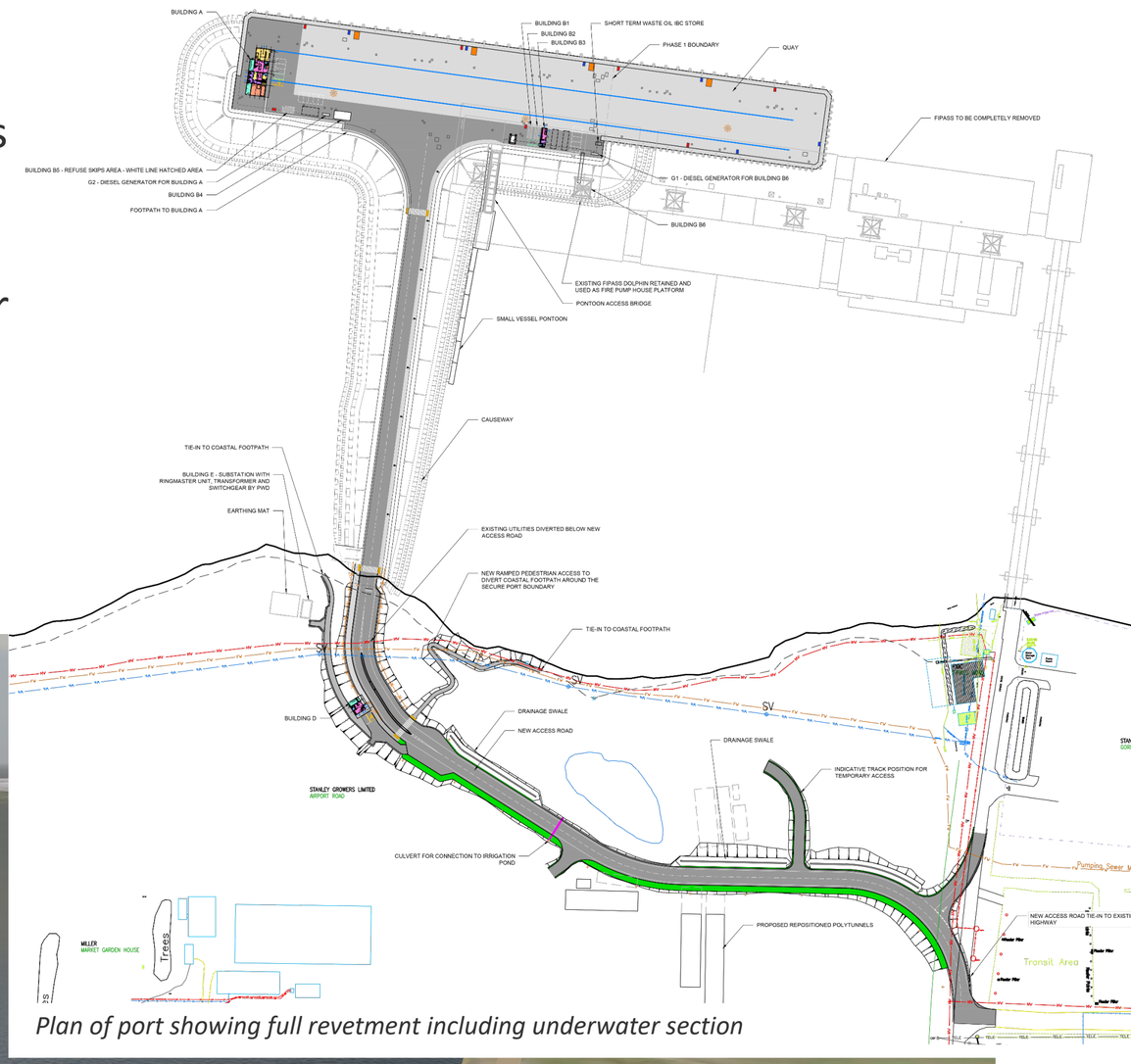
FALKLAND ISLANDS: New Port Facility

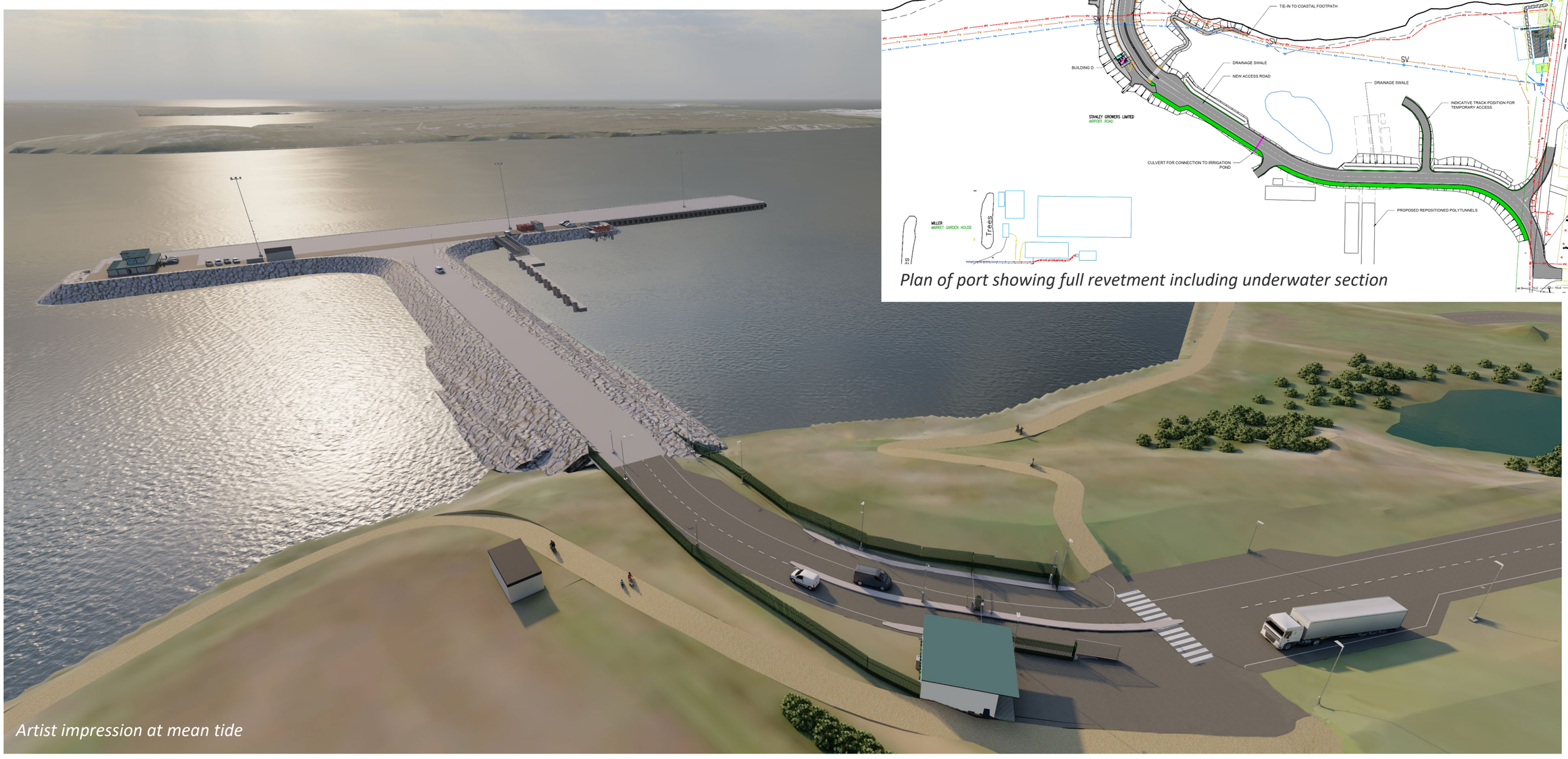
Key Features & Benefits

KEY FEATURES

- Overall quay of 300 x 50/40m with fenders & mooring bollards which allows for future growth projections
- Clear port area to maximise operational space & flexibility
- Service points (water & fuel) along main berthing face & water on eastern & southern berths
- Prioritised cruise / tanker berth (western end of main quay)
- Approach causeway protected by rock armour
- Southern berth for shallow draught vessels & Concordia Bay



