



CONSTRUCTION METHOD STATEMENT

Project Title: J750 Parc Hadau

Location: Parc Hadau, Waun Sterw, Pontardawe

WRW CONSTRUCTION LTD

Registered Head Office: Anchor Point, Llanelli, Carmarthenshire, SA15 2LF

Tel: 01554 779 922

Website: www.wrw.co.uk

Prepared by: Huw Triggs – Operations Manager

Dated: 6th July 2020

Revision: 02- T Smith. 25th August 2020

CONTENTS

1. CONSTRUCTION PHASE HEALTH & SAFETY PLAN
2. DESCRIPTION OF THE PROJECT
3. THE PROJECT TEAM
4. MANAGEMENT ARRANGEMENTS
5. HEALTH & SAFETY PRINCIPLES & OBJECTIVES
6. TRAINING
7. COORDINATION & COMMUNICATION
8. SELECTION PROCESS
9. WORK ACTIVITY ASSESSMENTS & CONTROL
10. HAZARDS & RESTRICTIONS IDENTIFIED
11. CONTROL DOCUMENTS
12. APPENDIX SCHEDULE

3. THE PROJECT TEAM

CLIENT
Sero Homes Vision House, Oaktree Court, Mulberry Drive, Cardiff Gate Business Park, Cardiff, CF23 8RS
Contact: Jim McArdell Tel: 07932 429 773 Email: Jim@serohomes.com

PRINCIPAL CONTRACTOR
WRW Construction Ltd Anchor Point, North Dock, Llanelli, SA15 2LF
Contact: Tim Smith Tel: 07976 865498 Email: Tim.smith@wrw.co.uk

CDM PRINCIPAL DESIGNER
To be appointed.
Contact: Tel: Email:

ARCHITECT
Loyn + Co 88 Glebe Street, Penarth, CF64 1EF
Contact: Tim Lyon Tel: 02920 711 432 Email: TBC

STRUCTURAL ENGINEERS
To be appointed.
Contact: Tel: Email:

MECHANICAL & ELECTRICAL CONSULTANTS
To be appointed.
Contact: Tel: Email:

4. MANAGEMENT ARRANGEMENTS

The Management of WRW Construction Ltd “WRW” - “we” - “our”- “us” will take all reasonable practical steps so as to ensure the health, welfare, and safety of all its employees, contractors, visitors and others involved on the project with particular attention to: -

- The provision and maintenance of plant and systems of work that are safe and without risk to health.
- Proper arrangements for the use, handling, storage and transportation of materials and substances.
- The maintenance of premises and places of work, which are safe to all persons.

The details of the project’s management structure and the assignment of responsibilities amongst the various organisations involved are as detailed within The Construction Design and Management Regulations 2015 (CDM 2015).

WRW Company Organogram (Appendix - B) details the internal management structure of WRW Construction Ltd as the Principal Contractor.

Our Project Organogram (Appendix - C) outlines the names of the individuals associated with the project and this will be updated during the course of the project to reflect current arrangements, and the current version of the Project Organogram will be placed on all Site Notice Boards.

5. HEALTH & SAFETY PRINCIPLES & OBJECTIVES

Our Site Manager will be responsible for maintaining Health and Safety Standards on site on a day-to-day basis and the project will be monitored and audited on a monthly basis by the designated HSQE Coordinator with our appointed Construction Manager.

The performance of the project will be monitored by this HSQE Coordinator and we will advise all project stakeholders via our monthly Contractor Project Report on the status of our safety audits together with any other correspondence or contact made by the Health and Safety Executive “HSE” or any other regulatory body.

Our Site Managers will be appropriately qualified and trained to the CITB Site Managers Safety Training Scheme “SMSTS” and all site operatives, contractors and subcontractors will be required to be qualified to the appropriate Construction Skills Certification Scheme “CSCS” level.

All accidents, incidents, occurrences and complaints, however slight, will be recorded on our Incident & Occurrences Report “IOR” and this report will be sent to our HSQE Coordinator for monitoring and for further action.

Each “IOR” will be investigated by us and a record of the “IOR” is entered onto our Incident Occurrence Register (Appendix - F) for review at our monthly WRW Board Meetings.

The “HSE” will be notified of any occurrence covered under “RIDDOR”.

The provision of the required First Aid Kit and equipment will be located in the Site Office and in other Site Welfare Facilities as deemed appropriate and our Site Manager will be responsible for maintaining the required levels of items and for ensuring that the First Aid Kits are replenished.

Our Site Welfare Arrangements will comply with schedule 2 of the CDM Regulations 2015.

Our Site Managers will hold the required accredited First Aider qualification and this will be posted in all our welfare facilities to inform site personnel of the designated individuals together with contact numbers.

While the Covid 19 pandemic remains in place WRW will adopt the necessary site operating procedures in line with Welsh Government and the Construction Leadership Council.

6. TRAINING

WRW in accordance with our Investors in People accreditation award have in place a comprehensive training and review procedure which is conducted with all its employees.

We ensure that acceptable standards are maintained and that all personnel receive, where applicable, adequate and appropriate training in particular to Health & Safety.

Annual Training Plans are prepared and a Competence Training Register (Appendix - G) is maintained and regularly updated to ensure that training certificates remain current.

Each member of staff has their own individual personnel folder on "BOX" which can be accessed electronically by them to obtain their training certificates and other industry accreditation records such as:

- Site Managers Safety Training "SMST"
- Construction Skill Certificate Scheme "CSCS"
- Certification of Training Achievement for Construction Plant Operators "CTA"
- CITB and other Accredited Training
- Street Works Qualifications
- Professional Qualifications
- Professional Memberships

The training and qualification credentials of Contractors and Subcontractors that are to be engaged on the project are collated and recorded during Subcontract Order Meetings and on the delivery of Site Inductions.

