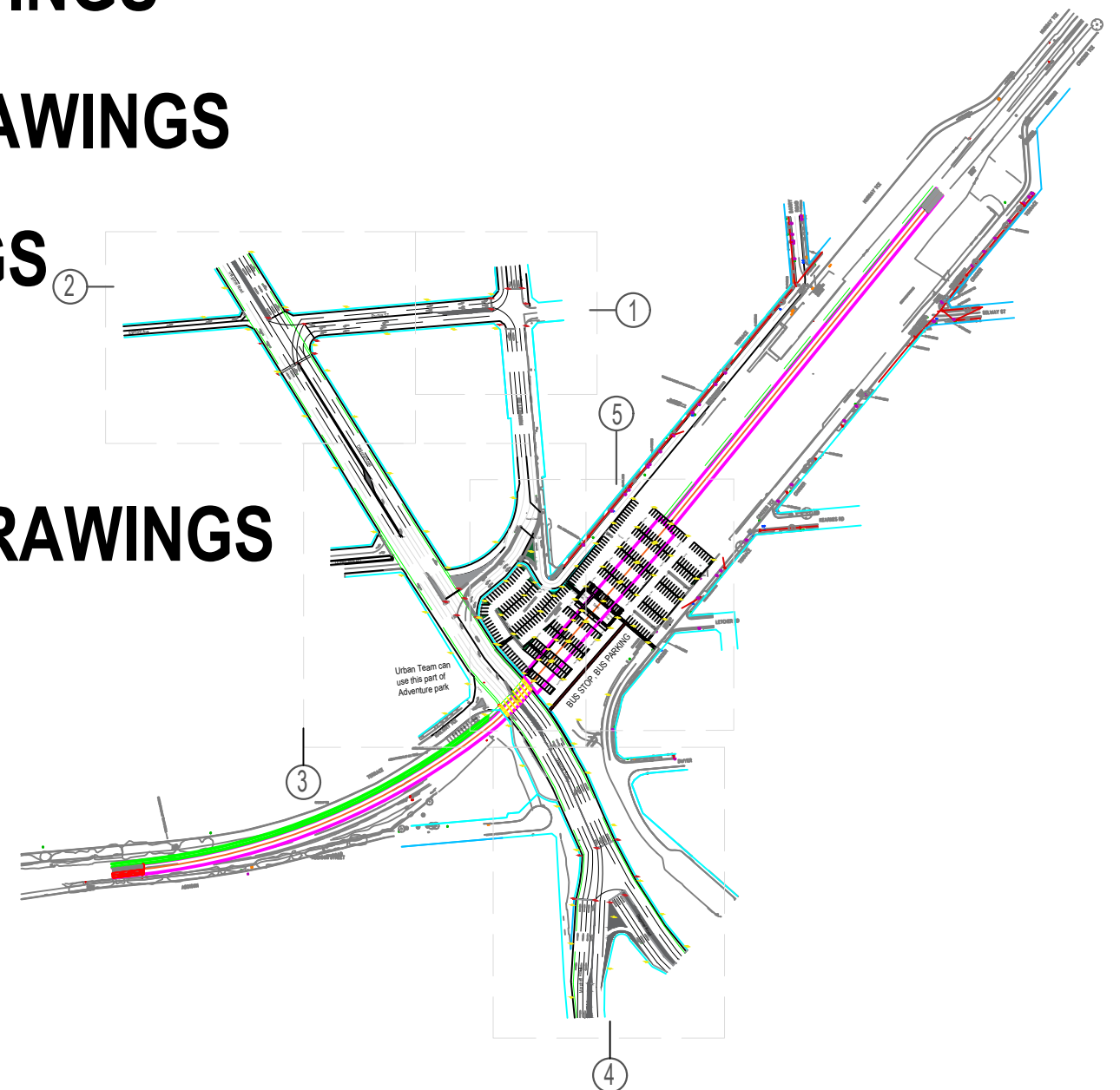


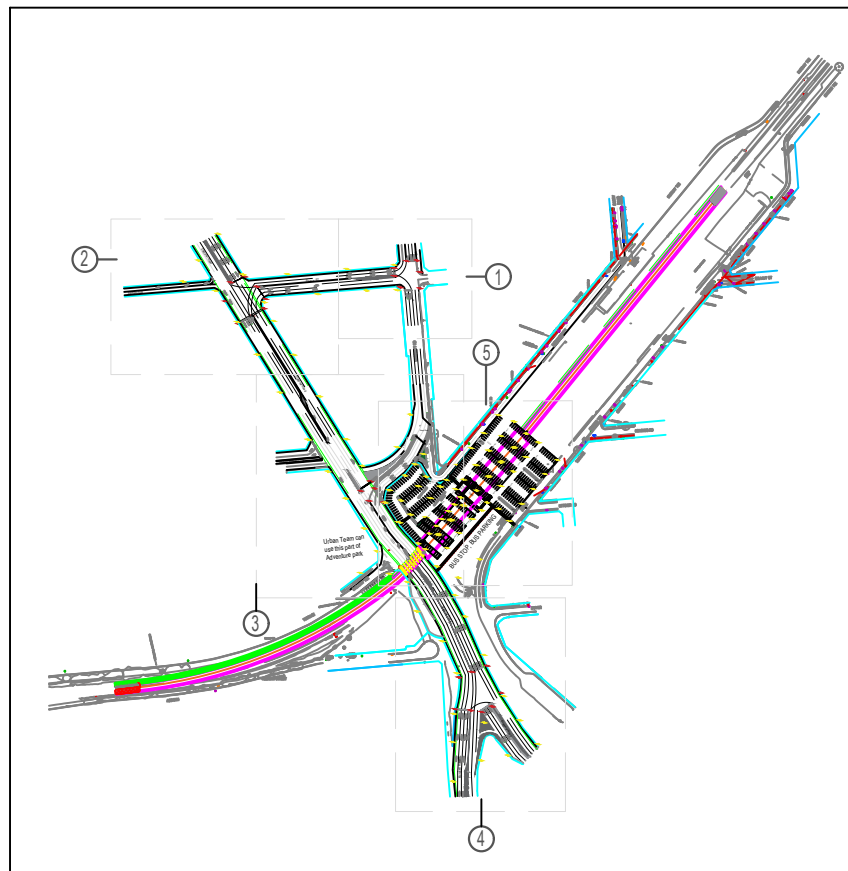


## DRAWING DETAILS

1. TRANSPORTATION DRAWINGS
2. STRUCTURAL DRAWINGS
3. GEOTECHNICAL DRAWINGS
4. SERVICES DRAWINGS
5. URBAN DRAWINGS
6. ENVIRONMENTAL DRAWINGS



# TRANSPORTATION DEPARTMENT



**DRAWING NUMBER**

**NAME OF DRAWING**

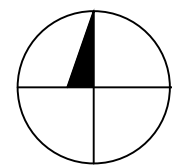
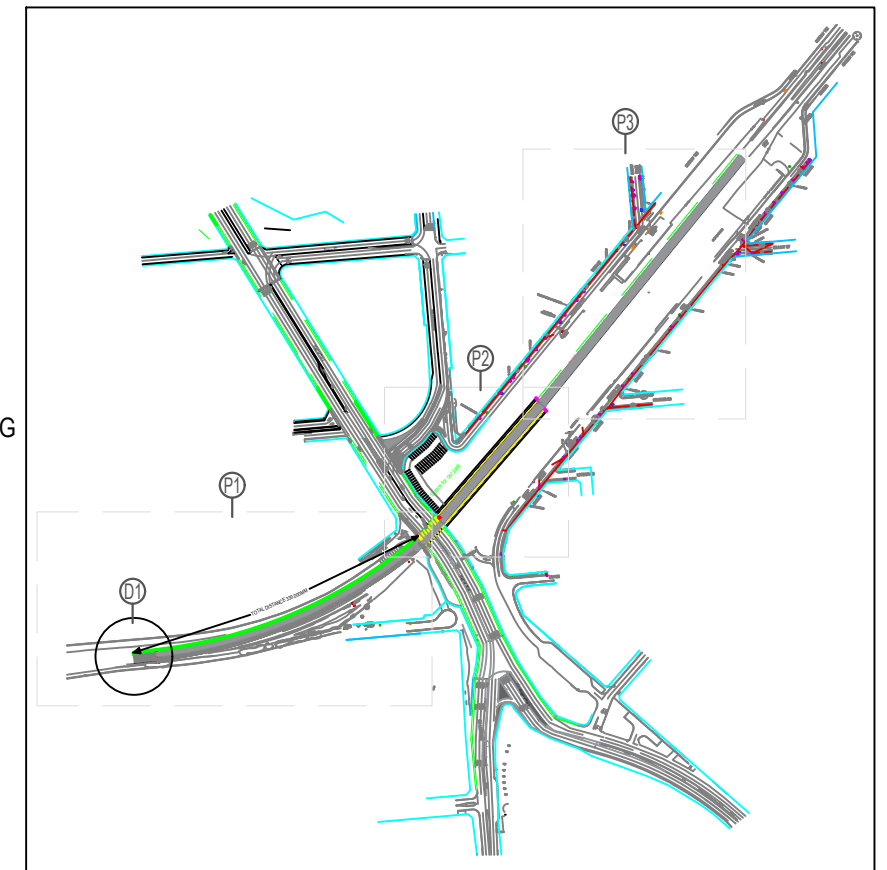
**DRAWN BY**

PACKAGE ONE: ROAD ALIGNMENT

001	MORPHETT ROAD INTERSECTION	PREM DHAKAL
002	PRUNUS STREET INTERSECTION	PENGFEI WANG
003	COLES INTERSECTION	RAZA JAMALE
004	NORTHERN SWIMMING POOL INTERSECTION	CHIZHENGPING YANG
005	CAR PARK DETAILS	PREM DHAKAL

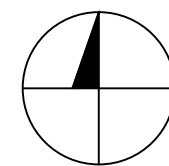
PACKAGE TWO: PLATFORM AND RAIL TRACK

006	WEST END RAILWAY TRACK	HAYELOM
007	PLATFORM AND RAILWAY TRACK DETAILS	KAVVITHIRAN S R



CAR PARK DETAILS

SCALE: 1:20000



CAR PARK DETAILS

SCALE: 1:20000

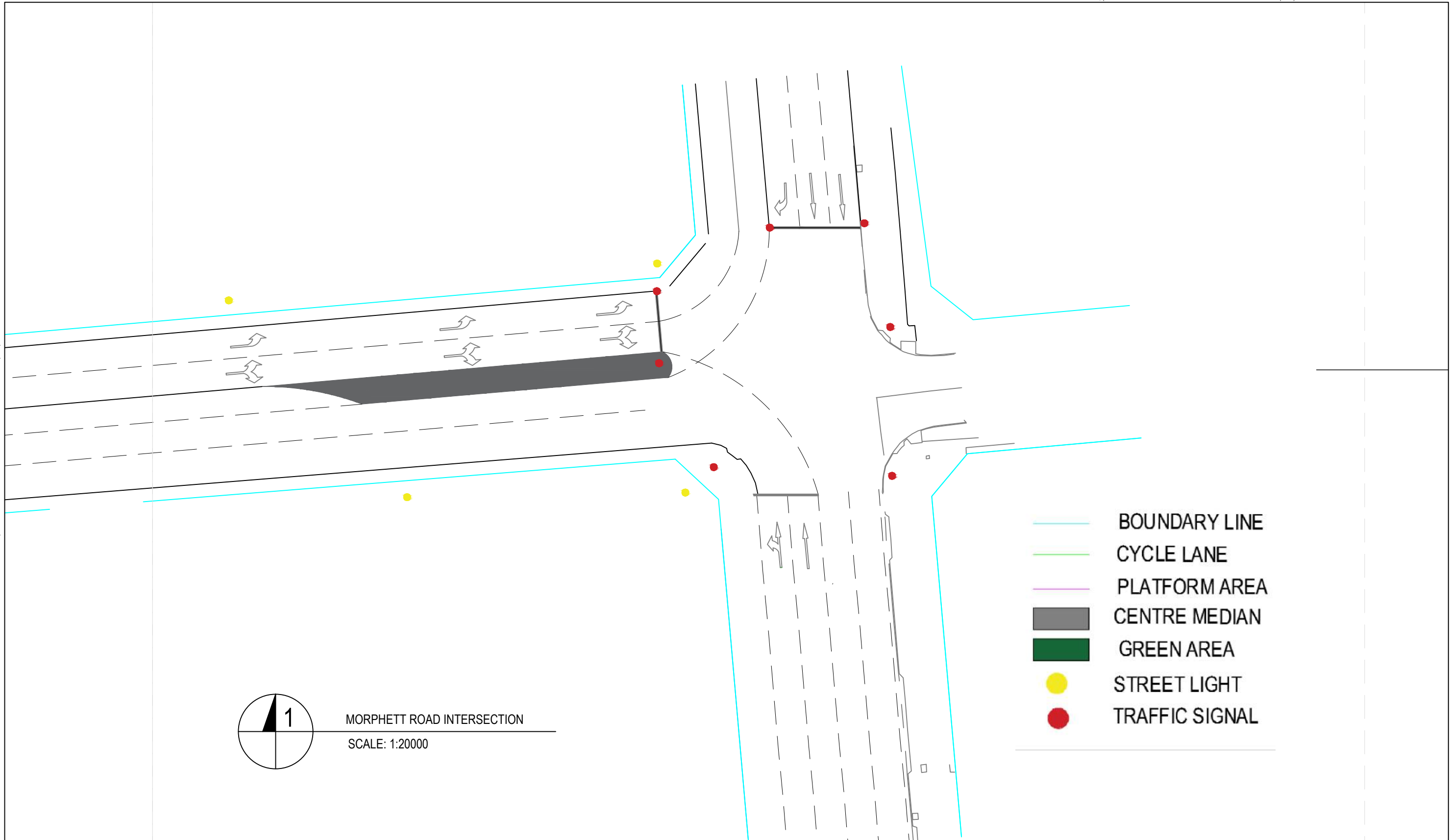
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: TSHERING PENJOR	SIGNED: TP	DATE: 11.06.2017	DRAWING TITLE: CONTENT	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 000	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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-  BOUNDARY LINE
-  CYCLE LANE
-  PLATFORM AREA
-  CENTRE MEDIAN
-  GREEN AREA
-  STREET LIGHT
-  TRAFFIC SIGNAL


MORPHETT ROAD INTERSECTION  
SCALE: 1:20000

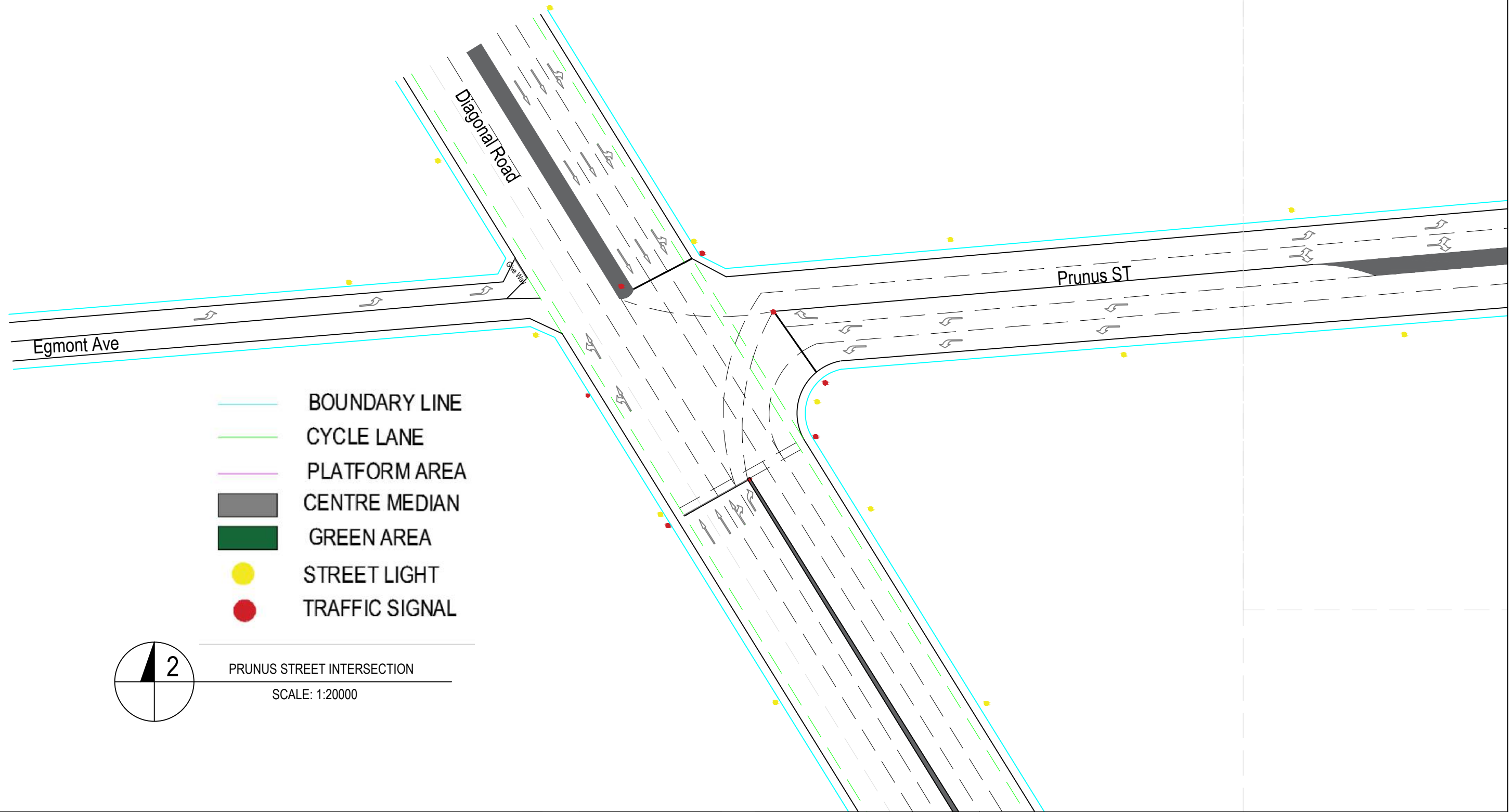
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:










