

NOTES

- 1. ALL LEVELS GIVEN ARE TO A.H.D.
- 2. ALL DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE
- CHECK THE LOCATION OF ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORK. CHECK LEVELS OF SERVICES IN CRITICAL AREAS. IT IS NOT GUARANTEED THAT ALL SERVICES HAVE BEEN SHOWN ON THE DRAWINGS.
- OBTAIN PERMIT(S) FROM THE RELEVANT AUTHORITY AS AND WHEN REQUIRED.
- REINSTATE ALL SURFACES UPON COMPLETION OF THE WORKS AS DIRECTED BY AND TO THE SATISFACTION OF THE SUPERINTENDENT

CITY OF PALMERSTON

- GIVE A MINIMUM 48 HOURS NOTICE TO THE CITY OF PALMERSTON OF INTENDED COMMENCEMENT DATE AND PROGRAMME OF WORKS. ALL NOTIFICATIONS SHALL BE IN WRITING.
- CONTRACTOR IS RESPONSIBLE FOR 'AS CONSTRUCTED DRAWINGS' FOR ROADWORKS AND STORMWATER DRAINAGE SIGNED BY THE DEVELOPERS CONSULTANT SHALL BE LODGED WITH THE CITY OF PALMERSTON BY THE CONSULTANT PRIOR TO ACCEPTANCE OF ON MAINTENANCE.
- ALL WORKS TO BE CARRIED OUT TO THE CITY OF PALMERSTON REQUIREMENTS.
- 4. ALL TOPS OF SERVICE PITS, MANHOLES, INSPECTION OPENINGS, VALVE BOXES AND OTHER SERVICES ETC, SHALL MATCH FINISHED SURFACE LEVELS AND SLOPE OF VERGES AND FOOTPATHS.
- ALL TOPS OF SERVICE PITS, MANHOLES, INSPECTION OPENINGS, AND OTHER SERVICES ETC, LOCATED WITHIN ALLOTMENTS SHALL BE FINISHED AT A LOGICAL AND WORKABLE RELATIONSHIP TO LEVELS OF ADJACENT VERGE AND FOOTPATHS.

COUNCIL INSPECTIONS

. AFTER THE ENGINEERING PLANS AND SPECIFICATIONS HAVE BEEN GIVEN APPROVAL BY COUNCIL, THE DEVELOPER OR THEIR REPRESENTATIVE SHALL INFORM THE COUNCIL IN WRITING OF THE NAME(S) AND ADDRESS(ES) OF PRINCIPAL CONTRACTOR(S) TO WHOM IT IS PROPOSED TO AWARD THE CONTRACT(S).

THE COUNCIL SHALL ADVISE THE DEVELOPER OR THEIR REPRESENTATIVE WHO WILL BE CARRYING OUT INSPECTION ON SITE

IT IS ALSO THE DEVELOPER'S RESPONSIBILITY TO ENSURE THAT THE COUNCIL IS NOTIFIED OF THE COMMENCEMENT AND COMPLETION OF EACH PHASE OF WORK. WHILE AS MUCH NOTICE AS POSSIBLE IS DESIRABLE, A MINIMUM OF TWENTY FOUR (24) HOURS IS REQUIRED, EXCLUDING WEEKENDS AND PUBLIC HOLIDAYS. ALL NOTIFICATIONS SHALL BE IN WRITING.

THE DEVELOPER SHALL ARRANGE WITH THE CERTIFYING ENGINEER AND REPRESENTATIVE OF COUNCIL FOR JOINT INSPECTIONS OF WORKS WHEN EACH NEW ELEMENT OF CONSTRUCTION IS BEING PERFORMED FOR THE FIRST TIME.

 THE DEVELOPER SHALL ALSO NOTIFY THE COUNCIL REPRESENTATIVE IN WRITING, AND AT LEAST TWENTY-FOUR HOURS IN ADVANCE, OF THE COMMENCEMENT AND COMPLETION OF EACH PHASE OF DEVELOPMENT.

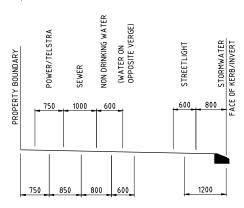
THE CERTIFYING ENGINEER SHALL CONDUCT ALL INSPECTIONS.

