

Appendix G - Retaining Walls and Abutment Plans (Plans, Elevations, Typical Sections)

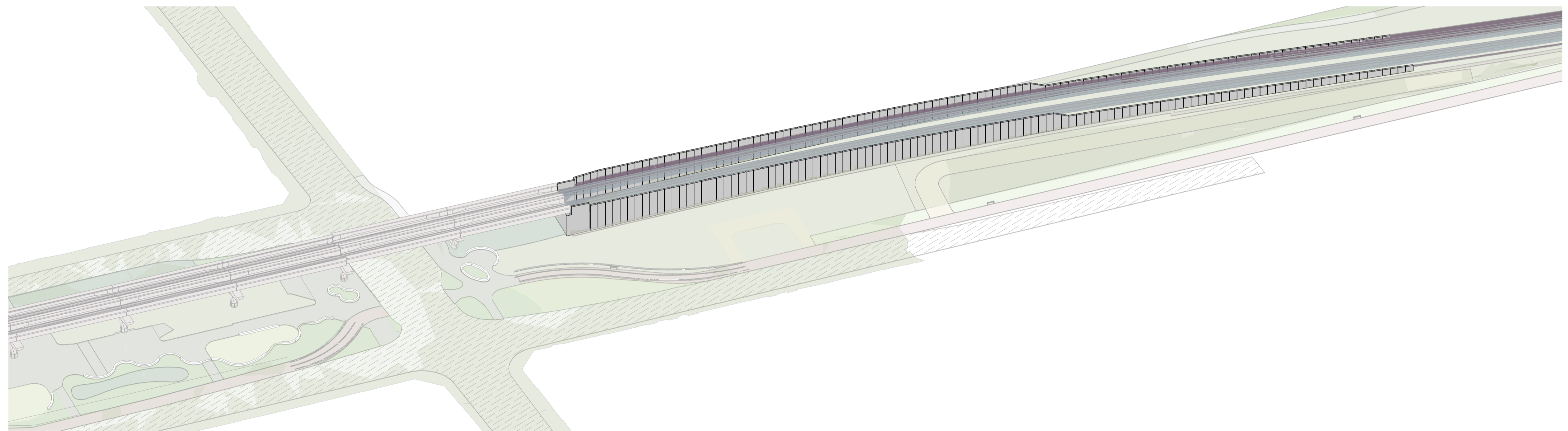


Government of **Western Australia**
Public Transport Authority

VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES

PROJECT WIDE - ABUTMENTS & RETAINING WALLS



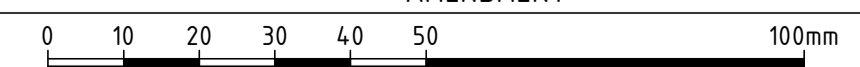
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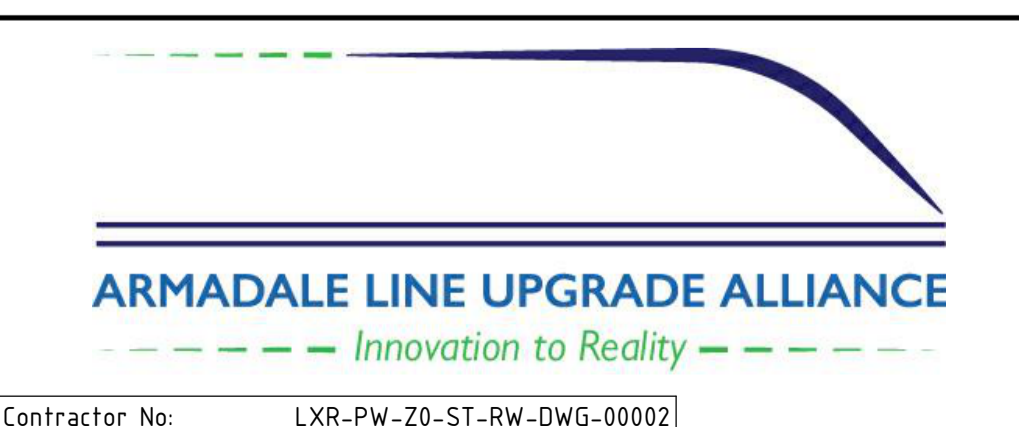
												VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL	
												ZONE 0 - CIVIL STRUCTURES PROJECT WIDE - ABUTMENTS & RETAINING WALLS COVER SHEET	
										DESIGNED M.SOUI DRAWN G.WIN CHECKED A.ISAAC APPROVED W.SCHWARZ DATE 24.06.2022		PTA Drawing No: 04-S-72-0001 Rev: A01	
A01 24.06.22 ISSUED FOR 15% INTERNAL REFERENCE DESIGN MS GW AI WS DSN DRN CHK APP		AMENDMENT 0 10 20 30 40 50 100mm AT ORIGINAL PLOT SIZE		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.		CONTRACTOR No: LXR-PW-Z0-ST-RW-DWG-00001		VALIDATION SIGNATURE DATE DATE APPROVED		REFERENCES		SCALE DATUM HORIZONTAL: PCG20 VERTICAL: AHD71	

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A01	LXR-PW-Z0-ST-RW-DWG-00002	04-S-72-0002	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - DRAWING INDEX
A01	LXR-PW-Z0-ST-RW-DWG-00003	04-S-72-0003	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - LOCALITY PLAN
A01	LXR-PW-Z0-ST-RW-DWG-00101	04-S-72-0007	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 1
A01	LXR-PW-Z0-ST-RW-DWG-00102	04-S-72-0008	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 2
A01	LXR-PW-Z0-ST-RW-DWG-00103	04-S-72-0009	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 3
A01	LXR-PW-Z0-ST-RW-DWG-00104	04-S-72-0010	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 4
A01	LXR-PW-Z0-ST-RW-DWG-00105	04-S-72-0011	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 5
A01	LXR-PW-Z0-ST-RW-DWG-00106	04-S-72-0012	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 6
A01	LXR-PW-Z0-ST-RW-DWG-00107	04-S-72-0013	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 7
A01	LXR-PW-Z0-ST-RW-DWG-00108	04-S-72-0014	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 8
A01	LXR-PW-Z0-ST-RW-DWG-00109	04-S-72-0015	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL PLAN AND ELEVATION - SHEET 9
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A01	LXR-PW-Z0-ST-RW-DWG-00166	04-S-72-0057	PROJECT WIDE - ABUTMENTS & RETAINING WALLS - RETAINING WALL CONCRETE DETAILS - SHEET 6

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ZONE 0 - CIVIL STRUCTURES PROJECT WIDE - ABUTMENTS & RETAINING WALLS DRAWING INDEX	
PTA Drawing No: 04-S-72-0002	Rev: A01

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DATE APPROVED

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HORIZONTAL: PCG20
VERTICAL: AHD71

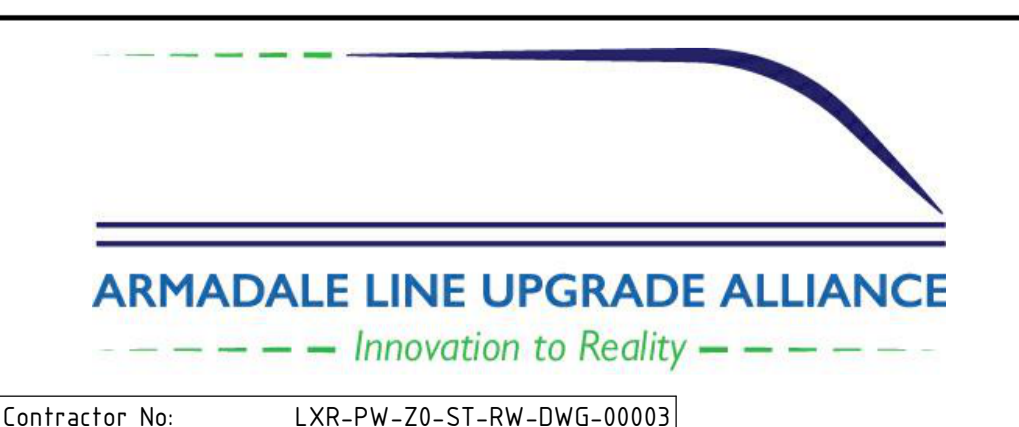
DESIGNED	M.SOOI
DRAWN	G.WIN
CHECKED	A.ISAAC
APPROVED	W.SCHWARZ
DATE	24.06.2022



LOCALITY PLAN
SCALE 1 : 5000

- LEGEND:**
- VIADUCT / PSP BRIDGE
 - EMBANKMENT
 - STATION
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY

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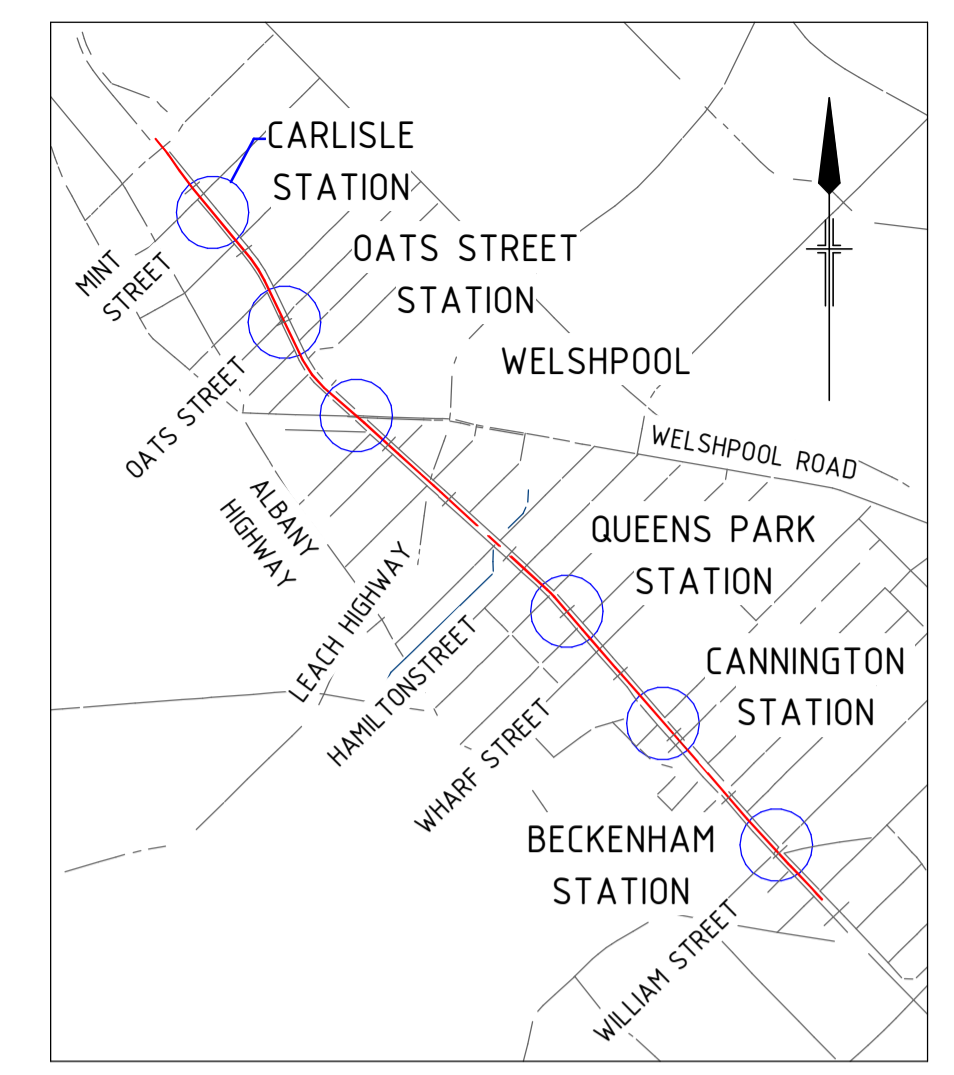
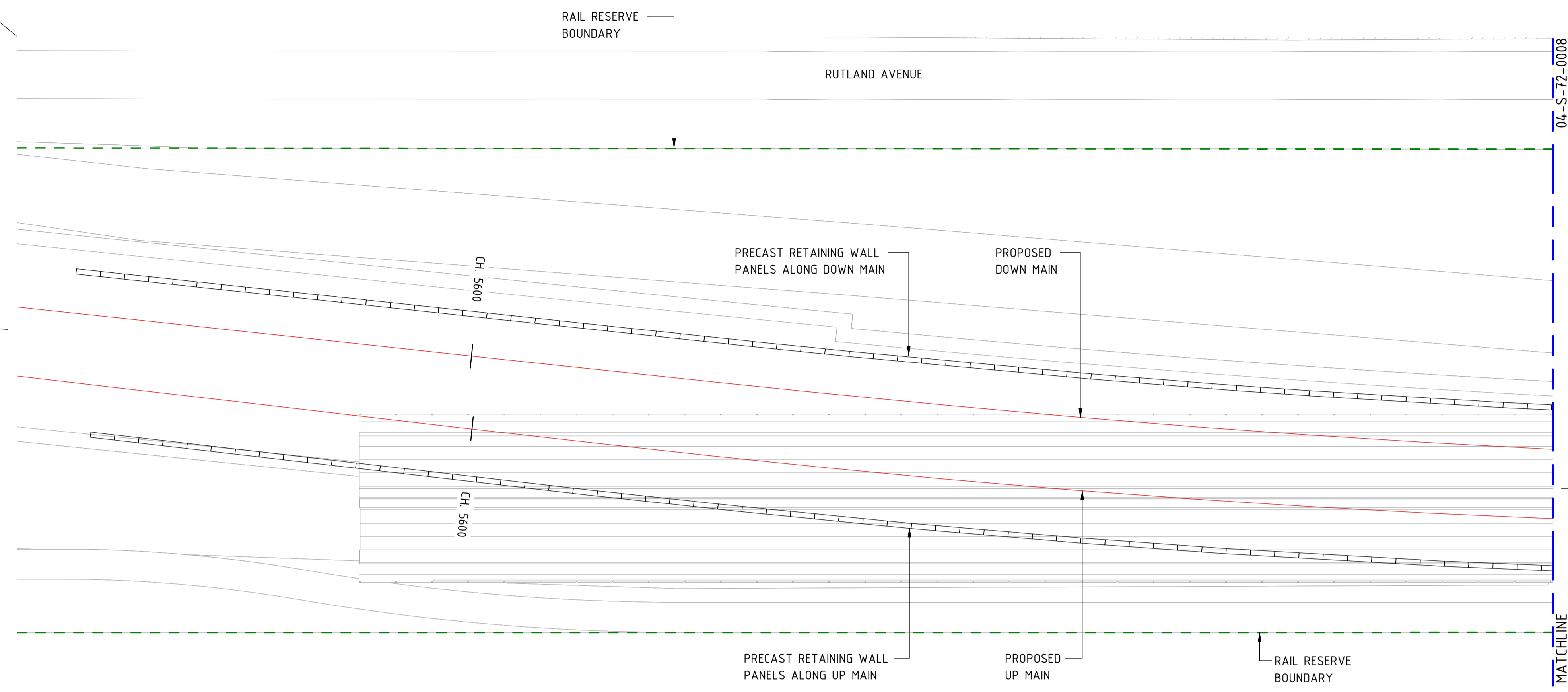
DESIGNED M.SOOI
DRAWN G.WIN
CHECKED A.ISAAC
APPROVED W.SCHWARZ
DATE 24.06.2022

REFERENCE DESIGN

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
LOCALITY PLAN
PTA Drawing No: **04-S-72-0003** Rev: **A01**

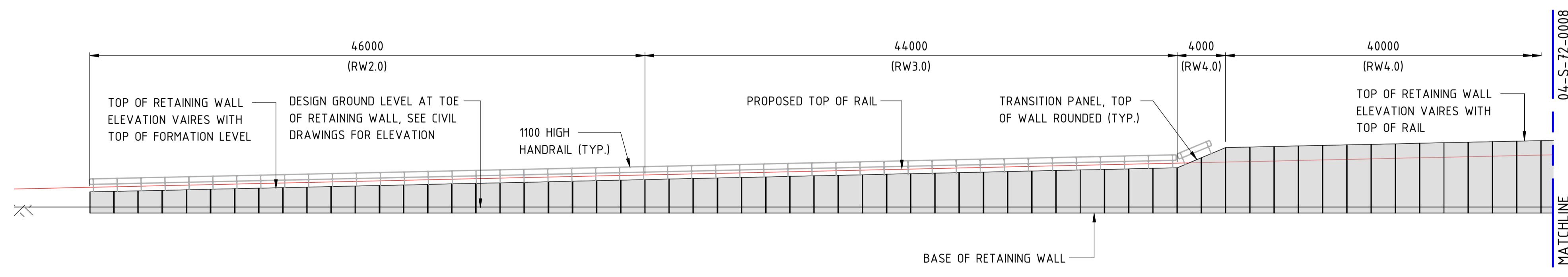


LOCALITY PLAN

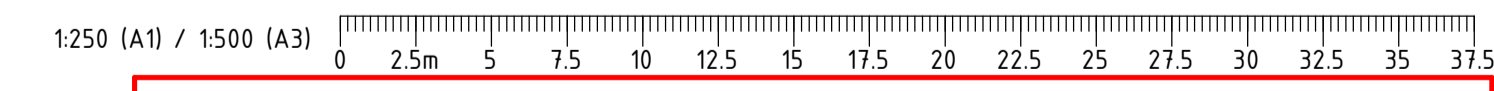
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1. NOISE WALL NOT SHOWN
 2. RIGID INCLUSION NOT SHOWN
 3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
 4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

- LEGEND:
- RETAINING WALL
 - VIADUCT / PSP BRIDGE
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY

RETAINING WALL PLAN - MINT STREET TO OATS STREET
SCALE 1 : 250



RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (UP MAIN)
SCALE 1 : 250



REFERENCE DESIGN

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 1
PTA Drawing No: 04-S-72-0007 Rev: A01

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REFERENCES

SCALE

As indicated

DATUM

HORIZONTAL: PCG20

VERTICAL: AHD71

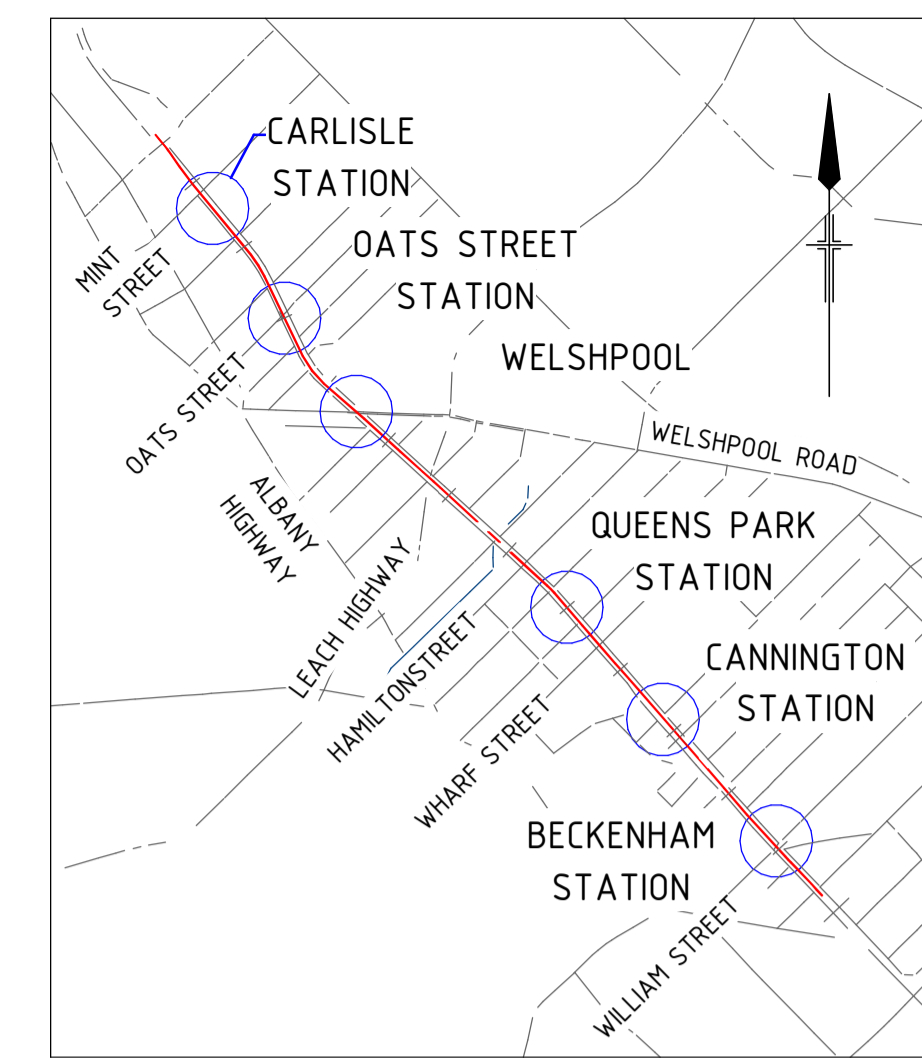
DESIGNED M.SOOI

DRAWN G.WIN

CHECKED A.ISAAC

APPROVED W.SCHWARZ

DATE 24.06.2022



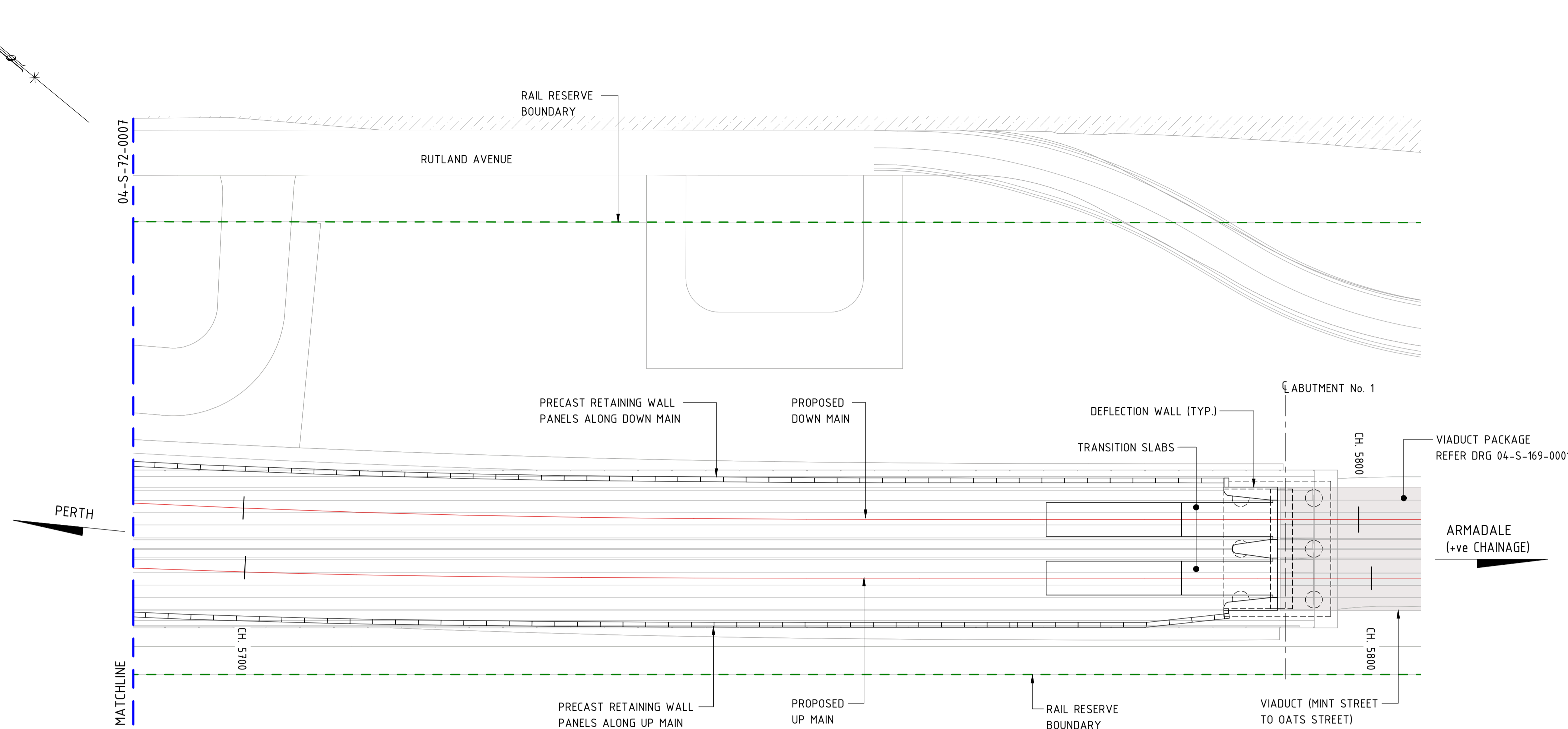
LOCALITY PLAN

NOTES:

