

GENERAL

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SHELL HARBOUR COUNCIL SUBDIVISION CODE, AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE SUPERINTENDENT FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE BUILDING CODE OF AUSTRALIA AS AMENDED AND THE APPROPRIATE AND CURRENT AUSTRALIAN STANDARDS.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- ALL DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BY THE BUILDER PRIOR TO CONSTRUCTION OR FABRICATION.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SHELL HARBOUR COUNCIL DESIGN GUIDELINES AND WORKS SPECIFICATIONS, WHERE DISCREPANCIES OCCUR THE MORE STRINGENT SPECIFICATION WILL TAKE PRECEDENCE.
- THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND SHALL MAKE ALL NECESSARY ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST AS REQUIRED. ALL COSTS TO BE BORNE BY THE APPLICANT.
- THE CONTRACTOR SHALL NOT ENTER UPON OR DO ANY WORK WITHIN ADJACENT LAND WITHOUT PRIOR WRITTEN PERMISSION OF THE LAND OWNER. THE CONTRACTOR SHALL PROVIDE MINIMUM 48 HOURS NOTICE TO THE PRINCIPAL FOR ALL INSPECTIONS.
- REFER TO CARDNO CONSULTING ENGINEERS FOR DETAILS OF THE HARBOUR BOULEVARD ROAD AND STORMWATER DESIGN.
- REFER TO WORLEY PARSONS CONSULTING ENGINEERS FOR DETAILS OF THE PROPOSED SEA WALL STORMWATER OULET PENETRATIONS, IF REQUIRED..

STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA:
ROAD DRAINAGE
5 YEAR ARI MINOR STORM EVENT
20 YEAR ARI MINOR STORM EVENT (HARBOUR BOULEVARD & TRUNK DRAINAGE)
100 YEAR ARI MAJOR STORM EVENT (ALL ROADS)
INTER ALLOTMENT DRAINAGE:
20 YEAR ARI STORM EVENT U.N.O.
- ALL STORMWATER DRAINAGE INFRASTRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT SHELL HARBOUR CITY COUNCIL SPECIFICATIONS: C220- STORMWATER DRAINAGE, C221 - PIPE DRAINAGE, C222 - PRECAST BOX CULVERTS, C223 - DRAINAGE STRUCTURES, C230 - SUBSURFACE DRAINAGE AND C231 - SUBSOIL AND FOUNDATION DRAINS.
- REINFORCED CONCRETE CLASS 'Z' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- EQUIVALENT STRENGTH FRC PIPES MAY BE USED.
- ALL STORMWATER TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH SHELL HARBOUR CITY COUNCIL SUBDIVISION DESIGN CODES AND H53 BEDDING.
- PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH COUNCIL SPECIFICATION AND AS3725. TYPE H53 SUPPORT SHALL BE USED IN ROAD RESERVES. TYPE H52 SUPPORT SHALL BE USED ELSEWHERE U.N.O.
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND ASINZS 3500 3.2 (1998).
- PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY ARCADIS CONSULTING.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
- GALVANISED STEEL STEP IRONS ARE TO BE PROVIDED IN ALL PITS DEEPER THAN 1.2m IN ACCORDANCE WITH SHELL HARBOUR CITY COUNCIL REQUIREMENTS.
- MINIMUM PIPE SIZE WITHIN ROAD RESERVE TO BE 375mm DIAMETER.
- MINIMUM INTERALLOTMENT DRAINAGE PIPE SIZE SHALL BE 150mm DIAMETER.
- CCTV ALL PIPES AFTER CONSTRUCTION AND PRIOR TO PRACTICAL COMPLETION. THIS INCLUDES ALL EXISTING PIPES THAT ARE TO BE RETAINED.
- PIPES ARE DESIGNED FOR OPERATIONAL LOADS ONLY. APPROPRIATE MEASURES SHOULD BE TAKEN TO PROTECT PIPES DURING CONSTRUCTION.
- ALL DIRECT CONNECTIONS TO BE MINIMUM 150mm DIAMETER PVC PIPEWORK, LAID AT MINIMUM 1.0% GRADE FROM POINT OF CONNECTION.
- ALL DIRECT CONNECTIONS TO STORMWATER IN LANEWAYS SHOULD HAVE 150mm CONCRETE SURROUND UNDER GARAGE STRUCTURES AND UP TO CONNECTION INTO STORMWATER PIPE LOCATED IN LANEWAYS.
- METAL KERB OUTLETS TO BE PROVIDED TO ALL LOTS DRAINING TO THE STREET.
- PREFABRICATED PITS TO COME FROM A QUALITY ASSURED SUPPLIER. CONTRACTOR TO INSPECT PITS WHEN DELIVERED TO SITE PRIOR TO INSTALLATION. ONLY THE DESIGNED KNOCKOUT AREAS TO BE USED FOR PIPE ENTRIES. ANY CRACKS IN PITS OR EVIDENCE THAT CONTRACTOR HAS EXTENDED THE KNOCKOUT AREA SHALL RENDER THE PIT UNACCEPTABLE. IT IS RECOMMENDED TO SAW CUT THE KNOCK OUT AREA WHEN CREATING THE OPENING IN THE PIT FOR THE PIPE TO MINIMISE POTENTIAL DAMAGE TO PIT.
- CONTRACTOR TO CCTV STORMWATER DRAINAGE NO SOONER THAN AFTER BASE COURSE LAYER IS PLACED. ANY DAMAGE TO PIPES / CULVERTS MUST BE REPORTED TO THE PCA PRIOR TO UNDERTAKING ANY REPAIRS. IT IS TO BE NOTED THAT ANY DAMAGE TO PIPES / CULVERTS IDENTIFIED IN THE CCTV REPORT THAT ARE LOCATED UNDER ROADS SHALL AS A MINIMUM REQUIRE A FULL SLEEVE REPAIR FROM PIT TO PIT. CIRCUMFERENTIAL CRACKS IN OTHER LOCATIONS SHALL AS A MINIMUM REQUIRE A SLEEVE REPAIR. THE REPAIR SHALL BE DONE BY AN APPROVED CONTRACTOR. A CCTV REPORT ON ALL REPAIRS WILL BE REQUIRED BY COUNCIL.

