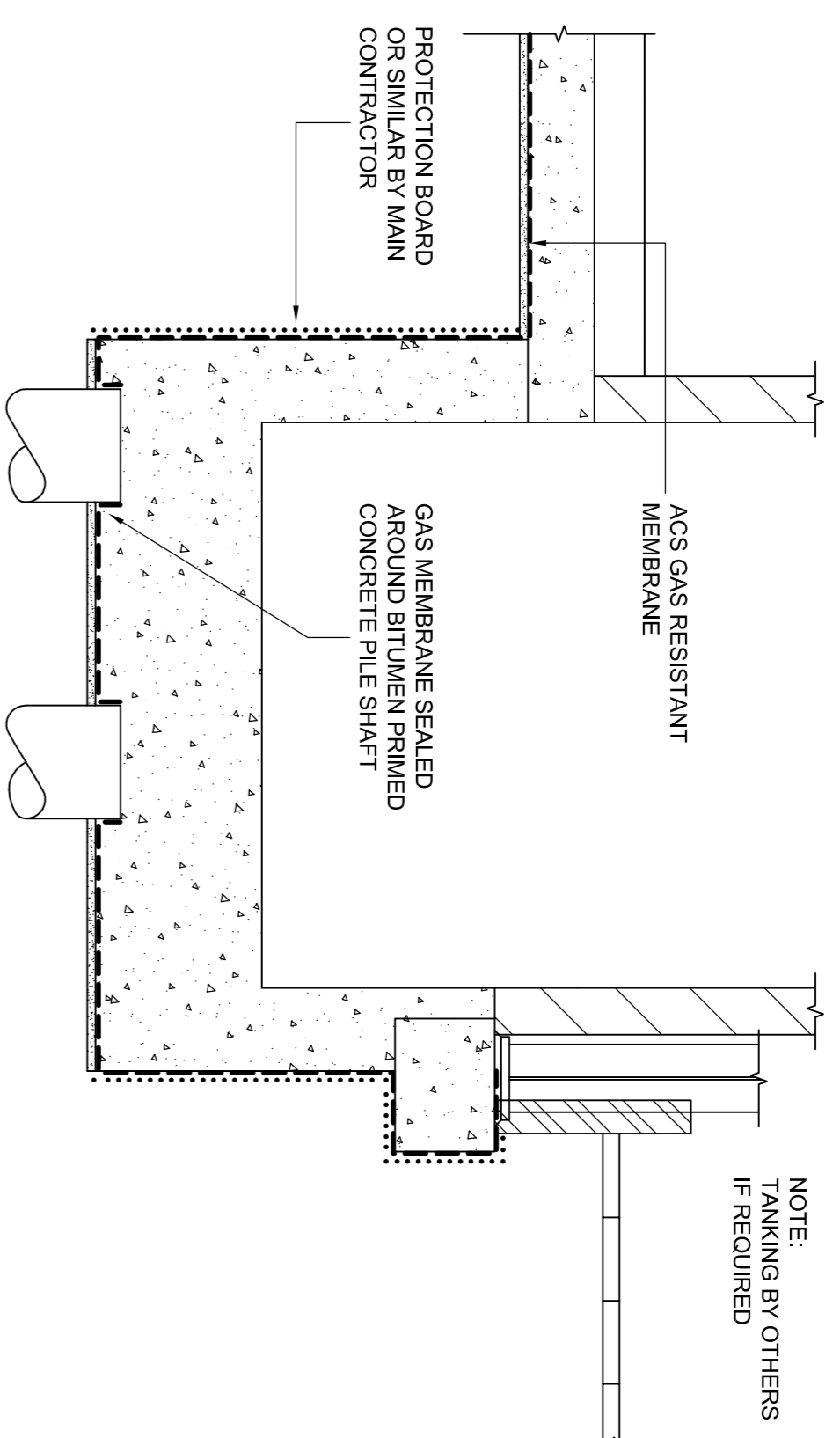


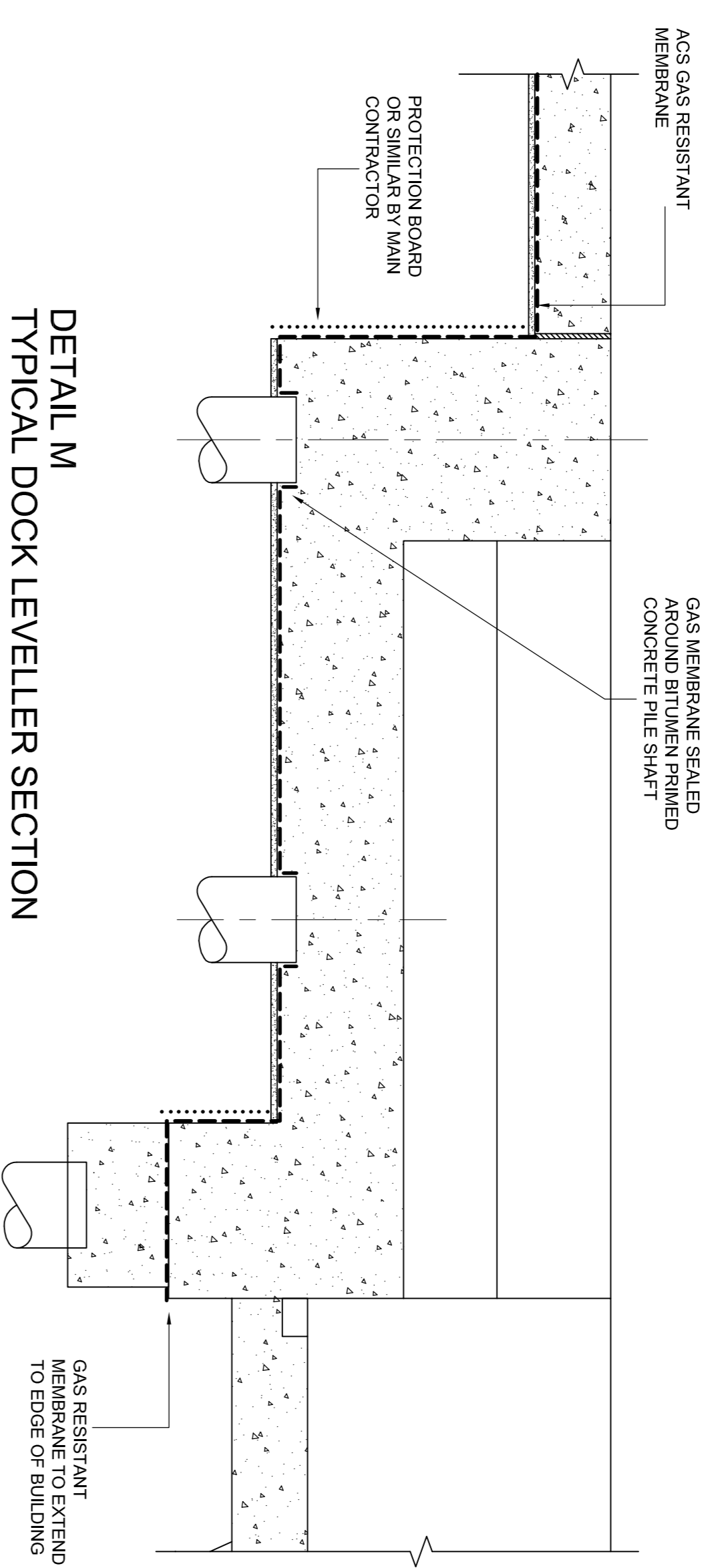
SPECIFICATION FOR GAS PROTECTION MEASURES

