PLANNING COMMISSION REPORT
OCTOBER 13, 2026 AGENDA

Agenda Item:	Subject:	Submitted By:
Agenda Items 6E,i,ii, 7E & 7F	Applications for a Change of Zoning Classification from AR Agriculture Residential District to R50 Two-Family Residential District for Lots 1-559 and Outlots A-N and MU Mixed Use District for Lot 560 and a Preliminary Plat for Lots 1-560 and Outlots A-N, Fairmont submitted by Graves Development Resources ("Subdivider") and Gregory Mahloch ("Owner") for property generally located at the southeast corner of 132nd Street & Platteview Road	Kathleen Gottsch City Administrator

Synopsis

FoleyShald ("Agent") submitted the following documents on September 4, 2026, on behalf of Graves Development Resources ("Subdivider") related to the property legally described as the Northwest Quarter of Section 19, Township 13 North, Range 12 East of the 6th P.M., Sarpy County, Nebraska consisting of approximately 154.17 acres, more or less, and generally located on the southeast corner of 132nd Street & Platteview Road, owned by Gregory Mahloch ("Owner"):

1. Request for Zone Change
2. Preliminary Plat Application

The following exhibits were also provided:

1. Preliminary Plat
    a. Preliminary Plat Parcel Table
    b. Legend Sheet
    c. Existing Conditions
    d. Grading and Drainage Plan
    e. Erosion Control Plan
    f. Water Main Plan
    g. Sanitary Sewer Plan
    h. Paving and Storm Sewer Plan
    i. Roadway Profiles – 132nd Street & Main Street
    j. Roadway Profiles – Platteview Road & Platteview Drive
    k. Roadway Profiles – Valley Drive & Hazel Lane
    l. Roadway Profiles – Lilac Street & Cedar Street

m. Roadway Profiles – 131st Avenue & 130th Avenue
n. Roadway Profiles – 130th Street & 129th Street
o. Roadway Profiles – 128th Street & 127th Street
p. Roadway Profiles – 126th Avenue & 126trh Street
q. Phasing Plan
r. Trail and Landscaping Plan

2. Preliminary Drainage Report
3. Sanitary Sewer Report
4. Source and Use of Funds
5. Wetland Delineation Report

Owner/Subdivider/Agent request the following in order to subdivide the land into a residential development:

1. Change of the zoning classification from AR (Agriculture Residential) to R50 (Two-Family Residential District for lots 1-559 and Outlots A-N; and to MU (Mixed-Use) for lot 560.
2. Preliminary Plat of Lots 1-560 and Outlots A-N, Fairmont

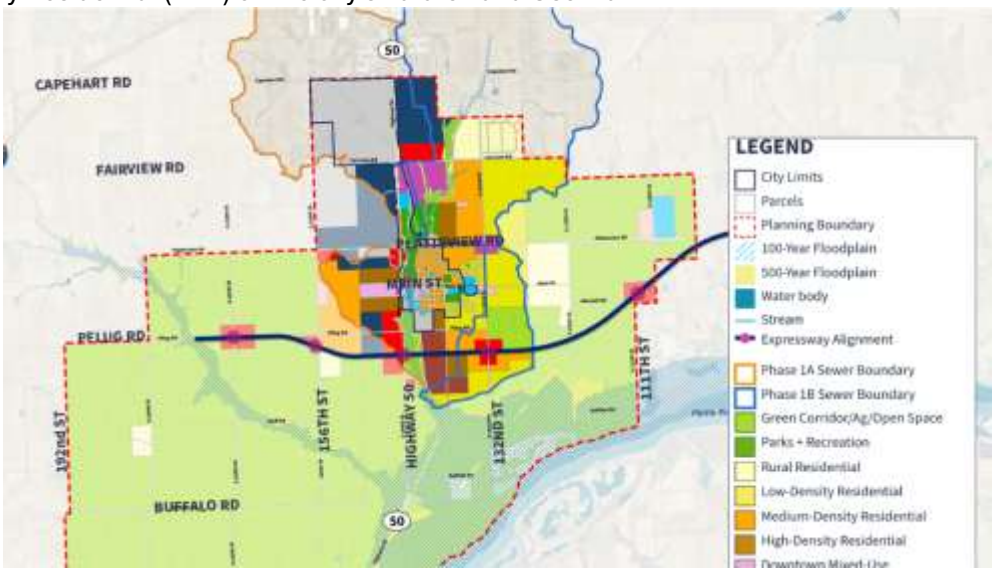
The application was forwarded to the Planning Review Team, which is comprised of Bill Seidler, Jr. (city attorney), Jeff Ray (city planner), Jeff Thompson (engineer for Sarpy County & Cities Wastewater Agency (SCCWWA)), Brian Schuele (city engineer with Olsson), MUD, NDOT, OPPD Land Management, Papio Missouri River Natural Resources District, Sarpy County (Admin/Engineering/Public Works), Sarpy County Emergency Management Agency, Sarpy County GIS, Sarpy County Planning, Sarpy County Sheriff, Chad Zimmerman (Springfield Fire Chief), and Ryan Saunders (Springfield Platteview Community Schools).

A copy of the synopsis of comments from the Planning Review team, as well as the application, are attached.

Additional Information:

1. Density Concerns:

According to the city's Comprehensive Plan that was adopted in May 2025, this property is designated as Low Density Residential (LDR) on the city's Future Land Use Plan.



The Low-Density Residential (LDR) Future Land Use Category lists R50 Two-Family Residential Zoning District as ***PC Partially Compatible***.

Compatibility Matrix

The zoning compatibility matrix shows the relationship between the future land use categories and Springfield's existing zoning districts. Zoning districts have been listed as either compatible ("C") or partially compatible ("PC") within each of the corresponding land use categories. If it is left blank, it is not compatible.

This matrix should be used as the basis for determining the appropriate zoning district(s) for land that is annexed into the City or as a property rezoning is being considered. If the zoning desired for a given property is incompatible with its land use designation, the designation on future land use map should be first amended accordingly. In certain situations, an update or amendment to this matrix may be warranted to address changes in development patterns or revisions to the City's zoning code regulations.

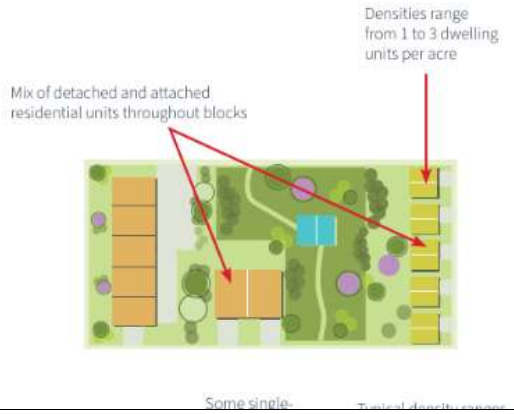
Future Land Use to Zoning Compatibility Matrix

Zoning Districts	Green Corridor/Open Space/ Agriculture	Parks and Recreation	Rural Residential	Rural Arts	Low-Density Residential	Medium -Density Residential	High-Density Residential	Mixed-Use	Downtown Mixed-Use	Neighborhood Commercial	Regional Commercial	Public/Quasi-Public	Business Park	Industrial
	Future Land Use Categories													
(AR) Agriculture Residential District	C	C	C	C	C							C		
(RT) Rural Arts/Tourism District	PC	PC	C	C	PC									
(R100) Single-Family Residential District			C	PC	C	PC								
(R92) Single-Family Residential District					C	PC								
(R87) Single Family Residential District					C	PC								
(R50) Two-Family Residential District					PC	C	C							
(R30) General Family Residential District						C	C	C	PC					
(RB) Residential Business District							PC	C	PC	C				
(M) Modified Residential District							PC	PC	PC	PC				
(MU) Mixed Use District								C	C	PC	C			
(DC) Downtown Commercial District								C	C	PC	C			
(BG) General Business District										C	C		PC	PC
(BH) Highway Business District											C		PC	PC
(BP) Business Park District													C	C
(LI) Light Industrial District													PC	C
(PUD) Planned Unit Development District	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Per the Low-Density Residential (LDR) definition outlined in the Comprehensive Plan, this land use category seeks densities ranging from 1 to 3 dwelling units per acre.

LOW-DENSITY RESIDENTIAL

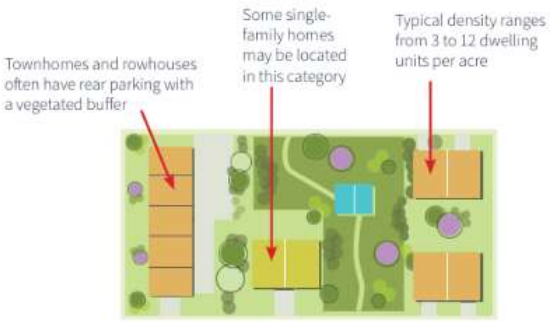
The Low-Density Residential land use area is intended for typical suburban scale residential development densities. This category represents one of the most common residential land use types and is located throughout town and in the one-mile zoning jurisdiction. Densities range from **1 to 3 dwelling units per acre.** This land use category may also include schools, churches, and civic uses.



Medium-Density Residential (MDR) and High-Density Residential (HDR) land use categories, which are compatible with the R50 Two-Family Residential District, seek densities ranging from 3 to 12 dwelling units per acre (MDR) and 12 or more dwelling units per acre (HDR).

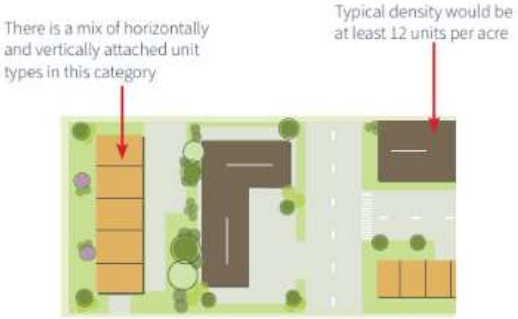
MEDIUM-DENSITY RESIDENTIAL

This land use is a mix of detached and horizontally attached single family residential dwellings including single-family detached homes, cottage courts, duplexes, triplexes, rowhouses, and townhomes of various designs and layouts. This area will also have a significant role as a transitional use between most commercial areas and lower density residential development. Densities range from **3 to 12 dwelling units per acre.** This land use may also include schools, churches, and civic uses.



HIGH-DENSITY RESIDENTIAL

This land use category includes horizontally and vertically attached residential dwellings including rowhouses, townhomes, apartments, and condominiums with a density of **12 or more dwelling units per acre.** Uses may also include schools, churches, and civic uses as well as senior housing, residential care facilities, and commercial day care centers



Density calculations for Fairmont:
154.17 acre parcel - 6.24 acres for Lot 560 MU - 19.3 acres for outlots = 128.63 developable acres

LDR Allowable Dwelling Units:
128 acres x 1 dwelling unit = 128 dwelling units
128 acres x 3 dwelling units = 384 dwelling units

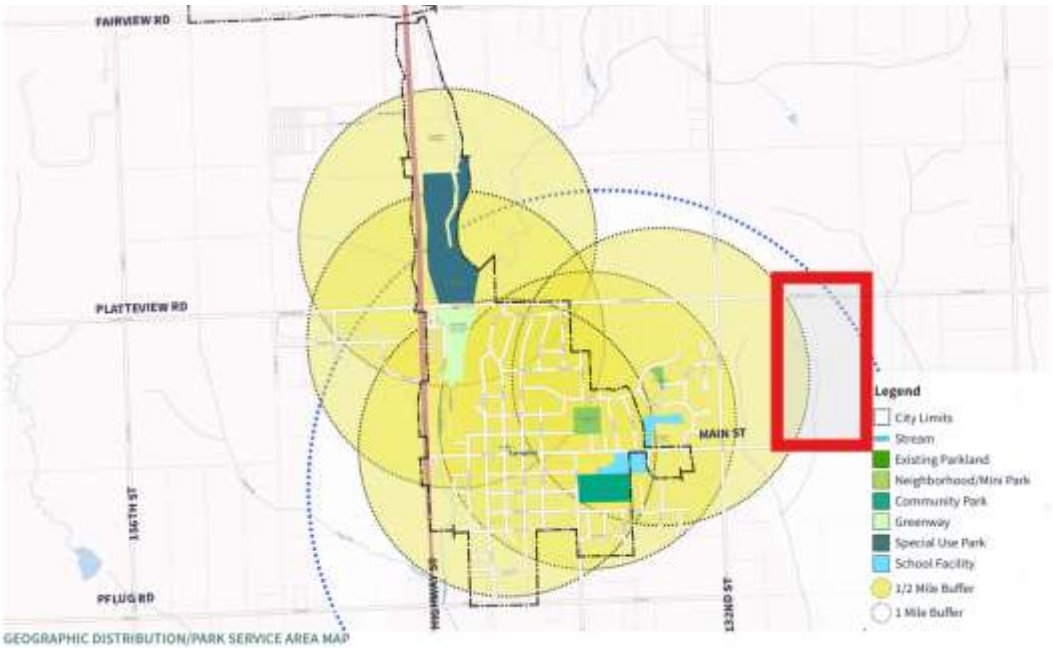
MDR Allowable Dwelling Units:
128 acres x 3 dwelling units = 384 dwelling units
128 acres x 12 dwelling units = 1,536 dwelling units

Fairmont's proposed number of dwelling units = 559 dwelling units

- ***175 more units than allowed under LDR***

2. Park Concerns:

Per the city's Comprehensive Plan, the eastern portion of this development is not served by an existing park. Refer to the Geographic Distribution/Park Service Area Map below.



GEOGRAPHIC DISTRIBUTION/PARK SERVICE AREA MAP

The Fairmont development does offer green space and trail connections through some outlots; however, based upon the Comprehensive Plan, this development needs to incorporate a neighborhood park to serve the residents of this area.

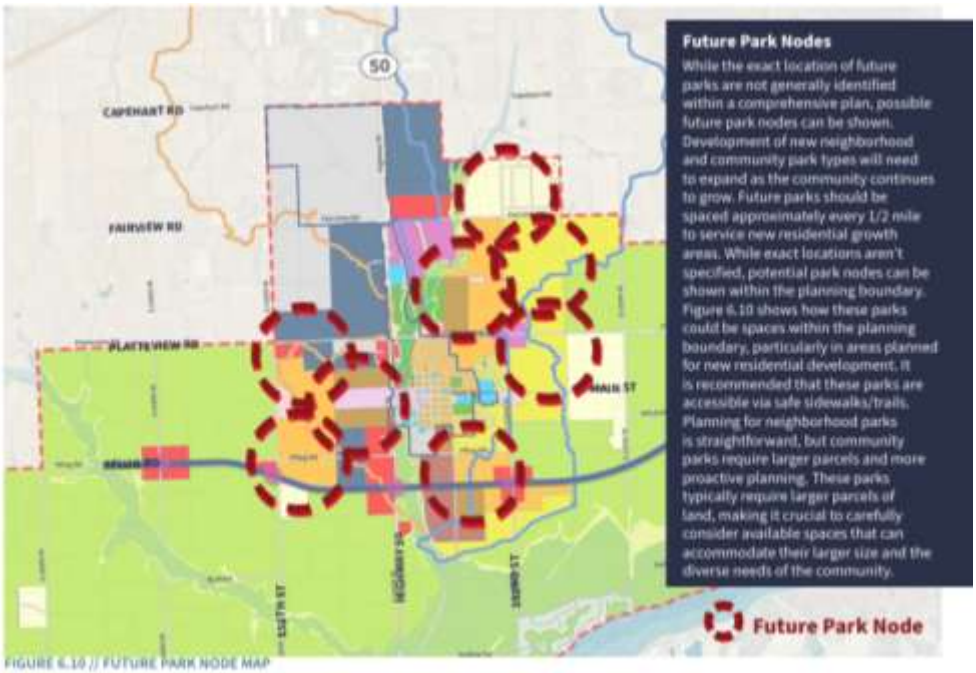


FIGURE 6.10 // FUTURE PARK NODE MAP

3. Street Concerns:

Per Section 4.15 Blocks of the city's subdivision regulations, block lengths, except in unusual circumstances, shall not exceed 800 feet. Pedestrian easements 10 feet wide shall be provided through or near the center of blocks more than 600 feet long in order to provide for pedestrian circulation.

All of the north/south streets, *except* for the far two western streets (i.e., 131st Avenue and 130th Avenue) exceed the 800 foot limit, with a couple of them extending beyond 1,000 feet. 130th Avenue is less than 800 feet but exceeds 600 feet and does not provide for pedestrian easements. None of the longer streets provide for pedestrian easements.

The eastern portions of Platteview Drive and Valley Drive and the western portion of Cedar Street (east/west streets) exceed the 800 foot limit and do not account for pedestrian easements. The eastern portion of Cedar Street is less than 800 feet but exceeds 600 feet and does not provide for pedestrian easements.

Recommendation

Planning Commission consideration. Planning Commission can recommend (1) approval, (2) denial, or (3) table action until the November 10 Planning Commission meeting.

Attachments

Synopsis of Comments
- Fairmont-Connection Fee Schedule_9-10-26.pdf
- Fairmont - Prelim Plat & Roadway Comments 9-15-26.pdf
- Fairmont Street Names Pending 9-21-26.pdf

Request for Zone Change Application
Preliminary Plat Application
Preliminary Plat
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- Phasing Plan
- Trail and Landscaping Plan

Preliminary Drainage Report
Sanitary Sewer Report
Source and Use of Funds
Wetland Delineation Report
Fairmont Home Exteriors

September 24, 2026

SYNOPSIS OF PROFESSIONAL STAFF COMMENTS
FOR PLANNING COMMISSION & CITY COUNCIL

Lots 1-560 and Outlots A-N, Fairmont
Gregory Mahloch (Owner)/Graves Development Resources (Subdivider)/FoleyShald (Agent)
Request for Zone Change and Preliminary Plat Applications

FoleyShald ("Agent") submitted the following documents on September 4, 2026, on behalf of Graves Development Resources ("Subdivider") related to the property legally described as Northwest quarter in Section 19, Township 13 North, Range 12 East of the 6th P.M. (154.17 AC), generally located on the southeast corner of 132nd Street & Platteview Road, Sarpy County, Nebraska, owned by Gregory Mahloch ("Owner"):

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Owner/Subdivider/Agent request the following in order to subdivide the land into a residential development:

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2. Preliminary Plat of Lots 1-560 and Outlots A-N, Fairmont

The documents were forwarded to the Residential Planning Review Team, which is comprised of Bill Seidler, Jr. (city attorney), Jeff Ray (city planner), Jeff Thompson (engineer for Sarpy County & Cities Wastewater Agency (SCCWWA)), Brian Schuele (city engineer with Olsson), MUD, NDOT, OPPD Land Management, Papio Missouri River Natural Resources District, Sarpy County (Admin/Public Works), Sarpy County Emergency Management Agency, Sarpy County GIS, Sarpy County Planning, Sarpy County Sheriff, Chad Zimmerman (Springfield Fire Chief), and Ryan Saunders (Springfield Platteview Community Schools). Below is a synopsis of their comments.

Bill Seidler, Jr., City Attorney

S.I.D. Method of Public Improvement

1. Under Springfield Subdivision Regulations, a plat must contain an itemized cost estimate for all public improvements and detailed breakdown of portion of estimated costs to be borne by the subdivider, and those borne by the City, S.I.D., or other proposed issuer of public debt.
2. The source and uses of Funds contains an itemization of costs to construct the public improvements in the subdivision and contains a table with a projection of value.
3. The S.I.D. property tax levy would be significantly higher than the City levy.
4. The City should consider alternatives to S.I.D. construction.
5. S.I.D.s are not part of the corporate limits of the City, and the City derives no property tax revenue from them. They do, however, have the potential for demands from S.I.D. residents, who do not understand the distinction between the City and the S.I.D.
6. S.I.D.s are governed by an S.I.D. Board of Directors, elected by the lot owners.
7. In the past, S.I.D.s adjacent to Springfield were allowed to increase the population, to allow for construction and amortization of City waterworks and City sewer systems across a larger population.

Development Risks to Springfield

1. A risk is that the development may not be able to construct houses or improvements to reach the projected values.
2. If the Developer cannot sell all of the lots at the projected price, and collect the special assessments, or if the average value of the improvements is less than the projected value, it may mean that the S.I.D. would have to address its debt. It would also mean that the projected debt could not be retired according to the projected schedule.

3. It is unknown if the current residential market conditions in Springfield, or the surrounding area, would allow for the construction of these improvements.
4. Given that the suggested dwellings are different than what currently exists in the City, an inquiry should be made into any market projections or studies that have been made to support the proposition in the sources and uses of funds.

Annexation Risk

1. If it is the policy of the City of Springfield not to annex S.I.D.s until the S.I.D. reduces its debt to a level that can be serviced at the then current levy of the City, it may mean that annexation of the area may never occur.
2. The tax levy of the S.I.D. should be compared to the property tax levy of the City of Springfield. It is unknown what the district tax levy would have to be to service its construction, debt, and operation cost.
3. If the S.I.D. cannot generate sufficient revenue to maintain its infrastructure, it may allow its infrastructure to deteriorate, which would create a problem for the City, with deteriorated streets, sewers, and outlots in an area within City limits.
4. If, in the future, the City cannot, or will not, annex this S.I.D., because of debt levels, or infrastructure considerations, the City would not be able to annex areas east or south of this S.I.D that were contiguous with this S.I.D. but not the corporate limits of the City. This means that if an area arose to the south, or east, of this projected S.I.D., that the City desired to annex, that the City could not reach the new subdivision. The City could not extend it extra territorial zoning jurisdiction.

Impact of Potential Lot Combinations and Undeveloped Lots

1. The Sources and Uses of Funds Exhibit projects a valuation of $257,412,500.
2. If lots within the subdivision are combined into single lots, or if lots are undeveloped, either by choice or because of market conditions, this could affect the valuation of the entire S.I.D. If the S.I.D. does not reach the projected valuation, the S.I.D. may not be able to retire its debt.
3. There are a number of known variables of unknown value that will affect the City's approach to annexing this S.I.D. They include market forces of the lot buyer, timing of lot development, cumulative value of parcels within the S.I.D., and levy rate set by the S.I.D. directors.
4. The Developer's methodology of the valuation assumption should be explored.

Scale of Development

1. To this commentator's knowledge, this would be the largest residential development Springfield has considered.
2. The zoning and construction will require more City staff time and input from the City Planner and County. There may be substantial present and future personnel costs to the City that cannot be offset by property taxes on the area if it has not been annexed by the City.

Subdivision Agreement

1. There will need to be a subdivision agreement between the Subdivider and the City.

Jeff Ray, City Planner
No response was received as of the date of this report.

Jeff Thompson, SCCWWA Engineer
SCCWWA staff review is based on the SCCWWA policy and procedures currently in effect at the time of this review.

1. Recommend a boundary adjustment application be submitted to the Agency board for consideration to amend and adjust the growth boundary zone to include the entire parcel within the UDZ.
    a. Based on the current Agency master plan, approximately 113 acres of the above reference parcel is currently located entirely in the Phase 1B service area with an additional 41 acres of the naturally draining east through the SCX-2 subbasin.
    b. Based on the current proposed preliminary plat layout, all flow is being proposed to flow west and south through the SCX-1 subbasin and directly through the SID 390 (Village on Main) conveyance system.
2. City to confirm and verify that the temporary solution proposed by SID 390 (Village on Main) is capable of accepting this additional development area flow.
    a. It is our current understanding that SID 390 (Village on Main) is proposing a temporary solution of some sort, in advance of the Agency's Phase 1B infrastructure being completed to the south and east.
3. City to provide, at the time of the final plat submittal, the sewer connection agreement between the City of Springfield and the development area.
4. SID to pay half (½) of the sewer connection fees; the remaining half (½) will be required at the time of the building permit application with each lot.
    a. Based on the current preliminary plat, the estimated ½ of the connection fees due at the time of the final plat could be as much as $1,531,696.60 (***see attached Fairmont-Connection Fee Schedule_9-10-26.pdf***). However, it appears that the proposed development is segmented into two (2) phases.
    b. The estimated ½ of the connection fees due at the time of the final plat for Phase 1 would be $732,475.26 with the Phase 2 fees being recalculated at the time of that final plat is under further consideration.
        i. These fees are based on the 2026-2027 fiscal year rates which expire June 30, 2027. Should the final plat(s) not be approved by then, future fiscal years rates shall apply.
    c. The City of Springfield may have their own connection fee charge for the development on top of the Agency charges which is perfectly understandable; however. confirmation would help clarify the costs in the submittal.
5. Subdivider to provide, at the time of the final plat submittal, an Excel spreadsheet with the final lot count and acreage for final connection fees due, as well as an AutoCAD file of the final plat layout.
6. Long-term monitoring for effects to the system will be required as this development ratio exceeds that of the engineering estimates.

   a. The Regional Wastewater System Financial Assessment TM_2015 3-11-16(final) Waatach and Platte River Regional Wastewater System Refinement Technical Memorandum and the Regional Wastewater Treatment Alternatives Technical Memorandum estimated 60% of the total acres of any residential to be developable with 5 EDU's per acre. Based on the current preliminary plat information, this development equates to a ratio of 63.11% which is larger than those preliminary engineering estimates.
7. Recommend further due diligence within the development area after testing to confirm inflow and infiltration ("I & I") is not encountered.
   a. Recent development within the Agency jurisdiction have found newly constructed developments are experiencing I & I issues even after initial system testing.
   b. An inflatable plug at the tie in structures prior to any initial home construction may be prudent for identifying this type of issue.

Brian Schuele, City Engineer w/ Olsson

1. Coordinate with City and Sarpy County for Interlocal Agreement for Main Street Improvements and future improvements to 132nd Street and Platteview Road.
   a. Per the future trails map in the comprehensive plan, a trail will be required as part of the future 132nd Street Improvements.
   b. Show current and future off-site road improvements on Paving Plan.
2. Provide Traffic Study for the development and determine if turn lanes are needed at any of the development entrances.
3. Add a note to Paving Plan that sidewalks adjacent to outlots shall be constructed with the streets. Sidewalks adjacent to lots can be constructed at the time each lot develops.
4. Coordinate with City for the addition of chicanes as a traffic calming measure on streets with block lengths that exceed the standards.
   a. No additional ROW will be needed for the addition of the chicanes.
5. Coordinate with HGM to incorporate linework for 132nd & Main Street improvements into the drawings.
   a. Include storm sewer and show connectivity to development storm sewer.
6. Coordinate with Olsson to incorporate linework for 132nd & Platteview Road improvements into the drawings.
7. Provide development CAD files, including water mains, for city to update the water model and provide sizing recommendations.
8. Drainage report has been submitted and appears to meet the city's requirements.
   a. A detailed review will be performed by the city along with the final plat submittal and infrastructure design.
9. Coordinate with City and Springfield Pines development for acceptance of wastewater that is currently handled by the existing lift station.
10. Update Source and Use of Funds to include:
    a. Main Street Improvements
       i. Cost share for developer's portion of current Sarpy County project.
       ii. Developer's construction of 8' trail upon completion of Sarpy County project.

b. 132nd Street Improvements
    i. Cost share for developer's portion of future widening and 8' trail.
c. Platteview Road Improvements
    i. Cost share for developer's portion of current Sarpy County project at intersection of 132nd and Platteview.
    ii. Cost share for developer's portion of future widening and 8' trail.
d. Reimbursements for existing water mains in 132nd Street and Platteview Road.

MUD

1. MUD is the supplier of natural gas to the Fairmont subdivision.
    a. MUD has an existing 3" natural gas main in Platteview Road and in S. 132nd St. from Platteview Road to Hazel Lane.
    b. Subdivider is required to add additional gas main extensions in S. 132nd Street from Hazel Lane to Main Street, in Main Street, and within all newly dedicated public rights-of-way within the Fairmont subdivision.

NDOT

No comments.

OPPD

1. Include the following standard dedication language to install electrical backbone.
    a. Dedication

    Know all men by these presents that we,_____, owners of the property described in the Certification of Survey and embraced within the plat, have caused said land to be subdivided into lots and streets to be numbered and named as shown, said subdivision to be hereafter known as (lots numbered as shown), and we do hereby ratify and approve of the disposition of our property as shown on the plat, and we do hereby dedicate to the public for public use the streets, avenues and circles, and we do hereby grant easements as shown on this plat, we do further grant a perpetual easement to the Omaha Public Power District, Qwest Communications and any company which has been granted a franchise to provide a cable television system in the area to be subdivided, their successors and assigns, to erect, operate, maintain, repair and renew poles, wires, cables, conduits and other related facilities, and to extend thereon wires or cables for the carrying and transmission of electric current for light, heat and power and for the transmission of signals and sounds of all kinds including signals provided by a cable television system, and the reception on, over, through, under and across a five-foot (5') wide strip of land abutting all front and side boundary lot lines; an eight-foot (8') wide strip of land abutting the rear boundary lines of all interior lots; and a sixteen-foot (16') wide strip of land abutting the rear boundary lines of all exterior lots. The term exterior lots is herein defined as those lots forming the outer perimeter of the above-described addition. Said sixteen-foot (16') wide easement will be reduced to an eight-foot (8') wide strip when the adjacent land is surveyed, platted and recorded. No permanent buildings or retaining walls shall be placed in the said easement ways, but the

same may be used for gardens, shrubs, landscaping and other purposes that do not then or later interfere with the aforesaid uses or rights herein granted.

2. An additional easement for new equipment may be necessary to power future improvements outside limits of dedication.
3. Subdivider is responsible for costs of relocating any existing facilities located on either private or public ROW that is related to the project.
    a. There are existing overhead facilities on north side of property.

Papio Missouri River Natural Resources District

1. The documents have been reviewed for compliance with SSWP policies and there are no comments.
    a. The existing drainage on site is either farm swales or road ditches and from LiDAR and Google Street View review none have enough depth to require a setback.

Sarpy County Admin/Public Works

Admin

The following comments are in relation to the arterial road network adjacent to the proposed Fairmont subdivision.

1. The County is currently designing the reconstruction of 132nd Street, from Platteview Road to Pflug Road, to a 3-lane roadway and construction of Main Street, from 132nd Street to 126th Street, to a 2-lane roadway.
    a. Construction of these segments is expected to occur in the 2027 and 2028 construction seasons.
2. The County requests the City of Springfield's Subdivision Agreement require the Subdivider/SID to enter into a road interlocal agreement with the County with the Subdivider/SID responsible for:
    a. The cost of one lane of improvement of Main Street from 132nd Street to 126th Street.
    b. Its proportionate share of a future traffic signal at 132nd Street and Main Street.
    c. The cost of one lane of improvement of 132nd Street from Main Street to Platteview Road.
    d. Its proportionate share of the improvement and signalization of the 132nd Street and Platteview intersection.
    e. The cost of one lane of improvement of Platteview Road from 132nd Street to 126th Street.

Public Works

1. Update Preliminary Plat as indicated (***see Page 1 in attached Fairmont - Prelim Plat & Roadway Comments 9-15-26.pdf***).
    a. Access points must meet minimum spacing requirements (1/4 mile for full access; 1/8 mile for right-in/right-out).
    b. Move access to 126th Street as close to east property line as possible.
    c. Consider additional future access points to the east from Valley Drive.
2. Provide a traffic impact study.

3. Update Roadway Profiles Valley Drive and Hazel Lane Exhibit E3 to include information on design speed (***see Page 2 in attached Fairmont - Prelim Plat & Roadway Comments 9-15-26.pdf***).

Sarpy County Emergency Management Agency
No response was received as of the date of this report.

Sarpy County GIS
1. Update Final Plat with street names.
    a. ***See attached Fairmont Street Names Pending 9-21-26.pdf.***

Sarpy County Planning
1. City to coordinate with Sarpy County Planning & Building for all permitting, plan review, and inspections.

Sarpy County Sheriff
1. County to consider speed limit changes on 132nd Street, as well as Platteview Road.
    a. Concerned with the amount of traffic with the developments, especially if there will be children walking to school or pedestrians routinely crossing 132nd Street to access the amenities of town (e.g., parks, school playground, etc.).

Springfield Fire Chief
1. Provide a plan showing exact placement, including measurements, of all fire hydrants.

Ryan Saunders (Springfield Platteview Community Schools)
Phasing & Growth Management
1. To support orderly community growth and ensure school facilities can adapt effectively, SPCS requests that the city evaluate options for phasing or staggering the approval of large-scale developments across multi-year intervals.
    a. With several ongoing residential projects currently in progress, managing the timeline of student enrollment absorption is critical for maintaining ideal student-to-teacher ratios and classroom capacity that our community has identified as priorities.
2. When multiple subdivisions move forward simultaneously, the projected student numbers multiply rapidly across all grade levels, placing a compound strain on school facilities, staffing ratios, and transportation.
3. The school district is looking at growth from two cities, Springfield and Papillion.
4. A typical single-family housing unit in our area generates roughly 0.5 to 0.7 K-12 students. Apartments general about .1 to .25 K-12 students. These numbers are down from the growth previously seen in Elkhorn and Gretna where it was upwards of 1.6 kids per house. For a project like Fairmont with 550+ total lots, phase 1 could yield roughly 150-200 students. When layered alongside other active developments such as Springview, Highlands and Village on Main, the annual influx can quickly exceed the 50-100 net new student threshold that our existing elementary and

secondary facilities can seamlessly absorb without adjustments to boundary lines or modular additions.

5. The school district is conducting an updated study with RSP & Associates that should conclude in the spring that will help with their projections. They are actively reviewing school boundaries and how those will need to change while evaluating building capacities based on preferred class size targets.
6. Staggering major approvals across multi-year intervals gives the district the lead time needed to plan for facility capacity and staff recruitment without compromising educational quality. Further, it will delay the need to go back to our community to pass another bond.
7. The school district already has the lowest or second lowest general fund levy in the state and no other school district is even close to the school's levy in the metro area and surrounding towns.
8. The school district understands that growth is coming and inevitable; however, the more that growth can be spread over a long period of time the best for the school district.
9. The school district is not specifically against any one development or project. They are advocating for extended and slowed growth.

<u>Infrastructure & Pedestrian Safety</u>

10. The school district requests a review of the site plan to consider incorporating dedicated sidewalks along 132nd Street and Main Street.
    a. Ensuring safe, walkable routes along these corridors will allow students residing in the area to safely access Springfield Elementary.

Attachments:

- Fairmont-Connection Fee Schedule_9-10-26.pdf
- Fairmont - Prelim Plat & Roadway Comments 9-15-26.pdf
- Fairmont Street Names Pending 9-21-26.pdf

Raw Acres	154.17	Ac	
Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
1	8239	0.19	$ 5,981.96
2	6640	0.15	$ 4,722.60
3	6640	0.15	$ 4,722.60
4	6640	0.15	$ 4,722.60
5	6640	0.15	$ 4,722.60
6	6640	0.15	$ 4,722.60
7	6640	0.15	$ 4,722.60
8	6640	0.15	$ 4,722.60
9	6640	0.15	$ 4,722.60
10	6640	0.15	$ 4,722.60
11	6640	0.15	$ 4,722.60
12	7520	0.17	$ 5,352.28
13	5019	0.12	$ 3,778.08
14	5091	0.12	$ 3,778.08
15	5031	0.12	$ 3,778.08
16	5173	0.12	$ 3,778.08
17	5293	0.12	$ 3,778.08
18	5501	0.13	$ 4,092.92
19	5847	0.13	$ 4,092.92
20	5800	0.13	$ 4,092.92
21	5081	0.12	$ 3,778.08
22	11713	0.27	$ 8,500.68
23	8766	0.20	$ 6,296.80
24	8316	0.19	$ 5,981.96
25	8324	0.19	$ 5,981.96
26	8509	0.20	$ 6,296.80
27	5522	0.13	$ 4,092.92
28	5362	0.12	$ 3,778.08
29	5159	0.12	$ 3,778.08
30	5024	0.12	$ 3,778.08
31	5014	0.12	$ 3,778.08
32	5548	0.13	$ 4,092.92
33	5899	0.14	$ 4,407.76
34	5344	0.12	$ 3,778.08
35	9102	0.21	$ 6,611.64
36	7360	0.17	$ 5,352.28
37	6983	0.16	$ 5,037.44
38	6640	0.15	$ 4,722.60
39	6640	0.15	$ 4,722.60

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
40	6640	0.15	$ 4,722.60
41	6640	0.15	$ 4,722.60
42	6640	0.15	$ 4,722.60
43	6640	0.15	$ 4,722.60
44	6640	0.15	$ 4,722.60
45	9844	0.23	$ 7,241.32
46	9511	0.22	$ 6,926.48
47	6782	0.16	$ 5,037.44
48	6600	0.15	$ 4,722.60
49	6600	0.15	$ 4,722.60
50	6671	0.15	$ 4,722.60
51	6741	0.15	$ 4,722.60
52	6741	0.15	$ 4,722.60
53	6741	0.15	$ 4,722.60
54	6741	0.15	$ 4,722.60
55	8538	0.20	$ 6,296.80
56	5208	0.12	$ 3,778.08
57	5012	0.12	$ 3,778.08
58	5012	0.12	$ 3,778.08
59	5012	0.12	$ 3,778.08
60	5357	0.12	$ 3,778.08
61	5357	0.12	$ 3,778.08
62	6238	0.14	$ 4,407.76
63	5881	0.14	$ 4,407.76
64	5849	0.13	$ 4,092.92
65	6267	0.14	$ 4,407.76
66	6146	0.14	$ 4,407.76
67	5798	0.13	$ 4,092.92
68	5423	0.12	$ 3,778.08
69	5150	0.12	$ 3,778.08
70	5123	0.12	$ 3,778.08
71	5123	0.12	$ 3,778.08
72	5064	0.12	$ 3,778.08
73	5064	0.12	$ 3,778.08
74	8035	0.18	$ 5,667.12
75	8035	0.18	$ 5,667.12
76	8035	0.18	$ 5,667.12
77	8035	0.18	$ 5,667.12
78	8036	0.18	$ 5,667.12
79	8125	0.19	$ 5,981.96
80	8468	0.19	$ 5,981.96

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
81	10233	0.23	$ 7,241.32
82	9390	0.22	$ 6,926.48
83	7608	0.17	$ 5,352.28
84	7608	0.17	$ 5,352.28
85	7608	0.17	$ 5,352.28
86	7608	0.17	$ 5,352.28
87	7608	0.17	$ 5,352.28
88	7608	0.17	$ 5,352.28
89	7608	0.17	$ 5,352.28
90	5075	0.12	$ 3,778.08
91	5075	0.12	$ 3,778.08
92	5075	0.12	$ 3,778.08
93	5252	0.12	$ 3,778.08
94	5051	0.12	$ 3,778.08
95	5101	0.12	$ 3,778.08
96	5101	0.12	$ 3,778.08
97	5101	0.12	$ 3,778.08
98	5101	0.12	$ 3,778.08
99	5101	0.12	$ 3,778.08
100	5101	0.12	$ 3,778.08
101	5389	0.12	$ 3,778.08
102	9001	0.21	$ 6,611.64
103	6649	0.15	$ 4,722.60
104	6649	0.15	$ 4,722.60
105	6649	0.15	$ 4,722.60
106	6649	0.15	$ 4,722.60
107	6649	0.15	$ 4,722.60
108	6649	0.15	$ 4,722.60
109	6551	0.15	$ 4,722.60
110	6557	0.15	$ 4,722.60
111	6557	0.15	$ 4,722.60
112	6557	0.15	$ 4,722.60
113	6557	0.15	$ 4,722.60
114	6557	0.15	$ 4,722.60
115	6557	0.15	$ 4,722.60
116	6557	0.15	$ 4,722.60
117	6557	0.15	$ 4,722.60
118	6557	0.15	$ 4,722.60
119	8244	0.19	$ 5,981.96
120	8334	0.19	$ 5,981.96
121	6594	0.15	$ 4,722.60

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
122	6593	0.15	$ 4,722.60
123	6591	0.15	$ 4,722.60
124	6589	0.15	$ 4,722.60
125	6587	0.15	$ 4,722.60
126	6586	0.15	$ 4,722.60
127	6584	0.15	$ 4,722.60
128	6582	0.15	$ 4,722.60
129	6510	0.15	$ 4,722.60
130	6453	0.15	$ 4,722.60
131	6470	0.15	$ 4,722.60
132	6487	0.15	$ 4,722.60
133	6504	0.15	$ 4,722.60
134	6520	0.15	$ 4,722.60
135	6536	0.15	$ 4,722.60
136	6580	0.15	$ 4,722.60
137	8257	0.19	$ 5,981.96
138	7955	0.18	$ 5,667.12
139	7273	0.17	$ 5,352.28
140	7450	0.17	$ 5,352.28
141	7450	0.17	$ 5,352.28
142	7450	0.17	$ 5,352.28
143	7600	0.17	$ 5,352.28
144	7600	0.17	$ 5,352.28
145	7600	0.17	$ 5,352.28
146	6929	0.16	$ 5,037.44
147	7027	0.16	$ 5,037.44
148	7027	0.16	$ 5,037.44
149	7027	0.16	$ 5,037.44
150	7027	0.16	$ 5,037.44
151	7027	0.16	$ 5,037.44
152	7027	0.16	$ 5,037.44
153	7915	0.18	$ 5,667.12
154	7760	0.18	$ 5,667.12
155	7090	0.16	$ 5,037.44
156	7090	0.16	$ 5,037.44
157	7090	0.16	$ 5,037.44
158	7090	0.16	$ 5,037.44
159	7090	0.16	$ 5,037.44
160	7090	0.16	$ 5,037.44
161	7090	0.16	$ 5,037.44
162	7090	0.16	$ 5,037.44

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
163	7830	0.18	$ 5,667.12
164	7890	0.18	$ 5,667.12
165	7890	0.18	$ 5,667.12
166	7890	0.18	$ 5,667.12
167	7890	0.18	$ 5,667.12
168	7890	0.18	$ 5,667.12
169	8870	0.20	$ 6,296.80
170	7256	0.17	$ 5,352.28
171	6459	0.15	$ 4,722.60
172	6477	0.15	$ 4,722.60
173	6477	0.15	$ 4,722.60
174	6477	0.15	$ 4,722.60
175	6477	0.15	$ 4,722.60
176	6477	0.15	$ 4,722.60
177	6477	0.15	$ 4,722.60
178	6477	0.15	$ 4,722.60
179	6503	0.15	$ 4,722.60
180	7592	0.17	$ 5,352.28
181	7840	0.18	$ 5,667.12
182	9329	0.21	$ 6,611.64
183	9513	0.22	$ 6,926.48
184	9366	0.22	$ 6,926.48
185	8893	0.20	$ 6,296.80
186	9127	0.21	$ 6,611.64
187	8219	0.19	$ 5,981.96
188	7730	0.18	$ 5,667.12
189	7730	0.18	$ 5,667.12
190	7730	0.18	$ 5,667.12
191	7730	0.18	$ 5,667.12
192	7730	0.18	$ 5,667.12
193	6925	0.16	$ 5,037.44
194	7130	0.16	$ 5,037.44
195	7130	0.16	$ 5,037.44
196	7130	0.16	$ 5,037.44
197	7130	0.16	$ 5,037.44
198	7130	0.16	$ 5,037.44
199	7130	0.16	$ 5,037.44
200	7130	0.16	$ 5,037.44
201	7127	0.16	$ 5,037.44
202	8261	0.19	$ 5,981.96
203	8194	0.19	$ 5,981.96

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
204	6632	0.15	$ 4,722.60
205	6670	0.15	$ 4,722.60
206	6670	0.15	$ 4,722.60
207	6670	0.15	$ 4,722.60
208	6670	0.15	$ 4,722.60
209	6670	0.15	$ 4,722.60
210	6670	0.15	$ 4,722.60
211	6670	0.15	$ 4,722.60
212	6670	0.15	$ 4,722.60
213	6670	0.15	$ 4,722.60
214	6670	0.15	$ 4,722.60
215	7534	0.17	$ 5,352.28
216	7665	0.18	$ 5,667.12
217	7665	0.18	$ 5,667.12
218	7665	0.18	$ 5,667.12
219	8182	0.19	$ 5,981.96
220	8409	0.19	$ 5,981.96
221	7455	0.17	$ 5,352.28
222	7455	0.17	$ 5,352.28
223	7455	0.17	$ 5,352.28
224	7455	0.17	$ 5,352.28
225	6350	0.15	$ 4,722.60
226	6368	0.15	$ 4,722.60
227	6368	0.15	$ 4,722.60
228	6368	0.15	$ 4,722.60
229	6368	0.15	$ 4,722.60
230	7547	0.17	$ 5,352.28
231	7547	0.17	$ 5,352.28
232	7547	0.17	$ 5,352.28
233	7547	0.17	$ 5,352.28
234	7547	0.17	$ 5,352.28
235	7547	0.17	$ 5,352.28
236	8617	0.20	$ 6,296.80
237	9951	0.23	$ 7,241.32
238	9208	0.21	$ 6,611.64
239	9611	0.22	$ 6,926.48
240	8639	0.20	$ 6,296.80
241	9163	0.21	$ 6,611.64
242	8344	0.19	$ 5,981.96
243	8344	0.19	$ 5,981.96
244	7658	0.18	$ 5,667.12

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
245	7524	0.17	$ 5,352.28
246	7524	0.17	$ 5,352.28
247	7524	0.17	$ 5,352.28
248	7524	0.17	$ 5,352.28
249	7524	0.17	$ 5,352.28
250	7524	0.17	$ 5,352.28
251	7524	0.17	$ 5,352.28
252	7524	0.17	$ 5,352.28
253	9892	0.23	$ 7,241.32
254	8942	0.21	$ 6,611.64
255	8220	0.19	$ 5,981.96
256	7715	0.18	$ 5,667.12
257	20568	0.47	$ 14,797.48
258	8194	0.19	$ 5,981.96
259	6643	0.15	$ 4,722.60
260	6616	0.15	$ 4,722.60
261	6623	0.15	$ 4,722.60
262	6664	0.15	$ 4,722.60
263	6740	0.15	$ 4,722.60
264	6849	0.16	$ 5,037.44
265	7456	0.17	$ 5,352.28
266	7000	0.16	$ 5,037.44
267	7174	0.16	$ 5,037.44
268	7328	0.17	$ 5,352.28
269	9509	0.22	$ 6,926.48
270	6410	0.15	$ 4,722.60
271	5185	0.12	$ 3,778.08
272	5185	0.12	$ 3,778.08
273	5185	0.12	$ 3,778.08
274	5185	0.12	$ 3,778.08
275	5185	0.12	$ 3,778.08
276	5185	0.12	$ 3,778.08
277	5185	0.12	$ 3,778.08
278	5185	0.12	$ 3,778.08
279	5185	0.12	$ 3,778.08
280	5185	0.12	$ 3,778.08
281	5185	0.12	$ 3,778.08
282	5185	0.12	$ 3,778.08
283	5327	0.12	$ 3,778.08
284	5501	0.13	$ 4,092.92
285	5501	0.13	$ 4,092.92

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
286	5501	0.13	$ 4,092.92
287	5501	0.13	$ 4,092.92
288	5367	0.12	$ 3,778.08
289	5174	0.12	$ 3,778.08
290	5174	0.12	$ 3,778.08
291	5174	0.12	$ 3,778.08
292	5174	0.12	$ 3,778.08
293	6259	0.14	$ 4,407.76
Phase 1	**2033281**	**46.53**	**$ 1,464,950.52**

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
294	7688	0.18	$ 5,667.12
295	7359	0.17	$ 5,352.28
296	7360	0.17	$ 5,352.28
297	7360	0.17	$ 5,352.28
298	7360	0.17	$ 5,352.28
299	7360	0.17	$ 5,352.28
300	7360	0.17	$ 5,352.28
301	8239	0.19	$ 5,981.96
302	9467	0.22	$ 6,926.48
303	7073	0.16	$ 5,037.44
304	7073	0.16	$ 5,037.44
305	7073	0.16	$ 5,037.44
306	7073	0.16	$ 5,037.44
307	7073	0.16	$ 5,037.44
308	7073	0.16	$ 5,037.44
309	7889	0.18	$ 5,667.12
310	9352	0.21	$ 6,611.64
311	7056	0.16	$ 5,037.44
312	6210	0.14	$ 4,407.76
313	6210	0.14	$ 4,407.76
314	6210	0.14	$ 4,407.76
315	6210	0.14	$ 4,407.76
316	6210	0.14	$ 4,407.76
317	6210	0.14	$ 4,407.76
318	6210	0.14	$ 4,407.76
319	7560	0.17	$ 5,352.28
320	7568	0.17	$ 5,352.28
321	9970	0.23	$ 7,241.32
322	10540	0.24	$ 7,556.16
323	8483	0.19	$ 5,981.96
324	7035	0.16	$ 5,037.44
325	6767	0.16	$ 5,037.44
326	6495	0.15	$ 4,722.60
327	6296	0.14	$ 4,407.76
328	6216	0.14	$ 4,407.76
329	6210	0.14	$ 4,407.76
330	6210	0.14	$ 4,407.76
331	6210	0.14	$ 4,407.76
332	6210	0.14	$ 4,407.76
333	7054	0.16	$ 5,037.44
334	7957	0.18	$ 5,667.12

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
335	7570	0.17	$ 5,352.28
336	7570	0.17	$ 5,352.28
337	7570	0.17	$ 5,352.28
338	7687	0.18	$ 5,667.12
339	7412	0.17	$ 5,352.28
340	7595	0.17	$ 5,352.28
341	7125	0.16	$ 5,037.44
342	7125	0.16	$ 5,037.44
343	7125	0.16	$ 5,037.44
344	8568	0.20	$ 6,296.80
345	8414	0.19	$ 5,981.96
346	6956	0.16	$ 5,037.44
347	6956	0.16	$ 5,037.44
348	6956	0.16	$ 5,037.44
349	6956	0.16	$ 5,037.44
350	6818	0.16	$ 5,037.44
351	6641	0.15	$ 4,722.60
352	6730	0.15	$ 4,722.60
353	6833	0.16	$ 5,037.44
354	7360	0.17	$ 5,352.28
355	7360	0.17	$ 5,352.28
356	8982	0.21	$ 6,611.64
357	7205	0.17	$ 5,352.28
358	6325	0.15	$ 4,722.60
359	6325	0.15	$ 4,722.60
360	6325	0.15	$ 4,722.60
361	6325	0.15	$ 4,722.60
362	6509	0.15	$ 4,722.60
363	6526	0.15	$ 4,722.60
364	6427	0.15	$ 4,722.60
365	6423	0.15	$ 4,722.60
366	6420	0.15	$ 4,722.60
367	6416	0.15	$ 4,722.60
368	6411	0.15	$ 4,722.60
369	11199	0.26	$ 8,185.84
370	8169	0.19	$ 5,981.96
371	7490	0.17	$ 5,352.28
372	7490	0.17	$ 5,352.28
373	7490	0.17	$ 5,352.28
374	7490	0.17	$ 5,352.28

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
375	7490	0.17	$ 5,352.28
376	6319	0.15	$ 4,722.60
377	6452	0.15	$ 4,722.60
378	6252	0.14	$ 4,407.76
379	6252	0.14	$ 4,407.76
380	6252	0.14	$ 4,407.76
381	6252	0.14	$ 4,407.76
382	7832	0.18	$ 5,667.12
383	7957	0.18	$ 5,667.12
384	6210	0.14	$ 4,407.76
385	6210	0.14	$ 4,407.76
386	6210	0.14	$ 4,407.76
387	5959	0.14	$ 4,407.76
388	6401	0.15	$ 4,722.60
389	6287	0.14	$ 4,407.76
390	7462	0.17	$ 5,352.28
391	7462	0.17	$ 5,352.28
392	6296	0.14	$ 4,407.76
393	6296	0.14	$ 4,407.76
394	6296	0.14	$ 4,407.76
395	6296	0.14	$ 4,407.76
396	7644	0.18	$ 5,667.12
397	9003	0.21	$ 6,611.64
398	7455	0.17	$ 5,352.28
399	7455	0.17	$ 5,352.28
400	6290	0.14	$ 4,407.76
401	6290	0.14	$ 4,407.76
402	6290	0.14	$ 4,407.76
403	6420	0.15	$ 4,722.60
404	7119	0.16	$ 5,037.44
405	7324	0.17	$ 5,352.28
406	7099	0.16	$ 5,037.44
407	7090	0.16	$ 5,037.44
408	7360	0.17	$ 5,352.28
409	8982	0.21	$ 6,611.64
410	9107	0.21	$ 6,611.64
411	7360	0.17	$ 5,352.28
412	7125	0.16	$ 5,037.44
413	7160	0.16	$ 5,037.44

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
414	7440	0.17	$ 5,352.28
415	7085	0.16	$ 5,037.44
416	7451	0.17	$ 5,352.28
417	7451	0.17	$ 5,352.28
418	7451	0.17	$ 5,352.28
419	6287	0.14	$ 4,407.76
420	6287	0.14	$ 4,407.76
421	6287	0.14	$ 4,407.76
422	8032	0.18	$ 5,667.12
423	9274	0.21	$ 6,611.64
424	6282	0.14	$ 4,407.76
425	6282	0.14	$ 4,407.76
426	6282	0.14	$ 4,407.76
427	6392	0.15	$ 4,722.60
428	6594	0.15	$ 4,722.60
429	6594	0.15	$ 4,722.60
430	6552	0.15	$ 4,722.60
431	6346	0.15	$ 4,722.60
432	6402	0.15	$ 4,722.60
433	6511	0.15	$ 4,722.60
434	6517	0.15	$ 4,722.60
435	6517	0.15	$ 4,722.60
436	7832	0.18	$ 5,667.12
437	9107	0.21	$ 6,611.64
438	7360	0.17	$ 5,352.28
439	7360	0.17	$ 5,352.28
440	7827	0.18	$ 5,667.12
441	7824	0.18	$ 5,667.12
442	7450	0.17	$ 5,352.28
443	7450	0.17	$ 5,352.28
444	7450	0.17	$ 5,352.28
445	7450	0.17	$ 5,352.28
446	7460	0.17	$ 5,352.28
447	7440	0.17	$ 5,352.28
448	9403	0.22	$ 6,926.48
449	12401	0.28	$ 8,815.52
450	9397	0.22	$ 6,926.48
451	9356	0.21	$ 6,611.64
452	7839	0.18	$ 5,667.12

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
453	7630	0.18	$ 5,667.12
454	8721	0.20	$ 6,296.80
455	8295	0.19	$ 5,981.96
456	6563	0.15	$ 4,722.60
457	6742	0.15	$ 4,722.60
458	6520	0.15	$ 4,722.60
459	6480	0.15	$ 4,722.60
460	7680	0.18	$ 5,667.12
461	7572	0.17	$ 5,352.28
462	9008	0.21	$ 6,611.64
463	8085	0.19	$ 5,981.96
464	8682	0.20	$ 6,296.80
465	8373	0.19	$ 5,981.96
466	7724	0.18	$ 5,667.12
467	7287	0.17	$ 5,352.28
468	7211	0.17	$ 5,352.28
469	8968	0.21	$ 6,611.64
470	8711	0.20	$ 6,296.80
471	8170	0.19	$ 5,981.96
472	8824	0.20	$ 6,296.80
473	8309	0.19	$ 5,981.96
474	12522	0.29	$ 9,130.36
475	8964	0.21	$ 6,611.64
476	8753	0.20	$ 6,296.80
477	8907	0.20	$ 6,296.80
478	9492	0.22	$ 6,926.48
479	8610	0.20	$ 6,296.80
480	8049	0.18	$ 5,667.12
481	7759	0.18	$ 5,667.12
482	7518	0.17	$ 5,352.28
483	8102	0.19	$ 5,981.96
484	6306	0.14	$ 4,407.76
485	6307	0.14	$ 4,407.76
486	6682	0.15	$ 4,722.60
487	7945	0.18	$ 5,667.12
488	7595	0.17	$ 5,352.28
489	7596	0.17	$ 5,352.28
490	7598	0.17	$ 5,352.28
491	7599	0.17	$ 5,352.28

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
492	7600	0.17	$ 5,352.28
493	7558	0.17	$ 5,352.28
494	6270	0.14	$ 4,407.76
495	6316	0.15	$ 4,722.60
496	7487	0.17	$ 5,352.28
497	9267	0.21	$ 6,611.64
498	7971	0.18	$ 5,667.12
499	6956	0.16	$ 5,037.44
500	6476	0.15	$ 4,722.60
501	6477	0.15	$ 4,722.60
502	6478	0.15	$ 4,722.60
503	6479	0.15	$ 4,722.60
504	6480	0.15	$ 4,722.60
505	6481	0.15	$ 4,722.60
506	6481	0.15	$ 4,722.60
507	6997	0.16	$ 5,037.44
508	8117	0.19	$ 5,981.96
509	14506	0.33	$ 10,389.72
510	13382	0.31	$ 9,760.04
511	6210	0.14	$ 4,407.76
512	6210	0.14	$ 4,407.76
513	6210	0.14	$ 4,407.76
514	6210	0.14	$ 4,407.76
515	6210	0.14	$ 4,407.76
516	6210	0.14	$ 4,407.76
517	6210	0.14	$ 4,407.76
518	6210	0.14	$ 4,407.76
519	8206	0.19	$ 5,981.96
520	7832	0.18	$ 5,667.12
521	6210	0.14	$ 4,407.76
522	6210	0.14	$ 4,407.76
523	6210	0.14	$ 4,407.76
524	7360	0.17	$ 5,352.28
525	7360	0.17	$ 5,352.28
526	7360	0.17	$ 5,352.28
527	7360	0.17	$ 5,352.28
528	7360	0.17	$ 5,352.28
529	6663	0.15	$ 4,722.60
530	6663	0.15	$ 4,722.60

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
531	6210	0.14	$ 4,407.76
532	7360	0.17	$ 5,352.28
533	7738	0.18	$ 5,667.12
534	9946	0.23	$ 7,241.32
535	9122	0.21	$ 6,611.64
536	6864	0.16	$ 5,037.44
537	6268	0.14	$ 4,407.76
538	6210	0.14	$ 4,407.76
539	6210	0.14	$ 4,407.76
540	6210	0.14	$ 4,407.76
541	6210	0.14	$ 4,407.76
542	6210	0.14	$ 4,407.76
543	7383	0.17	$ 5,352.28
544	7383	0.17	$ 5,352.28
545	7383	0.17	$ 5,352.28
546	7383	0.17	$ 5,352.28
547	6210	0.14	$ 4,407.76
548	7360	0.17	$ 5,352.28
549	9107	0.21	$ 6,611.64
550	7054	0.16	$ 5,037.44
551	6325	0.15	$ 4,722.60
552	6325	0.15	$ 4,722.60
553	6325	0.15	$ 4,722.60
554	6325	0.15	$ 4,722.60
555	6325	0.15	$ 4,722.60
556	6325	0.15	$ 4,722.60
557	6325	0.15	$ 4,722.60
558	6325	0.15	$ 4,722.60
559	9626	0.22	$ 6,926.48
560	271727	6.24	$ 196,460.16
Phase 2	**2217437**	**50.77**	**$ 1,598,442.68**
Total Developable Acres (UDZ)		**97.30**	
Total Sewer Connection Fee			**$ 3,063,393.20**
1/2 Due at F.P.			**$ 1,531,696.60**
1/2 Due at F.P. Phase 1			**$ 732,475.26**
1/2 Due at F.P. Phase 2*			**$ 799,221.34**

***Note: This value will need to be adjusted to the rates then in effect at the time of Phase 2 final plat filing**

Lot #	Lot Area (sf)	Platted Lot Area (acres)	Connection Fee at time of Plat FY 2026-2027
Due to Omaha for Phase 1 Connection Fees at Plat (1/2 of $293)			**$ 34,083.22**
OUTLOT A	39201	0.90	
OUTLOT B	165249	3.79	
OUTLOT C	20678	0.47	
OUTLOT D	103430	2.37	
OUTLOT E	101510	2.33	
OUTLOT F	116462	2.67	
OUTLOT G	20768	0.48	
OUTLOT H	15267	0.35	
OUTLOT I	18886	0.43	
OUTLOT J	2349	0.05	
OUTLOT K	39575	0.91	
OUTLOT L	48237	1.11	
OUTLOT M	49146	1.13	
OUTLOT N	100832	2.31	
Total Outlot	841,590	19.30	
Right of Way		37.57	
Total Project Acres		154.17	

Based on Regional Regional Wasterwater System Financial Assessment TM_2015 3-11-16(final) Waatach and Platte River Regional Wastewater System Refinement Technical Memorandum and the Regional Wastewater Treatment Alternatives Technical Memorandum. 60% of total acres estimated to be developable with 5 EDU's per acre

Development Developable Acres	63.11%	>60%
EDU's	486.5	

Access points must meet minimum spacing requirements (1/4 mile for full access, 1/8 mile for right-in/right-out)

Will need traffic impact study

Move access as close to East property line as possible

Consider additional future access points to the East

FAIRMONT

PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N

OWNER
GREGORY MAHLOCH
3351 N 210TH AVE PLAZA #148
ELKHORN, NE 68022

APPLICANT
GRAVES DEVELOPMENT RESOURCES
3803 N 153RD ST
OMAHA, NE 68116
402-614-9100

ENGINEER
FOLEYSHALD ENGINEERING
3930 S 147TH ST, STE 200
OMAHA, NE 68144
402-804-3993

SURVEYOR
CATLETT SURVEYING
13650 SOUTH 150TH COURT
BENNET, NE 68317
402-217-5816

UTILITY COMPANIES

POWER: OMAHA PUBLIC POWER DISTRICT
GAS: METROPOLITAN UTILITIES DISTRICT
SEWER: CITY OF SPRINGFIELD/SCCWWA
WATER: CITY OF SPRINGFIELD

WAIVERS

SECTION 4.15: BLOCKS
- BLOCK LENGTH TO EXCEED 800'

ZONING

EXISTING: AR (AGRICULTURE RESIDENTIAL)
PROPOSED: R50 (TWO-FAMILY RESIDENTIAL DISTRICT)
MU (MIXED-USE DISTRICT)

NOTES

1. ALL DISTANCES SHOWN ARE IN DECIMAL FEET.
2. ALL DISTANCES SHOWN ALONG CURVES ARE ARC DISTANCES, NOT CHORD DISTANCES
3. LOTS ARE CONCEPTUAL AND EXACT LOT LINES MAY VARY AT TIME OF FINAL PLAT.
4. VERTICAL DATUM IS BASED ON NAVD88 (GEOID-12A).
5. HORIZONTAL CONTROL IS BASED ON THE DOUGLAS/SARPY COMBINED LDP IN INTERNATIONAL FEET.

R50 ZONING REGUALTIONS							
USES	LOT AREA	LOT WIDTH	FRONT YARD	SIDE YARD	STREET SIDE YARD	REAR YARD	MAX. HEIGHT
SINGLE-FAMILY DWELLING	5,000 SF	50'	25'	7'	15'	25'	2.5 STORIES OR 35'
TWO-FAMILY DWELLING	5,000 SF	80'	25'	10'	15	25'	2.5 STORIES OR 35'

NOTE: A TWO-FAMILY DWELLING SPLIT INTO TWO SEPARATE LOTS REQUIRES A MINIMUM LOT AREA OF 5,000 SF PER UNIT, A MINIMUM LOT WIDTH OF 40', SIDE YARD SETBACK SHALL BE ZERO FEET AT COMMON WALLS, AND MUST MEET ALL OTHER SETBACK REQUIREMENTS.

MU ZONING REGUALTIONS								
USES	LOT AREA	LOT WIDTH	FRONT YARD	SIDE YARD	STREET SIDE YARD	REAR YARD	MAX. LOT COVERAGE BUILDING / IMPERVIOUS AREA	MAX. HEIGHT
SINGLE-FAMILY DWELLING	7,000 SF	70'	25'	7.5'	15'	25'	40 / 80	35'
SINGLE-FAMILY ATTACHED	4,500 SF PER UNIT	45' PER UNIT	25'	7.5'	15'	25'	40 / 80	35'
TWO-FAMILY DWELLING	10,000 SF	80'	25'	7.5'	15'	25'	40 / 80	35'
TOWNHOUSES / CONDOMINIUMS	2,500 SF PER UNIT	25' PER UNIT	25'	7.5'	15'	25'	50 / 80	35'
MULTI-FAMILY DWELLING	2,500 SF PER UNIT	100'	25'	7.5'	15'	25'	50 / 80	45'
OTHER PERMITTED AND CONDITIONAL USES	8,500 SF	75'	25'	7.5'	15'	25'	30 / 80	45'
ACCESSORY BUILDINGS	-	-	35'	5'	15'	8'	10	17'

NOTE: SEE ARTICLE 5, SECTION 5.14, PART "F", OF THE ZONING ORDINANCE OF THE CITY OF SPRINGFIELD FOR ADDITIONAL REQUIRED PROVISIONS FOR THE MU MIXED USE DISTRICT.

LEGAL DESCRIPTION

FROM SCHEDULE A, STEWART TITLE COMPANY, COMMITMENT FOR TITLE INSURANCE, NO. 2601048-CTS-1, EFFECTIVE DATE MARCH 11TH, 2026 AT 8:00AM.

THE NORTHWEST QUARTER (NW¼) IN SECTION NINETEEN (19) TOWNSHIP THIRTEEN (13), NORTH RANGE TWELVE (12), EAST OF THE 6TH P.M., SARPY COUNTY NEBRASKA.

OUTLOT USAGE

OUTLOT	PCSMP/ DRAINAGE	GREEN SPACE / TRAIL	LANDSCAPING
A		X	
B	X	X	
C			X
D		X	
E		X	
F	X		
G			X
H			X
I			X
J			X
K		X	
L		X	
M		X	
N	X		



VICINITY MAP

NOT TO SCALE

N
W E
S

0 100 200
SCALE: 1"= 100

FoleyShald ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
WEBSITE: foleyshald.com | PHONE: 402.804.3933
NEBRASKA CA-4197

PRELIMINARY PLAT

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS			
NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

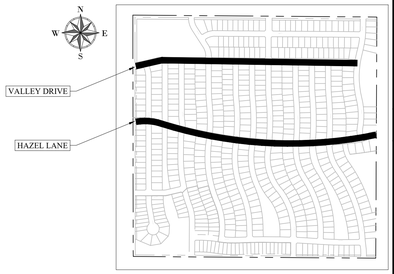
SHEET NO.
1 OF 3

W:\145.001 - Grace Mahloch Property\CAD\CIVIL\TECH DRAWINGS\PLAT\PHASE 1\145001_PHASE 1 PLAT.dwg, 9/4/2026 3:34:07 PM, JRAUERBACH,EDIR

FAIRMONT

PRELIMINARY PLAT

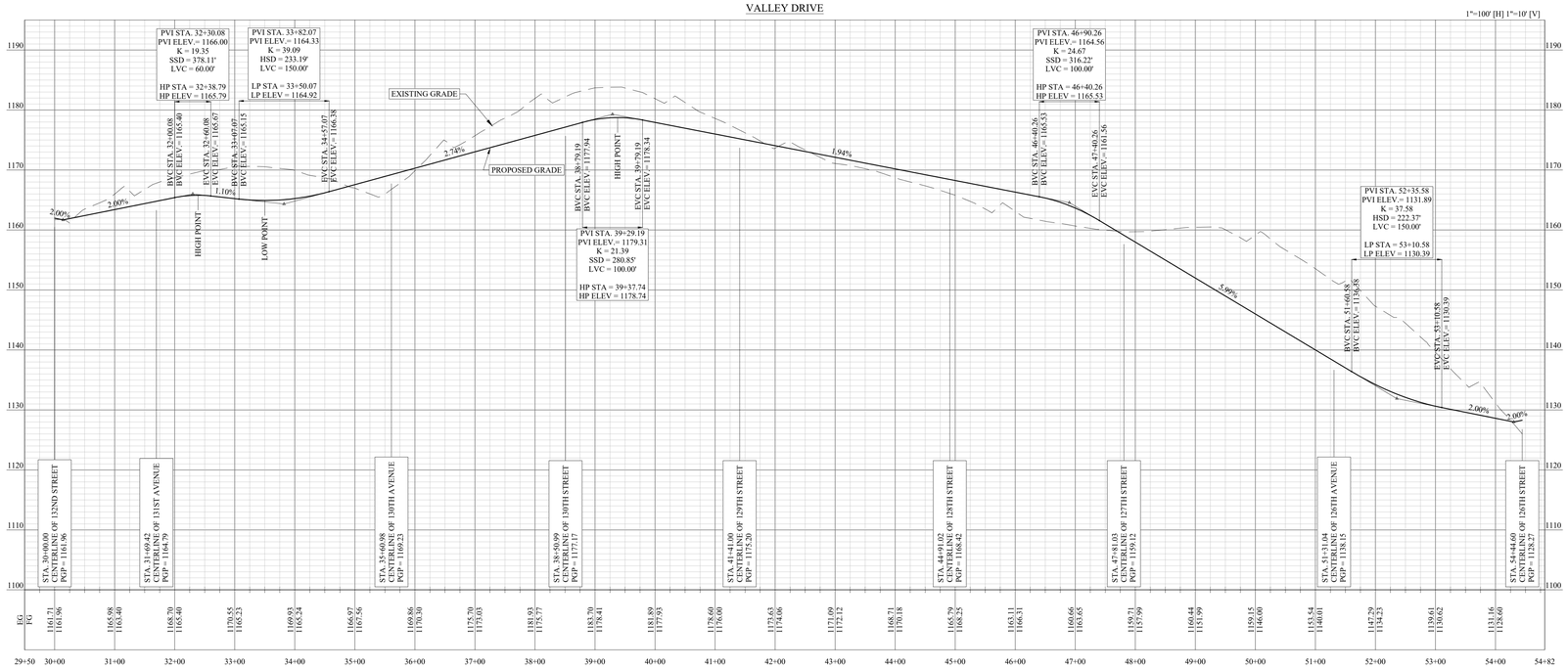
LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP

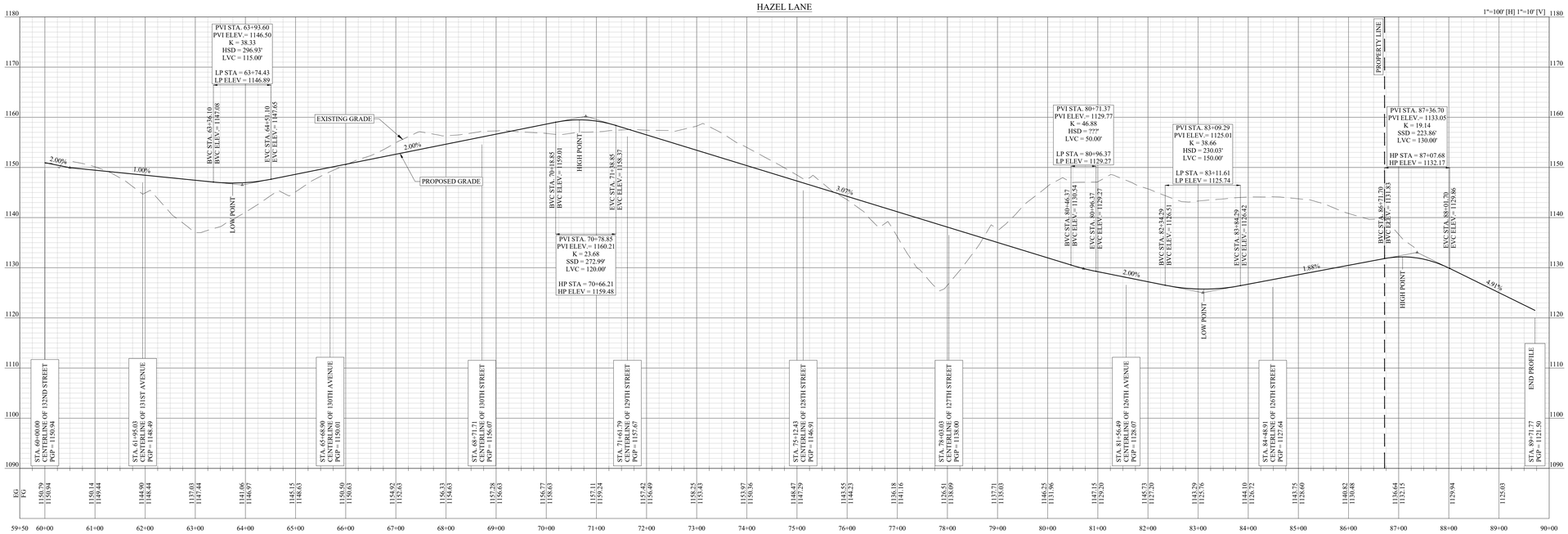
VALLEY DRIVE

1"=100' [H] 1"=10' [V]



HAZEL LANE

1"=100' [H] 1"=10' [V]



Design Speed?

