DAPTO HEALTH ONE
4 MARSHALL STREET, DAPTO

STANDARD SYMBOLS & NOTATIONS

SYMBOL	DESCRIPTION
— — —	BOUNDARY LINE
—— SW ——	PROPOSED STORMWATER DRAINAGE LINE (IN THE GROUND) Ø100 @ 1.0% MIN GRADE UNO.
—— - - - RW ——	PROPOSED RAINWATER DRAINAGE LINE Ø100 @ 1.0% MIN GRADE UNO. USE PRESSURE GRADE PIPES FOR CHARGED SYSTEM
	EXISTING STORMWATER DRAINAGE PIT AND PIPE
— —— —— —— – RM —	PUMP RISING MAIN
---- S/S ---- S/S —	90Ø SUBSOIL LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN
GRAVEL DISH DRAIN	GRAVEL DISH DRAIN AROUND EXTERNAL WALLS CONNECTED TO STORMWATER DRAINAGE WITH 90Ø PIPES
	SPOON / SWALE DRAIN
5	GRATED SURFACE INLET PIT WITH (OVERLAND FLOW DIRECTION). PIT DIMENSIONS ARE GOVERNED BY DEPTH REFER DETAIL
3	SEALED JUNCTION PIT
	GRATED DRAIN
	KERB INLET PIT WITH LINTEL
RWO	RAINWATER DRAINAGE OUTLET
22m²R→ ←44m²P	CATCHMENT AREA TO STORMWATER PIT
PO	DRAINAGE CELL PLANTER OUTLET
DP-100Ø	INDICATIVE DOWNPIPE - LOCATION AND MINIMUM SIZE
RHO	DOWNPIPE WITH RAINWATER HEAD OVERFLOW
SHO	DOWNPIPE WITH SUMP HIGH CAPACITY OVERFLOW
SSO	DOWNPIPE WITH SUMP-SIDE OVERFLOW
	GUTTER
IO	INSPECTION OPENING
VD-150Ø	VERTICAL DROP IN STORMWATER LINE (FROM ABOVE)
VD-150Ø	VERTICAL DROP IN STORMWATER LINE (TO BELOW)
DPS	DOWNPIPES WITH SPREADER
RWT	PROPOSED RAINWATER TANK
35.11	EXISTING SURFACE LEVEL
36.00	EXISTING SURVEY CONTOUR
* RL35.40	FINISHED SURFACE LEVEL
* P35.85	FINISHED PAVEMENT LEVEL
* TK35.55	TOP OF NEW KERB LEVEL
* TOW35.55	TOP OF NEW RETAINING WALL LEVEL
GL 35.05	PROPOSED PIT SURFACE LEVEL
IL 34.75	PROPOSED PIT INVERT LEVEL
FFL23.56	PROPOSED FINISHED FLOOR LEVEL
225Ø uPVC @ 1.0% MIN	PIPE SIZE, TYPE AND GRADE < > DENOTES DIRECTION OF FLOW
uPVC	RIGID PVC PIPE
RCP	REINFORCED CONCRETE PIPE
RKG	ROLL KERB & GUTTER
K&G	KERB & GUTTER
150 KO	150 HIGH KERB ONLY
OF	OVERFLOW SLOTS - LOCATION TO BE COORDINATED WITH ARCHITECT
	OVERLAND FLOW PATH
FALL FALL	FALL DIRECTION
TOW (X.XXm)	RETAINING WALL WITH HEIGHT
---- S ---- S —	EXISTING SEWER LINE
---- T ---- T —	EXISTING TELSTRA LINE
---- G ---- G —	EXISTING GAS LINE
---- E ---- E —	EXISTING ELECTRICITY LINE
---- W ---- W —	EXISTING WATER MAIN
	GRAVEL ABSORPTION TRENCH

ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

GENERAL

1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES.
2. ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS.
3. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
4. THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED COMPLETE NOR CORRECT.
5. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
6. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
7. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
8. ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
9. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT SPECIFIED.
10. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

SURVEY

1. JONES NICHOLSON IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY SURVEY INFORMATION PROVIDED ON THIS DRAWING.
2. ALL LEVELS ARE TO A.H.D.
3. ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.
4. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.

EARTHWORKS

1. PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
2. OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL. AVERAGE 200mm THICK. REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE.
3. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.
4. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND, PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM WEIGHT OF 5 TONNES WITH A MINIMUM OF 10 PASSES.
5. EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2%.
6. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
7. WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN.
8. FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 5.1.1). MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO APPROVAL.
9. COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
10. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL PAVEMENT.
11. ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

PROJECT INFORMATION TABLE

THE TABLES BELOW ARE TO BE READ IN CONJUNCTION WITH THE ADJACENT NOTES.

GEOTECHNICAL INFORMATION

COMPANY	REPORT No.	DATED
AARGUS	GS7393-1A	29/10/18

SURVEY INFORMATION

COMPANY	DATED
DEGOTARDI SMITH AND PARTNERS	16.04.2018

PROOF ROLLING

PROOF ROLLING SPECIFICATION

(min) ROLLER WEIGHT	(min) NUMBER OF PASSES
5 TONNE	10

COMPACTION TESTING

RATE OF TESTS	TEST AREA PER LAYER
2	1000m^2

- TESTING SHALL BE CARRIED OUT BY A REGISTERED NATA LABORATORY

RIGID PAVEMENT DESIGN

- DESIGN LIFE 40 YEARS
- DESIGN CBR 5%

DESIGN	LOAD	REPETITION
AXLE	______	______ HVAG

FLEXIBLE PAVEMENT DESIGN

- DESIGN LIFE 40 YEARS
- DESIGN CBR 5%

DESIGN VEHICLE	MAX LOAD	DESIGN TRAFFIC
MRV	2.5t	____ ESA

STORMWATER DRAINAGE

1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S SPECIFICATION.
2. PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC
3. PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
4. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
5. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
6. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
7. PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O
8. PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
9. BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
10. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
11. PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1000mm TO HAVE CLIMB IRONS.
12. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
13. ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE, LOAD CLASS A, UNLESS NOTED OTHERWISE.
14. ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE, LOAD CLASS D, UNLESS NOTED OTHERWISE.
15. INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
16. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
17. DOWNPIPES SHOWN ARE INDICATIVE ONLY, ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS.
18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
19. HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
20. FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS.
21. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION.
22. ALL BASES OF PITS TO BE BENCHED TO HALF PIPE DEPTH AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE.
23. SUBSOIL LINE:
PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS. LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL. PROVIDE FLUSHING EYE'S AT HIGH POINTS OR TO COUNCILS REQUIREMENTS.
24. SHOULD THE CONTRACTOR ELECT TO INSTALL PRECAST STORMWATER PITS AND THEY ARE PERMITTED BY COUNCIL AND THE CLIENT, THE PRECAST PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH RMS STANDARDS INCLUDING:
   a. SEAL THE SEGMENTS TOGETHER USING A SITE-APPROVED NON-SHRINK GROUT OR MASTIC-TYPE PRODUCT. APPLY THE SEALANT IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S REQUIREMENTS.
   b. ENSURE THAT NO GAPS REMAIN AND THAT A SMOOTH FACE EXISTS BETWEEN MULTIPLE UNITS.
   c. LEAVE THE SEGMENTS UNDISTURBED UNTIL THE PERIOD OF CURING IS COMPLETED IN ACCORDANCE WITH THE GROUT OR SEALANT PRODUCT MANUFACTURER'S REQUIREMENTS.