NORMALLY THE PHASES AT WHICH THE WORK MUST BE NOTIFIED ARE AS FOLLOWS:

- (A) PRIOR TO COMMENCEMENT OF CLEARING.
- (B) SETTING OUT AND COMMENCEMENT OF EARTHWORKS.
 (C) COMPLETION OF SUBSOIL DRAINAGE PRIOR TO BACKFILL
- (D) COMPLETION OF EARTHWORKS TO SUB GRADE BEFORE LAYING PAVEMENT.
- (E) COMMENCEMENT OF KERB AND CHANNEL.
- (F) COMMENCEMENT OF SUB-BASE.
 (G) COMMENCEMENT OF BASE COURSE.
- (G) COMMENCEMENT OF BASE COU (H) PREPARATION OF SURFACING.
- (I) COMMENCEMENT OF SURFACING.
- (J) STORMWATER DRAINAGE PIPE LAYING, PRIOR TO BACKFILLING AND TESTING. (K) ALL OTHER UNDERGROUND SERVICES BACKFILLING AND TESTING.
- L) FINAL INSPECTION.

POWER WATER CORPORATION

- DESIGN AND CONSTRUCTION OF THE WATER AND SEWERAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE POWER AND WATER CONNECTION CODE AND ASSOCIATED DOCUMENTS.
- PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL CHECK THE LOCATION
 OF ALL EXISTING SERVICES, AND CONFIRM FINISHED SURFACE LEVELS AND INVERT
 LEVELS OF EXISTING STUBS TO BE INCORPORATED IN THE WORKS.
- ALL WATER AND SEWERAGE (HYDRAULIC) WORKS SHALL BE CARRIED OUT AS SHOWN ON THE LATEST AMENDMENT OF THE DESIGN DRAWINGS.
- CONSTRUCTION SITE DRAWINGS MUST BE SIGNED AS "APPROVED FOR CONSTRUCTION" BY A SERVICES DEVELOPMENT OFFICER.
- SEVEN (7) DAYS NOTICE SHALL BE GIVEN TO SERVICES DEVELOPMENT, POWER AND WATER (FACSIMILE: 8924 5121 - NORTHERN REGION & 8951 7347 - SOUTHERN REGION), WITH A "NOTICE OF INTENTION TO START WORK" PRIOR TO COMMENCE
- 6. THE CONTRACTOR IS TO ARRANGE AND ATTEND A MEETING WITH PWC, THE HYDRAULIC CERTIFIER AND THE DEVELOPER PRIOR TO COMMENCEMENT OF WORK
- 7. ANY CHANGES TO THESE DRAWINGS, REQUIRED OF DESIRED DURING THE CONSTRUCTION PHASE, MUST BE AUTHORISED BY A SERVICE DEVELOPMENT OFFICER
- 3. CONTRACTOR IS RESPONSIBLE FOR 'AS CONSTRUCTED' DRAWINGS FOR WATER AND SEWER MUST BE PROVIDED TO SERVICES DEVELOPMENT, POWER AND WATER PRIOR TO HANDOVER INSPECTION. ENSURE ALL AS CONSTRUCTED INFORMATION HAS BEEN PICKED UP BY THE SURVEYOR PRIOR TO BACKFILLING.
- 9. 'AS CONSTRUCTED' DRAWINGS TO BE CERTIFIED BY THE CERTIFYING ENGINEER. 'AS CONSTRUCTED' SURVEY BY A REGISTERED SURVEYOR.
- 10. DESIGNER TO CONTACT SERVICES DEVELOPMENT, POWER AND WATER TO ARRANGE FOR HANDOVER INSPECTIONS. SEVEN (7) DAYS NOTICE MUST BE PROVIDED PRIOR TO HANDOVER INSPECTIONS.
- 11. CONNECTIONS TO EXISTING WATER AND SEWER MAINS WILL ONLY BE CARRIED OUT WHEN ALL WORKS UPSTREAM OF THE CONNECTION ARE COMPLETE (IE. TESTED, DISINFECTED WHERE APPLICABLE, BACKFILLED AND CERTIFICATES SUBMITTED) IN ACCORDANCE WITH THE APPROVED DESIGN DRAWINGS, AND HAVE SATISFACTORILY PASSED FINAL HANDOVER INSPECTION.
- 12. AT THE DEVELOPERS COST, POWER AND WATER SHALL PROVIDE A CONNECTION POINT ON EXISTING MAIN (S) WITH A BLANK FLANGE PRIOR TO CONSTRUCTION OF NEW WATERMAIN
- 13. POWER AND WATER PERSONNEL SHALL CONNECT ALL WATER AND SEWER TO EXISTING MAINS ONLY AFTER ACCEPTANCE OF THE WORK HAS BEEN ACHIEVED. THE CONSTRUCTOR IS RESPONSIBLE FOR ALL CONNECTION FEES, MATERIALS AND LABOUR FOR EXCAVATION, BACKFILLING AND REINSTATEMENT.
- 14. AT NO STAGE SHALL ANY CONTRACTOR BE ALLOWED TO CARRY OUT WORK ON PWC INFRASTRUCTURE.
- 15. AT LEAST SEVEN (7) WORKING DAYS NOTICE MUST BE PROVIDED TO SERVICES DEVELOPMENT, POWER AND WATER FOR APPLICATION OF A CERTIFICATE OF FINAL COMPLIANCE/DEVELOPMENT PERMIT CLEARANCE ALLOWING FOR AN INSPECTION AND REPORT OF OUTSTANDING DEFECTS/ISSUES. UPON NOTICE TO SERVICES DEVELOPMENT THAT RECTIFICATION OF OUTSTANDING DEFECTS/ISSUES HAS BEEN ADDRESSED, AND ADDITIONAL SEVEN (7) WORKING DAYS SHOULD BE ALLOWED FOR.
- ALL WORKS SHALL HAVE A DEFECTS PERIOD OF 2 YEARS FROM DATE OF ACCEPTANCE FROM PWC.
- 17. CONTRACTOR TO CONTACT SUPERINTENDENT FOR INSPECTION OF TRENCH BASE, BEDDING, PIPE INSTALLATION BACKFILL.



