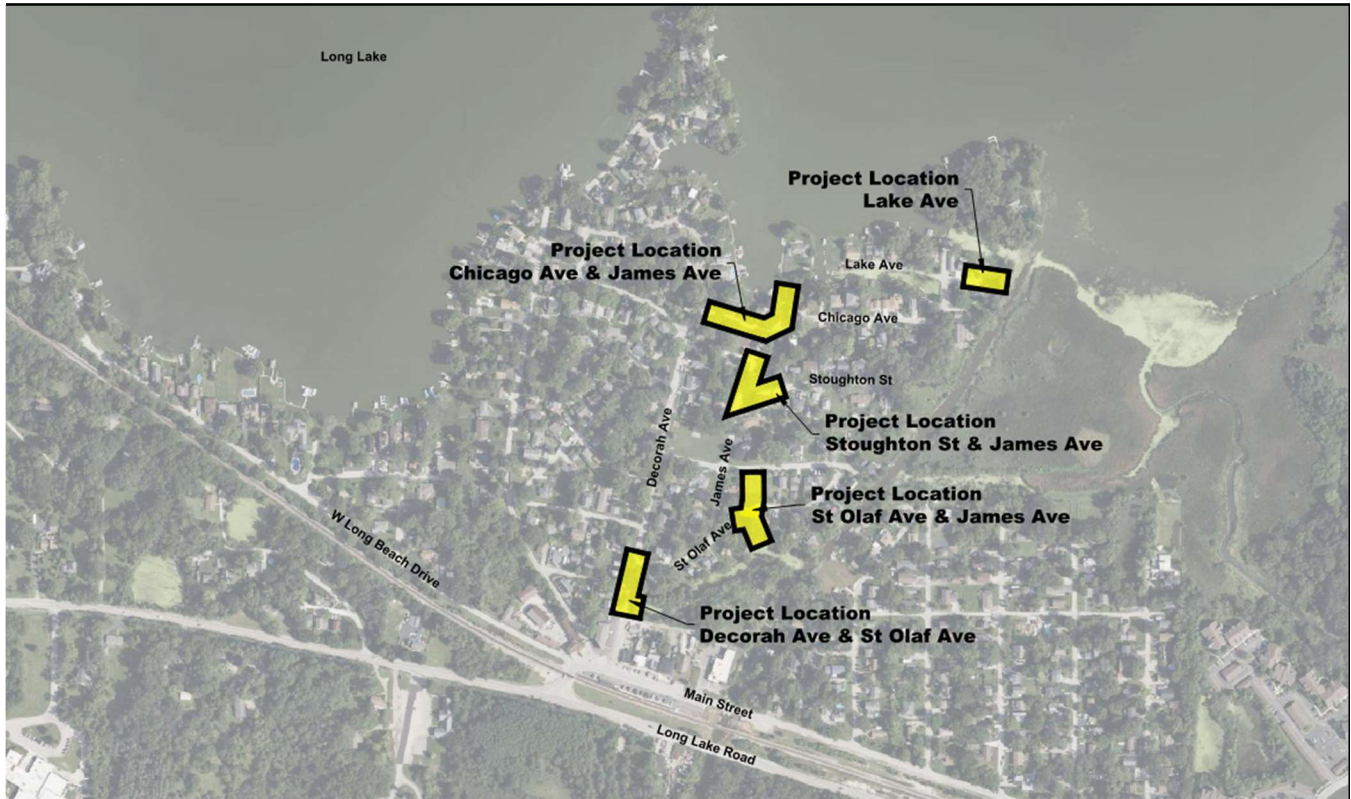


GRANT TOWNSHIP SOUTH SHORE LONG LAKE DRAINAGE IMPROVEMENTS SIRF GRANT SUBMITTAL



Applicant:

Grant Township Highway Department
26535 Molidor Road
Ingleside, IL 60041



Consultant:

Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive
Vernon Hills, IL 60061



September 13, 2024

Mr. Kurt Woolford, Executive Director
Lake County Stormwater Management Commission
500 W. Winchester Road, Suite 201
Libertyville, IL 60048

Re: SIRF Projects FY2025
Grant Township South Shore Long Lake Drainage Improvements
Unincorporated Grant Township

Dear Mr. Woolford:

On behalf of the Grant Township Highway Department, we are pleased to submit the enclosed project proposal for consideration of grant funding from the Lake County Watershed Management Board. The project is located within the Fox River Watershed. The following items are included for your review:

- SIRF Grant Application, Signed
- SIRF Grant Statement of Compliance, Signed
- Location Map
- Concept Exhibit
- Project Schedule
- Engineer's Opinion of Probable Cost

Project Description

The proposed stormwater improvements are located in unincorporated Grant Township within the Fox River Watershed. There are 5 locations just south of Long Lake that are currently experiencing flooding problems. The 5 locations will either be constructed as one project or broken out into phases depending on construction cost. The flooding at these locations floods homes causing structural damage and also presents a hazard for both vehicles and pedestrians, obstructing access to the area, including for emergency vehicles. The proposed project includes grading new swales and installing a new storm sewers designed to mitigate the current flooding issues. The project aims to improve stormwater conveyance, reduce flood risk, and enhance safety for residents and vehicles in the area.

The 5 project locations are:

1. Decorah Avenue and St Olaf Avenue
In the existing condition, the intersection floods along with the adjacent single-family-home yards. The existing grading at the intersection creates a bowl situation with no existing storm sewer to drain it. A 10-yr storm sewer is proposed to drain the intersection of Decorah Avenue and St Olaf Avenue and transport the stormwater to Long Lake. Proposed catch basins will protect downstream water quality.
2. St Olaf Avenue and James Avenue
In the existing condition, 34841 James Avenue floods often due to bowl-like nature of the area's grading with no existing storm sewer to drain it until it overflows over St Olaf Avenue to Long Lake. This home also has a basement door at ground elevation which then leads to repeated basement flooding and structural damage. A 100-yr storm sewer and swale are proposed to drain the 'bowl' to Long Lake. A proposed catch basin will protect downstream water quality. 34855 James Avenue also experiences flooding problems due to a large area sloping towards the home. A new swale is proposed to intercept stormwater before it reaches 34855 James Avenue.