1. NOISE WALL NOT SHOWN
2. RIGID INCLUSION NOT SHOWN
3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

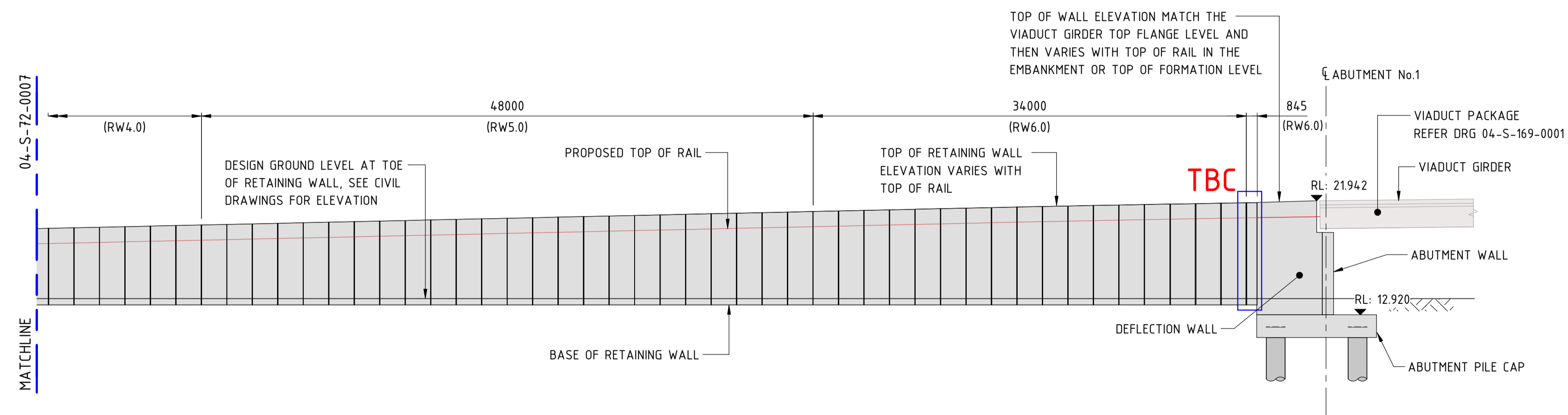
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- VIADUCT / PSP BRIDGE
- RAIL ALIGNMENT
- RAIL RESERVE BOUNDARY



RETAINING WALL PLAN - MINT STREET TO OATS STREET

SCALE 1 : 250



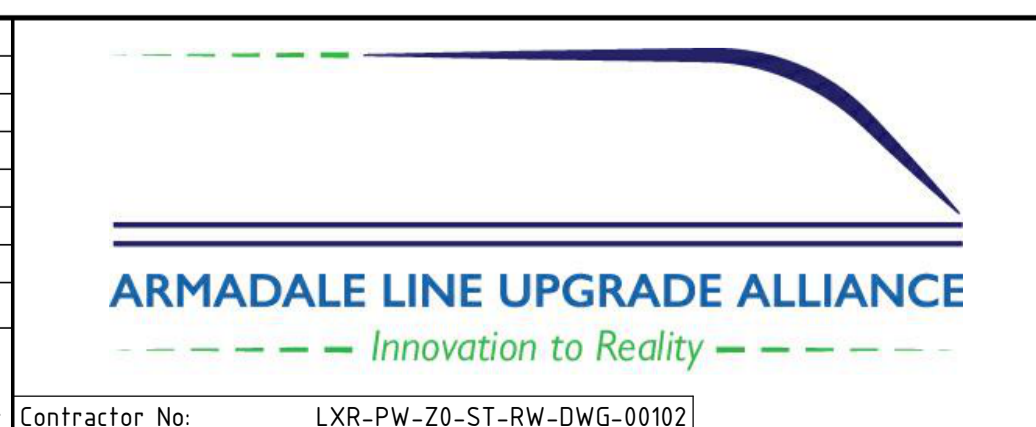
RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (UP MAIN)

SCALE 1 : 250



REFERENCE DESIGN

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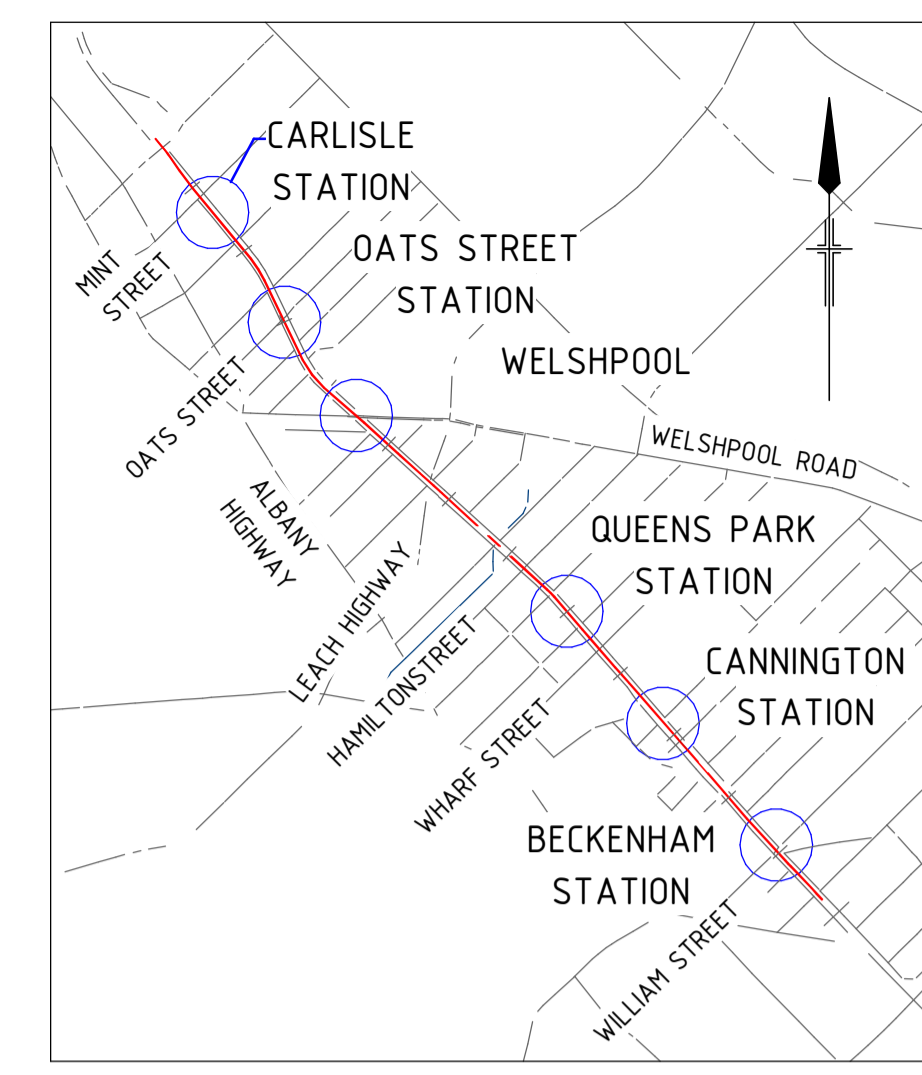
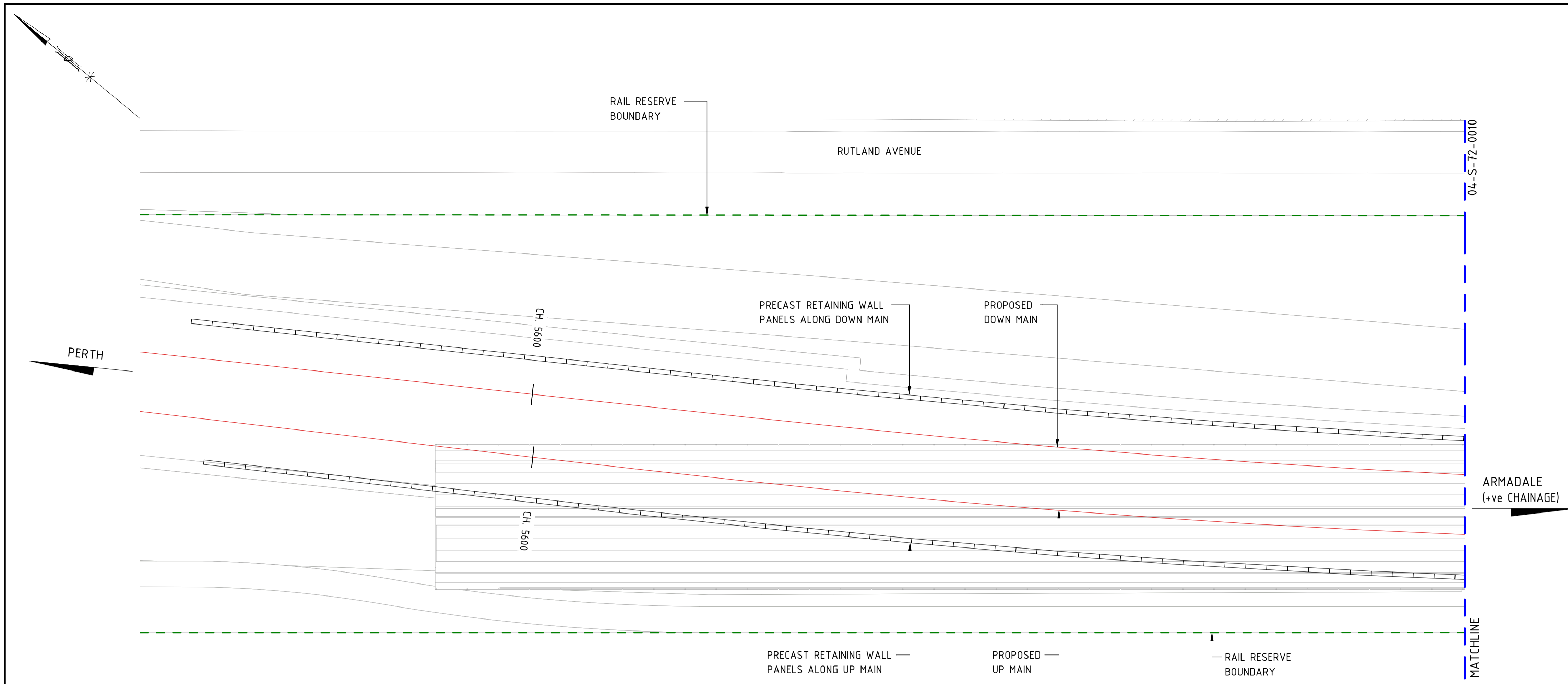
SCALE
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DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

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DRAWN G.WIN
CHECKED A.ISAAC
APPROVED W.SCHWARZ
DATE 24.06.2022

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 2
PTA Drawing No: 04-S-72-0008 Rev: A01

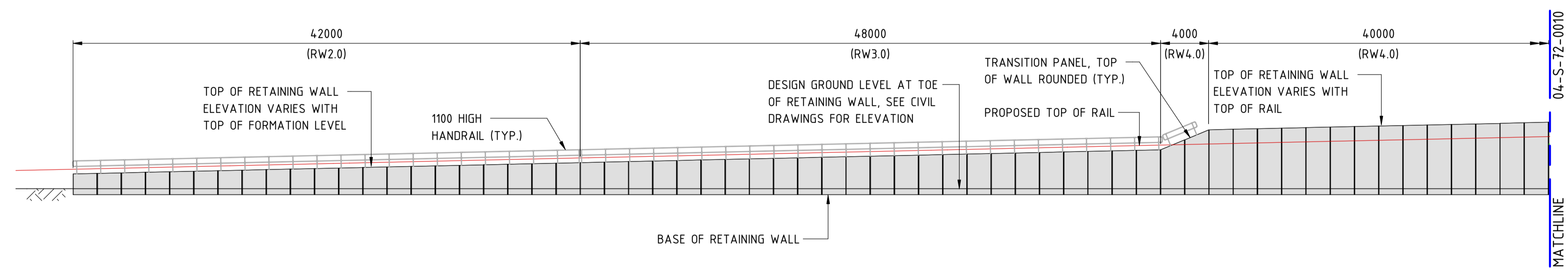


LOCALITY PLAN

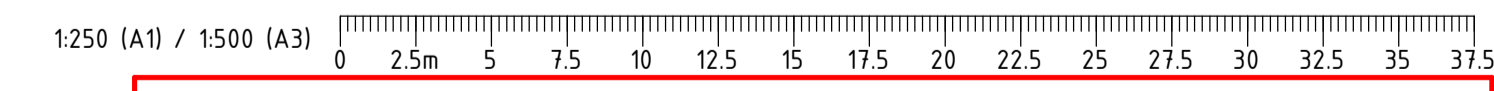
- NOTES:
1. NOISE WALL NOT SHOWN
 2. RIGID INCLUSION NOT SHOWN
 3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
 4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

- LEGEND:
- RETAINING WALL
 - VIADUCT / PSP BRIDGE
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY

RETAINING WALL PLAN - MINT STREET TO OATS STREET
SCALE 1 : 250



RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (DOWN MAIN)
SCALE 1 : 250



REFERENCE DESIGN

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 3
PTA Drawing No: 04-S-72-0009 | Rev: A01

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Contractor No: LXR-PW-Z0-ST-RW-DWG-00103

VALIDATION

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DATUM

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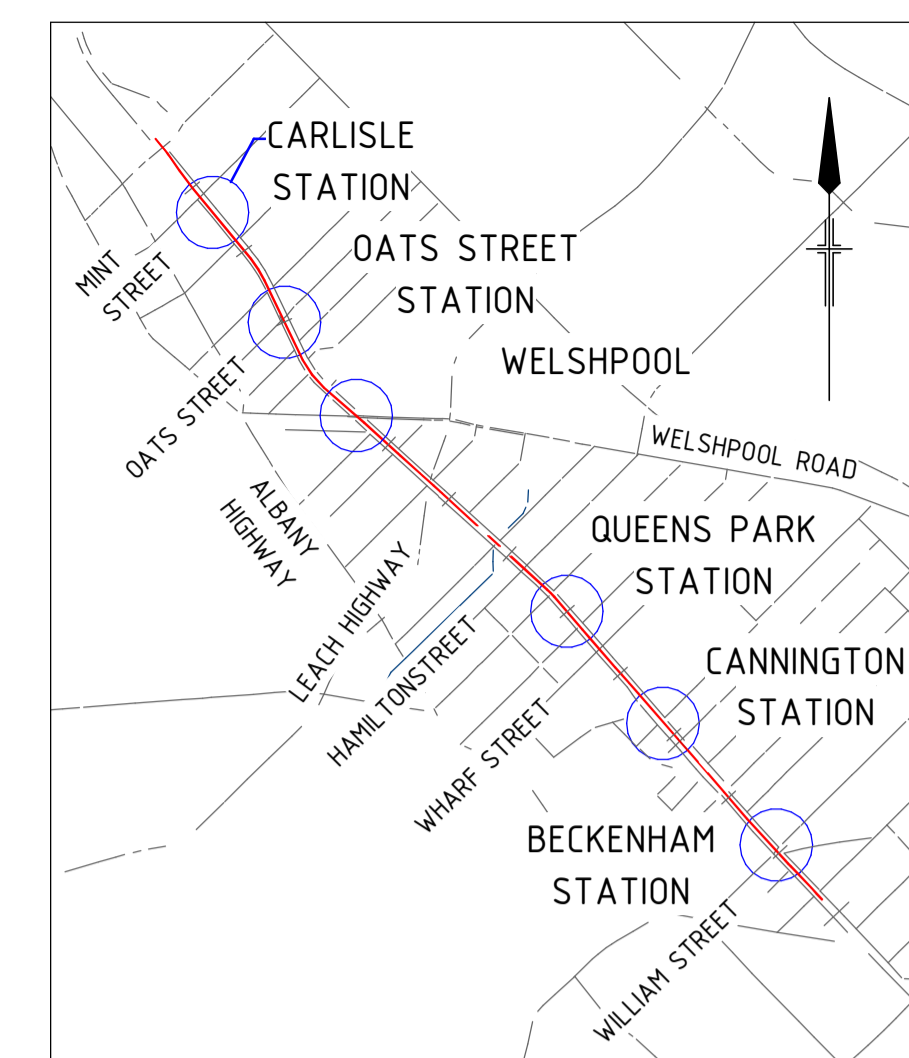
DESIGNED M.SOOI

DRAWN G.WIN

CHECKED A.ISAAC

APPROVED W.SCHWARZ

DATE 24.06.2022



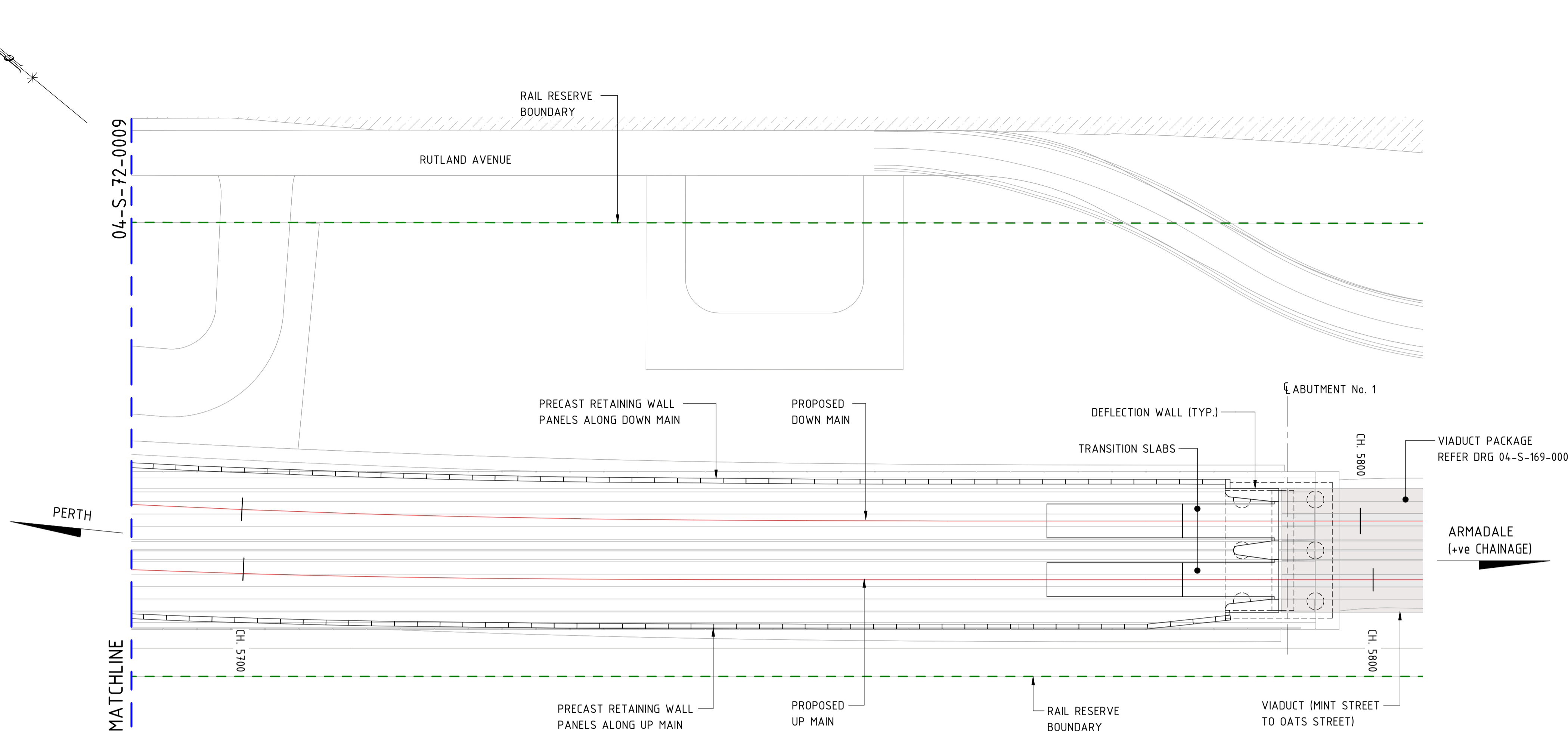
LOCALITY PLAN

NOTES:

1. NOISE WALL NOT SHOWN
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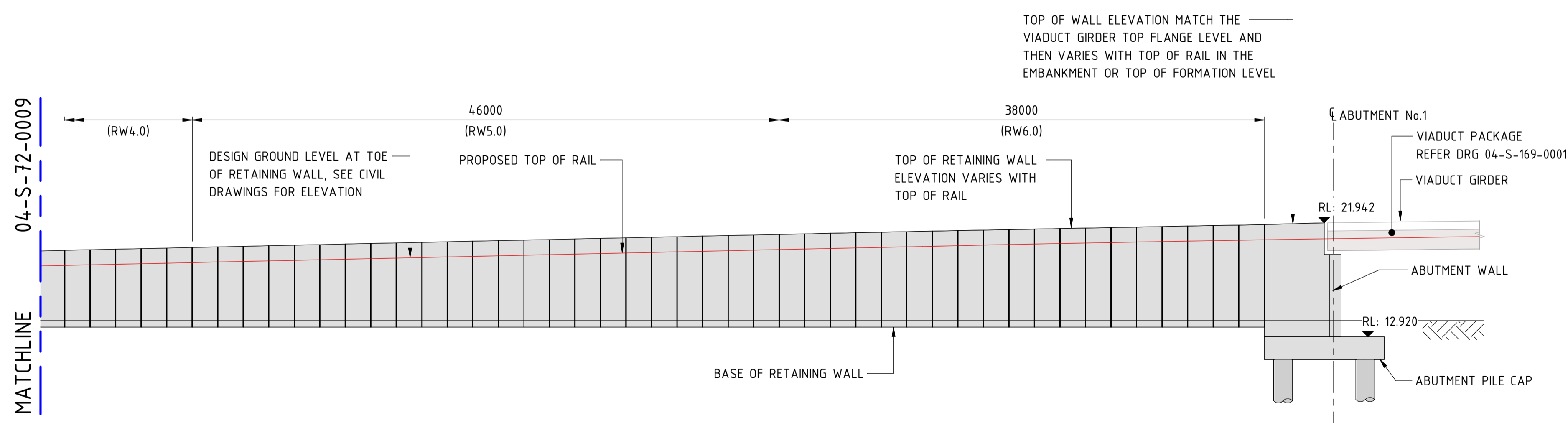
LEGEND:

- RETAINING WALL
- VIADUCT / PSP BRIDGE
- RAIL ALIGNMENT
- RAIL RESERVE BOUNDARY



RETAINING WALL PLAN - MINT STREET TO OATS STREET

SCALE 1 : 250



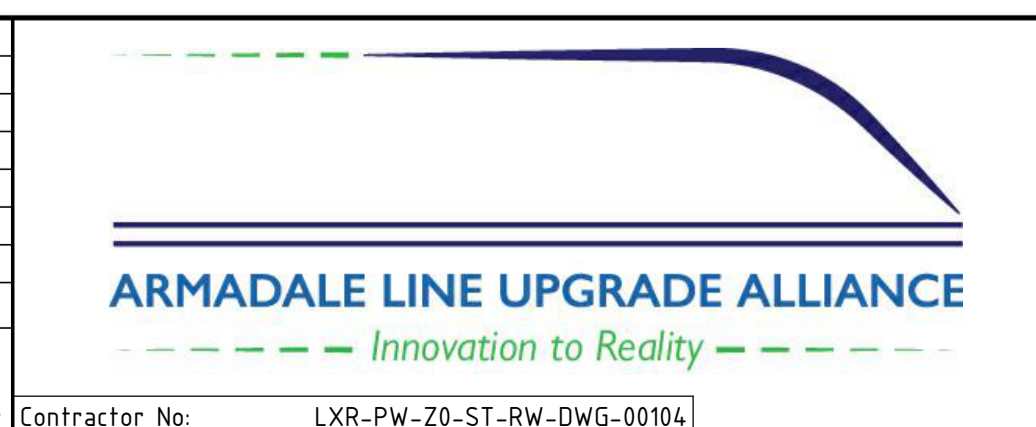
RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (DOWN MAIN)

SCALE 1 : 250



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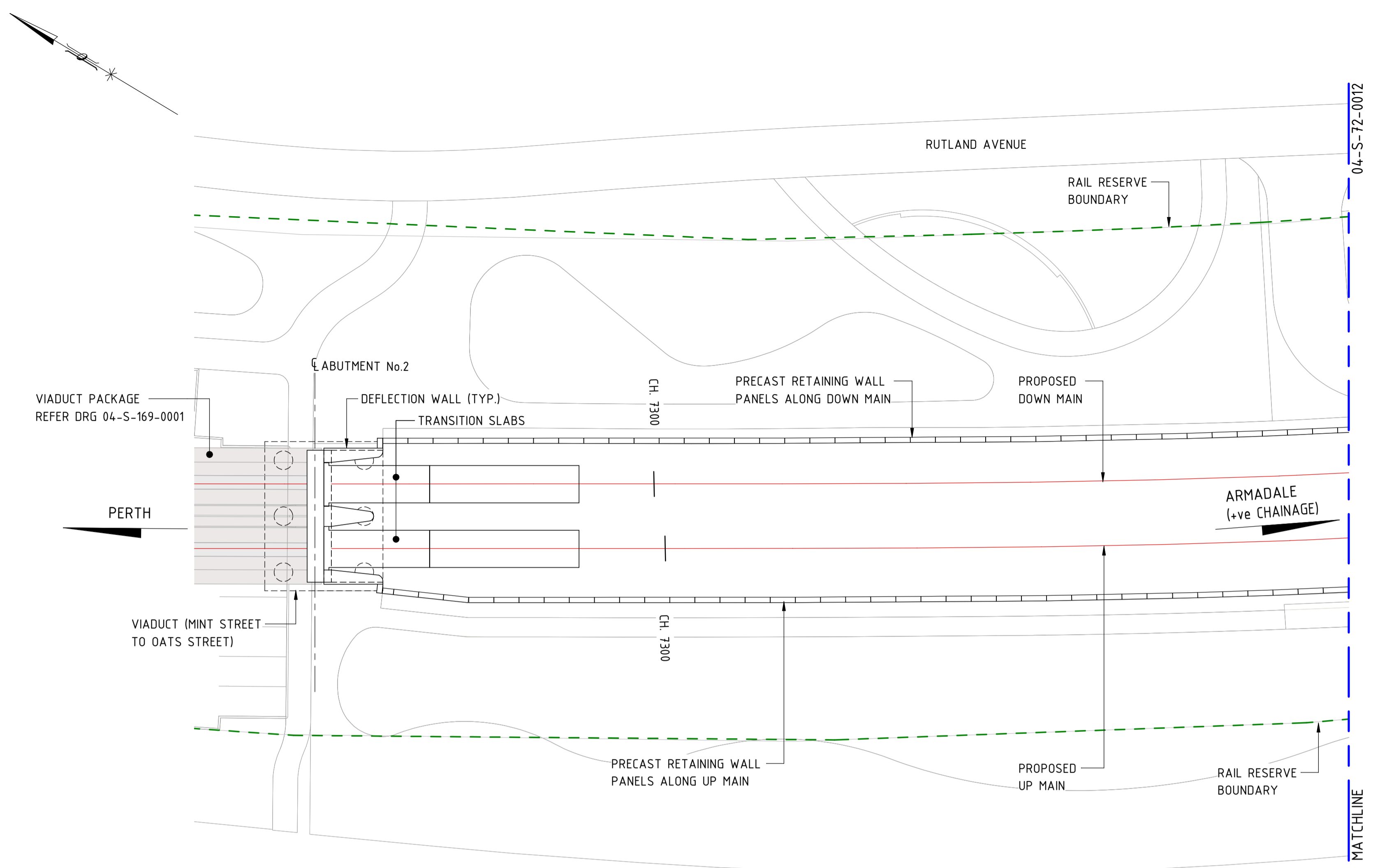
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DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

