

Project Type: Parking facility construction project

Novo Nordisk: Parking

Risk Log

10416392

Date 2023.04.18

Init MIT/NIRAS

										CONSEQUENCE									
ID	Category	Theme	Site relevance? (BA, MÅ, HI)	Description of Risk	Root causes	Likelihood	Likelihood converted	Schedule	Likelihood converted2	LxS	Cost	Likelihood converted3	LxC	Quality	Likelihood converted4	LxQ	Mitigation action plan	Deadline	Responsible
3	Technical risks	Authorities	All	There is a risk that dispensation from the local district plan is needed, which can delay the project.	Height, area utilization, noise, solar panels (?)	50,0%	4	3-6 months	3	12	200 000 kr.	1	4	Logistical break-down/tra	4	16	Early dialog with authorities e.g. solar panels as part of building height? Ensure boundary conditions in tender documents. Reduce height (e.g. remove solar panels). Perform a updated/more detailed calculation of area utilization.	31.05.2023	MHBP, MIHH
34	Other	Site logistics	MÅ, HI	Insufficient parking capacity (and no temporary parking spaces) preventing the construction execution start	Prior to and under construction existing parking spaces will be reduced. Contractor parking space.	50,0%	4	3-6 months	3	12	5 000 000 kr.	3	12	Logistical break-down/tra	4	16	Lease of temporary parking spaces. Establishing temporary parking spaces (gravel). Car-pooling and other temporary policies (site owners) - change behaviour. Limitation of contractor parking spaces. Shuttle bus (?). Deadline: Action plan.	30.09.2023	MHBP, ZCLM
36	Other	Project coordination/ interfaces	All	Postponed construction due other construction activities on all sites	Alot construction activities on all sites in scope	25,0%	3	> 6 months	4	12	5 000 000 kr.	3	9	No or minor impact on Qu	1	3	Proactively planning and coordination of all large construction activities on sites. This will be handled in Site Planning Office. Thorough documentation of decisions on building plot, construction site. Advisors needs to give input in expected construction initiation and size of construction site	12.05.2023	MIHH, MHBP, ZCLM, SOB
2	Technical risks	Site logistics	All	Site logistics due to other ongoing projects on site.	A lot of simultanous construction activities	50,0%	4	1-3 months	2	8	2 000 000 kr.	2	8	No or minor impact on Qu	1	4	Site planning office (already established). Coordination meetings/frequent communication. Communicate preconditions to main contractor (in tender documents). Early planning of construction site. Detailed simulation of simultanous activities.	30.09.2023	MHBP, ZCLM
16	Technical risks	Authorities	All	Building permit approval	Many NN projects, lack of authority review ressources. Contractor design insufficient	25,0%	3	1-3 months	2	6	2 000 000 kr.	2	6	No or minor impact on Qu	1	3	Early dialog with authorities. Reiew contractor design capacity/competences.	31.05.2023	MHBP, MIHH
8	Organizational and PM risks	NN internal/ stakeholder process	All	NN internal processes can delay project.	Complex governance and approval of funding	25,0%	3	1-3 months	2	6	200 000 kr.	1	3	No or minor impact on Qu	1	3	Proactive alignment with decision makers and close dialog with decision board representatives. Involve senior management to conduct lobbying with decision committees	31.05.2023	MHBP, ZCLM
26	Technical risks	Project coordination/ interfaces	All	Interface towards the fossil free project and establishment of the heating/cooling ring + electrical cable tracé, steam pipes etc. at all sites		25,0%	3	1-3 months	2	6	5 000 000 kr.	3	9	Logistical break-down/tra	4	12	NN internal coordination. NIRAS to coordinate internally regarding ongoing projects for NN.	31-09-2023	MIHH, MHBP, ZCLM, SOB
14	Other	Communication	All	Risk of misinterpretation of functional requirement.	Unclear tender material and requirements. No time to harvest experience across projects due to concurrent process.	12,5%	2	1-3 months	2	4	5 000 000 kr.	3	6	No or minor impact on Qu	1	2	Additional quality assurance before tender material is send out. Ensure involvement of relevant stakeholders.	31-06-2023	MIHH, MHBP, ZCLM, SOB
19	Organizational and PM risks	Tender documents	All	Errors or ambiguities regarding preconditions in tender documents	See ID. 14	12,5%	2	1-3 months	2	4	5 000 000 kr.	3	6	No or minor impact on Qu	1	2	Focus on quality control during CD phase. And clear communication with building contractor during the tender process /negotiation /bidding as well as thorough review with contractor.	31-06-2023	MIHH, MHBP, ZCLM, SOB
29	Organizational and PM risks	Ressources	All	Lack of competencies of managing large construction projects	PM ressources and advisors have not executed or managed large scale projects in NN terms, causing delay in the approval/funding process	12,5%	2	1-3 months	2	4	2 000 000 kr.	2	4	No or minor impact on Qu	1	2	Involve and conduct sparring with project steering groups and senior management and plan the review process of presentation material in due time. Advisors must conduct additional quality assurance on project material. In addition a sparring session with a reference group can be arranged	31.05.2023	MHBP, ZCLM
38	Technical risks	Vibrations	All	Vibrations may be a problem for existing lab facilities	Lab mice and sensitive equipment at MÅ are cld	12,5%	2	1-3 months	2	4	5 000 000 kr.	3	6	No or minor impact on Qu	1	2	NN clarify requirements at sites. If relevant NIRAS to incorporate requirements in tender documents.	31-09-2023	MHBP, ZCLM
