MAYOR & COUNCIL COMMUNICATION

DATE: **July 21, 2015**
REGULAR
ITEM #18
ORDINANCE 08-126
RESOLUTION 2015-60

AGENDA ITEM: Wildflower at Lake Elmo Zoning Map Amendment, Final Plat and Final PUD Plan

SUBMITTED BY: Nick M. Johnson, City Planner

THROUGH: Julie Johnson, City Clerk

REVIEWED BY: Planning Commission
Kyle Klatt, Community Development Director
Jack Griffin, City Engineer
Greg Malmquist, Fire Chief

SUGGESTED ORDER OF BUSINESS:

- Introduction of Item .....Community Development Director
- Report/Presentation……...Community Development Director
- Questions from Council to Staff ..... Mayor Facilitates
- Call for Motion ..... Mayor & City Council
- Discussion ..... Mayor & City Council
- Action on Motion ..... Mayor Facilitates

POLICY RECCOMENDER: Planning Commission

FISCAL IMPACT: TBD – the City will be asked to review a developer's agreement concerning the final plat at a future meeting. The agreement will include a detailed accounting of any development costs that will be the responsibility of the City.

SUMMARY AND ACTION REQUESTED: The City Council is being asked to consider a request from Robert Engstrom Company for approval of a zoning map amendment, final plat and final PUD plan for the first phase of the Wildflower at Lake Elmo planned residential development. The final plat includes 60 single-family residential lots, and the related construction plans for the improvements necessary to serve these homes. The City approved the Wildflower Preliminary Plat and Preliminary PUD Plan on April 7, 2015, which covered approximately 117 acres of land within the Village Planning Area. There are 145 single family

residential lots planned within the entire subdivision, and the final plat covers only a portion of the overall total of units that will eventually be platted.

The Planning Commission considered this matter at its July 13, 2015 meeting and unanimously recommended approval of the requested zoning map amendment. The suggested motion to adopt the Planning Commission recommendation is as follows:

"Move to adopt Ordinance 08-126, approving the Zoning Map Amendment for the Wildflower at Lake Elmo planned residential development."

In addition, the Planning Commission unanimously recommended approval of the Wildflower at Lake Elmo Final Plat and Final PUD Plan subject to 17 conditions of approval. The suggested motions to adopt the Planning Commission recommendation is as follows:

"Move to adopt Resolution No. 2015-60, approving the Final Plat and Final PUD Plan for the Wildflower at Lake Elmo planned residential development."

BACKGROUND INFORMATION:

Attached is the original detailed Staff report that was provided to the Planning Commission regarding the applicant's request for a zoning map amendment, final plat and final PUD plan. The staff report includes general information about the application, a summary of the relevant planning and zoning issues, a thorough review and analysis of the final plat (including a draft list of recommended conditions of approval), draft findings, and the Staff recommendation to the Planning Commission.

PLANNING COMMISSION REPORT:

The Planning Commission reviewed the final plat application at its July 13, 2015 meeting. At the meeting, a public hearing was held, necessitated by the zoning map amendment and final PUD plan actions. During the public hearing, the Planning Commission received the following testimony:

- Richard Smith, 11104 Stillwater Blvd. N., requested that a condition of approval be added to formalize the expectation that no further residential or commercial development would be allowed on outlots planned for open space or conservation. In addition, Mr. Smith noted that there is presently a gap in the connection of his driveway to Blazingstar Lane. He requests that this connection be completed during the phase 1 improvements. Mr. Engstrom did not have any concerns with either request.
- Robert Eischen, 11674 Stillwater Blvd. N., asked if the activities included in a private landscape agreement between his family and Robert Engstrom would be completed as part of the phase 1 improvements. Engstrom noted that these plantings and removals would be included in phase 1. Mr. Eischen asked that these activities be included as a condition of approval. Mr. Engstrom did not have a problem accommodating the request.

Full detail of the Planning Commission meeting and testimony received can be found in the Draft Planning Commission minutes dated 7/13/15.

In reviewing the proposed zoning map amendment, the Planning Commission unanimously recommended approval.

With regards to the review of the Wildflower at Lake Elmo Final Plat and Final PUD Plan, the Planning Commission discussed four additional conditions to add to the approval of the application:

1) The Planning Commission recommended a condition to require the applicant to enter into a legally binding agreement to prevent future residential or commercial development on outlots planned for open space or conservation.
2) The Planning Commission recommended a condition to require that the driveway connection for Mr. Smith be completed as part of the phase 1 improvements of Wildflower.
3) The Planning Commission recommended a condition that requires the applicant to complete the private planting agreement with the Eischen family as part of the phase 1 improvements.
4) Finally, the Planning Commission recommended that the Final Plat be revised to incorporate street names that are consistent with the Washington County Street Naming System.

The Planning Commission recommended approval of the Wildflower Final Plat and Final PUD Plan with 17 conditions of approval. The vote to recommend approval of the Wildflower Final Plat was unanimous (Vote: 6-0).

STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS:

Strengths: The proposed final plat is consistent with the approved preliminary plat subject to the conditions being recommended by Staff and the Planning Commission.

Weaknesses: Several conditions of approval must be met by the applicant, including revisions to the final construction plans to address comments from the City Engineer.

Opportunities: Approval of the plat application allows the development plans for the Wildflower at Lake Elmo planned development to proceed as planned in the Comprehensive Plan. Moving forward with sewered single family growth should allow the City to add additional users to the City's public sanitary sewer system, helping to finance the City's investments in sanitary sewer.

Threats: None

RECOMMENDATION:

Based on the aforementioned, the Planning Commission and Staff are recommending that the City Council approve the Wildflower at Lake Elmo Zoning Map Amendment through the following motion:

"Move to adopt Ordinance 08-126, approving the Zoning Map Amendment for the Wildflower at Lake Elmo planned residential development."

In addition, the Planning Commission and Staff are recommending that the City Council approve the Wildflower at Lake Elmo Final Plat and Final PUD Plan subject to 17 conditions of approval through the following motion:

"Move to adopt Resolution No. 2015-60, approving the Final Plat and Final PUD Plan for the Wildflower at Lake Elmo planned residential development."

ATTACHMENTS:

1. Ordinance 08-126
2. Resolution 2015-60
3. Staff Report to the Planning Commission, 7/13/15
4. Application Form
5. Project Narrative
6. Contact Information
7. Developer Acknowledgements
8. Neighborhood Park Concept
9. Wildflower Lot Development Summary
10. City Engineer Review Comments – 7/8/15
11. Fire Chief Comments – 7/7/15
12. Final Plat
13. Final Plat Supplemental Plans
14. Final Grading Plans
15. Final Landscape Plans

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 08-126

AN ORDINANCE AMENDING CHAPTER 154 OF THE LAKE ELMO CITY CODE OF ORDINANCES BY ADOPTIONG A REVISED OFFICIAL ZONING DISTRICT MAP RELATED TO THE WILDFLOWER AT LAKE ELMO PLANNED DEVELOPMENT

SECTION 1. Zoning Map Amendment. The following property is hereby rezoned from RT – Rural Development Transitional to MDR-PUD – Urban Medium Density Residential – Planned Unit Development and Rural Residential:

The North Half of the Southwest Quarter and the Southeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, save and except the following described part thereof:

All that part of the Northeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota described as follows:

> Beginning at the center of said Section 12; thence due South along the East line of said Northeast Quarter of Southwest Quarter a distance of 1240.5 feet; thence at right angles due West a distance of 200 feet; thence North 55 degrees 00 minutes 00 seconds West a distance of 270 feet; thence due North a distance of 617 feet; thence at right angles due East a distance of 147 feet; thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast Quarter of Southwest Quarter; thence Easterly along the North line of said Northeast Quarter of Southwest Quarter a distance of 274.17 feet to the place of beginning.

AND

That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows:

> Commencing at the Northeast corner of said Northeast Quarter of Northwest Quarter of said Section 13, thence West on the North line thereof 35 feet to a point, thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

Excepting therefrom all of the following described real property:

> The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.
>
> Together with
>
> Outlots O and P THE FIELDS OF SAINT CROIX 2ND ADDITION according to the plat thereof, Washington County, Minnesota.

SECTION 2. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 3. Adoption Date. This Ordinance 08-126 was adopted on this 21st day of July 2015, by a vote of ___ Ayes and ___ Nays.

LAKE ELMO CITY COUNCIL

_____
Mike Pearson, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 08-126 was published on the ____ day of _____, 2015.

CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA

RESOLUTION NO. 2015-60

A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) PLAN FOR THE WILDFLOWER AT LAKE ELMO PLANNED RESIDENTIAL DEVELOPMENT

WHEREAS, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

WHEREAS, Robert Engstrom Companies, 4801 West 81st Street, #101, Bloomington, MN has submitted an application to the City of Lake Elmo ("City") for a Final Plat and Final PUD Plan for the Wildflower at Lake Elmo planned residential development, a copy of which is on file in the City of Lake Elmo Community Development Department; and

WHEREAS, the City approved the Wildflower at Lake Elmo General Concept Plan on June 17, 2014; and

WHEREAS, the City approved the Wildflower at Lake Elmo Preliminary Plat and Preliminary PUD Plan on April 7, 2015; and

WHEREAS, the proposed Wildflower at Lake Elmo Final Plat and Final PUD Plan includes 60 single family residential lots within a planned development on two parcels of land (PIDs: 12.029.21.32.0001 and 12.029.21.43.0013) in the Village Planning Area; and

WHEREAS, the Lake Elmo Planning Commission held public hearing on July 13, 2015 to consider the Final Plat and Preliminary PUD Plan request; and

WHEREAS, the Lake Elmo Planning Commission adopted a motion recommending approval of the Final Plat and Final PUD Plan subject to XX conditions of approval; and

WHEREAS, the Lake Elmo Planning Commission has submitted its report and recommendation concerning the Final Plat and Final PUD Plan as part of a memorandum to the City Council for the July 21, 2015 Council Meeting; and

WHEREAS, the City Council reviewed the Wildflower at Lake Elmo Final Plat and Final PUD Plan at its meeting held on July 21, 2015 and made the following findings of fact:

1) That all the requirements of City Code Section 153.07 related to the Final Plan and Final Plat have been met by the Applicant, with the exceptions noted in the staff report.

2) That the proposed Final Plat for Wildwood consists of the creation of 60 single-family detached residential structures and an open space/nature conservation area.

3) That the Wildflower Final Plat and Final PUD Plan is consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on April 7, 2014.

4) That the Wildflower Final Plat and Final PUD Plan is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

5) That the Wildflower Final Plat generally complies with the City's Urban Medium Density Residential zoning district, with the exceptions as noted in the approved Preliminary PUD Plans.

6) That the Wildflower Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances, except as noted in this report or attachment thereof.

7) That the Wildflower Final Plat complies with the City's subdivision ordinance.

8) That the Wildflower Final Plat and Final PUD Plan complies with the City's Planned Unit Development Ordinance.

9) That the Wildflower Final Plat is consistent with the City's engineering standards with the exceptions noted by the City Engineer in his review comments to the City dated July 8, 2015 and as otherwise identified in future reviews.

NOW, THEREFORE, BE IT RESOLVED THAT the City Council does hereby approve the Wildflower at Lake Elmo Final Plat and Final PUD Plan subject to the following conditions:

1) The City Attorney shall review all proposed and existing conservation easements within the development area to ensure these easements will not encumber the City from installing and maintaining and the proposed public infrastructure (including storm water pons and related improvements) over the City-owned outlots.

2) The developer shall provide easements for public access to all public trails and sidewalks that are not otherwise constructed within a public right-of-way. Any such easements shall be subject to review and approval by the City Attorney.

3) The developer shall dedicate additional right-of-way associated with the future extension of Prairieview Trail to accommodate the planned storm water improvements include with the first addition public improvements. This right-of-way shall extend to the westernmost limits of Outlot F.

4) The developer shall dedicate additional right-of-way associated with the future extension of Blazingstar Lane to accommodate the planned private driveway that will provide access to the exception parcel located north of Outlot G. The developer shall provide any

easements necessary to ensure that this access may be accommodated once the plat has been recorded.

5) Final grading, drainage, and erosion control plans, sanitary and storm water management plans, landscape plans, and street and utility construction plans shall be reviewed and approved by the City Engineer prior to the recording of the Final Plat. All changes and modifications to the plans requested by the City Engineer in a memorandum dated July 8, 2015 and any future reviews shall be incorporated into these documents before they are approved.

6) All recommended conditions of approval as requested by the City Engineer in his July 8, 2015 comment letter shall be incorporated by reference into the City's approval of the final plat and PUD plans.

7) Prior to the execution of the Final Plat by City officials, the Developer shall enter into a Developer's Agreement acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements for the Wildflower Final Plat and Final Development Plans with financial guarantees therefore.

8) All easements as requested by the City Engineer and Public Works Department shall be documented on the Final Plat prior to the execution of the final plat by City Officials.

9) A Common Interest Agreement concerning management of the common areas of Wildflower and establishing a homeowner's association shall be submitted in final form to the Community Development Director before a building permit may be issued for any structure within this subdivision. The applicant shall also enter into a maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public park and open space on the final plat.

10) The developer is encouraged to incorporate elements from the Lake Elmo Theming Study into the final design of the community mailboxes within Wildflower.

11) The applicant shall deed Outlots B, C, J, and K to the City upon recording of the final plat.

12) The final landscape plan shall be updated to address the review comments from the City's landscape architecture consultant.

13) The final construction plans shall be updated to include a trail connection along Lake Elmo Avenue between the existing trail outlet to Lake Elmo Avenue and the boundary between the Wildflower development and the property south of Wildflower.

14) The developer shall establish a legally binding agreement to prevent further residential or commercial development of all outlots planned for open space or conservation uses.

15) The developer shall provide a completed bituminous driveway connection to the Smith property at 11514 Stillwater Boulevard North as part of the improvements associated with Phase 1 of the development.

16) The developer shall complete the planting and removal work at the Eischen property at 11647 Stillwater Boulevard North as described in a private agreement between the developer and Eischen family as part of Phase 1 of the development.

17) The final plat shall be revised to incorporate street names that are consistent with the Washington County Street Naming System.

Passed and duly adopted this 21st day of July, 2015 by the City Council of the City of Lake Elmo, Minnesota.

_____
Mike Pearson, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

PLANNING COMMISSION
DATE: 7/13/15
AGENDA ITEM: 4B – PUBLIC HEARING
CASE # 2015-21

ITEM: Wildflower Final Plat and Final PUD Plans (Phase 1)

SUBMITTED BY: Kyle Klatt, Planning Director

REVIEWED BY: Nick Johnson, City Planner
Jack Griffin, City Engineer

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to consider a request to approve a final plat, final PUD development plans, and related zoning map amendments associated with the first phase of the Wildflower PUD development. The final plat includes 60 single family residential lots that will be located within the western portion of the overall development area. Staff is recommending approval of the request subject to compliance with the conditions listed in this report.

GENERAL INFORMATION

Applicant: Robert Engstrom Companies; 4801 West 81st Street, #101, Bloomington, MN

Property Owners: Robert Engstrom Companies; 4801 West 81st Street, #101, Bloomington, MN

Location: Part of Sections 12 and 13, Township 29 North, Range 21 West in Lake Elmo, north of 39th Street, west of Lake Elmo Avenue, and south of the northern Village Planning Area boundary line. PID Numbers 13.029.21.32.00001, 12.029.21.34.0001, 13.029.21.21.0001 and 12.029.21.43.0013.

Request: Application for Final Plat and Final Planned Unit Development (PUD) Plan approval for the first phase of a residential development to be named Wildflower. The final plat includes 60 single-family residential lots, while the remainder of the site will be platted as outlots for either public dedication, common open space, or to be reserved for future development.

Existing Land Use and Zoning: Agriculture, Woods/Natural Vegetation, Wetlands, Open Space. Current Zoning: RT – Rural Transitional.

Surrounding Land Use and Zoning: North – vacant/agricultural land, rural residential – RR zoning; west – agricultural land (future Village residential) – A, RT, and RR zoning; south – offices, business park land – C zoning; east open space/Field of St. Croix II subdivision – RR and OP zoning.

Comprehensive Plan: Village Medium Density Residential (3-4 units per acre)/Village Open Space Overlay

History: The property was included in Village Planning Area boundary and municipal sewer service area as defined in the 2013 Village Land Use Plan. The site has historically been used for faming activities, including the growing of agricultural crops. A large portion of the site is located in a FEMA Flood District. The City approved a Comprehensive Plan Amendment last year that removed portions of the site from the open space land category. The City also approved a PUD Concept Plan for the property on June 17, 2014, and a preliminary plat and preliminary PUD plans on April 7, 2015.

Deadline for Action: Application Complete – 7/2/15
60 Day Deadline – 9/1/15
Extension Letter Mailed – No
120 Day Deadline – 10/31/15

Applicable Regulations: Chapter 153 – Subdivision Regulations
Article 10 – Urban Residential Districts (MDR)
Article 16 – Planned Unit Development Regulations
§150.270 Storm Water, Erosion, and Sediment Control

REQUEST DETAILS

The City of Lake Elmo has received a request from Robert Engstrom Companies for approval of a final plat and final PUD plan associated with the first phase of the Wildflower Planned Unit Development (PUD). The final plat will include the platting of 60 single-family residential lots, of which 22 will be the "garden villa" homes while the remainder will be the general single family homes located north of Wildflower Drive. The final plat includes the platting of a connection to the existing Layton Avenue right-of-way that will be shared between the Wildflower development and the adjacent Village Preserve single family neighborhood. As discussed during the concept and preliminary plat review, the subdivision will include a large amount of open space that will be owned and managed by the homeowner's association along with a series of City-owned outlots that will serve as storm water infiltration and retention areas.

Please note that the attached application materials provided by the applicant include the final plat, final grading, drainage, and erosion control plans for the entire site, a set of supplemental plans that provide a complete set of plans that have been updated from the preliminary plat, and utility and street construction plans for the first phase public improvements. After an initial City review, the developer submitted updated documents for all of the plans listed above with the exception of the construction plans. The City Engineer will need to review a final set of construction plans as a condition of approval. Due to the larger amount of materials already included in the packet, Staff is not including the submitted construction plans with this report (these are available for viewing at City Hall).

Since the City's approval of a preliminary plat, the developer has begun grading the site under a separate grading agreement with the City. The overall grading plans provided with the final plat therefore reflect the work that is currently taking place on the property. The initial construction access to the site has been provided via an existing private driveway from Highway 5, and this access will be eliminated once the new road off of 39th Street is completed. The final plans do show a driveway connection to the Richard Smith property north of Outlot G from the end of Blazingstar Lane as platted in the first addition. A portion of the driveway will be located over what will be the future extension of this road.

In advance of submitting an application for a final plat, the developer worked with the City and other external agencies to address the conditions attached to the City's approval of the preliminary plat. The end result of this process are the plans that have been labeled "Final Plan Supplemental Plans" that have been deemed compliant with the previous conditions of approval by the City. This includes the revising of several streets to meet the City's minimum requirements for width and other modifications from the preliminary plans. There are a few minor issues that need to be addressed as noted in the City Engineer's review memorandum, but none significant enough that they cannot be resolved through revisions to the final development plans or further review by the City Attorney. Staff has provided an update concerning the preliminary plat conditions in the latter sections of this report.

The applicant has submitted an updated plat and PUD development plan narrative and related submissions to the City, including a concept park layout for the shared park with the Village Preserve along with a lot profile sheet for the various types of lots that are planned. The overall project follows the preliminary plat very closely, and any modifications have been made in order to address the previous conditions of approval. Given the extensive reviews that have been performed on this development to date, Staff is not going to provide a detailed overview of the project as part of this report but would be happy to provide copies of any previous Staff reports on this matter upon request.

The final plat and supplemental plans address other review comments as noted in the following section of this report. As the applicant has worked to address the previous review comments and conditions of approval, there have been some minor modifications to the configuration of some lots within the subdivision to accommodate these revisions. These changes directly address preliminary plat review comments, and more specifically respond to the following:

- All roads have been designed to meet the City's minimum standards for width, both for streets that will have parking and those that will not.
- All outlots that will be owned by the City, the developer for future subdivision, and by the homeowner's association are all clearly labeled on the plans.
- The plans now include a sanitary sewer service stub that extends roughly halfway through Outlot H. This stub will be available for a future connection of sewer service to serve existing development to the north and east.
- The cul-de-sac widths, street design, and any street corners have been designed to comply with minimum City requirements and to accommodate emergency and public works vehicles.

The City's subdivision ordinance establishes the procedure for obtaining final subdivision approval, in which case a final plat may only be reviewed after the City takes action on a preliminary plat. As long as the final plat is consistent with the preliminary approval, it must be approved by the City. Please note that the City's approval of the Wildflower Preliminary Plat and Plans did include a series of conditions that must be met by the applicant, which are addressed in the "Review and Analysis" section below. Because the application is for approval of a final PUD plan, the request does require a public hearing to establish the final PUD zoning for the first phase of the development.

At this time, Staff is not recommended that the City establish a base zoning district for the development area. The three developers that have agreed to build the needed sanitary sewer connection south of the railroad tracks have yet to formally execute the required agreements to build

this line. Once these agreements have been executed, Staff will prepare the necessary map amendments to support the proposed Wildflower development. One of the conditions of approval notes that no permits (beyond model homes) may be issued until the new zoning for the area becomes effective. Staff has previously recommended a base zoning of MDR – Medium Density Residential for the residential portions of the subdivision and RR – rural residential for the open space and natural preservation areas.

Staff has reviewed the final plat and found that it is consistent with the preliminary plat that was approved by the City with the exceptions as noted below and as listed in the City Engineer's report. These exceptions can be addressed with the submission of revised final plans, and primarily relate to details that need to be worked out before final approval of the construction plans. The City's Landscape Architect has previously reviewed the landscape plan, and his comments have been used in the preparation of the final plan. Staff is recommending that the landscape plans be subject to final review by a landscape architect to address any plan modifications that are necessitated by the City Engineering comments. Although final construction plans still need to be reviewed and approved by the City, it is expected that any required modification can be accommodated by the developer without changing the final plat, and that these minor revisions may be made before the City releases the final plat for recording.

PLANNING AND ZONING ISSUES

The Wildflower development includes a request for a Planned Unit Development and some related flexibility as permitted under this ordinance. In order to grant a PUD, an applicant is required to demonstrate compliance with the City's PUD applicant requirements and PUD Objectives. These requirements and objectives were previously detailed with the applicants' preliminary plan submissions. For the most part, all portions of the development will be consistent with the zoning requirements for the City's MDR – Medium Density Residential Zoning District, with the exceptions that were discussed during the concept and preliminary plan review and are summarized as follows:

Setback	**MDR Zoning District (Min.)**	**Courtyard Homes (Min.)**
Front Yard	25 feet	20 feet
Interior Side Yard	10 Feet Principal Structure Side / 5 Feet Garage Side	Same or 7.5 both sides
Corner Side Yard	15	10
Rear Yard	20 feet	20 feet
Lot Area	7,000 square feet	5,865 square feet
Lot Depth	N/A	100 feet
Lot Width	50 feet	50 feet

Street Widths	**City Standard**	**Wildflower**
Alley/Rear Access	Not Allowed	18 feet

Cul-de-sac	**City Standard**	**Prairie View Trail**
Maximum Length	1,000 feet	1,300 feet

All other requirements for the City's MDR zoning district will apply, including the allowed uses and other site and development standards.

Please note that the above table does not include any modifications from the numbers originally proposed by the developer. The purpose of this table is to document the minimum expectation for lots and homes in the development, and is otherwise consistent with the development plans. Other than the extended cul-de-sac length for Prairieview Trail, there have been no exceptions requested for the single family homes outside of the courtyard home area.

The overall site plan for the property follows the adopted concept plan very closely, and the final plat and plans are consistent with preliminary plat as well. The following is a general summary of the subdivision design elements that have proposed as part of the Wildflower final plat and plans:

Zoning and Site Information:

- Existing Zoning: RT – Rural Development Transitional District
- Proposed Zoning: MDR – Lot Area; RR – Conservation/Buffer Areas
- Total Site Area: 119.28 acres
- Total Residential Units: 145 (78 single family, 67 courtyard homes)
  60 with Final Plat (38 single family; 22 courtyard)
- Proposed Density (Net): 4.0 Units per acre (per developer)

Proposed Lot Dimensional Standards (Single Family Lots):

- Min. Lot Width: 80 ft.
- Lot Depth: 130 ft. (135 ft. typical)
- Lot Area: 8,000 sq. ft. (10,298 min.)
- Front Yard Setback: 25 ft.
- Side Yard Setback: 10 ft. living space; 5 ft. garage
- Rear Yard Setback: 20 ft.

Proposed Lot Dimensional Standards through Planned Unit Development Process (courtyard homes):

- As listed above

Proposed Street Standards:

- Per development plans with modifications as requested by the City Engineer

Proposed Street Standards:

- ROW Width – Local 60 ft. (per Subdivision Ordinance)
- Street Widths – Local: 28 ft. (per City standard)
- Street Widths – Other: 24 ft. (two way with parking one side)
  20 ft. (one way with parking)
  18ft. (one way with no parking)
- Alley/Rear Access 18ft. (proposed PUD standard)

The standards listed above are all either in compliance with the applicable requirements from the City's zoning and subdivision regulations, or are consistent with requested modifications through the proposed planned unit development (PUD). Based on Staff's review of the Preliminary Plat and Preliminary PUD Plan, the applicant has generally demonstrated compliance with the majority of the applicable codes, and the requested modifications or flexibilities as allowed under the City's PUD

Ordinance represent a reasonable request given the various design goals the applicant it trying to achieve.

REVIEW AND ANALYSIS

The preliminary plat and plans for Wildflower were approved with several conditions, which are indicated below along with Staff's comments on the status of each. Staff is recommending approval of the final plat and plans with conditions intended to address the outstanding issues that will require additional review and/or documentation. In order to assist the Planning Commission with its review, Staff is also including a summary the critical issues that need to be resolved for the subdivision to move forward.

Critical Issues Summary:

1) ***Conservation Easements***. The developer is either proposing to implement new conservation easements over the common open space areas within the development, or will be keeping in place the conservation easements that were modified for Outlots J, I, and H. These new easements will need to be drafted and submitted to the City for formal adoption for the new areas, while the older easements must be formally executed and recorded one the final plat is also recorder with the County. There are two issues that Staff is has identified with the proposed or existing easements that must be subject to final review and approval by the City Attorney, including the following:

    a. One of the preliminary plat conditions requires that a "legally binding agreement to prevent further residential or commercial development of all outlots planned for open space or conservation uses" be established by the developer. The City Attorney will need to review any proposed conservation easements for consistency with this condition.

    b. The City Engineer has requested clarification that any existing or proposed conservation easements will not prohibit or impeded the City from installing and maintaining the proposed public infrastructure (including storm water ponds, sanitary sewer pipes, and storm water swales) over portions of these outlots. Staff is again asking that the City Attorney review these easement documents to ensure that the final language will not encumber the City in any manner.

2) ***Trail Construction and Easements***. The developer has proposed an extensive system of public trails throughout the development. Prior to acceptance of these trails for public use, the developer will need to construct them to meet City specifications and will need to submit easements granting public use of the trails to the City for approval. The developer is asking that the proposed trail dedication and granting of conservation easement suffice for the park land dedication requirements. Staff is asking to see the final calculations for land and trail dedication in order to accurately account for the equivalent dedication that would have otherwise been provided.

3) ***Platting of Adjacent Property***. The final plat and development plans include improvements that extend into the adjacent Village Preserve development, and specifically, portions of Wildflower Drive, Prairieview Trail, and storm water improvements. Should the Village Preserve Final Plat be recorded prior to Wildflower, this issue will no longer be relevant. Should Engstrom Companies wish to record its plat prior to Village Preserve, the developer will need to, at a minimum, secure the appropriate easements from the current land owner of

the Village Preserve (Gonyea) before the Wildflower final plat may be recorded. The applicant has demonstrated that there is an agreement in place between both parties, and has stated that this is a timing issue that will be satisfactorily resolved between the two developers.

4) ***General Review Comments***. All other recommended conditions of approval relate to final details that must be addressed by the applicant and can be handled prior to release of the final plat for recording.

In order to provide the Planning Commission with an update concerning the conditions associated with the preliminary plat and plans for Wildflower, Staff has prepared the following:

Preliminary Plat Conditions – With Staff Update Comments (updated information in bold italics):

1) No lots within a FEMA flood zone shall be approved as part of a final plat until such time that the City's Floodplain Management Map has been amended to remove these lots. As an alternative to amending this map, the developer must provide documentation that all structures will be built above the regulatory flood protection elevation, that any public infrastructure will also meet Floodplain Ordinance requirements, and that the proposed storm water ponds may be constructed within the floodplain area. ***Comments: This condition will apply to the final plat and all subsequent stages. The Valley Branch Watershed District has indicated that it will undertake a study to amend the FEMA flood delineations to lower the flood levels in this area to match those identified in the Goetschel Pond study. There are no buildable lots depicted on the final plat that are located in a flood district.***

2) Prior to any grading activity, the developer shall submit to the City temporary grading easements from the owner of the lots adjacent to Layton Avenue within the Brookman Addition in order to construct the improvements within this right-of-way as documented in the preliminary construction plans. ***Comments: These easements have been secured and grading has commenced within this area.***

3) The developer has requested the inclusion of public art within common areas and public property throughout Wildflower development. Prior to the placement of any art on publicly owned property or public rights-of-way, the developer and City shall enter into an agreement that clarifies the individuals or entities responsible for maintenance, upkeep and removal of any public art. No public art shall be lit in a manner that conflicts with the City's Lighting Ordinance. ***Comments: This is a condition that will apply to the future placement of public art within the development. To date, the developer has not provided the City with a specific plan or details concerning public art.***

4) Prior to the submission of a final plat for any portion of the Wildflower PUD, the developer shall work with the City to determine the appropriate park dedication calculations for the entire development area. ***Comments: The developer is asking that the City accept the park land, trail, and open space conservation (nature preserve) areas as meeting the spirit and intent of the City's park land dedication requirements. If the City were to assign a specific amount of land dedication to the plat, the developer would be required to provide at least five acres of parkland. Staff is asking that he developer provide a total calculation for the trail and other park areas to help assess the specific trade-off between park land and common open space. Staff is recommending that the developer not be required to dedicate any additional land, and that the larger nature preserve account for any land dedication shortfall.***

5) The applicant must enter into a separate grading agreement with the City prior to the commencement of any grading activity in advance of final plat and plan approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat, and said plan shall document extent of any proposed grading on the site. ***Comments: The applicant has entered into a grading agreement with the City and grading work is presently occurring on the site.***

6) The utility construction plans shall be updated to incorporate the recommendations of the City Engineer as described in a February 18, 2015 memorandum to the City concerning the appropriate location and size of sewer services through the PUD planning area, including any requested oversizing of these facilities to service adjacent properties, prior to the submission of a final plat. ***Comments: The supplemental plans included in the final plat submission address the previous review comments. The City Engineer must still review and approve the final, detailed construction plans for the project.***

7) The developer shall minimize the number of rain gardens within public rights-of-way consistent with the review comments from the City Engineer. Any such storm water infiltration features shall be subject to review and approval by the City Engineer. ***Comments: All rain gardens as previously proposed have been eliminated from the plans.***

8) The preliminary development plans must be revised to comply with City Street standards as referenced in the City Engineer's review memorandum dated February 18, 2015. ***Comments: The plans have been updated to meet City standards.***

9) The City approves all requests for flexibility from City Zoning and Subdivision requirements with the exception of the street standards noted in the preceding condition. ***Comments: The revised plans address this condition.***

10) The applicant is encouraged to incorporate elements from the Lake Elmo Theming Study into the open space areas within the subdivision. ***Comments: The final plans do not include any specific references to the City's theming study. This condition was not a mandatory requirement.***

11) The preliminary landscape plan shall be updated to address the review comments from the City's landscape architecture consultant as noted in a review letter dated February 4, 2015. ***Comments: The City's consultant has reviewed the preliminary plans and offered comments that have been incorporated into the final plans. Staff is recommending that a landscape architect perform a final review and approval of these plans, and to specifically review any landscape elements that are impacted by the final construction plan review.***

12) All center median planting areas as depicted on the preliminary plat and plans shall be owned by the City of Lake Elmo and maintained by the Homeowners Association. The applicant shall enter into a maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public park, trails, or open space on the final plat. ***Comments: The maintenance agreement will be incorporated into the developer's agreement.***

13) The Final Plat and Plans must address the requested modifications outlined in the City Engineer's review memorandum dated February 18, 2015. ***Comments: The final plans have addressed***

these comments except as noted by the City Engineer. A final review of the construction plans is pending and is recommended as a condition of approval.

14) Prior to recording the Final Plat for any portion of the area shown in the Preliminary Plat, the Developer shall enter into a Developers Agreement acceptable to the City Attorney that delineates who is responsible for the design, construction, and payment of public improvements. ***Comments: A developer's agreement will be submitted to the City Council either with or shortly after the final plat is approved.***

15) The developer shall provide an easement over or dedicate in a separate outlot all trails to be dedicated for public use. Any such trails shall be considered a park land dedication provide said trails are constructed by the developer with other public improvements within the subdivision. ***Comments: Staff is asking that the developer provide an overall calculation for the land to be dedicated as trail easements or public park land. The developer must provide easements for these trails in a manner that will be approved by the City Attorney. These easements must be completed before the City will accept the any of the public improvements within Wildflower.***

16) The City will not approve a final plat for any portion of Wildflower until such time that the City has approved construction plans and received financial security related to the construction of the public improvement project to connect the 39th Street Sewer to the 30th Street lift station. ***Comments: The City has approved a development contract for the Eastern Village Trunk Sewer project, and all parties are close to executing this agreement. Because Engstrom Companies has been one of the three private parties that will be funding the trunk sewer project, Staff is recommending that this condition be revised to state that no building permits (including model homes) will be issues within Wildflower until such time that an executed and funded development contract has been submitted to the City.***

17) The developer must follow all the rules and regulations of the Wetland Conservation Act, and adhere to the conditions of approval for the Valley Branch Watershed District Permit. ***Comments: The developers plan have been reviewed and approved by the Watershed District and grading work has commenced on this site in accordance with this permit.***

18) The developer shall maintain access to the Smith property (11514 Stillwater Boulevard North) during construction of the first development phase. Said access shall, at a minimum, be capable of supporting emergency management vehicles and be consistent with City access driveway standards. The existing driveway easement shall be vacated prior to the recording of the final plat. ***Comments: The developer has been maintaining the existing private drive to the Smith residence during the grading work. This condition will continue to apply to the development until such time that the temporary connection to Blazingstar Lane is made. Upon the City's acceptance of the public improvements within Wildflower, the existing driveway access must be eliminated.***

19) The developer shall establish a legally binding agreement to prevent further residential or commercial development of all outlots that are planned for open space or conservation uses within the preliminary plat. ***Comments: The developer is proposing to place a conservation easement over all open space outlots within the development. The City Attorney should review any such easements for consistency with this condition.***

Staff is recommending certain conditions that been specifically identified as part of the final plat review, and that have not otherwise been addressed by the applicant, be addressed as part of the Planning Commission's recommendation to the City Council. The City Engineer's review letter does identify several issues that need to be addressed by the developer in order for the City to deem the final plans complete. Of particular concern to the City Engineer is ensuring that the City has adequate easements or right-of-way in place to support the proposed infrastructure. Staff is recommending that two of the planned rights-of-way be extended (but not otherwise improved) in order to address this matter.

Based on the above Staff report and analysis, Staff is recommending approval of the final plat and final development plans for phase one with several conditions intended to address the outstanding issues noted above and to further clarify the City's expectations in order for the developer to proceed with the recording of the final plat.

The recommended conditions are as follows:

Recommended Conditions of Approval:

1) The City Attorney shall review all proposed and existing conservation easements within the development area to ensure these easements will not encumber the City from installing and maintaining and the proposed public infrastructure (including storm water pons and related improvements) over the City-owned outlots.

2) The developer shall provide easements for public access to all public trails and sidewalks that are not otherwise constructed within a public right-of-way. Any such easements shall be subject to review and approval by the City Attorney.

3) The developer shall dedicate additional right-of-way associated with the future extension of Prairieview Trail to accommodate the planned storm water improvements include with the first addition public improvements. This right-of-way shall extend to the westernmost limits of Outlot F.

4) The developer shall dedicate additional right-of-way associated with the future extension of Blazingstar Lane to accommodate the planned private driveway that will provide access to the exception parcel located north of Outlot G. The developer shall provide any easements necessary to ensure that this access may be accommodated once the plat has been recorded.

5) Final grading, drainage, and erosion control plans, sanitary and storm water management plans, landscape plans, and street and utility construction plans shall be reviewed and approved by the City Engineer prior to the recording of the Final Plat. All changes and modifications to the plans requested by the City Engineer in a memorandum dated July 8, 2015 and any future reviews shall be incorporated into these documents before they are approved.

6) All recommended conditions of approval as requested by the City Engineer in his July 8, 2015 comment letter shall be incorporated by reference into the City's approval of the final plat and PUD plans.

