

GMI Quality Control Statement

Planning Condition 3 – Materials
Circle Square 3

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Approved by:

Approval Date:

Revision Control

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Revision log

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1.0 ROLES AND RESPONSIBILITIES

This section explains the roles of those designing, constructing, reviewing and signing off the material sample panel.

1.1 Roles and Responsibilities

Role	Responsibilities
Client – Bruntwood	The Client team are responsible for undertaking visual inspections of the sample panels and reporting to the principal contractor quality and workmanship issues.
Architect – Bridge Architects	<p>Design Intent</p> <p>The architect prepares the design intent drawings for the façade sample panel to demonstrate the different façade typologies and key features of building façade. The architect also provides detailed design of the masonry wall build ups and coordination of subcontractor design.</p> <p>Brickwork</p> <p>The architect is responsible for the selection of suitable bricks and mortar colour prior to submission to the Local Planning Authority for Review.</p> <p>Sample Panel</p> <p>Design and Setting Out</p> <p>Design information will include detailed setting out of masonry to replicate the different brick sizes, bonds and features used on the building. Also setting out and coordination of the various glazed features of the building, such as curved windows at ground floor.</p> <p>Systems & Components</p> <p>Where the architect has detailed design responsibility for the masonry wall, they will provide specification of the systems and components for example, insulation and cavity trays.</p> <p>Where the subcontractor proposes a system e.g. curtain walling the architect reviews the system for performance compliance, quality and aesthetics.</p> <p>Colours and Finishes</p>

	<p>The architect is responsible for specifying finishes and colours of all materials. Through reviewing samples provided by subcontractors, the architect signs off the colour and finish.</p>
Façade Consultant – Ramboll	<p>The façade consultant, appointed by the Client is responsible for reviewing the design information and commenting on compliance with the façade specification.</p>
Principal Contractor – GMI	<p>Design Intent</p> <p>GMI construction are responsible for procuring materials and subcontractors through a competitive tendering process and rigorous competency and quality assessment.</p> <p>Brickwork</p> <p>GMI identify the brick supplier and manage procurement, delivery and construction of the brickwork sample panels and façade sample panels. Conducting their own snagging and rework.</p> <p>Sample Panel</p> <p>Construction</p> <p>GMI are responsible with their subcontractors for constructing the sample panel in line with the design information.</p> <p>Quality Control</p> <p>Managing the installation against the design drawings and checking correct installation of products and components.</p> <p>Snagging and Rectification</p> <p>GMI will undertake snagging of the sample panel with the architect and Client and undertake any rectification works prior to review by the local Planning Authority.</p>
Curtain Walling Subcontractor – Casu	<p>The subcontractor is responsible for detailed design of the curtain walling system, calculations of fixings and the construction of their elements of the façade.</p>
Masonry Subcontractor – Kinlan. Masonry Support – IGHSS	<p>The subcontractor is responsible for detailed design of the masonry support system, calculations of fixings and the construction of their elements of the façade.</p>

SFS / Thru Wall Subcontractor - Bluegyp	The subcontractor is responsible for detailed design of the SFS backing wall system, calculations of fixings and the construction of their elements of the façade.
Precast masonry Arch – Ibstock	The subcontractor is responsible for detailed design of the precast concrete arch, calculations of fixings and the fabrication and delivery. The principal contractor is responsible for installation.
Façade Ventilators – SES	<p>The MVHR extract and intake ventilators located behind the perforated brickwork are designed and fabricated by the mechanical subcontractor.</p> <p>Also, calculations to demonstrate air flow is achieved through the louver and perforated. Brickwork. They are responsible for providing mock ups for review and coordination.</p>

