

MINUTES OF DECEMBER 1, 2020 COMMITTEE OF THE WHOLE MEETING
GLENCOE PARK DISTRICT
999 GREEN BAY ROAD, GLENCOE, ILLINOIS 60022

The meeting was called to order at 7:07pm and roll was called. Commissioners indicated their permission to record.

Committee Members present:

Lisa Brooks, President
Stefanie Boron, Vice President
Michael Covey, Treasurer
Josh Lutton, Commissioner
Dudley Onderdonk, Commissioner

Staff present:

Lisa Sheppard, Executive Director/Secretary
Carol Mensinger, Director of Finance/HR
Chris Leiner, Director of Parks/Maintenance
Bobby Collins, Director of Recreation/Facilities
Erin Classen, Supt. of Marketing/Communications
Jenny Runkel, Administrative Assistant

Members of the Public in attendance who signed in or spoke: Josephine Bellalta, Brandon Hinkle, John Mac Manus, Bart Schneider, Eileen Sirkin

Matters from the Public: There were no matters from the public.

Commissioner Onderdonk fixed audio issues and gave permission to record at 7:13pm.

Discussion on Kalk Park Phase II Renovation Concept: John Mac Manus and Josephine Bellalta of Altamanu, Inc. gave the presentation attached to these minutes. The presentation included existing conditions, underdrains/rain garden wetland/underground tank potential solutions, pathway lights, and basketball court fence or plantings for safety. Also suggested for a future project was to mirror Kalk Park's entrance to Veteran's Park entrance. Budget and the probability of working on the Kalk Park entrance was reviewed and discussion ensued on options.

The committee asked staff to move option 1 plans forward to the Board for approval at the December regular Board meeting. Board also directed staff to investigate if the Kalk Park entrance would affect future trail improvements the Village is considering in that area.

Discussion on Altamanu, Inc. Contract Design Services for South Overlook: Director Leiner reviewed the bond issuance funding the plans for south overlook. Upping the timeline during a very competitive bid market due to COVID-19 would be of great financial benefit to the park district. Major water transmission lines do not run under the south overlook as they did under the north overlook reducing the cost. This project would occur in early spring. Josephine and John answered committee questions.

The committee directed staff to move forward with approval of the south overlook project at the December regular Board meeting.

Discussion on Altamanu, Inc. Contract Design Services for Boating Beach

Staircase/Retaining Wall: Director Leiner explained that the stairs are now our only safe access point to the boating beach. The area in front of the water plant is not consistently available due to high water levels. A switchback ramp was discussed for ADA accessibility, if it is feasible. This project will require a structural engineer due to different soil conditions and elevation changes. The staircase must be free-standing in case the water plant changes or moves in the future. This is a high priority project as rainwater runoff took out the foundation of the stairs weeks after it was installed a year ago. The stairs are also slippery. Both stairs and ramp options as well as turning the ramp to the north to avoid the water plant and Lake Michigan water will be explored.

The committee directed staff to move forward with approval of the boating beach staircase and retaining wall project at the December regular Board meeting.

Review Changes to the Financial Policies and Procedures Manual: The first manual was created in 2017 is now updated to include two timeclock manuals and policies as well as a debt disclosure policy.

The committee directed staff to move the Financial Policies and Procedures Manual forward for approval at the December regular Board meeting.

Other Business: The Frank Lloyd Wright is project delayed due to COVID-19. The exterior should be done mid-January, but not the sidewalk and grass. Executive Director Sheppard will clarify when the fence will be removed. We have received no feedback on the timeline. Drainage will be a substantial improvement.

Adjourn to Closed Session: At 8:37pm, Commissioner Onderdonk moved to adjourn into closed session to discuss a lease as mandated by Section 2.06. 5 ILCS 120/2 (c)(5).

Commissioner Lutton seconded the motion. Roll call vote taken:

AYES: Boron, Covey, Lutton, Onderdonk, Brooks

NAYS: None

ABSENT: None

The motion passed.

Return to Open Session: Commissioner Lutton moved to return to open session at 8:56pm, Commissioner Boron seconded the motion. Roll call vote taken:

AYES: Boron, Covey, Lutton, Onderdonk, Brooks

NAYS: None

ABSENT: None

The motion passed.

There was no action taken during or after closed session.

Adjourn: Commissioner Lutton moved to adjourn the meeting at 8:56pm. Commissioner Onderdonk seconded the motion. Roll call vote taken:

AYES: Boron, Covey, Lutton, Onderdonk, Brooks

NAYS: None

ABSENT: None
The motion passed.

Respectfully submitted,

Lisa M. Sheppard
Secretary

Kalk Park
GLENCOE PARK DISTRICT

DAY OF DREAMS



Kalk Park Storm Water Solutions Concept Design

Kalk Park Presentation

1. Existing Conditions

2. Potential Solutions

Underdrains

Rain Garden/Wetland

Underground Tanks

3. Electrical

Pathway lights for the park

4. Additional Issues and Future Projects

Background : Village of Glencoe Stormwater System



Stormwater Sewer is High as it Starts its Descent



Kalk is below road elevation. Storm Water Sewer Slopes down towards the Lake. High at Kalk. Therefore issues with connecting to sewer.

Kalk Park Existing Conditions



Kalk Park Existing Conditions : Meadow Floods

The Park is 2.60 acres

The meadow is almost flat

Like most parks in Glencoe it is at a lower elevation than its surroundings

The soils are comprised of a thin layer of topsoil over clay.

There is minimal water percolation into the soil



Kalk Park Existing Conditions : Meadow Floods

“The meadow at Kalk Park over the last few years has been flooded from February, when the clay is still frozen, through June/July. During hot weather, the water heats and the heated water kills the inundated plants”.