7. COORDINATION & COMMUNICATION

WRW Construction Ltd under our Integrated Management System "IMS" accreditations, ISO 9001:2008 Quality Assurance, 14001: 2004 Environmental, Health & Safety and Investor in People, conduct various reviews, meetings, forums and workshops in connection with the maintenance of these standards wherein Health and Safety is seen as a priority agenda topic.

Individual projects together with the overall performance of the Company's entire project stock are reviewed at WRW Board Meetings, actions are identified to prevent reoccurrence and for improvement, with these actions being cascaded to the relevant individuals via department Directors.

WRW hold project Operational Management Meetings wherein our principal staff review the projects monthly that they are responsible for with Department Directors.

All our Construction Managers and Commercial Managers meet quarterly to collectively discuss and review project issues, these meetings also act as improvement workshops and implementation forums for Health and Safety matters.

Project Review Meetings (Appendix - H) are held at site level wherein the specific issues of the project are reviewed and in particular the coordination and performance of Health and Safety matters on site. Actions are taken to address any shortcomings and these are reviewed at subsequent meetings.

Review Meeting Minutes follow a pre-set agenda and minutes are prepared and issued for action to relevant individuals as identified.

Internal IMS Audits are conducted to review the entire system.

Project Team

Design Team Meetings (Appendix - I) are held throughout the project to ensure that design compliance is maintained and to ensure that issues that could affect the Health, Safety and Wellbeing of those affected by the project are removed or reduced to a manageable status. Required actions are issued and reviewed at subsequent meetings.

A Project Compliance Action Plan (Appendix - J) is maintained throughout the delivery of the project to ensure that the correct status of the design is maintained together with the delivery of key documents such as the Health and Safety Folder and O & M Manuals.

Our designated Design Coordinator will monitor the design compliance of the project via Project Compliance Action Plan, Legal Design Conditions Tracker and our RFI Schedule (Appendix - K) and for the preparation and coordination of The Health and Safety Folder and O & M Manuals.

Client meetings are conducted at monthly intervals throughout the project, at this meeting we will issue to the meeting stakeholders our Contractor Project Report.

Arrangements for dealing with the issues highlighted are discussed and required actions are issued and reviewed at subsequent meetings.

Contractors and Subcontractors

On site Workshops, Toolbox Talks and Supply Chain Progress Meetings are held by our Site Personnel with our contractors and subcontractors to discuss and agree Health and Safety and Site Design requirements.

Arrangements for dealing with the issues highlighted are discussed and required actions are issued and reviewed at subsequent meetings.

Our Supply Chain is continually reviewed via a Supply Chain Performance Assessment (Appendix - L) which is undertaken monthly by our Site Management Staff to ensure that they remain focused on their activities and duties regarding Health and Safety and other key requirements that would affect their wellbeing and the wellbeing of others engaged on the project.

Site Compound + Welfare

WRW will provide a fully segregated site compound and welfare area for the duration of the project. Although the specific layout for Par Hadau is yet to be finalised the compound will be sufficiently sized to accommodate all personnel associated with the project daily. This will include office and storage space, toilets, showers, canteen and drying space. There will also be a fully segregated external area for all personnel. Due to the concerns surrounding existing groundwater on the site, WRW will look to complete early enabling works that will involve the installation of attenuation and groundwater management systems, the positioning of the welfare will be a key consideration with this.

Water materials will be segregated on site to enabling recycling and attempt to avoid disposal to landfill, noisy activities will be monitored and suitable water suppression employed to limit exposure for construction personnel and adjoining properties.

Due to the positioning of the site relative to existing homes, noisy activities will only take place between 8am-6pm Monday to Friday and 8am-1pm on Saturdays by exception. The overall transport plan for all members of the project team will need to be considered at an early stage. Although public transport will be encouraged, the location of the site will mean most personnel attending the project will inevitably drive. The phasing of the project will allow enough parking within the project boundary which will mitigate the need to park on adjoining roads. In addition to this WRW will implement car sharing initiatives throughout the duration of the project to minimise the volume of cars attending the project. The early construction of suitable roads will also be a key consideration and will be detailed further in the Plant Vehicle Pedestrian Management Plan.

Plant Vehicle Pedestrian Management Plan "PVPMP"

A site specific "PVPMP" (Appendix - M) will be prepared by our Plant, Vehicle and Pedestrian Coordinator. "PVPC" and our "PVPC" will have sufficient knowledge and experience to identify and manage the risks associated with effective plant and people interface.

During the life of the project it will be necessary to review the “PVPMP” to reflect the requirements of the project as conditions change.

We will have in place a designated Plant and Vehicle Marshal “PVM” who will escort the deliveries and on discharge together with the sign from delivery notes. The name of the appointed “PVM” will be posted on the site notice board together with their contact number. The PVM will also coordinate the delivery booking system which will mean all deliveries are booked in at least 24 hours in advance, so that no vehicles are left waiting on the adjoining roads. A holding area will be implemented on the A4067 which is circa 10mins from the project, all deliveries will be required to call the PVM prior to attending site to ensure the site is ready to take the delivery. Once they arrive on site, the site compound will be setup in a way that vehicles are able to be pulled directly in to the site rather than waiting on Waunsterw.

During periods of rain / inclement weather or where the vehicle has had to go ‘off road’ prior to leaving site the vehicles wheels will be inspected for mud and debris.

If required a wheel cleaning area / facility will be present during these times with a policy that no vehicle will be allowed to leave site which would contaminate the public highway.

Once checked the vehicle will be escorted from site by the “PVM” who will also be responsible for inspecting vehicles before exiting the site.

The appointed “PVM” will periodically check the condition of public roads and paths for any mud or debris and during these inspections should the need for a road sweeper become apparent then our Site Manager can call in the services of a local supplier.

