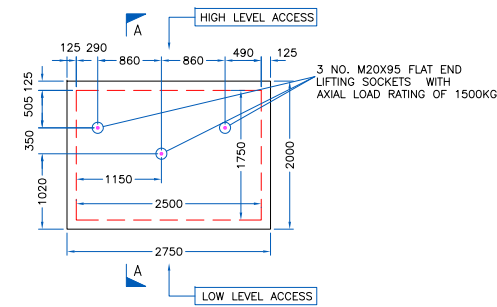
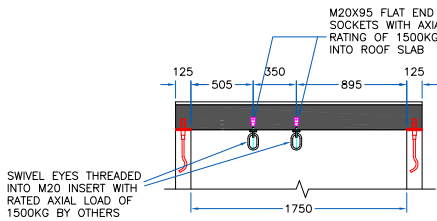
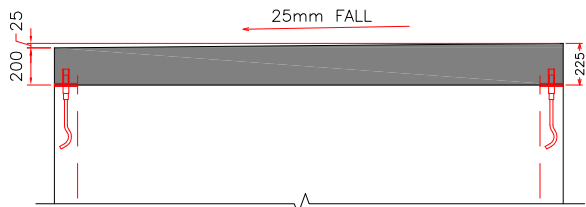




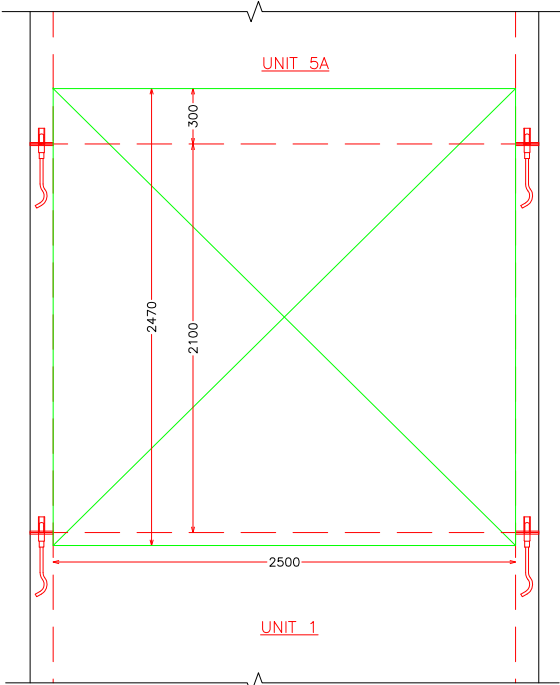
PLAN OF LIFTING POINTS
CAST INTO ROOF SLAB
SCALE 1:50