FoleyShald ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
WEBSITE: foleyshald.com | PHONE: 402.504.3933
NEBRASKA CA-4197

ROADWAY PROFILES

VALLEY DRIVE AND HAZEL LANE

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

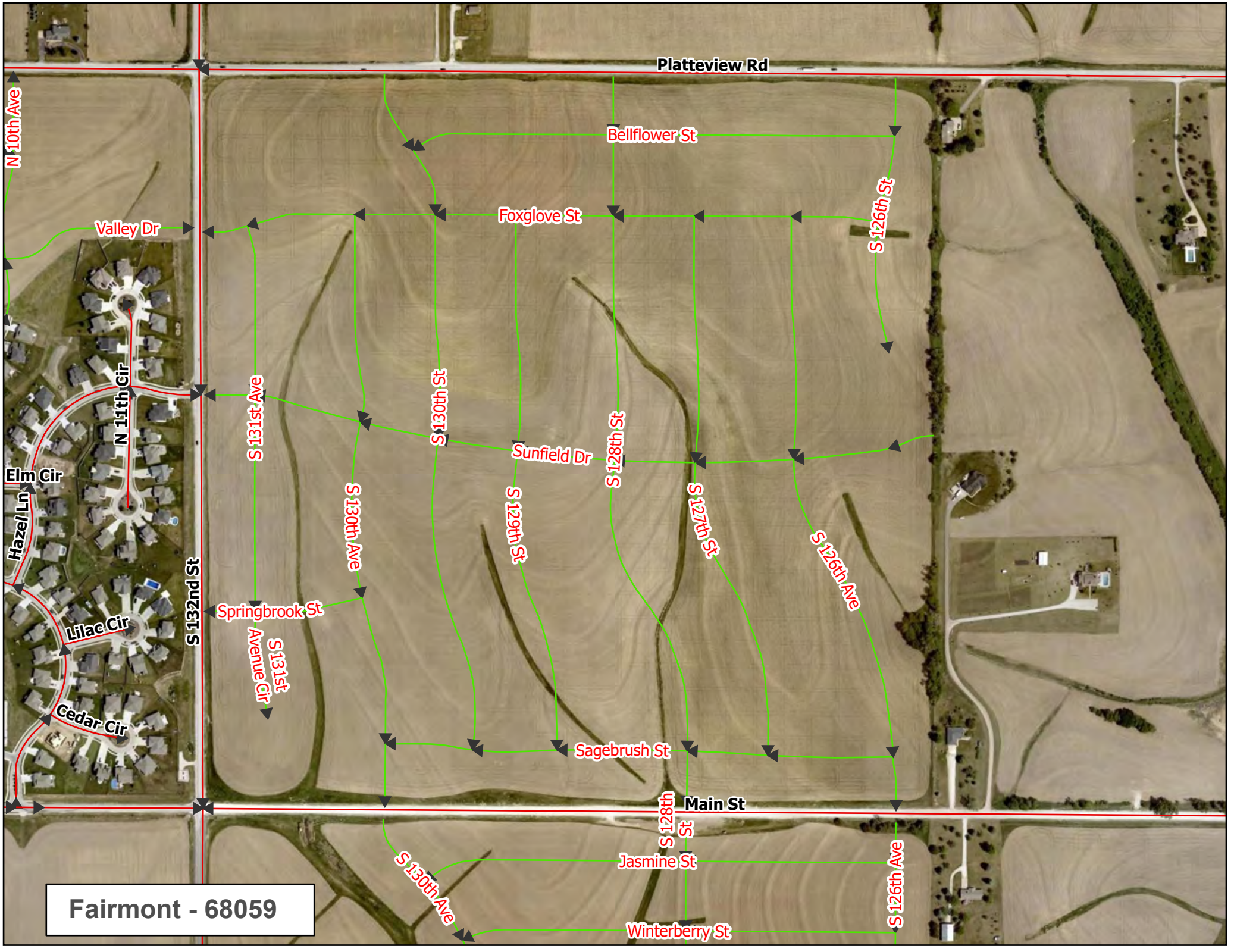
NOT RELEASED FOR CONSTRUCTION

DRAWN BY:	REVIEWED BY:
JR	JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.

EXHIBIT E3

W:\145.001 - Green Midrock Property\CIVIL\DESIGN\EXHIBITS\EXHIBIT E3 - STREET PLAN AND PROFILES.dwg, 9/4/2026 11:15:52 PM, JR.JOHNSON


Platteview Rd
N 10th Ave
Bellflower St
Foxglove St
S 126th St
Valley Dr
N 11th Cir
S 131st Ave
S 130th St
Sunfield Dr
S 128th St
S 127th St
S 126th Ave
Elm Cir
Hazel Ln
S 130th Ave
S 129th St
S 132nd St
Springbrook St
Lilac Cir
Avenue Cir
S 131st
Cedar Cir
Sagebrush St
Main St
S 128th St
Jasmine St
S 130th Ave
S 126th Ave
Winterberry St
Fairmont - 68059

springfield
NEBRASKA

REQUEST FOR ZONE CHANGE

(please print or type)

Applicant's Name Graves Development Resources
Address 3803 N 153rd Street
Phone (402) 614 - 9100 ext.

Owner's Name Gregory Mahloch
Address 3351 N 210th Avenue Plaza #148
Phone (402) 706 - 8800 ext.

Agent's Name
Address
Phone ( ) - ext.

Hereby request the Planning Commission and City Council to consider a change of zoning classification. The current zoning designation of the property is as follows:
AR (AGRICULTURE RESIDENTIAL)

The desired zoning designation of the property is as follows:
R50 (TWO-FAMILY RESIDENTIAL DISTRICT) LOTS 1-559, OUTLOTS A-N
MU (MIXED-USE) LOT 560

Please note: Minimum size requirements are necessary in some Zoning Districts. Please contact city staff for information regarding these minimum requirements.

The zone change is requested for the property legally described as the following:

FROM SCHEDULE A, STEWART TITLE COMPANY, COMMITMENT FOR TITLE INSURANCE, NO. 2601048-CTS-1, EFFECTIVE DATE MARCH 11TH, 2026 AT 8:00AM.
THE NORTHWEST QUARTER (NW1/4) IN SECTION NINETEEN (19) TOWNSHIP THIRTEEN (13), NORTH RANGE TWELVE (12), EAST OF THE 6TH P.M., SARPY COUNTY NEBRASKA.

The existing use of the property is as follows:
EXISITNG FARM GROUND

P.O. Box 189 ~ 170 North 3rd Street ~ Springfield, NE 68059
Phone (402) 253-2204 ~ Fax (402) 387-5116
springfieldne.org

The applicant is requesting a zone change for the following purpose:
A 574 LOT RESIDENTIAL SUBDIVISION INCLUDING A MIXED-USE LOT AT THE CORNER OF 132ND AND PLATTEVIEW

- ✓ ***Please refer to the Zone Change Checklist for a complete list of required information.***
- ✓ ***Complete information must be provided by the applicant or no action will be taken.***
- ✓ ***Please refer to the Review Schedule for submittal deadlines and public hearing dates.***

I hereby certify that all required information and materials are herewith attached and said materials are true and accurate to the best of my knowledge.

Signed _____
Applicant

Date Sept 2, 2026

Application Fee: $400.00
**$200.00 of the fee is refundable only if City Council denies request*

All fees are due and payable to the City Treasurer upon application.

springfield
NEBRASKA

PRELIMINARY PLAT APPLICATION

(please print or type)

Subdivider's Name Graves Development Resources
Address 3803 N 153rd Street
Phone (402) 614 - 9100 ext.

Owner's Name Gregory Mahloch
Address 3351 N 210th Avenue Plaza #148
Phone (402) 706 - 8800 ext.

Agent's Name
Address
Phone ( ) - ext.

The Preliminary Plat is requested for the property legally described as follows:

FROM SCHEDULE A, STEWART TITLE COMPANY, COMMITMENT FOR TITLE INSURANCE, NO. 2601048-CTS-1, EFFECTIVE DATE MARCH 11TH, 2026 AT 8:00AM.
THE NORTHWEST QUARTER (NW1/4) IN SECTION NINETEEN (19) TOWNSHIP THIRTEEN (13), NORTH RANGE TWELVE (12), EAST OF THE 6TH P.M., SARPY COUNTY NEBRASKA.

The current zoning of the property is as follows:

AR (AGRICULTURE RESIDENTIAL)

Name of the Preliminary Plat:

FAIRMONT

Number of lots in the Preliminary Plat:

574 (560 lots and 14 outlots)

Does the subdivider have any interest in the land surrounding the preliminary plat?

- [x] yes
- [ ] no

If yes, please describe the nature of such interest:

The subdivider was involved with the Springfield Pines development directly west of this project.

Will the preliminary plat require any zoning or other action (rezone, planned development, conditional use, vacations) to complete the development?

- ☑ yes
- ☐ no

If yes, please describe the nature of the action:

The preliminary plat will convert existing farmland currently zoned AR into primarily R50 residential lots with a single Mixed-Use lot at the corner of 132nd and Platteview.

Does the preliminary plat meet all the criteria required in the Subdivision Regulations and as found on the Preliminary Plat Checklist?

- ☑ yes (Subdivider is requesting a waiver on block length)
- ☐ no

✓ ***Please refer to the Preliminary Plat Checklist for a complete list of required information.***

✓ ***Complete information must be provided by the applicant or no action will be taken.***

✓ ***Please refer to the Review Schedule for submittal deadlines and public hearing dates.***

I hereby certify that all required information and materials are herewith attached and said materials are true and accurate to the best of my knowledge.

Signed _____
Applicant

Date Sept 2, 2026

Application Fee: $750.00 plus $10.00 per lot
Revised Preliminary Plat Fee: $250.00
*fees are nonrefundable

All fees are due and payable to the City Treasurer upon application.

FAIRMONT

PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



OWNER

GREGORY MAHLOCH
3351 N 210TH AVE PLAZA #148
ELKHORN, NE 68022

APPLICANT

GRAVES DEVELOPMENT RESOURCES
3803 N 153RD ST
OMAHA, NE 68116
402-614-9100

ENGINEER

FOLEYSHALD ENGINEERING
3930 S 147TH ST, STE 200
OMAHA, NE 68144
402-804-3993

SURVEYOR

CATLETT SURVEYING
13650 SOUTH 150TH COURT
BENNET, NE 68317
402-217-5816

UTILITY COMPANIES

POWER: OMAHA PUBLIC POWER DISTRICT
GAS: METROPOLITAN UTILITIES DISTRICT
SEWER: CITY OF SPRINGFIELD/SCCWWA
WATER: CITY OF SPRINGFIELD

WAIVERS

SECTION 4.15: BLOCKS
- BLOCK LENGTH TO EXCEED 800'

ZONING

EXISTING: AR (AGRICULTURE RESIDENTIAL)
PROPOSED: R50 (TWO-FAMILY RESIDENTIAL DISTRICT)
MU (MIXED-USE DISTRICT)

NOTES

1. ALL DISTANCES SHOWN ARE IN DECIMAL FEET.
2. ALL DISTANCES SHOWN ALONG CURVES ARE ARC DISTANCES, NOT CHORD DISTANCES
3. LOTS ARE CONCEPTUAL AND EXACT LOT LINES MAY VARY AT TIME OF FINAL PLAT.
4. VERTICAL DATUM IS BASED ON NAVD88 (GEOID-12A).
5. HORIZONTAL CONTROL IS BASED ON THE DOUGLAS/SARPY COMBINED LDP IN INTERNATIONAL FEET.

R50 ZONING REGUALTIONS							
USES	LOT AREA	LOT WIDTH	FRONT YARD	SIDE YARD	STREET SIDE YARD	REAR YARD	MAX. HEIGHT
SINGLE-FAMILY DWELLING	5,000 SF	50'	25'	7'	15'	25'	2.5 STORIES OR 35'
TWO-FAMILY DWELLING	5,000 SF	80'	25'	10'	15	25'	2.5 STORIES OR 35'

NOTE: A TWO-FAMILY DWELLING SPLIT INTO TWO SEPARATE LOTS REQUIRES A MINIMUM LOT AREA OF 5,000 SF PER UNIT, A MINIMUM LOT WIDTH OF 40', SIDE YARD SETBACK SHALL BE ZERO FEET AT COMMON WALLS, AND MUST MEET ALL OTHER SETBACK REQUIREMENTS.

MU ZONING REGUALTIONS								
USES	LOT AREA	LOT WIDTH	FRONT YARD	SIDE YARD	STREET SIDE YARD	REAR YARD	MAX. LOT COVERAGE BUILDING / IMPERVIOUS AREA	MAX. HEIGHT
SINGLE-FAMILY DWELLING	7,000 SF	70'	25'	7.5'	15'	25'	40 / 80	35'
SINGLE-FAMILY ATTACHED	4,500 SF PER UNIT	45' PER UNIT	25'	7.5'	15'	25'	40 / 80	35'
TWO-FAMILY DWELLING	10,000 SF	80'	25'	7.5'	15'	25'	40 / 80	35'
TOWNHOUSES / CONDOMINIUMS	2,500 SF PER UNIT	25' PER UNIT	25'	7.5'	15'	25'	50 / 80	35'
MULTI-FAMILY DWELLING	2,500 SF PER UNIT	100'	25'	7.5'	15'	25'	50 / 80	45'
OTHER PERMITTED AND CONDITIONAL USES	8,500 SF	75'	25'	7.5'	15'	25'	30 / 80	45'
ACCESSORY BUILDINGS	-	-	35'	5'	15'	8'	10	17'

NOTE: SEE ARTICLE 5, SECTION 5.14, PART "F", OF THE ZONING ORDINANCE OF THE CITY OF SPRINGFIELD FOR ADDITIONAL REQUIRED PROVISIONS FOR THE MU MIXED USE DISTRICT.

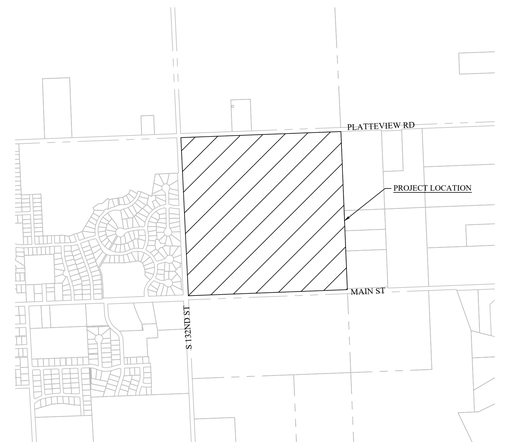
LEGAL DESCRIPTION

FROM SCHEDULE A, STEWART TITLE COMPANY, COMMITMENT FOR TITLE INSURANCE, NO. 2601048-CTS-1, EFFECTIVE DATE MARCH 11TH, 2026 AT 8:00AM.

THE NORTHWEST QUARTER (NW¼) IN SECTION NINETEEN (19) TOWNSHIP THIRTEEN (13), NORTH RANGE TWELVE (12), EAST OF THE 6TH P.M., SARPY COUNTY NEBRASKA.

OUTLOT USAGE

OUTLOT	PCSMP/ DRAINAGE	GREEN SPACE / TRAIL	LANDSCAPING
A		X	
B	X	X	
C			X
D		X	
E		X	
F	X		
G			X
H			X
I			X
J			X
K		X	
L		X	
M		X	
N	X		



VICINITY MAP

NOT TO SCALE

N
W E
S

0 100 200
SCALE: 1"= 100

FoleyShald ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
WEBSITE: foleyshald.com | PHONE: 402.804.3933
NEBRASKA CA-4197

PRELIMINARY PLAT

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS			
NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
1 OF 3

W:\145.001 - Grace Midtown Property\CAD\CIVIL\TECH DRAWINGS\PLAT\PLAT\145.001_PLAT.dwg, 9/4/2026 3:34:07 PM, JRAUERBACH2018

FAIRMONT
PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
1	8239	0.19
2	6640	0.15
3	6640	0.15
4	6640	0.15
5	6640	0.15
6	6640	0.15
7	6640	0.15
8	6640	0.15
9	6640	0.15
10	6640	0.15
11	6640	0.15
12	7520	0.17
13	5019	0.12
14	5091	0.12
15	5031	0.12
16	5173	0.12
17	5293	0.12
18	5501	0.13
19	5847	0.13
20	5800	0.13
21	5081	0.12
22	11713	0.27
23	8766	0.20
24	8316	0.19
25	8324	0.19
26	8509	0.20
27	5522	0.13
28	5362	0.12
29	5159	0.12
30	5024	0.12
31	5014	0.12
32	5548	0.13
33	5899	0.14
34	5344	0.12
35	9102	0.21
36	7360	0.17
37	6983	0.16
38	6640	0.15
39	6640	0.15
40	6640	0.15
41	6640	0.15
42	6640	0.15
43	6640	0.15
44	6640	0.15
45	9844	0.23
46	9511	0.22
47	6782	0.16
48	6600	0.15
49	6600	0.15
50	6671	0.15
51	6741	0.15
52	6741	0.15
53	6741	0.15
54	6741	0.15
55	8538	0.20
56	5208	0.12
57	5012	0.12
58	5012	0.12
59	5012	0.12
60	5357	0.12
61	5357	0.12
62	6238	0.14
63	5881	0.14
64	5849	0.13
65	6267	0.14
66	6146	0.14
67	5798	0.13
68	5423	0.12
69	5150	0.12
70	5123	0.12
71	5123	0.12
72	5064	0.12
73	5064	0.12
74	8035	0.18
75	8035	0.18
76	8035	0.18
77	8035	0.18
78	8036	0.18
79	8125	0.19
80	8468	0.19

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
81	10233	0.23
82	9390	0.22
83	7608	0.17
84	7608	0.17
85	7608	0.17
86	7608	0.17
87	7608	0.17
88	7608	0.17
89	7608	0.17
90	5075	0.12
91	5075	0.12
92	5075	0.12
93	5252	0.12
94	5051	0.12
95	5101	0.12
96	5101	0.12
97	5101	0.12
98	5101	0.12
99	5101	0.12
100	5101	0.12
101	5389	0.12
102	9001	0.21
103	6649	0.15
104	6649	0.15
105	6649	0.15
106	6649	0.15
107	6649	0.15
108	6649	0.15
109	6551	0.15
110	6557	0.15
111	6557	0.15
112	6557	0.15
113	6557	0.15
114	6557	0.15
115	6557	0.15
116	6557	0.15
117	6557	0.15
118	6557	0.15
119	8244	0.19
120	8334	0.19
121	6594	0.15
122	6593	0.15
123	6591	0.15
124	6589	0.15
125	6587	0.15
126	6586	0.15
127	6584	0.15
128	6582	0.15
129	6510	0.15
130	6453	0.15
131	6470	0.15
132	6487	0.15
133	6504	0.15
134	6520	0.15
135	6536	0.15
136	6580	0.15
137	8257	0.19
138	7955	0.18
139	7273	0.17
140	7450	0.17
141	7450	0.17
142	7450	0.17
143	7600	0.17
144	7600	0.17
145	7600	0.17
146	6929	0.16
147	7027	0.16
148	7027	0.16
149	7027	0.16
150	7027	0.16
151	7027	0.16
152	7027	0.16
153	7915	0.18
154	7760	0.18
155	7090	0.16
156	7090	0.16
157	7090	0.16
158	7090	0.16
159	7090	0.16
160	7090	0.16

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
161	7090	0.16
162	7090	0.16
163	7830	0.18
164	7890	0.18
165	7890	0.18
166	7890	0.18
167	7890	0.18
168	7890	0.18
169	8870	0.20
170	7256	0.17
171	6459	0.15
172	6477	0.15
173	6477	0.15
174	6477	0.15
175	6477	0.15
176	6477	0.15
177	6477	0.15
178	6477	0.15
179	6503	0.15
180	7592	0.17
181	7840	0.18
182	9329	0.21
183	9513	0.22
184	9366	0.22
185	8893	0.20
186	9127	0.21
187	8219	0.19
188	7730	0.18
189	7730	0.18
190	7730	0.18
191	7730	0.18
192	7730	0.18
193	6925	0.16
194	7130	0.16
195	7130	0.16
196	7130	0.16
197	7130	0.16
198	7130	0.16
199	7130	0.16
200	7130	0.16
201	7127	0.16
202	8261	0.19
203	8194	0.19
204	6632	0.15
205	6670	0.15
206	6670	0.15
207	6670	0.15
208	6670	0.15
209	6670	0.15
210	6670	0.15
211	6670	0.15
212	6670	0.15
213	6670	0.15
214	6670	0.15
215	7534	0.17
216	7665	0.18
217	7665	0.18
218	7665	0.18
219	8182	0.19
220	8409	0.19
221	7455	0.17
222	7455	0.17
223	7455	0.17
224	7455	0.17
225	6350	0.15
226	6368	0.15
227	6368	0.15
228	6368	0.15
229	6368	0.15
230	7547	0.17
231	7547	0.17
232	7547	0.17
233	7547	0.17
234	7547	0.17
235	7547	0.17
236	8617	0.20
237	9951	0.23
238	9208	0.21
239	9611	0.22
240	8639	0.20

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
241	9163	0.21
242	8344	0.19
243	8344	0.19
244	7658	0.18
245	7524	0.17
246	7524	0.17
247	7524	0.17
248	7524	0.17
249	7524	0.17
250	7524	0.17
251	7524	0.17
252	7524	0.17
253	9892	0.23
254	8942	0.21
255	8220	0.19
256	7715	0.18
257	20568	0.47
258	8194	0.19
259	6643	0.15
260	6616	0.15
261	6623	0.15
262	6664	0.15
263	6740	0.15
264	6849	0.16
265	7456	0.17
266	7000	0.16
267	7174	0.16
268	7328	0.17
269	9509	0.22
270	6410	0.15
271	5185	0.12
272	5185	0.12
273	5185	0.12
274	5185	0.12
275	5185	0.12
276	5185	0.12
277	5185	0.12
278	5185	0.12
279	5185	0.12
280	5185	0.12
281	5185	0.12
282	5185	0.12
283	5327	0.12
284	5501	0.13
285	5501	0.13
286	5501	0.13
287	5501	0.13
288	5367	0.12
289	5174	0.12
290	5174	0.12
291	5174	0.12
292	5174	0.12
293	6259	0.14
294	7688	0.18
295	7359	0.17
296	7360	0.17
297	7360	0.17
298	7360	0.17
299	7360	0.17
300	7360	0.17
301	8239	0.19
302	9467	0.22
303	7073	0.16
304	7073	0.16
305	7073	0.16
306	7073	0.16
307	7073	0.16
308	7073	0.16
309	7889	0.18
310	9352	0.21
311	7056	0.16
312	6210	0.14
313	6210	0.14
314	6210	0.14
315	6210	0.14
316	6210	0.14
317	6210	0.14
318	6210	0.14
319	7560	0.17
320	7568	0.17

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
321	9970	0.23
322	10540	0.24
323	8483	0.19
324	7035	0.16
325	6767	0.16
326	6495	0.15
327	6296	0.14
328	6216	0.14
329	6210	0.14
330	6210	0.14
331	6210	0.14
332	6210	0.14
333	7054	0.16
334	7957	0.18
335	7570	0.17
336	7570	0.17
337	7570	0.17
338	7687	0.18
339	7412	0.17
340	7595	0.17
341	7125	0.16
342	7125	0.16
343	7125	0.16
344	8568	0.20
345	8414	0.19
346	6956	0.16
347	6956	0.16
348	6956	0.16
349	6956	0.16
350	6818	0.16
351	6641	0.15
352	6730	0.15
353	6833	0.16
354	7360	0.17
355	7360	0.17
356	8982	0.21
357	7205	0.17
358	6325	0.15
359	6325	0.15
360	6325	0.15
361	6325	0.15
362	6509	0.15
363	6526	0.15
364	6427	0.15
365	6423	0.15
366	6420	0.15
367	6416	0.15
368	6411	0.15
369	11199	0.26
370	8169	0.19
371	7490	0.17
372	7490	0.17
373	7490	0.17
374	7490	0.17
375	7490	0.17
376	6319	0.15
377	6452	0.15
378	6252	0.14
379	6252	0.14
380	6252	0.14
381	6252	0.14
382	7832	0.18
383	7957	0.18
384	6210	0.14
385	6210	0.14
386	6210	0.14
387	5959	0.14
388	6401	0.15
389	6287	0.14
390	7462	0.17
391	7462	0.17
392	6296	0.14
393	6296	0.14
394	6296	0.14
395	6296	0.14
396	7644	0.18
397	9003	0.21
398	7455	0.17
399	7455	0.17
400	6290	0.14

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
401	6290	0.14
402	6290	0.14
403	6420	0.15
404	7119	0.16
405	7324	0.17
406	7099	0.16
407	7090	0.16
408	7360	0.17
409	8982	0.21
410	9107	0.21
411	7360	0.17
412	7125	0.16
413	7160	0.16
414	7440	0.17
415	7085	0.16
416	7451	0.17
417	7451	0.17
418	7451	0.17
419	6287	0.14
420	6287	0.14
421	6287	0.14
422	8032	0.18
423	9274	0.21
424	6282	0.14
425	6282	0.14
426	6282	0.14
427	6392	0.15
428	6594	0.15
429	6594	0.15
430	6552	0.15
431	6346	0.15
432	6402	0.15
433	6511	0.15
434	6517	0.15
435	6517	0.15
436	7832	0.18
437	9107	0.21
438	7360	0.17
439	7360	0.17
440	7827	0.18
441	7824	0.18
442	7450	0.17
443	7450	0.17
444	7450	0.17
445	7450	0.17
446	7460	0.17
447	7440	0.17
448	9403	0.22
449	12401	0.28
450	9397	0.22
451	9356	0.21
452	7839	0.18
453	7630	0.18
454	8721	0.20
455	8295	0.19
456	6563	0.15
457	6742	0.15
458	6520	0.15
459	6480	0.15
460	7680	0.18
461	7572	0.17
462	9008	0.21
463	8085	0.19
464	8682	0.20
465	8373	0.19
466	7724	0.18
467	7287	0.17
468	7211	0.17
469	8968	0.21
470	8711	0.20
471	8170	0.19
472	8824	0.20
473	8309	0.19
474	12522	0.29
475	8964	0.21
476	8753	0.20
477	8907	0.20
478	9492	0.22
479	8610	0.20
480	8049	0.18

PARCEL TABLE		
PARCEL #	AREA (SF)	AREA (AC)
481	7759	0.18
482	7518	0.17
483	8102	0.19
484	6306	0.14
485	6307	0.14
486	6682	0.15
487	7945	0.18
488	7595	0.17
489	7596	0.17
490	7598	0.17
491	7599	0.17
492	7600	0.17
493	7558	0.17
494	6270	0.14
495	6316	0.15
496	7487	0.17
497	9267	0.21
498	7971	0.18
499	6956	0.16
500	6476	0.15
501	6477	0.15
502	6478	0.15
503	6479	0.15
504	6480	0.15
505	6481	0.15
506	6481	0.15
507	6997	0.16
508	8117	0.19
509	14506	0.33
510	13382	0.31
511	6210	0.14
512	6210	0.14
513	6210	0.14
514	6210	0.14
515	6210	0.14
516	6210	0.14
517	6210	0.14
518	6210	0.14
519	8206	0.19
520	7832	0.18
521	6210	0.14
522	6210	0.14
523	6210	0.14
524	7360	0.17
525	7360	0.17
526	7360	0.17
527	7360	0.17
528	7360	0.17
529	6663	0.15
530	6663	0.15
531	6210	0.14
532	7360	0.17
533	7738	0.18
534	9946	0.23
535	9122	0.21
536	6864	0.16
537	6268	0.14
538	6210	0.14
539	6210	0.14
540	6210	0.14
541	6210	0.14
542	6210	0.14
543	7383	0.17
544	7383	0.17
545	7383	0.17
546	7383	0.17
547	6210	0.14
548	7360	0.17
549	9107	0.21
550	7054	0.16
551	6325	0.15
552	6325	0.15
553	6325	0.15
554	6325	0.15
555	6325	0.15
556	6325	0.15
557	6325	0.15
558	6325	0.15
559	9626	0.22
560	271727	6.24

PARCEL TABLE		
OUTLOT #	AREA (SF)	AREA (AC)
OUTLOT A	39201	0.90
OUTLOT B	165249	3.79
OUTLOT C	20678	0.47
OUTLOT D	103430	2.37
OUTLOT E	101510	2.33
OUTLOT F	116462	2.67
OUTLOT G	20768	0.48
OUTLOT H	15267	0.35
OUTLOT I	18886	0.43
OUTLOT J	2349	0.05
OUTLOT K	39575	0.91
OUTLOT L	48237	1.11
OUTLOT M	49146	1.13
OUTLOT N	100832	2.31

FoleyShald ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
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NEBRASKA CA-4197

PRELIMINARY PLAT
PARCEL TABLE

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
2 OF 3

W:\145.001 - Grove Midtown Property\CAD\CIVIL\TECH\SUBMITTALS\PRELIMINARY PLAT\145.001 PRELIMINARY PLAT.dwg, 9/4/2026 12:14:18 PM, JRAASHOLM

EXISTING

Label	Line type
AIR	AIR
BUILDING OVERHANG	
CABLE	CATV
CONDUIT	
COMBINED STORM/SANITARY SEWER	CSO
CONSTRUCTION FENCE	CF
CREEK FLOW LINE	
CREEK FLOW DIRECTION	>
DRAIN TILES	DR
ELECTRIC	E
EDGE OF PAVEMENT	
FENCE	X
FENCE - BARBED WIRE	//
FENCE - STEEL	O
FENCE - WIRE	/\/
FENCE - WOOD	□
FIBER OPTICS	FO
FLOOD PLAIN	FP
FLOW ARROW	FM
FLOW LINE	>
FORCE MAIN	FM
GAS	G
GRAVEL AND DIRT EDGE	
GUARD RAIL	
IRRIGATION	IRR
NON POTABLE WATER	NPW
OIL	OIL
OVERHEAD ELECTRIC	OHE
OVERHEAD TELEPHONE	OHT
OVERHEAD UTILITY	O/H
POWER	P
RAILROAD TRACKS	
RAW WATER	RW
ROOF DRAIN	RD
SANITARY SEWER	SS
STORM SEWER	ST
STREAM	
TELEPHONE	T
UNDER DRAIN	UD
UNDERGROUND ELECTRIC	UGE
UNIDENTIFIED UTILITY	UU
UTILITY	U
VEGETATION LINE	
WATER	W
WATERS EDGE	

Label	Symbol
SANITARY CLEAN OUT	CO
SANITARY MANHOLE	S
SEWER WARNING SIGN	S
SEPTIC TANK	S
AREA INLET ROUND	
AREA INLET SQUARE	
GRATE INLET	
GRATE INLET W/ HOOD	
STORM MANHOLE	D
STORM PIPE END	
4' CURB INLET	
CURB INLET LEFT	
CURB INLET RIGHT	
DOWN SPOUT/ROOF DRAIN	DS
FLARED END SECTION	
CONTINUE SYMBOL	~
CABLE MANHOLE	C
CABLE WARNING SIGN	C
CABLE PEDESTAL	
CABLE PULLBOX	
LIGHT POLE	
YARD LIGHT	
GROUND LIGHT	
BLDG MOUNTED LIGHT	
STREET LIGHT	
POWER POLE	
H STRUCTURE	
H STRUCTURE W/ TRANSFORMER	
ELECTRIC MANHOLE	E
ELECTRIC METER	E
ELECTRIC PEDESTAL	
ELECTRIC PULLBOX	
ELECTRIC TRANSFORMER	E
ELECTRIC VAULT	EV
ELECTRIC WARNING SIGN	E
GUY	
FIBER OPTIC MANHOLE	F
FIBER OPTIC PULL BOX	
FIBER OPTIC VAULT	FV
FIBER OPTIC PEDESTAL	F
FIBER OPTIC WARNING SIGN	F
FUEL TANK	F
FUEL CAP	F
FUEL PUMP	F
GAS CURB STOP	G
GAS MANHOLE	G
GAS METER	G
GAS VALVE	
GAS WARNING SIGN	G
TELEPHONE MANHOLE	T
TELEPHONE PEDESTAL	
TELEPHONE PULLBOX	
TELEPHONE WARNING SIGN	T
UNIDENTIFIED MANHOLE	U
UNIDENTIFIED UTILITY PEDESTAL	U
UNIDENTIFIED VALVE	U
UNIDENTIFIED PULLBOX	U
WATER CURB STOP	
WATER MANHOLE	W
WATER METER	W
WATER VALVE	

Label	Symbol
WATER WARNING SIGN	W
AUTO SPRINKLER BUILDING	
FIRE HYDRANT	
POST INDICATOR VALVE	PIV
YARD HYDRANT	
IRRIGATION CONTROL VALVE	
IRRIGATION SPRINKLER HEAD	
WELL	
MONITORING WELL	W
TABLE	
SATELLITE DISH	
MAILBOX	MB
MISCELLANEOUS POINT	
VENT	V
TOWER	
PROPANE TANK	P
FLAGPOLE	
AIR CONDITIONING UNIT	
DRINKING FOUNTAIN	
BBQ PIT	BBQ
BENCH	
BOLLARD	
BORE HOLE	
COLUMN ROUND	
COLUMN SQUARE	
VACUUM	V
TREE DECIDUOUS	
TREE CONIFEROUS	
BUSH	
BOULDER	
ARROW LEFT	
ARROW RIGHT	
ARROW STRAIGHT	
STRIPING "ONLY"	ONLY
BICYCLE STRIPING	
HANDICAP SYMBOL	
TRAFFIC SIGNAL	
TRAFFIC SIGNAL PEDESTAL	
TRAFFIC SIGNAL PULL BOX	TS
PARKING METER	
SIGN	
STOP SIGN	STOP
YIELD SIGN	
RR CROSSING ARM	
BENCHMARK	
TEMPORARY BENCHMARK	
ROW MARKER	
CONTROL POINT	
MONUMENT FOUND	
MONUMENT SET	
WITNESS CORNER	
COMPUTED CORNER	
SECTION CORNER TIE	
SECTION CORNER	

RECORD

Label	Line type
AIR	R-A
CABLE	R-CA
ELECTRIC	R-E
FIBER OPTIC	R-FO
GAS	R-G
SANITARY SEWER	R-SS
STORM SEWER	R-ST
TELEPHONE	R-T
UNDERGROUND ELECTRIC	R-UGE
UTILITY	R-U
WATER	R-W

PROPOSED

GENERAL

Label	Symbol
LIMITS OF CONSTRUCTION	
REVISION CLOUD	R1

UTILITY

Label	Symbol
PROPOSED SANITARY SERVICE	
PROPOSED SANITARY SEWER	75' OF 8" PVC @ 0.40% SS
PROPOSED STORM SEWER	75' OF 18" RCP @ 0.50%
PROPOSED WATER MAIN	75' LF 6" PVC @ 0.00% W
PROPOSED FORCEMAIN	171' LF 8" DIP @ 0.00% FM
IRRIGATION	IRR
NON POTABLE WATER	NPW
ROOF DRAIN	RD
SLOTTED UNDER DRAIN	8"DR
PROPOSED FENCE - WIRE	
PROPOSED FENCE - GENERAL	
PROPOSED AREA INLET	AI-01
PROPOSED AREA INLET	AI-01
PROPOSED CURB INLET	CI-01
PROPOSED MANHOLE	MH-01
PROPOSED GRATE INLET	GI-01
PROPOSED FLARED END SECTION	FSE-01
PROPOSED PIPE PLUG	PP-01
PROPOSED CLEAN OUT	CO-01 CO
PROPOSED MANHOLE	MH-01
DROP MANHOLE	MH-01
FIRE HYDRANT	
TEE	
GATE VALVE	
PLUG VALVE	
CROSSING	
BEND	
REDUCER	
BUTTERFLY VALVE	
CHECK VALVE	
BALL VALVE	
COMBINATION AIR VALVE	
PIPE CAP	
PIPE PLUG	

GRADING

Label	Symbol
CONTOUR	1100
EXISTING CONTOUR	1100
FILL AREA	
WETLANDS AREA NOT TO BE DISTURBED	
STABILIZED ACCESS ROAD	
VEGETATED BUFFER STRIP	
SPOT ELEVATION	1172.00
CUT / FILL SPOT ELEVATIONS	2.65 / - 2.65
SURFACE SLOPES	0.22% 3:1

DRAINAGE

Label	Symbol
PROPOSED STORM INLET DRAINAGE REPORT	
PROPOSED STORM OUTLET DRAINAGE REPORT	
PROPOSED STORM PIPE DRAINAGE REPORT	
500-YR FLOOD PLAIN	500YR
100-YR LOOD PLAIN	100YR
FLOOD WAY	FLDWY
DRAINAGE AREA NAME	X-XX
DRAINAGE AREA RUNOFF COEFFICIENT	## AC. C= ##
DRAINAGE BASIN DELINEATION	
DRAINAGE SUB BASIN DELINEATION	
TIME OF CONCENTRATION DRAINAGE PATH	GRA 254 @ 7.85%

EROSION CONTROL

Label	Symbol
EARTH BERM	EB
EARTH DIVERSION	ED
FILL DIVERSION	FD
INTERCEPTOR DIKE	ID
INTERCEPTOR SWALE	
LEVEL TERRACE	LT
SILT FENCE	SF
TEMPORARY DITCH	TD
LEVEL SPREADER	LS
STRAW WATTLE	SW
TEMPORARY SLOPE DRAIN	
BIORETENTION GARDEN	
STRAW HAY BALE	STB
SLOPE PROTECTION	SP
INLET PROTECTION	IP
CONSTRUCTION ENTRANCE	
STAGING AREA	
SWPPP SIGN	
EROSION BLANKET	

PAVEMENT

Label	Symbol
PAVEMENT	
PCC CURB AND GUTTER	
PARKING/PAVEMENT STRIPING	
RETAINING WALL	
X" PCC PAVEMENT	
ASPHALT PAVEMENT	
X" PCC SIDEWALK PAVEMENT	
X" REINFORCED PCC PAVEMENT	
X" PCC TRAIL PAVEMENT	
X" GRAVEL PAVEMENT	
STAMPED PCC/MEDIAN SURFACING	
PAVING BARRICADE	
BUILDING	
PARKING STALL COUNT	15
FLOW LINE/RIDGE LINE	
JOINT A	
JOINT B	
JOINT D	
JOINT E	
JOINT F	
JOINT G	
JOINT H	
JOINT JLC-K	
JOINT JLH-S	
PROPOSED CURB RAMP	
PAVEMENT REMOVAL	

PLATTING

Label	Symbol
PROPOSED PROPERTY LINE	
PROPOSED RIGHT OF WAY LINE	
ADJACENT LOT LINE	
EASEMENT LINE	
CENTERLINE	
SETBACK	
MONUMENT SET	
MONUMENT FOUND	
SECTION CORNER	
COMPUTED CORNER	
WITNESS CORNER	

GENERAL ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT	N	NORTH
ASPH	ASPHALT	N.T.S.	NOT TO SCALE
BC	BOTTOM OF CURB	OT	OPEN TOP PIPE
BOSW	BACK OF WALK	(P)	PLAT DIMENSION
BP	BOTTOM OF PIPE	PL	PROPERTY LINE
BW	BOTTOM OF WALL	PT	PINCHED TOP PIPE
(C)	COMPUTED DIMENSION	P.V.C.	POLYVINYL CHLORIDE
CATV	CABLE TELEVISION	PVC	POINT OF VERTICAL CURVE
CF	CUBIC FOOT	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	PVT	POINT OF VERTICAL TANGENCY
CMP	CORRUGATED METAL PIPE	X 1020.12	SPOT ELEVATION
CONC	CONCRETE	(R)	RECORD DIMENSION
CP	CONTROL POINT	RB	REBAR
CPP	CORRUGATED PLASTIC PIPE	RCP	REINFORCED CONCRETE PIPE
CY	CUBIC YARD	ROW	RIGHT OF WAY
DIA	DIAMETER	S	SOUTH
DIP	DUCTILE IRON PIPE	SF	SQUARE FEET
E	EAST	SS	SANITARY SEWER
ELEV	ELEVATION	ST	STORM
EOG	EDGE OF GRAVEL	STA	STATION
FES	FLARED END SECTION	STD	STANDARD
FF	FINISH FLOOR ELEVATION	SW	SIDEWALK
FG	FINISHED GRADE	T	TELEPHONE
FH	FIRE HYDRANT	TC	TOP OF CURB
FL	FLOWLINE	TOF	TOP OF FOUNDATION
G	GUTTER	TOG	TOP OF GRADE
GB	GRADE BREAK	TOI	TOP OF ISLAND
HP/LP	HIGH POINT/LOW POINT	TP	TOP OF PAVEMENT
HORIZ	HORIZONTAL	TS	TOP OF SLAB
PCHC	HORIZONTAL POINT OF CURVATURE	TW	TOP OF WALL
PIHC	HORIZONTAL POINT OF INTERSECTION	TYP.	TYPICAL
PTHC	HORIZONTAL POINT OF TANGENCY	VERT	VERTICAL
PCCHC	HORIZONTAL POINT OF COMPOUND CURVATURE	W	WEST
PRCHC	HORIZONTAL POINT OF REVERSE CURVATURE	WQCV	WATER QUALITY CAPTURE VOLUME
IE	INVERT ELEVATION	YPC	YELLOW PLASTIC CAP
LF	LINEAR FEET		
(M)	MEASURED DIMENSION		
MH	MANHOLE		
ME	MATCH EXISTING		

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LEGEND SHEET

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

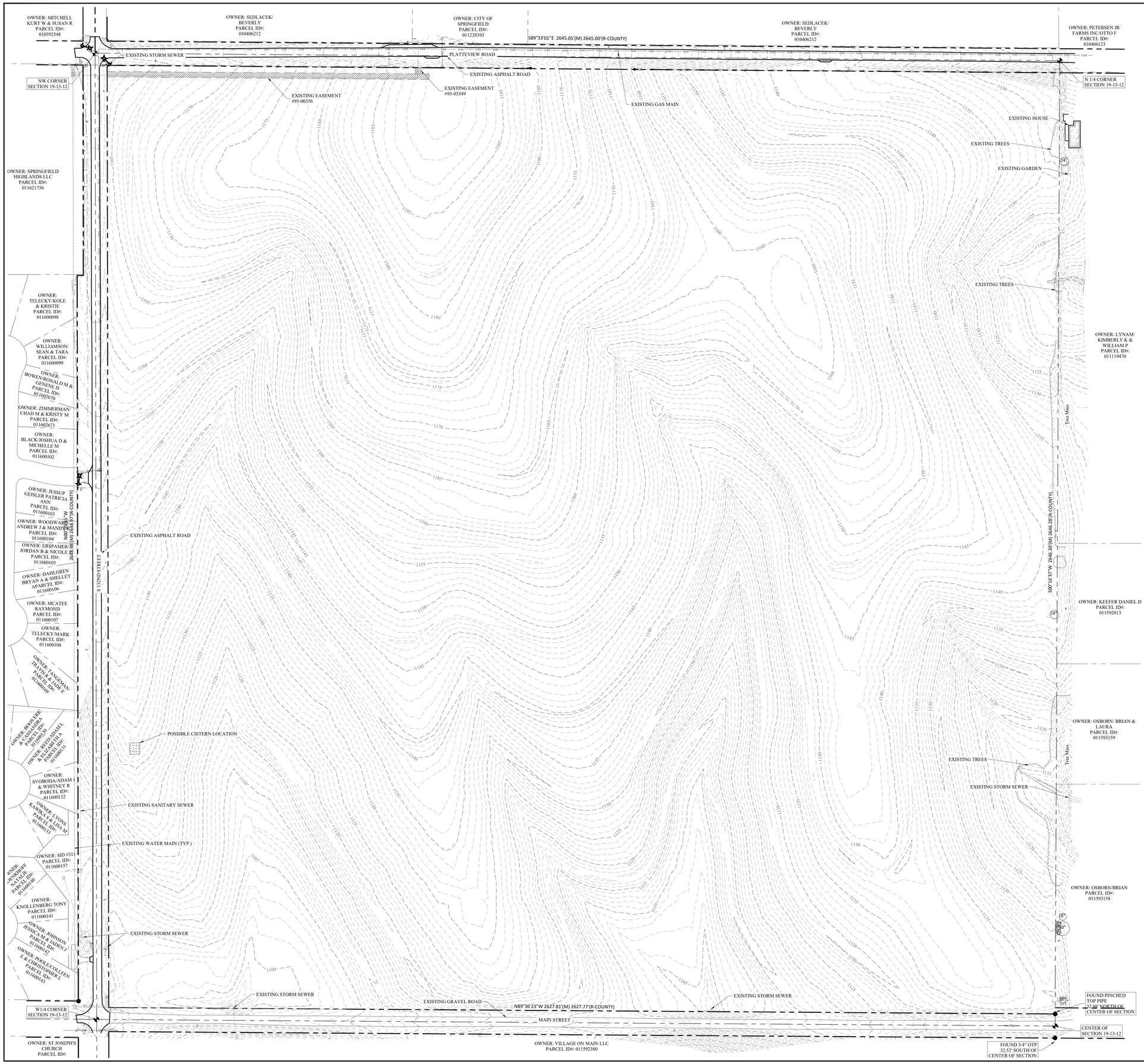
SHEET NO. 3 OF 3

W:\145.001 - Graves Mahloch Property\CAD\CONSTRUCTION DRAWINGS\PLATTING\145001-LEGEND SHEET.dwg, 9/4/2026 12:14:23 PM, JRADERMACHER

FAIRMONT

PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



N

W E

S

0 100 200

SCALE: 1"= 100

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EXISTING CONDITIONS

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

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DATE: 09/04/2026	PROJECT NUMBER: 145.001

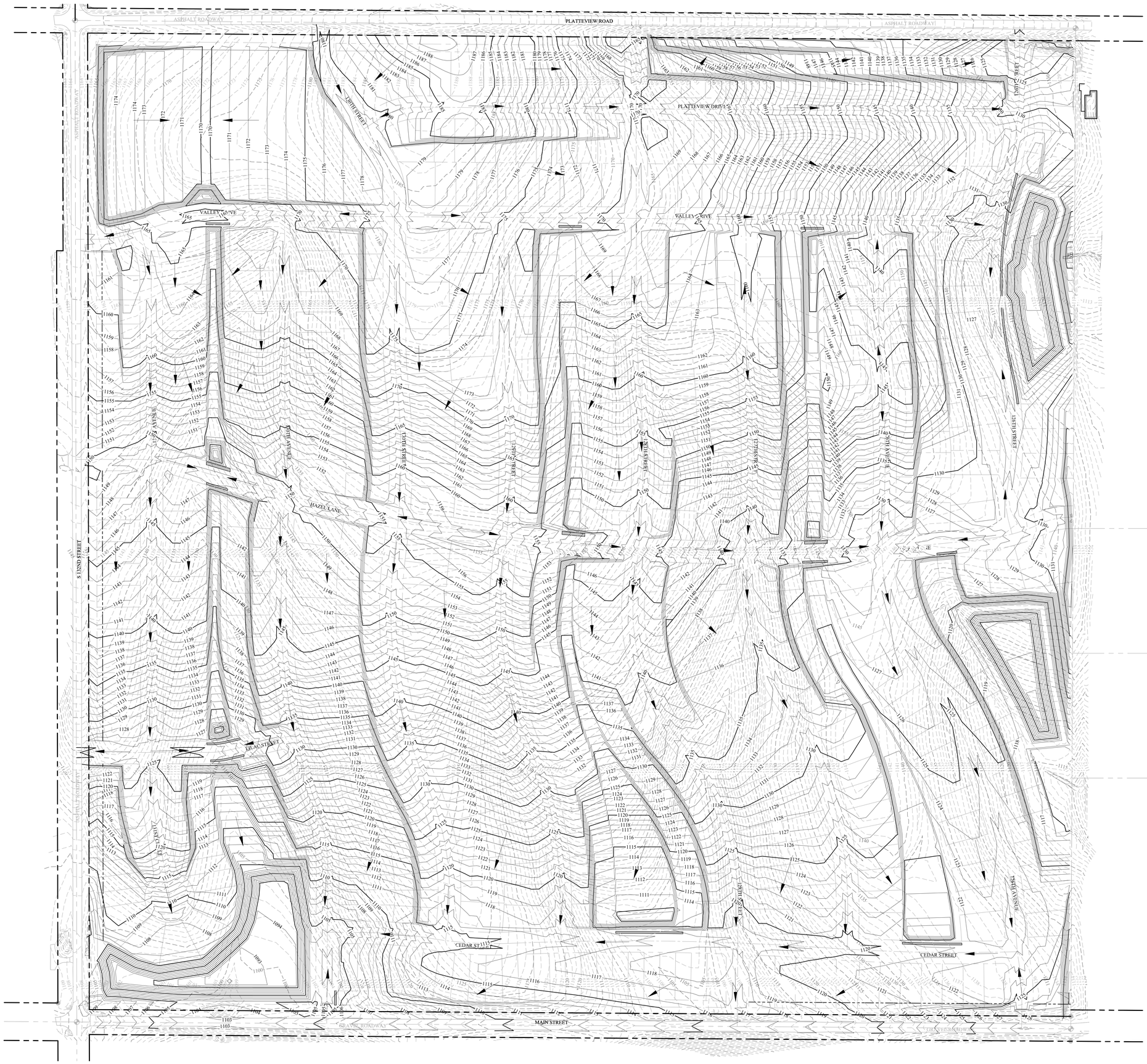
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EXHIBIT A

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FAIRMONT

PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



N
W E
S

0 100 200
SCALE: 1"= 100

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GRADING AND DRAINAGE PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

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DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
EXHIBIT B1

FAIRMONT

PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



N
W E
S

0 100 200
SCALE: 1"= 100

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EROSION CONTROL PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS			
NO.	DATE	REVISION DESCRIPTION	BY

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DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
EXHIBIT B2

FAIRMONT
PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



N
W E
S

0 100 200
SCALE: 1"= 100

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WATER MAIN PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

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DRAWN BY:	REVIEWED BY:
JR	JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
EXHIBIT C

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FAIRMONT

PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



N

W E

S

0 100 200

SCALE: 1"= 100

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SANITARY SEWER PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS			
NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.

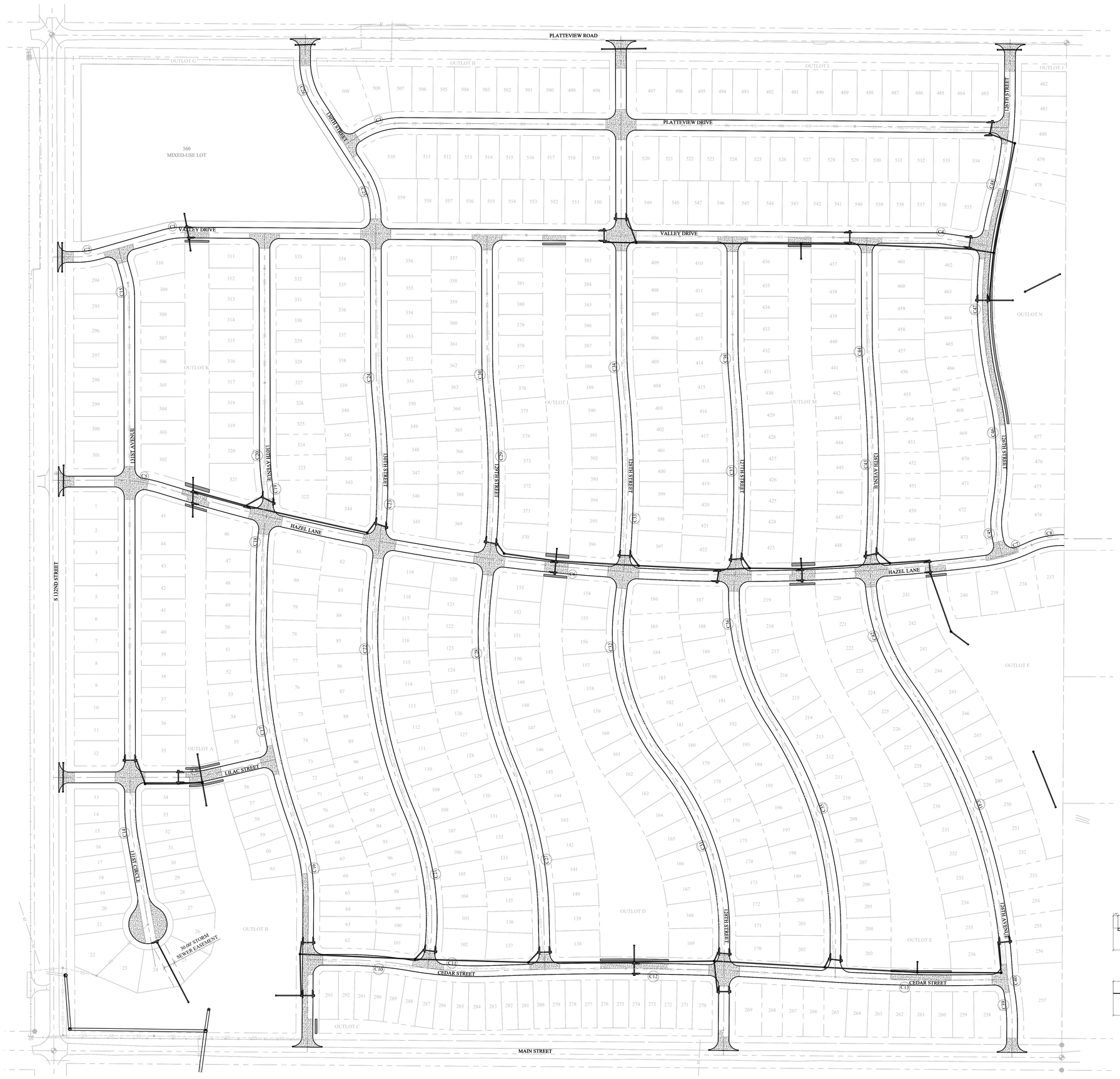
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FAIRMONT

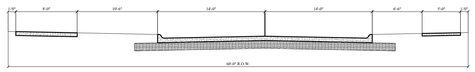
PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



CENTERLINE CURVE TABLE

CURVE #	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C2	200.00'	55.69'	55.51'	N81° 55' 36.87"E	15°57'16"
C3	200.00'	57.54'	57.34'	N82° 11' 30.25"E	16°29'03"
C4	200.00'	27.30'	27.28'	S85° 39' 20.18"E	7°49'16"
C5	400.00'	121.22'	120.76'	N81° 25' 00.55"W	17°21'50"
C6	5080.00'	2161.60'	2145.33'	S84° 55' 29.68"E	24°22'48"
C7	400.00'	127.63'	127.09'	N73° 44' 40.04"E	18°16'52"
C8	200.00'	88.65'	87.93'	N77° 18' 06.94"E	25°23'46"
C9	200.00'	44.96'	44.86'	N83° 27' 42.81"E	12°52'45"
C10	1000.00'	165.40'	165.21'	N84° 52' 05.32"W	9°28'35"
C11	1000.00'	213.86'	213.45'	S86° 15' 23.19"E	12°15'11"
C12	7500.00'	839.67'	839.23'	N89° 10' 32.47"W	6°24'53"
C13	5000.00'	504.02'	503.80'	S88° 51' 22.25"E	5°46'32"
C14	495.00'	85.59'	85.48'	N05° 02' 56.53"W	9°54'23"
C15	205.00'	57.10'	56.92'	N08° 04' 14.38"W	15°57'34"
C16	500.00'	181.32'	180.33'	N09° 59' 43.23"W	20°46'40"
C17	1470.00'	537.86'	534.86'	N09° 54' 08.31"W	20°57'50"
C18	700.00'	130.61'	130.42'	N05° 55' 29.97"E	10°41'26"
C19	200.00'	67.67'	67.35'	N01° 34' 36.31"E	19°23'14"
C20	700.00'	97.96'	97.88'	N04° 06' 27.65"W	8°01'06"
C21	700.00'	375.81'	371.32'	N08° 03' 40.81"W	30°45'38"
C22	1180.00'	640.33'	632.50'	N07° 53' 45.18"W	31°05'30"
C23	1820.00'	437.15'	436.10'	N00° 46' 08.02"E	13°45'43"
C24	1180.00'	123.85'	123.79'	N03° 06' 19.22"W	6°00'49"
C25	200.00'	114.23'	112.68'	N16° 27' 39.28"W	32°43'29"
C26	200.00'	116.14'	114.52'	N16° 11' 12.63"W	33°16'22"
C27	990.00'	384.04'	381.63'	N12° 27' 08.18"W	22°13'34"
C28	890.00'	463.50'	458.28'	N08° 38' 45.20"W	29°50'20"
C29	2100.00'	452.72'	451.85'	N00° 05' 51.03"E	12°21'07"
C30	890.00'	92.89'	92.85'	N03° 05' 18.66"W	5°58'48"
C31	700.00'	482.68'	473.18'	N19° 21' 37.48"W	39°30'29"
C32	540.00'	440.74'	428.61'	N15° 43' 56.12"W	46°45'52"
C33	2460.00'	573.08'	571.79'	N00° 58' 33.83"E	13°20'52"
C34	1000.00'	97.72'	97.69'	N02° 53' 53.41"W	5°35'57"
C35	990.00'	586.54'	578.00'	N16° 34' 44.98"W	33°56'44"
C36	600.00'	405.67'	397.99'	N14° 10' 56.96"W	38°44'20"
C37	2750.00'	510.79'	510.06'	N00° 08' 03.15"W	10°38'32"
C38	1030.00'	96.30'	96.26'	N02° 46' 37.05"W	5°21'24"
C39	500.00'	88.58'	88.46'	N04° 40' 54.07"W	10°09'02"
C40	500.00'	59.34'	59.31'	N06° 21' 24.39"W	6°48'01"
C41	1400.00'	800.84'	789.97'	N19° 20' 38.60"W	32°46'30"
C42	500.00'	345.17'	338.36'	S15° 57' 16.33"E	39°33'14"
C43	3100.00'	490.43'	489.92'	N00° 42' 35.02"W	9°03'52"
C44	1000.00'	89.77'	89.74'	N02° 40' 12.86"W	5°08'36"
C45	200.00'	88.00'	87.29'	N02° 11' 36.88"W	25°12'35"
C46	750.00'	310.64'	308.43'	N01° 53' 19.98"W	23°43'53"
C47	1000.00'	507.51'	502.09'	S00° 47' 04.80"W	29°04'42"
C48	1000.00'	262.63'	261.87'	N07° 48' 00.46"E	15°02'51"



TYPICAL HAZEL LANE



TYPICAL RESIDENTIAL STREET

N

W E

S

0 100 200

SCALE: 1"= 100

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PAVING AND STORM SEWER PLAN

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

DRAWN BY: JR	REVIEWED BY: JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

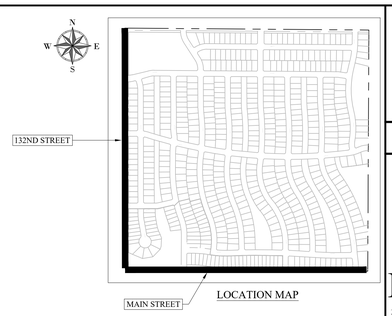
SHEET NO.

EXHIBIT E

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FAIRMONT

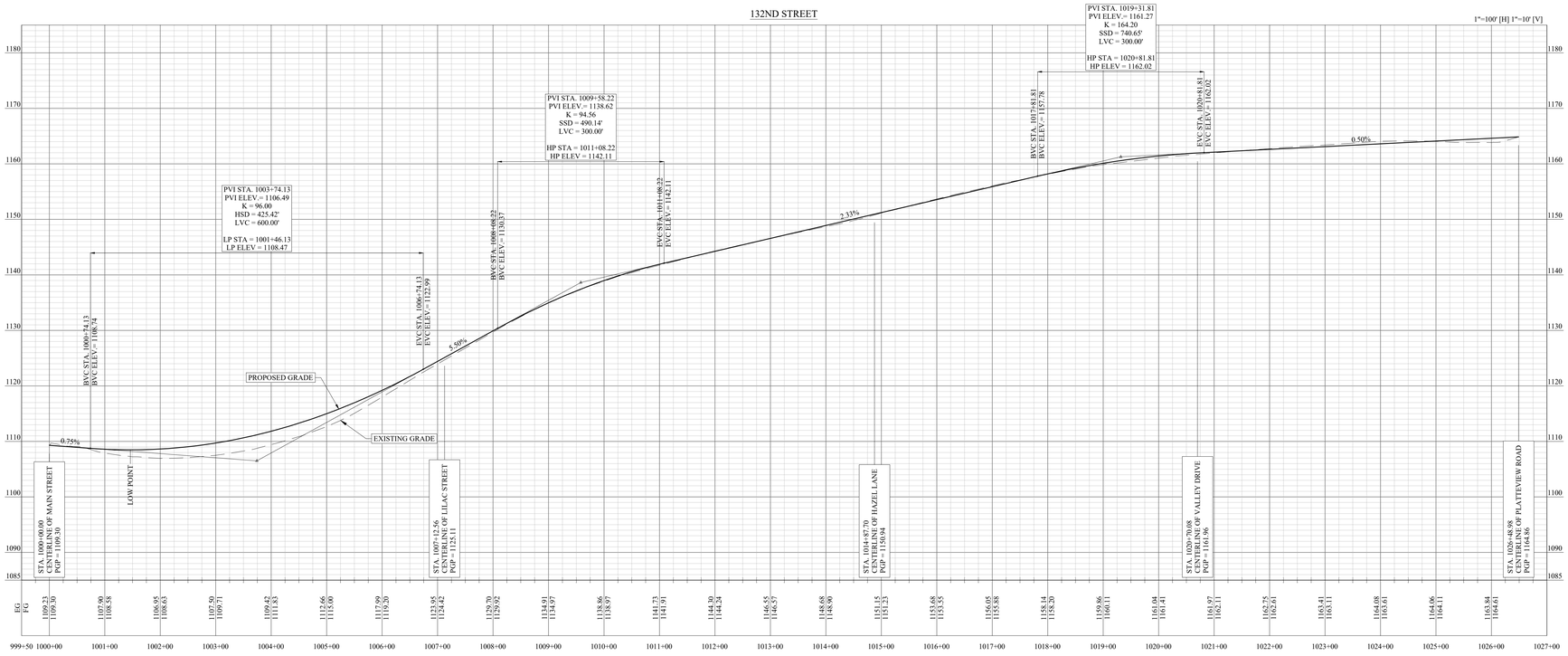
PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



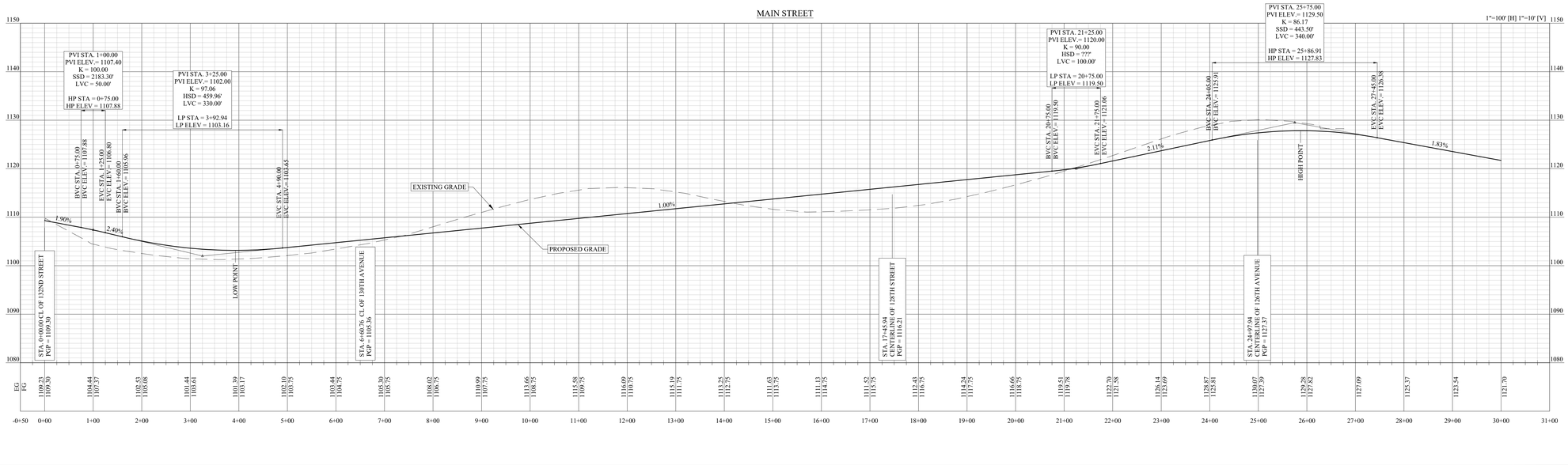
LOCATION MAP

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132ND STREET



MAIN STREET



ROADWAY PROFILES
132ND STREET AND MAIN STREET

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

NOT RELEASED FOR CONSTRUCTION

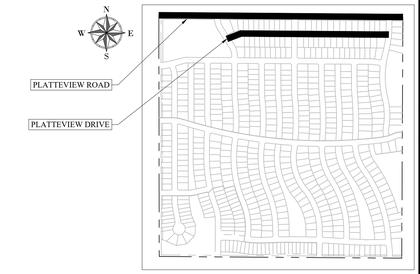
DRAWN BY:	REVIEWED BY:
JR	JS
DATE:	PROJECT NUMBER:
09/04/2026	145.001

SHEET NO.
EXHIBIT E1

W:\145.001 - Grove Market Property\1-SDO\DESIGN\SURVEY_SYNC\145.001 EXHIBIT E1 - STAGE PLAN AND PROFILES.dwg, 9/4/2026 12:13:44 PM, JR, ARCHITECH B

FAIRMONT

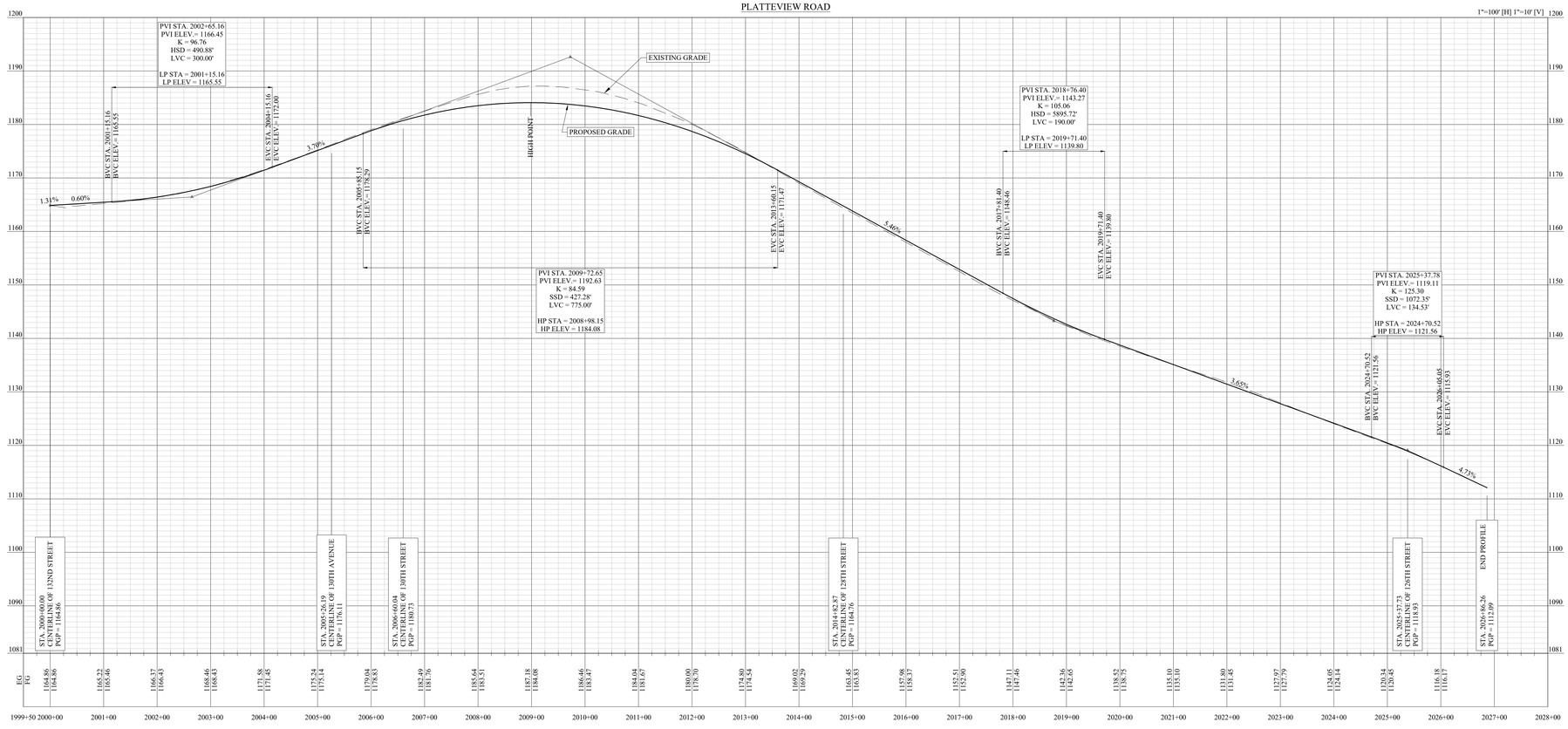
PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP

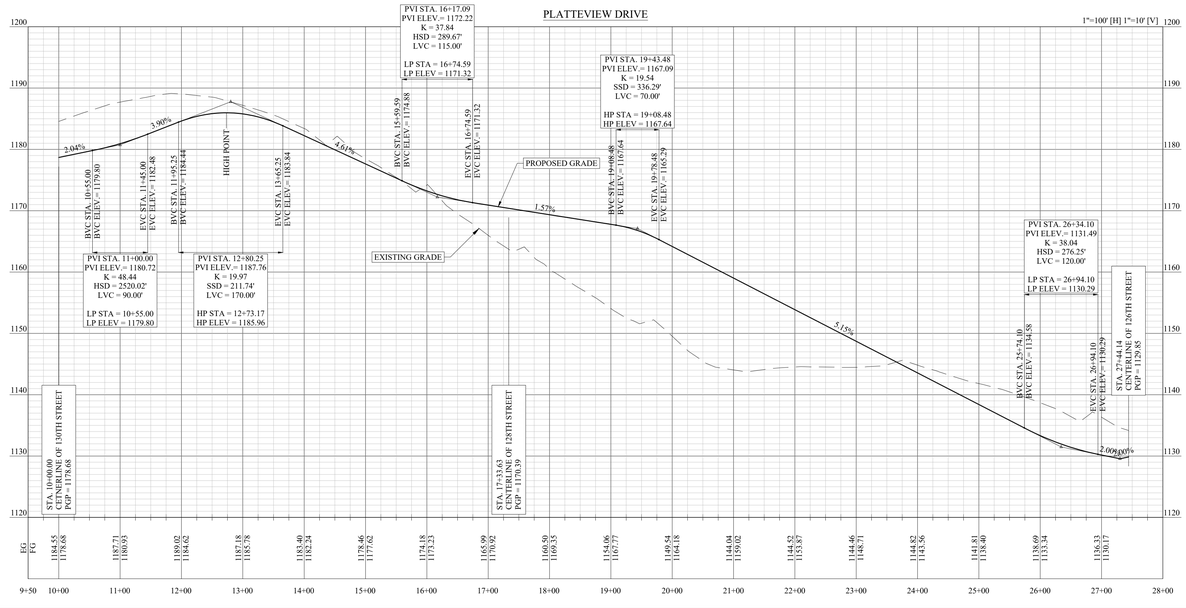
PLATTEVIEW ROAD

1"=100' [H] 1"=10' [V]



PLATTEVIEW DRIVE

1"=100' [H] 1"=10' [V]



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ROADWAY PROFILES
PLATTEVIEW ROAD AND PLATEVIEW DRIVE
FAIRMONT
SPRINGFIELD, NE
PRELIMINARY PLAT

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

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JR	JS
DATE:	PROJECT NUMBER:
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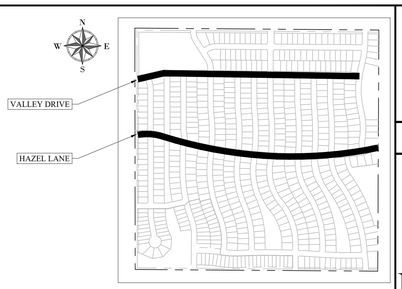
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FAIRMONT

PRELIMINARY PLAT

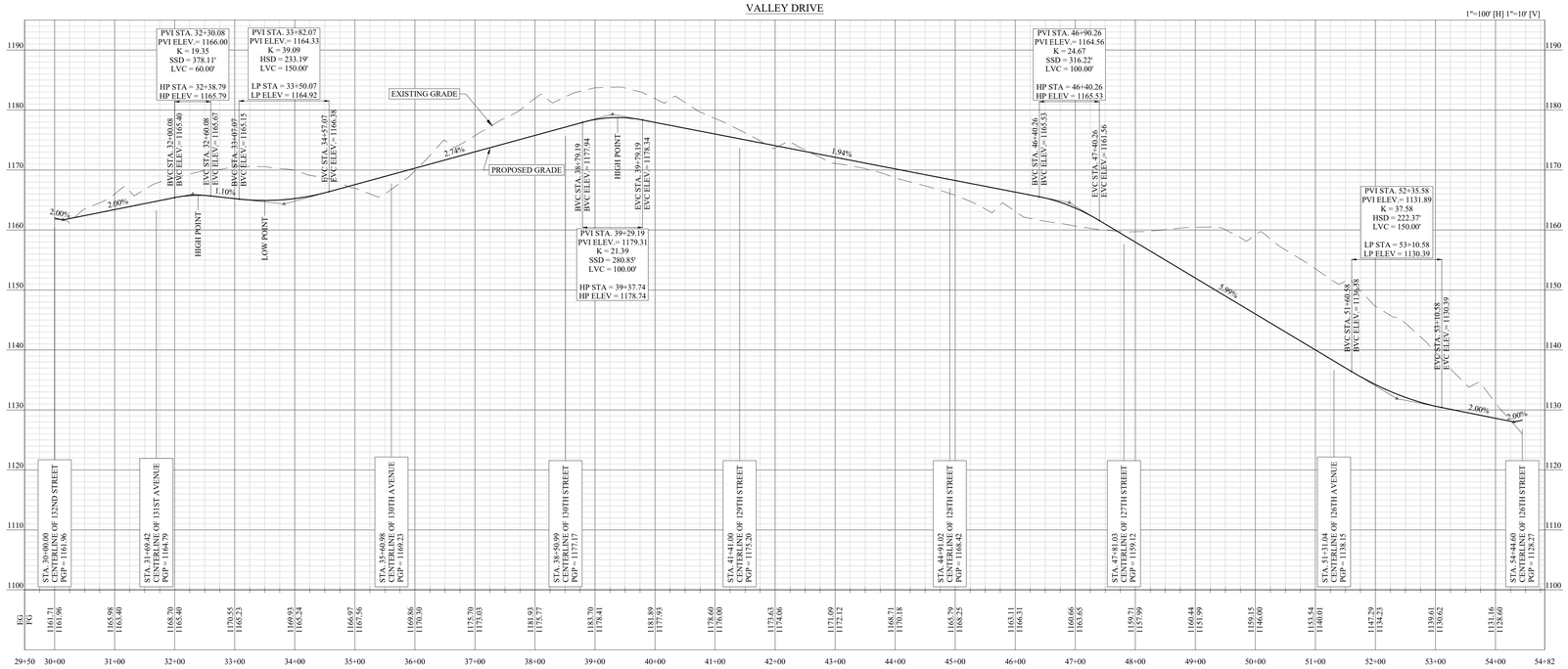
LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP

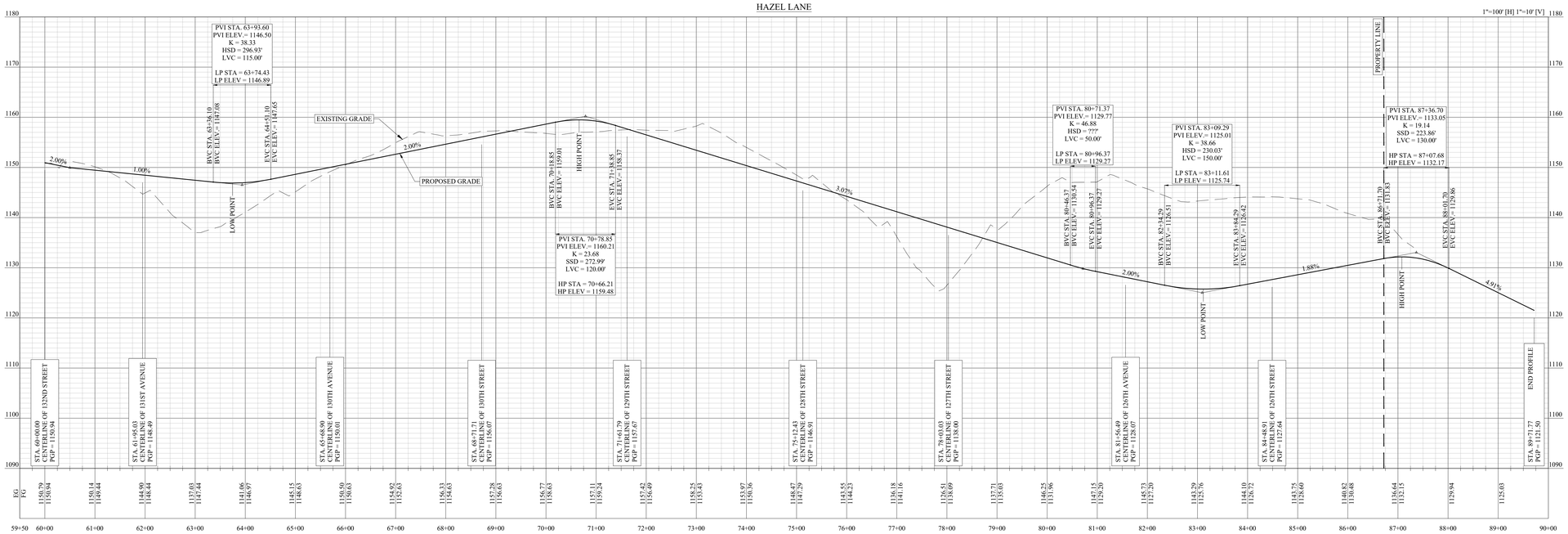
VALLEY DRIVE

1"=100' [H] 1"=10' [V]



HAZEL LANE

1"=100' [H] 1"=10' [V]



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ROADWAY PROFILES

VALLEY DRIVE AND HAZEL LANE

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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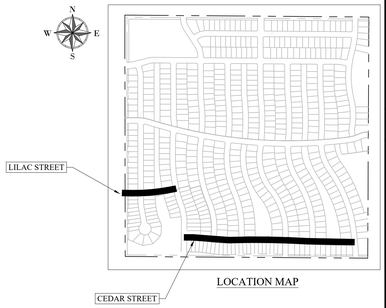
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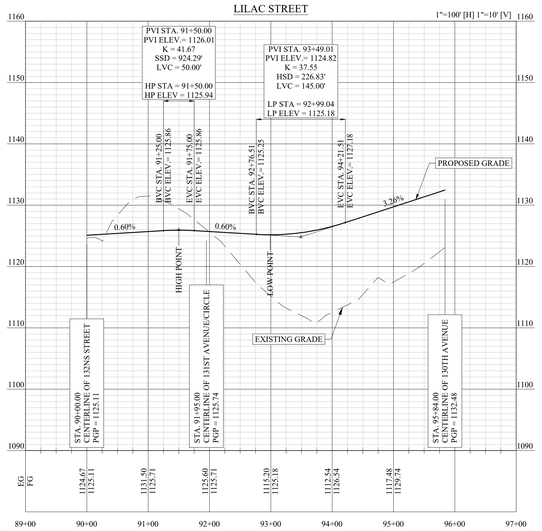
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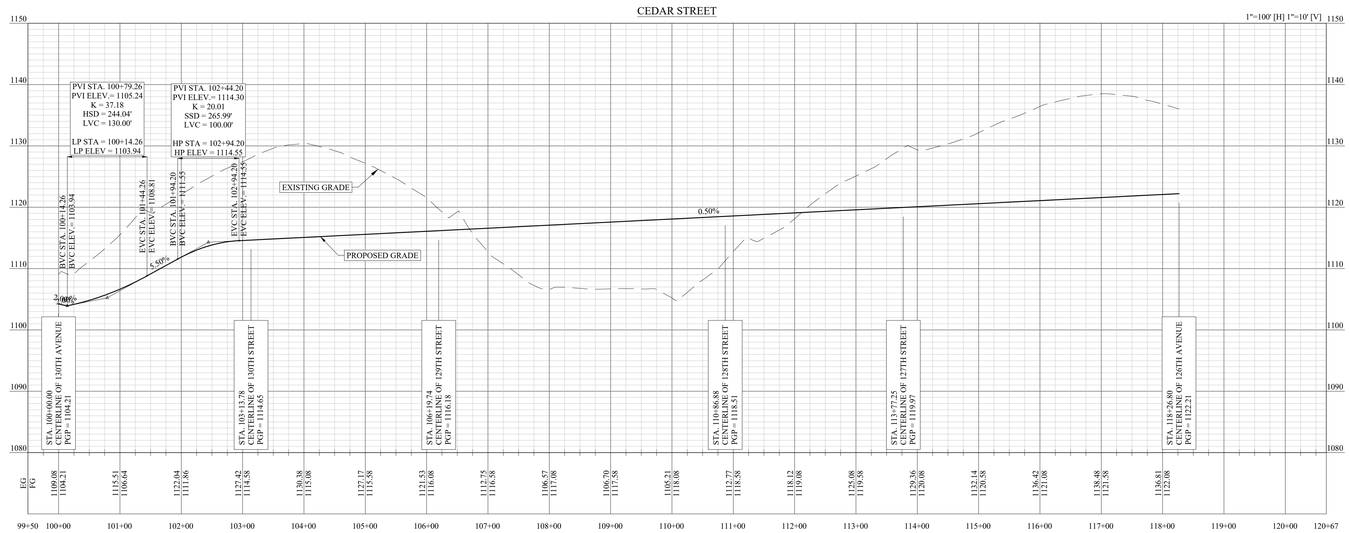
PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP





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ROADWAY PROFILES

LILAC STREET AND CEDAR STREET

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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DATE: 09/04/2026	PROJECT NUMBER: 145.001

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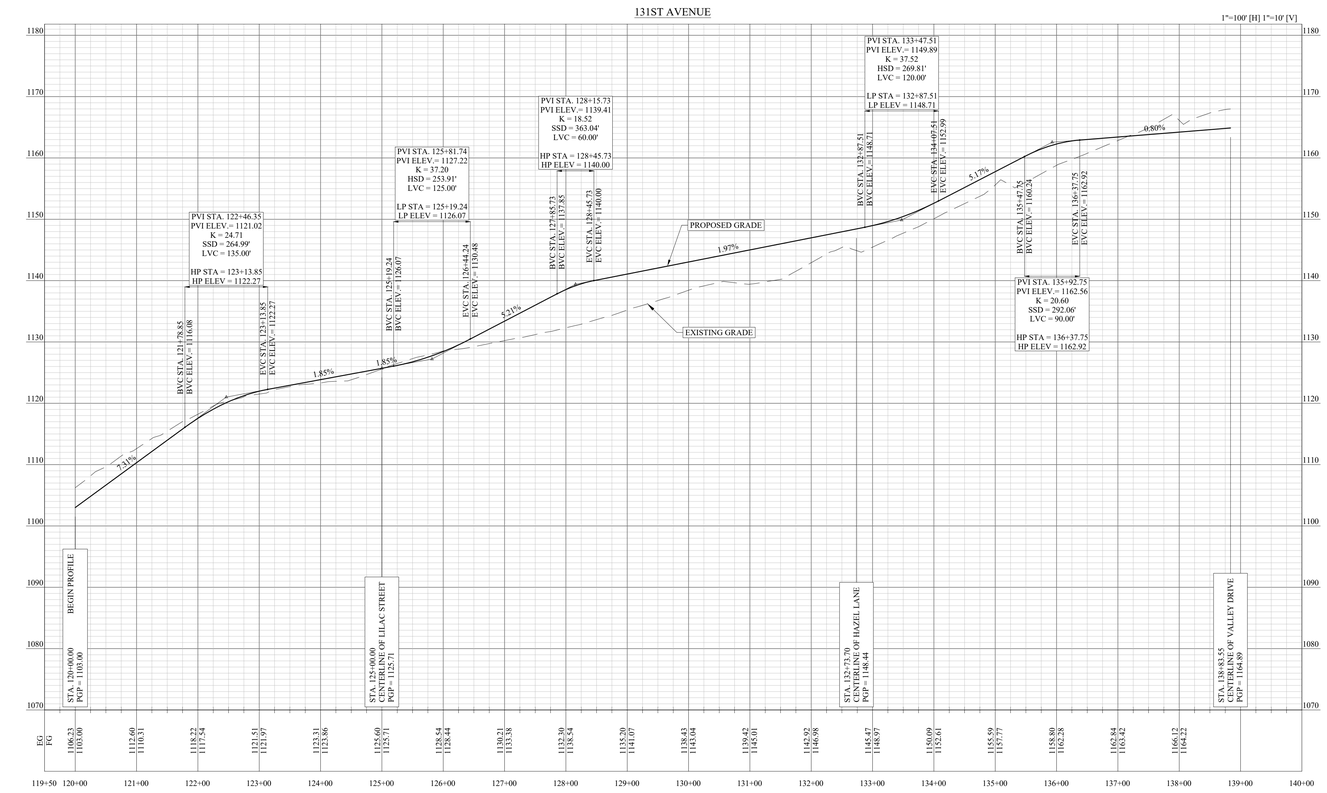
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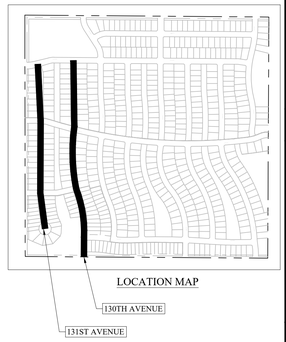
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FAIRMONT

PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N





LOCATION MAP

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ROADWAY PROFILES

131ST AVENUE AND 130TH AVENUE

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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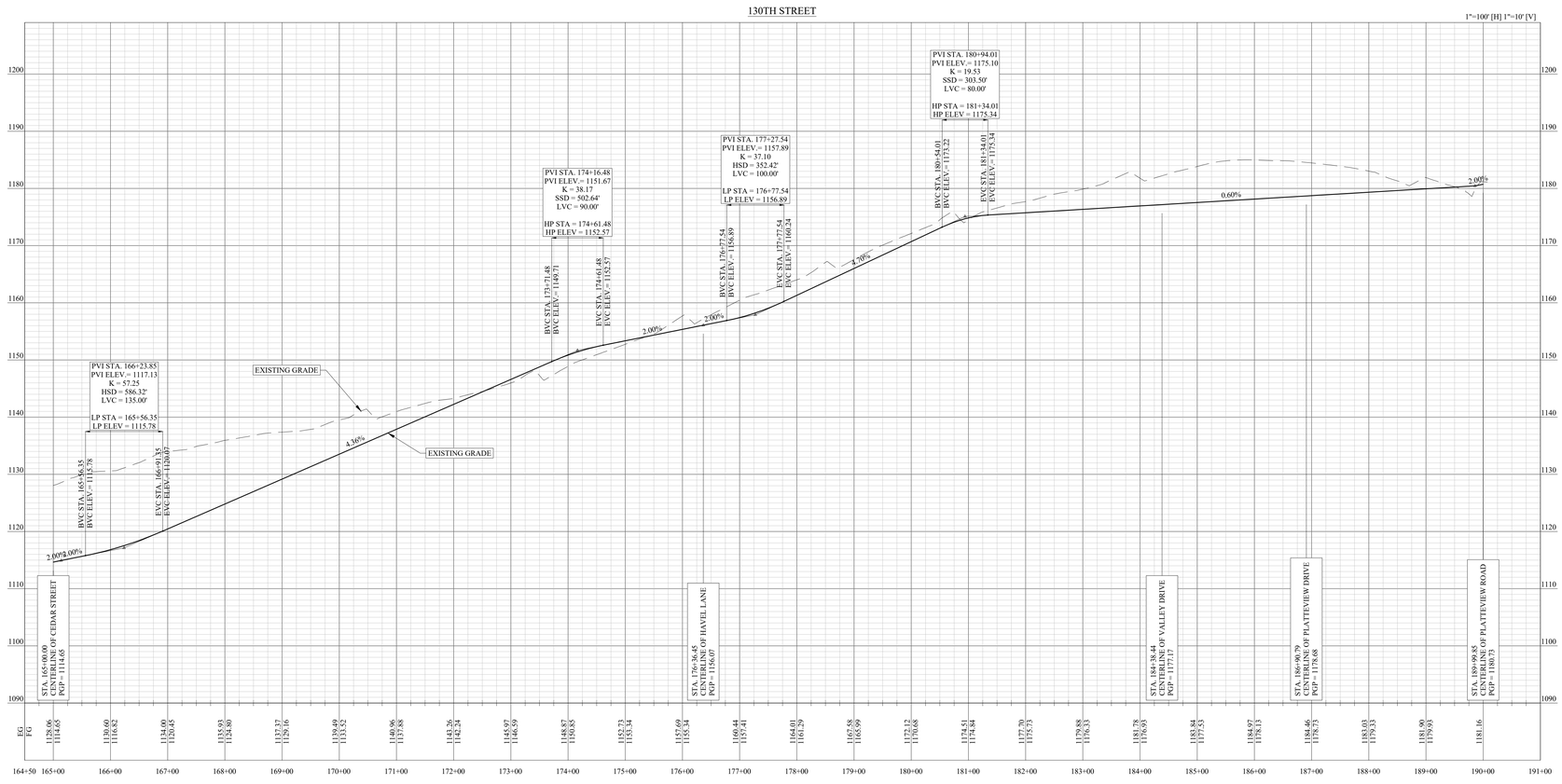
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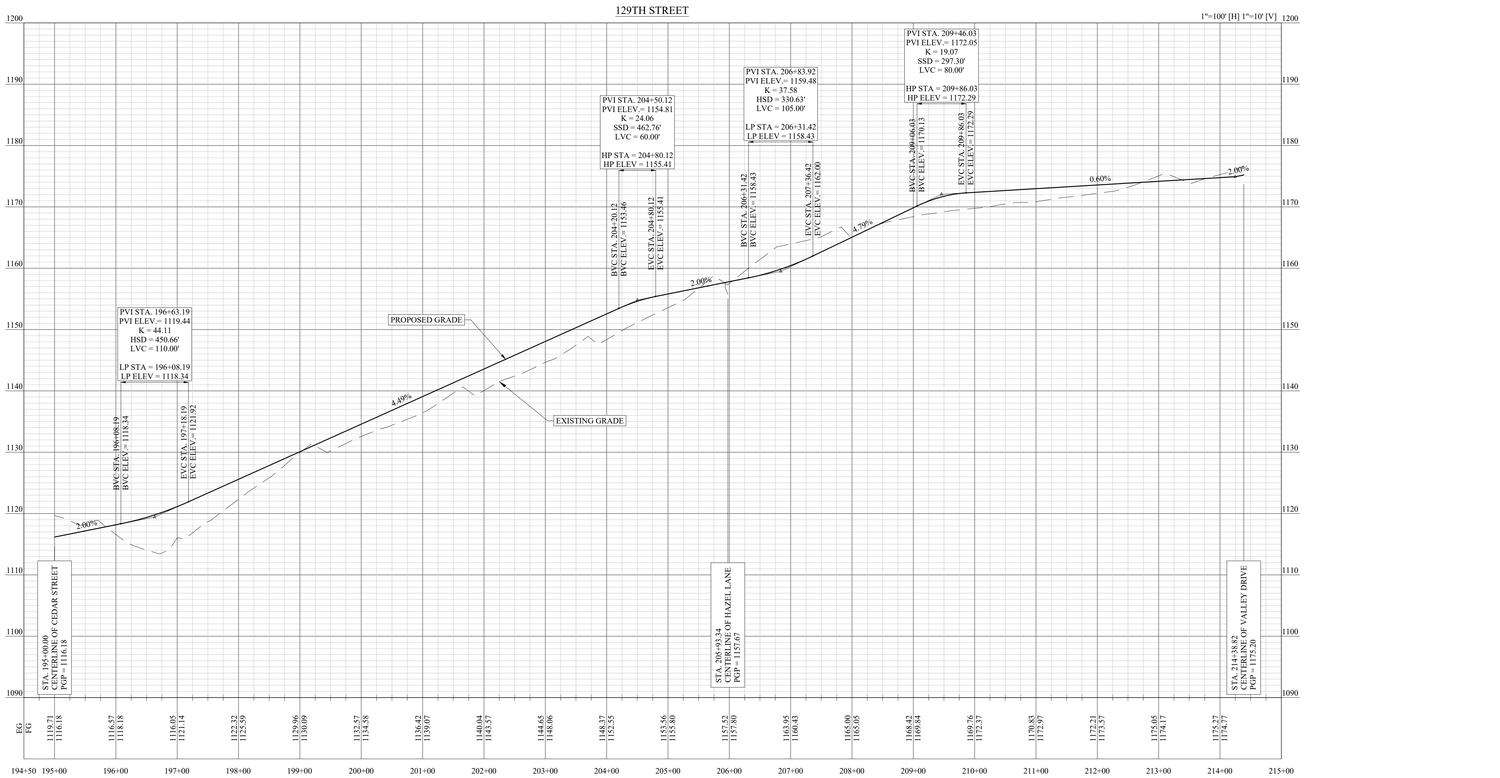
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FAIRMONT

PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N







LOCATION MAP

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NEBRASKA CA-4197

ROADWAY PROFILES

130TH STREET AND 129TH STREET

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS			
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DATE: 09/04/2026	PROJECT NUMBER: 145.001

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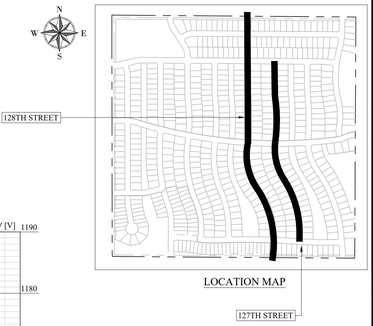
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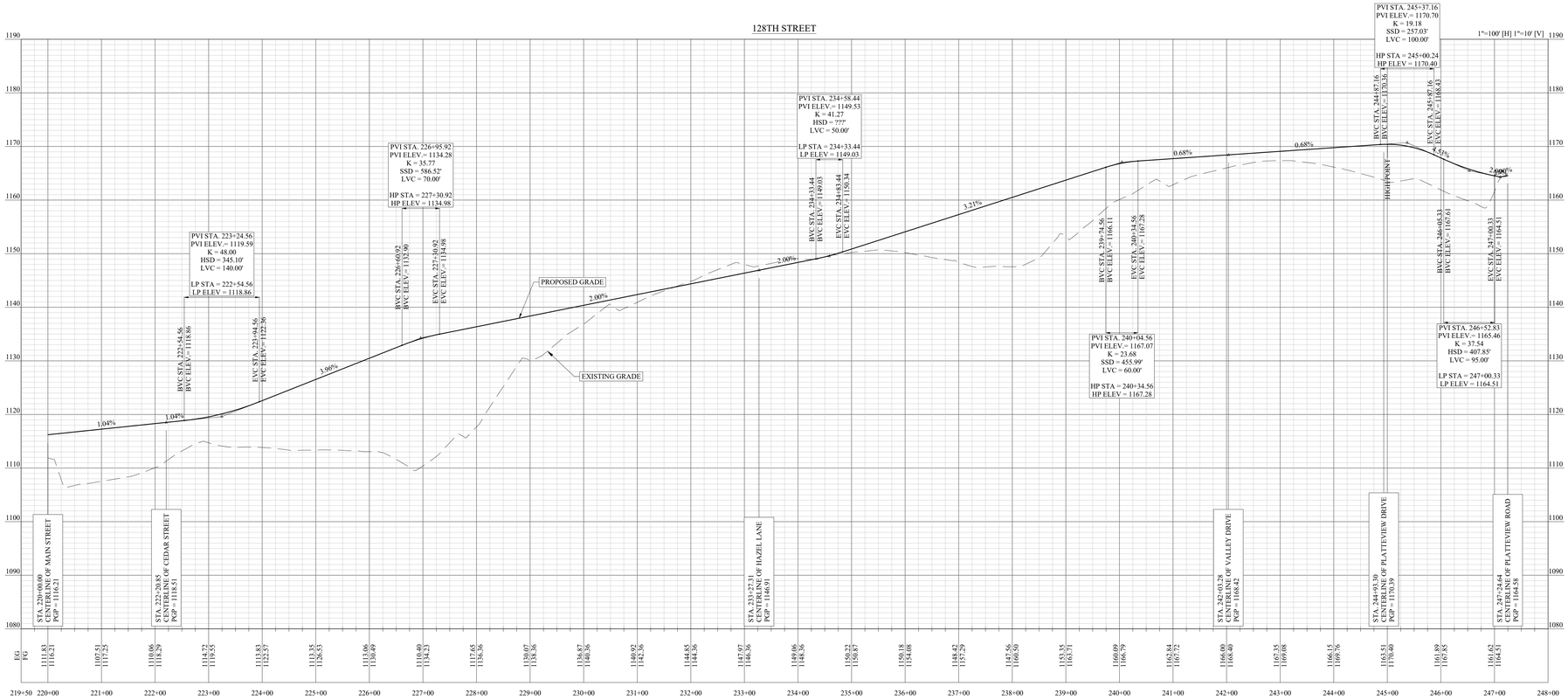
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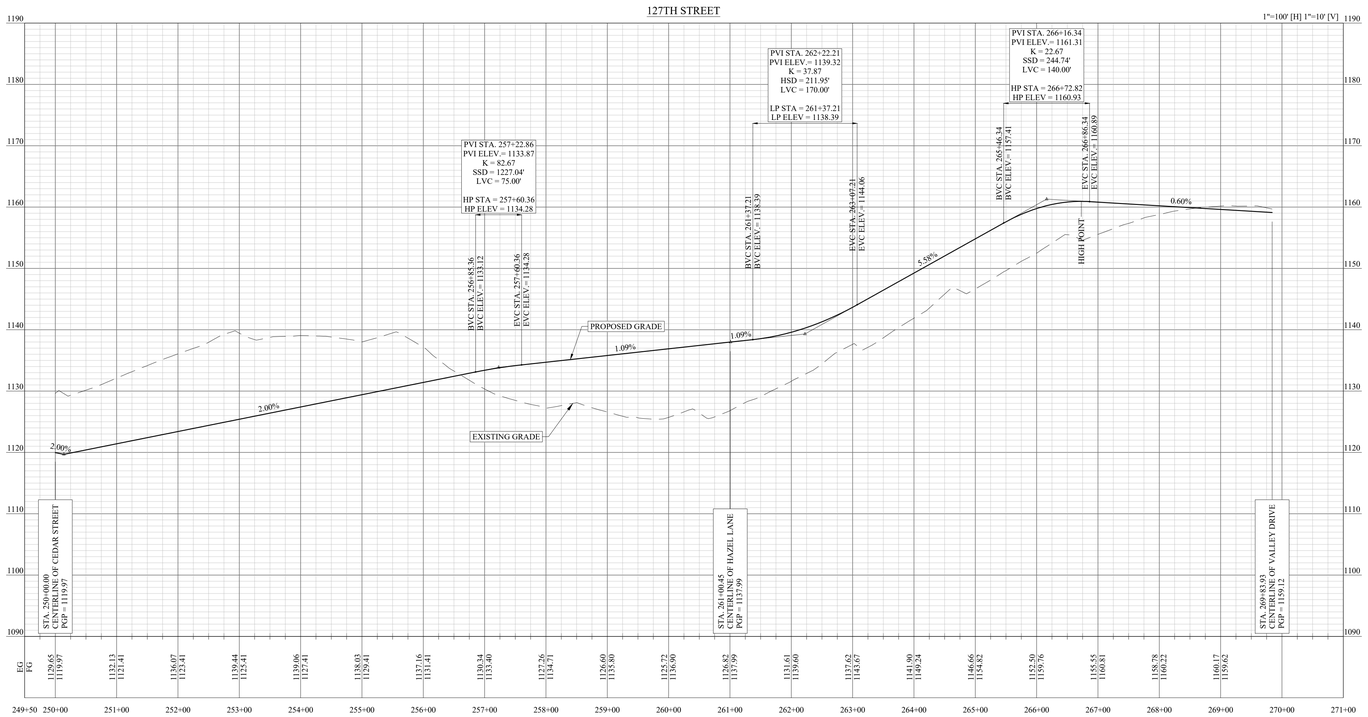
PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP





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ROADWAY PROFILES

128TH STREET AND 127TH STREET

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

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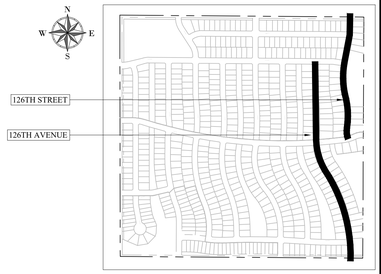
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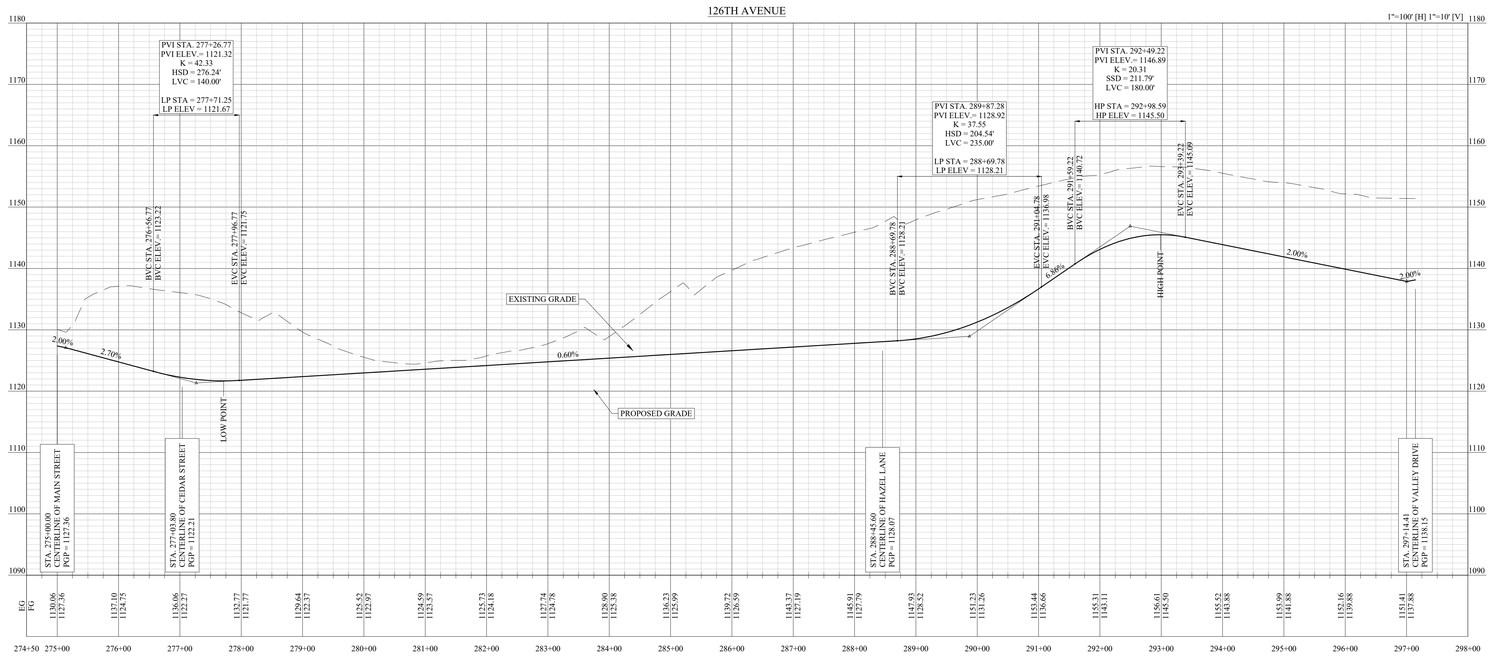
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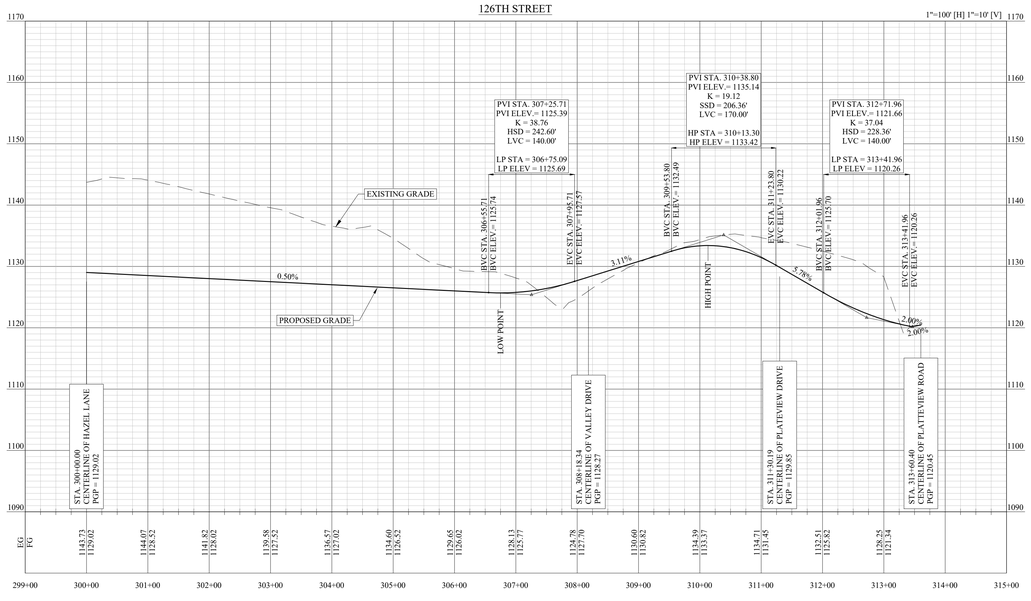
PRELIMINARY PLAT

LOTS 1-560 AND OUTLOTS A-N



LOCATION MAP





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NEBRASKA CA-4197

ROADWAY PROFILES

126TH AVENUE AND 126TH STREET

FAIRMONT

SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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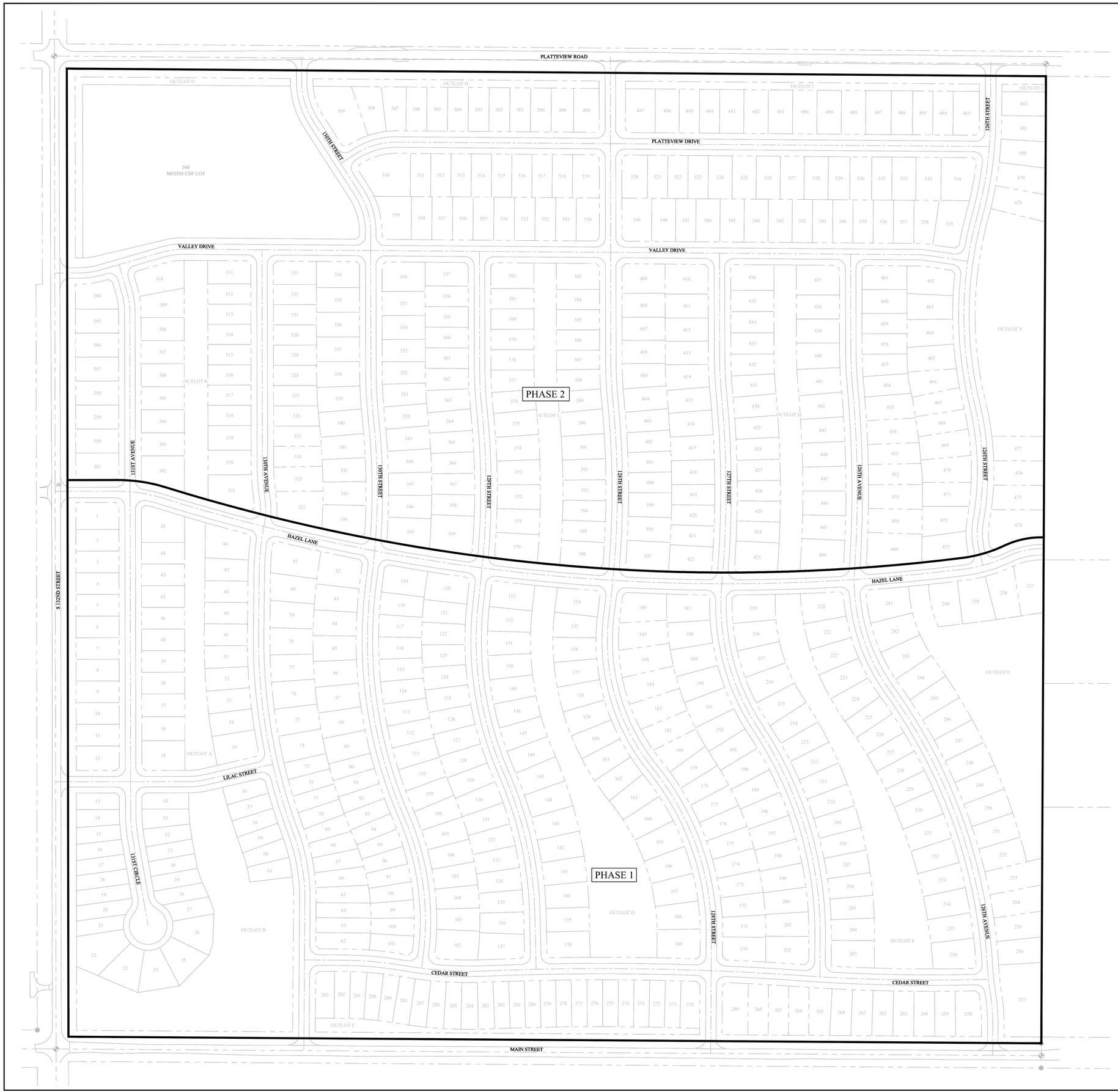
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FAIRMONT

PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N



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0 100 200
SCALE: 1"= 100

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PHASING PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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FAIRMONT
PRELIMINARY PLAT
LOTS 1-560 AND OUTLOTS A-N

PLATTEVIEW ROAD
PLATTEVIEW DRIVE
VALLEY DRIVE
HAZEL LANE
LILAC STREET
CEDAR STREET
MAIN STREET
S 72ND STREET
130TH STREET
126TH STREET
125TH AVENUE
126TH AVENUE
127TH AVENUE
128TH STREET
129TH STREET
130TH AVENUE
131ST AVENUE
131ST CIRCLE
560
MIXED-USE LOT
40.00' STREET TREE SPACING, TYP.
15.00' LANDSCAPING EASEMENT
OUTLOT A
OUTLOT B
OUTLOT C
OUTLOT D
OUTLOT E
OUTLOT F
OUTLOT M
OUTLOT N

N
W E
S

0 100 200
SCALE: 1"= 100

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TRAIL AND LANDSCAPING PLAN

FAIRMONT
SPRINGFIELD, NE

PRELIMINARY PLAT

PLAN REVISIONS

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DRAWN BY:	REVIEWED BY:
JR	JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

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Preliminary Drainage Report

Fairmont

132nd and Main

Springfield, Sarpy County, NE

FSE #: 145.001

FSE: CA-4197

September 4, 2026

Contents

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Appendix A	Hydrologic Soil Group Map
Appendix B	HydroCAD Calculations
Appendix C	Drainage Exhibits

Fairmont - 132nd and Main Street

1 Project Narrative

This report was prepared to analyze the hydrologic impacts of a proposed residential development in Springfield, NE. The development includes approximately 160 acres including county ROW. It is located northeast of Main Street and 132nd Street. The information provided within this drainage report includes a summary of the existing and proposed development conditions of the site.

The development will consist mainly of detached single-family lots, with attached single-family housing in the southwest corner, a mixed-use lot in the northwest corner, and all related infrastructure. Proposed drainage patterns will generally follow existing conditions. Three extended dry detention basins will provide runoff treatment and detention in accordance with City of Springfield requirements.

2 Existing Development Conditions

The existing site consists primarily of farmed agricultural fields in row-crop production, and a few minor grass drainage swales. Adjacent properties to the north and east primarily consist of row-crop agricultural land. Springfield Pines is an existing single-family residential development to the west, Springfield Highlands is a new development under construction west of 132nd Street and north of Springfield Pines. Village on Main is planned to be built out through the next few years in three phases directly south, which will be primarily a residential development. Platteview Road bounds the property to the north, Main Street to the south, and 132nd Street to the west. East of the site there are existing acreage lots, and a water tower lies across Platteview Road. All drainage from the property eventually ends up flowing to the Platte River, approximately 2 miles to the south.

The NRCS Web Soil Survey website categorizes the majority of the cropland area on site as Hydrologic Soil Group “C” with the main soil type identified as Contrary-Marhsall silty clay loams complex. The channel areas are generally categorized as Hydrologic Soil Group “C” with soil types identified as Judson silty clay loam. Appendix A presents a map of the hydrologic soil groups on site.

Subcatchment E1A includes the area near the intersection of Platteview Road and 132nd Street which ultimately discharges through a culvert at the northwest corner of the property. This area is primarily row crops.

Subcatchment E2A includes the majority of the Springfield Pines subdivision and is the only offsite flow into the site. This area is generally considered quarter acre residential lots. There is a small area of row crops at the north end of the watershed. Stormwater runoff is routed through storm sewer to a series of detention basins before discharging east across 132nd Street. Eventually this runoff routes through the southwest corner of the property to Impact Point 2. An existing drainage study was developed for the Springfield Pines development and was used for direct entry into the proposed development’s modeling.

Subcatchment E2B includes the west area of the property which drains through a Main Street culvert in the southwest part of the property at Impact Point 2. This area is primarily contoured

row crops. 132nd Street bounds the area to west and Main Street bounds to the south of the drainage area. A portion of those road right-of-ways drain toward the culvert.

Subcatchment E3A also includes contoured row crops in the center of the property. This area currently drains through a separate Main Street culvert further east at the south end of the proposed development at Impact Point 3. A portion of the Main Street right-of-way drains toward the culvert.

Subcatchment E4A includes the southeastern corner of the property. This small area is primarily row crops with a small section of Main Street. Stormwater runoff flows east towards the north ditch of Main Street at Impact Point 4.

Subcatchment E5A includes primarily contoured row crops at the southeast side of the site. Stormwater runoff flows to Impact Point 5 at the southeastern side of the property. At Impact Point 5 it continues to flow southeasterly through three existing culverts and into a drainage swale in the neighboring farm field.

Subcatchment E6A includes the northeast area of the property This subcatchment is also row crops. Stormwater runoff flows easterly into an existing grass swale and into a drainage swale in the neighboring farm field at Impact Point 6.

Subcatchment E7A includes the north side and northeast corner of the property This subcatchment is also row crops with a section of Platteview Road. Stormwater runoff flows easterly along the south side of Platteview Road in a drainage ditch as it reaches the northeast corner of the property which is Impact Point 7.

Table 1 shows the drainage area, curve number, concentration time, and flow rate for the existing watersheds. Appendix C identifies the locations of each existing subcatchment, along with the flow path used to determine the time of concentration. Appendix B includes the calculations for existing conditions directly from the HydroCAD design software.

Table 1 – Existing Drainage & Peak Flows

Basin	Area (acres)	CN	TC (min)	2-Year Flow (cfs)	10-Year Flow (cfs)	100-Year Flow (cfs)
E1A	5.6	80	18.8	8.1	15.4	31.7
E2A	47.2	-	9.0	48.1	133.7	210.5
E2B	51.8	79	25.9	59.6	116.4	243.9
E3A	59.8	78	26.5	64.2	127.8	271.7
E4A	0.2	92	2.4	0.7	1.2	2.0
E5A	14.6	78	14.2	21.7	42.8	90.7
E6A	13.0	78	14.6	19.2	37.9	80.0
E7A	15.9	79	20.8	20.7	40.3	84.1
TOTAL	208.1	79				

3 Proposed Development Conditions

The proposed site consists of 559 single family residential lots. There is also one mixed-use lot on the northwest corner of the site that is 6.24 acres. The southwest corner of the site is proposed to include 76 single-family attached lots. The remainder of the site is proposed to be the rest of the 483 single family residential lots with green spaces spread throughout the site.

Flow to Impact Points 1, 3, 4, and 7 will be significantly reduced or eliminated with proposed grading routing stormwater towards proposed detention basins at Impact Points 2, 5, and 6. Construction for the project will include mass grading, sanitary sewer, water main, storm sewer, street paving, power, gas main, private utilities, and drainage improvements.

Existing discharge from the neighboring Springfield Pines development flows into a pair of 48" CMP culverts that currently discharges into the site near the southwest corner. That flow is proposed to be routed around the proposed southwest basin and into Impact Point 2, and is unchanged in proposed conditions. In current conditions the 100 year storm event over tops 132nd street from the neighboring property at the pair of 48" culverts, the southwest basin has been designed to handle the small amount of overflow from the culverts for the 100 year event.

Subcatchment P1 includes the northwest corner of the property. This area is being reduced significantly from its original size to prevent adverse effects at Impact Point #1. It now primarily contains part of the proposed multi-use lot, and area in the right of ways of Platteview Road and 132nd Street. Matching the existing condition, stormwater runoff flows towards to an existing culvert that crosses Platteview Road.

Subcatchments P2A, P2B and P2D include the areas that drain to the proposed southwest detention basin. These areas are primarily composed of single family lots, with a majority of the mixed-use lot, green spaces, and the single family attached lots also being accounted for in these areas. P2B would be the area that would flow to Impact point 3 but has been rerouted to Impact Point 2. P2D will flow south through the existing drainage swale along the east side of 132nd Street before flowing into the proposed southwest basin. Subcatchment P2C includes the southern edge of the site. Plans to pave Main Street and add curbs and the proposed typical right of way section have been accounted for in the proposed model. This Subcatchment area accounts for the proposed backyards along the north side of Main Street flowing west and to Impact Point 2 undetained.

Subcatchment P4 includes the small area on the southeast corner of the site flowing east to Impact Point 4. This area and flow rate have been reduced from the existing conditions.

Subcatchment P5A includes the area that will drain to the southeast detention basin. The area is made up of primarily of single family lots and the basin itself. The basin outlets into the existing drainage swale at Impact Point 5, where it is then discharged with the undetained flow from Subcatchment P5B, which naturally drains to the impact point.

Subcatchment P6A includes the northeast portion of the property This subcatchment is made up of primarily single family residential lots and the northeast detention basin. The northeast basin discharges into the existing drainage swale at Impact Point 6 with a heavily reduced peak flow from the existing conditions to protect the neighboring property. Impact Point 6 also includes flow from Subcatchment P6B, this is the undetained area that naturally flows to the impact point.

Subcatchement P7A includes the area on the northern edge of the site that flows east along the existing drainage ditch to the south of Platteview Road. This area is made up of the southern half

of the Platteview roadway and a portion of the backyards from single family lots on the northeast portion of the site.

Table 2 shows the drainage area, curve number, concentration time, and flow rate for the proposed watersheds. Appendix C identifies the locations of each proposed subcatchment, along with the flow path used to determine the time of concentration. Appendix B includes the calculations for proposed conditions directly from the HydroCAD design software.

Table 2 – Proposed Drainage & Peak Flows

Basin	Area (acres)	CN	TC (min)	2-Year Flow (cfs)	10-Year Flow (cfs)	100-Year Flow (cfs)
P1	2.1	81	13.8	3.9	7.3	14.6
P2A	59.6	84	27.1	87.0	155.4	301.7
P2B	29.8	82	24.6	41.6	76.7	153.1
P2C	6.3	83	15.5	11.7	21.2	41.5
P2D	4.7	84	19.0	8.3	14.8	28.6
P4	0.4	81	1.8	0.1	0.2	0.5
P5A	24.4	82	14.2	44.8	82.3	164.0
P5B	1.1	79	8.3	2.2	4.2	8.7
P6A	24.9	82	18.2	40.7	75.2	149.7
P6B	0.7	79	10.3	1.2	2.3	4.8
P7	6.9	81	14.9	11.8	22.1	44.4
E2A	47.2	-	9.0	48.1	133.7	210.5
TOTAL	208.1	83				

PCSMP requirements will be met mainly by using three large dry detention basins. Proposed lots within the development are modeled using various NRCS CN-values. The proposed single family attached lots were modeled with the NRCS CN-value for 1/8-acre residential lot. The proposed single family lots are modeled with the NRCS CN-value for the 1/4-acre residential lot. The proposed mixed-use lot is modeled with the NRCS CN-value for the urban commercial lot. The proposed grassed drainage areas are modeled with the NRCS CN-value for >75% grass cover, in good condition. These designated CN-values provide the best approximation of the runoff coefficient based on impervious areas for the proposed mix of lots. It should be noted that individual lots may vary.

4 Drainage Summary

HydroCAD Version 10.20-3 modeling software was utilized in the analysis, using the SCS TR-20 method to analyze the peak runoff rates for the existing and proposed development conditions. Modeling results for both conditions are shown in Appendix B.

The development has been designed to cause “no adverse impact” compared to the existing conditions. This is partially achieved by reducing runoff areas at the corners of the property to reduce the amount of undetained flow. Three BMPs utilized for this project are large dry detention basins near the southwest, southeast, and northeast corners of site which have been designed to reduce peak runoff rates. Peak runoff rates are checked versus existing conditions for the 2-, 10-, and 100-year rainfall events for Sarpy County. It should be noted that peak flows at Impact Points 2 and 3 incorporate modeling for existing and proposed Main Street culverts.

The proposed detention basins are also intended to treat water quality for the first 0.5” runoff. This is achieved by creating a water quality orifice at the bottom of each of the proposed detention outlet structures, and then a larger opening above the elevation at which the desired water quality volume is reached.

The following Table 3 summarizes the modeling results which reflect the total peak flow (cfs) leaving the site for the existing development conditions, and the proposed development conditions. Table 4 summarizes the required and provided water quality. Table 5 summarizes the peak inflows, outflows, water elevations, and storage volumes for detention basins in each storm event.

Table 3 – Existing vs. Proposed Peak Flows

Impact Point	2-Year Flow (cfs)		10-Year Flow (cfs)		100-Year Flow (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
1	8.1	3.9	15.4	7.2	31.7	14.6
2	91.3	78.3	243.7	239.7	449.2	439.0
3	45.6	0.0	57.2	0.0	70.7	0.0
4	0.7	0.1	1.2	0.2	2.0	0.5
5	21.7	3.5	42.8	19.7	90.7	40.0
6	19.2	2.4	37.9	18.9	80.0	41.8
7	20.7	11.8	40.3	22.1	84.1	44.4
TOTAL	207.3	99.9	438.4	307.8	808.4	580.2

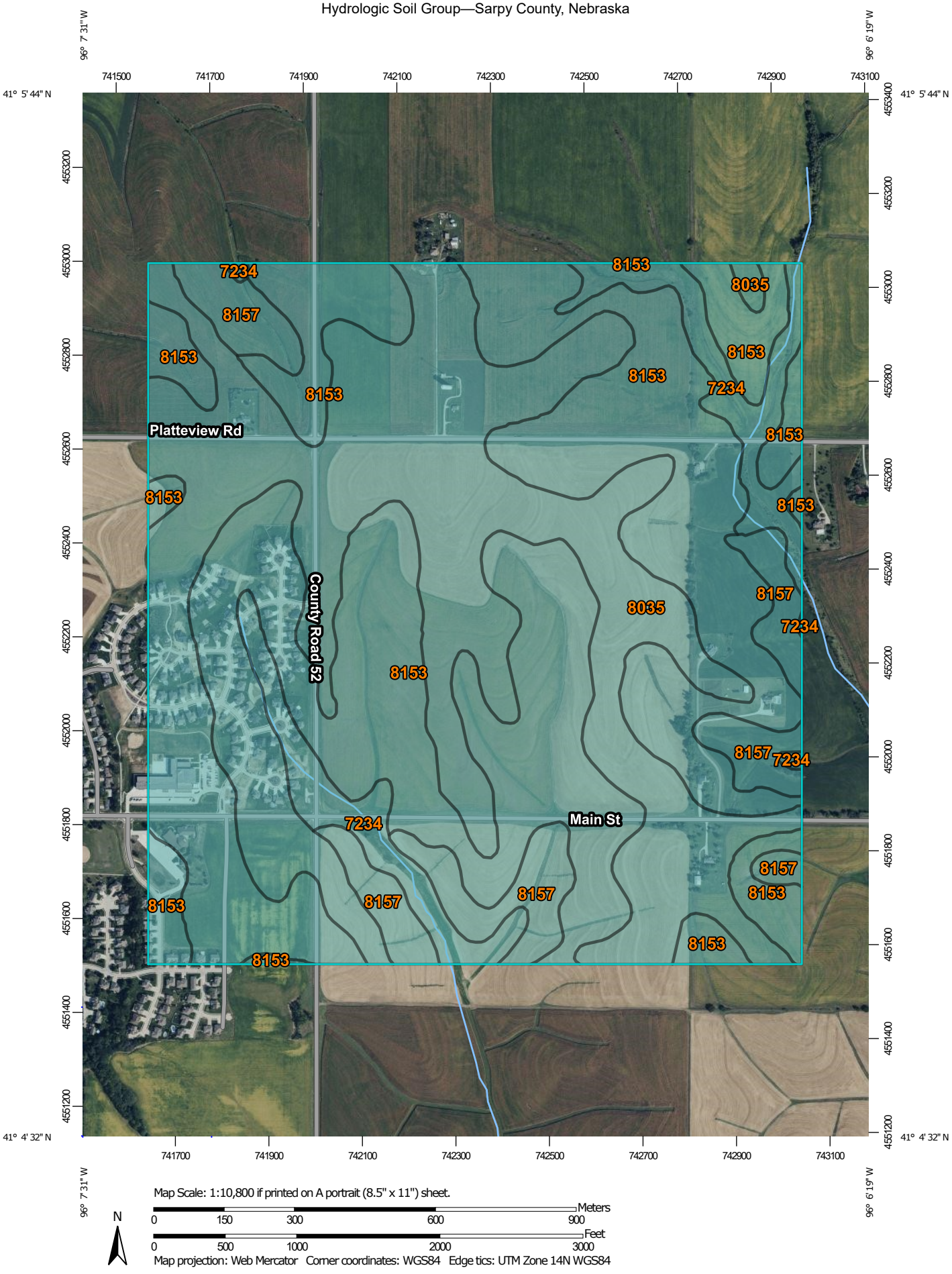
Table 4 – Water Quality Treatment

Impact Point	Required Volume (cubic feet)	Available Volume (cubic feet)	Drawdown Time (hours)
1	3,929	-	-
2	182,499	190,555	31.5
3	-	-	-
4	79	-	-
5	46,244	86,918	25
6	46,291	92,958	33
7	12,459	-	-
TOTAL	291,501	370,431	-

Table 5 – Detention Basin Design

Event	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Elevation (feet)	Peak Storage Volume (cf)
Southwest Basin (P2A P)				
2-Year	135.4	30.9	1,098.66	270,086
10-Year	244.9	105.9	1,100.44	401,430
100-Year	479.6	224.6	1,103.89	715,289
Southeast Basin (P5 P)				
2-Year	44.8	2.0	1,111.73	79,378
10-Year	82.3	19.2	1,112.94	114,805
100-Year	164.0	38.6	1,115.91	224,312
Northeast Basin (P6 P)				
2-Year	40.6	2.0	1,120.62	82,556
10-Year	75.2	18.6	1,121.89	119,947
100-Year	149.7	41.1	1,124.73	227,691

APPENDIX A


96° 7' 31" W
96° 6' 19" W
741500
741700
741900
742100
742300
742500
742700
742900
743100
41° 5' 44" N
41° 4' 32" N
4553400
4553200
4553000
4552800
4552600
4552400
4552200
4552000
4551800
4551600
4551400
4551200
7234
8153
8035
8157
Platteview Rd
County Road 52
Main St
Map Scale: 1:10,800 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 150 300 600 900
Feet
0 500 1000 2000 3000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sarpy County, Nebraska
Survey Area Data: Version 19, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7234	Judson silty clay loam, 2 to 6 percent slopes	C	34.8	6.7%
8035	Marshall-Contrary silty clay loams, 2 to 7 percent slopes	C	195.4	37.8%
8153	Contrary-Marshall silty clay loams, 6 to 11 percent slopes	C	246.7	47.6%
8157	Contrary-Monona-Ida complex, 6 to 17 percent slopes	C	40.8	7.9%
Totals for Area of Interest			**517.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

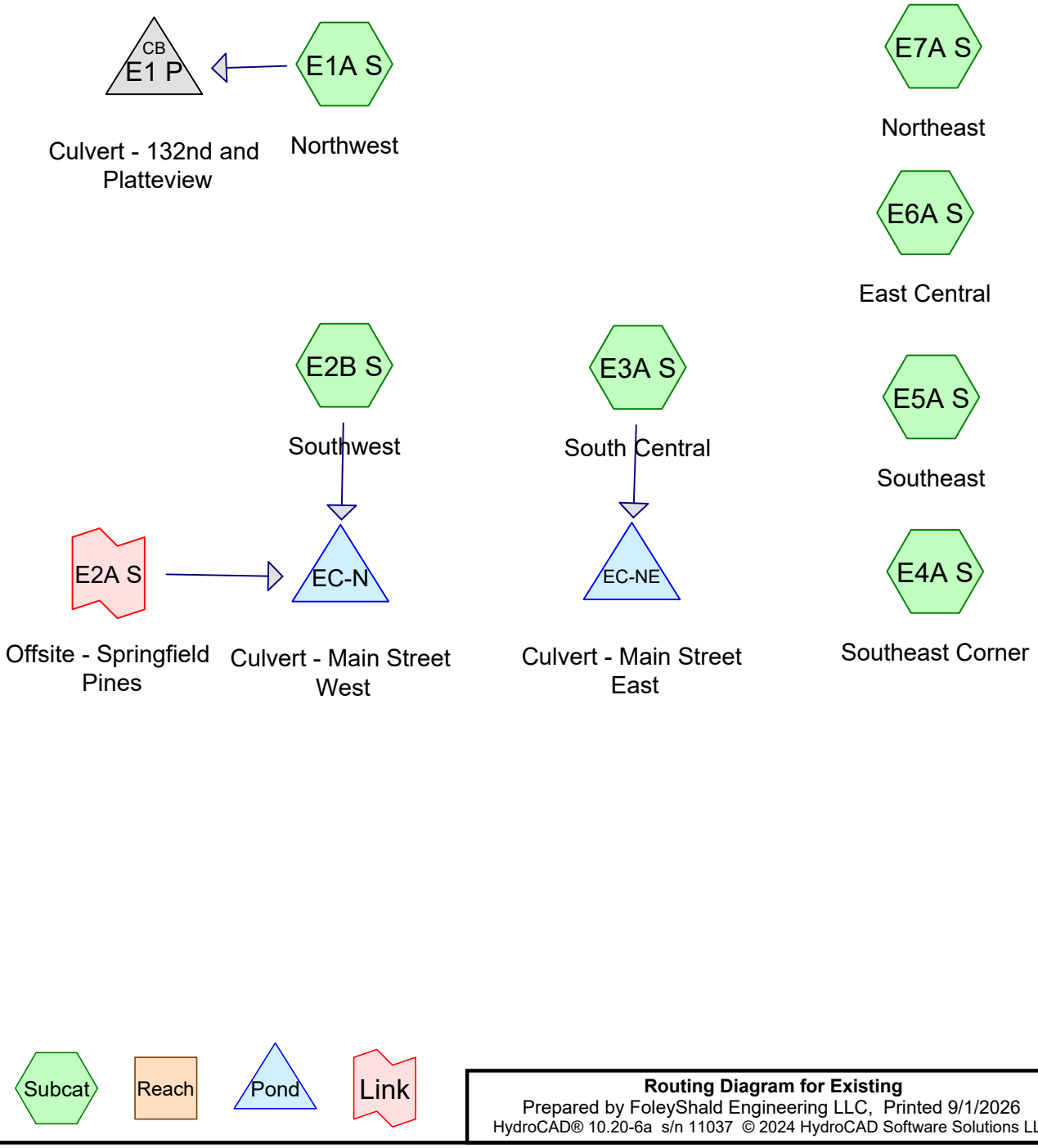
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX B



Routing Diagram for Existing
Prepared by FoleyShald Engineering LLC, Printed 9/1/2026
HydroCAD® 10.20-6a s/n 11037 © 2024 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
6.060	92	Paved roads w/open ditches, 50% imp, HSG C (E1A S, E2B S, E3A S, E4A S, E7A S)
153.700	78	Row crops, C&T, Good, HSG C (E1A S, E2B S, E3A S, E5A S, E6A S, E7A S)
1.100	76	Woods/grass comb., Fair, HSG C (E5A S, E6A S, E7A S)
160.860	**79**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1A S: Northwest Runoff Area=5.590 ac 7.42% Impervious Runoff Depth=1.27"
Flow Length=1,390' Tc=18.8 min CN=80 Runoff=8.09 cfs 0.593 af

Subcatchment E2B S: Southwest Runoff Area=51.800 ac 2.64% Impervious Runoff Depth=1.21"
Flow Length=2,680' Tc=25.9 min CN=79 Runoff=59.62 cfs 5.225 af

Subcatchment E3A S: South Central Runoff Area=59.780 ac 0.85% Impervious Runoff Depth=1.15"
Flow Length=2,740' Tc=26.5 min CN=78 Runoff=64.21 cfs 5.730 af

Subcatchment E4A S: Southeast Corner Runoff Area=0.170 ac 50.00% Impervious Runoff Depth=2.19"
Flow Length=130' Tc=2.4 min CN=92 Runoff=0.74 cfs 0.031 af

Subcatchment E5A S: Southeast Runoff Area=14.610 ac 0.00% Impervious Runoff Depth=1.15"
Flow Length=1,110' Tc=14.2 min CN=78 Runoff=21.69 cfs 1.400 af

Subcatchment E6A S: East Central Runoff Area=13.020 ac 0.00% Impervious Runoff Depth=1.15"
Flow Length=940' Tc=14.6 min CN=78 Runoff=19.18 cfs 1.248 af

Subcatchment E7A S: Northeast Runoff Area=15.890 ac 4.12% Impervious Runoff Depth=1.21"
Flow Length=1,820' Tc=20.8 min CN=79 Runoff=20.69 cfs 1.603 af

Link E2A S: Offsite - Springfield Pines Manual Hydrograph delayed by 9.0 min Inflow=48.12 cfs 29.321 af
Area= 47.200 ac 25.54% Imperv. Primary=48.12 cfs 29.321 af

Total Runoff Area = 160.860 ac Runoff Volume = 15.830 af Average Runoff Depth = 1.18"
98.12% Pervious = 157.830 ac 1.88% Impervious = 3.030 ac

Summary for Subcatchment E1A S: Northwest

Runoff = 8.09 cfs @ 12.29 hrs, Volume= 0.593 af, Depth= 1.27"
Routed to Pond E1 P : Culvert - 132nd and Platteview

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
4.760	78	Row crops, C&T, Good, HSG C
0.830	92	Paved roads w/open ditches, 50% imp, HSG C
5.590	80	Weighted Average
5.175		92.58% Pervious Area
0.415		7.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	300	0.0267	0.48		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
5.2	640	0.0526	2.06		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
3.2	450	0.0244	2.34		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
18.8	1,390	Total			

Summary for Subcatchment E2B S: Southwest

Runoff = 59.62 cfs @ 12.39 hrs, Volume= 5.225 af, Depth= 1.21"
Routed to Pond EC-N : Culvert - Main Street West

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
49.070	78	Row crops, C&T, Good, HSG C
2.730	92	Paved roads w/open ditches, 50% imp, HSG C
51.800	79	Weighted Average
50.435		97.36% Pervious Area
1.365		2.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.0	300	0.0233	0.46		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
1.8	270	0.0778	2.51		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
13.1	2,110	0.0322	2.69		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
25.9	2,680	Total			

Summary for Subcatchment E3A S: South Central

Runoff = 64.21 cfs @ 12.40 hrs, Volume= 5.730 af, Depth= 1.15"
Routed to Pond EC-NE : Culvert - Main Street East

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
58.760	78	Row crops, C&T, Good, HSG C
1.020	92	Paved roads w/open ditches, 50% imp, HSG C
59.780	78	Weighted Average
59.270		99.15% Pervious Area
0.510		0.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	300	0.0300	0.50		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
3.3	400	0.0500	2.01		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
13.3	2,040	0.0289	2.55		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
26.5	2,740	Total			

Summary for Subcatchment E4A S: Southeast Corner

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.74 cfs @ 12.08 hrs, Volume= 0.031 af, Depth= 2.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
0.170	92	Paved roads w/open ditches, 50% imp, HSG C
0.085		50.00% Pervious Area
0.085		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	30	0.1666	0.30		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
0.8	100	0.0200	2.12		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
2.4	130	Total			

Summary for Subcatchment E5A S: Southeast

Runoff = 21.69 cfs @ 12.24 hrs, Volume= 1.400 af, Depth= 1.15"
Routed to nonexistent node IP2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
14.000	78	Row crops, C&T, Good, HSG C
0.610	76	Woods/grass comb., Fair, HSG C
14.610	78	Weighted Average
14.610		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	300	0.0333	0.53		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
1.3	180	0.0611	2.22		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
3.4	630	0.0429	3.11		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
14.2	1,110	Total			

Summary for Subcatchment E6A S: East Central

Runoff = 19.18 cfs @ 12.24 hrs, Volume= 1.248 af, Depth= 1.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
12.760	78	Row crops, C&T, Good, HSG C
0.260	76	Woods/grass comb., Fair, HSG C
13.020	78	Weighted Average
13.020		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	300	0.0367	0.55		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
5.5	640	0.0469	1.95		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
14.6	940	Total			

Summary for Subcatchment E7A S: Northeast

Runoff = 20.69 cfs @ 12.32 hrs, Volume= 1.603 af, Depth= 1.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (ac)	CN	Description
14.350	78	Row crops, C&T, Good, HSG C
1.310	92	Paved roads w/open ditches, 50% imp, HSG C
0.230	76	Woods/grass comb., Fair, HSG C
15.890	79	Weighted Average
15.235		95.88% Pervious Area
0.655		4.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	300	0.0333	0.53		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
7.8	920	0.0478	1.97		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
3.5	600	0.0367	2.87		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
20.8	1,820	Total			

Summary for Link E2A S: Offsite - Springfield Pines

Inflow Area = 47.200 ac, 25.54% Impervious, Inflow Depth = 7.45" for 2-Year event
Inflow = 48.12 cfs @ 12.00 hrs, Volume= 29.321 af
Primary = 48.12 cfs @ 12.15 hrs, Volume= 29.321 af, Atten= 0%, Lag= 9.0 min
Routed to Pond EC-N : Culvert - Main Street West

Primary outflow = Inflow delayed by 9.0 min, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

2-Year 15 Point manual hydrograph, To= 5.00 hrs, dt= 1.00 hrs, Area= 47.200 ac, 25.54% Imp., cfs =
3.18 6.51 12.07 19.85 29.22 38.43 45.58 48.12 45.58 38.43
29.22 19.85 12.07 6.51 3.18

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1A S: Northwest Runoff Area=5.590 ac 7.42% Impervious Runoff Depth=2.40"
Flow Length=1,390' Tc=18.8 min CN=80 Runoff=15.44 cfs 1.119 af

Subcatchment E2B S: Southwest Runoff Area=51.800 ac 2.64% Impervious Runoff Depth=2.32"
Flow Length=2,680' Tc=25.9 min CN=79 Runoff=116.39 cfs 10.005 af

Subcatchment E3A S: South Central Runoff Area=59.780 ac 0.85% Impervious Runoff Depth=2.24"
Flow Length=2,740' Tc=26.5 min CN=78 Runoff=127.82 cfs 11.135 af

Subcatchment E4A S: Southeast Corner Runoff Area=0.170 ac 50.00% Impervious Runoff Depth=3.53"
Flow Length=130' Tc=2.4 min CN=92 Runoff=1.16 cfs 0.050 af

Subcatchment E5A S: Southeast Runoff Area=14.610 ac 0.00% Impervious Runoff Depth=2.24"
Flow Length=1,110' Tc=14.2 min CN=78 Runoff=42.84 cfs 2.721 af

Subcatchment E6A S: East Central Runoff Area=13.020 ac 0.00% Impervious Runoff Depth=2.24"
Flow Length=940' Tc=14.6 min CN=78 Runoff=37.90 cfs 2.425 af

Subcatchment E7A S: Northeast Runoff Area=15.890 ac 4.12% Impervious Runoff Depth=2.32"
Flow Length=1,820' Tc=20.8 min CN=79 Runoff=40.30 cfs 3.069 af

Link E2A S: Offsite - Springfield Pines Manual Hydrograph delayed by 9.0 min Inflow=133.74 cfs 81.497 af
Area= 47.200 ac 25.54% Imperv. Primary=133.74 cfs 81.497 af