Appropriate temporary or semi-permanent signage will be provided to notify construction traffic of speed limits and warning them to beware of children and other pedestrians as they enter and exit the site.

Temporary Work Arrangements

At WRW we have in place effective arrangements for the controlling of risks arising from the use of temporary works and these have been captured in the Temporary Works Procedure (Appendix - N) and contain the following elements: -

- Appointment of a Temporary Works Coordinator
- Preparation of an adequate design brief
- Production of a temporary works design
- Independent checking of the temporary works design

Community Engagement

WRW appreciates that construction activities are likely to be a cause of concern for residents. In addition to the measures detailed above, WRW will have a designated point of contact based on the project to address any issues immediately.

In addition to this, there will be a dedicated CSR Coordinator based in our Llanelli office who will coordinate engagement opportunities at regular intervals with the local community with the aim of building close relationships and keeping residents informed through holding coffee mornings and issuing newsletters at regular intervals.

As part of the site compound, WRW will integrate viewing areas for residents in to site hoarding as well as provide the opportunity for residents to regularly attend site.

Site Notice Board

Our site offices and welfare units will contain specific project notices to communicate specific Health and Safety requirements together with worker Wellbeing.

Site Notice Boards Inventory (Appendix – O) will be inspected by our Site Manager on a weekly basis to ensure that signage and notices are current.

Site Safety Induction

All new site starters will be given a Specific Site Induction (Appendix – P) by a competent member of our Site Management Staff and a Site Induction Record (Appendix - Q) form will be completed prior to them being allowed access to the construction work area.

All the relevant information concerning the site parameters, activities, procedure, site rules, restrictions together with the required “PVPMP” arrangements will be conveyed to each individual and a record of their training and competencies will be taken at that time and placed on file for further referencing.

Site Attendance Log

All site personnel and site visitors will be required to sign in on a Site Attendance Log (Appendix – R), at which point they will be provided with specific instruction for site access together with the planned activities for that day and if applicable they will be directed to the Site Office for further instruction and direction.

Black Hat Regime

We have recently implemented a Black Hat Regime wherein each contractor and subcontractor company that are engaged on site will appoint a competently trained person to act as their Black Hat representative.

This individual together with all the other Black Hat representatives will meet with our Site Manager on a daily basis to discuss common Health and Safety issues and to suggest working improvements for all site workers.

Actions will be agreed and reviewed at subsequent meetings.

8. SELECTION PROCESS

Our IMS Accredited together within our Coins Project Management Software and our partnership arrangements with Construction Line, provides us with the mechanism to assess the status and competence level of our supply chain - contractors, subcontractors, suppliers and consultants.

Contractors - Subcontractors

Contractors intended for inclusion on the project will be asked to provide the relevant information via a Letter of Intent (Appendix -S) prior to their appointment and commencement on site.

Subcontractor Order Forms (Appendix – T) are completed at the meeting where issues regarding Health and Safety and the requirements of the project are discussed, clarified, and agreed.

On acceptance of the conditions of appointment, a Subcontract order package is raised and issued containing as applicable, the following documentation:

- Subcontract Order Forms
- Standard Subcontract Conditions
- Subcontractor Safety Code (Appendix – U)
- Subcontractors Work Package & Specifications

Suppliers – Materials - Plant - Consultants

Suppliers of materials or equipment are informed of specific project requirements through the issue of an official Purchase Order, which outlines the specific site requirements.

Delivery location, site contact personnel, description and quantity of the commodity requirements for COSHH data sheets, delivery restrictions, off-loading arrangements, delivery times and delivery date.

A “PVPMP” may also be issued if deemed necessary.

9. WORK ACTIVITY ASSESSMENTS & CONTROL

Risk Assessments

Where necessary, we will prepare a Risk Assessment (Appendix- V) to detail the risks associated with specific activities and these assessments will outline the required controls necessary to undertake the work safely.

COSHH Assessments

When applicable COSHH Assessments (Appendix - W) will be prepared by us in line with the use of products and substances involved in the construction process and these assessments will be outlined to all site operatives, contractors and subcontractors via Toolbox Talks.

Method Statements

Risk Assessments and COSHH Assessments will be utilised to prepare Method Statements (Appendix - X) and together they will form the basis of our site specific “RAMS”

Activity Assessments

Specialist contractors and subcontracts will undertake the majority of work on this project and as such their Risk Assessments, COSHH Assessment and Method Statements will be evaluated by our competent Site Management Team prior to the commencement of their work package and specific work activity.

We will utilise our Subcontractor RAMS Evaluation (Appendix - Y) and our Subcontractor COSHH Evaluation (Appendix - Z) to undertake this exercise.

Individual folders will be maintained throughout the duration of the project to control these “RAMS” and they will be made available to the CDM Principal Designer for comment.

At this stage sufficient information is not significantly advanced to establish full extent of these controls.

Toolbox Talks

Toolbox Talks are held with contractors and subcontractors to discuss and give direction of work activities, work interface requirements, work restrictions and specific work arrangements requiring permits to work.

These meetings also enable the Site Management to develop cooperation with contractors and subcontractors in making them aware of certain site activities and assists in coordinating these activities in a safe manner.

All relevant "RAMS" together with the appended documentation is copied and issued to relevant parties at the Toolbox Talk meeting.

Permits To Work

Permits to Work (Appendix - ZA) will be implemented to control specific key activities.

10. HAZARDS & RESTRICTIONS IDENTIFIED

On review of the information received to date, the following items have been identified as key hazards that need to be mitigated.

