SUPERELEVATED SECTIONS, EXCEPT AS NOTED OTHERWISE.

TRACK PROFILES ARE CARRIED ON THE LOW RAIL THROUGH HORIZONTAL CURVES AND SPIRALS. THE LENGTHS OF LINES ARE BASED ON THE CENTERLINE OF TRACK ALIGNMENT, EXCEPT AS NOTED OTHERWISE.

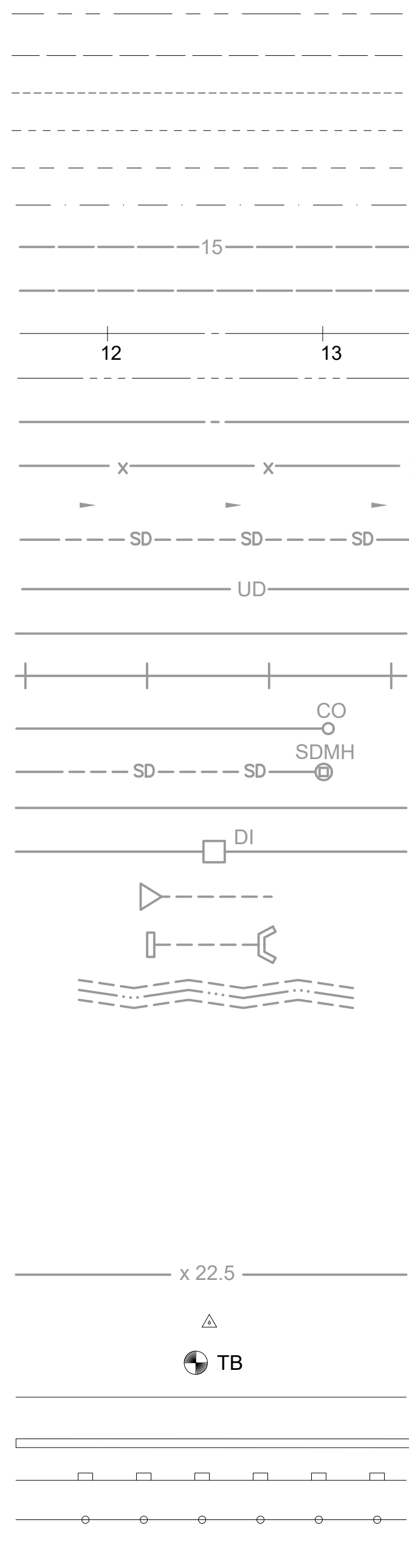
TRACK SUPERELEVATION IS ACCOMPLISHED BY MAINTAINING TOP OF INSIDE (LOW) RAIL AT PROFILE GRADE LINE AND BY RAISING THE OUTSIDE RAIL AN AMOUNT EQUAL TO THE ACTUAL SUPERELEVATION EXCEPT AS NOTED OTHERWISE.

EXISTING AND NEW UTILITIES, SURFACE AND SUBSURFACE, ARE NOT SHOWN ON CIVIL DRAWINGS. FOR UTILITY LOCATIONS SEE SURFACE DRAINAGE AND UTILITY DRAWINGS.