DRAINAGE INSTALLATION

RCP CONVENTIONAL INSTALLATIONS & ROAD CROSSINGS

1. SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
2. BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:

a. COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:

SIEVE SIZE (mm)	19	2.36	0.60	0.30	0.15	0.075
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

- AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITY AS DESCRIBED IN APPENDIX D OF AS1726.

b. BEDDING DEPTH UNDER THE PIPE TO BE 100mm.

c. BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE 'HAUNCH ZONE.'

d. THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL.

e. COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT.

3. BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY.
4. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.

SAFETY IN DESIGN

1. THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.
2. REFER TO THE JONES NICHOLSON'S SAFETY IN DESIGN REPORT FOR UNIQUE RISKS ASSOCIATED WITH THE DESIGN.
3. JONES NICHOLSON'S ASSESSMENT DID NOT IDENTIFY ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN.

DRAWING LIST

No.	DRAWING TITLE
C000	NOTES AND LEGEND
C200	STORMWATER DRAINAGE GROUND PLAN
C210	STORMWATER DRAINAGE LEVEL 1 PLAN
C220	STORMWATER DRAINAGE ROOF PLAN
C050	CIVIL DESIGN DETAILS
C051	CIVIL DESIGN DETAILS SHEET 2
ESM2	EROSION AND SEDIMENT MANAGEMENT DETAILS
ESM1	EROSION AND SEDIMENT MANAGEMENT PLAN

PAVEMENT - FLEXIBLE

1. THE PAVEMENT DESIGN AS DETAILED ASSUMES A PROPERLY PREPARED UNIFORM AND STABLE SUBGRADE. CONFIRMATION OF DESIGN CBR RATIO IS REQUIRED BY A GEOTEHCNICAL ENGINEER PRIOR TO WORKS COMMENCING.
2. ASSUMED DESIGN CBR TO BE CONFIRMED ONSITE DURING CONSTRUCTION PRIOR TO PLACEMENT OF PAVEMENT MATERIALS. THE CONTRACTOR IS TO UNDERTAKE SUFFICIENT CBR TESTING TO CONFIRM THE ASSUMED VALUE. WHERE LESSER VALUE HAS BEEN DETERMINED, THE SUPERVISING ENGINEER IS TO BE NOTIFIED TO DETERMINE A REVISED PAVEMENT DESIGN.
3. PAVEMENT TO BE CONSTRUCTED AS FOLLOWS:
   SURFACE COURSE - DENSE GRADED ASPHALT
   PRIMERSEAL - EMULSION BASED HOT BITUMEN
   BASE COURSE - DGB 20
   SUB BASE - DGS 40
4. SUBGRADE SHALL BE COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY RATIO AT OPTIMUM MOISTURE CONTENT ±2%. IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS.
5. SUBBASE COURSE SHALL BE COMPACTED TO 95% MODIFIED MAXIMUM DRY DENSITY.
6. BASECOURSE SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY.
7. PRIOR TO THE PLACEMENT OF THE PRIMERSEAL AND AFTER THE REQUIRED DENSITY IS ACHIEVED, THE PAVEMENT IS TO BE ALLOWED TO DRY BACK TO APPROXIMATELY 60% TO 70% OPTIMUM MOISTURE CONTENT.
8. ALL SUBGRADES TO BE ROOF ROLLED & APPROVED BY SUPERVISING ENGINEER.
9. COMPACTION TESTS ARE TO BE UNDERTAKEN FOR ALL PAVEMENT LAYERS INCLUDING SUBGRADE AT A RATE TO BE DETERMINED BY THE SUPERVISING ENGINEER & THE RESULTS TO BE SUPPLIED TO THE ENGINEER PRIOR TO PLACEMENT OF THE NEXT PAVEMENT LAYER.

PAVEMENT - RIGID

1. PREPARATION FOR PAVEMENT: CLEAR SITE, STRIP TOPSOIL, CUT AND FILL AND PREPARATION OF SUBGRADE SHALL BE AS DESCRIBED IN "EARTHWORKS" NOTES.
2. SUBGRADE SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% IN ACCORDANCE WITH AS 1289 5.1.1.
3. BASE COURSE SHALL BE CONSTRUCTED FROM FINE CRUSHED ROCK DGB20 COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% IN ACCORDANCE WITH AS 1289 5.1.11
4. CONCRETE PAVEMENT SLABS SHALL BE AS DETAILED ON THE DRAWINGS.
5. ALL WORKMANSHIP AND MATERIALS FOR CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS 3600 AND AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
6. CONCRETE QUALITY ALL CEMENT SHALL BE TYPE SL SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972

ELEMENT	STRENGTH GRADE (MPa)	SLUMP	MAXIMUM AGGREG. SIZE (mm)
PAVEMENT	32	80	20

7. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3600.
8. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
9. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm.
10. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
11. THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS. COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
12. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT.
13. REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

PAVEMENT - SEGMENTAL

1. PREPARATION FOR PAVEMENT: CLEAR SITE, STRIP TOPSOIL, CUT AND FILL AND PREPARATION OF SUBGRADE SHALL BE AS DESCRIBED IN "EARTHWORKS".
2. SUBGRADE SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ±2% IN ACCORDANCE WITH AS 1289.5.1.1.
3. BASECOURSE SHALL BE CONSTRUCTED FROM FINE CRUSHED ROCK DGB20 COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ±2% IN ACCORDANCE WITH AS 1289.5.1.1.
4. PROVIDE CONCRETE WORKING SLAB 20MPa MIN 100mm THICK AS DETAILED ON DRAWING.
5. SEGMENTAL PAVING SHALL BE AS DETAILED ON THE DRAWINGS, AND ARE TO BE SUPPLIED WITH UNITS OF MAXIMUM GROSS PLAN AREA <0.1m^2. WHERE THIS AREA IS EXCEEDED REFER CONCRETE FLAG PAVEMENT SPECIFICATION.
6. ALL WORKMANSHIP AND MATERIALS FOR PAVER WORK SHALL BE IN ACCORDANCE WITH ALL AS 4455, AS4456, AS4459, T44, T45, T46. CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENT.
7. PAVER QUALITY:

APPLICATIONS	CHARACTERISTIC BREAKING LOAD (kN)	CHARACTERISTIC FLEXURAL STRENGTH (MPa)
RESIDENTIAL PEDESTRIAN	2	2
RESIDENTIAL DRIVEWAYS	5	3
PUBLIC FOOTPATHS	5	3
ROADS	5	3
INDUSTRIAL PAVEMENTS	10	4

PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 4456.4 AND AS 4456.5.