7) Prior to the execution of the Final Plat by City officials, the Developer shall enter into a Developer's Agreement acceptable to the City Attorney and approved by the City Council

that delineates who is responsible for the design, construction, and payment of the required improvements for the Wildflower Final Plat and Final Development Plans with financial guarantees therefore.

8) All easements as requested by the City Engineer and Public Works Department shall be documented on the Final Plat prior to the execution of the final plat by City Officials.

9) A Common Interest Agreement concerning management of the common areas of Wildflower and establishing a homeowner's association shall be submitted in final form to the Community Development Director before a building permit may be issued for any structure within this subdivision. The applicant shall also enter into a maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public park and open space on the final plat.

10) The developer is encouraged to incorporate elements from the Lake Elmo Theming Study into the final design of the community mailboxes within Wildflower.

11) The applicant shall deed Outlots B, C, J, and K to the City upon recording of the final plat.

12) The final landscape plan shall be updated to address the review comments from the City's landscape architecture consultant.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Wildflower Final Plat and Final PUD Plans

- That all the requirements of City Code Section 153.07 related to the Final Plan and Final Plat have been met by the Applicant.

- That the proposed Final Plat for Wildwood consists of the creation of 60 single-family detached residential structures and an open space/nature conservation area.

- That the Wildflower Final Plat and Final PUD Plan is consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on April 7, 2014.

- That the Wildflower Final Plat and Final PUD Plan is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

- That the Wildflower Final Plat generally complies with the City's Urban Medium Density Residential zoning district, with the exceptions as noted in the approved Preliminary PUD Plans.

- That the Wildflower Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances, except as noted in this report or attachment thereof.

- That the Wildflower Final Plat complies with the City's subdivision ordinance.

- That the Wildflower Final Plat and Final PUD Plan complies with the City's Planned Unit Development Ordinance.

- That the Wildflower Final Plat is consistent with the City's engineering standards with the exceptions noted by the City Engineer in his review comments to the City dated July 8, 2015 and as otherwise identified in future reviews.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Final Plat and Final Development Plans for Wildflower with the 12 conditions of approval as listed in the Staff report.

Suggested motion:

"Move to recommend approval of the requested Zoning Map Amendment for the Wildflower planned development based on the findings of fact listed in the Staff Report."

ATTACHMENTS:

1. Application Form
2. Project Narrative
3. Contact Information
4. Developer Acknowledgements
5. Neighborhood Park Concept
6. Wildflower Lot Development Summary
7. City Engineer Review Comments – 7/8/15
8. Fire Chief Comments – 7/7/15
9. Final Plat
10. Final Plat Supplemental Plans
11. Final Grading Plans
12. Final Landscape Plans

SUGGESTED ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Open the Public Hearing.....Chair
- Close the Public Hearing.....Chair
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
LU File #: _____

THE CITY OF
LAKE ELMO

651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

FINAL PLAT APPLICATION

Applicant: Robert Engstrom Companies
Address: 4801 West 81st Street, Ste 101, Minneapolis, MN 55437
Phone #: 952-893-1001
Email Address: bob@engstromco.com

Fee Owner: Robert Engstrom Companies
Address: 4801 West 81st Street, Ste 101, Minneapolis, MN 55437
Phone #: 952-893-1001
Email Address: bob@engstromco.com

Property Location (Address and Complete (long) Legal Description:
NE Quadrant of the intersection of Stillwater Blvd. & Lake Elmo Ave.
The North Half of the SW Quarter and the SE Quarter of the SW Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota

General information of proposed subdivision:
60 lot residential subdivision & Entire Development Grading
(See Attached Summary)

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning Ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant: Robt E Engstrom Date: 5/21/15

Fee Owner Signature Robt E Engstrom Date: 5/21/15

Wildflower at Lake Elmo Summary

Robert Engstrom Companies (REC) has acquired and has fee title to a 101-acre site, and also owns 16 acres for Outlots O & P, The Fields of St. Croix, Second Addition. The sites are immediately west of The Fields of St. Croix, Second Addition, and near the Village Center of Lake Elmo.

The overall land plan has 145 lots, planned in a manner that is organized within a context that has a structural relationship to the City of Lake Elmo, Village Center.

Approximately 60 acres will be converted to native habitat of Pollinator Prairie, native trees and shrubs, along with Association-owned parks. A mile and a half of bituminous trails will be installed on an easement to the City of Lake Elmo, thereby permitting the trails to be open to the public. The trails will be owned and maintained by the City. The native habitat open space will be owned by the Wildflower at Lake Elmo Community Association. The trails and open space will be developed and paid by REC. It is deemed that combination of the open space land, habitat installation and the trail expense more than exceeds any reasonable park dedication requirement. In addition, REC has prepared a Concept Park Plan for the adjoining Gonyea development and is donating an extra 8,737 square feet of land to add to the Gonyea park dedication. The schematic plan is attached.

The First Addition includes 60 home-sites, of which 22 are for the Garden Villa Homes. The Garden Villa Homes are primarily single-level homes, with Association maintenance of the grounds and a heavily landscaped, private interior park. The other home-sites are somewhat larger than offered in the marketplace, in order to provide more flexibility for architectural designs.

The homes will be built by individual builders, thereby providing more architectural diversity and personal service. REC will maintain architectural control of all homes and landscaping plans. Front-yard sidewalks will serve most of the homes.

The landscaping plan, which conforms to the City standards, will be enhanced by more interesting designs, and including more pollinator-friendly trees and shrubs. In addition, individual homeowners will be required to plant at least 100 square feet of native plants, as part of their landscaping plan. A Native Plant Trail is planned along a portion of the Promenade to provide educational value for homeowners and others.

Public Art will include some distinctive landscape designs such as benches and freestanding sculptural features. Any sculptures located on City ROWs will be approved in advance by the City.

The PUD flexibility should be an incentive to provide some unique designs for landscape details and also provide for a variety of lot line setbacks. [see attached exhibit]

A separate application for a development sign will be submitted for the access easement adjoining State Highway 5.

The stormwater design provides for a maximum amount of surface water to be retained on site.

Initial concerns/issues of the affected neighbors regarding proximity and view buffers have been addressed and agreed to by neighbors (Smith, Dupuis & Eischen) and the Wildflower developer.

Specific provisions are:

- Provide buffer and view screening plantings of selected deciduous, coniferous and shrub materials to the above mentioned properties.
- Remove/clear existing dead and invasive plant materials, and intersperse new plant materials.
- Remove planned lots and convert area to open space with berms and plantings. Provide new road access. Extend utilities and services to existing homestead. (Smith property).

Current status:

- Large tree plantings installed Fall, 2014 (Dupuis property).
- Shrubs planned for 2015.
- Other properties will be completed as appropriate to construction progress and access.

We do not anticipate any other issues, weather dependent.

A Conservation Easement will be executed in favor of the City of Lake Elmo for the open space areas that are owned by the Wildflower at Lake Elmo Community Association.

Directory

Developer: Robert Engstrom Companies
4801 W 81st Street, Suite 101
Bloomington, MN 55437
952-893-1001
Bob Engstrom
Paul Engstrom

Engineering & Surveying:
Pioneer Engineering
2422 Enterprise Drive
Mendota Heights, MN 55120
651-681-1914
Paul Thomas
John Molinaro

Architect: Design Forum
4801 W 81st Street, Suite 101
Bloomington, MN 55437
612-618-7406
Jerry Mazarra

Soils: Haugo GeoTechnical Services
13570 Grove Drive, #278
Maple Grove, MN 55311
612-554-4829
Paul Haugo

General Contractor:
S. M. Hentges & Sons, Inc.
650 Quaker Avenue
Jordan, MN 55352
952-492-5700
Gary Zajac

THE CITY OF
LAKE ELMO

Lake Elmo City Hall
651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

ACKNOWLEDGEMENT OF RESPONSIBILITY

This is to certify that I am making application for the described action by the City and that I am responsible for complying with all City requirements with regard to this request. This application should be processed in my name and I am the party whom the City should contact regarding any matter pertaining to this application.

I have read and understand the instructions supplied for processing this application. The documents and/or information I have submitted are true and correct to the best of my knowledge. I will keep myself informed of the deadlines for submission of material and of the progress of this application.

I understand that this application may be reviewed by City staff and consultants. I further understand that additional information, including, but not limited to, traffic analysis and expert testimony may be required for review of this application. I agree to pay to the City upon demand, expenses, determined by the City, that the City incurs in reviewing this application and shall provide an escrow deposit to the City in an amount to be determined by the City. Said expenses shall include, but are not limited to, staff time, engineering, legal expenses and other consultant expenses.

I agree to allow access by City personnel to the property for purposes of review of my application.

Signature of applicant Robert E Engstrom Date 5/21/15

Name of applicant Robert Engstrom Companies Phone 952-893-1001
(Please Print)

Name and address of Contact (if other than applicant)

THE CITY OF
LAKE ELMO

Lake Elmo City Hall
651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

AFFIRMATION OF SUFFICIENT INTEREST

I hereby affirm that **I am the fee title owner** of the below described property or that I have written authorization from the owner to pursue the described action.

Name of applicant Robert Engstrom Companies
(Please Print)

Street address/legal description of subject property

NE Quadrant of the intersection of Stillwater Blvd. & Lake Elmo Ave.

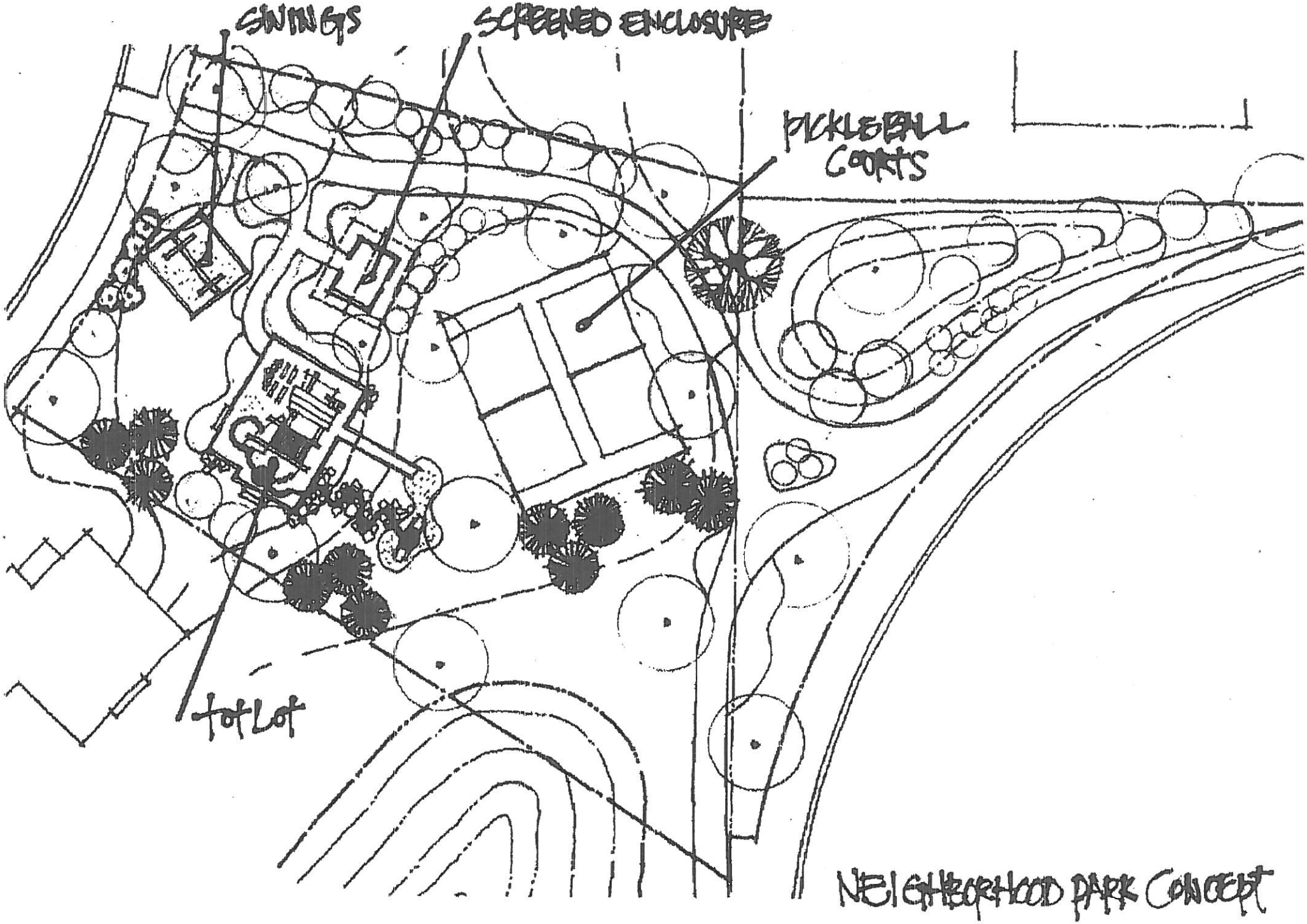
Signature

5/21/15
Date

If you are not the fee owner, attach another copy of this form which has been completed by the fee owner or a copy of your authorization to pursue this action.

If a corporation is fee title holder, attach a copy of the resolution of the Board of Directors authorizing this action.

If a joint venture or partnership is the fee owner, attach a copy of agreement authorizing this action on behalf of the joint venture or partnership.


SWINGS
SCREENED ENCLOSURE
PICKLEBALL COURTS
tot Lot
NEIGHBORHOOD PARK CONCEPT

WILDFLOWER *

LOT PROFILE (SFD)

	RIDGE LOTS	CONSERVANCY LOTS	PRAIRIE LOTS	COURTYARD LOTS
QUANTITY	9	13	54	67
AVG DIMENSION	VARIABLE	VARIABLE	85'x145' +/-	60'x115' +/-
AVG SIZE (S.F.)	18,585	21,600	12,325 +/-	7,015 +/-

SETBACKS

	RIDGE LOTS	CONSERVANCY LOTS	PRAIRIE LOTS	COURTYARD LOTS
FRONT YD.	25'	25'	25'	20'+
SIDE YD.				
HOUSE:	15'	15'	10'	10' (OR 7.5')
GARAGE:	10'	10'	5'	5' (OR 7.5')
STREET:	25'	25'	15'	15'
REAR YD.	VARIABLE To maintain bluff vegetation and slope erosion (25' Minimum)	VARIABLE To maintain bluff vegetation and slope erosion (25' Minimum)	30'	20'+

COURTYARD LOTS:

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR & SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.

A.	FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'-0" MAX.
B.	WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'-0" MAX.
C.	CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'-0" MAX.
D.	FRONT PORCHES	10'-0" MAX. PAST HOUSE FRONT FACE
E.	ROOF OVERHANGS, ALL SIDES	3'-6" MAX.
F.	HIGH FENCES – NOT ATTACHED TO HOUSE (MAX. HT. 6') SIDE YARD SETBACK	3'-0" MAX. DISTANCE FROM SETBACK LINE
G.	LOW FENCES (30"- 42" HT.) – FRONT & REAR YD - ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD - 8'-0" INSIDE FRONT YARD P.L. REAR YD: NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE
H.	DECKS & PATIOS – FRONT YD.	6'-0" INSIDE FRONT P.L.
I.	DECKS & PATIOS – SIDE YD.	3'-0" MAX. DISTANCE FROM SETBACK LINE
J.	DECKS & PATIOS – REAR YD.	NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE
K.	TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDEN AREAS. EXACT FEATURE DESIGN AND LOCATION TO BE REVIEWED AND APPROVED BY R.E.C. DESIGN REVIEW PROCEDURE.

8-21-2014
8-26-2014
11-5-2014 - TOTAL LOTS: 143

*SIS 5/28/2015

MEMORANDUM

FOCUS ENGINEERING, inc.

Cara Geheren, P.E.	**651.300.4261**
Jack Griffin, P.E.	**651.300.4264**
Ryan Stempski, P.E.	**651.300.4267**
Chad Isakson, P.E.	**651.300.4283**

Date: July 8, 2015

To: Kyle Klatt, Planning Director
From: Jack Griffin, P.E., City Engineer

Re: Wildflower at Lake Elmo
Phase 1 Final Plat Review

An engineering review has been completed for the revised Final Plat Supplemental Plans and Wildflower at Lake Elmo 1st Addition Final Plat. The submittal consisted of the following documentation prepared by Pioneer Engineering, Inc. and received on July 6, 2015:

- Response memorandum dated July 2, 2015.
- Final Plat Supplemental Plans dated July 2, 2015.
- Revised Final Grading, Drainage and Erosion Control Plans dated July 2, 2015.
- Wildflower at Lake Elmo 1st Addition Final Plat.

STATUS/FINDINGS: An engineering review has been separated for Final Plat conditional approval and Final Construction Plan approval. Please see the following review comments relating to the Final Plat application.

FINAL PLAT – 1ST ADDITION

- Final Plat approval must be contingent upon the Village Preserve Final Plat being recorded with Washington County to ensure adequate R/W is platted for Prairieview Trail and Wildflower Drive. The entire street R/W for Prairieview Trail and Wildflower Drive must be platted and recorded at the County, or executed roadway and utility easements in the City's standard easement form must be provided to the City, prior to the start of street and utility construction.
- A drainage and utility easement must be provided over Outlot O to accommodate the storm sewer pipe proposed as part of the Phase 1 construction along Lots 3-5 and 21-23, Block 5.
- Final Plat approval must be contingent upon a revised Final Plat that includes additional Prairieview R/W (approx. 140 feet) to include the street R/W necessary to accommodate the Phase 1 storm sewer pipe being constructed from Pond 3N to the Outlot C storm water pond (Pond 200).
- As required, Outlots B, C, J and K are proposed to be dedicated to the City as part of the Plat.
- Final Plat approval must be contingent upon Outlot J being dedicated to the City free from any and all restrictions from third party easements to ensure that the City has no restrictions going forward in regards to operation, maintenance and replacement of the storm water infrastructure.
- Final Plat approval must be contingent upon the Outlot H drainage and utility easement being fully available to the City for the ongoing ownership, maintenance and replacement of the City sanitary sewer pipe, free from any restrictions by third party easements.
- The Outlot A is shown as HOA owned with a drainage and utility easement over the Outlot. This easement must be revised as a trail, drainage and utility easement.

- The Outlot F is shown as HOA owned with a drainage and utility easement over the Outlot. This easement must be revised as a trail, drainage and utility easement.
- The Outlot L is shown as HOA owned with a drainage and utility easement over the Outlot. This easement must be revised as a sidewalk, drainage and utility easement.
- The Final Plat must be contingent upon the completion of the Village East Trunk Sanitary Sewer from the Reid Park Lift Station to the UPRR. The conditional approval should include provisions to not allow building permits, including model homes, until construction of the Village East Trunk Sanitary Sewer from the Reid Park Lift Station to the UPRR has commenced, a letter of credit to secure the construction is in place, and a schedule for completion has been determined.

FINAL PLAT SUPPLEMENTAL PLANS: Final Plat approval must be contingent upon the Final Plat Supplemental Plans being revised and resubmitted per the following review comments:

- Revise Outlot H to include a blanket drainage and utility easement.
- Revise Outlot A drainage and utility easement to include trail, drainage and utility easement.
- Revise Outlot F drainage and utility easement to include trail, drainage and utility easement.
- Revise Outlot L drainage and utility easement to include sidewalk, drainage and utility easement.

FINAL CONSTRUCTION PLANS

- No construction, except for grading operations may occur on the site until the applicant has received City Engineer approval for the final street and utility construction plans and has obtained all applicable permits for the Subdivision.
- The Final Plat shall not be recorded until final construction plan approval is granted.
- Final construction plan review comments will be provided separately to assist the applicant with the completion of Final Construction Plans.

Station #1
3510 Laverne Ave. No.
Lake Elmo, MN 55042
651-770-5006

Station #2
4259 Jamaca Ave. No.
Lake Elmo, MN. 55042
651-779-8882

LAKE ELMO FIRE DEPARTMENT

July 7, 2015

Review of the FINAL PLAT AND FINAL PUD PLAN – WILDFLOWER AT LAKE ELMO

Following a review of the packet provided, I have concerns related to the following:

- February 13, 2015 – "*Hydrant placement/spacing. Hydrants need to be placed at intersections to be most advantageous for emergency response and spaced per our requirements, with spacing of hydrants not to exceed 500'"*.
  There are still areas that do not meet our minimum requirement of hydrant spacing not to exceed 500'. This spacing is measured via travel distance, (roadway) between hydrants. Please resubmit drawing showing corrections.
- I also have concerns regarding the placement of hydrants along what is currently named WILDFLOWER DRIVE. With hydrants located only on one side of the roadway, it may become necessary for us to shut down this main access road when using these hydrants for fire suppression to the north.
- Street naming to remain consistent with current program as adopted by City Council. This matter was addressed in my review letter dated February 13, 2015 and based on the current drawings, this development is not in compliance.
- I am concerned with the name of the development being "WILDFLOWER" as we already have a WILDFLOWER SHORES development located on Hwy5 on the West end of Lake Elmo. As with our previous discussion with Council regarding street naming and our goal of avoiding "confusion" for emergency responders, the name similarity could create problems as well.
- This item was identified in February and I don't know if it has been addressed?
  I have concerns with the turning radius of islands shown, especially the "tear drop" design as this presents problems for us getting several large apparatus into these areas, even more so in the winter.
- This item was identified in February and I don't know if it has been addressed?
  Road widths must comply with current standards. Narrow roads create problems for us. When there is a structure fire we need to get several apparatus to the scene. There may be alternatives offered up such as "one way" or "no parking", which experience has shown us that these are easily disregarded and when you factor in narrowing due to snowbanks, this creates difficulty in responding.

Sincerely,

Greg Malmquist, Fire Chief

"Proudly Serving Neighbors & Friends"

WILDFLOWER AT LAKE ELMO 1ST ADDITION

KNOW ALL PERSONS BY THESE PRESENTS: That Robert Engstrom Companies, a Minnesota corporation, owner of the following described property:

The North Half of the Southwest Quarter and the Southeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, EXCEPT the following described part thereof:

All that part of the Northeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, described as follows:

Beginning at the center of said Section 12; thence due South along the east line of said Northeast Quarter of the Southwest Quarter a distance of 1240.5 feet, thence at right angles due West a distance of 200 feet, thence North 55 degrees 00 minutes 00 seconds West a distance of 270 feet, thence due North a distance of 617 feet, thence at right angles due East a distance of 147 feet, thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast Quarter of the Southwest Quarter, thence Easterly along the North line of said Northeast Quarter of the Southwest Quarter a distance of 274.17 feet to the place of beginning.

Also EXCEPT:
The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.

AND

That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows:

Commencing at the Northeast corner of said Northeast Quarter of the Northwest Quarter of said Section 13; thence West on the North line thereof 35 feet to a point; thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

AND

Outlots O and P, THE FIELDS OF SAINT CROIX 2ND ADDITION according to the recorded plat thereof, Washington County, Minnesota.

Outlot P is Torrens property – Certificate of Title Number 54384

Has caused the same to be surveyed and platted as WILDFLOWER AT LAKE ELMO 1ST ADDITION and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as created by this plat.

In witness whereof said Robert Engstrom Companies, a Minnesota corporation, has caused these presents to be signed by Robert E. Engstrom this _____ day of _____, 20____.

STATE OF MINNESOTA

Signed: Robert Engstrom Companies, a Minnesota corporation

_____

Robert E. Engstrom, its Presicent

COUNTY OF _____

This instrument was acknowledged before me on this _____, by Robert E. Engstrom, its President of Robert Engstrom Companies, a Minnesota corporation, on behalf of the corporation.

_____

_____

Notary Public, _____

My Commission Expires _____

SURVEYOR'S CERTIFICATE

I Peter J. Hawkinson do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been set, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20____.

_____

Peter J. Hawkinson, Licensed Land Surveyor
Minnesota License No. 42299

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on this _____ by Peter J. Hawkinson, Licensed Land Surveyor.

_____

_____

Notary Public, _____

My Commission Expires _____

CITY PLANNING COMMISSION, Lake Elmo, Minnesota

Approved by the Planning Commission of the City of Lake Elmo, Minnesota, this _____ day of _____, 20____.

By: _____ Chairman

By: _____ Secretary

CITY COUNCIL, Lake Elmo, Minnesota

This plat was approved by the City Council of the City of Lake Elmo, Minnesota, this _____ day of _____, 20____, and hereby certifies compliance with all requirements as set forth in Section 505.03, Subd. 2, Minnesota Statutes.

By: _____ Mayor

By: _____ Clerk

COUNTY SURVEYOR, Washington County, Minnesota

Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 20____.

By: _____ Washington County Surveyor

By: _____

COUNTY AUDITOR/TREASURER, Washington County, Minnesota

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20____ on the real estate hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes, and transfer has been entered on this _____ day of _____, 20____.

By: _____ Washington County Auditor/Treasurer

By: _____ Deputy

COUNTY RECORDER, Washington County, Minnesota

Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 20____, at ____ o'clock ____ M. and was duly recorded in Washington County Records.

By: _____ Washington County Recorder

By: _____ Deputy

COUNTY REGISTRAR OF TITLES, Washington County, Minnesota

Document Number _____

I hereby certify that this instrument was filed in the Office of the Registrar of Titles for record on this _____ day of _____, 20____, at ____ o'clock ____ M. and was duly recorded in Washington County Records.

By: _____ Washington County Registrar of Titles

By: _____ Deputy

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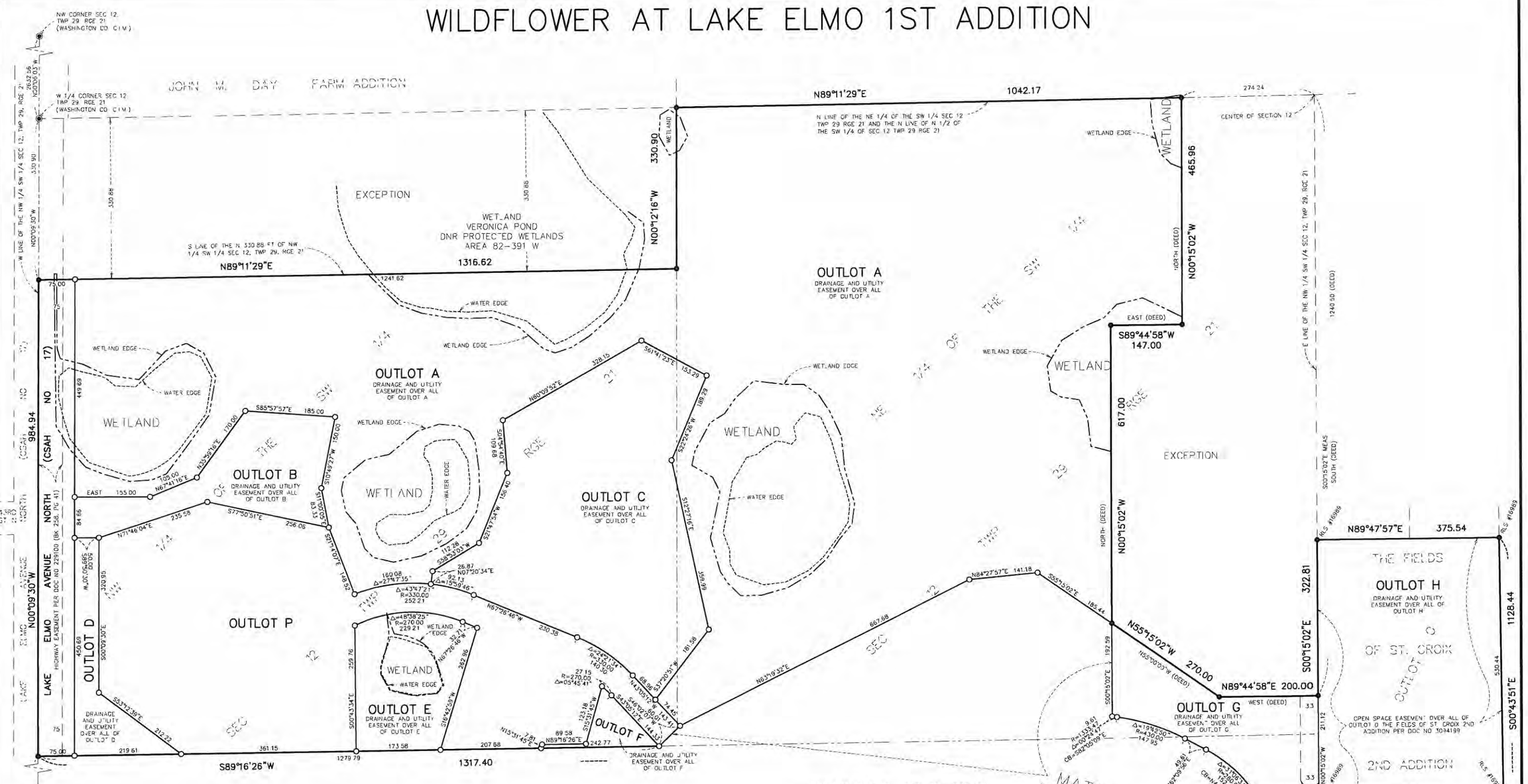
CIVIL ENGINEERS · LAND PLANNERS · LAND SURVEYORS · LANDSCAPE ARCHITECTS

WILDFLOWER AT LAKE ELMO 1ST ADDITION



THE ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WEST LINE OF THE NW 1/4 OF THE SW 1/4 OF SEC 12, TWP 29, RGE. 21, WHICH IS ASSUMED TO HAVE A BEARING OF NORTH 00°09'30" WEST.

WETLAND DELINEATED BY BOPRAY ENVIRONMENTAL SERVICES, LLC

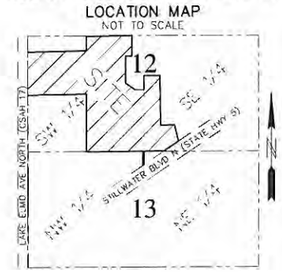
- ◉ DENOTES FOUND WASHINGTON COUNTY CAST IRON MONUMENT
- O DENOTES SET 1/2 INCH BY 14 INCH IRON PIPE MONUMENT MARKED BY LICENSE NUMBER 42299, OR WILL BE SET IN ACCORDANCE WITH MS SECTION 505.021, SUBD. 10
- ● DENOTES FOUND 1/2 INCH IRON MONUMENT MARKED BY LICENSE NUMBER 42299 UNLESS OTHERWISE NOTED

(DEED) DENOTES DIMENSIONS PER DOCUMENT NUMBER 3993488

N

100 50 0 100
Scale in Feet
1 Inch = 100 Feet

SECTION 12 & 13, TWP 29, RGE 21
LOCATION MAP
NOT TO SCALE



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CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS

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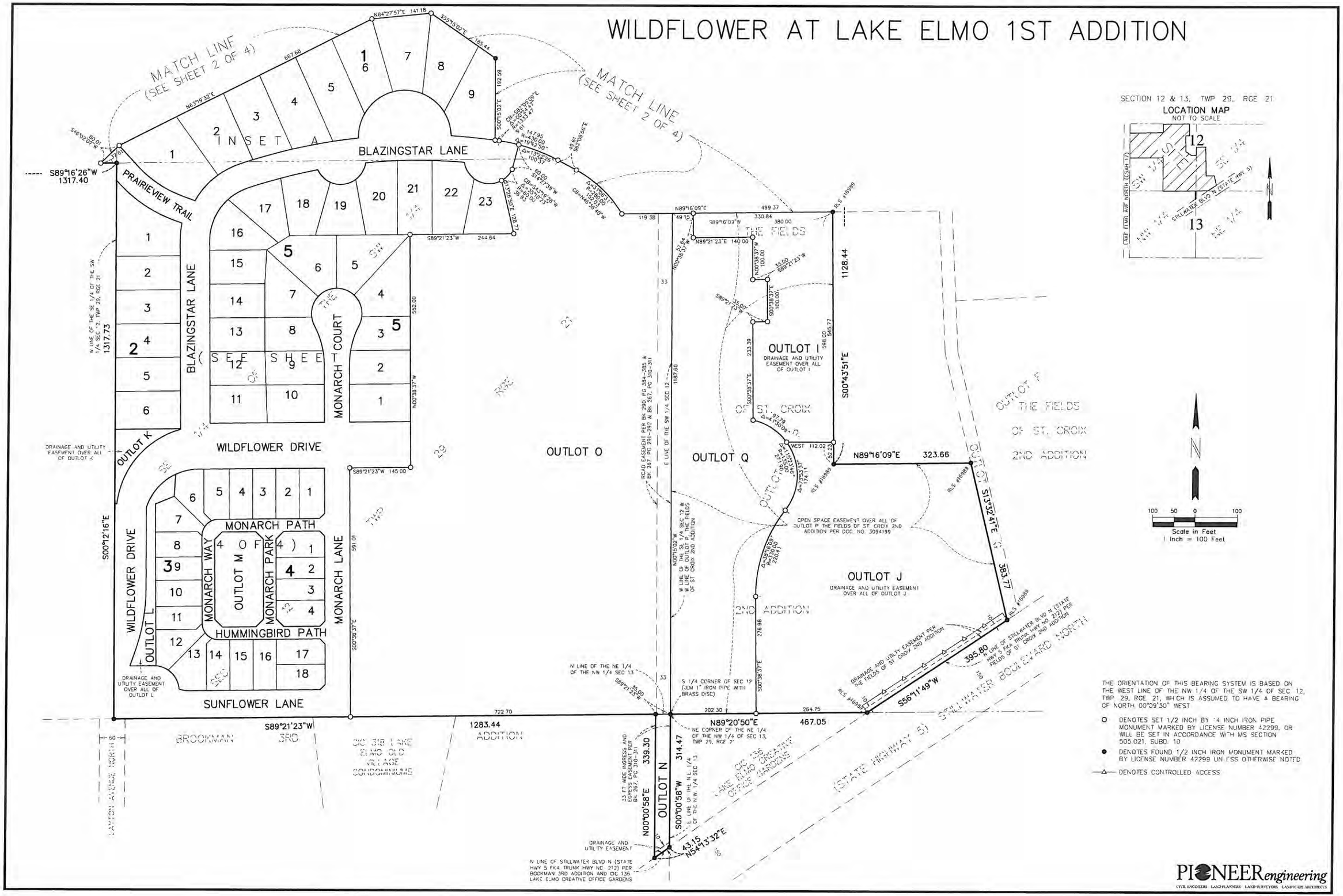
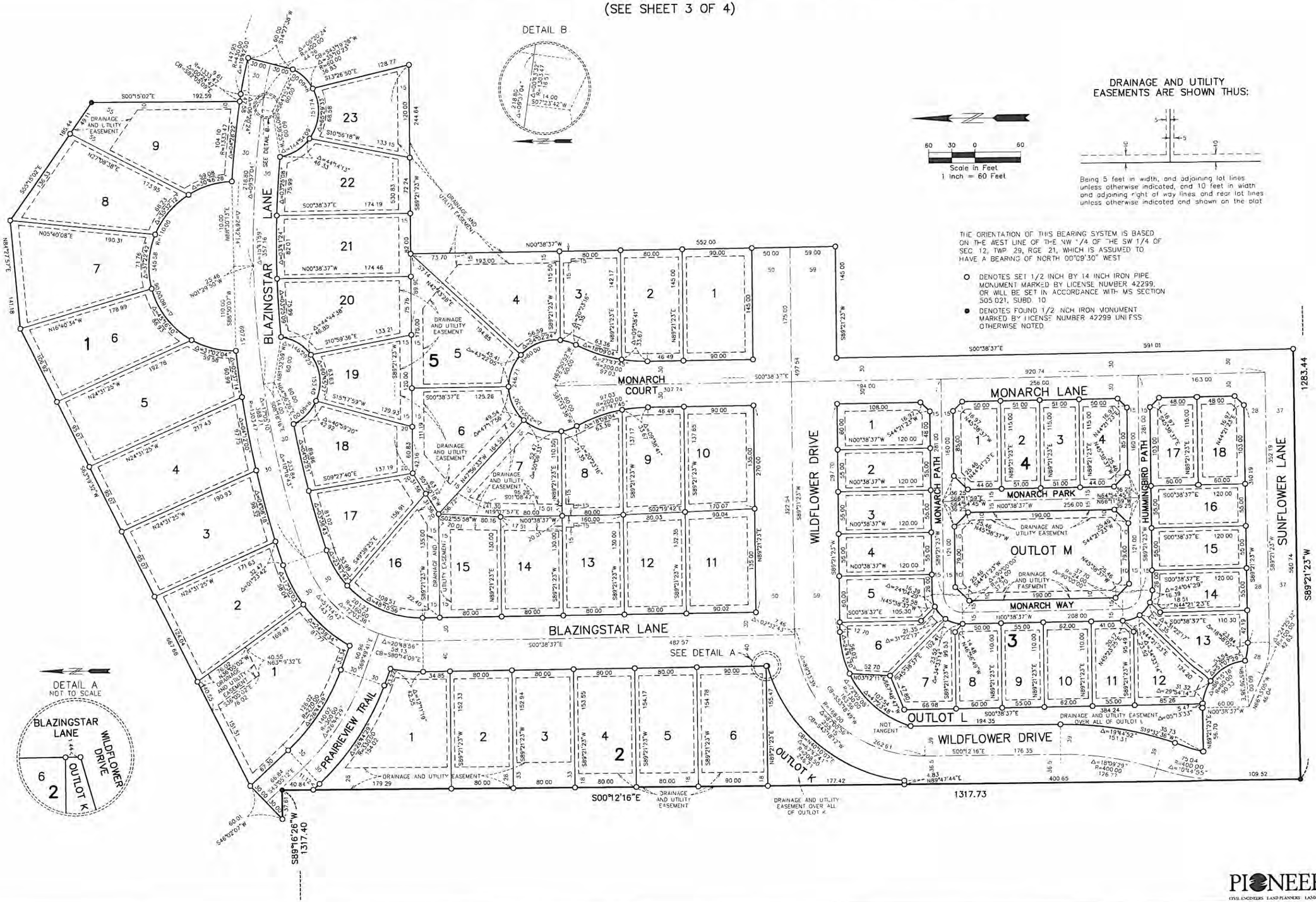


