Approach,Work Plan and Methodology Ecological Rejuvenation and Enhancement of Ponds in Varanasi and 05 years of Operation and Maintenance (O&M)

Tender Issued By
Varanasi Development Authority

SUSTAINABLE SOLUTIONS FOR POND REJUVENATION and WASTEWATER TREATMENT

TECHNOLOGY COMPANY :-

Organic 121
FORESIGHT + RESEARCH + INNOVATION

COLLABORATIONS WITH :

Massachusetts Institute of Technology

Enhancing Water Quality through Advanced Eco-Friendly Techniques

NSF

USDA CERTIFIED BIOBASED PRODUCT
PRODUCT 79%

GREEN SEAL CERTIFIED

USDA ORGANIC

ORGANIC FARMING

100% ECO FRIENDLY

Company Background

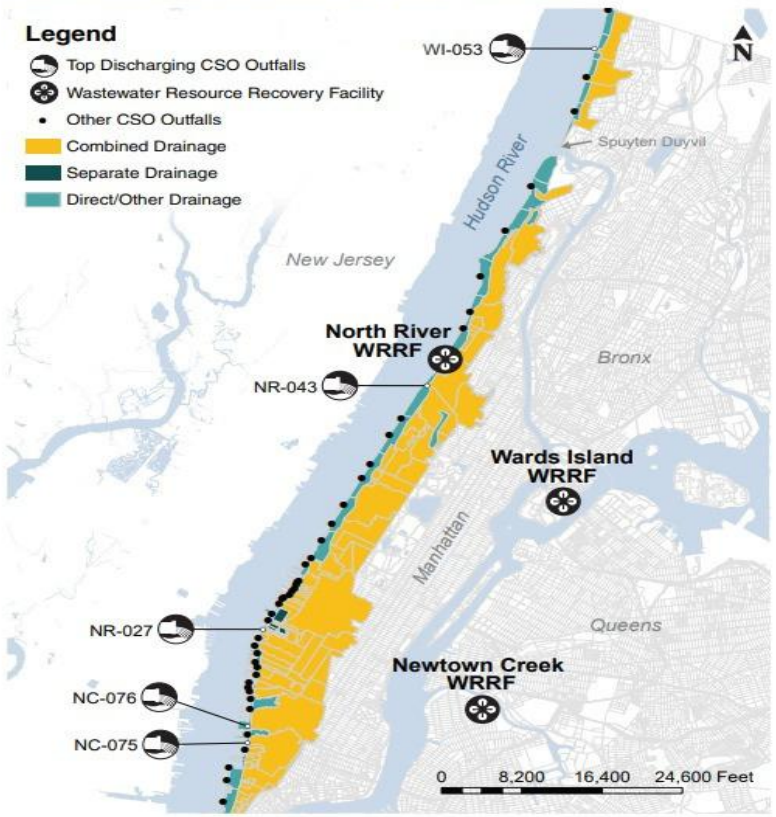
Key Milestones – Organic121's Founders Growth Journey

- **2002** – Founded in **New York, USA**, initiated with the **Hudson River Bio-Remediation Project**
- **2015** – Incorporated in **India** with headquarters in **Gurugram, Haryana**
- **2017** – Commissioned **first Bioformulations manufacturing unit** in **Basai, Haryana**
- **2019** – Established **engineering, assembly, and fabrication plant** for:
  - Wastewater Treatment Systems
  - Biogas and Other Gases Plants
  - Located in **Bijopur, Haryana**

- **CERTIFICATIONS FROM DRDO | IIT –R | IIRT | NSF | USDA Organic | ISO 9001 | GMP Compliant | Green Pro Certified**

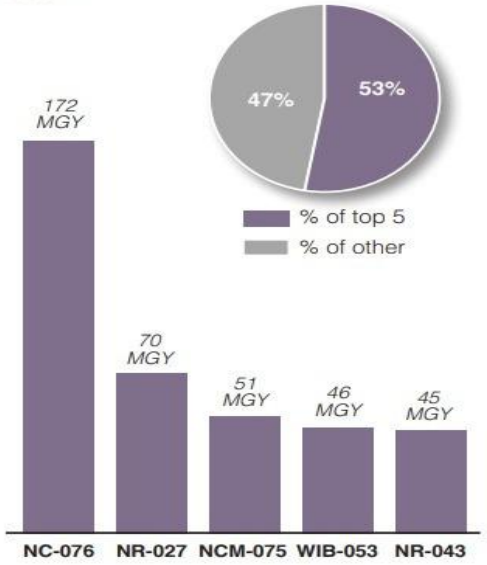
Hudson Bay River Restoration Project

Hudson River Sewershed CSO Outfalls



Top Discharging CSO Outfalls

A total of 52 CSO outfalls are located along the shoreline of the Hudson River. The total CSO discharge volume is about 725 million gallons per year (MGY). The top 5 discharging CSO outfalls account for 53% of this total volume and their associated average annual discharge volumes are shown in the bar chart below.

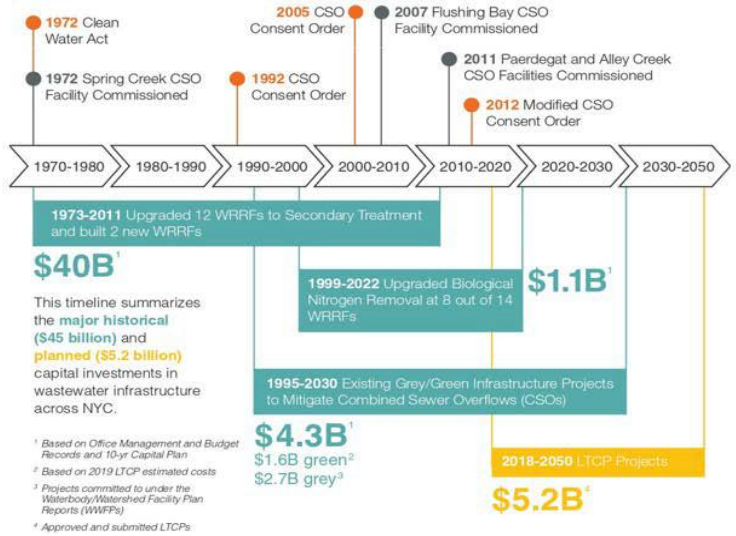


Investment and Success to Date

Historical Major Capital Investments in Wastewater Infrastructure

Improving New York Harbor's water quality has been a City and DEP priority for decades. According to the City's most recent Harbor Survey Report, the Harbor is cleaner now than at any time in the last 100 years. Continued improvements to the City's 14 wastewater resource recovery facilities (WRRFs), and ongoing investments have resulted in an 80% reduction in combined sewer overflows since the mid-1980s. With nine LTCPs approved, one pending, and this current one being submitted in March 2020, current and planned infrastructure investments will result in even further water quality improvements.

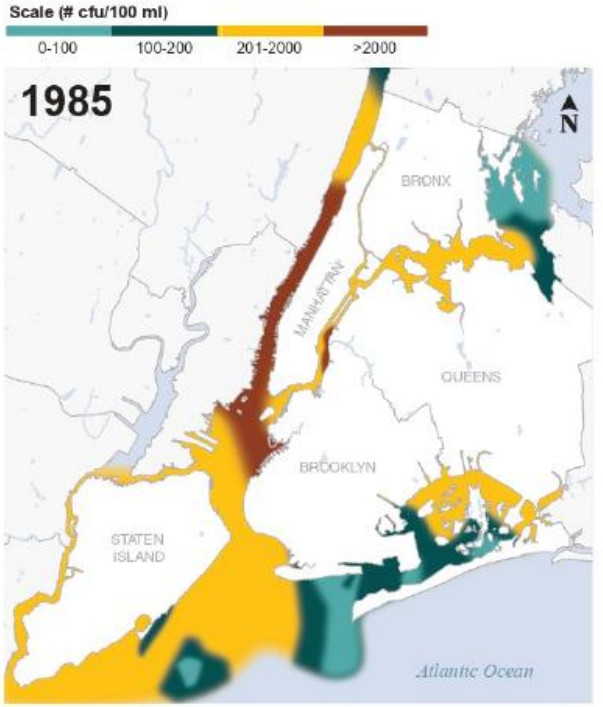
$45 Billion
in historic capital investments has led to
80% Reduction
in annual CSO discharges since the mid-1980's



Water Quality Improvements Over Time

< 100 cfu/100ml
GM fecal coliform concentrations in most waterbodies

The additional $5.2 billion investment in projects in the current CSO LTCP Program will result in further water quality improvement.



> 200 cfu/100ml
GM fecal coliform concentrations in Citywide/Open Waters

> 2,000 cfu/100ml
GM fecal coliform concentrations in portions of the Hudson River, East River, and Upper New York Bay

$45 Billion
in historic capital investments has led to
80% Reduction
in annual CSO discharges since the mid-1980's

Insitu Bio-Remediation in Kumbh Melas since 2016

Year	Type of Kumbh	Location
2016	Simhastha Kumbh	Ujjain (Madhya Pradesh)
2019	Ardh Kumbh	Prayagraj (Allahabad)
2021	Maha Kumbh	Haridwar (Uttarakhand)
2025	Maha Kumbh	Prayagraj (Allahabad)

TREAT AND MAINTAIN WATER QUALITY IN THE LAKES PRE AND DURING THE FESTIVAL

- Maintain water quality
- Reduce odours and contamination in the water
- Treatment to not use chemicals
- Use green technology to deliver results
- Eliminate and control mosquito breeding in the waters
- The Kumbh Mela which has often drawn record crowds of 50 60 million pilgrims, is the largest gathering in the world.

Insitu Bio-Remediation in Kumbh Melas

Key Points:

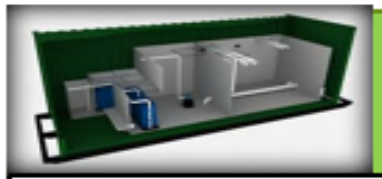
- **Maha Kumbh 2025:** The Uttar Pradesh government estimated over 45 crore (450 million) attendees, making it one of the largest religious gatherings in history. **25309 MLD Treated in 30 Days**
- **Kumbh Mela 2019:** Approximately 25 crore (250 million) devotees attended.
- **Ujjain Kumbh Melas:** around 12 crore (120 million) attendees.

Date	Bathing Occasion	Approximate Number of Devotees
January 29, 2025	Mauni Amavasya	5 crore
February 3, 2025	Basant Panchami	2.33 crore
February 12, 2025	Maghi Purnima	2 crore
February 26, 2025	Maha Shivratri	1.3 crore

RAPID WASTEWATER TREATMENT

- **Project: NDMC, New Delhi**
- **Objective:** To provide CONTAMINATION FREE DRINKING QUALITY WATER using Advanced Rapid Waste Water Treatment Technologies.
- **Current Status: Successful Running 30 KLD plant** in AIIMS Fountain underground. 3.5 yrs current operations performance.

