

LGID: 'Western Grandstand'

ANNEXURE 4 - FLOOD RESILIENCE STRATEGIES



FLOOD RESILIENCE REPORT

WESTERN GRANDSTAND

NORTH IPSWICH SPORTS & ENTERTAINMENT PRECINCT (NISEP)

PROJECT NO:	VP468710
DATE:	23 MARCH 2026
REV #:	A

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Introduction

Buildcorp Group Pty Ltd have prepared this Flood Resilience Report on behalf of Mewing Planning Consultants (**the Entity**) for submission to Ipswich City Council (**Council**) in its capacity as a Designator under the *Planning Act 2016* (**Planning Act**) to support the making of a Local Government Infrastructure Designation (**LGID**) to guide the delivery of the North Ipswich Sports and Entertainment Precinct (**NISEP**) Western Grandstand (**the Project**). The proposed LGID designation applies to land at 43 – 54 The Terrace and 1A Pine Street, North Ipswich. These lots are formally described as Lot 246 on SL8089, Lot 221 SL4494, Lot 100 on SL12562 and Lot A on AP22241 (**the site**).

An LGID is a statutory planning mechanism under the Planning Act to give statutory effect to the Project, allowing for the efficient and timely supply of community infrastructure for the site.

The site is known as the North Ipswich Reserve, which is a sporting precinct that comprises the North Ipswich Reserve Sports Fields, Len Johnson Oval, and the Ipswich Jets Rugby League fields, grandstand and associated facilities. Funding has recently been secured from the Commonwealth and State Government to upgrade the NISEP Western Grandstand and associated facilities and all stakeholders are committed to redeveloping the grandstand to support future major sporting events.

The purpose of the Infrastructure Designation is to facilitate construction of a Major Sport, Recreation and Entertainment Facility¹, substantively comprising the new grandstand (“Western Grandstand”). The Major Sport, Recreation and Entertainment Facility is a defined term in the Ipswich City Plan, and falls within the designation of Sporting Facilities under Schedule 5 of the *Planning Regulation 2017*.

The new grandstand will be located centrally within the site, broadly sited in the footprint of the recently demolished grandstand structure. The grandstand is to be located to the west of the main playing field, located on Lot 246 SL8089. The proposed scope of works involve an increase to the maximum capacity of spectators within the grandstand to approximately 2199, however it is important to note that the capacity of spectators on the site will continue to be a maximum of 5,000 persons. The Project will also provide for improved facilities for guests, players and staff at the facility, such as new change rooms, amenities, function spaces (associated with spectating games) and media facilities.

The proposed works aim to enhance the amenity of North Ipswich Reserve in a way that aligns with the facility’s current operational capacity. The upgrades are designed with consideration for building functionality and connectivity with both existing structures and planned future facilities. All existing on-site activities will continue unchanged under the proposed scope, with key operational elements summarised below:

- ▼ Event attendees (Regular – approx. 50 per year): less than 150 persons;
- ▼ Event attendees (In all other circumstances – approx. 30 per year): total attendees more than 150 persons, of which approximately 15 events are ‘game days’ with 500 to 1,500 attendees;
- ▼ Maximum capacity: 5,000 persons, for limited events;
- ▼ Training (on-site): daily, comprising approximately 40 attendees; and
- ▼ Hours of operation: 8:00am to 11:00pm daily, depending on activities and/or events.

This report is prepared to support the LGID. In doing so, it provides an assessment of the Western Grandstand (as a Major Sport, Recreation and Entertainment Facility) against the relevant aspect of the Ipswich City Plan and the relevant State Development Assessment Provisions.

¹ Schedule 24 of the Planning Regulation 2017 (Planning Regulation) defines a Major Sport, Recreation and Entertainment Facility as “the use of premises for large-scale events, including, for example, major sporting, recreation, conference or entertainment events”.

Executive Summary

This report outlines how the proposed Western Grandstand has been designed to appropriately manage flood risk to users and infrastructure at North Ipswich Reserve. Flood modelling indicates that the site is not affected by flooding up to the 10% AEP event; however, flooding occurs during the 1% AEP event with climate change due to overtopping of the Bremer River, resulting in a maximum flood level of RL 22.62 m AHD across the site. Consistent with the Ipswich City Plan 2025, the applicable Flood Planning Level (FPL) is RL 22.92 m AHD, incorporating a 300 mm freeboard. The proposed development is primarily constructed at a ground level of RL 21.50 m AHD, with flood impacts and hazards appropriately considered in the design response.