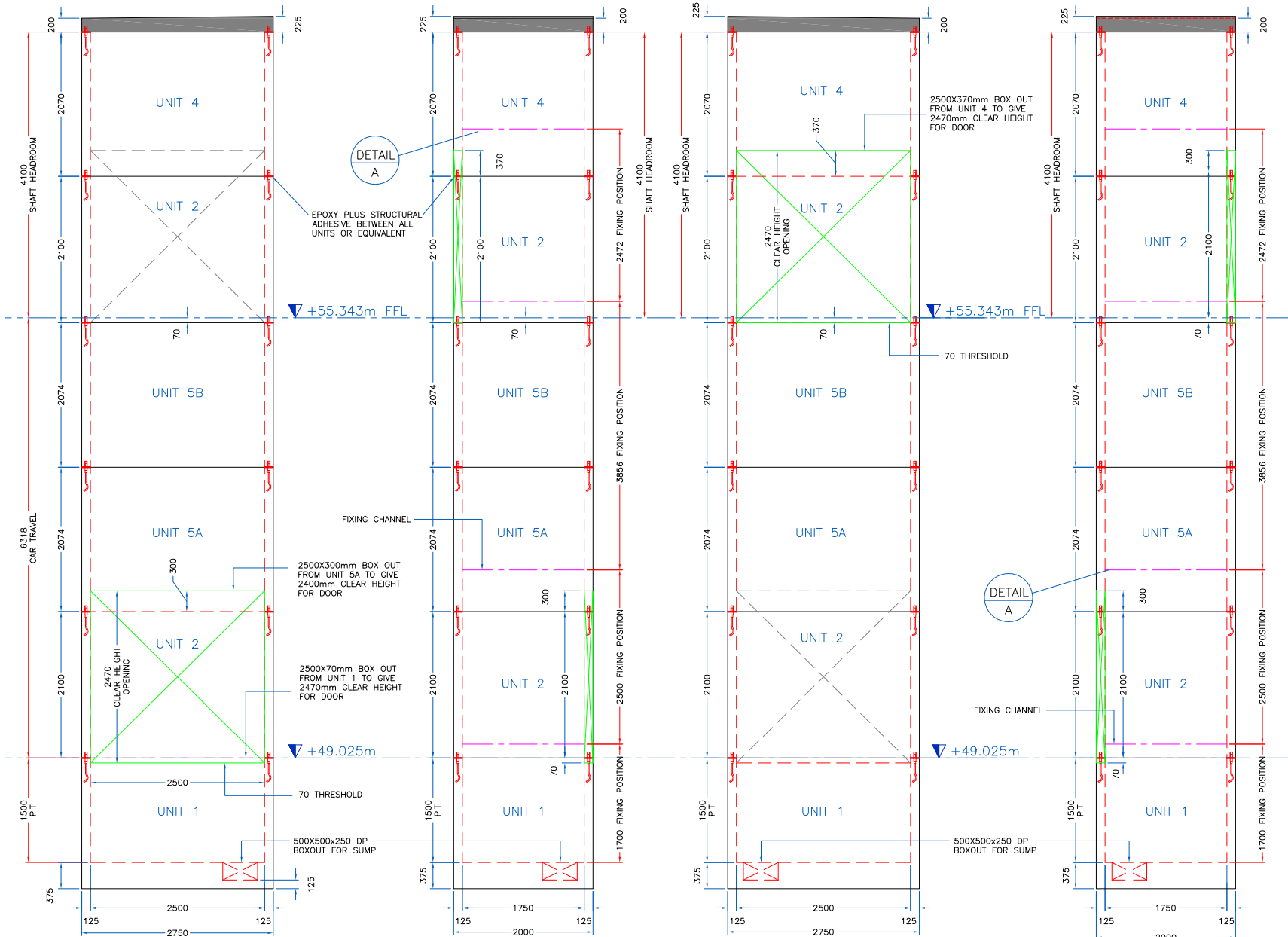
SECTION A-A
SCALE 1:30



ROOF SLAB - ELEVATION A
SCALE 1:20



LIFTSHAFT DOOR OPE ELEVATION
SCALE 1:20

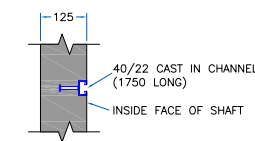


VIEW A
SCALE 1:40

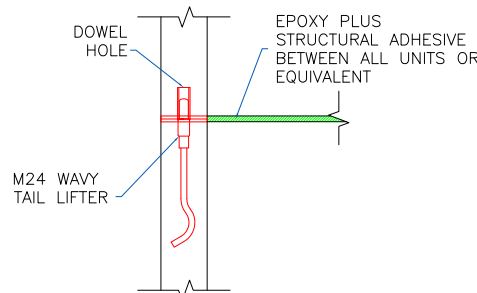
VIEW B
SCALE 1:40

VIEW C
SCALE 1:40

VIEW D
SCALE 1:40

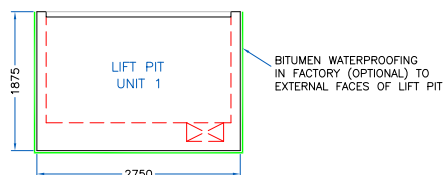


DETAIL A
SCALE 1:10

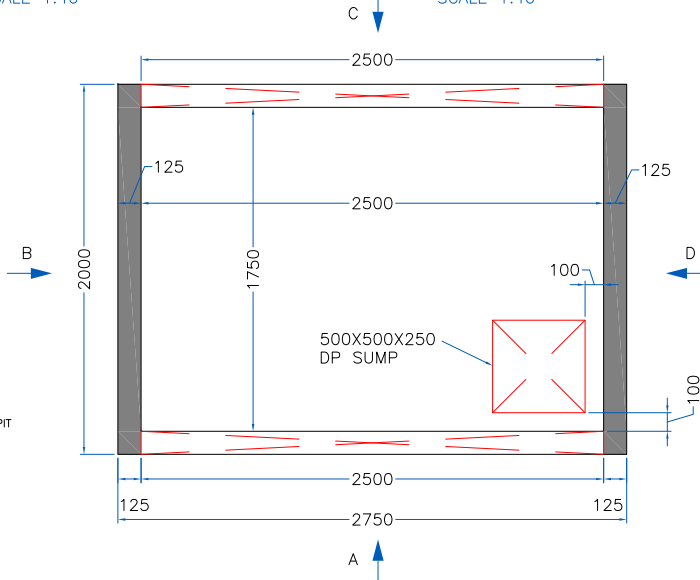


CONNECTION DETAIL
SCALE 1:10

UNIT NO.	NO.
UNIT TYPE 1	1
UNIT TYPE 2	2
UNIT TYPE 4	1
UNIT TYPE 5A	1
UNIT TYPE 5B	1
SLAB UNIT	1



LIFT PIT WATERPROOFING
DETAIL (OPTIONAL)
SCALE 1:50



LIFTSHAFT - PLAN
SCALE 1:20

!!ATTENTION!!
F2 FINISH TO ALL
CONCRETE FACES

- NOTES:
- THIS DRAWING IS FOR STRUCTURAL PURPOSES ONLY AND SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.
 - ALL DIMENSIONS ARE IN MILLIMETRES, ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM, OR SITE DATUM AS SUPPLIED BY THE CLIENT.
 - ALL REINFORCED CONCRETE TO BE AN C40/50 MIX, MINIMUM COMBINED PC AND GBS CONTENT OF 400kg/m AND A MAXIMUM FREE WATER/CEMENT RATIO OF 0.48.
 - COVER TO REINFORCEMENT: NOMINAL COVER = 50mm, PERMITTED COVER DEVIATION = 5mm.
 - THE DESIGN OF THE PCC LIFT SHAFT COMPLIES WITH THE FOLLOWING BRITISH & EUROPEAN STANDARDS:
BS EN 81-1 - SAFETY RULES FOR THE CONSTRUCTION & INSTALLATION OF ELECTRIC LIFTS.
BS EN 197-1 - CEMENT PT 1: COMPOSITION, SPECIFICATIONS & CONFORMITY CRITERIA FOR COMMON CEMENTS
BS EN 206-1 - CONCRETE PT 1: SPECIFICATION, PERFORMANCE, PRODUCTION AND CONFORMITY
BS EN 934-2 - ADMIXTURES FOR CONCRETE, MORTAR & GROUT
BS EN 12620 - AGGREGATES FOR CONCRETE
BS 882:1992 - SPECIFICATION FOR AGGREGATES FROM NATURAL SOURCES FOR CONCRETE
