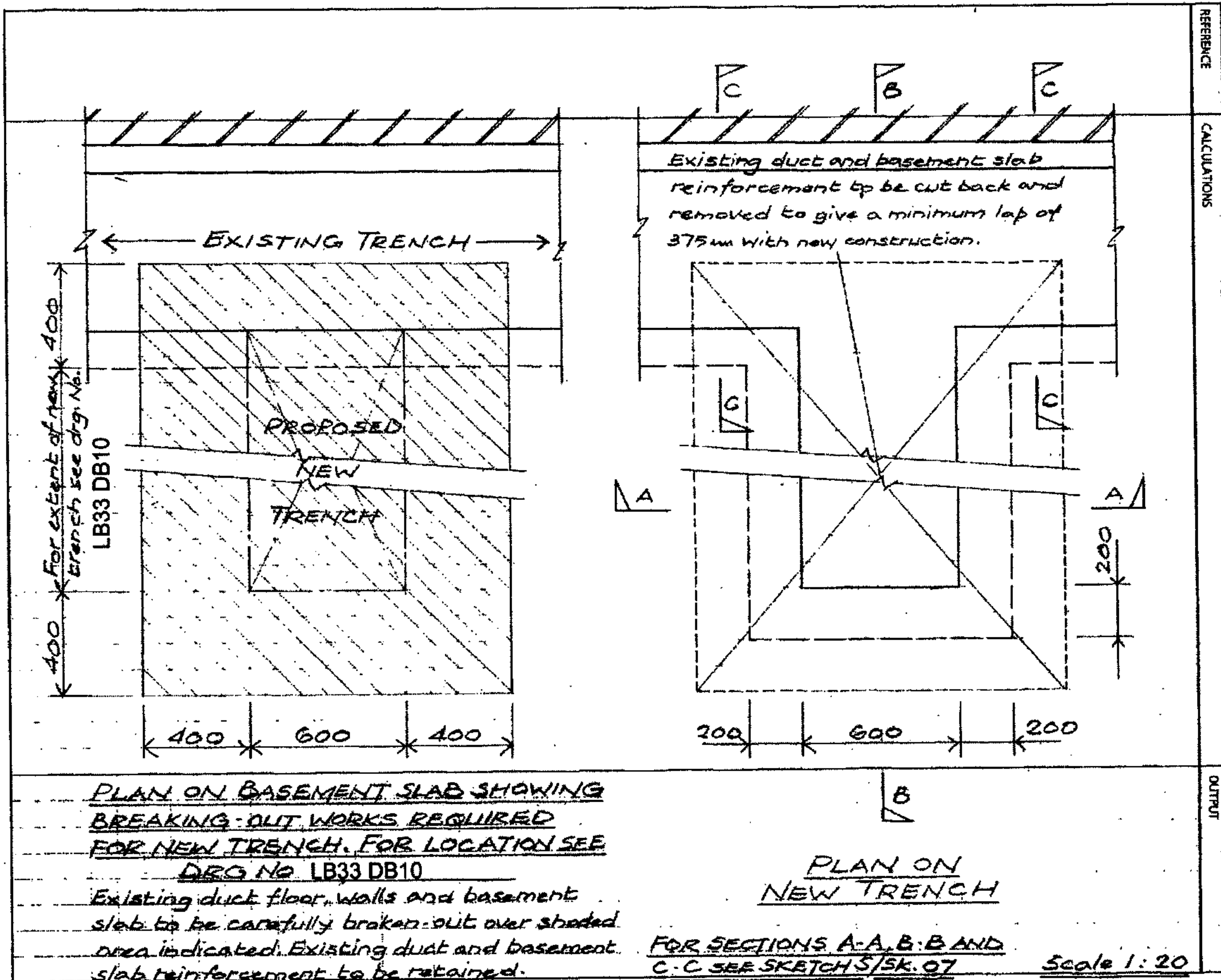


JOB TITLE	UNIVERSITY OF LONDON SENATE HOUSE		JOB NO	P2000078
ELEMENT	ENABLING WORKS		CALC SHEET NO	S/SK.01
DRAWING REF	WORKS TO EXISTING BASEMENT SHEET 1		DATE	AUGUST '06
CHECKED BY	DATE	CALCULATIONS BY		
		D.H.P.		

