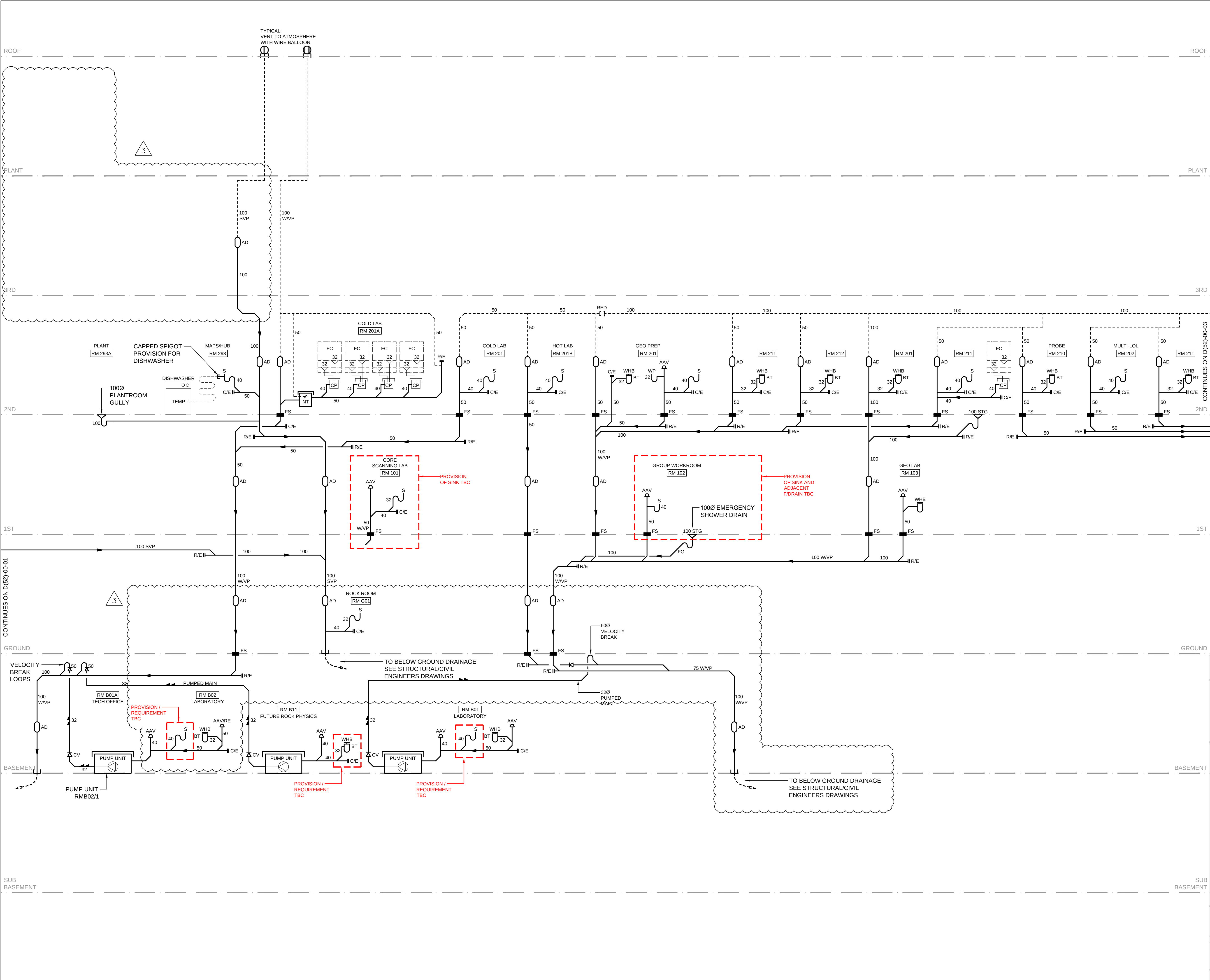




NOTES:

- SANITARY PIPEWORK TO BE HDPE SOIL AND WASTE PIPE AND FITTINGS.
- LABORATORY CHEMICAL WASTE PIPE AND FITTINGS TO BE A "CPV" SYSTEM WITH EXPANSION JOINTS AS RECOMMENDED BY "CPV".
- THE INSTALLATION SHALL COMPLY WITH BSEN 12056-2:2010 AND THE BUILDING REGULATIONS.

LEGEND:

AAV AIR ADMITTANCE VALVE
AD ACCESS DOOR
BT BOTTLE TRAP
C/E CLEANING EYE
CP CATCH POT
CS CLEANER'S SINK
CV CHECK VALVE
DP DRAIN POINT
FC FUME CABINET
FS FIRE SLEEVE
NT NEUTRALISING TRAP
PM PUMPING MAIN
R/E RODDING EYE
RED REDUCER
S SINK
SH SHOWER
SP SOIL PIPE
STG SEALED TOP GULLY
SVP SOIL VENT PIPE
UR URINAL
VP VENT PIPE
WC WATER CLOSET - TOILET
WHB WASH HAND BASIN
WM WASHING MACHINE
WP WATER PURIFIER
WVP WASTE VENT PIPE

--- WASTE VENT PIPE
— SOIL/WASTE PIPE

Rev	Date	Description	Chk	App
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DT

STAGE D

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Godalming
Surrey GU7 2AZ

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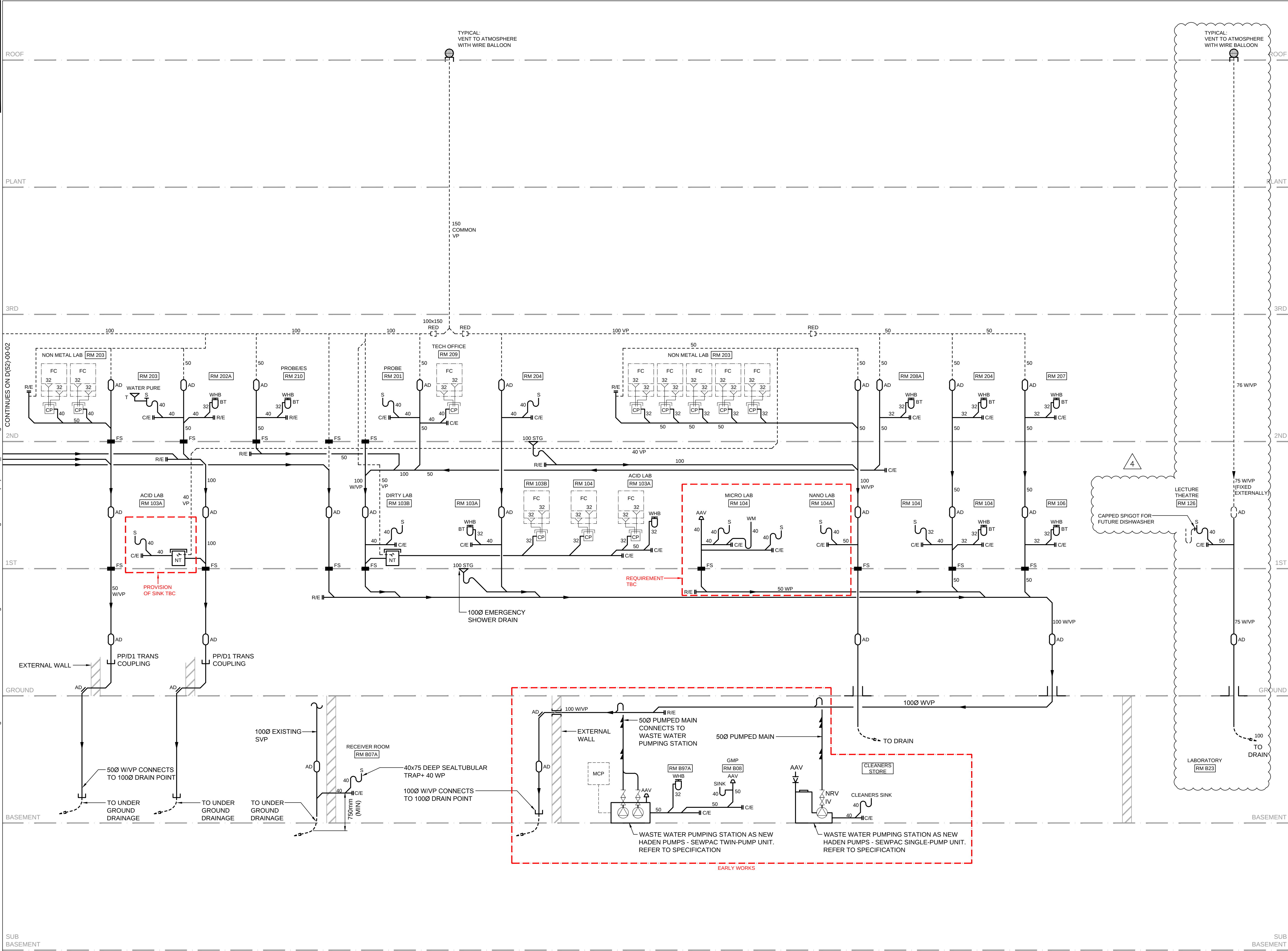
Client: UNIVERSITY COLLEGE LONDON

Site/Project: KLB Masterplan Refurbishment Project (PSO0044)

Title: SANITARY PIPEWORK AND LABORATORY DRAINAGE SCHEMATIC SHEET 2 OF 3

Drawn:	SMW	Checked:	MTL
Designed:	KW	Approved:	DW
Date:	13/01/2016	Scale:	NTS
Project Number:	3512445M-BBG	Drawing Number:	D(52)-00-02
Revision:			3

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NOTES:

- SANITARY PIPEWORK TO BE HDPE SOIL AND WASTE PIPE AND FITTINGS.
- LABORATORY CHEMICAL WASTE PIPE AND FITTINGS TO BE A "CPV" SYSTEM WITH EXPANSION JOINTS AS RECOMMENDED BY "CPV".
- THE INSTALLATION SHALL COMPLY WITH BSEN 12056-2:2010 AND THE BUILDING REGULATIONS.

LEGEND:

AAV AIR ADMITTANCE VALVE
AD ACCESS DOOR
BT BOTTLE TRAP
C/E CLEANING EYE
CP CATCH POT
CS CLEANER'S SINK
CV CHECK VALVE
DP DRAIN POINT
FC FUME CABINET
FS FIRE SLEEVE
NT NEUTRALISING TRAP
PM PUMPING MAIN
R/E RODDING EYE
RED REDUCER
S SINK
SH SHOWER
SP SOIL PIPE
STG SEALED TOP GULLY
SVP SOIL VENT PIPE
UR URINAL
VP VENT PIPE
WC WATER CLOSET - TOILET
WHB WASH HAND BASIN
WM WASHING MACHINE
WP WATER PURIFIER
WVP WASTE VENT PIPE

--- WASTE VENT PIPE
— SOIL/WASTE PIPE

4	13.01.16	STAGE D ISSUE	MTL	DW
3	01.05.15	ARCHITECTURAL UPDATE TO GMP LAB	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DT
Rev	Date	Description	Chk	App

STAGE D

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Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

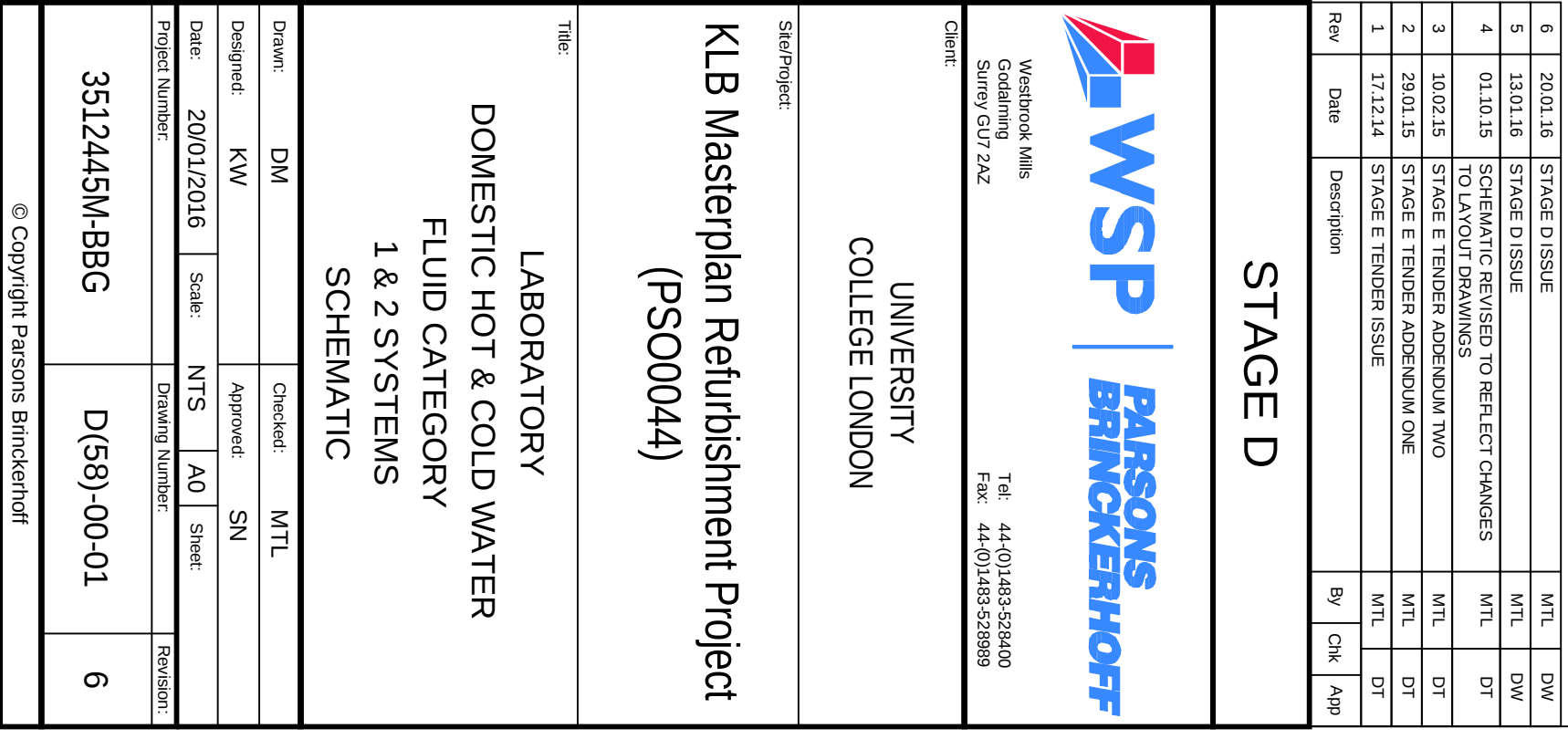
Client:
UNIVERSITY COLLEGE LONDON

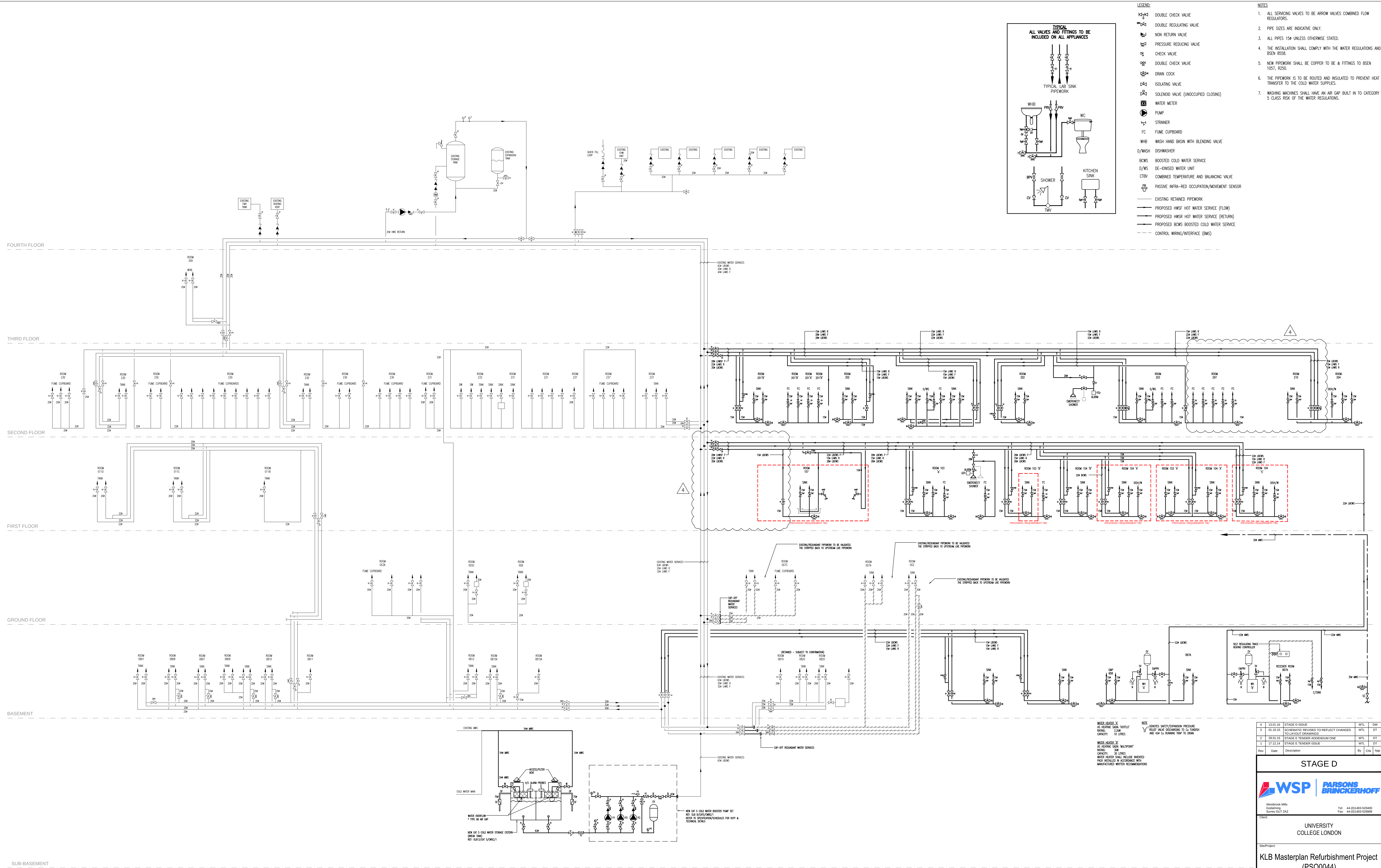
Site/Project:
KLB Masterplan Refurbishment Project (PSO0044)

Title:
SANITARY PIPEWORK AND LABORATORY DRAINAGE SCHEMATIC SHEET 3 OF 3

Drawn: SMW	Checked: MTL		
Designed: KW	Approved: DW		
Date: 13/01/2016	Scale: NTS	A1	Sheet: 3 of 3
Project Number: 3512445M-BBG	Drawing Number: D(52)-00-03	Revision: 4	

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4	13.01.16	STAGE D ISSUE	MTL	DW	
3	01.10.15	SCHEMATIC REVISED TO REFLECT CHANGES TO LAYOUT DRAWNGS	MTL	DT	
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT	
1	17.12.14	STAGE E TENDER ISSUE	MTL	DT	
Rev	Date	Description	By	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ
Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528669

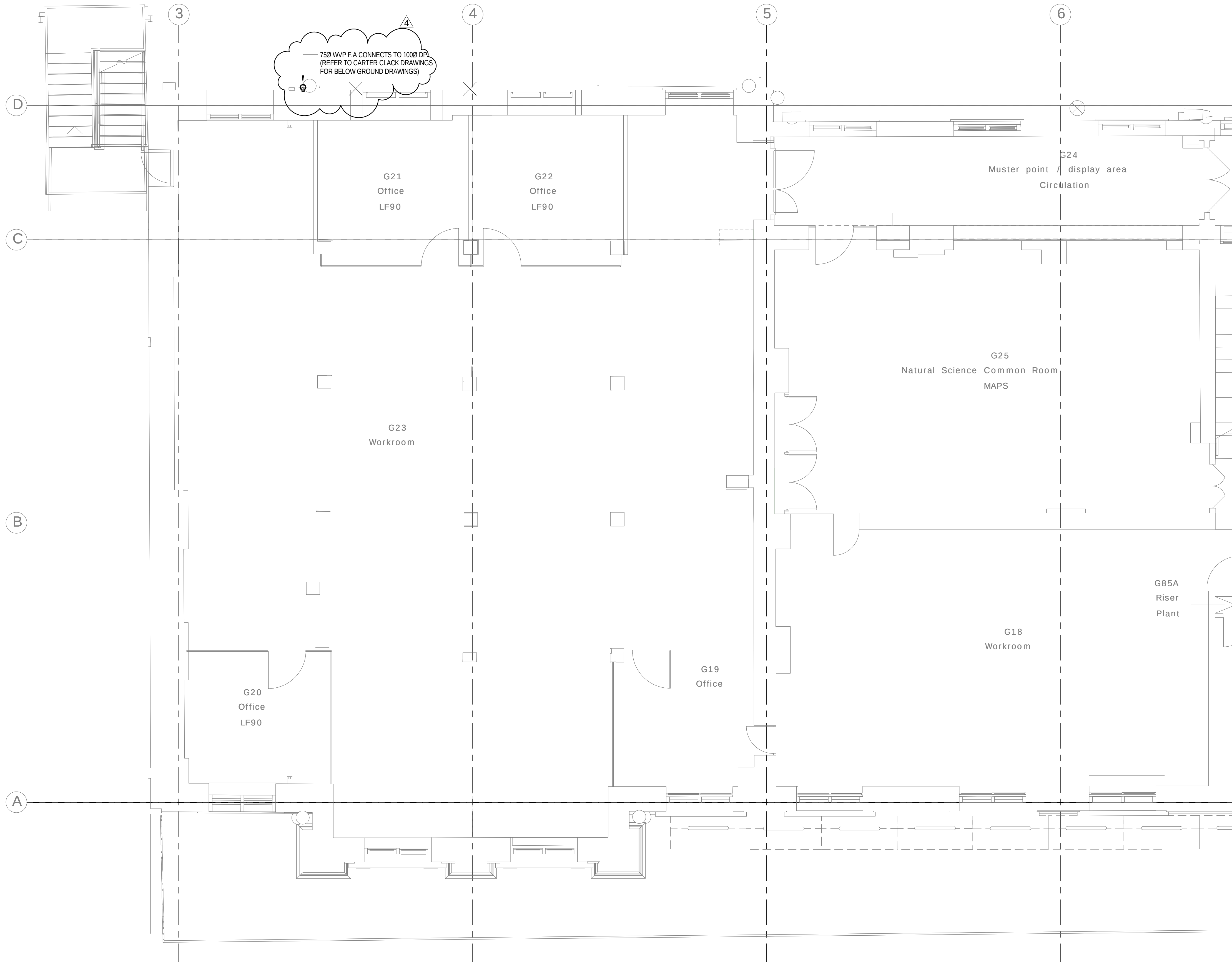
Client: UNIVERSITY COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title: LABORATORY
DOMESTIC HOT & COLD WATER
FLUID CATEGORY 5 SYSTEM
SCHEMATIC

Drawn: DM		Checked: ML	
Designed: KW		Approved: SN	
Date: 13/01/2016	Scale: NTS	A0	Sheet:
Project Number:		Drawing Number:	Revision:



- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ



Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Ground Floor
Sanitary Pipework Layout

Sheet 1 of 4

Drawn: SM

Checked: KW

Designed: MTL

Approved: DW

Date: 10/14/14

Scale: As indicated

A1

Sheet:

Project Number:

3512445M-BBG

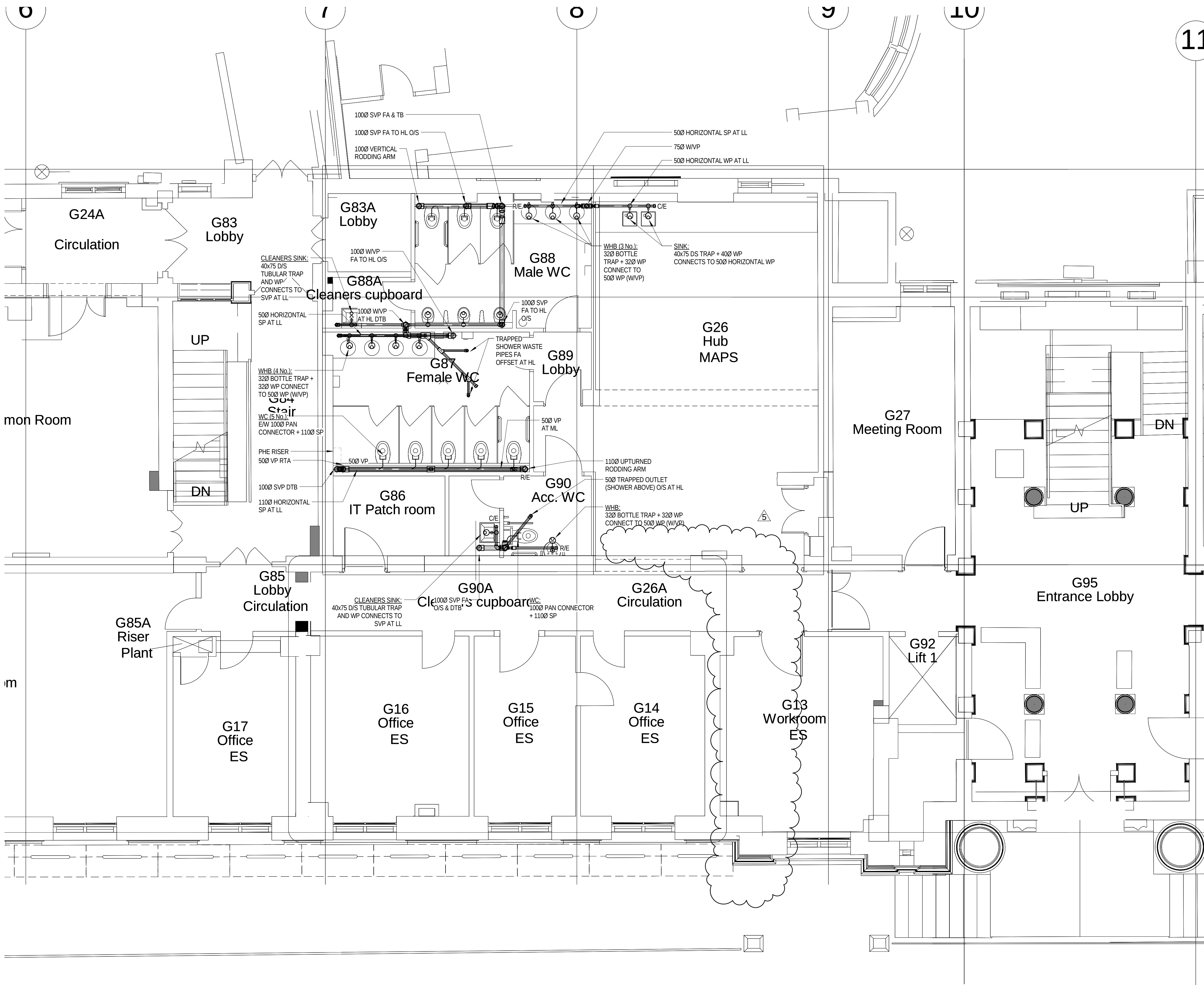
Drawing Number:

L(58)-00-01

Revision:

4

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NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

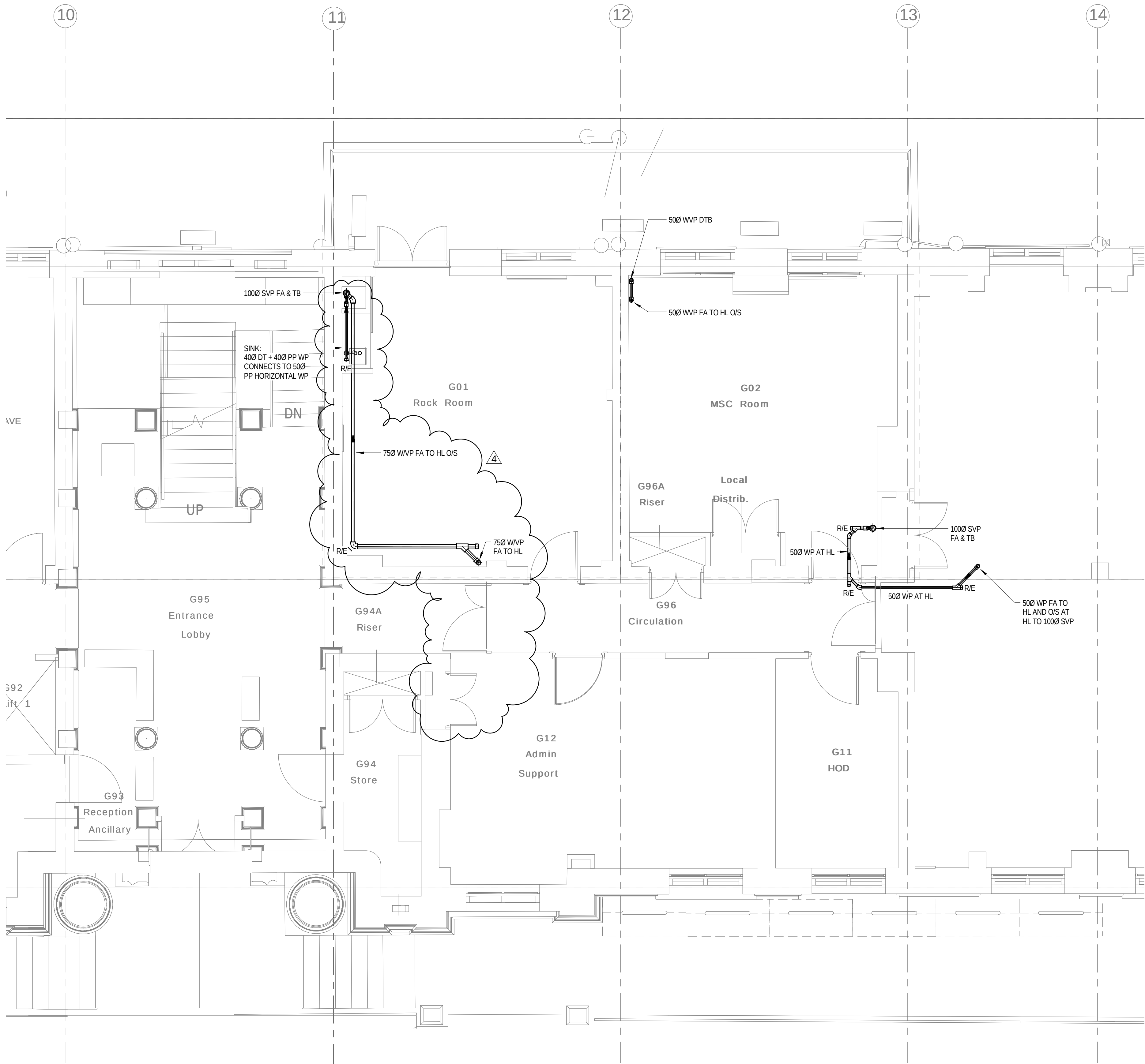
AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRAIN CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRAIN CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

5	12.04.16	STAGE D ISSUE	RB	DW
4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D			
			
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Tet: 44-(0)1483-528400 Fax: 44-(0)1483-528989			
Client: UNIVERSITY COLLEGE LONDON			
Site/Project: KLB Masterplan Refurbishment Project (PSO0044)			
Title: Ground Floor Sanitary Pipework Layout			
Sheet 2 of 4			
Drawn:	SM	Checked:	KW
Designed:	MTL	Approved:	DW
Date:	10/14/14	Scale:	As indicated
Project Number:	3512445M-BBG	Drawing Number:	L(58)-00-02
		Revision:	5
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Ground Floor Sanitary Drainage Pipework 03

1 : 50



NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRAIN CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
E/W	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ
Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:
**UNIVERSITY
COLLEGE LONDON**

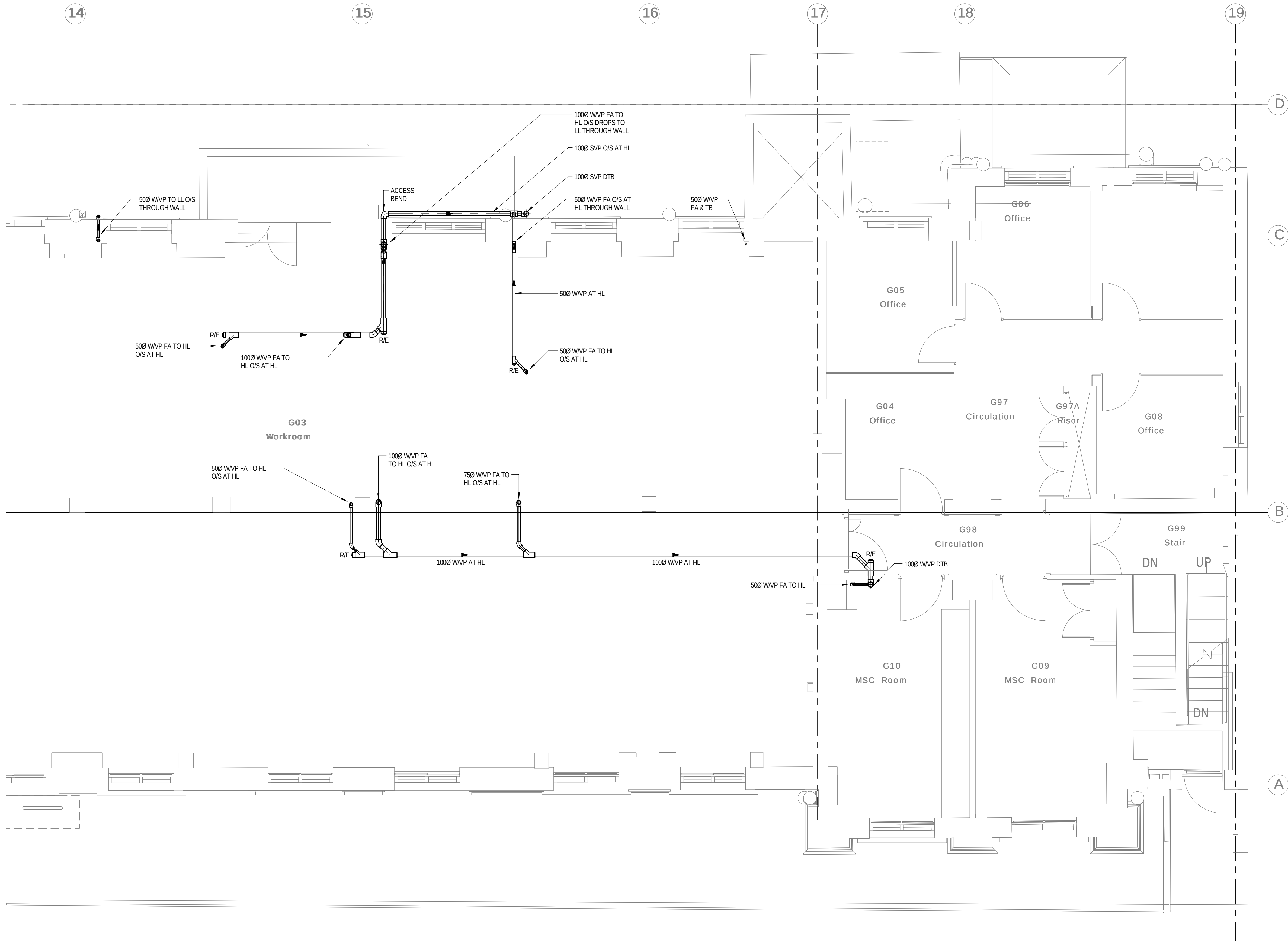
Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Ground Floor
Sanitary Pipework Layout**

Sheet 3 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	Revision:
3512445M-BBG		L(58)-00-03	4
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Ground Floor Sanitary Drainage Pipework 04
1 : 50

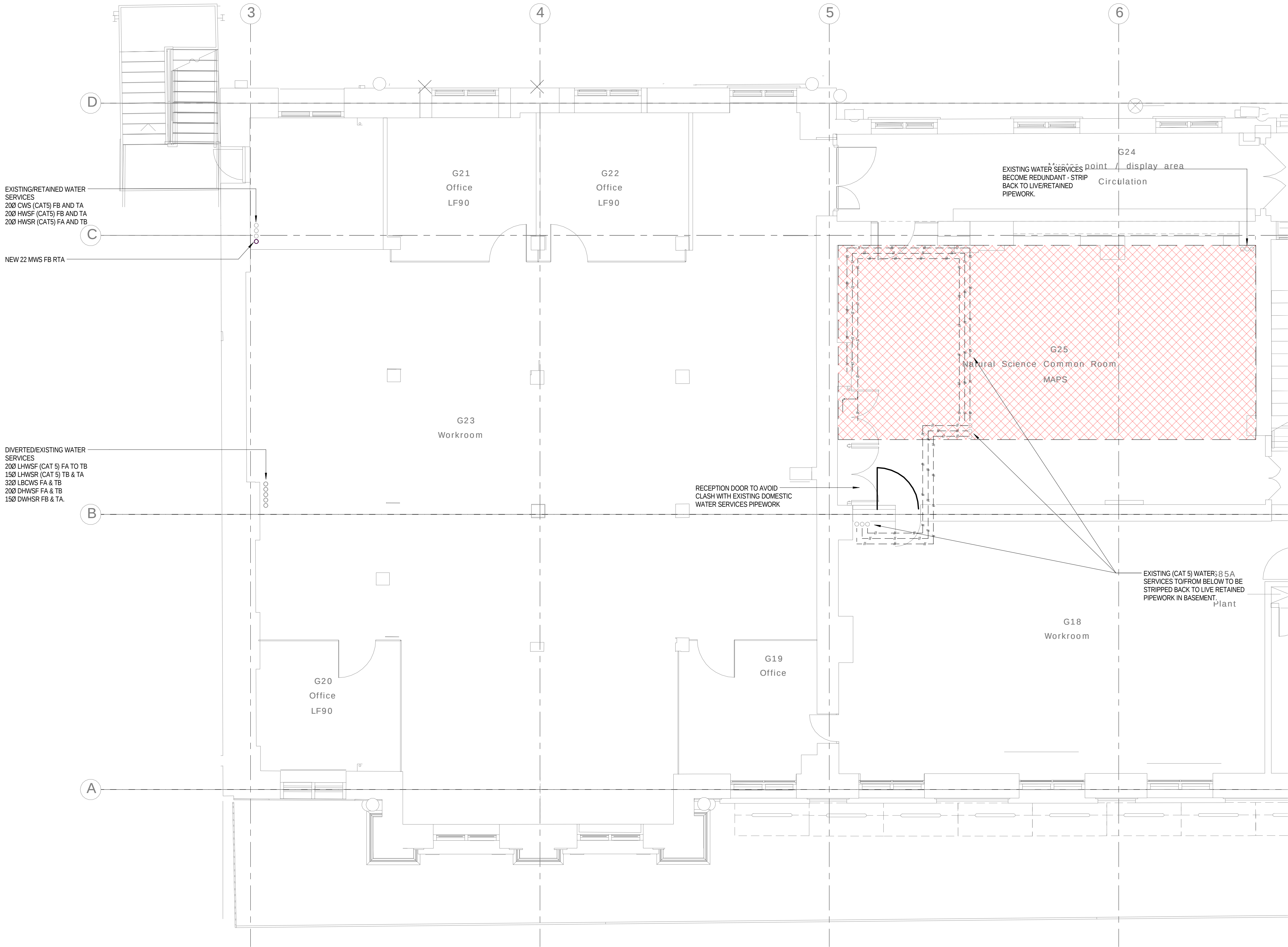


- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
 2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRAIN CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App
STAGE D				
 WSP  Westbrook Mills Godalming Surrey GU7 2AZ Tel: 44-(0)1483-528400 Fax: 44-(0)1483-528989				
Client:				
UNIVERSITY COLLEGE LONDON				
Site/Project:				
KLB Masterplan Refurbishment Project (PSO0044)				
Title:				
Ground Floor Sanitary Pipework Layout				
Sheet 4 of 4				
Drawn: SM			Checked: KW	
Designed: MTL			Approved: DW	
Date: 10/14/14		Scale: As indicated	A1	Sheet:
Project Number:			Drawing Number:	Revision:
3512445M-BBG			L(58)-00-04	3
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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A

ANCHOR
- AAV

AUTOMATIC AIR VENT
- AVV

ANTI VACUUM VALVE
- BCWS

BOOSTED COLD WATER SERVICE
- C5

CATEGORY 5 LAB HOT AND COLD WATER
- CV

CHECK VALVE
- CVA

CEILING VOID ABOVE
- DOC

DRAIN OFF COCK
- DTB

DROP TO BELOW
- DW

DEIONISED WATER
- DWIM

DISHWASHER
- ES

EMERGENCY SHOWER
- EV

EXPANSION VESSEL
- EW

EYE WASH
- FA

FROM ABOVE
- FB

FROM BELOW
- FCupd

FUME CUPBOARD
- FC

FLEXIBLE COUPLING
- FV

FLOAT VALVE
- HA

HYDRAULIC ACCUMULATOR
- HL

HIGH LEVEL
- HUBT

HOSE UNION BIB TAP
- HWH

HOT WATER HEATER
- IV

ISOLATING VALVE
- LL

LOW LEVEL
- M

METER
- MWS

MAINS WATER SERVICE
- NRV

NON RETURN VALVE
- POU

POINT OF USE
- PRV

PRESSURE REDUCING VALVE
- SAV

SAFETY VALVE
- SF

SCREEN FILTER
- SV

SERVICING VALVE
- ST

STRAINER
- T

TUNDISH
- TA

TO ABOVE
- TB

TO BELOW
- TMV

THERMOSTATIC BLENDING VALVE
- T&PRV

TEMPERATURE/PRESSURE RELIEF VALVE
- WM

WASHING MACHINE
- WIPUR

WATER PURIFIER
- A

ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - - -

EXISTING REDUNDANT (REMOVED)
- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF

DOMESTIC HOT WATER SERVICE (FLOW)
- DHWSR

DOMESTIC HOT WATER SERVICE (RETURN)
- CWS

COLD WATER SERVICE
- BCWS

BOOSTED COLD WATER SERVICE
- MWS

MAINS WATER SERVICE
- CAT 1

FLUID CATEGORY 1 (WATER REGULATIONS)
- CAT 2

FLUID CATEGORY 2 (WATER REGULATIONS)
- CAT 4

FLUID CATEGORY 4 (WATER REGULATIONS)
- CAT 5

FLUID CATEGORY 5 (WATER REGULATIONS)
- LHWSF

LABORATORY HOT WATER SERVICE (FLOW)
- LHWSR

LABORATORY HOT WATER SERVICE (RETURN)
- LBCWS

LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

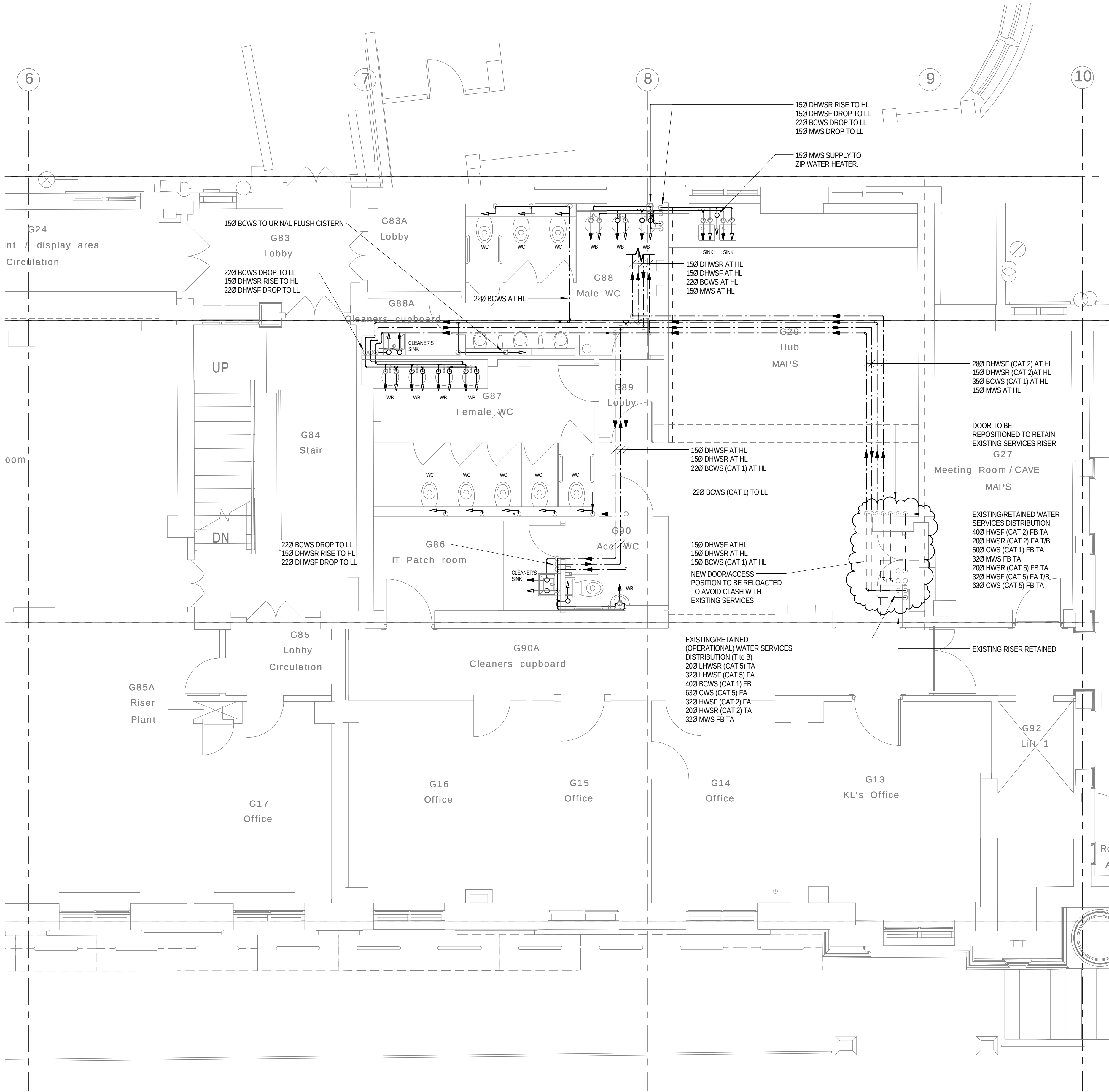
KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Ground Floor
Domestic and Laboratory Water Services

Sheet 1 of 4

Drawn:	KC	Checked:	KW		
Designed:	MTL	Approved:	DW		
Date:	11/27/14	Scale:	As indicated	A1	Sheet:
Project Number:		Drawing Number:			Revision:
3512445M-BBG		L(58)-00-05			3
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Ground Floor DWS 02

1 : 50

NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

A	ANCHOR
AAV	AUTOMATIC AIR VENT
AVV	ANTI VACUUM VALVE
BCWS	BOOSTED COLD WATER SERVICE
C5	CATEGORY 5 LAB HOT AND COLD WATER
CV	CHECK VALVE
CVA	CEILING VOID ABOVE
DOC	DRAIN OFF COCK
DTB	DROP TO BELOW
DW	DEIONISED WATER
DWM	DISHWASHER
ES	EMERGENCY SHOWER
EV	EXPANSION VESSEL
EW	EYE WASH
FA	FROM ABOVE
FB	FROM BELOW
FCupd	FUME CURBOARD
FC	FLEXIBLE COUPLING
FV	FLOAT VALVE
HA	HYDRAULIC ACCUMULATOR
HL	HIGH LEVEL
HUBT	HOSE UNION BIB TAP
HWT	HOT WATER HEATER
IV	ISOLATING VALVE
LL	LOW LEVEL
M	METER
MWS	MAINS WATER SERVICE
NRV	NON RETURN VALVE
POU	POINT OF USE
PRV	PRESSURE REDUCING VALVE
SAV	SAFETY VALVE
SF	SCREEN FILTER
SgV	SERVISING VALVE
ST	STRAINER
T	TUNDISH
TA	TO ABOVE
TB	TO BELOW
TMV	THERMOSTATIC BLENDING VALVE
T&PRV	TEMPERATURE/PRESSURE RELIEF VALVE
WM	WASHING MACHINE
WPUR	WATER PURIFIER
(A)	ANCHOR POINT

PIPEWORK LEGEND

---	EXISTING RETAINED
-/-/-/-/-	EXISTING REDUNDANT (REMOVED)
---	NEW PROPOSED WATER SERVICES (HIGH LEVEL)
---	NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

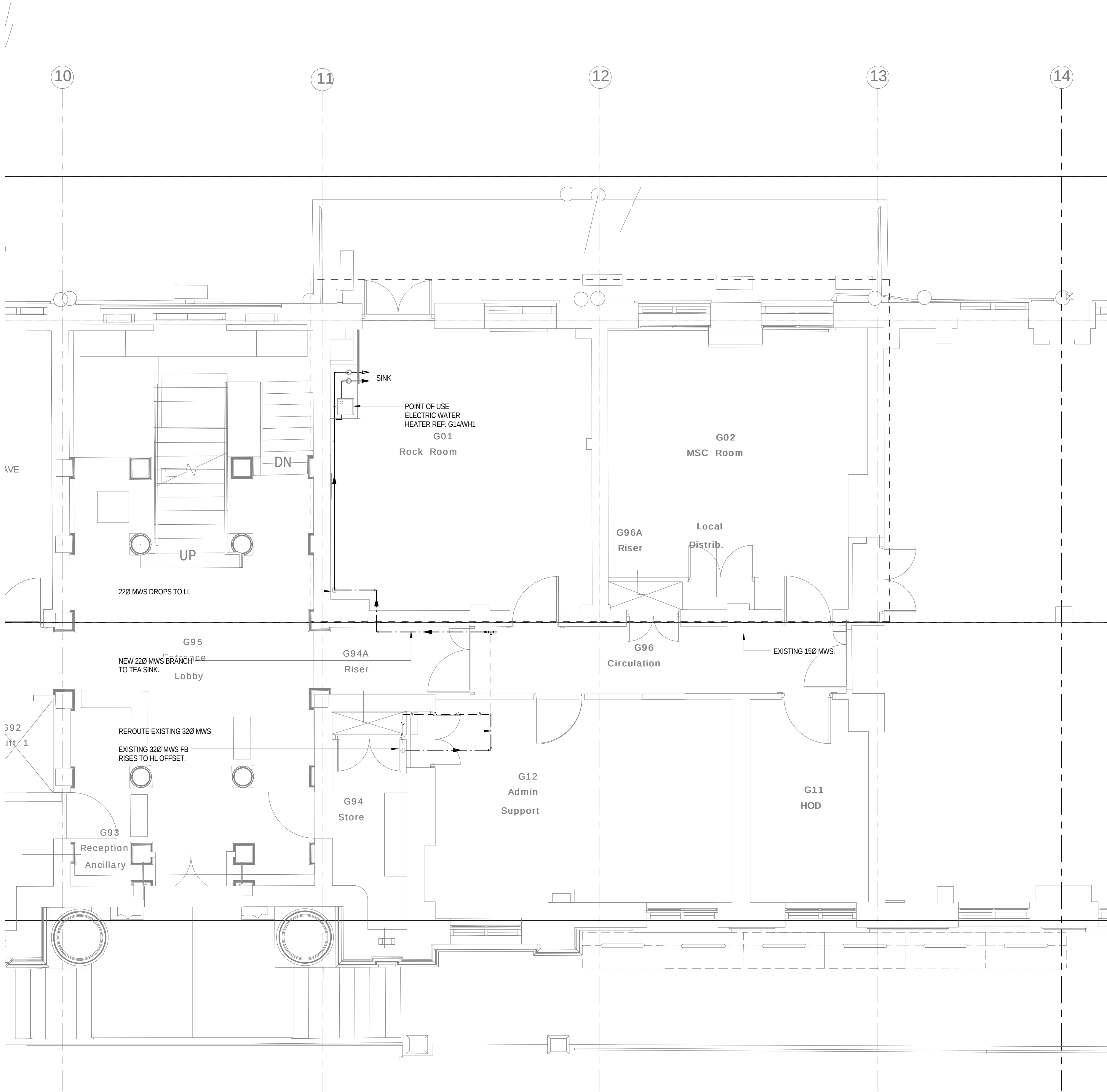
Client:
**UNIVERSITY
COLLEGE LONDON**

Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Ground Floor
Domestic and Laboratory Water Services**