3. Stoughton Street and James Avenue

In the existing condition, stormwater runs down James Avenue and repeatedly floods 25278 Stoughton Street before overflow over Stoughton Street to Long Lake. A 10-year storm sewer is proposed to collect the stormwater before it reaches 25278 Stoughton Street and transport it to Long Lake. Proposed catch basins will protect downstream water quality.

4. Chicago Avenue and James Avenue

In the existing condition, stormwater flows from Rockford Street, Rock Island Street, and Chicago Avenue to 25297 Chicago Avenue, repeatedly flooding it before flowing down James Street. A 10-year storm sewer is proposed to collect the stormwater before it reaches 25297 Chicago Avenue and transport it to Long Lake. Proposed catch basins will protect downstream water quality.

5. Lake Avenue

In the existing condition, stormwater is trapped in from of 25138 Lake Avenue, causing repeated roadway and yard flooding. A new roadside swale is proposed to drain this are to Long Lake.

The proposed project benefits are:

- Structural Damage and Building Flooding – Structural damage and building flooding is occurring at 34841 James Avenue, 34855 James Avenue, 25278 Stoughton Street, and 25297 Chicago Avenue. The proposed improvements will eliminate this structural damage and building flooding for the 10-year storm. The improvements will further eliminate this structural damage and building flooding for the 100-year storm for 34841 James Avenue.
- Road Flooding and Health and Safety – Road flooding is occurring at multiple locations. This impacts the health and safety of the local residents as it limits access of emergency vehicles and creates unsafe driving conditions. Currently, the Decorah Avenue and St Olaf Avenue intersection floods, stormwater overflows over St Olaf Avenue and over Stoughton Street, stormwater flows down James Avenue, and Lake Avenue floods. The proposed improvements will eliminate all this roadway flooding for the 10-year storm. The improvements will further eliminate this roadway flooding for the 100-year storm for St Olaf Avenue in from of 34841 James Avenue.
- Nuisance Flooding – Nuisance flooding currently occurs at all project locations, flooding front yards, rear yards, and side yards. The proposed improvements will eliminate the nuisance floods in the 10-year storm event.

In summary, the proposed project will significantly reduce flooding throughout the south shore of Long Lake community, ensuring safer access for local residents and emergency vehicles, eliminating building flooding and structural damage, and protecting downstream water quality. The Grant Township Highway Department will fund the project and is seeking grant funding from the Lake County Watershed Management Board to support the engineering design and construction of these stormwater improvements. The engineering and construction management will be done by Gewalt Hamilton and Associates.

If you have any questions regarding this application, please call me at (847) 478-9700 or email me at: dvanek@gha-engineers.com.

Sincerely,



Daniel Vanek, PE, CFM
Water Resources Engineer

cc: Ms. Kim Kiesgen, Grant Township Highway Commissioner – Grant Township
Ms. Carissa Smith, Township Engineer – Grant Township

Stormwater Infrastructure Repair Fund Eligibility Authorization Form

Disclaimer: Approval of the project described herein is an acknowledgement of potential program eligibility only and in no way authorizes payment of funds, reimbursement of expenses incurred for the project and does not guarantee any future funding for the project. Funding may be available once the project has met all the eligibility requirements and a project agreement has been approved and executed by the Commission.

| | | | |
|--|--|-------|----------------|
| Applicant Jurisdiction (s) (Community, Township, HOA) | Grant Township Highway Department | | |
| Brief Project Title | Grant Township South Shore Long Lake Drainage Improvements | | |
| General Location | Grant Township – Various Locations South of Long Lake | | |
| Contact Person | Daniel Vanek, PE, CFM | | |
| Address | 625 Forest Edge Drive | | |
| City, State Zip | Vernon Hills, Illinois 60061 | Phone | (847) 478-9700 |
| Resource Request | | | |
| <input checked="" type="checkbox"/> SIRF Funds <input type="checkbox"/> SMC Staff Capacity <input type="checkbox"/> Combination Funds and Staff | | | |
| <p>Project Description (use additional sheets if necessary):</p> <p>The proposed stormwater improvements are located in unincorporated Grant Township within the Fox River Watershed. There are 5 locations just south of Long Lake that are currently experiencing flooding problems. The 5 locations will either be constructed as one project or broken out into phases depending on construction cost. The flooding at these locations floods homes causing structural damage and also presents a hazard for both vehicles and pedestrians, obstructing access to the area, including for emergency vehicles. The proposed project includes grading new swales and installing a new storm sewers designed to mitigate the current flooding issues. The proposed project will significantly reduce flooding throughout the south shore of Long Lake community, ensuring safer access for local residents and emergency vehicles, eliminating building flooding and structural damage, and protecting downstream water quality. The Grant Township Highway Department will fund the project and is seeking grant funding from the Lake County Watershed Management Board to support the engineering design and construction of these stormwater improvements. The engineering and construction management will be done by Gewalt Hamilton and Associates. The 5 locations are:</p> <ol style="list-style-type: none"> 1. Decorah Ave and St Olaf Ave – roadway flooding, health and safety, and nuisance flooding. 2. St Olaf Ave and James Ave – structural damage, flooded building, health and safety, road flooding, nuisance flooding. 3. Stoughton St and James Ave – structural damage, flooded building, health and safety, road flooding, nuisance flooding. 4. Chicago Ave and James Ave – structural damage, flooded building, health and safety, road flooding, nuisance flooding. 5. Lake Ave – roadway flooding, health and safety, and nuisance flooding. <p>See the attached cover letter for more information.</p> | | | |

| | | | | | |
|------------------------------|------------|-----------------|-----------------|------------|-----------|
| Cost Estimate | \$503,621 | Applicant Share | \$403,621 | SIRF Share | \$100,000 |
| In-Kind Service Person Hours | Applicant | N/A | SMC | N/A | |
| In-Kind Service Description | N/A | | | | |
| Project Timing | Start Date | 01/2025 | Completion Date | 09/2025 | |