WILDFLOWER AT LAKE ELMO 1ST ADDITION

INSET A
(SEE SHEET 3 OF 4)



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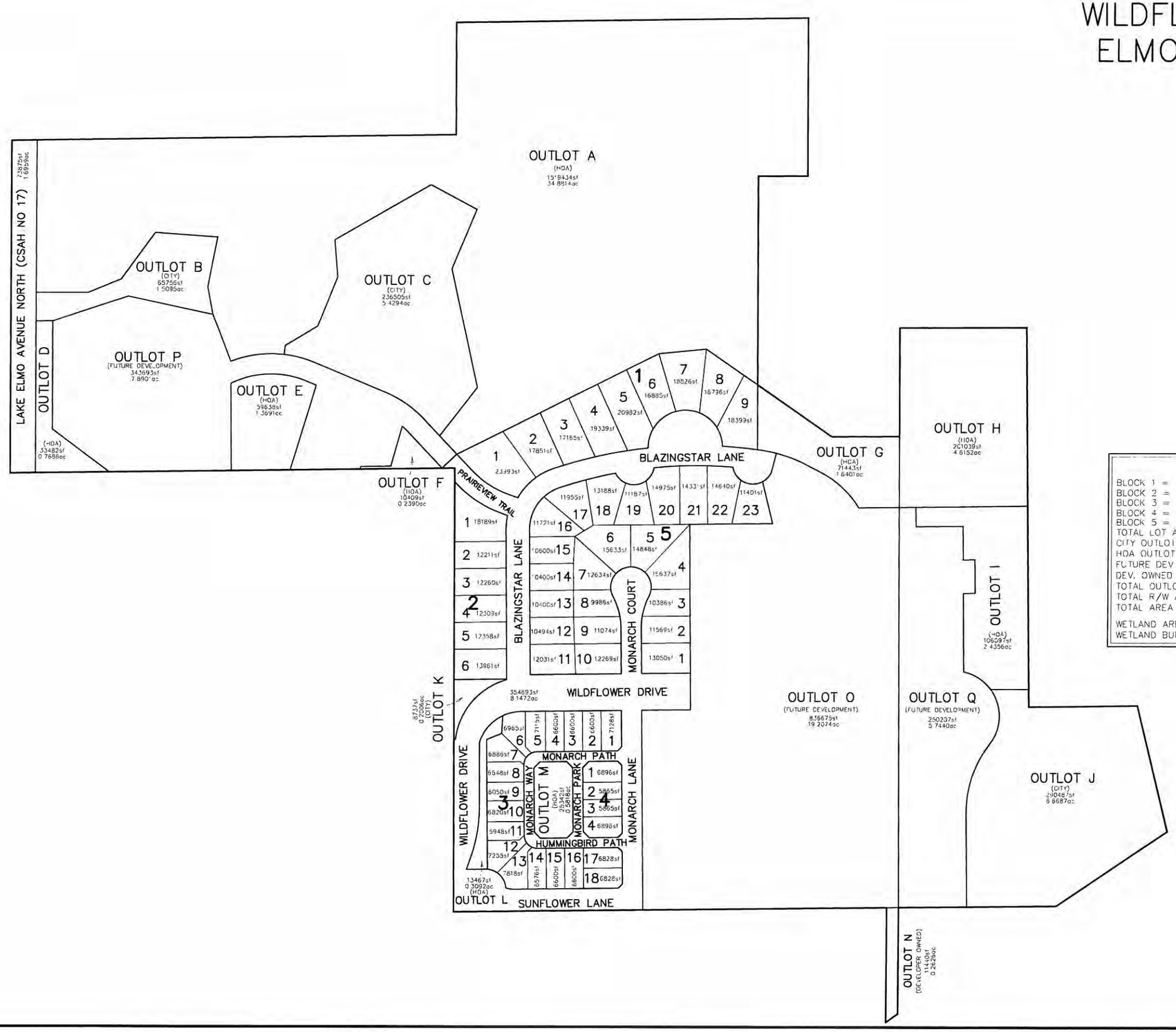
WILDFLOWER AT LAKE ELMO 1ST ADDITION

AREA SKETCH



AREA SUMMARY

BLOCK 1 =	170,236 SF	3.9081 AC.
BLOCK 2 =	81,288 SF	1.8661 AC
BLOCK 3 =	121,765 SF.	2.7953 AC.
BLOCK 4 =	25,522 SF	0.5859 AC
BLOCK 5 =	284,409 SF	6.5291 AC
TOTAL LOT AREA =	683,220 SF	15.6845 AC.
CITY OUTLOT AREA =	601,485 SF	13.8082 AC.
HOA OUTLOT AREA =	2,040,351 SF	46.8400 AC
FUTURE DEV OUTLOT AREA =	1,430,575 SF	32.8415 AC
DEV. OWNED OUTLOT AREA =	11,440 SF	0.2626 AC
TOTAL OUTLOT AREA =	4,083,851 SF	93.7523 AC
TOTAL R/W AREA =	354,893 SF	8.1472 AC.
TOTAL AREA =	5,121,964 SF	117.5840 AC
WETLAND AREA =	335,052 SF.	7.6918 AC.
WETLAND BUFFER AREA =	726,635 SF	16.6812 AC

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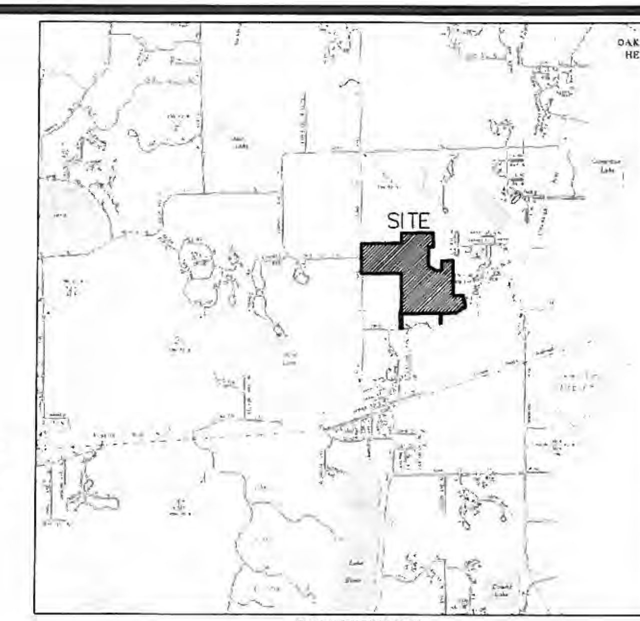
WILDFLOWER AT LAKE ELMO
FINAL PLAT SUPPLEMENTAL PLANS
LAKE ELMO, MINNESOTA



LOCATION MAP

SHEET INDEX

FINAL PLAT SUPPLEMENTAL
S-1. COVER SHEET
S-2-3. EXISTING CONDITIONS
S-4. OWNERSHIP & LANDUSE
S-5-6. PLAT EXHIBIT
S-7. SITE PLAN OVERALL
S-8-9. SITE PLAN
S-10. UTILITY PLAN OVERALL
S-11-18. UTILITY PLAN
S-19-22. STREET PROFILES
S-23. DETAILS

FINAL GRADING PLAN
G-1. COVER SHEET
G-2. LEGENDS
G-3. FINAL GRADING PLAN OVERALL
G-4-11. FINAL GRADING PLAN
G-12-13. EROSION CONTROL PLAN
G-14-15. SEEDING PLAN
G-16-18. GRADING DETAILS
E-1. PHASING/BUFFER EXHIBIT
E-2. INTERIM RETAINING WALL GRADING
E-3. LIFT STATION EXHIBIT
P-1-4. STREET PROFILES
T1. SOUTH ENRANCE TREE INVENTORY
T2. TREE PROTECTION PLAN
T3. TREE PROTECTION PLAN

PREPARED BY PIONEER ENGINEERING, P.A.

JOHN M. MOLINARO
REGISTERED PROFESSIONAL CIVIL ENGINEER
45831
REG. NO.

PETER J. HAWKINSON
REGISTERED PROFESSIONAL LAND SURVEYOR
42299
REG. NO.

DEVELOPER
ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111
CONTACT: ROBERT ENGSTROM
ROBERTEENGRSTROM@GMAIL.COM
(952) 893-1001

LANDOWNER
ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111
ROBERTEENGRSTROM@GMAIL.COM
(952) 893-1001

PROPOSED DEVELOPMENT PHASING
MASS GRADING TO BE PERFORMED IN ONE PHASE.
UTILITY AND STREET CONSTRUCTION TO BE PERFORMED IN THREE PHASES.

01-ENG-114058-SHEET-S-CVR

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2422 Enterprise Drive
Mendota Heights, MN 55120
(651) 681-1914
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Name John M. Molinaro
Reg. No. 45831 Date 05-28-2015

Revisions
1 07-02-15 City/Watershed Comments

Date	05-28-2015
Designed	PAT/JMM
Drawn	JMM

COVER SHEET

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

S-1 OF 23

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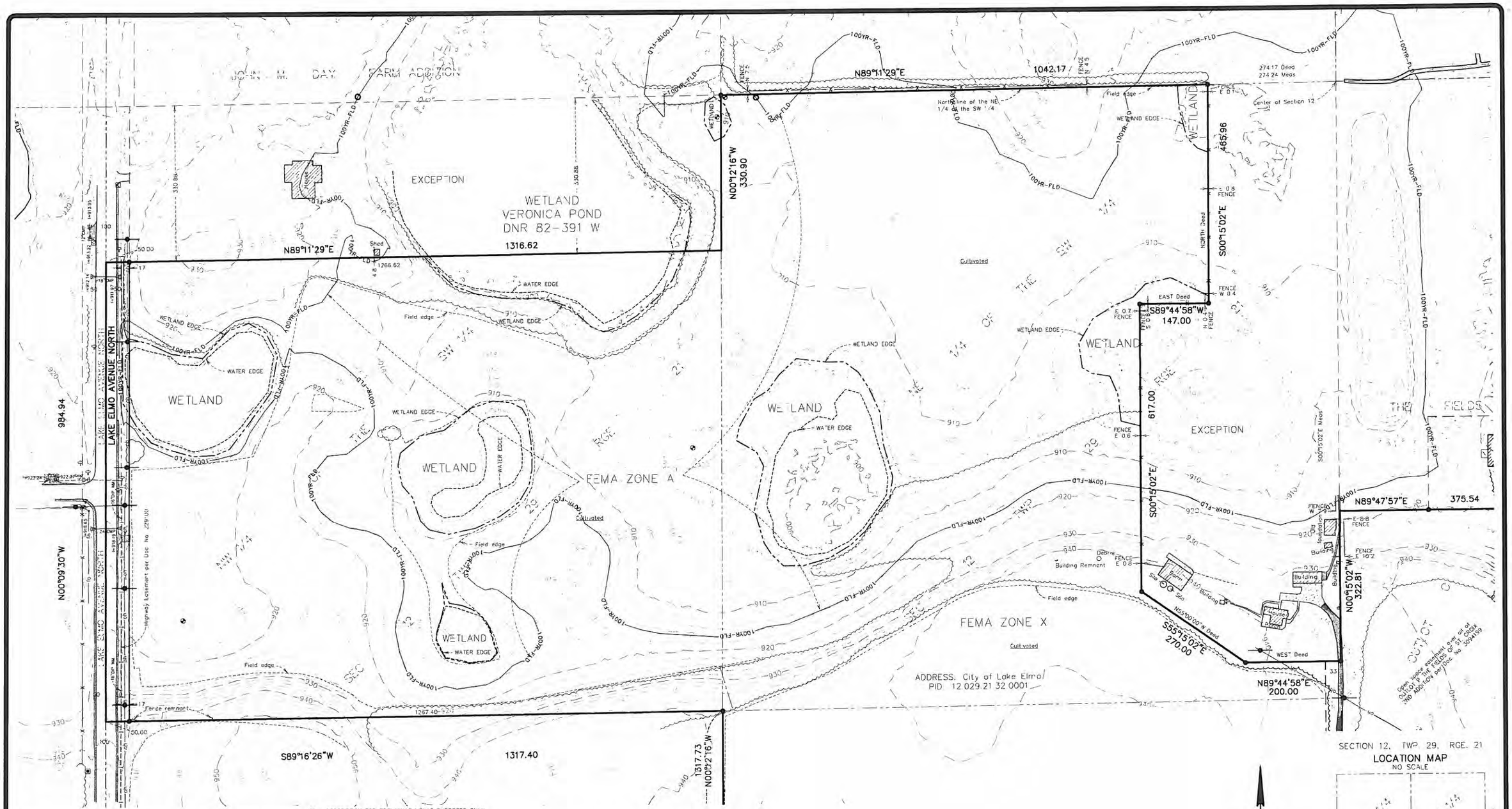
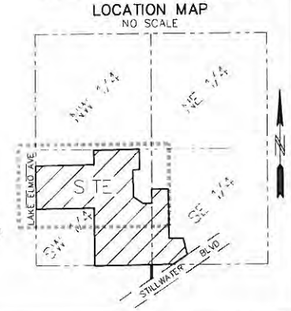
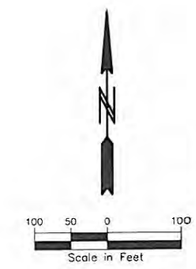


SECTION 12, TWP 29, RGE. 21

LOCATION MAP

NO SCALE





DATE OF SURVEY 4/12/2014

LEGAL DESCRIPTION FOR PRELIMINARY PLAT PURPOSES ONLY

The real estate being located in the County of Washington, State of Minnesota, and legally described as follows

The North Half of Southwest Quarter and the Southeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, save and except the following described part thereof: All that part of the Northeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, described as follows: Beginning at the center of said Section 12; thence due South along the East line of said Northeast Quarter of Southwest Quarter a distance of 1240.5 feet; thence at right angles due West a distance of 200 feet; thence North 55 degrees 00 minutes 00 seconds West a distance of 270 feet; thence due North a distance of 617 feet; thence at right angles due East a distance of 147 feet; thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast Quarter of Southwest Quarter; thence Easterly along the North line of said Northeast Quarter of Southwest Quarter a distance of 274.17 feet to the place of beginning

And

That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows: Commencing at the Northeast corner of said Northeast Quarter of Northwest Quarter of said Section 13; thence West on the North line thereof 35 feet to a point; thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning

Excepting therefrom all of the following described real property: The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota

Together with

Outlots O and P, THE FIELDS OF SAINT CROIX 2ND ADDITION according to the plat thereof, Washington County, Minnesota

PIONEER engineering

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Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota

Name: Peter T. Hawkinson
Reg. No. 42299 Date: 05-28-2015

Revisions:

Date 05-28-2015
Designed:
Drawn mdp

EXISTING CONDITIONS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

S-2 OF 18

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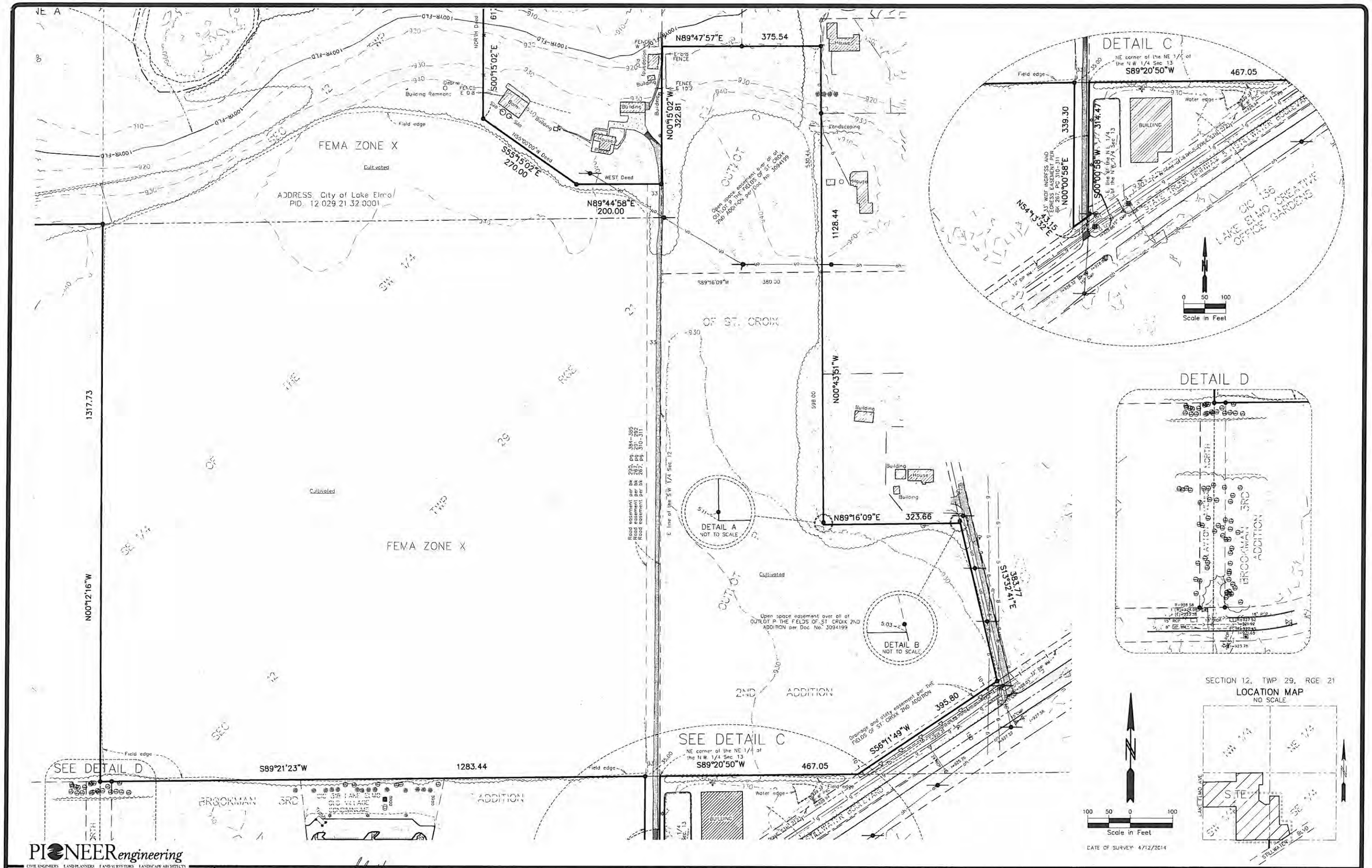

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Reg. No. 42299 Date 05-28-2015

Revisions

Date	05-28-2015
Designed	
Drawn	mdp

EXISTING CONDITIONS

ROBERT ENGSTROM COMPANIES
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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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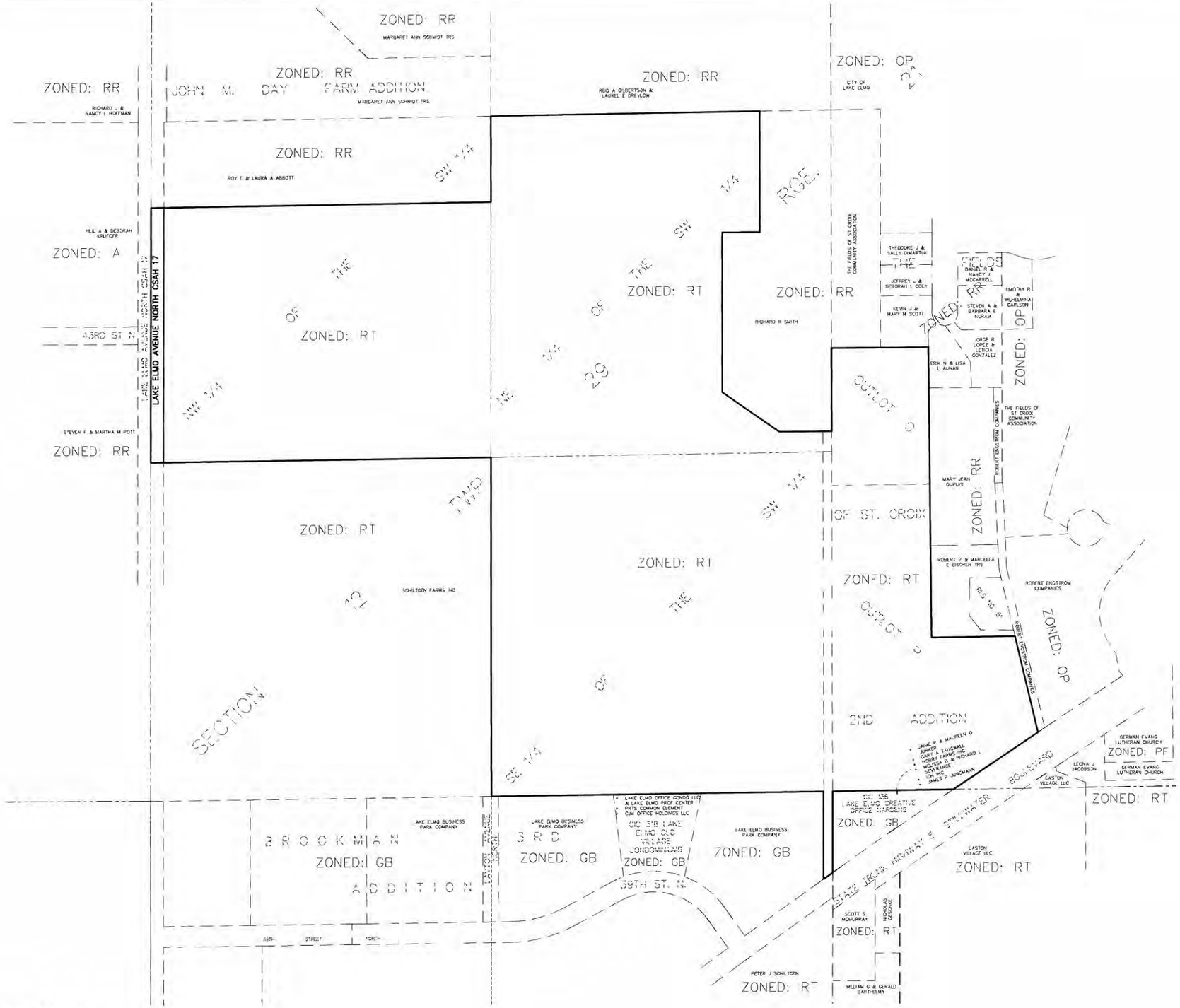


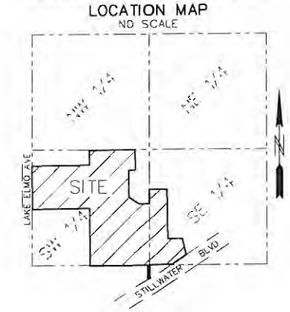
LEGEND

A – Agriculture
GB – General Business
RR – Rural Residential
RT – Rural Development Transitional
OP – Open Space Preservation District
PF – Public and Quasi-Public Open Space

N

200 100 0 200
Scale in Feet

SECTION 12, TWP 29, RGE 21
LOCATION MAP
NO SCALE



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Reg. No 42299 Date 05-28-2015

Revisions

Date 05-28-2015
Designed
Drawn mdp

OWNERSHIP AND LAND USE

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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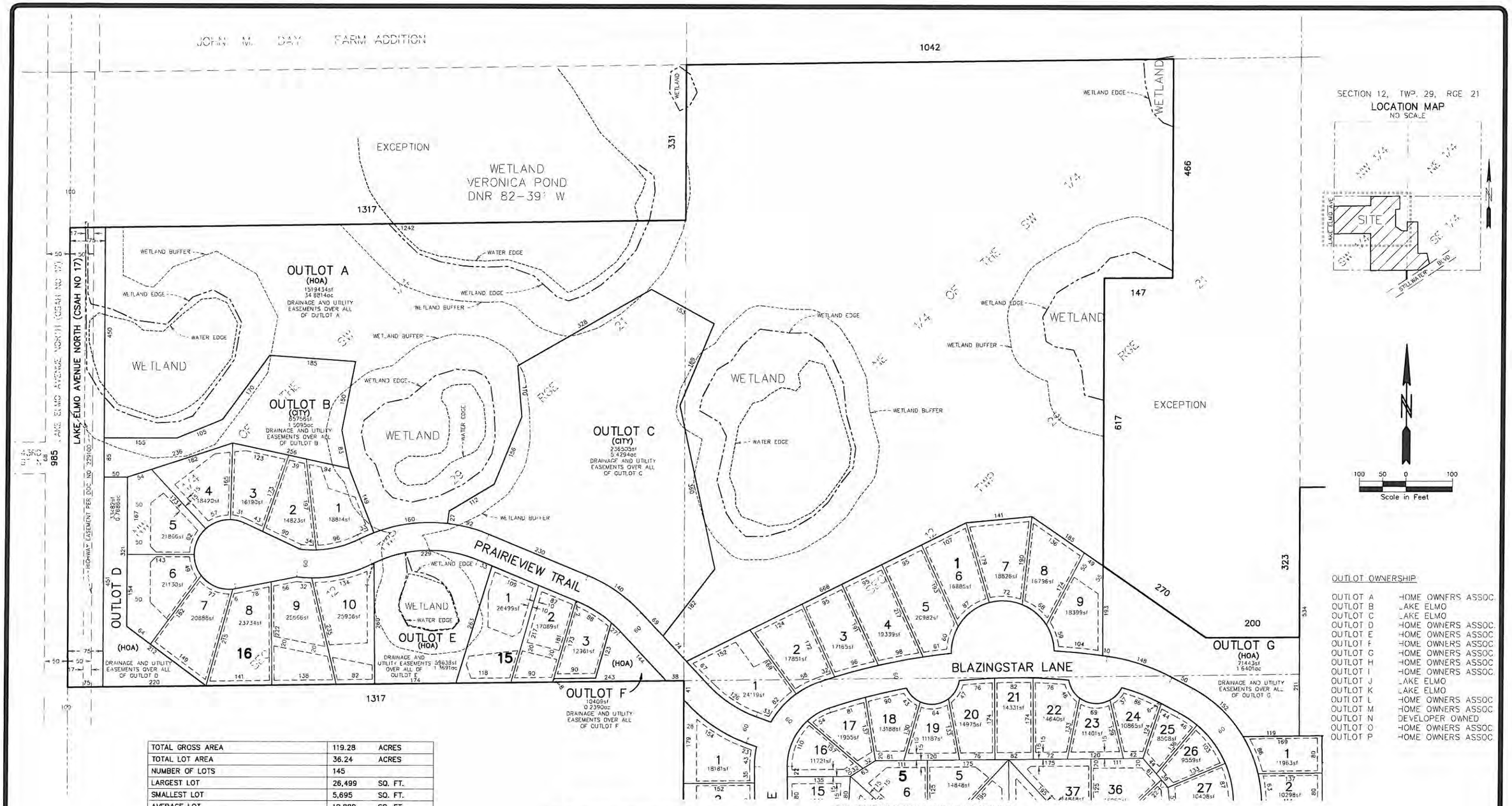

TOTAL GROSS AREA	119.28	ACRES
TOTAL LOT AREA	36.24	ACRES
NUMBER OF LOTS	145	
LARGEST LOT	26,499	SQ. FT.
SMALLEST LOT	5,695	SQ. FT.
AVERAGE LOT	10,889	SQ. FT.
NUMBER OF OUTLOTS	16	
TOTAL OUTLOT AREA	62.33	ACRES
LAKE ELMO AVE N. RIGHT OF WAY AREA	1.70	ACRES
RESIDENTIAL RIGHT OF WAY AREA	19.01	ACRES
TOTAL RIGHT OF WAY AREA	20.71	ACRES
GROSS DENSITY (EXCLUDES OUTLOTS)	2.55	LOTS/ACRE
NET DENSITY (EXCLUDES OUTLOTS & R/W)	4.00	LOTS/ACRE
ZONING	PUD	

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC
OUTLOT F	HOME OWNERS ASSOC
OUTLOT G	HOME OWNERS ASSOC
OUTLOT H	HOME OWNERS ASSOC
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC
OUTLOT M	HOME OWNERS ASSOC
OUTLOT N	DEVELOPER OWNED
OUTLOT O	HOME OWNERS ASSOC
OUTLOT P	HOME OWNERS ASSOC

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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota

Name Peter J. Hawkinson
Reg. No. 42290 Date 05-28-2015

Revisions
1 7-2-15 City Comments

Date 05-28-2015
Designed
Drawn mdp

PLAT EXHIBIT

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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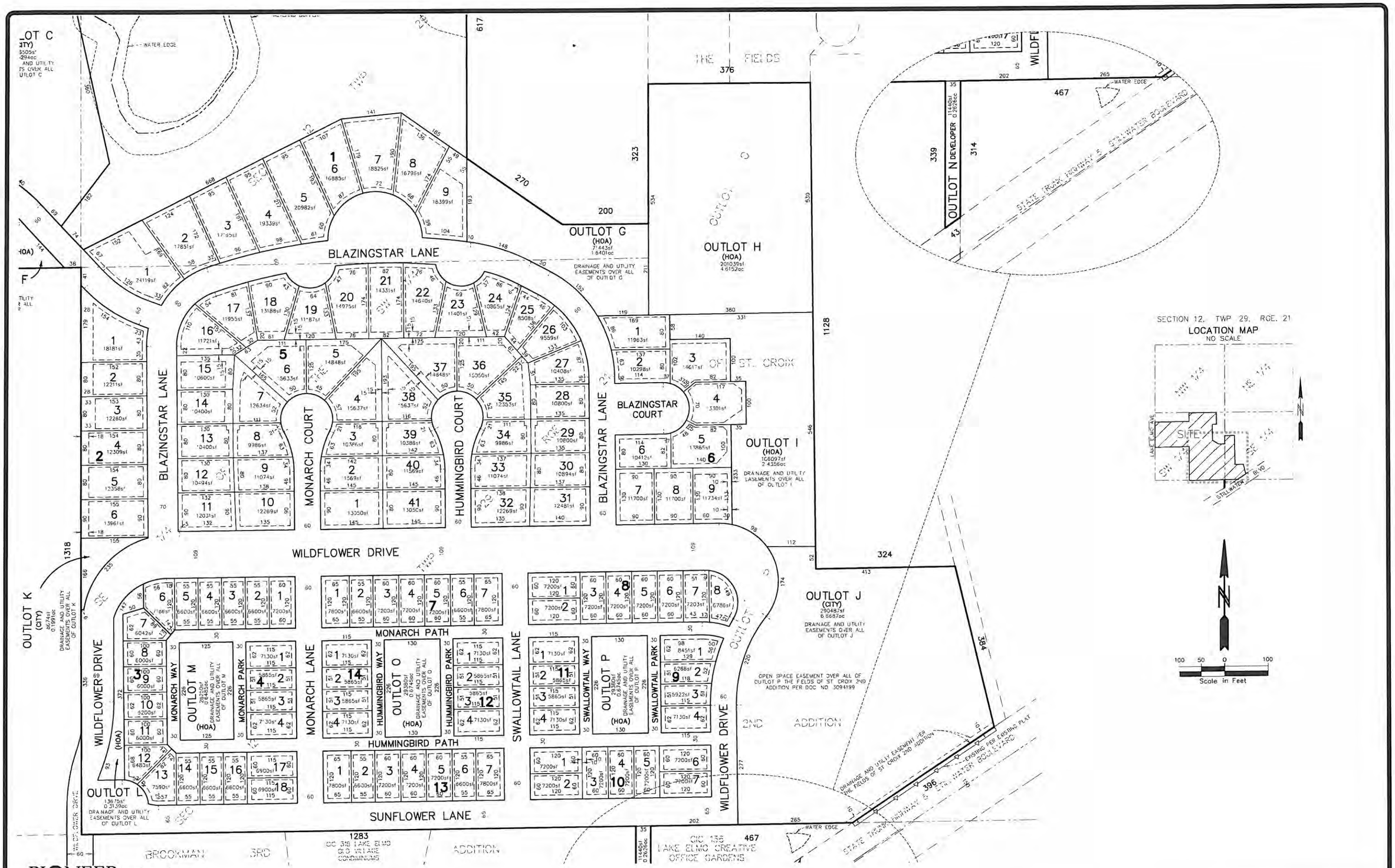

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Reg. No. 42290 Date 05-28-2015

Revisions
1. 07-02-15 City/Watershed Comments

Date 05-28-2015
Designed
Drawn mdp

PLAT EXHIBIT

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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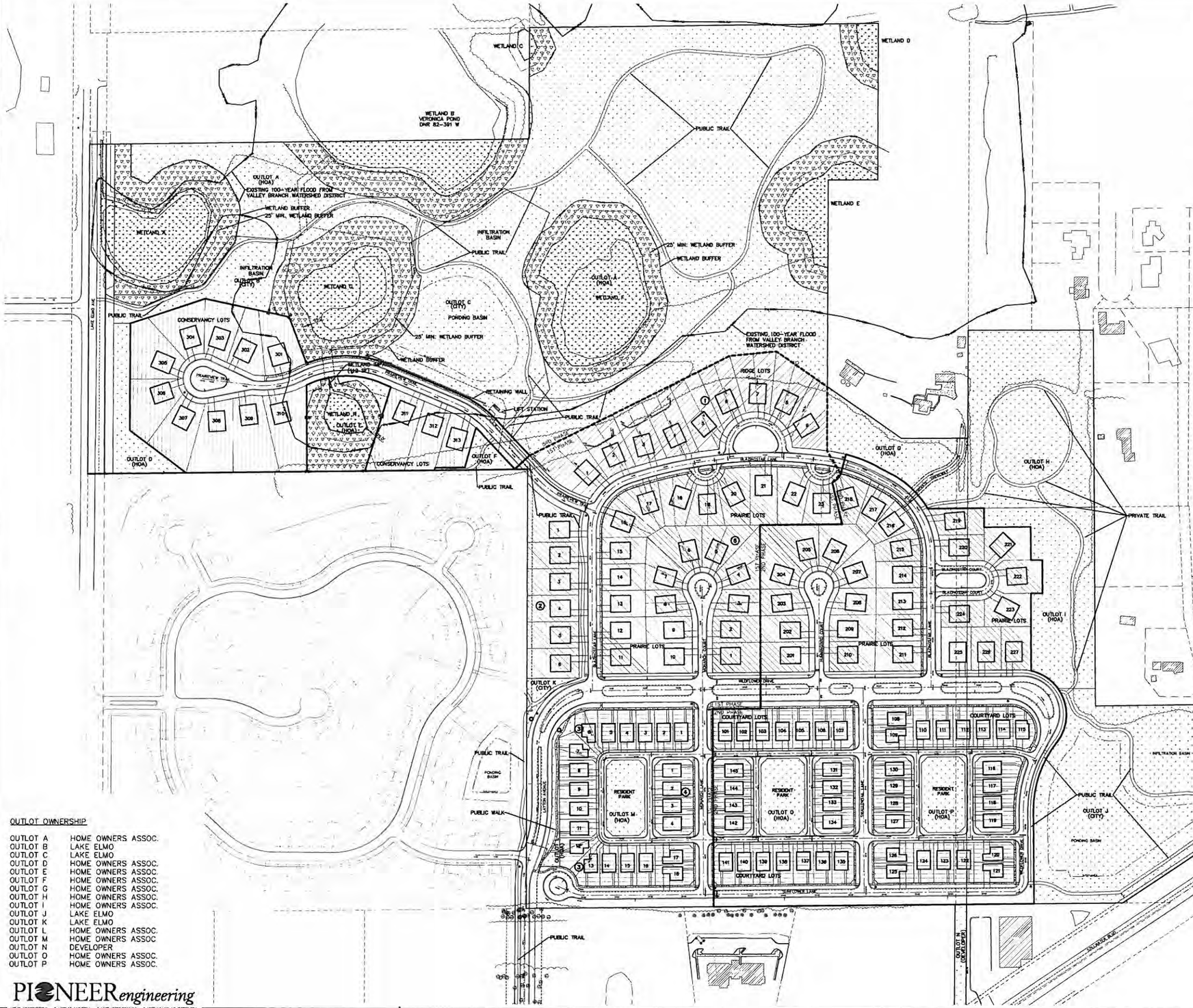

PROPOSED SETBACKS PER DESIGN FORUM

RIDGE LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

CONSERVANCY LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

PRAIRIE LOTS
- FRONT–25'
- SIDE HOUSE–10'
- SIDE GARAGE–5'
- SIDE STREET–15'
- REAR–30'

COURTYARD LOTS
- FRONT–20'
- SIDE HOUSE–10'(OR 7.5')
- SIDE GARAGE–5'(OR 7.5')
- SIDE STREET–15'
- SIDE ALLEY–10'
- REAR–22'

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS

A. FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'–0" MAX.
B. WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'–0" MAX.
C. CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'–0" MAX.
D. FRONT PORCHES	10'–0" MAX. OR 6'–0" INSIDE FRONT P.L.
E. ROOF OVERHANGS, ALL SIDES	3–6" MAX.
F. HIGH FENCES–NOT ATTACHED TO HOUSE (MAX. HT. 5'–6:)	3'–0" MAX SIDE YD.
G. LOW FENCES (30"–36" HT)–FRONT & REAR YD–ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD OR 6'–0" INSIDE FRONT P.L. REAR YD–NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE.
H. DECK & PATIOS–FRONT YD	6'–0" INSIDE FRONT P.L.
I. DECK & PATIOS–SIDE YD.	3'–0" INSIDE FRONT P.L.
J. DECK & PATIOS–REAR YD.	NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE
K. TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDENS' AREAS.

