# Deliverability Workshop RIBA Stages 5-7

28/09/2023







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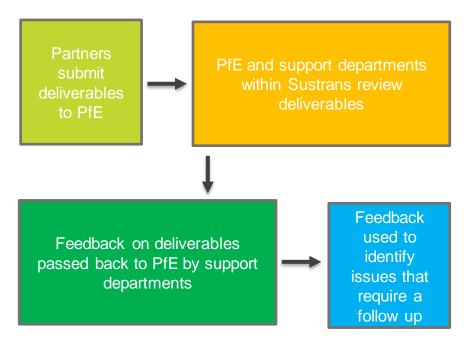


# Have you got a Project at Construction Stage or nearing Construction?

#### Who we are and our role in Sustrans



- Engineering and Assurance Team
  - Marie-Claire Nyinawumuntu



#### **Overview of RIBA Stages**



- Based on Royal Institute of British Architects, RIBA, Stages
- ▶ Established to provide a plan of work to provide a structured approach to projects.
  - Stage 0 Strategic Definition ('The Brief')
  - Stage 1 Preparation & Brief (Feasibility Design)
  - Stage 2 Concept Design

S3-4 Panel

S0-2 Panel

- Stage 3 Developed Design (AKA Spatial Coordination)
- Stage 4 Technical Design

S5-7 Panel

- Stage 5 Construction
- Stage 6 Handover
- ► Stage 7 In use

#### **Stage Descriptions**



- At end of Stage 4
  - Have a complete design package ready or tendering, with risks mitigated, prices estimated and all permissions at least agreed in principle
  - Provide timelines and costings for Stage 5-7 activities
- During Stage 5 Construction
  - Tender the works and award a contract, NEC4 is a common option
  - Construction Phase Plan prepared using the Pre-construction information,
  - Site supervision and progress reports
- For community organisations
  - Final land agreements and statutory permissions in place
  - If not confident with CDM regulations a client advisor may be appointed (but the responsibility remains with the Client)

#### **Stage Descriptions**



- Stage 6 Handover
  - Project completion report and lessons learned register
  - Start of defects period at construction completion
  - ► H+S File completed this is a CDM requirement
  - Stage 3 RSA on completed asset
  - Snagging list
  - Maintenance Plan finalised and enacted
  - Asset adoption at end of defects period
- Stage 7 In-use
  - Monitoring and evaluation
  - Stage 4 RSA to review any issues
  - Lessons learned summary

## **Key Points – Managing Risk**



Q: What can be done to help manage risk during Construction

#### **Key Points – Managing Risk**



- Client role includes appointing a Contractor with suitable skills knowledge and experience to undertake the work (competent contractor)
- Clear PCI information provided from the PD with suitable attention paid to it by the PC
- Importance of highlighting site-specific risks that are not obvious / business as usual
- Residual risks taken forward by the Contractor and incorporated into their Construction Phase Plan
- ► Costs should be associated to risks this should form the basis of the risk allowance
- Contractors have always been looking to reduce risk, but the Client now has duties too

# **Key Points – Managing Risk**





#### **Key Points – Estimating and Procurement**



- Match funding sources and their contributions should be provided (noting that construction funding is requires a 30% match funding contribution)
- A procurement strategy is needed so that Sustrans can understand the route to market
  - Scotland excel, any other existing frameworks or your own route to market can also be appropriate but the strategy needs to be described
- ▶ A timeline / programme should also be shown
- Preference is for competitive tenders
- Competent contractor?
- A full BoQ with item breakdown is expected with quantities and rates
- Contingency / Risk allowance added should be linked to the risk register
  - Optimism bias at 3% for general highways, and 6% for structures should be included
  - Allowance for inflation

