



Figure 10 - Elevations of the proposed HBW

However, concerns have been raised by Council and in public submissions that the project does not comply with the 12 metre height restriction in the *Parramatta Development Control Plan 2005* (DCP), the height and bulk of the project is out of character with the locality, and that the project (if approved) would create a precedent for other similar developments in the future. The Parramatta Park Trust also raised concerns that the visual assessment did not include an assessment of the impacts of the proposal on the cultural and natural heritage values within the Government Precinct under *Sydney Regional Environmental Plan No. 28 - Parramatta*.

In response to these concerns, CCA acknowledges that the project would not comply with Council's DCP, but notes that the DCP is not a development standard and the strict height control is unnecessary and unreasonable because the height and scale of the HBW is dictated by the size of the automated storage system, the height of the facility represents an efficient use of industrial land, and the visual impacts of the facility can be adequately mitigated.

CCA also argues that the proposed HBW is generally consistent with the Department's *Draft Westmead Precinct Plan*, which would set a height limit of 28 metres for the CCA site. The Draft Plan has been prepared by the Department in consultation with major interest groups in the region, including Parramatta City Council, the University of Western Sydney and Westmead Hospital, and is to be implemented through an amendment to *Sydney Regional Environmental Plan No. 28 – Parramatta*.

CCA also points out that there are several other buildings in the area that have a similar height to the proposed HBW. These include Westmead Hospital and the residential apartment blocks on Bridge Road to the south of the site – both of which are more than 10 metres taller than the relative elevation of the proposed HBW. In terms of setting a precedent, CCA believes that this is unlikely because the need for the proposed facility and its co-location with a manufacturing plant are unique, and companies that might have similar requirements for a large warehousing facility already have similar facilities elsewhere or are in the process of building them (e.g. Woolworths at Michinbury and Coles at Eastern Creek).

The Department generally accepts these arguments, and is satisfied that there is a strong economic justification for the non-compliance with the relevant height restrictions in Council's DCP (see Section 5.1 above). The Department also notes that CCA has already reduced the original height of the HBW from 40 to 32 metres following consultation with the Department to reduce visual impacts, and while there are no buildings of a similar height in the immediate vicinity of the site, the proposed HBW is not altogether inconsistent with other buildings in the wider area.

Furthermore, the Department notes that the site is zoned for employment and is separated from residential areas to the east by existing light industrial facilities and to the north by the Cumberland Highway (Briens Road) which is an 8 lane major arterial road. The Department also agrees that the construction of such a large building is unlikely to set a precedent for future development in the local area because there is only limited industrial land and this land is divided up into a number of small sites that could not support such a large development.

In regard to the concerns raised by the Parramatta Park Trust, the Department notes that the project falls well outside the Government Precinct and the visual assessment undertaken for the project indicates that the proposed facility would not be visible from either Parramatta Regional Park or Parramatta Gaol.

CCA also prepared shadow diagrams which demonstrate that the proposed HBW and other structures on the site would not overshadow adjoining properties, and that the shadows cast on Toongabbie Creek to the south of the site would be equal to or less than the existing shadows cast by CCA's current facility.

While the Department is generally satisfied with CCA's assessment of visual impacts, it believes that without further mitigation the project would result in significant impacts on at least 16 residences on Edward and Christine Streets to the immediate north of the site and some residents on the western end of Balmoral Road to the east of the site.

In response to the Department's concerns, and to mitigate and offset the impacts on the local community further, CCA has proposed a number of additional commitments:

- exploring additional visual mitigation measures with the most affected residents on Edwards and Christine Streets, including planting mature screening trees in the road reserve along Briens Road and/or within their properties;
- planting mature screening trees along the western side of Redbank Road to screen the eastern façade of the HBW from residences in Balmoral Road; and
- a Community Enhancement Program worth approximately \$2 million which would involve improvement works at Arthur Philip Reserve (see Figure 11). The exact nature of these works would be finalised in consultation with Council and the community, and would include irrigation works, recreational facilities, landscaping and ongoing maintenance of these facilities. The program would improve the amenity of the park and provide a more attractive community recreational area for the local community. The program is consistent with Council's Section 94 Contributions Plan, and CCA's contribution is more than 3 times what would normally be levied under the Contributions Plan.

