



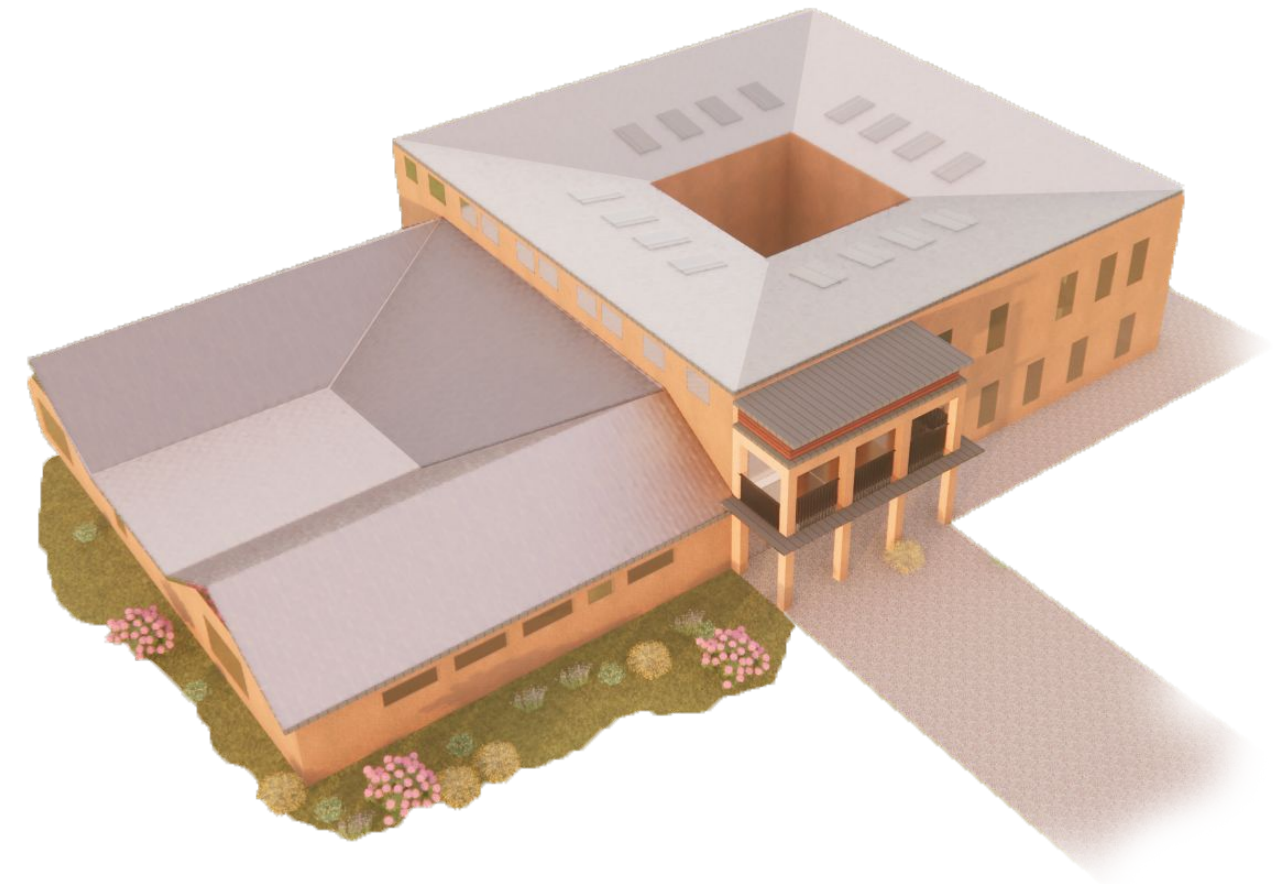
OSILIGI MATERNITY HOSPITAL, KENYA
WINGS OF HOPE GLOBAL COOPERATIVE
OSILIGI HOPE FOUNDATION

OSILIGI MATERNITY HOSPITAL NAROK COUNTY, KENYA

CONCEPT DESIGN AND VISUALIZATION

DATE: JULY 22, 2024

PREPARED BY BUILD HEALTH INTERNATIONAL
FOR WINGS OF HOPE GLOBAL COOPERATIVE (WOH)



Organization Background

WINGS OF HOPE GLOBAL COOPERATIVE

Founded in July of 2019 by David C. Weeks as Global Craft Cooperative (EIN 84-2393155), The Wings of Hope Global Cooperative became its trade name in June 2023 and as a 501c3 non-profit organization it serves as a platform to provide resources for humanitarian assistance. The organization is an extension of Mr. Weeks' International philanthropic work as Director of Global Education at the Glenelg Country School in Howard County, Maryland.