This report has been developed in consultation with the project design team and Ipswich City Council stakeholders to establish strategies for developing a design that responds appropriately to flood risk, including considerations for operations, site and room planning, materials selection, and equipment placement.

Key principles include:

- ▼ Designing ground-level elements to accommodate inundation and minimise flood-related damage.
- ▼ Enabling rapid recovery through resilient materials, layouts, and detailing that support efficient cleaning and reinstatement.
- ▼ Integrating life-safety measures that allow safe isolation of services and timely post-flood reoccupation.
- ▼ Locating critical services, infrastructure, and sensitive uses above the Flood Planning Level where practicable.

The following planning policies and guidelines will be considered in the flood resilience assessment:

- ▼ Ipswich City Plan 2025
- ▼ Ipswich Integrated Catchment Plan 2021
- ▼ The National Construction Code – Flood Standard and Flood Handbook
- ▼ The Queensland Development Code (QDC) for the construction of buildings in flood hazard areas
- ▼ The Queensland Government's Flood Resilient Building Guidance for Queensland Homes

This report is to be read in conjunction with the Flood Impact Assessment and Flood Emergency Management Plan

Flood Level Summary

Location	Finished Floor Level AHD	1% AEP with climate change	Inundation Depth at 1% AEP (m)	Flood Planning Level AHD	Inundation Depth at FPL (m)
External Plaza / Landscapng (North)	22.2	22.62	0.42	22.92	0.72
Main Entry / Landscapng (South)	21.5	22.62	1.12	22.92	1.42
Corporate Centre Terrace	21.5	22.62	1.12	22.92	1.42
Circulation / Players Tunnel	21.5	22.62	1.12	22.92	1.42
Grandstand	19.555	22.62	3.065	22.92	3.365
Concourse	23.38	22.62	-0.76	22.92	-0.46
Hot & Cold Water (External)	22.92	22.62	-0.3	22.92	0
Mechanical Plant	22.92	22.62	-0.3	22.92	0
Lifts 01 & 02	21.5	22.62	1.12	22.92	1.42
Platform Lift (Concourse to L1)	23.38	22.62	-0.76	22.92	-0.46
Platform Lift (GF to Concourse)	21.5	22.62	1.12	22.92	1.42
Comms	25.3	22.62	-2.68	22.92	-2.38
MSB	25.3	22.62	-2.68	22.92	-2.38
Amenities / PWD (North)	22.2	22.62	0.42	22.92	0.72
Amenities / PWD (South)	21.5	22.62	1.12	22.92	1.42
Canteen	22.2	22.62	0.42	22.92	0.72
Storage Rooms / Cleaners / Serv	21.5	22.62	1.12	22.92	1.42
Referee / Change Rooms	21.5	22.62	1.12	22.92	1.42
Medical / Doctors / Drug Testing	21.5	22.62	1.12	22.92	1.42
Internal PWD	21.5	22.62	1.12	22.92	1.42

Flood Resilient Strategies

The following strategies proposed to be incorporated as part of the design solution where possible.