SITWORKS NOTES

- ORIGIN OF LEVELS- REFER SURVEY NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO ARCADIS CONSULTING.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED IN ACCORDANCE WITH SHELL HARBOUR SUBDIVISION DESIGN CODES AND H53 BEDDING.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051 (UNBOUND), R.T.A. FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A S 1289 5.2.1. BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM NON-VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER). SOFT SPOTS ARE TO BE REPLACED WITH SUITABLE SELECT FILL FOR A DEPTH OF AT LEAST 0.5m OR AS ADVISED BY THE GEOTECHNICAL ENGINEER.
- SELECT MATERIAL FOR BACKFILLING SHALL BE GRANULAR MATERIAL WHICH IS NATURALLY OCCURRING, HAVING A PARTICLE SIZE DISTRIBUTION DETERMINED IN ACCORDANCE WITH AS 1289 3.6.1. SELECT MATERIAL CAN BE CRUSHED ROCK, NATURAL SOIL, GRAVEL AND SAND, OR OTHER APPROVED GRANULAR MATERIAL CONSISTING OF CLEAN, SOUND, DURABLE FRAGMENTS, FREE FROM ORGANIC MATTER FROM AN APPROVED SOURCE. GRADING LIMITS FOR SELECT FILL SHALL BE IN ACCORDANCE WITH AS 3725 AND SHELL HARBOUR COUNCIL SUBDIVISION DEVELOPMENT CONSTRUCTION SPECIFICATION C213: EARTHWORKS.
- FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN :-
A. 1 TEST PER 200mm² OF FILL PLACED PER 200 LAYER OF FILL.
B. 3 TESTS PER LAYER
C. 1 TEST PER 2000m² OF EXPOSED SUBGRADE
TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798 (2007).
- REINFORCEMENT SHALL BE "SPREAD IN LAYERS MAXIMUM 300mm THICK AND COMPACTED TO SPECIFICATION.
15. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

KERBING NOTES

- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa U.N.O IN REINFORCED CONCRETE NOTES.
- ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
- EXPANSION JOINTS (E, J) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- IN THE REPLACEMENT OF KERB AND GUTTER :- EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 900mm WIDE U.N.O.
- EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB AND GUTTER WITH 100mm DIA HOLE.
- EXISTING KERB AND GUTTER IS TO BE COMPLETELY REMOVED WHERE NEW KERB AND GUTTER IS SHOWN.

STREET FURNITURE

- ALL SIGNAGE TO BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE R.M.S REGULATORY SIGNS MANUAL.
- ALL LAMP COLUMNS TO BE IN ACCORDANCE WITH SHELL HARBOUR CITY COUNCIL AND /OR ENDEAVOUR ENERGY SPECIFICATIONS. LAMP COLUMNS TO BE PACESETTER 400G BY VERTIKOTE WITH COLOUR AS INTERPON D2015 CHARCOAL YL238A.

SURVEY NOTES

- THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. ARCADIS CONSULTING DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
- SHOWN DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT ARCADIS CONSULTING.

