

- 2 JUL 2018

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**NOTICE TO APPLICANT OF DETERMINATION OF AN APPLICATION TO MODIFY A
DEVELOPMENT CONSENT**

Environmental Planning & Assessment Act 1979

Pursuant to the Act, notice is hereby given of the determination by the consent authority of the Development Application No. 118/2017 (Part 2) (Modification Administration Reference No. DAM 49/2018).

In accordance with the Act the Development Application has been determined by the GRANTING OF CONSENT UNDER DELEGATED AUTHORITY SUBJECT TO THE CONDITIONS DESCRIBED BELOW.

CURRENT CONSENT

This Consent modifies Development Consent No. 118/2017 relating to the land described and the following proposed development.

**TORRENS TITLE SUBDIVISION COMPRISING OF 58 RESIDENTIAL LOTS,
NINE (9) SUPERLOTS, THREE (3) PUBLIC RESERVES
& THREE (3) RESIDUE LOTS**

LOTS 4003 & 4004 DP 1235539 & LOT 2056 DP 1203745

HARBOUR BOULEVARD, SHELL COVE

Determination date of consent: 14 MARCH 2018¹



Victoria Nicholson
Senior Development Assessment Officer
City Development - Planning

On behalf of Carey McIntyre, General Manager

1. As Modified (Part 2) on 29 June 2018

CC: DPI Water
jeremy.morice@dpi.nsw.gov.au
Your Ref: 10 ERM2017/0420

Roads & Maritime Services
development.southern@rms.nsw.gov.au

ENGLISH

If you have difficulties understanding this correspondence, please contact Council by phone (4221 6111) or, if you wish, come into the office where staff will be pleased to assist you and if required, an appropriate interpreter will be called.

MACEDONIAN

Ако имате тедшкотии да ја разберете оваа кореспонденција, ве молиме контактирајте ја Општината по телефон на 4221 6111 или ако сакате, дојдете во канцеларијата каде што службениците со задоволство ќе ви помогнат, и ако е потребно, ќе повикат соодветен преведувач.

SPANISH

Si tuviera dificultades para entender esta correspondencia, le rogamos llamar por teléfono al Municipio, número 4221 6111, o bien, si lo prefiere, puede venir a nuestras oficinas, donde el personal tendrá el agrado de ayudarle y, si fuera necesario, de llamar a un intérprete.

GERMAN

Wenn Sie Schwierigkeiten haben, diese Korrespondenz zu verstehen, setzen Sie sich bitte telefonisch mit der Gemeinde in Verbindung (4221 6111) oder, falls Ihnen das lieber ist, kommen Sie in unser Büro: wir werden Ihnen gerne behilflich sein und werden, falls nötig, einen estsprechenden Dolmetscher hinzurufen.

ITALIAN

Se non riuscite a capire bene questa lettera, vi preghiamo di telefonare al Comune, numero telefonico: 4221 6111. Se preferite, potete venire di persona al nostro ufficio dove il personale sarà felice di aiutarvi. Se richiesto, un interprete sarà messo a vostra disposizione.

GREEK

Αν έχετε δυσκολία να καταλάβετε την παρούσα αλληλογραφία, παρακαλούμε επικοινωνήστε με τη Δημαρχία (Τηλ.4221 6111), ή αν επιθυμείτε ελάτε στα γραφεία όπου το προσωπικό θα σας βοηθήσει ευχαρίστως και αν χρειαστεί θα κληθεί κατάλληλος διερμηνέας.

CROATIAN

Ako ne možete razumjeti ovo pismo, molimo nazovite općinu na 4221 6111 ili, ako želite, dođite u naš ured gdje će vam osoblje rado pomoći i po potrebi nazvati odgovarajućeg tumača.

PORTUGUESE

Se tem dificuldade de entender esta correspondência, aueira contactar o Conselho Municipal pelo telefone (4221 6111) ou, se o quiser, queira vir á secretaria onde o pessoal terá prazer de lhe prestar ajuda e, se for preciso, mandar-se-á vir um intérprete.

SERBIAN

Ако имате потешкоћа у разумевању овог дописа, молим назовите Општину на 4221 6111 или, ако желите, дођите у нашу канцеларију где ће вам особље радо помоћи, или, где је потребно, назвати одговарајућег тумач.

TURKISH

Bu yazıyı anlamakta zorluk çekerseniz, Belediyeyi lütfen telefonla 4221 6111 arayınız, veya dilerseniz ofise geliniz; oradaki görevliler size memnuniyetle yardım edecekler ve gerekirse uygun bir tercümanla temasa geçilecektir.

POLISH

Jeśli masz trudności ze zrozumieniem treści niniejszego pisma, skontaktuj się z Radą Miejskiej (Council) telefonicznie pod numerem 4221 6111, lub też - jeśli wolisz - przyjdź do naszego urzędu, gdzie personel z przyjemnością udzieli Ci pomocy i - w razie konieczności - zorganizuje pomoc tłumacza.

MODIFIED CONSENT RELATES TO:

Modifications approved under DA No. 118/2017 (Part 2) are:

- Correction in the description of the approved subdivision to refer to nine (9) superlots, and
- Correction of condition no. 12 to refer to a 12.5m rigid vehicle.

The conditions of consent are set out as follows:

This development consent has been divided into different parts according to where, during the development process, each condition may be most relevant. Some conditions may be appropriate to more than one part. All conditions must be complied with.

PART A - ADMINISTRATIVE CONDITIONS

**1 Construction Certificate (Subdivision) & PCA Notification
*Environmental Planning & Assessment Act 1979 Section 81A***

Before any site works, building or use is commenced, the person having the benefit of the development consent must:

- obtain a Construction Certificate from Shellharbour City Council or other accredited certifier, and
- appoint a Principal Certifying Authority.

For Torrens Title Subdivision, the appointed Principal Certifying Authority must be Shellharbour City Council.

2 Prescribed Conditions

This development consent is subject to the prescribed conditions made under the *Environmental Planning & Assessment Regulation 2000*.

3 Development in Accordance with Plans

The development must be in accordance with the following approved Development Application plans and documents as endorsed by Council's stamp except where modified by conditions of this consent. Where there is an inconsistency between the approved plans/documentation and the conditions of this consent, the conditions will take precedence to the extent of the inconsistency.

Name of Plan/Document	Prepared By	Reference	Date
Subdivision Plans	-	D216137 Sheets 1-4 of 5	Undated Received 12.09.2017
		D216137 Sheet 5 of 5	01.12.2017
Staging Plan	-	-	Received 25.07.2017
Boat Harbour Precinct E Designated Bin Collection Locations	WorleyParsons	Road 22 & 16 301015-03163-CI-DSK-7600	15.08.2017
		Road 21	28.08.2017

Development Application No. 118/2017 (Part 2)
 Lots 4003 & 4004 DP 1235539 & Lot 2056 DP 1203745, Harbour Boulevard Shell Cove

Name of Plan/Document	Prepared By	Reference	Date	
		301015-03163-CI-DSK-7601		
Precinct E & Wetlands 6 Landscape & Boundary Walls	GroupGSA	Cover sheet 13294 EW- 0000 Issue B	28.02.2017	
		General Arrangement 13294 EW- 1100 Issue D		
		Details 13294 EW- 4003 Issue A		
		W6 General Arrangement 13294 EW- 1200 Issue F		
		W6 Section 13294 EW- 3001 Issue B		21.02.2017
		Boundary Wall Details 13294 EW- 4001 Issue C		28.02.2017
Boundary Wall Details 13294 EW- 4002 Issue C				
Waste Management Plan	Australand Corporation (NSW) Pty Ltd	-	17.03.2017	
Boat Harbour Precinct E Cut and Fill Bulk Earthworks Plan	WorleyParsons	301015-03163-CI-DSK-7002 – Revision E	05.09.2017	
Boat Harbour Precinct E Grading Plan	WorleyParsons	301015-03163-CI-DSK-7001 – Revision J	22.09.2017	
Boat Harbour Precinct E – Stormwater Concept Plan	WorleyParsons	301015-03163-CI-DSK- 7015– Revision E	01.09.2017	
Shell Cove Precinct E, Wetland 6, Wetland 7 and Northern Lands Flood Assessment	Advisian WorleyParsons Group	301015-03163	25.09.2017	
Acid Sulfate Soil Management Plan Precinct E, Northern lands, WL6 and WL7 Shell Cove	Coffey Geotechnics Pty Ltd	GEOTWOLL02058CH-AA Rev 3	13.02.2017	
Erosion and Sediment Control Plan & Details	WorleyParsons	301015-03163-CI-DSK-7016	01.09.2017	
		301015-03163-CI-DSK-7017	13.12.2016	
Acoustic Requirements Letter	Wilkson Murray	05032-CP	31.07.2017	

4 Compliance with Notations on Drawings

Works must comply with any annotations on the approved plans.

5 NSW Department of Primary Industry - Water (DPI-Water)

The development must comply with General Terms of Approval and advice of the DPI - Water, as contained in their letter dated 27 May 2017, consisting of five (5) pages, and which forms part of this Notice of Determination.

6 Staging of Development

The development shall be generally staged as follows:

Stage	Development
1	includes the 58 residential lots, 2 superlots for future medium density housing development and those roads highlighted in yellow on the Staging Plan
2	includes 6 superlots for future medium density housing development and the roads highlighted in green on the Staging Plan
3	includes Wetland 6 and the road highlighted in pink on the Staging Plan.

All conditions of this consent apply to each stage, unless otherwise specified.

7 Limitations of Consent

No approval is granted for any future subdivision of the proposed superlots under this consent.

PART B - PRIOR TO ISSUE OF SUBDIVISION CONSTRUCTION CERTIFICATE

8 Amendments to Approved Plans

The amendments described below must be incorporated in the overall development and must be reflected in any plans prepared for the purpose of obtaining a Construction Certificate:

- a. The fence along the secondary frontage of Lots 5058 - 5041 must incorporate a gate and Lots 5042 – 5044 should incorporate a gate subject to public reserve landscape. The gate design and materials shall integrate with the design and materials of the fence as shown on the approved plans.
- b. Where the Road 11 (north) off-road concrete pad to be provided for the GPT service truck encroaches on the pedestrian-cycle shareway path it must be ensured that there is a minimum unobstructed width of 1m to allow uninterrupted movement of shareway path users. If the parking pad encroaches onto the shareway path, it is to be suitably linemarked and signed to indicate its purpose (for example, 'service vehicle parking').

9 Initial Geotechnical Report

A geotechnical report, prepared by a suitably qualified and experienced geotechnical engineer, must be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

The report must cover, but not be limited to, the following:

- a. extent and stability of proposed embankments including those acting as retarding basins,
- b. recommended Geotechnical testing requirements,
- c. level of geotechnical supervision for each part of the works as defined under AS 3798 - *Guidelines on Earthworks for Commercial and Residential Developments*,

- d. an analysis of the level of risk to existing adjacent structures/buildings including the scenario of a construction contractor using vibratory rollers anywhere within the site the subject of these works. In the event that vibratory rollers could affect adjacent structures/buildings, high risk areas must be identified on a plan and the approved engineering plans must be amended to indicate that vibratory rollers must not be used within that zone,
- e. the impact of the installation of services on overall site stability and recommendations on short term drainage methods, shoring requirements and other remedial measures that may be appropriate during installation,
- f. the recommended treatment of any unstable areas within privately owned allotments,
- g. requirement for subsurface drainage lines, and
- h. overall assessment of the engineering plans for the proposed development and their suitability in relation to the site's geotechnical characteristics.

10 Soil and Water Management Plan (SWMP)

Prior to the issue of the Construction Certificate, a SWMP must be submitted to and approved by the Certifying Authority.

The SWMP must clearly identify site features, constraints and soil types together with the nature of the proposed land disturbing activities and specify the type and location of erosion and sediment control measures. In addition, rehabilitation techniques that are necessary to deal with such activities shall be referred to where applicable.

The SWMP must take into account the requirements of Landcom's publication *Managing Urban Stormwater - Soils and Construction (2004)* thus ensuring the following objectives are achieved, namely:

- a. minimise the area of soils exposed at any one time,
- b. conserve topsoil for reuse on site,
- c. identify and protect proposed stockpile locations,
- d. preserve existing vegetation and identify revegetation techniques and materials,
- e. control surface water flows through the development construction site in a manner that:
 - i. diverts clean run-off around disturbed areas,
 - ii. minimises slope gradient and flow distance within disturbed areas,
 - iii. ensures surface run-off occurs at non-erodible velocities, and
 - iv. ensures disturbed areas are promptly rehabilitated.
- f. trap sediment on site to prevent off site damage. Hay bales are not to be used as sediment control devices. To ensure regular monitoring and maintenance of erosion and sediment control measures and rehabilitation works until the site is stabilised (includes landscaping),
- g. specifies measures to control dust generated as a result of construction activities on site,
- h. temporary sediment ponds must be fenced where the batter slope exceeds 1 vertical to 5 horizontal,
- i. design scour protection for the 20 year ARI event at all inlet and outlet structures, and
- j. include measures to prevent the tracking of sediment off the site.