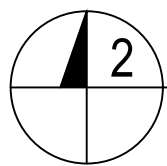
**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	DRAWING TITLE: MORPHETT ROAD INTERSECTION	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	REVISION:
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 001	
APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN	

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-  BOUNDARY LINE
-  CYCLE LANE
-  PLATFORM AREA
-  CENTRE MEDIAN
-  GREEN AREA
-  STREET LIGHT
-  TRAFFIC SIGNAL



PRUNUS STREET INTERSECTION

SCALE: 1:20000

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

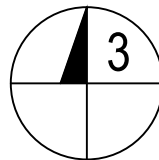
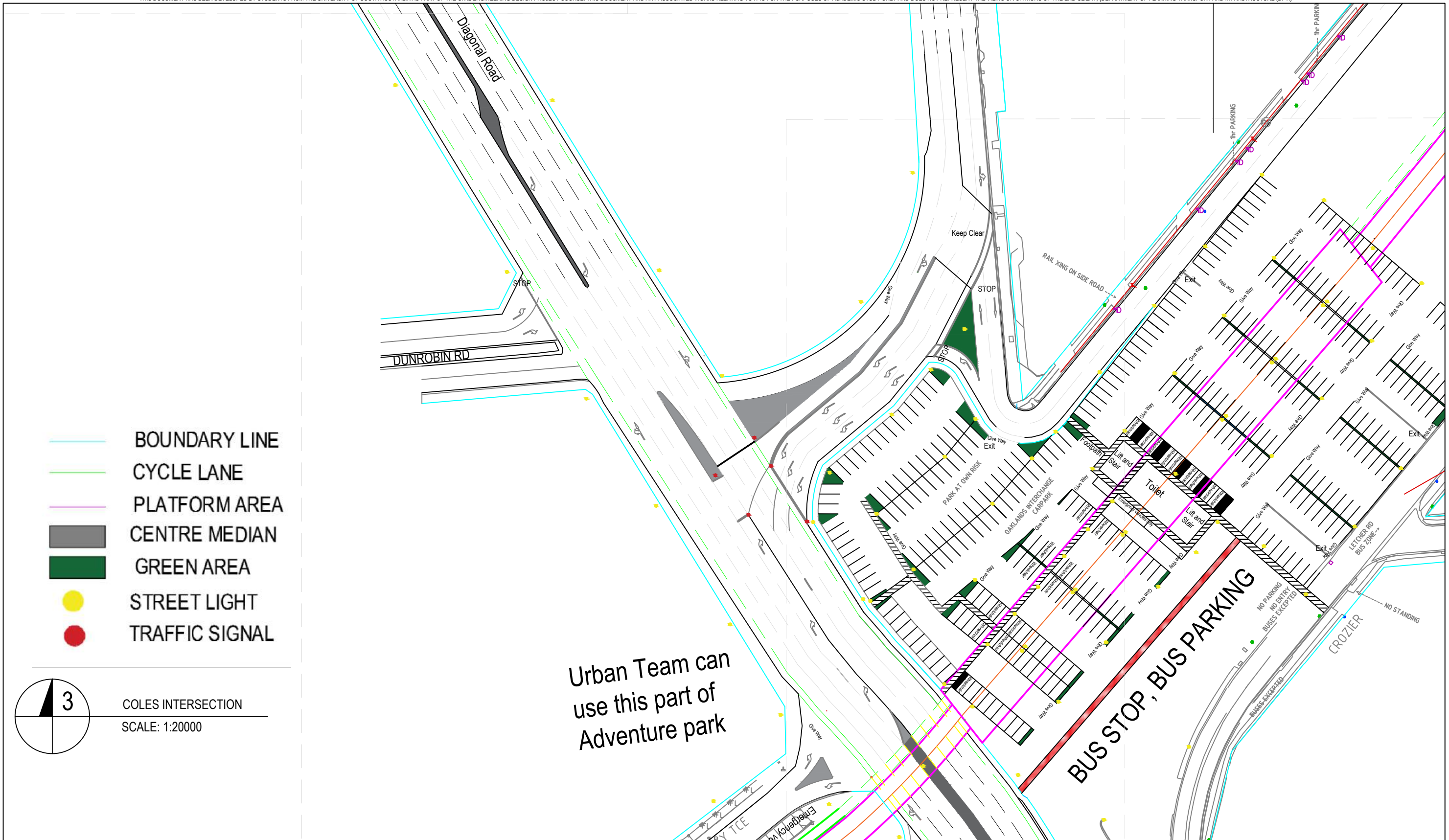


**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: PENGFEI WANG	SIGNED: PW	DATE: 10.06.2017	DRAWING TITLE: PRUNUS STREET INTERSECTION	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	REVISION:
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 002	AS SHOWN
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN



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COLES INTERSECTION  
SCALE: 1:20000

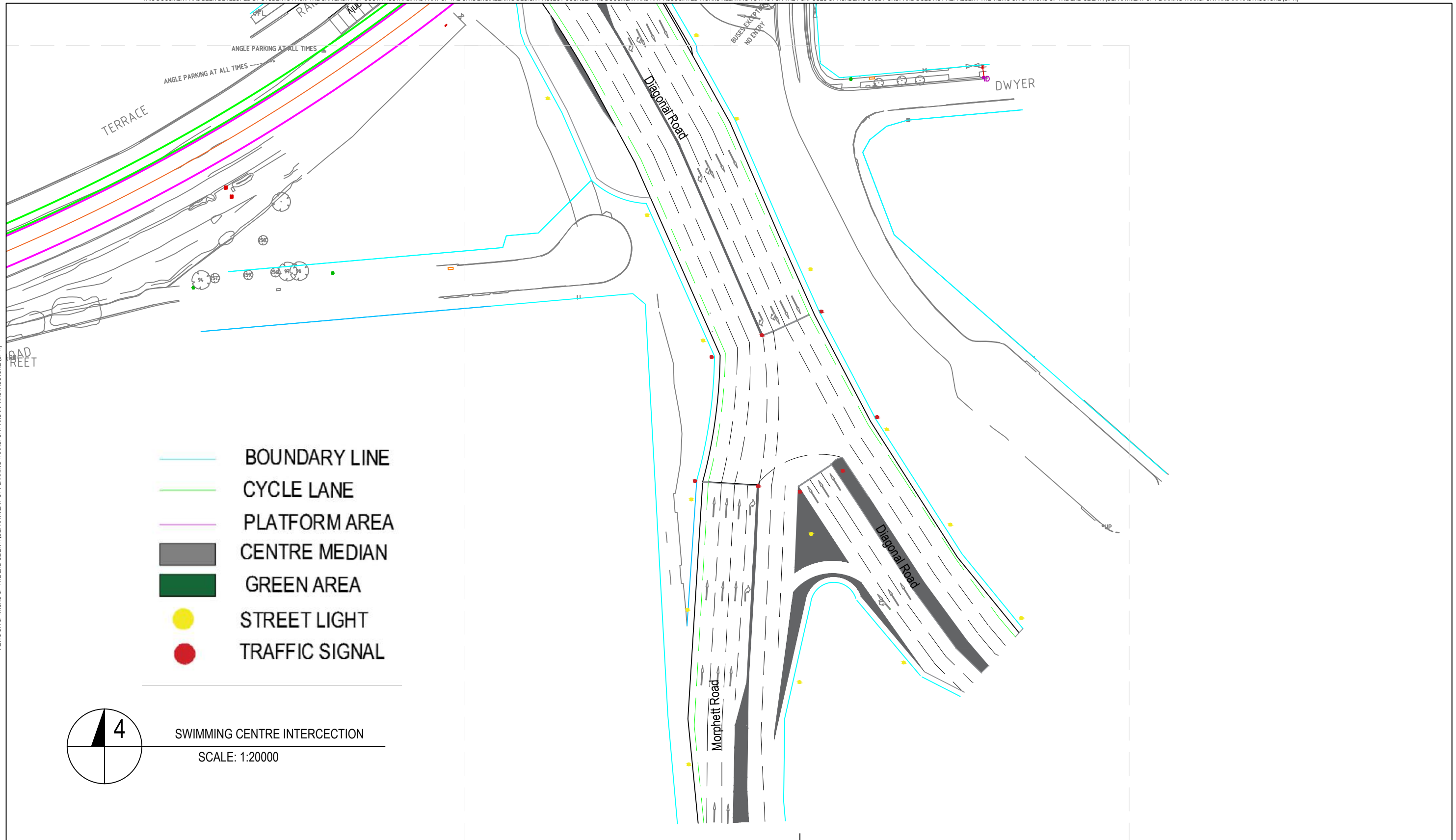
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:










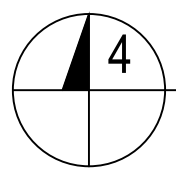
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHEIT ROADS

DRAWN BY: RAZA JAMALE	SIGNED: RJ	DATE: 10.06.2017	DRAWING TITLE: COLES INTERSECTION	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	003
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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-  BOUNDARY LINE
-  CYCLE LANE
-  PLATFORM AREA
-  CENTRE MEDIAN
-  GREEN AREA
-  STREET LIGHT
-  TRAFFIC SIGNAL



SWIMMING CENTRE INTERCEPTION

SCALE: 1:20000

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
**OAKLANDS PARK TRAIN  
 GRADE SEPARATION -  
 DIAGONAL AND  
 MORPHETT ROADS**

DRAWN BY: CHIZHENGPING YANG	SIGNED: CY	DATE: 10.06.2017	DRAWING TITLE: SWIMMING CENTRE INTERCEPTION	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	REVISION:
CHECKED BY: TSEING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 004	
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN



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REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

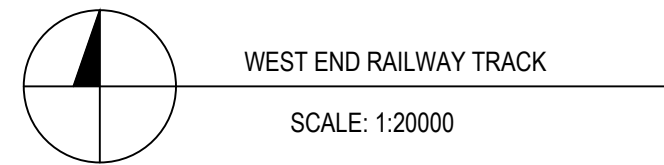
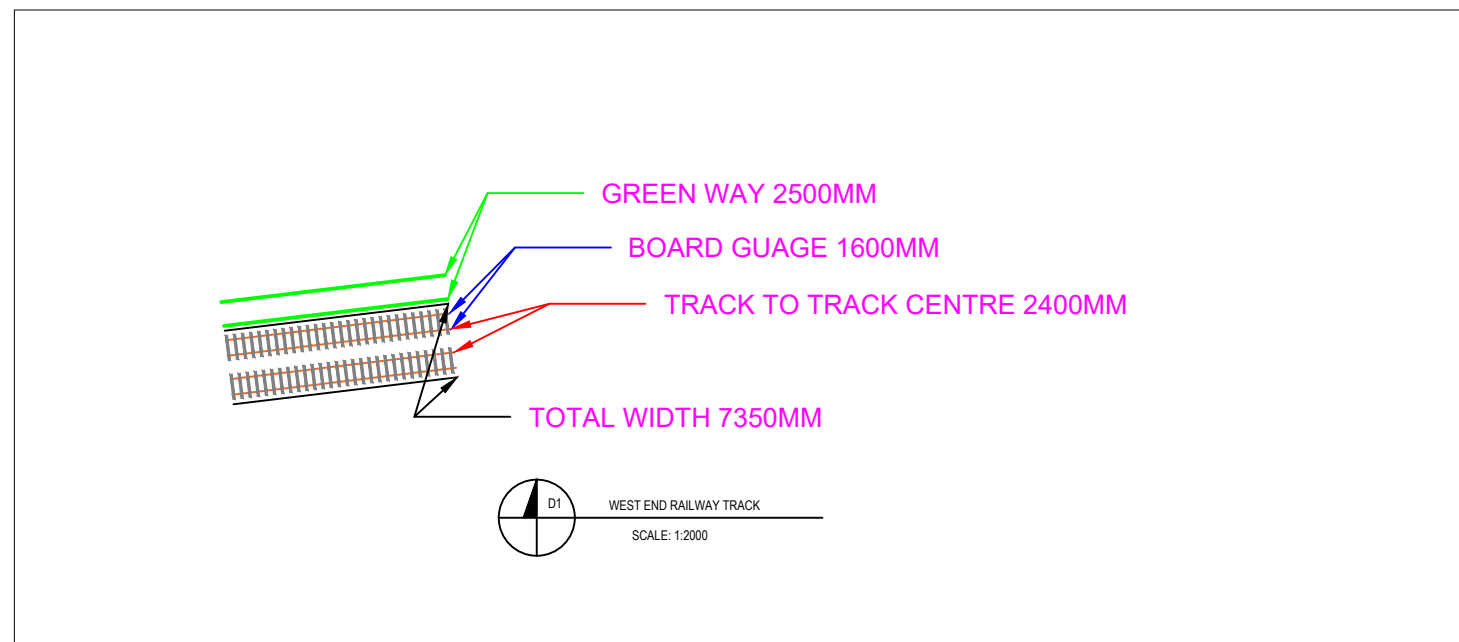
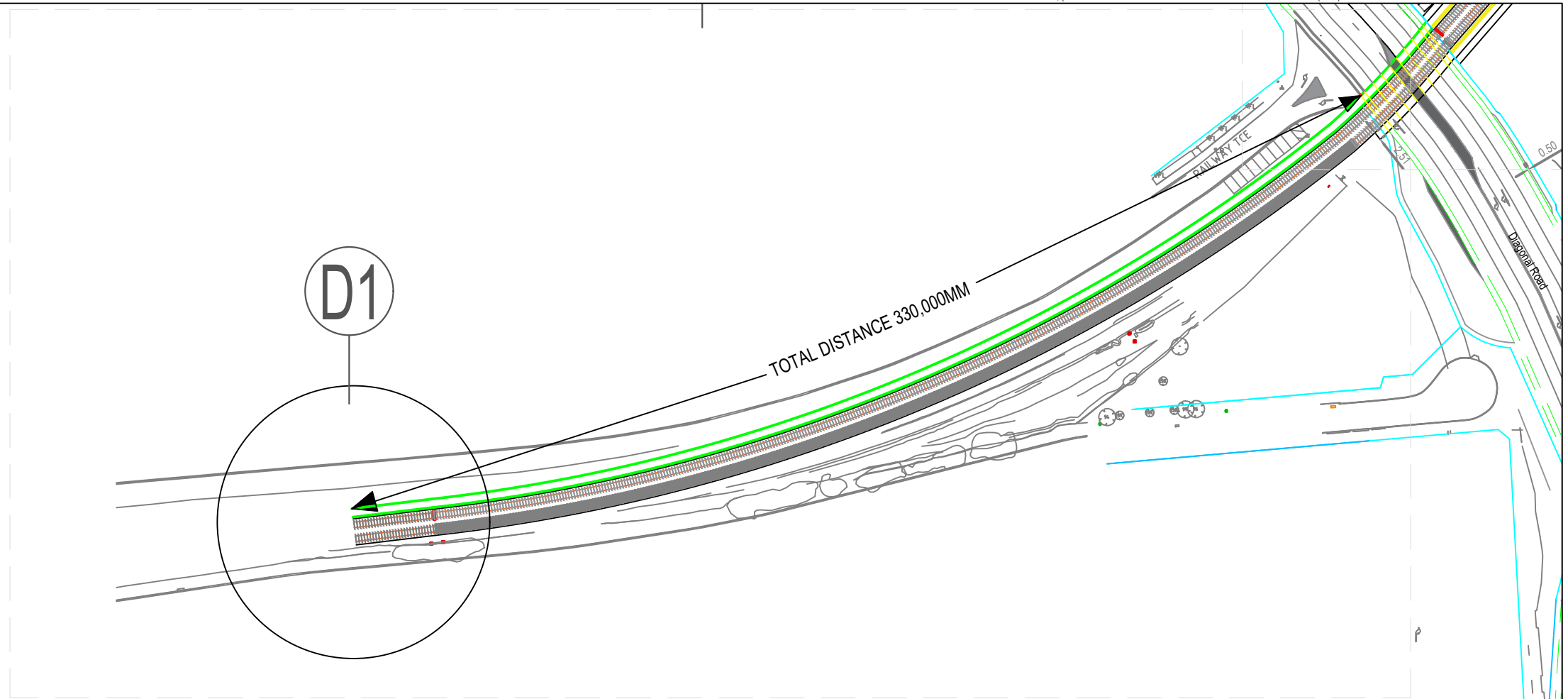


