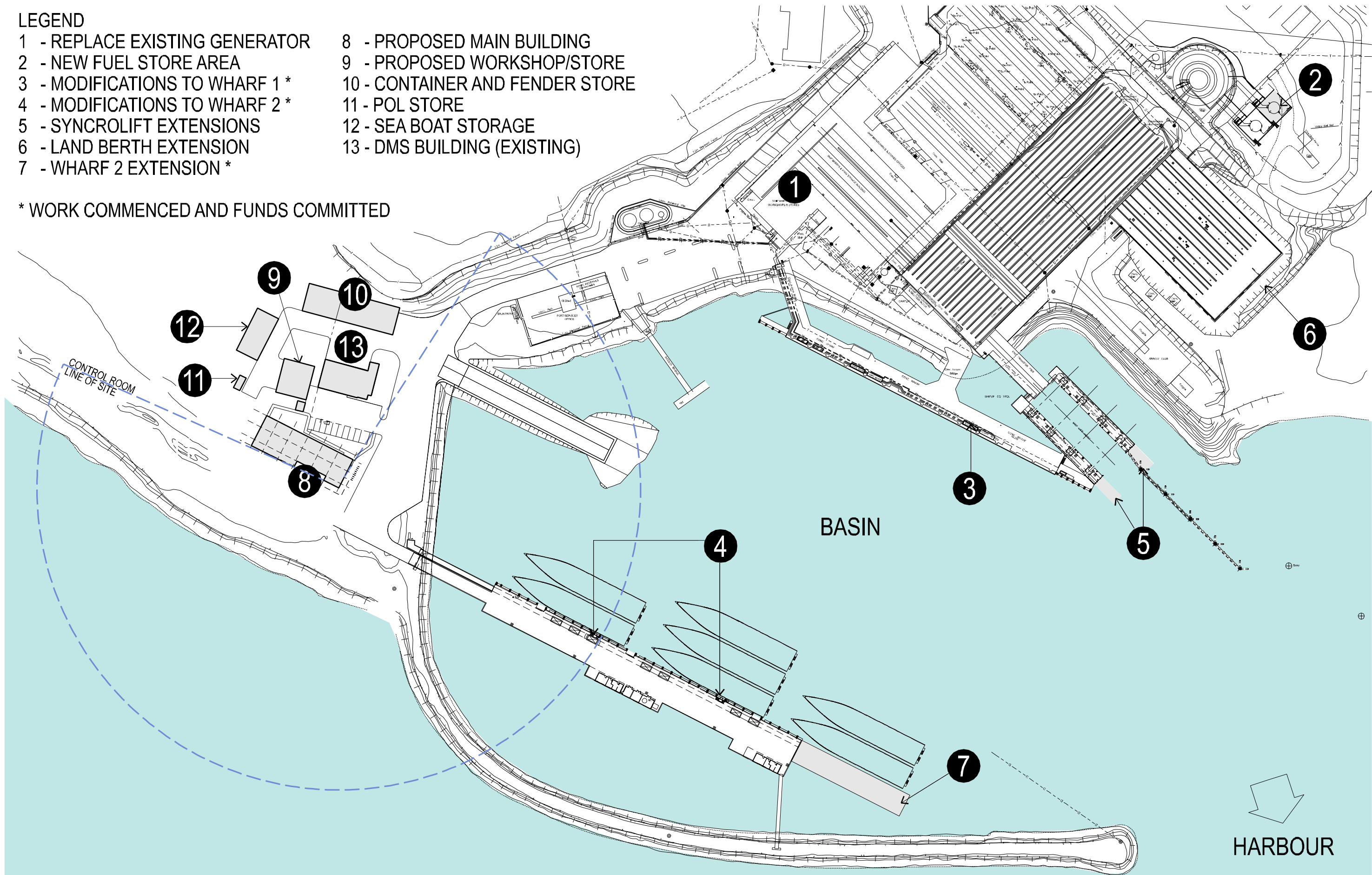


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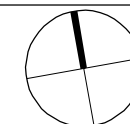
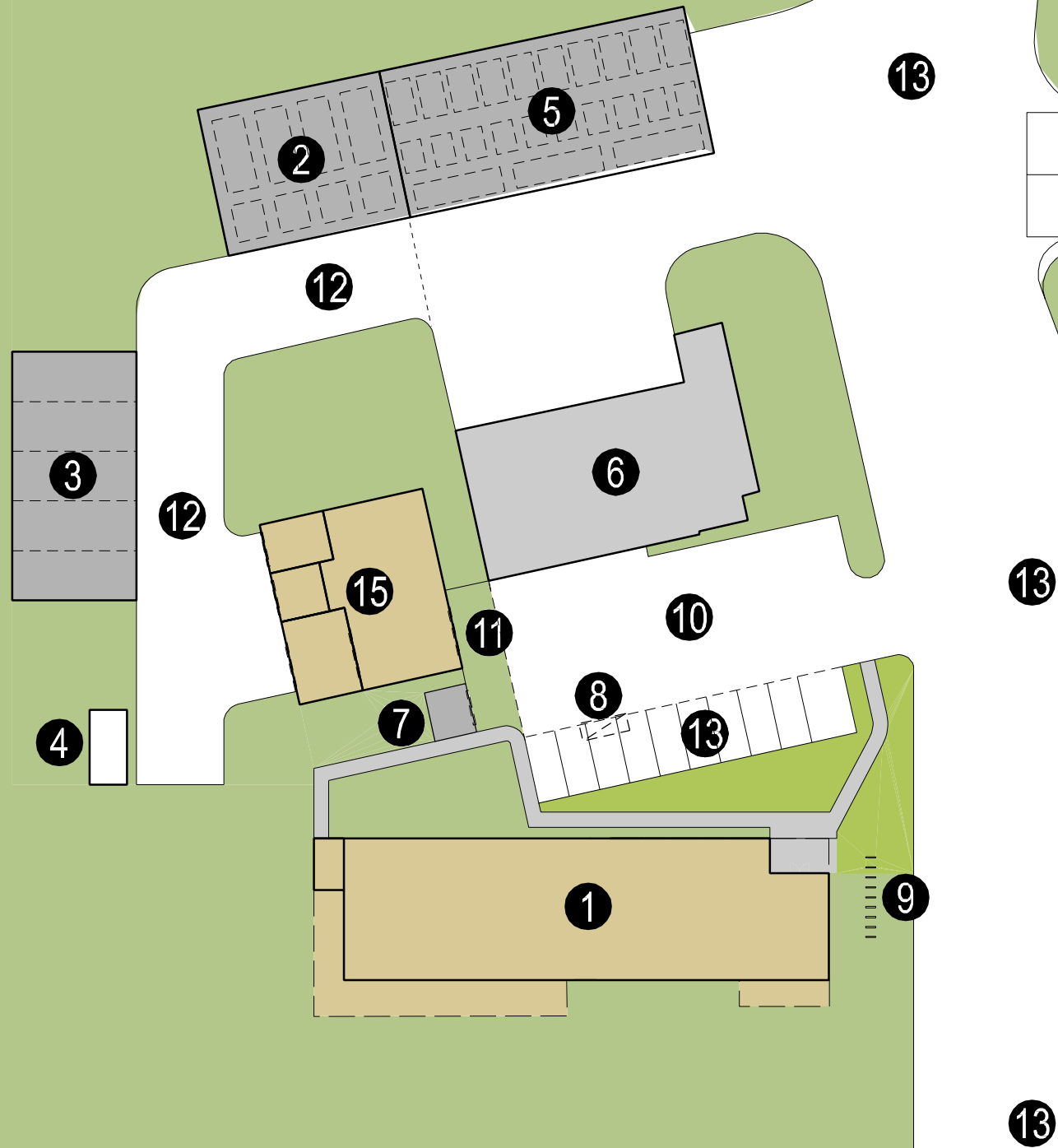
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|--------------------------------|---------------------------------|
| 1 - REPLACE EXISTING GENERATOR | 8 - PROPOSED MAIN BUILDING      |
| 2 - NEW FUEL STORE AREA        | 9 - PROPOSED WORKSHOP/STORE     |
| 3 - MODIFICATIONS TO WHARF 1 * | 10 - CONTAINER AND FENDER STORE |
| 4 - MODIFICATIONS TO WHARF 2 * | 11 - POL STORE                  |
| 5 - SYNCROLIFT EXTENSIONS      | 12 - SEA BOAT STORAGE           |
| 6 - LAND BERTH EXTENSION       | 13 - DMS BUILDING (EXISTING)    |
| 7 - WHARF 2 EXTENSION *        |                                 |