11 Soil and Water Management Plan (SWMP) Bond

The developer must lodge a bond to the amount of \$200 per lot to ensure compliance with erosion and sediment control measures incorporated in the approved Soil and Water Management Plan (SWMP). This bond must be in the form of an irrevocable bank guarantee made out in favour of Shellharbour City Council, and must operate as follows:

- a. the bond must be submitted to Council prior to the release of the Subdivision Construction Certificate,
- b. the bond must be held by Council until the expiration of the defects liability period for the subdivision, which commences at the completion of all engineering works, including placement of the final seal on all new roads, and
- c. if Council is to advise the developer that maintenance work is required on the erosion and sediment control measures, remedial work shall be substantially commenced within forty eight (48) hours from the time of advice. Failure to comply with this direction will give Council the right to employ an appropriate contractor, (which could include the Soil Conservation Service) to undertake such measures as deemed necessary and fund these works from the bond guarantee.

12 Road Design

Modified Condition – DA No. 118/2017 (Part 2) [DAM 49/2018]

The road design must comply with the following:

- a. the grading and layout of all roads and lots must not allow for trapped low points and in addition ensure that overland flow is passed safely over public land,
- b. the road pavement must be designed with one layer of asphalt having a minimum thickness of 40mm AC 14. The pavement design for the proposed roads must be carried out by a qualified Geotechnical/Civil engineer in accordance with *AUSTROADS Guide to Pavement Technology*,
- c. all vertical and horizontal alignment of all streets and all street intersections within the development must have adequate sight distance provided in accordance with AUSTROADS requirements,
- d. the geometric design of all roads, traffic facilities, intersection treatments, mid-block devices and entry features must be such as to permit a 12.5m rigid vehicle to manoeuvre in order to enter and leave each road travelling in a forward direction and without leaving the carriageway, and
- e. the relevant drawings must be annotated and properly referenced showing compliance with this condition. The drawings must be submitted with application for a Subdivision Construction Certificate for approval by the Certifying Authority.

13 Road Design – Waste Collection

Roads terminating with T-Head must be designed to enable a 12.5m heavy rigid vehicle to enter and exit in a forward motion in a maximum three point turn. The 12.5m heavy rigid vehicle swept paths must show that waste collection services can be provided for those dwellings located in a T head and still comply with the requirement that the waste collection vehicle will not make more than one reverse movement. Details demonstrating compliance with this condition must be submitted with application for a Subdivision Construction Certificate for approval by the Certifying Authority.

14 Road Drainage Plans

Road and drainage plans must be prepared by a suitably qualified engineer in accordance with Council's *Subdivision Design Code*. The plans must be submitted to the Certifying Authority for approval prior to the release of the Subdivision Construction Certificate. All road and drainage work must then be constructed in accordance with Council's construction standards and approval at no cost to Council.

All stormwater pipes within the road reserves and within drainage easements intended to be dedicated to Council must be installed generally to the HS3 standard in accordance with the current edition of AS 3725 - *Design for Installation of Buried Concrete Pipe*.

15 Structural Design of Deep Pits

All pits deeper than 0.9 metres shall be designed by a certified structural engineer and be in accordance with AS3600-2009. Pits deeper than 1.2 metres must have galvanised steel step irons (plastic coated black steel step irons will not be accepted) and pits deeper than 1.8 metres must be reinforced concrete. Step irons are to be at 300mm interval spacing from bottom of pit. Top step is to be a minimum 500mm below top surface level. Details to this effect must be incorporated on the detailed drainage design that is submitted to the Certifying Authority for the Subdivision Construction Certificate.

16 Flooding

The plans submitted with the Subdivision Construction Certificate application for the development must comply with the following restrictions to the satisfaction of the Certifying Authority:

- a. Building envelopes must be provided at a level equal to or greater than the Flood Planning Level, in accordance with the approved Shell Cove Precinct E, Wetland 6, Wetland 7 And Northern Lands Flood Assessment, dated 25 September 2017.
- b. An engineer's certificate certifying that the proposed pedestrian bridge over wetland 6 and the Road 11 road bridge are designed to withstand the forces of floodwaters, debris, submergence and buoyancy up to and including the Probable Maximum Flood level of 5.0 m AHD. The soffit level of both bridges must have a clearance of 500mm above the 1%AEP Flood Level.

17 Retaining Walls

Retaining walls that exceed 600mm in height must be designed by a practising structural engineer and a Construction Certificate must be obtained prior to the commencement of work on the retaining wall.

All retaining walls must be constructed of masonry materials. All retaining walls must be located within a residential lot, including the proposed retaining walls along the frontage to Harbour Boulevard and the reserve connecting to Road 16. Retaining wall details to be submitted with the Construction Certificate.

18 Controlled Activity Approval

A controlled activity approval for any works or activity on water front land must be obtained from DPI - Water prior to the issue of a Subdivision Construction Certificate for works or activity on waterfront land.

19 Electricity Substation

Where required, the land owner must dedicate to the applicable energy supplier, free of cost, an area of land within the development site (excluding any approved landscaped area) to enable an electricity substation to be installed. The size and location of the substation must be submitted for approval of both Council and the energy provider prior to the Subdivision Construction Certificate being issued.

20 Landscape & Street Tree Plan

A detailed landscape and street tree plan prepared by a Landscape Architect must be submitted with the Subdivision Construction Certificate. In addition to a soft copy, one hard copy is to be provided. The plan must be prepared in accordance with the *Shellharbour Development Control Plan* and the requirements provided in the table below:

Item	Landscape considerations/requirements
General	<ul style="list-style-type: none"> • The use of decomposed granite is not acceptable within the Shellharbour LGA area. An alternative material is to be used. • The Landscape plan must exclude all species listed as 'unsuitable' in Appendix 7 of the <i>Shellharbour Development Control Plan</i>. For example, <i>Cupaniopsis anacardioides</i> (Tuckeroo) and <i>Rhaphiolepis indica</i>, (Indian Hawthorn) are to be excluded as these species are considered environmental weeds.
Plant Schedule – Shrub Mix S1	Omit the use of <i>Acacia longifolia sophorae</i> – environmental weed within the Shellharbour LGA
Shareway Landscape	<ul style="list-style-type: none"> • Omit S1 within fork points of the shareway and replace with suitable species with growth habit that allows for easy surveillance and maintenance. • The use of the combination of bioretention plants M1 and shrub S1 planting within the landscape beds in close proximity to shareway and proposed residential lots will create surveillance and maintenance issues. • Landscape area between the shareway and residential pathway and property rear boundary amongst the residential pathways is to select for aesthetic (this may include screening of future walls), surveillance and maintenance issues. • Landscape planting adjacent to pathways shall ensure that there is no planting within one metre of the path, to allow for growth and ensure when growth is mature it does not extend over the pathway.
Seating Areas	<ul style="list-style-type: none"> • Relocate the proposed landscape bed opposite the seating area facing onto the wetland for visual viewing and surveillance issues or relocate seating area.
Macrophyte Plant Species & Works	<ul style="list-style-type: none"> • Omit the use of the plant species <i>Phragmites australis</i> and <i>Typha domingensis</i> as these species create choking of waterways. • The plant species <i>Juncus amabilis</i> should be replaced with the plant species <i>Juncus usitatus</i>. • Wetland species/design should consider the solar impacts of approved building height controls for development on adjoining lands. • Include the incorporation of piled rocks of a variety of sizes and logs amongst all areas of planted macrophytes within Wetland 6 to provide additional habitat for native fauna including frogs and reptiles.

Street Landscape	<ul style="list-style-type: none">• Omit any mixed planting adjacent to any pram ramp or pedestrian access to maximise motorist/pedestrian visibility. Replace with either turf or a ground cover with a mature height of 300mm.• PM2 planting mix to be listed in the plant schedule.• Omit the use of the tree species <i>Cupaniopsis anacardioides</i>. This species is creating havoc with self-seeding in our native bushland by bird dispersal.
Fencing & Public Reserve	Fencing adjoining the public reserve, Lot 5059, shall incorporate openings and masonry elements. Landscape beds shall be provided between the fence and reserve so as to soften the boundary interface. Species selected will be suitable for partially screening any sections of solid fencing and blank walls of any zero lot line buildings; this measure will also reduce graffiti risk.

21 Landscape Plan Construction Certificate Assessment

The developer must lodge with Council a fee as per Council's *Fees and Charges* for the assessment of the landscape plan prior to the issue of the Landscape Construction Certificate.

22 Street Tree and Landscape Inspection Fees

The developer must lodge with Council prior to the issue of the Subdivision Construction Certificate inspection fees in accordance with Council's *Fees and Charges* for:

- street tree and landscape works certification inspections, and
- street tree and landscape handover inspections following completion of the maintenance period.

23 Lot 5068 & Earthworks

The levels on proposed Lot 5068 are to remain as existing for the rear 50% depth of the lot to ensure that the transition to the Old Bass Point Road properties adjoining the eastern boundary is maintained at the existing conditions. Plans submitted with the Subdivision Construction Certificate must demonstrate compliance with the requirements of this condition to the satisfaction of the Certifying Authority.

PART C - PRIOR TO COMMENCEMENT OF WORKS

24 Unexpected Finds Contingency

An unexpected finds protocol for contamination must be prepared for the proposed works by a suitably qualified professional and submitted to the Certifying Authority prior to the commencement of works. The unexpected finds protocol should include procedures and protocols for managing risks should unexpected finds of contamination be identified at the site.

25 Aboriginal Heritage Induction

The applicant must ensure that the construction/project supervisors are fully informed and briefed with respect to the Consent and Aboriginal Heritage Permit (AHIP) No. 2534.

Prior to any works commencing on the land all staff, contractors and sub-contractors working on site must be inducted on Aboriginal Heritage implications and must sign acknowledgement of having received and understood this induction. This induction record must be retained on site for the duration of the construction works.

26 Site Meeting with Council

A site meeting with Council's Engineer, the applicant and the contractor must be held not less than 7 days prior to the commencement of work on site.

27 Soil and Water Management Plan Implementation (SWMP)

The measures required in the Soil and Water Management Plan approved by the Certifying Authority must be implemented prior to the commencement of works.

28 Construction Traffic Management Plan (CTMP)

Prior to the commencement of works, a CTMP detailing vehicle routes, number of trucks, hours of operation, access arrangements, impact on pedestrians and traffic control must be submitted to and approved by the Certifying Authority.

It is the developer's responsibility to adequately inform/brief for construction workers, sub-contractors and supervisors to ensure that the Construction Traffic Management Procedures are adhered to at all times.

29 Construction Environmental Management Plan (CEMP)

Prior to the commencement of works, a CEMP must be submitted to and approved by the Certifying Authority. The CEMP must include but is not limited to:

- Sediment and erosion controls,
- Acid sulphate soils protocols,
- Management of fuels and chemicals,
- A contaminated lands including unexpected finds and asbestos protocols,
- Construction noise controls,
- Dust control measures,
- Cultural Heritage stop work protocol, and
- Native fauna protection measures.

a. Construction Noise

Measures to minimise disturbance to nearby residents from construction noise are to be detailed. The noise management level for works during standard hours is background + 10 dB(A). Above this, all feasible and reasonable work practices will be implemented, as defined in the *Interim Construction Noise Guideline* (Office of Environment and Heritage (formerly DECC), 2009). For works outside standard hours, the noise management level is background + 5 dB(A). Any works causing a highly noise-affected level of LAeq 75 dB(A) (represents the point above which there may be strong community reaction) must implement feasible and reasonable ways to reduce noise, such as restricting the times of very noisy works to provide respite to affected residences.

30 Site Management Plan

Prior to the commencement of works, the applicant must submit to and obtain approval for a construction and site management plan from the Certifying Authority that clearly sets out the following:

- a. what actions are proposed to ensure safe access to and from the site and what protection will be provided to the road and footpath area from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like,
- b. the proposed method of loading and unloading excavation machines, building materials and formwork within the site,
- c. the proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period,
- d. sediment and erosion control measures as per Landcom's publication 'Managing Urban Stormwater - Soils and Construction (2004)' also known as the 'Blue Book' or subsequent revisions,
- d. how it is proposed to ensure that soil/excavated materials is not transported on wheels or tracks of vehicles or plant and deposited on the roadway, and
- e. the proposed method of support to any excavation adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in civil engineering.

31 Sydney Water Servicing

Application for a Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be made to Sydney Water Corporation prior to the commencement of works.

Application must be made through an authorised Water Servicing Coordinator. For assistance visit www.sydneywater.com.au > *Plumbing, building and developing* > *Developing* > *Land development* or telephone 13 2092.

32 Dilapidation Report

The beneficiary of the consent is to prepare a Dilapidation Report of any existing damage to public areas in the vicinity of the development site. The report must be supported with suitable photographic records. This information must be submitted to Council prior to the commencement of work.

33 Public Liability

Where occupation of and/or works within Council's road reserve are proposed, the beneficiary of this consent must provide evidence to Council of a Public Risk Insurance Policy with a minimum cover of \$20M for the full duration of the proposed works prior to the commencement of works. The Policy must note Council as an interested party.