DESIGNED M.SOOI
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DATE 24.06.2022

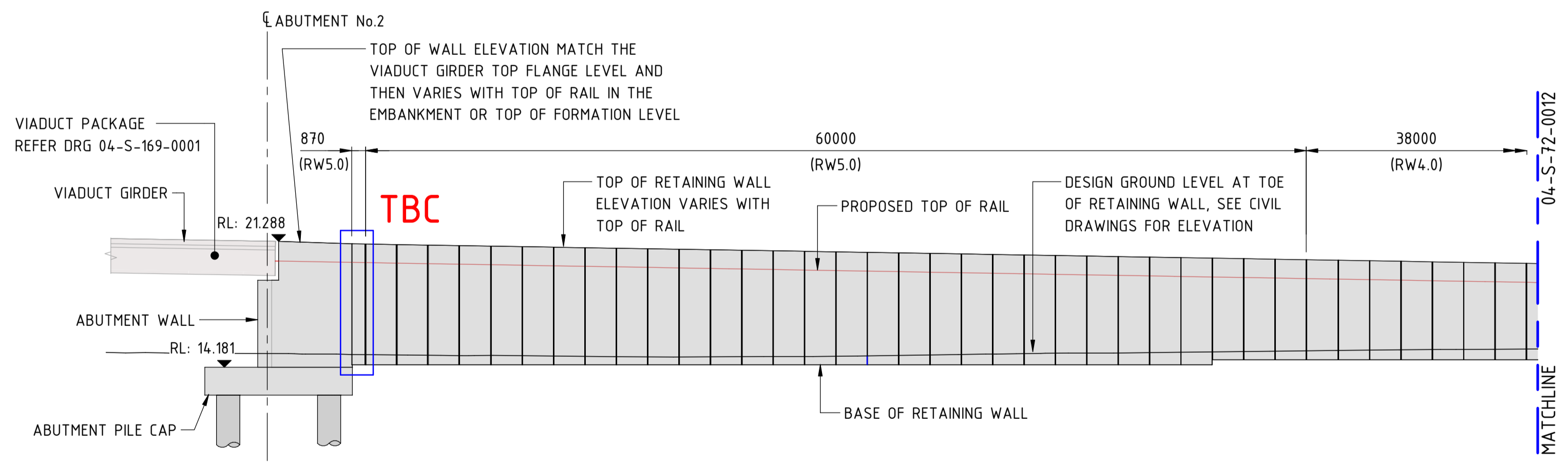
Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

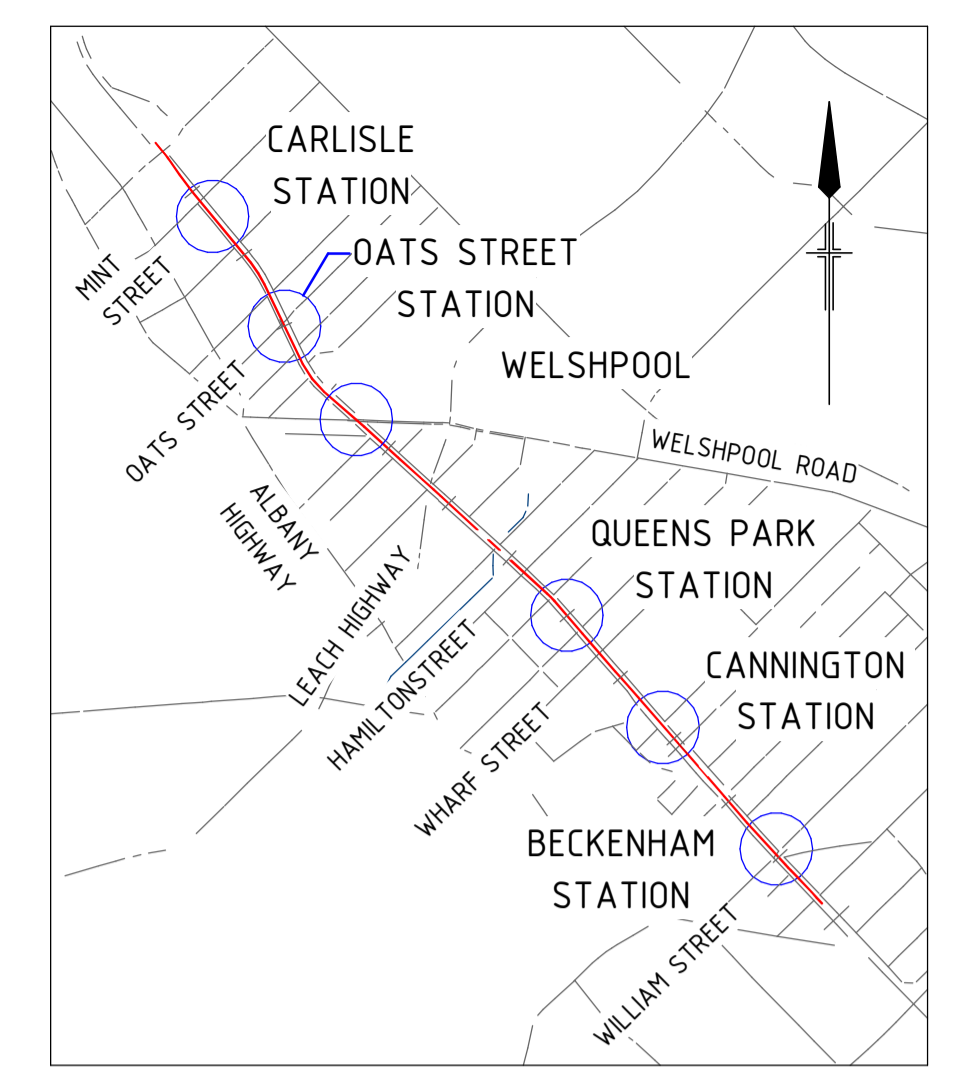
ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 4
PTA Drawing No: 04-S-72-0010 | Rev: A01



RETAINING WALL PLAN - MINT STREET TO OATS STREET
SCALE 1 : 250



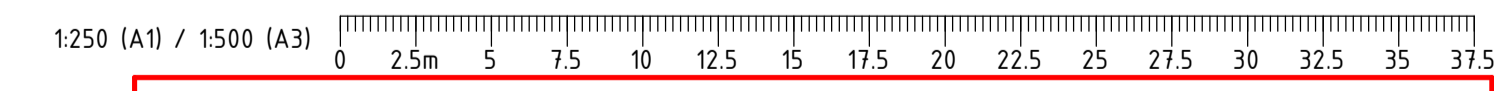
RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (UP MAIN)
SCALE 1 : 250



LOCALITY PLAN

- NOTES:**
1. NOISE WALL NOT SHOWN
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 3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
 4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

- LEGEND:**
- RETAINING WALL
 - VIADUCT / PSP BRIDGE
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY



REFERENCE DESIGN

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Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 5
PTA Drawing No: **04-S-72-0011** | Rev: **A01**

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ORIG SIZE: A1

Scale: 0 10 20 30 40 50 100mm

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REFERENCES

SCALE

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DATUM

HORIZONTAL: PCG20

VERTICAL: AHD71

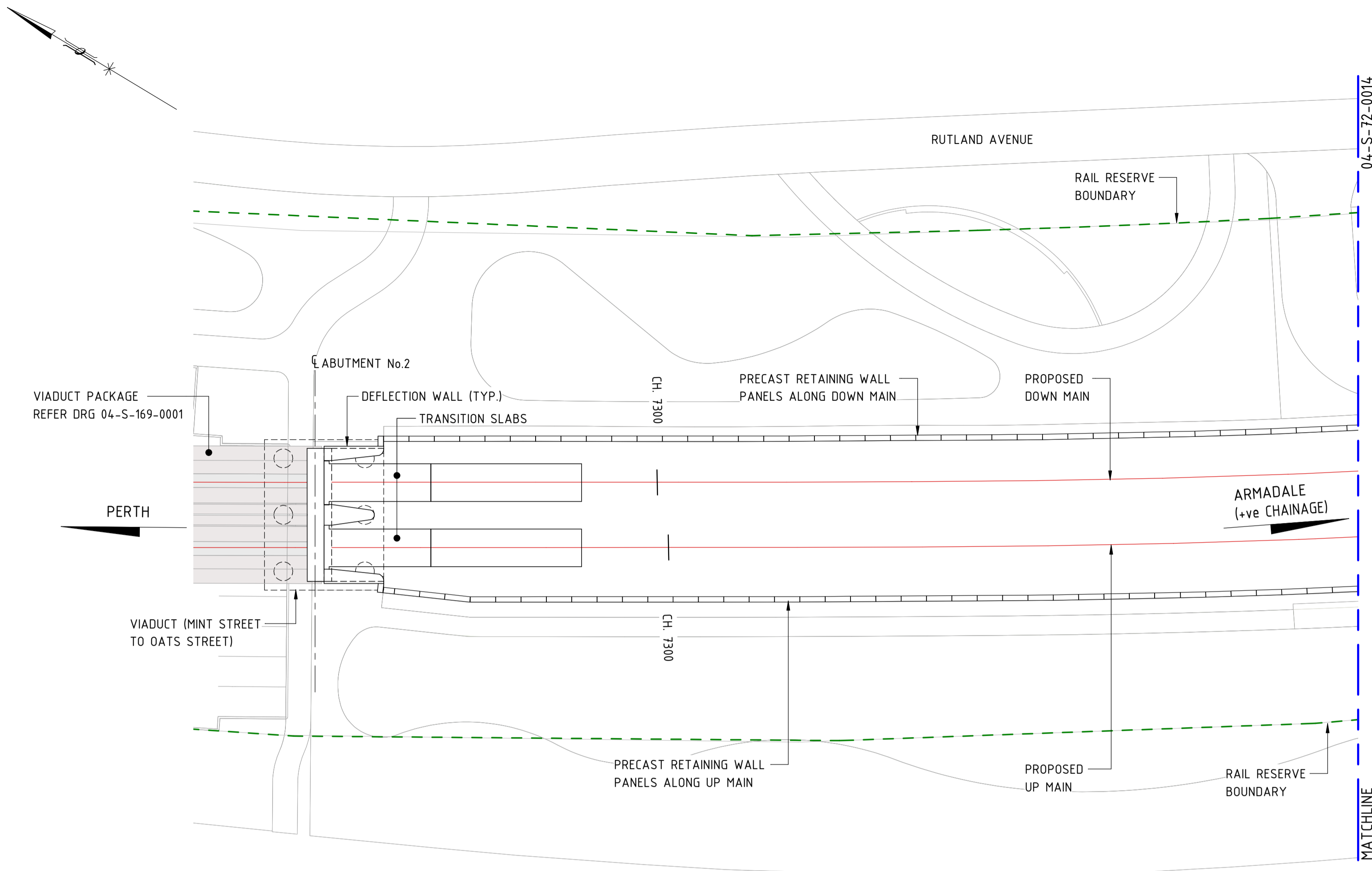
DESIGNED: M.SOOI

DRAWN: G.WIN

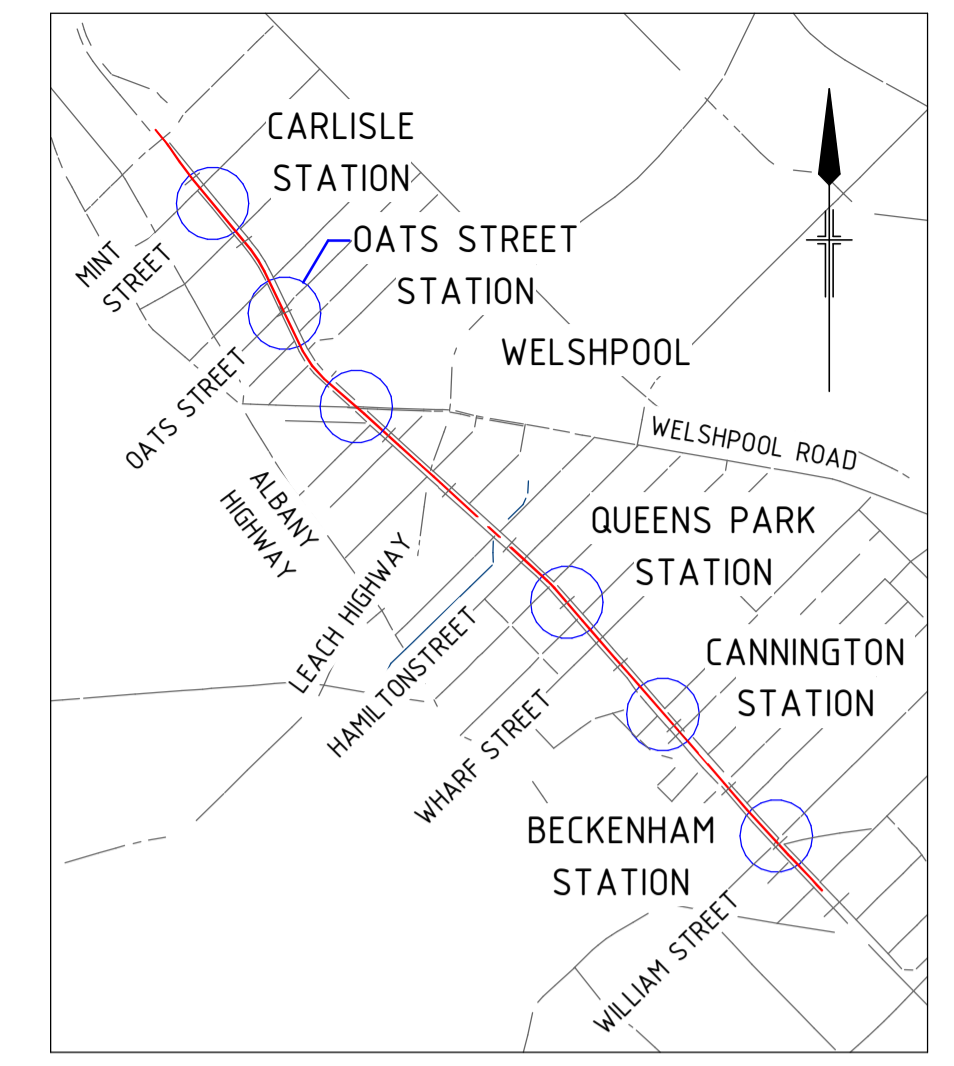
CHECKED: A.ISAAC

APPROVED: W.SCHWARZ

DATE: 24.06.2022



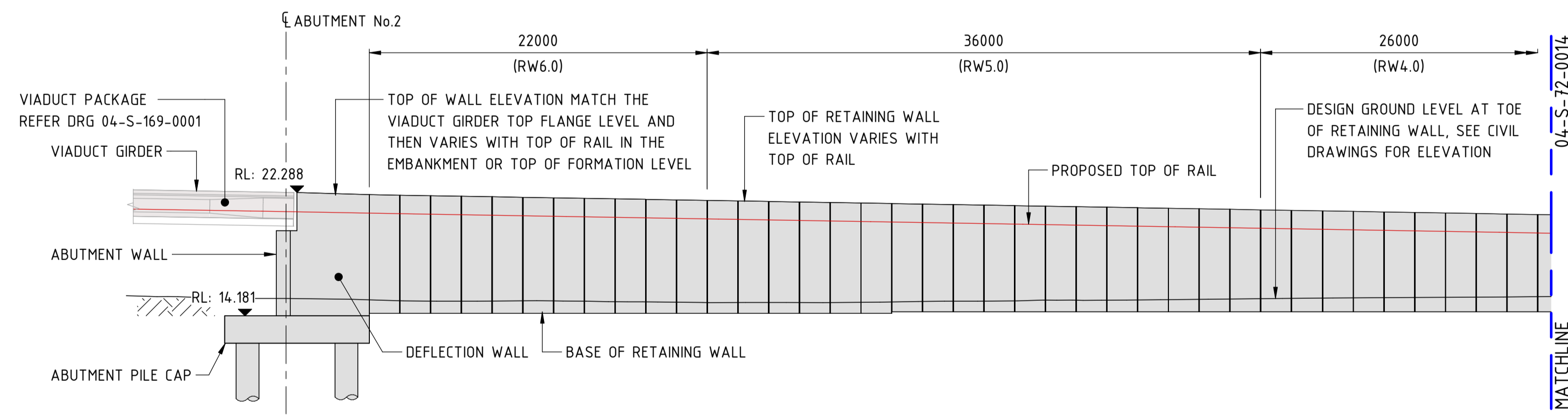
RETAINING WALL PLAN - MINT STREET TO OATS STREET
SCALE 1 : 250



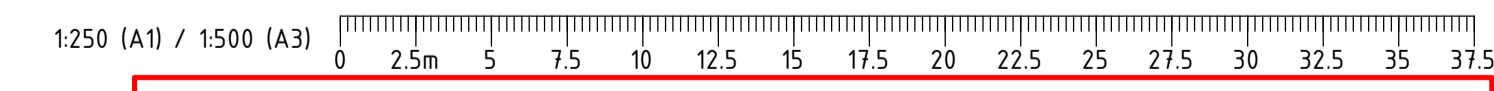
LOCALITY PLAN

- NOTES:**
1. NOISE WALL NOT SHOWN
 2. RIGID INCLUSION NOT SHOWN
 3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
 4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

- LEGEND:**
- RETAINING WALL
 - VIADUCT / PSP BRIDGE
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY



RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (DOWN MAIN)
SCALE 1 : 250



REFERENCE DESIGN

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL PLAN AND ELEVATION - SHEET 7
PTA Drawing No: **04-S-72-0013** | Rev: **A01**

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN	MS	GW	AI	WS
AT ORIGINAL PLOT SIZE						

ARMADALE LINE UPGRADE ALLIANCE
Innovation to Reality

Contractor No: LXR-PW-Z0-ST-RW-DWG-00107

VALIDATION

SIGNATURE

DATE

DATE APPROVED

REFERENCES

SCALE

As indicated

DATUM

HORIZONTAL: PCG20

VERTICAL: AHD71

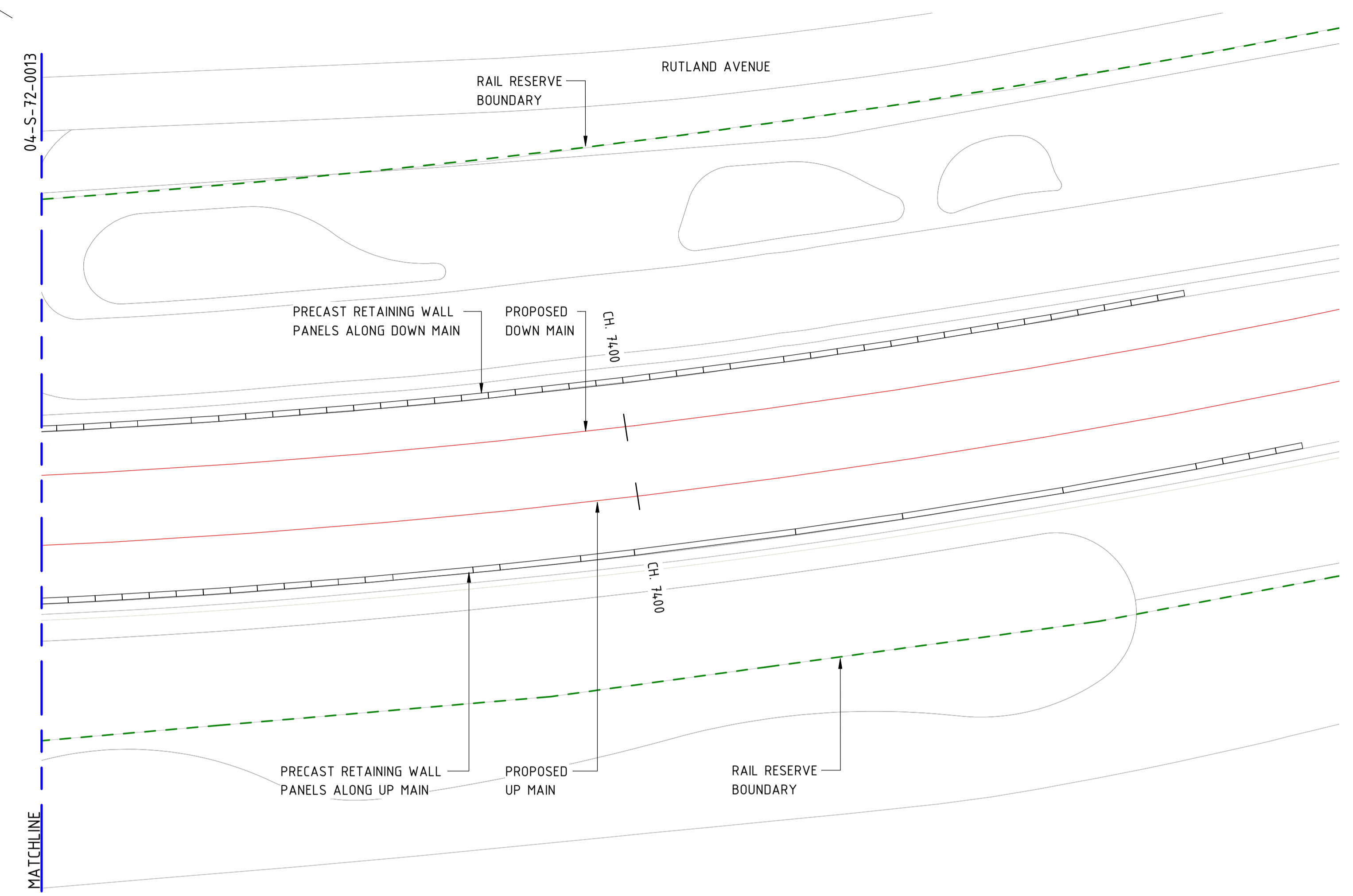
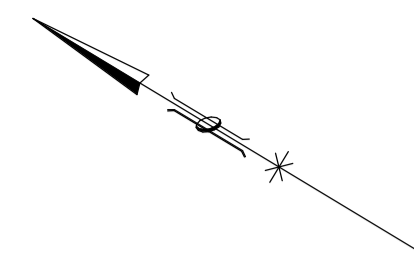
DESIGNED M.SOOI