Namely: -

- Proximity of construction works to residents.
- Wildlife and ecology management
- Work at height, Falls from height.
- Site cutting & construction dust.
- Buried obstructions/ unknown voids
- Existing groundwater issues
- Unknown buried services
- Instability of spoil piles
- Temporary instability of excavations/ slopes
- Construction of retaining walls
- Phasing Issues
- Loading out materials to houses
- Temporary stability of timber frames
- Sequencing of house construction
- Construction of roofs/walls
- Installing above ceilings – vent equipment, pipework, lighting, cable tray, etc
- Installing equipment on roofs
- Maintaining services at height- vent equipment, pipework, etc
- Potential risk of Leptospirosis/ Weils disease when working next to water or with soil.
- Conflict between pedestrians and vehicular traffic.
- Cutting hard landscape materials.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Cranes Lifting Equipment Mobile Elevated Working Platforms	1. Overturning 2. Contact with persons 3. Contact with structure 4. Dropping load 5. Collision	WRW's Appointed Person and needs to sign off all subcontractors lifting plans or produce WRW's Lifting Plans. He will establish the safe systems of work and control measures for all lifts. Ceri Prosser, Construction Manager will ensure that no lifting takes place take place without the Aps written approval Lift plans are anticipated for Telehandlers and Excavators at this time. No lifting will be permitted without a signed off lifting plan.

Erection of Structures	1. Premature collapse 2. Falls of persons/materials 3. Instability of crane/load	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. We will be subcontracting the timber frame design, manufacture and erection to a specialist installer who will propose a safe system of work ahead of commencing on site.
------------------------	--	---

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Traffic Management	1. Struck by vehicle 2. Accidents to road traffic including pedestrians	A Plant, Vehicle, Pedestrian Movement Plan "PVPMP" has been drafted be implemented and displayed on site. A copy will also be issued to all sub-contractors. Clearly defined traffic routes to be set which will avoid delivery vehicles entering the work zones. The telehandler will be restricted to a zone looping the development. All pedestrian routes will be segregated by suitable barriers with cross over points clearly visible on site. Public to be segregated from site traffic wherever possible. NO unauthorized access to the site.

		Site compound to be segregated from the public with no unauthorized access. WRW's PVPMP will identify the location of the site accommodation, welfare facilities, storage area, lay down and unloading areas. This plan will also be used to identify the vehicular traffic routes onto, around and off the site, as well as the defined pedestrian routes to ensure personnel and site traffic are separated and do not come into contact with each other. A competent banksman will be provided and the individual will be made known to all site personnel. The PVPMP will be posted in all Site Welfare Facilities and it will be discussed during each Site Induction. A copy of the PVPMP will be sent to the Principal Designer for consideration.
--	--	---

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Working at Heights	- Falls of persons from: Floor edges Openings in floors Open joisting Stairwells - Falls of materials / equipment - Falls of persons and articles through fragile construction materials	Any work at height risks will be assessed by our specialist contractors / subcontractors before the operation starts. Our Construction Manager Ceri Prosser will assess these before the work commences to ensure stability. Suitable independent scaffolding will be erected in accordance with TG20 and robust management will be adhered to regarding access to any scaffolding.
Brickwork / Blockwork	- Dust - Musculoskeletal injuries	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.

	3. Manual Handling 4. Working at heights	Please refer to the WRW suite of Risk Assessments which will be developed by our Site Manager in advance of works commencing.
--	--	---

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Excavations	1. Collapse 2. Persons and plant falling in 3. Trespassers (Public) falling in exposed trenches. 4. Ground Gases	Undertake work operation in accordance with prepared RAMS which should anticipate encountering some hotspots of contamination. WRW will monitor compliance throughout the operation. Works are to be planned and RAMS to be reviewed and approved before works commence. All excavations are to be either benched, battered back or implantation of a trench box with fall prevention systems in place is stated within the RAMS. We will ensure that all excavations are visible and secured at the end of each shift to prevent unauthorized persons entering the works area. It is to be ensured all excavations are visible and secured at the end of each shift. To prevent unauthorized persons entering the works area. All excavation must be assessed and have adequate shoring provided regardless of depth if deemed necessary to ensure the safety of those engaged in the work. Any excavations left unattended must be backfilled, securely fenced off or covered to prevent accidental falls. Regular inspections of the excavation should be undertaken by WRW in accordance with the regulations WRW will take every precaution to ensure that all members of the public and the adjacent owners are not inconvenienced or endangered by the works being carried out. All plant must be operated within the confines of the site and materials must be utilised at all times with the knowledge that members of the public are within the vicinity of the works in progress.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Plant and Topography	1. Tipping Plant	The full use of fully ticketed "CPCS" and experienced plant operatives, accompanied by banksmen. Crowd Barriers will also be used to direct Plant to the required traffic routes.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Access & Egress from Site. Security of site etc. Centre Visitors / Customers Visitor Traffic Visitor Parking Area Access from adjacent buildings Deliveries	1. Struck by falling materials/tools 2. Contact with vehicles/plant 3. Contact with hazardous substances/materials 4. Injuries to unauthorised persons	Segregation of all non-site specific people at all times and very close adherence to the PVPMP plan. Pedestrian routes will be incorporated on the site to keep vehicles and pedestrians apart. A secure hoarding will be installed at the start of the pre-construction phase. WRW will ensure that the site is proofed against unauthorized entry especially out of working hours. All materials, tools and plant must be securely stored or immobilized when not in use. Any ladders and scaffolding will, as far as is practicable, be made inaccessible out of work hours. All plant must be locked and rendered inoperable when left out of hours.
Site Clearance	1. Struck by vehicles 2. Underground services	Segregation of site traffic and public. Full CAT scanning of all areas prior to any works being undertaken. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Electrical Installation	1. Electric shock / burns 2. Falls of persons 3. Working at heights. 4. Flammable atmospheres	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Only competent persons will undertake works on the electrical installation. A Safe System of work will be agreed for any work on electrical systems before the operations begin.