Building Element	Flood resilient strategies
Services	▼ All critical services elevated above flood level ▪ Hot water units and air conditioning condenser units on external elevated plant deck ▪ MSB and Comms room relocated to Level 1 ▼ Sewer pump station to ensure plumbing compliance for fixtures below flood level ▼ Lighting, data and electrical points installed above FPL (best case), 1% AEP with climate change (base case) - subject to DDA compliance heights in some locations. ▼ Install separate circuits (with breakers) on the lower and upper levels ▼ Lift pits integrated with wells and pumps and water sensors provided to elevate lifts in flood event ▼ Under Review: Inclusions of sensors where light switches for DDA compliance fall within flood zone
Water Egress Considerations	▼ Avoid steps / introduce flush ▼ thresholds between rooms ▼ Surface control on sub-floor ground to increase resilience (falls / grates)
Wall type construction	▼ Core filled blockwork installed to ground floor as part of a flood resilient, cavity free design ▼ Avoid services cavities / risers
Openings (doors, windows)	▼ Install corrosion-resistant door and window hardware ▼ Install flush door sills to ensure easy cleaning after a flood event ▼ Use swing or face-of-wall sliding doors opposed to cavity sliding doors ▼ Use of gates or solid core doors opposed to hollow core doors
Floor & wall finishes	▼ Use flood resilient flooring and coved skirting where possible, alternate options under review ▼ Use waterproofing membrane where required ▼ Use flood resilient grout (semi-epoxy) and apply flood resilient sealant when tiling wet areas where required
Joinery / FFE	▼ Avoid fixed joinery where possible and use loose FFE that can be easily relocated ▼ Stainless steel kitchen benches and equipment on wheels that can be easily relocated where possible ▼ Where possible, raise fixed joinery elements above flood level / use flood resilient finishes ▼ Use wall mounted basins and no vanity benches throughout ground level
Landscape / External Areas	▼ No power bollards externally, use of generators when required ▼ Additional water points for post flood cleanup ▼ Flood resilient landscaping (i.e. gravel, stone, mulch, flood resilient plant species) ▼ Ventilation below grandstand to prevent mould growth and access maintained below grandstand for post flood inspections