DRAWN G.WIN

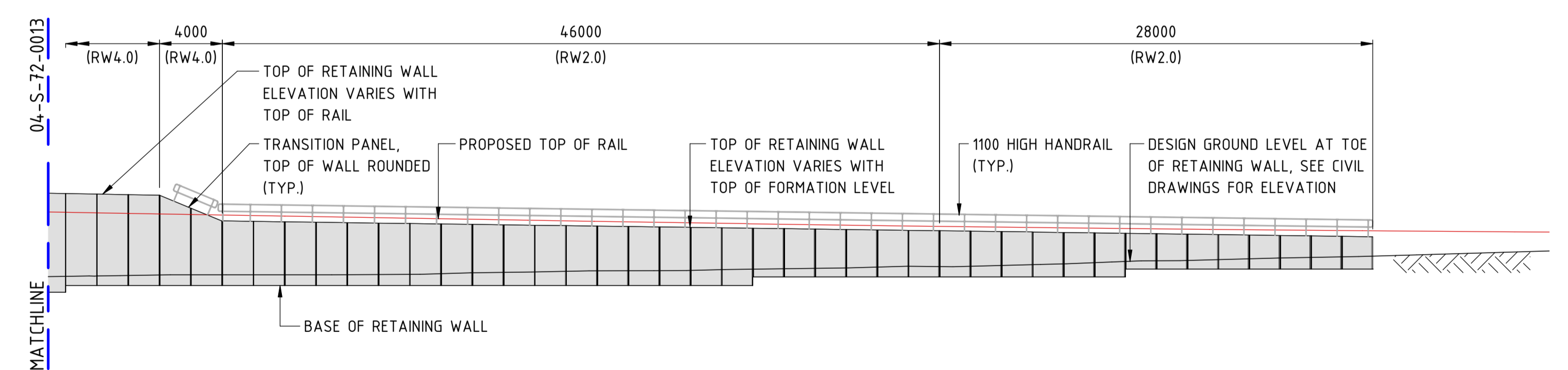
CHECKED A.ISAAC

APPROVED W.SCHWARZ

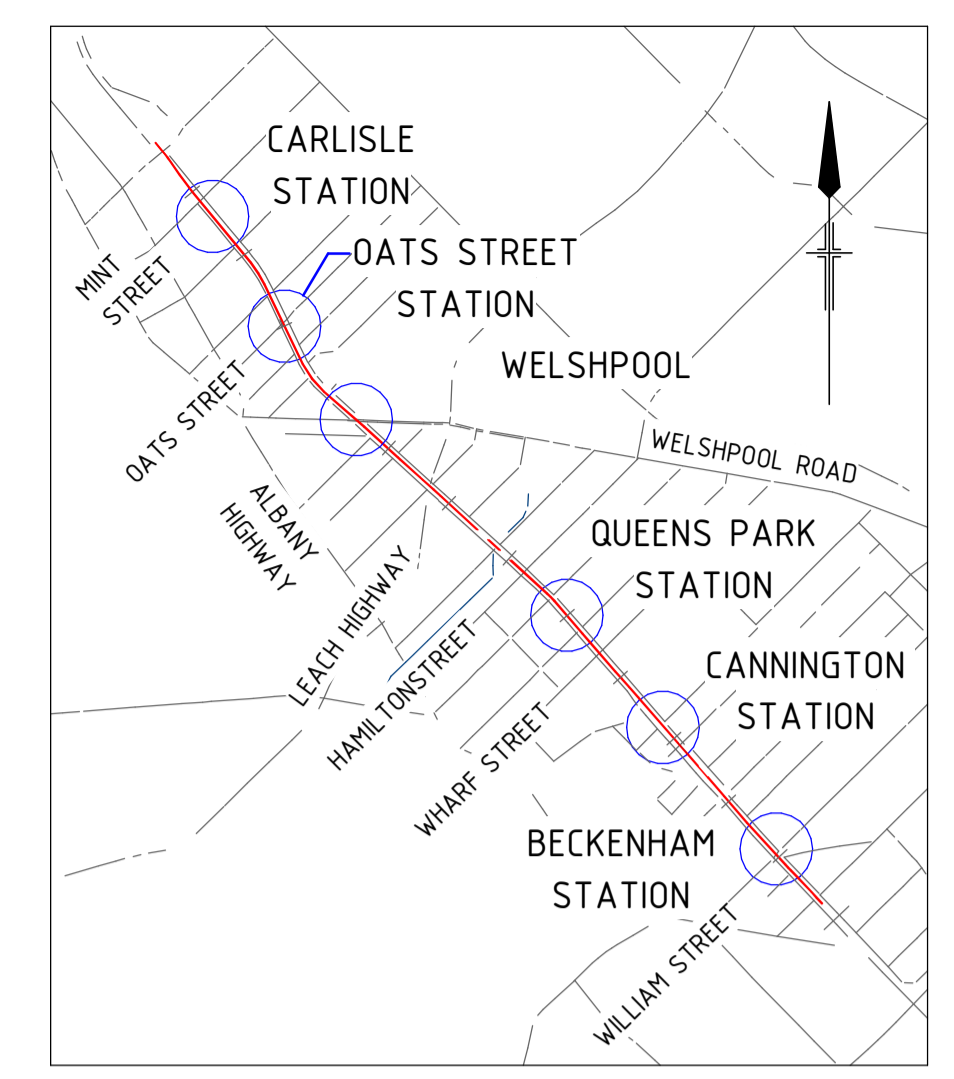
DATE 24.06.2022



RETAINING WALL PLAN - MINT STREET TO OATS STREET
SCALE 1 : 250



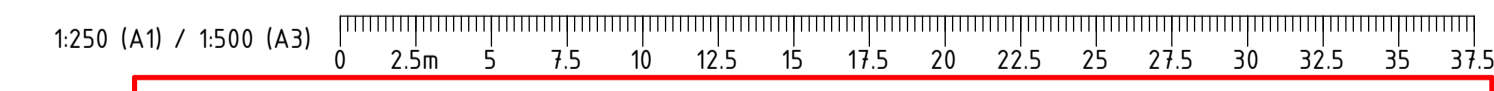
RETAINING WALL ELEVATION - MINT STREET TO OATS STREET (DOWN MAIN)
SCALE 1 : 250



LOCALITY PLAN

- NOTES:**
1. NOISE WALL NOT SHOWN
 2. RIGID INCLUSION NOT SHOWN
 3. WALL FLARE OUT FOR SIGNAL ZONE NOT SHOWN
 4. TOP OF WALL ELEVATIONS SHALL BE DETERMINED FROM THE TOP OF RAIL ELEVATION

- LEGEND:**
- RETAINING WALL
 - VIADUCT / PSP BRIDGE
 - RAIL ALIGNMENT
 - RAIL RESERVE BOUNDARY



REFERENCE DESIGN

		VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL	
ZONE 0 - CIVIL STRUCTURES			
PROJECT WIDE - ABUTMENTS & RETAINING WALLS			
RETAINING WALL PLAN AND ELEVATION - SHEET 8			
PTA Drawing No: 04-S-72-0014			Rev: A01

REV	DATE	AMENDMENT	MS	GW	AI	WS
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DSN	DRN	CHK	APP			
ORIG SIZE	AT ORIGINAL PLOT SIZE					
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Contractor No: LXR-PW-Z0-ST-RW-DWG-00108

VALIDATION

SIGNATURE

DATE

DATE APPROVED

REFERENCES

SCALE

As indicated

DATUM

HORIZONTAL: PCG20

VERTICAL: AHD71

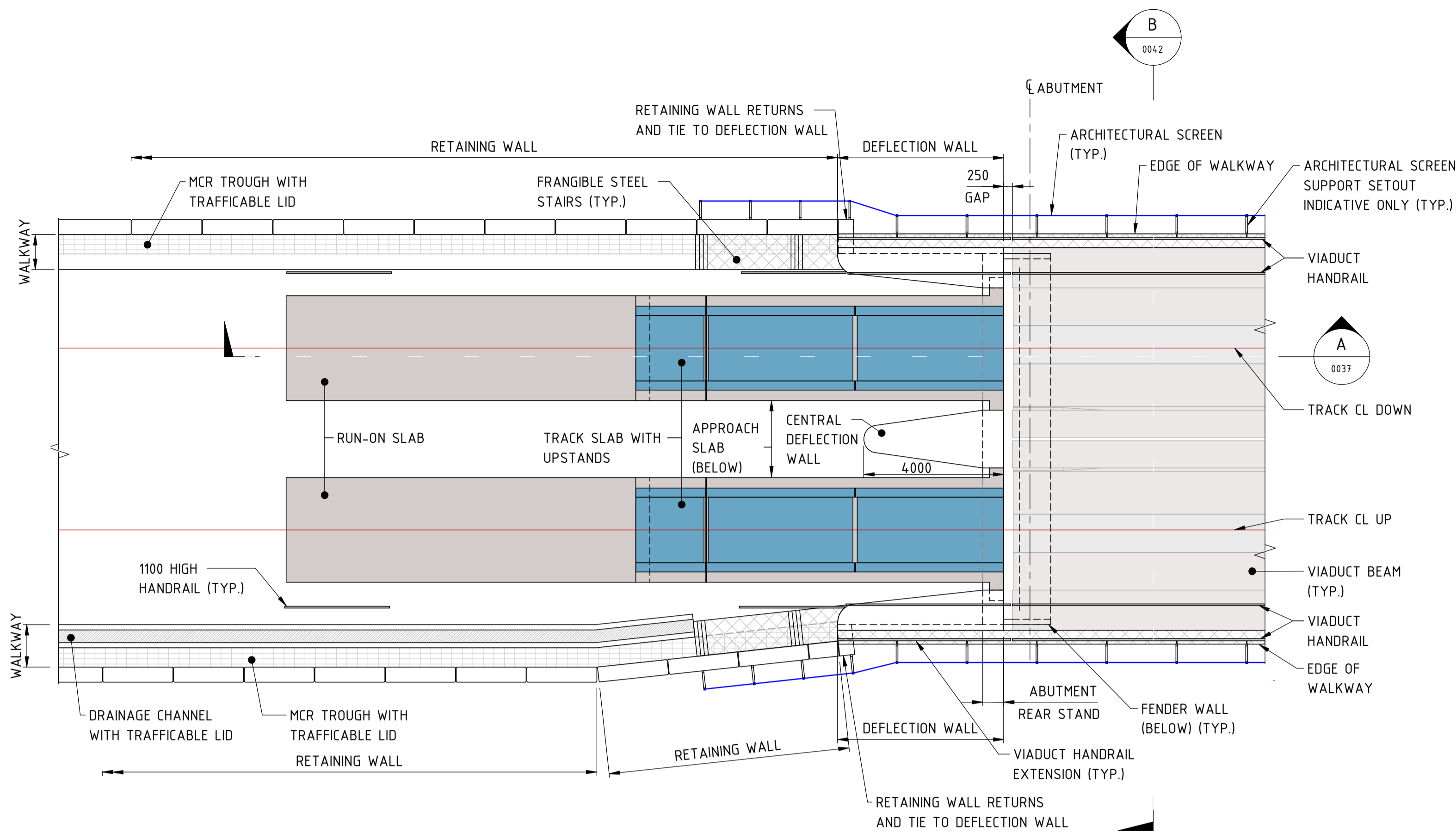
DESIGNED M.SOOI

DRAWN G.WIN

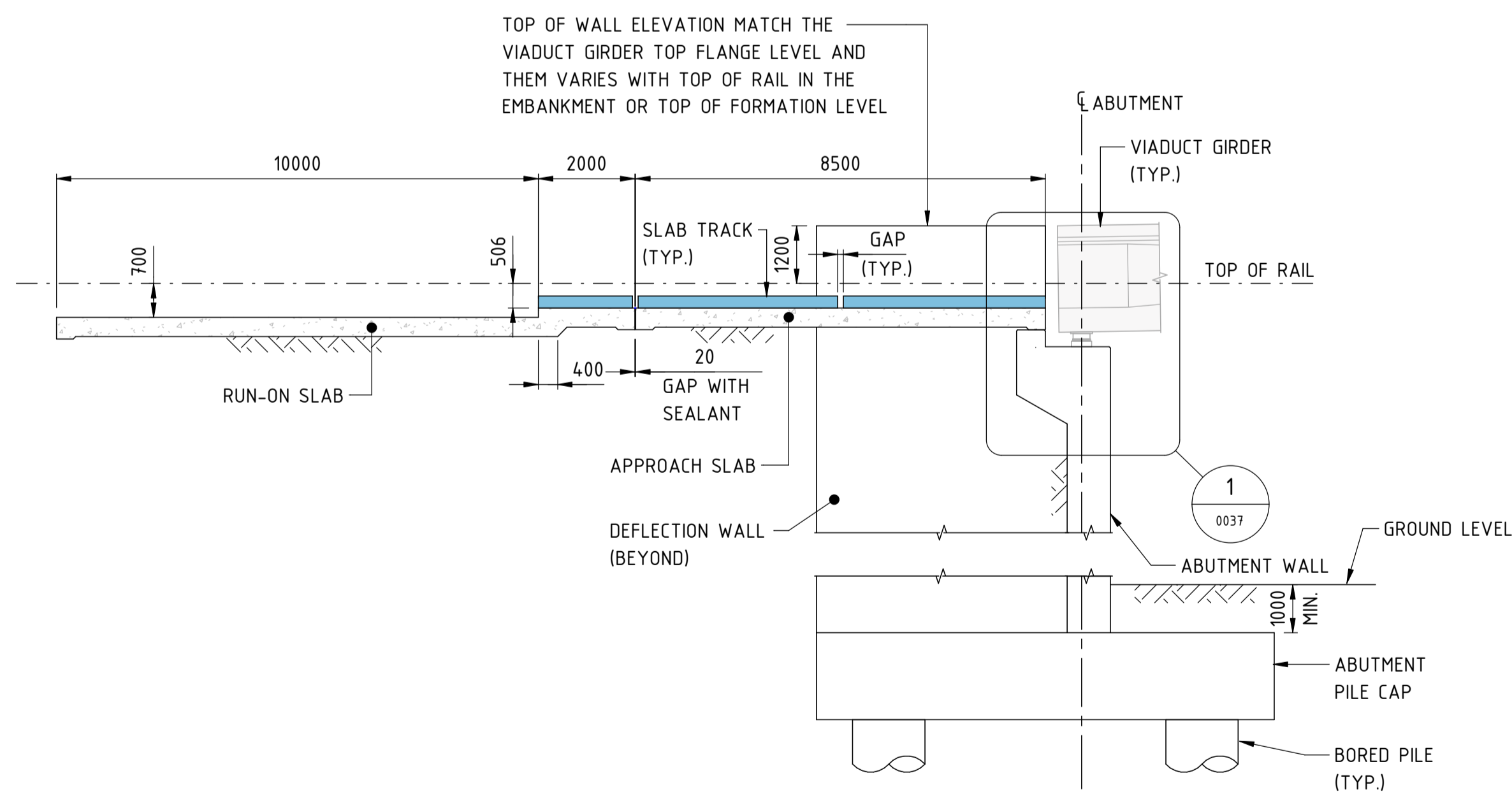
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APPROVED W.SCHWARZ

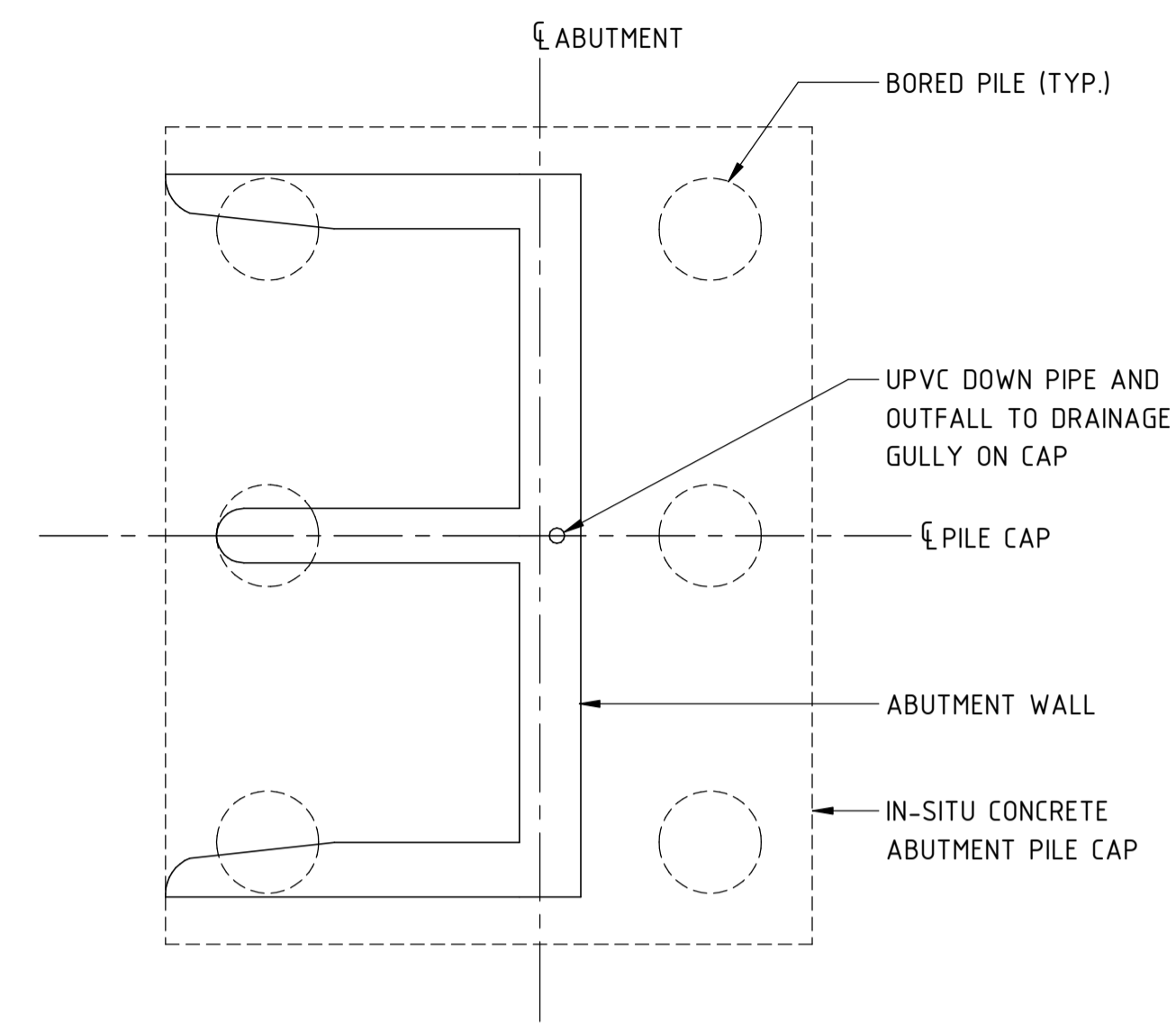
DATE 24.06.2022



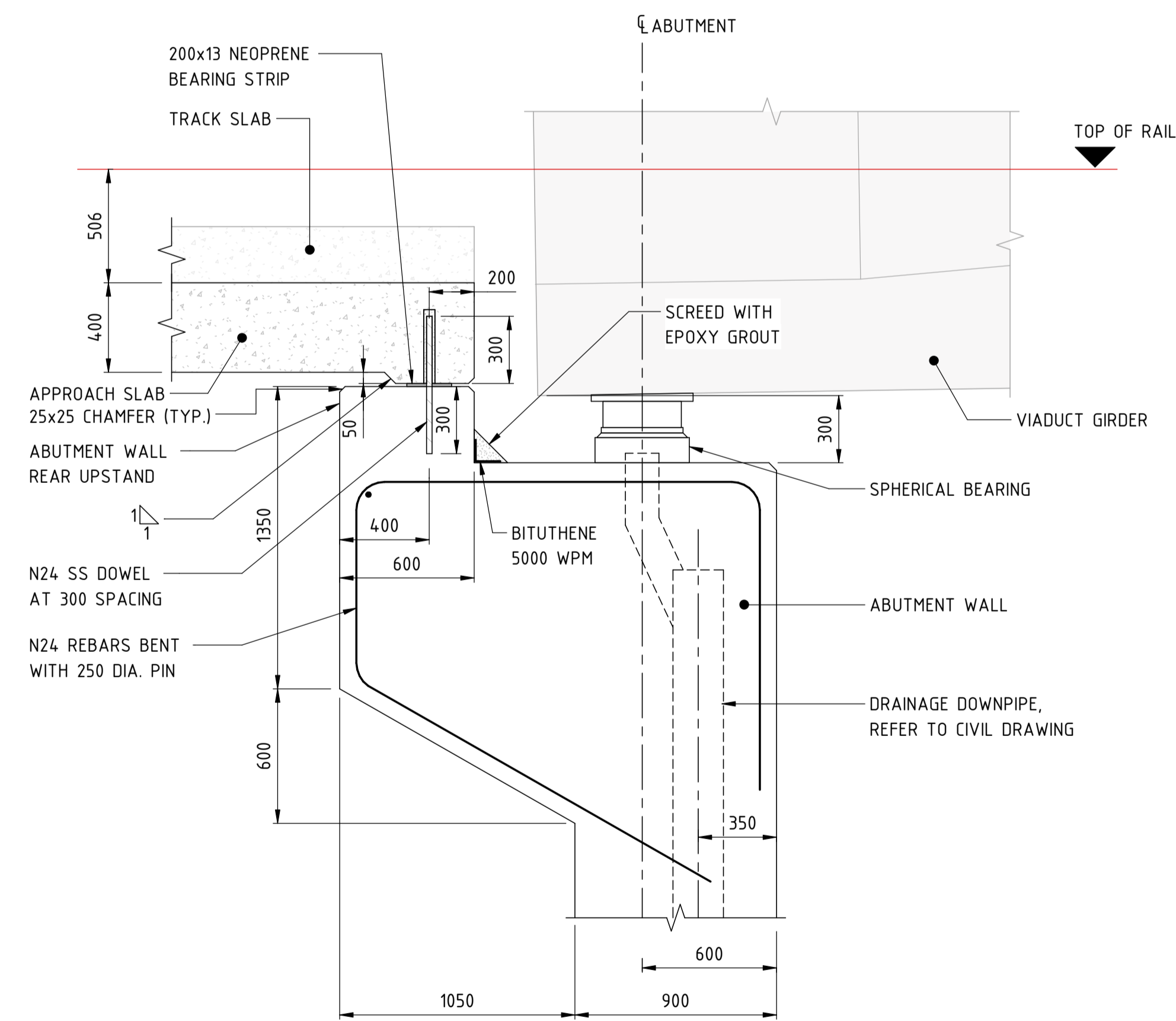
TYPICAL PLAN - DEFLECTION WALL TO RETAINING WALL TRANSITION
SCALE 1 : 100



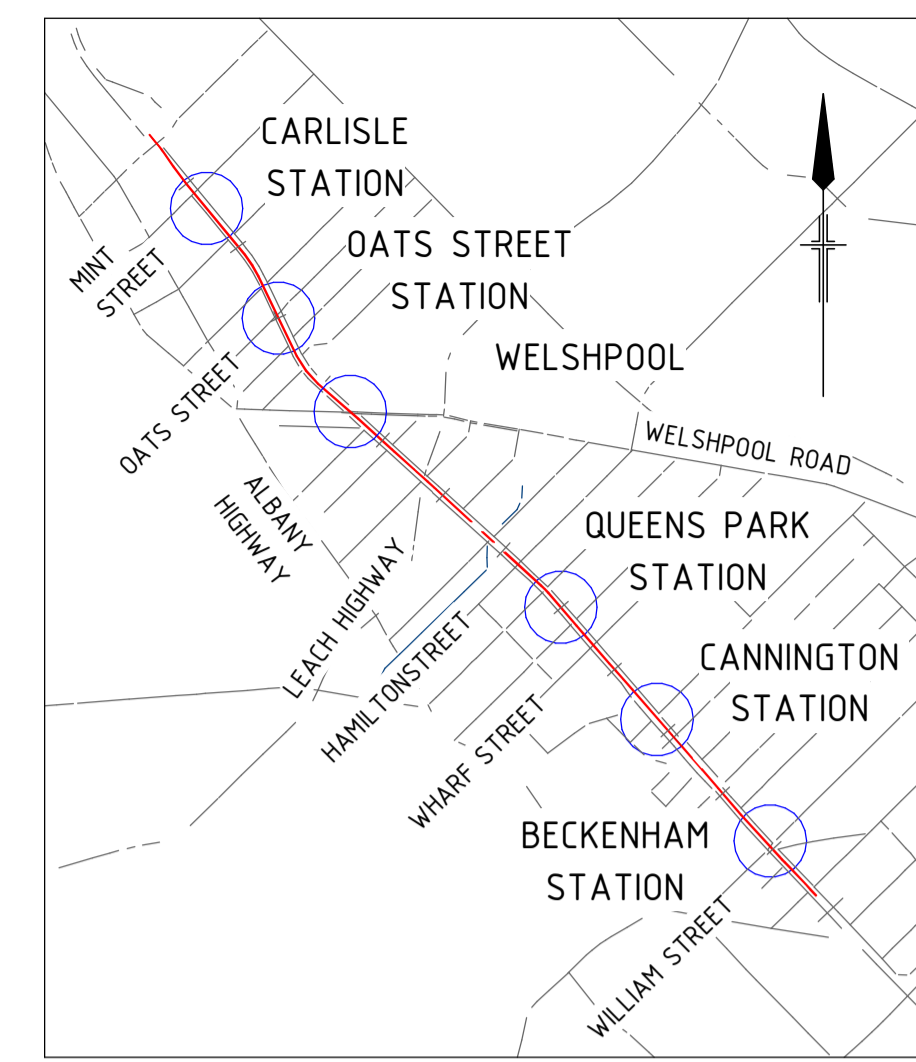
SECTION A
SCALE 1 : 100



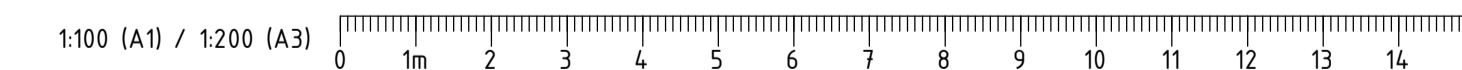
TYPICAL PLAN - ABUTMENT PILECAP
SCALE 1 : 100



