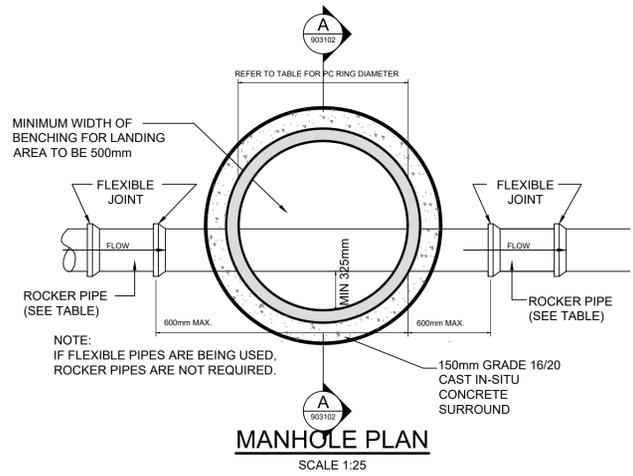


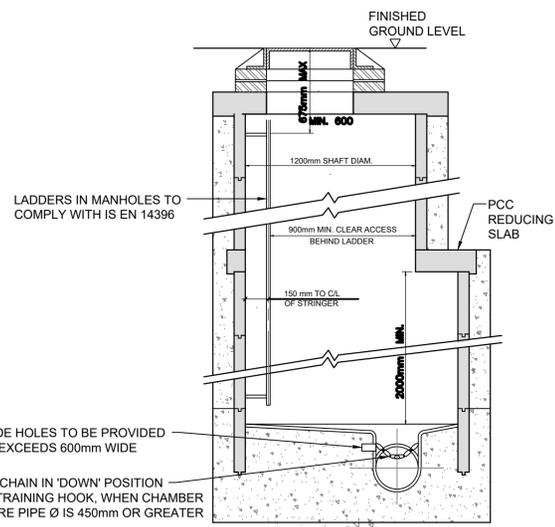
A1

DO NOT SCALE

File: PEK3-ATK-ZZ-01-DR-CE-903102.dwg  
Date: Jan 29, 2024 - 4:38pm  
Plotted by: SHER8400