UTILITY LOCATES

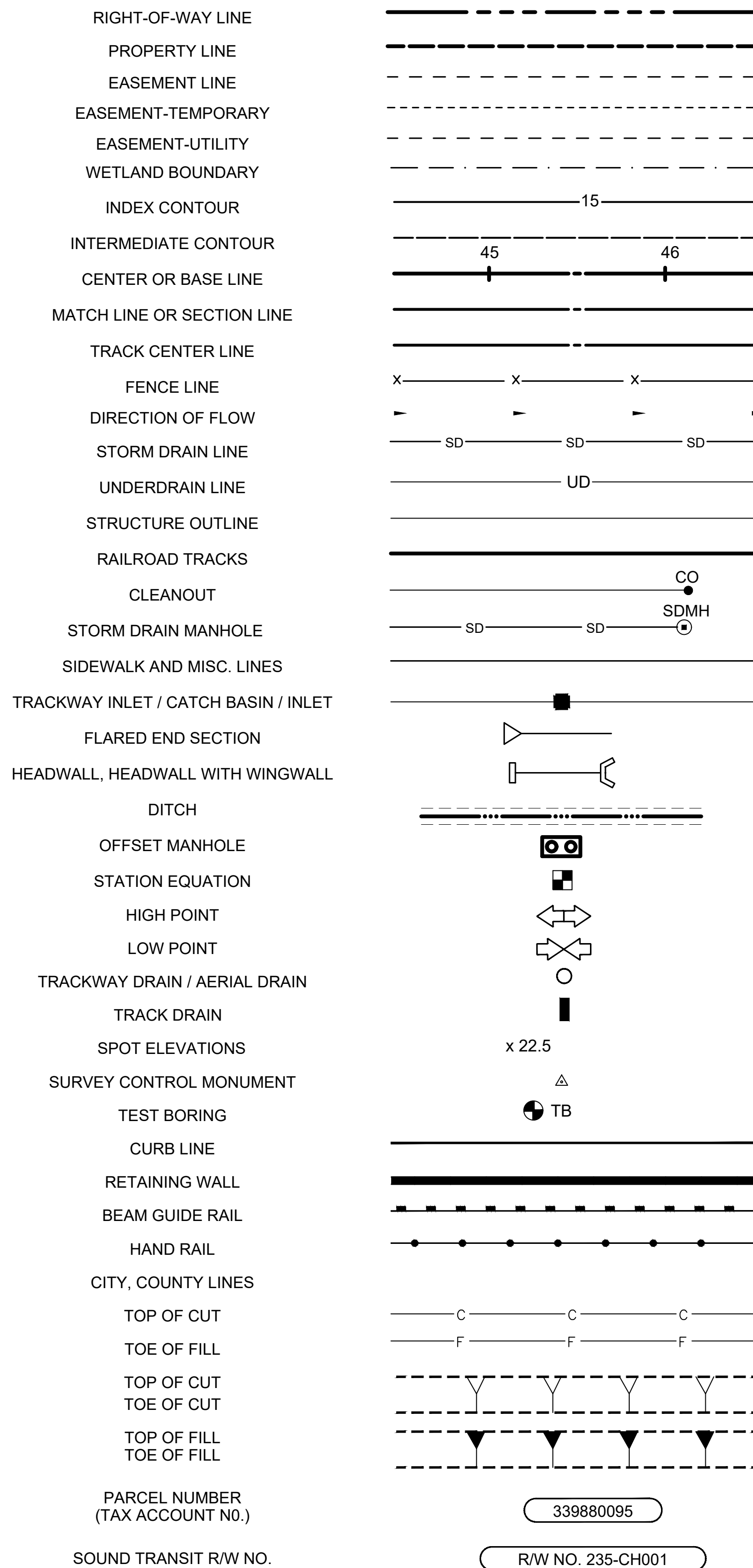
CALL MINIMUM 2 AND MAXIMUM 10 BUSINESS DAYS BEFORE YOU DIG
1-800-424-5555

EXISTING



SYMBOLS

PROPOSED



No.	DATE	DSN	CHK	APP	REVISION
2	2/2024				2024 REVISED GUIDANCE DRAWINGS
1	8/2019				REVISED - CIVIL DIRECTIVE AND STANDARD DWGS
0	6/2013				NEW - CIVIL, ARCH, SYSTEMS GUIDANCE DWGS

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:

DATE:

REVIEWED BY:

DATE:

SCALE:	NTS
FILENAME:	GUI-CZN001
CONTRACT No.:	RTA/LR -
DATE:	2/2024



SOUND TRANSIT
GUIDANCE DRAWINGS
CIVIL & UTILITIES
NOTES & SYMBOLS

DRAWING No.:	GUI-CZN001
FACILITY ID:	
SHEET No.:	2

03/20/24 | 11:54 AM | HARRISBK
C:\USERS\HARRISBK\DOCUMENTS\PROJECTS - DRAWINGS\UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUJ-UZN001.DWG

LEGEND - PROPOSED IMPROVEMENTS			UTILITY SYMBOLS		UTILITY LINE	
DESCRIPTION	EXAMPLE	NOTES	EXISTING	PROPOSED	EXISTING	PROPOSED
PIPE SEWER COMBINED <1'-0" DIA	8" PS	CONTINUOUS				
PIPE SEWER COMBINED ≥1'-0" DIA	24" PS	CONTINUOUS HATCH = DOTS, SCALE 10, 30°				
SIDE SEWER COMBINED	6" SS	CONTINUOUS				
PIPE SEWER SANITARY <1'-0" DIA	8" PSS	CONTINUOUS				
PIPE SEWER SANITARY ≥1'-0" DIA	24" PSS	CONTINUOUS HATCH = ANSI 31, SCALE 20, 90°				
SIDE SEWER SANITARY	6" SSS	CONTINUOUS				
PIPE STORM DRAIN <1'-0" DIA	8" PSD	CONTINUOUS				
PIPE STORM DRAIN ≥1'-0" DIA	24" PSD	CONTINUOUS HATCH = ANSI 31, SCALE 10, 0°				
SERVICE DRAIN	8" SD	CONTINUOUS				
WATERMAIN ≥1'-0" DIA	24" W	CONTINUOUS HATCH = DOTS, SCALE 20, 30°				
MANHOLE	MH-#					
INLET TYPE 250A						
INLET TYPE 250B						
INLET TYPE 252						
CATCH BASIN TYPE 240A						
CATCH BASIN TYPE 240B						
CATCH BASIN TYPE 240C						
CATCH BASIN TYPE 241						
CATCH BASIN TYPE 242A						
CATCH BASIN TYPE 242B						
CONCRETE DRIVEWAY HATCH=AR-CONC						
WATER METER	WM					