The storm sewer slopes towards the lake and is not deep on Park Ave at Kalk Park

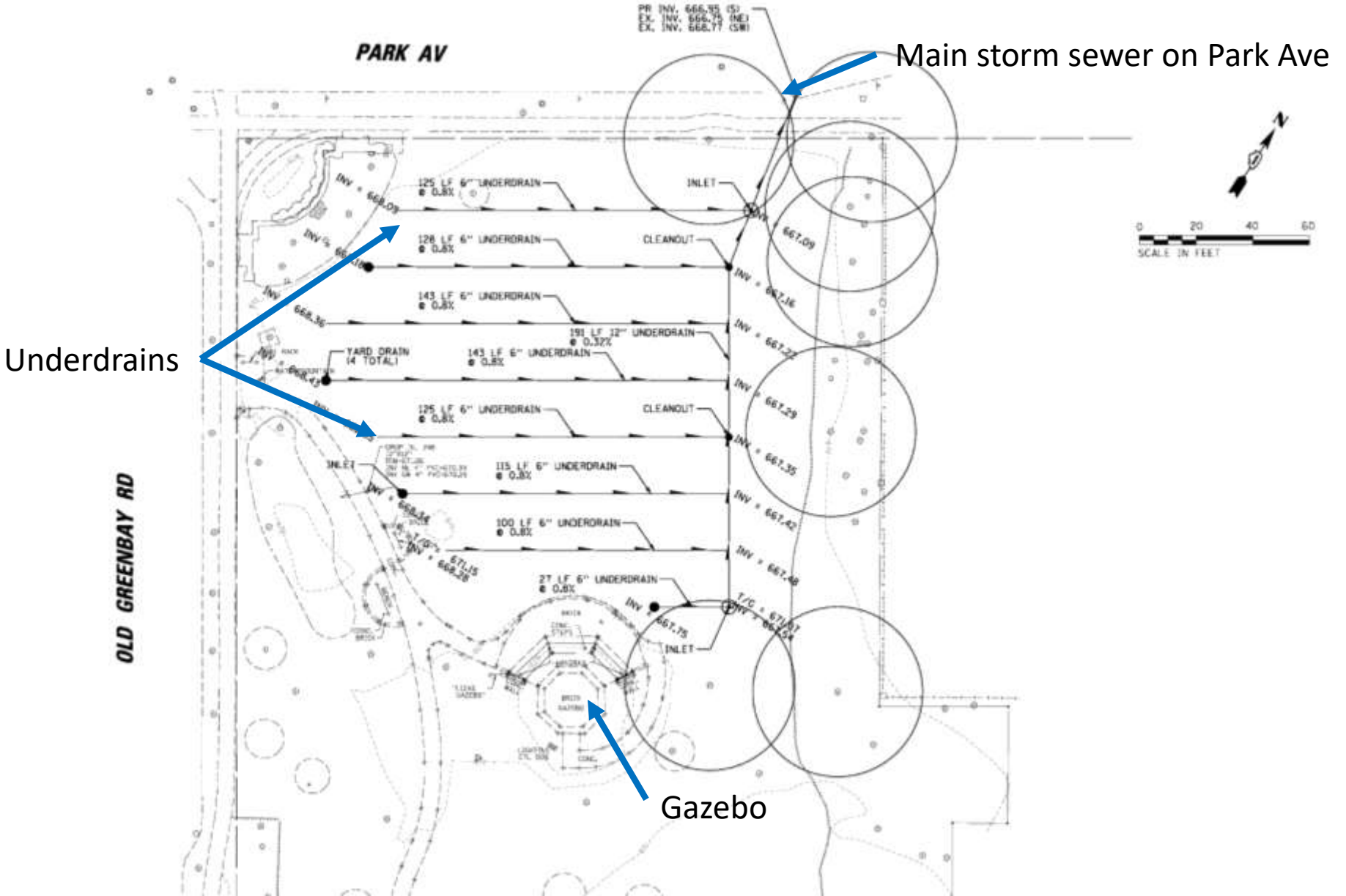


Potential Rain Garden Issues

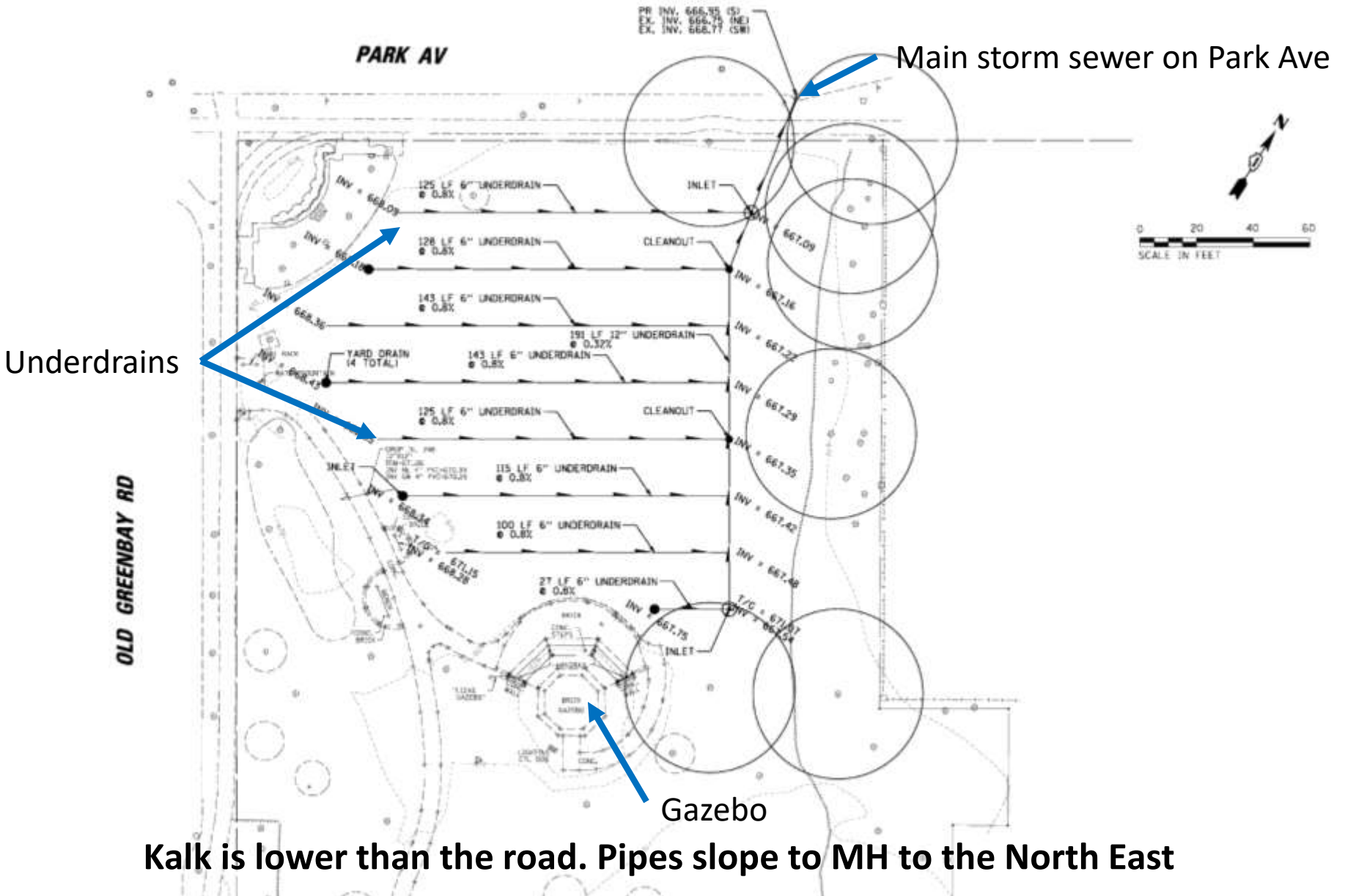
The meadow at Kalk is almost completely flat, therefore:

- There would be little sheet flow of storm water without significant regrading
- An underdrain system would be necessary

Solution 1, Underdrains to Storm Sewer



Underdrain Pipes Flow East Parallel w Storm Sewer



Underdrains

Main storm sewer on Park Ave

Gazebo

Kalk is lower than the road. Pipes slope to MH to the North East

Underdrain System Prelim Cost

Comprised of a geo-composite, prefabricated, water collection system, trench backfilled, with flexible prefabricated, composite product interconnected corrugated pipes. **(Recycled Materials)**

Pipes set in 2' of topsoil and stone then wrapped in a non-woven geotextile as a filter, free of any chemical treatment or coating and shall be inert to chemicals commonly found in soil.

