USACE SUPPORT OF THE OFFICE OF INSULAR AFFAIRS

Donald Schlack
Project Manager
US Army Engineer District Honolulu

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AGENDA

USACE Overview

Programs

- NEPA
- Schools
- Hospitals
- Design Reviews
- Design Guide

Questions

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Honolulu District

INK Architects/ Stantec

HHF PLANNERS
places for people

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NATIONAL ENVIRONMENTAL PROTECTION ACT (NEPA)

Ensuring that requirements are met and that resources are protected

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HISTORY

- 1969 National Environmental Policy Act Established
  - Covers federal actions (i.e. spending money)
- 2008 DOI published implementing regulations
  - Definitions
  - Levels
  - Exclusions
- 2008 USACE began delivering review and other support

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PROCESS

- Applicant/Grantee submits a grant proposal to OIA
- OIA sends signed Scope of Work (SOW) Approval Form to Grantee and USACE
- Grantee contacts USACE representative for tech assistance and enviro review
  - NEPA specialists focus on each insular area
  - Specialist determines NEPA level of analysis and other fed req
  - Grantee and USACE conduct necessary consultations
  - Grantee and/or USACE prepare NEPA documentation
  - USACE verifies sufficiency of compliance documents
  - USACE recommends Authorization to Proceed (ATP) to OIA
- OIA issues ATP to Grantee

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SUCCESS, ISSUES, SOLUTIONS, FUTURE

- **Successes**
  - Most projects move quickly through the process, in less than 6 months
  - OIA can document compliance
- **Issues**
  - Some projects languish for too long
  - Some applicants unfamiliar with the need or don't have the resources
  - Some applicants don't/can't provide timely responses
- **Solutions**
  - When possible, POH works closely to identify information requirements & gaps
  - Sometimes write a large portion of the documentation
- **Future?**
  - Periodic field visits
    - Training
    - Selected project compliance reviews

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PROJECTS ADDRESSING UNIQUE FACILITIES ISSUES OF THE ISLANDS

School Maintenance
Hospital Maintenance
Design Guide
Design Reviews

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INFRASTRUCTURE AID WOES IN THE ISLANDS

SCENARIO 1

- Large donor investments to small islands
- Designed and built by donor nation contractors or military
- Maintained by recipient
- Investment decays
- Abandon or rebuild

SCENARIO 2

- Large donor grants to small islands
- Design and construction managed by recipient
- Maintained by recipient
- Investment decays
- Abandon or rebuild

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MAJURO CAPITOL BUILDING

- **1990 Constructed**
  - Six Inches settling during construction
  - Completed and moved in
- **2014 Abandoned**

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INSULAR ISLAND CHALLENGES

- Extremely Corrosive Environment
- Hot and humid conditions
- Hurricanes, earthquakes, floods
- Logistical difficulties
- High cost of building materials
- Experience of designers
- Expertise of construction contractors
- Inappropriate specifications of equipment

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MAINTENANCE

- Infrastructure maintenance is a problem throughout the Pacific
  - De Sitters Law of 5
    - $1 deferred→ $5 to repair → **$25 to replace**
    - Build-Neglect-Rebuild?

- Maintenance of island facilities is especially difficult
  - Lack of maintenance results in loss of function

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ASSESSMENTS OF BUILDINGS AND CLASSROOMS (ABC'S)

Reducing the Backlog of Deferred Maintenance in Insular Schools

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PROGRAM GOALS AND HISTORY

- **Goals**
  - Partnership between the OIA and the governments of Guam, the Commonwealth of Northern Marianas, American Samoa, and the U.S. Virgin Islands
  - Improve the physical condition of the 115 public elementary, middle, and high schools in the insular areas
  - Build local capacity to sustain facility maintenance programs beyond this ABCs program.
- **History**
  - 2010 Initiated
  - 2013 Baseline facility assessments & ID of deferred maintenance
  - 2014-2021 Reduce backlog, build capacity
    - Embedded teams work with host agencies
  - 2021 Develop Facility Master Plans for Guam and American Samoa

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PROGRAM ACCOMPLISHMENTS

- Eleven contractor personnel embedded in the various Areas
  - Program Manager, Admin Assistant, Construction Specialist, Data Coordinator
- Project Related
  - Scoping
  - Design reviews
  - Cost estimates