**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHEM ROADS

DRAWN BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	DRAWING TITLE: CAR PARK DETAILS	
VERIFIED BY: PREM DHAKAL	SIGNED:	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	005
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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-  BOUNDARY LINE
-  CYCLE LANE
-  PLATFORM AREA
-  CENTRE MEDIAN
-  GREEN AREA
-  STREET LIGHT
-  TRAFFIC SIGNAL



SLEEPERS WIDTH 0.25M  
 DISTANCE BETWEEN TWO SLEEPERS = 0.6 M  
 LENGTH OF SLEEPERS = 2.6M

- DISTANCE BETWEEN TWO SLEEPERS WILL CHANGE ACCORDING TO TURNING RADIUS

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

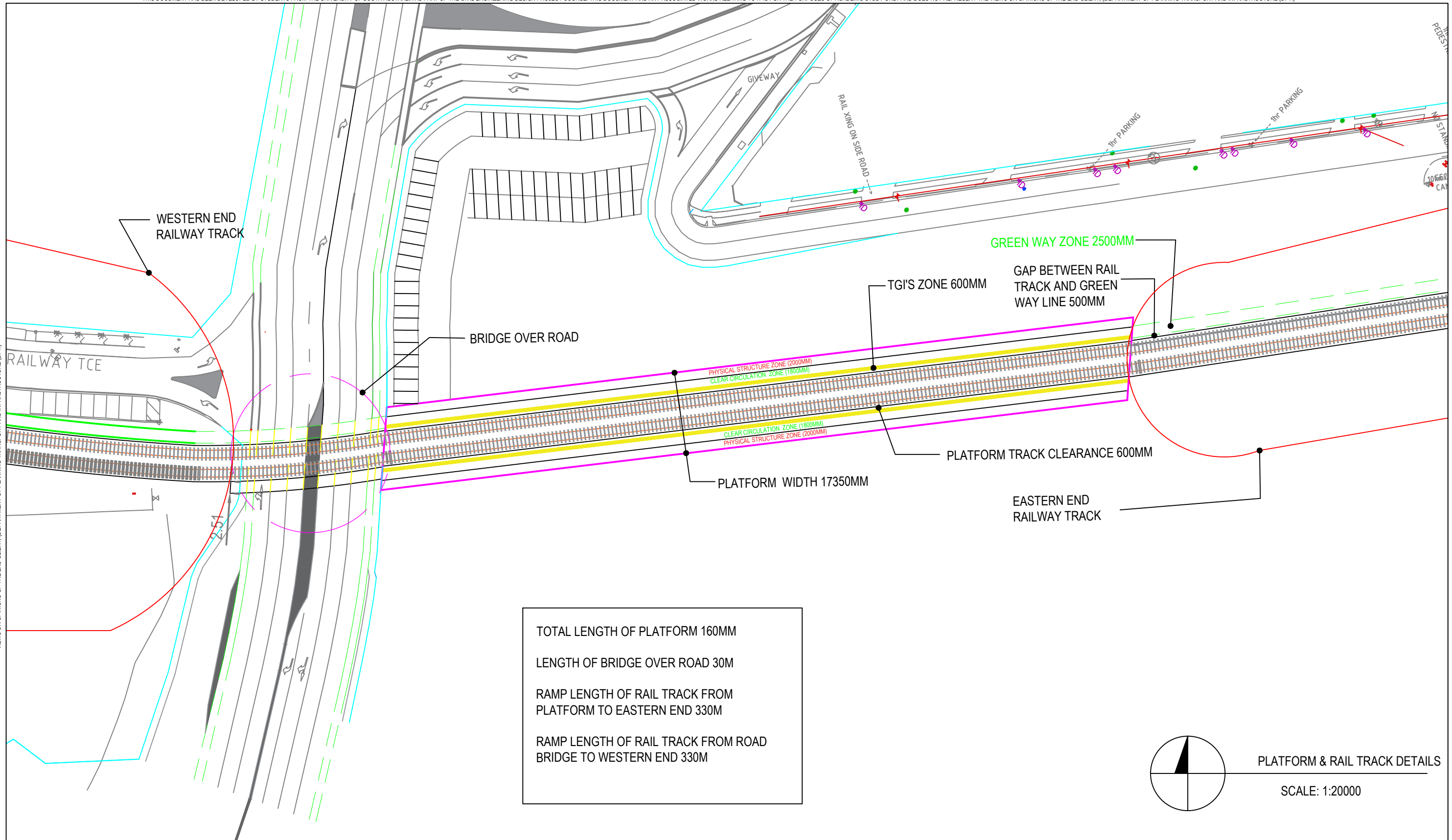


**PROJECT:**  
 OAKLANDS PARK TRAIN  
 GRADE SEPARATION -  
 DIAGONAL AND  
 MORPHETT ROADS

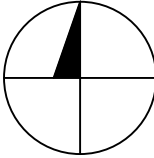
DRAWN BY: HAYELOM	SIGNED: HY	DATE: 10.06.2017	DRAWING TITLE: WEST END RAILWAY TRACK	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	006
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN



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TOTAL LENGTH OF PLATFORM 160MM  
 LENGTH OF BRIDGE OVER ROAD 30M  
 RAMP LENGTH OF RAIL TRACK FROM PLATFORM TO EASTERN END 330M  
 RAMP LENGTH OF RAIL TRACK FROM ROAD BRIDGE TO WESTERN END 330M



PLATFORM & RAIL TRACK DETAILS

SCALE: 1:20000

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
 OAKLANDS PARK TRAIN  
 GRADE SEPARATION -  
 DIAGONAL AND  
 MORPHETT ROADS

DRAWN BY: KAVVITHIRAN S RAJENDHIRAN	SIGNED: KSR	DATE: 10.06.2017	DRAWING TITLE: WEST END RAILWAY TRACK	
VERIFIED BY: PREM DHAKAL	SIGNED: PD	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	007
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

## STRUCTURAL DEPARTMENT

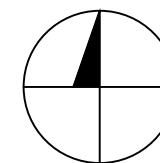
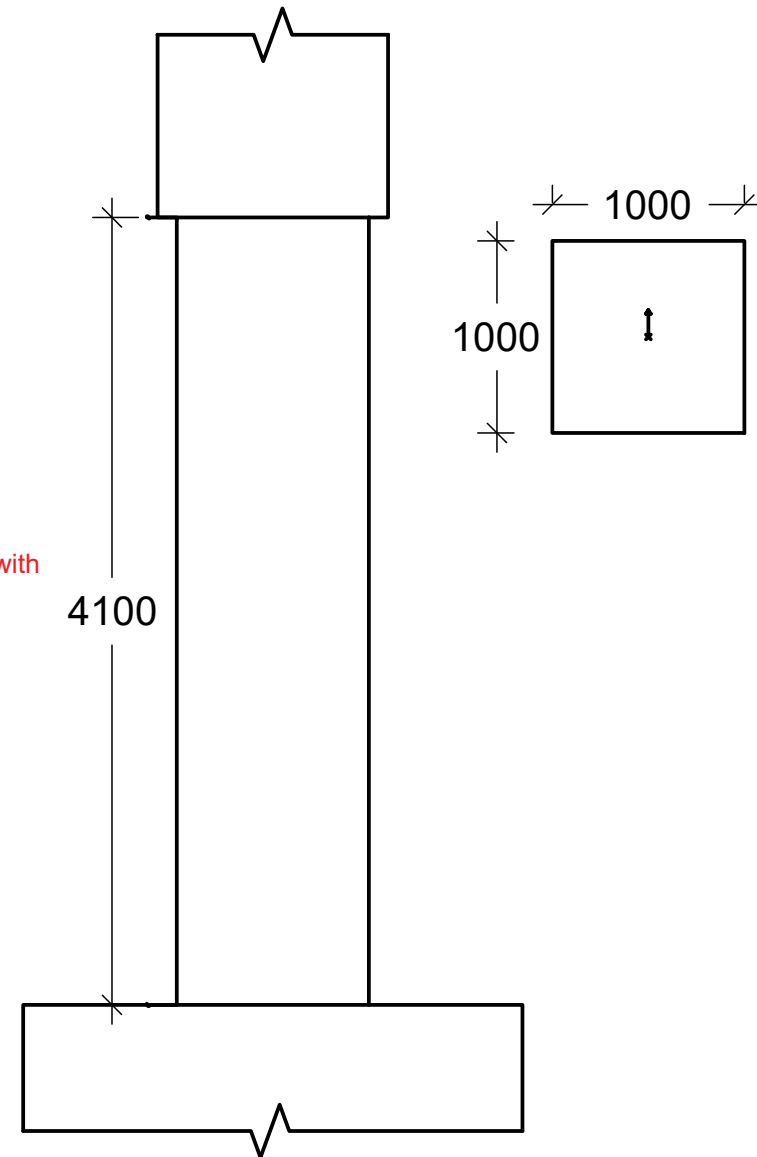
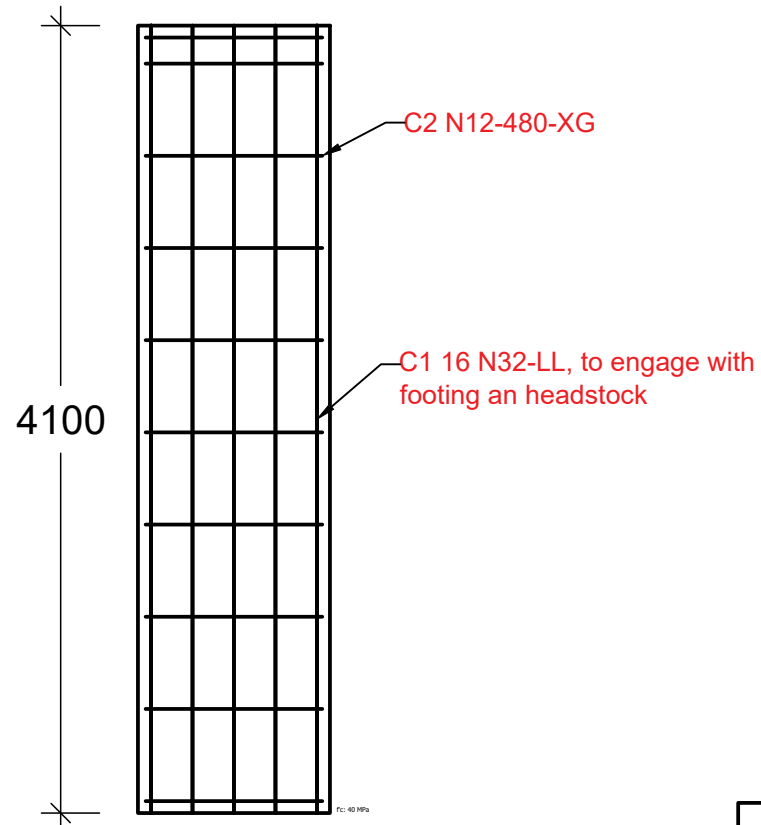
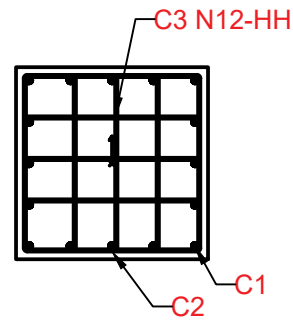
DRAWING NUMBER	NAME OF DRAWING	DRAWN BY	
<u>PACKAGE ONE: RAIL BRIDGE</u>			
0102	PLAN VIEW	SAM	NC
0103	TYPICAL CROSS SECTION	VINI	NC
0106	COLUMNS	SAM	COMPLETED
0107	HEADSTOCK	SAM	COMPLETED
0108	SUPER-TEE	JIA	COMPLETED
0109	DECK REINFORCEMENT	AMIRUL	NC
0110	PARAPETS	AMIRUL	NC
<u>PACKAGE TWO: RAIL PLATFORM</u>			
0202	PLAN VIEW	WILL	COMPLETED
0203	TYPICAL CROSS SECTION	WILL	COMPLETED
0204	ELEVATION VIEW	WILL	COMPLETED
0205	SLAB TOP & BOTTOM REINFORCEMENT	PARIN	COMPLETED
0206	SLAB CROSS SECTION	PARIN	COMPLETED
0207	BEAM REINFORCEMENT	PARIN	COMPLETED
0208	COLUMNS	PARIN	COMPLETED
0209	FOOTINGS	WILL	COMPLETED
0210	FOOTING/COLUMN CONNECTION	SAM	NC
<u>PACKAGE THREE: ARCHITECTURE SCREENS</u>			
0301	TITLE NOTES	OTHER	NA
0302	ARCHITECTURE SCREENS	OTHER	NA
<u>PACKAGE FOUR: ACCESS STRUCTURES</u>			
0401	TITLE NOTES	VINI	NA
<u>PACKAGE FIVE: CENTRE MEDIAN BARRIERS</u>			
0501	CENTRE MEDIAN BARRIERS	VINI	COMPLETED
<u>PACKAGE SIX: ELECTRIFICATION STRUCTURES</u>			
0601	TITLE NOTES	AMIRUL	NA
0602	TYPICAL DETAILS	AMIRUL	NC

**NS: NOT AVAILABLE**  
**NC: NOT COMPLETED**

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:							
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC A Difference in Thinking	<b>PROJECT:</b>		DRAWN BY: TSHERING PENJOR SIGNED: TP DATE: 13.06.2017	DRAWING TITLE: COVER
					VERIFIED BY: VINI TANDEL SIGNED: VT DATE: 13.06.2017				PROJECT NUMBER: 0617-001			
					CHECKED BY: TSHERING PENJOR SIGNED: TP DATE: 13.06.2017				DRAWING NUMBER: 001 REVISION:			
					APPROVED BY: SIGNED: DATE:				SCALE: NTS			

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COLUMN 9  
 CODE = AS3600 2009  
 5N32 TOP BARS  
 5N32 BOTTOM BARS  
 6N 32 SIDE BARS  
 N12 TIES @ 480  
 $f_c = 40 \text{ MPa}$   
 LENGTH = 4100MM



COLUMNS  
 SCALE: 1:1000

ALL DIMENSIONS IN MM

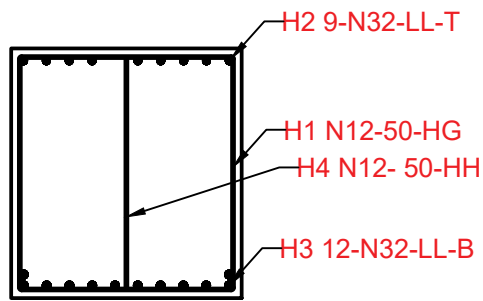
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**PROJECT:**  
 OAKLANDS PARK TRAIN  
 GRADE SEPARATION -  
 DIAGONAL AND  
 MORPHETT ROADS

