

SECOND KATHMANDU VALLEY WATER SUPPLY IMPROVEMENT PROJECT

Procurement Workshop

Kathmandu, 10 February 2021



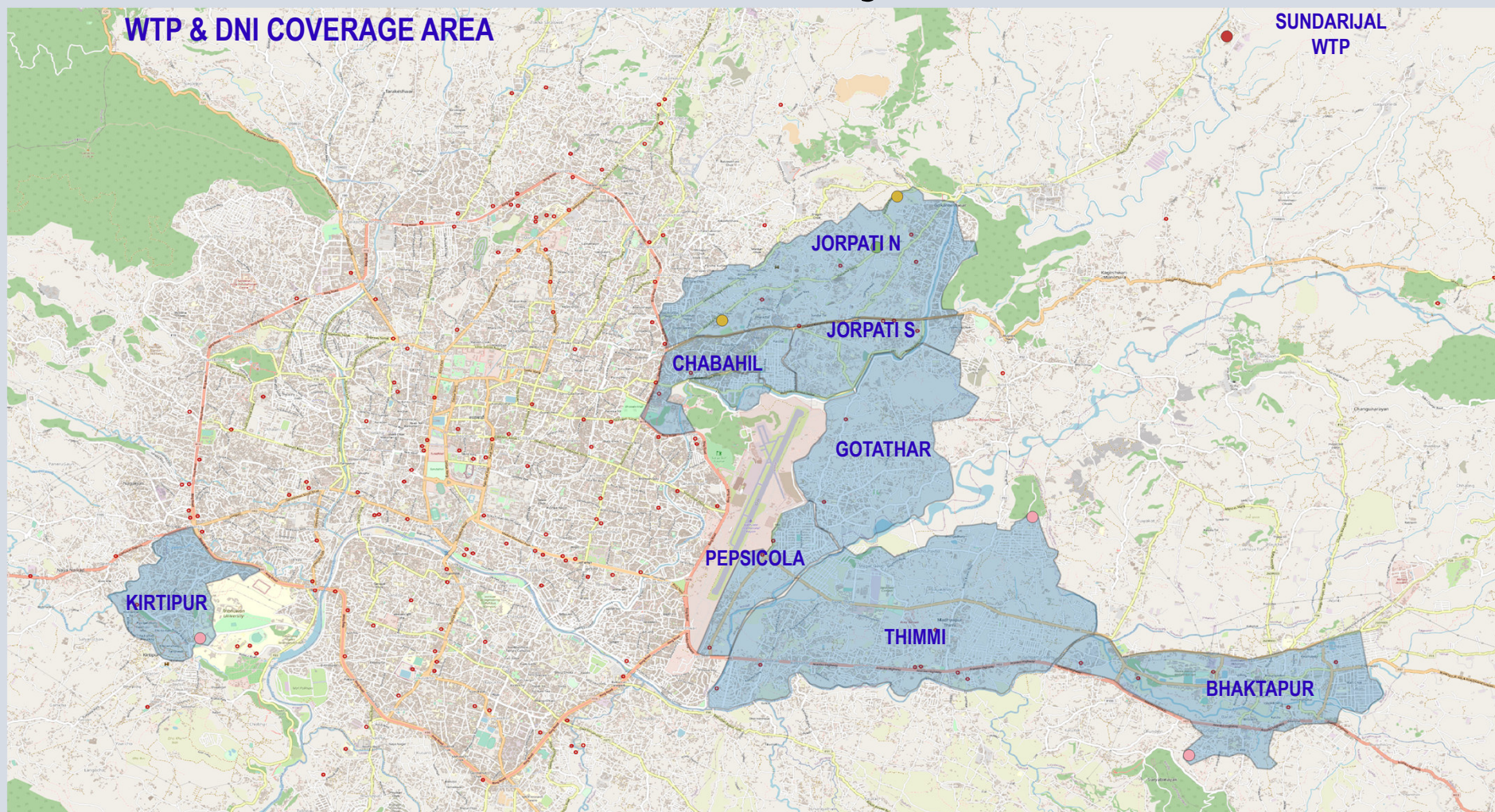
Kathmandu – Demography

- Population ~ 3 million; floating population ~1.2 million
- Average household size – 4.2 persons
- 575 sq.km Valley Area
- 18 municipalities, 3 districts (Kathmandu, Bhaktapur, and Lalitpur)
- Bell shaped valley with elevation varying from 1400m at periphery – 1280m
- About 500 hotels; 44000 beds; Average 5000 tourists per day

SKVWSIP – Institutional Arrangements

Institution	SKVWSIP Implementation Structure
MWS	Executing Agency
Project Implementation Directorate – KUKL (PID-KUKL)	Implementing Agency – Distribution network and House service connections
Melamchi Water Supply Development Board (MWSDB)	Implementing Agency – Bulk water infrastructure

SKVWSIP – Project Area



SKVWSIP – Overview & Timeline

- Total estimated project cost – \$230 million
- Project area: Greenfield development outside Ring Road in Kathmandu Valley
- Limited public water supply network; reliance on KUKL tankers, borewells, hand pumps, traditional water sources and private tankers
- Beneficiaries: About 110,000 households

Aspects	Arrangements
Commencement of procurement	First half of 2021
Implementation period	January 2022 – December 2028
Completion date	December 2028

SKVWSIP – Procurement Packages

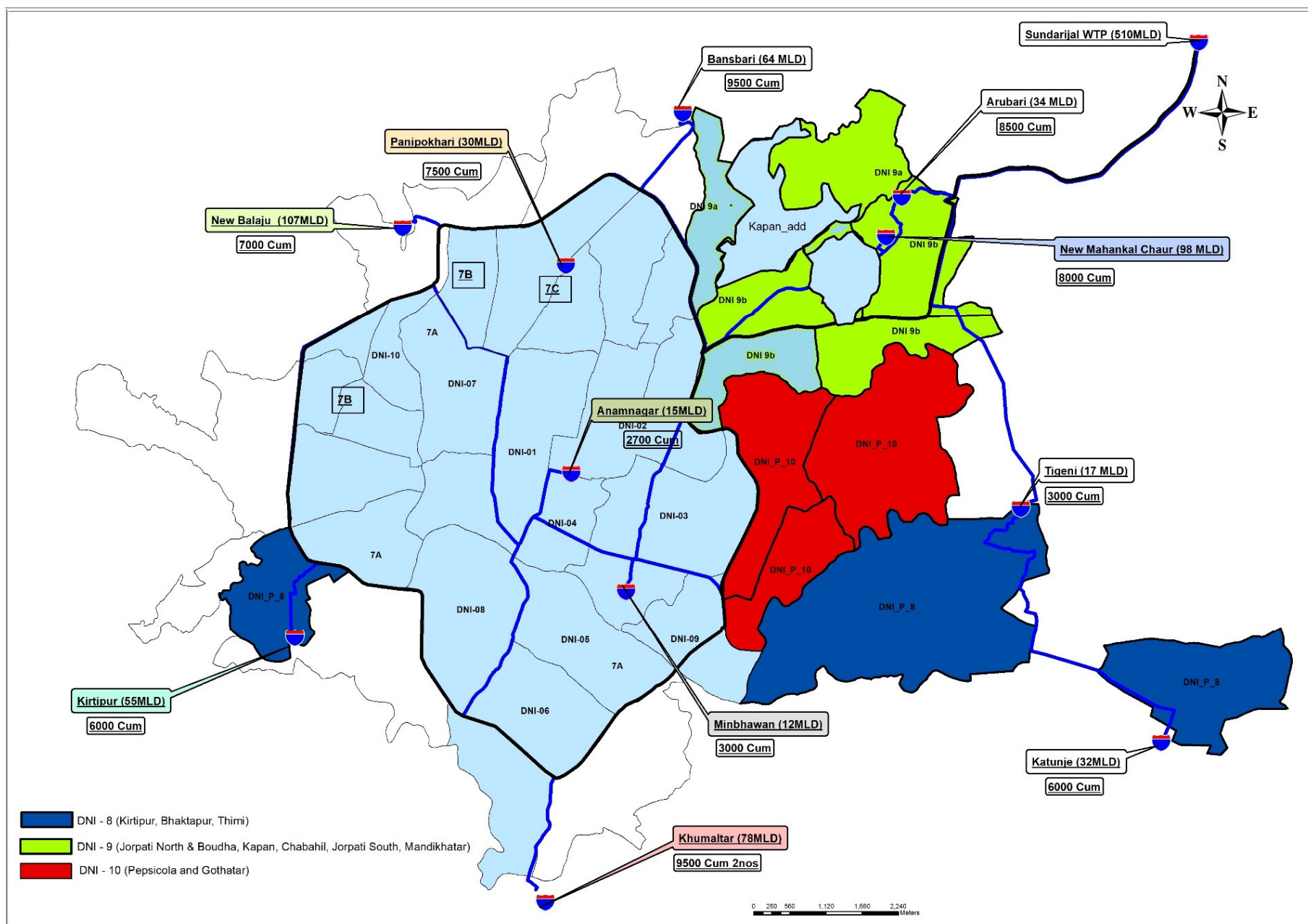
Scope	Indicative number of contracts
WTP (255 MLD)	1
Distribution network (about 700 km total)	3–4
Structural retrofitting of Headwork structure of Melamchi water diversion	1
IT-based decision support system for O&M of Melamchi Tunnel	1
IT-based early warning system for Melamchi Headworks	1
Capacity building of KUKL to strengthen operational and technical competencies	2
Project Consultants	2

