#### **GENERAL**

- 1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ANY OTHER WRITTEN INSTRUCTIONS ISSUED.
- 2. WHERE APPROVAL IS REQUIRED, THIS SHALL BE OF THE SUPERINTENDENT OR HIS
- 3. ANY AMBIGUITY OR DISCREPANCY SHALL BE REFERRED FOR CLARIFICATION BEFORE WORK PROCEEDS.
- 2. DIMENSIONS ARE IN PRESENTED MILLIMETERS WITH EQUIVALENT INCH VALUE SHOWN IN BRACKETS.

#### EXAMPLE: 1000mm (40")

REPRESENTATIVE.

- 3. FOR SPECIFIC ITEMS AND MEASUREMENTS, DIMENSIONS ARE ALSO PROVIDED IN INCHES TO ASSIST PURCHASING AND CLEARLY LABELED WITH "IDENTIFIER.
- 4. REFER TO THE DRAWING DIMENSIONS FOR SETTING OUT THE WORKS. HOWEVER, ALL EXISTING DIMENSIONS AND LEVELS ARE APPROXIMATE AND SHALL BE CONFIRMED BY THE CONTRACTOR ON SITE.
- 5. UNLESS NOTED OTHERWISE, ALL LEVELS ARE TO OD. SET OUT IS TO BNG 2000.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE STRUCTURE UNTIL ITS COMPLETION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED DURING THE WORKS.
- WHERE STANDARDS ARE REFERRED TO, THEY SHALL BE THE LATEST EDITION.
- 8. PROPRIETARY ITEMS, PROPOSED BY THE CONTRACTOR, ARE TO BE REVIEWED AND APPROVED BY THE DESIGNING ENGINEER PRIOR TO USE.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WORK AREAS.
- 10. ALL DEMOLITION SHALL BE IN AN ACCEPTABLE MANNER UNDER THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS 2009. ALL SURPLUS MATERIAL SHALL BE DISPOSED OF OFF SITE IN A LEGAL MANNER.

#### **EXCAVATION AND EARTHWORKS**

- 1. FOUNDATIONS ARE TO BEAR ON UNDISTURBED AND SOUND GROUND/ROCK. BEARING MATERIAL IS TO REMAIN UNDISTURBED AND BE REVIEWED BY THE ENGINEER PRIOR TO POURING FOOTING.
- 2. ALL SHORING, SHEETING AND DE-WATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- 3. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT ALL EXISTING AND SURROUNDING INFRASTRUCTURE
- 9. ANY SOFT AREAS IN BEARING MATERIAL ARE TO BE REMOVED AND FILLED WITH MASS CONCRETE OF MINIMUM STRENGTH 25 MPa.
- 6. A MINIMUM 50mm (2") CONCRETE BLINDING LAYER TO BE POURED UNDER THE FULL EXTENT OF THE WALL FOOTING.
- 10. NO BACKFILLING UNTIL 7 DAYS AFTER LAST CONCRETE POUR
- 11. BACKFILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER, CONSTRUCTION DEBRIS AND LARGE ROCKS.
- 12. ROCK FACE, WITHIN THE EXTENTS AS MARKED ON THE DRAWINGS, IS TO BE CUT BACK AND SMOOTHED TO ALLOW ADEQUATE SPACE FOR CONSTRUCTION OF THE NEW WALL.
- 13. IF UNEXPECTED MECHANICAL, ELECTRICAL OR STRUCTURAL ELEMENTS ARE ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT DETAILS OF SUCH TO THE ENGINEER.
- 14. THE CONTRACTOR SHALL LOCATE AND IDENTIFY EXISTING UNDERGROUND UTILITIES WITHIN THE SITE EXTENTS. IF UTILITIES ARE TO REMAIN, THE CONTRACTOR SHALL ENSURE THAT THE UTILITIES ARE SUPPORTED AND PROTECTED THROUGHOUT THE WORKS.