LOCAL SURVEY MARKS

SSM 168839 EASTING: 304252.302
NORTHING: 6170118.179
RL: 22.837m

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS AND SHELL HARBOUR CITY COUNCIL SPECIFICATION C271 - MINOR CONCRETE WORKS. PLEASE REFER TO LANDSCAPE ARCHITECT DESIGN DOCUMENTATION FOR ALL CONCRETE ADDITIVES (COLOUR) AND AGGREGATE TYPE
- CONCRETE QUALITY
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS3600 Fc MPA AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE	32	60	20
KERBS, PATHS AND PITS	25	80	20
DRAINAGE PITS	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379
- NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY ARCADIS CONSULTING.
- CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70MM FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.T.A. SPECIFICATION R83.
- REINFORCEMENT SYMBOLS:
N - DENOTES GRADE 450 N BARS TO AS 4671 GRADE N
R - DENOTES 230 R HOT ROLL PLAIN BARS TO AS 4671
SL - DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 4671
NUMBER OF BARS IN GROUP



NOMINAL BAR SIZE IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL, SL IS THE REFERENCE NUMBER FOR FABRIC TO AS 4671.

- REINFORCEMENT SHOULD HAVE THE FOLLOWING MINIMUM COVER:
 - 40mm MINIMUM (AS PER SCC SPECIFICATIONS)
 - 50mm FOR CONCRETE CAST IN CONTACT WITH EARTH OR FRESH WATER
 - AS NOTED ON DESIGN DRAWINGS AND DETAILS

- FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:



JOINTING NOTES

PEDESTRIAN PAVEMENT JOINTS

- ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINED AS FOLLOWS. (U.N.O)
- EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6m CENTRES.
- WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX. SPACING OF 1.5 x WIDTH OF THE PAVEMENT.
- WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
- PEDESTRIAN PAVEMENT JOINT DETAIL AS PER FOOTPATH DETAIL ON DRAWING C-D-504 AND SHELL HARBOUR COUNCIL DESIGN GUIDE D09 - CYCLEWAY AND PATHWAY DESIGN.
- CONTRACTOR IS TO REFER DRAWING C-D-504 FOR JOINT DETAILS FOR COVE BOULEVARD FOOTPATH AND PLAZA AREA
- ISOLATION JOINT TO BE APPLIED TO ALL FURNITURE SURROUNDS. PLEASE REFER TO LANDSCAPE ARCHITECT DESIGN FOR DETAILS

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED.
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS
 - EPA REQUIREMENTS
 - NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
- MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERRECTED AROUND PITS OR THE STORMWATER OUTLET PITS AND PIPES HAVE BEEN CONSTRUCTED, WHICH DIRECT FLOWS TO THE BOAT HARBOUR SEDIMENT CONTROL DEVICE.
- CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY, REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE.

EROSION CONTROL

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- SITE STABILISATION BY APPLICATION OF SEEDED HYDROMULCH WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

- STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS, WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

- ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SURFACES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- ALL TREES WITHIN THE EXTENT OF PROPOSED WORKS ARE TO BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

TELSTRA - DUTY OF CARE NOTE

- TELSTRA'S PLANS SHOW ONLY THE PRESENCE OF CABLES AND PLANT. THEY ONLY SHOW THEIR POSITION RELATIVE TO ROAD BOUNDARIES, PROPERTY FENCES ETC. AT THE TIME OF INSTALLATION AND TELSTRA DOES NOT WARRANT OR HOLD OUT THAT SUCH PLANS ARE ACCURATE THEREAFTER DUE TO CHANGES THAT MAY OCCUR OVER TIME. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY.
- THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR TELSTRA CABLES AND PLANT. BEFORE USING MACHINE EXCAVATORS TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY ITS LOCATION TELSTRA WILL SEEK COMPENSATION FOR DAMAGES CAUSED TO ITS PROPERTY AND LOSSES CAUSED TO TELSTRA AND ITS CUSTOMERS.

EXISTING UNDERGROUND SERVICES NOTES

- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE. ARCADIS CONSULTING CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER. CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
- CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
- CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

PROPOSED SERVICES NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SERVICE AUTHORITY DRAWINGS AND SPECIFICATIONS
- THE CONTRACTOR SHALL ATTEND, MANAGE & SUPERVISE THE PROVISION OF PUBLIC UTILITY SERVICES TO THE WORKS GENERALLY AS INDICATED ON THE SERVICES PLANS, NOTING THAT PRIOR & DURING CONSTRUCTION THE PUBLIC UTILITY AUTHORITIES WILL FINALISE THEIR DOCUMENTATION TO CONSTRUCTION ISSUE STANDARD. THE FOLLOWING GENERAL ARRANGEMENTS SHALL APPLY IN RESPECT OF EACH PUBLIC UTILITY SERVICE.

CONDUIT ROAD CROSSING

THE CIVIL CONTRACTOR SHALL ALLOW IN THEIR PRICE FOR CONDUIT CROSSINGS UNDER THE PROPOSED ROADS AS SHOWN ON THE "SERVICES PLAN".

