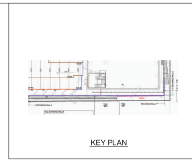
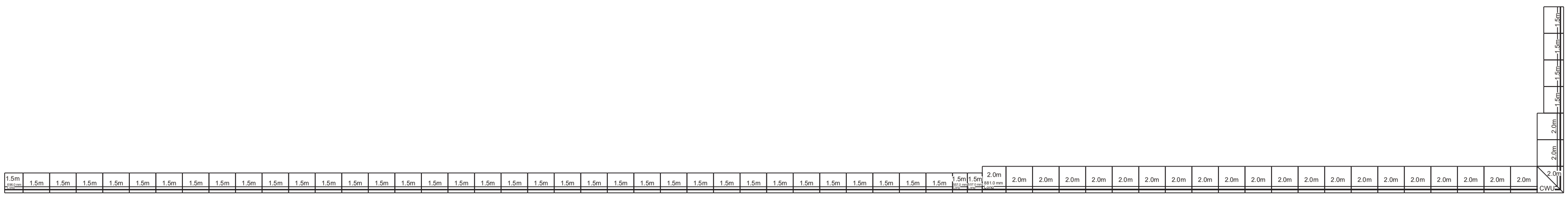
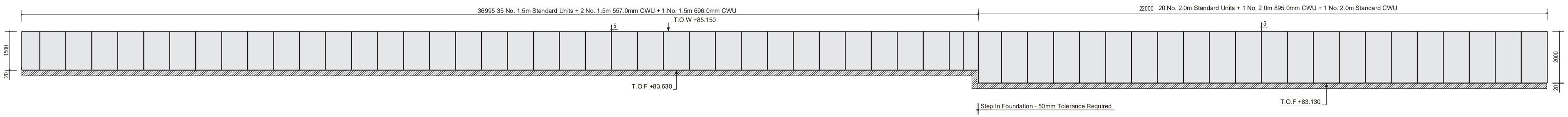
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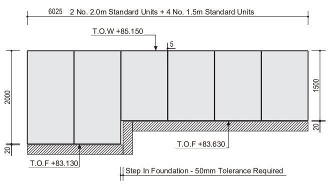

KEY PLAN



Plan View On Wall 1



Elevation View On Wall 1
(Viewed From Site)



Elevation View On Wall 1
(Viewed From Site)

Wall 1

Retaining Wall Type	No. of Units	Drawing Number	Weight Per Unit	Total Weight
1.5m Straight	39	FPM-SLW-1.5-GA latest rev.	0.71	27.69
1.50m x 557 Straight	2	FPM-SPL-1.50-GA-RC latest rev.	0.40	0.79
1.50m x 696 Straight	1	FPM-SPL-1.50-GA-RC latest rev.	0.49	0.49
2.00m Straight	22	FPM-SLW-2.00-GA latest rev.	1.01	22.22
2.00m x 895 Straight	1	FPM-SPL-2.00-GA-RC latest rev.	0.90	0.90
2.0m Corner	1	FPM-SLW-CWU-2.00-GA latest rev.	1.58	1.58
Total No. of Units	66		Total Weight	53.679

Manufacture Tolerances

Permissible dimensional deviations from mean dimensions shall be as follows:

Length	Cross section (each direction)
See Units Details	L < 150mm: +10/-5mm L = 400mm: +15/-10mm L > 2500mm: 30mm

Edge straightness (deviation from intended line)
L < 1m: 8mm
L > 1m: 8mm/m (but not to exceed 20mm)

Holes, openings steel plates and inserts
Size of hole or opening: 10mm
Location of holes, openings, steel plates, inserts: 25mm

Lifter position 25mm

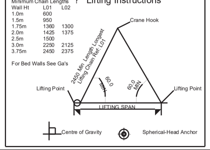
All tolerances as specified in Eurocode.

? Lifting Instructions

Minimum Chain Lengths

Wall Ht	L01	L02
1.0m	600	
1.5m	950	
1.75m	1360	1300
2.0m	1425	1375
2.5m	1500	
3.0m	2250	2125
3.75m	2450	2375

For Bed Walls See Ga's



Notes:

F P McCann have not undertaken any site engineering assessments.

1. Handling

For handling details, refer to retaining wall unit drawings.

2. Manufacture
a. Manufactured to BS EN 13369:2013.
b. Tolerances based on BS EN 13369:2013 & BS EN 13670:2009.
c. Finishes: refer to retaining wall unit drawings.

3. Design
a. Concrete design to BS EN 1992-1-1:2004.
b. Application of the wall to conform to the standard loading conditions (6) or to be verified (by Others) to be suitable based on the noted capacities (5). Loading of the wall during construction must be considered.
c. F.P. McCann have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.
d. Design Life > 100 years to BS8500
e. Cover to Reinforcement & Exposure: Refer to retaining wall unit drawings

4. ? Foundation
a. Concrete base to be designed and installed (by others).
b. To ensure good bond and satisfy cover requirements in the anchors the slab should have minimum strength of C20 / C25 and a minimum depth of 250mm

5. Retaining Wall Capacity
Refer to retaining wall unit drawings & calculations

6. Standard Loading Conditions
a) Four Loading conditions considered: -
- Loaded to rear with level fill and live load surcharge.
- Loaded to front with level fill and live load surcharge. *
- Loaded to rear with 20 sloped fill.
- Loaded to front with 20 sloped fill. *