- Process Establishment (i.e. workorder)
  - Procure and train on software

- Master Planning
  - Developing priorities for the future

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OBSERVATIONS

- Backlog was reduced
- Each area had separate challenges (bureaucracy, contractor base, expertise)
- All benefitted from construction oversight
- Few replaced the embedded personnel
  - Some staff did not want to work for Gov't
- Covid Impacts
  - Affected the cost of some projects
  - Delayed final facility assessments
  - Some embedded personnel left early
- Master Planning
  - Meetings done remotely due to Covid
  - Great Buy in (Guam)
  - Very difficult (American Samoa)

- Needs a Post Completion Review

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MEDICAL FACILITY ROOT CAUSE ANALYSIS

Protecting Investments, Protecting Health

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WHY DO THE FACILITIES FAIL?

Some possible causes of maintenance failures:

- Inappropriate designs,
- Flaws in construction/inappropriate construction materials,
- Inability to obtain spare parts,
- Delays due to the remoteness of the facility,
- Availability/cost of specialty contractors
- Training of the maintenance staff,
- Number of maintenance staff,
- Identification of periodic maintenance schedules,
- Insufficient maintenance budgets,
- Poor budget planning,
- Diversion of appropriated funds for other purposes
- …

While some issues may be common, every Island has it's own unique issues

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Deferred Painting

Water penetrates and wall fails

Low quality bolt

Must periodically clean and paint

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Weep hole vent for window condensation

Calking over weephole

Condensation builds up, mold, algae

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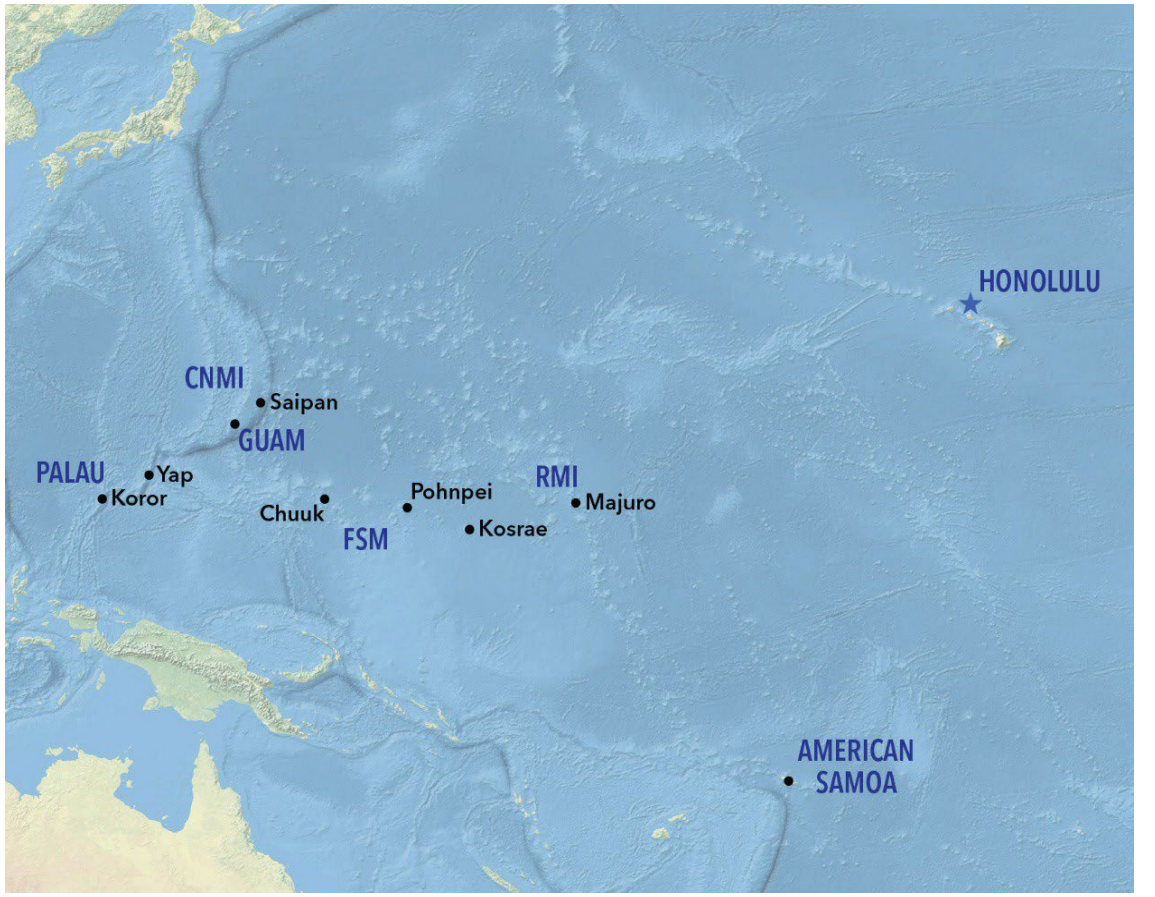
THE PROJECT