MANHOLE PLAN  
SCALE 1:25

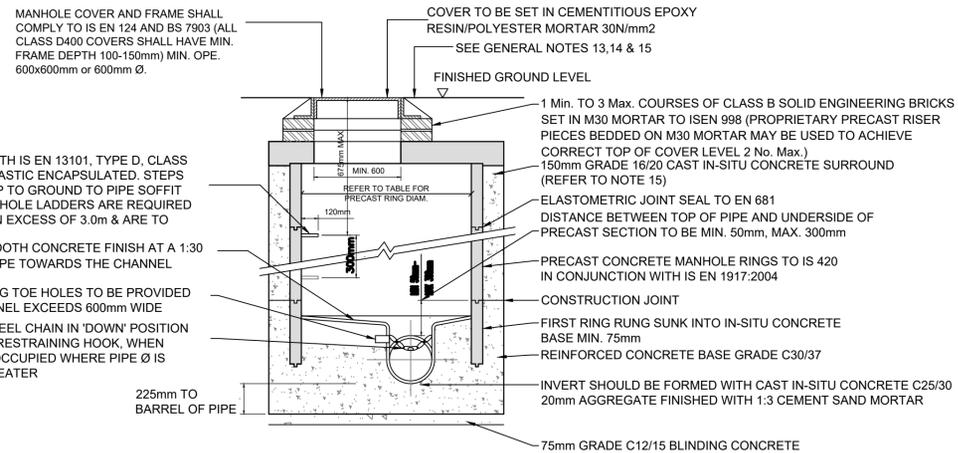


MANHOLE DETAIL GREATER THAN 3m & LESS THAN 6m, GROUND TO SOFFIT DEPTH  
scale 1:25

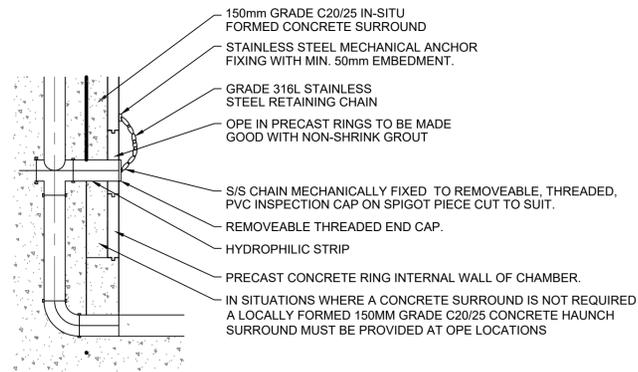
MINIMUM MANHOLE DIAMETERS			
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)	MIN. PRECAST ROOF SLAB EFFECTIVE THICKNESS (mm)	MIN. IN-SITU ROOF SLAB THICKNESS (mm)
LESS THAN 375	1000	100	225
375 TO 450	1200	100	225
450 TO 750	1600	170	225

ROCKER PIPE LENGTH	
PIPE DIAMETER (mm)	ROCKER PIPE LENGTH (mm)
150 TO 600	600
GREATER THAN 600 TO 750	1000
GREATER THAN 750	1250

SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS. MANHOLE SIZE OF THESE CHAMBERS MAY BE REQUIRED DUE TO MULTIPLE PIPES WITHIN MANHOLE.



MANHOLE DETAIL  
SECTION A-A SCALE 1:25



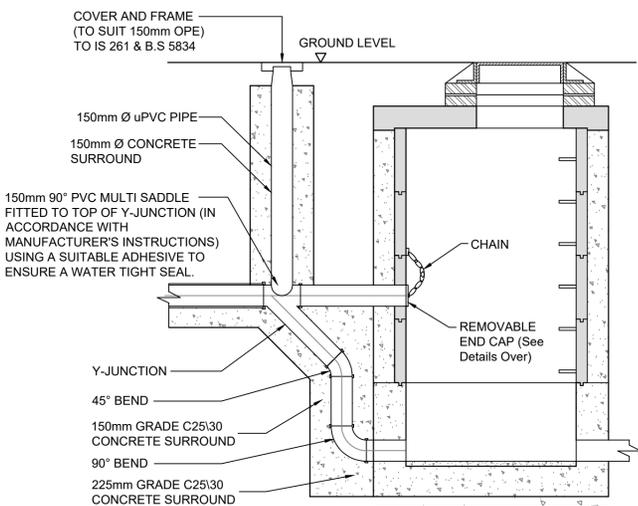
RODDING EYE END CAP DETAIL  
SCALE 1:25

MANHOLE STEPS TO COMPLY WITH IS EN 13101, TYPE D, CLASS 1, GALVANISED MILD STEEL & PLASTIC ENCAPSULATED. STEPS ARE REQUIRED IN MANHOLES UP TO GROUND TO PIPE SOFFIT DEPTH OF LESS THAN 3.0m. MANHOLE LADDERS ARE REQUIRED FOR MANHOLES WITH A DEPTH IN EXCESS OF 3.0m & ARE TO COMPLY WITH IS EN 14396.

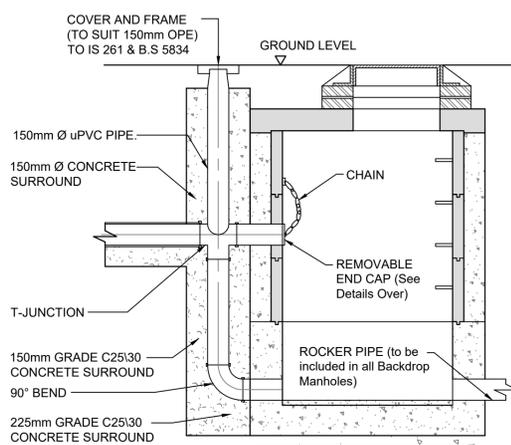
SMOOTH CONCRETE FINISH AT A 1:30 SLOPE TOWARDS THE CHANNEL