KEY
- OPEN SPACE
- WETLAND
- WETLAND IMPACT (112 SF)
- WETLAND BUFFER
- RIDGE LOTS (9)
- CONSERVANCY LOTS (13)
- PRAIRIE LOTS (56)
- COURTYARD LOTS (67)
- WETLAND BUFFER SIGN

COMMON OPEN SPACE AREAS (HOA)

OUTLOT A	34.881 AC
OUTLOT D	0.769 AC
OUTLOT E	1.369 AC
OUTLOT F	0.239 AC
OUTLOT G	1.640 AC
OUTLOT H	4.615 AC
OUTLOT I	2.436 AC
OUTLOT L	0.314 AC
OUTLOT M	0.649 AC
OUTLOT O	0.674 AC
OUTLOT P	0.674 AC
TOTAL	48.459 AC

PUBLIC OPEN SPACE/PUBLIC AMENITIES (CITY)

OUTLOT B	1.510 AC
OUTLOT C	5.429 AC
OUTLOT J	6.669 AC
OUTLOT K	0.199 AC
TOTAL	13.807 AC

COMMON OPEN SPACE (DEVELOPER OWNED)

OUTLOT N	0.263 AC
TOTAL	0.263 AC

OVERALL OPEN SPACE TOTAL 62.331 AC

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
OUTLOT F	HOME OWNERS ASSOC.
OUTLOT G	HOME OWNERS ASSOC.
OUTLOT H	HOME OWNERS ASSOC.
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC.
OUTLOT M	HOME OWNERS ASSOC
OUTLOT N	DEVELOPER
OUTLOT O	HOME OWNERS ASSOC.
OUTLOT P	HOME OWNERS ASSOC.

0 75 150 300
GRAPHIC SCALE IN FEET

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www.pioneereng.com

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Name Jean M. Molinaro
Reg. No. 45831 Date 05-28-2015

Revisions
1. 07-02-15 City/Watershed Comments

Date	05-28-2015
Designed	PAT/JMM
Drawn	JMM

SITE PLAN OVERALL

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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STREET SIGNAGE KEY

(S) STOP SIGN (R1-1)

(R) NO PARKING ANY TIME (R7-1)

PROPOSED SETBACKS PER DESIGN FORUM

RIDGE LOTS
- FRONT-25'
- SIDE HOUSE-15'
- SIDE GARAGE-10'
- SIDE STREET-25'
- REAR-VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)

CONSERVANCY LOTS
- FRONT-25'
- SIDE HOUSE-15'
- SIDE GARAGE-10'
- SIDE STREET-25'
- REAR-VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)

PRAIRIE LOTS
- FRONT-25'
- SIDE HOUSE-10'
- SIDE GARAGE-5'
- SIDE STREET-15'
- REAR-30'

COURTYARD LOTS
- FRONT-20'
- SIDE HOUSE-10'(OR 7.5')
- SIDE GARAGE-15'(OR 7.5')
- SIDE STREET-15'
- SIDE ALLEY-10'
- REAR-22'

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS

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E. ROOF OVERHANGS, ALL SIDES	3'-6" MAX.
F. HIGH FENCES-NOT ATTACHED TO HOUSE (MAX. HT. 5'-6")	3'-0" MAX. SIDE YD.
G. LOW FENCES (30"-36" HT.)-FRONT & REAR YD-ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD. OR 8'-0" INSIDE FRONT P.L. REAR YD NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
H. DECK & PATIOS-FRONT YD.	8'-0" INSIDE FRONT P.L.
I. DECK & PATIOS-SIDE YD.	3'-0" INSIDE FRONT P.L.
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LAKE ELMO, MINNESOTA

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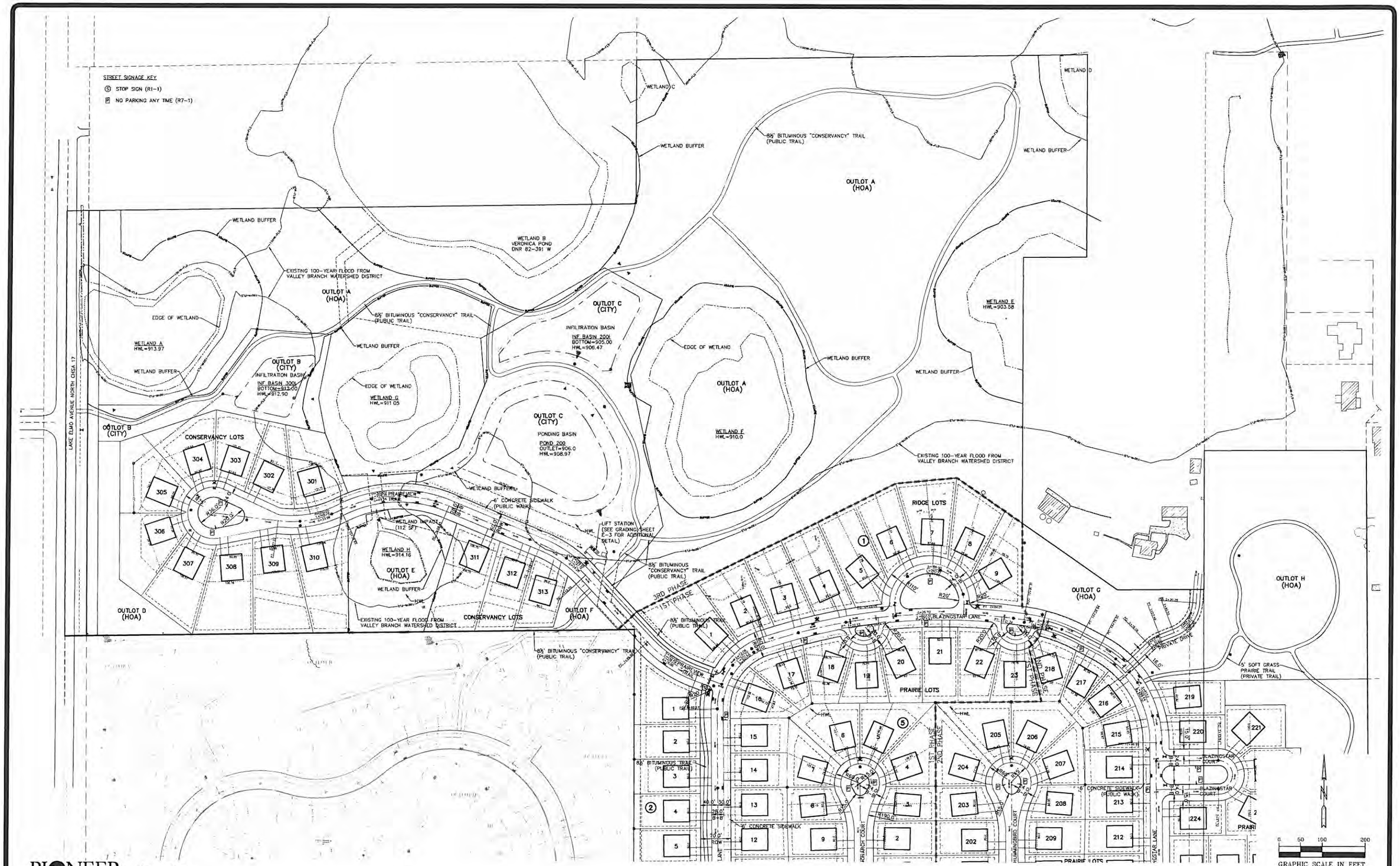

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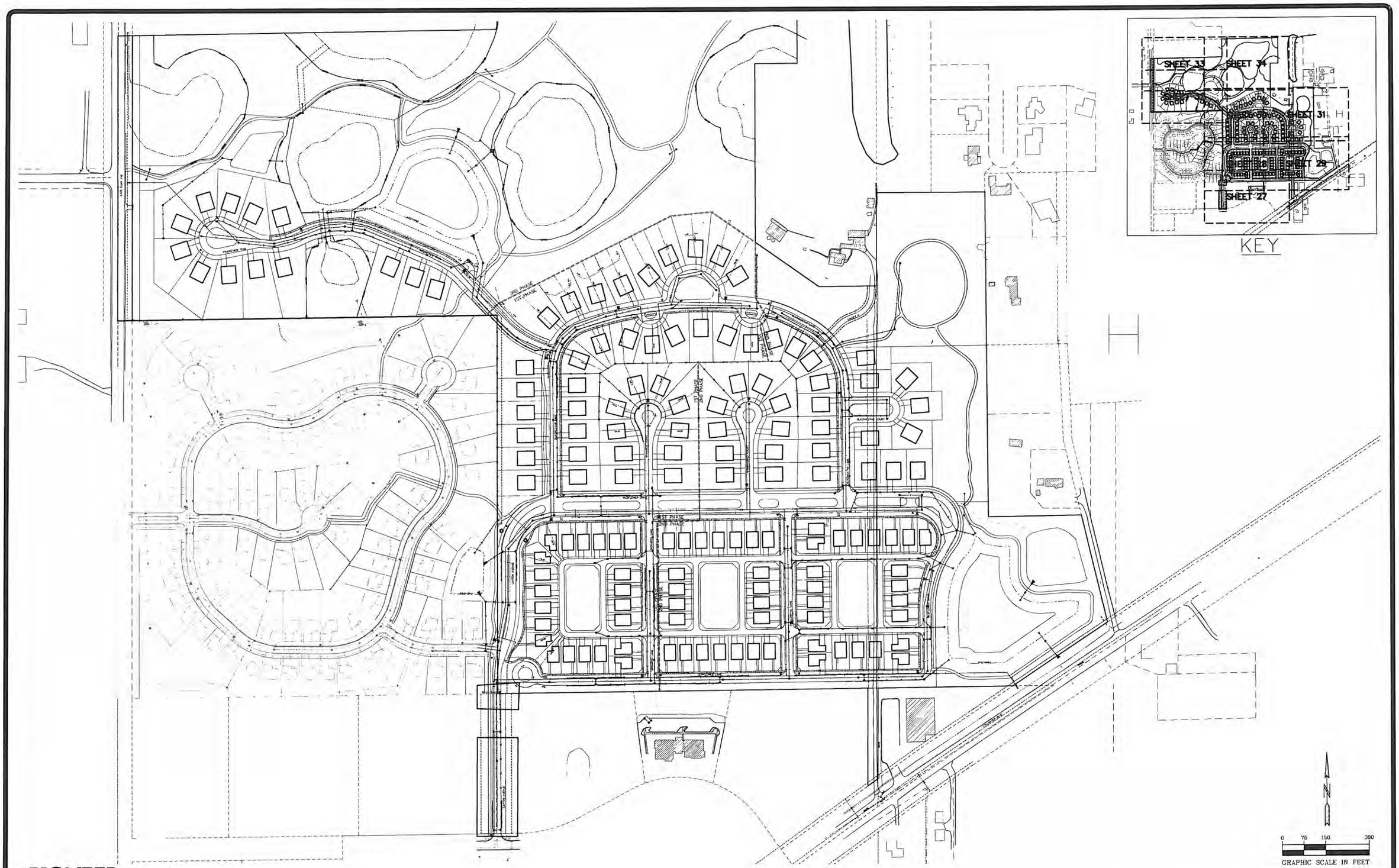

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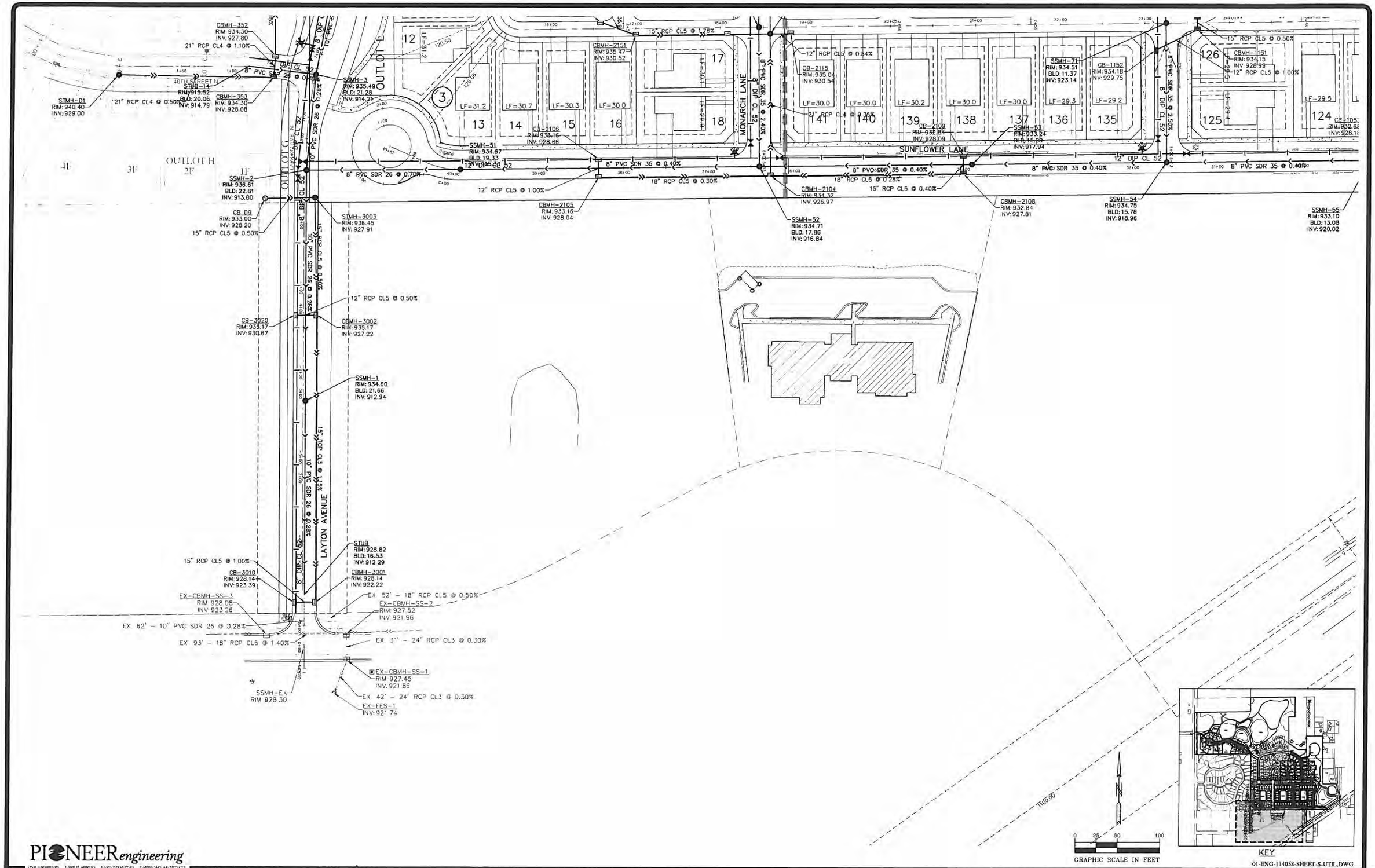

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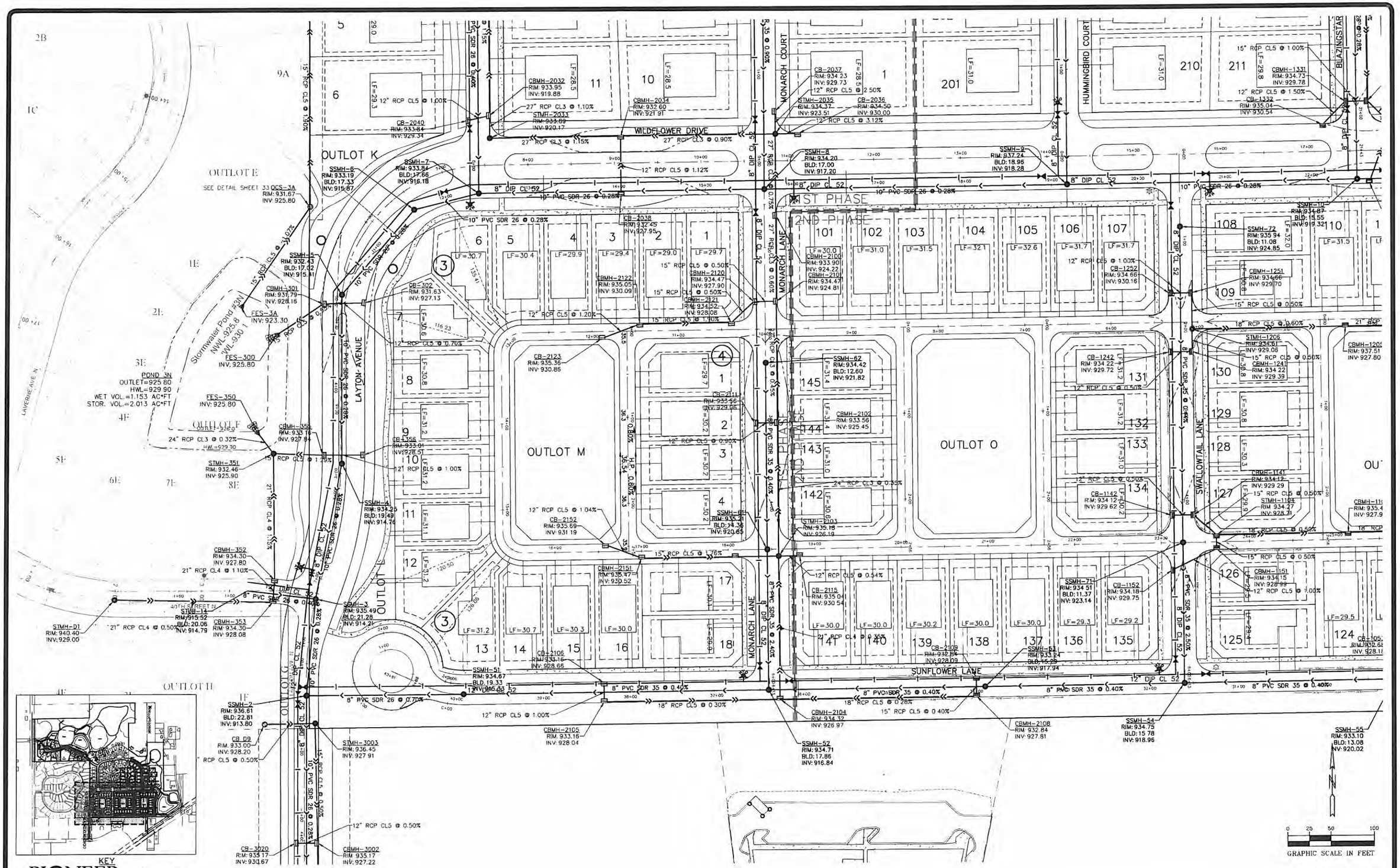

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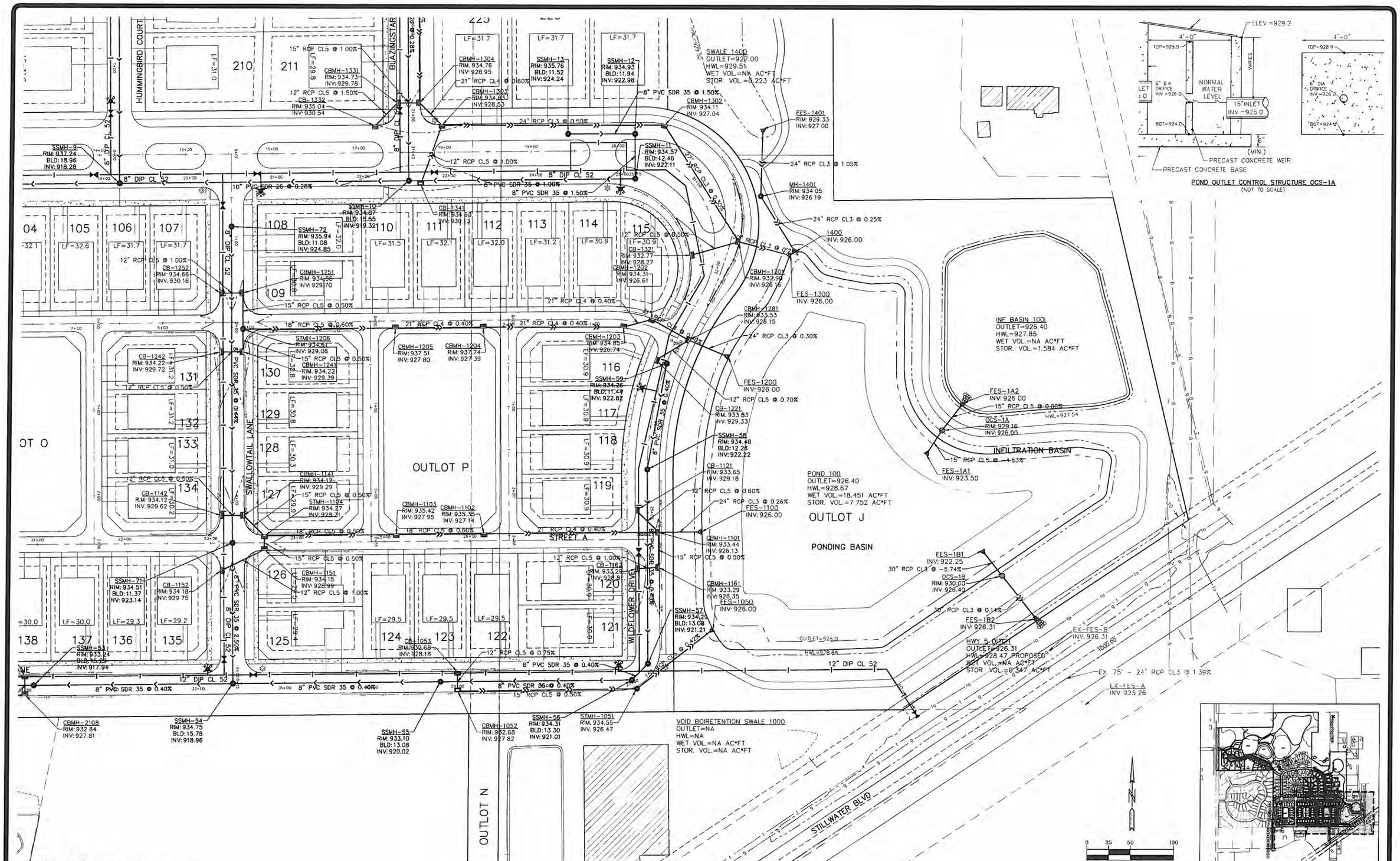

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WET VOL =13.457 AC*FT
STOR VOL.=8.651 AC*FT

3RD PHASE
1ST PHASE
2ND PHASE
1ST PHASE
2ND PHASE
OUTLOT E
OUTLOT C
OUTLOT G
BLAZINGSTAR LANE
BLAZINGSTAR LANE
PRAIRIEVIEW TRAIL
LAVENIE CIR NO
ARCH COURT
INGBIRD COURT
BUFFER
BUFFER
BUFFER

FES-2000
INV: 905.00

CB-2523
RIM: 920.72
INV: 916.22
12" RCP CL5 @ 0.50%

LIFT STATION
RIM: 922.10
BLD: 15.43

STMH-2001
RIM: 919.40
INV: 905.14

CBMH-2002
RIM: 924.19
INV: 909.15

SSMH-82
RIM: 921.66
BLD: 14.22
INV: 907.44

SSMH-81
RIM: 922.42
BLD: 15.46
INV: 906.96

8" PVC SDR 35 @ 0.44%

CBMH-2003
RIM: 924.68
INV: 909.51

CBMH-2004
RIM: 926.51
INV: 910.76

CBMH-2005
RIM: 927.42
INV: 911.80

SSMH-34
RIM: 929.97
BLD: 10.73
INV: 919.24

CBMH-2007
RIM: 929.21
INV: 923.90

STMH-2009
RIM: 931.19
INV: 926.06

STMH-2008
RIM: 929.35
INV: 924.28

SSMH-33
RIM: 929.25
BLD: 10.31
INV: 918.94

CBMH-2051
RIM: 924.60
INV: 914.02

CBMH-2080
RIM: 920.01
INV: 914.80

STMH-2006
RIM: 928.82
INV: 913.72

CBMH-2050
RIM: 925.60
INV: 913.70

SSMH-32
RIM: 929.16
BLD: 10.56
INV: 918.60

CBMH-2081
RIM: 922.99
INV: 917.80

SSMH-31
RIM: 932.24
BLD: 14.47
INV: 917.77

CBMH-2082
RIM: 926.19
INV: 921.00

CBMH-2052
RIM: 928.91
INV: 914.97

CBMH-2031
RIM: 931.80
INV: 917.09

CB-2025
RIM: 934.74
INV: 930.24

SSMH-35
RIM: 931.48
BLD: 11.91
INV: 919.57

SSMH-36
RIM: 934.51
BLD: 11.62
INV: 922.89

SSMH-37
RIM: 936.46
BLD: 11.55
INV: 924.91

SSMH-38
RIM: 938.33
BLD: 11.57
INV: 926.76

SSMH-91
RIM: 940.33
BLD: 11.57
INV: 928.76

SSMH-92
RIM: 941.86
BLD: 12.15
INV: 929.71

CB-2015
RIM: 938.46
INV: 933.96

SSMH-93
RIM: 941.62
BLD: 11.50
INV: 930.11

SSMH-39
RIM: 941.09
BLD: 11.52
INV: 929.57

CB-2018
RIM: 939.56
INV: 934.81

STMH-2017
RIM: 940.64
INV: 933.89

SSMH-25
RIM: 939.95
BLD: 11.61
INV: 928.34

SSMH-24
RIM: 939.03
BLD: 11.36
INV: 927.66

CBMH-1309
RIM: 938.46
INV: 933.57

CBMH-1308
RIM: 938.07
INV: 933.30

CBMH-2011
RIM: 937.87
INV: 932.22

CBMH-2010
RIM: 934.74
INV: 929.32

CBMH-2016
RIM: 940.76
INV: 933.45

CBMH-2054
RIM: 927.02
INV: 918.77

CBMH-2053
RIM: 925.76
INV: 918.26

CB-2079
RIM: 932.32
INV: 927.57

CB-2071
RIM: 928.96
INV: 924.21

SSMH-42
RIM: 932.81
BLD: 11.93
INV: 920.88

CB-2061
RIM: 931.16
INV: 926.41

CB-2037
RIM: 934.23
INV: 929.73

CBMH-2055
RIM: 927.26
INV: 921.41

CBMH-2056
RIM: 928.73
INV: 922.94

CBMH-2057
RIM: 928.73
INV: 923.50

CB-1310
RIM: 936.54
INV: 934.04

SSMH-23
RIM: 938.43
BLD: 17.28
INV: 921.23

SSMH-22
RIM: 937.75
BLD: 16.85
INV: 920.89

SSMH-43
RIM: 934.45
BLD: 12.23
INV: 922.22

CBMH-2058
RIM: 928.79
INV: 923.91

CB-2065
RIM: 934.01
INV: 929.26

SSMH-21
RIM: 936.93
BLD: 16.43
INV: 920.50

CB-2059
RIM: 931.54
INV: 926.79

CB-1351
RIM: 936.41
INV: 931.91

CBMH-1311
RIM: 929.15
INV: 926.79

KEY

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Drawn	JMM

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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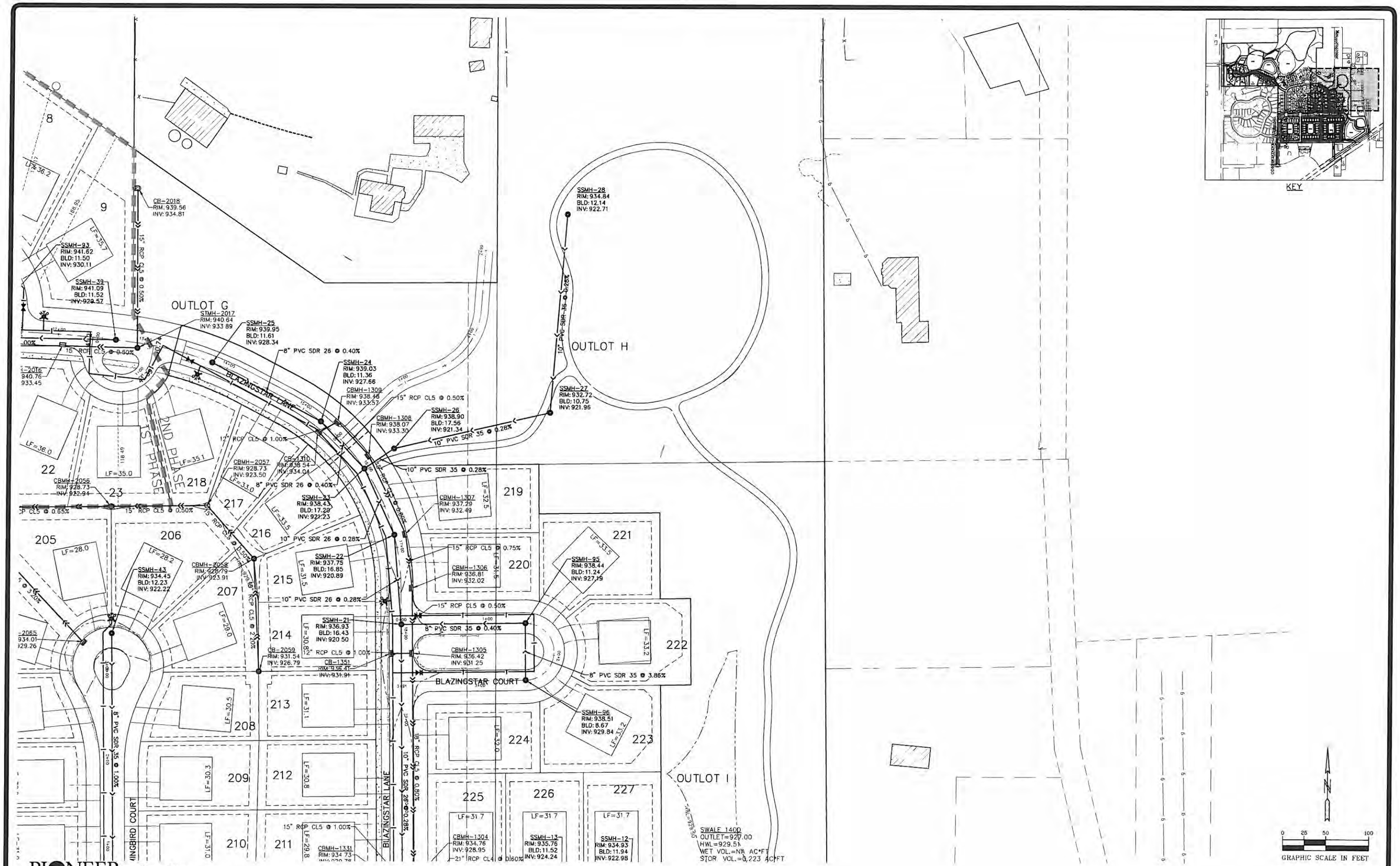

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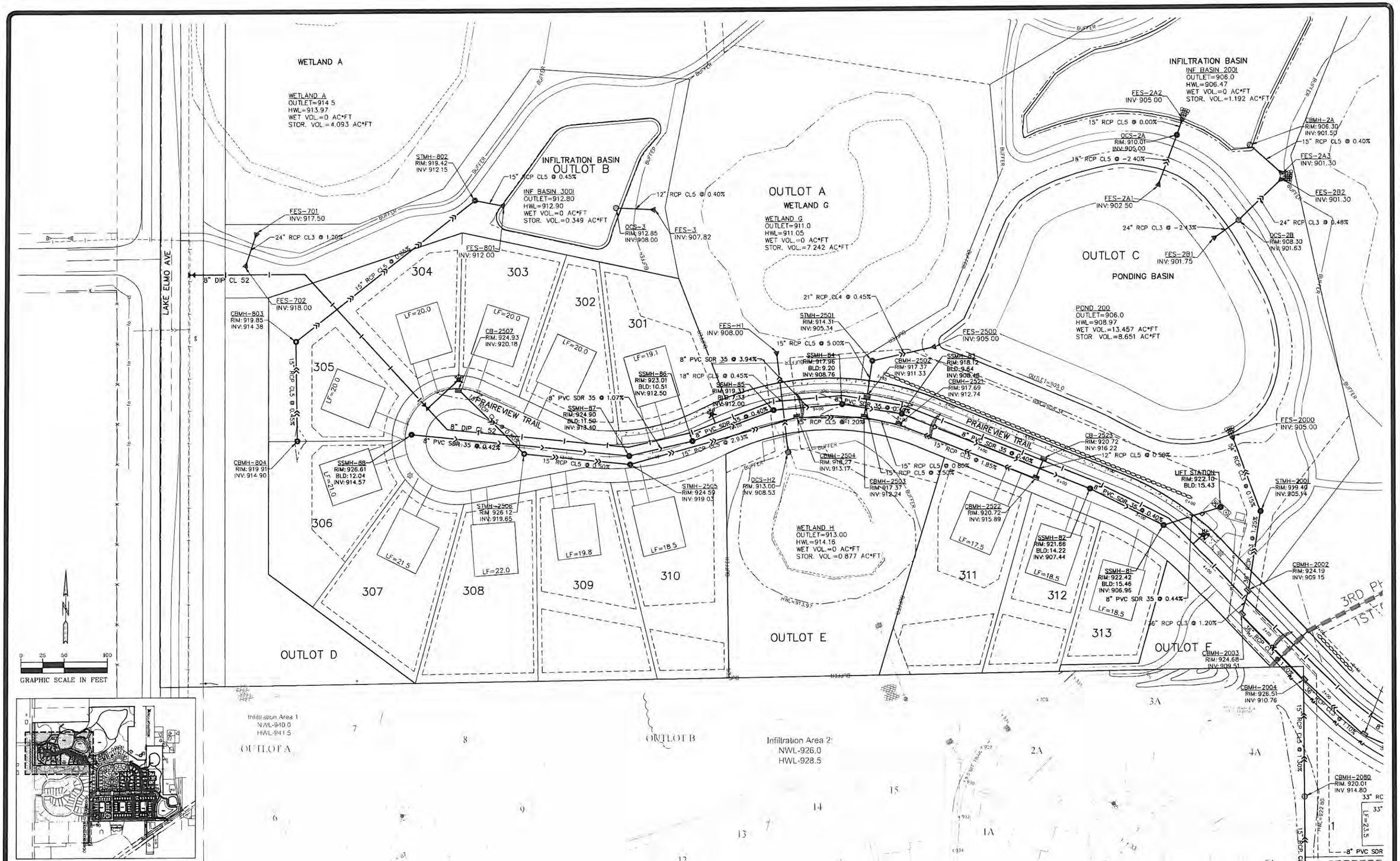