8. PAVERS TO BE BEDDED AND SOUND EDGE RESTRAINTS ARE TO BE PROVIDED.
9. JOINTS TO BE FULLY GROUTED.

ENVIRONMENTAL SITE MANAGEMENT

1. EROSION & SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" - SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS "SD"
2. SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM, SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
4. RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE.
5. AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
6. ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE.
7. ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
8. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 & SD6-12.
9. ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9.
10. STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
11. WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN.
12. NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
13. ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO SD6-14) TO SHAKE OFF SITE CLAY AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.
14. THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.
15. ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
16. PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
17. CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
18. DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME.
19. TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS)
20. ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER.
21. TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
22. DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT.
23. DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED. MATERIAL TO BE RESPREAD ON FOOTWAYS AFTER FINAL TRIMMING.
24. UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY THE SUPERINTENDENT AND ACCESS TO THE SEWER OR C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED.
25. TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'
26. PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
4	11.07.19	FOR CLIENT REVIEW	DK
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2	29.03.19	PRELIMINARY ISSUE	ELR
1	14.12.18	ISSUED FOR DA	AV

Responsive Engineering

CLIENT
ISLHD

STATUS
PRELIMINARY

DISCIPLINE
CIVIL

DRAWING TITLE
NOTES, LEGEND
DRAWING SCHEDULE

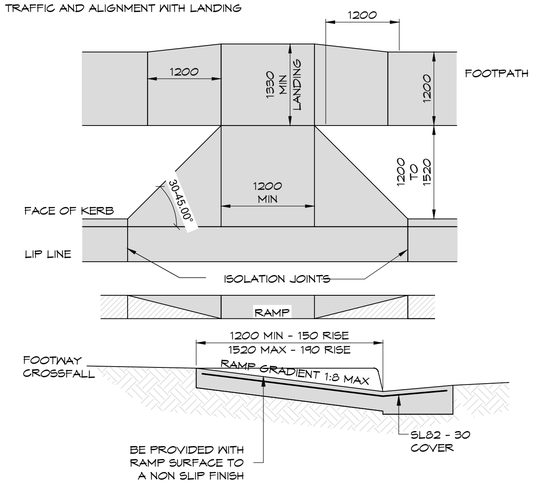
PROJECT
DAPTO HEALTH ONE
COMMUNITY HEALTH CENTRE

ADDRESS
4 MARSHALL STREET, DAPTO

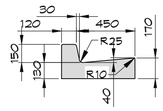
PROJECT DETAILS
DESIGN BA
DRAWN AV
DATE NOV 2018
DRG SIZE A1
SCALE -
PROJECT MGR BA
WWW.JN.COM.AU

18010648
C000 4

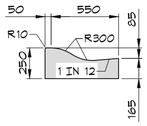
NOTE:
IF REQUIRED ADJUST FOOTPATH PAVING A MINIMUM 1.2m EITHER SIDE TO ENSURE REASONABLE GRADING FOR PEDESTRIAN TRAFFIC AND ALIGNMENT WITH LANDING



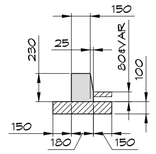
TYPICAL PRAM RAMP DETAIL



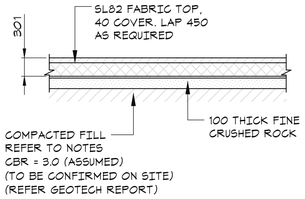
KERB & GUTTER (K&G)



ROLL KERB (RK)



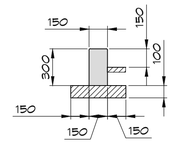
KERB ONLY (KO)



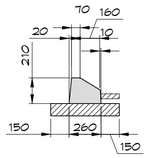
NOTE:

1. EXISTING BITUMEN PAVEMENT TO BE MILLED TO A DEPTH OF 40mm.
2. PAVEMENT TO BE CONSTRUCTED AS PER DETAIL.
3. EXISTING SUB-GRADE TO BE PROOF ROLLED TO THE SATISFACTION OF SUPERVISING ENGINEER AND SHALL BE COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY RATIO AT OPTIMUM MOISTURE CONTENT +/- 2% IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS.
4. NO GEOTECHNICAL TESTING HAS BEEN PROVIDED. ALL PAVEMENT DESIGNS HAVE BEEN BASED ON A MIN. CBR OF 4. THE CBR VALUE SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION CONTACT THE CIVIL ENGINEER IF THE DESIGN CBR IS LESS THAN 4.

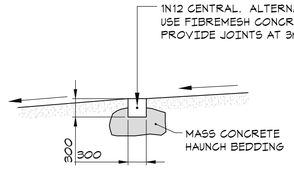
CONCRETE PAVEMENT TYPICAL DETAIL



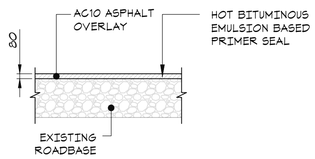
EDGE RESTRAINT



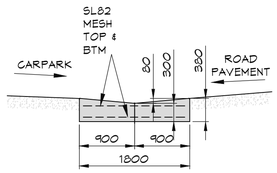
MOUNTABLE KERB



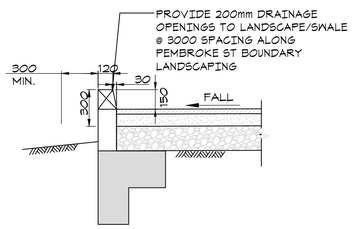
FLUSH KERB (FK)