BS 4449:2005 - SPECIFICATION FOR CARBON STEEL BARS FOR THE REINFORCEMENT OF CONCRETE
BS4483:2005 - STEEL FABRIC FOR THE REINFORCEMENT OF CONCRETE
BS4482:2005 - SPECIFICATION FOR COLD REDUCED STEEL WIRE FOR THE REINFORCEMENT OF CONCRETE
BS7973:2001 - SPACERS & CHAIRS FOR STEEL REINF & TIER SPEC.
BS8500:2006 - CONCRETE-COMPLEMENTARY BRITISH STANDARD TO BS EN206-1: PARTS 1 & 2
BS8666:2005 - SPECIFICATION FOR SCHEDULING, DIMENSIONING, BENDING AND CUTTING OF STEEL REINFORCEMENT.
BS EN 1990: 2002+A1: 2005+NA - BASIS OF STRUCTURAL DESIGN
BS EN 1991-1.1:2002+NA - GENERAL ACTIONS. DENSITIES, SELF WEIGHT AND IMPOSED LOADS FOR BUILDINGS.
BS EN 1991-1.4:2005+NA - GENERAL ACTIONS. WIND ACTIONS.
BS EN1991-1.6:2005+NA - GENERAL ACTIONS. ACTIONS DURING EXECUTION.
BS EN 1992-1.1:2004+NA - DESIGN OF CONCRETE STRUCTURES. GENERAL RULES AND RULES FOR BUILDINGS.
 - THE SHAFTS ARE DESIGNED TO RESIST THE FOLLOWING LOADS:
HORIZONTAL POINT LOADS (GUIDE LOADS) AND WIND LOADING.
VERTICAL LOADS APPLIED TO THE TOP SLAB AND/OR SHAFT.

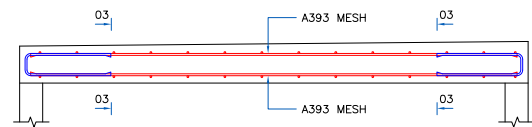
ESTIMATED UNIT WEIGHTS SHOWN BELOW
(UNIT WEIGHTS MAY VARY)
UNIT 1 = 9.2T
UNIT 2 = 4.3T
UNIT 4 = 5.5T
UNIT 5A = 5.6T
UNIT 5B = 5.8T
ROOF SLAB = 2.9T

E	08.07.13	REVISED AS PER COMMENTS
D	25.06.13	TRAVEL DISTANCE AMENDED
C	13.06.13	REVISED AS PER COMMENTS
B	21.05.13	DOORWAY LEVELS REVISED
A	03.05.13	FIRST ISSUE
REV	DATE	DESCRIPTION

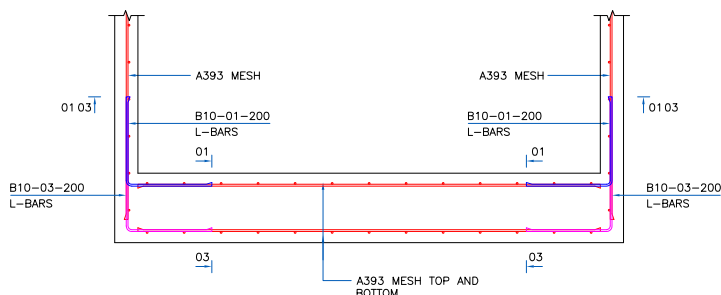
SHAY MURTAGH
RAHARNEY, MULLINGAR, CO. WESTMEATH
Phone:(044)74108/74149 Fax:(044)74552
email: sales@shaymurtagh.ie

CLIENT	BIRSE RAIL
PROJECT	IRK VALLEY ELEVATOR SHAFT
TITLE	OUTBOUND LIFT SHAFT GENEAL ARRANGEMENT AND DETAILS
SCALE	AS SHOWN@A1
DATE	02.05.13
DRAWN BY.	DK
Checked	RF
DRAWING NO.	1429 IS.101.E