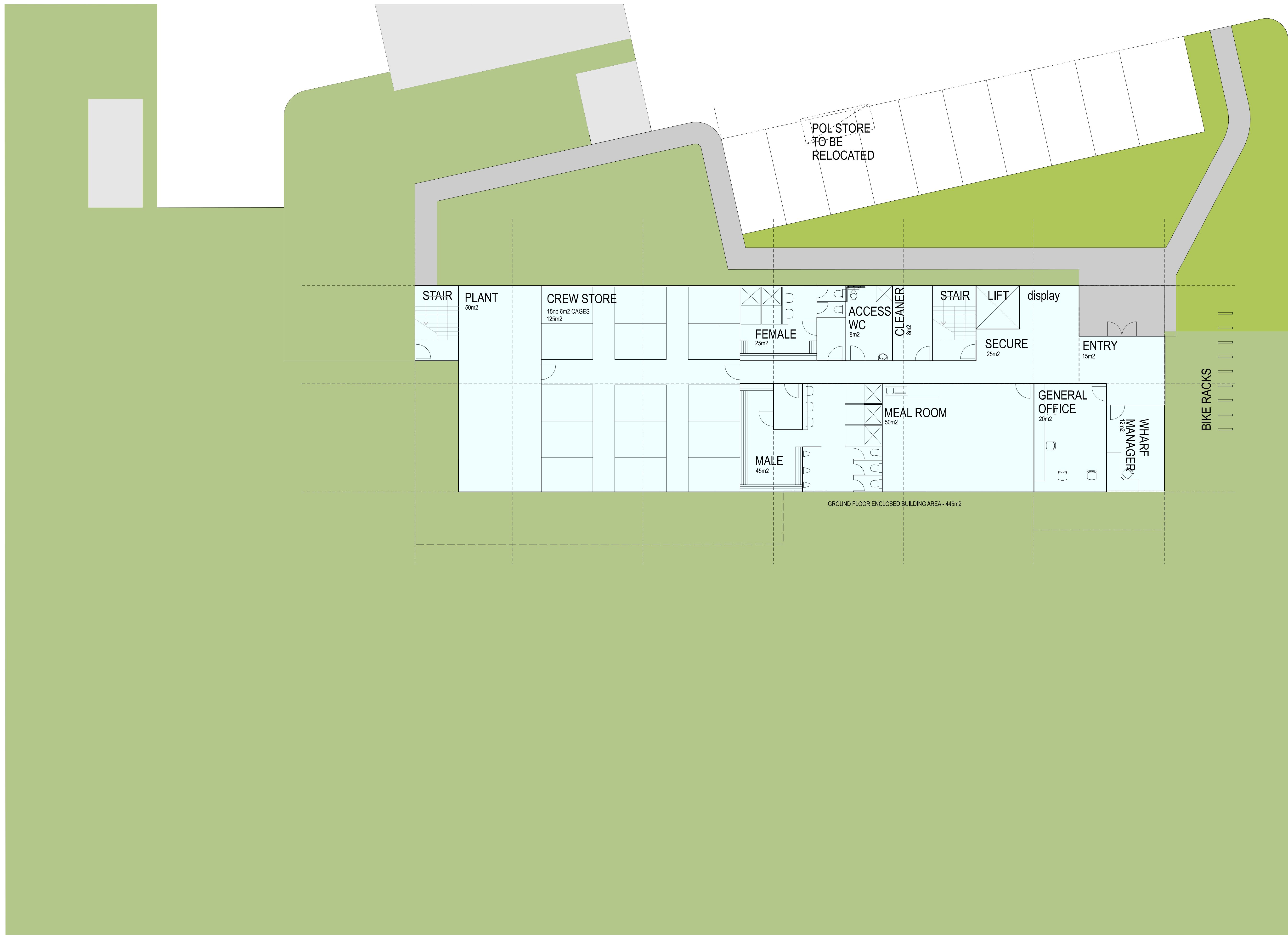
\* WORK COMMENCED AND FUNDS COMMITTED



LEGEND

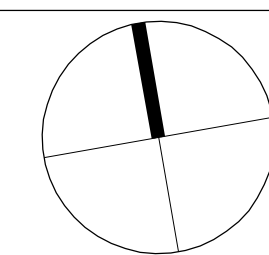
- 1 - MAIN BUILDING
- 2 - CONTAINER STORAGE
- 3 - SEA BOAT STORAGE
- 4 - POL STORE
- 5 - FENDER STORE
- 6 - DMS BUILDING (EXISTING)
- 7 - WASTE COLLECTION
- 8 - EXISTING POL STORE TO BE RELOCATED
- 9 - BIKE RACKS
- 10 - EXISTING HARDSTAND (BITUMEN)
- 11 - LOADING AREA/HARDSTAND (BITUMEN)
- 12 - NEW HARDSTAND/ROAD (BITUMEN)
- 13 - EXISTING BITUMEN ROAD
- 14 - ALLOCATED DEFENCE CARPARK (10 CARS)
- 15 - PSM GENERAL WORK AREA AND STORES