Electricity - General	1. Electrocution 2. Fire/explosion	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Only competent persons will undertake works on the electrical installation. A Safe System of work will be agreed for any work on electrical systems before the operations begin.
-----------------------	---	---

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Dust	1. Inhalation	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Any operations that may generate dust will be carefully monitored and all plant will be fitted with dust suppression and extracted where appropriate. Regular toolbox talks will be given by our Site Manager on Environmental Health controls. Face fit testing have been provided to WRW operatives and this will be a requirement for all subcontract operatives.

Fork Lift Trucks	1. Striking person/object	Undertake work operation in accordance with prepared RAMS.
------------------	---	--

	2. Lifting and lowering of loads	WRW will monitor compliance throughout the operation. Telehandler lifting Plan and Traffic Management Plan. Any changes to the plan need to be recorded and clearly communicated to all relevant personnel. Only qualified and experienced operatives will be permitted to operate ALL plant and tools.
--	----------------------------------	---

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Lifting & transporting loads Manual Handling (See also Lifts and Hoists and Cranes, mobile elevated work platforms)	1. Lifting and transporting heavy loads 2. Musculoskeletal injuries 3. Trapping of hands/feet	Undertake work operation in accordance with prepared RAMS and HSE guidelines. WRW will monitor compliance throughout the operation. Only qualified and experienced operatives will be permitted to operate ALL plant and tools. Banksmen will be used if required. A heavy materials register will be implemented and updated through the project. A logistics plan will be implemented and updated throughout the project.
Machinery, Work involving Drilling Cutting Grinding	1. Traps 2. Impact 3. Contact 4. Entanglement 5. Ejection 6. Noise and vibration	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Only qualified and experienced operatives will be permitted to operate ALL plant and tools.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Noise Vibration	1. Hearing damage 2. Vibration white finger 3. Nuisance to residents / customers / public in area	Undertake work operation in accordance with prepared RAMS, HAVS assessments and RA assessments. WRW will monitor compliance throughout the operation. Any noisy operations such as cutting will be undertaken at a convenient time to minimize the risks. A specific RA will be produced for all operations to monitor exposure.
Power Tools	1. Electricity 2. Cuts / Abrasions 3. Entanglement 4. Noise & Vibration	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Where this falls within a subcontract package, our Site Manager will request, appraise and agree all required RAM's involved with the operation. He will continue to review the RAMS through their time on site to ensure their relevance.
Services Electricity, Gas, Water Telephone, Cable, Television	1. Fire/explosion 2. Burns 3. Electrocution 4. Accidental disruption of services.	Service disconnections will only be carried out by competent and registered contractors / subcontractors. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Full, detailed survey and logging of all existing services to be carried out to all areas prior to any works commencing. Permit to work will be implemented together with Lock Out permissions.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Transport	1. Struck by vehicle 2. Falls from vehicle 3. Striking an object etc.	PVPMP Traffic management plan will be implemented and displayed within site welfare arrangements. A copy will also be issued to all delivery and haulage contractors and subcontractors.
Public Safety	1. Out of hours' control 2. Vehicles entering and leaving site. 3. Falls of materials from scaffolding	The site will be made safe and secure at the end of every working day, with all excavations and openings closed up, security fencing checked and secured daily, all dangerous structures made safe and all materials and tools securely locked up daily. Skips will be sited within the designated works areas, within the security fencing areas. A trained traffic marshal will escort all vehicles out of the site to ensure that there is no risk to the public. Deliveries will be pre booked with our Site Manager. No works to drainage or otherwise will be undertaken outside of a secure, designed hoarding.
Street Works	1. Public Interface 2. Pedestrian Plant Interface	Street works will be conducted by approved licensed contractors. Street Works are to be planned and RAMS to be reviewed and approved before works commence. Clear and defined segregation to be defined and denoted on PVPMP traffic management plan to form part of the RAMS for the works. Area to be left secure at the end of each shift to prevent unauthorized entry into the working area.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Vermin	1. Contamination of Weil's Disease	WRW are to ensure compliance with the RAMS and any visible evidence of vermin present will be reported to the Site Manager immediately. WRW welfare provision will be kept clean and clear of rubbish at all times and no food is to be stored overnight at the facility.
Water	1. Falling in 2. Drowning	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Storage of chemicals	1. Chemical reactions and hazardous gases from leakage	No chemicals or hazardous gases are expected to be used on this project. Undertake work operation in accordance with prepared RAMS and COSSH assessments. WRW will monitor compliance throughout the operation.
Storage of flammable liquids Petrol / diesel and liquefied petroleum gases	1. Fire and explosion	A provision will be made to store a small bunded diesel bowser on site and a spill kit will be maintained near the bowser and within site storage containers. No more than 3 x 5 lts of petrol for small plant will be held on site at any given time and will be stored in a lockable container.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Plumbing Guttering / downpipes / water systems / Water Closet / wash hand basins	1. Working at heights 2. Musculoskeletal injuries 3. Contact with hazardous substances/materials including lead work 4. Hot work	This will be a contracted / subcontract package. Before works start our Site Manager will request, appraise and agree all required RAMS involved with the operation. He will continue to review the RAMS through their time on site to ensure their relevance.
Lone Working	1. Isolation	No lone working will be permitted. Any operation will require a minimum of (2) two operatives on site at any one time.
Maintenance Work - General	1. Services 2. Machinery 3. Contact with hazardous substances/materials 4. Access	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Gas, Installation of	1. Explosion/fire 2. Musculoskeletal injuries	Undertake work operation in accordance with prepared RAMS. Only competent persons will undertake works on the gas installations.
Hazardous substances Toxic, harmful, irritant or corrosive substances, for example wet concrete, additives, mortars, grouts, adhesives, solvents, water proofing compounds, preservatives, sealants & jointing compounds etc.	1. Contact with hazardous substances/materials 2. Escape of substances.	Follow COSHH assessments We do not anticipate using any Hazardous substances on this project. Should a requirement arise, the operation needs to be risk assessed and accompanied by a method statement and COSHH Assessment.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Heating and Ventilation Plant, Installation of	1. Falls of persons/materials 2. Overturning of platforms 3. Musculoskeletal injuries	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Only competent persons will undertake works on the heating and ventilation Installation.
Highly Flammable Substances	1. Fire/explosion 2. Toxic vapours	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Hot work Including welding, burning, soldering, brazing, grinding	1. Fire, explosion 2. Fumes 3. Burns to skin & eyes (Arc eye)	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. We believe that we have designed out the majority of hot works and if they are required then a hot works permit to work will be implemented.
Working with Lead based materials	1. Inhalation 2. Ingestion	Not expected but if this occurs for compliance throughout the operation. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Highly Flammable Substances	1. Fire/explosion 2. Toxic vapours	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Installing / removing mechanical, electrical, control and instrumentation plant (General)	1. Musculoskeletal injuries 2. Fall of persons or materials 3. Inadequate plant isolation	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. Only competent persons will undertake works on the mechanical and electrical Installation.
Cartridge Operated Tools	1. Penetration of fixing into body 2. Noise	Where Cartridge Operated Tools are required. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Cleaning Activities	1. Falls of persons/materials 2. Use of power tools 3. Use of harmful materials 4. Musculoskeletal injuries	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Concrete	1. Contact with skin 2. Stressing failure 3. Pumping	Where we have been unable to design out cast in-situ concrete. (such as foundations) Follow COSHH assessments. Undertake work operation in accordance with prepared RAM. WRW will monitor compliance throughout the operation.
Waste	1. Environmental damage 2. Fire 3. Windblown material	Strict site control will be maintained with no burning on site. All skips will be kept within the site security fencing and netted if required. Skip Waste will be segregated for possible recycling.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Confined Space	1. Asphyxiation 2. Poisoning 3. Slips, trips, falls 4. Drowning 5. Inadequate plant isolation 6. Explosion	Where confined spaces working is necessary. Implement - permit to work process, confined space entry permits. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Adhesives	1. Fumes (Solvent) 2. Contact with skin	Where adhesives are required, work in accordance with prepared RAM. WRW will monitor compliance throughout the operation. WRW will insist on a specific COSHH assessment before the works commence and will monitor compliance throughout the operation.
Diamond cutting operations	1. Noise & vibration 2. Machinery 3. Eye injury	If the requirement arises, this will be undertaken by a specialist, competent contractors / subcontractors. Undertake work operation in accordance with prepared RAM. WRW will monitor compliance throughout the operation.
Working in hours of Darkness Poor illumination of worksite Floodlights dazzling approaching traffic etc.	1. Slips, trips, falls etc. due to unseen obstructions. 2. Traffic accidents due to impaired visibility.	Adequate lighting will be provided to all walk ways. Task lighting will be used where required, e.g. power floating to floor slabs. Lone working will not be permitted for anyone on site including the Site Manager.