The Wings of Hope Global Cooperative seeks to provide resources to promote good health, education, and economic growth that will empower people in need.

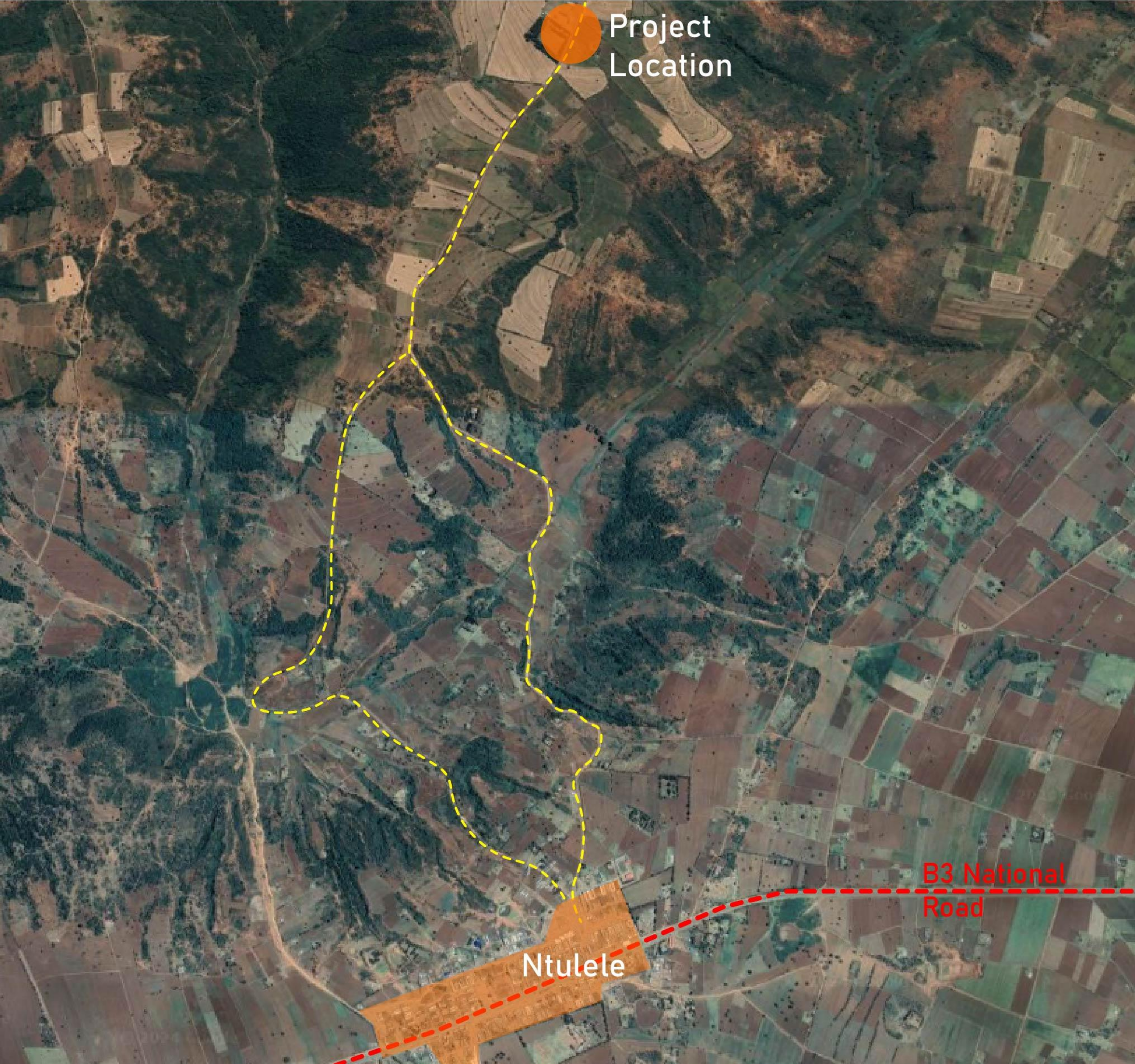
BUILD HEALTH INTERNATIONAL (BHI)

Build Health International (BHI) believes that every person has a human right to quality healthcare. That's why BHI builds and equips dignified spaces for care in the world's most vulnerable communities, enabling local clinicians to work at their full potential. Working closely with Ministries of Health, partner organizations, and local workforces, BHI promotes sustainable design, and empowers communities, and enables access to dignified and affordable healthcare.