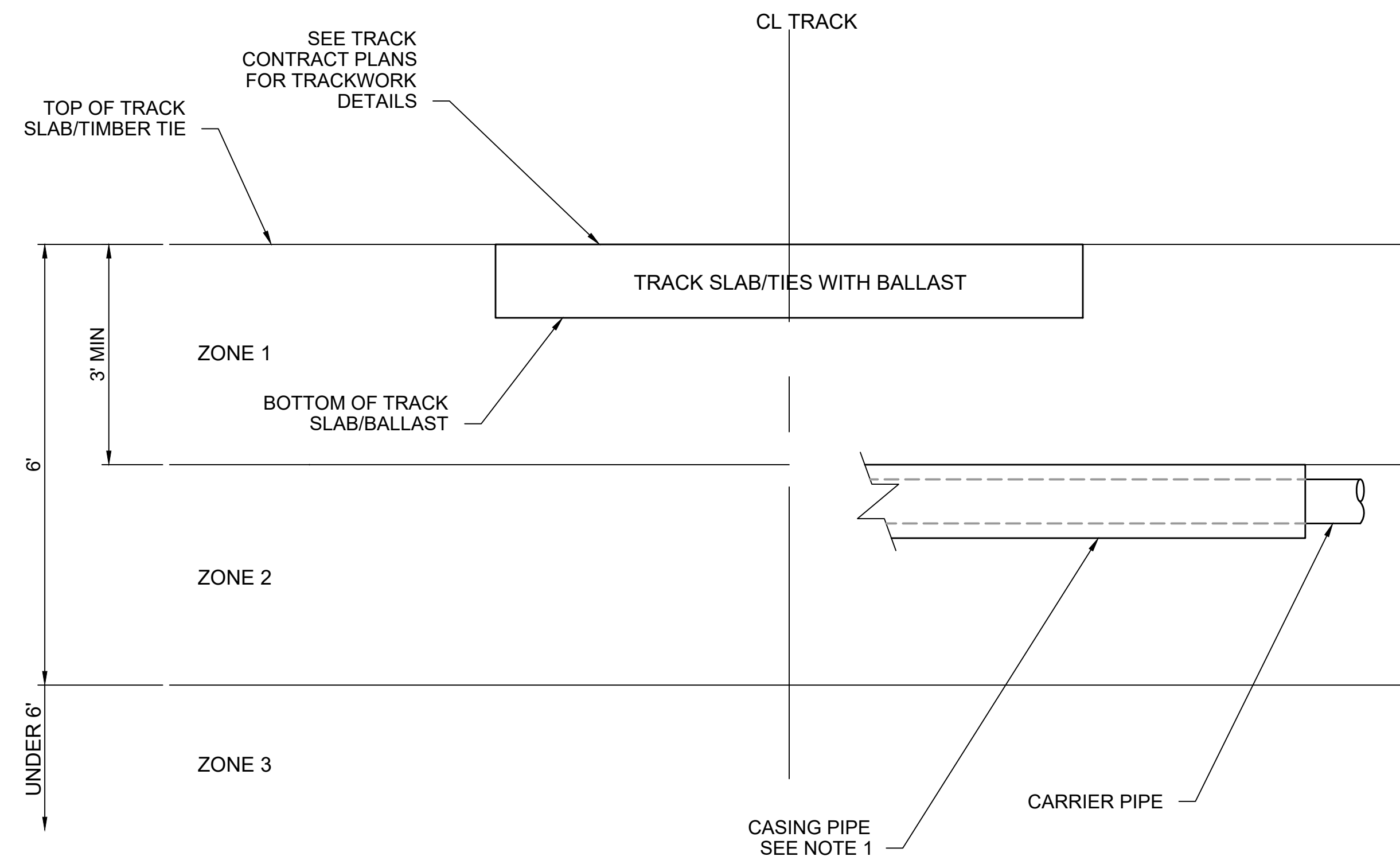
UTILITY NOTES	
1.	WHERE SPACE ALLOWS, UTILITY FACILITIES ARE SHOWN TO SCALE.
2.	THE LOCATIONS OF THE EXISTING UTILITIES ARE APPROXIMATE AND WERE COMPILED FROM INFORMATION PROVIDED BY PUBLIC AND PRIVATE UTILITY AGENCIES, LIMITED FIELD SURVEY, AND SITE VERIFICATION. CONTRACTOR SHALL VERIFY AND UPDATE THIS INFORMATION AND PERFORM DETAILED SURVEY AS REQUIRED TO DETERMINE THE ACTUAL LOCATIONS OF UTILITY FACILITIES.
3.	MAINTAIN BUILDING SERVICE CONNECTIONS TO ABUTTING PROPERTIES AT ALL TIMES. WATER SERVICES ARE NOT SHOWN.
4.	THESE SYMBOLS AND ABBREVIATIONS HAVE BEEN ADOPTED FOR USE IN SOUND TRANSIT DESIGNS FOR THE LIGHT RAIL TRANSIT SYSTEM AND MAY NOT BE IN COMPLETE AGREEMENT WITH THOSE SYMBOLS AND ABBREVIATIONS NORMALLY UTILIZED BY INDIVIDUAL UTILITY COMPANIES, AND LOCAL JURISDICTIONS.
5.	ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88). FOR CONVERSION TO CITY OF SEATTLE DATUM, SEE HORIZONTAL & VERTICAL CONTROL PLANS.
6.	WHERE POTHOLING HAS BEEN PERFORMED TO DETERMINE THE DEPTH TO EXISTING UTILITIES, THE DEPTH OF COVER ALONG WITH THE DATE THAT THE POTHOLING WAS PERFORMED IS NOTED ON THE DRAWING.
7.	UTILITY LOCATES CALL MINIMUM 2 AND MAXIMUM 10 BUSINESS DAYS BEFORE YOU DIG 1-800-424-5555