TYPICAL VIADUCT ABUTMENT
DETAIL 1
SCALE 1 : 20

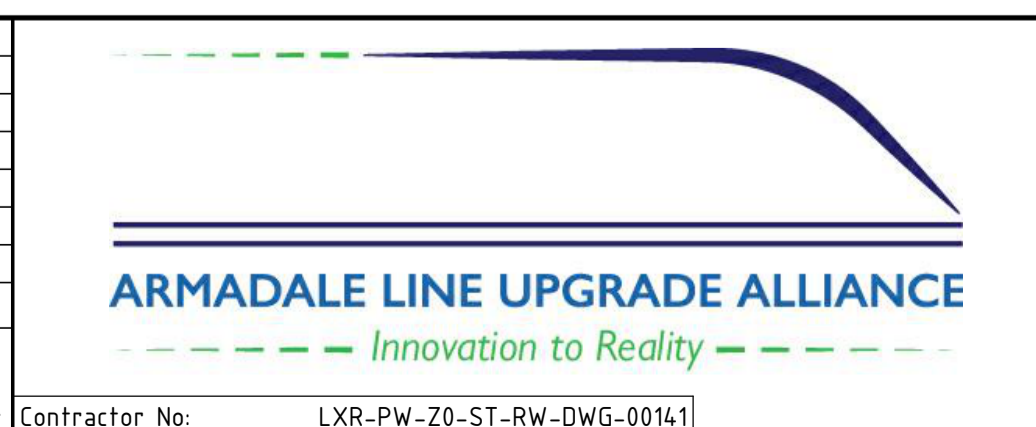


LOCALITY PLAN



REFERENCE DESIGN

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AMENDMENT	DSN	DRN	CHK	APP		
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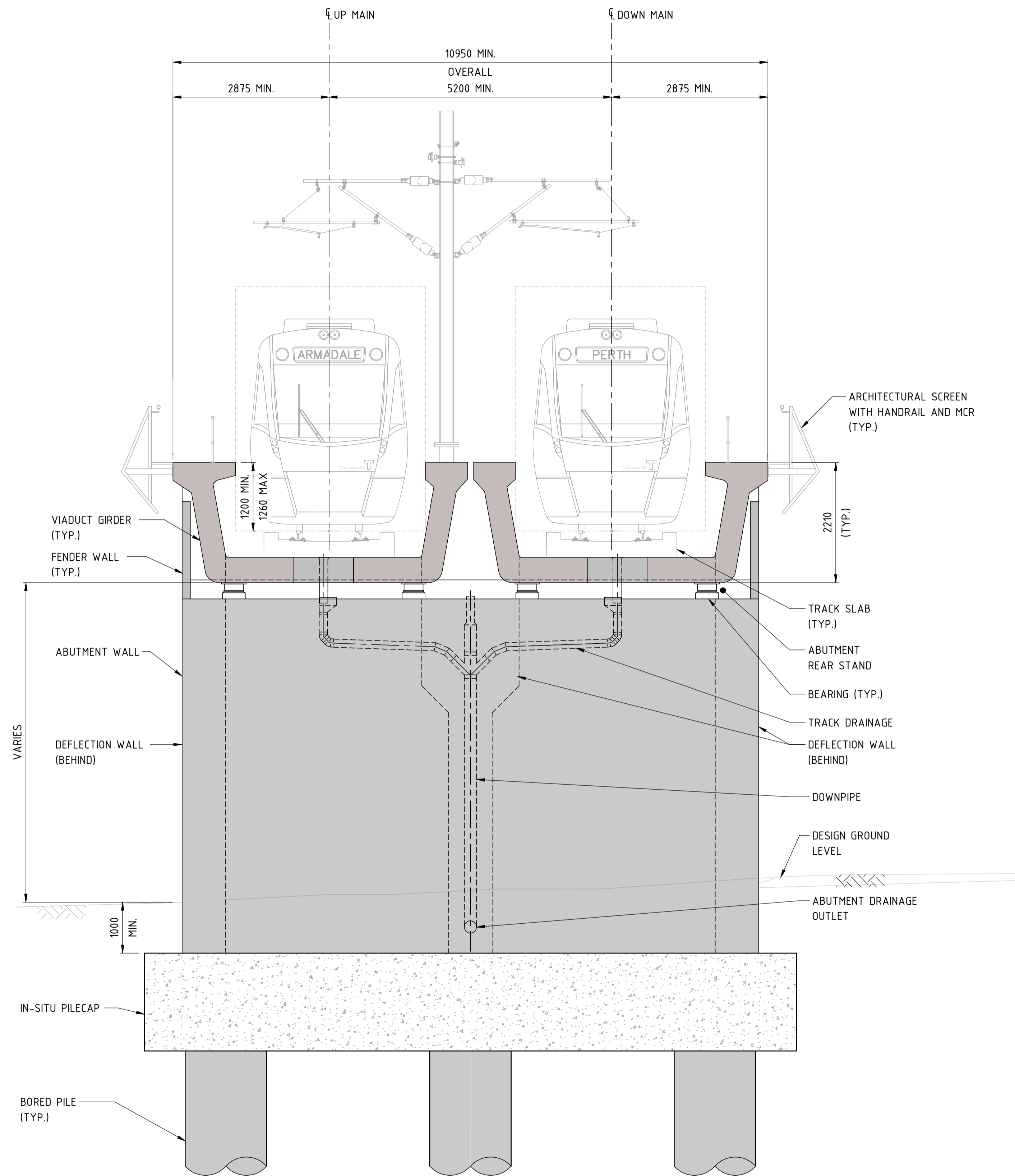


VALIDATION
SIGNATURE
DATE
DATE APPROVED

REFERENCES
SCALE
As indicated
DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

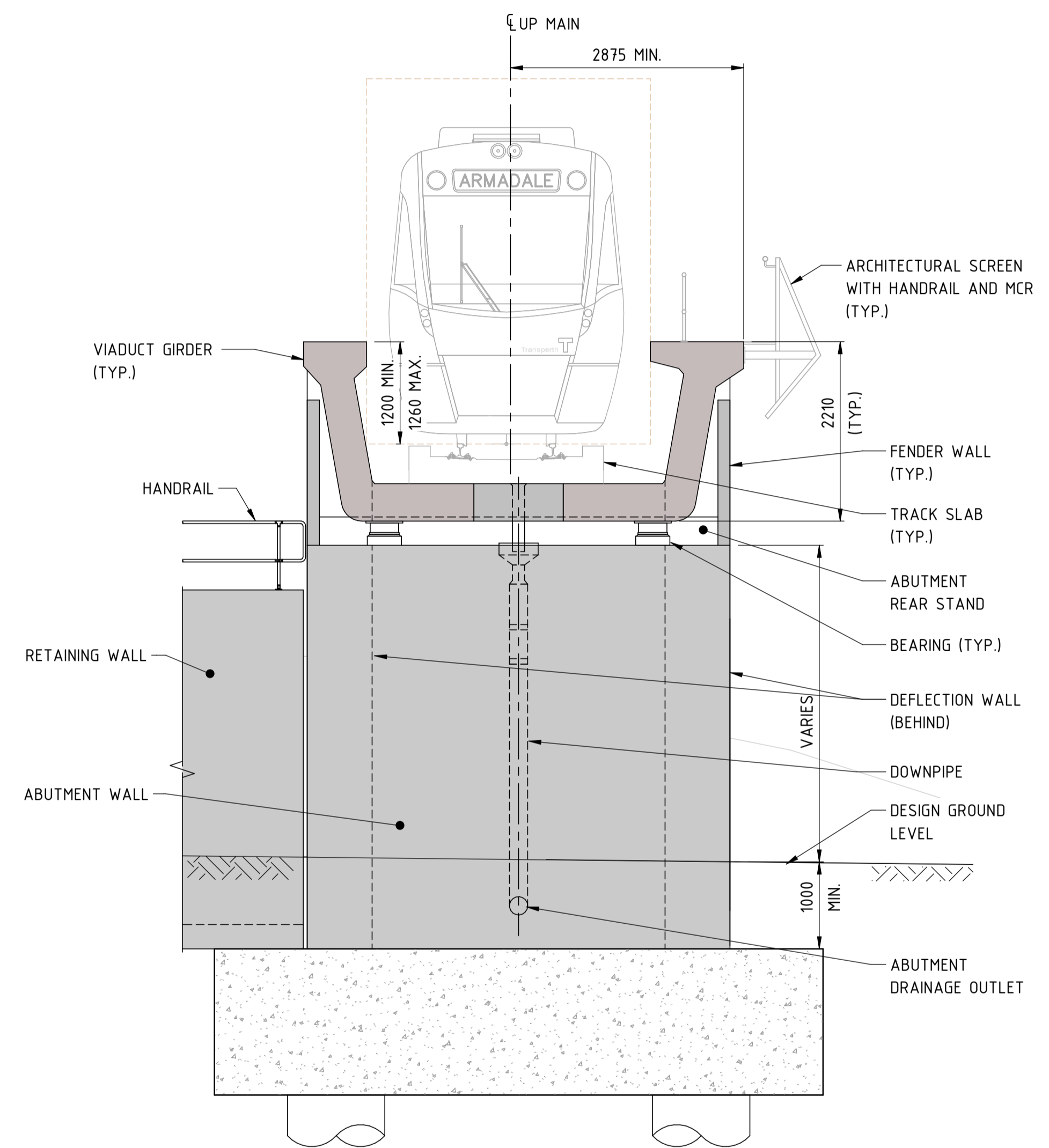
DESIGNED M.SOOI
DRAWN G.WIN
CHECKED A.ISAAC
APPROVED W.SCHWARZ
DATE 24.06.2022

Government of Western Australia
Public Transport Authority
VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL
ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
ABUTMENT GENERAL ARRANGEMENT - SHEET 1
PTA Drawing No: 04-S-72-0037
Rev: A01



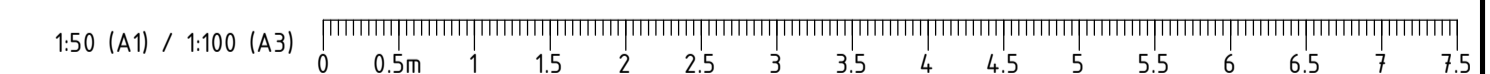
TYPICAL ABUTMENT ELEVATION

SECTION B
SCALE 1 : 50 0037



TYPICAL ABUTMENT ELEVATION (CANNINGTON)

SECTION E
SCALE 1 : 50 0039



REFERENCE DESIGN

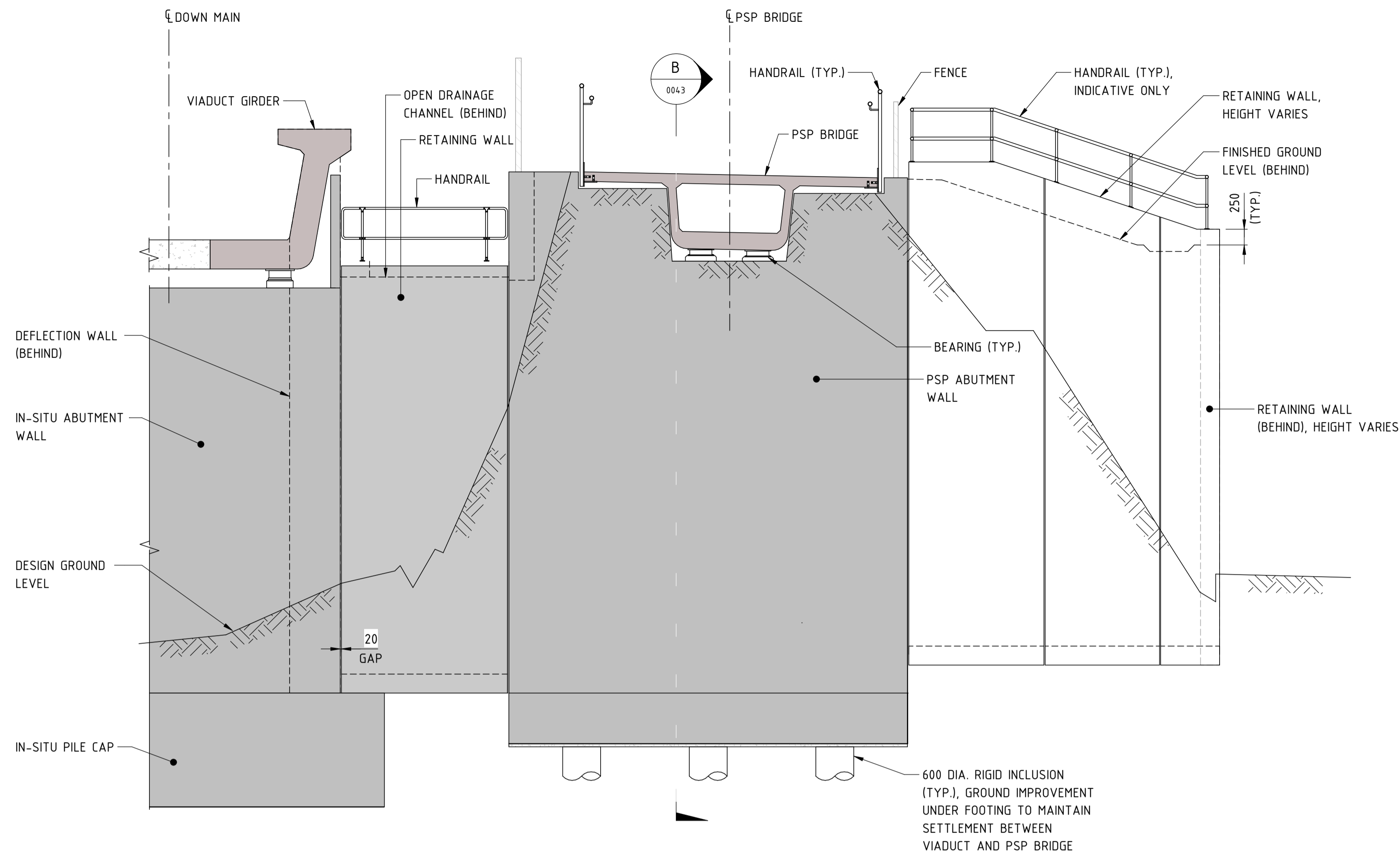
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<p>ORIG SIZE A1</p> <p>AT ORIGINAL PLOT SIZE</p> <p>This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.</p>						

Contractor No: LXR-PW-Z0-ST-RW-DWG-00151

VALIDATION	REFERENCES
SIGNATURE	
DATE	
DATE APPROVED	

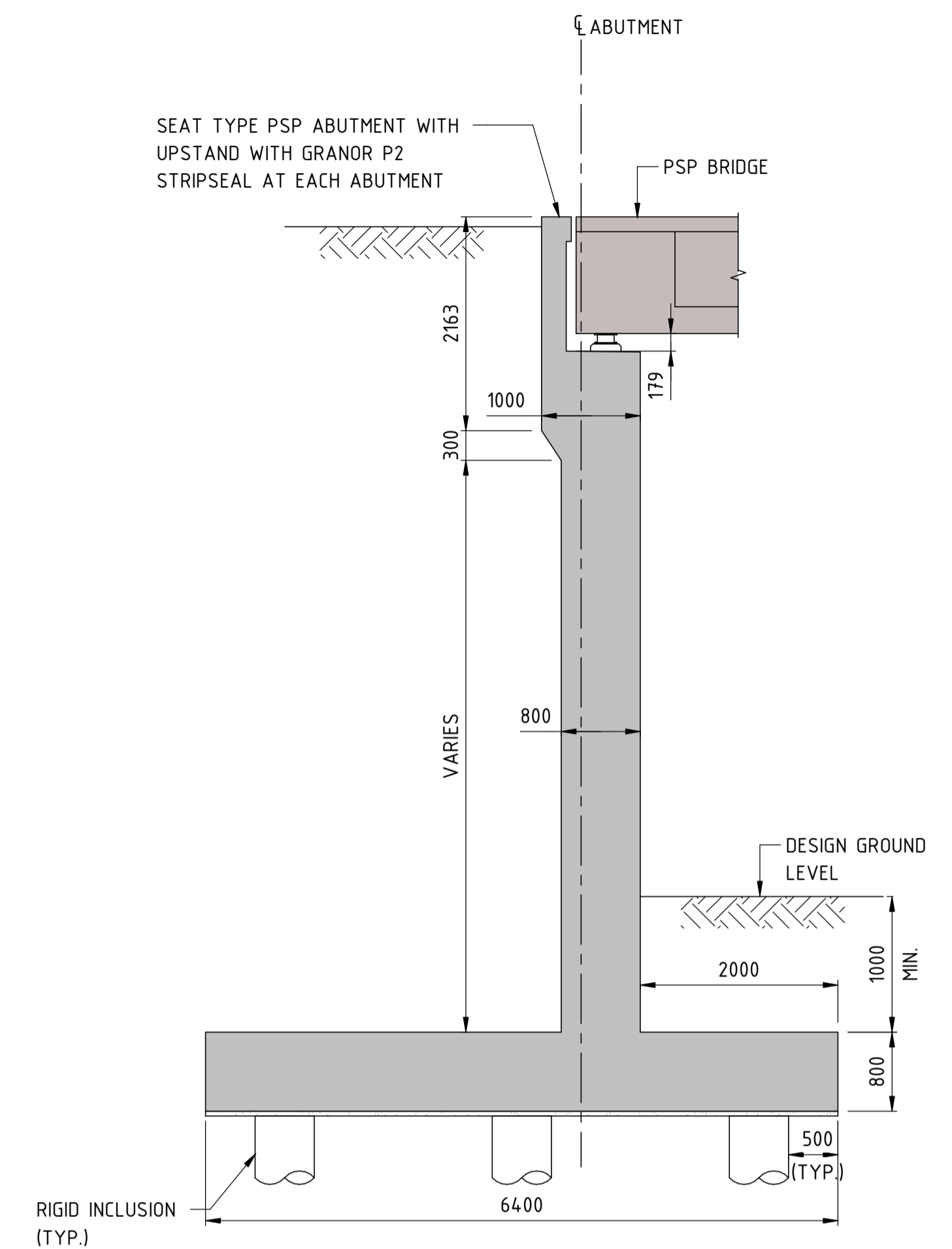
SCALE	DESIGNED
1 : 50	M.SOOI
DATUM	DRAWN
HORIZONTAL: PCG20	G.WIN
VERTICAL: AHD71	CHECKED
	A.ISAAC
	APPROVED
	W.SCHWARZ
	DATE
	24.06.2022

VICTORIA PARK TO CANNING	
LEVEL CROSSING REMOVAL	
ZONE 0 - CIVIL STRUCTURES	
PROJECT WIDE - ABUTMENTS & RETAINING WALLS	
GENERAL SECTIONS - SHEET 1	
PTA Drawing No: 04-S-72-0042	Rev: A01



TYPICAL ELEVATION - PSP ABUTMENT WALL (FRONT)

SECTION A
SCALE 1 : 50 0038



TYPICAL SECTION OF PSP ABUTMENT WALL

SECTION B
SCALE 1 : 50 0043

1:50 (A1) / 1:100 (A3) 0 0.5m 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5

REFERENCE DESIGN

REV	DATE	AMENDMENT	MS	GW	AI	WS
A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN				
ORIG SIZE	AT ORIGINAL PLOT SIZE		DSN	DRN	CHK	APP
A1						

ARMADALE LINE UPGRADE ALLIANCE
Innovation to Reality

Contractor No: LXR-PW-Z0-ST-RW-DWG-00152

VALIDATION
SIGNATURE
DATE
DATE APPROVED

REFERENCES

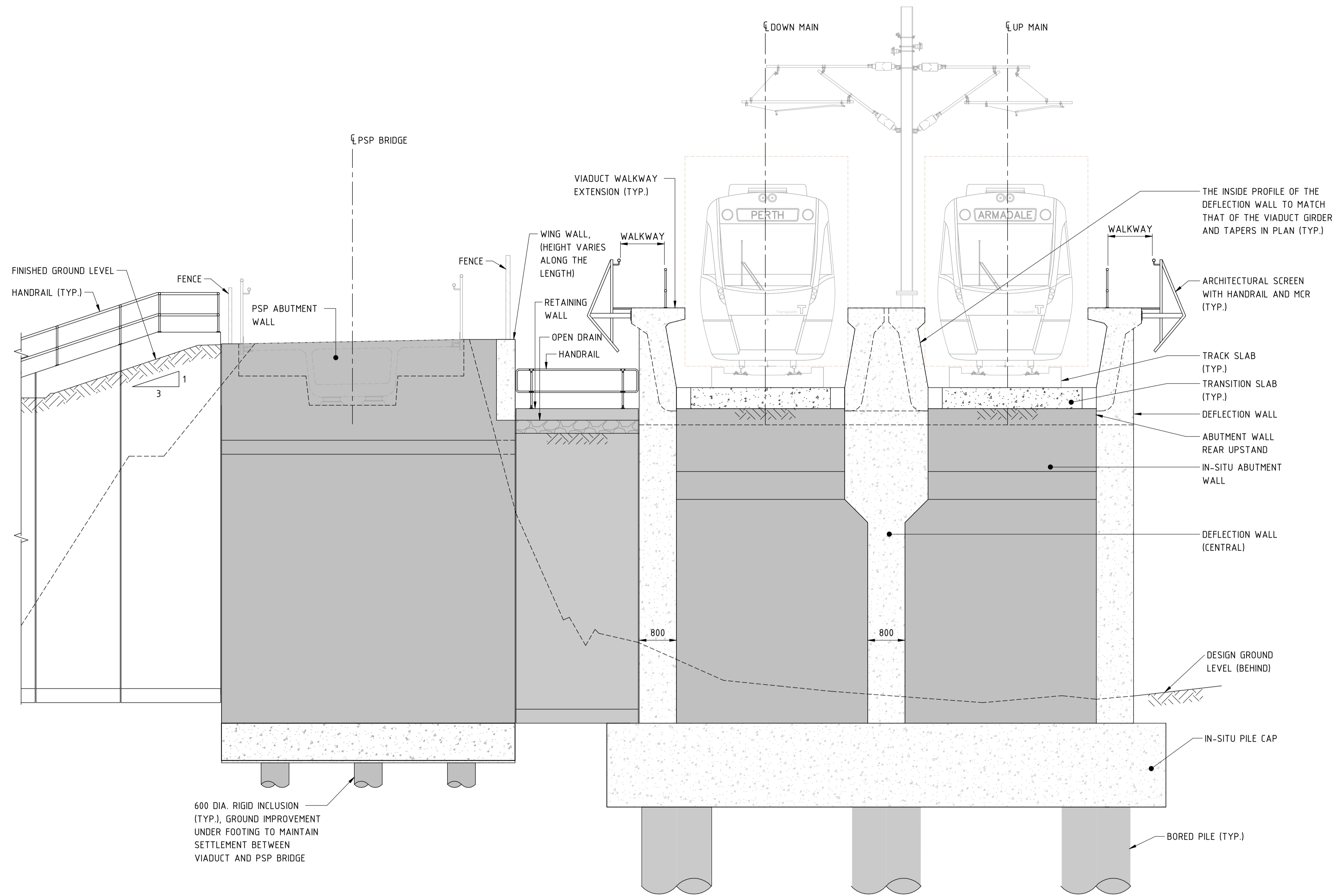
SCALE
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DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

DESIGNED M.SOOI
DRAWN G.WIN
CHECKED A.ISAAC
APPROVED W.SCHWARZ
DATE 24.06.2022

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
GENERAL SECTIONS - SHEET 2
PTA Drawing No: 04-S-72-0043 Rev: A01



TYPICAL ELEVATION - PSP AND VIADUCT ABUTMENT WALL (BACK)

SECTION **B**
SCALE 1 : 50

1:50 (A1) / 1:100 (A3) 0 0.5m 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5

REFERENCE DESIGN

A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN	MS	GW	AI	WS			
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP			
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ARMADALE LINE UPGRADE ALLIANCE
Innovation to Reality

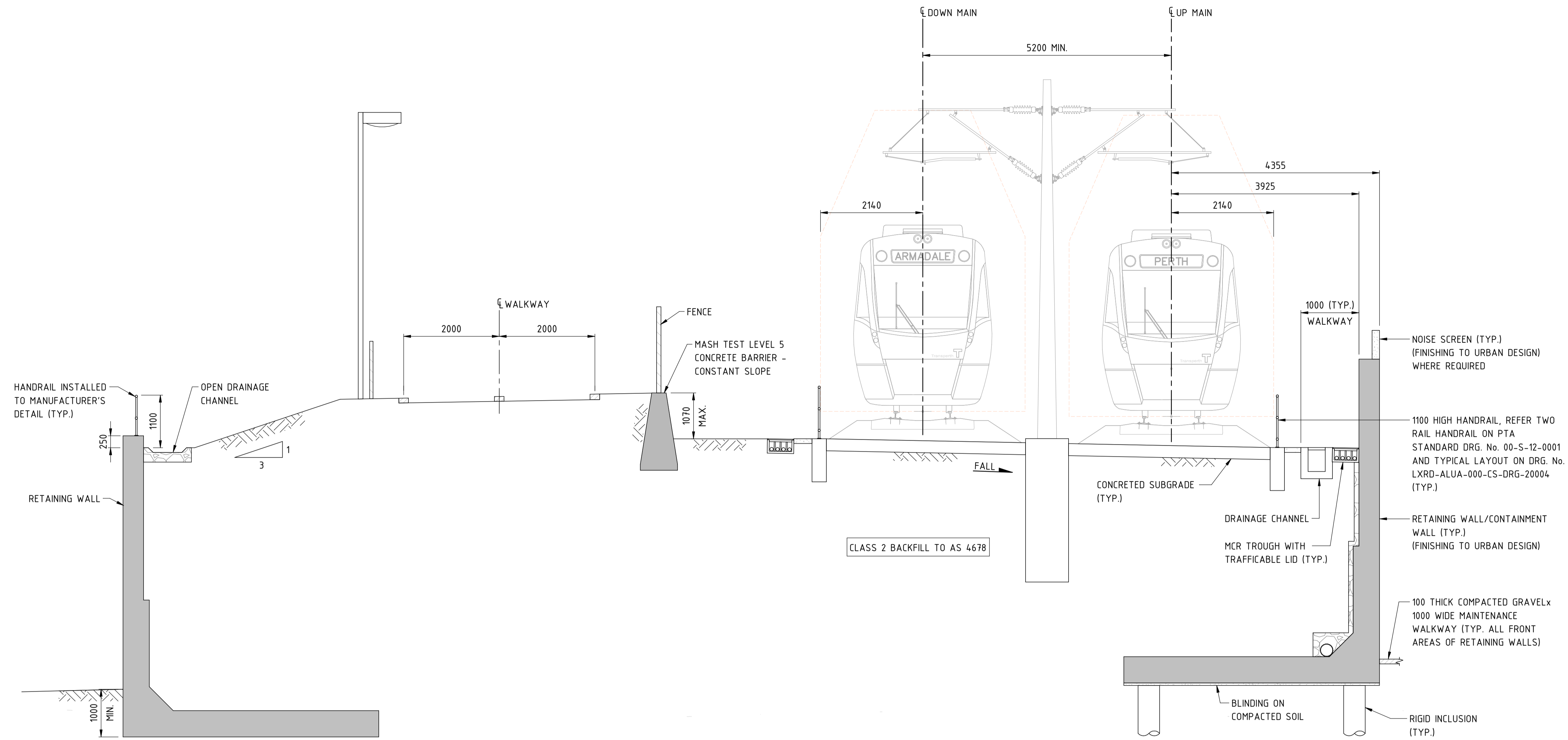
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SCALE	DESIGNED
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DATUM	DRAWN
HORIZONTAL: PCG20	G.WIN
VERTICAL: AHD71	CHECKED
	A.ISAAC
	APPROVED
	W.SCHWARZ
	DATE
	24.06.2022

