

MODIFICATION REQUEST:

26 Broadway, Chippendale

MP 08_0253 MOD 3 – Modification to the approved central thermal plant

Director-General's Environmental Assessment Report Section 75W of the Environmental Planning and Assessment Act 1979

April 2012

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1. BACKGROUND

1.1 The site

Frasers Broadway Pty Ltd ('the Proponent') has lodged an application (MP 08_0253 MOD 3) to modify the approved Project Application MP 08_0253 pursuant to Section 75W of the *Environmental Planning and Assessment Act 1979* ('the Act'). The application seeks to modify the approval to stage excavation and construction of a reduced basement component to install a single gas engine, being used in co-generation mode. The proposal will revert to trigeneration once Stage 2 is operational.

The subject site, 26 Broadway, Chippendale, is the former Carlton & United Breweries site, located at the south-western end of the Sydney Central Business District. The approved area designated for tri-generation treatment plant is positioned below Blocks 1 and 4 (and includes the brewery yard), in the north western portion of the site, with frontage to Broadway and Abercrombie Streets (Figure 1).



Figure 1: Blocks 1 & 4- project area located within orange outline, area of below ground works are located within pink outline

1.2 Previous Approvals

On 5 February 2009, the then Minister for Planning approved a Concept Plan (MP 06_0171 MOD 2) for redevelopment of the site for a mix of residential, commercial, retail uses and public open space. Details of the tri-generation facility were required to be provided with future project applications related to residential, commercial or retail development.

On 26 May 2010, the Planning Assessment Commission (PAC) granted approval to a Project Application (MP 08_0253) for:

- construction of a new 10-15 storey commercial building accommodating:
 - o 5 levels of basement car parking;

- space at basement level for installation of a tri-generation plant (plant not included within approval);
- o retail and commercial floor space;
- o child care centre.
- excavation below Blocks 1 and 4 and the Brewery Yard;
- demolition of rear ground floor bar of the Australian Hotel;
- demolition of the rear one storey bathroom and additions of the heritage terrace group known as 8-12 Abercrombie Street; and
- construction of the surrounding public domain.

The approval has been modified as follows:

- **MOD 1** approved by the Deputy Director General of Development Assessment and Systems Performance on **16 February 2012** approved a modification involving:
 - staged the construction of the basement to Blocks 1 and 4. Stage 1 included excavation and installation works to provide for the Central Thermal Plant (CTP) and associated infrastructure. Stage 2 is for excavation and construction of the remaining basement area to Blocks 1 and 4.
 - varied the approved tri-generation basement shell footprint (renamed Central Thermal Plant) to install the tri-generation facility and associated infrastructure;
 - excavate and alter the basement of the Brewery Building;
 - revise the design of the brewery yard and services; and
 - install rises within the chimney stack and heritage buildings.
- MOD 2 is currently under assessment and forms part of a modification submitted by the proponent to modify achievement of the Green Star rating for the Concept Plan and Project Application approvals.

2. PROPOSED MODIFICATION

This modification seeks to stage the excavation and construction of Blocks 1 and 4 as follows:

- Stage 1 is to excavate and construct a reduced CTP basement shell and install a single 1.0MW co-generation gas engine and associated infrastructure;
- revise the design of the brewery yard and services;
- re-utilise the existing chimney stack to exhaust 4 gas boilers and to install a new chimney stack to the west of the heritage buildings in the Brewery Yard to exhaust the gas engine; and
- Stage 2 is to excavate and construct all remaining works forming Blocks 1 and 4.

Refer to **Figure 2** and **Appendix A** for a comparison of plans and elevations between the approved Project Application and the Section 75W proposal.

The application also seeks to amend conditions to enable works required to be completed prior to the release of Stage 2 Construction Certificate, ahead of the surrounding public domain.

Construction of CTP, 26 Broadway, Chippendale MP08_0253 MOD 3

S75W Director-General's Report



Figure 2 shows the CTP (Stage 1) in context of the existing basement component to Blocks 1 and 4 (Stage 2).