The Department has incorporated these commitments into the recommended conditions of approval, including a requirement for CCA to implement additional visual mitigation measures at the 16 most affected residences on Edwards and Christine Streets (i.e. those within about 130 metres from the site) at the request of the landowner. The Department believes that residences beyond 130 metres from the site would not be as significantly impacted by the project, and consequently does not believe that these landowners should be entitled to the additional mitigation measures. The Department notes, however, that these residents would benefit from the on-site and off-site vegetation screening measures proposed by CCA and the improvement works at Arthur Phillip Reserve.

Overall, the Department considers that the location, scale and height of the project have been sufficiently justified by CCA, and the Department is satisfied that the visual impacts of the proposal would be predominantly localised and impacts would be reduced with distance from the site. The Department is generally satisfied that CCA has incorporated all reasonable and feasible measures into the design of the project, and with the implementation of the additional mitigation measures described above, that the visual impacts of the project on local residents can be effectively mitigated or offset.



Figure 11 – Concept Plan for Arthur Phillip Reserve

5.3 Traffic

Construction

The construction of the proposed development would take approximately 6 months and would occur in 3 stages: demolition and excavation, initial construction and peak construction. Heavy vehicle traffic during construction would comprise delivery trucks, water trucks, dump trucks and concrete trucks. The maximum volume of heavy vehicle traffic during the peak construction phase would be 50 heavy vehicles per day, and the maximum volume of light vehicle traffic during the peak construction phase would be 130 light vehicles per day (see Table 4). Construction traffic would be spread evenly throughout the day so that peak hour traffic in the local road network would not be adversely affected.

Table 4: Construction Traffic

Component	Demolition/excavation (max. vehicles/day)	Initial construction (max. vehicles/day)	Peak construction (max. vehicles/day)
Light Vehicles	30	80	130
Heavy Vehicles	60	80	50
Total	90	160	180

All construction traffic would access the site via Briens Road. CCA's traffic assessment indicated that Briens Road would comfortably accommodate the additional construction traffic, and that the level of service of all intersections would not change. The RTA's submission did not raise any concerns regarding the construction traffic impacts of the project.

Operation

Currently the site generates around 1870 vehicle movements a day. As a result of the project, this is expected to increase by around 240 (30 trucks, 210 cars) to a total of 2110 each day (see Table 5).

Table 5: Daily Vehicle Movements during Operation

Component	Existing (movements/day)	Future (movements/day)
Light Vehicles	1400	1610
Heavy Vehicles	470	500
Total	1870	2110

The additional vehicle movements would generally be spread throughout the day, and during morning and afternoon peak periods the total additional movements to/from the site is expected to increase from around 50 movements (see Table 6). Importantly, heavy vehicle movements are not predicted to increase in the afternoon peak hour.

Table 6: Peak Hour Vehicle Movements during Operation

Component	Existing AM (movements/hr)	Future AM (movements/hr)	Existing PM (movements/hr)	Future PM (movements/hr)
Light Vehicles	155	195	160	210
Heavy Vehicles	35	45	20	20
Total	190	240	180	230

Vehicles associated with the project would access the regional road network via Briens Road to the east and west, Darcy Road to the south, and Old Windsor Road to the north. CCA's traffic assessment demonstrated that the additional traffic volume generated by the project would represent less than 1% of the traffic currently on these roads, and that all current levels of service at key intersections would be maintained.

In terms of the impacts on the regional road network, the project would reduce the need for double-handling of product (between Northmead and other distribution facilities). CCA estimates that the project would reduce inter-warehouse transfers by up to 42,000 movements by 2020, which would have significant benefits for regional traffic networks and the environment by reducing greenhouse gas emissions and other vehicle emissions in the Sydney airshed.