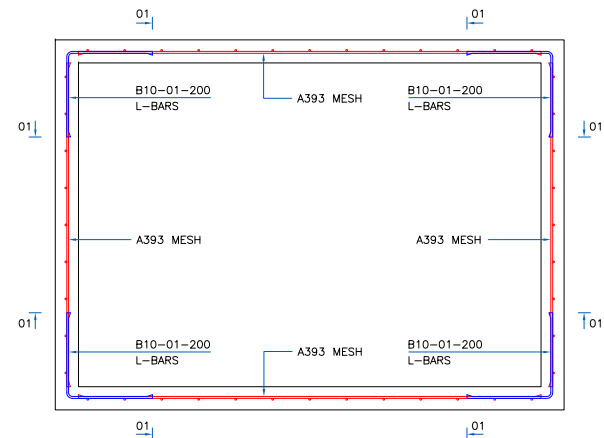
A B C D E F G H



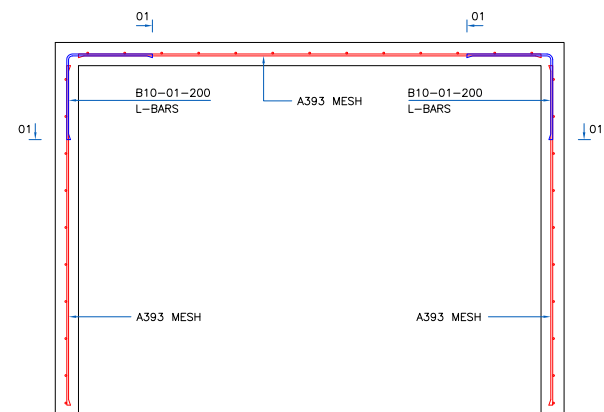
SECTION B-B
SCALE 1:20



SECTION C-C
SCALE 1:20



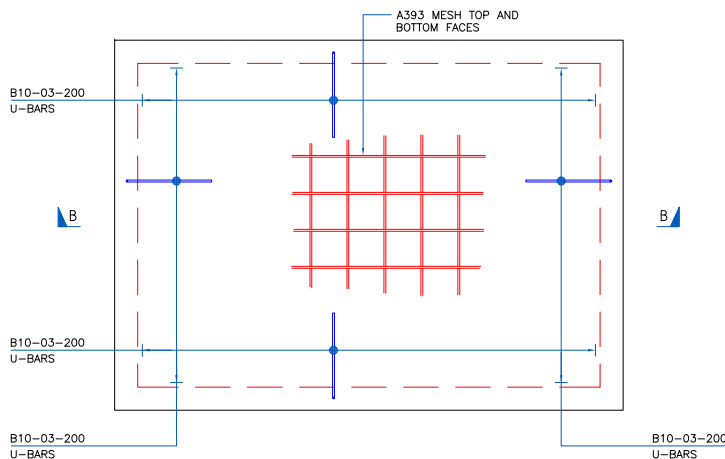
TYPICAL LIFT UNIT REINFORCED SECTION
SCALE 1:20