Plan of port showing full revetment including underwater section



Artist impression at mean tide

LONG TERM BENEFITS

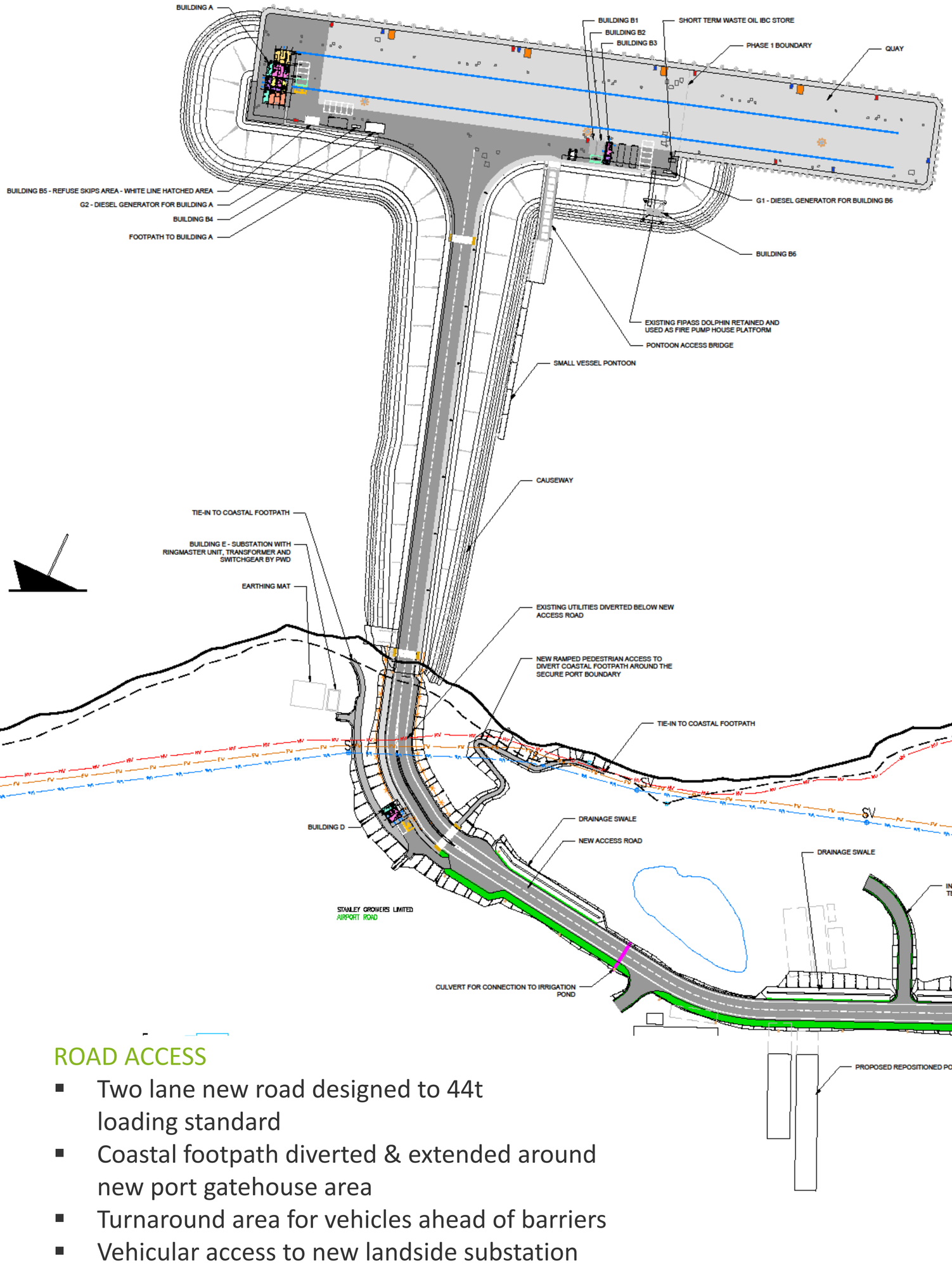
- Enhanced port facilities supporting economic growth
- Limits time needed to maintain FIPASS and risk of significant failure
- Port demand data available to FIG for future growth planning
- Establishment of H&S and environmental best practice
- Opportunities for local business and workforce
- Meets long term growth forecasts of port related industries
- Enhanced port facilities supporting economic growth

HEALTH & SAFETY BENEFITS

- Deck easier to de-ice; better safety for personnel
- Significantly reduced level of hazardous diving
- No stability issues when lifting cargo loads
- Improved HGV manoeuvrability & quick turnaround for transhipment
- Able to further modify for change in use / demand
- Better port lighting and electrical safety