Summary of Project Area Damages (Quantify Below # and type of damages incurred or threatened to occur)

| <u>Damage Priority</u> | <u>Flood Damage Type</u> | <u>Number of Occurrences</u> | <u>Frequency of Occurrences (e.g. Every Year, every two years)</u> |
|------------------------|--------------------------|------------------------------|--|
| 1 | Structural Damage | 1 | 2-year storm event & greater |
| 2 | Flooded Building | 4 | 2-year storm event & greater |
| 3 | Health and Safety | 8 | 2-year storm event & greater |
| 4 | Road Flooding | 10 | 2-year storm event & greater |
| 5 | Disruption of Revenue | 0 | 2-year storm event & greater |
| 6 | Parking Lot Flooding | 0 | 2-year storm event & greater |
| 7 | Nuisance Flooding | 7 | 2-year storm event & greater |

Summary of Project Benefits (how much of the quantified damage is to be relieved and to what extent)

- Structural Damage and Building Flooding – Structural damage and building flooding is occurring at 34841 James Avenue, 34855 James Avenue, 25278 Stoughton Street, and 25297 Chicago Avenue. The proposed improvements will eliminate this structural damage and building flooding for the 10-year storm. The improvements will further eliminate this structural damage and building flooding for the 100-year storm for 34841 James Avenue.
- Road Flooding and Health and Safety – Road flooding is occurring at multiple locations. This impacts the health and safety of the local residents as it limits access of emergency vehicles and creates unsafe driving conditions. Currently, the Decorah Avenue and St Olaf Avenue intersection floods, stormwater overflows over St Olaf Avenue and over Stoughton Street, stormwater flows down James Avenue, and Lake Avenue floods. The proposed improvements will eliminate all this roadway flooding for the 10-year storm. The improvements will further eliminate this roadway flooding for the 100-year storm for St Olaf Avenue in from of 34841 James Avenue.
- Nuisance Flooding – Nuisance flooding currently occurs at all project locations, flooding front yards, rear yards, and side yards. The proposed improvements will eliminate the nuisance floods in the 10-year storm event.

Statement of Local Commitment (assurance that applicant has sufficient matching funds and staff capacity)

The Grant Township Highway Department has the funds available to complete the project and will hire Gewalt Hamilton and Associates for the engineering and construction management.



Signature of Authorized Representative of the Cost Sharing Entity

Kim Kiesgen, Grant Township Highway Commissioner

Spell Name Above

Requested Attachments:

1. Location Map
2. Detailed project Description
3. Detailed (per criteria) Statement on Benefits, including quantifiable benefits.
4. Statement of compliance with SMC policies, local plans and Ordinance
5. Other comments or supporting documents.

Applicant:
Project Title:

Statement of Compliance

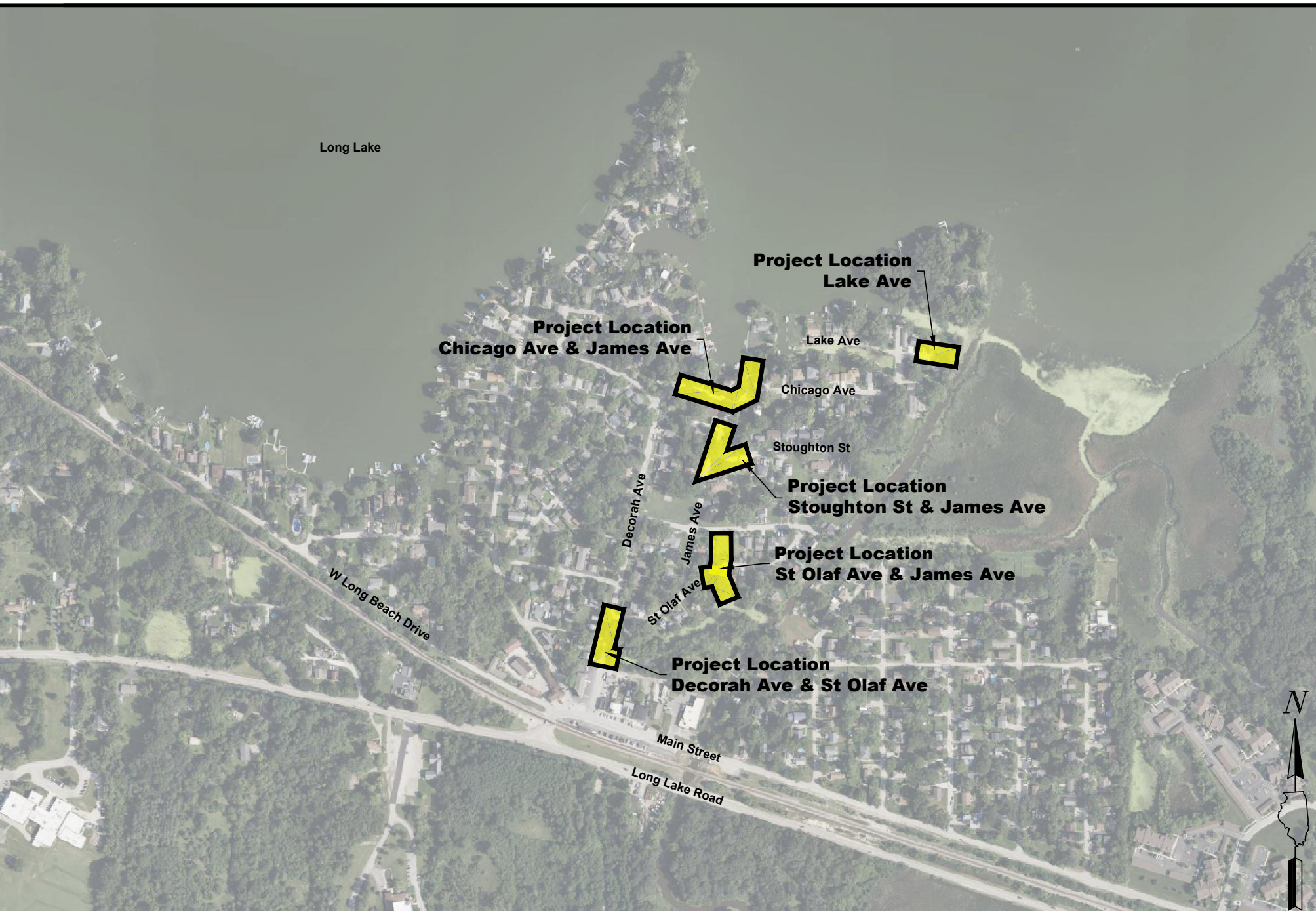
This project will comply with all Lake County Stormwater Management Commission policies, local plans and ordinances, and applicable state and federal regulations.