BHI designs, builds, and maintains sustainable healthcare facilities in low- and middle-income countries. With an experienced staff of global health experts, engineers, architects and contractors, BHI oversees planning, design, procurement, shipping, construction, and maintenance of facilities with our international nonprofit partners.

PLANNING AND DESIGN TEAM

- | | | |
|--------------------------|---|---|
| David C. Weeks | - | WOH, Project Leader |
| Kikanae Punuya | - | Osiligi Hope Foundation Site Supervisor |
| Marcus Tsouvalos | - | Design Architect |
| Gerard Georges | - | BHI, Director of Architecture |
| Robert Raymond | - | BHI, Hospital planner and Architect |
| Tracy Previlon | - | BHI, Drafter |
| Aristide Shingiro | - | BHI, Construction Manager |



Project Location

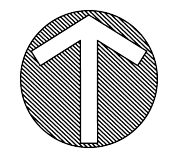
Project Location

- Proposed Development Site
 - Estimated ~ 9 650 sqm

The site is located in Ntulele, Kenya, in the County of Narok. The main road runs adjacent to the site, providing direct connectivity to the nearest city, Ntulele, which is approximately 4.8 kilometers away via the main road(s).

The surrounding properties feature primarily agricultural lands. To the northwest of the parcel, there is a Church under construction. Future development plans include the addition of a cultural center, further enhancing the community infrastructure and services in Ntulele.

- National Road
- Existing main road



Project Site

- Proposed Development Site
 - Estimated ~ 9 650 sqm

This parcel is primarily designated for healthcare facilities, including a maternity hospital, a medical dispensary, and a pharmacy. The main road runs adjacent to the site, providing direct connectivity to the nearest town, Ntulele, which is approximately 4.8 kilometers away via the main road. The surrounding properties feature primarily agricultural land. To the northwest of the parcel, there is a church. Future development plans for this site include the addition of a cultural center, further enhancing the Punyua community infrastructure and services in Ntulele.



CAMPUS PHASING PLAN

Phase 1: Maternal health clinic and surgical center
Phase 2: Future development to include a cultural center
and other amenities

Existing Conditions



Project Site



The main road runs adjacent to the east side of the site, providing direct connectivity to the nearest city, Ntulele, which is approximately 4.8 kilometers away via the main road.

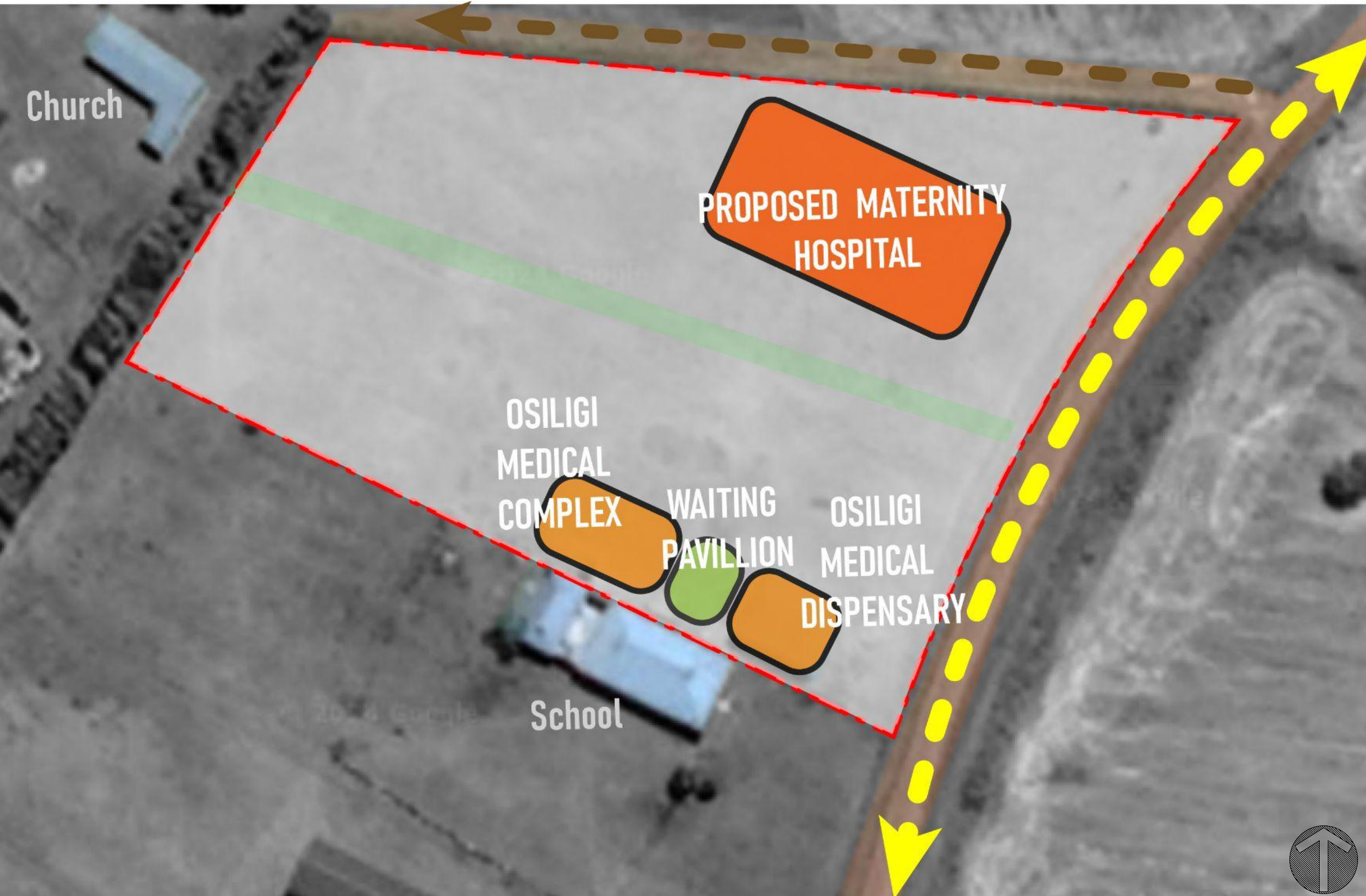
A fully functional dispensary is in the southeast corner of the site. The site also includes a pharmacy with dentist and vision offices to enhance the healthcare services available to the community. The presence of both the dispensary and pharmacy ensures that the community has access to essential healthcare services.