BDP

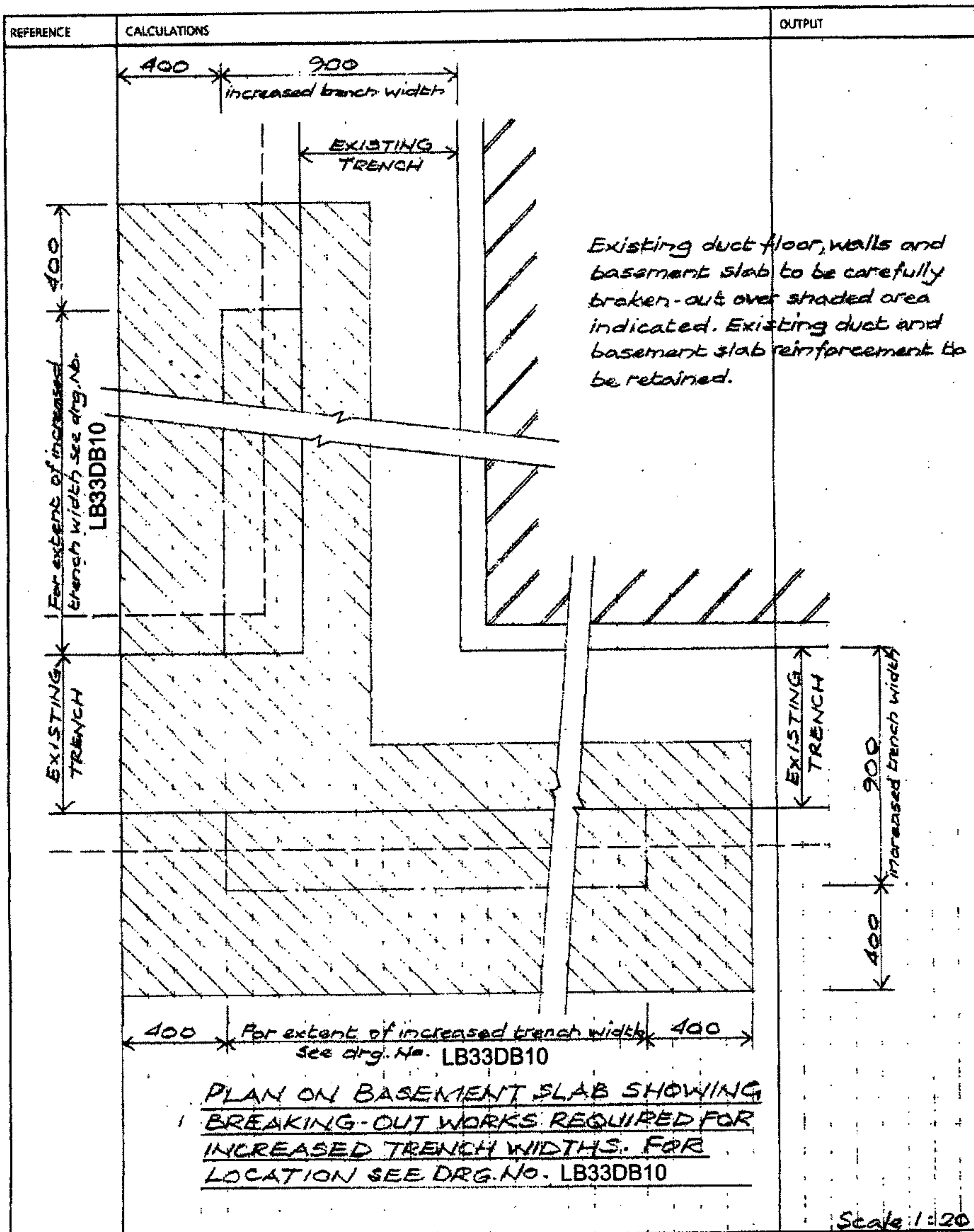
Calculation Sheet



JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO S/SK.02	
WORKS TO EXISTING BASEMENT			
DRAWING REF SHEET 2			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet

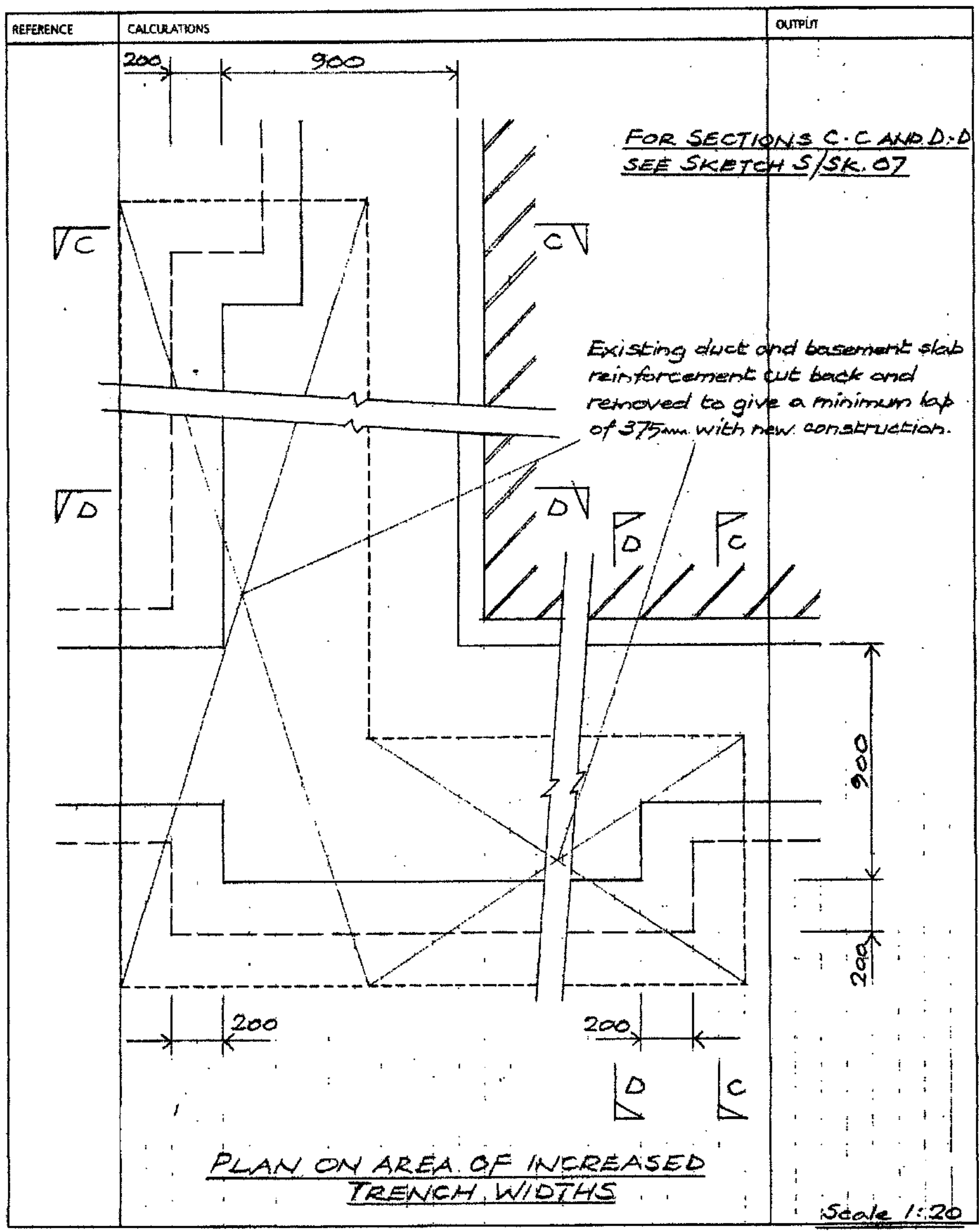


Scale 1:20

JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO	
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DRAWING REF SHEET 3			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