TYPICAL ALLOCATION DETAIL

N.T.S

NOTE: REFER LANDSCAPE DRGS FOR TREE ALIGNMENT AND ROOT BARRIER DETAILS

ROADS & DRAINAGE

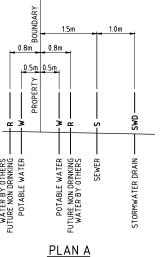
- R1. ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM AND ALL SETTING OUT CO-ORDINATES ARE TO PLAN AMG.
- R2. SETTING OUT AND LEVELLING REFERENCE POINTS FOR KERBING IS SHOWN ON THE DRAWINGS.
- R3. GRADE FINISHED SURFACE EVENLY BETWEEN LEVELS SUPPLIED.
- R4. PAVEMENT LEVELS ARE GIVEN AT QUARTER POINTS ON RADII LESS THAN 20m AND AT 5m CENTRES ELSEWHERE UNLESS SHOWN OTHERWISE
- R5. WHERE CONSTRUCTION JOINS EXISTING SAW CUT BACK 150mm MIN.
 INTO SOUND UNCONTAMINATED PAVEMENT MATERIAL AND MAKE
 GOOD
- R6. LINEMARKING & SIGNPOSTING SHALL BE IN ACCORDANCE WITH AS 1742. LINEMARKING SHALL BE 100mm WIDE AND WHITE IN COLOUR IN NO.
- R7. TOP OF DRAINAGE STRUCTURES SHALL BE FINISHED SUCH THAT COVERS AND SURROUNDS MATCH THE ADJACENT FINISHED SURFACE LEVEL AND SLOPE.
- R8. DRAINAGE PIPES SHALL BE R.C.P. CLASS '2' WITH EXTERNAL BANDAGE JOINTS UNLESS SHOWN OTHERWISE.
- R9. DRAINAGE STRUCTURES SETTING OUT REFER TO:a) SEP's - CENTRE OF MAIN CHAMBER AT INVERT LINE b) LETTERBOX PIT - CENTRE OF PIT c) HEADWALL - CENTRE OF HEADWALL
- R10. GRATED INLET PITS ARE PROPOSED IN PRIVATE PROPERTIES ONLY.
 NOMINAL OPENING SIZE TO BE AS SHOWN. CHAMBER TO BE PRECAST
 OR CAST INSTIU TO SUPERINTENDENTS APPROVAL PIT GRATES
 SHALL BE GENERALLY LIGHT DUTY, MEDIUM DUTY / BICYCLE SAFE
 GRATES ARE REQUIRED WITHIN FOOTPATHS AND ROADWAYS.
- R11. LETTERBOX PITS TO BE AS PER DPI STD DRG EXCEPT HORIZONTAL BARS SHALL BE PROVIDED AT 100m CENTRES.
- R12. WHERE CAPPED PIPES ARE SHOWN FOR FUTURE DRAINAGE CONNECTIONS. TIMBER END CAPS ARE NOT PERMITTED.
- R13. REFER TO STANDARD DRAWINGS DCC-106 AND CS1100 FOR STORMWATER PIPE LAYING DETAILS. SUPERINTENDENT TO CONFIRM STORMWATER PIPE BEDDING AND BACKFILL TYPES ON SITE.