Send a small team of engineers to assess the facility maintenance status and requirements for Chuuk, Yap, Pohnpei, Palau, Majuro, Kosrae and Saipan hospitals.

Assessment focus is not on WHAT is wrong but WHY and HOW it got that way.

Provide recommendations to develop **locally sustainable** high quality maintenance program.

Report will be used as a road map to develop a follow-on efforts to establish a **locally sustainable** plan for addressing root cause(s).



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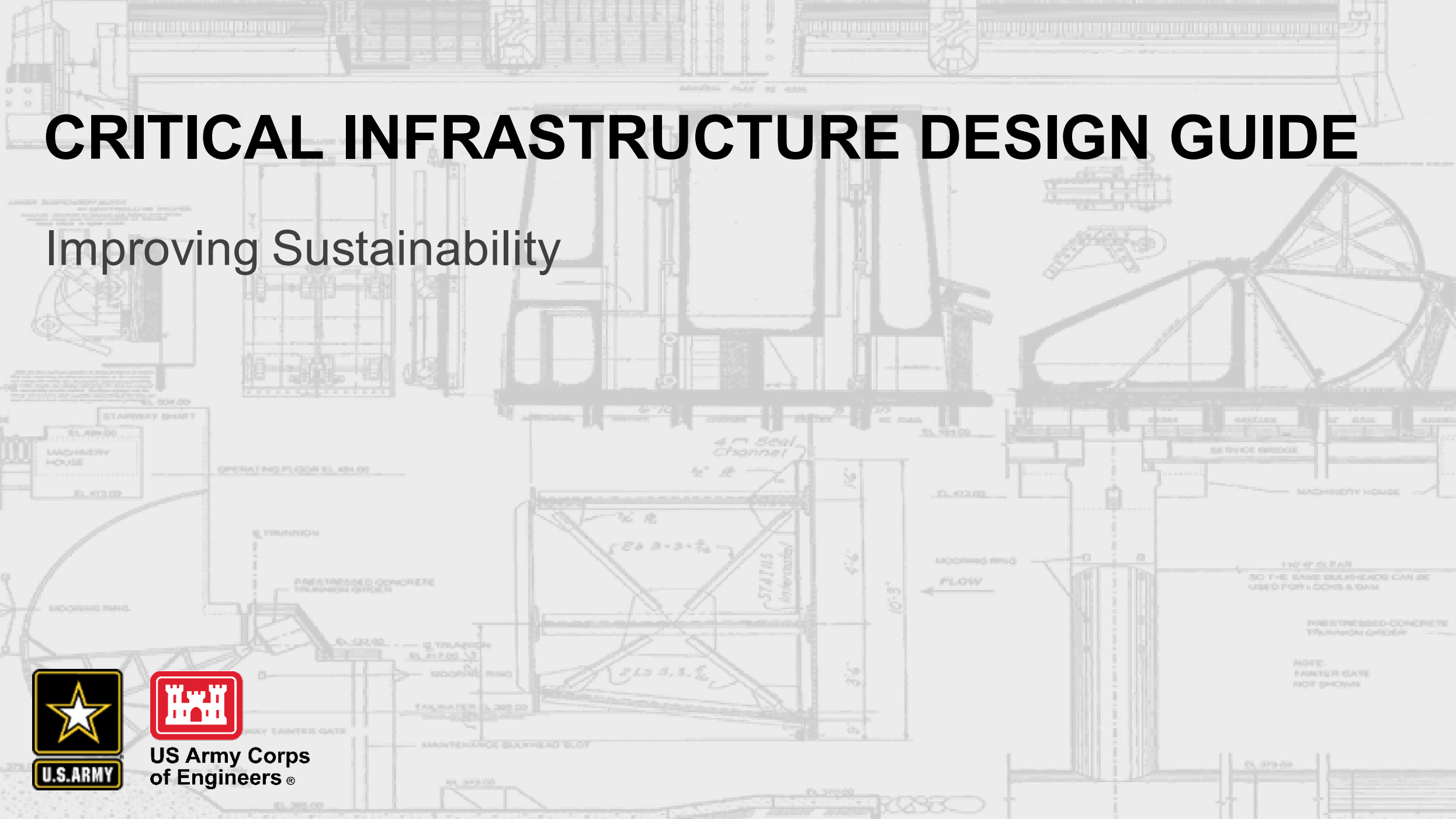
CRITICAL INFRASTRUCTURE DESIGN GUIDE

Improving Sustainability



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AREN'T BUILDING CODES ENOUGH?

