



1067 x 813 Public Combined Sewer
 FINAL CONNECTION TO BE APPROVED BY T.W. UTILITIES. ASSUME CONNECTION LEVEL AT HALF CHANNEL HEIGHT OF MIN 17.00.
 OFF SITE SEWER SHOWN BROWN WILL REQUIRE AGREEMENT WITH THAMES WATER AS PART OF THE S.106 AGREEMENT.
 ALTERNATIVE ROUTE TO BE DISCUSSED WITH TW INSPECTOR SUBJECT TO ANY UNKNOWN SERVICES AFFECTING ROUTE.
 FOR COSTING ALLOW FOR PC RING MANHOLE TYPE 2 TO SERVED FOR ADOPTION T1H EDITION S.106 HAS BEEN APPROVED. TW REF: 50053702

NEW PUBLIC SEWER CONNECTION UNDER SECTION 106 AGREEMENT WITH THAMES WATER UTILITIES.
 FINAL CONNECTION TO APPROVAL OF T.W. UTILITIES.
 FOR COSTING ALLOW FOR PC RING MANHOLE TYPE 2 TO SERVED FOR ADOPTION T1H EDITION S.106 HAS BEEN APPROVED. TW REF: 50053702

7 NO. NEW BACK INLET GULLIES TO ALLOW ROOF ACCESS TO STORM DRAINS WHERE THERE IS NO DOWNSTREAM INSPECTION CHAMBER.
 GULLY TO BE HERWORTH PLASTERDRAIN YARD GULLY, 225 INTERNAL DIAMETER. DEPTH TO SUIT BACK INLET AT 18.50. COVER AND GRILLE TO BE REWORKED AND REPLACED WITH PETER SAVAGE 870 SERIES INFLY COVER 300x300 BEDDED ON ENGINEERING BRICKWORK.

PIPE DROPS FROM HIGH LEVEL = 20.84. LOW LEVEL = 19.50. DRAINS CORE DRILLED THROUGH EXTERNAL WALL @ 19.50. # = HIGH LEVEL PIPE ACROSS TERRACE TO BE MIN 1:100 FALL.

75mm BLACK MDPPE PIPE CONNECTS TO CHAMBER S2 AT HIGH LEVEL 19.30.

CONNECTION FROM SLIDING DOOR CHANNEL SPSS TO HAVE NRV INSTALLED WITHIN MANHOLE S2. INSTALL PUSH FIT NRV 100 BY FLEXISEAL INTO MANHOLE BASE INLET.

PACKAGE PUMPING STATION. REF: PS1 (TOILETS, LEVEL B2 FOUL) TITRUPS JUPITER REFER TO DRAWING C03. TWIN VORTEX PUMPS. ON OUTSTANDING ARRANGEMENT. SEE NOTE 3. COVER TO BE TWIN SEAL, SHALLOW INFILL TO PERMIT TILES ON GROUT BED. COVER TO HAVE STAINLESS STEEL EDGE TRIM.

NEW 1000 STORM

NEW 1000 STORM

ENLARGE EXISTING CHAMBER TO INCLUDE FOUL PIPE. RETAIN EXISTING STORM BRANCHES. CHAMBER RECONSTRUCTED AS BRICK WIER CHAMBER BETWEEN TWO SYSTEMS. TO PROVIDE EXCESSIVE ALTERNATIVE FLOW ROUTE IN SURCHARGE CONDITIONS. COVER AT 18.39. STORM 17.65. FOUL 17.40. ALARMS AT LL 17.80. WER AT LL 17.90. REFER TO DRAWING 14132-C09.

TRAPPED GULLY TO NARROW STRIP BEHIND PLANTROOM. DROP DOWN WALL TO BE 70mm ENDSION CAST IRON PIPE, CONNECTED TO MANHOLE BELOW. GULLY TO BE ACC EG150, CONNECTED TO CAST IRON WITH FLEXIDRAIN BAND COUPLING.

100mm PIPE LAD SHALLOW UNDER ACC MD100 SHALLOW CHANNEL IN 150mm CONCRETE SURROUND. ACC COVER MIN 220mm LOADING TO ARCHITECTS CHOICE.

DELTA DRAIN PUMP OUTLET MAN. BEHIND SLAB. CONNECTED AT 300mm ABOVE SLAB TO SOIL STACK.

FOUL DROPS TO LOW LEVEL WITHIN 20 STORE IN DUCTILE IRON TIMESAVER PIPEWORK.

