MCCARRS CREEK ROAD CARGO WHARF

FOR CONSTRUCTION



DRAWING SCHEDULE					
DRG NO.	NO. DRAWING TITLE				
C1.01	Cover Sheet	2			
C1.02	Specification Notes	2			
C1.03	General Arrangement Plan - Sheet 1 of 2	2			
C1.04	General Arrangement Plan - Sheet 2 of 2	2			
C1.05	Pavement Plan and Details	2			
C1.06	Swept Path Analysis - 19.0m AV Parking in the Bay	2			
C1.07	Swept Path Analysis - 19.0m AV Entering the Wharf	2			
C1.08	Swept Path Analysis - 19.0m AV Exiting the Wharf	2			
C1.09	Swept Path Analysis - 12.5m HRV Parking in the Bay	2			
C1.10	Swept Path Analysis - 12.5m HRV Entering the Wharf	2			
C1.11	Swept Path Analysis - 12.5m HRV Exiting the Wharf	2			
C1.12	Traffic Control Devices Plan	2			
C1.13	Stormwater Longsection and Details	2			
C1.14	Civil Details	1			
C5.01	Cargo Wharf Typical Sections	1			
C5.02	Road Longsection	1			
C5.03	Road Cross Sections	1			

PRINT ALL DRAWINGS IN COLOUR



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CONSULTING ENGINEERS

 Hydraulic Services
Fire Services
Civil Services
Sydney Water Accredited Water Servicing Co-ordinator and Designer



COVER SHEET

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
AS SHOWN	J.M.	J.W.	P.G.	M.C.	
IOB No.		DRAWING No.		ISSUE	
5325		C1.01		2	
NOVEMBER 2018	FOR CONSTRUCTION				

GENERAL

- G1 DESIGN HEREIN HAS BEEN PREPARED BY WARREN SMITH AND PARTNERS PTY LTD CONSULTING CIVIL ENGINEERS LEVEL 9, 233 CASTLEREAGH ST, SYDNEY NSW 2000. TEL:- (02) 9299 1312, FAX:- (02) 9290 1295.
- THE DRAWINGS HEREIN SHALL BE READ AS G2. REQUIRED IN CONJUNCTION WITH STRUCTURAL ENGINEERS DRAWINGS:
- 63 ALL DIMENSIONS IN MILLIMETRES LINO. REDUCED LEVELS AND CHAINAGES ARE IN METRES. DO NO SCALE DRAWINGS. USE FIGURED DIMENSIONS.
- G4 THE PROPOSED WORKS DETAILED HEREIN SHALL B CONSTRUCTED TO THE REQUIREMENTS OF COUNCIL GENERALLY AS DETAILED HEREUNDER.
- 65 ALL EXISTING SERVICES SHALL BE VERIEIED FOR ALL EXISTING SERVICES SHALL BE VERIFIED FOR DEPTH AND HORIZONTAL POSITION BY PHYSICAL MEANS PRIOR TO EXCAVATION. ANY DISCREPANCIES SHALL BE BROUGHT FORTHWITH TO THE PROJECT MANAGER'S ATTENTION

STORMWATER & SUB-SOIL DRAINAGE MATERIALS:

- STW1 PIPES AND FITTINGS FOR STORMWATER
- DRAINAGE SHALL BE AS FOLLOWS UNO ON THE
- SEWER GRADE uPVC (SN8) WITH SOLVENT WELDED JOINTS FOR BELOW GROUND DRAINAGE UP TO 225mm
- FIRRE REINFORCED CEMENT / REINFORCED CONCRETE CLASS 4 WITH RUBBER RINGS FOR PIPE DIA'S GREATER THAN 225mm. UNO.
- REINFORCED CONCRETE WHERE REQUIRED BY AS 3500 FOR EXCESSIVE DEPTH.
- INSTALL IN ACCORDANCE WITH AUSTRALIAN STANDARD D AS3500 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- PIPES & FITTINGS FOR SUBSOIL DRAINAGE SHALL BE STW2 SLOTTED POLYVINYL CHLORIDE (PVC) WITH SOLVENT WELDED JOINTS MIN 150mm DIAMETER
- STW3 IN GROUND DRAINAGE PIPEWORK SERVING DP's SHALL BE MINIMUM 150mm DIA LINO
- STORWARD REPITS ARE AS SHOWN & SPECIFIED ON THE PLANS. PRECAST TYPE ACCEPTABLE WITH STEP IRONS FOR DEPTH GREATER THAN 1200. BENCH ALL PITS MIN: 50mm & EORM SMOOTH TRANSITION FROM INLET TO OUTLET, ALL INTERNAL PIT DIMENSIONS TO
- CONFORM TO TABLE 8.2 AS 3500.3 SELECT FILL SHALL BE MATERIAL OBTAINED FROM EXCAVATION OF THE PIPE TRENCH OR IMPORTED WITH A PARTICLE SIZE FOR ROCK NOT GREATER STW5 THAN 75mm OR FOR OTHER THAN ROCK NOT
- GREATER THAN 150mm. IMPORTED FILL SHALL BE EITHER. AND GENERALLY STW6. IMPORTED FILE SPIALE BE ETHER, AND GENERAL T CONSIST OF SINGLE SIZED AGGREGATE WITH PARTICLE SIZE NOT GREATER THAN SIMI WRAPPED ALL ROUND WITH GEOTEXTILE FILTER FABRIC OR APPROVED HIGH COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR.
- STOPMWATER PITS AND GRATES TO CONFORM WITH STW7 STORMWALER FITS AND GRATES TO COMPORT WIN STANDARD COUNCIL REQUIREMENTS, WHERE ON PUBLIC LAND, GRATES TO BE SUPPLIED IN CLASS SHOWN ON THE DRAWINGS.