2.0 INTERFACE MANAGEMENT

2.1 Interface and Responsibility

Interface / Component	Contractual Responsibility
Component – Curtain walling and Glass, Glazed In Louvers Doors, EPDM seals	Design and installation by Casu (Window Subcontractor). Fixing details into subframe designed and installed by Casu. EPDM laps from curtain walling onto breather membrane by Casu.
Component – Masonry Support	Design by IGHSS (Masonry Support Designer). Installation by Kinlan. (Masonry Subcontractor)
Component – SFS	Design by Metsec (SFS Designer). Installation by Bluegyp. (Through Wall Subcontractor)
Components – Vapour Control Layer, Insulation, CP Board, Breather Membrane and EPDM.	Design by Bridge Architects (Architect). Installation by Bluegyp (Through Wall Subcontractor). EPDM seals to perimeter of breather membrane installed by BlueGyp.
Brick ties and channel fixed to CP board. Bed joint reinforcement.	Design by Curtins (Structural Engineer). Installation by Kinlan (Masonry Subcontractor)
Cavity barriers and cavity closers, cavity trays, perpend weep joints.	Specification / performance by Bridge Architects (Architect). Alternative product technical proposals by Kinlan (Masonry Subcontractor). Installation by Kinlan (Masonry Subcontractor)
Pre cast Concrete Cills	Specification by Bridge Architects (Architect). Fabrication and installation by Kinlan (Masonry Subcontractor)
Façade Ventilators	Design and install by SES (MEP Contractor).
Mastic Sealant	Mastic sealant to junction between curtain walling/windows specified by architect from samples provided by GMI. Mastic sealant installed by specialist subcontractor.
Open Louvers	Open louvers to ground floor and roof level. Detailed design and Installation by Casu (Window Subcontractor). Secondary steelwork support frame design by Casu. Fabrication and installation by Total Steel (Steelwork Subcontractor)
Glass Balustrades	Detailed design and Installation by Sterling Fabrication (balustrade Fabricator).

3.0 OFF SITE MANAGEMENT

3.1

All suppliers to comply with robust GMI QA requirements for material quality and manufacturing processes. Refer to appendices for QA procedures. Regular visits taking place to glass manufacturing plant, brick manufacturer, masonry support manufacturer to make sure compliance. Arches manufacturers sending daily updates on progress and GMI QA compliance officer inspecting every arch prior to concrete being poured.

4.0 PROTECTION OF MATERIALS IN TRANSIT AND ON SITE

4.1

Each subcontractor to be allocated safe storage area on site. Materials inspected at the time of delivery and moved to designated storage area to be used as and when required. Deliveries split in quantities to suit programme and reduce amount of time materials stored on site to minimise damage.

4.2

Loading of the materials pre planned and coordinated with site requirements considering materials size and weight. Some materials pre-loaded on concrete slabs before external walls are formed to minimise risk of damage in transit

4.3

Manufacturers packaging to be suitable and adequate, depending on the fragility of the product delivered to site. More robust packaging requested for some materials more prone to damage

4.4

Window frames, curtain walling mullions and transoms and glass protected with roll on applied protective film to minimise risk of damage post install

5.0 SUB CONTRACTOR SELECTION AND MANAGEMENT

5.1 Sub Contractor Selection

As principal contractor GMI Construction maintain a supply chain of preferred subcontractors who we work with regularly. To maintain a high standard of subcontractors, the companies are reviewed under the GMI Subcontractor KPI Audits. They are audited on Health & safety, Commercial, Management and Supervision, Sustainability and Environment, Quality, Information Management, Design and Site Performance.

Sub-contractors are assessed on their previous experience of similar types of construction and where possible architectural style. GMI assess this through the KPI Audits described above, visiting previous project to assess quality and workmanship. As a business the stability of the company in terms of financial and labour availability are also checked.

Where the sub-contractor also has design responsibility the experience and qualifications of the designers are checked via a Pre-Qualification questionnaire. Previous examples of design information are also reviewed to assess technical competency.

It is a GMI requirement that Subcontractors have and maintain specific Quality Assurance accreditation to demonstrate an understanding and commitment to quality.

5.1 Sub Contractor Management

The GMI Site Management Team for the façade is made up of a Project Director overseeing the whole project with a dedicated Project Manager for facades. There is also a Site Manager allocated to brickwork, through wall construction and curtain walling. These teams are supported by a Technical Manager who oversees QA functions. For the design stage, the subcontractor design is overseen by the GMI Design Manager to ensure compliance with the specification.