**Proposed Distribution Network Packages
under
Second Kathmandu Valley Water Supply
Improvement Project**

**Procurement Workshop Presentation to Prospective
Bidders
for New DNI packages (DNI-8, 9 & 10)**

**PID-KUKL
Feb 2021**

Location of DNI Packages Outside Ring Road (DNI pkg. 8, 9b & 10)



Description/ Scope of Works

Key Features of the Packages

- ❑ About 3-4 packages under DNI – 8, 9 and 10 areas
- ❑ Each package involves:
 - Supply and laying of around 200-250 km of pipelines
 - Provision of 25000-30000 metered service connections
 - Demonstrate operational performance & functionality of networks
- ❑ Some small OHT and pumping stations
- ❑ Extended defect liability period (2-3 years)

Scope of Works – All Packages

❑ Construction:

- Preparation of surveys & working drawings (DMA/Sub DMA wise)
- Procurement of equipment and materials
- Road cutting permission application
- Traffic diversion and road closure program – Utility relocation if necessary
- Supply and Installation of pipes/fittings/valves/meters
- Segmental pressure and leakage testing
- Installation of SCADA-compatible flow control valves & other measuring devices
- Temporary restoration of excavated trenches
- Construction of Overhead Tanks (OHT) and small Pumping Stations

❑ Commissioning, Handover & Training of KUKL Staff:

- Leakage testing of sub-DMAs before meter installation
- Meter installation
- DMA-wise NRW assessment (real losses assessment) after meter installation
- Sectional handing over of each DMA after issuing of Taking-over Certificate
- As built drawings and GIS database of completed works
- Operation and maintenance manual and training KUKL staff

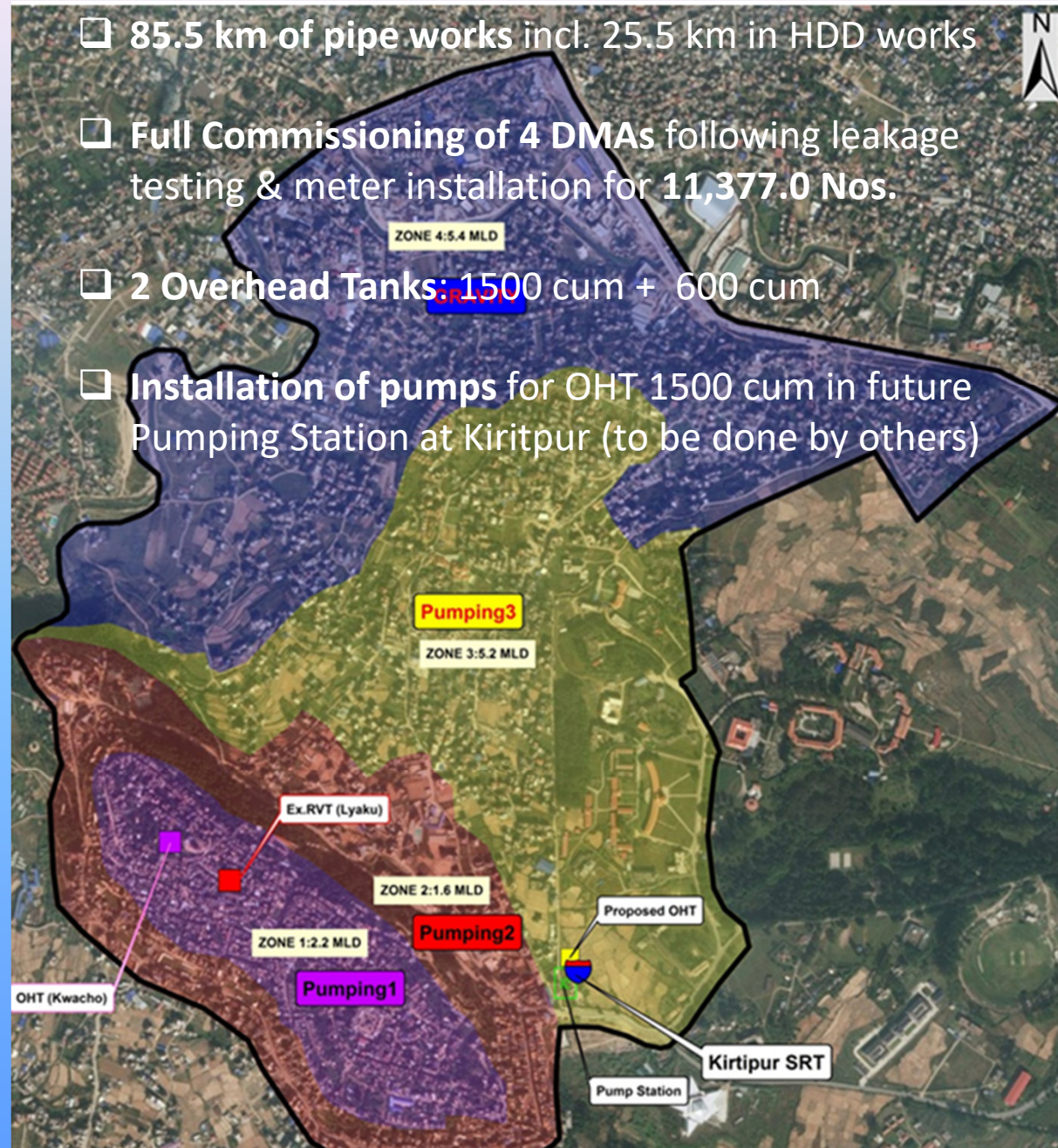
❑ Extended Defect Liability Period

- Extended DLP monitoring a fixed period (2-3 years period)

Description/ Scope of Works

DNI-8 KIRITIUR

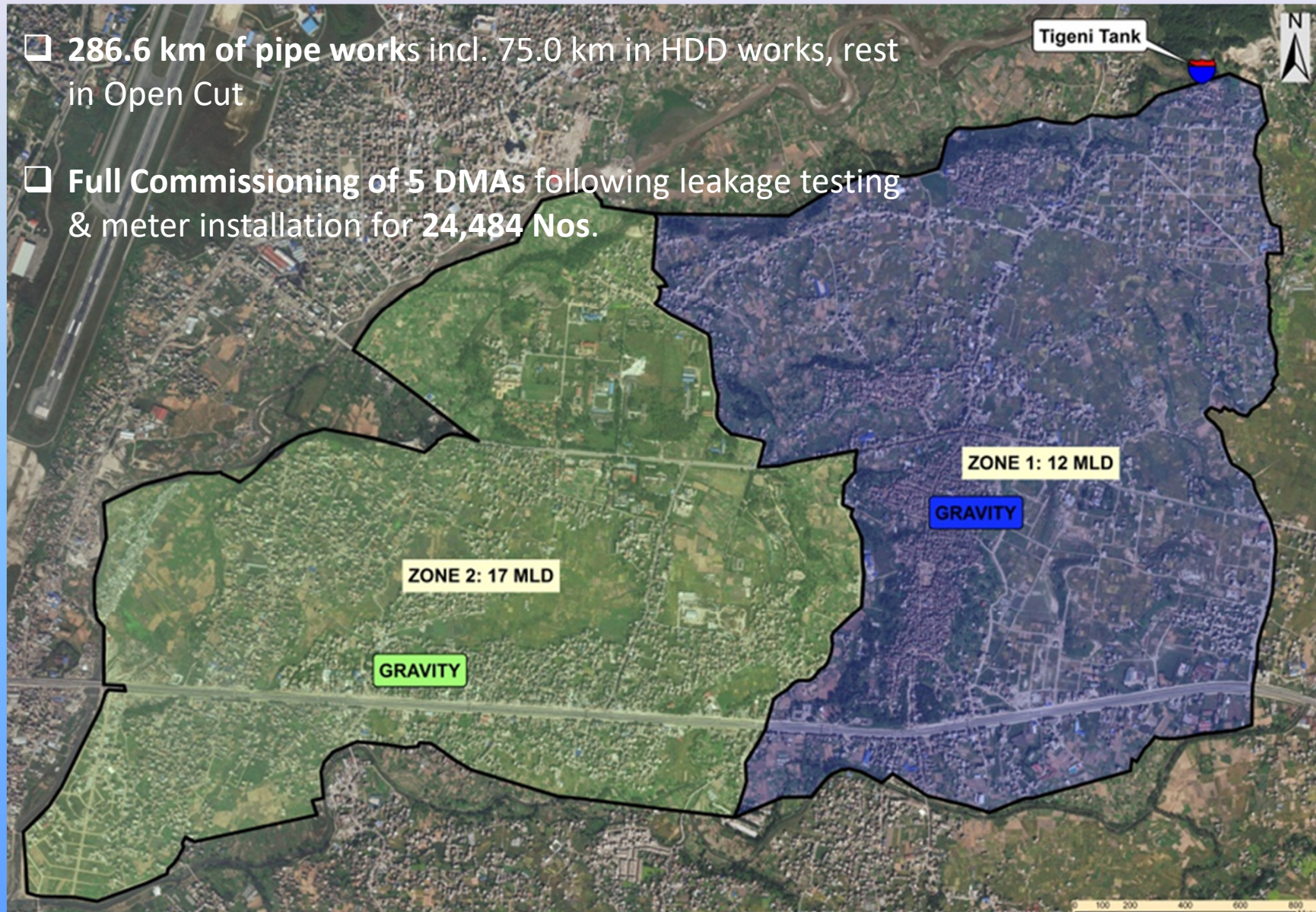
- ❑ 85.5 km of pipe works incl. 25.5 km in HDD works
- ❑ Full Commissioning of 4 DMAs following leakage testing & meter installation for 11,377.0 Nos.
- ❑ 2 Overhead Tanks: 1500 cum + 600 cum
- ❑ Installation of pumps for OHT 1500 cum in future Pumping Station at Kiritpur (to be done by others)