WATER & WASTE WATER TREATMENT SYSTEMS



WWTP / STP/ ETP/CETP

- Packaged systems for the treatment of toughest waters in municipal and industrial sectors

Ferrate Ion Treatment

- Advanced Oxidation + Coagulation + Disinfection using Fe VI
- Destroys chemicals and organics

Photo Bio Catalytic Systems

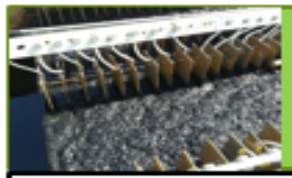
- Photo bio Catalytic is a photo catalytic membrane system that destroys chemicals and organic pollutants.

Anaerobic Digestion

- Convert Organic Waste to Methane and Other Valuable Byproducts

Oil Water Separation System

- Real time separation of Oil and water



Electro Coagulation System

- Removal of TDS, Oxidation system

Zero Liquid Discharge

- Leaving zero discharge at the end of the treatment cycle. ZLD is an advanced wastewater treatment method that includes ultrafiltration, reverse osmosis, evaporation/crystallization, and fractional electrode ionization

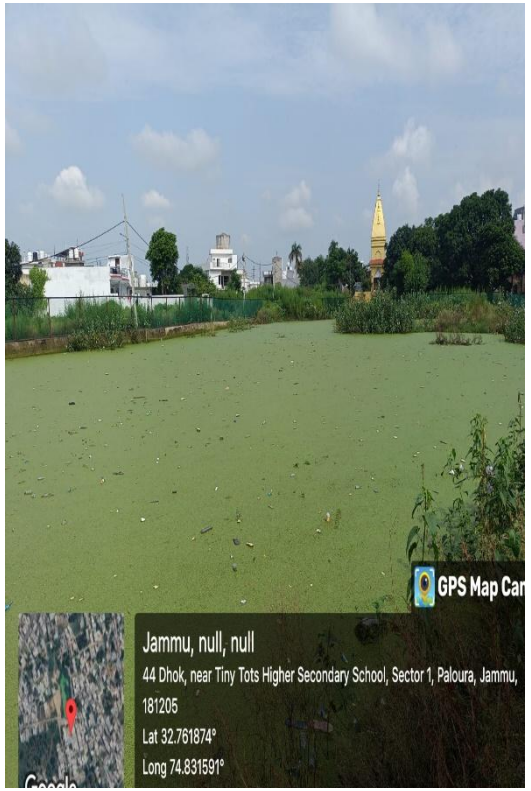
Desalination

- Desalination for filtration of Seawater and complicated wastewater

Ongoing Project: Urban Pond Restoration, Jammu Paloura

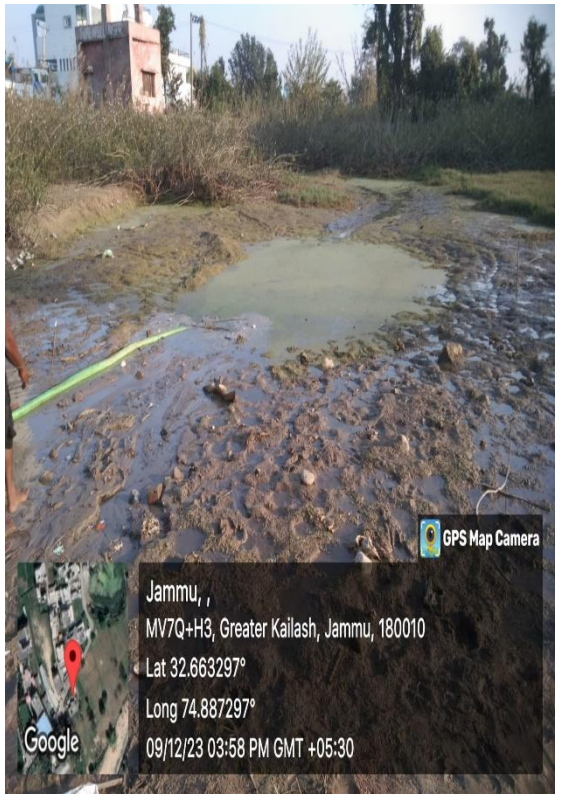
- **Scope**: Restoring five ponds with NBS and aesthetic upgrades.
- **Approach**: Phytoremediation, aeration, and softscaping with native species.
- **Learning**: Adaptive management and real-time monitoring optimize outcomes in dynamic urban settings.

These experiences inform our approach, ensuring proven methods are tailored to Varanasi's unique ecological and cultural context.



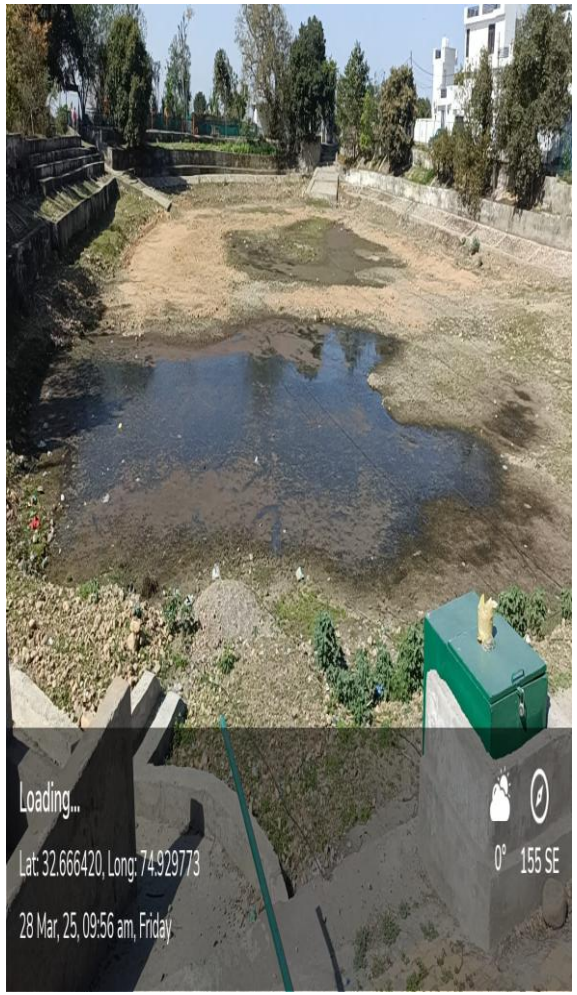
Before Treatment

After Treatment



Before work

After work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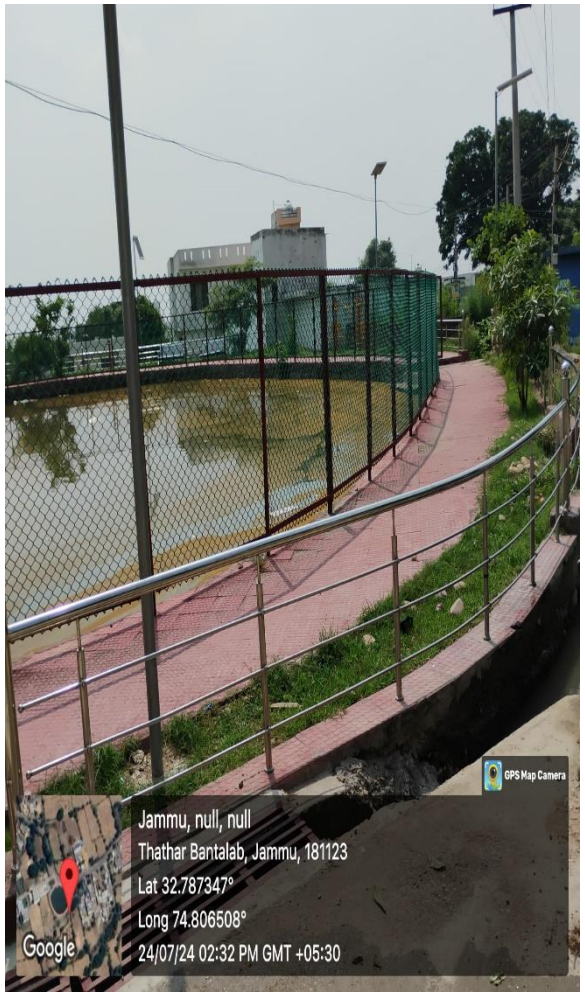
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Understanding of Project Scope and Site

Project Overview

Project Name: "Ecological Rejuvenation and Enhancement of Ponds in Varanasi and 05 Years of Operation and Maintenance"Authority: Varanasi Development Authority (VDA)
Model: Engineering, Procurement, and Construction (EPC)
Target: Three identified ponds in Varanasi, Uttar Pradesh
Budget: INR 10 Crores (estimated, excluding GST)
Scope:

- Ecological restoration and aesthetic enhancement
- Improved water qualityEnhanced biodiversity
- Development of sustainable, community-friendly recreational spaces
- Five years of Operation & Maintenance (O&M)

Rationale: Ponds, vital to Varanasi's heritage, have deteriorated due to urbanization, pollution, and neglect

Site Assessment and Broad Existing Situation

The RFP provides details of three ponds selected for rejuvenation:

1. Pond Upstream of Kardhmeshwar Mahadev Temple

- **Location**: Bari Bazar, Kanchanpur, Varanasi (25°16'5.16"N, 82°57'26.32"E)
- **Area**: Approx. 6,158.56 m^2
- **Depth**: Approx. 1.5 meters
- **Present Condition**: Dark green water covered with weeds (hyacinths, waterlilies), poor flow regime, high pollutant load from sewage, and solid waste dumping near the shore.
- **Water Quality (Dec 2024)**: pH 7.01, DO 1.2 mg/L, BOD 38 mg/L, COD 139 mg/L, TSS 272 mg/L, high coliform levels (1.7×10^3 - 0.8×10^5 MPN/100 ml).

Kandwa Pond:-

- **Location**: Bari Bazar, Kanchanpur, Varanasi (25°16'11.40"N, 82°57'35.62"E)
- **Area**: Approx. 7,172.95 m^2
- **Depth**: Approx. 1.5 meters
- **Present Condition**: Dark green, weed-infested water, poor flow, sewage influx, and solid waste accumulation.
- **Water Quality (Dec 2024)**: pH 7.62, DO 0.9 mg/L, BOD 57 mg/L, COD 154 mg/L, TSS 253 mg/L, coliform levels (0.9×10^5 - 1.6×10^7 MPN/100 ml).

