Village of Mount Prospect
Committee of the Whole
Meeting Agenda
50 S. Emerson St. Mount Prospect, IL 60056

January 23, 2024	Village Hall - 3rd Floor Board Room	7:00 PM

1. **CALL TO ORDER**
2. **CITIZENS TO BE HEARD**
3. **DISCUSSION ITEMS**
   - 3.1. Fairview Gardens Sewer Improvements
4. **VILLAGE MANAGER'S REPORT**
   - 4.1. As submitted
5. **ANY OTHER BUSINESS**
6. **ADJOURNMENT**

ANY INDIVIDUAL WHO WOULD LIKE TO ATTEND THIS MEETING BUT BECAUSE OF A DISABILITY OR NEEDS SOME ACCOMMODATION TO PARTICIPATE, SHOULD CONTACT THE VILLAGE MANAGER'S OFFICE AT 847/392-6000, EXTENSION 5327

Item Cover Page

Subject	**Fairview Gardens Sewer Improvements**
Meeting	January 23, 2024 - MEETING OF THE MOUNT PROSPECT COMMITTEE OF THE WHOLE
Fiscal Impact (Y/N)	Y
Dollar Amount	$2,000,000.00
Budget Source	American Rescue Plan Grant & General Fund
Category	DISCUSSION ITEMS
Type	Presentation

Information

On November 7, 2023, the Village Board awarded a contract to the Ciorba Group of Chicago, Illinois, to provide design and construction engineering services for a new gravity outfall from the Fairview Gardens sanitary sewer system to the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) interceptor sewer system.

This solution to the Fairview Gardens sanitary sewer sub-basin clear water inflow problem proposes a gravity sewer outlet concept that would eliminate the existing lift station and create a new connection to the MWRDGC Upper Des Plaines Intercepting Sewer 14A at an existing MWRDGC drop manhole. The new connection will be located at the northwest corner of Central Road and Wolf Road, in Des Plaines. The proposed gravity outfall includes the extension of a 12" sanitary sewer from the existing lift station wet well to the drop manhole at Intercepting Sewer 14A as shown in **Figure 1** (attached).

The capacity of this proposed 12" sanitary sewer is approximately 950 gallons per minute (GPM) at 95% full. A comparison of this capacity to other studied capacities in the system is provided in **Table 1**.

Table 1: Gravity Outfall Capacity Comparison

Comparison	Flow Rate (gpm)	Gravity Outfall % of Compared Flow	Notes
Existing Lift Station – 1 Pump Running	725	131%	The gravity outlet has 31% more capacity than the current standard lift station, operating with 1 pump running (the most common condition).

Existing Lift Station – 2 Pumps Running	1,040	91%	The gravity outlet has only 9% less capacity than the current lift station when both main pumps are running.
Existing Lift Station – 3 Pumps Running	1,150	83%	The gravity outlet has 17% less capacity than the current lift station when all 3 pumps are running. This condition very rarely occurs.
New Lift Station Capacity Allowed by Permit	369	257%	The new gravity sewer would have 2.6 times more capacity than a new reconstructed lift station.

In summary, a new gravity sewer outfall could essentially mimic the discharge capacity of the existing sewer pump station that serves the Fairview Gardens neighborhood.

Staff has received preliminary approval from MWRDGC to construct this new outfall and remove the existing pump station. The new gravity sewer outfall will be completed and in service by summer 2024.

The estimated cost of construction is $2,410,000. This estimate includes the cost of removing the existing pump station. Sufficient funds for this proposed expenditure have been allocated in the 2024 budget (Water/Sewer Enterprise Fund).

Private Property Improvements Required

However, in a letter granting conceptual approval of this idea, the MWRDGC reiterated its requirement to continue removing clear water inflow from private property sources:

"The WMO (Watershed Management Ordinance) permit for this project will include a Special Condition stating that the permit is contingent on the Village enacting a program under which all homes in the service basin of the Fairview Gardens lift station that have inflow sources connected to the sanitary system will disconnect those sources. Such sources will be disconnected no later than the first date upon which ownership of the property is transferred following the issuance of the WMO permit."

Staff proposes to satisfy this requirement by requiring homes tributary to the Fairview Gardens sanitary sewer sub-basin to successfully complete a clear water inflow inspection prior to the issuance of a property transfer stamp. This requirement will be established by local ordinance at a future Village Board meeting.

Discussion

Proposed Funding for Private Property Improvements

Approximately 95 homes in the sub-basin have clear water inflow problems. To help affected homeowners mitigate the cost of fixing these problems, staff proposes a direct grant program of $25,000 per home and a total program cap of $2 million. This level of funding will pay for plumbing improvements for 80 of 95 affected homes (assuming each homeowner utilizes the $25,000 maximum/home).