SELF CLEANING TOE HOLES TO BE PROVIDED WHERE CHANNEL EXCEEDS 600mm WIDE  
STAINLESS STEEL CHAIN IN 'DOWN' POSITION SECURED TO RESTRAINING HOOK, WHEN CHAMBER IS OCCUPIED WHERE PIPE Ø IS 450mm OR GREATER

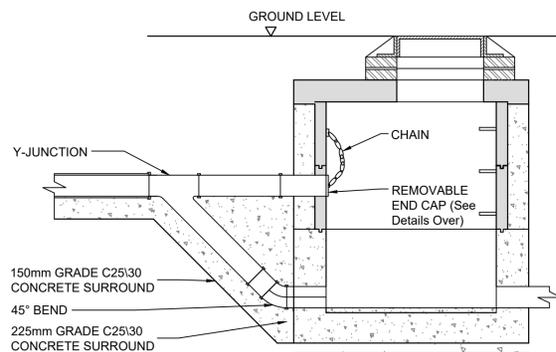
BACKDROP & CASCADE MANHOLE DETAILS



BACKDROP MANHOLE DETAIL TYPE 1  
SCALE 1:25

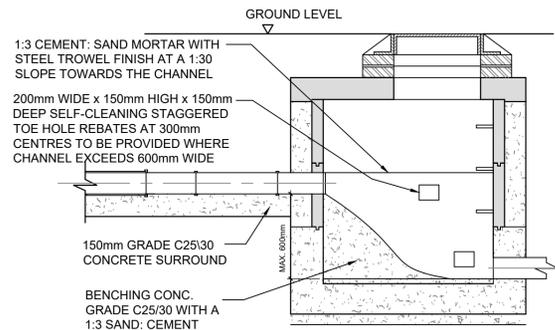


BACKDROP MANHOLE DETAIL TYPE 2  
SCALE 1:25



BACKDROP MANHOLE DETAIL TYPE 3  
SCALE 1:25

150mm - 450mm DIA. (INCL.) DROP GREATER THAN 600mm AND LESS THAN 1700mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 900 AND LESS THAN 1700mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 1300mm AND LESS THAN 2300mm  
(SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS.)



TYPE No.4 CASCADE MANHOLE  
SCALE 1:25

150mm - 450mm DIA. (INCL.) DROP GREATER THAN 600mm AND LESS THAN 1700mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 900 AND LESS THAN 1700mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 1300mm AND LESS THAN 2300mm  
(SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS.)

0 250 500 1000 1500 2000 2500mm  
SCALE 1:25 @ A1; 1:50 @ A3

- GENERAL NOTES**
- ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE
  - ONLY WRITTEN DIMENSIONS SHALL BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS
  - ALL LEVELS ARE IN METERS AND ARE TO MALIN HEAD DATUM
  - ALL COORDINATES ARE IN METERS AND ARE TO IRISH TRANSVERSE MERCATOR
  - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION
  - THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSES OF THE PLANNING APPLICATION AND IS SUBJECT TO DETAILED DESIGN.