- - - - - Site boundaries
- ← - - - - → Existing main road
- Existing road

Project Site

- Proposed Development

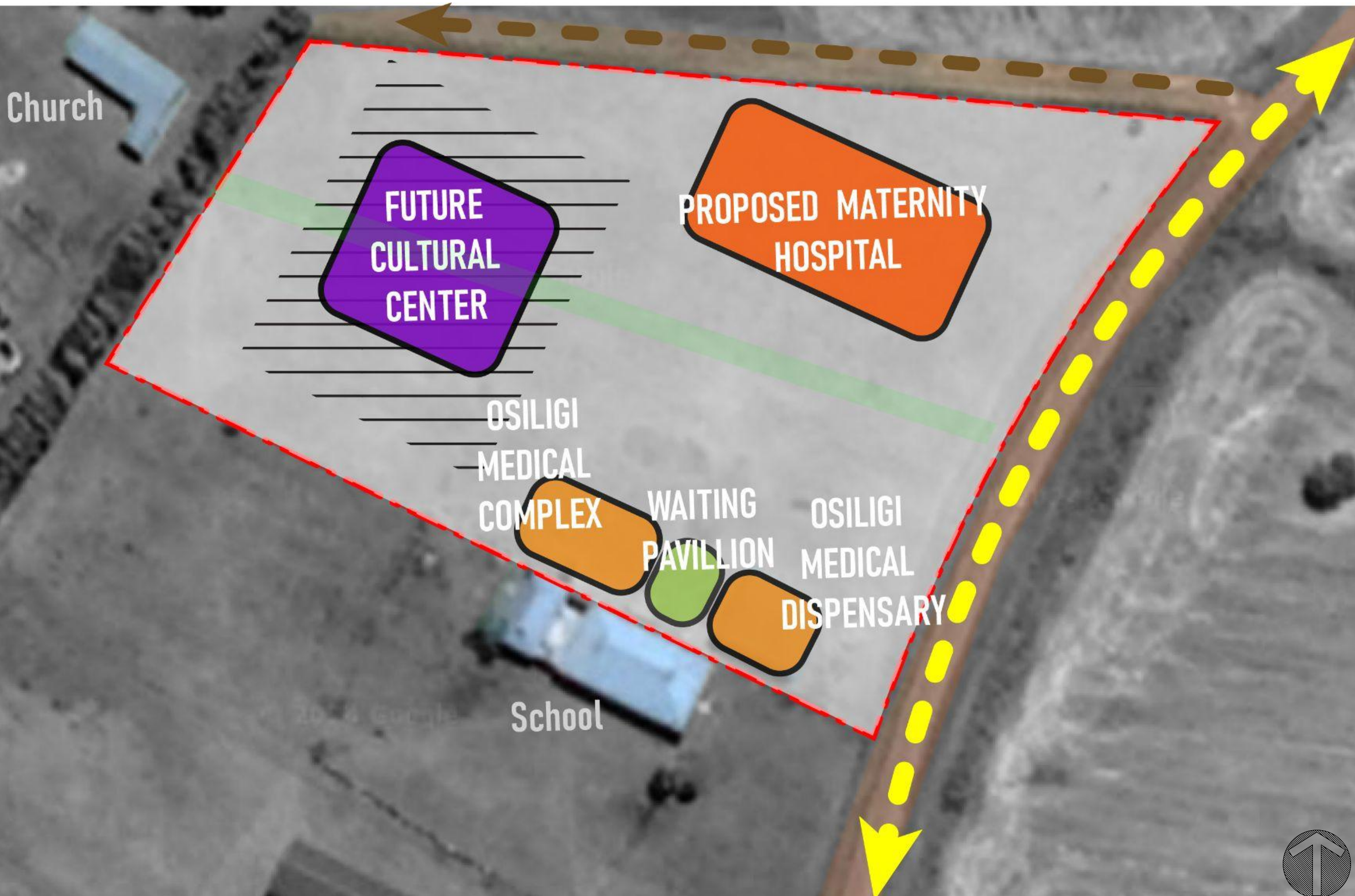
A maternal health and surgical health center is proposed to be located along the north side of the property and will be across from the pharmacy and the dispensary. will be maternity hospital, further expanding the range of medical services provided. A proposed road at the center of the site will ensure easy access to the healthcare facilities for the residents of Osiligi.