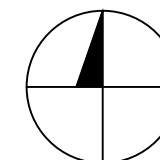
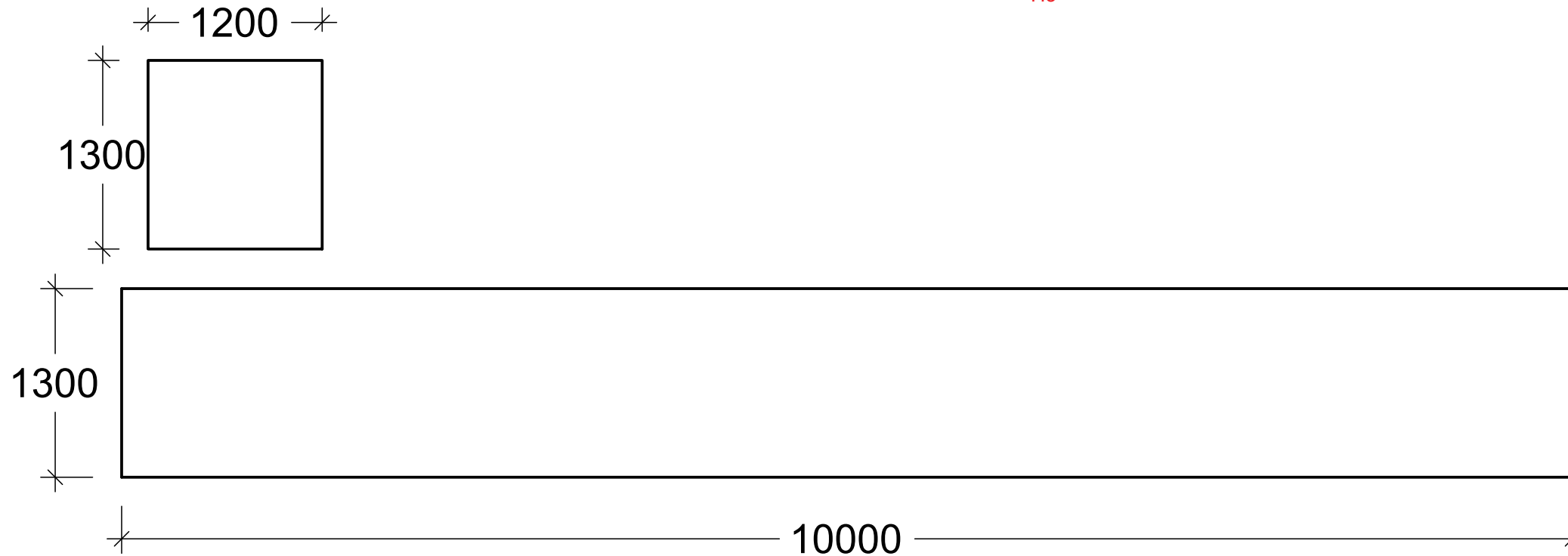
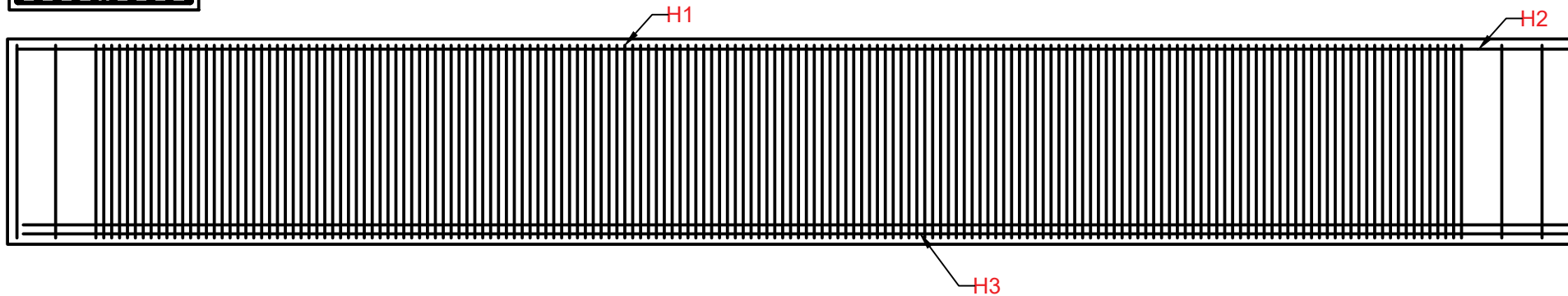
DRAWN BY: SAM	SIGNED: SAM	DATE: 13.06.2017	DRAWING TITLE: HEAD STOCK	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 13.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 13.06.2017	DRAWING NUMBER:	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN





**HEADSTOCK DESIGN CALCS**

9N28 TOP BARS  
 10N32 BOT BARS  
 2N32 BOT BARS  
 N10 STIRRUPS @ 50  
 $f_c = 40 \text{ MPa}$  SELF COMPACTING CONCRETE



HEADSTOCK  
 SCALE: 1:1000

ALL DIMENSIONS IN MM

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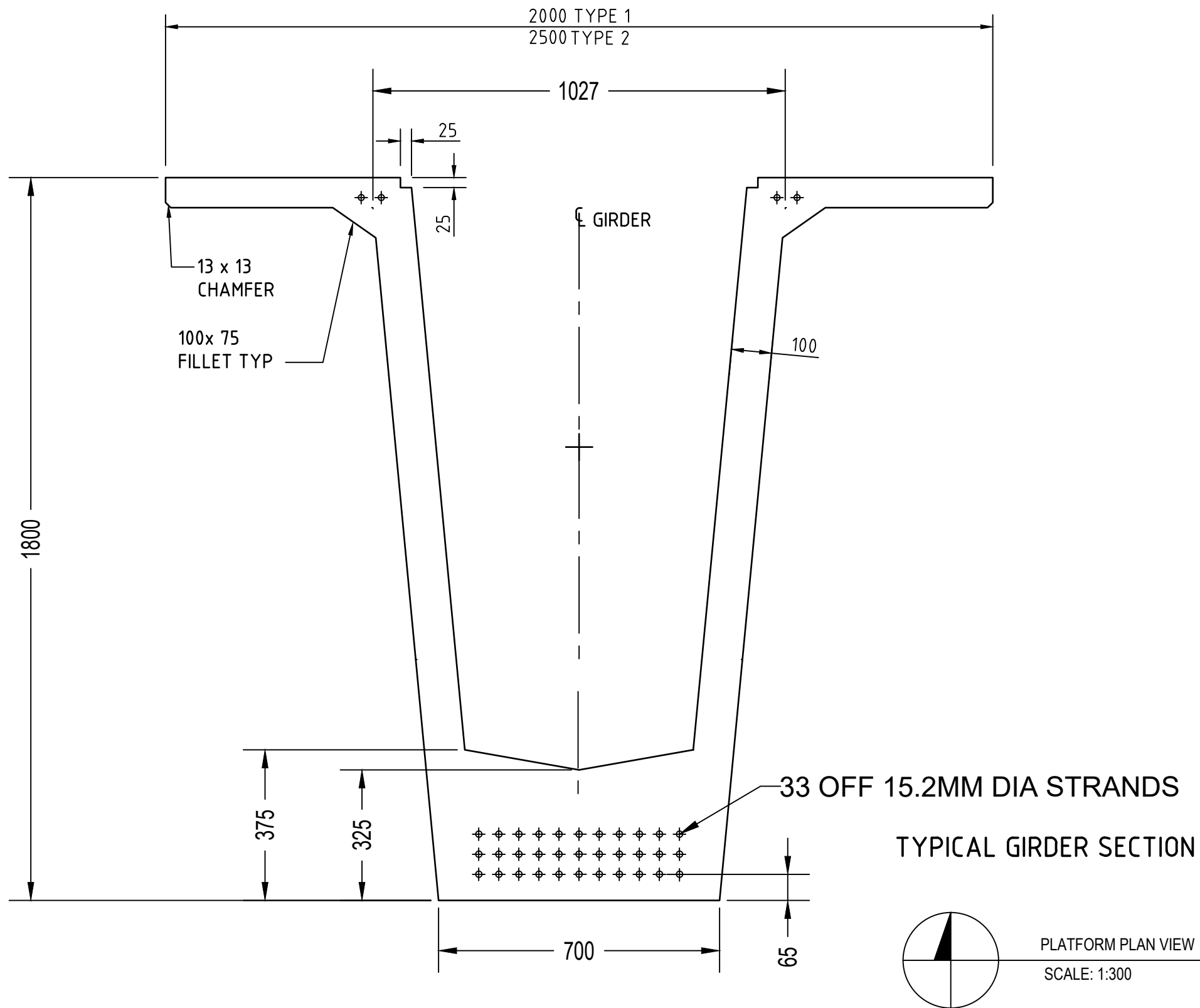
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
 OAKLANDS PARK TRAIN  
 GRADE SEPARATION -  
 DIAGONAL AND  
 MORPHETT ROADS

DRAWN BY: SAM	SIGNED: SAM	DATE: 13.06.2017	DRAWING TITLE: HEAD STOCK	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 13.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 13.06.2017	DRAWING NUMBER:	0107
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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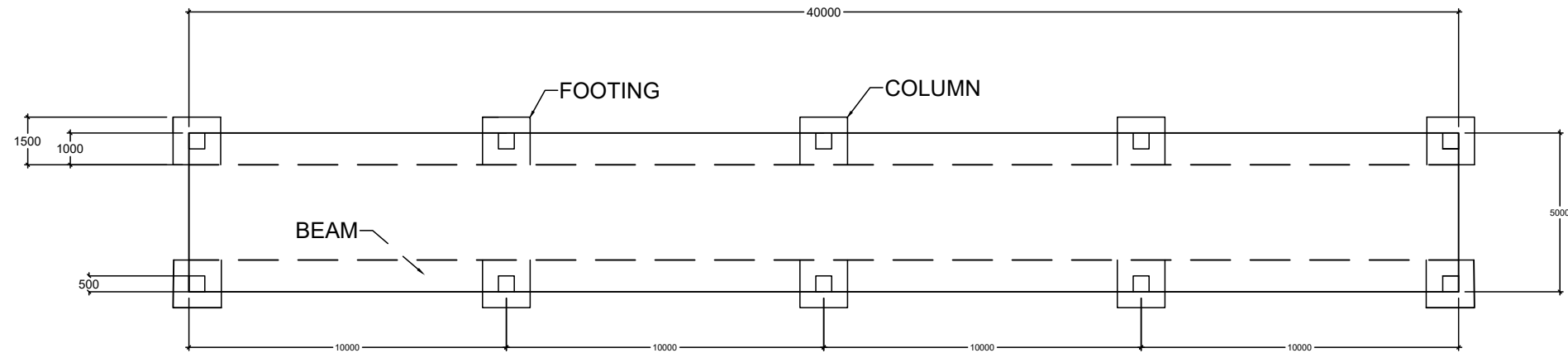
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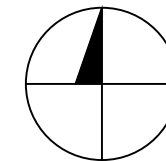
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: JIA SHI	SIGNED: JS	DATE: 09.06.2017	DRAWING TITLE: SUPPER - TEE	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 12.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 12.06.2017	DRAWING NUMBER:	0108
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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NOTE: TOTAL LENGTH OF THE PLATFORM WILL BE 160M. THE DRAWING HERE HAS CONSIDERED 40M LENGTH OF THE PLATFORM, OTHER PARTS FOR THE PLATFORM WOULD BE SAME.



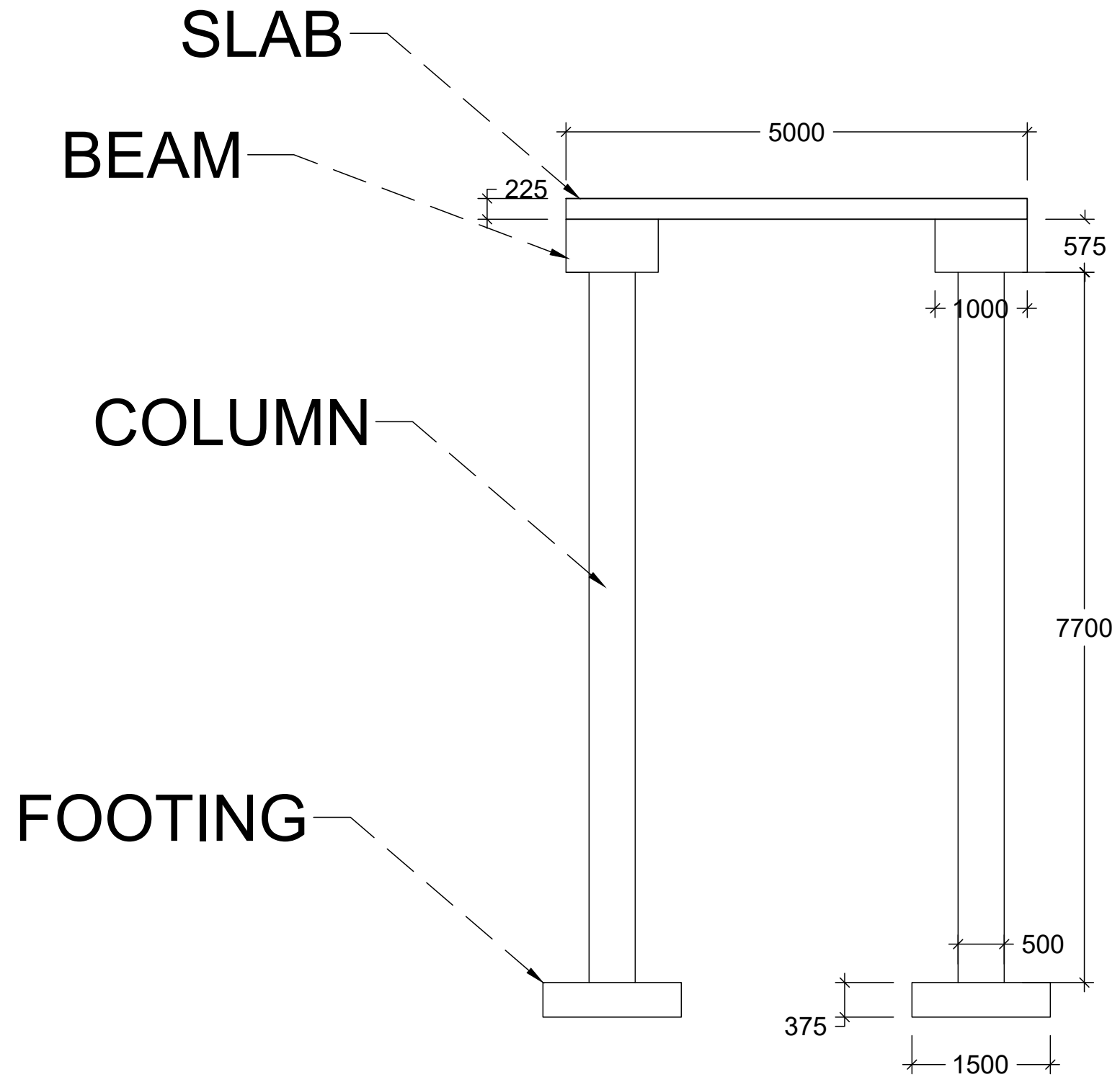
PLATFORM PLAN VIEW

SCALE: 1:5000

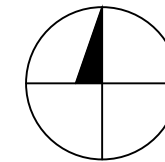
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:										
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC A Difference in Thinking	<b>PROJECT:</b>		DRAWN BY: HAOBIN WANG	SIGNED: HW	DATE: 10.06.2017	DRAWING TITLE: PLATFORM PLAN VIEW	
					VERIFIED BY: VINI TANDEL				SIGNED: VT	DATE: 10.06.2017	OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS		PROJECT NUMBER: 0617-001		
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 0202	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE: AS SHOWN				





NOTE: TOTAL LENGTH OF THE PLATFORM WILL BE 160M. THE DRAWING HERE HAS CONSIDERED 40M LENGTH OF THE PLATFORM, OTHER PARTS FOR THE PLATFORM WOULD BE SAME.



