

STANDARD AND EXAMPLE DRAWINGS

DRAWING	ISSUE	TITLE
GENERAL		
CA01-1-1	E	EXAMPLE CATCHMENT PLAN - DESIGN BASIS
CA01-1-2	D	EXAMPLE PRESSURE MAIN CHARACTERISTIC CURVE
CA01-1-3-1	C	TYPE 10, 40 AND 90 PUMPING STATIONS COMMON SPECIFICATION NOTES – SHEET 1 OF 2
CA01-1-3-2	B	TYPE 10, 40 AND 90 PUMPING STATIONS COMMON SPECIFICATION NOTES – SHEET 2 OF 2
CA01-1-4	C	TYPE 10, 40, 90 AND 180 PUMPING STATIONS AND VALVE PITS PIPE SUPPORT STAND, VALVE SPINDLE EXTENSION & GUIDE DETAILS
SITE PLANS AND ACCESS ROAD		
CA01-3-1	L	TYPE 40 PUMPING STATION WITH VALVE PIT SITE PLAN
CA01-3-2	K	TYPE 90 PUMPING STATION SITE PLAN
CA01-3-3	I	TYPE 10 & TYPE 40 PUMPING STATION - NO VALVE PIT SITE PLAN
CA01-3-5	A	PUMPING STATION ACCESS ROAD – HAMMERHEAD ROAD FOR 12.5M TRUCK – EXAMPLE DRAWING
EMERGENCY STORAGE		
CA01-5-1	G	EMERGENCY STORAGE TANK DETAILS
CA01-5-3	G	TYPE 40 PUMPING STATIONS AND SMALLER EMERGENCY OVERFLOW DETAILS
CA01-5-4	G	TYPE 90 PUMPING STATIONS EMERGENCY OVERFLOW DETAILS
CA01-5-5	D	PUMPING STATIONS WITH PUMP RATE NOT EXCEEDING 14L/s, EMERGENCY OVERFLOW DETAILS – BUBBLE UP ACCESS CHAMBER DISCHARGE
CA01-5-6	E	TYPE 10 AND TYPE 40 PUMPING STATIONS AIR VENT ARRANGEMENT
CA01-5-7	F	TYPE 90 PUMPING STATIONS AIR VENT ARRANGEMENT
CA01-5-10	B	TYPE 10 AND TYPE 40 PUMPING STATIONS AIR VENT ARRANGEMENT – FENCED SITE
TYPE 6 PUMPING STATION		
CA01-8-1	F	GENERAL ARRANGEMENT AND DETAILS
TYPE 10 PUMPING STATION		
CA01-9-6	G	PUMP GUIDE RAIL SUPPORT, LIFTING CHAIN HOOK & LIFTING CHAIN DETAILS – WET WELL
CA01-9-8	I	INLET PIPE, ULTRASONIC SUPPORT & LANYARD DETAILS
CA01-9-20	K	NO VALVE PIT - GENERAL ARRANGEMENT
CA01-9-21	K	NO VALVE PIT - GENERAL ARRANGEMENT – DECONTACTOR

CA01-9-22	F	NO VALVE PIT - STRUCTURAL DETAILS – PRECAST COMPONENTS
CA01-9-23-1	K	PRECAST SLAB AND COVER – TEMPORARY GUARDRAIL SYSTEM
CA01-9-23-2	I	PRECAST SLAB AND COVER – PERMANENT GUARDRAIL SYSTEM
CA01-9-24	E	NO VALVE PIT - ELECTRICAL SLAB DETAILS
CA01-9-25	F	NO VALVE PIT - MISCELLANEOUS STEEL FABRICATION DETAILS
CA01-9-26	E	NO VALVE PIT - ELECTRICAL SLAB DETAILS – DECONTACTOR
CA01-9-27	F	NO VALVE PIT - STRUCTURAL DETAILS – PRECAST COMPONENTS - DECONTACTOR
CA01-9-28	E	CONTROL AND ALARM HOLE COVERS
TYPE 10 PUMPING STATION - PREVENTION OF FALLS		
CA01-9-29	G	GRATING ARRANGEMENT
CA01-9-30	F	GRATING DETAILS
CA01-9-31	C	WITH TEMPORARY GUARDRAIL SYSTEM – GUARDRAIL DETAILS
CA01-9-32	D	PERMANENT GUARDRAIL SYSTEM – GUARDRAIL DETAILS
TYPE 40 PUMPING STATION - DN150 PIPEWORK WITH VALVE PIT		
CA01-10-2-1	L	GENERAL ARRANGEMENT - DN150 PIPEWORK
CA01-10-5-1	H	STRUCTURAL DETAILS - PRECAST COMPONENTS
CA01-10-6-1	J	PRECAST SLABS AND COVERS – TEMPORARY GUARDRAIL SYSTEM
CA01-10-6-2	C	PRECAST SLABS AND COVERS – TEMPORARY GUARDRAIL - REINFORCEMENT
CA01-10-6-3	E	PRECAST SLABS AND COVERS – PERMANENT GUARDRAIL SYSTEM
CA01-10-6-4	C	PRECAST SLABS AND COVERS – PERMANENT GUARDRAIL - REINFORCEMENT
CA01-10-7-1	F	ELECTRICAL SLAB DETAILS
CA01-10-9-1	G	VALVE, CONTROL AND ALARM HOLE COVERS
CA01-10-10-1	H	MISCELLANEOUS STEEL FABRICATION DETAILS
CA01-10-11-1	F	PUMP GUIDE RAIL SUPPORT, LIFTING CHAIN HOOK & LIFTING CHAIN DETAILS – WET WELL
CA01-10-12-1	J	VALVE PIT DRAIN, INLET PIPE & LANYARD DETAILS
CA01-10-13-1	D	ELECTRICAL CABINET SLAB FOR MORE THAN 4 CABINETS
CA01-10-18-1	G	GENERAL ARRANGEMENT – GUIDE RAILS ALTERNATIVE ARRANGEMENT
TYPE 40 PUMPING STATION - PREVENTION OF FALLS		
CA01-10-14-1	F	TEMP AND PERM GUARDRAIL SYSTEM – GRATING ARRANGEMENT
CA01-10-14-2	A	VALVE PIT – TEMP AND PERM GUARDRAIL SYSTEM – GRATING ARRANGEMENT
CA01-10-15-1	F	WITH TEMP OR PERM GUARDRAIL SYSTEM – GRATING DETAILS