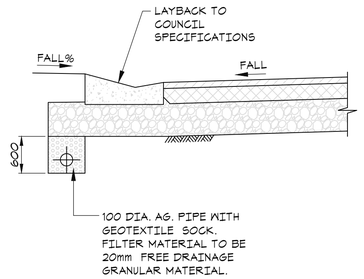
TYPICAL PAVEMENT RESURFACING DETAIL



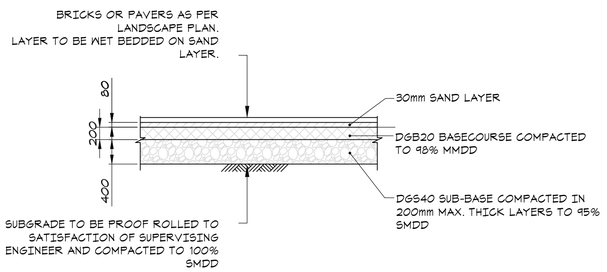
CONCRETE DISH DRAIN



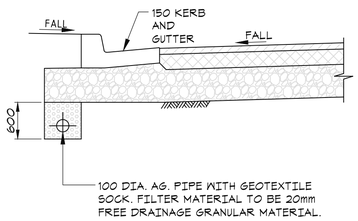
TYPICAL SLOTTED DRAINAGE KERB ONLYH DETAIL



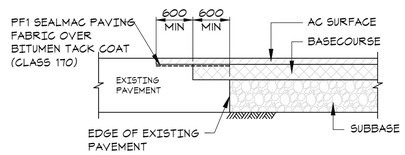
TYPICAL LAYBACK DETAIL



LANDSCAPE PAVEMENT TYPICAL DETAIL



TYPICAL ROAD PAVEMENT DETAIL



TYPICAL ROAD PAVEMENT JUNCTION WITH EXISTING PAVEMENTS

NOT TO BE USED FOR CONSTRUCTION

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CLIENT
ISLHD
STATUS
PRELIMINARY

DISCIPLINE
CIVIL

DRAWING TITLE
DETAILS
SHEET 1

PROJECT
DAPTO HEALTH ONE COMMUNITY HEALTH CENTRE
ADDRESS
4 MARSHALL STREET, DAPTO

PROJECT DETAILS

DESIGN	BA
DRAWN	AV
DATE	NOV 2018
DRG SIZE	A1
SCALE	-
PROJECT MGR	BA

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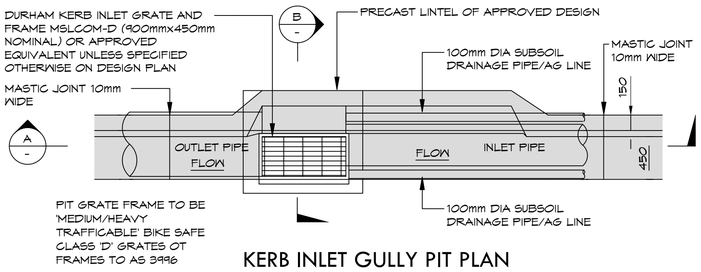
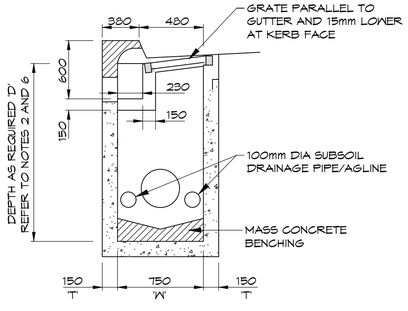
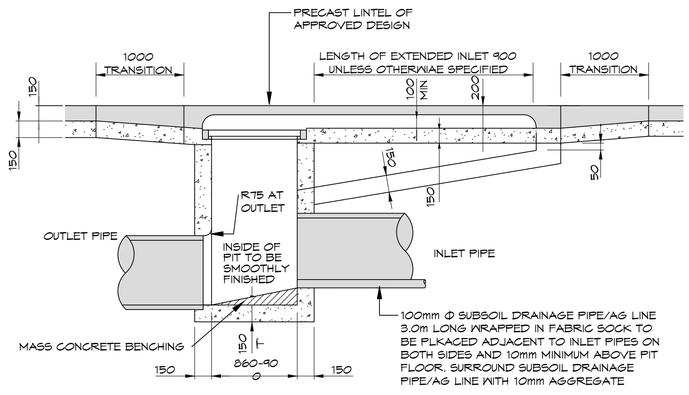


KERB INLET GULLY PIT PLAN

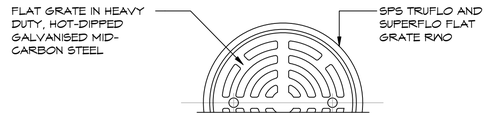
NOTE:
1. ALL KERB INLET PITS (ON GRADE) SHALL BE PROVIDED WITH AN EXTENDED INLET 900mm (MIN) LONG ON THE HIGHER SIDE
2. STEP IRONS TO BE PROVIDED AT 300mm CENTRES FOR PITS GREATER THAN 1200mm DEEEP AND PLACED ON A WALL CLEAR OF FLOW WHERE POSSIBLE IN ACCORDANCE WITH AS 1657.
3. THE COMPRESSIVE STRENGTH OF ALL CONCRETE USED SHALL BE 32MPa AT 28 DAYS IN ACCORDANCE WITH AS 1012 ANS AS 3600.
4. MINIMUM COVER TO ALL PIPES TO BE 600mm UNDER ROADS AND 450mm ELSEWHERE.
5. ALL INTERNAL PIT CORNERS TO BE PROVIDED WITH BENCHING TO IMPROVE FLOW.
6. WHERE INTERNAL WIDTH EXCEEDS 750mm OR DEPTH EXCEEDS 1200mm WALLS TO BE REINFORCED IN ACCORDANCE WITH THE TABLE SHOWN BELOW.
7. SELECTED GRANULAR MATERIAL BACKFILL SHALL BE PLACED TO FILL ALL EXCAVATED VOIDS. (REFER TO AS 3725-2007).
8. ALL PIPES TO BE LAID SO THAT THEIR VERTICAL CENTRE LINES INTERSECT AT THE CENTRE OF THE PIT.
9. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

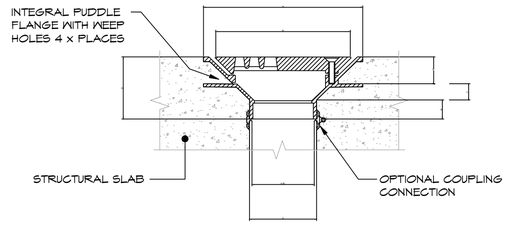


SECTION B-B



SECTIONAL ELEVATION A-A





N.B.	A	B	C	D	E	F	G	FLOW RATE * L/S
100	260	200	110	95	44	26	25	8.2
150	260	200	160	80	48	29	28	10.2
SUPERFLO**	400	290	160	143	66	39	38	17

* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

** SUPERFLO AVAILABLE IN 150mm OUTLET ONLY.

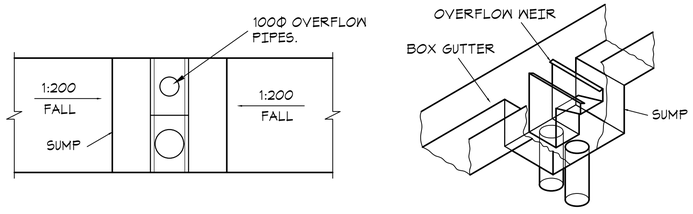
SPECIFICATION CODE:
- TIA100F (100mm TRUFLO CI BODY, GALVANISED FLAT GRATE).
- TIA150F (150mm TRUFLO CI BODY, GALVANISED FLAT GRATE).
- TIA100/90F2 (150mm SUPERFLO CI BODY, GALVANISED FLAT GRATE).