- THE CIVIL CONTRACTOR (TRENCH PROVIDER) IS TO ARRANGE ON SITE MEETING WITH ALL SERVICE AUTHORITIES PRIOR TO THE INSTALLATION OF CONDUITS.
- THE CIVIL CONTRACTOR TO CO-ORDINATE INSTALLATION OF ELECTRICITY, GAS AND TELECOMMUNICATION SERVICES.
- ELECTRICITY, GAS AND TELECOMMUNICATION SERVICES ARE TO BE LAID FOLLOWING THE INSTALLATION OF STORMWATER, SEWER AND WATER SERVICES AND KERB AND GUTTER.
- ALL UTILITY AUTHORITY REPRESENTATIVES TO INSPECT ROAD CROSSINGS PRIOR TO SEALING.
- ALL ELECTRICAL ROAD CROSSINGS TO BE CLASS 6 (ORANGE) uPVC CONDUITS.
- ALL GAS ROAD CROSSINGS TO BE uPVC GREY SEWER GRADE CONDUITS.
- ALL STREET POLES TO BE POSITIONED 350mm FROM BOUNDARY TO CENTRELINE OF POLE.
- WHERE FOOTPATHS ARE TO BE CONSTRUCTED, ALL SERVICE PIT COVERS AND MARKERS ARE TO BE LAID WHOLLY WITHIN OR WHOLLY OUTSIDE THE CONCRETE FOOTPATH. CONTACT SUPERINTENDENT SHOULD DIFFICULTIES ARISE.
- ELECTRICITY CONDUITS ARE SHOWN FOR CLARITY HOWEVER, CABLES MAY BE DIRECTLY BURIED. APPROVAL BY ENDEAVOUR ENERGY REQUIRED.
- SERVICES MARKERS ARE TO BE PLACED ON THE KERB & GUTTER AT ALL ROAD CROSSING POINTS, ON BOTH SIDES OF THE ROAD.
- ALL SERVICE PIT COVERS TO BE INSTALLED FLUSH WITH PROPOSED VERGE LEVELS AND GRADES.

BULK EARTHWORKS NOTES

- ORIGIN OF LEVELS: REFER SURVEY NOTES.
- STRIP ALL TOPSOIL/ORGANIC MATERIAL (150mm NOMINAL) FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
- COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

LOCATION	MINIMUM DRY DENSITY (AS 1289 E 5.1.1)
UNDER BUILDING SLABS ON GROUND	95-98% STD
UNDER ROADS, FOOTWAYS AND CARPARKS	100% STD
LANDSCAPED AREAS UNLESS NOTED OTHERWISE	95% STD

- BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH A 12 TONNE (MIN) DEADWEIGHT SMOOTH DRUM NON VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
- TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH THE CURRENT AS 3798.
- FILLING TO BE PLACED AND COMPACTED IN MAXIMUM LAYERS 200mm
- NO FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.
- WHERE GROUNDWATER DISCHARGE OCCURS IN BULK EXCAVATIONS OR CUT FACES, SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH THE SUPERINTENDENT / GEOTECH INSTRUCTIONS TO DIRECT DISCHARGE WATER TO THE NEAREST STORMWATER / SEDIMENTATION CONTROL DEVICE. THE SUBSOIL DRAINAGE MUST BE INSTALLED AS SOON AS PRACTICALLY POSSIBLE AFTER EXCAVATION. SUBSOIL DRAINAGE SHALL ALSO BE INSTALLED AT LOW POINTS IN THE FINISHED EARTHWORK PROFILE IN ACCORDANCE WITH THE SUPERINTENDENT / GEOTECH'S INSTRUCTIONS.
- ENSURE TEMPORARY DIVERSION CHANNELS ARE CONSTRUCTED AROUND STOCKPILED MATERIALS AND DISTURBED AREAS GENERALLY AS DETAILED.
- THE CONTRACTOR SHALL ALLOW FOR AND COORDINATE ALL MONITORING AND MAINTENANCE REQUIREMENTS IN RELATION TO SOIL AND GROUNDWATER CONDITIONS DURING CONSTRUCTION.
- WORKS TO BE IN ACCORDANCE WITH ALL GEOTECHNICAL REPORTS.

Issue	Description	Date
04	UPDATED DA ISSUE	25/10/2019
03	UPDATED DA ISSUE	04/10/2019
02	FINAL ISSUE	10/05/2018
01	DRAFT ISSUE	10/04/2018

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04	UPDATED DA ISSUE	25/10/2019
03	UPDATED DA ISSUE	04/10/2019
02	FINAL ISSUE	10/05/2018
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03	UPDATED DA ISSUE	04/1