#### <u>CONCRETE</u>

1. CONCRETE SHALL COMPLY WITH THE FOLLOWING SPECIFICATION:

- MINIMUM CONCRETE COVER TO REINFORCEMENT

FOOTINGS

TOP = 50mm (2")

BOTTOM = 75mm (3")

- MINIMUM CONCRETE STRENGTH AT SERVICE F'c = 25 MPa

- MINIMUM CEMENT CONTENT = 440 Kg/m³ (28 lb/ft³)

- MAXIMUM WATER/CEMENT RATIO = 0.5

- 2. CONCRETE MIX DESIGNS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 3. NO ADDITIVES TO BE USED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- 4. CAST IN ITEMS WITH LESS THAN 25mm (1") COVER TO ATMOSPHERE SHALL BE HOT DIPPED GALVANISED IN ACCORDANCE WITH ASTM A153.
- 5. ALL FORMWORK, SHORING AND RESHORING SHALL BE THE RESPONSIBILITY OF AND DESIGNED BY THE CONTRACTOR
- 4. CONCRETE SHALL BE TESTED FOR SLUMP ON SITE. THE TEST CYLINDERS SHALL BE TAKEN FOR 3, 7 AND 28 DAY STRENGTHS.
- 5. CONCRETE STRENGTH AND SLUMP TO BE AS FOLLOWS

MIN. SPECIFIED 28 DAY STRENGTH	SLUMP
25 MPa	75mm ± 25mm

#### **REINFORCEMENT**

- 1. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS. IF SHOWN/PERMITTED, WELDS SHALL DEVELOP THE FULL STRENGTH OF THE REINFORCING ELEMENT.
- 2. ALL REINFORCING STEEL TO HAVE A MINIMUM YIELD STRENGTH OF 410 MPa AND SHALL BE TYPE 2 DEFORMED BARS
- 3. ALL REINFORCING STEEL SHALL BE CLASS II GALVANISED IN ACCORDANCE WITH ASTM A767. TIE WIRE SHALL ALSO BE GALVANISED.
- 4. REINFORCEMENT SPACING NOT SHOWN SHALL BE TAKEN AS EQUAL.
- 5. REINFORCING CHAIRS ARE TO BE CONCRETE AND AS SMALL AS PRACTICABLE.
  PROPRIETARY PLASTIC COVER SUPPORTS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- 6. REINFORCING BARS SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY.
- 7. BARS SHOWN MAY REPRESENT MORE THAN ONE LENGTH AND/OR PROFILE.
- 8. BARS MAY NOT BE SHOWN IN TRUE POSITION FOR CLARITY. ALL HOOKS, BENDS AND COGS ARE STANDARD AND SHALL BE IN ACCORDANCE WITH ACI 318 UNLESS NOTED OTHERWISE.
- 9. LAP SPLICES TO ALTERNATE AND NO MORE THAN 50% OF SPLICES SHALL BE IN ANY ONE SECTION
- 10. BARS SHALL NOT BE CUT NOR BENT ON SITE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- 11. BARS SHALL BE BENT COLD BY MACHINE OR OTHER APPROVED MEANS PRODUCING A GRADUAL AND EVEN MOTION. BARS INCORRECTLY BENT SHALL NOT BE RE-BENT AND INCORPORATED IN THE WORKS AND NO REINFORCEMENT SHALL BE BENT WHEN IN POSITION IN THE WORKS, WHETHER OR NOT IT IS PARTIALLY EMBEDDED IN HARDENED CONCRETE.
- 12. CONTRACTOR TO PROVIDE 24 HOURS NOTICE FOR THE INSPECTION OF ALL REINFORCING PRIOR TO POURING CONCRETE.
- 10. LAP LENGTHS SHALL BE AS TABULATED (SHOWN BELOW) UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

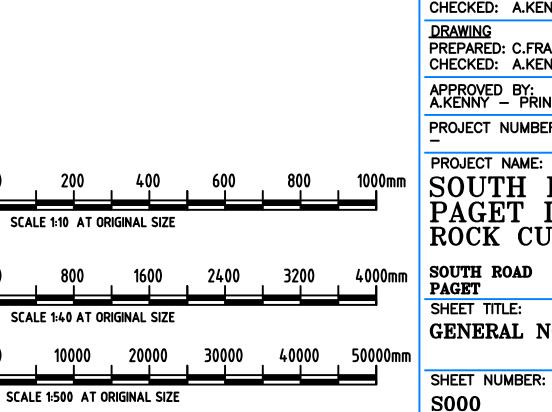
	BAR DIAMETER	MIN LAP LENGTH	
•	12	24"	
•	16	30"	
	20	36"	
•	25	60"	