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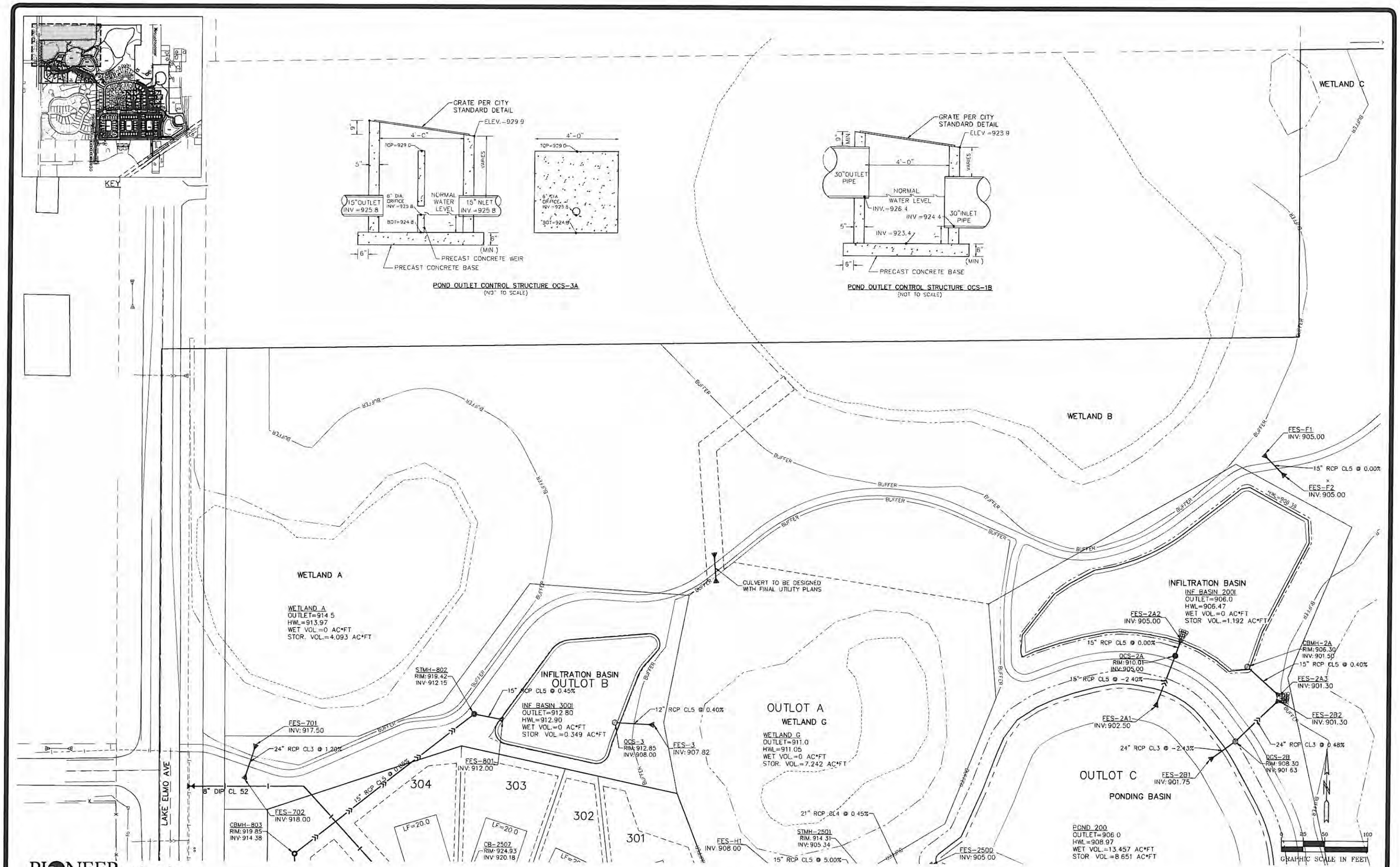

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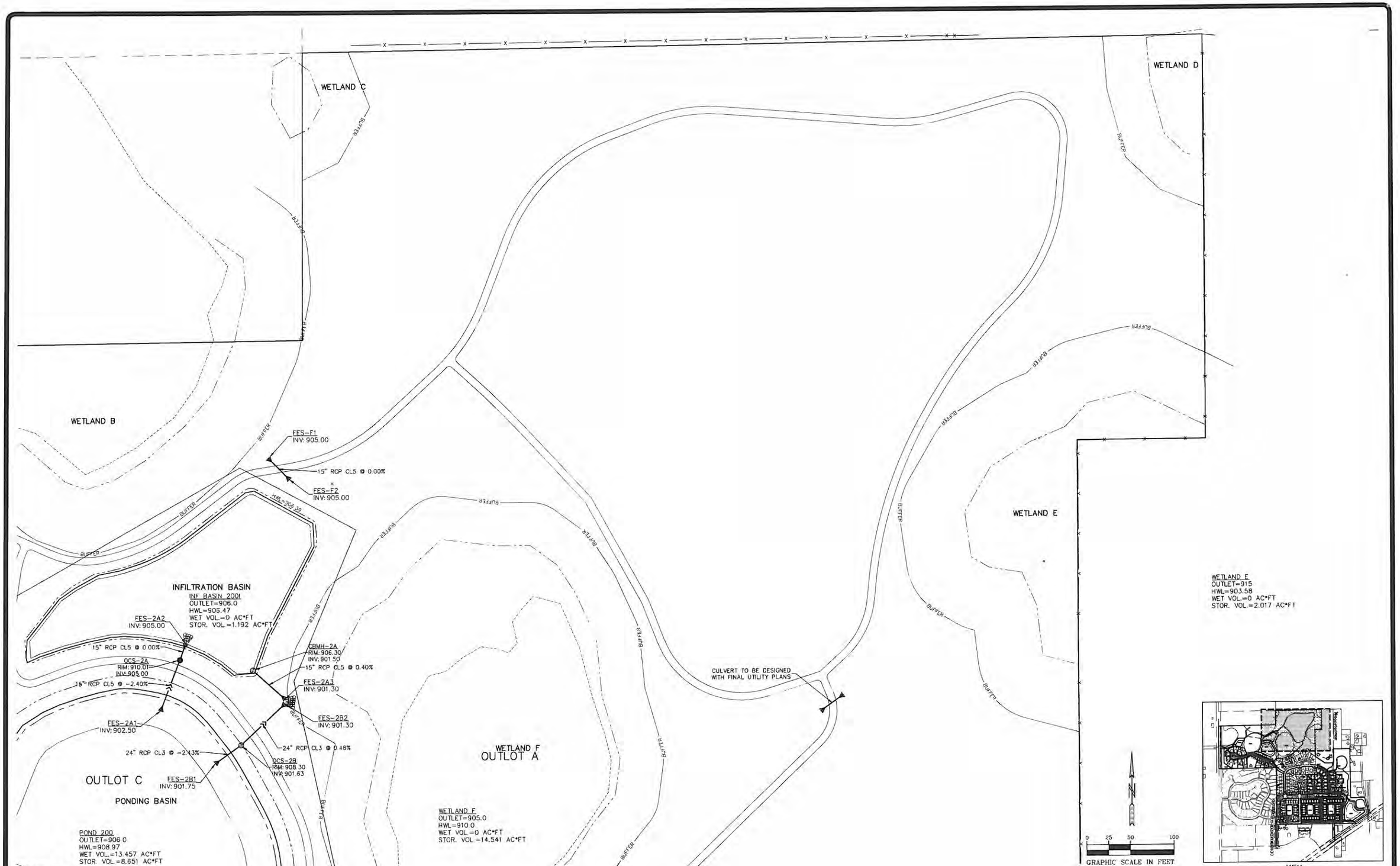

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Name: John M. Molinaro
Reg. No. 45831 Date 05-28-2015

Revisions
1. 07-02-15 City/Watershed Comments

Date	05-28-2015
Designed	PAT/JMM
Drawn	JMM

UTILITY PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

S-18 OF 23

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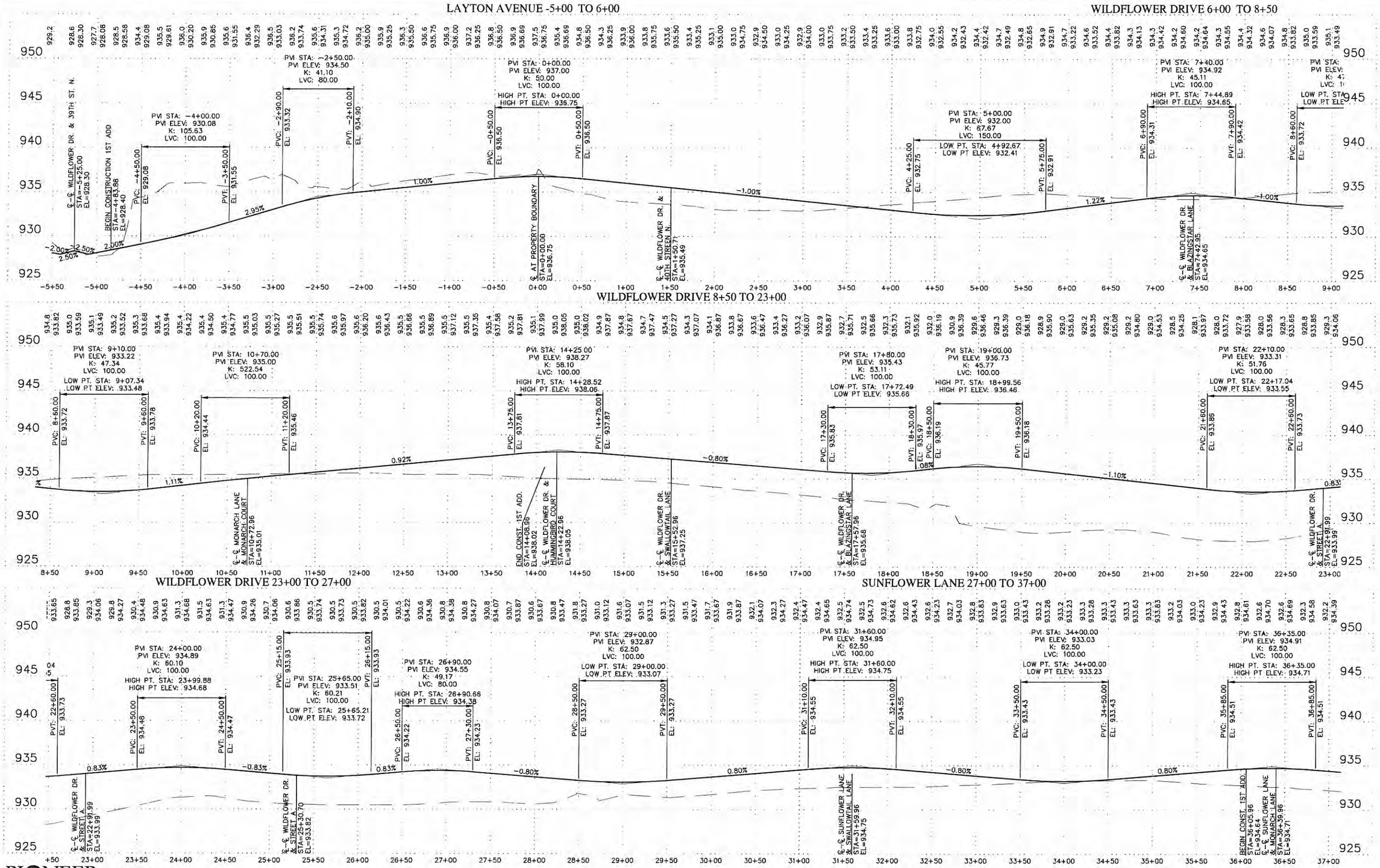

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STREET PROFILES

ROBERT ENGSTROM COMPANIES
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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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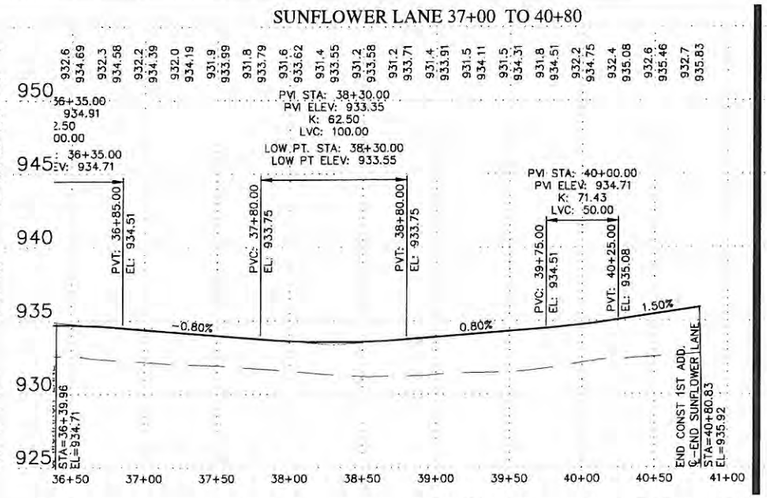

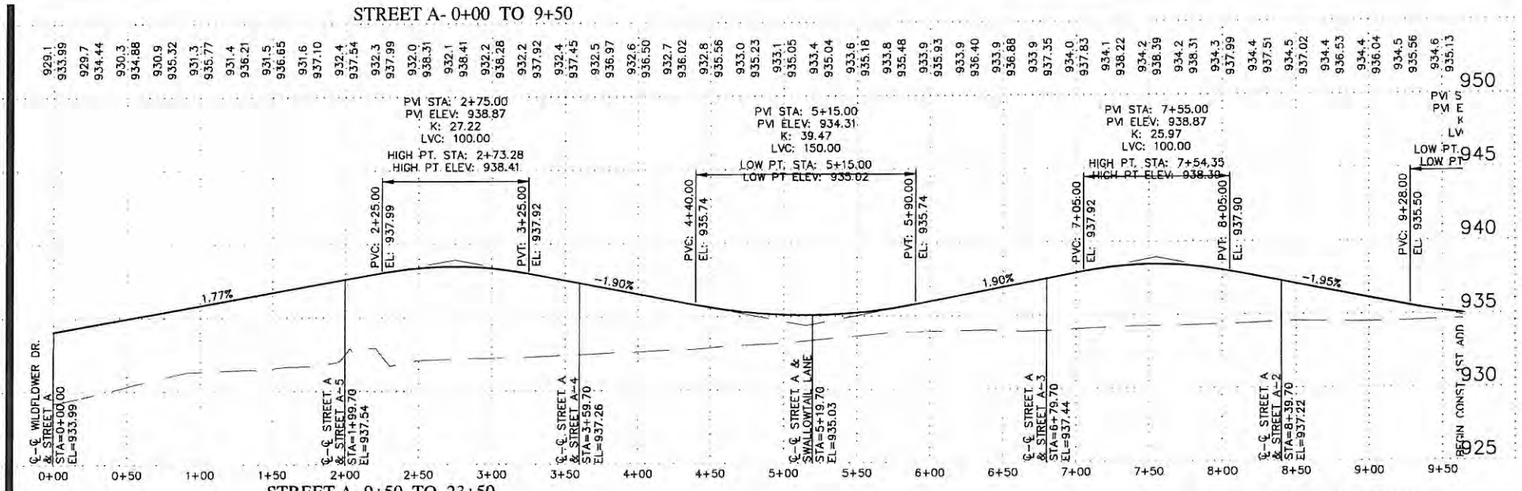

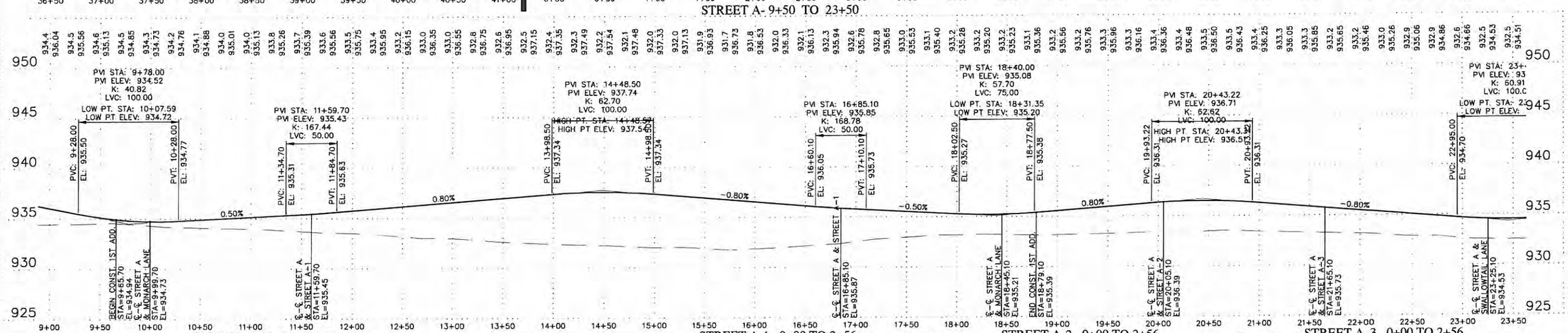

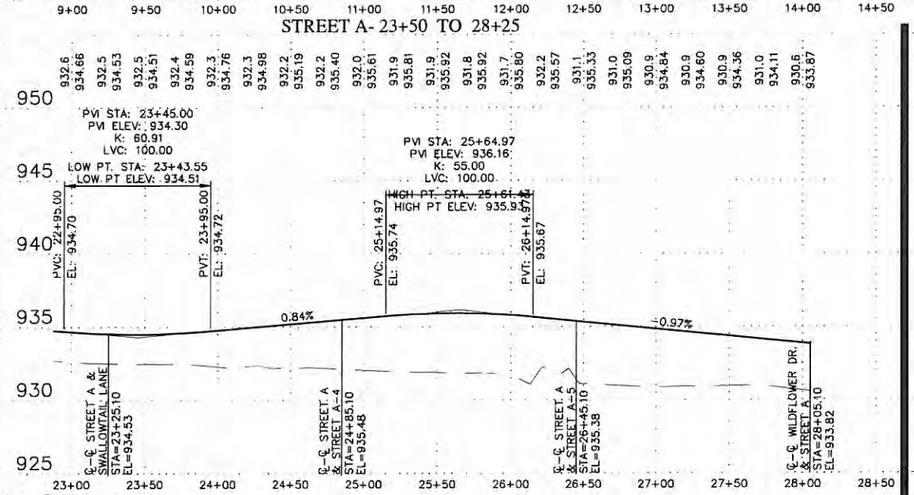

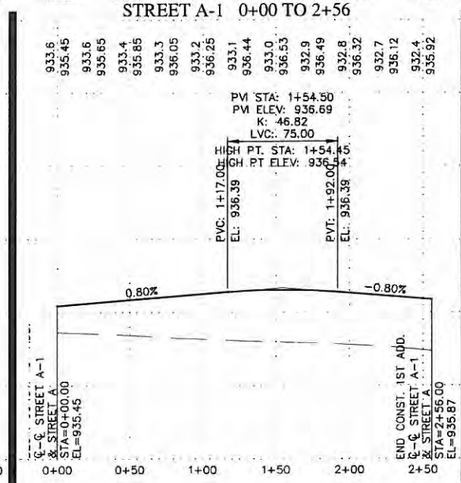

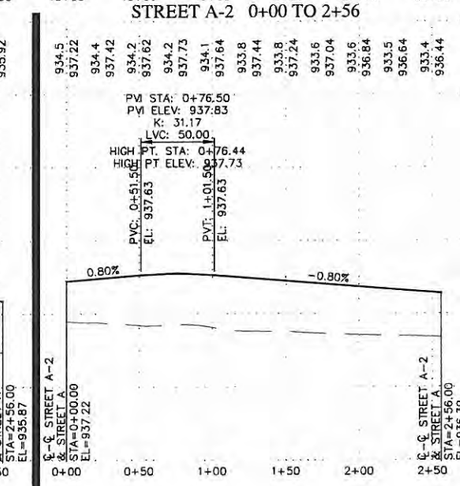

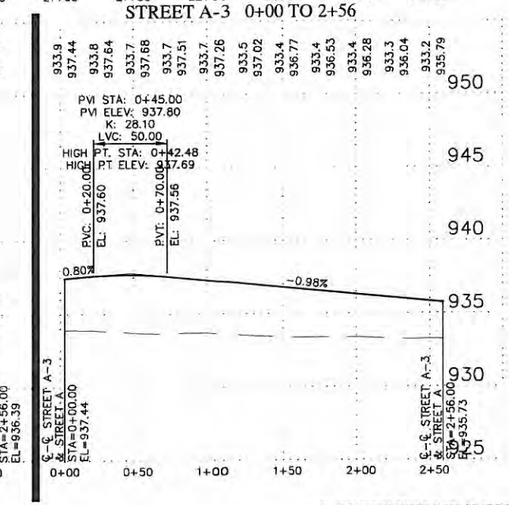

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LAKE ELMO, MINNESOTA

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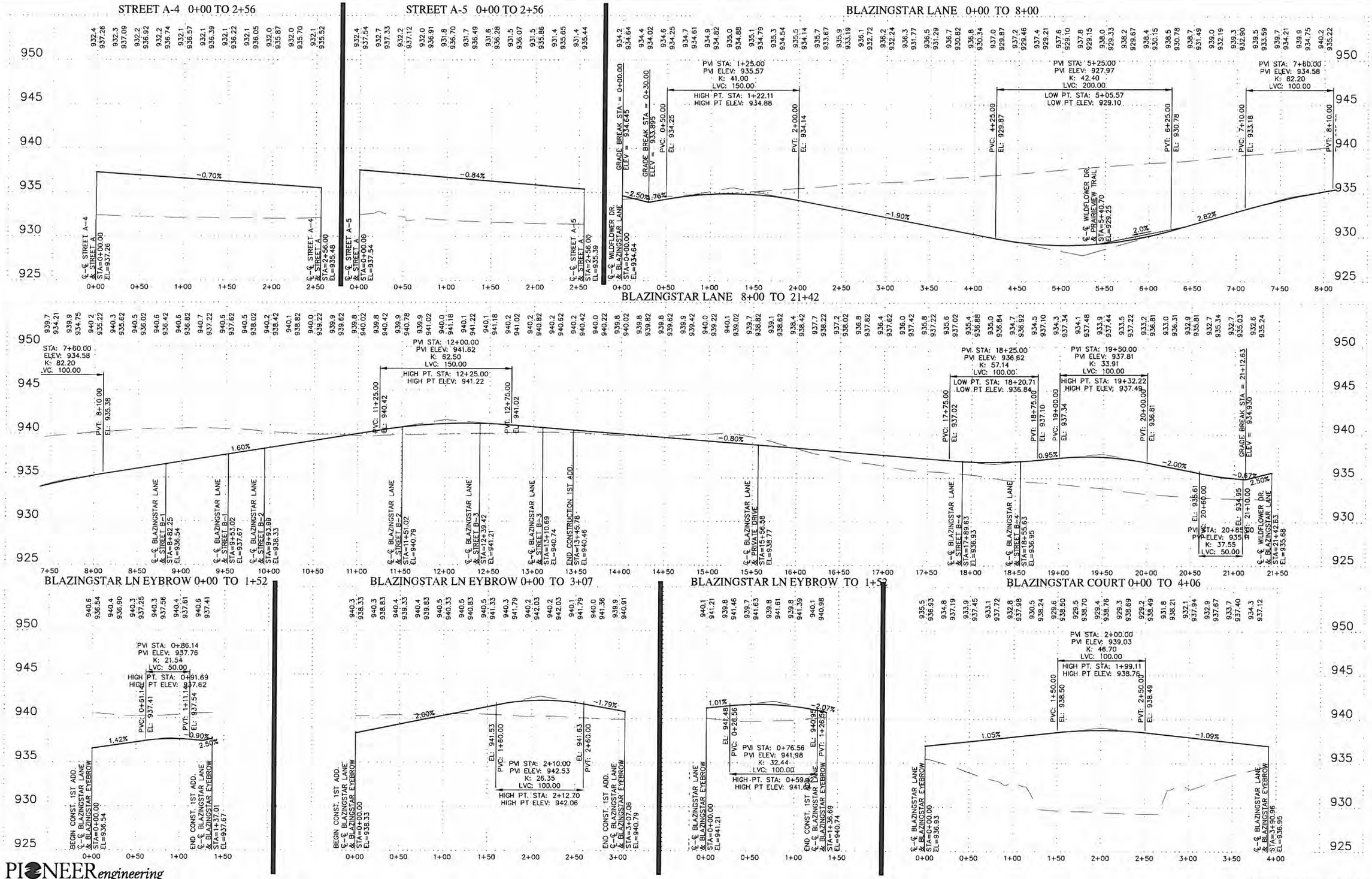

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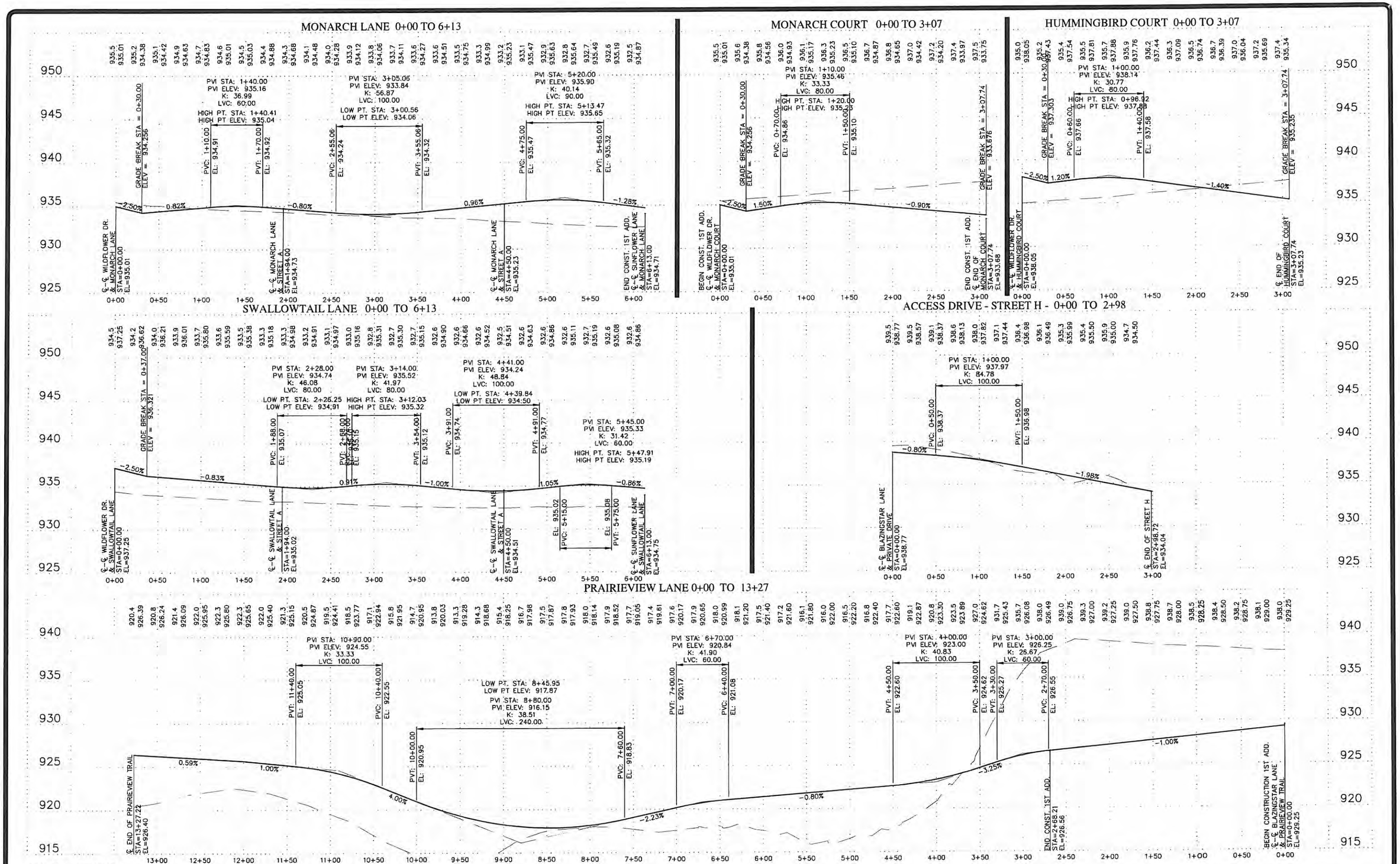

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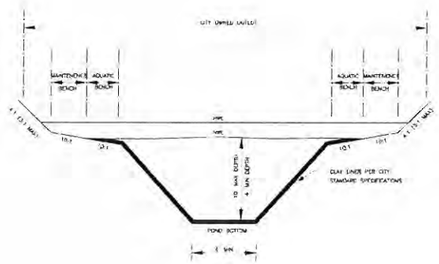
CITY OF LAKE ELMO

FEBRUARY 2015

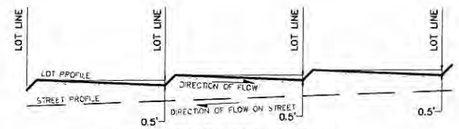
TYPICAL POND SECTION



STANDARD DRAWING NO 416 LAKE ELMO

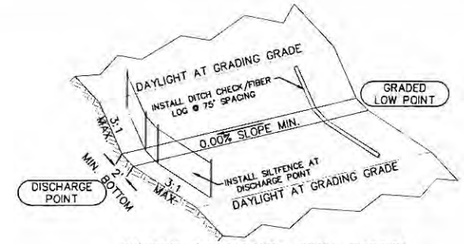
BASIN CLAY LINER MATERIAL NOTE:
"IMPERVIOUS CLAY LINER" MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS OR "EQUAL TO":

1. IN-PLACE PERMEABILITY: 1X10^-6 CM/SEC OR LESS.
2. GRAIN SIZE: P200 CONTENT 50 PERCENT BY WEIGHT OR GREATER, MAXIMUM GRAVEL CONTENT 5 PERCENT BY WEIGHT. MAXIMUM PARTICLE SIZE OF 2.5-INCH IN ANY DIRECTION.
3. CLAY CONTENT: 25 PERCENT BY WEIGHT OR GREATER (0.02 MM)
4. LIQUID LIMIT: 25 PERCENT OR GREATER.
5. PLASTICITY INDEX: 12 PERCENT OR GREATER.
6. COMPACTION: 95 PERCENT STANDARD PROCTER DENSITY OR GREATER DEPENDING ON CONTRACTOR SOURCE TESTING RESULTS.
7. IMPERVIOUS CLAY LINER MATERIAL SHALL BE FREE OF DEBRIS, ROOTS, ORGANIC MATERIAL, SOLID MINERAL MATERIAL LARGER THAN 2.5 INCHES IN DIAMETER, ANGULAR STONES OF ANY DIAMETER AND OTHER MATERIALS CONSIDERED DELETERIOUS TO THE GEOMEMBRANE LINER.
8. SOURCE TESTING: THE CONTRACTOR SHALL SUPPLY TEST RESULTS FROM AN INDEPENDENT TESTING LAB FOR A SAMPLE TAKEN AT THE CLAY SOURCE TO VERIFY THE ABOVE SPECIFICATIONS WILL BE MET. THE RESULTS SHALL BE SUBMITTED TO THE ENGINEER AT LEAST TWO WEEKS PRIOR TO DELEVERY TO THE SITE. THE SPECIFIC LOCATION OF THE SOURCE MUST BE INCLUDED WITH THE SUBMITTAL.
9. IN-PLACE TESTING: AFTER PLACEMENT OF THE CLAY, THE CONTRACTOR SHALL ARRANGE FOR INPLACE TESTING BY AN INDEPENDENT TESTING LAB TO VERIFY THE ABOVE SPECIFICATIONS AR MET. TESTING SHALL INCLUDE COMPACTION, GRAIN SIZE, ATTERBERG LIMITS, AND PERMEABILITY USING A RELATIVELY SUNDITURBED THIN WALL SAMPLE (SHELBY TUBE). THE IN-PLACE TESTING FREQUENCY SHALL BE ONE SAMPLE TESTED EVERY 1,000 CY OF CLAY PLACED.



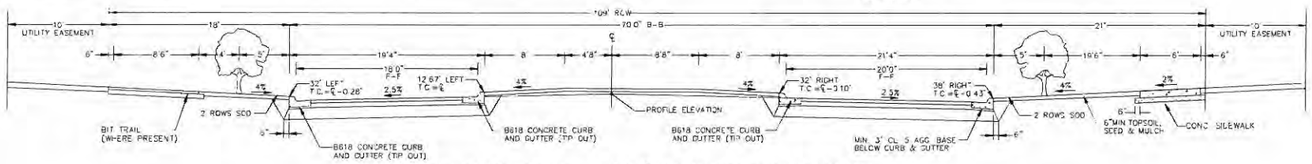
LOT BENCHING DETAIL

NO SCALE



TEMPORARY SURFACE SWALE SECTION (GRADE TO DRAIN SECTION DETAIL)

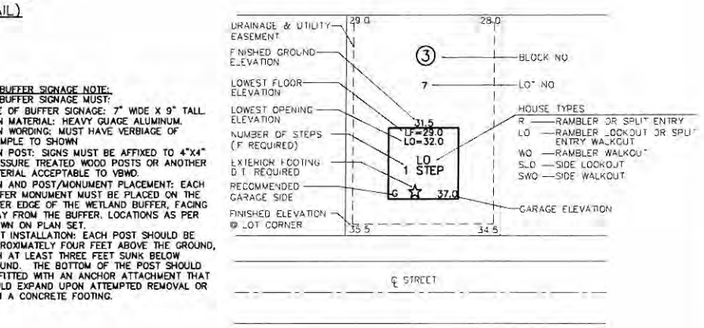
(TYPICAL SECTION NOT TO SCALE)



WILDFLOWER DRIVE – 109' ROW STREET SECTION

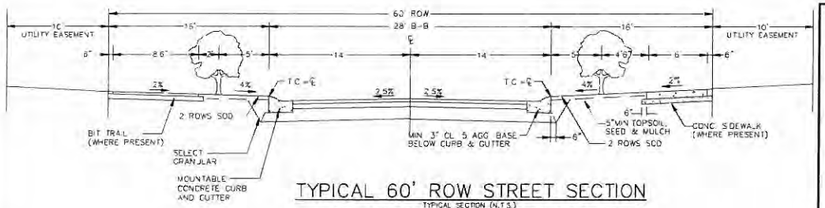
TYPICAL SECTION (NTS)

SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



WETLAND BUFFER SIGNAGE NOTE:
WETLAND BUFFER SIGNAGE MUST:

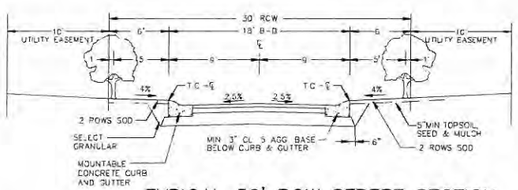
1. SIZE OF BUFFER SIGNAGE: 7" WIDE X 9" TALL.
2. SIGN MATERIAL: HEAVY GUAGE ALUMINUM.
3. SIGN WORDING: MUST HAVE VERBIAGE OF EXAMPLE TO SHOWN
4. SIGN POST: SIGNS MUST BE AFFIXED TO 4"X4" PRESSURE TREATED WOOD POSTS OR ANOTHER MATERIAL ACCEPTABLE TO VBWD.
5. SIGN AND POST/MONUMENT PLACEMENT: EACH BUFFER MONUMENT MUST BE PLACED ON THE OUTER EDGE OF THE WETLAND BUFFER, FACING AWAY FROM THE BUFFER. LOCATIONS AS PER SHOWN ON PLAN SET.
6. POST INSTALLATION: EACH POST SHOULD BE APPROXIMATELY FOUR FEET ABOVE THE GROUND, WITH AT LEAST THREE FEET SUNK BELOW GROUND. THE BOTTOM OF THE POST SHOULD BE FITTED WITH AN ANCHOR ATTACHMENT THAT WOULD EXPAND UPON ATTEMPTED REMOVAL OR WITH A CONCRETE FOOTING.



TYPICAL 60' ROW STREET SECTION

TYPICAL SECTION (NTS)

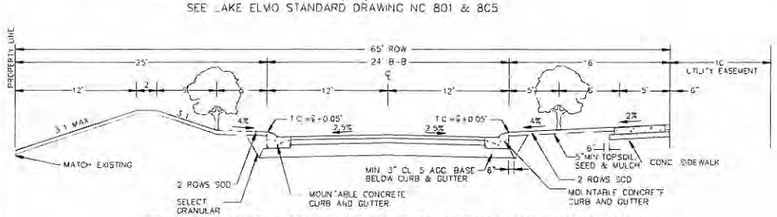
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL 30' ROW STREET SECTION

TYPICAL SECTION (NTS)

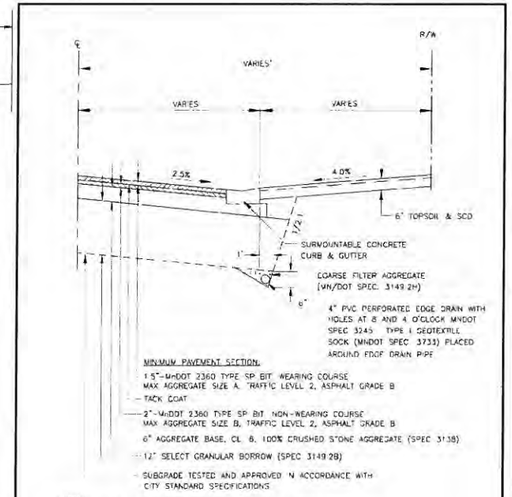
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



SUNFLOWER LANE STREET SECTION CROSS SLOPE

TYPICAL SECTION (NTS)

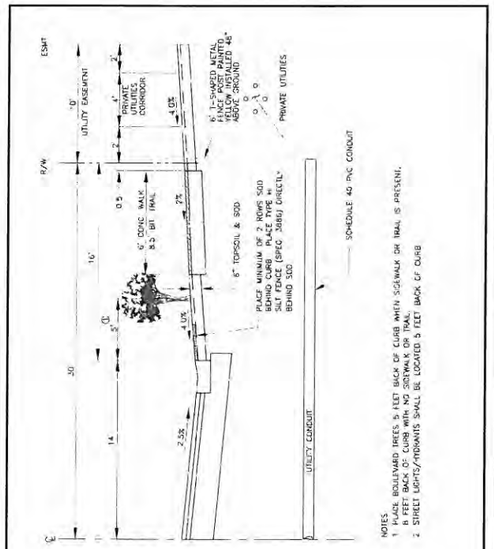
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL LOCAL RESIDENTIAL STREET SECTION (MINIMUM 7-TON DESIGN)

FEBRUARY 2015

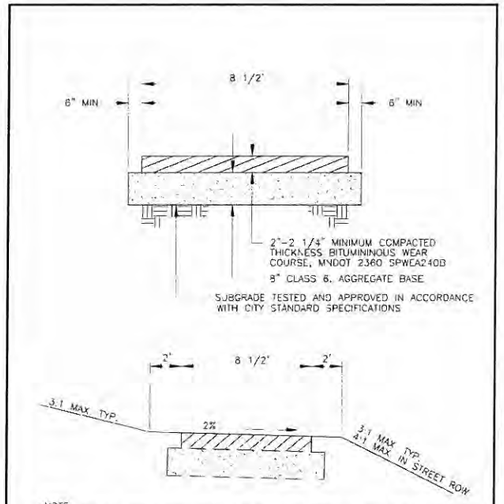
CITY OF LAKE ELMO — STANDARD DRAWING NO 801 LAKE ELMO



TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 805 LAKE ELMO



NOTE
1. BITUMINOUS TRAILS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM TRAIL SURFACE THROUGHOUT LENGTH OF TRAIL.