Construction loading must not be more onerous than the permanent condition.
* Standard Loading condition for Bed Walls and units which are 4m in height and above does not include loading from the front.

b) The backfill material should be free draining granular material such as a class 6N or 6P, fill as define in the manual of Contract Documents for Highway Works Volume 1 Specification Series 600 Clause 610 & table 6/1.
Characteristic effective shearing resistance f= 35,
Unit weight of fill = 19kN/m³
c) Live Load
- Standard L - Walls up to 3.75m = Up to 10.0kN/m² Refer to Standard Calculations.
- Standard L- Walls 4 to 6m = Up to 50.0kN/m² Refer to Standard Calculations.
- Bed Walls = Up to 50.0kN/m² Refer to Standard Calculations.

d) Handrail loading of 1.5kN at 1.1m above top of wall (fixing details by OTHERS)
Note: - Handrail loading not part of standard design for Standard L-Walls up to 3.75m

This Layout contains: - Standard L-Walls up 3.75m

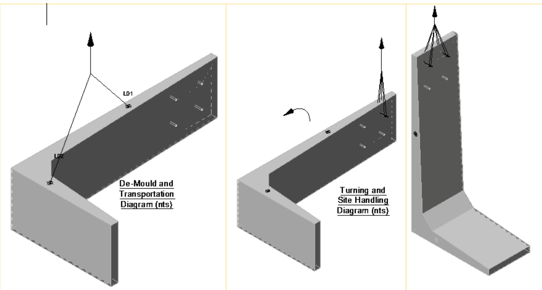
The Construction (Design and Management) Regulations 2015
a) If you are unsure of your responsibilities please refer to the HSE website.
b) These notes should be read by all CDM duty holders. Whilst we do not go into specifics such as working at heights, working over excavations, slips and trips etc, where ? is shown in the notes and on the drawing some potential hazard / risks are identified and should be assessed accordingly by the main contractor and the design team prior to any site works commencing.
c) Particular attention should be made to the notes identified by ? which have the potential for significant risk where not adhered to. This F.P McCann unit drawing should be read in conjunction with all other relevant drawings available from the design team e.g Architect, Engineer, Steelwork sub-contractor etc.
d) Lifting - The lifting equipment referred to in note 1 is the only lifting equipment which should be used on F.P. McCann supplied units. All elements must be lifted in accordance with F.P. McCann's lifting plan/method statement.
e) Installation - Where it is necessary to work at height i.e. removal of shackles, procedures for working at heights must be followed. The manufactures guidelines and safety recommendation for the application of the grout and resin must be followed.
f) ? Main Contractor to allow a minimum of 72 hours before commencement of back filling. Backfilling methods e.g. use of heavy roller not to exceed the design surcharge within a proximity to the heal of the retaining wall less than the height of the wall. Filling behind the precast walls to consist of a free draining granular fill laid in a maximum of 225mm layers compacted using a vibrating plate.

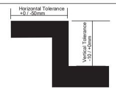
Installation steps (1-3.75m Standard L-Walls):
1. Position the units on to the shimmed concrete foundation.
2. Dry Pak to the edge of the base of the units to create a seal to the perimeter.
3. Through the 30mm preformed holes drill a 150mm, 20mm diameter hole into the foundation.
4. Fill holes with Sika Anchorfix-1 resin to a level so that when the dowels are inserted the resin becomes level with the top of the foundation (as a minimum).
5. Insert the B16 dowel bar into the resin. Ensure that the bar is pushed to the base of the drilled hole.
6. Ensure the units are uniformly supported by using the grouting hole to completely flood the shimmed void (and grouting hole) with Parex C.S grout.
7. Grout around the dowel using Parex C.S grout so that the dowel is completely encapsulated.
8. Do not disturb dowel bar or unit until grout has achieved full strength in accordance with grout manufacture guidelines.

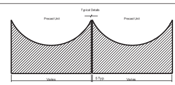
Installation Steps (Bed Walls + 4m to 6m Standard L-Walls):
1. Drill pilot hole embedment depth + 40mm (to allow for dust collection into foundation through slotted hole.
2. Remove collected dust from drilled hole by easing the drill bit up and down within the hole.
3. Using an impact wrench set to slow-start install M20x300 Excaliber with washer plate.
4. Void in precast toe to be fully filled with Larsen Multigrout 60 or similar

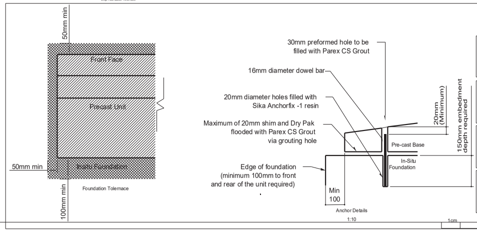
Please note the drawings provided are our own interpretations from levels provided and can be modified to suit your own site requirements.