PLATFORM TYPICAL CROSS SECTION

SCALE: 1:1500

ALL DIMENSIONS IN MM

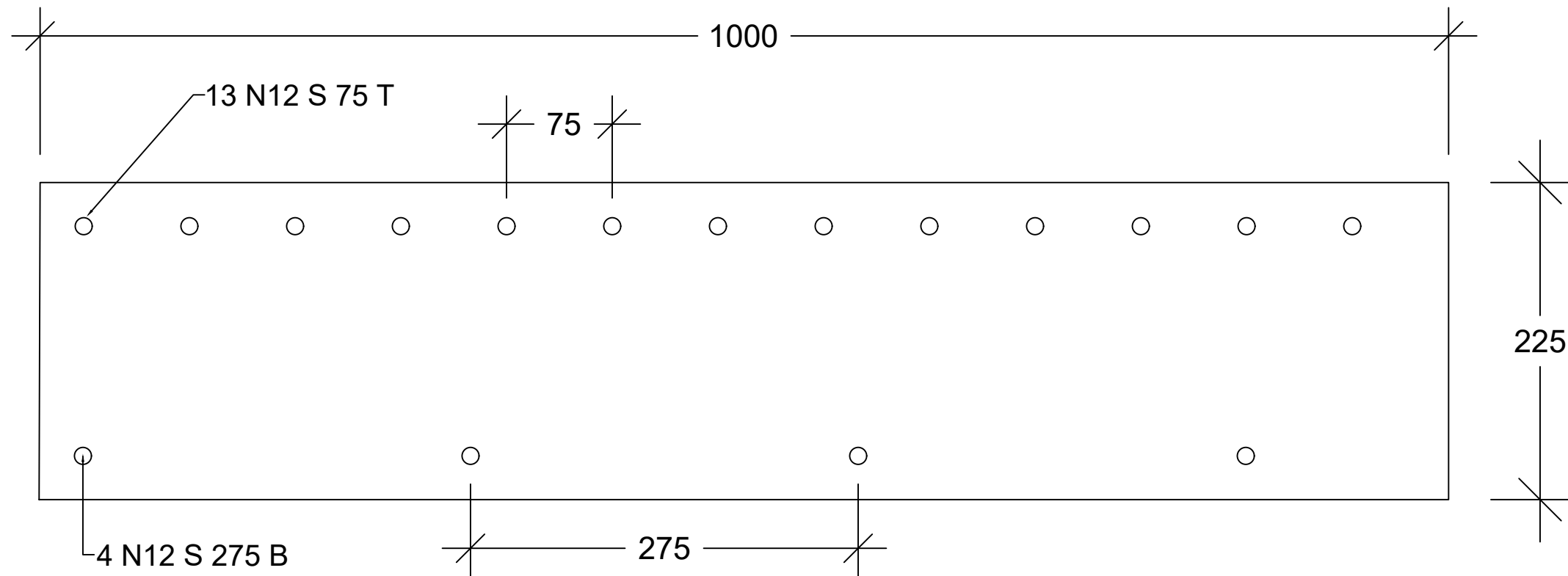
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



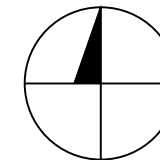
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: HAOBIN WANG	SIGNED: HW	DATE: 10.06.2017	DRAWING TITLE: PLATFORM TYPICAL CROSS SECTION	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 0203	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN	





NOTE: THE DRAWING SHOWS A CROSS SECTION VIEW OF SLAB REINFORCEMENT FOR 100MM WIDTH



SLAB CROSS-SECTION VIEW

SCALE: 1:100

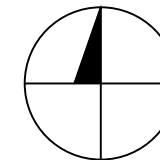
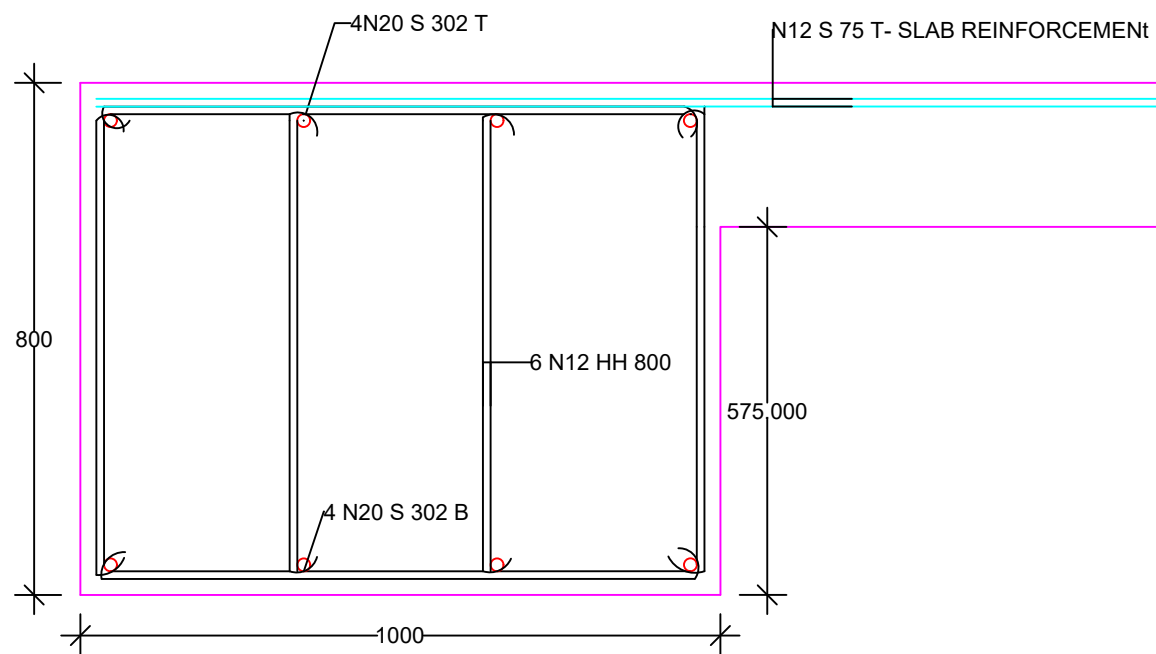
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:											
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC A Difference in Thinking	<b>PROJECT:</b>		DRAWN BY: PARIN UPADHYAY	SIGNED: PARIN	DATE: 10.06.2017	DRAWING TITLE: SLAB CROSS-SECTION VIEW		
					VERIFIED BY: VINI TANDEL				SIGNED: VT	DATE: 10.06.2017	OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS		PROJECT NUMBER: 0617-001			
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 005			REVISION:		
					APPROVED BY:				SIGNED:	DATE:	SCALE: AS SHOWN					





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BEAM REINFORCEMENT

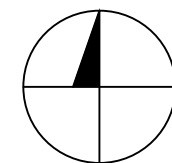
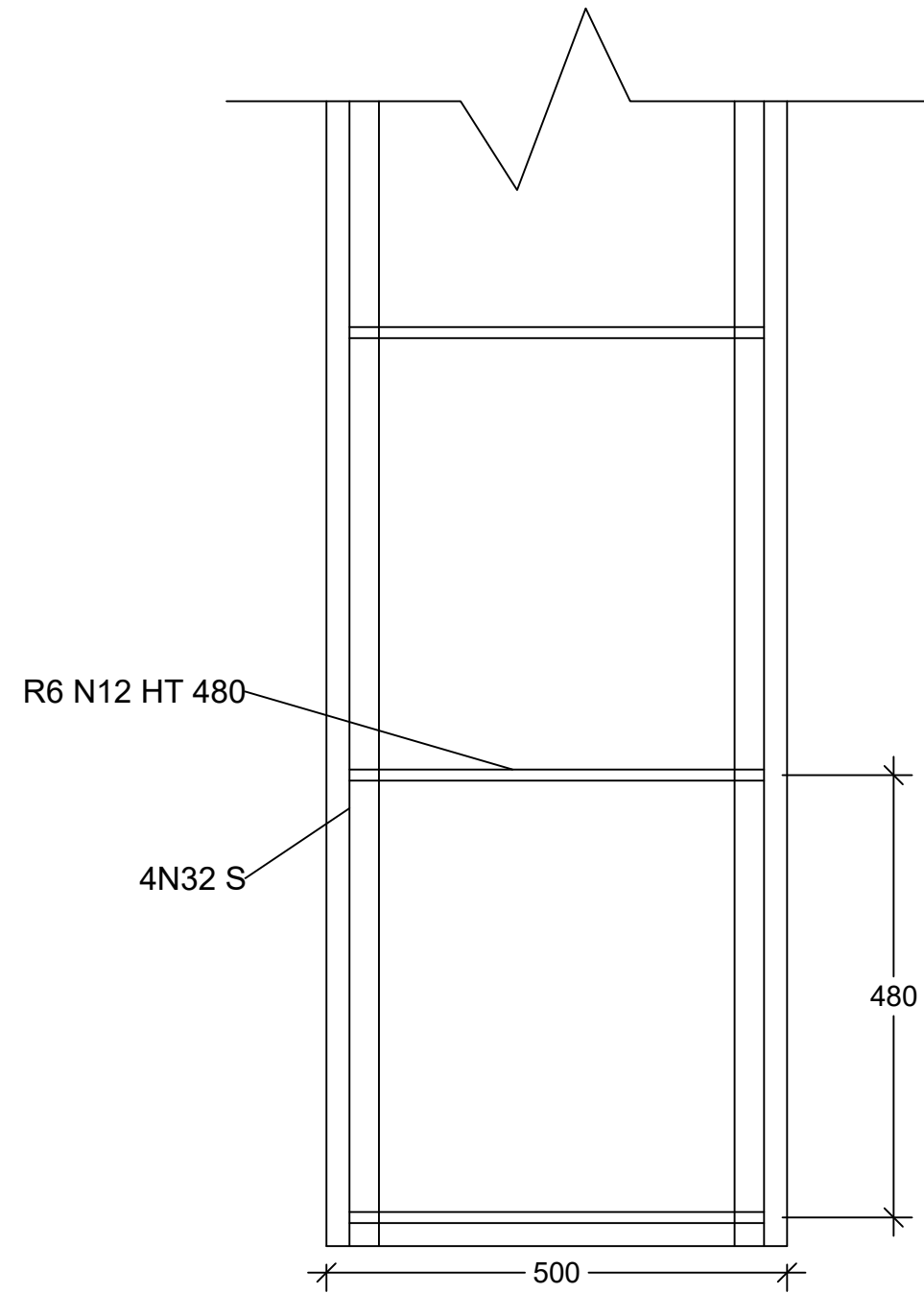
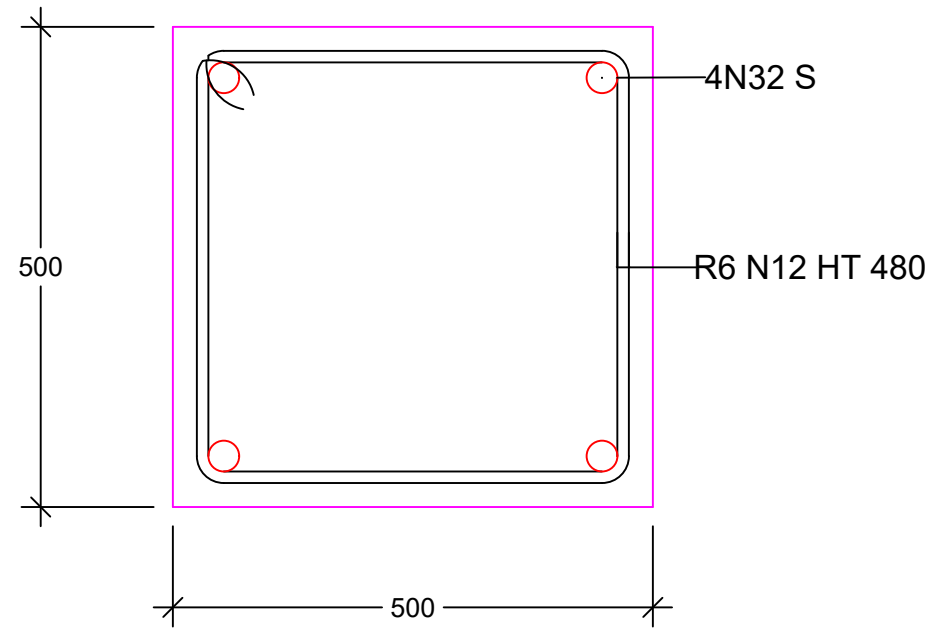
SCALE: 1:300

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:	Government of South Australia Department of Planning, Transport and Infrastructure		University of South Australia		DPC A Difference in Thinking		<b>PROJECT:</b> OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS		DRAWN BY: PARIN UPADHYAY	SIGNED: PU	DATE: 10.06.2017	DRAWING TITLE: BEAM REINFORCEMENT	
														VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	
														CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 008	REVISION:
														APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN	

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### CROSS SECTIONAL VIEW



COLUMN REINFORCEMENT

SCALE: 1:200

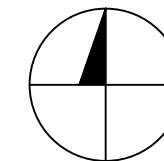
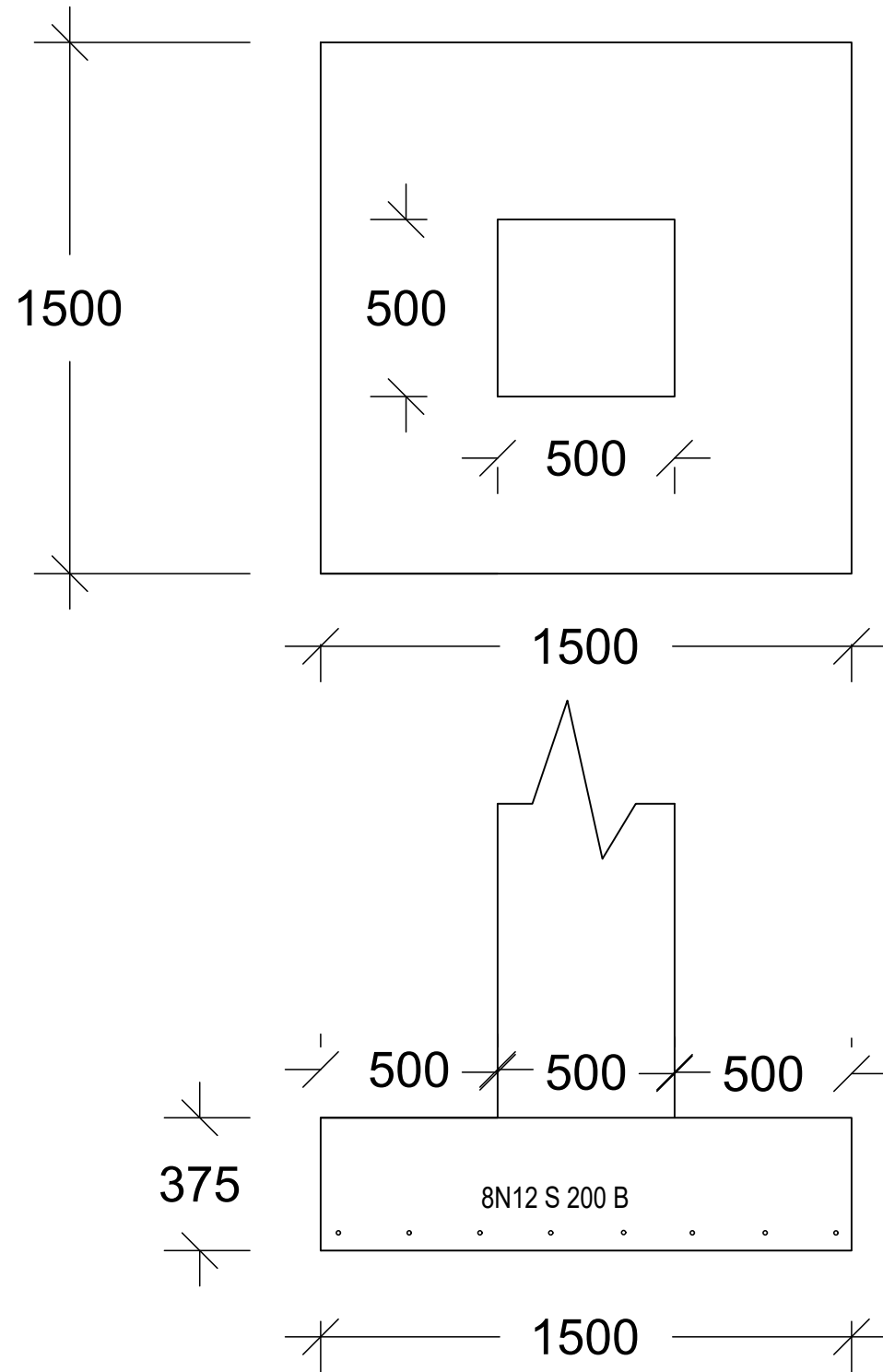
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: PARIN UPADHYAY	SIGNED: PU	DATE: 10.06.2017	DRAWING TITLE: COLUMN REINFORCEMENT	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER: 0617-001	REVISION:
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 009	
APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN	