INSTALLATION REQUIREMENTS:

- PIPES SHALL BE TRUE TO GRADES SHOWN AND STW8 PIPES SHALL BE INCLI TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRES OF THE INLET PIPES INTERSECT WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT. MINIMUM GRADES FOR GRAVITY STORMWATER
- STW9 DRAINAGE SHALL CONFORM TO AS3500 PART3 AS FOLLOWS, UNO:
- 1% FOR 100 AND 150 mm DIA 1% FOR 100 AND 150 mm DIA. 0.5% FOR 225 mm DIA 0.5% FOR 300 mm DIA 0.4% FOR 375 mm DIA MINIMUM DEPTH OF COVER SHALL BE :
- STW10. - 300mm IN PRIVATE PROPERTY (NON VEHICULAR
- TRAFFIC) - 450mm IN PUBLIC AREAS
- STW11.
- 450mm IN PUBLIC AREAS. 600mm IN VEHICULAR TRAFFICABLE AREAS (FOOTWAY/ROADWAY) BED ALL PIPES FIRMLY AND EVENLY ONTO IMPORTED BEDDING FILL MATERIAL LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE STW12 MANUEACTURERS RECOMMENDATIONS AND
- AS 3725-1989 BURIED FLEXIBLE PIPELINES AS 2566-1998 LOADS ON BURIED FLEXIBLE PIPELINES AS 1597.2-1996 PRECAST REINFORCED CONCRETE BOX CULVERTS. AS 3500-1990 NATIONAL PLUMBING & DRAINAGE CODE
- PART 2. SANITARY PLUMBING AND SANITARY DRAINAGE SYDNEY WATER REQUIREMENTS STW13. ALLOW TO TEST ALL PIPES AND PITS TO MANUFACTURERS REQUIREMENTS.

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70 80 90 100 110 120 130 140 150

DO NOT SCALE FROM DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT

TO BE COPIED IN PART OR WHOLE WITHOUT

WRITTEN PERMISSION

ROM WARREN SMITH IND PARTNERS.

- CONCRETE WORKS ALL WORKMANSHIP AND MATERIALS SHALL BE IN
- ACCORDANCE WITH AS3600 THE STANDARDS ASSOCIATION AUSTRALIA. STANDARDS. CITED IN AS3600 THE DRAWINGS AND THE SPECIFICATION
- THE DRAWINGS AND THE SPECIFICATION. ALL CONCRETE SHALL BE 80mm NOMINAL SLUMP, 20mm MAXIMUM AGGREGATE WITH NO ADMIXTURES OR FLY ASH, UNLESS OTHERWISE APPROVED. ALL CONCRETE INFOLMMENT ADMIXTURES OF THE ADMIXED AND ADMIXTURES OF THE C2. WORK IN CONTACT WITH SEWER TO HAVE TYPE SL PORTLAND CEMENT, OTHERWISE TYPE A CEMENT FOR PORTLAND CEMENT, OTHERWISE TYPE A CEMENT FOR BRIDGE WORKS, A MAXIMUM 56 DAYS SHRINKAGE OF 600 MICROSTRAIN, A MINIMUM CEMENT CONTENT 350kg/m3 AND MAXIMUM WATER:CEMENT RATIO OF 0.40 STRENZTU COMPL OF CONCENTE SAME AS MID: STRENGTH GRADE OF CONCRETE SHALL BE : 25 C3.
- (KERBS, EDGE STRIPS & CONCRETE ENCASEMENT) AND 32 MPa ELSEWHERE. C4 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED
- CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR APPROVED. GENERALLY FOR HAND PLACED KERB & GUTTER 6mm THICK APPROVED BITUMINOUS MASTIC JOINTING MATERIAL SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 6m. FOR MACHINE PLACED KERB & GUTTER 6mm THICK APPROVED BITUMIOUS MASTIC JOINTING MATERIAL SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 12m & GUILLOTINED, DUMMY GROOVED EXCEEDING 12m & GUILLOTINED DUMMY GROOVED JOINTS, 25mm IN DEPTH, SHALL BE FORMED EVERY 3m OF GUTTER. JOINTS ARE ALSO REQUIRED AT EACH END OF GUTTER CROSSING AND GULLY PITS. JOINTS SHALL BE SET VERTICAL AND SQUARE TO THE KERB.
- CONCRETE CURING SHALL BE IN ACCORDANCE WITH C5 AS3600. CURING SHALL BE COMMENCED WITHIN TWO HOURS OF FINISHING OPERATIONS AND SHALL BE CONTINUED FOR A MINIMUM OF SEVEN DAYS BY AN APPROVED PROPRIETARY COMPOUND OR BY KEEPING CONTINUOUSLY WET.
- EORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN C6 ACCORDANCE WITH AS3610. FORMWORK SHALL NOT BE STRIPPED NOR PROPS REMOVED WITHOUT APPROVAL