- MANHOLE GENERAL NOTES**
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
  - PRE-CAST MANHOLES UNITS: COMPLYING WITH REQUIREMENTS OF IS EN 1917 AND IS 420.
  - THICKER MANHOLE BASES REQUIRED FOR SEWERS IN EXCESS OF 3m DEEP WHERE THE SIZE IS GREATER THAN THE STANDARD MINIMUM SIZE
  - APPROVED PRE-CAST CONCRETE BASES MAY BE USED INCORPORATING CHANNELS, BENCHING ETC. SUBJECT TO ENGINEER REVIEW AND COMPLYING WITH IS EN 1719 AND IS 420.
  - STRUCTURAL DESIGN AND REINFORCEMENT DETAILS TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO ENGINEER FOR REVIEW.
  - MANHOLES GREATER THAN 3m IN DEPTH WILL REQUIRE A DETAILED STRUCTURAL DESIGN AND BE SUBJECT TO ENGINEER REVIEW.
  - MANHOLE ROOFS SHALL CONSIST OF A RE-INFORCED CONCRETE SLAB OF IN-SITU CONCRETE, C30/37, WITH A MINIMUM THICKNESS OF 225mm DESIGNED TO CARRY ALL LIVE AND DEAD LOADS. ALTERNATIVELY, APPROVED PRE-CAST CONCRETE ROOF SLABS MAY BE USED SUBJECT TO ENGINEER REVIEW AND COMPLIANCE WITH IS EN 1917.
  - COVERS AND FRAMES SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO REVIEW BY ENGINEER.
  - 200mm ALL AROUND x 100mm DEEP, C20/25 CONCRETE PLINTH COMPLETE WITH BULL NOSE FINISH AND TO BE PROVIDED COMPLETE WITH MILD STEEL REINFORCEMENT LINK AROUND COVERS IN GREEN AREAS.
  - ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY ENGINEER.
  - ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206: 2013.
  - ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
  - NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS
  - EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.
  - IF DEPTH FROM GROUND TO PIPE SOFFIT IS GREATER THAN 6m DEEP, A SITE SPECIFIC ENGINEERED SOLUTION FOR ACCESS SHALL BE PROVIDED.
  - PROPRIETARY WATERTIGHT PCC MANHOLE RING SYSTEMS WITH A WALL THICKNESS > 125mm, & A WATER TIGHT JOINT SEALING SYSTEM, MAY BE USED WITHOUT CONCRETE SURROUND, SUBJECT TO THE GROUND WATER LEVEL AT THE MANHOLE BEING LOW, & SUBJECT TO REVIEW BY ENGINEER
  - THE INTERNAL MANHOLE DIAMETERS SHOWN IN THE TABLE BELOW ARE MINIMUM DIMENSIONS AND WILL INCREASE DEPENDING ON THE NUMBER AND DIAMETER OF ADDITIONAL INLETS AND FINISHED WITH A 1:3 SAND/CEMENT FINISH TO SUIT FLOW OF INLETS AND OUTLET

- BACKDROP MANHOLE GENERAL NOTES**
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
  - RODDING EYE VERTICAL PIPE SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 AND BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY THE ENGINEER.
  - ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY THE ENGINEER.
  - ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
  - ALL BACKDROPS SHOULD TERMINATE AT THEIR LOWER END WITH A BEND INTO THE MAIN CHANNEL TO ENSURE THE DISCHARGE IS 45° OR LESS ON PLAN.
  - 200mm ALL AROUND x 100mm DEEP, C20/25 CONCRETE PLINTH COMPLETE WITH BULL NOSE FINISH AND TO BE PROVIDED COMPLETE WITH MILD STEEL REINFORCEMENT LINK AROUND COVERS IN GREEN AREAS

150mm - 450mm DIA. (INCL.) DROP GREATER THAN 1700mm & LESS THAN 2300mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 1300mm AND LESS THAN 3000mm  
SURVEY IRELAND & GOVERNMENT OF IRELAND  
REFER TO OSI SHEETS 3220-B, 3220-D, 3221-A, 3221-B, 3221-C & 3221-D

150mm - 450mm DIA. (INCL.) DROP GREATER THAN 900 AND LESS THAN 1700mm  
150mm - 900mm DIA. (INCL.) DROP GREATER THAN 1300mm AND LESS THAN 2300mm  
(SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS.)

Rev	Description	By	Date	Chk'd	Auth
0	ISSUED FOR PLANNING	PS	01.12.25	ND	AJB



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ATKINS HOUSE, 150 AIRSIDE BUSINESS PARK,  
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Client  
Project  
**CASHLA PEAKER PLANT**  
Rathmorrissey and Pollnagroagh  
(Townlands), Atherny, Co. Galway.

Purpose		PLANNING					
Title		TYPICAL DETAILS - SHEET 02 MANHOLE DETAILS					
Original Scale	AS SHOWN at A1	Design/Drawn	PS	Checked	ND	Authorised	AJB
Date	01.12.25	Date	01.12.25	Date	01.12.25		
Status	A2	Drawing Number	PEK3-ATK-ZZ-01-DR-CE-903102	Rev			
							0