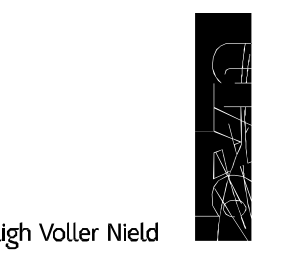
ACPB CREW SUPPORT AND PORT SERVICES FACILITY  
 DARWIN NAVAL BASE  
 C040407

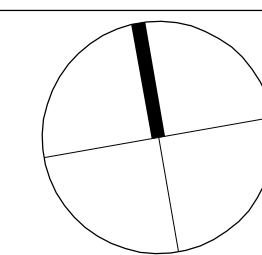
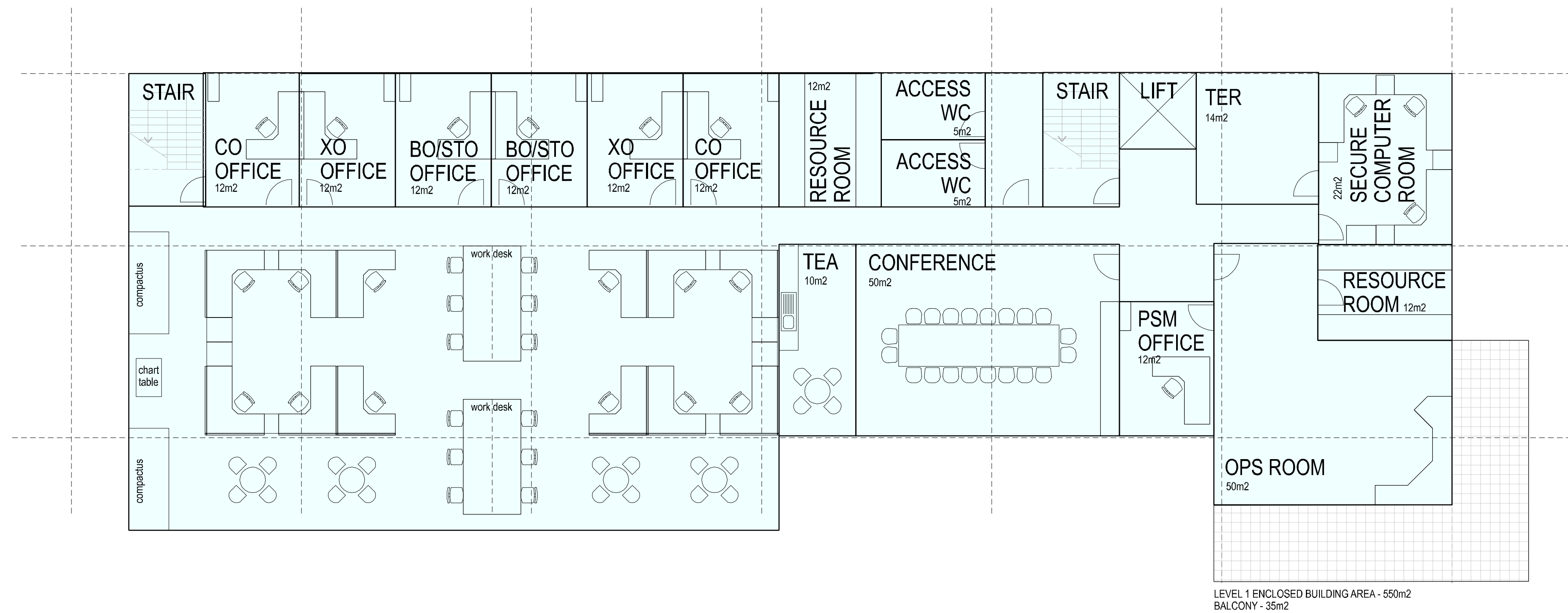
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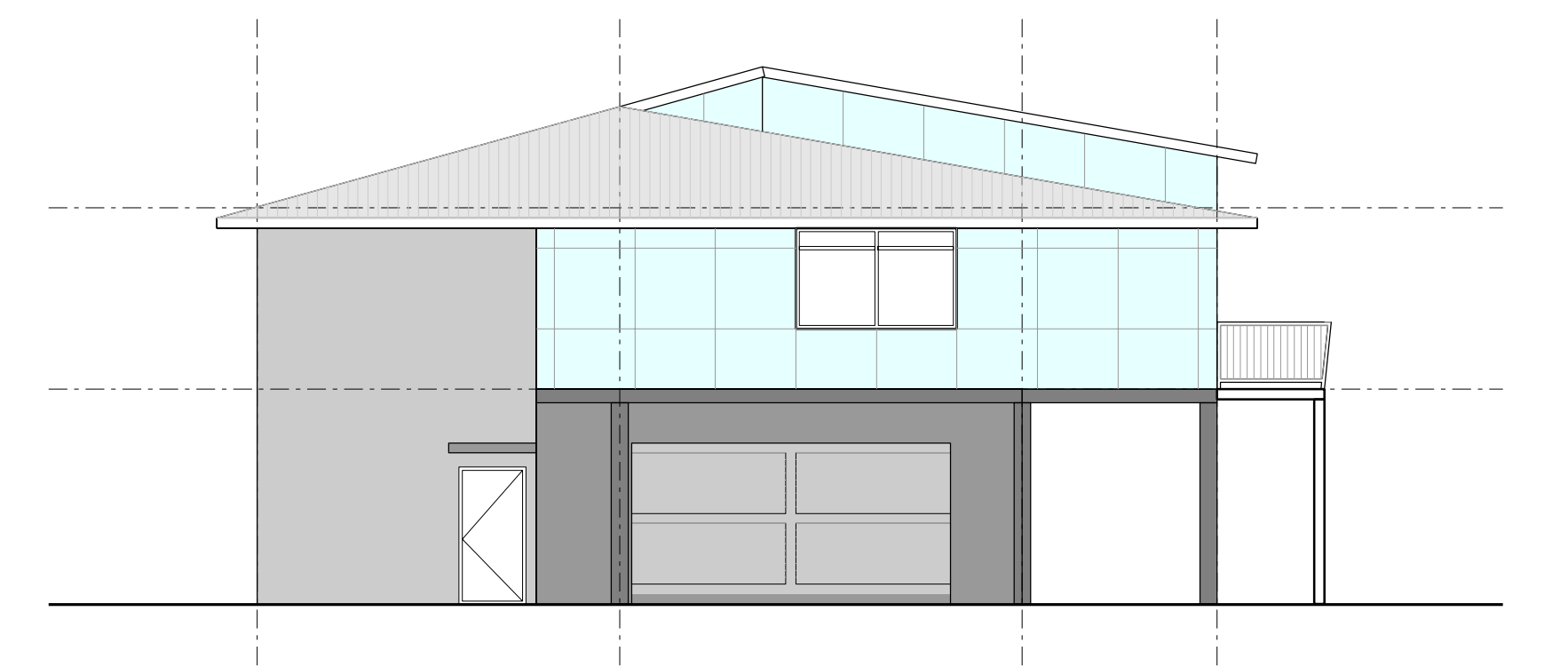
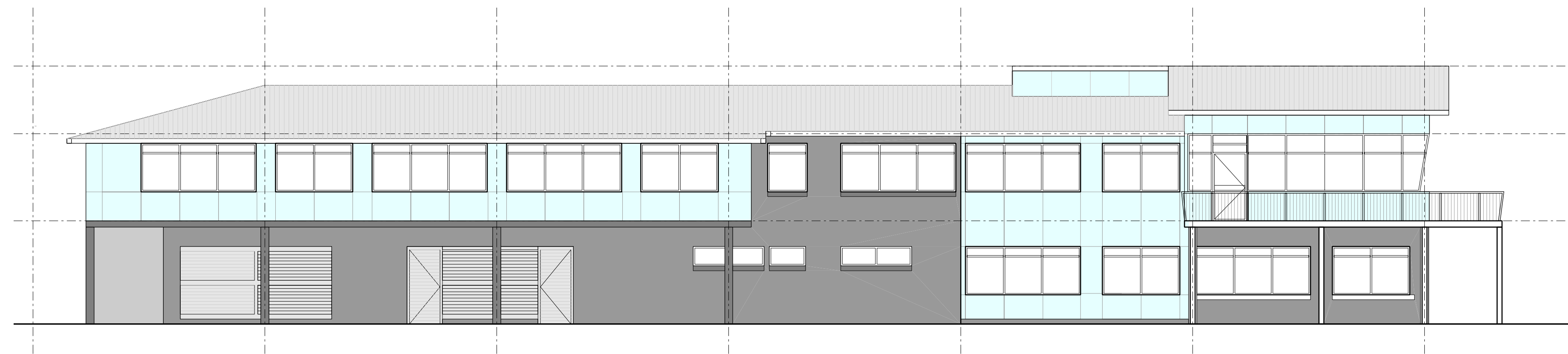
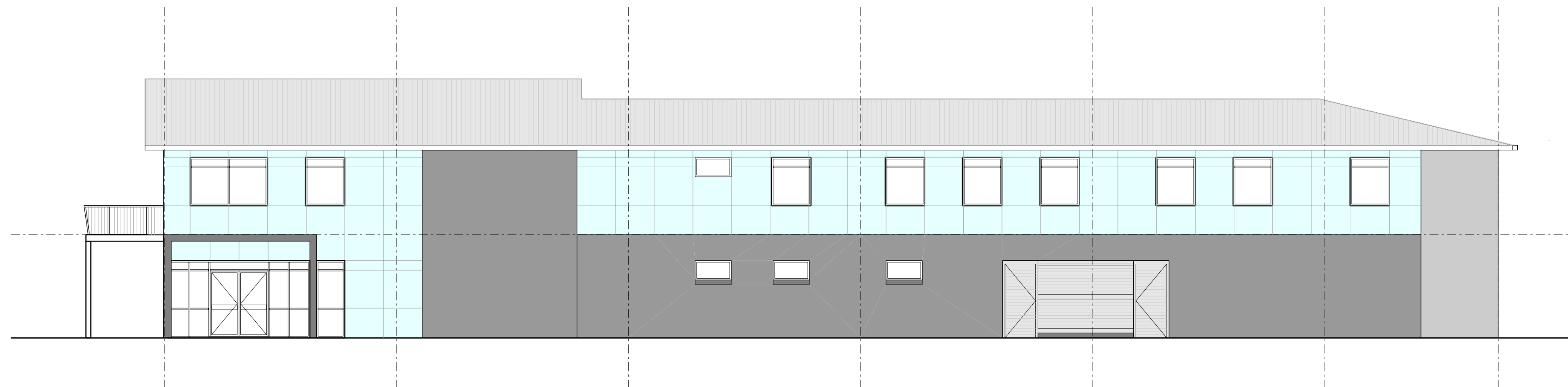