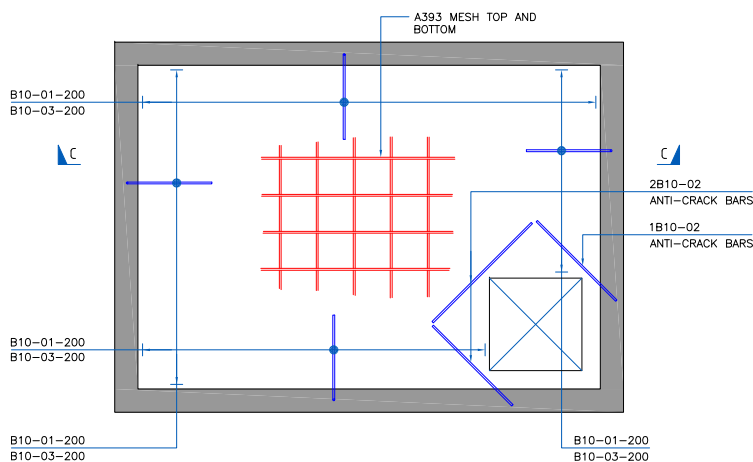
TYPICAL UNIT REINFORCED SECTION AT LIFT ENTRANCE
SCALE 1:20

- NOTES:
- THIS DRAWING IS FOR STRUCTURAL PURPOSES ONLY AND SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.
 - ALL DIMENSIONS ARE IN MILLIMETRES, ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM, OR SITE DATUM AS SUPPLIED BY THE CLIENT.
 - ALL REINFORCED CONCRETE TO BE AN C40/50 MIX, MINIMUM COMBINED PC AND GGBS CONTENT OF 400kg/m AND A MAXIMUM FREE WATER/CEMENT RATIO OF 0.48.
 - COVER TO REINFORCEMENT: NOMINAL COVER = 50mm, PERMITTED COVER DEVIATION = 5mm.
 - THE DESIGN OF THE PCC LIFT SHAFT COMPLIES WITH THE FOLLOWING BRITISH & EUROPEAN STANDARDS:
BS EN 81-1 - SAFETY RULES FOR THE CONSTRUCTION & INSTALLATION OF ELECTRIC LIFTS.
BS EN 197-1 - CEMENT PT.1: COMPOSITION, SPECIFICATIONS & CONFORMITY CRITERIA FOR COMMON CEMENTS.
BS EN 206-1 - CONCRETE PT 1: SPECIFICATION, PERFORMANCE, PRODUCTION AND CONFORMITY
BS EN 934-2 - ADMIXTURES FOR CONCRETE, MORTAR & GROUT
BS EN 12620 - AGGREGATES FOR CONCRETE
BS 882:1992 - SPECIFICATION FOR AGGREGATES FROM NATURAL SOURCES FOR CONCRETE
BS 4449:2005 - SPECIFICATION FOR CARBON STEEL BARS FOR THE REINFORCEMENT OF CONCRETE
BS4483:2005 - STEEL FABRIC FOR THE REINFORCEMENT OF CONCRETE
BS4482:2005 - SPECIFICATION FOR COLD REDUCED STEEL WIRE FOR THE REINFORCEMENT OF CONCRETE
BS7973:2001 - SPACERS & CHAIRS FOR STEEL REINF. & THER SPEC.
BS8500:2006 - CONCRETE-COMPLEMENTARY BRITISH STANDARD TO BS EN206-1: PARTS 1 & 2
BS8666:2005 - SPECIFICATION FOR SCHEDULING, DIMENSIONING, BENDING AND CUTTING OF STEEL REINFORCEMENT.
BS EN 1990: 2002+A1: 2005+NA - BASIS OF STRUCTURAL DESIGN
BS EN 1991-1.1:2002+NA - GENERAL ACTIONS: DENSITIES, SELF WEIGHT AND IMPOSED LOADS FOR BUILDINGS.
BS EN 1991-1.4:2005+NA - GENERAL ACTIONS: WIND ACTIONS.
BS EN1991-1.6:2005+NA - GENERAL ACTIONS: ACTIONS DURING EXECUTION.
BS EN 1992-1.1:2004+NA - DESIGN OF CONCRETE STRUCTURES. GENERAL RULES AND RULES FOR BUILDINGS.
 - THE SHAFTS ARE DESIGNED TO RESIST THE FOLLOWING LOADS: HORIZONTAL POINT LOADS (GUIDE LOADS) AND WIND LOADING. VERTICAL LOADS APPLIED TO THE TOP SLAB AND/OR SHAFT.

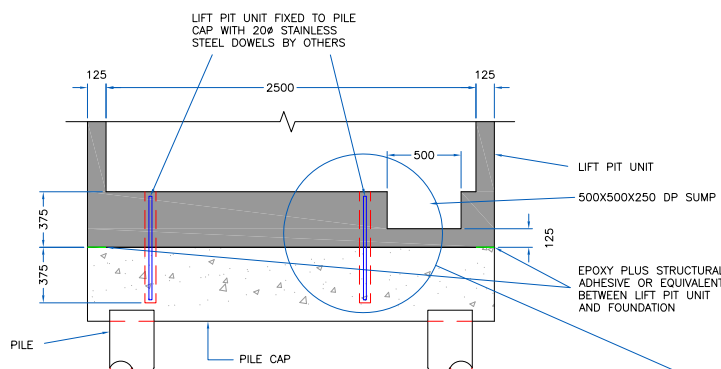
ESTIMATED UNIT WEIGHTS SHOWN BELOW
(UNIT WEIGHTS MAY VARY)
UNIT 1 = 9.2T
UNIT 2 = 4.3T
UNIT 4 = 5.5T
UNIT 5A = 5.6T
UNIT 5B = 5.8T
ROOF SLAB = 2.9T



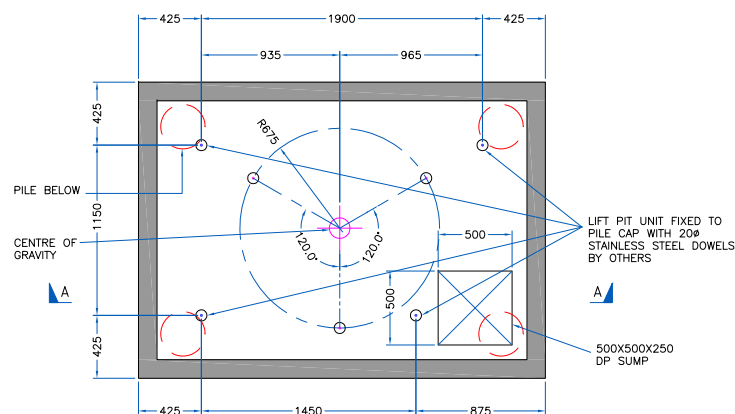
ROOF REINFORCEMENT PLAN
SCALE 1:20



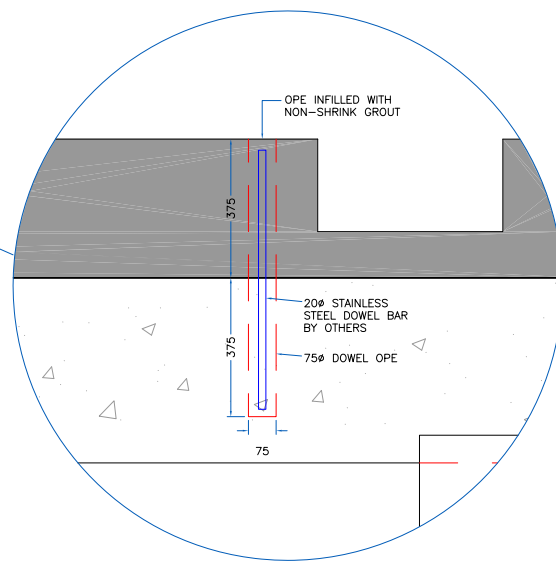
LIFT PIT BASE REINFORCEMENT PLAN
SCALE 1:20