PART D – DURING CONSTRUCTION WORKS

34 Site Documentation

A full set of approved documents (Development Consent, Construction Certificate Drawings and associated documentation) must be maintained on site for the duration of the construction works.

35 Precinct E Urban Design Guidelines

All works are to be consistent with the *Precinct E1 and E 2 Urban Design Guidelines* where relevant. Where there is an inconsistency between these urban design guidelines and the

conditions of this consent, the conditions will take precedence to the extent of the inconsistency.

36 Aboriginal Heritage

The applicant must ensure that the works have been undertaken in accordance with the Consent and Aboriginal Heritage Permit (AHIP) No. 2534. It is essential that works or vehicle movements do not occur in the immediate vicinity of registered Aboriginal site AHIMS 52-5-207.

The applicant must undertake works in accordance with the Approved Archaeological and Heritage Protection Plans (Protection Plans) and the ss87/90 Consent and Permit (No. 2534). The applicant must detail measures that have been taken to ensure compliance with the Conditions outlined within the Consent/Permit and the Protection Plans.

37 Hours of Work

Noise generating activities including construction, excavation and delivery of equipment and materials, must only be carried out between:

- 7am to 5pm Mondays to Fridays, and
- 8am to 1pm Saturdays.

38 Maintenance of Soil and Water Management Plan (SWMP)

The soil and water management controls must be maintained at all times during each stage of the development and checked for adequacy daily. The controls must not be removed until the development is completed and the disturbed areas have been stabilised to the satisfaction of the Certifying Authority.

Maintenance must include but is not limited to ensuring:

- a. all sediment fences, sediment traps and socks are properly placed and are working effectively, and
- b. that drains, gutters and roads are maintained clear of sediment at all times.

It is an offence under the *Protection of the Environment Operations Act 1997* to allow soil or other pollutants to fall or be washed into any waters or be placed where it is likely to fall or be washed into any waters. Substantial penalties may be issued for any offence.

39 Construction Environmental Management Plan (CEMP)

Management actions detailed in the CEMP must be implemented throughout construction works.

40 Open or Occupy a Roadway or Footpath - Section 138 Roads Act 1993

Prior to any physical works within Council's road reserve in such as (but not limited to) installing a driveway or connecting stormwater facilities, you will need to apply for approval under Section 138 of the *Roads Act 1993*. Fees are payable in accordance with Council's *Fees and Charges*.

To lodge your application you will need to submit the following information:

- a. detailed engineering drawings of the proposed works in the road and footpath area,
- b. a Traffic Management Plan,

- c. provision of Public Risk Insurance, and
- d. details of timing and length of works.

41 Acid Sulfate Soils Management Plan

In the event that acid sulphate soils are encountered during works, management actions detailed in the Coffey (Feb 2017) Acid Sulphate Soil Management Plan must be implemented.

42 Subdivision Design Code Compliance

All works to be dedicated as a Council asset must be installed/constructed in accordance with Council's *Subdivision Design Code*.

43 Lots and Site Filling

All lot and site filling must be performed under level 1 Geotechnical supervision in accordance with AS 3798-2007 or subsequent amendments.

44 Geotechnical Testing - Drainage

Geotechnical testing must be carried out and results submitted to the Certifying Authority to verify that the pipe trench bedding and backfill complies with the requirements outlined in Australian Standard AS 3725 - *Design for Installation of Buried Concrete Pipe* .

Geotechnical testing must verify that the pipe trench bedding and backfill complies with the requirements for HS3 bedding/backfill must be performed at the rate of one test per 50m of pipeline with not less than two tests in any section of pipe exceeding 25m in length.

45 Earthworks Cut, Fill & Grading

The maximum grading of cut or fill must be 45 degrees (1:1) where there is no retaining wall or no other method of stabilising cut or fill. The maximum depth of cut or fill on any portion of the allotment must be in accordance with the approved Cut and Fill Bulk Earthworks Plan.

46 Retaining Walls

All retaining walls must be located wholly within the property, including footings and agricultural drainage lines. This may require the wall to have a boundary setback of at least 200mm. Construction of retaining walls or associated drainage work along common boundaries must not compromise the structural integrity of any existing structures.

The maximum height of a retaining wall must not exceed 1.0m above the finished surface level.

No part of a retaining wall structure is to encroach on land proposed to be dedicated to Council.

47 Road Construction and Road Drainage Construction

The site manager must arrange for a satisfactory inspection by Shellharbour City Council of the following works:

- a. all road drainage works prior to backfilling of the work, and
- b. all road construction inspections as per Council's *Subdivision Design Code*.

48 Street Lighting

A Public Lighting Design Brief must be submitted to Shellharbour City Council for approval for the provision of street lighting on all new public roads to be dedicated to Council. A street lighting design plan must be prepared by an accredited service provider for contestable works in NSW and submitted to the Energy provider for approval prior to construction. All street lighting must comply with the electricity service provider *Street Lighting Policy* and illumination requirements. All costs associated with the installation of street lighting must be borne by the developer.

49 Traffic Committee – Signposting & Line Marking

A Signposting and Line Marking Plan must be lodged with Shellharbour City Council's Traffic Committee for written approval. The plan must detail all facilities, signage and line-marking required within and surrounding the development.

50 Waste Collection – Signposting & Line Marking

No Parking signs must be installed at the end of Road 21, in the T-Head of Roads 16, 17 and 21 and on the approach to the T-Head of these roads as notated on the approved 'Bin Collection' plans.

51 Street Tree Installation

Street tree installation the developer must be deferred until 70% of dwellings are developed to prevent damage and destruction to street trees throughout the dwelling construction phase.

52 Street Trees

Prior to the issue of the subdivision certificate one tree per lot and two per corner lot must be planted on the Council footpath reserve, as follows:

- a. tree species to be approved by Council,
- b. trees must be set back a minimum 900mm from the back of the kerb or midway between the footpath and kerb,
- c. rootbarrier must be installed adjacent to the back of the kerb & gutter and the concrete pavement as per the manufacturer's specifications,
- d. a minimum 1000mm width x 1500mm depth timber edging installed at the base of the tree constructed from the back of the kerb,
- e. 2 x hardwood stakes with 50mm Hessian ties, fixed in a figure 8, to support each tree, and
- f. minimum 75mm depth of organic mulch applied a minimum 600mm diameter surrounding the base of the trunk.

53 Street Tree Planting Distances

The following recommended clearances are to be taken into account prior to the installation of street trees:

- a. a minimum 2.0m either side of a driveway or vehicular crossing, services, signage and stormwater outlet/pit,
- b. minimum 3.0m from street light posts, and
- c. minimum 15m from pedestrian crossing and traffic signals.

54 Footpath & Shareway

Footpaths must be constructed in accordance with Council's specifications and be located in accordance with the *Precinct E1 and E 2 Urban Design Guidelines* unless otherwise approved by Council. Shareways are to be provided for the Lot 5059 public reserve and wetland 6.

PART E - PRIOR TO OCCUPATION

Not Applicable

PART F - PRIOR TO ISSUE OF SUBDIVISION CERTIFICATE

55 Final Plan of Subdivision

Prior to the release of the final plan of subdivision, it will be necessary to obtain a Subdivision Certificate from Shellharbour City Council. In this regard, it will be necessary to submit:

- a. an application for a Subdivision Certificate,
- b. five paper prints of the final plan of subdivision,
- c. the original and two paper copies of the 88B Instrument and Administration Sheet,
- d. fees appropriate at the time of submission of the application, and
- e. an electronic copy of the subdivision linework. The electronic copy should be in Map Grid of Australia 1994 Zone 56 (GDA94) coordinates and must contain closed linework of boundaries and easements. It must be submitted in DWG or DXF format on cd-rom or by email to traffic&subdivision@shellharbour.nsw.gov.au

The email and the electronic copy should be named "Subdivision Title & Stage".

All sections of the plan, 88B Instrument and Administration Sheet including the original and copies, (except for the General Manager's date and signature) must be completed prior to lodging the plan.

56 Sydney Water Section 73 Compliance Certificate

A Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained from Sydney Water Corporation and submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

57 Section 94 Contributions

A contribution of \$673,361.10, subject to annual indexation, must be paid to Council towards the provision of public amenities and public services prior to the issue of the Subdivision Certificate for each stage as shown on the table below. This amount has been calculated in accordance with Shellharbour City Council's *Section 94 Contributions Plan 2016 Amendment 1* dated 8 March 2017 in the following manner:

Stage	Precinct 2, Shellharbour	Less Credit C1.26 Passive Open Space Embellishment	Total Section 94 Contribution
1	\$658,114.33	(\$45,967.88)	\$612,146.45
2	\$65,811.43	(\$4,596.78)	\$61,214.65
Total	\$723,925.76	(\$50,564.66)	\$673,361.10

The contribution amount contained in this condition is the base rate indexed to the date the consent is issued. The contribution amount will be adjusted in accordance with the indexation methods detailed in the *Contributions Plan*. Current indexed rates are available from Council.

The *Contributions Plan* may be inspected or a copy purchased at the Customer Service Counter at Council's offices, or downloaded from www.shellharbour.nsw.gov.au

58 Road Dedication

Prior to issue of the Subdivision Certificate, Benkelman beam testing must be undertaken on all roads proposed for dedication as road reserve. Testing must be carried out in accordance with the current version of the Shellharbour City Council's *Subdivision Design Code* at the time of issue of this consent. The acceptance criteria will be based on the tolerable deflections as specified by AUSTRROADS at the time of issue of this consent.

At the time immediately prior to all roads becoming designated gazetted public road, an inspection is to be undertaken by Council to determine that the road is in satisfactory condition. The roads are to be handed over to Council at no cost to Council prior to issue of the Subdivision Certificate.

59 Inspection of Stormwater Pipes

All stormwater pipes within road reserves and within drainage easements intended to be dedicated to Council must be inspected by CCTV. The CCTV must be carried out after all earthworks and road pavement works within the locality of the pipelines have been completed. A copy of the CCTV inspection must be recorded and submitted to the Principal Certifying Authority prior to the release of the Subdivision Certificate. Damaged pipes must either be replaced or repaired to the Principal Certifying Authority's satisfaction prior to the issuing of a Subdivision Certificate.

60 Final Geotechnical Report

A final geotechnical report prepared by a suitably qualified and experienced geotechnical consultant must be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate. The report must include, but is not necessarily limited to,:

- a. all earthwork operations,
- b. a fill plan showing extent and depth of fill,
- c. certification that all earthworks within the site have complied with Council's *Subdivision Design Code*. This shall include appropriate test results, test location diagram and date of testing,
- d. certification that all recommendations contained in geotechnical reports lodged in support of this development have been satisfied,
- e. the exact extent of any restricted building zones or any other restrictions affecting any of the allotments. Particular attention shall be paid to the location of drainage lines, which must be burdened with a title restriction in the Section 88B Instrument,
- f. identification of all land affected by landslip or instability constraints (if applicable), and
- g. verification that the pipe trench bedding and backfill complies with the requirements for HS3 bedding/backfill.

61 Lot Creation Geotechnical Report

A Geotechnical Engineer's report must be submitted to the Principal Certifying Authority with the Subdivision Certificate application. The report must be prepared by a Chartered Professional Engineer with professionally recognised geotechnical experience and must include:

- a. the classification of the proposed lot in accordance with the Australian Standard 2870- Residential Slabs and Footings or subsequent amendments,
- b. the classification of the lot in relation to risk of slope instability, and
- c. the required site preparation and construction constraints within the building envelope of the lot appropriate to the assessed risk of slope instability.

62 Works As Executed Plans - Subdivision

Works As Executed plans must be submitted to the Principal Certifying Authority by a Registered Surveyor with the Subdivision Certificate application. The Works As Executed dimensions and levels must be shown in red on a copy of the approved Construction Certificate plans. As a minimum, the plan must show:

- a. compliance with the approved design plans of all drainage works within council land, road reserve and drainage easements including connection into the subject lot/s, surface and invert levels of all pits, invert levels and sizes of all pipelines,
- b. certification from a registered surveyor that all storm water pipes and other services are wholly within an appropriate easement,
- c. compliance with the approved design plans of paved areas within rights of carriageway and road reserve,
- d. the extent, depth and final levels of filling,
- e. the location of all underground service conduits, and
- f. all deviations from the approved Civil Engineering Plans

All levels must relate to Australian Height Datum.

63 Service Conduits

Service conduits must be placed across carriageways prior to the placing of any pavement material. In this regard, a copy of the services plans must be submitted to the Principal Certifying Authority prior to the placement of pavement material. Alternatively, the services crossings must be under bored.

64 Services & 88B Instrument

Lots affected by new or existing utility services must be burdened with easements and restrictions on the use of land to the satisfaction of the Principal Certifying Authority and the relevant utility provider.

