Dialysis Center PPP Project for the Renal Center Facility of the Baguio General Hospital and Medical Center (the "Project")

INFORMATION MEMORANDUM | DECEMBER 2023

PUBLIC-PRIVATE PARTNERSHIP CENTER

PPPH

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This Memorandum does not constitute a solicitation of bids for any aspect of the Project. Solicitations of bids and bidding guidelines will be distributed separately.

List of Abbreviations

AO	Administrative Order
BAWADI	Baguio Water District
BENECO	Benguet Electric Cooperative Inc.
BGHMC	Baguio General Hospital and Medical Center
BOI	Board of Investments
BOT	Build Operate and Transfer
BSTP	Baguio Sewage Treatment Plant
CAR	Cordillera Administrative Region
CBD	Central Business District
CFU	Colony-Forming Unit
CKD	Chronic Kidney Disease
CLUP	Comprehensive Land Use Plan
COA	Commission on Audit
DED	Detailed Engineering Design
DENR	Department of Environment and Natural Resources
DOE	Department of Energy
DOH	Department of Health
ECC	Environmental Compliance Certificate
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMB	Environmental Management Bureau
EMP	Environmental Management Plan
EO	Executive Order
EPC	Engineering, Procurement and Construction
EPRMP	Environmental Performance Report and Management Plan
ERS	Environmental Recycling System
ESRD	End-Stage Renal Disease
FMC	Fresenius Medical Care
GFA	Gross Floor Area
GIZ	General Institutional Zone
GSIS	Government Service Insurance System
GSO	General Services Office
HD	Hemodialysis
HDC	Hemodialysis Clinic
HFSRB	Health Facilities and Services Regulatory Bureau
HLURB	Housing and Land Use Regulatory Board
IA	Implementing Agency
ICC	Investment Coordination Committee
ICU	Intensive Care Unit

IP	Indigenous Peoples
IRR	Internal Rate of Return
KPI	Key Performance Indicator
LGC	Local Government Code
LGU	Local Government Unit
LTO	License to Operate
MANCOM	Management Committee
MCIT	Minimum Corporate Income Tax
MOA	Memorandum of Agreement
MPSS	Minimum Performance Standards and Specifications
NEDA	National Economic and Development Authority
NGAs	National Government Agencies
NIRC	National Internal Revenue Code
NKTI	National Kidney and Transplant Institute
NWRB	National Water Resources Board
O&M	Operations and Maintenance
PCO	Pollution Control Officer
PD	Peritoneal Dialysis or Presidential Decree
PHILHEALTH	Philippine Health Insurance Corporation
PMO	Project Management Office
PNRI	Philippine Nuclear Research Institute
PPP	Public-Private Partnership
PPPC	Public-Private Partnership Center
PPPGB	Public-Private Partnership Governing Board
PRC	Professional Regulations Commission
PSC	Project Study Committee
PTC	Permit to Construct
PWD	Persons with Disability
RA	Republic Act
RCIT	Regular Corporate Income Tax
REDCOP	Renal Disease Control Program
RMC	Revenue Memorandum Circular
RO	Reverse Osmosis
RPT	Real Property Tax
RRT	Renal Replacement Therapy
SEF	Special Education Fund
SSS	Social Security System
SWM	Solid Waste Management
TAA	Technical Assistance Agreement
TSD	Treatment, Storage and Disposal
UHC	Universal Health Care
VAT	Value-Added Tax
WACC	Weighted Average Cost of Capital

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EXECUTIVE SUMMARY

The Department of Health's (DOH) undertaking for the Dialysis Center PPP Project for the Renal Center Facility of the BGHMC under an open and competitive bidding process is an excellent opportunity to invest and cooperate with the ROP to help augment the health infrastructure in the Philippines. The Project is one of the priority infrastructure flagship projects under the current Administration and is an effort to help curb emerging threats to public health.

Project Context

In line with the Philippine Health Agenda, the government intends to improve tertiary hospitals in different urban centers to cater to the complex medical requirements of patients, and to avoid the overcapacity of hospitals in the National Capital Region. The Baguio General Hospital Medical Center is the largest DOH – retained tertiary hospital in the Cordillera Autonomous Region (CAR). Currently, BGHMC's Dialysis Center has 30-hemodialysis (HD) machines operating at four (4) shifts daily, six (6) days a week to accommodate the growing number of patients coming from all over Luzon. Its hemodialysis unit has become the dialysis center of Northern Luzon and caters to patients from the CAR, Regions I, II, III, and IV.

Kidneys are an essential part of the body which filters harmful toxins and waste through the urinary system. Without functioning kidneys, the body becomes overwhelmed with toxic chemicals and waste products which causes serious health issues. Chronic Kidney Disease (CKD) is one of the leading causes of hospitalization and the 10th leading cause of mortality in the Philippines. The final permanent stage of CKD is end-stage renal disease (ESRD). Patients with ESRD have kidney function at 10-15% of normal capacity. Patients with ESRD need dialysis for the rest of their life until they receive a kidney transplant. Dialysis allows ESRD patients to sustain their lives and stay healthy. Among the modalities of renal replacement therapy, hemodialysis treatment remains the most common modality used by ESRD patients. In the Philippines, 94% are on HD treatment, 4% are on Peritoneal Dialysis (PD) treatment, while 2% undergo kidney transplant.

Project Objectives

The objectives of the Project are as follows:

- Expand the capacity of BGHMC's dialysis unit to 108 HD machines operating at 3 shifts per day, 6 days a week, to accommodate more patients;[1]
- Enhance service delivery of HD treatments due to expanded capacity, including back-up machines; and,
- Reduce the out-of-pocket expenses of patients.

[1] 108 HD machines are exclusive of the 9 backup machines required for the Project

Project Overview

The Project is a solicited PPP proposal which involves the retrofitting of the BGHMC's existing dormitory building into a functional HD center for delivery of quality services. The existing building has three storeys (i.e., ground floor, and basements 1 and 2) with a current gross floor area of 2,457sqm. The private sector partner is expected to be responsible for the finance, design, construction, supply of machines and equipment, and the operation and maintenance of the facility. Specifically, it will involve the following:

- Rehabilitation of an existing three (3)-Storey building for the HD center;
- Procurement, delivery, and installation of renal facilities including provision of 108 HD machines, 9 backup HD machines and all other equipment necessary for HD operations;[2]
- Operation & maintenance (O&M) of the Project; and
- Provision of workforce (e.g., staff nurses, dialysis technicians, other administrative staff, and utility workers).

The private partner may recuperate its investment through revenue sharing with the BGHMC on the PhilHealth revenue net of mandated professional fees of government employees.

Legal and institutional framework

The Project will be structured as a 16-year Build-Operate-Transfer ("BOT") contract pursuant to Republic Act (RA) No. 6957 as amended by RA No. 7718 or the "Philippine BOT Law" and its Revised 2022 Implementing Rules and Regulations,[3] the Philippine Constitution, and other applicable laws and jurisprudence.

DOH will be the Implementing Agency for the Project with the BGHMC as the end-user. To retain its tertiary hospital classification, BGHMC will secure the License to Operate for the HD unit. BGHMC shall also lead the facilitation of PhilHealth reimbursements for the HD sessions provided and facilitate the payment to the private proponent. Meanwhile, the private proponent is expected to coordinate with BGHMC on required documentations for the reimbursement process.

Indicative implementation schedule

The duration for the concession is 16 years with a construction period of 1 year. Based on the projected demand for HD services in the Province of Benguet, facility sizing, and discussions with the BGHMC, it is recommended that the facility operate at a minimum of 60 HD machines (with 5 backup machines) in its first year of operations. The number of HD machines can be increased depending on the demand for such services until it reaches a maximum of 108 machines (with 9 backup machines).

[2] Hemodialysis machines shall be replaced every eight years, or once it reaches its maximum useful machine life according to DOH Administrative Order No. 2012-0001 or the New Rules and Regulations Governing the Licensure and Regulation of Dialysis Facilities in the Philippines.
[3] October 2022 version

Indicative investment requirements

As approved by the NEDA Board in October 2023, the estimated capital investment requirement for the Project is Php 329.28 Million, exclusive of Php 4.98 Million interest during construction.[4]

Project location

The Project will be located within the BGHMC compound in Governor Pack Road, Baguio City, Benguet, CAR, Philippines.

Competitive bidding process

The Private Partner will be selected through an open competitive single-stage tender process pursuant to the Philippine BOT Law and its IRR. The winning bidder will be determined based on the lowest revenue share of the private partner (net of PhilHealth-mandated professional fees of government employees) without availability payments.

Indicative timeline

Indicatively, the target timeline for the Project is as follows:

Milestone	*Target dates*
Publication of Invitation to Bid	December 17, 2023
Investor's Conference	January 16, 2024
Pre-Bid Conference	March 19, 2024
One-on-One Meeting with Bidders	22 March 2024 to 26 March 2024
Issuance of Final Contract and MPSS to Bidders	June 2024
Bid submission	June – July 2024
Bid evaluation (Pre-qualification, Technical, and Financial Proposals)	July – August 2024
Issuance of Notice of Award	2nd Week of August 2024
Evaluation of Post-Award Requirements	3rd Week of August 2024
Contract Signing	August 29, 2024
Contract implementation	2024 - 2039

[4] Estimated as of 2022 data

1. PROJECT RATIONALE AND BACKGROUND

1.1. Baguio General Hospital and Medical Center

The Baguio General Hospital and Medical Center (BGHMC) is the largest Department of Health (DOH)-retained tertiary hospital[5] in the Cordillera Administrative Region (CAR). In line with the current Administration's thrust to improve tertiary hospitals to cater to complex medical requirements of patients, the Republic Act (RA) No. 11084[6] was signed on September 23, 2018, increasing the bed capacity of BGHMC from 500 to 800 beds and upgrading its existing service facilities and professional health care services. BGHMC was also selected as an expansion area for the construction of state-of-the-art health facilities in an effort to decongest hospitals in the National Capital Region. As such, BGHMC prepared a master development plan to include construction of facilities for heart, trauma, brain, and kidney care services. The Project is an implementation of the master development plan to construct facilities in kidney care services.

Renal Care Services in BGHMC

BGHMC has an existing Dialysis Center with 30 hemodialysis (HD) machines, operating at four (4) shifts per day, at six (6) days a week. The current HD machines are utilized as follows: 26 HD machines for non-Hepatitis patients, three (3) HD machines for Hepatitis B patients, and one (1) HD machine for Hepatitis C patients. The facility is also composed of nine (9) rooms which include treatment rooms (5 rooms), consultation room, stock room, reprocessing area, nurses' lounge, dialyzer room, reverse osmosis (RO) water treatment room. The current facility still needs additional space for the stockroom. The lack of space in the stock room leads to the weekly replenishment of supplies instead of the suggested twice a month schedule. Per DOH Administrative Order (AO) 2012-0001, the prescribed size of the stock room is half (½) of the Hemodialysis treatment area.

The Hemodialysis Unit has been accommodating a growing number of patients from the CAR, Regions I, II, III, and IV. Currently, BGHMC has an outsourcing contract with Fresenius Medical Care (FMC) with the following allocation of obligations in Table 1. In terms of the equipment, FMC provides the state-of-the-art HD equipment and Reverse Osmosis water treatment machines.

The BGHMC's Hemodialysis Unit operates 24 hours from Monday to Sunday morning, 7:00 AM. The Hemodialysis machines are cleaned and rested from Sunday to Monday, 7:00 AM to 4:00 AM.

[5] Per DOH Administrative Order No. 2012-0012, a Level 3 hospital shall have as a minimum all of Level 2 capacity, including, but not limited to, the following: training hospital for major specialties on Medicine, Pediatrics, Obstetrics and Gynecology, and Surgery; physical medicine and rehabilitation unit; ambulatory surgical clinic; dialysis facility; blood bank; licensed clinical laboratory for histopathology examinations; and imaging facility with interventional radiology.

[6] An Act Increasing the Bed Capacity of the Baguio General Hospital and Medical Center from Five Hundred (500) to Eight Hundred (800) Beds and Appropriating Funds Therefor

Table 1. Obligations of BGHMC and FMC

BGHMC (Public)	FMC (Private Partner)
- Provide the space, - Refer patients for treatment, - Shoulder utilities (electricity and water) and linen costs; - Provide doctors, nurses and staffs; - Collect invoice from PhilHealth and settle service fees with Fresenius; - Shoulder 50% of water test costs	- Deliver the 30 machines and ancillary facilities; - Assist in the performance of dialysis procedures to patients referred by BGHMC; - Provide the necessary supplies and consumables; - Undertake repairs (when required) - Shoulder 50% of water test costs

Figure 1 shows the number of patients served by BGHMC from 2015 to 2018, while Figure 2 shows the number of HD sessions provided in the same duration.

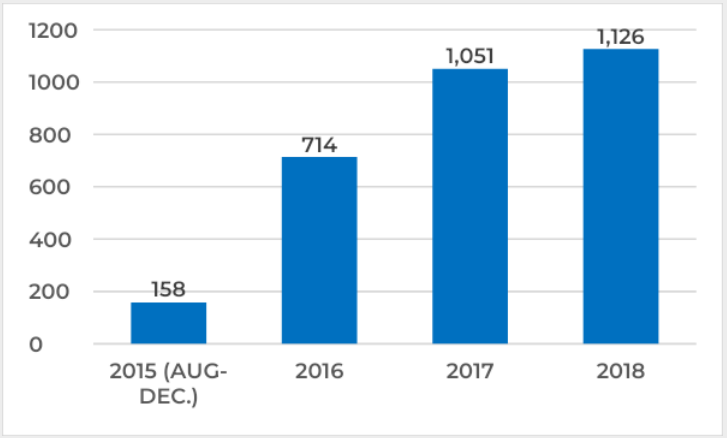

Figure 1. Number of Hemodialysis Patients in BGHMC (2015-2018)

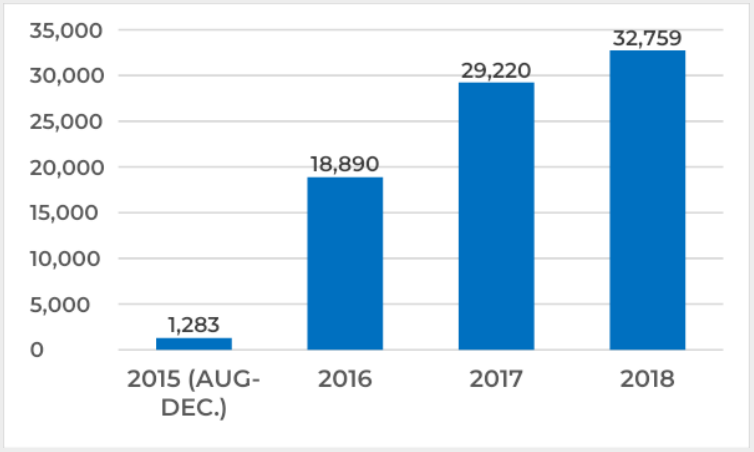

Figure 2. Number of Hemodialysis Sessions in BGHMC (2015-2018)

Operating at four shifts per day translates to a 100% utilization rate of the HD machines. Despite full utilization[7], anecdotal evidences establish that there are still unserved HD patients in BGHMC and that there is an increasing demand for such services. With the current service level capacity of BGHMC's HD facility, it has to turn away patients who would in turn seek treatment from other providers that may charge higher related fees than a government hospital.

