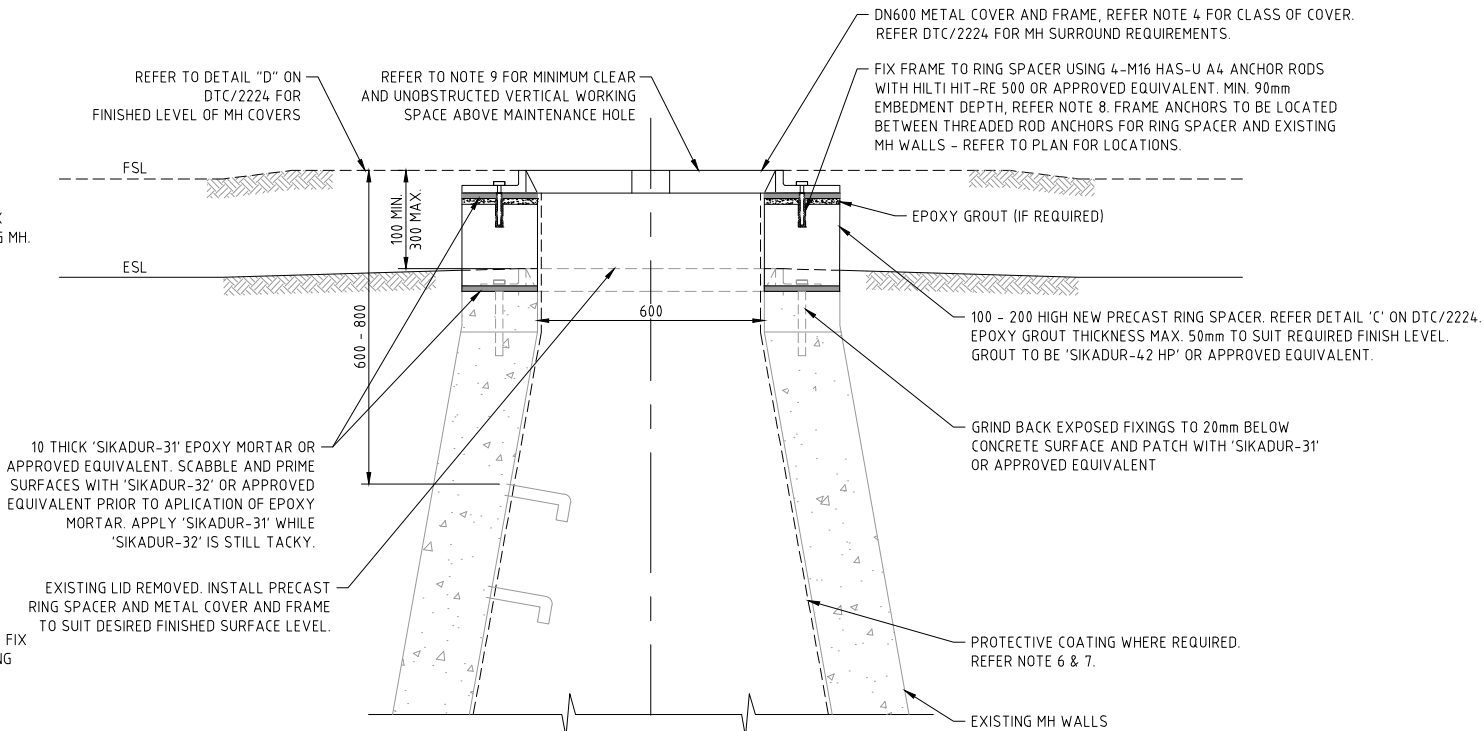
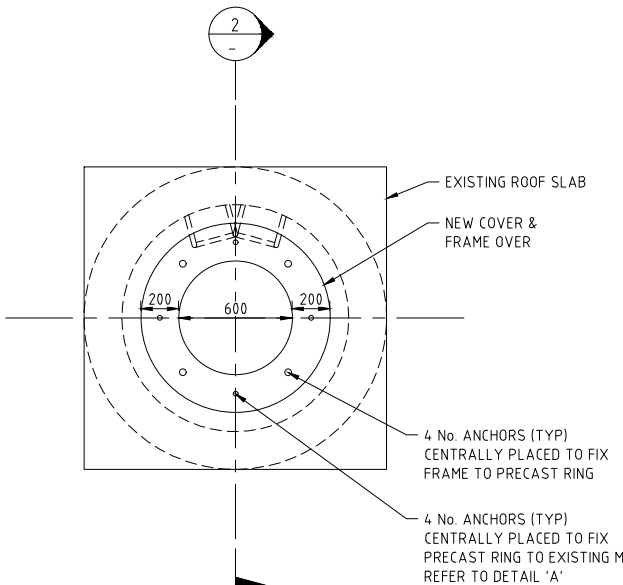