It is ultimately down to others to determine if these walls will meet their required loading conditions. The units do not offer a watertight seal due to square edges; the joint will need to have an additional material applied which should be specified and applied by others









3.75m Unit supplied with 6 No. 325mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

3.0m Unit supplied with 4 No. 300mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

2.5m Unit supplied with 4 No. 275mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

2.0m Unit supplied with 2 No. 275mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

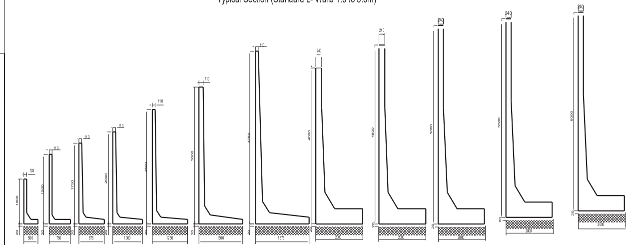
1.75m Unit supplied with 2 No. 275mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

1.5m Unit supplied with 2 No. 250mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

1.0m Unit supplied with 2 No. 250mm B16 deformed rebar dowel bars. (All dowel bars must be installed).

1cm A0

Typical Section (Standard L- Walls 1.0 to 5.0m)



Rev	Date	Revision detail	By	Chk'd

Status: For Information | Suitability: S2

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Client: Triton Construction

Project: CRABTREE LANE - Manchester

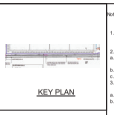
Title: Proposed Retaining Wall General Arrangement & Elevation Layouts

Drawn: TB | Checked: WW | Approved: KM
Internal Ref: Project No. 180915 | Date: 09-09-2025 | Scale: NTS

Drawing no: SKH-FPM-XX-XX-DR-X-0301 | Rev: SK01

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Notes:
F P McCann have not undertaken any site engineering assessments.

1. Handling
For handling details, refer to retaining wall unit drawings.
2. Manufacture
a. Manufactured to BS EN 13369:2013.

b. Tolerances based on BS EN 13369:2013 & BS EN 13670:2009.
c. Finishes - refer to retaining wall unit drawings.
3. Design

a. Concrete design to BS EN 1992-1-1:2004.
b. Application of the wall to conform to the standard loading conditions (B) or
Loading of the wall during construction is not to be considered.
c. F.P. McCann have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.
d. Design Life > 100 years to BS8500

e. Cover to Reinforcement & Exposure: Refer to retaining wall unit drawings
4. ? Foundation
a. Foundation base to be designed and installed (by others).
b. To ensure good bond and safety clear requirements in the enclosure the foundation should have minimum strength of C20 / 025 and a minimum depth of 250mm

5. Retaining Wall Capacity
Refer to retaining wall unit drawings & calculations

6. Standard Loading Conditions
a) Four Loading conditions are considered: –
- Loaded to rear with level fill and live load surcharge
- Loaded to front with level fill and live load surcharge *
- Loaded to rear with 2D sloped fill.

- Loaded to front with 2D sloped fill.
Construction loading must not be more onerous than the permanent condition.
Standard Loading condition for Bed Walls and units which are 4m in height and above should include loading to the front.
b) The backfill material should be free draining granular material such as a class 6N

or 6P, Fill as define in the manual of Contract Documents for Highway Works
Volume 1 Specification Series 600 Clause 610 & table 6/1
Characteristic effective shearing resistance = 35,
Unit weight of fill = 19kN/m³
c) Live Load
- Standard L - Walls up to 3. 15m = Up to 10 DkN/m² Refer to Standard

Calculations.
- Standard L- Walls 4 to 6m = Up to 5(DkN/m² Refer to Standard Calculations.
- Bed Walls = Up to 50 DkN/m². Refer to Standard Calculations.

d) Handrail loading of 1.5kN at 1. 1m above top of wall (fixing details by OTHERS)
Note: - Handrail loading not part of standard design for Standard L-Walls up to 3. 15m
This Load Contains - Standard L- Walls up 3. 15m

The Construction (Design and Management) Regulations 2015
a) If you are unsure of your responsibilities please refer to the HSE website.
b) These notes should be read by all CDM duty holders. Whilst we do not go into specifics such as working at heights, working over excavations, slips and trips

etc, where ‘3s shown in the notes and on the drawing some potential hazard / risk. are identified and should be assessed accordingly by the main contractor and the design team prior to any site works commencing.
c) Particular attention should be made to the notes identified by ‘ ? ‘ which have

the potential for significant risk where not adhered to. This F.P. McCann unit drawing should be read in conjunction with all other relevant drawings available from the design team e.g.Architect, Engineer, Site week sub-contractor etc.
d) Lifting - The lifting equipment referred to in note 11 is the only lifting equipment which should be used on F.P. McCann supplied units. All elements must be lifted

In accordance with F.P. McCann’s lifting banner/hoist statement.
e) Installation - - Where it is necessary to work at height i.e. removal of shackles, procedures for working at heights must be followed. The manufactures guidelines and safety recommendation for the application of the grout and resin must be

followed.
f) ? Main Contractor to allow a minimum of 72 hours before commencement