Sheet 2 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/27/14	Scale: As indicated
Project Number: 3512445M-BBG	Drawing Number: L(58)-00-06
	Revision: 3



NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

A	ANCHOR
AAV	AUTOMATIC AIR VENT
AVV	ANTI VACUUM VALVE
BCWS	BOOSTED COLD WATER SERVICE
C5	CATEGORY 5 LAB HOT AND COLD WATER
CV	CHECK VALVE
CVA	CEILING VOID ABOVE
DOC	DRAIN OFF COCK
DTB	DROP TO BELOW
DW	DEIONISED WATER
DWIM	DISHWASHER
ES	EMERGENCY SHOWER
EV	EXPANSION VESSEL
EW	EYE WASH
FA	FROM ABOVE
FB	FROM BELOW
FCupl	FUME CLIPBOARD
FC	FLEXIBLE COUPLING
FV	FLOAT VALVE
HA	HYDRAULIC ACCUMULATOR
HL	HIGH LEVEL
HUBT	HOSE UNION BIB TAP
HWH	HOT WATER HEATER
IV	ISOLATING VALVE
LL	LOW LEVEL
M	METER
MWS	MAINS WATER SERVICE
NRV	NON RETURN VALVE
POU	POINT OF USE
PRV	PRESSURE REDUCING VALVE
SAV	SAFETY VALVE
SF	SCREEN FILTER
SgV	SERVICING VALVE
ST	STRAINER
T	TUNDISH
TA	TO ABOVE
TB	TO BELOW
TMV	THERMOSTATIC BLENDING VALVE
T&PRV	TEMPERATURE/PRESSURE RELIEF VALVE
WM	WASHING MACHINE
W/PUR	WATER PURIFIER
(A)	ANCHOR POINT

PIPEWORK LEGEND

-----	EXISTING RETAINED
---//---//---//---	EXISTING REDUNDANT (REMOVED)
-----	NEW PROPOSED WATER SERVICES (HIGH LEVEL)
-----	NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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Godalming
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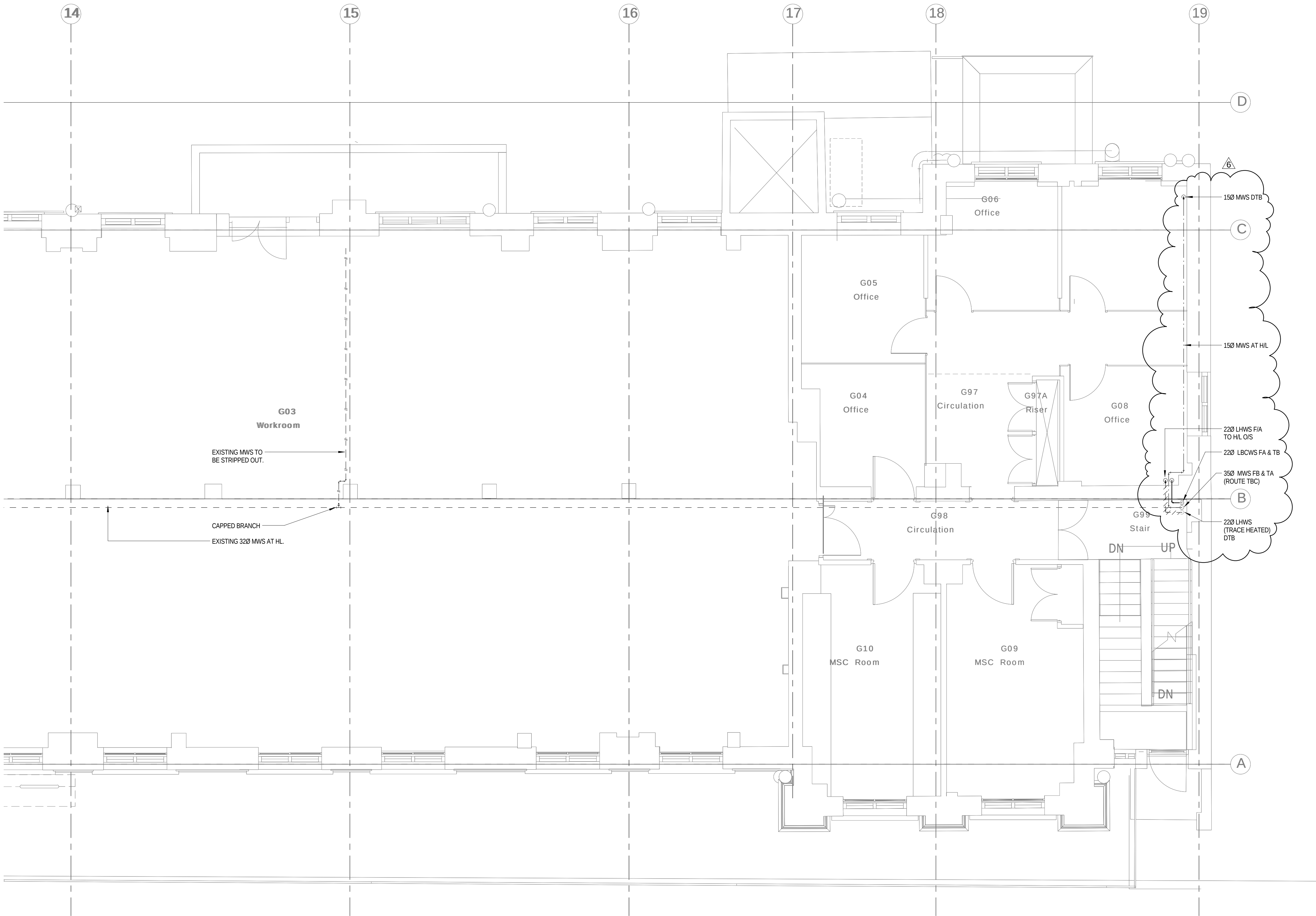
Client:
**UNIVERSITY
COLLEGE LONDON**

Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Ground Floor
Domestic and Laboratory Water Services**

Sheet 3 of 4

Drawn:	KC	Checked:	KW		
Designed:	MTL	Approved:	DW		
Date:	11/27/14	Scale: As indicated	A1	Sheet:	
Project Number:		Drawing Number:		Revision:	
3512445M-BBG		L(58)-00-07		3	
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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A

ANCHOR
- AAV

AUTOMATIC AIR VENT
- AVV

ANTI VACUUM VALVE
- BCWS

BOOSTED COLD WATER SERVICE
- C5

CATEGORY 5 LAB HOT AND COLD WATER
- CV

CHECK VALVE
- CVA

CEILING VOID ABOVE
- DOC

DRAIN OFF COCK
- DTB

DROP TO BELOW
- DW

DEIONISED WATER
- DWIM

DISHWASHER
- ES

EMERGENCY SHOWER
- EV

EXPANSION VESSEL
- EW

EYE WASH
- FA

FROM ABOVE
- FB

FROM BELOW
- FCupl

FUME CLIPBOARD
- FC

FLEXIBLE COUPLING
- FV

FLOAT VALVE
- HA

HYDRAULIC ACCUMULATOR
- HL

HIGH LEVEL
- HUBT

HOSE UNION BIB TAP
- HWH

HOT WATER HEATER
- IV

ISOLATING VALVE
- LL

LOW LEVEL
- M

METER
- MWS

MAINS WATER SERVICE
- NRV

NON RETURN VALVE
- POU

POINT OF USE
- PRV

PRESSURE REDUCING VALVE
- SAV

SAFETY VALVE
- SF

SCREEN FILTER
- SgV

SERVICING VALVE
- ST

STRAINER
- T

TUNDISH
- TA

TO ABOVE
- TB

TO BELOW
- TMV

THERMOSTATIC BLENDING VALVE
- T&PRV

TEMPERATURE/PRESSURE RELIEF VALVE
- WM

WASHING MACHINE
- W/PUR

WATER PURIFIER
- A
- ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- EXISTING REDUNDANT (REMOVED)
- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF

DOMESTIC HOT WATER SERVICE (FLOW)
- DHWSR

DOMESTIC HOT WATER SERVICE (RETURN)
- CWS

COLD WATER SERVICE
- BCWS

BOOSTED COLD WATER SERVICE
- MWS

MAINS WATER SERVICE
- CAT 1

FLUID CATEGORY 1 (WATER REGULATIONS)
- CAT 2

FLUID CATEGORY 2 (WATER REGULATIONS)
- CAT 4

FLUID CATEGORY 4 (WATER REGULATIONS)
- CAT 5

FLUID CATEGORY 5 (WATER REGULATIONS)
- LHWSF

LABORATORY HOT WATER SERVICE (FLOW)
- LHWSR

LABORATORY HOT WATER SERVICE (RETURN)
- LBCWS

LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

6	20.01.16	STAGE D ISSUE	MTL	DW
5	13.01.16	STAGE D ISSUE	MTL	DW
4	08.01.16	MINOR CHANGES	MTL	DW
3	01.10.15	PIPEWORK ROUTING CLARIFIED AS CLOUDED	MTL	DT
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

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Godalming

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Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Ground Floor
Domestic and Laboratory Water Services

Sheet 4 of 4

Drawn: KC

Checked: KW

Designed: MTL

Approved: DW

Date: 11/27/14

Scale: As indicated

A1

Sheet:

Project Number:

Drawing Number:

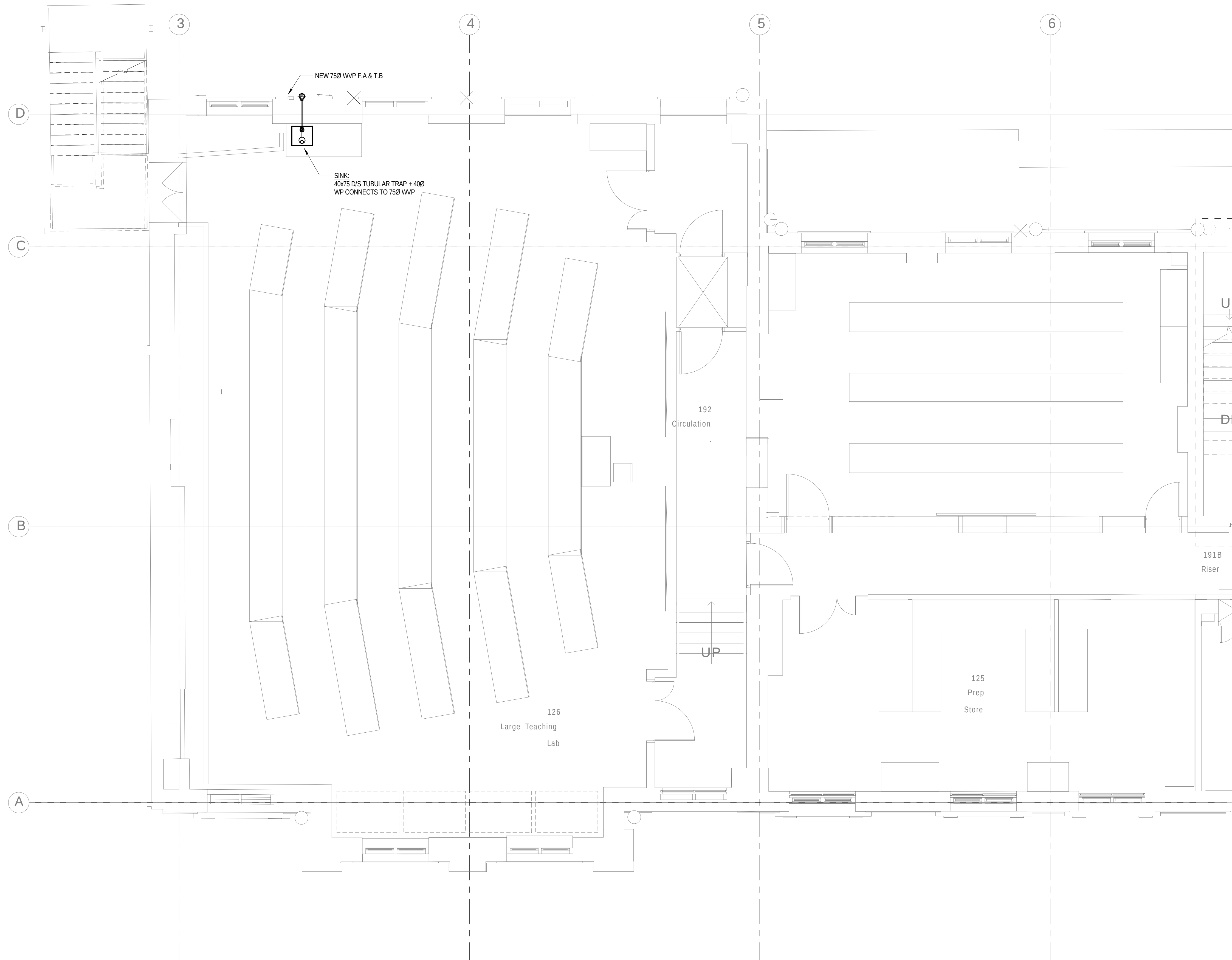
Revision:

3512445M-BBG

L(58)-00-08

6

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First Floor Sanitary Drainage Pipework 01
1 : 50

1 : 50

NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DDC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
EW	EMERGENCY SHOWER & FLOOR DRAIN
ES	EYE WASH
EW	EACH WITH
FC	FUME CATCHBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
R/A	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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Client

UNIVERSITY
COLLEGE LONDON

Site/Project	Year	Author	Notes
...	...	...	...

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

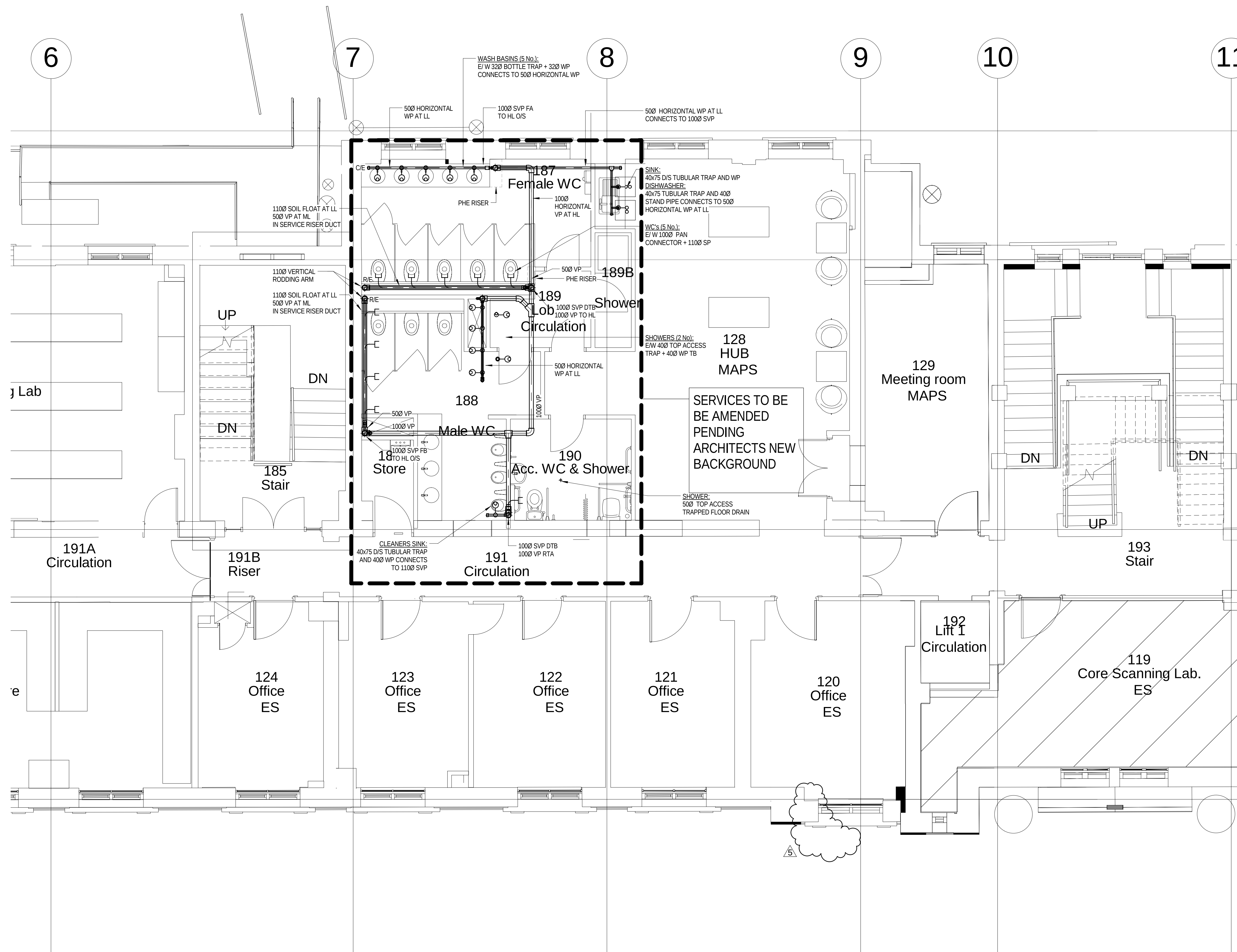
First Floor

Sanitary Pipework Layout

Sheet 1 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: AS indicated	A1	Sheet:
Project Number:		Drawing Number:	
3512445M-BBG		L(58)-01-01	
		3	
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NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CEILING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EYE WASH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

5	12.04.16	STAGE D ISSUE	RB	DW
4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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COLLEGE LONDON

Site/Project:
KLB Masterplan Refurbishment Project
(PSO0044)

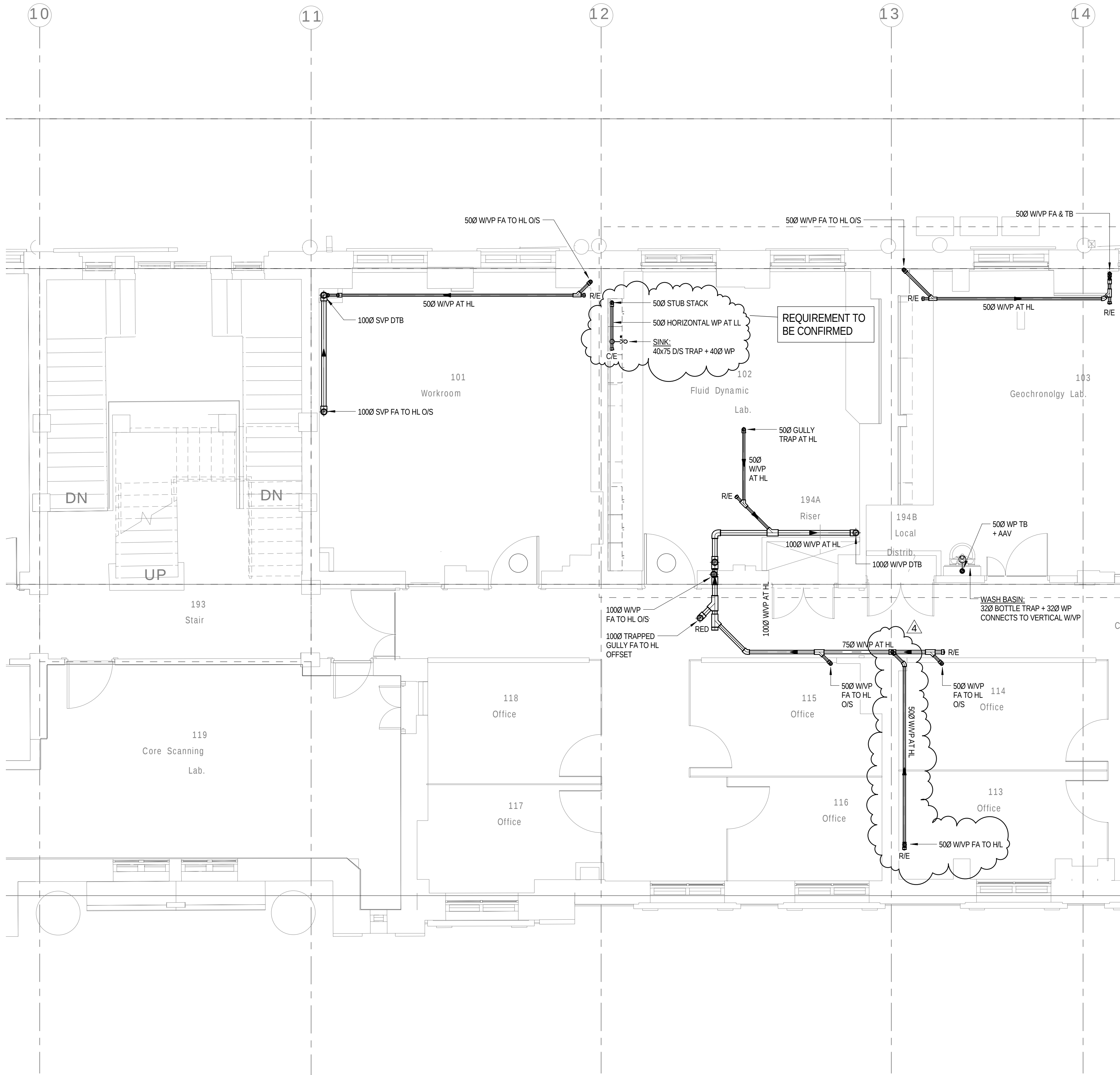
Title:

First Floor
Sanitary Pipework Layout

Sheet 2 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	
3512445M-BBG		L(58)-01-02	
		Revision:	
		5	

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NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI-SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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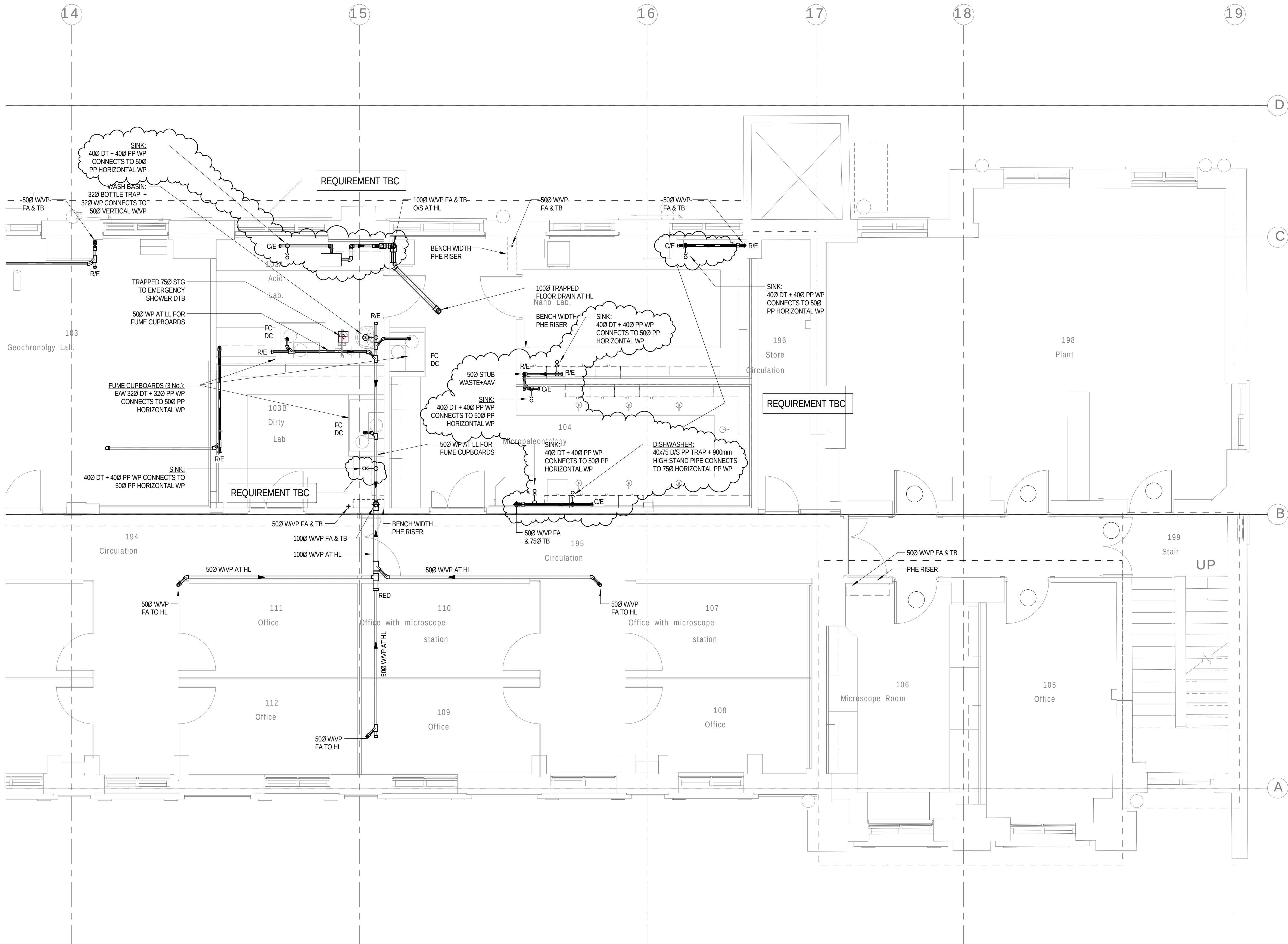
Client:
**UNIVERSITY
COLLEGE LONDON**

Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**First Floor
Sanitary Pipework Layout**

Sheet 3 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	Revision:
3512445M-BBG		L(58)-01-03	4
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- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
 2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

- LEGEND
- AAV AIR ADMITTANCE VALVE
 - ASP ANTI-SYPHON PIPE
 - C/E CLEANING EYE
 - CVA CEILING VOID ABOVE
 - CW CHEMICAL WASTE
 - DC DRIP CUP
 - DOC DRAIN OFF COCK
 - DP DRAIN POINT
 - DTB DROP TO BELOW
 - ES EMERGENCY SHOWER & FLOOR DRAIN
 - EW EYE WASH
 - E/W EACH WITH
 - FD FLOOR DRAIN
 - FA FROM ABOVE
 - FB FROM BELOW
 - FW FOUL WATER
 - HL HIGH LEVEL
 - ML MID LEVEL
 - LL LOW LEVEL
 - O/S OFFSET
 - PM PUMPED MAIN
 - R/E RODDING EYE
 - RTA RISE TO ABOVE
 - RED REDUCER
 - SP SOIL PIPE
 - SVP SOIL VENT PIPE
 - SW SURFACE WATER
 - TA TO ABOVE
 - TB TO BELOW
 - VP VENT PIPE
 - WHB WASH HAND BASIN
 - WP WASTE PIPE
 - WVP WASTE VENT PIPE
 - WM WASHING MACHINE

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

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COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
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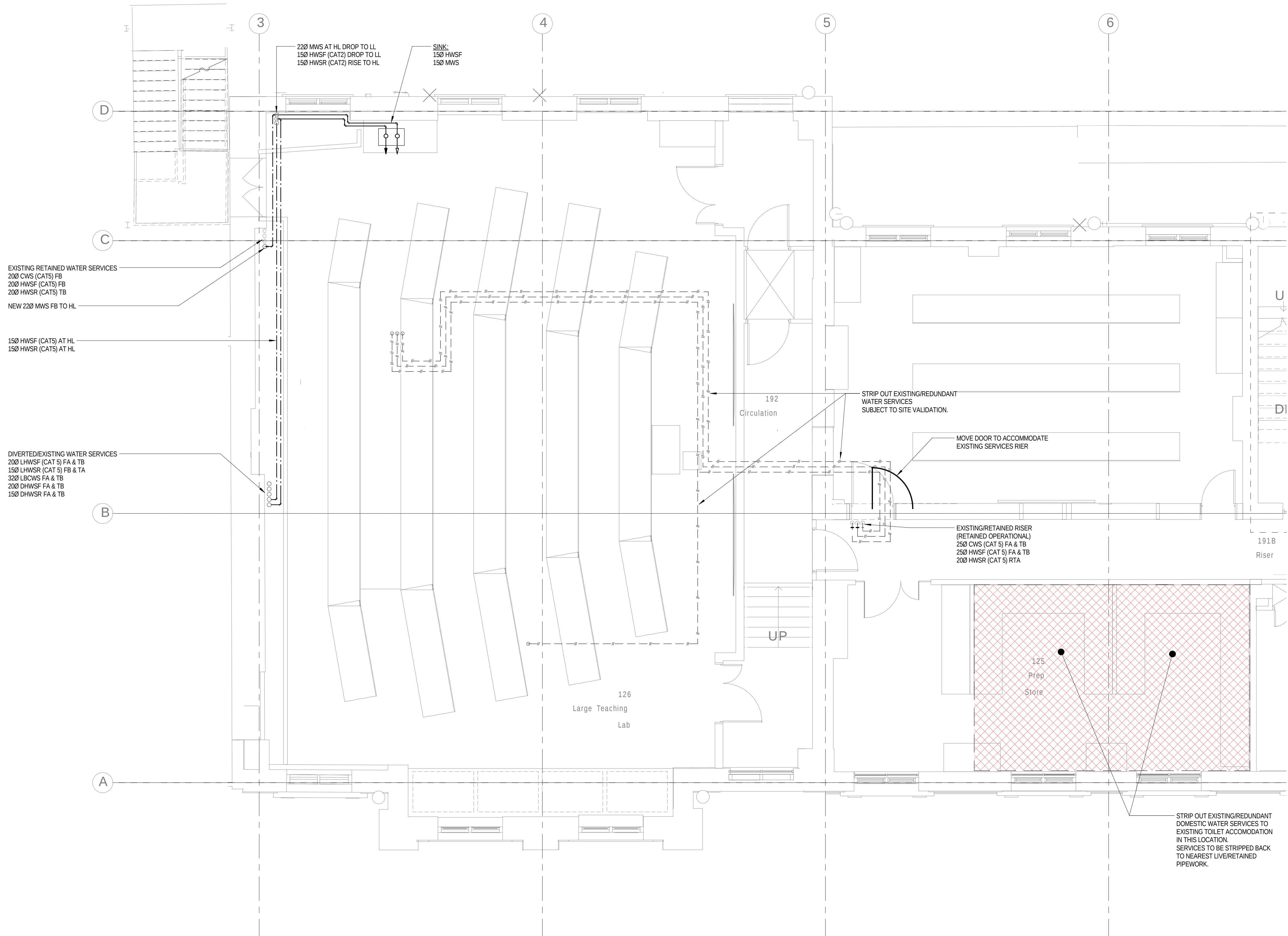
Title:

First Floor
Sanitary Pipework Layout

Sheet 4 of 4

Drawn: SM	Checked: KW
Designed: MTL	Approved: DW
Date: 10/14/14	Scale: As Indicated
Project Number:	Drawing Number:
3512445M-BBG	L(58)-01-04
	4

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NOTES

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

	ANCHOR
NAV	AUTOMATIC AIR VENT
NAV	ANTI VACUUM VALVE
NCVMS	BOOSTED COLD WATER SERVICE
NCVMS	COLD WATER LAB HOT AND COLD WATER
NCV	CHECK VALVE
NCVA	CEILING VOID ABOVE
DOC	DRAIN OFF COCK
NCB	DROP TO BELOW
NCV	DEIONISED WATER
NCV	DISHWASHER
NCV	EMERGENCY SHOWER
NCV	EXPANSION VESSEL
NCV	EYE WASH
NCV	FROM ABOVE
NCV	FROM BELOW
NCV	FIBRE CUPBOARD
NCV	F FLEXIBLE COUPLING
NCV	FLOAT VALVE
NCV	HYDRAULIC ACCUMULATOR
NCV	HIGH LEVEL
NCV	HOSE UNION BIP TAP
NCV	HOT WATER HEATER
NCV	ISOLATING VALVE
NCV	LOW LEVEL
NCV	METER
NCV	MAINS WATER SERVICE
NCV	NON RETURN VALVE
NCV	POINT OF USE
NCV	PRESSURE REDUCING VALVE
NCV	SAFETY VALVE
NCV	SCREEN FILTER
NCV	SERVICING VALVE
NCV	STRAINER
NCV	TUNDISH
NCV	TO ABOVE
NCV	TO BELOW
NCV	THERMOSTATIC BLENDING VALVE
NCV	TEMPERATURE/PRESSURE RELIEF VALVE
NCV	WASHING MACHINE
NCV	WATER PURIFIER
NCV	ANCHOR POINT

PIPEWORK LEGEND

----- EXISTING RETAINED
 - - - - - EXISTING REDUNDANT (REMOVED)
 _____ NEW PROPOSED WATER SERVICES (HIGH LEVEL)
 _____ NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

HWSF	DOMESTIC HOT WATER SERVICE (FLOW)
HWSR	DOMESTIC HOT WATER SERVICE (RETURN)
CWS	COLD WATER SERVICE
BCWS	BOOSTED COLD WATER SERVICE
MWS	MAINS WATER SERVICE
CAT 1	FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2	FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4	FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5	FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF	LABORATORY HOT WATER SERVICE (FLOW)
LHWSR	LABORATORY HOT WATER SERVICE (RETURN)
LBWS	LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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ient:

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COLLEGE LONDON

te/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

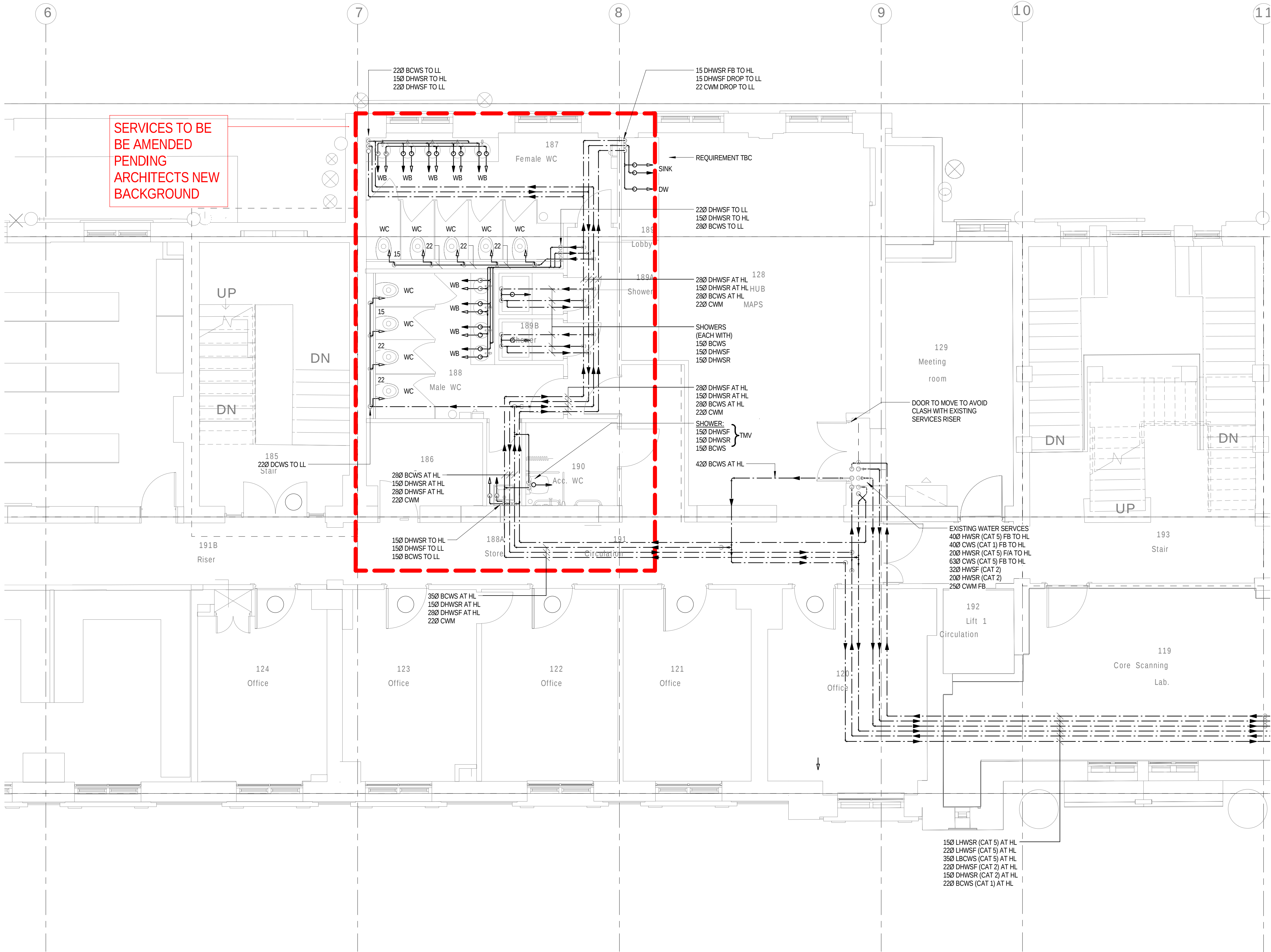
First Floor

Domestic and Laboratory Water Services

Sheet 1 of 4

Drawn: KC		Checked: KW	
Designed: MTL		Approved: DW	
Date: 11/28/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	
Revision:			
3512445M-BBG		L(58)-01-05	
		3	

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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
AAV AUTOMATIC AIR VENT
AVV ANTI VACUUM VALVE
BCWS BOOSTED COLD WATER SERVICE
CS CATEGORY 5 LAB HOT AND COLD WATER
CV CHECK VALVE
CVA CEILING VOID ABOVE
DOC DRAIN OFF COCK
DTB DROP TO BELOW
DW DEIONISED WATER
DWM DISHWASHER
ES EMERGENCY SHOWER
EV EXPANSION VESSEL
EW EYE WASH
FA FROM ABOVE
FB FROM BELOW
FCupd FUME CUPBOARD
FC FLEXIBLE COUPLING
FV FLOAT VALVE
HA HYDRAULIC ACCUMULATOR
HL HIGH LEVEL
HUBT HOSE UNION BIB TAP
HWH HOT WATER HEATER
IV ISOLATING VALVE
LL LOW LEVEL
M METER
MWS MAINS WATER SERVICE
NRV NON RETURN VALVE
POU POINT OF USE
PRV PRESSURE REDUCING VALVE
SAV SAFETY VALVE
SF SCREEN FILTER
SgV SERVICING VALVE
ST STRAINER
T TUNDISH
TA TO ABOVE
TB TO BELOW
TMV THERMOSTATIC BLENDING VALVE
T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
WM WASHING MACHINE
W/PUR WATER PURIFIER
Ⓐ ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - EXISTING REDUNDANT (REMOVED)
--- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
--- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP | **PARSONS BRINCKERHOFF**

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Godalming
Surrey GU7 2AZ

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Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

First Floor
Domestic and Laboratory Water Services

Sheet 2 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/28/14	Scale: As indicated
Project Number:	Drawing Number:
3512445M-BBG	L(58)-01-06
	4

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1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

A	ANCHOR
AAV	AUTOMATIC AIR VENT
AVV	ANTI VACUUM VALVE
BCWS	BOOSTED COLD WATER SERVICE
CBV	CHECK VALVE LAB HOT AND COLD WATER
CV	CHECK VALVE
CYA	CEILING VENT ABOVE
DOC	DRAIN OFF COCK
DTB	DROP TO BELOW
DW	DEIONISED WATER
DWM	DISHWASHER
EW	EMERGENCY SHOWER
EV	EXPANSION VESSEL
EW	EYE WASH
FA	FROM ABOVE
FB	FROM BELOW
FCupd	FUNE CURBOARD
FCV	FLEXIBLE COUPLING
FCV	FLOAT VALVE
HA	HYDRAULIC ACCUMULATOR
HL	HIGH LEVEL
HUBT	HOSE UNION BIB TAP
HWT	HOT WATER HEATER
IV	ISOLATING VALVE
LL	LOW LEVEL
M	METER
MWS	MAINS WATER SERVICE
NRV	NON RETURN VALVE
POU	POINT OF USE
PRV	PRESSURE REDUCING VALVE
SAV	SAFETY VALVE
SF	SCREEN FILTER
SgV	SERVICING VALVE
ST	STRAINER
TA	TUNDISH
TA	TO ABOVE
TB	TO BELOW
TWV	THERMOSTATIC BLENDING VALVE
T&PRV	TEMPERATURE/PRESSURE RELIEF VALVE
WM	WASHING MACHINE
WIPUR	WATER PURIFIER

PIPEWORK LEGEND

-----	EXISTING RETAINED
---H---H---H---	EXISTING REDUNDANT (REMOVED)
-----	NEW PROPOSED WATER SERVICES (HIGH LEVEL)
-----	NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

DHWSF	DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR	DOMESTIC HOT WATER SERVICE (RETURN)
CWS	COLD WATER SERVICE
BCWS	BOOSTED COLD WATER SERVICE
MWS	MAINS WATER SERVICE
CAT 1	FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2	FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4	FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5	FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF	LABORATORY HOT WATER SERVICE (FLOW)
LHWSR	LABORATORY HOT WATER SERVICE (RETURN)
LBWS	LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Client

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

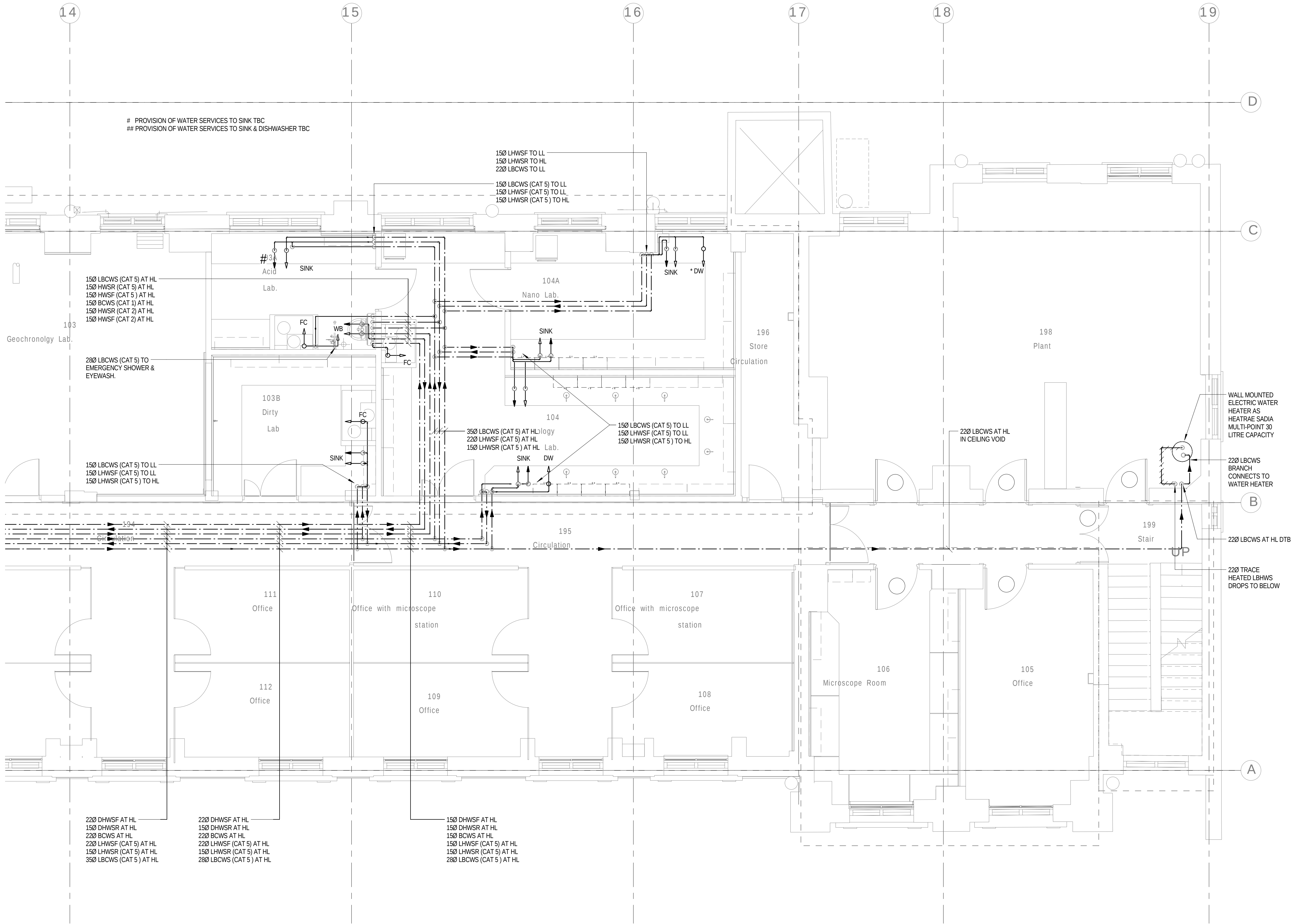
Title:

First Floor

Domestic and Laboratory Water Services

Sheet 3 of 4

Drawn: KC		Checked: KW	
Designed: MTL		Approved: DW	
Date: 11/28/14	Scale: As indicated	Alt:	Sheet:
Project Number:		Drawing Number:	
3512445M-BBG		L(58)-01-07	
		3	
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NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

A	ANCHOR
AAV	AUTOMATIC AIR VENT
AVV	ANTI VACUUM VALVE
BCWS	BOOSTED COLD WATER SERVICE
C5	CATEGORY 5 LAB HOT AND COLD WATER
CV	CHECK VALVE
CVA	CEILING VOID ABOVE
DOC	DRAIN OFF COCK
DTB	DROP TO BELOW
DW	DEIONISED WATER
DWIM	DISHWASHER
ES	EMERGENCY SHOWER
EV	EXPANSION VESSEL
EW	EYE WASH
FA	FROM ABOVE
FB	FROM BELOW
FCupd	FUME CUPBOARD
FC	FLEXIBLE COUPLING
FV	FLOAT VALVE
HA	HYDRAULIC ACCUMULATOR
HL	HIGH LEVEL
HUBT	HOSE UNION BIB TAP
HWH	HOT WATER HEATER
IV	ISOLATING VALVE
LL	LOW LEVEL
M	METER
MWS	MAINS WATER SERVICE
NRV	NON RETURN VALVE
POU	POINT OF USE
PRV	PRESSURE REDUCING VALVE
SAV	SAFETY VALVE
SF	SCREEN FILTER
SgV	SERVICING VALVE
ST	STRAINER
T	TUNDISH
TA	TO ABOVE
TB	TO BELOW
TMV	THERMOSTATIC BLENDING VALVE
T&PRV	TEMPERATURE/PRESSURE RELIEF VALVE
WM	WASHING MACHINE
WPUR	WATER PURIFIER
A	ANCHOR POINT

PIPEWORK LEGEND

---	EXISTING RETAINED
- - -	EXISTING REDUNDANT (REMOVED)
---	NEW PROPOSED WATER SERVICES (HIGH LEVEL)
---	NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

DHWSF	DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR	DOMESTIC HOT WATER SERVICE (RETURN)
CWS	COLD WATER SERVICE
BCWS	BOOSTED COLD WATER SERVICE
MWS	MAINS WATER SERVICE
CAT 1	FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2	FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4	FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5	FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF	LABORATORY HOT WATER SERVICE (FLOW)
LHWSR	LABORATORY HOT WATER SERVICE (RETURN)
LBCWS	LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

6	20.01.16	STAGE D ISSUE	MTL	DW
5	13.01.16	STAGE D ISSUE	MTL	DW
4	08.01.16	MINOR CHANGES	MTL	DW
3	01.10.15	PIPEWORK ROUTING CLARIFIED AS CLOUDED	MTL	DT
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