FALKLAND ISLANDS: New Port Facility

Key Features of the New Port Facility



PORT AREA

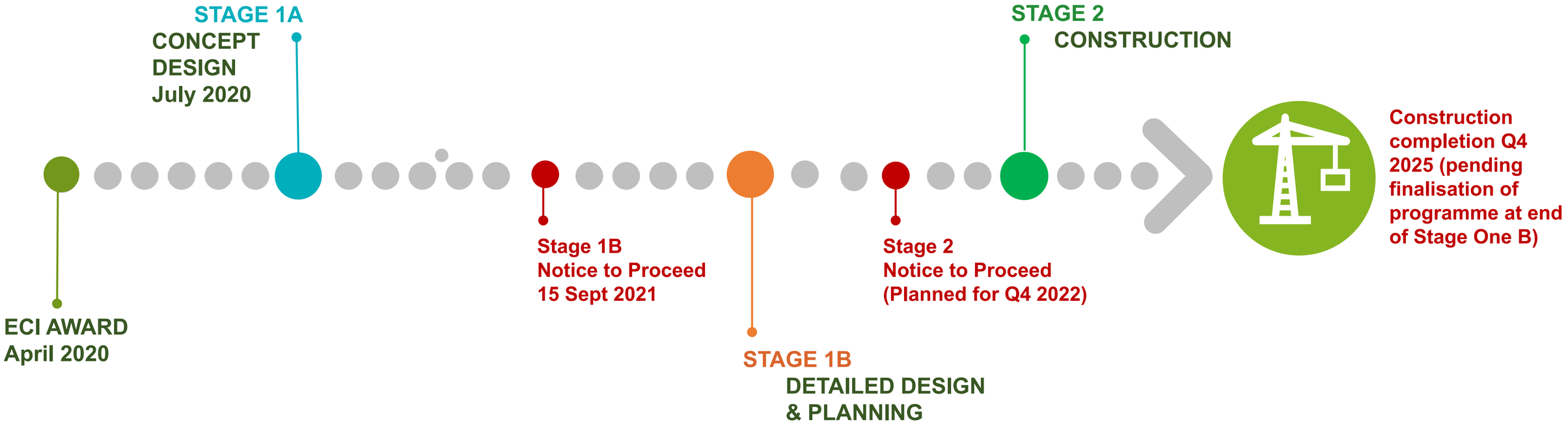
- Building A houses port management functions at Western End of Quay
- Central port welfare building
- Resupply pontoon suitable for telehandler & pedestrian pontoons for smaller vessels
- Services on pontoon including water, fuel and electrical power point.
- New substation and emergency generators for safeguarding life critical equipment
- Fire pumps (on existing dolphin) with new hydrants spaced around the quay
- Designed for flexible future expansion of port operations, including substation capacity
- Container storage for oil spillage equipment and space for future requirements
- Heavy duty pavement in cargo and key transhipment areas
- Lighting levels for safe working on port using LED lights to minimise light pollution

ROAD ACCESS

- Two lane new road designed to 44t loading standard
- Coastal footpath diverted & extended around new port gatehouse area
- Turnaround area for vehicles ahead of barriers
- Vehicular access to new landside substation
- Road lit by street lights (as existing FIPASS Rd)
- New services running in western verge
- Access to SSL, Seafarers Mission & SAAS yards maintained
- Existing FIPASS Road amended, realigned & traffic priority given to new NPF road

FALKLAND ISLANDS: New Port Facility

The Early Contractor Involvement (ECI) Process



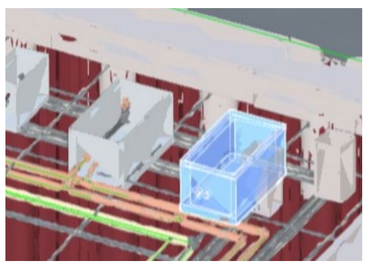
Initial Stakeholder Engagement in **Stage One A**, Sept 2020:

- **UK design staff** attended via Video Tele-Conference
- Total of **60 hours** in Video Tele-Conference meetings
- Total of **540 hours** of active participation with stakeholders
- Total of **4 site** visits (SSL, Stanley Growers, FIPASS, Seafarer's Mission)
- Over **2,500 hours** (questionnaires, presentations, attendance)
- **Public meeting** in Stanley Town Hall
- Further **industry stakeholder engagement** at end of Stage One A with MLA's and key FIG Officers

Further Stakeholder Engagement during **Stage One B**:

- Planning Officer
- Multiple meetings with: MLA's, FIG Officers, Maritime Authority and other industry stakeholders



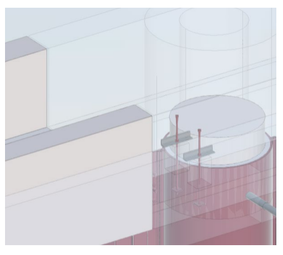

Early Contractor Involvement

- Development of Material Management processes & strategy
- Checking surveys for temporary sites & FIPASS safety checks for dismantlement
- Processes for new Port Environmental Management developed & EIS completed
- Coordination with SSL and PWD designs
- Development of Geo-tubes proposal & piling redesigned for geotechnical conditions