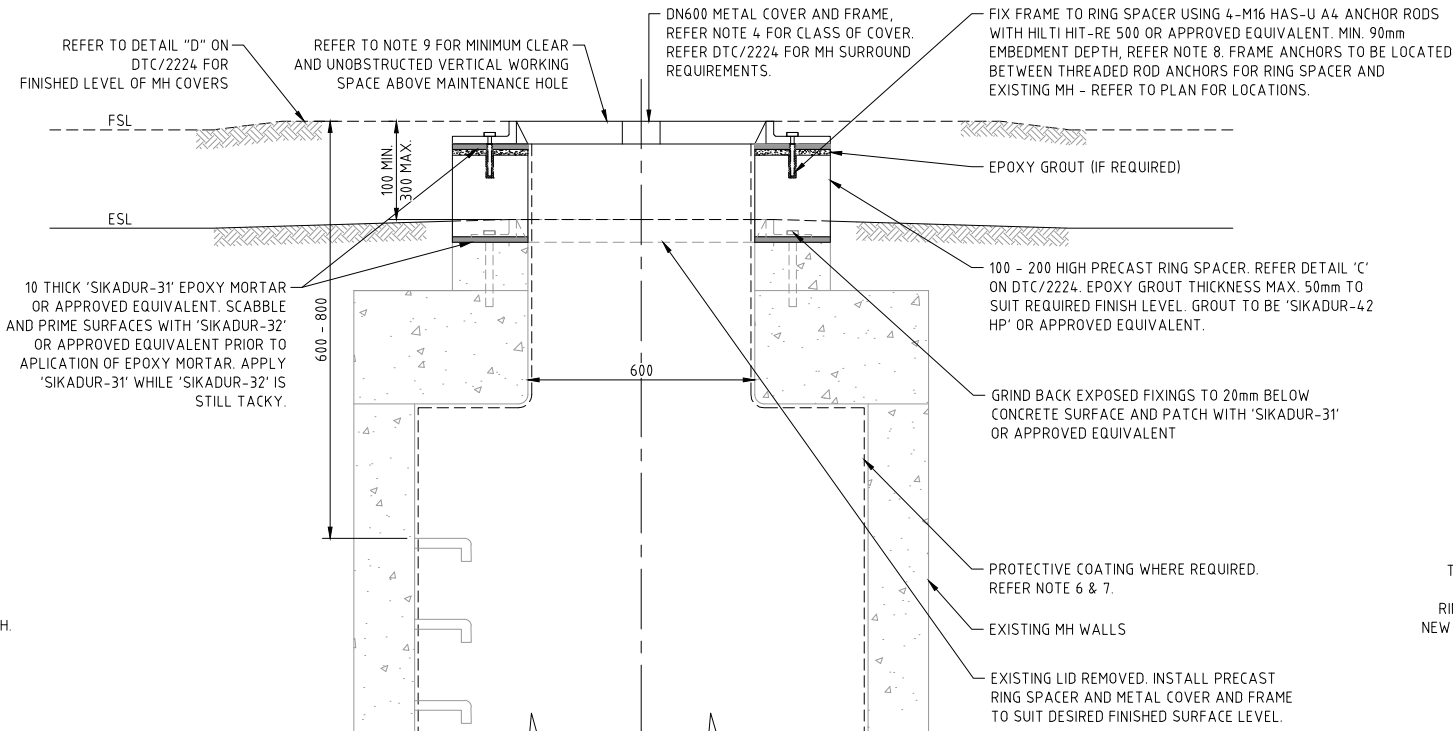
CONICAL MAINTENANCE HOLE - PLAN  
SCALE 1:20  
EXISTING PIPE WORK AND EXISTING BASE SLAB  
NOT SHOWN FOR CLARITY