Government of Western Australia
Public Transport Authority

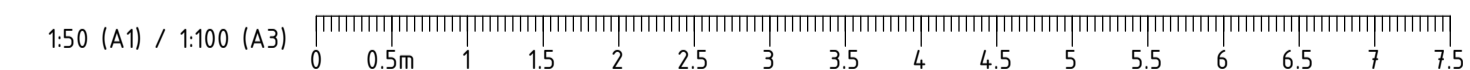
VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
GENERAL SECTIONS - SHEET 3
PTA Drawing No: **04-S-72-0044** | Rev: **A01**



TYPICAL SECTION - RETAINING WALL

SECTION **C**
SCALE 1 : 50



REFERENCE DESIGN

	VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL
ZONE 0 - CIVIL STRUCTURES PROJECT WIDE - ABUTMENTS & RETAINING WALLS GENERAL SECTIONS - SHEET 4	
PTA Drawing No: 04-S-72-0045	Rev: A01

REV	DATE	AMENDMENT	DSN	DRN	CHK	APP
A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN	MS	GW	AI	WS

ORIG SIZE **A1** AT ORIGINAL PLOT SIZE

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Contractor No: LXR-PW-Z0-ST-RW-DWG-00154

VALIDATION

SIGNATURE

DATE

DATE APPROVED

REFERENCES

SCALE

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DATUM

HORIZONTAL: PCG20

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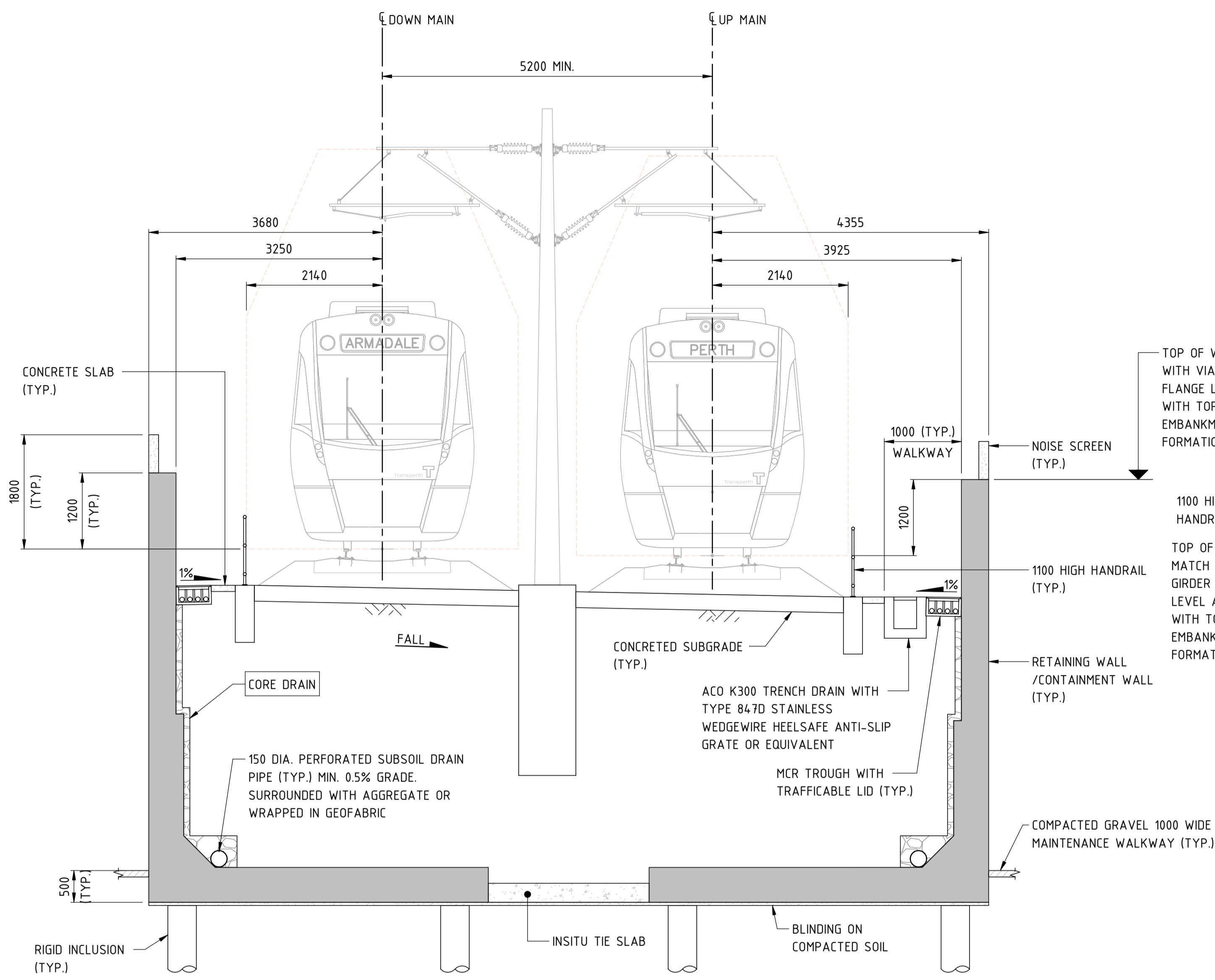
DESIGNED M.SOOI

DRAWN G.WIN

CHECKED A.ISAAC

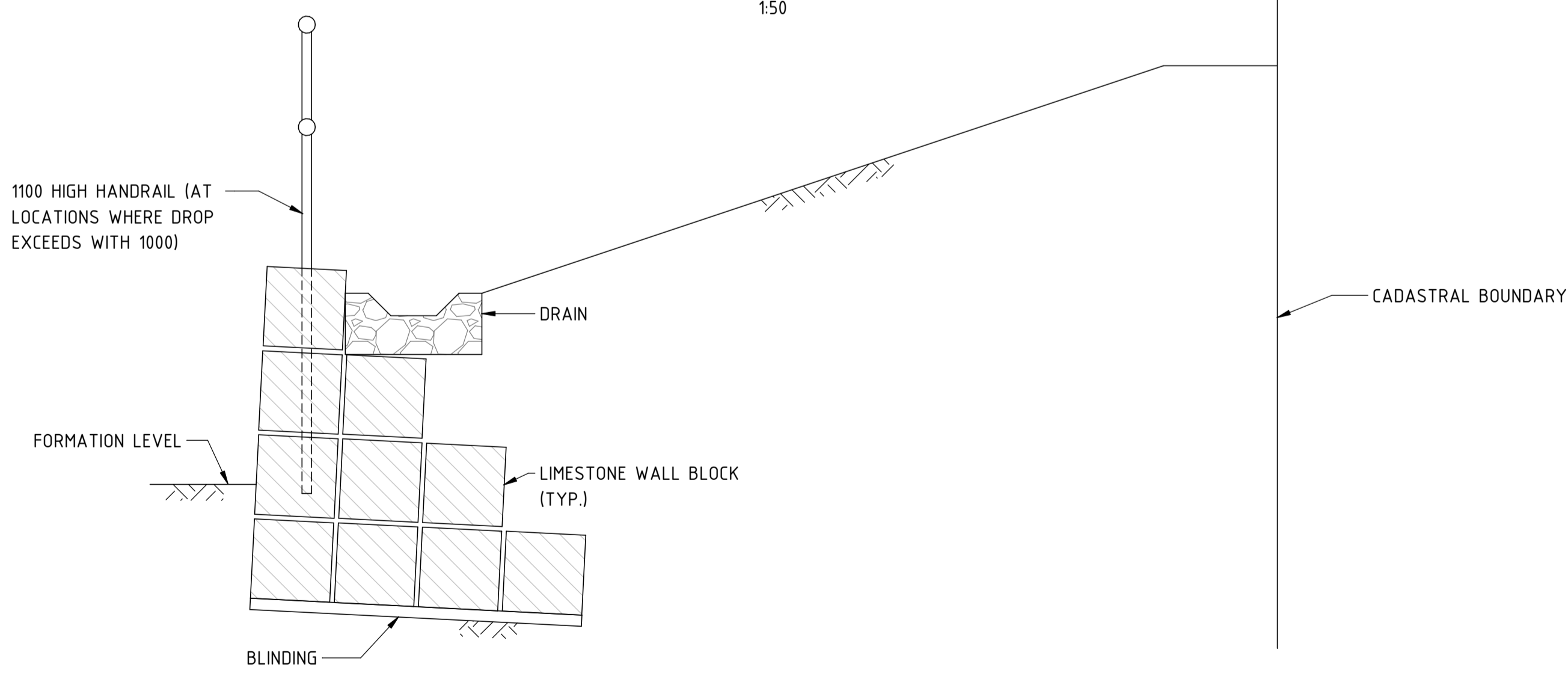
APPROVED W.SCHWARZ

DATE 24.06.2022



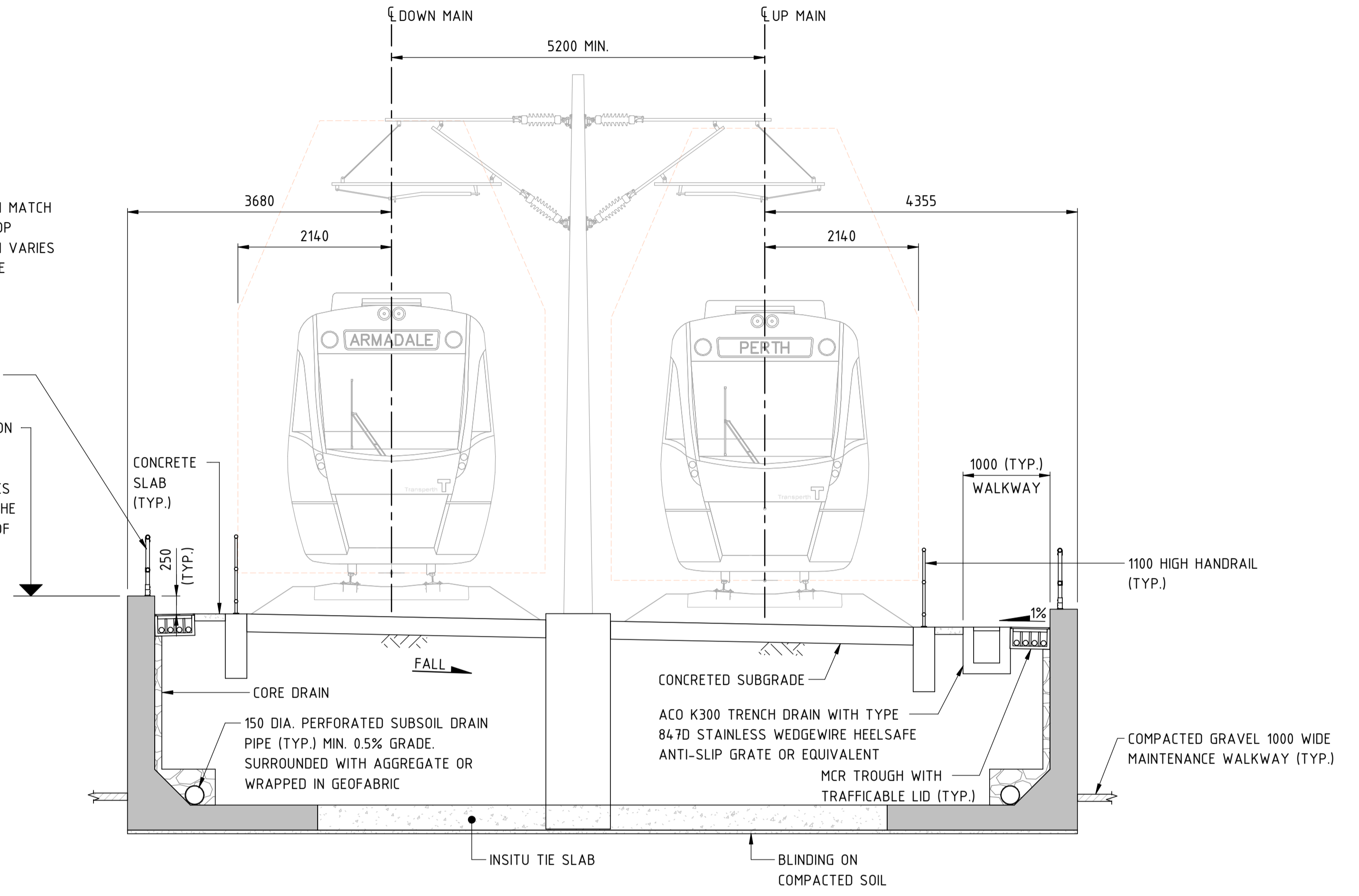
TYPICAL SECTION - STITCHED PRECAST RETAINING WALL

1:50



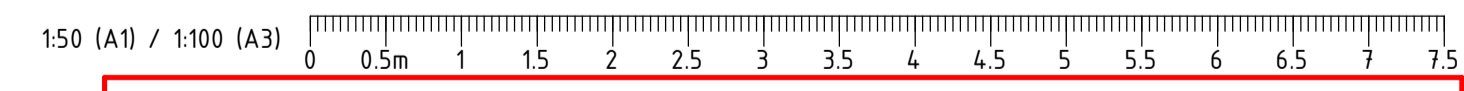
TYPICAL SECTION - LIMESTONE RETAINING WALL

1:50



TYPICAL SECTION - STITCHED PRECAST RETAINING WALL

1:50



REFERENCE DESIGN

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
GENERAL SECTIONS - SHEET 5
PTA Drawing No: 04-S-72-0046

Rev: A01

MS	GW	AI	WS
DSN	DRN	CHK	APP
ORIG SIZE	AMENDMENT		
A1	AT ORIGINAL PLOT SIZE		

24.06.22 ISSUED FOR 15% INTERNAL REFERENCE DESIGN

0 10 20 30 40 50 100mm

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Contractor No: LXR-PW-Z0-ST-RW-DWG-00155

VALIDATION

SIGNATURE

DATE

DATE APPROVED

REFERENCES

SCALE

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DATUM

HORIZONTAL: PCG20

VERTICAL: AHD71

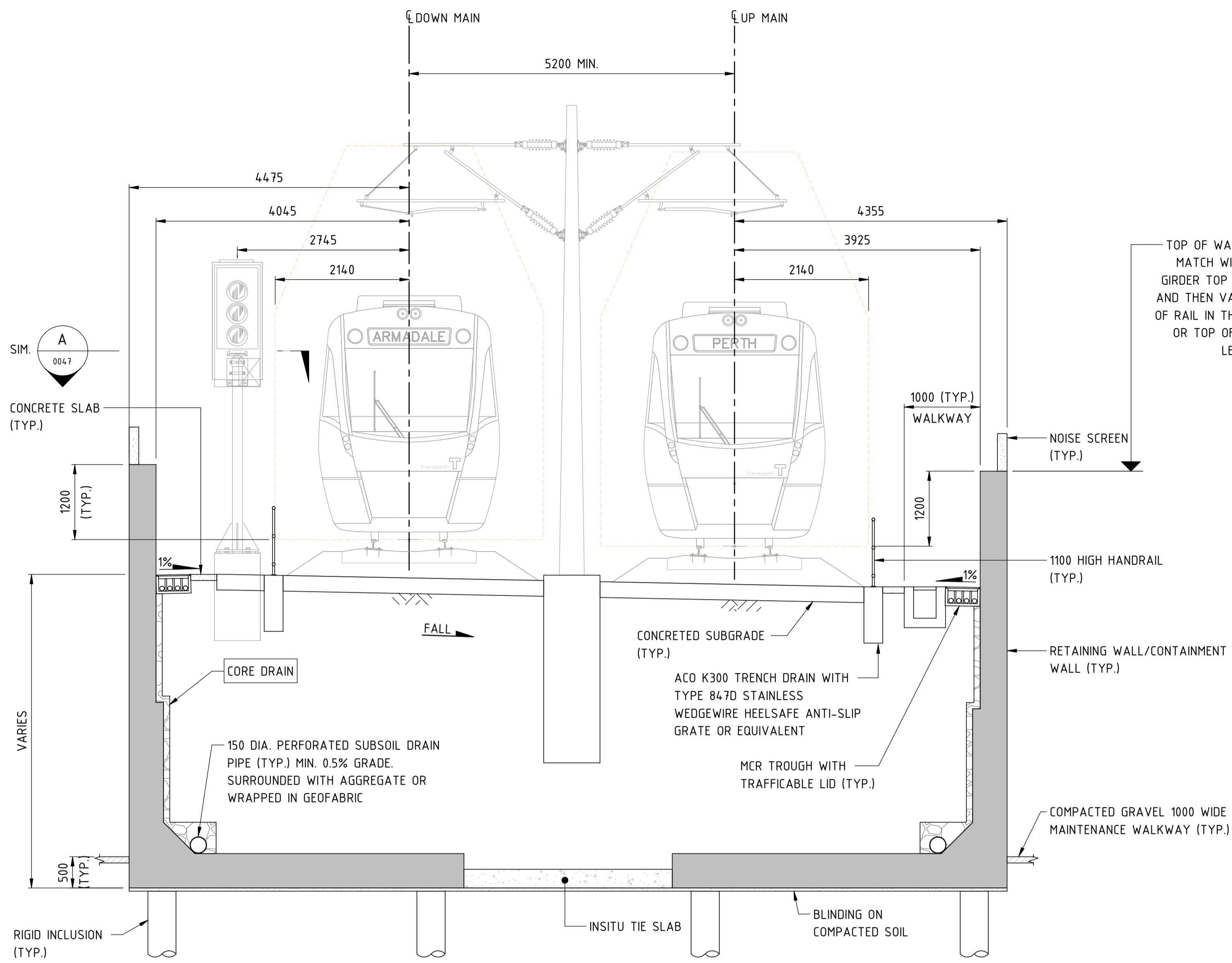
DESIGNED M.SOOI

DRAWN G.WIN

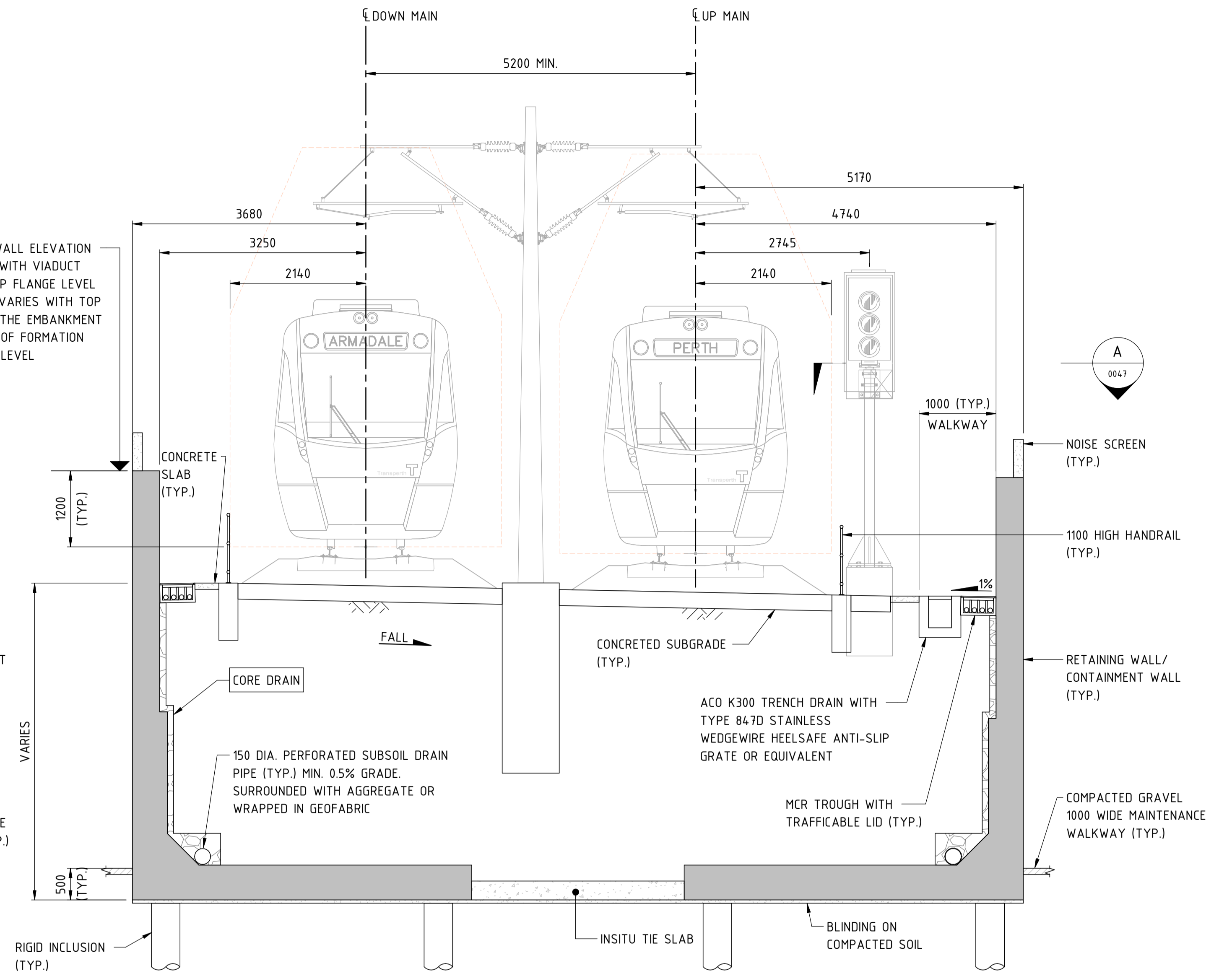
CHECKED A.ISAAC

APPROVED W.SCHWARZ

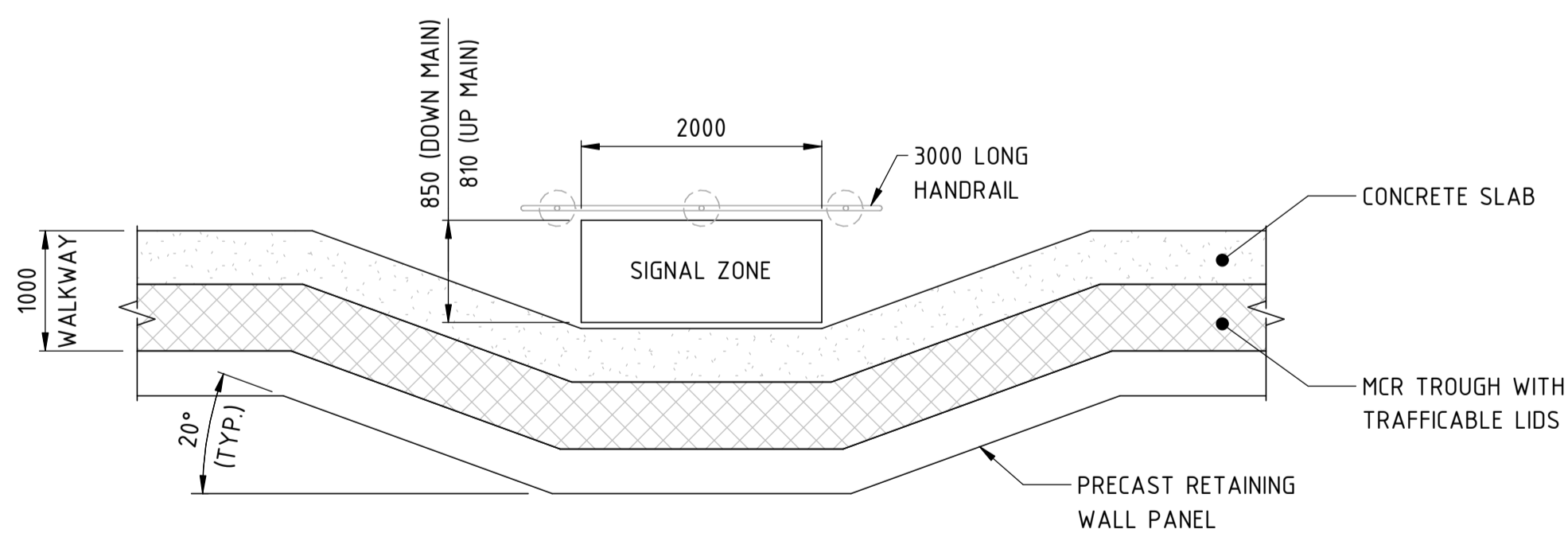
DATE 24.06.2022



DOWN MAIN SIGNAL - LOCAL WIDENING
TYPICAL SECTION - STITCHED PRECAST RETAINING WALL
 1:50

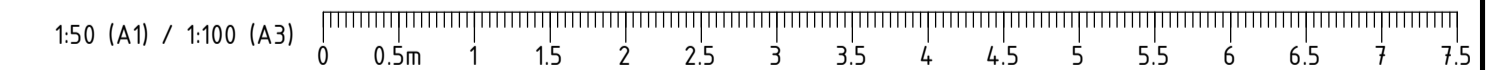


UP MAIN SIGNAL - LOCAL WIDENING
TYPICAL SECTION - STITCHED PRECAST RETAINING WALL
 1:50



PLAN - TYPICAL LOCAL WIDENING AT SIGNAL ZONE

SECTION A
 SCALE 1:50



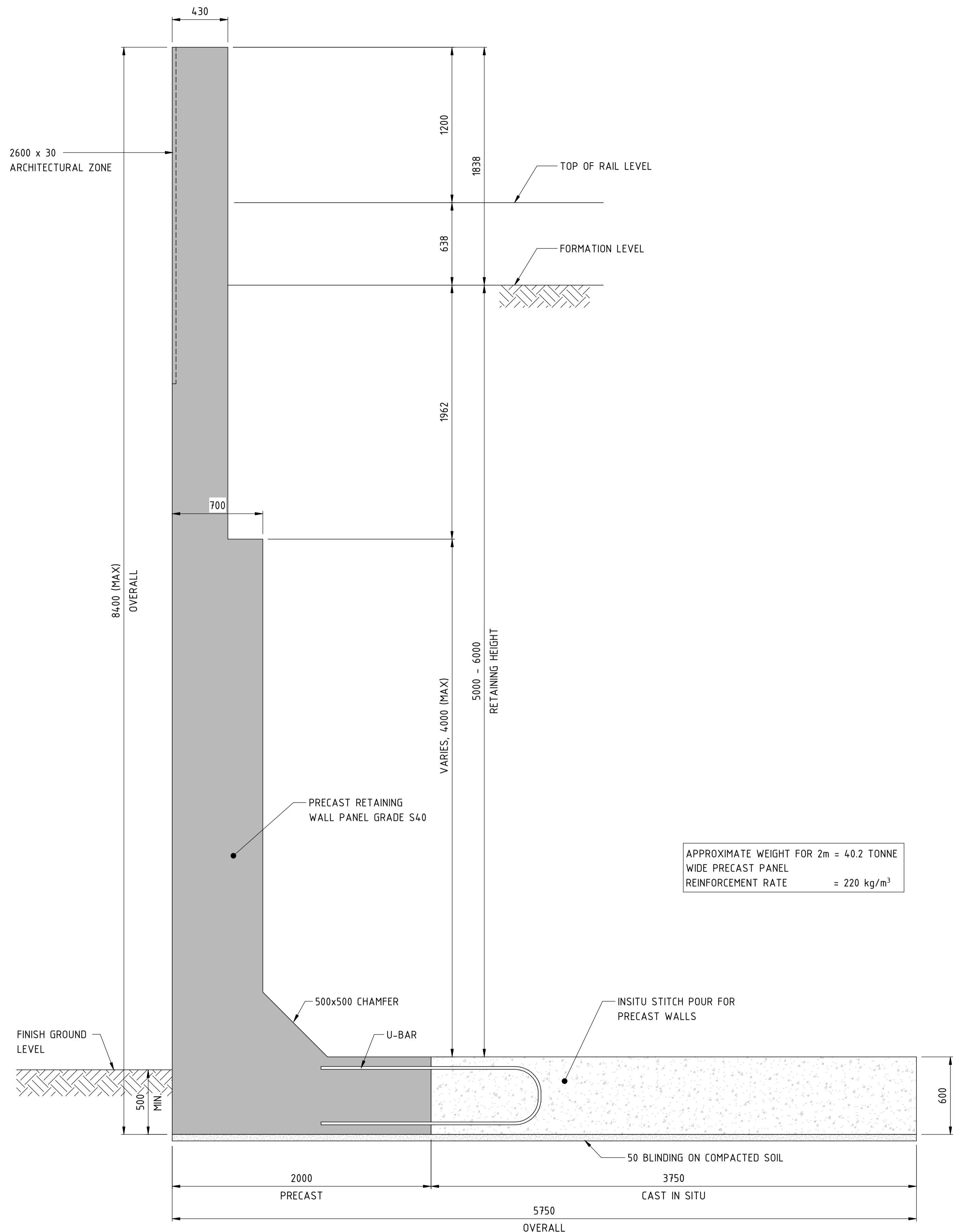
REFERENCE DESIGN	
	VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL
ZONE 0 - CIVIL STRUCTURES PROJECT WIDE - ABUTMENTS & RETAINING WALLS GENERAL SECTIONS - SHEET 6 PTA Drawing No: 04-S-72-0047	
Rev: A01	

