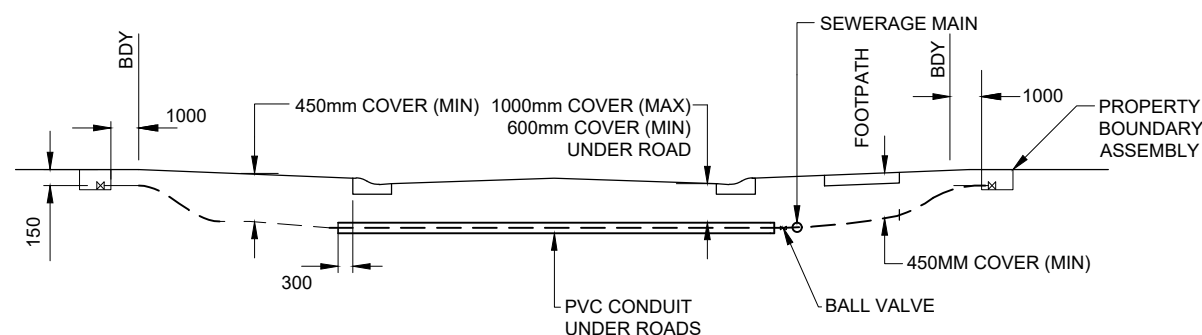


TYPICAL PLAN



TYPICAL SECTION

G GENERAL

1. THESE NOTES SHALL BE READ IN CONJUNCTION WITH TSC STANDARD DRAWINGS, TSC STANDARD SPECIFICATION D12 & C402 & THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. SHOULD ANY CONFLICT ARISE, THE REQUIREMENTS OF THE TSC STANDARD DRAWINGS & SPECIFICATION SHALL TAKE PRECEDENCE.
2. PRESSURE RETICULATION SEWER TO BE POSITIONED ON OPPOSITE SIDE OF ROAD TO WATER MAINS.
3. ALL BOLTS, NUTS AND WASHERS TO BE S.S.316.

C CIVIL WORKS PUMP STATION

1. PUMP STATIONS SHALL BE POSITIONED ON THE SITE TO ALLOW ALL EXISTING OR PROPOSED GRAVITY SEWERAGE (INCLUDING GREY WATER) TO DRAIN AT A MINIMUM GRADE OF 1:60 TO THE REQUIRED INLET LEVEL AT THE PUMP WELL.

F PIPES AND FITTINGS

1. THE ALIGNMENT OF THE PRESSURE PIPE SYSTEM SHALL GENERALLY BE IN ACCORDANCE WITH THIS DRAWING.
2. PRESSURE PIPES DISCHARGING FROM PUMP STATIONS SHALL BE 40mm OD PE100 PN 12.5 (ALL BLACK). ACCEPTABLE PIPE JOINTING SYSTEMS INCLUDE ELECTROFUSION COUPLINGS & COMPRESSION COUPLINGS RATED TO THE PIPE TEST PRESSURE OR HIGHER.
3. ALL PIPE FITTINGS SHALL BE FULL BORE. TAPPINGS WITH REDUCED CROSS SECTIONAL AREA ARE NOT ACCEPTABLE.
4. SEWER MARKER TAPE WITH TRACER WIRE SHALL BE INSTALLED ABOVE ALL PRESSURE PIPES.
5. ALL PIPE WORK CROSSING THE ROAD SHALL BE LOCATED WITHIN A 100mm DIAMETER HD-PVC CONDUIT. SINGLE PIPES CROSSING THE ROAD SHALL CROSS ADJACENT TO THE BOUNDARY KIT & AT 90 DEGREES TO THE ROAD CENTERLINE. WHERE TWO PIPES ARE CONTAINED WITHIN THE SAME CONDUIT, THEY SHALL CROSS THE ROAD OPPOSITE THE COMMON BOUNDARY AND AT 90° TO THE ROAD CENTERLINE.
6. PRESSURE PIPES DISCHARGING FROM PUMP STATIONS SHALL BE SEPARATELY CONNECTED TO THE RISING MAIN/PRESSURE RETICULATION SEWER.
7. A 32mm INTERNAL DIAMETER BRASS BALL VALVE OR STAINLESS STEEL (BURIED) SHALL BE PROVIDED AT EACH CONNECTION TO THE COMMON RISING MAIN/PRESSURE RETICULATION SEWER.
8. IN OTHER THAN ROADWAYS, THE CONTRACTOR SHALL PLACE THE BACK FILL SUFFICIENTLY HIGH TO COMPENSATE FOR EXPECTED SETTLEMENT & FURTHER BACK FILLING SHALL BE CARRIED OUT OR THE ORIGINAL BACK FILL TRIMMED TO ENSURE THAT FINAL LEVELS MATCH THE ORIGINAL SURFACE LEVEL.
9. SURPLUS MATERIAL SHALL BE REMOVED & THE SITE REINSTATED AS CLOSE AS PRACTICALLY POSSIBLE TO ITS ORIGINAL CONDITION.
10. IN LOCATIONS WHERE, IN THE OPINION OF THE COUNCIL OR COUNCIL'S REPRESENTATIVE, SURPLUS MATERIAL LEFT IN THE VICINITY OF THE TRENCH WOULD NOT BE OBJECTIONABLE, THE SURPLUS MATERIAL MAY BE DISPOSED BY SPREADING NEATLY IN THE VICINITY OF THE TRENCH TO THE SATISFACTION OF THE COUNCIL OR COUNCIL'S REPRESENTATIVE IN SUCH A WAY AS TO AVOID FUTURE EROSION OF THE BACK FILL & ADJACENT GROUND SURFACE.
11. BEDDING MATERIAL TO BE IN ACCORDANCE WITH TSC DEVELOPMENT CONSTRUCTION SPECIFICATION C402 - SEWERAGE SYSTEM.