SECTION 1  
SCALE - 1:10  
CONICAL MAINTENANCE HOLE - RAISING BY  $\leq 300\text{mm}$



CYLINDRICAL MAINTENANCE HOLE - PLAN  
SCALE 1:20  
EXISTING PIPE WORK AND EXISTING BASE SLAB  
NOT SHOWN FOR CLARITY



SECTION 2  
SCALE - 1:10  
CYLINDRICAL MAINTENANCE HOLE - RAISING BY  $\leq 300\text{mm}$

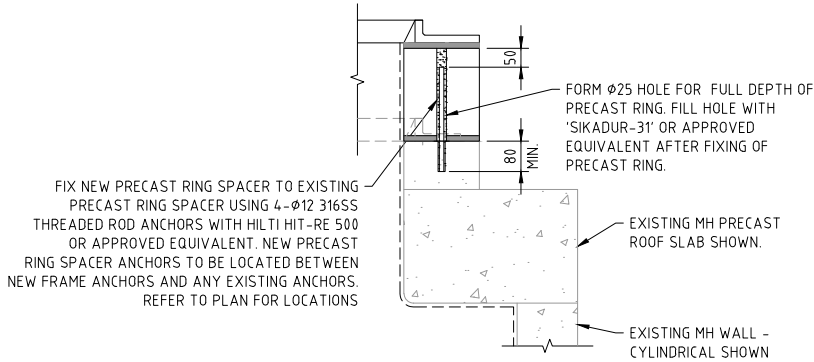
THIS DRAWING MAY ONLY BE USED IN THE COURSE OF AND FOR THE PURPOSE OF CREATING SYDNEY WATER ASSETS. USE THIS DRAWING WITH CARE. THE USER IS RESPONSIBLE FOR THE CORRECT APPLICATION OF THIS DRAWING. DEEMED TO COMPLY DRAWINGS ARE SUBJECT TO TERMS AND CONDITIONS OF USE AS PUBLISHED BY SYDNEY WATER.

NOTES:

