Appendix Q: Existing buildings and infrastructure at the DCWR site and their intended purpose

Area	**Existing Buildings/Infrastructure** (warehouses, sheds)	**Underground Services** (pipelines, storage tanks, septic, water, sewage)	**Intended Purpose** (demolished, removed, retained/maintained
Fort Hill Area	***Former Iron Ore and Zinc Concentrate Storage Area*** One building used as a workshop comprising a mechanical workshop, boiler makers and an electrical maintenance section, located in the north-western corner of the area. The Boom Shed is located along the north eastern boundary of the area. The shed is currently used for occasional storage. It was formerly used for the storage of the submarine boom net during WWII and later for ore materials stockpiling. A third building known as the Woodcutters Shed is located in the centre of the area. The building was used to stockpile ore material and is now used for general storage.	The area has typical services required to operate the Darwin Port Corporation facilities in the area, these include: Telecommunications: Two lines are present in the area. One line which enters the area to the north east and provides service to the Workshop. A second line runs through the vacant area to the south of the Woodcutters Shed to service the Duty Officer Building and Iron Ore Wharf. Electricity: Power enters the site at the north western corner of the Workshop building. A high voltage underground power line is also present at the south of the Boom Shed running to the substation to the south of the area. Water: Mains water supply is located along the northern length of the Boom Shed and the Workshop building. Smaller feed off lines are present to the south of the Workshop. Stormwater: Several stormwater pipes are present in the area ranging from 75 mm to 600 mm in diameter. Oil Lines: Three former lines ran	The Port Corporation operations have relocated to East Arm Port and the current facilities are to be decommissioned and removed from site to allow for the future development. Due to the increased usage of the site all ofthe current underground facilities, including electricity, water, telecommunications and stormwater will likely require upgrading or removal and replacement.

		aboveground between the Workshop and the Boom Shed. These lines have been removed, however, it is not known whether the former underground sections, running from the south of the Boom Shed to the valve junction point, have been removed	
	New Fort Hill Wharf Fort Hill Wharf is a high usage, multi-purpose wharf used for varying types of shipping. The west berth includes a high capacity floating Roll-on/Roll-off facility (the Ro-Ro linkspan). One main building is located approximately in the middle of the Wharf deck. This formerly housed the Darwin Port Corporation Harbour Master and the associated operations. Three fuel lines run onto the wharf under the eastern extension of the wharf. Other services to run in the vicinity of the fuel lines are water and compressed air.	NA	Fort Hill is to be retained for the berthing of large cruise ships and smaller vessels. The Darwin Port Corporation no longer operates from the wharf so the future of the building is unknown.
	Old Fort Hill Wharf The former Fort Hill Wharf was last used for ship berthing in 1963. It is structurally unsound and not used for any purpose. The fuel lines remain underneath the wharf deck but are largely corroded away. All other services are cut to the wharf.	NA	The wharf is likely to be dismantled and removed from site.
	Iron Ore Wharf The Iron Ore Wharf is used as a refueling		The future of the wharf is not known at

	facility for Royal Australian Navy and an offloading point for the oil tankers which supply all fuel to the Northern Territory as well as for the Navy. Four fuel lines run beneath the wharf deck. The wharf was also used for LPG and sulphuric acid. These products are no longer offloaded at the wharf.	NA	this stage. The Navy still requires a refueling facility in the area so the wharf is likely to remain for at least that purpose, as the commercial oil lines are to be moved to East Arm.
	Shipping Container Storage and Handling Area This area is a bitumenised surface storage area. Currently the main use of the area is for the temporary storage of cars which are unloaded to the area. The majority of the time the area remains vacant.	The underground services through the area include: Electricity: Power enters the area at eastern side of the compound and feeds the compressor shed and the lighting along the northern boundary. A second input is located to the west of the area to service Fort Hill Wharf. Stormwater: The hardstand area is serviced by several stormwater pipes of unknown size Telecommunications: A phone line is present at the eastern entry of the area and used to service the Duty Officer building. The lines for Fort Hill Wharf run along the western boundary of the area. Oil lines: The four fuel lines which run off Iron Ore Wharf run underground through the north of the storage area.	This area is to be retained for use as a storage and handling area for the future shipping operations which are believed to be part of the development. Removal of unnecessary structures and facilities, such as the compressor shed, machine house and above ground storage tanks is likely to be conducted.
	Quarantine Incinerator The Darwin Port Corporation Incinerator is used to burn disposed and seized	The underground services in the area include telecommunications, power and	The incinerator will become redundant in the near future when all quarantine and