Planning Application

Progress in Stage One B



DESIRE THE RIGHT

bam

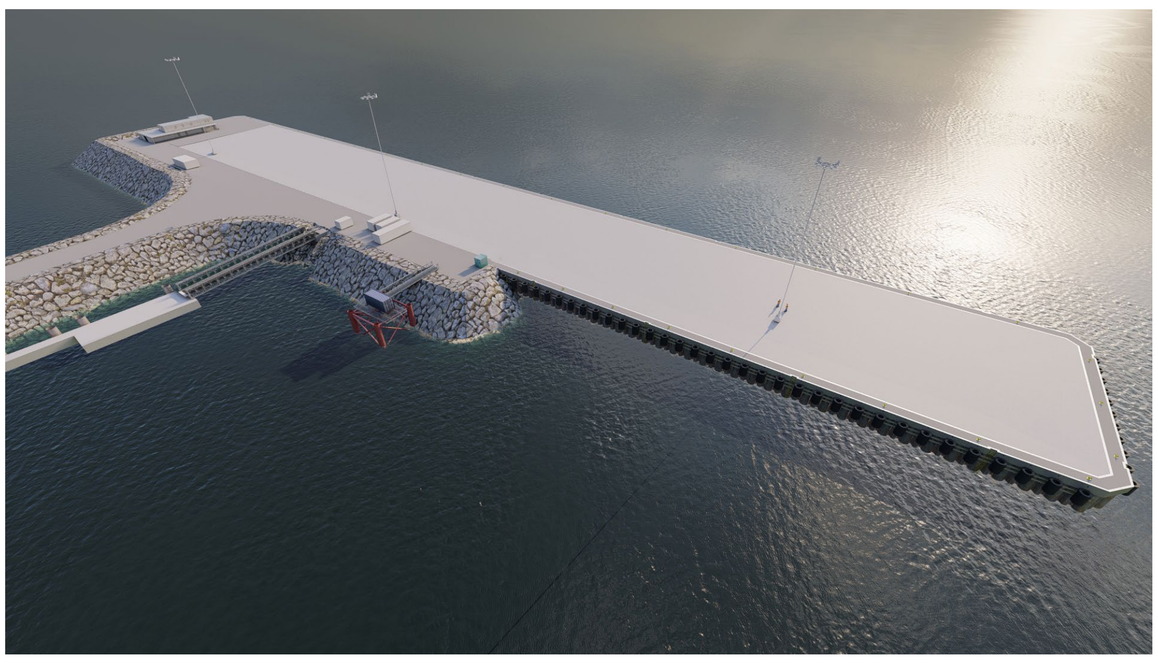
Royal HaskoningDHV
Enhancing Society Together

FALKLAND ISLANDS: New Port Facility

New Port Facility Lighting

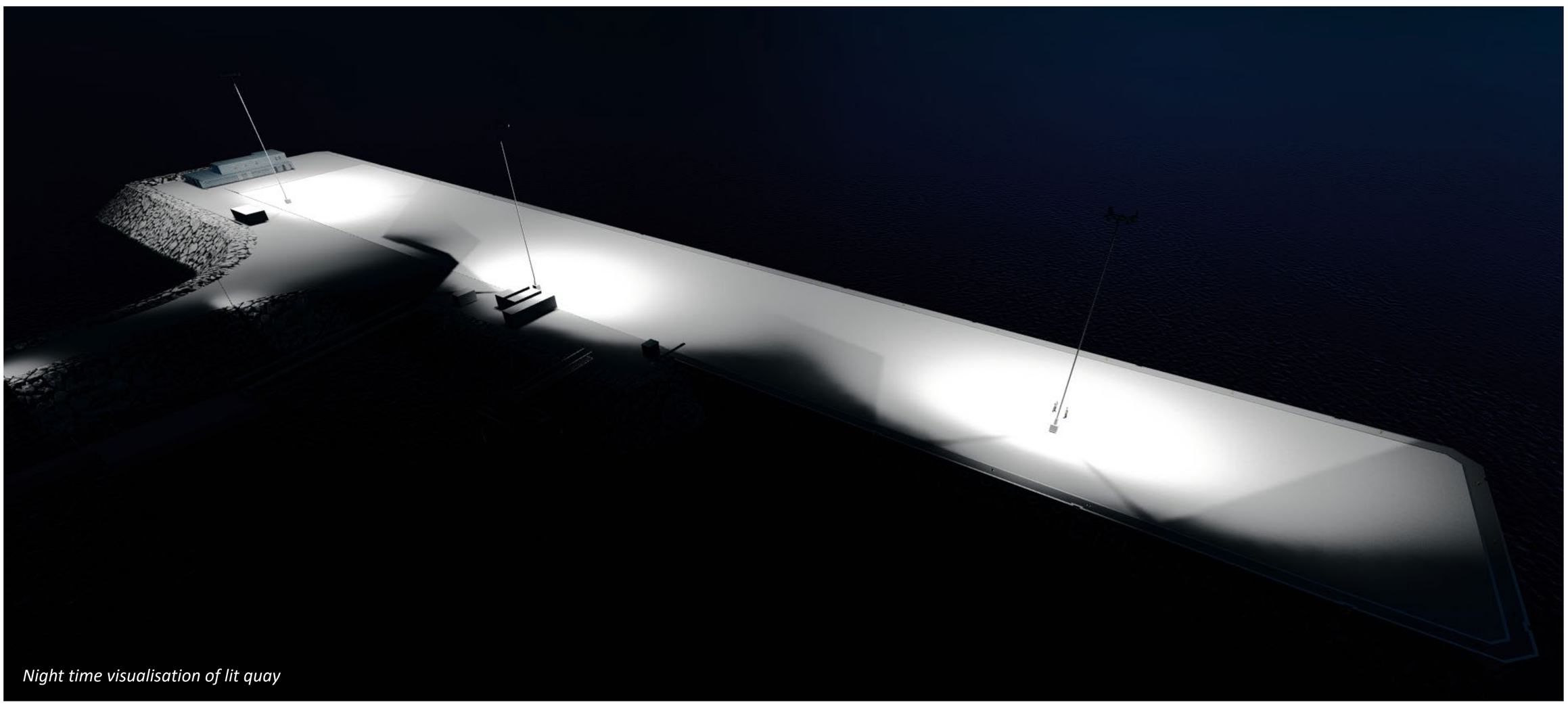
The lighting of the New Port facility will be principally by -