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PRELIM 03

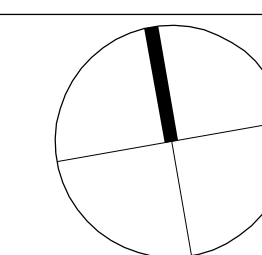






ACPB CREW SUPPORT AND PORT SERVICES FACILITY  
DARWIN NAVAL BASE  
C040407

ELEVATIONS



22-02-05  
1:200 @ A3

PRELIM  
05

POWER  
INITIATIVES

Bigg Voller Field



DRAWING No.	DESCRIPTION
BEJ404-S-DWG-003	GENERAL NOTES AND DESIGN CRITERIA

NOTES

**FOR CONSTRUCTION**



Australian Government  
Department of Defence

PROJECT  
**PROJECT N2194  
DARWIN NAVAL BASE  
PATROL BOAT FACILITIES**

CONTRACTOR



**THIESS PTY LTD**  
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40 MCDONNELL STREET, MILDURA, QLD, 4864  
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100mm ON ORIGINAL DRAWING

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	29.7.04
C	ISSUED FOR 100% DESIGN REVIEW	28.6.04
B	ISSUED FOR 70% DESIGN REVIEW	2.6.04
A	ISSUED FOR COMMENT	24.05.04

NAME	REVISIONS	SIGNATURE
SA GYE	SA GYE	
0 LEE	0 LEE	
J DIMOCK	J DIMOCK	
EL HOLLIDAY	EL HOLLIDAY	

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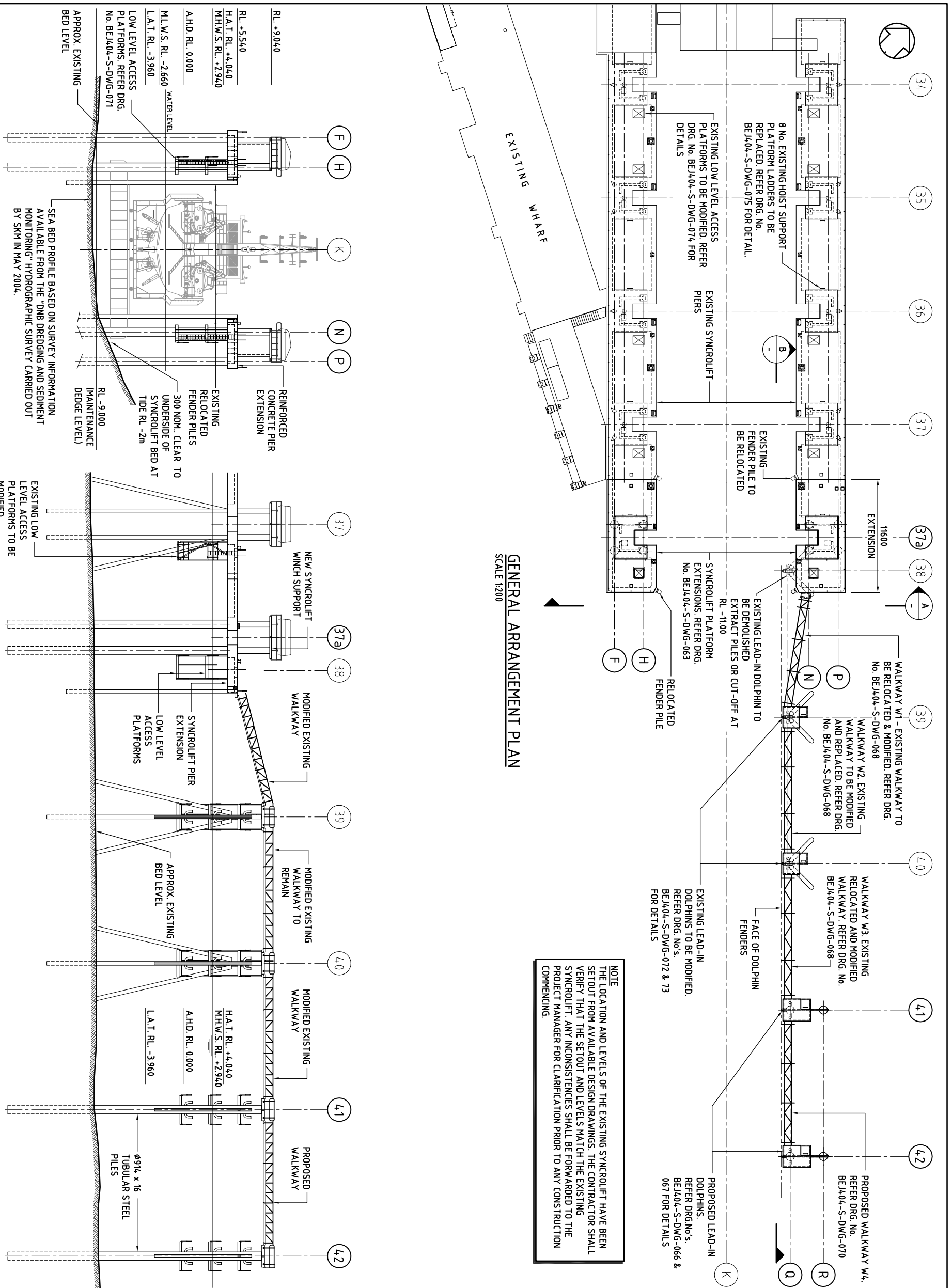
DRAWING SCALE	1:200	PROJECT No.	BEJ404
DRAFTER S. DAVIS			
CAD FILE: BEJ404-S-DWG-061.dwg			

TITLE  
**DARWIN NAVAL BASE REDEVELOPMENT  
SYNCROLIIFT PLATFORM EXTENSION  
GENERAL ARRANGEMENT  
PLAN AND SECTIONS**

KBR DRAWING No.	REVISION
BEJ404-S-DWG-061	0

**NOTE**  
THE LOCATION AND LEVELS OF THE EXISTING SYNCROLIIFT HAVE BEEN SETOUT FROM AVAILABLE DESIGN DRAWINGS. THE CONTRACTOR SHALL VERIFY THAT THE SETOUT AND LEVELS MATCH THE EXISTING SYNCROLIIFT. ANY INCONSISTENCIES SHALL BE FORWARDED TO THE PROJECT MANAGER FOR CLARIFICATION PRIOR TO ANY CONSTRUCTION COMMENCING.