CA01-10-16-1	C	WITH TEMPORARY GUARDRAIL SYSTEM – GUARDRAIL DETAILS
CA01-10-17-1	E	PERMANENT GUARDRAIL SYSTEM – GUARDRAIL DETAILS
TYPE 40 PUMPING STATION - DN100 PIPEWORK WITHOUT VALVE PIT		
CA01-10-20-1	J	GENERAL ARRANGEMENT – DN100 PIPEWORK
CA01-10-21-1	F	STRUCTURAL DETAILS – PRECAST COMPONENTS
CA01-10-22-1	G	PRECAST SLABS AND COVERS – TEMPORARY GUARDRAIL SYSTEM
CA01-10-22-2	E	PRECAST SLABS AND COVERS – PERMANENT GUARDRAIL SYSTEM
CA01-10-23-1	D	ELECTRICAL SLAB DETAILS
CA01-10-24-1	E	MISCELLANEOUS STEEL FABRICATION DETAILS
TYPE 40 PUMPING STATIONS WITH ELECTRICAL DECONTACTOR DN150 PIPEWORK AND VALVE PIT		
CA01-15-3-1	G	STRUCTURAL DETAILS - PRECAST COMPONENTS
CA01-15-7-1	D	WITH ELECTRICAL DECONTACTOR 22KW TO 37KW ELECTRICAL SLAB DETAILS
CA01-15-8-1	I	WITH ELECTRICAL DECONTACTOR 22KW TO 37KW GENERAL ARRANGEMENT – DN150 PIPEWORK
TYPE 40 PUMPING STATION WITH ELECTRICAL DECONTACTOR DN100 PIPEWORK WITHOUT VALVE PIT		
CA01-15-20-1	I	ELECTRICAL DECONTACTOR UP TO 22KW GENERAL ARRANGEMENT NO. 1 – DN100 PIPEWORK
CA01-15-21-1	I	ELECTRICAL DECONTACTOR >22KW TO 37KW GENERAL ARRANGEMENT NO. 2 – DN100 PIPEWORK
CA01-15-22-1	E	STRUCTURAL DETAILS – PRECAST COMPONENTS
CA01-15-24-1	D	WITH ELECTRICAL DECONTACTOR UP TO 22KW ELECTRICAL SLAB DETAILS
CA01-15-25-1	D	WITH ELECTRICAL DECONTACTOR >22KW TO 37KW ELECTRICAL SLAB DETAILS
TYPE 90 PUMPING STATIONS		
CA01-5-8-1	B	ODOUR CONTROL DETAILS
CA01-20-1-1	K	PUMP WELL CAST INSITU – GENERAL ARRANGEMENT – SHEET 1 OF 2
CA01-20-1-2	G	PUMP WELL CAST INSITU – GENERAL ARRANGEMENT – SHEET 2 OF 2
CA01-20-3-1	G	PUMP WELL CAST INSITU – STRUCTURAL DETAILS
CA01-20-5-1	E	PUMP WELL CAST INSITU – REINFORCEMENT DETAILS
CA01-20-7-1	E	VALVE PIT CAST INSITU – STRUCTURAL AND REINFORCEMENT DETAILS
CA01-20-9-1	G	PUMP GUIDE RAIL SUPPORT, LIFTING CHAIN HOOK & LIFTING CHAIN DETAILS
CA01-20-12-1	F	MSCL PIPE SPECIALS
CA01-20-14-1	E	CONTROL AND ALARM HOLE COVERS
CA01-20-15-1	I	INLET PIPE, INLET TEE, VALVE PIT DRAIN, ULTRASONIC SUPPORT & LANYARD DETAILS
CA01-20-16-1	D	ELECTRICAL SLAB DETAILS