“The meadow could be considered as a biofiltration basin”

Mike Kerr President CBEL

Underdrain Scheme

Preliminary Opinion of Probable Cost with 20% contingency and including all fees

Preliminary Estimate

\$311,771.00

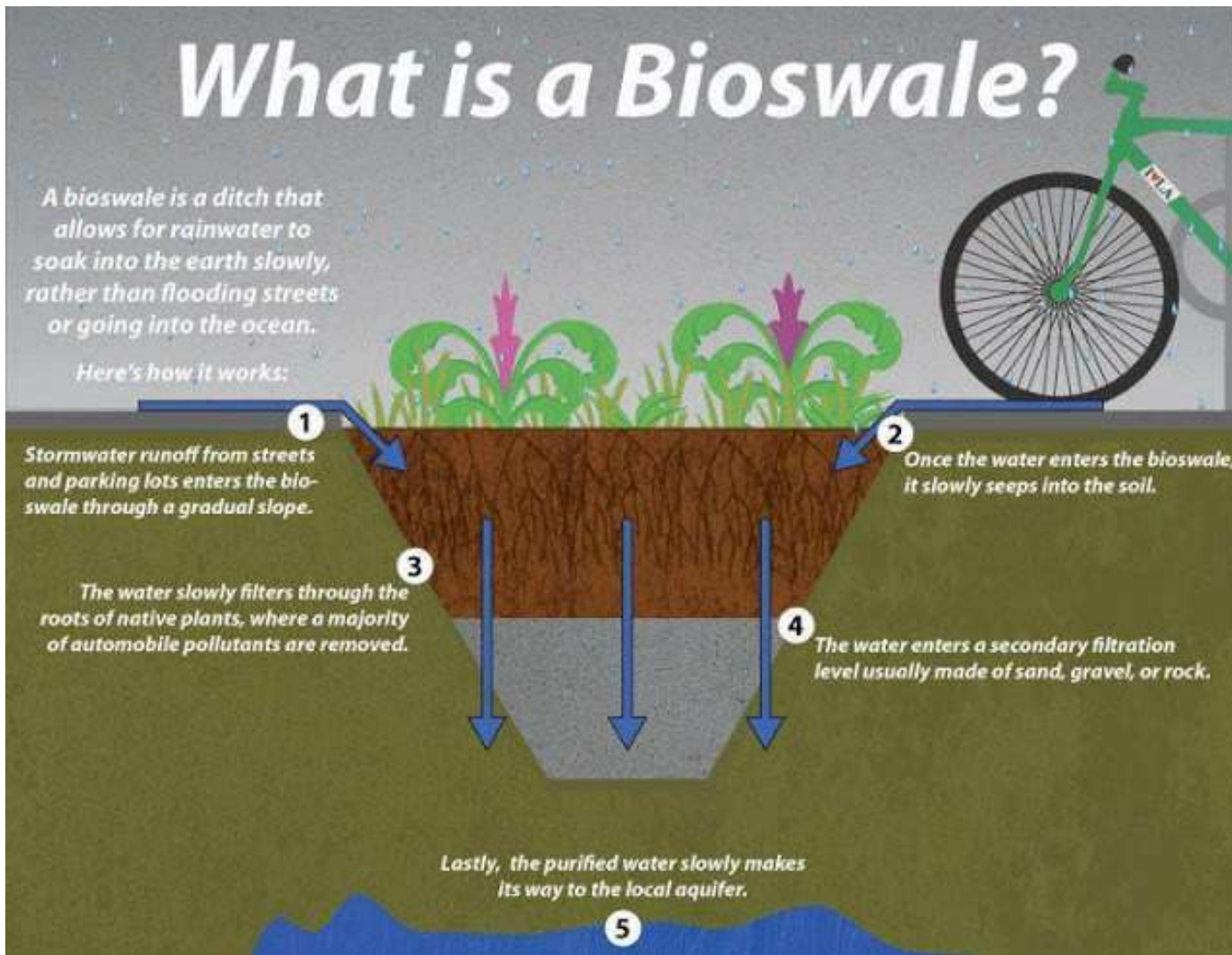
Examples Green Solutions by Altamanu



Van Vlissingen Prairie Chicago, multiple street infiltration planters and Constructed Wetland, Taylor Park Oak Park



WHAT IS A BIOSWALE



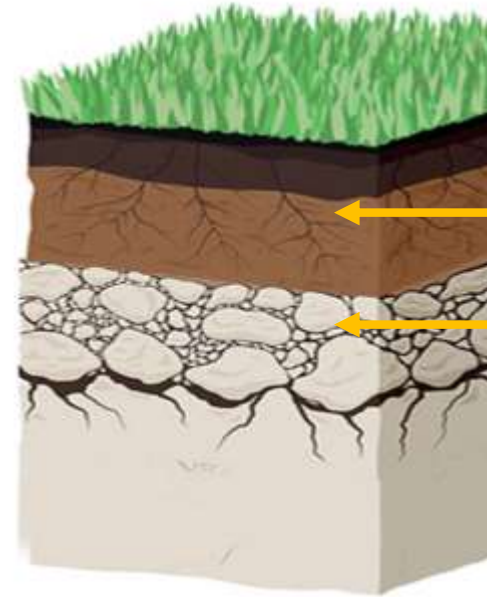
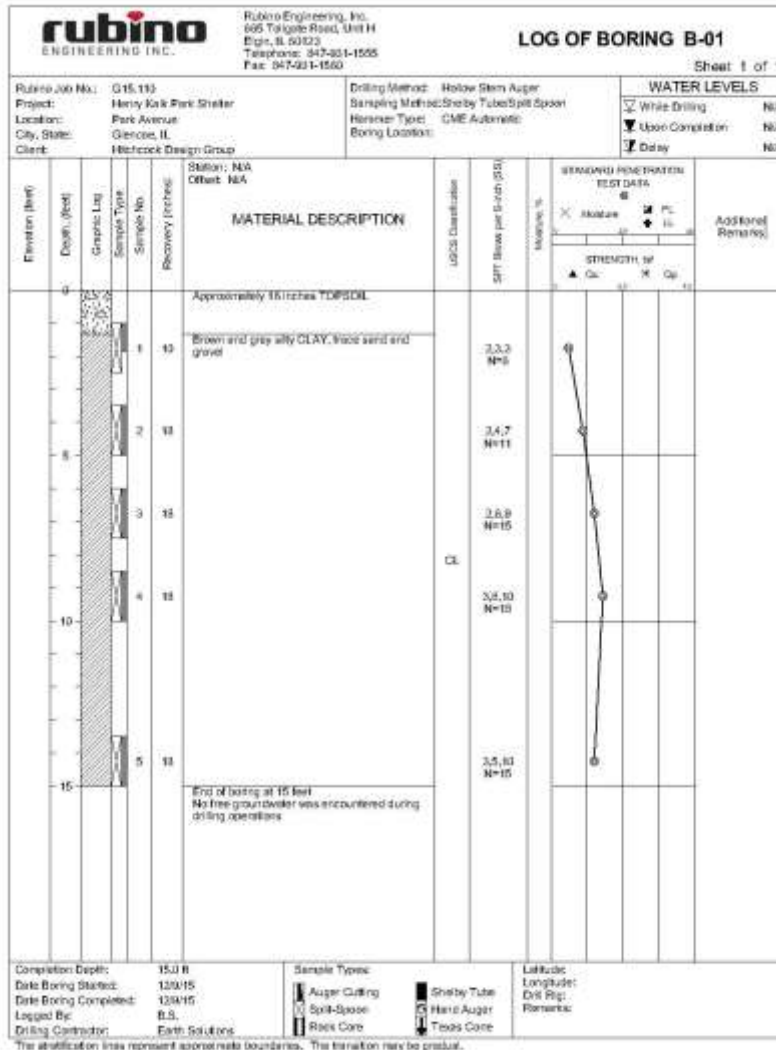
Kalk Park : Potential Rain Garden Issues

The meadow at Kalk is almost completely flat, therefore:

- There would be little sheet flow of storm water to the Bioswale
- An underdrain system would be necessary

And when the water gets to the Bioswale.....

