

LAYAN VERDE – Mitigation Plan

Here are the main mitigation measures implemented by Layan Verde for the construction phase:

- **General Principles:**

- Strictly adhere to all environmental impact prevention, mitigation, and monitoring measures as approved in the EIA report throughout both construction and operation periods.
- Systematically record monitoring results and verify compliance, submitting findings to the licensing authority and the Office of Natural Resources and Environmental Policy and Planning (ONEP).
- Inform relevant authorities of any project changes; if changes offer greater environmental benefit or are equivalent, ONEP will be informed. If changes affect the EIA's substance, expert committee approval is required.
- Upon project completion and before transfer of rights, fully inform the transferee of all EIA compliance rights and responsibilities. Failure to provide evidence of notification retains responsibility with the original owner.
- Promptly address and resolve public complaints regarding distress, nuisance, or damage caused by project activities, and inform ONEP and other relevant authorities for solutions.
- All environmental impact prevention and mitigation measures will be explicitly integrated into contracts with construction contractors, legally binding them to strict compliance.

- **Land and Topography Management:**

- Control construction activities strictly within the designated project area.
- Prohibit burning of waste materials on the construction site, with clear "No open flames" signage.
- Phase land preparation, excavation, and soil transportation into zones, completing building foundations and retaining walls in each zone before excavating adjacent areas to prevent soil collapse.
- Utilize 6-wheel trucks for soil transportation to minimize public road disturbance.
- Cover all soil loads with opaque tarpaulins to prevent spillage during transit.

- Restrict soil transport to daytime hours on weekdays, avoiding peak traffic periods (7:00 AM-9:00 AM and 4:00 PM-6:00 PM).
- Use plastic sheets to cover exposed ground during foundation and basement construction to prevent erosion.
- Install temporary sump pits and pumps in excavation areas for water management.
- Employ sheet piles and steel bracing for foundation and basement construction to prevent soil collapse.
- Place soil blankets along slopes behind specific buildings (A4 and A5).
- Prohibit land adjustment and soil transportation during heavy rainfall.
- Ensure supervision by an expert engineer to mitigate landslide impacts.
- Commit to not destroying or moving any bedrock.
- Strictly supervise building construction to ensure compliance with design specifications and permits.
- Provide remaining excavated soil from related projects to a local landowner free of charge, with the landowner responsible for transportation.
- Maintain a temporary 6-metre-wide drainage path in the soil receiving area to prevent flooding.

- **Air Quality Control:**

- Display a public information sign (at least 1x0.5 meters) detailing construction duration, work hours, contacts, and environmental control measures.
- Establish a comprehensive complaint recording system for dust, noise, and vibration, including resolution outcomes and actions taken.
- Implement an abnormal event recording system for dust incidents, specifying cause and time.

- **Noise and Vibration Abatement:**

- Install a solid metal sheet fence (or equivalent), approximately 3.5 meters high, around the entire project land boundary.
- Erect a temporary sound barrier (solid metal sheet fence or equivalent, 3.5 meters high) on the southern side of the building during structural work.
- For all six related projects, install temporary sound barriers (solid metal sheet with 125mm thick polyester absorber, 3.0 meters high) covering the

entire length of each layer upwards on the north, south, and east sides of each building.

- Strictly limit construction hours to 8:00 AM to 5:00 PM, Monday to Saturday. Concrete pouring for foundations may extend to 8:00 PM with prior notice to residents and permission from Or Bor Tor Cherng Talay. All construction ceases on Sundays and public holidays.
- Use drilled piles instead of driven piles to significantly reduce vibrations.
- Conduct pre-construction surveys and photographic records of neighboring buildings. Provide immediate compensation or repairs for any project-induced damage.
- Meet with and explain project details to surrounding residents before construction begins.

- **Water Resource Management:**

- Provide sufficient sanitary toilets (20 units) for construction areas and workers' accommodations.
- Treat wastewater from toilets using prefabricated aerated wastewater treatment tanks to meet a BOD outflow value not exceeding 20 mg/L before discharge into public drainage systems.
- Ensure only clean water drainage is permitted during the construction phase.
- Implement drainage ditches (0.6x0.5 meters) and a 250 cubic meter retention pond/sedimentation basin during land clearing and foundation construction.
- During structural construction, install drainage pipes (0.3 meters in diameter) with intermittent catchment pits leading to a 372.60 cubic meter sedimentation pond before discharging into temporary drainage channels and public systems.
- Jointly support expenses for the government's drainage system development plan.
- Regularly dredge sedimentation ponds/retention basins and drainage pipes (monthly).
- Assign workers to clean the construction area to prevent debris from blocking water flow.

- **Traffic Management and Public Safety:**

- Avoid transporting construction materials during peak hours (7:00 AM-9:00 AM and 4:00 PM-6:00 PM).
- If night transportation is necessary (e.g., for ready-mixed concrete), it will not extend beyond 8:00 PM, with prior notice to residents and permission from traffic officials.
- Pause all transportation of construction materials on Sundays and public holidays.
- Coordinate concrete truck movements to stagger arrivals and reduce traffic density.
- Construct a servitude road for construction vehicle access, which will be improved for public use post-construction.
- The contractor will be fully responsible for repairing any public roads damaged by material transportation.
- Install clear signage, including project name, directional arrows, warning signs for construction areas, and standard traffic signs/signals.
- Place warning lights and blinking signals at project entrances/exits during construction.
- Install adequate lighting in construction areas for nighttime operations.
- Require all trucks transporting materials or soil to use tarpaulins to cover their loads.
- Limit truck speeds to no more than 30 kilometers per hour in construction and community areas, with a public reporting sign on trucks.
- Strictly prohibit parking that obstructs traffic along the rural highway (4018).
- Provide on-site staff and security personnel to facilitate vehicle movement and ensure safe entry/exit without obstructing traffic.
- Display public information signs on transport trucks with contractor name and contact number for direct communication regarding inconveniences.

- **Community Engagement and Quality of Life:**

- Post public information signs displaying project details, construction timelines, and contact information for complaints.
- Establish formal systems for recording complaints (dust, noise, vibration) and abnormal dust events, detailing resolutions and actions.
- Project staff and contractors will hold weekly meetings with neighboring residents to foster understanding and address concerns, providing a direct contact number for immediate distress calls.

- Make a suggestion box available for receiving complaints.
- Strictly control Tower Cranes to remain within the project construction area to prevent damage to neighboring residents' life and property.
- Conduct a comprehensive survey and photographic record of neighboring buildings before construction. Provide compensation or immediate repairs for any project-induced damage.
- In case of fire, assistance can be requested from the Or Bor Tor Cherng Talay Disaster Prevention and Mitigation Office.