REINFORCEMENT

- R1. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY
- AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION. R2 WELDING OR SPLICES IN REINFORCEMENT SHALL BE
- LISED ONLY IN POSITIONS APPROVED BY THE ENGINEER R3. FABRIC LAP DETAILS SHALL BE IN ACCORDANCE WITH
- FIG.13.2.4 OF AS3600. HOOKS, LAPS AND BENDS SHALL BE IN ACCORDANCE R4
- WITH AS3600 UNO. **R**5 ALL CHEMICAL ANCHORS SHALL BE EITHER 'CHEMSET BY "RAMSET" WITH THE GLASS CAPSULE SYSTEM BY RAWGET WITH THE GLASS CAPSULE STSTEM INSTALLED IN STRICT ACCORANCE WITH MANUFACTURERS INSTRUCTIONS %%µOR HILTI HVU ADHESIVE ANCHOR WITH FOIL CAPSULE SYSTEM INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTION. ALL CHEMICAL ANCHORS SHALL BE HOT DIPPED GALVANIZED AND BE MIN M16 DIA LLN O

GENERAL EARTHWORKS, SITEWORKS & FILLING:

- FILLING:
- SGE1 THESE CLAUSES SHALL BE READ IN CONJUNCTION WITH THE JK GEOTECHNICS GEOTECHNICAL REPORT, DATED 23 MAY 2016
- THE RECOMMENDATIONS CONTAINED IN THE GEOTECH SGE2 REPORT SHALL OVERRIDE THE CLAUSES PRESENTED HEREIN
- HEREIN. STRIP ALL TOPSOIL AND UNDERLYING FILL AND STOCKPILE TOPSOIL FOR LATER REUSE FOR LANDSCAPING PURPOSES. NEW FILL REQUIRED TO REINSTATE CUT LEVELS TO DEPORTORED TO REINSTATE CUT LEVELS TO SGE3
- SGE4. PROPOSED BENCHING LEVELS SHALL BE SOURCED FROM OTHER PARTS OF THE EXCAVATION AS SELECT FILL OR IMPORTED FILL AS SPECIFIED BELOW IN SGE 5 AND SGE 6
- AND SGE 6. SELECT FILL SHALL CONSIST OF LOCALLY DERIVED OR CUT NATURAL CLAYS. IMPORTED FILL SHALL CONSIST OF RIPPED SANDSTONE OR SHALE OR SIMILAR MATERIAL WITH MAXIMUM SGE5
- SGE6. PARTICLE SIZE NOT GREATER THAN 120mm AND A MOISTURE CONTENT WITHIN 2-3% OF STANDARI NOTSTOK
- ALL FILL (COHESIVE SOIL) SHALL BE PLACED IN LAYERS OF 200mm MAXIMUM THICKNESS, COMPACTED BY MACHINE ROLLING TO ACHIEVE A DRY DENSITY RATIO SGE7 OF NOT LESS THAN 98% STANDARD MAXIMUM AT A ORRESPONDING MOISTURE CONTENT WITHIN 2-3% OF STANDARD OPTIMUM
- STANDARD OF IMUM. IN AREAS WHERE HIGH IMPACT ROLLING IS USED TEST EACH FINAL LAYER OF NOT GREATER THAN 300mm TO 400mm TO ACHIEVE A DRY DENSITY SGE8. RATIO OF NOT LESS THAN 98% STANDARD MAXIMUM AT A SGE8 CORRESPONDING MOISTURE CONTENT WITHIN 2-3% OF STANDARD OPTIMUM

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100% DETAILED DESING

ISSUE FOR CONSTRUCTION

EXCAVATION BATTERS: ALL TEMPORARY BATTERS CUT IN CLAY SUBSTRATE SHALL BE I HORIZ: 1 VERT. ALL LONG TEME KPOSED BATTERS CUT IN CLAY SUBSTRATE SHALL BE 2 HORIZ: 1 VERT. ALL DETENTION BASIN BATTERS IN CLAY SUBSTRATE SHALL BE 3 HORIZ : 1 VERT. ALL DETENTION BASIN BATTERS IN ROCK SUBSTRATE SHALL BE NEAR

- VERTICAL SGE10 GEOTECHNICAL TESTING IS TO BE LINDERTAKEN TO AT LEAST LEVEL 2 CONTROL OF FILL COMPACTION STANDARD, AS DEFINED IN AS. 3738 AS FOLLOWS
 - FOR GENERAL FILL OR CUT AREAS OVER THE AREA PROVIDE ONE (1) TEST PER 200mm LAYER. OVER AN AREA NOT GREATER THAN 500 m
 - FOR GENERAL FILL AREAS IN CONCENTRATED AREAS ADJACENT TO AND BEHIND THE STRUCTURE AND ADJACENT TO AND BEHIND RETAINING WALLS PROVIDE ONE (1) TEST PRE 200mm LAYER, OVER AN AREA NOT GREATER THAN 50m²
- SUBMIT ALL GEOTECHNICAL TEST RESULTS TO WARREN SGE11 SMITH & PARTNERS FOR REVIEW PRIOR TO CONTINUATION WITH SUBSEQUENT SECTION OF WORK.