CA01-20-17-1	F	INLET ACCESS CHAMBER DETAILS
CA01-20-18-1	D	DN200 BYPASS PUMPING PIPEWORK FOR TYPE 90 PUMPING STATION – TYPICAL BYPASS PIT CONFIGURATION
CA01-20-20-1	F	PUMP WELL PRECAST – GENERAL ARRANGEMENT-SHEET 1 OF 2
CA01-20-20-2	F	PUMP WELL PRECAST – GENERAL ARRANGEMENT-SHEET 2 OF 2
CA01-20-21	D	PUMP WELL AND VALVE PIT PRECAST – STRUCTURAL DETAILS

TYPE 90 PUMPING STATIONS - PUMP WELL - PREVENTION OF FALLS		
CA01-20-8-1	H	PUMP WELL – TOP SLAB WITH TEMPORARY GUARDRAIL SYSTEM - ARRANGEMENT
CA01-20-8-2	D	PUMP WELL – TOP SLAB WITH TEMPORARY GUARDRAIL SYSTEM - REINFORCEMENT
CA01-20-8-3	E	PUMP WELL – TOP SLAB WITH PERMANENT GUARDRAIL SYSTEM - ARRANGEMENT
CA01-20-8-4	E	PUMP WELL – TOP SLAB WITH PERMANENT GUARDRAIL SYSTEM - REINFORCEMENT
CA01-20-19-1	C	GRATING ARRANGEMENT AND NOTES
CA01-20-19-2	C	GRATING DETAILS
CA01-20-19-3	C	WITH TEMPORARY GUARDRAIL SYSTEM – GUARDRAIL DETAILS
CA01-20-19-4	E	WITH PERMANENT GUARDRAIL SYSTEM – GUARDRAIL DETAILS & NOTES

TYPE 90 PUMPING STATIONS – VALVE PIT - PREVENTION OF FALLS		
CA01-20-7-2	D	VALVE PIT – CIRCULAR – PRECAST SLAB AND COVERS – STRUCTURAL DETAILS – TEMPORARY GUARDRAIL SYSTEM
CA01-20-7-3	C	VALVE PIT – CIRCULAR – PRECAST SLAB AND COVERS – REINFORCEMENT – TEMPORARY GUARDRAIL SYSTEM
CA01-20-7-4	D	VALVE PIT – CIRCULAR – PRECAST SLAB AND COVERS – STRUCTURAL DETAILS – PERMANENT GUARDRAIL SYSTEM
CA01-20-7-5	C	VALVE PIT – CIRCULAR – PRECAST SLAB AND COVERS – REINFORCEMENT – PERMANENT GUARDRAIL SYSTEM
CA01-20-23-1	E	TEMP & PERM GUARDRAIL SYSTEM – GRATING ARRANGEMENT
CA01-20-24-1	E	WITH TEMP OR PERM GUARDRAIL SYSTEM – GRATING DETAILS
CA01-20-25-1	B	TEMPORARY GUARDRAIL SYSTEM – GUARDRAIL DETAILS
CA01-20-26-1	D	PERMANENT GUARDRAIL SYSTEM – GUARDRAIL DETAILS

PRESSURE MAINS (AIR/SCOUR/NON-RETURN VALVE AND FLOWMETER PIT ARRANGEMENTS)		
CA01-52-2	F	DN300 PRESSURE MAINS (OTHER THAN PE) - AIR VALVE ARRANGEMENT AND DETAILS