Appendix A: Floor Plan RL Mark Up

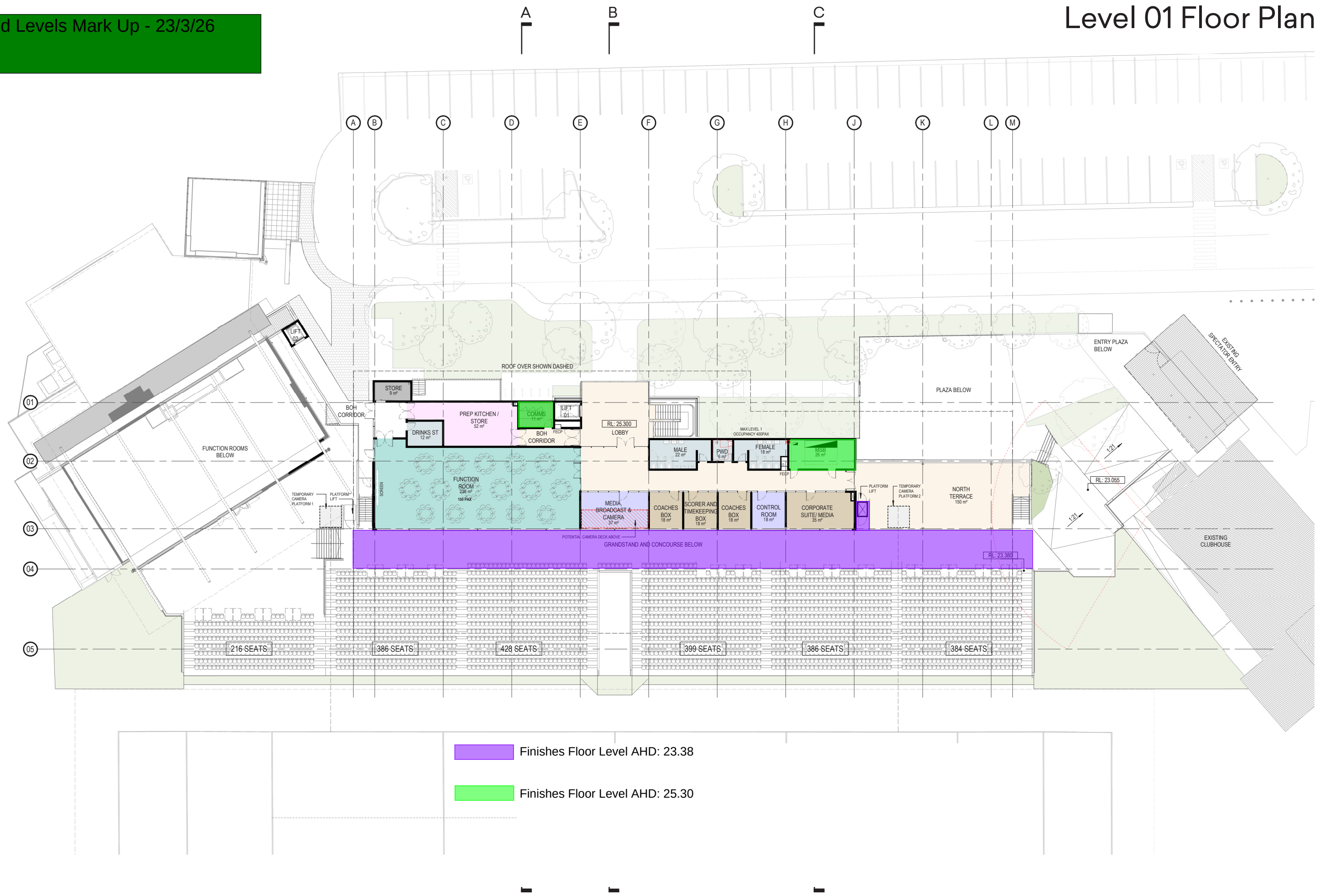
Flood Levels Mark Up - 23/3/26

Ground Floor Plan



Flood Levels Mark Up - 23/3/26

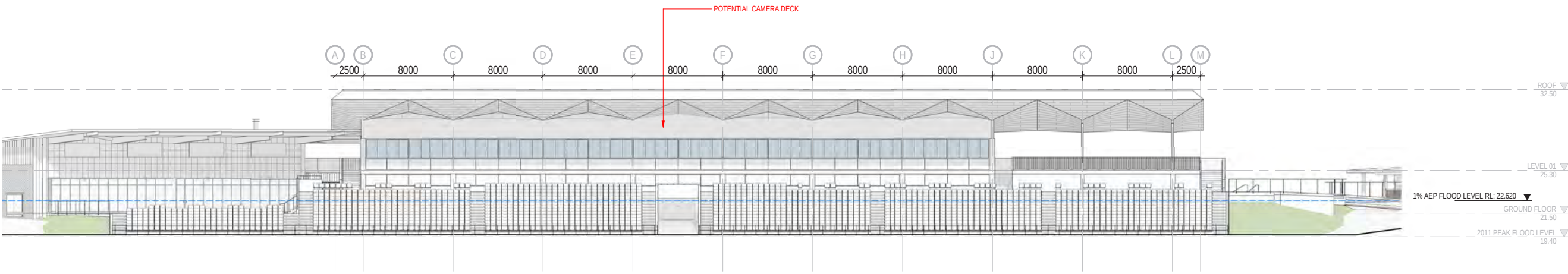