FARTH WORKS FOR SERVICES

- EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL E1. FOR INSPECTION WITH REGARD TO RE-USE FOR TRENCH BACKFILL, REMAINING MATERIAL TO BE REMOVED FROM
- BEDDING MATERIAL SHALL CONSIST OF IMPORTED FILL E2 ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN O.T.R. AND 200mm IN ROCK. EMBED ALL PIPES WITH IMPORTED FILL. PROVIDE
- E3. 200mm SIDE SUPPORT AND 150mm OVERLAY ABOVE PIPE CROWN.
- E4. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR FOOTWAY FILL MATERIAL SHALL BE AS FOLLOWS :
- UNDER ROADWAY

TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED. FILL AS SPECIFIED HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR

OTHER THAN ROADWAY

- TRENCH FILL MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT SELECT FILL AS SPECIFIC INCLUMENT AND SMALL NOT CONTAIN MORE THAN 200 FOR STONES OF SIZE BETWEEN 75mm & 150mm AND NONE LARGER THAN 150mm, PRIOR TO THE USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE CONSULTANT
- E5 COMPACT REDDING, EMBEDMENT AND TRENCH FILL MATERIALS AS FOLLOWS

FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOILS) EG. COARSE AGGREGATE FILL. HIGH GRADE COMPACTION SAND. THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%

TRENCH FILL: FOR GRANULAR MATERIAL (NON-COHESIVE SOILS), THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.

FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS). THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN

MEASURE OF COMPACTION: THE DEGREE OF COMPACTION SHALL BE MEASURED BY ONE OF THE FOLLOWING PARAMETERS :-

GRANULAR FILL (NON-COHESIVE SOLLS). THE DENSITY INDEX (ID) DETERMINED IN ACCORDANCE WITH AS 1289.E6.1 BASED ON THE MAXIMUM AND MINIMUM DRY DENSITIES IN ACCORDANCE WITH AS 1289.E5.1 AND THE FIELD DRY DENSITY IN ACCORDANCE WITH AS 1289.5.3.2. AS 1289.E3.5 OR AS 1289.E8.1.

NON-GRANULAR FILL (COHESIVE SOILS). THE DRY DENSITY RATION (RD) DETERMINED IN ACCORDANCE WITH AS 1289.5.4.1 BASED ON THE FIELD DRY DENSITY IN ACCORDANCE WITH AS 1289.5.3.2 AND THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289.5.1.1

- GEOTECHNICAL TESTING IS TO BE UNDERTAKEN TO AT F7 LEAST LEVEL 2 CONTROL OF FILL COMPACTION STANDARD, AS DEFINED IN AS. 3738 AS FOLLOWS
- TEST EACH 300mm LAYER ABOVE PIPE CROWN. TEST BASE & SUB-BASE LAYERS WHERE APPLICABLE. FESTS SHALL BE REQUIRED AT EACH 50m CENTRES WHERE THE LENGTH OF TRENCH IS WITHIN THE 50m RECHIREMENT
- E8. CONTINUATION WITH SUBSEQUENT SECTION OF WORK

RESTORE ALL TRAFFIC AREAS TO PRE EXISTING

RES2

SUBMIT ALL GEOTECHNICAL TEST RESULTS TO WARREN SMITH & PARTNERS FOR REVIEW PRIOR TO

FOR ALL SURFACES OTHER THAN IN TRAFFIC AREAS.

RESTORATION

VISION AMENDMENT

RESTORE DISTURBED SURFACES TO PRE-EXISTING CONDITIONS AND COMPACT AS SPECIFIED RESTORE ALL AUTHORITY OWNED AREAS TO COUNCIL RES3

AUTHORITY STANDARDS

LGA 1

CCTV2

THE DRAWINGS HEREIN SHALL BE READ IN CONJUNCTION WITH LOCAL AUTHORITY'S STANDARDS &

SPECIFICATIONS WHICH SHALL OVERRIDE SPECIAL

CLOSED CIRCUIT COLOUR TV (CCTV)

UNDERTAKE A CCTV INSPECTION OF ALL THE COMPLETED DRAINAGE IN ACCORDANCE WITH THE GUIDELINES OF THE THE AUSTRALIAN CONDUIT

APPLY THE FOLLOWING REQUIREMENTS TO THE CCTV

INSPECTION:-A USE DATA CAPTURE SOFTWARE APPROVED BY

C. THE CCTV VIDEOTAPE SHALL BE OF QUALITY TO

B CCTV REPORT AND SURVEY DATA IN PDF FORMAT

C. ONE HARD COPY PRINTOUT OF THE SURVEY DATA

WHERE STORMWATER DRAINAGE IS LAID IN THE VICINITY OF TREES / CANOPIES OF TREES, ALLOW THE CONSULTANT ARBORIST TO INSPECT PROGRESSIVELY THE EXCAVATION AND CONSTRUCTION WORKS.

