AGENDA
CHASKA PLANNING COMMISSION
CHASKA CITY HALL - COUNCIL CHAMBERS & ZOOM
Wednesday, March 12, 2025
7:00 PM

1. Call to Order
2. Roll Call
3. Adopt Agenda
4. Visitor Presentation
5. Approve Previous Meeting Minutes
   - 5.A. Approve December 11, 2024 meeting minutes
   - 5.B. Approve February 12, 2025 meeting minutes
6. Consent Items
   - 6.A. Recommend Approval of the Final Plat for Highpoint Vistas/Forestar/PC #2024-20
7. Action Items
   - 7.A. Recommend Approval of the Concept Plan for Edco on Creek Road/Pope Design Group/PC #2025-02
8. Other Business
9. Adjourn

CHASKA PLANNING COMMISSION
MINUTES
DECEMBER 11, 2024

1. Call to Order

Chairperson Brass called the meeting to order at 7 pm.

2. Roll Call

Roll call was taken. Members present: Commissioners Olson, Gaare, Aasen, Urbanski, Baswa, Purdy, Kerber, Campbell, and Chairperson Brass.

Members absent: None.

Also present: Nate Kabat, Community Development Director; and, Liz Hanson, City Planner.

3. Adopt the Agenda

Motion by Commissioner Aasen, second by Commissioner Kerber to adopt the agenda as presented.
Motion carried.

4. Visitor Presentation

No one appeared under Visitor Presentation.

5. Approve Previous Meeting Minutes

a. Approve October 9, 2024 and November 13, 2024 Planning Commission Meeting Minutes

Motion by Commissioner Brass, second by Commissioner Urbanski, to approve the minutes of the October 9, 2024 Planning Commission meeting.
Motion carried.

6. Consent Agenda

7. Action Items

a. Recommend Approval of the Concept Plan for Beckman Coulter at 316 Lake Hazeltine Drive/Beckman Coulter/PC #2024-23

City Planner Hanson presented the item to the Commission and noted that this item would come before the City Council on December 16, 2024.

Commissioner Olson stated that City Planner Hanson had said that originally the previous owner had an expansion plan for the building and asked what the square footage was for that plan.

City Planner Hanson stated that the square footage was roughly 50,000 sq. ft.

Commissioner Olson stated that this plan would be about 40% more than those plans.

Chair Brass referenced the back area and the nook that was created and asked if they had plans for outside storage in this location or if it was intended to just be an open area for trucks to turn around in.

City Planner Hanson suggested that the applicant could respond to that question and noted that at this time there was not a proposal for exterior storage. She stated that the assumption at the concept level was that it was intended to be more of a loading area for the additional warehouse portion of the addition.

Chair Brass noted that they are short about 100 stalls.

City Planner Hanson stated that they are short by a bit under 100 stalls right now and explained that there are ways to look at proof of parking on the site that they don't think would be insurmountable.

Amy Salsbury, representing the applicant, introduced herself.

Chair Brass reiterated his question relating to the back area.

Ms. Salsbury explained that area was intended to be used for truck turn around space and noted that they have faced the opening to the receiving docks to the south in order to help.

Chair Brass asked if the receiving docks and shipping docks were on opposite sides.

Ms. Salsbury stated that was correct and explained that they would flow their manufacturing from west to east.

Chair Brasse asked about their anticipated start time.

Ms. Salsbury explained that their anticipated start time, if everything was approved, would be the spring of 2025 for their groundbreaking.

Commissioner Gaare asked about parking for the additional 300 employees and if the facility would be done via shift work.

Ms. Salsbury stated that they will have multiple shifts for their workforce.

Chair Brass asked how many employees they were expecting to be on site for each shift.

Ms. Salsbury stated that they were estimating about 250 people at the maximum for each shift.

Commissioner Urbanski asked if all of the jobs would be manufacturing.

Ms. Salsbury stated that they would be manufacturing and manufacturing support jobs.

Commissioner Olson stated that it seemed like the size of the facility was limiting the ability to fit both the parking and the landscape requirements within City code and asked how they planned to deal with that.

Brian Wurdeman, Kimley Horn, stated that at this point they feel good about their ability to meet the parking requirements through a few different avenues, including proof of parking on the site. He noted that there were other facilities owned by Beckman in the area, so they could create a bit more of a comprehensive parking evaluation in order to balance out some other properties in the area. He stated that for landscaping, they recently had conducted a tree survey in order to better understand the existing trees and what may be able to be preserved in order to work that into the City code requirements. He clarified that he did not have that information at the Concept Plan stage, but do expect to continue to layer in more information for those items as they progress towards the Preliminary stage.

Commissioner Olson stated that buildings may change hands, so while today their plans for parking may all work, later, when the facility may not be part of the same ownership, it may not work and wanted to make sure that they were not losing site of the future.

Chair Brass asked about the parking requirement versus what was provided and asked if that had taken into consideration the existing building as well as the new building.

City Planner Hanson stated that it took into consideration everything that would be on the site.

Chair Brass asked if their manufacturing would be two-stories.

Ms. Salsbury explained that they plan to do the light manufacturing on the second floor and the heavier manufacturing on the first floor. She noted that the warehouse would have a raw materials side and a finished goods side.

Chair Brass asked if they planned to have any clean areas.

Ms. Salsbury answered that they would not have clean rooms, but may have a small HEPA hut.

Chair Brass asked what they would be manufacturing in this facility.

Ms. Salsbury stated that they will have different product lines but would all be instruments, and noted that the current campus produces immunoassay instruments and they will be bringing in some hematology and microbiology instruments.

Motion by Commissioner Brass, second by Commissioner Baswa, to recommend approval to the City Council approval of the concept plan for the building addition at 316 Lake Hazeltine Drive, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits unless modified by the conditions below:
a. Narrative (pgs 1-9), prepared by Beckman Coulter, dated November 5, 2024 and revised November 18, 2024
b. Existing Conditions Photographs, prepared by CRB, dated November 5, 2024

c. ALTA/NSPS Land Title Survey (pgs 1-3), prepared by EFN, undated
d. Site Plan, prepared by Kimley Horn, dated October 25, 2024
e. Grading Plan, prepared by Kimley Horn, dated October 25, 2024
f. Utility Plan, prepared by Kimley Horn, dated October 25, 2024
g. Landscape Plan, prepared by Kimley Horn, dated October 25, 2024
h. Existing Site, prepared by CRB, dated November 5, 2024
i. Space Function Diagrams Level 1, prepared by CRB, dated November 5, 2024
j. Space Function Diagrams Level 2, prepared by CRB, dated November 5, 2024
k. Building Materials and Precedents, prepared by CRB, dated November 5, 2024
l. Renderings, prepared by CRB, dated November 5, 2024
m. Elevations New Building Addition, prepared by CRB, dated November 5, 2024
2. Adherence to the City Engineer memo dated December 6, 2024.
3. Compliance with City Code Sec. 15.28 (Special Regulations), including but not limited to the following, and to be submitted with the preliminary site plan application:
a. Tree inventory and preservation plan;
b. Landscaping plans in conformance with City Code Sec. 15.28.070;
c. Grading plans;
d. Stormwater plan; and
e. Wetland Mitigation Plan
f. Truck turning exhibit
g. Fire truck turning exhibit
4. Coordination with:
a. City Engineer regarding utilities, grading, access, and drainage.
b. Electrical department on service requirements.
5. Setbacks are as follows:
a. Front yard setback (south property line): 30 - feet
b. Side yard setbacks (east & west property lines):
i. Interior: 15 – feet
c. Rear yard setback (north property line):
i. Property Line: 20 – feet
ii. Railroad ROW: 50 - feet
d. Wetlands: Varies based on wetland type
6. Development standards are as follows:
a. Floor Area Ratio (FAR) maximum: 0.5
b. Building Coverage maximum: 50%
7. Provision of a storm water management plan meeting City and Carver County WMO standards.
8. Provision of a wetland mitigation plan to be completed and approved prior to issuance of a grading permit and prior to final submittal.

Motion carried.

8. Other Business

a. Receive the November 18, 2024 City Council meeting minutes

9. Adjourn

Motion by Commissioner Brass, second by Commissioner Kerber, to adjourn the meeting at 7:26 pm.
Motion carried.

CHASKA PLANNING COMMISSION
MINUTES
FEBRUARY 12, 2025

1. Call to Order
Chairperson Brass called the meeting to order at 7 pm.

2. Roll Call
Roll call was taken. Members present: Commissioners Aasen, Urbanski, Baswa, Purdy, Kerber, Campbell, Sailer, Rostad, and Chairperson Brass.

Members absent: None.

Also present: Nate Kabat, Community Development Director; Liz Hanson, City Planner; Ashley Cauley, City Planner.

3. Adopt the Agenda
Motion by Commissioner Brass, second by Commissioner Aasen, to adopt the agenda as presented.
Motion carried.

4. Visitor Presentation
No one appeared under Visitor Presentation.

5. Approve Previous Meeting Minutes
There were none.

6. Consent Agenda
There were none.

7. Action Items

a. PUBLIC HEARING: Recommend Approval of the Preliminary Plat and Rezoning for Fultonwood/Pulte Homes/PC #2024-21

City Planner Hanson presented the item to the Commission.

Chairperson Brass noted that it looked like the applicant had been able to incorporate almost all the points the Commission had mentioned during the Concept Phase.

Commissioner Urbanski asked about the future roundabout and noted that at the start this would just be built with a 2-stop intersection and asked why money would be spent now on rebuilding an intersection and then re-doing it in 5 or 10 years.

City Planner Hanson stated that would be a question for Carver County.

Community Development Director Kabat stated that this segment of County Rd. 61 was once part of 212 and Carver County inherited it and part of that is the funds to make improvements to County Rd. 61, when the County was ready do it and the State would help fund the transition. He noted that the County intended for it to be a project that would be much more comprehensive than that access point, but explained that they were not at that point yet.

Chair Brass confirmed that the way this development would access the park would be to come across Spring Creek, walk on the path, use the crosswalk, then on the east side then travel to the north. He asked if staff was looking for something on the end of the right cul-de-sac straight down to the pathway.

City Planner Hanson stated that she did not believe that there was a defined path that needed to happen there. She noted that she felt some additional evaluation was needed in order to understand how people will travel through the area, such as the community park.

Chair Brass opened the public hearing at 7:34 p.m.

Haley Daily, Pulte Homes Minnesota, expressed her appreciation to staff for their assistance throughout the process and noted that they were available to answer Commission questions.

Commissioner Urbanski asked if the HOA would be the same as what is on the Carver side.

Ms. Daily stated that this would be a separate HOA.

There being no additional public input, he closed the Public Hearing at 7:36 p.m.

Commissioner Urbanski stated that this was basically an in-fill project and felt that they had done a really good job, especially with the recommendations that the Planning Commission had given them during the Concept phase. He stated that he felt what was proposed matched the house styles on the other side of the road and would be a good buffer from 212 and County Rd. 61.

Motion by Commissioner Brass, second by Commissioner Kerber, to recommend approval to the City Council approval of the preliminary plat for Fultonwood, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits unless modified by the conditions below:
    a. Narrative (pgs 1-15), prepared by Pulte Homes, dated January 24, 2025
    b. Cover sheet, prepared by Westwood, dated January 25, 2025
    c. Existing Conditions, prepared by Westwood, dated January 25, 2025
    d. Preliminary Plat, prepared by Westwood, dated January 25, 2025
    e. Preliminary Grading Drainage & Erosion Control – Overall, prepared by Westwood, dated January 25, 2025
    f. Preliminary Grading Drainage & Erosion Control (pgs 5-6), prepared by Westwood, dated January 25, 2025
    g. Preliminary Utility Plan – Overall, prepared by Westwood, dated January 25, 2025

h. Preliminary Utility Plan (pgs 8-9), prepared by Westwood, dated January 25, 2025
i. Street Profiles, prepared by Westwood, dated January 25, 2025
j. Details (pgs 11-13), prepared by Westwood, dated January 25, 2025
k. Overall Tree Preservation Plan & Data, prepared by Westwood, dated January 25, 2025
l. Tree Preservation Plan (pgs 15-16), prepared by Westwood, dated January 25, 2025
m. Overall Preliminary Landscape Plan, prepared by Westwood, dated January 25, 2025
n. Preliminary Landscape Plan (pgs 18-19), prepared by Westwood, dated January 25, 2025
o. Illustrative Plan, prepared by Westwood, dated January 23, 2025

2. Adherence to the City Engineer memo dated September 5, 2024.
3. Adherence to the Carver County Public Works memo dated August 28, 2024.
4. Adherence to the City's Boulevard Tree Policy and local street section design.
5. In addition to the items required by City Code Sec. 15.36.070 and Final Plat Submittal Requirements, the following must be submitted for a final plat application to be complete:
   a. Stormwater management plan meeting city standards;
   b. Tree inventory and preservation plan;
   c. Grading plans; and
   d. Landscaping plans in conformance with City Code Sec. 15.28.070.
6. Coordination with:
   a. City Engineer regarding utilities, grading, access, and drainage.
   b. MnDOT regarding noise mitigation plans.
   c. Electrical department (and Minnesota Valley) on service locations.
   d. City of Carver on right-of-way width and utility corridor needs for Spring Creek Drive
7. Compliance with City Ordinances, including:
   a. Sec. 15.28.290, Anti-monotony and Design requirements: including LP Smartside on front elevations and 4-inch window trim on all windows.
   b. Sec. 15.36.080, Subdivision Design Standards: including streets and sidewalks
8. Setbacks are as follows:
   a. Front yard setback: 25 - feet
   b. Side yard setbacks:
   Interior: 7.5 – feet
   Corner: 20 – feet
   c. Rear yard setback: 20 – feet
   d. Wooded Steep Slopes: 50 feet building setback and 30 feet no grade/no mow setback
   e. Wetlands: Varies based on wetland type
   f. County Road 61: 150 feet from centerline
   g. Trunk Highway 212: 50 feet from the ROW line or 225 feet from the centerline, whichever is greater
9. A construction management plan approved by the Engineering Department will be required prior to the release of a permit for any construction [site or building]. The plan must address work hours, construction access and parking, and overall site maintenance compliance.

10. Provision of sidewalks on both sides of all local streets.
11. Provision to further evaluate a pedestrian connection between the east cul de sac and proposed sidewalk on Mount Hope Road, and to be addressed at final submittal.
12. Provision to further evaluate including a boulevard of at least 7.5 feet wide along Spring Creek Drive east of Lot 15, Block and along Mount Hope Road, and to be addressed at final submittal.
13. Provision of boulevard trees every 50 feet between the curb and sidewalk for the full extent of all local streets, specifically along Spring Creek Drive and Mount Hope Road, and to be shown on the final plans.
14. Prior to final plat approval, developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs, including but not limited to park dedication fees.
15. Provision of a storm water management plan meeting City and Carver County WMO standards.
16. Provision that adequate maintenance accesses are provided for the stormwater ponds, be placed in outlots and not private properties, and to be shown on the plans at final submittal.
17. Provision to provide adequate landscaping, berming, and buffering along the development edges abutting Highway 212 and County Road 61, and to be shown on the final plans.
18. Provision to further evaluate preservation of the memorial tree on Spring Creek Drive and Mount Hope Road, and to be addressed at final submittal.
19. Provision that applicable easements, as identified by the Engineering department, for the extension of City utilities are secured prior to final plat recording.
20. Provision of a wetland delineation and/or replacement plan to be completed and approved prior to issuance of a grading permit and prior to final submittal.
21. Provision that roadway access can be accommodated through the Engelen property to access the Frenz property east of Engelen.
22. Provision that city utilities are extended to the site by the developer and paid for by the developer.
23. Disposition of outlots shall be as follows:
    a. Outlot A: stormwater to be owned by the City of Chaska
    b. Outlot B: stormwater to be owned by the City of Chaska
    c. Outlot C: private park and sidewalk to be owned by the HOA

Motion carried.

Motion by Commissioner Urbanski, second by Commissioner Brass, to recommend approval of the rezoning from Open (O) to Planned Residential District No. 88 (PRD-88) for Fultonwood, based on the draft ordinance.

Motion carried.

b. Recommend Approval of the Talero Curve Concept Plan (3910 Bavaria Road)/Quadriga Ventures/ PC #2024-24

City Planner Cauley presented the item to the Commission.

Chairperson Brass noted that this item was not a Public Hearing, but there appeared to be people present related to this item, so he would let people address the Commission later in the meeting.

Commissioner Purdy asked if the developer had agreed to be part of the HOA or if they were fighting it.

Megan Rogers, an attorney with Larkin Hoffman, representing Quadriga Ventures, explained that it was their proposal that the Talero Curve HOA welcome these new homes into their HOA which, under Minnesota law, required a vote of 100% of the current residents allowing them to join the HOA. She stated that they were absolutely committed to joining the Chavelle HOA as a whole.

Chair Brass asked for confirmation that they were in favor of joining the Chavelle HOA.

Ms. Rogers responded that they were absolutely in favor of joining the Chavelle HOA.

Chair Brass stated that if they joined the Chavelle HOA if that meant that the Chavelle HOA had the authority to not allow the development.

Ms. Rogers stated that she thinks there were 2 separate answers to that question. She explained that there were 2 plans that they have approached as part of this project, the first was the one that they had originally submitted as part of the Concept Plan that had incorporated a variance request associated with utilizing the existing access point that had been crafted as part of the Talero Curve plat in 2007. She noted that through further engagement with the HOA, there was concern about the location of that access point because it was directly across from 2 existing driveways. She explained that they would like to see the access point off-set which they would be happy to incorporate into the plans. She stated that the second plan would require them to negotiate an easement or purchase of property from the Talero Curve HOA. She stated that they have a letter of intent that is pending before the Talero Curve HOA Board for review.

Commissioner Purdy asked if Talero Curve had sidewalks on both sides.

Chair Brass stated that there were only sidewalks on one side.

Commissioner Purdy stated in the new proposal he did not believe that there were any sidewalks.

Ms. Rogers confirmed that at this point, they do not have sidewalks shown on the plan, but in their conversations during the neighborhood meeting, the plan would be to have a pedestrian crossing from the sidewalks on the east side across and also to incorporate sidewalks, as appropriate, desired by the neighborhood, or at the recommendation of the City.

Commissioner Urbanski stated that he would like to hear some input about what the homeowners were thinking.

Jessica Clinton, 3917 Balencia Lane, (via electronic means) asked if these dwellings were built if it would mean that they had maxed out the Chavelle dwellings and how the green space was calculated, which would mean that no further homes would be built on the remaining land.

Chair Brass confirmed that was correct and asked if there was anyone else who wanted to comment on the development.

Susan Stinchfield, 3740 Talero Curve, stated that she was a homeowner and also served as President on the HOA Board. She stated that Talero Curve acquired the outlots in 2018 by paying the back taxes for the purpose of assuring that Talero Curve had a buffer. She noted that the prior to that, the outlots had been written into their governing documents as part of their common elements, but they did not own them. She stated they understood that the farmland could be sold, but it was zoned rural, so their understanding was that a total of 3 homes could be built on that property. She noted that the residents of Talero Curve had not come into the neighborhood with the thought that they were going to expand Talero, which was how it was presented to them when they had been approached during the fall of 2023 by Quadriga. She stated that they began back-and-forth open conversations with them around January of 2024 and explained that when they were first approached, their initial thought was that they did not want to expand and explained that when Quadriga initial proposal was for the 'mirror' design, they communicated to them that they did not want that. She discussed the cul-de-sac option, problems they have with snow removal, access points, and the fact that this issue has caused quite a bit of dissention within the neighborhood.

Chair Brass asked if the HOA was in favor of the cul-de-sac proposal from the current plan.

Ms. Stinchfield stated that she has here tonight sort of wearing 2 hats. She explained that there were some people who supported the mirror image plans, but there were a lot of homeowners who prefer the cul-de-sac approach because of the green space that it would provide. She stated that this will impact every homeowner differently.

Chair Brass stated that he understood, but the same could be said for every development.

Ms. Stinchfield stated that, personally, she did not want there to be a road at all, but felt that the current proposal to move the road to the north, made sense. She noted that City staff had been wonderful throughout this whole process and their many conversations and had encouraged dialogue between their neighborhood and Quadriga. She explained that Quadriga had come up with quite a few ideas in order to help meet the needs of the neighborhood, but they did not have anything in writing, nor had the Board seen the letter of intent mentioned by Ms. Rogers.

Chair Brass asked if Ms. Stinchfield had anything to share about whether or not the neighborhood had any specific grievances because the City was not involved in things like the letter of intent.

Ms. Stinchfield stated that the HOA will have to vote 100% in favor of adding this project.

Chair Brass noted that the developer could also have their own HOA.

Ms. Stinchfield agreed, but if they were going to enter through the Chevalle entrance and would have access to their amenities, they should be part of Chevalle. She noted that the HOA's feeling was also that they would not be able to contractual the architectural designs of the homes, unless they are part of the HOA. She stated that they understood that they cannot stop this from happening, but what they could control is what they are able to do within their HOA guidelines

and according to their governing documents. She stated that there were a number of things that the HOA had submitted to the developer, but they were still waiting to hear back on whether they will actually do them or not.

Chair Brass that he was not an expert on HOAs and noted that he was not familiar with any cases where an HOA could override the City and explained that a property owner has the right to develop their property.

City Planner Cauley stated that it was not uncommon for an HOA to have different things that they are looking at, especially when it comes to design and maintenance for aesthetic type uses that go above and beyond the City Code requirements. She explained that she would not say that an HOA and its documents would 'trump' City Code and would just be in addition to what the City was reviewing.

Community Development Director Kabat stated that it was important for the Commission to keep in mind that what they were reviewing tonight was the application that was in front of the City. He explained that the HOA operated independently from the City, so their review and decisions were their own, independent, process. He encouraged the Commission to weigh in on the application submitted by the developer and noted that they could encourage discussions with the HOA to happen, but reiterated that was not connected to the City. He explained that there was a Master Chevalle Neighborhood Association which had sub-associations and believed that Talero Curve was one of the sub-associations and stated that he felt that there numerous options that the developer could pursue. He reiterated that for tonight, the Commission should be reviewing the Concept Plan that has been presented.

Mary Leopold 3669 Cavallo Pass, explained her neighborhood was part of the overall Chevalle and noted that she did not live in the Talero subdivision. She stated that she felt it was important to differentiate between the overall Chevalle HOA and the Talero Curve which was a sub-association. She noted that she was president of the overall Chevalle HOA and noted that the Talero Curve HOA had taken a position on this application, the overall Chevalle HOA had not, but felt that they were receptive to it.

Community Development Director Kabat stated that there have been multiple developments that have happened in the City similar to this and referenced the Jonathan neighborhood association. He explained that it was not uncommon, at this point in the process, for the arrangement with the association not to be fully known.

Steve Tinker, 3764 Talero Curve, stated that he had some ideas that he wanted to present to the Commission regarding the Concept Plan. He asked the Commission to consider having a landscaped island in the middle of the cul-de-sac because he felt it would be nice for both cul-de-sacs to have landscaped islands; consider requiring trees along the north side of the development as a screen; consider connecting the proposed retention pond to the Chevalle owned irrigation pond; and encourage side load garages, 3-car garages, so the layout of the new homes would more closely match the existing homes. He stated that he would like to know the number and locations of the street lights and would also like them to match the upgraded street lights that have been used in Talero.

Chair Brass stated that type of information would come during the Preliminary Plan stage.

Mr. Tinker stated that he would also like to see there just be a sidewalk on one side of the street and not both in order to help prevent problems with snow storage and noted that all of the homes on Talero Curve have walk-out basements and stated that he would like to see most of the new homes also have walk-out basements.

Ms. Stinchfield stated that they had never been told that with this development, the 3910 property would not be able to be developed anymore.

Chair Brass moved the discussion back to the Commission.

Commissioner Baswa stated that he felt that City Code required sidewalks to be on both sides of the street.

City Planner Cauley confirmed that the City did have a policy within the subdivision ordinance that had requirements for sidewalks and explained that the proposed sidewalks would be reviewed with that policy at the next stage in the process.

Chair Brass noted that this was still at the Concept Plan phase so there was still a lot to work on and stated that he felt that Mr. Tinker had shared some good thoughts during his comments, but didn't think the Commission should add conditions at this point. He noted that the attorney for the developer was present tonight and would assume that she had taken some notes about some of the feedback about what the neighbors would like to see with this development. He stated that he felt that moving the access point to the north did work a bit better and, in general, felt this proposal was fine in concept.

Commissioner Urbanski stated that he looks at this as a unique project and was glad that there was already good communication going back and forth between the HOA and the developer.

Motion by Commissioner Brass, second by Commissioner Baswa, to recommend the City Council approve the concept plan for Talero Curve, a 10-lot subdivision, subject to the following conditions:

1. Approval shall be based on the following graphic exhibits unless modified by the conditions below:
    a. Narratives, dated Nov. 20, 2024 and Jan. 29, 2025
    b. Existing conditions plan, dated Nov. 19, 2024.
    c. Concept plan – north shift, dated Jan. 28, 2025.
2. In addition to the items required by City Code Sec. 15.36.050, the following must be submitted for a preliminary plat application to be complete:
    a. An application signed by the applicant, property owner, and Talero Villas HOA.
    b. Survey;
    c. Grading plans;
    d. Tree inventory and preservation plan. This plan must also include trees within Outlots A and B, Chevalle 5th Addition;
    e. Landscaping plans in conformance with City Code Sec. 15.28.070. These plans must

also include cross-sections for viewshed and key community entrance analysis that meet the intent of the Greenbelt;
f. Typical building elevations and floor plans;
g. Stormwater management plan meeting city and Carver County WMO standards.
h. Opportunities to avoid construction traffic using Talero Curve should be explored.

3. The following plan changes are required:
   a. All plans must include the entire 3910 Bavaria Road property. Details can be used as necessary for the project site.
   b. The site plan must:
      i. include a preservation method, such as a conservation easement, over the remaining pasture area.
      ii. reconfigure lots to ensure a minimum lot size of 7,700 sq. ft.
      iii. increase the cul-de-sac bulb to 96 feet, in accordance with MSFC (2020), Appendix D.
   c. Utility plan must illustrate the:
      i. existing utility stubs must be abandoned at the water main and bulkheaded inside the sanitary sewer manhole.
      ii. New stubs must be cut in to the north per City requirements.
4. Continued coordination with:
   a. Talero Villas Homeowner's association regarding property acquisition, landscaping, and roadway/ utility connections; and
   b. City Engineer regarding utilities, grading, access, and drainage.
5. Adherence to the City Engineer memo dated Feb. 5, 2025.
6. Compliance with City Ordinances, including:
   a. Sec. 15.28.290, Anti-monotony and Design requirements: including LP Smartside on front elevations and 4-inch window trim on all windows.
   b. Sec. 15.36.080, Subdivision Design Standards: including streets, street trees, and sidewalks.
7. Setbacks are as follows:
   a. Front yard setback: 23 – feet
   b. Side yard setback: 5 – feet
   c. Rear yard setback: 20 – feet
8. Prior to final plat approval:
   a. In tandem with the preliminary plat approval, any necessary comprehensive plan amendments are approved;
   b. The developer shall enter into an agreement with the City for the provision of necessary infrastructure and associated development costs, including but not limited to park dedication fees;
   c. A wetland mitigation plan must be completed and approved.
9. Prior to final plat recording:
   a. Ensure that all applicable easements for City utility extensions, as identified by the Engineering Department, are secured.
10. Prior to issuance of a permit:
    a. Submit a construction management plan. This plan must address work hours, construction access and parking, and overall site maintenance compliance.

Motion carried.

c. Recommend the Appointment of Chair and Vice-Chair to City Council

Motion by Commissioner Purdy, second by Commissioner Kerber, to recommend Robb Brass serve as Chairperson of the Planning Commission for the calendar year 2025.

Motion carried.

Motion by Commissioner Brass, second by Commissioner Purdy, to recommend Todd Urbanski to serve as Vice-Chairperson of the Planning Commission for the calendar year 2025.

Motion carried.

8. Other Business

a. Staff Memo – February 24, 2025 – Planning Commission/City Council Joint Work Session – Zoning Update

Community Development Director Kabat gave an overview of the proposed discussion topic related to the City's zoning code at the upcoming Joint Work Session with the City Council and asked the Commission to let staff know if they would not be able to attend.

Commissioner Sailer

- Shared some of his background and experience and noted that serving on the Planning Commission seemed like a nice way to get more involved in the community.

Commissioner Rostad

- Shared a bit of information on her background and experience and where her interest in serving on the Commission came from.

9. Adjourn

Motion by Commissioner Brass, second by Commissioner Aasen to adjourn the meeting at 8:54 pm.
Motion carried.

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
03/12/2025

Subject: **Frenz & Worm Properties (Highpoint Vistas) – Final Plat**

Applicant: Forestar Group - Midwest

Location: East of Highway 212 and north of County Road 61 (Chaska Boulevard)

Case No.: 2024-20

Synopsis: Applicant seeks to obtain approval of a 56 lot final plat

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval

BACKGROUND

In 2017, a purchase agreement was executed to purchase the future collector road right-of-way (ROW) for the extension of Savanna Way southward from the roundabout at Big Woods Boulevard, community park and elementary school areas from the Holasek family. The City currently owns the ROW (~6 acres) and future community park acreage (~52 acres), while Eastern Carver County Schools owns the future elementary school acreage (~6). The ROW purchased terminates at the school district's property, but will eventually need to continue southward connecting with County Road 61. See below.

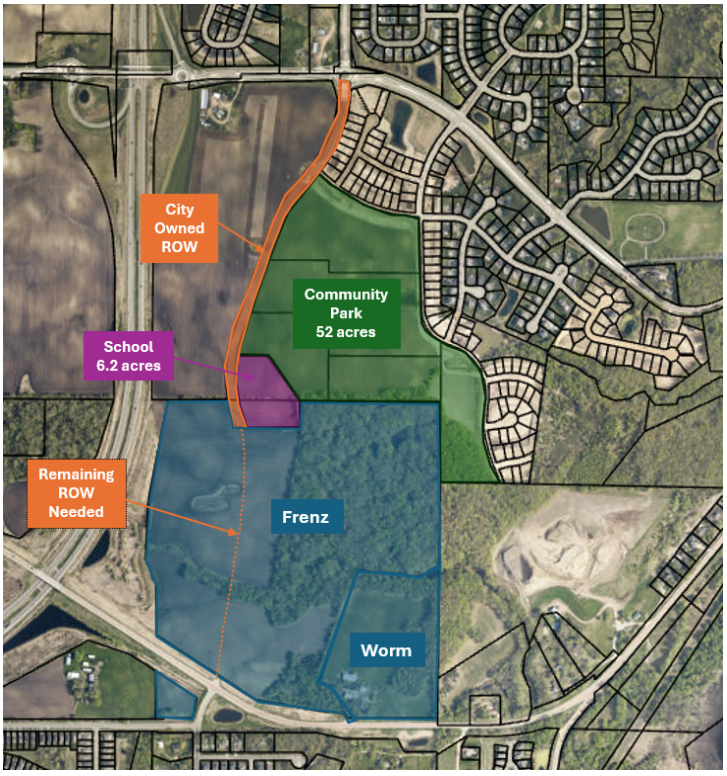


Figure 1: ROW, Community Park and School exhibit

PREVIOUS APPROVALS

In February 2022, the Concept Plan was approved for the property which showed 190 lots on a total of 127 acres.

In June 2024, the Preliminary Plat, Rezoning (PRD-86) and Variance were approved showing 162 lots on approximately 103 acres (see figure 2).

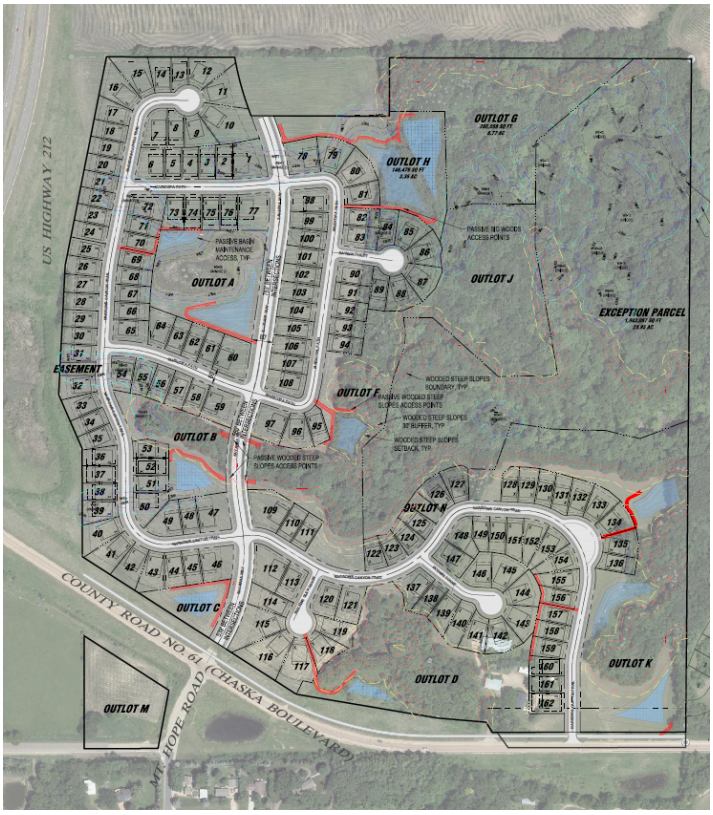


Figure 2: 2024 Approved Preliminary Plan

Final Plat (Phase 1)

The applicant is requesting approval of a Final Plat of the first phase of Highpoint Vistas. The following is intended to summarize the applicant's request and staff's analysis:

- **Existing Conditions.** The overall property is 127.42 acres in size. It is composed of two separate properties; one owned by the Worm family totaling 22.05 acres and one owned by the Frenz family totaling 105.37 acres. The overall development area will encompass a total of 103.48 acres of the 127.42 acre site as the Frenz family intends to retain 23.94 acres of their property. The Frenz family property consists of most of the Big Woods and agriculture area. The Frenz property does not contain any built structures. The Worm family property consists of farmed area with wooded steep slopes on the north and easterly boundaries of the property. The Worm property includes an existing farmstead made up of a residential home and three outbuildings. The Big Woods area makes up approximately 42 acres of the Frenz property and is oak tree savanna that includes very large hundreds of years old oak trees and other high quality tree species. A wetland delineation of the site concluded there are 15 wetlands and 6 watercourses present on site.

Figure 3: Existing Site & Adjacencies

- **Adjacent properties.** The site is bordered to the west by Highway 212; to the south by Chaska Boulevard (CR61) and City of Carver; to the east by currently undeveloped property owned by the Lano family and guided for open space and low density residential; to the north by the nearly 60-acre future City community park, elementary school site, and currently farmed property owned by the Holasek family and guided mixed residential.

- **Final Plat.** The final plat (phase 1) consists of 56 single family lots, Savanna Way platted ROW, and 9 outlots on approximately 53.5 acres. The outlots are proposed as follows:

    1. **Outlot A**: future development, stormwater, wooded steep slopes and wetland to be owned by the developer
    2. **Outlot B**: wooded steep slopes to be owned by the City of Chaska
    3. **Outlot C**: wooded steep slopes to be owned by the City of Chaska
    4. **Outlot D**: stormwater and wooded steep slopes to be owned by the City of Chaska
    5. **Outlot E**: stormwater and wooded steep slopes to be owned by the City of Chaska
    6. **Outlot F**: stormwater to be owned by the City of Chaska
    7. **Outlot G**: big woods, wooded steep slopes, and wetland and proposed park dedication area to be owned by the City of Chaska
    8. **Outlot H**: big woods, wooded steep slope and wetland to be owned by the developer
    9. **Outlot J**: future development to be owned by the developer

The area being final platted in this first phase for Highpoint Vistas does not include the entire preliminary plat area that was approved in June 2024. Staff has requested the developer to show the remaining area that was platted in the preliminary plat as a part of this first phase final plat. The developer will be required to show these remaining areas as outlots on the final plat prior to the final plat being recorded (see figure 4).

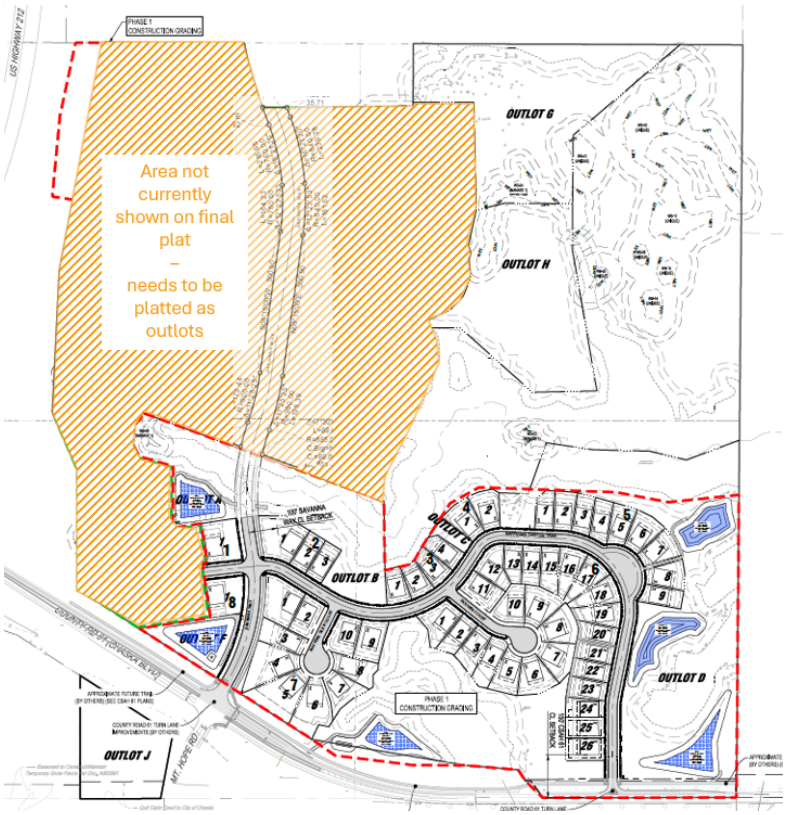


Figure 4: Proposed Final Plat

- **Land Use.** The parcels of land that this development encompasses has been rezoned to Planned Residential Development

(PRD-86). The density proposed for the 103-acre development area is approximately 2.4 dwelling units per net acre. The lot dimensions are similar in scale to lots found in the existing Harvest neighborhood to the north of County Road 44/Big Woods Boulevard and Rivertown Heights neighborhood to the north of this site off of the future Savanna Way connection. Minimum setbacks are proposed to be: front setback of 20 feet, side setback of 5 feet, corner lot side setback of 20 feet and rear yard setback of 25 feet.

- **Layout.** As envisioned in the Chaska Comprehensive Plan, Savanna Way will be the collector route through the overall project and provide important connections within the city. The developer plans to connect Savanna way to County Road 61 (Chaska Boulevard) and extend the collector road northward to meet where the City presently owns right-of-way next to the future school site. Eventually this collector road will extend north to connect into the round-about at Big Woods Boulevard. The developer also proposes a secondary neighborhood street access (Narrows Canyon Trail) to County Road 61 east of the collector road connection.

  The expansive woodland located in the NE area of the site is a remnant piece of big woods oak savanna and steep slope wooded ravines; a key environmental feature that the City has envisioned as open space in the Comprehensive Plan and Southwest Chaska Plan. The proposed site layout protects most of this wooded area and the pocket wetlands found there via Outlots G & H in this final plat. The development is concentrated mainly within the agricultural areas of the site. Preservation of the NE woodland area is an opportunity for this development to connect to the planned community park adjacent north through a more passive natural area experience.

- **Phasing.** The developer anticipates the project will be developed in 3 phases beginning in the southeast (see figure 5):
  - Phase 1 (2025): will include 38 acres and development of the Worm property and portions of the Frenz property located on the southeast side with 56 lots. This phase will also include the construction of both access points on County Road 61.
  - Phase 2 (~2026): will include 34 acres within the central portion of the Frenz property with 63 lots.
  - Phase 3 (~2027): will include 13 acres within the northwest portion of the Frenz property with 43 lots.

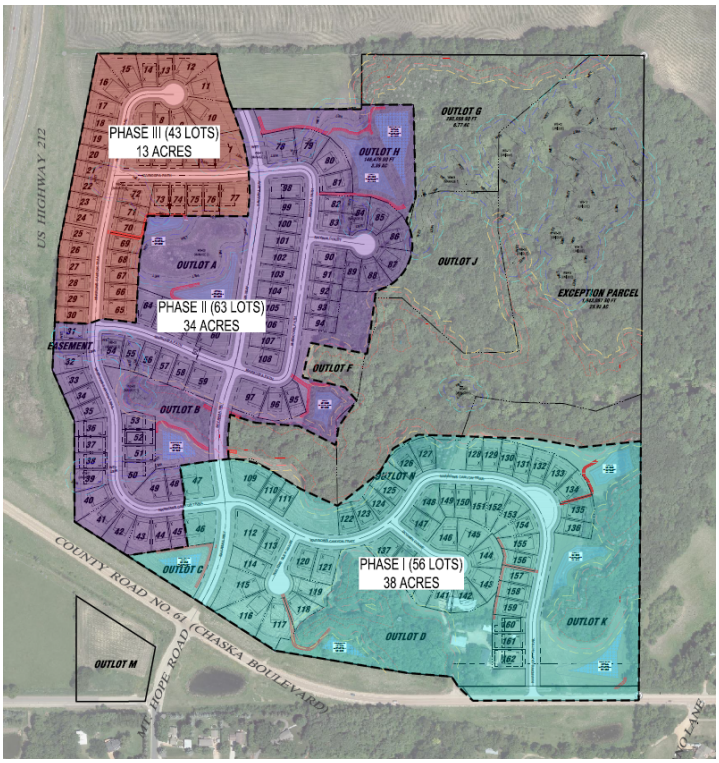


Figure 5: Development phasing from preliminary submittal

Transportation/ROW. The overall development plan proposes to provide for the extension of the Savanna Way collector road from the planned access point at Mount Hope Road intersection on County Road 61 northward to right-of-way property owned by the City next to the future school property. The collector road will not provide direct access to any of the proposed single-family lots in Highpoint Vistas. Access to the single-family lots will be provided via a network of internal residential roadways. The remaining collector road extension connecting to the roundabout on Big Woods Boulevard would occur as development north of Highpoint Vistas warrants it.

The first phase of Highpoint Vistas includes the construction of both access points proposed on Chaska Boulevard (Savanna Way and Narrows Canyon Trail). Both proposed connections to County Road 61 are consistent with the County's plan but continue to be evaluated by Carver County Public Works.

The access improvements planned on County Road 61 are being evaluated for interim and ultimate conditions. The *interim* condition is what's required in the near term to sufficiently accommodate the proposed Highpoint Vistas development and what would be constructed with the onset of the development. The *ultimate* condition is a future layout that accommodates the proposed Highpoint Vistas development and surrounding development and associated traffic forecasts. It was important to understand how either condition would fit into proposed right-of-way (ROW). The developer will need to ensure with Carver County that their final plat accommodates the ROW needs prior to recording of the final plat.

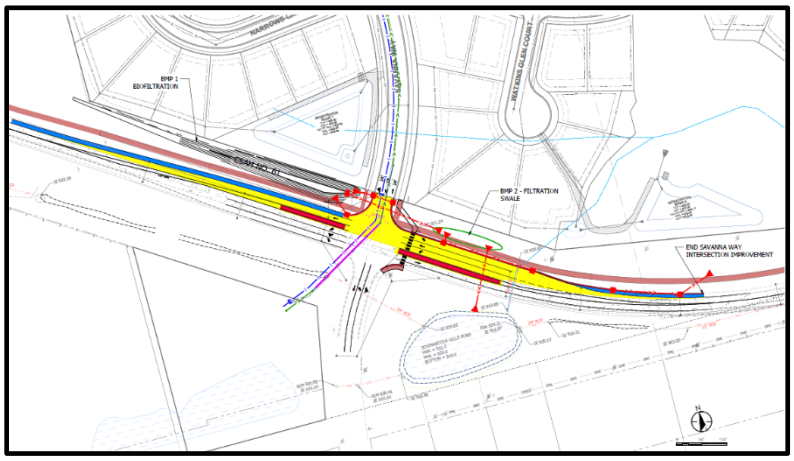


Figure 6: Savanna Way/CR61 interim condition

The collector road access at County Road 61 is proposed to operate as a full access. In its interim condition it will operate as a two-way stop control with dedicated left turn lanes (see figure 6). In its ultimate condition it will operate as a single-lane roundabout (see figure 7).

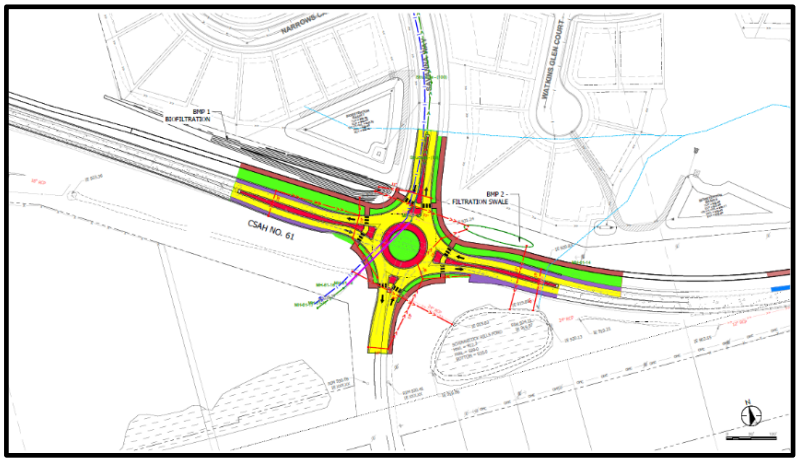


Figure 7: Savanna Way/CR61 ultimate condition

The Narrows Canyon Trail access at County Road 61 (Access A) is proposed to operate as a full access ultimately. However, in its interim condition it will operate as a 'porkchop' intersection allowing for right-in, right-out movements off/onto County Road 61 (see figure 8). In its ultimate condition it will be a 4-way stop control intersection connecting to the City of Carver to the south via the re-alignment of Lano Lane (see figure 9). City of Carver staff have been involved in the design of this connection and approve of the direction being taken. City of Carver agrees with the long-term intent to relocate the Lano Lane connection, and intends for this relocation to be development driven.

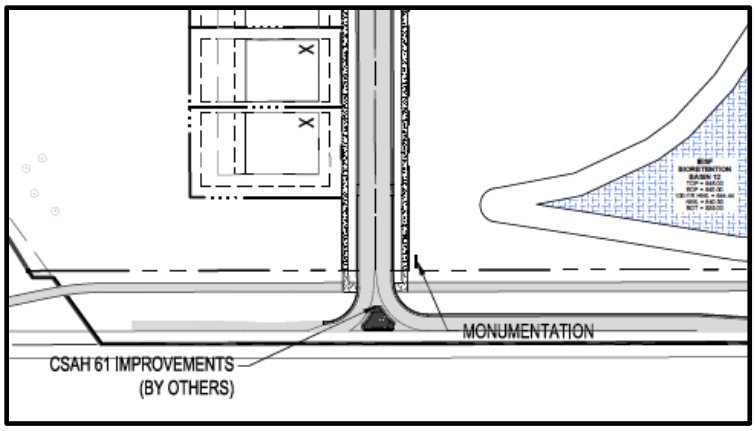


Figure 8: Access A interim condition

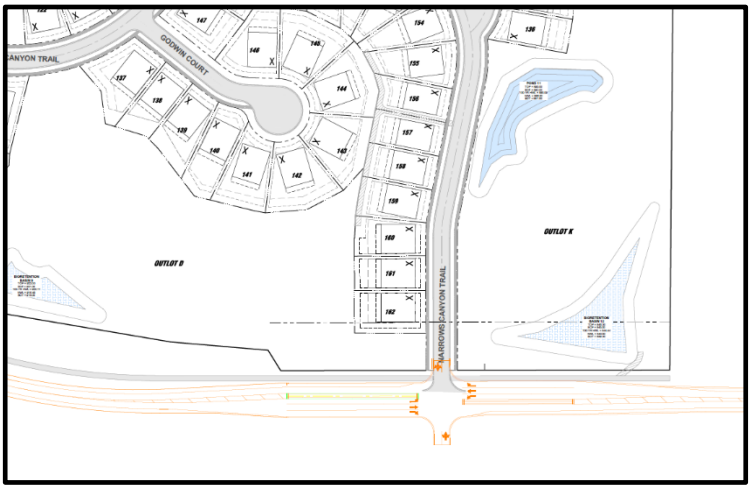


Figure 9: Access A ultimate condition

The current plan appears to show road right-of-way widths that are consistent with the designs in the existing adjacent developments; the local street network will be at least 60 feet wide, and the collector road (Savanna Way) will be at least 80 feet wide.

- **Utilities.** Sewer and water utilities are currently not available to this site. Water that is planned to service this site is currently located at the terminus of Founder's Path in the Rivertown Heights neighborhood and planned to be extended south through the City-owned right of way of the future Savanna Way extension (see Figure 10, blue line).

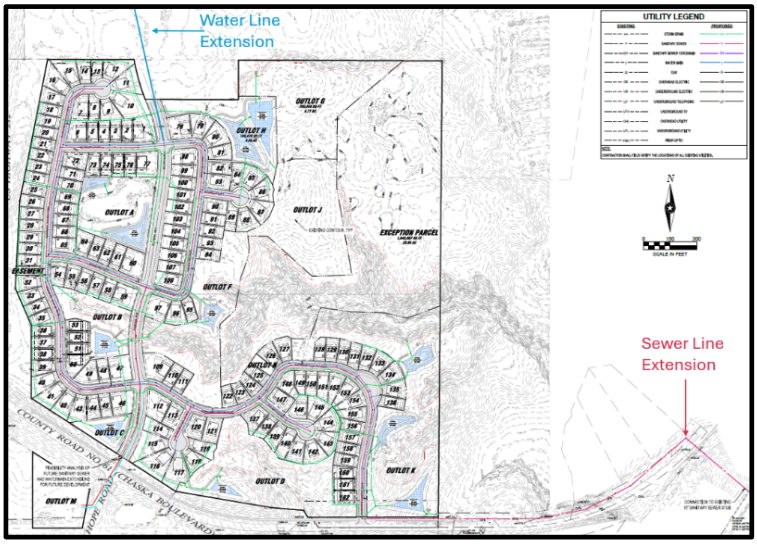


Figure 10: Utility Plan

Sewer is being extended from the sewer interceptor that is located south and east of Chaska Boulevard. This connection will run west down Chaska Boulevard and connect into the development at the proposed secondary access of Narrows Canyon Trail (see Figure 10, red line). The extension of this line will require an easement through the Brakemeier-owned property.

City staff have explained to the developer that the cost of these necessary extensions of water and sewer to their property, including property acquisitions/rights-of-way, would need to be born (paid for) by the developer. This is because the developer's proposal will require these extensions to occur ahead of the naturally anticipated path of development, which would be to proceed north to south from Big Woods Boulevard and generally following the planned Savanna Way collector extension.

- **Stormwater and Wetlands**
  The final plan proposes a stormwater management system that includes 6 stormwater pond areas and associated infrastructure. Maintenance accesses are shown as passive (non-paved) pathways. Maintenance accesses shall be provided by way of outlots and not through private lots. This final plan is showing all maintenance accesses within outlots. The developer will need to ensure that all future phases show maintenance accesses within outlots.

  A total of 15 wetlands and 6 water courses have been identified on the overall development site. The developer has applied for the wetland impact permits and are currently being reviewed by the Technical Evaluation Panel (TEP). Final project design will need to adhere to WCA permitting/mitigation for wetland impacts and Chaska Wetland Protection Standards. Prior to final plat recording, the wetland mitigation plan needs to be completed and approved for all impacted areas, including Savanna Way improvements.

- **Setbacks**
  The setbacks will be generally consistent with single-family residential developments. Namely, the front yard setback will be no less than 20 feet. The rear yard setback will be 25 feet. The side yard setback will be 5 feet. Corner lots will have a side yard setback of 20 feet.

  In addition to these setbacks, there are other setbacks that may apply to this site. See below:

SETBACKS	
Direction	**Setback**
Wooded Steep Slopes	50 feet building setback and 30 feet no grade/no mow setback
Wetlands	Varies based on wetland type
Savanna Way	100 feet from centerline
County Road 61	150 feet from centerline

Trunk Highway 212	50 feet from the ROW line or 225 feet from the centerline, whichever is greater

- **Architecture**
  The developer has stated that once the project is approved, Forestar will select an official home builder for project. Forestar is a majority-owned subsidiary of national home builder DR Horton. If DR Horton is selected as the builder, the developer anticipates home exteriors, floor plans and pricing will be similar to homes in the Sagewood and Rivertown Heights developments. The proposed homes will be 2-story single-family designs. Each floor plan will have multiple elevation options, which will create variety throughout. Final Builder selection is anticipated to occur prior to the start of Land Development and is subject to the City of Chaska's approval.

  City ordinance dictates that housing may not be similar within two houses to each side, directly across the street or diagonal from the house in question. This ordinance also requires LP Smartside (or similar material) be used on all front elevations, 4-inch window trim on all windows, and 360-degree architecture be incorporated on corner lots and lots whose sides are visible from public rights of way or across from open spaces.

- **Trails, Sidewalks & Access into the Bluff Areas.**
  A 10-foot City trail currently exists on the east side of Savanna Way north of Big Woods Boulevard. This trail connection will proceed south along Savanna Way as it connects to Chaska Boulevard. Another proposed city trail is planned on the north side of Chaska Boulevard and abutting the south side of the Highpoint Vistas property. The extent of this trail is shown from the east side up to the west side of the property limits. The developer will be responsible to at least grade out this trail section with the onset of their development construction. Installation of the trail will likely come when Carver County reconstructs Chaska Boulevard in the future.

  The final plan is showing sidewalks on both sides of the street up to the bulbs of cul de sacs to meet City policy.

  Passive openings to connect to the ravine areas are shown on the plan in multiple locations within Outlots A, B, C and D. These openings and connections will encourage and facilitate safe and meaningful access to the preserved Big Woods areas that have been programmed as public open space in the City's comprehensive plan.

- **Parkland Dedication & Big Woods Acquisition**
  A neighborhood park is not identified in this area per the Comprehensive Plan due to the site's proximity to the planned community park north of the property, which will serve the neighborhood's recreational needs.

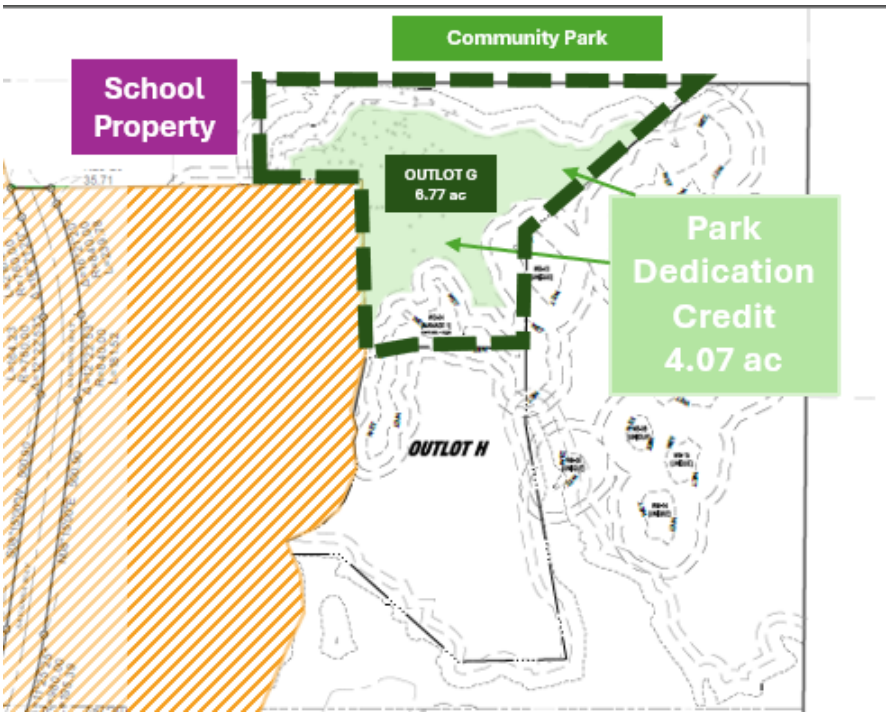


Figure 11: Park Dedication Credit Exhibit

Parkland dedication is required and can be accepted by land donation, cash donation, or a combination of both depending on the City's need and direction. Parkland credit can be given for any public park space that the City accepts and is deemed "developable". Parkland credit will not be given for bluff areas, wetlands, stormwater ponds, right of way, or land area deemed undevelopable that are dedicated to the City. If land donation is pursued then 10% of the gross area is required for parkland dedication; for this site, it would be 10.35 acres.

As the City has been evaluating the park dedication for this area, they provided direction to the developer to achieve an outlot that is approximately 4 acres in developable area and contiguous to the school and community park site. The remaining of the park dedication would be accepted as a cash in lieu fee to help supplement other park projects in the City, including development of the SW community park property adjacent north to this development.

The developer has identified Outlot G for parkland dedication which totals 6.77 acres with 4.07 acres of those as "developable" and therefore applicable as parkland dedication (previously shown as 4.01 acres in preliminary plans). Outlot G encompasses a portion of the Big Woods area and is a contiguous connection to the community park and school properties. A pedestrian connection is achieved through an adjoining outlot that can get users from the development and adjoining properties to the parkland space.

Consistent with preliminary approvals, the City can consider the 4.07 developable acres in Outlot G as credit towards a portion of the parkland dedication requirements. The 4.07 acres covers 39% of the parkland dedication requirements for the full development area (10.35 acres). As such, the applicant will have to satisfy the remaining 61% in parkland

dedication fees as was discussed at preliminary review. The developer's agreement (DA) will be the formal agreement of the details and fees owed for the development. The DA continues to be worked on and reviewed with city staff and the developer. In order for the final plat to be recorded, an executed DA approved by Chaska City Council will be required.

Big Woods Acquisition

The City is working with the developer to preserve the big woods areas through parkland dedication and city acquisition. Outlot G is being dedicated to the City as parkland dedication, which contains a portion of big woods. Outlot H, also contains a portion of big woods and is intended to be owned by the developer with the intention for the City to purchase for preservation. The City applied for two grant applications to obtain the funds necessary to purchase Outlot H. The applications are being administered through the agencies Legislative-Citizen Commission on Minnesota Resources (LCCMR) and the Department of Natural Resources (DNR). The city received good news following the preliminary approvals that both grant applications were approved. The city intends to purchase Outlot H with one of the grant applications and will hopefully use the remaining grant application towards additional big woods acquisition.

If the City is incapable of purchasing Outlot H by way of grants then it would open up the ability to develop the area. If the developer wishes to pursue development in this area they will be required to pursue all necessary land use applications such as, but not limited to, Concept Plan, Preliminary Plat, Comprehensive Plan Amendment, Rezoning, Final Plat, etc.

Park & Recreation Commission Review June 11, 2024

The Parks and Recreation Director and Park & Recreation Commission evaluated the park dedication noted during preliminary approvals at their meeting on June 11, 2024 and provided the following feedback:

- Expressed support for the preservation of the Big Woods to the greatest extent possible, while acknowledging cash contribution needs for the future community park.
- Supported the balanced approach to parkland dedication (4.01 acres in land credit and the remaining as cash contribution).

Ultimately, the commission unanimously recommended the City Council approve the parkland dedication of 4.01 acres and remaining in cash contribution in lieu of land for Highpoint Vistas.

- **Screening, Landscaping & Tree Preservation**

The landscape plan proposed shows the inclusion of landscaping in the street boulevards and along the edges to act as buffers between the major streets and homes.

This development abuts Trunk Highway 212 and County Road 61 and includes a collector road through the center. The final submittal has included a landscape plan and section drawings showing the landscaping and berming that are being incorporated along the

edges that abut these roadways. The landscaping and berming appears consistent with other developments near this project that abut major roadways.

Trees will be required in all boulevards for every 50 linear feet to meet the City's Boulevard Tree Policy. It should be noted that the boulevard is the area between the sidewalk and the street.

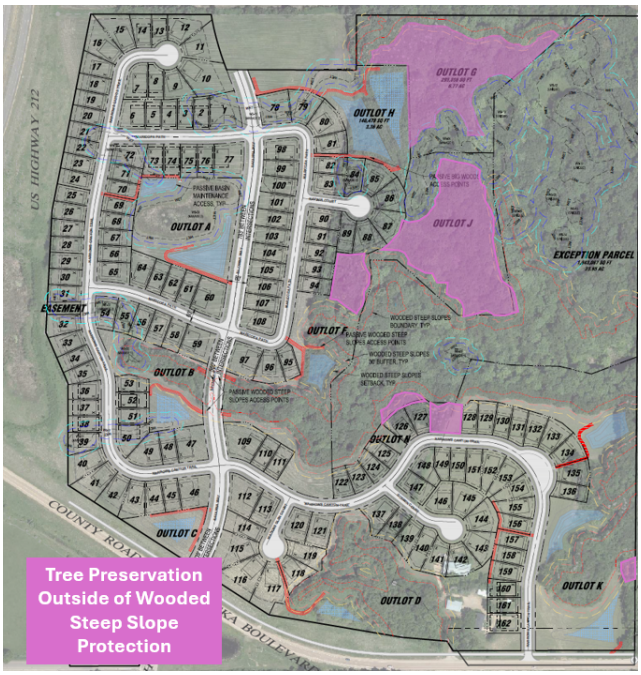


Figure 12: Tree Preservation Areas Overall Development

Although tree areas are minimal in the areas proposed for development on this site, it was noted that tree preservation is still an important piece of discussion for this development, specifically along areas where bluffs are present, and areas adjacent and encroaching into the Big Woods remnant. The applicant has provided a tree preservation plan that states 789 trees were surveyed in these areas, and 571 of those trees will be removed (218 trees saved). Of the 218 trees saved 120 significant trees will be protected, which are trees 12 inches in caliper and above. Figure 12 shows the areas proposed for tree preservation that fall outside of areas already protected. In addition to what is being saved the developer will be incorporating a large addition of new trees beyond the amount that is being removed. In staff's opinion the level of tree preservation that is proposed with this plan is proportionate.

- **Noise Study**
  The applicant conducted a noise study along the edges abutting Highway 212 and County Road 61. The results of that study showed noise readings that met or fell below the maximum noise output per MnDOT standards. MnDOT was able to review the study and did not state necessary mitigation methods based on the conclusions. They verbally indicated that the addition of berming and landscaping on the highway and county road edges shown on the development plans will help mitigate sound.

- **Retaining Wall**
  A large boulder retaining wall is proposed between the rear yards of Lots 7-8, Block 6 and Lots 28-22 Block 6. This wall varies in height but at its highest point it reaches almost 15 feet tall. The final plat shows a roughly 40 foot wide drainage and utility easement over the top of this structure. A master HOA is proposed to be responsible for the ownership and maintenance of the retaining walls. It will be important that the design of this retaining wall does not conflict with adjacent utilities and city maintenance accesses in this easement area. There is a storm sewer pipe that runs along the upper and lower edge of this wall.

- **Development Costs (Infrastructure Improvements)**
  The City of Chaska has a number of area-wide development cost such as, but not limited to:
    - Arterial Road Network
    - Collector Roads
    - Storm Sewer
    - Trails
    - Parks

  Prior to final plat recording, a development agreement will be required for approval by City Council. The developer will need to work with City Staff to determine which of these are applicable and what those fees will be.

Deadline for Agency Decisions

Complete Application Received	60-day review *	120 – day **
February 26, 2025	April 27, 2025	June 26, 2025
* Pursuant to MN State Statutes the City must act on the request within 60-days. ** The city can provide the applicant with a written letter requesting an additional 60-day review period.		

Planning Commission Action Requested:

Motion to recommend approval of Highpoint Vistas final plat for 56 lots, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits:
    a. Final Plat (pgs 1-5), prepared by ISG
        i. With changes to include full preliminary plat approval area
    b. Title (pg 1), prepared by ISG inc, dated February 25, 2025
    c. Construction Notes, prepared by ISG inc, dated February 25, 2025
    d. Utility Schedules (pgs 3-5), prepared by ISG inc, dated February 25, 2025
    e. Site Details (pgs 6-12), prepared by ISG inc, dated February 25, 2025
    f. Stormwater Basin Details (pgs 13-16), prepared by ISG inc, dated February 25, 2025
    g. MnDOT Ramp Grading Details (pgs 17-22), prepared by ISG inc, dated February 25, 2025
    h. Existing Site & Removal Plan (pg 23), prepared by ISG inc, dated February 25, 2025
    i. SWPPP Narrative (pgs 24-25), prepared by ISG inc, dated February 25, 2025
    j. SWPPP Details (pgs 26-27), prepared by ISG inc, dated February 25, 2025
    k. Pre Construction SWPPP (pgs 28-34), prepared by ISG inc, dated February 25, 2025
    l. Proposed SWPPP (pgs 35-41), prepared by ISG inc, dated February 25, 2025
    m. Phasing Plan, prepared by ISG inc, dated February 25, 2025
    n. Overall Utility, prepared by ISG inc, dated February 25, 2025
    o. Hydrant Coverage, prepared ISG inc, dated February 25, 2025
    p. Utility (pgs 45-48), prepared ISG inc, dated February 25, 2025
    q. Plan & Profile (Savanna Way) (pgs 49-50), prepared by ISG inc, dated February 25, 2025
    r. Plan & Profile (Narrows Canyon Trail) (pgs 51-53), prepared by ISG inc, dated February 25, 2025
    s. Plan & Profile (Godwin Trail), prepared by ISG inc, dated February 25, 2025
    t. Storm Sewer Profiles (pgs 55-59), prepared by ISG inc, dated February 25, 2025
    u. Grading Plan (pgs 60-79), prepared by ISG inc, dated February 25, 2025
    v. Retaining Wall Detail, prepared by ISG inc, dated February 25, 2025
    w. Wetland Mitigation Plan (pgs 71-72), prepared by ISG, inc, dated February 25, 2025
    x. Tree Preservation Plan (pgs 73-77), prepared by ISG inc, dated February 25, 2025
    y. Tree Inventory (pgs 78-80), prepared by ISG inc, dated February 25, 2025
    z. Restoration Plan (pgs 81-85), prepared by ISG inc, dated February 25, 2025
    aa. Planting Plan (pgs 86-90), prepared by ISG inc, dated February 25, 2025

bb. Planting Notes and Details, prepared by ISG inc, dated February 25, 2025
cc. Signage Plan, prepared by ISG inc, dated February 25, 2025
dd. Noise Study (pgs 1-20), prepared by esi engineering, dated May 8, 2024

2. Adherence with the City Engineer's Memo dated May 2, 2024.
3. Adherence with Carver County's memo dated February 18, 2025.
4. Provision of a 60 feet Right of Way width for all local streets, and 80 feet Right of Way for Savanna Way.
5. Adherence to the City's Boulevard Tree Policy and local street section design.
6. Provision of boulevard trees every 50 feet between the curb and sidewalk for the full extent of Savanna Way.
7. Provision of sidewalks on both sides of all local streets.
8. Adherence to the following building setbacks:
    a. Front: 20 feet
    b. Rear: 25 feet
    c. Side: 5 feet
    d. Side (corner): 20 feet
    e. Wooded Steep Slopes: 50 feet building setback and 30 feet no grade/no mow setback
    f. Wetlands: Varies based on wetland type
    g. Savanna Way: 100 feet from centerline
    h. County Road 61: 150 feet from centerline
    i. Trunk Highway 212: 50 feet from the ROW line or 225 feet from the centerline, whichever is greater
9. Prior to final plat recording, developer shall enter into a development agreement with the City for the provision of necessary infrastructure and associated development costs.
10. Compliance with the City's anti-monotony and design requirements zoning ordinance (Section 15.28.290).
11. Preservation of the wooded steep slopes, including 30-foot buffer and a 50-foot setback from that wooded steep slope.
12. Provision of a wetland mitigation plan, including the Savanna Way corridor impacts, to be completed and approved prior to issuance of a grading permit and prior final plat recording.
13. Provision of a storm water management plan meeting City and Carver County WMO standards.
14. Provision that the CCWMO has reviewed and approved the stormwater plan prior to a grading permit being issued and prior to final submittal.
15. Provision that all storm sewer systems on private lots are encompassed by a drainage and utility easement as directed by the engineering department and to be shown on the final plans.
16. Provision that adequate maintenance accesses are provided for the stormwater ponds, be placed in outlots and not private properties, and to be shown on all plans.
17. Provision to provide adequate landscaping, berming, and buffering along the development edges abutting Highway 212, County Road 61 and the Savanna Way collector extension.
18. Provision that utilities are available to serve Outlot J per the final plat (Frenz 2 acre parcel) for future development.
19. Provision that County Road 61 access designs are fully approved by Carver County prior to construction.
20. Provision that applicable easements, as identified by the Engineering department, for the extension of City utilities are secured prior to final plat recording.
21. Provision to show proposed City trails on the east side of Savanna Way, north side of Chaska Boulevard, and to the Big Woods areas.

22. Provision that all retaining walls are owned and maintained by the HOA.
23. Provision of a HOA covenant be created to cover the maintenance and responsibility of retaining walls within the Highpoint Vistas development.
24. Provision of at least 10 feet clearance zone on top and bottom from the exterior edge of the boulder wall up to the centerline of the storm sewer pipe, and to be reviewed and approved by city engineering at time of building permit.
25. Provision to obtain a building permit for all retaining walls.
26. Provision that the MnDOT easement area between lots 31 and 32 in the preliminary plat be platted as an outlot, and to be shown on the final plat when that phase is submitted.
27. Provision that if development is pursued on Outlot J that applicable land use applications are applied for and approved as determined by the Planning department.
28. Provision that proposed retaining walls meet zoning section 15.28.100.F.
29. Provision of developer to remove any hazardous trees as determined by Public Works after site grading is completed and prior to issuance of a building permit.
30. Provision of meeting zoning section 15.36.090 park dedication by dedicating 4.07 acres of developable land in Outlot G and providing cash in lieu of land as memorialized in the Development Agreement.
31. Provision that sufficient public right-of-way (ROW) is provided for the ultimate road conditions for the County Road 61 access points, and to be shown on the final plat prior recording.
32. Provision that the full preliminary plat approved area be shown on the final plat as outlots and to be completed prior to recording the final plat.

Carver County
Public Works
11360 Highway 212, Suite 1
Cologne, MN55322

February 18, 2025

Alexander D. Berlick
Development Director - North Region | Great Plains Division | Minneapolis
20860 Kenbridge Ct Suite 100
Lakeville, MN 55044

Subject: Highpoint Vistas Right of Way and Access Design

Carver County Public Works, alongside the City of Chaska, as reviewed right-of-way needs and design options for the two proposed accesses to the Highpoint Vistas development. Please see comments below. Per the City of Chaska, intersection design approval from Carver County Public Works is required prior to Final Plat approval.

Right of Way

- Cross section should be 2-lane divided rural (page 46 and 47 of PDF) west of Savannah Way with trail to the western extent of this development per City direction – 85 feet minimum right of way from highway centerline. This same cross section may continue to the east of the intersection as directed by the City due to the rural ditch in this area and drainage needs.
- Cross section should be 2-lane divided urban (page 48 and 49 of PDF) with trail east of Savannah Way, subject to direction from the City as noted above, to the eastern extent of this development per City direction – 65 feet minimum right of way from highway centerline.

Savannah Way Development Access Location

- Left turn lanes will be required for both directions of Highway 61.
- The eastbound right turn lane can remain as is. A westbound right turn lane will be required.
- The western median at the Savannah Way access should continue through the length of the left turn lane and of the eastbound approach to a minimum median width of 6' + 2' gutter on either side. Please see MnDOT standard plate 7109.
- The eastern median at the Savannah Way access should continue through the length of the left turn lane and of the westbound approach to a minimum width of 6' + 2' gutter on either side. Please see MnDOT standard plate 7109.
- Pedestrian median refuges are required for both east and west approaches as the City has sidewalk/trail planned for both sides of this intersection.
- Both of the city street legs of this intersection need to be analyzed in the TIA for the recommended lanes entering and leaving the intersection to achieve acceptable operations and safety performance for the ultimate build out of this development.

Eastern Development Access Location

- A right-in/right-out option for the eastern development access is recommend and is acceptable in lieu of a new left turn due to the upcoming planned reconstruction project on Highway 61 in this area in the next 5-years. A right turn lane will continue to be required as part of this project.
- This development shall work with our office to develop a bituminous pavement design to match the existing highway grading grade for the frost free section and meet the required traffic loading for 5-years but does not need to replicate the pre-existing concrete roadway underneath for the widening needed for the right turn lane.

Carver County
Public Works
11360 Highway 212, Suite 1
Cologne, MN55322

- The right-in/right-out will include a traffic island to channel traffic accordingly to not allow a left turn lane out of this access point.
- Traffic island lane openings shall be at least 18' wide to accommodate snow removal per City direction.

Trails

- All trails along Highway 61 will be either graded at a minimum, or fully constructed per City direction.

Sincerely,
Drew Pflaumer
Transportation Planning Manager
Carver County Public Works

HIGHPOINT VISTAS

PLAT FILE NO.
C.R. DOC. NO.

KNOW ALL PERSONS BY THESE PRESENTS: That Forestar (USA) Real Estate Group Inc., a Delaware limited liability company, fee owner of the following described property situated in the County of Carver, State of Minnesota to wit::

That part of the Southeast Quarter of the Southeast Quarter of Section 7, Township 115, Range 23, Carver County, Minnesota, described as follows:

Beginning at the southeast corner of Section 7, Township 115, Range 23; thence running North along the east line of Section 7 a distance of 19.62 chains to a post in the Creek; thence South 69 degrees West 3.00 chains along the Creek; thence North 77 degrees West 2.00 chains; thence North 89 degrees West 3.00 chains; thence North 82 degrees West 2.50 chains; thence South 19 degrees West 14.50 chains; thence South 66.50 degrees East 1.55 chains; thence South 36.50 degrees East 5.63 chains to a post in the line between Sections 7 and 18; thence East along said line 10.62 chains to the place of beginning.