					DESIGNED BY:						SCALE:	SOUND TRANSIT GUIDANCE DRAWINGS CIVIL & UTILITIES NOTES & SYMBOLS		DRAWING No.:			
					DRAWN BY:						NTS			GUI-UZN001		GUI-UZN001	
					CHECKED BY:						FILENAME:					FACILITY ID:	
					APPROVED BY:						CONTRACT No.:					SHEET No.: REV:	
No.	DATE	DSN	CHK	APP	REVISION					RTA/LR -			1				
						SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:	2/2024							

03/20/24 | 11:54 AM | HARRISBK C:\USERS\HARRISBK\Sound Transit\TECHNICAL STANDARDS AND REQUIREMENTS PROJECTS - DRAWINGS UPDATE 2023\GUIDANCE DRAWINGS\CIVIL-STRUCT\GUI-UCD101.DWG

NOTES:

- STRUCTURAL PROTECTION MAY INCLUDE INSTALLATION OF PIPE CASING OR CONCRETE COVER SLAB.

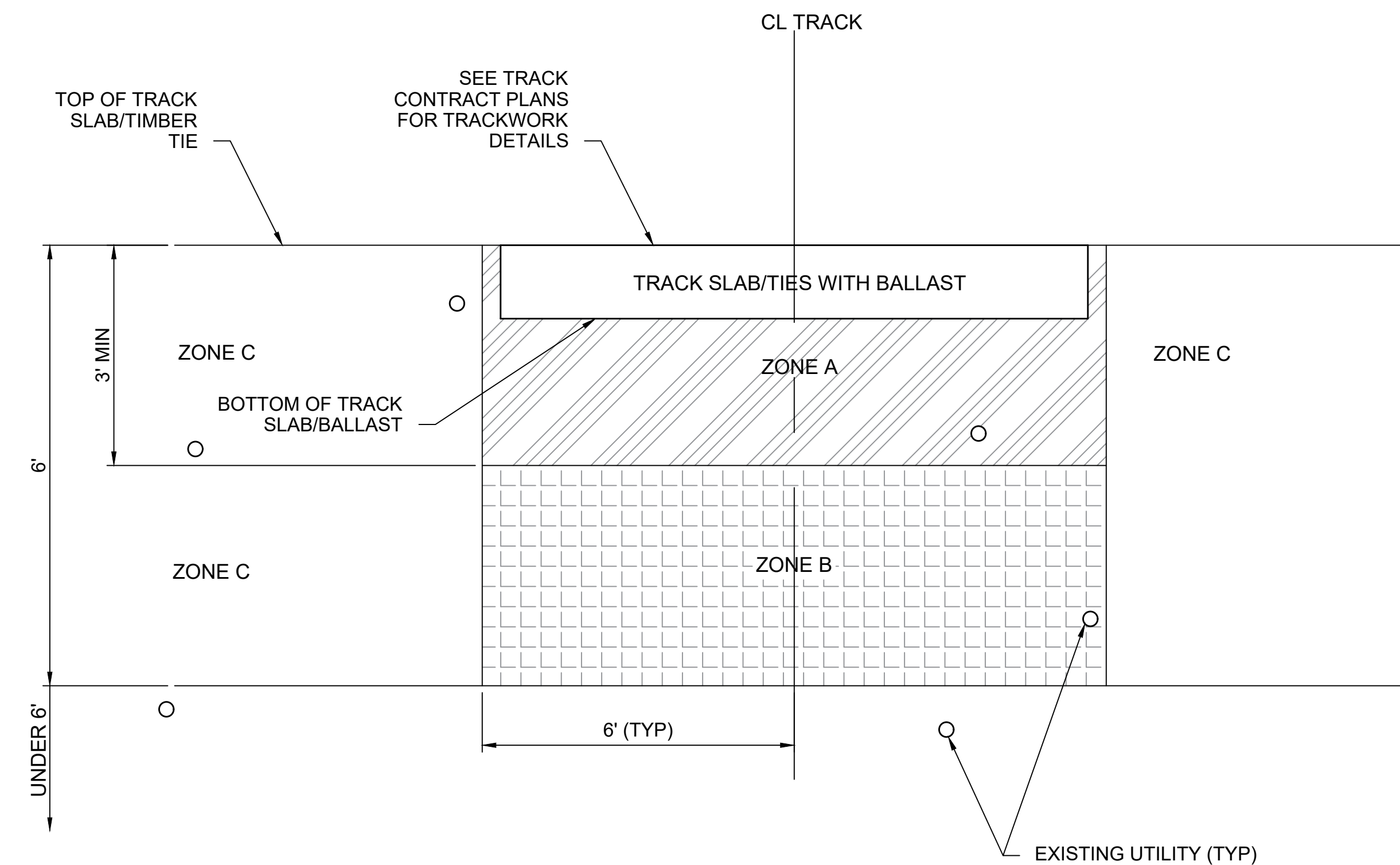


ZONE	PREFERRED CONFIGURATION
1	RELOCATE UTILITY (PREFERRED) OR PROVIDE STRUCTURAL PROTECTION (SEE NOTE 1)
2	RELOCATE UTILITY OR PROVIDE STRUCTURAL PROTECTION (SEE NOTE 1)