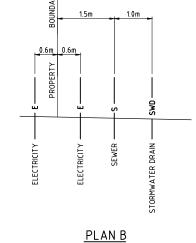
<u>SETOUT</u>

- ST1. TO ASSIST THE PLAN SETOUT FOR THIS PROJECT, A DIGITAL COPY OF THESE ENGINEERING DRAWINGS WILL BE MADE AVAILABLE FOR USE BY THE PROJECT SURVEYOR. ALL DRAWING NOTATION TAKES PRECEDENCE OVER ALL DIGITAL INFORMATION PROVIDED.
- ST2. FOR ALL LANDSCAPING & FOOTPATH SETOUT AND OTHER DETAILS, REFER LANDSCAPE DRGs. LEVELS SHOWN ON THESE ENGINEERING DRGs APPLY.

EARTHWORKS

FOR EARTHWORKS NOTES SEE SHEET CE003





ABBREVIATIONS

A/G

BM

CT

DICL

DN

D/S

EW

FH

HD

HW

GIP

GPT

I BP

LD

MMDD

TELSTRA

FL

ACCESS CHAMBER

CURVE TO TANGENT

WATERMAIN DEAD END

DUCTILE IRON CEMENT LINED

FINISHED SURFACE LEVEL

GROSS POLLUTANT TRAP

MAXIMUM MODIFIED DRY DENSITY

EROSION AND SEDIMENT CONTROL

LINEMARKING AND SIGNAGE

SUPERINTENDENT IN CONSULTATION WITH NRETAS.

FOR LINEMARKING AND SIGNAGE NOTES SEE DRAWING CR032

ABOVE GROUND

BENCHMARK

NOMINAL BORE

DOWNSTREAM

FIRE HYDRAN

FLANGED JOINT

HEAVY DUTY

GRATED INLET PIT

HEADWALL

GUIDE POST

INVERT LEVEL

INTERSECTION POINT

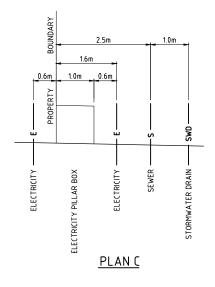
LETTER BOX PIT

INCLUSIVE

LIGHT DUTY

MANHOLE

ENDWALL



MAINTENANCE SHAFT

OPEN UNLINED DRAIN

REINFORCED CONCRETE BOX CULVERT

REINFORCED CONCRETE PIPE

NOT IN CONTRACT

NOT TO SCALE

POWER POLE

uPVC PIPEWORK

REDUCED LEVEL

SIDE ENTRY PIT

SURFACE LEVEL

SURVEY STATION

TANGENT TO CURVE

TERMINAL MAINTENANCE SHAFT

UNLESS NOTED OTHERWISE

SLUICE VALVE

TANGENT POINT

UNDER GROUND

TELSTRA PIT

UPSTREAM

SOCKET

SPIGOT

RUBBER RING JOINT

NTS

OUD

PVC

RCBC

RCP

RL

RRJ

SEP

SL

S0

SP

STN

S۷

TC

TMS

TPIT

U/G

UNO

U/S

T1. THE CONTRACTOR IS REQUIRED TO LIASE WITH TELSTRA TO COORDINATE WORKS. APPLICATION WITH

THE CONTRACTOR SHALL LIASE WITH NRETAS AND IS RESPONSIBLE FOR IMPLEMENTATION AND

MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES AS PER APPROVED PLANS.