SECTION A-A
SCALE 1:25



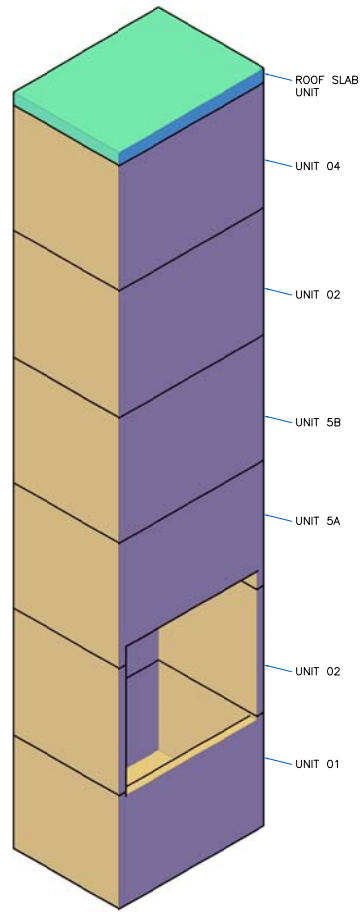
LIFT PIT PLAN
SCALE 1:25



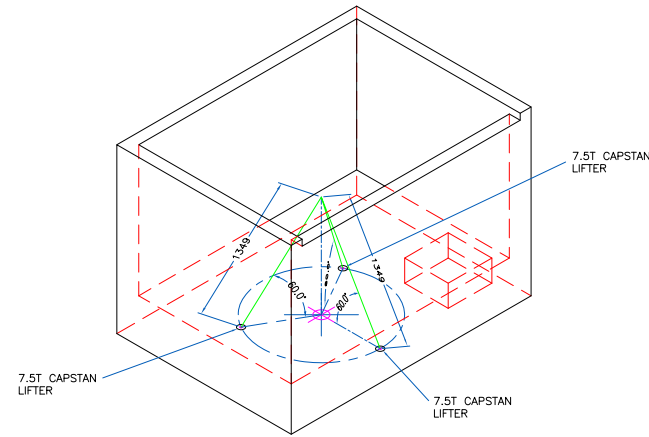
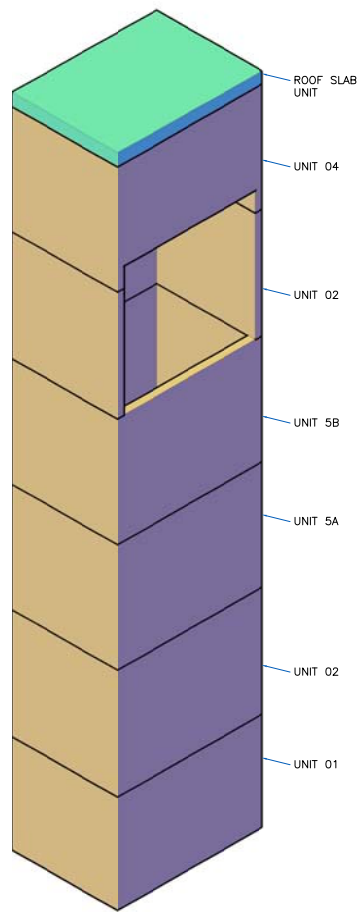
DOWEL DETAIL
SCALE 1:10

B	08.07.13	REVISED AS PER COMMENTS
A	25.06.13	FIRST ISSUE
REV	DATE	DESCRIPTION
 RAHARNEY, MULLINGAR, CO. WESTMEATH Phone:(044)74108/74149 Fax:(044)74552 email: sales@shaymurtagh.ie		
CLIENT	BIRSE RAIL	
PROJECT	IRK VALLEY ELEVATOR SHAFT	
TITLE	OUTBOUND LIFT SHAFT REINFORCEMENT DETAILS	
SCALE	AS SHOWN@A1	DATE 18.06.13
DRAWN BY.	Checked	1429 IS.102.B DRAWING NO.
JL	RF	