**GENERAL ARRANGEMENT PLAN**  
SCALE 1:200

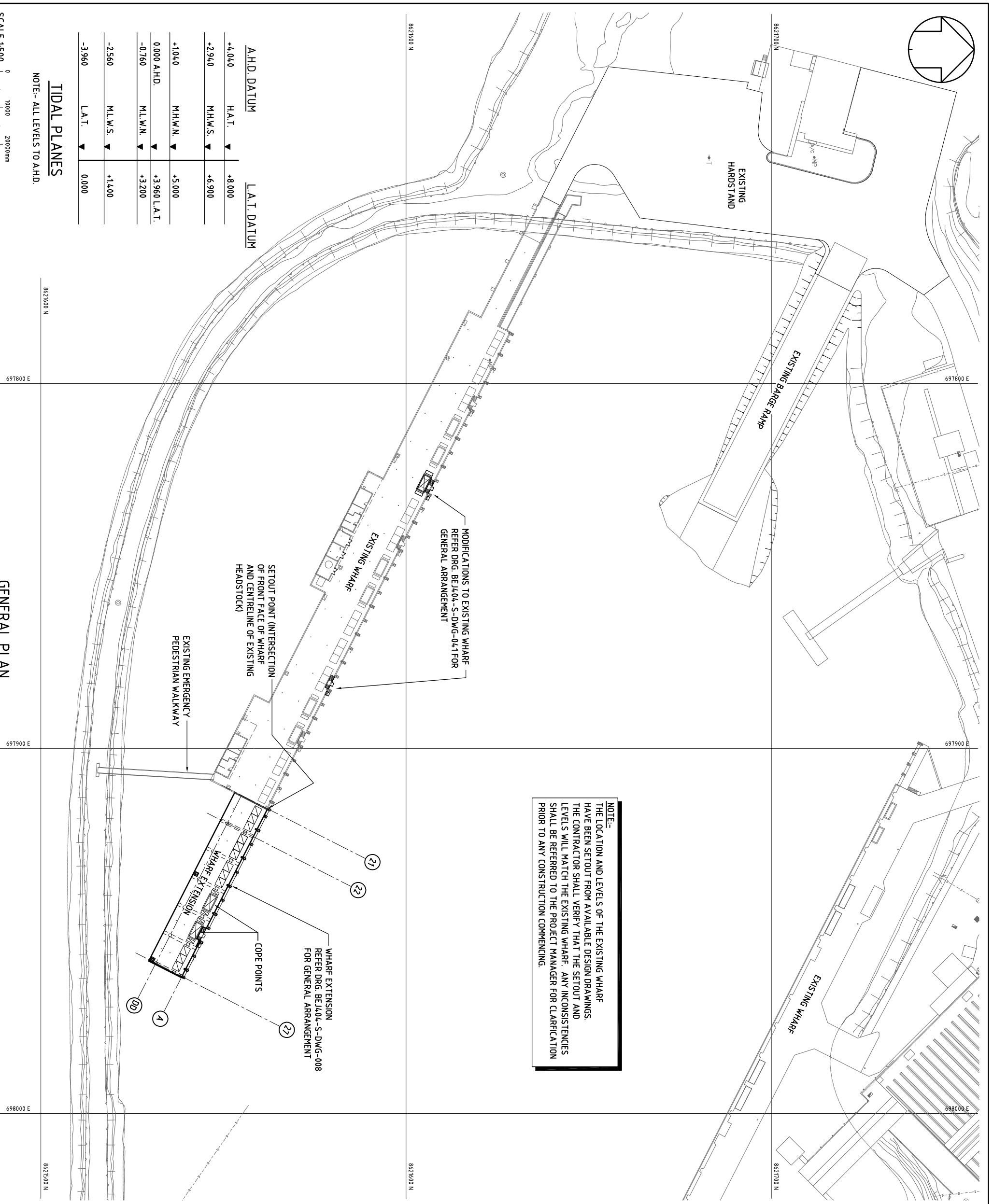
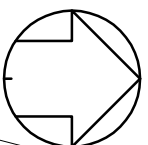


**SECTION A**  
SCALE 1:200

**SECTION B**  
SCALE 1:200

SCALE 1:200  
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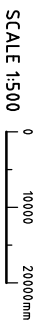


**NOTE:-**  
 THE LOCATION AND LEVELS OF THE EXISTING WHARF HAVE BEEN SETOUT FROM AVAILABLE DESIGN DRAWINGS. THE CONTRACTOR SHALL VERIFY THAT THE SETOUT AND LEVELS WILL MATCH THE EXISTING WHARF. ANY INCONSISTENCIES SHALL BE REFERRED TO THE PROJECT MANAGER FOR CLARIFICATION PRIOR TO ANY CONSTRUCTION COMMENCING.

A.H.D. DATUM		L.A.T. DATUM	
+4.040	H.A.T. ▼	+8.000	
+2.940	M.H.W.S. ▼	+6.900	
+1.040	M.H.W.N. ▼	+5.000	
0.000 A.H.D.		+3.960 L.A.T.	
-0.760	M.L.W.N. ▼	+3.200	
-2.560	M.L.W.S. ▼	+1.400	
-3.960	L.A.T. ▼	0.000	

**TIDAL PLANES**

NOTE:- ALL LEVELS TO A.H.D.



SCALE 1:500

**GENERAL PLAN**

SCALE 1:500

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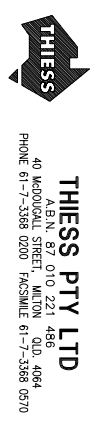
REFERENCE DRAWINGS