Total Runoff Area = 160.860 ac Runoff Volume = 30.525 af Average Runoff Depth = 2.28"
98.12% Pervious = 157.830 ac 1.88% Impervious = 3.030 ac

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1A S: Northwest Runoff Area=5.590 ac 7.42% Impervious Runoff Depth=4.99"
Flow Length=1,390' Tc=18.8 min CN=80 Runoff=31.66 cfs 2.325 af

Subcatchment E2B S: Southwest Runoff Area=51.800 ac 2.64% Impervious Runoff Depth=4.88"
Flow Length=2,680' Tc=25.9 min CN=79 Runoff=243.85 cfs 21.057 af

Subcatchment E3A S: South Central Runoff Area=59.780 ac 0.85% Impervious Runoff Depth=4.77"
Flow Length=2,740' Tc=26.5 min CN=78 Runoff=271.72 cfs 23.743 af

Subcatchment E4A S: Southeast Corner Runoff Area=0.170 ac 50.00% Impervious Runoff Depth=6.37"
Flow Length=130' Tc=2.4 min CN=92 Runoff=2.01 cfs 0.090 af

Subcatchment E5A S: Southeast Runoff Area=14.610 ac 0.00% Impervious Runoff Depth=4.77"
Flow Length=1,110' Tc=14.2 min CN=78 Runoff=90.74 cfs 5.803 af

Subcatchment E6A S: East Central Runoff Area=13.020 ac 0.00% Impervious Runoff Depth=4.77"
Flow Length=940' Tc=14.6 min CN=78 Runoff=79.97 cfs 5.171 af

Subcatchment E7A S: Northeast Runoff Area=15.890 ac 4.12% Impervious Runoff Depth=4.88"
Flow Length=1,820' Tc=20.8 min CN=79 Runoff=84.08 cfs 6.459 af

Link E2A S: Offsite - Springfield Pines Manual Hydrograph delayed by 9.0 min Inflow=210.48 cfs 128.252 af
Area= 47.200 ac 25.54% Imperv. Primary=210.48 cfs 128.252 af

Total Runoff Area = 160.860 ac Runoff Volume = 64.649 af Average Runoff Depth = 4.82"
98.12% Pervious = 157.830 ac 1.88% Impervious = 3.030 ac

Summary for Pond EC-N: Culvert - Main Street West

Inflow Area = 99.000 ac, 13.56% Impervious, Inflow Depth = 4.19" for 2-Year event
Inflow = 107.13 cfs @ 12.39 hrs, Volume= 34.546 af
Outflow = 91.27 cfs @ 12.57 hrs, Volume= 34.544 af, Atten= 15%, Lag= 11.2 min
Primary = 91.27 cfs @ 12.57 hrs, Volume= 34.544 af
Routed to nonexistent node R-C
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to nonexistent node R-C

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,099.42' @ 12.57 hrs Surf.Area= 53,412 sf Storage= 21,315 cf

Plug-Flow detention time= 0.9 min calculated for 34.508 af (100% of inflow)
Center-of-Mass det. time= 0.9 min (746.3 - 745.4)

Volume	Invert	Avail.Storage	Storage Description
#1	1,093.00'	382,456 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

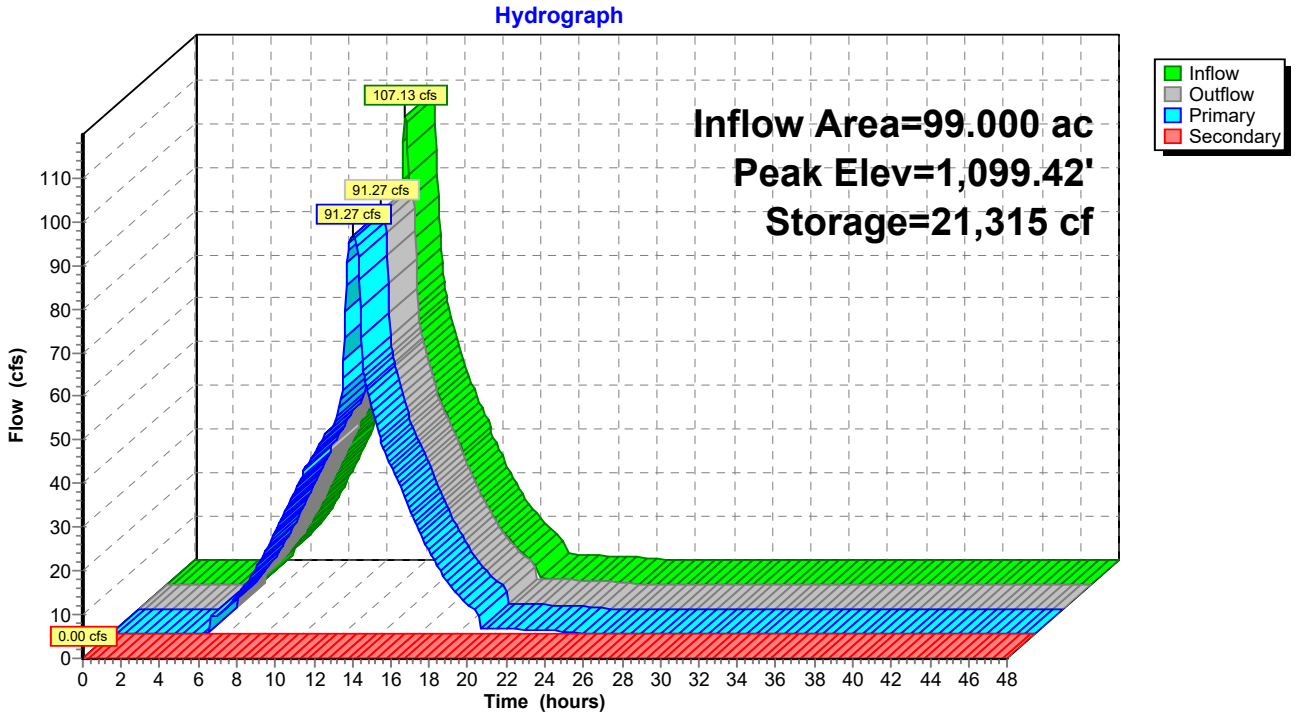
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,093.00	10	10.0	0	0	10
1,094.00	260	130.0	107	107	1,349
1,095.00	420	140.0	337	444	1,602
1,096.00	590	160.0	503	946	2,103
1,097.00	1,070	200.0	818	1,765	3,263
1,098.00	3,280	450.0	2,074	3,839	16,198
1,099.00	8,650	850.0	5,752	9,591	57,584
1,100.00	177,340	1,470.0	75,052	84,643	172,054
1,101.00	55,490	1,880.0	110,677	195,320	281,366
1,102.00	96,680	2,460.0	75,138	270,458	481,691
1,103.00	128,050	2,220.0	111,998	382,456	571,103

Device	Routing	Invert	Outlet Devices
#1	Primary	1,093.77'	**48.0" Round Culvert** L= 88.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,093.77' / 1,091.40' S= 0.0269 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 12.57 sf
#2	Secondary	1,102.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 1.00 Width (feet) 240.00 400.00

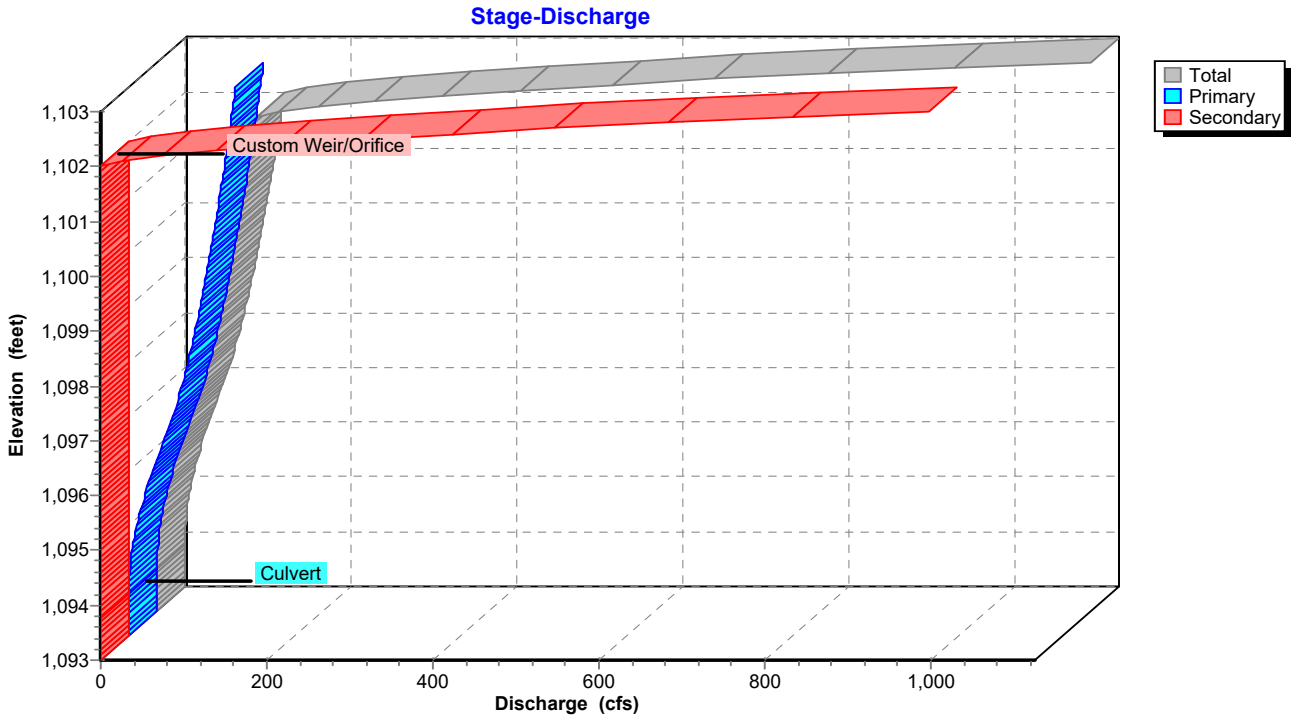
Primary OutFlow Max=91.24 cfs @ 12.57 hrs HW=1,099.42' (Free Discharge)
1=Culvert (Inlet Controls 91.24 cfs @ 7.26 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,093.00' (Free Discharge)
2=Custom Weir/Orifice (Controls 0.00 cfs)

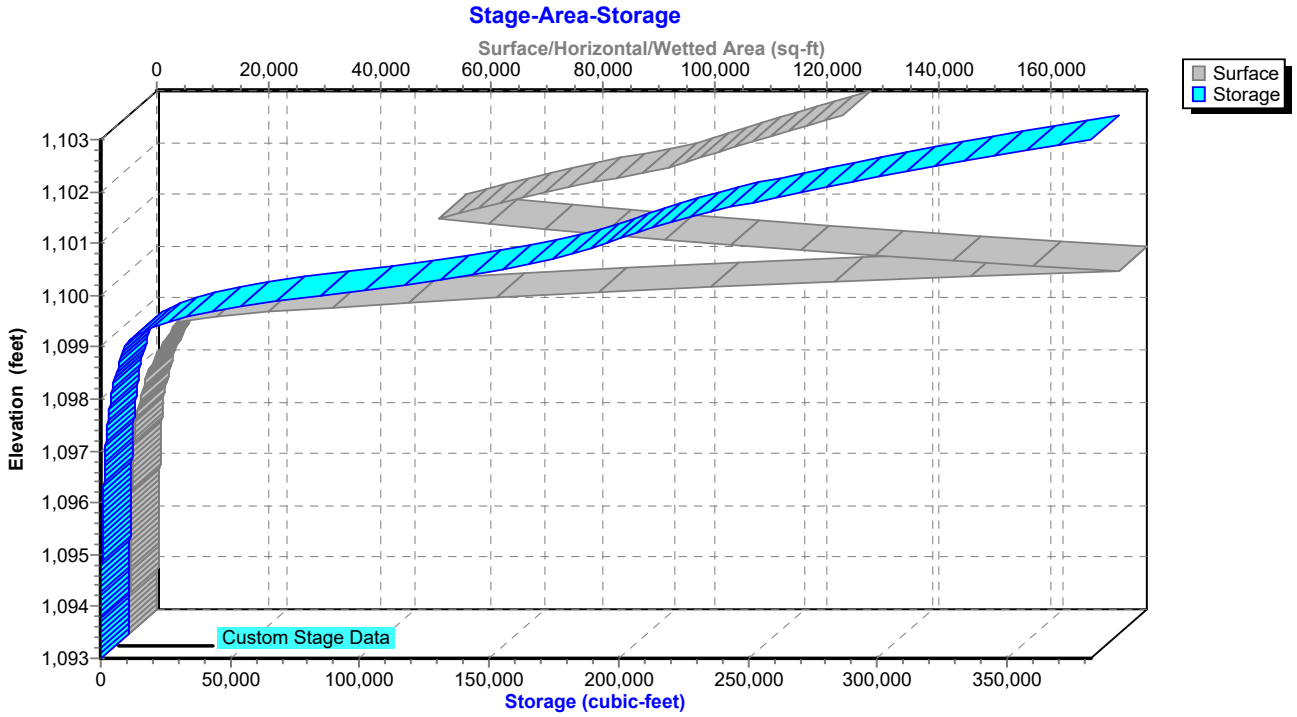
Pond EC-N: Culvert - Main Street West



Pond EC-N: Culvert - Main Street West



Pond EC-N: Culvert - Main Street West



Stage-Discharge for Pond EC-N: Culvert - Main Street West

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
1,093.00	0.00	0.00	0.00
1,093.10	0.00	0.00	0.00
1,093.20	0.00	0.00	0.00
1,093.30	0.00	0.00	0.00
1,093.40	0.00	0.00	0.00
1,093.50	0.00	0.00	0.00
1,093.60	0.00	0.00	0.00
1,093.70	0.00	0.00	0.00
1,093.80	0.01	0.01	0.00
1,093.90	0.12	0.12	0.00
1,094.00	0.37	0.37	0.00
1,094.10	0.76	0.76	0.00
1,094.20	1.28	1.28	0.00
1,094.30	1.93	1.93	0.00
1,094.40	2.71	2.71	0.00
1,094.50	3.60	3.60	0.00
1,094.60	4.62	4.62	0.00
1,094.70	5.75	5.75	0.00
1,094.80	6.99	6.99	0.00
1,094.90	8.33	8.33	0.00
1,095.00	9.78	9.78	0.00
1,095.10	11.33	11.33	0.00
1,095.20	12.97	12.97	0.00
1,095.30	14.70	14.70	0.00
1,095.40	16.51	16.51	0.00
1,095.50	18.41	18.41	0.00
1,095.60	20.38	20.38	0.00
1,095.70	22.42	22.42	0.00
1,095.80	24.52	24.52	0.00
1,095.90	26.69	26.69	0.00
1,096.00	28.90	28.90	0.00
1,096.10	31.17	31.17	0.00
1,096.20	33.48	33.48	0.00
1,096.30	35.82	35.82	0.00
1,096.40	38.19	38.19	0.00
1,096.50	40.58	40.58	0.00
1,096.60	42.98	42.98	0.00
1,096.70	45.39	45.39	0.00
1,096.80	47.79	47.79	0.00
1,096.90	50.17	50.17	0.00
1,097.00	52.52	52.52	0.00
1,097.10	54.84	54.84	0.00
1,097.20	57.09	57.09	0.00
1,097.30	59.28	59.28	0.00
1,097.40	61.37	61.37	0.00
1,097.50	63.33	63.33	0.00
1,097.60	65.13	65.13	0.00
1,097.70	66.70	66.70	0.00
1,097.80	68.06	68.06	0.00
1,097.90	69.72	69.72	0.00
1,098.00	71.33	71.33	0.00
1,098.10	72.92	72.92	0.00
1,098.20	74.46	74.46	0.00
1,098.30	75.98	75.98	0.00
1,098.40	77.47	77.47	0.00
1,098.50	78.93	78.93	0.00
1,098.60	80.36	80.36	0.00
1,098.70	81.77	81.77	0.00
1,098.80	83.15	83.15	0.00
1,098.90	84.51	84.51	0.00
1,099.00	85.85	85.85	0.00
1,099.10	87.17	87.17	0.00
1,099.20	88.47	88.47	0.00
1,099.30	89.75	89.75	0.00
1,099.40	91.01	91.01	0.00
1,099.50	92.26	92.26	0.00
1,099.60	93.48	93.48	0.00
1,099.70	94.70	94.70	0.00
1,099.80	95.89	95.89	0.00
1,099.90	97.08	97.08	0.00
1,100.00	98.25	98.25	0.00
1,100.10	99.40	99.40	0.00
1,100.20	100.54	100.54	0.00
1,100.30	101.67	101.67	0.00
1,100.40	102.79	102.79	0.00
1,100.50	103.89	103.89	0.00
1,100.60	104.98	104.98	0.00
1,100.70	106.06	106.06	0.00
1,100.80	107.13	107.13	0.00
1,100.90	108.19	108.19	0.00
1,101.00	109.24	109.24	0.00
1,101.10	110.28	110.28	0.00
1,101.20	111.31	111.31	0.00
1,101.30	112.33	112.33	0.00
1,101.40	113.34	113.34	0.00
1,101.50	114.35	114.35	0.00
1,101.60	115.34	115.34	0.00
1,101.70	116.32	116.32	0.00
1,101.80	117.30	117.30	0.00
1,101.90	118.27	118.27	0.00
1,102.00	119.23	119.23	0.00
1,102.10	145.70	120.18	25.52
1,102.20	195.18	121.13	74.05
1,102.30	261.55	122.07	139.49
1,102.40	343.05	123.00	220.05
1,102.50	438.87	123.92	314.95
1,102.60	548.59	124.84	423.75
1,102.70	672.01	125.75	546.26
1,102.80	809.05	126.65	682.40
1,102.90	959.71	127.55	832.16
1,103.00	**1,124.04**	**128.44**	**995.60**

Summary for Pond EC-N: Culvert - Main Street West

Inflow Area = 99.000 ac, 13.56% Impervious, Inflow Depth = 11.09" for 10-Year event
Inflow = 248.71 cfs @ 12.37 hrs, Volume= 91.502 af
Outflow = 243.59 cfs @ 12.44 hrs, Volume= 91.501 af, Atten= 2%, Lag= 4.1 min
Primary = 121.81 cfs @ 12.44 hrs, Volume= 85.049 af
Routed to nonexistent node R-C
Secondary = 121.78 cfs @ 12.44 hrs, Volume= 6.452 af
Routed to nonexistent node R-C

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,102.27' @ 12.44 hrs Surf.Area= 104,805 sf Storage= 297,947 cf

Plug-Flow detention time= 18.8 min calculated for 91.406 af (100% of inflow)
Center-of-Mass det. time= 18.8 min (758.1 - 739.4)

Volume	Invert	Avail.Storage	Storage Description
#1	1,093.00'	382,456 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

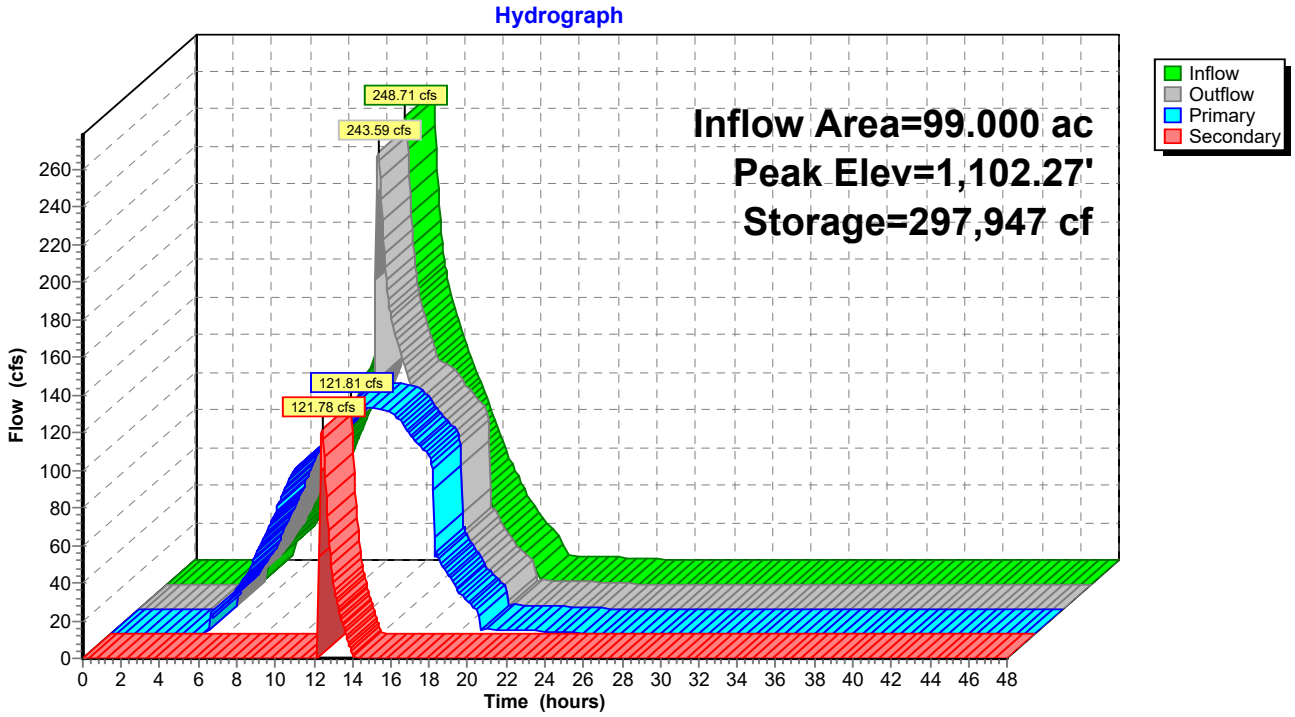
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,093.00	10	10.0	0	0	10
1,094.00	260	130.0	107	107	1,349
1,095.00	420	140.0	337	444	1,602
1,096.00	590	160.0	503	946	2,103
1,097.00	1,070	200.0	818	1,765	3,263
1,098.00	3,280	450.0	2,074	3,839	16,198
1,099.00	8,650	850.0	5,752	9,591	57,584
1,100.00	177,340	1,470.0	75,052	84,643	172,054
1,101.00	55,490	1,880.0	110,677	195,320	281,366
1,102.00	96,680	2,460.0	75,138	270,458	481,691
1,103.00	128,050	2,220.0	111,998	382,456	571,103

Device	Routing	Invert	Outlet Devices
#1	Primary	1,093.77'	**48.0" Round Culvert** L= 88.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,093.77' / 1,091.40' S= 0.0269 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 12.57 sf
#2	Secondary	1,102.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 1.00 Width (feet) 240.00 400.00

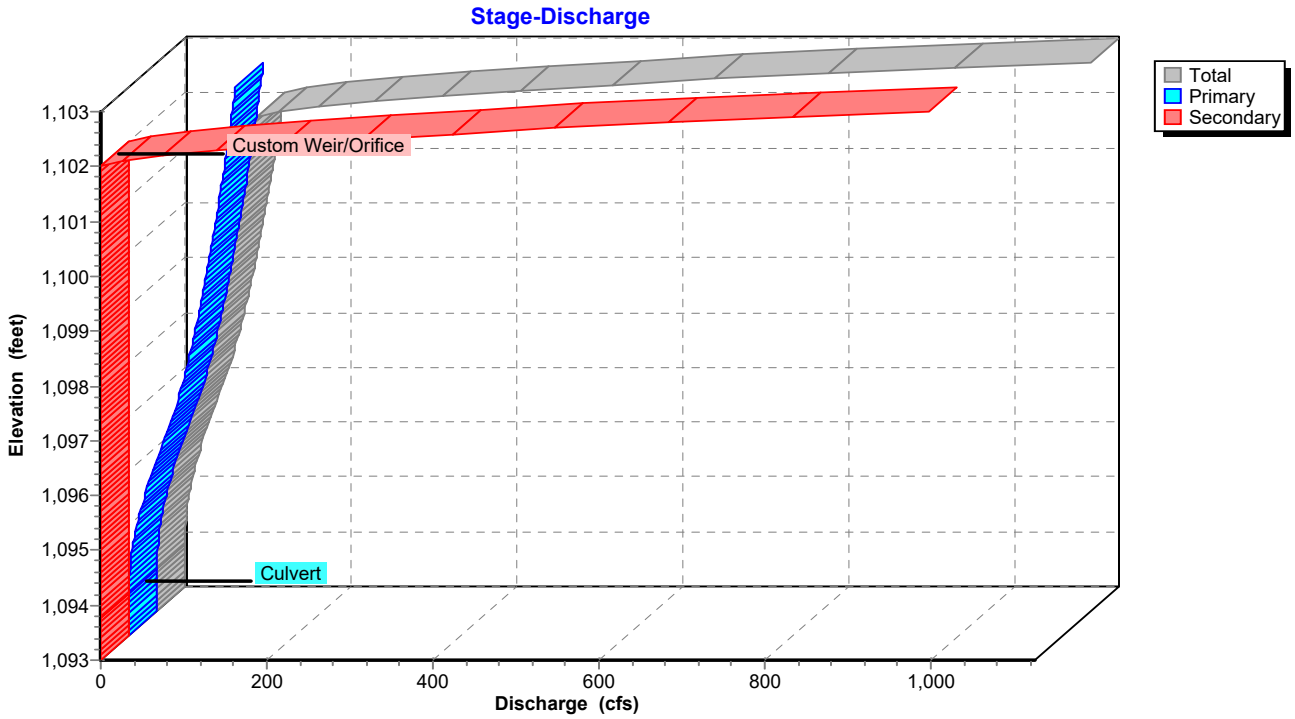
Primary OutFlow Max=121.81 cfs @ 12.44 hrs HW=1,102.27' (Free Discharge)
1=Culvert (Inlet Controls 121.81 cfs @ 9.69 fps)

Secondary OutFlow Max=119.70 cfs @ 12.44 hrs HW=1,102.27' (Free Discharge)
2=Custom Weir/Orifice (Weir Controls 119.70 cfs @ 1.68 fps)

Pond EC-N: Culvert - Main Street West



Pond EC-N: Culvert - Main Street West



Summary for Pond EC-N: Culvert - Main Street West

Inflow Area = 99.000 ac, 13.56% Impervious, Inflow Depth = 18.10" for 100-Year event
Inflow = 451.92 cfs @ 12.37 hrs, Volume= 149.309 af
Outflow = 449.19 cfs @ 12.40 hrs, Volume= 149.308 af, Atten= 1%, Lag= 2.0 min
Primary = 124.01 cfs @ 12.40 hrs, Volume= 105.919 af
Routed to nonexistent node R-C
Secondary = 325.18 cfs @ 12.40 hrs, Volume= 43.389 af
Routed to nonexistent node R-C

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,102.51' @ 12.40 hrs Surf.Area= 112,110 sf Storage= 323,589 cf

Plug-Flow detention time= 20.1 min calculated for 149.308 af (100% of inflow)
Center-of-Mass det. time= 19.9 min (760.1 - 740.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,093.00'	382,456 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

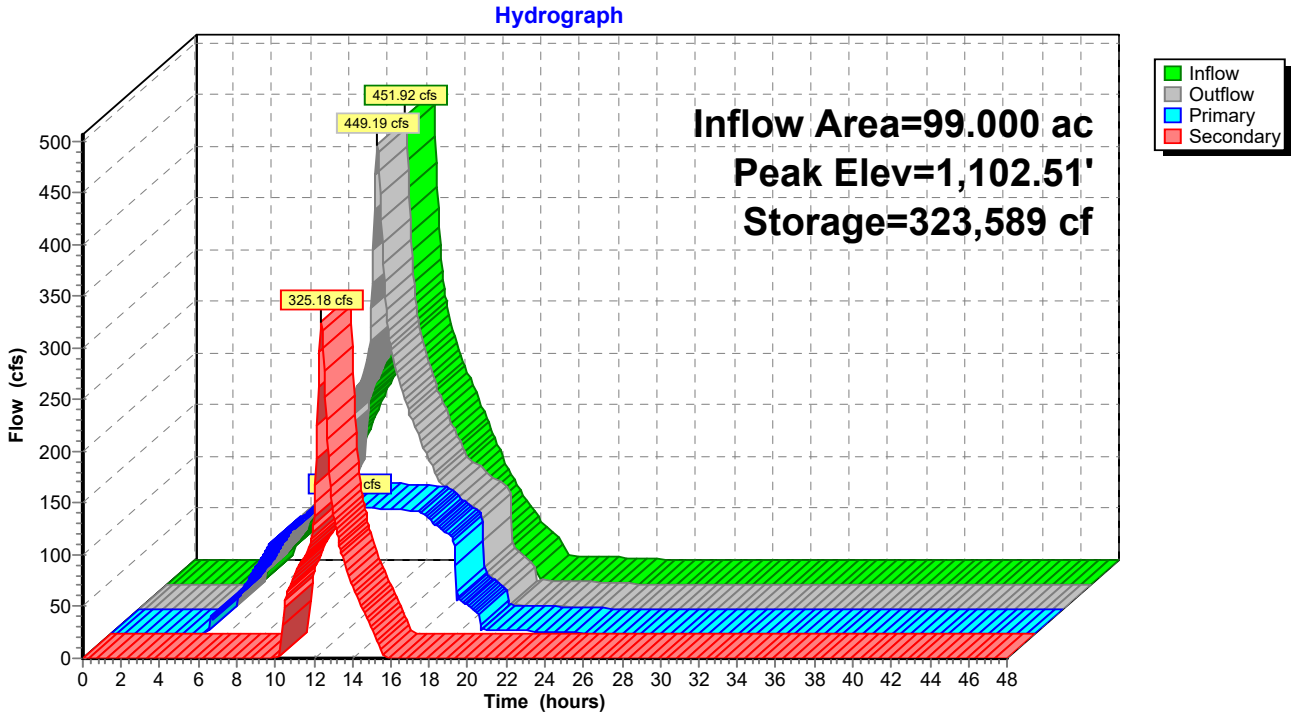
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,093.00	10	10.0	0	0	10
1,094.00	260	130.0	107	107	1,349
1,095.00	420	140.0	337	444	1,602
1,096.00	590	160.0	503	946	2,103
1,097.00	1,070	200.0	818	1,765	3,263
1,098.00	3,280	450.0	2,074	3,839	16,198
1,099.00	8,650	850.0	5,752	9,591	57,584
1,100.00	177,340	1,470.0	75,052	84,643	172,054
1,101.00	55,490	1,880.0	110,677	195,320	281,366
1,102.00	96,680	2,460.0	75,138	270,458	481,691
1,103.00	128,050	2,220.0	111,998	382,456	571,103

Device	Routing	Invert	Outlet Devices
#1	Primary	1,093.77'	**48.0" Round Culvert** L= 88.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,093.77' / 1,091.40' S= 0.0269 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 12.57 sf
#2	Secondary	1,102.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 1.00 Width (feet) 240.00 400.00

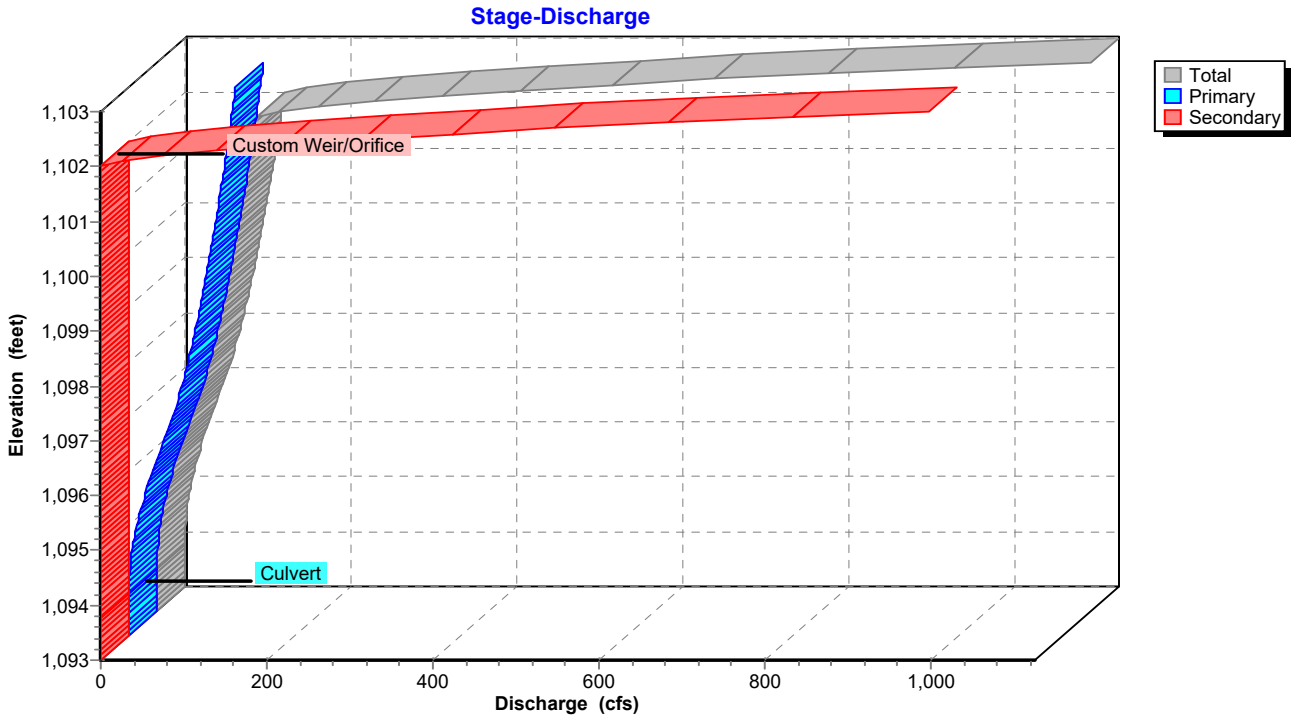
Primary OutFlow Max=124.01 cfs @ 12.40 hrs HW=1,102.51' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 124.01 cfs @ 9.87 fps)

Secondary OutFlow Max=324.41 cfs @ 12.40 hrs HW=1,102.51' (Free Discharge)
↑—**2=Custom Weir/Orifice** (Weir Controls 324.41 cfs @ 2.27 fps)

Pond EC-N: Culvert - Main Street West



Pond EC-N: Culvert - Main Street West



Summary for Pond EC-NE: Culvert - Main Street East

Inflow Area = 59.780 ac, 0.85% Impervious, Inflow Depth = 1.15" for 2-Year event
Inflow = 64.21 cfs @ 12.40 hrs, Volume= 5.730 af
Outflow = 45.58 cfs @ 12.61 hrs, Volume= 5.729 af, Atten= 29%, Lag= 12.5 min
Primary = 45.58 cfs @ 12.61 hrs, Volume= 5.729 af
Routed to nonexistent node R-E
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to nonexistent node R-E

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,106.24' @ 12.61 hrs Surf.Area= 26,149 sf Storage= 24,727 cf

Plug-Flow detention time= 3.9 min calculated for 5.729 af (100% of inflow)
Center-of-Mass det. time= 3.6 min (843.8 - 840.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,101.00'	639,603 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

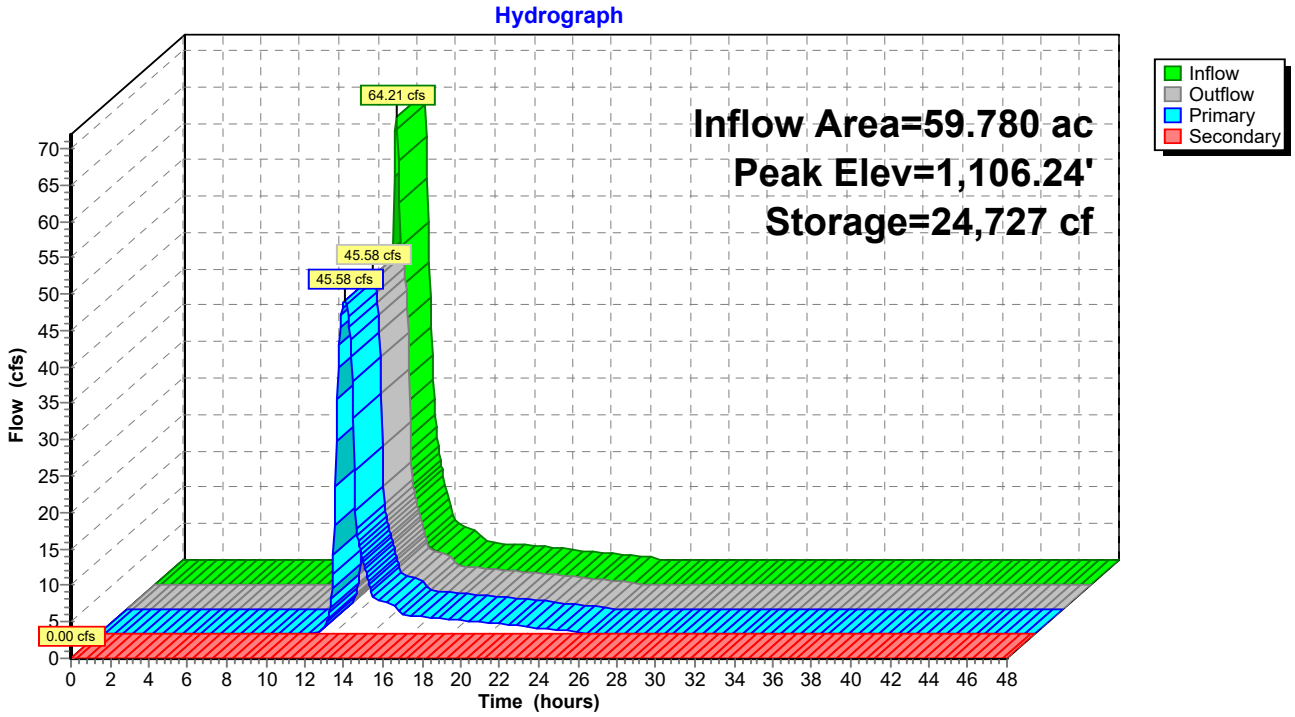
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,101.00	40	20.0	0	0	40
1,102.00	100	40.0	68	68	140
1,103.00	430	110.0	246	314	979
1,104.00	2,560	250.0	1,346	1,660	4,994
1,105.00	6,640	550.0	4,441	6,101	24,097
1,106.00	20,760	1,150.0	13,047	19,148	105,270
1,107.00	47,530	1,540.0	33,234	52,382	188,766
1,108.00	79,610	1,750.0	62,884	115,266	243,770
1,109.00	108,070	1,910.0	93,478	208,745	290,407
1,110.00	132,210	2,100.0	119,937	328,682	351,070
1,111.00	155,220	2,270.0	143,561	472,243	410,228
1,112.00	179,800	2,520.0	167,360	639,603	505,553

Device	Routing	Invert	Outlet Devices
#1	Primary	1,101.86'	**36.0" Round Culvert** L= 119.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,101.86' / 1,088.66' S= 0.1109 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 7.07 sf
#2	Secondary	1,111.50'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.50 1.00 Width (feet) 60.00 290.00

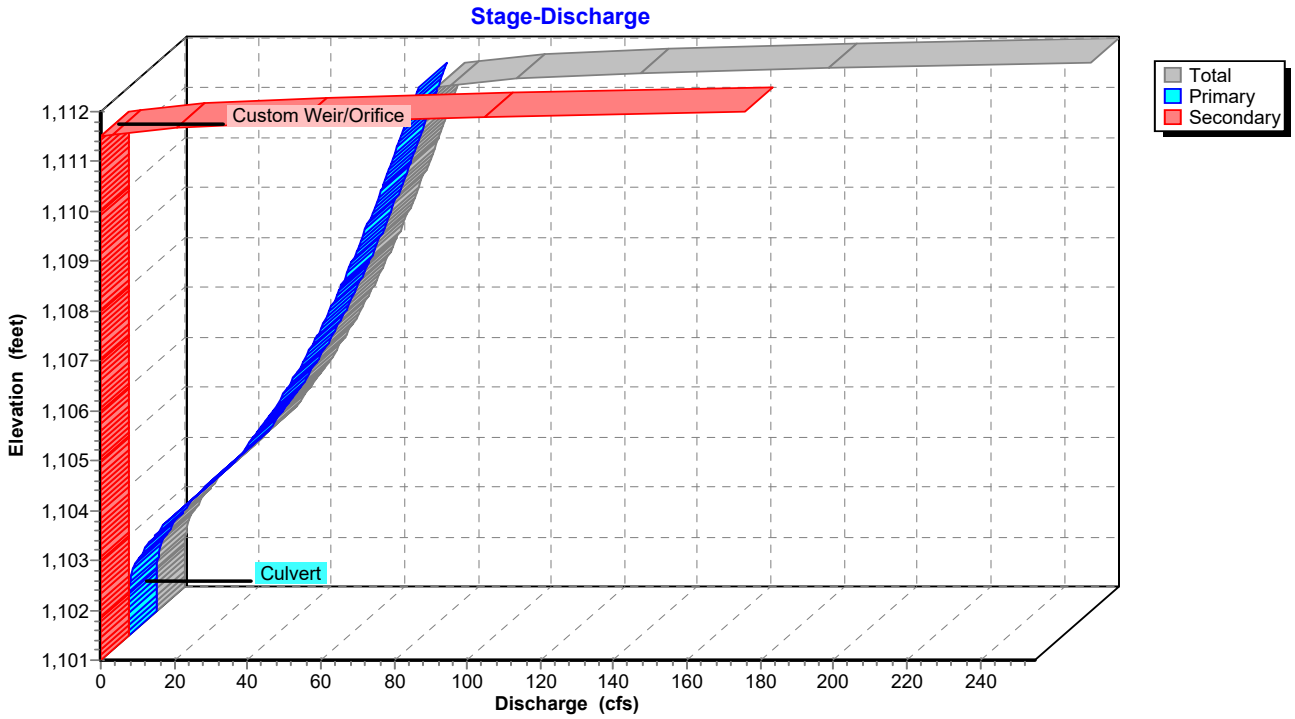
Primary OutFlow Max=45.56 cfs @ 12.61 hrs HW=1,106.24' (Free Discharge)
↑**1=Culvert** (Inlet Controls 45.56 cfs @ 6.45 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,101.00' (Free Discharge)
↑**2=Custom Weir/Orifice** (Controls 0.00 cfs)

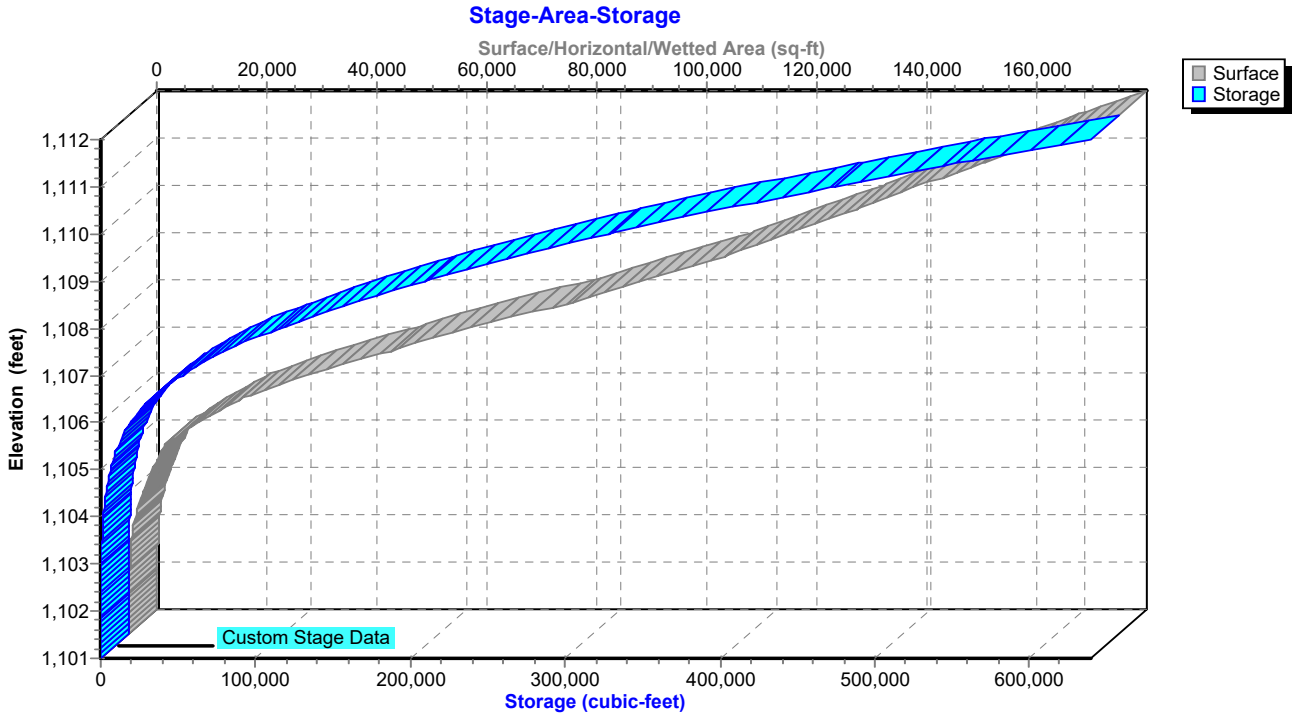
Pond EC-NE: Culvert - Main Street East



Pond EC-NE: Culvert - Main Street East



Pond EC-NE: Culvert - Main Street East



Stage-Discharge for Pond EC-NE: Culvert - Main Street East

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
1,101.00	0.00	0.00	0.00
1,101.20	0.00	0.00	0.00
1,101.40	0.00	0.00	0.00
1,101.60	0.00	0.00	0.00
1,101.80	0.00	0.00	0.00
1,102.00	0.12	0.12	0.00
1,102.20	0.69	0.69	0.00
1,102.40	1.71	1.71	0.00
1,102.60	3.14	3.14	0.00
1,102.80	4.94	4.94	0.00
1,103.00	7.07	7.07	0.00
1,103.20	9.51	9.51	0.00
1,103.40	12.19	12.19	0.00
1,103.60	15.07	15.07	0.00
1,103.80	18.10	18.10	0.00
1,104.00	21.21	21.21	0.00
1,104.20	24.32	24.32	0.00
1,104.40	27.34	27.34	0.00
1,104.60	30.12	30.12	0.00
1,104.80	32.42	32.42	0.00
1,105.00	34.41	34.41	0.00
1,105.20	36.45	36.45	0.00
1,105.40	38.38	38.38	0.00
1,105.60	40.22	40.22	0.00
1,105.80	41.97	41.97	0.00
1,106.00	43.66	43.66	0.00
1,106.20	45.28	45.28	0.00
1,106.40	46.85	46.85	0.00
1,106.60	48.37	48.37	0.00
1,106.80	49.84	49.84	0.00
1,107.00	51.26	51.26	0.00
1,107.20	52.65	52.65	0.00
1,107.40	54.01	54.01	0.00
1,107.60	55.33	55.33	0.00
1,107.80	56.62	56.62	0.00
1,108.00	57.88	57.88	0.00
1,108.20	59.11	59.11	0.00
1,108.40	60.32	60.32	0.00
1,108.60	61.51	61.51	0.00
1,108.80	62.67	62.67	0.00
1,109.00	63.81	63.81	0.00
1,109.20	64.93	64.93	0.00
1,109.40	66.04	66.04	0.00
1,109.60	67.12	67.12	0.00
1,109.80	68.19	68.19	0.00
1,110.00	69.24	69.24	0.00
1,110.20	70.27	70.27	0.00
1,110.40	71.29	71.29	0.00
1,110.60	72.30	72.30	0.00
1,110.80	73.29	73.29	0.00
1,111.00	74.27	74.27	0.00
1,111.20	75.24	75.24	0.00
1,111.40	76.19	76.19	0.00
1,111.60	85.25	77.13	8.12
1,111.80	140.05	78.06	61.99
1,112.00	**254.98**	**78.98**	**176.00**

Summary for Pond EC-NE: Culvert - Main Street East

Inflow Area = 59.780 ac, 0.85% Impervious, Inflow Depth = 2.24" for 10-Year event
Inflow = 127.82 cfs @ 12.39 hrs, Volume= 11.135 af
Outflow = 57.23 cfs @ 12.76 hrs, Volume= 11.134 af, Atten= 55%, Lag= 22.6 min
Primary = 57.23 cfs @ 12.76 hrs, Volume= 11.134 af
Routed to nonexistent node R-E
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to nonexistent node R-E

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,107.90' @ 12.76 hrs Surf.Area= 75,914 sf Storage= 107,231 cf

Plug-Flow detention time= 13.7 min calculated for 11.122 af (100% of inflow)
Center-of-Mass det. time= 13.7 min (839.9 - 826.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,101.00'	639,603 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

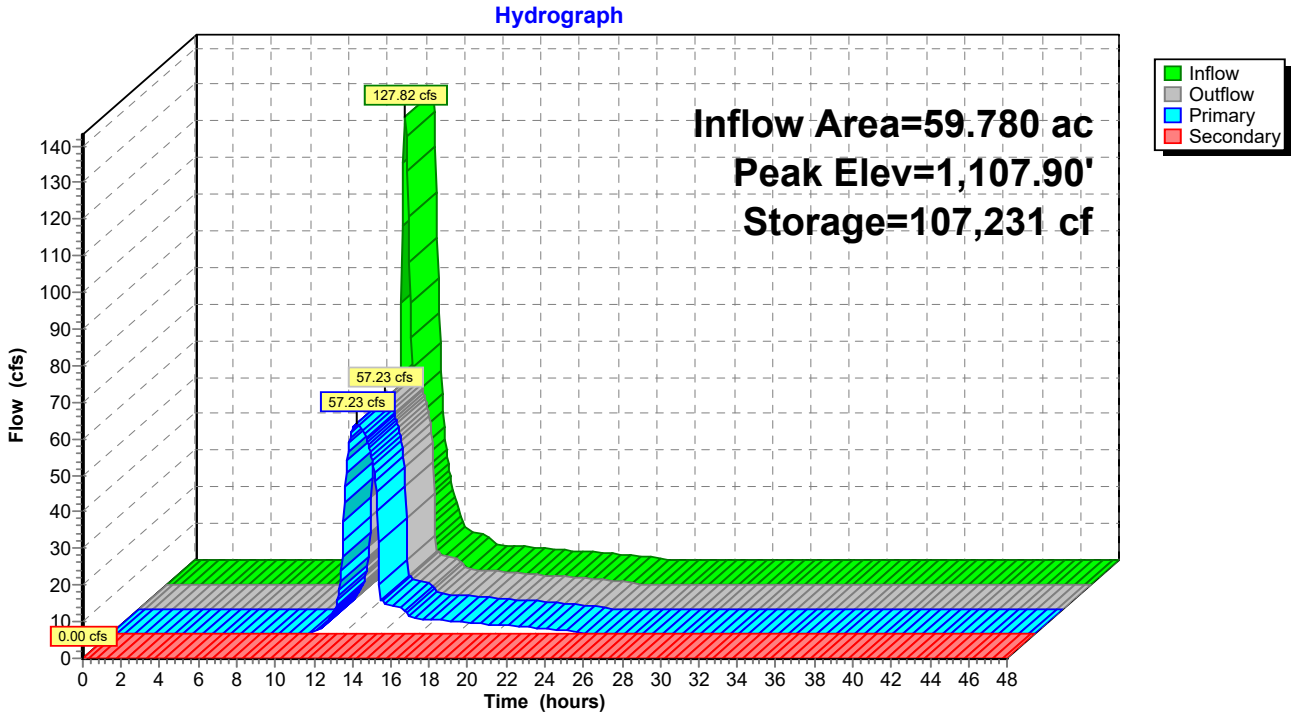
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,101.00	40	20.0	0	0	40
1,102.00	100	40.0	68	68	140
1,103.00	430	110.0	246	314	979
1,104.00	2,560	250.0	1,346	1,660	4,994
1,105.00	6,640	550.0	4,441	6,101	24,097
1,106.00	20,760	1,150.0	13,047	19,148	105,270
1,107.00	47,530	1,540.0	33,234	52,382	188,766
1,108.00	79,610	1,750.0	62,884	115,266	243,770
1,109.00	108,070	1,910.0	93,478	208,745	290,407
1,110.00	132,210	2,100.0	119,937	328,682	351,070
1,111.00	155,220	2,270.0	143,561	472,243	410,228
1,112.00	179,800	2,520.0	167,360	639,603	505,553

Device	Routing	Invert	Outlet Devices
#1	Primary	1,101.86'	**36.0" Round Culvert** L= 119.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,101.86' / 1,088.66' S= 0.1109 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 7.07 sf
#2	Secondary	1,111.50'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.50 1.00 Width (feet) 60.00 290.00

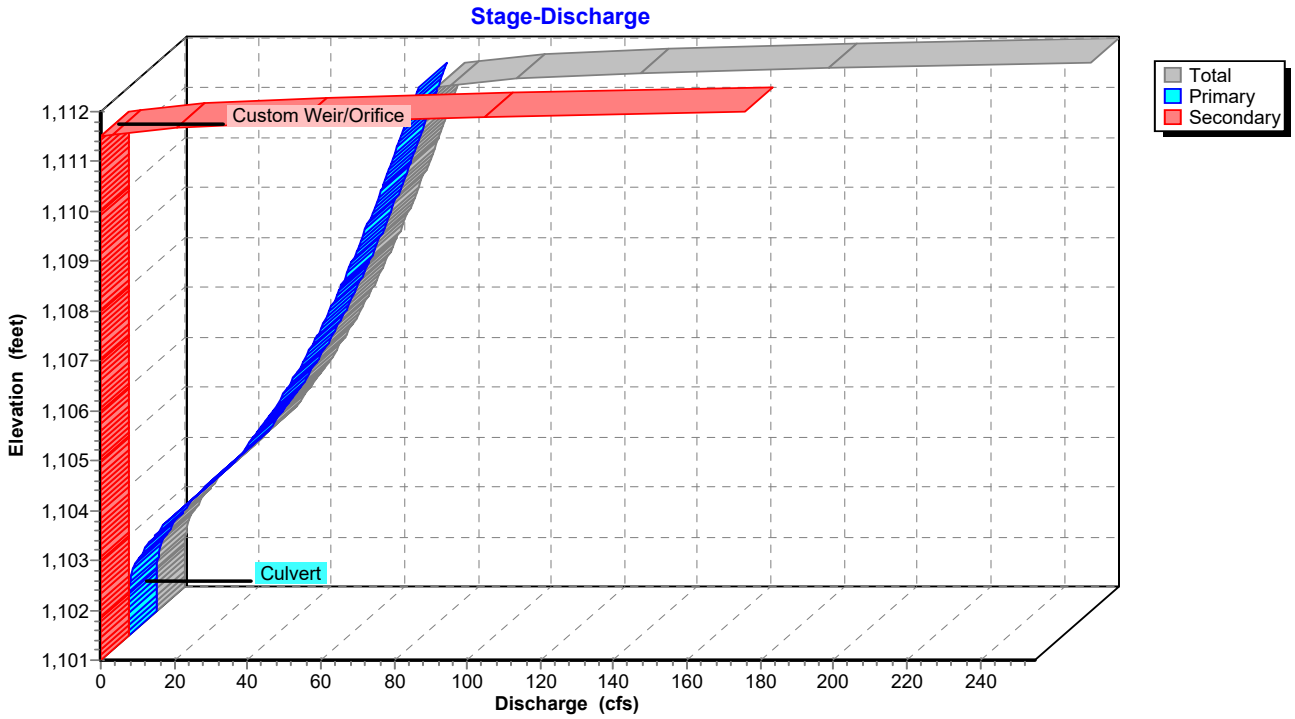
Primary OutFlow Max=57.22 cfs @ 12.76 hrs HW=1,107.89' (Free Discharge)
1=Culvert (Inlet Controls 57.22 cfs @ 8.09 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,101.00' (Free Discharge)
2=Custom Weir/Orifice (Controls 0.00 cfs)

Pond EC-NE: Culvert - Main Street East



Pond EC-NE: Culvert - Main Street East



Summary for Pond EC-NE: Culvert - Main Street East

Inflow Area = 59.780 ac, 0.85% Impervious, Inflow Depth = 4.77" for 100-Year event
Inflow = 271.72 cfs @ 12.38 hrs, Volume= 23.743 af
Outflow = 70.66 cfs @ 12.96 hrs, Volume= 23.742 af, Atten= 74%, Lag= 34.8 min
Primary = 70.66 cfs @ 12.96 hrs, Volume= 23.742 af
Routed to nonexistent node R-E
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to nonexistent node R-E

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,110.27' @ 12.96 hrs Surf.Area= 138,351 sf Storage= 365,866 cf

Plug-Flow detention time= 42.2 min calculated for 23.717 af (100% of inflow)
Center-of-Mass det. time= 42.1 min (853.1 - 811.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,101.00'	639,603 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

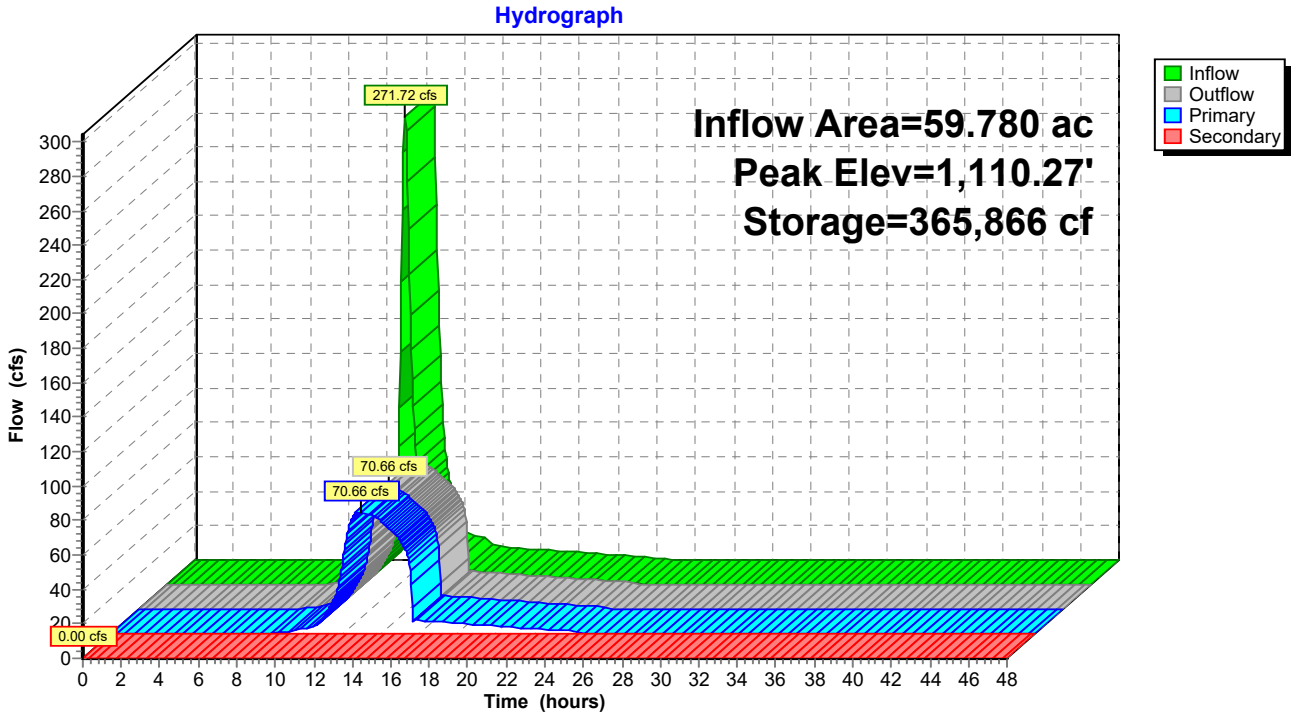
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,101.00	40	20.0	0	0	40
1,102.00	100	40.0	68	68	140
1,103.00	430	110.0	246	314	979
1,104.00	2,560	250.0	1,346	1,660	4,994
1,105.00	6,640	550.0	4,441	6,101	24,097
1,106.00	20,760	1,150.0	13,047	19,148	105,270
1,107.00	47,530	1,540.0	33,234	52,382	188,766
1,108.00	79,610	1,750.0	62,884	115,266	243,770
1,109.00	108,070	1,910.0	93,478	208,745	290,407
1,110.00	132,210	2,100.0	119,937	328,682	351,070
1,111.00	155,220	2,270.0	143,561	472,243	410,228
1,112.00	179,800	2,520.0	167,360	639,603	505,553

Device	Routing	Invert	Outlet Devices
#1	Primary	1,101.86'	**36.0" Round Culvert** L= 119.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,101.86' / 1,088.66' S= 0.1109 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 7.07 sf
#2	Secondary	1,111.50'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.50 1.00 Width (feet) 60.00 290.00

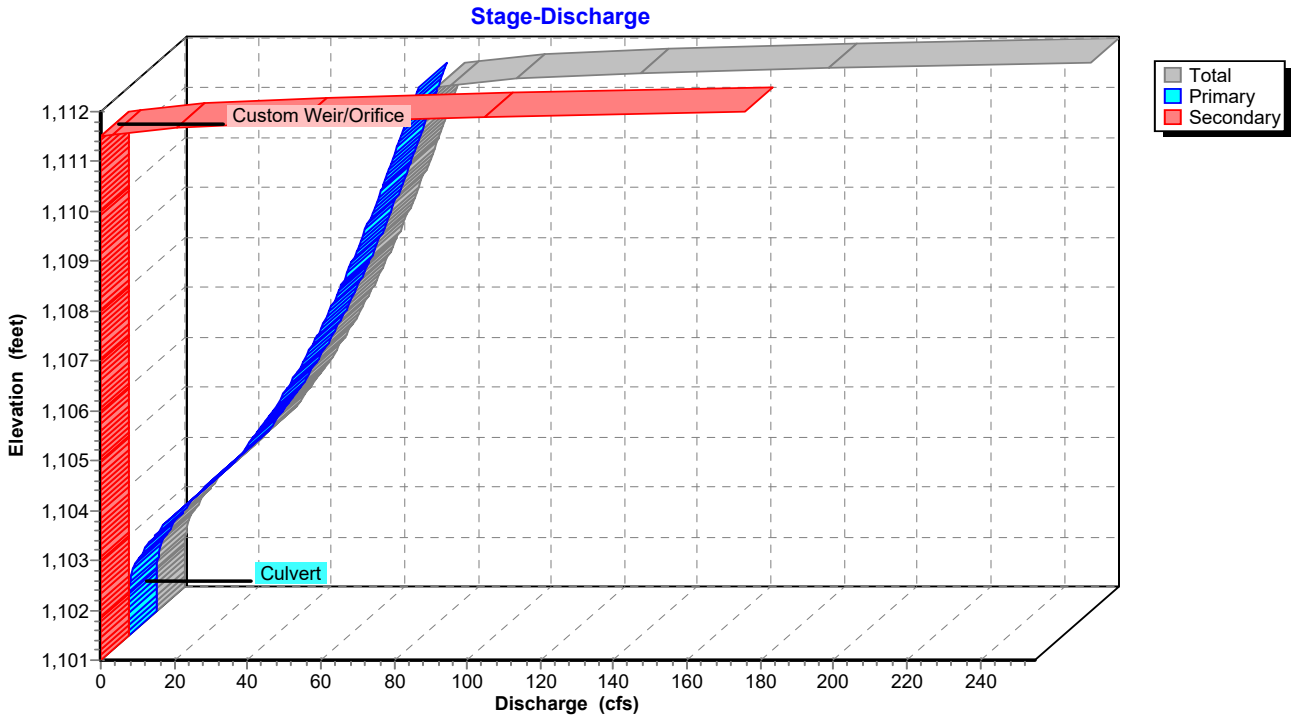
Primary OutFlow Max=70.65 cfs @ 12.96 hrs HW=1,110.27' (Free Discharge)
↑**1=Culvert** (Inlet Controls 70.65 cfs @ 10.00 fps)

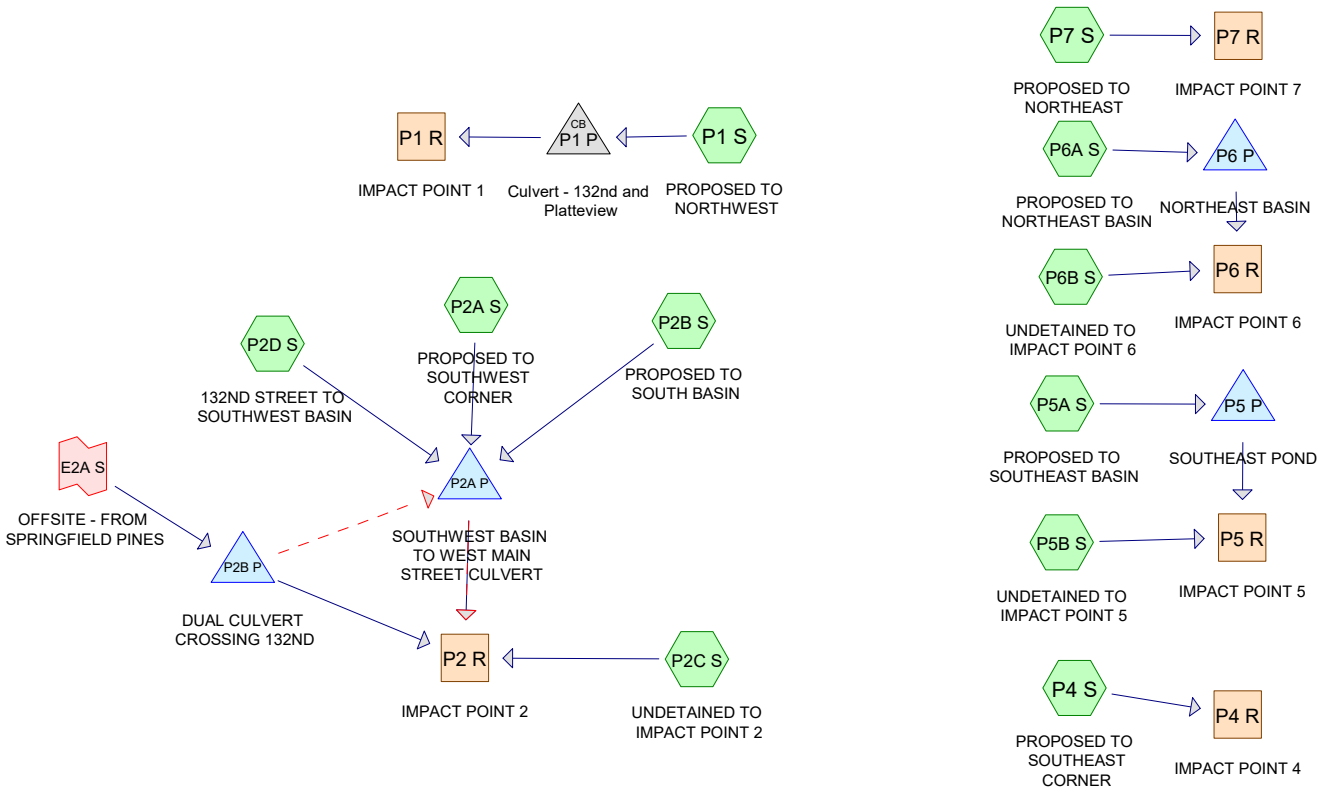
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,101.00' (Free Discharge)
↑**2=Custom Weir/Orifice** (Controls 0.00 cfs)

Pond EC-NE: Culvert - Main Street East



Pond EC-NE: Culvert - Main Street East





Subcat Reach Pond Link

Routing Diagram for Proposed

Prepared by FoleyShald Engineering LLC, Printed 9/3/2026

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Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
113.517	83	1/4 acre lots, 38% imp, HSG C (P2A S, P2B S, P2C S, P2D S, P5A S, P5B S, P6A S, P6B S, P7 S)
12.346	90	1/8 acre lots, 65% imp, HSG C (P2A S, P2B S, P2C S, P2D S)
26.025	74	>75% Grass cover, Good, HSG C (P1 S, P2A S, P2B S, P2C S, P2D S, P4 S, P5A S, P5B S, P6A S, P6B S, P7 S)
2.735	98	Paved parking, HSG C (P1 S, P2C S, P2D S, P4 S, P7 S)
6.237	94	Urban commercial, 85% imp, HSG C (P1 S, P2A S, P2D S)
160.860	**83**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1 S: PROPOSED TO Runoff Area=95,203 sf 27.53% Impervious Runoff Depth=1.34"
Flow Length=875' Tc=13.8 min CN=81 Runoff=3.86 cfs 0.243 af

Subcatchment P2A S: PROPOSED TO Runoff Area=2,599,899 sf 43.51% Impervious Runoff Depth=1.54"
Flow Length=2,871' Tc=27.1 min CN=84 Runoff=86.98 cfs 7.665 af

Subcatchment P2B S: PROPOSED TO Runoff Area=1,300,724 sf 32.27% Impervious Runoff Depth=1.40"
Flow Length=2,810' Tc=24.6 min CN=82 Runoff=41.55 cfs 3.490 af

Subcatchment P2C S: UNDETAINED TO Runoff Area=275,316 sf 38.78% Impervious Runoff Depth=1.47"
Flow Length=1,870' Tc=15.5 min CN=83 Runoff=11.73 cfs 0.775 af

Subcatchment P2D S: 132ND STREET TO Runoff Area=205,331 sf 40.45% Impervious Runoff Depth=1.54"
Flow Length=2,148' Tc=19.0 min CN=84 Runoff=8.30 cfs 0.605 af

Subcatchment P4 S: PROPOSED TO Runoff Area=1,894 sf 30.41% Impervious Runoff Depth=1.34"
Flow Length=50' Tc=1.8 min CN=81 Runoff=0.13 cfs 0.005 af

Subcatchment P5A S: PROPOSED TO Runoff Area=1,064,056 sf 31.88% Impervious Runoff Depth=1.40"
Flow Length=2,300' Tc=14.2 min CN=82 Runoff=44.84 cfs 2.855 af

Subcatchment P5B S: UNDETAINED TO Runoff Area=47,970 sf 22.93% Impervious Runoff Depth=1.21"
Flow Length=240' Tc=8.3 min CN=79 Runoff=2.18 cfs 0.111 af

Subcatchment P6A S: PROPOSED TO Runoff Area=1,086,425 sf 34.20% Impervious Runoff Depth=1.40"
Flow Length=1,174' Tc=18.2 min CN=82 Runoff=40.65 cfs 2.915 af

Subcatchment P6B S: UNDETAINED TO Runoff Area=29,231 sf 23.00% Impervious Runoff Depth=1.21"
Flow Length=320' Tc=10.3 min CN=79 Runoff=1.21 cfs 0.068 af

Subcatchment P7 S: PROPOSED TO Runoff Area=301,011 sf 27.43% Impervious Runoff Depth=1.34"
Flow Length=1,696' Tc=14.9 min CN=81 Runoff=11.81 cfs 0.770 af

Link E2A S: OFFSITE - FROM Manual Hydrograph delayed by 9.0 min Inflow=48.12 cfs 29.321 af
Area= 47.200 ac 25.54% Imperv. Primary=48.12 cfs 29.321 af

Total Runoff Area = 160.860 ac Runoff Volume = 19.502 af Average Runoff Depth = 1.45"
63.20% Pervious = 101.662 ac 36.80% Impervious = 59.198 ac