CA01-52-3	F	DN375/400 PRESSURE MAINS (OTHER THAN PE) - AIR VALVE ARRANGEMENT AND DETAILS
CA01-52-5	E	DN315, 355, 450, 560 & 630 PE PRESSURE MAINS - AIR VALVE ARRANGEMENT AND DETAILS
CA01-53-1	A	DN125, 180, 315, 355 & 450 PE PRESSURE MAINS – SWING CHECK NON-RETURN VALVE ARRANGEMENT & DETAILS
CA01-54-2	F	DN200 TO DN300 PRESSURE MAINS (OTHER THAN PE) - SCOUR VALVES - DEEP VALVE PIT (DEPTH TO IL 2.3M AND GREATER)
CA01-54-3	F	DN200 TO DN300 PRESSURE MAINS (OTHER THAN PE) - SCOUR VALVES - SHALLOW VALVE PIT (DEPTH TO IL LESS THAN 2.3M)
CA01-54-4	F	DN375/400 PRESSURE MAINS - SCOUR VALVES (OTHER THAN PE) - SHALLOW VALVE PIT (DEPTH TO IL LESS THAN 2.3M)
CA01-54-5	F	DN375/400 PRESSURE MAINS - SCOUR VALVES (OTHER THAN PE) - DEEP VALVE PIT (DEPTH TO IL 2.3M AND GREATER)
CA01-54-7	E	DN250 - DN630 PE PRESSURE MAINS - SCOUR VALVES - DEEP VALVE PIT (DEPTH TO IL 2.3M AND GREATER)
CA01-54-8	E	DN250 TO DN630 PE PRESSURE MAINS - SCOUR VALVES - SHALLOW VALVE PIT (DEPTH TO IL LESS THAN 2.3M)
CA01-56-2-1	B	TYPE 90 PUMPING STATIONS, MOBILE PUMP CONNECTION AND AIR RELEASE POINT CANCELLED (REFER TO CA01-020-018)
CA01-57-1-1	C	MAGNETIC FLOW METER INSTALLATION – SHALLOW ARRANGEMENT
CA01-57-2-1	C	MAGNETIC FLOW METER INSTALLATION – DEEP ARRANGEMENT
PRESSURE MAINS (AIR AND SCOUR VALVE ARRANGEMENTS - NO PITS)		
CA01-52-1-1	D	DN80 TO DN250 PRESSURE MAINS –OTHER THAN PE - AIR RELEASE POINT ARRANGEMENT & DETAILS
CA01-52-4-1	B	DN125, DN180 & DN250 PE PRESSURE MAINS - AIR RELEASE POINT ARRANGEMENT & DETAILS
CA01-54-1-1	E	DN80 TO DN150 PRESSURE MAINS (OTHER THAN PE) – SCOUR POINTS - ARRANGEMENT WITHOUT VALVE PIT (DEPTH TO IL LESS THAN 4M)
CA01-54-6-1	C	DN125 & DN180 PE PRESSURE MAINS - SCOUR POINTS - ARRANGEMENT WITHOUT VALVE PIT (DEPTH TO IL LESS THAN 4M)
CA01-56-1-1	D	TYPE 10 AND TYPE 40 PUMPING STATIONS, MOBILE PUMP CONNECTION AND AIR RELEASE POINT
CA01-56-4-1	B	PRESSURE MAINS DN100 TO DN300 BYPASS PUMPING PIPEWORK – TYPICAL BYPASS PIT CONFIGURATION
CA01-56-5-1	B	PRESSURE MAINS DN100 TO DN300 BYPASS PUMPING PIPEWORK – FABRICATION AND SLUICE VALVE INSTALLATION DETAILS
PRESSURE MAINS (PIPELINES)		

CA01-60-1-1	D	PRESSURE MAINS - DN375 AND SMALLER, THRUST BLOCK AND TRENCH REFILL DETAILS
REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE		
CA01-70-1-1	L	ARRANGEMENT AND INSTALLATION DETAILS – FENCED SITE
CA01-70-1-2	F	ARRANGEMENT AND INSTALLATION DETAILS – UNFENCED SITE
CA01-70-3-1	E	RPZ ENCLOSURE – CAGE FABRICATION
EMERGENCY BACKUP GENERATOR - CONCRETE PAD		
CA01-80-1-1	B	STRUCTURAL DETAILS
INLET SEWER SEALING DETAILS		
CA01-58-1-1	A	INLET SEWER SEALING DETAILS
PIPELINE STANDARD AND EXAMPLE DRAWINGS		
LJ01-2-1-1	C	PE PIPE TO PVC PIPE CONNECTION PE PIPE SIZES DN125 TO DN450
LJ01-3-1-1	B	PE PIPELINE FITTING CONFIGURATION NOMINAL ECCENTRIC TEE DIMENSIONS
LJ01-3-2	A	VARIOUS PS TYPES (DN225 PVC INLET PIPE EXAMPLE) – INLET KNIFE GATE VALVE RETROFIT
LJ01-4-1-1	B	TRENCHLESS INSTALLATION OF PRESSURE MAINS AT CROSSINGS OF ROADS,RAILWAYS AND WATERWAYS - WASTEWATER CONVEYANCE ONLY

MARKER POST AND SIGNAGE STANDARD DRAWINGS		
KA76-1-1-1	F	ASSET IDENTIFICATION - MARKER POST TYPICAL DETAILS
KA76-1-2-1	G	PIPELINE - MARKER POST TYPICAL DETAILS