In line with the mandate of government hospitals and with the enactment of the Universal Health Care (UHC) Act, it is imperative that health care providers such as BGHMC invest on expanding its facilities and equipment to handle the increasing demand and provide equitable access to quality and affordable healthcare.

BGHMC intends to explore development options on how it can increase its service level capacity in order to accommodate its growing number of HD patients.

1.2. Project Context

End-stage renal disease (ESRD) is the final permanent stage of Chronic Kidney Disease (CKD) wherein kidneys are functioning at only 10-15% of their normal capacity, resulting in not being able to effectively support body functions. Two modalities on renal replacement therapy[8] are available to manage patients with ESRD: (1) kidney transplantation with drug suppression therapy; and (2) dialysis.

Kidney transplantation is considered to be the best option in terms of improvement in quality of life and survival (life expectancy) but finding the right match for a kidney donor remains a challenge. The

[7] Daily operations encounter interruptions on its scheduled treatments such as non-operational HD machines that need replacement/repair, and accommodation of emergency patients.
[8] therapy that replaces the normal blood-filtering function of the kidneys

other treatment option is to undergo dialysis, or the procedure to cleanse blood and get rid of the body's wastes. Dialysis may be either through peritoneal dialysis (PD) or HD.

Among the modalities of renal replacement therapy, HD treatment remains to be preferred by ESRD patients. Among patients undergoing renal replacement therapy in the Philippines, on an average, 94% are on HD treatment, 4% are on PD treatment, while 2% undergo kidney transplant.

PhilHealth now covers 156 sessions of hemodialysis annually.

1.3. Project Objectives

This Project aims to augment the existing capacity of BGHMC ultimately enabling more patients to avail of its services. To implement this, the general project objectives have been identified as follows:

- Expand the capacity of BGHMC's dialysis unit;
- Enhance service delivery of Hemodialysis treatments; and
- Reduce patients' out-of-pocket expenses

With the current service level capacity of BGHMC's HD facility, it has to turn away patients who would in turn seek treatment from other providers that may charge higher related fees than a government hospital. The BGHMC aims to increase its HD services' capacity, enabling more patients to avail of its services at a competitive rate. Low income patients will also have the opportunity to avail the dialysis service through the UHC Act. With the goal to expand the existing capacity of the HD unit, there is an even greater need to equip the hospital with quality facilities, equipment, and additional manpower. Given the limited capacity of the government financially and in terms of manpower, this Project can benefit from the infusion of the private sector's funding as well as their efficiency in operating and managing facilities. The proposed development of the Dialysis Center under PPP scheme intends to increase the service level capacity of the BGHMC's renal care services.

2. Enabling Environment: Institutional, Legal, and Regulatory

2.1. The Universal Health Care Law

Republic Act (RA) No. 11223, known as the Philippine Universal Health Care (UHC) Act, was signed on February 20, 2019. The Law aims to ensure that every Filipino citizen is entitled to healthy living, working and schooling conditions and access to a comprehensive set of services without financial hardship. Every Filipino citizen shall be automatically included in the National Health Insurance Program (NHIP) giving them access to preventive, promotive, curative, rehabilitative, and palliative care for medical, dental, mental, and emergency health services. The NHIP is the compulsory health insurance program of the government, which provides for universal health insurance coverage and ensure affordable, acceptable, available and accessible health care services for all citizens of the Philippines[9].

2.2. Role of PhilHealth

The Philippine Health Insurance Corporation (PhilHealth)[10] is a tax-exempt government corporation attached to the DOH for policy coordination and guidance.[11] PhilHealth issued several issuances that are relevant to the establishment and/or operation of a Hemodialysis Center. A summary of these issuances are in **Appendix A**.

Dialysis services are covered by PhilHealth's Z Benefits package. PhilHealth provides P2,600 per dialysis session, with a maximum of 156 sessions that can be availed per patient per calendar year.

2.3. Implementing Agency for the Project

The DOH will be the Implementing Agency for the Project, with the BGHMC as the end-user. The following sections provide an overview of the powers of the DOH and its PPP for Health Project

[9] Article II, Section 4(v) of RA 7875, as amended by Section 1(v) of RA 9241.
[10] Among the functions of PhilHealth are the following: (1) To supervise the provision of health benefits and to set standards, rules and regulations necessary to ensure quality of care, appropriate utilization of services; (2) To determine requirements and issue guidelines for the accreditation of health care providers for the Program in accordance with the NHIA; (3) To visit, enter and inspect facilities of health care providers and employers during office hours, unless there is reason to believe that inspection has to be done beyond office hours, and where applicable, secure copies of their medical, financial, and other records and data pertinent to the claims, accreditation, premium contribution, and that of their patients or employees, who are members of the Program; (4) To conduct an information campaign on the principles of the NHIP to the public and to accredited health care providers, which include the current benefit packages provided by PhilHealth, the mechanisms to avail of the current benefit packages, the list of accredited and disaccredited health care providers, arid the list of offices/branches where members can pay or check the status of paid health premiums; and (5) To conduct post-audit on the quality of services rendered by health care providers
[11] Article IV, Section 14 of RA 7875.

Management Office ("DOH PPPH-PMO") and the BGHMC as a DOH-retained hospital, in the implementation of the proposed Project.

2.3.1. Powers of the DOH

The *1987 Philippine Constitution* provides for the following provisions:

> Section 15, Article II. The State shall protect and promote the right to health of the people and instill health consciousness among them.
>
> Section 11, Article XIII. The State shall adopt an integrated and comprehensive approach to health development which shall endeavor to make essential goods, health and other social services available to all the people at affordable cost. There shall be priority for the needs of the underprivileged, sick, elderly, disabled, women, and children. The State shall endeavor to provide free medical care to paupers.

Through *Executive Order (EO) No. 292* also known as the *Administrative Code of 1987,* the DOH was mandated to be the lead national government agency in the formulation, planning and implementation of policies and programs in the field of health — including the delivery of health services to the people and the regulation and encouragement of providers thereof.[12]

On May 24, 1999, through *EO No. 102*[13]*,* as a result of the devolution of basic services to local government units, the DOH was transformed from being the sole provider of health services, to being a provider of specific health services and technical assistance for health. To accomplish its mandate and roles, the DOH was tasked, among others to:

1) formulate national policies and standards for health;
2) maintain national health facilities and hospitals with modern and advanced capabilities to support local services;
3) develop sub-national centers and facilities for health promotion, disease control and prevention, standards regulations and technical assistance;
4) create the environment for development of a health industrial complex;
5) oversee financing of the health sector and ensure equity and accessibility to health services; and
6) articulate the national health research agenda and ensure the provision of sufficient resources and logistics to attain excellence in evidenced-based interventions for health.

The DOH is comprised of various offices[14], among which is the Health Facilities Services and Regulatory Bureau (HFSRB) that is responsible for the following:

1) set the minimum standards for regulation of health facilities and services;
2) disseminate regulatory policies and standards for information and compliance;

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[12] Sec. 2, Chap. 1, Title IX, Book IV, E.O. No. 292.
[13] Redirecting the Functions and Operations of the Department of Health
[14] Office of the Chief of Staff; Administrative and Financial Management Team; Health Policy and Systems Development Team (HPSDT); Public Health Services Team; Health Facilities and Infrastructure Development Team; Health Regulation Team; Field Implementation & Coordination Team; and Procurement and Supply Chain Management Team

3) issue Permits to Construct (DOH-PTO), License to Operate (DOH-LTO), and Certificate of Accreditation (DOH-COA);
4) monitor health facilities and services to ensure sustainability of health facilities compliance with regulatory standards;
5) provide technical assistance, consultation and advisory services to stakeholders regarding health facilities regulation;
6) develop and conduct research relative to regulation of health facilities and services;
7) conducts fact-finding on complaints against health facilities and services;
8) acts on complaints against hospitals and other health facilities; and
9) render consultation and advisory services to stakeholders regarding health facilities regulation.

DOH's Revised Policy Framework for PPP for Health in Support of Universal Health Care

In 2019, DOH issued AO No. 2019-0028 or the Revised Policy Framework for Public-Private Partnership for Health in Support of Universal Health Care to "update [DOH's] policy framework for PPP for Health to align it with new statutory and policy directives, and to further promote PPPs that will improve health service delivery and facilities". **The AO applies to the entire health sector which includes, among others, DOH Hospitals.**

AO No. 2019-0028 prescribes a Governance Framework that is structured in Figure 3 below. Appendix B provides for a detailed explanation of the framework.

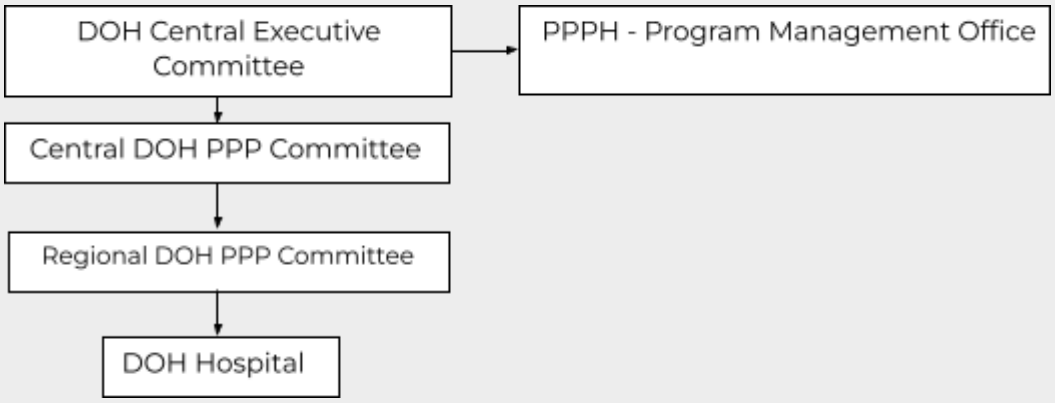

Figure 3. DOH AO No. 2019-0028 Governance Framework

The Central DOH PPP Committee is tasked to review and provide recommendatory approval to the DOH Executive Committee for policy matters relative to PPPs and for PPPH projects to be undertaken by DOH Entities.[15] The Regional DOH PPP Committee,[16] on the other hand, is expected to:

a. Assist DOH Entities in: (i) identification and preparation of solicited projects; and (ii) review and approval, partner selection and implementation of solicited and unsolicited projects; and

[15] Sec. IV. 5 of the Guidelines
[16] Sec. IV.4 of the Guidelines.

b. Act as the PPP champions, PPP resource persons, and focal point for PPP matters within the Corporate/Specialty hospitals, DOH-Attached Agencies, and CHDs and its covered DOH Hospitals including:
   i. Promoting greater awareness among its stakeholders of how PPPs can improve health service delivery and facilities; and
   ii. Proposing improvements in policies, guidelines, and regulations to further promote PPPs that will improve health service delivery and facilities.

Finally, the PPPH-PMO under the Central DOH Office shall monitor and evaluate PPPs.[17]

Based on AO No. 2019-0028, all DOH Hospitals must comply with the procedures and obtain the approvals outlined therein. Thus, while the DOH Hospital must be involved in the entire process, from identifying possible PPP projects to implementation thereof, ultimately, the power to approve and oversee the entire PPP process falls with the DOH Central Office (DOH Executive Committee and Central DOH PPP Committee through the PPPH-PMO). Thus:

a. The Regional DOH PPP Committee (which the DOH Hospital is a member of) should submit a list of projects to the Central DOH PPP Committee which will then give its recommendation to the DOH Executive Committee whether such projects will be approved.

b. The Central DOH PPP Committee, through the PPPH-PMO, will then assist the Regional DOH PPP Committee in overseeing PPP process and managing project prioritization, identification, preparation, review and approval, Private Sector Partner selection and project implementation.

c. The Regional DOH PPP Committee will in turn assist the DOH Hospital in identification and preparation of solicited projects; and (ii) review and approval, Private Sector Partner selection and project implementation.

BGHMC, as a retained hospital, is under the management and supervision of the DOH[18]. The administrative relationship between DOH and BGHMC implies that DOH may promulgate rules and regulations with regard to the operation of BGHMC and determine priorities in the execution of its plans and programs.

2.3.2. Powers of the BGHMC

BGHMC is classified as a DOH Retained Hospital (or DOH Hospital) which refers to all other hospitals under the management and operation of DOH not classified as Specialty Hospitals or Special Hospitals.[19] AO No. 0017-14 defines DOH Retained Hospitals as those under the management and operation of the DOH Center for Health Development, now referred to as DOH Regional Offices (DOH-ROs).[20]

[17] Sec. 4.c of the Guidelines.
[18] DOH AO No. 0017-14.
[19] DOH AO 0013-14 or the Revised Implementing Guidelines on the Medical Health Care Assistance Program of the Department of Health Integrating the Inputs from the Stakeholders Meeting Held April 2, 2014; and AO 0017-14 or the Implementing Guidelines on the Medical Assistance Program (MAP) of the Department of Health.
[20] DOH AO No. 0036-14.

On May 7, 1998, RA No. 8634 entitled, *An Act Increasing The Bed Capacity Of The Baguio General Hospital And Medical Center, Located In Baguio City, From Four Hundred (400) To Five Hundred (500) Beds, Upgrading The Service-Facilities And Professional Health Care Therein, And Appropriating Funds Therefore* was promulgated and gave the DOH the authority to issue the IRR thereof. Consequently, the DOH issued AO No. 0013-15 as RA No. 8634's IRR, which expanded BGHMC's services and provided that by 2016, BGHMC shall fully operate as a 500-bed Level III teaching and training medical center with additional services[21] and training programs (e.g., neuroscience, family medicine, and emergency medicine).

As a Level III General Hospital, BGHMC shall have as minimum, all of Level II hospital capacity. Required services for Level II and Level III hospitals are enumerated in Appendix C. A Level III hospital shall also have the following facilities:

1) teaching and/or training hospital with accredited residency training program for physicians in the four (4) major specialties namely: Medicine, Pediatrics, Obstetrics and Gynecology, and Surgery;
2) provision for physical medicine and rehabilitation unit;
3) provision for ambulatory surgical clinic;
4) provision for ***dialysis facility***;[22]
5) provision for blood bank;
6) a DOH licensed tertiary clinical laboratory with standard equipment/reagents/supplies necessary for the performance of histopathology examinations;
7) a DOH licensed level 3 imaging facility with interventional radiology.[23]

On July 23, 2018, RA No. 11084 entitled *An Act Increasing The Bed Capacity Of The Baguio General Hospital And Medical Center, From Five Hundred (500) To Eight Hundred (800) Beds And Appropriating Funds Therefor* was enacted further increasing the bed capacity of BGHMC to 800 beds.