For each of the façade packages, for example Masonry, it is a Contract requirement that the subcontractor has a non-working supervisor to manage and supervise work on site. This hierarchy of supervision ensures correct construction in line with the design information and quality of installation. The subcontractor is responsible for undertaking their own QA via the GMI 'Fieldview' system which is then second checked by GMI Site Management. Works which are substandard are issued a Non Conformance report and the subcontractor has to rectify the works to the correct standard and quality.

6.0 INSPECTION AND SIGN OFF FLOW CHART:



10 STEPS TO DELIVERING QUALITY

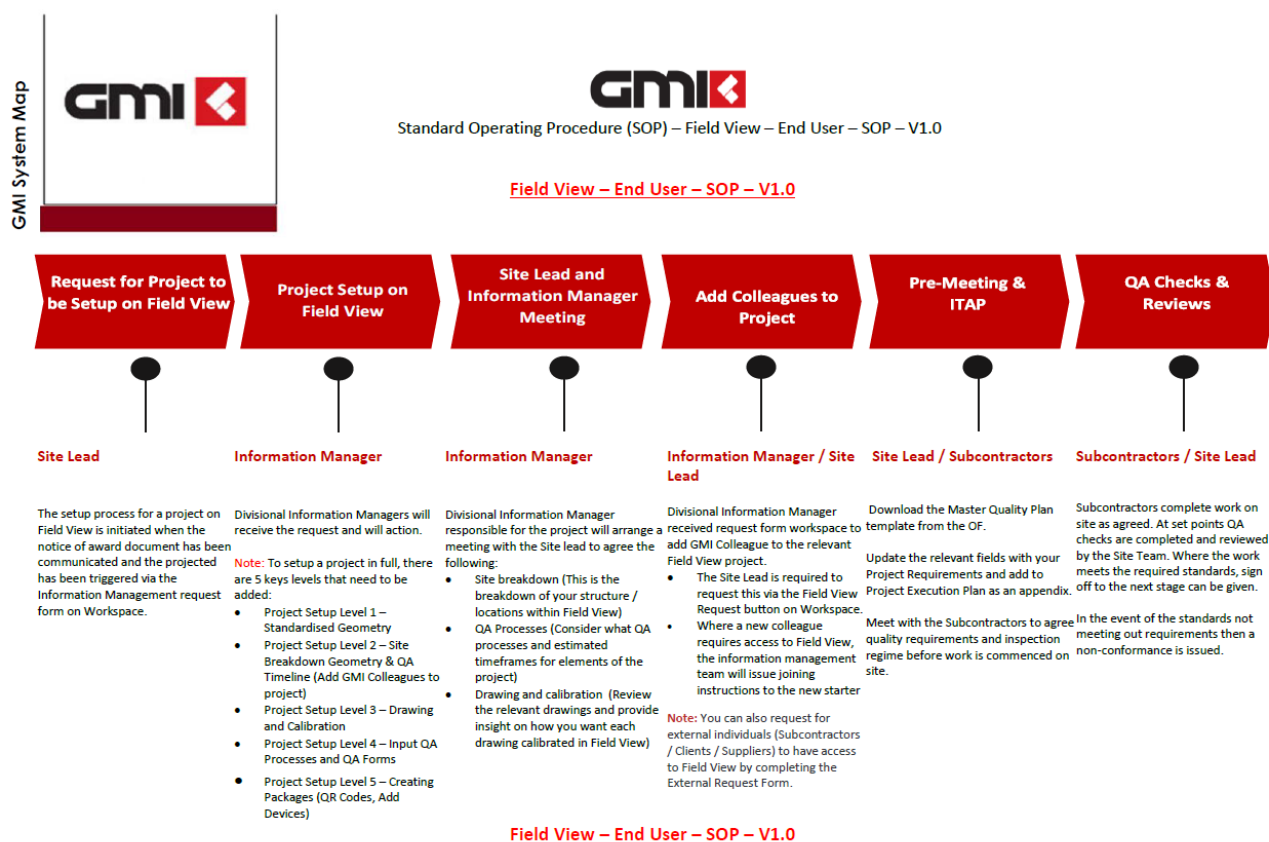
The GMI 10 Point Plan should be adopted at concept stage to support the project Quality Assurance preparation, enabling and delivery in line with the Building Safety Act 2022 and business mandate.