- Set of rules that specify the standards for constructed objects such as buildings and nonbuilding structures.
- Protect public health, safety and general welfare as they relate to the construction and occupancy of buildings and structures.
- Minimum Standards Only
- Many jurisdictions adjust based on local requirements
- Enforced???

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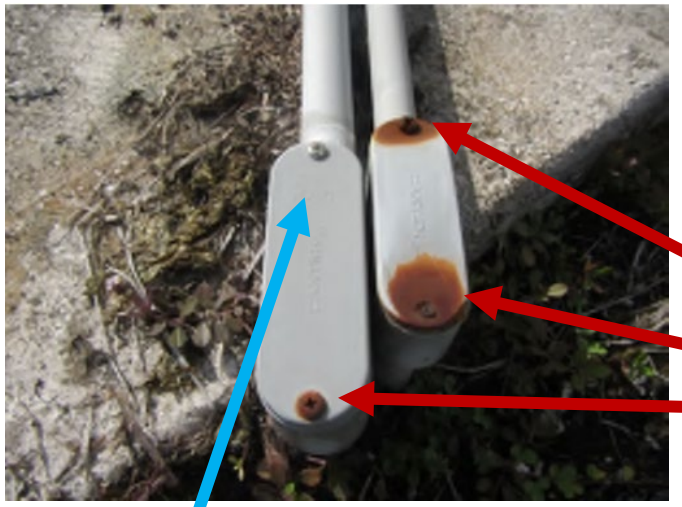


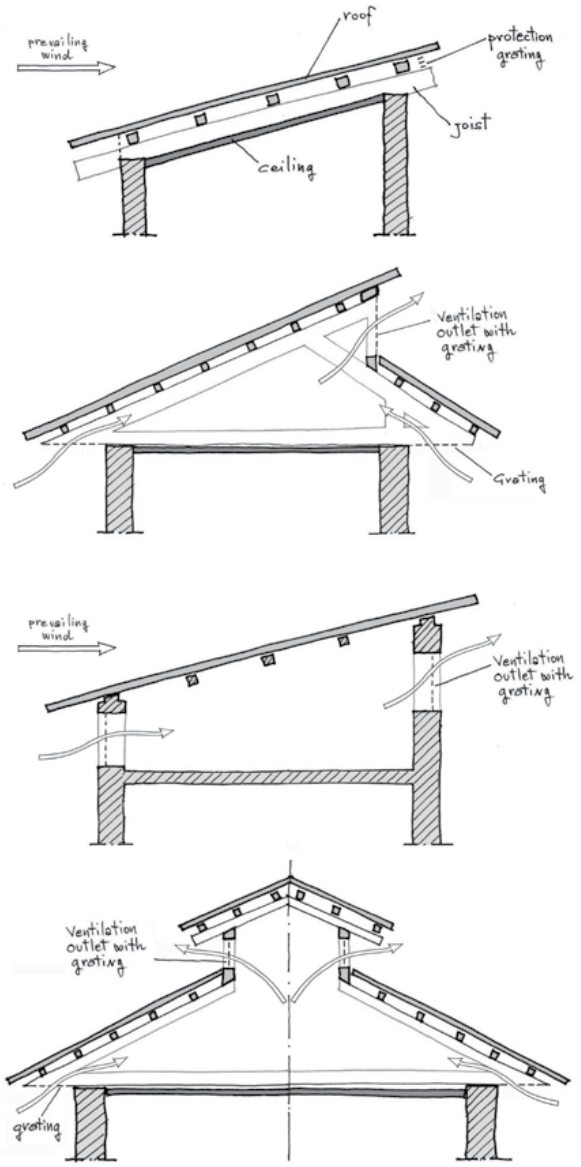
Iron

Stainless Steel

BAD ARCHITECTURE

- Insufficient overhang and lack of drainage to keep water away from the building.
- Result: Premature wall failure and mold in interstitial space.