AND

That part of the Southeast Quarter of Section 7, Township 115, Range 23, Carver County, Minnesota described as follows: Commencing at the southeast corner of said Section 7; thence North 00 degrees 29 minutes 09 seconds East, assumed bearing, along the east line of said Southeast Quarter, 1247.42 feet; thence South 69 degrees 29 minutes 09 seconds West, 198.00 feet; thence North 76 degrees 30 minutes 51 seconds West, 132.00 feet; thence North 88 degrees 30 minutes 51 seconds West, 198.00 feet; thence North 81 degrees 33 minutes 14 seconds West, 165.02 feet; thence South 19 degrees 29 minutes 09 seconds West, 189.40 feet to the point of beginning; thence North 87 degrees 55 minutes 30 seconds West, 102.17 feet; thence North 58 degrees 53 minutes 44 seconds West, 25.50 feet; thence South 78 degrees 15 minutes 38 seconds West, 46.67 feet; thence South 68 degrees 09 minutes 25 seconds West, 46.67 feet; thence South 56 degrees 53 minutes 52 seconds West, 57.30 feet; thence South 44 degrees 29 minutes 02 seconds West, 57.30 feet; thence South 34 degrees 04 minutes 47 seconds West, 84.23 feet; thence South 34 degrees 50 minutes 26 seconds West, 36.73 feet; thence South 29 degrees 30 minutes 05 seconds West, 55.87 feet; thence South 46 degrees 38 minutes 42 seconds West, 22.86 feet; thence South 81 degrees 39 minutes 04 seconds West, 34.89 feet; thence South 73 degrees 17 minutes 42 seconds West, 55.17 feet; thence North 00 degrees 45 minutes 26 seconds West, 241.21 feet; thence North 69 degrees 50 minutes 55 seconds West, 453.75 feet; thence northeasterly 89.67 feet along a non-tangential curve concave to the southeast, having a radius of 685.00 feet, a central angle of 07 degrees 30 minutes 00 seconds, a chord bearing of North 15 degrees 55 minutes 25 seconds East and a chord of 89.60 feet; thence northeasterly 195.39 feet along a tangential curve concave to the northwest, having a radius of 980.00 feet and a central angle of 11 degrees 25 minutes 25 seconds; thence North 08 degrees 15 minutes 00 seconds East, 500.90 feet; thence northerly 181.52 feet along a tangential curve concave to the west, having a radius of 840.00 feet and a central angle of 12 degrees 22 minutes 53 seconds; thence northwesterly 239.78 feet along a compound curve concave to the southwest, having a radius of 840.00 feet and a central angle of 16 degrees 21 minutes 20 seconds; thence North 20 degrees 29 minutes 12 seconds West, 35.71 feet to the south line of the north 223.00 feet of said Southeast Quarter; thence North 89 degrees 48 minutes 03 seconds West, along said south line of the north 223.00 feet, 85.51 feet; thence South 20 degrees 29 minutes 12 seconds East, 65.92 feet; thence southeasterly 216.95 feet along a tangential curve concave to the southwest, having a radius of 760.00 feet and a central angle of 16 degrees 21 minutes 20 seconds; thence southwesterly 164.23 feet along a compound curve concave to the west, having a radius of 760.00 feet and a central angle of 12 degrees 22 minutes 53 seconds; thence South 08 degrees 15 minutes 00 seconds West, 500.90 feet; thence southwesterly 179.44 feet along a tangential curve concave to the northwest, having a radius of 900.00 feet and a central angle of 11 degrees 25 minutes 25 seconds; thence southwesterly 88.94 feet along a tangential curve concave to the southeast, having a radius of 765.00 feet, a central angle of 06 degrees 39 minutes 40 seconds, a chord bearing of North 15 degrees 55 minutes 25 seconds East and a chord of 89.60 feet; thence North 69 degrees 50 minutes 55 seconds West, 365.43 feet; thence North 79 degrees 07 minutes 50 seconds West, 108.68 feet; thence South 83 degrees 47 minutes 05 seconds West, 60.58 feet; thence South 76 degrees 43 minutes 51 seconds West, 141.74 feet to a right of way line of Parcel 8 as shown on Minnesota Department of Transportation Right of Way Plat No. 10-29; thence South 23 degrees 31 minutes 36 seconds East, along said right of way line, 201.61 feet; thence South 00 degrees 06 minutes 42 seconds East, along said right of way line, 412.55 feet; thence South 57 degrees 15 minutes 41 seconds East, along said right of way line, 970.11 feet; thence South 80 degrees 25 minutes 26 seconds East, along said right of way line, 546.31 feet; thence South 85 degrees 09 minutes 20 seconds East, along said right of way line, 184.94 feet; thence South 31 degrees 55 minutes 03 seconds East, along said right of way line, 45.55 feet; thence North 89 degrees 54 minutes 33 seconds East, along said right of way line 18.92 feet; thence North 36 degrees 00 minutes 51 seconds West, 292.75 feet; thence North 66 degrees 00 minutes 51 seconds West, 102.30 feet; thence North 19 degrees 29 minutes 09 seconds East, 767.48 feet to the point of beginning.

AND

That part of the Southeast Quarter of Section 7, Township 115, Range 23, Carver County, Minnesota described as follows: Commencing at the East Quarter corner of said Section 7; thence North 89 degrees 48 minutes 03 seconds West, assumed bearing, along the north line of said Southeast Quarter, 1151.12 feet to the point of beginning; thence South 00 degrees 11 minutes 57 seconds West, perpendicular to said north line of the Southeast Quarter, 204.63 feet; thence North 90 degrees 00 minutes 00 seconds East, 211.72 feet; thence South 01 degrees 19 minutes 16 seconds East, 375.70 feet; thence North 76 degrees 30 minutes 33 seconds East, 103.37 feet; thence South 89 degrees 30 minutes 51 seconds East, 236.42 feet; thence North 00 degrees 29 minutes 09 seconds East, 238.94 feet; thence North 49 degrees 45 minutes 58 seconds East, 489.15 feet to said north line of the Southeast Quarter; thence North 89 degrees 48 minutes 03 seconds West, along said north line of the Southeast Quarter, 932.06 feet to the point of beginning.

AND

That part of the Southeast Quarter of Section 7, Township 115, Range 23, Carver County, Minnesota described as follows: Commencing at the East Quarter corner of said Section 7; thence North 89 degrees 48 minutes 03 seconds West, assumed bearing, along the north line of said Southeast Quarter, 1151.12 feet; thence South 00 degrees 11 minutes 57 seconds West, perpendicular to said north line of the Southeast Quarter, 204.63 feet; thence North 90 degrees 00 minutes 00 seconds East, 211.72 feet; thence South 01 degrees 19 minutes 16 seconds East, 375.70 feet to the point of beginning; thence North 76 degrees 30 minutes 33 seconds East, 103.37 feet; thence South 89 degrees 30 minutes 51 seconds East, 236.42 feet; thence South 00 degrees 29 minutes 09 seconds West, 158.43 feet; thence South 09 degrees 54 minutes 30 seconds East, 502.09 feet; thence South 88 degrees 44 minutes 56 seconds West, 226.37 feet; thence North 48 degrees 09 minutes 03 seconds West, 336.53 feet; thence North 89 degrees 48 minutes 03 seconds West, 111.25 feet; thence North 11 degrees 01 minutes 28 seconds West, 26.57 feet; thence North 66 degrees 20 minutes 21 seconds East, 85.32 feet; thence North 43 degrees 24 minutes 27 seconds East, 69.70 feet; thence North 22 degrees 49 minutes 02 seconds East, 69.70 feet; thence North 07 degrees 08 minutes 37 seconds West, 62.12 feet; thence North 16 degrees 52 minutes 42 seconds East, 25.47 feet; thence North 17 degrees 06 minutes 39 seconds West, 28.23 feet; thence North 12 degrees 21 minutes 50 seconds East, 125.67 feet to the point of beginning.

AND

That part of the Southeast Quarter of Section 7, Township 115, Range 23, Carver County, Minnesota described as follows: Commencing at the southeast corner of said Southeast Quarter; thence South 89 degrees 53 minutes 24 seconds West, assumed bearing, along the south line of said Southeast Quarter 2011.63 feet to Right of Way Boundary Corner B31 as shown on Minnesota Department of Transportation Right of Way Plat No. 10-29 as the same is on file and of record in the office of the County Recorder in and for Carver County, Minnesota and the point of beginning; thence North 10 degrees 39 minutes 53 seconds East, along the boundary of said Plat No. 10-29, 225.76 feet to Right of Way Boundary Corner B32; thence North 57 degrees 15 minutes 41 seconds West, along the boundary of said Plat No. 10-29, 384.01 feet; thence South 00 degrees 02 minutes 41 seconds West, 430.07 feet to the south line of said Southeast Quarter; thence North 89 degrees 53 minutes 24 seconds East along said south line 281.56 feet to the point of beginning.

Has caused the same to be surveyed and platted as HIGHPOINT VISTAS and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as created by this plat.

In witness whereof said Forestar (USA) Real Estate Group Inc., a Delaware limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 20_____.

Signed: Forestar (USA) Real Estate Group Inc.

_____ its _____

State of _____

County of _____

This instrument was acknowledged before me on _____, 20_____ by _____ its _____, of Forestar (USA) Real Estate Group Inc., a Delaware limited liability company, on behalf of the company.

_____

SURVEYOR'S CERTIFICATE

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

Dated this _____ day of _____, 20_____.

_____
Mark A. Schwanz, Licensed Land Surveyor
Minnesota License No. 45817

State of Minnesota
County of _____

This instrument was acknowledged before me on _____, 20_____ by Mark A. Schwanz.

_____
(signature)

_____
(print)

Notary Public, _____ County, Minnesota

My Commission expires _____

CITY COUNCIL, CITY OF CHASKA, MINNESOTA

This plat of **HIGHPOINT VISTAS**, was approved and accepted by the City Council of the City of Chaska, Minnesota at a regular meeting thereof held this _____ day of _____, 20_____, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

CITY COUNCIL, CITY OF CHASKA, MINNESOTA

By: _____ Mayor

By: _____ Clerk

COUNTY SURVEYOR, CARVER COUNTY, MINNESOTA

Pursuant to Chapter 395, Minnesota Laws of 1971, this plat has been approved this _____ day of _____, 20_____.

Brian E. Praske, County Surveyor

By: _____

COUNTY AUDITOR, CARVER COUNTY, MINNESOTA

I hereby certify that taxes payable in _____ and prior years have been paid for land described on this plat. Dated this _____ day of _____, 20_____.

Crystal Campos, County Auditor

By: _____

COUNTY RECORDER, CARVER COUNTY, MINNESOTA

I hereby certify that this plat of HIGHPOINT VISTAS was filed this _____ day of _____, 20_____, at ___ o'clock ___.M. as Document No. _____.

Kaaren Lewis, County Recorder

By: _____

ISG

FINAL PLAT FOR REVIEW

HIGHPOINT VISTAS

PLAT FILE NO.
C.R. DOC. NO.

N89°48'03"W 1151.12

POB

N89°48'03"W 932.07

NORTH LINE OF THE SE 1/4 SEC. 7 - T115 - R23

EAST 1/4 CORNER SEC. 7 - T115 - R23

EAST LINE OF THE SE 1/4 SEC. 7 - T115 - R23

204.62 S00°11'52"W

N89°59'55"E 211.72

SOUTHEAST 1/4

OUTLOT G

N49°45'57"E 489.16

375.70 S01°19'21"E

238.94

N00°29'09"E 397.37

158.43

S12°21'58"W 125.67

S17°06'39"E 28.23

S16°52'42"W 25.47

S07°08'37"E 62.12

S43°24'27"W 69.70

S22°49'02"W 69.70

S66°20'21"W 85.32

S11°01'28"E 26.57

SEC. 7 - T115 - R23

OUTLOT H

N09°54'30"W 92.09

S48°08'03"E 339.53

S89°48'03"E 111.25

N88°44'56"E 226.37

N89°48'03"W 85.51

N20°29'12"W 35.71

S20°29'12"E 65.92

L=216.95 R=760.00 Δ=16°21'20"

Δ=16°21'20" R=840.00 L=239.78

L=164.23 R=760.00 Δ=12°22'53"

Δ=12°22'53" R=840.00 L=181.52

SAVANNA WAY

S08°15'00"W 500.90

N08°15'00"E 500.90

L=179.44 R=900.00 Δ=11°25'25"

Δ=11°25'25" R=960.00 L=195.39

Δ=7°30'00" L=89.67 R=685.00 C.Brg=N15°55'25"E C.=89.60

453.75 N69°50'55"W

N14°27'08"E 625.57

S83°47'05"W 60.58

N79°07'50"W 108.68

S76°43'51"W 141.74

L=88.94 R=765.00 Δ=6°39'40"

365.43 N69°50'55"W

L=31.94 R=280.00 Δ=8°19'10"

N73°26'30"W 31.89

S23°31'36"E 201.61

L=69.75 R=280.00 Δ=14°16'21" C.Brg=N16°23'25"W C.=69.57

S80°44'45"W 59.82

82.28 N75°08'18"W

DRAINAGE AND UTILITY EASEMENT

OUTLOT A

N00°23'45"W 214.84

222.17 S81°28'17"W

412.55 S00°06'42"E

SW 1/4 - SE 1/4 SEC. 7-115-23

OUTLOT B

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT B

N00°45'26"W 241.21

S84°50'26"W 36.73

S29°30'05"W 55.87

S81°39'04"W 34.89

S73°17'42"W 55.17

OUTLOT C

S44°29'02"W 57.30

S56°53'52"W 46.67

S68°09'25"W 46.67

S78°15'38"W 46.67

N58°53'44"W 25.50

N87°55'30"W 102.17

189.40 S19°29'09"W

N81°33'14"W 165.02 (N82°W 2.5 CHAINS DEED)

198.00 N88°30'51"W (N89°W 3.00 CHAINS DEED)

132.00 N76°30'51"W (N77°W 2.00 CHAINS DEED)

198.00 S69°29'09"W (S68°W 3.00 CHAINS DEED)

SE 1/4 - SE 1/4 SEC. 7-115-23

S34°04'47"W 84.23

NARROWS CANYON TRAIL

S19°29'09"W 95.00 (S19°W 1.44 CHAINS DEED)

160.48 N12°25'05"W

GODWIN TRAIL

NARROWS CANYON TRAIL

OUTLOT D

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT D

N00°29'09"E 1247.42 (19.62 CHAINS 1294.92 FT DEED)

EAST LINE OF THE SE 1/4 OF SEC. 7-T115-R23

OUTLOT E

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT E

(S66.5'E 1.55 CHAINS DEED) N66°00'51"W 102.30

(S36°W 2.65 CHAINS DEED) 202.16' (MEAS) S36°00'51"E

OUTLOT F

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT F

SAVANNA WAY

HARDSCRABBLE COURT

NARROWS CANYON TRAIL

S57°15'41"E 970.11

COUNTY ROAD NO. 61 (CHASKA BOULEVARD)

384.01 N57°15'41"W

430.07 S00°02'41"W

OUTLOT J

PARCEL 9

FD. 3/4 IP

FD. ALUMINUM CAP

FD. ALUMINUM CAP

FD. 3/4 IP

S80°25'26"E 546.31

S85°09'20"E 184.94

N31°55'03"W 45.55

N10°39'53"E 225.76

N89°53'24"E 281.56

MINNESOTA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY PLAT NO. 10-29

S89°53'24"W 2011.63

741.15 S89°53'24"W

65 65 66.00

COUNTY ROAD NO. 61 (CHASKA BOULEVARD)

N89°53'24"E 675.11 (MEAS.) (EAST 10.62 CHAINS 700.92 FT DEED)

WITNESS CORNER FOR THE SE CORNER OF THE SE 1/4 SEC. 7 - T115 - R23 FD CARVER COUNTY CAST IRON MONUMENT

SE CORNER OF THE SE 1/4 SEC. 7 - T115 - R23

N89°54'33"E 18.92

S36°00'51"E 72.92

SOUTH LINE OF THE SE 1/4 OF SEC. 7-T115-R23

COUNTY ROAD NO. 61 (CHASKA BOULEVARD)

PARCEL 10A

N

0 100 200

SCALE IN FEET

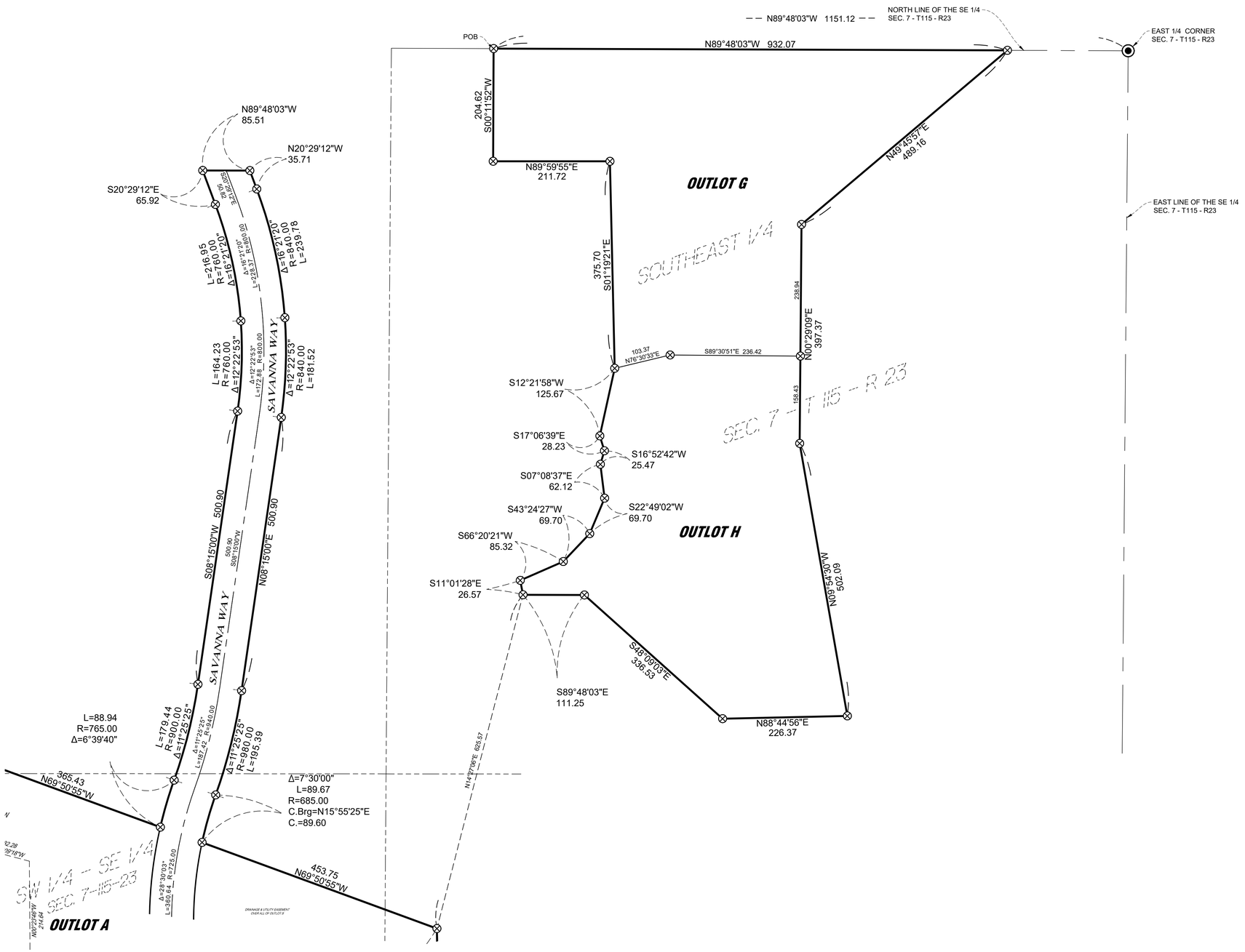
LEGEND

- ● DENOTES FOUND 1/2 INCH IRON MONUMENT
- ⊗ DENOTES 1/2 INCH DIA. x 18 INCH LONG IRON PIPE SET WITH PLASTIC CAP MARKED BY ISG LICENSE NO. 45817.
- ◉ DENOTES FOUND CAST IRON MONUMENT

BEARING NOTE:
BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 115 NORTH, RANGE 23 WEST WHICH IS ASSUMED TO HAVE A BEARING OF N00°29'09"E.

HIGHPOINT VISTAS

PLAT FILE NO.
C.R. DOC. NO.



N

0 100 200

SCALE IN FEET

LEGEND

⊗ DENOTES 1/2 INCH DIA. x 18 INCH LONG IRON PIPE SET WITH PLASTIC CAP MARKED BY ISG LICENSE NO. 45817.

◉ DENOTES FOUND CAST IRON MONUMENT

BEARING NOTE:
BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 115 NORTH, RANGE 23 WEST WHICH IS ASSUMED TO HAVE A BEARING OF N00°29'09"E.

ISG

HIGHPOINT VISTAS

PLAT FILE NO.
C.R. DOC. NO.

OUTLOT A

OUTLOT B

OUTLOT C
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT C

OUTLOT E
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT E

OUTLOT F
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT F

DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT B

NARROWS CANYON TRAIL

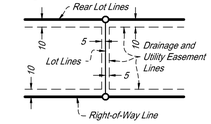
SAVANNA WAY

WATKINS GLEN COURT

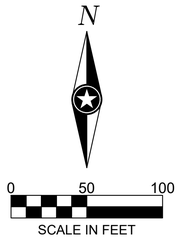
SW 1/4 - SE 1/4
SEC. 7-115-23

COUNTY ROAD NO. 81 (OLSON BOULEVARD)

Drainage and Utility Easements are shown thus:



Being 5 feet in width and adjoining lot lines and being 10 feet in width and adjoining right - of - way lines and rear lot lines, unless otherwise indicated on the plat.



LEGEND

- ● DENOTES FOUND 1/2 INCH IRON MONUMENT
- ⊗ DENOTES 1/2 INCH DIA. x 18 INCH LONG IRON PIPE SET WITH PLASTIC CAP MARKED BY ISG LICENSE NO. 45817.
- ○ DENOTES 1/2 INCH DIA. x 18 INCH LONG IRON PIPE SET IN ACCORDANCE WITH MN STATUTES SECTION 505.021, SUBD. 10

BEARING NOTE:
BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 115 NORTH, RANGE 23 WEST WHICH IS ASSUMED TO HAVE A BEARING OF N00°29'09"E.

ISG

HIGHPOINT VISTAS

PLAT FILE NO.
C.R. DOC. NO.

NARROWS CANYON TRAIL

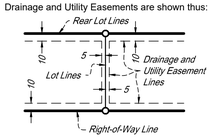
GODWIN TRAIL

OUTLOT C
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT C

OUTLOT D
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT D

OUTLOT E
DRAINAGE & UTILITY EASEMENT OVER ALL OF OUTLOT E

Drainage and Utility Easements are shown thus:



Being 5 feet in width and adjoining lot lines and being 10 feet in width and adjoining right - of - way lines and rear lot lines, unless otherwise indicated on the plat.

N

0 50 100

SCALE IN FEET

LEGEND

- ● DENOTES FOUND MONUMENT
- ○ DENOTES 1/2 INCH DIA. x 18 INCH LONG IRON PIPE SET IN ACCORDANCE WITH MN STATUTES SECTION 505.021, SUBD. 10

BEARING NOTE:
BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 115 NORTH, RANGE 23 WEST WHICH IS ASSUMED TO HAVE A BEARING OF N00°29'09"E.

ISG

FORESTAR

HIGHPOINT VISTAS (PHASE I)

CONSTRUCTION PLANS

CHASKA, MINNESOTA

ISG PROJECT # 23-27575

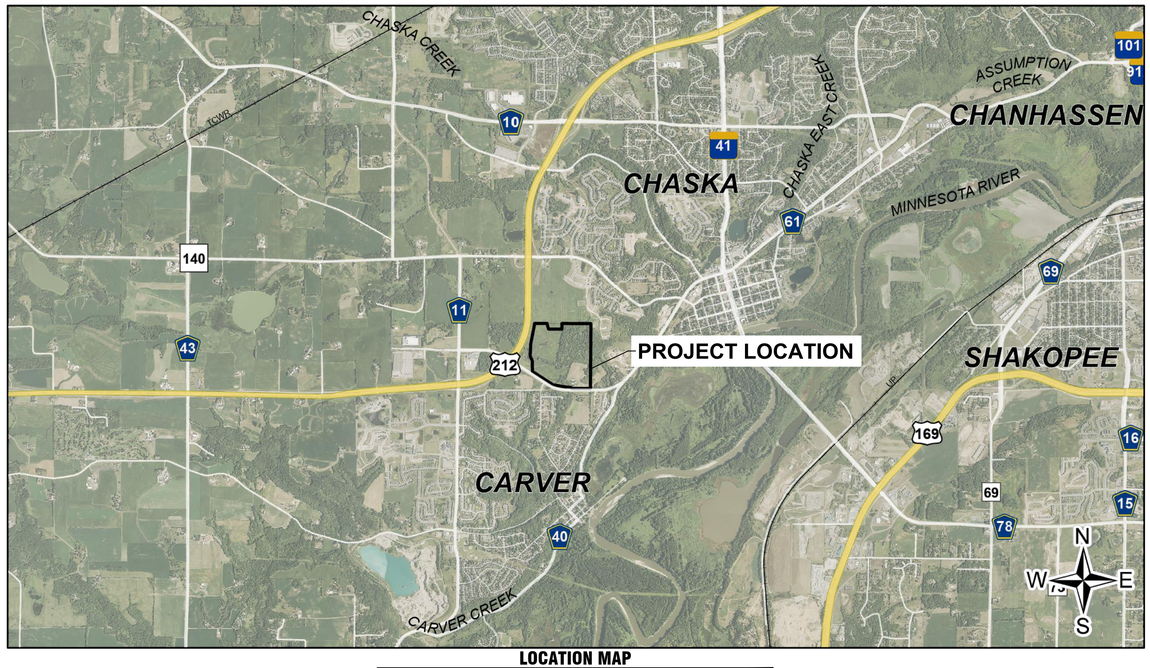
LEGEND

EXISTING

- CITY LIMITS
- SECTION LINE
- QUARTER SECTION LINE
- RIGHT OF WAY LINE
- PROPERTY / LOTLINE
- EASEMENT LINE
- ACCESS CONTROL
- WATER EDGE
- WETLAND BOUNDARY
- WETLAND / MARSH
- FENCE LINE
- CULVERT
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER FORCEMAIN
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND TV
- UNDERGROUND UTILITY
- UNDERGROUND FIBER OPTIC
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE
- MANHOLE/STRUCTURE
- CATCH BASIN
- HYDRANT
- VALVE
- CURB STOP
- POWER POLE
- UTILITY PEDESTAL / CABINET

PROPOSED

- LOT LINE
- RIGHT OF WAY
- EASEMENT
- CULVERT
- STORM SEWER
- STORM SEWER (PIPE WIDTH)
- SANITARY SEWER
- SANITARY SEWER (PIPE WIDTH)
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TV
- CONTOUR
- MANHOLE (STORM, SANITARY)
- CATCH BASIN
- HYDRANT
- VALVE



LOCATION MAP

0 3,000 6,000

SCALE IN FEET

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ABBREVIATIONS:

AC	ACRE	CL	CENTERLINE	FDC	FIRE DEPARTMENT CONNECTION	HH	HANDHOLE	LSO	LOWEST STRUCTURAL OPENING	PP	POLYPROPYLENE	STA	STATION
ADA	AMERICANS WITH DISABILITIES ACT	CMP	CORRUGATED METAL PIPE	FDN	FOUNDATION	HORIZ	HORIZONTAL	MAX	MAXIMUM	PSI	POUNDS PER SQUARE INCH	SY	SQUARE YARD
ADD	ADDENDUM	CO	CLEANOUT	FES	FLARED END SECTION	HR	HOUR	MB	MAIL BOX	PVC	POLYVINYL CHLORIDE	T/C	TOP OF CURB
AFF	ABOVE FINISHED FLOOR	CONC	CONCRETE	FFE	FINISHED FLOOR ELEVATION	HWL	HIGH WATER LEVEL	MECH	MECHANICAL	PVMT	PAVEMENT	TEL	TELEPHONE
AGG	AGGREGATE	CONST	CONSTRUCTION	FPM	FEET PER MINUTE	HWY	HIGHWAY	MH	MANHOLE	QTY	QUANTITY	TEMP	TEMPORARY
APPROX	APPROXIMATE	CONT	CONTINUOUS	FPS	FEET PER SECOND	HYD	HYDRANT	MIN	MINIMUM	R	RIM	THRU	THROUGH
ARCH	ARCHITECT, ARCHITECTURAL	CY	CUBIC YARD	FT	FOOT, FEET	I	INVERT	MISC	MISCELLANEOUS	RAD	RADIUS	TNFH	TOP NUT OF FIRE HYDRANT
BFE	BASEMENT FLOOR ELEVATION	C&G	CURB AND GUTTER	FTG	FOOTING	ID	INSIDE DIAMETER	NO	NUMBER	RCP	REINFORCED CONCRETE PIPE	TRANS	TRANSFORMER
BIT	BITUMINOUS	DEMO	DEMOLITION	GA	GAUGE	IN	INCH	NTS	NOT TO SCALE	RD	ROOF DRAIN	TV	TELEVISION
BM	BENCHMARK	DIA	DIAMETER	GAL	GALLON	INV	INVERT	NWL	NORMAL WATER LEVEL	REBAR	REINFORCING BAR	T/W	TOP OF WALL
CAD	COMPUTER-AIDED DESIGN	DIM	DIMENSION	GALV	GALVANIZED	IP	IRON PIPE	OC	ON CENTER	REM	REMOVE	TYP	TYPICAL
CB	CATCH BASIN	DS	DOWNSPOUT	GC	GENERAL CONTRACTOR	IPS	IRON PIPE SIZE	OCEW	ON CENTER EACH WAY	ROW	RIGHT OF WAY	UT	UTILITY, UNDERGROUND TELEPHONE
CFS	CUBIC FEET PER SECOND	EA	EACH	GFE	GARAGE FLOOR ELEVATION	J-BOX	JUNCTION BOX	OH	OVERHEAD	R/W	RIGHT OF WAY		
CF	CUBIC FOOT	ELEC	ELECTRICAL	GL	GUTTER LINE	JT	JOINT	OHD	OVERHEAD DOOR	SAN	SANITARY	VCP	VITRIFIED CLAY PIPE
CI	CAST IRON	ELEV	ELEVATION	GPM	GALLONS PER MINUTE	LF	LINEAR FEET	OZ	OUNCE	SCH	SCHEDULE	W/O	WITHOUT
CIP	CAST IRON PIPE	EOF	EMERGENCY OVERFLOW	GV	GATE VALVE	LIN	LINEAR	PED	PEDESTAL, PEDESTRIAN	SF	SQUARE FOOT	W/	WITH
CIPC	CAST IN PLACE CONCRETE	EQ	EQUAL	HDPE	HIGH DENSITY POLYETHYLENE	LPS	LOW PRESSURE STEAM	PERF	PERFORATED	SPEC	SPECIFICATION	YD	YARD
CJ	CONTROL JOINT	EX	EXISTING	HD	HEAVY DUTY	LS	LUMP SUM	PL	PROPERTY LINE	SQ	SQUARE	YR	YEAR

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS, AND CLARIFICATIONS ISSUED BY ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED, AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS, AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "GOPHER STATE ONE CALL" FOR UTILITY LOCATIONS A MINIMUM OF 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-252-1166).

PROJECT INDEX:

OWNER:
FORESTAR
STEPHEN W. GARDINER
20860 KENBRIDGE CT (SUITE 100)
LAKEVILLE/MN/55044
PH: 612.581.8940

PROJECT ADDRESS / LOCATION:

SEC 7/TOWNSHIP 115N/RANGE 23W

CARVER COUNTY
CHASKA, MN

MANAGING OFFICE:

BLOOMINGTON OFFICE
7900 INTERNATIONAL DRIVE
SUITE 550
MINNEAPOLIS, MN 55425
PHONE: 952.426.0699

PROJECT MANAGER: BECKY GUENTHER
EMAIL: BECKY.GUENTHER@ISGINC.COM

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF CHASKA REQUIREMENTS AND MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION, THE MnDOT SUPPLEMENTAL SPECIFICATIONS, SEPTEMBER 2022, THE STANDARD SPECIFICATIONS FOR SANITARY SEWER, STORM DRAIN AND WATERMAIN AS PROPOSED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA 2018, AND THE CURRENT VERSION OF THE MINNESOTA STATE PLUMBING CODE UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), 1996 ADJUSTMENT (NAD83(1996)) ON THE CARVER COUNTY COORDINATE SYSTEM, IN U.S. SURVEY FEET.

ELEVATIONS HAVE BEEN REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
RTK GPS METHODS WERE USED TO ESTABLISH HORIZONTAL AND VERTICAL COORDINATES FOR THIS PROJECT.

B.M. ELEVATION=948.96

MnDOT GSID Station #108660
LOCATED 0.75 MILES NE FROM JUNCTION OF HIGHWAY 212 AND JONATHAN CARVER PARKWAY IN CHASKA

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN FALL OF 2022 AND FALL OF 2023 BY ISG.

FORESTAR

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TITLE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TITLE

SHEET

1

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:25 PM

SOIL AND CONSTRUCTION NOTES

1. TOP OF THE GRADING GRADE: THE TOP OF GRADING GRADE FOR THIS PROJECT IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE.

2. SUITABLE GRADING MATERIAL: ON THIS PROJECT SUITABLE GRADING MATERIAL SHALL INCLUDE ALL MINERAL SOILS IN ACCORDANCE WITH THE TRIAXIAL CHART IN THE MnDOT GRADING AND BASE MANUAL, EXCEPT SILT. UNSUITABLE MATERIALS SHALL INCLUDE DEBRIS, MARL, PEAT, WOOD, OR ANY OTHER ORGANIC SOILS. SELECT GRADING MATERIAL SHOULD BE RESERVED FOR EMBANKMENT PLACEMENT WITHIN THE ROADWAY CORE.

3. STRIP ALL INPLACE TOPSOIL AND SLOPE DRESSING IN AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING. INPLACE TOPSOIL AND SLOPE DRESSING, ENCOUNTERED IN THE AREAS OF PROPOSED CONSTRUCTION.

4. PROVIDE A SAWCUT WHERE PLACING NEW PAVEMENT NEXT TO INPLACE PAVEMENT TO ENSURE A UNIFORM JOINT. THE CONTRACTOR SHALL SAWCUT THE EXISTING BITUMINOUS PAVEMENT AT ALL LOCATIONS WHERE THE NEW PAVEMENT MATCHES IN PLACE PAVEMENT, PROVIDING A CLEAN STRAIGHT EDGE. PRIOR TO PAVING THE WEAR COURSE, THE CONTRACTOR SHALL MILL THE EDGE OF ADJACENT PAVEMENTS TO PROVIDE FULL DEPTH OF THE WEAR COURSE TO THE EDGE. SAW CUTTING AND MILLING OF THE EDGES OF THE EXISTING PAVEMENTS AT THE CONSTRUCTION LIMITS SHALL BE INCIDENTAL TO PAVING. THE CONTRACTOR SHALL ALSO BE REQUIRED TO CLEAN THE UNDERLYING PAVEMENT SURFACE PRIOR TO PAVING THE WEAR COURSE. A WATER TRUCK AND PICK-UP STREET SWEEPER WILL BE REQUIRED FOR THIS WORK TO MINIMIZE DUST AND DIRT IMPACTS ON ADJACENT RESIDENCES.

5. BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION AND EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE RECYCLED TO THE EXTENT ALLOWED IN BASE AND SURFACING ITEMS OR DISPOSED OF OFF THE PROJECT LIMITS IN ACCORDANCE WITH MnDOT SPECIFICATION SPEC. 2104.3C3.

6. OBTAIN COMPACTION ON THE GRADING PORTION OF PERMANENT CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND IF IT ISNT SPECIFICALLY OUTLINED THEN FOLLOW THE "QUALITY COMPACTION METHOD" REQUIREMENTS.

7. OBTAIN COMPACTION ON THE MnDOT CLASS 5 PORTION OF THE PAVEMENT SECTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND CITY OF CHASKA.

8. TEST ROLLING SHALL BE REQUIRED ON ALL ROADWAYS WITH A LOADED TRI-AXLE DUMP TRUCK AT THE BOTTOM OF THE SUBGRADE AND THE TOP OF THE AGGREGATE BASE.

9. IN ANY PROPOSED CONSTRUCTION THE CONTRACTOR SHALL STRIVE TO SUBSTANTIALLY MATCH THE SOILS INPLACE IN THE TOP 4' OF THE ROADWAYS. GRANULAR BACKFILL SHALL NOT BE PERMITTED ADJACENT TO INPLACE NON-GRANULAR SOILS IN ORDER TO PREVENT AN ABRUPT SOILS DIFFERENTIAL.

10. THE BOTTOM OF ALL SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD".

11. IN ANY CASE WHERE GRANULAR EMBANKMENTS OR BACKFILL JOIN NON-GRANULAR SOIL EMBANKMENTS OR BACKFILL, PROVIDE A 1(V):20(H) TRANSITION TAPER BETWEEN THE CHANGES IN MATERIAL TO PREVENT AN ABRUPT SOILS DIFFERENTIAL. THE 1(V):20(H) TAPER SHALL BE CONSTRUCTED SO THAT THE GRANULAR BACKFILL MATERIAL OVERLAYS THE ADJACENT NON-GRANULAR SOILS BACKFILL.

12. WHERE CONNECTING NEW SURFACING ADJACENT TO ANY INPLACE PAVEMENTS TO BE WIDENED, CUT VERTICALLY TO THE BOTTOM OF THE INPLACE SURFACING OR TO THE BOTTOM OF THE NEW SURFACING DESIGN, WHICH EVER IS DEEPER, THEN AT A 2(V):1(H) SLOPE TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

13. WHERE SUBCUTS RUN INTO DRIVEWAYS OR LOCAL ROADS, CUT VERTICALLY TO THE BOTTOM OF THE INPLACE SURFACING OR TO THE BOTTOM OF THE NEW SURFACING DESIGN, WHICHEVER IS DEEPER, THEN AT A 1(V):4(H) TAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

14. THE CONTRACTOR IS HEREBY REMINDED OF THEIR RESPONSIBILITY UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THIS AREA. CONTACT MUST BE MADE THROUGH GOPHER STATE ONE-CALL.

15. SLOPE DRESSING ON THIS PROJECT IS DEFINED AS THE TOPSOIL OR OTHER SOIL PLACED DURING CONSTRUCTION TO PROVIDE A MEDIUM FOR ESTABLISHING TURF.

16. ANY DEBRIS WHICH MAY BE ENCOUNTERED DURING GRADING SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT RIGHT OF WAY IN A SUITABLE DISPOSAL AREA.

17. EXTREME CARE SHALL BE TAKEN SO THAT ALL EXISTING TREES LOCATED WITHIN & ADJACENT TO THE CONSTRUCTION AREAS ARE NOT REMOVED OR DAMAGED, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL CONTACT THE OWNER WITH ANY POTENTIAL CONFLICTS.

18. UNLESS OTHERWISE RECOMMENDED, PROVIDE FOR ALL SUBCUTS AND BACKFILL ACCORDINGLY THROUGHOUT THE ENTIRE PROJECT AS DEFINED ON THE GRADING PLANS.

19. PROVIDE 1(V):20(H) TAPERS WHEN CHANGING SUBCUT DEPTHS.

20. PIPE SEWERS CONNECTING MANHOLES AND CATCH BASINS SHALL BE IN ACCORDANCE WITH MNDOT SPEC. 2503 AND CITY OF CHASKA REQUIREMENTS. BEDDING AND BACKFILL SHALL CONSIST OF UNIFORM SUITABLE GRADING MATERIAL MATCHING ADJACENT SOILS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

21. NO EXTRA PAYMENT WILL BE MADE FOR TEMPORARY STOCKPILING OF EXCAVATION, EMBANKMENT AND/OR BORROW MATERIAL.

22. CONSTRUCTION ACTIVITY SHALL BE PERFORMED IN SUCH A MANNER THAT ACCESS IS MAINTAINED TO ALL RESIDENCES. WHERE CONSTRUCTION OPERATIONS REQUIRE CLOSURE OF ACCESS TO SITE OR SURROUNDING PROPERTIES, CONTRACTOR SHALL COORDINATE WITH SAID PROPERTY OWNER AT LEAST 24 HOURS BEFORE THE ANTICIPATED ACCESS INTERRUPTION AND ALL ACCESS SHALL BE AT LEAST TEMPORARILY RESTORED EACH NIGHT BEFORE THE END OF THE WORK DAY. NO PROPERTY OWNER SHALL BE LEFT WITHOUT ADEQUATE ACCESS OVERNIGHT OR OVER THE WEEKEND. EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED AS WELL.

23. AS SHOWN ON THE PLANS, VARIOUS UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS. THERE ARE ADDITIONAL UTILITIES THAT MAY EXIST AND ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR ACTIVITIES WITH THE AFFECTED UTILITY COMPANIES AND/OR ADJACENT PROPERTY OWNERS AND WILL BE RESPONSIBLE FOR VERIFICATION AND PROTECTION OF ALL UTILITIES IN THEIR EXISTING LOCATION (POWER POLES, PEDESTALS, ETC.). THE CONTRACTOR SHALL COORDINATE WITH THE PRIVATE UTILITIES AND/OR ADJACENT PROPERTY OWNERS TO ARRANGE SUPPORTING/RELOCATE AND/OR REPAIRS TO ALL FACILITIES AS NEEDED FOR ALL UTILITY AND STREET IMPROVEMENTS. THE OWNER SHALL NOT INCUR ADDITIONAL COSTS IF THE LOCATIONS OF UTILITIES ARE NOT SHOWN ON THE PLANS FOR FOR DELAYS IN CONSTRUCTION CAUSED FROM CONFLICTS WITH PRIVATE UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH CARVER COUNTY, THE CITY OF CHASKA, AND ALL UTILITY COMPANIES FOR ANY NECESSARY REMOVAL AND RELOCATION OF THEIR FACILITIES. THE CONTRACTOR SHALL PERFORM GRADING OPERATIONS AROUND ALL OVERHEAD ELECTRIC POWER POLES AND GUY WIRES. COORDINATE WITH LOCAL ELECTRIC COMPANY.

24. STORAGE AREAS ARE ONLY FOR NEW MATERIALS TO BE INCORPORATED INTO THE WORK OR MATERIALS SALVAGED FROM THE PROJECT THAT ARE TO BE REINSTALLED AS PART OF THE PROJECT. CONTRACTOR WILL NOT BE ALLOWED TO STORE PROJECT REMOVAL ITEMS (SUCH AS CONCRETE PAVEMENTS, SIDEWALKS, OLD MANHOLE STRUCTURES, ETC.) FOR LATER DISPOSAL. THOSE TYPES OF MATERIALS SHALL BE REMOVED FROM THE PROJECT AREA ON THE DAY THAT IT IS REMOVED FROM ITS EXISTING LOCATION,. THE CONTRACTOR SHALL ERECT A TEMPORARY BARRIER SYSTEM TO PREVENT THE GENERAL PUBLIC FROM ACCESSING THE STORAGE AREA. THE BARRIER SYSTEM SHALL BE APPROVED BY THE ENGINEER AND ERECTED PRIOR TO STORING MATERIALS. THE STORAGE AREAS SHALL BE RESTORED TO EXISTING OR BETTER QUALITY PRIOR TO PROJECT ACCEPTANCE. ALL COSTS INCURRED BY THE CONTRACTOR TO PROVIDE, MAINTAIN AND REMOVE THE TEMPORARY BARRIER SYSTEM AND RESTORE THE STORAGE AREA ARE INCIDENTAL TO THE PROJECT.

25. CONCRETE WASHOUT SHALL BE IN ACCORDANCE WITH MnDOT SPECIFICATION 1717 AND AS MAY BE MODIFIED IN THE SPECIAL PROVISIONS. ALL MATERIALS AND WORK NECESSARY TO CONSTRUCT AND MAINTAIN THE CONCRETE WASHOUT AREA SHALL BE INCIDENTAL TO CONCRETE PAY ITEMS.

26. ANY DISTURBED PROPERTY PINS SHALL BE REPLACED AND RESET AT NO COST TO THE OWNER.

27. ALL CURB RAMPS & SIDEWALKS SHALL CONFORM TO THE LATEST ADA REQUIREMENTS.

28. UTILITY TRENCHES SHALL BE COMPACTED BY THE METHODS LISTED IN THE GEOTECHNICAL REPORT. IF MEANS ARE NOT SPECIFIED THEN FOLLOW THE THE "QUALITY COMPACTION METHOD" PER MnDOT SPECIFICATIONS.

29. THE REMOVAL OF BITUMINOUS/CONCRETE PAVEMENT SHALL INCLUDE ALL NECESSARY SAWCUTS AS INCIDENTAL.

30. ALL FIELD TILES CROSSING THE EXISTING AND/OR NEW RIGHT OF WAY SHALL BE PROTECTED AT ALL TIMES. TILE LINES MARKED ON THIS PLAN AND ANY LOCATED DURING CONSTRUCTION OPERATIONS SHALL BE VERIFIED TO BE IN WORKING ORDER AT THE COMPLETION OF MASS EARTHWORK AND AGGREGATE PLACEMENT OPERATIONS. INSPECTION, DOCUMENTATION AND REPAIR/REPLACEMENT OF TILE LINES, IF NECESSARY DUE TO THE NEGLIGENCE OF THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

31. THE CONTRACTOR SHALL INSTALL TEMPORARY MAIL BOXES AND SUPPORTS AT LOCATIONS DESIGNATED BY THE POST MASTER DURING CONSTRUCTION OPERATIONS, INCIDENTAL.

32. IT IS SUSPECTED THAT UNKNOWN TILES ARE LOCATED WITHIN THE EXCAVATION AREA. SHOULD A TILE BE BROKEN DURING EXCAVATION ACTIVITES AND DETERMINED TO BE A LIVE TILE, THE CONTRACTOR SHALL FURNISH AND UTILIZE THE SAME OR SIMILAR MATERIAL AS THE BROKEN PIPE TO RECONNECT THE BROKEN TILE. WHERE THE NEW PIPING AND EXISTING PIPE ARE OF DIFFERENT SIZES AND/OR MATERIALS, THE CONTRACTOR SHALL FURNISH AND INSTALL ECCENTRIC FITTINGS OR "FERNCOS" TO PROVIDE A CONSTANT FLOW LINE ELEVATION AND WATERTIGHT CONNECTION.

PLOT DATE: 2/25/2025 4:25 PM

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TITLE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

CONSTRUCTION NOTES

SHEET

2

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY NOT FOR CONSTRUCTION

SANITARY SEWER STRUCTURE SCHEDULE

STRUCTURE NO.	ALIGNMENT	STATION	LOCATION	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
S-8	NARROWS CANYON TRAIL SE	23+75	0' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	21.99	867.49	845.50	SP-8
S-9	NARROWS CANYON TRAIL SE	21+55	1' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	17.76	884.27	866.51	SP-9
S-10	NARROWS CANYON TRAIL SE	20+20	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	16.14	894.62	878.48	SP-10
S-11	NARROWS CANYON TRAIL SE	18+21	2' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.52	903.15	888.63	SP-11
S-12	NARROWS CANYON TRAIL SE	17+17	3' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	14.35	908.38	894.04	SP-12
S-13	NARROWS CANYON TRAIL SE	16+14	5' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.86	912.33	899.47	SP-13
S-14	NARROWS CANYON TRAIL SE	14+84	2' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	19.02	921.61	902.59	SP-14
S-15	NARROWS CANYON TRAIL SE	12+28	1' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	20.66	924.73	904.07	SP-15
S-16	NARROWS CANYON TRAIL SE	11+52	2' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	19.00	923.55	904.55	SP-16
S-17	NARROWS CANYON TRAIL SE	10+22	6' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.32	923.62	905.30	SP-17
S-18	NARROWS CANYON TRAIL SE	9+61	5' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.48	924.19	905.71	SP-18
S-18A	GODWIN CT	122+43	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.40	925.17	906.77	SP-18A
S-18B	GODWIN CT	123+86	37' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.15	919.77	907.62	SP-18B
S-19	NARROWS CANYON TRAIL SE	7+93	11' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	16.57	927.09	910.52	SP-19
S-20	NARROWS CANYON TRAIL SE	6+38	9' R	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	19.92	931.32	911.40	SP-20
S-21	NARROWS CANYON TRAIL SE	5+51	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.94	930.89	911.95	SP-21
S-21A	WATKINS GLEN COURT	113+24	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	15.92	929.15	913.23	SP-21A
S-22	NARROWS CANYON TRAIL SE	3+24	2' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.36	931.51	913.15	SP-22
S-23	SAVANNA WAY	5+15	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	16.89	930.66	913.77	SP-23
S-23A	NARROWS CANYON TRAIL SE	0+45	1' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.52	936.21	917.69	SP-23A
S-24	SAVANNA WAY	6+61	1' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	13.85	928.55	914.70	SP-24
S-25	SAVANNA WAY	8+80	10' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	12.57	928.69	916.12	SP-25
S-26	SAVANNA WAY	10+73	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	15.90	933.28	917.38	SP-26
S-27	SAVANNA WAY	3+50	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	18.34	933.04	914.70	SP-27
S-28	SAVANNA WAY	1+64	0'	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	19.98	935.71	915.73	SP-28
S-29	SAVANNA WAY	1+01	56' L	MnDOT 4007C	48 Ø	RC	NEENAH R-1642 "SANITARY SEWER" 2 CONCEALED PICK HOLES	17.86	934.10	916.24	SP-29

SANITARY SEWER PIPE SCHEDULE

PIPE NO.	ALIGNMENT	STATION	LOCATION	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-9	NARROWS CANYON TRAIL SE	21+55' to 23+75'	1' R to 0' R	S-9	866.51	S-8	855.52	8	PVC	SDR-35	5.00%	220
SP-10	NARROWS CANYON TRAIL SE	20+20' to 21+55'	0' to 1' R	S-10	878.48	S-9	871.71	8	PVC	SDR-35	5.00%	135
SP-11	NARROWS CANYON TRAIL SE	18+21' to 20+20'	-2' L to 0'	S-11	888.63	S-10	878.68	8	PVC	SDR-35	5.00%	199
SP-12	NARROWS CANYON TRAIL SE	17+17' to 18+21'	-3' L to -2' L	S-12	894.04	S-11	888.83	8	PVC	SDR-35	5.00%	104
SP-13	NARROWS CANYON TRAIL SE	16+14' to 17+17'	-5' L to -3' L	S-13	899.47	S-12	894.24	8	PVC	SDR-35	5.00%	105
SP-14	NARROWS CANYON TRAIL SE	14+84' to 16+14'	-2' L to -5' L	S-14	902.69	S-13	899.67	8	PVC	SDR-26	2.33%	130
SP-15	NARROWS CANYON TRAIL SE	12+28' to 14+84'	-1' L to -2' L	S-15	904.07	S-14	902.79	8	PVC	SDR-26	0.50%	257
SP-16	NARROWS CANYON TRAIL SE	11+52' to 12+28'	-2' L to -1' L	S-16	904.55	S-15	904.17	8	PVC	SDR-26	0.50%	75
SP-17	NARROWS CANYON TRAIL SE	10+22' to 11+52'	6' R to -2' L	S-17	905.30	S-16	904.65	8	PVC	SDR-26	0.50%	130
SP-18	NARROWS CANYON TRAIL SE	9+61' to 10+22'	5' R to 6' R	S-18	905.71	S-17	905.40	8	PVC	SDR-26	0.50%	62
SP-18A	GODWIN CT	122+43' to 120+50'	0' to 0'	S-18A	906.77	S-18	905.81	8	PVC	SDR-26	0.50%	193
SP-18B	GODWIN CT	123+86' to 122+43'	37' R to 0'	S-18B	907.62	S-18A	906.87	8	PVC	SDR-26	0.50%	150
SP-19	NARROWS CANYON TRAIL SE	7+93' to 9+61'	11' R to 5' R	S-19	910.52	S-18	905.81	8	PVC	SDR-26	2.77%	170
SP-20	NARROWS CANYON TRAIL SE	6+38' to 7+93'	9' R to 11' R	S-20	911.40	S-19	910.62	8	PVC	SDR-26	0.50%	158
SP-21	NARROWS CANYON TRAIL SE	5+51' to 6+38'	0' to 9' R	S-21	911.95	S-20	911.50	8	PVC	SDR-26	0.50%	89
SP-21A	WATKINS GLEN COURT	113+24' to 111+00'	0' to 0'	S-21A	913.23	S-21	912.11	8	PVC	SDR-26	0.50%	224
SP-22	NARROWS CANYON TRAIL SE	3+24' to 5+51'	-2' L to 0'	S-22	913.15	S-21	912.05	8	PVC	SDR-26	0.49%	227
SP-23	NARROWS CANYON TRAIL SE	2+28' to 3+24'	0' to -2' L	S-23	913.77	S-22	913.25	8	PVC	SDR-26	0.55%	95
SP-23A	NARROWS CANYON TRAIL SE	0+45' to 2+28'	-1' L to 0'	S-23A	917.69	S-23	913.87	8	PVC	SDR-35	2.08%	183
SP-23B	NARROWS CANYON TRAIL SE	0+37' to 0+45'	-2' L to -1' L	8" PLUG	917.85	S-23A	917.69	8	PVC	SDR-35	2.08%	8
SP-24	SAVANNA WAY	6+61' to 5+15'	-1' L to 0'	S-24	914.70	S-23	913.82	8	PVC	SDR-35	0.60%	146
SP-25	SAVANNA WAY	8+80' to 6+61'	-10' L to -1' L	S-25	916.12	S-24	914.80	8	PVC	SDR-35	0.60%	220
SP-26	SAVANNA WAY	10+73' to 8+80'	0' to -10' L	S-26	917.38	S-25	916.22	8	PVC	SDR-35	0.60%	194
SP-26A	SAVANNA WAY	10+72' to 10+73'	22' R to 0'	ST--554	917.59	S-26	917.48	8	PVC	SDR-35	0.50%	22
SP-26B	SAVANNA WAY	10+74' to 10+73'	-10' L to 0'	ST--553	917.53	S-26	917.48	8	PVC	SDR-35	0.50%	10
SP-27	SAVANNA WAY	3+50' to 5+15'	0' to 0'	S-27	914.70	S-23	913.87	8	PVC	SDR-26	0.50%	165
SP-28	SAVANNA WAY	1+64' to 3+50'	0' to 0'	S-28	915.73	S-27	914.80	8	PVC	SDR-26	0.50%	185
SP-29	SAVANNA WAY	1+01' to 1+64'	-56' L to 0'	S-29	916.24	S-28	915.83	8	PVC	SDR-26	0.50%	83
SP-30	SAVANNA WAY	0+87' to 1+01'	-56' L to -56' L	STUB	916.40	S-29	916.34	8	PVC	SDR-26	0.50%	13

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-1	ST-1	908.03	FES-1	907.10	60	RCP	RCP	0.61%	152
P-1A	FES-1A	921.06	ST-1	920.60	54	RCP	RCP	0.90%	51
P-601	FES-601	924.50	ST-601	924.64	24	RCP	RCP	0.50%	28
P-602	ST-601	919.50	ST-602	918.93	24	RCP	RCP	0.40%	142
P-603	ST-602	918.93	ST-604	918.05	24	RCP	RCP	0.40%	223
P-604	ST-604	915.70	ST-1	915.19	36	RCP	RCP	0.35%	147
P-604A	ST-604A	916.00	ST-604	915.90	24	RCP	RCP	0.50%	20
P-604B	FES-604B	921.50	ST-604A	921.59	24	RCP	RCP	0.50%	19
P-701	ST-701	924.19	FES-701	924.00	30	RCP	RCP	0.16%	117
P-701A	ST-701A	928.31	ST-701	927.89	18	RCP	RCP	1.00%	42
P-702	ST-702	924.94	ST-701	924.39	30	RCP	RCP	0.29%	189
P-702A	ST-702A	925.42	ST-702	925.14	18	RCP	RCP	0.61%	46
P-702B	ST-702B	925.78	ST-702A	925.62	15	RCP	RCP	0.50%	31
P-702C	ST-702C	925.66	ST-702	925.14	12	RCP	RCP	1.00%	52
P-703	ST-703	925.27	ST-702	925.14	24	RCP	RCP	0.29%	43
P-704	ST-704	925.61	ST-703	925.47	18	RCP	RCP	0.30%	47
P-704A	ST-704A	926.17	ST-704	925.81	12	RCP	RCP	0.98%	37
P-705	ST-705	926.91	ST-704	925.81	15	RCP	RCP	0.50%	221
P-705A	ST-705A	927.27	ST-705	927.11	12	RCP	RCP	0.50%	31
P-901	ST-902	917.55	FES-901	917.00	24	RCP	RCP	1.12%	49
P-903	ST-903	918.49	ST-902	918.00	18	RCP	RCP	0.38%	129
P-904	ST-904	919.88	ST-903	918.69	15	RCP	RCP	0.68%	174
P-905	ST-905	920.70	ST-904	920.08	15	RCP	RCP	0.58%	107
P-906	ST-906	921.74	ST-905	920.90	15	RCP	RCP	0.58%	144
P-908	ST-908	917.91	ST-902	917.75	24	RCP	RCP	0.18%	88
P-908A	ST-908A	923.69	ST-908	918.11	15	RCP	RCP	3.90%	143
P-909	ST-909	918.30	ST-908	918.11	15	RCP	RCP	0.39%	48
P-910	ST-910	918.59	ST-909	918.30	15	RCP	RCP	0.34%	83

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-911	ST-911	919.14	ST-910	918.79	15	RCP	RCP	0.40%	89
P-912	FES-912	915.00	ST-912	915.11	24	RCP	RCP	0.52%	21
P-913	ST-912	911.00	FES-913	910.00	30	RCP	RCP	1.31%	76
P-1001	ST-1001	895.15	FES-1001	894.50	24	RCP	RCP	1.71%	38
P-1002	ST-1002	898.43	ST-1001	895.35	24	RCP	RCP	2.00%	154
P-1003	ST-1003	900.44	ST-1002	898.63	24	RCP	RCP	1.97%	92
P-1004	ST-1004	903.23	ST-1003	900.64	24	RCP	RCP	3.14%	83
P-1005	ST-1005	906.54	ST-1004	903.43	24	RCP	RCP	2.07%	150
P-1005A	ST-1005A	918.50	ST-1005	918.18	12	RCP	RCP	0.97%	33
P-1006	ST-1006	910.04	ST-1005	906.74	24	RCP	RCP	1.59%	207
P-1007	ST-1007	910.76	ST-1006	910.24	24	RCP	RCP	0.70%	75
P-1008	ST-1008	911.30	ST-1007	910.96	24	RCP	RCP	0.70%	48
P-1008A	ST-1008A	918.03	ST-1008	917.72	12	RCP	RCP	1.00%	31
P-1009	ST-1009	911.92	ST-1008	911.50	24	RCP	RCP	0.40%	103
P-1010	ST-1010	912.04	ST-1009	911.92	24	RCP	RCP	0.40%	31
P-1011	ST-1011	912.67	ST-1010	912.24	18	RCP	RCP	1.20%	35
P-1011A	ST-1011A	913.80	ST-1011	912.96	18	RCP	RCP	0.50%	168
P-1011B	ST-1011B	914.87	ST-1011A	914.00	18	RCP	RCP	0.50%	175
P-1012A	ST-1012A	918.47	ST-1011	917.79	12	RCP	RCP	2.50%	27
P-1012B	ST-1012B	919.45	ST-1012A	918.67	12	RCP	RCP	2.50%	31
P-1016	ST-1016	896.82	FES-1016	894.50	15	RCP	RCP	4.71%	49
P-1017	ST-1017	902.54	ST-1016	897.02	12	RCP	RCP	4.71%	117
P-1018	ST-1018	909.03	ST-1017	902.74	12	RCP	RCP	7.25%	87
P-1019	FES-1019	891.36	ST-1019	892.50	24	RCP	RCP	2.99%	38
P-1020	ST-1019	889.75	FES-1020	886.96	24	RCP	RCP	3.27%	85
P-1101	ST-1101	886.87	FES-1101	886.50	30	RCP	RCP	0.99%	37
P-1102	ST-1102	887.17	ST-1101	886.87	30	RCP	RCP	0.90%	33
P-1103	ST-1103	887.58	ST-1102	887.17	30	RCP	RCP	0.30%	139

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-1104	ST-1104	889.44	ST-1103	887.78	18	RCP	RCP	4.51%	37
P-1105	ST-1105	891.54	ST-1104	889.64	18	RCP	RCP	5.00%	38
P-1106	ST-1106	895.06	ST-1105	891.74	18	RCP	RCP	5.00%	66
P-1107	ST-1107	897.34	ST-1106	897.21	18	RCP	RCP	1.00%	13
P-1108	ST-1108	898.47	ST-1107	897.54	18	RCP	RCP	1.00%	93
P-1109	ST-1109	899.46	ST-1108	898.67	18	RCP	RCP	0.50%	157
P-1110	ST-1110	902.06	ST-1109	899.66	12	RCP	RCP	3.00%	80
P-1111	ST-1111	905.73	ST-1110	902.26	12	RCP	RCP	3.00%	116
P-1112	ST-1112	908.45	ST-1111	905.93	12	RCP	RCP	2.41%	105
P-1113	ST-1113	911.32	ST-1112	908.65	12	RCP	RCP	1.64%	163
P-1114	ST-1114	912.22	ST-1113	911.52	12	RCP	RCP	0.82%	85
P-1115	ST-1115	901.10	ST-1106	895.26	12	RCP	RCP	5.00%	117
P-1116	ST-1116	906.28	ST-1115	901.30	12	RCP	RCP	5.00%	100
P-1117	ST-1117	908.18	ST-1116	906.48	12	RCP	RCP	5.00%	34
P-1201	ST-1201	840.31	FES-1201	839.00	24	RCP	RCP	2.00%	66
P-1202	ST-1202	868.54	ST-1201	842.00	15	RCP	RCP	29.16%	91
P-1202A	ST-1202A	869.52	ST-1202	868.74	12	RCP	RCP	2.00%	39
P-1202B	ST-1202B	870.24	ST-1202A	869.72	12	RCP	RCP	1.64%	32
P-1203	ST-1203	881.25	ST-1202	870.17	15	RCP	RCP	5.00%	222
P-1204	FES-1204	882.50	ST-1203	884.37	12	RCP	RCP	2.73%	68
P-1205	ST-1205	857.88	ST-1201	846.35	18	RCP	RCP	13.52%	85
P-1206	ST-1206	858.90	ST-1205	858.07	18	RCP	RCP	2.50%	33
P-1207	ST-1207	863.42	ST-1206	859.10	15	RCP	RCP	2.65%	163
P-1208	ST-1208	874.72	ST-1207	863.62	12	RCP	RCP	7.61%	146
P-1209	FES-1209	839.00	ST-1209	839.09	24	RCP	RCP	0.50%	19
P-1210	ST-1209	834.50	FES-1210	830.00	24	RCP	RCP	7.72%	58

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DATE_____ LIC. NO._____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SCHEDULES
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

UTILITY SCHEDULES

SHEET

3

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
NARROWS CANYON TRAIL SE	0+37 TO 0+66	-11' TO -11'	C900	29	8
NARROWS CANYON TRAIL SE	0+66 TO 0+66	-20' TO -22'	PP	3	6
NARROWS CANYON TRAIL SE	0+67 TO 0+66	-12' TO -19'	PP	7	6
NARROWS CANYON TRAIL SE	0+67 TO 1+40	-11' TO -11'	C900	73	8
SAVANNA WAY	0+87 TO 0+94	-44' TO -45'	C900	7	8
SAVANNA WAY	0+95 TO 1+59	-45' TO 12'	C900	85	8
NARROWS CANYON TRAIL SE	1+41 TO 1+46	-11' TO -11'	C900	5	8
NARROWS CANYON TRAIL SE	1+47 TO 1+52	-11' TO -11'	C900	5	8
NARROWS CANYON TRAIL SE	1+53 TO 1+57	-11' TO -11'	C900	5	8
NARROWS CANYON TRAIL SE	1+58 TO 1+84	-11' TO -11'	C900	26	8
SAVANNA WAY	1+60 TO 2+33	13' TO 16'	C900	74	8
NARROWS CANYON TRAIL SE	1+85 TO 2+36	-11' TO -11'	C900	50	8
SAVANNA WAY	2+33 TO 3+50	16' TO 16'	C900	120	8
NARROWS CANYON TRAIL SE	2+37 TO 2+38	-11' TO -11'	C900	2	12
NARROWS CANYON TRAIL SE	2+40 TO 2+54	-11' TO -11'	C900	15	12
NARROWS CANYON TRAIL SE	2+55 TO 3+15	-11' TO -14'	C900	65	12
NARROWS CANYON TRAIL SE	3+16 TO 4+04	-14' TO -11'	C900	91	12
SAVANNA WAY	3+50 TO 4+77	16' TO 13'	C900	129	8
NARROWS CANYON TRAIL SE	4+04 TO 4+04	-19' TO -11'	C900	8	6
NARROWS CANYON TRAIL SE	4+04 TO 4+04	-23' TO -20'	C900	3	6
NARROWS CANYON TRAIL SE	4+05 TO 5+18	-11' TO -11'	C900	113	12
SAVANNA WAY	4+78 TO 4+87	14' TO 14'	C900	10	8
SAVANNA WAY	4+87 TO 5+23	14' TO 12'	C900	36	8
NARROWS CANYON TRAIL SE	5+18 TO 5+63	-11' TO -12'	C900	43	12
SAVANNA WAY	5+24 TO 5+26	12' TO 11'	C900	2	12
SAVANNA WAY	5+27 TO 6+60	11' TO 11'	C900	133	12
NARROWS CANYON TRAIL SE	5+64 TO 6+36	-12' TO -3'	C900	71	12
NARROWS CANYON TRAIL SE	6+37 TO 6+76	-3' TO -9'	C900	39	12
SAVANNA WAY	6+61 TO 8+80	11' TO 2'	C900	217	12
NARROWS CANYON TRAIL SE	6+75 TO 6+76	-22' TO -18'	C900	4	6
NARROWS CANYON TRAIL SE	6+76 TO 6+77	-17' TO -10'	C900	8	6
NARROWS CANYON TRAIL SE	6+77 TO 7+93	-9' TO -1'	C900	114	12
NARROWS CANYON TRAIL SE	7+93 TO 9+58	-1' TO -6'	C900	162	12
SAVANNA WAY	8+80 TO 10+82	2' TO 13'	C900	201	12
NARROWS CANYON TRAIL SE	9+59 TO 9+69	-6' TO -7'	C900	10	12
NARROWS CANYON TRAIL SE	9+70 TO 10+22	-7' TO -6'	C900	51	12
NARROWS CANYON TRAIL SE	10+22 TO 11+51	-6' TO -13'	C900	130	12
SAVANNA WAY	10+82 TO 10+82	13' TO 18'	C900	4	8
SAVANNA WAY	10+83 TO 10+82	8' TO 12'	C900	4	8
SAVANNA WAY	10+83 TO 10+88	13' TO 13'	C900	5	12
SAVANNA WAY	10+89 TO 11+24	13' TO 33'	C900	41	12
SAVANNA WAY	11+25 TO 18+00	33' TO 38'	C900	682	12
NARROWS CANYON TRAIL SE	11+51 TO 11+85	-13' TO -14'	C900	38	12
NARROWS CANYON TRAIL SE	11+85 TO 12+19	-14' TO -14'	C900	38	12
NARROWS CANYON TRAIL SE	12+19 TO 12+89	-14' TO -10'	C900	72	12
NARROWS CANYON TRAIL SE	12+89 TO 12+89	-23' TO -20'	C900	3	6
NARROWS CANYON TRAIL SE	12+89 TO 12+89	-19' TO -11'	C900	8	6
NARROWS CANYON TRAIL SE	12+90 TO 14+85	-10' TO -13'	C900	197	12
NARROWS CANYON TRAIL SE	14+85 TO 16+13	-13' TO -17'	C900	134	12
NARROWS CANYON TRAIL SE	16+14 TO 17+00	-17' TO -12'	C900	91	12
NARROWS CANYON TRAIL SE	17+01 TO 17+03	-12' TO -12'	C900	2	12
NARROWS CANYON TRAIL SE	17+04 TO 17+08	-12' TO -13'	C900	4	12
NARROWS CANYON TRAIL SE	17+09 TO 17+10	-13' TO -13'	C900	2	12
NARROWS CANYON TRAIL SE	17+11 TO 17+17	-13' TO -14'	C900	6	12
NARROWS CANYON TRAIL SE	17+17 TO 17+49	-14' TO -9'	C900	34	12
NARROWS CANYON TRAIL SE	17+50 TO 18+20	-9' TO -13'	C900	73	12
NARROWS CANYON TRAIL SE	17+53 TO 17+50	-60' TO -10'	C900	51	6
NARROWS CANYON TRAIL SE	17+54 TO 17+53	-64' TO -61'	C900	3	6
SAVANNA WAY	18+00 TO 18+88	38' TO 34'	C900	92	12
NARROWS CANYON TRAIL SE	18+21 TO 21+55	-13' TO -10'	C900	336	12

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

WATERMAIN SCHEDULE

ALIGNMENT	STATION	LOCATION	PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
SAVANNA WAY	18+89 TO 18+89	35' TO 39'	C900	4	8
SAVANNA WAY	18+89 TO 18+89	29' TO 33'	C900	4	8
SAVANNA WAY	18+89 TO 18+93	34' TO 34'	C900	4	12
NARROWS CANYON TRAIL SE	21+55 TO 23+19	-10' TO -10'	C900	162	12
NARROWS CANYON TRAIL SE	23+20 TO 23+22	-10' TO -10'	C900	2	6
NARROWS CANYON TRAIL SE	23+23 TO 23+25	-10' TO -13'	C900	3	6
NARROWS CANYON TRAIL SE	23+25 TO 23+25	-13' TO -19'	C900	6	6
NARROWS CANYON TRAIL SE	23+25 TO 23+25	-20' TO -22'	C900	3	6
WATKINS GLEN COURT	110+88 TO 110+90	-12' TO -12'	C900	2	8
WATKINS GLEN COURT	110+91 TO 113+08	-12' TO -12'	C900	217	8
WATKINS GLEN COURT	113+09 TO 113+60	-12' TO -30'	C900	55	8
WATKINS GLEN COURT	113+60 TO 113+62	-30' TO -31'	C900	2	6
WATKINS GLEN COURT	113+63 TO 113+67	-31' TO -32'	C900	4	6
GODWIN CT	120+41 TO 122+15	-11' TO -10'	C900	174	8
GODWIN CT	122+15 TO 122+15	-21' TO -24'	C900	3	6
GODWIN CT	122+16 TO 122+15	-11' TO -20'	C900	9	6
GODWIN CT	122+16 TO 122+39	-10' TO -10'	C900	23	8
GODWIN CT	122+39 TO 123+67	-10' TO 16'	C900	125	8
GODWIN CT	123+68 TO 123+96	16' TO -2'	C900	34	8
GODWIN CT	123+97 TO 124+02	-2' TO -6'	C900	7	6
GODWIN CT	124+03 TO 124+05	-7' TO -8'	C900	3	6

** PIPE LENGTHS EXCLUDE ALL TEES, VALVES, AND FITTINGS

WATERMAIN FITTING SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE	WEIGHT (LBS)
NARROWS CANYON TRAIL SE	0+37	-11	CAP	8"	26
NARROWS CANYON TRAIL SE	0+67	-11	TEE	8"x6"	79
SAVANNA WAY	0+87	-44	CAP	8"	26
SAVANNA WAY	0+95	-45	BEND	8"x45°	50
NARROWS CANYON TRAIL SE	1+41	-11	BEND	8"x45°	50
NARROWS CANYON TRAIL SE	1+46	-11	BEND	8"x45°	50
NARROWS CANYON TRAIL SE	1+52	-11	BEND	8"x45°	50
NARROWS CANYON TRAIL SE	1+58	-11	BEND	8"x45°	50
SAVANNA WAY	1+60	13	BEND	8"x45°	50
SAVANNA WAY	2+33	16	BEND	8"x11.25°	44
NARROWS CANYON TRAIL SE	2+36	-11	REDUCER	12"x8"	57
NARROWS CANYON TRAIL SE	2+55	-11	BEND	12"x11.25°	68
NARROWS CANYON TRAIL SE	3+16	-14	BEND	12"x22.5°	81
SAVANNA WAY	3+50	16	BEND	8"x11.25°	44
NARROWS CANYON TRAIL SE	4+04	-11	TEE	12"x6"	119
SAVANNA WAY	4+87	14	BEND	8"x11.25°	44
NARROWS CANYON TRAIL SE	5+18	-11	BEND	12"x11.25°	68
SAVANNA WAY	5+23	12	REDUCER	12"x8"	57
SAVANNA WAY	5+26	11	CROSS	12"x12"	202
NARROWS CANYON TRAIL SE	5+63	-12	TEE	12"x8"	126
NARROWS CANYON TRAIL SE	6+36	-3	BEND	12"x22.5°	81
SAVANNA WAY	6+60	11	BEND	12"x11.25°	68
NARROWS CANYON TRAIL SE	6+77	-9	TEE	12"x6"	119
NARROWS CANYON TRAIL SE	7+93	-1	BEND	12"x22.5°	81
SAVANNA WAY	8+80	2	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	9+59	-6	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	9+69	-7	TEE	12"x8"	126
NARROWS CANYON TRAIL SE	10+22	-6	BEND	12"x11.25°	68
SAVANNA WAY	10+82	18	CAP	8"	26
SAVANNA WAY	10+82	13	CROSS	12"x8"	149
SAVANNA WAY	10+83	8	CAP	8"	26
SAVANNA WAY	10+88	13	BEND	12"x22.5°	81
SAVANNA WAY	11+25	33	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	11+51	-13	BEND	12"x11.25°	68
NARROWS CANYON TRAIL SE	11+85	-14	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	12+19	-14	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	12+89	-10	TEE	12"x6"	119
NARROWS CANYON TRAIL SE	14+85	-13	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	16+13	-17	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	17+00	-12	BEND	12"x45°	108
NARROWS CANYON TRAIL SE	17+03	-12	BEND	12"x45°	108
NARROWS CANYON TRAIL SE	17+08	-13	BEND	12"x45°	108
NARROWS CANYON TRAIL SE	17+11	-13	BEND	12"x45°	108
NARROWS CANYON TRAIL SE	17+17	-14	BEND	12"x22.5°	81
NARROWS CANYON TRAIL SE	17+50	-9	TEE	12"x6"	119
SAVANNA WAY	18+00	38	BEND	12"x11.25°	68
NARROWS CANYON TRAIL SE	18+20	-13	BEND	12"x22.5°	81
SAVANNA WAY	18+89	39	CAP	8"	26
SAVANNA WAY	18+89	29	CAP	8"	26
SAVANNA WAY	18+89	34	CROSS	12"x8"	149
NARROWS CANYON TRAIL SE	21+55	-10	BEND	12"x11.25°	68
NARROWS CANYON TRAIL SE	23+19	-10	REDUCER	12"x6"	64
NARROWS CANYON TRAIL SE	23+22	-10	BEND	6"x45°	36
NARROWS CANYON TRAIL SE	23+25	-13	BEND	6"x45°	36
WATKINS GLEN COURT	113+08	-12	BEND	8"x22.5°	50
WATKINS GLEN COURT	113+60	-30	REDUCER	8"x6"	39
GODWIN CT	122+16	-10	TEE	8"x6"	79
GODWIN CT	122+39	-10	BEND	8"x11.25°	44
GODWIN CT	123+67	16	BEND	8"x45°	50
GODWIN CT	123+96	-2	REDUCER	8"x6"	39

HYDRANT SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE	BREAK
NARROWS CANYON TRAIL SE	0+66	-22	HYDRANT	5'x 7'-6"	935.51
NARROWS CANYON TRAIL SE	4+04	-23	HYDRANT	5'x 7'-6"	932.42
NARROWS CANYON TRAIL SE	6+75	-22	HYDRANT	5'x 7'-6"	931.82
NARROWS CANYON TRAIL SE	12+89	-23	HYDRANT	5'x 7'-6"	925.94
NARROWS CANYON TRAIL SE	17+54	-64	HYDRANT	5'x 7'-6"	908.03
NARROWS CANYON TRAIL SE	23+25	-22	HYDRANT	5'x 7'-6"	871.23
WATKINS GLEN COURT	113+67	-32	HYDRANT	5'x 7'-6"	929.32
GODWIN CT	122+15	-24	HYDRANT	5'x 7'-6"	925.99
GODWIN CT	124+05	-8	HYDRANT	5'x 7'-6"	921.07

VALVE SCHEDULE

ALIGNMENT	STATION	LOCATION	TYPE	SIZE
NARROWS CANYON TRAIL SE	0+66	-19	GV & BOX	6"
NARROWS CANYON TRAIL SE	1+85	-11	GV & BOX	8"
NARROWS CANYON TRAIL SE	4+04	-19	GV & BOX	6"
SAVANNA WAY	4+77	14	GV & BOX	8"
NARROWS CANYON TRAIL SE	6+76	-18	GV & BOX	6"
NARROWS CANYON TRAIL SE	12+89	-20	GV & BOX	6"
NARROWS CANYON TRAIL SE	17+53	-61	GV & BOX	6"
NARROWS CANYON TRAIL SE	23+25	-20	GV & BOX	6"
WATKINS GLEN COURT	110+91	-12	GV & BOX	8"
WATKINS GLEN COURT	113+63	-31	GV & BOX	6"
GODWIN CT	122+15	-21	GV & BOX	6"
GODWIN CT	124+03	-6	GV & BOX	6"

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SCHEDULES
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

UTILITY SCHEDULES

SHEET

4

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:27 PM

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	* TOP OF CASTING ELEVATION	OUTLET INVERT	OUTLET PIPE
ST-1	MnDOT 4020	102 Ø	RC	NEENAH 3067-VB	20.25	928.28	908.03	P-1
ST-601	MnDOT 4020	48 Ø	RC	SKIMMER GRATE (SEE DETAIL)	11.00	930.50	919.50	P-602
ST-602	MnDOT 4020	48 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	11.24	930.17	918.93	P-603
ST-604	MnDOT 4020	60 Ø	RC	NEENAH R-4342 BEEHIVE	13.20	928.90	915.70	P-604
ST-604A	MnDOT 4020	60 Ø	RC	SKIMMER GRATE (SEE DETAIL)	11.06	927.06	916.00	P-604A
ST-701	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	14.08	934.26	920.19	P-701
ST-701A	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	6.00	934.31	928.31	P-701A
ST-702	MnDOT 4020	60 Ø	RC	NEENAH R-3067-VB	6.51	931.45	924.94	P-702
ST-702A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.74	931.17	925.42	P-702A
ST-702B	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.32	931.10	925.78	P-702B
ST-702C	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342 BEEHIVE	4.11	929.76	925.66	P-702C
ST-703	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	6.10	931.37	925.27	P-703
ST-704	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	5.50	931.11	925.61	P-704
ST-704A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	4.67	930.84	926.17	P-704A
ST-705	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	3.45	930.37	926.91	P-705
ST-705A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	3.22	930.49	927.27	P-705A
ST-902	MnDOT TYPE F	48 Ø	RC	NEENAH R-4342 BEEHIVE	3.80	921.35	917.55	P-901
ST-903	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	5.45	923.94	918.49	P-903
ST-904	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	7.55	927.42	919.88	P-904
ST-905	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342 BEEHIVE	5.11	925.81	920.70	P-905
ST-906	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342 BEEHIVE	2.85	924.59	921.74	P-906
ST-908	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353 BEEHIVE	4.01	921.91	917.91	P-908
ST-908A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.35	929.04	923.69	P-908A
ST-909	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342 BEEHIVE	3.54	921.84	918.30	P-909
ST-910	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	2.76	921.34	918.59	P-910
ST-911	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	2.75	921.89	919.14	P-911
ST-912	MnDOT 4020	48 Ø	RC	SKIMMER GRATE (SEE DETAIL)	9.60	920.60	911.00	P-913
ST-1001	MnDOT 4020	60 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	6.24	901.39	895.15	P-1001
ST-1002	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V SAFL BAFFLE	12.76	907.19	894.43	P-1002
ST-1003	MnDOT 4020	60 Ø	RC	NEENAH R-3067-VB	7.83	908.28	900.44	P-1003
ST-1004	MnDOT 4020	48 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	9.10	912.34	903.23	P-1004
ST-1005	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	16.37	922.92	906.54	P-1005
ST-1005A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	4.47	922.97	918.50	P-1005A
ST-1006	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	15.06	925.10	910.04	P-1006
ST-1007	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	12.81	923.57	910.76	P-1007
ST-1008	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	11.83	923.13	911.30	P-1008
ST-1008A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.61	923.64	918.03	P-1008A
ST-1009	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	12.10	924.01	911.92	P-1009
ST-1010	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	12.67	924.71	912.04	P-1010
ST-1011	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	12.01	924.67	912.67	P-1011
ST-1011A	MnDOT TYPE F	48 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	11.34	925.14	913.80	P-1011A
ST-1011B	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-VB	4.31	919.18	914.87	P-1011B
ST-1012A	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.46	923.93	918.47	P-1012A
ST-1012B	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	5.12	924.57	919.45	P-1012B
ST-1016	MnDOT TYPE G	48 Ø	RC	NEENAH R-4353-BEEHIVE	4.68	901.50	896.82	P-1016
ST-1017	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	3.00	905.54	902.54	P-1017
ST-1018	MnDOT TYPE G	48 Ø	RC	NEENAH R-4353-BEEHIVE	4.50	913.53	909.03	P-1018
ST-1019	MnDOT 4020	48 Ø	RC	SKIMMER GRATE (SEE DETAIL)	9.75	899.50	889.75	P-1020
ST-1101	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V SAFL BAFFLE	11.73	894.60	882.87	P-1101
ST-1102	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	7.44	894.60	887.17	P-1102
ST-1103	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353 BEEHIVE	3.67	891.25	887.58	P-1103
ST-1104	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	3.13	892.57	889.44	P-1104
ST-1105	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	4.74	896.28	891.54	P-1105
ST-1106	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	7.75	902.81	895.06	P-1106
ST-1107	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	6.54	903.88	897.34	P-1107
ST-1108	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	5.95	904.42	898.47	P-1108
ST-1109	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	3.09	902.55	899.46	P-1109
ST-1110	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	4.50	906.56	902.06	P-1110
ST-1111	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	5.82	911.55	905.73	P-1111
ST-1112	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	4.08	912.52	908.45	P-1112

* TOP OF CASTING ELEVATIONS ON CURB STYLE CATCH BASINS = TOP BACK OF CURB BOX, NOT GUTTER ELEVATION
** STRUCTURES WITH SAFL BAFFLE (SEE DETAIL)

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	* TOP OF CASTING ELEVATION	OUTLET INVERT	OUTLET PIPE
ST-1113	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	9.11	920.43	911.32	P-1113
ST-1114	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	3.75	915.97	912.22	P-1114
ST-1115	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	10.56	911.67	901.10	P-1115
ST-1116	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	7.38	913.66	906.28	P-1116
ST-1117	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	6.16	914.34	908.18	P-1117
ST-1201	MnDOT 4020	48 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	11.02	851.33	840.31	P-1201
ST-1202	MnDOT 4020	48 Ø	RC	NEENAH R-1642 "STORM SEWER" STAMP 2 CONCEALED PICK HOLES	7.44	875.98	868.54	P-1202
ST-1202A	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V SAFL BAFFLE	9.01	874.52	865.52	P-1202A
ST-1202B	CATCH BASIN (TYPE 1)	24 x 36	RC	NEENAH R-3067-V	4.38	874.62	870.24	P-1202B
ST-1203	MnDOT 4020	48 Ø	RC	SKIMMER GRATE (SEE DETAIL)	10.25	891.50	881.25	P-1203
ST-1205	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V SAFL BAFFLE	12.43	866.31	853.88	P-1205
ST-1206	MnDOT 4020	48 Ø	RC	NEENAH R-3067-V	7.58	866.48	858.90	P-1206
ST-1207	MnDOT TYPE F	48 Ø	RC	NEENAH R-4353-BEEHIVE	7.67	871.09	863.42	P-1207
ST-1208	MnDOT TYPE H	27 Ø	RC	NEENAH R-4342-BEEHIVE	3.31	878.03	874.72	P-1208
ST-1209	MnDOT 4020	60 Ø	RC	SKIMMER GRATE (SEE DETAIL)	10.25	844.75	834.50	P-1210

* TOP OF CASTING ELEVATIONS ON CURB STYLE CATCH BASINS = TOP BACK OF CURB BOX, NOT GUTTER ELEVATION
** STRUCTURES WITH SAFL BAFFLE (SEE DETAIL)

STORM DRAIN APRON SCHEDULE

APRON NO.	APRON SIZE (IN)	APRON MATERIAL	INVERT ELEVATION	PIPE NO.	NOTES
FES-1	60	RCP	907.10	P-1	
FES-1A	54	RCP	921.06	P-1A	
FES-601	24	RC	924.50	P-601	
FES-604B	24	RC	921.50	P-604B	
FES-701	30	RC	924.00	P-701	7 CY - CL 3 RIPRAP
FES-901	24	RC	917.00	P-901	9 CY - CL 3 RIPRAP
FES-912	24	RC	915.00	P-912	
FES-913	30	RC	910.00	P-913	7 CY - CL 3 RIPRAP
FES-1001	24	RCP	894.50	P-1001	
FES-1016	15	RC	894.50	P-1016	
FES-1019	24	RC	891.36	P-1019	
FES-1020	24	RC	886.96	P-1020	9 CY - CL 3 RIPRAP
FES-1101	30	RC	886.50	P-1101	
FES-1201	24	RC	839.00	P-1201	5 CY - CL 3 RIPRAP
FES-1204	12	RC	882.50	P-1204	
FES-1209	24	RC	839.00	P-1209	
FES-1210	24	RC	830.00	P-1210	9 CY - CL 3 RIPRAP

** PIPE LENGTH INCLUDES LENGTH OF APRON

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SCHEDULES
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

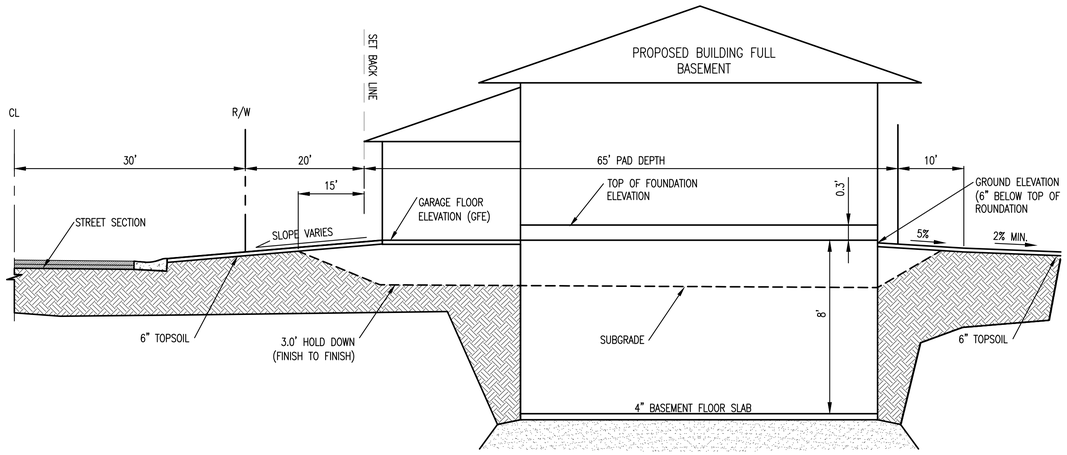
UTILITY SCHEDULES

SHEET

5 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:28 PM



SINGLE FAMILY FULL BASEMENT (FB)
3.0' HOLD DOWN

N.T.S.