The 'Golden Thread' ethos MUST be applied across ALL construction activity, and compliance linked to commercial valuation and payment via the designated gateways.



• APPROVAL GATEWAY

Standard Operating procedure for Fieldview QA process:



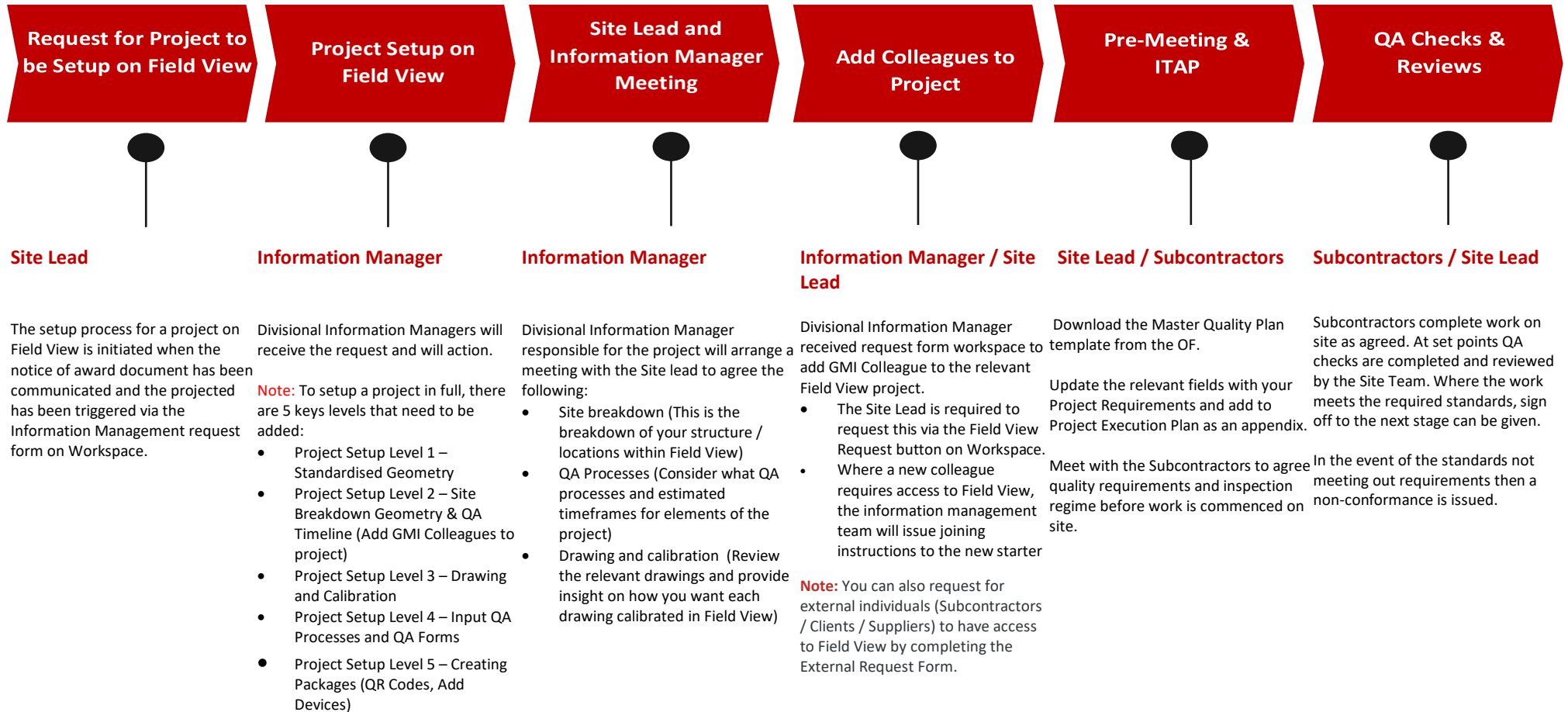
7.0 SAMPLE AND DESIGN VERIFICATION BEFORE CASE OFFICER

Refer to appendices for GMI QA of sample panel.



Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

Field View – End User – SOP – V1.0



Field View – End User – SOP – V1.0



Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

Reason to use this SOP:

This SOP demonstrates the steps and information required in order for a project to be setup on Field View.