Council indicated that it believed that the number of parking spaces proposed on the site is excessive and would therefore not comply with the aims of SREP 28 to reduce reliance on private vehicles and encourage public transport. To comply with SREP 28, CCA has estimated that 743 parking spaces would be required. Currently 540 parking spaces are provided on site, some 200 spaces less than what is required under SREP 28. CCA are not proposing to increase the number of spaces. CCA has assessed parking requirements for the proposal in accordance with the RTA's *Guide to Traffic Generating Development* rather than the SREP 28. This allowed CCA to determine the actual spaces needed to meet parking demand rather than basing the number of spaces on industrial and warehousing floor space. In addition, CCA has a target of reducing private vehicle use to the site by 10% and has committed to investigating an incentive program to encourage use of the T-way that is located adjacent to the site. Consequently, the Department considers that the assessment undertaken by CCA was appropriate, that the project is not inconsistent with the requirements of SREP 28, and that the parking spaces currently provided are adequate.

Given the above analysis, the Department and the RTA are satisfied that the proposed development would not have a significant impact on the surrounding road network. Nevertheless, the RTA provided recommended conditions relating to access arrangements, internal road design and parking, which have been incorporated into the recommended conditions of approval. The Department has also incorporated a condition that requires the Proponent to prepare a Traffic Management Plan for the construction and operation of the project to manage driver behaviour, ensure public safety, maintain access to nearby properties, and minimise the impacts of the project on the local road network.

5.4 Noise

Construction Noise

Since the length of the proposed construction period exceeds 6 months, operational noise criteria has been applied to both the construction and operation of the facility in accordance with the DEC's guidelines. CCA's assessment indicated that, without any form of mitigation, the construction impacts would likely exceed the DEC's operational noise criteria for the proposal at nearby residences. CCA proposes several mitigation measures including restricted hours of construction, selection and maintenance of equipment and the erection of noise barriers to reduce noise impacts during construction.

The Department is satisfied that these mitigation measures would reduce construction noise to acceptable levels. Nevertheless, the recommended conditions of approval require CCA to meet operational criteria during construction, and to prepare a Construction Noise Management Plan to implement the proposed mitigation measures and monitor construction noise.

Operational Noise

The proposed facility would operate 24 hours per day and would generate noise from several sources: mechanical plant, warehousing activities, road traffic, site traffic and loading dock activities. A comparison of the DEC criteria and the predicted noise emissions from the project without mitigation measures in place is provided in Table 7.

Table 7: Predicted Noise Impacts (dB(A)) at Various Locations without Mitigation

Location	Redbank School	Casuarina Lodge		Eastern Residences		Northern Residences	
	Day	Day	Night	Day	Night	Day	Night
Predicted Impact	31	37	37	29	29	58	58
DEC Criteria	35	35	35	46	41	53	45
Exceedance	-	2	2	-	-	5	13

The results indicate that operations at the site would comply with DEC's noise criteria at residences to the east of the site and the Redbank School to the south of the site. However, the assessment indicates that there would be a minor exceedance (up to 2 dBA) of the noise criteria at Casuarina Lodge (a part of the Westmead Hospital complex) to the south of the site, and significant exceedances (up to 13 dBA) at residents to the north of the site. CCA's assessment attributed both of these exceedances to the southern and northern loading docks and associated truck movements in the areas of the site closest to these receptors.

In regard to Casuarina Lodge, the night time noise levels at this facility are already around 57 dBA, and consequently the noise generated from the site (i.e. 37 dBA) is unlikely to be noticeable above background levels. CCA therefore concluded that additional noise mitigation measures were not warranted on the southern side of the site.

To mitigate noise levels to the north of the site, CCA is proposing to install a 3.5 metre noise wall along the majority of the northern boundary of the site. The noise assessment indicates that the noise wall would effectively reduce noise levels from the facility to below the DEC criteria at residences to the north of the site.

Both the Department and DEC are generally satisfied with CCA's noise assessment, and agree that with the installation of the noise wall that the project is unlikely to result in any significant noise impacts on local residents or other landowners in the area. Notwithstanding, the Department believes CCA should be required to comply with the DEC noise criteria at all residences, and prepare and implement a noise monitoring program for the project to demonstrate compliance with the noise criteria.