ADDITIONAL EROSION CONTROLS MAY BE REQUIRED DURING CONSTRUCTION AS DETERMINED BY THE

'TELSTRA SMART COMMUNITY' LODGED. REGISTRATION No. T.B.A AND AFR No. T.B.A.

TYPICAL SERVICE LOT CONNECTION DETAILS

N.T.S

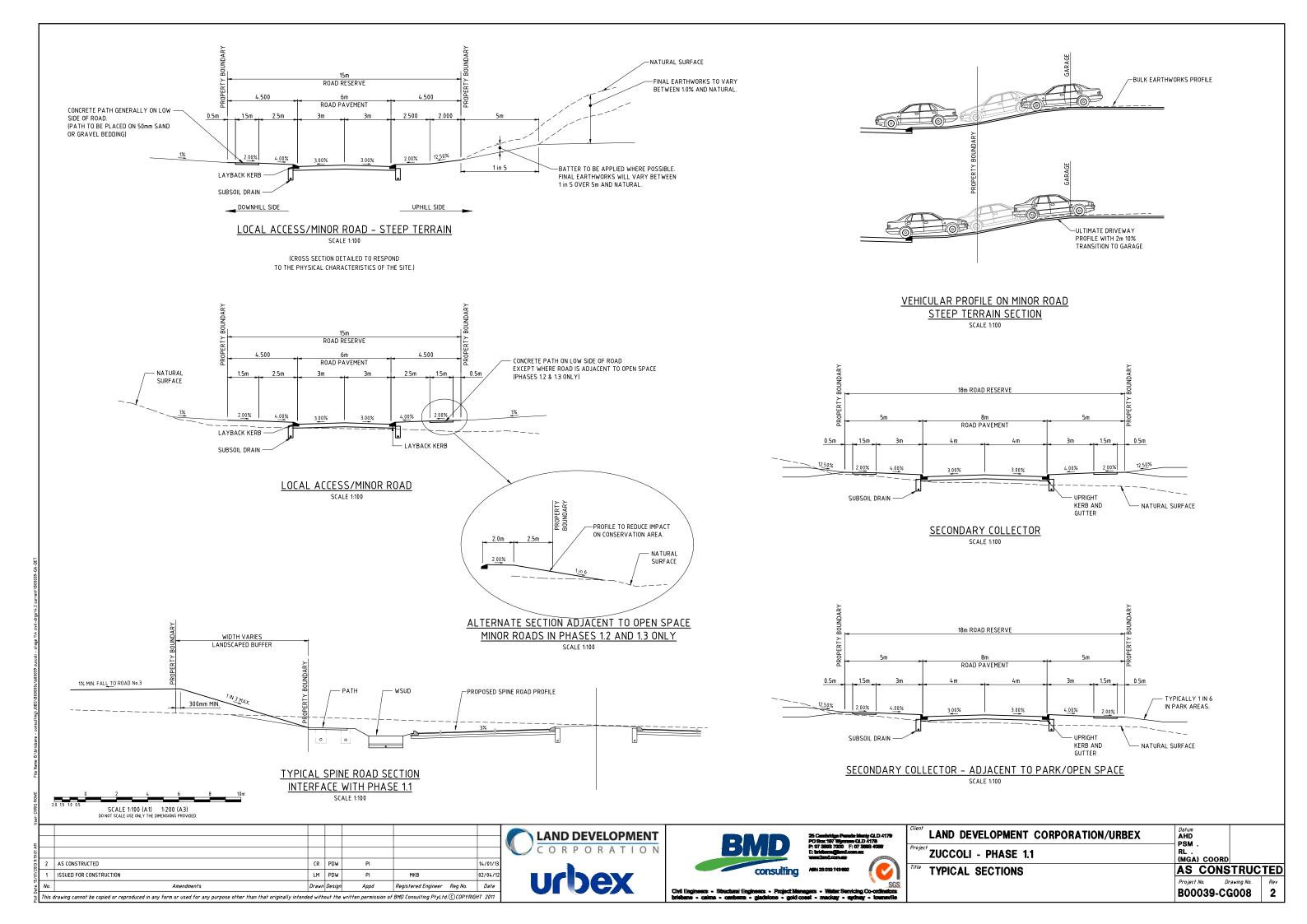
NOTE: ALL WATER & SEWER CONNECTIONS OFFSETS FROM BOUNDARY SHALL BE AS PER PWC STD DRAWINGS UNLESS NOTED OTHERWISE ON PLAN DRGS.