- Site boundaries
- ← - - - → Existing main road
- Existing road

Future Development

Future developments include a cultural center at the west end of the site, with an access drive and parking, connected to the central road. This will provide easy access to local residents and visitors.



- Site boundaries
- ← - - - → Existing main road
- Existing road

FUNCTIONAL SPACE PROGRAM

This functional space program is a detailed, multi-purpose document that serves as an interface between a physical space and the activities, programs and services the space will support.

This provides a guide to assess minimum space requirements based of regulatory requirements and healthcare standards.

A functional program generally consists of the following:

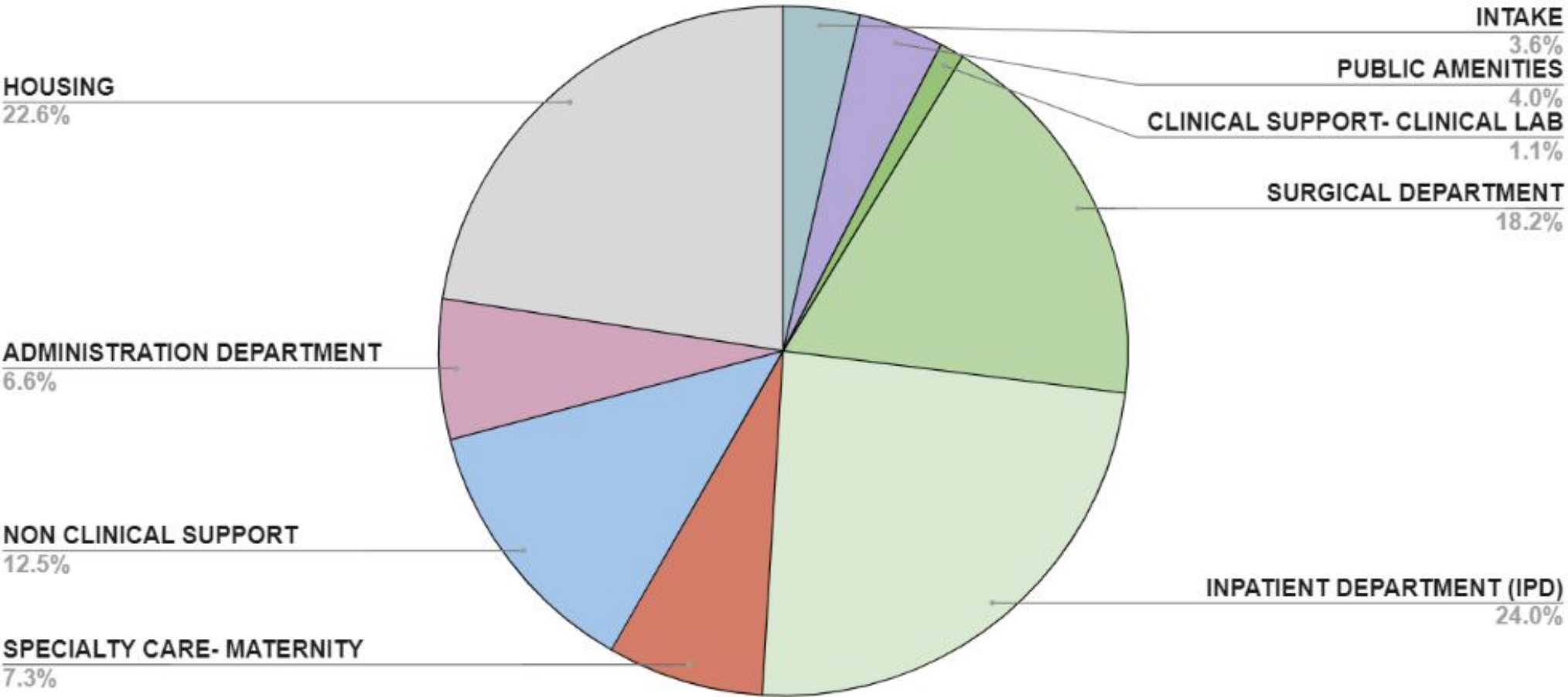
Assumptions

- Scope of program and service elements
- Objectives to be achieved
- Projected workload
- Projected staffing