Restrictions, covenants and/or easements are to be placed on title that address the following:

- a. Acoustic attenuation measures for all lots within 40m of Harbour Boulevard as detailed in Wilkinson Murray letter dated 31 July 2017 for lots 5045-5058 and superlots 5064, 5067 and 5068.
- b. The owner/occupier of Lots 5032, 5038, 5039, 5045, 5046, 5058, and 5067 must present waste receptacles for the collection of waste at the kerb in accordance with the approved Designated Bin Collection Area Plans. Designated waste receptacle location for

kerbside collection must be suitably notated on the deposited plan and land title of affected lots in accordance with the approved Designated Bin Collection Location Plans (refer condition 3) for Lots 5032 and 5058 on Road 16, Lots 5038, 5039, 5045 and 5046 on Road 22, and all future lots of superlot 5067 on Road 21. The future lot at the end of Road 21 must present bins at the adjoining boundary to allow adequate space for collection. The designated bin area for Lots 5039 and 5046 located on the road reserve within the frontage of Lots 5040 and 5047 respectively must be suitably notated on the deposited plan and land title of Lots 5040 and 5047.

- c. Any retaining wall required to retain building envelopes with a Flood Planning Level in accordance with the approved Shell Cove Precinct E, Wetland 6, Wetland 7 And Northern Lands Flood Assessment, dated 25 September 2017 (refer condition 16) must be protected and must not be altered, damaged or interfered with.

65 Utility services – Electricity

Prior to the release of the Subdivision Certificate for the development written advice must be submitted to the Principal Certifying Authority that all requirements for the supply of electricity to the proposed allotments have been satisfied from the relevant electricity provider.

66 Street Names

Proposed street names for all new roads shall be submitted for Council's consideration.

The submission shall include the:

- a. reasons for/or background/history to the names and estate theme,
- b. an A4 size plan of the street/reserve layout with proposed names and road numbers if applicable, and
- c. fees in accordance with Council's *Fees & Charges*.

Street names and/or public reserve names must be finalised prior to release of the Subdivision Certificate.

67 Completion of Landscape Works

All landscape works must be carried out in accordance with the approved Landscape Plans prior to the release of the Subdivision Certificate. Any variations to the Plan must be authorised by Council in writing before any changes are made/installed.

68 Landscape Inspection

All landscape works excluding street trees must be inspected by Council prior to the issue of the Subdivision Certificate. Council will need to be notified for the landscape inspection.

69 Repairs to Public Infrastructure

Any damage to public infrastructure, other than that previously noted in the Dilapidation Report (refer Part C), must be repaired and reinstated prior to the issue of the Subdivision Certificate. This work must be carried out by Council, or Council approved contractor, at the expense of the beneficiary of the consent.

70 Completion Certificate

Prior to the issue of a Completion Certificate by the Certifying Authority, the applicant must submit satisfactory Works As Executed Plans, CCTV of stormwater drainage and evidence of all other testing and construction works in accordance with the approved Construction Certificate plans and Council's *Subdivision Design Code* .

The Completion Certificate must be requested by the applicant in writing.

71 Verification of Waste Management

Documentation verifying that all waste streams were managed in accordance with the Waste Management Plan shall be provided to the Principal Certifying Authority prior to the issue of a Subdivision Certificate. All records, such as waste disposal dockets or photographic evidence, shall be retained by the Principal Certifying Authority.

72 Release of Certificate

The Subdivision Certificate shall not be released until all works required for the development, subject of this consent, have been completed.

This condition excludes verge landscape works as the planting of street trees and verge turfing is to be deferred until 70% of dwellings have been constructed.

PART G - AFTER ISSUE OF SUBDIVISION CERTIFICATE

73 Road & Drainage Works Maintenance Period

All road and drainage works must be maintained for a minimum period of 12 months commencing from the date of issue of the Subdivision Certificate, unless otherwise agreed to by Council. The developer must ensure that any defective works must be rectified and/or replaced during the maintenance period in accordance with the approved Construction Certificate plans. All costs arising during the maintenance period must be borne by the developer. All works must be maintained in their original construction condition for this liability period. The developer must notify Council for a re-inspection at the end of the maintenance period

74 Landscape Maintenance Period

To ensure establishment of the landscape, the completed landscaping works must be maintained for a 24 month period following the issue of the Subdivision Certificate. It is the responsibility of the beneficiary of the consent to ensure that any defective landscaping and/or plantings are rectified/replaced at the conclusion of the maintenance period in accordance with the approved landscape plan.

75 Street Tree Maintenance

To ensure establishment of the street trees, the completed street tree installation works must be maintained for a 12 month period following the issue of the Subdivision Certificate. It is the responsibility of the developer to ensure that any defective street tree installations shall be rectified/replaced at the conclusion of the maintenance period in accordance with the approved landscape plan.

76 Street Tree Inspection

All street trees must be inspected by Council prior to the commencement of a 12 month maintenance period. It is the responsibility of the developer to notify Council for the street tree inspection.

77 Street Tree Handover

A street tree handover inspection is required to be carried out by Council with the developer at the completion of the 12 month maintenance period providing the street trees have remained in a satisfactory condition. In the event that the street trees are found damaged, dying or removed, a further inspection will be required to inspect all remedial work prior to handover.

78 Wetland Management Plan

Prior to handover of ponds, a wetland management plan must be prepared to the satisfaction of Council.

PART H – OTHER APPROVALS

79 NSW Department of Primary Industry – Water

Where there is an inconsistency between the General Terms of Approval (GTAs) for works requiring a controlled activity approval and the conditions of this consent, the GTAs will take precedence to the extent of the inconsistency.

Development Application No. 118/2017 (Part 2)
Lots 4003 & 4004 DP 1235539 & Lot 2056 DP 1203745, Harbour Boulevard Shell Cove

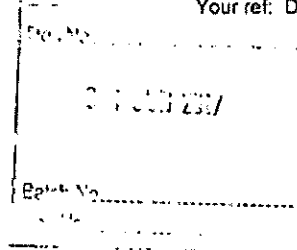


Department of
Primary Industries
Water

Contact: Jeremy Morice
Phone: 02 4224 9736
Fax: 02 4224 9740
Email: jeremy.morice@dpi.nsw.gov.au

Our ref: 10 ERM2017/0420
Our file:
Your ref: DA118/2017

The General Manager
Shellharbour City Council
PO Box 155
Shellharbour City Centre NSW 2529



Attention: Victoria Nicholson

27 May 2017

Dear Madam

Re: Integrated Development Referral – General Terms of Approval
Dev Ref: DA118/2017

Description of proposed activity: Shell Cove - Precinct E, Wetland 6 & Northern Lands
Site location: Lot 8032 1072187 Lots 2055 & 2056 DP 1203745 Boolwaroo Pde and Harbour Boulevard Shell Cove

I refer to your recent letter regarding an integrated Development Application (DA) proposed for the subject property. Attached, please find DPI Water's (formerly the NSW Office of Water) General Terms of Approval (GTA) for works requiring a controlled activity approval under the *Water Management Act 2000* (WM Act), as detailed in the subject DA.

Please note Council's statutory obligations under section 91A (3) of the *Environmental Planning and Assessment Act 1979* (EPA Act) which requires a consent, granted by a consent authority, to be consistent with the general terms of any approval proposed to be granted by the approval body.

If the proposed development is approved by Council, DPI Water requests that these GTA be included (in their entirety) in Council's development consent. Please also note the following:

- DPI Water should be notified if any plans or documents are amended and these amendments significantly change the proposed development or result in additional works on waterfront land (which includes (i) the bed of any river together with any land within 40 metres inland of the highest bank of the river, or (ii) the bed of any lake, together with any land within 40 metres of the shore of the lake, or (iii) the bed of any estuary, together with any land within 40 metres inland of the mean high water mark of the estuary).
- Once notified, DPI Water will ascertain if the amended plans require review or variation/s to the GTA. This requirement applies even if the proposed works are part of Council's proposed consent conditions and do not appear in the original documentation.

-2-

- DPI Water should be notified if Council receives an application to modify the development consent and the modifications change any activities on waterfront land.
- DPI Water requests notification of any legal challenge to the consent.

As the controlled activity to be carried out on waterfront land cannot commence before the applicant applies for and obtains a controlled activity approval, DPI Water recommends the following condition be included in the development consent:

"The Construction Certificate will not be issued over any part of the site requiring a controlled activity approval until a copy of the approval has been provided to Council".

The attached GTA are not the controlled activity approval. The applicant must apply (to DPI Water) for a controlled activity approval **after consent** has been issued by Council **and before** the commencement of any work or activity on waterfront land.

Finalisation of a controlled activity approval can take up to eight (8) weeks from the date DPI Water receives all documentation (to its satisfaction). Applicants must complete and submit (to the undersigned) an application form for a controlled activity approval together with any required plans, documents, the appropriate fee and security deposit or bank guarantee (if required by the Office of Water) and proof of Council's development consent.


Application forms for the controlled activity approval are available from the undersigned or from DPI Water's website:

www.water.nsw.gov.au [Water licensing](#) » [Approvals](#) » [Controlled activities](#)

DPI Water requests that Council provide a copy of this letter to the applicant.

DPI Water also requests that Council provides DPI Water with a copy of the determination for this development application as required under section 91A (6) of the EPA Act.

Yours Sincerely



Jeremy Morice
Water Regulation Officer
Water Regulatory Operations, Water Regulatory Operations South
NSW Department of Primary Industries – DPI Water

General Terms of Approval

for work requiring a controlled activity approval
 under s91 of the *Water Management Act 2000*

Number	Condition	File No:
Site Address:	Lot 8032 1072187 Lots 2055 & 2056 DP 1203745 Boollwaroo Pde and Harbour Boulevard Shell Cove	
DA Number:	DA118/2017	
LGA:	Shellharbour City Council	
Plans, standards and guidelines		
1	These General Terms of Approval (GTA) only apply to the controlled activities described in the plans and associated documentation relating to DA118/2017 and provided by Council: <ul style="list-style-type: none"> (i) Statement of Environmental Effects (ii) Stormwater and Water Cycle Management Plan (iii) Landscape Plan (iv) DA Plans and Drawings Any amendments or modifications to the proposed controlled activities may render these GTA invalid. If the proposed controlled activities are amended or modified DPI Water (formerly the NSW Office of Water) must be notified to determine if any variations to these GTA will be required.	
2	Prior to the commencement of any controlled activity (works) on waterfront land, the consent holder must obtain a Controlled Activity Approval (CAA) under the Water Management Act from DPI Water. Waterfront land for the purposes of this DA is land and material in or within 40 metres of the top of the bank or shore of the river identified.	
3	The consent holder must prepare or commission the preparation of: <ul style="list-style-type: none"> (i) Construction Detailed Drainage Plans (ii) Soil and Water Management Plan (iii) Final Landscape Plan 	
4	All plans must be prepared by a suitably qualified person and submitted to the DPI Water for approval prior to any controlled activity commencing. The following plans must be prepared in accordance with DPI Water's guidelines located at www.water.nsw.gov.au/ Water-Licensing/Approvals . <ul style="list-style-type: none"> (i) Vegetation Management Plans (ii) Laying pipes and cables in watercourses (iii) Riparian Corridors (iv) In-stream works (v) Outlet structures (vi) Watercourse crossings 	
5	The consent holder must (i) carry out any controlled activity in accordance with approved plans and (ii) construct and/or implement any controlled activity by or under the direct supervision of a suitably qualified professional and (iii) when required, provide a certificate of completion to DPI Water.	

Number	Condition	File No:
Rehabilitation and maintenance		
6	The consent holder must carry out a maintenance period of two (2) years after practical completion of all controlled activities, rehabilitation and vegetation management in accordance with a plan approved by the DPI Water.	
7	The consent holder must reinstate waterfront land affected by the carrying out of any controlled activity in accordance with a plan or design approved by the DPI Water.	
Reporting requirements		
8	The consent holder must use a suitably qualified person to monitor the progress, completion, performance of works, rehabilitation and maintenance and report to DPI Water as required.	
Security deposits		
9	The consent holder must provide a security deposit (bank guarantee or cash bond) - equal to the sum of the cost of complying with the obligations under any approval - to DPI Water as and when required.	
Access-ways		
10	The consent holder must design and construct all ramps, stairs access ways, cycle paths, pedestrian paths or other non-vehicular form of access way so that they do not result in erosion, obstruction of flow, destabilisation, or damage to the bed or banks of the river or waterfront land, other than in accordance with a plan approved by DPI Water.	
11	The consent holder must not locate ramps, stairs, access ways, cycle paths, pedestrian paths or any other non-vehicular form of access way in a riparian corridor other than in accordance with a plan approved by DPI Water.	
Bridge, causeway, culverts, and crossing		
12	The consent holder must ensure that the construction of any bridge, causeway, culvert or crossing does not result in erosion, obstruction of flow, destabilisation or damage to the bed or banks of the river or waterfront land, other than in accordance with a plan approved by DPI Water.	
13	The consent holder must ensure that any bridge, causeway, culvert or crossing does not obstruct water flow and direction, is the same width as the river or sufficiently wide to maintain water circulation, with no significant water level difference between either side of the structure other than in accordance with a plan approved by DPI Water.	
Disposal		
14	The consent holder must ensure that no materials or cleared vegetation that may (i) obstruct flow, (ii) wash into the water body, or (iii) cause damage to river banks; are left on waterfront land other than in accordance with a plan approved by DPI Water.	
Drainage and Stormwater		
15	The consent holder is to ensure that all drainage works (i) capture and convey runoffs, discharges and flood flows to low flow water level in accordance with a plan approved by DPI Water; and (ii) do not obstruct the flow of water other than in accordance with a plan approved by DPI Water.	
16	The consent holder must stabilise drain discharge points to prevent erosion in accordance with a plan approved by DPI Water.	
Erosion control		
17	The consent holder must establish all erosion and sediment control works and water diversion structures in accordance with a plan approved by DPI Water. These works and structures must be inspected and maintained throughout the working period and must not be removed until the site has been fully stabilised.	