Background:

Viewpoint Field View is a cloud-based mobile application that allows workers to capture, share and report data in the field. Viewpoint Field View helps support users to quickly resolve issues, mitigate risks and deliver higher quality projects.

The system allows you to:

- Complete snagging and tasks – create custom tasks such as snags in real-time and mark the exact location. Improve communications and accountability by assigning tasks to teams and subcontractors, then easily track to close with complete visibility at every step.
- Processes – Create task sequences and workflows for any field process. Proactively ensure quality checks occur to reduce errors ahead of time. Colour-coded statuses provided visibility into task completion, and ensure that tasks are completed in the correct order.
- Forms – Create custom, or select from pre-configured forms within Field View to capture and share data live on-site – without going back to the office. Attach and markup photos, electronic signature signoff, and the ability to access supporting documentation.
- Reporting and Dashboards – Gain total visibility with visualised charts, statistics, and grid views.

As per our information management policies, the security, quality, and consistency of our data is of utmost importance to us as a company. Field View allows us to share information securely with external organisations allowing us to benefit from enhanced communication and collaboration. Field View forms part of our core data storage and security systems here at GMI.

Process:

Note: for the purpose of this SOP the term:

- The Information management team are responsible for completing the administration of Field View. This includes the creation and setup of projects which follow the below stages:
 - Project Setup Level 1 – Standardised Geometry
 - Project Setup Level 2 – Site Breakdown Geometry & QA Timeline (Add GMI Colleagues to project)
 - Project Setup Level 3 – Drawing and Calibration
 - Project Setup Level 4 – Input QA Processes and QA Forms
 - Project Setup Level 5 – Creating Packages (QR Codes, Add Devices)

Step	Description	Who Involved
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Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

1	<p>Request for project to be setup on Field View</p> <ul style="list-style-type: none"> The setup process for a project on Field View is initiated when the notice of award document has been communicated and the project has been triggered via the Information Management request form on Workspace. <ul style="list-style-type: none"> Form to be populated by Site Lead for the project. <ul style="list-style-type: none"> Project Name Project Reference – Region_ProjectNumber Project Type – Industrial / Residential / Warehouse / Hotel (Select from drop down) Project Owner – GMI Construction Organisation Type - Main Contractor Project Start Date Project End Date – (left blank) Full Address Time Zone – GMT <p>Note: When a project request is submitted a SharePoint, Project Mailbox, and View Point accounts are also created.</p>	Site Lead
2	<p>Project created on Field View</p> <ul style="list-style-type: none"> Divisional Information Managers will receive the request from ITSM and will action using the following information: <p>Note: At this point the project is now created in Field View, but the project hasn't been fully set up. In order to setup a project in full, there are 5 keys levels that need to be added:</p> <ul style="list-style-type: none"> Project Setup Level 1 – Standardised Geometry Project Setup Level 2 – Site Breakdown Geometry & QA Timeline (Add GMI Colleagues to project) Project Setup Level 3 – Drawing and Calibration Project Setup Level 4 – Input QA Processes and QA Forms Project Setup Level 5 – Creating Packages (QR Codes, Add Devices) 	Information Manager
3	<p>Arrange and Complete meeting with Site Lead</p> <ul style="list-style-type: none"> Divisional Information Manager responsible for the project will arrange a meeting with the Site lead to agree the following: <ul style="list-style-type: none"> Site breakdown (This is the breakdown of your structure / locations within Field View) QA Processes (Consider what QA processes and estimated timeframes for elements of the project) Drawing and calibration (Review the relevant drawings and provide insight on how you want each drawing calibrated in Field View) <p>Note: Meetings usually take place on site and can last up to two hours.</p>	Information Manager Site Lead



Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

4	Add GMI Colleagues to project <ul style="list-style-type: none"> Divisional Information Manager received request form workspace to add GMI Colleague to the relevant Field View project. <ul style="list-style-type: none"> The Site Lead is required to request this via the Field View Request button on Workspace. Where a new colleague requires access to Field View, the information management team will issue joining instructions to the new starter. – Step 4a 	Information Manager GMI Colleague
4a	New GMI Colleague – Joining Instructions <ul style="list-style-type: none"> Receive joining instructions and follow to create an account. Once account has been created, Information Management Team will then add the user to the project. 	GMI Colleague
5	Site Team Reviews Field View Project <ul style="list-style-type: none"> Once the project has been set up on Field View and users added. You be able to access the project via the project list in Field View. <ul style="list-style-type: none"> Before progressing you should check that all relevant information has been added as requested at the Divisional Information Manager meeting. <ul style="list-style-type: none"> Site breakdown (This is the breakdown of your structure / locations within Field View) QA Processes (Consider what QA processes and estimated timeframes for elements of the project) Drawing and calibration (Review the relevant drawings and provide insight on how you want each drawing calibrated in Field View) If there are no required changes, move to step 8 If changes are required, move to step 6 	Site Lead
6	Amendments Required on Field View Project <ul style="list-style-type: none"> Raise the relevant changes to Field View to your local Divisional Information Manager. Where changes fall within their remit, this will be made. <ul style="list-style-type: none"> Changes outside of Divisional Information Manager or Site Team remit will need to be escalated to Construction Director and then onto Change Approval Board if required. <p>Note: All approvals for amendments to documents / process should be captured digitally and stored within the Project SharePoint folder.</p>	Information Manager Site Lead
7	Quality Plan <ul style="list-style-type: none"> Master template can be found on OF and downloaded. This should be renamed to the project requirements and saved to SharePoint. Update the relevant fields with your Project Requirements 	Site Lead



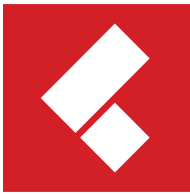
Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

	<ul style="list-style-type: none"> Add to Project Execution Plan as an appendix 	
8	Pre-Start Meeting <ul style="list-style-type: none"> Meet with Subcontractor before they start on site. Discuss quality requirements and time to implement Inspection Test and Approval Plan (ITAP) <p>Note: Refer to Pre-Start Meeting SOP once produced.</p>	Site Lead
9	ITAP Meeting (With each Main Subcontractor) <ul style="list-style-type: none"> Meet with Subcontractor before they start on site. Agree inspection regime for work on site for that specific contractor. Once approved, upload to SharePoint to relevant Project file and update Quality Plan if required. (add to Quality Plan as appendices) 	Site Lead
Time Lapse – Subcontractor conducts work on site up to hold point		
10	Hold Point Reached – Subcontractor <ul style="list-style-type: none"> Subcontractor will open Field View to the relevant process. <ul style="list-style-type: none"> Reviewed their work and uploads relevant evidence. Submit process for review by GMI Site Team and sign off, of hold point. If Subcontractor identifies issues with their own work, they can raise an NCR. – go to step 15 	Site Lead
11	Hold Point Review and Sign Off – GMI Site Team <ul style="list-style-type: none"> Review submitted evidence from Subcontractor, and quality of work on site. <ul style="list-style-type: none"> If everything meets required standards – sign off - go to step 13 If paper work and evidence doesn't meet required standards – refer back to Subcontractor – go to step 12 If quality of work doesn't meet required standard – Raise an NCR – go to step 16 	Site Lead
12	Hold Point Referral (Paperwork and Evidence)– Subcontractor <ul style="list-style-type: none"> Update relevant paperwork and provide additional evidence as outlined in the referral. Once complete resubmit for review. – go to step 11 	Site Lead
13	Hold Point Approved <ul style="list-style-type: none"> If work has completed and all hold points have passed, then move onto Sign Off – go to step 14 If work still ongoing, move to next section until next hold point – repeat 10 to 13 	Site Lead