- Operational workflow and procedures
- Design and spatial considerations
- Functional relationships

Maternity Hospital - Program

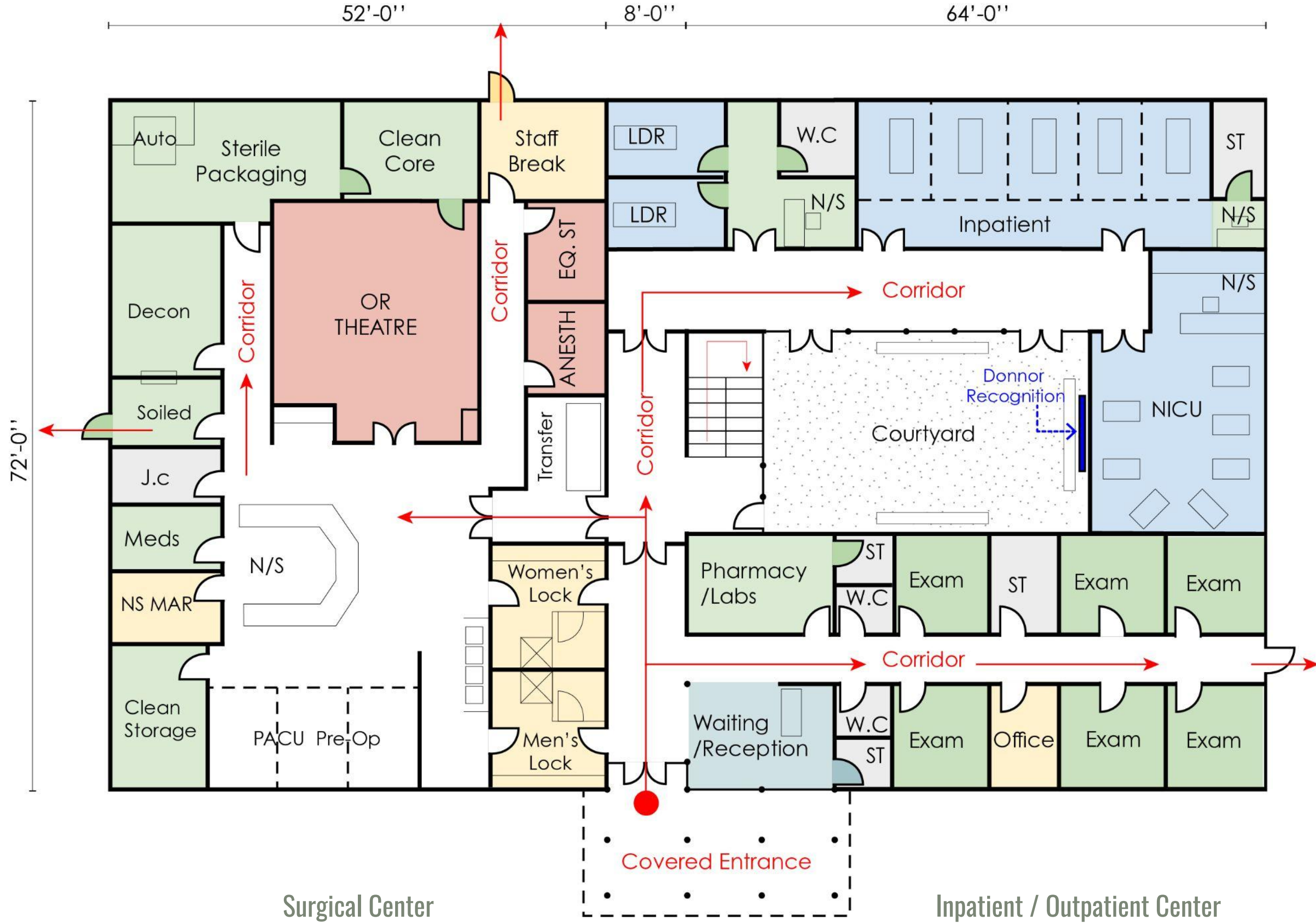
| Site Area | | SQM | SQFT | |
|------------------|--------------------------------|-------|-----------|--------------|
| Site Area | | 13731 | 147799.25 | |
| DEPARTMENT AREAS | | SQM | SQFT | % of program |
| 00 | GENERAL SITE | 0 | 0 | 0% |
| 01 | INTAKE | 62 | 667 | 3% |
| 02 | PUBLIC AMENITIES | 69 | 742 | 4% |
| 04 | OUTPATIENT DEPARTMENT (OPD) | 76 | 820 | 4% |
| 05b | CLINICAL SUPPORT- CLINICAL LAB | 20 | 215 | 1% |
| 07 | SURGICAL DEPARTMENT | 314 | 3,379 | 17% |
| 08 | INPATIENT DEPARTMENT (IPD) | 413 | 4,445 | 23% |
| 09 | SPECIALTY CARE- MATERNITY | 126 | 1,356 | 7% |
| 10 | NON CLINICAL SUPPORT | 216 | 2,325 | 12% |
| 11 | ADMINISTRATION DEPARTMENT | 113 | 1,216 | 6% |
| 12 | HOUSING | 388 | 4,176 | 22% |
| TOTAL | | 1795 | 19341 | |