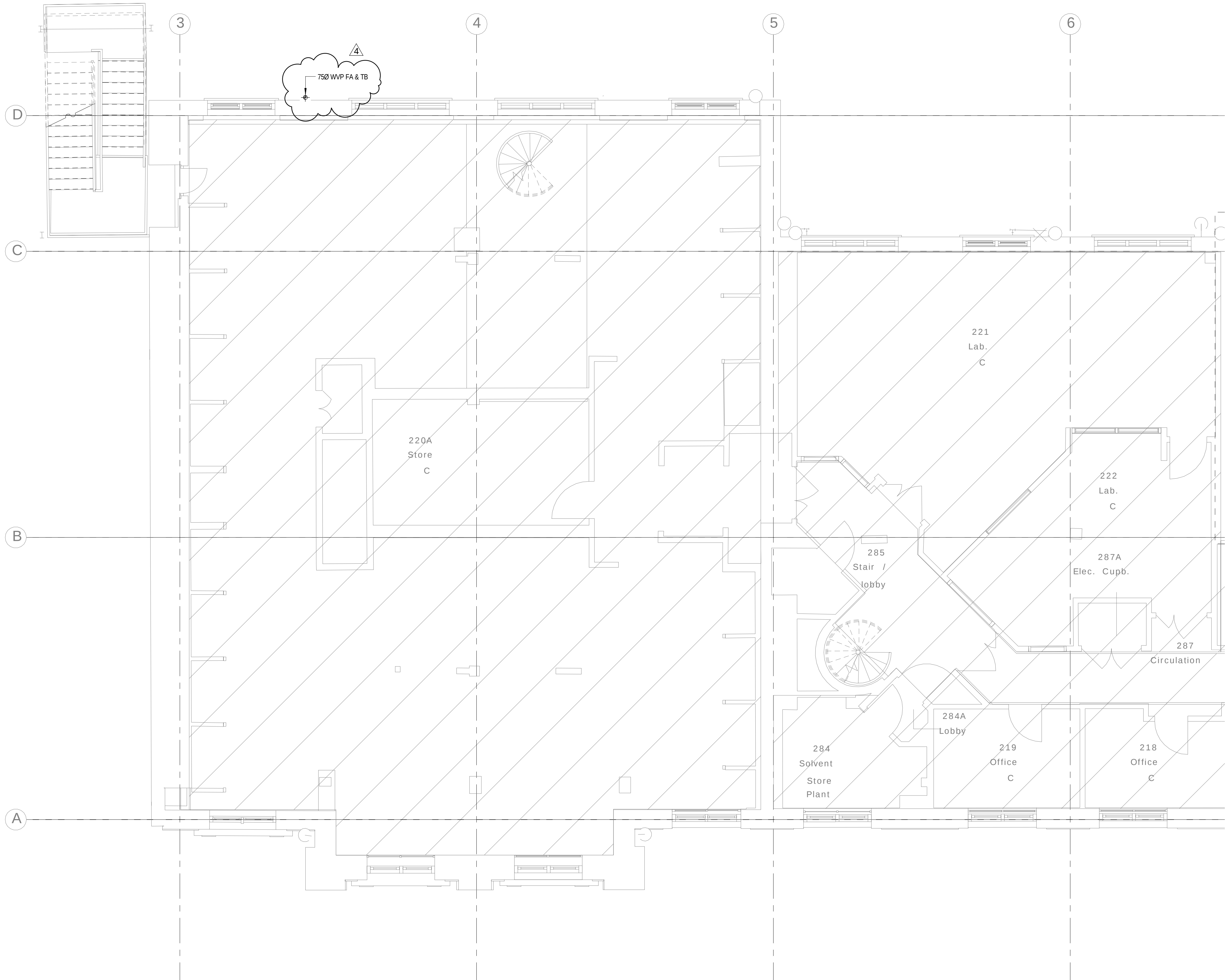
Client: UNIVERSITY COLLEGE LONDON

Site/Project: KLB Masterplan Refurbishment Project (PSO0044)

Title: First Floor
Domestic and Laboratory Water Services

Sheet 4 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/28/14	Scale: As indicated
Project Number: 3512445M-BBG	Drawing Number: L(58)-01-08
	Revision: 6



- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ



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Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Second Floor
Sanitary Pipework Layout

Sheet 1 of 4

Drawn: SM

Checked: KW

Designed: MTL

Approved: DW

Date: 10/14/14

Scale: As Indicated

A1

Sheet:

Project Number:

Drawing Number:

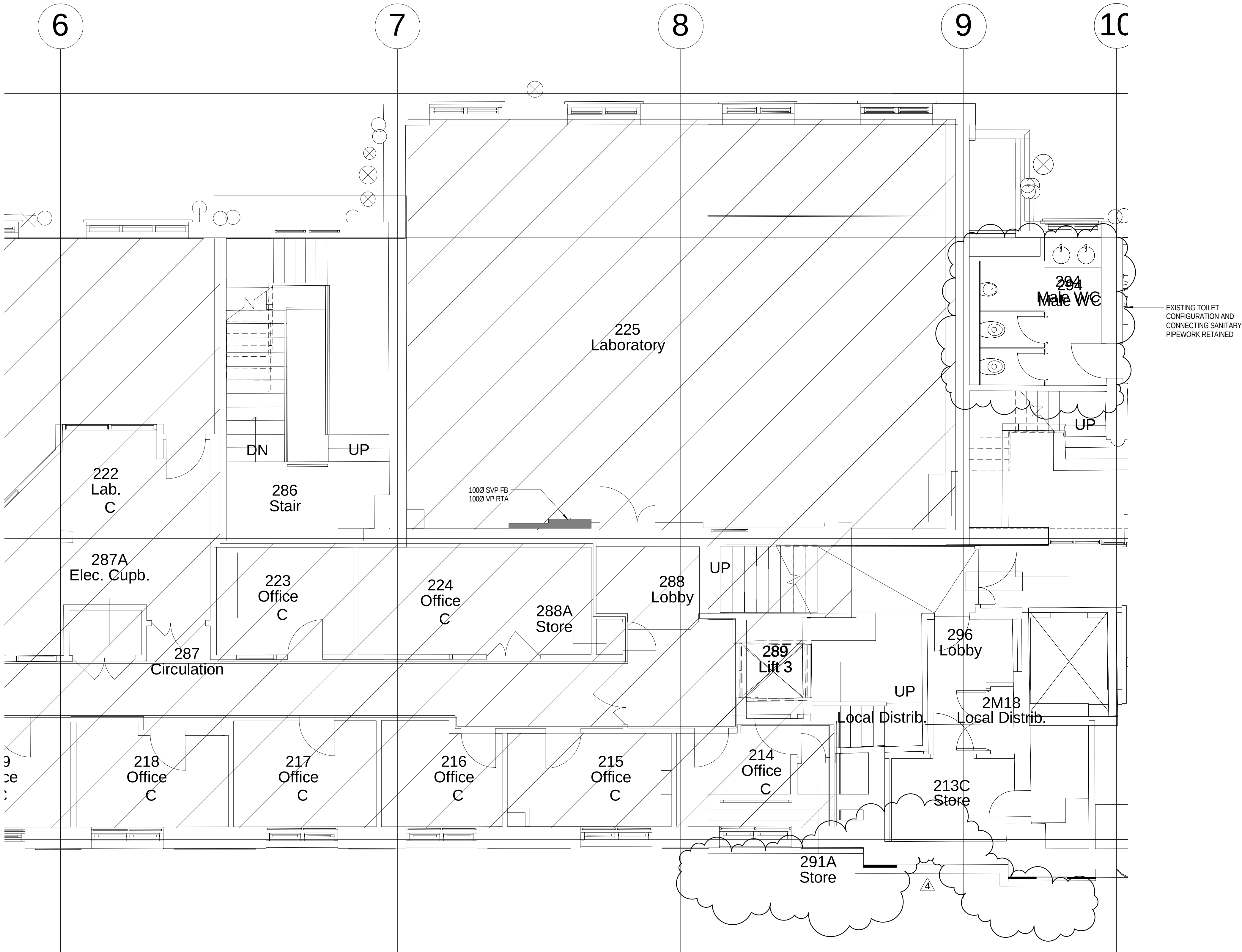
Revision:

3512445M-BBG

L(58)-02-01

4

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- NOTES
- ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
 - ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.
- LEGEND
- | | |
|-----|-------------------------------------|
| AAV | AIR ADMITTANCE VALVE |
| ASP | ANTI SYPHON PIPE |
| C/E | CLEANING EYE |
| CVA | CEILING VOID ABOVE |
| CW | CHEMICAL WASTE |
| DC | DRIP CUP |
| DOC | DRAIN OFF COCK |
| DP | DRAIN POINT |
| DTB | DROP TO BELOW |
| ES | EMERGENCY SHOWER & FLOOR DRAIN |
| EW | EYE WASH |
| EW | EACH WITH |
| FC | FUME CUPBOARD (DRIP CUP & CATCHPOT) |
| FD | FLOOR DRAIN |
| FA | FROM ABOVE |
| FB | FROM BELOW |
| FW | FOUL WATER |
| HL | HIGH LEVEL |
| ML | MID LEVEL |
| LL | LOW LEVEL |
| O/S | OFFSET |
| PM | PUMPED MAIN |
| R/E | RODDING EYE |
| RTA | RISE TO ABOVE |
| RED | REDUCER |
| SP | SOIL PIPE |
| SVP | SOIL VENT PIPE |
| SW | SURFACE WATER |
| TA | TO ABOVE |
| TB | TO BELOW |
| VP | VENT PIPE |
| WHB | WASH HAND BASIN |
| WP | WASTE PIPE |
| WVP | WASTE VENT PIPE |
| WM | WASHING MACHINE |

4	12.04.16	STAGE D ISSUE	RB	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

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BRINCKERHOFF

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Godalming
Surrey GU7 2AZ

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Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

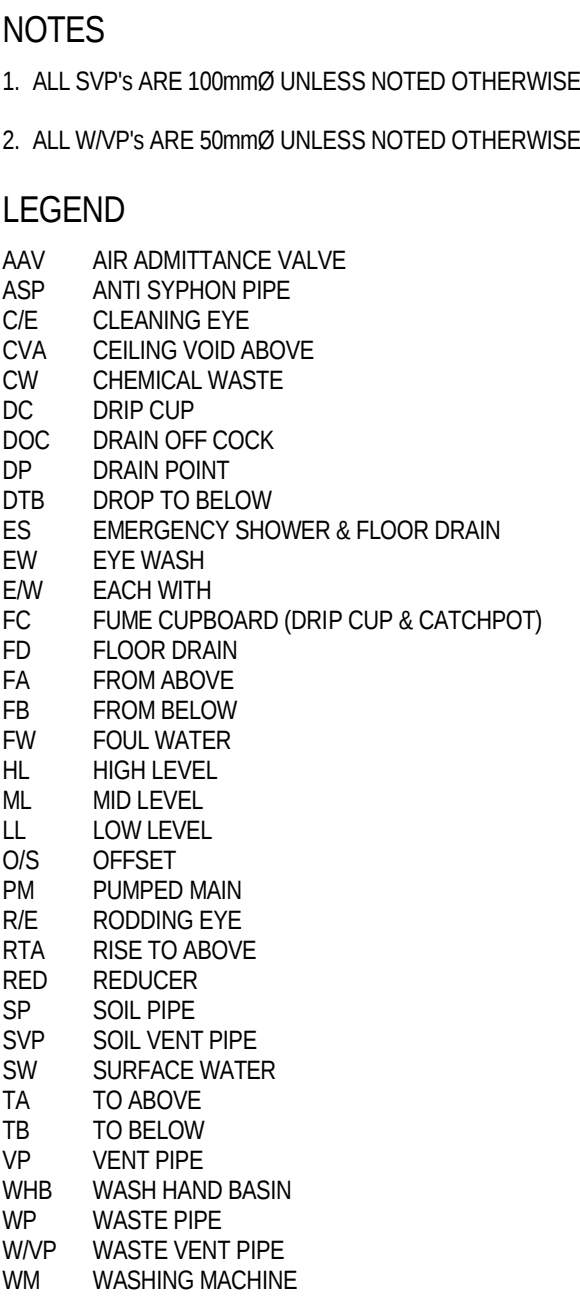
Title:

Second Floor
Sanitary Pipework Layout

Sheet 2 of 4

Drawn: SM	Checked: KW
Designed: MTL	Approved: DW
Date: 10/14/14	Scale: As indicated
Project Number: 3512445M-BBG	Drawing Number: L(58)-02-02
	Revision: 4

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5	12.04.16	STAGE D ISSUE	RB	DW
4	20.01.16	STAGE D ISSUE	MTL	DW
3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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Client

UNIVERSITY
COLLEGE LONDON

Site/Project

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Second Floor

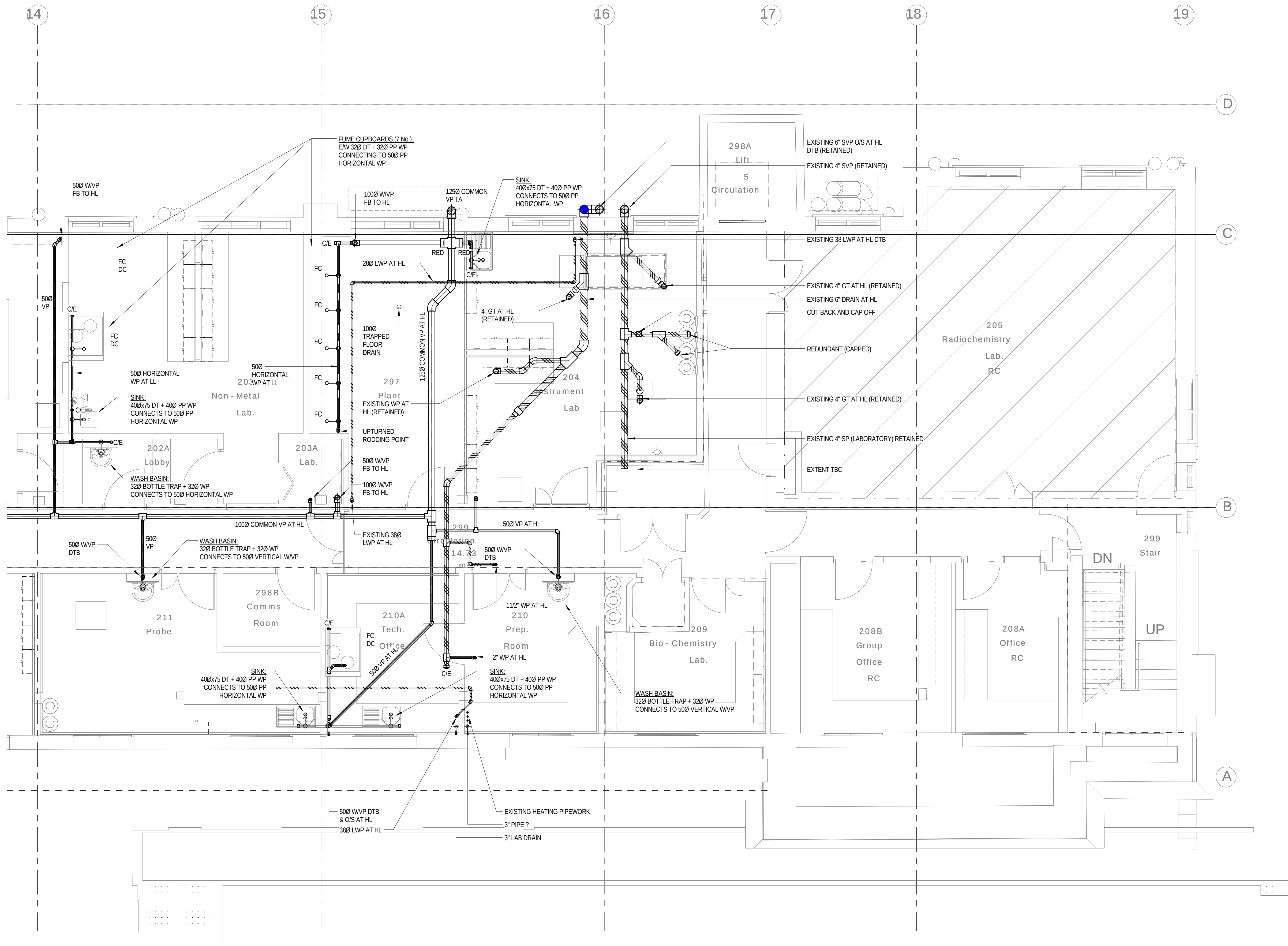
Sanitary Pipework Layout

Sheet 3 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: AS indicated	A1	Sheet:
Project Number:		Drawing Number:	
3512445M-BBG		L(58)-02-03	
		5	

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Second Floor Sanitary Drainage Pipework 03



- NOTES**
- ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
 - ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.
- LEGEND**
- | | |
|-----|-------------------------------------|
| AAV | AIR ADMITTANCE VALVE |
| ASP | ANTI SYPHON PIPE |
| C/E | CLEANING EYE |
| CVA | CEILING VOID ABOVE |
| CW | CHEMICAL WASTE |
| DC | DRIP CUP |
| DOC | DRAIN OFF COCK |
| DP | DRAIN POINT |
| DTB | DROP TO BELOW |
| ES | EMERGENCY SHOWER & FLOOR DRAIN |
| EW | EYE WASH |
| EW | EACH WITH |
| FC | FUME CUPBOARD (DRIP CUP & CATCHPOT) |
| FD | FLOOR DRAIN |
| FA | FROM ABOVE |
| FB | FROM BELOW |
| FW | FOUL WATER |
| HL | HIGH LEVEL |
| ML | MID LEVEL |
| LL | LOW LEVEL |
| O/S | OFFSET |
| PM | PUMPED MAIN |
| R/E | RODDING EYE |
| RTA | RISE TO ABOVE |
| RED | REDUCER |
| SP | SOIL PIPE |
| SVP | SOIL VENT PIPE |
| SW | SURFACE WATER |
| TA | TO ABOVE |
| TB | TO BELOW |
| VP | VENT PIPE |
| WHB | WASH HAND BASIN |
| WP | WASTE PIPE |
| WVP | WASTE VENT PIPE |
| WM | WASHING MACHINE |

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



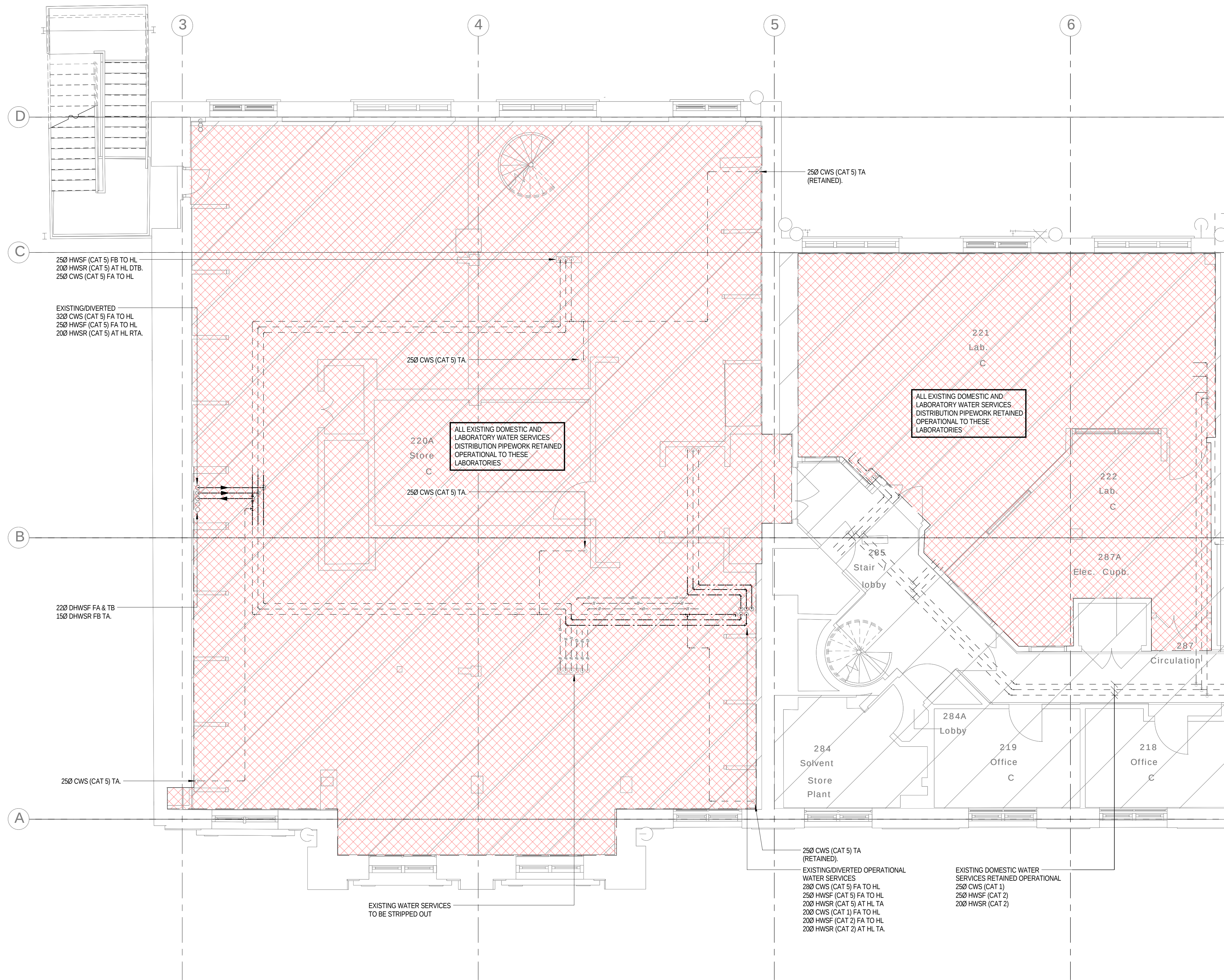
Client: UNIVERSITY COLLEGE LONDON
Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Site/Project: KLB Masterplan Refurbishment Project (PSO0044)

Title: Second Floor Sanitary Pipework Layout

Sheet 4 of 4

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	Revision:
3512445M-BBG		L(58)-02-04	3



NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02

LEGEND

- | | |
|-------|-----------------------------------|
| A | ANCHOR |
| AAV | AUTOMATIC AIR VENT |
| AV | ANTI VACUUM VALVE |
| BCWS | BOOSTED COLD WATER SERVICE |
| CV | CATEGORY 5 LAB HOT AND COLD WATER |
| C5 | CHECK VALVE |
| CVA | CELLING VENT ABOVE |
| DOC | DRAIN OFF COCK |
| DTB | DROP TO BELOW |
| DW | DEIONISED WATER |
| DWIM | DISHWASHER |
| ES | EMERGENCY SHOWER |
| EV | EXPANSION VESSEL |
| EW | EYE WASH |
| FA | FROM ABOVE |
| FB | FROM BELOW |
| FCupd | FUME CUPBOARD |
| FC | FLEXIBLE COUPLING |
| FV | FLOAT VALVE |
| HA | HYDRAULIC ACCUMULATOR |
| HL | HIGH LEVEL |
| HUBT | HOSE UNION BIB TAP |
| HW | HOT WATER HEATER |
| IV | ISOLATING VALVE |
| L | LOW LEVEL |
| M | METER |
| MWS | MAINS WATER SERVICE |
| NRV | NON RETURN VALVE |
| PCU | PAT OF USE |
| PRV | PRESSURE REDUCING VALVE |
| SAV | SAFETY VALVE |
| SF | SCREEN FILTER |
| SgV | SERVICING VALVE |
| ST | STRAINER |
| T | TUNDISH |
| TA | TO ABOVE |
| TB | TO BELOW |
| TW | TEMPEROSTATIC BLENDING VALVE |
| TP&RV | TEMPERATURE/PRESSURE RELIEF VALVE |
| WM | WASHING MACHINE |
| WIPUR | WATER PURIFIER |

PIPEWORK LEGEND

- | | |
|-----------|---|
| ----- | EXISTING RETAINED |
| - - - - - | EXISTING REDUNDANT (REMOVED) |
| ----- | NEW PROPOSED WATER SERVICES
(HIGH LEVEL) |
| ----- | NEW PROPOSED WATER SERVICES
(LOW LEVEL) |

WATER SERVICES

- | | |
|-------|---------------------------------------|
| DHWSF | DOMESTIC HOT WATER SERVICE (FLOW) |
| DHWSR | DOMESTIC HOT WATER SERVICE (RETURN) |
| CWS | COLD WATER SERVICE |
| BCWS | BOOSTED COLD WATER SERVICE |
| MWS | MAINS WATER SERVICE |
| CAT 1 | FLUID CATEGORY 1 (WATER REGULATIONS) |
| CAT 2 | FLUID CATEGORY 2 (WATER REGULATIONS) |
| CAT 4 | FLUID CATEGORY 4 (WATER REGULATIONS) |
| CAT 5 | FLUID CATEGORY 5 (WATER REGULATIONS) |
| LHWSF | LABORATORY HOT WATER SERVICE (FLOW) |
| LHWSR | LABORATORY HOT WATER SERVICE (RETURN) |
| LBWS | LABORATORY BOOSTED COLD WATER SERVICE |

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
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Client

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

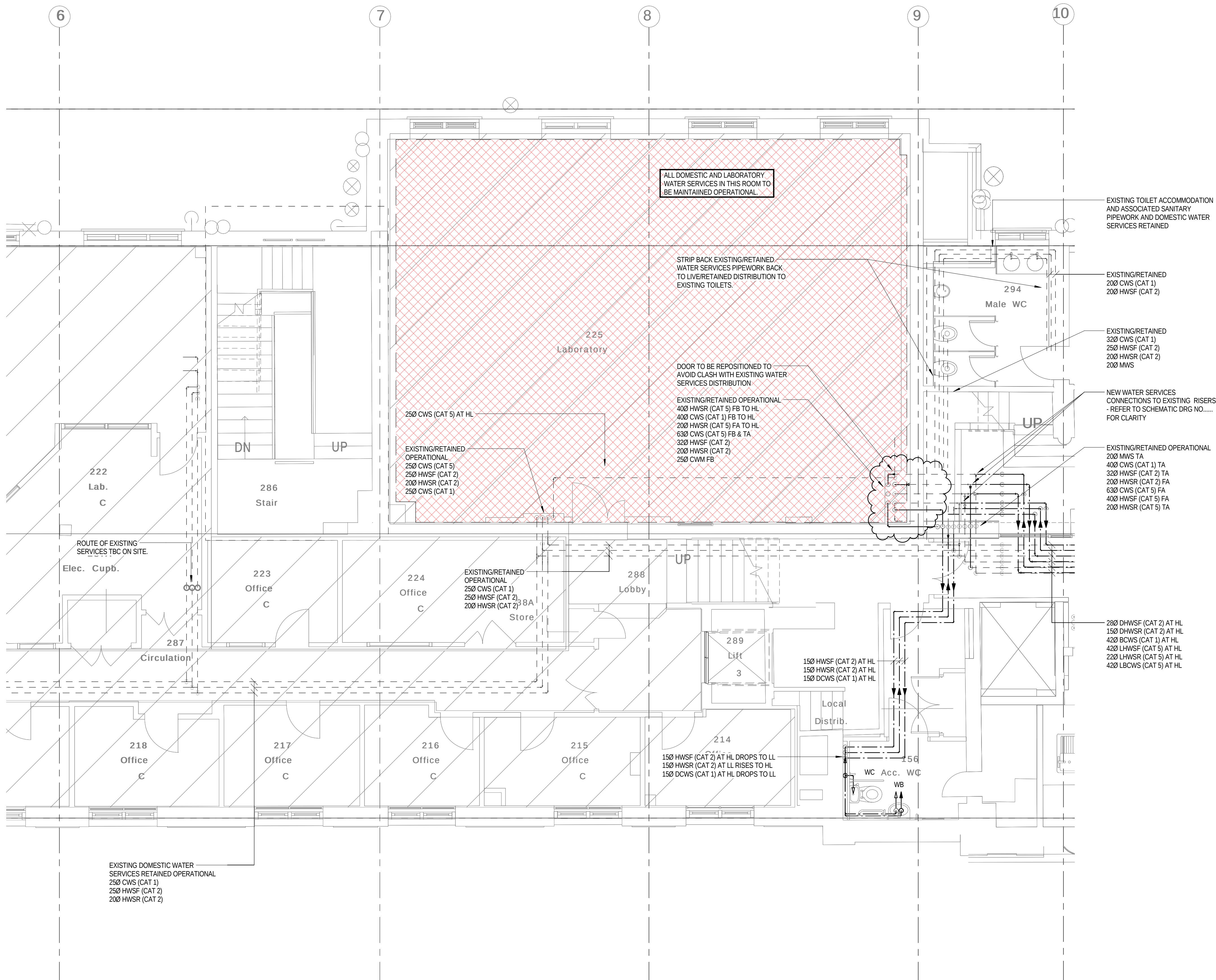
Second Floor

Domestic and Laboratory Water Services

Sheet 1 of 4

Drawn: KC		Checked: KW	
Designed: MTL		Approved: DW	
Date: 12/08/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	Revision:
3512445M-BBG		L(58)-02-05	3