P PROPERTY BOUNDARY ASSEMBLY

1. ONE PROPERTY BOUNDARY ASSEMBLY PER PUMP STATION SHALL BE PROVIDED & POSITIONED WITHIN THE PRIVATE PROPERTY. THE LID OF THE BOX SHALL BE CLEARLY MARKED "PRESSURE SEWER VALVES". INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD DRAWINGS.
2. ALL FITTINGS TO BE COMPLETELY CONTAINED WITHIN BOX & UN-BURIED.
3. UNLESS SUPPLIED AS A COMPLETE PROPRIETARY ITEM, VALVES AND TEES TO BE BSP THREADED BRASS OR STAINLESS STEEL.

V VALVES

1. AIR & SCOUR VALVES MAY BE REQUIRED AT SIGNIFICANT HIGH & LOW POINTS ON THE COMMON PRESSURE RETICULATION SEWER. THESE REQUIREMENTS ARE PROJECT SPECIFIC & THE DEVELOPER/DESIGNER SHALL CONSULT TSC TO DETERMINE AIR & SCOUR VALVE PROVISIONS.
2. WHERE AIR OR SCOUR VALVES ARE REQUIRED, THEY SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TSC STANDARD DRAWINGS.
3. LIDS OF AIR OR SCOUR VALVES SHALL BE CLEARLY MARKED "SEWAGE AIR VALVE" OR "SEWAGE SCOUR VALVE" AS APPLICABLE.

E ELECTRICAL WORKS

MAINS SUPPLY CABLE (BETWEEN DOMESTIC SWITCHBOARD AND CONTROL PANEL)

1. POWER TO THE CONTROL PANEL SHALL BE FROM THE DOMESTIC POWER SUPPLY SWITCHBOARD. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS WITH THE CONTRACTOR TO PROVIDE & INSTALL A 15 AMP 8 KA MINIMUM CIRCUIT BREAKER MOUNTED IN THE MAIN SWITCHBOARD & LABELED "SEWERAGE PUMP".
2. CABLING FROM SWITCHBOARD TO CONTROL PANEL SHALL BE RUN IN MINIMUM 2.5mm TWIN & EARTH CIRCULAR OR TPS. MECHANICAL PROTECTION SHALL BE PROVIDED WHERE REQUIRED. ALL CONDUITS TO BE SEALED WITH A NON-SETTING SEALING COMPOUND TO PREVENT THE INGRESS OF VERMIN.
3. ALL ELECTRICAL WORKS SHALL COMPLY WITH AS3000 & ANY OTHER RELEVANT STANDARDS & REGULATIONS

CONTROL PANEL

1. BEFORE PROCEEDING WITH THE INSTALLATION, THE CONTRACTOR SHALL VERIFY THAT THE SUPPLY VOLTAGE IS THE SAME AS THE MOTOR VOLTAGE SHOWN ON THE PUMP COMPLIANCE PLATE (GENERALLY DOMESTIC 240 VOLT SINGLE PHASE).
2. THE CONTROL PANEL SHALL BE MOUNTED ON TO AN EXTERIOR WALL SURFACE, AS CLOSE AS POSSIBLE TO THE PUMP STATION & WITHIN LINE OF SITE OF THE PUMP STATION.
3. THE CONTROL PANEL SHALL BE MOUNTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. ANY PENETRATIONS REQUIRED INTO THE CONTROL PANEL FOR MOUNTING, SHALL BE PROVIDED IN SUCH A MANNER AS TO MAINTAIN THE INTEGRITY OF THE UNIT.
4. THE UNIT SHALL BE SET AT A HEIGHT OF 1200mm ABOVE GROUND LEVEL, WITH ALL CABLE ENTRIES FROM BELOW. ALL CABLE ENTRIES SHALL USE A SUITABLE PLASTIC GLAND WITH NEOPRENE COMPRESSION SEAL & ALL CONDUITS TO BE SEALED WITH A NON-SETTING SEALING COMPOUND TO PREVENT THE INGRESS OF VERMIN.
5. ALL FIXINGS SHALL BE 316 STAINLESS STEEL.