Funds will be dispersed on a first come, first served basis until exhausted. Potentially, this could result in as many as 15 homeowners bearing the full cost of their improvements.

The recently completed Lowden Lane pilot project revealed that the total average cost to eliminate clear water inflow from a single-family house was $33,000. However, that cost included complete restoration, such as drywall replacement, floor covering replacement, and painting. In addition, the cost also includes any electric service upgrades necessary to add a sump pump.

The average cost per home for the required plumbing work only was $26,000. This scope of work is limited to installing a sump pump, disconnecting exterior footing tile drains, backfilling excavations, and repairing a concrete floor trench. It does not include replacing floor or wall treatments, and it does not include the cost of electrical service upgrades.

Staff proposes to limit eligible grant funding to required plumbing work only. This caveat would allow $2 million in found funds to pay for most work necessary to eliminate clear water inflow in the Fairview Gardens sanitary sewer sub-basin.

Proposed Sources of Funds
$900,000 worth of funding for this program could be drawn from unspent American Rescue Plan (ARP) money.

Mount Prospect received $7.0 million from the ARP. Subsequently, the Village Board allotted $5.3 million of this grant towards an Emergency Water System Interconnection with the Northwest Water Commission.

The remaining $1.7 million was assigned to the Human Services Department and Community Development Department for various programs. Human Services and Community Development have used $359,913 from the American Rescue Plan. Based on recent estimates, they may spend an additional $466,200. That leaves the Village with an unspent American Rescue Plan award totaling $900,000.

The Village must spend the remaining $900,000 in the American Rescue Plan by December 2024. However, per the new rules issued for the Coronavirus State and Local Fiscal Recovery Funds (SLFRF), a community with an ARP grant of less than $10 million can opt for a standard deduction and use the amount as it wishes except for the reduction of property taxes, pension payment, and debt obligations. Water and sewer projects are eligible items on which the American Rescue Plan dollars can be spent.

The remaining $1.1 million can be sourced from the General Fund after the initial $900,000 runs out. Not all $1.1 million will be available at once. Staff anticipates that the General Fund can incrementally fund $1.1 million over the course of several years (i.e., 2024-2027).

In addition, any unspent funds from the gravity outfall sewer project can also be reallocated towards private property improvements.

Funding for private property improvements is neither budgeted in the current Community

Investment Plan (CIP) nor included in the most recent water and sewer rate study. Consequently, funding this project utilizing the Water and Sewer Enterprise Fund could burden the fund and result in a higher future rate increase.

Alternatives

1. Create a $2 million direct grant program for private property sewer improvements to reduce clear water inflow in the Fairview Gardens sanitary sewer sub-basin. The maximum grant award is $25,000 per home.
2. Action at the discretion of the Village Board.

Staff Recommendation

Staff recommends that the Fairview Gardens Sanitary Sewer Lift Station and Clear Water Inflow Problem be resolved by constructing a new gravity outfall connection to the MWRDGC interceptor on Wolf Road.

Staff also recommends establishing a $2 million fund to distribute a maximum of $25,000 grant per eligible home for the elimination of private sector clear water inflow.

If implemented, this solution would provide a sanitary sewer discharge capacity that essentially replaces the existing sewer pump station, and it would also be the most cost-effective of available alternatives. Table 2 below summarizes estimated costs:

Table 2: Alternatives Cost Comparisons

Alternative	Cost Estimate
Inline Pipe Relief Storage	$8,686,000
Underground Relief Storage (St. Emily)	$5,638,000
Underground Relief Storage (Bluett Park)	$4,597,750
Gravity Outfall & $2M Private Property Fund	$4,410,000*