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Number	Condition	File No:
Excavation		
18	The consent holder must ensure that no excavation is undertaken on waterfront land other than in accordance with a plan approved by DPI Water.	
19	The consent holder must ensure that any excavation does not result in (i) diversion of any river (ii) bed or bank instability or (iii) damage to native vegetation within the area where a controlled activity has been authorised, other than in accordance with a plan approved by DPI Water.	
Maintaining river		
20	The consent holder must ensure that (i) river diversion, realignment or alteration does not result from any controlled activity work and (ii) bank control or protection works maintain the existing river hydraulic and geomorphic functions, and (iii) bed control structures do not result in river degradation other than in accordance with a plan approved by DPI Water.	
21	The consent holder must ensure that the surfaces of river banks are graded to enable the unobstructed flow of water and bank retaining structures result in a stable river bank in accordance with a plan approved by DPI Water.	
END OF CONDITIONS		

REASONS FOR THE IMPOSITION OF CONDITIONS

1. To minimise any possible adverse environmental impacts of the proposed development.
2. To ensure that the amenity and character of the surrounding area is protected.
3. To ensure that the design and siting of the development complies with the provisions of Environmental Planning Instruments and Council's Codes and Policies.
4. To ensure that the development does not conflict with the public interest.

Advisory Notes – Project Specific

ANPS1 Community Safety

Management of crime risk for the development include the following considerations:

Lighting

The lighting of public areas including reserves, paths, streets and footpaths will enhance the safety and the perception of safety in the area. The lighting should facilitate natural surveillance especially in entrances/exits, of buildings, access routes, pathways and car parks to encourage safety and passive surveillance. Factors that should be considered to optimise crime prevention include:

1. Lighting should enable users to identify a face from within 15 metres to assist with personal safety
2. Use white toned lights instead of yellow toned lights to promote a safer feeling.

Access Control

Due to the reserve consisting of a water body and wetlands area, it proposes a possible drowning risk to young children. Signage should be installed to warn users of the risk.

Territorial reinforcement

There should be an appropriate maintenance schedule of public areas to ensure that the space is attractive and well used.

Landscaping

The plant selection should maximise surveillance and visibility to the area and an appropriate maintenance schedule should be adopted to ensure this continues.

Graffiti Management

Graffiti management and prevention techniques include:

1. If graffiti does occur, it should be removed within 24 - 48 hours to reduce the notoriety sought by offenders and decrease its likelihood of appearing again in the future.
2. Green screens along blank walls using low lying shrubbery or climbers (check to ensure they will not destroy the wall).
3. The use of anti-graffiti paint and coatings could also be considered.

Advisory Notes – General

Erection of Signs

The principal contractor and the Principal Certifying Authority will need to have a sign (or signs) erected and maintained on the development site that provides their name and contact telephone number (during and outside work hours for the principal contractor), and stating that unauthorised entry to the site is prohibited. The principal contractor and Principal Certifying Authority can have separate signs or they can both use one sign if they choose. A maximum penalty of 10 penalty units applies for failure to erect and maintain sign(s) detailing principal contractor and Principal Certifying Authority identification.

WorkCover Authority

The requirements of WorkCover Authority must be satisfied at all times.

Obstacle Height Limitation - Airport

There are height limitations relating to the operation of the airport for developments/activities/construction that may involve cranes, plant or machinery in the Shellharbour Local Government Area. Further details can be obtained from Council concerning the obstacle height limitations.

Failure to Comply with Consent

Failure to comply with any of the conditions of consent may result in a Penalty Infringement Notice being issued against the owner/applicant/builder. Substantially greater penalties may be imposed by the Court for non compliance

Lapsing of Development Consent

In accordance with section 95 of the *Environmental Planning & Assessment Act 1979*, the development approval lapses five years after the approval date unless building, engineering or construction work relating to the building has physically commenced.

Right to Appeal

If you are dissatisfied with this decision, section 97 of the *Environmental Planning & Assessment Act 1979* gives you the right to appeal to the Land & Environment Court within six months after the date on which you receive this notice.

Review of Determination

If you are dissatisfied with this decision, section 82A of the *Environmental Planning & Assessment Act 1979* provides that you may request Council to review its determination. The request cannot be made after the time limit for making of an appeal under section 97 expires.

To Vary Development Consent

The plans and/or conditions of this consent are binding and may only be varied upon **application** to Council under section 96 of the *Environmental Planning & Assessment Act 1979*. The appropriate fee shall accompany the application and no action shall be taken on the requested variation **unless and until** the **written** authorisation of Council is received by way of an amended consent.

Dial Before You Dig

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets, please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures (this is the law in New South Wales). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial Before You Dig service in advance of any construction or planning activities.

Telecommunications Act 1997 (Commonwealth)

Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the *Criminal Code Act 1995 (Cth)* and is liable for prosecution. Furthermore, damage to Telstra's

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Lots 4003 & 4004 DP 1235539 & Lot 2056 DP 1203745, Harbour Boulevard Shell Cove

infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact Telstra's Network Integrity Team on 1800810443.

Development within Vicinity of a High Pressure Gas Main

Contact Dial Before You Dig on 1100 or www.dialbeforeyoudig.com.au. Proposed works in the vicinity of any high pressure gas main must be directed to:

Jemena Asset Management Pty Ltd
PO Box 6507
SILVERWATER NSW 2128

Attention: Land Services Department

END OF NOTICE



SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

DA No. 118/2017 / 14 March 2018

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WASTE MANAGEMENT PLAN TEMPLATE

A Waste Management Plan is to be submitted with development applications for demolition, construction and operational works.

Applicant Details	
Applicant No.	Australand Corporation (NSW) Pty Ltd
Name	Alex Colquhoun
Address	Po Box 4148 Shellharbour NSW
Phone number(s)	02) 4297 7364
Email	crfa chris.randle@fraserproperty.com.au
Project Details	
Address of development	Harbour Blvd Shell Cove
Existing buildings and other structures currently on the site	None
Description of proposed development	73 lot torrens subdivision
<p>The Waste Objectives set out in the DCP are aligned with Shellharbour City Council's Community Strategic Plan and Waste Strategy. The details on this form are the provisions and intentions for minimising waste relating to this development. All records demonstrating the lawful disposal of waste must be retained and kept readily accessible for inspection by regulatory authorities such as Council, EPA or WorkCover NSW.</p>	
Name	Alex Colquhoun
Signature	
Date	17/3/17

Construction (all types of developments)

Type of waste generated	Estimate Volume (m ³) or Weight (t) of Reuse and specify method of onsite reuse	Estimate volume (m ³) or Weight (t) of Recyclables and specify contractor and recycling outlet to be used	Estimate Volume (m ³) or Weight (t) disposed and specify landfill to be used
Excavation material	1500m ³ proposed to be placed on the landscape mound within Lot 22 DP 1010797		
Timber			
Concrete	£.	50m ³ - Dunmore Recycling	
Bricks			
Tiles			
Metal (specify)			
Glass			
Plasterboard			
Packaging (used pallets, pallet wrap)		10m ³ - Dunmore Recycling	
Garden organics (Green waste)		500m ³ - Dunmore Recycling	
Containers (cans, plastic, glass)			
Paper/cardboard		100kg - Dunmore Recycling	
Residual waste			
Hazardous/special waste e.g. asbestos (specify)			
Other (specify)			General Waste 50m ³ - Dunmore Tip.

SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

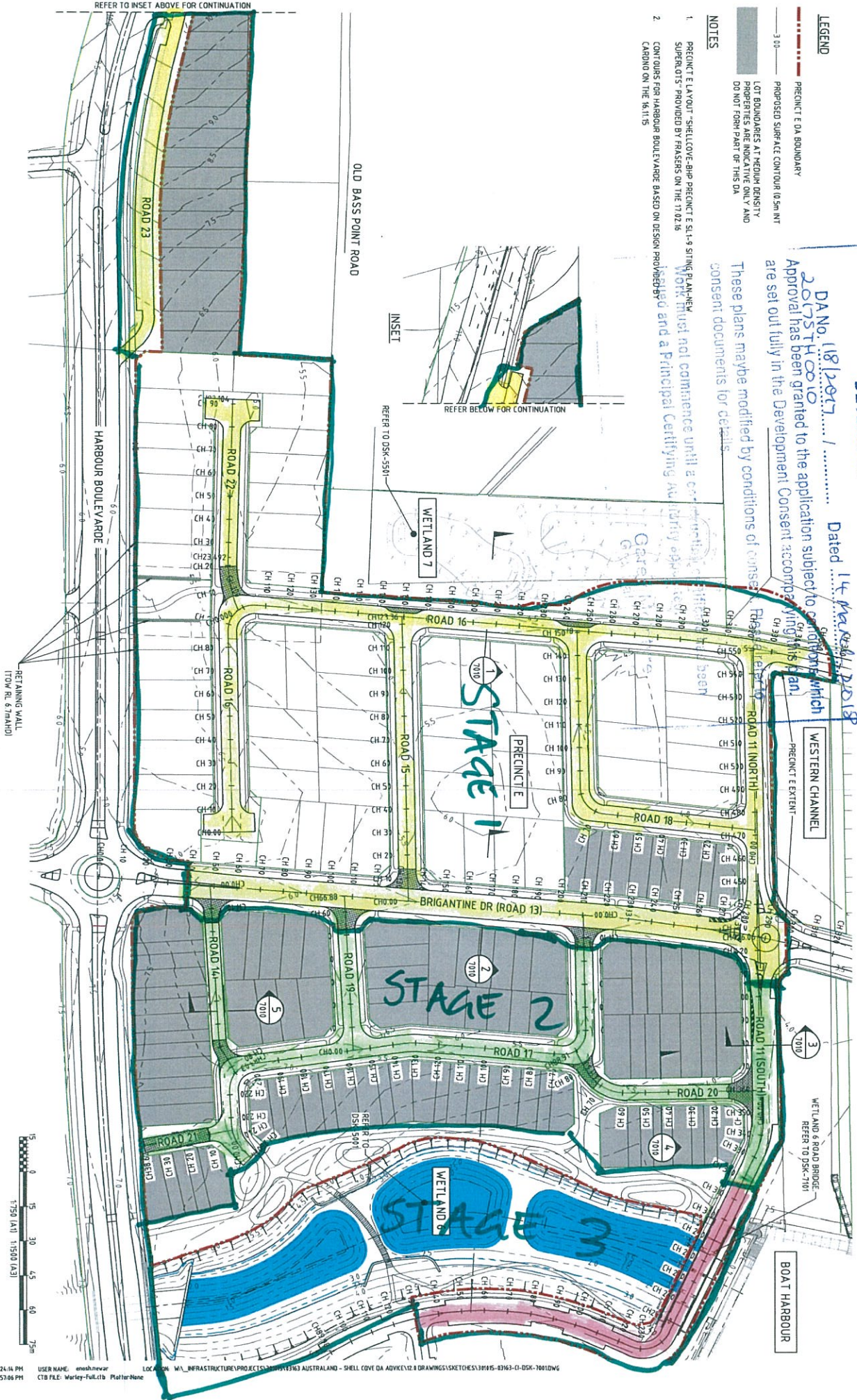
Dated 14 March 2018

DA No. 1812087 / 1
2015 STAGING PLAN
Approval has been granted to the application subject to conditions which are set out fully in the Development Consent accompanying this plan.

These plans may be modified by conditions of consent documents for details.