NOTE:

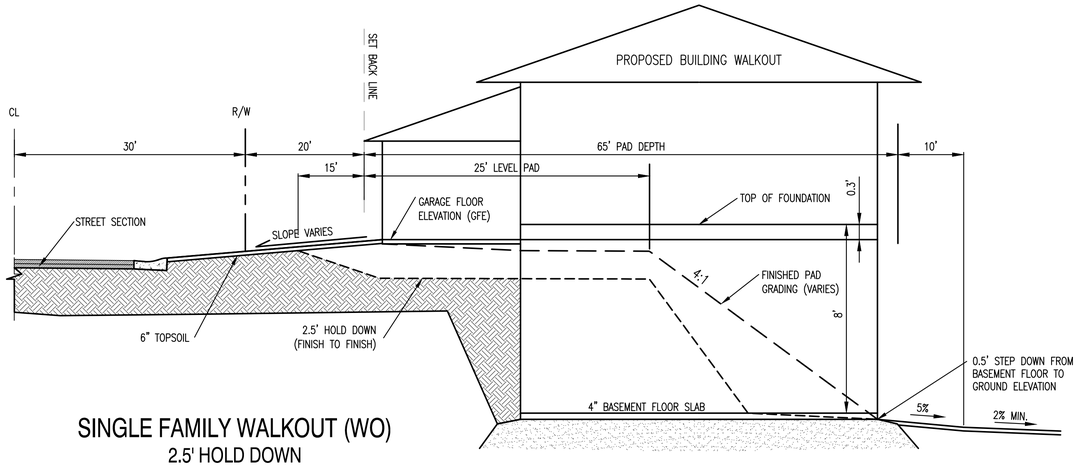
FB = FULL BASEMENT

LO = LOOK OUT BASEMENT

WO = WALKOUT BASEMENT

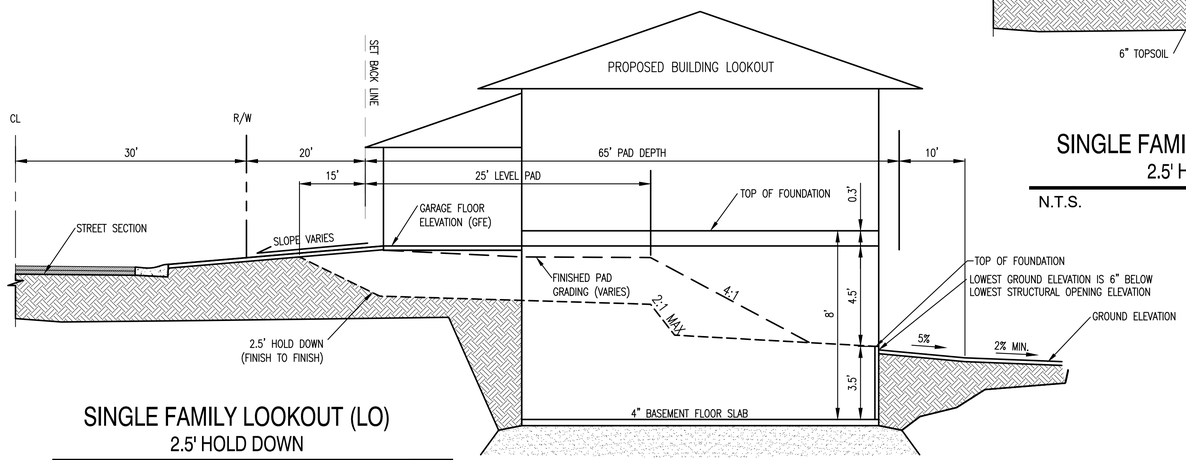
THE FIRST ELEVATION LISTED REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION LISTED REFERS TO THE LOWEST STRUCTURAL OPENING (LSO). IF NO SECOND ELEVATION IS LISTED THEN THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING.

SEE DETAILS OF EACH TYPE.



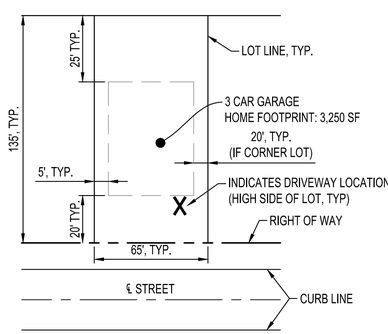
SINGLE FAMILY WALKOUT (WO)
2.5' HOLD DOWN

N.T.S.



SINGLE FAMILY LOOKOUT (LO)
2.5' HOLD DOWN

N.T.S.



65' SINGLE FAMILY TYPICAL LOT LAYOUT

NTS

PRELIMINARY NOT FOR CONSTRUCTION

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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PROJECT NO.	23-27575
FILE NAME	27575-DETAILS
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

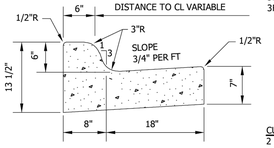
TITLE

SITE DETAILS

SHEET

6 OF 92

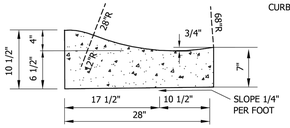
PLOT DATE: 2/25/2025 4:28 PM



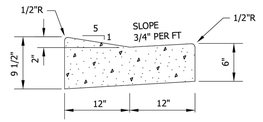
MNDOT B618

CONCRETE MATERIALS AS FOLLOWS:
3F52 - MANUAL PLACEMENT
3F32 - SLIP FORM PLACEMENT

CURB REINFORCEMENT REQUIREMENTS:
2 - NO. 4 REINFORCING RODS, 20 FEET LONG, SHALL BE PLACED IN THE LOWER PORTION OF THE CURB CROSSING ALL SEWER AND WATER SERVICE TRENCHES, FIRE HYDRANT LEADS, STORM SEWER TRENCHES AND OTHER EXCAVATIONS OR TRENCHES. 2 - NO. 4 REINFORCING RODS SHALL ALSO BE PLACED ON EACH SIDE OF ALL CATCH BASINS LOCATED WITHIN THE CURB AND GUTTER.



SURMOUNTABLE



DRIVEWAY
SURMOUNTABLE

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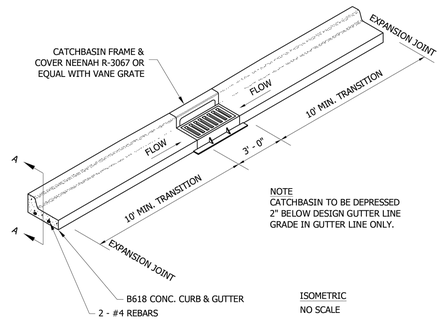
CURB AND GUTTER

CHASKA, MINNESOTA

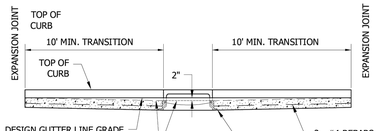
LAST REVISION: APRIL 2023

PLATE NO. STR-1



NOTE
CATCHBASIN TO BE DEPRESSED 2" BELOW DESIGN GUTTER LINE GRADE IN GUTTER LINE ONLY.

ISOMETRIC
NO SCALE



SECTION A-A
NO SCALE

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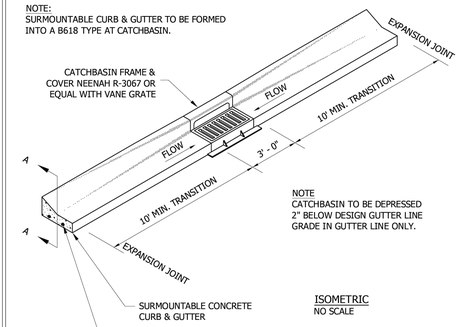
B618 CURB & GUTTER
CONSTRUCTION AT CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

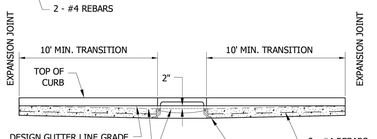
PLATE NO. STR-4

NOTE:
SURMOUNTABLE CURB & GUTTER TO BE FORMED INTO A B618 TYPE AT CATCHBASIN.



NOTE
CATCHBASIN TO BE DEPRESSED 2" BELOW DESIGN GUTTER LINE GRADE IN GUTTER LINE ONLY.

ISOMETRIC
NO SCALE



SECTION A-A
NO SCALE

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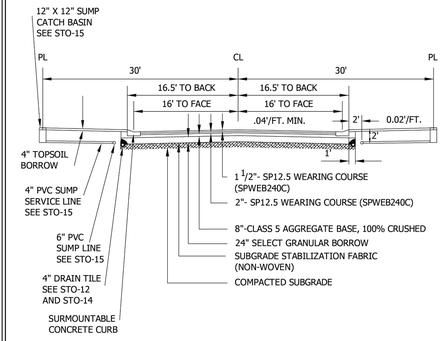
SURMOUNTABLE CURB & GUTTER
CONSTRUCTION AT CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

PLATE NO. STR-5



STANDARD STREET SECTION (7 TON)

NOTES:
1. ALL ORGANIC OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM BENEATH THE ROADWAY.
2. A TEST ROLL OF THE PREPARED SUBGRADE SHALL BE PERFORMED BY THE OWNER IN THE PRESENCE OF A CITY INSPECTOR. THE CITY HAS THE AUTHORITY TO REQUIRE ADDITIONAL SUBGRADE CORRECTION OR ELIMINATE THE STABILIZATION FABRIC.
3. THE CITY RESERVES THE RIGHT TO MODIFY STREET SECTION AS REQUIRED.
4. NO CONCRETE WORK OR BITUMINOUS PAVING SHALL OCCURE AFTER OCTOBER 15TH UNLESS AUTHORIZED BY THE CITY OF CHASKA.
5. STREET WIDTH TO BE DETERMINED BY PROJECTED TRAFFIC VOLUMES.
6. RECYCLE MATERIAL ACCEPTED AS CLASS 5 AGGREGATE BASE SUBSTITUTE IF MEETING GUIDELINES.

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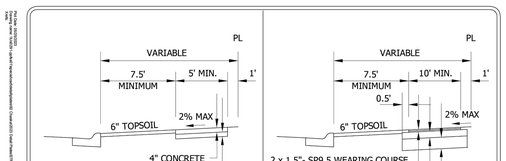
TYPICAL SECTIONS FOR
RESIDENTIAL STREETS
7 TON SECTION

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. STR-7

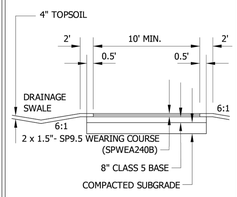


CONC. MIX: 3F52 (MANUAL PLACEMENT)
3F32 (SLIP FORM PLACEMENT)

NEIGHBORHOOD SIDEWALK

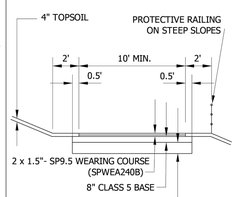
* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

COMMUNITY ROADWAY TRAIL
URBAN SECTION



* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

COMMUNITY GREENWAY TRAIL



* BIT SHALL BE PLACED AND COMPACTED IN 2 LIFTS

COMMUNITY GREENWAY TRAIL
SIDE SLOPE LOCATION

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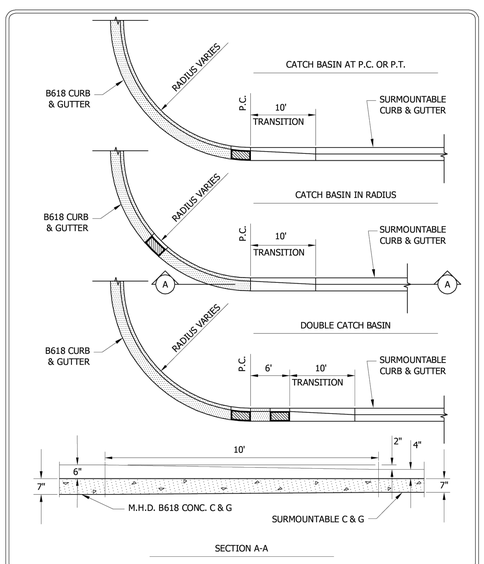
TYPICAL PLACEMENT AND SECTION
FOR WALKS AND TRAILS

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. STR-9



SECTION A-A

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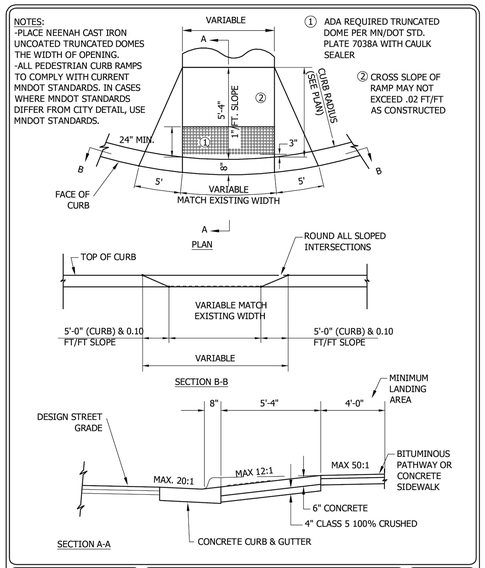
CONCRETE CURB & GUTTER
TRANSITION

CHASKA, MINNESOTA

LAST REVISION: OCT. 1989

PLATE NO. STR-10

NOTES:
-PLACE NEENAH CAST IRON UNCOATED TRUNCATED DOMES THE WIDTH OF OPENING.
-ALL PEDESTRIAN CURB RAMPS TO COMPLY WITH CURRENT MNDOT STANDARDS. IN CASES WHERE MNDOT STANDARDS DIFFER FROM CITY DETAIL, USE MNDOT STANDARDS.



SECTION A-A

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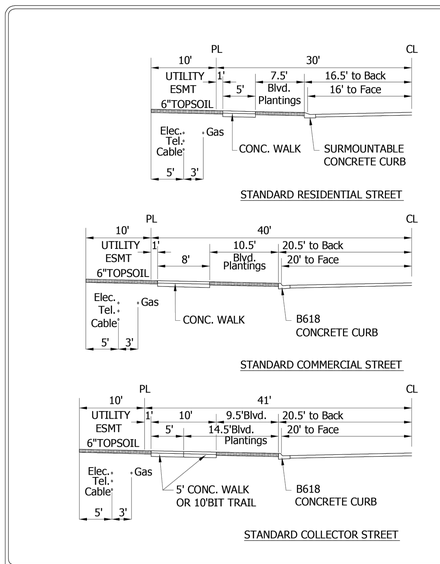
PEDESTRIAN CURB RAMP
FOR PATHWAY/SIDEWALK

CHASKA, MINNESOTA

LAST REVISION: AUG 2023

PLATE NO. STR-11



STANDARD RESIDENTIAL STREET

STANDARD COMMERCIAL STREET

STANDARD COLLECTOR STREET

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TYPICAL STREET
COMPONENTS/DIMENSIONS
RESIDENTIAL, COMMERCIAL & COLLECTOR
CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STR-16

ISG

FORESTAR

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

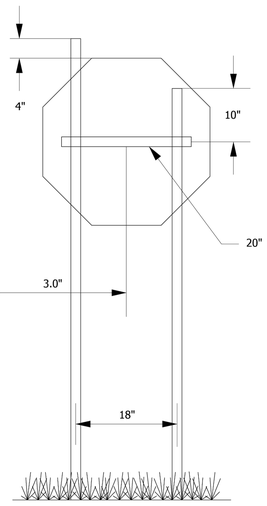
SHEET

7

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:28 PM



NOTES:
STOP SIGNS SHOULD BE INSTALLED 3' BEHIND B/C

ALL STOP SIGNS SHALL BE INSTALLED WITH TWO POSTS UNLESS APPROVED BY OWNER

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STOP SIGN INSTALLATION DETAIL

CHASKA, MINNESOTA

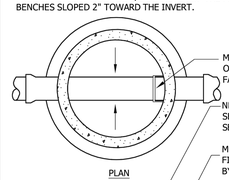
LAST REVISION: JUNE 2012

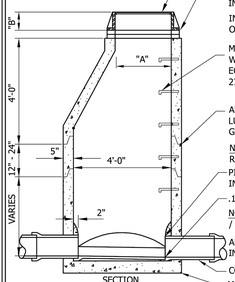
PLATE NO. STR-15

PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"





MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATION FOR CASTING NUMBER.

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.

MAXIMUM 20"ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.

INSTALL I&I BARRIER BY STRIKE PRODUCTS OR APPROVED EQUAL.

MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL, 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL)

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS, RAMNECK. AND GATOR WRAP.

NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.

PIPE SHALL BE CUT 2" FROM INSIDE FACE OF WALL.

.1' DROP ACROSS INVERTS MIN.

NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.

ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.

COMPACT TO TOP OF PIPE, TO FIRST JOINT.

MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .

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SANITARY SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2023

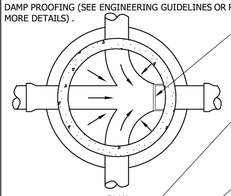
PLATE NO. SAN-1

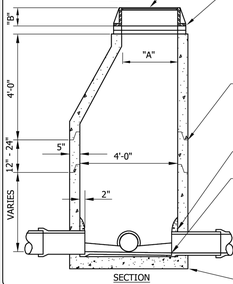
PRECAST INVERT WITH A MINIMUM 1% THROUGH SLOPE REQUIRED.

PRECAST INVERT MUST BE 1/2 DIAMETER OF THE PIPE AND BENCHES SLOPED 2" TOWARD THE INVERT.

FRAME	A	B
R16420245	27"	7"
R1755G	27"	7"

OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS) .





MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

NEENAH COVER **R1642-5001**, LETTERED "SANITARY SEWER" WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECIFICATIONS FOR CASTING NUMBER

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTING RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.

MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING

INSTALL I&I BARRIER BY STRIKE PRODUCTS OR APPROVED EQUAL.

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS, RAMNECK AND GATOR WRAP.

NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.

PIPE SHALL BE CUT OUT 2" FROM INSIDE FACE OF WALL.

.1' DROP ACROSS INVERTS (MIN.)

NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.

ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE.
MINIMUM THICKNESS OF PRECAST BASE IS 6" FOR 14' DEEP OR LESS, AND INCREASES 1" IN THICKNESS FOR EVERY 4' OF DEPTH GREATER THAN 14'.

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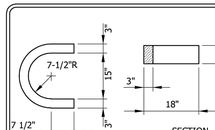
SANITARY SEWER JUNCTION MANHOLE

CHASKA, MINNESOTA

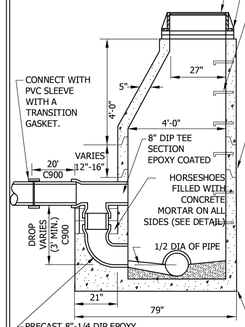
LAST REVISION: MARCH 2023

PLATE NO. SAN-2

FRAME	A	B
R1642-2310B	27"	7"
R1755G	27"	7"



HORSESHOE DETAILS



NEENAH COVER **R-1642-5001**, LETTERED "SANITARY SEWER", WITH 2 CONCEALED PICK HOLES AND SELF SEALING LID. SEE SPECS. FOR CASTING NUMBERS.

MINIMUM OF 2 MAXIMUM OF 4 ADJUSTMENT RINGS. FINAL RING MATERIAL AND ADHESIVE TO BE SPECIFIED BY OWNER ON A PROJECT BASIS.
INSTALL I&I BARRIER BY STRIKE PRODUCTS OR APPROVED EQUAL.

- MAXIMUM 20" ADJUSTMENT ALLOWED INCLUDING RINGS AND CASTING.

MANHOLE STEPS, COPOLYMER POLYPROPYLENE PLASTIC, WITH 1/2" GRADE 60 STEEL REINFORCEMENT OR EQUAL 16" ON CENTER. (NO STEPS ALLOWED IN UPPER 27" BARREL.)

- MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

ALL JOINTS IN MANHOLE TO HAVE SELF LUBRICATING RUBBER GASKETS, RAMNECK, AND GATOR WRAP.

- NOTE: ALL INFILTRATION AREAS SHALL BE REPAIRED UNTIL MANHOLE IS WATER TIGHT.
- NOTE: OUTER SURFACE OF ALL PRE-CAST SECTIONS SHALL RECEIVE 2 COATS OF BITUMINOUS DAMP PROOFING (SEE ENGINEERING GUIDELINES OR PROJECT SPECIFICATIONS FOR MORE DETAILS).
- INTERIOR MANHOLE WALL SHALL BE COMPLETELY LINED WITH HDPE OR APPROVED SPRAY ON LINER SYSTEM, SEE SPEC FOR MORE DETAILS.
- PIPE SHALL BE CUT OUT FLUSH WITH INSIDE FACE OF WALL.
- NOTE: KOR-N-SEAL MANHOLE TO BE USED FOR PIPE / MANHOLE CONNECTION.
- ALL DOG HOUSES SHALL BE GROUTED ON INSIDE OF MANHOLE. PRECAST INVERT SHOULD BE 1/2 DIAMETER OF PIPE AND BENCHES SLOPED 2" TOWARD INVERT.

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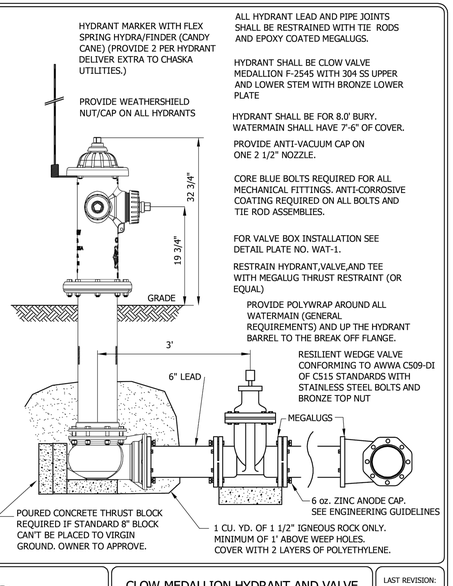
SANITARY SEWER DROP INLET MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2023

PLATE NO. SAN-4



ALL HYDRANT LEAD AND PIPE JOINTS SHALL BE RESTRAINED WITH TIE RODS AND EPOXY COATED MEGALUGS.

HYDRANT SHALL BE CLOW VALVE MEDALLION F-2545 WITH 304 SS UPPER AND LOWER STEM WITH BRONZE LOWER PLATE

HYDRANT SHALL BE FOR 8.0' BURY. WATERMAIN SHALL HAVE 7'-6" OF COVER.

PROVIDE ANTI-VACUUM CAP ON ONE 2 1/2" NOZZLE.

CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

FOR VALVE BOX INSTALLATION SEE DETAIL PLATE NO. WAT-1.

RESTRAIN HYDRANT,VALVE,AND TEE WITH MEGALUG THRUST RESTRAINT (OR EQUAL)

PROVIDE POLYWRAP AROUND ALL WATERMAIN (GENERAL REQUIREMENTS) AND UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE.

RESILIENT WEDGE VALVE CONFORMING TO AWWA C509-DI OF C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

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CLOW MEDALLION HYDRANT AND VALVE INSTALLATION

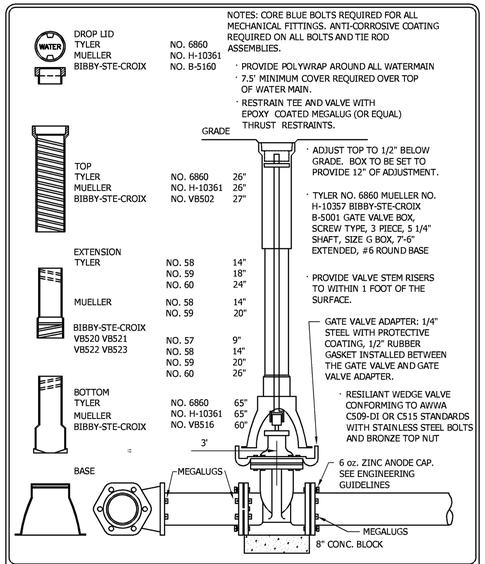
CHASKA, MINNESOTA

LAST REVISION: AUGUST 2023

PLATE NO. WAT-11

NOTES: CORE BLUE BOLTS REQUIRED FOR ALL MECHANICAL FITTINGS. ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

- PROVIDE POLYWRAP AROUND ALL WATERMAIN
- 7.5' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.
- RESTRAIN TEE AND VALVE WITH EPOXY COATED MEGALUG (OR EQUAL) THRUST RESTRAINTS.



- ADJUST TOP TO 1/2" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.
- TYLER NO. 6860 MUELLER NO. H-10357 BIBBY-STE-CROIX B-5001 GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 7'-6" EXTENDED, #6 ROUND BASE
- PROVIDE VALVE STEM RISERS TO WITHIN 1 FOOT OF THE SURFACE.
- GATE VALVE ADAPTER: 1/4" STEEL WITH PROTECTIVE COATING, 1/2" RUBBER GASKET INSTALLED BETWEEN THE GATE VALVE AND GATE VALVE ADAPTER.
- RESILIANT WEDGE VALVE CONFORMING TO AWWA C509-DI OR C515 STANDARDS WITH STAINLESS STEEL BOLTS AND BRONZE TOP NUT

6 oz. ZINC ANODE CAP. SEE ENGINEERING GUIDELINES

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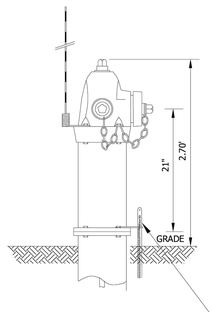
GATE VALVE AND BOX INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-1



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TRACER WIRE FOR PVC WATER MAIN

CHASKA, MN

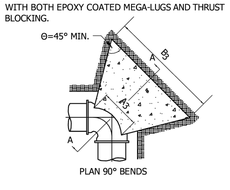
LAST REVISION: JANUARY 2022

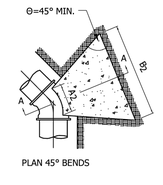
PLATE NO. WAT-10

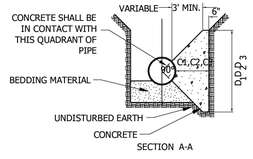
NOTES:
1. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POURED AGAINST FIRM UNDISTURBED EARTH.
2. DIMENSION C1,C2,C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Θ EQUAL TO OR LARGER THAN 45°.
3. DIMENSION A1,A2,A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MJ BOLTS.
4. PROVIDE POLYETHYLENE WRAP AROUND ALL WATERMAIN.
5. ALL BENDS AND FITTINGS SHALL BE RESTRAINED WITH BOTH EPOXY COATED MEGA-LUGS AND THRUST BLOCKING.

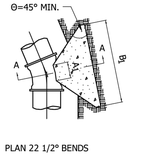
BUTTRESS DIMENSIONS

PIPE SIZE	22 1/2° BEND		45° BEND		90° BEND	
	B_1	D_1	B_2	D_2	B_3	D_3
6"	1'-5"	1'-5"	1'-5"	1'-5"	2'-1"	1'-6"
8"	1'-5"	1'-5"	2'-1"	1'-6"	2'-8"	2'-0"
12"	1'-10"	1'-10"	3'-4"	2'-0"	4'-9"	2'-6"
16"	3'-0"	2'-0"	3'-10"	3'-0"	6'-2"	3'-6"
20"	3'-6"	2'-8"	5'-6"	3'-4"	8'-4"	4'-0"
24"	4'-4"	3'-0"	6'-10"	3'-10"	9'-8"	5'-0"
30"	-	-	9'-3"	6'-0"	17'-0"	6'-0"









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CONCRETE THRUST BLOCKING

CHASKA, MINNESOTA

LAST REVISION: APRIL 2005

PLATE NO. WAT-4

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

8

OF 92

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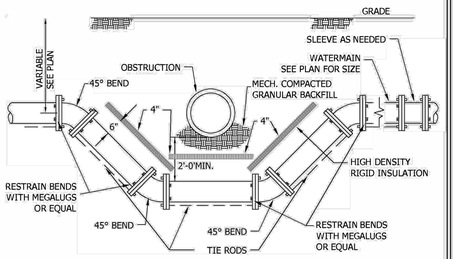
PLOT DATE: 2/25/2025 4:29 PM



1. USE EPOXY COATED MEGALUG THRUST RESTRAINTS AND COATED TIE RODS ON ALL JOINTS AND FITTINGS. CORE BLUE BOLTS REQUIRED ON ALL MECHANICAL JOINTS.
2. RESTRAIN A MINIMUM OF TWO PIPE JOINTS (40 LF) LEFT AND RIGHT OF THE LOWERING.
3. SEE PLATE NO. GEN-11 TO DETERMINE THE WIDTH OF THE INSULATING BOARD REQUIRED
4. SEE PLATE NO. WAT-4 TO DETERMINE THE REQUIRED CONCRETE THRUST BLOCKING.
5. ANTI CORROSIVE COATING REQUIRED ON ALL BOLT AND RESTRAINT ASSEMBLIES AND WELDS.
6. SACRAFICIAL ZINC ANODE CAPS ON EACH SIDE OF WATER FITTINGS. SEE ENGINEERING GUIDELINES.
7. INSTALL POLYETHELENE FILM WRAP AROUND ALL PIPE INCLUDED IN THE LOWERING.

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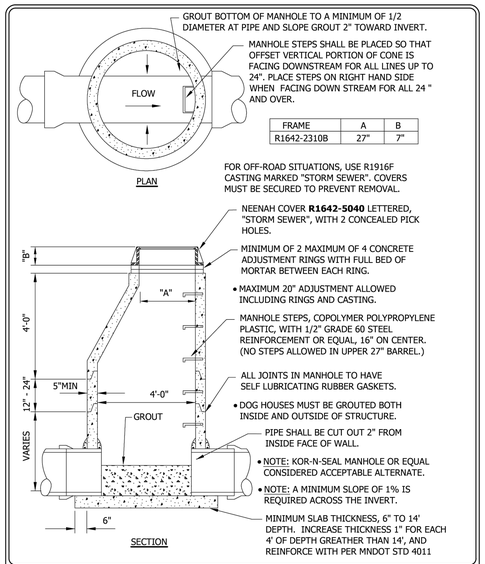
WATER MAIN LOWERING
WITH INSULATION DETAIL

CHASKA, MINNESOTA

LAST REVISION: MARCH 2019

PLATE NO. WAT-6



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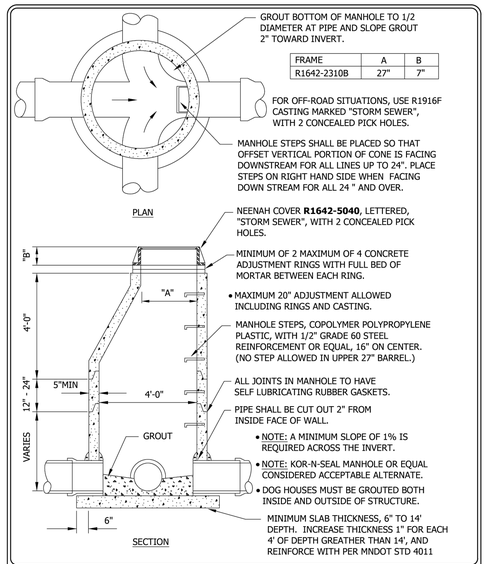
STORM SEWER MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-1



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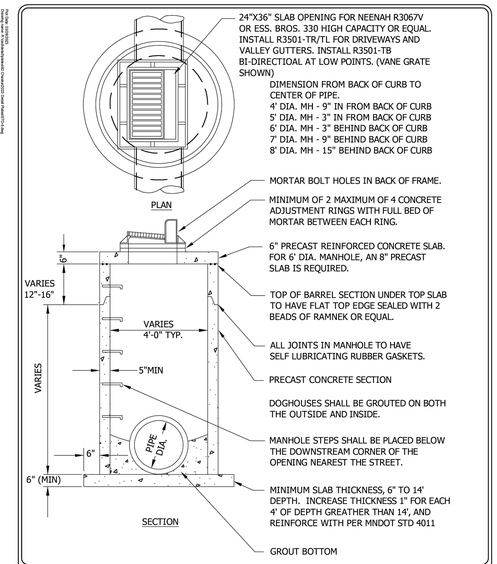
STORM SEWER JUNCTION MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-2



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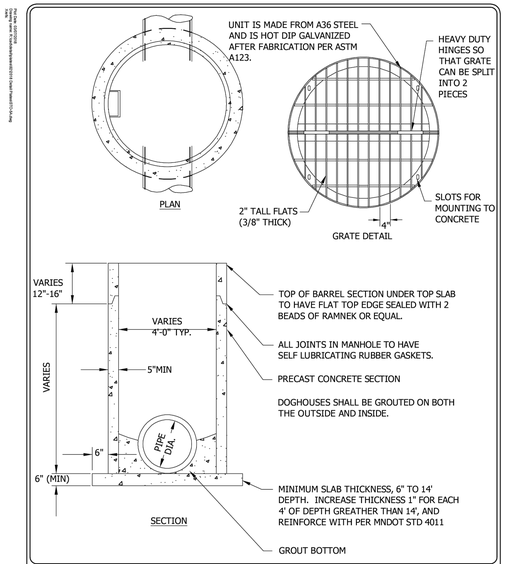
TYPE II
CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: MARCH 2023

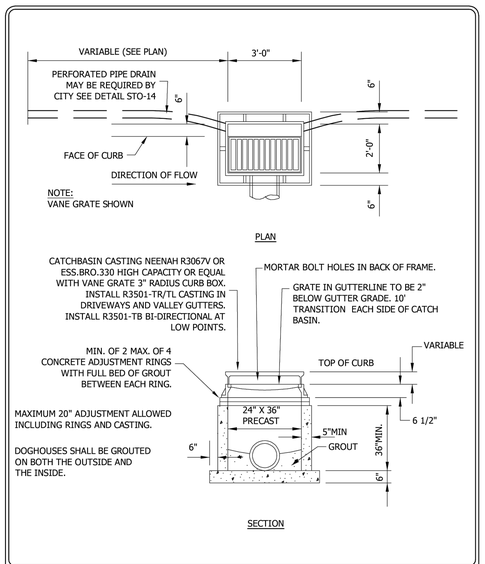
PLATE NO. STO-5



TYPE II
CATCHBASIN MANHOLE
POND SKIMMER
CARVER, MINNESOTA

LAST REVISION: MARCH 2018

PLATE NO. STO-5A



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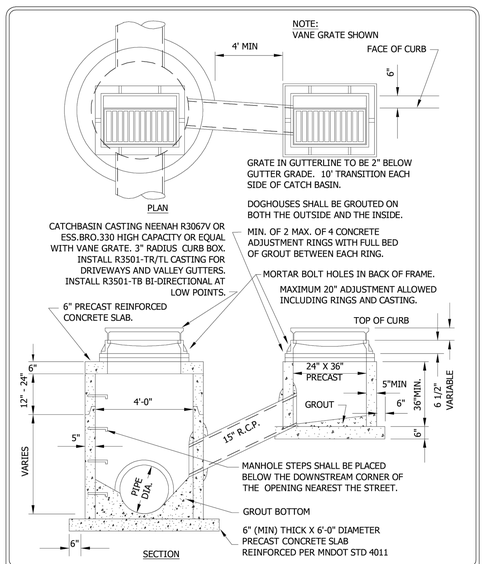
TYPE II
CATCHBASIN

CHASKA, MINNESOTA

LAST REVISION: MARCH 2023

PLATE NO. STO-6



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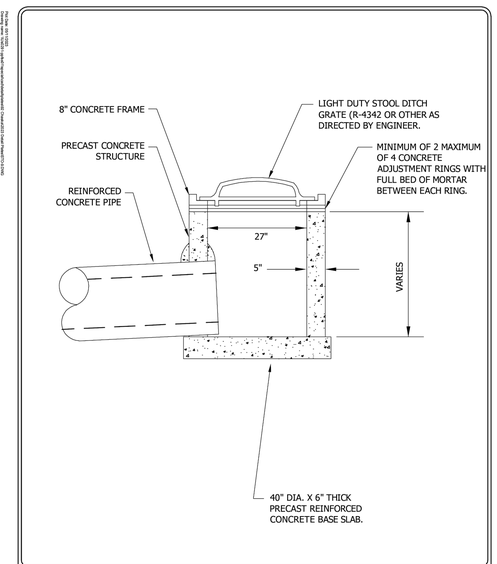
DOUBLE CATCHBASIN
TYPE II CBMH WITH TYPE II CB

CHASKA, MINNESOTA

LAST REVISION: MARCH 2023

PLATE NO. STO-7



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PRECAST 27" SHALLOW
DEPTH BEEHIVE

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. STO-9

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
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CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

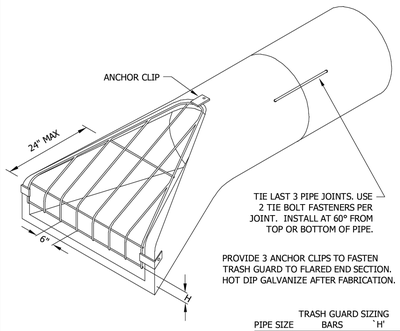
9

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:29 PM

SEE CITY PLATE NO. STO-11 FOR RIPRAP PLACEMENT.



ISOMETRIC

TIE LAST 3 PIPE JOINTS. USE 2 TIE BOLT FASTENERS PER JOINT. INSTALL AT 60° FROM TOP OR BOTTOM OF PIPE.

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

TRASH GUARD SIZING

PIPE SIZE	BARS	`H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"-24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

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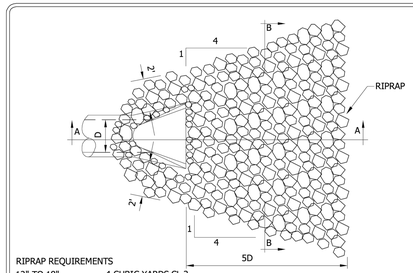
FLARED END SECTION AND TRASH GUARD

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. STO-10

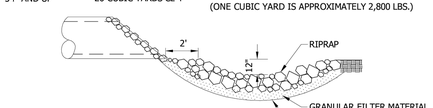


PLAN

RIPRAP REQUIREMENTS

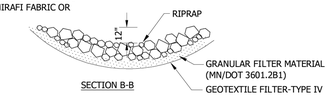
12" TO 18"	4 CUBIC YARDS CL.3
21" TO 27"	8 CUBIC YARDS CL.3
30" TO 36"	12 CUBIC YARDS CL.3
42" TO 48"	16 CUBIC YARDS CL.3
54" AND UP	20 CUBIC YARDS CL 4

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)



SECTION A-A

NOTE
FILTER BLANKET REQUIRED UNDER RIPRAP OR 2 LAYERS OF 500X MIRAFI FABRIC OR EQUAL



SECTION B-B

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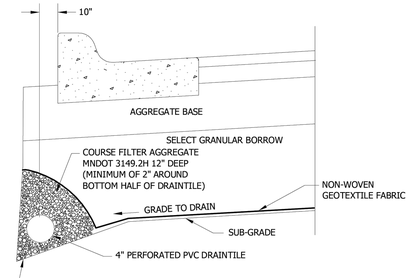
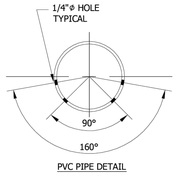
RIPRAP AT OUTLETS

CHASKA, MINNESOTA

LAST REVISION: APRIL 2004

PLATE NO. STO-11





PVC PIPE DETAIL

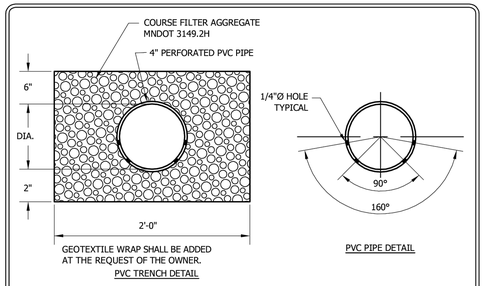
Stantec
2335 Highway 36 W
St. Paul, MN 55113
www.stantec.com

PERFORATED PVC DRAINTILE PIPE BELOW CONCRETE CURB

CHASKA, MINNESOTA

LAST REVISION: NOV. 2016

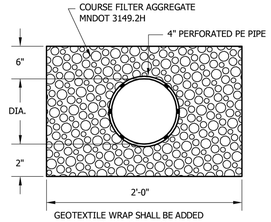
PLATE NO. STO-12



GEOTEXTILE WRAP SHALL BE ADDED AT THE REQUEST OF THE OWNER.

PVC TRENCH DETAIL

PVC PIPE DETAIL



GEOTEXTILE WRAP SHALL BE ADDED AT THE REQUEST OF THE OWNER.

P.E. TRENCH DETAIL

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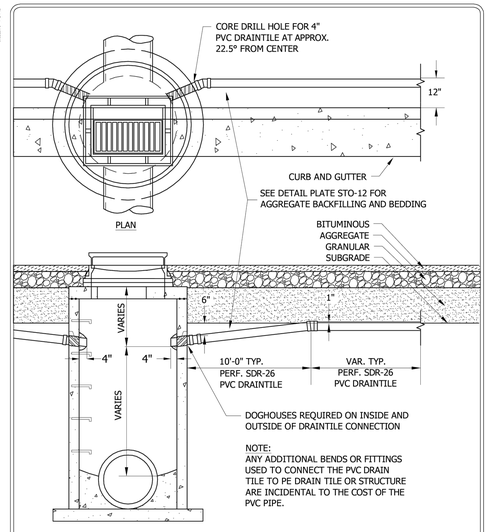
PERFORATED PIPE TRENCH DETAIL

CHASKA, MINNESOTA

LAST REVISION: NOV. 2014

PLATE NO. STO-13



PLAN

DOGHOUSES REQUIRED ON INSIDE AND OUTSIDE OF DRAINTILE CONNECTION

NOTE:
ANY ADDITIONAL BENDS OR FITTINGS USED TO CONNECT THE PVC DRAIN TILE TO PE DRAIN TILE OR STRUCTURE ARE INCIDENTAL TO THE COST OF THE PVC PIPE.

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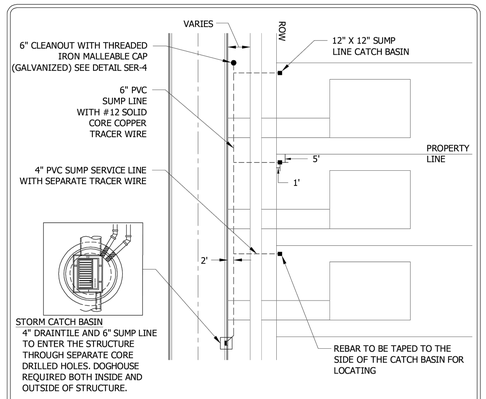
DRAINTILE INSTALLATION INTO CATCHBASIN MANHOLE

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. STO-14



NOTES:
1. 6" PVC SUMP LINE TO BE INSTALLED 2' BELOW GRADE AND TO BE CORE DRILLED INTO NEAREST DOWNSTREAM CATCH BASIN.
2. EXTEND 4" PVC SUMP SERVICE FROM MAIN TO RIGHT OF WAY ON SUMP DISCHARGE SIDE OF BUILDING.
3. ALTERNATE CONFIGURATIONS ONLY WITH THE APPROVAL OF OWNER.
4. SEE ENGINEERING GUIDELINES OR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. MAXIMUM SUMP LINE LENGTH 300'. IF LONGER SUMP LINE IS NECESSARY, INTERMEDIATE CLEANOUTS WILL BE REQUIRED EVERY 200'.
6. INSTALL 4" X 4" POST ADJACENT TO EACH SUMP CATCH BASIN FOR PROTECTION DURING CONSTRUCTION.
7. CLEAN OUT TO BE PLACED ON PROPERTY LINE AT END OF LAST SERVICE LINE. IF SERVICE FALLS IN DRIVEWAY THE MAINLINE WILL BE EXTENDED BEYOND DRIVEWAY/ALLEY TO ENSURE THE CLEANOUT IS IN GREEN SPACE.
8. A SEPARATE TRACER WIRE WILL EXTEND FROM THE FINISHED GRADE CLEANOUT LOCATION WITH TRACER WIRE BOX AND FOLLOW THE SUMP LINE TO THE STRUCTURE LOCATION.

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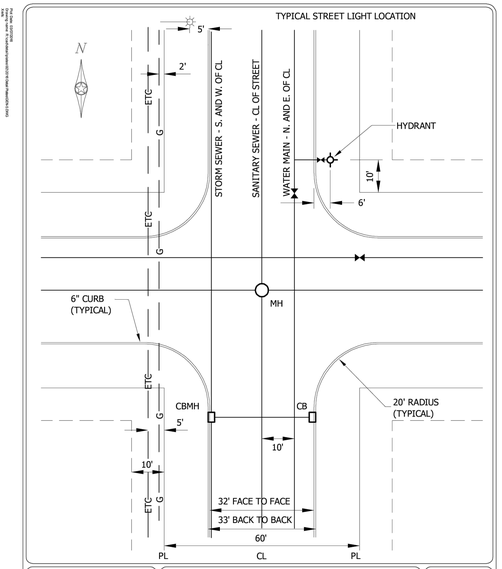
PVC SUMP LINE BEHIND CURB

CHASKA, MINNESOTA

LAST REVISION: JUNE 2022

PLATE NO. STO-15



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TYPICAL UTILITY LOCATIONS (PUBLIC AND PRIVATE)

CHASKA, MINNESOTA

LAST REVISION: MARCH 2016

PLATE NO. GEN-5

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

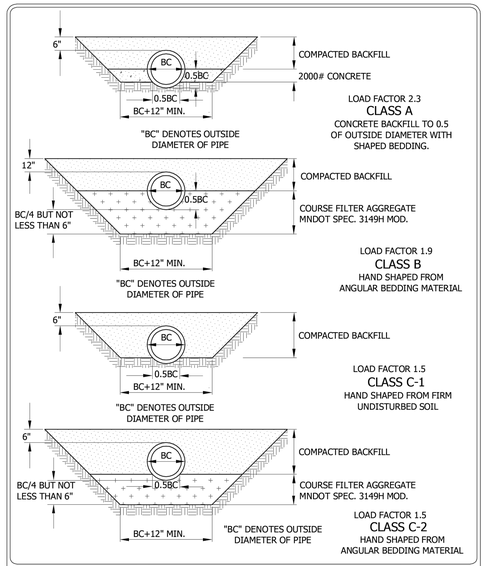
SHEET

10

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:29 PM



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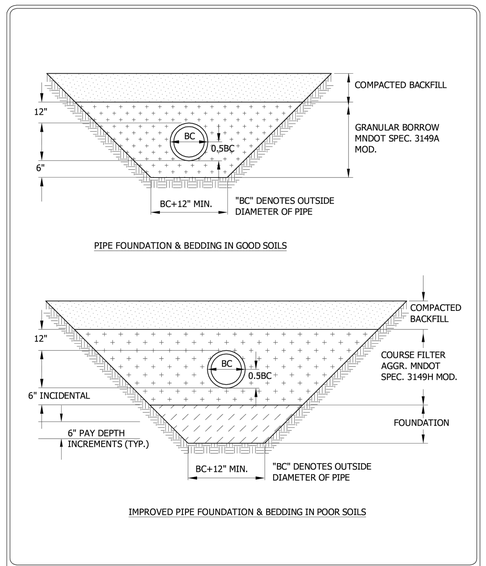
BEDDING METHODS FOR RCP OR DIP

CHASKA, MINNESOTA

LAST REVISION: MARCH 2001

PLATE NO. GEN-6



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BEDDING METHODS FOR PVC

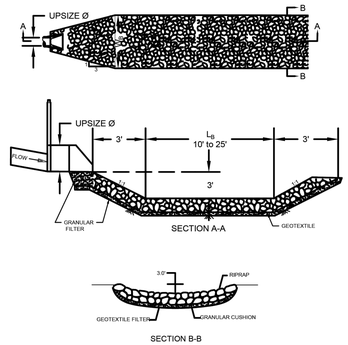
CHASKA, MINNESOTA

LAST REVISION: MARCH 2008

PLATE NO. GEN-7

TABLE OF QUANTITIES

INLET	UPSIZE	BASIN LENGTH	BASIN WIDTH	MATERIAL QUANTITIES				
DIA. OF ROUND PIPE	DIA. OF ROUND PIPE	LB	WB	GEOTEXTILE FILTER	GRANULAR FILTER UNDER APRON	RIPRAP 12" DEPTH	RIPRAP 18" DEPTH	RIPRAP 24" DEPTH
(IN.)	(IN.)	(FT)	(FT)	(SQ YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
15 & 18	30	10	6	1	1	3	-	-
24	36	10	8	1	1	-	8	-
36	48	20	8	3	3	-	-	20
48	72	25	10	3	3	-	-	25



CARVER COUNTY

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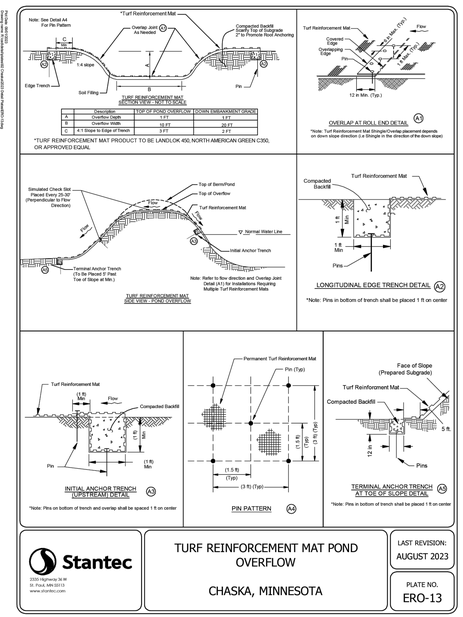
RAVINE EXAMPLE STILLING BASIN

JUNE 2023

DETAIL 16



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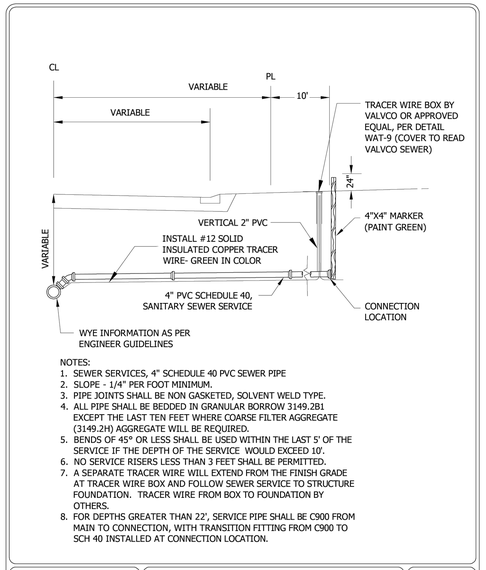
TURF REINFORCEMENT MAT POND OVERFLOW

CHASKA, MINNESOTA

LAST REVISION: AUGUST 2023

PLATE NO. ERO-13



NOTES:
1. SEWER SERVICES, 4" SCHEDULE 40 PVC SEWER PIPE
2. SLOPE - 1/4" PER FOOT MINIMUM.
3. PIPE JOINTS SHALL BE NON GASKETED, SOLVENT WELD TYPE.
4. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.2B1 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) AGGREGATE WILL BE REQUIRED.
5. BENDS OF 45° OR LESS SHALL BE USED WITHIN THE LAST 5' OF THE SERVICE IF THE DEPTH OF THE SERVICE WOULD EXCEED 10'.
6. NO SERVICE RISERS LESS THAN 3 FEET SHALL BE PERMITTED.
7. A SEPARATE TRACER WIRE WILL EXTEND FROM THE FINISH GRADE AT TRACER WIRE BOX AND FOLLOW SEWER SERVICE TO STRUCTURE FOUNDATION. TRACER WIRE FROM BOX TO FOUNDATION BY OTHERS.
8. FOR DEPTHS GREATER THAN 22', SERVICE PIPE SHALL BE C900 FROM MAIN TO CONNECTION, WITH TRANSITION FITTING FROM C900 TO SCH 40 INSTALLED AT CONNECTION LOCATION.

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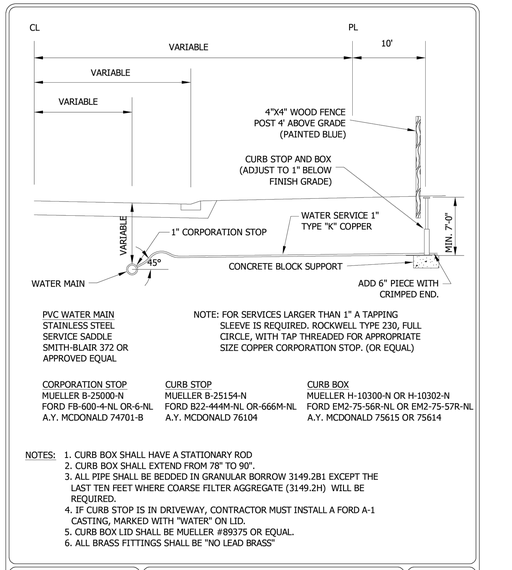
SEWER SERVICE CONNECTION

CHASKA, MINNESOTA

LAST REVISION: APRIL 2016

PLATE NO. SER-1



PVC WATER MAIN
STAINLESS STEEL SERVICE SADDLE
SMITH-BLAIR 372 OR APPROVED EQUAL

NOTE: FOR SERVICES LARGER THAN 1" A TAPPING SLEEVE IS REQUIRED. ROCKWELL TYPE 230, FULL CIRCLE, WITH TAP THREADED FOR APPROPRIATE SIZE COPPER CORPORATION STOP. (OR EQUAL)

CORPORATION STOP	CURB STOP	CURB BOX
MUELLER B-25000-N	MUELLER B-25154-N	MUELLER H-10300-N OR H-10302-N
FORD FB-600-4-NL OR-6-NL	FORD B22-444M-NL OR-666M-NL	FORD EM2-75-56R-NL OR EM2-75-57R-NL
A.Y. MCDONALD 74701-B	A.Y. MCDONALD 76104	A.Y. MCDONALD 75615 OR 75614

NOTES:
1. CURB BOX SHALL HAVE A STATIONARY ROD
2. CURB BOX SHALL EXTEND FROM 78" TO 90".
3. ALL PIPE SHALL BE BEDDED IN GRANULAR BORROW 3149.2B1 EXCEPT THE LAST TEN FEET WHERE COARSE FILTER AGGREGATE (3149.2H) WILL BE REQUIRED.
4. IF CURB STOP IS IN DRIVEWAY, CONTRACTOR MUST INSTALL A FORD A-1 CASTING, MARKED WITH "WATER" ON LID.
5. CURB BOX LID SHALL BE MUELLER #89375 OR EQUAL.
6. ALL BRASS FITTINGS SHALL BE "NO LEAD BRASS"

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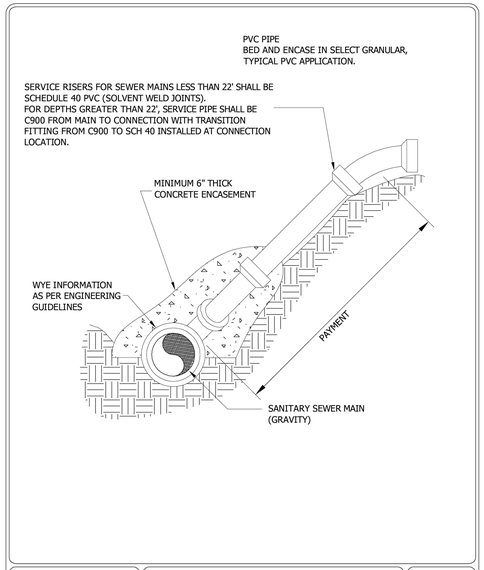
WATER SERVICE CONNECTION
COPPER PIPE
CHASKA, MINNESOTA

LAST REVISION: MARCH 2016

PLATE NO. SER-2



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SERVICE RISER

CHASKA, MINNESOTA

LAST REVISION: MARCH 2016

PLATE NO. SER-3

PLOT DATE: 2/25/2025 4:29 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

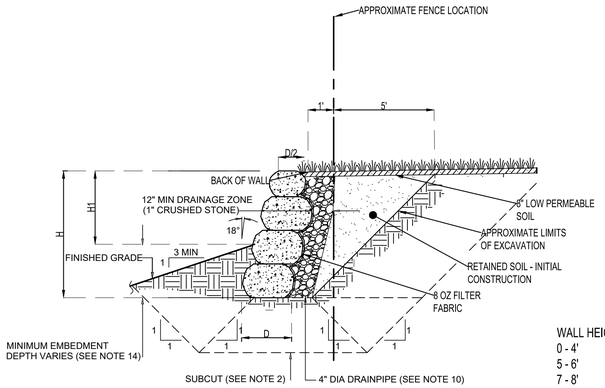
SITE DETAILS

SHEET

11

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

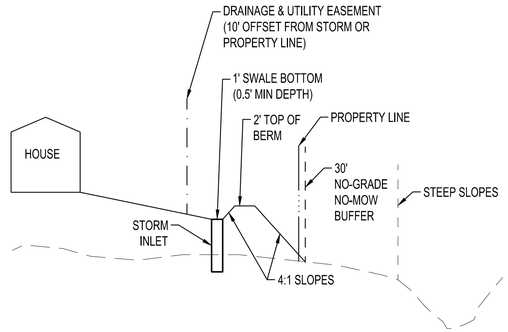


TYPICAL WALL SECTION
(FOR WALL HEIGHTS >17' SEE SHEET 9)

BOULDER WALL
DESIGN BY OTHERS

BOULDER DEPTH SCHEDULE:

WALL HEIGHT (H):	BOULDER DEPTH (D):
0 - 4'	24"
5 - 6'	28"
7 - 8'	36"
9 - 10'	44"
11 - 12'	52"
13 - 14'	60"
15 - 16'	68"
17'	72"
18 - 19'	84" + 24" Concrete



REAR YARD BERM AND SWALE
NTS

PRELIMINARY NOT FOR CONSTRUCTION

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

12

OF 92

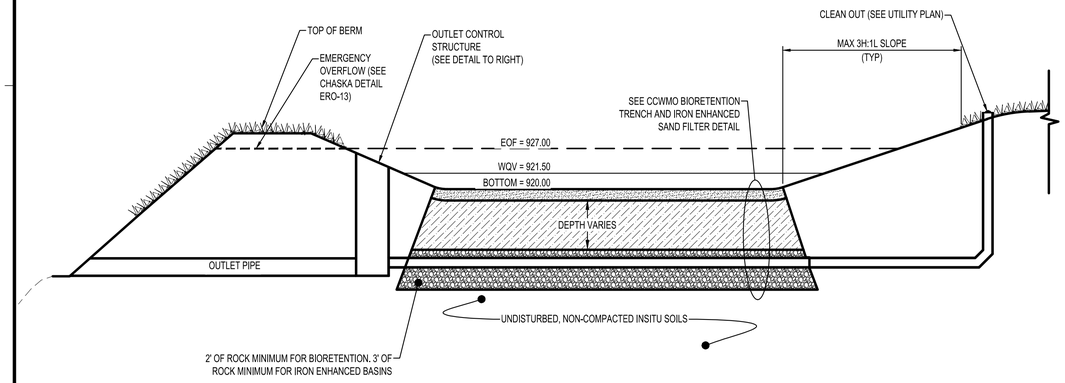
PLOT DATE: 2/25/2025 4:29 PM

FILTRATION BASIN CONSTRUCTION:

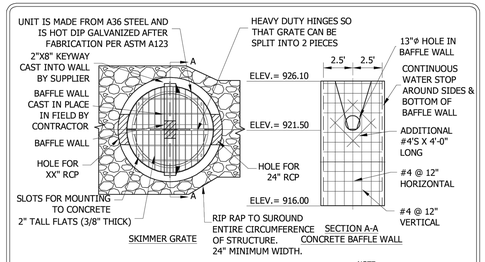
A. Work Shall Include - All excavation and construction as outlined in the plans, specifications and details outlining the construction of the filtration basin.
B. The Contractor shall maintain silt fence around the perimeter of the filtration basin during all phases of construction. The filtration area must be staked off and marked to keep all construction traffic, equipment and material stockpiles out of the proposed filtration area.
C. The Contractor shall ensure that the filtration basin is not used as a sediment trap during construction and that no runoff enters the basin prior to the completion of construction and complete stabilization of surrounding areas draining to the basin. All upland drainage must be diverted to prevent runoff from entering filtration basin work area.
D. Filtration basin shall be constructed at the end of the project after all areas surrounding it and draining into it have been constructed and fully stabilized, this includes the sanitary sewer. In order to avoid soil compaction in the basin no equipment shall be driven in the area of the basin prior to its construction, and when it is constructed only light earth moving equipment with tracks shall be used.
E. After final grading the basin's floor shall be tilled to a depth of at least 6 inches to provide a well-aerated, porous surface. Smearing of the soil in the basin shall be avoided and if smearing does occur it shall be corrected by raking or retilling of the basin.
F. Immediately following filtration basin construction, the entire basin shall be seeded and stabilized as indicated in the plans. Filtration basin MUST be fully stabilized prior to any upstream runoff being directed to basin.

BIORETENTION SOIL: 90% sand, 10% MnDOT grade 2 compost.
IRON ENHANCED MEDIA: Clean sand mixed with iron filings 5% by weight.

BASIN SEEDING: Refer to Site Restoration Plan for basin seeding requirements.



FILTRATION BASIN 6
NTS SD800



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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
FILTRATION BASIN 6
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023
PLATE NO. STO-18C

FILTRATION BASIN CONSTRUCTION:

A. Work Shall Include - All excavation and construction as outlined in the plans, specifications and details outlining the construction of the filtration basin.
B. The Contractor shall maintain silt fence around the perimeter of the filtration basin during all phases of construction. The filtration area must be staked off and marked to keep all construction traffic, equipment and material stockpiles out of the proposed filtration area.
C. The Contractor shall ensure that the filtration basin is not used as a sediment trap during construction and that no runoff enters the basin prior to the completion of construction and complete stabilization of surrounding areas draining to the basin. All upland drainage must be diverted to prevent runoff from entering filtration basin work area.
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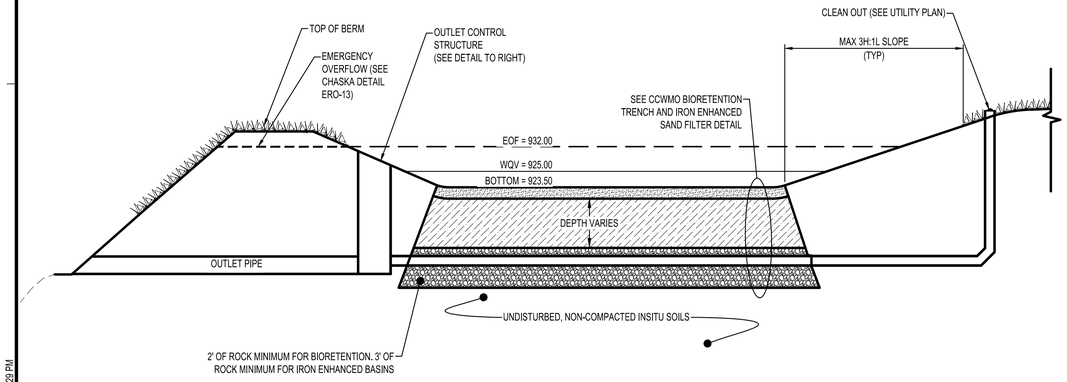
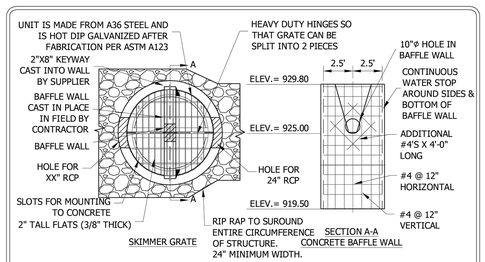
BASIN SEEDING: Refer to Site Restoration Plan for basin seeding requirements.



FILTRATION BASIN 7
NTS SD800



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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
FILTRATION BASIN 7
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023
PLATE NO. STO-18C

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-STORM
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORMWATER BASIN DETAILS

SHEET

13 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:29 PM

FILTRATION BASIN CONSTRUCTION:

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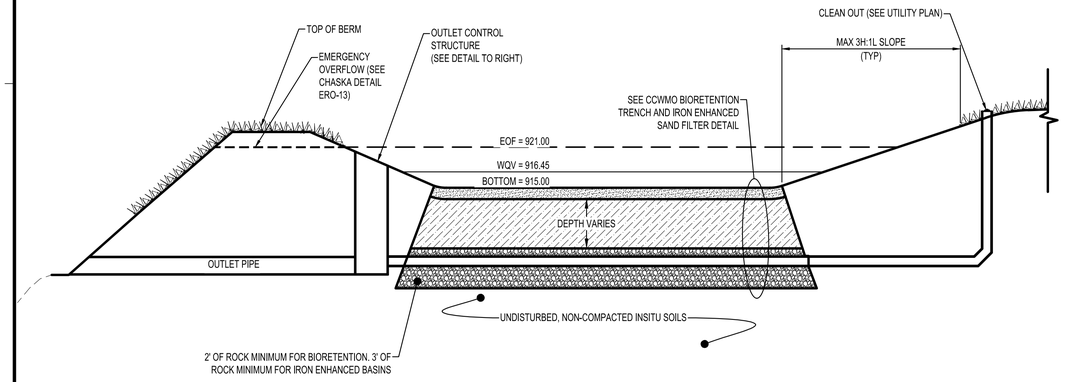
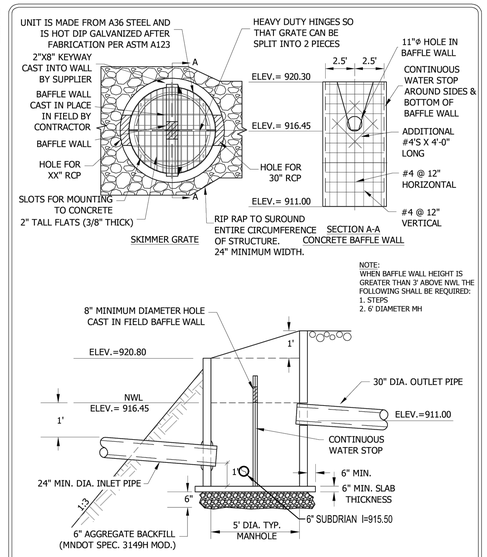
B. The Contractor shall maintain silt fence around the perimeter of the filtration basin during all phases of construction. The filtration area must be staked off and marked to keep all construction traffic, equipment and material stockpiles out of the proposed filtration area.
C. The Contractor shall ensure that the filtration basin is not used as a sediment trap during construction and that no runoff enters the basin prior to the completion of construction and complete stabilization of surrounding areas draining to the basin. All upland drainage must be diverted to prevent runoff from entering filtration basin work area.
D. Filtration basin shall be constructed at the end of the project after all areas surrounding it and draining into it have been constructed and fully stabilized, this includes the sanitary sewer. In order to avoid soil compaction in the basin no equipment shall be driven in the area of the basin prior to its construction, and when it is constructed only light earth moving equipment with tracks shall be used.
E. After final grading the basin's floor shall be tilled to a depth of at least 6 inches to provide a well-aerated, porous surface. Smearing of the soil in the basin shall be avoided and if smearing does occur it shall be corrected by raking or retilling of the basin.
F. Immediately following filtration basin construction, the entire basin shall be seeded and stabilized as indicated in the plans. Filtration basin MUST be fully stabilized prior to any upstream runoff being directed to basin.

BIORETENTION SOIL: 90% sand, 10% MnDOT grade 2 compost.
IRON ENHANCED MEDIA: Clean sand mixed with iron filings 5% by weight.

BASIN SEEDING: Refer to Site Restoration Plan for basin seeding requirements.