3. Kanchanpur Pond

- **Location**: Gokul Nagar, DLW Colony, Chitaipur, Kanchanpur, Varanasi (25°19'20.00"N, 82°59'44.50"E)
- **Area**: Approx. 8,800 m²
- **Depth**: Approx. 2.7 meters
- **Present Condition**: Dark green water with weeds, sewage pollution, solid waste dumping, and stagnant flow.
- **Water Quality (Dec 2024)**: pH 7.31, DO 1.3 mg/L, BOD 62 mg/L, COD 139 mg/L, TSS 223 mg/L, coliform levels (>1.6 × 10^7 MPN/100 ml).

Common Observations:

- All ponds exhibit severe ecological degradation, with water quality far below CPCB Class B (outdoor bathing) or Class D (wildlife propagation) standards.
- Low dissolved oxygen (DO < 1.3 mg/L), high BOD/COD, and excessive nutrient levels indicate eutrophication and organic pollution.
- Physical conditions include weed overgrowth, debris accumulation, and foul odors, rendering the ponds unusable for community or ecological purposes.

Major Challenges

Water Quality Degradation:

- High pollutant loads from sewage and solid waste inflows exceed permissible limits (e.g., BOD > 3 mg/L for Class B, DO < 5 mg/L).
- Achieving Class B or minimum Class D water quality within six months poses a significant technical challenge.

Poor Hydrological Flow:

- Stagnant water and disrupted natural flow patterns hinder self-purification and aquifer recharge.
- Reconnecting ponds to natural streams or aquifers requires detailed hydrological studies and interventions.

Biodiversity Loss:

- Invasive weeds (e.g., hyacinths) and pollution have displaced native flora and fauna, necessitating ecological restoration.

Urban Pressures:

- Encroachment, unplanned urbanization, and lack of drainage systems contribute to contamination and erosion risks.

Aesthetic and Structural Deficiencies:

- Lack of pathways, lighting, and boundary walls limits accessibility and safety.
- Surrounding areas require significant landscaping and civil works to enhance usability and appeal.

Long-Term Sustainability:

- Ensuring perennial water levels, preventing re-pollution, and maintaining infrastructure over five years amid urban growth is critical.

Scope of Work

The project scope is divided into two parts:

Part A: Ecological Rejuvenation and Water Quality Improvement:-

- **Conduct detailed site assessments (geo-technical, hydrological studies).**
- **Implement nature-based solutions (NBS) for de-weeding, de-silting, and waste removal.**
- **Restore water quality to Class B (or minimum Class D) standards within six months using in-situ methods.**
- **Enhance biodiversity with native species and ensure natural aquifer recharge.**
- **Establish long-term monitoring and maintenance protocols (quarterly water tests, progress reports).**

Part B: Aesthetic Enhancement and Beautification

- Design and execute hardscaping (pathways, boundary walls), softscaping (native plantations), and landscaping.
- Install lighting, drainage systems, and amenities (benches, signage, toilets).
- Develop recreational spaces while ensuring safety, accessibility, and compliance with local standards.
- Maintain infrastructure and landscapes for five years post-completion.

Key Objectives:

- Restore ecological balance and water quality.
- Create sustainable, low-maintenance urban sponges.
- Enhance community engagement and aesthetic value.

Holistic Approach for Rejuvenation:-

Our approach to rejuvenating the three identified ponds in Varanasi—Pond Upstream of Kardhmeshwar Mahadev Temple, Kandwa Pond, and Kanchanpur Pond—centers on a holistic strategy that integrates ecological restoration, water quality improvement, and aesthetic enhancement.

We aim to transform these degraded water bodies into sustainable urban sponges that enhance biodiversity, improve community well-being, and align with Varanasi's cultural and environmental heritage. This will be achieved by:

- **Ecosystem-Based Restoration**: Addressing water quality, biodiversity, and hydrological connectivity simultaneously to ensure long-term ecological health.
- **Community-Centric Design**: Enhancing accessibility and recreational value to foster community ownership and engagement.
- **Sustainability Focus**: Prioritizing low-maintenance, eco-friendly solutions to ensure durability over the 5-year O&M period and beyond.

Treatment Methodology

1. Preliminary Activities

Task	Method
Survey & Baseline Assessment	GPS mapping, water profiling (inlets/outlets), sediment testing
Fencing & Signage	Prevent further dumping and access by stray cattle
Community Engagement	Local awareness and involvement in the protection

2. Solid Waste & Hyacinth Removal

Component	Action
Hyacinth	Mechanical removal (amphibious weed harvester or manual); compostable after dewatering
Floating Debris	Skimming using floating nets or trash booms
Solid Waste (Plastic, etc.)	Manual or mechanical removal; segregate for disposal/recycling

Treatment Methodology

3. Desilting and Dredging

- Purpose: Remove organic sludge, improve depth, and reduce BOD/COD.
- Method: Cutter suction dredging or excavator-based desilting (off-season or low-water period).
- Sludge Handling: Use sludge drying beds; nutrient-rich top layer can be composted or used as fertilizer.

4. Wastewater Treatment at Inlets

Treatment Stage	Description
Bar Screens	Remove gross solids at inlet drains
Oil & Grit Trap	Remove oils/grease and settle heavy particles
Primy Treatment	Settling tank or baffled chamber to reduce suspended solids
Secondary Treatment	Constructed wetlands, bio-remediation zones for Formulation dosing
Tertiary (optional)	UV/ozonation for coliform removal, especially if discharge is planned

5. In-Pond Biological Treatment

Method	Function
Floating Wetlands (FTW)	Native plants (e.g., Canna, Typha) on rafts; uptake nutrients (N, P), improve DO
Bioaugmentation	Add beneficial microbes to reduce organic matter, sludge
Aeration	Solar-powered fountains or diffused aeration to boost DO > 3 mg/L
Phytoremediation Zones	Marginal wetland plantation to filter runoff and stabilize banks

6. Coliform Reduction

- Install **constructed reed beds** at inflows
- Use **UV treatment**, or **ozonation** at discharge if needed
- **Prevent open defecation & sewage discharge** into pond

7. Monitoring and Maintenance

Activity	Frequency
Water Quality Testing	Monthly (DO, BOD, COD, TSS, pH, coliforms)
Desilting	Every 3–5 years
Weed Control	Quarterly
Community Watch	Continuous, with local NGO or SHG engagement

Expected Outcomes

Parameter	Before	Target
DO (mg/L)	1.3	> 3.5
BOD (mg/L)	62	< 10
COD (mg/L)	139	< 50
TSS (mg/L)	223	< 30
Coliform (MPN/100 ml)	$>10^7$	<500

Add-ons

- Biodiversity Enhancement: Introduce native aquatic plants and fish species; monitor bird and insect return.
- Hydraulic Restoration: Construct channels or check dams to reconnect ponds to natural water sources.
- Solar-powered lighting and aeration
- Beautification & pathway development for eco-tourism

Preliminary Concepts for Urban Landscaping, Softscaping, and Aesthetic Upgradation:-

Our vision for the pond surroundings combines functionality, aesthetics, and sustainability:

Urban Landscaping:

- **Pathways and Sit-Outs**: Curved, pedestrian-friendly pathways made of permeable pavers, lined with benches and shaded pergolas for community use.
- **Lighting**: Solar-powered LED lights along pathways and focal points, enhancing safety and evening aesthetics.
- **Drainage**: Integrated stormwater channels with silt traps to manage runoff and prevent erosion.

Softscaping:

- **Native Plantations**: Trees (e.g., Neem, Banyan), shrubs (e.g., Hibiscus), and groundcovers (e.g., Vetiver grass) to stabilize soil and support biodiversity.
- **Seasonal Gardens**: Flower beds with marigolds and lotuses to reflect Varanasi's cultural palette.
- **Irrigation**: Drip irrigation systems using treated pond water for sustainability.

- **Bio filtration Systems**: Using gravel beds and microbial cultures to treat incoming sewage and runoff naturally.
- **De-weeding and De-silting**: Manual and mechanical removal of invasive weeds (e.g., hyacinths) and sediment, followed by bioremediation to prevent regrowth.

2. Technology Interventions:

- **In-Situ Bioremediation.** Using DRDO approved bioformulation called Triyogani – Biocatalyx from Organic121 to enhance the water quality and reducing pollution in the water
- **In Situ Aeration**: Deploying solar-powered aerators to boost dissolved oxygen (DO) levels, targeting >5 mg/L for Class B standards.
- **Silt Traps and Pre-Treatment Units**: Installing engineered silt traps and bio-swales to intercept pollutants before they enter the ponds.
- **Water Quality Testing**: Conduct periodic water quality testing for pH, DO, BOD, and TSS, regularly for monitoring the treatment and its modifications as required and quarterly reporting to VDA.
- **Hydraulic Connectivity**: Re-establishing links to natural aquifers or streams using controlled channeling and check dams, informed by hydrological modeling.

Methodology

(Preliminary Project Structuring)

The project will be structured into four phases to ensure systematic execution and compliance with RFP requirements:

Phase 1: Assessment and Planning (Months 1-2)

- Detailed site surveys, water quality testing, and stakeholder consultations.
- Development of a comprehensive rejuvenation plan.

Phase 2: Design and Approvals (Months 3-4)

- Conceptual and detailed designs for ecological and aesthetic works.
- Securing statutory approvals from VDA and local bodies.

Phase 3: Implementation (Months 5-12)

- Execution of ecological rejuvenation, civil works, landscaping, and beautification.
- Installation of monitoring systems and initial O&M setup.

Phase 4: Operation and Maintenance (Years 2-6)

- Five-year maintenance of water quality, infrastructure, and landscapes.
- Quarterly reporting and community training for sustainability.