Signature: Kim Kiesgen

Printed Name: Kim Kiesgen

Position: Grant Township Highway Commissioner

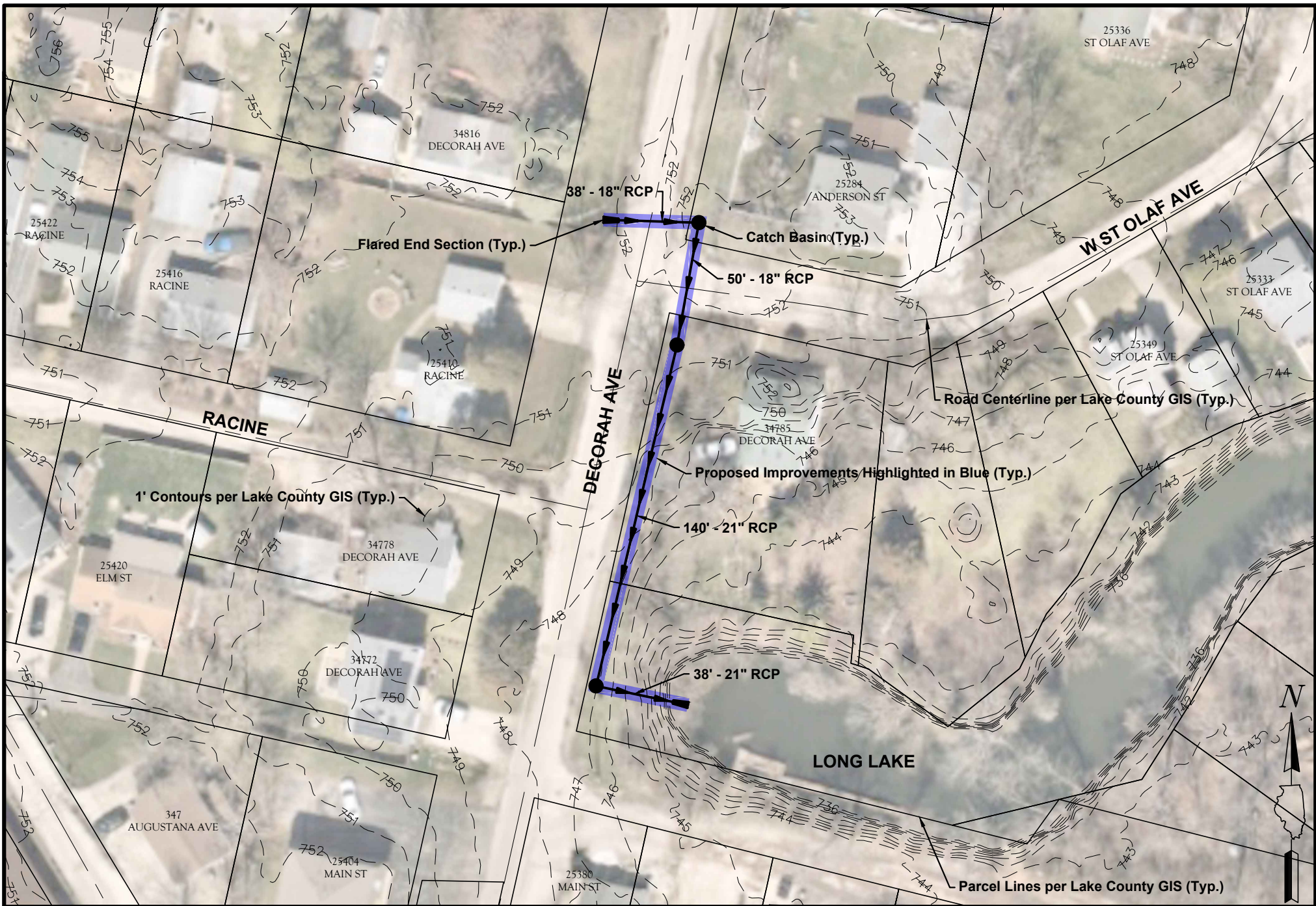
Date: Sept 13, 2024



GHA GEWALT HAMILTON ASSOCIATES, INC.
 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