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NOTES

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LEGEND

ANCHOR
AAV
AUTOMATIC AIR VENT
ANTI VACUUM VALVE
BOOSTED COLD WATER SERVICE
CS
COLD WATER LABS HOT AND COLD WATER
CV
CHECK VALVE
CVA
CEILING VOID ABOVE
DOC
DRAIN OFF COCK
DTB
DROP TO BELOW
DEIONISED WATER
DWIM
DISHWASHER
ENMG
EXPANSION SHOWER
EV
EXPANSION VESSEL
EW
EYE WASH
FA
FROM ABOVE
FB
FROM BELOW
FCE
FUME CUPBOARD
FC
FLEXIBLE COUPLING
FV
FLOAT VALVE
HA
HYDRAULIC ACCUMULATOR
HL
HIGH LEVEL
HUBT
HOSE UNION BIB TAP
HW
HOT WATER HEATER
IV
ISOLATING VALVE
LL
LOW LEVEL
M
METER
MWS
MAINS WATER SERVICE
NRV
NON RETURN VALVE
POU
POINT OF USE
PRPV
PRESSURE REDUCING VALVE
PS
SAFETY VALVE
SF
SCREEN FILTER
SgV
SERVICING VALVE
ST
STRAINER
T
TUNDISH
TO ABOVE
TO BELOW
TMV
THERMOSTATIC BLENDING VALVE
TPRV
TEMPERATURE/PRESSURE RELIEF VALVE
WM
WASHING MACHINE
WPUR
WATER PURIFIER
ANCHOR POINT

PIPEWORK LEGEND

-----	EXISTING RETAINED
-H- -H- -H-	EXISTING REDUNDANT (REMOVED)
-----	NEW PROPOSED WATER SERVICES (HIGH LEVEL)
-----	NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

HWHSF	DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR	DOMESTIC HOT WATER SERVICE (RETURN)
CWS	COLD WATER SERVICE
BCWS	BOOSTED COLD WATER SERVICE
MWS	MAINS WATER SERVICE
CAT 1	FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2	FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4	FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5	FLUID CATEGORY 5 (WATER REGULATIONS)
LHWFS	LABORATORY HOT WATER SERVICE (FLOW)
LHWSR	LABORATORY HOT WATER SERVICE (RETURN)
LBWBS	LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



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Client

UNIVERSITY
COLLEGE LONDON

Site/Project

KLB Masterplan Refurbishment Project
(PSO0044)

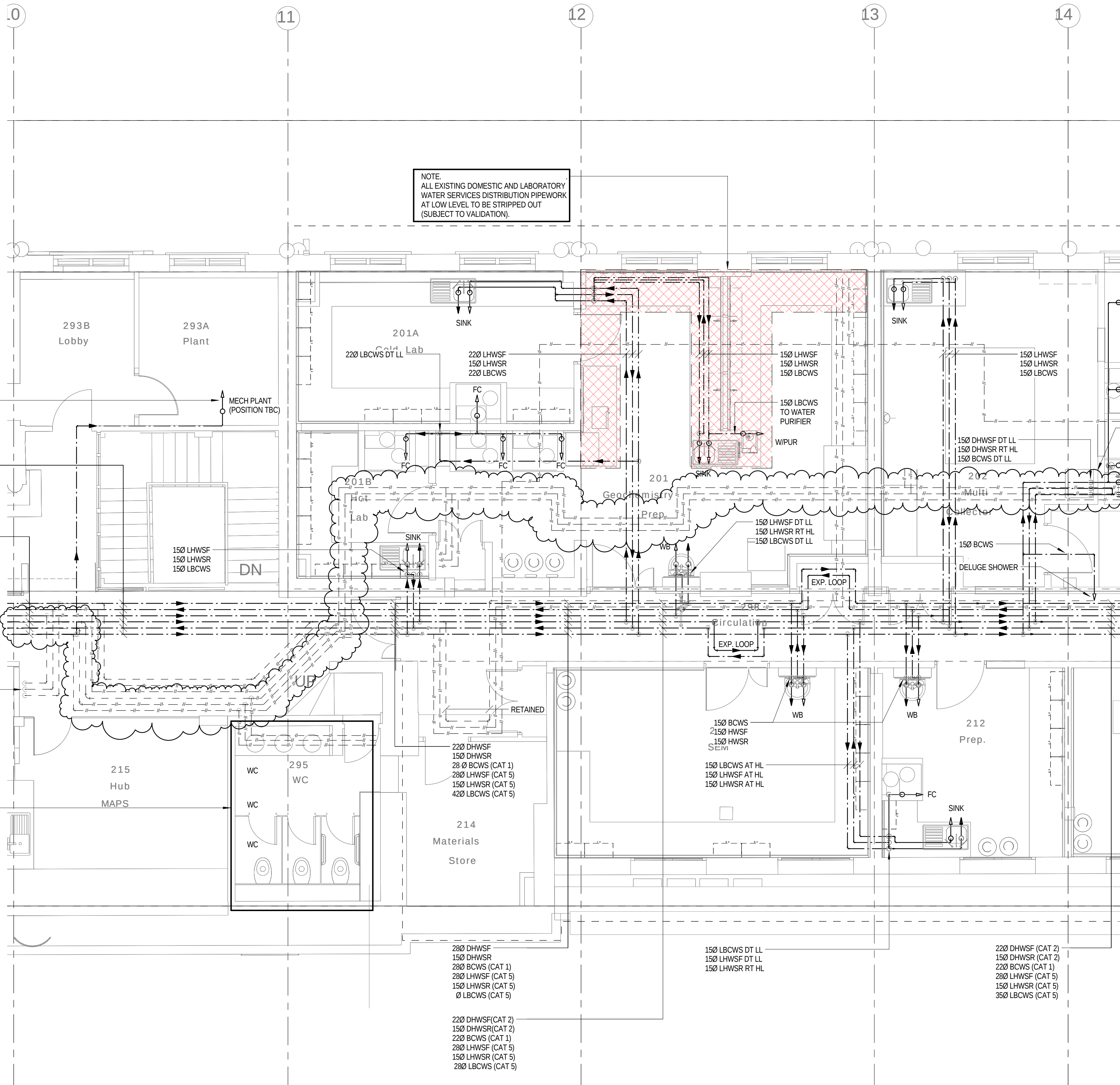
Title:

Second Floor
Domestic and Laboratory Water Services

Sheet 2 of 4

Drawn:	KC	Checked:	KW	
Designed:	MTL	Approved:	DW	
Date:	12/08/14	Scale:	As indicated	Sheet:
Project Number:		Drawing Number:		Revision:
3512445M-BBG		L(58)-02-06		3

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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
AAV AUTOMATIC AIR VENT
AVV ANTI VACUUM VALVE
BCWS BOOSTED COLD WATER SERVICE
C5 CATEGORY 5 LAB HOT AND COLD WATER
CV CHECK VALVE
CVA CEILING VOID ABOVE
DOC DRAIN OFF COCK
DTB DROP TO BELOW
DW DEIONISED WATER
DWIM DISHWASHER
ES EMERGENCY SHOWER
EV EXPANSION VESSEL
EW EYE WASH
FA FROM ABOVE
FB FROM BELOW
FCupd FUME CUPBOARD
FC FLEXIBLE COUPLING
FV FLOAT VALVE
HA HYDRAULIC ACCUMULATOR
HL HIGH LEVEL
HUBT HOSE UNION BIB TAP
HWH HOT WATER HEATER
IV ISOLATING VALVE
LL LOW LEVEL
M METER
MWS MAINS WATER SERVICE
NRV NON RETURN VALVE
POU POINT OF USE
PRV PRESSURE REDUCING VALVE
SAV SAFETY VALVE
SF SCREEN FILTER
SgV SERVING VALVE
ST STRAINER
T TUNDISH
TA TO ABOVE
TB TO BELOW
TMV THERMOSTATIC BLENDING VALVE
T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
WM WASHING MACHINE
WIPUR WATER PURIFIER
ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
--- EXISTING REDUNDANT (REMOVED)
--- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
--- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP | **PARSONS BRINCKERHOFF**

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Surrey GU7 2AZ

Tel: 44-(0)1483-528400
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Client:
UNIVERSITY COLLEGE LONDON

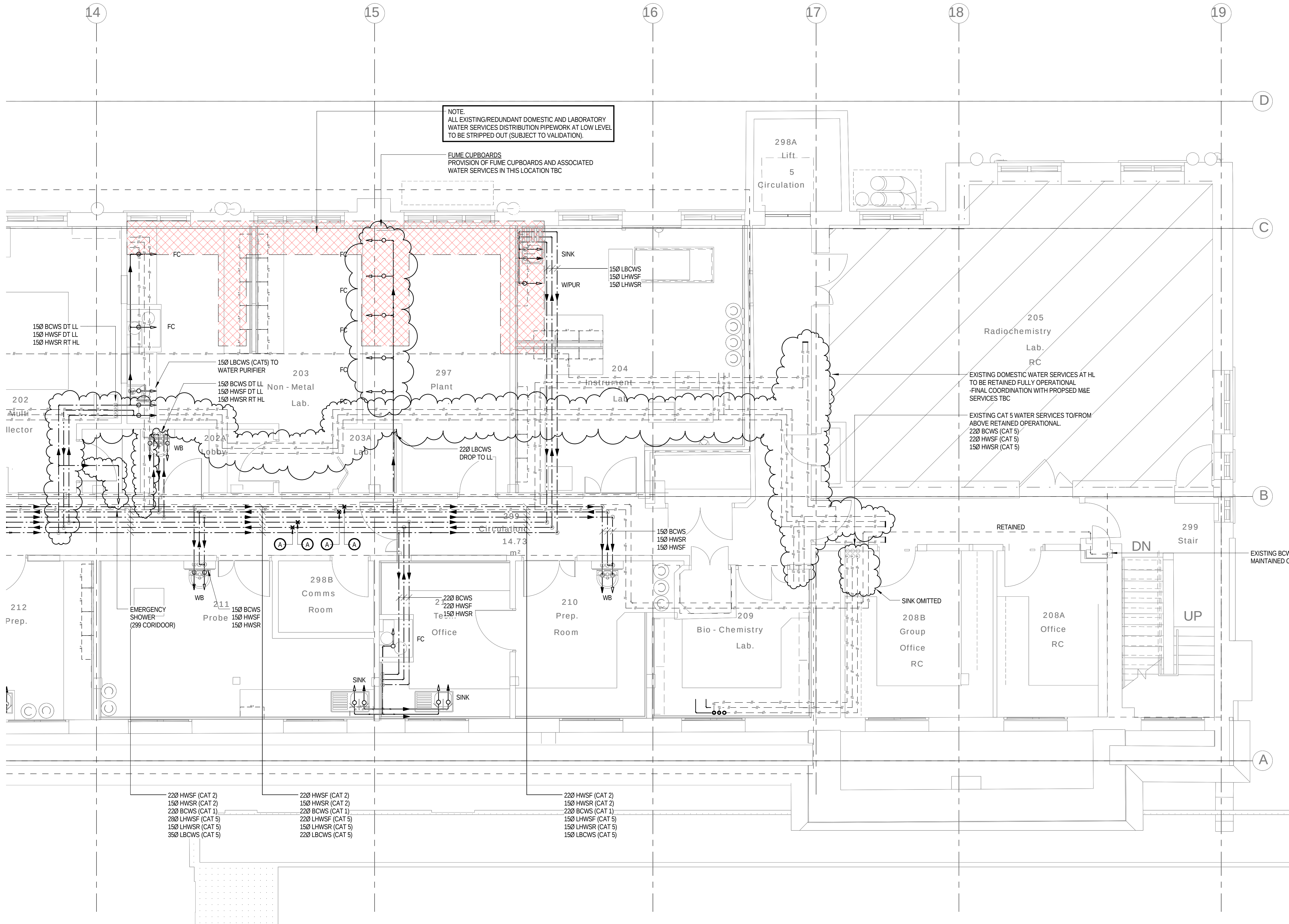
Site/Project:
KLB Masterplan Refurbishment Project (PSO0044)

Title:
**Second Floor
Domestic and Laboratory Water Services**

Sheet 3 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 12/08/14	Scale: As indicated
Project Number: 3512445M-BBG	Drawing Number: L(58)-02-07
	Revision: 3

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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
AAV AUTOMATIC AIR VENT
AVV ANTI VACUUM VALVE
BCWS BOOSTED COLD WATER SERVICE
C5 CATEGORY 5 LAB HOT AND COLD WATER
CV CHECK VALVE
CVA CEILING VOID ABOVE
DOC DRAIN OFF COCK
DTB DROP TO BELOW
DW DEIONISED WATER
DWM DISHWASHER
ES EMERGENCY SHOWER
EV EXPANSION VESSEL
EW EYE WASH
FA FROM ABOVE
FB FROM BELOW
FCupd FUME CUPBOARD
FC FLEXIBLE COUPLING
FV FLOAT VALVE
HA HYDRAULIC ACCUMULATOR
HL HIGH LEVEL
HUBT HOSE UNION BIB TAP
HWH HOT WATER HEATER
IV ISOLATING VALVE
LL LOW LEVEL
M METER
MWS MAINS WATER SERVICE
NRV NON RETURN VALVE
POU POINT OF USE
PRV PRESSURE REDUCING VALVE
SAV SAFETY VALVE
SF SCREEN FILTER
SgV SERVICING VALVE
ST STRAINER
T TUNDISH
TA TO ABOVE
TB TO BELOW
TMV THERMOSTATIC BLENDING VALVE
T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
WM WASHING MACHINE
WIPUR WATER PURIFIER
ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
EXISTING REDUNDANT (REMOVED)
NEW PROPOSED WATER SERVICES (HIGH LEVEL)
NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

EXISTING BCWS (CAT 5) TA MAINTAINED OPERATIONAL.

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:
UNIVERSITY
COLLEGE LONDON

Site/Project:
KLB Masterplan Refurbishment Project
(PSO0044)

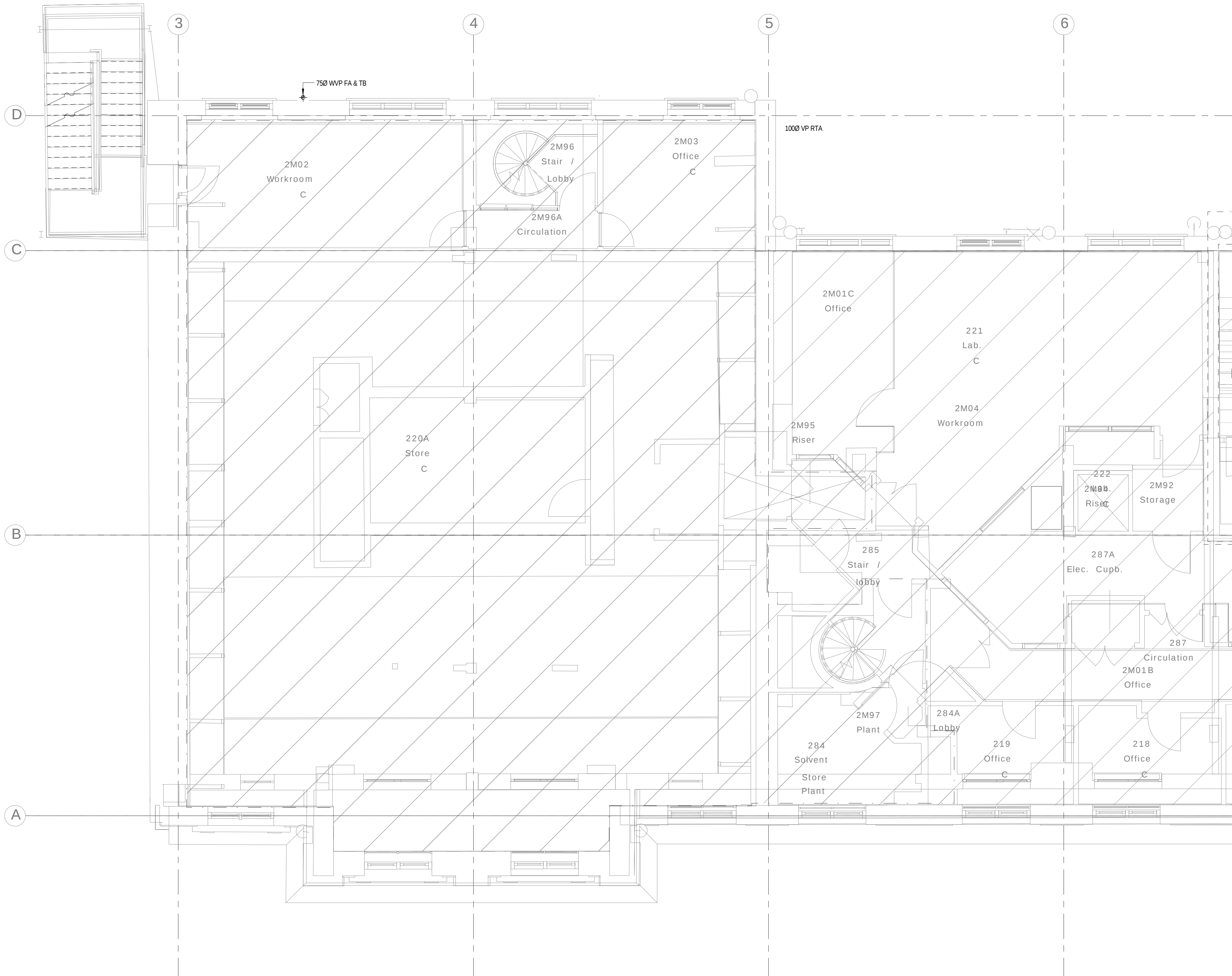
Title:
Second Floor
Domestic and Laboratory Water Services

Sheet 4 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 12/08/14	Scale: As indicated
Project Number:	Drawing Number:
3512445M-BBG	L(58)-02-08
	3

Second Floor Mezzanine Sanitary Drainage Pipework 01

1 : 50



- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

- LEGEND
- AAV

ASP

C/E

CVA

CW

DC

DOC

DP

DTB

ES

EW

EW

FC

FD

FA

FB

FW

HL

ML

LL

O/S

PM

R/E

RTA

RED

SP

SVP

SW

TA

TB

VP

WHB

WP

WVP

WM
- AIR ADMITTANCE VALVE

ANTI SYPHON PIPE

CLEANING EYE

CEILING VOID ABOVE

CHEMICAL WASTE

DRIP CUP

DRAIN OFF COCK

DRAIN POINT

DROP TO BELOW

EMERGENCY SHOWER & FLOOR DRAIN

EYE WASH

EACH WITH

FUME CUPBOARD (DRIP CUP & CATCHPOT)

FLOOR DRAIN

FROM ABOVE

FROM BELOW

FOUL WATER

HIGH LEVEL

MID LEVEL

LOW LEVEL

OFFSET

PUMPED MAIN

RODDING EYE

RISE TO ABOVE

REDUCER

SOIL PIPE

SOIL VENT PIPE

SURFACE WATER

TO ABOVE

TO BELOW

VENT PIPE

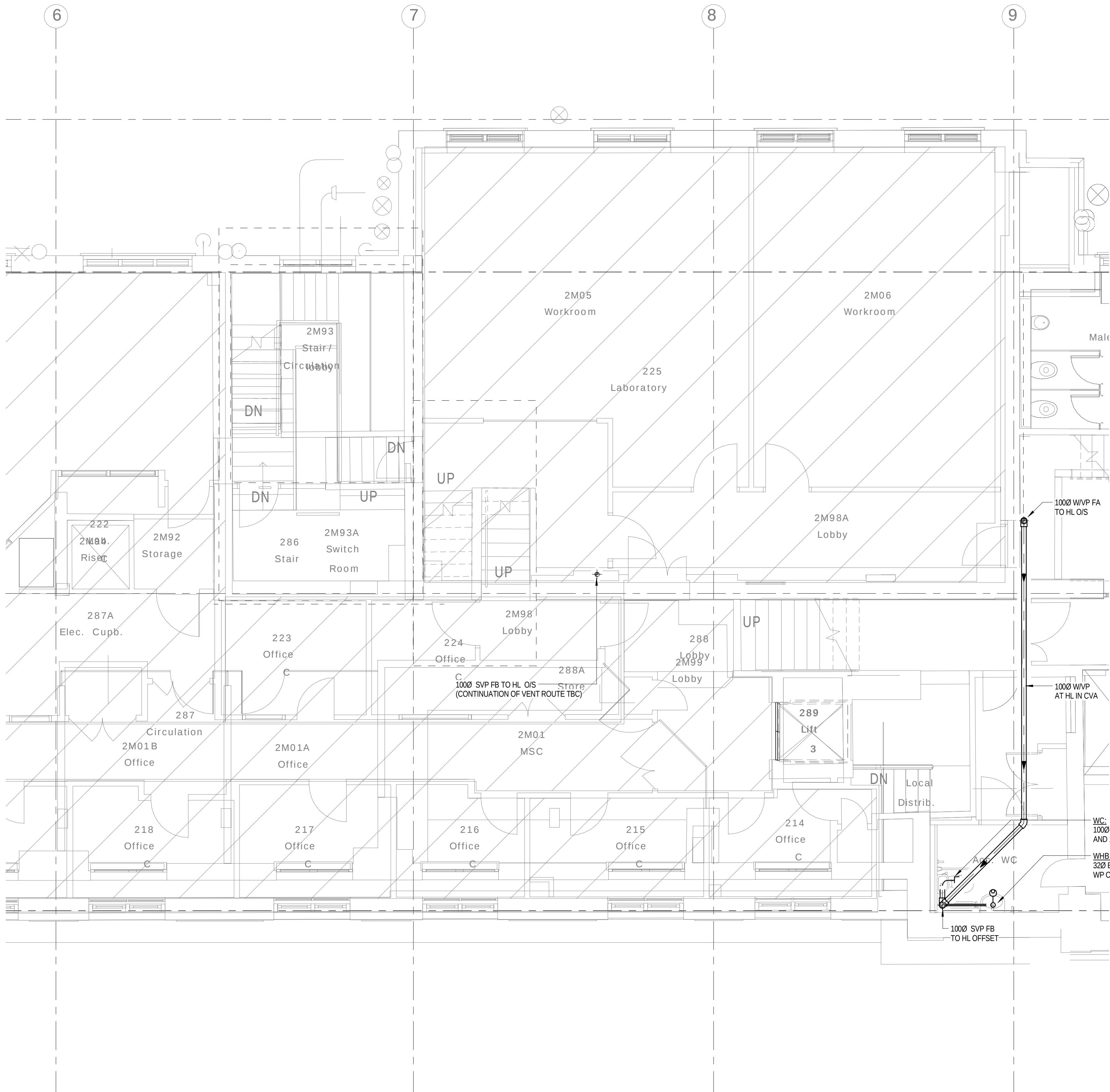
WASH HAND BASIN

WASTE PIPE

WASTE VENT PIPE

WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App
STAGE D				
WSP Westbrook Mills Godalming Surrey GU7 2AZ PARSONS BRINCKERHOFF Tel: 44-(0)1483-528400 Fax: 44-(0)1483-528989				
Client:				
UNIVERSITY COLLEGE LONDON				
Site/Project:				
KLB Masterplan Refurbishment Project (PSO0044)				
Title:				
Second Floor Mezzanine Sanitary Pipework Layout				
Sheet 1 of 2				
Drawn: SM		Checked: KW		
Designed: MTL		Approved: DW		
Date: 10/14/14	Scale: As indicated	A1	Sheet:	
Project Number:		Drawing Number:		Revision:
3512445M-BBG		L(58)-2M-01		3
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NOTES

1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CLIP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
E/W	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ
Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