Level 01 Floor Plan



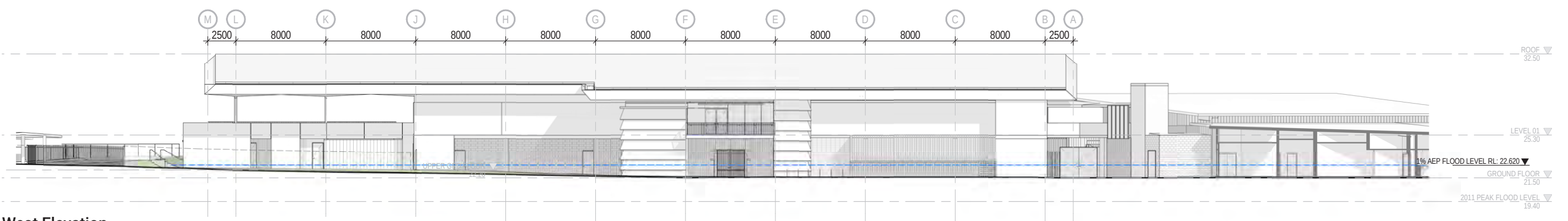
Finishes Floor Level AHD: 23.38

Finishes Floor Level AHD: 25.30

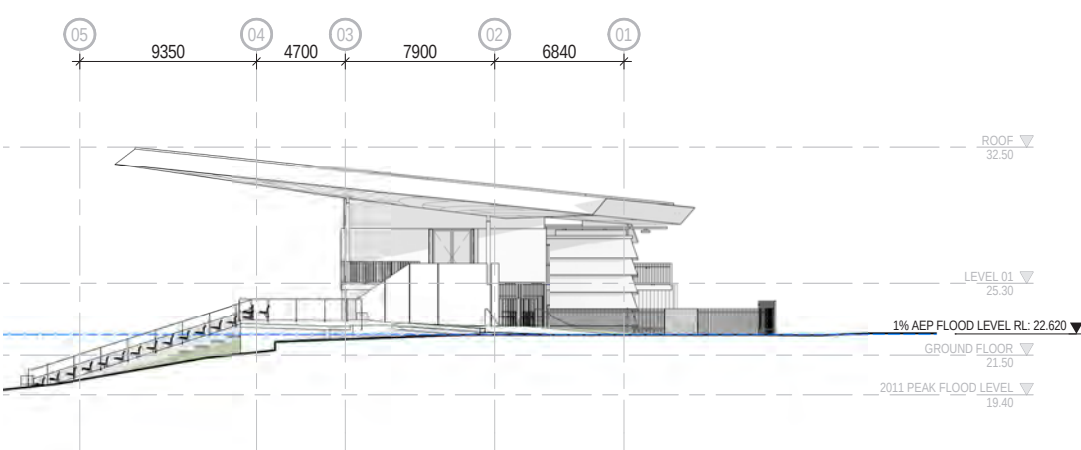
Elevations