DRAWING No.	DESCRIPTION
BEJ404-S-DWG-003	GENERAL NOTES AND DESIGN CRITERIA
NOTES	

**FOR CONSTRUCTION**



PROJECT  
**PROJECT N2194**  
**DARWIN NAVAL BASE**  
**PATROL BOAT FACILITIES**



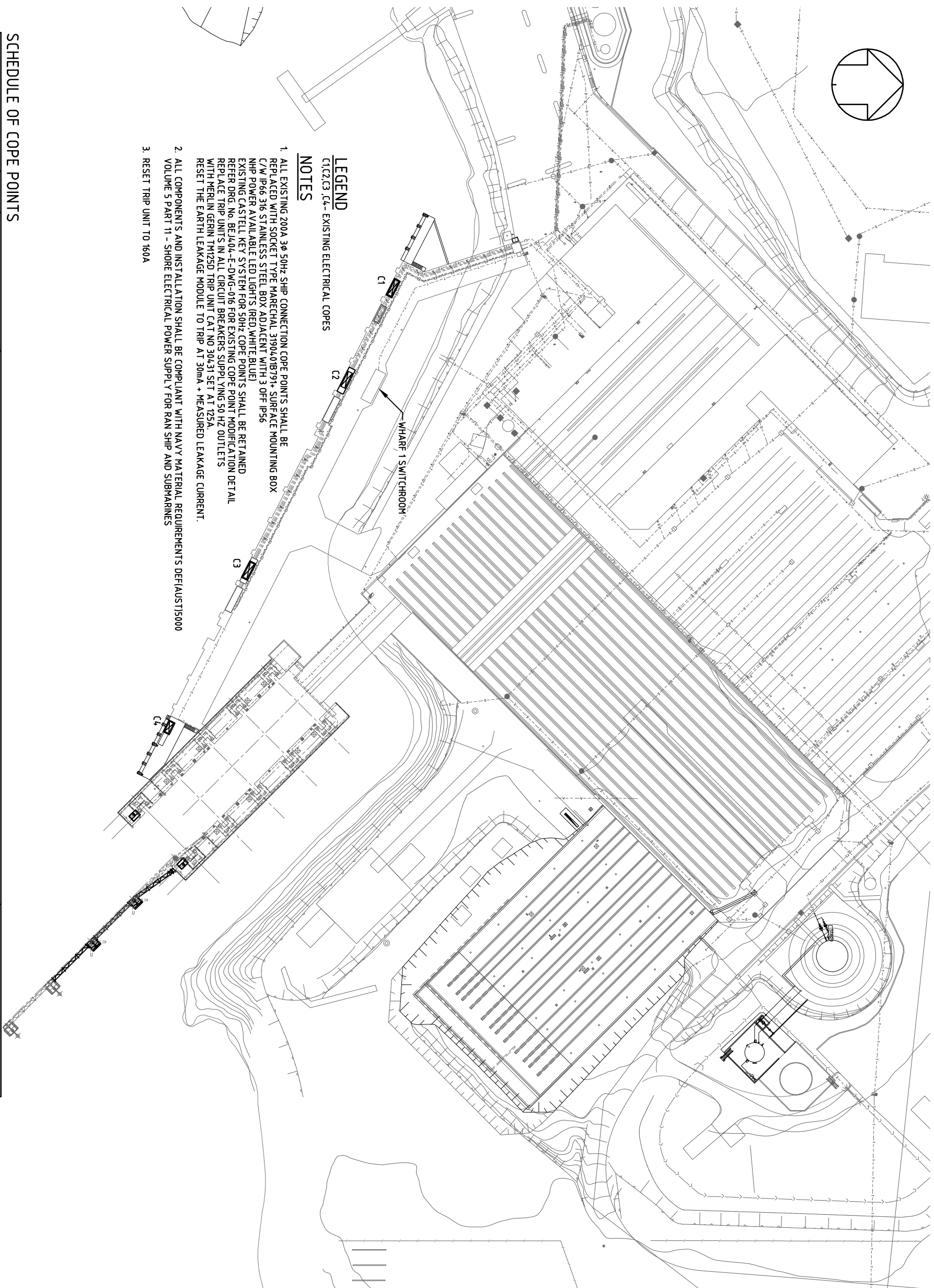
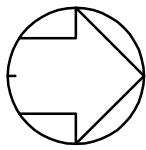
REV	DESCRIPTION	DATE
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C	ISSUED FOR 100% DESIGN REVIEW	28.6.04
B	ISSUED FOR 70% DESIGN REVIEW	2.6.04
A	ISSUED FOR 30% DESIGN REVIEW	4.5.04

NAME	REVISIONS	SIGNATURE
SA GYE		SA GYE
O LEE		O LEE
J DIMPICK		J DIMPICK
EL HOLLIDAY		EL HOLLIDAY

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 Kellogg Brown & Root Pty Ltd  
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 Brisbane, Queensland, 4086  
 ph (07) 3173-8555 fax (07) 3173-6500

DRAWING SCALE  
**1:500**  
 DRAFTER: SD  
 TITLE  
**DARWIN NAVAL BASE REDEVELOPMENT**  
**WHARF 2 EXTENSION**  
**GENERAL ARRANGEMENT**  
**PLAN**

KBR DRAWING No.  
**BEJ404-S-DWG-004**  
 PROJECT DRAWING No.  
**0**



**LEGEND**  
C1, C2, C3, C4 - EXISTING ELECTRICAL COPES

- NOTES**
1. ALL EXISTING 200A 3Ø 50Hz SHIP CONNECTION COPE POINTS SHALL BE REPLACED WITH SOCKET TYPE MARCHEL 3190, 01B/71+ SURFACE MOUNTING BOX C/W IP66 3/16 STAINLESS STEEL BOX ADJACENT WITH 3 OFF IP56 NHP POWER AVAILABLE LED LIGHTS (RED WHITE BLUE) EXISTING CASTELL KEY SYSTEM FOR 50Hz COPE POINTS SHALL BE RETAINED REFER DRG. No. BEL404-E-DWG-016 FOR EXISTING COPE POINT MODIFICATION DETAIL REPLACE TRIP UNITS IN ALL CIRCUIT BREAKERS SUPPLYING 50 Hz OUTLETS WITH MERLIN GERIN TM125D TRIP UNIT CAT NO 30431 SET AT 175A. RESET THE EARTH LEAKAGE MODULE TO TRIP AT 30ma + MEASURED LEAKAGE CURRENT.
  2. ALL COMPONENTS AND INSTALLATION SHALL BE COMPLIANT WITH NAVY MATERIAL REQUIREMENTS DEFAULT 15000 VOLUME 5 PART 11 - SHORE ELECTRICAL POWER SUPPLY FOR RAN SHIP AND SUBMARINES
  3. RESET TRIP UNIT TO 160A

**SCHEDULE OF COPE POINTS**

COPE POINT	EARTH POINT	60Hz				50Hz				COMMUNICATIONS
		440V 3PH 200A COPE BOX	415V 3PH 200A COPE BOX	415V 3PH 32A OUTLET	240V 1PH 15A OUTLET	240V 1PH 10A OUTLET	240V 1PH 15A OUTLET	240V 1PH 10A OUTLET		
EXISTING C1	1	3 (NOTE 3)	1 (NOTE 1 AND 2)	1	2			3 x 1 PR OUTLETS, 6 x 2 PR OUTLETS		
EXISTING C2	1	3 (NOTE 3)	1 (NOTE 1 AND 2)	1	1			3 x 1 PR OUTLETS, 6 x 2 PR OUTLETS		
EXISTING C3	1	3 (NOTE 3)	2 (NOTE 1 AND 2)	1			2	3 x 1 PR OUTLETS, 6 x 2 PR OUTLETS		
EXISTING C4	1	3 (NOTE 3)	1 (NOTE 1 AND 2)	1	2			3 x 1 PR OUTLETS, 6 x 2 PR OUTLETS		

SCALE 1:500  
0 10000 20000mm

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REFERENCE DRAWINGS

DRAWING No.	DESCRIPTION

NOTES

**FOR CONSTRUCTION**



PROJECT  
**PROJECT N2194**  
**DARWIN NAVAL BASE**  
**PATROL BOAT FACILITIES**



CONTRACTOR  
**THIESS PTY LTD**  
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100mm ON ORIGINAL DRAWING

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	29.7.04
B	ISSUED FOR 100% DESIGN REVIEW	28.6.04
A	ISSUED FOR 70% DESIGN REVIEW	7.6.04

DRAFTING	NAME	REVISIONS	SIGNATURE
SA GYE	SA GYE		
DESIGN	H MICHALKOW		
DESIGN	R HOLLIS		
VERIFICATION	R HOLLIS		
PROJECT APPROVAL	EL HOLLIDAY		
CLIENT			