LOCATION EXHIBIT
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

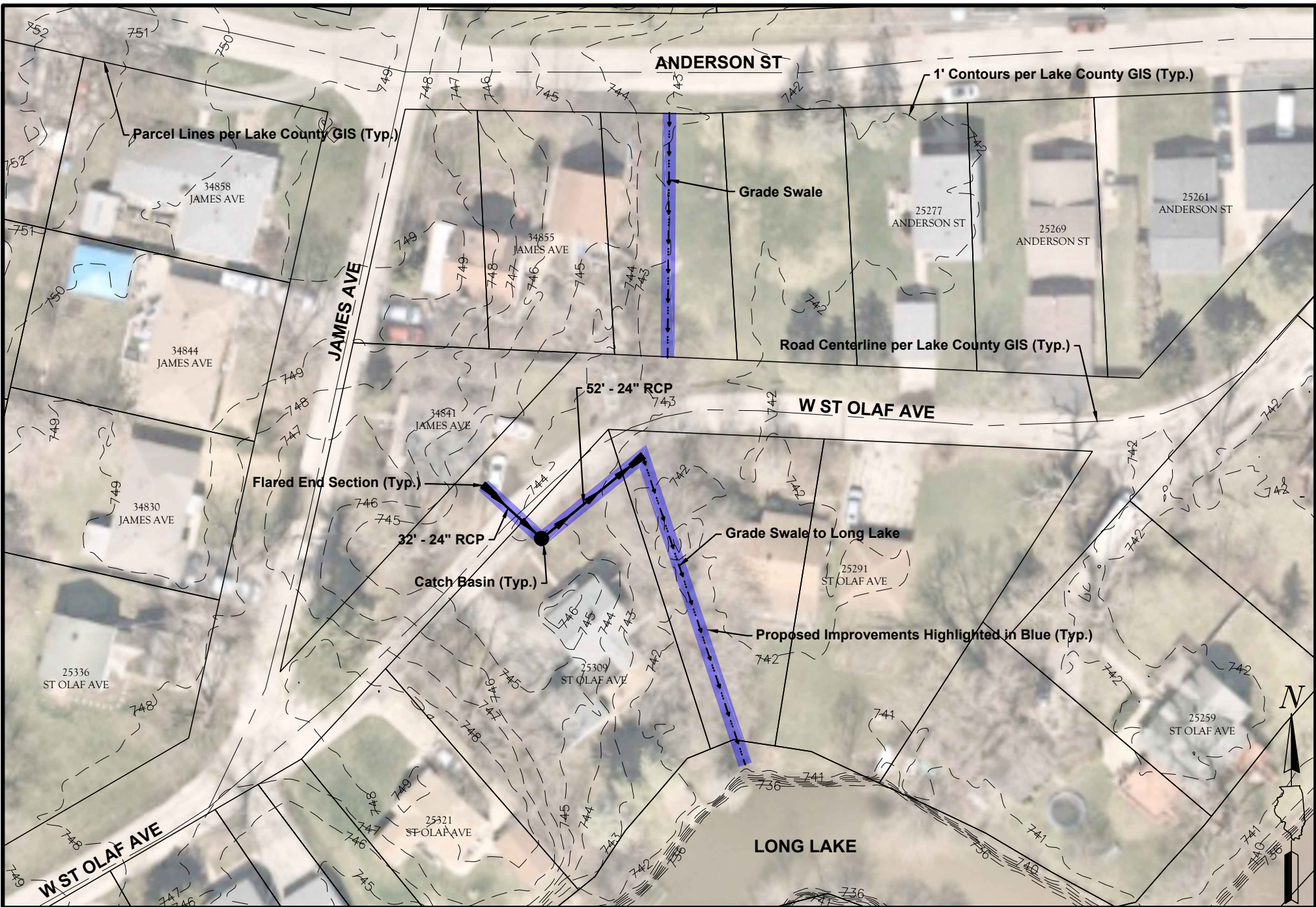
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| DRAWN BY: DJV | GHA PROJECT # |
| DATE: 09/12/24 | 4052.100 |
| CHECKED BY: CAS | SCALE: 1"=500' |



GHA GEWALT HAMILTON
ASSOCIATES, INC.
 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

CONCEPT EXHIBIT-DECORAH AVE & ST OLAF AVE
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

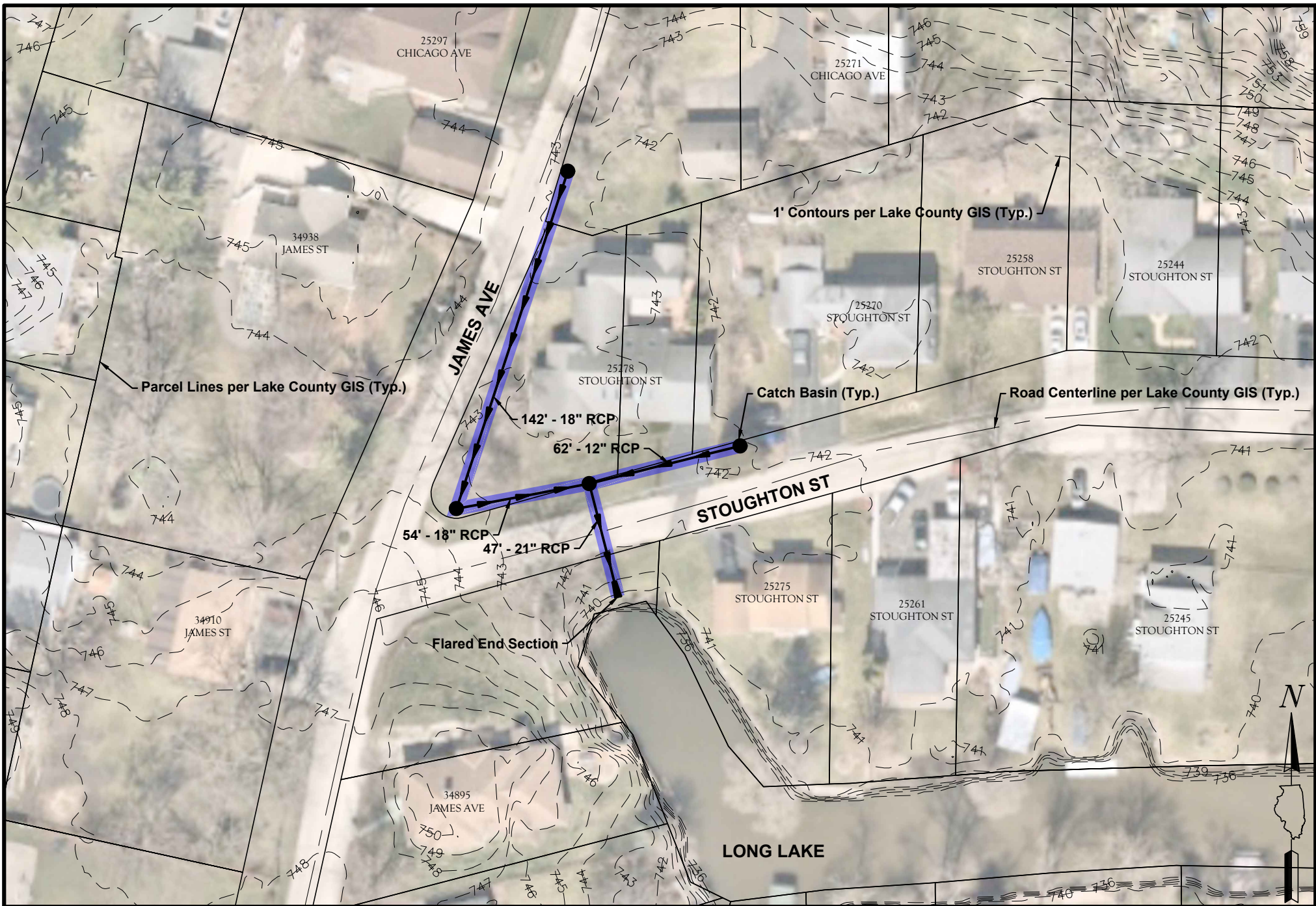
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| CHECKED BY: CAS | SCALE: 1"=50' |