- LED lights mounted on 30m high masts
- Lighting has been designed to minimise light spill toward Stanley
- Lighting Lux levels on the quay will be in compliance with current health and safety requirements for operational ports
- Envisaged that additional ships lighting will not be required to light the working area
- Access road and causeway will be lit by LED street lights similar to those in use around Stanley



KEY FEATURES

- New shielded LED lighting system lights the quay not the sky for safe night time use
- Removes the need for the use of ships own lighting; mitigating light spill
- At base of high masts are the Electrical connections for plugging in containers



Night time visualisation of lit quay

FALKLAND ISLANDS: New Port Facility

New Port Buildings

The port buildings have been designed to provide shelter, as far as practicable, to personnel and visitors from the prevailing westerly winds. Facilities are provided for overall Port Management, including management of cruise passengers. Storage space for essential equipment is also provided. There is a separate welfare building for port personnel with space for future expansion of port facilities. The gatehouse building will house staff controlling access to the port in compliance with port security regulations.

KEY FEATURES

- Well insulated including double glazing
- Extendable in the future
- Sited to maximise shelter from the wind and rain
- Based on standardised units
- Functional to meet the needs of the New Port Facility

Artist impression of Port Management building (A)

FALKLAND ISLANDS: New Port Facility

Sustainability Credentials of the New Port Facility

AGGREGATES

- All rock required for project will be quarried locally at existing Pony's pass quarry
- Overall quarried rock volumes have been reduced as much as possible (ie: 42% reduction in rock fill volume compared with tender stage)
- Concrete used where possible instead of steel and will use local crushed aggregates

CONSTRUCTION

- Weight of steel piles has been rationalised to balance pile driving productivity and structural requirements
- Buildings will have good levels of insulation

ELECTRICAL USE

- Electric Vehicle charging points will be installed at the gatehouse and on the port
- LED port lighting and building lighting is specified
- Lighting is shielded to minimise effect to night sky

GROUND CONDITIONS

- Surficial silt may be reused as fertiliser (if required and suitable post testing) after treatment
- Peat excavated for the road will be reused to enhance soil conditions nearby (if required)

WATER

- Swales adopted to drain roadway and provide natural attenuation, minimising construction material use
- Rainwater will be discharged back into harbour through oil interceptors, mitigating pollution risk
- Port generated foul water will be treated by low energy package sewage treatment plants before discharging clean water back into harbour
- Steel material within FIPASS barges will be shipped overseas for recycling / scrapped