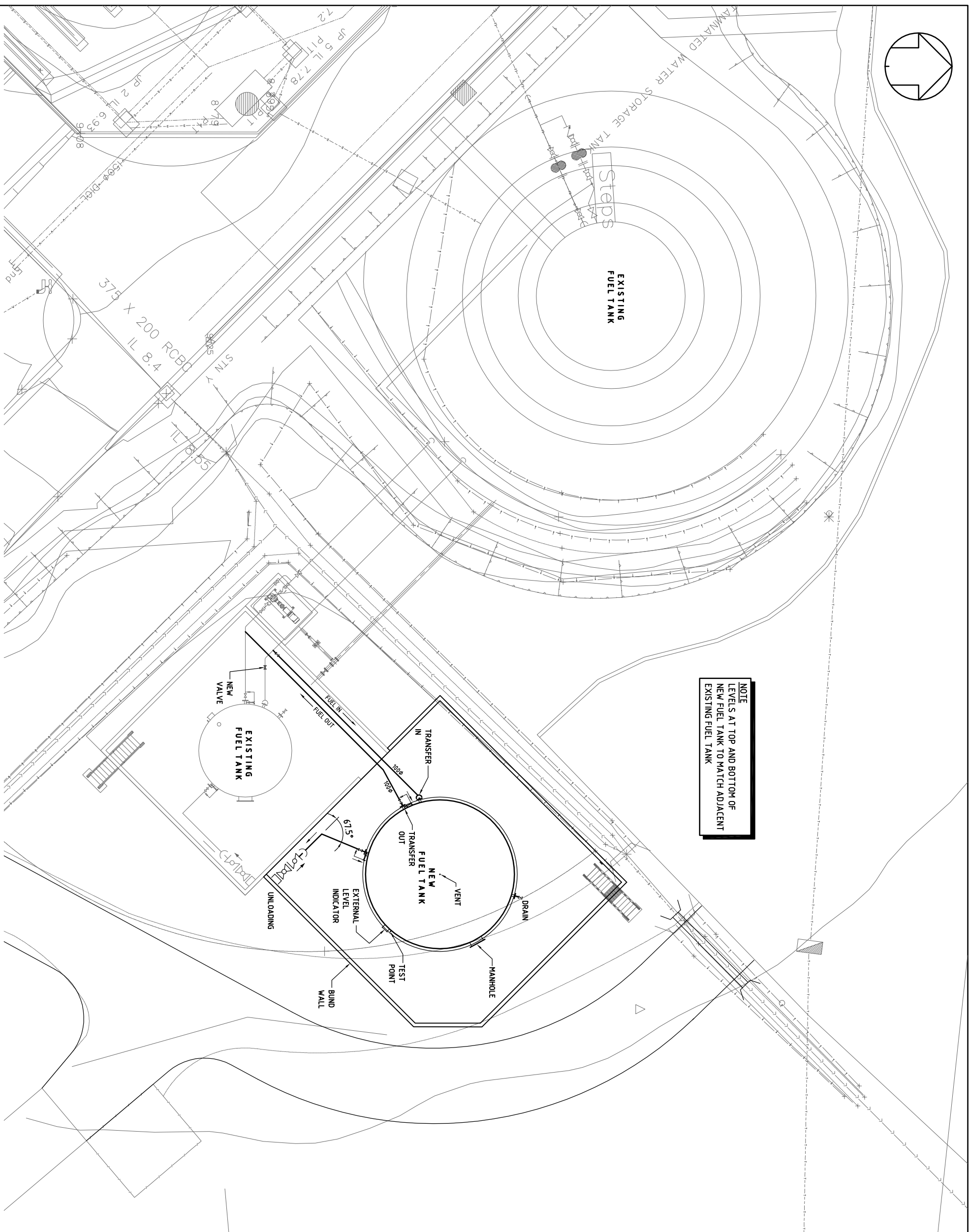
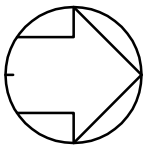
APPROVALS

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555 Coronation Drive, Toowoomba,  
Brisbane, Queensland, 4086  
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DRAWING SCALE 1:500  
DRAFTER: HM  
TITLE  
**DARWIN NAVAL BASE REDEVELOPMENT**  
**ELECTRICAL SERVICES**  
**WHARF 1 MODIFICATIONS**  
**GENERAL LAYOUT**

KBR DRAWING NO.  
**BEJ4,04-E-DWG-029**  
PROJECT DRAWING NO.  
**0**





**NOTE**  
 LEVELS AT TOP AND BOTTOM OF  
 NEW FUEL TANK TO MATCH ADJACENT  
 EXISTING FUEL TANK

**PLAN**  
 SCALE 1:100

SCALE 1:100  
 0 2000 4000 mm

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DRAWING No.	DESCRIPTION

NOTES

**FOR CONSTRUCTION**



**Australian Government**  
 Department of Defence

PROJECT  
**PROJECT N2194**  
**DARWIN NAVAL BASE**  
**PATROL BOAT FACILITIES**

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100mm ON ORIGINAL DRAWING

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	29.7.04
A	ISSUED FOR 100% DESIGN REVIEW	28.6.04

NAME	REVISIONS	SIGNATURE
DRAFTING SA GYE		SA GYE
DESIGN J SOUTH		J SOUTH
DESIGN N TIERNAN		N TIERNAN
PROJECT APPROVAL EL HOLLIDAY		EL HOLLIDAY

APPROVALS  
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DRAWING SCALE  
**1:100**  
 DRAFTER: SPH  
 CAD FILE: BEJ404-M-DWG-022.dwg

TITLE  
**DARWIN NAVAL BASE REDEVELOPMENT**  
**HYDRAULIC SERVICES**  
**NEW FUEL STORAGE**  
**FUEL & OIL SYSTEM - STORAGE TANK G.A.**

KBR DRAWING No.  
**BEJ404-M-DWG-022**  
 PROJECT DRAWING No.  
**0**

DRAWING No.	DESCRIPTION
BEJ404-S-DWG-003	GENERAL NOTES AND DESIGN CRITERIA
NOTES	



Australian Government  
Department of Defence

PROJECT  
**PROJECT N2194**  
**DARWIN NAVAL BASE**  
**PATROL BOAT FACILITIES**

CONTRACTOR  
**THIESS**  
THIESS PTY LTD  
A.B.N. 87 010 221 486  
40 McDONALD STREET, MANTON Q.U.L.D. 4084  
PHONE 61-7-5888 0280 FACSIMILE 61-7-5888 0370

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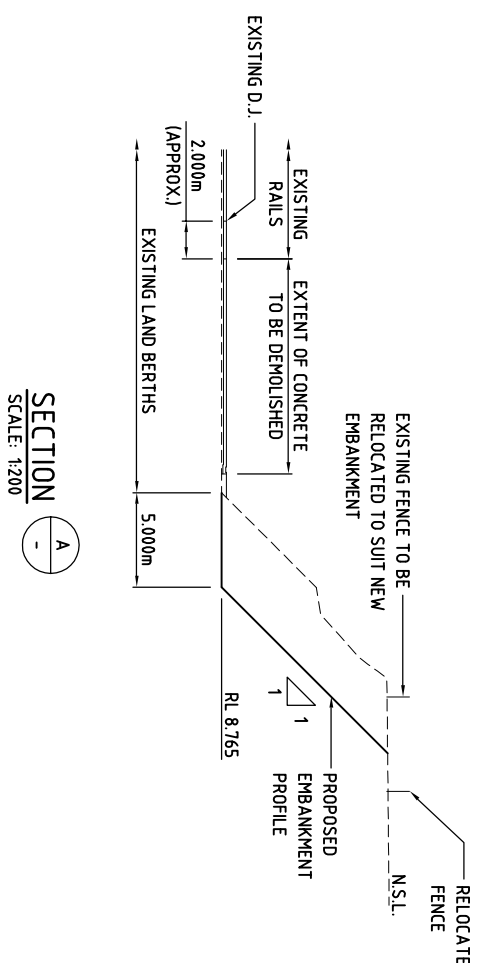
REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	29.7.04
B	ISSUED FOR 100% DESIGN REVIEW	28.6.04
A	ISSUED FOR 70% DESIGN REVIEW	2.6.04
REV	DESCRIPTION	DATE

DRAFTING	NAME	REVISIONS	SIGNATURE
DESIGN	SA GYE	SA GYE	
DESIGN	0 LEE	0 LEE	
DESIGN VERIFICATION	J DIMPICK	J DIMPICK	
PROJECT APPROVAL	EL HOLLIDAY	EL HOLLIDAY	
CLIENT			