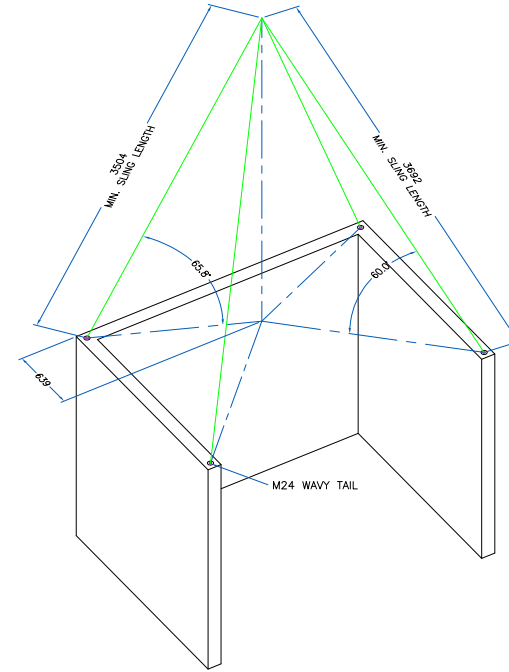
A B C D E F G H



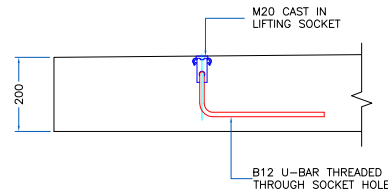
ASSEMBLED LIFT SHAFT VIEWS
SCALE 1:50



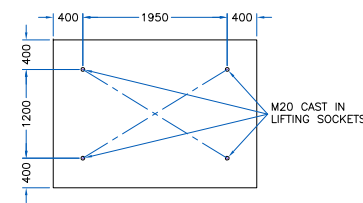
UNIT_01 INSTALLATION LIFT
SCALE 1:30



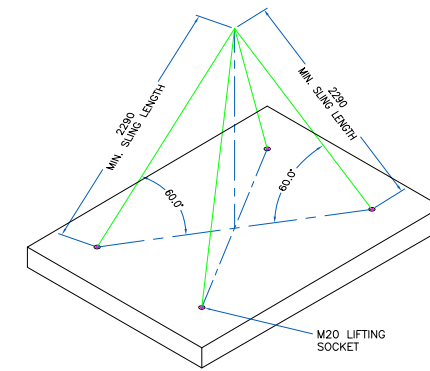
UNIT_02 INSTALLATION LIFT
SCALE 1:30



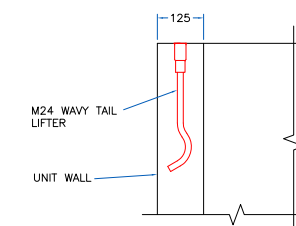
SLAB UNIT LIFTING
POINT DETAIL
SCALE 1:10



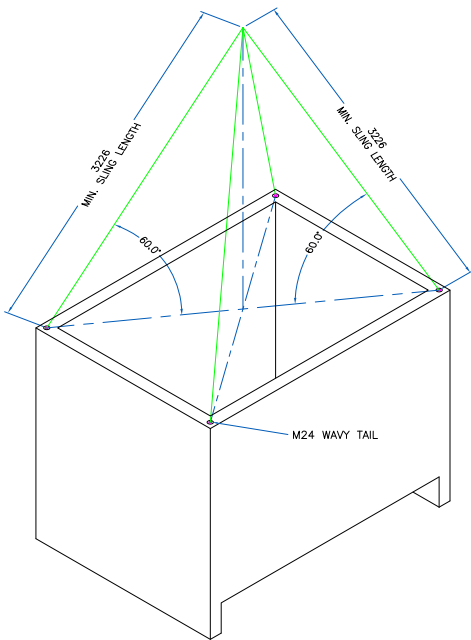
ROOF SLAB LIFTING PLAN
SCALE 1:50



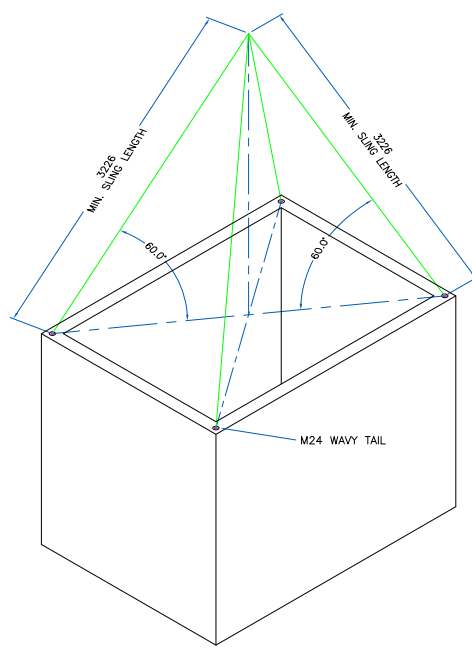
ROOF SLAB INSTALLATION LIFT
SCALE 1:30



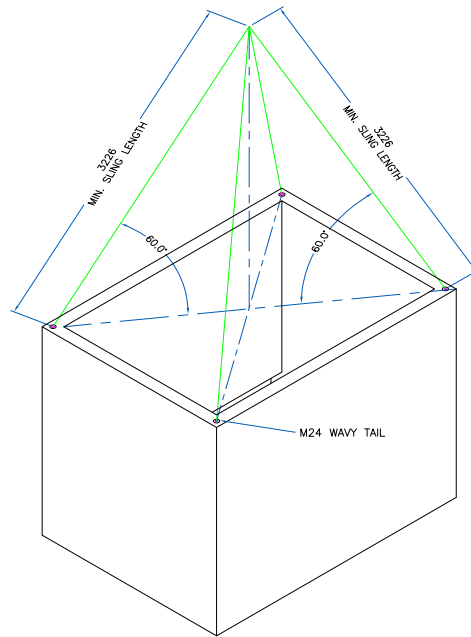
SHAFT UNIT LIFTING
POINT DETAIL
SCALE 1:10