CONSTRUCTION

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SUE

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M.C.

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SPECIFICATION NOTES

J.W. P.G.

C1.02

FOR CONSTRUCTION

J.M.

AS SHOWN

EMBER 201

5325001

ALLOW ACCURATE ASSESSMENT OF THE INTERNAL CONDITION OF THE PIPE.

CONDITION EVALUATION MANUAL (ACCEM).

B. USE CERTIFIED CCTV OPERATORS

CCTV3. FURNISH TO THE DESIGN OF THE CONSULTANT:-

A. VIDEOS IN MPG FORMAT FOR VIEWING

SYDNEY WATER

PROTECTION OF TREES

DETAILS SHOWN ON THE DRAWINGS.

- ROAD WORKS, DRIVEWAYS & CARPARKS
- ALLOW FOR LEVEL 2 TESTING AND SUB-GRADE ALLOW FOR LEVEL 2 TESTING AND SUB-GRADE CONDITIONS & PAVEMENT THICKNESS TO BE VERIFIED BY GEOTECHNICAL CONSULTANT AFTER INSPECTION OF PRELIMINARY BOXING.
- ALLOW FOR ANY SUB-GRADE REPLACEMENT WORK TO BE DETERMINED AS REQUIRED BY GEOTECHNICAL CONSULTANT AT THE TIME OF PAVEMENT ONSIGNATION. INIMUM DRY DENSITY RATIOS (AS 1289 3.4.1-1993) TO
- 98% MODIFIED BASE COURSE: SUB-BASE 95% MODIFIED SUB-GRADE 100% STANDARD SUB-GRADE REPLACEMENT: 100% STANDARE
- R4 PAVEMENT MATERIALS TO COMPLY WITH RMS SPECIFICATION No. 3051 OR SIMILAR AS APPROVED BY GEOTECHNICAL CONSULTANT.
 - PROVIDE (1) TEST FOR FACH LAYER NOT EXCEEDING 250mm THICK BEING RASECOURSE SUB-RASE # SUB-GRADE OVER AN AREA NOT GREATER THAN 500m²
- SUBMIT ALL GEOTECHNICAL TEST RESULTS TO WARREN R6. SMITH & PARTNERS FOR REVIEW PRIOR TO CONTINUATION WITH SUBSEQUENT SECTION OF WORK

APPROVALS

P2

P3

R5

- THE AS CONSTRUCTED WORKS SHALL BE INSPECTED BY DESIGN CONSULTANT. MINIMUM 48 HOURS NOTICE SHALL APPLY TO ALL INSPECTIONS. THE DESIGN PLANS HEREIN ARE SUBJECT TO COUNCIL A1
- A2. APPROVAL PRIOR TO CONSTRUCTION. OBTAIN EXPRESS (WRITTEN) ADVICE TO PROCEED FROM PROJECT
- MANAGER PRIOR TO COMMENCEMENT MARAGER PRICE TO COMMENCEMENT. SUBMIT WORK-AS EXECUTED DRAWINGS IN CIVILCAD OR DXF DIGITAL FORMAT AND HARD COPY FORMAT. VERIFY ALL CONSTRUCTION WORKS SHOWN HEREON. CERTIFY THAT THE AS CONSTRUCTED SYSTEM HAS A3
- A4. BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS ISSUED FOR CONSTRUCTION

SERVICES UNDER ROAD SURFACES

ALL OTHER SERVICES INCLUDING BUT NOT LIMITED TO S1 WATER HYDRANT GAS SEWER ELECTRICAL AND WATER, HTDRANT, GAS, SEWER, ELECTRICAL AND COMMUNICATIONS CONDUITS OR CABLES SHALL BE LAID WITH MINIMUM 600mm U.N.O. COVER BELOW PROPOSED ROAD SURFACE OR APPROVED OTHER MEANS TO PROTECT DURING CONSTRUCTION.

ROAD SIGNS & LINE MARKING

- ALL SIGNS AND LINEMARKING SHALL BE TO ROADS & TRAFFIC AUTHORITY STANDARDS AND SPECIFICATIONS AND AS.1742, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
- ALL LINEMARKING SHALL BE AUGMENTED BY **PS**2 RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPMs) AND ALL SHALL BE TO AS 1742.2 - 1994 AND AS 1742 2 /AMDT 1/1997-10-05
- ALL ROAD SIGNS AND POSTS SHALL BE TO AS 1742.2 -1994 AND AS 1742.2 /AMDT 1/1997-10-05 RS3 PROTECTION OF FLORA - REFER SPECIFICATION

DUG TO AVOID DAMAGE TO TREE ROOTS.