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3. STATUTORY CONTEXT

3.1 Continuing Operation of Part 3A to Modify the Project Approval

In accordance with Clause 3 of Schedule 6A of the Act, section 75W of the Act as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 64, continues to apply to transitional Part 3A projects.

Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove the modification of the project under section 75W of the Act.

3.2 Modification of the Minister's Approval

The modification application has been lodged with the Director-General pursuant to Section 75W of the Act. Section 75W provides for the modification of a Minister's approval including *"revoking or varying a condition of the approval or imposing an additional condition of the approval"*.

The subject modification seeks to change the terms of the Minister's determination through amending the conditions of approval. On this basis, a modification is required.

3.3 Environmental Assessment Requirements (DGRs)

Section 75W(3) of the EP&A Act provides that the Director-General may notify the proponent of environmental assessment requirements (DGRs') with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.

In this instance, following an assessment of the modification request, it was not considered necessary to notify the proponent of environmental assessment requirements pursuant to Section 75W(3) with respect to the proposed modification, as suitable information was provided to the department to consider the application.

No additional environmental assessment requirements were issued with respect to the proposed modification, as sufficient information has been provided to the Department in order to consider the application. Further, the issues raised remain consistent with the key assessment requirements addressed in the original DGR's.

3.4 Delegation

The Minister has delegated his functions to determine Section 75W modification requests to the Department where:

- the relevant Council has not made an objection;
- a political donation statement has been made, but only in respect of a previous related application; and
- there are less than 10 public submissions in the nature of objections.

Council has not objected to the proposed modification subject to the conditions of approval being satisfied; a political disclosure statement has been made, but only in respect of the original application; and the Department did not receive any public submissions.

Accordingly, the application is able to be determined by the Deputy Director General of Development Assessment & Systems Performance, under delegation.

4. CONSULTATION AND EXHIBITION

Under Section 75X (2) (f) of the Act, the Director-General is required to make the modification request publicly available. The modification request was made available on the Department's website and referred to City of Sydney Council, Office of Environment and Heritage, Transport for NSW, Heritage Branch, Sydney Water and TransGrid for comment. Due to the nature of the proposed modification, the modification request was not exhibited by any other means. No public submissions were received on the modification request.

City of Sydney Council

Council raise no objection to the proposed modification, subject to relevant conditions relating to the Central Thermal Plant approved under MOD 1 being maintained. The Department notes that the production size of 1.0MWe is not above that previously modified 1.8MWe and that the previously approved conditions remain appropriate. On this basis, Council's considerations are satisfactorily addressed.

Office of Environment and Heritage (OEH)

OEH has reviewed the proposal for a 1.0 MWe cogeneration plant and recommend measurements and verifications over a 12 month period to record the operating efficiency of the proposed tri-generation system. On this basis, OEH recommend an amendment to Condition F8 – Measurement and Verification of the Tri Generation System as previously modified. The Department is satisfied that the monitoring over a 12 month period will provide the necessary data to confirm how the tri generation technology makes a contribution towards ESD for the site. Accordingly, an amendment to Condition F8 is recommended.

Need for Environment Protection Licence.

OEH advise the proposal will continue to require an Environment Protection Licence. In this respect, an existing condition (Condition B44) remains appropriate and is amended accordingly.

Emissions

The proponent submitted a Plant Engineering Services PA report, prepared by WSP dated January 2012 which has been reviewed by OEH. OEH has advised that air quality impacts, including the proposed stack height of the low level chimney, cannot be adequately assessed at this stage given that final test results for air modelling have not been provided. On this basis, OEH recommend that an air quality assessment compliant with the Environment Protection Authority criteria be submitted for approval prior to construction. Accordingly, a condition of approval is recommended to which the proponent is agreeable.

