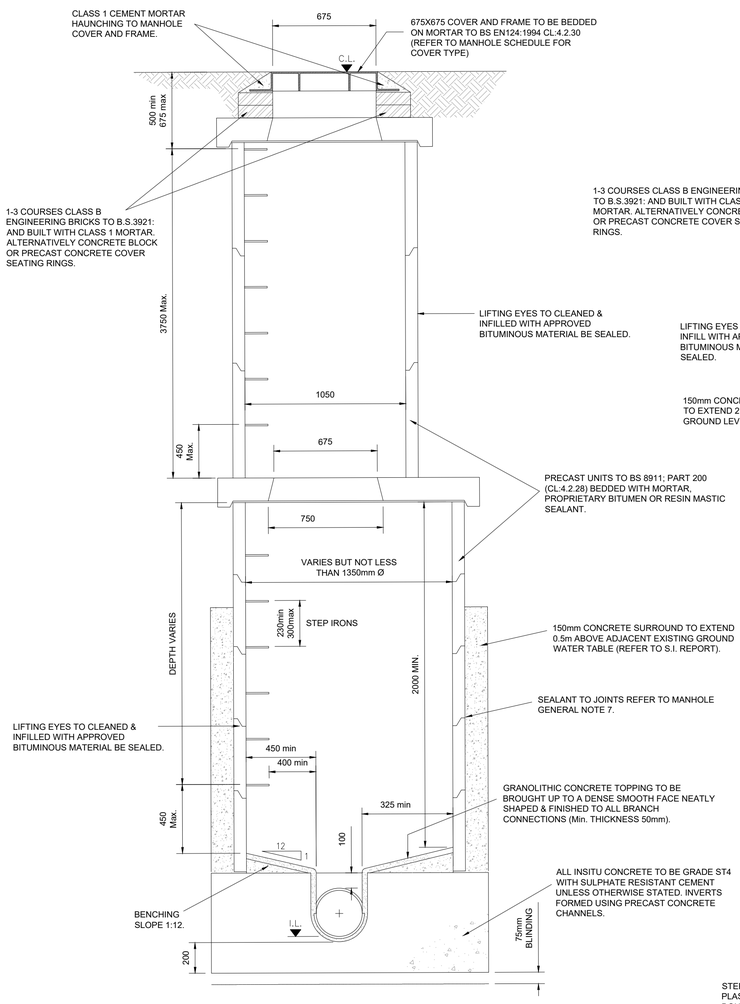
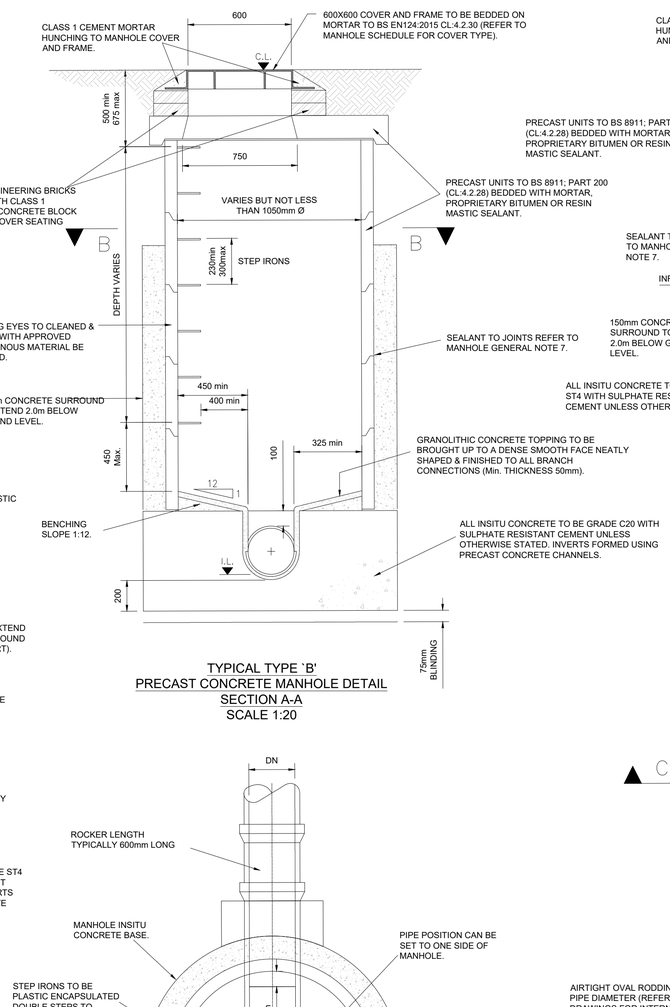