Standard Operating Procedure (SOP) – Field View – End User – SOP – V1.0

14	Final Sign Off - GMI <ul style="list-style-type: none"> Once all work has completed and all hold points have been approved, sign off process as complete on Field View by changing status to Complete. 	Site Lead
End Process		
Non-Conformity Report		
15	NCR Raised by Subcontractor <ul style="list-style-type: none"> Where a Subcontractor raises there own NCR, this will notify the Site Team who will the agree remedial strategy with the Subcontractor. Once remedial work is completed, the Subcontractor will notify the Site Team to complete an inspection. 	Site Lead
16	NCR Raised by GMI <ul style="list-style-type: none"> Where a GMI raises the NCR against a Subcontractor, they will be notified by Field View and will be required to present a solution / remedial action for approval. Once approved, the Subcontractor will complete remedial action and resubmit for inspection. 	Site Lead
17	NCR Sign Off by GMI <ul style="list-style-type: none"> Once inspection is completed and approved, the GMI Site Team will sign off the NCR as complete. If inspection is completed an additional remedial work is needed, then the subcontractor will be notified to complete further work before resubmitting for inspection again. 	Site Lead



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 * **APPROVAL GATEWAY**

Quality - Sample Panel

Form Reference	F1.3443732
Owned By	Ryan Smith (Kinlan Brickwork Ltd)
Date	12/06/2024 10:09:14
Status	Inspected
Project Name	Circle Square
Project Address	Circle Square No.3 Circle Square Manchester M1 7FS
Location	Circle Square

Location	Circle Square
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Bricklayers Gang

#	Name
1	Mick Baines
2	Mick Baines Jnr

Backing structure

Has a backing structure been provided for the sample panel to be build off?	Yes
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Provided backing struture

Capture a photo of the backing structure provided for the sample panel	
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[12/06/2024 13:06:16](#)



[21/06/2024 11:27:43](#)

Sample Panel	
Brick Type	Other Answer: Mixed Length York Handmade

Capture a photo(s) of the brick and or block being installed.



[12/06/2024 13:07:19](#)



[21/06/2024 11:28:02](#)

Brick Finish

Other Answer: Weatherstruck Pointing

Capture photo(s) of the finished sample panel.



[12/06/2024 13:08:47](#)



[21/06/2024 11:28:15](#)

Capture a Photo(s) of the work set out and bonded correctly.



12 Jun 2024 at 13:09 BST
53.4716725759756, -2.23659226190966

[12/06/2024 13:09:19](#)

Capture photo(s) of a level on wall showing plum, line & level.



[12/06/2024 13:09:45](#)



[12/06/2024 13:10:02](#)



[12/06/2024 13:10:30](#)



[12/06/2024 13:10:57](#)

Capture photo(s) of gauge



[12/06/2024 13:11:34](#)



[21/06/2024 11:28:34](#)

Capture a photo(s) of the movement joint if applicable



[12/06/2024 13:11:49](#)



[21/06/2024 11:28:50](#)

Has a lintel been installed?	Yes
Lintels	

Capture a photo to show the lintel has been installed to the correct height as per the design with a tape



[21/06/2024 11:29:11](#)



[21/06/2024 11:29:20](#)

Capture photo(s) of the lintel bearing with tape measure



[21/06/2024 11:29:44](#)

Has a cavity tray been installed above the opening?

Yes

Opening Cavity tray

Capture a Photo(s) of the cavity tray installed to the backing structure as per the design



[21/06/2024 11:30:13](#)

Capture a photo of the cavity tray stop ends with the correct turn up's.



[21/06/2024 11:30:29](#)

capture a photo of the weep holes installed correctly as per the design, showing the weep's free from debris.



[21/06/2024 11:30:52](#)

Are Ties installed?

Yes

Ties

Capture a photo(s) of the correct ties in use with the correct embedment.



[12/06/2024 13:12:37](#)

Capture a photo(s) of the ties clear from all mortar droppings.



[12/06/2024 13:13:29](#)

Cavity

Capture photo(s) of the cavity free from all mortar build up.



[12/06/2024 13:15:33](#)

Pointing	
Have all Profill clamp holes and pin holes been pointed?	Yes
Has the work been brushed off and pointed to the required specification?	Yes
Work Area	
Have the work areas been cleared and left in a safe standard?	Yes

Capture photo(s) of work area



[12/06/2024 13:15:45](#)

Workmanship Standard

Comments on the appearance and standard of workmanship	good standard
Are any remedial works required?	No

Inspected and works signed off by Kinlan representative	
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Ryan Smith (Kinlan Brickwork Ltd)

12/06/2024 10:14:40

Is the client required to check and sign off each form for Brickwork as part of the handover.	No
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