PLATFORM FOOTING

SCALE: 1:500

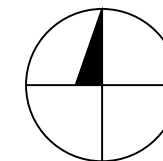
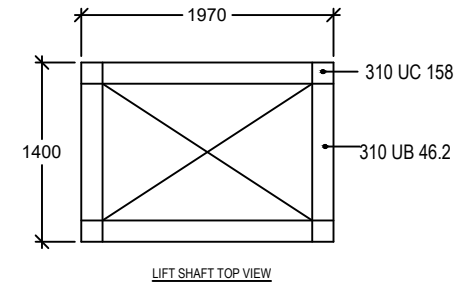
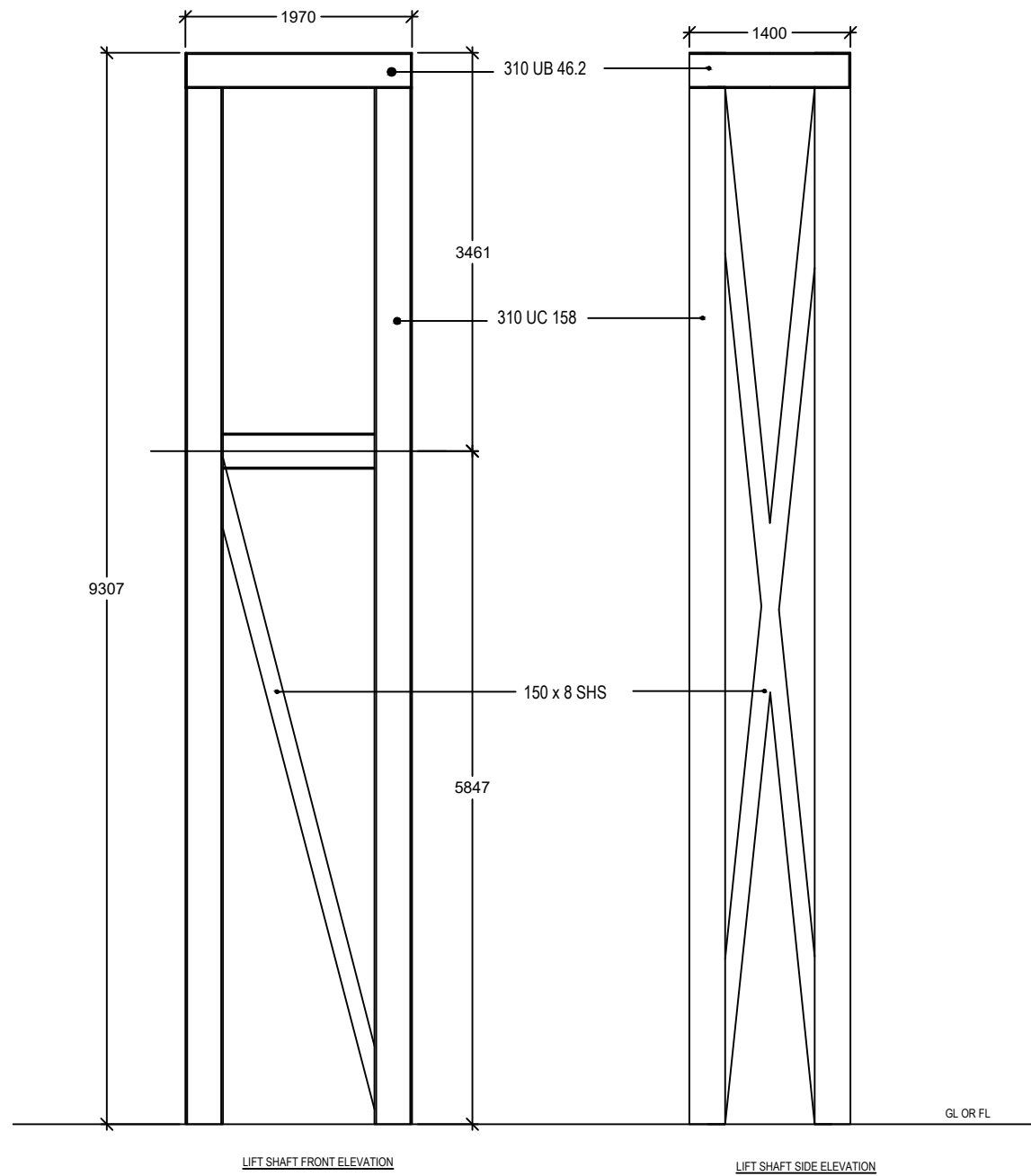
ALL DIMENSIONS IN MM

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REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:	 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC A Difference in Thinking	<b>PROJECT:</b>		DRAWN BY: HAOBIN WANG	SIGNED: HW	DATE: 10.06.2017	DRAWING TITLE: PLATFORM FOOTING	
									VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER: 0617-001			
									CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER: 0210	REVISION:		
									APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN			



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LIFT SHAFT  
SCALE: 1:1500

ALL DIMENSIONS IN MM

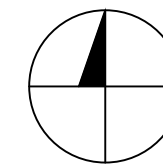
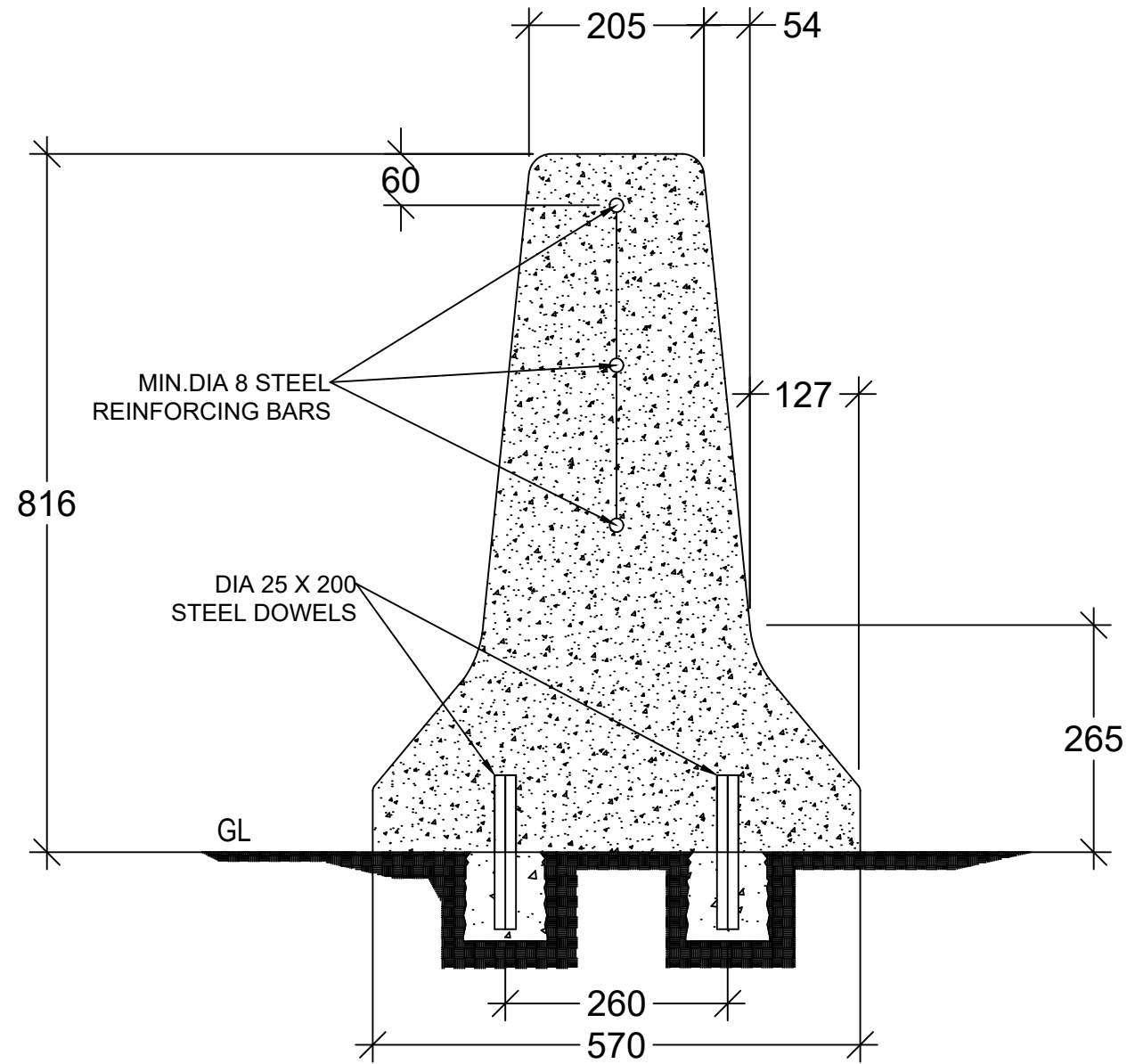
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	DRAWING TITLE: CENTRE MEDIAN BARRIERS	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	001
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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CENTRE MEDIAN BARRIERS  
SCALE: 1:200

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	DRAWING TITLE: CENTRE MEDIAN BARRIERS	
VERIFIED BY: VINI TANDEL	SIGNED: VT	DATE: 10.06.2017	PROJECT NUMBER:	0617-001
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 10.06.2017	DRAWING NUMBER:	001
APPROVED BY:	SIGNED:	DATE:	REVISION:	AS SHOWN

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STANDARD BARS			NON-STANDARD BARS			STANDARD TIES		NON-STANDARD TIES		EXAMPLE OF REINFORCEMENT DETAILS		
DIAGRAM	CODE	DIAGRAM	CODE	DIAGRAM	CODE	DIAGRAM	CODE	DIAGRAM	CODE	DIAGRAM	CODE	
	S		U		AZ		UT		T	<p><b>PLAN</b></p> <p><b>SECTION 1</b></p> <p><b>BAR NOTATION</b></p> <p>S8 8-N24-S-250-T</p> <p>S9 8-N24-LL-250-T</p> <p><b>MESH NOTATION</b></p> <p>S7 SL81-S-B</p> <p><b>BAR MARK</b></p> <p>NO OF BARS</p> <p>DUCTILITY CLASS</p> <p>NOM. BAR DIA (mm)</p> <p>BAR BENDING CODE</p> <p>BAR SPACING</p> <p>LOCATION</p> <p><b>LOCATION</b></p> <p>T-TOP FACE</p> <p>B-BOTTOM FACE</p> <p>NF-NEAR FACE</p> <p>FF-FAR FACE</p> <p>EF-EACH FACE †</p> <p>C-PLACED CENTRALLY</p> <p>† THE NUMBER OF BARS INDICATED IN THE BAR NOTATIONS IS THE QUANTITY IN EACH FACE</p> <p><b>NOTES</b></p> <p>1. DESIGNATION FOR BARS AND MESH IN ACCORDANCE WITH AS/NZS 4671.</p> <p>2. STANDARD HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH AS 3600.</p> <p>3. ALL DIMENSIONS ARE TO INTERSECTION OF STRAIGHT PORTIONS AT OUTSIDE OF ALL TYPES OF BENDS.</p> <p>4. MESH SHEETS ARE 2400mm WIDE. WHERE WIDTH EXCEEDS THIS VALUE THE SUPPLIER SHALL ADD IN THE SPECIFIED SIDE LAPS TO OBTAIN THE GROSS MESH AREA.</p> <p>5. THE BAR BENDING CODES FOR MESH ARE THE SAME AS FOR BARS (FOR EXAMPLE L,LL,V).</p> <p>6. NON-STANDARD BARS TO BE CODED Z1,Z2 ETC. ADD SUFFIX "T" FOR NON-STANDARD TIES (FOR EXAMPLE Z3T,Z4T, ETC).</p> <p>7. WHERE BARS CANNOT BE SUPPLIED IN THE LENGTH SPECIFIED THEY SHALL BE LAPPED. THE LAPS SHALL BE STAGGERED AND THEIR LOCATION SHALL BE SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT.</p>		
	H		VV		BZ		CT		XT			
	HH		VL		CZ		VT		BT			
	L		VS		SP		RT					
	LL		J		S							
	LH		JJ		L							
	LV		JL		P							
	K		JV		AL							
	WK		F		AW							
	WS		C									

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

Government of South Australia  
Department of Planning, Transport and Infrastructure

University of South Australia

DPC  
A Difference in Thinking

**PROJECT:**

**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: TSHERING PENJOR	SIGNED: TP	DATE: 12.06.2017	DRAWING TITLE: BAR SHAPE DIAGRAM	
VERIFIED BY: VINIKUMARI TANDEL	SIGNED: VT	DATE: 12.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 12.06.2017	DRAWING NUMBER: 000	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	NTS





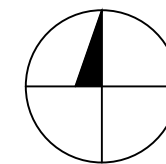
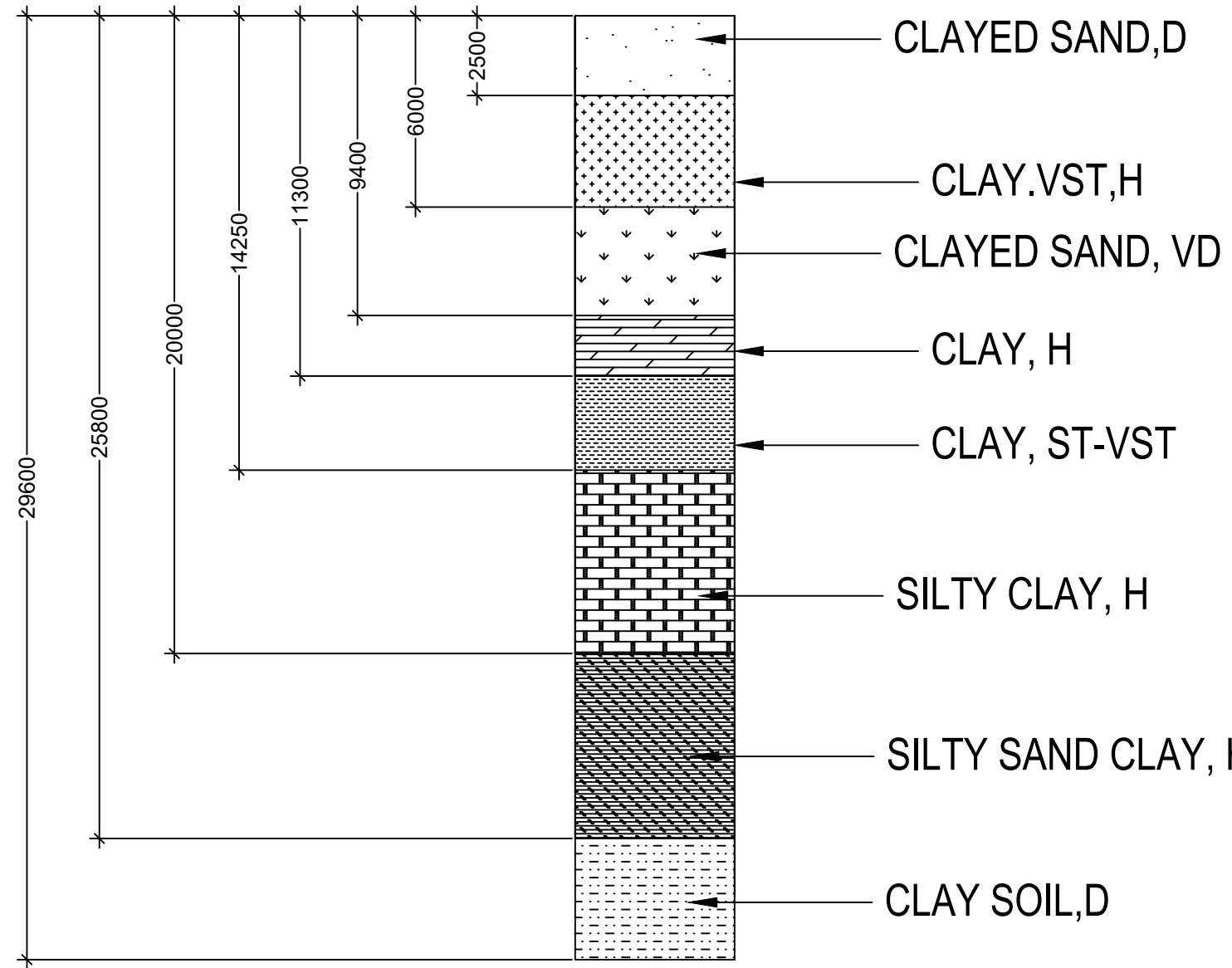
# GEOTECHNICAL DEPARTMENT

DRAWING NUMBER	NAME OF DRAWING	DRAWN BY
001	SIMPLIFIED SOIL PROFILE	ZHE WANG
002	PILE CAP PLAN VIEW	LONGQUAN SU
003	PILE CAP ELEVATION	QUNWEI ZHENG
004	RETAINING WALL FINAL DESIGN	JULIAN TANG
005	REINFORCEMENT DETAILS FOR RETAINING WALL	QUANG VINH HO
006	PAVEMENT DESIGN LAYERS	VINCENT WONG
007	BALLAST PROFILE	BIYAN DONG
008	PILE CAP TOP AND BOTTOM REINFORCEMENT	QUNWEI ZHENG
009	PILE REINFORCEMENT	QUNWEI ZHENG

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REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:									<b>PROJECT:</b> OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS		DRAWN BY: ALL	SIGNED:	DATE: 07.06.2017	DRAWING TITLE: CONTENT	
																VERIFIED BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001	
																CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 000	REVISION:
																APPROVED BY:	SIGNED:	DATE:	SCALE:	NTS