2.4. The PPP Center of the Philippines

The PPP Center is the main driver of the PPP Program. It serves as the central coordinating and monitoring agency for all PPP projects in the Philippines. It champions the country's PPP Program by enabling implementing agencies in all aspects of project preparation, managing of the Project Development and Monitoring Facility (PDMF), providing projects advisory and facilitation services, monitoring and empowering agencies through various capacity building activities.

[21] Additional services such as cancer center, nuclear medicine, pulmonary, and high-end diagnostic services.
[22] Emphasis supplied.
[23] DOH AO No. 2012-0012 or the Rules and Regulations Governing the New Classification of Hospitals and Other Health Facilities in the Philippines,

2.5. Legal Framework for Procurement

The legal framework for the Project will be the Philippine BOT Law which allows the financing, construction, operation and maintenance of infrastructure projects by the private sector. Under this law, health facilities and infrastructure are included in the definition of Private Sector Infrastructure or development projects.[24] The procurement shall also be governed by the Philippine Constitution and other relevant laws and jurisprudences.

2.6. Other Relevant Laws and Regulations on Project Implementation

2.6.1. License to Operate

RA No. 4226 or the Hospital Licensure Act gives the HFSRB the power to survey all government and private hospitals to determine their fitness to operate, prescribe standards plans for government hospitals, approve plans for government and private hospitals, issue permits or authority to construct, and grant and revoke licenses for operation and maintenance of hospitals, among others.

In relation thereto, DOH issued AO No. 2012-0001 entitled New Rules and Regulations Governing the Licensure and Regulation of Dialysis Facilities in the Philippines, which provides the requirements to operate HDCs in the country, the standards for the physical facilities, (e.g., the dialysis service complex, non-treatment areas or reception areas) and minimum equipment, instrument, and supply requirements. The AO empowers the HFSRB to require an operator of an HDC to secure:

- *DOH-Permit to Construct* (DOH-PTC) prior to construction. It is a permit issued to an applicant who will establish and operate a hospital or other health facility, upon compliance with required documents prior to the actual construction of the facility. It is also required for hospitals and other health facilities with substantial alteration, expansion, renovation, or increase in the number of beds.
- *DOH-License to Operate* (DOH-LTO), which is a formal authority issued by DOH to an individual, agency, partnership or corporation to operate a hospital or other health facility. The DOH-PTC is a pre-requisite for the issuance of the DOH-LTO.

DOH AO No. 2018-0016 was subsequently issued revising the guidelines for the implementation of the One-Stop Shop Licensing System using the Online Licensing and Regulatory System (OLRS) for the processing and issuance of DOH-LTOs. All applications shall be through the OLRS once it is fully functional. Under this AO, the HFSRB shall be responsible for the initial issuance and renewal of DOH-LTOs of Level II and III General Hospitals, as well as non-hospital-based HDCs. The same process for the issuance of an initial DOH-LTO shall also be applicable for hospitals and other health facilities with substantial alteration, expansion, renovation, or increase in the number of beds.

[24] Section 2, RA 7718

DOH-LTOs for hospitals shall be valid for one year while those for non-hospital-based HDCs shall be valid for three years.

Currently, the OLRS is in Phase 2 (partial implementation), with Phase 3 (full implementation) slated to commence in July 2020. It is recommended to seek confirmation with the HFSRB, as the Bureau implementing the AO, if the System will be applicable by the time the Project is for implementation. Otherwise, the manual process in the OSS Licensing System as found in DOH AO No. 2007-0021 shall be implemented.
The DOH-LTO is defined as a "formal authority issued by the DOH to an individual, agency, partnership or corporation to operate a hospital or other health facility". BGHMC currently holds a DOH-LTO for its existing hemodialysis facility. For the proposed Project, the BGHMC decided to be the party responsible applying for the LTO considering the following implications:

- **Retention of Level III General Hospital Status**

In the discussion in Section 3.2.2 of this report, one of the minimum requirements for a Level III General Hospital is the "provision for dialysis facility". As the HDC shall be within the BGHMC premises, it will retain its Level III status regardless of whether such will be operated by itself or through a Private Sector Entity Partner. The same goes should BGHMC also itself decide to operate an in-patient HD facility.

However, per HFSRB advice, a DOH-LTO to operate an HDC must be issued in the name of BGHMC to retain its Level III status.

- **Party Responsible for the Collection of Claims from PhilHealth**

The PSC had a consultation meeting with the HFSRB on October 22, 2019. HFSRB discussed that the party (i.e. either BGHMC or the private partner) which the DOH-LTO has been named after shall be the one to lead the facilitation of collection of payments from PhilHealth.

2.6.2. Foreign Participation and Ownership

2.6.2.1. Amended Public Service Act

The Project does not fall under the nationality restrictions indicated in Republic Act No. 11659 or the "Amended Public Services Act". Per the Amended Public Services Act, which was signed into law on March 21, 2022, public utility specifically refers to a public service that operates, manages or controls for public use any of the following:

1. Distribution of electricity;
2. Transmission of electricity;
3. Petroleum and petroleum products pipeline transmission systems;
4. Water pipelines distribution systems and wastewater pipeline systems,
5. Seaports, and,
6. Public utility vehicles

2.6.2.2. Participation of Foreign Contractors in Construction

Sec. 5.4 of the Amended BOT Law provides the legal requirements for pre-qualification of a prospective project proponent, to wit:

> *For purposes of pre-qualification, the Contractor proposed to be engaged by the Project Proponent to undertake the Construction of the project must be* ***duly licensed and accredited by the PCAB, in the case of a Filipino Contractor, or by an equivalent accreditation institution in the Contractor's country of origin, in the case of a foreign Contractor****. Once the Project Proponent is* ***awarded the project, such foreign Contractor must secure a license and accreditation from the PCAB****.*[25]

In addition, Executive Order No. 65 s. 2018 or the "Eleventh (11th) Regular Foreign Investment Negative List"[26] provides that firms engaged in the construction of infrastructure/development projects covered by the BOT Law are exempted from the forty percent (40%) equity limitation imposed on foreign ownership of construction firms allowed to participate in such an investment activity.[27]

Thus, subject to relevant rules and regulations, the participation of a foreign contractor in the construction of a PPP hospital or non-hospital-based hemodialysis clinics (HDC) is allowed provided it secures a license and accreditation from the Philippine Contractors Accreditation Board.

2.6.2.3. Ownership and operation of hospital and non-hospital-based hemodialysis centers

The 11th Regular Foreign Negative List is silent as to the restriction on ownership and operation of hospital and non-hospital based HDC in the country. There being no nationality restriction to the ownership and operation of HDCs, foreign individuals, partnerships, and corporations are not precluded from being the Private Sector Entity Partner in the project. HDCs are also not deemed public utilities which may be subjected to maximum foreign equity of forty percent (40%).

Ownership of land and building of HDCs

While there are no nationality restrictions on the ownership of the building which would house the HDC, ownership of the project site, however, must comply with Article XII, Section 7 of the 1987 Philippine Constitution that restricts ownership of land to Filipino citizens or corporations with at least sixty percent (60%) Filipino equity.

The proposed project site, located within the BGHMC Compound, is fully-owned by the BGHMC and currently functions as a dormitory.[28]

[25] Emphasis supplied.
[26] Issued on October 29, 2018.
[27] List A: Foreign Ownership is Limited by Mandate of the Constitution and Specific Laws
[28] BGHMC does not have a title for the land. BGHMC's proof of ownership is the DENR Order for the Issuance of Special Patent over the site.

2.6.3. National and Local Taxes

National and local taxes applicable to the proposed Project are summarized in Table 2.

Table 2. Taxes Applicable to the Proposed Project

Tax	Basis
National Internal Revenue Taxes	
Income Tax on Project Proponent	Income derived by the Project Proponent from the Project shall be subject to income tax under the National Internal Revenue Code (NIRC), as amended by RA No. 10963 otherwise known as the Tax Reform for Acceleration and Inclusion.
Income Tax on BGHMC	Hospitals (whether proprietary or government) may claim income tax exemption under Section 30 (E) and/or Section 30 (G) of the NIRC
Value-Added Tax (VAT)	● Section 109 (G) of the NIRC, as amended, provides that medical, dental and hospital services except those rendered by professionals are exempt from VAT. Thus, income generated from the services rendered by the hemodialysis facility shall be exempt from VAT, while the professional fees of the doctors or other professionals, if any, engaged for their services shall be subject to VAT. ● The acquisition of HD machines and related equipment are not VAT exempt transactions under Section 109 of the NIRC. The Project Proponent will shoulder the VAT liability at a rate of 12% of the gross selling price of the machines and equipment purchased. ● Sale or lease of goods and services to senior citizens and persons with disability, as provided under RA 9994 (Expanded Senior Citizens Act of 2010) and RA 10754 (An Act Expanding the Benefits and Privileges of Persons with Disability), is exempt from VAT.[29]
Local Government Taxes	
Real Property Tax	● The Project Site will be provided by BGHMC. However, as the certified true copy of the title covering the site is not available, it cannot be concluded with certainty the ownership over the Project Site and whether it is subject to any liens or encumbrances.[30] ● BGHMC confirmed that it is currently exempted from RPT but the basis of its RPT exemption has yet to be validated. If its exemption is based on

[29] Section 109 (W), NIRC as amended by RA 10963
[30] BGHMC does not have a title for the land. BGHMC's proof of ownership is the DENR Order for the Issuance of Special Patent over the site.

Table 2. Taxes Applicable to the Proposed Project

Tax	Basis
	Section 234 (a)[31] of the Local Government Code (LGC), the Project Site will be subject to RPT if the actual and beneficial use of the entire Project Site will be transferred to the Project Proponent, which is a taxable person. On the other hand, if its exemption is based on Section 234 (b)[32] of the LGC, only those portions of the Project Site not actually, directly, and exclusively used for charitable purposes will be subject to RPT.
Rates for RPT	Baguio City levies and *ad valorem* tax on real property such as land, building, machinery and other improvements at the rate of 2% on the assessed value of commercial, industrial, and special real properties.[33]
Special Education Fund (SEF)	Under Section 235 of the LGC, a city may levy and collect an annual tax of 1% on the assessed value of real property which shall be in addition to the basic real property tax. The proceeds thereof shall accrue exclusively to the SEF. Baguio City enforces such special levy under the its Revenue Code.[34]
Local Transfer Tax	Baguio City levies a tax on the sale, donation, barter, or any other mode of transferring ownership or title of real property at a rate of 75% of one percent of the total consideration involved in the acquisition of the property or of the fair market value in case the monetary consideration involved in the transfer is not substantial, whichever is higher.[35]

2.6.4. Operation and Staffing of the HD Center

Relative to staffing, the following medical personnel of the HDC must be qualified to practice in the Philippines, specifically:

Table 3. Staffing of the HD Center

[31] Under Section 234 (a) of the LGC, real property owned by the Republic of the Philippines or any of its political subdivisions is exempt from payment of real property tax except when the beneficial use thereof has been granted, for consideration or otherwise, to a taxable person. Real property tax attaches to the property and is chargeable against the taxable person who had actual or beneficial use and possession of it regardless of whether or not he is the owner.

[32] Section 234 (b) of the LGC provides for a RPT exemption on all lands, buildings, and improvements of charitable institutions which are actually, directly, and exclusively for charitable purposes. If real property is used for one or more commercial purposes, it is subject to taxation.

[33] Section 93, Baguio City Tax Ordinance No. 2000-001 or "An Ordinance Enacting the Revenue Code of Baguio City" (December 27, 2000) (Baguio City Tax Ordinance).

[34] Section 95, Baguio City Tax Ordinance

[35] Section 4, Baguio City Tax Ordinance

Staff[36]	Professional Qualifications
Head of HDC/Medical Director	Duly licensed by the Professional Regulation Commission (PRC) Preferably a nephrologist certified by the Specialty Board of the Philippines Society of Nephrology (PSN)[37]
	Duly licensed by PRC and: a. Board certified in nephrology or b. Board eligible in nephrology or c. Board certified in IM or Pediatrics with work experience in any DOH licensed HDC for at least three (3) months or d. Board eligible in IM or Pediatrics with work experience in any DOH licensed HDC for at least three (3) months or e. Undergoing an accredited residency training program in IM or Pediatrics (exclusively for training hospitals) or f. General practitioner with work experience in any DOH licensed HDC for at least six (6) months.
Nurse	Duly licensed by the PRC in accordance with RA No. 9173 or the Philippine Nursing Act of 2002

While generally, the practice of medicine and nursing is exclusive to Filipino citizens, foreigners may be allowed to practice the same following reciprocity rules.[38] In addition, foreign doctors would also need to be certified by the PSN upon satisfactory evaluation of their submission of its requirements.

[36] There are no professional requirements for dialysis technician, supervisor of medical records, and administrative staff although they are also required staff.
[37] 2.a.1.c. Whenever a nephrologist is not readily available for the position of Medical Director, CHD shall allow the following physicians to handle HDC in order of priority:
1. Board eligible in nephrology;
2. Board certified in Internal Medicine (IM) or Pediatrics with work experience in any DOH licensed HDC at least three (3) months;
Board eligible in IM or Pediatrics with work experience in any DOH licensed HDC for at least three (3) months;
4. General practitioner with work experience in any DOH licensed HDC for at least six (6) months.
The training of a non-nephrologist for the position of Medical Director shall be in accordance with the guidelines developed by PSN.
[38] Sec. 9 of the Medical Act of 1959, and Sec. 20 of the Philippine Nursing Act of 2002, respectively.

3. PROJECT SITE

Key information gathered about the proposed Project and project site were used as reference in identifying technical design and safeguards considerations, as well as the applicable statutes. Environmental and social profiles of the City and Barangay, and the implications on or what may be affected by the Project, are presented in this section.

3.1. Location, Vicinity and Accessibility

The proposed project site is located within the 16.7 ha[39] property of the BGHMC in Barangay BGH Compound, Baguio City. The BGHMC Compound is connected to national road networks including Kennon Road and Marcos Highway. Figure 4 shows the boundaries of Barangay BGH Compound and the access roads going to the BGHMC Compound.

Physician on Duty (POD)

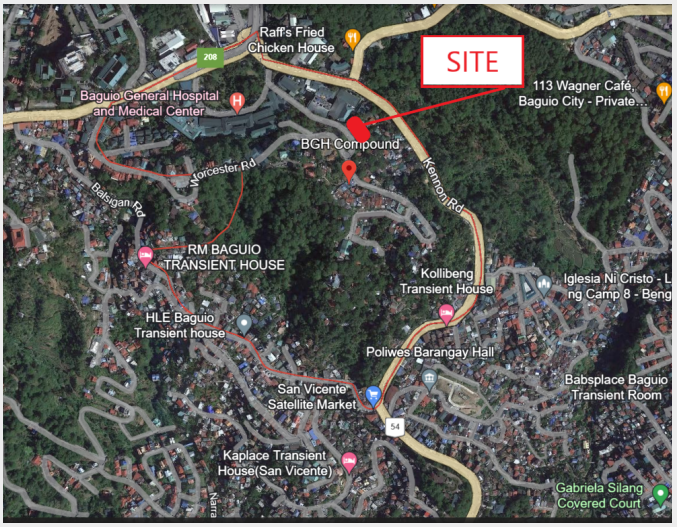

Figure 4. Access Road to BGHMC

Public transport in Baguio City in general is relatively convenient with intra-municipality and intercity routes as well as regular services to and from Metro Manila, Pangasinan, La Union, Abra, Ilocos Region, Cagayan Valley and as far as Zambales and Quezon Province. The BGHMC Compound is accessible not just to areas within Benguet Province but to nearby provinces as well.