Soil Boring and Test Results: Impenetrable Clay Soils



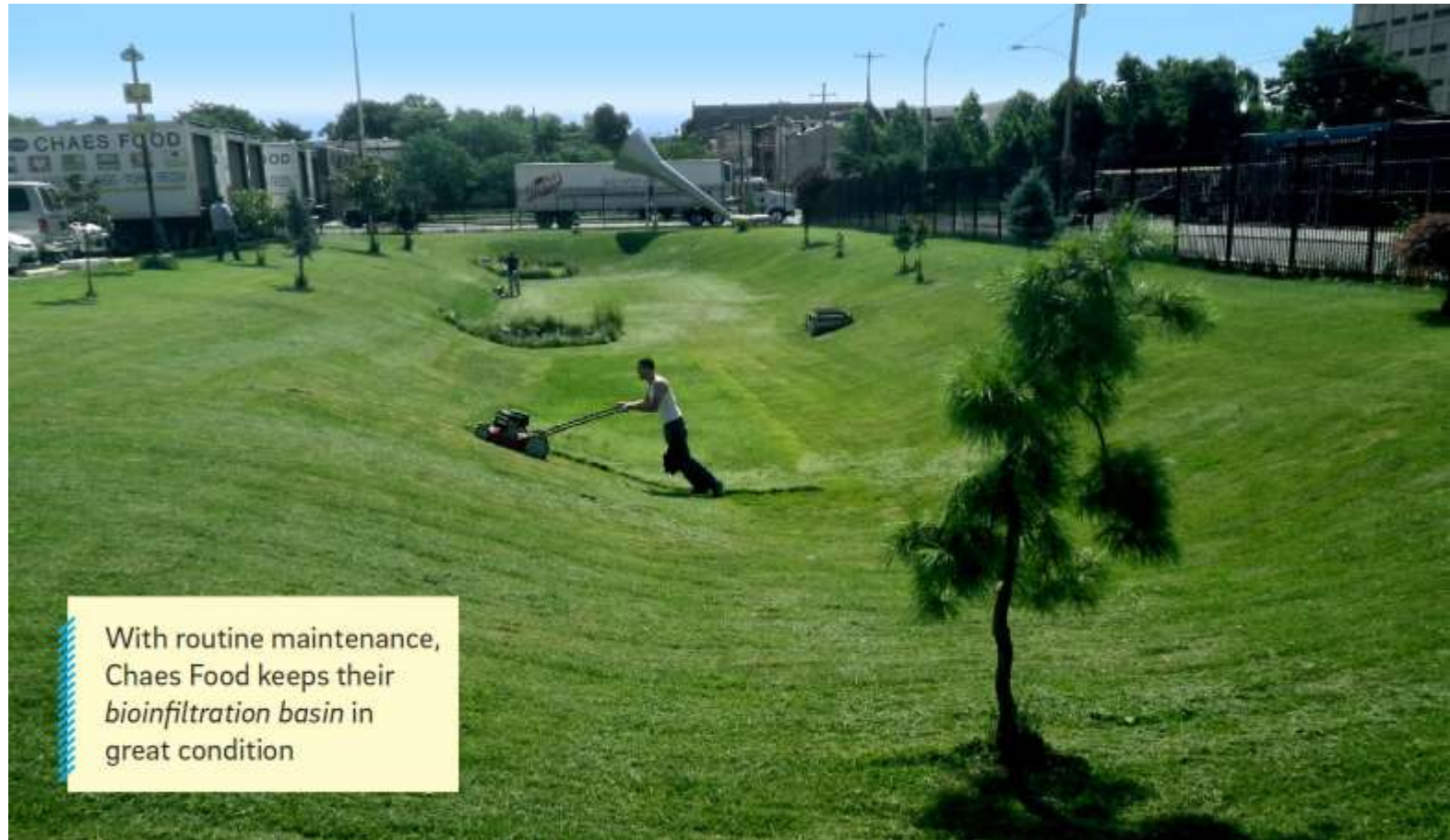
12 to 16 " of organic material and topsoil

Brown and Gray Clay

- Soils are 12" to 16" of topsoil over almost impenetrable clay soils
- After a rain event the storm water will not percolate through the soil

A Working Example Philadelphia

“The city is investing an estimated \$2.4 billion in public funds to create a citywide mosaic of green stormwater infrastructure.”



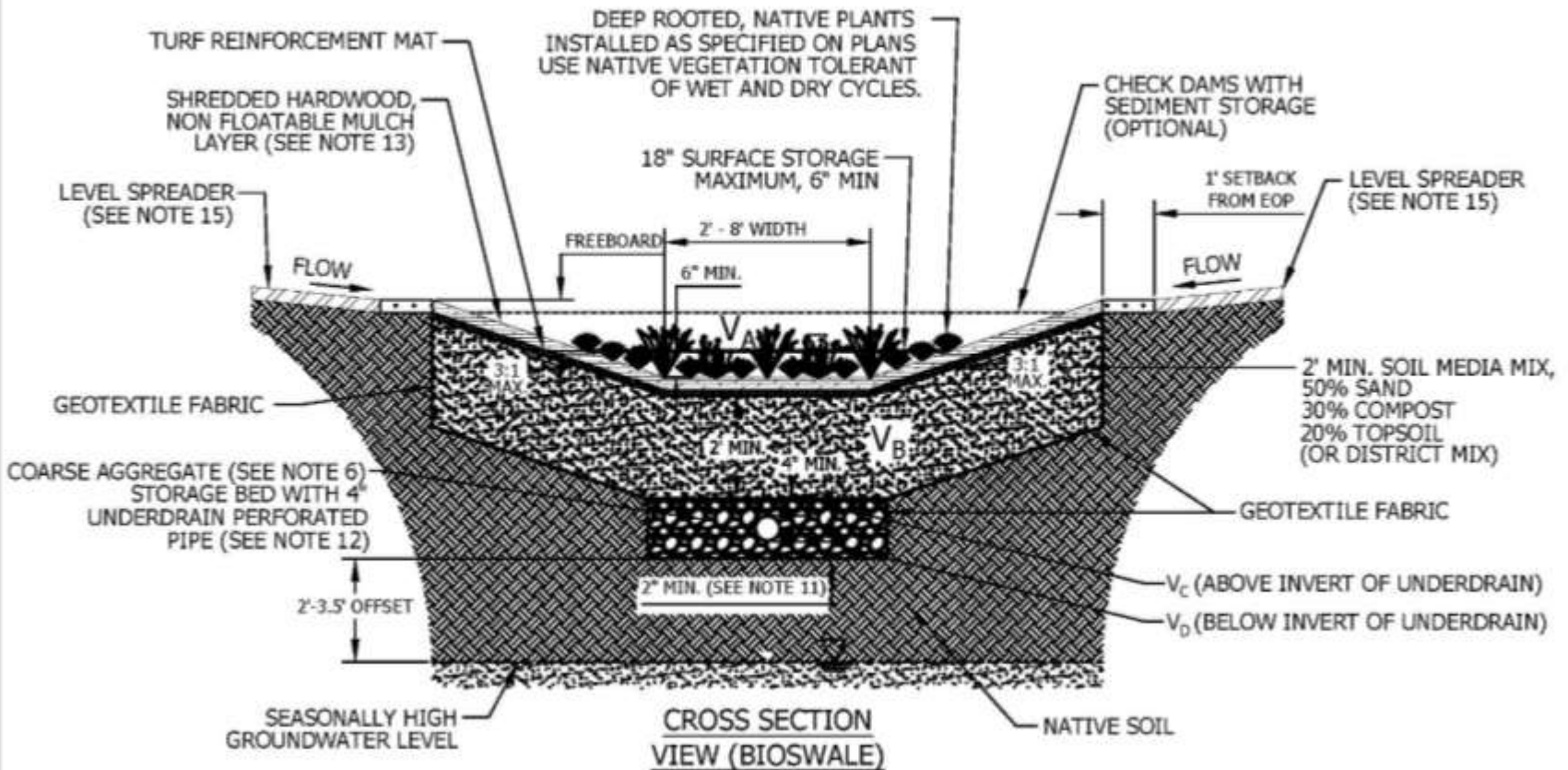
Bio-infiltration Basin Chaes Foods Philadelphia
A smaller version of this would seem ideal

