PORT MAQUARIE BASE HOSPITAL EXPANSION PROJECT

enstruct

CIVIL EXTERNAL ENABLING WORKS DRAWING LIST:

CV-100.01-L1-SP2	ENABLING WORKS CIVIL EXTERNAL WORKS PART PLAN 1
CV-100.02-L1-SP2	ENABLING WORKS EROISION & SEDIMENTATION CONTROL PART PLAN 1
CV-100.31-L1-SP0	ENABLING WORKS CIVIL EXTERNAL WORKS SECTIONS AND DETAILS SHEET 1
CV-100.32-L1-SP0	ENABLING WORKS CIVIL EXTERNAL WORKS SECTIONS AND DETAILS SHEET 2
CV-100.35-L1-SP2	ENABLING WORKS CIVIL EXTERNAL WORKS DETENTION/WETLANDS BASIN DETAILS SHEET 1
CV-100.36-L1-SP2	ENABLING WORKS CIVIL EXTERNAL WORKS DETENTION/WETLANDS BASIN DETAILS SHEET 2

CIVIL EXTERNAL MAIN WORKS DRAWING LIST:

CV-100.11-L1-SP1	MAIN WORKS CIVIL EXTERNAL WORKS PART PLAN 2
CV-100.12-L1-SP1	MAIN WORKS EROISION & SEDIMENTATION CONTROL PART PLAN 2
CV-100.21-L1-SP1	MAIN WORKS CIVIL EXTERNAL WORKS PART PLAN 3
CV-100.22-L1-SP1	MAIN WORKS EROISION & SEDIMENTATION CONTROL PART PLAN 3

ENABLING WORKS GENERAL NOTES:

GENERAL

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, DRAWINGS & SPECIFICATIONS.
2. ALL WORKS TO BE CARRIED OUT TO THE REQUIREMENTS AND SATISFACTION OF THE DEPARTMENT OF HEALTH NSW, THE LOCAL COUNCIL, THE PROJECT MANAGER, THE ARCHITECT, THE SUPERINTENDENT, OR THEIR NOMINATED REPRESENTATIVES.
3. THE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NSW 2000.
4. ALL WORKS TO COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.

DIMENSIONS AND SET OUT

1. ALL PLAN DIMENSIONS ARE IN METRES AND DETAILS OR SECTIONS IN MILLIMETRES UNLESS NOTED OTHERWISE ON PLANS.
2. DISTANCE, CHAINAGES & COORDINATES ARE IN METRES.
3. ALL LEVELS ARE IN METRES TO AHD.
4. SETOUT DIMENSIONS ALL RELATE TO LOCAL SITE GRID AS PER SURVEY PLAN ORIGINS
5. THE CONTRACTORS SURVEYOR TO SET OUT THE PROPERTY BOUNDARIES OF THE LOTS UPON WHICH THE WORKS ARE CONSTRUCTED.
6. WHERE NEW LEVELS ARE DEFINED BY CONTOURS THE PLAN LOCATION MAY BE SCALED FROM THE PLANS UNLESS OTHERWISE DEFINED BY DIMENSIONS OR COORDINATES.
7. WHERE NEW WORKS ARE TO MATCH EXISTING THE LEVELS GIVEN ARE APPROXIMATE ONLY AND ARE TO BE ADJUSTED AS NECESSARY TO MATCH EXISTING. THIS MAY APPLY TO KERB & GUTTERS, FOOTPATHS, BOUNDARIES, PITS, & PIPE INVERTS.

SURVEY

1. FOR EXISTING SITE LEVELS, CONTOURS BOUNDARIES AND BENCH MARKS REFER TO THE SURVEY PLAN BY LAND SURVEYORS HOPKINS SRC NO 6553-001
2. LEVELS ARE TO AHD WITH ORIGIN SSM 31674 RL 11.663
3. WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.

DEMOLITION

1. DEMOLISH ALL EXISTING SURFACE FEATURES, PAVEMENTS, KERBS AND GUTTERS IN CONFLICT WHIT THE WORKS.
2. ALL DEMOLITION MATERIALS SHALL BE TAKEN OFF SITE TO CONTRACTORS TIP.