GHA GEWALT HAMILTON ASSOCIATES, INC.
 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

CONCEPT EXHIBIT-JAMES AVE & ST OLAF AVE
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

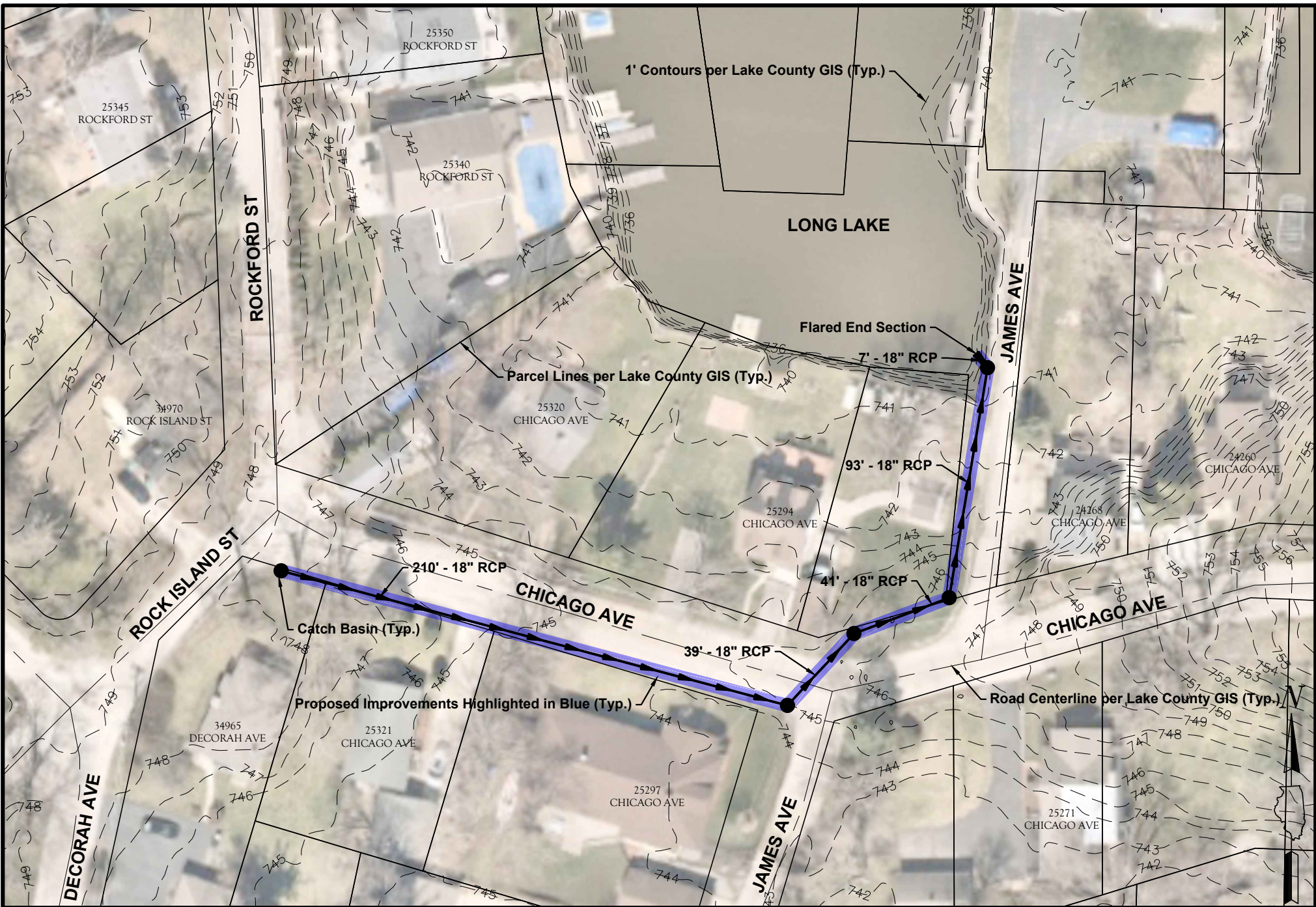
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 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

CONCEPT EXHIBIT-JAMES AVE & STOUGHTON ST
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