Used at Kalk the Water would have nowhere to go



This basin or similar and the meadow would be flooded for a similar amount of time as today

Kalk Park : Potential Solutions Add Underdrain



Visual Translation



As the soil is almost impenetrable, we would need a pipe below to drain the swale/basin to the storm sewer on Park Avenue or Swale will Overflow

Kalk Park : Bioswale Issues at Kalk

From **Michael E. Kerr**, *President*, **Christopher B. Burke Engineering, Ltd.**

Bioswales are typically used for surface runoff which we don't have **unless we re-grade the whole park to flow east.**

To use a bioswale with the pipe underdrains we are vertically challenged.

- Our outlet at the CB is 666.5
- Even laying our N/S drain at 0.5% we'd have an upstream invert of 667.2
- The swale invert needs to be 6" (pipe diameter) + 4" (stone) + 2' (topsoil) above the invert of the pipe underdrain so about 670; see the attached typical section
- Our underdrain fingers would have to daylight at this elevation to get any benefit from the bioswale leaving us no cover as we install the underdrains from east to west

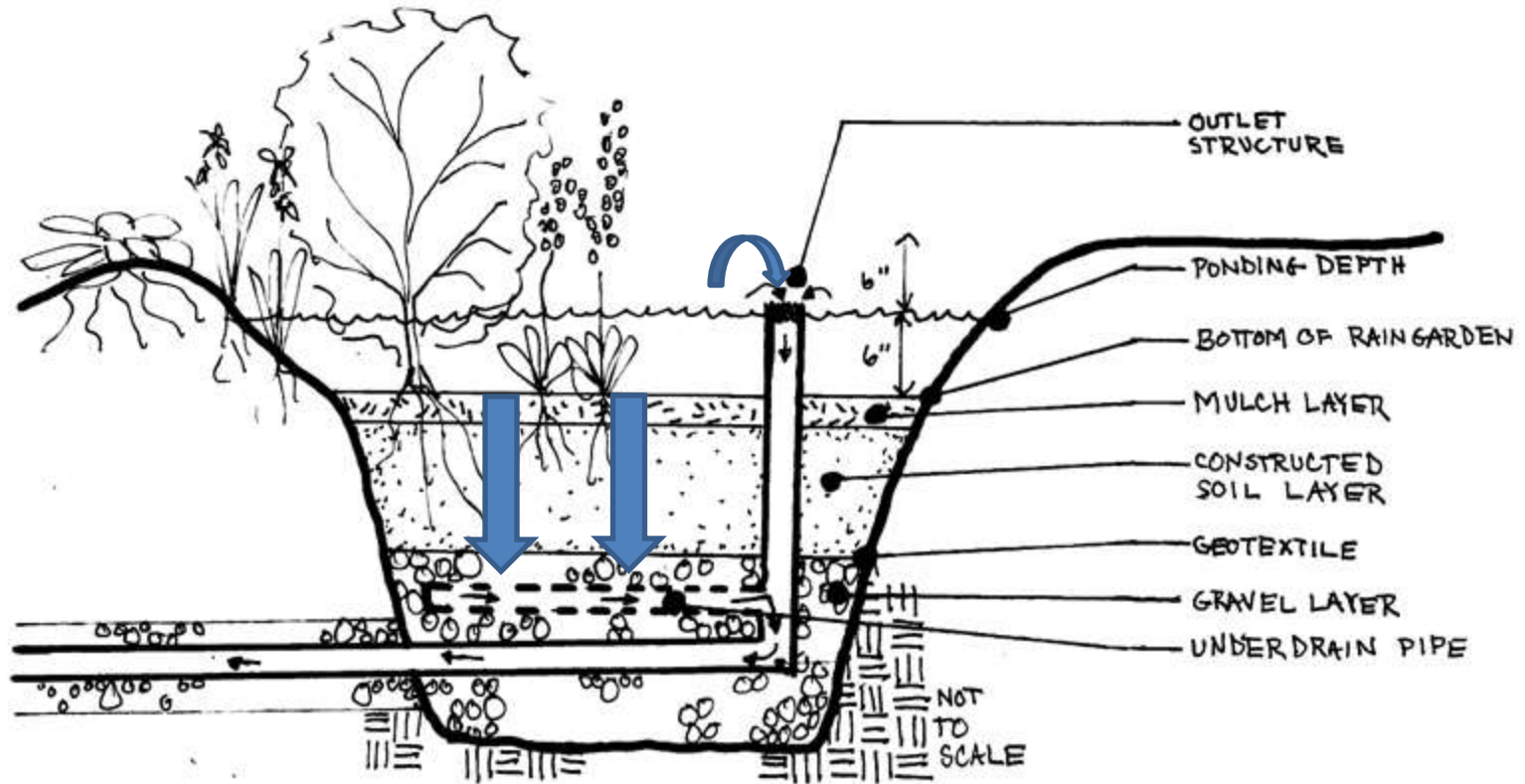
Translation.....