EARTHWORKS

1. TOPSOIL TO BE STRIPPED TO A NOMINAL DEPTH OF 150MM WITH THE ACTUAL DEPTH BEING DETERMINED ON SITE AND STOCKPILED FOR LATER REUSE IN LANDSCAPING AS DIRECTED.
2. SURPLUS TOPSOIL NOT ABLE TO BE STOCKPILED OR NOT REQUIRED FOR FUTURE USE TO BE TAKEN OFF SITE TO CONTRACTORS TIP.
3. CUT & FILL OVER THE SITE TO BULK EARTHWORK LEVELS.
4. PROOF ROLL THE AREAS TO BE FILLED WITH A 3 TONNE ROLLER AND EXCAVATE AND REMOVE ANY SOFT SPOTS.
5. FILL TO BE COMPACTED IN LAYERS 200MM THICK TO 98% OF STANDARD MAXIMUM DRY DENSITY (SMDD) AT OPTIMUM MOISTURE CONTENT +/- 2% FOR GENERAL FILL AREAS OR 100% OF SMDD FOR DETENTION POND BANKS.
6. COMPACTION CONTROL TESTING TO BE CARRIED OUT AT THE RATE OF ONE TEST PER 100 SM ON EVERY LAYER OF FILL BY A REGISTERED NATA TESTING LABORATORY.
7. ALL EXCAVATED MATERIAL NOT BEING REUSED IN THE FINISHED WORKS SHALL BE TAKEN OFF SITE TO CONTRACTORS TIP.
8. BACKFILL BEHIND RETAINING WALLS AND PITS TO BE AN APPROVED FREE DRAINING GRANULAR MATERIAL COMPACTED IN 150MM LAYERS TO 100% SMDD.
9. THE SIDES OF ALL EXCAVATION SHALL BE FULLY SUPPORTED AT ALL TIMES BY TRENCH SHEETING OR TIMBER BOARDS.

EXISTING SERVICES

1. THE LOCATION OF EXISTING SERVICES SHOWN ON THEIR PLANS HAS BEEN TAKEN FROM UTILITY SERVICES RECORDS AND MAY NOT BE UP TO DATE, ACCURATE, OR COMPLETE IN ANY WAY.
2. THE EXACT LOCATION AND PRESENCE OF EXISTING SERVICES SHALL BE CHECKED BEFORE ANY EXCAVATION TAKES PLACE BY, CHECKING WITH ALL RELEVANT AUTHORITIES, USING UNDERGROUND SERVICES SEARCH LOCATION EQUIPMENT & BY HAND EXCAVATION BEFORE PROCEEDING WITH EARTHWORKS BY MACHINES.
3. ADJUST OR REPLACE ANY SURFACE FITTINGS, PITS OR PIT COVERS AFFECTED BY THE NEW WORKS ALL IN ACCORDANCE WITH THE REQUIREMENTS AND APPROVAL OF THE RELEVANT AUTHORITY

PAVEMENTS & FOOTPATHS - CONCRETE

1. PREPARATION FOR PAVEMENT CUT & FILL AND SUBGRADE TO BE AS DESCRIBED FOR EARTHWORKS
2. TOP 300MM OF SUBGRADE TO BE COMPACTED TO 100% OF STANDARD MAXIMUM DRY DENSITY (SMDD) AT OPTIMUM MOISTURE CONTENT +/- 2% TO AS 1289 5.1.1
3. BASE COURSE AND SUBBASE TO BE CONSTRUCTED OF PLAIN OR CEMENT STABILISED CRUSHED ROCKS, AS SHOWN ON THE PLANS OR DETAILS, AND COMPACTED IN LAYERS NOT EXCEEDING 150MM THICK TO 100% OF STANDARD MAXIMUM DRY DENSITY (SMDD) AT OPTIMUM MOISTURE CONTENT +/- 2% TO AS 1289 5.1.1 S
4. CONCRETE TO BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENOUS MASS COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS.
5. CEMENT TO BE TYPE A.
6. PROJECT CONTROL TESTING FOR SLUMP AND STRENGTH TO BE CARRIED OUT IN ACCORDANCE WITH AS 3600.
7. CONCRETE PROPERTIES TO BE
   DRIVEWAYS -25 MPA -80MM SLUMP -20MM AGG
   FOOTPATHS -25 MPa -80MM SLUMP -20MM AGG
8. COVER TO BE
   DRIVEWAY - 50MM
   FOOTPATHS - 30MM
9. ADMIXTURES NOT TO USED UNLESS APPROVED IN WRITING.
10. SURFACE FINISH TO BE BROOMED UNLESS SHOWN OTHERWISE.
11. DECORATIVE FINISHES, COLOURS OR PATTERNS TO BE APPLIED AS SHOWN ON THE ARCHITECTS PLANS
12. CURING OF ALL CONCRETE IS TO BE BY CONTINUOUSLY KEEPING THE SURFACES WET FOR A PERIOD OF 3 DAYS AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS.
13. ALTERNATIVELY AN APPROVED CURING MEMBRANE MAY BE USED AND APPLIED WITHIN 1 HOUR OF INITIAL SET WHICH IS USUALLY WITHIN 2 HOURS OF PLACEMENT.
14. JOINTS TO BE OF THE TYPE SHOWN ON THE PLANS, IN THE LOCATION AS SHOWN, OR AT SPACINGS NOT EXCEEDING THE MAXIMUM SPACINGS CALLED UP ON THE DRAWINGS.
15. NO TRAFFIC OF ANY TYPE TO BE ALLOWED ON THE PAVEMENTS FOR 14 DAYS.
16. REPAIRS TO CONCRETE NOT TO BE ATTEMPTED WITHOUT THE EXPRESS APPROVAL IN WRITING OF THE SUPERINTENDENT.
17. PAVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH AS 3727 - GUIDE TO RESIDENTIAL PAVEMENTS