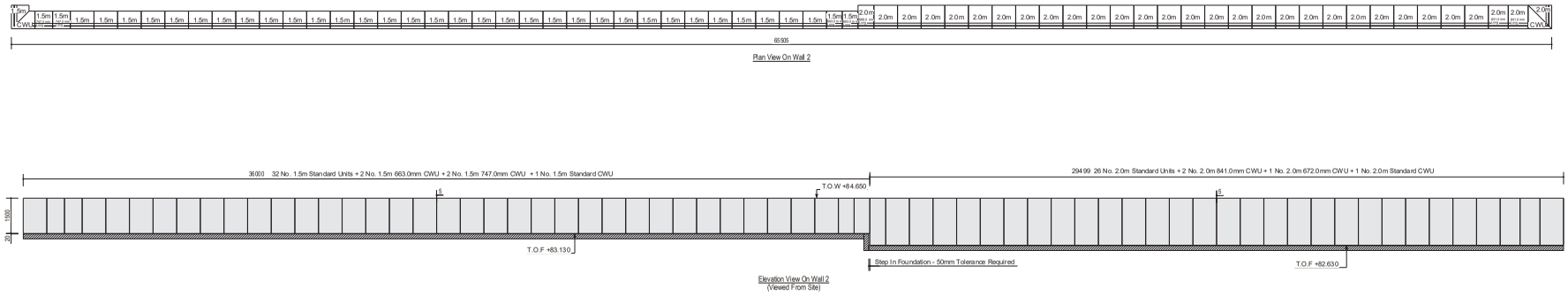
of back filling. Backfilling methods eg. use of heavy rollers not to exceed the design surcharge within a proximity to the heel of the retaining wall less than the height of the wall. Filling behind the precast walls to consist of a free draining granular fill laid in a maximum of 225mm layers compacted using a vibrating plate.
Installation steps (1.0.75m Standard L-Walls):
1. Position the units on to the shimmed concrete foundation.
2. Dry Pak to the edge of the base of the units to create a seal to the perimeter.
3. Through the 30mm preformed holes drill a 150mm, 20mm diameter hole into the foundation.

4. Fill holes with Sika Anchorfix-1 resin to a level so that when the dowel is are inserted the resin is comes level with the top of the foundation (as a minimum).
5. Insert the B16 dowel bar into the resin. Ensure that the bar is pushed to the base of the drilled hole.
6. Ensure the units are uniformly supported by using the grouting hole to completely fill out the shimmed void (and grouting hole) with Parex CS grout.
7. Grout around the dowel using Parex CS grout so that the dowel is completely encased in grout.
8. Do not disturb dowel bar or unit until grout has achieved full strength in

accordance with grout manufacture guidelines.
Installation Steps (Bed Walls + 4m to 6m Stand ard L-Walls):
1. Drill pilot hole embedment depth + 40mm (to allow for dust collection into foundation through slotted hole.
2. Remove collected dust from drilled hole by easing the drill bit up and down whilst rotating.
3. Using an impact wrench set to slow-start install M20x300 Excaliber with washer plate.
4. Void in precast toe to be fully filled with Larsen Multigrout 60 or similar

Please note the drawings provided are our own interpretations from levels provided and can be modified to suit your own site requirements.

It is ultimately down to others to determine if these walls will meet their required loading conditions. The units do not offer a watertight seal due to square edges; the joint will need to have an additional material applied which should be specified and applied by others



Wall 2

Retaining Wall Type	No. of Units	Drawing Number	Weight Per Unit	Total Weight
1.5m Straight	32	FPM-SLW-1.5-GA latest rev.	0.71	22.72
1.50m x 663 Straight	2	FPM-SPL-1.50-GA-RC latest rev.	0.47	0.94
1.50m x 747 Straight	2	FPM-SPL-1.50-GA-RC latest rev.	0.53	1.06
1.5m Corner	1	FPM-SLW-CWU-1.50-GA latest rev.	1.17	1.17
2.00m Straight	26	FPM-SLW-2.00-GA latest rev.	1.01	26.26
2.00m x 672 Straight	1	FPM-SPL-2.00-GA-RC latest rev.	0.68	0.68
2.00m x 841 Straight	2	FPM-SPL-2.00-GA-RC latest rev.	0.85	1.70
2.0m Corner	1	FPM-SLW-CWU-2.00-GA latest rev.	1.58	1.58
Total No. of Units	67		Total Weight	56.110

Manufactures Tolerances
Permissible dimensional deviations from mean dimensions shall be as follows:

Length	Cross section (each direction)
See Units Details	< 150mm: +10/-5mm < 400mm: +15/-10mm > 250mm: 30mm

Edge straightness (deviation from intended line)
< 1m: 8mm
> 1m: 8mm m (but not to exceed 20mm)

Holes, openings steel plates and inserts
Size of hole or opening: 10mm
Location of holes, openings, steel plates, inserts: 25mm

Lifter position 25mm

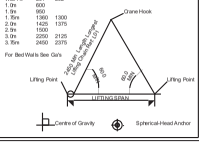
All tolerances as specified in Eurocode.

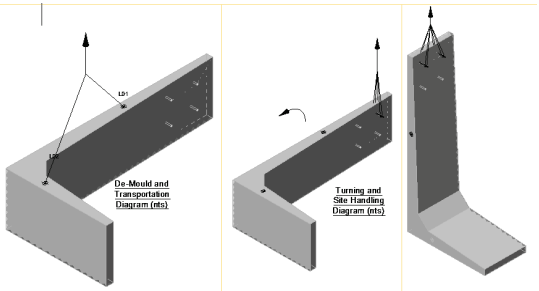
Lifting Instructions

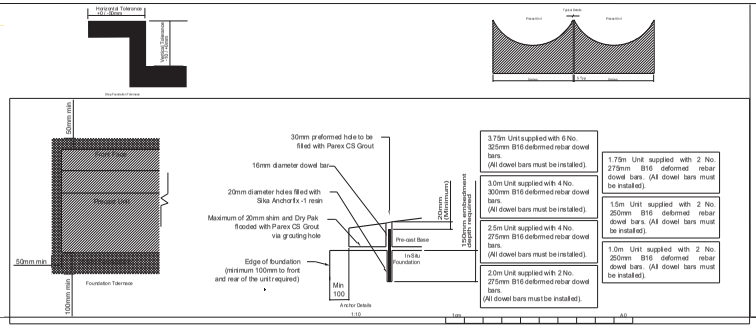
Minimum Chain Lengths ?

