DESIGNERS RISK ASSESSMENT

Sheet No:*1*	Name: ***G. Murphy***	Project No: ***24060***	MBA CONSULTING
Rev: ***B – 23.09.24*** ***A – 13.09.24***	Date: ***Sept 2024***	Project: ***Penzance Dry Dock, Penzance*** Brief Description: ***Alterations to existing steelwork frame to accommodate new cranes internally and provision of new foundations to support two additional cranes externally.***	

Activity, Design. Describe including drg Nos etc	Hazard / *Risk* Outline what the potential to cause harm as a result of column 1	Initial Risk Rating	Actions by Designer to reduce risk a) Is the risk rating >1 If yes consider the need to reduce risk b) Can the risk be avoided or reduced by changing the design c) If the final risk rating is still >1 then explain why and what others need to do to minimise the risk	Final Risk Rating See matrix. If >1 info reqd for File / Plan	Is the final Risk Rating 2 or 3 If so, in what form has the information been Sent to PS Responsible Party:
Site Set-up / Working in close proximity to main high street with public highway and pedestrians. ***Working in close proximity to harbour/foreshore***	*1.Danger of access to site by general public with building in close proximity.* *2.Possibility of occupants and operatives being exposed to noise, dust and debris arising from works.* *3.Contractor to be familiar with tide times and sea conditions with works required to rear elevation and sea wall.*	*Ser. = M* *Lik. = M* ***Risk = 2***	*Beyond designer's scope to reduce this risk; inherent with the realization of the works.* *Contractor to ensure site is secure and provide additional barriers and protection to localized areas of work if deemed necessary.* *Contractor to prepare method of working and sequencing of proposals.* *Responsibility of Contractor to ensure adequate means by which risk can be acceptably reduced - achievable through adoption of good site practices*	***1***	*Contractor*
Access / Egress to the site.	*Maneuverability of plant/heavy machinery in and out of site.* *Delivery of materials and equipment.*	*Ser. = M* *Lik. = M* ***Risk = 2***	*Contractor to put in place a site management plan to co-ordinate maneuvering of plant and delivery of materials in and out of site, maintaining communication with adjacent site users and neighboring properties.*	***1***	*Contractor*

SEVERITY	H	M	L
H	3	3	2
M	3	2	1
L	2	1	1

LIKELYHOOD

SEVERITY

H – Fatality, major injury causing long term disability

M – Injury or illness causing short term disability

L – Other injury or illness

LIKELYHOOD

H – Certain or near certain

M – Reasonably likely

L – Very seldom or never

RISK RATING

3 – High risk- Action required

2 – Medium risk – Action required unless good reason

1 – Low risk – No action required

DESIGNERS RISK ASSESSMENT

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Excavations: *MBA Drgs:* *24060-10-12,30*	*Possibility of encountering existing services during excavation works.*	*Ser. = H* *Lik. =M* ***Risk = 2***	*Prior to any excavation, contractor to carry out comprehensive services sweep; to be advised by Client of any known services in the area. A utility survey is to be carried out if one has not been provided.* *Contractor to adopt established safe working practices in respect of excavation to safely determine services locations prior to commencement of any excavation work, refer to HSE HS(G) 47 Avoiding danger from underground services, L22 Safe use of work equipment PUWER 1998.*	***1***	*Contractor*
Excavations: *MBA Drgs:* *24060-10-12,30*	*Deep, widespread excavations > 1.2m in depth provided to foundations. Danger of operative falls into open excavations. Risk of overhead falling objects or plant items.*	*Ser. = H* *Lik. = L* ***Risk= 2***	*Contractor to ensure adequate enclosure and identification of hazardous works areas and to adopt safe, established work practices.* *Refer to HSE CIS8 Safety in excavations and HSE, Health and Safety in construction, 2001.* *Beyond designer's scope to reduce the risk; inherent with the project realization- the depth of foundations have been kept to a minimal where*		

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H	3	3	2
M	3	2	1
L	2	1	1

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RISK RATING

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DESIGNERS RISK ASSESSMENT

Sheet No:*3*	Name: ***G. Murphy***	Project No: ***24060***			
Rev: ***B – 23.09.24*** ***A – 13.09.24***	Date: ***Sept 2024***	Project: ***Penzance Dry Dock, Penzance*** Brief Description: ***Alterations to existing steelwork frame to accommodate new cranes internally and provision of new foundations to support two additional cranes externally.***			
Activity, Design. Describe including drg Nos etc	Hazard / *Risk* Outline what the potential to cause harm as a result of column 1	Initial Risk Rating	Actions by Designer to reduce risk a) Is the risk rating >1 If yes consider the need to reduce risk b) Can the risk be avoided or reduced by changing the design c) If the final risk rating is still >1 then explain why and what others need to do to minimise the risk	Final Risk Rating See matrix. If >1 info reqd for File / Plan	Is the final Risk Rating 2 or 3 If so, in what form has the information been Sent to PS Responsible Party:
			possible, although where excavations exceed 1.20m, side support should be provided to excavations which appear unstable. *Contractor to refer to Karn Geo site investigation report (ref: 24093, July '24)*	***1***	*Contractor*
Excavations cont.: *MBA Drgs:* *24060-10-12,30*	*Excavations and piling works to be carried out in close proximity to dock edge.*	*Ser. = H* *Lik. = L* ***Risk= 2***	*Contractor to review existing edge protection and satisfy themselves on the condition of the structures and to adopt safe, established work practices designing temporary works.*	***1***	*Contractor*
Excavations cont.: *MBA Drgs:* *24060-10-12,30*	*Excavations and piling works to be carried out in close proximity to dock edge.*	*Ser. = H* *Lik. = L* ***Risk= 2***	*Contractor to record condition of dock wall before starting on site and monitor during proposed works.* *Piling contractor to review site constraints and position piling rig to limit loading to dock wall.*	***1***	*Contractor*