BICYCLE-PEDESTRIAN PATH

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 509 LAKE ELMO

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Revisions: 1 07-01-15 City/Watershed Comments

Date	05-28-2015
Designed	PAT/JMM
Drawn	JMM

DETAILS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114098-SHEET-S-DTLS

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WILDFLOWER AT LAKE ELMO
FINAL GRADING, DRAINAGE & EROSION CONTROL PLAN
LAKE ELMO, MINNESOTA

PROPOSED SETBACKS PER DESIGN FORUM

RIDGE LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)

CONSERVANCY LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)

PRAIRIE LOTS
- FRONT–25'
- SIDE HOUSE–10'
- SIDE GARAGE–5'
- SIDE STREET–15'
- REAR–30'

COURTYARD LOTS
- FRONT–20'
- SIDE HOUSE–10'(OR 7.5')
- SIDE GARAGE–3'(OR 7.5')
- SIDE STREET–15'
- SIDE ALLEY–10'
- REAR–22'

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.

A. FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'–0" MAX.
B. WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'–0" MAX.
C. CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'–0" MAX.
D. FRONT PORCHES	10'–0" MAX. OR 6'–0" INSIDE FRONT P.L.
E. ROOF OVERHANGS, ALL SIDES	3'–6" MAX.
F. HIGH FENCES–NOT ATTACHED TO HOUSE (MAX. HT. 5'–6.)	3'–0" MAX. SIDE YD.
G. LOW FENCES (30"–36" HT)–FRONT & REAR YD–ALLOWED. CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD OR 8'–0" INSIDE FRONT P.L. REAR YD:NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE.
H. DECK & PATIOS–FRONT YD.	8'–0" INSIDE FRONT P.L.
I. DECK & PATIOS–SIDE YD	3'–0" INSIDE FRONT P.L.
J. DECK & PATIOS–REAR YD	NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE.
K. TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDENS AREAS.

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
OUTLOT F	HOME OWNERS ASSOC.
OUTLOT G	HOME OWNERS ASSOC.
OUTLOT H	HOME OWNERS ASSOC.
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC.
OUTLOT M	HOME OWNERS ASSOC.
OUTLOT N	DEVELOPER
OUTLOT O	HOME OWNERS ASSOC.
OUTLOT P	HOME OWNERS ASSOC.

PREPARED BY PIONEER ENGINEERING, P.A.

JOHN M. MOLINARO
REGISTERED PROFESSIONAL CIVIL ENGINEER

45831
REG. NO.

PETER J. HAWKINSON
REGISTERED PROFESSIONAL LAND SURVEYOR

42299
REG. NO.

DEVELOPER
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LANDOWNER
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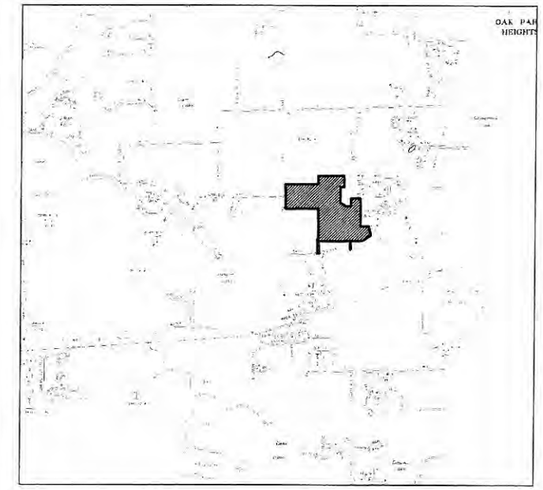
ROBERTEENGRSTROM@GMAIL.COM
(952) 893-1001

PROPOSED DEVELOPMENT PHASING
MASS GRADING TO BE PERFORMED IN ONE PHASE.
UTILITY AND STREET CONSTRUCTION TO BE PERFORMED IN THREE PHASES.



LOCATION MAP

N

0 100 200 400
GRAPHIC SCALE IN FEET

SHEET INDEX

G-1. COVER SHEET
G-2. LEGENDS
G-3. FINAL GRADING PLAN OVERALL
G-4-11. FINAL GRADING PLAN
G-12-13. EROSION CONTROL PLAN
G-14-15. SEEDING PLAN
G-16-18. GRADING DETAILS

E-1. PHASING/BUFFER EXHIBIT
E-2. INTERIM RETAINING WALL GRADING
E-3. LIFT STATION EXHIBIT

P-1-4. STREET PROFILES

T1. SOUTH ENRANCE TREE INVENTORY
T2. TREE PROTECTION PLAN
T3. TREE PROTECTION PLAN

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Name John M. Molinaro
Reg. No. 45831 Date 02-13-15

Revisions
1 04-07-15 City Comments
2 04-26-15 City Comments
3 05-06-15 City/Watershed Comments
4 05-12-15 City/Watershed Comments
5 06-11-15 Courtyard/Sunflower Revision
6 07-02-15 City/Watershed Comments

Date	02-13-15
Designed	KAW/BJM
Drawn	KAW/BJM

COVER SHEET

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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LEGEND

UTILITY LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SANITARY MANHOLE
			SANITARY SEWER (SANITARY & WATERMAIN PLANS)
			SANITARY SEWER (STORM SEWER PLANS)
	FM	FM	FORCE MAIN
			HYDRANT
			GATE VALVE
			REDUCER
			CURB STOP
			WATERMAIN (SANITARY & WATERMAIN PLANS)
			WATERMAIN (STORM SEWER PLANS)
			CATCH BASIN
			BEEHIVE
			STORM MANHOLE
			FLARED END SECTION
			CONTROL STRUCTURE
			STORM SEWER (SANITARY & WATERMAIN PLANS)
			STORM SEWER (STORM SEWER PLANS)
			CULVERT
PERF PERF	PERF PERF	PERF PERF	PERFORATED DRAINTILE
DT DT	DT DT	DT DT	SOLID DRAINTILE SERVICE
			CASING
e e	e e	e e	UNDERGROUND ELECTRIC LINE
fo fo	fo fo	fo fo	UNDERGROUND FIBER OPTIC LINE
g g	g g	g g	UNDERGROUND GAS PIPELINE
lpg lpg	lpg lpg	lpg lpg	UNDERGROUND PETROLEUM PIPELINE
t t	t t	t t	UNDERGROUND TELEPHONE LINES
tv tv	tv tv	tv tv	UNDERGROUND TELEVISION LINE
g g	oh oh	oh oh	OVERHEAD UTILITY LINES

SITE LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SURMOUNTABLE CURB & GUTTER
			B-STYLE CURB & GUTTER
			RIBBON CURB & GUTTER
			EDGE OF BITUMINOUS
			YELLOW PAVEMENT STRIPING (SINGLE/DOUBLE)
			WHITE PAVEMENT STRIPING (SINGLE/DOUBLE)
			PHASE LINE
			CENTERLINE
902	902	902	2' CONTOUR LINE
900	900	900	10' CONTOUR LINE
	OUTLET=967.0		POND OUTLET LINE
	HWL=900.2		POND HIGH WATER LINE
	84.3 X		PROPOSED SPOT ELEVATION
			EMERGENCY OVERFLOW
			DRAINAGE FLOW ARROW
			DELINEATED / PROPOSED WETLAND LINE
BUFFER	BUFFER	BUFFER	WETLAND BUFFER
			TREE LINE
FEMA	FEMA	FEMA	FEMA FLOODPLAIN BOUNDARY
			RETAINING WALL
x x	x x	x x	FENCE (BARBED WIRE)
# #	# #	# #	FENCE (CHAIN LINK)
[] []	[] []	[] []	FENCE (WOOD)
	CW		CONSERVATION AREA SIGN
	W		WETLAND BUFFER SIGN
			TYPE III BARRICADE
			LIGHT POLE
			STREET SIGNS
			PEDESTRIAN RAMP

SURVEY LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			BOUNDARY
			RIGHT OF WAY
			LOT LINE
			EASEMENT
			SET BACK LINE
			SECTION LINE
			RESTRICTED ACCESS

HATCH PATTERNS

	GRAVEL SURFACE		WETLAND
	BITUMINOUS SURFACE		WETLAND UPLAND BUFFER
	CONCRETE SURFACE		WETLAND MITIGATION
	RIP RAP		PERMANENT TURF RESTORATION
	SELECT BACKFILL MATERIAL		PERMANENT WET BASIN SEEDING
	EROSION CONTROL BLANKET MNDOT CATEGORY PER PLAN		UPLAND/NATURAL AREA SEEDING

TOPOGRAPHIC SYMBOLS

- CATCH BASIN
- CATCH BASIN BEEHIVE
- FLARED END SECTION
- GATE VALVE
- HYDRANT
- WATER SERVICE
- WATER WELL
- MONITORING WELL
- CLEANOUT
- HAND HOLE
- MANHOLE OTHER THAN SANITARY OR STORM
- SANITARY OR STORM MANHOLE
- LAWN SPRINKLER VALVE
- LAWN SPRINKLER HEAD
- UTILITY POLE
- TRANSFORMER BOX
- FIBER OPTIC BOX
- ELECTRIC BOX
- NATURAL GAS METER
- LIGHT POLE
- SEMAPHORE
- TELEPHONE BOX
- CABLE BOX
- CAST IRON MONUMENT
- FOUND IRON PIPE
- JUDICIAL LAND MARK
- PK NAIL
- CONTROL POINT
- SPIKE
- FLAG POLE
- TEST HOLE
- MAILBOX
- SIGN
- BOLLARD
- CONSERVATION POST
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB / BUSH

EROSION & SEDIMENT CONTROL

- STANDARD EROSION CONTROL
- SECONDARY EROSION CONTROL FENCE.
- EROSION CONTROL AT BACK OF CURB.
- TREE FENCE
- CATCH BASIN INLET PROTECTION
- STRAW BIO ROLLS
- ROCK BERM
- SUMPED RIP RAP PERMANENT ENERGY DISSIPATER
- DISCHARGE LOCATION
- GRAVEL CONSTRUCTION ENTRANCE
- TEMPORARY OUTLET FLOATING SKIMMER
- BASIN ACCESS 8% SLOPE MAX.
- STEEP SLOPE AREA

CURB LEGEND

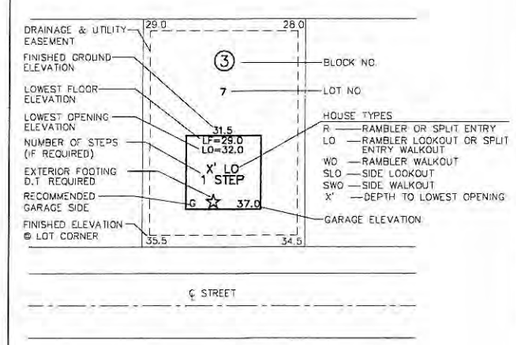
- 08.15 / 4+46.57 = TOP OF CURB ELEVATION FOR SURMOUNTABLE CURB
- 08.15 T.O. / 4+46.57 = TOP OF CURB ELEVATION FOR SURMOUNTABLE CURB (TIP OUT GUTTER)
- 08.32 / 4+46.57 = TOP OF CURB ELEVATION FOR B618 CURB
- 08.32 T.O. / 4+46.57 = TOP OF CURB ELEVATION FOR B618 CURB (TIP OUT GUTTER)
- 07.82 / 4+46.57 = BITUMINOUS ELEVATION

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE
BV	BUTTERFLY VALVE
BMP	BEST MANAGEMENT PRACTICE
℄	CENTER LINE
CB	CATCHBASIN
CBMH	CATCHBASIN MANHOLE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CS	CURB STOP
DIP	DUCTILE IRON PIPE
DT	DRAINTILE
EL/ELEV	ELEVATION
EX	EXISTING
FES	FLARED END SECTION
F-F	FACE TO FACE
FM	FORCEMAIN
GB	GRADE BREAK
GND	GROUND
GV	GATE VALVE
HP	HIGH POINT
HYD	HYDRANT
HWL	HIGH WATER LEVEL
INV	INVERT
K	CURVE COEFFICIENT
L	LENGTH
LF	LOWEST FLOOR
LO	LOOKOUT
LO	LOWEST OPENING
LP	LIQUID PETROLEUM
LP	LOW POINT
MH	MANHOLE
PC	POINT OF CURVATURE
PCC	COMPOUND CURVE
PI	POINT OF INTERSECTION
⅊	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PVT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R	RAMBLER
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OFF WAY
SSWR	SANITARY SEWER
STA	STATION
STRM	STORM SEWER
SWPPP	STORM WATER POLLUTION PROTECTION PLAN
TNH	TOP NUT HYDRANT
TYP	TYPICAL
WM	WATER MAIN
WO	WALKOUT

LOT INFORMATION

(TYPICAL SECTION NOT TO SCALE)



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LEGENDS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114098-SHEET-GRAD-LEGN

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1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.

2. SEQUENCING: ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SILT FENCE: THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. STOCKPILES: ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.

5. INLET PROTECTION: THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

6. TEMPORARY SEDIMENT BASINS: THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

7. ROCK CONSTRUCTION ENTRANCE: A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

8. STREET SWEEPING: ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

LAKE ELMO | CITY OF LAKE ELMO | STANDARD DRAWING NO. 600A LAKE ELMO

9. DEWATERING: EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR OTHERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.

10. POSITIVE DRAINAGE AND PROTECTION: THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION. WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

11. DRAINAGE DITCHES: THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

12. TURF ESTABLISHMENT: ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

LAKE ELMO | CITY OF LAKE ELMO | STANDARD DRAWING NO. 600B LAKE ELMO

13. MAINTENANCE AND INSPECTION: EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 1/2 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48 HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.

14. REMOVAL: THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.

15. FINAL STORM SEWER SYSTEM: AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.

16. DITCH CHECK (BIOROLL BLANKET SYSTEM): BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

17. FLOTATION SILT CURTAIN: FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.

18. CONCRETE WASHOUT ONSITE: ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

LAKE ELMO | CITY OF LAKE ELMO | STANDARD DRAWING NO. 600C LAKE ELMO

SITE REQUIREMENTS:
ELEVATIONS:
-LOWEST FLOOR ELEVATION:
LF=HWL+2.0'
-LOWEST OPENING ELEVATION
LO=HWL+2.0'
LO=EOF+2.0'

0 100 200 400
GRAPHIC SCALE IN FEET

01-ENG-114058-SHEET-GRAD-OVER.DWG

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Name John M. Molinaro
Reg. No. 45831 Date 02-13-15

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4. 05-12-15 City/Watershed Comments
5. 06-11-15 Courtyard/Sunflower Revision
6. 07-02-15 City/Watershed Comments

Date 02-13-15
Designed KAW/BJM
Drawn KAW/BJM

GRADING OVERALL

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

G-3 OF 18

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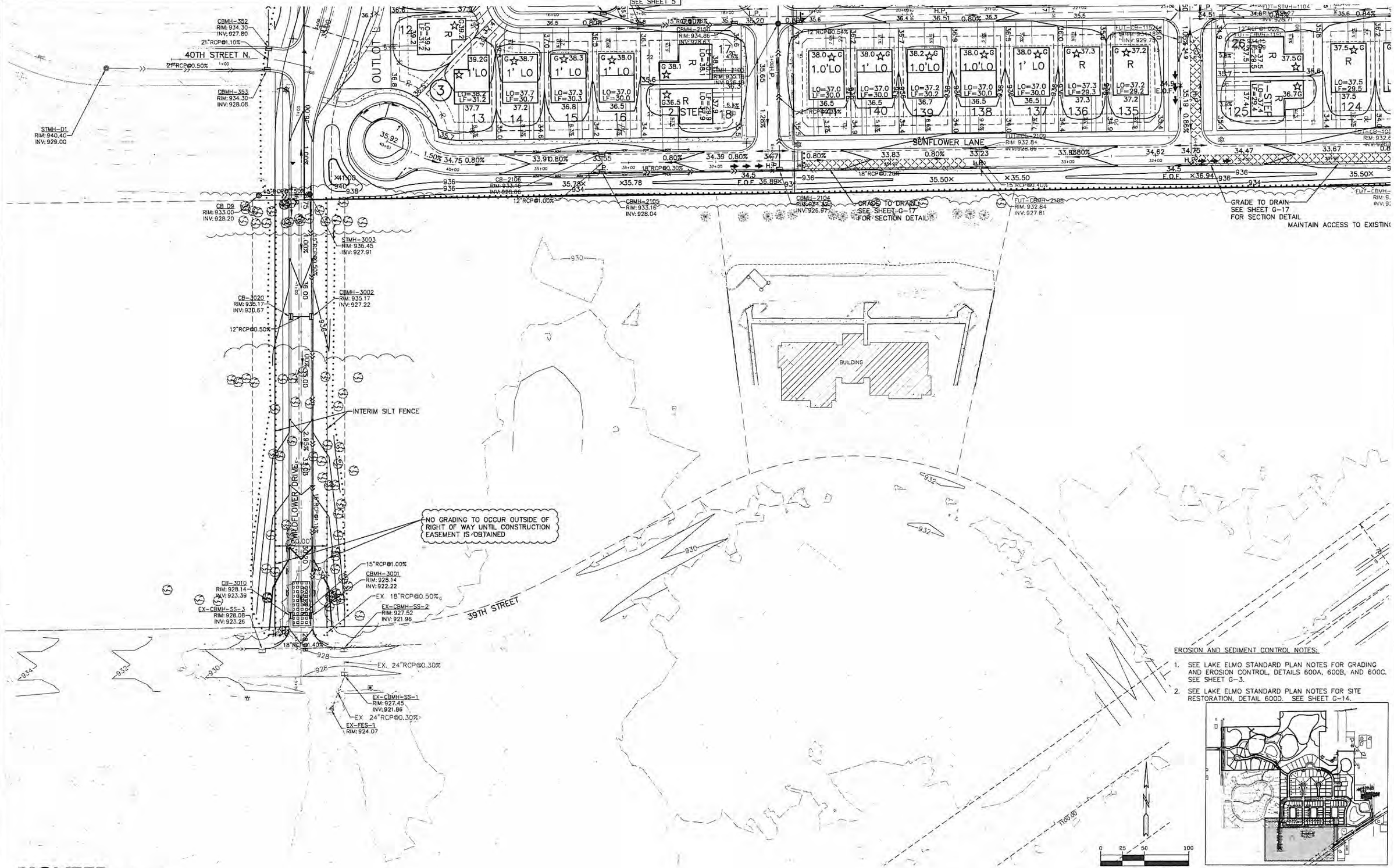

EROSION AND SEDIMENT CONTROL NOTES:

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2. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D. SEE SHEET G-14.

KEY

01-ENG-114058 SHEET-GRAD.DWG

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WILDFLOWER AT LAKE ELMO
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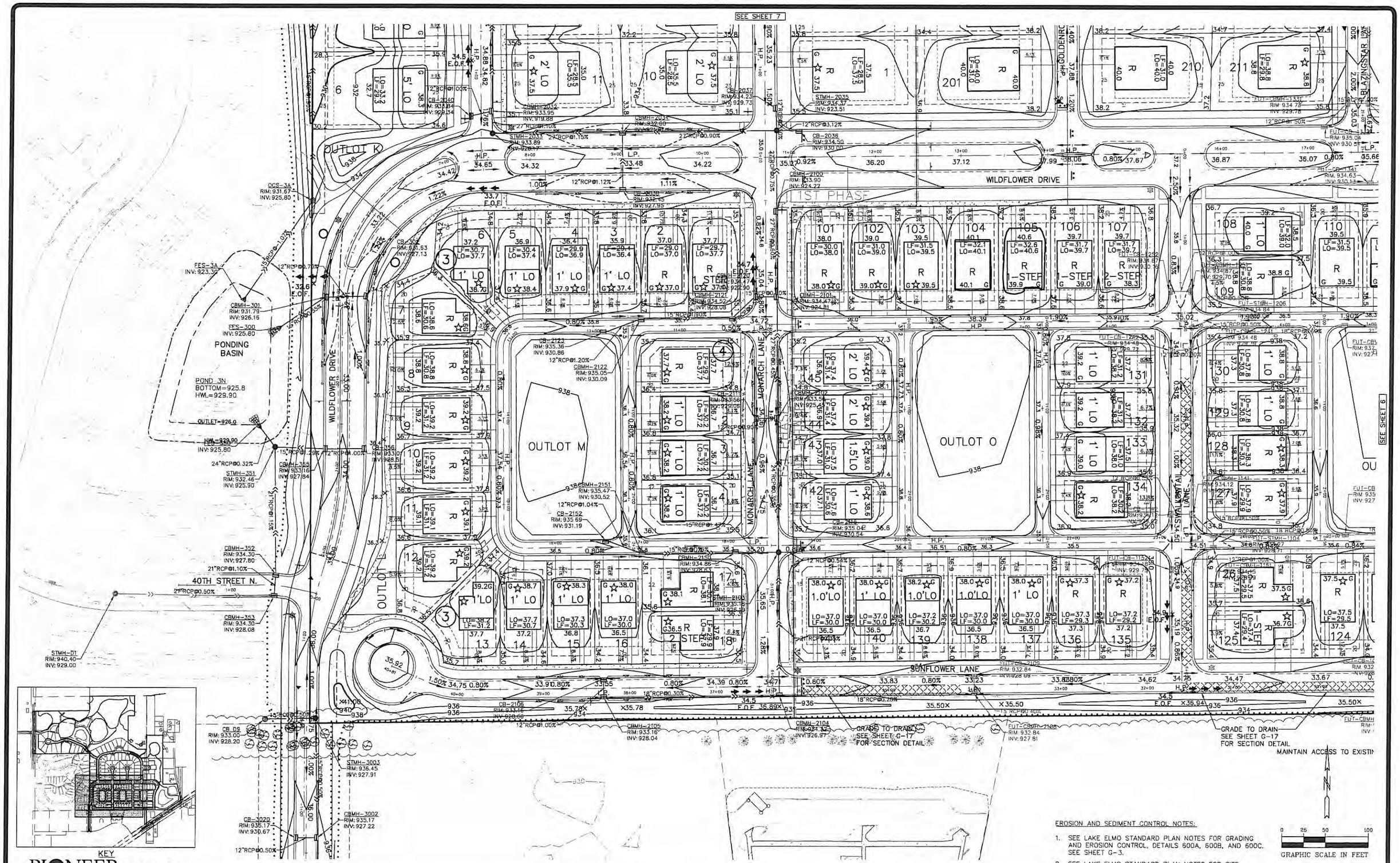

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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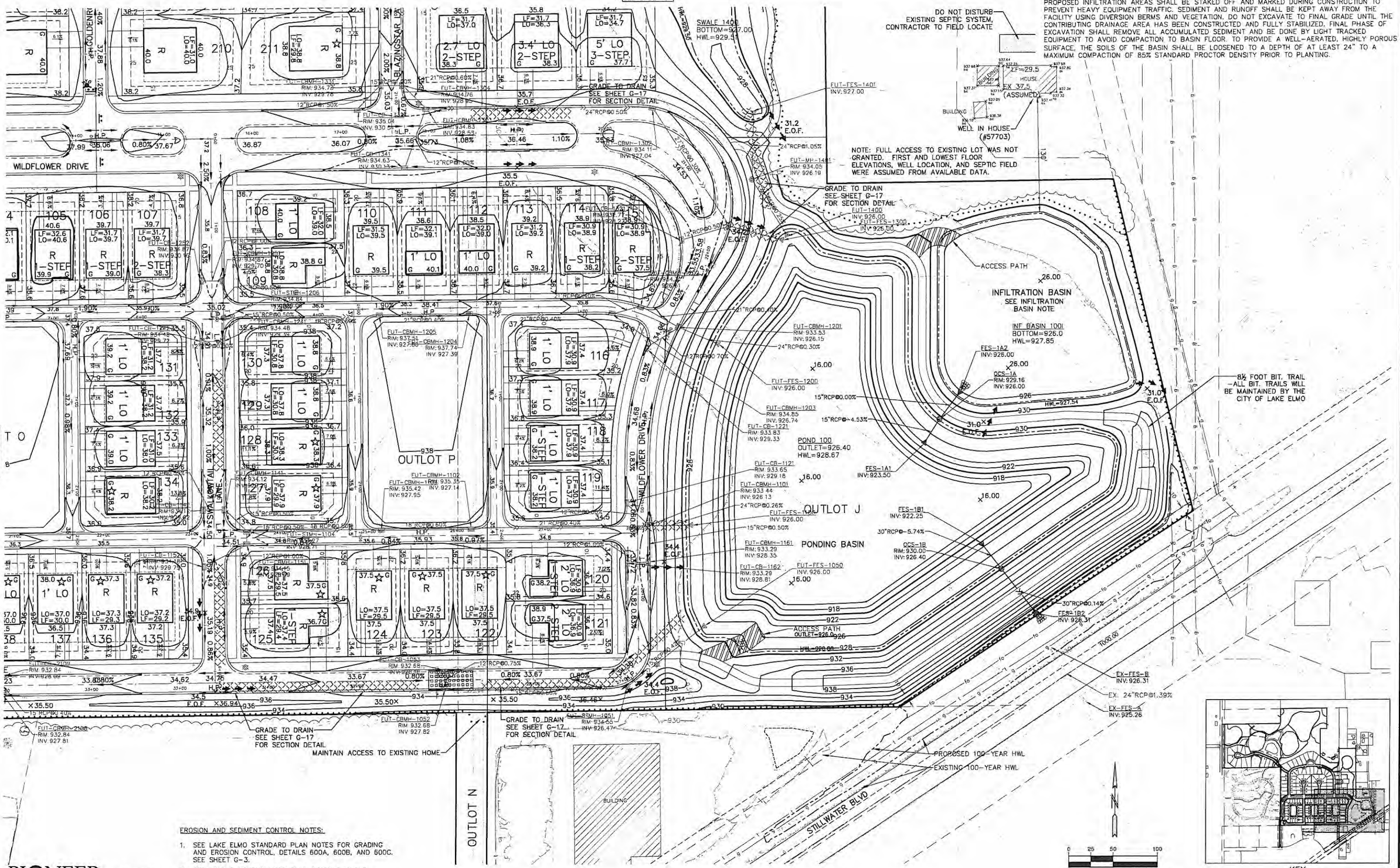
INFILTRATION NOTE:
PROPOSED INFILTRATION AREAS SHALL BE STAKED OFF AND MARKED DURING CONSTRUCTION TO PREVENT HEAVY EQUIPMENT TRAFFIC. SEDIMENT AND RUNOFF SHALL BE KEPT AWAY FROM THE FACILITY USING DIVERSION BERMS AND VEGETATION. DO NOT EXCAVATE TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. FINAL PHASE OF EXCAVATION SHALL REMOVE ALL ACCUMULATED SEDIMENT AND BE DONE BY LIGHT TRACKED EQUIPMENT TO AVOID COMPACTION TO BASIN FLOOR. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS OF THE BASIN SHALL BE LOOSENED TO A DEPTH OF AT LEAST 24" TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY PRIOR TO PLANTING.



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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

G-6 OF 18

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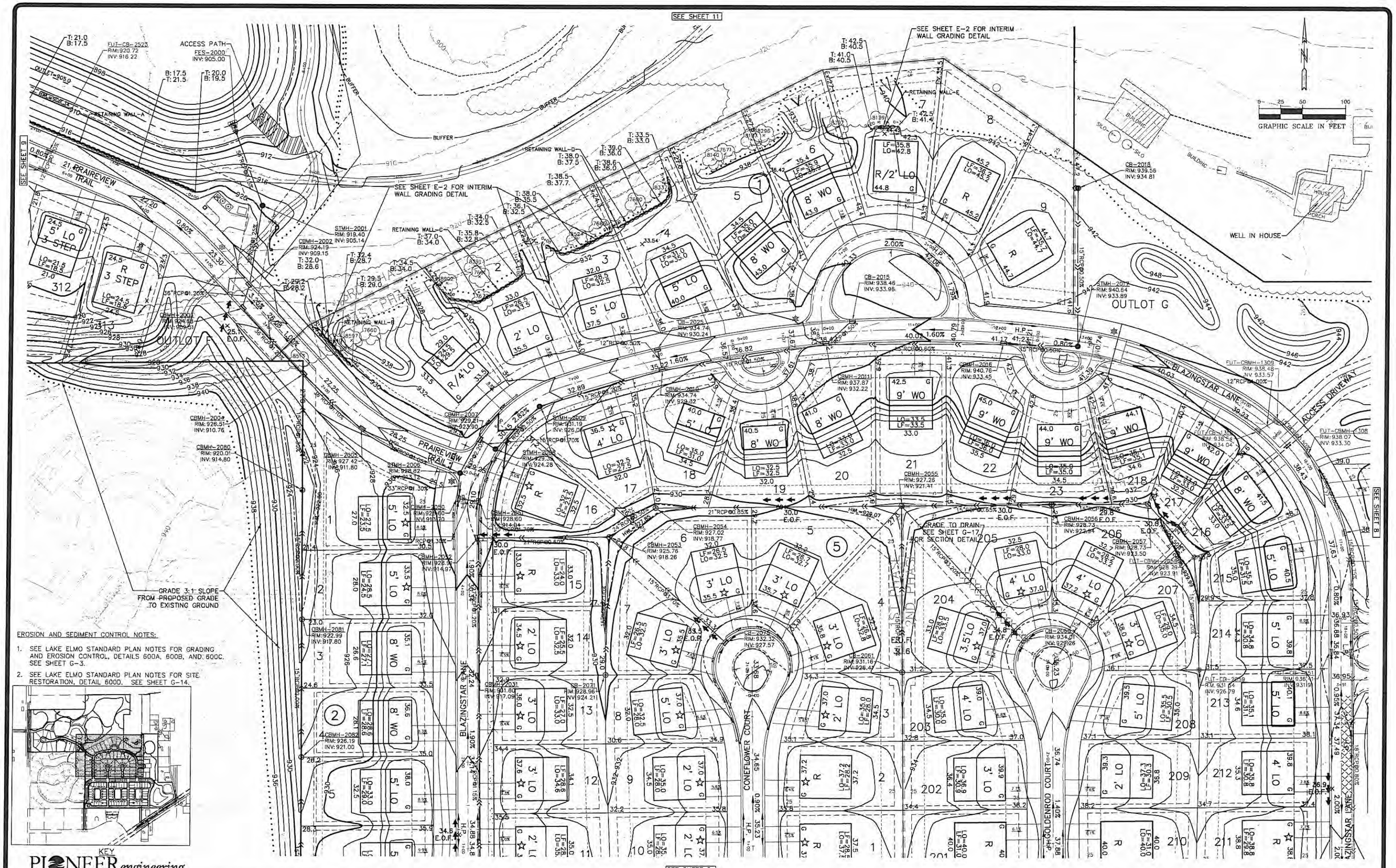

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MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114058-SHEET-GRAD DWG

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EROSION AND SEDIMENT CONTROL NOTES:

1. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C. SEE SHEET G-3.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D. SEE SHEET G-14.

KEY

PIONEER engineering

CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS

2422 Enterprise Drive
Mendota Heights, MN 55120

(651) 681-1914
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name: John M. Molinaro
Reg. No: 45831 Date: 02-13-15

Revisions:
1 04-07-15 City Comments
2 04-28-15 City Comments
3 05-06-15 City/Watershed Comments
4 05-12-15 City/Watershed Comments
5 06-11-15 Counyard/Sunflower Revision
6 07-02-15 City/Watershed Comments

Date	02-13-15
Designed	KAW/BJM
Drawn	KAW/BJM

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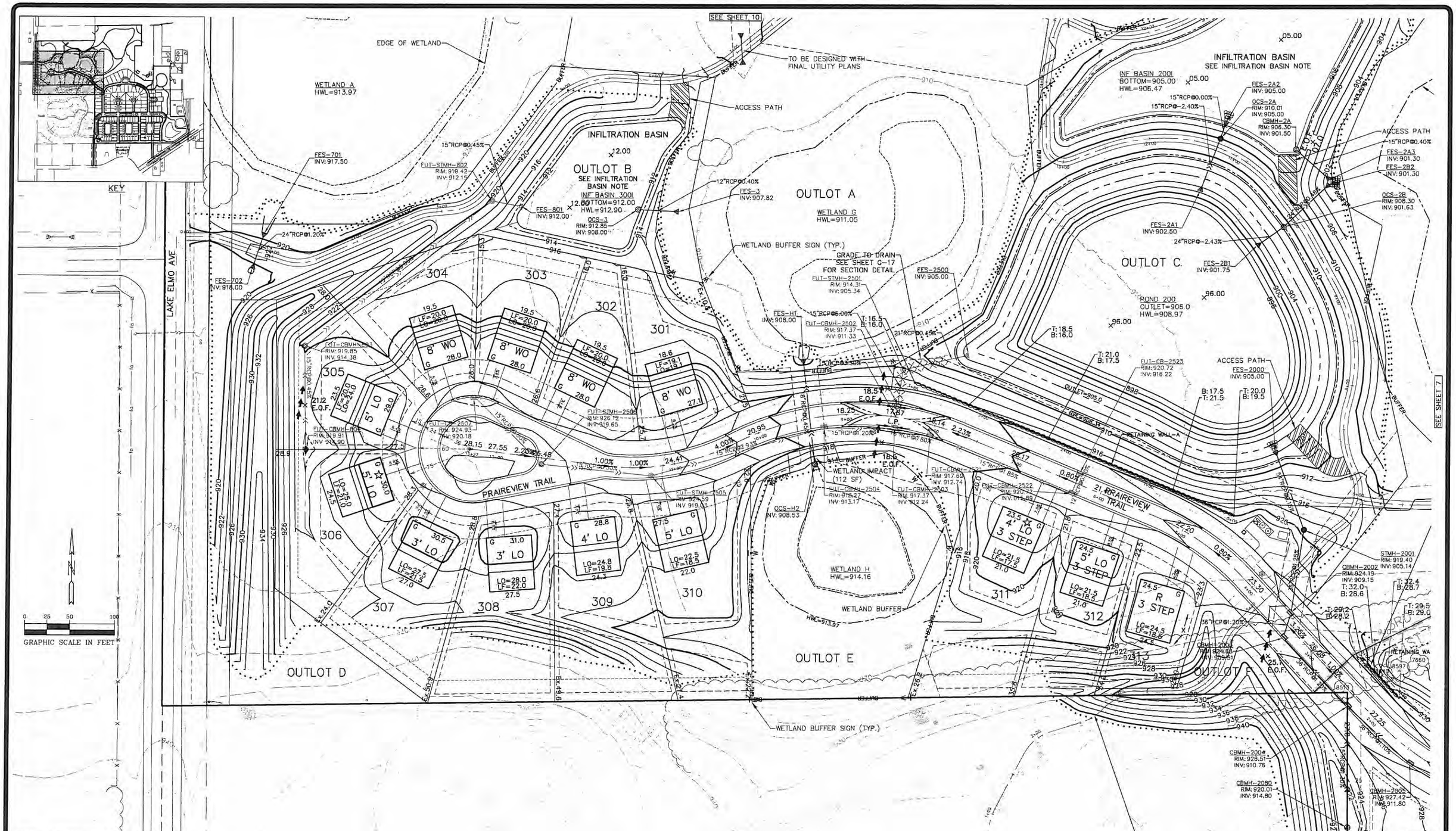

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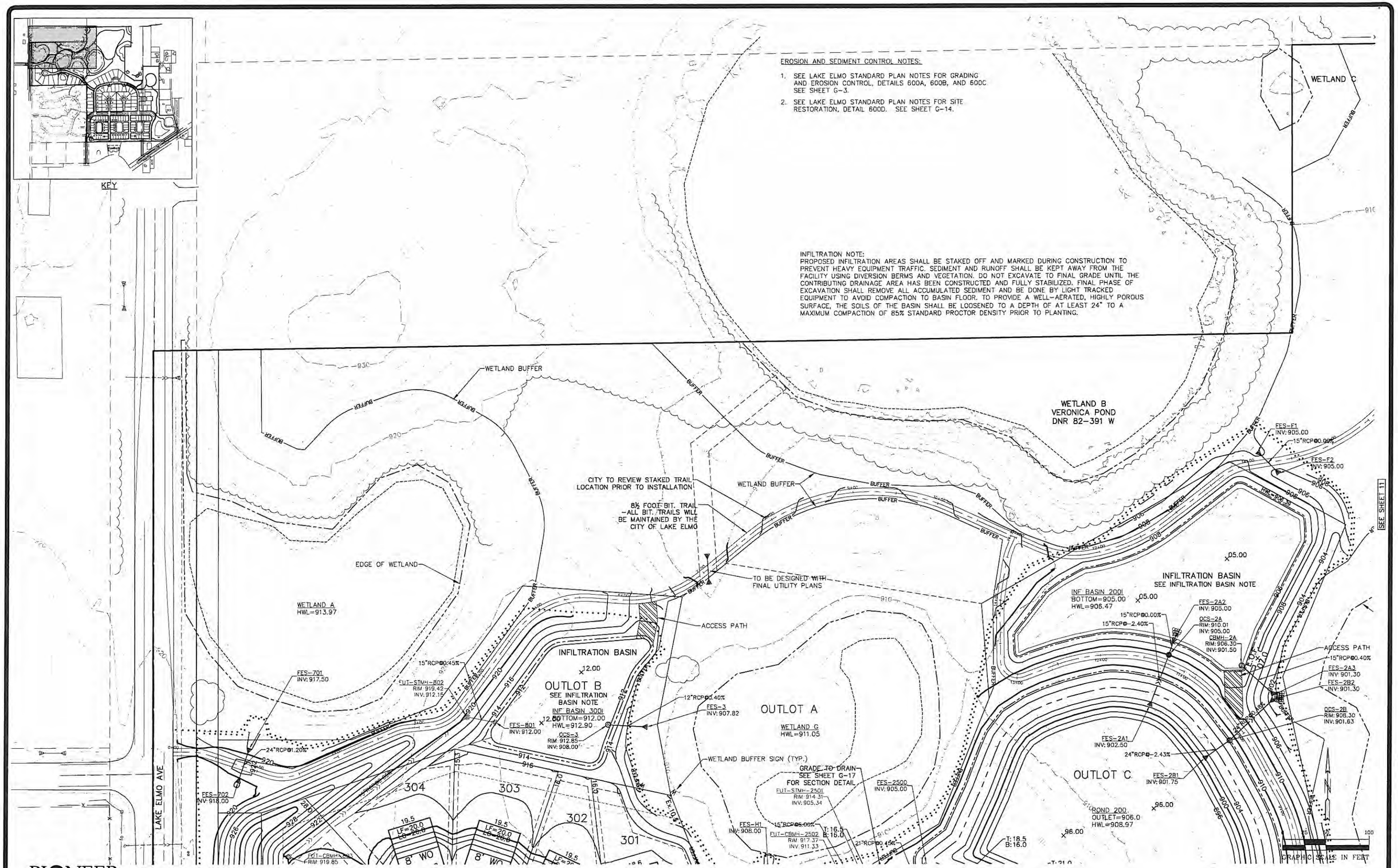
INFILTRATION NOTE:
PROPOSED INFILTRATION AREAS SHALL BE STAKED OFF AND MARKED DURING CONSTRUCTION TO PREVENT HEAVY EQUIPMENT TRAFFIC. SEDIMENT AND RUNOFF SHALL BE KEPT AWAY FROM THE FACILITY USING DIVERSION BERMS AND VEGETATION. DO NOT EXCAVATE TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. FINAL PHASE OF EXCAVATION SHALL REMOVE ALL ACCUMULATED SEDIMENT AND BE DONE BY LIGHT TRACKED EQUIPMENT TO AVOID COMPACTION TO BASIN FLOOR. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS OF THE BASIN SHALL BE LOOSENED TO A DEPTH OF AT LEAST 24" TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY PRIOR TO PLANTING.