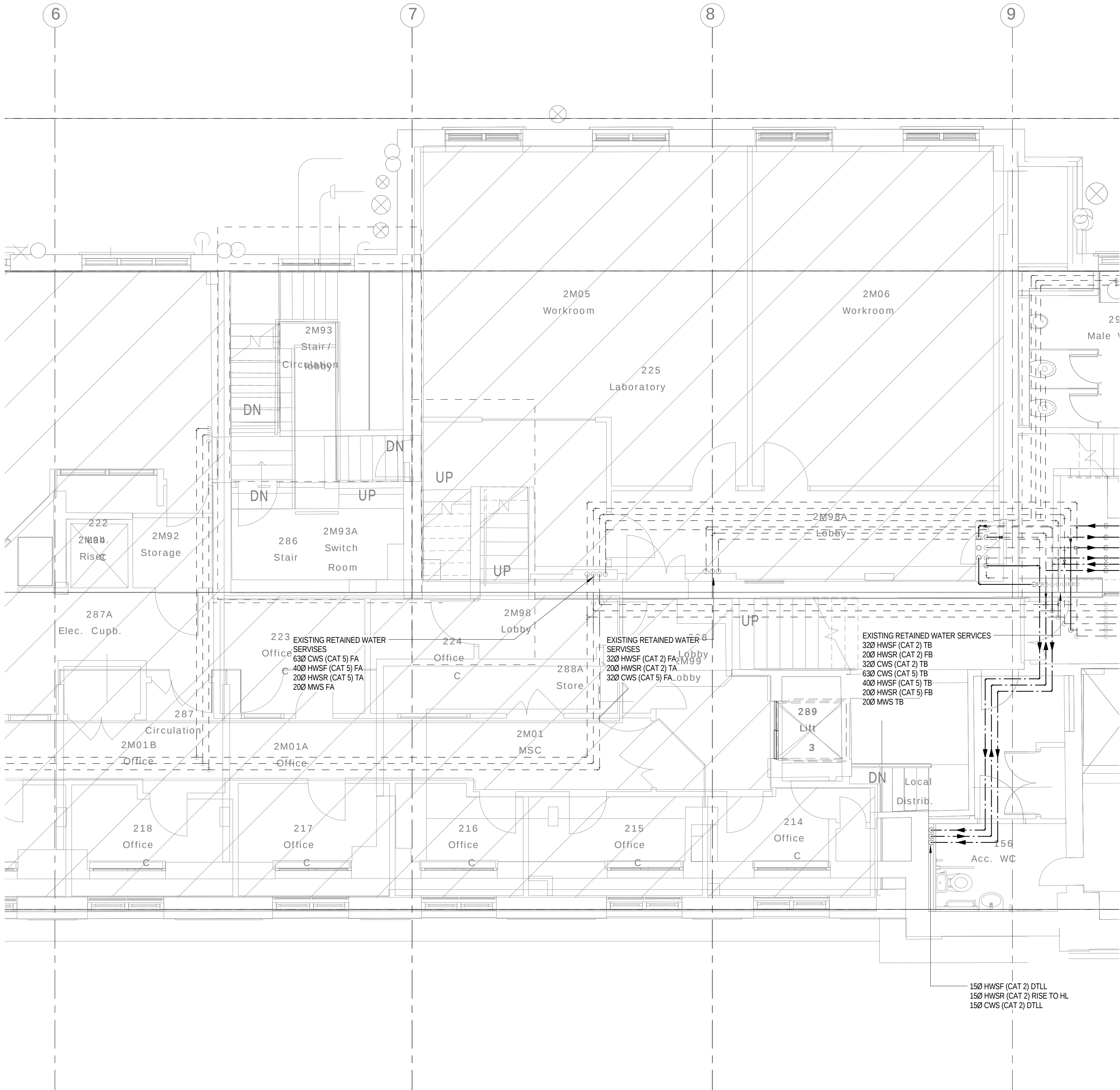
Client:
**UNIVERSITY
COLLEGE LONDON**

Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Second Floor Mezzanine
Sanitary Pipework Layout**

Sheet 2 of 2

Drawn: SM		Checked: KW	
Designed: MTL		Approved: DW	
Date: 10/14/14	Scale: As indicated	A1	Sheet:
Project Number:		Drawing Number:	
3512445M-BBG		L(58)-2M-02	
		3	
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FOR CONTINUATION OF WATER SERVICES
REFER TO DRAWING L(58)-2M-06

NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
AAV AUTOMATIC AIR VENT
AVV ANTI VACUUM VALVE
BCWS BOOSTED COLD WATER SERVICE
C5 CATEGORY 5 LAB HOT AND COLD WATER
CV CHECK VALVE
CVA CEILING VOID ABOVE
DOC DRAIN OFF COCK
DTB DROP TO BELOW
DW DEIONISED WATER
DWM DISHWASHER
ES EMERGENCY SHOWER
EV EXPANSION VESSEL
EW EYE WASH
FA FROM ABOVE
FB FROM BELOW
FCupd FUME CUPBOARD
FC FLEXIBLE COUPLING
FV FLOAT VALVE
HA HYDRAULIC ACCUMULATOR
HL HIGH LEVEL
HUBT HOSE UNION BIB TAP
HWH HOT WATER HEATER
IV ISOLATING VALVE
LL LOW LEVEL
M MEETER
MWS MAINS WATER SERVICE
NRV NON RETURN VALVE
POU POINT OF USE
PRV PRESSURE REDUCING VALVE
SAV SAFETY VALVE
SF SCREEN FILTER
SgV SERVICING VALVE
ST STRAINER
T TUNDISH
TA TO ABOVE
TB TO BELOW
TMV THERMOSTATIC BLENDING VALVE
T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
WM WASHING MACHINE
WPUR WATER PURIFIER
ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - - - EXISTING REDUNDANT (REMOVED)
===== NEW PROPOSED WATER SERVICES (HIGH LEVEL)
===== NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
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CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWSF LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



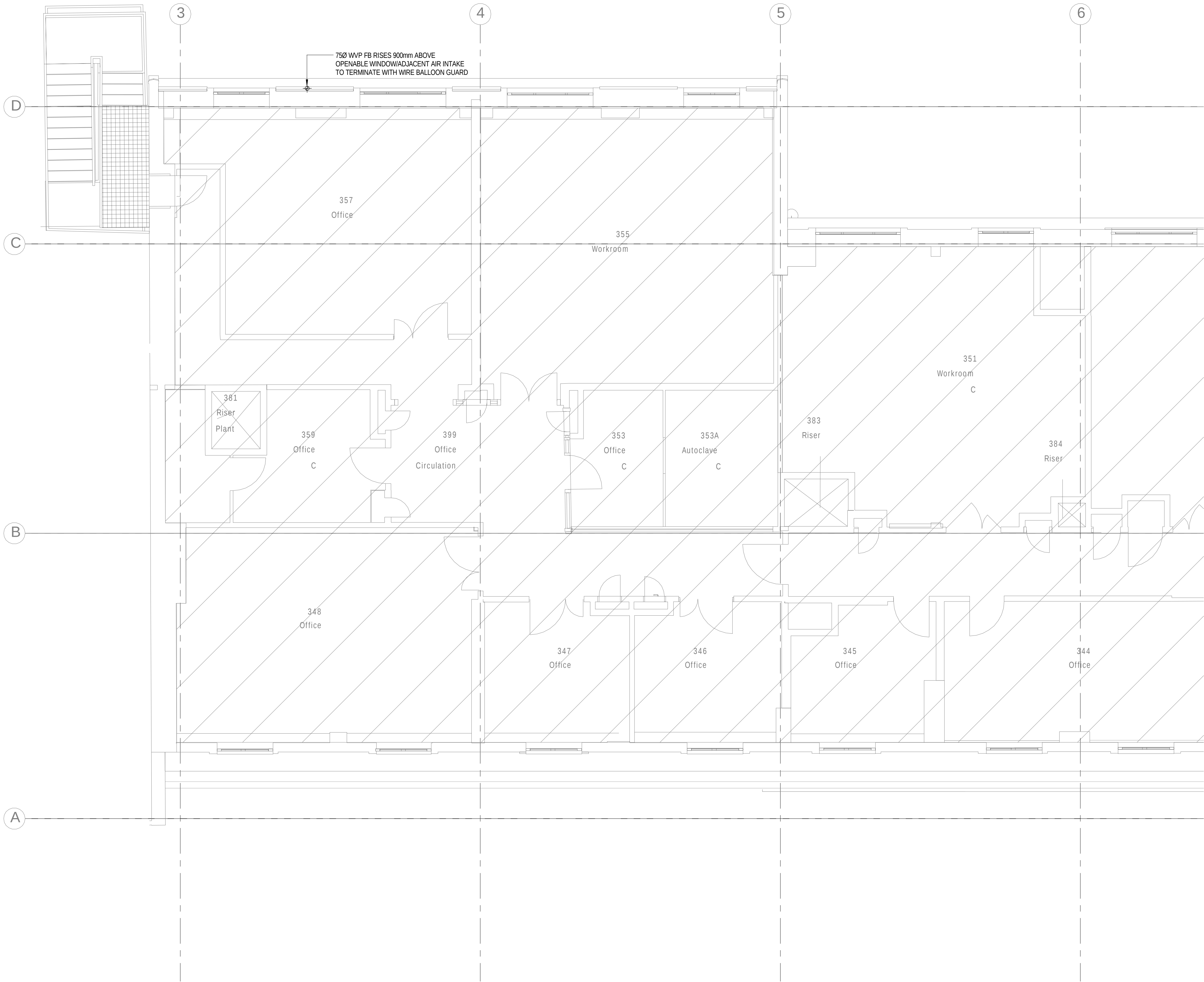
Client: UNIVERSITY COLLEGE LONDON

Site/Project: KLB Masterplan Refurbishment Project (PSO0044)

Title: Second Floor Mezzanine
Domestic and Laboratory Water Services

Sheet 1 of 1

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/28/14	Scale: As indicated
Project Number: 3512445M-BBG	Drawing Number: L(58)-2M-05
	Revision: 3



- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CLIP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

Westbrook Mills

Godalming

Surrey GU7 2AZ

PARSONS
BRINCKERHOFF

Tel: 44-(0)1483-528400

Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Third Floor
Sanitary Pipework Layout

Sheet 1 of 4

Drawn:	SM	Checked:	KW
Designed:	MTL	Approved:	DW
Date:	10/14/14	Scale:	As indicated
Project Number:	3512445M-BBG	Drawing Number:	L(58)-03-01
		Revision:	3

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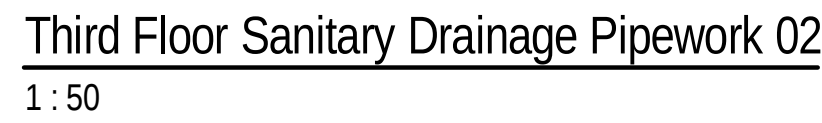
Third Floor Sanitary Drainage Pipework 01

1 : 50

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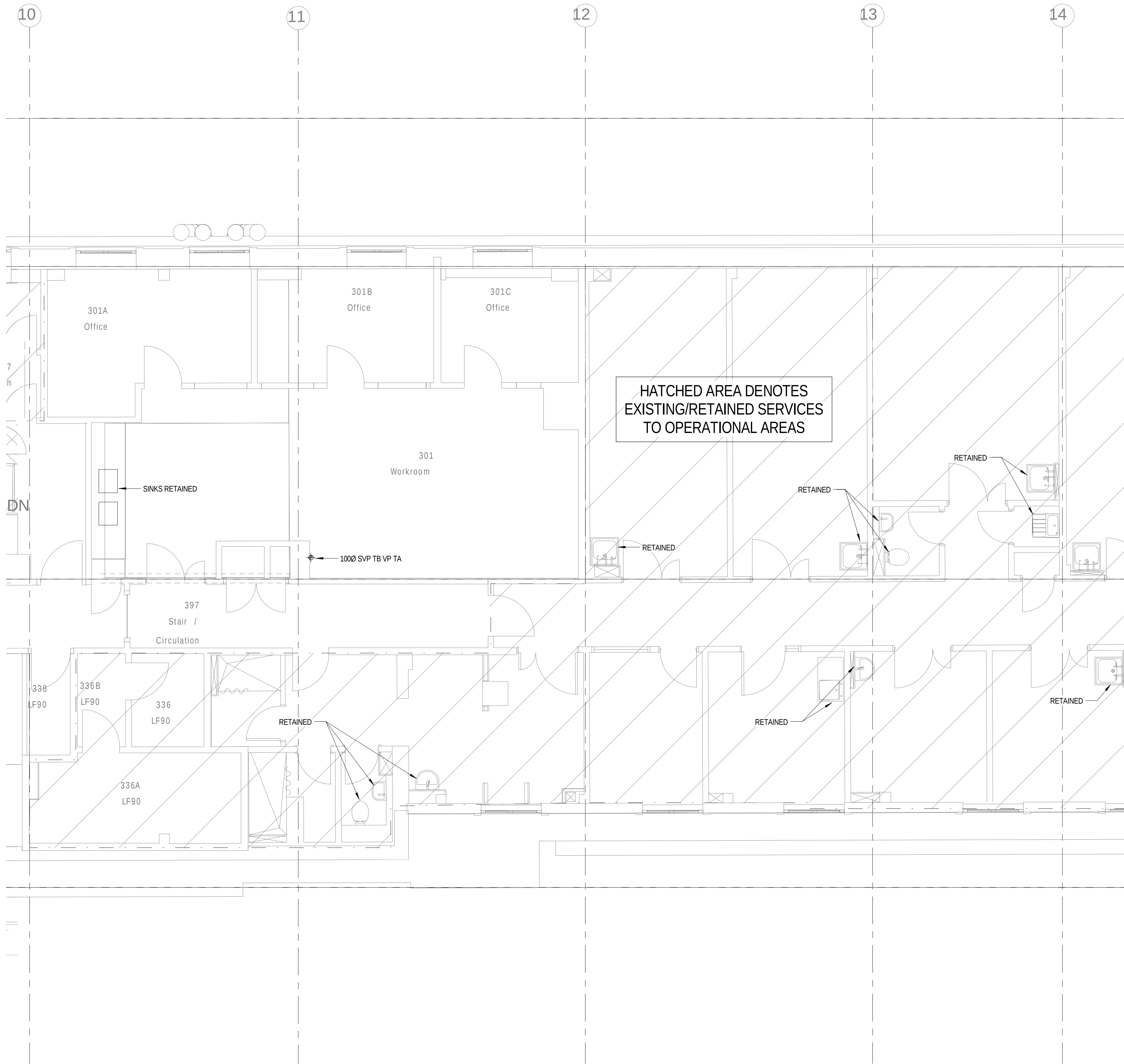
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AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
DC	CHEMICAL WASTE
CD	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
E/W	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
R/TA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

Sheet 2 of 4



- NOTES
- ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.
 - ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	D RIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (D RIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

PARSONS

BRINCKERHOFF

Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Third Floor
Sanitary Pipework Layout

Sheet 3 of 4

Drawn: SM

Checked: KW

Designed: MTL

Approved: DW

Date: 10/14/14

Scale: As indicated

A1

Sheet:

Project Number:

Drawing Number:

Revision:

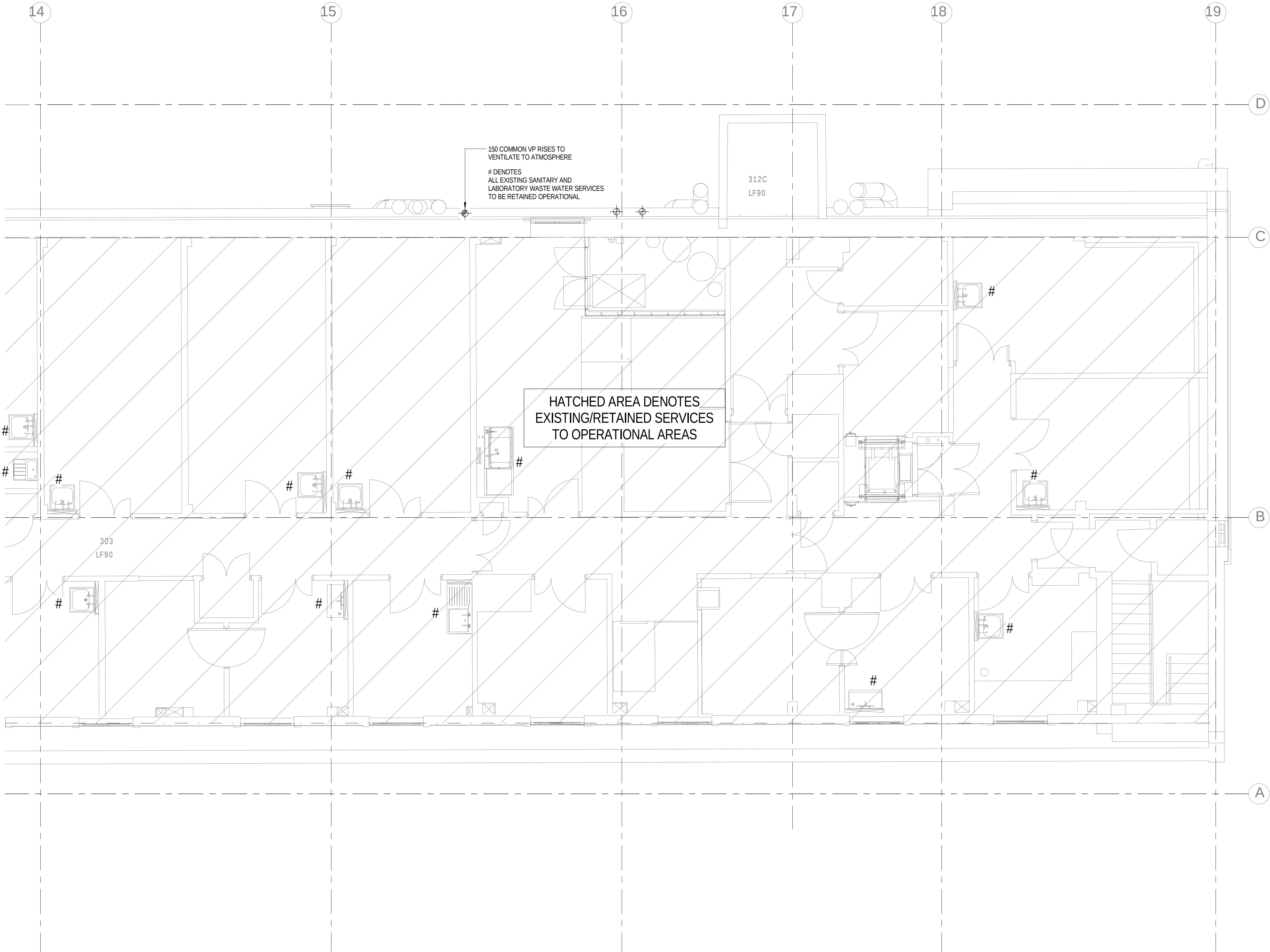
3512445M-BBG

L(58)-03-03

3

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Third Floor Sanitary Drainage Pipework 03
1 : 50



- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

PARSONS

BRINCKERHOFF

Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Third Floor
Sanitary Pipework Layout

Sheet 4 of 4

Drawn: SM

Checked: KW

Designed: MTL

Approved: DW

Date: 10/14/14

Scale: As indicated

A1

Sheet:

Project Number:

Drawing Number:

Revision:

3512445M-BBG

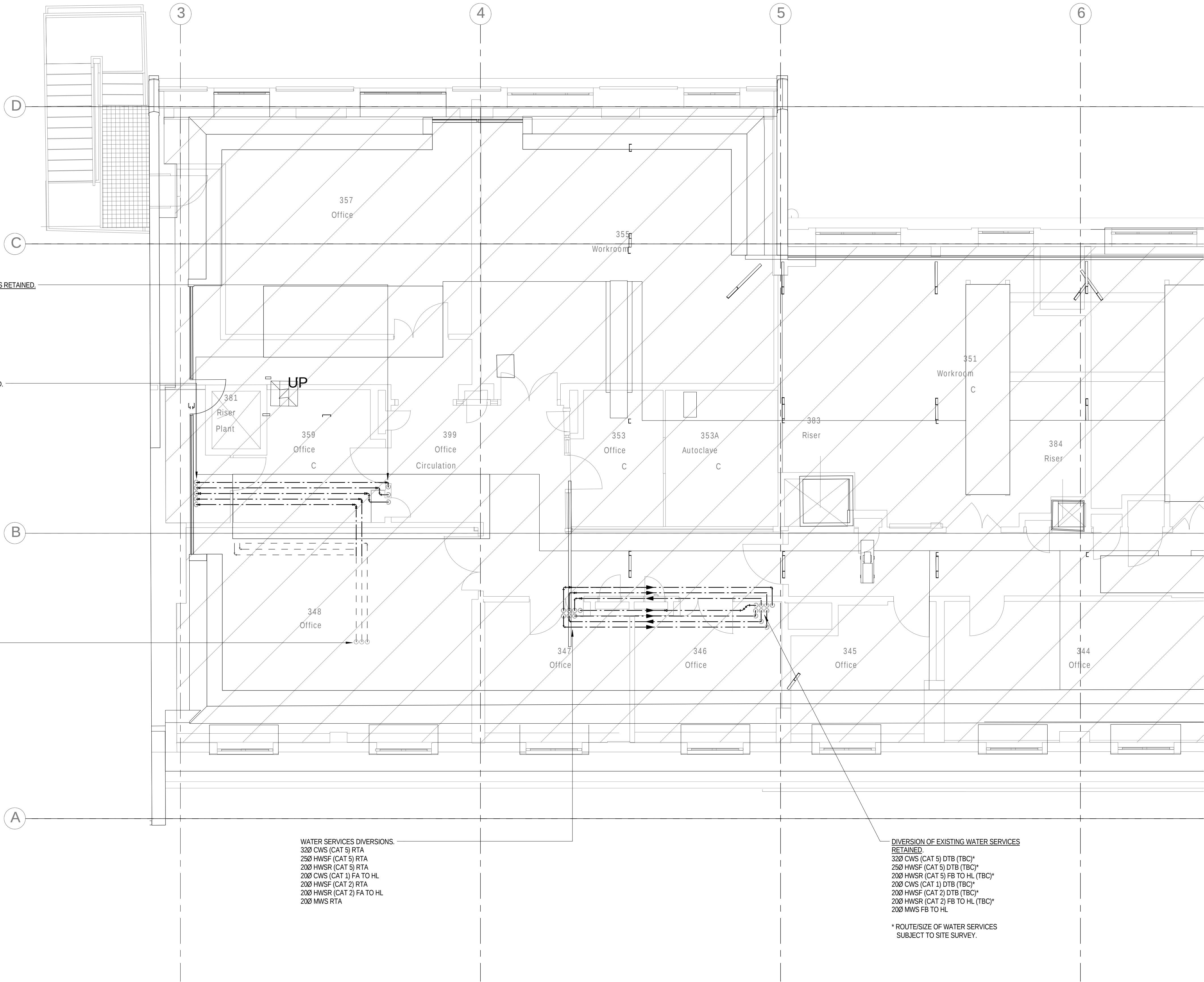
L(58)-03-04

3

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Third Floor Sanitary Drainage Pipework 04

1 : 50



NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
AAV AUTOMATIC AIR VENT
AVV ANTI VACUUM VALVE
BCWS BOOSTED COLD WATER SERVICE
C5 CATEGORY 5 LAB HOT AND COLD WATER
CV CHECK VALVE
CVA CEILING VOID ABOVE
DOC DRAIN OFF COCK
DTB DROP TO BELOW
DW DEIONISED WATER
DWM DISHWASHER
ES EMERGENCY SHOWER
EV EXPANSION VESSEL
EW EYE WASH
FA FROM ABOVE
FB FROM BELOW
FCupd FUME CUPBOARD
FC FLEXIBLE COUPLING
FV FLOAT VALVE
HA HYDRAULIC ACCUMULATOR
HL HIGH LEVEL
HUBT HOSE UNION BIB TAP
HWH HOT WATER HEATER
IV ISOLATING VALVE
LL LOW LEVEL
M METER
MWS MAINS WATER SERVICE
NRV NON RETURN VALVE
POU POINT OF USE
PRV PRESSURE REDUCING VALVE
SAV SAFETY VALVE
SF SCREEN FILTER
SgV SERVICING VALVE
ST STRAINER
T TUNDISH
TA TO ABOVE
TB TO BELOW
TMV THERMOSTATIC BLENDING VALVE
T&PRV TEMPERATUREPRESSURE RELIEF VALVE
WM WASHING MACHINE
WPUR WATER PURIFIER
A ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - EXISTING REDUNDANT (REMOVED)
--- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
--- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
CWS COLD WATER SERVICE
BCWS BOOSTED COLD WATER SERVICE
MWS MAINS WATER SERVICE
CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
LHWFS LABORATORY HOT WATER SERVICE (FLOW)
LHWSR LABORATORY HOT WATER SERVICE (RETURN)
LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
Fax: 44-(0)1483-528989

Client:

UNIVERSITY
COLLEGE LONDON

Site/Project:

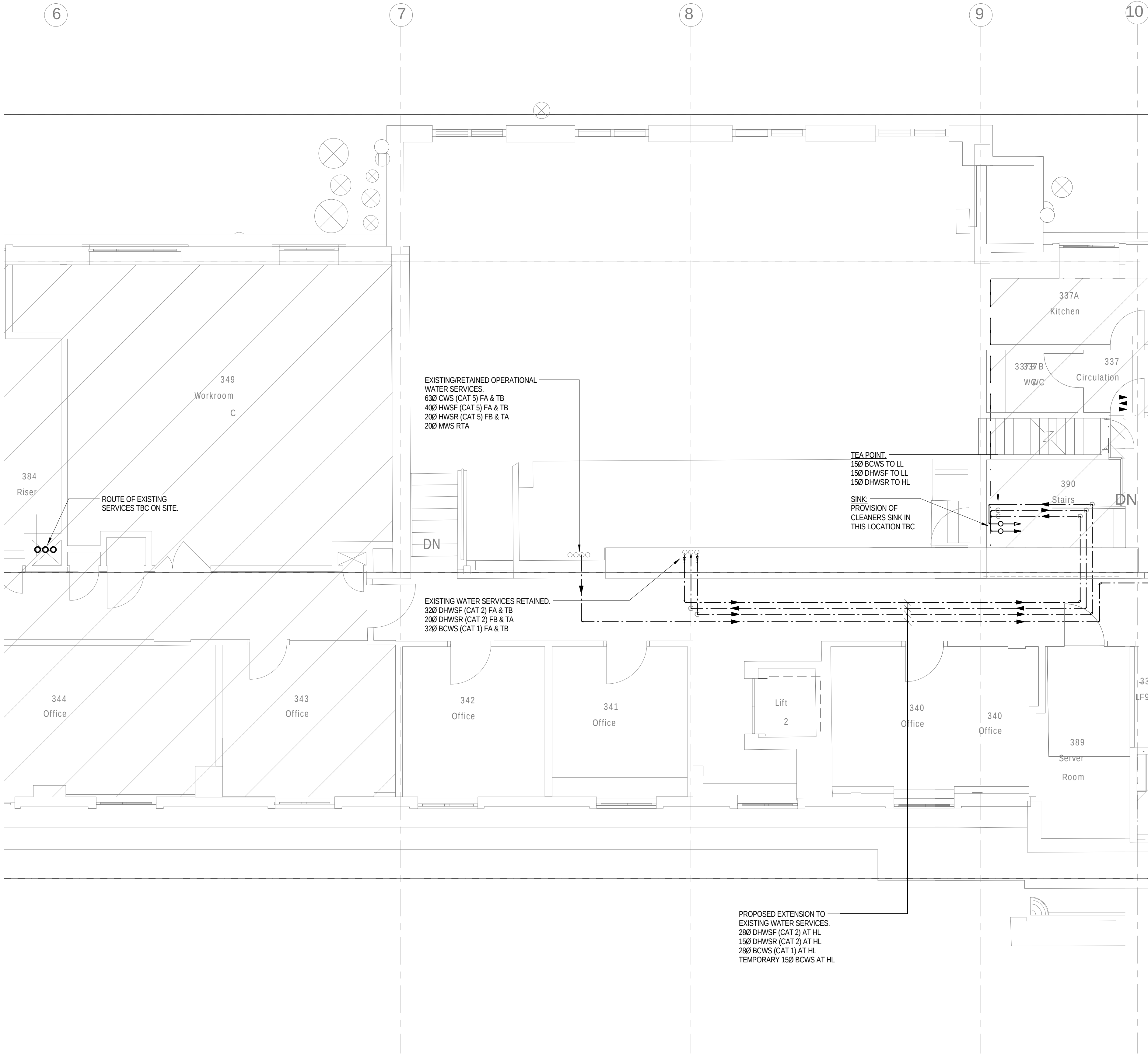
KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Third Floor
Domestic and Laboratory Water Services

Sheet 1 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/28/14	Scale: As indicated
Project Number:	Drawing Number:
3512445M-BBG	L(58)-03-05
	3



NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
- AAV AUTOMATIC AIR VENT
- AVV ANTI VACUUM VALVE
- BCWS BOOSTED COLD WATER SERVICE
- C5 CATEGORY 5 LAB HOT AND COLD WATER
- CV CHECK VALVE
- CVA CEILING VOID ABOVE
- DOC DRAIN OFF COCK
- DTB DROP TO BELOW
- DW DEIONISED WATER
- DWIM DISHWASHER
- ES EMERGENCY SHOWER
- EV EXPANSION VESSEL
- EW EYE WASH
- FA FROM ABOVE
- FB FROM BELOW
- FCupd FUME CUPBOARD
- FC FLEXIBLE COUPLING
- FV FLOAT VALVE
- HA HYDRAULIC ACCUMULATOR
- HL HIGH LEVEL
- HUBT HOSE UNION BIB TAP
- HWH HOT WATER HEATER
- IV ISOLATING VALVE
- LL LOW LEVEL
- M METER
- MWS MAINS WATER SERVICE
- NRV NON RETURN VALVE
- POU POINT OF USE
- PRV PRESSURE REDUCING VALVE
- SAV SAFETY VALVE
- SF SCREEN FILTER
- SgV SERVICING VALVE
- ST STRAINER
- T TUNDISH
- TA TO ABOVE
- TB TO BELOW
- TMV THERMOSTATIC BLENDING VALVE
- T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
- WM WASHING MACHINE
- WPUR WATER PURIFIER
- (A) ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - - - EXISTING REDUNDANT (REMOVED)
- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
- DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
- CWS COLD WATER SERVICE
- BCWS BOOSTED COLD WATER SERVICE
- MWS MAINS WATER SERVICE
- CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
- CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
- CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
- CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
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- LHWSR LABORATORY HOT WATER SERVICE (RETURN)
- LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ

Tel: 44-(0)1483-528400
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Client:
**UNIVERSITY
COLLEGE LONDON**

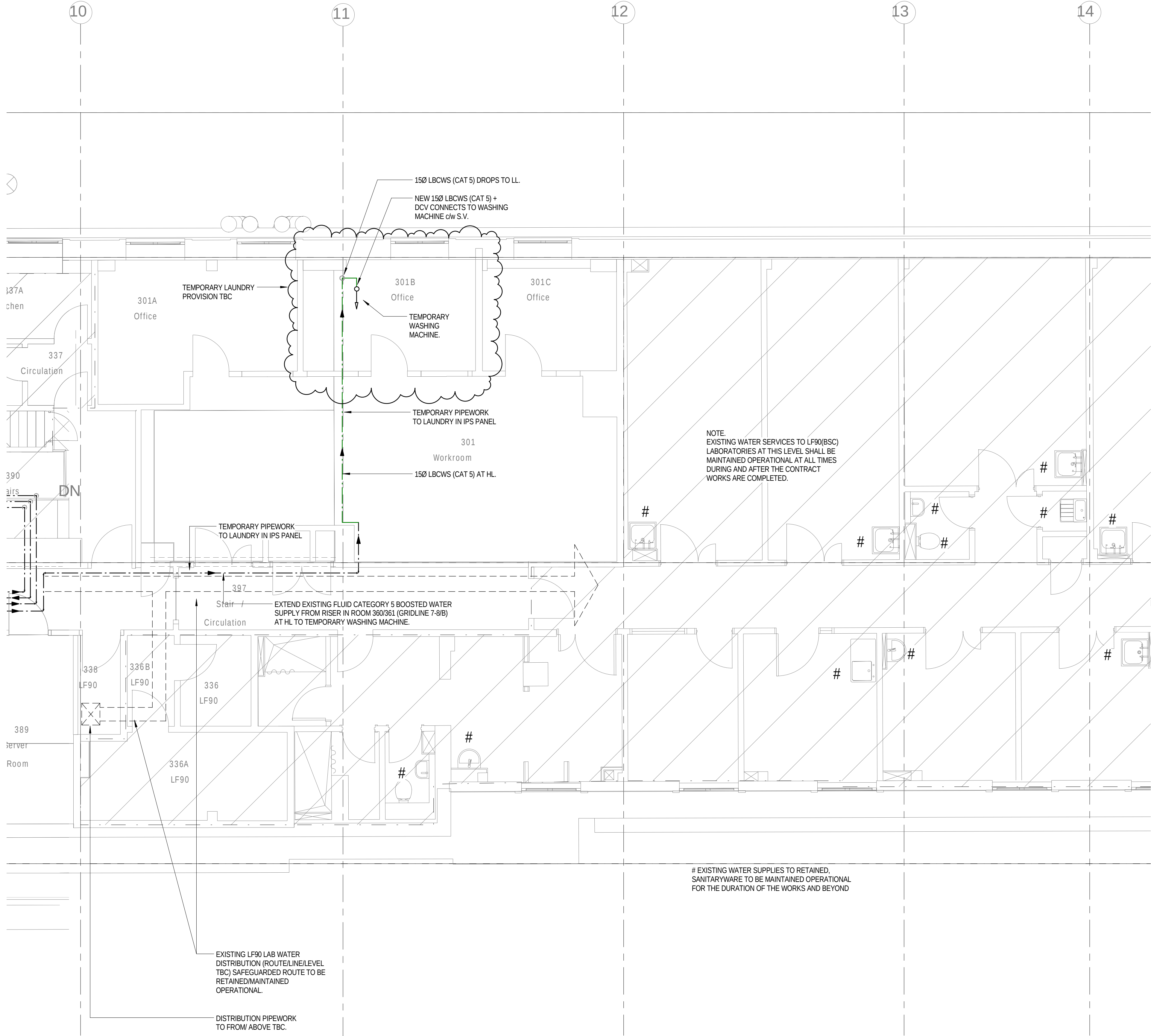
Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Third Floor
Domestic and Laboratory Water Services**

Sheet 2 of 4

Drawn: KC	Checked: KW
Designed: MTL	Approved: DW
Date: 11/28/14	Scale: As indicated
Project Number:	Drawing Number:
3512445M-BBG	L(58)-03-06
	3

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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A

ANCHOR
- AAV

AUTOMATIC AIR VENT
- AVV

ANTI VACUUM VALVE
- BCWS

BOOSTED COLD WATER SERVICE
- CS

CATEGORY 5 LAB HOT AND COLD WATER
- CV

CHECK VALVE
- CVA

CEILING VOID ABOVE
- DOC

DRAIN OFF COCK
- DTB

DROP TO BELOW
- DW

DEIONISED WATER
- DWM

DISHWASHER
- ES

EMERGENCY SHOWER
- EV

EXPANSION VESSEL
- EW

EYE WASH
- FA

FROM ABOVE
- FB

FROM BELOW
- FCupd

FUME CUPBOARD
- FC

FLEXIBLE COUPLING
- FV

FLOAT VALVE
- HA

HYDRAULIC ACCUMULATOR
- HL

HIGH LEVEL
- HUBT

HOSE UNION BIB TAP
- HWH

HOT WATER HEATER
- IV

ISOLATING VALVE
- LL

LOW LEVEL
- M

METER
- MWS

MAINS WATER SERVICE
- NRV

NON RETURN VALVE
- POU

POINT OF USE
- PRV

PRESSURE REDUCING VALVE
- SAV

SAFETY VALVE
- SF

SCREEN FILTER
- SgV

SERVICING VALVE
- ST

STRAINER
- T

TUNDISH
- TA

TO ABOVE
- TB

TO BELOW
- TMV

THERMOSTATIC BLENDING VALVE
- T&PRV

TEMPERATURE/PRESSURE RELIEF VALVE
- WM

WASHING MACHINE
- WPUR

WATER PURIFIER
- A

ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- /---/---/---

EXISTING REDUNDANT (REMOVED)
- NEW PROPOSED WATER SERVICES (HIGH LEVEL)
- NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF

DOMESTIC HOT WATER SERVICE (FLOW)
- DHWSR

DOMESTIC HOT WATER SERVICE (RETURN)
- CWS

COLD WATER SERVICE
- BCWS

BOOSTED COLD WATER SERVICE
- MWS

MAINS WATER SERVICE
- CAT 1

FLUID CATEGORY 1 (WATER REGULATIONS)
- CAT 2

FLUID CATEGORY 2 (WATER REGULATIONS)
- CAT 4

FLUID CATEGORY 4 (WATER REGULATIONS)
- CAT 5

FLUID CATEGORY 5 (WATER REGULATIONS)
- LHWSF

LABORATORY HOT WATER SERVICE (FLOW)
- LHWSR

LABORATORY HOT WATER SERVICE (RETURN)
- LBCWS

LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D

WSP

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Westbrook Mills
Godalming
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Client:

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COLLEGE LONDON

Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Third Floor
Domestic and Laboratory Water Services

Sheet 3 of 4

Drawn: KC

Checked: KW

Designed: MTL

Approved: DW

Date: 11/28/14

Scale: As indicated

A1

Sheet:

Project Number:

3512445M-BBG

Drawing Number:

L(58)-03-07

Revision:

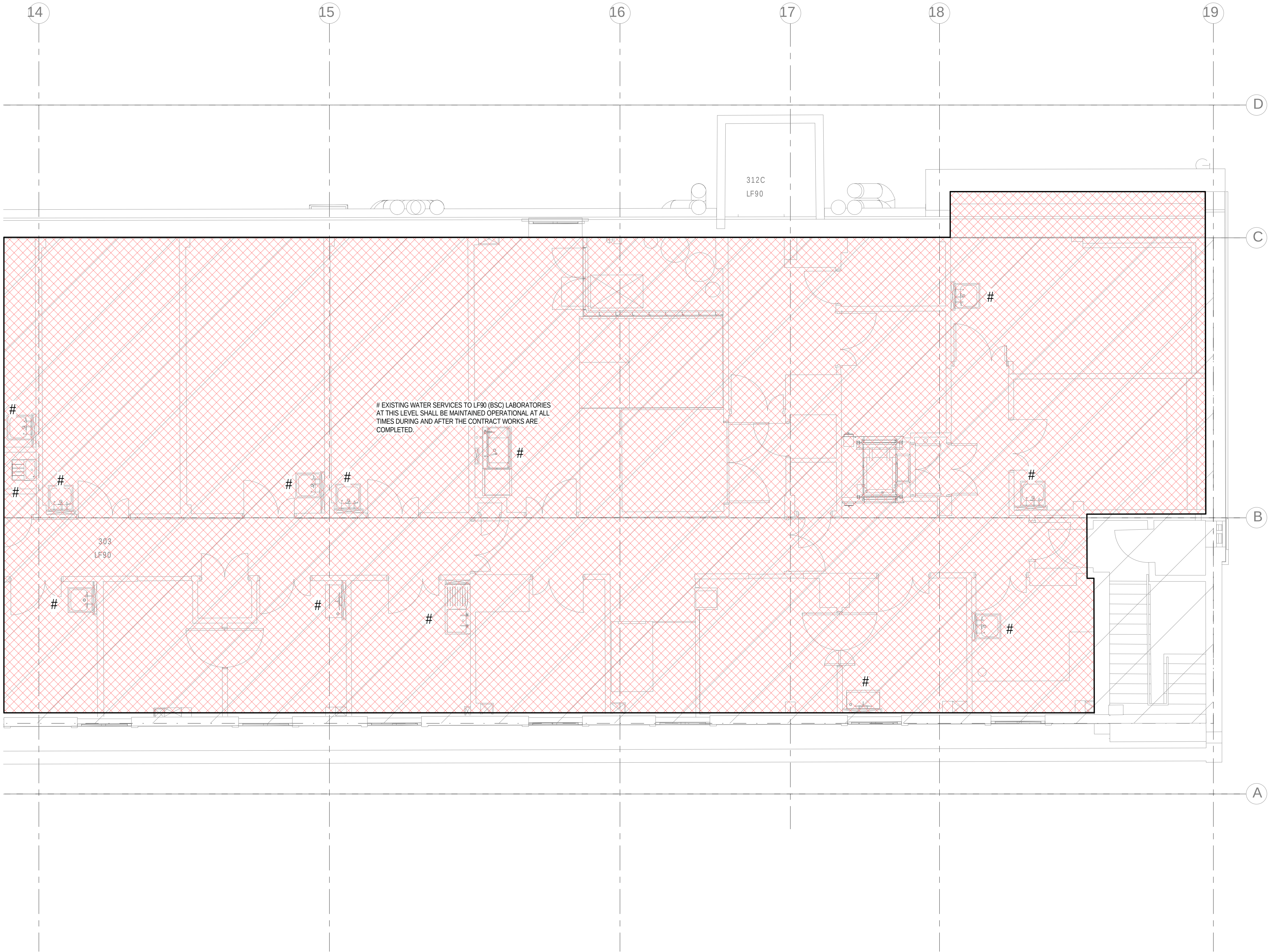
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File Name: C:\Users\sanjay.makwana\Documents\KLB Revit MEP Model_sanjay.makwana.rvt

Print Date: 20/01/2016 16:36:21

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NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SCHEMATIC DRAWINGS No.s D(58)00-01 AND D(58)00-02.

LEGEND

- A ANCHOR
- AAV AUTOMATIC AIR VENT
- AVV ANTI VACUUM VALVE
- BCWS BOOSTED COLD WATER SERVICE
- C5 CATEGORY 5 LAB HOT AND COLD WATER
- CV CHECK VALVE
- CVA CEILING VOID ABOVE
- DOC DRAIN OFF COCK
- DTB DROP TO BELOW
- DW DEIONISED WATER
- DWIM DISHWASHER
- ES EMERGENCY SHOWER
- EV EXPANSION VESSEL
- EW EYE WASH
- FA FROM ABOVE
- FB FROM BELOW
- FCupd FUME CUPBOARD
- FC FLEXIBLE COUPLING
- FV FLOAT VALVE
- HA HYDRAULIC ACCUMULATOR
- HL HIGH LEVEL
- HUBT HOSE UNION BIB TAP
- HWH HOT WATER HEATER
- IV ISOLATING VALVE
- LL LOW LEVEL
- M METER
- MWS MAINS WATER SERVICE
- NRV NON RETURN VALVE
- POU POINT OF USE
- PRV PRESSURE REDUCING VALVE
- SAV SAFETY VALVE
- SF SCREEN FILTER
- SgV SERVICING VALVE
- ST STRAINER
- T TUNDISH
- TA TO ABOVE
- TB TO BELOW
- TMV THERMOSTATIC BLENDING VALVE
- T&PRV TEMPERATURE/PRESSURE RELIEF VALVE
- WM WASHING MACHINE
- WPUR WATER PURIFIER
- (A) ANCHOR POINT

PIPEWORK LEGEND

- EXISTING RETAINED
- - - - - EXISTING REDUNDANT (REMOVED)
- ===== NEW PROPOSED WATER SERVICES (HIGH LEVEL)
- ===== NEW PROPOSED WATER SERVICES (LOW LEVEL)

WATER SERVICES

- DHWSF DOMESTIC HOT WATER SERVICE (FLOW)
- DHWSR DOMESTIC HOT WATER SERVICE (RETURN)
- CWS COLD WATER SERVICE
- BCWS BOOSTED COLD WATER SERVICE
- MWS MAINS WATER SERVICE
- CAT 1 FLUID CATEGORY 1 (WATER REGULATIONS)
- CAT 2 FLUID CATEGORY 2 (WATER REGULATIONS)
- CAT 4 FLUID CATEGORY 4 (WATER REGULATIONS)
- CAT 5 FLUID CATEGORY 5 (WATER REGULATIONS)
- LHWSF LABORATORY HOT WATER SERVICE (FLOW)
- LHWSR LABORATORY HOT WATER SERVICE (RETURN)
- LBCWS LABORATORY BOOSTED COLD WATER SERVICE

NOTE:
EXISTING PIPEWORK SIZES TBC BY SURVEY

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
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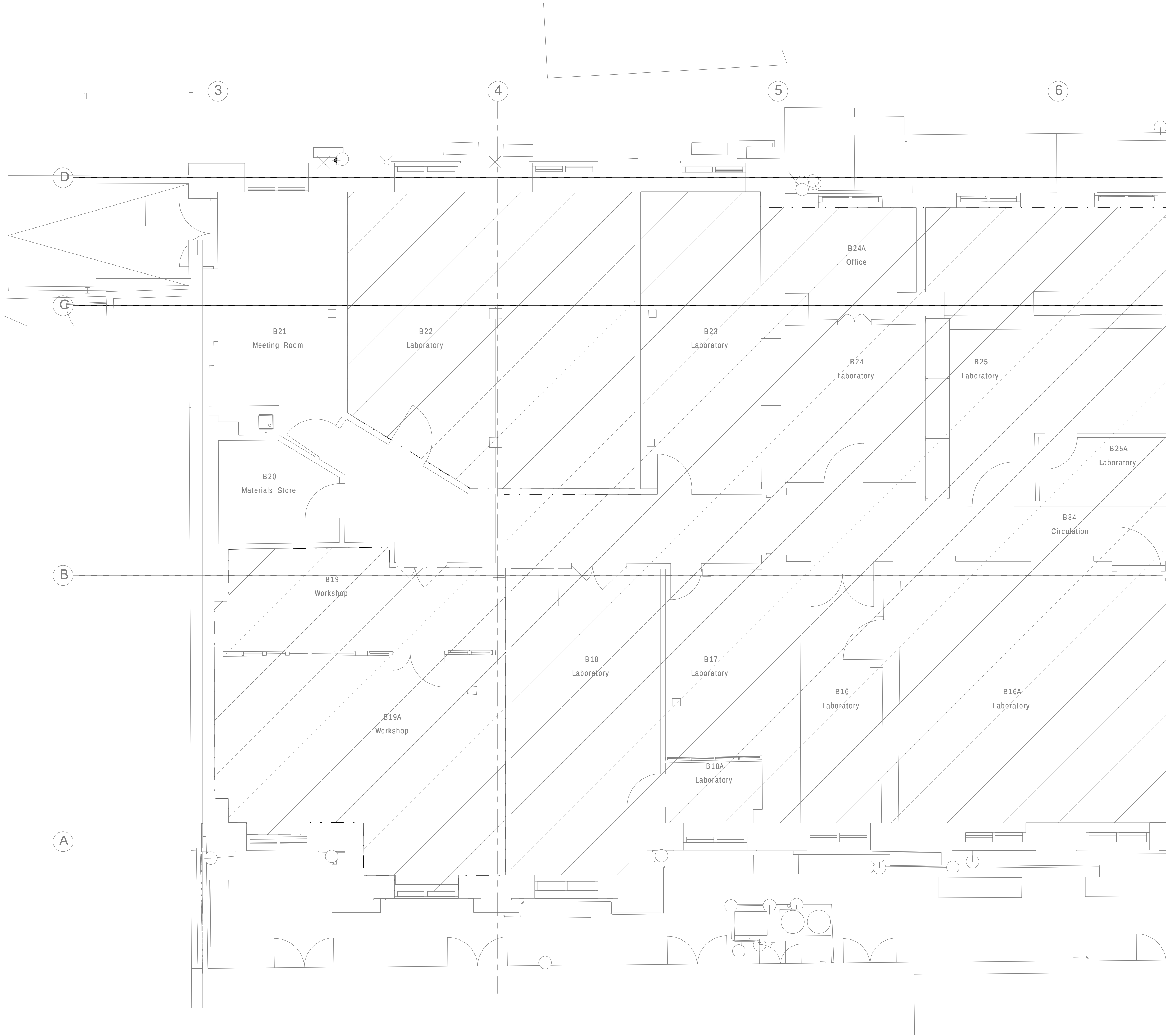
Client:
**UNIVERSITY
COLLEGE LONDON**

Site/Project:
**KLB Masterplan Refurbishment Project
(PSO0044)**

Title:
**Third Floor
Domestic and Laboratory Water Services**

Sheet 4 of 4

Drawn: KC		Checked: KW	
Designed: MTL		Approved: DW	
Date: 11/28/14	Scale: As indicated	A1	Sheet:
Project Number:	Drawing Number:		Revision:
3512445M-BBG	L(58)-03-08		3
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- NOTES
1. ALL SVP's ARE 100mmØ UNLESS NOTED OTHERWISE.

2. ALL WVP's ARE 50mmØ UNLESS NOTED OTHERWISE.

LEGEND

AAV	AIR ADMITTANCE VALVE
ASP	ANTI SYPHON PIPE
C/E	CLEANING EYE
CVA	CEILING VOID ABOVE
CW	CHEMICAL WASTE
DC	DRIP CUP
DOC	DRAIN OFF COCK
DP	DRAIN POINT
DTB	DROP TO BELOW
ES	EMERGENCY SHOWER & FLOOR DRAIN
EW	EYE WASH
EW	EACH WITH
FC	FUME CUPBOARD (DRIP CUP & CATCHPOT)
FD	FLOOR DRAIN
FA	FROM ABOVE
FB	FROM BELOW
FW	FOUL WATER
HL	HIGH LEVEL
ML	MID LEVEL
LL	LOW LEVEL
O/S	OFFSET
PM	PUMPED MAIN
R/E	RODDING EYE
RTA	RISE TO ABOVE
RED	REDUCER
SP	SOIL PIPE
SVP	SOIL VENT PIPE
SW	SURFACE WATER
TA	TO ABOVE
TB	TO BELOW
VP	VENT PIPE
WHB	WASH HAND BASIN
WP	WASTE PIPE
WVP	WASTE VENT PIPE
WM	WASHING MACHINE

3	13.01.16	STAGE D ISSUE	MTL	DW
2	29.01.15	STAGE E TENDER ADDENDUM ONE	MTL	DT
1	17.12.14	STAGE E TENDER ISSUE	MTL	DW
Rev	Date	Description	Chk	App

STAGE D



Westbrook Mills
Godalming
Surrey GU7 2AZ



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Site/Project:

KLB Masterplan Refurbishment Project
(PSO0044)

Title:

Basement Level 1
Sanitary Pipework Layout

Sheet 1 of 4

Drawn: SM

Checked: KW

Designed: MTL

Approved: DW

Date: 10/14/14

Scale: As indicated

A1

Sheet:

Project Number:

Drawing Number:

Revision:

3512445M-BBG

L(58)-B1-01

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