# THE MINISTRY OF PUBLIC WORKS P.O. BOX HM525

P.O. Box HM525 Hamilton HMCX Bermuda Phone: (441) 295-5151

DEPARTMENT OF WORKS AND ENGINEERING

Fax: (441) 295-5658



SCALE: AS SHOWN AT ANSI D **SURVEY** PREPARED: -DATE: XX/XX/XXXX **DESIGN** PREPARED: C.FRASER DATE: 12/10/2023 CHECKED: A.KENNY DATE: 12/10/2023 PREPARED: C.FRASER DATE: 12/10/2023 CHECKED: A.KENNY DATE: 12/10/2023 APPROVED BY: A.KENNY - PRINC STRUCTURAL ENGINEER PROJECT NUMBER: PROJECT NAME: SOUTH ROAD PAGET LIGHTS ROCK CUT REMEDIAL SOUTH ROAD **PAGET** SHEET TITLE: **GENERAL NOTES** REVISION

B REVISED TO SUIT OPMP COMMENTS 06/11/23

ISSUED FOR: INFORMATION

DATE:

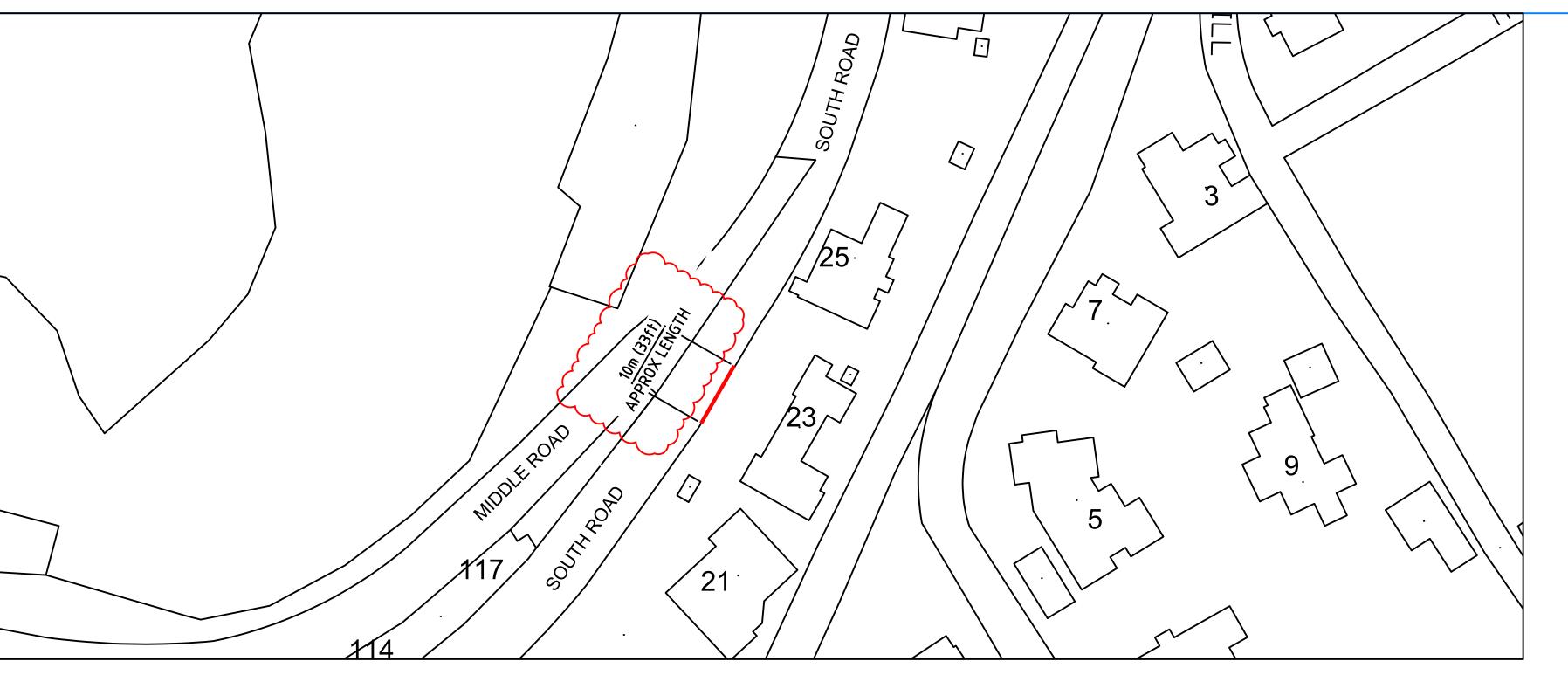
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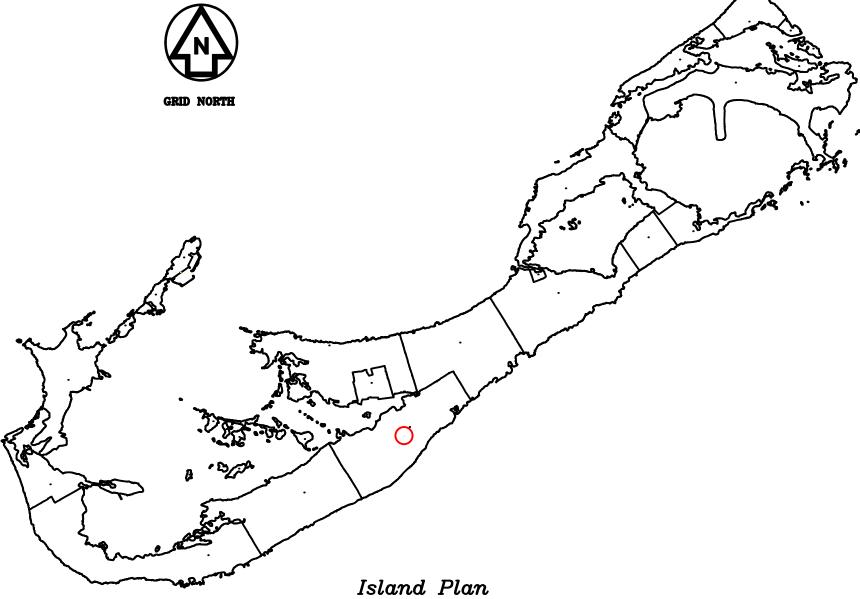
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**AMENDMENTS:** 