REV	DATE	ISSUED FOR 15% INTERNAL REFERENCE DESIGN	MS	GW	AI	WS
A01	24.06.22					
AMENDMENT						
ORIG SIZE	0 10 20 30 40 50 100mm		DSN	DRN	CHK	APP
A1	AT ORIGINAL PLOT SIZE					

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Contractor No: LXR-PW-Z0-ST-RW-DWG-00156

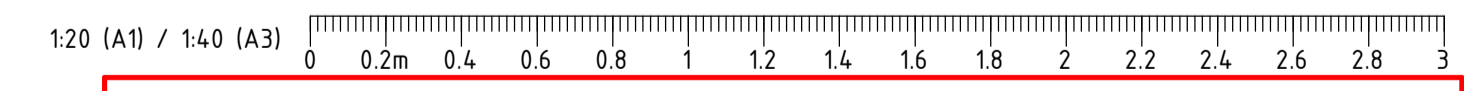
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DATE		DATUM	DRAWN
DATE APPROVED		HORIZONTAL: PCG20	G.WIN
		VERTICAL: AHD71	CHECKED
			A.ISAAC
			APPROVED
			W.SCHWARZ
			DATE
			24.06.2022



- NOTES:**
1. NO RETAINING WALLS REQUIRED BELOW H_s≤1000mm.
 2. ALLOW FOR STABILITY BRACING OF THE RETAINING WALL PRIOR TO BACKFILLING.
 3. SEE PLAN AND ELEVATION DRAWINGS FOR NOISE WALL LOCATIONS.
 4. ONLY WALLS WHERE H>3000mm ARE TO WITHSTAND IMPACT LOAD OF 500kN.
 5. WEIGHT OF PRECAST WALL FOR HANDLING PURPOSES (DOES NOT INCLUDE IN-SITU CONCRETE)

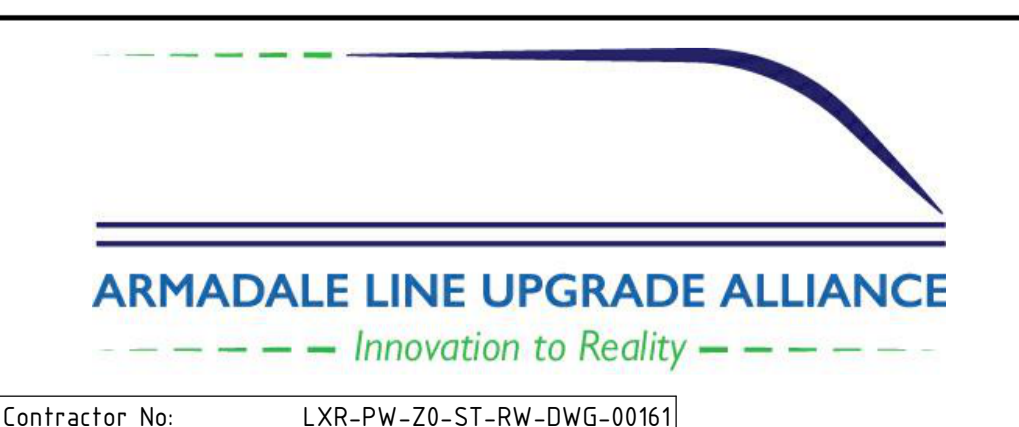
REFER GENERAL ARRANGEMENT PLAN AND ELEVATION FOR LOCATIONS OF RETAINING WALL

PRECAST RETAINING WALL PANEL RW6.0
SCALE 1 : 20



REFERENCE DESIGN

A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN	MS	GW	AI	WS	
REV	DATE	AMENDMENT	DSN	DRN	CHK	APP	
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A1	AT ORIGINAL PLOT SIZE		Contractor No: LXR-PW-Z0-ST-RW-DWG-00161				



VALIDATION
SIGNATURE
DATE
DATE APPROVED

REFERENCES
SCALE
As indicated
DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

DESIGNED M.SOOI
DRAWN G.WIN
CHECKED A.ISAAC
APPROVED W.SCHWARZ
DATE 24.06.2022

Government of Western Australia
Public Transport Authority

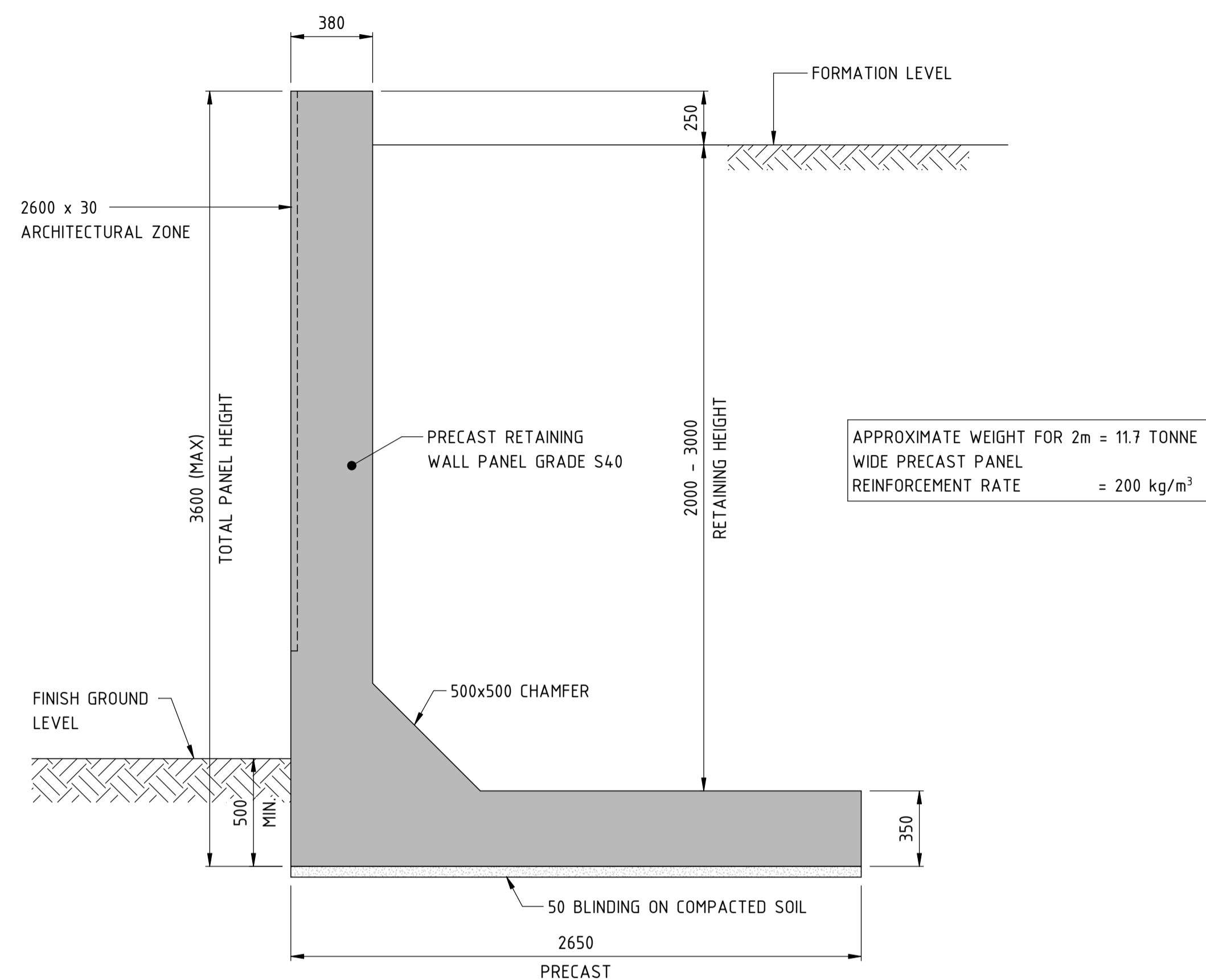
VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL CONCRETE DETAILS - SHEET 1
PTA Drawing No: **04-S-72-0052** | Rev: **A01**

NOTES:

1. NO RETAINING WALLS REQUIRED BELOW H_s≤1000mm.
2. ALLOW FOR STABILITY BRACING OF THE RETAINING WALL PRIOR TO BACKFILLING.
3. SEE PLAN AND ELEVATION DRAWINGS FOR NOISE WALL LOCATIONS.
4. ONLY WALLS WHERE H>3000mm ARE TO WITHSTAND IMPACT LOAD OF 500kN.
5. WEIGHT OF PRECAST WALL FOR HANDLING PURPOSES (DOES NOT INCLUDE IN-SITU CONCRETE)

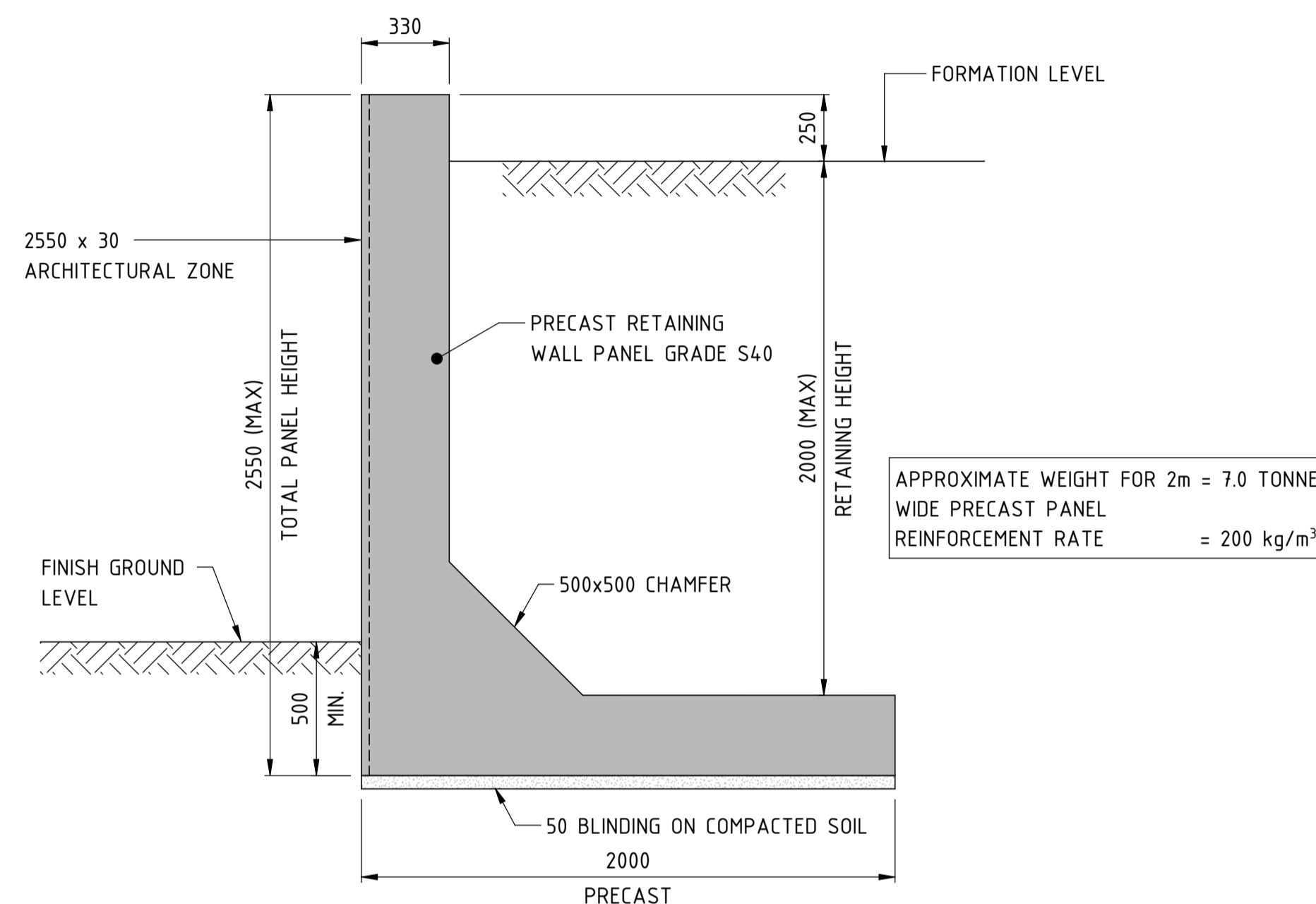
REFER GENERAL ARRANGEMENT PLAN AND ELEVATION FOR LOCATIONS OF RETAINING WALL



APPROXIMATE WEIGHT FOR 2m = 11.7 TONNE
WIDE PRECAST PANEL
REINFORCEMENT RATE = 200 kg/m³

PRECAST RETAINING WALL PANEL RW3.0

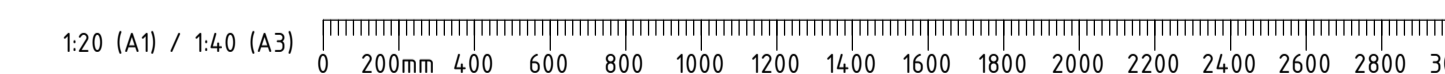
SCALE 1 : 20



APPROXIMATE WEIGHT FOR 2m = 7.0 TONNE
WIDE PRECAST PANEL
REINFORCEMENT RATE = 200 kg/m³

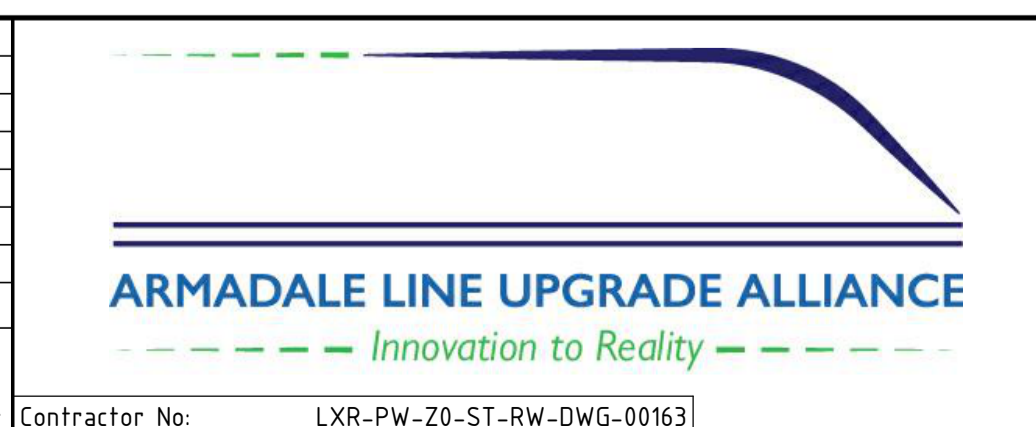
PRECAST RETAINING WALL PANEL RW2.0

SCALE 1 : 20



REFERENCE DESIGN

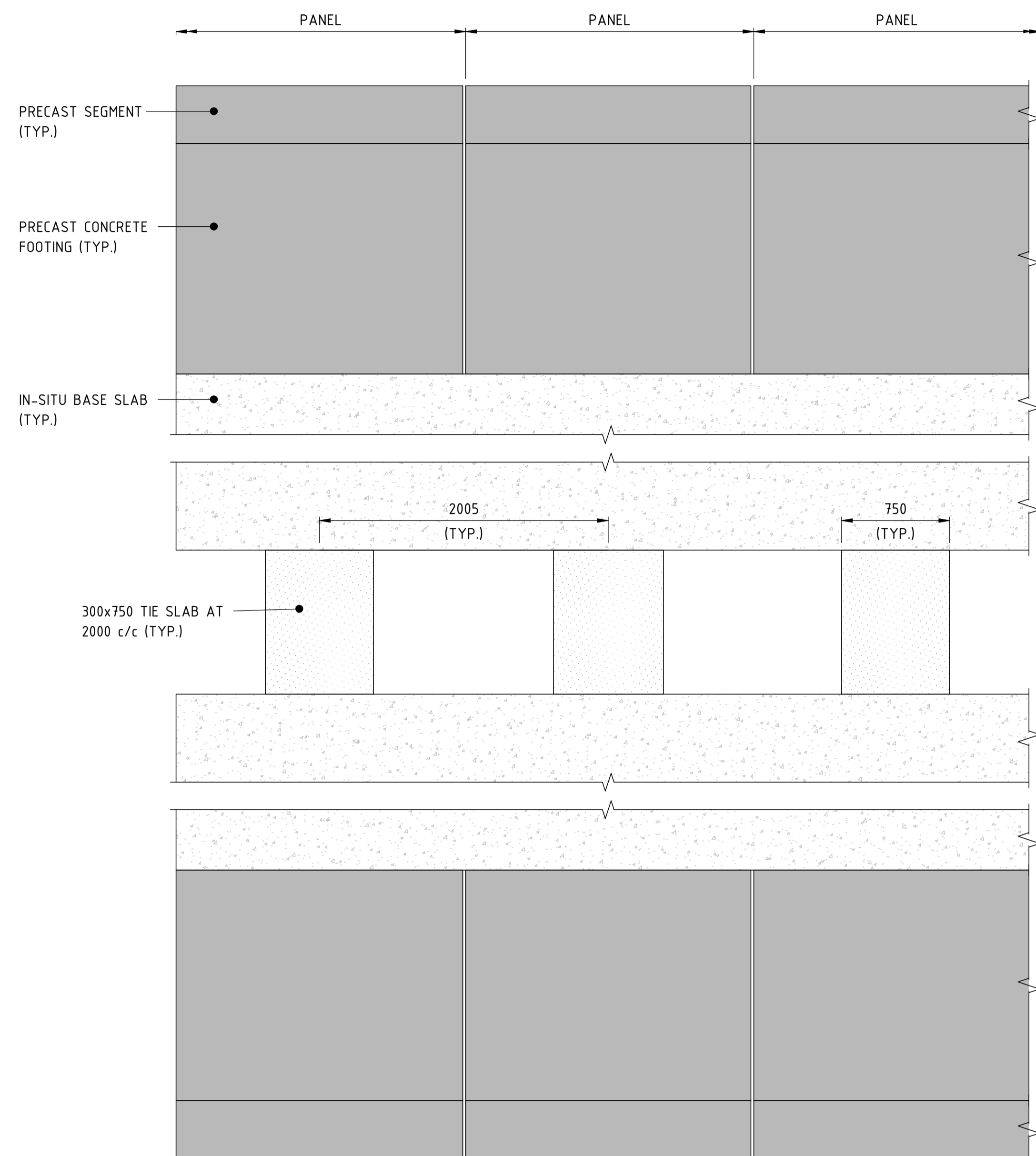
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A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN				
DSN	DRN	CHK	APP			
ORIG SIZE	AT ORIGINAL PLOT SIZE		This document must not be copied without PTA's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorised purpose.			
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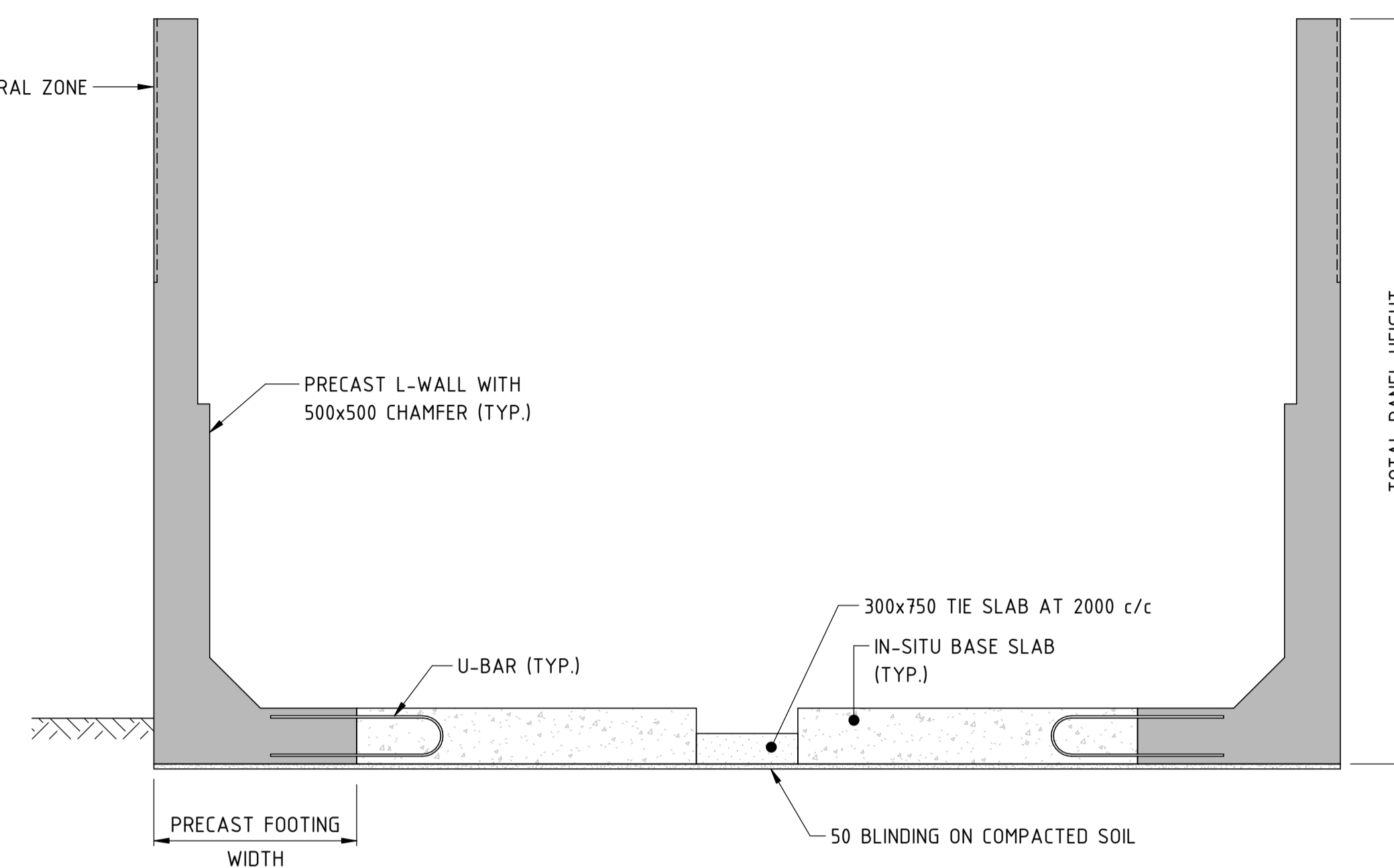
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SCALE	DESIGNED
As indicated	M.SOOI
DATUM	DRAWN
HORIZONTAL: PCG20	G.WIN
VERTICAL: AHD71	CHECKED
	A.ISAAC
	APPROVED
	W.SCHWARZ
	DATE
	24.06.2022