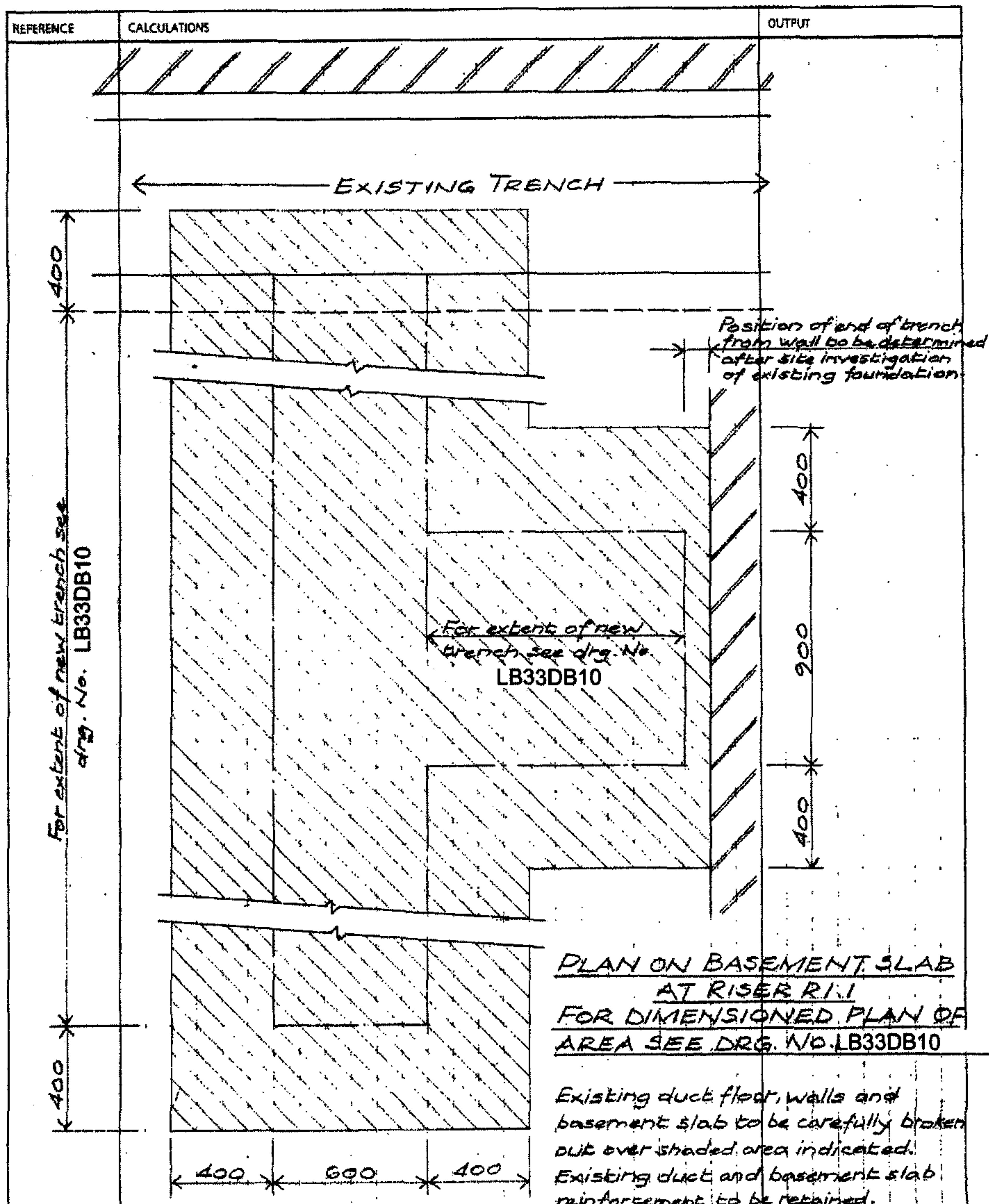
Calculation Sheet



JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO	
WORKS TO EXISTING BASEMENT		S/SK.04	
DRAWING REF SHEET 4			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet

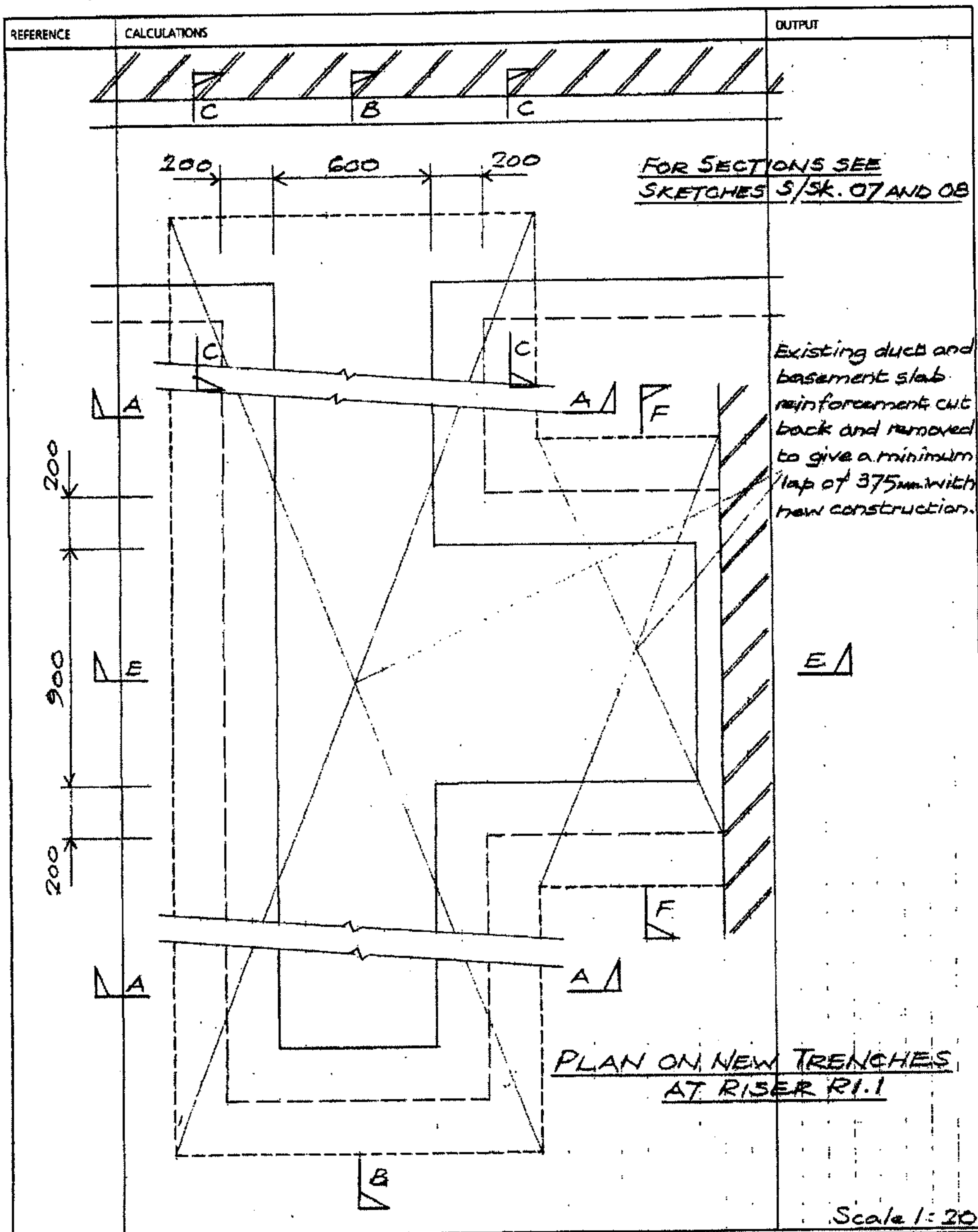


Scale 1:20

JOB TITLE UNIVERSITY OF LONDON SENATE HOUSE		JOB NO P2000078	
ELEMENT ENABLING WORKS WORKS TO EXISTING BASEMENT DRAWING REF SHEET 5		CALC SHEET NO S/SK. 05	