Transport for NSW (TfNSW)

TfNSW advise they agree with the proponent's amended Condition B37 to enable Stage 1 works to proceed, being the installation of a single co generation gas engine, which does not involve works likely to impact on the interim metro corridor. However, TfNSW requests that in addition to the proposed amendment, the condition be updated to reflect Transport for NSW being responsible for the Interim Metro Corridor. Accordingly, an additional amendment to Condition B37 is recommended.

Heritage Branch

The Heritage Branch raises no objection to the proposed modification. The Department considers the proposed external changes to the existing heritage buildings will only have a minor impact on the appearance of the historic brewery buildings and brewery yard.

Other Authorities

TransGrid and Sydney Water did not provide a response to the modification application.

5. CONSIDERATION OF PROPOSED MODIFICATIONS

The Department considers the key issues associated with this modification to be:

- staged construction of basement to Blocks 1 and 4;
- air quality;
- residential amenity; and
- insert timing for staging into approval conditions for Blocks 1 and 4.

Staged Construction of Central Thermal Plant within basement to Blocks 1 and 4

The Project Application for Blocks 1 and 4 originally split the Central Thermal Plant (CTP) (previously described as a tri-generation plant) between the present basement location under the Brewery Yard within Block 4B and the basement area to Block 4 south. The previous modification (MP 08_0253 MOD 1) sought to combine the tri-generation gas facility and thermal plant within a single location over 4 levels under the Brewery Yard within Block 4B.

The scope of works for Stage 1 reduces the size of the CTP basement structure by removing the tri-generation plant, including thermal storage, and reducing the previously modified depth from 4 to 2 levels. In effect, the proposed modification reduces the tri-generation plant production to a single 1.0MWe co-generation gas engine. Stage 2 comprises the remainder of works to Blocks 1 and 4.

The proponent has advised that the capacity within the CTP basement is sufficient to accommodate 2 x 1.0MWe co-generation gas engines. Notwithstanding, the final size of the CTP facility (either co-generation or tri-generation mode) is the subject of discussions currently underway with potential operators and will be confirmed in Stage 2. The Department therefore recommends that the final details for installing the tri-generation equipment be provided prior to the release of the Construction Certificate for Stage 2. An appropriate condition of approval is therefore recommended (Condition A13).

The Department is supportive of the proposed modification for the following reasons:

- the provision of a CTP facility in co-generation mode that uses gas rather than coal to produce electricity for on site use will ensure green house gas emissions are reduced, assist towards achieving a 6 Star Green Star Precinct and it makes an important contribution towards ESD for the site, consistent with Condition B12 - ESD and Sustainable Design of the approved Concept Plan (MP 06_0171 MOD 2); and
- the designated approved CTP basement location will continue to house a gas engine in cogeneration mode (as a minimum) consistent with Condition A11 - CTP of the Project Approval for Blocks 1 and 4 (MP 08_0253).

The Department is satisfied that the proposed modification remains consistent with the approved use, to provide a structure that can house CTP (gas engine technology appropriate to produce power and useable heat in a single process) for use by building blocks on site. Further, a co-generation facility capable of reducing green house gas emissions will continue to make an important contribution towards Ecologically Sustainable Development on the site.

On this basis, the Department is supportive of staged construction to expedite delivery and operation of the co-generation facility ahead of the remainder of Blocks 1 and 4.

Air Quality

The proponent has advised that exhaust gases from the boilers of the 4 hot water systems associated with the co-generation engine discharge through the existing Irving Street Brewery building chimney (measuring 54 metres above ground). A separate, low level chimney (measuring 34 metres above ground) is proposed to exhaust the gas engine and is to be located to the west of Building 30 and 26 within the Brewery Yard. However, the proponent also

advises that conclusive test results for air quality modelling are to be provided once the size of Stage 2 is finalised.

On this basis, the Environment Protection Authority (EPA) advised that the height of the proposed stack is dependent upon final air quality test results to ensure that appropriate safeguards for air quality impacts can be appropriately controlled in proximity of sensitive residential receptors (balconies, windows within a dense urban environment). Accordingly, EPA recommends that a conclusive air quality assessment be submitted and approved prior to construction. Accordingly, a new condition is recommended (Condition E24).