Summary for Subcatchment P1 S: PROPOSED TO NORTHWEST

Runoff = 3.86 cfs @ 12.23 hrs, Volume= 0.243 af, Depth= 1.34"
Routed to Pond P1 P : Culvert - 132nd and Platteview

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
66,993	74	>75% Grass cover, Good, HSG C
14,886	98	Paved parking, HSG C
13,324	94	Urban commercial, 85% imp, HSG C
95,203	81	Weighted Average
68,992		72.47% Pervious Area
26,211		27.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0300	0.19		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
0.8	117	0.0300	2.60		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	50	0.0300	10.30	18.19	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
4.3	608	0.0250	2.37		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
13.8	875	Total			

Summary for Subcatchment P2A S: PROPOSED TO SOUTHWEST CORNER

[47] Hint: Peak is 586% of capacity of segment #5
[47] Hint: Peak is 496% of capacity of segment #7
[47] Hint: Peak is 248% of capacity of segment #9

Runoff = 86.98 cfs @ 12.39 hrs, Volume= 7.665 af, Depth= 1.54"
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
1,708,518	83	1/4 acre lots, 38% imp, HSG C
425,916	90	1/8 acre lots, 65% imp, HSG C
241,261	94	Urban commercial, 85% imp, HSG C
224,204	74	>75% Grass cover, Good, HSG C
2,599,899	84	Weighted Average
1,468,745		56.49% Pervious Area
1,131,154		43.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	150	0.0466	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
1.7	100	0.0200	0.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.7	345	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.6	515	0.0274	3.36		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.1	70	0.0200	8.41	14.86	**Pipe Channel, RCP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
3.6	580	0.0320	2.68		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.3	96	0.0060	5.58	17.52	**Pipe Channel, RCP_Round 24"** 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Corrugated PE, smooth interior
3.6	620	0.0370	2.89		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.2	125	0.0240	11.16	35.05	**Pipe Channel, RCP_Round 24"** 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Corrugated PE, smooth interior
1.4	270	0.0440	3.15		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
27.1	2,871	Total			

Summary for Subcatchment P2B S: PROPOSED TO SOUTH BASIN

[47] Hint: Peak is 155% of capacity of segment #4

Runoff = 41.55 cfs @ 12.37 hrs, Volume= 3.490 af, Depth= 1.40"
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
1,081,122	83	1/4 acre lots, 38% imp, HSG C
13,790	90	1/8 acre lots, 65% imp, HSG C
205,812	74	>75% Grass cover, Good, HSG C
1,300,724	82	Weighted Average
880,934		67.73% Pervious Area
419,790		32.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0200	0.17		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
0.8	60	0.0300	1.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
10.3	930	0.0100	1.50		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
3.4	1,720	0.0140	8.52	26.77	**Pipe Channel, RCP_Round 24"** 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Corrugated PE, smooth interior
24.6	2,810	Total			

Summary for Subcatchment P2C S: UNDETAINED TO IMPACT POINT 2

Runoff = 11.73 cfs @ 12.25 hrs, Volume= 0.775 af, Depth= 1.47"
Routed to Reach P2 R : IMPACT POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
50,669	83	1/4 acre lots, 38% imp, HSG C
67,308	90	1/8 acre lots, 65% imp, HSG C
113,578	74	>75% Grass cover, Good, HSG C
43,761	98	Paved parking, HSG C
275,316	83	Weighted Average
168,551		61.22% Pervious Area
106,765		38.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	90	0.0250	0.18		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
1.3	80	0.0200	0.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
2.5	300	0.0100	2.03		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.2	1,400	0.0100	7.20	22.62	**Pipe Channel, RCP_Round 24"** 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Corrugated PE, smooth interior
15.5	1,870	Total			

Summary for Subcatchment P2D S: 132ND STREET TO SOUTHWEST BASIN

Runoff = 8.30 cfs @ 12.29 hrs, Volume= 0.605 af, Depth= 1.54"
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
27,316	83	1/4 acre lots, 38% imp, HSG C
30,760	90	1/8 acre lots, 65% imp, HSG C
17,112	94	Urban commercial, 85% imp, HSG C
91,996	74	>75% Grass cover, Good, HSG C
38,147	98	Paved parking, HSG C
205,331	84	Weighted Average
122,265		59.55% Pervious Area
83,066		40.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.1000	0.32		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
13.7	2,048	0.0276	2.49		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
19.0	2,148	Total			

Summary for Subcatchment P4 S: PROPOSED TO SOUTHEAST CORNER

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.13 cfs @ 12.08 hrs, Volume= 0.005 af, Depth= 1.34"
Routed to Reach P4 R : IMPACT POINT 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
1,318	74	>75% Grass cover, Good, HSG C
576	98	Paved parking, HSG C
1,894	81	Weighted Average
1,318		69.59% Pervious Area
576		30.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	30	0.1666	0.30		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
0.2	20	0.0200	2.12		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
1.8	50	Total			

Summary for Subcatchment P5A S: PROPOSED TO SOUTHEAST BASIN

Runoff = 44.84 cfs @ 12.23 hrs, Volume= 2.855 af, Depth= 1.40"
Routed to Pond P5 P : SOUTHEAST POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
171,334	74	>75% Grass cover, Good, HSG C
892,722	83	1/4 acre lots, 38% imp, HSG C
1,064,056	82	Weighted Average
724,822		68.12% Pervious Area
339,234		31.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.7	150	0.0200	0.37		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
1.7	100	0.0200	0.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.0	285	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.3	335	0.0479	4.44		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.5	1,430	0.0300	16.34	115.53	**Pipe Channel, RCP_Round 36"** 36.0" Round Area= 7.1 sf Perim= 9.4' r= 0.75' n= 0.013 Corrugated PE, smooth interior
14.2	2,300	Total			

Summary for Subcatchment P5B S: UNDETAINED TO IMPACT POINT 5

Runoff = 2.18 cfs @ 12.16 hrs, Volume= 0.111 af, Depth= 1.21"
Routed to Reach P5 R : IMPACT POINT 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
19,027	74	>75% Grass cover, Good, HSG C
28,943	83	1/4 acre lots, 38% imp, HSG C
47,970	79	Weighted Average
36,972		77.07% Pervious Area
10,998		22.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	100	0.0500	0.24		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
1.3	140	0.0650	1.78		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
8.3	240	Total			

Summary for Subcatchment P6A S: PROPOSED TO NORTHEAST BASIN

Runoff = 40.65 cfs @ 12.28 hrs, Volume= 2.915 af, Depth= 1.40"
Routed to Pond P6 P : NORTHEAST BASIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
108,627	74	>75% Grass cover, Good, HSG C
977,798	83	1/4 acre lots, 38% imp, HSG C
1,086,425	82	Weighted Average
714,862		65.80% Pervious Area
371,563		34.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.0300	0.21		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
5.6	330	0.0200	0.99		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	40	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.4	654	0.0700	24.97	176.47	**Pipe Channel, RCP_Round 36"** 36.0" Round Area= 7.1 sf Perim= 9.4' r= 0.75' n= 0.013 Corrugated PE, smooth interior
18.2	1,174	Total			

Summary for Subcatchment P6B S: UNDETAINED TO IMPACT POINT 6

Runoff = 1.21 cfs @ 12.19 hrs, Volume= 0.068 af, Depth= 1.21"
Routed to Reach P6 R : IMPACT POINT 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
11,539	74	>75% Grass cover, Good, HSG C
17,692	83	1/4 acre lots, 38% imp, HSG C
29,231	79	Weighted Average
22,508		77.00% Pervious Area
6,723		23.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0300	0.19		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.03"
1.7	220	0.0900	2.10		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
10.3	320	Total			

Summary for Subcatchment P7 S: PROPOSED TO NORTHEAST

Runoff = 11.81 cfs @ 12.24 hrs, Volume= 0.770 af, Depth= 1.34"
Routed to Reach P7 R : IMPACT POINT 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=3.03"

Area (sf)	CN	Description
119,228	74	>75% Grass cover, Good, HSG C
21,775	98	Paved parking, HSG C
160,008	83	1/4 acre lots, 38% imp, HSG C
301,011	81	Weighted Average
218,433		72.57% Pervious Area
82,578		27.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	200	0.0270	0.45		**Sheet Flow,** Cultivated: Residue<=20% n= 0.060 P2= 3.03"
1.4	306	0.0590	3.64		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	100	0.0500	13.29	23.49	**Pipe Channel, RCP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
5.2	915	0.0380	2.92		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.1	60	0.0300	10.30	18.19	**Pipe Channel, RCP_Round 18"** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.6	115	0.0400	3.00		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
14.9	1,696	Total			

Summary for Link E2A S: OFFSITE - FROM SPRINGFIELD PINES

Inflow Area = 47.200 ac, 25.54% Impervious, Inflow Depth = 7.45" for 2-Year event
Inflow = 48.12 cfs @ 12.00 hrs, Volume= 29.321 af
Primary = 48.12 cfs @ 12.15 hrs, Volume= 29.321 af, Atten= 0%, Lag= 9.0 min
Routed to Pond P2B P : DUAL CULVERT CROSSING 132ND

Primary outflow = Inflow delayed by 9.0 min, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

2-Year 15 Point manual hydrograph, To= 5.00 hrs, dt= 1.00 hrs, Area= 47.200 ac, 25.54% Imp., cfs =

3.18	6.51	12.07	19.85	29.22	38.43	45.58	48.12	45.58	38.43
29.22	19.85	12.07	6.51	3.18					

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1 S: PROPOSED TO Runoff Area=95,203 sf 27.53% Impervious Runoff Depth=2.49"
Flow Length=875' Tc=13.8 min CN=81 Runoff=7.25 cfs 0.453 af

Subcatchment P2A S: PROPOSED TO Runoff Area=2,599,899 sf 43.51% Impervious Runoff Depth=2.75"
Flow Length=2,871' Tc=27.1 min CN=84 Runoff=155.44 cfs 13.696 af

Subcatchment P2B S: PROPOSED TO Runoff Area=1,300,724 sf 32.27% Impervious Runoff Depth=2.57"
Flow Length=2,810' Tc=24.6 min CN=82 Runoff=76.72 cfs 6.407 af

Subcatchment P2C S: UNDETAINED TO Runoff Area=275,316 sf 38.78% Impervious Runoff Depth=2.66"
Flow Length=1,870' Tc=15.5 min CN=83 Runoff=21.19 cfs 1.403 af

Subcatchment P2D S: 132ND STREET TO Runoff Area=205,331 sf 40.45% Impervious Runoff Depth=2.75"
Flow Length=2,148' Tc=19.0 min CN=84 Runoff=14.78 cfs 1.082 af

Subcatchment P4 S: PROPOSED TO Runoff Area=1,894 sf 30.41% Impervious Runoff Depth=2.49"
Flow Length=50' Tc=1.8 min CN=81 Runoff=0.23 cfs 0.009 af

Subcatchment P5A S: PROPOSED TO Runoff Area=1,064,056 sf 31.88% Impervious Runoff Depth=2.57"
Flow Length=2,300' Tc=14.2 min CN=82 Runoff=82.31 cfs 5.241 af

Subcatchment P5B S: UNDETAINED TO Runoff Area=47,970 sf 22.93% Impervious Runoff Depth=2.32"
Flow Length=240' Tc=8.3 min CN=79 Runoff=4.20 cfs 0.213 af

Subcatchment P6A S: PROPOSED TO Runoff Area=1,086,425 sf 34.20% Impervious Runoff Depth=2.57"
Flow Length=1,174' Tc=18.2 min CN=82 Runoff=75.19 cfs 5.351 af

Subcatchment P6B S: UNDETAINED TO Runoff Area=29,231 sf 23.00% Impervious Runoff Depth=2.32"
Flow Length=320' Tc=10.3 min CN=79 Runoff=2.34 cfs 0.130 af

Subcatchment P7 S: PROPOSED TO Runoff Area=301,011 sf 27.43% Impervious Runoff Depth=2.49"
Flow Length=1,696' Tc=14.9 min CN=81 Runoff=22.06 cfs 1.433 af

Link E2A S: OFFSITE - FROM Manual Hydrograph delayed by 9.0 min Inflow=133.74 cfs 81.497 af
Area= 47.200 ac 25.54% Imperv. Primary=133.74 cfs 81.497 af

Total Runoff Area = 160.860 ac Runoff Volume = 35.417 af Average Runoff Depth = 2.64"
63.20% Pervious = 101.662 ac 36.80% Impervious = 59.198 ac

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1 S: PROPOSED TO Runoff Area=95,203 sf 27.53% Impervious Runoff Depth=5.10"
Flow Length=875' Tc=13.8 min CN=81 Runoff=14.60 cfs 0.929 af

Subcatchment P2A S: PROPOSED TO Runoff Area=2,599,899 sf 43.51% Impervious Runoff Depth=5.44"
Flow Length=2,871' Tc=27.1 min CN=84 Runoff=301.66 cfs 27.080 af

Subcatchment P2B S: PROPOSED TO Runoff Area=1,300,724 sf 32.27% Impervious Runoff Depth=5.22"
Flow Length=2,810' Tc=24.6 min CN=82 Runoff=153.09 cfs 12.981 af

Subcatchment P2C S: UNDETAINED TO Runoff Area=275,316 sf 38.78% Impervious Runoff Depth=5.33"
Flow Length=1,870' Tc=15.5 min CN=83 Runoff=41.45 cfs 2.808 af

Subcatchment P2D S: 132ND STREET TO Runoff Area=205,331 sf 40.45% Impervious Runoff Depth=5.44"
Flow Length=2,148' Tc=19.0 min CN=84 Runoff=28.57 cfs 2.139 af

Subcatchment P4 S: PROPOSED TO Runoff Area=1,894 sf 30.41% Impervious Runoff Depth=5.10"
Flow Length=50' Tc=1.8 min CN=81 Runoff=0.45 cfs 0.018 af

Subcatchment P5A S: PROPOSED TO Runoff Area=1,064,056 sf 31.88% Impervious Runoff Depth=5.22"
Flow Length=2,300' Tc=14.2 min CN=82 Runoff=164.00 cfs 10.619 af

Subcatchment P5B S: UNDETAINED TO Runoff Area=47,970 sf 22.93% Impervious Runoff Depth=4.88"
Flow Length=240' Tc=8.3 min CN=79 Runoff=8.67 cfs 0.448 af

Subcatchment P6A S: PROPOSED TO Runoff Area=1,086,425 sf 34.20% Impervious Runoff Depth=5.22"
Flow Length=1,174' Tc=18.2 min CN=82 Runoff=149.66 cfs 10.843 af

Subcatchment P6B S: UNDETAINED TO Runoff Area=29,231 sf 23.00% Impervious Runoff Depth=4.88"
Flow Length=320' Tc=10.3 min CN=79 Runoff=4.83 cfs 0.273 af

Subcatchment P7 S: PROPOSED TO Runoff Area=301,011 sf 27.43% Impervious Runoff Depth=5.10"
Flow Length=1,696' Tc=14.9 min CN=81 Runoff=44.42 cfs 2.939 af

Link E2A S: OFFSITE - FROM Manual Hydrograph delayed by 9.0 min Inflow=210.48 cfs 128.252 af
Area= 47.200 ac 25.54% Imperv. Primary=210.48 cfs 128.252 af

Total Runoff Area = 160.860 ac Runoff Volume = 71.077 af Average Runoff Depth = 5.30"
63.20% Pervious = 101.662 ac 36.80% Impervious = 59.198 ac

Summary for Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

[92] Warning: Device #4 is above defined storage

Inflow Area = 94.260 ac, 39.80% Impervious, Inflow Depth = 1.50" for 2-Year event
Inflow = 135.37 cfs @ 12.38 hrs, Volume= 11.760 af
Outflow = 30.89 cfs @ 13.07 hrs, Volume= 11.760 af, Atten= 77%, Lag= 41.4 min
Primary = 30.89 cfs @ 13.07 hrs, Volume= 11.760 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach P2 R : IMPACT POINT 2

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,098.66' @ 13.07 hrs Surf.Area= 68,254 sf Storage= 270,086 cf

Plug-Flow detention time= 430.6 min calculated for 11.748 af (100% of inflow)
Center-of-Mass det. time= 431.5 min (1,258.2 - 826.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,092.00'	726,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

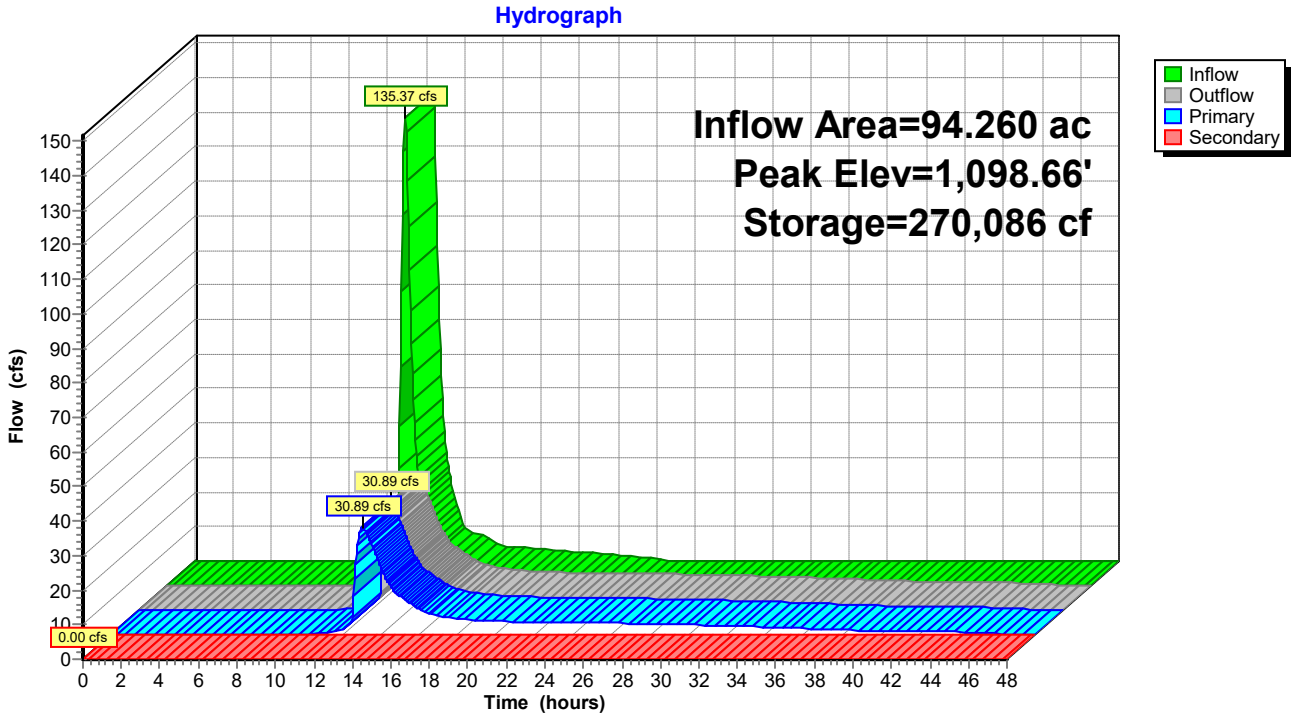
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,092.00	64	0	0
1,093.00	10,003	5,034	5,034
1,094.00	30,078	20,041	25,074
1,095.00	44,145	37,112	62,186
1,096.00	52,097	48,121	110,307
1,097.00	58,139	55,118	165,425
1,098.00	64,193	61,166	226,591
1,099.00	70,376	67,285	293,875
1,100.00	76,686	73,531	367,406
1,101.00	83,123	79,905	447,311
1,102.00	89,686	86,405	533,715
1,103.00	96,377	93,032	626,747
1,104.00	102,352	99,365	726,111

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,092.00'	**6.0" Vert. Orifice/Grate** X 2 rows with 24.0" cc spacing C= 0.600 Limited to weir flow at low heads
#2	Device 3	1,097.42'	**72.0" W x 42.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	1,092.00'	**60.0" Round RCP_Round 60"** L= 152.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,092.00' / 1,091.00' S= 0.0066 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,104.00'	**40.0' long + 1.0 '/' SideZ x 100.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

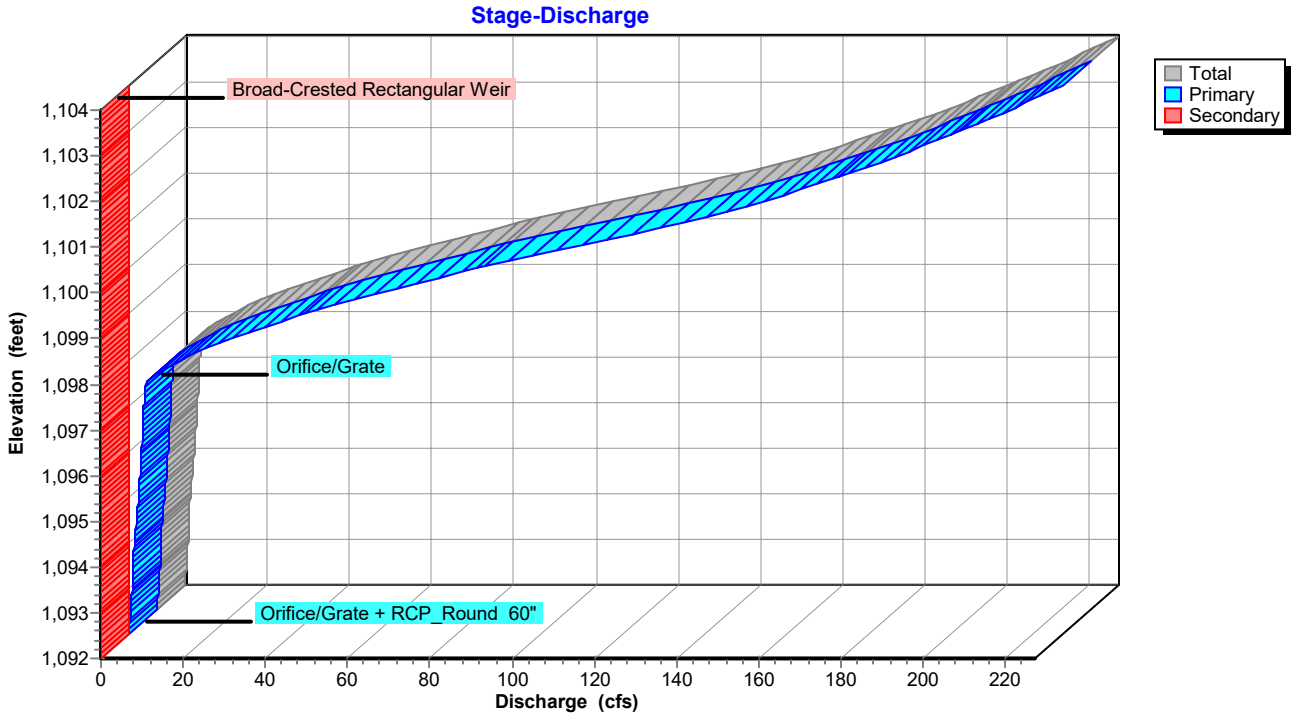
Primary OutFlow Max=30.84 cfs @ 13.07 hrs HW=1,098.66' (Free Discharge)
└─**3=RCP_Round 60"** (Passes 30.84 cfs of 194.96 cfs potential flow)
  └─**1=Orifice/Grate** (Orifice Controls 4.38 cfs @ 11.15 fps)
  └─**2=Orifice/Grate** (Orifice Controls 26.47 cfs @ 3.57 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,092.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

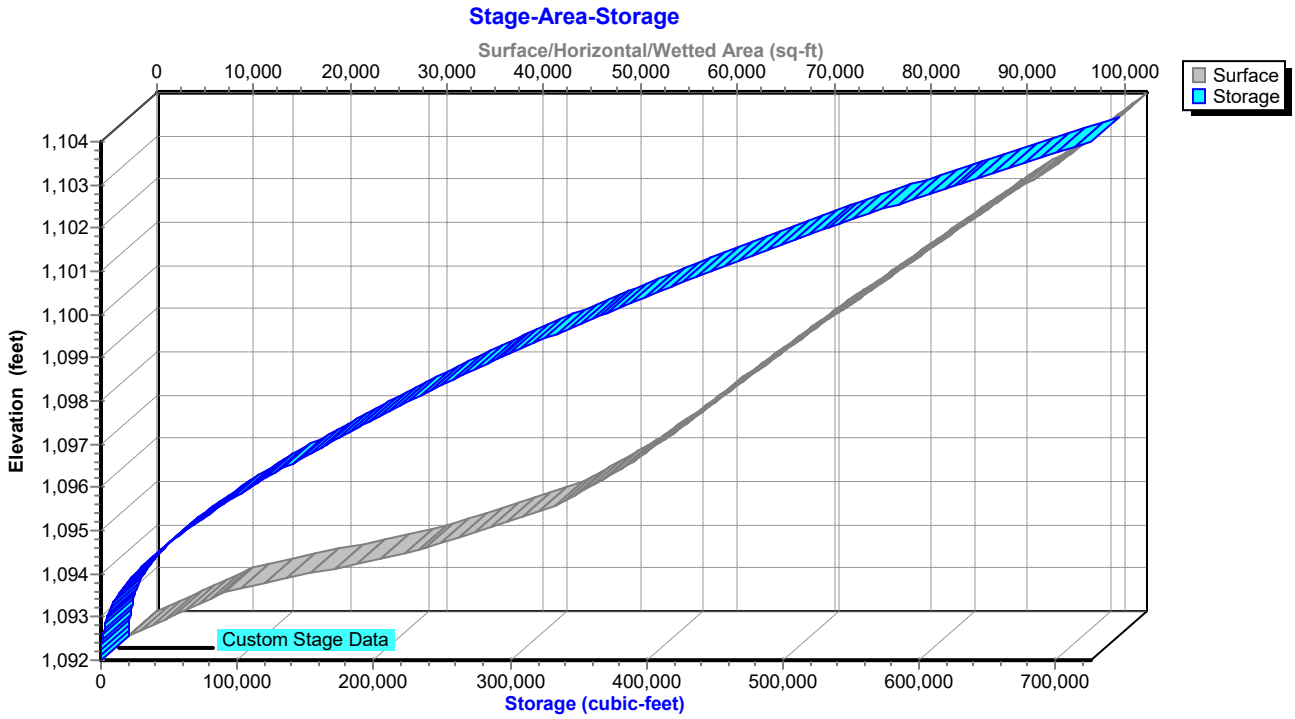
Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Stage-Discharge for Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
1,092.00	0.00	0.00	**0.00**
1,092.20	0.11	0.11	0.00
1,092.40	0.36	0.36	0.00
1,092.60	0.56	0.56	0.00
1,092.80	0.70	0.70	0.00
1,093.00	0.82	0.82	0.00
1,093.20	0.92	0.92	0.00
1,093.40	1.01	1.01	0.00
1,093.60	1.10	1.10	0.00
1,093.80	1.18	1.18	0.00
1,094.00	1.25	1.25	0.00
1,094.20	1.43	1.43	0.00
1,094.40	1.75	1.75	0.00
1,094.60	2.01	2.01	0.00
1,094.80	2.21	2.21	0.00
1,095.00	2.39	2.39	0.00
1,095.20	2.55	2.55	0.00
1,095.40	2.69	2.69	0.00
1,095.60	2.83	2.83	0.00
1,095.80	2.96	2.96	0.00
1,096.00	3.08	3.08	0.00
1,096.20	3.20	3.20	0.00
1,096.40	3.31	3.31	0.00
1,096.60	3.42	3.42	0.00
1,096.80	3.53	3.53	0.00
1,097.00	3.63	3.63	0.00
1,097.20	3.73	3.73	0.00
1,097.40	3.82	3.82	0.00
1,097.60	5.39	5.39	0.00
1,097.80	8.52	8.52	0.00
1,098.00	12.61	12.61	0.00
1,098.20	17.45	17.45	0.00
1,098.40	22.96	22.96	0.00
1,098.60	29.04	29.04	0.00
1,098.80	35.66	35.66	0.00
1,099.00	42.77	42.77	0.00
1,099.20	50.33	50.33	0.00
1,099.40	58.33	58.33	0.00
1,099.60	66.74	66.74	0.00
1,099.80	75.54	75.54	0.00
1,100.00	84.71	84.71	0.00
1,100.20	94.25	94.25	0.00
1,100.40	104.12	104.12	0.00
1,100.60	114.33	114.33	0.00
1,100.80	124.87	124.87	0.00
1,101.00	135.28	135.28	0.00
1,101.20	144.01	144.01	0.00
1,101.40	151.91	151.91	0.00
1,101.60	159.25	159.25	0.00
1,101.80	166.17	166.17	0.00
1,102.00	172.75	172.75	0.00
1,102.20	179.03	179.03	0.00
1,102.40	185.08	185.08	0.00
1,102.60	190.90	190.90	0.00
1,102.80	196.53	196.53	0.00
1,103.00	201.99	201.99	0.00
1,103.20	207.29	207.29	0.00
1,103.40	212.44	212.44	0.00
1,103.60	217.47	217.47	0.00
1,103.80	222.38	222.38	0.00
1,104.00	**227.17**	**227.17**	0.00

Summary for Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

[92] Warning: Device #4 is above defined storage

Inflow Area = 94.260 ac, 39.80% Impervious, Inflow Depth = 2.70" for 10-Year event
Inflow = 244.96 cfs @ 12.37 hrs, Volume= 21.185 af
Outflow = 105.93 cfs @ 12.75 hrs, Volume= 21.179 af, Atten= 57%, Lag= 22.9 min
Primary = 105.93 cfs @ 12.75 hrs, Volume= 21.179 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach P2 R : IMPACT POINT 2

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,100.44' @ 12.75 hrs Surf.Area= 79,491 sf Storage= 401,430 cf

Plug-Flow detention time= 278.0 min calculated for 21.157 af (100% of inflow)
Center-of-Mass det. time= 279.0 min (1,093.8 - 814.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,092.00'	726,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

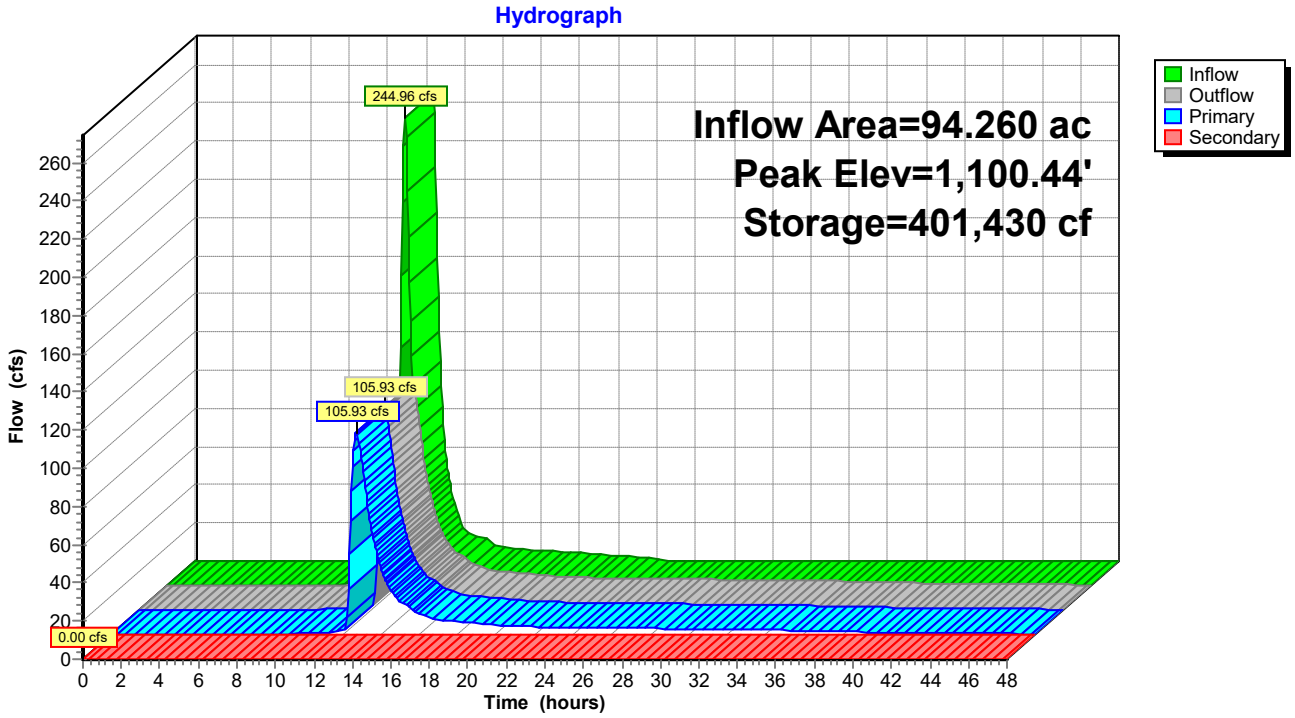
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,092.00	64	0	0
1,093.00	10,003	5,034	5,034
1,094.00	30,078	20,041	25,074
1,095.00	44,145	37,112	62,186
1,096.00	52,097	48,121	110,307
1,097.00	58,139	55,118	165,425
1,098.00	64,193	61,166	226,591
1,099.00	70,376	67,285	293,875
1,100.00	76,686	73,531	367,406
1,101.00	83,123	79,905	447,311
1,102.00	89,686	86,405	533,715
1,103.00	96,377	93,032	626,747
1,104.00	102,352	99,365	726,111

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,092.00'	**6.0" Vert. Orifice/Grate** X 2 rows with 24.0" cc spacing C= 0.600 Limited to weir flow at low heads
#2	Device 3	1,097.42'	**72.0" W x 42.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	1,092.00'	**60.0" Round RCP_Round 60"** L= 152.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,092.00' / 1,091.00' S= 0.0066 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,104.00'	**40.0' long + 1.0 '/' SideZ x 100.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

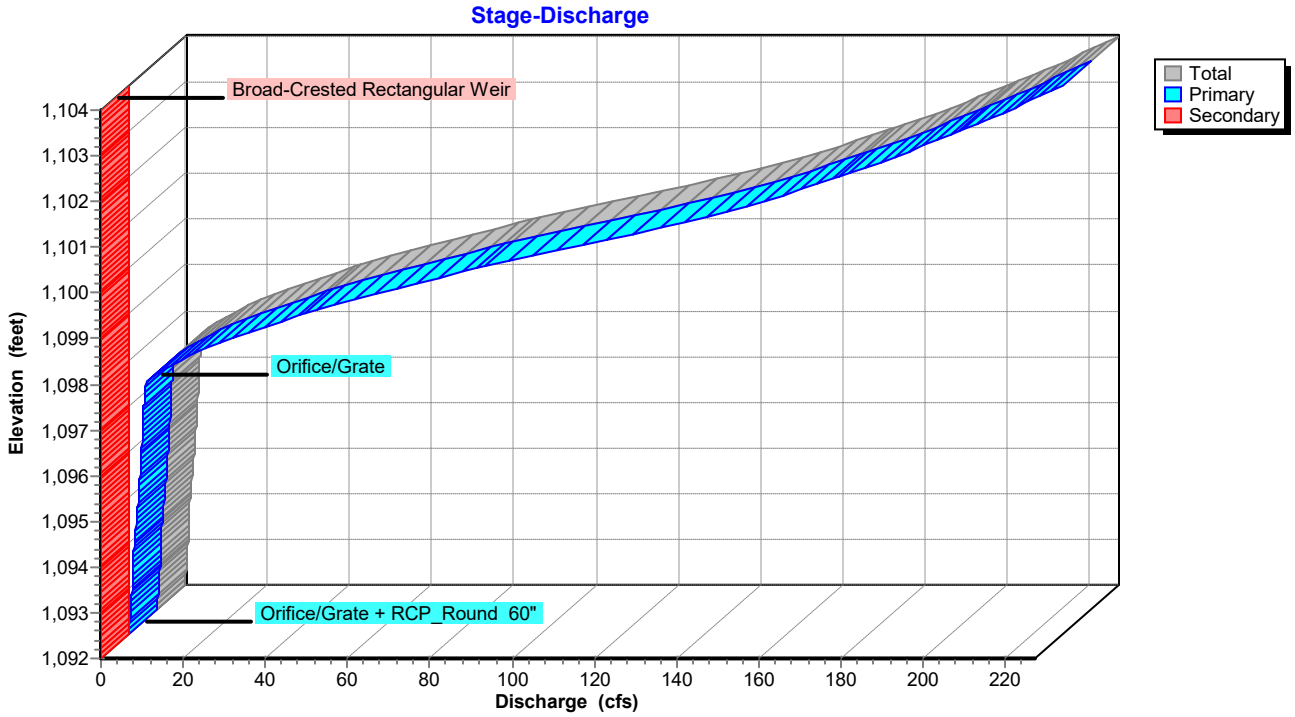
Primary OutFlow Max=105.92 cfs @ 12.75 hrs HW=1,100.44' (Free Discharge)
└─**3=RCP_Round 60"** (Passes 105.92 cfs of 250.25 cfs potential flow)
  └─**1=Orifice/Grate** (Orifice Controls 5.06 cfs @ 12.88 fps)
  └─**2=Orifice/Grate** (Orifice Controls 100.86 cfs @ 5.57 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,092.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Summary for Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

[92] Warning: Device #4 is above defined storage

Inflow Area = 94.260 ac, 39.80% Impervious, Inflow Depth = 5.37" for 100-Year event
Inflow = 479.59 cfs @ 12.36 hrs, Volume= 42.202 af
Outflow = 224.64 cfs @ 12.70 hrs, Volume= 42.166 af, Atten= 53%, Lag= 20.7 min
Primary = 224.64 cfs @ 12.70 hrs, Volume= 42.166 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach P2 R : IMPACT POINT 2

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,103.89' @ 12.70 hrs Surf.Area= 101,718 sf Storage= 715,289 cf

Plug-Flow detention time= 170.5 min calculated for 42.166 af (100% of inflow)
Center-of-Mass det. time= 169.9 min (971.0 - 801.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,092.00'	726,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

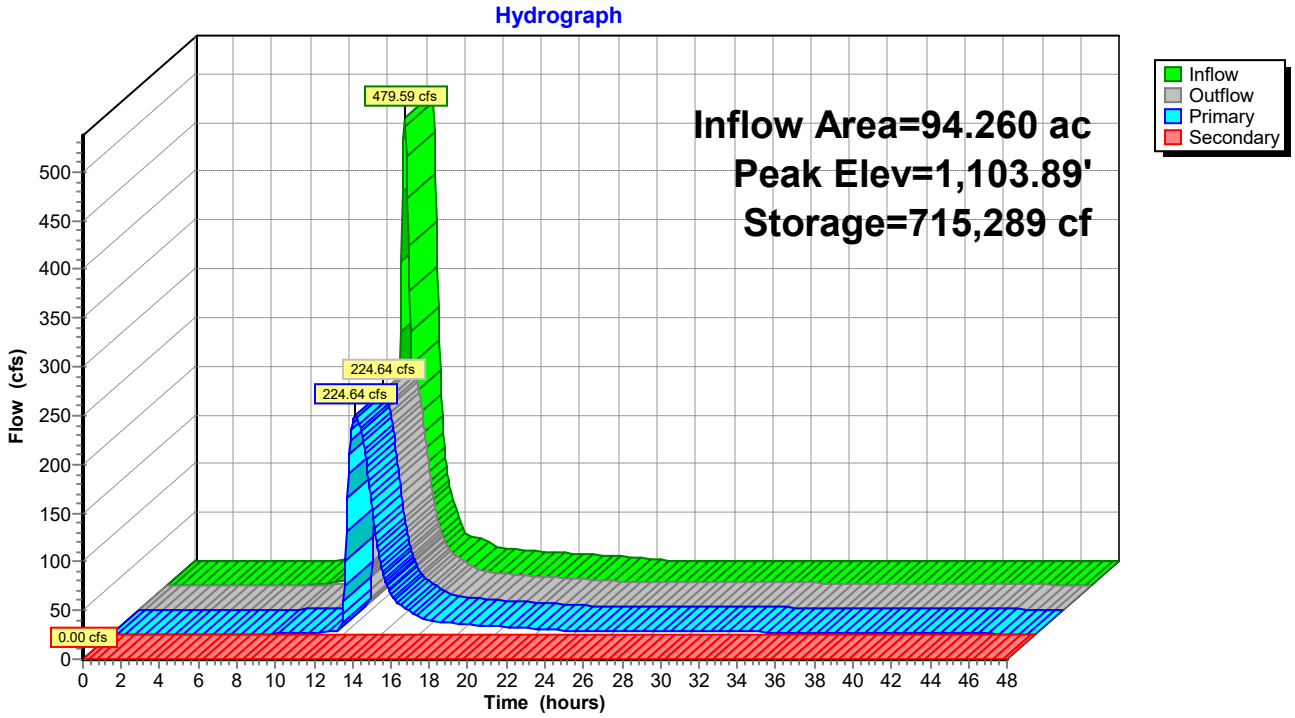
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,092.00	64	0	0
1,093.00	10,003	5,034	5,034
1,094.00	30,078	20,041	25,074
1,095.00	44,145	37,112	62,186
1,096.00	52,097	48,121	110,307
1,097.00	58,139	55,118	165,425
1,098.00	64,193	61,166	226,591
1,099.00	70,376	67,285	293,875
1,100.00	76,686	73,531	367,406
1,101.00	83,123	79,905	447,311
1,102.00	89,686	86,405	533,715
1,103.00	96,377	93,032	626,747
1,104.00	102,352	99,365	726,111

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,092.00'	**6.0" Vert. Orifice/Grate** X 2 rows with 24.0" cc spacing C= 0.600 Limited to weir flow at low heads
#2	Device 3	1,097.42'	**72.0" W x 42.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	1,092.00'	**60.0" Round RCP_Round 60"** L= 152.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,092.00' / 1,091.00' S= 0.0066 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,104.00'	**40.0' long + 1.0 '/' SideZ x 100.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

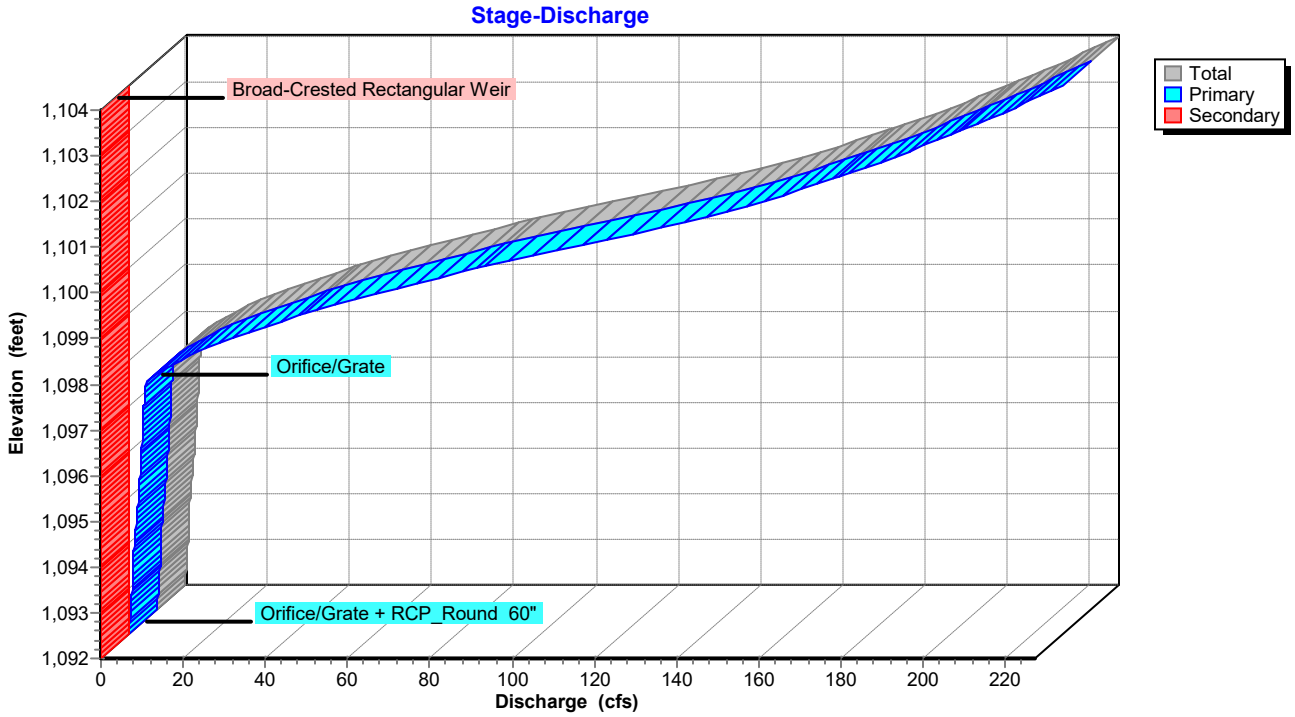
Primary OutFlow Max=224.58 cfs @ 12.70 hrs HW=1,103.89' (Free Discharge)
└─**3=RCP_Round 60"** (Passes 224.58 cfs of 333.80 cfs potential flow)
  └─**1=Orifice/Grate** (Orifice Controls 6.16 cfs @ 15.69 fps)
  └─**2=Orifice/Grate** (Orifice Controls 218.42 cfs @ 10.40 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,092.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT



Summary for Pond P2B P: DUAL CULVERT CROSSING 132ND

[92] Warning: Device #4 is above defined storage

Inflow Area = 47.200 ac, 25.54% Impervious, Inflow Depth = 7.45" for 2-Year event
Inflow = 48.12 cfs @ 12.15 hrs, Volume= 29.321 af
Outflow = 48.11 cfs @ 12.15 hrs, Volume= 29.321 af, Atten= 0%, Lag= 0.2 min
Primary = 48.11 cfs @ 12.15 hrs, Volume= 29.321 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,103.76' @ 12.15 hrs Surf.Area= 597 sf Storage= 523 cf

Plug-Flow detention time= 0.2 min calculated for 29.291 af (100% of inflow)
Center-of-Mass det. time= 0.2 min (729.2 - 729.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,102.00'	5,731 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

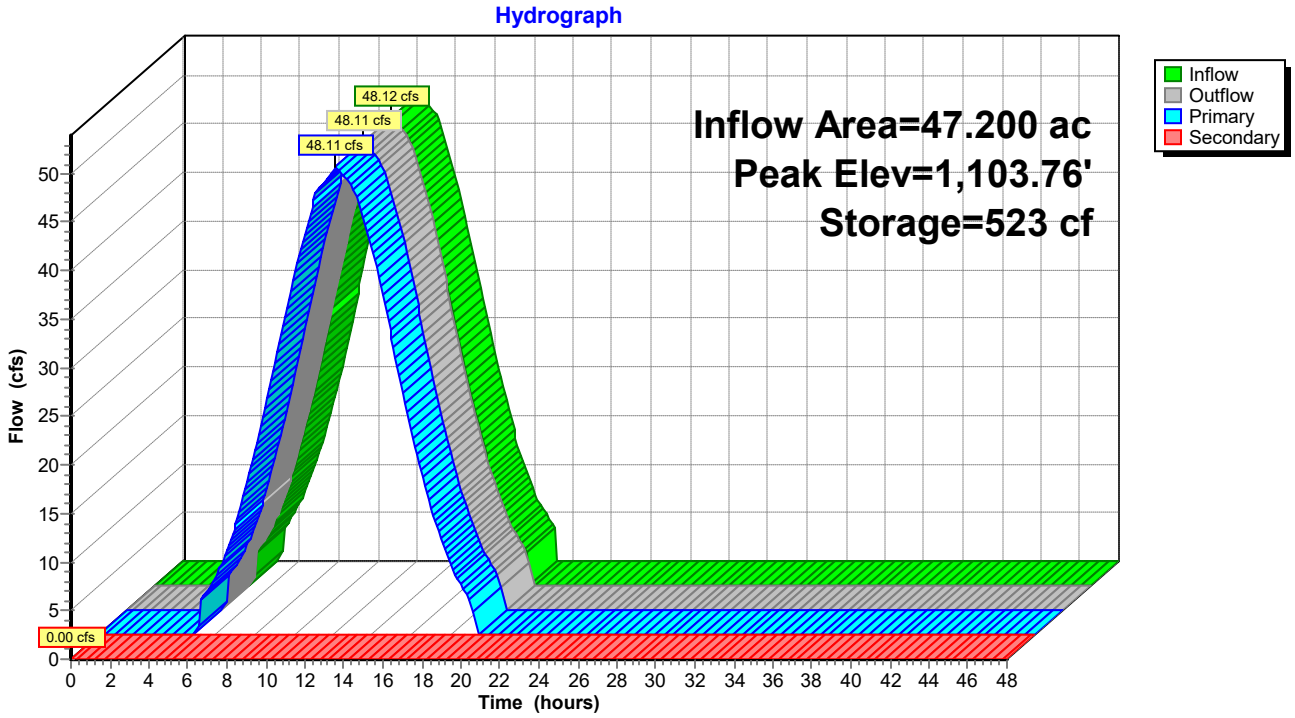
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,102.00	50	0	0
1,103.00	308	179	179
1,104.00	688	498	677
1,105.00	1,129	909	1,586
1,106.00	1,696	1,413	2,998
1,107.00	3,770	2,733	5,731

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#2	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#3	Primary	1,100.60'	**60.0" Round RCP_Round 60"** L= 100.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,100.60' / 1,098.90' S= 0.0170 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,107.00'	**26.0' long + 0.3 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

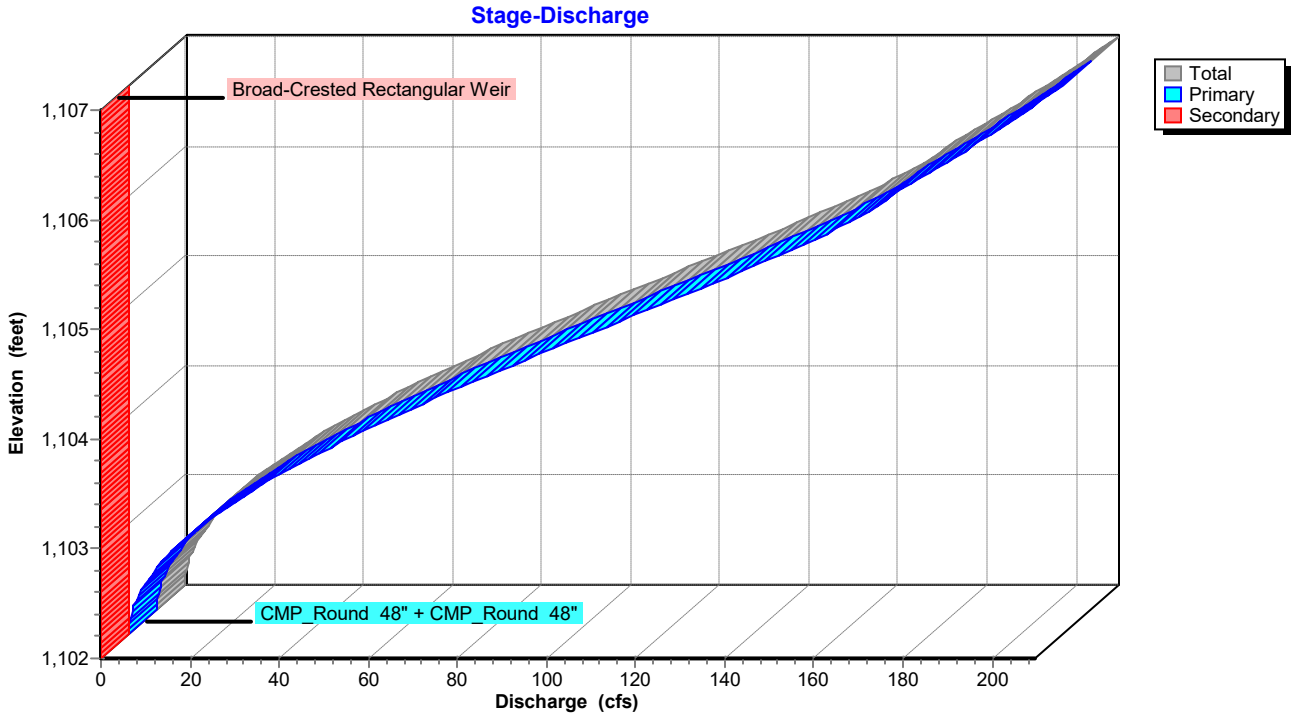
Primary OutFlow Max=48.10 cfs @ 12.15 hrs HW=1,103.76' (Free Discharge)
└─**3=RCP_Round 60"** (Passes 48.10 cfs of 92.21 cfs potential flow)
  ├─**1=CMP_Round 48"** (Inlet Controls 24.05 cfs @ 4.52 fps)
  └─**2=CMP_Round 48"** (Inlet Controls 24.05 cfs @ 4.52 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,102.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

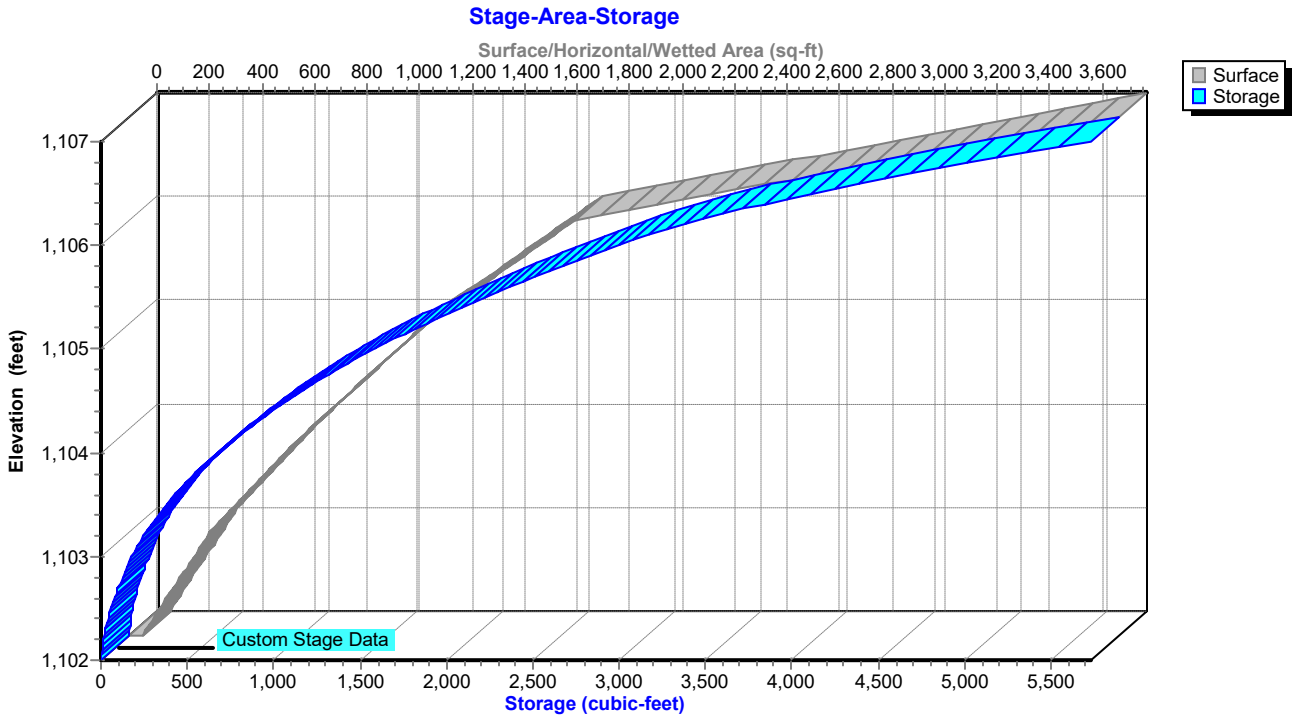
Pond P2B P: DUAL CULVERT CROSSING 132ND



Pond P2B P: DUAL CULVERT CROSSING 132ND



Pond P2B P: DUAL CULVERT CROSSING 132ND



Stage-Discharge for Pond P2B P: DUAL CULVERT CROSSING 132ND

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
1,102.00	0.00	0.00	**0.00**
1,102.05	0.05	0.05	0.00
1,102.10	0.18	0.18	0.00
1,102.15	0.40	0.40	0.00
1,102.20	0.72	0.72	0.00
1,102.25	1.11	1.11	0.00
1,102.30	1.60	1.60	0.00
1,102.35	2.17	2.17	0.00
1,102.40	2.82	2.82	0.00
1,102.45	3.55	3.55	0.00
1,102.50	4.37	4.37	0.00
1,102.55	5.26	5.26	0.00
1,102.60	6.23	6.23	0.00
1,102.65	7.29	7.29	0.00
1,102.70	8.41	8.41	0.00
1,102.75	9.62	9.62	0.00
1,102.80	10.90	10.90	0.00
1,102.85	12.25	12.25	0.00
1,102.90	13.67	13.67	0.00
1,102.95	15.17	15.17	0.00
1,103.00	16.73	16.73	0.00
1,103.05	18.36	18.36	0.00
1,103.10	20.06	20.06	0.00
1,103.15	21.82	21.82	0.00
1,103.20	23.65	23.65	0.00
1,103.25	25.54	25.54	0.00
1,103.30	27.50	27.50	0.00
1,103.35	29.51	29.51	0.00
1,103.40	31.58	31.58	0.00
1,103.45	33.71	33.71	0.00
1,103.50	35.90	35.90	0.00
1,103.55	38.14	38.14	0.00
1,103.60	40.43	40.43	0.00
1,103.65	42.78	42.78	0.00
1,103.70	45.17	45.17	0.00
1,103.75	47.61	47.61	0.00
1,103.80	50.11	50.11	0.00
1,103.85	52.64	52.64	0.00
1,103.90	55.22	55.22	0.00
1,103.95	57.84	57.84	0.00
1,104.00	60.51	60.51	0.00
1,104.05	63.21	63.21	0.00
1,104.10	65.95	65.95	0.00
1,104.15	68.72	68.72	0.00
1,104.20	71.53	71.53	0.00
1,104.25	74.36	74.36	0.00
1,104.30	77.23	77.23	0.00
1,104.35	80.13	80.13	0.00
1,104.40	83.05	83.05	0.00
1,104.45	85.99	85.99	0.00
1,104.50	88.96	88.96	0.00
1,104.55	91.94	91.94	0.00
1,104.60	94.94	94.94	0.00
1,104.65	97.95	97.95	0.00
1,104.70	100.98	100.98	0.00
1,104.75	104.02	104.02	0.00
1,104.80	107.06	107.06	0.00
1,104.85	110.10	110.10	0.00
1,104.90	113.15	113.15	0.00
1,104.95	116.20	116.20	0.00
1,105.00	119.24	119.24	0.00
1,105.05	122.27	122.27	0.00
1,105.10	125.29	125.29	0.00
1,105.15	128.29	128.29	0.00
1,105.20	131.28	131.28	0.00
1,105.25	134.24	134.24	0.00
1,105.30	137.17	137.17	0.00
1,105.35	140.08	140.08	0.00
1,105.40	142.94	142.94	0.00
1,105.45	145.76	145.76	0.00
1,105.50	148.54	148.54	0.00
1,105.55	151.25	151.25	0.00
1,105.60	153.91	153.91	0.00
1,105.65	156.49	156.49	0.00
1,105.70	158.99	158.99	0.00
1,105.75	161.39	161.39	0.00
1,105.80	163.69	163.69	0.00
1,105.85	165.85	165.85	0.00
1,105.90	167.86	167.86	0.00
1,105.95	169.66	169.66	0.00
1,106.00	171.14	171.14	0.00
1,106.05	173.27	173.27	0.00
1,106.10	175.37	175.37	0.00
1,106.15	177.44	177.44	0.00
1,106.20	179.49	179.49	0.00
1,106.25	181.52	181.52	0.00
1,106.30	183.53	183.53	0.00
1,106.35	185.51	185.51	0.00
1,106.40	187.47	187.47	0.00
1,106.45	189.42	189.42	0.00
1,106.50	191.34	191.34	0.00
1,106.55	193.24	193.24	0.00
1,106.60	195.13	195.13	0.00
1,106.65	197.00	197.00	0.00
1,106.70	198.85	198.85	0.00
1,106.75	200.68	200.68	0.00
1,106.80	202.49	202.49	0.00
1,106.85	204.29	204.29	0.00
1,106.90	206.08	206.08	0.00
1,106.95	207.85	207.85	0.00
1,107.00	**209.60**	**209.60**	0.00

Summary for Pond P2B P: DUAL CULVERT CROSSING 132ND

[92] Warning: Device #4 is above defined storage

Inflow Area = 47.200 ac, 25.54% Impervious, Inflow Depth = 20.72" for 10-Year event
Inflow = 133.74 cfs @ 12.15 hrs, Volume= 81.497 af
Outflow = 133.70 cfs @ 12.16 hrs, Volume= 81.498 af, Atten= 0%, Lag= 0.4 min
Primary = 133.70 cfs @ 12.16 hrs, Volume= 81.498 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,105.24' @ 12.16 hrs Surf.Area= 1,266 sf Storage= 1,874 cf

Plug-Flow detention time= 0.2 min calculated for 81.413 af (100% of inflow)
Center-of-Mass det. time= 0.2 min (729.2 - 729.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,102.00'	5,731 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

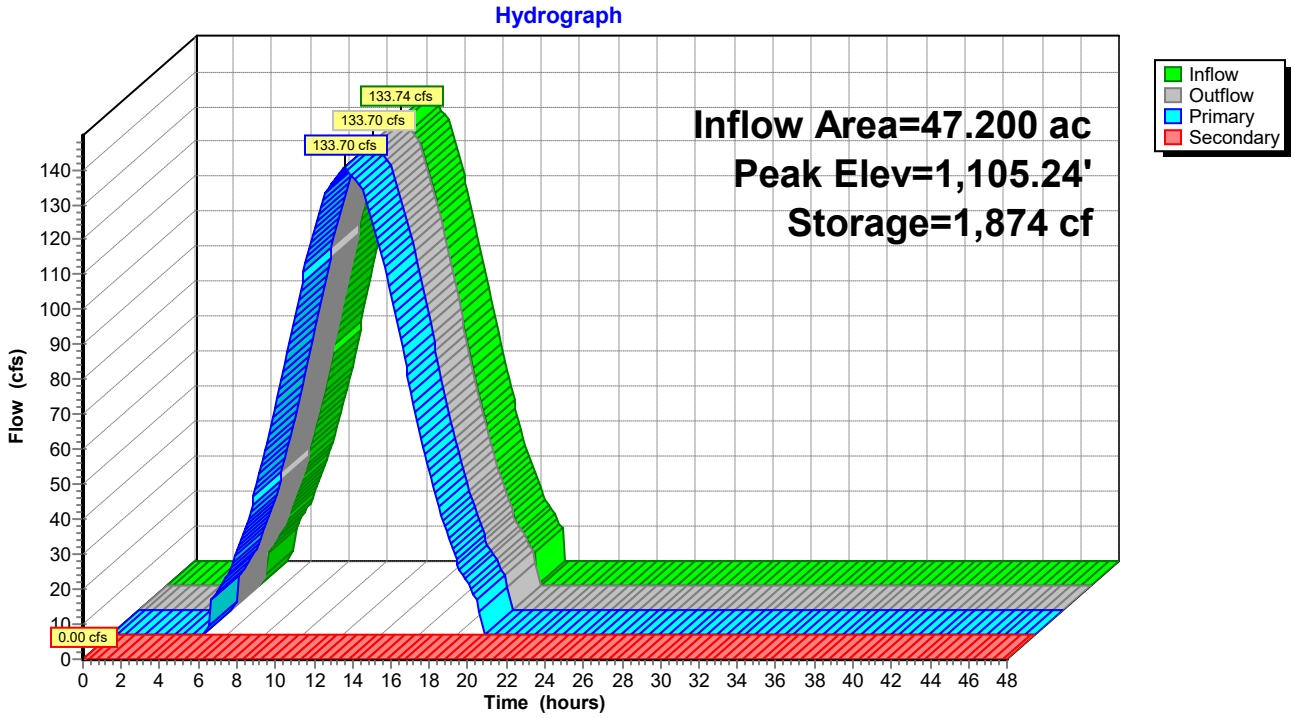
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,102.00	50	0	0
1,103.00	308	179	179
1,104.00	688	498	677
1,105.00	1,129	909	1,586
1,106.00	1,696	1,413	2,998
1,107.00	3,770	2,733	5,731

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#2	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#3	Primary	1,100.60'	**60.0" Round RCP_Round 60"** L= 100.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,100.60' / 1,098.90' S= 0.0170 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,107.00'	**26.0' long + 0.3 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

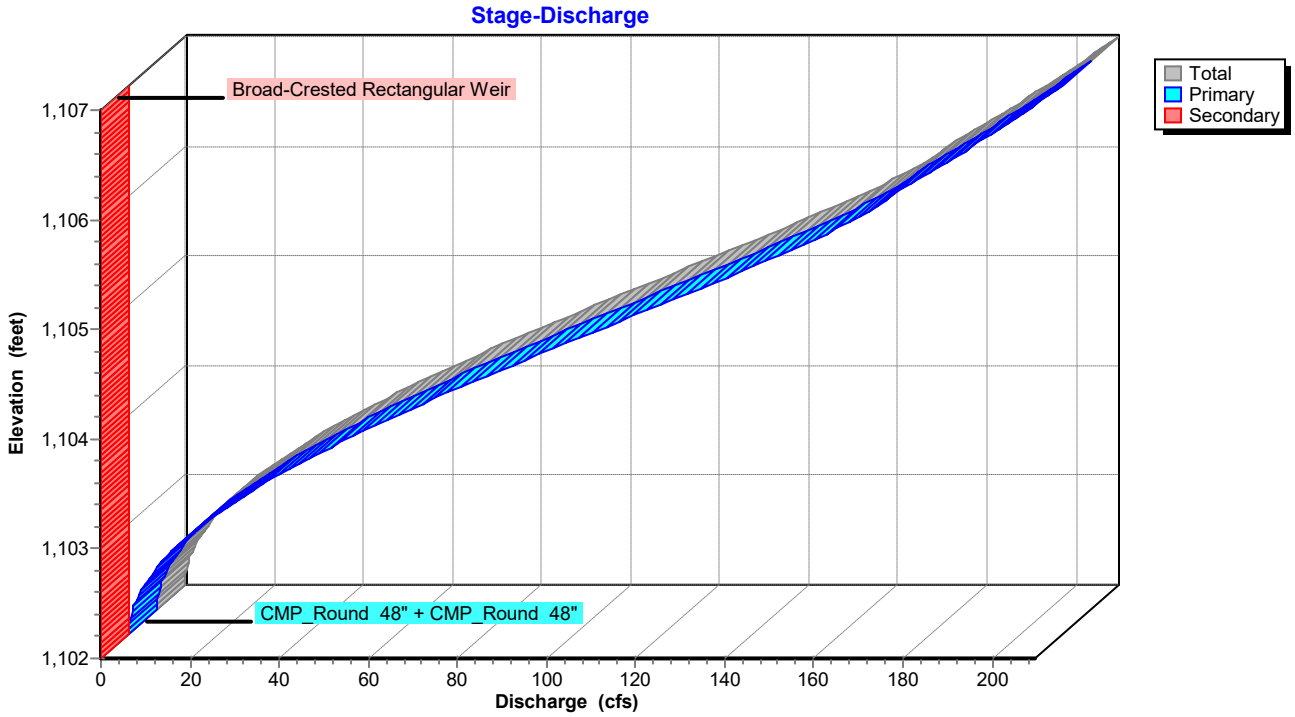
Primary OutFlow Max=133.67 cfs @ 12.16 hrs HW=1,105.24' (Free Discharge)
└**3=RCP_Round 60"** (Passes 133.67 cfs of 162.02 cfs potential flow)
  └**1=CMP_Round 48"** (Inlet Controls 66.84 cfs @ 6.13 fps)
  └**2=CMP_Round 48"** (Inlet Controls 66.84 cfs @ 6.13 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,102.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P2B P: DUAL CULVERT CROSSING 132ND



Pond P2B P: DUAL CULVERT CROSSING 132ND



Summary for Pond P2B P: DUAL CULVERT CROSSING 132ND

[92] Warning: Device #4 is above defined storage
[93] Warning: Storage range exceeded by 0.02'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 47.200 ac, 25.54% Impervious, Inflow Depth = 32.61" for 100-Year event
Inflow = 210.48 cfs @ 12.15 hrs, Volume= 128.252 af
Outflow = 210.80 cfs @ 12.15 hrs, Volume= 128.254 af, Atten= 0%, Lag= 0.0 min
Primary = 210.43 cfs @ 12.15 hrs, Volume= 128.252 af
Routed to Reach P2 R : IMPACT POINT 2
Secondary = 0.37 cfs @ 12.15 hrs, Volume= 0.002 af
Routed to Pond P2A P : SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,107.02' @ 12.15 hrs Surf.Area= 3,770 sf Storage= 5,731 cf

Plug-Flow detention time= 0.3 min calculated for 128.120 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (729.3 - 729.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,102.00'	5,731 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

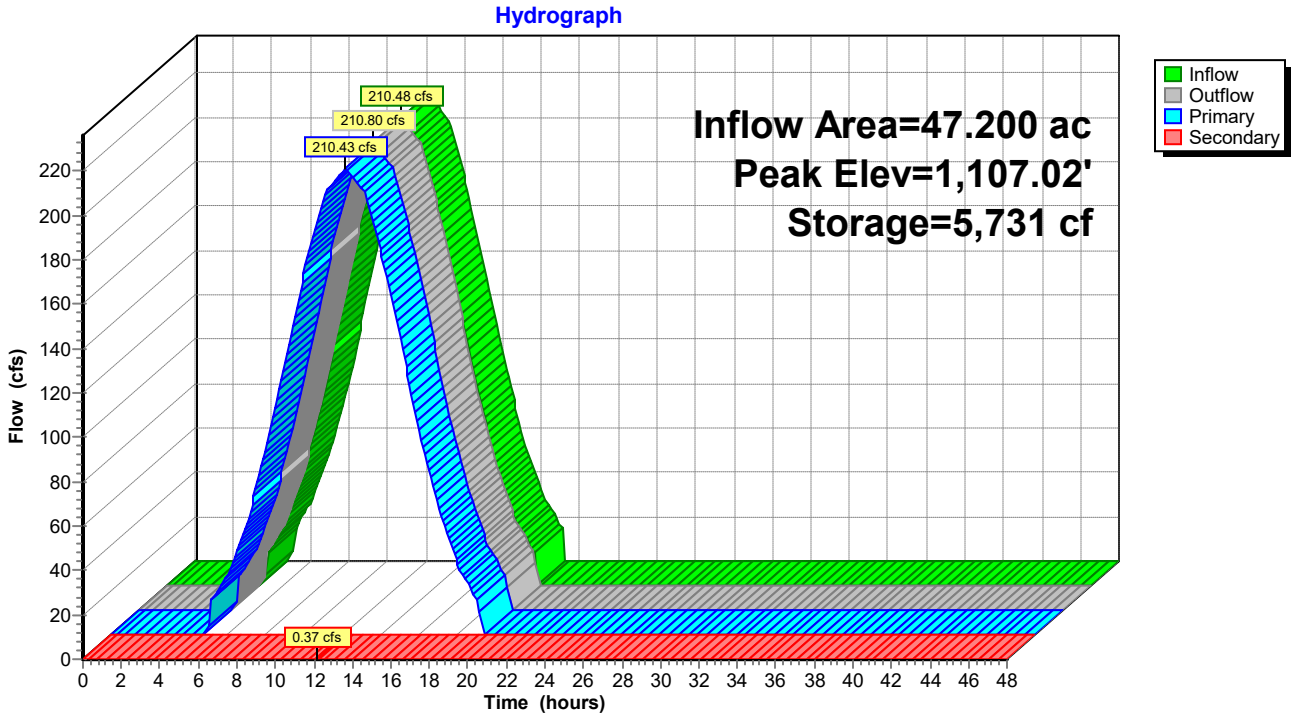
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,102.00	50	0	0
1,103.00	308	179	179
1,104.00	688	498	677
1,105.00	1,129	909	1,586
1,106.00	1,696	1,413	2,998
1,107.00	3,770	2,733	5,731