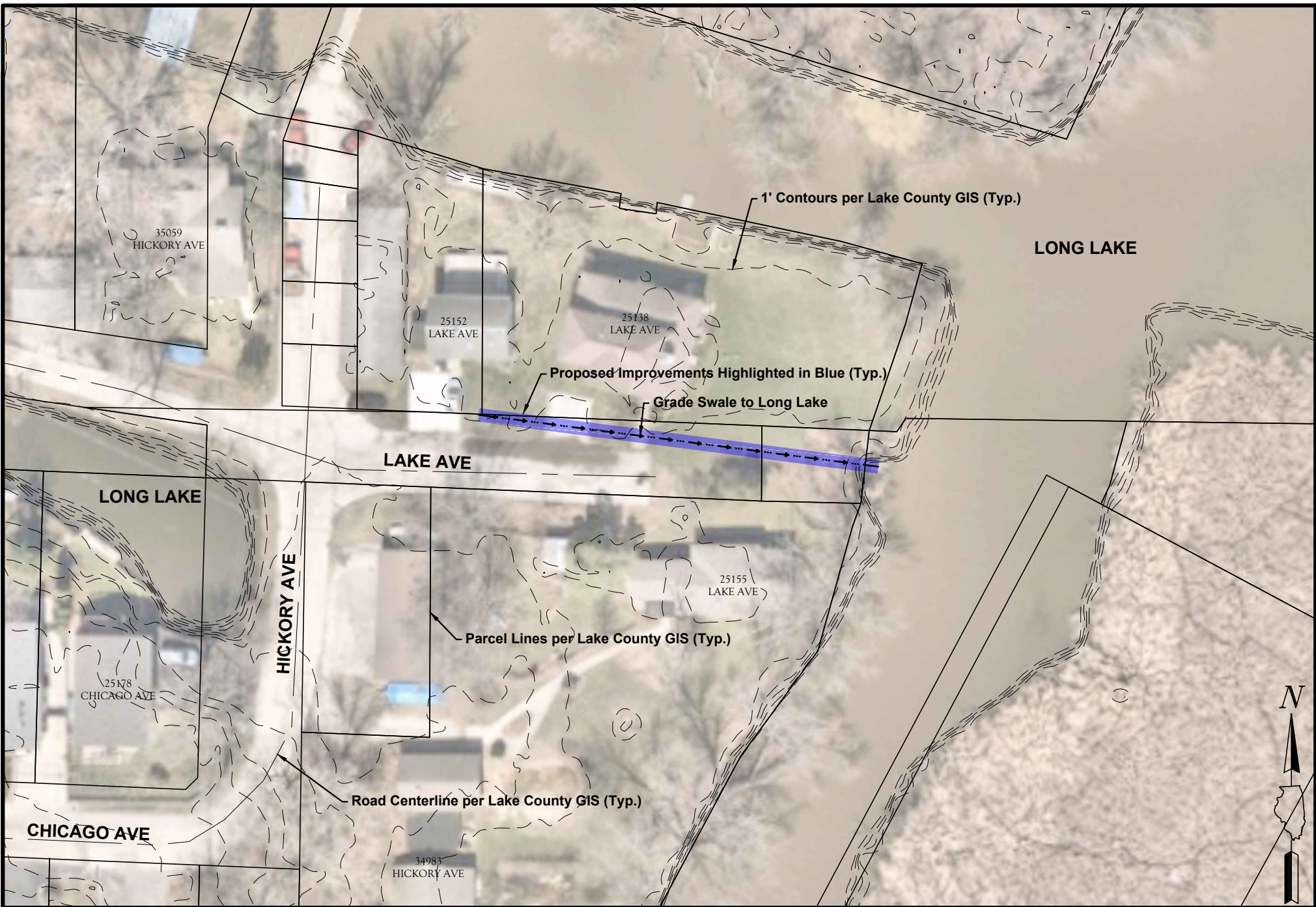
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 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

CONCEPT EXHIBIT-JAMES AVE & CHICAGO AVE
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

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|------------------------------------|---------------|
| FILE: 4052.100 Concept Exhibit.dwg | |
| DRAWN BY: DJV | GHA PROJECT # |
| DATE: 09/12/24 | 4052.100 |
| CHECKED BY: CAS | SCALE: 1"=50' |



GHA GEWALT HAMILTON
ASSOCIATES, INC.
 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

CONCEPT EXHIBIT-LAKE AVE
GRANT TOWNSHIP SOUTH SHORE LONG LAKE
DRAINAGE IMPROVEMENTS
UNINCORPORATED GRANT TOWNSHIP, ILLINOIS

| | |
|------------------------------------|---------------|
| FILE: 4052.100 Concept Exhibit.dwg | |
| DRAWN BY: DJV | GHA PROJECT # |
| DATE: 09/12/24 | 4052.100 |
| CHECKED BY: CAS | SCALE: 1"=50' |

Estimated Project Schedule

Grant Township South Shore Long Lake Drainage Improvements

| | Dec-24 | | | | | Jan-25 | | | | Feb-25 | | | | Mar-25 | | | | |
|---|--------|------|-------|-------|-------|--------|------|------|------|--------|-----|------|------|--------|-----|------|------|------|
| TASK CATEGORY | 12/1 | 12/8 | 12/15 | 12/22 | 12/29 | 1/5 | 1/12 | 1/19 | 1/26 | 2/2 | 2/9 | 2/16 | 2/23 | 3/2 | 3/9 | 3/16 | 3/23 | 3/30 |
| 1 - FIELD WORK AND INFORMATION REVIEW | | | | | | | | | | | | | | | | | | |
| 2 - PREPARATION OF PLANS, SPECS, & EOPC | | | | | | | | | | | | | | | | | | |
| 3 - PERMIT APPLICATIONS | | | | | | | | | | | | | | | | | | |
| 4 - OUT TO BID & CONSTRUCTION | | | | | | | | | | | | | | | | | | |