GOOD DESIGN CAN SAVE ENERGY



Good Design which takes advantage of natural ventilation to minimize need for air conditioning

Good Design defeated by subsequent repairs and upgrades

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TAFUNA HIGH SCHOOL (AMERICAN SAMOA)

- **Special Needs and Computer Lab**
  - $1M
  - Dedicated Sept 2020
- **Cracks in Foundation**
- **Aug 2021 Closed**
- https://www.samoanews.com/local-news/new-ths-classroom-building-closed-safety-reasons

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GOALS OF THE DESIGN GUIDE

- Provide a clear approach for designers to establish and maintain sustainable facilities and implement appropriate standards.

- May prescribe more costly construction methods or materials than would be required for a similar facility in an arid environment to increase the life expectancy or ease of maintenance of such materials.

- Implementable by people in the insular areas.

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METHODS AND SCHEDULE

- Review Design Guides from Kwajalein, Australia, Honolulu and Others
- Survey Building Codes in use in the Insular Areas
- Phone Interviews of Points of Contract (no travel)
  - Insular Public Works Departments
  - Architect/Engineer firms working in the region
  - Construction firms working in the region (need FSM POC's)
  - UN and Asia Development Bank (are there others?)
- Briefing of Findings and Recommendations (January 2022)
  - Focus on those that are implementable in the islands
- Prepare Draft and Final IDG by July 2022

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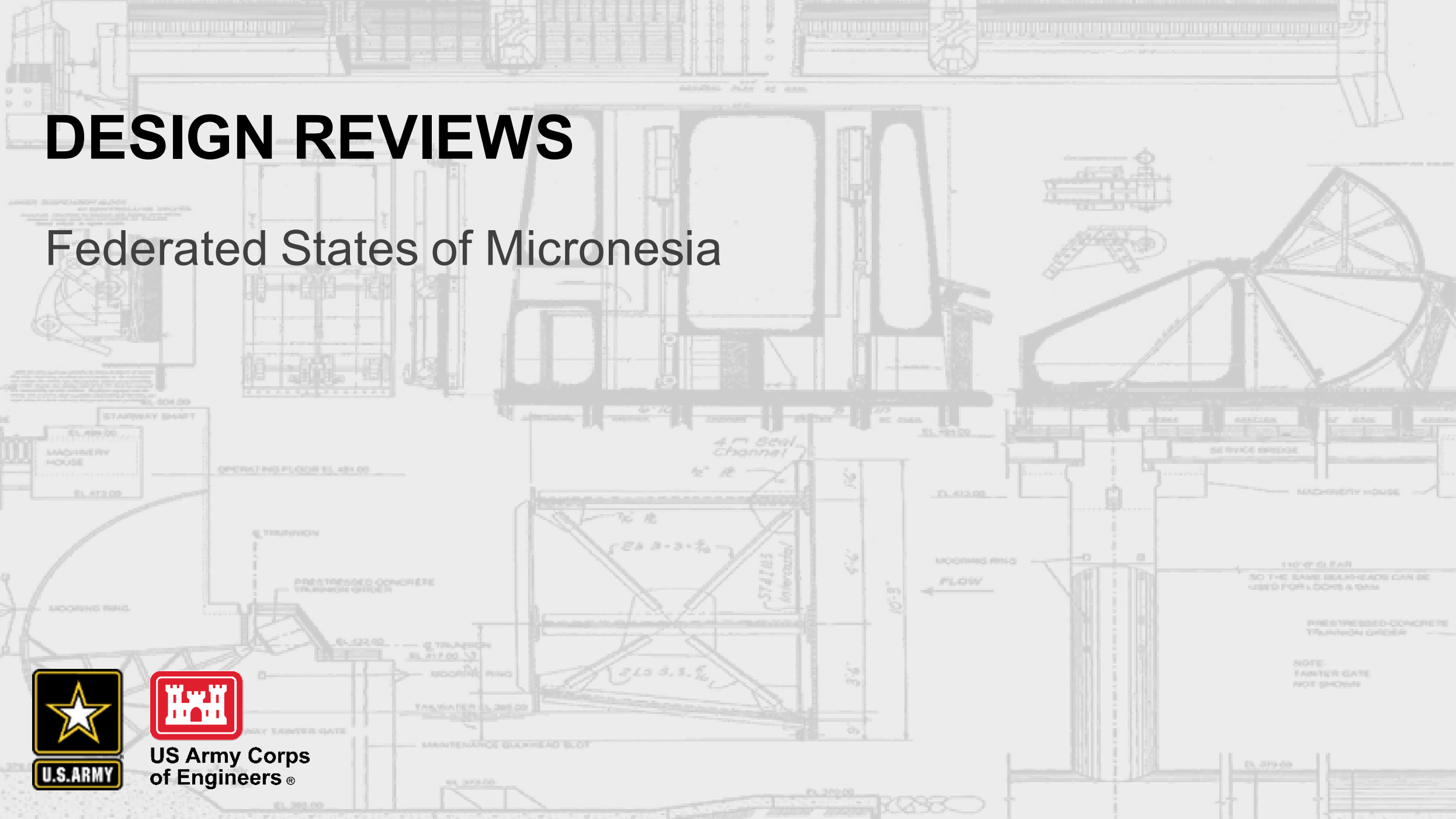
DESIGN REVIEWS