Device	Routing	Invert	Outlet Devices
#1	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#2	Device 3	1,102.00'	**48.0" Round CMP_Round 48"** L= 50.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,102.00' / 1,100.60' S= 0.0280 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 12.57 sf
#3	Primary	1,100.60'	**60.0" Round RCP_Round 60"** L= 100.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 1,100.60' / 1,098.90' S= 0.0170 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 19.63 sf
#4	Secondary	1,107.00'	**26.0' long + 0.3 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

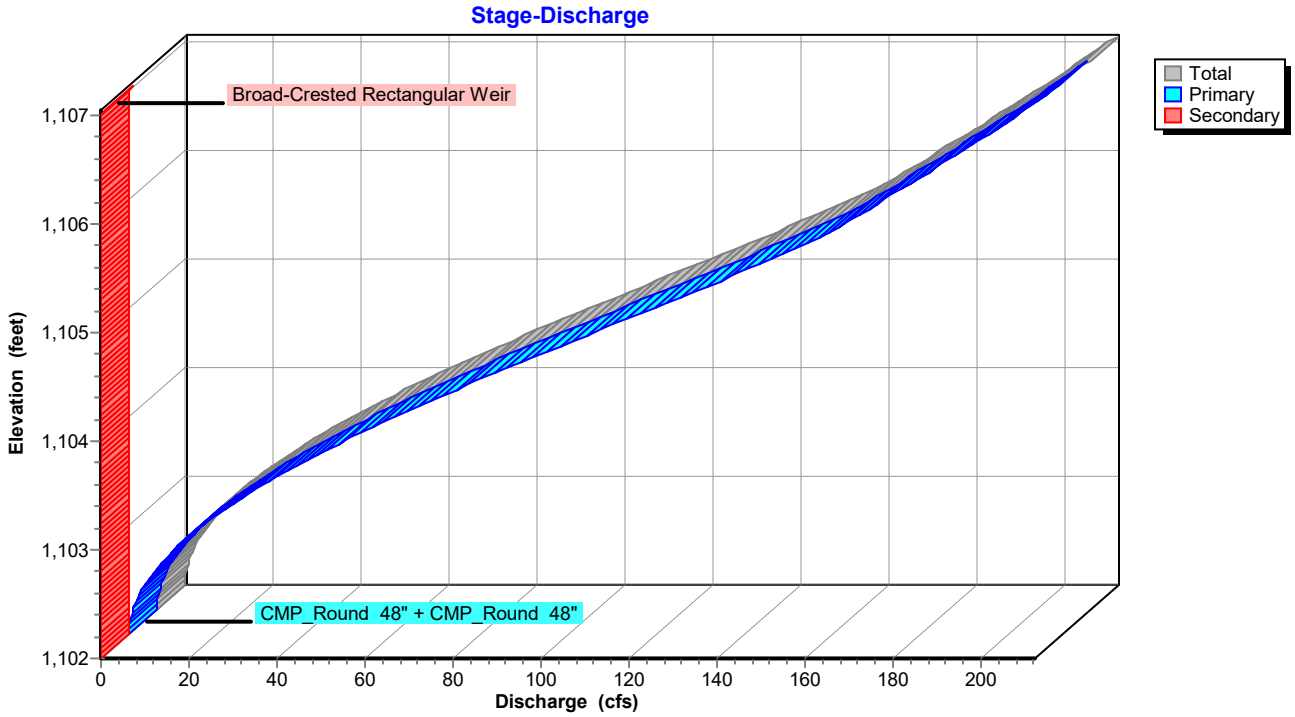
Primary OutFlow Max=210.43 cfs @ 12.15 hrs HW=1,107.02' (Free Discharge)
└─**3=RCP_Round 60"** (Passes 210.43 cfs of 230.15 cfs potential flow)
  ├─**1=CMP_Round 48"** (Inlet Controls 105.22 cfs @ 8.37 fps)
  └─**2=CMP_Round 48"** (Inlet Controls 105.22 cfs @ 8.37 fps)

Secondary OutFlow Max=0.26 cfs @ 12.15 hrs HW=1,107.02' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Weir Controls 0.26 cfs @ 0.41 fps)

Pond P2B P: DUAL CULVERT CROSSING 132ND



Pond P2B P: DUAL CULVERT CROSSING 132ND



Summary for Pond P5 P: SOUTHEAST POND

Inflow Area = 24.427 ac, 31.88% Impervious, Inflow Depth = 1.40" for 2-Year event
Inflow = 44.84 cfs @ 12.23 hrs, Volume= 2.855 af
Outflow = 2.00 cfs @ 14.43 hrs, Volume= 2.855 af, Atten= 96%, Lag= 131.8 min
Primary = 2.00 cfs @ 14.43 hrs, Volume= 2.855 af
Routed to Reach P5 R : IMPACT POINT 5

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,111.73' @ 14.43 hrs Surf.Area= 27,276 sf Storage= 79,378 cf

Plug-Flow detention time= 460.5 min calculated for 2.855 af (100% of inflow)
Center-of-Mass det. time= 460.2 min (1,279.4 - 819.2)

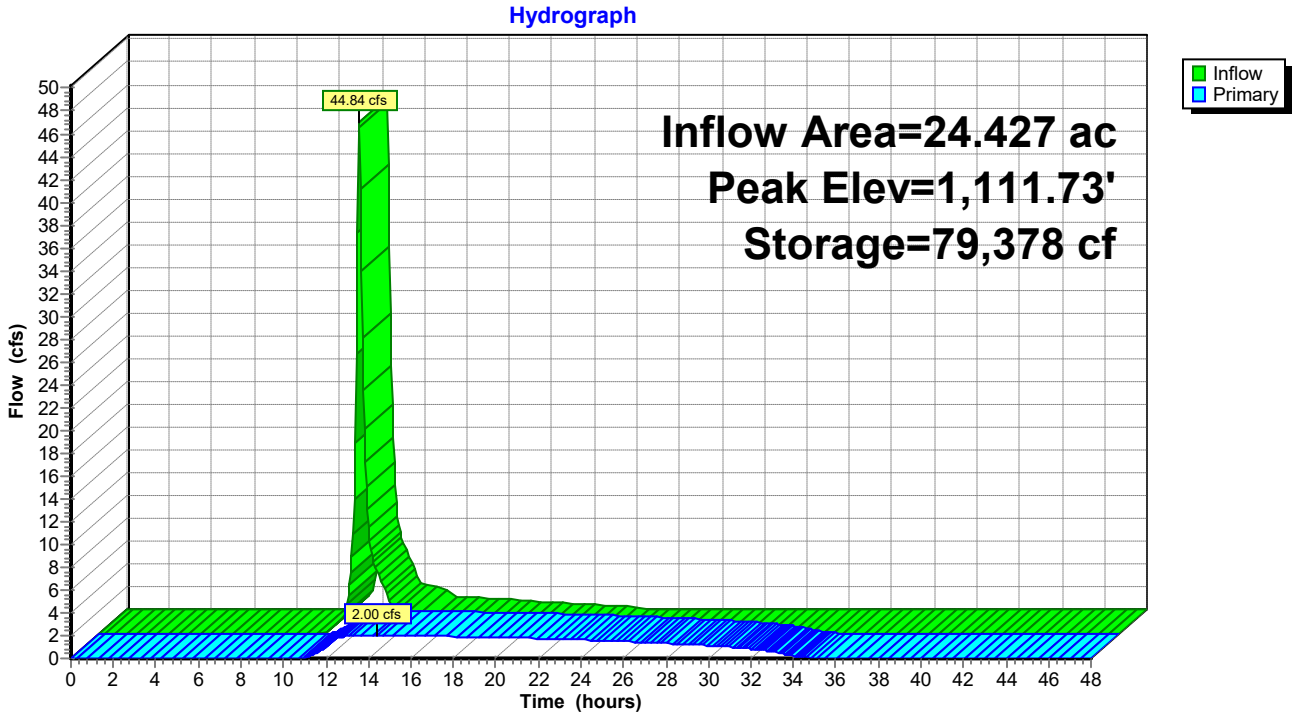
Volume	Invert	Avail.Storage	Storage Description
#1	1,107.00'	272,960 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,107.00	1,430	0	0
1,108.00	7,409	4,420	4,420
1,109.00	18,242	12,826	17,245
1,110.00	21,619	19,931	37,176
1,111.00	24,840	23,230	60,405
1,112.00	28,185	26,513	86,918
1,113.00	31,650	29,918	116,835
1,114.00	35,235	33,443	150,278
1,115.00	38,941	37,088	187,366
1,116.00	42,767	40,854	228,220
1,117.00	46,713	44,740	272,960

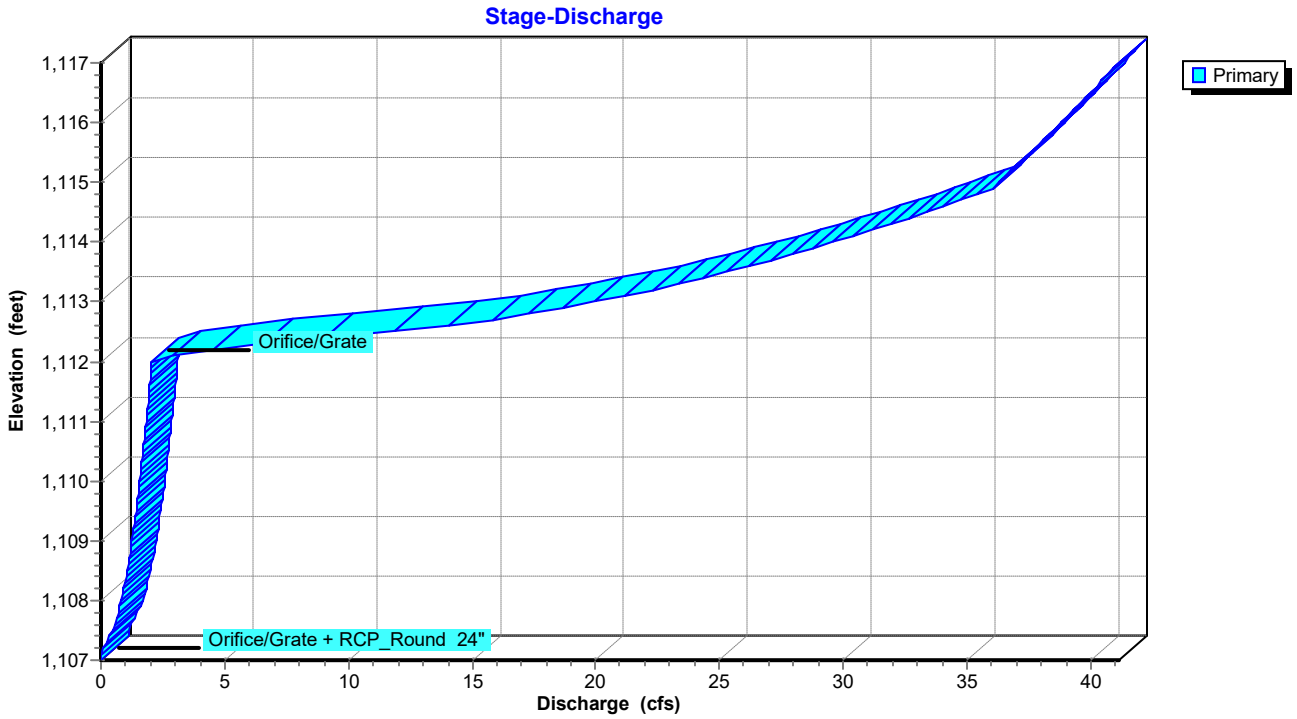
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,107.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,107.00'	**24.0" Round RCP_Round 24"** L= 175.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 1,107.00' / 1,106.00' S= 0.0057 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#3	Device 2	1,112.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.00 cfs @ 14.43 hrs HW=1,111.73' (Free Discharge)
└**2=RCP_Round 24"** (Passes 2.00 cfs of 26.47 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 2.00 cfs @ 10.19 fps)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

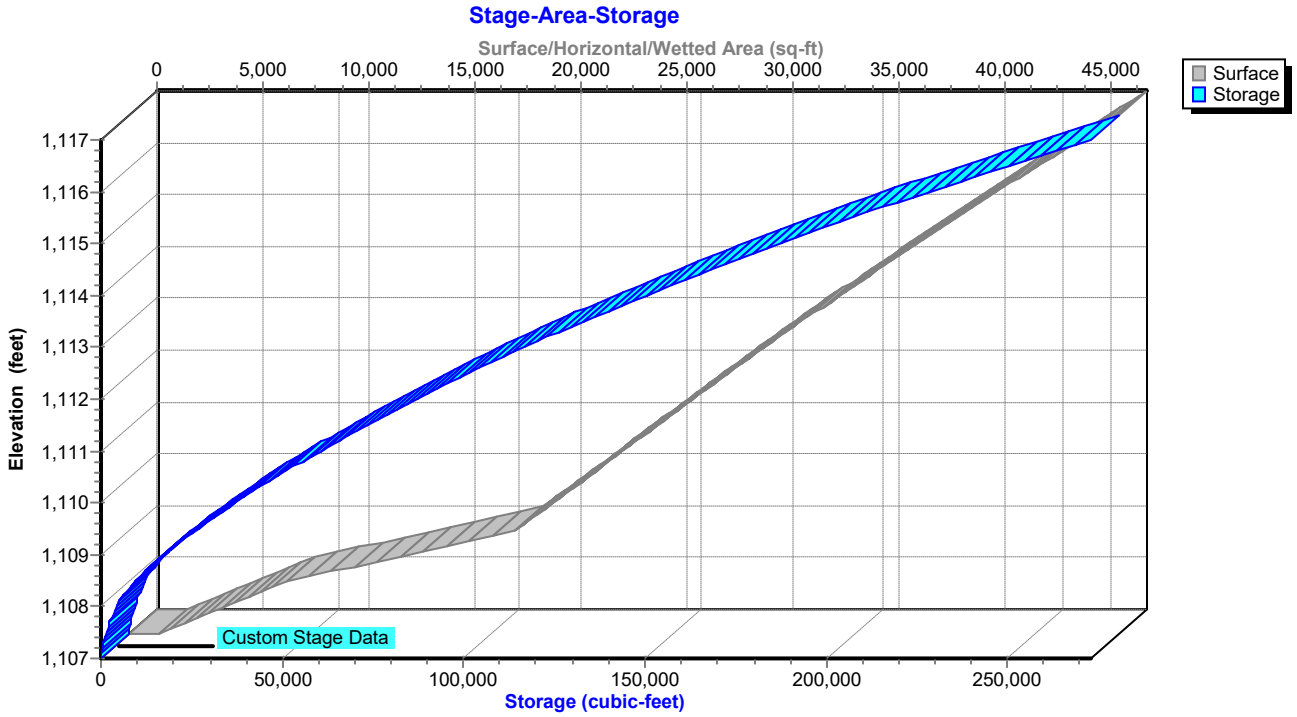
Pond P5 P: SOUTHEAST POND



Pond P5 P: SOUTHEAST POND



Pond P5 P: SOUTHEAST POND



Stage-Discharge for Pond P5 P: SOUTHEAST POND

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
1,107.00	0.00	1,109.60	1.45	1,112.20	4.55	1,114.80	35.39
1,107.05	0.01	1,109.65	1.46	1,112.25	5.54	1,114.85	35.72
1,107.10	0.03	1,109.70	1.48	1,112.30	6.63	1,114.90	36.02
1,107.15	0.07	1,109.75	1.49	1,112.35	7.81	1,114.95	36.15
1,107.20	0.11	1,109.80	1.51	1,112.40	9.08	1,115.00	36.28
1,107.25	0.17	1,109.85	1.52	1,112.45	10.42	1,115.05	36.41
1,107.30	0.23	1,109.90	1.54	1,112.50	11.85	1,115.10	36.53
1,107.35	0.30	1,109.95	1.55	1,112.55	13.04	1,115.15	36.66
1,107.40	0.36	1,110.00	1.57	1,112.60	14.05	1,115.20	36.79
1,107.45	0.43	1,110.05	1.58	1,112.65	14.96	1,115.25	36.92
1,107.50	0.47	1,110.10	1.60	1,112.70	15.80	1,115.30	37.05
1,107.55	0.52	1,110.15	1.61	1,112.75	16.58	1,115.35	37.17
1,107.60	0.56	1,110.20	1.62	1,112.80	17.33	1,115.40	37.30
1,107.65	0.60	1,110.25	1.64	1,112.85	18.03	1,115.45	37.42
1,107.70	0.63	1,110.30	1.65	1,112.90	18.71	1,115.50	37.55
1,107.75	0.67	1,110.35	1.66	1,112.95	19.35	1,115.55	37.67
1,107.80	0.70	1,110.40	1.68	1,113.00	19.97	1,115.60	37.80
1,107.85	0.73	1,110.45	1.69	1,113.05	20.58	1,115.65	37.92
1,107.90	0.76	1,110.50	1.70	1,113.10	21.16	1,115.70	38.05
1,107.95	0.79	1,110.55	1.72	1,113.15	21.72	1,115.75	38.17
1,108.00	0.82	1,110.60	1.73	1,113.20	22.27	1,115.80	38.29
1,108.05	0.85	1,110.65	1.74	1,113.25	22.81	1,115.85	38.42
1,108.10	0.87	1,110.70	1.76	1,113.30	23.33	1,115.90	38.54
1,108.15	0.90	1,110.75	1.77	1,113.35	23.83	1,115.95	38.66
1,108.20	0.92	1,110.80	1.78	1,113.40	24.33	1,116.00	38.78
1,108.25	0.95	1,110.85	1.79	1,113.45	24.82	1,116.05	38.90
1,108.30	0.97	1,110.90	1.81	1,113.50	25.29	1,116.10	39.02
1,108.35	0.99	1,110.95	1.82	1,113.55	25.76	1,116.15	39.14
1,108.40	1.01	1,111.00	1.83	1,113.60	26.22	1,116.20	39.26
1,108.45	1.04	1,111.05	1.84	1,113.65	26.67	1,116.25	39.38
1,108.50	1.06	1,111.10	1.86	1,113.70	27.11	1,116.30	39.50
1,108.55	1.08	1,111.15	1.87	1,113.75	27.54	1,116.35	39.62
1,108.60	1.10	1,111.20	1.88	1,113.80	27.97	1,116.40	39.74
1,108.65	1.12	1,111.25	1.89	1,113.85	28.39	1,116.45	39.86
1,108.70	1.14	1,111.30	1.90	1,113.90	28.80	1,116.50	39.97
1,108.75	1.16	1,111.35	1.91	1,113.95	29.21	1,116.55	40.09
1,108.80	1.18	1,111.40	1.93	1,114.00	29.61	1,116.60	40.21
1,108.85	1.20	1,111.45	1.94	1,114.05	30.01	1,116.65	40.33
1,108.90	1.21	1,111.50	1.95	1,114.10	30.40	1,116.70	40.44
1,108.95	1.23	1,111.55	1.96	1,114.15	30.78	1,116.75	40.56
1,109.00	1.25	1,111.60	1.97	1,114.20	31.16	1,116.80	40.67
1,109.05	1.27	1,111.65	1.98	1,114.25	31.54	1,116.85	40.79
1,109.10	1.29	1,111.70	1.99	1,114.30	31.91	1,116.90	40.90
1,109.15	1.30	1,111.75	2.01	1,114.35	32.27	1,116.95	41.02
1,109.20	1.32	1,111.80	2.02	1,114.40	32.63	1,117.00	**41.13**
1,109.25	1.34	1,111.85	2.03	1,114.45	32.99		
1,109.30	1.35	1,111.90	2.04	1,114.50	33.35		
1,109.35	1.37	1,111.95	2.05	1,114.55	33.70		
1,109.40	1.39	1,112.00	2.06	1,114.60	34.04		
1,109.45	1.40	1,112.05	2.38	1,114.65	34.38		
1,109.50	1.42	1,112.10	2.95	1,114.70	34.72		
1,109.55	1.43	1,112.15	3.68	1,114.75	35.06		

Summary for Pond P5 P: SOUTHEAST POND

Inflow Area = 24.427 ac, 31.88% Impervious, Inflow Depth = 2.57" for 10-Year event
Inflow = 82.31 cfs @ 12.23 hrs, Volume= 5.241 af
Outflow = 19.16 cfs @ 12.64 hrs, Volume= 5.241 af, Atten= 77%, Lag= 25.1 min
Primary = 19.16 cfs @ 12.64 hrs, Volume= 5.241 af
Routed to Reach P5 R : IMPACT POINT 5

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,112.94' @ 12.64 hrs Surf.Area= 31,427 sf Storage= 114,805 cf

Plug-Flow detention time= 348.3 min calculated for 5.236 af (100% of inflow)
Center-of-Mass det. time= 348.9 min (1,155.8 - 806.8)

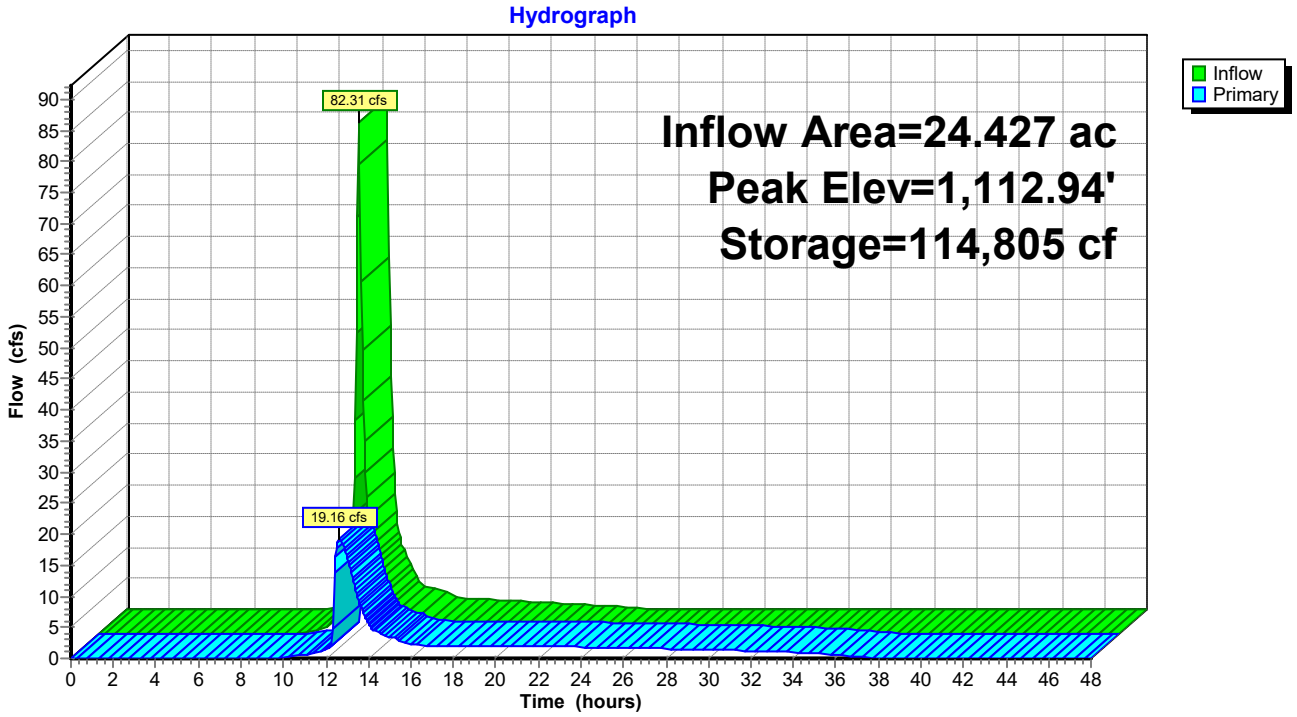
Volume	Invert	Avail.Storage	Storage Description
#1	1,107.00'	272,960 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,107.00	1,430	0	0
1,108.00	7,409	4,420	4,420
1,109.00	18,242	12,826	17,245
1,110.00	21,619	19,931	37,176
1,111.00	24,840	23,230	60,405
1,112.00	28,185	26,513	86,918
1,113.00	31,650	29,918	116,835
1,114.00	35,235	33,443	150,278
1,115.00	38,941	37,088	187,366
1,116.00	42,767	40,854	228,220
1,117.00	46,713	44,740	272,960

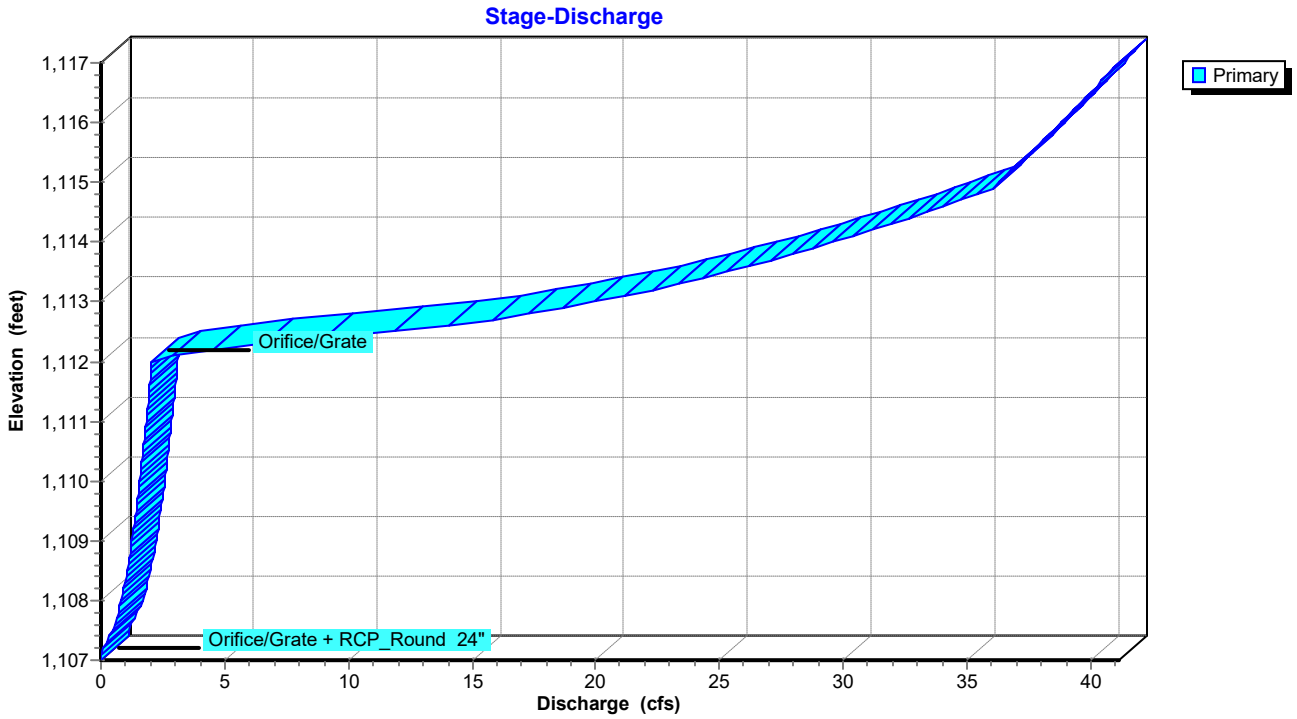
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,107.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,107.00'	**24.0" Round RCP_Round 24"** L= 175.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 1,107.00' / 1,106.00' S= 0.0057 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#3	Device 2	1,112.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=19.16 cfs @ 12.64 hrs HW=1,112.93' (Free Discharge)
└**2=RCP_Round 24"** (Passes 19.16 cfs of 30.46 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 2.25 cfs @ 11.48 fps)
  └**3=Orifice/Grate** (Orifice Controls 16.90 cfs @ 3.96 fps)

Pond P5 P: SOUTHEAST POND



Pond P5 P: SOUTHEAST POND



Summary for Pond P5 P: SOUTHEAST POND

Inflow Area = 24.427 ac, 31.88% Impervious, Inflow Depth = 5.22" for 100-Year event
Inflow = 164.00 cfs @ 12.22 hrs, Volume= 10.619 af
Outflow = 38.56 cfs @ 12.62 hrs, Volume= 10.619 af, Atten= 76%, Lag= 23.9 min
Primary = 38.56 cfs @ 12.62 hrs, Volume= 10.619 af
Routed to Reach P5 R : IMPACT POINT 5

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,115.91' @ 12.62 hrs Surf.Area= 42,416 sf Storage= 224,312 cf

Plug-Flow detention time= 227.7 min calculated for 10.608 af (100% of inflow)
Center-of-Mass det. time= 228.5 min (1,021.2 - 792.7)

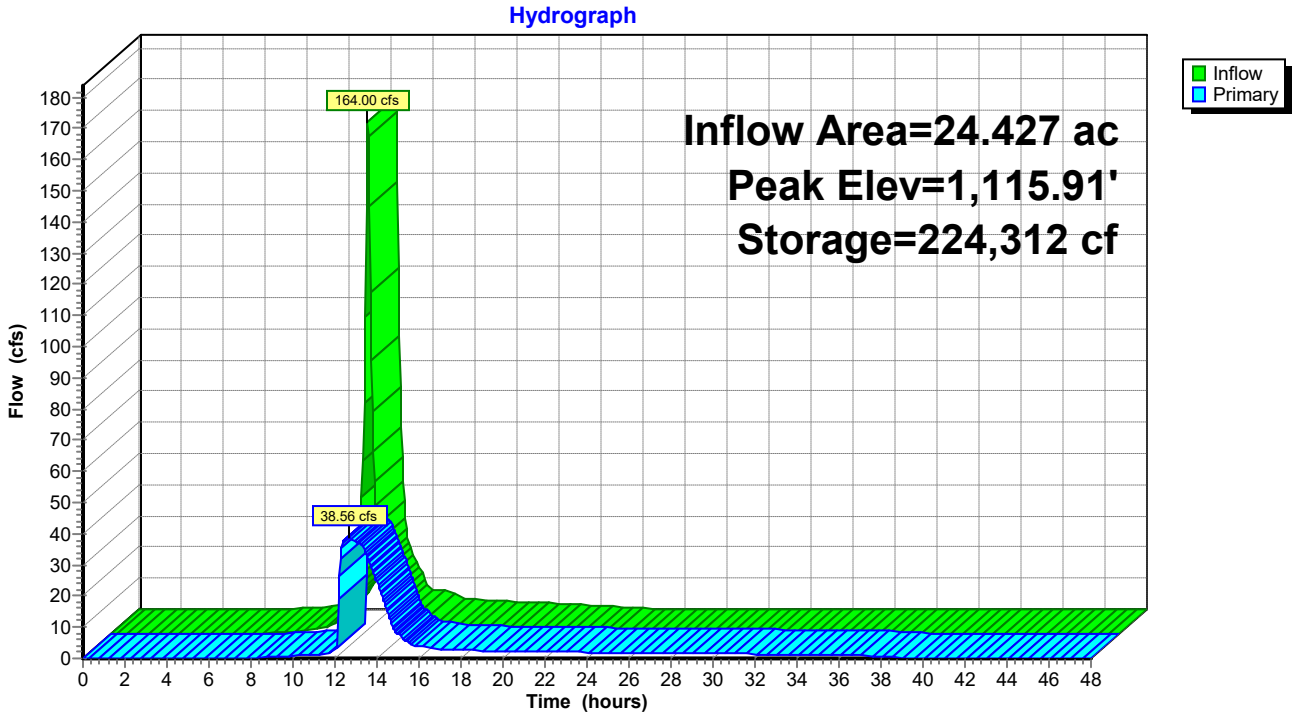
Volume	Invert	Avail.Storage	Storage Description
#1	1,107.00'	272,960 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,107.00	1,430	0	0
1,108.00	7,409	4,420	4,420
1,109.00	18,242	12,826	17,245
1,110.00	21,619	19,931	37,176
1,111.00	24,840	23,230	60,405
1,112.00	28,185	26,513	86,918
1,113.00	31,650	29,918	116,835
1,114.00	35,235	33,443	150,278
1,115.00	38,941	37,088	187,366
1,116.00	42,767	40,854	228,220
1,117.00	46,713	44,740	272,960

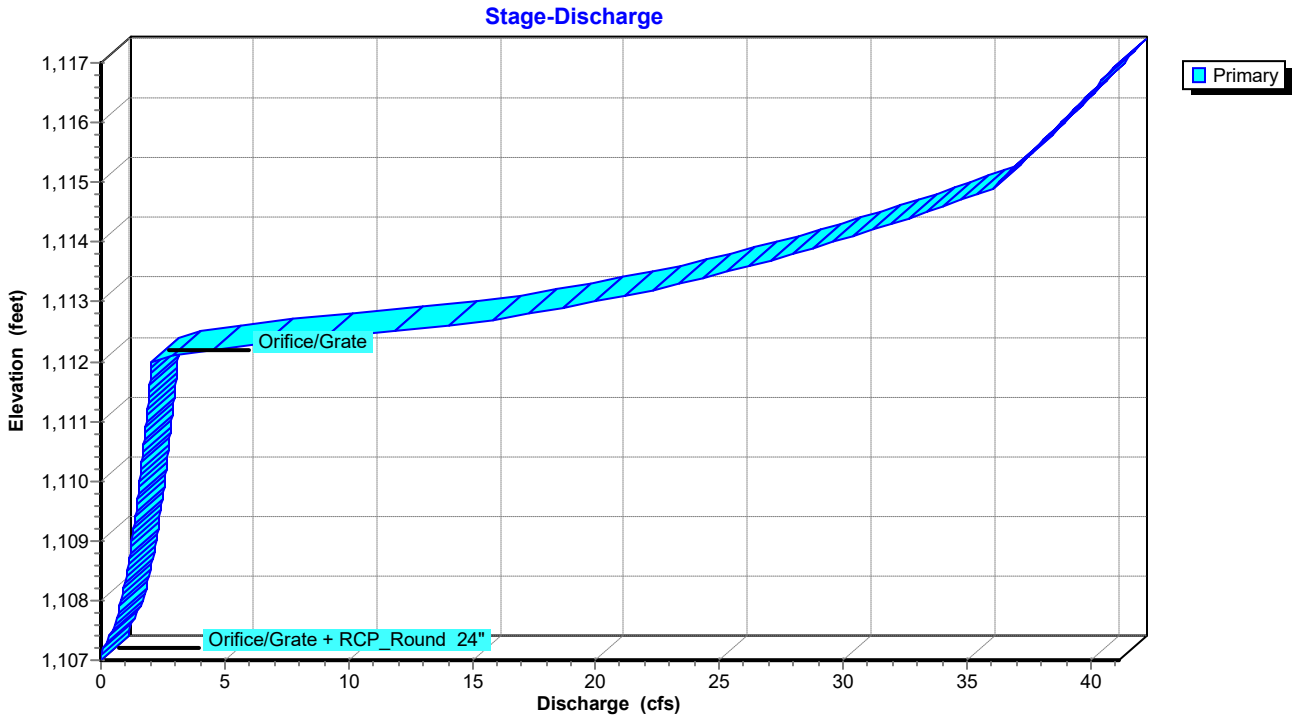
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,107.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,107.00'	**24.0" Round RCP_Round 24"** L= 175.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 1,107.00' / 1,106.00' S= 0.0057 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#3	Device 2	1,112.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=38.55 cfs @ 12.62 hrs HW=1,115.90' (Free Discharge)
└─**2=RCP_Round 24"** (Barrel Controls 38.55 cfs @ 12.27 fps)
  ├─**1=Orifice/Grate** (Passes < 2.78 cfs potential flow)
  └─**3=Orifice/Grate** (Passes < 39.27 cfs potential flow)

Pond P5 P: SOUTHEAST POND



Pond P5 P: SOUTHEAST POND



Summary for Pond P6 P: NORTHEAST BASIN

Inflow Area = 24.941 ac, 34.20% Impervious, Inflow Depth = 1.40" for 2-Year event
Inflow = 40.65 cfs @ 12.28 hrs, Volume= 2.915 af
Outflow = 1.98 cfs @ 14.77 hrs, Volume= 2.912 af, Atten= 95%, Lag= 149.4 min
Primary = 1.98 cfs @ 14.77 hrs, Volume= 2.912 af
Routed to Reach P6 R : IMPACT POINT 6

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,120.62' @ 14.77 hrs Surf.Area= 26,977 sf Storage= 82,556 cf

Plug-Flow detention time= 499.6 min calculated for 2.909 af (100% of inflow)
Center-of-Mass det. time= 499.8 min (1,322.7 - 822.9)

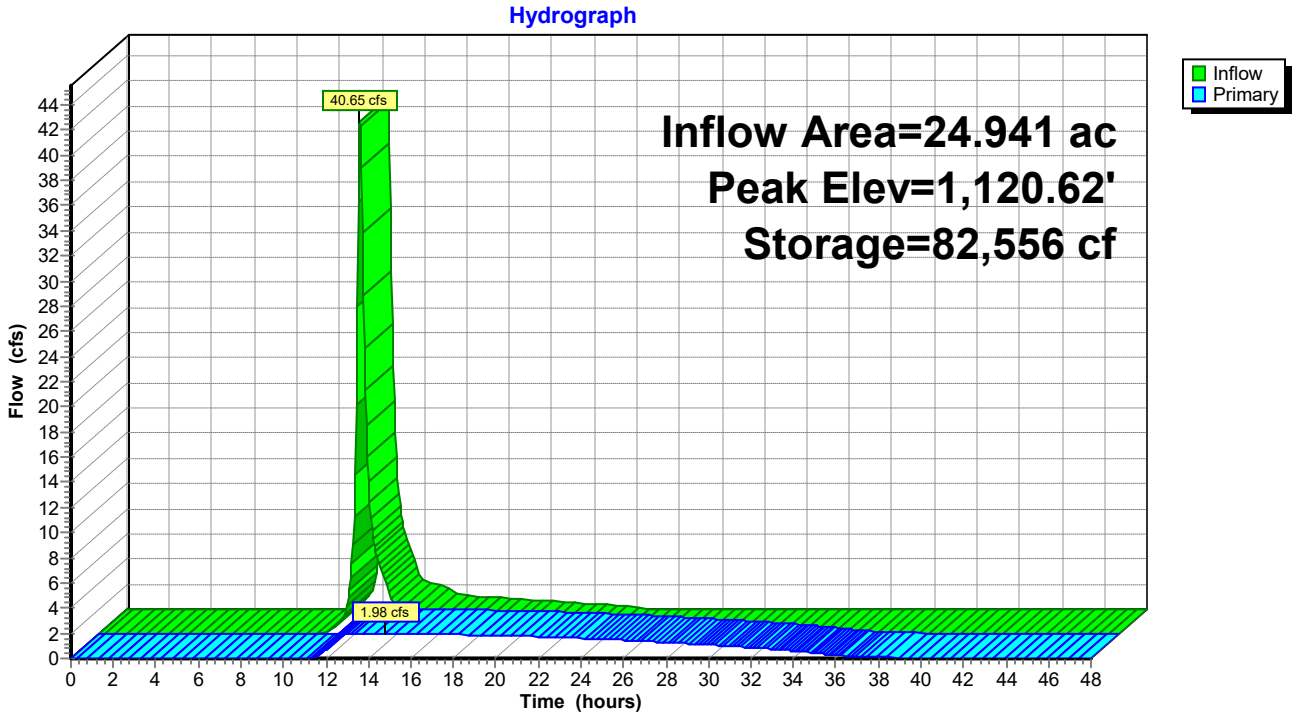
Volume	Invert	Avail.Storage	Storage Description
#1	1,116.00'	287,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,116.00	5,544	0	0
1,117.00	13,334	9,439	9,439
1,118.00	17,238	15,286	24,725
1,119.00	20,835	19,037	43,762
1,120.00	24,565	22,700	66,462
1,121.00	28,427	26,496	92,958
1,122.00	32,422	30,425	123,382
1,123.00	36,551	34,487	157,869
1,124.00	40,816	38,684	196,552
1,125.00	45,216	43,016	239,568
1,126.00	49,752	47,484	287,052

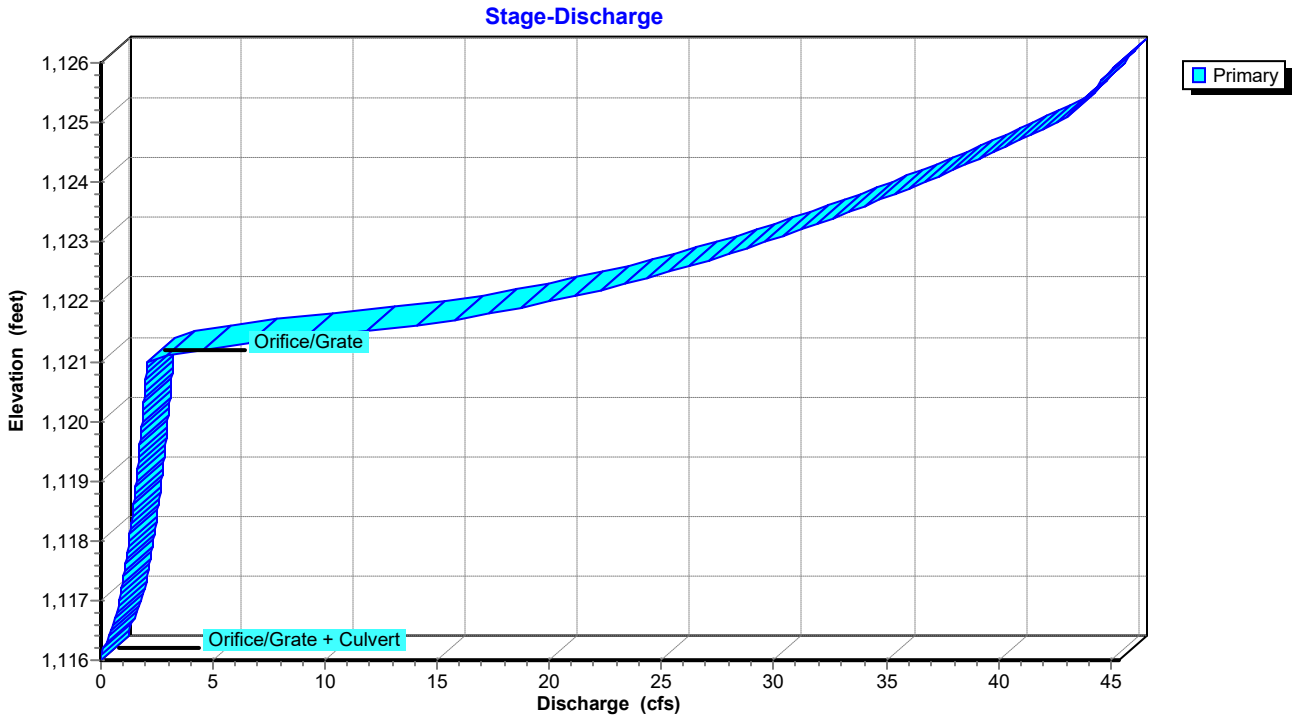
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,116.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,116.00'	**24.0" Round Culvert** L= 100.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,116.00' / 1,115.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#3	Device 2	1,121.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.98 cfs @ 14.77 hrs HW=1,120.62' (Free Discharge)
└**2=Culvert** (Passes 1.98 cfs of 28.80 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 1.98 cfs @ 10.07 fps)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

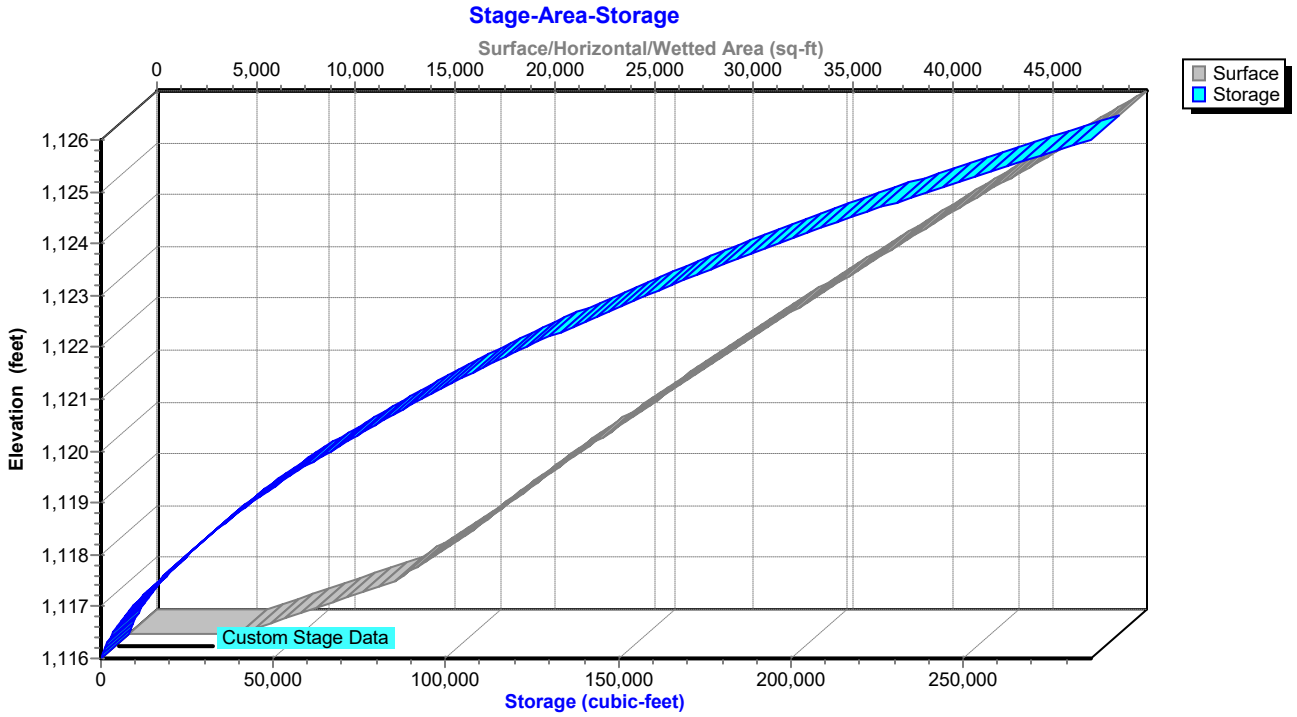
Pond P6 P: NORTHEAST BASIN



Pond P6 P: NORTHEAST BASIN



Pond P6 P: NORTHEAST BASIN



Stage-Discharge for Pond P6 P: NORTHEAST BASIN

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
1,116.00	0.00	1,118.60	1.45	1,121.20	4.55	1,123.80	35.39
1,116.05	0.01	1,118.65	1.46	1,121.25	5.54	1,123.85	35.72
1,116.10	0.03	1,118.70	1.48	1,121.30	6.63	1,123.90	36.05
1,116.15	0.07	1,118.75	1.49	1,121.35	7.81	1,123.95	36.37
1,116.20	0.11	1,118.80	1.51	1,121.40	9.08	1,124.00	36.69
1,116.25	0.17	1,118.85	1.52	1,121.45	10.42	1,124.05	37.01
1,116.30	0.23	1,118.90	1.54	1,121.50	11.85	1,124.10	37.32
1,116.35	0.30	1,118.95	1.55	1,121.55	13.04	1,124.15	37.63
1,116.40	0.36	1,119.00	1.57	1,121.60	14.05	1,124.20	37.94
1,116.45	0.43	1,119.05	1.58	1,121.65	14.96	1,124.25	38.25
1,116.50	0.47	1,119.10	1.60	1,121.70	15.80	1,124.30	38.55
1,116.55	0.52	1,119.15	1.61	1,121.75	16.58	1,124.35	38.85
1,116.60	0.56	1,119.20	1.62	1,121.80	17.33	1,124.40	39.15
1,116.65	0.60	1,119.25	1.64	1,121.85	18.03	1,124.45	39.45
1,116.70	0.63	1,119.30	1.65	1,121.90	18.71	1,124.50	39.74
1,116.75	0.67	1,119.35	1.66	1,121.95	19.35	1,124.55	40.03
1,116.80	0.70	1,119.40	1.68	1,122.00	19.97	1,124.60	40.32
1,116.85	0.73	1,119.45	1.69	1,122.05	20.58	1,124.65	40.61
1,116.90	0.76	1,119.50	1.70	1,122.10	21.16	1,124.70	40.90
1,116.95	0.79	1,119.55	1.72	1,122.15	21.72	1,124.75	41.18
1,117.00	0.82	1,119.60	1.73	1,122.20	22.27	1,124.80	41.46
1,117.05	0.85	1,119.65	1.74	1,122.25	22.81	1,124.85	41.74
1,117.10	0.87	1,119.70	1.76	1,122.30	23.33	1,124.90	42.02
1,117.15	0.90	1,119.75	1.77	1,122.35	23.83	1,124.95	42.30
1,117.20	0.92	1,119.80	1.78	1,122.40	24.33	1,125.00	42.57
1,117.25	0.95	1,119.85	1.79	1,122.45	24.82	1,125.05	42.84
1,117.30	0.97	1,119.90	1.81	1,122.50	25.29	1,125.10	43.05
1,117.35	0.99	1,119.95	1.82	1,122.55	25.76	1,125.15	43.18
1,117.40	1.01	1,120.00	1.83	1,122.60	26.22	1,125.20	43.32
1,117.45	1.04	1,120.05	1.84	1,122.65	26.67	1,125.25	43.45
1,117.50	1.06	1,120.10	1.86	1,122.70	27.11	1,125.30	43.58
1,117.55	1.08	1,120.15	1.87	1,122.75	27.54	1,125.35	43.71
1,117.60	1.10	1,120.20	1.88	1,122.80	27.97	1,125.40	43.84
1,117.65	1.12	1,120.25	1.89	1,122.85	28.39	1,125.45	43.97
1,117.70	1.14	1,120.30	1.90	1,122.90	28.80	1,125.50	44.10
1,117.75	1.16	1,120.35	1.91	1,122.95	29.21	1,125.55	44.23
1,117.80	1.18	1,120.40	1.93	1,123.00	29.61	1,125.60	44.36
1,117.85	1.20	1,120.45	1.94	1,123.05	30.01	1,125.65	44.49
1,117.90	1.21	1,120.50	1.95	1,123.10	30.40	1,125.70	44.62
1,117.95	1.23	1,120.55	1.96	1,123.15	30.78	1,125.75	44.75
1,118.00	1.25	1,120.60	1.97	1,123.20	31.16	1,125.80	44.87
1,118.05	1.27	1,120.65	1.98	1,123.25	31.54	1,125.85	45.00
1,118.10	1.29	1,120.70	1.99	1,123.30	31.91	1,125.90	45.13
1,118.15	1.30	1,120.75	2.01	1,123.35	32.27	1,125.95	45.25
1,118.20	1.32	1,120.80	2.02	1,123.40	32.63	1,126.00	**45.38**
1,118.25	1.34	1,120.85	2.03	1,123.45	32.99		
1,118.30	1.35	1,120.90	2.04	1,123.50	33.35		
1,118.35	1.37	1,120.95	2.05	1,123.55	33.70		
1,118.40	1.39	1,121.00	2.06	1,123.60	34.04		
1,118.45	1.40	1,121.05	2.38	1,123.65	34.38		
1,118.50	1.42	1,121.10	2.95	1,123.70	34.72		
1,118.55	1.43	1,121.15	3.68	1,123.75	35.06		

Summary for Pond P6 P: NORTHEAST BASIN

Inflow Area = 24.941 ac, 34.20% Impervious, Inflow Depth = 2.57" for 10-Year event
Inflow = 75.19 cfs @ 12.27 hrs, Volume= 5.351 af
Outflow = 18.61 cfs @ 12.74 hrs, Volume= 5.345 af, Atten= 75%, Lag= 28.0 min
Primary = 18.61 cfs @ 12.74 hrs, Volume= 5.345 af
Routed to Reach P6 R : IMPACT POINT 6

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,121.89' @ 12.74 hrs Surf.Area= 31,996 sf Storage= 119,947 cf

Plug-Flow detention time= 386.2 min calculated for 5.345 af (100% of inflow)
Center-of-Mass det. time= 385.4 min (1,196.0 - 810.5)

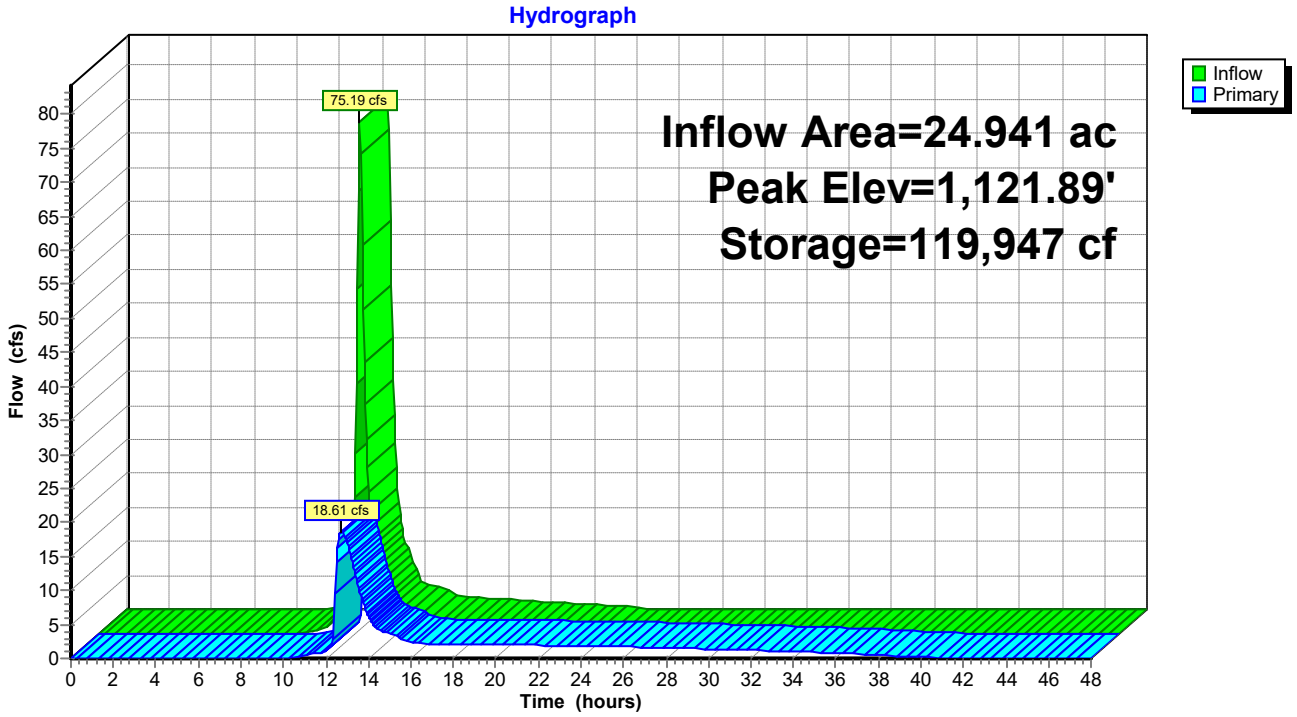
Volume	Invert	Avail.Storage	Storage Description
#1	1,116.00'	287,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,116.00	5,544	0	0
1,117.00	13,334	9,439	9,439
1,118.00	17,238	15,286	24,725
1,119.00	20,835	19,037	43,762
1,120.00	24,565	22,700	66,462
1,121.00	28,427	26,496	92,958
1,122.00	32,422	30,425	123,382
1,123.00	36,551	34,487	157,869
1,124.00	40,816	38,684	196,552
1,125.00	45,216	43,016	239,568
1,126.00	49,752	47,484	287,052

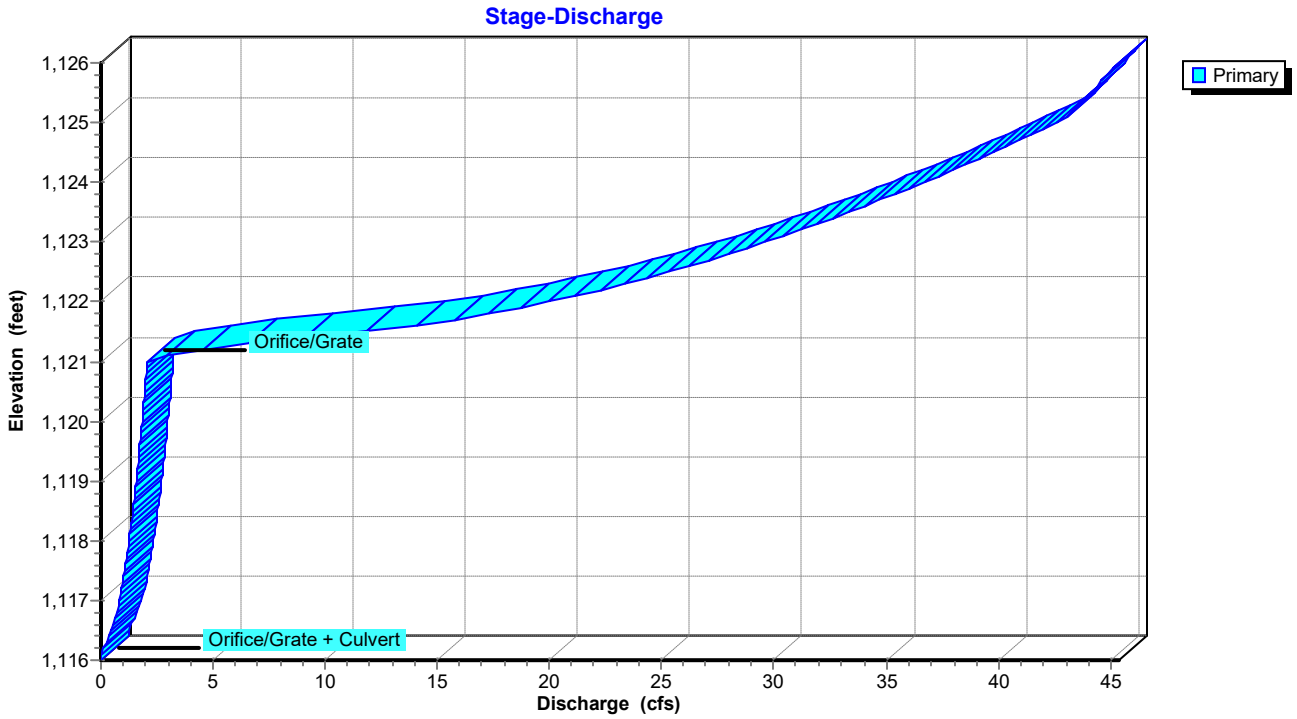
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,116.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,116.00'	**24.0" Round Culvert** L= 100.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,116.00' / 1,115.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#3	Device 2	1,121.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=18.60 cfs @ 12.74 hrs HW=1,121.89' (Free Discharge)
└**2=Culvert** (Passes 18.60 cfs of 33.46 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 2.25 cfs @ 11.44 fps)
  └**3=Orifice/Grate** (Orifice Controls 16.36 cfs @ 3.83 fps)

Pond P6 P: NORTHEAST BASIN



Pond P6 P: NORTHEAST BASIN



Summary for Pond P6 P: NORTHEAST BASIN

Inflow Area = 24.941 ac, 34.20% Impervious, Inflow Depth = 5.22" for 100-Year event
Inflow = 149.66 cfs @ 12.27 hrs, Volume= 10.843 af
Outflow = 41.09 cfs @ 12.69 hrs, Volume= 10.833 af, Atten= 73%, Lag= 25.0 min
Primary = 41.09 cfs @ 12.69 hrs, Volume= 10.833 af
Routed to Reach P6 R : IMPACT POINT 6

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 1,124.73' @ 12.69 hrs Surf.Area= 44,045 sf Storage= 227,691 cf

Plug-Flow detention time= 247.0 min calculated for 10.833 af (100% of inflow)
Center-of-Mass det. time= 246.5 min (1,042.9 - 796.5)

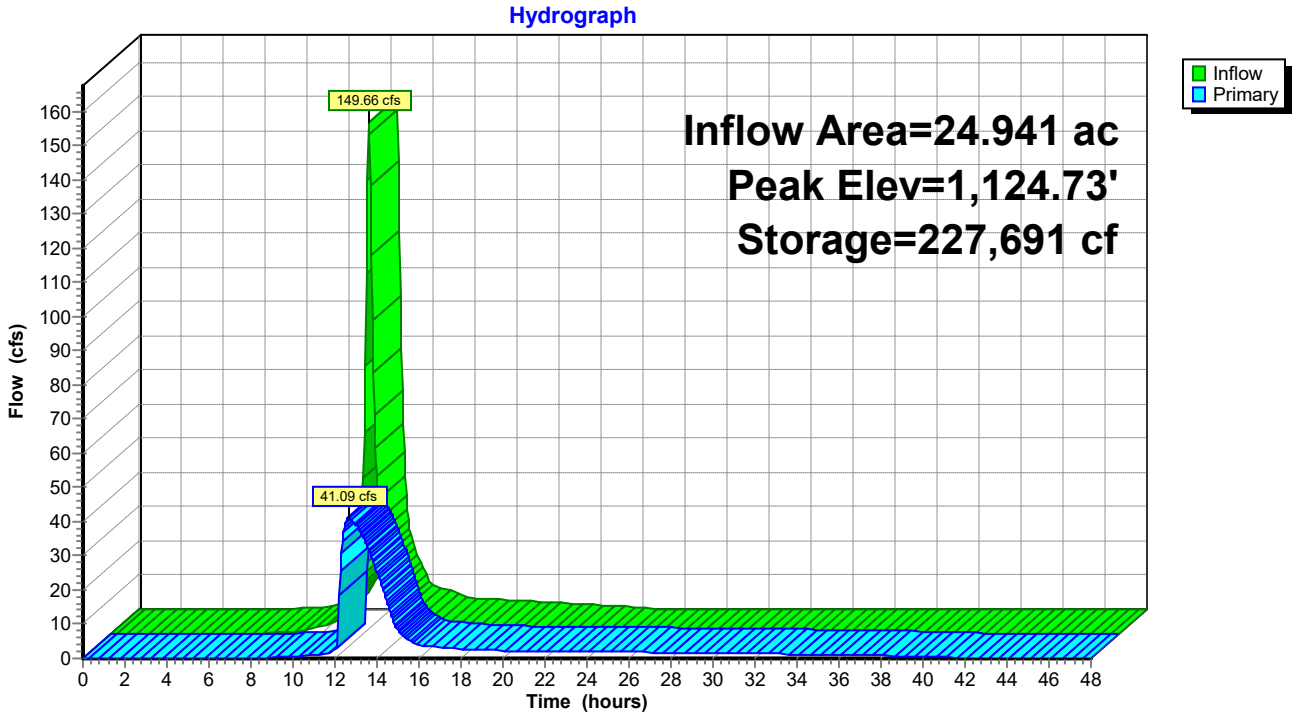
Volume	Invert	Avail.Storage	Storage Description
#1	1,116.00'	287,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,116.00	5,544	0	0
1,117.00	13,334	9,439	9,439
1,118.00	17,238	15,286	24,725
1,119.00	20,835	19,037	43,762
1,120.00	24,565	22,700	66,462
1,121.00	28,427	26,496	92,958
1,122.00	32,422	30,425	123,382
1,123.00	36,551	34,487	157,869
1,124.00	40,816	38,684	196,552
1,125.00	45,216	43,016	239,568
1,126.00	49,752	47,484	287,052

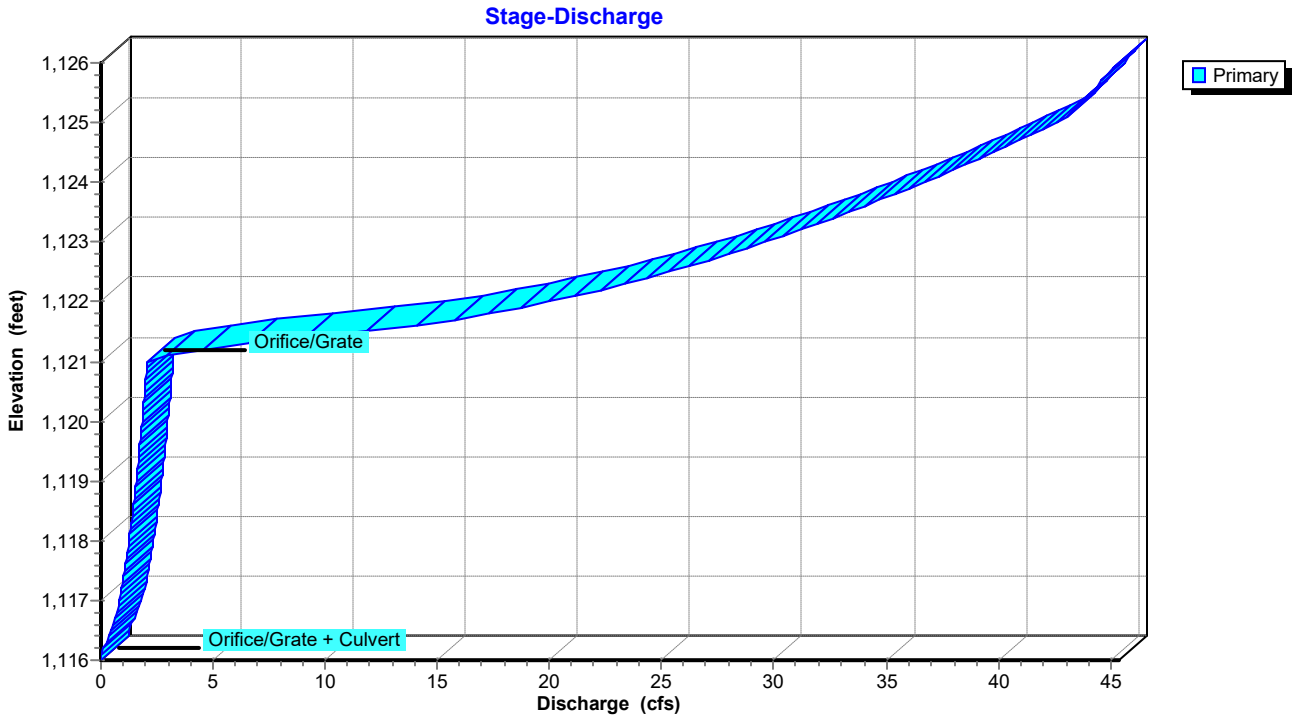
Device	Routing	Invert	Outlet Devices
#1	Device 2	1,116.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	1,116.00'	**24.0" Round Culvert** L= 100.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,116.00' / 1,115.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#3	Device 2	1,121.00'	**25.6" W x 6.0" H Vert. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=41.08 cfs @ 12.69 hrs HW=1,124.73' (Free Discharge)
└**2=Culvert** (Passes 41.08 cfs of 42.06 cfs potential flow)
  ├**1=Orifice/Grate** (Orifice Controls 2.75 cfs @ 14.02 fps)
  └**3=Orifice/Grate** (Orifice Controls 38.32 cfs @ 8.98 fps)

