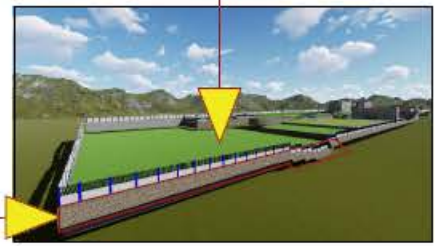
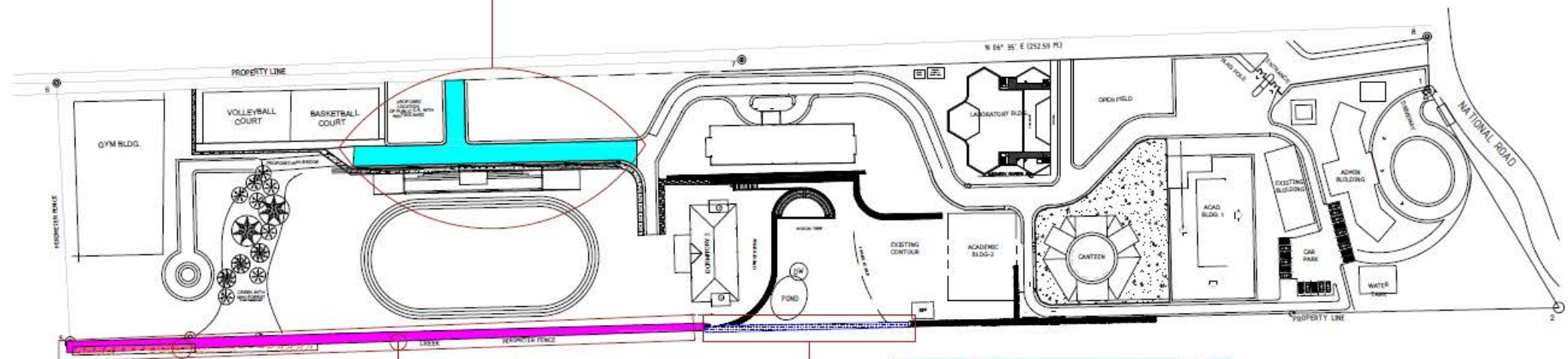
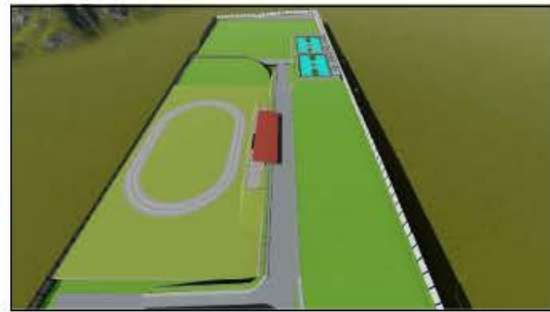


- 162 Im ROAD NETWORK
- 245 Im HALF CONCRETE, HALF STEEL PERIMETER FENCE
- 70 Im RETAINING WALL
- 115 Im SLOPE PROTECTION



PHILIPPINE SCIENCE HIGH SCHOOL - MIMAROPA REGION CAMPUS
SITE DEVELOPMENT PLAN
 SCALE: NTS

	PROJECT TITLE:	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO.:
	CONSTRUCTION OF SITE DEVELOPMENT 2021	KEN JAMES F. FADRIQUELA <small>RESIDENT CIVIL ENGINEER</small>	MERIAM F. FALLAR <small>ADMINISTRATIVE OFFICER V</small>	EDWARD C. ALBARACIN <small>CAMPUS DIRECTOR II</small>	AS SHOWN	SDP 0 1

A. GENERAL NOTES:

1. IN THE INTERPRETATION OF THESE DRAWINGS, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL COORDINATE WITH THE AR, ME, SE, EE, AND OTHER UTILITIES AND EQUIPMENT PLANS FOR THE EXACT SIZE, NUMBER AND LOCATIONS OF ALL SLEEVES OR OPENINGS THRU FLOOR SLABS, BEAMS AND WALLS AND ALSO BUILDING DIMENSIONS.
3. ALL REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI - 318 - 14 BUILDING CODE, AND ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS (LATEST EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENTS.
4. ALL SLABS, BEAMS, GIRDERS AND OTHER STRUCTURAL ELEMENTS WHICH ARE NOT INDICATED, DETAILED, DESIGNATED OR INADVERTENTLY OMITTED BUT ARE NECESSARY TO BE COORDINATED WITH ARCHITECTURAL AND OTHER ALLIED ENGINEERING PLANS AS WELL AS TO COMPLETE THE STRUCTURAL WORKS IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT UP DURING PRE-BIDS/MEETINGS/ NEGOTIATIONS. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS PROVIDED AND INCLUDED ALL THESE ITEMS IN THEIR BID.