APPROVALS  
**Kellogg Brown & Root Pty Ltd**  
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Kellogg Brown & Root Pty Ltd ABN 91 007 660 317  
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Brisbane, Queensland, 4086  
ph (07) 3723-6555 fax (07) 3723-6500

DRAWING SCALE  
**1:200**  
DRAFTER: SPH  
CAD FILE: BEJ404-C-DWG-001.dwg  
PROJECT: BEJ404  
TITLE  
**DARWIN NAVAL BASE REDEVELOPMENT**  
**LAND BERTH EXTENSION**  
**EARTHWORKS**  
**PLAN AND SECTION**

KBR DRAWING NO.  
**BEJ404-C-DWG-001**  
PROJECT DRAWING NO.  
**0**



**SECTION A-A**  
SCALE: 1:200

**NOTE**  
THE LOCATION AND LEVELS OF THE EXISTING LAND BERTH HAVE BEEN SET OUT FROM AVAILABLE DESIGN DRAWINGS. THE CONTRACTOR SHALL VERIFY THAT THE SET OUT AND LEVELS WILL MATCH THE EXISTING LAND BERTH. ANY INCONSISTENCIES SHALL BE REFERRED TO THE PROJECT MANAGER FOR CLARIFICATION PRIOR TO ANY CONSTRUCTION COMMENCING.

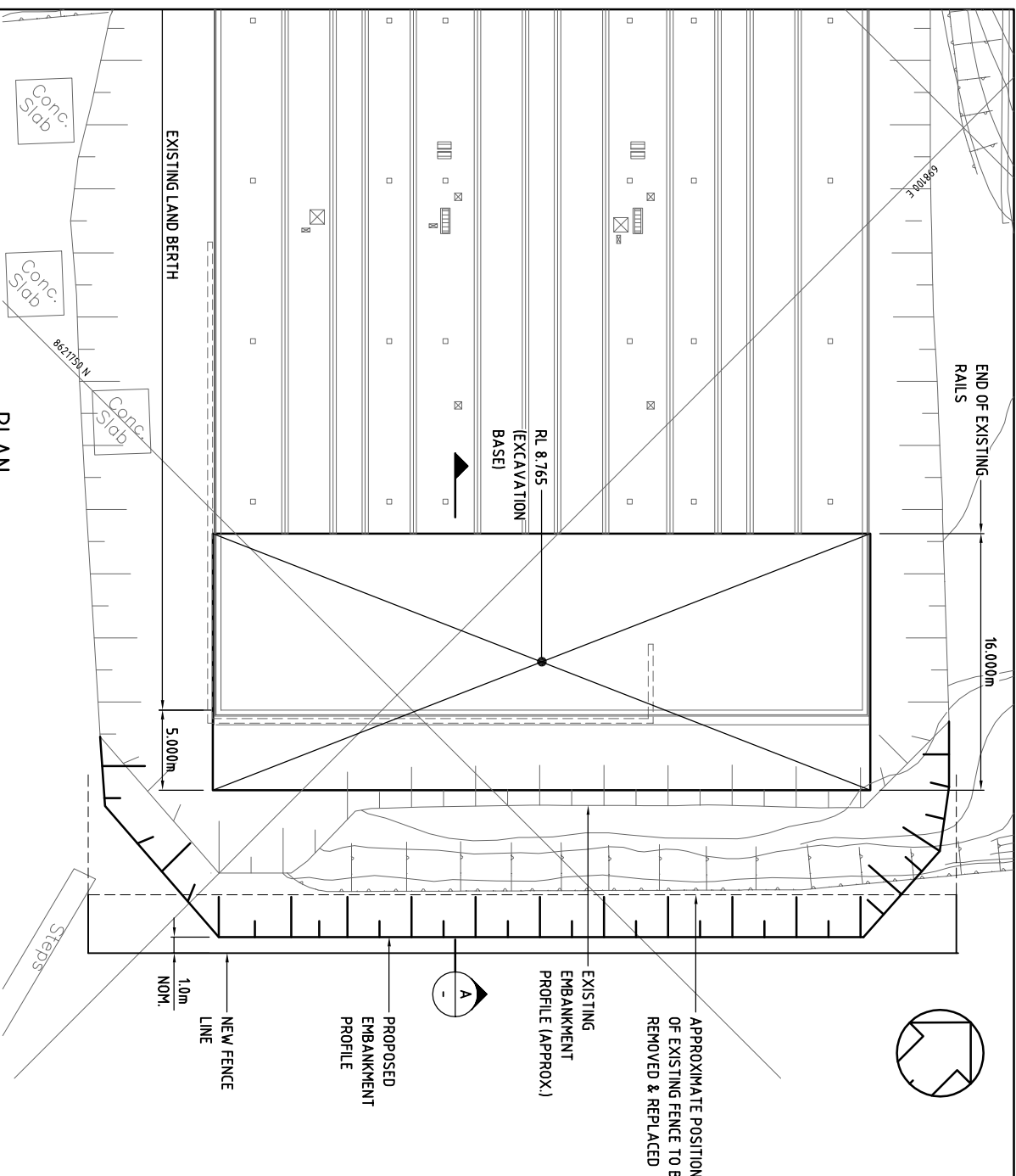
**GENERAL NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG No.s BEJ404-C-DWG-002, 003 & 004.

**EARTHWORKS NOTES:**

- E1. SITE PREPARATION AND EARTHWORKS IN THE BUILDING AREA SHALL COMPLY WITH AS3798 OR AS OTHERWISE SPECIFIED.
- E2. STRIP ALL VEGETATION, ORGANIC TOPSOIL AND OTHER DELETERIOUS MATERIAL AND REMOVE FROM SITE ALL MATERIAL THAT CANNOT BE RE-USED. CLEAR ALL TREE ROOTS AND OBSTRUCTIONS.
- E3. EXCAVATE AND TRIM THE BUILDING OR PAVEMENT PLATFORMS AND IN AREAS OF CUT, REMOVE EXCESS MATERIALS TO THE SUBGRADE LEVELS INDICATED ON THE DRAWINGS. REMOVE FROM THE SITE ALL MATERIAL THAT IS NOT REQUIRED OR IS UNSUITABLE FOR FILLING.
- E4. COMPACT THE PREPARED SUBGRADE TO THE FOLLOWING MINIMUM DENSITIES:  
- GRANULAR MATERIAL - 75% DENSITY INDEX  
- COHESIVE MATERIAL - 98% STANDARD
- E5. FILL SHALL BE PLACED IN LAYERS OF NO MORE THAN 200mm THICKNESS AND COMPACTED TO 98% STANDARD COMPACTION WHILE ST BEING MAINTAINED AT A MOISTURE CONTENT WITHIN A RANGE OF PLUS 2% TO MINUS 0% OF STANDARD MOISTURE CONTENT.
- E6. PRIOR TO COMMENCEMENT OF WORKS THE SUBCONTRACTOR IS TO IDENTIFY AND BE SATISFIED OF THE CORRECT LOCATIONS OF ALL SERVICES WHETHER INDICATED ON THE DRAWINGS OR NOT. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE SUBCONTRACTORS EXPENSE.
- E7. EXISTING SURFACE CONTOURS, WHERE SHOWN, HAVE BEEN INTERPOLATED AND MAY NOT BE ACCURATE.
- E8. ANY STRUCTURES, SERVICES, PAVEMENTS OR SURFACES DAMAGED, DIRTED OR MADE UNSERVICEABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.

**PLAN**  
SCALE 1:200



SCALE 1:200  
0 4000 8000 mm