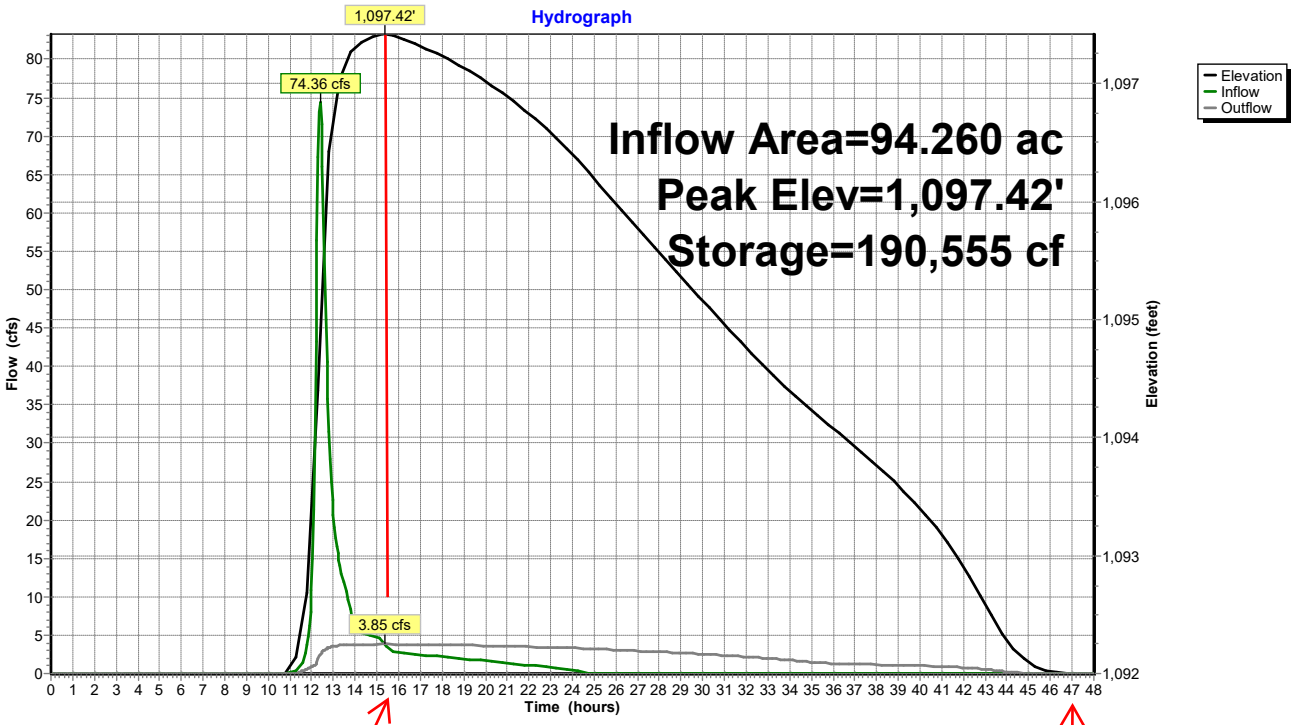
Pond P6 P: NORTHEAST BASIN



Pond P6 P: NORTHEAST BASIN



Pond P2A P: SOUTHWEST BASIN TO WEST MAIN STREET CULVERT

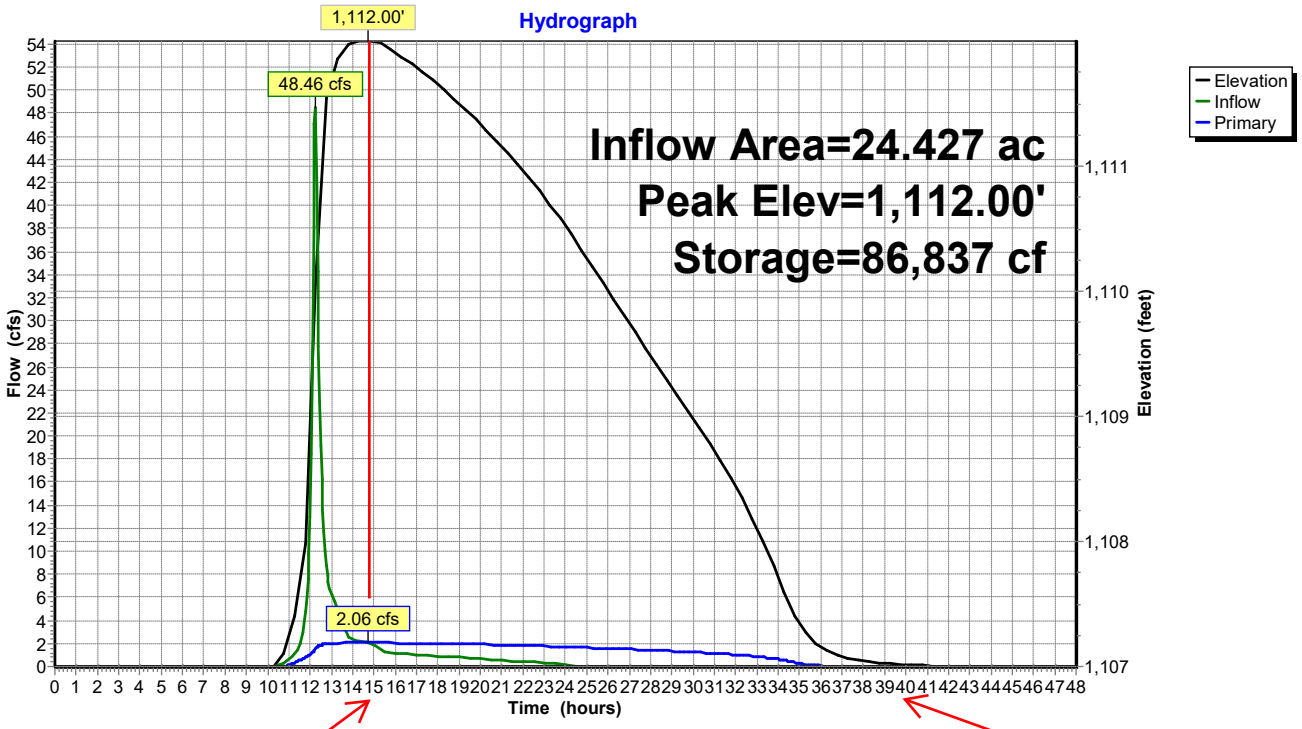


PEAK AT 15.5 HOURS

RETURN TO LOWEST POND ELEVATION AT 47 HOURS

DRAWDOWN OF 31.5 HOURS

Pond P5 P: SOUTHEAST POND

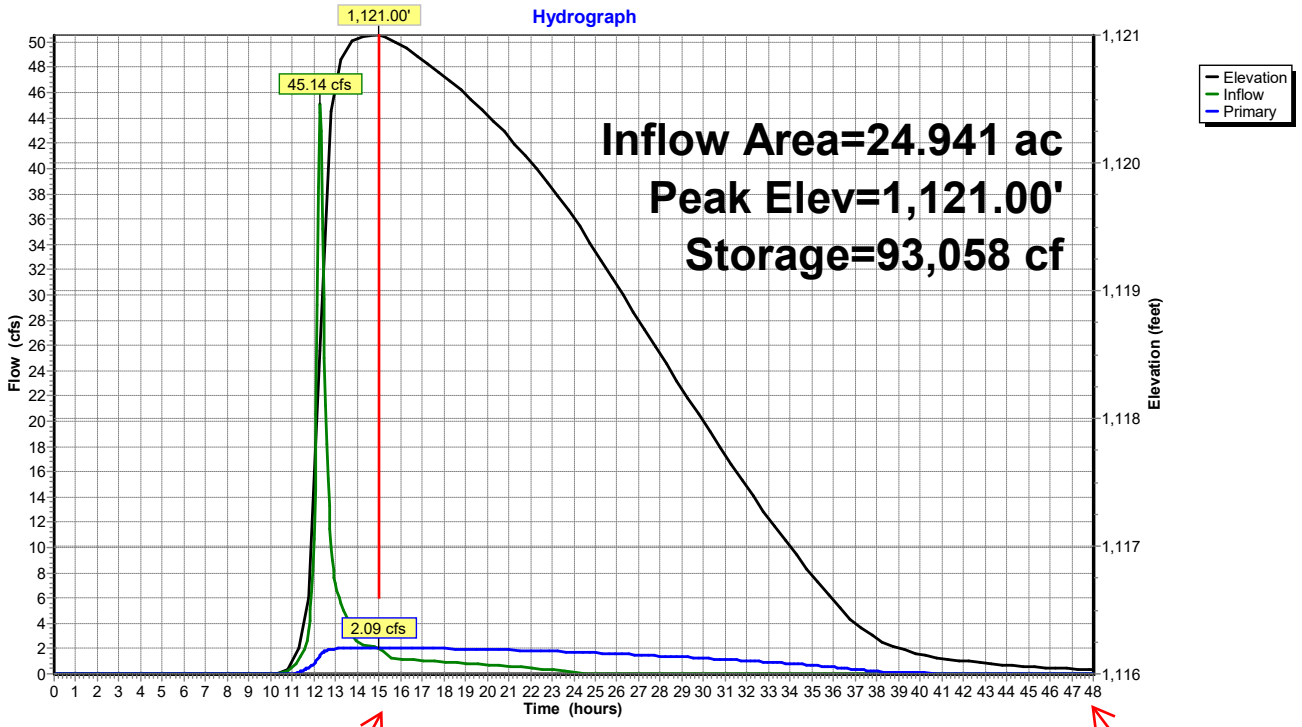


PEAK AT 15 HOURS

RETURN TO LOWEST POND ELEVATION AT 40 HOURS

DRAWDOWN OF 25 HOURS

Pond P6 P: NORTHEAST BASIN



PEAK AT 15 HOURS

RETURN TO LOWEST POND ELEVATION AT 48 HOURS

DRAWDOWN OF 33 HOURS

APPENDIX C

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0 200 400
SCALE: 1"= 200

FoleyShald
ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
WEBSITE: foleyshald.com | PHONE: 402.804.3933
NEBRASKA CA-4197

DRAINAGE EXHIBIT
EXISTING CONDITIONS

FAIRMONT

132ND STREET & MAIN STREET

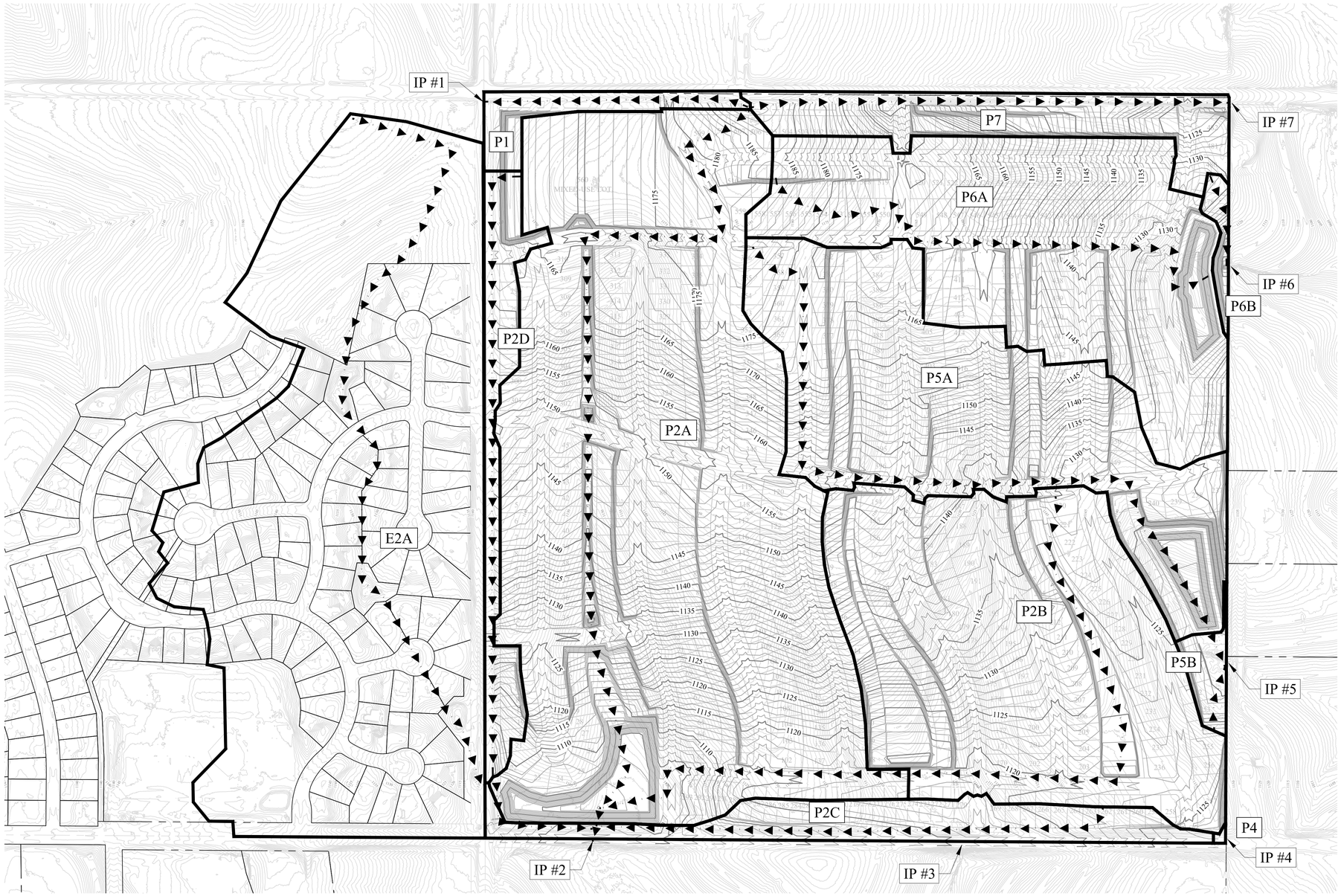
PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

DRAWN BY:	REVIEWED BY:
JR	JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
1 OF 2

W:\145.001 - Grace Mallock Property\CAD\EXHIBITS\PRELIMINARY DRAINAGE REPORT\145001 - EXISTING DRAINAGE MAP.dwg, 9/3/2026 5:05:59 PM, JR, ANSI B (Landscape)



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0 200 400
SCALE: 1"= 200

FoleyShald ENGINEERING
3930 S. 147TH STREET, SUITE 200 | OMAHA, NE 68144
WEBSITE: foleyshald.com | PHONE: 402.804.3933
NEBRASKA CA-4197

DRAINAGE EXHIBIT
PROPOSED CONDITIONS

FAIRMONT

132ND STREET & MAIN STREET

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

DRAWN BY:	REVIEWED BY:
JR	JS
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.
2 OF 2

W:\145.001 - Graves Mahrt Property\CAD\EXHIBITS\PRELIMINARY DRAINAGE REPORT\145001 - PROPOSED DRAINAGE MAP(2).dwg, 9/4/2026 12:23:39 PM, JSCHUBERT

Fairmont

Sanitary Sewer 30% Design Report

September 4, 2026

FSE #: 145.001

FSE: CA-4197

TABLE OF CONTENTS

	Page
Introduction	3
Project Narrative	3
Future Development Upstream	3
Effect of Project Peak Flows	3

Appendices

A. Sanitary Sewer Map
B. Peak Flow Calculations

Fairmont: Sanitary Sewer Report

Introduction

The proposed Fairmont development is an approximately 160-acre residential subdivision located east of 132nd Street, south of Platteview Road and north of Main Street. The information provided within this sanitary report includes the flow and pipe calculations used to size the sanitary sewer mains to accommodate the peak flows anticipated from the area.

Project Narrative

Fairmont consists of 559 residential lots, and one mixed-use lot. The 559 residential lots contain 76 duplex lots with the rest being two different sizes of single-family lots. The mixed-use lot consists of approximately six acres.

The proposed development will slope south towards the Village on Main development. Both sites are within the Sarpy County and Cities Wastewater Agency watershed "SCX-1". The interceptor sewer for this area is currently in design by the agency but is anticipated to be several years away from construction. So, it's expected that for the immediate future that the developments will need to use a lift station to pump wastewater back west to the existing City of Springfield sewer infrastructure. SID 390 Village on Main has a temporary lift station and force main that will serve both Village on Main and Fairmont until the agency sewer is online. Fairmont will be contributing to the cost of the temporary lift station and force main. See Appendix A for site map and Appendix B for sanitary sewer calculations for the development.

Future Development Upstream

Springfield Pines is an existing residential development including a school northwest of 132nd and Main. It is currently served by a sewer lift station which pumps wastewater back west to the city sewer main on Main Street. All lots within the existing development are included in the proposed calculations, assuming the lift station will eventually be removed, and a connection will be made to the proposed Fairmont system.

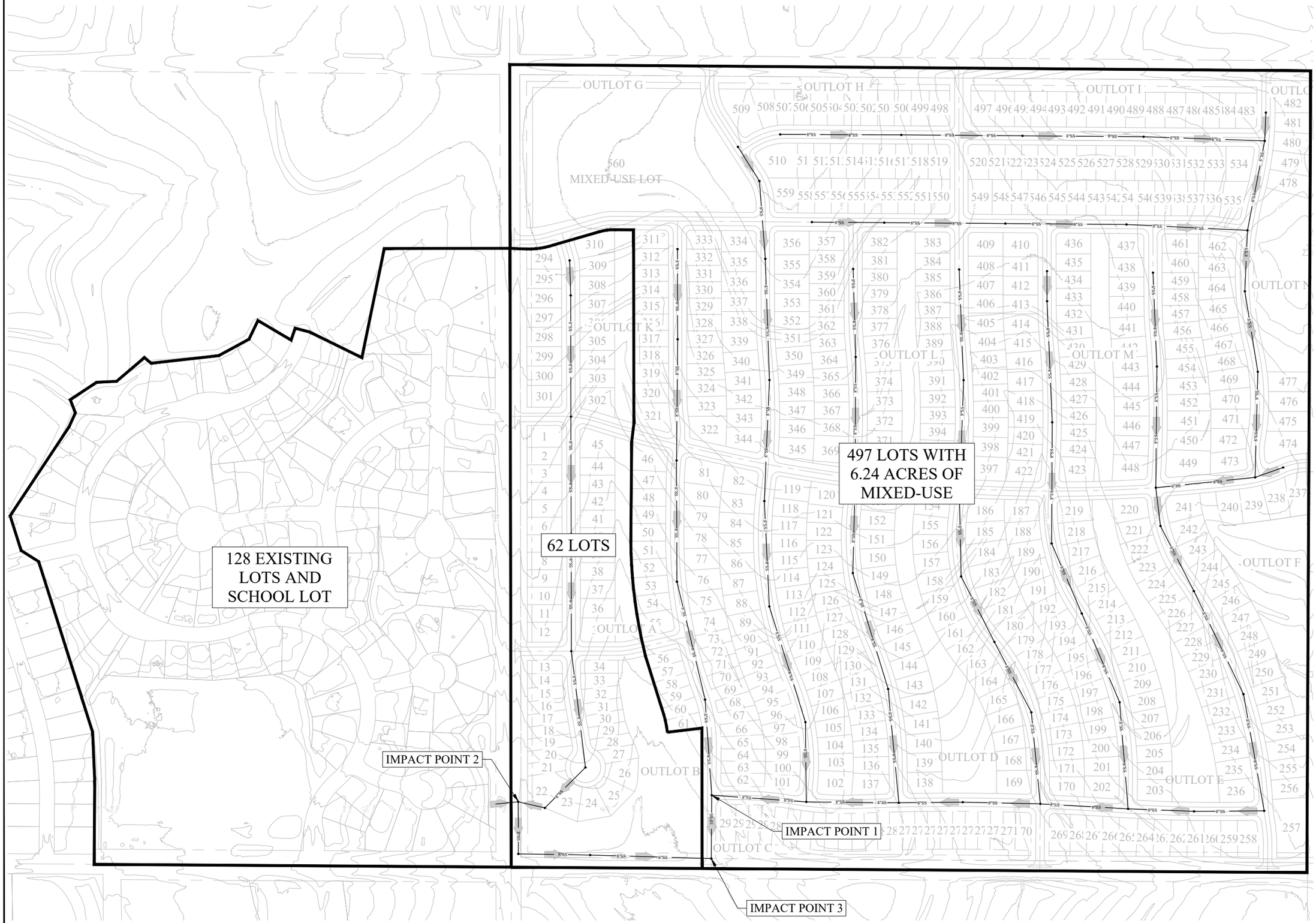
Offsite properties to the north and east are not expected to connect to the proposed sanitary sewer system within Fairmont. Existing topography goes away from this development. Agency watersheds also delineate these properties as being within separate sewer watersheds.

Effect of Project Peak Flows

The peak wastewater flow for the development including offsite areas is calculated at approximately 1.46 cfs. This level of flow will likely necessitate upsizing a run of sewer main within the development to 10" I.D. It's expected that all improvements short-term and long-term will be coordinated with both the City of Springfield and SCCWA.

The proposed wastewater flow has been compared to flows that were anticipated with the Village on Main development. Overall the number of proposed developed units (655) is slightly lower than what was anticipated from the undeveloped property (677). It's worth noting that the Fairmont sanitary sewer design proposes a single connection point (IP #3) at 130th Avenue versus the two separate anticipated with the Village on Main design. Proposed sewer within SID 390 was verified to have the capacity for this adjustment.

APPENDIX A



N
W E
S

0 300 600
SCALE: 1"= 300

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NEBRASKA CA-4197

SANITARY SEWER CALCULATIONS

FAIRMONT

SPRINGFIELD, NE

PLAN REVISIONS

NO.	DATE	REVISION DESCRIPTION	BY

PRELIMINARY

DRAWN BY: JPR	REVIEWED BY: JES
DATE: 09/04/2026	PROJECT NUMBER: 145.001

SHEET NO.

EXHIBIT

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APPENDIX B

Project: Fairmont
FSE #: 145.001
Prepared by: Jack Radermacher
Date: 9/4/26

Multi-Family Density = 15.37 D.U. per acre
Undeveloped Area = 4.26 D.U. per acre
School Flow Rate = 9750 gpd

Notes:
User input in Blue, Calculated values in Black

Assumed d/D = 0.80

Gravity Sanitary Sewer Design Form

Location			Quantity of Wastewater Calculations															Gravity Sewer Calculations										
			Residential				School			Pop. Served		I/I				Design Flow												
Impact Point	From	To	No. of D.U.	Density (per D.U.)	Eq. Pop	Unit Flow Rate (gpd)	Unit Flow Rate (gpd)	ADWF Point of Study (gpd)	ADWF SUM (gpd)	Point of Study	SUM	Unit Flow Rate (gpcd)	I/I (gpd)	AWWF (gpd)	PF	PWWF (gpd)	PWWF (cfs)	Pipe Slope S (ft/ft)	Pipe Length L (ft)	Manning's n	Pipe Dia. D (in)	Flow Area A (ft^2)	Hyd Radius (ft)	Full Pipe Capacity Q (cfs)	Full Pipe Velocity V (ft/s)	Enough Capacity?	Enough Velocity?	Comments
001	MH2	MH1	593	2.47	1465	83	0	121,571	121,571	1,465	1,465	83	121,571	243,142	2.92	709,275	1.10	0.0040	209	0.013	10	0.47	0.25	1.35	2.90	YES	YES	497 SINGLE FAMILY LOTS (506 DU), 1 6.24 MULTI-USE LOT ASSUMED MULTIFAMILY (96 DU)
002	EXMH3	EXMH2	190	2.47	469	83	9750	48,702	48,702	469	469	83	38,952	87,654	3.16	277,361	0.43	0.0040	172	0.013	8	0.30	0.25	0.87	2.90	YES	YES	SPRINGFIELD PINES (128 DU), SCHOOL (9750 GPD), 131ST AVENUE (62 DU)
003	MH1	VOM MH-7	0	2.47	0	83	0	0	170,273	0	1,934	83	160,523	330,796	2.86	945,007	1.46	0.0050	138	0.013	10	0.47	0.25	1.51	3.24	YES	YES	CONNECTION TO VILLAGE ON MAIN PROPOSED SANITARY SEWER

Fairmont

Project Summary

Source and Use of Funds

Springfield, NE

PROPOSED IMPROVEMENT	QUANTITY	UNIT	CONSTRUCTION COST	SOFT COST	TOTAL COST	GENERAL OBLIGATION	SPECIAL ASSESSMENT	REIMBURSABLE	PRIVATE
GRADING	962,000	CY	$ 3,294,037	$ 362,344	$ 3,656,381	$ -	$ -	$ -	$ 3,656,381
SANITARY SEWER									
Interior	20,500	LF	$ 3,492,445	$ 1,531,129	$ 5,023,574	$ 51,720	$ 4,971,854	$ -	$ -
Outfall Reimbursement			$ 1,681,266	$ 262,864	$ 1,944,130	$ 1,944,130	$ -	$ -	$ -
Capital Facilities Fee			$ 3,540,947	$ 553,624	$ 4,094,571	$ 2,047,286	$ -	$ -	$ 2,047,286
STORM SEWER									
Interior	8,540	LF	$ 1,682,835	$ 737,775	$ 2,420,610	$ 2,420,610	$ -	$ -	$ -
Watershed Fee			$ 723,819	$ -	$ 723,819	$ -	$ -	$ -	$ 723,819
PCSMP			$ 735,405	$ 322,410	$ 1,057,815	$ 1,057,815	$ -	$ -	$ -
PAVING									
Interior	80,600	SY	$ 5,628,328	$ 2,467,525	$ 8,095,853	$ 2,242,587	$ 5,853,266	$ -	$ -
Exterior	3,700	SY	$ 962,170	$ 150,434	$ 1,112,604	$ 1,112,604	$ -	$ -	$ -
Traffic Signal			$ 110,000	$ 17,198	$ 127,198	$ 127,198	$ -	$ -	$ -
Arterial Street Improvment Fee			$ 2,101,770	$ -	$ 2,101,770	$ -	$ -	$ -	$ 2,101,770
WATER									
Interior	26,000	LF	$ 2,909,665	$ 1,275,631	$ 4,185,296	$ 553,835	$ 3,631,461	$ -	$ -
Exterior	3,700	LF	$ 515,775	$ 156,787	$ 672,562	$ 336,281	$ -	$ 336,281	$ -
Main Street Reimbursement	750	LF	$ 55,631	$ 8,698	$ 64,329	$ 64,329	$ -	$ -	$ -
Capital Facilities Fee			$ 763,015	$ 119,297	$ 882,312	$ 445,153	$ -	$ -	$ 437,159
SIDEWALKS/TRAILS/PARKS									
Interior	133,600	SF	$ 1,262,873	$ 553,658	$ 1,816,531	$ 1,816,531	$ -	$ -	$ -
Park Space Fee			$ -	$ -	$ -	$ -	$ -	$ -	$ -
POWER									
Interior	25,900	LF	$ 2,035,661	$ 892,458	$ 2,928,119	$ -	$ 2,928,119	$ -	$ -
Gas Main			$ -	$ -	$ -	$ -	$ -	$ -	$ -
REVIEW FEES			$ 171,732	$ 26,850	$ 198,582	$ 198,582	$ -	$ -	$ -
TOTAL			$ 31,667,374	$ 9,438,682	$ 41,106,056	$ 14,418,661	$ 17,384,699	$ 336,281	$ 8,966,415

PROJECTED VALUATION

		Unit Valuation	Valuation
Single Family Residential	483 Units		$ 224,000,000
Duplex Residential	76 Units		$ 26,600,000
Mixed-Use	54,500 SF		$ 6,812,500
		Total - 100%	$ 257,412,500
		Total - 95%	$ 244,541,875
		Debt Ratio at 95% Valuation	6.03%
		Debt Ratio after Reimbursement	5.90%

Fairmont

Phase 1

Source and Use of Funds

Springfield, NE

PROPOSED IMPROVEMENT	QUANTITY	UNIT	CONSTRUCTION COST	SOFT COST	TOTAL COST	GENERAL OBLIGATION	SPECIAL ASSESSMENT	REIMBURSABLE	PRIVATE
GRADING	565,000	CY	$ 1,914,808	$ 210,629	$ 2,125,436	$ -	$ -	$ -	$ 2,125,436
SANITARY SEWER									
Interior	11,700	LF	$ 1,954,150	$ 856,722	$ 2,810,872	$ 51,720	$ 2,759,152	$ -	$ -
Outfall Reimbursement			$ 1,681,266	$ 262,864	$ 1,944,130	$ 1,944,130	$ -	$ -	$ -
Capital Facilities Fee			$ 1,616,640	$ 252,760	$ 1,869,401	$ 934,700	$ -	$ -	$ 934,700
STORM SEWER									
Interior	6,320	LF	$ 1,297,065	$ 568,648	$ 1,865,713	$ 1,865,713	$ -	$ -	$ -
Watershed Fee			$ 361,621	$ -	$ 361,621	$ -	$ -	$ -	$ 361,621
PCSMP			$ 550,660	$ 241,416	$ 792,076	$ 792,076	$ -	$ -	$ -
PAVING									
Interior	43,900	SY	$ 3,164,603	$ 1,387,399	$ 4,552,002	$ 1,486,684	$ 3,065,318	$ -	$ -
Exterior	9,600	SY	$ 962,170	$ 150,434	$ 1,112,604	$ 1,112,604	$ -	$ -	$ -
Traffic Signal			$ -	$ -	$ -	$ -	$ -	$ -	$ -
Arterial Street Improvement Fee			$ 1,025,063	$ -	$ 1,025,063	$ -	$ -	$ -	$ 1,025,063
WATER									
Interior	13,700	LF	$ 1,591,755	$ 697,844	$ 2,289,599	$ 315,736	$ 1,973,863	$ -	$ -
Exterior	1,950	LF	$ 269,963	$ 118,355	$ 388,317	$ 194,159	$ -	$ 194,159	$ -
Main Street Reimbursement	750	LF	$ 55,631	$ 8,698	$ 64,329	$ 64,329	$ -	$ -	$ -
Capital Facilities Fee			$ 329,192	$ 51,469	$ 380,660	$ 194,327	$ -	$ -	$ 186,333
SIDEWALKS/TRAILS/PARKS									
Interior	56,750	SF	$ 597,483	$ 261,943	$ 859,426	$ 859,426	$ -	$ -	$ -
Park Space Fee			$ -	$ -	$ -	$ -	$ -	$ -	$ -
POWER									
Interior	14,100	LF	$ 1,115,247	$ 488,937	$ 1,604,184	$ -	$ 1,604,184	$ -	$ -
Gas Main			$ -	$ -	$ -	$ -	$ -	$ -	$ -
REVIEW FEES			$ 105,563	$ 16,505	$ 122,067	$ 122,067	$ -	$ -	$ -
TOTAL			$ 18,592,878	$ 5,574,624	$ 24,167,502	$ 9,937,672	$ 9,402,518	$ 194,159	$ 4,633,153

PROJECTED VALUATION

		Unit Valuation	Valuation
Single Family Residential	217 Units	$ 450,000	$ 97,650,000
Duplex Residential	76 Units	$ 350,000	$ 26,600,000
Mixed-Use	0 SF	$ 50	$ -
		Total - 100%	$ 124,250,000
		Total - 95%	$ 118,037,500

Debt Ratio at 95% Valuation	8.58%
Debt Ratio after Reimbursement	8.42%

GRADING

Assumption/Comments:

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	MOBILIZATION	1	LS	$	10,000.00	$	10,000.00
2	CONSTRUCT SILT FENCE	4,000	LF	$	3.00	$	12,000.00
3	MAINTAIN SILT FENCE	400	LF	$	2.00	$	800.00
4	CONSTRUCT CONSTRUCTION ENTRANCE	1	EA	$	10,000.00	$	10,000.00
5	MAINTAIN CONSTRUCTION ENTRANCE	1	EA	$	5,000.00	$	5,000.00
6	STRIP AND STOCKPILE TOPSOIL (6" THICK)	65,000	CY	$	1.25	$	81,250.00
7	COMMON EXCAVATION	565,000	CY	$	2.25	$	1,271,250.00
8	PLACE TOPSOIL OUTSIDE ROW (6" THICK)	65,000	CY	$	1.25	$	81,250.00
9	INSTALL SEEDING - TEMPORARY MIX	80	AC	$	500.00	$	40,000.00
10	INSTALL SEEDING - SUBDIVISION MIX	5,000	SY	$	0.25	$	1,250.00
11	INSTALL EROSION CONTROL BLANKET, TYPE II	5,000	SY	$	1.65	$	8,250.00
12	INSTALL TURF REINFORCEMENT MATTING	0	SY	$	3.00	$	-
13	CONSTRUCT SEDIMENT BASIN OUTLET STRUCTURE	2	EA	$	15,000.00	$	30,000.00
14	INSTALL 60" CMP	200	LF	$	350.00	$	70,000.00
15	INSTALL ANTI-SEEP COLLAR	4	EA	$	1,000.00	$	4,000.00
16	INSTALL TYPE 'C' RIPRAP	200	TN	$	200.00	$	40,000.00
	CONTINGENCY	15%		$	1,665,050.00	$	249,757.50
	Estimated Construction Costs					$	1,914,807.50
		ESTIMATED SOFT COSTS					
		11%	Engineering Design, Construction Admin				$210,628.83
	Estimated Soft Costs						$210,628.83
	Total Estimated Costs					$	2,125,436.33

SANITARY SEWER - INTERIOR

Assumption/Comments:

12 VF for typical manholes - 18 VF for critical path manholes
42 LF per service - 75% wye - 25% MH Stub
Assuming upsized pipe and stub to Springfield Pines will be G.O.
G.O. = 200*10 + 33,000 = $35,000 (1.84%)

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	TRAFFIC CONTROL	1	LS	$ 10,000.00	$ 10,000.00
3	EXPLORATORY EXCAVATION	10	HR	$ 300.00	$ 3,000.00
4	MAINTAIN SILT FENCE	400	LF	$ 3.00	$ 1,200.00
5	MAINTAIN CONSTRUCTION ENTRANCE (3" CRUSHED ROCK AGGREGATE)	100	TN	$ 60.00	$ 6,000.00
6	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	600	TN	$ 60.00	$ 36,000.00
7	CONSTRUCT 10" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	200	LF	$ 65.00	$ 13,000.00
8	CONSTRUCT 8" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	11,500	LF	$ 56.00	$ 644,000.00
9	CONSTRUCT 6" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	12,300	LF	$ 48.00	$ 590,400.00
10	BORE 8" SANITARY SEWER PIPE	50	LF	$ 660.00	$ 33,000.00
11	CONSTRUCT 6"X8" WYE	220	EA	$ 350.00	$ 77,000.00
12	CONSTRUCT 6" SANITARY SEWER MANHOLE STUBOUT	73	EA	$ 250.00	$ 18,250.00
13	CONSTRUCT 8" SANITARY SEWER PIPE PLUG	9	EA	$ 100.00	$ 900.00
14	CONSTRUCT 8" SANITARY SEWER CLEANOUT W/ PCC COLLAR	9	EA	$ 550.00	$ 4,950.00
15	CONSTRUCT 54" ID SANITARY MANHOLE (38 EA)	528	VF	$ 600.00	$ 316,800.00
16	CONSTRUCT RING COLLAR ON SANITARY SEWER MANHOLE	4	EA	$ 600.00	$ 2,400.00
17	INSTALL EXTERNAL FRAME SEAL ON SANITARY SEWER MANHOLE	4	EA	$ 500.00	$ 2,000.00
18	INSTALL SEEDING "TEMPORARY MIX"	19	AC	$ 400.00	$ 7,600.00
	CONTINGENCY	10%		$ 1,776,500.00	$ 177,650.00
	Estimated Construction Costs				$ 1,954,150.00
		ESTIMATED SOFT COSTS			
		19%	Engineering Design, Construction Admin		$371,288.50
		2%	Geotechnical and Testing		$39,083.00
		5%	Legal		$118,226.08
		5%	Fiscal		$118,226.08
		7%	Interest		$182,068.16
		1%	Bond Counsel		$27,830.42
		12 Months	Duration		
	Total Estimated Soft Costs				$856,722.22
	Total Estimated Costs				$ 2,810,872.22

SANITARY SEWER - EXTERIOR

Assumption/Comments:

Reimbursement to SID 390 for temporary lift station, force main, and oversized sewer main. Assumed reimbursement of 67% for 160 acres out of the 240 service area. Based on SID 390 SUF estimated costs from 09/01/2026.

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	LIFT STATION AND FORCE MAIN REIMBURSEMENT	1	LS	$ 1,636,313.00	$ 1,636,313.00
2	OVERSIZED SANITARY SEWER REIMBURSEMENT	1	LS	$ 44,953.00	$ 44,953.00
	CONTINGENCY	0%		$ 1,681,266.00	$ -
	Estimated Construction Costs				$ 1,681,266.00
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$33,625.32
		5%	Fiscal		$84,063.30
		7%	Interest		$125,926.82
		1%	Bond Counsel		$19,248.81
		12	Months Duration		
	Total Estimated Soft Costs				$262,864.26
	Total Estimated Costs				$ 1,944,130.26

SANITARY - FEES

Assumption/Comments:

SCCWWA 2026-2027 Fee Schedule
Half paid at Final Plat and half paid at Building Permit
Lots 1-293

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	46.68	AC	$ 31,484.00	$ 1,469,673.12
	CONTINGENCY	10%		$ 1,469,673.12	$ 146,967.31
	Estimated Construction Costs				$ 1,616,640.43
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$32,332.81
		5%	Fiscal		$80,832.02
		7%	Interest		$121,086.37
		1%	Bond Counsel		$18,508.92
		12	Months Duration		
	Total Estimated Soft Costs				$252,760.11
	Total Estimated Costs				$ 1,869,400.55

STORM SEWER

Assumption/Comments:

7 VF PER MH
50 TN PER RIP RAP OUTLET

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	MAINTAIN SILT FENCE	400	LF	$ 3.00	$ 1,200.00
3	DEWATERING	40	HR	$ 125.00	$ 5,000.00
4	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	100	TN	$ 60.00	$ 6,000.00
5	MAINTAIN CONSTRUCTION ENTRANCE (3" CRUSHED ROCK AGGREGATE)	100	TN	$ 60.00	$ 6,000.00
6	CONSTRUCT 18" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	790	LF	$ 60.00	$ 47,400.00
7	CONSTRUCT 24" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	1,630	LF	$ 75.00	$ 122,250.00
8	CONSTRUCT 30" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	1,370	LF	$ 100.00	$ 137,000.00
9	CONSTRUCT 36" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	910	LF	$ 125.00	$ 113,750.00
10	CONSTRUCT 42" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	740	LF	$ 175.00	$ 129,500.00
11	CONSTRUCT 48" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	380	LF	$ 250.00	$ 95,000.00
12	CONSTRUCT 60" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	500	LF	$ 450.00	$ 225,000.00
13	CONSTRUCT 54" I.D. STORM MANHOLE (9 EA)	63	VF	$ 1,050.00	$ 66,150.00
14	CONSTRUCT 60" I.D. STORM MANHOLE (6 EA)	42	VF	$ 1,200.00	$ 50,400.00
15	CONSTRUCT 96" I.D. STORM MANHOLE (3 EA)	21	VF	$ 3,000.00	$ 63,000.00
16	CONSTRUCT 18" R.C. FLARED END SECTION	3	EA	$ 2,000.00	$ 6,000.00
17	CONSTRUCT 24" R.C. FLARED END SECTION	5	EA	$ 2,500.00	$ 12,500.00
18	CONSTRUCT 36" R.C. FLARED END SECTION	4	EA	$ 3,500.00	$ 14,000.00
19	CONSTRUCT 48" R.C. FLARED END SECTION	2	EA	$ 4,500.00	$ 9,000.00
20	INSTALL REINFORCED CONCRETE PIPE COUPLERS	90	EA	$ 200.00	$ 18,000.00
21	INSTALL RIP-RAP, TYPE A	100	TN	$ 120.00	$ 12,000.00
22	INSTALL RIP-RAP, TYPE B	150	TN	$ 120.00	$ 18,000.00
23	INSTALL RIP-RAP, TYPE C	100	TN	$ 120.00	$ 12,000.00
	CONTINGENCY	10%		$ 1,179,150.00	$ 117,915.00
	Estimated Construction Costs				$ 1,297,065.00

ESTIMATED SOFT COSTS

	Engineering Design, Construction	
19%	Admin	$246,442.35
2%	Geotechnical and Testing	$25,941.30
5%	Legal	$78,472.43
5%	Fiscal	$78,472.43
7%	Interest	$120,847.55
1%	Bond Counsel	$18,472.41
12 Months	Duration	

Total Estimated Soft Costs $568,648.47

Total Estimated Costs $ 1,865,713.47

STORM SEWER - WATERSHED FEES

Assumption/Comments:

Springfield Master Fee Schedule
FY 2027
Paid at Building Permit

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	293	LOTS	$ 1,122.00	$ 328,746.00
2	Multi-Family	0.0	AC	$ 4,939.00	$ -
	CONTINGENCY	10%		$ 328,746.00	$ 32,874.60
	Estimated Construction Costs				$ 361,620.60
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		0%	Legal		$0.00
		0%	Fiscal		$0.00
		0%	Interest		$0.00
		0%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ 361,620.60

STORM SEWER - PCSMP

Assumption/Comments:

Outlot purchase includes Outlots B and F.
Unit cost is based on estimated land purchase price of $40,000 per acre

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 5,000.00	$ 5,000.00
2	TRAFFIC CONTROL	1	LS	$ 1,000.00	$ 1,000.00
3	DEWATERING	40	HR	$ 125.00	$ 5,000.00
4	MAINTAIN SILT FENCE	400	LF	$ 3.00	$ 1,200.00
5	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	50	TN	$ 60.00	$ 3,000.00
6	CONSTRUCT 24" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	150	LF	$ 100.00	$ 15,000.00
7	CONSTRUCT 60" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	70	LF	$ 450.00	$ 31,500.00
8	CONSTRUCT 72" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	100	LF	$ 650.00	$ 65,000.00
9	CONSTRUCT BASIN OUTLET STRUCTURE	2	EA	$ 20,000.00	$ 40,000.00
10	CONSTRUCT 24" R.C. FLARED END SECTION	1	EA	$ 2,500.00	$ 2,500.00
11	CONSTRUCT 72" R.C. FLARED END SECTION	1	EA	$ 6,500.00	$ 6,500.00
12	INSTALL REINFORCED CONCRETE PIPE COUPLERS	15	EA	$ 200.00	$ 3,000.00
13	INSTALL SEEDING "WETLAND MIX"	2	AC	$ 2,000.00	$ 4,000.00
14	INSTALL SEEDING "SUBDIVISION MIX"	5	AC	$ 1,200.00	$ 6,000.00
15	INSTALL EROSION CONTROL BLANKET "TYPE I"	5	AC	$ 8,000.00	$ 40,000.00
16	INSTALL RIP-RAP, TYPE C	100	TN	$ 119.00	$ 11,900.00
17	OUTLOT PURCHASE	6.50	AC	$ 40,000.00	$ 260,000.00
	CONTINGENCY	10%		$ 500,600.00	$ 50,060.00
	Estimated Construction Costs				$ 550,660.00

ESTIMATED SOFT COSTS

	Engineering Design, Construction	
19%	Admin	$104,625.40
2%	Geotechnical and Testing	$11,013.20
5%	Legal	$33,314.93
5%	Fiscal	$33,314.93
7%	Interest	$51,304.99
1%	Bond Counsel	$7,842.33
12 Months	Duration	

Total Estimated Soft Costs $241,415.79

Total Estimated Costs $ 792,075.79

PAVING - INTERIOR

Assumption/Comments:

Pavement is 9,720 SY G.O. (43,900-9,720=34,180 S.A.)
34,180*60+11,393*3 = $2,084,980 S.A. (67.34% of Construction Cost)

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	TRAFFIC CONTROL	1	LS	$	10,000.00	$	10,000.00
2	COMMON EARTH EXCAVATION	14,633	CY	$	3.00	$	43,900.00
3	CONSTRUCT 7-INCH CONCRETE PAVEMENT (OPW 3500)	43,900	SY	$	55.00	$	2,414,500.00
4	ADJUST MANHOLE TO GRADE	53	EA	$	300.00	$	15,900.00
5	INSTALL EXTERNAL FRAME SEAL	38	EA	$	500.00	$	19,000.00
6	CONSTRUCT THICKENED EDGE	650	LF	$	20.00	$	13,000.00
7	CONSTRUCT CONCRETE HEADER	250	LF	$	20.00	$	5,000.00
8	CONSTRUCT CURB INLET - TYPE I	32	EA	$	5,500.00	$	176,000.00
9	CONSTRUCT CURB INLET - TYPE III	14	EA	$	5,700.00	$	79,800.00
10	INSTALL CURB INLET PROTECTION	46	EA	$	300.00	$	13,800.00
11	CONSTRUCT END OF ROAD BARRICADE	9	EA	$	600.00	$	5,400.00
12	CONSTRUCT TEMPORARY TURNAROUND (2 EA)	564	SF	$	8.00	$	4,512.00
13	INSTALL SEEDING (SUBDIVISION MIX)	19	AC	$	1,000.00	$	19,000.00
14	INSTALL MULCHING	19	AC	$	600.00	$	11,400.00
15	INSTALL STREET NAME SIGNS	21	EA	$	150.00	$	3,150.00
16	INSTALL REGULATORY SIGNS	27	EA	$	150.00	$	4,050.00
17	INSTALL SIGN POSTS	27	EA	$	1,000.00	$	27,000.00
18	JET EXISTING SANITARY SEWER	11,500	LF	$	1.00	$	11,500.00
	CONTINGENCY	10%		$	2,876,912.00	$	287,691.20
	Estimated Construction Costs					$	3,164,603.20
		ESTIMATED SOFT COSTS					
		19%	Engineering Design, Construction Admin				$601,274.61
		2%	Geotechnical and Testing				$63,292.06
		5%	Legal				$191,458.49
		5%	Fiscal				$191,458.49
		7%	Interest				$294,846.08
		1%	Bond Counsel				$45,069.33
		12 Months	Duration				
	Total Estimated Soft Costs						$1,387,399.07
	Total Estimated Costs					$	4,552,002.27

PAVING - EXTERIOR

Assumption/Comments:

Includes roadway reconstruction with 31' pavement on Main Street and 24' pavement 150' north of the intersection on 132nd Street to be designed and constructed by the County. SID to reimburse 50%

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	TRAFFIC CONTROL	1	LS	$ 10,000.00	$ 10,000.00
3	CONSTRUCT SILT FENCE	6,000	LF	$ 3.00	$ 18,000.00
4	MAINTAIN SILT FENCE	600	LF	$ 2.00	$ 1,200.00
5	REMOVE SILT FENCE	6,000	LF	$ 1.00	$ 6,000.00
6	STRIP AND STOCKPILE TOPSOIL (6" THICK)	6,600	CY	$ 1.25	$ 8,250.00
7	COMMON EXCAVATION	68,000	CY	$ 2.25	$ 153,000.00
8	PLACE TOPSOIL OUTSIDE PAVEMENT	6,600	CY	$ 1.25	$ 8,250.00
9	INSTALL SEEDING (ROW MIX)	9	AC	$ 1,000.00	$ 9,000.00
10	INSTALL EROSION CONTROL BLANKET, TYPE II	9	AC	$ 8,000.00	$ 72,000.00
101	CONSTRUCT 18" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	200	LF	$ 75.00	$ 15,000.00
102	CONSTRUCT 24" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	300	LF	$ 100.00	$ 30,000.00
103	CONSTRUCT 30" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	560	LF	$ 125.00	$ 70,000.00
104	CONSTRUCT 36" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	410	LF	$ 150.00	$ 61,500.00
105	CONSTRUCT 42" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	300	LF	$ 200.00	$ 60,000.00
106	CONSTRUCT 48" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	300	LF	$ 250.00	$ 75,000.00
107	CONSTRUCT 60" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	40	LF	$ 450.00	$ 18,000.00
108	CONSTRUCT 72" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	110	LF	$ 650.00	$ 71,500.00
109	CONSTRUCT 96" I.D. STORM MANHOLE (2 EA)	20	VF	$ 3,000.00	$ 60,000.00
110	CONSTRUCT 48" I.D. AREA INLET – TYPE II (0 EA)	-	VF	$ 1,000.00	$ -
111	CONSTRUCT 60" R.C. FLARED END SECTION	1	EA	$ 5,500.00	$ 5,500.00
112	CONSTRUCT 72" R.C. FLARED END SECTION	1	EA	$ 6,500.00	$ 6,500.00
113	INSTALL REINFORCED CONCRETE PIPE COUPLERS	9	EA	$ 200.00	$ 1,800.00
114	INSTALL RIP-RAP, TYPE C	200	TN	$ 120.00	$ 24,000.00
201	PAVEMENT REMOVAL	400	SY	$ 15.00	$ 6,000.00
202	SUBGRADE PREPARATION	3,200	CY	$ 3.00	$ 9,600.00
203	CONSTRUCT 10-INCH CONCRETE PAVEMENT (OPW 3500)	9,600	SY	$ 90.00	$ 864,000.00
204	CONSTRUCT 6-INCH GRAVEL SURFACING	180	SY	$ 20.00	$ 3,600.00
205	ADJUST MANHOLE TO GRADE	2	EA	$ 300.00	$ 600.00
206	CONSTRUCT CURB INLET - TYPE I	4	EA	$ 5,500.00	$ 22,000.00
207	CONSTRUCT CURB INLET - TYPE III	4	EA	$ 5,700.00	$ 22,800.00
208	INSTALL CURB INLET PROTECTION	8	EA	$ 300.00	$ 2,400.00
209	INSTALL STREET NAME SIGNS	4	EA	$ 150.00	$ 600.00
210	INSTALL REGULATORY SIGNS	10	EA	$ 150.00	$ 1,500.00
211	INSTALL SIGN POSTS	10	EA	$ 1,000.00	$ 10,000.00
212	INSTALL PAVEMENT STRIPING, GROOVED, 6" SOLID WHITE PERMANENT PAINT	5,900	LF	$ 2.00	$ 11,800.00
	CONTINGENCY	10%		$ 1,749,400.00	$ 174,940.00
	Estimated Construction Costs (50% Cost Split)				$ 962,170.00

ESTIMATED SOFT COSTS

	Engineering Design, Construction	
0%	Admin	$0.00
0%	Geotechnical and Testing	$0.00
2%	Legal	$19,243.40
5%	Fiscal	$48,108.50
7%	Interest	$72,066.53
1%	Bond Counsel	$11,015.88
12 Months	Duration	

Total Estimated Soft Costs $150,434.32

Total Estimated Costs $ 1,112,604.32

PAVING - FEES

Assumption/Comments:

Springfield Master Fee Schedule
Arterial Street Improvement Policy
0.75% of building valuations paid at building permit for single-family/townhomes
$5,000/acre multifamily, Paid at Building Permit

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	293	LOTS	0.75%	$ 931,875.00
2	Multi-Family	0.0	AC	$ 5,000.00	$ -
	CONTINGENCY	10%		$ 931,875.00	$ 93,187.50
	Estimated Construction Costs				$ 1,025,062.50
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		0%	Legal		$0.00
		0%	Fiscal		$0.00
		0%	Interest		$0.00
		0%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ 1,025,062.50

WATER - INTERIOR

Assumption/Comments:

Hydrants expected to be G.O. (13.79% of Construction Cost)

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	TRAFFIC CONTROL	1	LS	$ 10,000.00	$ 10,000.00
3	EXPLORATORY EXCAVATION	10	HR	$ 300.00	$ 3,000.00
4	MAINTAIN SILT FENCE	400	LF	$ 3.00	$ 1,200.00
5	CONSTRUCT 8" D.I.R.J. WATER MAIN	1,350	LF	$ 100.00	$ 135,000.00
6	CONSTRUCT 8" D.I.P.J. WATER MAIN	12,350	LF	$ 65.00	$ 802,750.00
7	CONSTRUCT TYPE 1 HYDRANT ASSEMBLY	30	EA	$ 6,000.00	$ 180,000.00
8	CONSTRUCT TYPE 5 HYDRANT ASSEMBLY	9	EA	$ 6,000.00	$ 54,000.00
9	CONSTRUCT 8" GATE VALVE, M.J. & BOX	69	EA	$ 3,000.00	$ 207,000.00
10	CONSTRUCT 8" X 8" TEE, M.J. W/ BACKING BLOCK	11	EA	$ 1,000.00	$ 11,000.00
11	CONSTRUCT 8" X 8" CROSS, M.J.	9	EA	$ 1,400.00	$ 12,600.00
12	CONSTRUCT 8" X 22.5° BEND, M.J. W/ BACKING BLOCK	0	EA	$ 750.00	$ -
13	CONSTRUCT 8" X 45° BEND, M.J. W/ BACKING BLOCK	6	EA	$ 750.00	$ 4,500.00
14	INSTALL 8" PIPE PLUG W/ BACKING BLOCK	0	EA	$ 500.00	$ -
15	INSTALL SEEDING, SUBDIVISION MIX	10	AC	$ 1,000.00	$ 10,000.00
16	INSTALL MULCHING	10	AC	$ 600.00	$ 6,000.00
	CONTINGENCY	10%		$ 1,447,050.00	$ 144,705.00
	Estimated Construction Costs				$ 1,591,755.00

	ESTIMATED SOFT COSTS	
	Engineering Design, Construction	
19%	Admin	$302,433.45
2%	Geotechnical and Testing	$31,835.10
5%	Legal	$96,301.18
5%	Fiscal	$96,301.18
7%	Interest	$148,303.81
1%	Bond Counsel	$22,669.30
12 Months	Duration	
Total Estimated Soft Costs		$697,844.02
Total Estimated Costs		$ 2,289,599.02

WATER - EXTERIOR

Assumption/Comments:

Includes water main along Main Street west 130th.
50% reimbursable by SID 390 future phases

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	CONSTRUCT 12" WATER MAIN (DIP)	1,950	LF	$	105.00	$	204,750.00
2	CONSTRUCT FIRE HYDRANT	5	EA	$	6,000.00	$	30,000.00
	CONTINGENCY	15%		$	234,750.00	$	35,212.50
	Estimated Construction Costs					$	269,962.50
		ESTIMATED SOFT COSTS					
			Engineering Design, Construction				
		19%	Admin				$51,292.88
		2%	Geotechnical and Testing				$5,399.25
		5%	Legal				$16,332.73
		5%	Fiscal				$16,332.73
		7%	Interest				$25,152.41
		1%	Bond Counsel				$3,844.72
		12	Months Duration				
	Total Estimated Soft Costs						$118,354.72
	Total Estimated Costs					$	388,317.22

WATER - REIMBURSEMENT

Assumption/Comments:

Includes water main along 132nd Street along the western boundary of the project.
Project to be designed and built by the City and reimbursed 50% by SID

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	CONSTRUCT 12" WATER MAIN (DIP)	750	LF	$	105.00	$	78,750.00
2	CONSTRUCT FIRE HYDRANT	3	EA	$	6,000.00	$	18,000.00
	CONTINGENCY	15%		$	96,750.00	$	14,512.50
	Estimated Construction Costs (50% Cost Split)					$	55,631.25
		ESTIMATED SOFT COSTS					
			Engineering Design, Construction				
		0%	Admin				$0.00
		0%	Geotechnical and Testing				$0.00
		2%	Legal				$1,112.63
		5%	Fiscal				$2,781.56
		7%	Interest				$4,166.78
		1%	Bond Counsel				$636.92
		12	Months Duration				
	Total Estimated Soft Costs						$8,697.89
	Total Estimated Costs					$	64,329.14

WATER - FEES

Assumption/Comments:

Springfield Master Fee Schedule: Half of single family and all of outlot fees due at platting and other half due at building permit. (51.05%)

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Single Family / Townhome	293	LOTS	$ 1,000.00	$ 293,000.00
2	Multi-Family	0	UNITS	$ 1,000.00	$ -
3	Outlot	12.53	AC	$ 500.00	$ 6,265.00
	CONTINGENCY	10%		$ 299,265.00	$ 29,926.50
	Estimated Construction Costs				$ 329,191.50
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$6,583.83
		5%	Fiscal		$16,459.58
		7%	Interest		$24,656.44
		1%	Bond Counsel		$3,768.91
		12	Months Duration		
	Total Estimated Soft Costs				$51,468.76
	Total Estimated Costs				$ 380,660.26

SIDEWALKS/TRAILS/PARKS

Assumption/Comments:

Assuming Park Fees will be waived with proposed trails and park area.

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	CONSTRUCT CURB RAMP	88	EA	$	1,500.00	$	132,000.00
2	CONSTRUCT 5-INCH CONCRETE SIDEWALK (OPW 3500)	3,950	SF	$	5.00	$	19,750.00
3	CONSTRUCT 6-INCH CONCRETE TRAIL (OPW 3500)	52,800	SF	$	6.00	$	316,800.00
4	STREET TREES	102	EA	$	500.00	$	51,000.00
5	PARK IMPROVEMENTS	0	LS	$	400,000.00	$	-
	CONTINGENCY	15%		$	519,550.00	$	77,932.50
	Estimated Construction Costs					$	597,482.50
		ESTIMATED SOFT COSTS					
			Engineering Design, Construction				
		19%	Admin				$113,521.68
		2%	Geotechnical and Testing				$11,949.65
		5%	Legal				$36,147.69
		5%	Fiscal				$36,147.69
		7%	Interest				$55,667.44
		1%	Bond Counsel				$8,509.17
		12	Months Duration				
	Total Estimated Soft Costs					$	261,943.32
	Total Estimated Costs					$	859,425.82

PARK - FEES

Assumption/Comments:

Springfield Master Fee Schedule
0.04 acres/unit
$30,000/acre
Assuming Park Fees will be waived with proposed trail and park areas.

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	11.72	AC	$ 30,000.00	$ 351,600.00
	CONTINGENCY	-100%		$ 351,600.00	$ (351,600.00)
	Estimated Construction Costs				$ -
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$0.00
		5%	Fiscal		$0.00
		7%	Interest		$0.00
		1%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ -

POWER

Assumption/Comments:

Estimated cost based on average of recent projects.

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	Power Infrastructure (per linear foot of street)	14,100	LF	$	80.00	$	1,128,000.00
2	Single Family Reimbursement	293	LOTS	$	(540.00)	$	(158,220.00)
	CONTINGENCY	15%		$	969,780.00	$	145,467.00
	Estimated Construction Costs					$	1,115,247.00
		ESTIMATED SOFT COSTS					
		19%	Engineering Design, Construction Admin				$211,896.93
		2%	Geotechnical and Testing				$22,304.94
		5%	Legal				$67,472.44
		5%	Fiscal				$67,472.44
		7%	Interest				$103,907.56
		1%	Bond Counsel				$15,883.01
		12	Months Duration				
	Total Estimated Soft Costs						$488,937.33
	Total Estimated Costs					$	1,604,184.33

GAS MAIN

Assumption/Comments:

Expecting credits and adjustments will cancel out costs

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Gas Main Costs	1	LS	$ -	$ -
2	Available Revenue Credit	1	LS	$ -	$ -
3	Adjustments	1	LS	$ -	$ -
	CONTINGENCY	15%		$ -	$ -
	Estimated Construction Costs				$ -
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$0.00
		5%	Fiscal		$0.00
		7%	Interest		$0.00
		1%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ -

REVIEW FEES

Assumption/Comments:

	Bid Item Description	Construction Cost		Plan Review Fee	Total
1	SANITARY - INTERIOR	$ 1,954,150.00	1%	$	19,541.50
2	SANITARY - EXTERIOR	$ 1,681,266.00	1%	$	16,812.66
3	STORM SEWER	$ 1,297,065.00	1%	$	12,970.65
4	PAVING - INTERIOR	$ 3,164,603.20	1%	$	31,646.03
6	WATER - INTERIOR	$ 1,591,755.00	1%	$	15,917.55
7	WATER - EXTERIOR	$ 269,962.50	1%	$	2,699.63
8	SIDEWALKS/TRAILS/PARKS	$ 597,482.50	1%	$	5,974.83
	Estimated Construction Costs			$	105,562.84

ESTIMATED SOFT COSTS

	Engineering Design, Construction	
0%	Admin	$0.00
0%	Geotechnical and Testing	$0.00
2%	Legal	$2,111.26
5%	Fiscal	$5,278.14
7%	Interest	$7,906.66
1%	Bond Counsel	$1,208.59
12 Months	Duration	

Total Estimated Soft Costs	$16,504.64
Total Estimated Costs	$ 122,067.49

Fairmont

Phase 2

Source and Use of Funds

Springfield, NE

PROPOSED IMPROVEMENT	QUANTITY	UNIT	CONSTRUCTION COST	SOFT COST	TOTAL COST	GENERAL OBLIGATION	SPECIAL ASSESSMENT	REIMBURSABLE	PRIVATE
GRADING	397,000	CY	$ 1,379,230	$ 151,715	$ 1,530,945	$ -	$ -	$ -	$ 1,530,945
SANITARY SEWER									
Interior	8,800	LF	$ 1,538,295	$ 674,407	$ 2,212,702	$ -	$ 2,212,702	$ -	$ -
Outfall Reimbursement			$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Facilities Fee			$ 1,924,307	$ 300,863	$ 2,225,170	$ 1,112,585	$ -	$ -	$ 1,112,585
STORM SEWER									
Interior	2,220	LF	$ 385,770	$ 169,126	$ 554,896	$ 554,896	$ -	$ -	$ -
Watershed Fee			$ 362,198	$ -	$ 362,198	$ -	$ -	$ -	$ 362,198
PCSMP			$ 184,745	$ 80,994	$ 265,739	$ 265,739	$ -	$ -	$ -
PAVING									
Interior	36,700	SY	$ 2,463,725	$ 1,080,126	$ 3,543,851	$ 755,903	$ 2,787,947	$ -	$ -
Exterior	0	SY	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Traffic Signal			$ 110,000	$ 17,198	$ 127,198	$ 127,198	$ -	$ -	$ -
Arterial Street Improvment Fee			$ 1,076,708	$ -	$ 1,076,708	$ -	$ -	$ -	$ 1,076,708
WATER									
Interior	12,300	LF	$ 1,317,910	$ 577,787	$ 1,895,697	$ 238,100	$ 1,657,598	$ -	$ -
Exterior	1,750	LF	$ 245,813	$ 38,433	$ 284,245	$ 142,123	$ -	$ 142,123	$ -
Main Street Reimbursement	0	LF	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Facilities Fee			$ 433,824	$ 67,828	$ 501,651	$ 250,826	$ -	$ -	$ 250,826
SIDEWALKS/TRAILS/PARKS									
Interior	76,850	SF	$ 665,390	$ 291,715	$ 957,105	$ 957,105	$ -	$ -	$ -
Park Space Fee			$ -	$ -	$ -	$ -	$ -	$ -	$ -
POWER									
Interior	11,800	LF	$ 920,414	$ 403,520	$ 1,323,934	$ -	$ 1,323,934	$ -	$ -
Gas Main			$ -	$ -	$ -	$ -	$ -	$ -	$ -
REVIEW FEES			$ 66,169	$ 10,345	$ 76,514	$ 76,514	$ -	$ -	$ -
TOTAL			$ 13,074,497	$ 3,864,058	$ 16,938,555	$ 4,480,989	$ 7,982,181	$ 142,123	$ 4,333,262

PROJECTED VALUATION

		Unit Valuation	Valuation
Single Family Residential	266 Units	$ 475,000	$ 126,350,000
Duplex Residential	0 Units	$ 350,000	$ -
Multi-Family	54,500 SF	$ 125	$ 6,812,500
		Total - 100%	$ 133,162,500
		Total - 95%	$ 126,504,375

Debt Ratio at 95% Valuation	3.65%
Debt Ratio after Reimbursement	3.54%

GRADING

Assumption/Comments:

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	MOBILIZATION	1	LS	$	10,000.00	$	10,000.00
2	CONSTRUCT SILT FENCE	5,000	LF	$	3.00	$	15,000.00
3	MAINTAIN SILT FENCE	500	LF	$	2.00	$	1,000.00
4	CONSTRUCT CONSTRUCTION ENTRANCE	1	EA	$	10,000.00	$	10,000.00
5	MAINTAIN CONSTRUCTION ENTRANCE	1	EA	$	5,000.00	$	5,000.00
6	STRIP AND STOCKPILE TOPSOIL (6" THICK)	60,000	CY	$	1.25	$	75,000.00
7	COMMON EXCAVATION	397,000	CY	$	2.25	$	893,250.00
8	PLACE TOPSOIL OUTSIDE ROW (6" THICK)	60,000	CY	$	1.25	$	75,000.00
9	INSTALL SEEDING - TEMPORARY MIX	74	AC	$	500.00	$	37,000.00
10	INSTALL SEEDING - SUBDIVISION MIX	3,200	SY	$	0.25	$	800.00
11	INSTALL EROSION CONTROL BLANKET, TYPE II	3,200	SY	$	1.65	$	5,280.00
12	INSTALL TURF REINFORCEMENT MATTING	0	SY	$	3.00	$	-
13	CONSTRUCT SEDIMENT BASIN OUTLET STRUCTURE	1	EA	$	15,000.00	$	15,000.00
14	INSTALL 60" CMP	100	LF	$	350.00	$	35,000.00
15	INSTALL ANTI-SEEP COLLAR	2	EA	$	1,000.00	$	2,000.00
16	INSTALL TYPE 'C' RIPRAP	100	TN	$	200.00	$	20,000.00
	CONTINGENCY	15%		$	1,199,330.00	$	179,899.50
	Estimated Construction Costs					$	1,379,229.50
		ESTIMATED SOFT COSTS					
		11%	Engineering Design, Construction Admin				$151,715.25
	Estimated Soft Costs						$151,715.25
	Total Estimated Costs					$	1,530,944.75

SANITARY SEWER - INTERIOR

Assumption/Comments:

12 VF for typical manholes - 18 VF for critical path manholes
42 LF per service - 75% wye - 25% MH Stub

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	TRAFFIC CONTROL	1	LS	$ 10,000.00	$ 10,000.00
3	EXPLORATORY EXCAVATION	10	HR	$ 300.00	$ 3,000.00
4	MAINTAIN SILT FENCE	500	LF	$ 3.00	$ 1,500.00
5	MAINTAIN CONSTRUCTION ENTRANCE (3" CRUSHED ROCK AGGREGATE)	100	TN	$ 60.00	$ 6,000.00
6	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	300	TN	$ 60.00	$ 18,000.00
7	CONSTRUCT 10" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	0	LF	$ 65.00	$ -
8	CONSTRUCT 8" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	8,800	LF	$ 56.00	$ 492,800.00
9	CONSTRUCT 6" PVC SANITARY SEWER PIPE W/ TYPE F3 AGGREGATE BEDDING	11,200	LF	$ 48.00	$ 537,600.00
10	BORE 8" SANITARY SEWER PIPE	0	LF	$ 660.00	$ -
11	CONSTRUCT 6"X8" WYE	200	EA	$ 350.00	$ 70,000.00
12	CONSTRUCT 6" SANITARY SEWER MANHOLE STUBOUT	67	EA	$ 250.00	$ 16,750.00
13	CONSTRUCT 8" SANITARY SEWER PIPE PLUG	0	EA	$ 100.00	$ -
14	CONSTRUCT 8" SANITARY SEWER CLEANOUT W/ PCC COLLAR	0	EA	$ 550.00	$ -
15	CONSTRUCT 54" ID SANITARY MANHOLE (29 EA)	378	VF	$ 600.00	$ 226,800.00
16	CONSTRUCT RING COLLAR ON SANITARY SEWER MANHOLE	0	EA	$ 600.00	$ -
17	INSTALL EXTERNAL FRAME SEAL ON SANITARY SEWER MANHOLE	0	EA	$ 500.00	$ -
18	INSTALL SEEDING "TEMPORARY MIX"	15	AC	$ 400.00	$ 6,000.00
	CONTINGENCY	10%		$ 1,398,450.00	$ 139,845.00
	Estimated Construction Costs				$ 1,538,295.00

ESTIMATED SOFT COSTS

19%	Engineering Design, Construction Admin	$292,276.05
2%	Geotechnical and Testing	$30,765.90
5%	Legal	$93,066.85
5%	Fiscal	$93,066.85
7%	Interest	$143,322.95
1%	Bond Counsel	$21,907.94
12	Months Duration	

Total Estimated Soft Costs $674,406.53

Total Estimated Costs $ 2,212,701.53

SANITARY - FEES

Assumption/Comments:

SCCWWA projected 2030-2031 Fee Schedule based on $500 annual increase
Half paid at Final Plat and half paid at Building Permit
Lots 294-560

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	52.22	AC	$ 33,500.00	$ 1,749,370.00
	CONTINGENCY	10%		$ 1,749,370.00	$ 174,937.00
	Estimated Construction Costs				$ 1,924,307.00
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$38,486.14
		5%	Fiscal		$96,215.35
		7%	Interest		$144,130.59
		1%	Bond Counsel		$22,031.39
		12	Months Duration		
	Total Estimated Soft Costs				$300,863.48
	Total Estimated Costs				$ 2,225,170.48

STORM SEWER

Assumption/Comments:

7 VF PER MH
50 TN PER RIP RAP OUTLET

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	MOBILIZATION	1	LS	$	10,000.00	$	10,000.00
2	MAINTAIN SILT FENCE	500	LF	$	3.00	$	1,500.00
3	DEWATERING	40	HR	$	125.00	$	5,000.00
4	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	100	TN	$	60.00	$	6,000.00
5	MAINTAIN CONSTRUCTION ENTRANCE (3" CRUSHED ROCK AGGREGATE)	100	TN	$	60.00	$	6,000.00
6	CONSTRUCT 18" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	320	LF	$	60.00	$	19,200.00
7	CONSTRUCT 24" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	650	LF	$	75.00	$	48,750.00
8	CONSTRUCT 30" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	650	LF	$	100.00	$	65,000.00
9	CONSTRUCT 36" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	410	LF	$	125.00	$	51,250.00
10	CONSTRUCT 42" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	190	LF	$	175.00	$	33,250.00
11	CONSTRUCT 48" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	-	LF	$	250.00	$	-
12	CONSTRUCT 60" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	-	LF	$	450.00	$	-
13	CONSTRUCT 54" I.D. STORM MANHOLE (3 EA)	21	VF	$	1,050.00	$	22,050.00
14	CONSTRUCT 60" I.D. STORM MANHOLE (1 EA)	7	VF	$	1,200.00	$	8,400.00
15	CONSTRUCT 96" I.D. STORM MANHOLE (0 EA)	-	VF	$	2,500.00	$	-
16	CONSTRUCT 18" R.C. FLARED END SECTION	4	EA	$	2,000.00	$	8,000.00
17	CONSTRUCT 24" R.C. FLARED END SECTION	3	EA	$	2,500.00	$	7,500.00
18	CONSTRUCT 36" R.C. FLARED END SECTION	3	EA	$	3,500.00	$	10,500.00
19	CONSTRUCT 48" R.C. FLARED END SECTION	1	EA	$	4,500.00	$	4,500.00
20	INSTALL REINFORCED CONCRETE PIPE COUPLERS	39	EA	$	200.00	$	7,800.00
21	INSTALL RIP-RAP, TYPE A	100	TN	$	120.00	$	12,000.00
22	INSTALL RIP-RAP, TYPE B	150	TN	$	120.00	$	18,000.00
23	INSTALL RIP-RAP, TYPE C	50	TN	$	120.00	$	6,000.00
	CONTINGENCY	10%		$	350,700.00	$	35,070.00
	Estimated Construction Costs					$	385,770.00

	ESTIMATED SOFT COSTS	
	Engineering Design, Construction	
19%	Admin	$73,296.30
2%	Geotechnical and Testing	$7,715.40
5%	Legal	$23,339.09
5%	Fiscal	$23,339.09
7%	Interest	$35,942.19
1%	Bond Counsel	$5,494.02
12 Months	Duration	
Total Estimated Soft Costs		$169,126.08
Total Estimated Costs		$ 554,896.08

STORM SEWER - WATERSHED FEES

Assumption/Comments:

Springfield Master Fee Schedule
FY 2027
Paid at Building Permit

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	266	LOTS	$ 1,122.00	$ 298,452.00
2	Multi-Family	6.24	AC	$ 4,939.00	$ 30,819.36
	CONTINGENCY	10%		$ 329,271.36	$ 32,927.14
	Estimated Construction Costs				$ 362,198.50
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		0%	Legal		$0.00
		0%	Fiscal		$0.00
		0%	Interest		$0.00
		0%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ 362,198.50

STORM SEWER - PCSMP

Assumption/Comments:

Outlot purchase includes Outlots N.
Unit cost is based on estimated land purchase price of $40,000 per acre

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 5,000.00	$ 5,000.00
2	TRAFFIC CONTROL	1	LS	$ 1,000.00	$ 1,000.00
3	DEWATERING	40	HR	$ 125.00	$ 5,000.00
4	MAINTAIN SILT FENCE	500	LF	$ 3.00	$ 1,500.00
5	STABILIZE TRENCH (3" CRUSHED ROCK AGGREGATE)	50	TN	$ 60.00	$ 3,000.00
6	CONSTRUCT 24" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	100	LF	$ 100.00	$ 10,000.00
7	CONSTRUCT 60" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	-	LF	$ 450.00	$ -
8	CONSTRUCT 72" RCP (CLASS III) W/ TYPE R2 AGGREGATE BEDDING	-	LF	$ 650.00	$ -
9	CONSTRUCT BASIN OUTLET STRUCTURE	1	EA	$ 20,000.00	$ 20,000.00
10	CONSTRUCT 24" R.C. FLARED END SECTION	1	EA	$ 2,500.00	$ 2,500.00
11	CONSTRUCT 72" R.C. FLARED END SECTION	-	EA	$ 6,500.00	$ -
12	INSTALL REINFORCED CONCRETE PIPE COUPLERS	6	EA	$ 200.00	$ 1,200.00
13	INSTALL SEEDING "WETLAND MIX"	1	AC	$ 2,000.00	$ 2,000.00
14	INSTALL SEEDING "SUBDIVISION MIX"	2	AC	$ 1,200.00	$ 2,400.00
15	INSTALL EROSION CONTROL BLANKET "TYPE I"	2	AC	$ 8,000.00	$ 16,000.00
16	INSTALL RIP-RAP, TYPE C	50	TN	$ 119.00	$ 5,950.00
17	OUTLOT PURCHASE	2.31	AC	$ 40,000.00	$ 92,400.00
	CONTINGENCY	10%		$ 167,950.00	$ 16,795.00
	Estimated Construction Costs				$ 184,745.00

	ESTIMATED SOFT COSTS	
	Engineering Design, Construction	
19%	Admin	$35,101.55
2%	Geotechnical and Testing	$3,694.90
5%	Legal	$11,177.07
5%	Fiscal	$11,177.07
7%	Interest	$17,212.69
1%	Bond Counsel	$2,631.08
12 Months	Duration	
	Total Estimated Soft Costs	$80,994.37
	Total Estimated Costs	$ 265,739.37

PAVING - INTERIOR

Assumption/Comments:

Seeding approximately 2x pavement area
Pavement is 5,450 SY G.O. (36,700-5,450=31,250 S.A.)
31,250*60+10,416*3 = $1,906,250 S.A. (78.67% of Construction Cost)

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	TRAFFIC CONTROL	1	LS	$	10,000.00	$	10,000.00
2	COMMON EARTH EXCAVATION	12,233	CY	$	3.00	$	36,700.00
3	CONSTRUCT 7-INCH CONCRETE PAVEMENT (OPW 3500)	36,700	SY	$	55.00	$	2,018,500.00
4	ADJUST MANHOLE TO GRADE	33	EA	$	300.00	$	9,900.00
5	INSTALL EXTERNAL FRAME SEAL	29	EA	$	500.00	$	14,500.00
6	CONSTRUCT THICKENED EDGE	540	LF	$	20.00	$	10,800.00
7	CONSTRUCT CONCRETE HEADER	0	LF	$	20.00	$	-
8	CONSTRUCT CURB INLET - TYPE I	10	EA	$	5,500.00	$	55,000.00
9	CONSTRUCT CURB INLET - TYPE III	4	EA	$	5,700.00	$	22,800.00
10	INSTALL CURB INLET PROTECTION	14	EA	$	300.00	$	4,200.00
11	CONSTRUCT END OF ROAD BARRICADE	0	EA	$	600.00	$	-
12	CONSTRUCT TEMPORARY TURNAROUND (2 EA)	0	SF	$	8.00	$	-
13	INSTALL SEEDING (SUBDIVISION MIX)	16	AC	$	1,000.00	$	16,000.00
14	INSTALL MULCHING	16	AC	$	600.00	$	9,600.00
15	INSTALL STREET NAME SIGNS	15	EA	$	150.00	$	2,250.00
16	INSTALL REGULATORY SIGNS	18	EA	$	150.00	$	2,700.00
17	INSTALL SIGN POSTS	18	EA	$	1,000.00	$	18,000.00
18	JET EXISTING SANITARY SEWER	8,800	LF	$	1.00	$	8,800.00
	CONTINGENCY	10%		$	2,239,750.00	$	223,975.00
	Estimated Construction Costs					$	2,463,725.00

ESTIMATED SOFT COSTS

	Engineering Design, Construction	
19%	Admin	$468,107.75
2%	Geotechnical and Testing	$49,274.50
5%	Legal	$149,055.36
5%	Fiscal	$149,055.36
7%	Interest	$229,545.26
1%	Bond Counsel	$35,087.63
12 Months	Duration	

Total Estimated Soft Costs $1,080,125.87

Total Estimated Costs $ 3,543,850.87

PAVING - SIGNAL

Assumption/Comments:

25% Contribution to Traffic Signal at 132nd and Main

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	TRAFFIC SIGNAL	1	LS	$ 400,000.00	$ 400,000.00
	CONTINGENCY	10%		$ 400,000.00	$ 40,000.00
	Estimated Construction Costs (25% Cost Split)				$ 110,000.00
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$2,200.00
		5%	Fiscal		$5,500.00
		7%	Interest		$8,239.00
		1%	Bond Counsel		$1,259.39
		12	Months Duration		
	Total Estimated Soft Costs				$17,198.39
	Total Estimated Costs				$ 127,198.39

PAVING - FEES

Assumption/Comments:

Springfield Master Fee Schedule
Arterial Street Improvement Policy
0.75% of building valuations paid at building permit for single-family/townhomes
$5,000/acre multifamily, Paid at Building Permit

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	266	LOTS	0.75%	$ 947,625.00
2	Multi-Family	6.24	AC	$ 5,000.00	$ 31,200.00
	CONTINGENCY	10%		$ 978,825.00	$ 97,882.50
	Estimated Construction Costs				$ 1,076,707.50
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		0%	Legal		$0.00
		0%	Fiscal		$0.00
		0%	Interest		$0.00
		0%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ 1,076,707.50

WATER - INTERIOR

Assumption/Comments:

Hydrants expected to be G.O. (12.56% of Construction Cost)

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	$ 10,000.00	$ 10,000.00
2	TRAFFIC CONTROL	1	LS	$ 10,000.00	$ 10,000.00
3	EXPLORATORY EXCAVATION	10	HR	$ 300.00	$ 3,000.00
4	MAINTAIN SILT FENCE	500	LF	$ 3.00	$ 1,500.00
5	CONSTRUCT 8" D.I.R.J. WATER MAIN	900	LF	$ 100.00	$ 90,000.00
6	CONSTRUCT 8" D.I.P.J. WATER MAIN	11,400	LF	$ 65.00	$ 741,000.00
7	CONSTRUCT TYPE 1 HYDRANT ASSEMBLY	28	EA	$ 6,000.00	$ 168,000.00
8	CONSTRUCT TYPE 5 HYDRANT ASSEMBLY	0	EA	$ 6,000.00	$ -
9	CONSTRUCT 8" GATE VALVE, M.J. & BOX	48	EA	$ 3,000.00	$ 144,000.00
10	CONSTRUCT 8" X 8" TEE, M.J. W/ BACKING BLOCK	12	EA	$ 1,000.00	$ 12,000.00
11	CONSTRUCT 8" X 8" CROSS, M.J.	3	EA	$ 1,400.00	$ 4,200.00
12	CONSTRUCT 8" X 22.5° BEND, M.J. W/ BACKING BLOCK	0	EA	$ 750.00	$ -
13	CONSTRUCT 8" X 45° BEND, M.J. W/ BACKING BLOCK	0	EA	$ 750.00	$ -
14	INSTALL 8" PIPE PLUG W/ BACKING BLOCK	0	EA	$ 500.00	$ -
15	INSTALL SEEDING, SUBDIVISION MIX	9	AC	$ 1,000.00	$ 9,000.00
16	INSTALL MULCHING	9	AC	$ 600.00	$ 5,400.00
	CONTINGENCY	10%		$ 1,198,100.00	$ 119,810.00
	Estimated Construction Costs				$ 1,317,910.00

	ESTIMATED SOFT COSTS	
	Engineering Design, Construction	
19%	Admin	$250,402.90
2%	Geotechnical and Testing	$26,358.20
5%	Legal	$79,733.56
5%	Fiscal	$79,733.56
7%	Interest	$122,789.67
1%	Bond Counsel	$18,769.28
12 Months	Duration	
Total Estimated Soft Costs		$577,787.16
Total Estimated Costs		$ 1,895,697.16

WATER - EXTERIOR

Assumption/Comments:

Includes water main along Platteview Road up to the eastern boundary of project.
50% Reimbursable by future development to the north

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	CONSTRUCT 12" WATER MAIN (DIP)	1,750	LF	$ 105.00	$ 183,750.00
2	CONSTRUCT FIRE HYDRANT	5	EA	$ 6,000.00	$ 30,000.00
	CONTINGENCY	15%		$ 213,750.00	$ 32,062.50
	Estimated Construction Costs				$ 245,812.50
		ESTIMATED SOFT COSTS			
		Engineering Design, Construction			
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$4,916.25
		5%	Fiscal		$12,290.63
		7%	Interest		$18,411.36
		1%	Bond Counsel		$2,814.31
		12	Months Duration		
	Total Estimated Soft Costs				$38,432.54
	Total Estimated Costs				$ 284,245.04

WATER - FEES

Assumption/Comments:

Assuming 20 units/acre on mixed-use lot
Springfield Master Fee Schedule: Half of single family and all of outlot fees due at platting and other half due at building permit. (50.63%)

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Single Family / Townhome	266	LOTS	$ 1,000.00	$ 266,000.00
2	Multi-Family	125	UNITS	$ 1,000.00	$ 125,000.00
3	Outlot	6.77	AC	$ 500.00	$ 3,385.00
	CONTINGENCY	10%		$ 394,385.00	$ 39,438.50
	Estimated Construction Costs				$ 433,823.50
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$8,676.47
		5%	Fiscal		$21,691.18
		7%	Interest		$32,493.38
		1%	Bond Counsel		$4,966.85
		12	Months Duration		
	Total Estimated Soft Costs				$67,827.87
	Total Estimated Costs				$ 501,651.37

SIDEWALKS/TRAILS/PARKS

Assumption/Comments:

Assuming Park Fees will be waived with proposed trail and park area.