DESIRE THE RIGHT

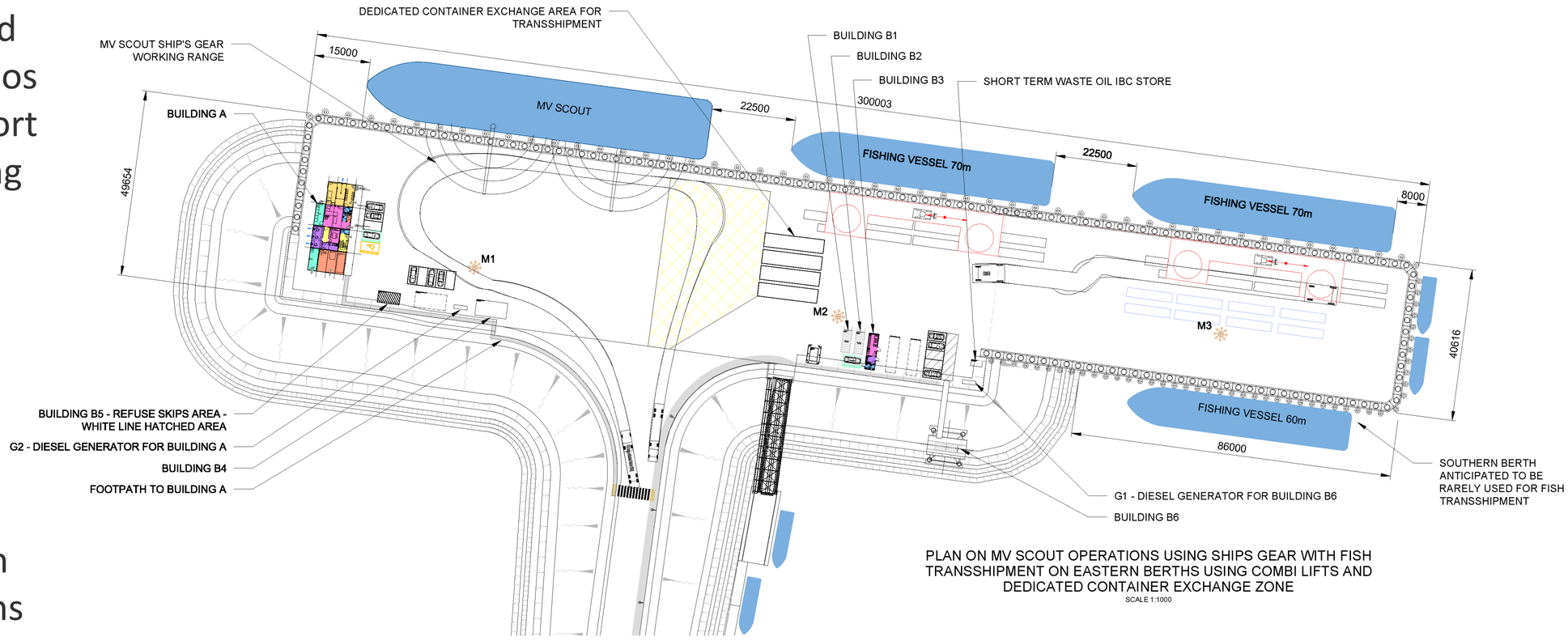
bam

Royal HaskoningDHV
Enhancing Society Together

FALKLAND ISLANDS: New Port Facility

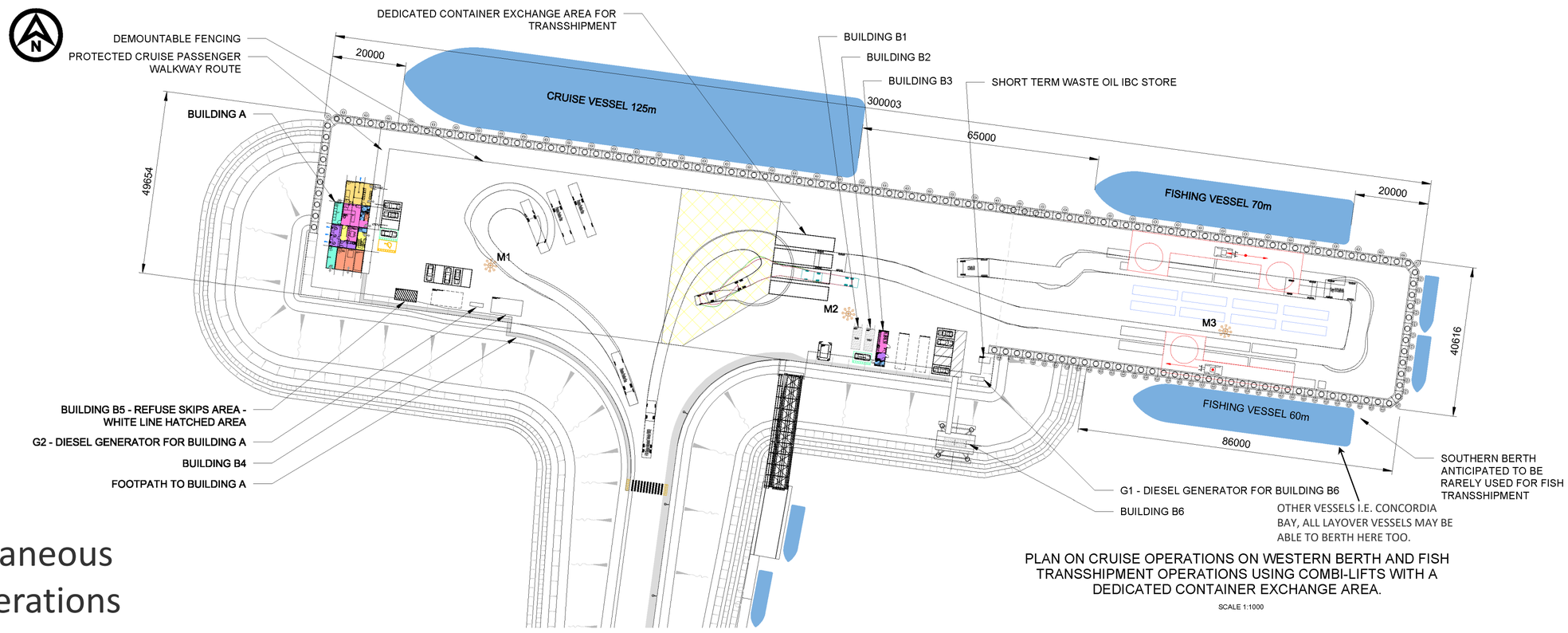
Planning for Future Capacity

Illustrations below based on high demand scenarios demonstrate that the port can deal with all berthing patterns. Note, some of these berthing patterns would only occur infrequently.



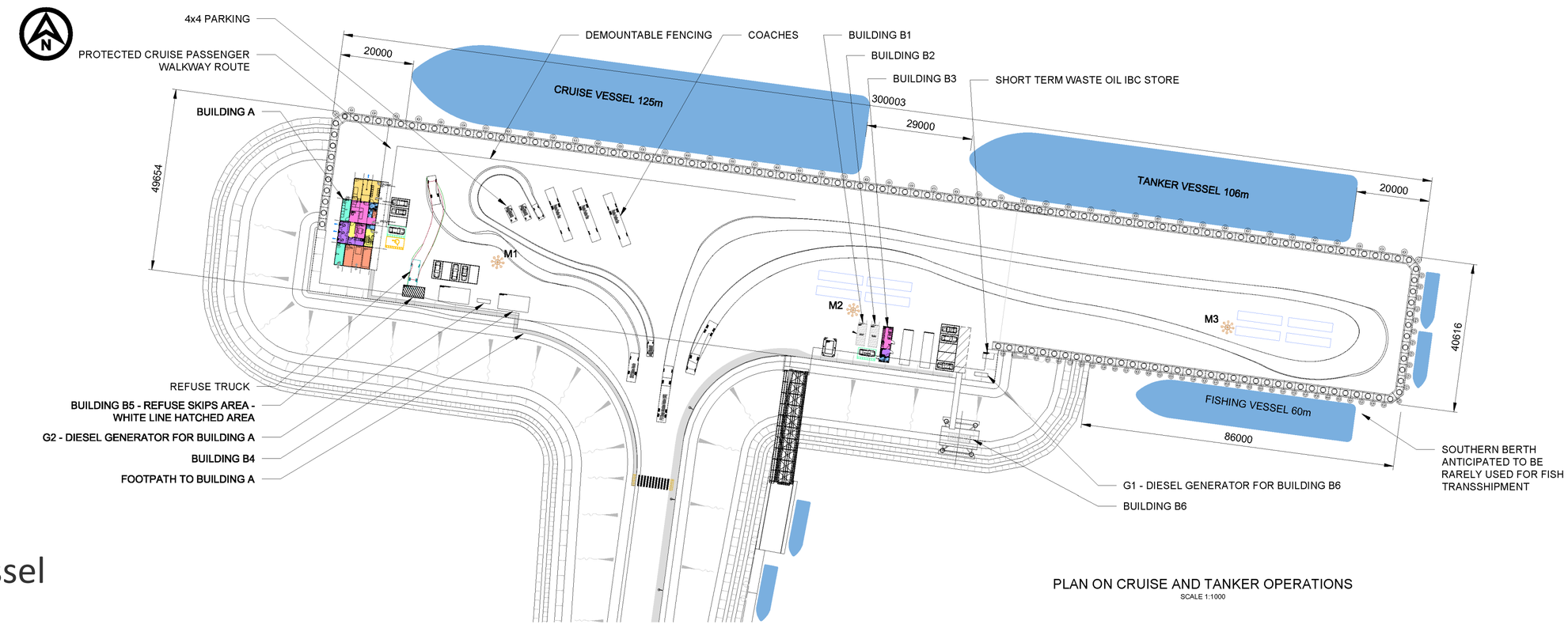
PLAN ON MV SCOUT OPERATIONS USING SHIPS GEAR WITH FISH TRANSSHIPMENT ON EASTERN BERTHS USING COMBI LIFTS AND DEDICATED CONTAINER EXCHANGE ZONE
SCALE 1:1000

Container Handling and Three Simultaneous Fish Transhipment Operations



PLAN ON CRUISE OPERATIONS ON WESTERN BERTH AND FISH TRANSSHIPMENT OPERATIONS USING COMBI-LIFTS WITH A DEDICATED CONTAINER EXCHANGE AREA.
SCALE 1:1000

Cruise and Two Simultaneous Fish Transhipment Operations



PLAN ON CRUISE AND TANKER OPERATIONS
SCALE 1:1000

Cruise and Tanker Vessel Operations