- NOTES
1. PRELIMINARY "SHELLOVE-UP" PRELIMINARY STAGING PLAN - NEW SUPERLOTS PROVIDED BY FRASERS ON THE 17.02.16
 2. CONTOURS FOR HARBOUR BOULEVARDE BASED ON DESIGN PROVIDED BY CABRIDO ON THE 16.11.15

- LEGEND
- PRELIMINARY DA BOUNDARY
 - PROPOSED SURFACE CONTOUR (0.5m INT)
 - LOT BOUNDARIES AT MEDIUM DENSITY PROPERTIES ARE INDICATIVE ONLY AND DO NOT FORM PART OF THIS DA



WorleyParsons resources & energy

Oneway BY APPOINTMENT

ISSUE	DATE	ISSUE DESCRIPTION	BY
D	18/01/17	ISSUED FOR APPROVAL	EN
C	18/01/17	ISSUED FOR APPROVAL	EN
B	18/01/17	ISSUED FOR APPROVAL	EN
A	18/01/17	ISSUED FOR CLIENT REVIEW	EN

FRASERS PROPERTY

INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION


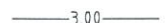

SHELL COVE - BOAT HARBOUR PRECINCT
Staging Plan GRADING PLAN

301015-03163-CI-DSK-7001

PLANT DATE & TIME: 7/2/2017 5:24:44 PM USER NAME: emash/nevar
SAVE DATE & TIME: 7/2/2017 3:57:06 PM CTB FILE: Worley-Full.ctb Plotter:None

Received 25 Jul 2017

LEGEND

-  PRECINCT E DA BOUNDARY
-  3.00 PROPOSED SURFACE CONTOUR (0.5m INT)
-  LOT BOUNDARIES AT MEDIUM DENSITY PROPERTIES ARE INDICATIVE ONLY AND DO NOT FORM PART OF THIS DA

NOTES

1. PRECINCT E LAYOUT "SHELLCOVE-BHP PRECINCT E SL1-9 SITING PLAN-NEW SUPERLOTS" PROVIDED BY FRASERS ON THE 22.08.17
2. CONTOURS FOR HARBOUR BOULEVARDE BASED ON DESIGN PROVIDED BY CARDNO ON THE 16.11.15

**SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT**

DA No. 118/2017 / Dated 14 March 2018
26175+H00510

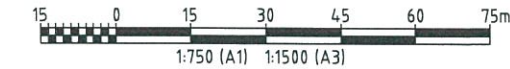
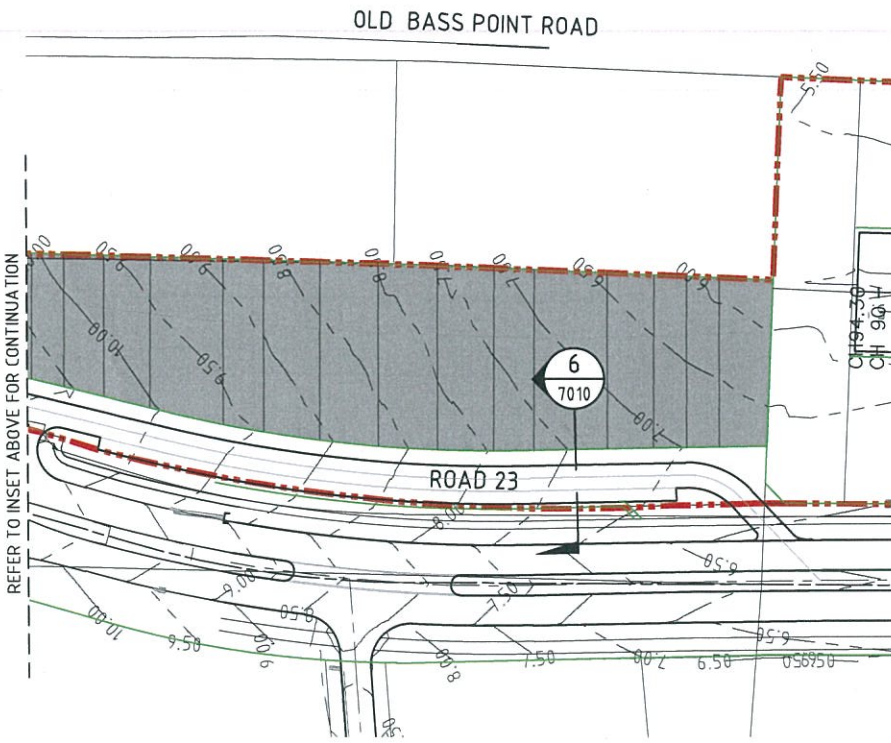
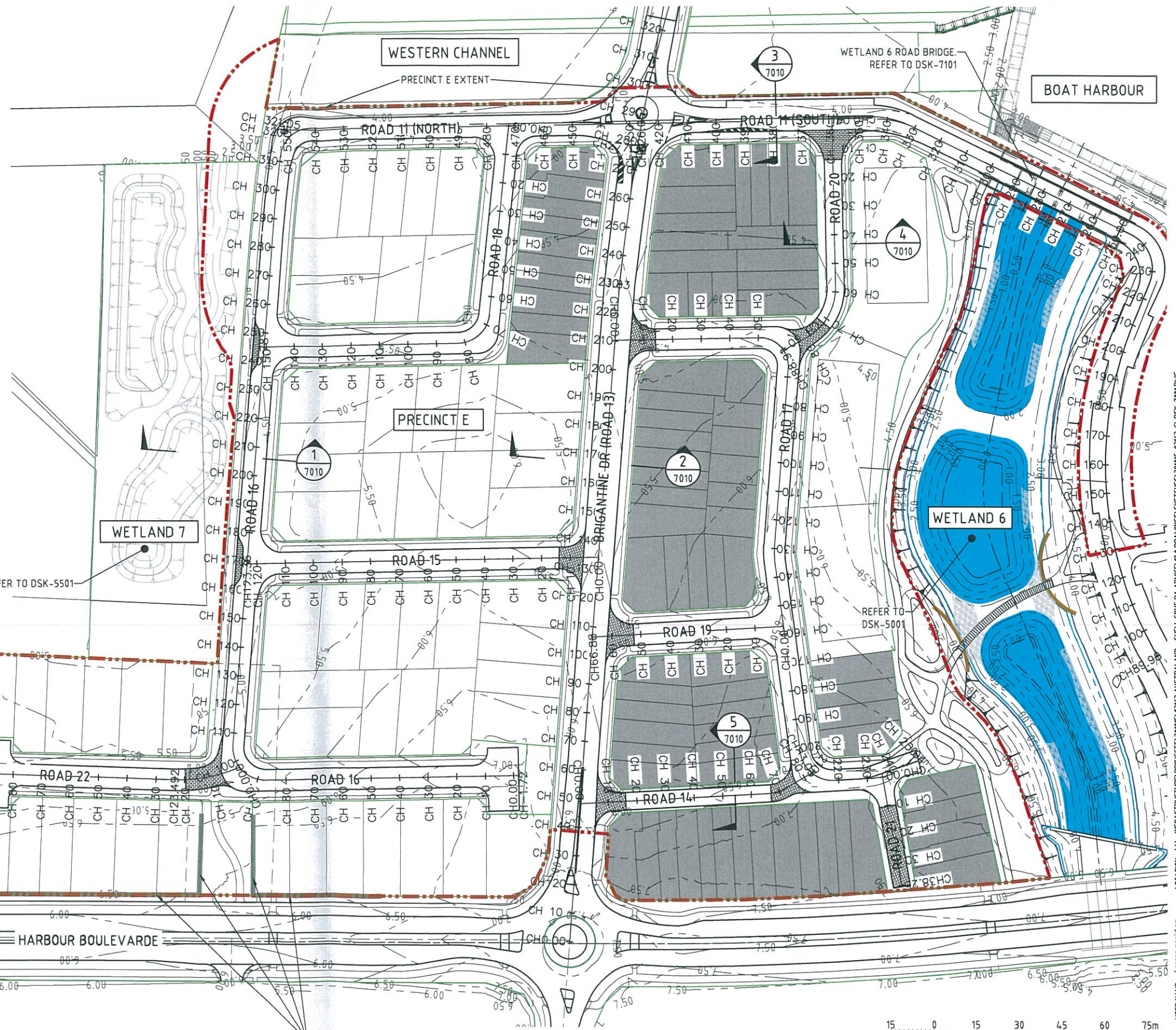
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Carey McIntyre
Geomatics

REFER BELOW FOR CONTINUATION



must be wholly contained within private property.



ISSUE	DATE	ISSUE DESCRIPTION	DRAWN
J	22.08.17	DESIGN CONTOURS REVISED	KM
I	05.09.17	DRAWING UPDATED	KM
H	01.09.17	SECTION 6 ADDED	KM
G	30.08.17	FOOTPATH REVISED BETWEEN ROAD 17 & WETLAND 6 CONNECTION	KM
F	28.08.17	ROAD 21 AREA REVISED AND PRECINCT E BOUNDARY UPDATED	KM



INFORMATION ONLY
NOT TO BE USED
FOR CONSTRUCTION



**SHELL COVE - BOAT HARBOUR PRECINCT
PRECINCT E
GRADING PLAN**

301015-03163-CI-DSK-7001

LOCATION: W:\INFRASTRUCTURE\PROJECTS\301015\3163 AUSTRALAND - SHELL COVE DA\ADVISE\2. DRAWINGS\SKETCHES\301015-03163-CI-DSK-7001.DWG
 USER NAME: kannan.maniakan
 PLOT DATE & TIME: 22/09/2017 5:41:31 PM
 CTB FILE: Worley-Full.ctb
 Plotter: None

SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

DA No. 118 (2017) Dated 14 March 2018
2017 STH0010

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Carey McIntyre
Geotechnical Engineer

CUT FILL LEGEND			
DEPTH RANGE 1m INTERVAL			
LOWER VALUE	UPPER VALUE	COLOUR	
-4	to -3	m	Yellow
-3	to -2	m	Orange
-2	to -1	m	Red
-1	to 0	m	Dark Red
0	to 1	m	Green
1	to 2	m	Light Green
2	to 3	m	Light Blue
3	to 4	m	Blue

APPROXIMATE EARTHWORKS VOLUMES	
CUT (m³)	-5148
FILL (m³)	104280
BALANCE (m³)	99132

NOTES

- EARTHWORKS VOLUMES CALCULATED TO EXISTING SURFACE, BASED ON SURVEY PROVIDED BY FRASERS IN EMAIL DATED: 28th JANUARY 2016.
- NO STRIPPING OR BULKING FACTORS HAVE BEEN INCLUDED
- INTERIM EARTHWORKS, IF COMPLETED, WOULD ALTER EARTHWORKS VOLUMES.

Refer condition no. 23

REFER BELOW FOR CONTINUATION

INSET

OLD BASS POINT ROAD

WETLAND 7

PRECINCT E

ROAD 15

BRIGANTINE DR (ROAD 13)

ROAD 17

WETLAND 6

ROAD 19

ROAD 22

ROAD 16

ROAD 14

ROAD 23

HARBOUR BOULEVARDE

WESTERN CHANNEL

BOAT HARBOUR



ISSUE	DATE	ISSUE DESCRIPTION	DRAWN
E	15.09.17	CUT & FILL BULK EARTHWORKS UPDATED	KM
D	01.09.17	WETLAND 6 EXTENTS AND LOT BOUNDARY REVISED	KM
C	15.08.17	ROAD 16, 21 & 22 REVISED & KERB LINES UPDATED	KM
B	13.12.16	ISSUED FOR APPROVAL	EN
F	16.09.17	QUANTITY UPDATED	KM









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SHELL COVE - BOAT HARBOUR PRECINCT
PRECINCT E
CUT & FILL BULK EARTHWORKS PLAN
301015-03163-CI-DSK-7002

LOCATION: W:\INFRASTRUCTURE\PROJECTS\301015\3163 AUSTRALAND - SHELL COVE DA\DWG\12.8 DRAWINGS\SHEETS\301015-03163-CI-DSK-7002.DWG
USER NAME: karanamandian
CIB FILE: Worley-Full.cib Plot: here

LEGEND

-  PROPOSED STORMWATER NETWORK
-  PROPOSED HYDROCON SYSTEM
-  CATCHMENT BOUNDARY & SIZE
1.52ha
-  JELLY FISH SYSTEM, FOR DETAILS REFER TO DWG 5001 & 5501
-  GPT, FOR DETAILS REFER TO DWG 5001 & 5501
-  CHANNEL TO CONVEY 100 YEAR ARI FLOW TO THE TOP OF THE EXISTING WESTERN CHANNEL

**SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT**

DA No. 118/2017 / Dated 14 March 2018
201757H0010

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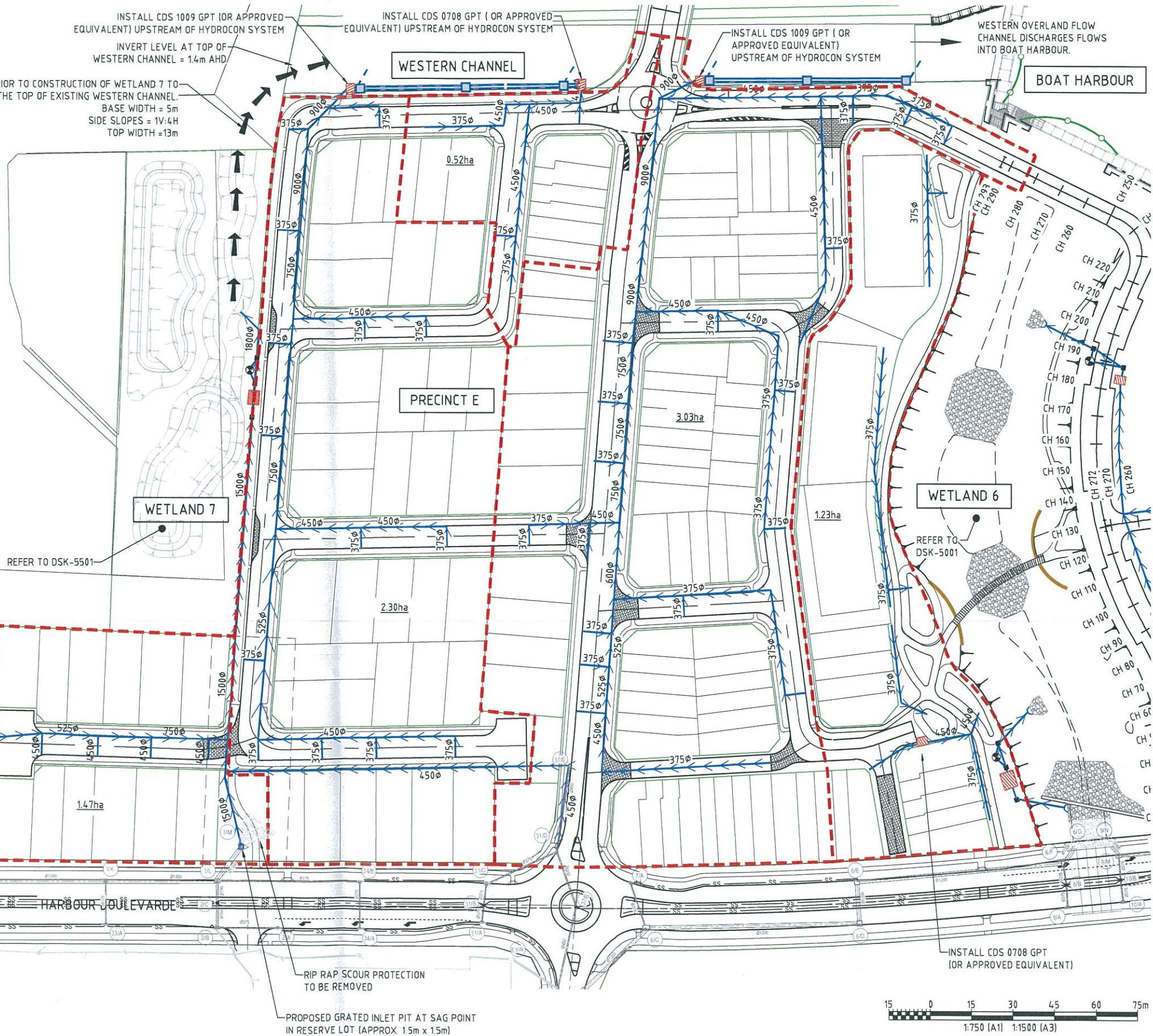
Carey McIntyre
General Manager

INSTALL CDS 1009 GPT (OR APPROVED EQUIVALENT) UPSTREAM OF HYDROCON SYSTEM
INVERT LEVEL AT TOP OF WESTERN CHANNEL = 1.4m AHD

INSTALL CDS 0708 GPT (OR APPROVED EQUIVALENT) UPSTREAM OF HYDROCON SYSTEM

INSTALL CDS 1009 GPT (OR APPROVED EQUIVALENT) UPSTREAM OF HYDROCON SYSTEM

WESTERN OVERLAND FLOW CHANNEL DISCHARGES FLOWS INTO BOAT HARBOUR.



PROPOSED GRATED INLET PIT AT SAG POINT IN RESERVE LOT (APPROX. 1.5m x 1.5m)

RIP RAP SCOUR PROTECTION TO BE REMOVED

INSTALL CDS 0708 GPT (OR APPROVED EQUIVALENT)



ISSUE	DATE	ISSUE DESCRIPTION	DRAWN
E	11.09.17	CATCHMENT UPDATED	KM
D	15.08.17	CATCHMENT BOUNDARY UPDATED IN ROAD 11 & 16 BEND	KM
C	13.12.14	ISSUED FOR APPROVAL	EN
G	08.09.17	STORM WATER DESIGN CHANGED	KM
F	15.09.17	DRAWING UPDATED	KM



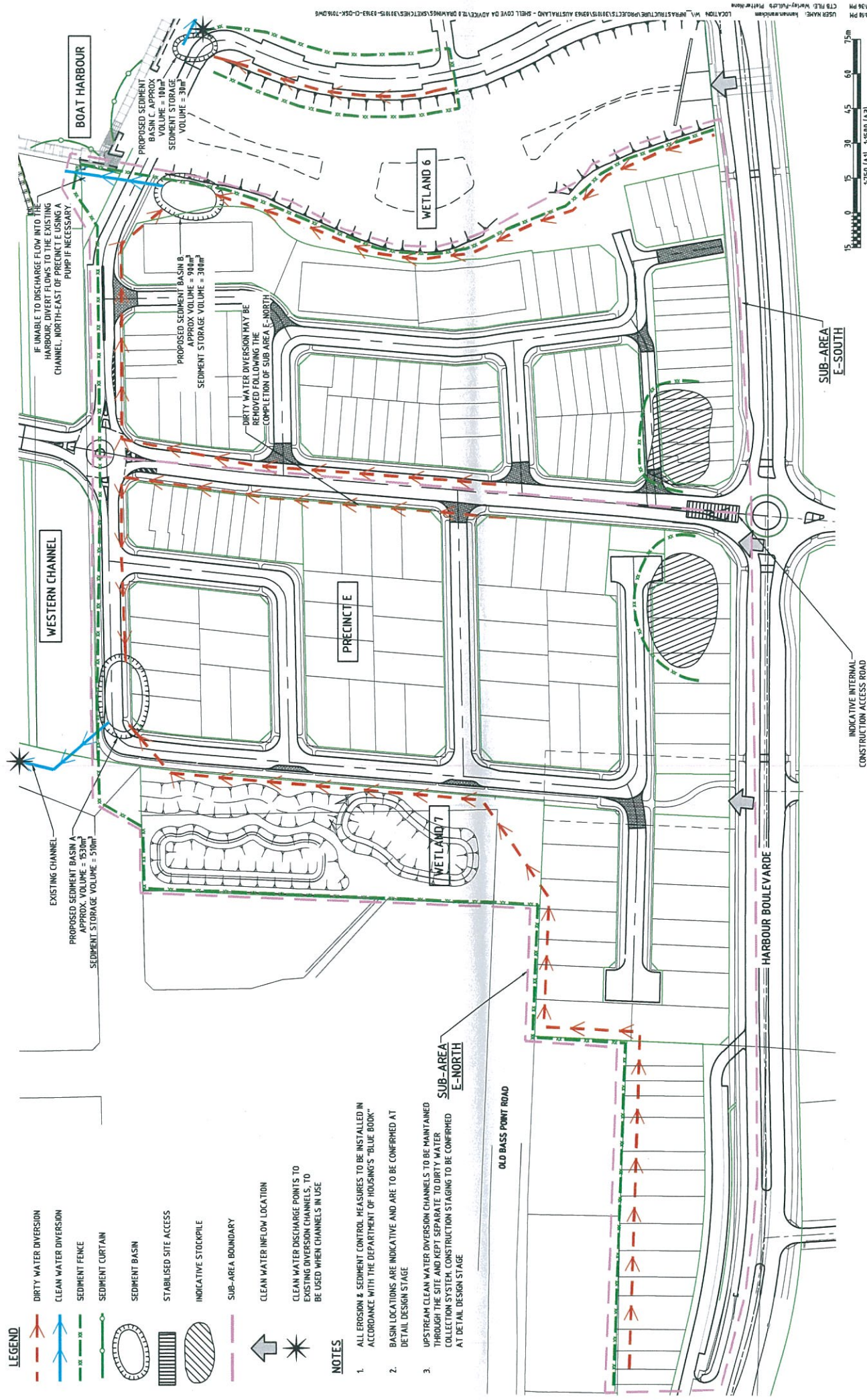
INFORMATION ONLY
NOT TO BE USED
FOR CONSTRUCTION



**SHELL COVE - BOAT HARBOUR PRECINCT
PRECINCT E
STORMWATER MANAGEMENT CONCEPT PLAN**

301015-03163-CI-DSK-7015

LOCATION: W:\INFRASTRUCTURE\PROJECTS\301015\03163 AUSTRALAND - SHELL COVE DA - ADVEN2\2 DRAWINGS\METRICS\301015-03163-CI-DSK-7015.DWG
 USER NAME: hemanthnathan
 CIB FILE: Worley-Full.ctb
 Plot Date & Time: 01/20/17 10:28 PM
 Save Date & Time: 01/20/17 10:53 PM








SHELL HARBOUR PRECINCT E
 EROSION & SEDIMENT CONTROL PLAN
 301015-03163-CI-DSK-7016

REV	DATE	BY	SCALE DESCRIPTION
E			LOT BOUNDARY UPDATED
D			SEWER FENCE & BOUNDARY UPDATED IN ROAD TO E & W ROAD
C			ISSUED FOR APPROVAL
B			ISSUED FOR APPROVAL
F			DRAWING UPDATED

INDICATIVE INTERNAL CONSTRUCTION ACCESS ROAD
 SUB-AREA E-SOUTH
 SUB-AREA E-NORTH
 WESTERN CHANNEL
 BOAT HARBOUR
 WETLAND 6
 WETLAND 7
 HARBOUR BOULEVARDE
 OLD BASS POINT ROAD

PROPOSED SEDIMENT BASIN A APPROX VOLUME = 500m³ SEDIMENT STORAGE VOLUME = 500m³
 PROPOSED SEDIMENT BASIN B APPROX VOLUME = 98m³ SEDIMENT STORAGE VOLUME = 30m³
 PROPOSED SEDIMENT BASIN C APPROX VOLUME = 30m³ SEDIMENT STORAGE VOLUME = 30m³
 IF UNABLE TO DISCHARGE FLOW INTO HARBOUR, DIVERT FLOWS TO THE EXISTING CHANNEL, NORTH-EAST OF PRECINCT E USING A PUMP IF NECESSARY.

DIRTY WATER DIVERSION MAY BE REMOVED FOLLOWING THE COMPLETION OF SUB AREA E-NORTH

SHELLHARBOUR CITY COUNCIL
 DEVELOPMENT CONSENT
 DA No. 118/2017, Dated 14 March 2018
 20175TH0010
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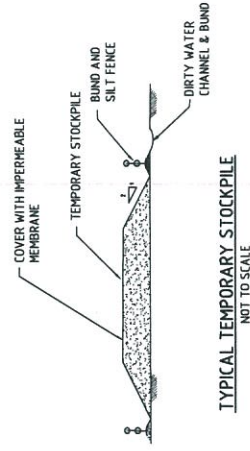
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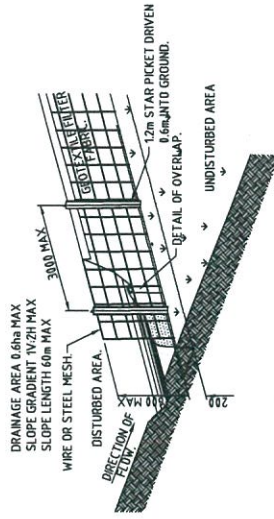
Carey McIntyre
 General Manager



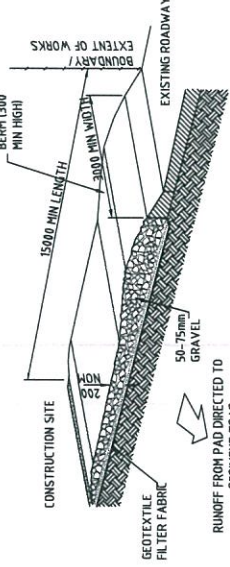
DIRTY WATER DIVERSION CHANNEL
NOT TO SCALE



TYPICAL TEMPORARY STOCKPILE
NOT TO SCALE

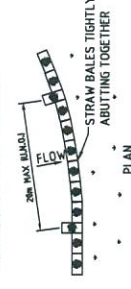


SEDIMENT FENCE
NOT TO SCALE

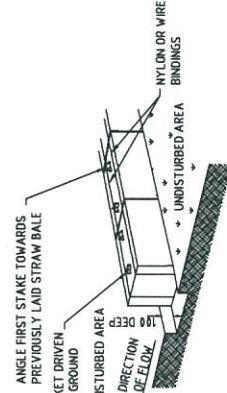


STABILISED SITE ACCESS
NOT TO SCALE

MAINTENANCE
THE TEMPORARY ACCESS SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY PRIOR TO TOP DRESSING WITH AN ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY. TEMPORARY SITE ACCESS IS TO INCORPORATE SHAKER PAD AND WASH DOWN.



STRAW BALE SEDIMENT FILTER
NOT TO SCALE



NOTES:

ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE DEPARTMENT OF HOUSING'S "BLUE BOOK".

GEOTEXTILE LINED SEDIMENT FENCE

1. FOR SEDIMENT FENCE, JOIN SECTIONS OF FABRIC AT A STAR PICKET WITH 150mm OVERLAP.
2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 3m APART.
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.