25	Organizational and PM risks	NN internal/ stakeholder process	BA	NZ owns the plot for the chosen location in Bagsværd and must therefore give permission for constructing the parking house which can impact time/cost. This is discussed in Landowners association in Bagsværd	Due to the merger of NZ and Chr. Hansen, NZ does not have a clear building portfolio strategy causing long or no decision making regarding co-funding/sell building plot	5,0%	1	3-6 months	3	3	2 000 000 kr.	2	2	Logistical break-down/tra	4	4	Involve senior management for them to engage with NZ regarding a decision	31.05.2023	MHBP, ZCLM
13	Organizational and PM risks	NN internal/ stakeholder process	All	NN internal stakeholders decisionmaking in regard to solar panels.	With the uncertainty in the data behind on solarpanels, the sustainability businesscase in questionable.	25,0%	3	1-4 weeks	1	3	200 000 kr.	1	3	No or minor impact on Qu	1	3	The advisors needs to make the material behind th recommendation precise and well-documented. The NN project team needs to direct the recommendation and decision to the "right" stakeholders or senior managment members	12.05.2023	MIHH, MHBP, ZCLM, SOB
17	Organizational and PM risks	NN internal/ stakeholder process	All	Uncertainty regarding sustainability at NN	Difficult to incorporate sustainability in constructions like parking house where steel and concrete are the main materials. Lack of evidence regarding sustainability in parking	25,0%	3	1-4 weeks	1	3	200 000 kr.	1	3	No or minor impact on Qu	1	3	Advisors provide a sustainability brief where all possible initiatives are assessed and a clear recommendation is provided e.g. reuse of concrete (?) NIRAS to provide a long list of possible initiatives and associated recommendation / weighting of impact to be presented for NN management/stakeholders.	30.04.2023	MIHH
22	Technical risks	Soil conditions	All	Soil conditions and archaeological findings will impact the time schedule and cost for soil handling	Uncertainty regarding soil conditions at temporary parking sites (Construction sites have already been screened)	5,0%	1	1-3 months	2	2	2 000 000 kr.	2	2	No or minor impact on Qu	1	1	Geotechnical and environmental investigations. Scope to be clarified. Dialog with local museum.	31.05.2023	MIHH
11	External and business risks	Long lead items	All	Delivery time of building materials/equipment.	Quantity/volume of the demand of materials when construction 3 parking houses simutaniously may lead to shortage on some or	5,0%	1	1-3 months	2	2	2 000 000 kr.	2	2	High levels of errors & om	2	2	Potential shortage on materials must be brought up with the turnkey contractors in the tender process in order to secure sufficient building materials before construction start. Alternative one turnkey contractor cant be granted all three/four parking houses. Dialog with turnkey contractor in terms of	31-09-2023	MIHH
18	Organizational and PM risks	NN internal/ stakeholder process	All	Disagreement between NN HQ and NN sites regarding choice of solutions	Many opinions on how to make a functional parking house in the different Steering groups	12,5%	2	1-4 weeks	1	2	200 000 kr.	1	2	No or minor impact on Qu	1	2	Make sure to align expactations and what the different steering groups can influence. The technical and functional requirements are set by the project team based on recommendations from the advisors and dialog with internal SME's	31.05.2023	MHBP, ZCLM
24	Technical risks	Utilities/Services	All	Breach on main utility lines/cables resulting in interrupt/disturbance of production. Lack of capacity (e.g. for EV chargers).	General uncertainty.	5,0%	1	1-3 months	2	2	10 000 000 kr.	4	4	Logistical break-down/tra	4	4	Review drawings. Assess capacity for EV chargers.	31.05.2023	MIHH
12	External and business risks	Contractors	All	Lack of interest for bidding from the contractors.	Still high activity in construction sector	5,0%	1	1-3 months	2	2	5 000 000 kr.	3	3	No or minor impact on Qu	1	1	Early dialog. May consider number of bidders to balance attractiveness and risk of only a few bids. Ensure that it is easy to provide a bid without spending alot of time on bid.		
5	Technical risks	Authorities	BA	New district plan for BA will not be approved.	General uncertainty.	5,0%	1	1-3 months	2	2	200 000 kr.	1	1	No or minor impact on Qu	1	1	Cannot impact risk at this point.		
6	Organizational and PM risks	Ressources	All	Ressource challenges in the engineering and/or architectual team may cause delays.	High activity level and key project members ma	12,5%	2	1-4 weeks	1	2	200 000 kr.	1	2	No or minor impact on Qu	1	2			
37	Other	EHS hazards		Accidents under construction due to lack of safety coordination causing WEA "arbejdstilsynet" to stop the construction		5,0%	1	1-4 weeks	1	1	2 000 000 kr.	2	2	No or minor impact on Qu	1	1	Will be handled seperately		
7	Organizational and PM risks	Neighbors		Neighbors can be resistance to the project, expecially in MAA.		5,0%	1	1-4 weeks	1	1	200 000 kr.	1	1	No or minor impact on Qu	1	1			
33	External and business risks	Change in legislation		Change in legislations e.g amount of EV charges or parking norm (max)	Lack of capacity in supply lines.	5,0%	1	1-3 months	2	2	5 000 000 kr.	3	3	High levels of errors & om	2	2			
10	External and business risks	Contractors		Contractor or sub-consultant goes bankrupt.		5,0%	1	1-3 months	2	2	200 000 kr.	1	1	No or minor impact on Qu	1	1			
32	External and business risks	Scope change		Decrease in the number of employees resulting in a change of demand for additional parking spaces		5,0%	1	1-4 weeks	1	1	5 000 000 kr.	3	3	No or minor impact on Qu	1	1			
1	Technical risks	External noise	MÅ, HI	External noise level will go beyond permit limit.	Residential areas close to site.	5,0%	1	1-4 weeks	1	1	2 000 000 kr.	2	2	No or minor impact on Qu	1	1			