1st Phase of works target start 20/02.

B NEW MANHOLE

A

C

Notes by ES 20/01/06 Cont...

⑦ - Work package scope split identified on the drawing splitting 8940, 9000

⑧ - Service to be diverted around the the HV substation. Arup to review design and incorporate.

RPP COMMENTS. 31/01/06.

A:- WHY A FOUL CONNECTION TO THE SUB STATION ?

B:- NEW MANHOLE REQUIRED ON EXISTING SURFACE WATER DRAIN TO SUIT REVISED OUTFALL POSITIONS FROM BLOCK 3

C:- IS MANHOLE ON FOUL DRAIN REQUIRED?

Notes by ES 20/01/06

① - CCTV Survey existing 750 pipe to confirm exact location.

② - Apply for road closure to install pipe to existing manhole.

③ - Detail required from Arup to confirm relationship between manhole, secant wall, 750 pipe. Once the existing 750 connection is located the manhole design can be finalised possible change to 2No manholes.

④ - Location of 225mm foul drain on plan to be agreed with ULL and located on the easement section.

⑤ - Location of ULL HV Substation & cable

⑥ - —"— LV Power supply —"—

NOTES:-

1. THIS DRAWING IS BASED ON THE TOPOGRAPHICAL SURVEY DRAWING 05C1181/SK01 & BY SURVEY SPECIFICATIONS.
2. THIS DRAWING IS BASED ON "DRAINAGE DESIGN PRINCIPLES" DRAWING 8530/M05 REV P2 BY MITCHAM BPP.
3. THE INFORMATION SHOWN ON THIS DRAWING IS PROVIDED FOR TENDER PURPOSES ONLY.
4. THE EXTERNAL WORKS LAYOUT IS BASED ON THE H.E.A. DRAWING "PHASE 1, PROPOSED LEVELS AND DRAINAGE" NO1.30A.2004 REF C DATED 08/06/05.
5. THE LOCATIONS AND ARRANGEMENTS FOR THE SURFACE WATER CHANNEL/SLOT DRAINS SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT.
6. THE PROPOSED 750M SURFACE WATER SEWER ALONGSIDE THE BRICKWORK PILE WALL FOR WOLF HARDMAN SQUARE IS TO BE LOCATED A SET DISTANCE FROM THE PILE WALL IN ACCORDANCE WITH THE EASEMENT WIDTH AGREED BETWEEN BRIDGEMANS AND U.L.L. ANY EXISTING TOPSOIL/MADE GROUND/PEATS TO BE BROKEN DOWN TO 500mm BELOW BOTTOM FALL OF PROPOSED PIPE.

KEY:-

- EXISTING SEWER TO BE ABANDONED
- EXISTING COMBINED SEWER AND MANHOLE
- EXISTING FOUL SEWER AND MANHOLE
- EXISTING SURFACE WATER SEWER AND MANHOLE
- EXISTING MANHOLE FOUL DRAIN
- EXISTING MANHOLE SURFACE WATER DRAIN

TO UNITED UTILITIES DETAILS

- ACCEPTABLE FOUL DRAIN
- ACCEPTABLE FOUL DRAIN MANHOLE
- ACCEPTABLE SURFACE WATER DRAIN
- ACCEPTABLE SURFACE WATER DRAIN MANHOLE
- ACCEPTABLE BACKDROP MANHOLE
- SEALED CAP TO STUB PIPE

TO ARUP DETAILS

- NON-ACCEPTABLE FOUL DRAIN
- NON-ACCEPTABLE FOUL DRAIN MANHOLE
- FOUL DRAIN MANHOLE BACKDROP
- NON-ACCEPTABLE SURFACE WATER DRAIN AND MANHOLE
- SURFACE WATER DRAIN MANHOLE BACKDROP
- NON-ACCEPTABLE COMBINED DRAIN
- FOUL DRAIN ROCKING EYE (NON-ACCEPTABLE)
- SURFACE WATER ROCKING EYE
- UNDRAINED DRAINAGE

TO LANDSCAPE ARCHITECT DETAILS

- SURFACE WATER CHANNEL/SLOT DRAIN
- PP POP-UP POWER/WATER SUPPLY
- IGP INGROUND POWER SUPPLY CHAMBER
- IGW INGROUND WASTE WATER CHAMBER
- HB HYDRANT BOLLARD

TO SERVICE ENGINEER DETAILS

- SUSPENDED PIPEWORK FOR SURFACE WATER DRAIN WITHIN BASEMENT (UNLESS SHOWN OTHERWISE)
- SUSPENDED PIPEWORK FOR FOUL DRAIN WITHIN BASEMENT

P4	30/11/05	EC	PS	PH
UPDATED TENDER ISSUE				
P3	29/11/05	DW	PS	PH
TENDER ISSUE				
P2	13/10/05	EC	EC	PH
PRELIMINARY DESIGN FOR COMMENT				
P1	04/10/05	EC	EC	PH
ISSUED FOR COMMENT				
Issue	Date	By	Chkd	Appd

ARUP

Client: ALLIED LONDON PROPERTIES LTD

Job Title: HARDMAN SQUARE - PHASE 1 SPINNINGFIELDS MANCHESTER

Drawing Title: EXTERNAL DRAINAGE

Scale at A1: 1:200

File ID: 2006BPP01-A2700-AA21-AU-B-DESIGN-ARUP00

Drawing Status: TENDER

Drawing No: C5000

Issue: P4

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