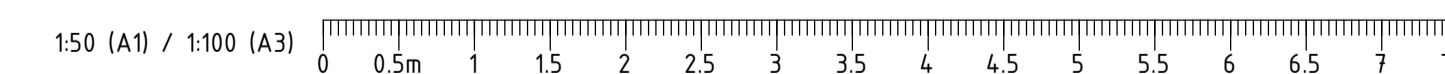
VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL	
ZONE 0 - CIVIL STRUCTURES	
PROJECT WIDE - ABUTMENTS & RETAINING WALLS	
RETAINING WALL CONCRETE DETAILS - SHEET 3	
PTA Drawing No: 04-S-72-0054	Rev: A01



**TYPICAL PLAN - PRECAST RETAINING WALL
AND IN-SITU CONCRETE BASE**
SCALE N.T.S



**RETAINING WALL CONCEPTUAL USING PRECAST
L-SHAPED WALL**
SCALE 1 : 50



REFERENCE DESIGN

REV	DATE	AMENDMENT	MS	GW	AI	WS
A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN				
ORIG SIZE	AT ORIGINAL PLOT SIZE		DSN	DRN	CHK	APP
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ARMADALE LINE UPGRADE ALLIANCE
Innovation to Reality

VALIDATION
SIGNATURE
DATE
DATE APPROVED

REFERENCES
SCALE
DATUM
HORIZONTAL: PCG20
VERTICAL: AHD71

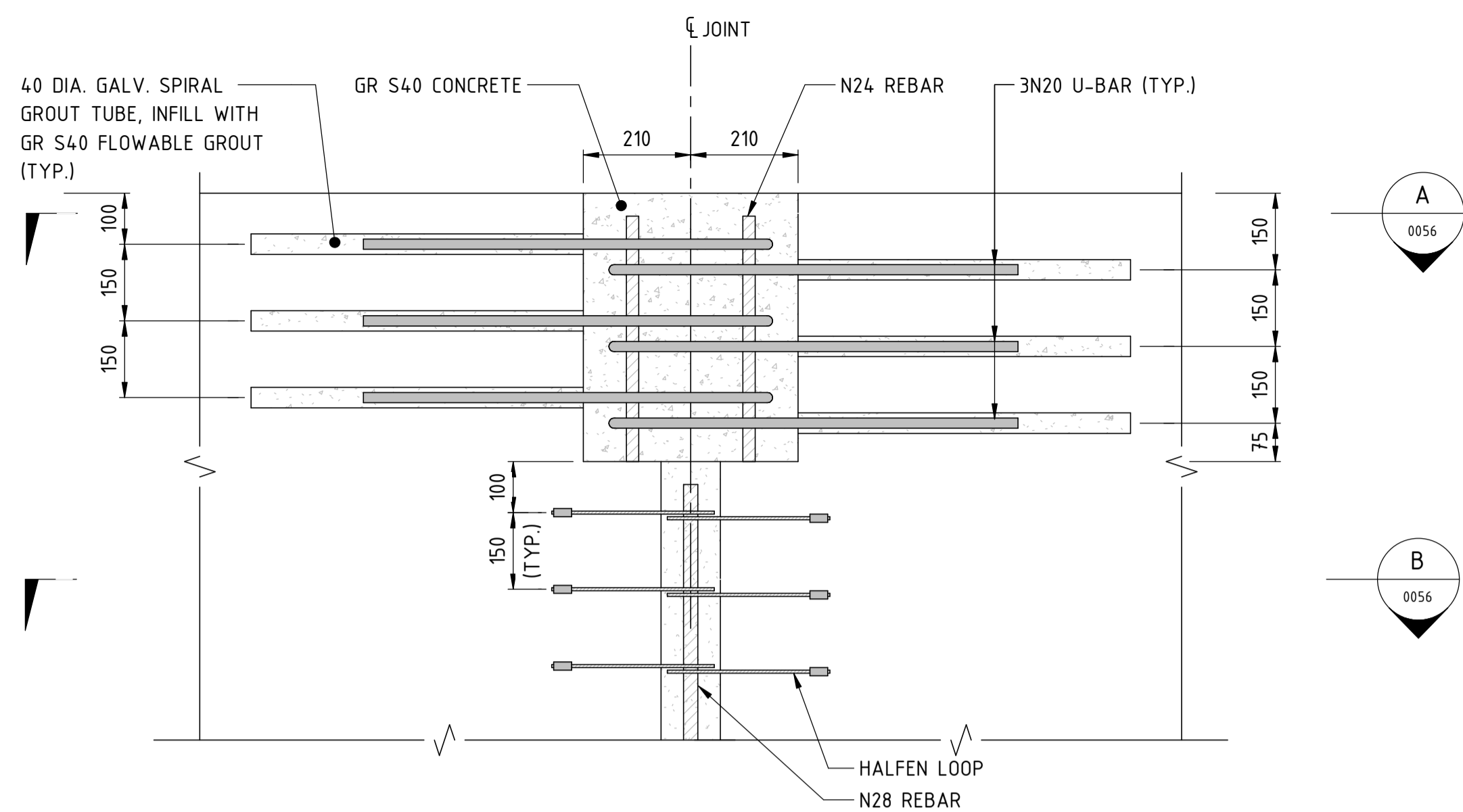
DESIGNED	M.SOOI
DRAWN	G.WIN
CHECKED	A.ISAAC
APPROVED	W.SCHWARZ
DATE	24.06.2022

Government of Western Australia
Public Transport Authority

VICTORIA PARK TO CANNING
LEVEL CROSSING REMOVAL

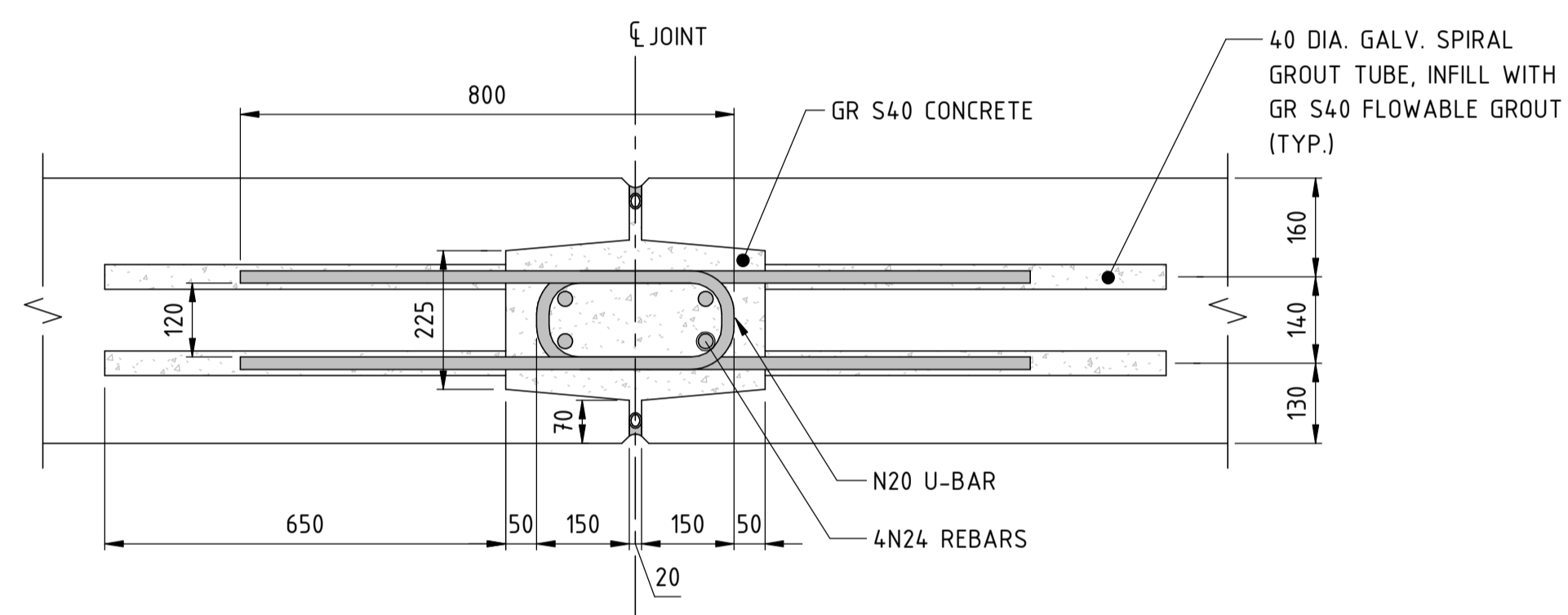
ZONE 0 - CIVIL STRUCTURES
PROJECT WIDE - ABUTMENTS & RETAINING WALLS
RETAINING WALL CONCRETE DETAILS - SHEET 4

PTA Drawing No: **04-S-72-0055** | Rev: **A01**



**TYPICAL PRECAST RETAINING WALL
CONNECTION DETAIL AT TOP JOINT**

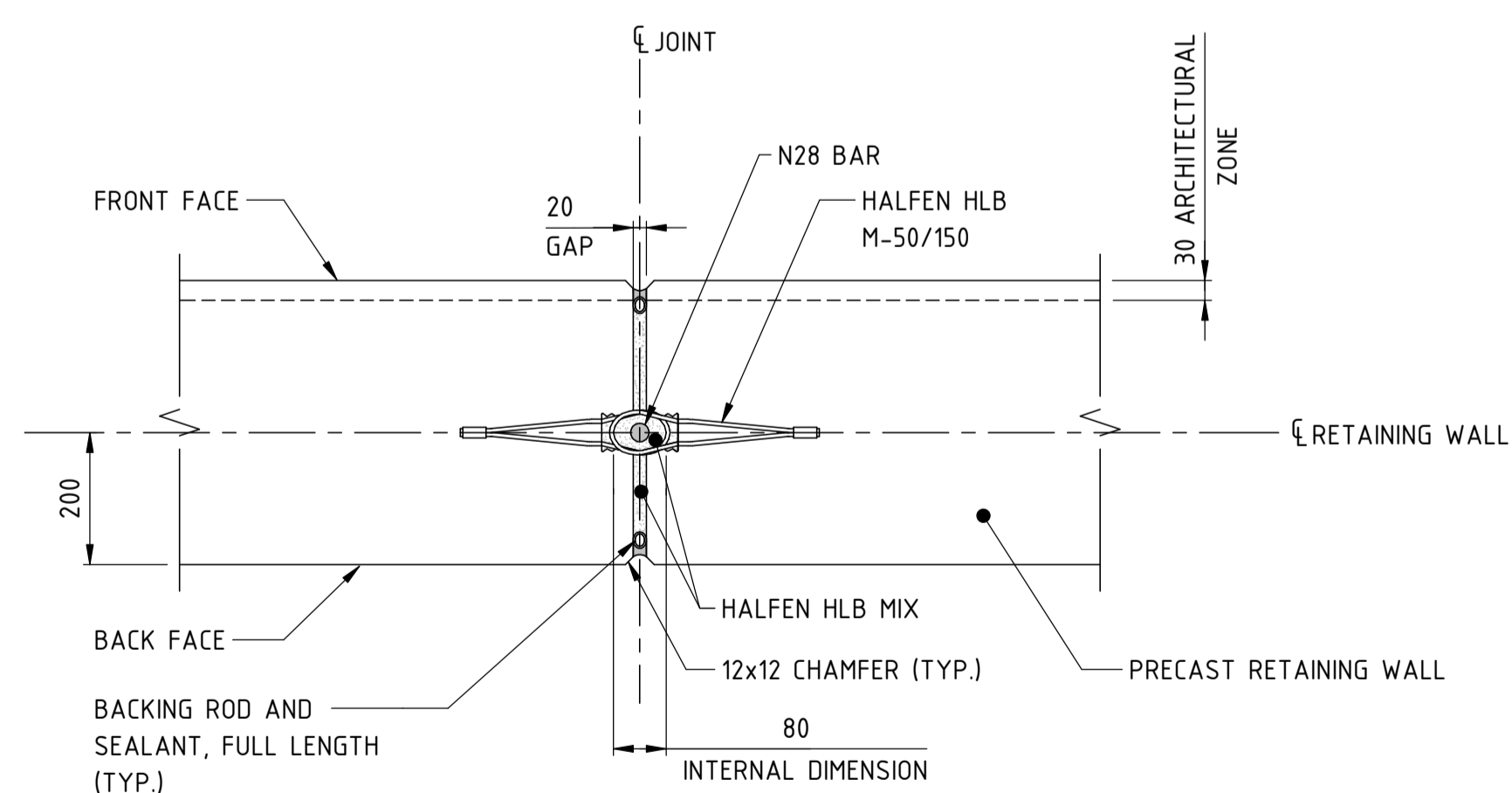
SCALE 1 : 10



JOINT DETAIL AT TOP OF RETAINING WALL (TYP.)

SECTION A

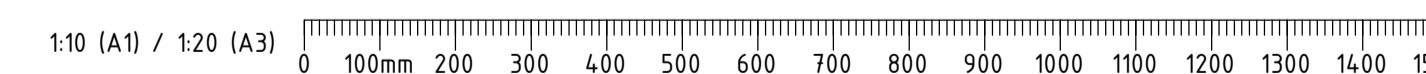
SCALE 1 : 10



JOINT DETAIL IN VERTICAL FACE OF PRECAST RETAINING WALL (TYP.)

SECTION B

SCALE 1 : 10



REFERENCE DESIGN

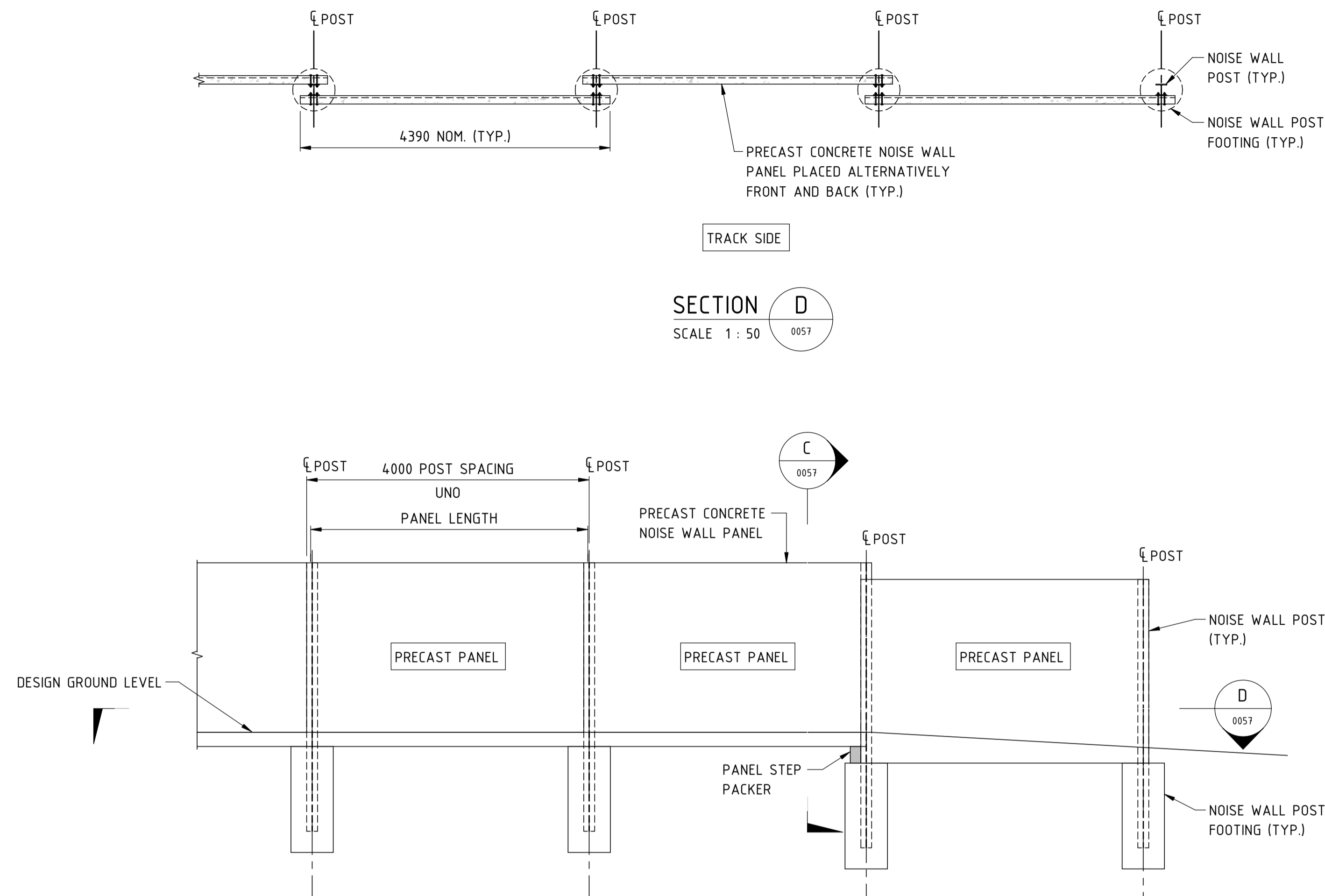
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Contractor No: LXR-PW-Z0-ST-RW-DWG-00165

VALIDATION	REFERENCES
SIGNATURE	
DATE	
DATE APPROVED	

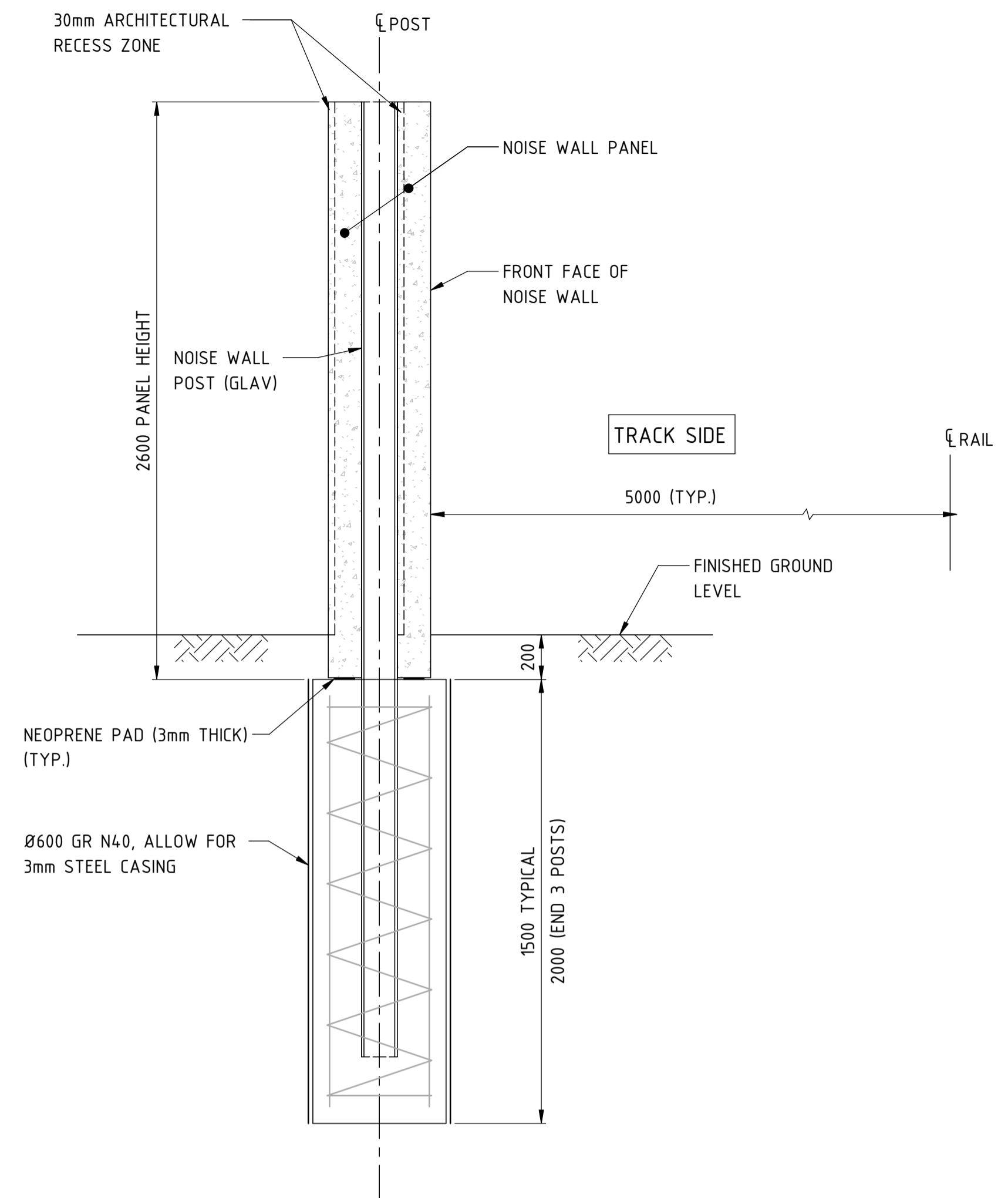
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DATUM	DRAWN
HORIZONTAL: PCG20	G.WIN
VERTICAL: AHD71	CHECKED
	A.ISAAC
	APPROVED
	W.SCHWARZ
	DATE
	24.06.2022

		VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL	
ZONE 0 - CIVIL STRUCTURES PROJECT WIDE - ABUTMENTS & RETAINING WALLS RETAINING WALL CONCRETE DETAILS - SHEET 5			
PTA Drawing No: 04-S-72-0056		Rev: A01	



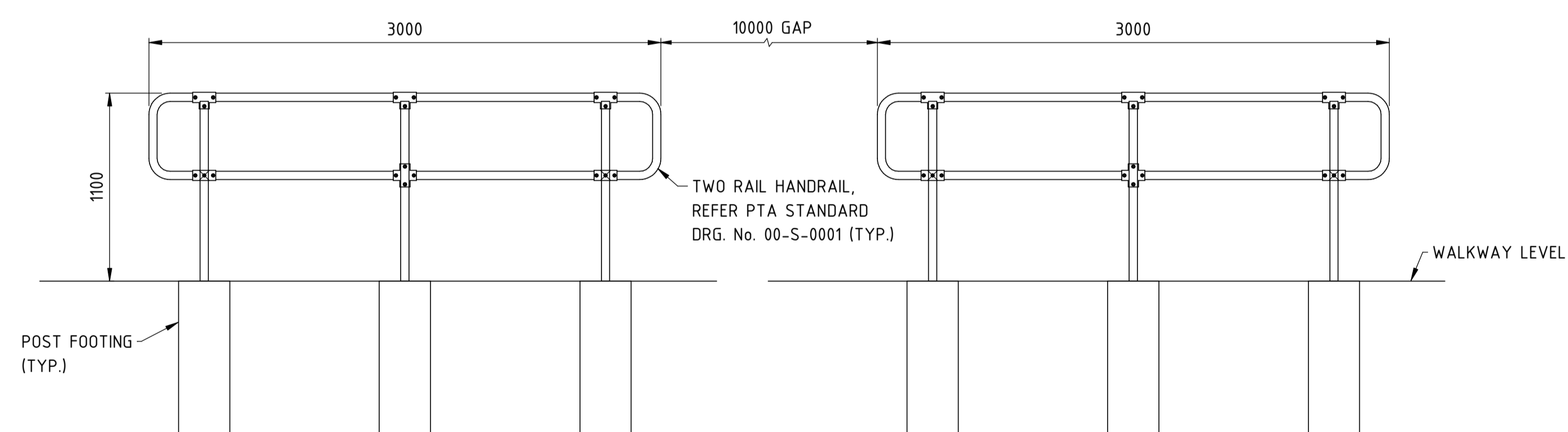
TYPICAL POST AND PANEL NOISE WALL ELEVATION

1:50



SECTION C

SCALE 1:20



TYPICAL HANDRAIL SETOUT ON EMBANKMENTS

1:25

REFERENCE DESIGN

REV	DATE	AMENDMENT	MS	GW	AI	WS
A01	24.06.22	ISSUED FOR 15% INTERNAL REFERENCE DESIGN				
ORIG SIZE	AT ORIGINAL PLOT SIZE		DSN	DRN	CHK	APP
A1						

ARMADALE LINE UPGRADE ALLIANCE
Innovation to Reality

VALIDATION	REFERENCES
SIGNATURE	
DATE	
DATE APPROVED	

SCALE	DESIGNED
As indicated	M.SOOI
DATUM	DRAWN
HORIZONTAL: PCG20	G.WIN
VERTICAL: AHD71	CHECKED
	A.ISAAC
	APPROVED
	W.SCHWARZ
	DATE
	24.06.2022

VICTORIA PARK TO CANNING LEVEL CROSSING REMOVAL	
ZONE 0 - CIVIL STRUCTURES	
PROJECT WIDE - ABUTMENTS & RETAINING WALLS	
RETAINING WALL CONCRETE DETAILS - SHEET 6	
PTA Drawing No:	04-S-72-0057
Rev:	A01