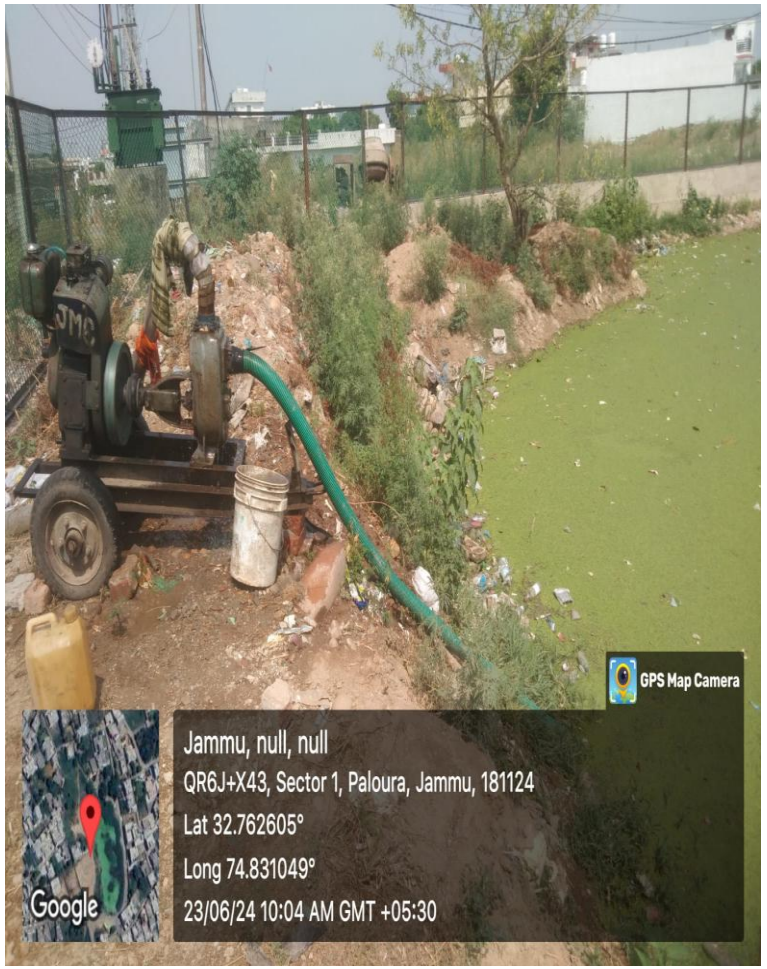
Use and Application of Nature-Based Solutions (NBS) and Technology Interventions

We propose a synergistic blend of Nature-Based Solutions (NBS) and advanced technology interventions to meet the project's ecological and water quality goals:

1. Nature-Based Solutions:

- **Bioremediation:** Dosing formulations to emable manual de-weeding by shrinking the size of invasive hyacinth and to boost water quality treatment by eliminating pathogens.

- **Phytoremediation**: Planting native aquatic plants (e.g., Phragmites australis, Typha latifolia) along pond edges to naturally filter pollutants and reduce nitrogen/phosphorus levels.
- **Floating Wetlands**: Installing modular floating islands with native vegetation to enhance water purification and provide habitats for aquatic life.



Organic In Situ Bioremediation Formulation

"Triyogani" Organic Multipurpose Sanitizing Solution

Triyogani (त्रियोगनी) : set of multiple formulations aid in comprehensive In Situ treatment and sanitization of confined area, STP, Nallah, Drain, space, equipment, vehicle, fruits and vegetables etc.

It works on the principle of contamination control by using microbial cultures, biocatalysts, enzymes for the removal of contaminants, pollutants, and toxins from soil, water, and other environments. Rapidly eliminates harmful pathogens.

Human-Safe
Human Safe combination blend of natural herbals sync with permissible limits of ozone.

Sterility Assurance Level (Triyogani)
Tested & validated against bacterial spores : *Geobacillus stearothermophilus* - both alone and in combination with ozone.

Syn Ozone
Triyoganated Ozone treatment is synergistic and produce additive beneficiary impact.

Multi-Formulated Variants
Triyogani is available as fumigant, hand sanitizer & fruits / veggie wash (liquid / solid) formulations.

Non-Toxic [Child Safe]
Unlike chemical entity, Triyogani (herbal formulation) is extremely safe for all age groups and have no toxicity.

Travel Compatible
Dilute it to develop personalized hand sanitizer that can be carried while traveling.

Disinfectant Toxins Free
Alcohol, quaternary ammonium salts, HoCl, NaOCl & Hydrogen Peroxide Free Sanitizing Medium.

Concentrate Pack
Available in concentrated form (to be mixed with water) as cost effective solution for all.

Multi-Platform Support
Compatible with Poom Swachh, Ultra Swachh, Ati Swachh, Tri-Netra, Samgrah Swachh, Mini Veg Wash & other disinfection units.

Enviro-Friendly
Dispersion in environment as fumigant or using it as hand sanitizer, leaves no environmental toxin.

Old Wisdom Modern Blend
Time proven anti-microbial neem, thyme & lemon grass with additives in pharmacologically effective modern blend.

Limits to Zero
Recurring cost limits to negligible expense in all technologically integrated platforms.

20/10/2020

Director Lab/Estt.

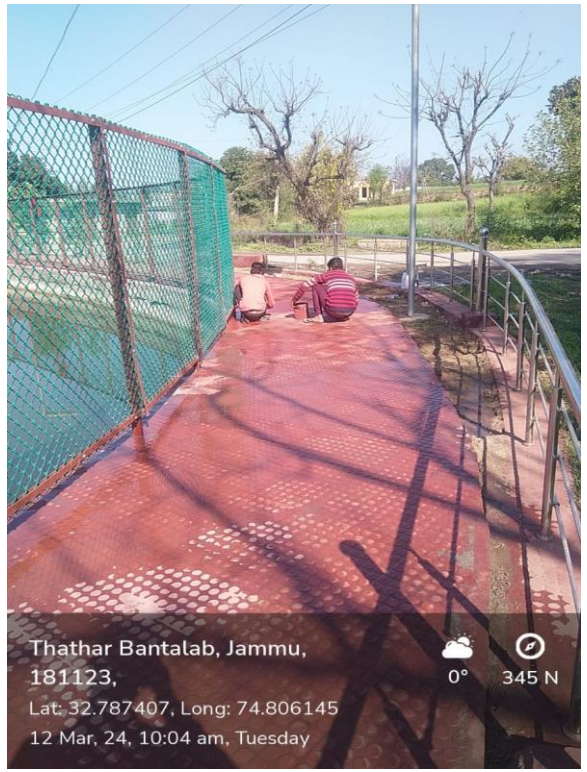
For Gel Craft Healthcare Pvt. Ltd.

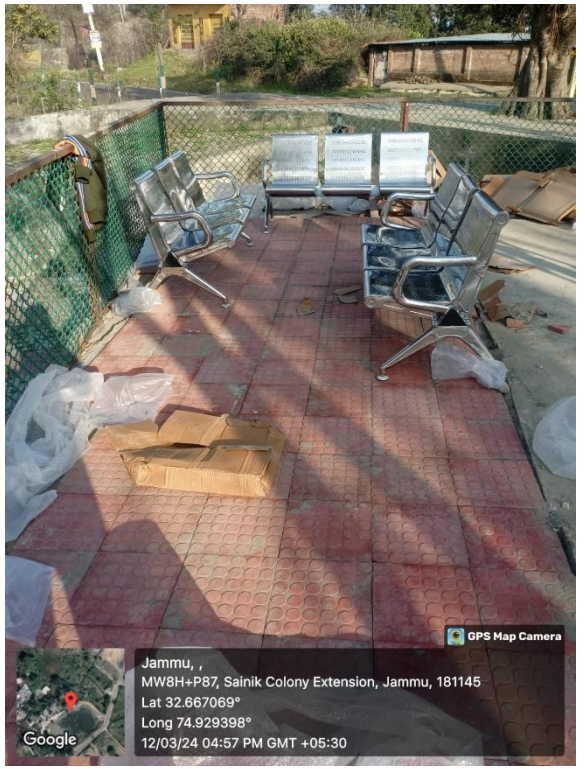
Authorised Signatory / Director
M/s Gel Craft Healthcare (P) Limited

License No. DRDO/DPTM/2020/1135

Aesthetic Upgradation:

- **Boundary Walls**: Low, aesthetically designed walls with local stone cladding and decorative trellises.
- **Recreational Spaces**: Small plazas with signage and kiosks, blending modern design with traditional motifs.
- **3D Renderings**: Preliminary designs showcasing revitalized ponds with clear water, lush greenery, and vibrant community spaces.






VARANASI
Funtasia Waterpark and Resort
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Dhamek Stupa, Sarnath
धमेक स्तूप, सारनाथ
Harhua
हरहुआ
LAMHI
लमही
DANGANJ
दानगंज
SARNATH
सारनाथ
JP Medicare
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Varanasi Development Authority
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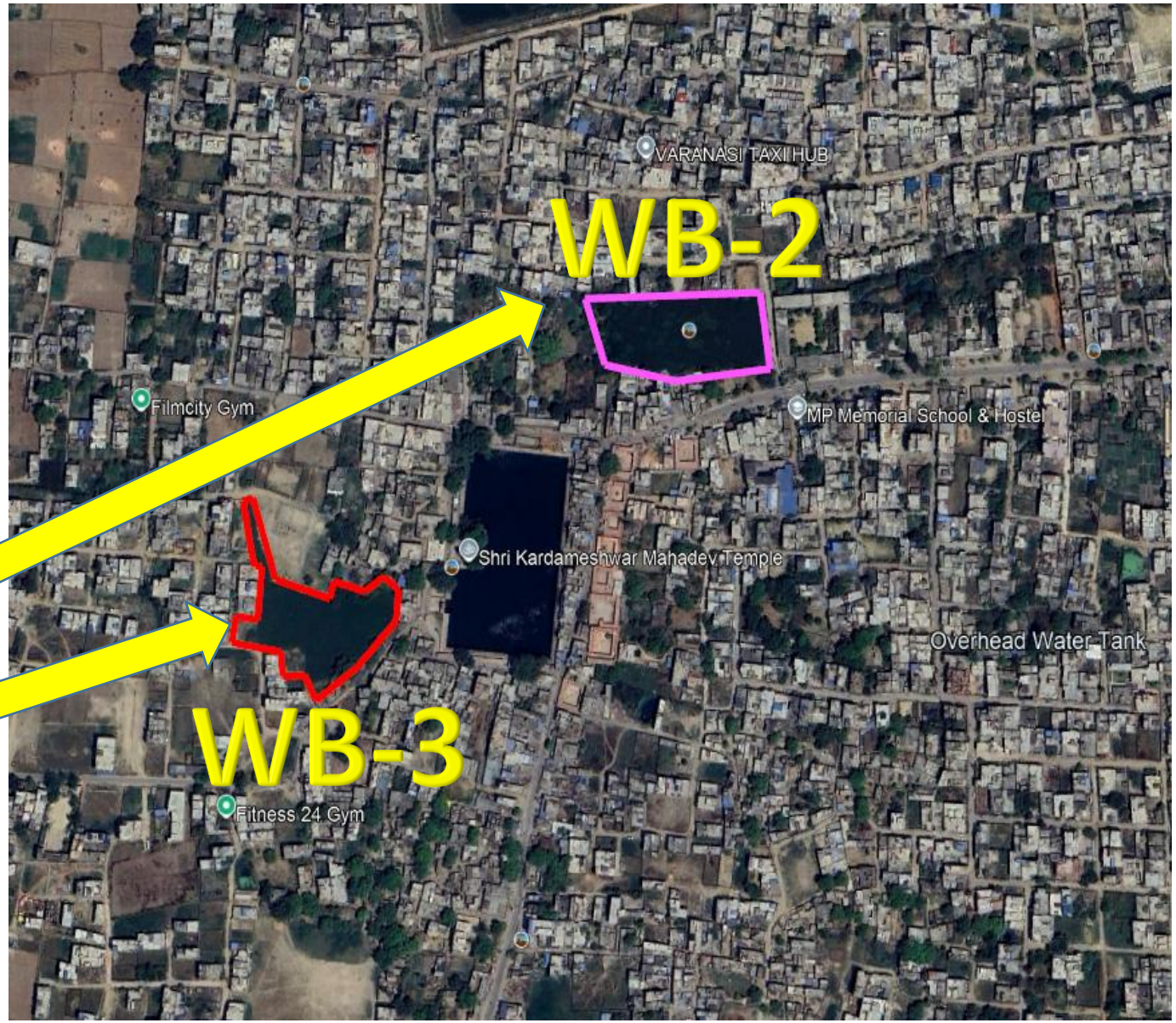