The Storm Sewer is High on Park Ave



Exaggerated to explain the issue

Add an Outlet/Overflow Structure



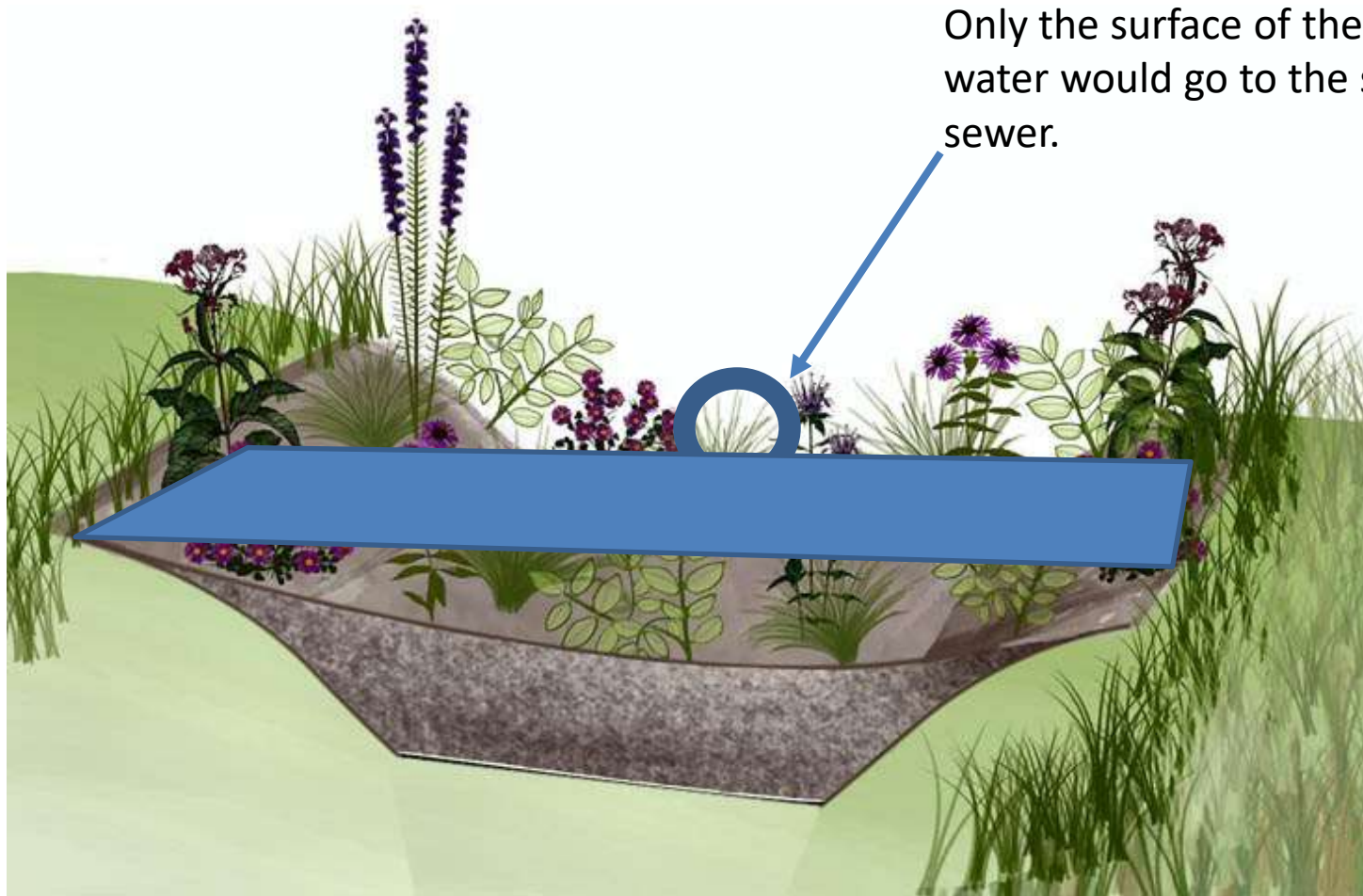
Typical Detail will not work due to Elevational Issues

Add an Overflow Directly from Bioswale



How well will this work?

Add an Overflow Directly from Bioswale



Only the surface of the storm water would go to the storm sewer.

How well will this work? Why is this an issue?

Kalk Park : Research and Testing Roadside Bioswales

North Carolina University and Ohio State University

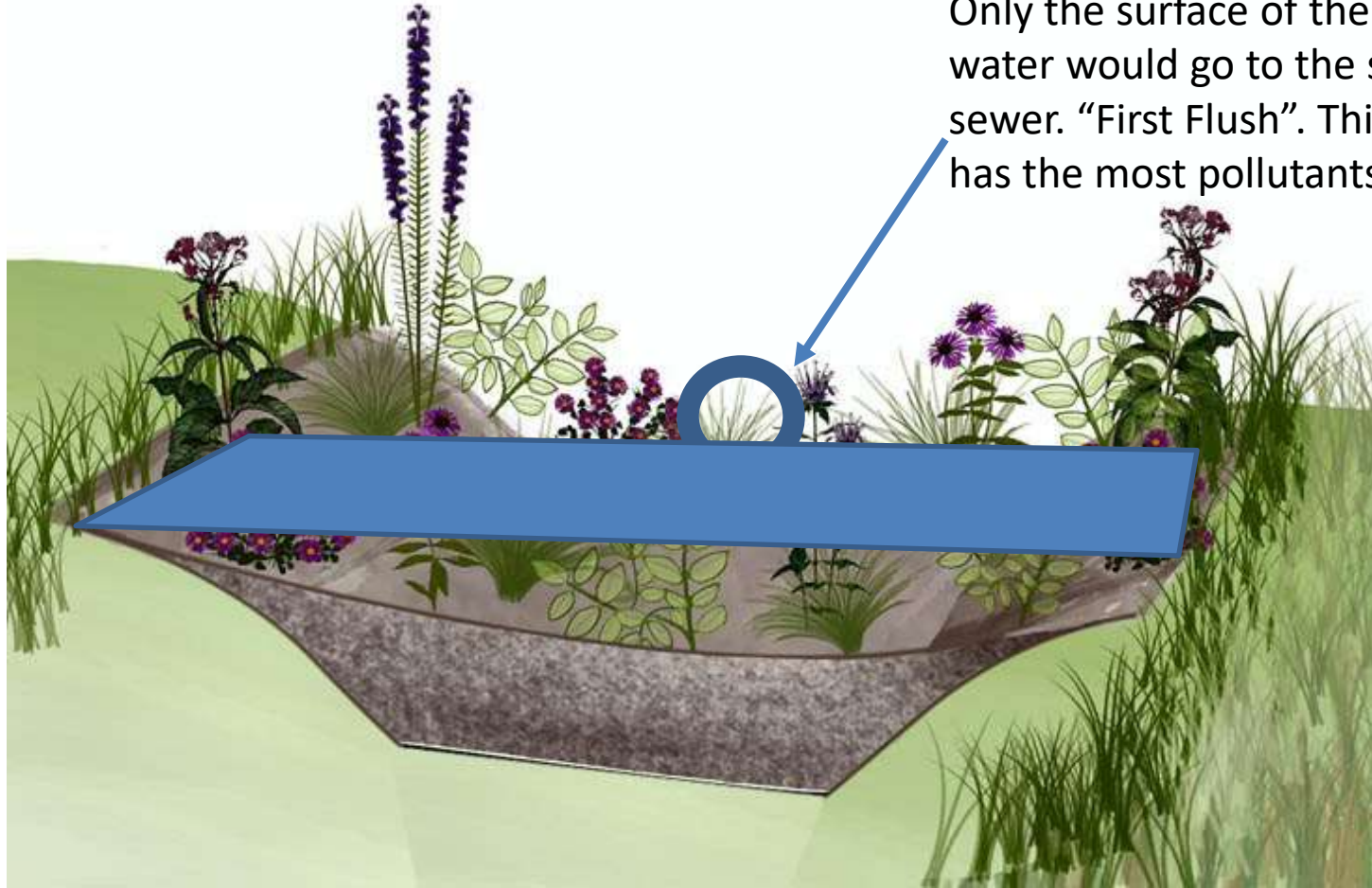
“Standard roadside vegetated swales often do not provide consistent pollutant removal. To increase infiltration and pollutant removal, bioswales are designed with an underlying soil media and an underdrain”.

When they carried out their research, they found....

“.....only the underdrain effluent concentrations were below the North Carolina's high quality water limit of 20 mg/L. perhaps due to a first flush of bacteria which was treated by the soil media”.

