Element Type	Unit Type	Flight (no.)	Width (mm)	Depth/Thickness (mm)	Length (mm)	Quantit
			(unit lenght)	(unit lenght)	(unit lenght)	
TEP UNIT	sGS1	-	310	30		1
	sGS2 sGS3	-				1 1
	sGS4	-	300	150	Mathematics   1715   1960   2000   1680   1730   1920   2070   1630   1650   2030   1920   1680   1720   1680   1720   1660   1670   1660   2055   1980   1620   2040   1960   1675   1630   1665   2030   1970   1665   1655   2000   1975   1630   16670   1975   2010   1670   1700   1965   2050	1
	sGS5	-	220	140		1
	sGS6	]	330	140	1920	1
	sGS7		330	150		1
-	sGS8	-				1
-	sGS9 sGS10	-	340	130		1 1
	sGS11	1				1
	sGS12	1	340	150	1680	1
	sGS13	]	320	150		1
	sGS14	1 (bottom)	720	170		1
	sGS15 sGS16		340	150		1
	sGS17					1
	sGS18		330	135		1
	sGS19		340	150	1920	1
	sGS20		340	130		1
-	sGS21		325	140		1
-	sGS22 sGS23					1
	sGS24	-	340	140		1
	sGS25	-	240	7.40		1
	sGS26		340	140		1
	sGS27		320	150		1
	sGS28		520	150		1
-	sGS29 sGS30		310	150		1 1
-	sGS30 sGS31					1
-	sGS32	-	340	150		1
	sGS33	1	250	140		1
	sGS34	]	350	140	2040	1
	sGS35		340	140		1
	sGS36		7.0	110		1
-	sGS37		310	140		1
-	sGS38 sGS39					1
	sGS40		310	130		1
	sGS41	-	200	120		1
	sGS42	1	300	130	2030	1
	sGS43	]	330	130	1970	1
	sGS44	2	330	130		1
-	sGS45	(middle)	330	140		1
	sGS46 sGS47	-				1
	sGS48	-	330	140		1
	sGS49	1	220	140		1
	sGS50	]	330	140	1975	1
	sGS51		320	140		1
	sGS52	-				1
	sGS53 sGS54	-	330	130		1
	sGS55	-				1
	sGS56	]	340	140		1
	sGS57		325	140		1
	sGS58		343	140		1
	sGS59		260-300	140		1
	sGS60 sGS61	-				1
	sGS62		300-320	140		1
	sGS63	3 (top)	220	110.140		1
	sGS64		330	110-140		1
	sGS65		280-320	110-140		1
	sGS66		200 720	110 110		1
	sGS67 sGS68		280-320	110-140		1
	sGS69					1
	sGS70		280-320	110-140		1
	sGS71		240.220	120		1
	sGS72		240-330	130	2130	1
	sGS73		260-300	130		1
	sGS74					1
	sGS75 sGS76		300-340	130		1
	sGS76 sGS77	-			2020	1
	sGS78		290-330	130	1700	1
	sGS79	]	220.255	125	1655	1
	sGS80		320-355	135	2090	1
	sGS81		340	130	2020	1
	sGS82		J.10	150	1700	1
-	sGS83		340	140	1700	1
	sGS84 sGS85	-			2000	1
	sGS86	1	310	130	1700	1
		i .	1	1	1.00	