Federated States of Micronesia



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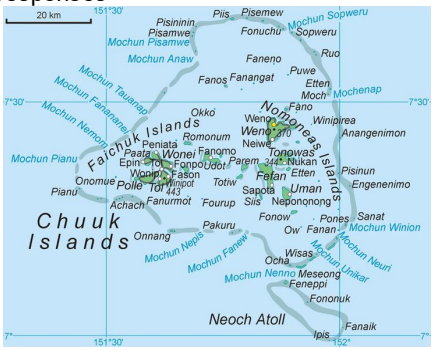
INTERNATIONAL & INTERAGENCY SERVICES (IIS) - POH
CIVIL WORKS – FEDERATED STATES OF MICRONESIA (FSM) PROGRAM

CHUUK WORKLOAD/MILESTONES

- FSM **Chuuk State** Program Management Office (PMO)
  - 16 Island Dispensary's - Readvertisement Pending Contracting Revisions
  - Onoun Elementary School – 60% ITR Complete, Awaiting AE responses
  - Ettal Elementary School – 60% ITR Complete, Awaiting AE responses
  - Eot Elementary School – 60% ITR Submittal Dec 21
  - Pwene Elementary School – Expected Jan 22 Submittal



YAP WORKLOAD/MILESTONES

- FSM **Yap State** Program Management Office (PMO)
  - Yap High School – 60% ITR Pending additional PMO submittal Documents
  - Colonia Middle School – 60% ITR Complete
  - Wolei Elementary School – Awaiting 60% Submittal Documents
  - Water Tank Replacement – RFP in Review, Dec 21
  - Water Treatment Facility – Awaiting RFP Submittal
  - Wastewater Treatment Facility – RFP in Received Nov 21, Expected comments Jan 22

CHUUK PROJECTS

Chuuk High School Campus

Pwene Elementary School

YAP PROJECTS

Yap High School Campus

Yap Wastewater Treatment Facility

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INTERNATIONAL & INTERAGENCY SERVICES (IIS) - POH
CIVIL WORKS – FEDERATED STATES OF MICRONESIA (FSM) PROGRAM

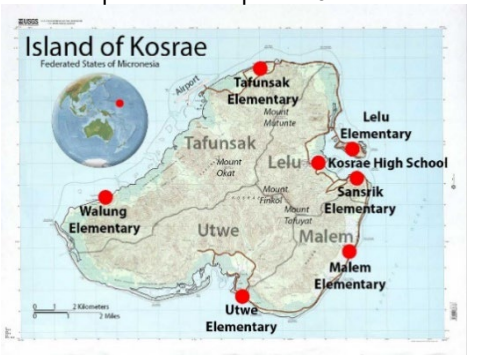
PMU & POHNPEI PMO WORKLOAD/MILESTONES

- FSM **National** Program Management Unit (PMU)
  College of Micronesia (COM), 5 New Campus Projects: COVID Delayed-Construction Start TBD

- FSM **Pohnpei State** Program Management Office (PMO)
  Primary Healthcare Facility – Bids received/evaluations complete.
  Substance Abuse Facility – Bids received/evaluations complete.
  PICS High School Facilities Phase 1&2 – Evaluating Bid Submissions
  Elementary School Campus Projects (3 locations) – ITR's in Progress