	materials from the incoming vessels. The incinerator is diesel fueled, fed from an aboveground fuel storage tank.	water all delivered from the Port Corporation Workshop to the north eastern corner of the incinerator.	customs waste will be transported to Royal Darwin Hospital for incineration. It is to be removed at the same time as the other existing Fort Hill facilities.
Bitumen Plant Area	***Bitumen Plant*** The Shell Bitumen Plant has been situated in the area since the early 1960s. The site receives bitumen feed stock which is refined to bitumen to be used in Darwin and throughout the Northern Territory. A Port Corporation owned substation building and fire water pump house are located to the northwest of the site.	Underground pipelines come into the Bitumen Plant at the southern corner of the site from Iron Ore Wharf into the two above ground bulk bitumen feedstock tanks. All services at the site are above ground with the only below ground structures being the triple interceptor trap, located between the south of the two bitumen feedstock tanks, and potentially the bases of the large tanks. A drainage line runs underground from the interceptor out the south eastern corner to the nearby drainage swale.	The Shell Bitumen Plant is to be demolished following the expiration of the lease and all structure removed from site. at which time environmental works will be conducted to remediate any impact from the operation of the site.
	Former Tipping Shed Area The only structure in the area is a single building located towards the north-eastern boundary of the area. This building was part of the ore conveyor system and is no longer in use	The underground services which are present at the site include: Water: Two underground lines are situated in the area. One 25mm line to the north of the area and one 100mm asbestos line to the south. Telecommunications: The lines run along the north western boundary, along the south western boundary with supply lines running into the Bitumen Plant and to the Fort Hill Area.	The Tipping Shed structure is to be removed. The majority of the existing services, such as the water, telecommunications and fuel lines, are to remain at the site.

	Former Cockburn Cement Area The area formerly housed the Cockburn Cement Silo until it was demolished in mid 2003. The weighbridge and associated office remain on the site.	The weighbridge is situated flush with the ground with the working mechanisms situated below ground. All services associated with the silo, weighbridge and office have been disconnected to the site. The service conduits may remain on site. The Shell fuel lines run through the western portion of the area to the Shell Bitumen Plant.	The weighbridge and the office will be removed from the site and any redundant services which remain on site will also be removed.
Warehouse Area	The main features in the area are two large warehouse buildings and associated yard areas. The second shed has recently been dismantled and removed from site. Two rail carriages are located at the eastern end of the area and used as a restaurant. Other structures located in the area are situated in the north eastern corner and include a public toilet block and two disused small buildings formerly used as office space.	The underground services present in the Warehouse Area include: Electricity: The main power service runs along the southern side of Kitchener Drive to the north of the area. An electrical substation is located at the south eastern corner of the eastern warehouse. From this substation the power for the sheds is sourced. Water: A high pressure 300 mm water main runs along the southern side of Kitchener Drive to the north of the area. Feeder lines, generally 150 mm, from the 300 mm main are located in the vicinity of the two warehouses. Telecommunications: The main power service runs along the southern side of Kitchener Drive to the north of the area and towards Stokes Hill Wharf. Lines run to each of the warehouses and the two office buildings. Stormwater: Several lines are located in	At the time the site is to be handed over to the developers the remaining buildings and hardstand areas will be removed. All redundant services are also to be removed from site.