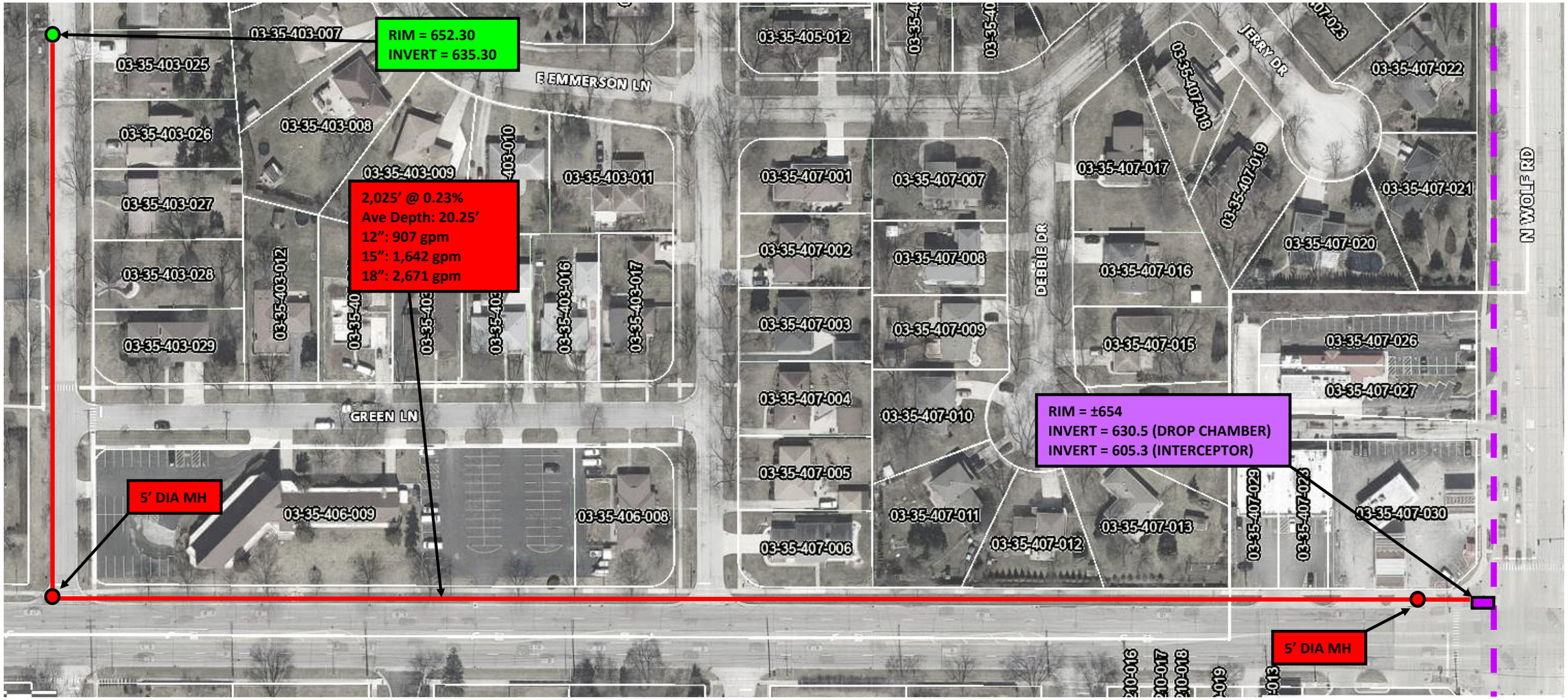
**$2,410,000 for new gravity sewer outfall connection to MWRDGC and removal of existing sewer pump station + $2,000,000 for private property sewer upgrades = $4,410,000.*

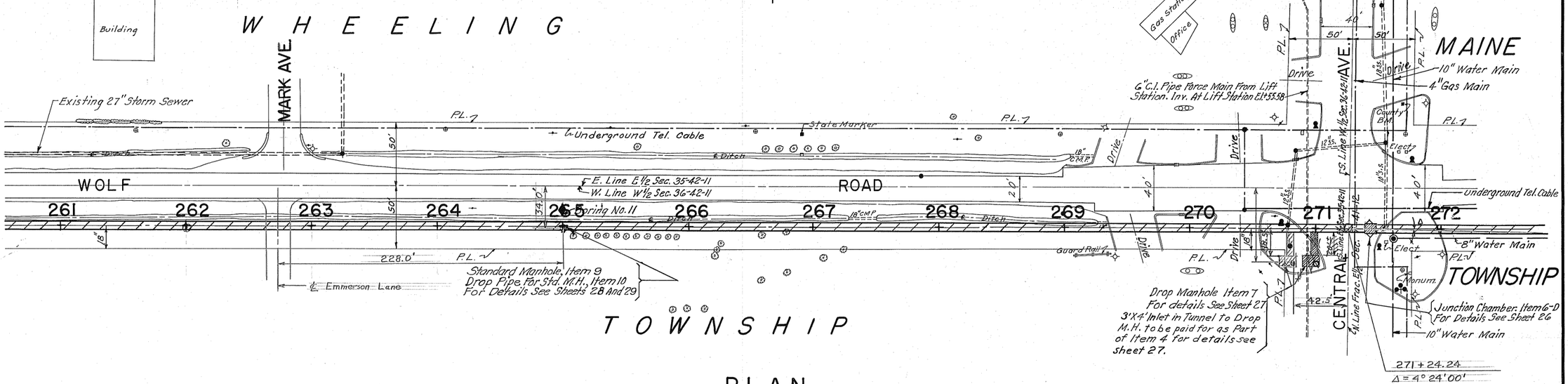
Public Works staff will be available at the January 16 Committee of the Whole meeting to present this proposal to the Village Board and facilitate discussion.