% AREAS



FLOOR PLANS

FIRST FLOOR PLAN



- Surgical Center
3,744 sq. ft. / 347 m²
- Inpatient / Outpatient Center
3,968 sq. ft. / 368 m²

DEPARTMENT LEGEND

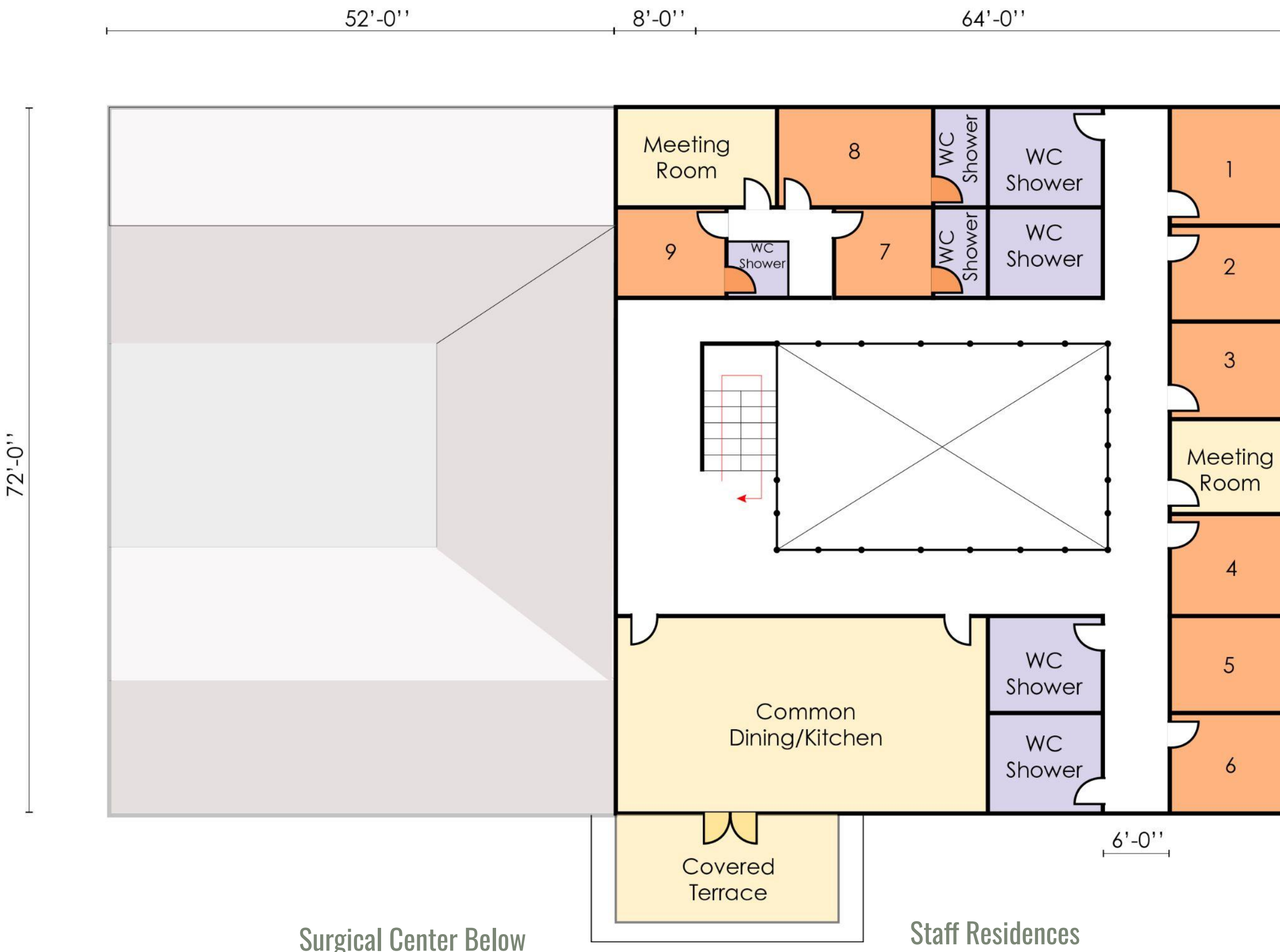
- 01 INTAKE
- 02 PUBLIC AMENITIES
- 03 EMERGENCY DEPARTMENT
- 04 OUTPATIENT DEPARTMENT (OPD)
- 05 CLINICAL SUPPORT
- 06 IMAGING & DIAGNOSTIC TESTING
- 07 SURGICAL DEPARTMENT
- 08 INPATIENT DEPARTMENT (IPD)
- 09 SPECIALTY CARE
- 10 NON CLINICAL SUPPORT
- 11 ADMINISTRATION DEPARTMENT
- 12 HOUSING

SECOND FLOOR PLAN

- Staff Residences
- 3,968 sq. ft. / 368 m2

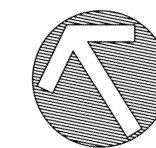
DEPARTMENT LEGEND

- 01 INTAKE
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- 11 ADMINISTRATION DEPARTMENT
- 12 HOUSING



Surgical Center Below

Staff Residences



BUILDING FACADES

RENDERINGS

Main Entrance



RENDERINGS

Main Entrance



ESTIMATED COSTS

A **Rough Order of Magnitude (ROM)** has been developed to help conceptualize the potential cost of the Campus Development Plan. This conceptual budget consisting of a weighted mix of historic costs per square foot of buildings of comparative size, shape, and scope and representative of the buildings proposed within the Campus Development Plan. A phased approach was used to prioritize the implementation of the campus development plan and provide a recommended build out plan.

ROM - Conceptual Budget

Infrastructure: \$95K

A&E Design:

Construction Docs: \$6k

Sitework:

Roads, Stormwater: \$15k

Waste & H2O MGMT

Water & Sewer: \$40k

Electrical Service:

Power Generation: \$40k

Clinic/Residences: \$320K

A&E Design:

Construction Docs: \$20k

Two Story Building:

Construction: \$295k

Note:

These conceptual costs do not include medical equipment, furniture, miscellaneous supplies, consumables, solar panels, legal fees or permitting costs

Surgical Center: \$373k

A&E Design:

Construction Docs: \$28k

One Story Building:

Construction: \$345k

Estimated Total: \$788k

Estimated costs by area

| | |
|--------------------|--------|
| Operating Theatre: | \$100k |
| Prep & Recovery: | \$50K |
| Courtyard: | \$25K |
| Outpatient Clinic: | \$55K |
| NICU: | \$75K |
| Inpatient Clinic: | \$65K |
| Labor Delivery Rm: | \$40K |
| Kitchen/Dining: | \$30k |
| Solar Power: | TBD |
| Landscaping: | TBD |