Traffic Noise

A maximum of 45 additional heavy vehicle movements per hour would be generated by the project during operation. CCA's noise assessment indicates that operational traffic noise would generate less than 0.5 dBA additional traffic noise, which is considered insignificant. Nevertheless, the recommended conditions of approval would require CCA to prepare a Traffic Management Plan to ensure that traffic noise impacts on existing and future residents in the area are kept to a minimum.

5.5 Air Quality

Construction

The construction of the project would involve demolition of existing structures, site excavation and heavy vehicle movements. CCA prepared an Air Quality Management Plan to address the impacts associated with construction. The mitigation measures proposed in this plan include water spraying of exposed areas, stockpile management, controlled site vehicle movements, regular maintenance of erosion control structures and covering of heavy vehicle loads. The plan also outlines a monitoring program for deposited dust which would be implemented during construction. The Department believes that the proposed construction works can be adequately managed by the measures proposed in the plan.

Operation

The operation of the project would generate some additional emissions associated with the activities on the site and transportation of products to customers. However, CCA's air impact assessment indicates that there is significant existing capacity in the local airshed to accommodate the slight

increases in vehicle emissions that would occur as a result of the proposal. The assessment also indicates that the project would actually reduce air emissions and greenhouse gas emissions from the site because the automated high bay warehouse would substantially reduce reliance on the existing fleet of forklifts on the site. Regionally the project would also achieve greenhouse gas savings through a significant reduction in double and triple-handling of product currently required by CCA's existing transfer, storage and distribution system. Overall, the project is expected to reduce greenhouse emissions associated with CCA's operations by more than 50% (see Table 8).

Table 8: Summary of Greenhouse Gas Reductions

Year	Predicted CO ₂ Equivalent Emissions (tonnes/year)			
	Baseline Scenario	Projected Scenario	Total Saving	Percentage Saving
2008	2,212	1,239	973	56
2015	2,876	1,541	1,335	54
2020	3,462	1,803	1,660	52

CCA has prepared an Air Quality Management Plan for the project, which includes measures to minimise vehicle movements on-site and in the regional road network, and maintenance requirements for CCA's vehicle fleet and contractors. CCA's air impact assessment concluded that these measures would ensure that air quality impacts are within acceptable limits. Both the Department and the DEC are satisfied with CCA's air quality assessment, and agree that the project is unlikely to result in any significant air quality impacts.

5.6 Stormwater

Construction

The proposed development involves demolition, excavation and site preparation works which could generate erosion and sedimentation. CCA has prepared an Erosion and Sedimentation Control Plan which includes measures such as sediment fences and filters at key drainage points, and truck shaker trays at all vehicle access points. The recommended conditions of approval require CCA to implement this plan prior to the commencement of construction.

Operation

Existing stormwater infrastructure at the site currently drains both the site and an area outside the site. There are currently no gross pollutant traps or other forms of filtration on the site, and stormwater runs through a trunk drain directly into Toongabbie Creek. To improve the management of stormwater on the site, CCA proposes to divert stormwater into two separate on-site detention systems for trapping and filtration prior to release to Toongabbie Creek (some water would be retained for on-site irrigation). The release outlets would be upgraded to include scour protection and energy dissipation features which would reduce the potential for runoff to cause erosion in Toongabbie Creek. The proposed stormwater measures would improve the quality of stormwater runoff from the site, and have been designed in accordance with relevant Council and Department of Natural Resources (DNR) guidelines.

The DNR raised no objections to the proposed project, and provided conditions which have been incorporated into the recommended conditions of approval. These conditions require CCA to prepare a Vegetation Management Plan for the project to minimise the impact on the riparian zone along Toongabbie Creek. They also provide design criteria for the stormwater outlets at the site. The Department and DNR are satisfied that these conditions would ensure that stormwater is appropriately managed.

5.7 Other Issues

Other issues raised in the EA, by government agencies or in public submissions are considered to be minor issues, components of key issues or of minor environmental impact. The Department is satisfied that they can be controlled, mitigated or managed through appropriate conditions of approval.