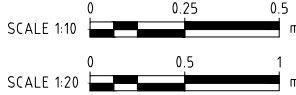
- ALL WORKS TO BE IN ACCORDANCE WITH SYDNEY WATER TECHNICAL SPECIFICATION - CIVIL UNO.
  - ALL PIPES/FITTINGS/VALVES/OTHER PRODUCTS TO BE IN ACCORDANCE WITH EPS 500 OR EPS 501 UNO.
  - ALL CONSTRUCTION JOINTS TO BE SCABBLED TO EXPOSE AGGREGATE AND CLEANED WITH A WIRE BRUSH. SATURATE SURFACE WITH WATER AND REMOVE EXCESS WATER PRIOR TO CASTING.
  - THE DESIGN IS SUITABLE FOR THE AREAS DESCRIBED BELOW. THE LOADING FOR THE LOWERED MAINTENANCE HOLE MUST NOT EXCEED THE LOADING FOR THE EXISTING MAINTENANCE HOLE.
- CLASS B COVER**  
AREAS WITHIN PRIVATE PROPERTIES, AND PUBLIC PLACES, PEDESTRIAN MALLS AND FOOTWAYS NOT SUBJECTED TO VEHICULAR LOADING AND PREVENTED FROM ACCIDENTAL VEHICLE LOADING BY MEANS OF PHYSICAL BARRIERS (e.g. BOLLARDS, TRAFFIC BARRIERS, OR KERBS HIGHER THAN 300mm).
- CLASS D COVER**  
FOOTWAY AND DRIVEWAYS IN AREAS ZONED RESIDENTIAL NOT RESTRICTED TO VEHICLES, PARKLAND WITH NO RESTRICTION TO VEHICULAR ACCESS AND ROAD CARRIAGEWAYS & DRIVEWAYS WITH A TRAFFIC LOAD UP TO W80 WHEEL LOAD AND A160 AXLE LOAD.
- COMPETENT STRUCTURAL ENGINEER MUST COMPLETE A SITE-SPECIFIC STRUCTURAL ASSESSMENT OF THE EXISTING MAINTENANCE HOLE, INCLUDING A CONDITION ASSESSMENT PRIOR TO CONSTRUCTION, TO SATISFY THE NECESSARY LOADING AS SET OUT IN NOTE 4. FINDINGS OF STRUCTURAL ASSESSMENT MUST BE DOCUMENTED IN A REPORT. IF EXISTING MH IS FOUND TO BE UNSUITABLE FOR RAISING, CONTACT SYDNEY WATER.
  - FOR DN375 AND DN450 SEWERS, ALL INTERNAL SURFACES (EXCLUDING BENCHING) OF MAINTENANCE HOLES MUST BE PROVIDED WITH A PROTECTIVE COATING IN ACCORDANCE WITH WSA 201 AND SYDNEY WATER SUPPLEMENT. COATING SYSTEM MUST BE CPL, EUH OR NOV.  
FOR DN150 - DN300 SEWERS, ALL INTERNAL SURFACES (EXCLUDING BENCHING) OF MAINTENANCE HOLES AT THE DISCHARGE OF PUMPED FLOWS AND THE NEXT TWO MAINTENANCE HOLES DOWNSTREAM OF A PUMPED DISCHARGE MUST BE PROVIDED WITH A PROTECTIVE COATING / LINING IN ACCORDANCE WITH WSA 201 AND SYDNEY WATER SUPPLEMENT. COATING SYSTEM MUST BE CPL, EUH.
  - CONDUCT PROTECTIVE COATING ASSESSMENT OF THE EXISTING MAINTENANCE HOLE TO ENSURE COMPATIBILITY WITH NEW PROTECTIVE COATING(S). INTERFACE BETWEEN NEW AND EXISTING COATING MUST BE FREE OF GAPS AND MAINTAIN INTEGRITY OF COATING SYSTEM.
  - CONFIRM LOCATION OF REINFORCEMENT BARS PRIOR TO DRILLING OF ANCHOR HOLES TO AVOID CLASHING WITH THE REINFORCEMENT BARS AND ENSURE ALL ANCHORS DO NOT HAVE CONTACT WITH THE REINFORCEMENT. ENSURE MIN. 70mm CLEAR DISTANCE FROM EDGE OF HOLE TO INTERNAL AND EXTERNAL FACES.
  - MINIMUM CLEAR AND UNOBSTRUCTED VERTICAL WORKING SPACE ABOVE MAINTENANCE HOLE TO BE AS FOLLOWS SUBJECT TO SITE SPECIFIC SAFETY IN DESIGN:  
FOR SEWER  $\leq$  DN300: NO ABOVE GROUND OBSTRUCTIONS WITHIN 1m OF MH ACCESS COVER  
FOR SEWER  $>$  DN300: NO ABOVE GROUND OBSTRUCTIONS WITHIN ZONE OF INFLUENCE (AS DEFINED IN SYDNEY WATER TECHNICAL GUIDELINES - BUILDING OVER AND ADJACENT TO PIPE ASSETS)
  - CONTRACTOR MUST ENSURE FLOW ISOLATION/FLOW MANAGEMENT PLAN IS APPROVED BY SYDNEY WATER AND UNDER EXECUTION PRIOR TO WORKS COMMENCING.
  - CONTRACTOR MUST ENSURE EXISTING MAINTENANCE HOLE AND SEWER IS PROTECTED DURING CONSTRUCTION.
  - CONTRACTOR MUST SEEK AND RECEIVE APPROVAL FROM SYDNEY WATER PRIOR TO COMMENCING WORKS TO ENSURE THAT ANY CHANGES TO THE MAINTENANCE HOLE COVER LEVEL DO NOT HAVE ADVERSE IMPACTS ON NETWORK PERFORMANCE (E.G. OVERFLOW FREQUENCY OR VOLUME).

REFERENCE DRAWINGS

- DTC/2000 MAINTENANCE HOLES - CAST IN-SITU CONSTRUCTION NOTES  
DTC/2220 MAINTENANCE HOLES DETAILS - SHEET 1  
DTC/2224 MAINTENANCE HOLE DETAILS COVER AND SPACER DETAILS



DETAIL "A"  
NEW PRECAST RING CONNECTION DETAIL  
SCALE 1:10



Sydney  
WATER

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APPROVED

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ENGINEERING MODERNISATION MANAGER

ENGINEERING & TECHNICAL SUPPORT

A	ORIGINAL ISSUE	NS	31/07/24		
LETTER	DETAILS OF ISSUE / AMENDMENT	APP'D	DATE		

DEEMED TO COMPLY DRAWINGS

RAISING OF EXISTING  
MAINTENANCE HOLES BY  $\leq 300\text{mm}$   
SEWERS  $\leq$  DN450

DTC

2230

ISSUE	DATE
A	31/07/24