SEVERITY	H	M	L
H	3	3	2
M	3	2	1
L	2	1	1

LIKELYHOOD

SEVERITY

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Activity, Design. Describe including drg Nos etc	Hazard / *Risk* Outline what the potential to cause harm as a result of column 1	Initial Risk Rating	Actions by Designer to reduce risk a) Is the risk rating >1 If yes consider the need to reduce risk b) Can the risk be avoided or reduced by changing the design c) If the final risk rating is still >1 then explain why and what others need to do to minimise the risk	Final Risk Rating See matrix. If >1 info reqd for File / Plan	Is the final Risk Rating 2 or 3 If so, in what form has the information been Sent to PS Responsible Party:
Excavations cont.: *Karn Geo Investigation Report, (ref: 24093, July '24)*	*Possibility of site operatives being exposed to sources of site contamination.*	*Ser. = M* *Lik. = M* ***Risk = 2***	*Refer to Karn Geo site investigation report (ref: 24093, July '24)* *If any sources of contamination are exposed, Geotechnical Engineer to be contacted to carry out any additional testing required to verify hazard.* *Contractor to put in place all necessary procedures to ensure safe working conditions for site workers.*	***1***	*Contractor*
Excavations cont.: *Karn Geo Investigation Report, (ref: 24093, July '24)*	*Possibility of encountering UXO during substructure works.*	*Ser. = M* *Lik. = M* ***Risk = 2***	*Refer to Karn Geo site investigation report (ref: 24093, July '24)* *Proposed pile locations to be surveyed for UXO contamination prior to commencement of piling.*	***1***	*Contractor*
Excavations cont.: *Karn Geo Investigation Report, (ref: 24093, July '24)*	*Possibility of site operatives being exposed to Asbestos in Made Ground.*	*Ser. = M* *Lik. = M* ***Risk = 2***	*The contractor should review the asbestos register and prior to any excavations, investigative, demolition or refurbishment works and adopt safe working practices in respect to encountering suspected Asbestos. Operatives should have necessary awareness of Asbestos.* *Refer to Geotechnical Engineers report for inferred areas of Asbestos and refer to report for outlined procedures if suspected Asbestos is found.*	***1***	*Contractor*

SEVERITY \ LIKELYHOOD	H	M	L
H	3	3	2
M	3	2	1
L	2	1	1

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RISK RATING

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Excavations cont.:	*Encountering existing underground obstructions and features*	*Ser. = L* *Lik. = H* ***Risk = 2***	*Historical drawings show a variety of different structures and layouts in the vicinity of the dock.* *Therefore a generous allowance should be made for encountering features and obstructions during any piling or other substructure works. Re-working of the design may be required.* *Probing at the proposed pile positions is recommended ahead of the works.*	***1***	*Contractor*
Temporary stability of steelwork framing: *General*	*Collapse during high winds / severe weather or accidental loads due to site traffic.*	*Ser. = H* *Lik. = L* ***Risk = 2***	*Beyond designers scope to reduce this risk; inherent with the project realization. Contractor to ensure adequate stability of all structural elements during construction phase. Temporary bracing to be used to ensure stability.*	***1***	*Contractor*
Temporary stability of steelwork framing: *General*	*Collapse due to temporary instability during demolition of existing framing.*	*Ser. = H* *Lik. = L* ***Risk = 2***	*Contractor to ensure adequate stability of all structural elements during construction phase. MBA have developed an outline sequence of construction to assist the contractor in developing their proposed sequencing.*	***1***	*Contractor*

SEVERITY \ LIKELYHOOD	H	M	L
H	3	3	2
M	3	2	1
L	2	1	1

SEVERITY

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RISK RATING

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DESIGNERS RISK ASSESSMENT

Sheet No:**6**	Name: ***G. Murphy***	Project No: ***24060***	MBA CONSULTING
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Existing Structural Elements: *General*	*Collapse/failure of existing structural elements.*	*Ser. = H* *Lik. = L* ***Risk = 2***	*Contractor to expose full extent of existing structure in the areas of the proposed works to ensure the structural elements are stable and in sound condition.*	***1***	*Contractor*
Post Construction: *MBA Drg: General*	*Safe working space for general maintenance of building and maintenance and replacement of mechanical services etc.*	*Ser. = M* *Lik. = L* ***Risk = 1***	*Contractor, Architect and M&E consultants' responsibility to ensure this is provided following receipt of structural information.*	***1***	*Contractor/Architect/ M&E Consultants*

SEVERITY	H	M	L
H	3	3	2
M	3	2	1
L	2	1	1

LIKELYHOOD

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RISK RATING

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