Wall Ht	L01	L02
1.0m	600	
1.5m	950	
1.75m	1360	1300
2.0m	1425	1375
2.5m	1500	
3.0m	2250	2125
3.15m	2450	2375

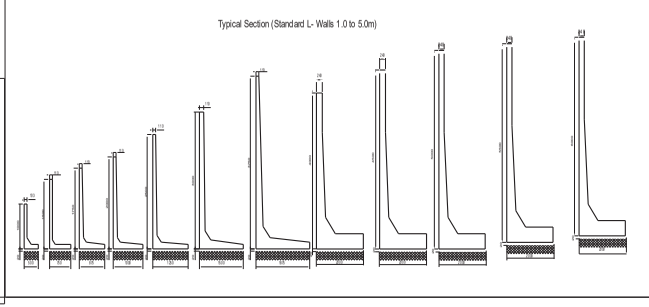
For Bed Walls See Ga's







Typical Section (Standard L- Walls 1.0 to 5.0m)



Rev	Date	Revision status	By	Chk'd

Status: For Information Suitability: S2

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www.fpmccann.co.uk

Client: Triton Construction

Project: CRABTREE LANE - Manchester

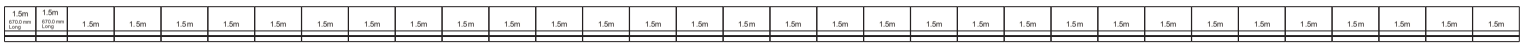
Title: Proposed Retaining Wall General Arrangement & Elevation Layouts

Drn: TB	Chk'd: WW	Apvd: XM
Issue Ref: Project No. 180915	Date: 09-09-2020	Scale: NTS

Drawing no: SKH-FPM-XX-XX-DR-X-0302 Rev: SK01

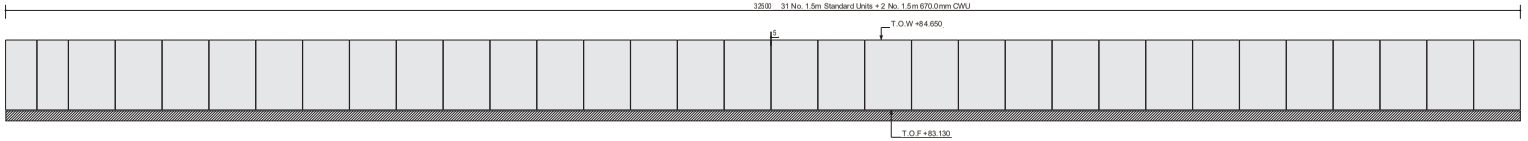
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3250 0

Plan View On Wall 3



Elevation View On Wall 3
(Viewed From Site)



KEY PLAN

Notes:

F P McCann have not undertaken any site engineering assessments.

1. Handling

For handling details, refer to retaining wall unit drawings.

2. Manufacture
a. Manufactured to BS EN 13369:2013.

b. Tolerances based on BS EN 13369:2013 & BS EN 13670:2009.

c. Finishes - refer to retaining wall unit drawings.

3. Design

a. Concrete design to BS EN 1992-1-1:2004.

b. Application of the wall to conform to the standard loading conditions (5) or the wall will be designed for the actual loading conditions specified (5)
Loading of the wall during construction must be considered.

c. F.P. McCann have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.

d. Design Life > 100 years to BS8500

4. a. Cover to Reinforcement & Exposure: Refer to retaining wall unit drawings

4. b. Foundation

a. Suitable base to be designed and installed (by others).

b. To ensure good bond and safety crane requirements in the end-on lift the concrete should have minimum strength of C20 / 025 and a minimum depth of 250mm

5. Retaining Wall Capacity
Refer to retaining wall unit drawings & calculations

6. Standard Loading Conditions

a) Four Loading conditions considered: -
- Loaded to rear with level fill and live load surcharge
- Loaded to front with level fill and live load surcharge *
- Loaded to rear with 20 sloped fill.

- Loaded to front with 20 sloped fill.