The project is part of BGHMC's healthcare facilities expansion program currently being undertaken to augment its existing facilities in order to meet the rising demand for healthcare services.

The initial conceptual design for the proposed Dialysis Center was to construct the building in a vacant lot (with 1,862.32 sqm-building footprint and 5,291.75 sqm floor area). This is reflected in the Environmental Performance Report and Management Plan (EPRMP) which was prepared as a requirement for securing an Environmental Compliance Certificate (ECC) from the EMB-DENR for the entire BGHMC Compound. The ECC for the entire BGHMC Compound was issued by the EMB DENR on June 21, 2019.

[39] Environmental Performance Report and Management Plan (EPRMP), BGHMC Expansion Project (submitted to DENR for ECC Application)

In the course of the project development, BGHMC decided to change the project site: to retrofit instead the existing dormitory building and convert it into a dialysis center. The location of the project site is within the BGHMC Compound and its vicinity is shown in Figure 5.

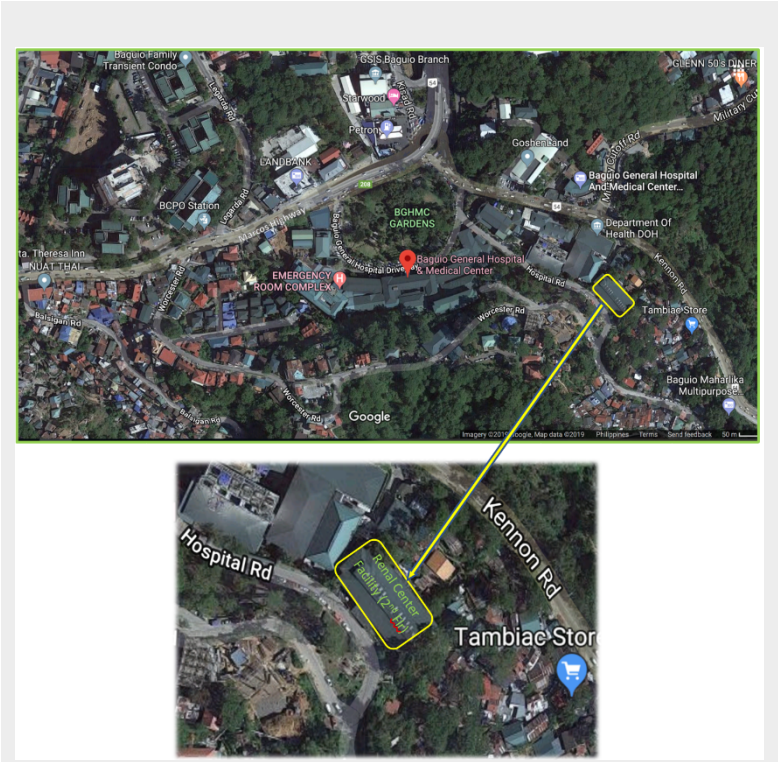

Figure 5. Project Site and its Vicinity

As proof of land ownership, BGHMC has a Certification issued by the Baguio City DENR-CENRO to the effect that the DENR-CENRO has accepted and numbered an application from BGHMC for special patent for Local and National Government Institutions for Special Patent No. SP-DOH (Hospital Purposes) 141102-003 over a parcel of land identified as Lot 4, CSS-CAR_000867-D situated at Res. Sec. “A&J”, BGH Compound, Baguio City.

The Comprehensive Land Use Plan (CLUP) of Baguio City for 2013-2023 approved by the Housing and Land Use Regulatory Board (HLURB) through Resolution 959 Series of 2017 indicates that the BGHMC Compound is within a General Institutional Zone as reflected in the General Land Use Map, a copy of which is in Figure 6.

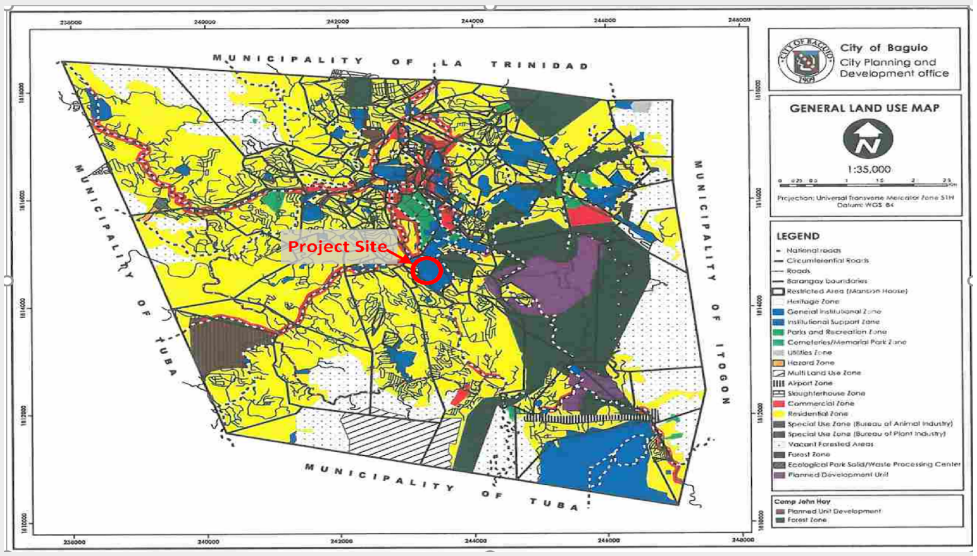

Figure 6. General Land Use of Baguio City showing the Project Site[40]

Based on the Comprehensive Zoning Regulations for the City of Baguio (SP Ordinance No. 63 Series of 2016), the surrounding areas within the BGH Compound Zoning District are a mix of High-Density Residential Zone (R3), Low Density Residential Zone (R1) and Low-Density Commercial Zone (C1).[41] This follows the current actual land use as can be seen in Figure 5 where clusters of residential and commercial areas surround the BGHMC Complex.

Based on Baguio City's Comprehensive Land Use Plan, a multi-nodal Urban Form concept is advantageous to Baguio's unique terrain as this will redirect development away from and decongest the central business district (CBD) toward strategically identified urban growth areas or nodes shown in Figure 7.

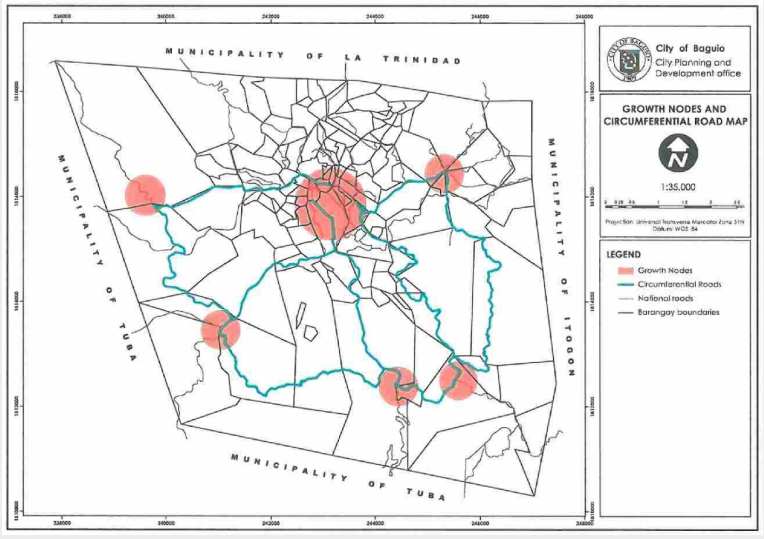

Figure 7. Growth Nodes and Circumferential Road Map

The City's CBD already has dynamic commercial activities with banking and finance centers, mall centers, the city's public market, hotels and restaurants, tourist destinations like Burnham Park and Cathedral. Moreover, institutional buildings like private schools /universities, government regional offices, hospitals (including BGHMC) and residential abodes are found within or along the periphery of the CBD. The other growth nodes are characterized by clusters of development having its own specialization while providing daily needs and social services that would encourage residents not to

[40] Source: CLUP of Baguio City: 2013-2023
[41] #127 of Appendix B of the Baguio City Zoning Ordinance

ply into the core node for such needed services. The hemodialysis facility is intended to address the projected demand of the City, aligned with its development program.

3.2. Key Environmental Profile: Topography, Climate and Geology

Baguio is the highest City in the Philippines. Elevations range from 900 m along Bued River to 1600m at Pacdal. Majority of the slopes (about 78% of the total area) are gentle to moderately steep with slope of less than 30%. Its topographic features exhibit the rugged topography of the Cordilleras. The variety of natural landforms in the city including its pine covering, making the city's towering landscape interesting[42].

Baguio City has type 1 climate wherein the dry season from November to April is affected by the northeast monsoon (Amihan) and the wet season from May to October is affected by southwest monsoon (Habagat). For the period 1970-2010, the average annual temperature is 19.5°C. Compared to the lowlands, Baguio's temperature is generally cooler by 9°C but recent years have shown changes in average temperature. Based on PAGASA-DOST's 2020 and 2050 Climate Change projections for CAR, the following are the key projections for Benguet Province:

- Temperature increases throughout the year but more pronounced from December to March;
- Seasonal rainfall increase for the months of June to August and decrease for the months of March to May (based on 2050 projections);
- Decrease in the number of dry days for 2020 and 2050; and
- Decrease in the number of days with rainfall >300mm for year 2020 but increase for year 2050

In general, soils within the city are classified as clay loam. Soil materials for embankment or fill purposes can be found in almost any place in the area.
Part of Baguio City lies atop a limestone formation which explains the numerous sinkholes underneath some parts of the City. Sinkholes develop when the limestone formation is dissolved as a result of weathering due to exposure to running water. The four (4) major sinkholes in the City are located at City Camp Proper, Crystal Cave, Dominican and Green Valley.[43]

The City is crisscrossed by several rivers among which are the Bued, Balili, Galiano-Camp-Asin, Naguilian Rivers and Ambalanga. The widest river is the Bued River followed by the Balili River. Drainage facility at the Central Business District is through an underground drainage system along Magsaysay Avenue constructed by the Department of Public Works and Highways (DPWH) and drains towards the Balili River. Among the proclaimed Watershed Forest Reserves are Lower Agno, Busol, Buyog and Lucnab. The BGHMC Compound is outside the Watershed Zone and Protected Forest Zone and the nearest watershed zone is Camp 8.

[42] Comprehensive Land Use Plan of Baguio City (2013-2023)
[43] Chapter II Geo-Physical Environment of Baguio City Ecological Profile accessed thru http://www.baguio.gov.ph/sites/default/files/city_planning_and_development_office/downloadable_forms/Ecological%20Profile%202017%20%28Chapter%202%29.pdf (March 2020)

3.3. Natural Hazards

a) Earthquake and Landslides

Earthquake generators surrounding Baguio City are segments of the Philippine Fault, Digdig Fault, San Manuel Fault, Tebbo Fault and the Tuba Fault. The nearest fault is the Tuba Fault which is about 8.5 kilometers northwest of the site. Although these are not active faults, the Mirador, San Vicente, Burnham, Loakan and Bued are local faults traversing through the built up areas of Baguio City. Only the San Vicente Fault exhibited surface manifestations, such as landslides at the San Vicente Area and displacement at the Baguio Cemetery.

The presence of several faults and lineaments in the City is aggravated by continuing denudation of its vegetative cover resulting in soil exposure. There are two types of mass movement prevailing in the City – earthquake induced and rain induced erosions. The project area is currently rated as *moderately susceptible to landslide* which means that the area is stable with occasional and localized movement. However, with the recent developments within the BGHMC Compound and nearby areas, this rating needs to be reassessed.

The 16 July 1990 earthquake is perhaps the most destructive recorded in the history of Baguio City with estimated damage ranging from 480 to 640 million USD (Bankoff, 2003). Most of the damage and loss of life came from building collapse and landslides (Durkin, 1991). A post-earthquake engineering survey found that reinforced concrete structures from the 1950s and 1960 survived better than structures built in the 1980s as the city began to expand more rapidly (Hopkins, 1973).

b) Rainfall

Extreme rainfall events also caused enormous damages to infrastructures, claimed lives and adversely affected the economy of Baguio City including the Southwest Monsoon Rains in July 1972, Super Typhoon Pepeng in October 2009 and Typhoon Ompong in September 1018. For the July 1972 incident, seven multi-storied houses sled down the rain-soaked slope of Aurora Hill near the old Baptist Church and claimed several lives. The 2009 Supertyphoon Pepeng claimed at least 60 lives, most are from the recorded 97 soil erosion/landslides incidents. The 2018 Super Typhoon Ompong left CAR with at least 111 casualties (13 in Baguio City) due to widespread landslides and damages to houses and evacuation centers.[44] Because of the City's topography and geographic location, among the common incidents caused by extreme rainfall events are eroded riprap, soil erosion/landslide, falling rocks and mudslides, vehicular accidents and isolation from the other parts of the country because of major roads blockages.

[44] https://www.baguioheraldexpressonline.com/ompong-aftermath-damages-in-car-by-super-typhoon-sept28

3.4. Key Social Profile

Based on the 2015 Census of Population (POPCEN 2015), the projected population of Baguio City for 2018 is 361,569. The Age-Sex distribution of population in 2016 showed that children aged 15-19 and 20-24 years, comprised the largest age groups followed by those in age groups 0-4 years and 5-9 years. Females outnumbered males in all age groups except for the younger age group (1-4 years). Figure 8 shows the age-sex structure for Baguio City in 2015.

As of 2012 Municipal and City Small Area Poverty Estimates released by the Philippine Statistics Authority, poverty incidence in Baguio City improved considerably from 2.4% to 0.9% in 2012.

For peace and order situation, Baguio City is generally peaceful and crime rate has substantially decreased based on recent police data. However, it is important to note that rape cases have increased with April and July having the highest incidence. Most of the rape victims (assumed to be females) were between age 15 to 18 and were assaulted between 10 PM to 4 AM while either they or the perpetrators were under the influence of alcohol.