FILTRATION BASIN 9
NTS SD800



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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
FILTRATION BASIN 9
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023
PLATE NO. STO-18C

FILTRATION BASIN CONSTRUCTION:

A. Work Shall Include - All excavation and construction as outlined in the plans, specifications and details outlining the construction of the filtration basin.
B. The Contractor shall maintain silt fence around the perimeter of the filtration basin during all phases of construction. The filtration area must be staked off and marked to keep all construction traffic, equipment and material stockpiles out of the proposed filtration area.
C. The Contractor shall ensure that the filtration basin is not used as a sediment trap during construction and that no runoff enters the basin prior to the completion of construction and complete stabilization of surrounding areas draining to the basin. All upland drainage must be diverted to prevent runoff from entering filtration basin work area.
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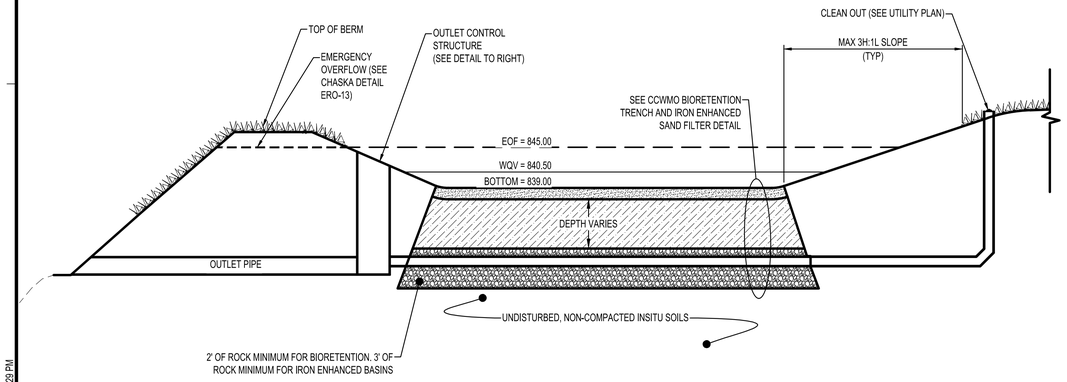
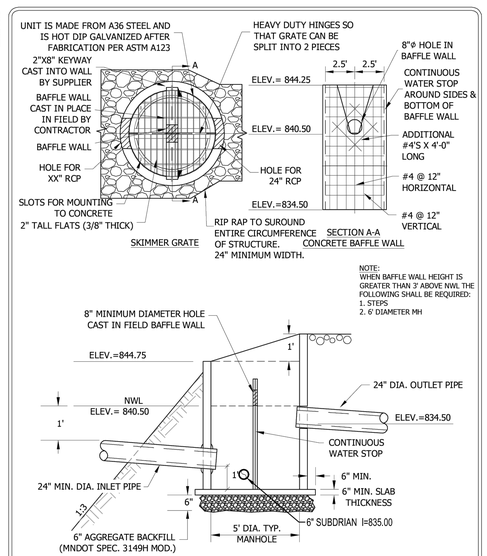


FILTRATION BASIN 12
NTS SD800



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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
FILTRATION BASIN 12
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023
PLATE NO. STO-18C

PLOT DATE: 2/25/2025 4:29 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-STORM
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

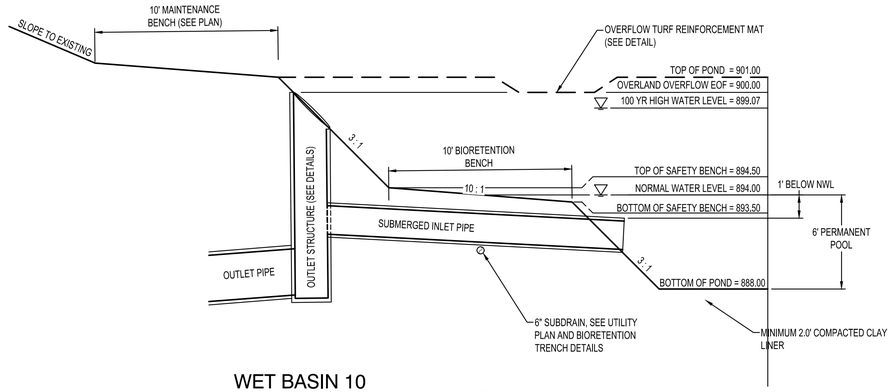
STORMWATER BASIN DETAILS

SHEET

14 OF 92

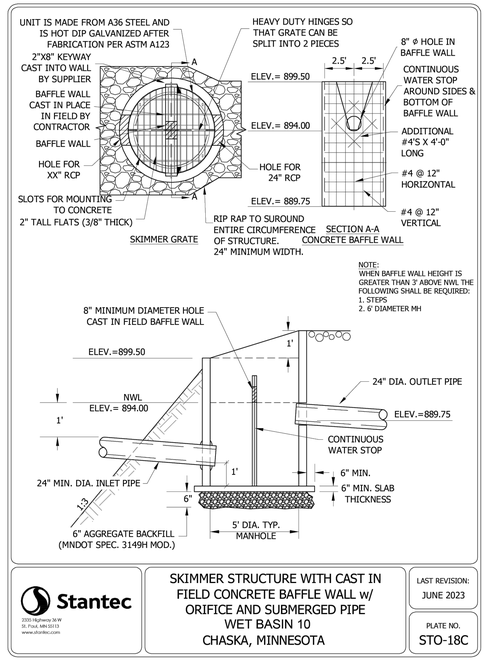
PRELIMINARY NOT FOR CONSTRUCTION

WET BASIN SUMMARY							
BASIN	TOP	EOF	100-YR HWL	NWL	BENCH BOTTOM	BENCH TOP	BOTTOM
1	931.00	930.00	929.81	924.00	923.50	924.50	915.00
2	936.75	935.75	935.21	934.00	933.00	934.00	928.00
3	936.75	935.75	935.20	934.00	933.00	934.00	929.75
5	927.00	926.00	924.86	919.00	918.50	919.50	913.00
10	901.00	900.00	899.07	894.00	893.50	894.50	888.00
11	893.00	892.00	890.09	886.00	885.50	896.50	881.50



WET BASIN 10
WITH BIORETENTION BENCH

NTS SD800



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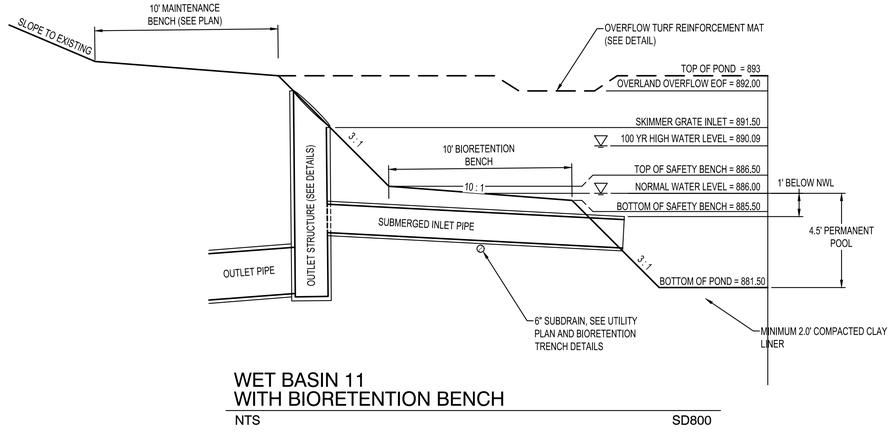
SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
WET BASIN 10
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023

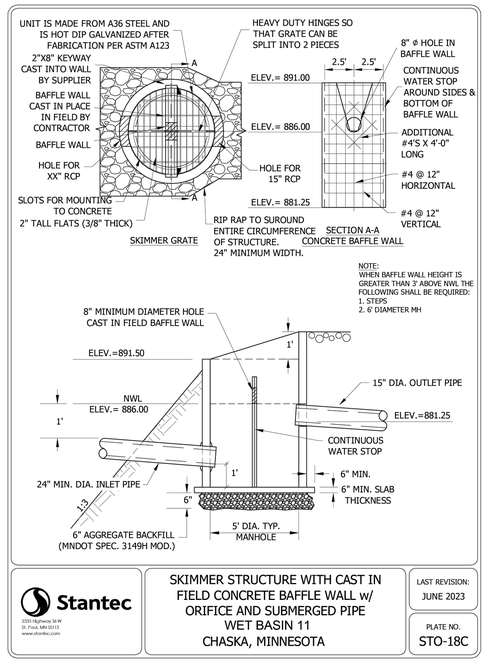
PLATE NO. STO-18C

WET BASIN SUMMARY							
BASIN	TOP	EOF	100-YR HWL	NWL	BENCH BOTTOM	BENCH TOP	BOTTOM
1	931.00	930.00	929.81	924.00	923.50	924.50	915.00
2	936.75	935.75	935.21	934.00	933.00	934.00	928.00
3	936.75	935.75	935.20	934.00	933.00	934.00	929.75
5	927.00	926.00	924.86	919.00	918.50	919.50	913.00
10	901.00	900.00	899.07	894.00	893.50	894.50	888.00
11	893.00	892.00	890.09	886.00	885.50	896.50	881.50



WET BASIN 11
WITH BIORETENTION BENCH

NTS SD800



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SKIMMER STRUCTURE WITH CAST IN FIELD CONCRETE BAFFLE WALL w/ ORIFICE AND SUBMERGED PIPE
WET BASIN 11
CHASKA, MINNESOTA

LAST REVISION: JUNE 2023

PLATE NO. STO-18C

PLOT DATE: 2/25/2025 4:30 PM

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CHASKA MINNESOTA

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ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORMWATER BASIN DETAILS

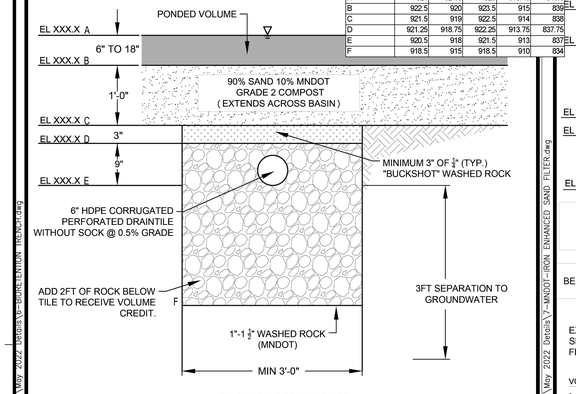
SHEET

15 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

BIORETENTION TRENCH ELEVATIONS

ELEVATION REFERENCE	BASIN 1A	BASIN 6	BASIN 7	BASIN 9	BASIN 12
A	924	921.5	925	916.45	840.5
B	922.5	920	923.5	915	839
C	921.5	919	922.5	914	838
D	921.25	918.75	922.25	913.75	837.75
E	920.5	918	921.5	913	837
F	918.5	915	918.5	910	834



CALCULATIONS TO MEET RULES

VOLUME:

1. TO RECEIVE VOLUME CREDIT, 2FT OF ROCK MUST BE ADDED BELOW THE TILE PER DETAIL. TILE INVERT MUST BE 3FT ABOVE DOWNSTREAM NWL, GROUNDWATER, BEDROCK, ETC.
2. VOLUME REDUCTION IS CALCULATED AS 40% OF PONDED VOLUME.
3. IF NO VEGETATION IS PROVIDED, THE VOLUME CALCULATION IS REDUCED TO 50% OF ROCK VOLUME BELOW TILE.

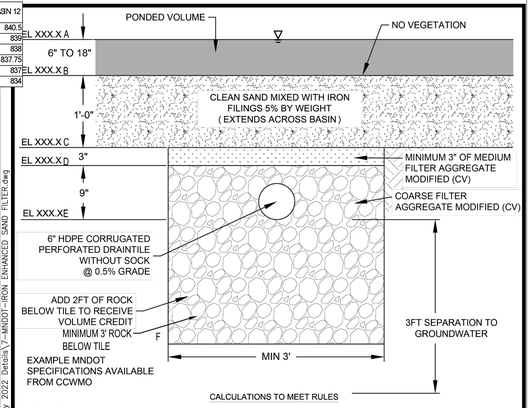
WATER QUALITY:

1. FILTRATION IS CALCULATED AS 75% TP REMOVAL AND 90% TSS REMOVAL.

PERFORMANCE REQUIREMENTS:

1. 48 HOUR DRAWDOWN OF BMPS IS REQUIRED. TO DETERMINE SURFACE AREA NEEDED, USE FILTRATION RATE OF 8 CF OF PONDED VOLUME PER SF OF SURFACE AREA.
2. BOUNCE IN THE 10-YEAR STORM EVENT SHALL NOT EXCEED 2.5 FEET ABOVE CONSTRUCTED OUTLET.
3. UNLESS RUNOFF PASSES THROUGH A POND FIRST, STORMWATER SHALL BE ROUTED TO A PRE-TREATMENT FACILITY. PRE-TREATMENT SHALL BE SIZED TO 10% OF THE WATER QUALITY VOLUME ROUTED TO THE ASSOCIATED BMP.
4. AN EMERGENCY OVERFLOW (EOF) IS REQUIRED. EOFS MUST BE A MINIMUM OF 6 INCHES ABOVE THE ASSOCIATED HWL. EOFS MUST BE REINFORCED WITH TURF REINFORCEMENT MATTING (TRM) RIP RAP IS NOT AN ACCEPTABLE EOF REINFORCEMENT METHOD.

CARVER COUNTY	Stantec	BIORETENTION TRENCH	JUNE 2023 / DETAIL 6



CALCULATIONS TO MEET RULES

VOLUME:

1. TO RECEIVE VOLUME CREDIT, 2FT OF ROCK MUST BE ADDED BELOW TILE PER DETAIL. TILE INVERT MUST BE 3FT ABOVE DOWNSTREAM NWL, GROUNDWATER, BEDROCK, ETC.
2. VOLUME REDUCTION IS CALCULATED AS 50% OF ROCK VOLUME BELOW TILE.

WATER QUALITY:

1. IRON ENHANCED FILTRATION IS CALCULATED AS 90% TP REMOVAL AND 90% TSS REMOVAL.

PERFORMANCE REQUIREMENTS:

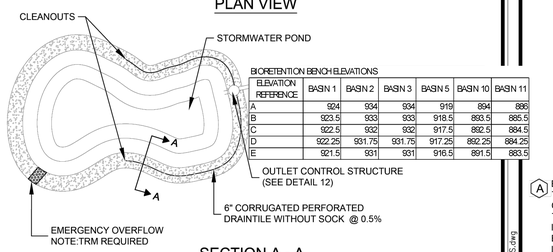
1. 48 HOUR DRAWDOWN OF BMPS IS REQUIRED. TO DETERMINE SURFACE AREA NEEDED, USE FILTRATION RATE OF 8 CF OF PONDED VOLUME PER SF OF SURFACE AREA.
2. BOUNCE IN THE 10-YEAR STORM EVENT SHALL NOT EXCEED 2.5 FEET ABOVE CONSTRUCTED OUTLET.
3. UNLESS RUNOFF PASSES THROUGH A POND FIRST, STORMWATER SHALL BE ROUTED TO A PRE-TREATMENT FOREBAY. PRE-TREATMENT SHALL BE SIZED TO 10% OF THE WATER QUALITY VOLUME ROUTED TO THE ASSOCIATED BMP.
4. AN EMERGENCY OVERFLOW (EOF) IS REQUIRED. EOFS MUST BE A MINIMUM OF 6 INCHES ABOVE THE ASSOCIATED HWL. EOFS MUST BE REINFORCED WITH TURF REINFORCEMENT MATTING (TRM) RIP RAP IS NOT AN ACCEPTABLE EOF REINFORCEMENT METHOD.

IRON FILINGS:

1. AMOUNT OF FILINGS CAN BE DETERMINED BY CALCULATING TOTAL SAND NEEDED TO FILL THE TRENCH, AND MULTIPLYING BY 5%.
2. SAND IRON NEEDS TO BE PRE-MIXED PRIOR TO INSTALLATION. CAN OCCUR OFF SITE.
3. IRON FILINGS MUST BE CLEANED AND WASHED. PROVIDE SUPPLIER INFORMATION TO WMO. NO OIL OR GREASE ALLOWED.

CARVER COUNTY	Stantec	MNDOT IRON ENHANCED SAND FILTER	JUNE 2023 / DETAIL 7

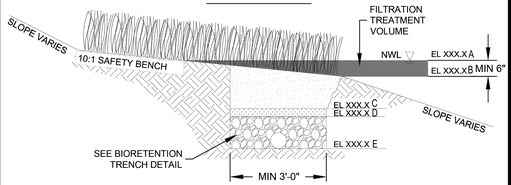
PLAN VIEW



BIORETENTION BENCH ELEVATIONS

ELEVATION REFERENCE	BASIN 1	BASIN 2	BASIN 3	BASIN 5	BASIN 10	BASIN 11
A	934	934	934	919	894	886
B	923.5	933	933	918.5	893.5	885.5
C	922.5	932	932	917.5	892.5	884.5
D	922.25	931.75	931.75	917.25	892.25	884.25
E	921.5	931	931	916.5	891.5	883.5

SECTION A - A



CALCULATIONS TO MEET RULES

VOLUME:

1. NO VOLUME REDUCTION IS GIVEN FOR BIORETENTION BENCH.

WATER QUALITY:

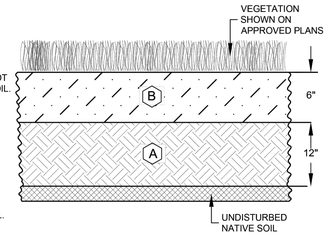
1. PAIRED WITH A NURP POND VOLUME, BIORETENTION BENCHES RECEIVE 90% TP REDUCTION AND 90% TSS REDUCTION. PAIRED WITH A MN STORMWATER MANUAL POND VOLUME, BIORETENTION BENCHES RECEIVE 75% TP AND 80% TSS REDUCTION.

PERFORMANCE REQUIREMENTS:

1. 48 HOUR DRAWDOWN OF BMPS IS REQUIRED. TO DETERMINE SURFACE AREA NEEDED, USE FILTRATION RATE OF 8 CF OF PONDED VOLUME PER SF OF SURFACE AREA.
2. AN EMERGENCY OVERFLOW (EOF) IS REQUIRED. EOFS MUST BE A MINIMUM OF 6 INCHES ABOVE THE ASSOCIATED HWL. EOFS MUST BE REINFORCED WITH TURF REINFORCEMENT MATTING (TRM) RIP RAP IS NOT AN ACCEPTABLE EOF REINFORCEMENT METHOD.
3. WHEN PAIRED WITH A STORMWATER REUSE PRACTICE, NATIVE SOILS TO BE COMPACTED PRIOR TO ROCK/TILE INSTALLATION.

CARVER COUNTY	Stantec	BIORETENTION BENCH	JUNE 2023 / DETAIL 3

DISTURBED SOILS



A BEFORE REPLACEMENT OF ANY TOPSOIL, APPLY 1 INCH OF MNDOT GRADE 2 COMPOST OVER SUBSOIL. TILL TO A MINIMUM DEPTH OF 12 INCHES USING RIP-TYPE TILLAGE EQUIPMENT. DURING TILLING, INSTALLATION MUST STOP IF SMEARING AND COMPACTION IS OCCURRING.

B INCORPORATE MNDOT GRADE 2 COMPOST IN THE TOPSOIL AT A RATE OF 2 INCHES OF COMPOST PER 6 INCHES TOTAL OF TOPSOIL. ALL TOPSOIL SHOULD MEET CARVER COUNTY SPEC.

CALCULATIONS TO MEET RULES

VOLUME:

1. VOLUME REDUCTION IS CALCULATED USING 0.5 INCHES OVER THE AMENDED AREA.

NOTE: CONTRACTOR SHALL SUBMIT AN AMENDED SOILS WORK PLAN TO WMO REPRESENTATIVE AT PRECONSTRUCTION MEETING. AMENDED SOILS WORK PLAN SHALL INCLUDE INFORMATION ON METHOD, EQUIPMENT TO BE USED, PHASING, NAME OF RESTORATION SUBCONTRACTOR, AND OTHER INFORMATION RELEVANT TO ENSURING THE GOAL OF THE AMENDED SOILS WILL BE MET. FINAL APPROVAL WILL NOT BE GRANTED WITHOUT SATISFACTORY AMENDED SOILS WORK PLAN.

CARVER COUNTY	Stantec	AMENDED SOILS	JUNE 2023 / DETAIL 2

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-STORM
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORMWATER BASIN DETAILS

SHEET

16 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:30 PM
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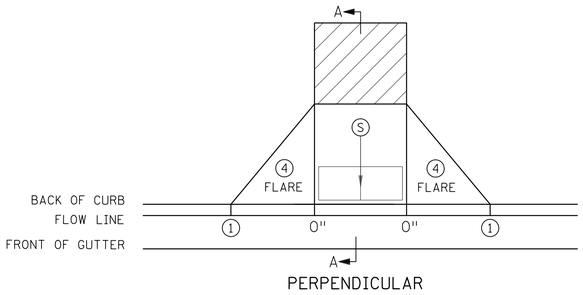
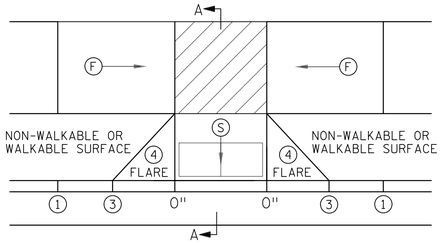
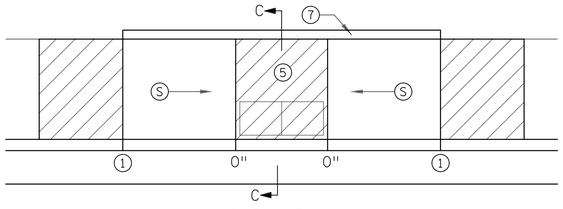
\\us0242-pfss01\shared_projects\27704851\drafting\Standard Details\V2-BIORETENTION BENCH.dwg
\\us0242-pfss01\shared_projects\27704851\drafting\Standard Details\V2-BIORETENTION TRENCH.dwg



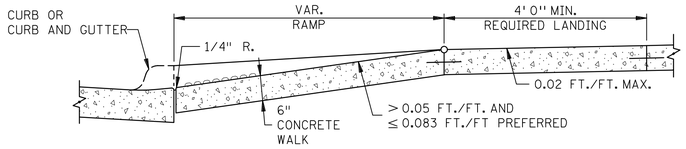
PERPENDICULAR



TIERED PERPENDICULAR

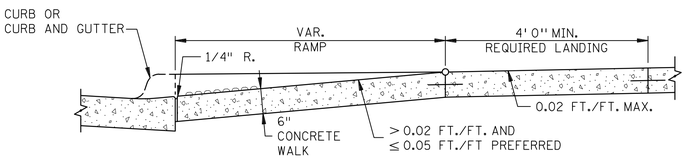


PARALLEL



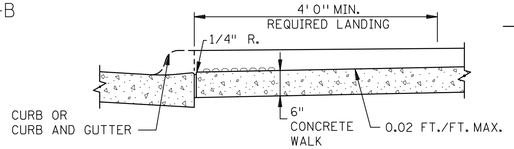
SECTION A-A

PERPENDICULAR/TIERED/DIAGONAL



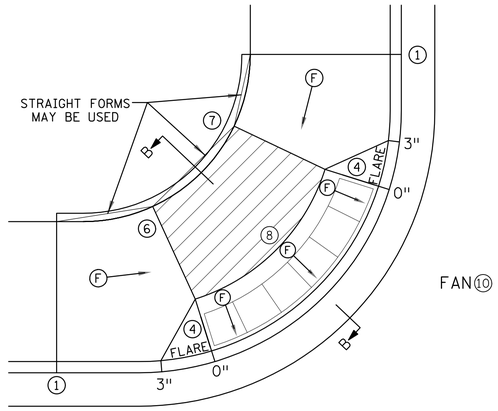
SECTION B-B

FAN

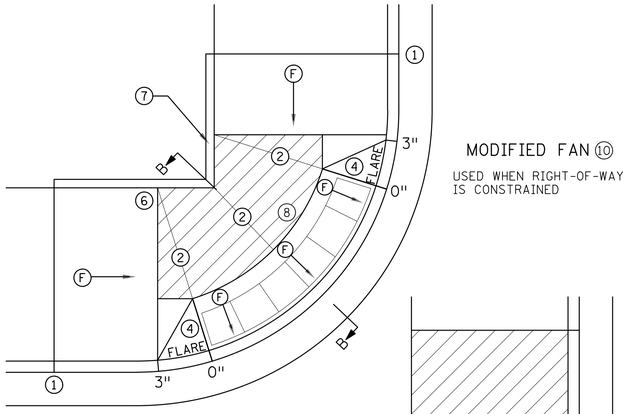


SECTION C-C

PARALLEL/DEPRESSED CORNER

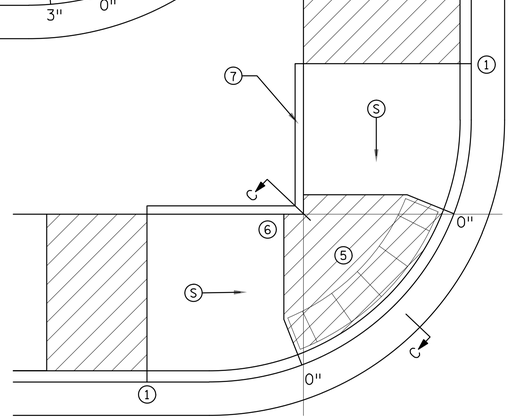


FAN⑩

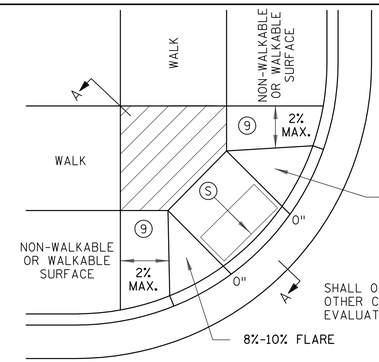


MODIFIED FAN⑩

USED WHEN RIGHT-OF-WAY IS CONSTRAINED



DEPRESSED CORNER



DIAGONAL

SHALL ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN ⑥ BELOW.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISIONS - PROSECUTION OF WORK (ADA).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/TRAIL WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

① MATCH FULL HEIGHT CURB.
② 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
③ 3" HIGH CURB WHEN USING A 3' LONG RAMP, 4" HIGH CURB WHEN USING A 4' LONG RAMP.
④ SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS, WHEN INITIAL LANDING IS AT FULL CURB HEIGHT.
⑤ DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
⑥ THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)
⑦ WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
⑧ A 7' MIN TOP RADIUS GRADE BREAK REQUIRED TO BE CONSTRUCTIBLE.
⑨ PAVE FULL WALK WIDTH.
⑩ "S" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

Ⓢ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

Ⓕ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:

APPROVED: JANUARY 23, 2017

OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

STATE DESIGN ENGINEER

REVISED:

APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 1 OF 6

PLOT DATE: 2/25/2025 4:39 PM

ISG

FORESTAR

NOTE:
THE CLARITY OF THESE PLANS DEPEND UPON COLOR COPIES. IF THIS TEXT DOES NOT APPEAR IN COLOR, THIS IS NOT AN ORIGINAL PLAN SET AND MAY RESULT IN MISINTERPRETATION.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

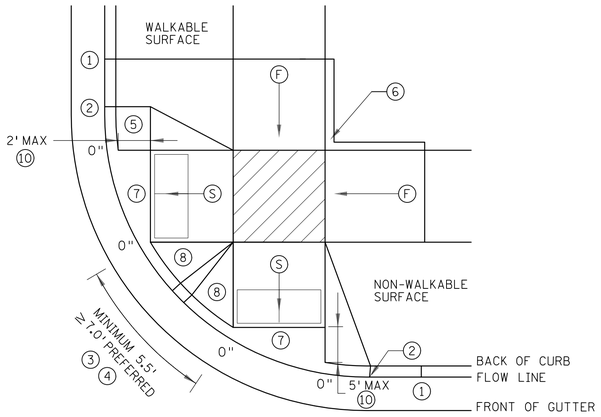
MNDOT RAMP GRADING DETAILS

SHEET

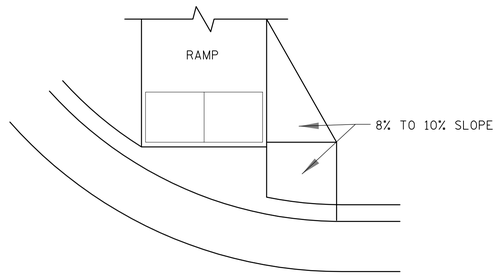
17

OF 92

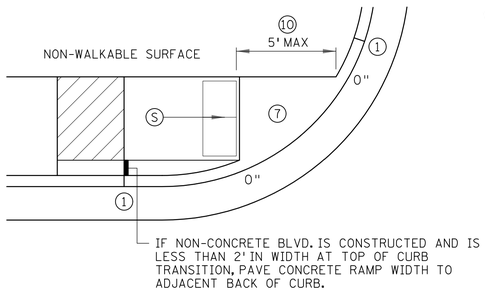
PRELIMINARY NOT FOR CONSTRUCTION



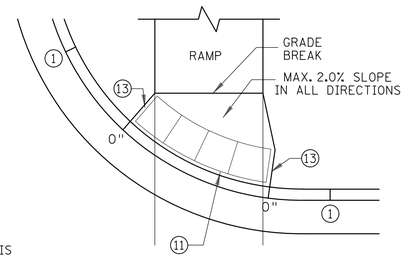
COMBINED DIRECTIONAL ⑨



DIRECTIONAL RAMP WALKABLE FLARE

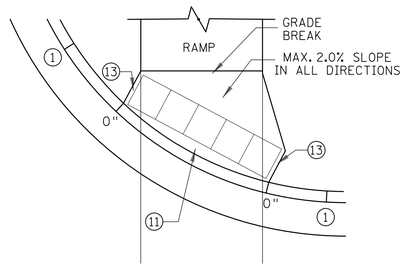


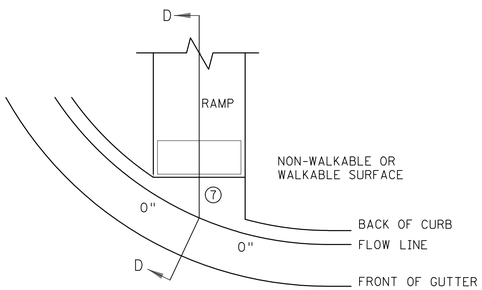
STANDARD ONE-WAY DIRECTIONAL ⑨



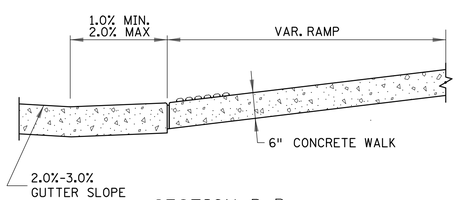
DETECTABLE WARNING PLACEMENT WHEN SETBACK CRITERIA IS EXCEEDED ⑫

ONE-WAY DIRECTIONAL WITH DETECTABLE WARNING AT BACK OF CURB

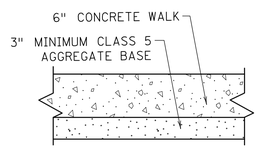




CURB FOR DIRECTIONAL RAMPS ⑭



SECTION D-D



TYPICAL SIDEWALK SECTION WITHIN INTERSECTION CORNER

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOP GRADE BREAK OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISION (PROSECUTION OF WORK).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATH AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/PATH WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB. SEE NOTES ⑩ & ⑪ FOR INFORMATION REGARDING RECTANGULAR DETECTABLE WARNING PLACEMENT.

① MATCH FULL CURB HEIGHT.

② 3" HIGH CURB WHEN USING A 3' LONG RAMP
4" HIGH CURB WHEN USING A 4' LONG RAMP.

③ 3" MINIMUM CURB HEIGHT (5.5' MIN. DISTANCE REQUIRED BETWEEN DOMES)
4" PREFERRED (7' MIN. DISTANCE REQUIRED BETWEEN DOMES).

④ THE "BUMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTIONAL RAMPS. IF THIS OCCURS MODIFY THE RAMP LOCATION OR SWITCH RAMP TO A FAN/DEPRESSED CORNER.

⑤ WHEN USING CONCRETE PAVED FLARES ON THE OUTSIDE OF DIRECTIONAL RAMPS, AND ADJACENT TO A WALKABLE SURFACE, DIRECTIONAL RAMP FLARES SHOULD BE USED. SEE THE DETAIL ON THIS SHEET.

⑥ GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.

⑦ MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.

⑧ 8% TO 10% WALKABLE FLARE.

⑨ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.

⑩ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

⑪ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.

⑫ FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE WARNINGS SHALL COVER THE ENTIRE WIDTH OF THE WALK/PATH. THIS ENSURES A DETECTABLE EDGE AND HELPS ELIMINATE THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.

⑬ THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑭ TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOMES ARE PLACED ALONG THE BACK OF CURB.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:
APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER

REVISED:
APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 2 OF 6

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FORESTAR

NOTE:
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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

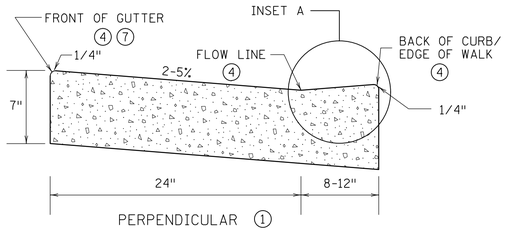
TITLE

MNDOT RAMP GRADING DETAILS

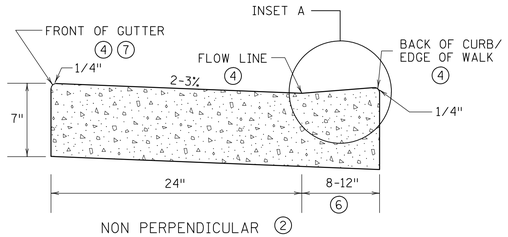
SHEET
18
OF 92

PRELIMINARY NOT FOR CONSTRUCTION

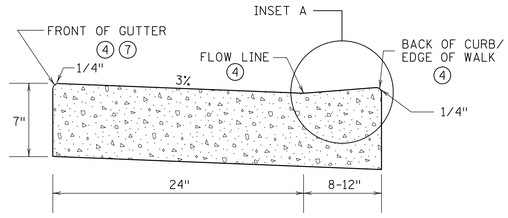
PLOT DATE: 2/5/2025 4:39 PM



PERPENDICULAR (1)

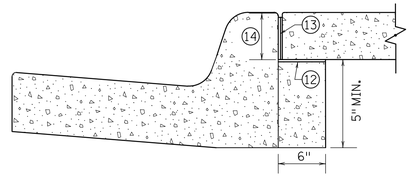


NON PERPENDICULAR (2)



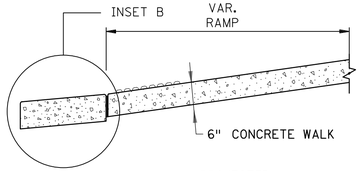
FOR CURB MACHINE PLACEMENT AROUND RADIUS (3)
(REGARDLESS OF RAMP TYPE)

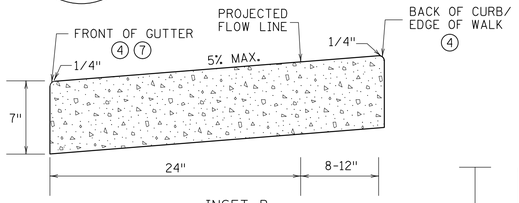
PEDESTRIAN ACCESS ROUTE CURB & GUTTER DETAIL



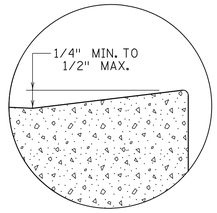
OPTIONAL SILL CURB WHEN SIDEWALK
IS AT BACK OF CURB

CONCRETE SILL TO BE USED ONLY WHEN
SPECIFIED IN THE PLAN.

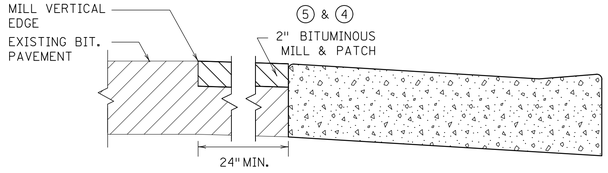


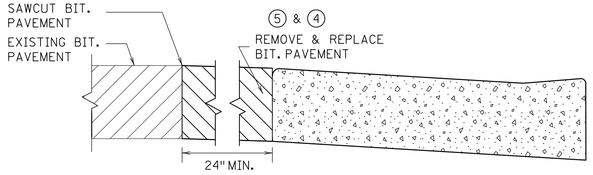


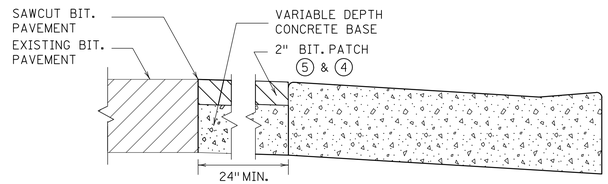
INSET B
OUTFLOW GUTTER (8)



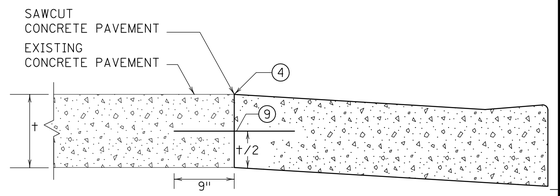
INSET A





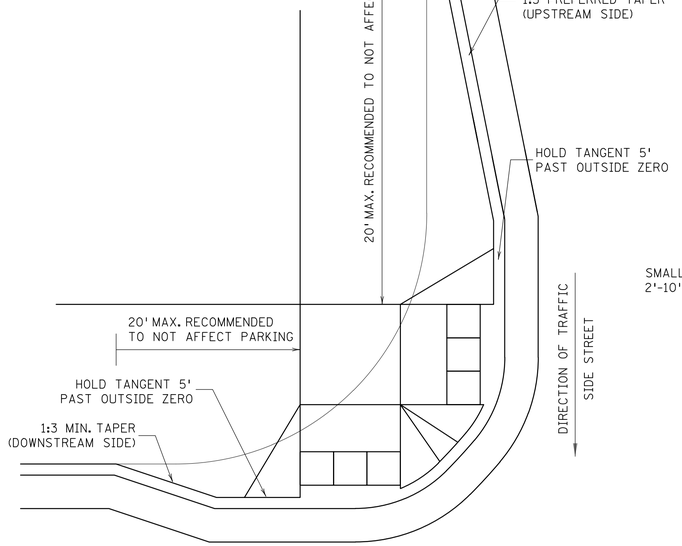


ONLY ALLOWED PER ENGINEER'S APPROVAL



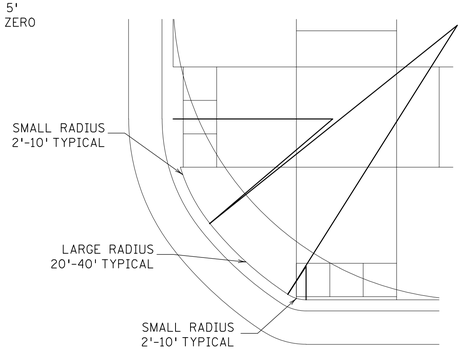
PAVEMENT TREATMENT OPTIONS IN FRONT OF CURB & GUTTER

FOR USE ON CURB RAMP RETROFITS



ADA CURB EXTENSION WITH COMPOUND RADIUS (BUMP OUT) (11)

DIRECTION OF TRAFFIC
MAIN STREET



COMBINED DIRECTIONAL (10)
(COMPOUND RADIUS)

NOTES:

POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.

NO PONDING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

(1) FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.

(2) FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS & DEPRESSED CORNERS.

(3) BEGIN GUTTER SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.

(4) THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".

(5) ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.

(6) VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIRECTIONAL CURB SLOPE REQUIREMENTS.

(7) TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. TOP 1.5" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR GUTTER SHALL NOT BE OVERLAID.

(8) SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.

(9) DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1' MINIMUM FROM ALL JOINTS.

(10) HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE DOME SETBACK LENGTH AND MINIMIZES DIRECTIONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.

(11) CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, USUALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR APS INTERSECTIONS WHERE SPACE IS LIMITED. PUSH BUTTONS MUST MEET APS CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.

(12) PLACE BOND BREAKER BETWEEN WALK AND TOP OF SILL.

(13) 1/2" PREFORMED JOINT FILLER PER MNDOT SPEC. 3702.

(14) DIMENSION TO BE SAME AS SIDEWALK THICKNESS, 4" MIN.

REVISION:

APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

REVISED:

APPROVED:
1-23-2017
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 3 OF 6

PLOT DATE: 2/25/2025 4:30 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

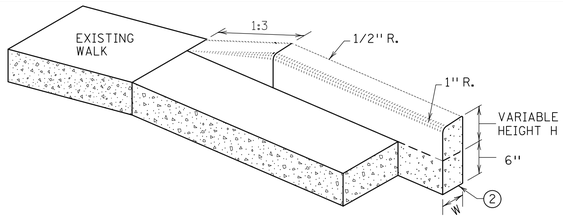
MNDOT RAMP GRADING DETAILS

SHEET

19

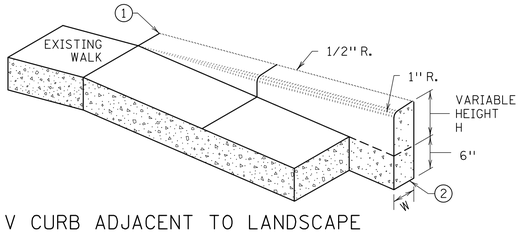
OF 92

PRELIMINARY NOT FOR CONSTRUCTION



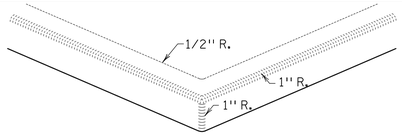
V CURB ADJACENT TO LANDSCAPE

CURB WITHIN SIDEWALK LIMITS

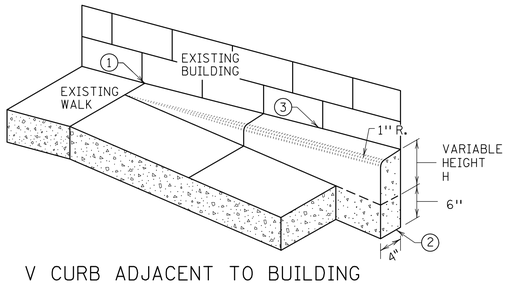


V CURB ADJACENT TO LANDSCAPE

CURB OUTSIDE SIDEWALK LIMITS

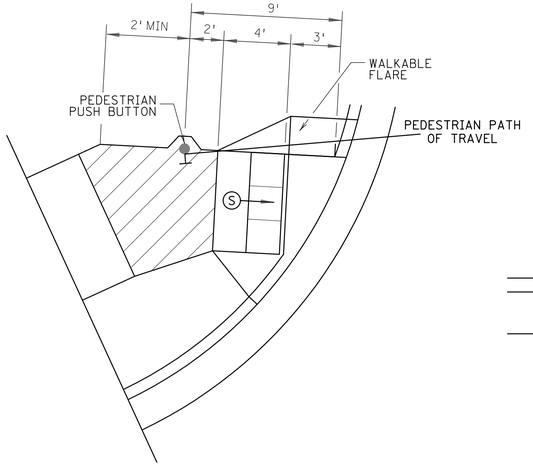


V CURB INTERSECTION



V CURB ADJACENT TO BUILDING OR BARRIER

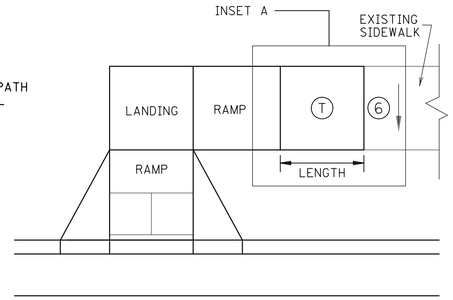
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"

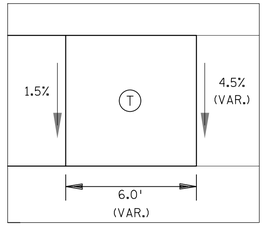


SEMI-DIRECTIONAL RAMP (3,4,9)

3' DOME SETBACK, 4' LONG RAMP AND PUSH BUTTON 9' FROM THE BACK OF CURB

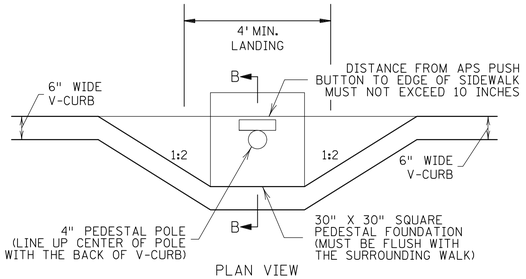
PRIMARILY USED FOR APS APPLICATIONS WHERE THE PAR DOES NOT CONTINUE PAST THE PUSH BUTTON (DEAD-END SIDEWALK)



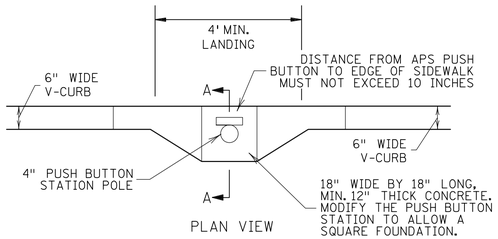


INSET A

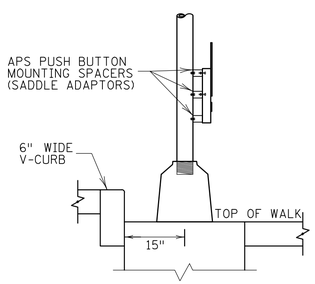
TRANSITION PANEL ④⑤



PLAN VIEW

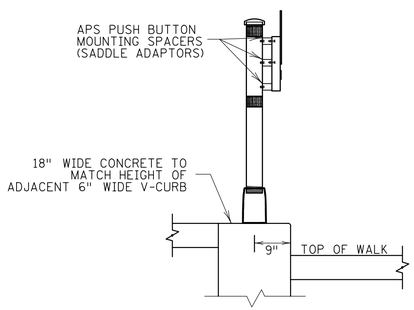


PLAN VIEW



SECTION B-B

SIGNAL PEDESTAL & PUSH BUTTON (V-CURB)



SECTION A-A

PUSH BUTTON STATION (V-CURB)

NOTES:

A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

1. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
2. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
3. EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
4. THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1' LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE. WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%, DOUBLE THE CALCULATED TRANSITION LENGTH.
5. TRANSITION PANELS ARE TO ONLY BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).
6. EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- (S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- (T) TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

REVISION:

APPROVED: JANUARY 23, 2017

OPERATIONS ENGINEER

REVISED:

APPROVED: 1-23-2017

STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 5 OF 6

PLOT DATE: 2/25/2025 4:39 PM

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PROJECT

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HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

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TITLE

MNDOT RAMP GRADING DETAILS

SHEET

20

OF 92

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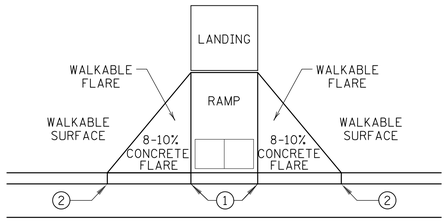
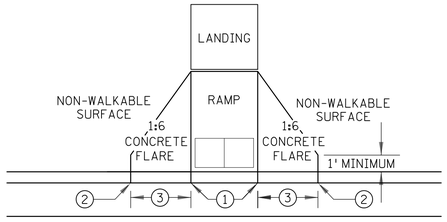
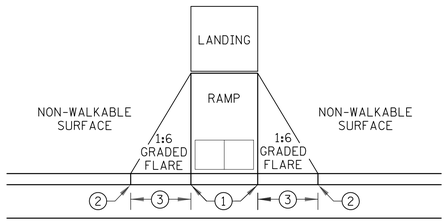


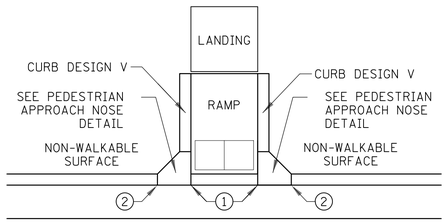
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE

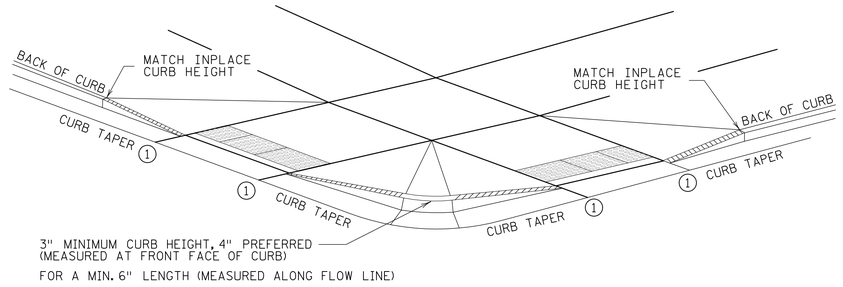


GRADED FLARES

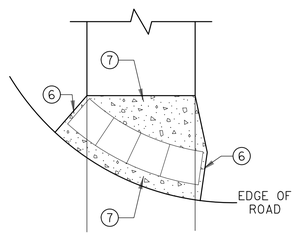


RETURNED CURB ⑤

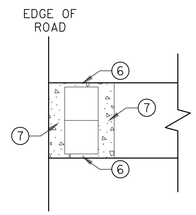
TYPICAL SIDE TREATMENT OPTIONS ④ ⑪



DETECTABLE EDGE WITH ⑧
CURB AND GUTTER

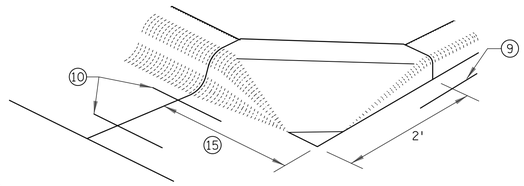


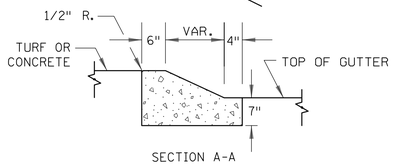
RADIAL DETECTABLE WARNING



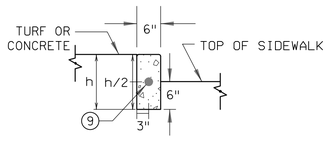
RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER

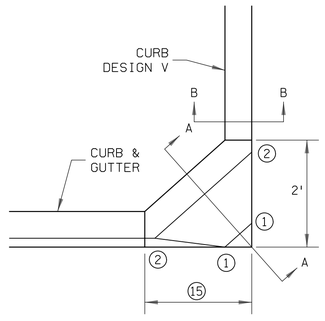




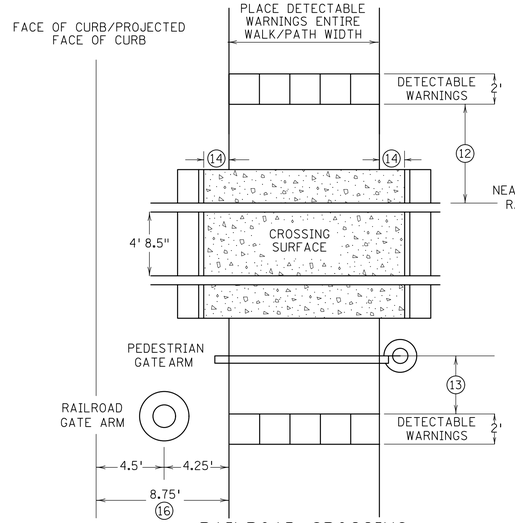
SECTION A-A



SECTION B-B



PEDESTRIAN APPROACH
NOSE DETAIL
(FOR RETURNED CURB
SIDE TREATMENT)



RAILROAD CROSSING
PLAN VIEW

NOTES:

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

① 0" CURB HEIGHT.

② FULL CURB HEIGHT.

③ 2' FOR 4" HIGH CURB AND 3' FOR 6" HIGH CURB.

④ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.

⑤ TYPICALLY USED FOR MEDIANS AND ISLANDS.

⑥ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑦ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BITUMINOUS ROADWAY AND/OR BITUMINOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.

⑧ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

⑨ DRILL AND GROUT 1 - NO. 4 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE V CURB.

⑩ DRILL AND GROUT 2 - NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.

⑪ SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB (I.E. 6' LONG RAMP FOR 6" HIGH CURB). WHEN THE INITIAL LANDING IS MORE THAN 1" BELOW FULL HEIGHT CURB REFER TO SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT TAPERS AND MAINTAIN POSITIVE BOULEVARD DRAINAGE.

⑫ NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.

⑬ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL, 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE ⑫.

⑭ CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.

⑮ 3' FOR MEDIANS AND SPLITTER ISLANDS. NOSE CAN BE REDUCED TO 2' ON FREE RIGHT ISLANDS.

⑯ SIDEWALK TO BE PLACED 8.75' MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB. THIS ENSURES MIN. CLEARANCE BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.

REVISION:

APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER

REVISED:

APPROVED:
1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 4 OF 6

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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REVIEWED BY	RAG
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CLIENT PROJECT NO.	-

TITLE

MNDOT RAMP GRADING DETAILS

SHEET

21

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

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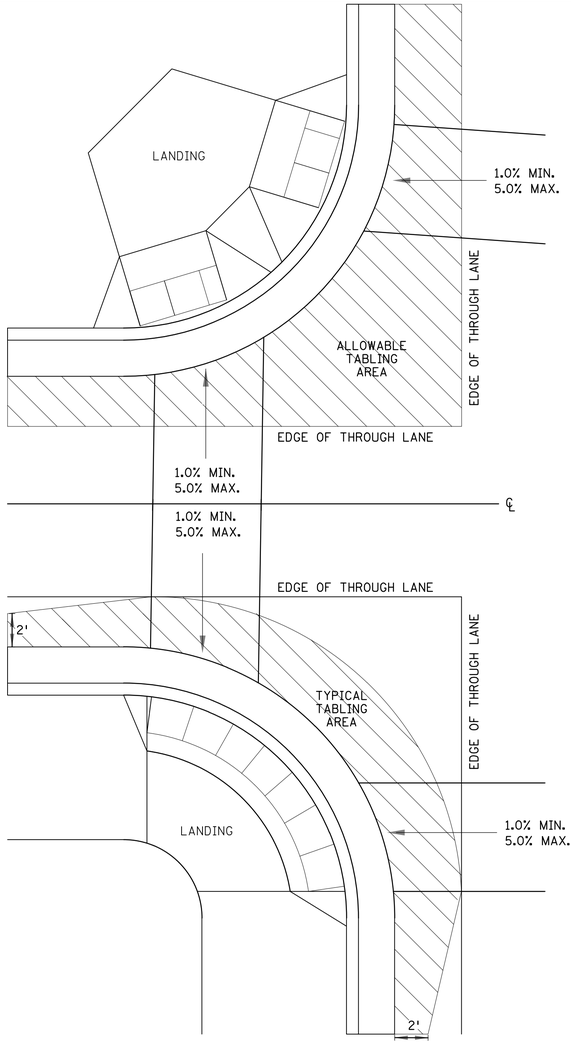
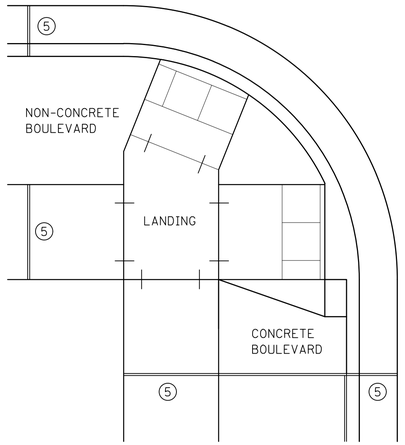
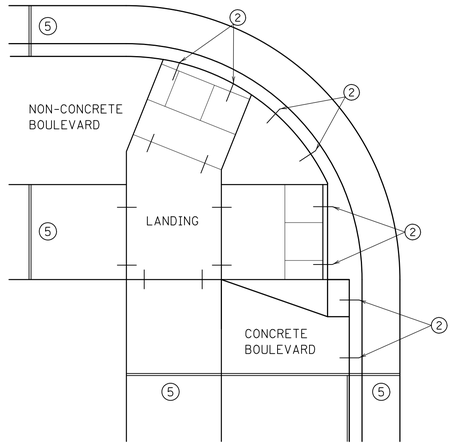


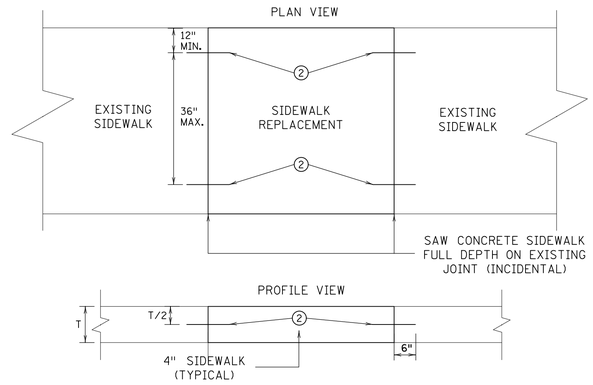
CURB LINE AND ROAD CROSSING ADJUSTMENTS



EXPANSION MATERIAL PLACEMENT FOR CONCRETE AND BITUMINOUS ROADWAYS

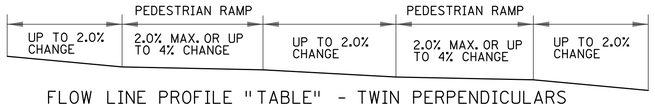


OPTIONAL CURB LINE REINFORCEMENT PLACEMENT ON BITUMINOUS ROADWAYS ④

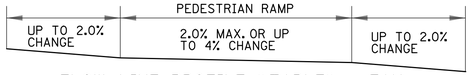


OPTIONAL SIDEWALK REINFORCEMENT

SIDEWALK REINFORCEMENT TO BE USED ONLY WHEN SPECIFIED IN THE PLAN.



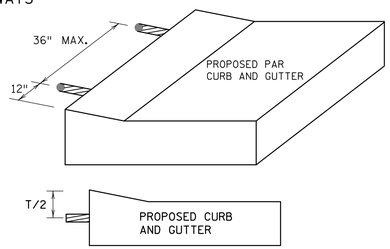
FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



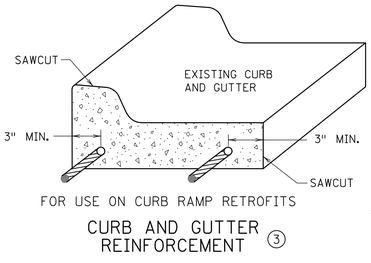
FLOW LINE PROFILE "TABLE" - FAN

FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS

FLOW LINE PROFILE RAISE - FAN

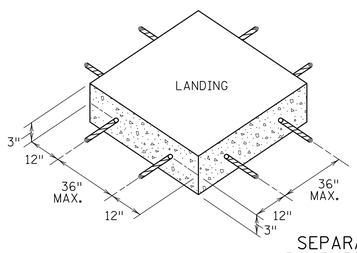


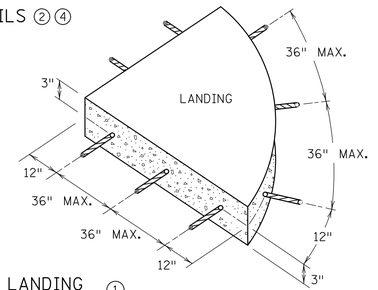
OPTIONAL CURB LINE REINFORCEMENT DETAILS ②④



FOR USE ON CURB RAMP RETROFITS

CURB AND GUTTER REINFORCEMENT ③





SEPARATE LANDING POUR REINFORCEMENT ①

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS "TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2%. WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE. TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA;

1) 1.0% MIN. CROSS-SLOPE OF THE ROAD
2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
3) "TABLE" FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA;

1) 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
2) 1.0% MIN. FLOW LINE (ON EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
3) 5.0% RECOMMENDED MAX. FLOW LINE
4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

NOTES:

① TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.

② DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAXIMUM CENTER TO CENTER (EPOXY COATED). BARS TO BE ADJUSTED TO MATCH RAMP GRADE.

③ DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS WITHIN RADIUS.

④ THIS OPTIONAL CURB LINE REINFORCEMENT DETAIL SHOULD ONLY BE USED ON BITUMINOUS ROADWAYS WHEN SPECIFIED IN THE PLAN.

⑤ 1/2 IN. PREFORMED JOINT FILLER MATERIAL PER MNDOT SPEC. 3702.

REVISION:

APPROVED: JANUARY 23, 2017

OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

STATE DESIGN ENGINEER

REVISED:

APPROVED: 1-23-2017

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 6 OF 6

PLOT DATE: 2/25/2025 4:30 PM

ISG

FORESTAR

NOTE:
THE CLARITY OF THESE PLANS DEPEND UPON COLOR COPIES. IF THIS TEXT DOES NOT APPEAR IN COLOR, THIS IS NOT AN ORIGINAL PLAN SET AND MAY RESULT IN MISINTERPRETATION.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-DETAILS-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

MNDOT RAMP GRADING DETAILS

SHEET

22

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

REMOVAL LEGEND

SYMBOL	DESCRIPTION
	DEMOLISH BUILDING
	REMOVE DECIDUOUS TREE (CLEAR AND GRUB)

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT AND SECTION REMOVAL.

ISG

FORESTAR

NOTE:
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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-EXISTING
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

EXISTING SITE & REMOVAL PLAN

SHEET

23 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:30 PM

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT LOCATION

PROJECT/SITE NAME: HIGHPOINT VISTAS
PROJECT LOCATION: 4130 CHASKA BLVD
CITY/TOWNSHIP: CHASKA
COUNTY/STATE: CARVER, MINNESOTA
ZIP CODE: 55318
LATITUDE/LONGITUDE: 44.7794, -93.6298
SECTION, TOWNSHIP, RANGE: S7, T115N, R23W

PROJECT DESCRIPTION

THE PROJECT INCLUDES CONSTRUCTION OF A NEW TWO-LANE NORTH/SOUTH COLLECTOR ROADWAY LOCAL MUNICIPAL STREETS, SIDEWALK, WATERMAIN, SANITARY AND STORM SEWER, AND 162 SINGLE FAMILY UNITS. THE DEVELOPMENT IS NORTH OF C.R. 61 (CHASKA BOULEVARD) AND IS ON THE SOUTHERN BORDER OF THE CHASKA, MN CITY LIMITS. THIS PROJECT ALSO INCLUDES THE CONSTRUCTION OF CORRESPONDING STORMWATER MANAGEMENT, CURRENTLY PLANNED AS BOTH WET BASINS AND BIOFILTRATION BASINS. THIS PROJECT AREA INCLUDES A NEW TWO-LANE NORTH/SOUTH COLLECTOR ROADWAY THAT IS ADJECENT TO THE PROJECT AND WILL BE DESIGNED BY THE CITY OF CHASKA.

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF, CLEARING AND GRUBBING, TREE REMOVALS, UTILITIES, GRADING, PAVING, LANDSCAPING, AND OTHER RELATED SITE WORK.

TENTATIVE CONSTRUCTION SCHEDULE (OPERATOR SHOULD PROVIDE ESTIMATED CONSTRUCTION SCHEDULE TO THE OWNER'S REPRESENTATIVE)	
CONSTRUCTION ACTIVITIES:	**ESTIMATED DATES OF SOIL DISTURBANCE ACTIVITIES:**
CLEARING AND GRUBBING OPERATIONS, GRADING, TEMP, POND	APRIL - MAY 2025
UTILITIES	JUNE – JULY 2025
CURB & GUTTER/SIDEWALK	AUGUST – SEPTEMBER 2025
PAVING	SEPTEMBER – OCTOBER 2025
INITIAL TURF, LIGHTING	OCTOBER 2025
LANDSCAPING, FINAL TURF, MISC.	APRIL 2026

PRE-CONSTRUCTION IMPERVIOUS SURFACE AND DISTURBED AREA CALCULATIONS

TOTAL AREA TO BE DISTURBED = 76.13 ACRES MINIMUM AREA REQUIRING MPCA PERMIT = 1.00 ACRES
TOTAL AREA TO BE DISTURBED (PHASE 1) = 50.49
****AN MPCA NPDES PERMIT IS REQUIRED FOR THIS PROJECT****
IMPERVIOUS AREA: PRE-CONSTRUCTION (ON-SITE) = 0.77 ACRES/POST-CONSTRUCTION = 26.21 ACRES
NET INCREASE OF IMPERVIOUS AREA = 25.44 ACRES
MINIMUM NEW IMPERVIOUS SURFACE AREA CREATED REQUIRING PERMANENT STORMWATER MANAGEMENT = 1.00 ACRES

CONTACT INFORMATION/RESPONSIBLE PARTIES

THE OWNER OWNS THE LAND, ADJACENT ROADS, AND EASEMENT AREAS ASSOCIATED WITH THE PROJECT. THE OWNER IS THE OWNER CO-PERMITTEE APPLYING FOR PERMIT COVERAGE AND WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT INCLUDING DEVELOPING THIS SWPPP AND THE LONG-TERM MAINTENANCE PLAN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT (IF APPLICABLE). THE OWNER WILL ENSURE THAT THE DESCRIBED WORK IN THE SWPPP IS BEING COMPLETED BY THE OPERATOR PERMITTEE.

OWNER/PERMITTEE: FORESTAR (STEPHEN GARDINER, REAL ESTATE INVESTMENT & DEVELOPMENT DIRECTOR)
20860 KENBRIDGE CT, SUITE 100
LAKEVILLE, MN 55044
612.581.8940 / STEPHENGARDINER@FORESTAR.COM

THE PRIMARY CONTRACTOR WILL ENTER INTO A CONTRACT WITH THE OWNER TO COMPLETE THE REQUIRED WORK FOR THIS PROJECT. THE PRIMARY CONTRACTOR WILL BECOME (UNDER CONTRACT) THE OPERATOR CO-PERMITTEE ON THE NPDES PERMIT (THROUGH EXECUTION OF AN NPDES PERMIT MODIFICATION FORM) AND THEREBY AGREE TO IMPLEMENT THIS SWPPP IN COOPERATION WITH THE OWNER. THE OPERATOR IS RESPONSIBLE FOR IDENTIFYING AN EROSION CONTROL SUPERVISOR PRIOR TO STARTING CONSTRUCTION (REFER TO SWPPP AMENDMENT SECTION). THE NPDES PERMIT MODIFICATION FORM SHALL BE SUBMITTED TO THE MPCA AFTER THE PROJECT IS AWARDED TO THE OPERATION.

THE OPERATOR WILL ENSURE THAT INDIVIDUALS OVERSEEING OR IMPLEMENTING THE SWPPP HAVE BEEN PROPERLY TRAINED AND THAT CERTIFICATIONS WILL BE MADE AVAILABLE UPON REQUEST. THIS INCLUDES ANY SUB-CONTRACTORS THAT THE OPERATOR EMPLOYS UNDER SEPARATE CONTRACT. THE OPERATOR WILL PROVIDE THE CONTACT INFORMATION FOR THE EROSION CONTROL SUPERVISOR, SITE SUPERINTENDENT/FOREMAN, AND BMP INSTALLERS. THE EROSION CONTROL SUPERVISOR SHALL BE A RESPONSIBLE EMPLOYEE OF THE PRIME CONTRACTOR AND/OR DULY AUTHORIZED BY THE PRIME CONTRACTOR TO REPRESENT THE PRIME CONTRACTOR ON ALL MATTERS PERTAINING TO THE NPDES CONSTRUCTION STORMWATER PERMIT COMPLIANCE. THE EROSION CONTROL SUPERVISOR SHALL HAVE AUTHORITY OVER ALL OPERATOR ACTIVITIES WHICH INFLUENCE NPDES PERMIT COMPLIANCE, INCLUDING GRADING, EXCAVATION, BRIDGE CONSTRUCTION, CULVERT INSTALLATION, UTILITY WORK, CLEARING/GRUBBING, DEWATERING, AND ANY OTHER OPERATION THAT INCREASES THE EROSION POTENTIAL ON THE PROJECT.

THE OPERATOR WILL PERFORM A PRECONSTRUCTION SITE VISIT TO ADDRESS ANY AREAS OF CONCERN PERTAINING TO ENVIRONMENTAL COMPLIANCE. THE OPERATOR WILL IMPLEMENT AND MAINTAIN BMPS FOR THE DURATION OF CONSTRUCTION PROJECT. THE OPERATOR WILL COMPLETE THE REQUIRED SITE INSPECTIONS AND IS RESPONSIBLE FOR SECTIONS 3-4, 6-22, 24, AND APPLICABLE PARTS OF 23, TO REMAIN IN COMPLIANCE WITH NPDES PERMIT.

OPERATOR/PERMITTEE: (TO BE DETERMINED)

ISG INC. HAS BEEN CONTRACTED BY THE OWNER TO DEVELOP THE SWPPP PLAN FOR THIS PROJECT. THIS SWPPP WAS PREPARED BY AN INDIVIDUAL THAT HAS BEEN PROPERLY TRAINED IN ACCORDANCE TO SECTION 21 OF THE NPDES PERMIT (CERTIFICATION CARDS ARE AVAILABLE UPON REQUEST). ISG INC. WILL OFFER GUIDANCE FOR COMPLIANCE WITH THE NPDES PERMIT BEFORE, DURING, AND AFTER CONSTRUCTION OF THE PROJECT.

SWPPP DESIGNER:
ISG INC. (LEANNA MARKOVICS)
7900 INTERNATIONAL DR., SUITE 550
MINNEAPOLIS, MN 55425
952-426-0699/LEANNA.MARKOVICS@ISGINC.COM

PERMANENT STORMWATER MANAGEMENT SYSTEM:
ISG INC. (BECKY GUENTHER)
7900 INTERNATIONAL DR., SUITE 550
MINNEAPOLIS, MN 55416
952-426-0699/BECKY.GUENTHER@ISGINC.COM

AGENCY CONTACTS			
AGENCY	**PERMIT**	**NAME**	**PHONE NUMBER/E-MAIL**
MPCA (EMERGENCY)	N/A	STATE DUTY OFFICER	1-800-422-0798
MPCA	NPDES-CSW #MNR100001	JOSH NORMAN	651-757-2389/JOSH.NORMAN@STATE.MN.US
CITY OF CHASKA	GRADING PERMIT	BRENT ALCOTT	952-227-7525/BALCOTT@CHASKAMN.GOV
WCA	WCA	BRENT ALCOTT	952-227-7525/BALCOTT@CHASKAMN.GOV
CCWMO - WATERSHED DISTRICT	WATER MANAGEMENT	TIM SUNDBY	651-324-7246/TSUNDBY@CARVERCOUNTYMN.GOV

PERMANENT STORMWATER TREATMENT SYSTEMS

THE NPDES PERMANENT WATER QUALITY VOLUME (SECTION 15) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED IN THE PROPOSED FILTRATION BASINS AND WET SEDIMENTATION BASINS. HYDROLOGIC AND WATER QUALITY MODELING DATA AND THE CONTAMINATION CHECKLIST IS AVAILABLE UPON REQUEST. THE SITE IS UNABLE TO MEET THE FULL VOLUME REDUCTION REQUIREMENT DUE TO ON-SITE SOILS THAT ARE NOT CONDUCIVE TO INFILTRATION.

LOCATION OF SWPPP COMPONENTS		
DESCRIPTION	**TITLE**	**LOCATION (SHEET NAME)**
SWPPP NARRATIVE	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE CONDITIONS	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE MAPS (SOILS, WATER RESOURCES, POTENTIAL POLLUTANT GENERATING ACTIVITIES)	SWPPP MAP, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
DIRECTION OF SURFACE WATER FLOW (PRE- & POST- CONSTRUCTION	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
IMPERVIOUS SURFACES	CONSTRUCTION PLAN & PROFILE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
TEMPORARY EROSION & SEDIMENT CONTROL BMPS FOR STEEP SLOPES (3:1), DNR FISH EXCLUSION "WORK IN WATER RESTRICTIONS" REFER TO SWPPP	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
PERMANENT EROSION PREVENTION BMPS	TURF ESTABLISHMENT PLAN, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); SWPPP GENERAL INFORMATION, DETAILS AND NOTES; TURF RESTORATION PLAN
STORM SEWER	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); OVERALL UTILITY PLAN
GRADING	GRADING PLAN	OVERALL GRADING PLAN, NOTES AND EARTHWORK CALCULATIONS
ESTIMATED BMP QUANTITIES	ESTIMATED QUANTITIES	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
BMP DETAILS/SPECIFICATIONS	MISC. DETAILS, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
HYDROLOGIC/WATER QUALITY MODELING		AVAILABLE UPON REQUEST

EXISTING SITE CONDITIONS, SOILS, & WATER RESOURCES

SOILS AND NATIVE TOPSOIL: NATIVE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR FINAL GRADING OPERATIONS, WHERE INDICATED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. METHODS AND EQUIPMENT TO MINIMIZE SOIL COMPACTION (IN PROPOSED INFILTRATION AREAS, DRIP LINE OF TREES TO BE PRESERVED, ETC.) SHALL BE DETERMINED BY THE OPERATOR'S SWPPP AMENDMENT. TRACKED VEHICLES ARE PREFERRED AND WHEELED VEHICLES ARE DISCOURAGED IN THESE AREAS. THE USDA-NRCS MAPPED SOILS ON THIS SITE ARE SHOWN AS POTENTIALLY HIGHLY ERODIBLE ON THE COUNTY SOIL SURVEY MAP. PARTICLE SIZE AND COARSE FRAGMENT DATA IS AVAILABLE UPON REQUEST.

DESCRIPTION OF RECEIVING WATERS (LOCATED WITHIN 1-MILE): STORMWATER FROM THIS PROJECT WILL BE CONVEYED VIA SWALES INTO STORMWATER PONDS AND BASINS. PROJECT DISCHARGE POINTS (OVERFLOWS FROM AND PONDS) DISCHARGE TO MULTIPLE RAVINES THROUGHOUT THE SITE, WETLAND WB-04, AS WELL AS A CULVERT CROSSING CR61 (CHASKA BOULEVARD). GENERALLY, DISCHARGE FROM THE NORTH END OF THE SITE DISCHARGES THROUGH A SWALE WHICH DRAINS TO AN UNIMPAIRED SECTION OF CHASKA CREEK WHILE THE SOUTH PORTION OF THE SITE DRAINS THROUGH A SWALE TO CHASKA LAKE WHICH UTIMATELY OUTLETS TO CHASKA CREEK AND THE MINNESOTA RIVER OVER 1 MILE FROM THE SITE DISCHARGE. THE NPDES PERMANENT WATER QUALITY VOLUME (SECTION 15) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED IN THE CONSTRUCTED PONDS AND DITCHES. HYDROLOGIC AND WATER QUALITY MODELING DATA IS AVAILABLE UPON REQUEST.

DESCRIPTION OF IMPAIRED WATERS OR WATER SUBJECT TO TMDLS: A SPECIAL AND IMPAIRED WATERS SEARCH WAS COMPLETED USING THE MPCA SEARCH ENGINE (HTTPS://MPCA.MAPS.ARCGIS.COM/APPS/WEBAPPVIEWER/INDEX.HTML?ID =E03EF170FA3E41F6BE92F9FAFEC100CC) ON 06/17/2024. BASED ON THIS REVIEW, THE SEARCH SHOWED NO IMPAIRED WATERS OR WATERS SUBJECT TO TMDLS WITHIN THE PROJECT LIMITS. IT IS NOTABLE THAT ALTHOUGH THERE IS AN IMPAIRED WATER WITHIN ONE MILE OF THE SITE, THE SITE DISCHARGES TO UNIMPAIRED WATERS, AS NOTED ABOVE.

POTENTIAL FOR SEDIMENT AND/OR OTHER POLLUTANT(S) DISCHARGING FROM THE PROJECT SITE

THE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS IN THIS SWPPP HAVE BEEN DESIGNED TO MINIMIZE THE POTENTIAL OF SEDIMENTS DISCHARGING OFF-SITE FROM A 0.5 INCH RAINFALL WITHIN A 24-HOUR PERIOD. THE NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATE FOR THE PROJECT LOCATION WAS REVIEWED AND USED FOR ANTICIPATED INSPECTION FREQUENCY, BMP DESIGN, AND ESTIMATING CONSTRUCTION ACTIVITIES IN THIS SWPPP. ATLAS 14 RESULTS DO NOT NECESSARILY REFLECT ANY DESIGN CRITERIA IN THE PERMANENT STORMWATER MANAGEMENT SYSTEM.