(Soil at Kalk can act as filter)

Translation



Only the surface of the storm water would go to the storm sewer. "First Flush". This water has the most pollutants

Habitat at Taylor Park



The constructed wetland at Taylor overflows into the combined sewer during and after major rain events. However it does provide habitat for insects and birds and creates interest for the park visitor



We Continued to Examine a Green Solution



Potential Rain Garden Issues

The meadow at Kalk is almost completely flat, therefore:

- There would be little sheet flow of storm water to the rain garden
- An underdrain system would be necessary
- An overflow to the storm sewer would not guarantee cleaner water

Potential Solutions

1. Add an overflow structure from rain garden to the main storm sewer on Park Ave

The underdrain system would be replicated to drain the meadow. During and after major rain events the storm water will fill the rain garden and overflow to the main storm sewer. An overflow structure would be an add on not included in the cost of the underdrain system.

2. Excavate to a level that can detain the storm water

This would be a major increase in cost. The depth of the facility will increase dramatically. Soil would have to be either taken off site or major regrading/redesign of the site would be necessary.

3. Expand the size of the rain garden

If the disturbance passes 0.5 acres MWRD requirements kick-in and a large area of the meadow would be used for detention.

Preliminary Cost Comparison

Underdrain Scheme

Preliminary Opinion of Probable Cost with 20% contingency

Preliminary Estimate \$311,771.00

Rain Garden/Wetland Scheme

Preliminary Opinion of Probable Cost with 20% contingency

Preliminary Estimate \$397,931.00

Includes overflow structure to main storm sewer

Examination of Cost of Maintenance

COSTS OF MAINTENANCE UNDER AVERAGE SPOIL CONDITIONS

CONSTRUCTED WETLANDS

BIOSWALE

RAIN GARDEN
(MORE COMPLEX)

BIOINFILTRATION BASIN
(MOWING GRASS)

UNDERDRAINS



Evaluation

The Underdrain System will deal with the stormwater issues. “I would suggest that our underdrains provide water quality benefit as they are placed in 2’ of topsoil surrounded by stone (much like a bioswale).

“The meadow (with underdrains) could be considered as a biofiltration basin”

Mike Kerr President CBBEL

The green solutions investigated do not significantly improve the removal of pollutants in this case due to the various constraints at Kalk Park.

The underdrain system is the least expensive to maintain due to the conditions at Kalk.

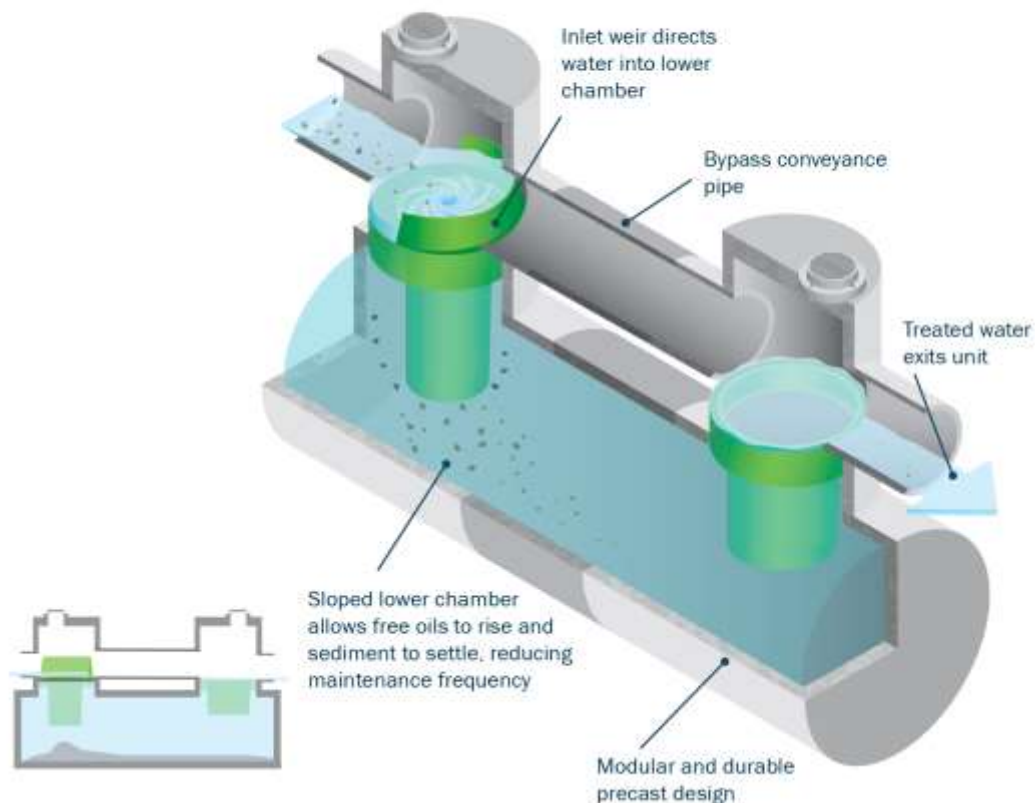
The green solutions could provide visual appeal and habitat. However, Park District Staff stated that Kalk Park is a downtown park that is expected to be intensively used not as a habitat exhibit. Other suitable locations could be found for that.

We could also add a “stormceptor” or other water quality device between the underdrain system and the CB; this would improve the quality of water leaving the site but would need to be maintained.

Two Additional Schemes

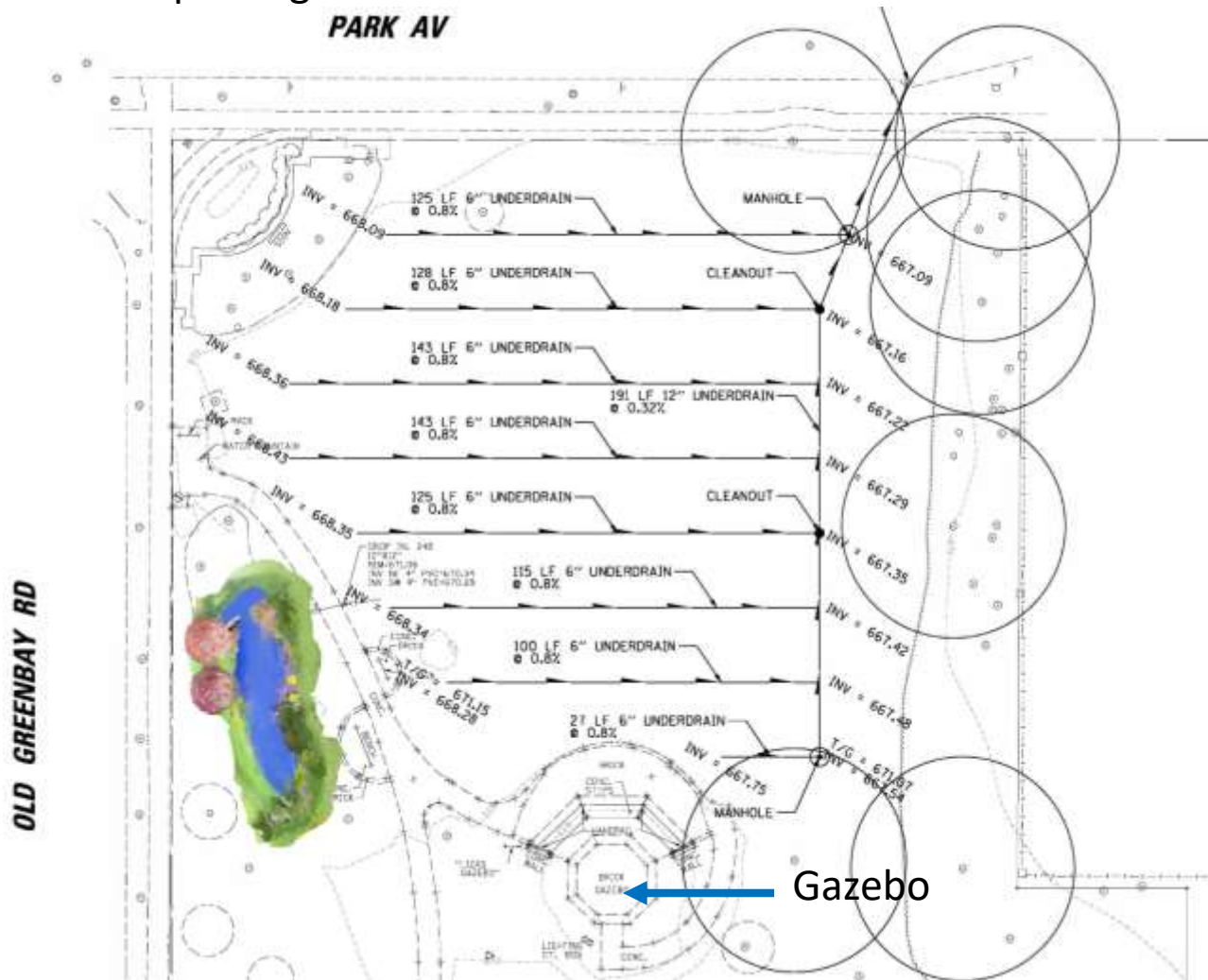
1. We could also add a stormceptor or other water quality device between the underdrain system and the CB; this would improve water quality of water leaving the site but would need to be maintained.