Baguio City is gaining prominence as a regional center for health services in the Cordilleras. The presence of the BGHMC as the only tertiary health facility in the area complemented by the modern specialized facilities and services of the private sector enhances the City's capability in the delivery of health services. Baguio City has six (6) hospitals (two are government-owned, while four are private-owned) that cater to the medical needs of the community as well as other neighboring provinces. A summary of public and private key health personnel complement in 2017 is shown in Table 4.[45]

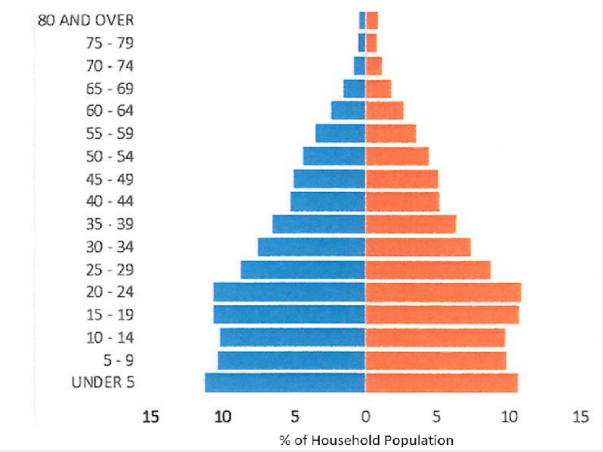

Figure 8. Age-Sex Structure for Baguio City

Table 4. Public and Private Key Health Personnel Complement (2017)

Health Personnel	Public	Private	Total
Physician	279	1,334	1,613
Nurse	341	558	899

[45] Baguio City Government. Baguio City Ecological Profile 2017 (Chapter 3a). baguio.gov.ph. http://www.baguio.gov.ph/sites/default/files/city_planning_and_development_office/downloadable_forms/Ecological%20Profile%202017%20%28Chapter%203a%29.pdf. (accessed 28 June 2019)

Midwife	64	53	117

Baguio City is also known as the Center of Education in the North. There are a total of 463 schools in Baguio City as of 2017, of which 20 are Universities and Colleges that include two (2) premier state-owned schools – University of the Philippines - Baguio Campus and the Philippine Military Academy. Medical and Allied Courses is third in terms of enrollment and graduates for school years 2016-2017 and 2017-2018 based on CHED-CAR data as illustrated in Figure 9.

	Enrollment				Graduates			
	2017-2018		2016-2017		2016-2017		2015-2016	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Business Administration	11,675	24.8%	14,058	24.9%	3,589	34.5%	3,317	33.3%
Engineering & Technology	8,677	18.4%	10,177	18.0%	1,186	11.4%	1,270	12.8%
Medical & Allied Courses	6,227	13.2%	8,455	15.0%	1,243	12.0%	1,203	12.1%
Education	3,800	8.1%	4,226	7.5%	797	7.7%	866	8.7%

Source: CHED-CAR as cited in Chapter 3b of Baguio City's Ecological Profile 2019

Figure 9. Programs with Highest Number of Enrollment and Graduates in Baguio City

Among the schools offering medical and healthcare courses in Baguio City are Pines City Colleges, University of the Cordilleras, St. Louis University, University of Baguio and Easter College. Considering this data, there is a potential for local supply of healthcare service workers in the City.

4. TECHNICAL ANALYSIS

4.1. Project Scope

The scope of the proposed Project includes the financing, construction, and operation and maintenance of a hemodialysis facility within the BGHMC Compound. The proposed project site is the existing BGHMC Dormitory Building which consists of three storeys (i.e. Ground Floor, Basement 1, Basement 2), with a gross floor area (GFA) of 2,457 sqm.[46] The building will be retrofitted to meet the required standards for a hemodialysis facility.

The following sections discuss in detail the recommended design specifications for the hemodialysis facility in terms of infrastructure/civil works requirements, necessary medical equipment and ancillary facilities, and operations and maintenance essentials to ensure the facility's adherence to relevant DOH guidelines on HD facilities. The technical analysis also presents the safeguard and resiliency concerns that should be considered during the proposed project's construction and operation and maintenance.

4.2. Capital Expenditure Requirements

4.2.1. The Facility

4.2.1.1. Sizing Requirements

DOH Administrative Order No. 2012-0001 (New Rules and Regulation Governing the Licensure and Regulation of Dialysis Facilities in the Philippines) and DOH Administrative Order No. 2016-0042 (Guidelines in the Application for Department of Health Permit to Construct) specifies, among other things, the spatial planning requirements in developing hemodialysis facilities.

Using these two guidelines as reference, simplified space multiplier factors (GFA/HD machines) were derived in order to estimate the minimum GFA required for a desired number of dialysis units. In Table 5 below, multiplying the required number of hemodialysis (HD) machines (column A) with the corresponding space multiplier factor (column B) will give the estimated minimum floor size needed to house the hemodialysis facility.

[46] BGHMC, Letter to PPP Center dated August 9, 2019.

Table 5. HD Units vs. Required Gross Floor Area (GFA)

(A) Number of HD units	(B) Space multiplier factor (GFA / HD units)	(C) Recommended minimum GFA (in sqm) for the HD Facility
10	23	230
20	18	360
30	16	480
40	15	600
50	15	750
60	15	900
70	15	1050
80	14	1120
90	14	1260
100	14	1400
110	14	1540
120	14	1680
130	14	1810

The recommended minimum GFA indicated above covers all the space necessary to operate the renal facility according to the DOH standards, which should include: (i) Dialysis Service Complex, such as space for HD stations, nurse stations and working area, area for circulation within the HD treatment section, processing room, water treatment room, supply/storage room, dialyzer processing area, service support area, emergency generator room; and (ii) Non-Treatment areas/reception area, such as business office, reception, waiting area, doctors' office, toilets and area for circulation within the non-HD treatment section.

To illustrate, should the proposed HD facility aim to operate and maintain 60 HD machines at its Year 1 of operation, it would need at least a GFA of 900sqm to ensure compliance to the DOH requirements on space allocation for the HD machines and other components/areas within an HD facility.

Should it be established that any of the abovementioned functional components required under DOH guidelines are already available and may be provided by BGHMC outside of the project site, then the freed-up space can accommodate additional number of HD machines.

4.2.1.2. Functional Area Components

The required functional area for the HD Center is outlined in Table 6. Some key spatial planning design requirements and considerations are provided.

Table 6. Functional Area Required for the HD Center Building

Dialysis Service Complex	Key Spatial Planning Considerations
1. HD Stations 2. Nurse Stations with Working Area 3. Area for Circulation w/in HD Treatment Section 4. Processing Room 5. Water Treatment Room 6. Supply / Storage Room 7. Dialyzer Processing Area 8. Service Support Area 9. Emergency Generator Room	• The area shall not be less than six (6) square meters to accommodate a bed or chair, the dialysis equipment and emergency equipment if needed; • Nursing station shall be located in an area that allows adequate surveillance of patients on hemodialysis machines; • There shall be storage area for sterile instrument/supplies and other materials; • There shall be work area that contains a work counter, hand washing sink, storage cabinets; • There shall be designated water treatment area and toilet facility for the staff/patients with urinal, water closet, and lavatory; • Treatment areas should have a temperature of [16.0 to 22.0] C & [55% to 60%] humidity.
Non-Treatment Areas	**Key Spatial Planning Considerations**
1. Business Office, Reception 2. Waiting Area 3. Doctors Office 4. Toilets 5. Area For Circulation w/in HD Treatment Section	• Business Office, Reception areas shall be for information service, admitting section, cashier etc.; • Waiting area should have sufficient seats for patients and visitors; • The HD Centre shall have 24-hour provision of potable water for drinking & hand hygiene. It shall also have 24-hour supply of electricity, either through direct supply or from other sources.

4.2.1.3. Compliance to City Government's Safeguards Policies and Building Requirement

The City of Baguio, in its Environment Code and Comprehensive Zoning Ordinance, has the following policies that should be considered in designing the infrastructure component of the project:

i. "Green Building" Policy which requires integration in the plans of new buildings the following as requisite of issuance of building permit:
   - Rain capture or water harvesting facility, water re-use and recycling
   - Energy conservation retrofitting to more energy efficient devices
   - Wastewater treatment facility
   - Solid waste management with emphasis on segregation, minimization, recycling and composting

ii. Policies of Wastewater/Sewage Management
   - Buildings with a wastewater volume of 12 cu.m. per day shall provide their own treatment facility
   - Healthcare facilities shall have their own wastewater treatment facilities or may be connected to the sewage treatment plant. However, facilities with laboratories shall require pre-treating their wastewater prior to discharge into a sewage treatment plant
   - For new structures, in no case shall an occupancy permit be issued without a Certificate of Sewer Connection from the City Environment and Parks Management Office. This is also a requirement for the processing & issuance of Business Permits by the Permits and Licensing Office.

iii. Provision of adequate parking spaces- parking slot requirements shall be an integral part of buildings/structures guided by the following requirement:
   - Under "Public hospital" classification: 1 off-street cum on site car parking slot for every 25 beds
   - Under "Private Hospital" classification: 1 off-street cum on site car parking slot for every 12 beds
   - Note that parking slot provided outside the building/structure will be qualified only as buffer parking.

iv. Height regulation for Buildings in General Institutional Areas
   - Allowable Storeys: 8
   - Max. height above established grade: 24 meters

v. Vulnerability Profile & Disaster Risk Assessment by Barangay which contains the following important information that should be considered in assessing the integrity of the dormitory building where the hemodialysis facility will be established:
   - General climatic type and climate change projections
   - Topography and Slope

- Soils
- River System
- Drainage System
- Flood prone areas
- Faults
- Geologic & Meteorological Hazard

BGHMC commissioned a number of geotechnical investigations in connection with the construction of other buildings within the compound. These can likewise serve as reference.

4.2.1.4. Gender, Persons with Disability (PWD) and Senior Citizens Considerations

The design of the building shall consider gender differences as well as PWD and senior citizens' ease of access requirements.

Separate and sufficient number of clean toilets for male, female and unisex in strategic locations should be included in the design. These shall be accessible to patients, watchers /visitors. Entrance and exit points to the building should be well-lit for security purposes especially during night time.

The National Building Code, Batas Pambansa Bilang 344 (Act to Enhance of Disabled Persons by Requiring Certain Buildings, Institutions, Establishments and Public Utilities to install Facilities and Other Devices) and the Senior Citizen's Act has the following provisions that are recommended to be considered in the building design:

- Requirement for reserved parking for PWD and Senior Citizens;
- Provision of adequate and clean comfort rooms with facilities for PWD and Senior Citizens in properly located areas;
- Easy, direct access, and smooth circulation for vehicles and pedestrians, including PWD and Senior Citizens; and
- Installation of elevators or ramps for easy access by PWDs and senior citizens.

4.2.2. Medical Equipment

4.2.2.1. Hemodialysis (HD) Machines

The discussions presented in this section are only indicative. The bidders may propose a different equipment sculpting based on its own estimate as long as compliant with MPSS and KPIs to be released for the Project.

Quantity of HD Machines

Based on the demand study conducted, the estimated corresponding HD units recommended for the BGHMC HD facility are summarized as follows:

Table 7. HD Machines Demand Projection

	2025	2026	2027	2028	2029
Number of Patients to be accommodated by BGHMC	360	420	480	570	648
Number of HD units - main	60	70	80	95	108
Number of HD units - backup	5	6	7	8	9

Machine Life

Based on the estimated HD treatment time, as well as the HD machine aging requirement prescribed under DOH AO 2012-001, the expected HD Machine Service Life according to possible operating schedules are presented in Table 8.

Table 8. HD Machine Service Life per Operating Schedule Scenario

HD Treatment Time	Quantity	Units
HD time per treatment (based on BGHMC experience)	240	Minutes
	4	Hours
HD Machines Aging Criteria	**Quantity**	**Units**
HD machine maximum aging (whichever comes earlier among the 3)	30,000	Machine Hours
	7,500	Treatments
	10	Years
HD Machine Service Life per Operating Schedule Scenario:	**HD Machine Life**	
- at 4 shifts/day, 6 days/week, 52 weeks/year	6.00	Years
- at 3 shifts/day, 6 days/week, 52 weeks/year	8.00	Years
- at 2 shifts/day, 6 days/week, 52 weeks/year	12.00	Years

HD units that reach maximum machine life should be replaced.

Back up Requirements

Based on PhilHealth Circular No. 20, s-2005 (Revisions on Accreditation Requirements for Freestanding Dialysis Clinics), back-up machines are to be provided as follows:

- One (1) back-up machine for every 15 machines. If center has less than fifteen (15) machines, it should have at least one (1) back-up machine;
- Dialysis center should not be running beyond 75% of capacity

The abovementioned back-up requirements should be considered in delivering the number of HD machines necessary to perform the required Service Capacity specified in Key Performance Indicators (KPIs) section of this Report. In compliance with these requirements, a total of 9 back-up

machines should be provided (8 back-up for the 108 main machines + 1 back-up dedicated for Hepa B patients).

4.2.2.2. Other Medical Equipment

The proposed BGHMC HD Facility shall have adequate medical equipment and instruments commensurate with the number of HD service capacity. There shall also be an established system for maintenance of critical equipment. A suggested list of medical equipment and instruments which the project proponent needs to provide beginning at day 1 of operation is enumerated in Table 9. BGHMC may further modify this list according to its preferred requirements.

Table 9. List of Medical Equipment and Instruments

Medical Equipment	Quantity (in units)
Dialyzer reprocessing system	8.00
Dialyzer rinsing system	2.00
Dialysis chair	100.00
Body composition analyzer	4.00
Powder bicarbonate mixer	4.00
Dialyzer rack - 300 slots for negative	4.00
Dialyzer rack - 50 slots for positive	4.00
Airways Adjuncts	2.00
Airways Intubation Kit	2.00
Diagnostic Set	4.00
Biological Refrigerator	2.00
Cardiac Board	10.00
Defibrillator with Cardiac Monitor	2.00
Different set of bins	5.00
ECG Machine	4.00
Floor Lamps (Drop light or gooseneck)	10.00
Foot Stools	10.00
IV Stand with Pole	10.00
Mayo Table and Tray	10.00

Table 9. List of Medical Equipment and Instruments

Medical Equipment	Quantity (in units)
Minor Surgical Set	10.00
Nebulizer	10.00
Oxygen Tank with gauge and humidifier	20.00
Penlights	10.00
Suction Machine	10.00
Pulse Oximeter	10.00
Glucometer	10.00
Sphygmomanometer	100.00
Stethoscopes (Stainless Steel)	100.00
Stretcher	5.00
Thermometer, digital	10.00
Electronic Weighing Scale, capable of accommodating wheelchair	2.00
Wheelchair	10.00
Emergency Cart	2.00

All equipment shall be kept in good working condition through periodic inspection, cleaning and maintenance. An equipment logbook shall be maintained for all major equipment. The above-cited quantities shall be adjusted corresponding to the actual delivery profile of HD machines. Except for the Dialyzer reprocessing system and Dialysis chair (which are presented separately), the items in Table 10 are included in the Others component of the HD Equipment cost estimate in the financial model.