Pre-Construction Information Reference	Principal Hazard(s)	Mitigating Measures
Exposure to Radiation	1. Persons being exposed to the Sun.	Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation. A no short trousers policy will be implemented, with a minimum of a short sleeve T Shirt (i.e. no exposed upper bodies) Sun cream will be available as part of the site welfare arrangements. Advice on sun protection will be included within the Site Induction.
Ecology Areas	Damage to foliage and fauna Death to animals and mammals	Ensure that all ecology works are undertaken in line with the ecology surveys. Maintain inspection records of findings before and during construction works. Undertake work operation in accordance with prepared RAMS. WRW will monitor compliance throughout the operation.
Fire	1. Heat 2. Destruction of property 3. Injury to persons	A full fire risk assessment is to be compiled before works start on site. As highlighted during the site induction, fire assembly points and firefighting stations will be highlighted along with what to do should you discover a fire.

11. CONTROL DOCUMENTATION

Our Site Manager is responsible for maintaining and coordinating Health and Safety records on a day-to-day basis on site.

Our Construction Manager is responsible for the overall conformity of Health and Safety on this project and for the obtainment of required information and records.

Our HSQE Coordinator is responsible for the compliance of Health and Safety on this project.

Our BIM / Design Coordinator is responsible for the design compliance on this project and for the coordination and delivery of The Health & Safety Folder together with O & M Manuals to the CDM Principal Designer.

Our cloud based document management system "BOX" and our IMS Accreditation together with our IMS Document Register will act as our platform for the stringently control, cataloguing of required documentation, this will include the accessibility of all required forms and records to ensure that we are able to deliver a fully compliant project.

Our "BOX" Project Structure enables us to collaborate fully with all the project stakeholders.

In addition to electronic forms and records, paper copies are also maintained on site by our WRW Project Team to ensure that current documentation is available and accessible at all times for site contractors, operatives and site visitors.