TEMPORARY DIVERSION CHANNELS

1. DRAINS TO BE OF PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED.
2. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE.
3. CONSTRUCTION IS OF A TEMPORARY NATURE AND SHALL BE REMOVED AT COMPLETION OF WORKS.
4. DIRECT DISCHARGE TO LEVEL SPREADER.
5. COMPACT WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS.
6. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW.
7. ALL OPEN DRAINS TO BE TURFED AS A MINIMUM. PROVIDE JUTE MESH LINING ON ANY DRAIN WITH A LONGITUDINAL GRADE EXCEEDING 5%.
8. DIRTY WATER DIVERSION CHANNEL (OR LIP ON THE TOP OF FILL BATTERS) DIRECTING FLOW INTO SEDIMENT BASIN. STRAW BALES TO BE PLACED AT 1.5m INTERVALS AS A MINIMUM TRANSVERSE PROTECTIVE DEVICE.
9. FOR DIRTY WATER DIVERSION CHANNELS OF 0-25% PROVIDE TRANSVERSE STRAW BALE PROTECTION FOR GRADES OF 2.5-20% PROVIDE GRADE STABILISING STRUCTURES AND FOR GRADE 20%+ PROVIDE ROCK CHECK DAMS.
10. A "CLEAN" WATER DIVERSION CHANNEL SHALL BE PROVIDED ON THE HIGH SIDE OF THE WORKS. ALL FLOWS SHALL BE DIRECTED AROUND THE CONSTRUCTION SITE WITHOUT COMING IN CONTACT WITH DISTURBED GROUND.

DISTURBED AREAS

1. REVEGETATION MUST BE APPLIED TO DISTURBED AREAS AS SOON AS PRACTICAL AFTER COMPLETION OF EARTHWORKS AND MUST BE ESTABLISHED PRIOR TO RELEASE OF THE MAINTENANCE SECURITY.
2. VEGETATION SHALL BE RETAINED IN UNDISTURBED AREAS AND LOCATIONS OF CUT TO FILL TRANSITIONS.

SEDIMENT BASIN

1. TEMPORARY SEDIMENT POND WILL REQUIRE THE ADDITION OF GYPSUM TO PROMOTE FLOCCULATION
2. GYPSUM IS TYPICALLY ADMINISTERED AT THE RATE OF 30kg/100m³ OF STORED WATER. HOWEVER, GYPSUM SHOULD BE ADDED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS BUT AS A MINIMUM SHOULD BE APPLIED ONCE A MONTH & IMMEDIATELY FOLLOWING A RAINFALL EVENT.
3. THE CONTRACTOR SHALL MONITOR THE WATER QUALITY WITHIN THE SEDIMENT POND & SAMPLE & TEST FOR SUSPENDED SOLIDS AFTER THE FIRST TWO RAINFALL EVENTS TO CALIBRATE GYPSUM DOSING REQUIREMENTS.



INFORMATION ONLY
NOT TO BE USED
FOR CONSTRUCTION



REV	ISSUED FOR APPROVAL	EN	EN	DATE	SCALE DESCRIPTION
A	ISSUED FOR CLIENT REVIEW	EN	EN		



SHELL HARBOUR PRECINCT E
EROSION & SEDIMENT CONTROL DETAILS
301015-03163-CI-DSK-7017

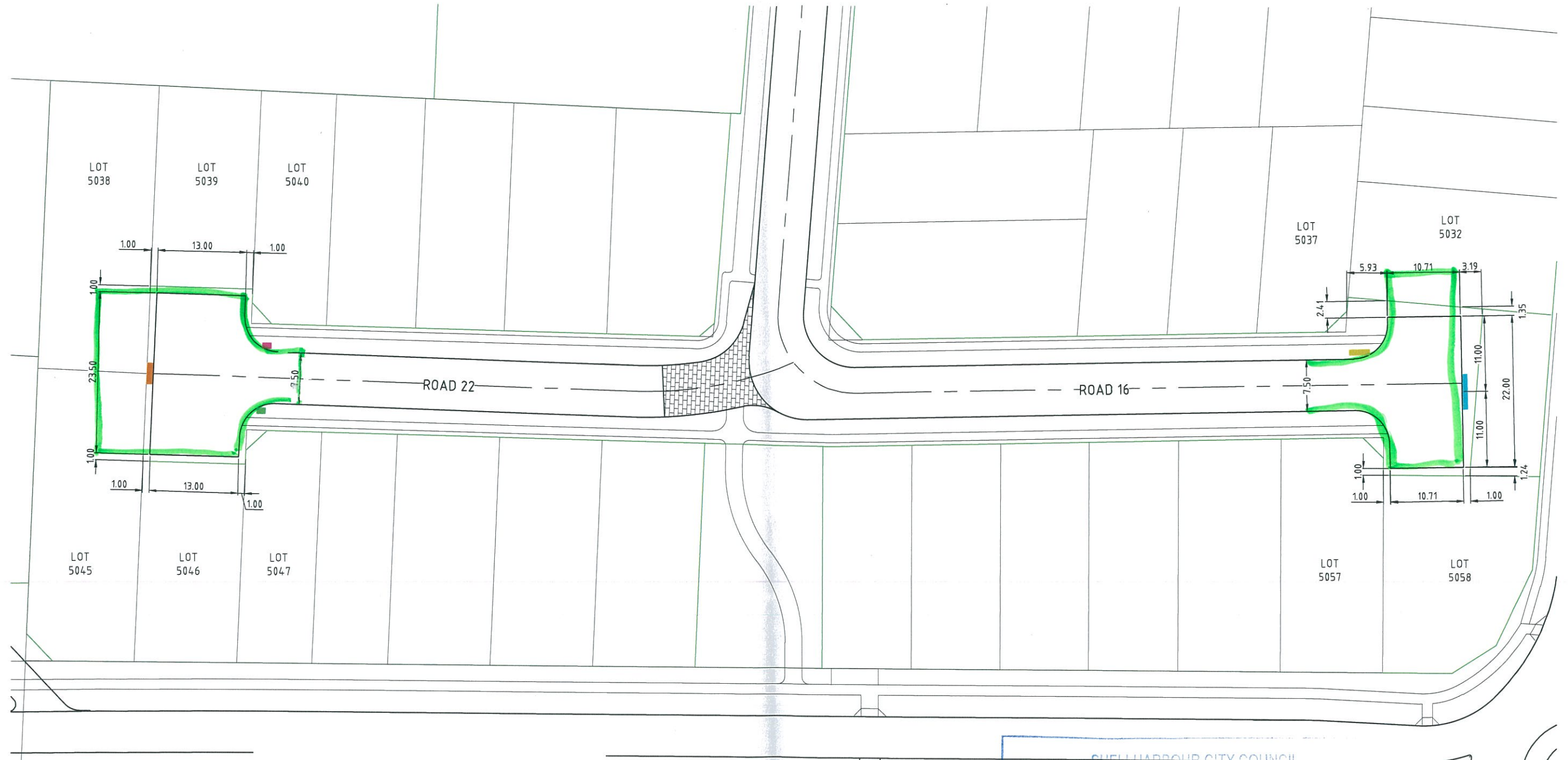
SHELL HARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

DA No. 118 (2017) / Dated 14 March 2018
2017STK0010
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Carey McIntyre
General Manager



LEGEND:

- DESIGNATED BIN COLLECTION LOCATION FOR ROAD 22 T-HEAD (LOTS 5038 AND 5045)
- DESIGNATED BIN COLLECTION LOCATION FOR ROAD 22 T-HEAD (LOTS 5039)
- DESIGNATED BIN COLLECTION LOCATION FOR ROAD 22 T-HEAD (LOTS 5046)
- DESIGNATED BIN COLLECTION LOCATION FOR ROAD 16 T-HEAD PREFERENCE 1 (LOTS 5032 AND 5058)
- DESIGNATED BIN COLLECTION LOCATION FOR ROAD 16 T-HEAD PREFERENCE 2 (LOTS 5032 AND 5058)
- No parking signage & line marking

SHELL HARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

DA No. 118/2017 / Dated 14 March 2018
 20175740010

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Carey McIntyre
General Manager



ISSUE	DATE	ISSUE DESCRIPTION	DRAWN
A	14/03/18	ISSUED FOR CLIENT REVIEW	KM



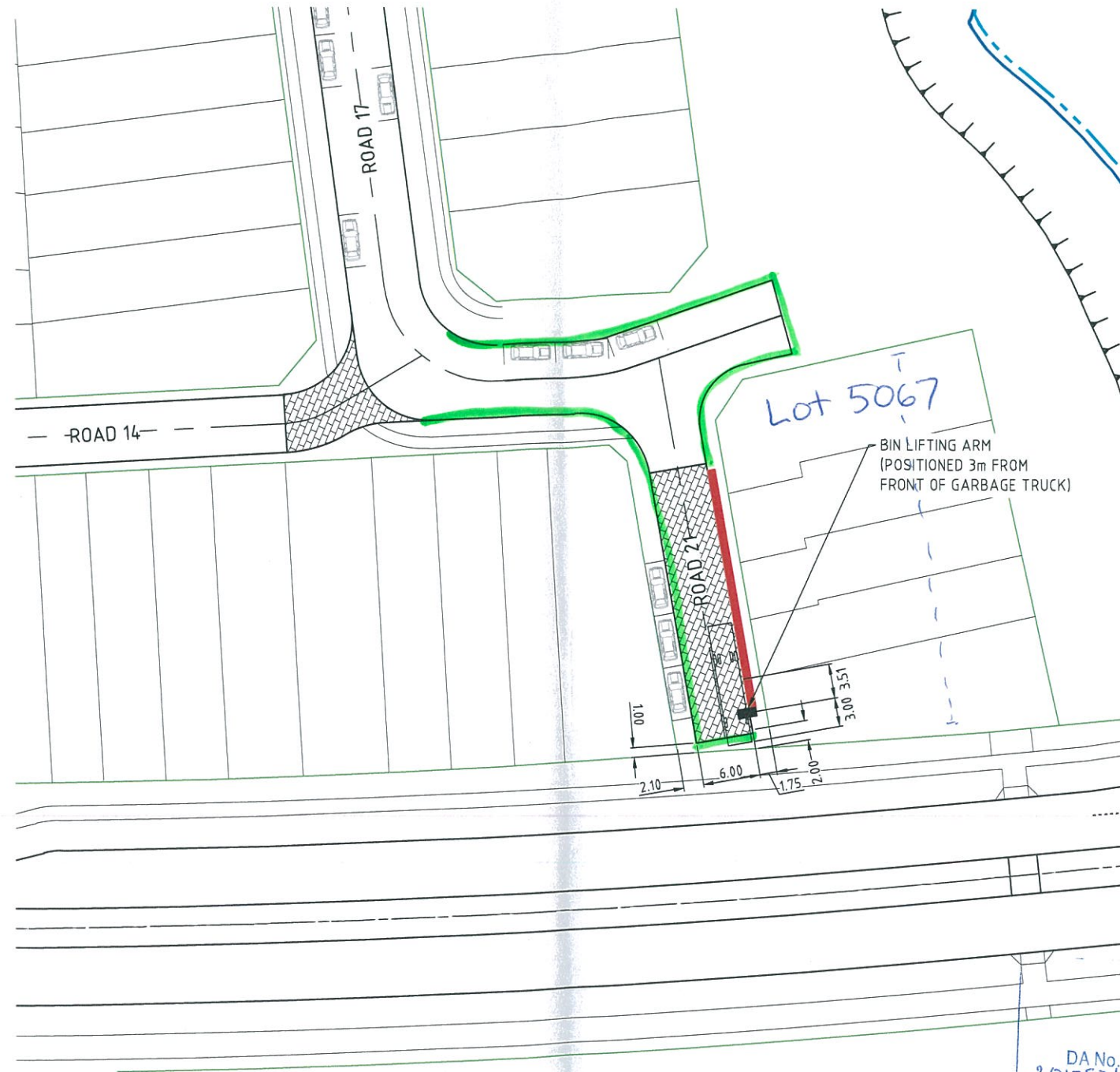
INFORMATION ONLY
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**SHELL COVE - BOAT HARBOUR PRECINCT E
GARBAGE BIN COLLECTION LOCATIONS
ROAD 22 & 16**

301015-03163-CI-DSK-7600

LOCATION: W:\INFRASTRUCTURE\PROJECTS\301015\B163 AUSTRALAND - SHELL COVE DA ADVIC\12.0 DRAWINGS\SKETCHES\301015-03163-CI-DSK-7600.DWG
 USER NAME: kamanandikum
 CTD FILE: Worley-Full.ctb
 PLOT DATE & TIME: 28/8/2017 12:32:22 PM
 SAVE DATE & TIME: 28/8/2017 12:25:52 PM



SHELLHARBOUR CITY COUNCIL
DEVELOPMENT CONSENT

DA No. 118/2017 / Dated 14 March 2018
20175TH0010

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Carey McIntyre
General Manager

LEGEND:

— DESIGNATED BIN COLLECTION LOCATIONS FOR ROAD 21

— No parking signage & line marking



ISSUE	DATE	ISSUE DESCRIPTION	DRAWN
D	28.08.17	LOT BOUNDARY, ROAD AND DIMENSIONS UPDATED	KM
C	21.08.17	VEHICLE BIN LIFTING ARM LOCATION ADDED	KM
B	17.08.17	VEHICLE TEMPLATE ADDED	KM
A	15.08.17	ISSUED FOR CLIENT REVIEW	KM



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SHELL COVE - BOAT HARBOUR PRECINCT E
GARBAGE BIN COLLECTION LOCATIONS
ROAD 21

301015-03163-CI-DSK-7601