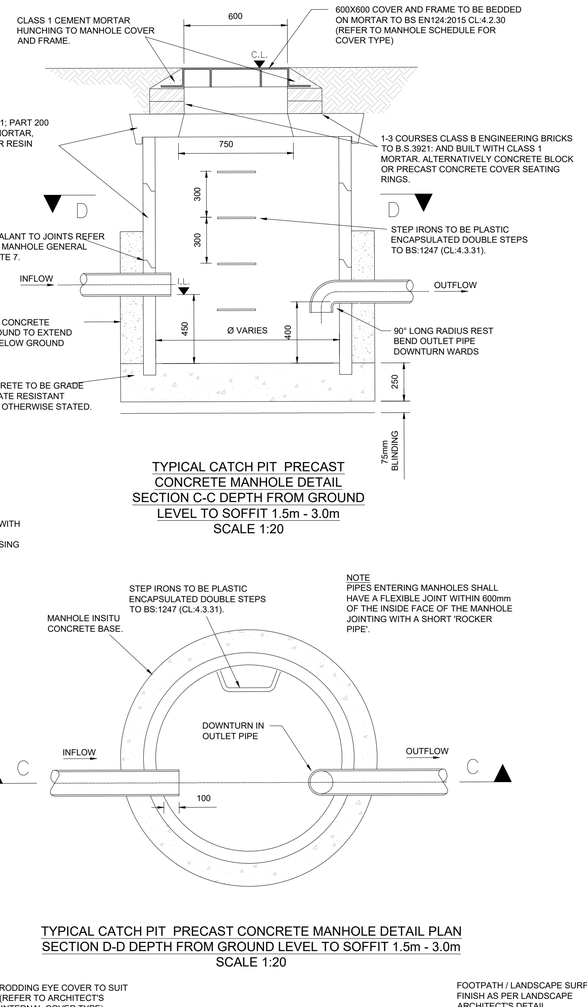