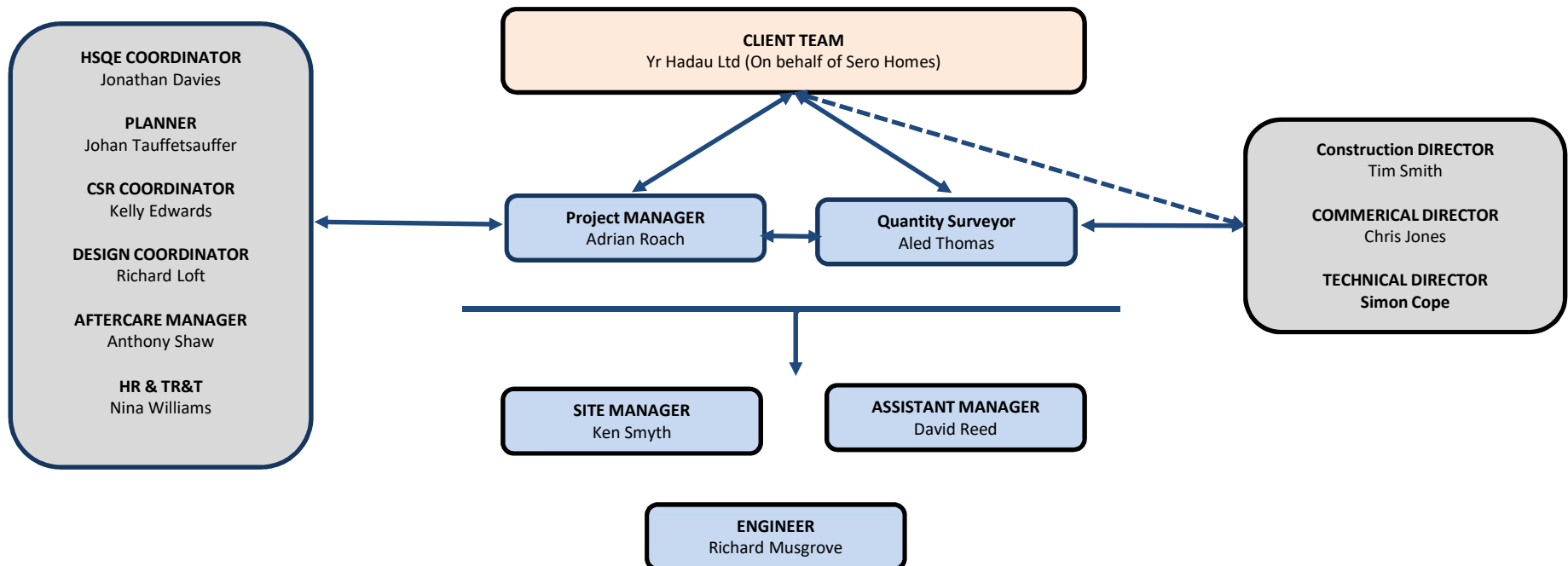
12. APPENDIX SCHEDULE

A	Pre-Construction Information
B	WRW Company Organogram
C	Project Organogram
D	Safety Audit
E	Contractor Project Report
F	Incident & Occurrence Register
G	Competence Training Register
H	Project Review Meetings
I	Design Team Meetings
J	Project Compliance Action Plan
K	RFI Schedule
L	Supply Chain Progress Meetings
M	Plant Vehicle Pedestrian Management Plan "PVPMP"
N	Temporary Works Procedure
O	Site Notice Board Inventory
P	Specific Site Induction
Q	Site Induction Record
R	Site Attendance Log
S	Subcontractor Letter of Intent
T	Subcontract Order Forms
U	Subcontractor Safety Code
V	Risk Assessments
W	COSHH Assessments
X	Method Statements
Y	Subcontractors RAM Evaluation
Z	Subcontractor COSHH Evaluation
ZA	Permit to Work

Parc Hadau, Pontardawe

PROJECT TEAM

Version Date: 25.08.2020



Traffic Management Plan

Parc Hadau, Pontardawe

Prepared: 6th July, 2020



WRW Construction Ltd

Parc Hadau

Waun Sterw

Pontardawe

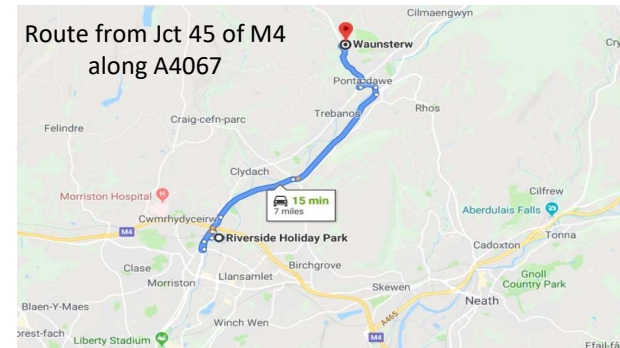
SA8 4NX



Looking up Waunsterw towards site entrance



Route from Jct 45 of M4
along A4067



Looking down from site entrance



Parc Hadau: Delivery Rules

1. All construction Vehicles will access the site from the M4, exiting at Junction 45 and following the route shown on the plan. All vehicles will exit by the same route
2. All deliveries will be booked in the PVM at least 24 hours in advance. Deliveries arriving outside of these hours or unannounced will be strictly turned away from site.
3. All vehicles will be required to call the PVM from the A4067 to inform them of their impending arrival. If the PVM is not ready for them they will be asked to wait.
4. Upon arrival at the site, the PVM will bank vehicles in to site and ensure compliance with PVPMP and 5MPH speed Limit.
5. If there is a requirement to reverse it will need to be supervised by the banksman, however, this is not expected.
6. Gateman to bank vehicles out of site and ensure compliance with PVPMP and 5MPH speed Limit.

Plant Vehicle Pedestrian Movement Plan



Hours of Operation

All works will be between 08 00 Hours and 18 00 Hours on Mondays to Fridays and 08 00 and 13 00 Hours on Saturdays and; at no time on Sundays and Bank Holidays unless agreed.