B. NOTES ON CONCRETE MIXES AND PLACING

1. UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN THE SPECIFICATIONS THE MINIMUM 28-DAYS CYLINDER COMPRESSIVE STRENGTH OF CONCRETE f'_c , SHALL BE AS FOLLOWS:

1.1 FOUNDATION & WALLS	28 MPa. (4000 psi)
------------------------	--------------------
2. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, RE-HANDLING OR FLOWING. PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEEL BARROWS. NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEEL BARROWS OR BUCKETS, IN WHICH CASE, THEY SHALL NOT EXCEED SIX THOUSAND (6000mm) IN AGGREGATE LENGTH.
3. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.

C. NOTES ON REINFORCING STEEL BARS

1. ALL REINFORCING STEEL BARS SHALL BE NEW BILLET, HOT ROLLED, WELDABLE, DEFORMED BARS CONFORMING TO THE SPECIFICATIONS OF PNS 49: 1986 (ASTM 615) , AND ASTM A706 (GR. 60, WELDABLE) WHOSE GRADE IS SHOWN ON TABLE 1.

TABLE-1	
GRADE	BAR DIAMETER
GRADE 415 ($f_y = 60 \text{ ksi}$)	16, 20, 25, 28, 32 MM DIA.
GRADE 275 ($f_y = 40 \text{ ksi}$)	10, 12 MM DIA.
GRADE 230 ($f_y = 33 \text{ ksi}$)	SMALLER THAN 10 MM DIA.
2. THE SUPPLEMENTARY REQUIREMENTS OF WELDABLE DEFORMED REINFORCING BARS SHALL BE AS FOLLOWS:
 - 2.1 THE MAXIMUM YIELD STRENGTH OF WELDABLE BARS = 540 MPa.
 - 2.2 THE TENSILE STRENGTH SHALL NOT BE LESS THAN 1.25 TIMES THE ACTUAL YIELD STRENGTH.
3. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS, SECURED IN THE REQUIRED LOCATION IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE BUILDING CODE AND THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI - 315.
4. ALL REINFORCING BARS SHALL BE CLEANED THOROUGHLY OF ALL LOOSE RUST, SOIL OR OTHER MATERIAL IMMEDIATELY PRIOR TO PLACING CONCRETE.
5. THE REQUIRED LENGTH OF LAP FOR TENSION SPLICES IS BASED ON THE DEVELOPMENT LENGTH, L_d , SHOWN IN TABLE 2 FOR RC BEAMS AND GIRDERS, ON THE FOLLOWING CLASSIFICATIONS :

TENSION SPlice CLASSIFICATION	SPLICE LENGTH
CLASS A	1.0 L_d
CLASS B	1.3 L_d

6. TOP BARS ARE HORIZONTAL BARS WITH AT LEAST 300 mm OF CONCRETE CAST BELOW IT.

TABLE-2				
DEVELOPMENT LENGTH, L_d , IN TENSION FOR RC BEAMS & GIRDERS				
(PRESSURE & MIN. PRESSURE)				
BAR SIZE (mm)	$f'_c = 21 \text{ MPa}$ (3,000 psi)		$f'_c = 28 \text{ MPa}$ (4,000 psi)	
	TOP BARS (mm)	OTHERS (mm)	TOP BARS (mm)	OTHERS (mm)
16#	800	600	700	525
20#	1090	840	1000	730

NOTE: FOR BUNDLE BARS (3 BUNDLES/4 BUNDLES) MULTIPLY ABOVE TABLE BY 1.3

7. THE REQUIRED LENGTH OF LAP FOR COMPRESSION SPLICES SHALL BE AS SHOWN IN TABLE 4.

TABLE-4 LENGTH OF LAP COMPRESSION SPLICES(mm)		
BAR SIZE (mm)	$f'_c = 21.0 \text{ MPa}$ (3,000psi)	$f'_c = 28.0 \text{ MPa}$ (4,000psi)
16	420	390
20	540	510
25	720	600
28	810	720
32	900	780
36	990	900

8. A FULL WELDED SPLICES SHALL HAVE BARS BUTTED AND WELDED TO DEVELOP IN TENSION AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH f_y OF THE BAR. (SEE FIGURE 1a & 1b))