		the area. The lines convey stormwater collected from the Darwin CBD and from the site and outfall to Kitchener Bay. Oil Lines: Three oil lines run underground to the west of the approach road to Stokes Hill Wharf. An underground "valve pit" is situated at the north eastern corner of the area. A former fuel line is believed to have run underground to the south of Kitchener Drive. The status of this line is unclear. Sewerage: There are septic systems associated with the public toilets and the office buildings in the north eastern corner of the site. A third septic system is located in the vicinity of a former toilet block associated with the dismantled shed.	
Old Northern Cement Plant Area	The site was cleared of all its above ground infrastructure and all services disconnected in 1994. The underground cement supply pipe is still in place off site but unknown on site.	The only underground services in the area are a telecommunications line and a high pressure water line which run along the boundary between the Bitumen Plant and the Old Northern Cement Area. The underground structures (eg piles) for the large silos are believed to have been left in place at the time of the demolition. No indication of large underground structures were noted during the site investigation field works.	The site will be developed based on the accepted master plan. No significant works are required on the site.
Recently Reclaimed Area	The Recently Reclaimed Area has never housed any structures since being fully reclaimed in 1994.	The only underground services in the area are stormwater lines of varying and unknown size.	The site will be developed based on the accepted master plan. No significant works are required on the site.
Stokes Hill Area	***Fuel Tank Storage Area***		

	The excavated area of Stokes Hill is largely covered by two large above ground storage tanks. These tanks were built for use of the power station. The tanks contain hydrocarbon materials. A concrete water tank and associated pump house buildings are located at the top of the excavated depression. This is no longer in active use.	The fuel tanks are constructed with a conical base and are buried approximately 1 m below the existing surface at their deepest point. A buried line connects the two tanks. Two large diameter pipes which transported water to and from the water tank run underground a short distance at the top of the hill.	The two fuel tanks are to be emptied and cleaned before they are dismantled and removed from site. The water tank is likely to be removed but no plans are in place for the commencement of this.
	Former Stokes Hill Power Station The majority of above ground structures associated with the former power station were removed after the decommissioning of the power station. The only structures to remain are three disconnected transformers to the north of the site and the remnants of WWII fuel storage tank No. 6. No underground structures were removed. All concrete slabs remain at the site.	The large cooling water inlet and outlets and the associated underground cooling pipes remain in place. A[l services are disconnected to the site but the majority of the conduit lines remain in place.	It is not clear if the underground infrastructure will require removal for the development.
	Stokes Hill Wharf Stokes Hill Wharf comprises a concrete decking on steel piles and bracing. The Wharf is not sufficiently structurally sound to cater for large vessels.	NA	The wharf is to remain in use for small fishing vessels, tourist charters and eateries.
	Jetty and Steam Pump Station Area The area comprises the former Steam Pump House, the Jetty Pump House (now a restaurant), Indo Pacific Marine, the Australian Pearl Exhibition and a small storage shed. The majority of the area is	Underground services related to the operation of the commercial interests in the area include telecommunications, water and sewerage. The cooling lines which were associated	The area is to be retained in its current state.

	asphalt sealed and used for public parking.	with the power station are still thought to be in place, running from the Jetty Pump House to the power station site.	
Above Ground Fuel Pipelines (Kitchener Drive)	Five above ground fuel pipelines run along the northern side of Kitchener Drive from the Bitumen Plant to the corner of McMinn Street. These lines are used by the Navy as well as BP, Shell, Mobil and Ampol fuel terminals located at Stuart Park.	NA	The major oil companies are in the process of setting up at a new joint user terminal at East Arm Port. The Navy OFI is to remain and therefore some or all of the aboveground fuel lines will remain.
World War II Storage Tunnels Area	Comprises five tunnels, two of which are accessible via an entrance to the north of the warehouse area along Kitchener Drive. Two other tunnels are accessible from the eastern end of Kitchener Drive, and house pumps for the fuel lines. The fifth tunnel if located under Government House (located above the Darwin Wharf Precinct area at the western end).	The storage tunnel system connects to the above ground storage tanks in the Stokes Hill area. The piping systems are believed to pass under McMinn Street near the junction with Kitchener Drive. Much of this piping is above ground on the western side of McMinn Street.	The tunnels will remain and the tourist operation is likely to continue.