KOSRAE WORKLOAD/MILESTONES

- FSM **Kosrae State** Program Management Office (PMO)
  Kosrae Hospital – PMO Contracting Changes Pending Submittal
  Malem & Etwa Elem Schools – New Work Request & Delivery of AE initial review pending
  Bridge Utility Relocation – New WA request letter expected Jan 22



POHNPEI PROJECTS

Pohnpei Primary Healthcare Facility Project
- ITR Complete
- Advertisement July 15 – Sept 15
- Two Local Contractor Bids Received
- Cost Exceeds Estimate
- Readvertisement Expected

Pohnpei Mental Health & Substance Abuse
- ITR Complete
- Advertisement Aug 15 – Oct 30
- Single Bids Received
- Cost Exceeds Estimate
- Readvertisement Expected

KOSRAE PROJECTS

Kosrae Hospital Project

Kosrae Airport/Okat Bridge Relocation Project

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Continuing Authorities Program – On-going Studies

Project/Phase/Cost/ Remarks/ Scheduled Milestone Date
Waiakea Palai FRM CAP 205, Hilo, HI/ Feasibility/ $1.2M/ Project is Feasibility complete pending MSC Approval once CZM Issue is resolved.
Wailele FRM CAP 205, Laie, Oahu, HI/ Feasibility/ $1.1M/ C&C Requested to push Real Estate Discussion to January 2022. PDT working Sec. 106/NEPA/CZM/H&H and Econ Updates in the meantime/ March 2022
Haleiwa SBH Beneficial Use Dredged Material, Section 1122, Haleiwa, Oahu, HI/ Feasibility/ $450K/ Pending completion of EFHA to complete Environmental Tasks for ATR Review./February '22
Kuliouou FRM CAP 205, Honolulu, HI/Feasibility/ $1.1M/ Awaiting Sponsor Funds
East Agana Coastal Storm Damage Section 14, Guam/Feasibility/ $980K/ Scoping Feasibility to TSP Milestone. PMP and Review Plan to be complete./
Ofu Airport Section 14, Am. Samoa/FID/$50K/ FID Complete. FCSA execution pending, WIK negotiations complete/ Working with OC to approve FCSA Package./January 2022

Continuing Authorities Program – New Start Studies Approved!!!

Project/Phase/Cost
Ta'u Small Boat Harbor Modification Section 107, Am. Samoa/Developing Federal Interest Determination
Agat Mayors Compound Section 14, Guam/ Developing Federal Interest Determination
Mannel Basin, Merizzo Section 205, Guam/ Developing Federal Interest Determination

- Waiakea Palai Design and Implementation will be eligible once the CZM Issue is resolved with State Office of Planning.
- Guam Projects Kick-Off meeting scheduled for 14 Dec

- **CAP Authorities:**

Section 14 Emergency Streambank/Coastal Erosion $5M Federal Limit;
Section 103 Hurricane Storm Damage Reduction $10M Federal Limit;
Section 107 Navigation Storm $10M Federal Limit;
Section 204 Beneficial Use of Dredged Material from Navigation Projects; Section 205 Flood Risk Management $10M Federal Limit;
Section 206 Aquatic Ecosystem Restoration $10M Federal Limit

- Process:
  - Letter of Interest from Sponsor to New Start authorization- 6-18 months
  - Federal Interest Determination- 4 months
  - FCSA Negotiation to Tentatively Selected Plan- 1 year
  - TSP to Report Submittal- 6 months

- NEPA Timeline start is to be determined. If a project requires an EIS, it should not be considered for CAP.

CAP Delegation of Authority

- DPM for CW provided guidance for further delegation of authority from the MSC to District in September 2020.
- POD is working with POA and POH to update the MSC CAP Program Management Plan in order to identify opportunities for delegation. District capabilities/Regional capabilities/MSC capabilities are being evaluated for implementation of the delegated authorities.
- There is an annual certification requirement for delegation of authorities; evaluation of requirements need to be coordinated with MSC.
- NEPA Coordination and Timeline is being developed by the Planning and Project Management COP with the Environmental COP. It is a different process than the Military Construction and Regulatory Branch due to the Planning Process for Feasibility Studies.

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QUESTIONS?

NEPA
School Maintenance
Hospital Maintenance
Design Guide
Design Reviews

Point of Contact:

Donald Schlack
US Army Engineer District, Honolulu
Fort Shafter, Hawaii
+1(808) 835-4082
+1(808) 349-5828
Donald.w.schlack@usace.army.mil

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