

SCOTTISH HOUSEBUILDERS HEALTH & SAFETY FORUM

CDM – Designers Perspective 1st May 2019



CDM – Designers Perspective

Edward A Smith B.Sc. MCIOB, Dip H&SM

Technical Director

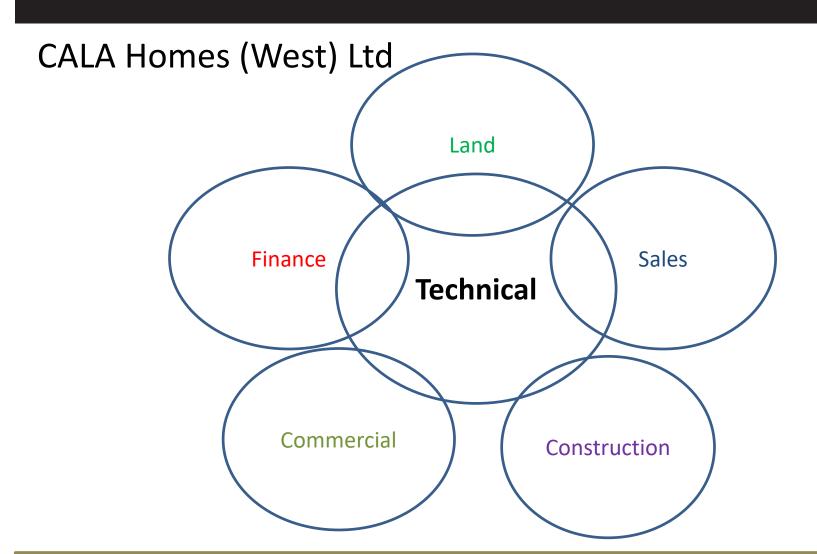
CALA Homes (West Ltd)



BACKGROUND

- Early Start
- B&P / GCU Sandwich Degree (BEM)
- Resident Engineer BNFL Safety Critical Environments
- Planning Supervisor (1995)
- MCIOB 1996
- GCU Diploma Health & Safety Management 1998
- Gained MIOSH 1998 (now lapsed)
- 22yrs Consultancy Most Sectors
- Project Manager / Director Multi Faceted Major Projects
- Joined CALA in 2017 to bring PM Principles to the Business







IT IS **UNACCEPTABLE** THAT, IN THE 21ST CENTURY, ANYONE SHOULD RUN THE RISK OF BECOMING CHRONICALLY ILL, BEING INJURED OR KILLED MERELY AS A RESULT OF ATTENDING THEIR PLACE OF WORK



HEALTH & SAFETY AT WORK ACT 1974



GUIDING PRINCIPLES

Employers Must Ensure the:

- Health Safety & Welfare of Employees
- Health Safety & Welfare of Others

Employers Must

- Manage Health & Safety
- Assess Risk
- Train
- Provide a Safe Workplace
- Provide Safe Methods
- Provide a Health & safety Policy if more than 5 Employees



SAFE

<u>SYSTEM</u>

OF WORK



CDM

Construction Design & Management Regulations 2015



APPLICATION

- DOESN'T MATTER
- IT APPLIES TO US ALL IN ALL CIRCUMSTANCES



Client

Make suitable arrangements for managing a project.

This includes making Sure:

- Other Duty Holders Are Appointed
- Sufficient TIME and RESOURCE are allocated
- Relevant information is prepared and provided to other duty holders
- The Principal Designer and Principal Contractor carry out their duties
- Welfare facilities are provided



Designer

When preparing or Modifying designs, to eliminate, reduce or control foreseeable RISKS that may arise during:

Construction

AND

The Maintenance and use of a building once it is built

Provide information to other members of the team to allow them to fulfil their duties



Principal Designers

Plan, manage, monitor and coordinate health and safety in the preconstruction phase of a project.

This includes:

- identifying, eliminating or controlling foreseeable risks; ensuring designers carry out their duties.
- Prepare and provide relevant information to other duty holders.
- Provide relevant information to the Principal Contractor to help them plan, manage, monitor and coordinate health and safety in the construction phase.



Principal Contractors

Plan, manage, monitor and coordinate health and safety in the construction phase of a project.

This includes:

- liaising with the Client and Principal Designer;
- preparing the Construction Phase Plan;
- organising cooperation between contractors and coordinating their work.

Ensure:

- suitable site inductions are provided;
- reasonable steps are taken to prevent unauthorised access;
- workers are consulted and engaged in securing their health and safety; and
- welfare facilities are provide



PRACTICALLY....WHO?

Client

CALA Homes (West) Ltd MD BUT also Land / Tech

Designers

CALA Central Design, Tech Team & Consultants

Principal Designer

CALA Homes (West) Ltd Technical Team and TD

Principal Contractor

CALA Homes (West) Ltd Construction Team

Workers

Everyone who enters a Site



Why is the client important?

- The client has a major influence over the way a project is procured and managed.
- Regardless of the size of the project, the client has contractual control, appoints designers and contractors, and determines the money, time and other resources available.



SAFE

<u>SYSTEM</u>

OF WORK



EVERYONE

Cooperates with Each Other

- Working together to ensure Health, Safety & Wellbeing of everyone concerned
- Reporting Dangerous Conditions
- Provide Clear Information and Instructions

COMMUNICATION



CALA West Approach

- Project Team Approach
- Gateways
- RIBA Plan of Work 2013 Stage 3 Design Report
- CALA Way Governance & Rigour
- Risk Managed Approach Informs CAG
- Desk Top Study Informs Viability and Design
- Embedded in Culture
- COMMUNICATE



NOTABLE RISKS

- Contaminated Land
- Service Strikes Pre / Post Infrastructure
- Ground Gases
- Watercourses
- Weather / Climate
- Surroundings & Environment
- New or Less Familiar Construction Types
- Business Model Changes

RELEVANT



Example - Light Gauge Steel Frames in City Centres

- Internal stair rises with building
- Concrete / metal deck to work off
- Weather Proof Frame
- Fire
- Less reliant on Scaffolds
- Quicker Build
- Introduces greater crane discipline
- Off Site fabrication



COMMUNICATION CHANNELS

- Project Team
- Risk Register
- Stage 3 Design Report
- Cost Plan & Appraisal
- Drawing Notes and Warnings
- PCI



SAFE

<u>SYSTEM</u>

OF WORK



Part 4

Regulation 16 – 35

- Regulation 16 Application of Part 4
- Regulation 17 Safe places of construction work
- Regulation 18 Good order and site security
- Regulation 19 Stability of structures
- Regulation 20 Demolition or dismantling
- Regulation 21 Explosives
- Regulation 22 Excavations
- Regulation 23 Cofferdams and caissons
- Regulation 24 Reports of inspections
- Regulation 25 Energy distribution installations
- Regulation 26 Prevention of drowning
- Regulation 27 Traffic routes
- Regulation 28 Vehicles
- Regulation 29 Prevention of risk from fire, flooding or asphyxiation
- Regulation 30 Emergency procedures
- Regulation 31 Emergency routes and exits
- Regulation 32 Fire detection and fire-fighting
- Regulation 33 Fresh air
- Regulation 34 Temperature and weather protection
- Regulation 35 Lighting



CALA SITES

- Constantly Changing Environment
- Transient Workforce
- Weather
- Interfaces
- Clients
- General Public

STRESS



SPARE A THOUGHT!