4.2.3. Ancillary Facilities

This section discusses considerations in the design of key support facilities related to the continuous supply of water and energy, which are essential in the seamless operations of the HD facility, and on waste management facilities needed to ensure proper disposal of various waste materials.

4.2.3.1. Raw Water Requirement, Supply/Source, Treatment System and Storage

Hemodialysis procedure has specific requirements in water quantity and quality. On the average, 150 to 170 L volume of dialysis water is required per session, based on literature review. DOH AO

2013-0003 (Implementing Guidelines in the Analysis, Monitoring and Maintenance of water used in Dialysis facilities) requires continuous water supply that complies with biological and chemical standards compatible with acceptable HD techniques.

In terms of quality, DOH guidelines on licensing of Dialysis Clinics requires that the water quality should at least be HPC<200 CFU/mL and Fecal Coliform<1.1 MPN/100mL. Quality of water used for dialysis operations is regulated by the DOH through DOH AO 2013-003 and is subject to periodic compliance monitoring and reporting.

To comply with this, raw water needs to undergo a water treatment process before it can be used as dialysis water. The Reverse Osmosis (RO) treatment technology is currently the most commonly used. Figure 10 is a simplified illustration of the use of water in a hemodialysis procedure.

The water supply for BGHMC's existing operations comes partly from the Baguio Water District (BAWADI) and partly deep well. BAWADI handles water production and distribution system for the City of Baguio.[47]

4.2.3.2. Power Supply, Consumption and Energy Conservation/Efficiency Measures

Electricity, which is generated outside the city, is mainly distributed by the Benguet Electric Cooperative (BENECO) Inc., serving all barangays of Baguio City. BENECO's average power rate is PhP 8.40 per KWh[48] which is relatively cheaper compared to the other electric cooperatives and Meralco (PhP 10.20 per KWh).

Hemodialysis operations require a lot of energy and a reliable and continuous power supply. HD Facilities provide energy-intensive procedures especially for heating the dialysis fluid to normal body temperature of 37°C and in treatment of raw water into dialysis water. To ensure continuous power supply, part of the emergency requirements recommended for the Project is to have an emergency contingency plan that includes either (1) an emergency backup generator on the premises with capacity to operate the facility for 16 hours; (2) a contract with a supplier/vendor to make an emergency generator available on demand within 36 hours; or (3) a contract with another licensed HD Center within 30 kilometers to provide emergency contingency care for patients.

If power supply is not available, one (1) HD machine will require a 1.65KW size generator[49]. By way of benchmark, an average facility having 16-20 HD machines and a commensurate water treatment system will be requiring at least a 50KW generator.

Based on literature review, for HD Operations in general, power requirement is mainly for the use of HD machines and instruments during treatment.

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[47] It serves Baguio City and parts of Tuba, Benguet and maintains 62 deep wells, 15 booster pumps, 4 spring source and a rain catchment facility in Mount Sto. Tomas.

[48] https://northphiltimes.blogspot.com/2019/07/beneco-hydropower-plant-to-reduce-power.html?fbclid=IwAR2_FppJjLi6RWppnE5vcjUrHhdYQDL4CgrTJKJ4rnBgCLC-Hvkq8oFUSE4 – accessed 16 August 2019

[49] ESRD Network. https://www.esrdnetwork.org/sites/default/files/content/uploads/Kidney-Care-in-Emergencies-Brochure-072915.pdf

4.2.3.3. Waste Management Facilities

A hemodialysis facility is expected to generate large volumes of solid and liquid wastes. Each dialysis treatment generates considerable amount of solid wastes including hazardous wastes which require special management in accordance with RA 6969 and the Joint DENR-DOH AO 02-2005

4.3. Operations and Maintenance of the Project

4.3.1. Supplies, Consumables, and Materials

The BGHMC HD Facility should have adequate supplies, consumables and materials commensurate to the number of operating HD units. Likewise, emergency drugs and consumables should be available at all times.

As part of the operating requirements for the facility, the private proponent shall be required to have defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas.

Indicative list of supplies, consumables and materials required per treatment are given in the table below. The bidders may have different actual supplies, consumables as long as they are compliant with MPSS and KPIs to be released for the Project.

Table 10. List of Supplies, Consumables and Materials

Supplies, Consumables and materials	Quantity	Units per treatment
Hemodialysis Supplies and Consumables	1.00	set
OS 8x12	5.00	pieces
Bouffant Cap	3.00	pieces
Facemask	3.00	pieces
Sediment filter	0.027	pack
Industrial Salt	0.003	pack
Residual strips	1.00	piece
Forms	2.00	pieces

4.3.2. Required Manpower/Medical Staff and Information on Employment

The HD facility shall have qualified and/or trained medical staff (Physician on Duty, Nurses, Dialysis Technicians) as per the requirements of professional and regulatory bodies. Per DOH Administrative Order No. 2012 – 0001, and PhilHealth Circular No. 20, s-2005, the table below indicates the number of medical staff required for the operation of the HD facility:

Table 11. List of Required Medical Staff per Shift

Medical Staff	Required per Shift per DOH AO 2012-0001	Required Medical Staff per Shift at 60 HD machines	To be provided/cost shouldered by
Physician on duty	1 per 15 HD stations	4	BGHMC
Nephrologists	Not specified; BGHMC discretion	BGHMC discretion	BGHMC
Department Unit Head	Not specified; BGHMC discretion	BGHMC discretion	BGHMC
Supervising Nurse	Not specified; BGHMC discretion	2 (1 per 30 HD stations)	BGHMC
Staff Nurse	1 per 4 HD stations	15 per shift x 2 shifts per day	Private Partner (included in Direct Labor cost)
Dialysis Technician	Not specified; BGHMC discretion	1 per 10 HD machines x 2 shifts per day	Private Partner (included in Overhead)
Administrative Staff	Not specified; BGHMC discretion	4 staff (fixed) x 2 shifts per day	Private Partner (included in Overhead)
Utility Worker	Not specified; BGHMC discretion	3 staff (fixed) x 1 shift per day	Private Partner (included in Overhead)

For every staff member, there shall be a personal record containing the appointment order, documentary evidence of qualification and/or training (and professional registration where applicable). Periodic skill enhancement/ refresher training relevant to their job profile shall be provided, as prescribed by professional bodies and as per local law/regulations.

The personnel to be provided by BGHMC per above table will be the personnel currently employed by BGHMC in its existing dialysis facility, who will be reassigned to the project once operations start. At Year 1 of operations (i.e., 60 HD machines), the Project will employ around 50-60 medical staff, which can increase up to 90-105 medical staff once 108 HD machines are in operation. In addition, around 50 – 100 jobs will be created during the various stages of the construction phase.

Cost estimates for the above personnel are included in the line item in the financial model specified in Table 11. The above estimated personnel should be available according to the preferred delivery schedules for the HD machines. For every staff member, there shall be a personal record containing the appointment order, documentary evidence of qualification and/or training (and professional registration where applicable). Periodic skill enhancement/ refresher training relevant to their job profile shall be provided, as prescribed by professional bodies and as per local law/regulations. During the implementation phase, sex-aggregated data on the actual employment due to the Project shall be monitored.

4.3.3. Other Overhead Costs

Other significant cost drivers identified during the O&M period are as follows:

Other Overheads	Objective
Water analysis	To check compliance to water quality standards required under DOH AO 2012-0001 and DOH AO 2013-0003
Chemical analysis	To check compliance to water quality standards required under DOH AO 2012-0001 and DOH AO 2013-0003
Housekeeping and Maintenance Works	To maintain cleanliness and usability of building components
Security	To maintain order and security within and around the HD Center

5. Environmental, Social and Gender Equity Safeguards and Project Resiliency

The PPP Governing Board Resolution 2018-12-02 recognizes the importance of mainstreaming environmental, social and gender (safeguards) concerns in the PPP process as early as the project development stage. Timely identification of related requirements and having it considered in the project feasibility study, planning and design lowers the risks of associated delays.

5.1. Key Environmental and Social Safeguards Concerns for Hemodialysis Operations

Commercial activities have congested Baguio City's CBD including the BGHMC area, posing concerns on resource use competition and on waste management. Hemodialysis is a resource-intensive procedure, requiring volumes of water and energy and generates volumes of wastes (wastewater, plastic wastes, hazardous wastes, etc.).

5.2. Project Resiliency and Contribution to Climate Change Mitigation

The HD Facility should set up its on-site emergency plan for foreseeable disaster events and a system for linking with off-site emergency plan of BGHMC and the Baguio City's Disaster Risk Reduction and Management Office.

For new buildings, the above items together with the provision of proper wastewater and solid waste management system is a requisite for the issuance of building permit. As the HD Facility will be established in an old building, the applicability of such for purposes of securing building permit shall be validated.

5.3. Pre- Project Implementation Safeguards Studies, Permits and Clearances

Below summarizes an indicative list of the necessary studies, permits and clearances that shall be done/secured before project implementation.

Table 12. Required Studies, Permits and Licenses Pre-Project Implementation

Type of Study / Permit / Clearance	Remarks
Environmental Compliance Certificate (ECC)	● ECC-OL-CAR-2019-0061 was issued 21 June 2019 for the entire BGHMC complex. However, EMB-DENR must be informed about the changes in the project vis-à-vis what was disclosed in the ECC application (i.e. change in project site, from the location of existing motorpool to location of dormitory building). ● BGHMC is accountable to EMB-DENR for the compliance to the conditions of the ECC and corresponding reporting requirement. It is recommended that the private proponent be oriented on the ECC conditions and EPRMP commitments as a consideration in the detailed engineering design, construction activities and operations. Appropriate arrangements should be made for regular reporting of environmental performance of the HD facility based on the parameters set in relevant environmental laws as required by EMB-DENR, the LGU and other government entities.
Tree Cutting Permit[50]	The City of Baguio, in its Environment Code provides for the "Preservation and Conservation of Pine Trees and other endemic and indigenous tree species". The City has instituted controls in the cutting of trees affected by site development, subject to government's regulatory measures such as building permit and ECC under the following conditions: • In cases where the planting of replacement tree is no longer viable (within the project area), no permit to cut shall be granted unless the applicant already planted thirty (30) pine trees as replacement for every pine tree in areas to be identified by the CEPMO • For pine trees located on public lands, the area where the pine tree to be cut shall be preserved for no other purpose but to grow a replacement pine tree to be undertaken by the CEPMO, except when cutting is for public welfare subject to the EIA and ECC requisites • Construction owners must be required to plant trees, within the construction site or in watersheds or parks…for land area 1,000 sq.m or more, each tree to be cut shall be replaced with a minimum of ten (10) tree seedlings.

[50] Tree cutting permit has to be secured from the DENR-CAR by submitting the following documentary requirements for evaluation: Letter of application, LGU Endorsement/Certification of No Objection (City and Barangay), Copy of the Land Title (OCT/TCT) for Private Property, Photographs of trees to be removed, and Site Development Plan and ECC. (Source: http://penroagnor.com/wp-content/uploads/2015/05/Tree_Cutting_Permits.pdf)

Table 12. Required Studies, Permits and Licenses Pre-Project Implementation

Type of Study / Permit / Clearance	Remarks
Locational Clearance	The proposed location of the HD facility is consistent with the CLUP. Locational Clearance has to be secured by owners/developers from the Zoning Officer as a pre-requisite for the issuance of building permit by the City Building Official. Zoning Fees for institutional facilities is at PhP 400 + 1/10 of 1% of cost in excess of PhP 100,000.
Building Regulations and Permit	In addition to the requirements pursuant to PD 1096, National Building Code, the City Government requires the incorporation in the building plans of the following: ● Rain capture or water harvesting facility, water re-use and recycling ● Energy conservation retrofitting to more energy efficient devices ● Wastewater treatment facility (for buildings with at least 12 cu.m/day wastewater) ● Building with a minimum roof area of 200 sqm. shall incorporate 30% of its roof area for plants and trees Other environmental development controls as specified in the City's Comprehensive Zoning Ordinance such as excavation, drainage, building height as well as parking and electrical transformers requirements shall be referred to in the preparation of the detailed engineering design for the building.

5.4. Safeguards Implementation, Monitoring and Evaluation

The private proponent shall coordinate with BGHMC on the monitoring and evaluation of safeguards implementation. At the pre-construction to construction stages, the objective of monitoring and evaluation is to ensure that appropriate environment and social safeguards as recommended are integrated in the detailed engineering design and are complied with in the construction of the facilities. Variances should be documented and justified as applicable. Monitoring and evaluation of compliance with the pre-project implementation clearance / permit requirements shall also be done at this stage. The BGHMC's designated PCO shall include in its monitoring, evaluation and required reporting the safeguards implementation performance for the construction activities for the HD Facility Project.

Upon completion of the construction activities, the monitoring and evaluation shall be based on systems developed, with appropriate indicators, to address identified safeguards concerns during the operations stage to ensure continuous implementation of appropriate safeguards.

6. Demand Assessment

The study team gathered relevant data from the National Kidney Transplant Institute-Renal Disease Control Program (REDCOP).[51] Methodology and assumptions made were also consulted with REDCOP, which is the authorized government entity to consolidate and process data in relation to End-Stage Renal Disease (ESRD) in the Philippines. The demand projects indicated in this section are only indicative. Bidders may assess the demand based on their own projections and due diligence.

6.1. Demand and Supply Situation of HD Treatments in Benguet

There is a projected upward trend for the demand and supply of HD treatments in Benguet from 2018 to 2029 as illustrated in Figure 15. It is to be noted that, even with the HD treatments that BGHMC can supply through this Project, the projected supply of HD treatments in Benguet would still not be sufficient to cater fully to the demand for the service, as illustrated by the Remaining Unserved Demand. This strongly supports the need for additional HD treatments in the area which the BGHMC can supplement through this Project.

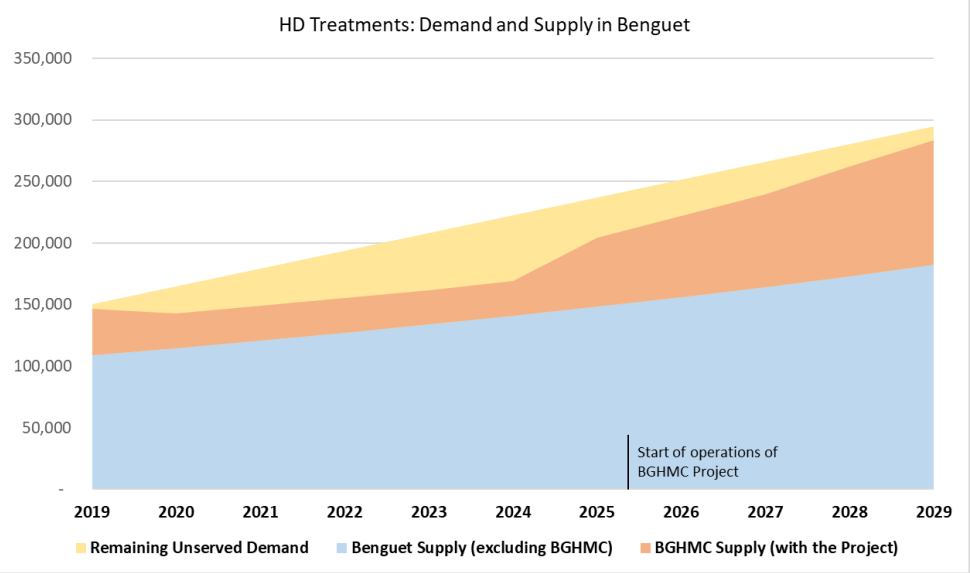

Figure 15. Demand and Supply Situation of HD Treatments in Benguet

6.2. BGHMC's Market Share

BGHMC's hemodialysis patients were determined by using BGHMC's 50% market share from the projected prevalence in Benguet Province. The 50% market share is based on the average ratio of BGHMC patients to total Incidence for 2018 (59%) and 2019 (52%), rounded.