Description/ Scope of Works

DNI-8 THIMI

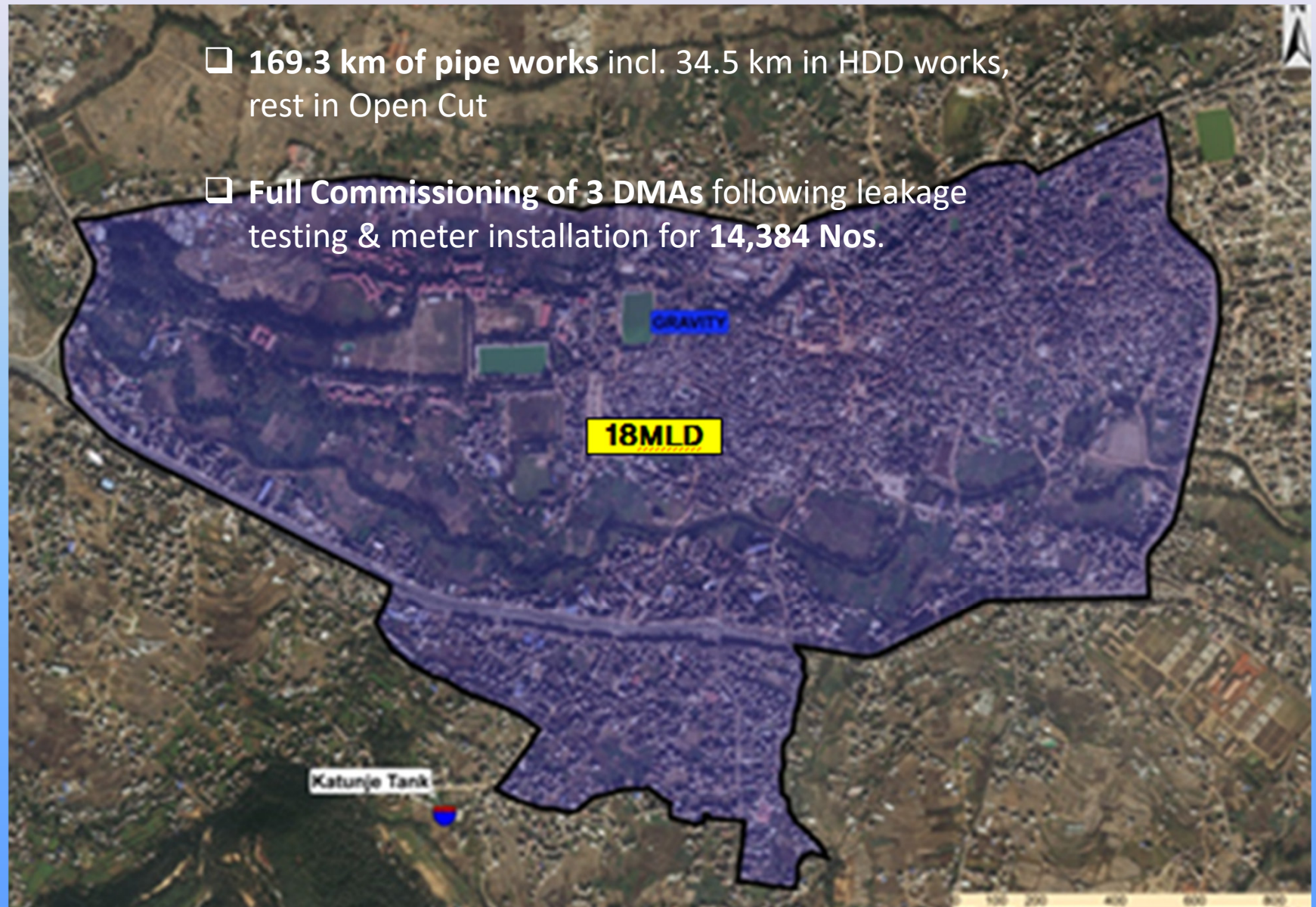
- ❑ 286.6 km of pipe works incl. 75.0 km in HDD works, rest in Open Cut
- ❑ Full Commissioning of 5 DMAs following leakage testing & meter installation for 24,484 Nos.



Description/ Scope of Works

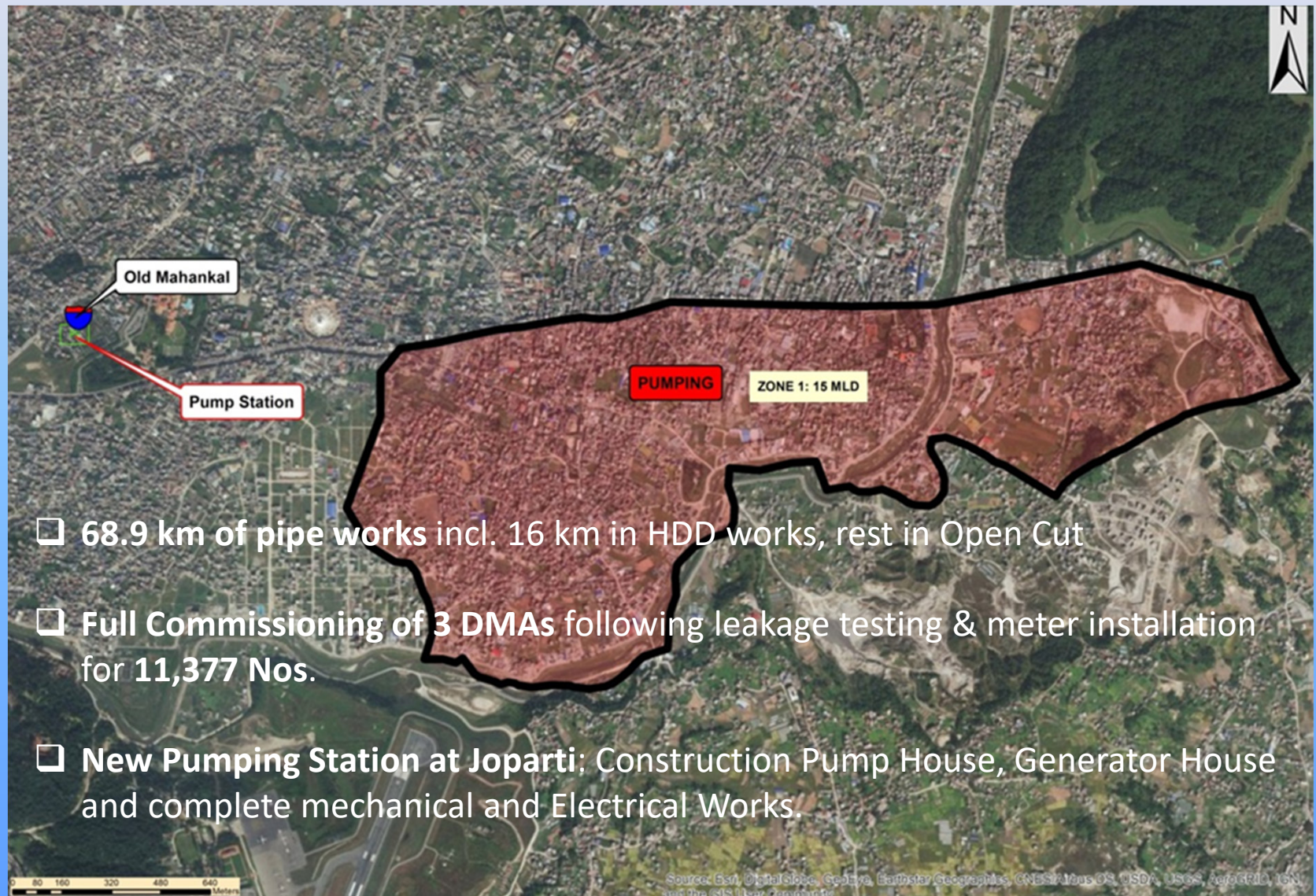
DNI-8 BHAKTAPUR

- ❑ 169.3 km of pipe works incl. 34.5 km in HDD works, rest in Open Cut
- ❑ Full Commissioning of 3 DMAs following leakage testing & meter installation for 14,384 Nos.