VARANASI TAXI HUB
WB-2
Filmcity Gym
MP Memorial School & Hostel
Shri Kardameshwar Mahadev Temple
Overhead Water Tank
WB-3
Fitness 24 Gym

Ecological Sensitive Design

Entry to the Pond

Natural Water absorption with the natural elements for Pavements

Observation Deck

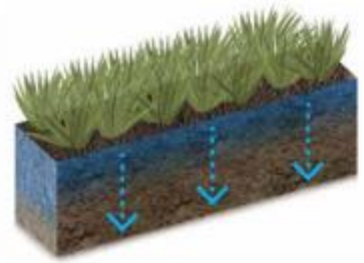
SITTING AREA AND RECREATIONAL SPACES

Invisible STP PLANT & Treated Water Fall Feature

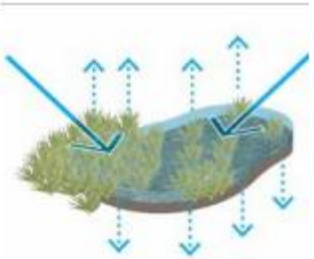
Stone Pitching and Grass feature

LITTORAL SHELVES INSTALLATION

Filtration
Plant foliage, fibrous roots, sand, or other porous media help slow the flow of stormwater while also sequestering suspended sediments, resulting in cleaner water "down stream".

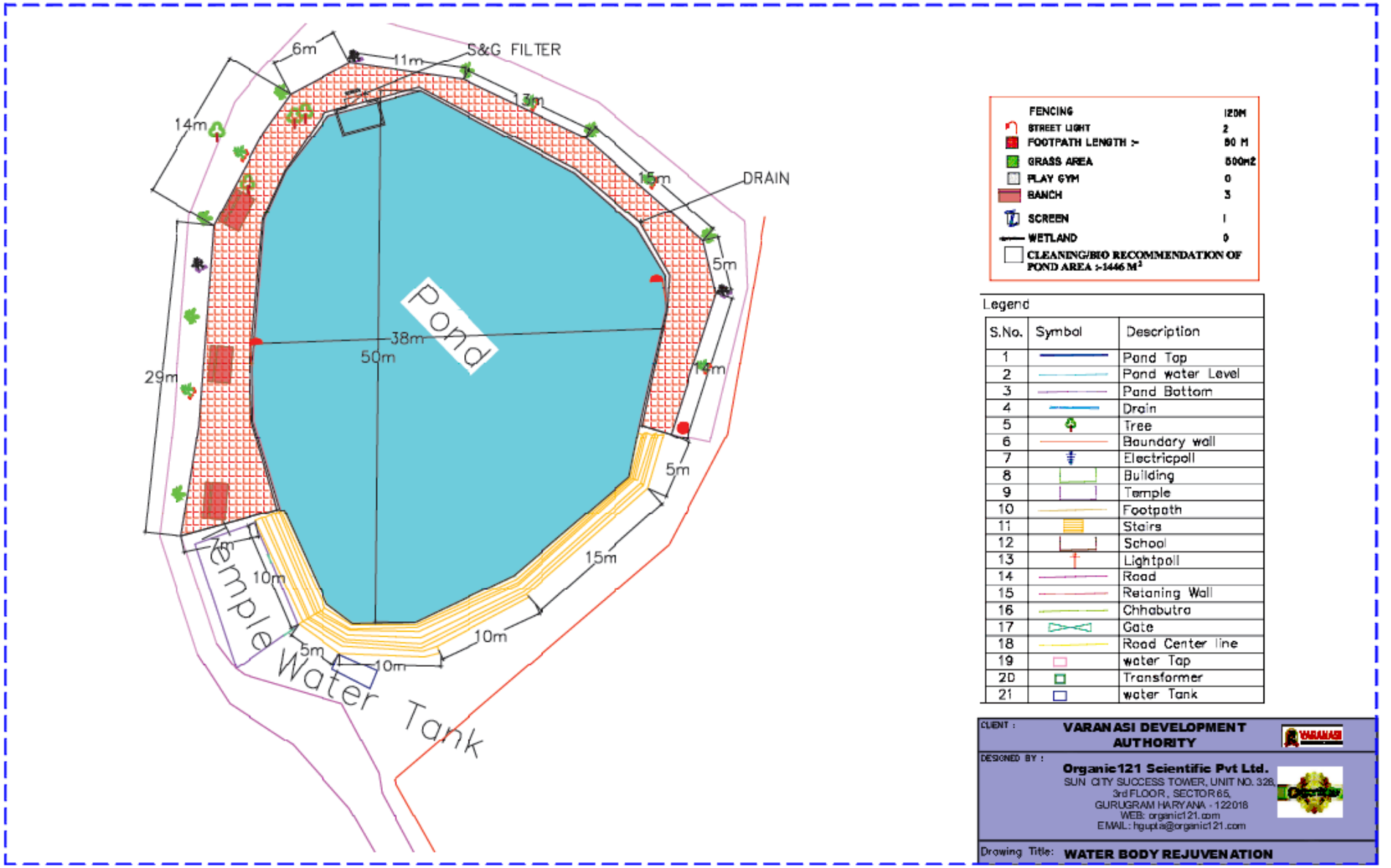


Percolation
Permeable soils and sands allow for stormwater to infiltrate vertically into groundwater flows.



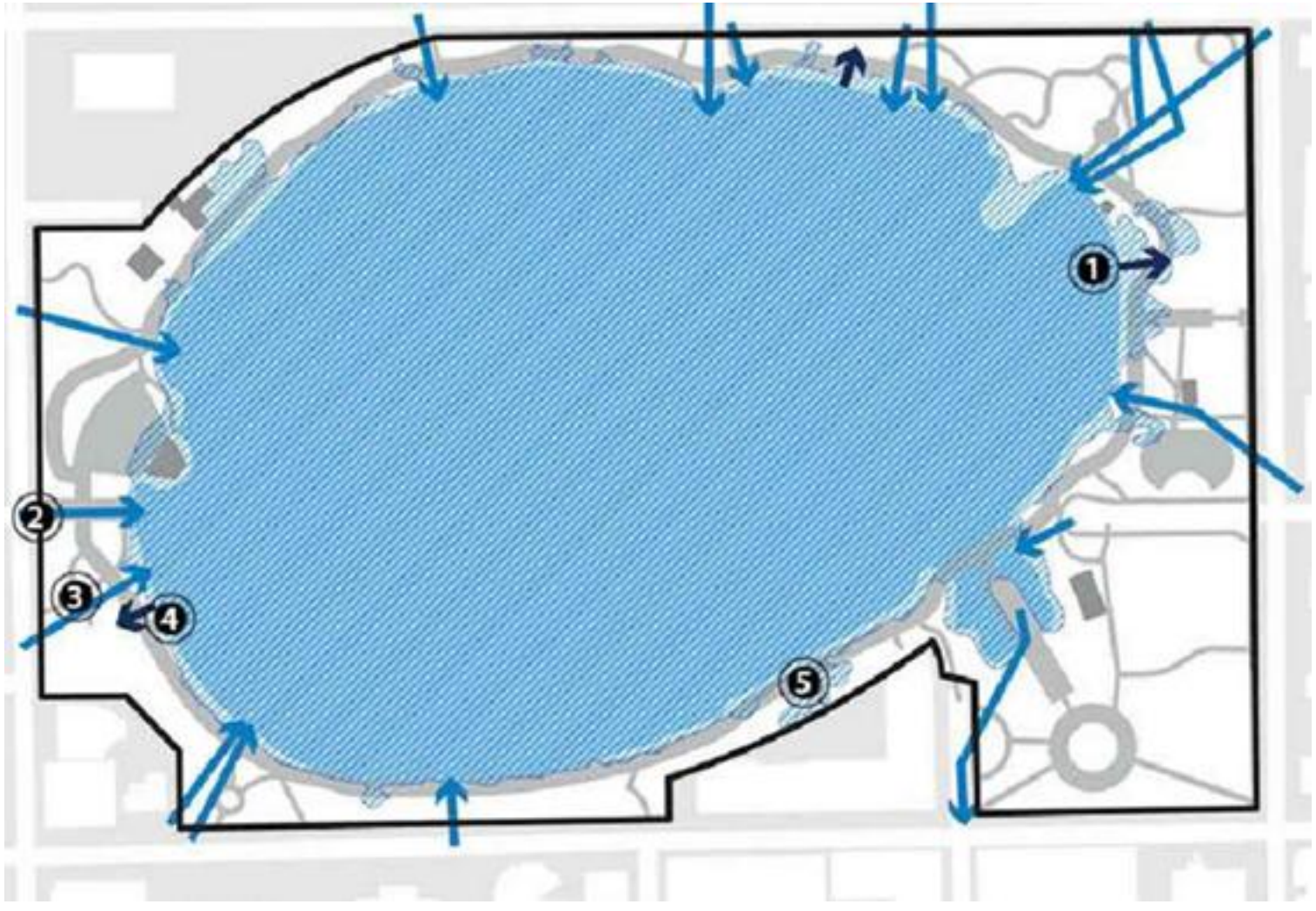
Bio-remediation
Stormwater soaks in areas where various types of plants, bacterias, fungi, and the presence of light remove, transfer, stabilize, and/or destroy contaminants in the stormwater