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WETLAND C

WETLAND D

WETLAND B
VERONICA POND
DNR 82-391 W

SEE SHEET 10

10.7
E.O.F.

FES-F1
INV: 905.00
15"RCP@0.00%

FES-F2
INV: 905.00

8½ FOOT BIT. TRAIL
ALL BIT. TRAILS WILL
BE MAINTAINED BY THE
CITY OF LAKE ELMO

CITY TO REVIEW STAKED TRAIL
LOCATION PRIOR TO INSTALLATION

WETLAND E

INFILTRATION BASIN
SEE INFILTRATION BASIN NOTE

INF BASIN 2001
BOTTOM=905.00
HWL=906.47

FES-2A2
INV: 905.00

15"RCP@0.00%

15"RCP@-2.40%

OCS-2A
RIM: 910.01
INV: 905.00

CBMH-2A
RIM: 905.30
INV: 901.50

EDGE OF WETLAND

ACCESS PATH

15"RCP@0.40%

FES-2A3
INV: 901.30

FES-2B2
INV: 901.30

OCS-2B
RIM: 908.30
INV: 901.63

FES-2A1
INV: 902.50

24"RCP@-2.43%

FES-2B1
INV: 901.75

OUTLOT C

POND 200
OUTLET=906.0
HWL=908.97

OUTLOT A
WETLAND F

WETLAND F
HWL=910.0

WETLAND BUFFER

TO BE DESIGNED WITH
FINAL UTILITY PLANS

SEE SHEET E-2 FOR INTERIM
WALL GRADING DETAIL

SEE SHEET 9

SEE SHEET 7

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0 25 50 100
GRAPHIC SCALE IN FEET

KEY

01 ENG 114058-SHEET-GRAD DWG

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Drawn KAW/BJM

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G-11 OF 18

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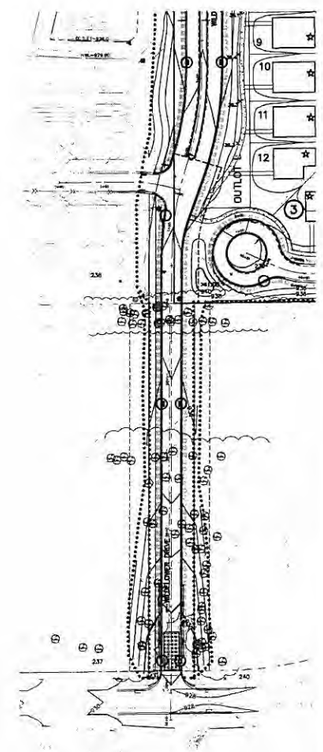

0 50 100 200
GRAPHIC SCALE IN FEET

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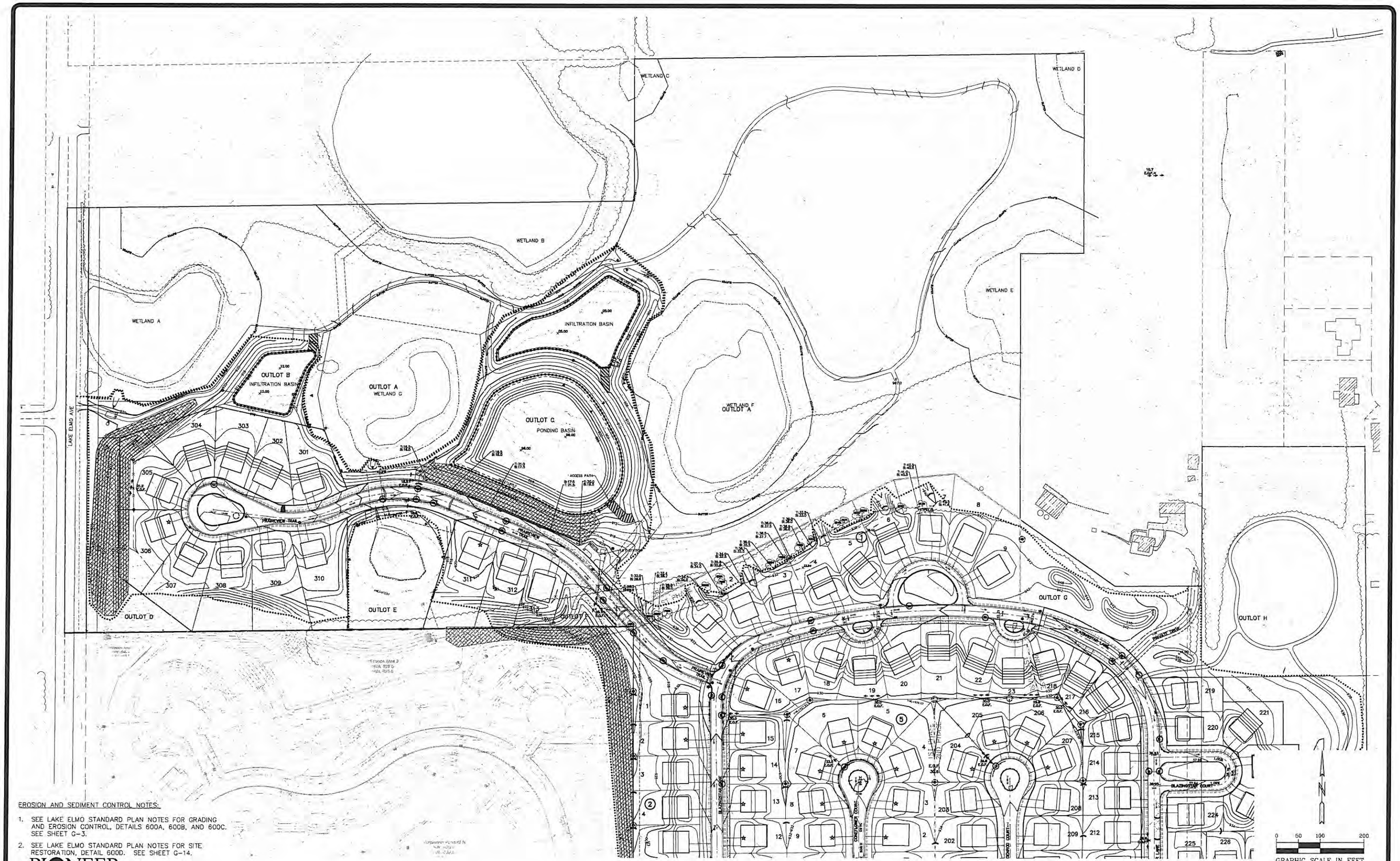

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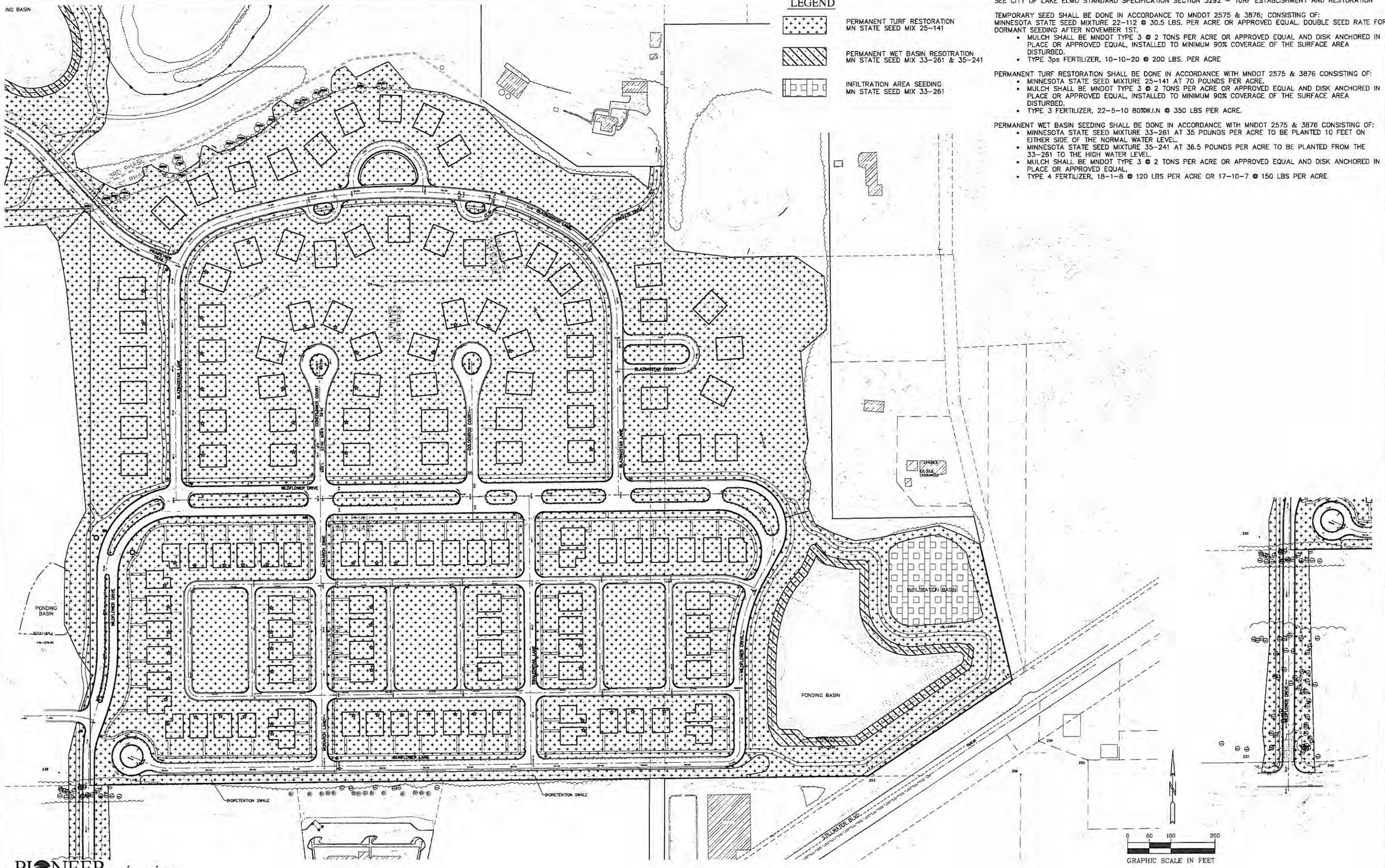

LEGEND

- PERMANENT TURF RESTORATION MN STATE SEED MIX 25-141
- PERMANENT WET BASIN RESOTRATION MN STATE SEED MIX 33-261 & 35-241
- INFILTRATION AREA SEEDING MN STATE SEED MIX 33-261

SEE CITY OF LAKE ELMO STANDARD SPECIFICATION SECTION 3292 – TURF ESTABLISHMENT AND RESTORATION

TEMPORARY SEED SHALL BE DONE IN ACCORDANCE TO MNDOT 2575 & 3876; CONSISTING OF:
MINNESOTA STATE SEED MIXTURE 22-112 @ 30.5 LBS. PER ACRE OR APPROVED EQUAL. DOUBLE SEED RATE FOR DORMANT SEEDING AFTER NOVEMBER 1ST.

- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 3ps FERTILIZER, 10-10-20 @ 200 LBS. PER ACRE

PERMANENT TURF RESTORATION SHALL BE DONE IN ACCORDANCE WITH MNDOT 2575 & 3876 CONSISTING OF:

- MINNESOTA STATE SEED MIXTURE 25-141 AT 70 POUNDS PER ACRE.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.
- TYPE 3 FERTILIZER, 22-5-10 80%W.I.N @ 350 LBS PER ACRE.

PERMANENT WET BASIN SEEDING SHALL BE DONE IN ACCORDANCE WITH MNDOT 2575 & 3876 CONSISTING OF:

- MINNESOTA STATE SEED MIXTURE 33-261 AT 35 POUNDS PER ACRE TO BE PLANTED 10 FEET ON EITHER SIDE OF THE NORMAL WATER LEVEL.
- MINNESOTA STATE SEED MIXTURE 35-241 AT 36.5 POUNDS PER ACRE TO BE PLANTED FROM THE 33-261 TO THE HIGH WATER LEVEL.
- MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL,
- TYPE 4 FERTILIZER, 18-1-8 @ 120 LBS PER ACRE OR 17-10-7 @ 150 LBS PER ACRE

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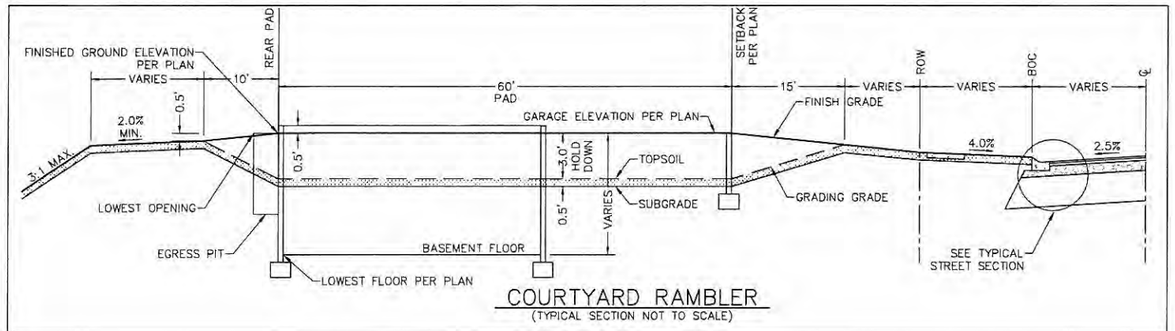
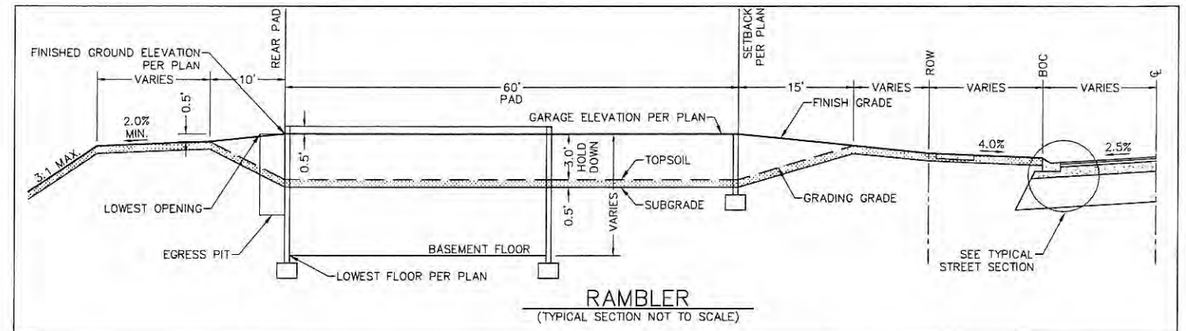


COURTYARD RAMBLER
(TYPICAL SECTION NOT TO SCALE)



RAMBLER
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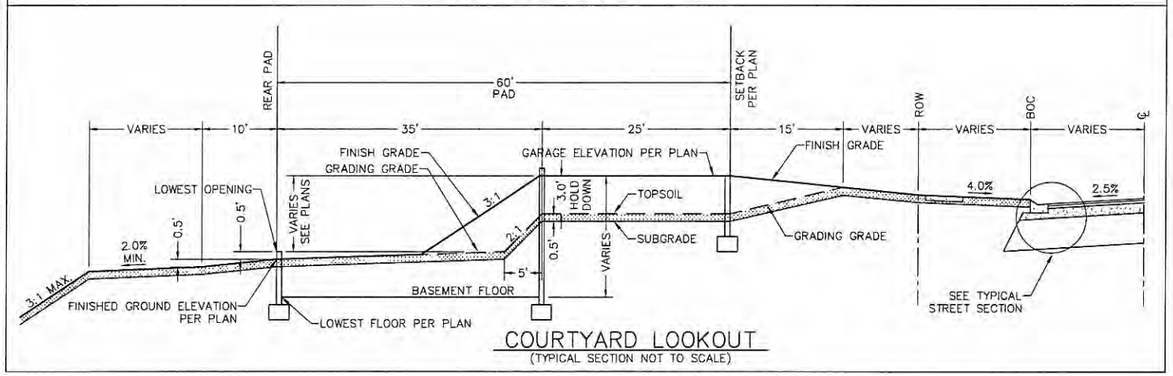
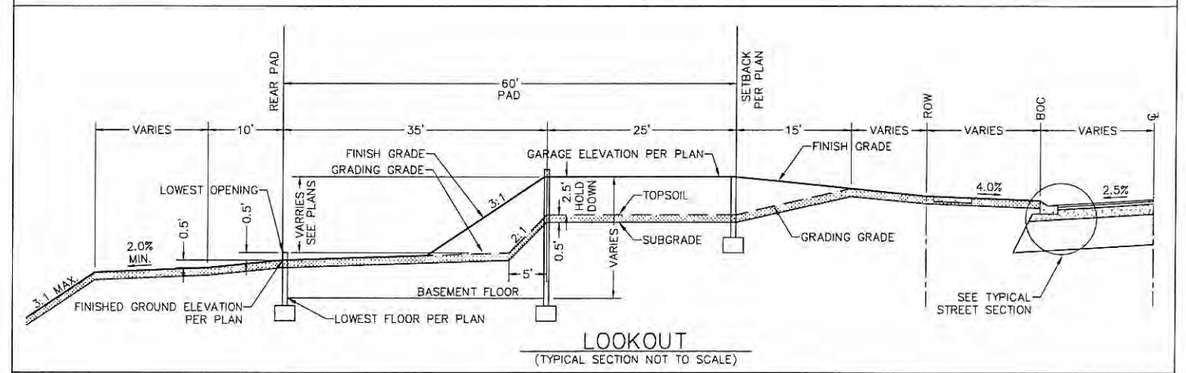


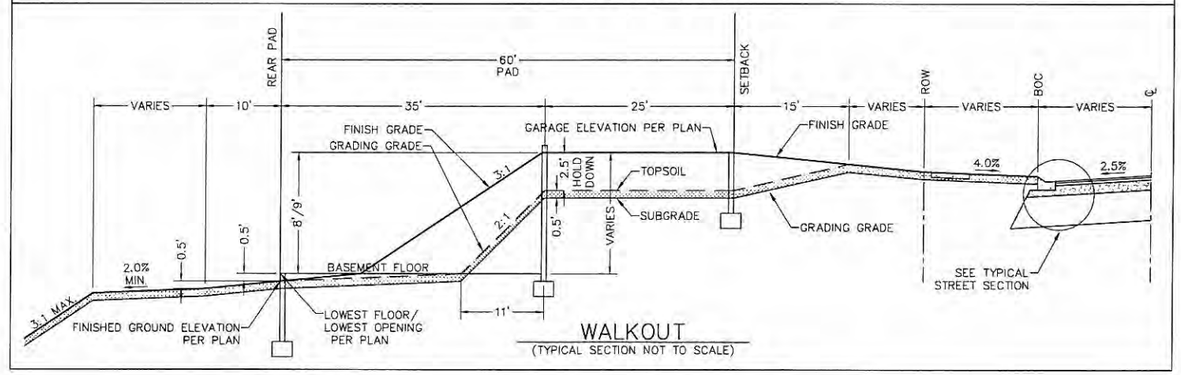
COURTYARD LOOKOUT
(TYPICAL SECTION NOT TO SCALE)



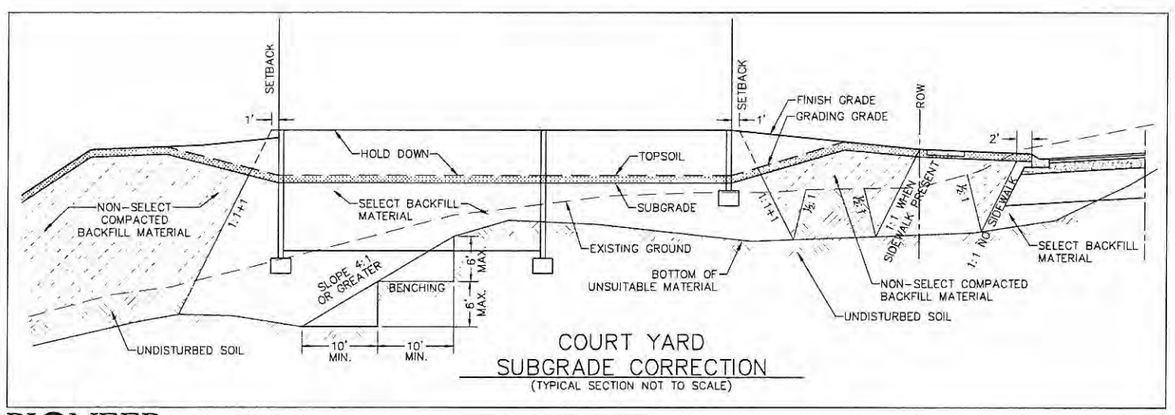
LOOKOUT
(TYPICAL SECTION NOT TO SCALE)

SITE REQUIREMENTS:
ELEVATIONS:
-LOWEST FLOOR ELEVATION:
LF=HWL+2.0'
-LOWEST OPENING ELEVATION:
LO=HWL+2.0'
LO=EOF+2.0'

DRAINTILE REQUIREMENTS:
EXTERIOR PERIMETER FOOTING DRAINTILE REQUIRED ON LOTS MARKED WITH: ☆



WALKOUT
(TYPICAL SECTION NOT TO SCALE)



COURT YARD
SUBGRADE CORRECTION
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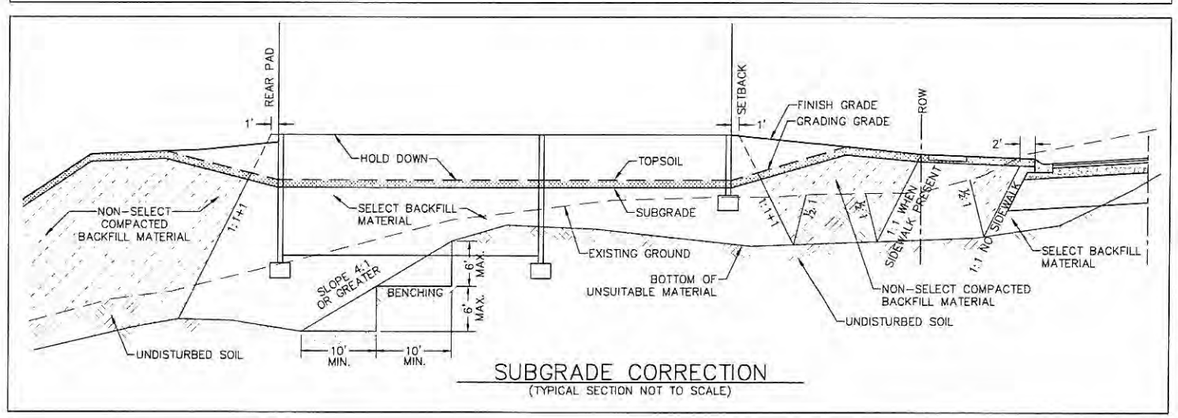

SUBGRADE CORRECTION
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DETAILS

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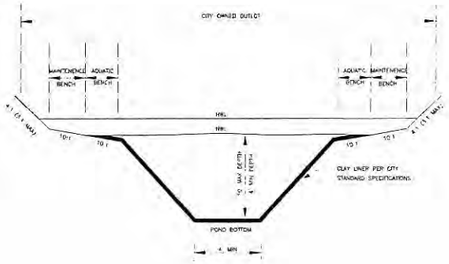
CITY OF LAKE ELMO

FEBRUARY 2015

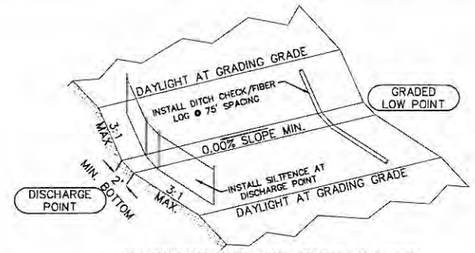
TYPICAL POND SECTION



STANDARD DRAWING NO. 416 LAKE ELMO

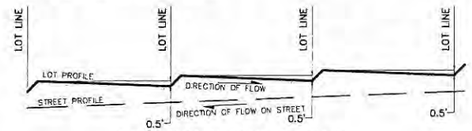
BASIN CLAY LINER MATERIAL NOTE:
"IMPERVIOUS CLAY LINER" MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS OR "EQUAL TO":

1. IN-PLACE PERMEABILITY:1X10^-6 CM/SEC OR LESS.
2. GRAIN SIZE: P200 CONTENT 50 PERCENT BY WEIGHT OR GREATER, MAXIMUM GRAVEL CONTENT 5 PERCENT BY WEIGHT. MAXIMUM PARTICLE SIZE OF 2.5-INCH IN ANY DIRECTION.
3. CLAY CONTENT: 25 PERCENT BY WEIGHT OR GREATER (0.02 MM).
4. LIQUID LIMIT: 25 PERCENT OR GREATER.
5. PLASTICITY INDEX: 12 PERCENT OR GREATER.
6. COMPACTION: 95 PERCENT STANDARD PROCTER DENSITY OR GREATER DEPENDING ON CONTRACTOR SOURCE TESTING RESULTS.
7. IMPERVIOUS CLAY LINER MATERIAL SHALL BE FREE OF DEBRIS, ROOTS, ORGANIC MATERIAL, SOLID MINERAL MATERIAL LARGER THAN 2.5 INCHES IN DIAMETER, ANGULAR STONES OF ANY DIAMETER AND OTHER MATERIALS CONSIDERED DELETERIOUS TO THE GEOMEMBRANE LINER.
8. SOURCE TESTING: THE CONTRACTOR SHALL SUPPLY TEST RESULTS FROM AN INDEPENDENT TESTING LAB FOR A SAMPLE TAKEN AT THE CLAY SOURCE TO VERIFY THE ABOVE SPECIFICATIONS WILL BE MET. THE RESULTS SHALL BE SUBMITTED TO THE ENGINEER AT LEAST TWO WEEKS PRIOR TO DELEVERY TO THE SITE. THE SPECIFIC LOCATION OF THE SOURCE MUST BE INCLUDED WITH THE SUBMITTAL.
9. IN-PLACE TESTING: AFTER PLACEMENT OF THE CLAY, THE CONTRACTOR SHALL ARRANGE FOR INPLACE TESTING BY AN INDEPENDENT TESTING LAB TO VERIFY THE ABOVE SPECIFICATIONS AR MET. TESTING SHALL INCLUDE COMPACTION, GRAIN SIZE, ATTERBERG LIMITS, AND PERMEABILITY USING A RELATIVELY SUNDITURBED THIN WALL SAMPLE (SHELBY TUBE). THE IN-PLACE TESTING FREQUENCY SHALL BE ONE SAMPLE TESTED EVERY 1,000 CY OF CLAY PLACED.



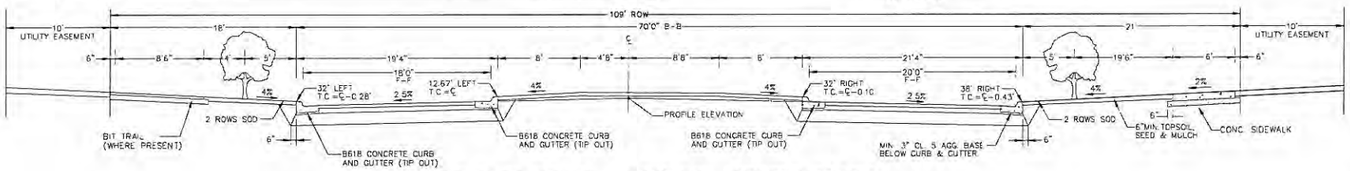
TEMPORARY SURFACE SWALE SECTION (GRADE TO DRAIN SECTION DETAIL)

(TYPICAL SECTION NOT TO SCALE)



LOT BENCHING DETAIL

NO SCALE



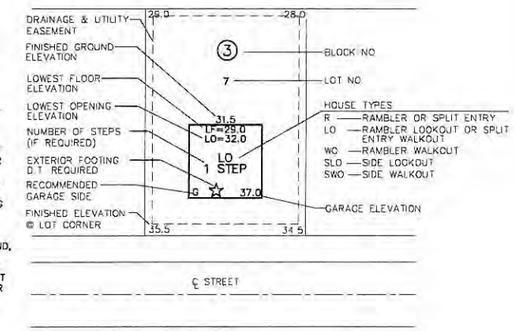
WILDFLOWER DRIVE – 109' ROW STREET SECTION

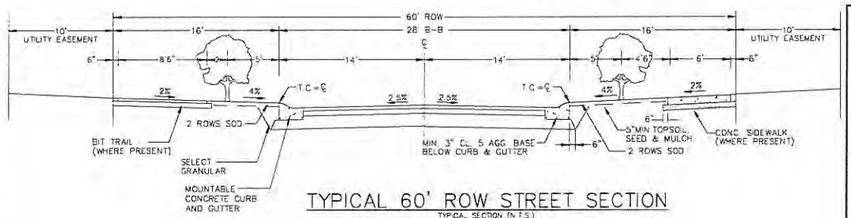
TYPICAL SECTION (N.T.S.)

SEE LAKE ELMO STANDARD DRAWING NO 801 & 805

WETLAND BUFFER SIGNAGE NOTE:
WETLAND BUFFER SIGNAGE MUST:

1. SIZE OF BUFFER SIGNAGE: 7" WIDE X 9" TALL.
2. SIGN MATERIAL: HEAVY GUAGE ALUMINUM.
3. SIGN WORDING: MUST HAVE VERBIAGE OF EXAMPLE TO SHOWN
4. SIGN POST: SIGNS MUST BE AFFIXED TO 4"X4" PRESSURE TREATED WOOD POSTS OR ANOTHER MATERIAL ACCEPTABLE TO VBWD.
5. SIGN AND POST/MONUMENT PLACEMENT: EACH BUFFER MONUMENT MUST BE PLACED ON THE OUTER EDGE OF THE WETLAND BUFFER, FACING AWAY FROM THE BUFFER. LOCATIONS AS PER SHOWN ON PLAN SET.
6. POST INSTALLATION: EACH POST SHOULD BE APPROXIMATELY FOUR FEET ABOVE THE GROUND, WITH AT LEAST THREE FEET SUNK BELOW GROUND. THE BOTTOM OF THE POST SHOULD BE FITTED WITH AN ANCHOR ATTACHMENT THAT WOULD EXPAND UPON ATTEMPTED REMOVAL OR WITH A CONCRETE FOOTING.

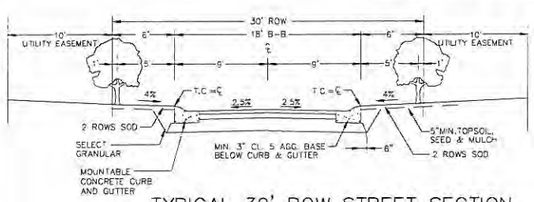




TYPICAL 60' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

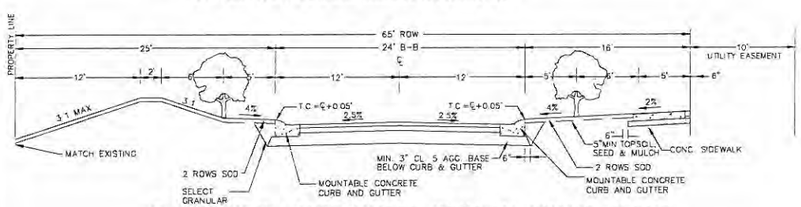
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL 30' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

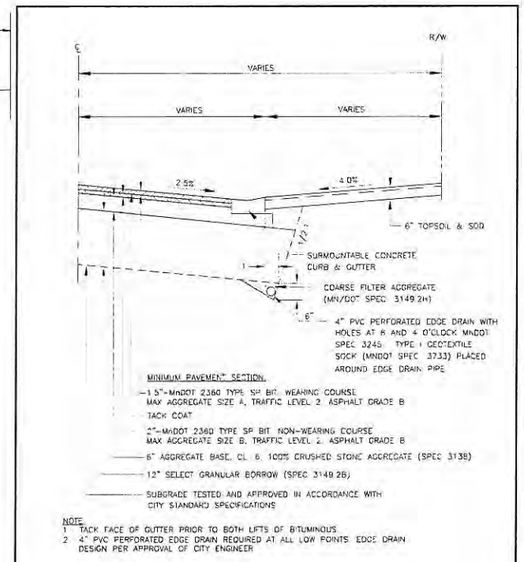
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



SUNFLOWER LANE STREET SECTION CROSS SLOPE

TYPICAL SECTION (N.T.S.)