ROUTINE INSPECTION AND BMP MAINTENANCE BY THE OPERATOR IS CRUCIAL IN ENSURING THE FUNCTIONALITY OF EACH BMP. STEEP SLOPES AND OTHER ENVIRONMENTALLY SENSITIVE AREAS THAT ARE AT A HIGHER RISK OF SEDIMENTATION ARE DEFINED IN THIS SWPPP (IF APPLICABLE).

CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED

AREAS NOT TO BE DISTURBED ARE TO BE DELINEATED BEFORE WORK BEGINS. PERMITTEES ARE RESPONSIBLE FOR PRESERVING A 50 FOOT NATURAL BUFFER OR (IF INFEASIBLE AND DOCUMENTED) PROVIDE REDUNDANT SEDIMENT CONTROL BMPS, WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET AND RECEIVES DRAINAGE FROM THE PROJECT'S GRADING LIMITS. THIS REQUIREMENT DOES NOT APPLY TO ADJACENT ROAD SIDE DITCHES, JUDICIAL/COUNTY DITCHES, STORMWATER CONVEYANCES, STORM DRAIN INLETS, AND SEDIMENT BASINS.

THERE IS CONSTRUCTION PHASING AND STAGING DEFINED BY THE OWNER FOR THIS PROJECT. THE SCHEDULE FOR INSTALLING TEMPORARY BMPS SHALL BE PER PHASE AS SHOWN IN PLANS. THE PROJECT'S CONSTRUCTION PHASING AND STAGING IS DEFINED BY THE "CONSTRUCTION STAGING & TRAFFIC CONTROL PLAN" AND PROJECT SPECIFICATIONS.

ENVIRONMENTALLY SENSITIVE AREAS

STEEP SLOPES: EXISTING AND PROPOSED SLOPES 1 IN 3 (33.33%) AND STEEPER THAT ARE PROPOSED TO BE DISTURBED ARE ILLUSTRATED ON THE PLAN SHEETS. STEEP SLOPES MAY BE TEMPORARILY CREATED DURING GRADING OPERATIONS IF NECESSARY, AT WHICH TIME TEMPORARY BMPS MUST BE IMPLEMENTED BY THE OPERATOR (THROUGH AN APPROVED SWPPP AMENDMENT) WITHIN 14 DAYS OF NO LONGER WORKING THE STEEP SLOPE.

CONTAMINATED PROPERTIES: THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DATABASE WAS REVIEWED ON 06/17/24 (WWW.PCA.STATE.MN.US/DATA/WHATS-MY-NEIGHBORHOOD) AND A CONTAMINATION ASSESSMENT WAS PERFORMED (AVAILABLE UPON REQUEST). THE RESULTS OF THIS REVIEW SHOW NO KNOWN CONTAMINATED PROPERTIES OR LEAK SOURCES LOCATED WITHIN AND ADJACENT TO THE PROJECT LIMITS.

STORMWATER POLLUTION MITIGATION MEASURES (AS IDENTIFIED FROM ENVIRONMENTAL REVIEW): NO FORMAL ENVIRONMENTAL REVIEW WAS REQUIRED FOR THIS PROJECT. THEREFORE, NO ADDITIONAL STORMWATER RELATED MITIGATION MEASURES APPLY.

KARST AREAS: THERE ARE NO KNOWN ACTIVE KARST AREAS WITHIN OR ADJACENT TO THE PROJECT LIMITS.

SITE PLAN REQUIRED AREAS: AREAS OF "HIGH ENVIRONMENTAL RISKS" ARE KNOWN TO BE LOCATED WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS. AREAS OF HIGH ENVIRONMENTAL RISKS ARE KNOWN TO BE LOCATED WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS, AS IDENTIFIED ON THTE SWPPP SHEETS OF THE CONSTRUCTION PLAN SET. OPERATOR SHALL SUBMIT A SITE PLAN FOR THE IDENTIFIED ENVIRONMENTALLY SENSITIVE AREAS. EACH SITE PLAN MUST DETAIL PROPOSED ACTIVITIES, CORRESPONDING SCHEDULING, STAGING, TEMPORARY EROSION AND SEDIMENT CONTROLS, AND BMP DETAILS PER SECTION 1717 OF THE MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. SITE PLANS MUST BE APPROVED BY PROJECT ENGINEER PRIOR TO INITIATING THE SPECIFIED WORK WITHIN EACH SITE PLAN AREA.

FLOOD CONTINGENCY PLAN: PROJECT ACTIVITIES DO NOT OCCUR WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY.

FISH EXCLUSION DATES:
FISH EXCLUSION DATES ARE NOT APPLICABLE TO THIS PROJECT LOCATION.

AQUATIC INVASIVE SPECIES: ALL IN-STREAM AND DEWATERING EQUIPMENT SHALL BE DECONTAMINATED OF ALL AQUATIC PLANTS AND PROHIBITED INVASIVE SPECIES PRIOR TO USING WITHIN SURFACE WATERS ON-SITE AND TRANSPORTING OFF-SITE. ALL DECONTAMINATION ACTIVITIES SHALL MEET THE CHAPTER 1 STANDARDS OF THE MINNESOTA DNR'S BEST PRACTICES MANUAL FOR MEETING DNR GENERAL PUBLIC WATERS WORK PERMIT GP 2004-0001.

WETLANDS: THERE ARE SEVERAL WETLANDS WITHIN THE PROJECT AREA AND MUST BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE. 1.49 ACRES OF WETLAND FILLED/EXCAVATION HAS BEEN PERMITTED AS ILLUSTRATED ON THE PLAN SHEETS. PERMITTED AREAS OF WETLAND IMPACT WILL BE PROTECTED WITH SILT FENCE ALONG THE PERIMETER OF THE FILL OR EXCAVATION LIMITS.

APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL PROGRAMS: THE PROJECT FALLS UNDER THE JURISDICTION OF SEVERAL ENTITIES, AS IDENTIFIED IN THE "AGENCY CONTACTS" TABLE ON PAGE 1 OF THE SWPPP. THE MORE STRINGENT OF LOCAL VS. STATE VS. FEDERAL RULES SHALL APPLY WHERE THEY CONFLICT. INFORMATION PERTAINING TO THE STATE NPDES PERMIT CAN BE FOUND AT: (HTTP://WWW.PCA.STATE.MN.US/INDEX.PHP/WATER/WATER-TYPES-AND-PROGRAMS/STORMWATER/CONSTRUCTION-STORMWATER). THE OPERATOR IS RESPONSIBLE TO COMPLY WITH ALL APPLICABLE PERMITS, MNDOT SPECIAL PROVISION, MNDOT SPEC BOOK (2018 EDITION), MNDOT SPECIFICATIONS 1717.

TOPSOIL MANAGEMENT:

NOTES: 6 INCHES OF TOPSOIL MUST BE RESTORED TO ALL PERVIOUS AREAS. TOPSOIL MUST MEET THE CCMWO TOPSOIL STANDARD. STOCKPILED MATERIAL MAY NEED TO BE AMMENDED TO MEET STANDARD (STANDARD IN TABLE BELOW). SUBSOIL MUST BE DECOMPACTED TO A DEPTH OF 6 INCHES PRIOR TO PLACEMENT OF TOPSOIL AND THE CONTRACTOR MUST IDENTIFY THE DECOMPACTION METHOD USED. QUANTITY OF TOPSOIL NEEDED IS PROVIDED IN THE QUANTITIES BASED OFF THE AREA SHOWN ON THE SITE RESTORATION PLAN AS PROPOSED GREENSPACE. TOPSOIL TESTING SHALL BE DONE IN ACCORDANCE WITH PROJECT SPECIFICATIONS, MNDOT 2574 AND 3877; THE CONTRACTOR SHALL CONDUCT FERTILITY TESTINF IN ACCORDANCE WITH THE STANDARD TESTINF PROCEDURES OF THE UNIVERSITY OF MINNESOTA SOILS TESTING LABORATORY, SOIL SCIENE DEPARTMENT.

CARVER COUNTY TOPSOIL STANDARD		
REQUIREMENT	**RANGE**	**TEST METHOD**
MATERIAL PASSING IN THE ¾ IN (19 MM)	100%	ASTM D 422
MATERIAL PASSING IN THE NO. 4 IN (4.75 MM)	≥85%	-
CLAY	5%-33%	ASTM D 422
SILT	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	ASTM D 422
SAND	REFER TO "POLLUTION PREVENTION MANAGEMENT MEASURES"	ASTM D 422
ORGANIC MATTER	REFER TO "DEWATERING" SECTION	ASTM D 2974
PH	6.1-8.0	ASTM G 51
COMPACTION	-1,400 KPA / 200 POUNDS PER SQUARE INCH (PSI) IN THE UPPER 12 INCHES OF SOIL, OR - BULK DENSITY OF LESS THAN 1.4 GRAMS PER CUBIC CENTIMETERE G/CM³ IN THE UPPER 12 INCHES OF SOIL.	FIELD TEST

SEQUENCE OF CONSTRUCTION/TIMING OF BMP INSTALLATION

NO CONSTRUCTION OPERATIONS, INCLUDING REMOVALS, THAT REQUIRE EROSION & SEDIMENT CONTROL PER THE SWPPP CAN COMMENCE UNTIL THE OPERATOR'S EROSION CONTROL SUPERVISOR CERTIFIES THE PROPER INSTALLATION OF BMPS AND A CHAIN OF RESPONSIBILITY FOR SWPPP IMPLEMENTATION IS CREATED FOR ALL OPERATORS ON THE SITE. PERIMETER SEDIMENT CONTROLS (SILT FENCE, INLET PROTECTION, CONSTRUCTION ENTRANCES, ETC.) SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ACHIEVED. OPERATOR SHALL IMPLEMENT THE NECESSARY ON-SITE BMPS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS TO PREVENT NUISANCE CONDITIONS (MN RULES 7050.2010) FROM ANY DISCHARGES UNDER COVERAGE OF THE NPDES PERMIT. IN SOME CASES, MULTIPLE OR REDUNDANT APPLICATIONS OF SOME BMPS MAY BE NEEDED TO MEET THESE REQUIREMENTS.

INSPECTION PROCEDURES, SWPPP AMENDMENTS, RECORD KEEPING, & TRAINING

1. THE SWPPP MUST BE AMENDED BY THE OPERATOR WHEN THE IDENTITY OF THE RESPONSIBLE SITE OPERATORS (EROSION CONTROL SUPERVISOR, SUB-CONTRACTORS, ETC.) ARE KNOWN.

2. THE OPERATOR MUST INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE OPERATOR SHALL PROVIDE A RAINFALL GAUGE ON-SITE, WITHIN ONE MILE OF THE SITE, OR SOURCE OF THE WEATHER REPORTING SYSTEM THAT USES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES. THE LOCATION AND SOURCE OF THE RAINFALL GAUGE OR REPORTING SYSTEM MUST BE DOCUMENTED IN THE FIRST SWPPP INSPECTION REPORT. THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE PER MONTH OR SUSPENDED IF SITE CONDITIONS MEET ITEM 11.10 OF THE NPDES PERMIT. ALL INSPECTIONS AND MAINTENANCE CONDUCTED MUST BE RECORDED IN WRITING BY THE OPERATOR AND RETAINED WITH THE SWPPP. THE MPCA SITE INSPECTION FORM IS AVAILABLE FOR OPERATORS TO USE TO COMPLETE THE REQUIRED INSPECTIONS. THE FORM CAN BE FOUND ON THE MPCA WEBSITE OR AVAILABLE UPON REQUEST FOR THE PROJECT OWNER. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
   A. DATE, TIME, AND NAME OF PERSON(S) CONDUCTING INSPECTIONS;
   B. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
   C. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); INCLUDING DOCUMENTATION/PHOTOS OF IMPLEMENTED BMPS INTENDED TO CORRECT A PROBLEM BUT FAILED.
   D. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS;
   E. DOCUMENTATION OF CHANGES MADE TO THE SWPPP.

3. SWPPP AMENDMENTS AND SITE PLANS WILL BE PREPARED BY THE OPERATOR AND SUBMITTED TO THE OWNER FOR REVIEW AND WRITTEN APPROVAL BY THE PROJECT OWNER (OR DESIGNATED REPRESENTATIVE). ALL OWNER ACCEPTED AND DENIED SWPPP AMENDMENTS AND SITE PLANS MUST BE RECORDED IN WRITING AND RETAINED WITH THE SWPPP.

ISG

FORESTAR

NOTE:
THE CLARITY OF THESE PLANS DEPEND UPON COLOR COPIES. IF THIS TEXT DOES NOT APPEAR IN COLOR, THIS IS NOT AN ORIGINAL PLAN SET AND MAY RESULT IN MISINTERPRETATION.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP NARRATIVE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SWPPP NARRATIVE

SHEET

24 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

4. THE SWPPP SHALL BE AMENDED TO INCLUDE ADDITIONAL OR MODIFIED BMPS, DESIGNED TO CORRECT IDENTIFIED PROBLEMS OR ADDRESS SITUATIONS (UNDER SECTION 6 OF THE NPDES PERMIT), PRIOR TO CONDUCTING SPECIFIC STAGES/PHASES OF THE PROJECT, AS REQUIRED BY THE OWNER AND DEFINED IN THIS PROJECT SWPPP.

   THE TABLE BELOW IS A SUMMARY OF THE REQUIRED SWPPP AMENDMENTS:

SUMMARY OF OPERATOR PREPARED SWPPP AMENDMENTS (REQUIRED BY OWNER)		
SWPPP AMENDMENT NAME	**SWPPP AMENDMENT DETAILS**	**SUBMITTAL TIMEFRAME**
OPERATOR CHAIN OF RESPONSIBILITY	REFER TO "CONTACT INFORMATION/RESPONSIBLE PARTIES" SECTION	7 DAY PRIOR TO INITIATING WORK
BMP AMENDMENTS	SUBSTITUTED, ADDITIONAL, OR REDUNDANT BMPS TO COMPENSATE FOR FAILING/FAILED BMPS	DURING/AFTER CONSTRUCTION ACTIVITIES
METHODS TO MINIMIZE SOIL COMPACTION	REFER TO "EXISTING SITE CONDITIONS, SOILS, AND WATER RESOURCES" SECTION	7 DAYS PRIOR TO WORK WITHIN INFILTRATION BASINS AND PRESERVED TREE AREAS
STEEP SLOPES PHASING PLAN	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	7 DAYS PRIOR TO INITIATING WORK
SPILL PREVENTION & RESPONSE PLAN	REFER TO "POLLUTION PREVENTION MANAGEMENT MEASURES"	7 DAY PRIOR TO INITIATING WORK
DEWATERING PLAN	REFER TO "DEWATERING" SECTION	7 DAYS PRIOR TO ACTIVITY

5. THE SWPPP (ORIGINAL OR COPIES), ALL CHANGES TO THE SWPPP, PROJECT MANUAL, AND INSPECTIONS/MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN THE FIELD OFFICE OR ON-SITE VEHICLE DURING NORMAL WORKING HOURS. THE PERMITTEES MUST KEEP AND MAKE AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE DAYS THE SWPPP, OTHER STORMWATER RELATED PERMITS, RECORDS OF ALL INSPECTION/MAINTENANCE, ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS, ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS AND OTHER INFORMATION REQUIRED BY THE GENERAL PERMIT FOR THREE YEARS FOLLOWING THE NOTICE OF TERMINATION.

6. THE OPERATOR MUST ASSIGN A TRAINED INDIVIDUAL(S) (PURSUANT TO SECTION 21) TO OVERSEE THE IMPLEMENTATION, MAINTENANCE, AND REPAIR OF BMPS. THIS INDIVIDUAL(S) SHALL ALSO PERFORM INSPECTIONS, REVISE/AMEND THE SWPPP (DOCUMENT IN SWPPP AS NECESSARY), AND BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE PERMITTED OWNER (OR ITS DESIGNEE), LOCAL GOVERNMENT UNITS, OR MPCA. MNDOT LEAD PROJECTS REQUIRE AVAILABLE ONSITE INSPECTION WITHIN 24 HOURS.

POLLUTION PREVENTION MANAGEMENT MEASURES

POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE:

- SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVALS/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPPING STOCKPILING, WET/DRY PAVEMENT CUTTING, STREET CONSTRUCTION.
- BASIC/ACIDIC PH LEVELS FROM CURB AND GUTTER, MANHOLE STRUCTURES, SIDEWALKS, DRIVEWAY APRONS, FOUNDATIONS, BRIDGE ABUTMENTS, WET/DRY PAVEMENT CUTTING, AND MASONRY WASHOUT/CLEANOUT.
- EXCESS NUTRIENTS FROM LANDSCAPING INSTALLATIONS, SOIL ADDITIVES, FERTILIZATION, MULCHING
- HYDROCARBONS FROM STREET CONSTRUCTION, DEMOLITION/REMOVALS, WET/DRY PAVEMENT CUTTING

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE NPDES-CSW PERMIT. OPERATOR WILL SUBMIT A SPILL PREVENTION AND RESPONSE PLAN (SPRP) TO THE ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY. THE SPRP MUST SATISFACTORILY ADDRESS (AT A MINIMUM) THE FOLLOWING NPDES REQUIREMENTS BY THE PROPOSED IMPLEMENTATION AND MAINTENANCE OF APPROPRIATE BMPS:

NO-EXPOSURE: CONSTRUCTION AND BUILDING PRODUCTS (THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS), PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPING MATERIALS MUST BE UNDER COVER (PLASTIC SHEETING OR TEMPORARY ROOFS) TO MINIMIZE CONTACT WITH STORMWATER AND PRECIPITATION.

SOLID WASTE: SEDIMENT, ASPHALT, CONCRETE MILLINGS, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND SHALL COMPLY WITH MPCA DISPOSAL REQUIREMENTS (CH. 7035).

HAZARDOUS MATERIALS: GAS, DIESEL, OIL, ANTIFREEZE, PAINT SOLVENTS, SOAPS, DETERGENTS, WOOD PRESERVATIVES, CLEANING SOLVENTS, CURING COMPOUNDS, ACIDS, ETC., MUST BE STORED IN SEALED CONTAINERS. SECONDARY SPILL CONTAINMENT IS REQUIRED FOR ALL MATERIALS IF STORED ON-SITE FOR MORE THAN 24 CONSECUTIVE HOURS (DOUBLE WALLED TANKS ARE ACCEPTABLE FOR SECONDARY CONTAINMENT). STORAGE AND DISPOSAL OF HAZARDOUS WASTES AND MATERIALS MUST BE IN COMPLIANCE WITH MPCA REGULATIONS (CH. 7045).

PORTABLE TOILETS: MUST BE POSITIONED AND SECURED SO THEY ARE NOT TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE PROPERLY DISPOSED OF IN ACCORDANCE WITH MPCA REGULATIONS (CH. 7041).

SPILLED OR LEAKED CHEMICALS: REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICAL OR FUEL WILL BE LOADED OR UNLOADED. PROCEDURES FOR SPILL RESPONSE AND MATERIALS FOR CONTAINMENT, CLEANUP (DRIP PANS, ABSORBENTS, AND SPILL KITS), AND APPROPRIATE DISPOSAL SHALL BE AVAILABLE AT ALL TIMES ON-SITE. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINNESOTA STATUTE 115.061.

EQUIPMENT/VEHICLE WASHING: WHEN VEHICLE/EQUIPMENT WASHING MUST OCCUR ON-SITE, THE ACTIVITY IS LIMITED TO A CONTAINED PORTION OF THE STAGING AREA UNLESS INFEASIBLE THROUGH A SWPPP AMENDMENT. SOAPS, DETERGENTS, AND SOLVENTS ARE TO BE USED AND STORED PROPERLY. RUNOFF MUST BE CONTAINED FROM THE WASHING AREAS AND DISPOSED OF PROPERLY.

CONCRETE, STUCCO, PAINT, CURING COMPOUNDS, SOLVENTS, AND OTHER WASHOUT WASTES: TEMPORARY OR LONG-TERM STORAGE OF WASHOUT WASTE IS PROHIBITED ON-SITE (SLURRY MUST BE HAULED IMMEDIATELY OFF-SITE). OPERATOR MUST SUBMIT A CONCRETE WASHOUT PLAN TO THE PROJECT ENGINEER FOR APPROVAL OF ALL ON-SITE WASHOUT LOCATIONS. ON-SITE WASHOUT LOCATIONS MUST BE LOCATED 200 FEET FROM AN ENVIRONMENTALLY SENSITIVE AREA AND SURFACE WATERS, HAVE "CONCRETE WASHOUT AREA" SIGNAGE, AND BE CONTAINED IN A LEAK PROOF CONTAINER OR IMPERMEABLE LINER. LIQUID AND SOLID WASTES SHOULD NOT CONTACT THE GROUND (UNLESS PERMITTED IN THE CONCRETE WASHOUT PLAN), BE CONTAINED TO PREVENT RUNOFF FROM THE WASHOUT LOCATION, AND MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS.

BURNING: BURNING OF GARBAGE, CONSTRUCTION DEBRIS, TREES, BRUSH, OR OTHER VEGETATIVE MATERIAL IS NOT ALLOWED ON SITE UNLESS PRIOR APPROVAL IS GRANTED BY THE OWNER.

CONSTRUCTION ACTIVITY REQUIREMENTS: EROSION PREVENTION PRACTICES, PROCEDURES, & MAINTENANCE STANDARDS

THE OPERATOR IS RESPONSIBLE FOR THE INSTALLATION, OPERATION, AND CONTINUED MAINTENANCE OF ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS, AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS, FOR THE DURATION OF THE CONSTRUCTION WORK AT THE SITE UNTIL FINAL STABILIZATION IS ACHIEVED. ALL BMPS MUST BE ADEQUATELY LOCATED, DESIGNED, INSTALLED, AND MAINTAINED TO PREVENT EROSION FROM A MINIMUM 0.5 INCH TOTAL RAINFALL EVENT WITHIN 24 HOURS.

ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED IN THE SWPPP. ALL ERODED MATERIAL THAT LEAVES THE SITE SHALL BE COLLECTED BY THE OPERATOR AND RETURNED TO THE SITE AT THE OPERATOR'S EXPENSE AND INCIDENTAL TO THE PROJECT COST.

TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED AS SOON AS POSSIBLE, BUT NO LATER THAN THE END OF THE NEXT WORK DAY FOLLOWING THE DAY EARTH-DISTURBING ACTIVITIES IN THAT PORTION OF THE SITE HAS TEMPORARILY OF PERMANENTLY CEASED. ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. INITIATED STABILIZATION IS DEFINED AS COMPLETING ONE (OR MORE) OF THE FOLLOWING: SOIL PREPARATION FOR VEGETATION, MULCHING (OR OTHER TEMPORARY NON-VEGETATIVE BMP), SEEDING/PLANTING, OR SCHEDULING STABILIZATION MEASURES TO BE FULLY INSTALLED AND COMPLETED WITHIN THE 14 DAY TIMEFRAME.

FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF WOTUS AND THAT DRAIN TO THESE WATERS WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.

TEMPORARY STABILIZATION BMPS SHALL ONLY BE IMPLEMENTED WHEN PERMANENT STABILIZATION BMPS CANNOT BE IMPLEMENTED WITHIN THE 14 DAY TIMEFRAME FOR EXPOSED SOILS.

TEMPORARY/PERMANENT DRAINAGE DITCHES & SWALES: THE NORMAL WETTED PERIMETER (2-YEAR, 24-HOUR PRECIPITATION EVENT) OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH, CHANNEL, OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN THE LAST 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER WITHIN 24 HOURS OF CONNECTION. STABILIZATION REMAINING OF THE REMAINING PORTIONS OF THE CHANNEL MUST BE STABILIZED WITHIN 14 DAYS. ALL STORMWATER CONVEYANCE CHANNELS MUST USE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES WITHIN AND ALONG THE LENGTH OF THE CHANNEL AND AT ANY OUTLETS. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A TEMPORARY SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS, HOWEVER, MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM. MULCH, HYDROMULCH, TACKIFIER, OR POLYARCRYLAMIDE BELOW THE WETTED PERIMETER OF A DITCH, SWALE, OR OTHER SURFACE WATER CONVEYANCE IS NOT ACCEPTABLE STABILIZATION.

EROSION CONTROL BLANKETS/MATS: OPERATOR SHALL VERIFY DURING REGULAR INSPECTIONS THAT NO GULLIES, RILLS, OR SCOUR HOLES HAVE FORMED UNDER EROSION CONTROL BLANKETS AND MATS. ALL REPAIRS MUST BE COMPLETED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

MULCH: OPERATOR MUST APPLY MULCH IN A UNIFORM PATTERN OVER THE DISTURBED SOILS TO ACHIEVE A MINIMUM OF 90% GROUND COVER.

DUST CONTROL: DUST FROM THE SITE WILL BE CONTROLLED BY INCREASED STREET SWEEPING AND/OR USING A MOBILE PRESSURE-TYPE DISTRIBUTOR TRUCK TO APPLY POTABLE WATER TO DISTURBED AREAS. THE MOBILE UNIT WILL APPLY WATER AT A RATE NECESSARY TO PREVENT RUNOFF AND PONDING.

STORM SEWER OUTLETS: PIPE OUTLETS MUST HAVE TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER HYDRAULIC CONNECTION TO A RECEIVING SURFACE WATER.

TEMPORARY & PERMANENT EROSION PREVENTION BMPS

TYPE 1 MULCH: APPLY TO DISTURBED SLOPES LESS THAN 1:3 (V:H) WITH BLOWER EQUIPMENT OR CONCURRENTLY WITH HYDROMULCH AT 2 TONS/ACRE. IMMEDIATELY OVERSPRAY (IF NOT HYDROMULCHED) WITH TACKIFIER (PER MANUFACTURER'S RECOMMENDED RATES) OR DISC-ANCHORED.

RAPID STABILIZATION METHOD #3: THIS WORK SHALL CONSIST OF OPERATIONS NECESSARY TO RAPIDLY STABILIZE SMALL CRITICAL AREAS WITHIN 200 FEET OF SURFACE WATERS TO PREVENT OFF-SITE SEDIMENTATION AND OR TO COMPLY WITH PERMIT REQUIREMENTS. INSTALL PER MNDOT SPECIFICATIONS 2575.3N.

RAPID STABILIZATION METHOD #4 (WOOD FIBER, NATURAL NET ONLY) IS AN ACCEPTABLE BMP FOR DISTURBED AREAS ADJACENT TO ENVIRONMENTALLY SENSITIVE AREAS, SURFACE WATERS, AND WITHIN THE LAST 200 FEET OF DITCH BOTTOMS.

TEMPORARY WINTER COVER: AREAS OF EXPOSED SOILS THAT ARE NOT COMPLETED BEFORE THE WINTER WILL BE STABILIZED WITH TYPE #3 (CERTIFIED AS WEED FREE) ADJACENT TO WETLAND OR STORMWATER PONDS. ALL OTHER DISTURBED AREAS SHALL BE STABILIZED WITH TYPE #1 MULCH UNLESS AN ALTERNATIVE, MORE PROTECTIVE BMPS ARE SPECIFIC WITHIN THE SWPPP. ALL EXPOSED SOILS SHALL BE STABILIZED BEFORE CONSTRUCTION IS COMPLETED FOR THE SEASON.

HYDRO-MULCH TYPE #5: HYDRAULIC SOIL STABILIZER IN COMBINATION WITH A TACKIFIER WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS TO EXPOSED SOILS AREAS TO PROVIDE TEMPORARY LONG-TERM OR PERMANENT COVER FOR VEGETATION ESTABLISHMENT.

CONSTRUCTION ACTIVITY REQUIREMENTS: SEDIMENT CONTROL PRACTICES, PROCEDURES, & MAINTENANCE STANDARDS

DOWNGRADIENT SYSTEMS: IF THE DOWNGRADIENT TREATMENT SYSTEM IS OVERLOADED, ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS MUST BE INSTALLED TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES.

PERIMETER CONTROL BMPS (SILT FENCES, CHIP/SLASH MULCH SACKS, BIOROLLS, FLOATING SILT CURTAIN, ETC.): PERIMETER CONTROL BMPS SHALL BE INSTALLED ON ALL DOWNGRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER AREAS PRIOR TO INITIATING UPGRADIENT LAND DISTURBANCE ACTIVITIES. UPLAND PERIMETER CONTROL BMPS SHALL BE PLACED AS CLOSE AS POSSIBLE TO FOLLOW A SINGLE CONTOUR ELEVATION. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR MAINTAINED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. FLOATING SILT CURTAIN SHALL BE INSTALLED AS CLOSE TO THE SHORELINE AS POSSIBLE FOR SHORELANDIN-WATER SHORT-TERM CONSTRUCTION ACTIVITIES. IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IN THAT AREA IS COMPLETE, AN UPLAND PERIMETER CONTROL MUST BE INSTALLED IF EXPOSED SOILS CONTINUE TO DRAIN TO THE SURFACE WATER.

50 FOOT NATURAL BUFFER(S): REFER TO "CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED" SECTION OF THIS SWPPP.

TEMPORARY SEDIMENTATION BASINS: WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, A TEMPORARY SEDIMENT BASIN MUST BE PROVIDED PRIOR TO RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS. ALL TEMPORARY BASINS SHALL BE CONSTRUCTED AND OPERATIONAL PRIOR TO GRADING TEN (10) OR MORE ACRES. BASINS MUST PROVIDE A LIVE STORAGE VOLUME FROM A 2-YEAR 24-HOUR STORM EVENT FROM EACH ACRE (DISTURBED AND UNDISTURBED) DRAINING TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER. AT A MINIMUM, IF CALCULATIONS ARE NOT PERFORMED, THE BASIN SHALL PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE FROM EACH ACRE. THE BASIN INTAKE MUST BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE, PREVENT SHORT CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS, INCLUDE AN EMERGENCY OVERFLOW ABOVE THE LIVE STORAGE ELEVATION, AND PROVIDE ENERGY DISSIPATION AT THE BASIN OUTLET. BASINS MUST BE DRAINED AND SEDIMENT REMOVED WHEN THE DEPTH OF COLLECTED SEDIMENT IN THE BASIN REACHES 1/2 THE LIVE STORAGE VOLUME. IF A BASIN IS INFEASIBLE WITHIN THE PROJECT LIMITS, EQUIVALENT SEDIMENT CONTROL BMPS MUST BE IMPLEMENTED AND DOCUMENTED IN THE SWPPP OR SWPPP AMENDMENT.

SEDIMENT TRAPS: SAFL BAFFLES ARE PROPOSED THROUGHOUT THE SITE AS A METHOD OF PRETREATMENT. FOLLOWING FINAL STABILIZATION, THESE PRACTICES MUST BE CLEANED.

TEMPORARY STOCKPILES: ALL STOCKPILES MUST HAVE SILT FENCE OR EQUIVALENT PERIMETER SEDIMENT CONTROLS IMPLEMENTED AND MAINTAINED AT ALL TIMES. PILES CANNOT BE PLACED IN BUFFER AREAS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS OR CONDUITS AND DITCHES, UNLESS THERE IS A BYPASS IN PLACE TO PREVENT STORMWATER RUN-ON INTO THE STOCKPILE. STABILIZATION ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY, OR ORGANIC COMPONENTS IS NOT REQUIRED.

CONSTRUCTION SITE ENTRANCE/VEHICLE TRACKING: OPERATOR MUST MINIMIZE SEDIMENT FROM LEAVING THE CONSTRUCTION SITE (OR ONTO STREETS WITHIN THE SITE) BY IMPLEMENTING BMPS SUCH AS ROCK PADS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS. STREET SWEEPING MUST BE USED DAILY DURING CONSTRUCTION OPERATIONS IF SUCH BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES (ON AND OFF-SITE) WITHIN 24 HOURS OF DISCOVERY OR SOONER AS DIRECTED BY THE PROJECT OWNER. MULTIPLE STREET SWEEPINGS AT THE OPERATOR'S EXPENSE MAY BE REQUIRED ON ALL ENTRY/EXIT POINTS TO THE SITE AT THE DISCRETION OF THE PROJECT OWNER. STREET SWEEPING WILL OCCURR AS NEEDED AND WILL BE INDICATED ON INSPECTION REPORTS IF REQUIRED.

SURFACE WATERS: INCLUDING OFF-SITE AND DOWNSTREAM DRAINAGE DITCHES, CATCH BASINS, AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. THE REMOVAL AND STABILIZATION OF EXPOSED SOILS MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) CALENDAR DAYS OF OBTAINING ACCESS. THE PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AND RECEIVING ANY APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.

INLET PROTECTION: ALL STORM DRAIN INLETS (INCLUDING DOWNGRADIENT, OFF-SITE) MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. SILT FENCE IS NOT AN ACCEPTABLE CATCH BASIN INLET PROTECTION BMP. CONTRACTOR SHALL CLEAN, REMOVE AND DISPOSE OF SEDIMENT AND/OR REPLACE STORM DRAIN INLET PROTECTION ON A ROUTINE BASIS TO ENSURE THE DEVICE IS FULLY FUNCTIONAL PRIOR TO THE NEXT FORECASTED PRECIPITATION EVENT (30% OR GREATER). INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE PERMITTEE(S) OR THE JURISDICTIONAL AUTHORITY (E.G. CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER). WRITTEN CORRESPONDENCE REGARDING THE NEED FOR REMOVAL MUST BE DOCUMENTED IN THE SWPPP.

CHEMICAL TREATMENTS: OPERATOR MUST AMEND THE SWPPP TO INCLUDE THE INTENDED USES AND LOCATIONS OF FLOCCULANTS, POLYMERS, AND OTHER SEDIMENTATION TREATMENT CHEMICALS. CHEMICAL TREATMENTS MAY ONLY BE APPLIED IN AREAS WHERE TREATED STORMWATER IS DIRECTED TO A RECEIVING SEDIMENT CONTROL SYSTEM (NOT DIRECTLY DISCHARGED TO NATURAL WATER BODIES). THIS INCLUDES DOCUMENTING THE EXPECTED SOIL TYPES, MANUFACTURER'S RECOMMENDED DOSING, APPLICATION RATES/QUANTITIES, AND MONITORING RESULTS (TURBIDITY, PH).

DEWATERING, STREAM DIVERSION, AND BASIN DRAINING

DEWATERING, STREAM DIVERSION, OR BASIN DRAINING IS ANTICIPATED DURING CONSTRUCTION OF THIS PROJECT. UTILITY TRENCHING, CULVERT CONSTRUCTION, AND NEW POND GRADING WILL REQUIRE SITE DEWATERING. WHEN DEWATERING OR BASIN DRAINING IS REQUIRED, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND NARRATIVE TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO UNDERTAKING THESE ACTIVITIES. DEWATERING PLAN MUST INCLUDE BMPS TO PREVENT SEDIMENT TRANSPORT, EROSION, AND ADVERSE IMPACTS TO DOWNSTREAM RECEIVING WATERS. THE DEWATERING PLAN MUST ALSO INCLUDE ANY SPECIFIC CHEMICAL TREATMENTS (FLOC, POLYMERS, ETC.) THAT WILL BE USED. IF AN APPROVED TMDL WASTE LOAD ALLOCATION IS ESTABLISHED FOR CONSTRUCTION ACTIVITIES ON A RECEIVING WATERBODY, THE OPERATOR MUST IMPLEMENT ALL NECESSARY BMPS TO MEET THE ASSIGNED WLA. THE DEWATERING PLAN AND DNR APPROPRIATIONS PERMIT WILL BECOME PART OF THE SWPPP. WATER THAT IS TURBID OR HAS SEDIMENT MUST BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN (AND/OR OTHER APPROPRIATE BMPS) ON THE PROJECT SITE WHENEVER POSSIBLE. DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASIN MUST BE VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT IS OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2), IMPACTS TO WETLANDS, AND EROSION IN RECEIVING CHANNELS OR ON DOWNSLOPE PROPERTIES WILL NOT RESULT FROM THE DISCHARGE. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SAND BAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES. ADEQUATE SEDIMENTATION CONTROL MEASURES AND ADDITIONAL FILTRATION BMPS ARE REQUIRED FOR DISCHARGE WATER THAT CONTAINS SUSPENDED SOLIDS, OIL, OR GREASE.

PERMIT TERMINATION CONDITIONS

PERMIT TERMINATION CONDITIONS ARE ACHIEVED WHEN THE FOLLOWING FOUR PARAMETERS ARE COMPLETED PRIOR TO SUBMISSION OF THE NOTICE OF TERMINATION TO MPCA.

1. 70% VEGETATIVE COVER: ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND ALL EXPOSED SOILS ARE STABILIZED BY A UNIFORM, LIVE PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PERVIOUS SURFACE AREA OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSIVE CONDITIONS. REFER TO PART 13.7 IF THE PROJECT IS ON AGRICULTURAL LAND. FOR RESIDENTIAL CONSTRUCTION ONLY, PLEASE REFER TO PART 13.6 OF THE NPDES PERMIT.

2. FINAL CLEAN OUT OF PERMANENT STORMWATER MANAGEMENT SYSTEMS & CONVEYANCE SYSTEMS: ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM PERMANENT STORMWATER MANAGEMENT SYSTEMS, CONVEYANCE SYSTEMS, AND DITCHES MUST BE STABILIZED WITH PERMANENT COVER. ALL SYSTEMS MUST OPERATE AS DESIGNED.

3. REMOVAL OF ALL TEMPORARY SYNTHETIC BMPS: ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPS (SUCH AS SILT FENCE) MUST BE REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE. BMPS DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.

4. OPERATOR PROVIDES THE OWNER ALL INSPECTION AND SWPPP AMENDMENT RECORDS FOR THE PROJECT. OWNER IS RESPONSIBLE FOR KEEPING ALL RECORDS (AS DEFINED IN PART 24.5) ON FILE FOR THREE YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION.

   THE CO-PERMITTEES (OWNER AND OPERATOR) MUST SIGN AND SUBMIT THE COMPLETED NOTICE OF TERMINATION TO THE MPCA WITHIN 30 DAYS AFTER SELLING/LEGALLY TRANSFERRING THE PROPERTY OR FINAL STABILIZATION IS ACHIEVED. PERMITTEE(S) MAY TERMINATE PERMIT COVERAGE PRIOR TO THE PROJECT COMPLETION IF THE CONDITIONS IN PART 4 OF THE NPDES-CSW PERMIT ARE MET.

EROSION CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
2511.507	RANDOM RIPRAP, CLASS III	CY	64
2573.502	PROPOSED STORM DRAIN INLET PROTECTION	EACH	72
2573.502	CULVERT END CONTROL	EACH	7
2573.503	SILT FENCE, PREASSEMBLED	LF	27,571
2573.503	SEDIMENT CONTROL LOG	LF	2,916
2573.501	STABILIZED CONSTRUCTION EXIT	EACH	2
2575.504	EROSION CONTROL BLANKET, CATEGORY 20N	SY	39,231
2575.504	TURF REINFORCEMENT MAT, CATEGORY 55	SY	330
2575.504	TURF REINFORCEMENT MAT, CATEGORY 60	SY	266
	CONCRETE WASHOUT AREA	EACH	1

QUANTITIES ARE FOR INFORMATIONAL PURPOSES TO MEET THE REQUIREMENTS OF THE CONSTRUCTION STORMWATER PERMIT, NO GUARANTEE IS MADE TO THE ACTUAL QUANTITIES REQUIRED.

ISG

FORESTAR

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP NARRATIVE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

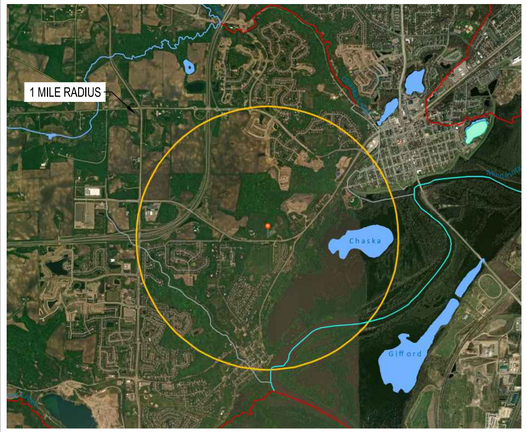
TITLE

SWPPP NARRATIVE

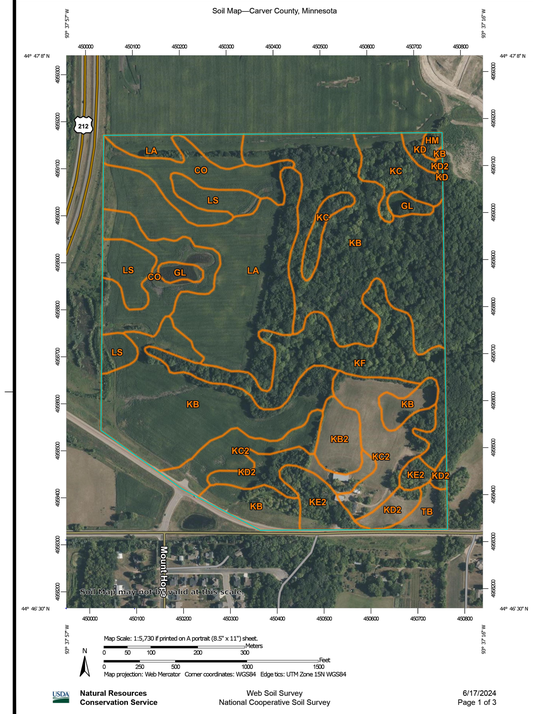
SHEET

25 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

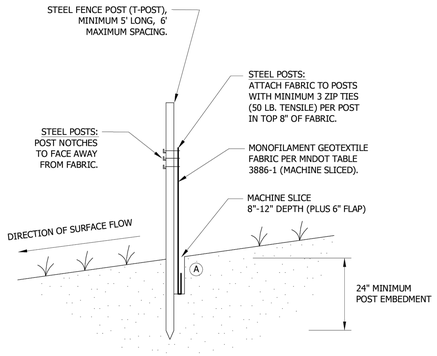


IMPAIRED WATERS MAP



USDA Natural Resources Conservation Service — Web Soil Survey, National Cooperative Soil Survey — 6/17/2024 Page 1 of 3

WEB SOIL SURVEY MAP



NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY DUTY (ERO-1B) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE CITY.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND *BEFORE* INSTALLATION OF STEEL POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. *THEN* INSTALL THE POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

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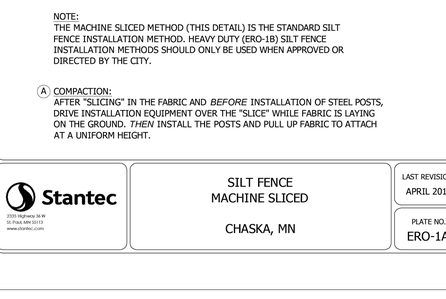
SILT FENCE
MACHINE SLICED

CHASKA, MN

LAST REVISION: APRIL 2011

PLATE NO. ERO-1A



WIMCO ROAD DRAIN CG-23* HIGH FLOW INLET PROTECTION CURB AND GUTTER MODEL OR CITY APPROVED EQUAL.

* FOR THE NEW R-3290-VB STANDARD CASTING, INSTALL WIMCO ROAD DRAIN CG-3290 OR CITY APPROVED EQUAL.

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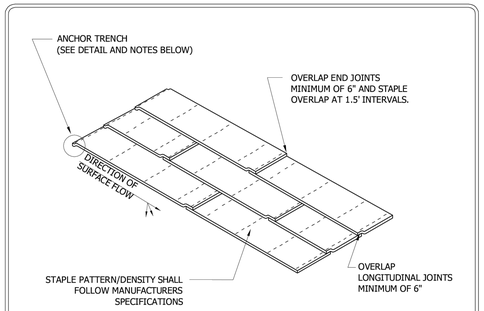
INLET PROTECTION - CATCH BASIN INSERT
AFTER CURB CONSTRUCTION

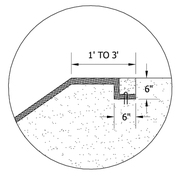
CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-4B



ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



NOTE:
SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLUMPS, STICKS, VEHICLE IMPRINTS, AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.

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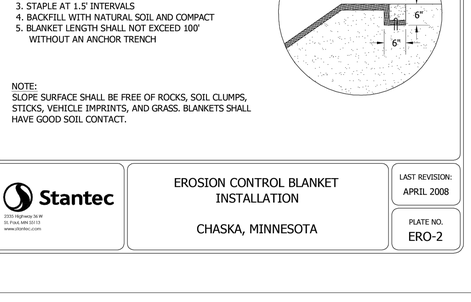
EROSION CONTROL BLANKET
INSTALLATION

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-2



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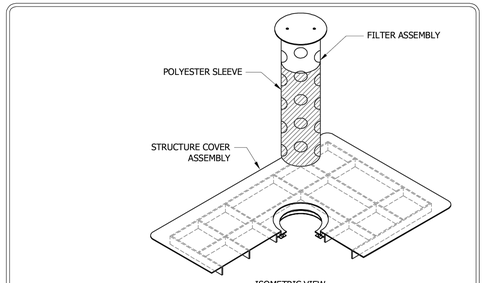
INLET PROTECTION
BEEHIVE CASTING

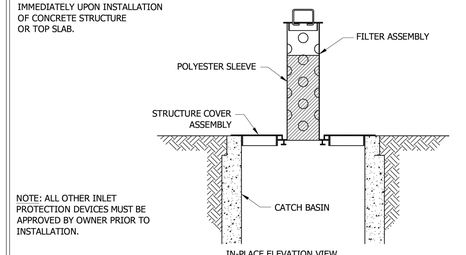
CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-4C



DEVICES TO BE INSTALLED IMMEDIATELY UPON INSTALLATION OF CONCRETE STRUCTURE OR TOP SLAB.



NOTE: ALL OTHER INLET PROTECTION DEVICES MUST BE APPROVED BY OWNER PRIOR TO INSTALLATION.

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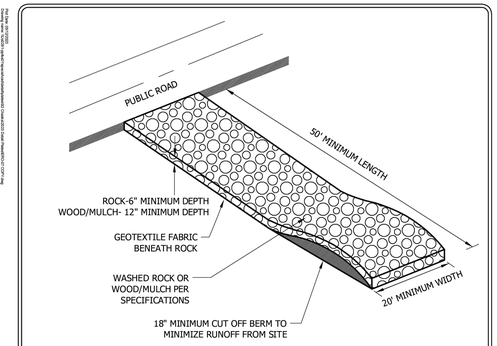
INLET PROTECTION FOR CATCH BASIN
BEFORE CURB CONSTRUCTION

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-4A



NOTES:
1. MnDOT 3733 TYPE 4 FILTER FABRIC SHALL BE PLACED UNDER ROCK OR MULCH TO STOP MUD MIGRATION THROUGH MATERIAL.
2. FUGITIVE ROCK OR MULCH WILL BE REMOVED FROM ADJACENT ROADWAYS DAILY OR MORE FREQUENTLY AS NECESSARY.
3. CONSTRUCTION ENTRANCE MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF GRADING OPERATIONS ON THE SITE.
4. THE ENTRANCE MUST BE MAINTAINED IN PROPER CONDITION TO PREVENT TRACKING OF MUD OFF THE SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL ROCK, WOOD/MULCH, OR REMOVAL AND REINSTALLATION OF THE PAD.
5. THIS ENTRANCE WILL BE USED BY ALL VEHICLES ENTERING OR LEAVING THE PROJECT.
6. THE CONSTRUCTION ENTRANCE WILL BE REMOVED PRIOR TO THE PLACEMENT OF BITUMINOUS SURFACING.

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ROCK CONSTRUCTION ENTRANCE

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. ERO-7

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP NARRATIVE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

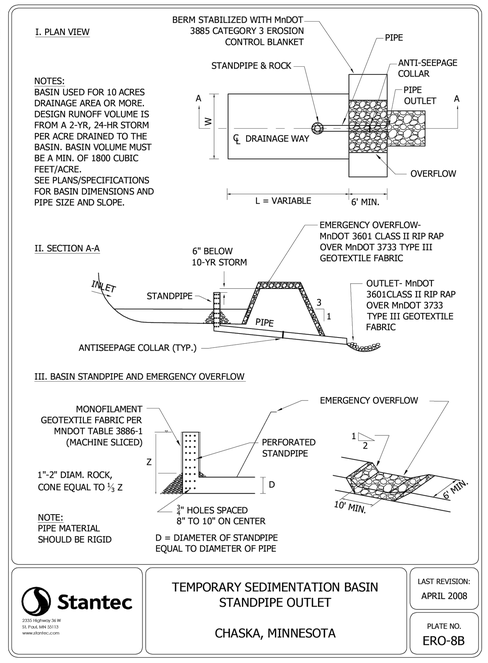
TITLE

SWPPP DETAILS

SHEET

26 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



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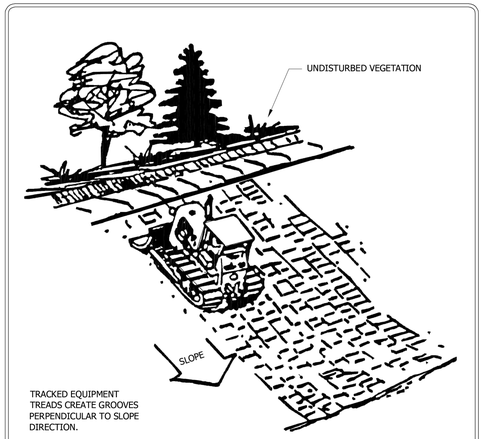
TEMPORARY SEDIMENTATION BASIN STANDPIPE OUTLET

CHASKA, MINNESOTA

LAST REVISION: APRIL 2008

PLATE NO. ERO-8B



NOTE:
ALL SLOPES WITH A GRADE EQUAL TO OR STEEPER THAN 3:1 REQUIRE SLOPE TRACKING. SLOPES WITH A GRADE MORE GRADUAL THAN 3:1 REQUIRE SLOPE TRACKING IF THE STABILIZATION METHOD IS EROSION CONTROL BLANKET OR HYDROMULCH.

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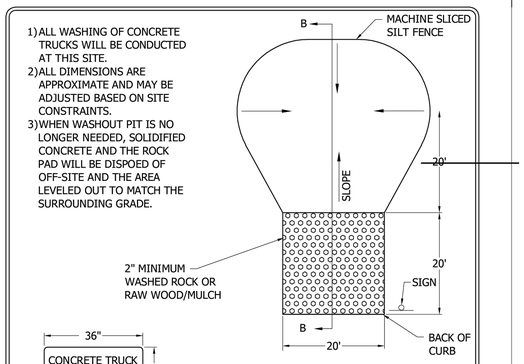
SLOPE TRACKING

CHASKA, MINNESOTA

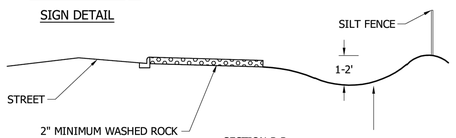
LAST REVISION: FEB 2004

PLATE NO. ERO-10

1) ALL WASHING OF CONCRETE TRUCKS WILL BE CONDUCTED AT THIS SITE.
2) ALL DIMENSIONS ARE APPROXIMATE AND MAY BE ADJUSTED BASED ON SITE CONSTRAINTS.
3) WHEN WASHOUT PIT IS NO LONGER NEEDED, SOLIDIFIED CONCRETE AND THE ROCK PAD WILL BE DISPOED OF OFF-SITE AND THE AREA LEVELED OUT TO MATCH THE SURROUNDING GRADE.



SIGN DETAIL



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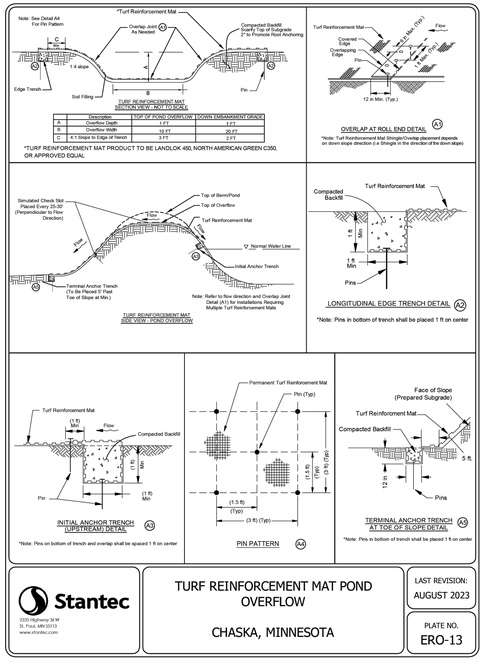
CONCRETE WASHOUT PIT

CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. ERO-12



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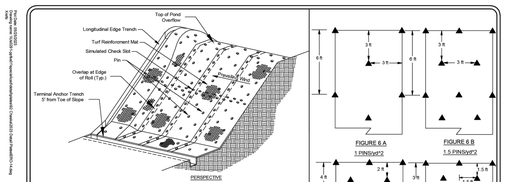
TURF REINFORCEMENT MAT POND OVERFLOW

CHASKA, MINNESOTA

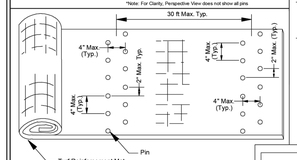
LAST REVISION: AUGUST 2023

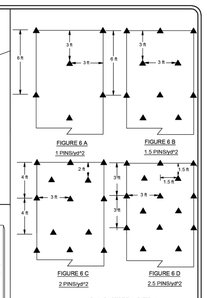
PLATE NO. ERO-13



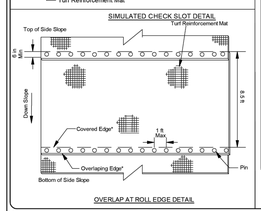
OVERVIEW OF TURF REINFORCEMENT MAT ON SLOPE

*Note: For Clarity, Perspective View does not show all pins





PIN PATTERN DETAIL



OVERLAP AT ROLL EDGE DETAIL

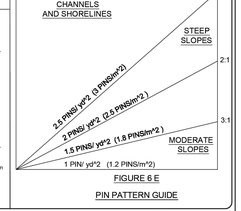


FIGURE 6 E

PIN PATTERN GUIDE

Stantec
2335 Highway 36 W
St. Paul, MN 55113
www.stantec.com

TURF REINFORCEMENT MAT ON SLOPE
CHASKA, MINNESOTA

LAST REVISION: MAY 2023

PLATE NO. ERO-14

ISG

FORESTAR

NOTE:
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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP NARRATIVE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

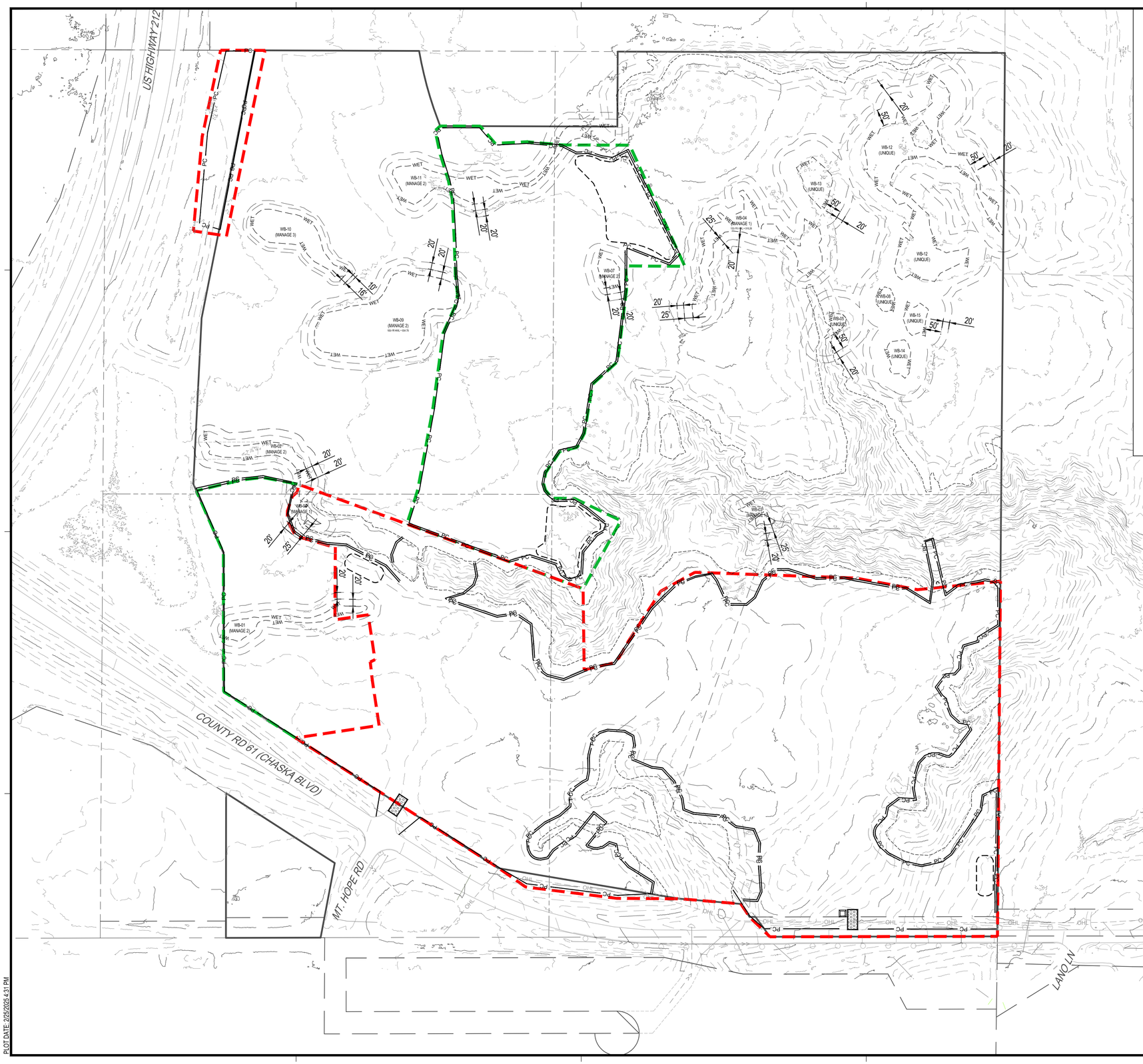
SWPPP DETAILS

SHEET

27

OF 92

PRELIMINARY NOT FOR CONSTRUCTION



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
	PHASE 1 CONSTRUCTION GRADING
	PHASE 1 MASS GRADING

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PRE-CONSTRUCTION SWPPP (OVERALL)

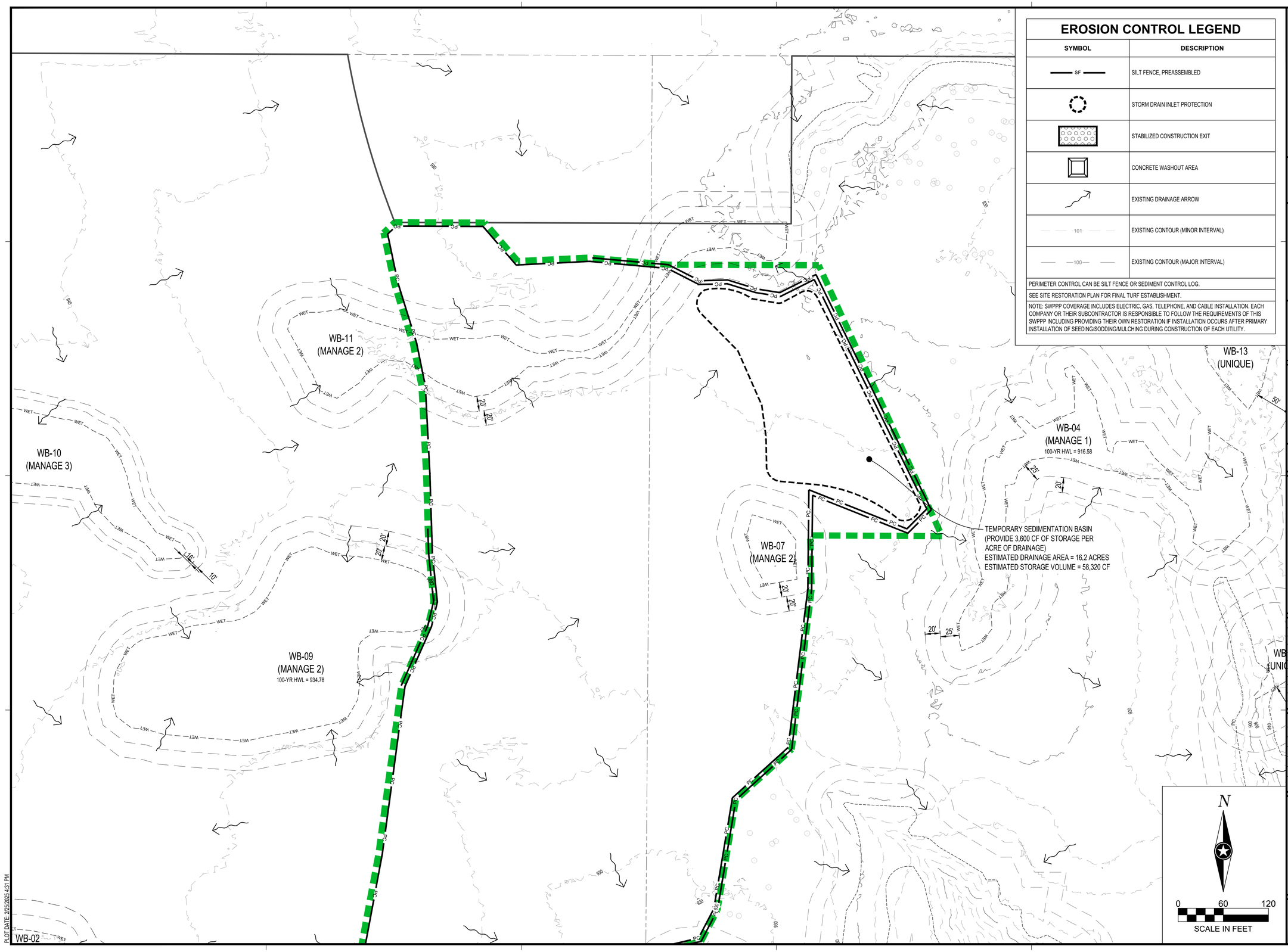
SHEET

28

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:31 PM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PRE-CONSTRUCTION SWPPP (N)

SHEET

29 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:31 PM

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

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OFF-SITE BERM LOCATION

WB-11
(MANAGE 2)

WB-10
(MANAGE 3)

WB-09
(MANAGE 2)
100-YR HWL = 934.78

WB-07
(MANAGE 2)

TEMPORARY SEDIMENTATION BASIN
(PROVIDE 3,600 CF OF STORAGE PER ACRE OF DRAINAGE)
ESTIMATED DRAINAGE AREA = 16.2 ACRES
ESTIMATED STORAGE VOLUME = 58,320 CF

N

0 ## ###
SCALE IN FEET

PLOT DATE: 2/25/2025 4:31 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

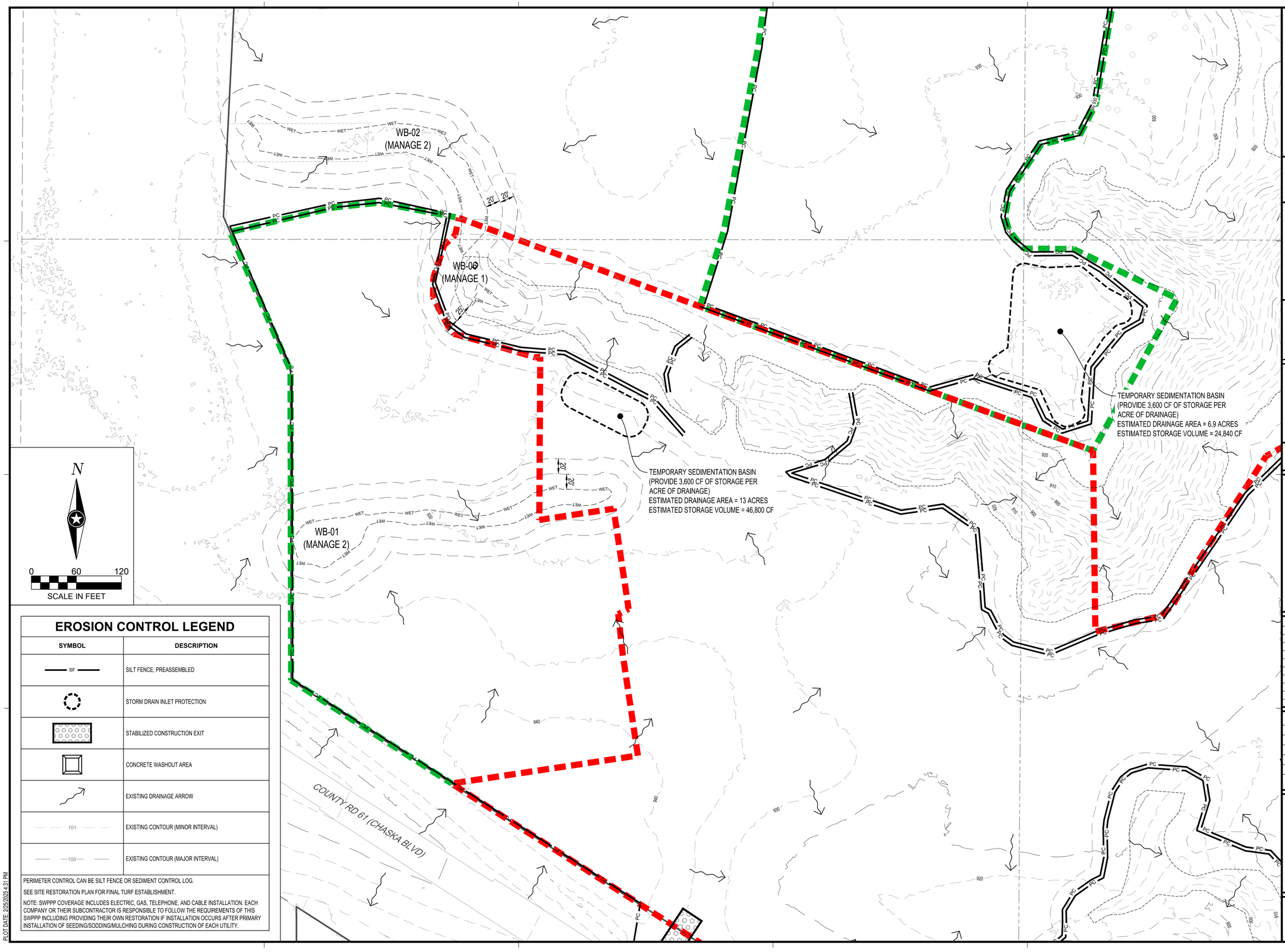
TITLE

PRE-CONSTRUCTION SWPPP (NW)

SHEET

30 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



N

0 60 120

SCALE IN FEET

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

PLOT DATE: 2/25/2025 4:31 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PRE-CONSTRUCTION SWPPP (W)

SHEET

31 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

TEMPORARY SEDIMENTATION BASIN
(PROVIDE 3,600 CF OF STORAGE PER ACRE OF DRAINAGE)
ESTIMATED DRAINAGE AREA = 13 ACRES
ESTIMATED STORAGE VOLUME = 46,800 CF

TEMPORARY SEDIMENTATION BASIN
(PROVIDE 3,600 CF OF STORAGE PER ACRE OF DRAINAGE)
ESTIMATED DRAINAGE AREA = 6.9 ACRES
ESTIMATED STORAGE VOLUME = 24,840 CF

MT. HOPE RD

(BLVD)

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

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N

0 60 120
SCALE IN FEET

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PRE-CONSTRUCTION SWPPP (S)

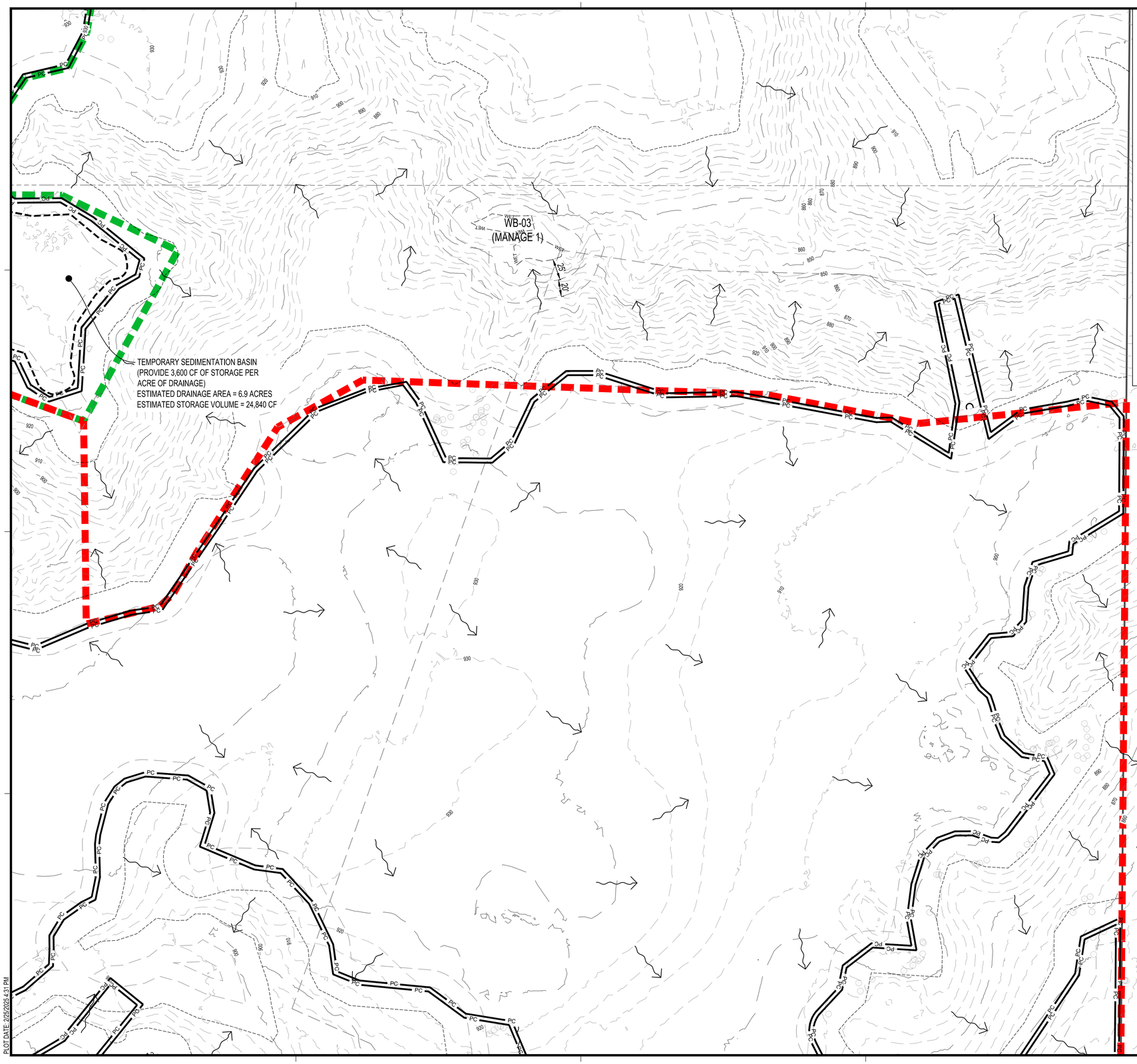
SHEET

32

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:31 PM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

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ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

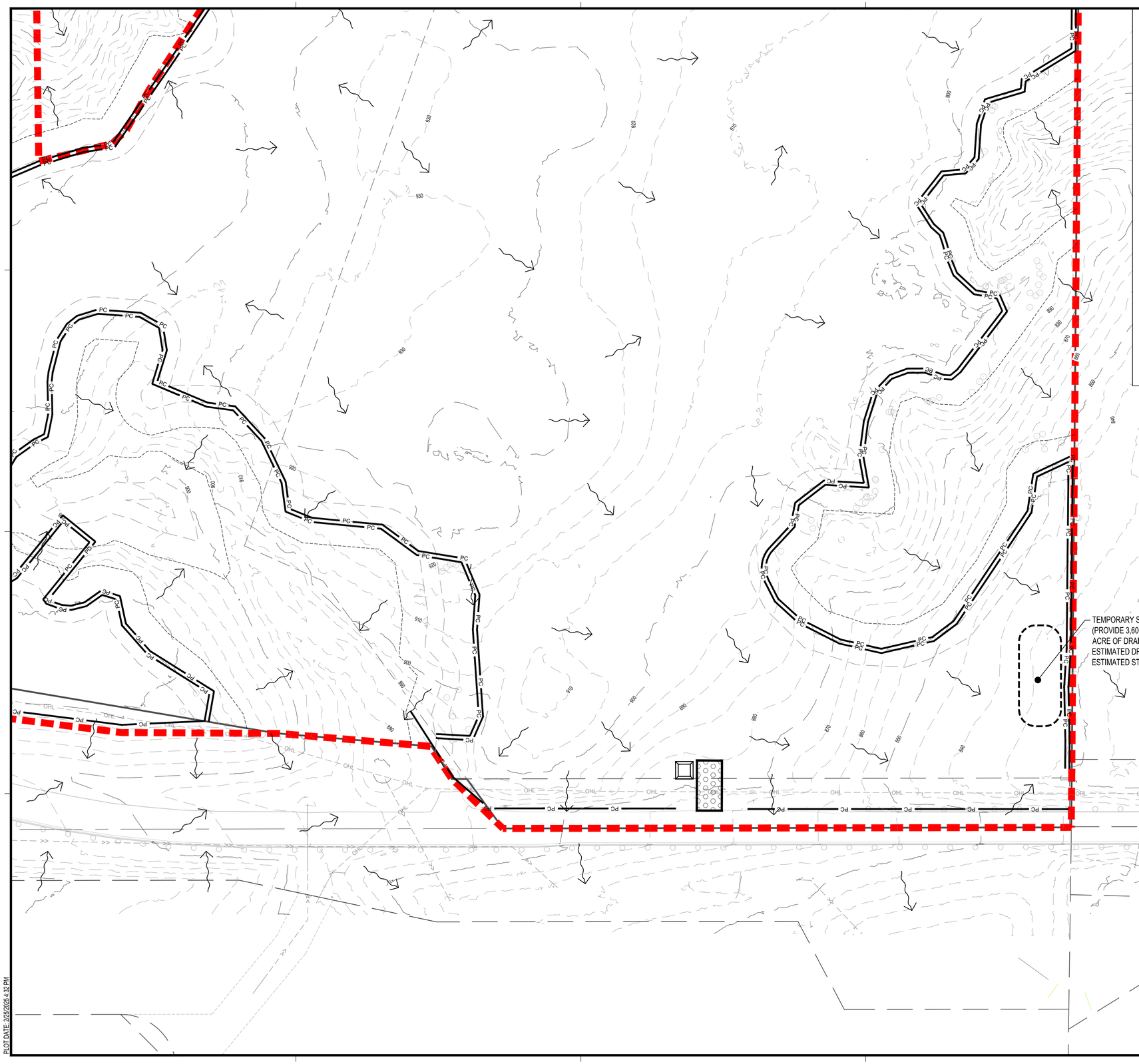
31
PRE-CONSTRUCTION SWPPP (E)

SHEET

33 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:31 PM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	STABILIZED CONSTRUCTION EXIT
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP-PRE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

31 PRE-CONSTRUCTION SWPPP (SE)

SHEET

34 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:32 PM

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N
	EROSION CONTROL BLANKET, CATEGORY 60
	TURF REINFORCEMENT MAT, CATEGORY 55
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 CONSTRUCTION GRADING
	PHASE 1 MASS GRADING

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

N

0 150 300

SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (OVERALL)