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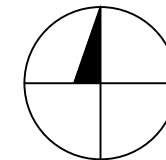
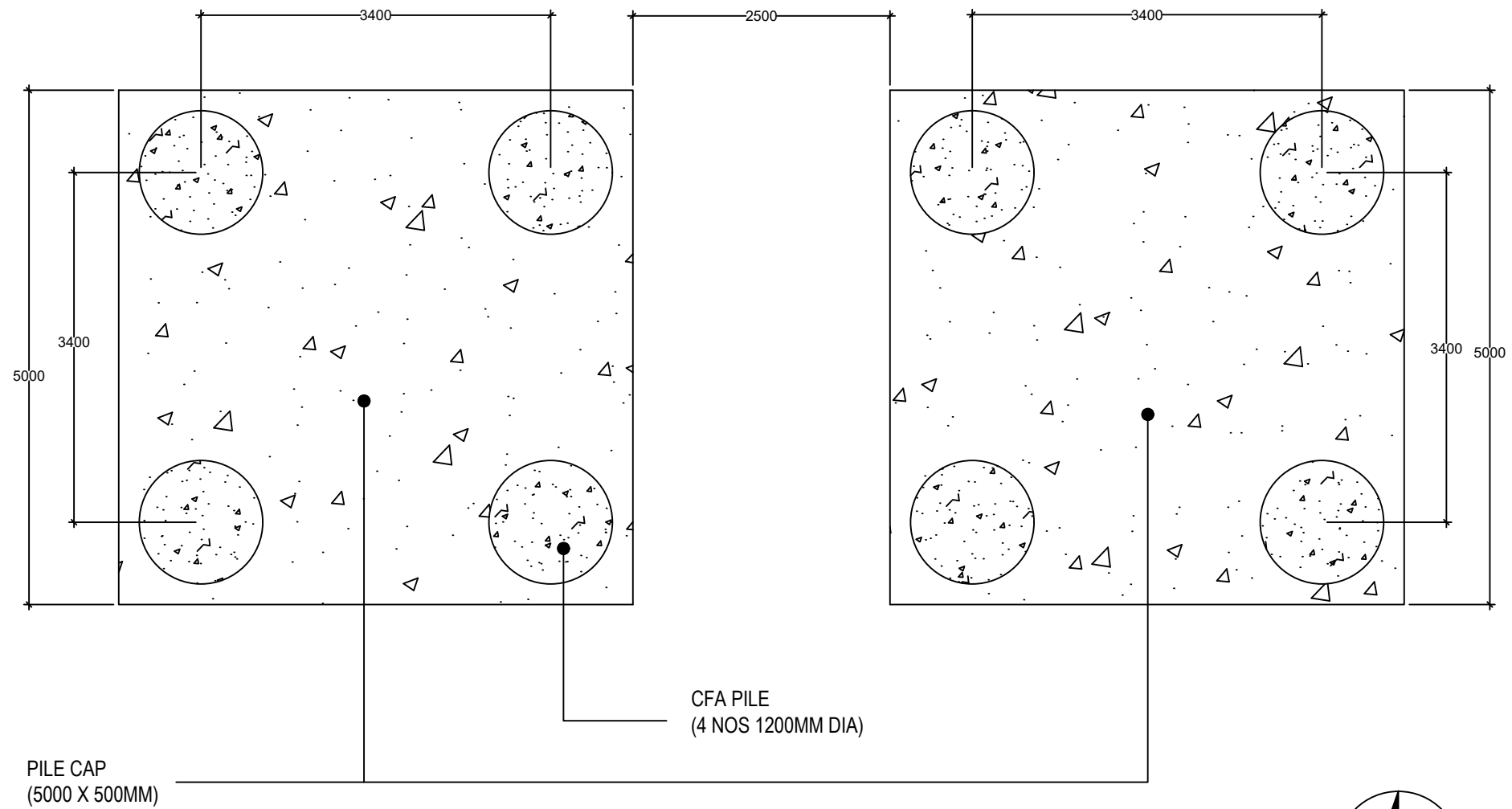
SIMPLIFIED SOIL PROFILE

SCALE: 1:5000

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:										
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 The Difference in thinking	<b>PROJECT:</b>		DRAWN BY: ZHE WANG	SIGNED: ZW	DATE: 07.06.2017	DRAWING TITLE: SIMPLIFIED SOIL PROFILE	
					VERIFIED BY: QUNWEI ZHENG				SIGNED: QZ	DATE: 07.06.2017	OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS			PROJECT NUMBER: 0617-001	
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 001	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE:	AS SHOWN			

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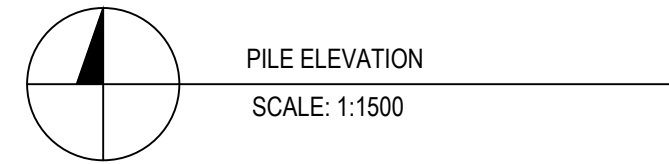
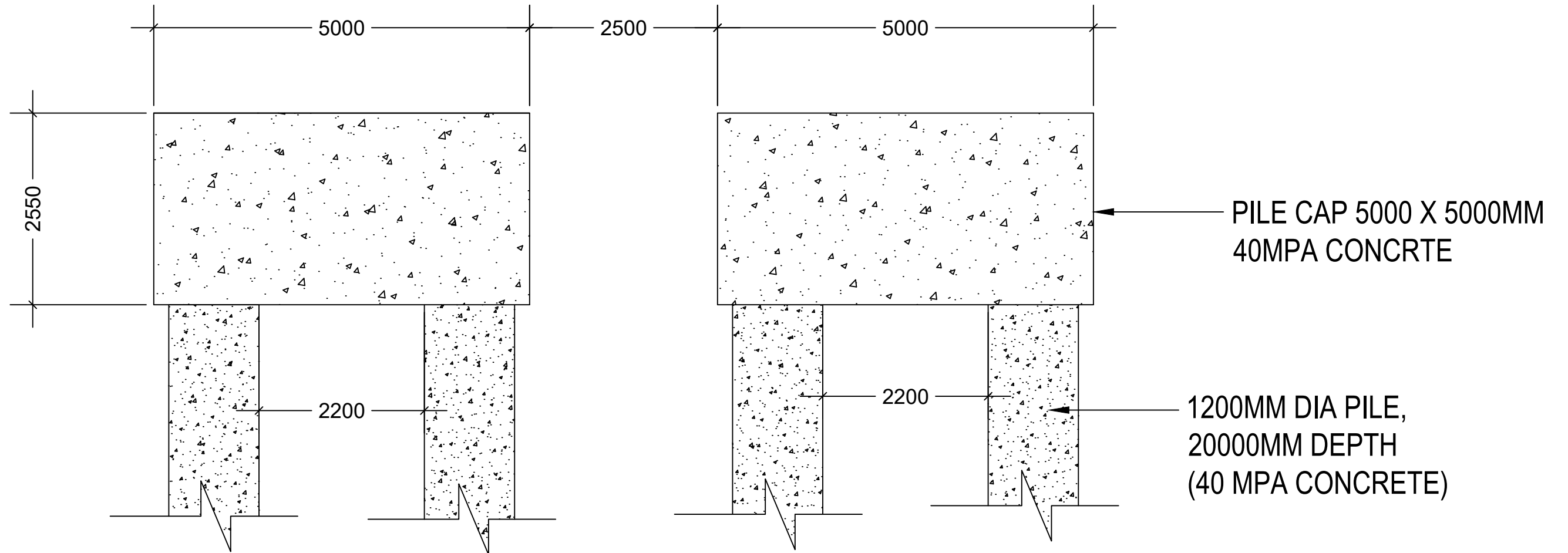
PILE CAP PLAN VIEW

SCALE: 1:1500

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:					DRAWING TITLE: PILE CAP PLAN VIEW					
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 The Difference in thinking	<b>PROJECT:</b>		DRAWN BY: LONGQUAN SU	SIGNED: SU	DATE: 07.06.2017	DRAWING TITLE: PILE CAP PLAN VIEW	
					OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS				VERIFIED BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001			
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 002	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE: AS SHOWN				

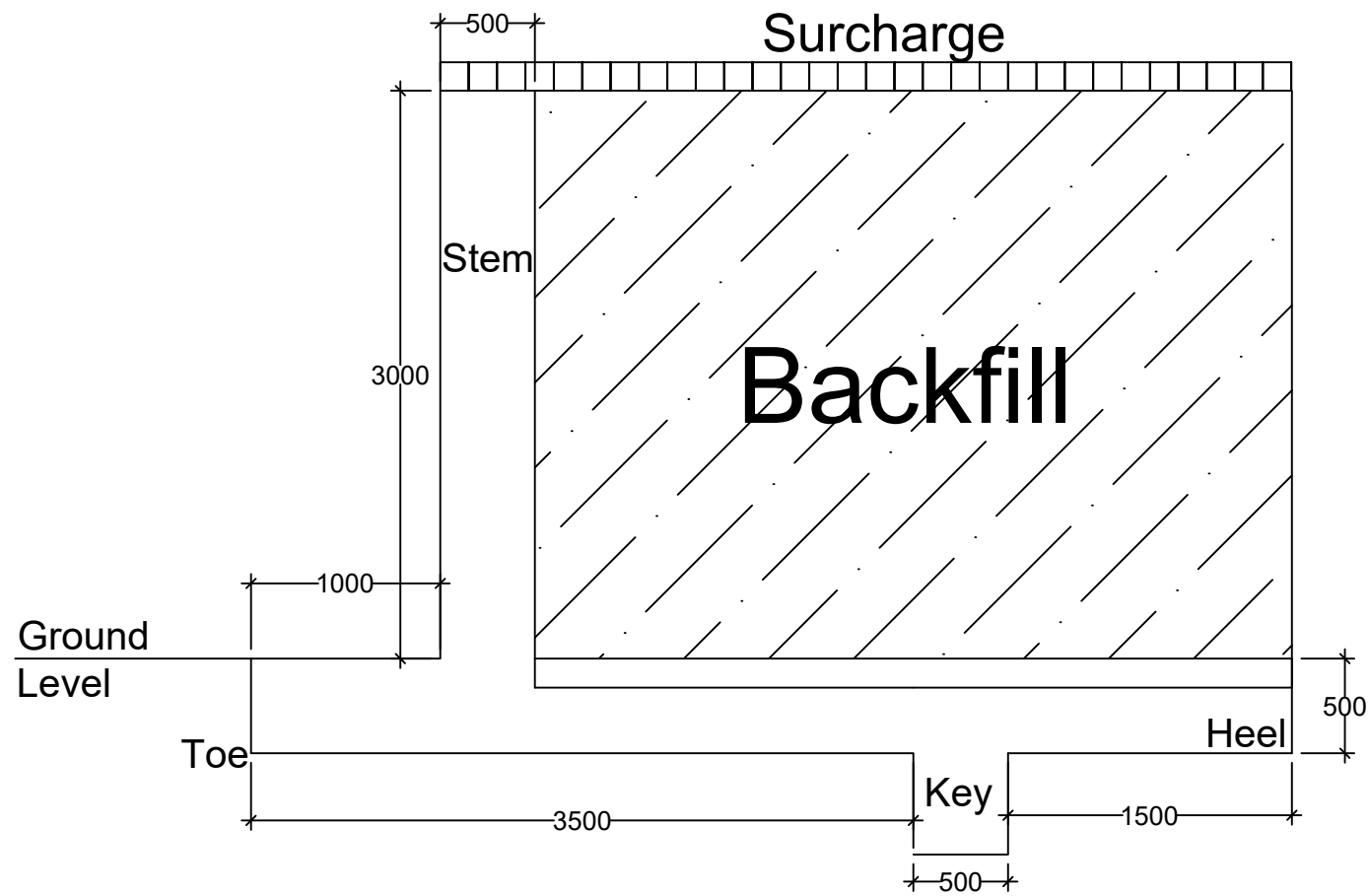
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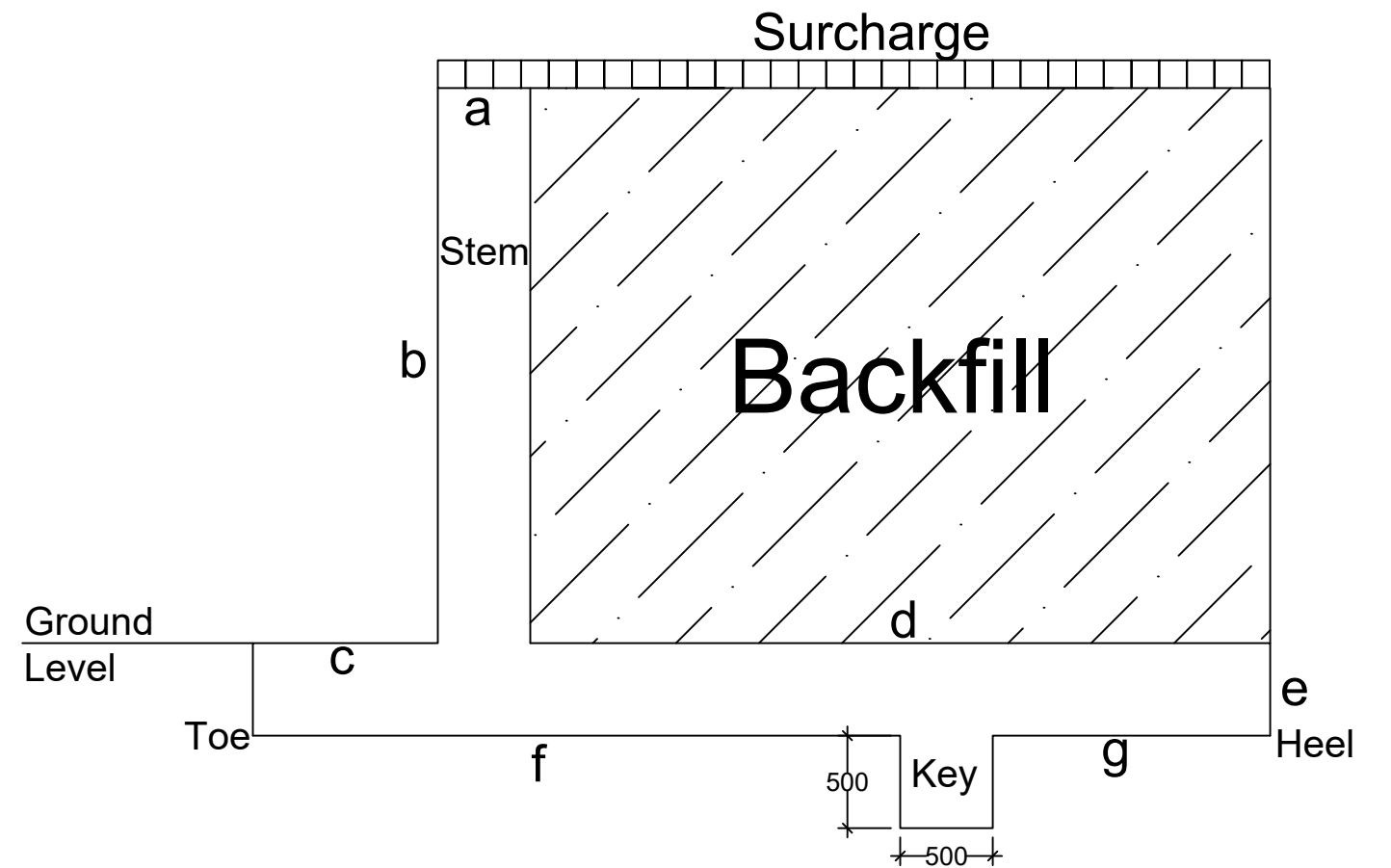
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:									
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 The Difference in thinking	<b>PROJECT:</b> OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS	DRAWN BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 07.06.2017	DRAWING TITLE: PILE ELEVATION	
					VERIFIED BY: QUNWEI ZHENG					SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001		
					CHECKED BY: TSHERING PENJOR					SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 003	REVISION:	
					APPROVED BY:					SIGNED:	DATE:	SCALE: AS SHOWN		

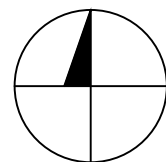




UNDERNEATH RETAINING WALL (CROSS SECTION VIEW)



SIDE RETAINING WALL (CROSS SECTION VIEW)



RETAINING WALL

SCALE: 1:1000

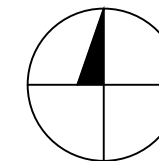
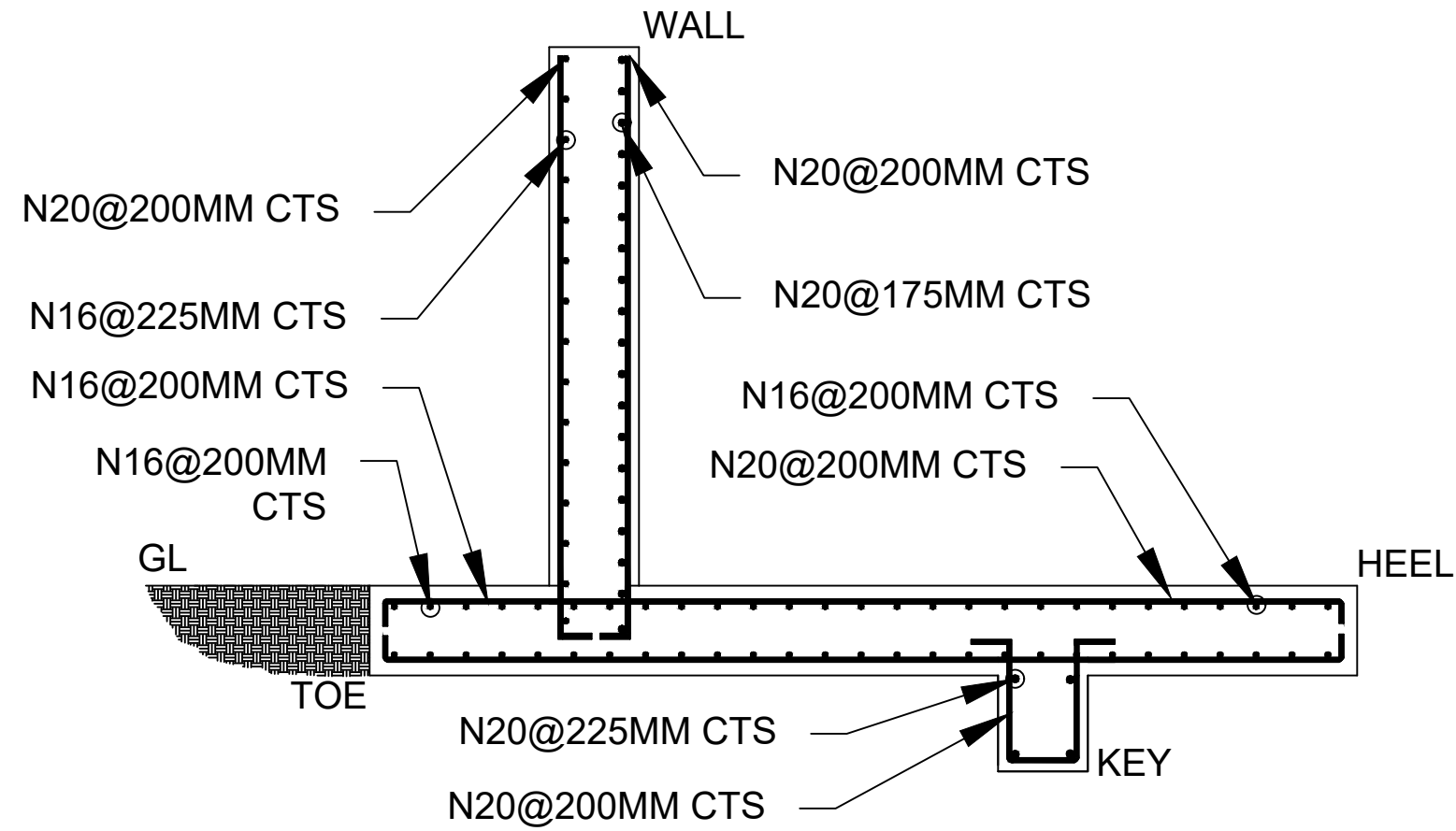
NOTES: 7 DIFFERENT DIMENSIONS OF SIDE WALL WERE DESIGNED, REFER TO TABLE BELOW FOR VALUES.