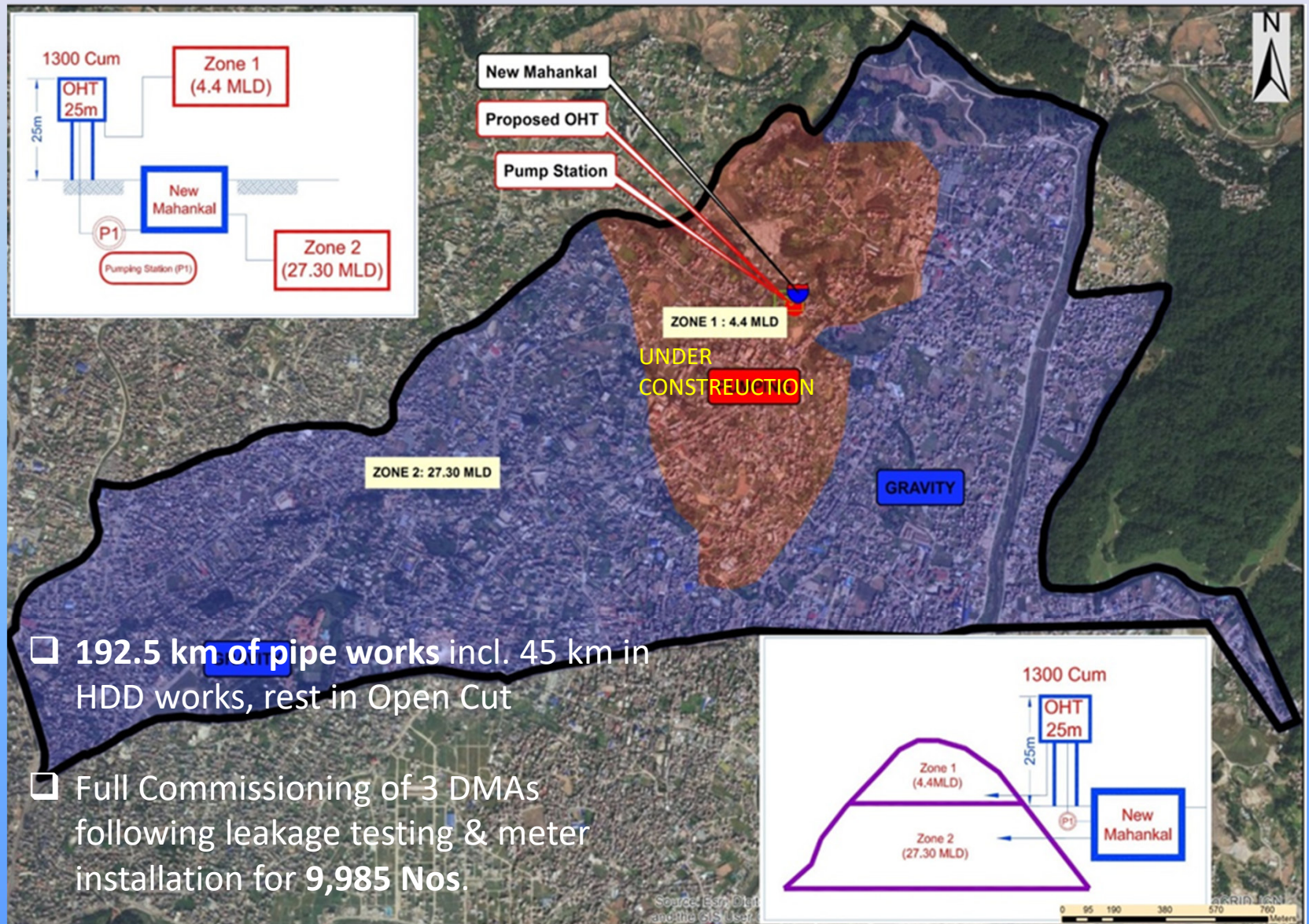
Description/ Scope of Works

DNI-9b JORPATI SOUTH



Description/ Scope of Works

DNI-9b JORPATI NORTH

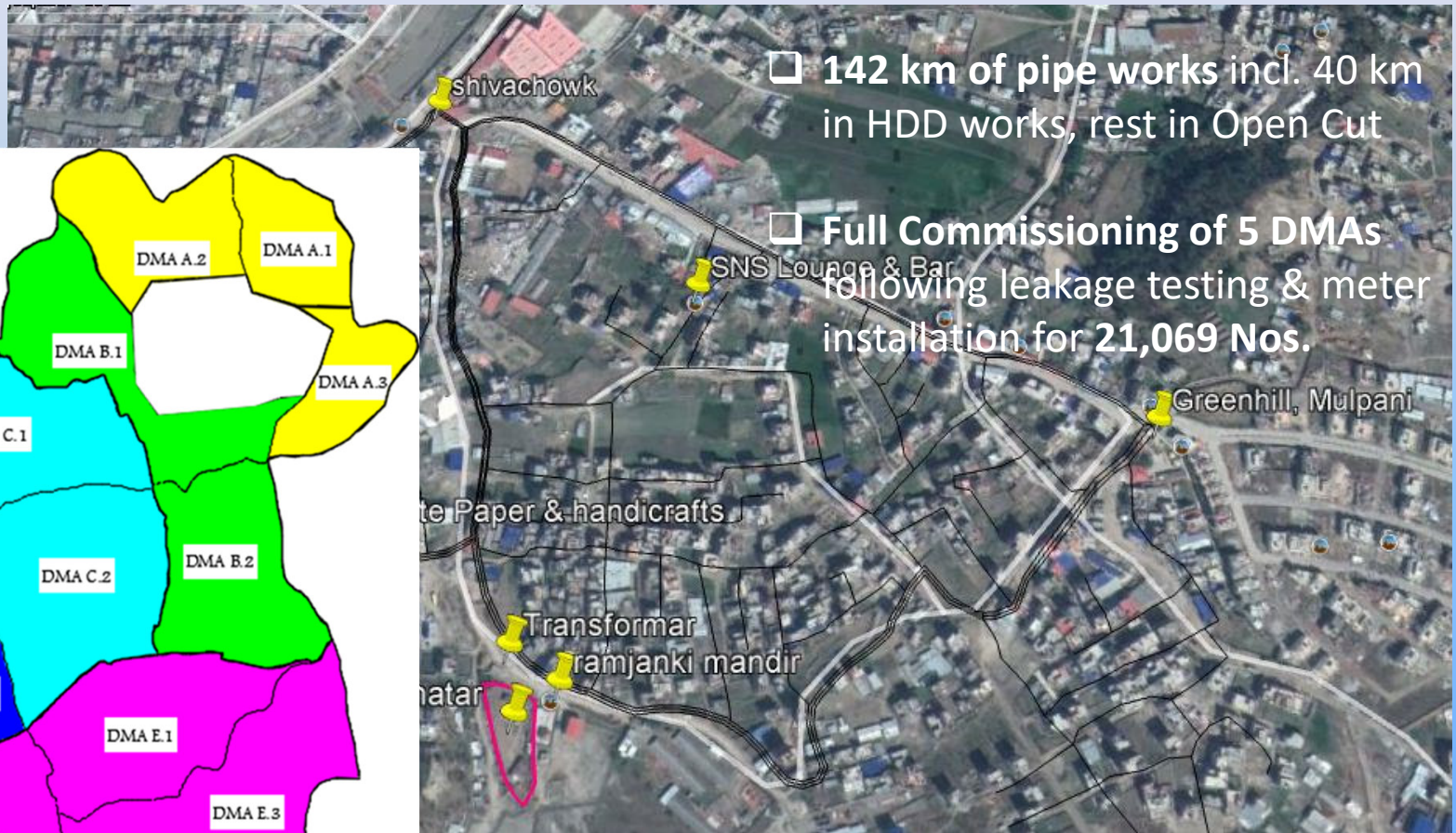
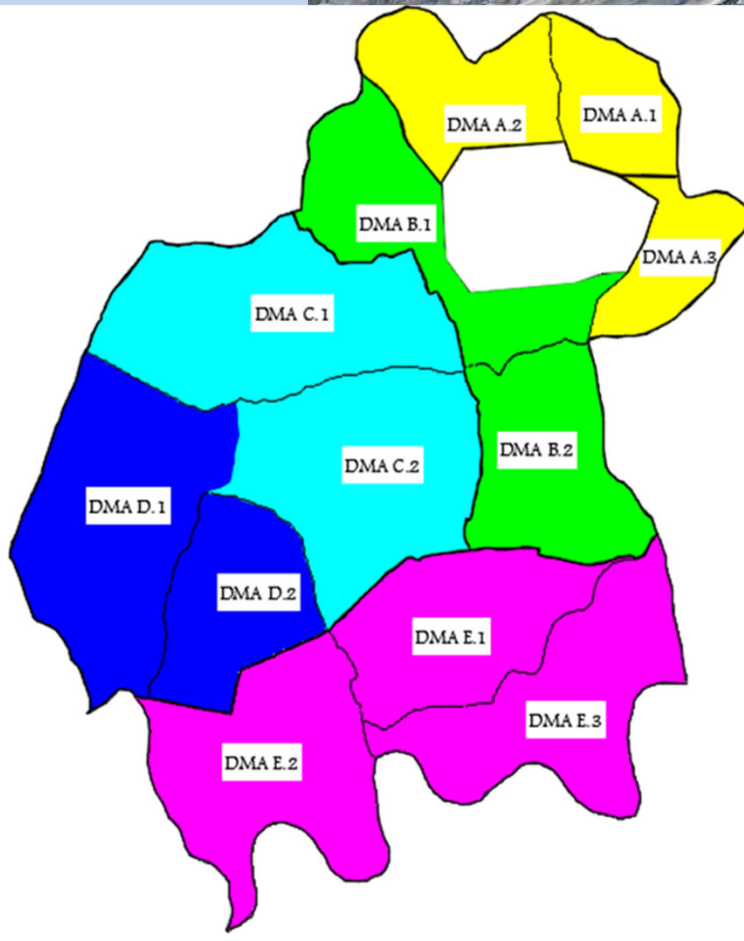