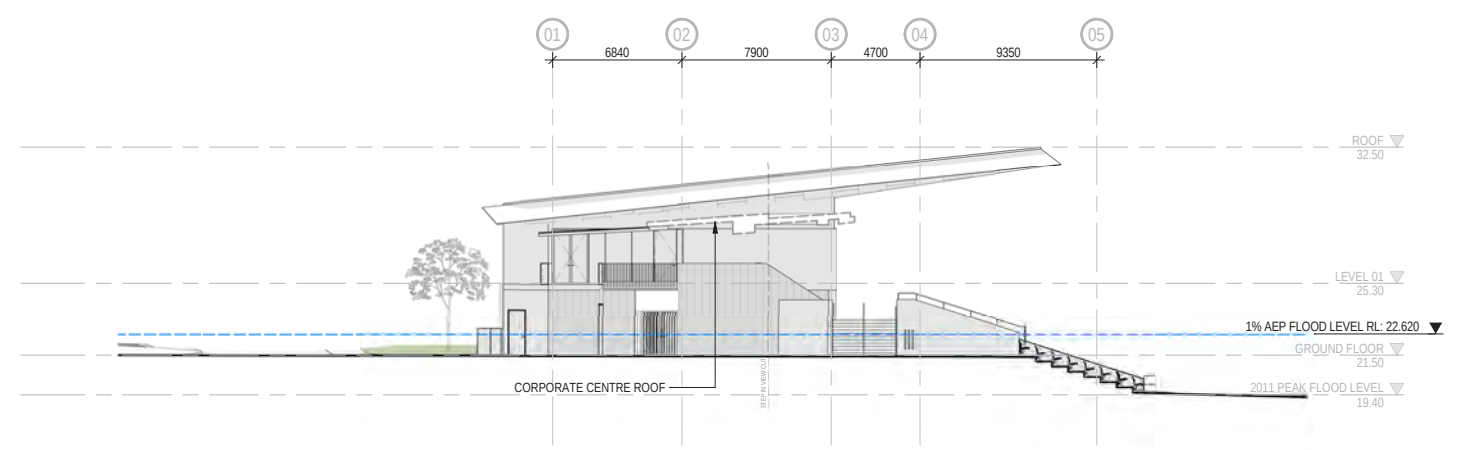
East Elevation



West Elevation

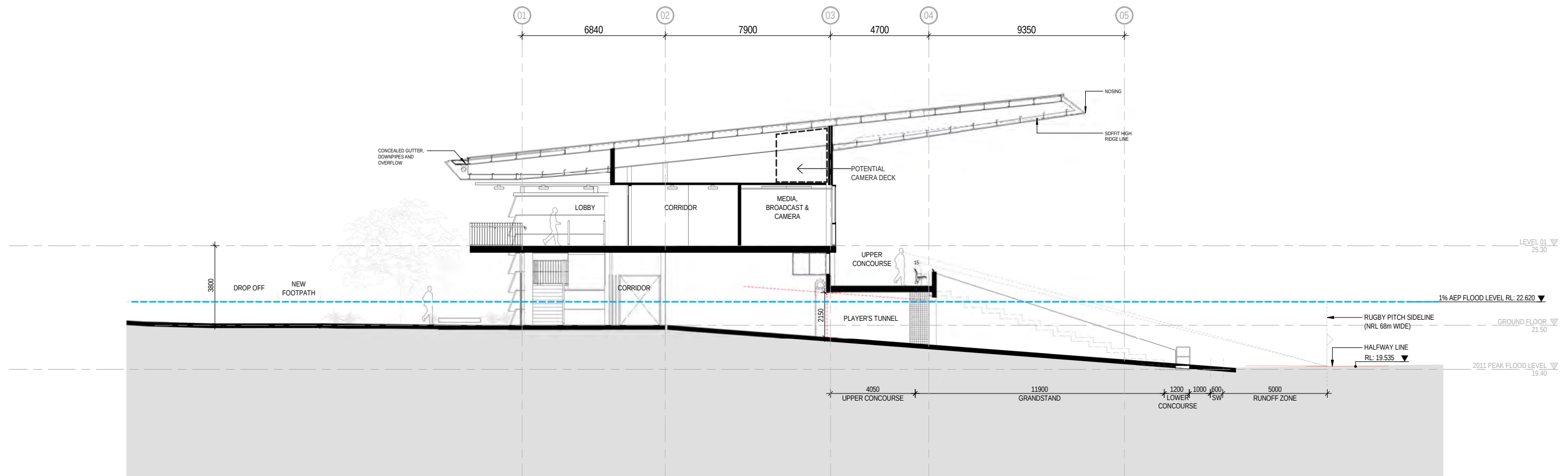
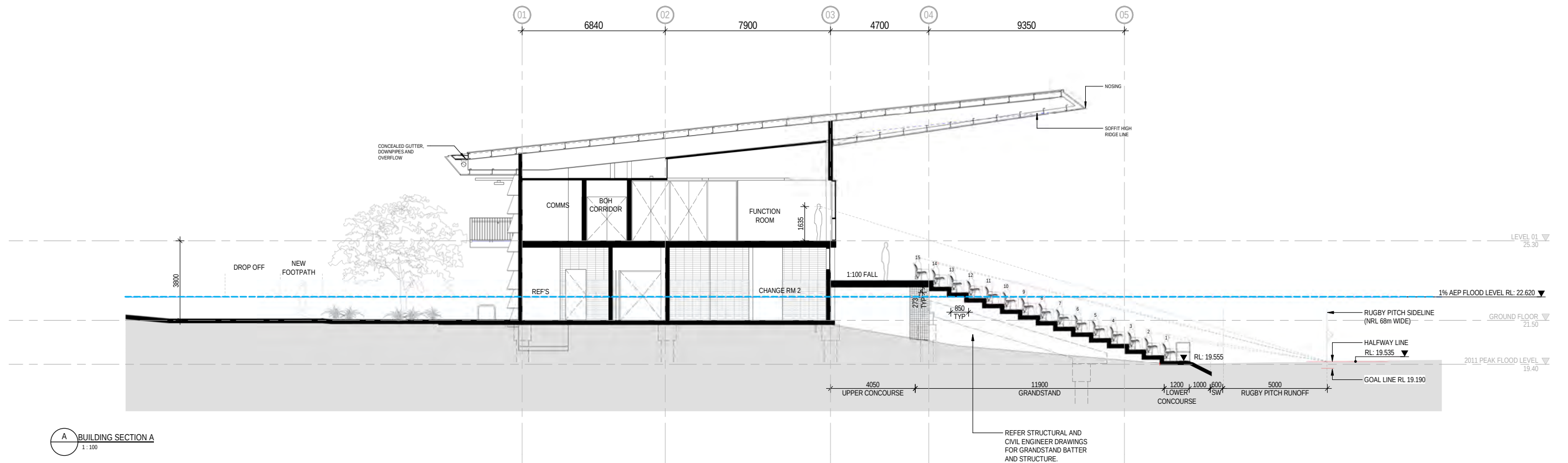


North Elevation



South Elevation

Sections



Sections