ANY TRENCHES WITHIN 3m OF TREES SHALL BE HAND

THE SEWERAGE WORKS HAVE BEEN LOCATED TO

MINIMISE CLEARING AND DAMAGE TO THE EXISTING

FLORA ENVIRONMENT NO TREES ARE PERMITTED TO BE

REMOVED OR DAMAGED UNO. CONSTRUCTION OF THE

SEWER CRAVITY OR RISING MAIN IN THE VICINITY OF

SEVER GRAVITIOR RESING MAIN IN THE VICINITION EXISTING TREES SHALL BE HAND EXCAVATED ONLY, ENSURING IRREVERSIBLE DAMAGE OF THE ROOT SYSTEM DOES NOT OCCUR.

IF IT IS CONSIDERED NECESSARY TO PERFORM ANY

CUTTING REPAIR AND REMOVAL APPLICATION IN

AN APPROVED TREE SURGEON

WARD

MCCARRS CREEK ROAD

CARGO WHARF

APPROVAL FROM PITTWATER COUNCIL

WORK ON TREES. INCLUDING TRIMMING. LOPPING. ROOT

WRITING, REPAIR AND REMOVAL, APPLICATION IN WRITING SHALL BE MADE BY THE CONTRACTOR TO THE SUPERINTENDENT. ANY WORK PERMITTED TO BE DONE

ON TREES TO BE RETAINED SHALL BE PERFORMED BY

NO MATURE TREES OR SHRURS ARE TO BE REMOVED

FOR THE PURPOSES OF THE WORKS WITHOUT PRIOR

Warrer

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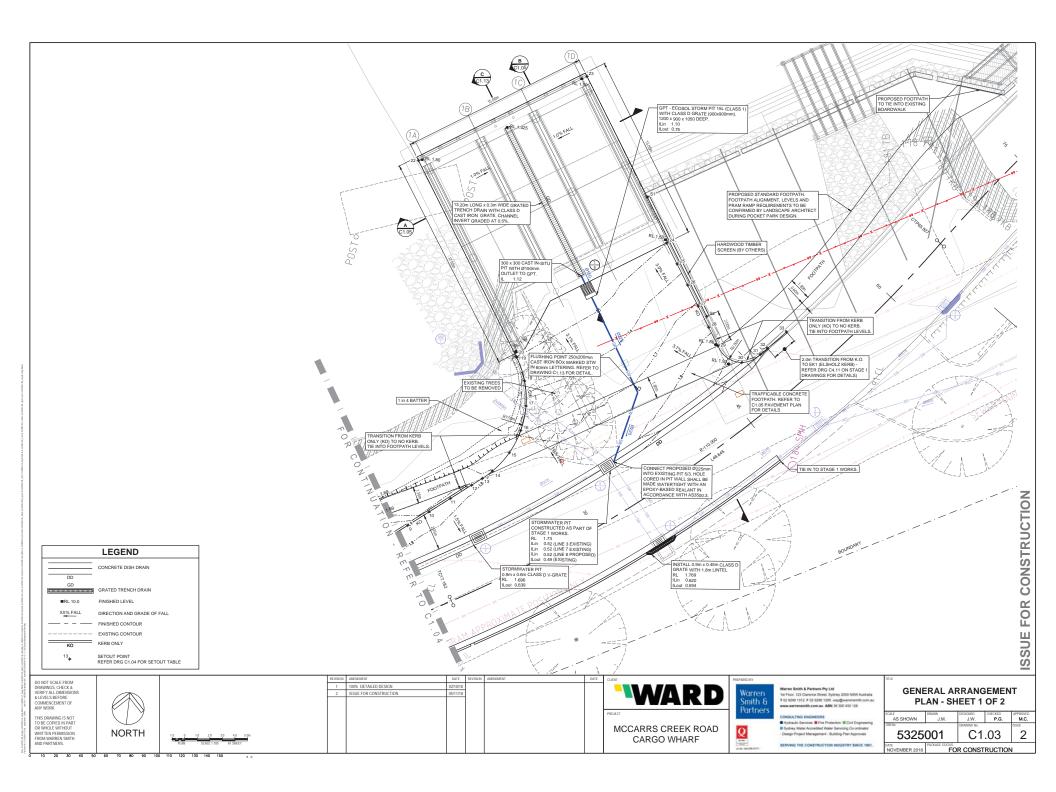
Smith 8 Partner arren Solith & Partners Phy Ltd II Floor, 123 Clarence Street, Sydney 2000 NSW Australia 02 9208 1312 F 92 9290 1205 wsp@warrensrith.com.a ws.warrensmith.com.au ABN 36 300 430 126