SUGGESTED APPLICATIONS:
- CAR PARK DECKS.
- PLANT ROOMS.
- PEDESTRIAN PRECINCTS.

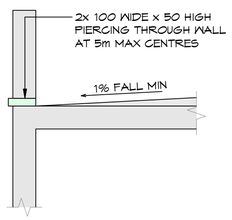
RWO DETAIL

DEPTH TO INVERT 'D'	WALL & BASE THICKNESS 'T'	SPACING OF 'N16' WALL & BASE REINFORCEMENT				
		MAXIMUM INTERNAL PLAN DIMENSION 'W'				
		0 - 1190	1200 - 1790	1800 - 2390	2400 - 2690	2700 - 3000
0 - 1990	150	NIL REINFT.	250 CP	250 CP	250 CP	250 CP
2000 - 2490	200	250 CP	250 CP	250 CP	250 CP	250 CP

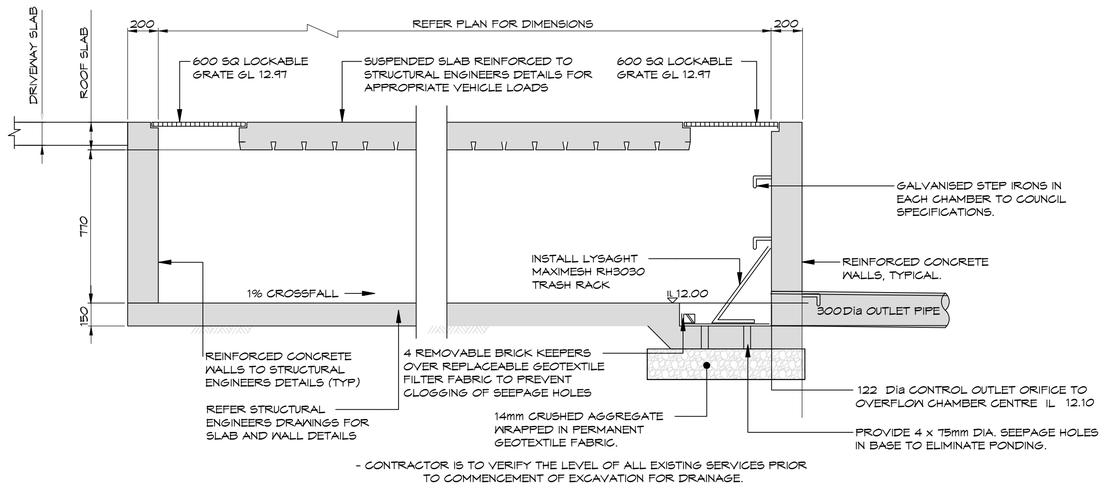
PARRAMATTA COUNCIL KERB INLET GULLY PIT DETAIL



TYPICAL SUMP-HIGH CAPACITY OVERFLOW/OUTLET DETAILS



BALCONY OVERFLOW DETAIL



ON SITE DETENTION TANK DETAIL - DRIVEWAY AREA WITH CONTROL PIT & SUMP

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
5	09.08.19	FOR CLIENT REVIEW	DK
4	11.07.19	FOR CLIENT REVIEW	DK
3	27.06.19	PRELIMINARY ISSUE	DK
2	29.03.19	PRELIMINARY ISSUE	ELR
1	14.12.18	ISSUED FOR DA	AV

JN Responsive Engineering

CLIENT ISLHD
STATUS PRELIMINARY

DISCIPLINE CIVIL
DRAWING TITLE DETAILS SHEET 2

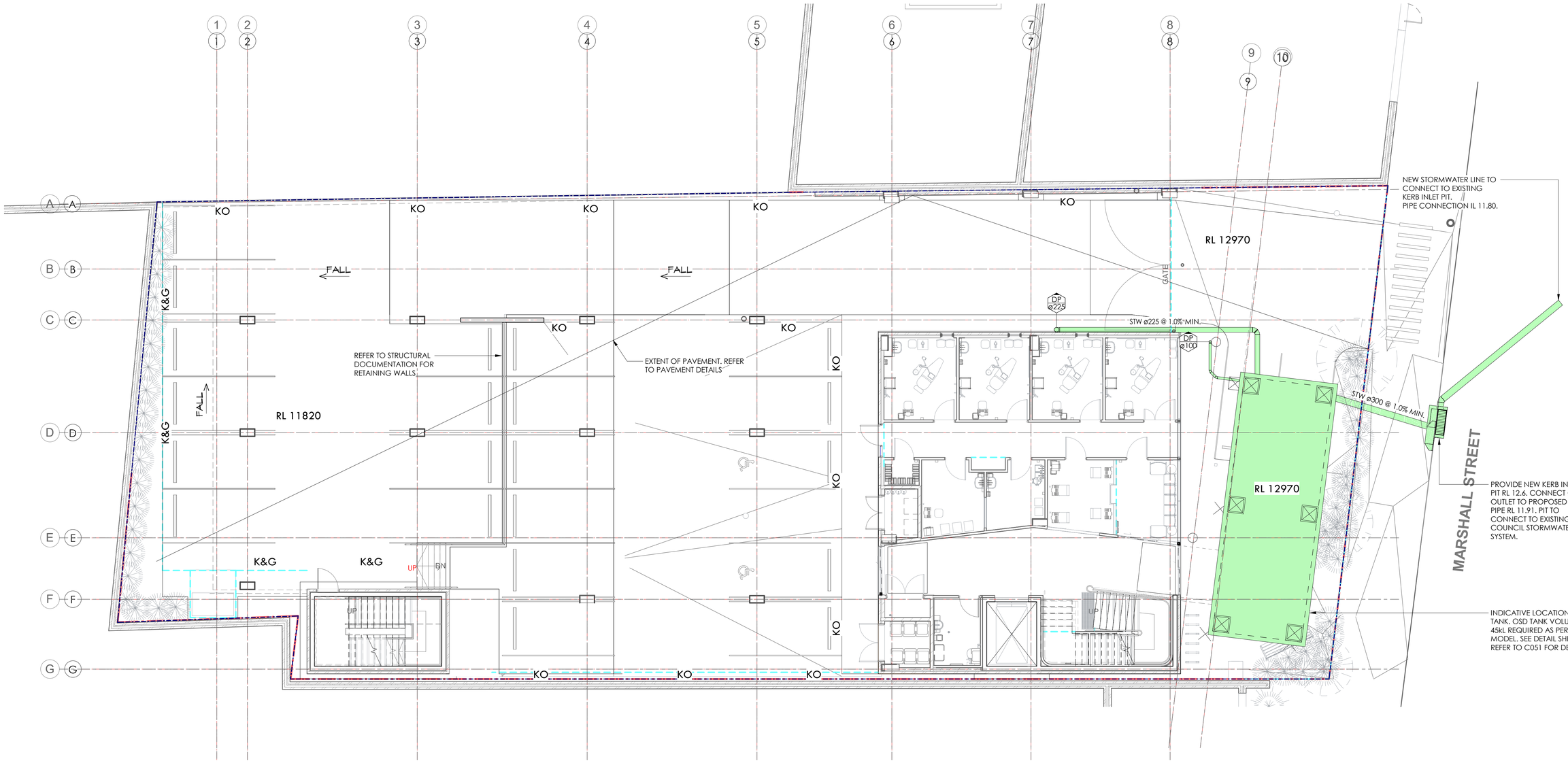
PROJECT DAPTO HEALTH ONE COMMUNITY HEALTH CENTRE
ADDRESS 4 MARSHALL STREET, DAPTO