UNIT_5A INSTALLATION LIFT
SCALE 1:30



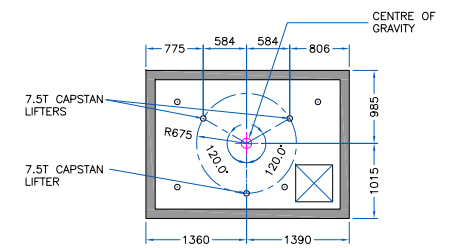
UNIT_5B INSTALLATION LIFT
SCALE 1:30



UNIT_04 INSTALLATION LIFT
SCALE 1:30

- NOTES:
- THIS DRAWING IS FOR STRUCTURAL PURPOSES ONLY AND SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS.
 - ALL DIMENSIONS ARE IN MILLIMETRES, ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM, OR SITE DATUM AS SUPPLIED BY THE CLIENT.
 - ALL REINFORCED CONCRETE TO BE AN C40/50 MIX, MINIMUM COMBINED PC AND GGBS CONTENT OF 400kg/m AND A MAXIMUM FREE WATER/CEMENT RATIO OF 0.48.
 - COVER TO REINFORCEMENT: NOMINAL COVER = 50mm, PERMITTED COVER DEVIATION = 5mm.
 - THE DESIGN OF THE PCC LIFT SHAFT COMPLIES WITH THE FOLLOWING BRITISH & EUROPEAN STANDARDS:
BS EN 81-1 - SAFETY RULES FOR THE CONSTRUCTION & INSTALLATION OF ELECTRIC LIFTS.
BS EN 197-1 - CEMENT PT 1: COMPOSITION, SPECIFICATIONS & CONFORMITY CRITERIA FOR COMMON CEMENTS
BS EN 206-1 - CONCRETE PT 1: SPECIFICATION, PERFORMANCE, PRODUCTION AND CONFORMITY
BS EN 934-2 - ADMIXTURES FOR CONCRETE, MORTAR & GROUT
BS EN 12620 - AGGREGATES FOR CONCRETE
BS 882:1992 - SPECIFICATION FOR AGGREGATES FROM NATURAL SOURCES FOR CONCRETE
BS 4449:2005 - SPECIFICATION FOR CARBON STEEL BARS FOR THE REINFORCEMENT OF CONCRETE
BS4483:2005 - STEEL FABRIC FOR THE REINFORCEMENT OF CONCRETE
BS4482:2005 - SPECIFICATION FOR COLD REDUCED STEEL WIRE FOR THE REINFORCEMENT OF CONCRETE
BS7973:2001 - SPACERS & CHAIRS FOR STEEL REINF & THER SPEC.
BS8500:2006 - CONCRETE-COMPLEMENTARY BRITISH STANDARD TO BS EN206-1: PARTS 1 & 2
BS8666:2005 - SPECIFICATION FOR SCHEDULING, DIMENSIONING, BENDING AND CUTTING OF STEEL REINFORCEMENT.
BS EN 1990: 2002+A1: 2005+NA - BASIS OF STRUCTURAL DESIGN
BS EN 1991-1.1:2002+NA - GENERAL ACTIONS. DENSITIES, SELF WEIGHT AND IMPOSED LOADS FOR BUILDINGS.
BS EN 1991-1.4:2005+NA - GENERAL ACTIONS. WIND ACTIONS.
BS EN1991-1.6:2005+NA - GENERAL ACTIONS. ACTIONS DURING EXECUTION.
BS EN 1992-1.1:2004+NA - DESIGN OF CONCRETE STRUCTURES. GENERAL RULES AND RULES FOR BUILDINGS.
 - THE SHAFTS ARE DESIGNED TO RESIST THE FOLLOWING LOADS:
HORIZONTAL POINT LOADS (GUIDE LOADS) AND WIND LOADING.
VERTICAL LOADS APPLIED TO THE TOP SLAB AND/OR SHAFT.

ESTIMATED UNIT WEIGHTS SHOWN BELOW
(UNIT WEIGHTS MAY VARY)
UNIT 1 = 9.2T
UNIT 2 = 4.3T
UNIT 4 = 5.5T
UNIT 5A = 5.6T
UNIT 5B = 5.8T
ROOF SLAB = 2.9T



LIFT PIT PLAN SHOWING
INSTALLATION LIFTERS
SCALE 1:50

B	08.07.13	REVISED AS PER COMMENTS
A	25.06.13	FIRST ISSUE
REV	DATE	DESCRIPTION
 SHAY MURTAGH RAHARNEY, MULLINGAR, CO. WESTMEATH Phone:(044)74108/74149 Fax:(044)74552 email: sales@shaymurtagh.ie		
CLIENT	BIRSE RAIL	
PROJECT	IRK VALLEY ELEVATOR SHAFT	
TITLE	OUTBOUND LIFT SHAFT LIFTING DETAILS	
SCALE	AS SHOWN@A1	DATE 18.06.13
DRAWN BY.	Checked	1429 IS.103.B DRAWING NO.
JL	RF	