lement Type	Unit Type	Elevation	Width (mm)	Depth/Thickness (mm)	Length (mm)	Quantit
		(internal,	(	( ( )	/ '. I I . I . I	
CODE LINE	001 (l · · · )	from steps)	(unit lenght)	(unit lenght)		
COPE UNIT	cGS1 (keystone)				Length (mm)           (unit lenght)           340 (265)           675           785           765           730           630           895 (760)           740           570           340 (280)           760           800           680           640           660           750           650           530 (380)           400           510           1130 (690)           775           650           600           730           690           750           575 (475)           1080           640           730 (630)           560           790           750           690           840           740           450 (550)           450           710           440 (380)           800           720           605           820 (730)           490           580 (500) <td>1</td>	1
	cGS2					1
	cGS3					1
	cGS4					1
	cGS5					1
_	cGS6 cGS7					1
		_				1
	cGS8 (keystone)	_				1
	cGS10	_				1
	cGS11 (keystone)					1
_	cGS12	_		-		1
	cGS12	_				1
_		_				1
_	cGS14 cGS15	_	240	170		1
<u> </u>		- Post				1
_	cGS16	East				1
<u> </u>	cGS17	_				1
<u> </u>	cGS18	_				1
<u> </u>	cGS19 (keystone)	_				1
<u> </u>	cGS20	_				1
	cGS21	_				1
	cGS22 (keystone)	_				1
<u> </u>	cGS23	_				1
<u> </u>	cGS24	_				1
<u> </u>	cGS25	_				1
_	cGS26	_				1
_	cGS27	_				1
	cGS28					1
	cGS29 (keystone)	_				1
	cGS30	_				1
	cGS31					1
	cGS32 (keystone)	_				1
	cGS33	_				1
	cGS34	_				1
	cGS35					1
	cGS36	_				1
	cGS37	_				1
	cGS38					1
	cGS39 (keystone)					1
	cGS40					1
	cGS41					1
	cGS42 (keystone)					1
	cGS43					1
	cGS44	_				1
	cGS45	_				1
	cGS46	_				1
	cGS47	West	240	170		1
	cGS48					1
	cGS49	_				1
	cGS50 (keystone)	_				1
	cGS51	_				1
	cGS52 (keystone)	_				1
	cGS53	_				1
	cGS54	_				1
	cGS55	_				1
	cGS56	_				1
	cGS57	_				1
	cGS58					1
	cGS59					1
	cGS60 (keystone)					1
	cGS61					1
	cGS62				440	1
	cGS63			<u>                                       </u>	650	1
						63

		(internal, from steps)	(unit lenght)	(unit lenght)	(unit lenght)	Quanti
FACE WALL UNIT	wGS1 (keystone) wGS2 (keystone)	East	200 (TBC with	270	730(520) 720(600)	1 1
	wGS3 wGS4		downtakings)		710 840	1
	wGS5				770	1
	wGS6 wGS7				830 810-880	1
	wGS8 wGS9				810 670	1 1
	wGS10				750	1
	wGS11 wGS12				600 660	1
	wGS13 wGS14				790 790	1 1
	wGS15 (keystone) wGS16 (keystone)				800(430) 780(725)	1
	wGS17				745	1
	wGS18 wGS19 (keystone)				800 720(630)	1
	wGS20 (keystone) wGS21				690(500) 730	1
	wGS22				700 720	1
	wGS23 wGS24				850	1 1
	wGS25 wGS26				680 650	1
	wGS27 wGS28				740 580	1 1
	wGS29				640	1
	wGS30 wGS31				580 760	1
	wGS32 wGS33				730 700	1 1
	wGS34 (keystone)				780(550)	1
	wGS35 (keystone) wGS36				670(550) 740	1 1
	wGS37 wGS38				640 520	1
	wGS39 (keystone) wGS40 (keystone)				690(610) 710(460)	1 1
	wGS41				730	1
	wGS42 wGS43				900	1
	wGS44 wGS45				690 900	1 1
	wGS46				900	1
	wGS47 wGS48				760 830	1
	wGS49 wGS50				760 700	1
	wGS51 wGS52 (keystone)				750 740(520)	1 1
	wGS53 (keystone)				680(580)	1
	wGS54 wGS55				800 680	1
	wGS56 wGS57				680 790	1
FACE WALL	wGS58	West			58 770 (500)	1
UNIT	wGS59 (keystone) wGS60 (keystone)	West			690 (550)	1
	wGS61 wGS62				750 840	1
	wGS63 wGS64				750 880	1 1
	wGS65				750	1
	wGS66 wGS67				780 700	1
	wGS68 wGS69				750 700	1
	wGS70 wGS71				850 780	1
	wGS72				820	1
	wGS73 (keystone) wGS74 (keystone)				950 (500, 450) 760 (710)	1
	wGS75 wGS76				700 740	1
	wGS77 (keystone)				670 (540)	1
	wGS78 (keystone) wGS79				670 (550) 840	1
	wGS80 wGS81				820 750	1
	wGS82 wGS83				750 820	1 1
	wGS84				880	1
	wGS85 wGS86				850 720	1
	wGS87 wGS88				780 880	1
	wGS89 wGS90 (keystone)				840 750 (540)	1
	wGS91 (keystone)				580 (430)	1
	wGS92 wGS93				610 780	1
	wGS94 wGS95 (keystone)				800 500 (440)	1 1
	wGS96 (keystone) wGS97				640 (570)	1
	wGS98				830	1
	wGS99 wGS100				880 830	1 1
	wGS101 wGS102				890 790	1 1
	wGS103				730 700	1
	wGS104 wGS105				690	1
	wGS106 wGS107	_			700 700	1
	wGS108 (keystone)				810 (580) 630 (480)	1
	wGS109 (keystone) wGS110				700	1
	wGS111 wGS112				700 740	1
	wGS113				820	1