| | Apr-25 | | | | May-25 | | | | Jun-25 | | | | Jul-25 | | | | |
|---|--------|------|------|------|--------|------|------|------|--------|-----|------|------|--------|-----|------|------|------|
| TASK CATEGORY | 4/6 | 4/13 | 4/20 | 4/27 | 5/4 | 5/11 | 5/18 | 5/25 | 6/1 | 6/8 | 6/15 | 6/22 | 6/29 | 7/6 | 7/13 | 7/20 | 7/27 |
| 1 - FIELD WORK AND INFORMATION REVIEW | | | | | | | | | | | | | | | | | |
| 2 - PREPARATION OF PLANS, SPECS, & EOPC | | | | | | | | | | | | | | | | | |
| 3 - PERMIT APPLICATIONS | | | | | | | | | | | | | | | | | |
| 4 - OUT TO BID & CONSTRUCTION | | | | | | | | | | | | | | | | | |

| | Aug-25 | | | | | Sep-25 | | | | Oct-25 | | | | Nov-25 | | | | |
|---|--------|------|------|------|------|--------|------|------|------|--------|-------|-------|-------|--------|------|-------|-------|-------|
| TASK CATEGORY | 8/3 | 8/10 | 8/17 | 8/24 | 8/31 | 9/7 | 9/14 | 9/21 | 9/28 | 10/5 | 10/12 | 10/19 | 10/26 | 11/2 | 11/9 | 11/16 | 11/23 | 11/30 |
| 1 - FIELD WORK AND INFORMATION REVIEW | | | | | | | | | | | | | | | | | | |
| 2 - PREPARATION OF PLANS, SPECS, & EOPC | | | | | | | | | | | | | | | | | | |
| 3 - PERMIT APPLICATIONS | | | | | | | | | | | | | | | | | | |
| 4 - OUT TO BID & CONSTRUCTION | | | | | | | | | | | | | | | | | | |

ENGINEER'S OPINION OF PROBABLE COST

Project Name: Grant Township South Shore Long Lake Drainage Improvements

Location: Grant Township, South of Long Lake

Client: Grant Township Highway Department

GHA Project #: 4052.100

Prepared By: Daniel J. Vanek

Date: September 13, 2024



625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

CONCEPT PLAN STORMWATER IMPROVEMENTS

ENGINEER'S OPINION OF PROBABLE COST SUMMARY TABLE

| Section | Section Cost |
|---------------------------------|------------------|
| Storm Sewer System & Grading | \$259,755 |
| Utility & Grounds Restoration | \$32,280 |
| Miscellaneous | \$47,222 |
| Engineering & Management | \$63,640 |
| Total | |
| | \$402,897 |
| Total w/ 25% Contingency | |
| | \$503,621 |

STORM SEWER SYSTEM & GRADING

| ITEM | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | COST |
|--------------|---------------------------|------|----------|------------|-----------|
| 1 | 12" RCP | LF | 62 | \$105 | \$6,510 |
| 2 | 18" RCP | LF | 674 | \$135 | \$90,990 |
| 3 | 21" RCP | LF | 225 | \$155 | \$34,875 |
| 4 | 24" RCP | LF | 84 | \$170 | \$14,280 |
| 5 | 18" Flared End Section | EA | 2 | \$2,000 | \$4,000 |
| 6 | 21" Flared End Section | EA | 2 | \$2,700 | \$5,400 |
| 7 | 24" Flared End Section | EA | 2 | \$3,100 | \$6,200 |
| 8 | Catch Basin - 4' Diameter | EA | 13 | \$6,000 | \$78,000 |
| 9 | Ditch Grading & Shaping | LF | 390 | \$50 | \$19,500 |
| Section Cost | | | | | \$259,755 |

UTILITY & GROUNDS RESTORATION

| ITEM | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | COST |
|--------------|---|------|----------|------------|----------|
| 1 | Pavement Reconstruction Over Proposed Storm Sewer | SY | 170 | \$120 | \$20,400 |
| 2 | Landscape Restoration | SY | 990 | \$12 | \$11,880 |
| Section Cost | | | | | \$32,280 |

ENGINEER'S OPINION OF PROBABLE COST

Project Name: Grant Township South Shore Long Lake Drainage Improvements

Location: Grant Township, South of Long Lake

Client: Grant Township Highway Department

GHA Project #: 4052.100

Prepared By: Daniel J. Vanek

Date: September 13, 2024



625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

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CONCEPT PLAN STORMWATER IMPROVEMENTS

MISCELLANEOUS

| ITEM | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | COST |
|------|---------------------------------|------|----------|--------------|----------|
| 1 | Soil Erosion & Sediment Control | SY | 990 | \$4 | \$3,960 |
| 2 | As-Built Drawings | LSUM | 1 | \$3,000 | \$3,000 |
| 3 | Traffic Control | LSUM | 4.5% | \$259,755 | \$11,689 |
| 4 | Construction Layout | LSUM | 2.0% | \$259,755 | \$5,195 |
| 5 | Private Utility Adjustment | LSUM | 3.0% | \$259,755 | \$7,793 |
| 6 | Mobilization | LSUM | 6.0% | \$259,755 | \$15,585 |
| | | | | Section Cost | \$47,222 |

ENGINEERING & MANAGEMENT

| ITEM | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | COST |
|------|-------------------------|------|----------|--------------|----------|
| 1 | Design Engineering | LSUM | 8.0% | \$259,755 | \$20,780 |
| 2 | Permitting | LSUM | 6.5% | \$259,755 | \$16,884 |
| 3 | Construction Management | LSUM | 8.0% | \$259,755 | \$20,780 |
| 4 | Administration Township | LSUM | 2.0% | \$259,755 | \$5,195 |
| | | | | Section Cost | \$63,640 |

*Since Gewalt-Hamilton Associates Inc. Has No Control Over the Cost of Labor, Materials, or Equipment, or Over the Contractor's Methods of Determining Prices, or Over Competitive Bidding of Market Conditions, Opinions of Probable Costs, as Provided for Herein, Are to be Made on the Basis of Experience and Qualifications and Represent the Best Judgement as a Design professional Familiar with the Construction Industry. Gewalt Hamilton Associates, Inc. Cannot and Does Not Guarantee That Proposals, Bids, or The Construction Costs Will Not Vary From Opinions of Probable Cost Prepared for the Owner.