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



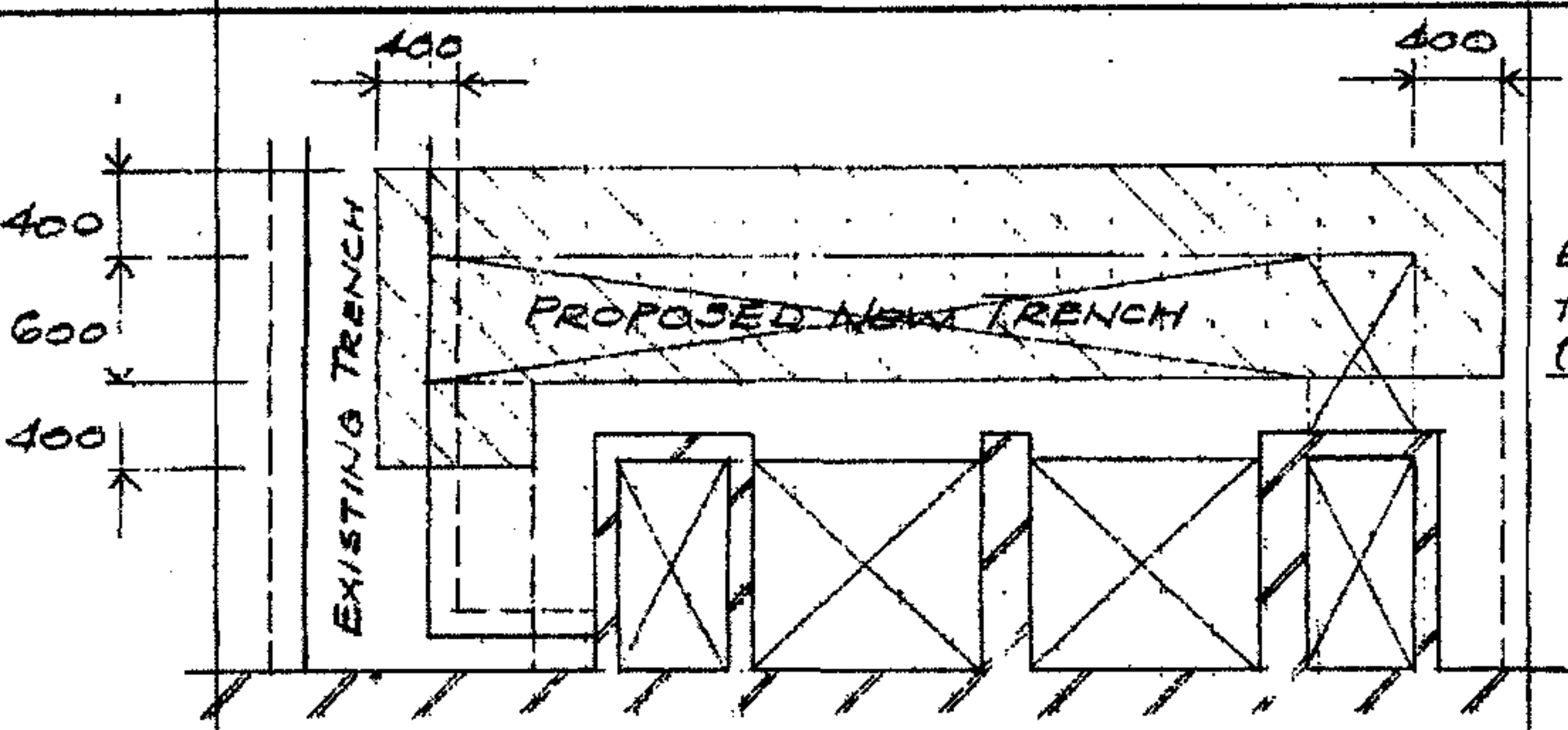
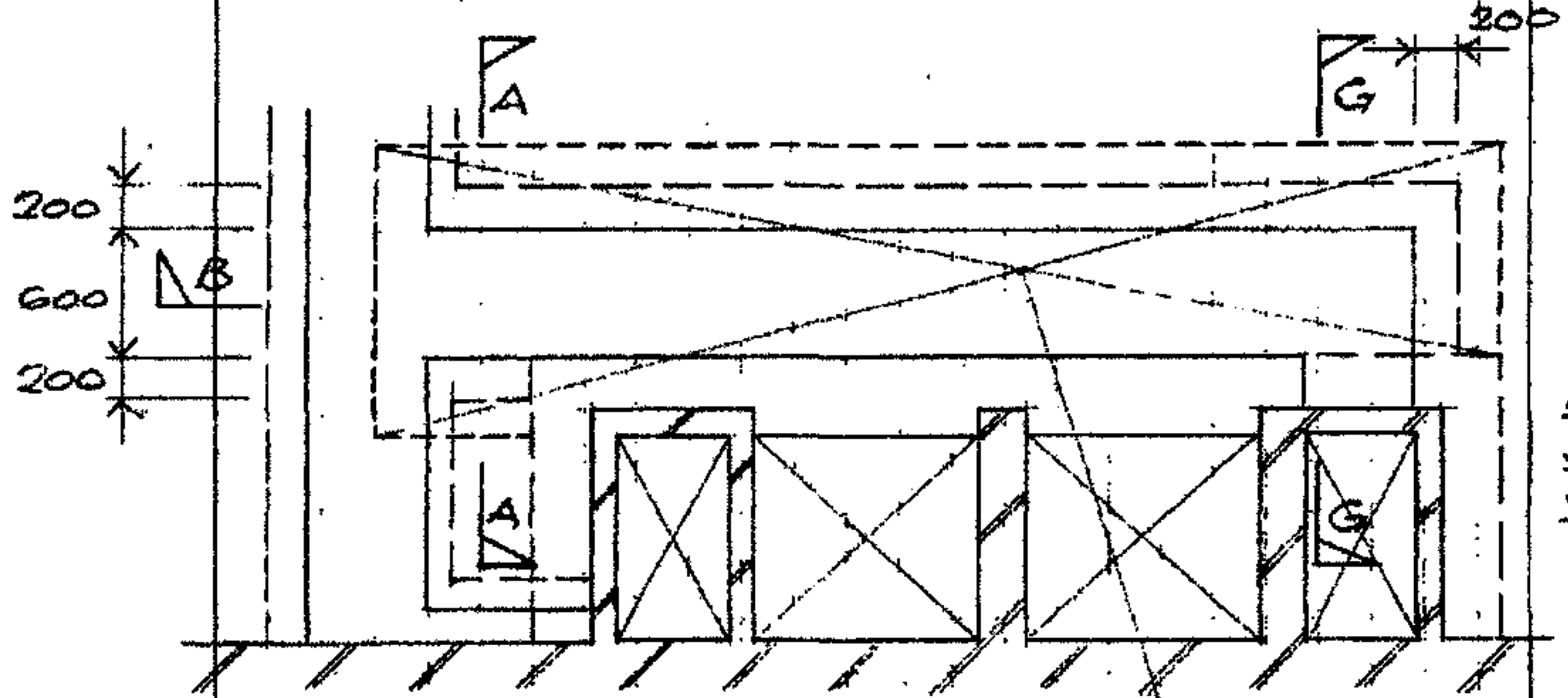
Calculation Sheet