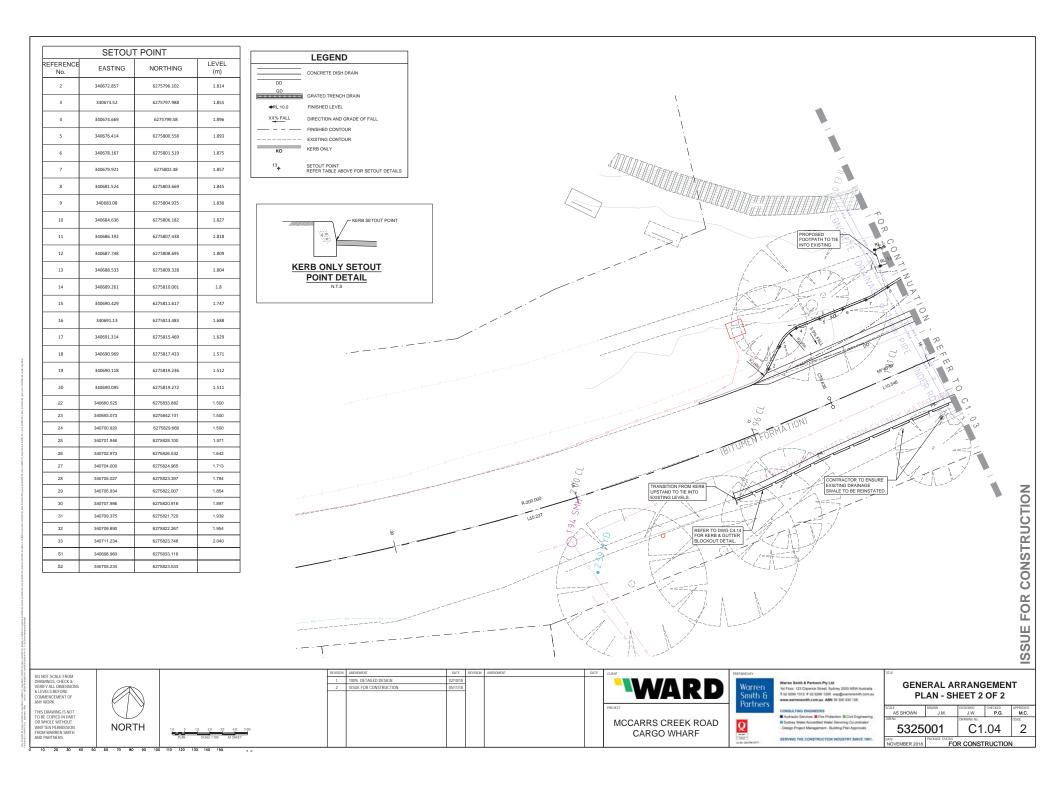
Hydraulic Services Fire Protection III Civil Engineering

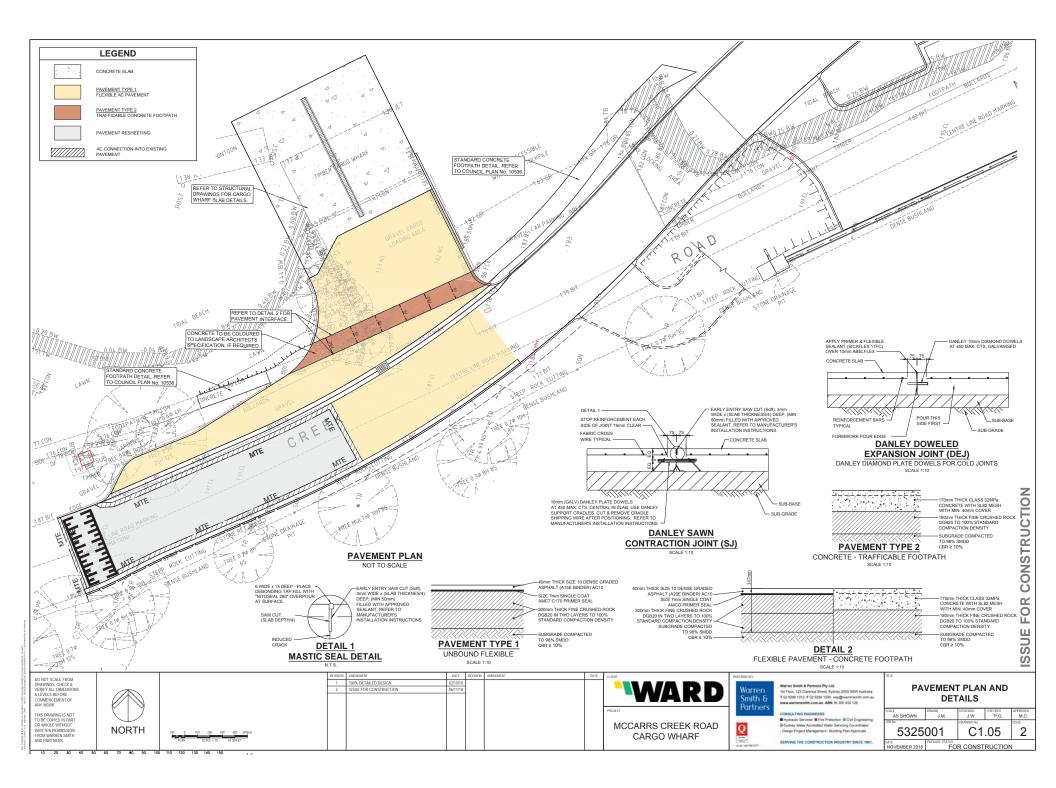
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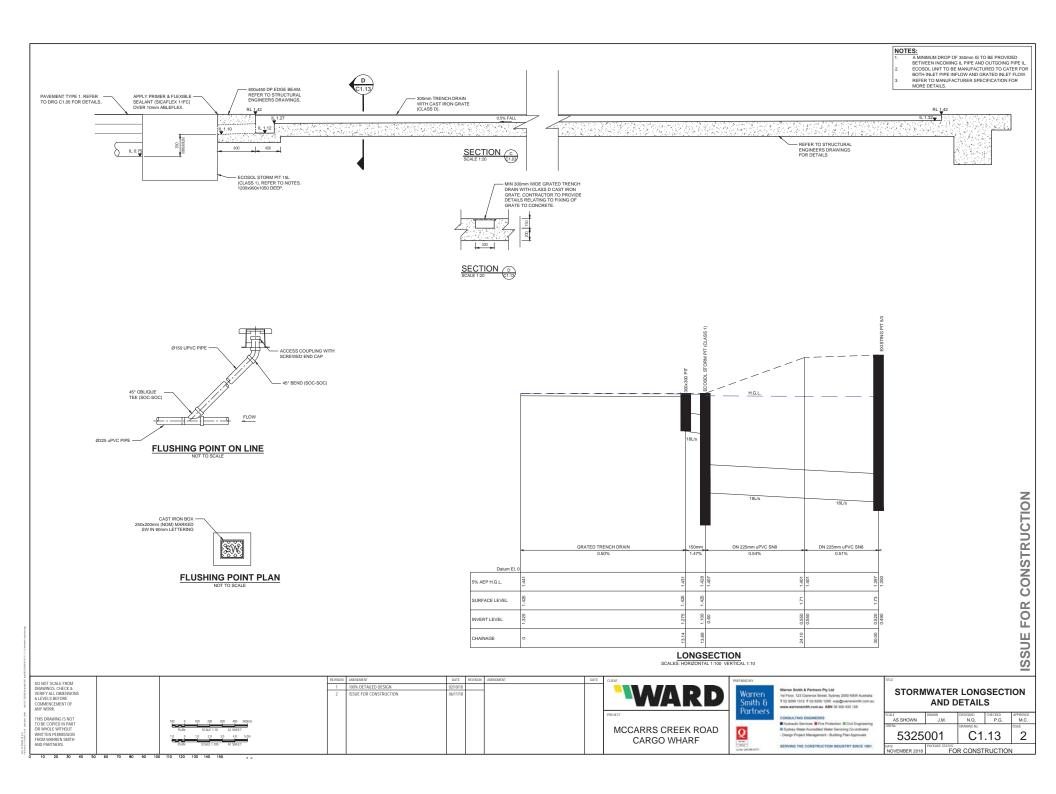
Sydney Water Accredited Water Servicing Co-ordinate