1000 DUCT TO CONTROL PANEL CAST INTO SLAB. PANEL LOCATION TO BE AGREED WITH M&E CONSULTANT.

150 MDPPE WITH FALL TO TANK AT MIN 1:100

SOAKAWAY WITH CENTRAL PERFORATED CORE. CL = 20.20. TOP OF GRAVEL = 19.20. BOTTOM OF GRAVEL = 16.20. 10m LONG x 6m WIDE. GRAVEL TO HAVE 30% VOID RATIO. EXCAVATION LINED WITH TERRAM 1000 GEOTEXTILE. NOTE: SOAKAWAY IS TO BE CAPPED AND PROTECTED FROM SILTS DURING CONSTRUCTION. SOAKAWAY HAS BEEN SIZED ON G.I. AVAILABLE, HOWEVER FORMAL INFILTRATION RATE OF SOILS IS NOT AVAILABLE. PRIOR TO CONSTRUCTION ALLOW FOR 1% INFILTRATION TEST AT THE BASE OF THE SOAKAWAY TO VERIFY DESIGN. TEST TO BE TO BRE386 REQUIREMENTS.

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RETAIN EXISTING STORM DRAINAGE ROUTE THROUGH BUILDING RELINE.

ACD SUMP UNIT OUTLET WITH AIR TRAP.

DELTA DRAIN PUMP OUTLET MAN. BEHIND SLAB. CONNECTED AT 300mm ABOVE SLAB TO SOIL STACK.

DELTA DRAIN RUN 1.

DELTA DRAIN RUN 2.

DELTA DRAIN RUN 3.

DELTA DRAIN RUN 4.

DELTA DRAIN RUN 5.

DELTA DRAIN RUN 6.

NEW TRAPPED OUTLET TO EXISTING CHANNEL.

NEW TRAPPED OUTLET TO EXISTING CHANNEL.

DELTA DRAIN RUN 1.

DELTA DRAIN RUN 2.

DELTA DRAIN RUN 3.

DELTA DRAIN RUN 4.

DELTA DRAIN RUN 5.

DELTA DRAIN RUN 6.

DELTA DRAIN RUN 7.

NEW TRAPPED OUTLET TO EXISTING CHANNEL.

NEW TRAPPED OUTLET TO EXISTING CHANNEL.

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DELTA DRAIN RUN 2.

DELTA DRAIN RUN 3.

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DELTA DRAIN RUN 7.

KEY:

[Blue line]	EXISTING SURFACE WATER DRAIN	[Green shaded area]	GREEN SHADE INDICATES DRAINAGE BELOW BASEMENT LEVEL TO BE HOPE FULLY WELDED PIPEWORK TO BE WATER TIGHT TO 6m HEAD. CHAMBERS AT THIS LEVEL TO BE WATER TIGHT PIPES PREFABRICATED CHAMBERS OR SIMILAR APPROVED.
[Red line]	EXISTING FOUL WATER DRAIN	[Red X mark]	DRAIN ABANDONED BY EXCAVATION OR GROUT FILLING. MAIN DRAINS SHOWN ONLY. ALLOW FOR SIGNIFICANT NUMBER OF SMALL DRAINS AND BRANCHES. REFER TO SERVICES SURVEY.
[Green line]	EXISTING COMBINED WATER DRAIN	[Green box]	SLAB PENETRATION FOR DRAINAGE - SEE SCHEDULE ON DRG. 14132-C05
[Blue dashed line]	PROPOSED SURFACE WATER DRAIN, 100mm Ø UNLESS NOTED OTHERWISE	[F2]	INSPECTION CHAMBER REFERENCE - SEE SCHEDULE ON DRG. 14132-C05
[Red dashed line]	PROPOSED FOUL WATER DRAIN, 100mm Ø UNLESS NOTED OTHERWISE	[S2]	RAINWATER DOWNPIPE LOCATIONS FROM SERVICES SURVEY - RIPS TO REMAIN CONNECTED TO NEAREST EXISTING STORM DRAIN UNLESS PICKED UP BY NEW SYSTEM AS SHOWN
[Green dashed line]	PROPOSED COMBINED WATER DRAIN		
[Blue dashed line]	PROPOSED SURFACE WATER DRAIN, 150mm Ø UNLESS NOTED OTHERWISE		
[Red dashed line]	PROPOSED FOUL WATER DRAIN, 150mm Ø UNLESS NOTED OTHERWISE		
[Green dashed line]	PROPOSED COMBINED WATER DRAIN, 150mm Ø UNLESS NOTED OTHERWISE		
[Blue dashed line]	DELTA DRAIN SUMP UNIT - COVER AS DRG. 14132-C06. FOR POWER SUPPLY AND TELEMETRY REFER TO M&E CONSULTANTS DRAWINGS.		