PROJECT DETAILS
DESIGN BA
DRAWN AV
DATE NOV 2018
DRG SIZE A1
SCALE -
PROJECT MGR BA
WWW.JN.COM.AU

18010648
C051 5

NOTES:

1. ALL DOWNPIPES AND GROUND FLOWS TO OSD TANK WHERE POSSIBLE.
2. OVERLAND FLOW NOT CAPTURED BY OSD TO OUTLET TO ADJACENT COUNCIL CAR PARK, MATCHING EXISTING DRAINAGE CONDITIONS.
3. REFER TO ARCHITECTURAL PLANS FOR LEVELS.



No	DATE	BY	DESCRIPTION
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1	14.12.18	AV	ISSUED FOR DA

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CLIENT

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
STORMWATER DRAINAGE GROUND PLAN

PROJECT

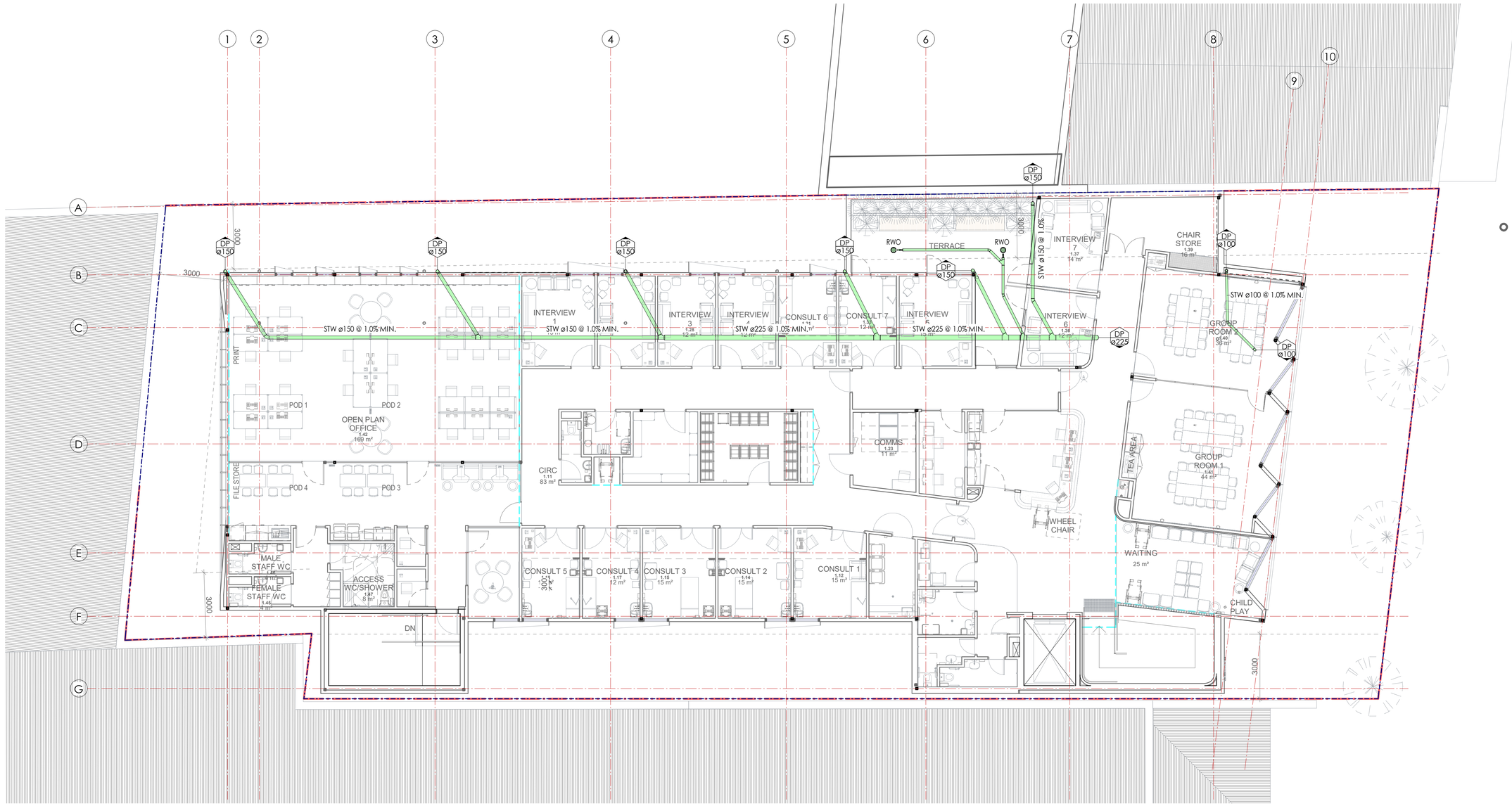
ADDRESS

PROJECT DETAILS
DESIGN
DRAWN
DATE
DRG SIZE A1
SCALE As indicated
PROJECT
MGR
WWW.JN.COM.AU

C200 5

NOTES:

1. ALL DOWNPIPES AND GROUND FLOWS TO OSD TANK WHERE POSSIBLE.
2. OVERLAND FLOW NOT CAPTURED BY OSD TO OUTLET TO ADJACENT COUNCIL CAR PARK, MATCHING EXISTING DRAINAGE CONDITIONS.