PAVEMENTS - ASPHALTIC

1. SUBGRADE PREPARATION, BASE COURSE & SUBBASE TO BE AS DESCRIBED FOR PAVEMENTS AND FOOTPATHS - CONCRETE ABOVE.
2. WEARING COURSE OF HOT APPLIED ASPHALTIC CONCRETE AC10 OF THICKNESS SHOWN ON THE PLANS TO RELEVANT AUSTRALIAN STANDARDS.

FOOTPATH CROSSINGS

1. VEHICULAR CROSSINGS TO BE CONSTRUCTED, REMOVED, OR ADJUSTED AS SHOWN ON THE PLANS
2. THE APPLICATION FOR THE FOOTPATH CROSSING WORKS TO BE LODGED WITH THE LOCAL COUNCIL.
3. THE REINFORCED CONCRETE PAVEMENT CROSSING AND LAYBACK KERB TO BE CONSTRUCTED IN ACCORDANCE WITH COUNCILS ENGINEERING DETAILS WHICH PROVIDE THE DETAILS OF THE 150MM THICK REINFORCED SLAB AND LAYBACK PLUS LEVELS.

KERBS & GUTTERS ON GROUND

1. SUBGRADE PREPARATION, BASE COURSE AND COMPACTION TO BE AS FOR PAVEMENTS AND FOOTPATHS - CONCRETE ABOVE.
2. KERBS AND KERBS AND GUTTERS ARE TO BE CONSTRUCTED OF PLAIN UNREINFORCED CONCRETE CLASS 25 MPa TO THE ALIGNMENT AND LEVELS SHOWN.
3. CONCRETE MAYBE CAST IN FORMWORK, EXTRUDED, OR SLIPFORMED.
4. CONTRACTION JOINTS TO BE FORMED BY 4MM THICK REMOVABLE INSERTS AT 4M CENTRES MAX UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

KERB UPSTANDS ON SLABS

1. KERBS CAST AS UPSTANDS ON REINFORCED CONCRETE SLAB BASE TO BE REINFORCED AS PER DETAILS AND OF THE SAME CONCRETE AS USED FOR THE UNDERLYING SLAB.
2. CONCRETE TO CAST IN FORMWORK.
3. ALL JOINTS TO BE OF THE TYPE AND LOCATION TO MATCH THE UNDERLYING SLAB.

REINFORCEMENT

1. ALL REINFORCEMENT TO BE TO AS 1302
2. N DENOTES GRADE 400.
3. LAPS SHALL BE TO AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.

ROOF DRAINAGE

1. ROOFWATER DRAINAGE INLET SUMPS, GUTTERS AND DOWNPIPES TO BE SIZED TO SUIT THE 20 YEAR ARI

STORMWATER DRAINAGE

1. PIPES ARE DESIGNED TO CONVEY THE 1 IN 20 YEAR STORM UNDERGROUND AND OVERLAND FLOWS OVERLAND TO THE ONSITE DETENTION POND
2. ALL PAVED SURFACE LEVELS AND GRADES TO BE COORDINATED WITH GULLY PIT LEVELS TO ENSURE NO UNDRAINED AREAS OCCUR.
3. THE SIDES OF ALL PIPE TRENCH EXCAVATIONS DEEPER THAN 1.5 METRES SHALL BE FULLY SUPPORTED AT ALL TIMES BY TRENCH SHEETING OR TIMBER BOARDS.
4. INVERT LEVELS GIVEN REFER TO THE PROPOSED LEVELS AT THE CENTRE OF THE PIT.
5. PIPE LENGTHS GIVEN ON THE PLAN ARE APPROXIMATE TO THE NEAREST 0.5M AND ARE MEASURED FROM CENTRELINE OF PITS
6. ALL NEW PIPES TO BE LAID IN AN UPSTREAM DIRECTION. THE LINE, LEVEL AND LOCATION OF EXISTING SERVICES CROSSING THE LINE OF THE PROPOSED STORMWATER PIPE SHALL BE DETERMINED BY EXCAVATION PRIOR TO LAYING OF THE PIPE. IF CONFLICT IS APPARENT THE PROJECT MANAGER SHALL BE NOTIFIED AND INSTRUCTIONS AS TO WHETHER THE EXISTING SERVICE IS TO BE ADJUSTED OR THE PROPOSED PIPE INVERT ALTERED WILL BE ISSUED.
7. ALL STORMWATER PIPES EQUAL OR GREATER THAN 300MM DIA TO BE CONCRETE RUBBER RING JOINT CLASS 2 TO AS 1342 UNLESS NOTED OTHERWISE.
8. STORMWATER PIPES UP TO AND INCLUDING 225 DIA TO BE SWV UPVC RUBBER RING JOINT CLASS SN8 TO AS 1260
9. PIPE BEDDING, HAUNCH AND BACKFILL TO BE AS SHOWN ON THE DETAILS DRAWING.
10. SUBSOIL DRAINAGE PIPES TO BE SLOTTED PIPE AND FILTER SOCK CLASS 1000 to AS 2439 PART 1 LAID AT PREFERABLE MINIMUM GRADE 1 IN 100 OR ABSOLUTE MINIMUM 1 IN 200 WHERE LIMITED BY OUTFALL LEVELS.