SUPPLY AND CONTROL CABLES (BETWEEN DOMESTIC SWITCHBOARD & CONTROL PANEL)

1. PUMP STATION AND CONTROL CABINET SHALL BE LOCATED NO FURTHER THAN 10 METER FROM EACH OTHER. CABLE JOINTS WILL NOT BE PERMITTED.
2. THE SUPPLY CABLE IS TO BE INSTALLED WITHIN A 32mm DIAMETER HD-PVC ORANGE ELECTRICAL CONDUIT. WHERE CONTROL CABLES ARE REQUIRED, THESE SHALL BE INSTALLED IN A SEPARATE 32mm DIAMETER CONDUIT. FLEXIBLE CONDUITS ARE NOT ACCEPTABLE. MINIMUM COVER TO ELECTRICAL CONDUITS SHALL BE 500mm IN NON-TRAFFICABLE AREAS & 600mm IN TRAFFICABLE AREAS.
3. LONG SWEEP RADIUS BENDS SHALL BE USED AT ALL CHANGES OF DIRECTION TO ENABLE EASY CABLE INSTALLATION AND MAINTENANCE. IF MORE THAN ONE PUMP IS TO BE INSTALLED, A SEPARATE CONDUIT SHALL BE PROVIDED FOR EACH PUMP.
4. CONDUIT PENETRATIONS INTO THE PUMP WELL SHALL BE SEALED WITH A RUBBER GROMMET OR FACTORY FITTED SEAL.
5. ALL ELECTRICAL CONDUITS SHALL BE PROVIDED WITH CORRECTLY SIZED CABLE GLANDS TO ENSURE THE VOID BETWEEN THE CABLE AND THE CONDUIT IS COMPLETELY SEALED.
6. ALL MECHANICAL PROTECTION ON PUMP & CONTROL CABLE CONDUITS MUST BE EASILY REMOVABLE.
7. A MINIMUM OF 1.5 METRES OF PUMP & CONTROL CABLE IS TO BE COILED & SUSPENDED IN THE PUMP WELL.
8. THE CONTRACTOR SHALL RUN ELECTRICAL MARKER TAPE 150mm BELOW THE FINISHED GROUND LEVEL DIRECTLY ABOVE THE CONDUITS FOR THE ENTIRE LENGTH OF THE CONDUIT. MARKER TAPE SHALL BE ORANGE IN COLOUR, 150mm WIDE & STAMPED WITH THE WORDS "DANGER - ELECTRICAL LINES BELOW" OR SIMILAR.

A AS CONSTRUCTED DRAWINGS

1. AS CONSTRUCTED DRAWINGS SHOWING THE POSITION OF THE PUMP STATION, GRAVITY PIPE WORK, PRESSURE PIPE WORK, BOUNDARY KIT, ELECTRICAL CONTROL PANEL & CABLES IN RELATION TO PROPERTY BOUNDARIES OR PERMANENT STRUCTURES SHALL BE SUBMITTED TO COUNCIL PRIOR TO COMMISSIONING.

ISSUE	AMENDMENT DETAILS	INITIALS	DATE
D	MINOR NOTE AMENDMENTS	S.K.J	03.2019
C	NOTES AMENDED	A.K.R.	09.2015
B	NOTES AMENDED & PLAN FORM UPGRADED	G.P.C.	06.2015
A	ORIGINAL ISSUE	J.P.	11.2006



DESIGN UNIT

COUNCIL OFFICES
TUMBULGUM ROAD,
MURWILLUMBAH,
NEW SOUTH WALES 2484

PHONE 02 6670 2400
FAX 02 6672 7513
WEBSITE www.tweed.nsw.gov.au

DESIGN ENGINEER	<i>Adw</i>	DATE 14.09.15
DESIGN MANAGER	<i>P. Hoyle</i>	DATE 14.09.15
DRAWN	ENGINEERING & OPERATIONS DESIGN UNIT	
SCALE	AS SHOWN	

PROJECT:	SEWERAGE WORKS STANDARDS	DRAWING NUMBER:	S.D. 260
PLAN TITLE:	PRESSURE SEWERAGE SYSTEMS PROPERTY SERVICE LAYOUT		SEP 2015

ACAD FILE No: G:_AAA TSC STANDARD DRAWINGS\200 SEWERAGE WORKS\S.D.260 (June-15 Rev B).dwg