JOB TITLE UNIVERSITY OF LONDON SENATE HOUSE		JOB NO P2000078	
ELEMENT ENABLING WORKS WORKS TO EXISTING BASEMENT		CALC SHEET NO S/SK.06	
DRAWING REF SHEET 6			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet

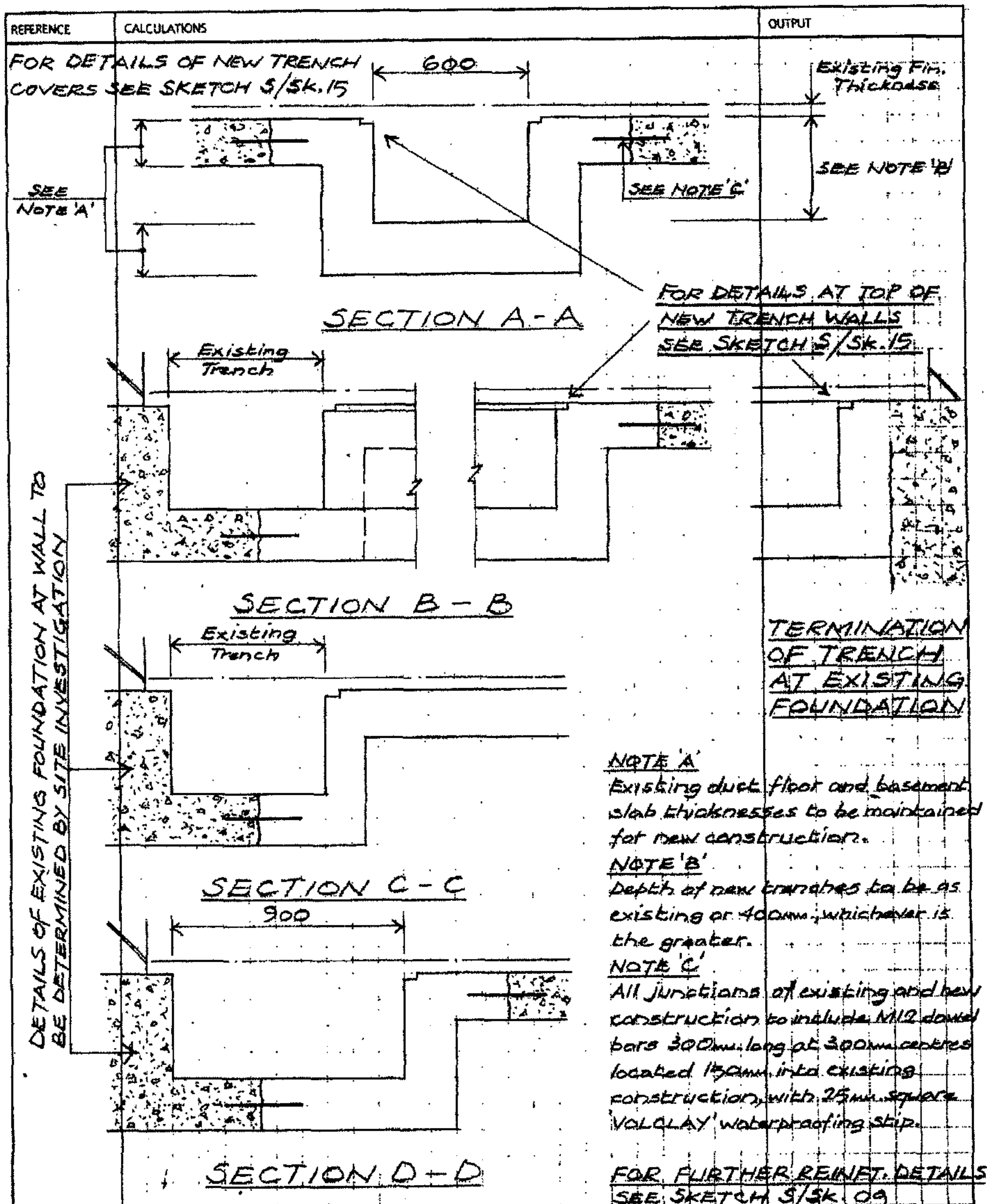
REFERENCE	CALCULATIONS	OUTPUT
	 <u>PLAN ON BASEMENT SLAB SHOWING BREAKING-OUT WORKS REQUIRED FOR NEW TRENCH TO RISER R3.5. FOR LOCATION SEE DRG. NO. LB33DB10</u> <u>(WORKS FOR NEW TRENCH TO RISER R4.2 SIMILAR)</u> Existing duct floor, walls and basement slab to be carefully broken-out over shaded area indicated. Existing duct and basement slab reinforcement to be retained.	Edge of lift foundation (assumed)
	 Existing duct and basement slab reinforcement cut back and removed to give minimum lap of 375mm with new construction. <u>PLAN ON NEW TRENCH TO RISER R3.5 (DETAILS OF NEW TRENCH TO RISER R4.2 SIMILAR)</u>	<u>B1</u> <u>FOR SECTIONS SEE SKETCHES S/SK.07 AND 08</u>

Scale 1:50

JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO S/SK.07	
DRAWING REF SHEET 7			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet

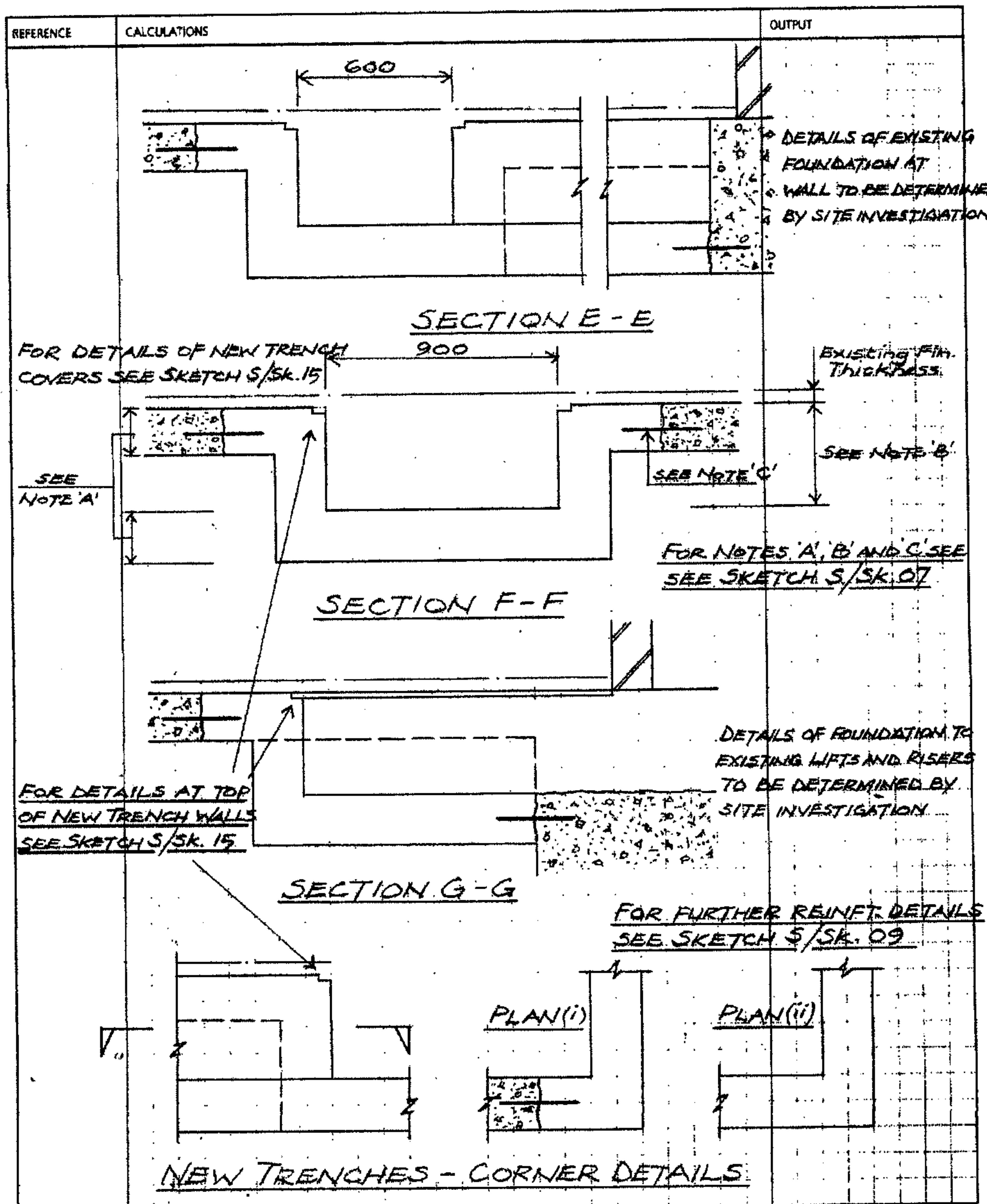


Scale 1:20

JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO	
WORKS TO EXISTING BASEMENT		S/SK.08	
DRAWING REF SHEET 8			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet



JOB TITLE	UNIVERSITY OF LONDON SENATE HOUSE		JOB NO	P2000078
ELEMENT	ENABLING WORKS		CALC SHEET NO	S/SK.10
DRAWING REF	SHEET 9		DATE	AUGUST 06
CHECKED BY	DATE	CALCULATIONS BY	DATE	
		D.H.P.		



Calculation Sheet

REFERENCE	CALCULATIONS	OUTPUT
	PLAN ON BASEMENT SLAB SHOWING BREAKING-OUT WORKS REQUIRED FOR NEW SUMP. FOR LOCATION SEE DRG. NO. LB33DB10	Existing duct floor, walls and basement slab to be carefully broken out over shaded area indicated. Existing duct and basement slab reinforcement to be retained.
	PLAN ON NEW SUMP Existing duct and basement slab reinforcement to be cut back and removed to give a minimum lap of 375mm with new construction.	FOR SECTIONS Z-Z AND Y-Y SEE SKETCH S/SK.11 Scale 1:20

JOB TITLE UNIVERSITY OF LONDON		JOB NO P2000078	
SENATE HOUSE			
ELEMENT ENABLING WORKS		CALC SHEET NO	
WORKS TO EXISTING BASEMENT		S/SK. 11	
DRAWING REF SHEET 10			
CHECKED BY	DATE	CALCULATIONS BY D.H.P.	DATE AUGUST '06



Calculation Sheet

REFERENCE	CALCULATIONS	OUTPUT
	Basement slab thickness to be maintained for new construction FOR DETAILS OF NEW SUMP COVER SEE SKETCH S/SK. 15 500 M12 dowel bars at 300 c/s. 300mm long located 150mm into existing construction 25mm square 'VULCLAY' waterproofing strip SECTION Z-Z Existing Trench New Sump FOR DETAILS AT TOP OF SUMP WALLS SEE SKETCH S/SK. 15 SECTION Y-Y <u>DETAILS OF NEW SUMP</u>	Existing Fin. thickness Depth of sump to be 500mm or 100mm below adjacent trench level whichever is the greater 200
		Scale 1:20