VALUES FOR DIFFERENT DESIGN HEIGHT							
HEIGHT(M)	A(M)	B(M)	C(M)	D(M)	E(M)	F(M)	G(M)
3	0.5	3	1	4	0.5	3.5	1.5
2.5	0.5	2.5	1	3.5	0.5	3	1.5
2	0.4	2	0.8	3.2	0.4	3	1
1.5	0.3	1.5	0.7	3	0.3	2.5	1
1	0.3	1	0.7	3	0.3	2.5	1
0.5	0.3	0.5	0.7	3	0.3	2.5	1
0.1	0.3	0.1	0.7	3	0.3	2.5	1

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:	PROJECT:		DRAWN BY: JULIAN TANG	SIGNED: JT	DATE: 07.06.2017	DRAWING TITLE: RETAINING WALL				
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC The Difference in thinking	OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS			VERIFIED BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 004	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE: AS SHOWN				

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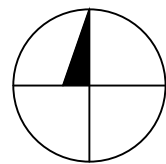
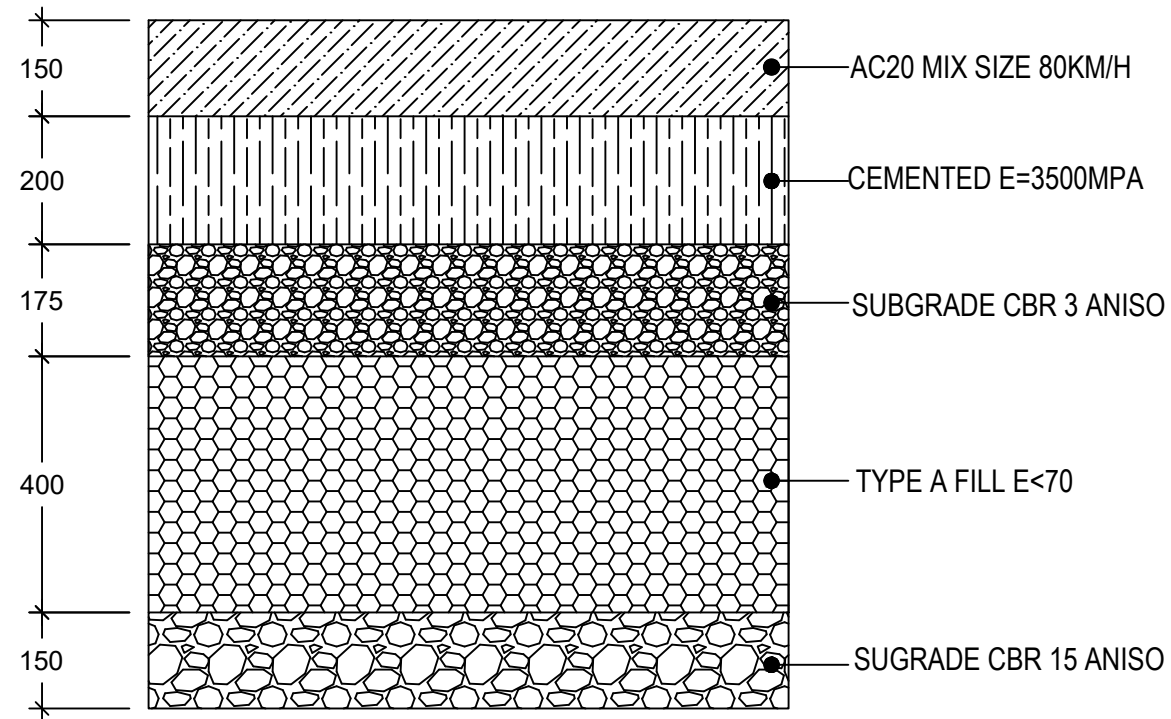
REINFORCEMENT DETAILS FOR RETAINING WALL

SCALE: 1:1000

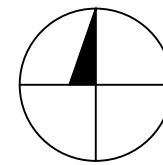
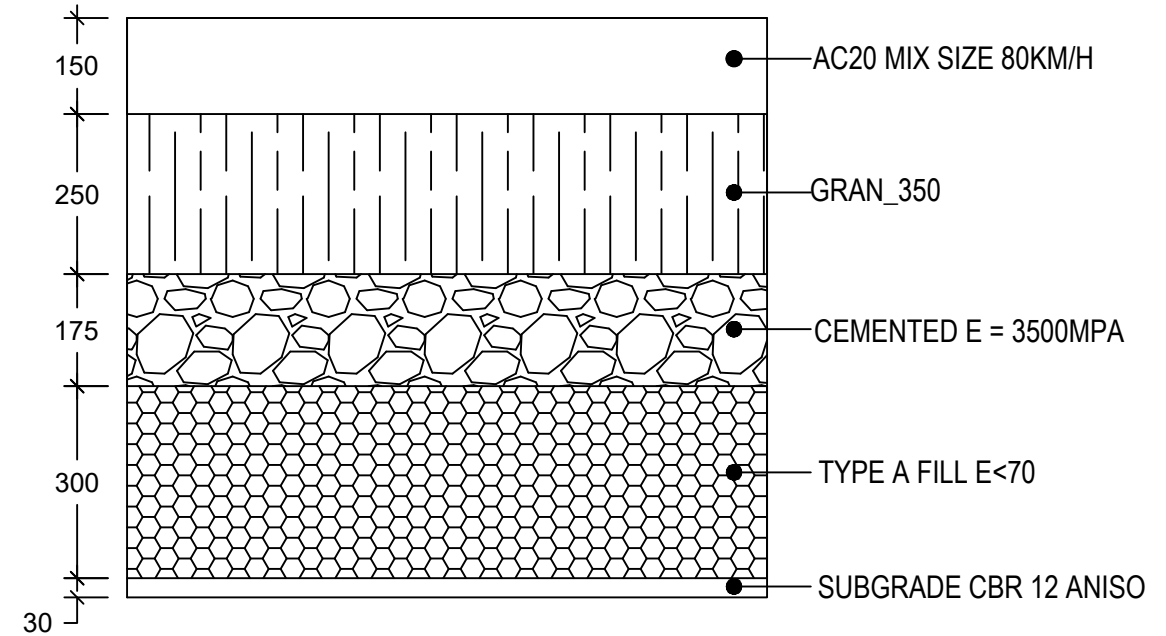
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:								
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 The Difference in thinking	<b>PROJECT:</b>		DRAWN BY: QUANG VINH HO SIGNED: QVH DATE: 07.06.2017	DRAWING TITLE: REINFORCEMENT DETAILS FOR RETAINING WALL	
					OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS				VERIFIED BY: QUNWEI ZHENG SIGNED: QZ DATE: 07.06.2017	PROJECT NUMBER: 0617-001			
									CHECKED BY: TSHERING PENJOR SIGNED: TP DATE: 07.06.2017	DRAWING NUMBER: 005	REVISION:		
									APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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MORPHETT ROAD AND DIAGONAL ROAD PAVEMENT LAYERS  
SCALE: 1:300

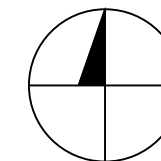
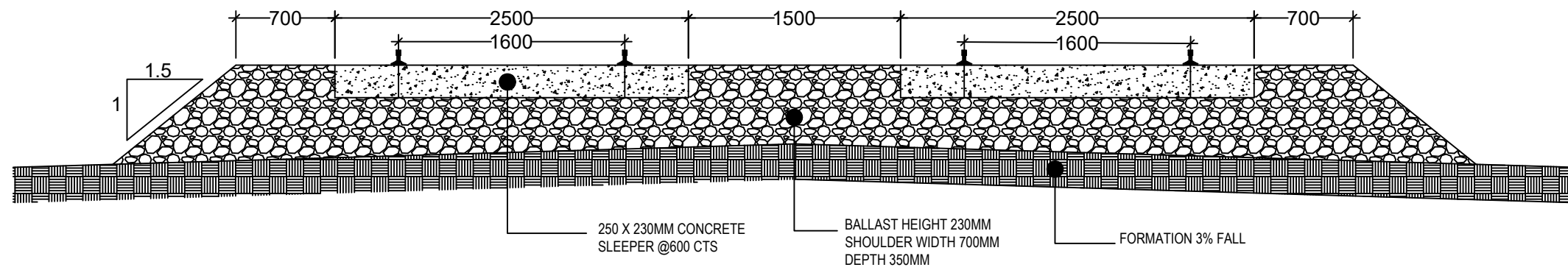


PRUNUS STREET PAVEMENT DESIGN  
SCALE: 1:300

ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:	Government of South Australia Department of Planning, Transport and Infrastructure		University of South Australia		DPC The Difference in thinking		PROJECT: OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS	DRAWN BY: WONG VINCENT	SIGNED: WV	DATE: 07.06.2017	DRAWING TITLE: PAVEMENT LAYERS	
													VERIFIED BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001	
													CHECKED BY: TSHERING PENJOR	SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 006	REVISION:
													APPROVED BY:	SIGNED:	DATE:	SCALE: AS SHOWN	

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BALLAST PROFILE  
SCALE: 1:1000

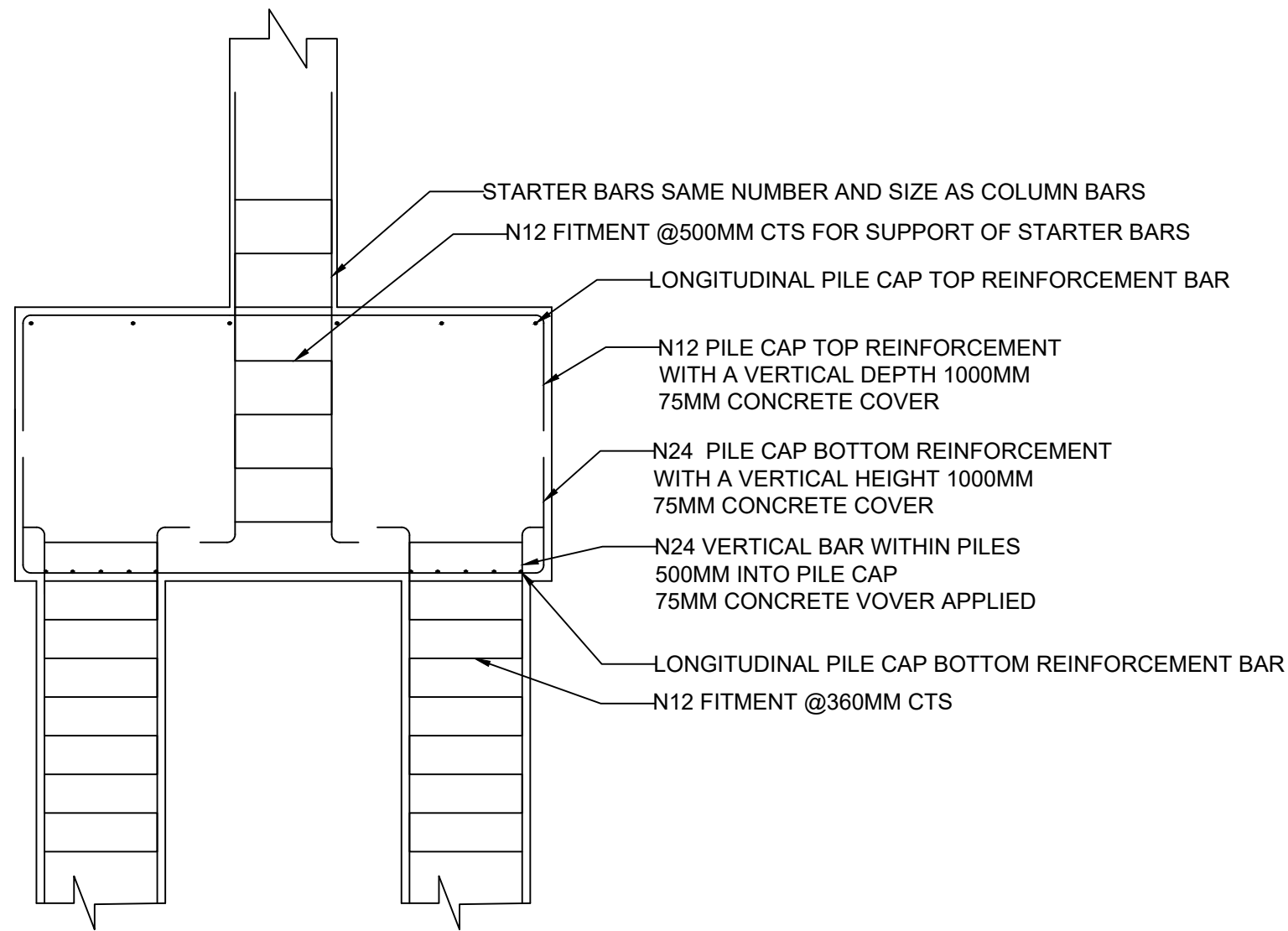
ALL DIMENSIONS IN MM

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:										
						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 DPC The Difference in thinking	<b>PROJECT:</b>		DRAWN BY: BIYAN DONG	SIGNED: BD	DATE: 07.06.2017	DRAWING TITLE: BALLAST PROFILE	
					VERIFIED BY: QUNWEI ZHENG				SIGNED: QZ	DATE: 07.06.2017	PROJECT NUMBER: 0617-001				
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 07.06.2017	DRAWING NUMBER: 007	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE:	AS SHOWN			

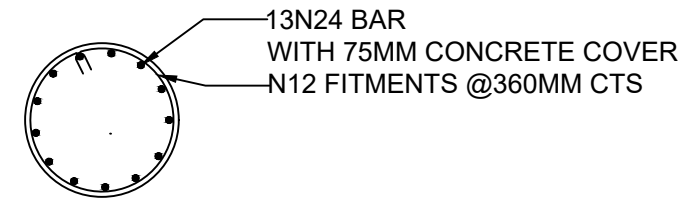




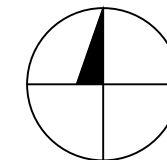
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PILE FOOTING SYSTEM REINFORCEMENT ELEVATION



PILE REINFORCEMENT SCHEDULE



PILE REINFORCEMENT  
SCALE: 1:1500

ALL DIMENSIONS IN MM

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						 Government of South Australia Department of Planning, Transport and Infrastructure	 University of South Australia	 The Difference in thinking	<b>PROJECT:</b>		DRAWN BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 12.06.2017	DRAWING TITLE: PILE REINFORCEMENT	
					OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS				VERIFIED BY: QUNWEI ZHENG	SIGNED: QZ	DATE: 12.06.2017	PROJECT NUMBER: 0617-001			
					CHECKED BY: TSHERING PENJOR				SIGNED: TP	DATE: 12.06.2017	DRAWING NUMBER: 09	REVISION:			
					APPROVED BY:				SIGNED:	DATE:	SCALE: AS SHOWN				