- General Notes**
- This drawing is to be read in conjunction with all relevant architectural & engineering drawings & specifications.
 - The contractor is to be responsible for all dimensions & for the correct setting out of the works on site.
 - Do not scale from this drawing.
- NOTES:**
- NOT USED.
 - TERRACE DRAIN SYSTEM IS DESIGNED BASED ON PRELIMINARY SITE INVESTIGATION AS AN INFILTRATION SYSTEM. SUBJECT TO POROSITY TESTING, THE SYSTEM MAY NEED TO REVERT TO AN ATTENTION SYSTEM, HOWEVER STORAGE VOLUMES WOULD BE SMALL AND TO BE SELECTED FROM THE R12 x 300 SERIES OF MATERIALS (CLAY, PLASTIC, DUCTILE IRON).
 - PUMPING STATIONS AS DRAWING C03.
 - PROPOSED KITCHEN DRAINAGE IS TO BE LAID AS SHALLOW AS POSSIBLE. AT HEAD OF RINS, REST RIDGES ARE TO BE LAID WITHIN SLAB @ INVERT LEVELS CIRCA 300mm BELOW SLAB LEVEL. PIPE TO BE LAID AT FALLS WITHIN A SLAB THICKENING UNTIL SORT OF PIPE IS 150mm BELOW SLAB LEVEL. THEN PROVIDE SHORT ROOFER PIPE AND SURROUND PIPE IN CLASS 9 GRANULAR BEDDING.
 - WHERE PIPES ARE CAST THROUGH WALL, THESE ARE TO BE SEALED AS WATERPROOFING MANUFACTURERS STANDARD DETAILS AT MINIMUM PROVIDE HYDROPHILIC SEALANT BANDS TO PIPE.

Rev	Date	Amendments
C20	08.10.18	LIBRARY ADDITION OF PLANTER DRAIN.
C19	10.07.18	NRV ADDED TO MHS2. CHAMBER S6 & S10 CLARIFIED.
C18	07.06.18	BRANCH PIPE FROM SP88 TO DOOR CHANNEL ACC E1.50 AS ADDED.
C17	07.04.18	RECYCLING TANK LOCATION COORDINATED WITH M&A.
C16	13.03.18	F144 ALARM ROUTE UPDATED. MH S8 REDRAWN TO BRICK.
C15	18.02.18	DRAINAGE AT ROOFWATER RECYCLING REVD. OFF SITE FOUL ROUTE REVD. F144 REVD. DRAINAGE TO SOUTH OF SOUTHERN TERRACE REVD.
C14	09.01.18	OFF SITE MANHOLE F14 OMITTED.
C13	14.10.17	SOUTHERN TERRACE DRAIN POINT REFERENCES AND LEVELS POINTS ADDED
C12	14.06.17	E.T. PLATFORM LEVEL REVISED.

Construction

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Project Title
HONOURABLE SOCIETY OF LINCOLN'S INN.

Drawing Title
BELOW GROUND DRAINAGE G.A. SHEET 1. BASEMENT AND EXTERNALS

Project Number
14132

Scale @ A0
1:100 @ A0

Drawn by
MS

Checked by
MJ

Date
APR 2015

Revision
C20

5 - ALL DRAINAGE BELOW BASEMENT SLAB LEVEL WITHIN WATER TABLE TO BE FORMED IN FULLY WELDED MDPPE. ALL MANHOLE CHAMBERS BENEATH BASEMENT SLAB TO BE FULLY SEALED THERMOPLASTIC OR SIMILAR APPROVED.

6 - ALL EXISTING MANHOLES BEING RETAINED ARE TO HAVE COVERS INSPECTED AND REPLACED AS INSTRUCTED BY THE C.A. FOR COSTING ALLOW FOR 30% RESTRUCTION.

7 - EXISTING CHANNEL AND GULLY TO HAVE COVERS RAISED TO SUIT NEW PAVING LEVELS OVER BASEMENT LIBRARY. ASSUME GULLY RAISED 250mm. OUTLET RETAINED. CHANNEL TO BE LAID TO ENSURE INVERT FALLS BACK TOWARDS EXISTING GULLY. ALLOW FOR RELATING 10m OF CHANNEL. LOCAL SURFACINGS TO BE RAISED AS NECESSARY, ALLOW FOR RAISING 50mm2 OF SURFACING BETWEEN 0-250mm.

8 - PIPE MATERIALS TO BE AS SHOWN ON G.A. DRAWING. WHERE MATERIALS ARE NOT CALLED OUT, THEN PIPE MATERIALS ARE AN OPEN SPEC AND TO BE SELECTED FROM THE R12 x 300 SERIES OF MATERIALS (CLAY, PLASTIC, DUCTILE IRON).

9 - WHERE PIPES ARE CAST THROUGH WALL, THESE ARE TO BE SEALED AS WATERPROOFING MANUFACTURERS STANDARD DETAILS AT MINIMUM PROVIDE HYDROPHILIC SEALANT BANDS TO PIPE.