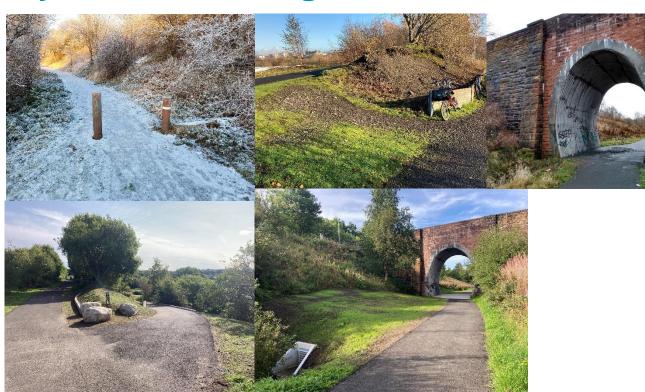


#### **Key Points – Change Control**

- Aim of the Stage 5-7 submission is to provide a package that is priced accurately
- It is possible that post tender not enough money has been allowed for
  - Delays in tendering, final landownership agreements, inflation, market volatility, underestimation,
- In the first instance an Early Warning as soon as the risk is known about, (inform Sustrans!)
- ▶ Then when the risk is realised submit a change control (also known as a compensation event) to:
  - ▶ Value Engineer the project important not to change the scope of the scheme
  - Reduce the geographical scope of the project
  - Submit a change control request drawing down from the project contingency (Sustrans would not need to be notified of this) or requesting additional funding
  - A combination of the above
- Can get complex quickly, communication is very important.
- Ultimately the works could get aborted

# **Key Points – Change Control**





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# Maintenance and Monitoring Requirements sustrans

- Written confirmation that a project will be adopted by the Local Authority
- Some sort of schedule prepared and agreed (when maintenance works/inspections will be undertaken);
- roles (who will maintain it and be responsible for the aspects of maintenance);
- whether any particular plant or safety measures are needed
- ▶ Health and Safety plan should be passed on to assist with safe maintenance

#### Monitoring

- Complete RSA Stage 4
- Project Impact Report to be submitted 12-18 months after completion
- Continuous or periodic data collection to measure the impact may be appropriate

#### **Key Points – Construction Phase Plan I**



- Q: What might be found be in a Construction Phase Plan?
- Typically completed by the Principal Contractor using information provided by the designer in the Pre-Construction Information (PCI)
- Should contain information on how the site will be set up, run and managed with a particular focus on ensuring the safety of all people who may be impacted by the site
  - Named responsible people
  - Welfare management
  - Site induction procedures
  - First aid information including hospital location/s
  - Fire procedures and meeting points

## **Key Points – Construction Phase Plan II**



- Risk Assessments and Method Statements
- Restrictions including timings, methods, materials, Machinery, etc.
- Detail site access and egress, diversions, temporary routes cognisant of the Equalities Act, traffic management
- Environmental considerations, nesting seasons, nature, watercourses, run off, spillages

#### **Contractor CDM Duties**



- ► CDM roles should be clearly identified on the application
  - Principal Contractor may not be known when applying for 5-7 funding (but will need to be appointed before work starts)
- PC Duties are primarily to ensure the completion of the work safely (CDM wording is much more prescriptive!)
- The Client has ultimate responsibility for many CDM duties even if they delegate this to the PC (they need to ensure that they are undertaken), e.g.:
  - That a Construction Phase Plan is completed
  - Suitable welfare is provided
- Note that the funder role is not a recognised CDM role however we want to have confidence that any project we are funding is carrying out their CDM requirements

#### **Stage 5-7 Client duties**



- Q: What kind of duties does the Client hold?
- Ensuring the Principal Contractor (PC) has the skills, knowledge, experience and organisational capability to undertake the work
  - Previous work, case studies, previous project success
- Stage 5 duties include
  - ► F10 form notification to HSE ahead of the commencement of construction (it is likely that all PfE projects will be notifiable)
  - Ensuring the PC creates a CPP and that the PD drafts a Health and Safety Plan
  - That Welfare facilities are provided
- ► Tasks and duties may be delegated but the Client is ultimately responsible for their completion
- CDM 2015 has an emphasis on collaborative working; The Client role may seem daunting but if there is a constructive relationship with the PD and PC it should be relatively straightforward to undertake this role effectively.

#### **Summary**



- Stage 5 is the time when everything about the project and its construction should be confirmed and aligned ready to be built.
- It is the time when the accuracy (or not!) of costings, risks and assumptions are realised:
  - Actual market prices vs estimates
  - Actual ground conditions vs investigations or assumptions
  - Uncovering of unexpected assets, utilities or issues
  - Construction problems that were not foreseen
- Stage 6 should set in motion the schemes use, its maintenance and incorporation into becoming the normal, as well as celebrating the completion of construction
- Stage 7 to prove the success of the project, primarily in terms of use and safety





- Connecting Woodside: Glasgow
- Speirs Bruce Way: Granton Edinburgh
- Eddleston Water Path: Peebles to Eddleston
- Papdale Park: Kirkwall Orkney

**Connecting Woodside - Glasgow** 





**Speirs Bruce Way - Granton** 





#### **Eddleston Water Path**





https://www.showcase-sustrans.org.uk/places-for-everyone/

## Papdale Park - Kirkwall





https://www.showcase-sustrans.org.uk/places-for-everyone/



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