No	DATE	BY	DESCRIPTION
4	11.07.19	DK	FOR CLIENT REVIEW
3	27.06.19	DK	PRELIMINARY ISSUE
2	29.03.19	ELR	PRELIMINARY ISSUE
1	14.12.18	AV	ISSUED FOR DA

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CLIENT
ISLHD

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN 2019

DRAWING TITLE
STORMWATER DRAINAGE LEVEL 1 PLAN

PROJECT
DAPTO HEALTHONE COMMUNITY HEALTH CENTRE

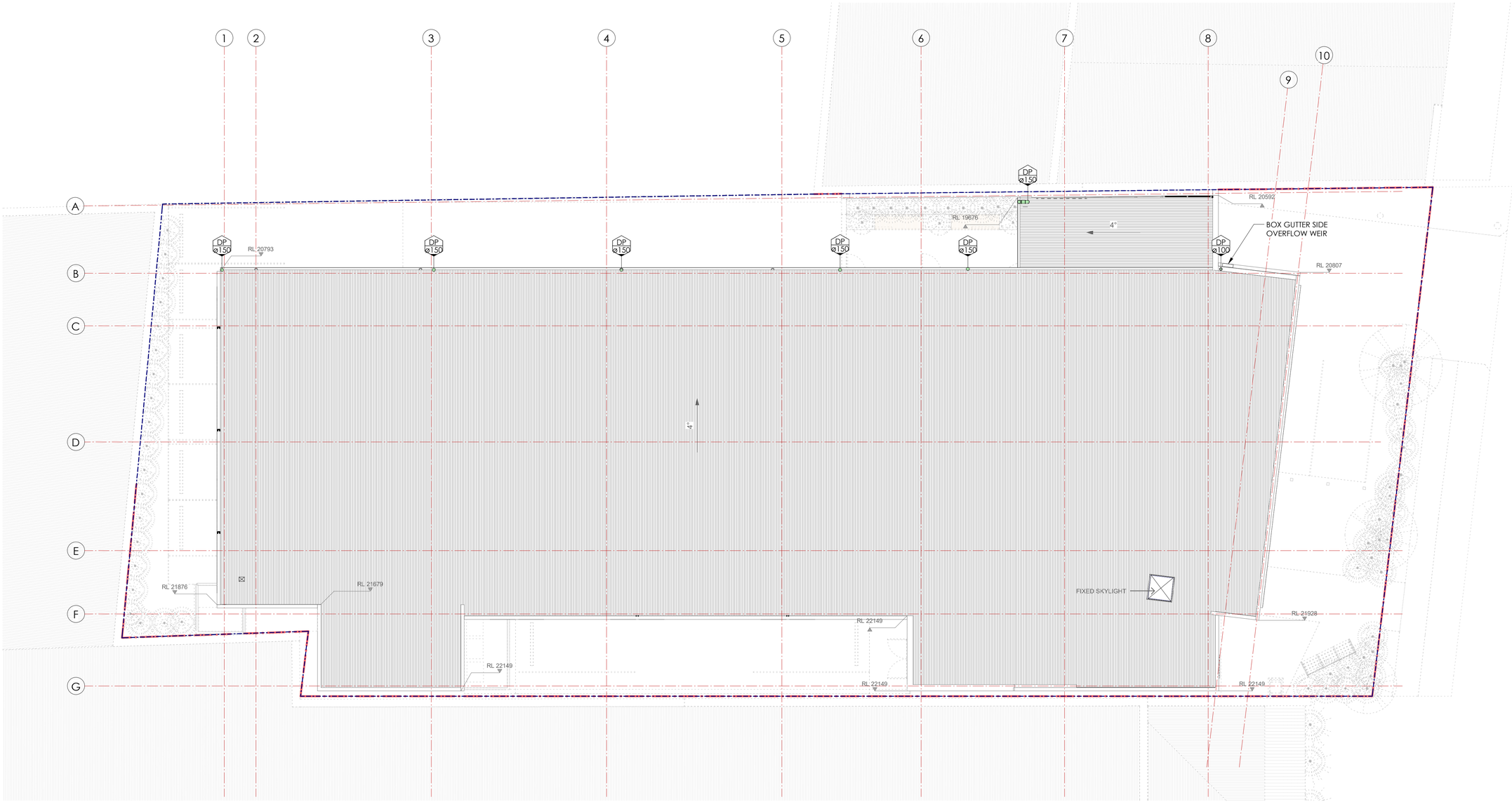
ADDRESS
4 Marshall Street, Dapto NSW 2530

PROJECT DETAILS
DESIGN :
DRAWN :
DATE 21.03.2019
DRG SIZE A1
SCALE As indicated
PROJECT MB
MGR
WWW.JN.COM.AU

18010648
C210 4

NOTES:

1. ALL DOWNPIPES AND GROUND FLOWS TO OSD TANK WHERE POSSIBLE.
2. OVERLAND FLOW NOT CAPTURED BY OSD TO OUTLET TO ADJACENT COUNCIL CAR PARK, MATCHING EXISTING DRAINAGE CONDITIONS.
3. DOWNPIPE LOCATIONS ARE INDICATIVE ONLY AND WILL BE FINALISED AT CC STAGE.



No	DATE	BY	DESCRIPTION
4	11.07.19	DK	FOR CLIENT REVIEW
3	27.06.19	DK	PRELIMINARY ISSUE
2	29.03.19	ELR	PRELIMINARY ISSUE
1	14.12.18	AV	ISSUED FOR DA

JN Responsive Engineering

CLIENT
ISLHD

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
STORMWATER DRAINAGE ROOF PLAN

PROJECT
DAPTO HEALTHONE COMMUNITY HEALTH CENTRE

ADDRESS
4 Marshall Street, Dapto NSW 2530

PROJECT DETAILS
DESIGN -
DRAWN -
DATE 21.03.2019
DRG SIZE A1
SCALE As indicated
PROJECT MB
MGR
WWW.JN.COM.AU

18010648
C220 4

NOTES:

1. OSD TANK DESIGNED TO RESTRICT FLOWS TO COUNCIL'S EXISTING SYSTEM IN MARSHALL STREET TO EXISTING FLOW RATES.
2. EXISTING FLOW RATES BASED ON DRAINS MODELING OF EXISTING SYSTEM.
3. DRAINS MODEL CAN BE PROVIDED TO COUNCIL UPON REQUEST.