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	CONSTRUCT CURB RAMP	50	EA	$ 1,500.00	$ 75,000.00
2	CONSTRUCT 5-INCH CONCRETE SIDEWALK (OPW 3500)	4,000	SF	$ 5.00	$ 20,000.00
3	CONSTRUCT 6-INCH CONCRETE TRAIL (OPW 3500)	72,850	SF	$ 6.00	$ 437,100.00
4	STREET TREES	93	EA	$ 500.00	$ 46,500.00
5	PARK IMPROVEMENTS	0	LS	$ 400,000.00	$ -
	CONTINGENCY	15%		$ 578,600.00	$ 86,790.00
	Estimated Construction Costs				$ 665,390.00
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		19%	Admin		$126,424.10
		2%	Geotechnical and Testing		$13,307.80
		5%	Legal		$40,256.10
		5%	Fiscal		$40,256.10
		7%	Interest		$61,994.39
		1%	Bond Counsel		$9,476.28
		12 Months	Duration		
	Total Estimated Soft Costs				$ 291,714.76
	Total Estimated Costs				$ 957,104.76

PARK - FEES

Assumption/Comments:

Springfield Master Fee Schedule
0.04 acres/unit
$30,000/acre
Assuming Park Fees will be waived with proposed trail and park area.

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Residential	10.64	AC	$ 30,000.00	$ 319,200.00
	CONTINGENCY	-100%		$ 319,200.00	$ (319,200.00)
	Estimated Construction Costs				$ -
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$0.00
		5%	Fiscal		$0.00
		7%	Interest		$0.00
		1%	Bond Counsel		$0.00
		12	Months Duration		
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ -

POWER

Assumption/Comments:

Estimated cost based on average of recent projects.

	Bid Item Description	Approximate Quantity	Unit		Unit Price		Total
1	Power Infrastructure (per linear foot of street)	11,800	LF	$	80.00	$	944,000.00
2	Single Family Reimbursement	266	LOTS	$	(540.00)	$	(143,640.00)
	CONTINGENCY	15%		$	800,360.00	$	120,054.00
	Estimated Construction Costs					$	920,414.00
		ESTIMATED SOFT COSTS					
		19%	Engineering Design, Construction Admin				$174,878.66
		2%	Geotechnical and Testing				$18,408.28
		5%	Legal				$55,685.05
		5%	Fiscal				$55,685.05
		7%	Interest				$85,754.97
		1%	Bond Counsel				$13,108.26
		12	Months Duration				
	Total Estimated Soft Costs						$403,520.27
	Total Estimated Costs					$	1,323,934.27

GAS MAIN

Assumption/Comments:

Expecting credits and adjustments will cancel out costs

	Bid Item Description	Approximate Quantity	Unit	Unit Price	Total
1	Gas Main Costs	1	LS	$ -	$ -
2	Available Revenue Credit	1	LS	$ -	$ -
3	Adjustments	1	LS	$ -	$ -
	CONTINGENCY	15%		$ -	$ -
	Estimated Construction Costs				$ -
		ESTIMATED SOFT COSTS			
		0%		Admin	$0.00
		0%		Geotechnical and Testing	$0.00
		2%		Legal	$0.00
		5%		Fiscal	$0.00
		7%		Interest	$0.00
		1%		Bond Counsel	$0.00
		12	Months	Duration	
	Total Estimated Soft Costs				$0.00
	Total Estimated Costs				$ -

REVIEW FEES

Assumption/Comments:

	Bid Item Description	Construction Cost		Plan Review Fee	Total
1	SANITARY - INTERIOR	$ 1,538,295.00	1%	$	15,382.95
2	SANITARY - EXTERIOR	$ -	1%	$	-
3	STORM SEWER	$ 385,770.00	1%	$	3,857.70
4	PAVING - INTERIOR	$ 2,463,725.00	1%	$	24,637.25
5	PAVING - EXTERIOR	$ -	1%	$	-
6	WATER - INTERIOR	$ 1,317,910.00	1%	$	13,179.10
7	WATER - EXTERIOR	$ 245,812.50	1%	$	2,458.13
8	SIDEWALKS/TRAILS/PARKS	$ 665,390.00	1%	$	6,653.90
	Estimated Construction Costs			$	66,169.03
		ESTIMATED SOFT COSTS			
			Engineering Design, Construction		
		0%	Admin		$0.00
		0%	Geotechnical and Testing		$0.00
		2%	Legal		$1,323.38
		5%	Fiscal		$3,308.45
		7%	Interest		$4,956.06
		1%	Bond Counsel		$757.57
		12 Months	Duration		
	Total Estimated Soft Costs				$10,345.46
	Total Estimated Costs			$	76,514.49

Wetland and Waterway Investigation Report

Mahloch Farms

Springfield, Sarpy County, Nebraska

Benesch Project No. 1127-170031.00

PREPARED FOR:

Graves Development
14503 Grover Street, Suite 102
Omaha, NE 68144

August 2026
Revision 0

benesch

EXECUTIVE SUMMARY

This report documents the findings of a wetland and waterway investigation performed by Benesch on behalf of Graves Development for an approximately 160-acre site proposed for commercial or residential development. The site is located in Springfield, Sarpy County, Nebraska. Benesch staff completed the field investigation on July 23, 2026. Based on a review of existing data resources and field investigation, Benesch identified the following aquatic resources within the project investigation area:

- 0.275 acres of Palustrine Emergent Temporarily/Seasonally Flooded (PEMA/C) wetlands

See Exhibit 1 below for an overview of the wetland and waterway investigation findings at the site.

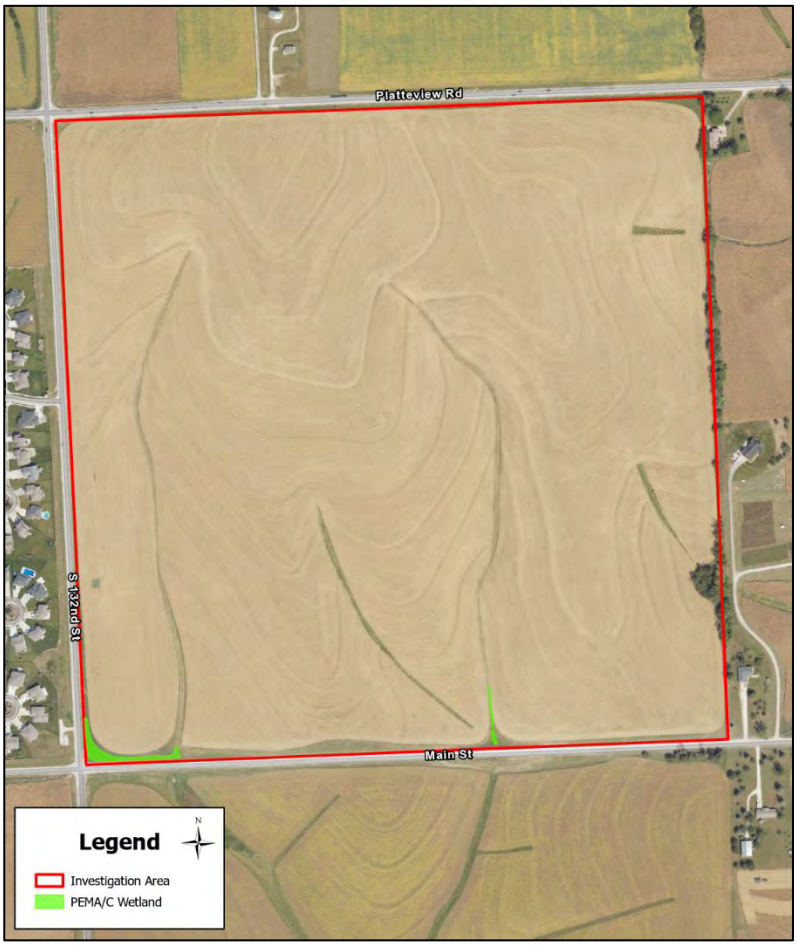


Exhibit 1. Wetland and waterway investigation overview of the Mahloch Farms site.

RELIANCE

This report has been prepared for the exclusive use and reliance of Graves Development for the specific application to the project discussed herein and has been prepared under generally accepted practices in the profession. In the event any changes at the project site or in wetlands regulations as outlined in this report occur, the opinions of this report cannot be considered valid unless the changes are reviewed, and the opinions of this report are modified or verified by Benesch.

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INTRODUCTION

Benesch was retained by Graves Development to provide professional consulting services related to a wetland and waterway investigation for a proposed commercial or residential development located in Springfield, Nebraska. The purpose of this report is to advise Graves Development of any identified wetlands, waterways, or other potentially regulated features in anticipation of the proposed construction within the investigation area. Wetlands and waterways evaluated during this investigation include federally regulated waters under the Clean Water Act (CWA) – "Waters of the United States" (WOTUS), and the state of Nebraska regulated waters under Title 117 – Nebraska Surface Water Quality Standards.

Benesch completed the field investigation on July 23, 2026, in general accordance with the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual. The following information describes the investigation area, methods used to identify wetlands and waterways, findings from a desktop review of existing aquatic resources, and findings from the field investigation. Results from this investigation can be verified with USACE to confirm jurisdictional boundaries.

1.1 Site Location

The site is located southeast of the intersection of South 132nd Street and Platteview Road. More specifically, the Public Land Survey System (PLSS) description for the site is Section 19, Township 13 North, and Range 12 East. A general point of Latitude and Longitude for the site is 41.085496°, -96.114445°. A Project Location Map is provided in Figure 1, Appendix A.

1.2 Site Description

The site is comprised primarily of active row crop agricultural land. There are numerous farm swales throughout the site. Surrounding land use to the north, east, and south of the investigation area consists of row crop agricultural land and residential homes. Land use to the west of the site consists of row crop agriculture, a residential neighborhood, church buildings, public parks, and an elementary school.

1.3 Investigation Area

The investigation area consists of a 160-acre parcel of land southeast of the South 132nd Street and Platteview Road intersection. An Investigation Area Map is provided as Figure 2 in Appendix A.

2.0 METHODS

2.1 Preliminary Review/Desktop Study

Benesch reviewed the following resources before conducting the field investigation.

1. United States Geological Survey (USGS) Topographic Map (2021) obtained via ArcGIS Online base map database (Esri, 2025).
2. Sarpy County 2025 Aerial Imagery obtained from the Metropolitan Area Planning Agency (MAPA) Program (2025).
3. Historic aerial imagery from Google Earth (2026), multiple years from 1985 to 2026.
4. Web Soil Survey digital data obtained via the Natural Resources Conservation Service (2025).
5. US Fish & Wildlife Service National Wetlands Inventory (NWI) Map (2026).
6. National Hydrography Dataset (NHD) obtained from USGS (2023).

2.2 Field Investigation

A field investigation was performed on July 23, 2026, within the investigation area defined in Section 1.3 and depicted in Figure 2 (Appendix A). Benesch investigated potential wetlands in general accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) and the *Midwest Regional Supplement* (USACE, 2010). Benesch followed the routine method and sampled potential wetland areas based on the presence of hydrophytic vegetation and/or the presence of wetland hydrology.

The following wetland parameters were examined at each sample point:

1. Hydrophytic vegetation
2. Hydric soil
3. Wetland hydrology

At each potential wetland location, vegetation in each of the four strata (trees, shrubs, herbs, and woody vines) was identified by species and recorded percent cover. Individual taxa were checked against the *National Wetland Plant List, version 3.6* (USACE, 2022) and their indicators status was noted. Dominant species were determined by the 50/20 rule. Hydrophytic vegetation was considered prevalent when more than 50% of dominant species in the plant community had an indicator status of OBL, FACW, and/or FAC. Wetland hydrology was evaluated on the ground surface and subsurface to a depth of at least 20 inches. Soil and hydric indicators were evaluated to a depth of at least 20 inches. When necessary, the problematic hydric soil procedure was applied at sample points with problematic soils.

Field observations at each sampling location were entered on a Midwest Region USACE Wetland Determination Data Form. Using the USACE's general methodology, an area was classified as a wetland if a positive indicator for each of the three parameters (hydrophytic vegetation, hydric soils, and hydrology) was present. Benesch classified wetlands according to the Cowardin Classification System (1979) and Nebraska Wetland Subclass (1997) in conjunction with field observations and mapping resources. If a wetland was confirmed, the boundary was delineated at the wetland/upland vegetation change. An official outpoint for each wetland was placed in a nearby upland area.

USACE regulated waterways are typically identified by the presence of a defined bed and bank with an Ordinary High-Water Mark (OHWM). USACE defines OHWM as being "established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR 328.3(c.) (7.) (Federal Register 2021) and RGL- 05-05 (USACE 2005).

Ground-level photographs were taken at each feature and sample point. A photo log is included in Appendix C. Wetland sample points, photograph points, and aquatic resource boundaries were mapped in the field with a sub-foot accurate Trimble DA 2 GPS and ESRI Field Maps software. This information was overlaid on aerial imagery utilizing ArcGIS Pro 3.2.2 software.

2.3 Farmed Wetland Investigation Procedure

A wetlands in agricultural settings review was conducted for the agricultural portions of the investigation area. Using the methodology from Part 650.1903 of the Engineering Field Handbook – Supplemental data for remote sensing, numerous years of aerial photography obtained from Google Earth were reviewed for wetland hydrology and compared to the cumulative precipitation results from the Antecedent Precipitation Tool (APT) for National Agricultural Imagery Program (NAIP) aerials and their image dates. Five years of aerials were

chosen for review (three normal years, one wet year, and one dry year). A period is considered normal if the cumulative precipitation in the preceding three months falls within the normal range. Using Procedure 1 on pages 19-25 of the Engineering Field Handbook, the five aerials were reviewed for wetland signatures as defined in section 513.30 of the USDA National Food Security Act Manual.

Benesch evaluated aerial imagery from the aforementioned years for wet signatures based on protocol established by the NRCS to determine if wetland hydrology exists for USACE regulated wetlands (USACE Midwest Regional Supplement). Wet signatures include crop stress, drowned out crops, areas not cropped, standing water, and hydrophytic vegetation. For an area to meet the wetland hydrology indicator, wet signatures must be present in more than half of the aerial photographs. In cases where wet signatures were present in more than half of the aerial photographs, an average wet signature boundary was created. Areas with wet signatures present in more than half of the aerial images/photographs were assessed for hydric soils in the field. In wet signature areas within the row crop fields on the site, soil profiles were assessed to a depth of 40 inches, if not met before that depth, to account for soil disturbance by farming practices.

3.0 FINDINGS

3.1 Preliminary Review/Desktop Analysis

USGS Topographic Map

The USGS National Map depicts the investigation area as predominately undeveloped land. An intermittent channel is shown to pass through the southwest corner of the investigation area, trending northwest to southeast. Another intermittent channel is shown to flow south through the site, stemming from the central region of the investigation area. The topographic relief on the site ranges from 1,110 feet above mean sea level (MSL) to 1,180 feet above MSL based on 10-foot contour intervals. See Figure 1, Appendix A for the USGS National Map.

2025 Sarpy County Aerial Photography

The MAPA aerial image shows the investigation area as entirely row crop agricultural field apart from the farm swales located throughout the site. The land surrounding the site is depicted as row crop agricultural land, residential homes, church buildings, public parks, and an elementary school. See Figure 2 in Appendix A for the MAPA aerial image. This aerial was used as the background image because it is the most recent aerial image of the site available.

Web Soil Survey

Soils within the investigation area are classified by the USDA-NRCS Web Soil Survey (WSS) as Soil Map Units Judson silty clay loam, 2 to 6 percent slopes (7234), Marshall-Contrary silty clay loams, 2 to 7 percent slopes (8035), and Contrary-Marshall silty clay loams (8153). Of the three soil map units depicted within the investigation area, only one (7234) has a Hydric Rating above 0%. This rating indicates the percentage of a map unit that meets the criteria for hydric soils. Map units are compiled of one or more map unit components or soil types, each of which is rated as hydric or non-hydric. Each map unit is rated based on its respective components and the percentage of each component within map unit. Soil Map Unit 7234 has a Hydric Rating of 2% and makes up 1.3% of the study area. One of the two aquatic resources identified within the investigation area is located within this unit. The other aquatic resource identified within the investigation area is located within Soil Map Unit 8153, which has a Hydric Rating of 0%. The third unit present within the investigation area (8035) also has a Hydric Rating of 0%. See Figure 4 in Appendix A for the NRCS soil survey map.

The National Technical Committee for Hydric Soils (NTCHS) definition for hydric soils identifies general soil properties that are associated with wetness. To determine whether a specific soil is hydric or non-hydric, more

specific information, for example, information about the depth and duration of the water table is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands (Soil Survey Staff, 2019).

National Wetlands Inventory Data

The National Wetlands Inventory (NWI) depicts two riverine habitats within the investigation area. These habitats are further classified as Riverine, Intermittent, Streambed, Seasonally Flooded (R4SBC). See Figure 3 in Appendix A for the location of the habitats and their classification.

National Hydrography Dataset

The National Hydrography Dataset (NHD) map depicts an intermittent flowline entering the site near the southwest corner of the site and flowing southeast approximately 400 feet where it exits the investigation area. During the site visit, this NHD feature was determined to be representative of PEMA/C Wetland S-1, which is located southwest of the depicted flowline. A second intermittent flowline is depicted to originate in the central region of the site, and travel south through a farm swale before exiting the investigation area. During the site visit, this NHD feature was determined to be representative of PEMA/C Wetland S-3, with a portion of the mapped flowline overlapping the delineated wetland. Wetlands S-1 and S-3 are discussed in further detail in a later section of this report. South of the investigation area, these NHD flowlines join and continue in a southeasterly direction until connecting to the Platte River. See Figure 3 in Appendix A for NHD flowlines.

Climate Data

The USACE Antecedent Precipitation Tool reports that precipitation values from the day before the site visit back 90 days were “Drier than Normal” compared to the 30-year average precipitation range. The National NWS reported 1.91 inches of precipitation from July 1 to July 23, 2026, for the Gretna area (NWS, 2026), which is approximately 1.57 inches below normal for July. The year-to-date (1-1-2026 to 7-23-2026) precipitation for that station was 16.29 inches, which is 3.83 inches below normal. The Gretna, Nebraska NWS station is located approximately 7.5 miles from the investigation area. Precipitation values reported at the NWS station in Gretna, Nebraska are likely similar to precipitation received within the investigation area. Overall, total precipitation representing the investigation area was below normal but likely did not influence the findings of this investigation.

3.2 Field Investigation

Benesch staff identified approximately 0.275 acres of PEMA/C wetlands in two locations, one near the southwest corner and the other in the south-central portion of the investigation area. These features are discussed in more detail below. Supporting information and maps are included in the appendices as follows: Wetland Delineation Map (Figure 5 in Appendix A), USACE wetland data forms (Appendix B), and site photographs (Appendix C).

PEMA/C Wetlands

0.275 acres of PEMA/C wetlands were delineated within the investigation area. Sample points S-1 and S-3 represent this wetland type. Because these wetlands are located in a roadway ditch, they are not assigned a subclass. These wetlands were observed in the southwest corner and south-central side of the investigation area where hydrology associated with drainageways appears to accumulate on the north side of Main Street. See Exhibit 2 for an example of a PEMA/C wetland present within the investigation area. Dominant vegetation included reed canary grass (*Phalaris arundinacea*) and yellow nutsedge (*Cyperus esculentus*). The dominance test was met at both wetland sample points.

Hydric soil was present at both PEMA/C sample points in the form of Depleted Matrix (F3) and Redox Dark Surface (F6) indicators. Water sources supporting wetland hydrology include direct precipitation and surface water runoff from the surrounding watershed. Wetland hydrology indicators observed in the field within PEMA/C wetlands include Oxidized Rhizospheres on Living Roots (C3), Geomorphic Position (D2), and FAC-Neutral Test (D5).



Exhibit 2. PEMA/C wetland present in southwest region of investigation area, represented by S-1.

Jurisdictional Status: Wetlands S-1 and S-3 drain south from the site to culverts under Main Street located along the southern boundary. These drainageways continue in a southeasterly direction until connecting to the Platte River. Although surface water connectivity may occur during significant rain events, a continuous surface water connection was not observed during the site investigation. Because Wetlands S-1 and S-3 do not appear to maintain a continuous surface connection to a Relatively Permanent Water (RPW) or a Traditional Navigable Water (TNW), these wetlands are likely non-jurisdictional under Section 404 of the Clean Water Act. However, they appear to remain subject to regulation under Title 117.

3.3 Summary of Delineated Features

Table 1 below summarizes the findings of the wetland and waterway investigation conducted at the site on July 23, 2026.

Table 1: Wetland and waterway features delineated within the site.

Feature	Lat/Long	Sample Point	Classification	NE Subclass	Area (acres)
PEMA/C Wetland S-1	41.0819289°N 96.1191918°W	S-1	PEMA/C	N/A	0.245
PEMA/C Wetland S-3	41.0819041°N 96.1132866°W	S-3	PEMA/C	N/A	0.030
				PEMA/C Total	**0.275**

4.0 CONCLUSION

A wetland and waterway investigation was conducted in July 2026 for the commercial/residential development project proposed by Graves Development. Benesch identified and delineated 0.275 acres of PEMA/C wetlands throughout the investigation area. Federally regulated wetlands under Section 404 of the CWA require a continuous surface water connection to Relatively Permanent Water (RPW) or Traditional Navigable Water (TNW). Wetlands S-1 and S-3 do not appear to have a continuous surface water connection to an RPW or TNW.

Therefore, in our professional opinion, these features are likely non-jurisdictional under Section 404 of the Clean Water Act, although they would remain subject to regulation under Title 117.

The above conclusions regarding the jurisdictional status of these wetland features are the professional opinion of Benesch. Ultimately, the USACE determines questions of federal jurisdiction, and NDWEE determines questions of state jurisdiction. Federal jurisdiction can be requested by submitting this report along with an Approved Jurisdictional Determination (AJD) form to the USACE - Nebraska Regulatory Office and copying NDWEE. Any proposed impacts to federally regulated wetlands would require a Section 404 permit. Any non-federally regulated wetlands may be regulated under Title 117 of the Nebraska Surface Water Quality Standards which is administered by NDWEE and would require authorization from that agency.

Report Prepared by:

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Scientist II

Andy Miller, PWS
Group Manager

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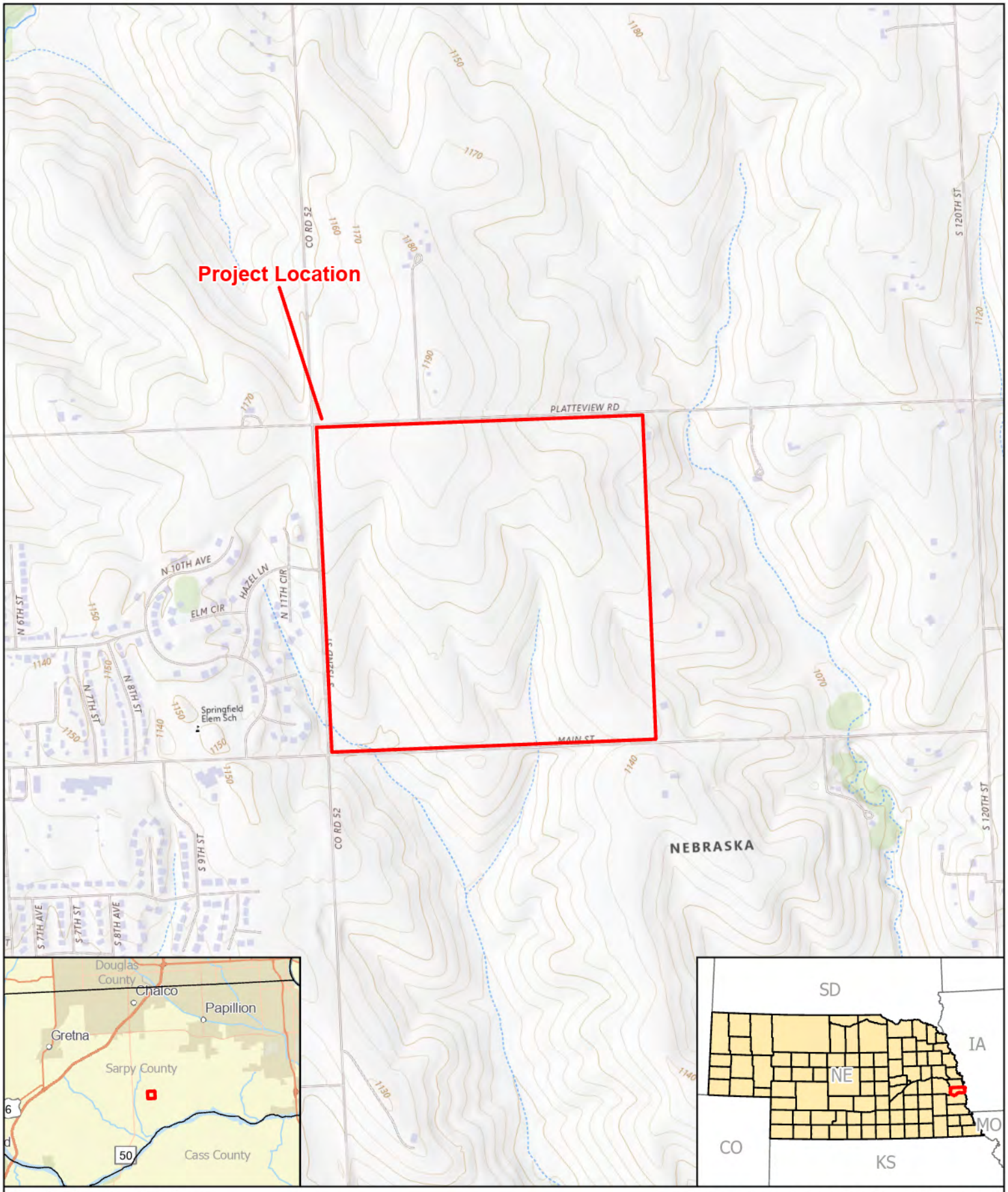
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APPENDIX A

FIGURES

Figure 1 – Project Location Map (USGS Topographic)
Figure 2 – Investigation Area Map
Figure 3 – NHD and NWI Map
Figure 4 – Web Soil Survey Map
Figure 5 – Wetland Delineation Map
Figure 6 – Wetland Signature Map



MAPA 2025 Sarpy County Aerial Imagery

PROJECT LOCATION MAP - FIGURE 1

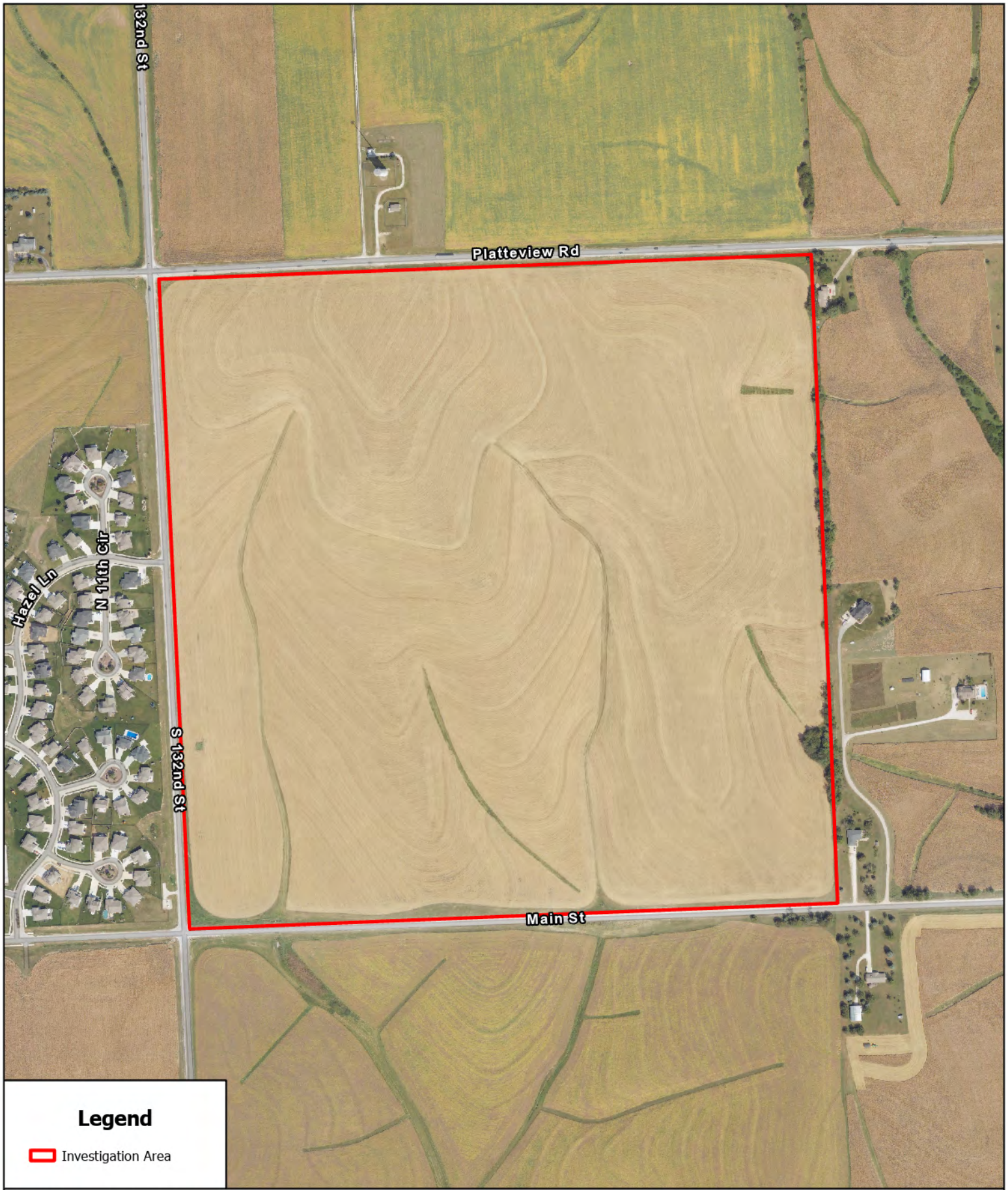
benesch

0 500 1,000 Feet

Absolute Scale 1:12,000

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska



MAPA 2025 Sarpy County Aerial Imagery

INVESTIGATION AREA MAP - FIGURE 2

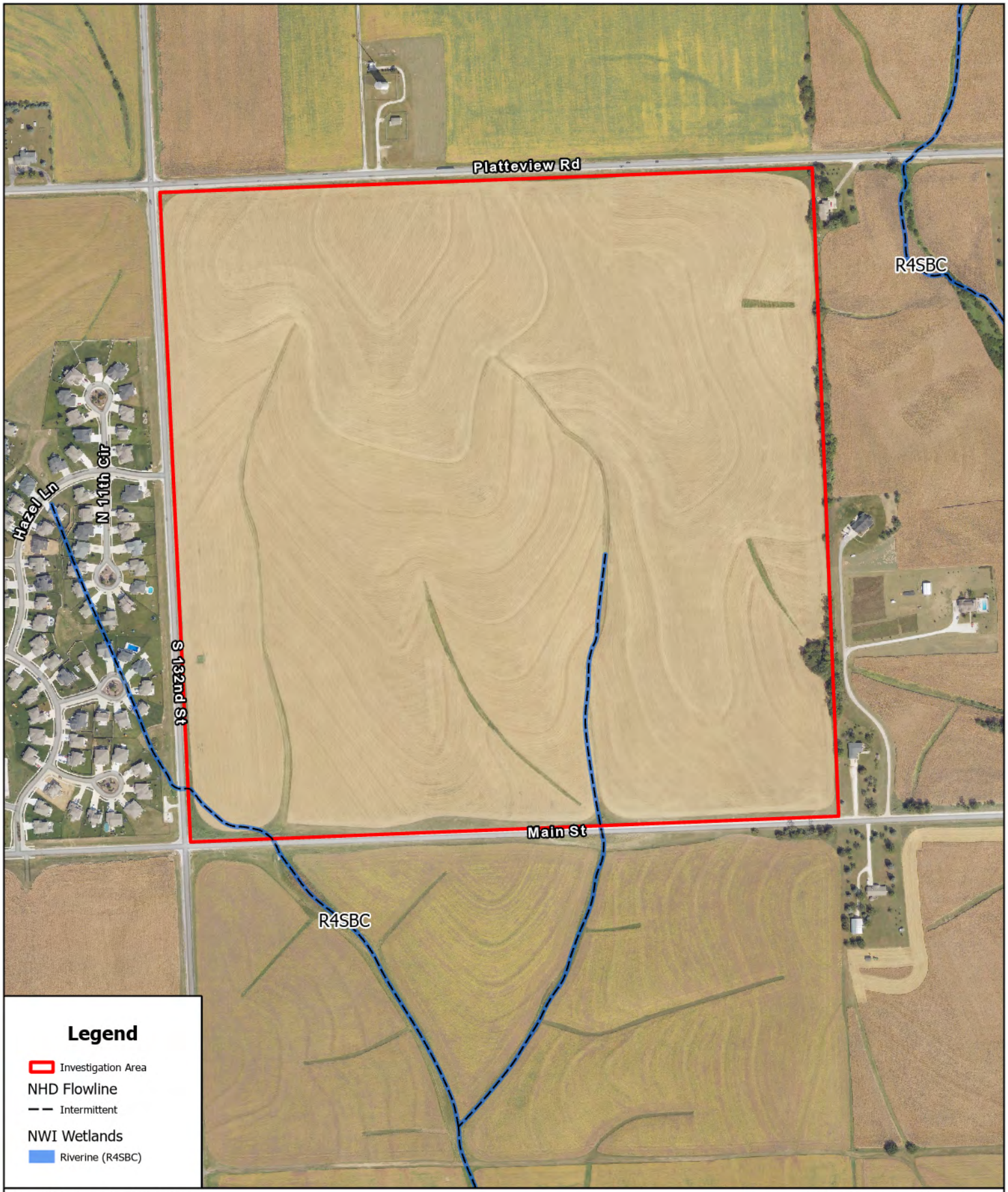
benesch

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Absolute Scale 1:6,000

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska



MAPA 2025 Sarpy County Aerial Imagery

NHD & NWI MAP - FIGURE 3

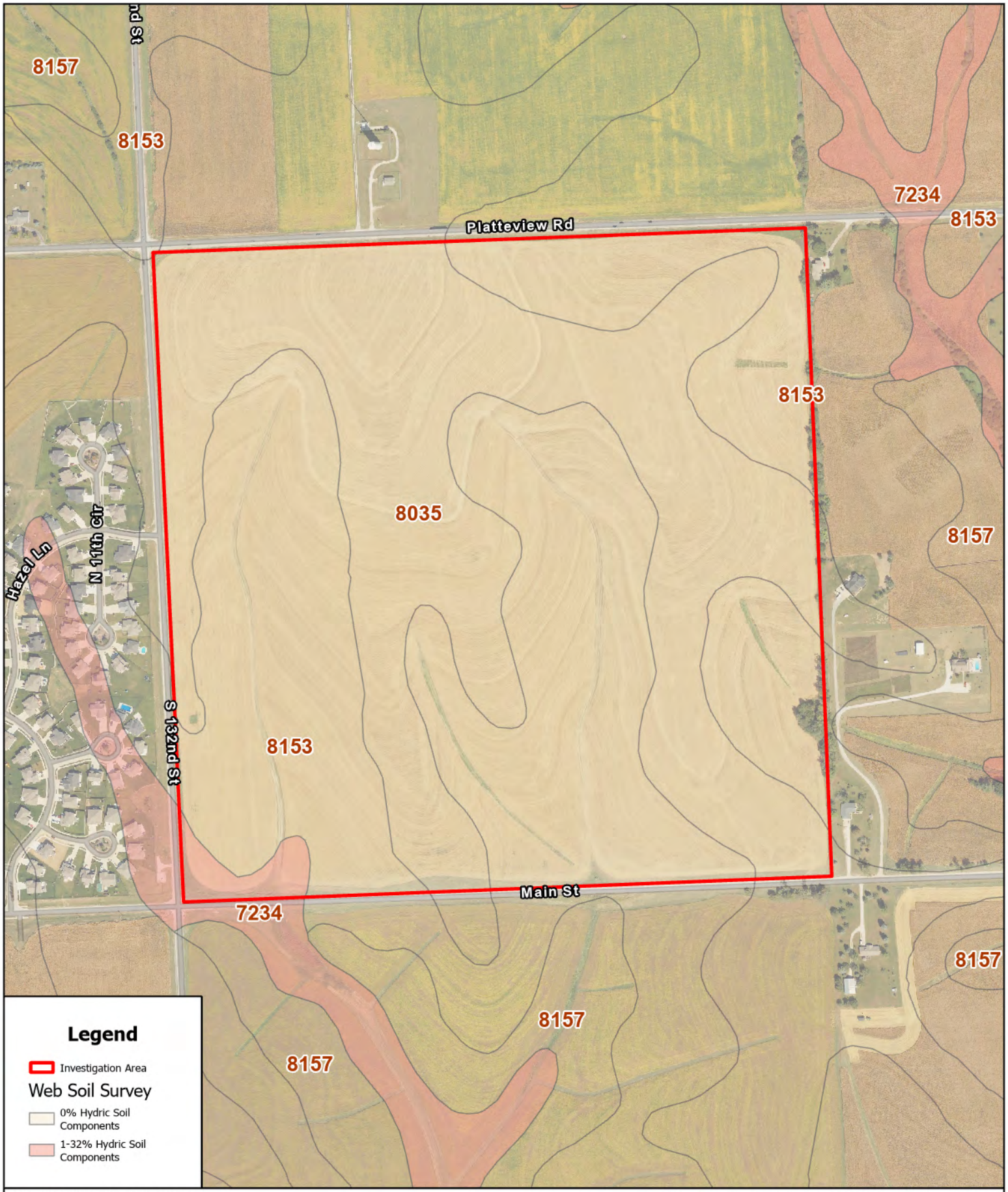
benesch

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Absolute Scale 1:6,000

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska



MAPA 2025 Sarpy County Aerial Imagery

WEB SOIL SURVEY MAP - FIGURE 4

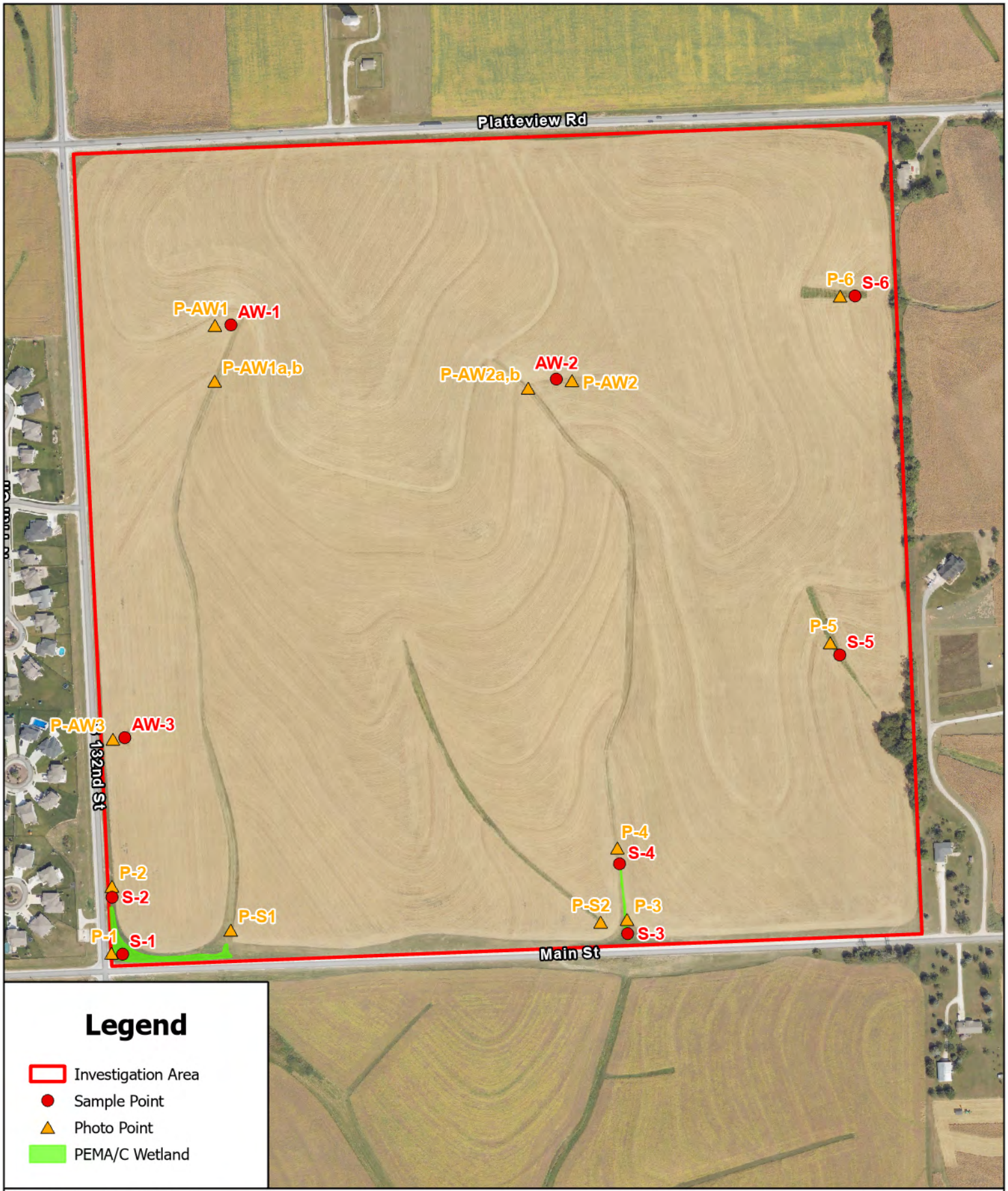
benesch

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Absolute Scale 1:6,000

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska



MAPA 2025 Sarpy County Aerial Imagery

WETLAND DELINEATION MAP - FIGURE 5

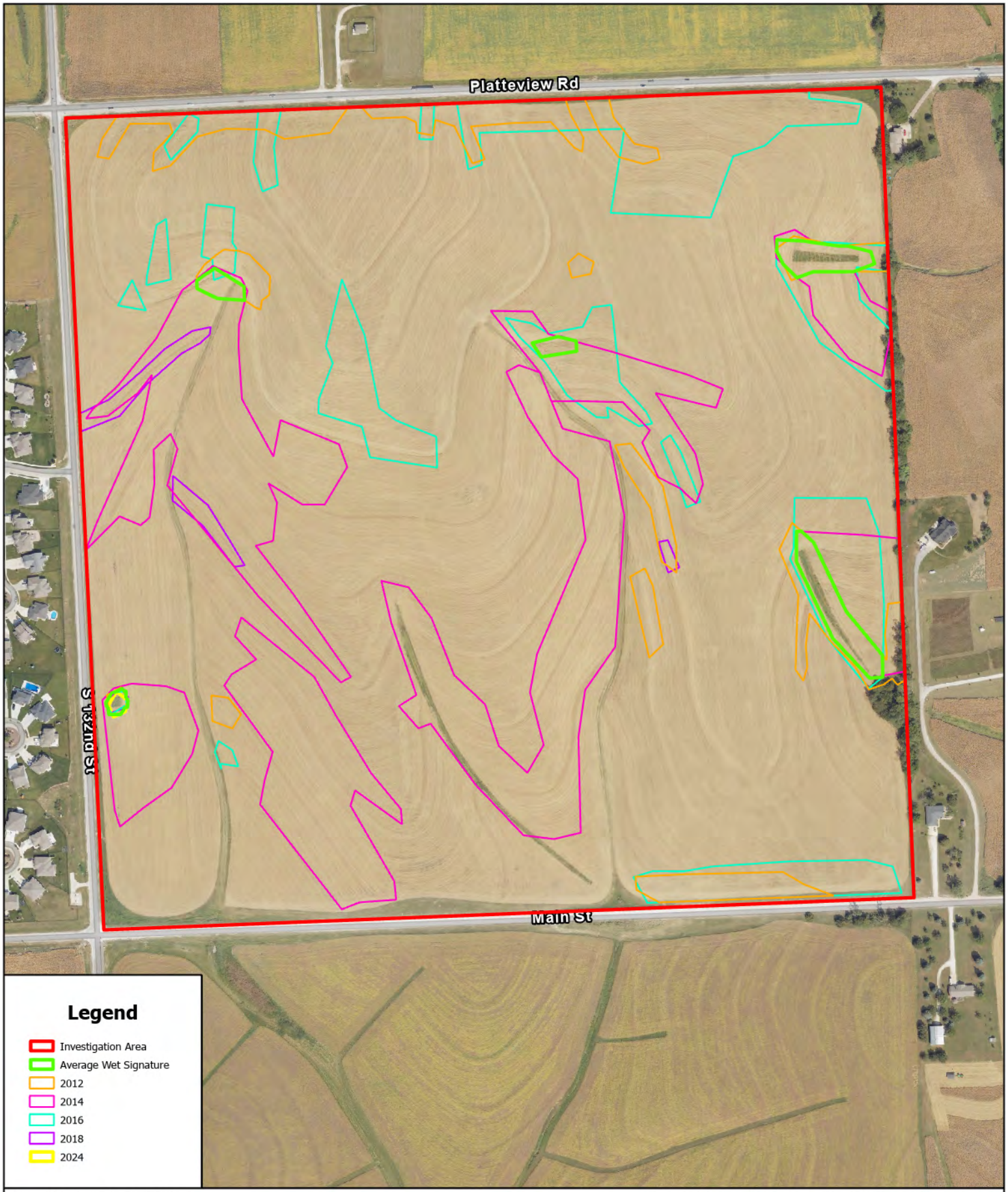
benesch

0 200 400 Feet

Absolute Scale 1:4,800

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska



MAPA 2025 Sarpy County Aerial Imagery

WETLAND SIGNATURE MAP - FIGURE 6

benesch

0 200 400 Feet

Absolute Scale 1:4,800

N

Mahloch Parcel
Springfield, Sarpy County, Nebraska

APPENDIX B

CORPS OF ENGINEERS WETLAND DETERMINATION DATA FORMS

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: AW-1

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Agriculture Field Local relief (concave, convex, none): Concave

Slope (%): 3-5 Lat: 41.087382 Long: -96.117574 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point in depicted average wet signature in agriculture field on a slope near farmed swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Setaria pumila*	40	Yes	FAC
2. *Echinochloa crus-galli*	10	No	FACW
3. *Poa pratensis*	10	No	FAC
4. *Bromus inermis*	10	No	FACU
5. *Setaria faberi*	5	No	FACU
6. *Amaranthus palmeri*	3	No	FACU
7. *Digitaria sanguinalis*	1	No	FACU
8.			
9.			
10.			
	79	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Sample point recorded in soybean field with no signs of stunted/stressed vegetation. Listed vegetation is located in nearby farm swale.

SOIL

Sampling Point: AW-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2	60					Loamy/Clayey	10YR 2/2 40%; Silty Clay Loam
10-14	10YR 3/1	70	10YR 5/8	2	C	M	Loamy/Clayey	MM. 10YR 4/2 28%; Silty Clay Loam
14-20	10YR 3/1	70	10YR 5/6	5	C	M	Loamy/Clayey	MM. 10YR 4/2 25%; Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted soils

Depth (inches): 20

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: AW-2

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave

Slope (%): 3-5 Lat: 41.086778 Long: -96.113828 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in depicted average wet signature in agricultural field on terrace near farm swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Setaria pumila*	30	Yes	FAC
2. *Hordeum jubatum*	20	Yes	FAC
3. *Digitaria sanguinalis*	15	No	FACU
4. *Panicum virgatum*	10	No	FAC
5. *Polygonum aviculare*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Sample point taken in soybean field. Listed vegetation is located in nearby farm swale.

SOIL

Sampling Point: AW-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	65	10YR 5/6	1	C	M	Loamy/Clayey	MM. 10YR 3/1 34%; Silty Clay Loam
4-7	10YR 3/1	55	10YR 5/6	1	C	M	Loamy/Clayey	MM. 10YR 4/3 44%; Silty Clay Loam
7-12	2.5Y 5/3	70	10YR 5/8	30	C	M	Loamy/Clayey	Prominent redox concentrations
12-17	2.5Y 5/3	50	10YR 5/8	50	C	M	Loamy/Clayey	Prominent redox concentrations
17-30	2.5Y 6/3	70	10YR 5/8	30	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: AW-3

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range:

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): 8-10 Lat: 41.083802 Long: -96.11902 Datum: NAD 83

Soil Map Unit Name: 8035 - Marshall- Contrary silty clay loams, 2 to 7 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in depicted average wet signature in western region of agriculture field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Setaria faberi*	60	Yes	FACU
2. *Ipomoea hederacea*	30	Yes	FAC
3. *Abutilon theophrasti*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	100 (A)		370 (B)

Prevalence Index = B/A = 3.70

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: AW-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	60					Loamy/Clayey	MM. 10YR 4/4 40%; Silty Clay Loam
6-20	10YR 4/4	70					Loamy/Clayey	MM. 10YR 3/1 30%; Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-1

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave

Slope (%): 3-5 Lat: 41.081902 Long: -96.119157 Datum: NAD 83

Soil Map Unit Name: 7234 - Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
PEMA/C wetland sample point recorded in depressional area in ditch in the southwest region of investigation area. Area is dominated by reed canary grass.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	98	Yes	FACW
2. *Persicaria maculosa*	2	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/1	80	7.5YR 5/8	20	C	M	Loamy/Clayey	Silty Clay Loam
7-20	10YR 4/1	50	7.5YR 5/8	20	C	M	Loamy/Clayey	MM. 10YR 2/2 30%; Silty Clay Loam
20-24	10YR 3/2	85	7.5YR 4/6	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
7-20 depth mixed matrix with 10YR 2/2 at 30%.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-2

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): None

Slope (%): 0-3 Lat: 41.082406 Long: -96.11925 Datum: NAD 83

Soil Map Unit Name: 7234 - Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in southwest region of investigation area north of wetland feature.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bromus catharticus*	95	Yes	UPL
2. *Persicaria amphibia*	5	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	95	x 5 =	475
Column Totals:	100 (A)		480 (B)

Prevalence Index = B/A = 4.80

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/3	100					Loamy/Clayey	Silty Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock/Gravel

Depth (inches): 16

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-3

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 3-5 Lat: 41.081884 Long: -96.113291 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
PEMA/C wetland sample point positioned in depression on south end of farm swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Morus alba*	15	Yes	FAC
2.			
3.			
4.			
5.			
	15 =Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	30	Yes	FACW
2. *Cyperus esculentus*	30	Yes	FACW
3. *Cannabis sativa*	10	No	UPL
4. *Persicaria maculosa*	10	No	FACW
5. *Rumex crispus*	5	No	FAC
6. *Asclepias syriaca*	5	No	FACU
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	60					Loamy/Clayey	10YR 3/1 40%; Silty Clay Loam
7-12	10YR 3/1	70	10YR 5/6	10	C	M	Loamy/Clayey	MM. 10YR 4/3 20%; Silty Clay Loam
12-20	10YR 3/1	65	10YR 5/6	20	C	M	Loamy/Clayey	MM. 10YR 4/3 15%; Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-4

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): None

Slope (%): 3-5 Lat: 41.082500 Long: -96.113348 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in farm swale north of feature.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Setaria pumila*	65	Yes	FAC
2. *Hordeum jubatum*	10	No	FAC
3. *Amaranthus palmeri*	10	No	FACU
4. *Digitaria sanguinalis*	10	No	FACU
5. *Persicaria lapathifolia*	2	No	FACW
6.			
7.			
8.			
9.			
10.			
	97 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	50	10YR 5/6	1	C	M	Loamy/Clayey	MM. 10YR 4/1 49%; Silty Clay Loam
10-20	10YR 4/3	70	10YR 5/6	1	C	M	Loamy/Clayey	MM. 10YR 3/1 29%; Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-5

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 41.084245 Long: -96.110685 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in swale in depicted average wet signature.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 5/3	100			C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Mahloch Farms City/County: Sarpy County Sampling Date: 7/23/2026

Applicant/Owner: Nebraska Department of Transportation State: NE Sampling Point: S-6

Investigator(s): Matthew Vanicek, Mekenzie Horihan, Abigail Meyer Section, Township, Range: S19 T13N R12E

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 41.087389 Long: -96.11032 Datum: NAD 83

Soil Map Unit Name: 8153 - Contrary-Marshall silty clay loams, 6 to 11 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland sample point positioned in average wet signature in farm swale in the northeast region of investigation area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bromus inermis*	98	Yes	FACU
2. *Convolvulus arvensis*	2	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	98	x 4 =	392
UPL species	2	x 5 =	10
Column Totals:	100 (A)		402 (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 5/3	80					Loamy/Clayey	MM. 10YR 4/2 20%, Silty Clay Loam
8-13	10YR 5/3	80	10YR 5/6	2	C	M	Loamy/Clayey	MM. 10YR 4/2 18%, Silty Clay Loam
13-20	10YR 5/3	50	10YR 5/6	2	C	M	Loamy/Clayey	MM. 10YR 4/2 48%, Silty Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX C

SITE PHOTOGRAPH LOG



P-1: View of wetland S-1 in road ditch.
Orientation: East



P-2: View of upland outpoint for wetland S-1 in road ditch north of feature.
Orientation: South



P-S1: View of swale vegetation in south end of farm swale.
Orientation: North



P-AW1: View of upland sample point AW-1 in soybean field near farm swale.
Orientation: East



P-AW1a: View of swale vegetation near sample point AW-1.
Orientation: North



P-AW1b: View of swale vegetation near sample point AW-1.
Orientation: Southwest



P-S2: View of swale vegetation on south end of farm swale.
Orientation: Northwest



P-3: View of wetland S-3 in south end of farm swale.
Orientation: South



P-4: View of upland outpoint for S-4 positioned in farm swale north of feature.
Orientation: South



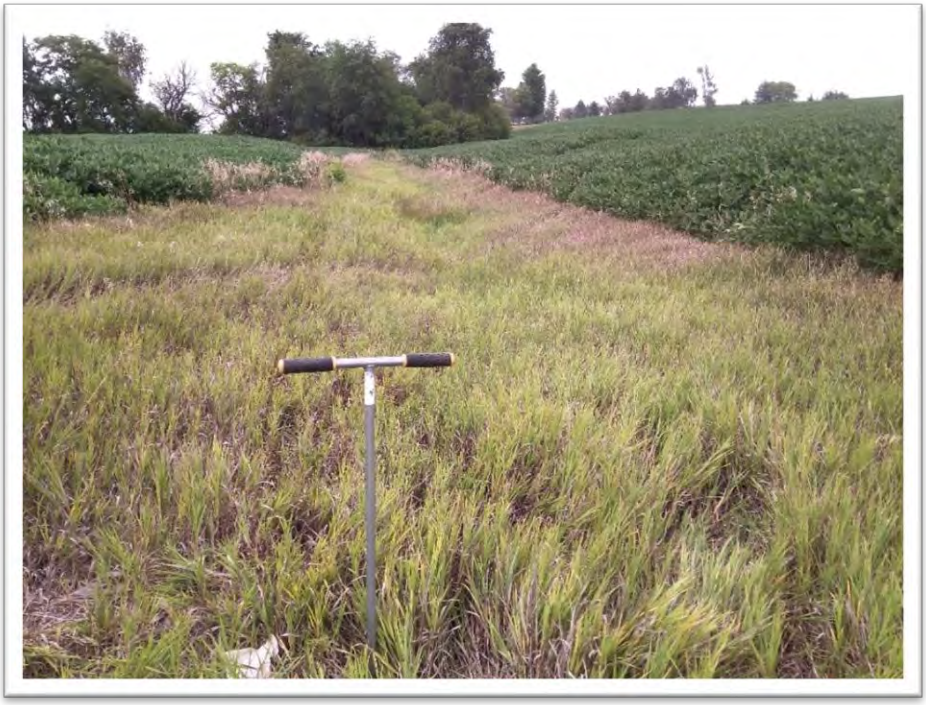
P-AW2: View of upland sample point AW-2 in soybean field near farm swale.
Orientation: West



P-AW2a: View of swale vegetation near sample point AW-2.
Orientation: North



P-AW2b: View of swale vegetation near sample point AW-2.
Orientation: South



P-5: View of upland sample point S-5 positioned in farm swale in east region of investigation area.
Orientation: Southeast



P-AW3: View of upland sample point AW-3 positioned in western region of investigation area.
Orientation: East

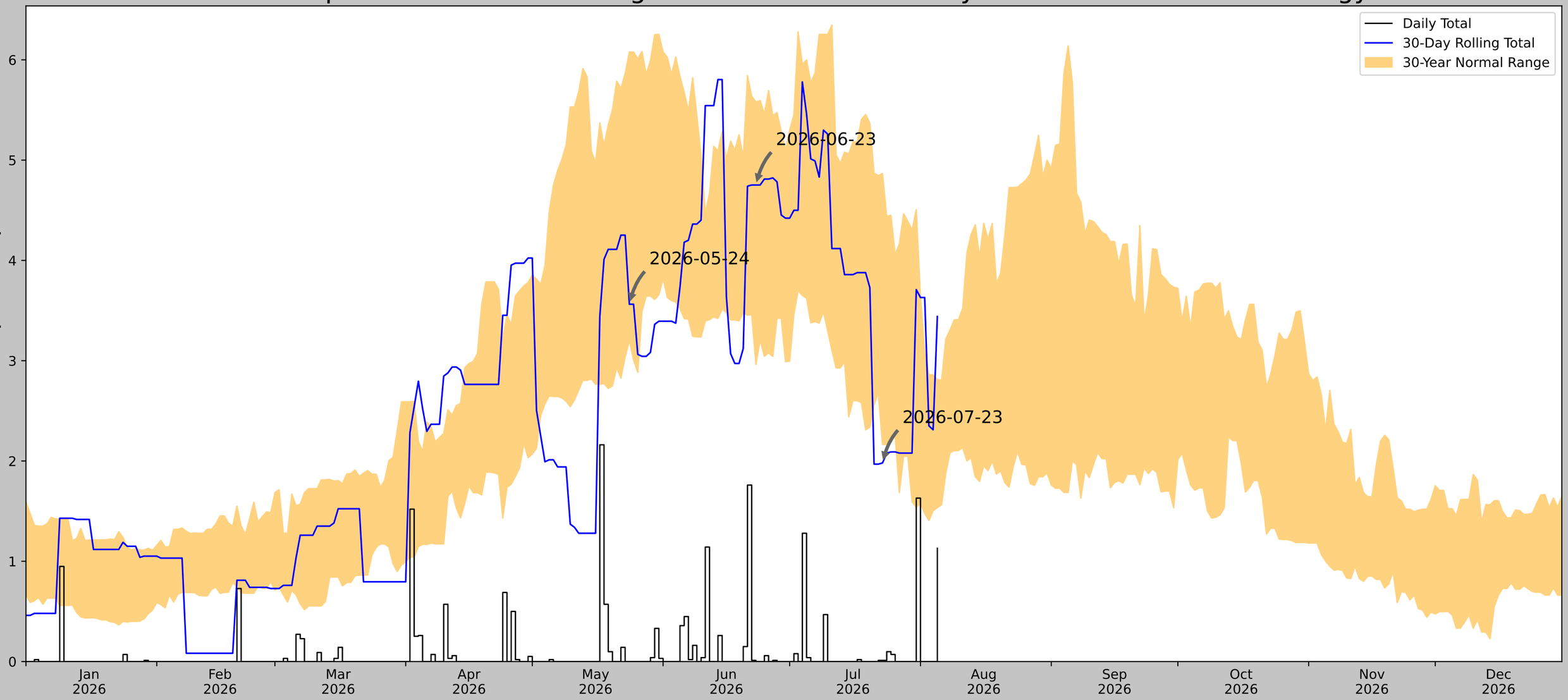


P-6: View of upland sample point S-6 positioned in farm swale in northeast region of investigation area.
Orientation: East

APPENDIX D

ANTECEDENT PRECIPIATION TOOL

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.0855, -96.11445
Observation Date	2026-07-23
Elevation (ft)	1157.368
Drought Index (PDSI)	Moderate drought (2026-06)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2026-07-23	2.164961	4.867717	1.980315	Dry	1	3	3
2026-06-23	2.962599	5.579921	4.751969	Normal	2	2	4
2026-05-24	3.201575	6.078347	3.562992	Normal	2	1	2
Result							Drier than Normal - 9

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	7.502	122.488	4.295	10087	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1035.105	0.044	244.751	0.031	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1008	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

SPRINGFIELD, NEBRASKA

Fairmont

REPRESENTATIVE HOME EXTERIORS

Representative exteriors from the builder's current product line. Plans are offered with multiple elevation and color options, so rooflines, garages, siding, stone and front porches vary from home to home.

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01 Two-story · Shake gables · Shutters · Front porch



02 3-car · Shake · Stone-front porch



03 Board & batten · Two-tone siding



04 Shake gables · Front porch



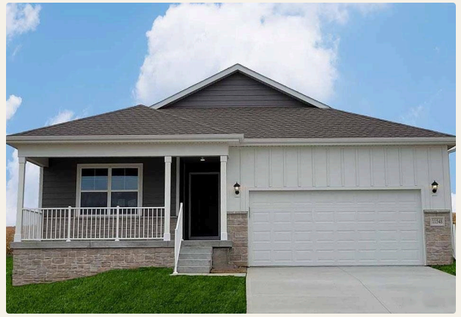
05 Split 3-car · Board & batten



06 Shake · Shutters · Front porch



07 Two-story · Shake · Shutters



08 Board & batten · Railed porch



09 Board & batten · Covered porch



10 Board & batten · Stone



11 Shake gable · Front porch



12 Board & batten · Stone

Photographs show actual D.R. Horton floor plans from the builder's current product line. Final elevations, materials and colors are subject to architectural approval by developer.

FAIRMONT · SPRINGFIELD, NEBRASKA

The Design Elements

MATERIALS, GARAGES AND PORCHES IN ROTATION

Rather than one repeated elevation, each home draws from a shared palette of materials and features, combined differently from one home to the next.

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SIDING & MASONRY



Board & Batten

Vertical boards with raised battens on gables, garage walls and full façades, for a modern farmhouse character.



Shake Shingle

Shingle-textured siding in the gables, adding depth, shadow and a Craftsman accent to the roofline.



Traditional Lap

Horizontal lap siding as the main field, in body colors from white and cream to tan, gray, brown and blue.



Stone Accents

Stone veneer wainscot along the front façade and garage piers, and full stone fronts on select porches.

GARAGES & PORCHES



Two-Car Garage

Set within a façade that also carries windows, stone and a visible front entry.



Three-Car Garage

Offered on select plans, including a split arrangement that breaks up the garage face.



Front Porches

Covered porches with columns, railings or stone bases that bring living space toward the street.

Photographs show actual D.R. Horton floor plans from the builder's current product line. Final elevations, materials and colors are subject to architectural approval by developer.

FAIRMONT · SPRINGFIELD, NEBRASKA

Along the Street

AN ILLUSTRATIVE STREETSCAPE

Eight of the exteriors from sheet 1, placed on both sides of a street to show how varied exteriors read together. Illustrative sequence only; not a lot-specific plan.

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02 3-car · Shake · Stone-front porch



03 Board & batten · Two-tone siding



07 Two-story · Shake · Shutters



08 Board & batten · Railed porch



05 Split 3-car · Board & batten



04 Shake gables · Front porch



09 Board & batten · Covered porch



01 Two-story · Shake gables · Front porch

Graves Development Resources

Photographs show actual D.R. Horton floor plans from the builder's current product line. Final elevations, materials and colors are subject to architectural approval by developer.