*Stormceptor*MAX[®]



Two Additional Schemes

2. There is a low point of the west side of the path through the park. We could add, in addition to the underdrain system, a small rain garden at this low point. Overflow could be directed into the parking lot to the west.



Underground Storage

The design team did not investigate the use of underground storage due to the following:

- Cost of excavation and haul-off of soil
- Need for an underdrain system to drain water to tanks
- Need for pumps and improved irrigation system

Kalk Park : Proposed Lights “The Ashbery”



Traditional Look with
Contemporary Technology

Kalk Park : Proposed Lights “The Ashbery”



Traditional and Contemporary

Kalk Park : Proposed Lights “The Ashbery”

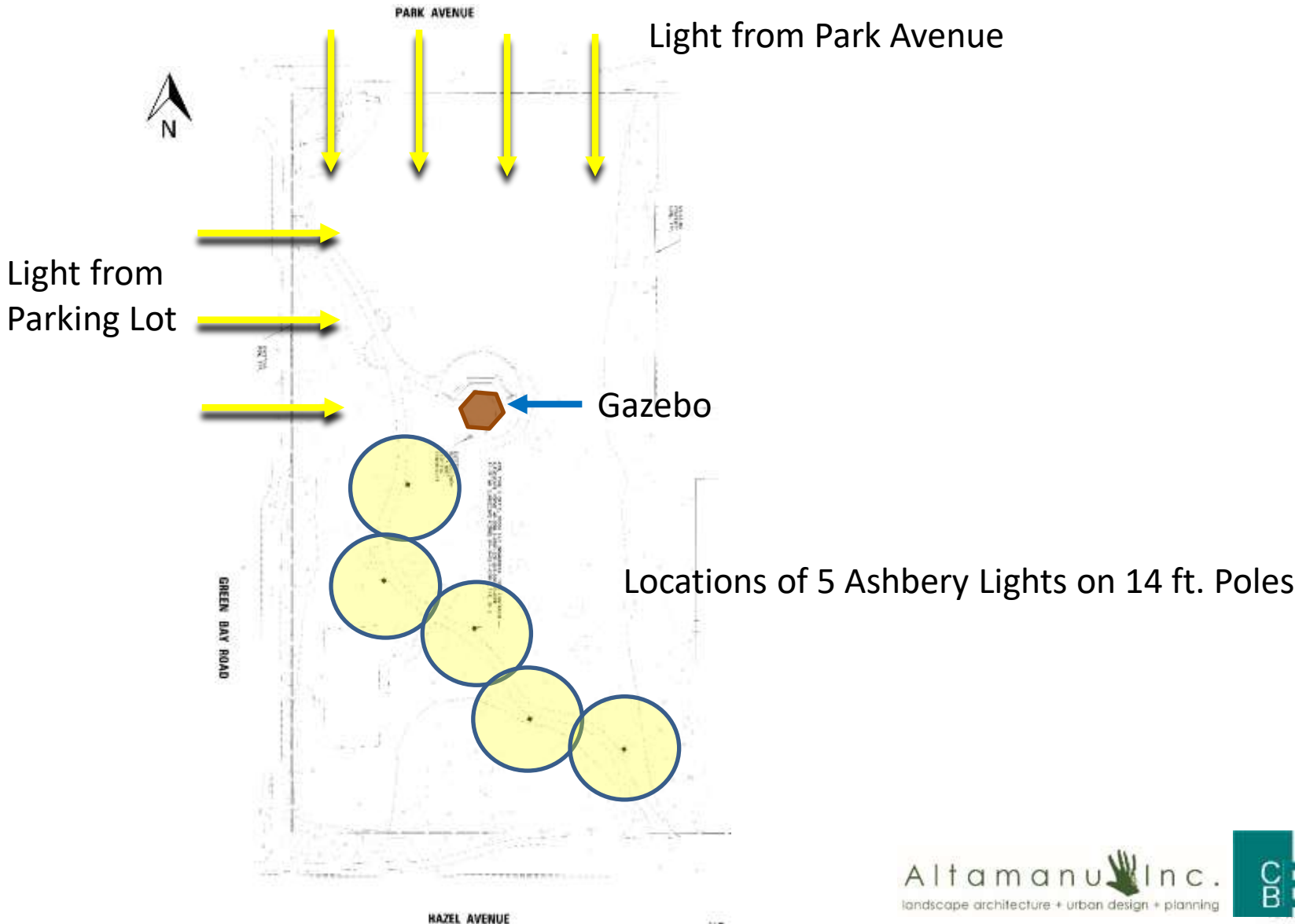
LED technology and optics with an homage to traditional-style lights

Glare control requires less eye adaptation, enabling lower light levels **and lower energy use** with excellent visual acuity

Practical with tenon-mounted luminaires can be retrofitted in the field.

Dark Sky Compliant: The light fixture is designed to direct light to the ground, not up into the sky where it can contribute to light pollution.

Proposed Location of 5 Lights on 14ft Poles



Kalk Park : Sustainable Solutions

- Native Plants will be added to the Park and Planting Beds
- Recycled materials will be used in the drainage system
- Dark Sky Compliant light fixtures, designed to direct light to the ground, not up into the sky where it can contribute to light pollution.
- LED lights and optics with glare control, lower light levels and lower energy use

Kalk Park Existing Conditions : Basketball Court



Currently there is no barrier on the west side of the court. Balls drop down into the parking lot or along the path to Hazel Avenue. A 6 ft. high black chain link fence is proposed to minimize this. A taller fence would require a variance from the Village.

Kalk Park : Sight Line Issues at N. W. Corner



Conflict Point: Sight Line Issue at Bike Path

Remove Tall Planting and Redesign Beds

Altamanu Inc.
landscape architecture + urban design + planning





Very long-Term: The Proposed Plaza at Memorial Park. Potential to create a similar plaza at Kalk Park and create a Symmetric Gateway



Thank You

Altamanu.com