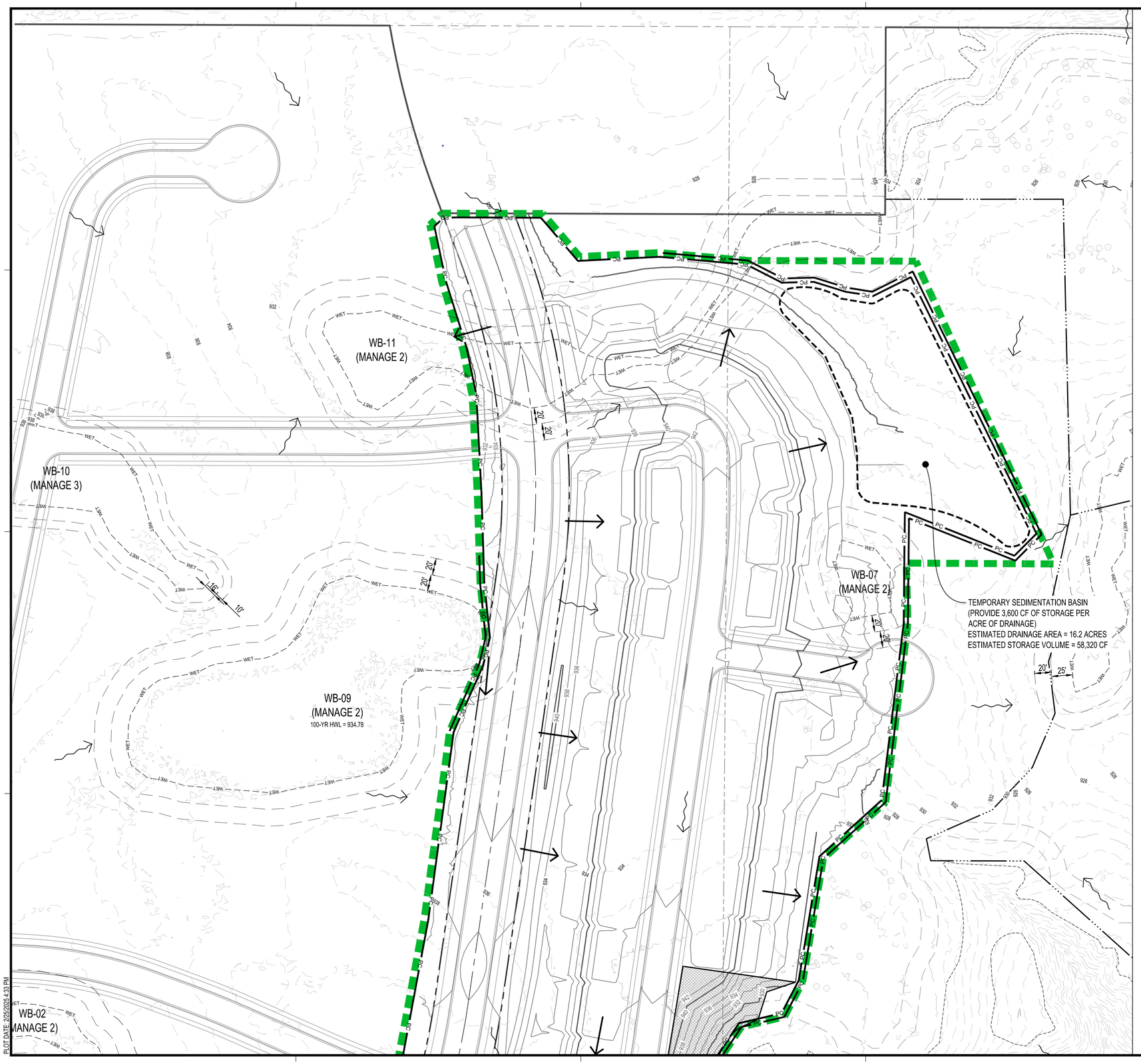
SHEET

35

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:33 PM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N
	EROSION CONTROL BLANKET, CATEGORY 60
	TURF REINFORCEMENT MAT, CATEGORY 55
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

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N

0 60 120

SCALE IN FEET

ISG

FORESTAR

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (N)

SHEET

36 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:33 PM

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE

	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N

	EROSION CONTROL BLANKET, CATEGORY 60
	TURF REINFORCEMENT MAT, CATEGORY 55
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

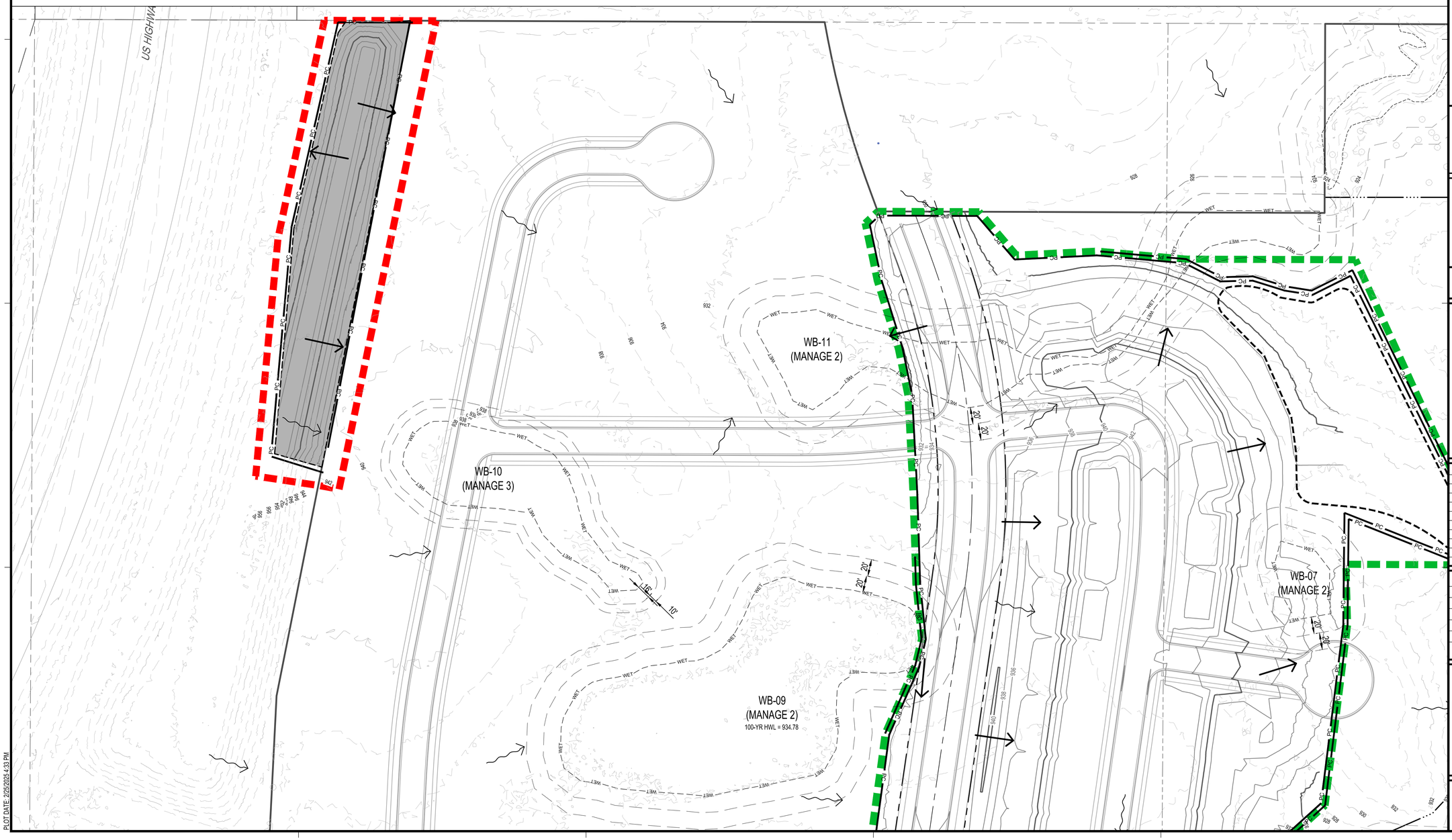
SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

N

0 60 120

SCALE IN FEET



ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (NW)

SHEET

37 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:33 PM

N

0 60 120

SCALE IN FEET

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N
	EROSION CONTROL BLANKET, CATEGORY 60
	TURF REINFORCEMENT MAT, CATEGORY 55
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

WB-02 (MANAGE 2)

WB-06 (MANAGE 1)

WB-01 (MANAGE 2)

AMEND SOIL (SEE CARVER COUNTY DETAIL)

AMEND SOIL (SEE CARVER COUNTY DETAIL)

IESF BIORETENTION BASIN 6
TOP = 928.00
EOF = 927.00
100-YR HWL = 926.08
NWL = 921.50
BOT = 920.00

IESF BIORETENTION BASIN 7
TOP = 933.00
EOF = 932.00
100-YR HWL = 929.70
NWL = 925.00
BOT = 923.50

25'x10' STILLING BASIN (SEE CARVER COUNTY DETAIL)

TEMPORARY SEDIMENTATION BASIN (PROVIDE 3,600 CF OF STORAGE PER ACRE OF DRAINAGE)
ESTIMATED DRAINAGE AREA = 6.9 ACRES
ESTIMATED STORAGE VOLUME = 24,840 CF

OUTLOT B

SAVANNA WAY

WATKINS GLEN COURT

COUNTY RD 61 (CHASKA BLVD)

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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DRAWN BY	AJR/LMM/LHH
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REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (W)

SHEET

38 OF 92

PLOT DATE: 2/25/2025 1:33 PM

PRELIMINARY NOT FOR CONSTRUCTION

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED

TPF TPF	TREE PROTECTION FENCE		STABILIZED CONSTRUCTION EXIT		CONCRETE WASHOUT AREA
	STORM DRAIN INLET PROTECTION		EROSION CONTROL BLANKET, CATEGORY 20N		EXISTING DRAINAGE ARROW
	CULVERT END CONTROL		EROSION CONTROL BLANKET, CATEGORY 60		PROPOSED DRAINAGE ARROW
	SEDIMENT CONTROL LOG		TURF REINFORCEMENT MAT, CATEGORY 55	101	EXISTING CONTOUR (MINOR INTERVAL)

100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

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PLOT DATE: 2/25/2025 4:33 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PROPOSED SWPPP (S)

SHEET

39 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N
	EROSION CONTROL BLANKET, CATEGORY 60
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	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
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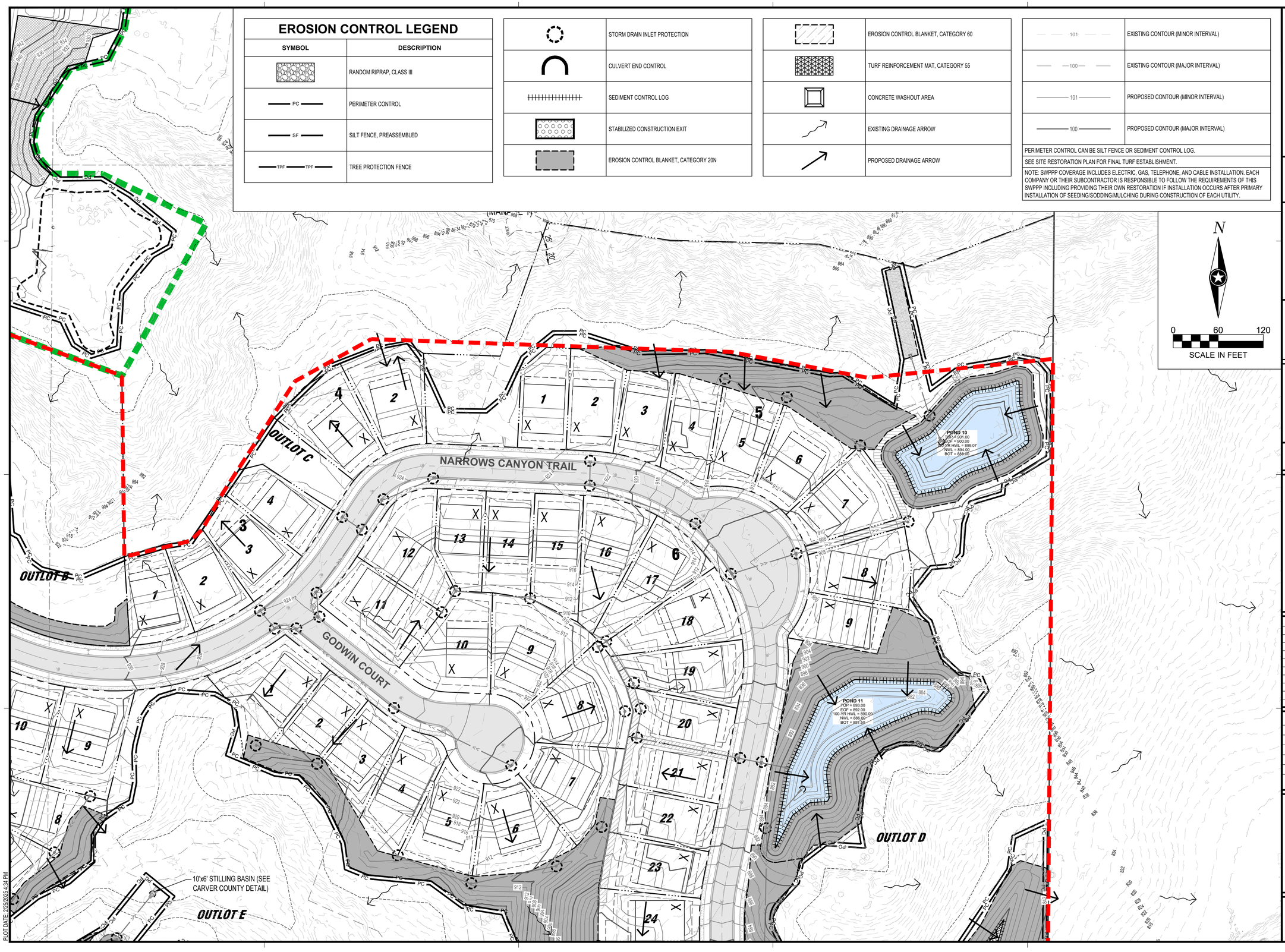

PLOT DATE: 3/25/2025 4:24 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

36 PROPOSED SWPPP (E)

SHEET

40 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS III
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
TPF TPF	TREE PROTECTION FENCE
	STORM DRAIN INLET PROTECTION
	CULVERT END CONTROL
	SEDIMENT CONTROL LOG
	STABILIZED CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY 20N
	EROSION CONTROL BLANKET, CATEGORY 60
	TURF REINFORCEMENT MAT, CATEGORY 55
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	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
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N

0 60 120

SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SWPPP
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

36 PROPOSED SWPPP (SE)

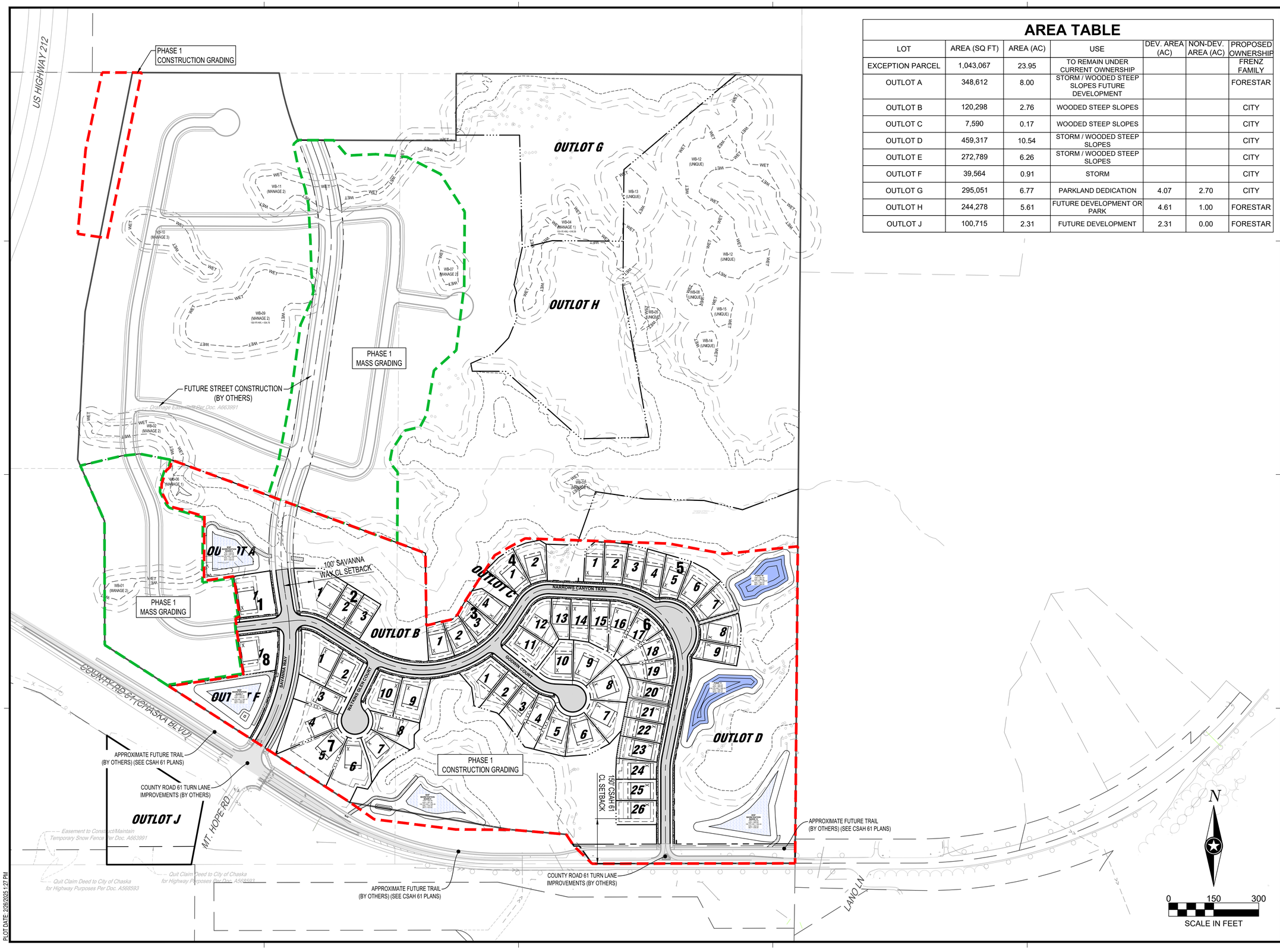
SHEET

41

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:34 PM



AREA TABLE

LOT	AREA (SQ FT)	AREA (AC)	USE	DEV. AREA (AC)	NON-DEV. AREA (AC)	PROPOSED OWNERSHIP
EXCEPTION PARCEL	1,043,067	23.95	TO REMAIN UNDER CURRENT OWNERSHIP			FRENZ FAMILY
OUTLOT A	348,612	8.00	STORM / WOODED STEEP SLOPES FUTURE DEVELOPMENT			FORESTAR
OUTLOT B	120,298	2.76	WOODED STEEP SLOPES			CITY
OUTLOT C	7,590	0.17	WOODED STEEP SLOPES			CITY
OUTLOT D	459,317	10.54	STORM / WOODED STEEP SLOPES			CITY
OUTLOT E	272,789	6.26	STORM / WOODED STEEP SLOPES			CITY
OUTLOT F	39,564	0.91	STORM			CITY
OUTLOT G	295,051	6.77	PARKLAND DEDICATION	4.07	2.70	CITY
OUTLOT H	244,278	5.61	FUTURE DEVELOPMENT OR PARK	4.61	1.00	FORESTAR
OUTLOT J	100,715	2.31	FUTURE DEVELOPMENT	2.31	0.00	FORESTAR

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-OVERALL
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PHASING PLAN

SHEET

42 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/26/2025 1:27 PM

UTILITY LEGEND

EXISTING		PROPOSED
— — — >> — — —	STORM DRAIN	>>
— — — > — — —	SANITARY SEWER	>
— — — II> — — —	SANITARY SEWER FORCEMAIN	II>
— — — I — — —	WATER MAIN	I
— — — G — — —	GAS	G
— — — OE — — —	OVERHEAD ELECTRIC	OE
— — — UE — — —	UNDERGROUND ELECTRIC	UE
— — — UT — — —	UNDERGROUND TELEPHONE	UT
— — — UTV — — —	UNDERGROUND TV	
— — — OHL — — —	OVERHEAD UTILITY	
— — — UTL — — —	UNDERGROUND UTILITY	
— — — FBO — — —	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-UTILITY
DRAWN BY	AJR/LMM/LHH
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CLIENT PROJECT NO.	-

TITLE

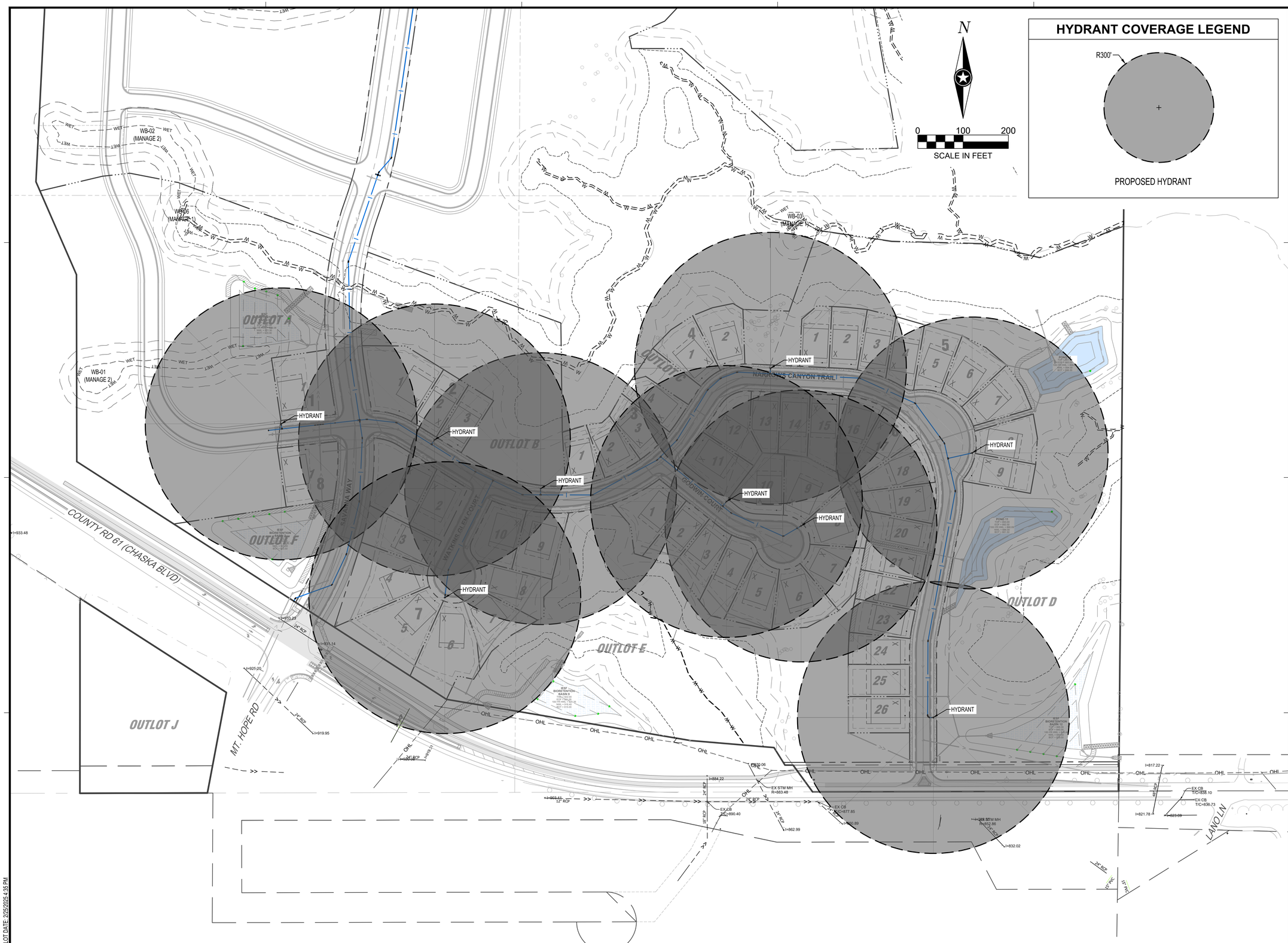
OVERALL UTILITY

SHEET

43 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:34 PM



PLOT DATE: 2/25/2025 4:35 PM

PRELIMINARY NOT FOR CONSTRUCTION

ISG

FORESTAR

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CLIENT PROJECT NO.	-

TITLE

HYDRANT COVERAGE

SHEET

44

OF 92

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

UTILITY LEGEND

EXISTING		PROPOSED
>>	STORM DRAIN	>>
	SUBDRAIN	
	SUBDRAIN SERVICE	
>	SANITARY SEWER	>
II>	SANITARY SEWER FORCEMAIN	II>
I	WATER MAIN	I
G	GAS	G
OE	OVERHEAD ELECTRIC	OE
UE	UNDERGROUND ELECTRIC	UE
UT	UNDERGROUND TELEPHONE	UT
UTV	UNDERGROUND TV	
OHL	OVERHEAD UTILITY	
UTL	UNDERGROUND UTILITY	
FBO	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

12" OFF-SITE WATERMAIN (BY OTHERS)

FUTURE STREET CONSTRUCTION (TYP)

CONNECT 12" OFF-SITE WATERMAIN TO PROPOSED 12" WATERMAIN

8" CAP

8" CAP

12"x8" CROSS

12"x11.25° BEND

12" WATERMAIN

12" WATERMAIN

WB-11
(MANAGE 2)

WB-10
(MANAGE 3)

WB-09
(MANAGE 2)
100-YR HWL = 934.78

WB-07
(MANAGE 2)

WB-0
(MANAG
100-YR HWL =

WET

946 948 950 952 954 944 946 934 932 930 928 936 938 940 942 944 946 948 950 952 954 956 958 960 962 964

N

0 60 120
SCALE IN FEET

PLOT DATE: 2/5/2025 4:35 PM

PRELIMINARY NOT FOR CONSTRUCTION

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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CLIENT PROJECT NO.	-

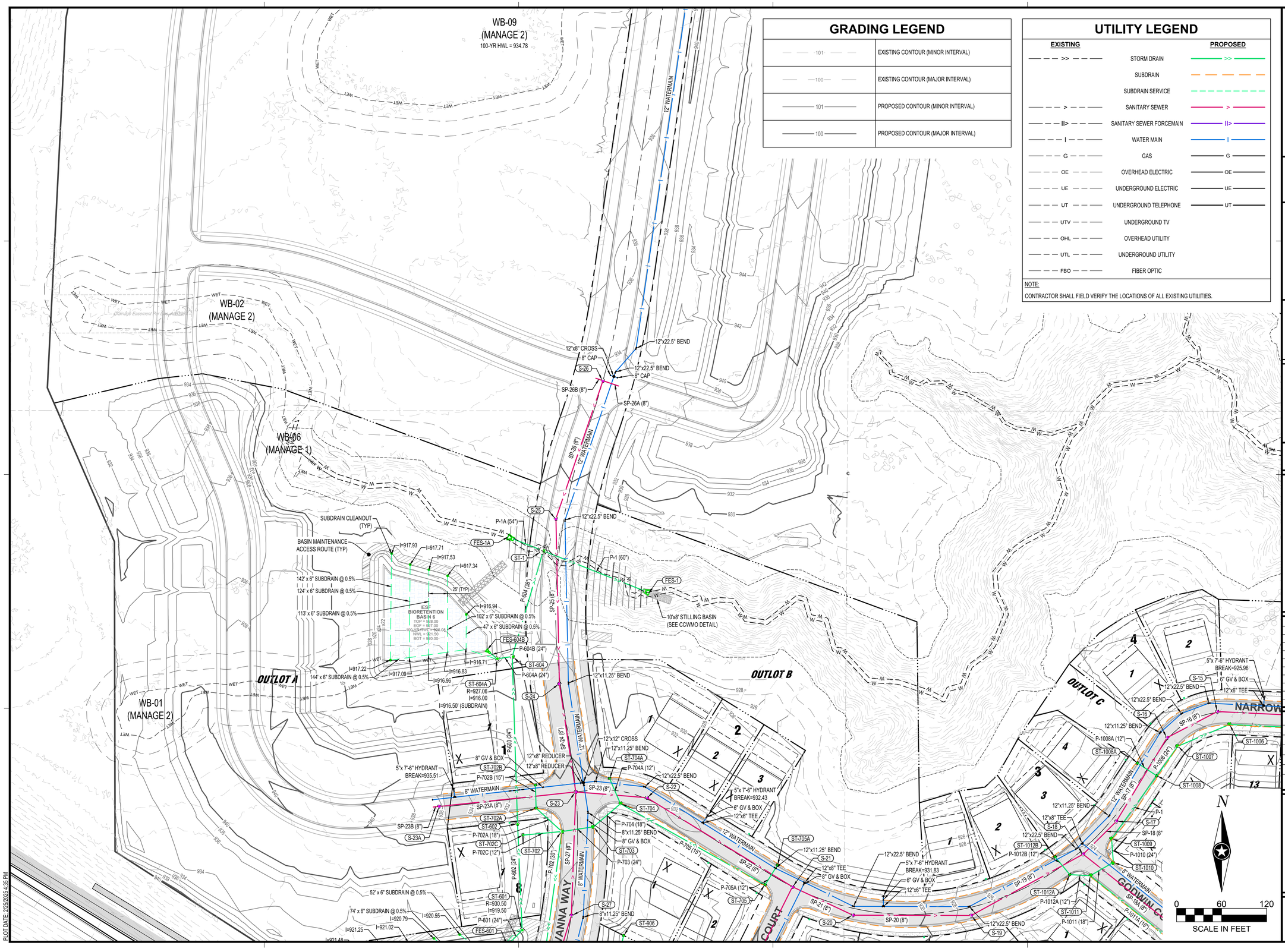
TITLE

UTILITY (N)

SHEET

45

OF 92



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

UTILITY LEGEND

EXISTING		PROPOSED
>>	STORM DRAIN	>>
	SUBDRAIN	
	SUBDRAIN SERVICE	
>	SANITARY SEWER	>
II>	SANITARY SEWER FORCEMAIN	II>
I	WATER MAIN	I
G	GAS	G
OE	OVERHEAD ELECTRIC	OE
UE	UNDERGROUND ELECTRIC	UE
UT	UNDERGROUND TELEPHONE	UT
UTV	UNDERGROUND TV	
OHL	OVERHEAD UTILITY	
UTL	UNDERGROUND UTILITY	
FBO	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-UTILITY
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

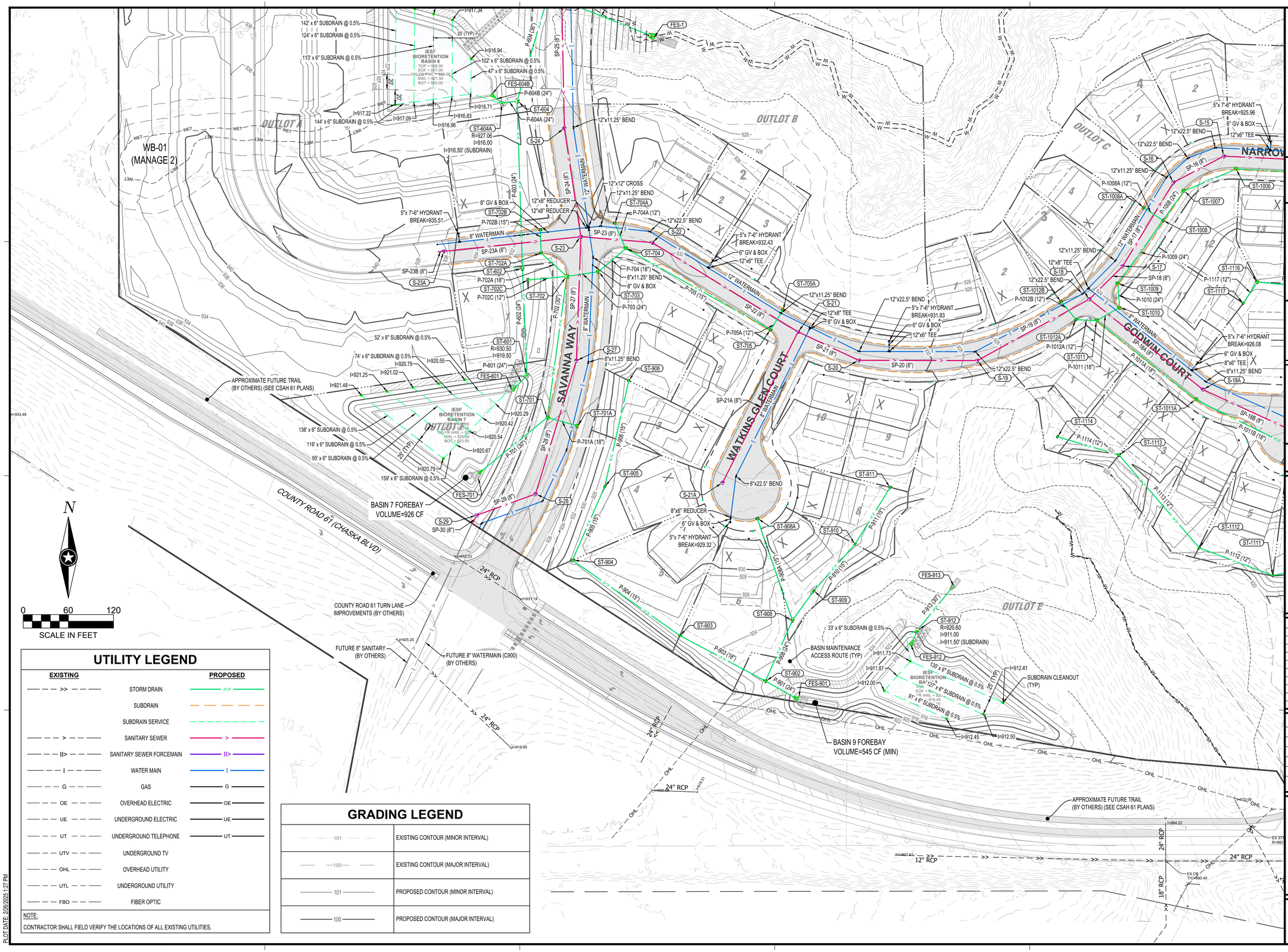
UTILITY (CENTRAL)

SHEET

46 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:35 PM



UTILITY LEGEND

EXISTING		PROPOSED
—— — — >> — — ——	STORM DRAIN	——>>——
	SUBDRAIN	— — — — —
	SUBDRAIN SERVICE	— — — — —
—— — — > — — ——	SANITARY SEWER	——>——
—— — — II> — — ——	SANITARY SEWER FORCEMAIN	——II>——
—— — — I — — ——	WATER MAIN	——I——
—— — — G — — ——	GAS	——G——
—— — — OE — — ——	OVERHEAD ELECTRIC	——OE——
—— — — UE — — ——	UNDERGROUND ELECTRIC	——UE——
—— — — UT — — ——	UNDERGROUND TELEPHONE	——UT——
—— — — UTV — — ——	UNDERGROUND TV	
—— — — OHL — — ——	OVERHEAD UTILITY	
—— — — UTL — — ——	UNDERGROUND UTILITY	
—— — — FBO — — ——	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PLOT DATE: 2/6/2025 1:27 PM

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-UTILITY
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

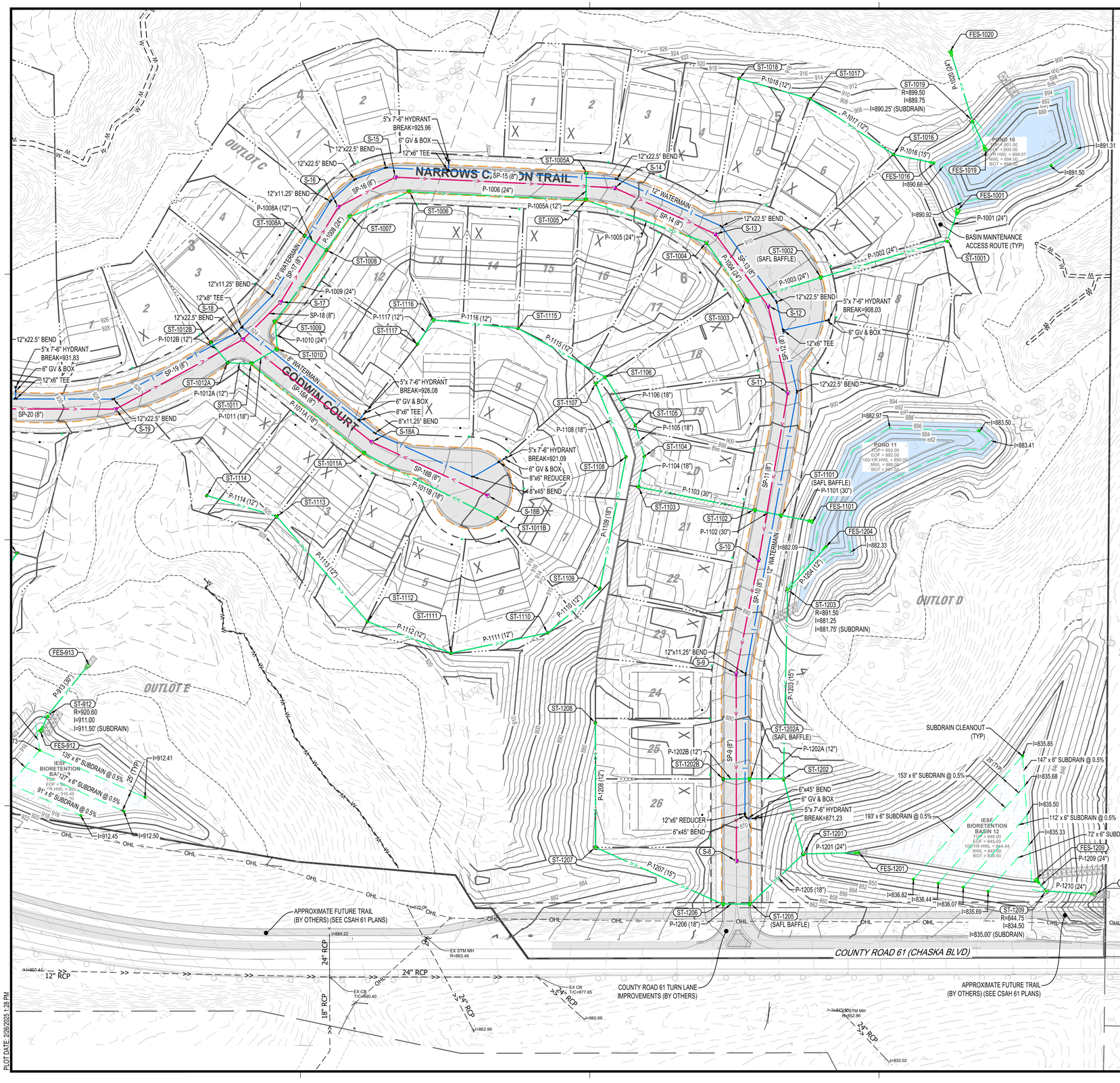
TITLE

UTILITY (SW)

SHEET

47 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



UTILITY LEGEND

EXISTING		PROPOSED
>>	STORM DRAIN	>>
	SUBDRAIN	
	SUBDRAIN SERVICE	
>	SANITARY SEWER	>
II>	SANITARY SEWER FORCEMAIN	II>
I	WATER MAIN	I
G	GAS	G
OE	OVERHEAD ELECTRIC	OE
UE	UNDERGROUND ELECTRIC	UE
UT	UNDERGROUND TELEPHONE	UT
UTV	UNDERGROUND TV	
OHL	OVERHEAD UTILITY	
UTL	UNDERGROUND UTILITY	
FBO	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-UTILITY
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

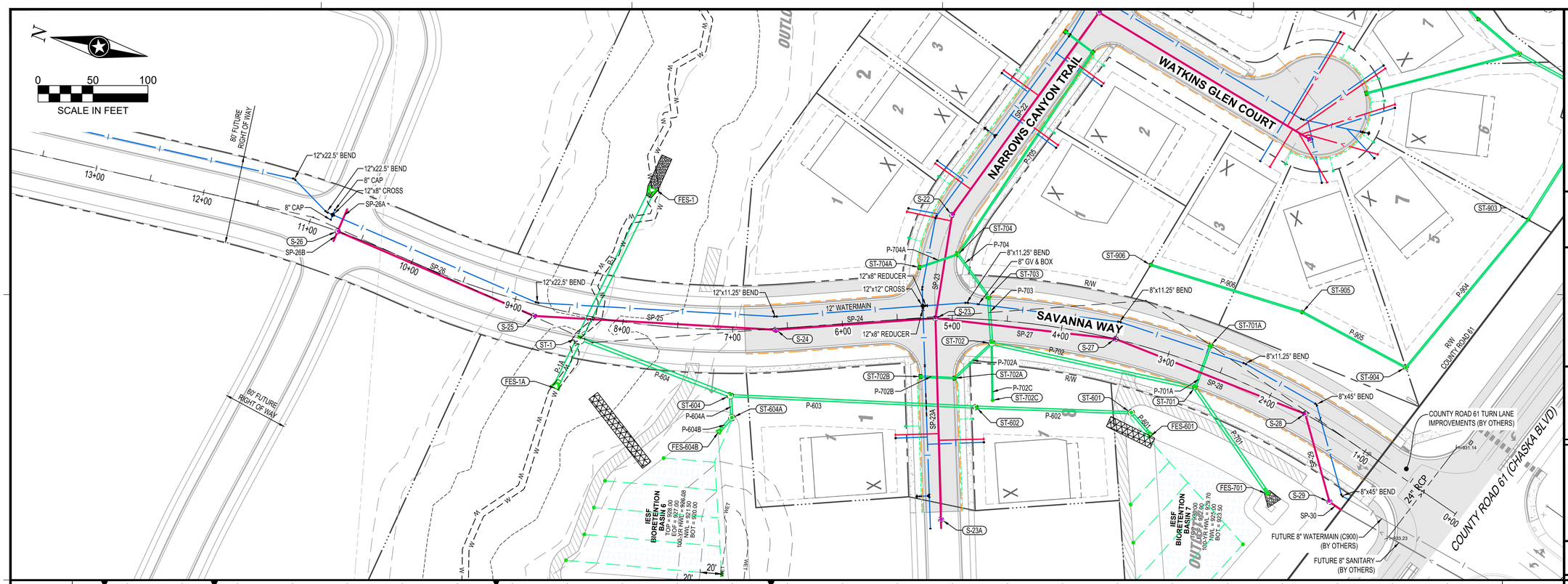
UTILITY (SE)

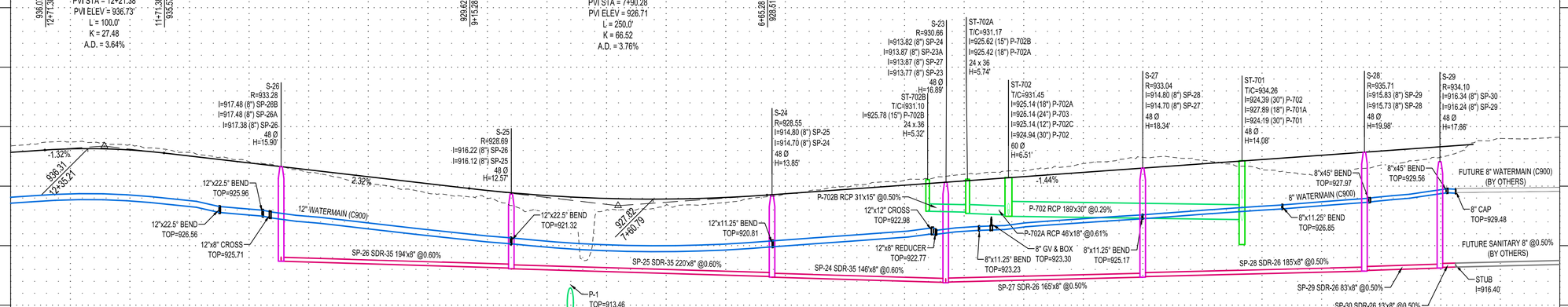
SHEET

48 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/26/2025 1:28 PM





UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL:
  DEPTHS UP TO 16': PVC SDR 35
  DEPTHS 16'-22': PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL:
  WATERMAIN: PVC C900
  WATER SERVICE: HDPE (SER-2A)
- STORM DRAIN MATERIAL:
  RCP

WATERMAIN CROSSINGS:
MINIMUM 18" VERTICAL SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

PLOT DATE: 2/5/2025 4:36 PM

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (SAVANNAH)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

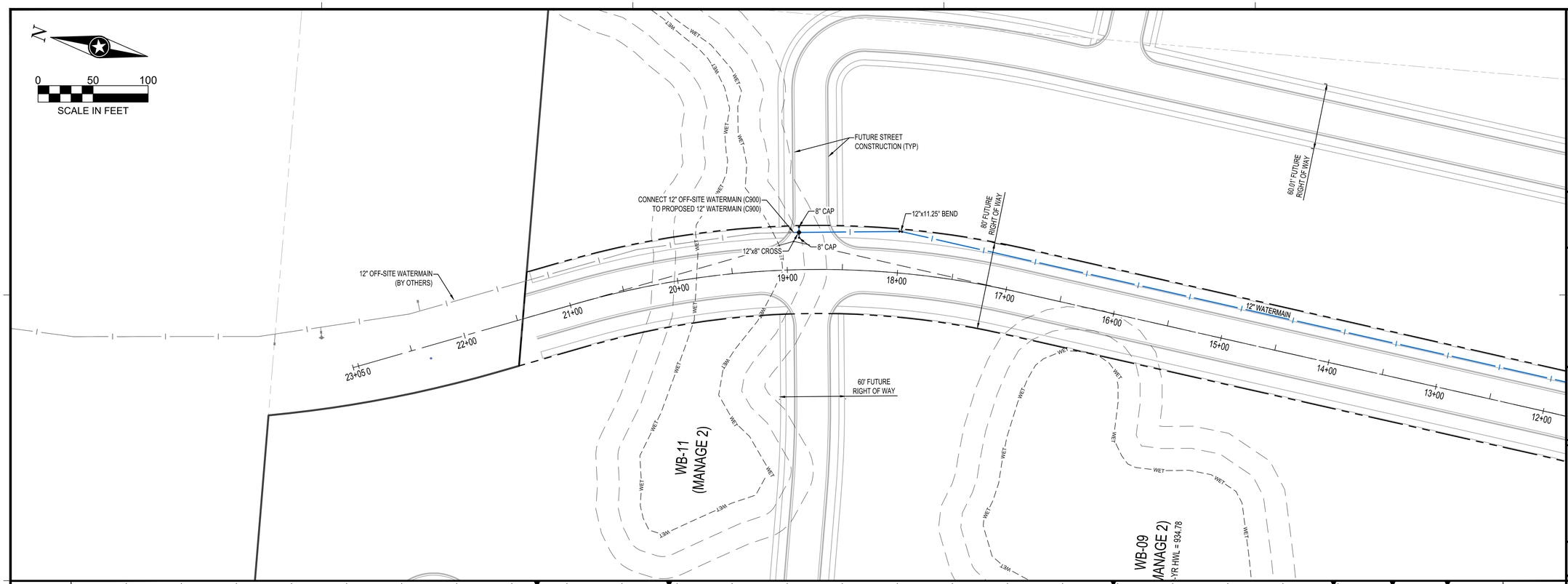
TITLE

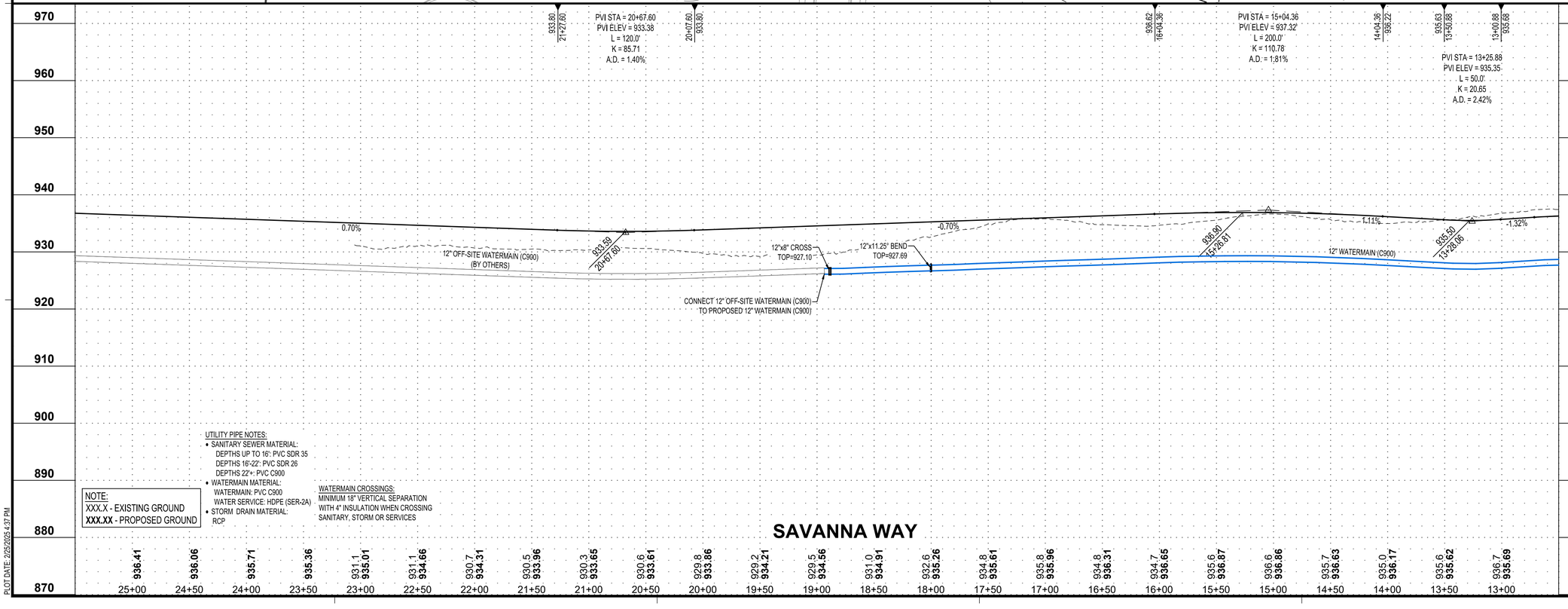
PLAN & PROFILE (SAVANNA WAY)

SHEET

49 OF 92

PRELIMINARY NOT FOR CONSTRUCTION





NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

UTILITY PIPE NOTES:
- SANITARY SEWER MATERIAL:
  DEPTHS UP TO 16': PVC SDR 35
  DEPTHS 16'-22': PVC SDR 26
  DEPTHS 22'+: PVC C900
- WATERMAIN MATERIAL:
  WATERMAIN: PVC C900
  WATER SERVICE: HDPE (SER-2A)
- STORM DRAIN MATERIAL:
  RCP

WATERMAIN CROSSINGS:
MINIMUM 18" VERTICAL SEPARATION WITH 4" INSULATION WHEN CROSSING SANITARY, STORM OR SERVICES

PLOT DATE: 2/25/2025 4:37 PM

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FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (SAVANNAH)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

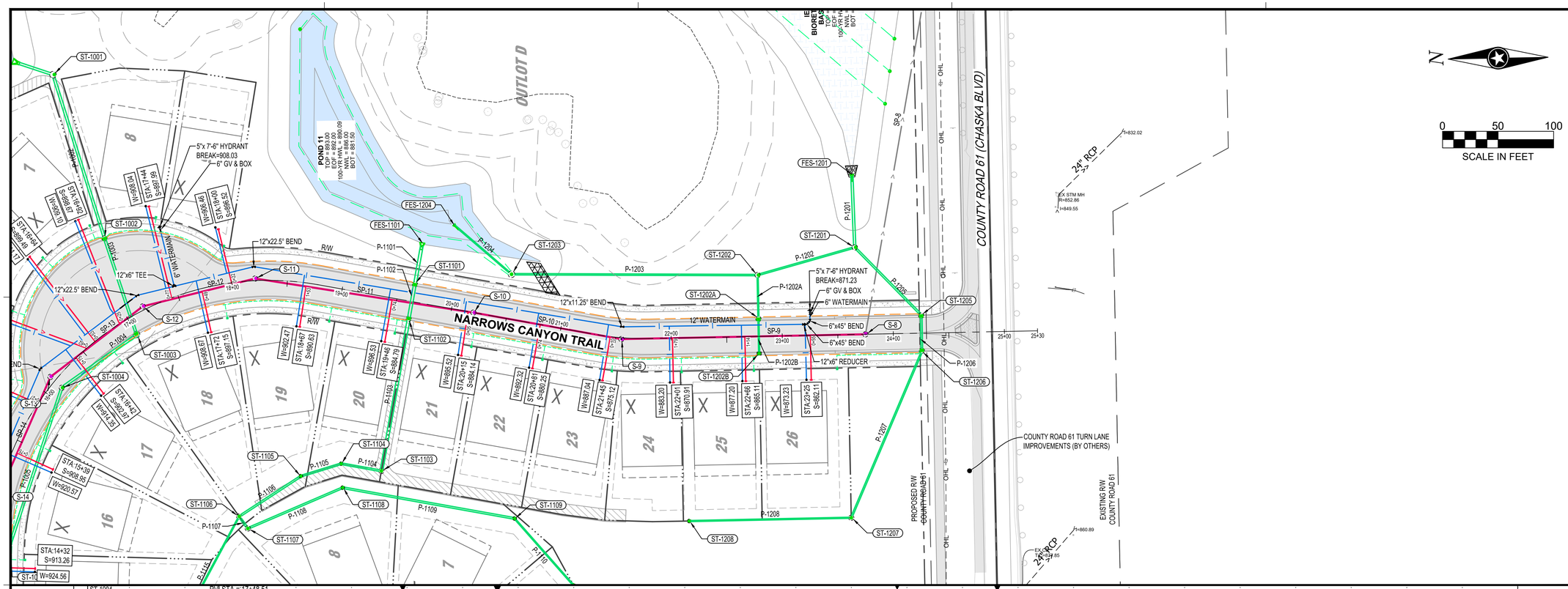
TITLE

PLAN & PROFILE (SAVANNA WAY)

SHEET

50 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



PLOT DATE: 2/5/2025 4:39 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (N CANYON SE)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

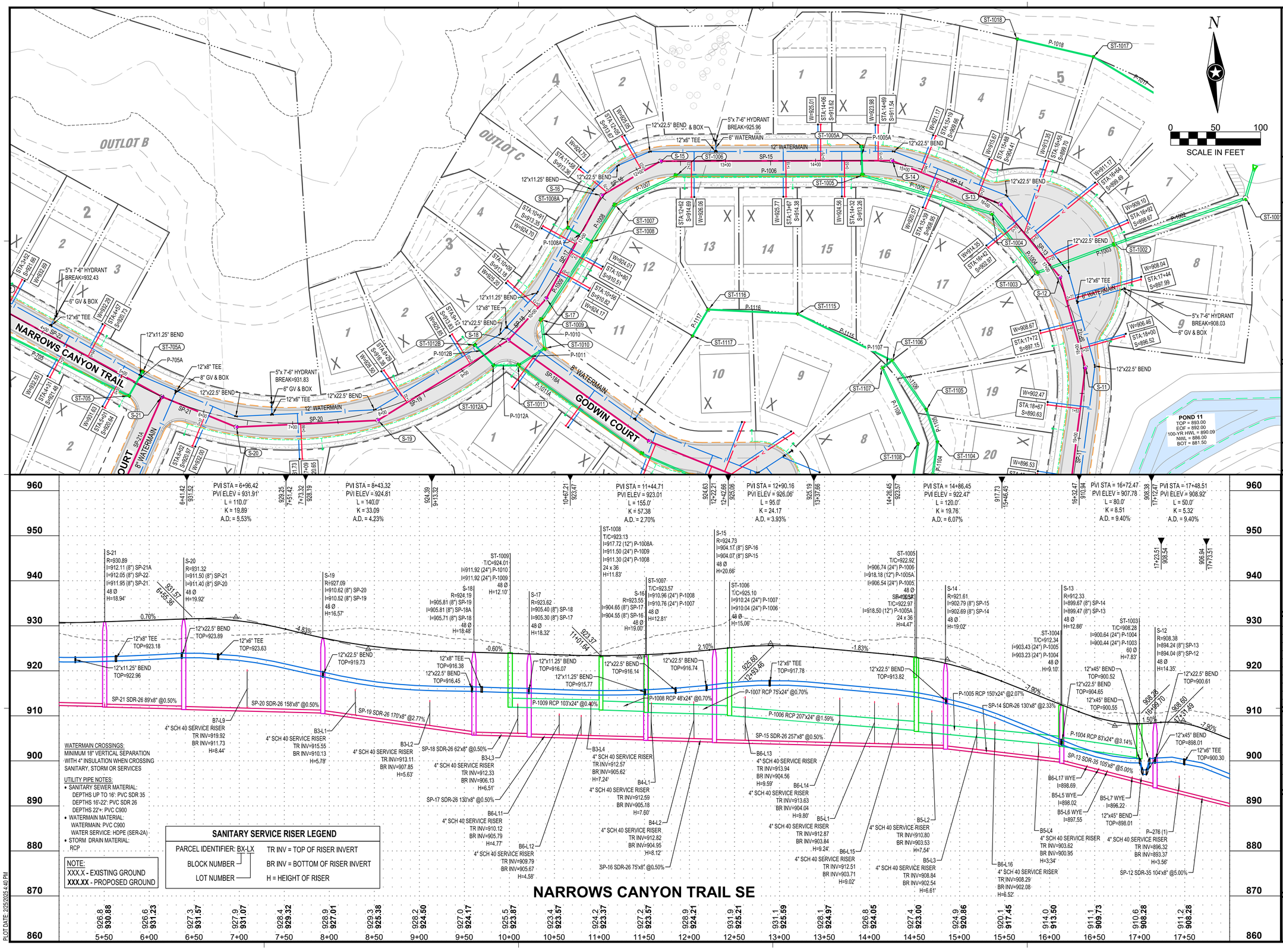
TITLE

PLAN & PROFILE (NARROWS CANYON TRAIL)

SHEET

51 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



PLOT DATE: 2/5/2025 4:40 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (N CANYON SE)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

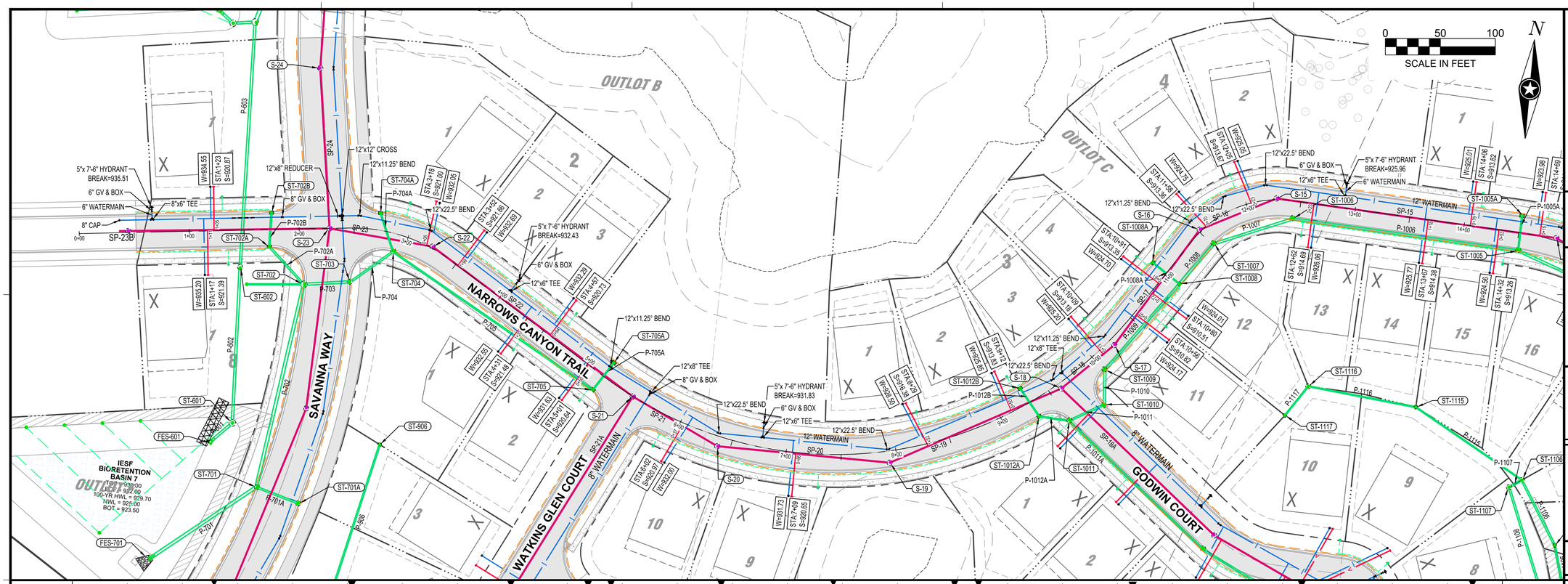
TITLE

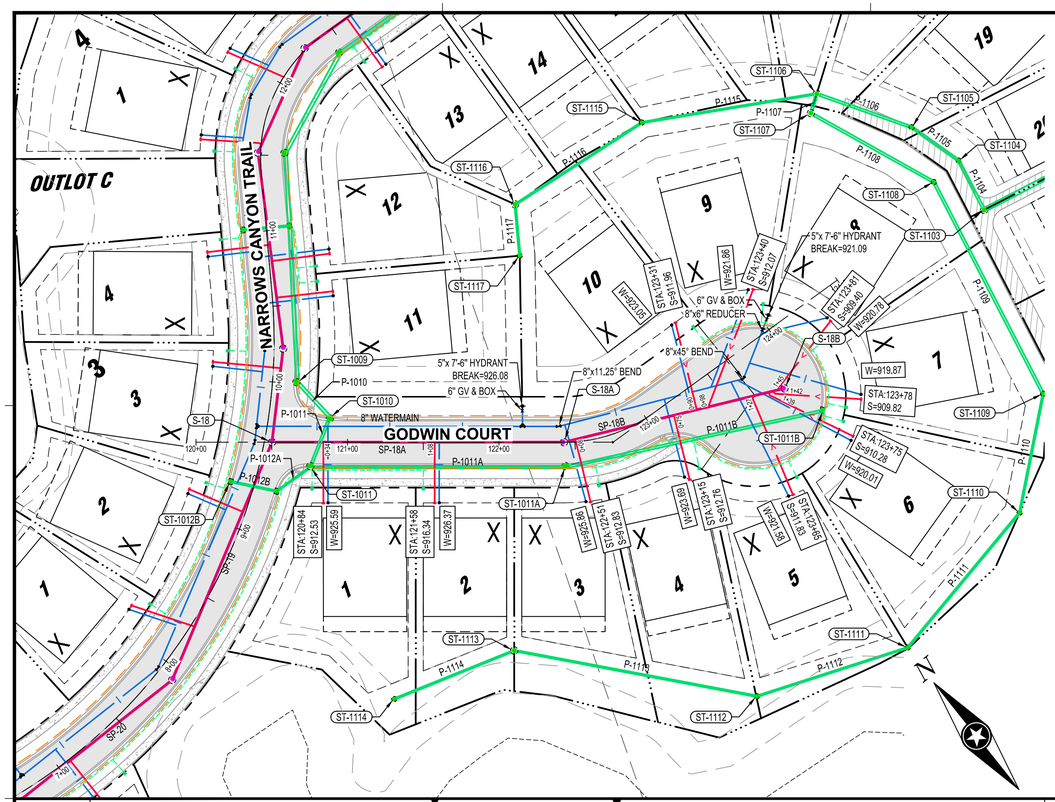
PLAN & PROFILE (NARROWS CANYON TRAIL)

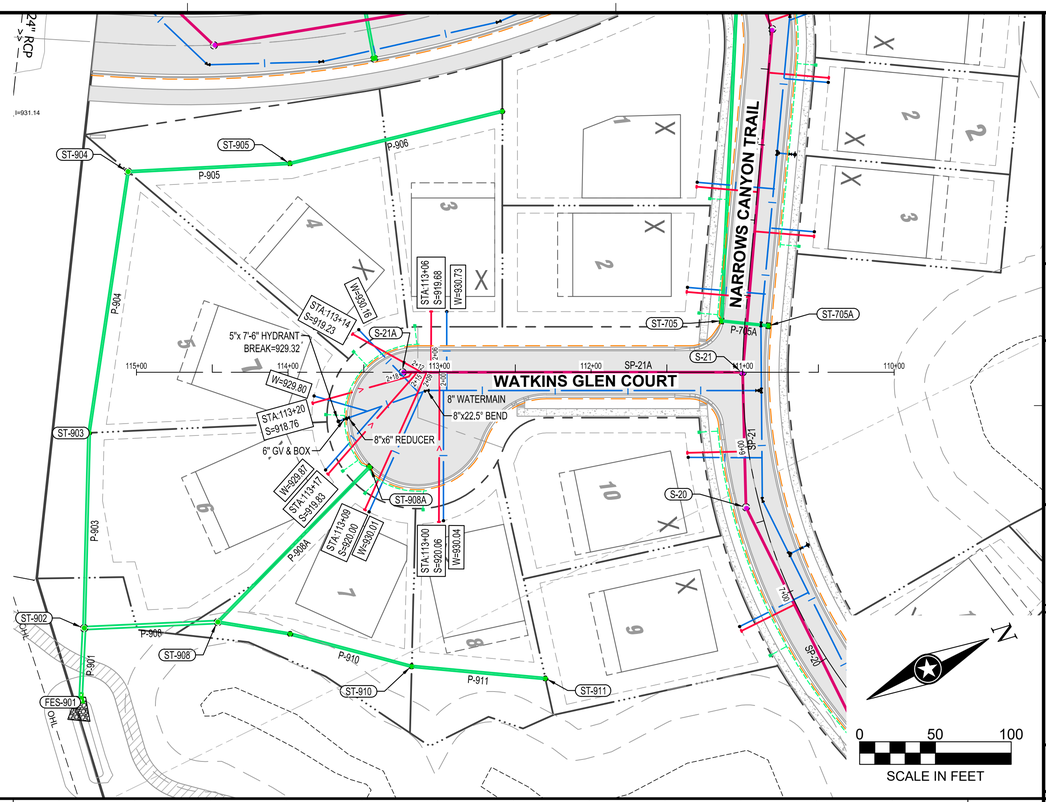
SHEET

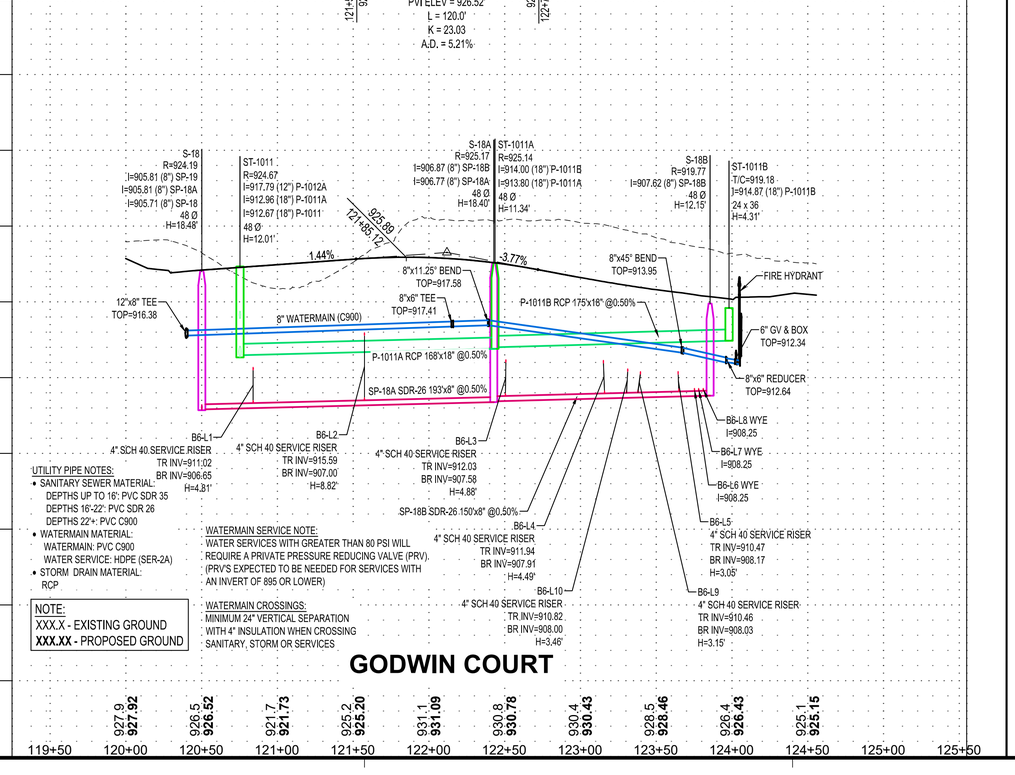
52 OF 92

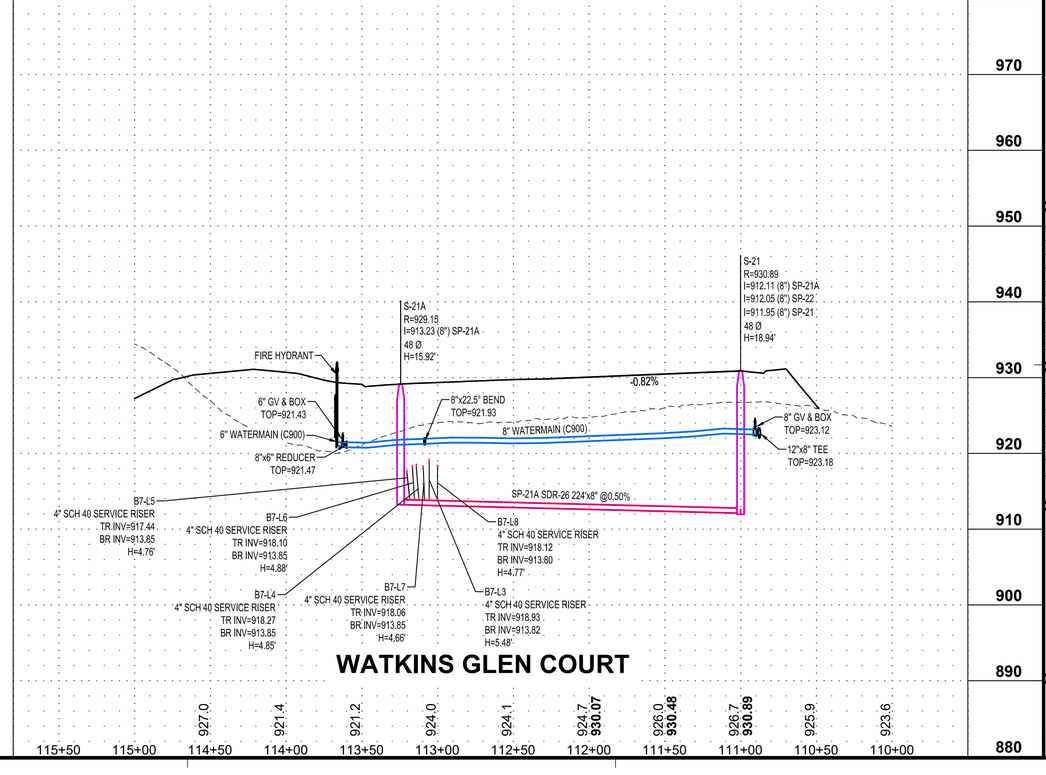
PRELIMINARY NOT FOR CONSTRUCTION


SCALE IN FEET
0
50
100
N
OUTLOT B
OUTLOT C
NARROWS CANYON TRAIL
SAVANNA WAY
WATKINS GLEN COURT
GODWIN COURT
8" WATERMAIN
12" WATERMAIN
IESF BIORETENTION BASIN 7
OUTLOT A
100-YR HWL = 929.70
NWL = 925.90
BOT = 923.50
5'x 7'-6" HYDRANT BREAK=935.51
6" GV & BOX
6" WATERMAIN
8" CAP
8"x6" TEE
12"x8" REDUCER
8" GV & BOX
12"x12" CROSS
12"x11.25" BEND
12"x22.5" BEND
5'x 7'-6" HYDRANT BREAK=932.43
12"x6" TEE
12"x8" TEE
5'x 7'-6" HYDRANT BREAK=931.83
12"x11.25" BEND
12"x8" TEE
12"x22.5" BEND
12"x6" TEE
12"x22.5" BEND
12"x22.5" BEND
6" GV & BOX
5'x 7'-6" HYDRANT BREAK=925.96
6" WATERMAIN
12"x22.5" BEND
12"x11.25" BEND
12"x22.5" BEND
12"x22.5" BEND
12"x11.25" BEND
12"x8" TEE
12"x22.5" BEND
12"x22.5" BEND
12"x11.25" BEND









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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (CDS)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

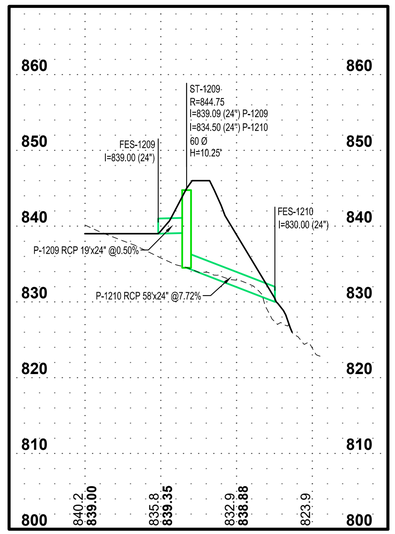
PLAN & PROFILE (GODWIN TRAIL)

SHEET

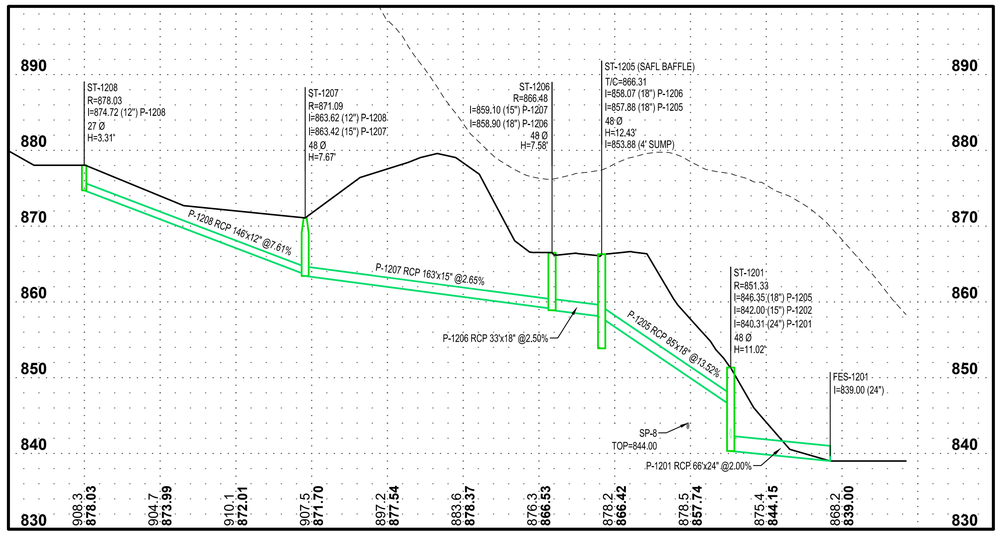
54 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

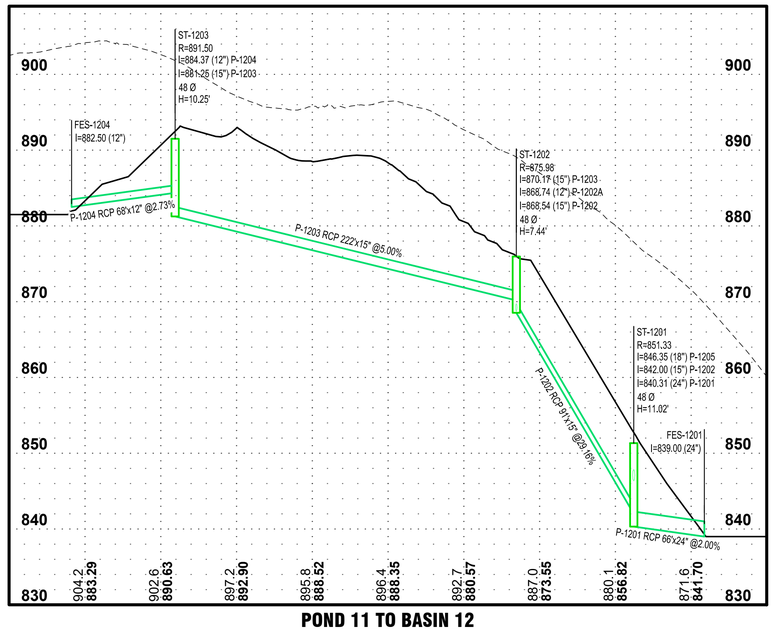
PLOT DATE: 2/5/2025 4:43 PM



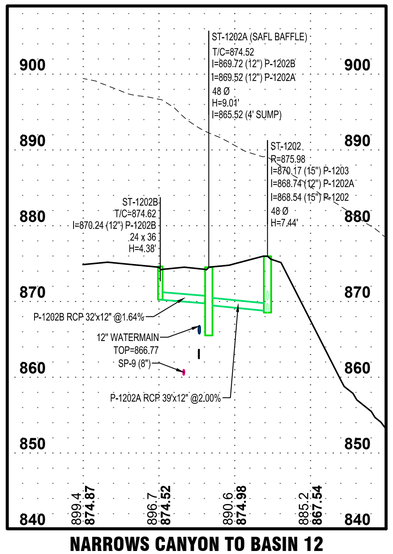
P12 - OUTLET STRUCTURE



BACKYARDS (161-162) TO BASIN 12



POND 11 TO BASIN 12



NARROWS CANYON TO BASIN 12

PROFILE LEGEND

	EXISTING GROUND
	PROPOSED GROUND
1000.0 1000.00	XXX.X - EXISTING GROUND ℄ XXX.XX - PROPOSED GROUND ℄

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

WATERMAIN DESIGNED TO MAINTAIN 18" VERTICAL SEPERATION BETWEEN SANITARY AND STORM SEWER. WATERMAIN SHALL HAVE MINIMUM 7.5' OF COVER (TYP). WATERMAIN ELEVATIONS ARE TO TOP OF PIPE.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (STORM)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

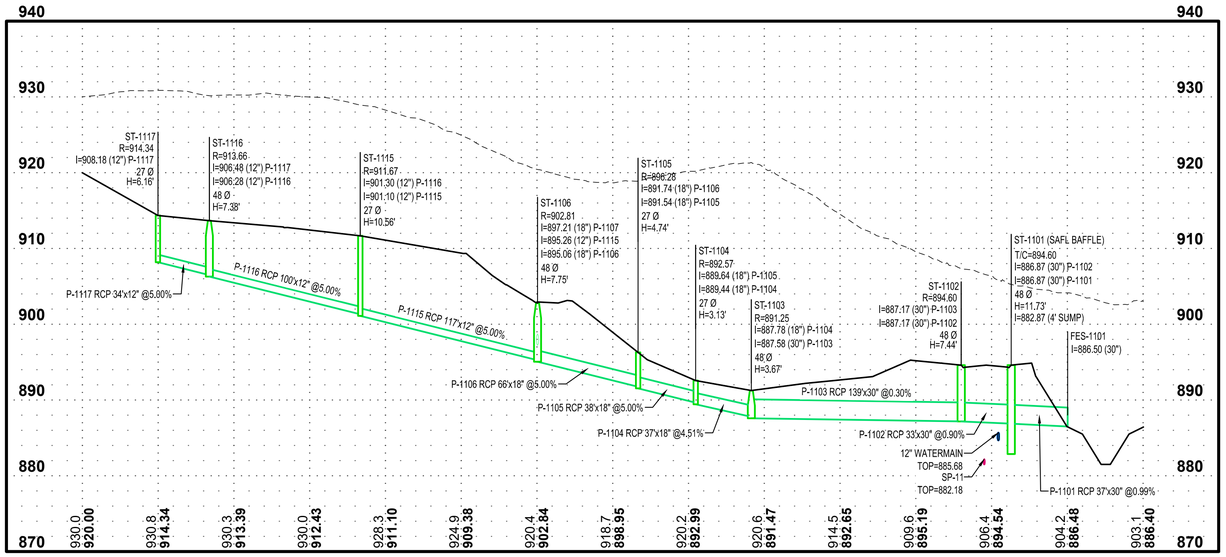
STORM SEWER PROFILES

SHEET

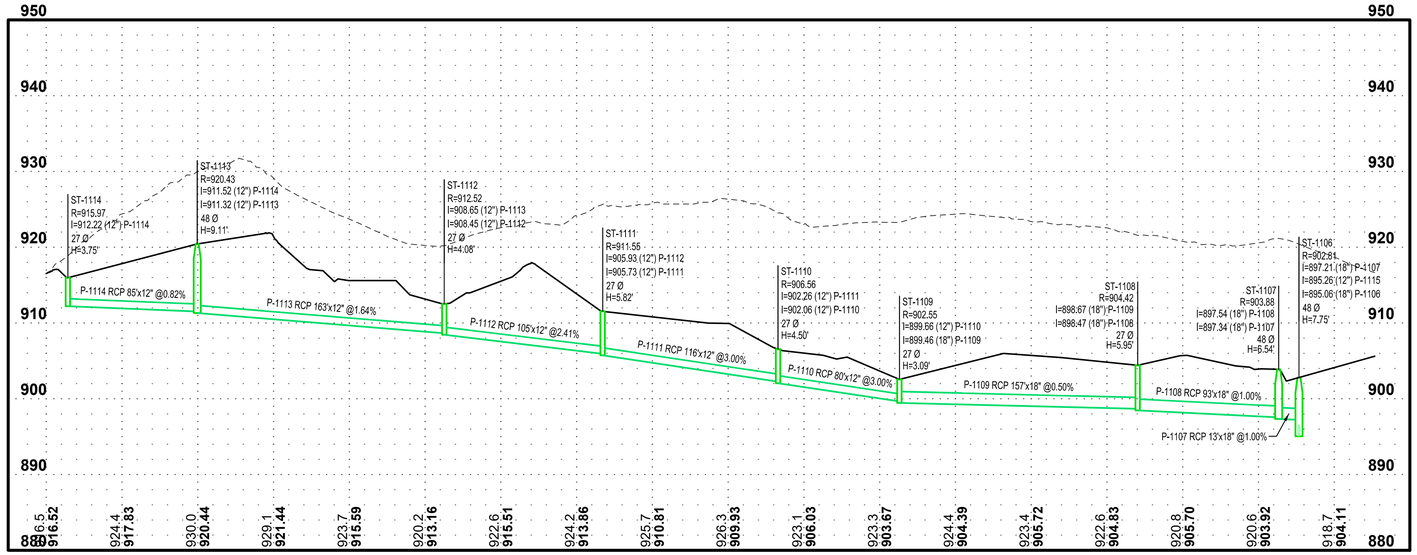
55 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:44 PM



GODWIN CT. (N) TO POND 11



GODWIN CT. (S) TO POND 11

PROFILE LEGEND

– – – –	EXISTING GROUND
———	PROPOSED GROUND
1000.0 / 1000.00	XXX.X - EXISTING GROUND ℄ XXX.XX - PROPOSED GROUND ℄

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

WATERMAIN DESIGNED TO MAINTAIN 18" VERTICAL SEPERATION BETWEEN SANITARY AND STORM SEWER. WATERMAIN SHALL HAVE MINIMUM 7.5' OF COVER (TYP). WATERMAIN ELEVATIONS ARE TO TOP OF PIPE.