CONVENTIONAL ECO-RESTORATION OF WATER BODIES

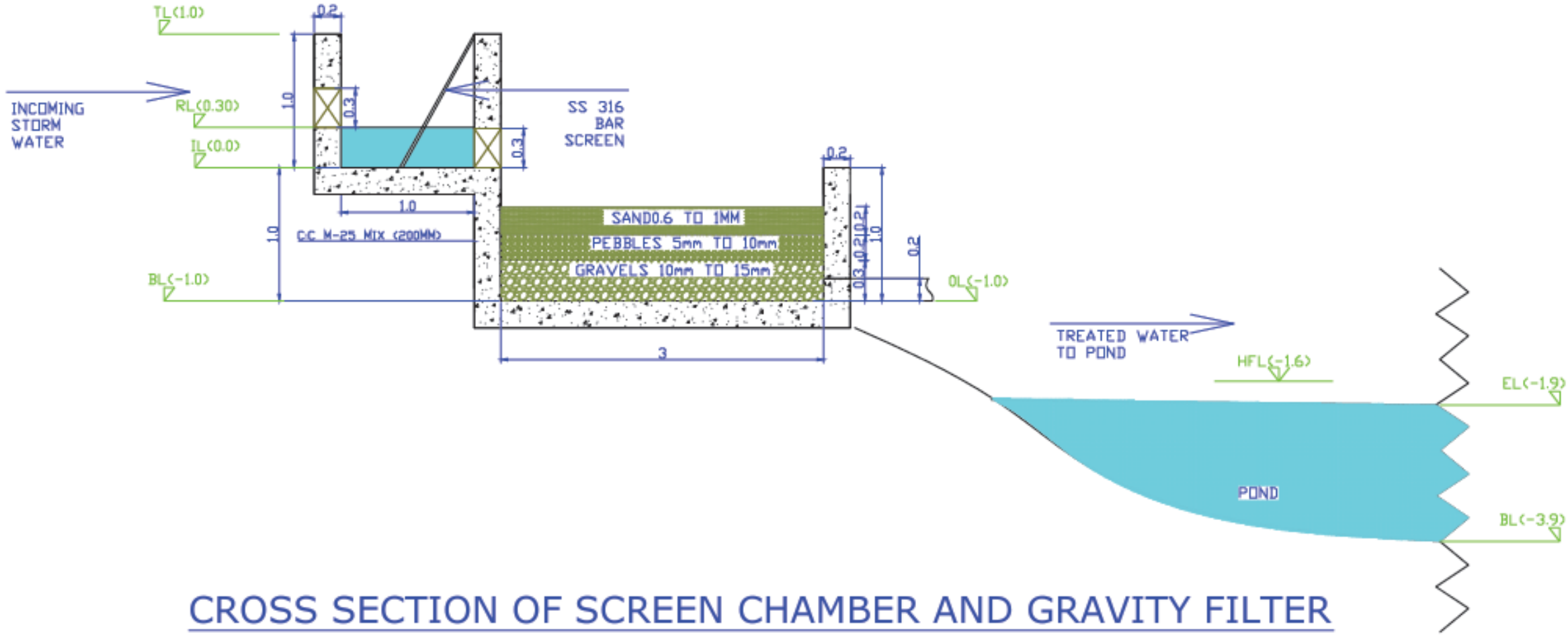


Tapping all the incoming Sewer Points and taking them to one single location for treatment and then releasing into the pond