Material Storage

Dedicated zones will be created to store materials. Materials will be ordered "Just in time" to avoid needless storage on site. This area will be used for the storage of plant and materials throughout construction

Site Lighting

Measures for controlling the use of site lighting whether required for safe working or for security purposes will be written into all works orders. Task lighting and safety lighting will be switched off before the end of the working day (18:00)

Site Security

The site will be secured by a Heras proprietary hoarding, which will be temporary works approved and double clipped with security fittings. The main site entrance will consist of a 2.4m high timber hoarding with double leaf vehicle access gates. There will also be a cabin here for the PVM who will be permanently based at the gate to welcome all deliveries as well as coordinate any queries with residents. Outside of working hours, we propose to use a remote CCTV security Service to identify unauthorised entry to the site.

Wheel Washing

We propose to only permit vehicles to drive on the existing tarmac road onto a clean newly installed haul road. Although we do not expect a significant amount of wheel washing, our gateman will have a jet wash on site and will inspect every vehicle before it leaves. We will also have a road sweeper attend site as required.

Pedestrian Route

A fully segregated pedestrian route is provided from the Site Office to all work faces. All pedestrian and vehicle interfaces are clearly identified to pedestrians and drivers. All pedestrian routes are fully illuminated [not shown]. Pedestrians are to stay within pedestrian routes unless crossing at a designated point as indicated.

Vehicle Routes

Articulated Vehicles will need to enter the site as indicated. The permanent roadway will be constructed early and will be utilised as a one way, clockwise route around the site. A barrier system will be installed to segregate vehicles and pedestrians. We will promote "Fors" cyclist protection system when placing all delivery orders.

Lifting

Lifting will be carried out by a mixture of mobile cranes, telehandlers and excavators. All lifting will be carried out in segregated areas.

Site Offices & Parking

We propose Modular solutions for our office and welfare requirements. All operatives working on the site will sign in to ensure we have accurate records in case of emergency. The muster point is as shown.

There will be on site parking for operatives and visitors. We will promote car sharing when placing orders. The segregated sales parking has not been shown for clarity.

Environmental Buffer

Protected environmental buffer. See CEMP for specific details, appended here for clarity – extends further than displayed here.

Gateman

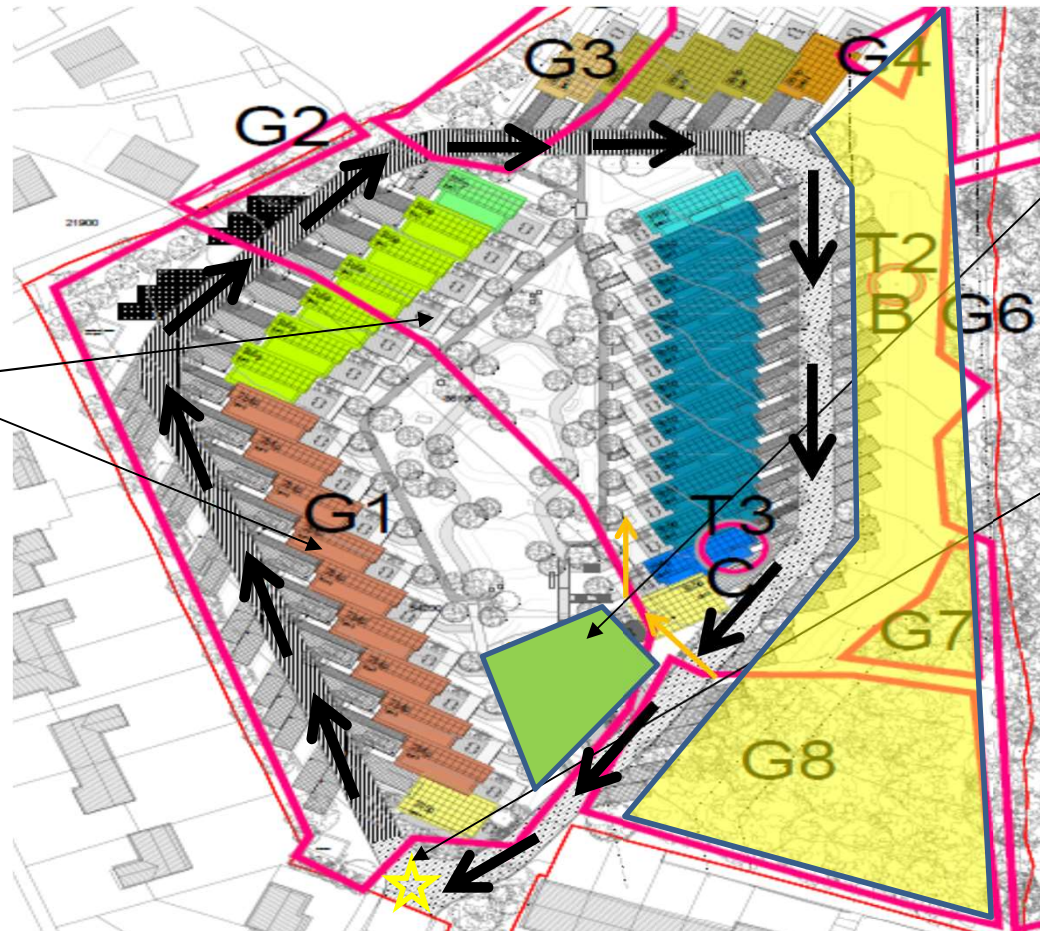
A gateman will be positioned at the gates at all times during operation. All vehicles will stop at the gate at and receive further instruction before proceeding to be unloaded.

Unloading Zones

A dedicated unloading zone will be created for all materials in. Unloading will be from within the site hoardings access via gates (not shown). Distribution thereafter will be via telehandler (Horizontal) and

Temporary Signage

Appropriate temporary or semi permanent signage will be provided to notify construction traffic of speed limits and warning them to beware of children and other pedestrians as they enter and exit the site.



All areas,
All times



Site Entrance



Vehicle route



Pedestrian route

Construction Environmental Plan Extract of Site Constraints

Please refer to Construction Environmental Plan for further details on the environmental constraints.