[51] REDCOP is the office in-charge of implementing the NKTI's public health projects on the prevention and control of renal and other related diseases. It plans, implements and monitors projects for research, advocacy, training, service and quality assurance. It also administers and manages the Philippine Renal Disease Registry (PRDR), which include the following: the End Stage Renal Disease (ESRD) Registry composed of the Hemodialysis, Peritoneal Dialysis & Transplant Registries, and the Chronic Kidney Disease Registry composed of Biopsy.

6.3. Patients per HD Machines

The number of patients per HD machine were determined based on the following assumptions:

- The HD machines will be operating at 18 hours a day, 6 days a week;
- The duration of each hemodialysis session is six hours, including the duration for disinfecting of machines after each treatment;
- The ESRD patients follows a thrice a week hemodialysis session treatment; and

Each HD machine is assumed to operate for 936 sessions per year, while each ESRD patient follows a thrice a week hemodialysis session treatment which translates to 156 session treatment in a year. Hence, six (6) patients per HD Machine can be accommodated.

6.4. Quantify Number of HD Machines Needed

Based on the projected prevalence during operating years, the number of hemodialysis machines required to fully serve BGHMC's estimated market share in Benguet and Baguio City were identified. These estimates also follow the assumptions specified in Step 3.

The table below presents the number of HD machines needed at a given year, based on the prevalence of ESRD cases in Benguet ("HD Machines based on prevalence data"). Considering the recommended HD units for the GFA of the facility and capacity of the building/HD facility, the recommended number of HD machines were then determined ("HD Machines recommended").

Table 13. HD Machines Estimates based on Prevalence

Year	1	2	3	4	5
HD Machines (based on prevalence data)	157	172	188	205	222
HD Machines (recommended)*	60	70	80	95	108

**exclusive of back-up machines*

The phasing plan above is only indicative. The private proponent may adopt its own phasing plan, provided that it meets the minimum number of 60 machines at the start of operations. Ramp-up of number of HD machines may be at the private proponent's own judgement depending on the expected demand/number of patients.

7. INDICATIVE FEATURES OF THE PPP CONTRACT

7.1. Scope of the Project

The scope of the Project includes undertaking the following:

1. **Refurbishment of the space for the BGHMC HD Center**. The BGHMC HD Facility shall refer to the space to be refurbished and maintained by the Private Partner, and in which the principal functions of the Required Services shall be performed. The BGHMC HD Facility shall house the HD Service Areas, Furniture, Fixtures and Non-Medical Equipment, Ancillary Facilities.

2. **Procurement, Delivery and Installation of Renal Facilities**. Renal Facilities shall refer to the machines, equipment and other items as well as the minimum quantities listed to be specified in the Instruction to Bidders and PPP Contract for the Project. The indicative specifications of the facilities to be delivered under the Project are also discussed under Sections 4.2 and 4.3 of this Information Memorandum.

3. **Undertaking of Required Services**. Required Services shall refer to all the obligations which the Private Partner shall perform and/or deliver under the proposed PPP arrangement. Required Services shall include the following, among others:

    a) Operation of HD Facility, consistent with the Operating Procedures approved by BGHMC, as well as the relevant DOH Guidelines, and which shall cover the following services:
        i. Treatment of BGHMC Patients (BGHMC Patients referring to the patients referred by BGHMC to the Private Partner for treatment, which shall either be Regular Patients (Out-Patients), In-patients, Emergency Patients, and Indigent / Charity Patients as may be defined by DOH);
        ii. Provide Supplies, Consumables and Materials;
        iii. Provide Required Manpower;
        iv. Pay for cost of Utilities; and
        v. Shoulder Other Operational Overhead Costs.

    b) Maintenance of the HD Facility, as defined under Appendix D – Proposed Building Maintenance Obligations by Private Partner

    c) Maintenance of the Renal Facilities to be defined in the Instruction to Bidders and PPP Contract.

7.2. Private Sector Revenues

The revenues of the Project will be generated from the payment of patients for HD sessions. The case rate of PhilHealth for each hemodialysis session (per PhilHealth Circular No. 2023-0009) is currently set at Php 2,600. Any changes on the case rate would be through issuances of the PhilHealth.

The Private Sector will earn its revenues based on the revenue share for the Project. The revenue share will be determined in a competitive bidding.

The BGHMC shall facilitate the PhilHealth claims and provide the Private Proponent its revenue share.

7.3. PPP Arrangement Options for the Proposed HD Facility

Below is a summary of the possible sharing of responsibilities between the BGHMC and the private sector partner:

Table 14. Indicative Project Details

Item	Indicative details
General Obligations of the Private Sector Partner (PSP)	▪ Rehabilitation of an existing three (3)-Storey building for the hemodialysis center ▪ Procurement, Delivery, and Installation of Renal Facilities including provision of HD machines and all equipment necessary for hemodialysis operations ▪ Operation & Maintenance (O&M) of the hemodialysis center ▪ Provision of Manpower (e.g., staff nurses, dialysis technicians, other administrative staff, and utility workers)
General Obligations of BGHMC	▪ Provision of project site (i.e., land and building) ▪ Provision of Manpower (i.e., physicians on duty, nephrologists, department unit head, and supervising nurses)

Table 14. Indicative Project Details

Item	Indicative details
PPP Arrangement	Build-Operate-Transfer (BOT) under the BOT Law and its IRR
Concession Period	16 years (inclusive of 1 year construction period)
Number of HD Machines	The private partner shall maintain a minimum number of hemodialysis machines as follows: a. Prior to start of operations - 60 hemodialysis machines b. By end of 1st year of operations - 70 hemodialysis machines c. By end of 2nd year of operations - 80 hemodialysis machines d. By end of 3rd year of operations - 95 hemodialysis machines e. By end of 4th year of operations onwards - 108 hemodialysis machines In addition to these, the private partner shall maintain the required back-up machines as required under PhilHealth Circular No. 20, s. 2005 or any future relevant issuances of PhilHealth/DOH.

Under this structure, the PSP will assume all project costs, including maintenance costs for the HD facility. The HD Facility may initially operate 60 HD machines and increase its quantity depending on the demand. There will also be a mixed arrangement for the medical staff, thereby suggesting a joint accountability on medical-related performance indicators.

7.4. Indicative Risk Identification and Allocation

This section presents the proposed allocation of identified project risks between the government and the PSP. The general principle of a risk matrix is that certain identified risks should be allocated to the party that is best equipped to manage it. This risk allocation was also developed bearing in mind the feedback from the potential private sector proponents.

Table 15. Risk Allocation Matrix

Risks	Risk Allocation		Remarks
	Public Sector	Private Sector	
Construction Period			
1. Completion risk. The retrofitting works may not be completed on time and within the original cost estimate.		√	
2. Additional costs due to change-orders		√	PSP to bear change order risk up to a certain cost threshold
3. Bankability issues due to unacceptable projected cash flow available for debt service or debt service coverage ratios; or unwillingness of banks to take sponsor risk during construction.	√	√	Government will need to recognize that terms of concession agreement have to be bankable
4. Shortfalls or delays in the availability of funds.		√	
5. Delays in obtaining building permits, environmental clearances, etc.		√	Government to assist PSP in negotiations with DOH, LGU, DENR, DPWH, etc.
6. Unavailability or inaccessibility of site for construction works due to political actions or court orders.	√		Within the government's ability to manage. Provisions for excusable delays in concession agreement
7. Change in law or material adverse government action.	√		Provisions in concession agreement under events of default. A contingent liability of the national government.

Table 15. Risk Allocation Matrix

Risks	Risk Allocation		Remarks
	Public Sector	Private Sector	
8. Physical force majeure	√	√	50-50 sharing in the termination payments in events of default
Operation Period			
1. Shortfalls in actual volumes of patients, possibly due to competition from stand-alone clinics or unattractiveness of the BGHMC Renal Facility due to inadequate facilities or poor service.		√	PSP bears risk of volume of patients
2. Disqualification from Phil Health benefits	√	√	Joint risk of BGHMC and PSP
3. Higher operating costs which exceed the Phil Health rates.		√	
4. Technology and obsolescence risk of the HD machines		√	
5. Financial risks in exchange rates and interest rates.		√	
6. Resistance/hostility from existing stakeholders in BGHMC	√	√	
7. Change in law or material adverse government action.	√		
8. Environmental risk		√	
9. Physical force majeure	√	√	

8. The Tender Process

8.1. Bid Parameter

The winning bidder will be determined based on the lowest revenue share to Private Sector Partner (net of PhilHealth-mandated professional fees of government employees) without availability payments. The winning bidder will be determined through a competitive bidding process.

8.2. Issuance of Bid Documents

Interested parties may purchase the Bidding Documents from the Department of Health, upon its availability. Bidding documents will include, among others, this Information Memorandum, the Invitation to Bid ("Invitation"), the Instruction to Bidders ("ITB"), and the draft Concession Agreement and its Annexes.

Payment instructions for the purchase of the Bidding Documents will be made available in the PPP Center'swebsites at https://ppp.gov.ph/ppp_projects/bghmc-renal-center-facility/.

8.3. Entities involved in the bidding

The DOH Secretary ("SOH") will create an SBAC that will be responsible for all aspects of the bidding process as specified in Section 3.2 of the Revised 2022 BOT IRR. The SOH will also approve the Concession Agreement prior to its execution.

The SBAC will be supported by a Technical Working Group and Secretariat in the fulfillment of its duties.

The PPP Center will be involved in the bidding process as the primary transaction support for the DOH and BGHMC.

The DOF and Statutory Counsel will issue an opinion on the Concession Agreement as indicated in Section 10.10 of the Revised 2022 BOT IRR.

8.4. Single-stage qualification and bidding

The tender process will be undertaken pursuant to a single stage qualification and bidding process pursuant to Section 5.7 of the Revised 2022 BOT IRR. Under a single stage bidding, the bidders will submit their technical and financial proposals simultaneously. On the Bid Submission Date specified in the ITB, Bidders will be required to submit three separate envelopes containing their qualifications requirements, technical proposals, and financial proposals.

8.5. Bid Evaluation

Pre-qualification and technical bids will be evaluated on a pass/fail basis pursuant to the requirements specified in the ITB. Only bidders who passed the succeeding stage will proceed to the next stage. The financial bids will be evaluated based on the approved bid parameter for the Project.

8.6. Bidder Due Diligence

Interested parties are invited to conduct their due diligence and will be provided access to site visits at the BGHMC. The process will be supervised by DOH and/or the BGHMC authorized representatives.

Bidders will also be provided with access to the Virtual Data Room ("VDR") where relevant due diligence materials and Bidding Documents will be made available.

8.7. Indicative Project Timeline

Figure presents the key project development milestones and implementation timeline. This is further summarized in the succeeding table.

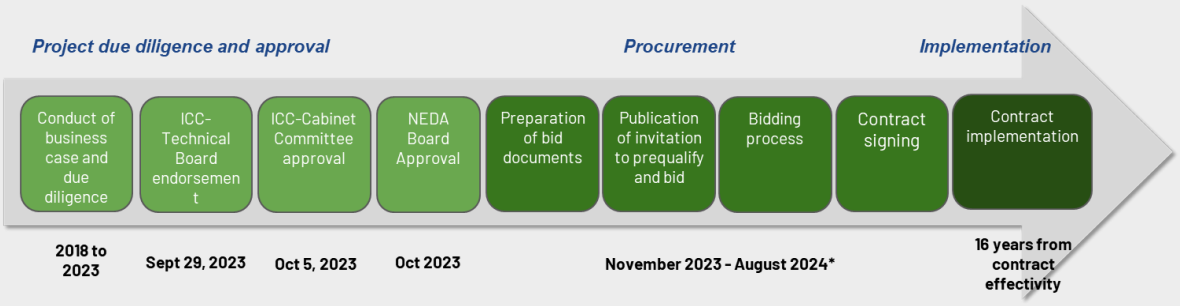

Figure 10. Project timeline

Table 16. Indicative Project Timeline

Activity / Milestone	Timeline
NEDA ICC-Technical Board Endorsement	September 29, 2023
NEDA-ICC – Cabinet Committee Approval	October 5, 2023
NEDA Board Approval	October 13, 2023
Publication of Invitation to Bid	December 17, 2023
Pre-bid Conference	March 15, 2024

Table 16. Indicative Project Timeline

Activity / Milestone	Timeline
Bid Submission	June – July 2024
Bid Evaluation (Pre-qualification, Technical, and Financial Proposals)	July - August 2024
Issuance of Notice of Award	2nd Week of August 2024
Evaluation of Post-Award Requirements	3rd Week of August 2024
Contract Signing	August 29, 2024
Contract implementation	2024 - 2039

9. Transaction Contacts

Maria Francia Miciano-Laxamana, MD, MHSA, CHS
Undersecretary, Department of Health
ppphsecretariat@doh.gov.ph / usecfmlosc@doh.gov.ph

Ricardo B. Runez, Jr., MD
Medical Center Chief II, Baguio General Hospital and Medical Center
mcc@bghmc.doh.gov.ph

Atty. Roseanne R. Galiste
Attorney IV, Baguio General Hospital and Medical Center
rosanne_rarang@yahoo.com

Gianna C. Capacia
Project Development Officer, PPP Center of the Philippines
gccapacia@ppp.gov.ph

Carlo Manuel P. Gulapa
Project Development Officer, PPP Center of the Philippines
cpulapa@ppp.gov.ph

Appendices

APPENDIX A. SUMMARY OF PHILHEALTH ISSUANCES RELEVANT FOR HEMODIALYSIS CENTERS

1. *Circular No. 6, series of 2017* or *Strengthening the Implementation of No Balance Billing (NBB) Policy (Revision 1)*, which was superseded by *Circular No. 17, series of 2017, Strengthening the Implementation of NBB Policy (Revision 2)*. Under the NBB Policy, no other fees or expenses shall be charged or be paid for by qualified NBB patients above and beyond the packaged rate. This Circular further provided that starting April 1, 2017, the NBB policy shall apply to both hospital-based and non-hospital based Freestanding Dialysis Centers (FDC) dialysis package.