PRELIMINARY NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	BY	DESCRIPTION	AMDT	DATE	BY	DESCRIPTION
3	09.08.19	DK	FOR CLIENT REVIEW				
2	24.03.19	ELR	PRELIMINARY ISSUE				
1	14.12.18	AV	ISSUED FOR DA				

CIVIL • STRUCTURAL • BUILDING SERVICES

JONES NICHOLSON CONSULTING ENGINEERS
WWW.JONESNICHOLSON.COM.AU ABN: 51 003 316 032

DESIGN :	BA
DRAWN :	AV
DATE :	NOV 2018
DRG SIZE :	A1
SCALE :	1:100
PROJECT MGR :	BA

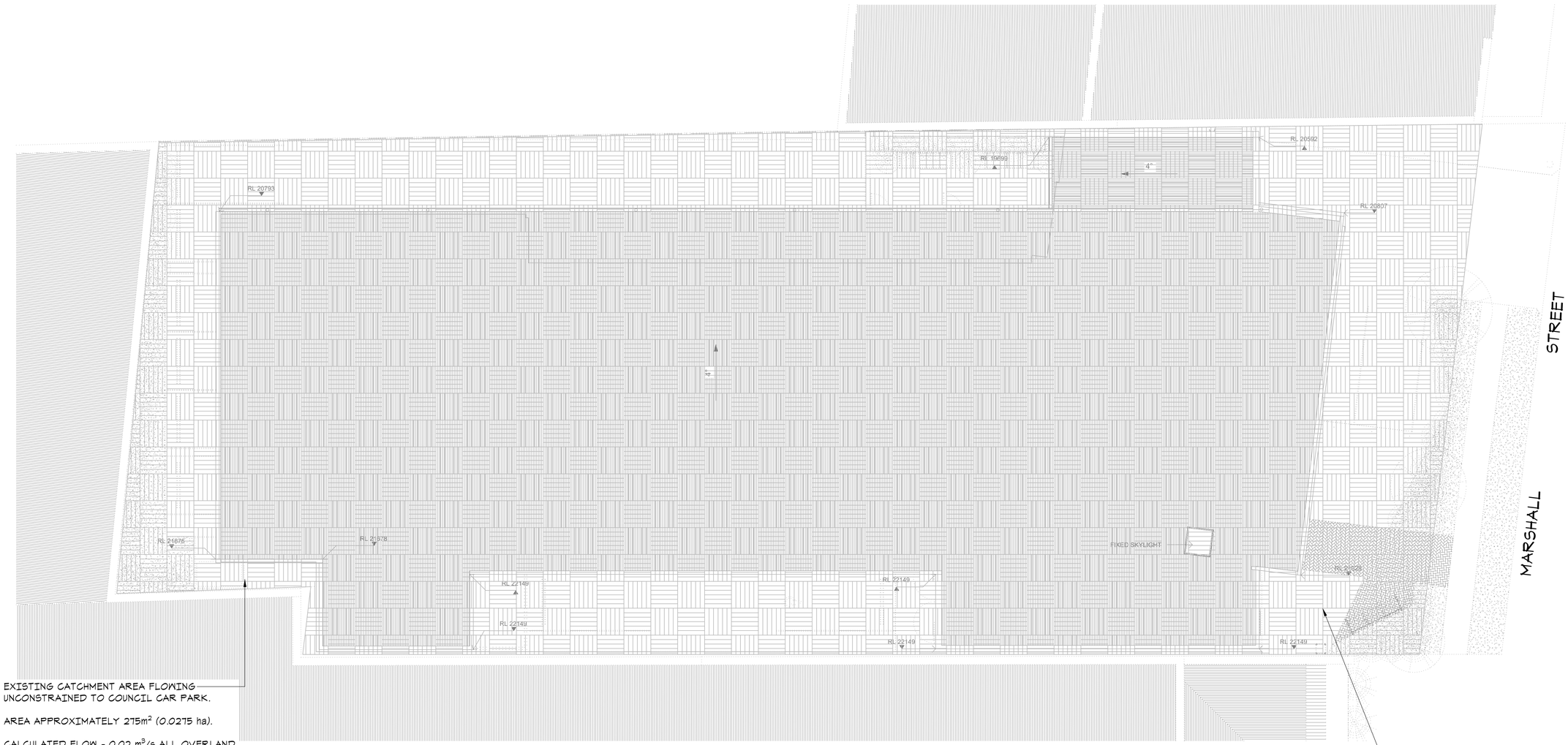
STORMWATER EXISTING CATCHMENT PLAN

DaptoHealthOne
6 MARSHALL STREET, DAPTO
ILLAWARRA SHOALHAVEN LHD

18010648
C0203

NOTES:

1. OSD TANK DESIGNED TO RESTRICT FLOWS TO COUNCIL'S EXISTING SYSTEM IN MARSHALL STREET TO EXISTING FLOW RATES.
2. EXISTING FLOW RATES BASED ON DRAINS MODELING OF EXISTING SYSTEM.
3. DRAINS MODEL CAN BE PROVIDED TO COUNCIL UPON REQUEST.



EXISTING CATCHMENT AREA FLOWING UNCONSTRAINED TO COUNCIL CAR PARK.

AREA APPROXIMATELY 275m^2 (0.0275 ha).

CALCULATED FLOW - 0.02 m^3/s ALL OVERLAND

REDUCTION OF 0.045 m^3/s

CATCHMENT AREA FLOWING TO EXISTING COUNCIL STORMWATER INFRASTRUCTURE VIA KERB OUTLET.

APPROXIMATE AREA 1,018m^2 (0.1018 ha).

CALCULATED FLOW - 0.026 m^3/s PIPED
CALCULATED FLOW - 0.000 m^3/s OVERLAND
TOTAL FLOW FROM SITE TO COUNCIL SYSTEM - 0.026 m^3/s

PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	BY	DESCRIPTION	AMDT	DATE	BY	DESCRIPTION
3	09.08.19	DK	FOR CLIENT REVIEW				
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CIVIL • STRUCTURAL • BUILDING SERVICES

JONES NICHOLSON CONSULTING ENGINEERS
WWW.JONESNICHOLSON.COM.AU ABN: 51 003 316 032

DESIGN : BA
DRAWN : AV
DATE : NOV 2018
DRG SIZE : A1
SCALE : 1:100
PROJECT MGR : BA

STORMWATER PROPOSED CATCHMENT PLAN

DaptoHealthOne
7 MARSHALL STREET, DAPTO

ILLAWARRA SHOALHAVEN LHD

18010648
C0213