ISG

FORESTAR

NOTE:
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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (STORM)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORM SEWER PROFILES

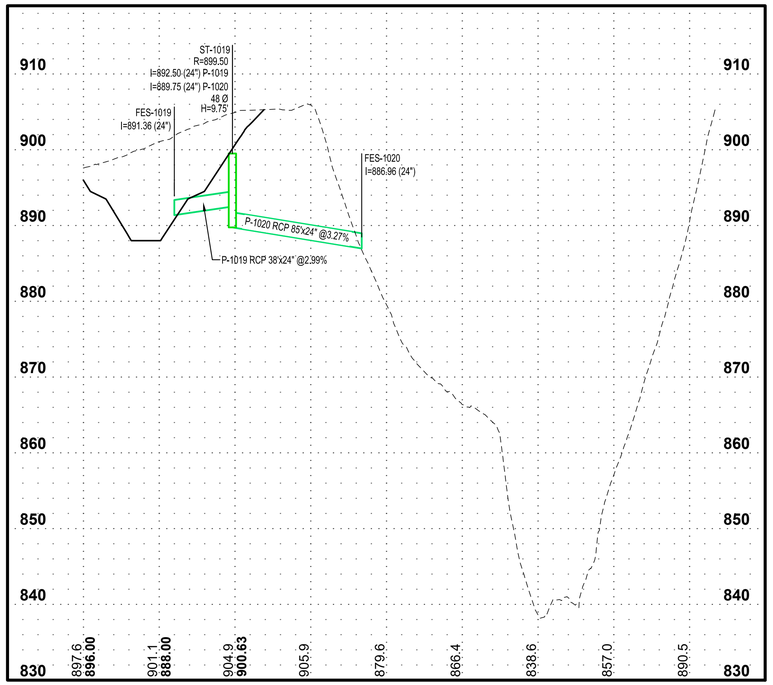
SHEET

56

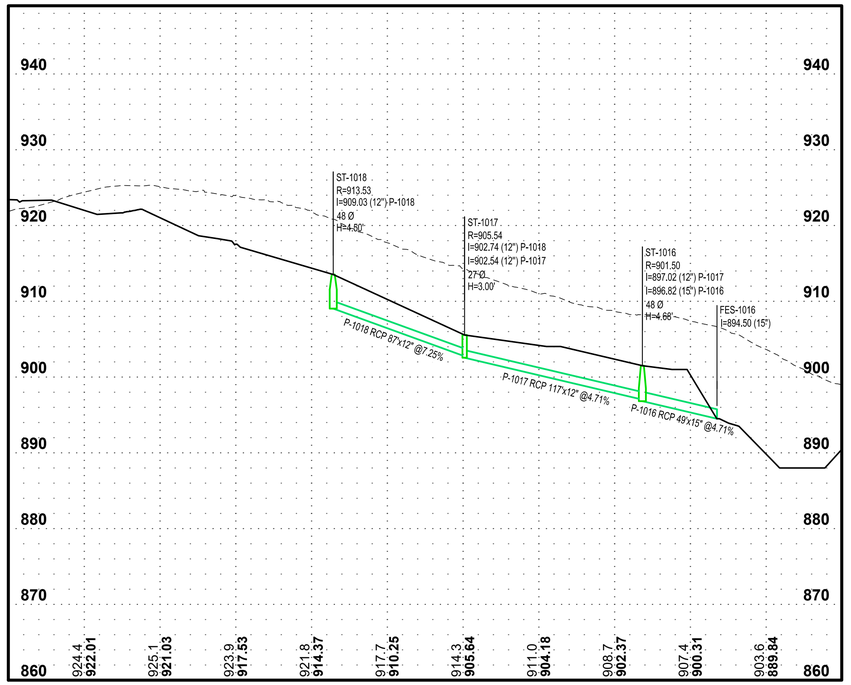
OF 92

PRELIMINARY NOT FOR CONSTRUCTION

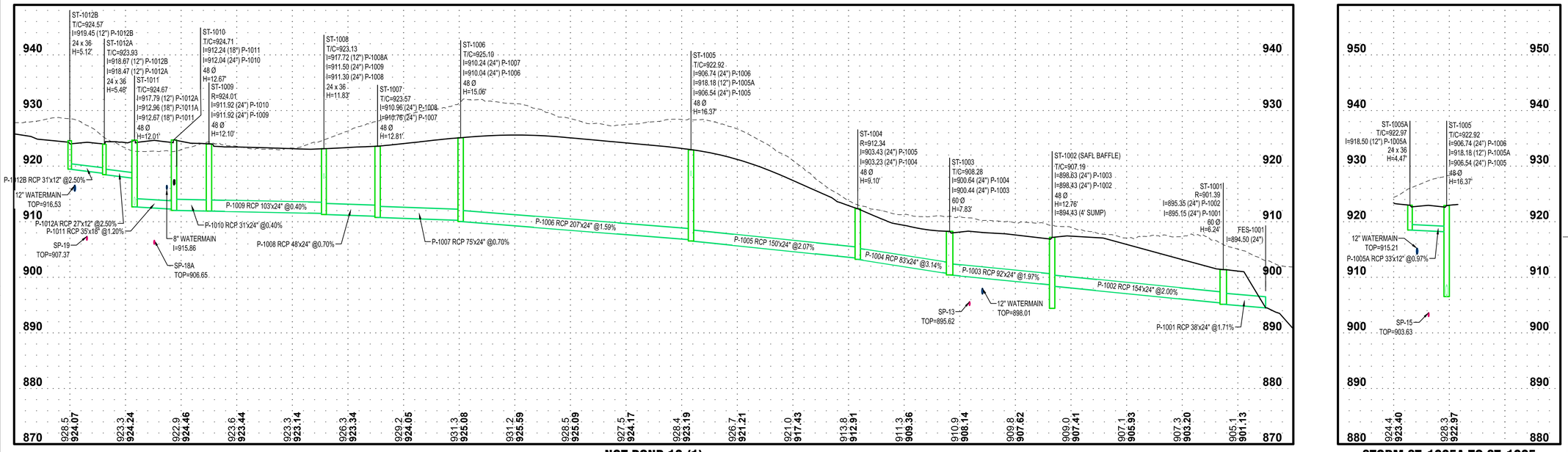
PLOT DATE: 2/5/2025 4:45 PM



P10 - OUTLET



P10 - BACK YARDS (N) (1)



NCT POND 10 (1)

STORM ST-1005A TO ST-1005

PROFILE LEGEND

- - - -	EXISTING GROUND
———	PROPOSED GROUND
1000.0 1000.00	XXX.X - EXISTING GROUND ℄ XXX.XX - PROPOSED GROUND ℄

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

WATERMAIN DESIGNED TO MAINTAIN 18" VERTICAL SEPERATION BETWEEN SANITARY AND STORM SEWER. WATERMAIN SHALL HAVE MINIMUM 7.5' OF COVER (TYP). WATERMAIN ELEVATIONS ARE TO TOP OF PIPE.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (STORM)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORM SEWER PROFILES

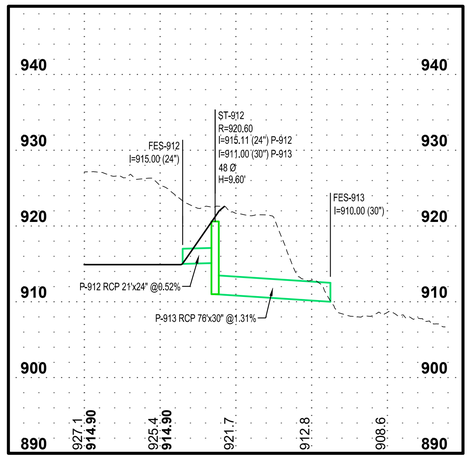
SHEET

57

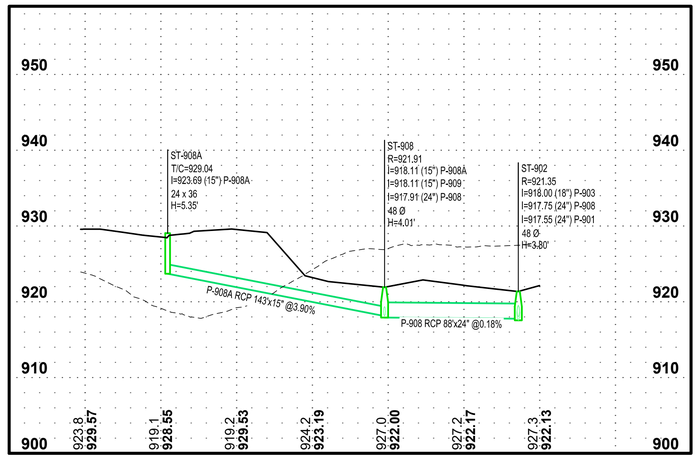
OF 92

PRELIMINARY NOT FOR CONSTRUCTION

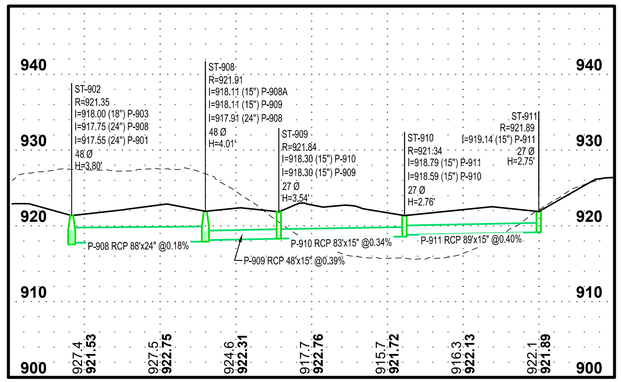
PLOT DATE: 2/25/2025 4:45 PM



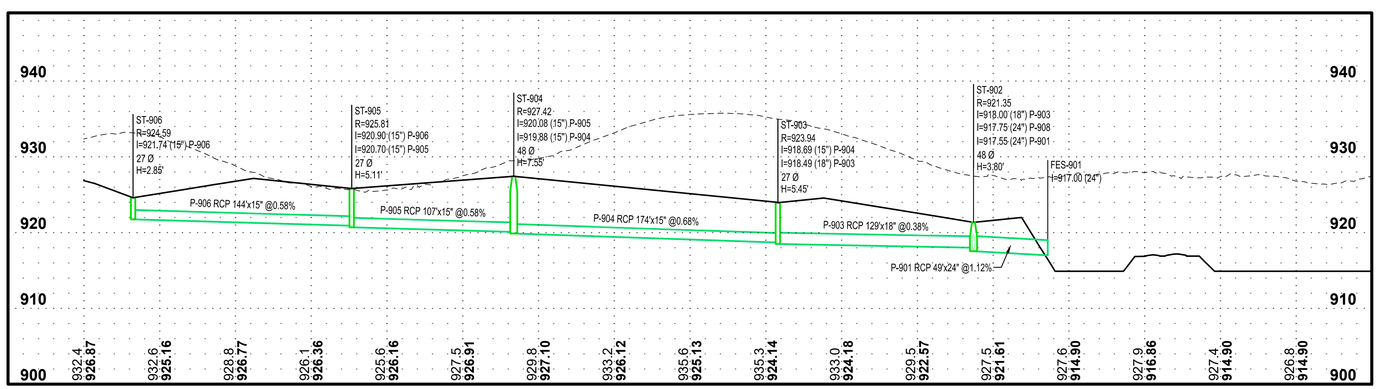
P9 - OUTLET



P9 SOUTH CUL-DE-SAC



BASIN 9 - EAST BACKYARDS



P9 - BACKYARDS

PROFILE LEGEND

- - - -	EXISTING GROUND
———	PROPOSED GROUND
1000.0 1000.00	XXX.X - EXISTING GROUND ℄ XXX.XX - PROPOSED GROUND ℄

NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND

WATERMAIN DESIGNED TO MAINTAIN 18" VERTICAL SEPERATION BETWEEN SANITARY AND STORM SEWER. WATERMAIN SHALL HAVE MINIMUM 7.5' OF COVER (TYP). WATERMAIN ELEVATIONS ARE TO TOP OF PIPE.

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (STORM)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

STORM SEWER PROFILES

SHEET

58

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

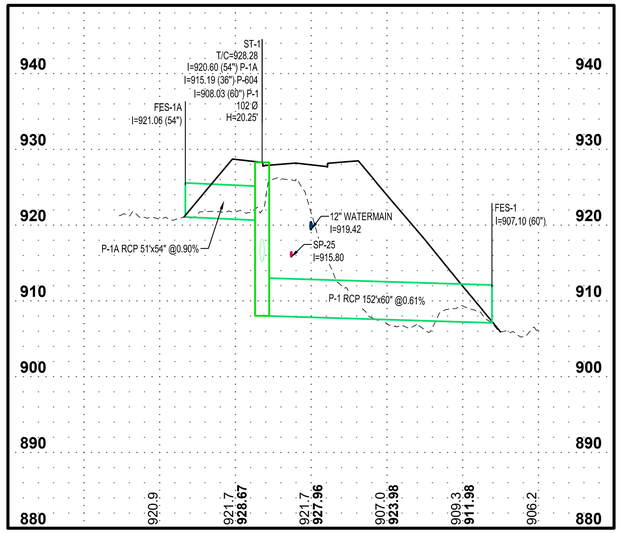
PLOT DATE: 2/5/2025 1:46 PM

WATERMAIN DESIGNED TO MAINTAIN 18" VERTICAL SEPERATION BETWEEN SANITARY AND STORM SEWER. WATERMAIN SHALL HAVE MINIMUM 7.5' OF COVER (TYP). WATERMAIN ELEVATIONS ARE TO TOP OF PIPE.

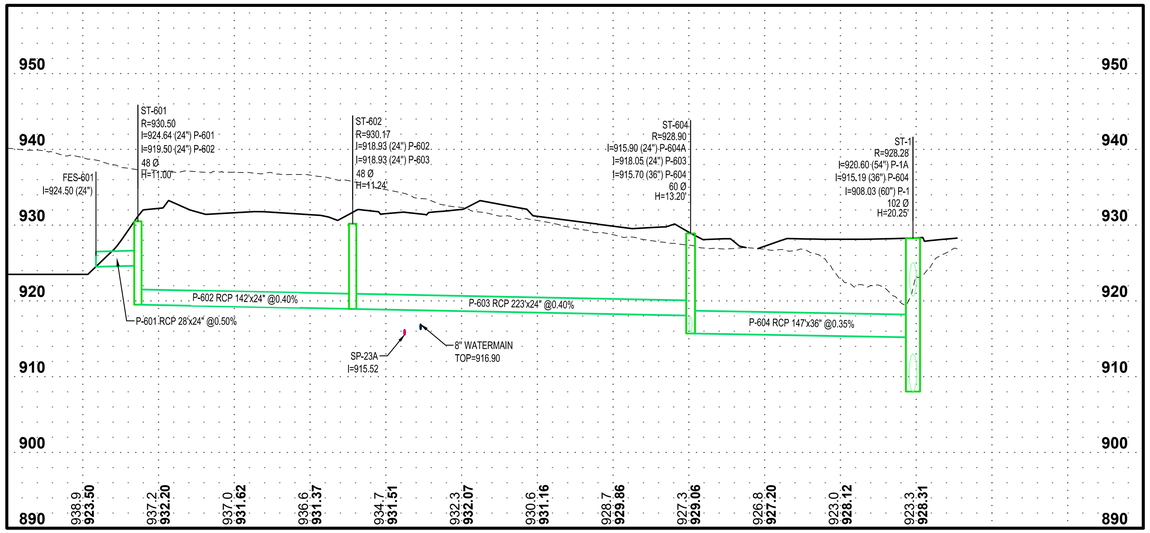
PROFILE LEGEND

- - - - -	EXISTING GROUND
———	PROPOSED GROUND
1000.0 / 1000.00	XXX.X - EXISTING GROUND ℄ XXX.XX - PROPOSED GROUND ℄

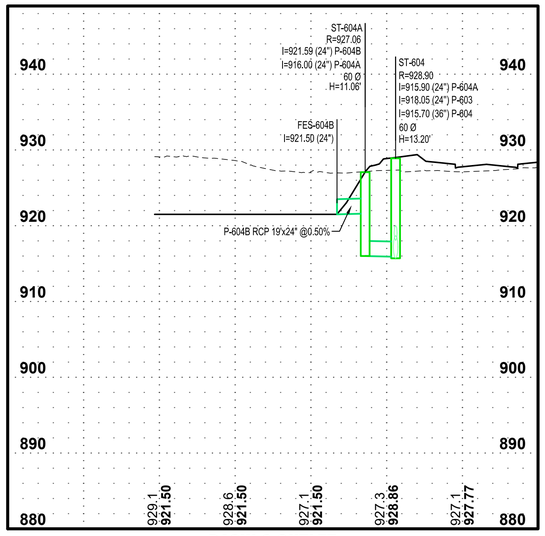
NOTE:
XXX.X - EXISTING GROUND
XXX.XX - PROPOSED GROUND



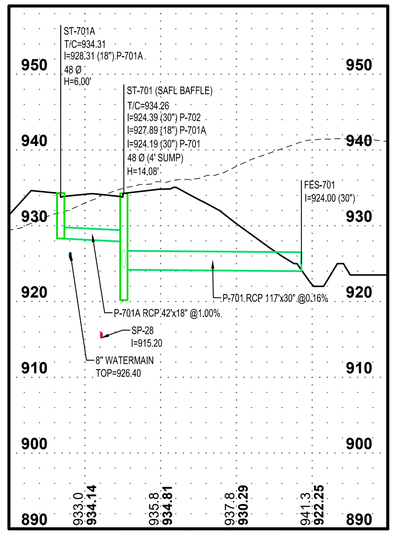
SAVANNA WAY CULVERT CROSSING



ST-1 TO BASIN 7



BASIN 6 OUTLET



ST-701A TO POND 7

PRELIMINARY NOT FOR CONSTRUCTION

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-PROF (STORM)
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

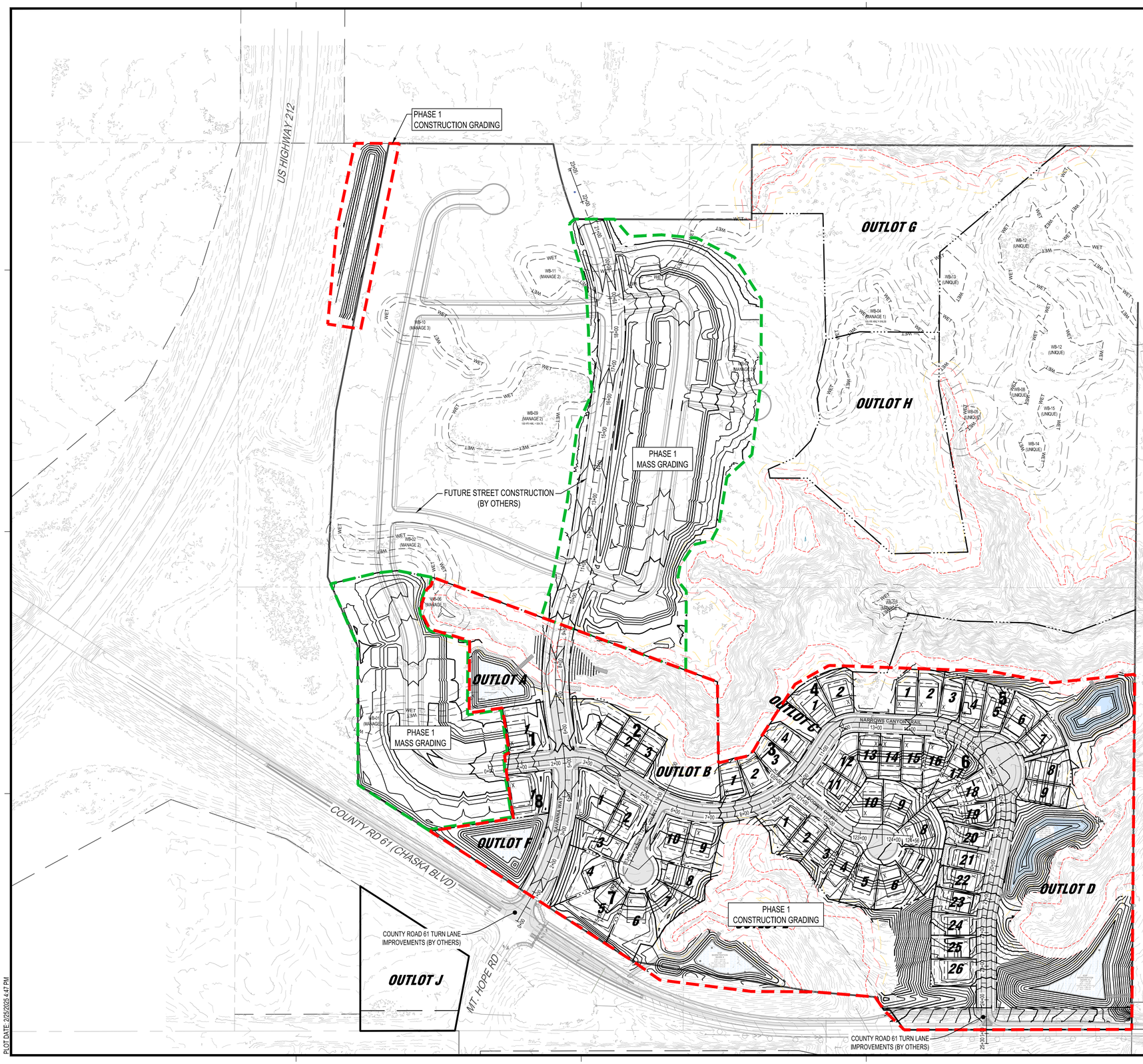
TITLE

STORM SEWER PROFILES

SHEET

59 OF 92

PLOT DATE: 2/25/2025 4:47 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 CONSTRUCTION GRADING
	PHASE 1 MASS GRADING

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-O
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

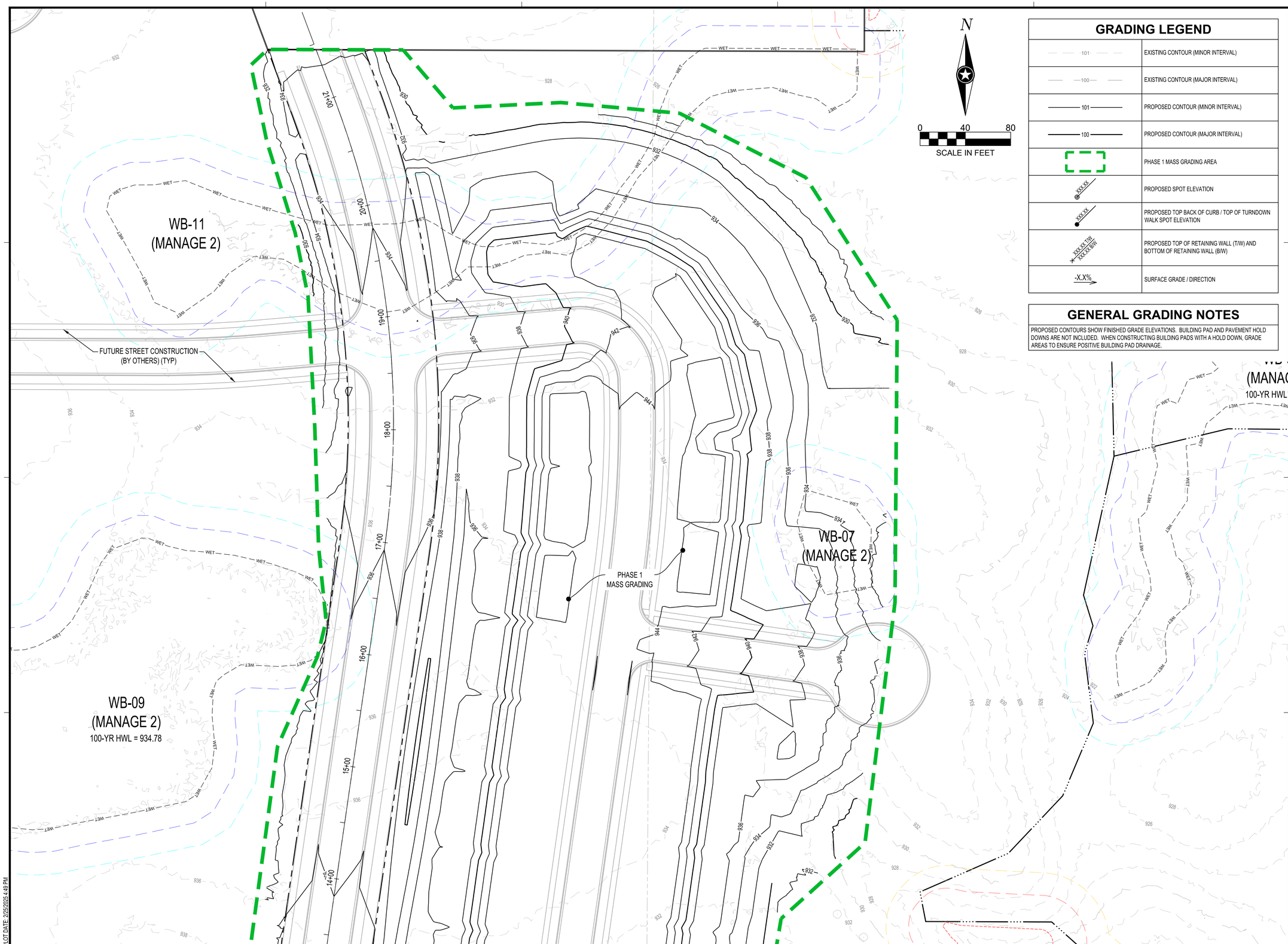
GRADING PLAN (OVERALL)

SHEET

60 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:47 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 MASS GRADING AREA
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX T/W XXXX.XX B/W	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

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PROJECT

FORESTAR

HIGHPOINT VISTAS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

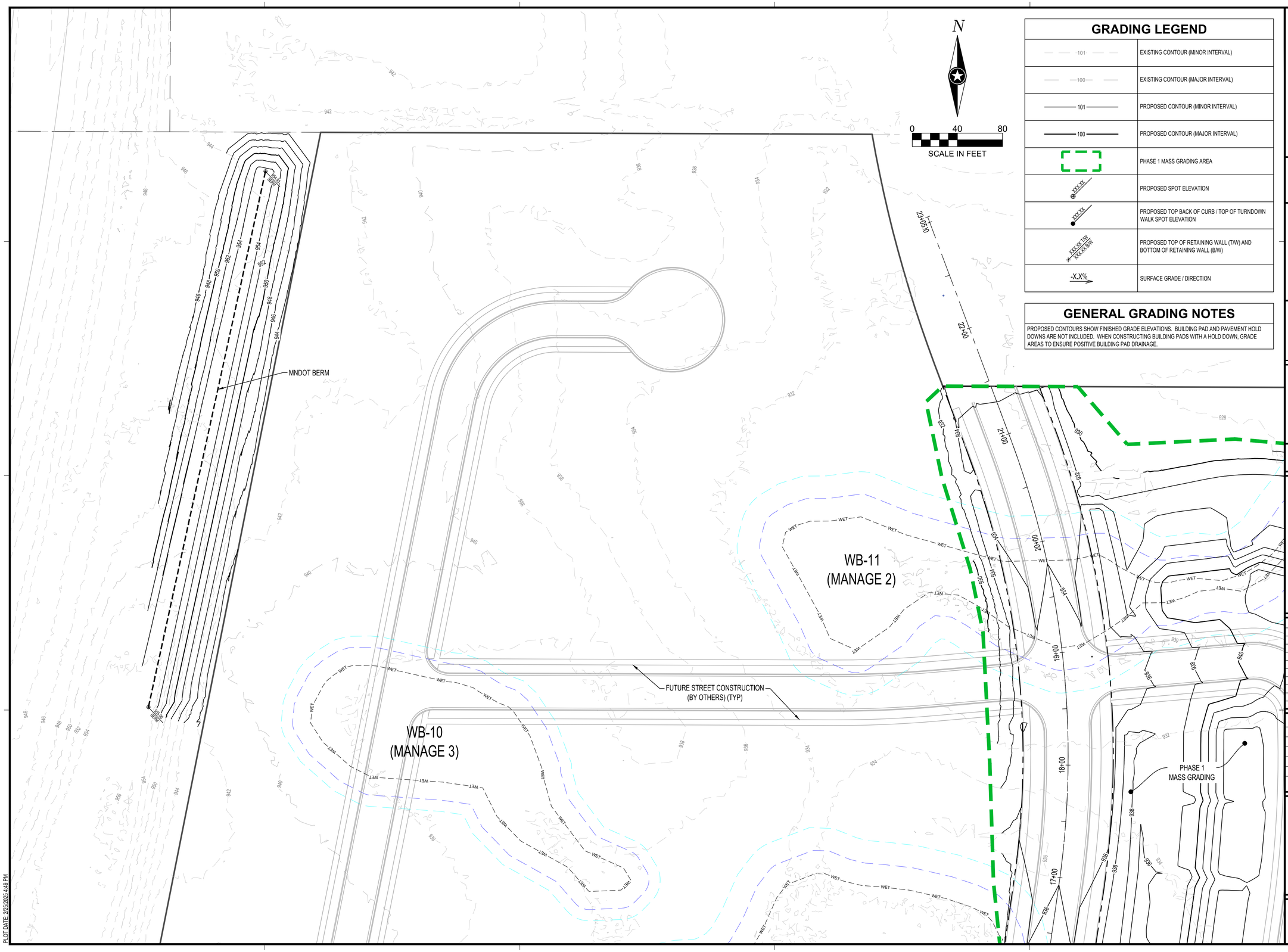
GRADING PLAN (NE)

SHEET

61 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:49 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 MASS GRADING AREA
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX TW XXX.XX BW	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

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PROJECT

FORESTAR

HIGHPOINT VISTAS

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

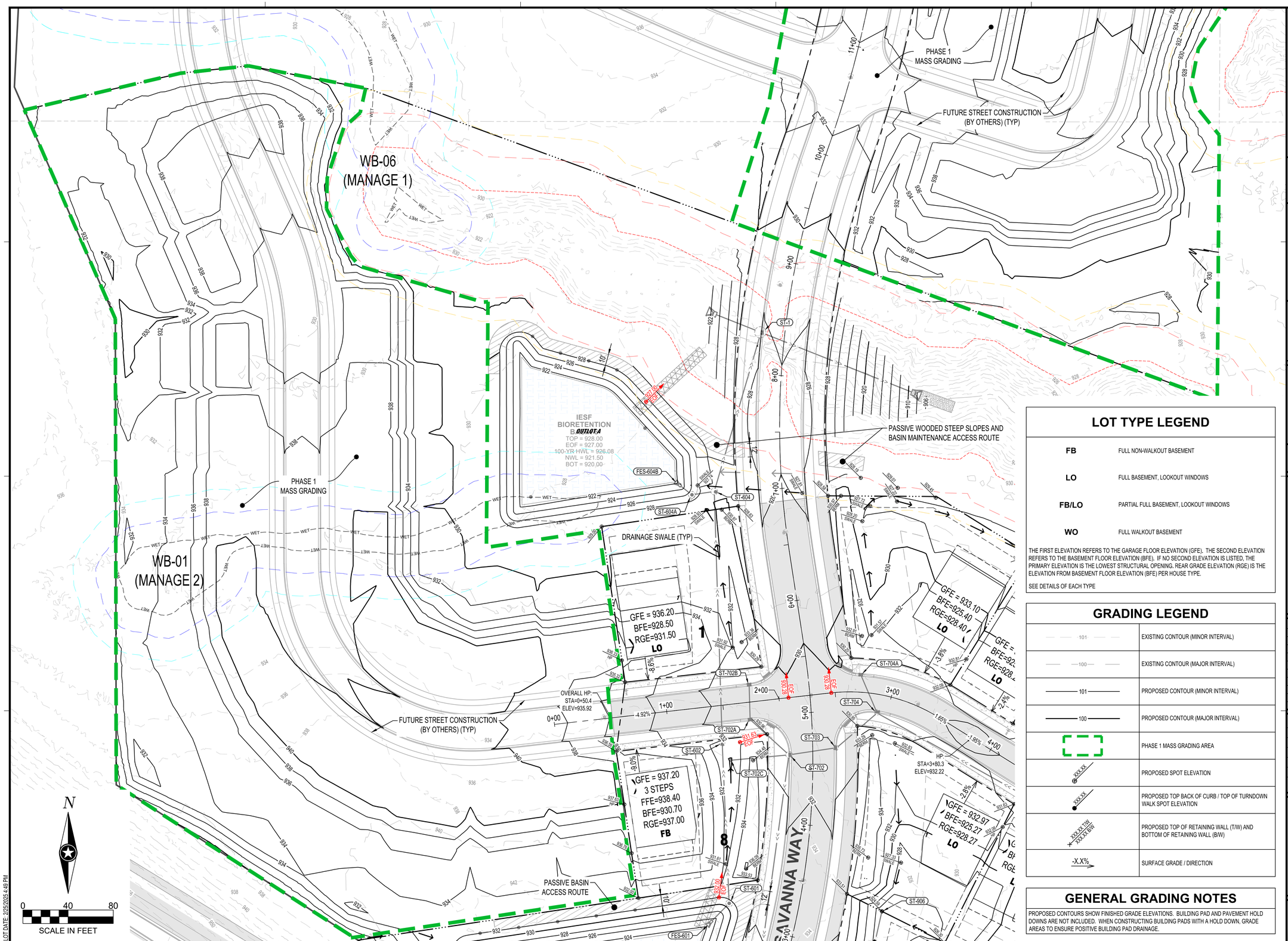
GRADING PLAN (NW)

SHEET

62 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:49 PM



PLOT DATE: 2/25/2025 4:49 PM

LOT TYPE LEGEND

FB	FULL NON-WALKOUT BASEMENT
LO	FULL BASEMENT, LOOKOUT WINDOWS
FB/LO	PARTIAL FULL BASEMENT, LOOKOUT WINDOWS
WO	FULL WALKOUT BASEMENT

THE FIRST ELEVATION REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION REFERS TO THE BASEMENT FLOOR ELEVATION (BFE). IF NO SECOND ELEVATION IS LISTED, THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING. REAR GRADE ELEVATION (RGE) IS THE ELEVATION FROM BASEMENT FLOOR ELEVATION (BFE) PER HOUSE TYPE.

SEE DETAILS OF EACH TYPE

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 MASS GRADING AREA
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX TW XXX.XX BW	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

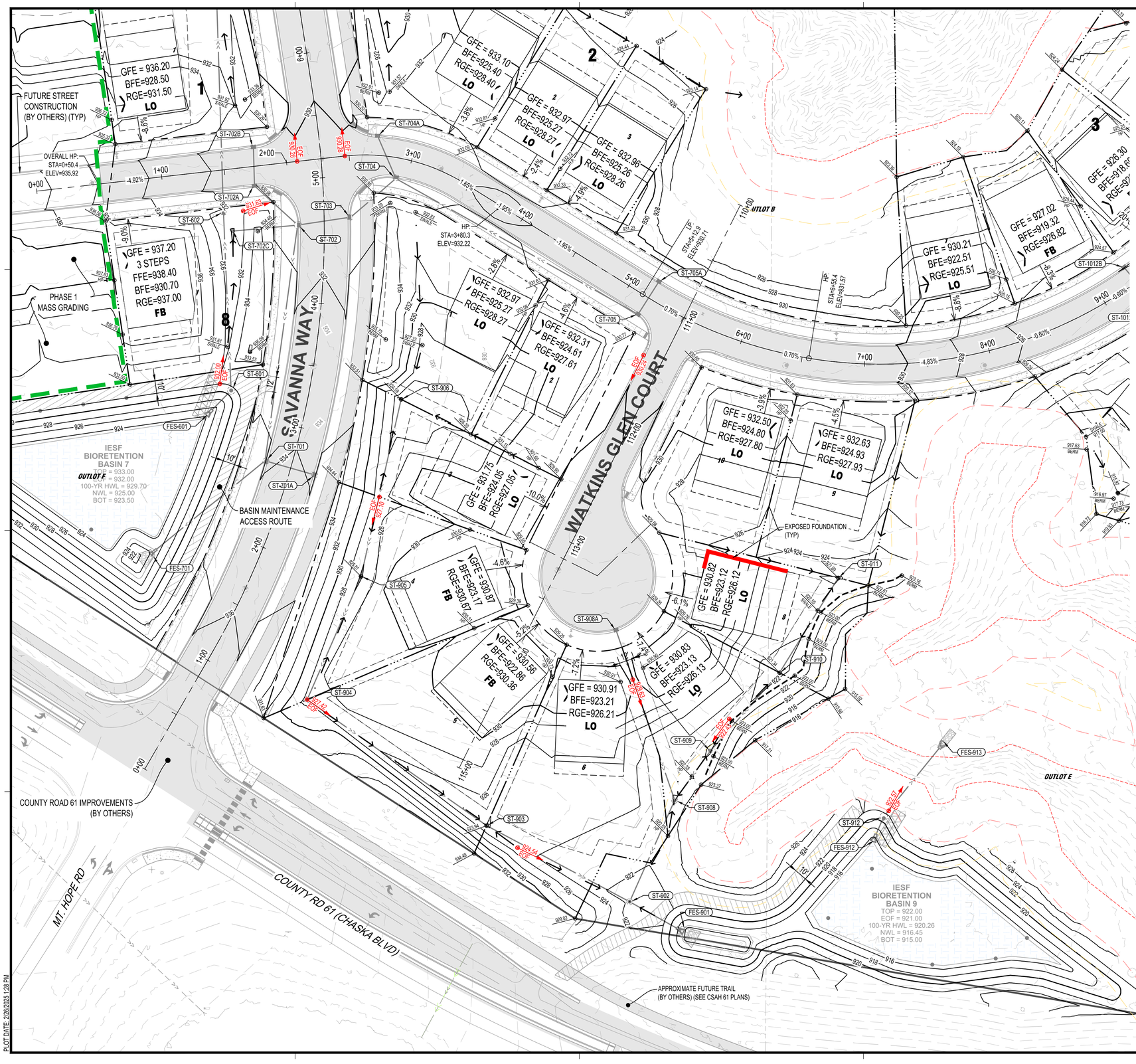
GRADING PLAN (SW)

SHEET

63

OF 92

PRELIMINARY NOT FOR CONSTRUCTION



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
	PHASE 1 MASS GRADING AREA
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX TW XXX.XX BW	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

LOT TYPE LEGEND

FB	FULL NON-WALKOUT BASEMENT
LO	FULL BASEMENT, LOOKOUT WINDOWS
FB/LO	PARTIAL FULL BASEMENT, LOOKOUT WINDOWS
WO	FULL WALKOUT BASEMENT

THE FIRST ELEVATION REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION REFERS TO THE BASEMENT FLOOR ELEVATION (BFE). IF NO SECOND ELEVATION IS LISTED, THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING. REAR GRADE ELEVATION (RGE) IS THE ELEVATION FROM BASEMENT FLOOR ELEVATION (BFE) PER HOUSE TYPE.

SEE DETAILS OF EACH TYPE

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

GRADING PLAN (CENTRAL)

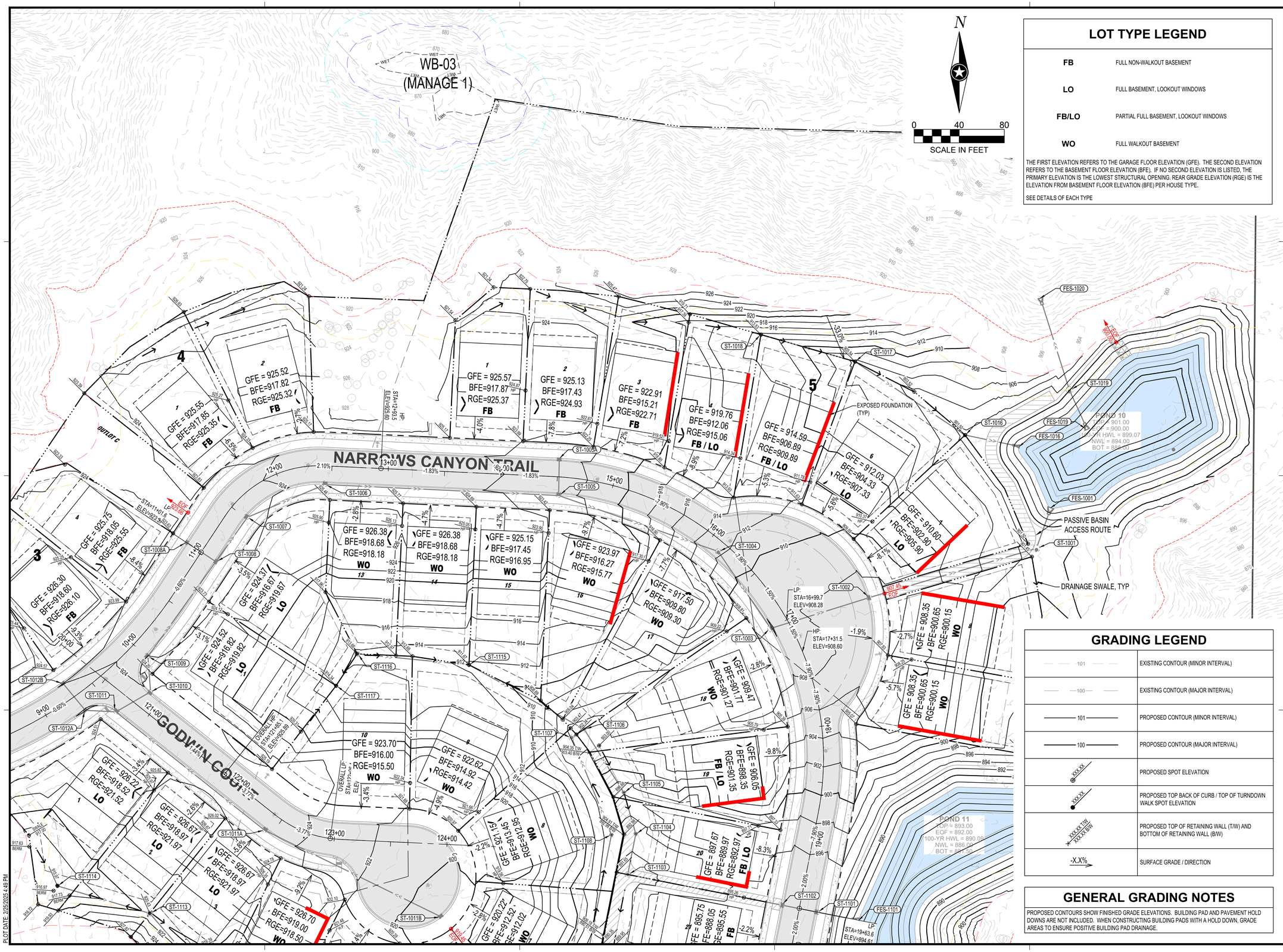
SHEET

64

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/26/2025 1:28 PM



LOT TYPE LEGEND

FB	FULL NON-WALKOUT BASEMENT
LO	FULL BASEMENT, LOOKOUT WINDOWS
FB/LO	PARTIAL FULL BASEMENT, LOOKOUT WINDOWS
WO	FULL WALKOUT BASEMENT

THE FIRST ELEVATION REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION REFERS TO THE BASEMENT FLOOR ELEVATION (BFE). IF NO SECOND ELEVATION IS LISTED, THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING. REAR GRADE ELEVATION (RGE) IS THE ELEVATION FROM BASEMENT FLOOR ELEVATION (BFE) PER HOUSE TYPE.

SEE DETAILS OF EACH TYPE

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX T/W XXX.XX B/W	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

ISG

FORESTAR

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

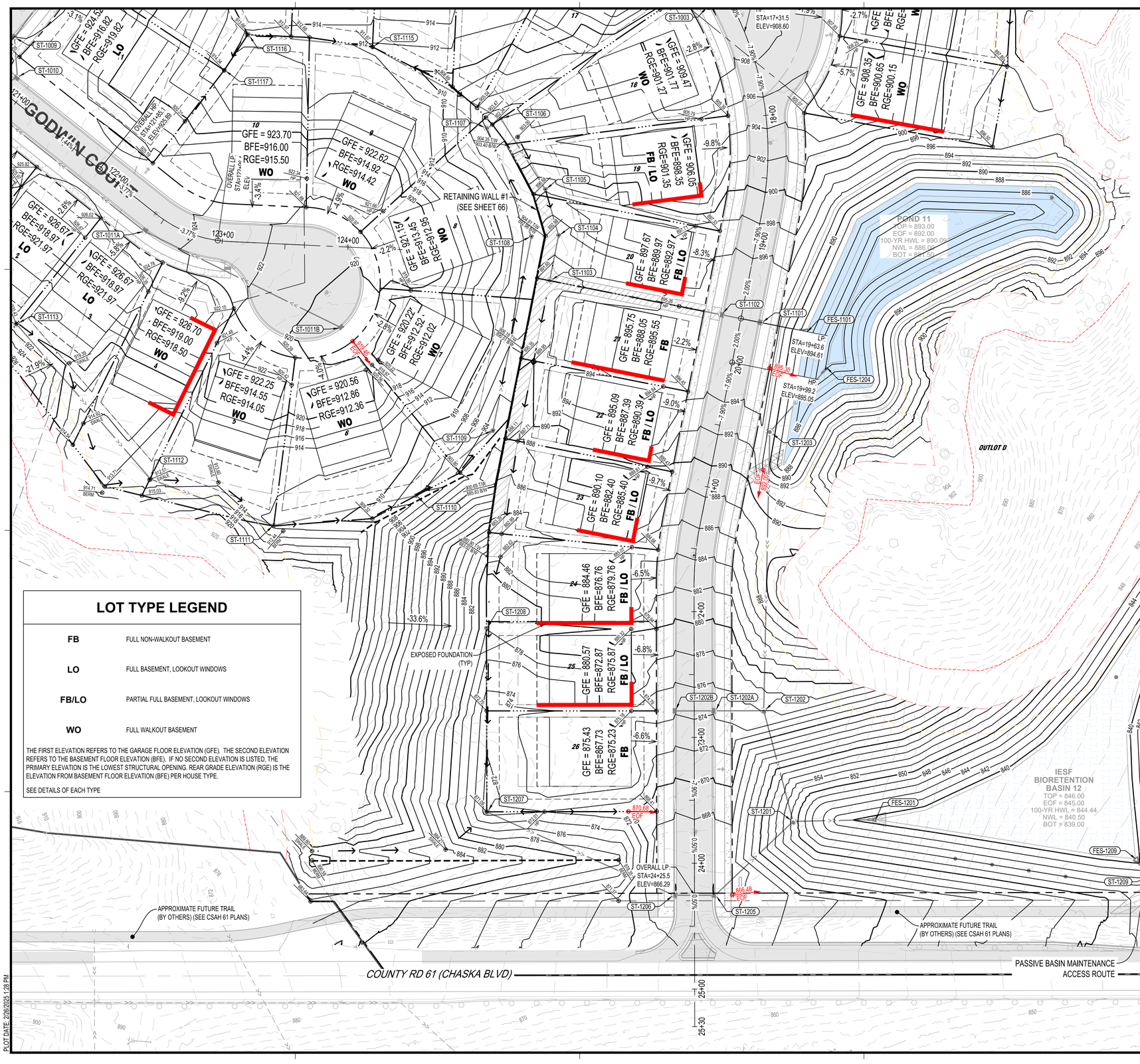
GRADING PLAN (E)

SHEET

65 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025, 1:49 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
XXX.XX TW XXX.XX BW	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

LOT TYPE LEGEND

FB	FULL NON-WALKOUT BASEMENT
LO	FULL BASEMENT, LOOKOUT WINDOWS
FB/LO	PARTIAL FULL BASEMENT, LOOKOUT WINDOWS
WO	FULL WALKOUT BASEMENT

THE FIRST ELEVATION REFERS TO THE GARAGE FLOOR ELEVATION (GFE). THE SECOND ELEVATION REFERS TO THE BASEMENT FLOOR ELEVATION (BFE). IF NO SECOND ELEVATION IS LISTED, THE PRIMARY ELEVATION IS THE LOWEST STRUCTURAL OPENING. REAR GRADE ELEVATION (RGE) IS THE ELEVATION FROM BASEMENT FLOOR ELEVATION (BFE) PER HOUSE TYPE.

SEE DETAILS OF EACH TYPE

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

GRADING PLAN (SE)

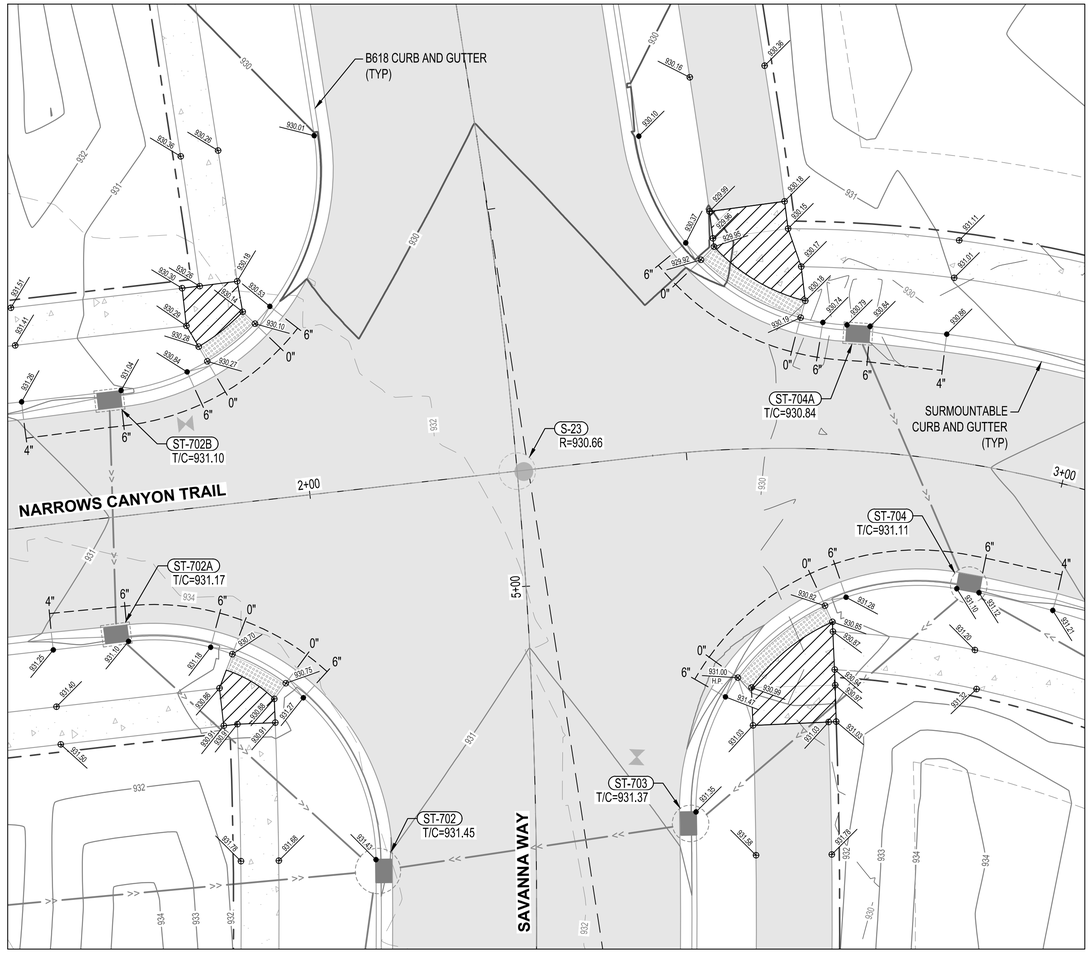
SHEET

66

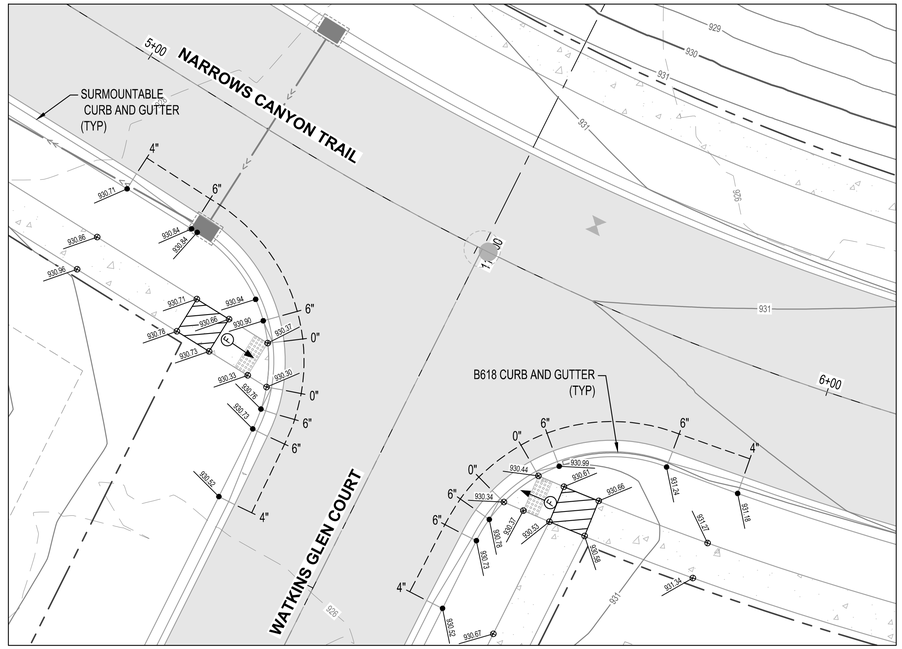
OF 92

PRELIMINARY NOT FOR CONSTRUCTION

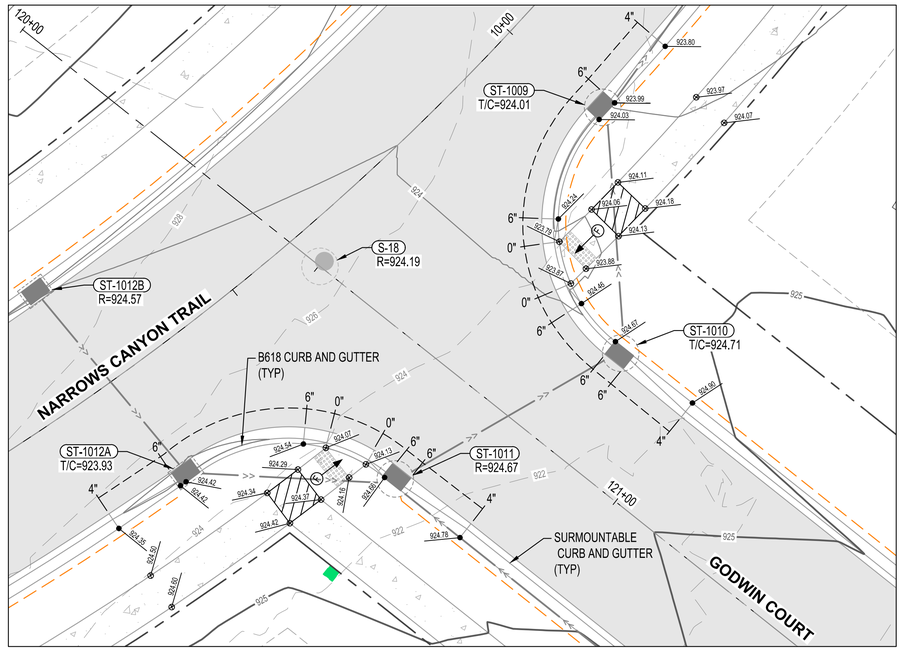
PLOT DATE: 2/26/2025 1:23 PM



NARROWS CANYON TRAIL & SAVANNAH WAY



NARROWS CANYON TRAIL AND WATKINS GLEN COURT



NARROWS CANYON TRAIL AND GODWIN COURT

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

PEDESTRIAN RAMP LEGEND

	LANDING AREA - 4'x4' MIN. DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS
F	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
S	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 5.0% AND LESS THAN 8.3% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
X"	CURB HEIGHT

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

N

0 10 20

SCALE IN FEET

PLOT DATE: 2/25/2025 4:51 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

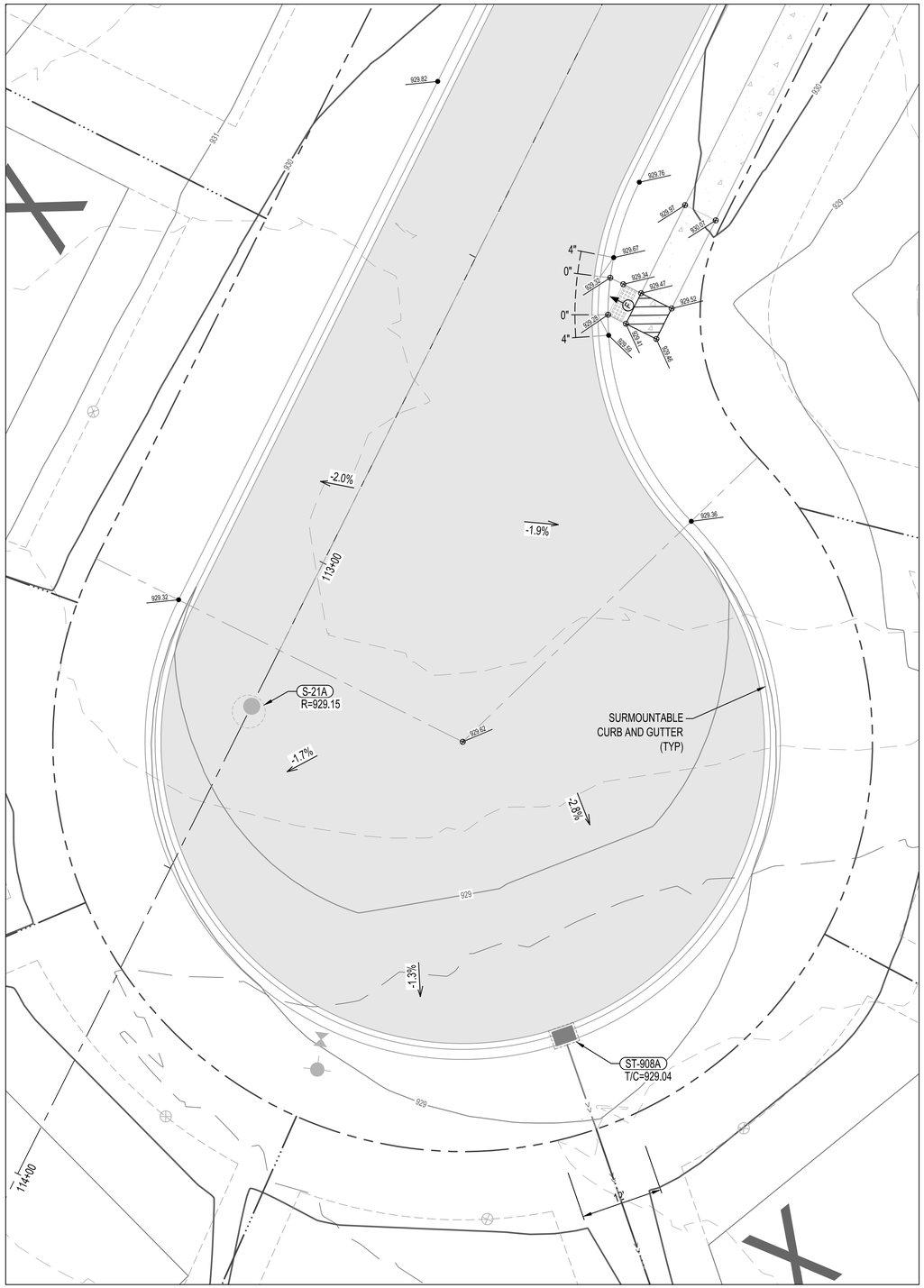
GRADING PLAN (INTERSECTIONS)

SHEET

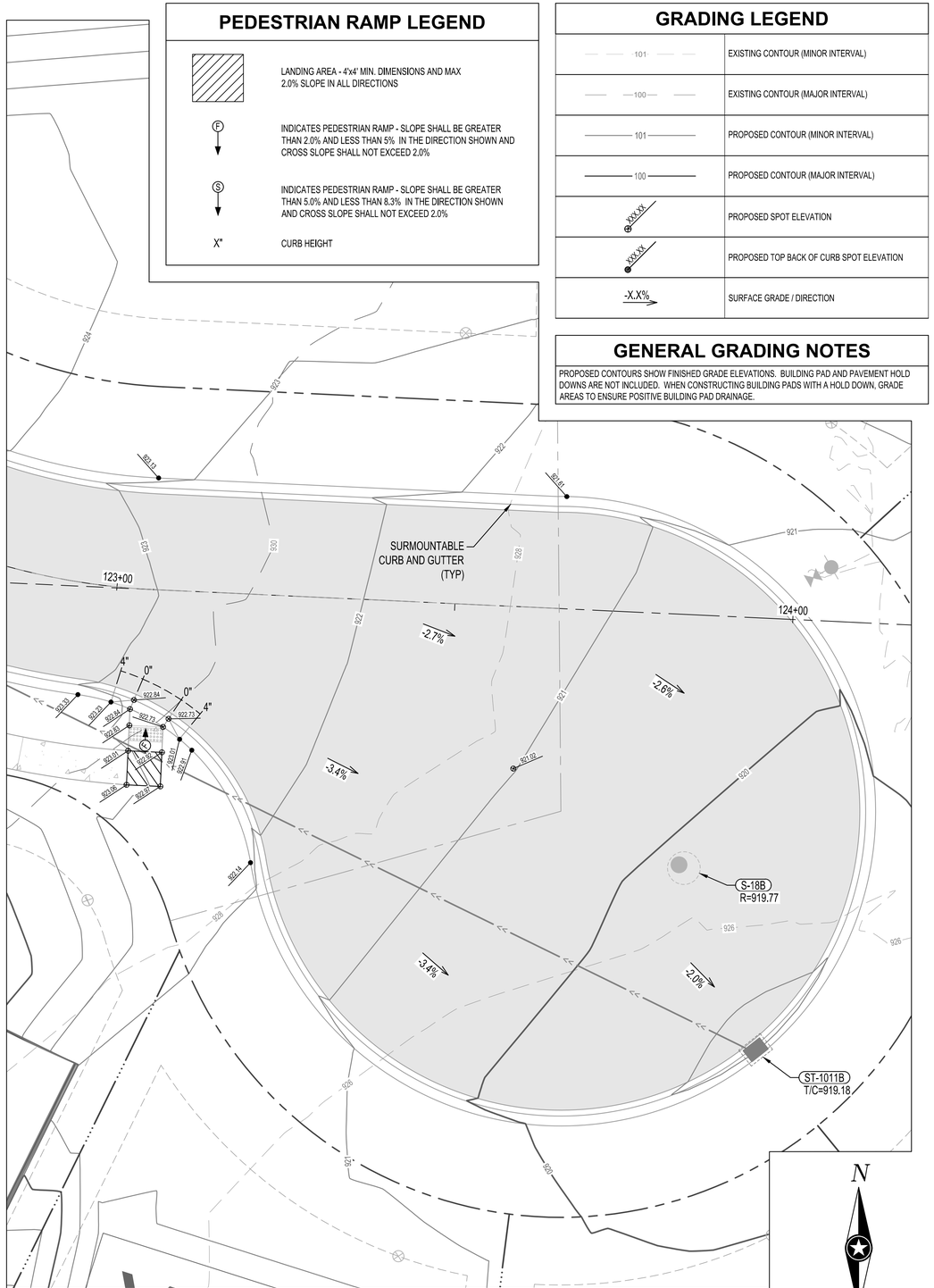
67

OF 92

PRELIMINARY NOT FOR CONSTRUCTION



WATKINS GLEN COURT CUL-DE-SAC



GODWIN COURT CUL-DE-SAC

PEDESTRIAN RAMP LEGEND

	LANDING AREA - 4'x4' MIN. DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS
Ⓕ	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
Ⓢ	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 5.0% AND LESS THAN 8.3% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
X"	CURB HEIGHT

GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

N

0 10 20
SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

GRADING PLAN (INTERSECTIONS)

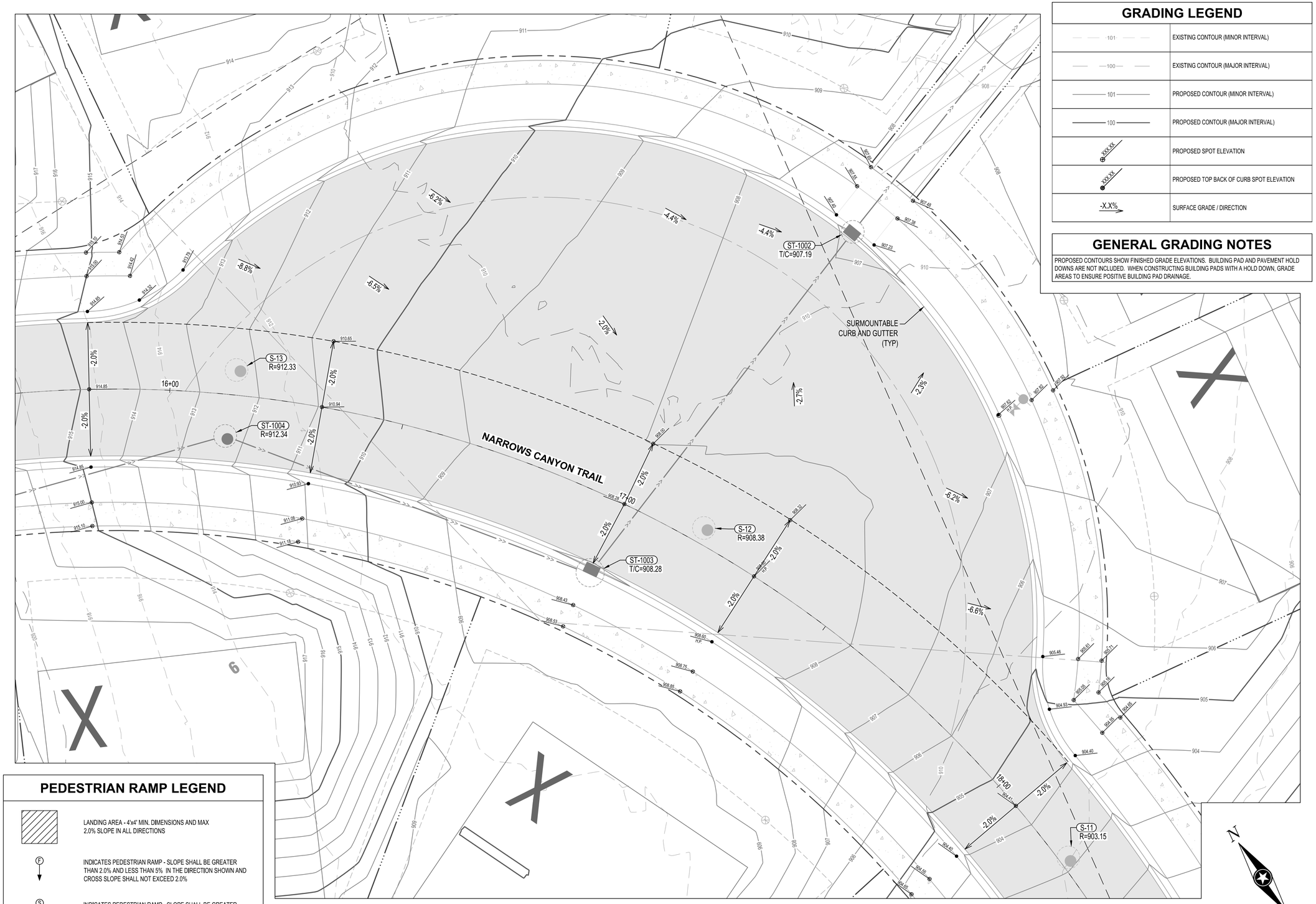
SHEET

68

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:51 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XXX.XX	PROPOSED SPOT ELEVATION
XXX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

PEDESTRIAN RAMP LEGEND

	LANDING AREA - 4'x4' MIN. DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS
(F) ↓	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
(S) ↓	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 5.0% AND LESS THAN 8.3% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%
X"	CURB HEIGHT

0 10 20
SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-ADA
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

GRADING PLAN (INTERSECTIONS)