Construction loading must not be more onerous than the permanent condition.
Standard Loading condition for Bed Walls and units which are 4m in height and above should include loading on the front.

b) The backfill material should be free draining granular material such as a class 6N

or 6P, Fill as defined in the manual of Contract Documents for Highway Works
Volume 1 Specification Series 600 Clause 610 & table 6/1
Characteristic effective shearing resistance = 35,
Unit weight of fill = 19kN/m³

c) Live Load
- Standard L - Walls up to 3. 75m = Up to 10 Dkn/m² Refer to Standard

Calculations.
- Standard L- Walls 4 to 6m = Up to 5[DkN/m² Refer to Standard Calculations.
- Bed Walls = Up. to 50.DkN/m². Refer to Standard Calculations.

d) Handrail loading of 1.5kN at 1. 1m above top of wall (fixing details by OTHERS)
Note: - Handrail loading not part of standard design for Standard L-Walls up to 3. 75m

The Listed contains: - Standard L-Walls up 3. 75m

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a) If you are unsure of your responsibilities please refer to the HSE website.
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c) Particular attention should be made to the notes identified by ' ? ' which have

the potential for significant risk where not adhered to. This F.P. McCann unit drawing should be read in conjunction with all other relevant drawings available from the design team e.g.Architect, Engineer, Steelwork sub-contractor etc.
d) Lifting - The lifting equipment referred to in note 1 is the only lifting equipment which should be used on F.P. McCann supplied units. All elements must be lifted

In accordance with F.P. McCann's lifting plan/method statement.
e) Installation - Where it is necessary to work at height i.e. removal of shackles, procedures for working at heights must be followed. The manufactures guidelines and safety recommendation for the application of the grout and resin must be

followed.
f) ? Main Contractor to allow a minimum of 72 hours before commencement

of back filling. Backfilling methods eg. use of heavy roller not to exceed the design surcharge within a proximity to the heel of the retaining wall less than the height of the wall. Filling behind the precast walls to consist of a free draining granular fill laid in a maximum of 225mm layers compacted using a vibrating plate.
Installation steps (1-0.75m Standard L-Walls):
1. Position the units on to the shimmed concrete foundation.
2. Dry Pak to the edge of the base of the units to create a seal to the perimeter.
3. Through the 30mm preformed holes drill a 150mm, 20mm diameter hole into the foundation.

4. Fill holes with Sika Anchorfix-1 resin to a level so that when the dowel is are inserted the resin is comes level with the top of the foundation (as a minimum).
5. Insert the B16 dowel bar into the resin. Ensure that the bar is pushed to the base of the drilled hole.
6. Ensure the units are uniformly supported by using the grouting hole to completely fill out the shimmed void (and grouting hole) with Parex C.S. grout.
7. Grout around the dowel using Parex C.S grout so that the dowel is completely encased in grout.
8. Do not disturb dowel bar or unit until grout has achieved full strength in

accordance with grout manufacture guidelines.
Installation Steps (Bed Walls + 4m to 6m Stand ard L-Walls):
1. Drill pilot hole embedment depth + 40mm (to allow for dust collection into foundation through slotted hole.
2. Remove collected dust from drilled hole by easing the drill bit up and down whilst running.
3. Using an impact wrench set to slow-start install M20x300 Excaliber with washer plate.
4. Void in precast toe to be fully filled with Larsen Multigrout 60 or similar

Please note the drawings provided are our own interpretations from levels provided and can be modified to suit your own site requirements.

It is ultimately down to others to determine if these walls will meet their required loading conditions. The units do not offer a watertight seal due to square edges; the joint will need to have an additional material applied which should be specified and applied by others

Wall 3

Retaining Wall Type	No. of Units	Drawing Number	Weight Per Unit	Total Weight
1.5m Straight	31	FPM-SLW-1.5-GA latest rev.	0.71	22.01
1.50m x 670 Straight	2	FPM-SPL-1.50-GA-RC latest rev.	0.48	0.95
Total No. of Units	33		Total Weight	22.961

Manufactures Tolerances

Permissible dimensional deviations from mean dimensions shall be as follows:

Length	Cross section (each direction)	
See Units Details	< 150mm:	+10/-5mm
	> 400mm:	+15/-10mm
	> 2500mm:	30mm

Edge straightness (deviation from intended line)

< 1m:	8mm
> 1m:	8mm m (but not to exceed 20mm)

Holes, openings steel plates and inserts

Size of hole or opening:	10mm
Location of holes , openings, steel plates, inserts:	25mm
Lifter position	25mm

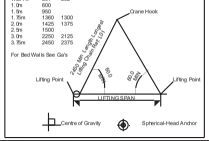
All tolerances as specified in Eurocode.

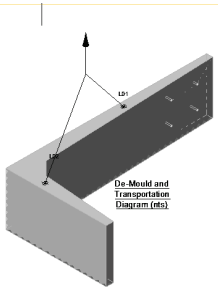
Lifting Instructions

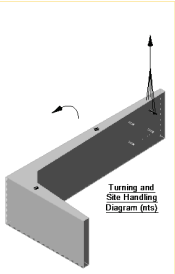
Minimum Chain Lengths ?

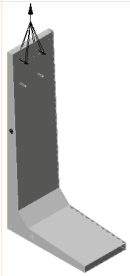
Wall Ht	L01	L02
1.0m	600	
1.5m	950	
1.75m	1360	1300
2.0m	1425	1375
2.5m	1500	
3.0m	2250	2125
3.75m	2450	2375