Description/ Scope of Works

DNI-10 GOTHATAR

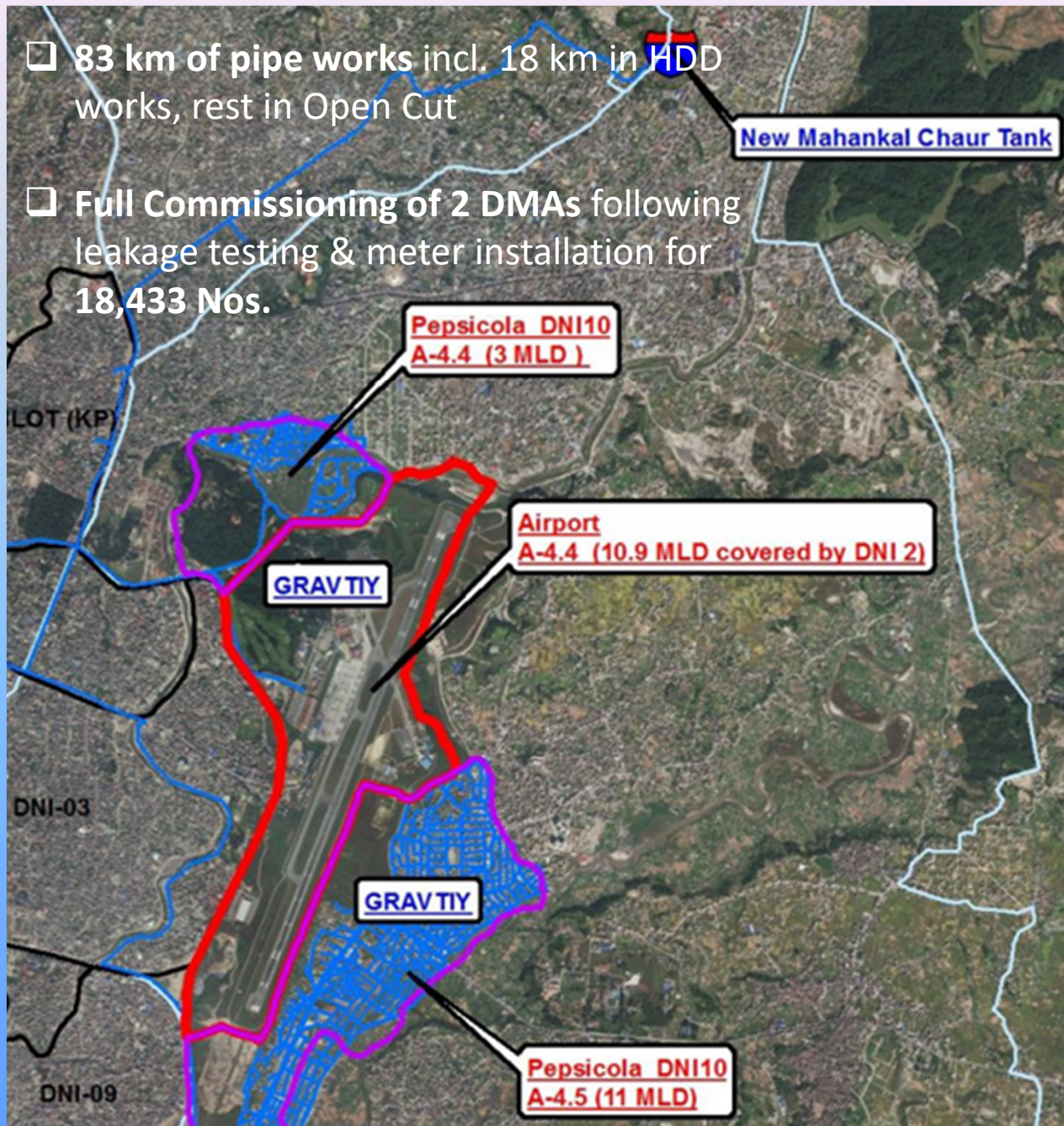
☐ 142 km of pipe works incl. 40 km in HDD works, rest in Open Cut

☐ Full Commissioning of 5 DMAs following leakage testing & meter installation for 21,069 Nos.



Description/ Scope of Works

- ❑ 83 km of pipe works incl. 18 km in HDD works, rest in Open Cut
- ❑ Full Commissioning of 2 DMAs following leakage testing & meter installation for 18,433 Nos.



DNI-10 PEPSICOLA

Safeguard and related Employer Requirements

- Requirements for **HDD Works** incl Specific Surveys such as identification of utilities
- **Environmental Management Plan** → to be developed by Contractor from IEE and EMP contained in the Tender Documents:
 - Soil and Pipe Trench Management
 - Slope Management
 - Pollution (air, noise and vibrations)
 - Damaged To Utilities and Reinstatement
- **OHS Management Plan** → incl. Special Measures for COVID-19 containment (See PID guidelines, SOP procedures)
- **Contractor's OHS Management Responsibility**
- **Safety, Environment and Social Safeguard (SESS) Checklist**
- **OHS Audit; OHS Plan; New Labor Camp Standards**
- **Social / Resettlement / Awareness Rising, Grievance Redress, Gender & Social Issues and Information Dissemination**



**Proposed Water Treatment Plant Package
under
Second Kathmandu Valley
Water Supply Improvement Project**

Procurement Workshop

**by
Melamchi Water Supply Development Board**

Feb 2021

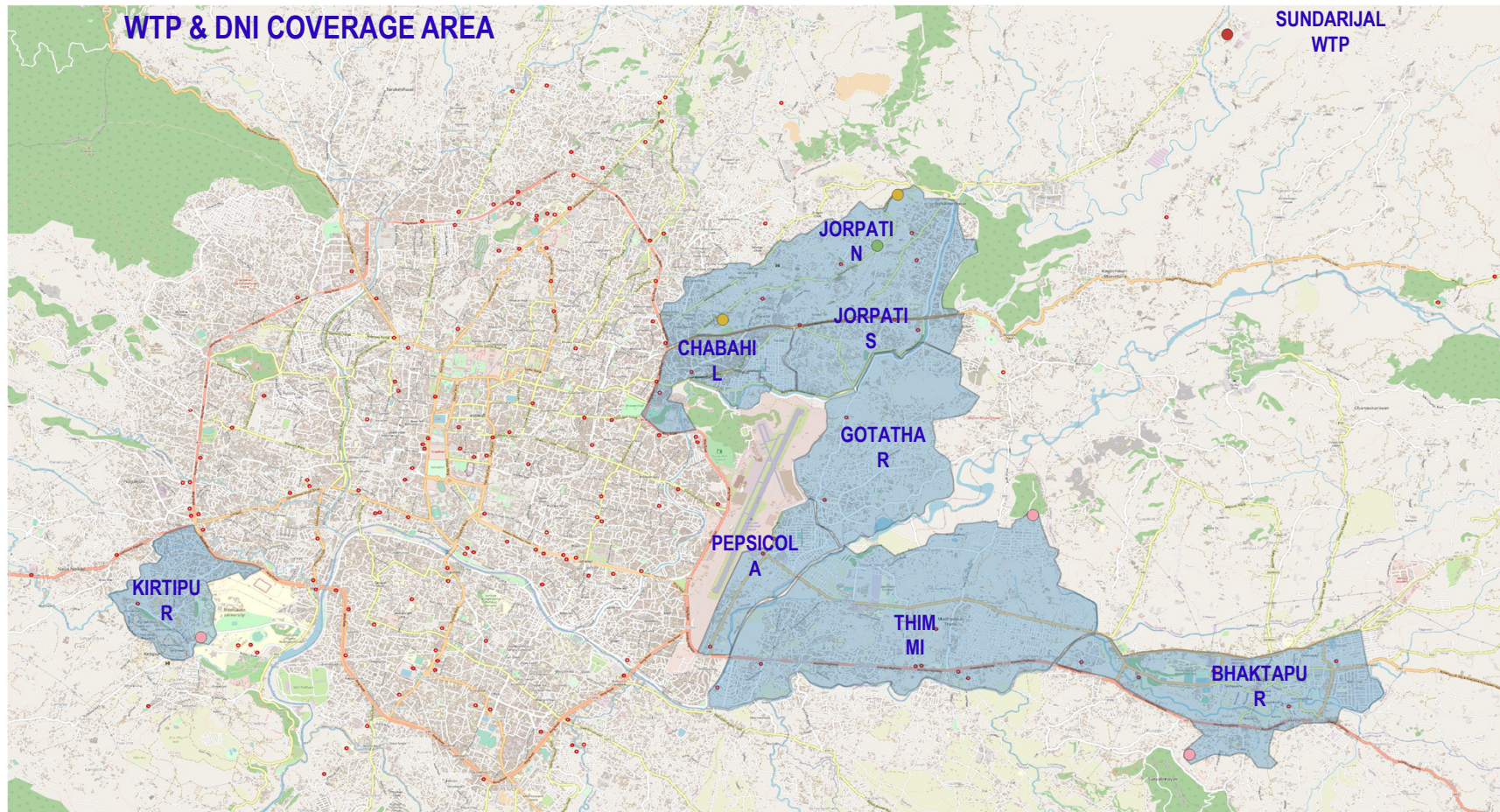
Phasing of Bulk Water Supply Augmentation