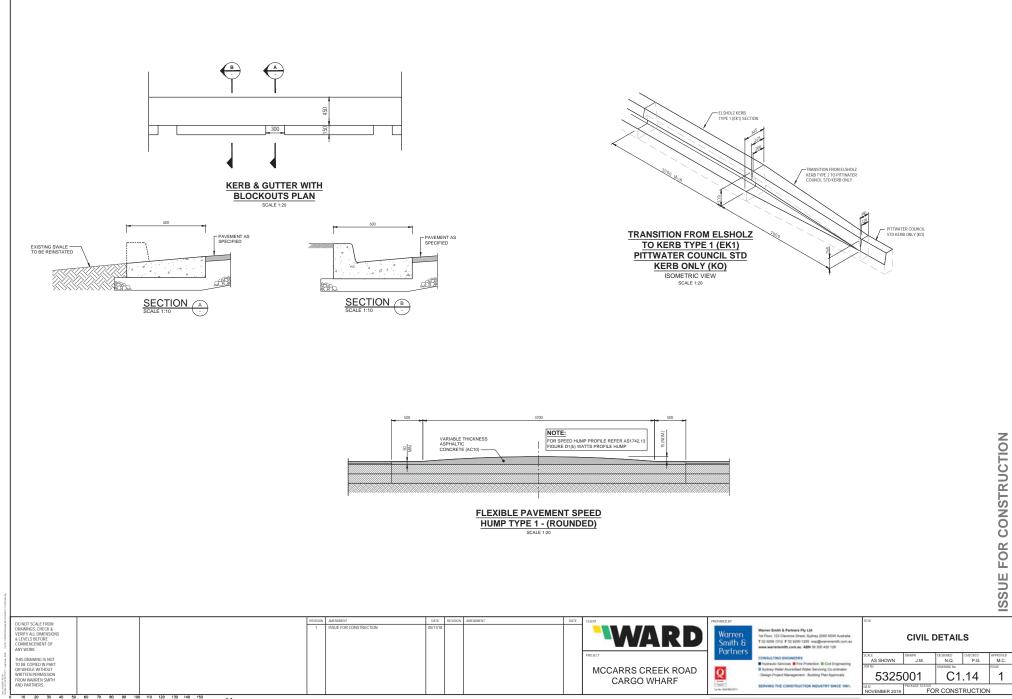
Design Project Management - Building Plan Approval











10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 SHEET SIZE AT