STORMWATER DETENTION

1. THE DETENTION POND IS DESIGNED TO MEET PORT MACQUARIE COUNCIL REQUIREMENTS
2. THE POND IS DESIGNED SUCH THAT THE POST DEVELOPMENT RUNOFF FOR ALL STORMS FROM ARI 5 YEAR TO THE ARI 100 YEAR DO NOT EXCEED THE PRE-DEVELOPMENT RUNOFFS FOR THE SAME ARI STORM EVENTS
3. PROMINENT SIGNAGE TO BE PROVIDED INDICATING THE PRESENCE OF THE DETENTION POND AND WARNING THAT WATER LEVELS MAY RISE RAPIDLY DURING STORMS

WETLANDS

1. THE WETLANDS POND IS PROVIDED TO MEET THE WATER QUALITY REQUIREMENTS OF PORT MACQUARIE COUNCIL AND IS PROVIDED WITH MACROPHYTIC PLANTS TO REMOVE POLLUTANTS NATURALLY

GAS TANKS

1. THE EXISTING LPG GAS TANK IS TO BE RELOCATED IN A TEMPORARY LOCATION IN THE ADJACENT CARPARK UNTIL COMPLETION OF THE NEW TANK FARM.
2. OLD LPG TANK TO BE REMOVED AND DISPOSED OF TO CONTRACTORS TIP. TEMPORARY LOCATION TO BE REINSTATED AS PRE CONDITION.

LINE MARKING

1. CARPARK LINEMARKING TO BE IN ACCORDANCE WITH RTA SPEC R141 AND AS 1742.2
2. MARKINGS TO BE WATER BOURNE PAINT 300 MICRON DRY FILM THICKNESS
3. CARPARK BAY LINE TO BE 100MM WIDE CONTINUOS WHITE
4. ARROWS TO BE LENGTH AND SHAPE AS PER STANDARDS

EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL CONSTRUCT, MAINTAIN, AND FINALLY REMOVE, SOIL EROSION AND SEDIMENT CONTROL WORKS DURING THE RELEVANT CONSTRUCTION PHASE OF THE WORKS.
2. THE WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE LANDCOM PUBLICATION - MANAGING URBAN STORMWATER SOILS & CONSTRUCTION MANUAL 2004
3. THE PRIMARY PURPOSE OF THESE MEASURES IS TO PREVENT ERODED SOIL FROM BEING WASHED OR BLOWN FROM THE SITE WHILST ANY BARE EARTH IS EXPOSED TO THE ELEMENTS.
4. THESE MEASURES WILL INCLUDE BUT NOT BE LIMITED TO SUCH ITEMS AS:-
   a. TEMPORARY SWALES OR DITCHES TO CONVEY ALL STORMWATER RUNOFF FROM THE GROUND LEVEL OR THE BELOW GROUND EXCAVATED AREA
   b. A SEDIMENT BASIN AT THE END OF THESE SWALES WITH A PUMP TO DISCHARGE FILTERED WATER TO THE NEAREST COUNCIL PIPE
   c. SILT FENCES AND HAY BALES WHERE NECESSARY
   d. A VEHICLE WHEEL CLEANING GRID AT THE SINGLE POINT OF ENTRY TO THE SITE
   e. TEMPORARY HARD GRAVEL OR BITUMINOUS SEALED ROADS WITHIN THE SITE
   f. DUST ELIMINATION MEASURES SUCH AS TEMPORARY COVERING OF OR FREQUENT WATERING OF THE DENUDED AREAS DURING WINDY WEATHER.
5. ALL PERMANENT STRUCTURES SUCH AS PAVEMENTS, STORMWATER PIPES AND PITS, TO BE THOROUGHLY CLEANED OF ALL SILT AND DEBRIS AT PRACTICAL COMPLETION OF THE WORKS.
6. THE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT NSW 2000.

TENDER

KEY PLAN

NORTH

NOTES
1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING WITH THE WORK. ENSTRUCT SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES
4. THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS, REPORTS AND DRAWINGS.

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