Source	Conveyance by	Quantity	Year	Status	Length
		MLD			km
Melamchhi	Melamchhi diversion tunnel	170	MWSP	Near completion	26
Yangri	Yangri diversion tunnel	170	Phase II of Kathmandu Valley Bulk Water Project		9
Lerke	Lerke diversion tunnel	170	Phase II of Kathmandu Valley Bulk Water Project		2
Total		510			

SUNDARIJAL TREATMENT WORKS

Capacity (MLD)	FUNDING	Status
85	PHASE 1 Part I (JICA supported)	Ready to commission
85	PHASE 1 PART I (ADB supported)	Advance stage of construction
255	PHASE 2 PART I (SKVWSP)	Procurement preparatory works ongoing
$(85+85)*50\%=85$	PHASE 2 PART II	Will be augmented later
510	TOTAL	

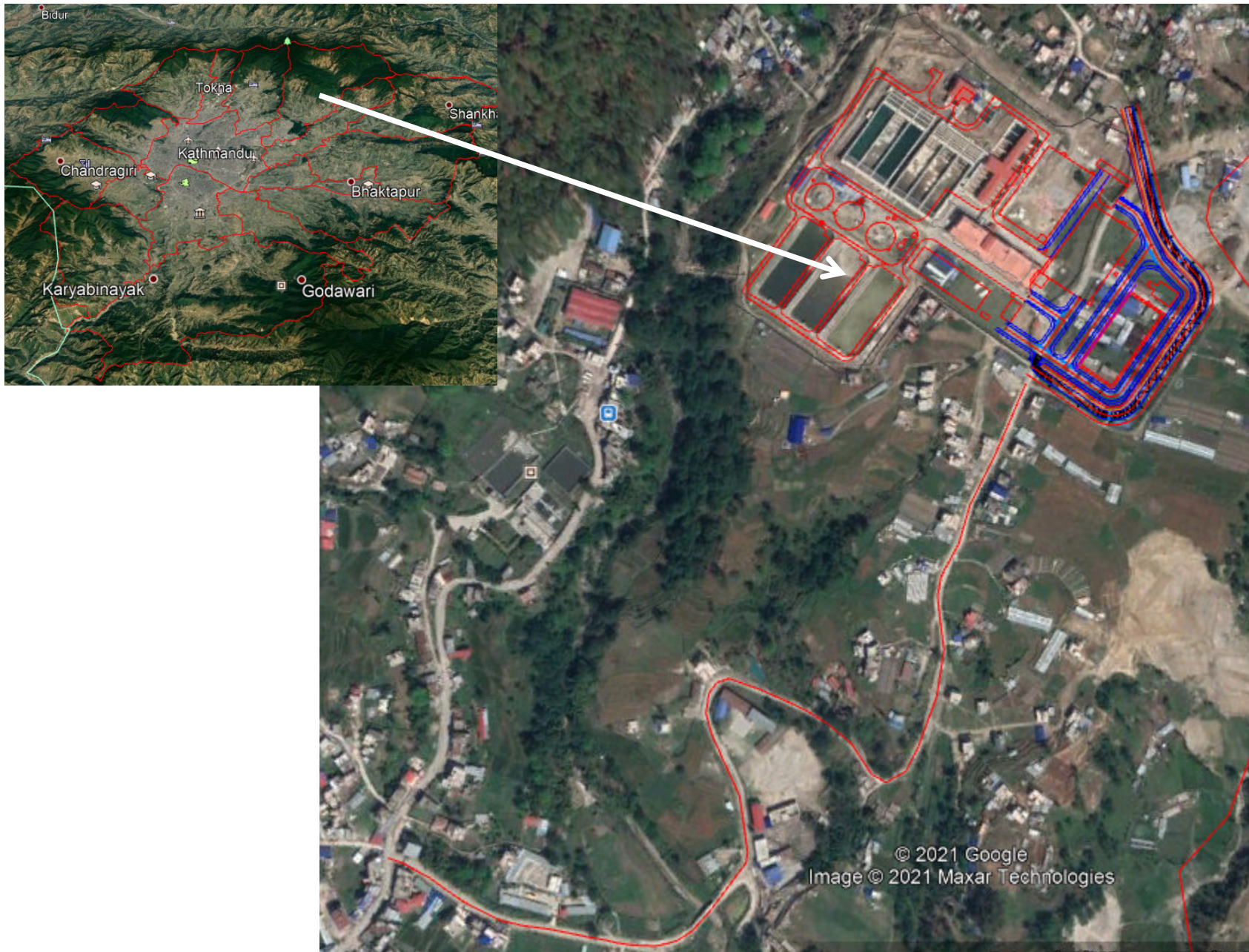
SKVWSIP – Proposed Project Area



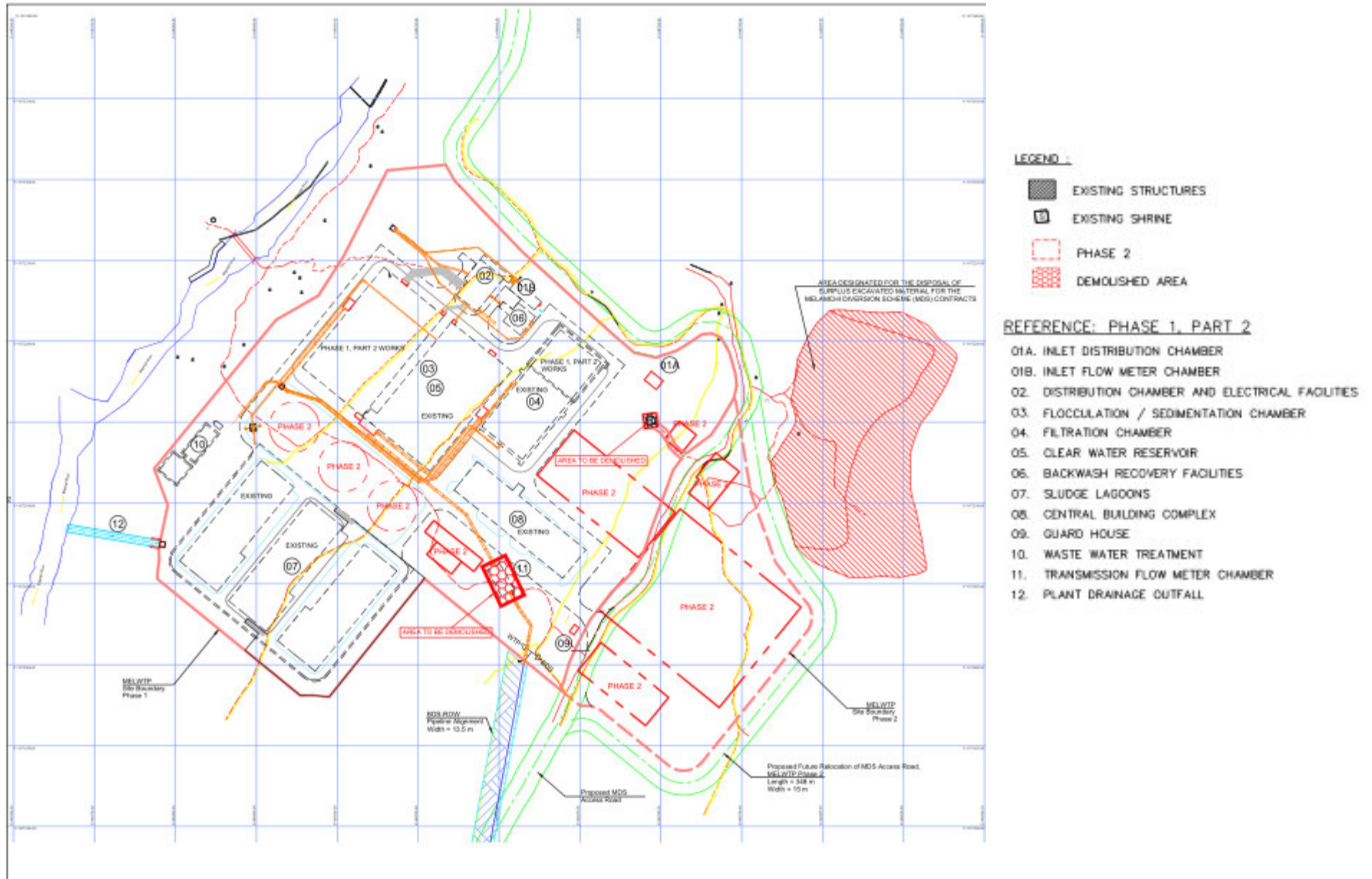
Contract Package – WTP

Employer	Melamchi Water Supply Development Board
WTP capacity	255 MLD
Land	Available