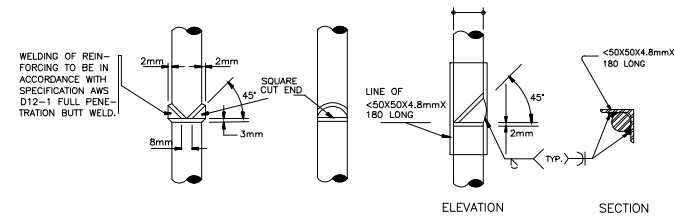
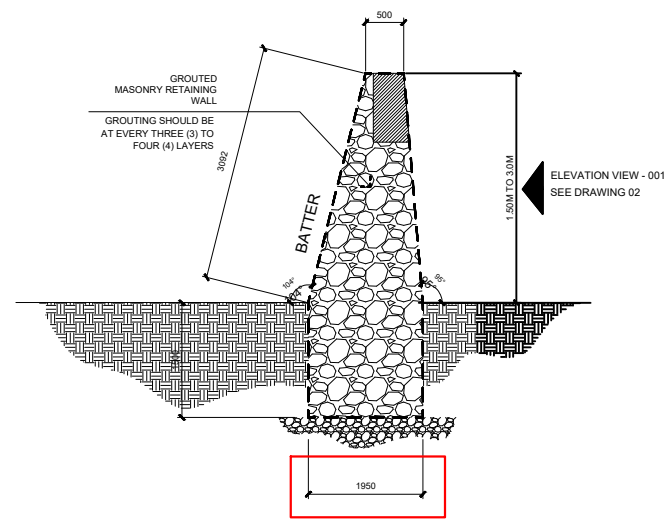


FIGURE 1a **FIGURE 1b**
TYPICAL WELDED SPLICE DETAILS FOR BARS 25# TO 36#
FIGURE 1

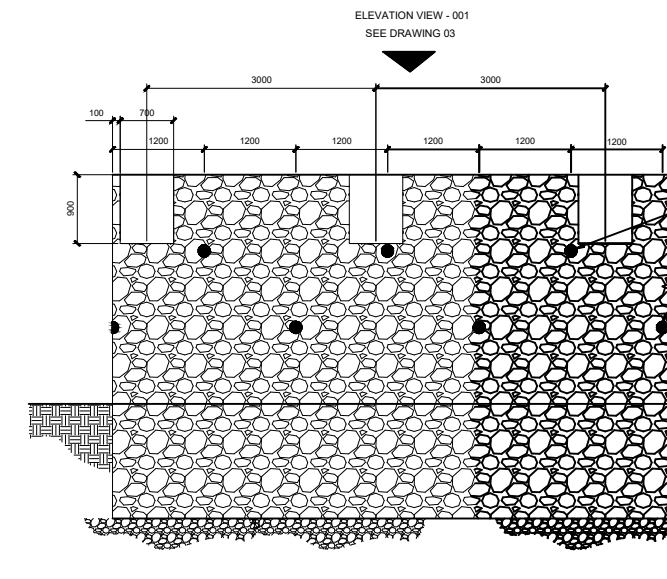
9. ALL WELDING OF REINFORCEMENT SHALL CONFORM TO THE PROVISIONS OF THE STRUCTURAL WELDING CODE-REINFORCING STEEL, AWS D1.4
10. A FULL MECHANICAL CONNECTION (REBAR SPLICER) SHALL DEVELOP IN TENSION OR COMPRESSION, AS REQUIRED, 125 PERCENT OF THE SPECIFIED YIELD STRENGTH f_y OF THE BAR. IF USED, SUBMIT SAMPLE FOR APPROVAL OF THE STRUCTURAL ENGINEER.
11. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:
 - 1) CONCRETE CAST AGAINST EARTH - 75 mm
 - 2) CONCRETE EXPOSED TO EARTH OR WEATHER-
20 mm TO 36 mm BARS - 50 mm
16 mm BARS AND SMALLER - 40 mm
 - 3) CONCRETE NOT EXPOSED TO EARTH OR WEATHER-
SLABS, WALLS, JOINTS - 20 mm
BEAMS AND COLUMNS - 40 mm