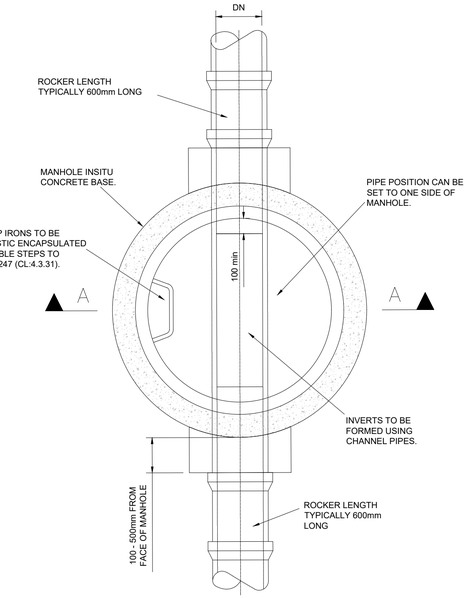
TYPICAL TYPE A1 PRECAST CONCRETE MANHOLE
SCALE 1:20



TYPICAL TYPE `B'
PRECAST CONCRETE MANHOLE DETAIL
SECTION A-A
SCALE 1:20

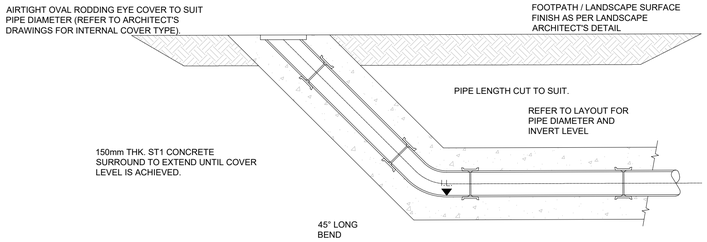


TYPICAL CATCH PIT PRECAST CONCRETE MANHOLE DETAIL
SECTION C-C DEPTH FROM GROUND LEVEL TO SOFFIT 1.5m - 3.0m
SCALE 1:20

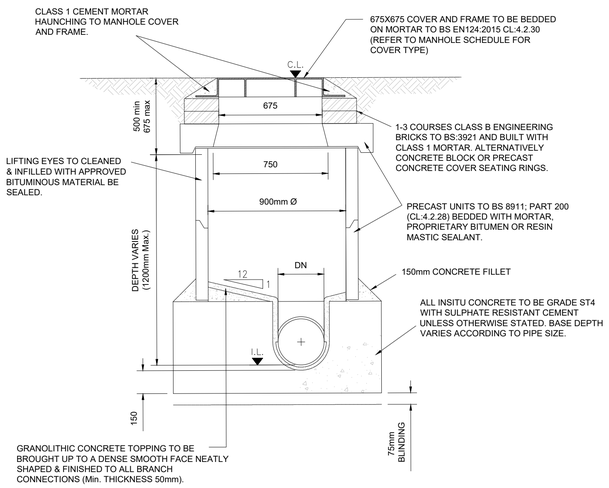


TYPICAL TYPE `B' PRECAST CONCRETE MANHOLE DETAIL
PLAN SECTION B-B
DEPTH FROM GROUND LEVEL TO SOFFIT 1.5m - 3.0m
SCALE 1:20

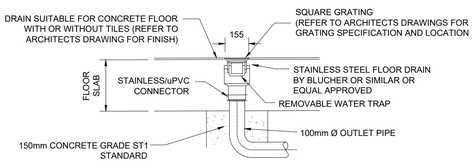
TYPICAL CATCH PIT PRECAST CONCRETE MANHOLE DETAIL PLAN
SECTION D-D DEPTH FROM GROUND LEVEL TO SOFFIT 1.5m - 3.0m
SCALE 1:20



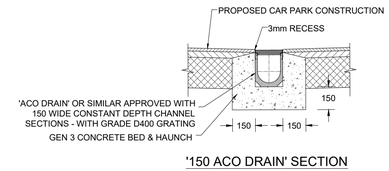
TYPICAL RODDING EYE DETAIL NON-TRAFFICKED AREAS
SCALE 1:20



TYPICAL PRECAST MANHOLE INSPECTION CHAMBER
DEPTH FROM GROUND LEVEL TO SOFFIT 1.2m - 1.5m
SCALE 1:20



FLOOR GULLY
SCALE 1:20



'150 ACO DRAIN' SECTION
NTS

NOTES:

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT AND ENGINEER DRAWINGS & SPECIFICATION NOTES.

DO NOT SCALE. USE FIGURED DIMENSIONS ONLY. ATKINSRÉALIS DRAWINGS ARE FOR CIVIL INFORMATION. FOR ALL SETTING OUT DIMENSIONS AND DETAILS REFER TO ARCHITECTS DRAWINGS.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

MAINTENANCE AND CLEANING

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

DECOMMISSIONING AND DEMOLITION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