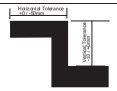
For Bed Walls See Ga's

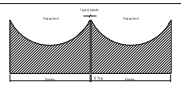


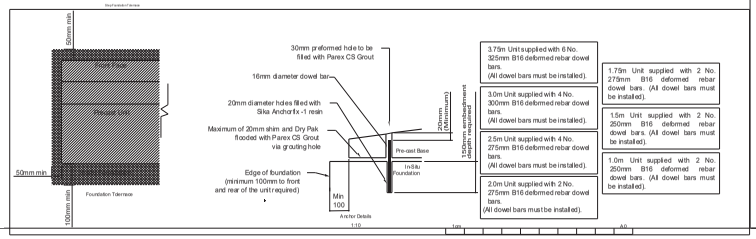




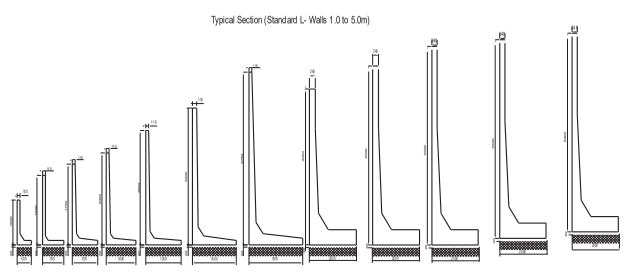








Typical Section (Standard L- Walls 1.0 to 5.0m)



Rev	Date	Revision status	By	Chk'd

Status: For Information Suitability: S2

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Client: Triton Construction

Project: CRABTREE LANE - Manchester

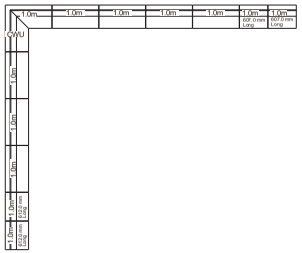
Title: Proposed Retaining Wall General Arrangement & Elevation Layouts

Drn: TB	Chk'd: WW	Apvd: XM
Issue Ref: Report No. 180915	Date: 09-09-2020	Scale: NTS

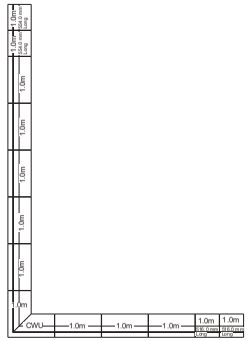
Drawing no: SKH-FPM-XX-XX-DR-X-0303 Rev: SK01

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DO NOT SCALE - IF IN DOUBT PLEASE ASK



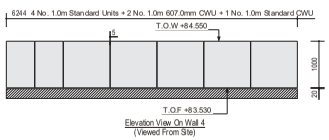
Plan View On Wall 4



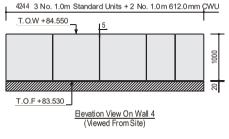
Plan View On Wall 5



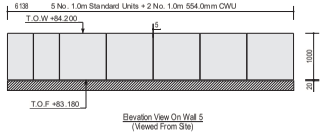
KEY PLAN



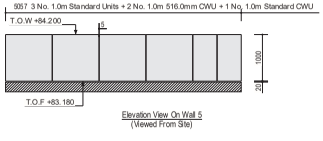
Elevation View On Wall 4
(Viewed From Site)



Elevation View On Wall 4
(Viewed From Site)



Elevation View On Wall 5
(Viewed From Site)



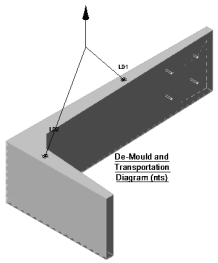
Elevation View On Wall 5
(Viewed From Site)

Wall 4

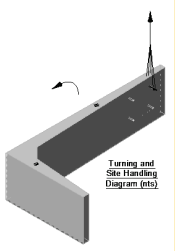
Retaining Wall Type	No. of Units	Drawing Number	Weight Per Unit	Total Weight
1.0m Straight	7	FPM-SLW-1.0-GA latest rev.	0.44	3.08
1.00m x 607 Straight	2	FPM-SPL-1.00-GA-RC latest rev.	0.27	0.53
1.00m x 612 Straight	2	FPM-SPL-1.00-GA-RC latest rev.	0.27	0.54
1.0m Corner	1	FPM-SLW-CWU-1.00-GA latest rev.	0.79	0.79
Total No. of Units	12		Total Weight	4.943

Wall 5

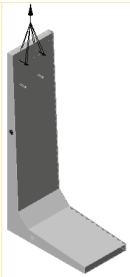
Retaining Wall Type	No. of Units	Drawing Number	Weight Per Unit	Total Weight
1.0m Straight	8	FPM-SLW-1.0-GA latest rev.	0.44	3.52
1.00m x 516 Straight	2	FPM-SPL-1.00-GA-RC latest rev.	0.23	0.45
1.00m x 554 Straight	2	FPM-SPL-1.00-GA-RC latest rev.	0.24	0.49
1.0m Corner	1	FPM-SLW-CWU-1.00-GA latest rev.	0.79	0.79
Total No. of Units	13		Total Weight	5.252

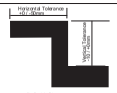


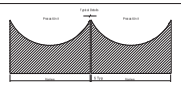
De-Mould and Transportation Diagram (nts)

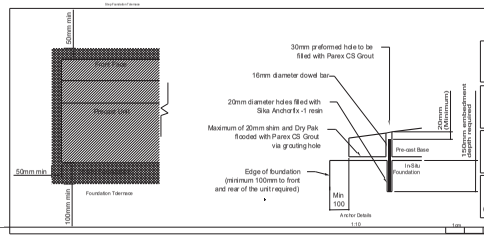


Turning and Site Handling Diagram (nts)

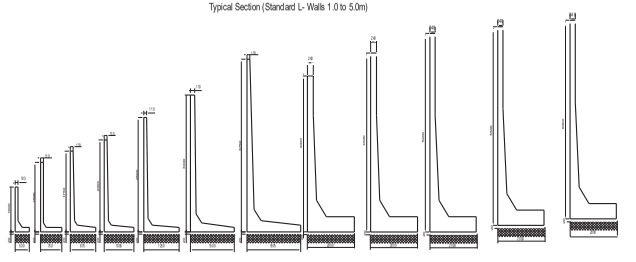








Typical Section (Standard L- Walls 1.0 to 5.0m)



Notes:

F P McCann have not undertaken any site engineering assessments.