2. *Circular No. 7, series of 2016* or the *PhilHealth Dialysis Database*, a system that collects data on members and dependents diagnosed of CKD. This does not substitute the existing Philippine Renal Disease Registry (PRDR).

3. *Circular No. 22, series of 2015* superseded by *Circular No. 24, series of 2015* or the New PhilHealth Dialysis Package (Revision 1), which provided that the new rate of Php 2,600 shall apply to all dialysis sessions starting September 15, 2015 regardless of whether the regular 45 days have been exhausted or not.

4. *Circular No. 31, series of 2014* or the *Health Care Provider Performance Assessment System (HCP PAS)* superseded by *Circular No. 26, series of 2016*, *Health Care Provider Performance Assessment System (HCP PAS) Revision 1 and Circular No. 19 series of 2018 (HCP PAS) Revision 2,* which provided for PhilHealth guidelines on monitoring of Health Care Providers.

5. *Circular No. 22, series of 2015, Health Care Provider Performance Assessment System (HCP PAS) Revision 1,* prescribing for New PhilHealth Dialysis Package and increasing the maximum number of Hemodialysis sessions a member can avail from 45 to 90 sessions per calendar year, which is shared among the principal member and his/her dependents. It further provides that standard care for dialysis is covered by NBB policy. Facilities should ensure that standard care for dialysis is available to NBB patients who cannot pay excess charges for high-flux dialysis.

6. *Circular No. 54, series of 2012 Provider Engagement through Accreditation and Contracting for Health Services (PEACHeS).*

7. *Circular No. 24, series of 2012*, "*Entitlement to NHIP benefits of all Pantawid Pamilyang Pilipino Program Beneficiaries of the DSWD*" provides that the hospital shall accept 4Ps identification cards as proof of membership.

8. *Circular No. 22, series of 2012* provides that the Accreditation Department shall ensure that hospitals shall adhere to the prescribed specifications for NBB beds. Nonconformity may be

considered as breach of Performance Commitment subject to sanctions in *Circular No. 31, series of 2014*.

9. *Circular No. 11, series of 2011*, which provides for New PhilHealth Case Rates for Selected Medical Cases and Surgical Procedures and the NBB Policy,

10. *Circular No. 6, series of 2006*, *Clarifications on PhilHealth Benefits for Dialysis*, which provides that all currently accredited secondary and tertiary hospitals are not required to have a separate accreditation for providing dialysis services. All accredited facilities (hospital-based dialysis clinics and FCDs) are required to participate in the PRDR. All new patients on chronic dialysis therapy should be registered by all accredited dialysis clinics to the PRDR. Non-compliance to reporting with PRDR shall be appropriately dealt with during renewal of accreditation.

11. *Circular No. 9, series of 2023, Institutionalization of 156 Hemodialysis Sessions*, which provides that patients diagnosed with Chronic Disease Stage 5 on hemodialysis treatment shall be allowed to avail 156 HD treatment sessions per year based on the prescription of their nephrologists.

The following PhilHealth Board Resolutions were deemed to be relevant in the operation of Hemodialysis centers:

1. *PhilHealth Board Resolution No. 1924, series of 2015*, mandated that all senior citizen members including Lifetime Members and Kasambahays who are 60 years old and above shall be entitled to the NBB Policy of PhilHealth.

2. *Board Resolution No. 1441, series of 2010* where NBB policy for the most common medical and surgical conditions experienced in the country was adopted.

Other relevant laws:

1. RA No. 7432 as amended by RA No. 9257 and further amended by RA No. 9994 otherwise known as the “Expanded Senior Citizens Act of 2010”, which provides that the senior citizens shall be entitled to free medical and dental services, diagnostic and laboratory fees, subject to the guidelines to be issued by the DOH in coordination with the PhilHealth.

2. RA No. 747, An Act to Regulate the Fees to be Charged Against Patients in Government Hospitals and Charity Clinics Classifying Patients According to their Financial Condition.

3. RA No. 7718, An Act Amending Certain Sections of RA No. 6957, entitled "An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector, and for Other Purposes" allowing private participation in government projects.

APPENDIX B. DOH AO No. 2019-0028 GOVERNANCE FRAMEWORK

Each Center for Health Development (CHDs)[52] must establish a **Regional DOH PPP Committee**[53] which is composed of the Assistant Regional Director of the CHD, 2 representatives from the Health Facility Development Unit, 1 representative from any DOH Hospital and 1 representative from the LGU. A CHD shall submit to the **Central DOH PPP Committee**[54] a list of their identified PPPH projects for approval which will comprise the DOH pipeline of PPP Projects. Every CHD must also submit to the PPPH-PMO a copy of its Regional DOH PPP Committee strategic plan for the period until 2022, and for every five-year period thereafter[55] with the recommending approval of the Central DOH PPP Committee. It is the DOH Executive Committee, headed by the DOH Secretary, that shall have final approval of the PPPH Program strategic plan.[56]

The DOH Central PPP Committee, through the PPPH-PMO, will support and assist the DOH Regional PPP Committee in (i) overseeing PPP processes for projects within their region; and (ii) managing project prioritization, identification, preparation, review and approval, partner selection and implementation.

Particular to solicited PPP Projects, AO 2019-0028 prescribes the following procedure:

1) **DOH Central PPP Committee**, through the **PPPH-Program Management Office (PPPH-PMO)**, shall assist each **DOH Regional PPP Committee** in identifying projects that may be undertaken as PPP to be included in the development plan of the DOH Hospitals. The PPPH-PMO and the DOH Central and Regional PPP Committees shall use the DOH PPP Project Screening, Scoping the Prioritization Guide Book.

2) In identifying projects that may be undertaken as PPP, the PPPH-PMO and DOH Central and Regional PPP Committees shall first consider projects covered by the Philippine Health Facility Development Plan (2017-2022),[57] the Universal Health Care Act, F1+ for Health,[58] and the e-Health Investment Plan.[59]

3) The PPPH-PMO shall study, or cause the study of, the feasibility of undertaking the following as PPPs: (a) Digital health infrastructure projects (e-Health Projects); (b) Large and complex infrastructure projects; (c) Health service delivery involving complex medical systems and

[52] DOH Regional Health Office
[53] Composed of the Assistant Director of the CHD, and representatives from the Health Facility Development Unit (HFDU), a DOH hospital, and the LGU
[54] Established by AO 2019-0028
[55] Item VI.1.b. of DOH AO 2019-0028.
[56] Item. VI.1.a of DOH AO 2019-0028.
[57] Intended as a "macro plan that serves as a guide for the upgrading of all health facilities throughout the country towards the achievement of Philippine Health Agenda guarantees."
[58] Roadmap created by DOH and DOST on how to use IT for healthcare in the country.
[59] A strategy for implementing health reforms, has been put into action by the different offices, bureaus, programs, and projects including attached agencies since 2005.

equipment with high obsolescence rate; and (d) Other projects that have undergone due process of application and evaluation.

Relative to the conduct of the above-mentioned feasibility study of a PPP project, the DOH Entity shall use "the expertise of private sector individuals and groups, or corporations in the government, or international development partners with experience in undertaking infrastructure or development projects",[60] using either "its own funds or project preparation support arrangements, such as the Project Development and Monitoring Facility of the PPP Center and those offered by international development partners."[61]

The approval, implementation, and monitoring of PPPHs and the selection of Private Sector Entity Partners must comply with Sec. 3(b) of the UHC Act provisions on health service accessibility, quality, and affordability, in addition to the BOT Law, or NEDA JV Guidelines, as applicable, and other relevant laws.[62]

Each project shall be overseen by a Project Steering Committee composed of high-level representatives of the Private Sector Entity Partner while the DOH Entity's representative shall be designated by the Secretary of Health, and when possible, it shall be chaired by the DOH office that will be the end-user of the health facility.[63]

[60] Sec. 3.a.i. of the Guidelines.
[61] Sec. 3.a.ii. of the Guidelines.
[62] Sec. 4.a. of the Guidelines.
[63] Sec. 4.b of the Guidelines.

APPENDIX C. REQUIREMENTS FOR TERTIARY GENERAL HOSPITALS

A General Hospital is defined as one that provides services for all kinds of illnesses, diseases, injuries, or deformities. It shall provide medical and surgical care to the sick and injured, maternity, newborn, and child care. It shall be equipped with the service capabilities needed to support board certified/eligible medical specialists and other licensed physicians rendering services in, but not limited to the following:

a. Clinical Services
   1. Family Medicine;
   2. Pediatrics;
   3. Internal Medicine;
   4. Obstetrics and Gynecology;
   5. Surgery;

b. Emergency Services;
c. Outpatient Services;
d. Ancillary and Support Services such as, clinical laboratory, imaging facility, and pharmacy.

A Level 2 General Hospital shall have a minimum, all of Level 1 capacity, including, but not limited to the following:

1. An organized staff of qualified and competent personnel with Chief of Hospital/Medical Director and appropriate board certified Clinical Department Heads;
2. Departmentalized and equipped with the service capabilities needed to support board certified/eligible medical specialties of Medicine, Pediatrics, Obstetrics and Gynecology, Surgery, their subspecialties and ancillary services;
3. Provision for general ICU for critically ill patients;
4. Provision for Neonatal Intensive Care Unit (NICU);
5. Provision for High Risk Pregnancy Unit (HRPU);
6. Provision for respiratory therapy services;
7. A DOH licensed tertiary clinical laboratory;
8. A DOH licensed level 2 imaging facility with mobile x-ray inside the institution and with capability for contrast examinations.

On the other hand, a Level 1 hospital shall have as minimum the services stipulated for a General Hospital, including but not limited to, the following:

1. A staff of qualified medical, allied medical and administrative personnel headed by a physician duly licensed by PRC;
2. Bed space for its authorized bed capability in accordance with DOH Guidelines in the Planning and Design of Hospitals;
3. An operating room with standard equipment and provision for sterilization of equipment and supplies in accordance with:

a. DOH Reference Plan in the Planning and Design of an Operating Room/Theater (See Annex A of AO 2012-0012)
b. DOH Guidelines on Cleaning, Disinfection and Sterilization of Reusable Medical Devices in Hospital Facilities in the Philippines (See Annex B of AO 2012-0012).
4. A post-operative recovery room;
5. Maternity facilities, consisting of ward(s), room(s), a delivery room, exclusively for maternity patients and newborns;
6. Isolation facilities with proper procedures for the care and control of infectious and communicable diseases as well as for the prevention of cross infections;
7. A separate dental section/clinic;
8. Provision for blood station;
9. A DOH licensed secondary clinical laboratory with the services of a consulting pathologist;
10. A DOH licensed level 1 imaging facility with the services of a consulting radiologist;
11. A DOH licensed pharmacy.

APPENDIX D. PROPOSED BUILDING MAINTENANCE OBLIGATIONS BY PRIVATE PARTNER

No.	Item
A.	**Electricity Supply**
1	Preventive and breakdown maintenance
2	Coordination and assistance from authorities when required
3	Replacement of faulty fixtures
4	Daily checking of UPS, batteries, etc.
5	Purchase of electrical consumables and spares as required
6	Payment of bills (arrangements to be confirmed with BGHMC)
7	Items included
a)	Distribution boards
b)	Electrical fittings (indoor and outdoor)
c)	Lift systems
d)	UPS systems
e)	Water pumps
f)	Air conditioning
B.	**Diesel Generator Sets**
1	Operation of DG sets, minor maintenance, preventive maintenance
2	Major breakdown maintenance including replacement if required
3	Diesel stock monitoring and raising requirement for replenishment
4	Purchase of diesel as required
C.	**Water Supply and Plumbing works – applicable when utilities become an obligation of the Private Partner**
1	Coordinating with Baguio Water District for uninterrupted water supply
2	Arranging for water when there is shortage in supply
3	Pumping of water from underground as required to ensure continuous supply
4	Preventive maintenance of distribution pipeline, valves and other fixtures

No.	Item
5	Coordinating with Baguio Water District for any repair work on the pipelines
6	Cleaning of water storage tanks at agreed intervals
7	Maintenance of drains and manholes
8	Purchase of plumbing and sanitation fittings as required
D.	**Fire Protection system**
1	Maintenance of fire hydrant system, pipes and nozzles
2	Preventive maintenance of fire pumps and motors
3	Preventive maintenance of pipelines and valves
4	Coordination with manufacturer for major maintenance to be carried out by them
5	Maintenance, refilling and coordination with vendors as required for Portable Fire Extinguishers
6	Responding to fire alarm, checking reasons, taking corrective action and conducting periodic fire evacuation drills (as required)
E.	**Air Conditioning Systems**
1	Operation of ACs, checks and routine maintenance including minor repairs
2	Uninterrupted maintenance of desired temperature in server rooms and other critical areas
3	Cleaning of ducts and filters of AC Units and ventilator systems at frequent intervals and when need arises
4	Record keeping of status of AC units and ventilator systems, including Split ACs and window ACs as well as details regarding services carried out.
F.	**Telephone Lines and Network Cables**
1	Attending to minor faults in telephone sets and lines and making them operational.
2	Attending to EPABX system faults and reporting them to the manufacturer for servicing as required
3	Installation telephone lines inside the HD Center
4	Coordination with relevant authorities for rectification in the event of fault in the lines

No.	Item
5	Maintenance and repair of network cabling inside the building for providing LAN connectivity in coordination with external agency as and when maintenance is carried out by them
G.	**Supply of consumables**
1	Supply of all Consumables materials and other related items of good quality and as per approved specifications
2	Procurement of Consumables in advance to ensure that sufficient numbers are available in storage
H.	**Waste Disposal Management**
1	Collection and segregation of Waste in the earmarked area
2	Arrange for disposal of Waste at areas designated by the relevant authorities
I.	**Security**
1	Providing round the clock security at the entrance lobbies
2	Gunmen, lady security guards and male security guards
3	Maintaining register for visitors and workers
4	Security personnel shall patrol the premises and give instructions for movement of vehicles
J.	**Housekeeping**
1	Brooming, cleaning, sweeping, mopping and wiping of all floors and common areas
2	Daily cleaning to be carried out before office hours
3	Continuous cleaning to be carried out in the BGHMC HD Center
4	Cleaning of furniture, partitions, glass panels, railings, doors, windows, blinds, office equipment including computers, storage cupboards and other items inside the building.
5	Daily maintaining the Dialysis Service Complex and Non Treatment Areas
6	Cleaning and clearing of emergency exits at regular intervals
7	Thorough cleaning of all toilets using required detergent and putting naphthalene balls and air purifier in all urinals, wash basins and WC area to maintain wash rooms, toilets, wash basins etc. clean and disinfected
8	Ensuring that the fittings like taps, exhaust fans and flushes are working properly

No.	Item
9	Daily removal of garbage & other wastes and cleaning of dustbins and putting plastic bags in dustbins every morning and disposal of garbage every evening after office hours at designated areas
10	Pest control activities for the entire building and the premises
11	Cleaning of external windows, façade, etc. at regular intervals
12	Record keeping for all daily activities undertaken in the BGHMC HD Center