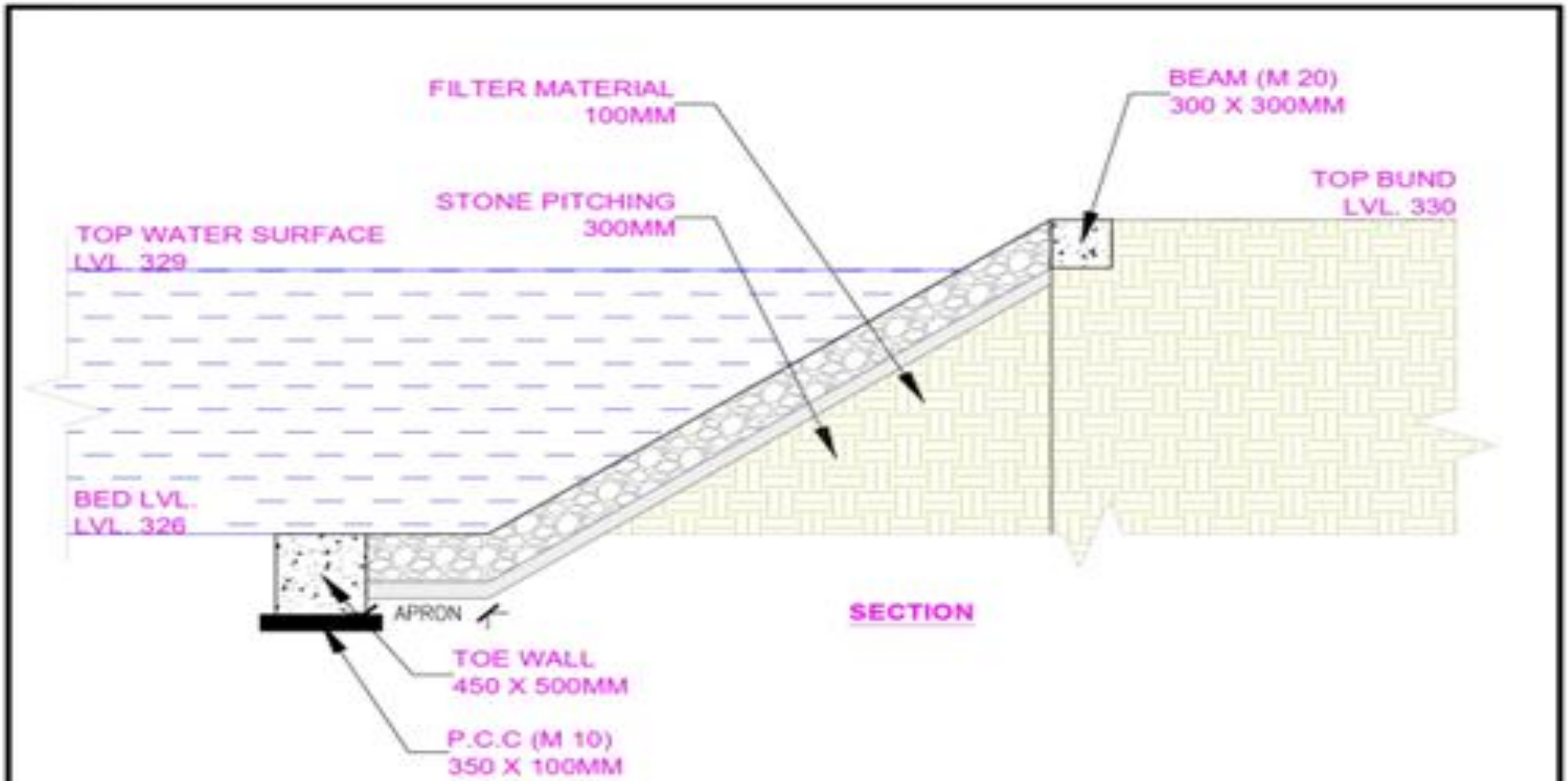
Sewer Inlets



DESIGN FOR STORM WATER FILTRATION SYSTEM FOR POND

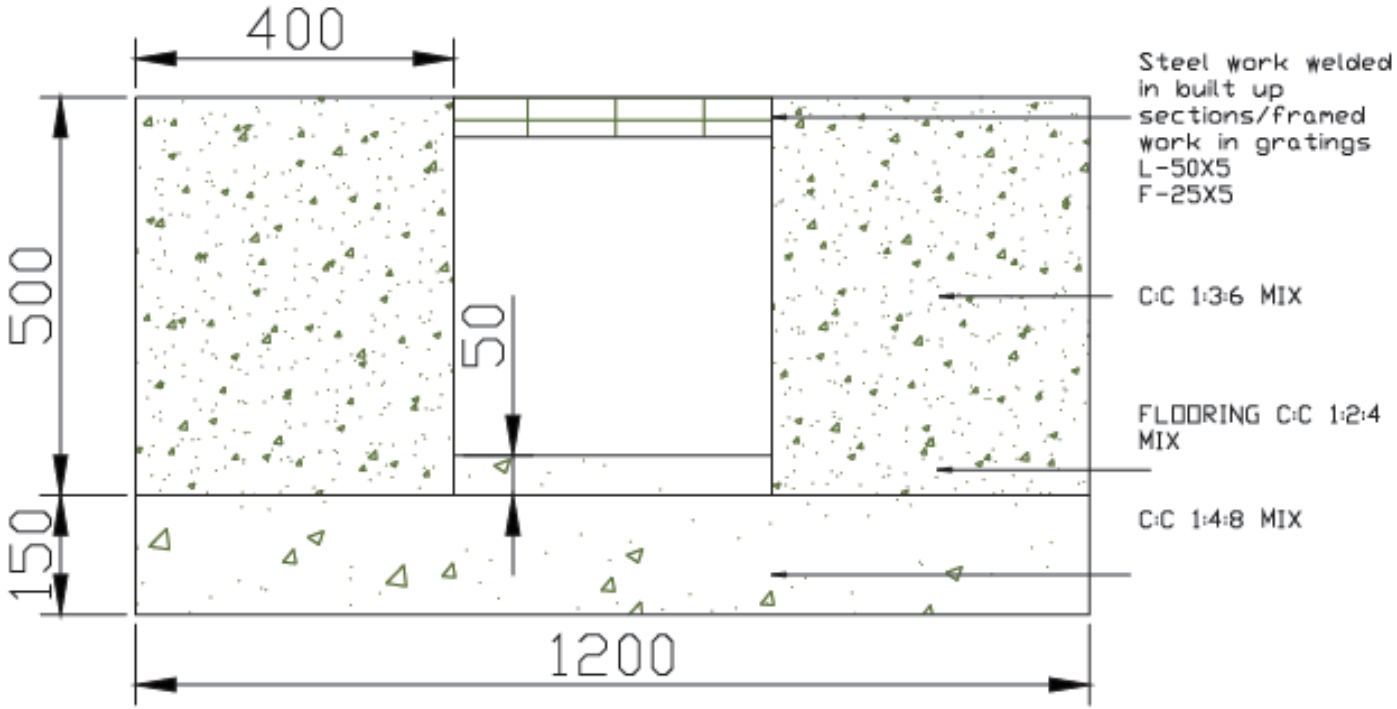


CROSS SECTION OF SCREEN CHAMBER AND GRAVITY FILTER

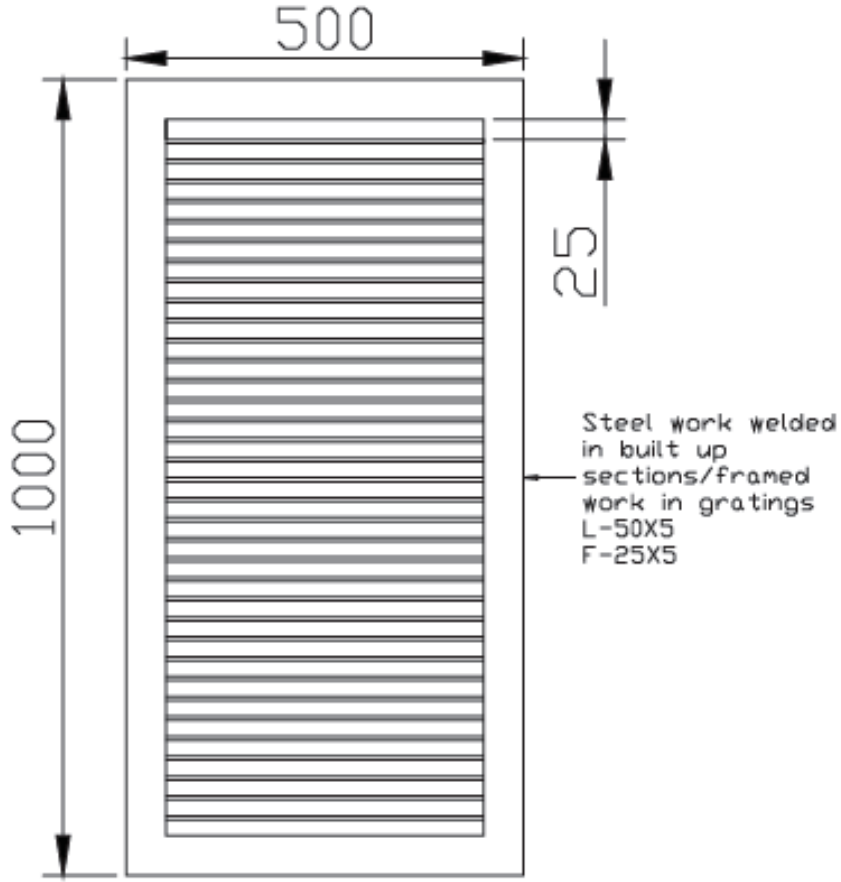


STONE PITCHING DETAIL

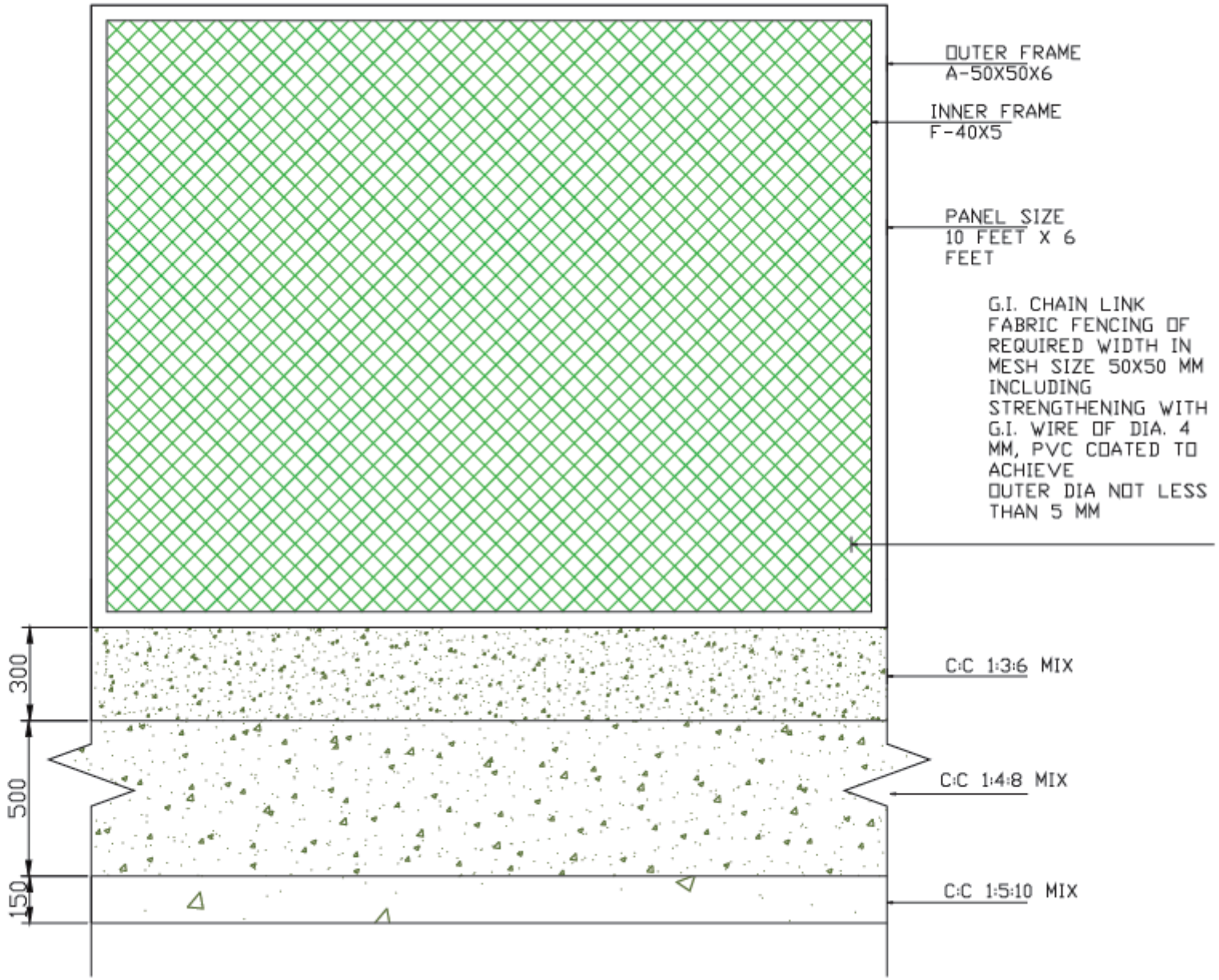
STORM WATER DRAIN



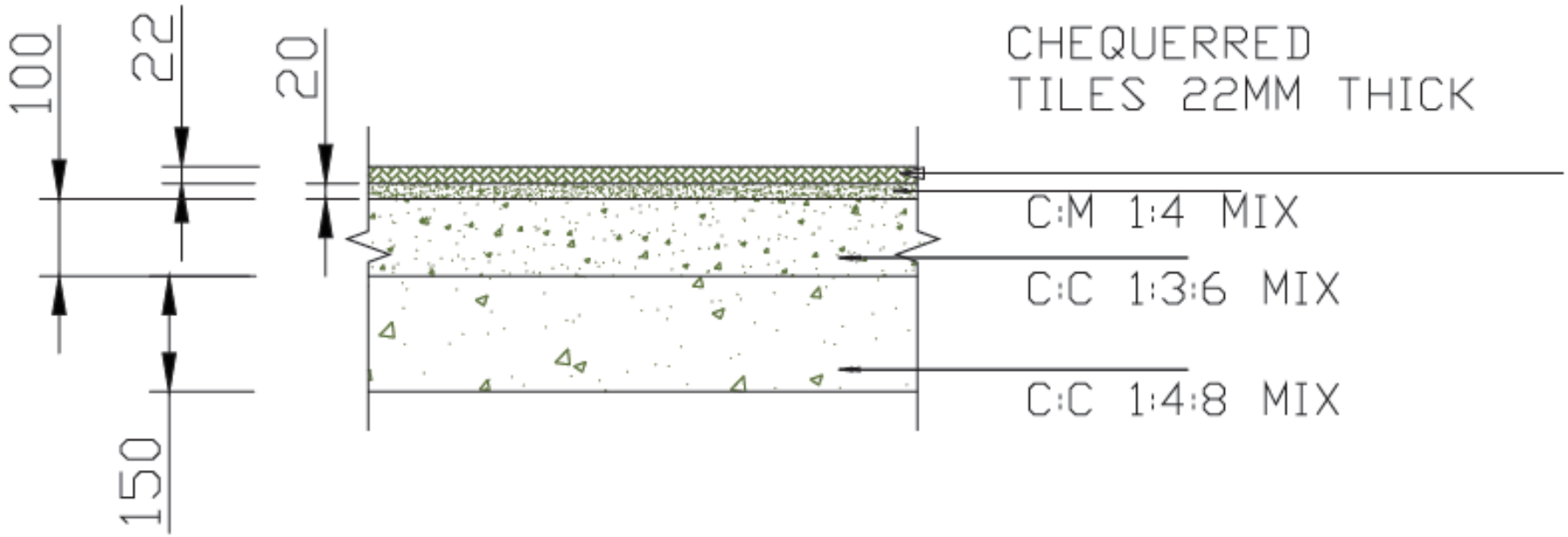
SECTION OF DRAIN



GRATING



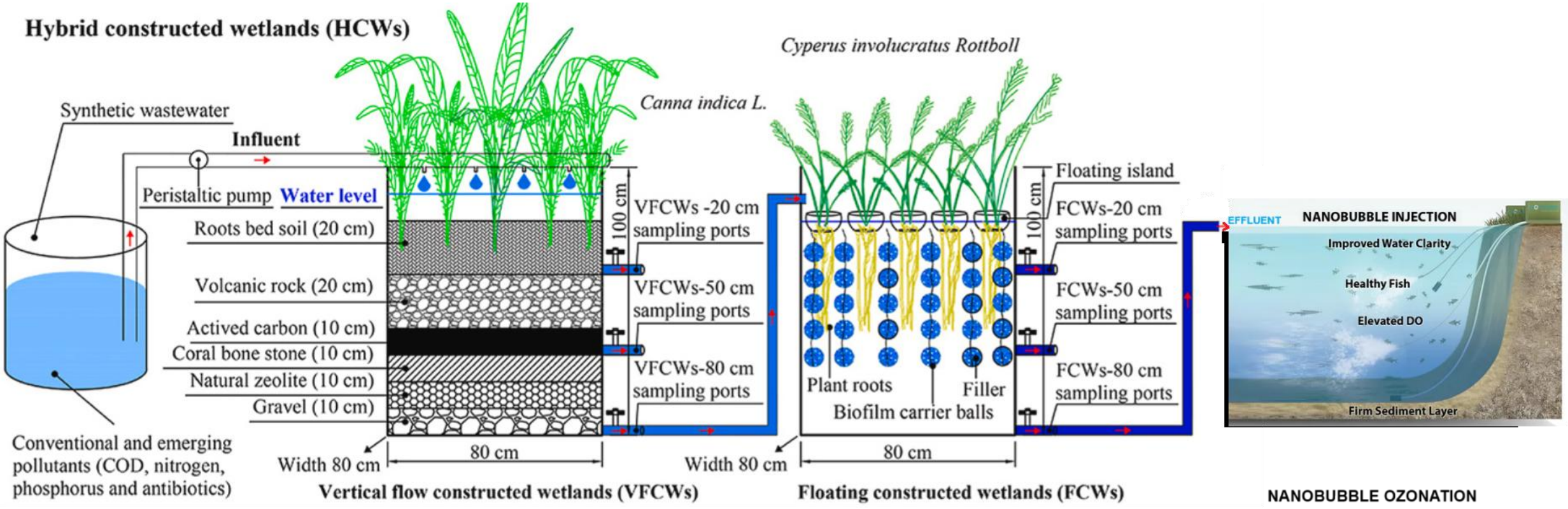
SECTION OF FENCING STORM WATER DRAIN POND