D. NOTES ON FOUNDATION

1. THE FOUNDATION IS DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF 100 kPa AT A MINIMUM DEPTH OF ONE AND A HALF (1.50) METERS FROM THE NATURAL GRADE LINE.
- NO FOOTING SHALL REST ON FILL. FOOTINGS FOR CHB WALLS AND OTHER MINOR STRUCTURES SHALL BE EMBEDDED AT LEAST 800mm FROM THE NATURAL GRADE LEVEL.
- PROVIDE TEMPORARY REMOVAL OF WATER FROM ANY SOURCE DURING CONSTRUCTION. DEWATERING SHALL BE CAREFULLY AND PROPERLY PERFORMED TO AVOID DISTURBING THE FOUNDATIONS AND SLAB BEARING SURFACES.
- CONTRACTOR SHALL DESIGN, INSTALL AND MONITOR EXCAVATIONS RETENTION SYSTEMS, AS REQUIRED FOR PROTECTION OF ADJACENT PROPERTIES AND PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO MINIMIZE SETTLEMENT AND PREVENT DAMAGE TO ADJACENT EXISTING OR NEW CONSTRUCTION.
- PREPARE CONDITIONS OF CONCRETE SUPPLY AND PLACEMENT OF THE COMPLETE FOUNDATION FOR THE FULL THICKNESS AS A CONTINUOUS MONOLITHIC CASTING.
- DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL GROUND FLOOR SLABS HAVE BEEN PLACED AND THE CONCRETE HAS ATTAINED THE REQUIRED STRENGTH.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELEVATION DETAILS, REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND OTHER TRADES FOR SUBSOIL DRAINAGE SYSTEM, MACHINERY ANCHORS AND OTHER EMBEDDED ITEMS, DEPRESSIONS, FINISHES, DOWELS FOR MASONRY WALLS, CURBS, ETC
- SEE TYPICAL DETAIL OF LIMITING SLOPE OF ADJACENT FOOTING AT DIFFERENT ELEVATION. (REFER TO FIGURE 2)

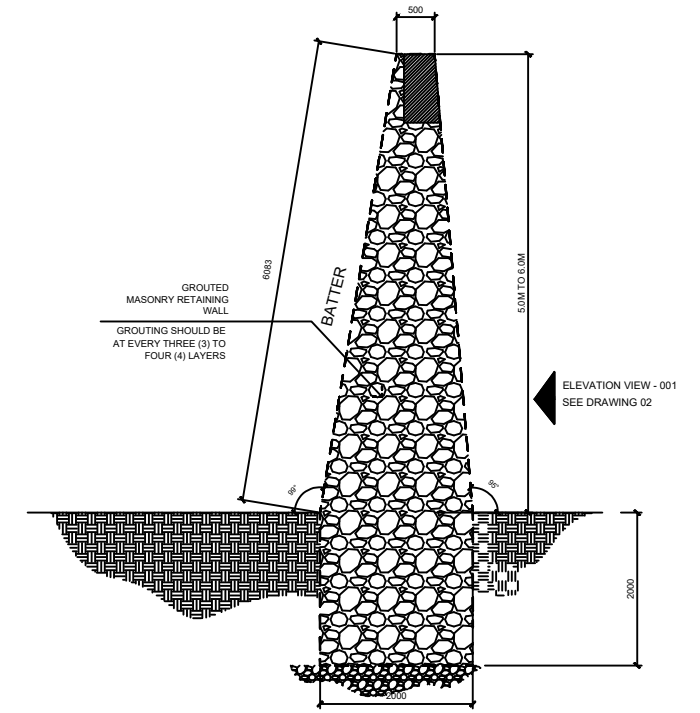


CROSS SECTION
1A **GRouted MASONRY RETAINING WALL -1**
RSP-01 SCALE 1:50m

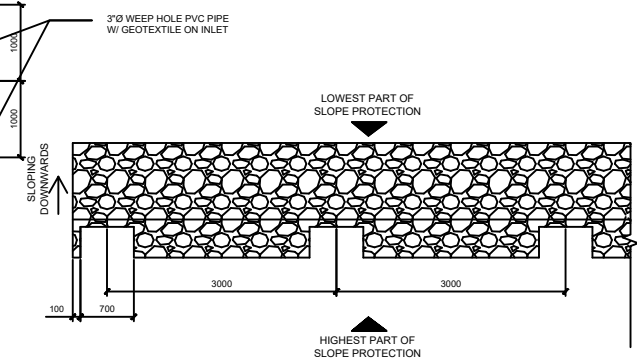


ELEVATION VIEW - 001
2 **GRouted MASONRY RETAINING WALL -1**
RSP-01 SCALE 1:50m

BLOCKING DETAILS



CROSS SECTION
1B **GRouted MASONRY RETAINING WALL -2**
RSP-01 SCALE 1:50m



ELEVATION VIEW - 002
3 **GRouted MASONRY RETAINING WALL -1**
RSP-01 SCALE 1:50m

BLOCKING DETAILS