15/01	1	ISSUED FOR CONSTRUCTION	LM	PDW	PI	 	02/04/12
2							
2013 9:	2	AS CONSTRUCTED	CR	PDW	PI		14/01/13
18:59 AM							



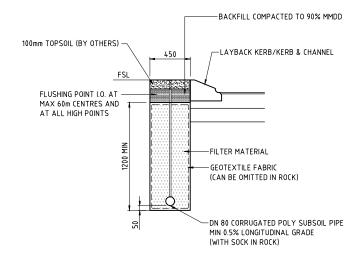


LAND DEVELOPMENT CORPORATION/URBEX	Datum AHD PSM .		
Project ZUCCOLI - PHASE 1.1	RL . (MGA) COORD		
Title GENERAL NOTES	AS CONS	TRUC	TED
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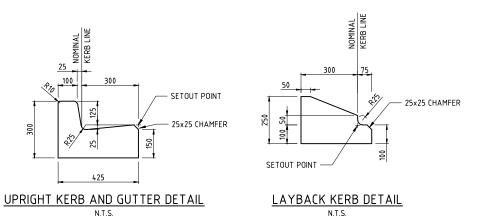
SUBSOIL DRAIN TYPE 1

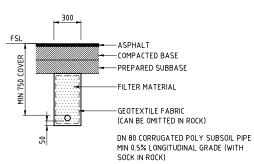
N.T.S. (SUITABLE FOR LOW FLOW)



SUBSOIL DRAIN TYPE 2

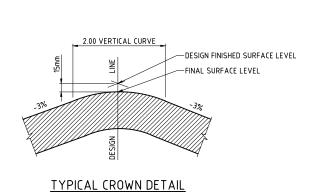
(SUITABLE FOR HIGH FLOW)

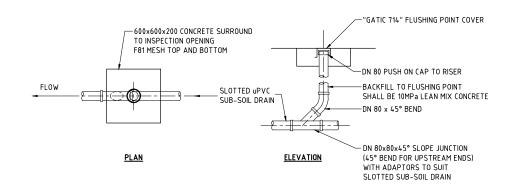




SUBSOIL DRAIN TYPE 3

(SUITABLE FOR UNDER ROAD IF REQUIRED) NOTE: ENSURE SUBSOIL PIPE FALLS TO PIT OR SUBSOIL DRAIN BEHIND KERB

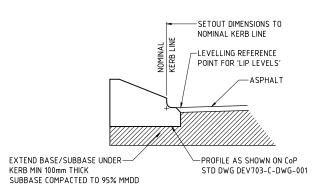




SUBSOIL FLUSHING POINT DETAIL

NOTE: WHEN LOCATING CONCRETE SURROUND CONTRACTOR TO TAKE INTO CONSIDERATION LOCATION OF SERVICES AND LOT ACCESSES.

> NOTE:-SUBSOIL DRAIN CONNECTION TO STORMWATER PITS SHALL BE SIMILAR TO SUBSOIL CONNECTION DETAIL ON D.C.C. STD DRG DCC-106



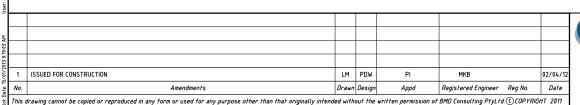
LAYBACK KERB DETAIL

UPRIGHT KERB AND GUTTER DETAIL

EXTEND BASE/SUBBASE UNDER-

SUBBASE COMPACTED TO 95% MMDD

KERB MIN 100mm THICK









Ť	LAND DEVELOPMENT CORPORATION/URBEX	Datum AHD PSM .			
	ZUCCOLI - PHASE 1.1	RL . (MGA) COORD			
	Title GENERAL DETAILS	AS CONS	TRUC	TED	
GS		Project No. Di	rawing No.	Rev	
		B00039-C0	3009	2	

-SETOUT DIMENSIONS TO NOMINAL KERB LINE

LEVELLING REFERENCE
POINT FOR 'LIP LEVELS'

-ASPHALT

PROFILE AS SHOWN ON COP

STD DWG DEV703-C-DWG-001