The Department concurs with the EPA that in the absence of air quality modelling test results to adequately safeguard sensitive residential uses (balconies and windows) from emissions produced from the co-generation plant, it is recommended a condition be included as part of the modification requiring that prior to construction, air quality levels to satisfy EPA licensing requirements be approved. On this basis, the Department is satisfied that any health concerns associated with air quality can be appropriately and fully considered and managed.

The EPA also advised that:

- Condition E21 Engine and Generator Gas Fired Power Plant should be amended to correct a typographical error in relation to the output of emissions. The Department notes the need for a corrected limit on emissions; and
- Condition B44 Environment Protection Licence and F8 Measurement and Verification of the Tri Generation Systems be amended to ensure EPA is the Certifying Authority for the licensing and measurement and verification report for the 1.0MWe co-generation gas engine.

Residential amenity

The proposal to reduce the scale and generator size of the CTP facility will not alter the present basement location under the Brewery Yard within Block 4b. On this basis, the Department considers the proposal will not result in additional construction and or operation related impacts of noise/vibration from that previously conditioned. Notwithstanding, OEH advised that noise impacts will be assessed when the proponent applies for an Environmental Protection Licence.

As previously discussed, an air quality assessment is required to be submitted and approved prior to construction to ensure appropriate safeguards can be achieved to limit gas exhaust emissions in proximity of residential uses both within the site and adjoining upon operation.

Further, the proposed modification does not alter the height, general bulk scale or setbacks of the approved buildings or significant fabric to the heritage brewery buildings and or brewery yard. Changes are limited to the brewery yard to house a small green substation and stair and air shaft. On this basis, the Heritage Council of NSW has no objection to approval of modifications to the Brewery buildings and Brewery Yard. Further, the Department is satisfied the changes are minor and will have little environmental impact upon the heritage significance of the Brewery building as most of the original built fabric and layout are to be retained.

Accordingly, the department is satisfied that the existing conditions of approval remain appropriate to adequately address environmental / visual impacts, associated with the current modification.

Staging of Approval conditions for Blocks 1 and 4

The proponent seeks approval to stage the project approval to expedite delivery and operation of those works relevant to Stage 1 and Stage 2 from the surrounding public domain works.

The Department notes the project approval conditions refer to the relevant construction certificate and do not provide the clarity and certainty sought by the proponent to deliver parts of

Blocks 1 and 4 prior to the remainder of the site. The Department considers that to insert timing for staging (either Stage 1 or Stage 2) into each existing condition will enable delivery of the CTP ahead of the remainder of Blocks 1 and 4 and, enable completion of building works for Blocks 1 and 4 before the public domain of the entire site.

The Department is satisfied that the staging of existing project approval conditions for Blocks 1 and 4 will not result in additional impacts for adjoining development and is therefore acceptable.

6. CONCLUSION AND RECOMMENDATION

The Department has assessed the application on its merits and the proposed modification is considered to be reasonable and will not result in any significant changes to the development as approved.

The Department is satisfied that the reduced central thermal plant will continue to provide an environmentally sustainable solution for redevelopment of the site and does not change the character of the approved development. Further, the Department is satisfied the proposal can be constructed and operated to ensure acceptable amenity of future residents, both within the development itself and for neighbouring properties subject to conditions.

The modified proposal remains consistent with the overall original design intent and terms of approval and is considered to be acceptable. It is therefore recommended that the application be approved, subject to the modified conditions.

It is recommended that the Deputy Director General of Development Assessment & Systems Performance, as delegate for the Minister for Planning and Infrastructure:

- (a) consider the findings and recommendations of this report; and
- (b) **approve** the modifications under delegated authority, under section 75W of the Environmental Planning and Assessment Act, 1979; and
- (c) sign the attached Instrument of Modification Approval for MP 08_0253 (MOD 3).

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27.4.12

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