Element Type	Unit Type	Elevation (internal,	Width (mm)  LDA Validation	Depth/Thickness (mm)  LDA Validation	LDA Validation	Quantit
		from steps)	(unit lenght)	(unit lenght)	(unit lenght)	
BASE COURSE	wbGS1 (keystone)	East	200	200	650 (460)	1
WALL UNIT	wbGS2		(TBC with		1030	1
	wbGS3		downtakings)		LDA Validation (unit lenght)   650 (460)   1030   1040   830   920   1070   720   440   490   440   760   760   730   670   680   440   850(730)   850   735   800 (720)   920   800   800   580   720   710(570)   870   920   1130(940)   770   960   980   720   1130(1100)   800   840   600(560)   770   600   760   880   740   930(830)   940   680   490(440)   950   820   940   680   770   770(660)   770   770(660)   770   770(660)   770   7	1
	wbGS4				830	1
	wbGS5				920	1
	wbGS6				1070	1
	wbGS7				720	1
	wbGS8				440	1
	wbGS9				490	1
	wbGS10				440	1
	wbGS11				760	1
	wbGS12				760	1
	wbGS13				730	1
	wbGS14					1
	wbGS15				680	1
	wbGS16				440	1
	wbGS17 (keystone)					1
	wbGS18					1
	wbGS19					1
	wbGS20 (keystone)					1
	wbGS21					1
	wbGS22					1
	wbGS23					1
	wbGS24					1
	wbGS25					1
	wbGS26					1
	wbGS27					1
	wbGS28					1
	wbGS29	West				1
	wbGS30					1
	wbGS31					1
	wbGS32					1
	wbGS33					1
	wbGS34 (keystone)					1
	wbGS35					1
	wbGS36					1
	wbGS37 (keystone)					1
	wbGS38					1
	wbGS39					1
	wbGS40					1
-	wbGS41					1
	wbGS42					1
	wbGS43 (keystone)					1
	wbGS44					1
	wbGS45					1
	wbGS46 (keystone)					1
	wbGS47					1
	wbGS48	$\overline{}$				1
	wbGS49	-				1
		$\dashv$				
	wbGS50	$\dashv$				1
	wbGS51	_				1
	wbGS52 (keystone)	$\dashv$				1
<u> </u>	wbGS53 wbGS54	_			800 1020	1
	wnt.ss4	1	i	i .	1070	1

LEGEND

NOTES: For further detail information on the Grand Staircase, refer to:

Grand staircase Existing Condition: Suitability for

Grand Staircase Proposed Arrangement 5442-LDA-00-ZZ-DR-L-8208

5442-LDA-00-ZZ-DR-L-8207

Conservation Statement and Addendum 5442-LDA-00-XX-RT-Z-9006

Existing and Proposed Layout 5442-LDA-00-ZZ-DR-L-1002 to 1005

Landscape Levels

5442-LDA-00-ZZ-DR-L-1006 to 1009

## UNITS CODING SYSTEM:

Step unit / Grand Staircase Cope unit / Grand Staircase cGS: wGS: Wall unit / Grand Staircase Base course unit / Grand Staircase Structural Wall base unit / Grand Staircase

# **READ THIS FIRST**

# Note for Contractors This drawing should be considered at

This drawing should be considered along with the risk information contained in the CDM Pre Construction Information. This information will include details of the SIGNIFICANT risks which LDA Design has identified which may arise from constructing their designs shown on this drawing. A Competent Contractor should be aware of the typical risks associated with doing this work.