3	NO MODIFICATION REQUIRED UNLESS SPECIAL CONCERN DUE TO AGE, CONDITION, REPLACEMENT FREQUENCY, ACCESS, OR RISK.

UTILITY MAIN - TRANSVERSE CROSSING (SINGLE TRACK CONFIGURATION SHOWN)

1

NTS



ZONE	PREFERRED CONFIGURATION
A	RELOCATE UTILITY (PREFERRED) OR PROVIDE STRUCTURAL PROTECTION. (SEE NOTE 1)
B	RELOCATE UTILITY OR PROVIDE STRUCTURAL PROTECTION (SEE NOTE 1)
C	NO MODIFICATION REQUIRED UNLESS SPECIAL CONCERN DUE TO AGE, CONDITION, REPLACEMENT FREQUENCY, ACCESS, OR RISK.

UTILITY MAIN - PARALLEL (SINGLE TRACK CONFIGURATION SHOWN)

2

NTS

No.	DATE	DSN	CHK	APP	REVISION
0	2/2024				2024 NEW GUIDANCE DRAWING

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SUBMITTED BY:	DATE:	REVIEWED BY:	DATE:
-	-	-	2/2024

LINE IS 1" AT FULL SCALE

SCALE:	NTS
FILENAME:	GUI-UCD101
CONTRACT No.:	RTA/LR -
DATE:	2/2024

**SOUND TRANSIT
GUIDANCE DRAWINGS**
CIVIL & UTILITIES

TYPICAL UNDERGROUND UTILITY CONFIGURATION
GUIDANCE

DRAWING No.:	GUI-UCD101
FACILITY ID:	
SHEET No.:	REV: 0