GENERAL MANHOLE NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT CODES OF PRACTICE AND BRITISH STANDARDS IN COMPLAISANCE WITH BUILDING CONTROL AND SEPA REGULATIONS.
2. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS.
3. MANHOLE COVERS WITHIN TRAFFICKED AREAS TO BE SAINT-GOBAIN, INTER-AX D400-N, HEAVY DUTY, DOUBLE TRIANGULAR, DUCTILE IRON TO BS:EN 124, 600x600 CLEAR OPENING, NON ROCK, LOCKABLE COVER OR EQUAL APPROVED.
4. MANHOLE COVERS IN AREAS ACCESSIBLE TO PEDESTRIANS ONLY TO BE SAINT-GOBAIN, TROJAN MEDIUM DUTY B125, SINGLE PIECE, DUCTILE IRON TO BS:EN 124, 600x600 CLEAR OPENING, SCREW DOWN COVER OR EQUAL APPROVED.
5. ALL MANHOLE & ACCESS COVERS WITHIN BUILDING FOOTPRINT TO BE DOUBLED SEALED. COVERS IN OPEN SPACE TO BE VENTILATED. REFER TO MANHOLE SCHEDULE FOR TYPE AND LOCATION.
6. FIRST FLEXIBLE JOINTS IN PIPES ADJACENT TO A MANHOLE SHALL BE A MAXIMUM OF 600mm FROM INSIDE FACE OF MANHOLE, CONNECTING TO ROCKER PIPE. REFER TO MANHOLE DIMENSIONS TABLE FOR ROCKER PIPE LENGTH.
7. MANHOLE CHAMBERS RINGS SHALL BE PRECAST UNITS TO BS:8911;PART 200 (CL:4.2.28) BEDDED WITH MORTAR, PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT OR OTHER SIMILAR APPROVED MATERIAL APPLIED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
8. THE LOWEST CHAMBER RING BEARING ON THE FOUNDATION AND THE HIGHEST CHAMBER RING RECEIVING THE COVER SLAB SHALL HAVE PLAIN ENDS AND BE BEDDED IN MORTAR.
9. MANHOLE ACCESS HOLE AND STEP IRON POSITIONS TO BE LOCATED TO GIVE GREATEST FREE AREAS OF BENCHING IMMEDIATELY BELOW.
10. STEP IRONS NOT TO PROTRUDE INTO 675 SQUARE ACCESS OPENING SHAFT COVER SLAB. STEP IRONS TO BE PLASTIC ENCAPSULATED DOUBLE STEPS TO BS:1247 (CL:4.3.31).
11. TOP STEP IRON TO BE LOCATED NOT LESS THAN 500 AND NOT GREATER THAN 675 FROM THE FINISHED MANHOLE COVER LEVEL.
12. CONCRETE FOUNDATION TO BE SCRABBLED BEFORE PLACING BENCHING.
13. WHERE OUTLET PIPE DIAMETER IS GREATER THAN INLET, PIPE SOFFIT TO BE THE SAME LEVEL UNLESS NOTED OTHERWISE. A MINIMUM FALL OF 50mm SHOULD BE ACHIEVED ACROSS MANHOLE IN DIRECTION OF FLOW
14. GRANOLITHIC CONCRETE TOPPING TO BE BROUGHT UP TO A DENSE SMOOTH FACE NEATLY SHAPED & FINISHED TO ALL BRANCH CONNECTIONS (Min. THICKNESS 50mm).
15. BENCHING SHALL BE TROWEL SMOOTH AND SLOPED TOWARDS THE CHANNEL AT 1 IN 12.
16. SELF CLEANING TOE HOLES TO BE PROVIDED WHERE CHANNELS EXCEED 600mm WIDE.
17. BRANCH BENDS AND BENCHING TO BE CURVED IN THE DIRECTION OF FLOW AND FORMED FROM GRANOLITHIC CONCRETE, HIGH STRENGTH CONCRETE TOPPING OR WITH GRADE ST4 CONCRETE TOWELED SMOOTH MONOLITHICALLY WITH THE BASE SLAB.
18. MANHOLES WITH OUTGOING PIPES GREATER THAN 450mm DIAMETER SHALL BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
19. ALL PRECAST CONCRETE PRODUCTS (i.e. PIPES, MANHOLE RINGS etc.) SHALL BE TO DESIGN SULPHATE CLASS DS-2 AND CHEMICAL DESIGN DC-3, IN ACCORDANCE WITH BRE SPECIAL DIGEST 1 AND BS:5911.
20. REFER TO SITE INVESTIGATION REPORT OR STRUCTURAL FOUNDATION DRAWINGS FOR IN-STU CONCRETE SULPHATE CLASSIFICATION.

Rev	Description	By	Chk'd	App'd	Date
P01	STAGE 3 ISSUE	CON	TT	CC	29/07/2024

Drawing Status: PLANNING
Suitability: S4

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Client: MANCHESTER CITY COUNCIL

Project Title: CENTRAL RETAIL PARK

Drawing Title: TYPICAL DRAINAGE DETAILS

Scale	Designed	Drawn	Checked	Authorised
AS SHOWN	CON	CON	TT	CC
Original Size	Date	Date	Date	Date
A1	18/01/2024	31/01/2024	01/02/2024	01/02/2024

Drawing Number: 5224911-ATK-XX-DR-CE-711002
Revision: P01

ATKINSRÉALIS PROJECT NUMBER: 5211569