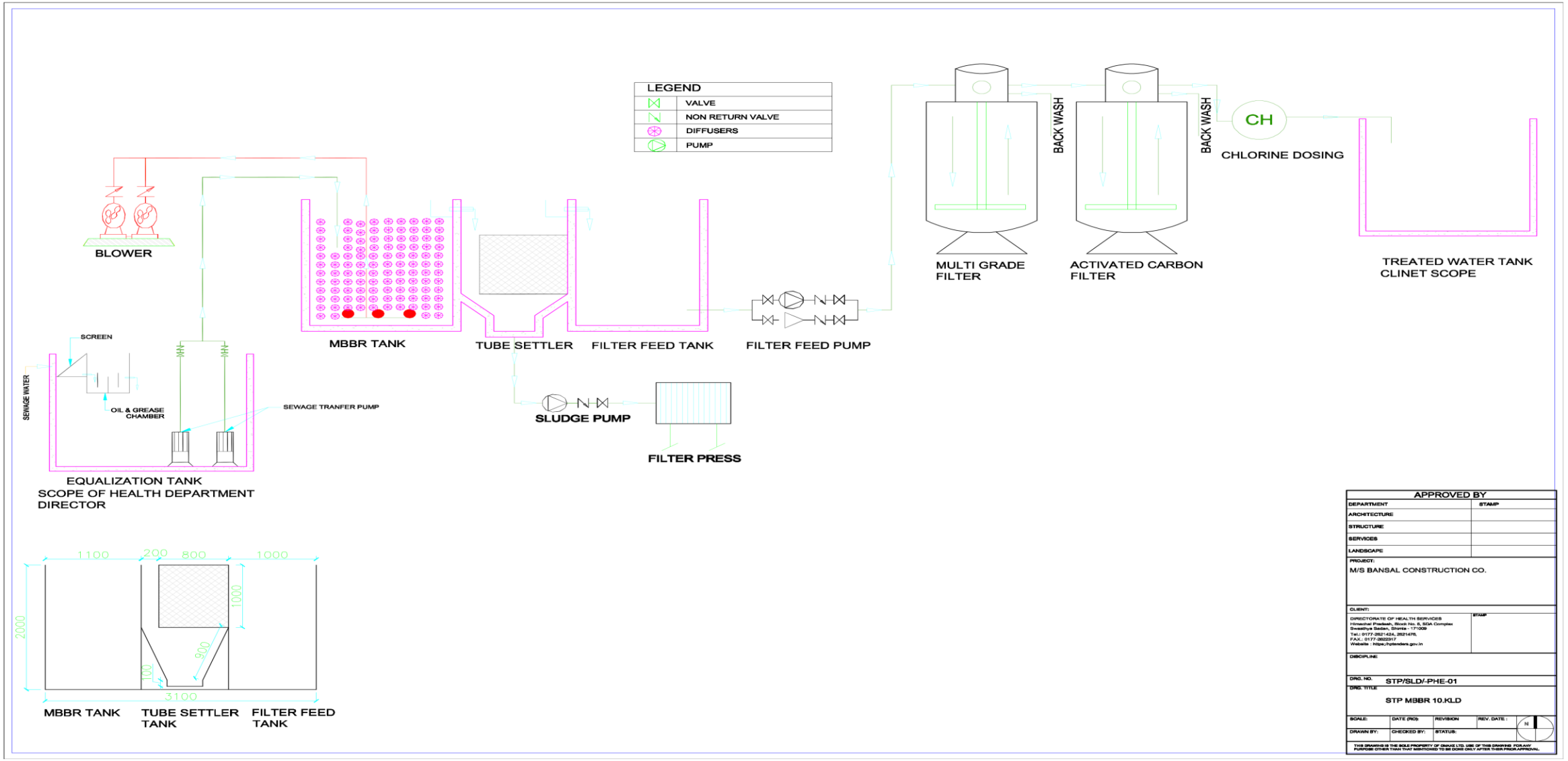
SECTION OF WALKWAY

OPTION – 1 Nature Based Constructed Wetland, Nanobubble Ozonated Wastewater treatment

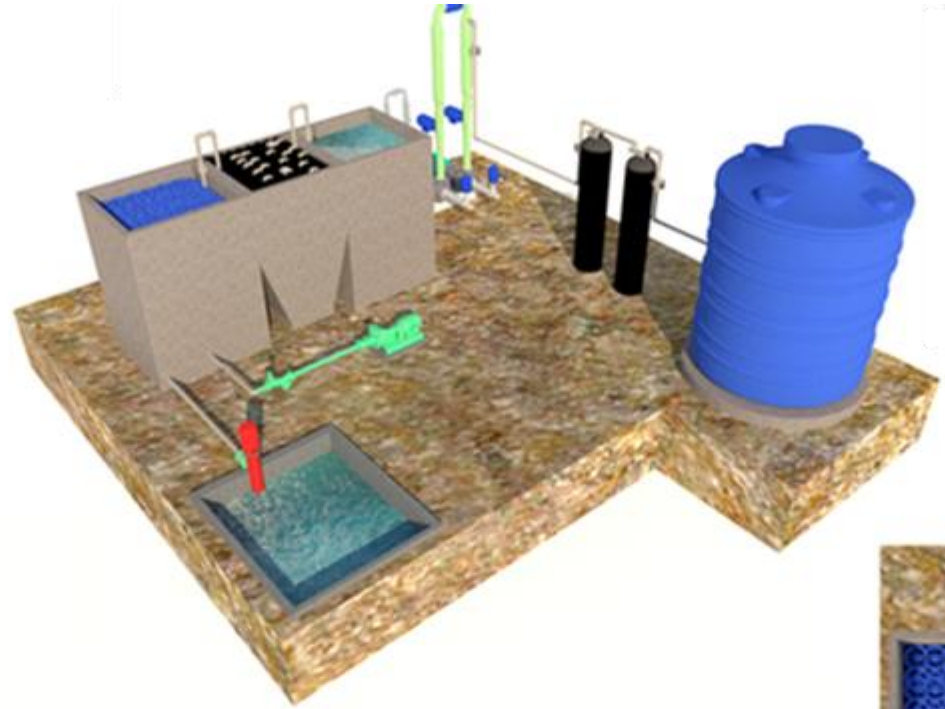
Nature Based Constructed Wetland Wastewater treatment with Nanobubble Ozonator

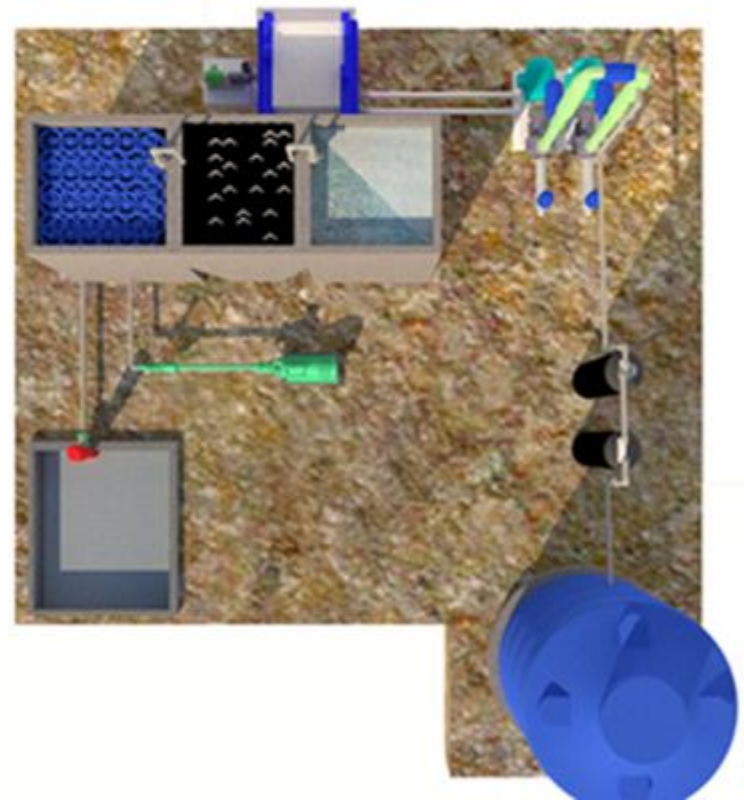


OPTION 2 – Advanced Hybrid STP With Nanobubble Ozonator and Waterfall Feature



3 D Layout





Examples of Experience

- AIIMS Fountain and Park:
- https://timesofindia.indiatimes.com/city/delhi/aiims-fountain-to-feed-on-wastewater-plant/articleshow/86020058.cms

Ongoing Works & Maintenance

Algae & Aquatic Weed Control

One essential service that Lake and Wetland Management provides is aquatic plant management, i.e. the control of algae and aquatic weeds. Controlling a lake or pond's plantlife is essential to that waterway's health. On the one hand, a lake with diverse vegetation and non-invasive plant species will see its ecology flourish. On the other hand, invasive weeds and unchecked algae growth can prevent nutrients from circulating within the pond,

Lake and Pond Aeration

By inducing circulation and efficiently adding dissolved oxygen throughout the lake or pond, many undesirable symptoms of a stagnant and stratified lake or pond are removed. Pond aerator installation will help to “clean” the water of cloudiness and odors. Most importantly, it helps to reduce the overall accumulation of organic sediment on the bottom and reduces the available nutrients in your water column, thereby reducing the likelihood of problematic algae blooms and other water quality problems. It will also aid in the promotion of a healthy habitat for fish and other aquatic life.

Fish Stocking

Fish stocking is the practice of raising fish in a hatchery and releasing them into a river, lake, or the ocean to supplement existing populations, or to create a population where none exists. Stocking may be done for the benefit of commercial, recreational, or tribal fishing, but may also be done to restore or increase a population of threatened or endangered fish in a body of water closed to fishing

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Thank You!