Scope	Construction and 8–10 years O&M
Treatment Technology	Simple and easy O&M, mostly remote control & monitoring, energy-efficient, proven technology, suitable for Nepal's climatic condition.
Contract modality	KPI based DBO contract
Indicative Performance Guarantees	(a) plant capacity, (b) yield, (c) water quality, (d) chemical consumption, (e) energy efficiency, (f) equipment guarantee

LOCATION OF WTP : EXISTING and PROPOSED



GENERAL LAYOUT OF EXISTING AND PROPOSED PLANT UNITS



THANK YOU

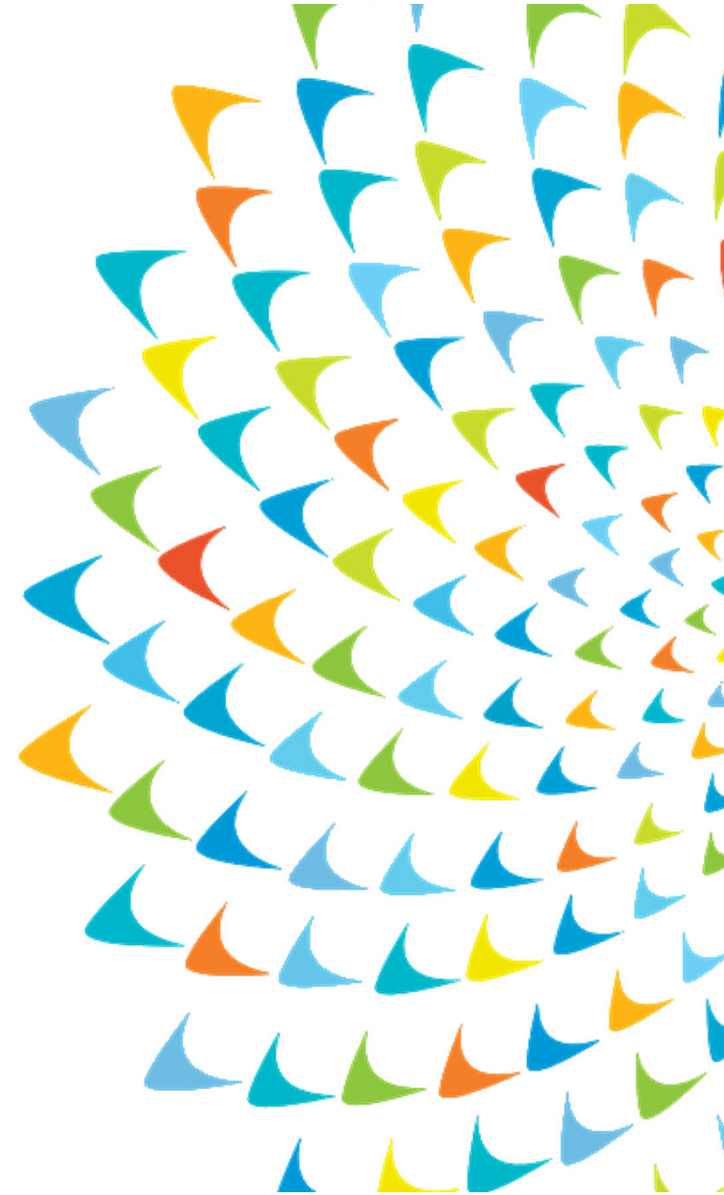


Briefing on ADB procurement procedures

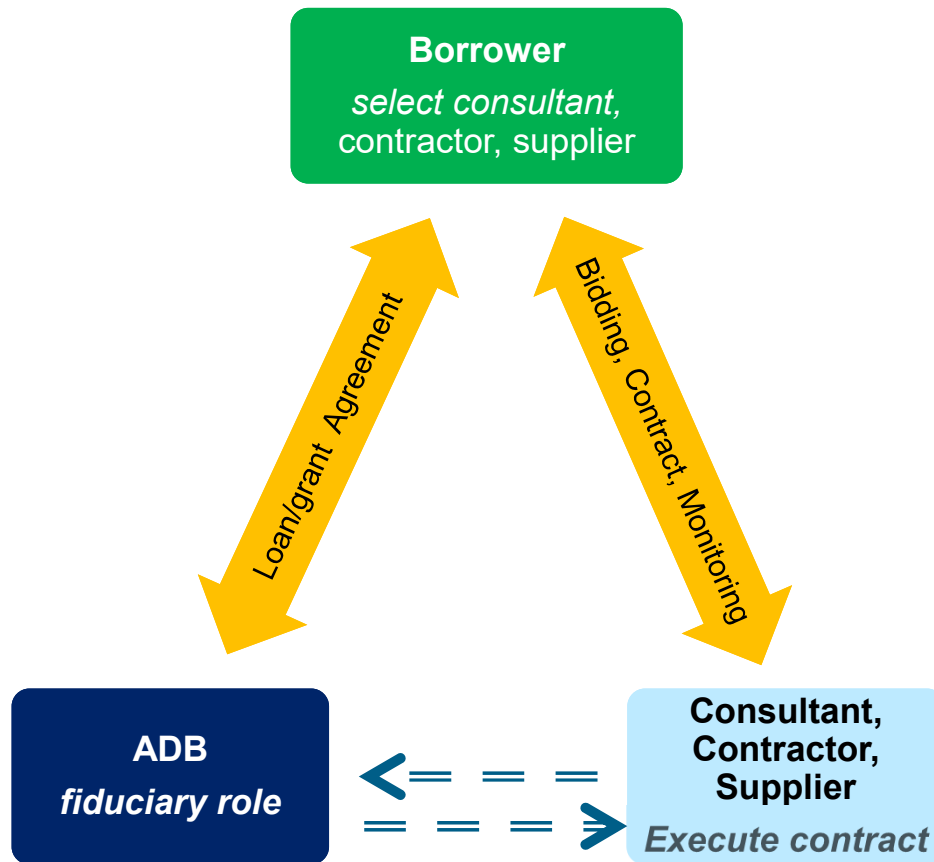
Second Kathmandu Water Supply Improvement Project

Kathmandu

10 February 2021



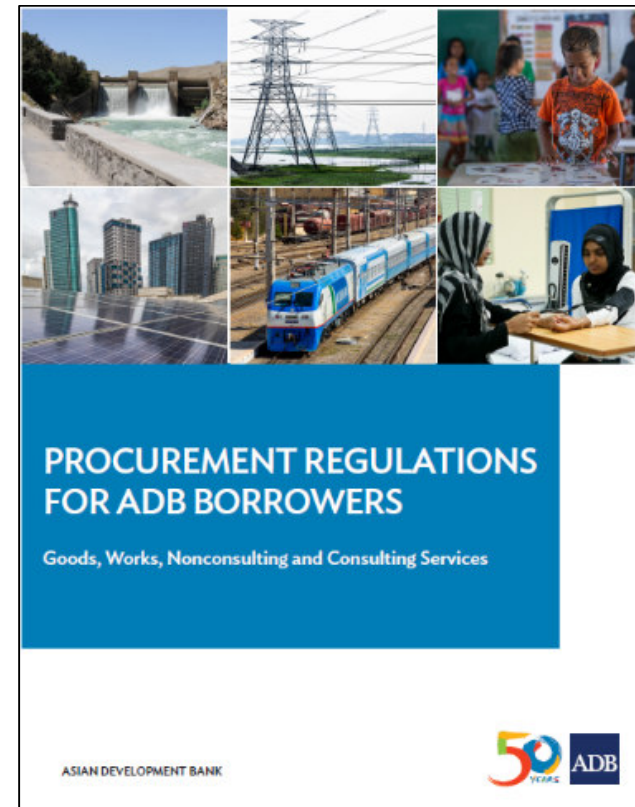
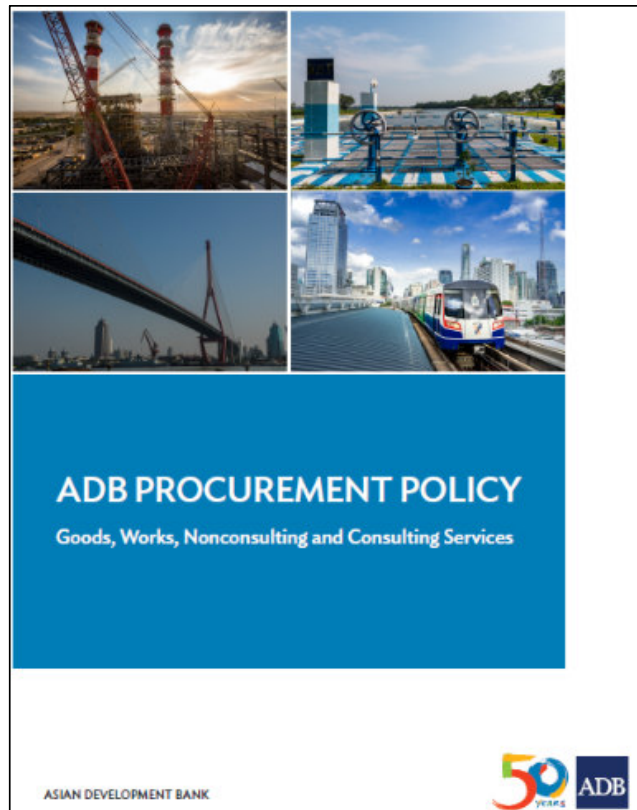
Roles and Responsibilities in ADB Procurement