NO: REVISION

A FOR TENDER





Location Plan Scale 1:500



FIGURE 1 VIEW ON ROCK CUT AND WALL UNDER CONSIDERATION

#### ─ ROCK FACE HAS BROKEN AWAY UNDERMINING THE CONCRETE FOOTING FOR THE PARAPET WALL ABOVE

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1. REFER TO SHEET S000 FOR DRAWING NOTES

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SCALE: AS SHOWN AT ANSI D

SURVEY PREPARED: –

DATE: XX/XX/XXXX

DESIGN
PREPARED: C.FRASER DATE: 12/10/2023
CHECKED: A.KENNY DATE: 12/10/2023 DRAWING
PREPARED: C.FRASER DATE: 12/10/2023
CHECKED: A.KENNY DATE: 12/10/2023

APPROVED BY: A.KENNY – PRINC STRUCTURAL ENGINEER

PROJECT NUMBER:

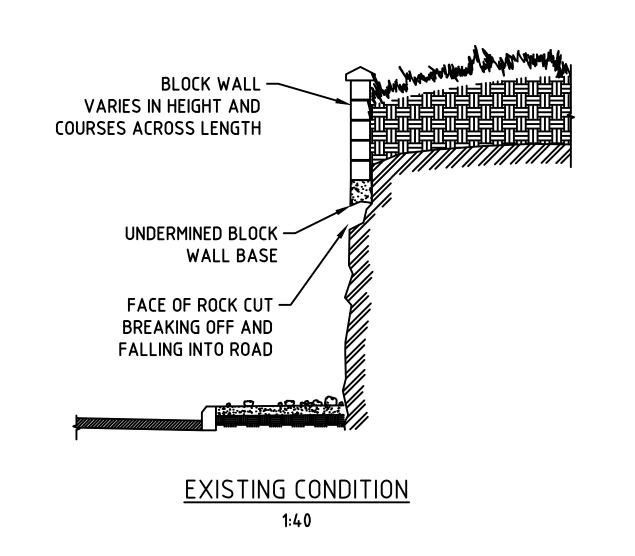
PROJECT NAME: SOUTH ROAD
PAGET LIGHTS
ROCK CUT REMEDIAL

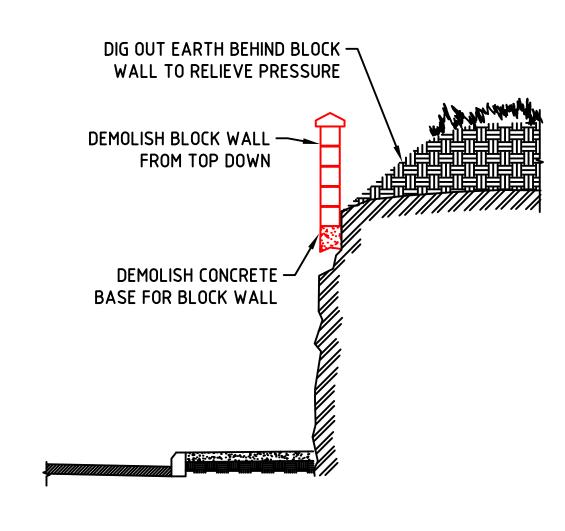
SOUTH ROAD PAGET SHEET TITLE:

LOCATION PLAN

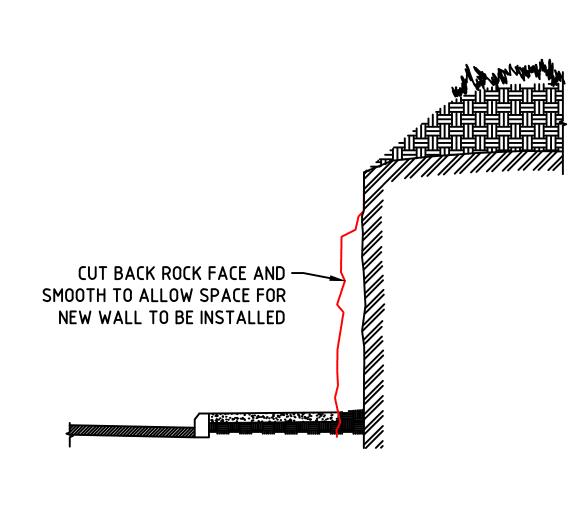
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REVISION