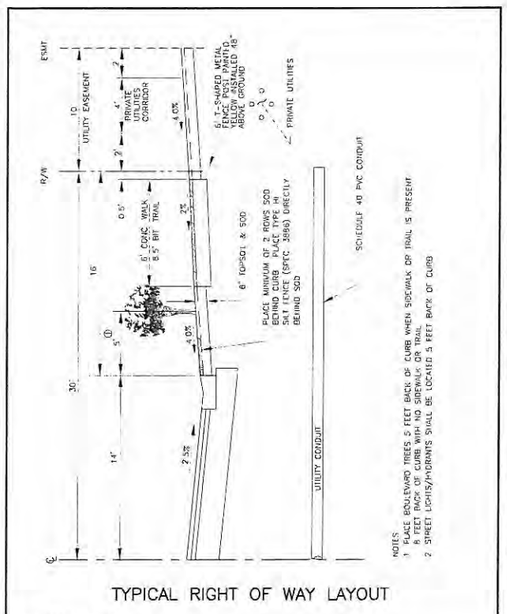
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL LOCAL RESIDENTIAL STREET SECTION (MINIMUM 7-TON DESIGN)

FEBRUARY 2015

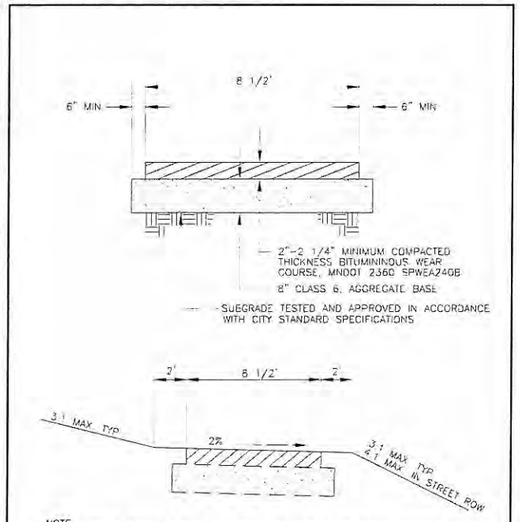
CITY OF LAKE ELMO — STANDARD DRAWING NO. 801 LAKE ELMO



TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 805 LAKE ELMO



NOTE
1 BITUMINOUS TRAILS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS
2 PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM TRAIL SURFACE THROUGHOUT LENGTH OF TRAIL

BICYCLE-PEDESTRIAN PATH

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 509 LAKE ELMO

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
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Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota. Name John M. Molinaro Reg. No. 45831 Date 02-13-15

Revisions:
1 04-07-15 City Comments
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6 07-02-15 City/Watershed Comments

Date	02-13-15
Designed	KAW/BJM
Drawn	KAW/BJM

DETAILS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114038-SHEET-GRAD-DTLS

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1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.

2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.

5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 600A — LAKE ELMO

9. DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR FOR DEWATERING HE CHOOSES. HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.

10. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

11. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 600B — LAKE ELMO

13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.

14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.

15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.

16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.

18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 600C — LAKE ELMO

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.

2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.

3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.

4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.

5. A MINIMUM OF 2 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.

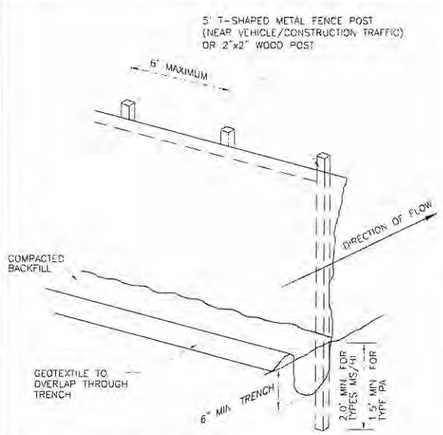
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES

SITE RESTORATION PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 600D — LAKE ELMO

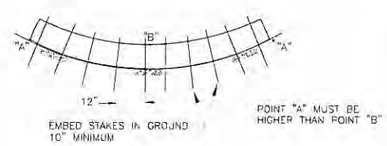


NOTE -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3 TYPE MS/HI NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886

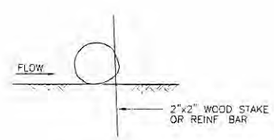
SILT FENCE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 601 — LAKE ELMO



DITCH SECTION



FIBER ROLL SECTION

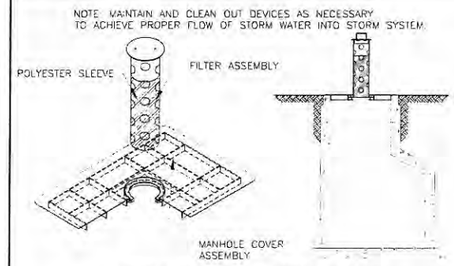
NOTE
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

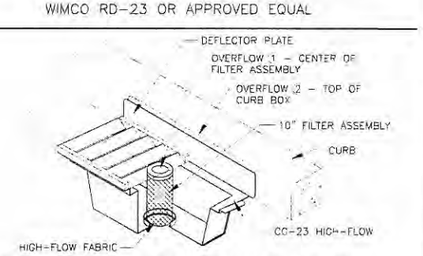
FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 603 — LAKE ELMO

NOTE: MAINTAIN AND CLEAN OUT DEVICES AS NECESSARY TO ACHIEVE PROPER FLOW OF STORM WATER INTO STORM SYSTEM.



WIMCO RD-23 OR APPROVED EQUAL

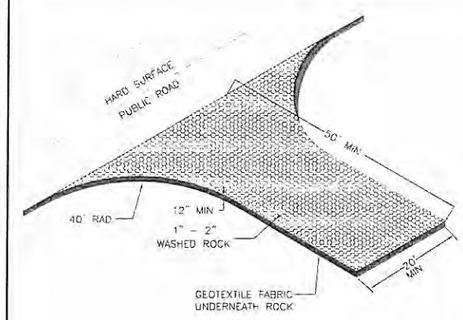


WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 604 — LAKE ELMO



NOTES

1. MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
2. A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
3. CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
4. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.
5. REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO 605 — LAKE ELMO

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www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name: John M. Molinaro — Reg. No. 45831 — Date 02-13-15

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5 06-11-15 Courtyard/Sunflower Revision
6 07-02-15 City/Watershed Comments

Date	02-13-15
Designed	KAW/BJM
Drawn	KAW/BJM

CITY DETAILS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114058-SHEET-GRAD-DTLS

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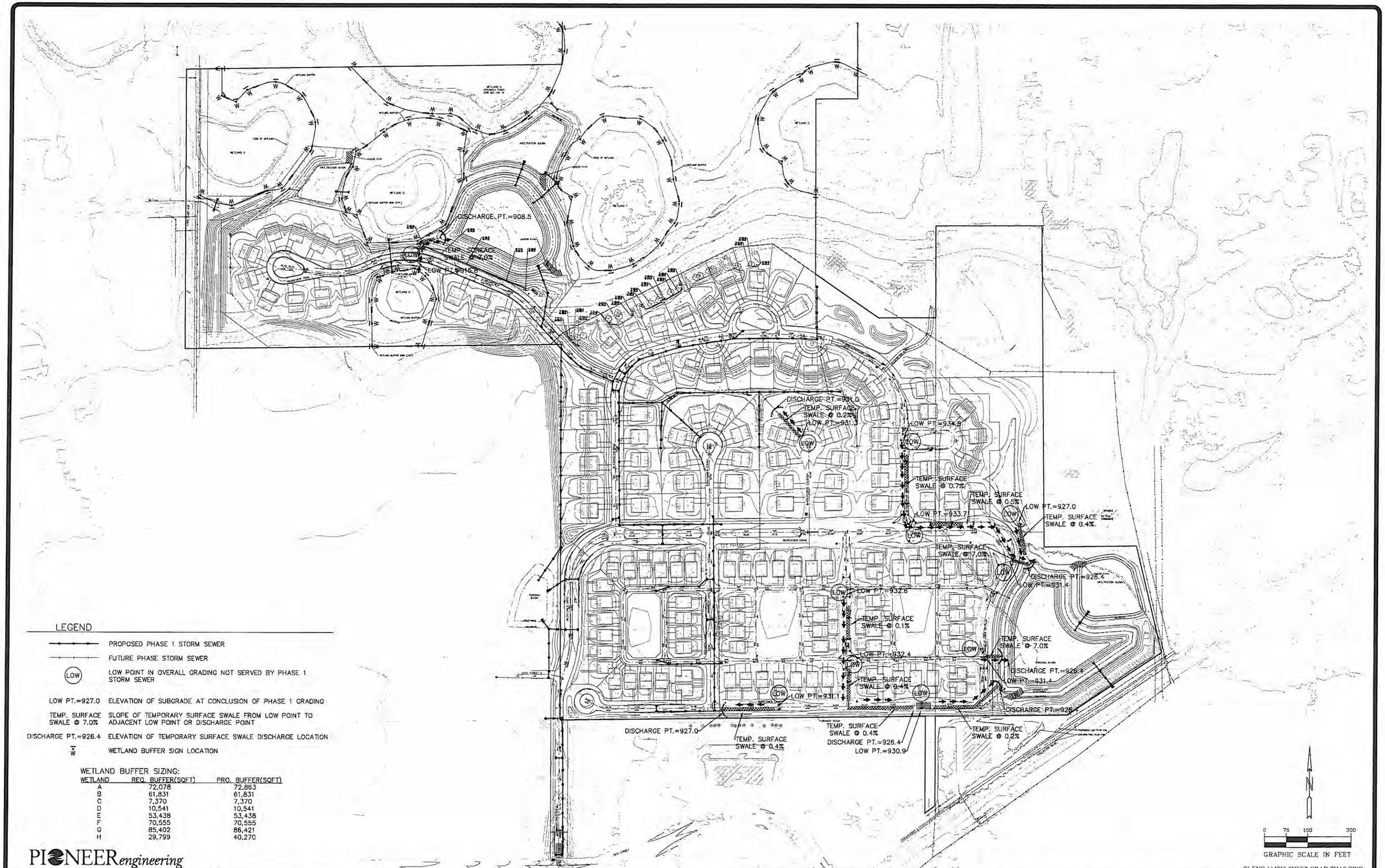

LEGEND

——●——●——	PROPOSED PHASE 1 STORM SEWER
——+——+——	FUTURE PHASE STORM SEWER
(LOW)	LOW POINT IN OVERALL GRADING NOT SERVED BY PHASE 1 STORM SEWER
LOW PT.=927.0	ELEVATION OF SUBGRADE AT CONCLUSION OF PHASE 1 GRADING
TEMP. SURFACE SWALE @ 7.0%	SLOPE OF TEMPORARY SURFACE SWALE FROM LOW POINT TO ADJACENT LOW POINT OR DISCHARGE POINT
DISCHARGE PT.=926.4	ELEVATION OF TEMPORARY SURFACE SWALE DISCHARGE LOCATION
W	WETLAND BUFFER SIGN LOCATION

WETLAND BUFFER SIZING:

WETLAND	REQ. BUFFER(SQFT)	PRO. BUFFER(SQFT)
A	72,078	72,863
B	61,831	61,831
C	7,370	7,370
D	10,541	10,541
E	53,438	53,438
F	70,555	70,555
G	85,402	86,421
H	29,799	40,270

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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

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Designed	KAW/BJM
Drawn	KAW/BJM

PHASING/BUFFER EXHIBIT

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

E-1 OF 3

01-ENG-114058-SHEET-GRAD PHAS.DWG

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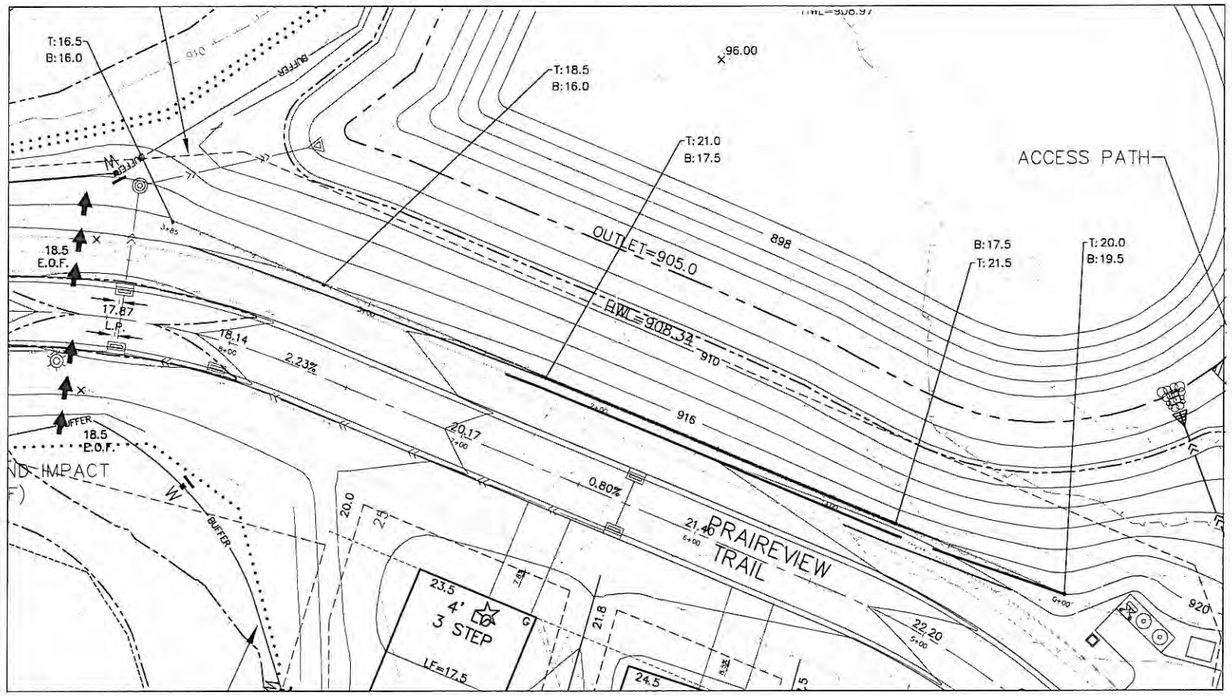
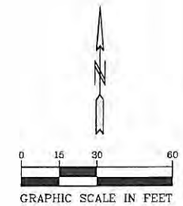
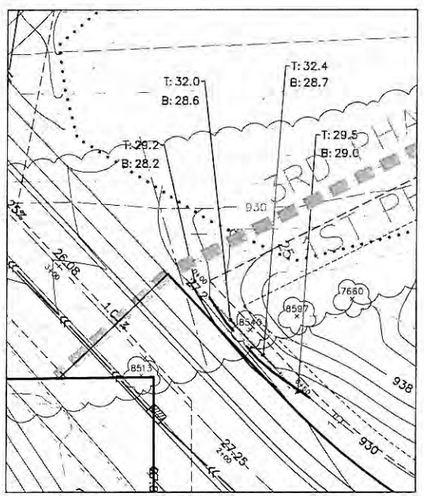
INTERIM WALL GRADING NOTE:
-GRADE SLOPES 1:1 FROM PROPOSED WALL LOCATION
-BLANKET ALL 1:1 SLOPES

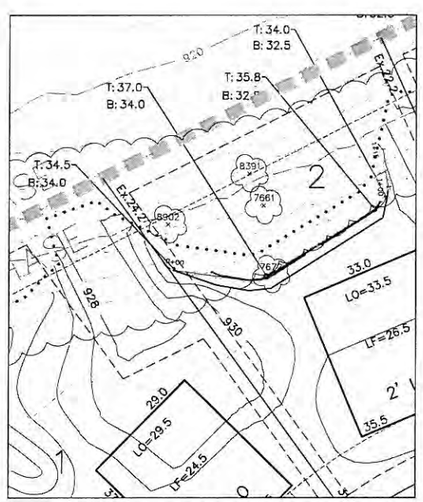


RETAINING WALL-A
AREA OF 1:1 SLOPE = 1,944 SF

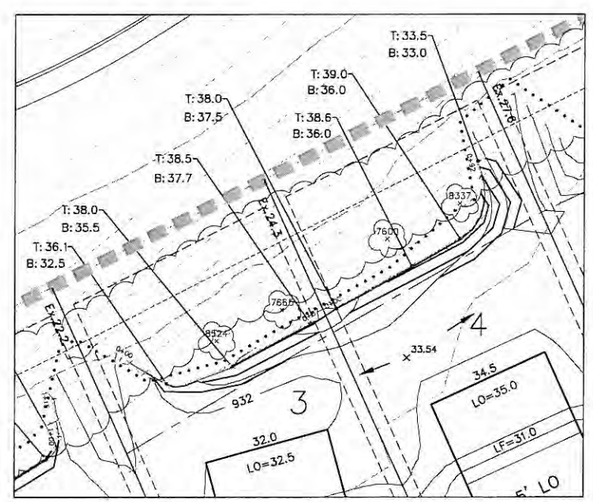




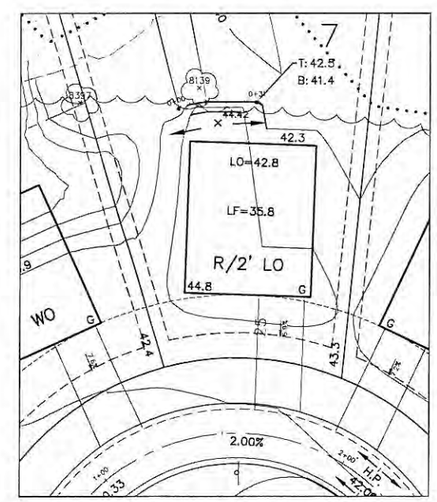
RETAINING WALL-B
AREA OF 1:1 SLOPE = 289 SF



RETAINING WALL-C
AREA OF 1:1 SLOPE = 397 SF



RETAINING WALL-D
AREA OF 1:1 SLOPE = 835 SF



RETAINING WALL-E
AREA OF 1:1 SLOPE = 175 SF

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www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Name John M. Molinaro
Reg No 45831 Date 02-13-15

Revisions
1 04-07-15 City Comments
2 04-29-15 City Comments
3 05-06-15 City/Watershed Comments
4 05-12-15 City/Watershed Comments
5 06-11-15 Courtyard/Sunflower Revision
6 07-02-15 City/Watershed Comments

Date 02-13-15
Designed KAW/BJM
Drawn KAW/BJM

INTERIM RETAINING WALL GRADING

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

01-ENG-114058 SHEET-GRAD-WALL.DWG

E-2 OF 3

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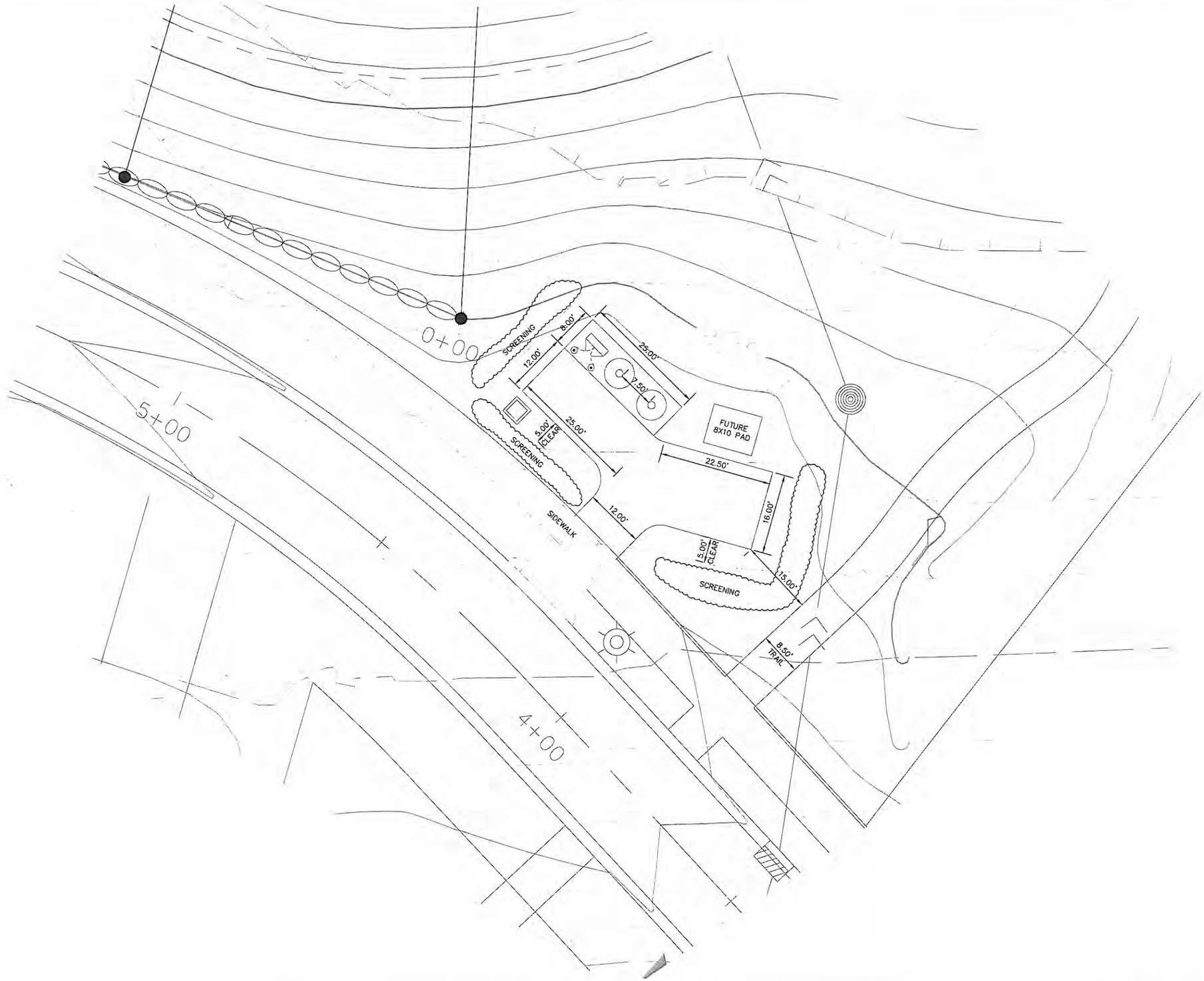

01-ENG-114058-SHEET LIFT.DWG

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Date	02-13-15
Designed	KAW/BJM
Drawn	KAW/BJM

LIFT STATION EXHIBIT

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

E-3 OF 3

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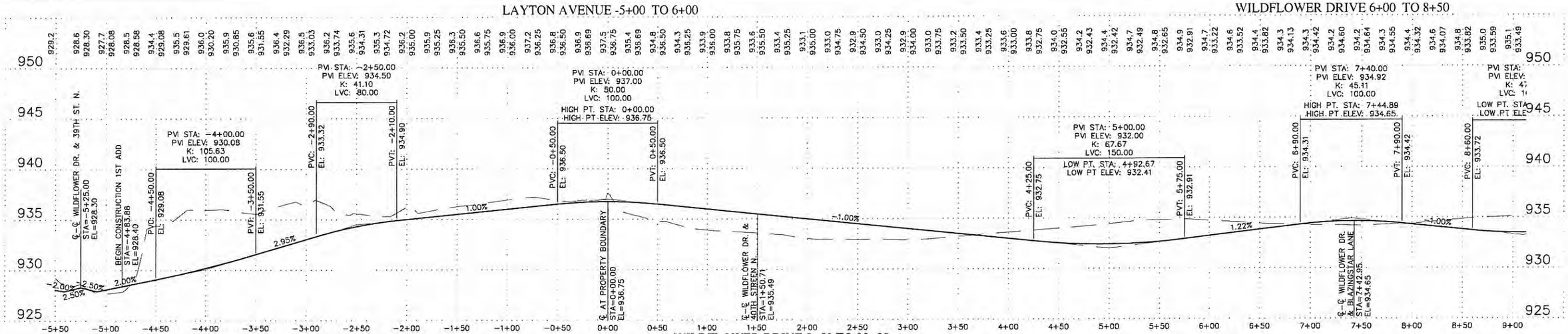
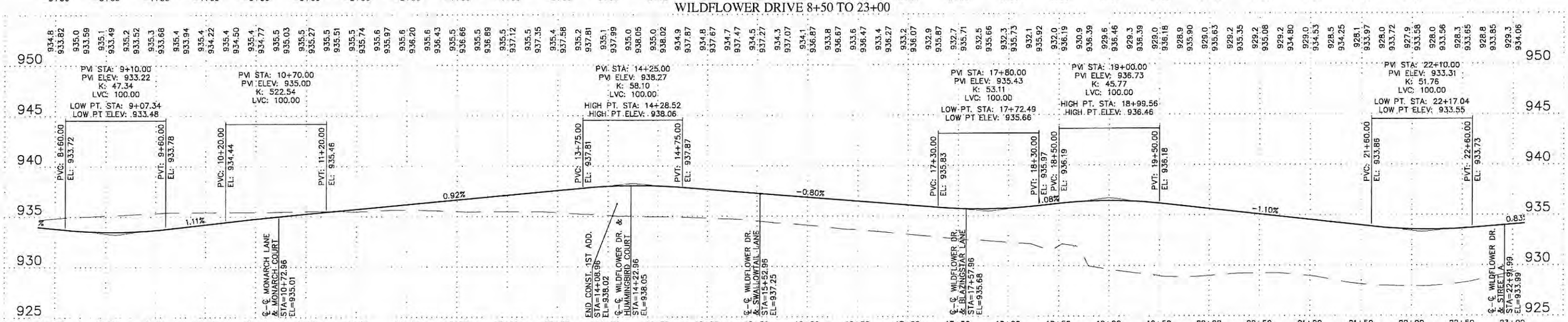
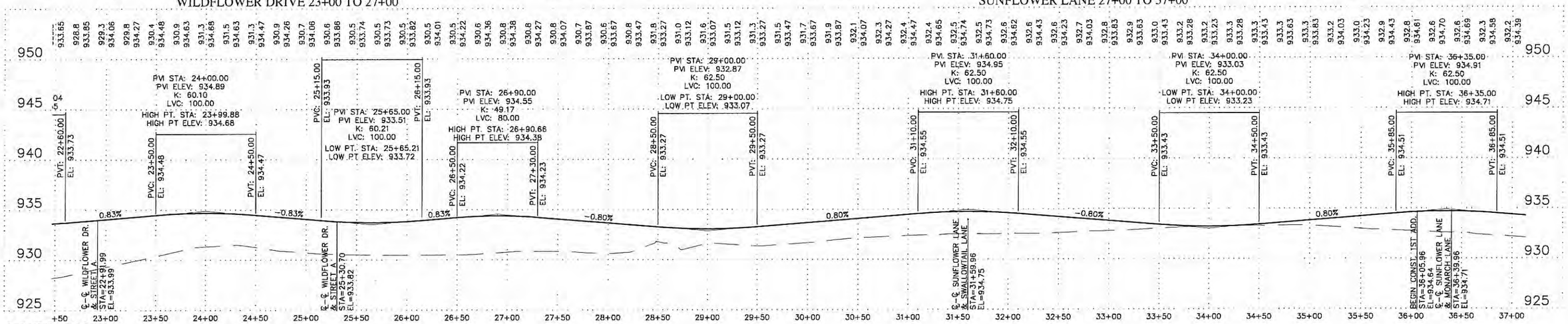
LAYTON AVENUE -5+00 TO 6+00 / WILDFLOWER DRIVE 6+00 TO 8+50



WILDFLOWER DRIVE 8+50 TO 23+00



WILDFLOWER DRIVE 23+00 TO 27+00 / SUNFLOWER LANE 27+00 TO 37+00



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Date	02-13-15
Designed	KAW/JJM
Drawn	KAW/JJM

STREET PROFILES

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

P-1 OF 4

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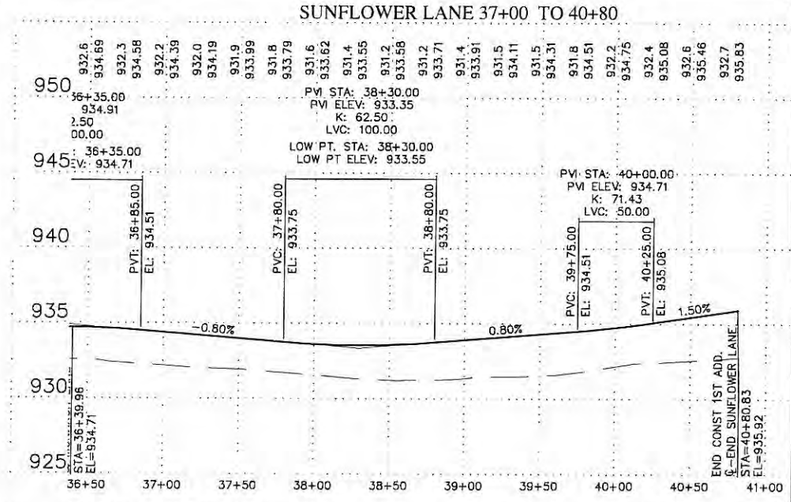

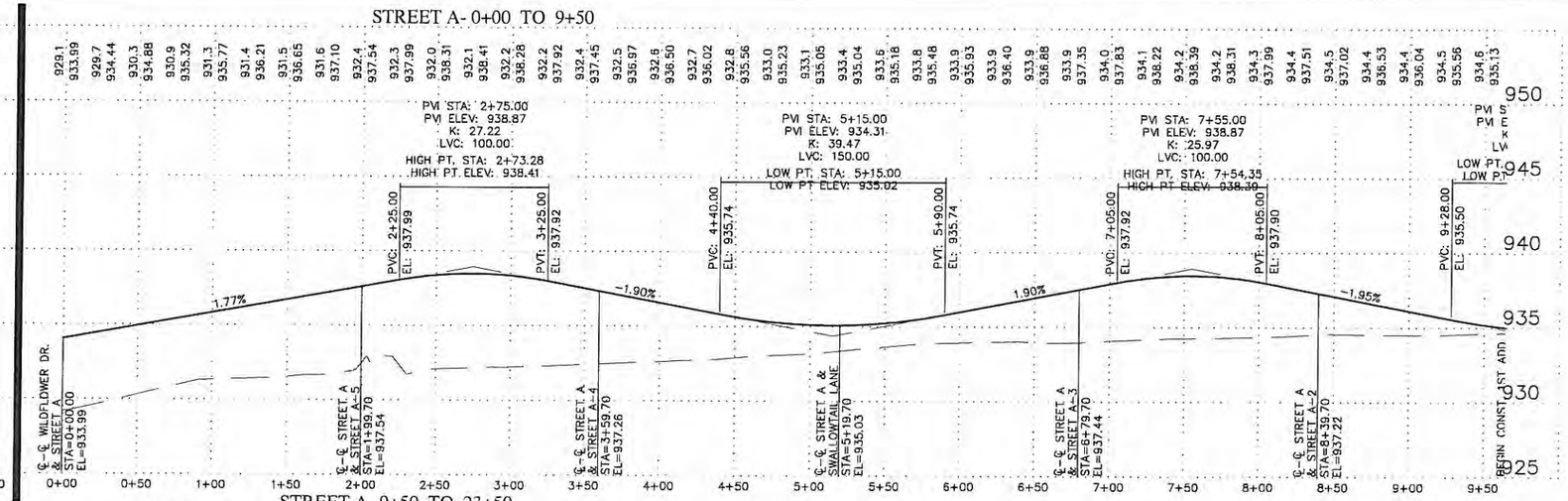

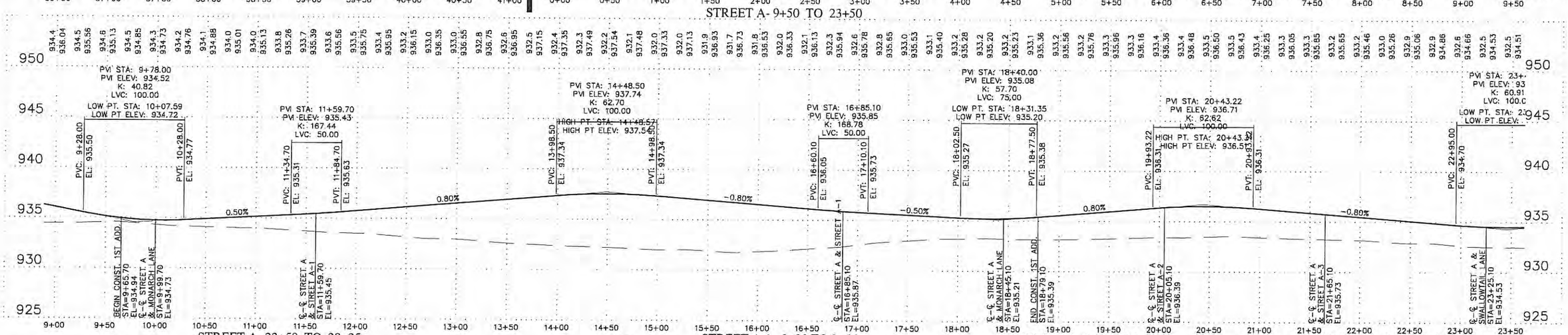

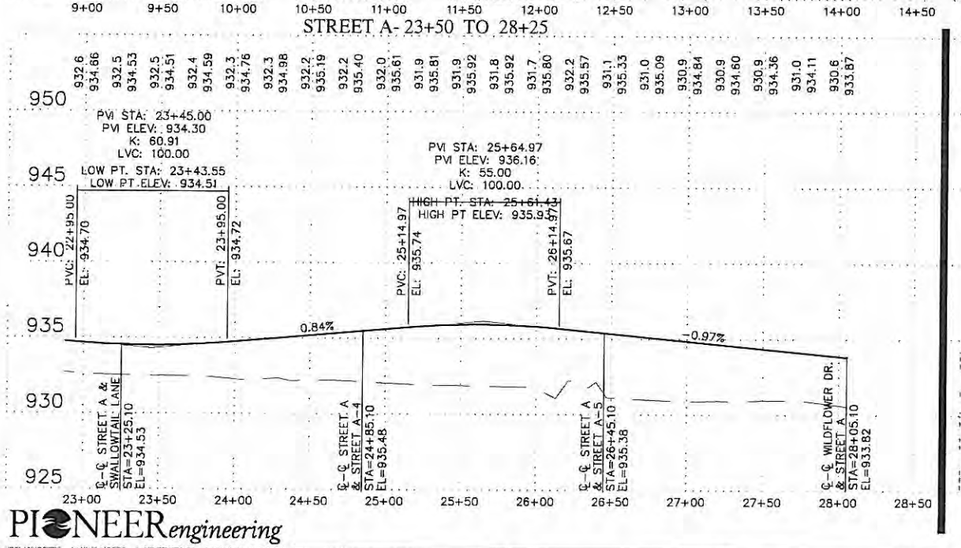

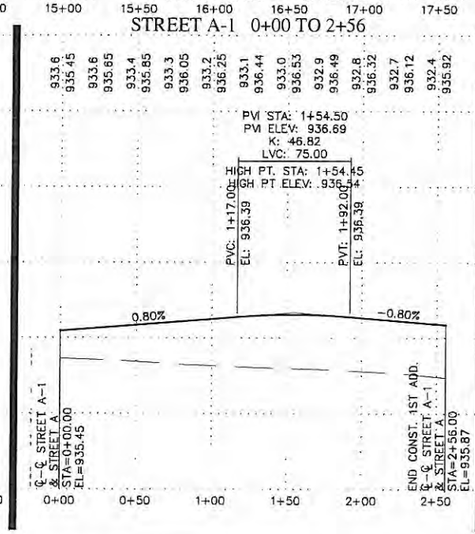

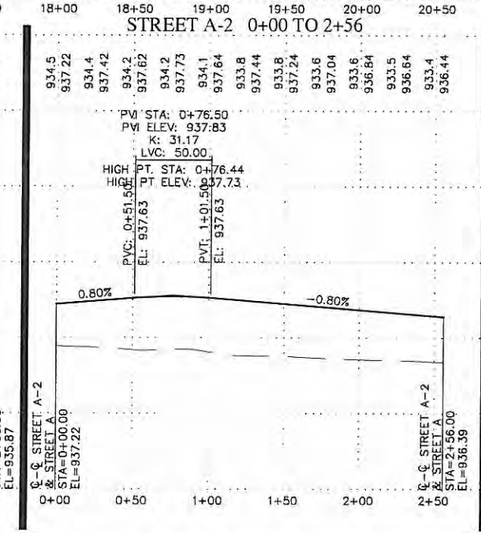

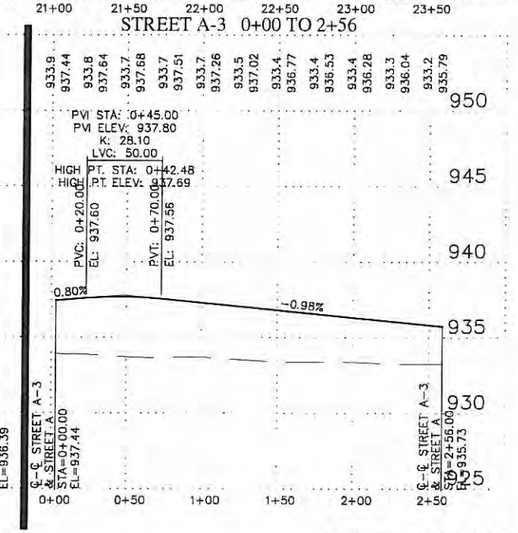

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