Attachments

1. FIGURE 1 - FAIRVIEW GARDENS GRAVITY OUTFALL CONCEPT

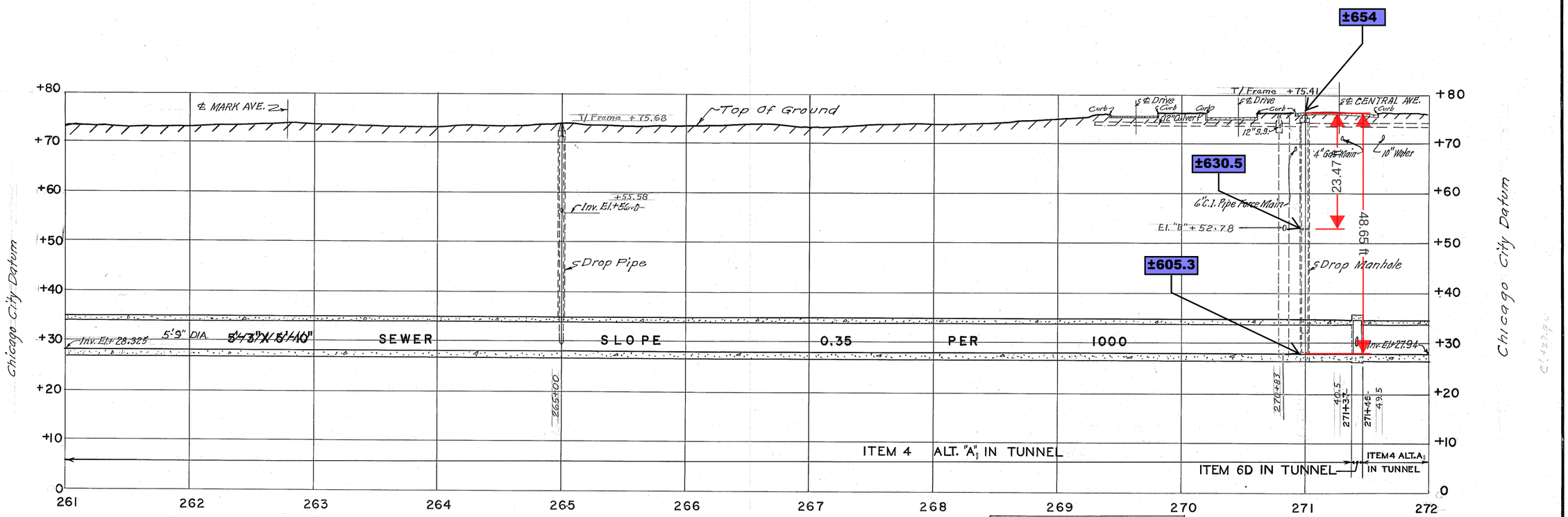
FIGURE 1: FAIRVIEW GARDENS SANITARY SEWER GRAVITY OUTFALL CONCEPT





PLAN

STA. 261+00 TO STA. 272+00



PROFILE

STA. 261+00 TO STA. 272+00

Plan: 1" = 40'-0"

Profile { Hor. 1" = 40'-0" / Vert. 1" = 10'-0"

REVISION OF PLAN		
DATE	DESCRIPTION	BY
2-1-63	Drop M.H. relocated 20' West, at Sta. 271+00	L.Z.

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO
APPROVED
JAN 17 1963
AS WORKING PLAN.
ENGINEERING DEPT. SEWER SECTION

BUILT AS SHOWN, EXCEPT AS NOTED
J. J. coughlin
PROJECT ENGINEER

Correct ..... Engr. of Sewer Design
Approved ..... Assistant Chief Engineer
Approved ..... Deputy Chief Engineer
Approved ..... Chief Engineer

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

UPPER DES PLAINES INTERCEPTING SEWER

CONTRACT NO. 14 - A

PLAN AND PROFILE

DRAWN BY M. Yrankin
TRACED BY P. De Salvo
CHECKED BY J. Mirza

Note "A" on Sheet No. 23 applies to this Sheet.

DECEMBER 1962