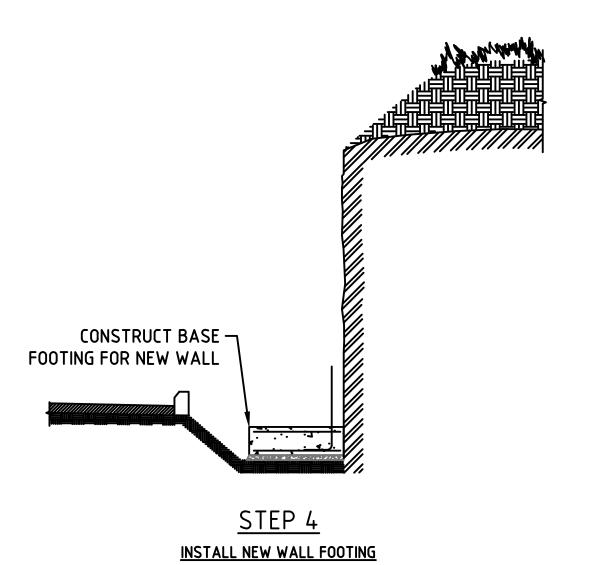




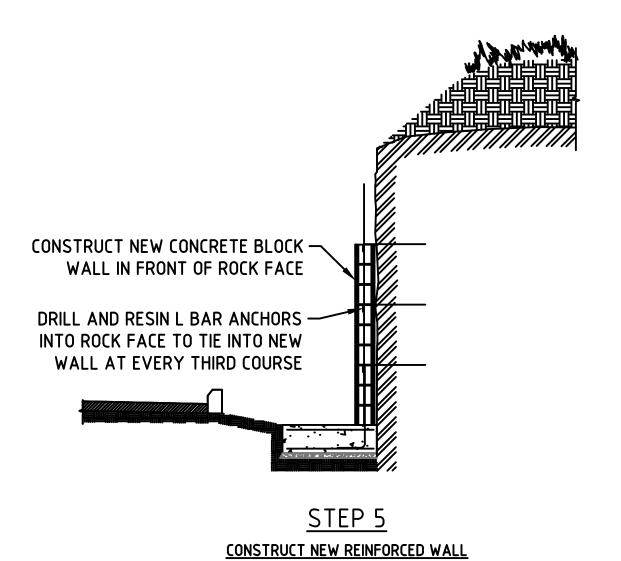
STEP 1 DEMOLISH WALL 1:40



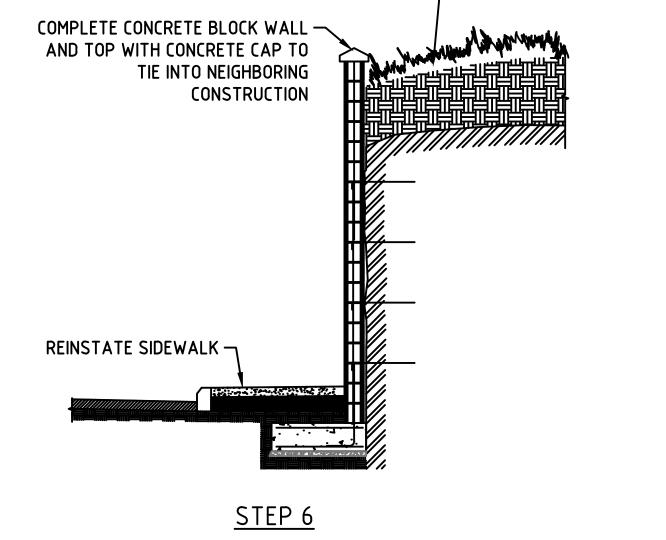
STEP 2 CUT BACK AND SMOOTH ROCK FACE 1:40



1:40



1:40



STEP 3

**EXCAVATE SIDEWALK** 

1:40

EXCAVATE SIDEWALK TO **ALLOW INSTALLATION OF** 

─ BACKFILL AND LANDSCAPE

**NEW WALL FOOTING** 

RETAIN EXISTING **CURBS FOR REUSE** 

> COMPLETE WALL, REINSTATE SIDEWALK AND BACKFILL 1:40

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	AMENDMENTS: NO:   REVISION   DATE:			
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<u>DESIGN</u> PREPARED: C.FRASER DATE: 12/10/2		DATE: 12/10/2023		
CHE	CKED: A.KENNY	DATE: 12/10/2023		
DRAWING PREPARED: C.FRASER DATE: 12/10/2023				
	CKED: A.KENNY	DATE: 12/10/2023 DATE: 12/10/2023		
APF A.KI	PROVED BY: ENNY — PRINC ST	RUCTURAL ENGINEER		

PROJECT NUMBER:

SOUTH ROAD PAGET LIGHTS

ROCK CUT REMEDIAL

CONSTRUCTION SEQUENCE

REVISION

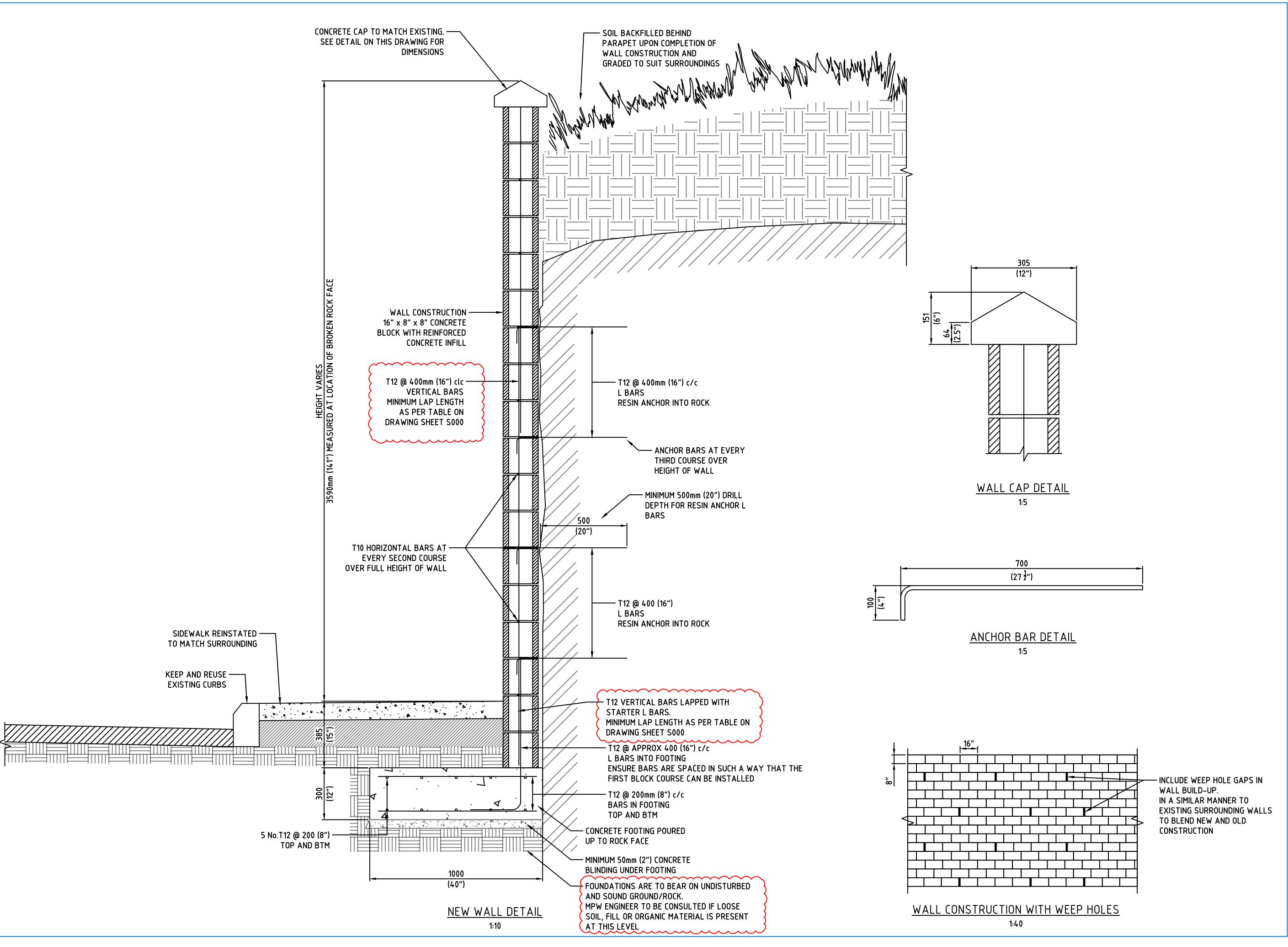
PROJECT NAME:

SOUTH ROAD PAGET

SHEET TITLE:

SHEET NUMBER:

S002



THE MINISTRY OF
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<u>NOTES</u>

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SURVEY
PREPARED: — DATE: XX/XX/XXXX

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DRAWING PREPARED: C FRASE

PREPARED: C.FRASER DATE: 12/10/2023 CHECKED: A.KENNY DATE: 12/10/2023

APPROVED BY:
A.KENNY - PRINC STRUCTURAL ENGINEER

PROJECT NUMBER:

PROJECT NAME:
SOUTH ROAD
PAGET LIGHTS
ROCK CUT REMEDIAL

SOUTH ROAD PAGET

SHEET TITLE:

NEW WALL DETAILS

SHEET NUMBER: S003

REVISION **B**