#### Note for Workers

DO NOT START YOUR WORK unless you know the Risks and Controls relating to the work on this drawing (including SAFE SEQUENCES OF WORK and EQUIPMENT).

Do not issue copies of parts of this drawing without the above Note for Workers (unless you are sure that the Workers can undertake the

C1 Construction Issue PLANNING ISSUE REV. DESCRIPTION

RW 19.08.2020 KT 01.11.19 APP. DATE

LDĀDESIGN

UNION TERRACE GARDENS

DRAWING TITLE **Grand Staircase** 

Existing Condition: Units Dimension Schedule

ISSUED BY Glasgow T: 0141 222 9780 DRAWN MGu DATE Oct 2019 SCALE@A1 Not to scale CHECKED RW STATUS Construction APPROVED KT

## DWG. NO 5442-LDA-00-ZZ-DR-L-8206-C

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only. © LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2015 Sources Ordnance Survey

PROPOSED GRAND STAIRCASE - DESIGN INTENT

Full extent of the historic Grand Staircase to be carefully taken down/de-mounted and all component parts taken to storage and sorted into like type elements for future re-use.

Site dimensions, by LDA Design are best approximation due to existing condition of elements,

joints and accumulation of detritus. The site dimensions have been used to determine the

proposed principles and extent of re-use.

Final dimensions and number of reusable units to be confirmed, by the Contractor, after component parts have been sorted, cleaned and dressed, prior to proceeding with any works connected with the reconfiguration of the Grand Staircase.

All stone elements to be carefully photographed and individually numbered/scheduled, as downtakings proceed, prior to careful removal to storage, at a location to be agreed with ACC.

Reconstruction of the new Grand Staircase will use a combination of re-used and new stone as indicated on drawing 5442-LDA-00-ZZ-DR-L-8208.

Sections and elevations showing the new arrangement including new and re-used elements to be prepared by the Contractor, once validation of the exact quantities and dimensions of salvaged stone is available.

#### ADDITIONAL NOTES:

STEP UNITS Historical movement evident by cracking of landing slabs and stair granite treads.

The measured survey shows a variety of dimensions across the steps: in particular the depth of the units are not consistent. Unit sizes are typically 140mm rise, but many are 130mm rise.

A number of steps are particularly worn and uneven, with some roughly cropped to suit the required

Joint sizes are significantly uneven and irregular, and not consistent; with clear evidence of re-pointing having been undertaken on a number of occasions.

Following the visual and measured surveys the recommendation is that the new step units are to be constructed from new stone to ensure consistent and compliant sizes.

The step units will be considered for re-use elsewhere, if appropriate and suitable condition e.g. kerb edge to central lawn. Re-use subject to further assessment following downtakings.

COPE UNITS The measured survey has indicated that there should be sufficient cope units, from the existing Grand Staircase, that can be re-used for three new flights of stairs (Flights 3, 4 and 5).

The cope units for the three other flights will be formed from salvaged balustrade cope units e.g. Rosemount Plaza (Flights 1, 2 and 6).

#### FACING WALL UNITS

The measured survey has indicated that there should be sufficient wall units, from the existing Grand Staircase, that can be re-use for four new flights of stairs (Flights 2, 3, 4 and 5).

The remaining two flights will require the walls to be constructed from new stone, to match the existing (Flights 1 and 6).

# BASE COURSE UNITS

The measured survey has indicated that there should be sufficient base course units, from the existing Grand Staircase, that can be re-used for three new flights of stairs (Flights 3, 4 and 5).

The remaining three flights will require the base courses to be constructed from new stone, to match the existing (Flights 1,2 and 6).

#### **PILLARS** All the stone pillars will require to be constructed from new stone. Colour and finish to be confirmed.

STRUCTURAL WALL STONE The stone forming the structural base of the Grand Staircase is not required for the reconfiguration of the new staircase.

The proposed ground/levels will be graded to follow the new staircase profile.

The existing wall stone could be considered for potential reuse, if appropriate.