Membrane

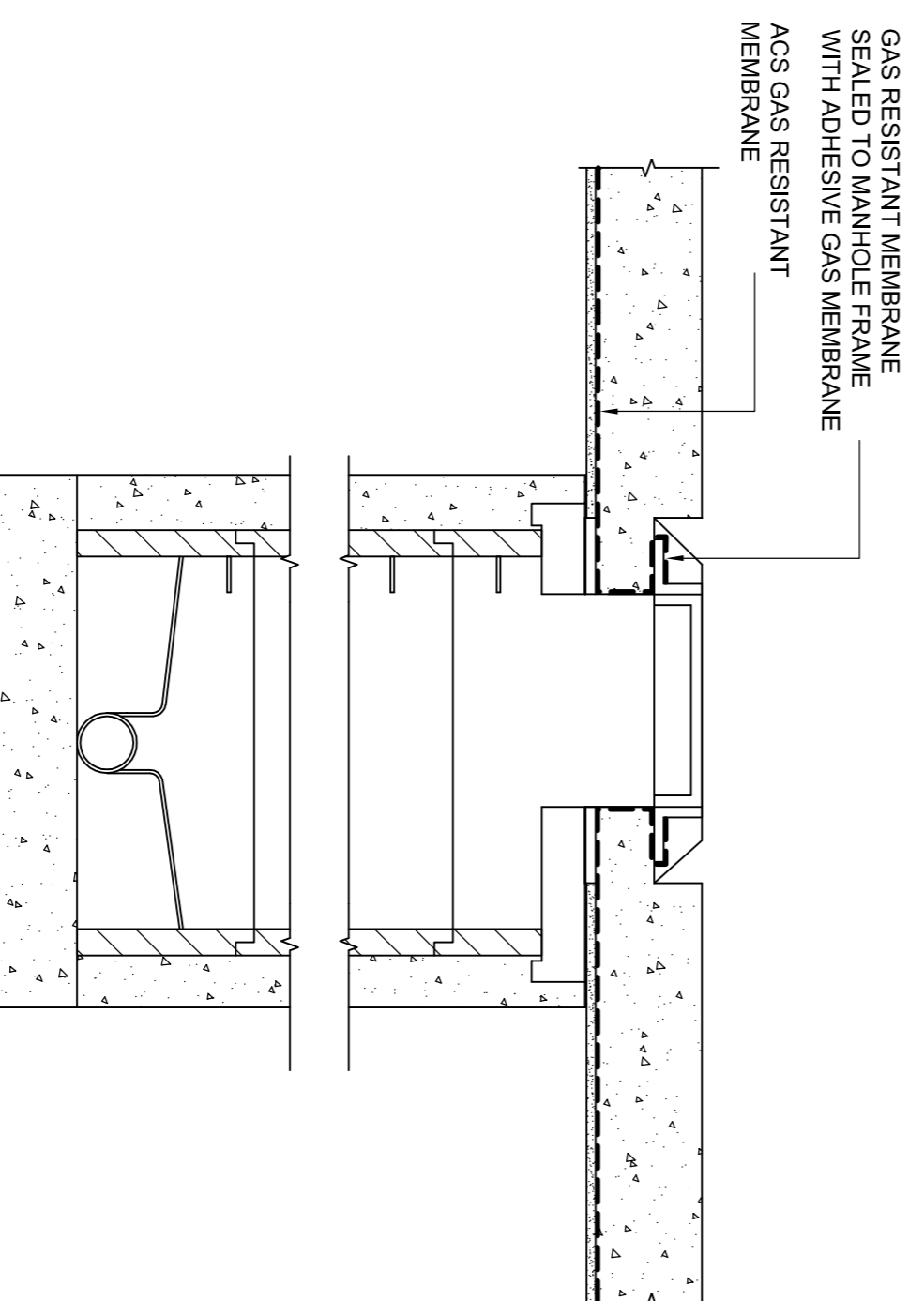
1. Gas resistant membrane to be high performance loose lay membrane containing encapsulated aluminium core. Maximum methane permeability 1 x 10⁻¹⁰ m³/m²/s. (ACS Gas Resistant Membrane)
2. Installation and protection in accordance with manufacturers recommendations. Membrane to be laid on bladed stone throughout.
3. Individual membrane sheets to be lapped minimum 100mm and sealed with 30mm wide proprietary butyl tape (ACS Butyl Sealant Tape).
4. All services and other penetrations to be sealed with self adhesive gas resistant membrane (ACS Adhesive Gas Membrane).
5. Sub-Slab Diffusers
Sub - slab depressurisation with individual diffusers comprising a 1000mm length of perforated 100mm ID HDPE pipe backfilled with 10mm no fines stone.
Pipework
6. Diffusers linked to external depressurisation unit via 100/150mm ID HDPE twin wall pipe.
7. All pipework to be jointed with proprietary push - fit connectors.
8. All pipework to have a minimum 150mm cover from underside of slab to top of pipe.
9. Pipework to be laid within or below granular stone or hardcore layer.
10. Excavation and backfilling for pipework to be carried out by MAIN CONTRACTOR.
Depressurisation Units
11. Depressurisation units to comprise 13A single phase flame-proof fans mounted in extract pipework. Fan housing by others and to Architects requirements. Location of depressurisation units to be agreed with contractor.
12. Extract pipework to comprise 150mm dia. grey uPVC pipe extending a minimum 2500mm above external ground level and fitted with static vent cowl (ACS Cowl ST150)



DETAIL L
TYPICAL LIFT PIT SECTION
SCALE - 1:20



DETAIL M
TYPICAL DOCK LEVELLER SECTION
SCALE - 1:20



DETAIL N
TYPICAL INTERNAL MANHOLE SECTION
SCALE - 1:20

CONSTRUCTION STATUS

| REVISION | DESCRIPTION | CHECKED | APPROVED | DATE |
|----------|-------------|---------|----------|------|
| | | | | |



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|------------|------------------------------|-------------------------|-------------------------|
| CLIENT | MARBANK CONSTRUCTION LIMITED | TITLE | GAS PROTECTION MEASURES |
| SCHEME | BEAM BEACH 8, RAINHAM | DETAILS - SHEET 2 OF 2) | |
| DRAWN | CHECKED | APPROVED | |
| DATE | REF | SCALE | DRAWING No. |
| APRIL 2005 | J059033 | AS SHOWN | J059033/03 |