1. Handling

For handling details, refer to retaining wall unit drawings.

2. Manufacture
a. Manufactured to BS EN 13369:2013.

b. Tolerances based on BS EN 13369:2013 & BS EN 13670:2009.

c. Finishes - refer to retaining wall unit drawings.

3. Design

a. Concrete design to BS EN 1992-1-1:2004.

b. Application of the wall to conform to the standard loading conditions (5) or
- Loading of the wall during construction must be considered.
- Loading of the wall during construction must be considered.

c. F.P. McCann have designed the concrete unit only, the stability of the support conditions should be checked by overall scheme designer.

d. Design Life > 100 years to BS8500

4. a. Cover to Reinforcement & Exposure: Refer to retaining wall unit drawings

4. b. ? Foundation

5. a. Concrete base to be designed and installed (by others).

5. b. To ensure good bond and satisfy cover requirements in the end-on to the concrete should have minimum strength of C20 / 025 and a minimum depth of 250mm

5. Retaining Wall Capacity
Refer to retaining wall unit drawings & calculations

6. Standard Loading Conditions

a) Four Loading conditions considered: -
- Loaded to rear with level fill and live load surcharge
- Loaded to front with level fill and live load surcharge *
- Loaded to rear with 20 sloped fill.

- Loaded to front with 20 sloped fill.

Construction loading must not be more onerous than the permanent condition.
Standard Loading condition for Bed Walls and units which are 4m in height and above should include loading to the front.

b) The backfill material should be free draining granular material such as a class 6N

or 6P, Fill as defined in the manual of Contract Documents for Highway Works
Volume 1 Specification Series 600 Clause 610 & table 6/1
Characteristic effective shearing resistance = 35,
Unit weight of fill = 19kN/m³

c) Live Load
- Standard L - Walls up to 3. 75m = Up to 10 0kN/m² Refer to Standard

Calculations.
- Standard L- Walls 4 to 6m = Up to 5(0kN/m² Refer to Standard Calculations.
- Bed Walls = Up to 50.0kN/m². Refer to Standard Calculations.

d) Handrail loading of 1.5kN at 1. 1m above top of wall (fixing details by OTHERS)
Note: - Handrail loading not part of standard design for Standard L-Walls up to 3. 75m

The Liebherr company - Standard L-Walls up to 3. 75m

The Construction (Design and Management) Regulations 2015
a) If you are unsure of your responsibilities please refer to the HSE website.
b) These notes should be read by all CDM duty holders. Whilst we do not go into specifics such as working at heights, working over excavations, slips and trips

etc, where ' 3s shown in the notes and on the drawing some potential hazard / risk are identified and should be assessed accordingly by the main contractor and the design team prior to any site works commencing.
c) Particular attention should be made to the notes identified by ' ? ' which have

the potential for significant risk where not adhered to. This F.P. McCann unit drawing should be read in conjunction with all other relevant drawings available from the design team e.g.Architect, Engineer, Site week sub-contractor etc.
d) Lifting - The lifting equipment referred to in note 1 is the only lifting equipment which should be used on F.P. McCann supplied units. All elements must be lifted

In accordance with F.P. McCann's lifting banksman statement.
e) Installation - Where it is necessary to work at height i.e. removal of shackles, procedures for working at heights must be followed. The manufacturers guidelines and safety recommendation for the application of the grout and resin must be

followed.
f) ? Main Contractor to allow a minimum of 72 hours before commencement

of back filling. Backfilling methods eg. use of heavy roller not to exceed the design surcharge within a proximity to the rear of the retaining wall less than the height of the wall. Filling behind the precast walls to consist of a free draining granular fill laid in a maximum of 225mm layers compacted using a vibrating plate.
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4. Fill holes with Sika Anchorfix-1 resin to a level so that when the dowels are inserted the resin becomes level with the top of the foundation (as a minimum).
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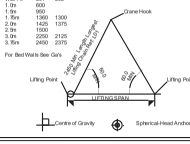
All tolerances as specified in Eurocode.

? Lifting Instructions

Minimum Chain Lengths

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1.0m	600	
1.5m	950	
1.75m	1360	1300
2.0m	1425	1375
2.5m	1500	
3.0m	2250	2125
3.75m	2450	2375

For Bed Walls See Ga's



Rev	Date	Revision status	By	Chk'd

Status: For Information
Suitability: S2

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www.fpmccann.co.uk

Client: Triton Construction

Project: CRABTREE LANE - Manchester

Title: Proposed Retaining Wall General Arrangement & Elevation Layouts

Drn: TD	Chk'd: WW	Appd: XM
Issue Ref: Project No: 180915	Date: 09-09-2020	Scale: NTS

Drawing no: SKH-FPM-XX-XX-DR-X-0304
Rev: SK01