Loan/Grant

- Borrower carries out bidding of goods/works and selection of consultants
- Borrower signs contract and monitors contract execution
- ADB reviews the procurement process to ensure compliance with the Loan/Grant Agreement.
- ADB may receive complaints and audit/sanction contractors.

ADB Procurement Policy and Regulations





Strategic Procurement Planning for Quality / Value for Money



Strategic
Procurement
Planning



	Quality	Structured arrangements delivering appropriate outputs in an effective manner to achieve project outcomes and objectives.
	Value for Money	Obtain optimal benefits through effective, efficient, and economic use of resources.

Delivering **Fit for Purpose** Quality and Value for Money through consideration of :
Project Outcomes - Internal Environment - External Environment – Market Dynamics – Risk



The Bidding Process

Open Competitive Bidding

(International Advertisement / National Advertisement)

Direct Contracting

Limited Competitive Bidding

Request for Quotation

**Selected bidding process will be decided through
Strategic Procurement Plan**

Bidding Procedures Options

<div>Bidding Procedures</div> <div>Determine the bidding procedures.</div>	1. Single-Stage-One-Envelope	Often used for goods, works, and nonconsulting services contracts
	Bidders submit their bids in one envelope containing both the technical and financial proposals	
	2. Single-Stage-Two-Envelope	Used generally for consulting services, but also applies to procurement of goods, works, and nonconsulting services contracts, if suitable
	Bidders submit two sealed envelopes simultaneously—one containing the technical proposal and the other the financial proposal, enclosed together in an outer single envelope.	

Bidding Procedures Options

Bidding Procedures

Determine the bidding procedures.

3. Two-Stage

Used for large and complex works (including plant and turnkey contracts) and nonconsulting services of special nature (e.g., information and communication technology systems)

Bidders submit first-stage technical proposals only and, later, second-stage bids in one envelope containing a financial proposal and revised technical proposal.

4. Two-Stage-Two-Envelope

Used for complex goods, works, and nonconsulting services

In the first stage, bidders submit two sealed envelopes simultaneously—one containing the technical proposal and the other the financial proposal, enclosed together in an outer single envelope. In the second stage, bidders submit one envelope containing both a supplementary (revised) financial proposal and revised technical proposal.

Contract Type / Size



Contract Type

Determined
by the type
and size of
the contract

Types of Contract

- Performance-Based Contracts
- Design – Build (DB)
- Design – Build – Operate (DBO)
- Turnkey
- Lump-Sum
- Time-Based

Sizing of Contract

Packaging is to be based on risk, environmental and market considerations.



Standard Bidding Documents



Bidding Documents

Prepare the bidding documents

ADB SBDs are available through the ADB website, covering:

- Prequalification
- Goods
- Works – Large Contracts (FIDIC Pink 2010)
- Works—Small Contracts
- Plant—Design, Supply, and Installation (ENAA)
- IT Products and Services
- DBO for Water and Wastewater Greenfield Infrastructure (FIDIC Gold 2008)
- Request for Quotation



Bid Documents Composition

Section 1 Instruction to Bidders

Section 2 Bid Data Sheet

- ITB11.1 (h) Additional documents required.
- ITB38.2 The qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, Subcontractors [insert "shall" or "shall not"] be permitted.

Section 3 Evaluation and Qualification Criteria

Section 4 Bidding Forms

Section 5 Eligible Countries

Section 6 Employers Requirements

Section 7 General Conditions of Contract

Section 8 Particular Conditions of Contract

Section 9 Contract Forms



Evaluation Criteria

Evaluate and
Award

Evaluate
the bids
received

1. Adequacy of Technical Proposal
2. Completion Time
3. Technical Alternatives
4. Specialist Subcontractors
5. Quantifiable Nonconformities and Omissions
6. Domestic Preference
7. Other Criteria
8. Multiple Contracts (AACT, Financial Resources)



Qualification Criteria

Evaluate and
Award

Evaluate
the bids
received

✓ the 'pass / fail' criteria

1. Eligibility

- Nationality
- Conflict of Interest
- ADB Eligibility
- Government Owned Enterprise
- UN Eligibility

2. Historical Non Performance

- History of Non Performing Contracts
- Suspension Based on Execution of Bid-Securing Declaration
- Pending Litigation and Arbitration

3. Financial Situation

- Historical Financial Performance (net worth - positive)
- Average Annual Construction Turnover
- Financial Resources

4. Construction Experiences

- Contracts of Similar Size and Nature
- Construction Experience in Key Activities

✓ Single Entity / JV partner requirement

✓ Weighted scoring criteria may also be used when suitable.

Advertisement



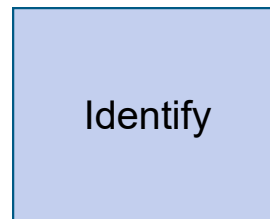
Publish

Publish the
procurement
notice

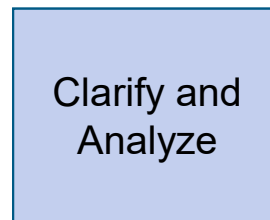
- Procurement opportunities are advertised on the ADB website:
 - ✓ “Business Opportunities” and “Projects and Tenders” sections.
 - ✓ Consulting contracts are specifically advertised in the Consultant Management System (CMS).
- National newspapers, gazettes, borrower country websites, or through other electronic means.



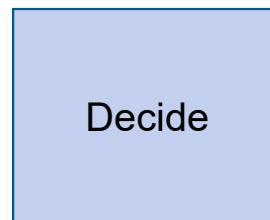
Abnormally Low Bids (ALB) Process



If a bid seems abnormal (due to price, risk, schedule) – identify it and investigate



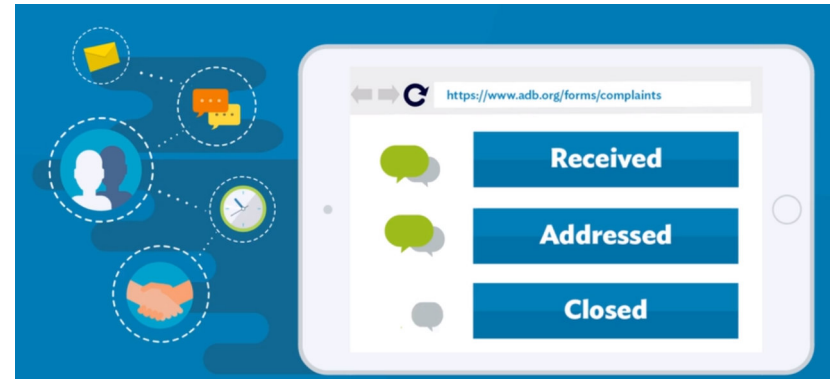
Clarify information with the bidder and analyse the responses – working with ADB to determine if the bid is an ALB, or if there is justification for the bid as submitted.



Justify the decision made, communicate with ADB and document.

Bidding Related Complaints

- Complaints and representations received shall also be included in the report, including the actions taken by the Executing Agency in resolving them.
- The handling of bidding-related complaints will involve the following key steps:
 - ✓ submitting a complaint;
 - ✓ debriefing by borrower (and/or ADB as required), as provided for in the bidding document; and
 - ✓ review of the complaint by borrower (and ADB as required).



TIPS

- Read Bid Documents thoroughly
- Attend pre bid Meeting
- Seek clarification in writing
- Addendum
- Financial Statements, Line of Credit, Bid Security, JV agreement
- Contractual Experience
- Ensure that all the necessary documents are in the envelope.
- No condition on bid.
- Use the form specified in the bidding documents.
- Seal envelope as instructed.
- Bid Submission Date / Time (Electronic procurement --- Up to \$10 million)





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*Thank
you*



ADB Procurement (July 2020)