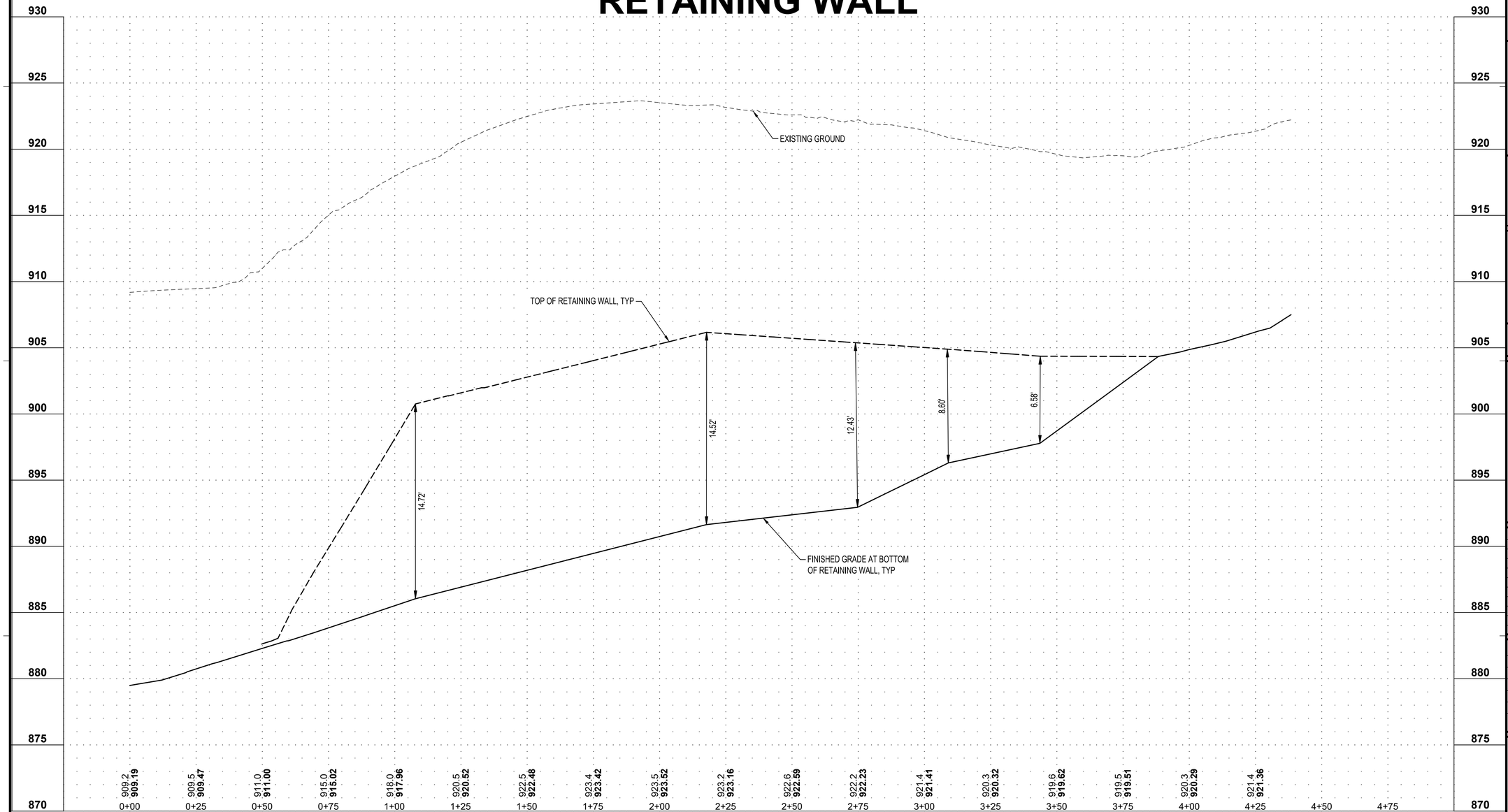
SHEET

69 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:51 PM

RETAINING WALL



0 20 40
SCALE IN FEET

PLOT DATE: 2/5/2025 4:52 PM

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FORESTAR

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-GRADE-D
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

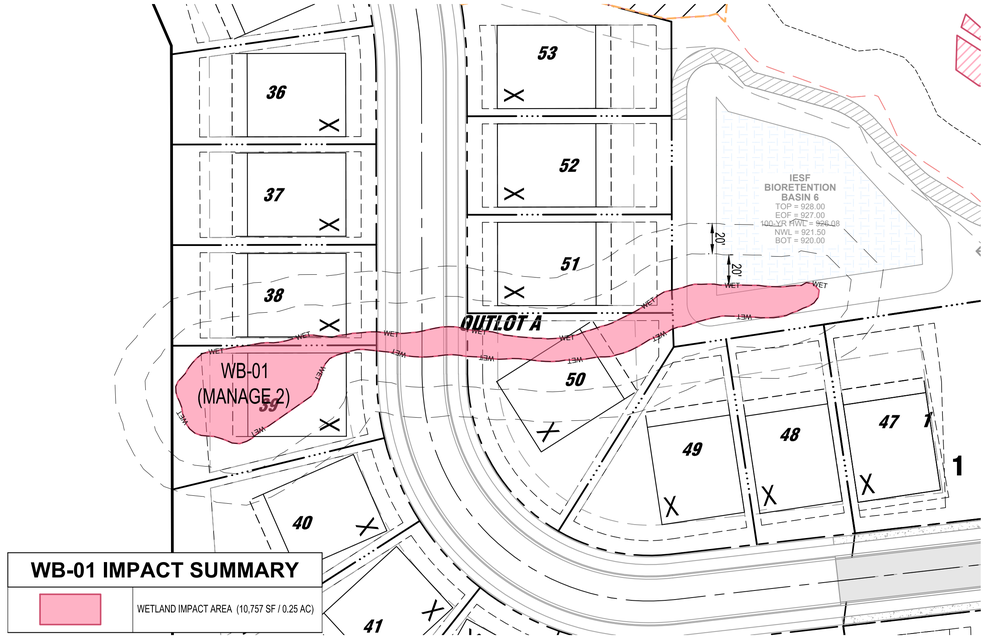
RETAINING WALL DETAIL

SHEET

70

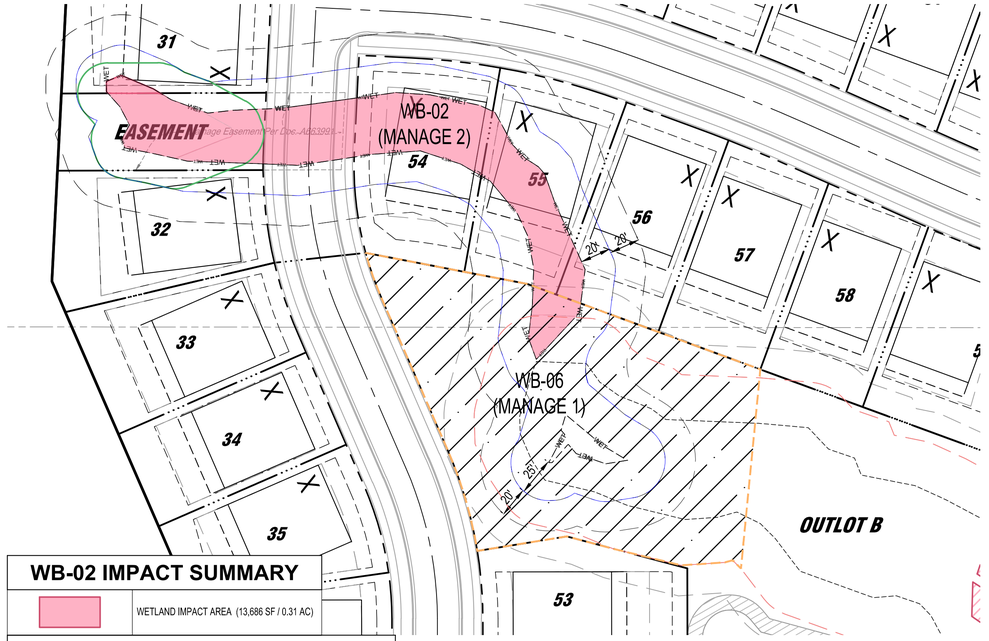
OF 92

PRELIMINARY NOT FOR CONSTRUCTION



WB-01 IMPACT SUMMARY

	WETLAND IMPACT AREA (10,757 SF / 0.25 AC)

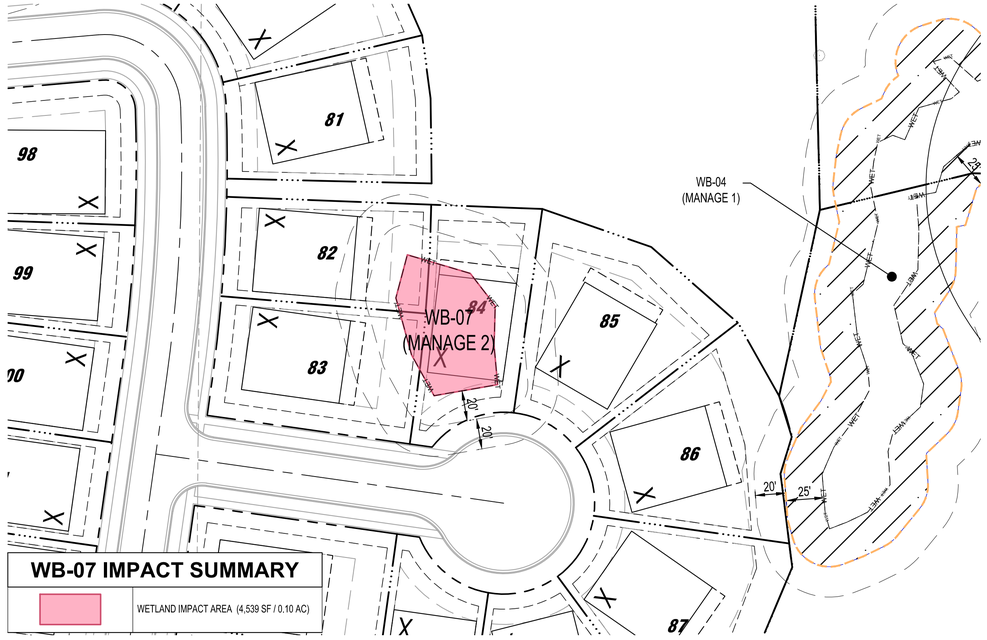


WB-02 IMPACT SUMMARY

	WETLAND IMPACT AREA (13,686 SF / 0.31 AC)

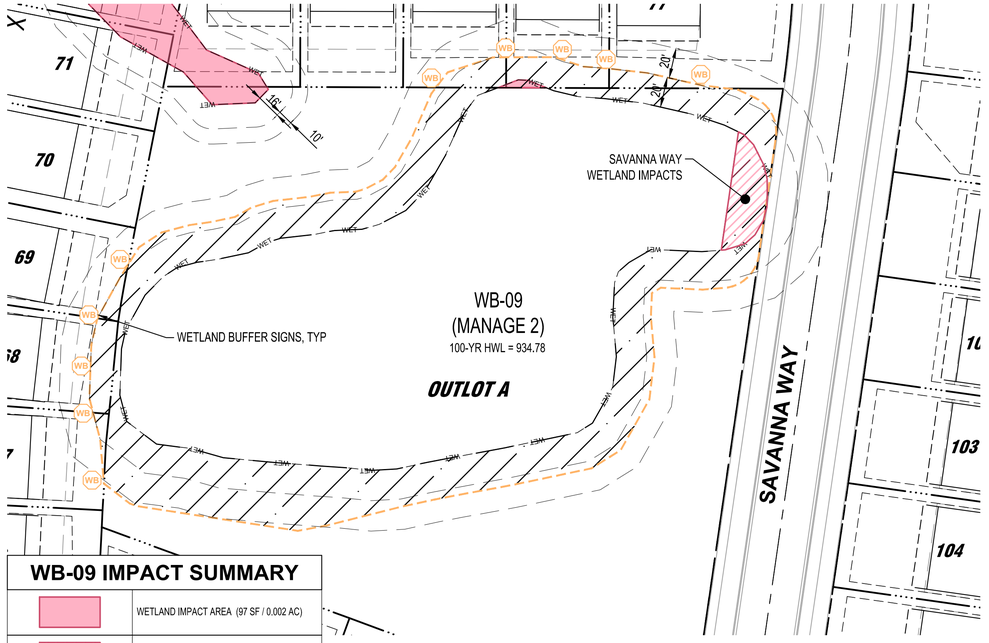
WB-06 BUFFER

	REQUIRED WETLAND BUFFER = 30,328 SF	PROVIDED WETLAND BUFFER = 34,275 SF



WB-07 IMPACT SUMMARY

	WETLAND IMPACT AREA (4,539 SF / 0.10 AC)



WB-09 IMPACT SUMMARY

	WETLAND IMPACT AREA (97 SF / 0.002 AC)
	SAVANNA WAY - WETLAND IMPACT AREA (1,505 SF / 0.035 AC)

WB-09 BUFFER

	REQUIRED WETLAND BUFFER = 29,824 SF	PROVIDED WETLAND BUFFER = 31,215 SF

PLOT DATE: 2/25/2025 4:52 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-WETLAND
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

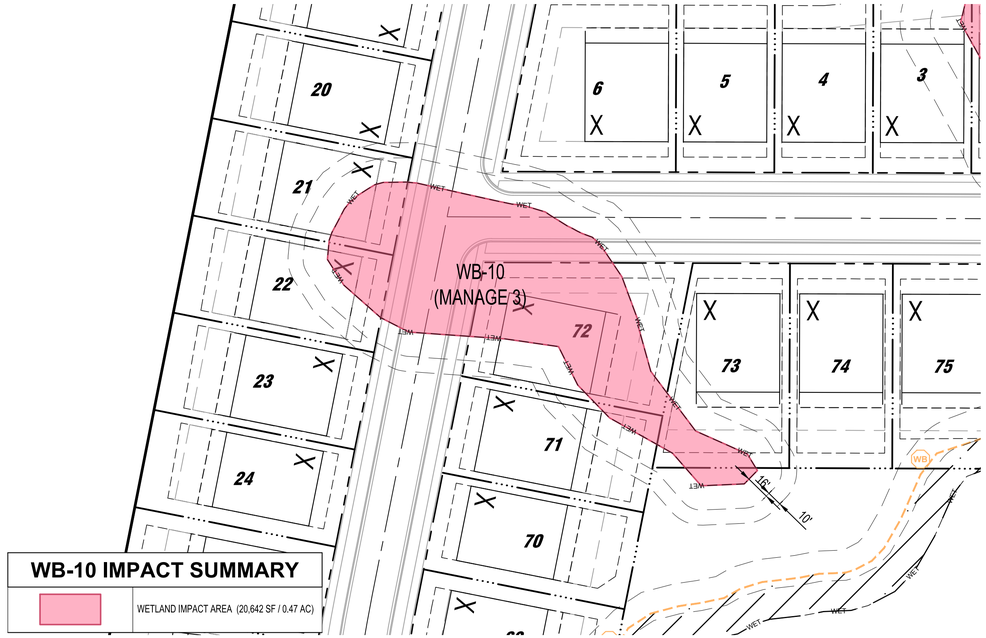
TITLE

WETLAND MITIGATION PLAN

SHEET

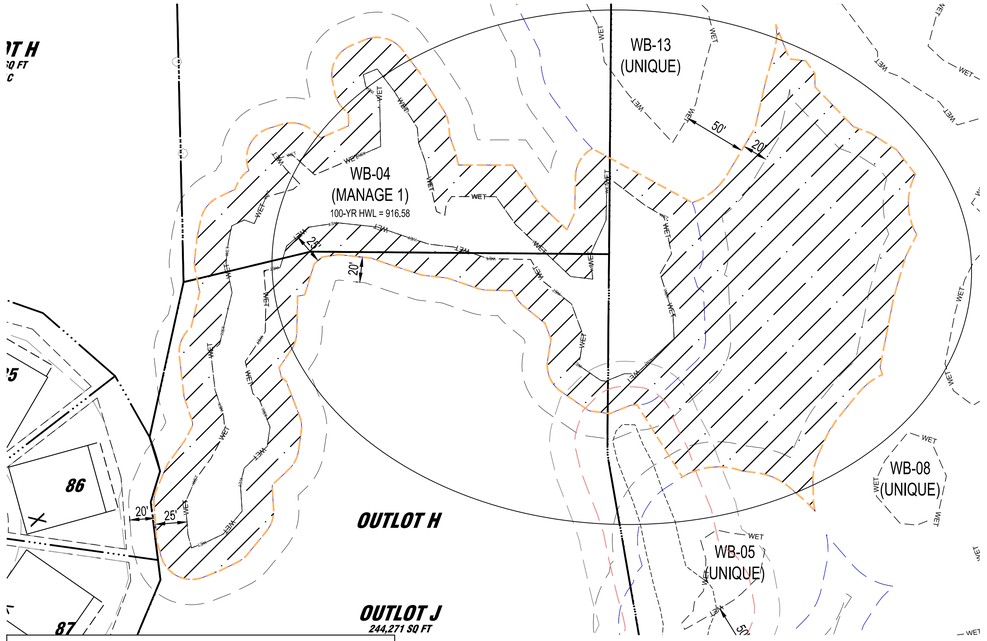
71 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



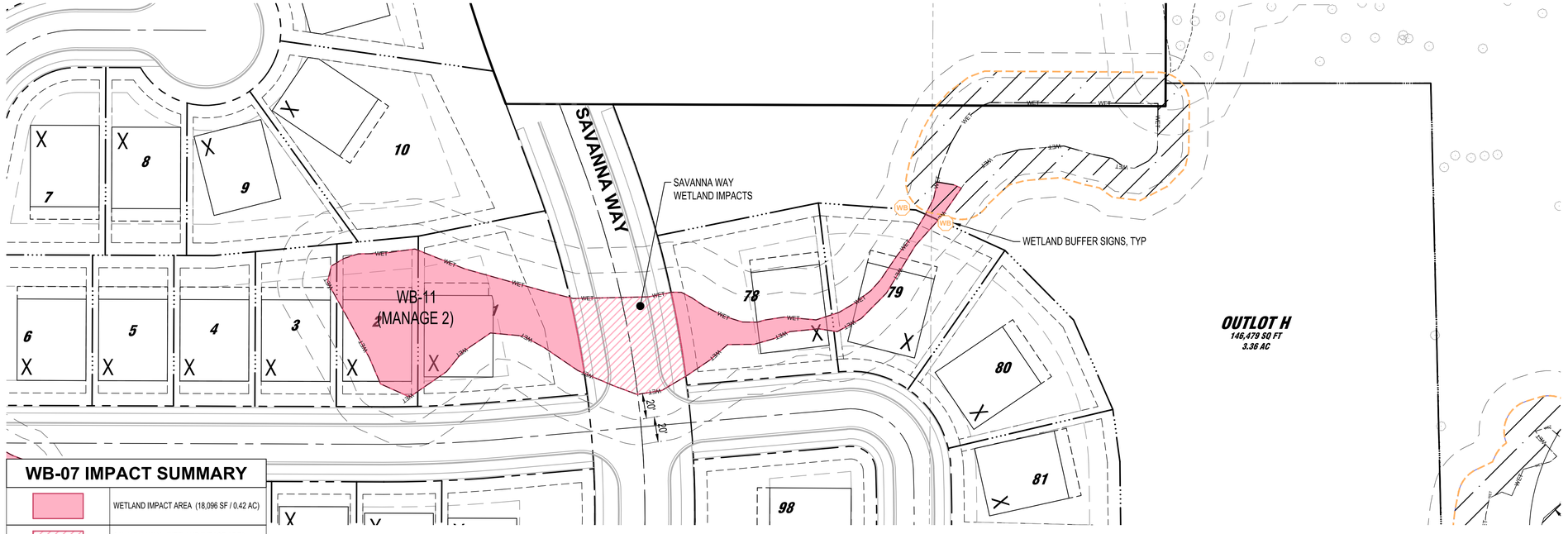
WB-10 IMPACT SUMMARY

	WETLAND IMPACT AREA (20,642 SF / 0.47 AC)



WB-04 BUFFER

	REQUIRED WETLAND BUFFER = 86,184 SF	PROVIDED WETLAND BUFFER = 86,942 SF



WB-07 IMPACT SUMMARY

	WETLAND IMPACT AREA (18,096 SF / 0.42 AC)
	SAVANNA WAY - WETLAND IMPACT AREA (5,779 SF / 0.13. AC)

WB-09 BUFFER

	REQUIRED WETLAND BUFFER = 13,162 SF	PROVIDED WETLAND BUFFER = 13,162 SF

PLOT DATE: 2/25/2025 4:52 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-WETLAND
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

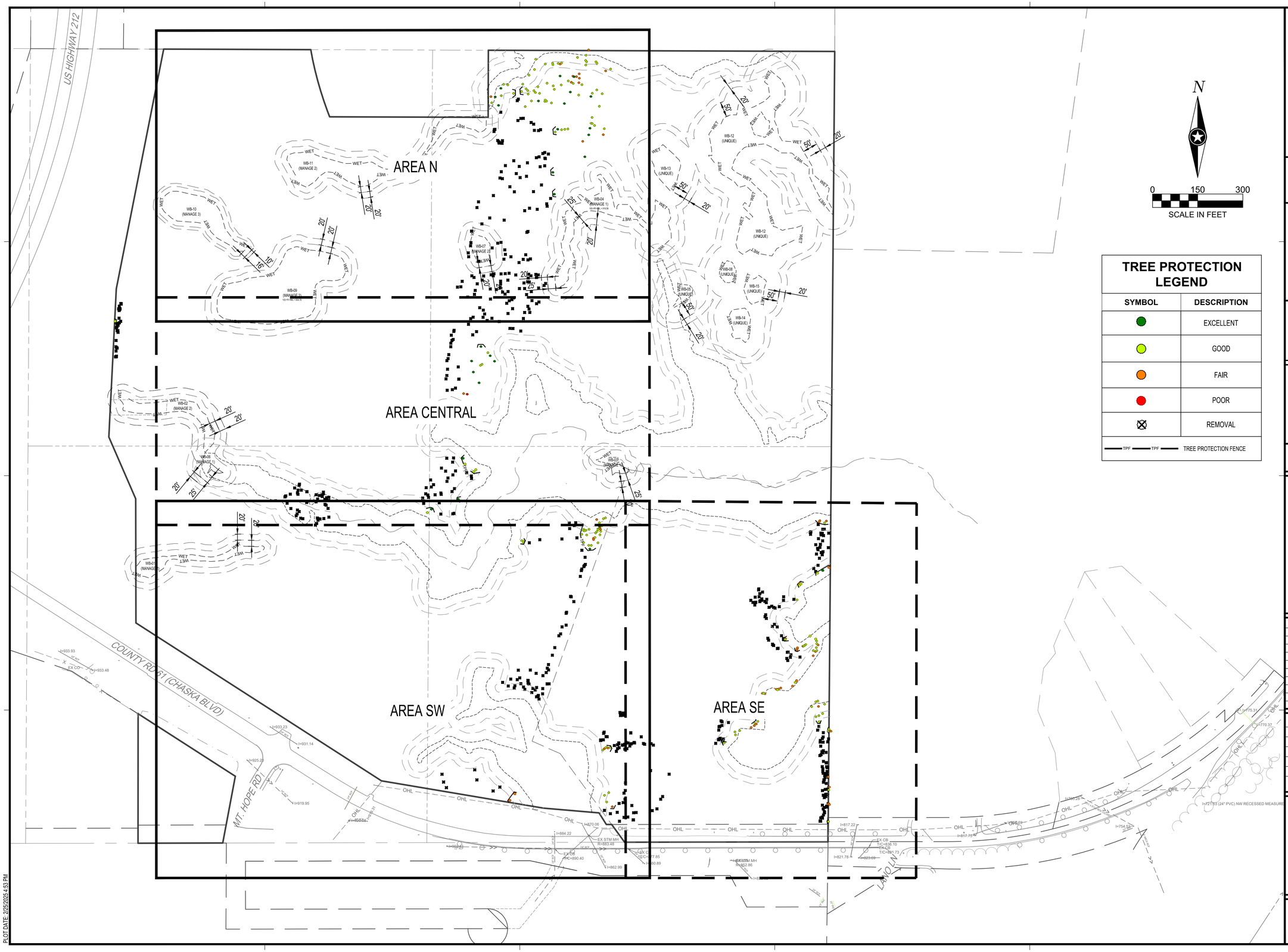
TITLE

WETLAND MITIGATION PLAN

SHEET

72 OF 92

PRELIMINARY NOT FOR CONSTRUCTION



TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	EXCELLENT
	GOOD
	FAIR
	POOR
	REMOVAL
TPF TPF	TREE PROTECTION FENCE

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION PLAN (OVERALL)

SHEET

73

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/5/2025 4:53 PM

TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	EXCELLENT
	GOOD
	FAIR
	POOR
	REMOVAL
TPF TPF	TREE PROTECTION FENCE

N

0 60 120

SCALE IN FEET

WB-11
(MANAGE 2)

WB-10
(MANAGE 3)

WB-09
(MANAGE 2)
100-YR HWL = 934.78

WB-07
(MANAGE 2)

WB-0
(MANAG
100-YR HWL =

FUTURE PHASES

TREE PROTECTION FENCE, TYP

WET

20'

25'

15'

10'

PLOT DATE: 2/25/2025 4:53 PM

PRELIMINARY NOT FOR CONSTRUCTION

ISG

FORESTAR

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DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION PLAN (N)

SHEET

74

OF 92

WB-09
(MANAGE 2)
100-YR HWL = 934.78

WB-02
(MANAGE 2)

WB-06
(MANAGE 1)

WB-01
(MANAGE 2)

WET

20'

FUTURE PHASES

TREE PROTECTION FENCE, TYP

TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
●	EXCELLENT
●	GOOD
●	FAIR
●	POOR
⊠	REMOVAL
TPF TPF	TREE PROTECTION FENCE

N

0 60 120
SCALE IN FEET

PLOT DATE: 2/25/2025 4:53 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION PLAN (C)

SHEET

75

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

WB-01
(MANAGE 2)

COUNTY RD 61 (CHASKA BLVD)

933.44
933.25
24" RCP
930.98
925.17
24" RCP
920.03
24" RCP
919.12
OHL
903.47
12" RCP
884.60
I=884.22
24" RCP
870.05
18" RCP
24" RCP
EX CB
TOC=890.40
EX ST
IN=883

TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	EXCELLENT
	GOOD
	FAIR
	POOR
	REMOVAL
TPF TPF	TREE PROTECTION FENCE

N

0 60 120
SCALE IN FEET

PLOT DATE: 2/25/2025 4:53 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION PLAN (SW)

SHEET

76 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

TREE PROTECTION FENCE, TYP

OHL

884.60
I=884.22

870.05

903.47

12" RCP

24" RCP

18" RCP

EX STM MH
R=883.48

EX CB
T/C=880.40

EX CB
T/C=877.85

860.81

863.01

EX STM MH
R=852.86

842.31

832.07

PLOT DATE: 2/25/2025 4:53 PM

TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	EXCELLENT
	GOOD
	FAIR
	POOR
	REMOVAL
TPF TPF	TREE PROTECTION FENCE

N

0 60 120

SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE PRESERVATION PLAN (SE)

SHEET

77

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
401	Hackberry	7	2-Good	2-Good		X
402	Walnut, Black	44	3-Fair	3-Fair	X	X
403	Walnut, Black	13	2-Good	2-Good	X	X
404	Elm, American	8	2-Good	2-Good		X
405	Ironwood	8.5	2-Good	2-Good		X
406	Ironwood	11	2-Good	2-Good	X	X
407	Ironwood	9.5	2-Good	2-Good		X
408	Ironwood	10	3-Fair	3-Fair	X	X
409	Oak, Bur	30	2-Good	2-Good	X	X
410	Basswood, American	10	2-Good	2-Good	X	X
411	Basswood, American	9	2-Good	2-Good		X
412	Basswood, American	9	2-Good	2-Good		X
413	Ash, White	8	2-Good	2-Good		X
414	Ash, White	9	2-Good	2-Good		X
415	Ash, White	8	2-Good	2-Good		X
416	Ash, White	7	2-Good	2-Good		X
417	Ash, White	8	2-Good	2-Good		X
418	Ash, White	10	2-Good	2-Good		X
419	Oak, Bur	6	2-Good	2-Good		X
420	Basswood, American	12	2-Good	2-Good	X	X
421	Basswood, American	15.5	2-Good	2-Good	X	X
422	Hickory, Bitternut	8	2-Good	2-Good		
423	Hickory, Bitternut	10.5	2-Good	2-Good	X	X
424	Ash, White	8	2-Good	2-Good		X
425	Ash, White	9.5	2-Good	2-Good		X
426	Ash, White	8.5	2-Good	2-Good		X
427	Ash, White	7	2-Good	2-Good		X
428	Ash, White	7.5	2-Good	2-Good		X
429	Ash, White	11.5	2-Good	2-Good		X
430	Ash, White	7	2-Good	2-Good		X
431	Ash, White	10	2-Good	2-Good		X
432	Ash, White	13	2-Good	2-Good		X
433	Oak, Northern Red	8.5	2-Good	2-Good		X
434	Elm, American	6.5	2-Good	2-Good		X
435	Ash, White	9	2-Good	2-Good		X
436	Oak, Northern Red	19.5	2-Good	2-Good	X	X
437	Oak, White	16	2-Good	2-Good	X	X
438	Basswood, American	15.5	2-Good	2-Good	X	X
439	Oak, Bur	21	2-Good	2-Good	X	X
440	Oak, White	25	2-Good	2-Good	X	X
441	Oak, Bur	22	2-Good	2-Good	X	X
442	Oak, Bur	36	2-Good	2-Good	X	X
443	Oak, White	24	1-Excellent	1-Excellent	X	X
444	Oak, White	28.5	2-Good	2-Good	X	X
445	Oak, Bur	37.5	1-Excellent	1-Excellent	X	X
446	Oak, Bur	23	2-Good	2-Good	X	X
447	Oak, Bur	31	1-Excellent	1-Excellent	X	X
448	Elm, American	10	2-Good	2-Good	X	X
449	Oak, White	30.5	1-Excellent	1-Excellent	X	X
450	Basswood, American	40	3-Fair	3-Fair	X	X
451	Oak, White	36	1-Excellent	1-Excellent	X	X
452	Oak, Bur	27	2-Good	2-Good	X	X
453	Oak, Bur	25.5	3-Fair	3-Fair	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
454	Oak, Bur	30.5	3-Fair	3-Fair	X	X
455	Elm, American	16.5	2-Good	2-Good	X	X
456	Basswood, American	8.5	2-Good	2-Good		X
457	Elm, American	7.5	2-Good	2-Good		X
458	Oak, Bur	31	3-Fair	3-Fair	X	X
459	Ironwood	16	3-Fair	3-Fair	X	X
460	Elm, Slippery	7.5	2-Good	2-Good	X	X
461	Maple, Sugar	8	2-Good	2-Good	X	X
462	Elm, American	8	2-Good	2-Good	X	X
463	Ironwood	11.5	2-Good	2-Good	X	X
464	Oak, Bur	27	2-Good	2-Good	X	X
465	Oak, Bur	22	1-Excellent	1-Excellent	X	X
466	Maple, Sugar	13	2-Good	2-Good	X	X
467	Oak, Bur	24.5	2-Good	2-Good	X	X
468	Maple, Sugar	20	3-Fair	3-Fair	X	X
469	Maple, Sugar	9	3-Fair	3-Fair	X	X
470	Maple, Sugar	15	2-Good	2-Good	X	X
471	Maple, Sugar	26	3-Fair	3-Fair	X	X
472	Maple, Sugar	23	2-Good	2-Good	X	X
473	Maple, Sugar	33	2-Good	2-Good	X	X
474	Maple, Sugar	21	2-Good	2-Good	X	X
475	Maple, Sugar	22.5	2-Good	2-Good	X	X
476	Maple, Sugar	25	2-Good	2-Good	X	X
477	Maple, Sugar	25	3-Fair	3-Fair	X	X
478	Maple, Sugar	14.5	2-Good	2-Good	X	X
479	Maple, Sugar	17.5	2-Good	2-Good	X	X
480	Maple, Sugar	15	2-Good	2-Good	X	X
481	Maple, Sugar	18.5	3-Fair	3-Fair	X	X
482	Maple, Sugar	17	2-Good	2-Good	X	X
483	Maple, Sugar	25	2-Good	2-Good	X	X
484	Maple, Sugar	13	1-Excellent	1-Excellent	X	X
485	Maple, Sugar	15.5	2-Good	2-Good	X	X
486	Maple, Sugar	15.5	1-Excellent	1-Excellent	X	X
487	Maple, Sugar	22.5	2-Good	2-Good	X	X
488	Maple, Sugar	24.5	2-Good	2-Good	X	X
489	Elm, American	12	2-Good	2-Good	X	X
490	Elm, American	10	2-Good	2-Good	X	X
491	Maple, Sugar	9	1-Excellent	1-Excellent	X	X
492	Elm, American	12	2-Good	2-Good	X	X
493	Ash, White	36	3-Fair	3-Fair	X	X
494	Oak, Bur	29.5	2-Good	2-Good	X	X
495	Oak, Bur	36	1-Excellent	1-Excellent	X	X
496	Elm, American	7.5	2-Good	2-Good		X
497	Basswood, American	11	1-Excellent	1-Excellent	X	X
498	Elm, American	9	2-Good	2-Good	X	X
499	Cherry, Black	10	2-Good	2-Good	X	X
500	Boxelder	23.5	2-Good	2-Good	X	X
501	Elm, American	9.5	2-Good	2-Good	X	X
502	Maple, Sugar	8	1-Excellent	1-Excellent	X	X
503	Elm, American	19	1-Excellent	1-Excellent	X	X
504	Redcedar, Eastern	9	2-Good	2-Good	X	X
505	Oak, White	30.5	1-Excellent	1-Excellent	X	X
506	Oak, White	30.5	1-Excellent	1-Excellent	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
507	Oak, White	32	1-Excellent	1-Excellent	X	X
508	Oak, White	50.5	3-Fair	3-Fair	X	X
509	<Null>	36	4-Poor	4-Poor	X	X
510	Oak, Bur	28	2-Good	2-Good	X	X
511	Elm, American	7.5	3-Fair	3-Fair		X
512	Elm, American	7	3-Fair	3-Fair		X
513	Elm, American	8.5	2-Good	2-Good	X	X
514	Oak, White	20.5	2-Good	2-Good	X	X
515	Elm, American	7	3-Fair	3-Fair		X
516	Basswood, American	22.5	2-Good	2-Good	X	X
517	Basswood, American	18	3-Fair	3-Fair	X	X
518	Basswood, American	34.5	2-Good	2-Good	X	X
519	Ironwood	7	3-Fair	3-Fair		X
520	Maple, Sugar	7.5	2-Good	2-Good		X
521	Maple, Sugar	9	2-Good	2-Good	X	X
522	Maple, Sugar	9.5	2-Good	2-Good	X	X
523	Oak, Bur	30	2-Good	2-Good	X	X
524	Hackberry	8	3-Fair	3-Fair	X	X
525	Redcedar, Eastern	14	3-Fair	3-Fair	X	X
526	Maple, Sugar	31	1-Excellent	1-Excellent	X	X
527	Oak, White	23.5	2-Good	2-Good	X	X
528	Redcedar, Eastern	9	3-Fair	3-Fair	X	X
529	Elm, American	9	3-Fair	3-Fair	X	X
530	Oak, White	40	3-Fair	3-Fair	X	X
531	Elm, American	8	2-Good	2-Good	X	X
532	Oak, Bur	17	2-Good	2-Good	X	X
533	Oak, Bur	17.5	3-Fair	3-Fair	X	X
534	Oak, Bur	37	2-Good	2-Good	X	X
535	Oak, White	35	4-Poor	4-Poor	X	X
536	Oak, Bur	34	2-Good	2-Good	X	X
537	Elm, American	8.5	3-Fair	3-Fair	X	X
538	Oak, Northern Red	6.5	3-Fair	3-Fair		X
539	Oak, Bur	35	1-Excellent	1-Excellent	X	X
540	Oak, Bur	21	2-Good	2-Good	X	X
541	Oak, Bur	26	1-Excellent	1-Excellent	X	X
542	Maple, Sugar	8	1-Excellent	1-Excellent		X
543	Maple, Sugar	6.5	1-Excellent	1-Excellent		X
544	Oak, Northern Red	6	1-Excellent	1-Excellent		
545	Oak, Northern Red	8	2-Good	2-Good		
546	Oak, Northern Red	8.5	1-Excellent	1-Excellent		
547	Redcedar, Eastern	10	1-Excellent	1-Excellent	X	
548	Oak, Bur	30	1-Excellent	1-Excellent	X	
549	Oak, Northern Red	9	1-Excellent	1-Excellent		X
550	Oak, Northern Red	8	1-Excellent	1-Excellent		X
551	Oak, Northern Red	7	1-Excellent	1-Excellent		X
552	Oak, Northern Red	8	2-Good	2-Good		X
553	Oak, Bur	29.5	1-Excellent	1-Excellent	X	
554	Redcedar, Eastern	6.5	2-Good	2-Good	X	
555	Redcedar, Eastern	9	2-Good	2-Good	X	
556	Oak, Bur	35.5	1-Excellent	1-Excellent	X	
557	Oak, Bur	28	4-Poor	4-Poor	X	
558	Maple, Sugar	9	3-Fair	3-Fair		
559	Oak, White	30	3-Fair	3-Fair	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
560	Oak, Northern Red	8	1-Excellent	1-Excellent		X
561	Oak, Northern Red	7	1-Excellent	1-Excellent		X
562	Redcedar, Eastern	9.5	1-Excellent	1-Excellent	X	X
563	Oak, Northern Red	7.5	1-Excellent	1-Excellent		X
564	Oak, Bur	7.5	2-Good	2-Good		X
565	Oak, Northern Red	8	1-Excellent	1-Excellent		X
566	Redcedar, Eastern	7	2-Good	2-Good		X
567	Oak, Northern Red	12.5	1-Excellent	1-Excellent	X	X
568	Oak, Northern Red	7	1-Excellent	1-Excellent		X
569	Oak, Northern Red	8	1-Excellent	1-Excellent		X
570	Oak, Bur	10	1-Excellent	1-Excellent	X	X
571	Oak, Northern Red	10	2-Good	2-Good	X	X
572	Oak, Bur	7.5	1-Excellent	1-Excellent		X
573	Redcedar, Eastern	6	1-Excellent	1-Excellent		X
574	Ash, White	8.5	2-Good	2-Good		X
575	Oak, Bur	6.5	2-Good	2-Good		X
576	Oak, Bur	31	1-Excellent	1-Excellent	X	
577	Oak, Bur	25	2-Good	2-Good	X	
578	Oak, Bur	26.5	3-Fair	3-Fair	X	X
579	Redcedar, Eastern	10	1-Excellent	1-Excellent	X	X
580	Redcedar, Eastern	9	1-Excellent	1-Excellent	X	X
581	Oak, Bur	33	1-Excellent	1-Excellent	X	
582	Redcedar, Eastern	13	1-Excellent	1-Excellent	X	X
583	Oak, Bur	26	1-Excellent	1-Excellent	X	X
584	Redcedar, Eastern	14	1-Excellent	1-Excellent	X	X
585	Basswood, American	38.5	1-Excellent	1-Excellent	X	X
586	Redcedar, Eastern	8.5	1-Excellent	1-Excellent	X	X
587	Redcedar, Eastern	13	1-Excellent	1-Excellent	X	X
588	Oak, Northern Red	8.5	1-Excellent	1-Excellent		X
589	Oak, Northern Red	8	1-Excellent	1-Excellent		X
590	Redcedar, Eastern	6.5	2-Good	2-Good	X	X
591	Redcedar, Eastern	9	2-Good	2-Good	X	X
592	Oak, Northern Red	8	1-Excellent	1-Excellent		X
593	Redcedar, Eastern	15	1-Excellent	1-Excellent	X	X
594	Oak, Bur	28	2-Good	2-Good	X	X
595	Oak, Bur	33.5	1-Excellent	1-Excellent	X	X
596	Redcedar, Eastern	8.5	1-Excellent	1-Excellent		X
597	Oak, Bur	40	2-Good	2-Good	X	X
598	Oak, Bur	35	2-Good	2-Good	X	X
599	Redcedar, Eastern	10	1-Excellent	1-Excellent	X	
600	Ironwood	6.5	2-Good	2-Good		
601	Redcedar, Eastern	7.5	1-Excellent	1-Excellent		X
602	Oak, Bur	34	1-Excellent	1-Excellent	X	X
603	Maple, Sugar	20.5	2-Good	2-Good	X	
604	Maple, Sugar	16.5	2-Good	2-Good	X	
605	Oak, Bur	27	3-Fair	3-Fair	X	X
606	Oak, Northern Red	7	1-Excellent	1-Excellent		X
607	Oak, Northern Red	7	2-Good	2-Good		X
608	Redcedar, Eastern	15	1-Excellent	1-Excellent	X	X
609	Oak, Northern Red	6.5	1-Excellent	1-Excellent		X
610	Oak, Northern Red	6.5	1-Excellent	1-Excellent		X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
611	Oak, Northern Red	7.5	1-Excellent	1-Excellent		X
612	Oak, Northern Red	7	1-Excellent	1-Excellent		X
613	Oak, Northern Red	7	2-Good	2-Good		X
614	Oak, Northern Red	6	1-Excellent	1-Excellent		X
615	Elm, American	12	2-Good	2-Good	X	X
616	Elm, American	15	1-Excellent	1-Excellent	X	X
617	Hickory, Bitternut	10	1-Excellent	1-Excellent	X	X
618	Hickory, Bitternut	6.5	2-Good	2-Good		X
619	Elm, American	18	3-Fair	3-Fair	X	X
620	Maple, Sugar	6	2-Good	2-Good		X
621	Elm, American	14.5	3-Fair	3-Fair	X	X
622	Basswood, American	8.5	3-Fair	3-Fair		X
623	Basswood, American	18	3-Fair	3-Fair	X	X
624	Basswood, American	14.5	3-Fair	3-Fair	X	X
625	Ash, White	11.5	2-Good	2-Good	X	X
626	Elm, American	14	4-Poor	4-Poor	X	X
627	Elm, American	7	2-Good	2-Good		X
628	Maple, Sugar	10	3-Fair	3-Fair	X	X
629	Elm, American	6.5	2-Good	2-Good		X
630	Ash, White	11.5	3-Fair	3-Fair	X	X
631	Elm, American	21.5	3-Fair	3-Fair	X	X
632	Elm, American	7	3-Fair	3-Fair		X
633	Elm, American	8	3-Fair	3-Fair		X
634	Elm, American	13	3-Fair	3-Fair	X	X
635	Elm, American	11	3-Fair	3-Fair	X	X
636	Elm, American	10	3-Fair	3-Fair	X	X
637	Maple, Sugar	10	2-Good	2-Good	X	X
638	Maple, Sugar	7.5	2-Good	2-Good		X
639	Ash, White	17	2-Good	2-Good	X	X
640	Hackberry	7	2-Good	2-Good		X
641	Basswood, American	24	2-Good	2-Good	X	X
642	Maple, Sugar	16	2-Good	2-Good	X	X
643	Basswood, American	48.5	3-Fair	3-Fair	X	X
644	Maple, Sugar	25.5	3-Fair	3-Fair	X	X
645	Maple, Sugar	21	2-Good	2-Good	X	X
646	Maple, Sugar	10	2-Good	2-Good	X	X
647	Oak, Northern Red	32.5	3-Fair	3-Fair	X	X
648	Maple, Sugar	9	2-Good	2-Good		X
649	Maple, Sugar	6.5	2-Good	2-Good		X
650	Maple, Sugar	10	3-Fair	3-Fair	X	X
651	Maple, Sugar	10	3-Fair	3-Fair	X	X
652	Maple, Sugar	9	3-Fair	3-Fair		X
653	Hickory, Bitternut	16	3-Fair	3-Fair	X	X
654	Maple, Sugar	13	3-Fair	3-Fair	X	X
655	Elm, American	10.5	3-Fair	3-Fair	X	X
656	Maple, Sugar	15	3-Fair	3-Fair	X	X
657	Elm, American	7.5	3-Fair	3-Fair		X
658	Elm, American	13	3-Fair	3-Fair	X	X
659	Elm, American	18	3-Fair	3-Fair	X	X
660	Maple, Sugar	24.5	3-Fair	3-Fair	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
661	Elm, American	15	2-Good	2-Good	X	X
662	Oak, Northern Red	9	3-Fair	3-Fair		X
663	Oak, Northern Red	8.5	2-Good	2-Good		
664	Oak, Northern Red	7	2-Good	2-Good		
665	Oak, Northern Red	7	2-Good	2-Good		
666	Oak, Bur	38.5	1-Excellent	1-Excellent	X	X
667	Oak, Bur	41	1-Excellent	1-Excellent	X	X
668	Oak, Bur	34	2-Good	2-Good	X	X
669	Redcedar, Eastern	14	1-Excellent	1-Excellent	X	X
670	Redcedar, Eastern	11	1-Excellent	1-Excellent	X	X
671	Elm, American	7	2-Good	2-Good		X
672	Oak, Bur	32.5	3-Fair	3-Fair	X	X
673	Oak, Northern Red	16	1-Excellent	1-Excellent	X	
674	Redcedar, Eastern	15	2-Good	2-Good	X	X
675	Oak, Northern Red	24	2-Good	2-Good	X	X
676	Redcedar, Eastern	13	3-Fair	3-Fair	X	X
677	Oak, Northern Red	11	3-Fair	3-Fair	X	X
678	Elm, American	9.5	2-Good	2-Good		X
679	Oak, Northern Red	12	3-Fair	3-Fair	X	X
680	Elm, American	9.5	3-Fair	3-Fair		X
681	Elm, American	19	2-Good	2-Good	X	X
682	Redcedar, Eastern	9	1-Excellent	1-Excellent	X	X
683	Redcedar, Eastern	7.5	1-Excellent	1-Excellent	X	X
684	Ash, White	11	3-Fair	3-Fair	X	X
685	Oak, Northern Red	15	2-Good	2-Good	X	X
686	Oak, Northern Red	9	3-Fair	3-Fair		X
687	Hackberry	9	2-Good	2-Good		X
688	Boxelder	9	2-Good	2-Good		X
689	Redcedar, Eastern	15.5	1-Excellent	1-Excellent	X	X
690	Redcedar, Eastern	18	2-Good	2-Good	X	X
691	Redcedar, Eastern	12	2-Good	2-Good	X	X
692	Redcedar, Eastern	7.5	2-Good	2-Good	X	X
693	Ash, White	15	3-Fair	3-Fair		X
694	Redcedar, Eastern	15	2-Good	2-Good	X	X
695	Redcedar, Eastern	22	2-Good	2-Good	X	X
696	Ash, White	11.5	3-Fair	3-Fair		X
697	Ash, White	11	3-Fair	3-Fair		X
698	Redcedar, Eastern	13.5	2-Good	2-Good		X
699	Redcedar, Eastern	7	3-Fair	3-Fair		X
700	Ash, White	9	3-Fair	3-Fair		X
701	Redcedar, Eastern	6.5	1-Excellent	1-Excellent	X	X
702	Redcedar, Eastern	9	1-Excellent	1-Excellent	X	X
703	Redcedar, Eastern	9	1-Excellent	1-Excellent	X	X
704	Redcedar, Eastern	9	2-Good	2-Good	X	X
705	Redcedar, Eastern	6.5	1-Excellent	1-Excellent	X	X
706	Redcedar, Eastern	10	1-Excellent	1-Excellent	X	X
707	Redcedar, Eastern	7.5	1-Excellent	1-Excellent	X	X
708	Ash, White	7	1-Excellent	1-Excellent		X
709	Redcedar, Eastern	10	2-Good	2-Good	X	X
710	Redcedar, Eastern	7	3-Fair	3-Fair	X	X

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ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE INVENTORY

SHEET

78 OF 92

PLOT DATE: 2/25/2025 4:53 PM

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
711	Redcedar, Eastern	9	3-Fair	3-Fair	X	X
712	Redcedar, Eastern	7	1-Excellent	1-Excellent	X	X
713	Redcedar, Eastern	10.5	1-Excellent	1-Excellent	X	X
714	Redcedar, Eastern	7.5	1-Excellent	1-Excellent	X	X
715	Redcedar, Eastern	7.5	1-Excellent	1-Excellent	X	X
716	Redcedar, Eastern	6.5	1-Excellent	1-Excellent	X	X
717	Redcedar, Eastern	7	1-Excellent	1-Excellent	X	X
718	Ash, White	14.5	3-Fair	3-Fair		X
719	Redcedar, Eastern	8.5	2-Good	2-Good	X	X
720	Hackberry	12	3-Fair	3-Fair	X	X
721	Maple, Sugar	11.5	2-Good	2-Good	X	X
722	Redcedar, Eastern	12	1-Excellent	1-Excellent	X	X
723	Hackberry	10	3-Fair	3-Fair	X	X
724	Hackberry	9	2-Good	2-Good		X
725	Oak, Northern Red	10	3-Fair	3-Fair	X	X
726	Redcedar, Eastern	10	3-Fair	3-Fair	X	X
727	Redcedar, Eastern	19	2-Good	2-Good	X	X
728	Redcedar, Eastern	29	3-Fair	3-Fair	X	X
729	Redcedar, Eastern	30	4-Poor	4-Poor	X	X
730	Redcedar, Eastern	33.5	4-Poor	4-Poor	X	X
731	Redcedar, Eastern	26.5	3-Fair	3-Fair	X	X
732	Redcedar, Eastern	24	2-Good	2-Good	X	X
733	Redcedar, Eastern	25	2-Good	2-Good	X	X
734	Redcedar, Eastern	25	3-Fair	3-Fair	X	
735	Boxelder	22	3-Fair	3-Fair	X	
736	Redcedar, Eastern	27.5	4-Poor	4-Poor	X	X
737	Oak, Northern Red	8.5	2-Good	2-Good		X
738	Oak, Northern Red	9.5	2-Good	2-Good		X
739	Oak, Northern Red	11	2-Good	2-Good	X	X
740	Elm, American	6	3-Fair	3-Fair		
741	Ash, White	11	3-Fair	3-Fair	X	
742	Oak, White	7	2-Good	2-Good		X
743	Maple, Sugar	15	2-Good	2-Good	X	X
744	Ash, White	13.5	3-Fair	3-Fair		
745	Ash, White	8	2-Good	2-Good		X
746	Maple, Sugar	11	2-Good	2-Good	X	
747	Hackberry	16	2-Good	2-Good	X	X
748	Oak, Northern Red	18.5	2-Good	2-Good	X	X
749	Maple, Sugar	12.5	1-Excellent	1-Excellent	X	X
750	Ash, White	19.5	2-Good	2-Good	X	X
751	Hackberry	12.5	2-Good	2-Good	X	X
752	Oak, Northern Red	15	2-Good	2-Good	X	X
753	Oak, White	9	2-Good	2-Good		X
754	Ash, White	14	2-Good	2-Good	X	X
755	Oak, Northern Red	16.5	3-Fair	3-Fair	X	X
756	Oak, Northern Red	19.5	2-Good	2-Good	X	X
757	Ash, White	14	3-Fair	3-Fair	X	X
758	Oak, Northern Red	12	2-Good	2-Good	X	X
759	Oak, Northern Red	12.5	2-Good	2-Good	X	X
760	Oak, Northern Red	10	3-Fair	3-Fair	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
761	Oak, Northern Red	17.5	2-Good	2-Good	X	X
762	Oak, Northern Red	7	2-Good	2-Good		X
763	Oak, Northern Red	16	2-Good	2-Good	X	X
764	Ash, White	25.5	3-Fair	3-Fair		X
765	Ash, White	16	2-Good	2-Good		X
766	Elm, American	12	2-Good	2-Good	X	X
767	Ash, White	16	3-Fair	3-Fair	X	X
768	Basswood, American	14	3-Fair	3-Fair	X	
769	Oak, Northern Red	9.5	1-Excellent	1-Excellent		
770	Oak, Northern Red	13	2-Good	2-Good	X	
771	Oak, White	7	2-Good	2-Good		X
772	Basswood, American	8	2-Good	2-Good		X
773	Ash, White	9	3-Fair	3-Fair		
774	Ash, White	10	2-Good	2-Good		
775	Cherry, Black	7	2-Good	2-Good		
776	Elm, American	10.5	2-Good	2-Good	X	X
777	Oak, Northern Red	6	2-Good	2-Good		X
778	Oak, Northern Red	17.5	2-Good	2-Good	X	X
779	Oak, White	7.5	2-Good	2-Good		X
780	Ash, White	7	3-Fair	3-Fair		X
781	Ash, White	8	3-Fair	3-Fair		X
782	Ash, White	12.5	3-Fair	3-Fair		X
783	Ash, White	14.5	3-Fair	3-Fair		X
784	Ash, White	7	3-Fair	3-Fair		X
785	Ash, White	12.5	2-Good	2-Good		X
786	Hackberry	13	2-Good	2-Good	X	X
787	Elm, American	7.5	3-Fair	3-Fair		X
788	Ash, White	9	2-Good	2-Good		X
789	Ash, White	12.5	2-Good	2-Good		X
790	Ash, White	8.5	4-Poor	4-Poor		X
791	Ash, White	14.5	3-Fair	3-Fair		X
792	Elm, American	14	3-Fair	3-Fair	X	X
793	Elm, American	8	3-Fair	3-Fair		X
794	Elm, American	7	3-Fair	3-Fair		X
795	Ash, White	24	4-Poor	4-Poor		X
796	Basswood, American	17	3-Fair	3-Fair	X	X
797	Oak, Northern Red	23	3-Fair	3-Fair	X	X
798	Basswood, American	13	3-Fair	3-Fair	X	X
799	Elm, American	11	3-Fair	3-Fair	X	X
800	Hackberry	8	2-Good	2-Good		X
801	Hackberry	12	2-Good	2-Good	X	X
802	Ash, White	11.5	3-Fair	3-Fair		X
803	Elm, American	20	3-Fair	3-Fair	X	X
804	Oak, Northern Red	27	3-Fair	3-Fair	X	X
805	Oak, Northern Red	34.5	3-Fair	3-Fair	X	X
806	Ash, White	14	3-Fair	3-Fair		X
807	Ash, White	11.5	3-Fair	3-Fair		X
808	Ash, White	9	3-Fair	3-Fair		X
809	Boxelder	24	3-Fair	3-Fair	X	
810	Ash, White	10	3-Fair	3-Fair		X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
811	Hackberry	9	2-Good	2-Good		
812	Ash, White	8	2-Good	2-Good		X
813	Elm, American	13	3-Fair	3-Fair	X	X
814	Ash, White	8	2-Good	2-Good		X
815	Ash, White	6	3-Fair	3-Fair		X
816	Ash, White	6	3-Fair	3-Fair		X
817	Ash, White	7.5	2-Good	2-Good		X
818	Ash, White	6.5	2-Good	2-Good		X
819	Ash, White	9	3-Fair	3-Fair		X
820	Oak, Northern Red	20	2-Good	2-Good	X	X
821	Ash, White	8	3-Fair	3-Fair		X
822	Oak, Northern Red	8	2-Good	2-Good		X
823	Oak, Northern Red	11	3-Fair	3-Fair	X	X
824	Oak, Northern Red	10	3-Fair	3-Fair	X	X
825	Oak, Northern Red	7.5	2-Good	2-Good		X
826	Ash, White	9	3-Fair	3-Fair		X
827	Ash, White	15	3-Fair	3-Fair		X
828	Ash, White	6.5	3-Fair	3-Fair		X
829	Elm, American	7	2-Good	2-Good		X
830	Elm, American	16	3-Fair	3-Fair	X	X
831	Boxelder	28.5	4-Poor	4-Poor	X	X
832	Elm, American	9	2-Good	2-Good		X
833	Elm, American	7.5	2-Good	2-Good		X
834	Oak, Northern Red	10	2-Good	2-Good	X	X
835	Oak, Northern Red	10	2-Good	2-Good	X	
836	Elm, American	7	2-Good	2-Good		X
837	Elm, American	6	3-Fair	3-Fair		X
838	Oak, Northern Red	11.5	4-Poor	4-Poor	X	X
839	Elm, American	18	2-Good	2-Good	X	X
840	Elm, American	7	2-Good	2-Good		X
841	Oak, Northern Red	13	3-Fair	3-Fair	X	X
842	Elm, American	10	2-Good	2-Good	X	X
843	Elm, American	6	2-Good	2-Good		X
844	Elm, American	8.5	3-Fair	3-Fair		X
845	Boxelder	30	4-Poor	4-Poor	X	X
846	Elm, American	8	2-Good	2-Good		X
847	Elm, American	7	2-Good	2-Good		X
848	Oak, Northern Red	9	3-Fair	3-Fair		
849	Ash, White	9	3-Fair	3-Fair		
850	Oak, Northern Red	10.5	2-Good	2-Good	X	
851	Basswood, American	13.5	2-Good	2-Good	X	
852	Oak, Northern Red	15	2-Good	2-Good	X	
853	Oak, Northern Red	13.5	3-Fair	3-Fair	X	
854	Oak, Northern Red	15.5	2-Good	2-Good	X	
855	Elm, American	20.5	2-Good	2-Good	X	
856	Hackberry	15.5	2-Good	2-Good	X	
857	Ironwood	14.5	2-Good	2-Good	X	
858	Maple, Sugar	7	2-Good	2-Good		
859	Maple, Sugar	9	2-Good	2-Good		
860	Maple, Sugar	6.5	2-Good	2-Good		

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
861	Boxelder	8.5	3-Fair	3-Fair		
862	Boxelder	11	3-Fair	3-Fair	X	
863	Boxelder	7	3-Fair	3-Fair		
864	Boxelder	9	3-Fair	3-Fair		
865	Ash, White	14.5	3-Fair	3-Fair		
866	Ash, White	39	2-Good	2-Good		
867	Ironwood	7.5	3-Fair	3-Fair		
868	Ash, White	15.5	3-Fair	3-Fair	X	
869	Ash, White	8.5	3-Fair	3-Fair		
870	Ash, White	13	2-Good	2-Good	X	
871	Ash, White	8	3-Fair	3-Fair		
872	Boxelder	8	3-Fair	3-Fair		
873	Boxelder	7	3-Fair	3-Fair		
874	Elm, American	23	2-Good	2-Good	X	
875	Boxelder	7	3-Fair	3-Fair		
876	Ash, White	13	2-Good	2-Good		
877	Ash, White	13.5	2-Good	2-Good		
878	Elm, American	8	2-Good	2-Good		
879	Elm, American	7	3-Fair	3-Fair		
880	Ash, White	12.5	2-Good	2-Good		
881	Hackberry	7	3-Fair	3-Fair		
882	Maple, Sugar	7	3-Fair	3-Fair		
883	Basswood, American	11	2-Good	2-Good	X	
884	Ash, White	11	2-Good	2-Good		
885	Hackberry	9	2-Good	2-Good		
886	Elm, American	7.5	2-Good	2-Good		
887	Boxelder	10.5	3-Fair	3-Fair	X	X
888	Hackberry	12.5	2-Good	2-Good	X	X
889	Hackberry	7.5	2-Good	2-Good		X
890	Ash, White	12.5	2-Good	2-Good		
891	Ash, White	9	3-Fair	3-Fair		
892	Ash, White	11	2-Good	2-Good		
893	Oak, Northern Red	16	2-Good	2-Good	X	
894	Ash, White	9	2-Good	2-Good		X
895	Oak, Northern Red	6.5	2-Good	2-Good		X
896	Hackberry	11	2-Good	2-Good	X	X
897	Ironwood	7.5	3-Fair	3-Fair		X
898	Ash, White	13	2-Good	2-Good	X	X
899	Oak, Northern Red	8.5	3-Fair	3-Fair		X
900	Ash, White	9.5	2-Good	2-Good		X
901	Oak, Northern Red	7.5	3-Fair	3-Fair		X
902	Boxelder	9.5	3-Fair	3-Fair		X
903	Elm, American	8	3-Fair	3-Fair		X
904	Elm, American	9	2-Good	2-Good		X
905	Elm, American	11	3-Fair	3-Fair	X	X
906	Elm, American	8.5	3-Fair	3-Fair		X
907	Elm, American	8	3-Fair	3-Fair		X
908	Elm, American	18	2-Good	2-Good	X	X
909	Ash, White	7.5	3-Fair	3-Fair		X
910	Elm, American	6.5	3-Fair	3-Fair		X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
911	Ash, White	11	2-Good	2-Good		X
912	Boxelder	6	3-Fair	3-Fair		X
913	Boxelder	6	3-Fair	3-Fair		X
914	Elm, American	6.5	3-Fair	3-Fair		X
915	Ash, White	14.5	2-Good	2-Good		X
916	Elm, American	8.5	3-Fair	3-Fair		X
917	Elm, American	8	3-Fair	3-Fair		X
918	Elm, American	6	3-Fair	3-Fair		X
919	Elm, American	7.5	3-Fair	3-Fair		X
920	Elm, American	8	3-Fair	3-Fair		X
921	Oak, Northern Red	9.5	2-Good	2-Good		X
922	Hackberry	6.5	3-Fair	3-Fair		X
923	Elm, American	11.5	2-Good	2-Good	X	X
924	Elm, American	8.5	3-Fair	3-Fair		X
925	Hackberry	9	3-Fair	3-Fair		X
926	Elm, American	11.5	2-Good	2-Good	X	X
927	Hackberry	6	3-Fair	3-Fair		
928	Hackberry	10	3-Fair	3-Fair	X	X
929	Boxelder	7.5	3-Fair	3-Fair		
930	Hackberry	12.5	2-Good	2-Good	X	
931	Hackberry	10	2-Good	2-Good	X	X
932	Hackberry	10.5	2-Good	2-Good	X	X
933	Elm, American	14	2-Good	2-Good	X	X
934	Hackberry	16	3-Fair	3-Fair	X	X
935	Hackberry	10.5	2-Good	2-Good	X	X
936	Hackberry	6.5	3-Fair	3-Fair		X
937	Hackberry	7	3-Fair	3-Fair		X
938	Hackberry	11	2-Good	2-Good	X	
939	Hackberry	10.5	3-Fair	3-Fair	X	X
940	Hackberry	9	3-Fair	3-Fair		X
941	Boxelder	7	3-Fair	3-Fair		
942	Hackberry	8.5	3-Fair	3-Fair		
943	Hackberry	7	3-Fair	3-Fair		
944	Elm, American	12.5	4-Poor	4-Poor	X	X
945	Hackberry	11.5	2-Good	2-Good	X	X
946	Hackberry	6.5	3-Fair	3-Fair		X
947	Hackberry	11	2-Good	2-Good	X	X
948	Hackberry	8	2-Good	2-Good		X
949	Hackberry	10	3-Fair	3-Fair	X	X
950	Elm, American	7.5	3-Fair	3-Fair		X
951	Hackberry	14.5	2-Good	2-Good	X	X
952	Elm, American	17	2-Good	2-Good	X	X
953	Oak, Northern Red	16	3-Fair	3-Fair	X	X
954	Boxelder	6.5	3-Fair	3-Fair		X
955	Hackberry	10	2-Good	2-Good	X	
956	Hackberry	6.5	3-Fair	3-Fair		X
957	Hackberry	10	3-Fair	3-Fair	X	X
958	Ash, White	23	1-Excellent	1-Excellent		X
959	Ash, White	17	2-Good	2-Good		X
960	Elm, American	28	3-Fair	3-Fair	X	X

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
961	Spruce, Colorado	17.5	2-Good	2-Good	X	X
962	Spruce, Colorado	21.5	2-Good	2-Good	X	X
963	Elm, American	9	3-Fair	3-Fair		X
964	Boxelder	27	4-Poor	4-Poor	X	X
965	Boxelder	17	4-Poor	4-Poor	X	X
966	Boxelder	14	4-Poor	4-Poor	X	X
967	Boxelder	12	4-Poor	4-Poor	X	X
968	Spruce, Colorado	7	3-Fair	3-Fair	X	X
969	Spruce, Colorado	9	2-Good	2-Good	X	X
970	Oak, White	24	2-Good	2-Good	X	X
971	Oak, Northern Red	13.5	2-Good	2-Good	X	X
972	Spruce, Colorado	6	2-Good	2-Good	X	X
973	Maple, Sugar	6.5	3-Fair	3-Fair		
974	Boxelder	22	2-Good	2-Good	X	X
975	Ash, White	12	3-Fair	3-Fair		X
976	Maple, Sugar	17.5	2-Good	2-Good	X	X
977	Maple, Silver	14	2-Good	2-Good	X	X
978	Maple, Silver	20	2-Good	2-Good	X	X
979	Elm, American	40.5	2-Good	2-Good	X	X
980	Maple, Sugar	19	2-Good	2-Good	X	X
981	Maple, Silver	19.5	2-Good	2-Good	X	X
982	Maple, Silver	23	2-Good	2-Good	X	
983	Cottonwood, Eastern	19	2-Good	2-Good	X	
984	Maple, Silver	22	2-Good	2-Good	X	
985	Boxelder	14.5	3-Fair	3-Fair	X	X
986	Elm, American	12	3-Fair	3-Fair	X	X
987	Spruce, Colorado	15	2-Good	2-Good	X	X
988	Spruce, Colorado	6	2-Good	2-Good		X
989	Spruce, Colorado	16	2-Good	2-Good	X	X
990	Spruce, Colorado	15	2-Good	2-Good	X	X
991	Spruce, Colorado	10.5	2-Good	2-Good	X	X
992	Spruce, Colorado	20.5	3-Fair	3-Fair	X	X
993	Ash, White	12	4-Poor	4-Poor		X
994	Ash, White	15	3-Fair	3-Fair		X
995	Ash, White	7	3-Fair	3-Fair		X
996	Ash, White	8.5	3-Fair	3-Fair		X
997	Ash, White	8.5	3-Fair	3-Fair		X
998	Ash, White	11	3-Fair	3-Fair		X
999	Ash, White	11.5	3-Fair	3-Fair		X
1000	Ash, White	12.5	3-Fair	3-Fair		X
1104	Ash, White	9.5	3-Fair	3-Fair		X
1105	Ash, White	9.5	3-Fair	3-Fair		X
1106	Ash, White	11	3-Fair	3-Fair		X
1107	Ash, White	15	2-Good	2-Good		
1108	Ash, White	7	3-Fair	3-Fair		
1109	Ash, White	17	2-Good	2-Good		
1110	Ash, White	11	2-Good	2-Good		
1111	Ash, White	9	3-Fair	3-Fair		
1112	Ash, White	17	2-Good	2-Good		
1113	Boxelder	12.5	3-Fair	3-Fair	X	X

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

TREE INVENTORY

SHEET

79 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:53 PM

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
1114	Boxelder	10	3-Fair	3-Fair	X	X
1115	Boxelder	10	3-Fair	3-Fair	X	X
1116	Boxelder	10.5	3-Fair	3-Fair	X	X
1117	Boxelder	9	3-Fair	3-Fair		X
1118	Boxelder	14	3-Fair	3-Fair	X	X
1119	Boxelder	10	3-Fair	3-Fair	X	X
1120	Boxelder	15	3-Fair	3-Fair	X	X
1121	Boxelder	7.5	3-Fair	3-Fair		X
1122	Elm, American	13	3-Fair	3-Fair	X	X
1123	Elm, American	14	3-Fair	3-Fair	X	X
1124	Elm, American	6.5	3-Fair	3-Fair		X
1125	Elm, American	6	3-Fair	3-Fair		X
1126	Elm, American	14	3-Fair	3-Fair	X	X
1127	Elm, American	7	3-Fair	3-Fair		X
1128	Boxelder	10	3-Fair	3-Fair	X	X
1129	Boxelder	12.5	3-Fair	3-Fair	X	X
1130	Cottonwood, Eastern	23	2-Good	2-Good	X	X
1131	Ash, White	15.5	2-Good	2-Good		X
1132	Ash, White	9.5	3-Fair	3-Fair		X
1133	Ash, White	14.5	2-Good	2-Good		X
1133	Ash, White	14.5	2-Good	2-Good		X
1308	Oak, White	33	1-Excellent	2-Good	X	X
1309	Oak, White	33	1-Excellent	2-Good	X	
1310	Maple, Sugar	8	2-Good	2-Good		
1311	Redcedar, Eastern	7	3-Fair	3-Fair		
1312	Oak, White	33	1-Excellent	2-Good	X	
1313	Oak, White	21	2-Good	2-Good	X	
1314	Oak, White	28	1-Excellent	2-Good	X	
1315	Ironwood	10	2-Good	2-Good	X	
1316	Oak, White	23	2-Good	2-Good	X	
1317	Oak, White	25.5	2-Good	2-Good	X	
1318	Oak, White	21.5	2-Good	2-Good	X	
1319	Oak, White	28.5	2-Good	2-Good	X	
1320	Oak, White	29	2-Good	2-Good	X	
1321	Maple, Sugar	10	2-Good	2-Good	X	
1322	Oak, White	25	2-Good	2-Good	X	
1323	Oak, White	28.5	2-Good	2-Good	X	
1324	Oak, White	25.5	2-Good	2-Good	X	
1325	Maple, Sugar	21.5	3-Fair	3-Fair	X	
1326	Oak, White	19.5	2-Good	2-Good	X	
1327	Oak, White	25	2-Good	2-Good	X	
1328	Oak, White	20	2-Good	2-Good	X	
1329	Oak, White	13	3-Fair	3-Fair	X	
1330	Oak, White	29	2-Good	2-Good	X	
1331	Oak, White	18	2-Good	2-Good	X	
1332	Oak, White	27	2-Good	2-Good	X	
1333	Oak, White	18.5	2-Good	2-Good	X	
1334	Oak, White	26.5	2-Good	2-Good	X	
1335	Oak, White	25	2-Good	2-Good	X	
1336	Redcedar, Eastern	7	3-Fair	4-Poor		

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
1337	Maple, Sugar	25	2-Good	2-Good	X	
1338	Oak, White	22	2-Good	2-Good	X	
1339	Oak, White	28	2-Good	2-Good	X	
1340	Oak, White	31	1-Excellent	2-Good	X	
1341	Maple, Sugar	7	2-Good	2-Good		
1342	Oak, White	29	2-Good	2-Good	X	
1343	Oak, White	31.5	1-Excellent	2-Good	X	
1344	Maple, Sugar	6.5	3-Fair	3-Fair		
1345	Ironwood	6.5	2-Good	2-Good		
1346	Maple, Sugar	7	3-Fair	3-Fair		
1347	Maple, Sugar	6.5	2-Good	2-Good		
1348	Maple, Sugar	7	3-Fair	3-Fair		
1349	Maple, Sugar	6.5	3-Fair	3-Fair		
1350	Maple, Sugar	6.5	3-Fair	3-Fair		
1351	Oak, White	29	1-Excellent	2-Good	X	
1352	Ironwood	8	3-Fair	3-Fair		
1353	Maple, Sugar	8	2-Good	2-Good		
1354	Oak, White	29	1-Excellent	2-Good	X	
1355	Oak, White	22	2-Good	2-Good	X	
1356	Oak, White	21.5	2-Good	2-Good	X	
1357	Oak, White	28.5	2-Good	2-Good	X	
1358	Maple, Sugar	24	2-Good	2-Good	X	
1359	Oak, White	21.5	2-Good	2-Good	X	
1360	Oak, White	23	2-Good	2-Good	X	
1361	Oak, White	24	2-Good	2-Good	X	
1362	Oak, White	24.5	2-Good	2-Good	X	
1363	Oak, White	17.5	2-Good	2-Good	X	
1364	Oak, White	18	2-Good	2-Good	X	
1365	Oak, White	16	2-Good	2-Good	X	
1366	Oak, White	15.5	2-Good	2-Good	X	
1367	Oak, White	22	2-Good	2-Good	X	X
1368	Oak, White	20	2-Good	2-Good	X	X
1369	Oak, White	18	2-Good	2-Good	X	
1370	Oak, White	23.5	2-Good	2-Good	X	
1371	Oak, White	26	2-Good	2-Good	X	
1372	Oak, White	26	1-Excellent	2-Good	X	
1373	Oak, White	17.5	2-Good	2-Good	X	
1374	Oak, White	17.5	2-Good	2-Good	X	
1375	Oak, White	25	2-Good	2-Good	X	
1376	Maple, Sugar	8	2-Good	2-Good		
1377	Oak, White	25.5	1-Excellent	2-Good	X	
1378	Oak, Northern Red	9	2-Good	2-Good	X	
1379	Butternut	8.5	2-Good	2-Good	X	
1380	Hickory, Bitternut	7	2-Good	2-Good		
1381	Poplar, White	7.5	2-Good	2-Good		
1382	Oak, White	28.5	1-Excellent	2-Good	X	
1383	Oak, Northern Red	7	2-Good	2-Good		
1384	Oak, White	7	3-Fair	3-Fair		
1385	Oak, White	33.5	1-Excellent	2-Good	X	
1386	Maple, Sugar	10	3-Fair	2-Good	X	

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
1387	Oak, White	27	1-Excellent	2-Good	X	
1388	Oak, White	28	1-Excellent	2-Good	X	
1389	Oak, Northern Red	8	2-Good	2-Good		
1390	Ash, White	6.5	2-Good	2-Good		
1391	Ash, White	9	2-Good	2-Good		
1392	Oak, Northern Red	13	2-Good	2-Good	X	
1393	Oak, Northern Red	8.5	2-Good	2-Good		X
1394	Oak, Northern Red	7.5	2-Good	2-Good		X
1395	Oak, White	26	1-Excellent	2-Good	X	X
1396	Oak, White	32.5	1-Excellent	2-Good	X	X
1397	Elm, American	6.5	3-Fair	3-Fair		X
1398	Oak, White	19	2-Good	2-Good	X	X
1399	Oak, White	34	1-Excellent	2-Good	X	X
1400	Cherry, Black	7.5	2-Good	2-Good		X
1401	Redcedar, Eastern	19	2-Good	2-Good	X	X
1402	Ash, White	8	2-Good	2-Good		X
1403	Ash, White	7	2-Good	2-Good		X
1404	Oak, White	33	1-Excellent	2-Good	X	X
1405	Oak, White	24.5	2-Good	2-Good	X	X
1406	Oak, White	29	1-Excellent	2-Good	X	X
1407	Oak, White	31	1-Excellent	2-Good	X	X
1408	Oak, White	24.5	2-Good	2-Good	X	X
1409	Oak, White	24.5	2-Good	2-Good	X	X
1410	Oak, White	24.5	2-Good	2-Good	X	X
1411	Elm, American	8	2-Good	2-Good		X
1412	Oak, White	13	3-Fair	3-Fair	X	X
1413	Oak, White	17	2-Good	2-Good	X	X
1414	Oak, White	24	2-Good	2-Good	X	X
1415	Oak, White	17	2-Good	2-Good	X	X
1416	Oak, White	28	1-Excellent	2-Good	X	
1417	Oak, White	26.5	1-Excellent	2-Good	X	
1418	Oak, White	24	2-Good	2-Good	X	X
1419	Oak, White	19	2-Good	2-Good	X	X
1420	Oak, White	22	2-Good	2-Good	X	X
1421	Maple, Sugar	24.5	2-Good	2-Good	X	X
1422	Oak, White	32	1-Excellent	2-Good	X	X
1423	Oak, White	31.5	1-Excellent	2-Good	X	X
1424	Oak, Northern Red	6.5	2-Good	2-Good		X
1425	Elm, American	6.5	3-Fair	3-Fair		X
1426	Elm, American	8	3-Fair	3-Fair		X
1427	Oak, White	26.5	1-Excellent	2-Good	X	X
1428	Hackberry	8	3-Fair	3-Fair		
1429	Boxelder	7	2-Good	2-Good		
1430	Hackberry	14.5	2-Good	2-Good	X	
1431	Ash, White	14.5	2-Good	2-Good	X	
1432	Redcedar, Eastern	9	2-Good	2-Good	X	
1433	Maple, Sugar	7.5	2-Good	2-Good		
1434	Elm, American	16	2-Good	2-Good	X	
1435	Oak, White	18	2-Good	2-Good	X	
1436	Ironwood	6.5	3-Fair	3-Fair		

Table 1. Tree Inventory Summary

Tree Tag Number	Tree Species	DBH (Inches)	Structural Condition	Health Condition	Significant	Removal
1437	Basswood, American	10.5	2-Good	2-Good	X	X
1438	Maple, Sugar	7	2-Good	2-Good		
1439	Maple, Sugar	11	2-Good	2-Good	X	
1440	Oak, White	6.5	3-Fair	3-Fair		
1441	Basswood, American	8	3-Fair	3-Fair		
1442	Basswood, American	11	2-Good	2-Good	X	
1443	Oak, Northern Red	7	2-Good	2-Good		
1444	Oak, Northern Red	25	1-Excellent	2-Good	X	
1445	Ironwood	7	3-Fair	3-Fair		
1446	Maple, Sugar	11.5	3-Fair	3-Fair	X	X
1447	Oak, Northern Red	12.5	2-Good	2-Good	X	
1448	Oak, Northern Red	16	2-Good	2-Good	X	
1449	Oak, Northern Red	22.5	2-Good	2-Good	X	
1450	Oak, Northern Red	16.5	2-Good	2-Good	X	
1451	Oak, Northern Red	21	2-Good	2-Good	X	
1452	Oak, Northern Red	8	2-Good	2-Good		
1453	Oak, Northern Red	7	3-Fair	3-Fair		
1454	Oak, Northern Red	6.5	3-Fair	3-Fair		
1455	Oak, Northern Red	19.5	2-Good	2-Good	X	
1456	Redcedar, Eastern	8.5	2-Good	2-Good		
1457	Boxelder	8.5	2-Good	2-Good		
1458	Maple, Sugar	7	2-Good	2-Good		
1459	Oak, Northern Red	7	2-Good	2-Good		
1460	Hackberry	10	2-Good	2-Good	X	
1461	Oak, Northern Red	8.5	2-Good	2-Good		
1462	Maple, Sugar	9	2-Good	2-Good		
1463	Maple, Sugar	8.5	2-Good	2-Good		
1464	Maple, Sugar	7	2-Good	2-Good		
1465	Oak, Northern Red	8	2-Good	2-Good		X

TREE PRESERVATION SUMMARY

789 SURVEYED TREES MEETING ORDINANCE THRESHOLD
571 TOTAL PROPOSED REMOVALS

SIGNIFICANT TREES
470 TOTAL
350 PROPOSED REMOVALS

120 SIGNIFICANT TREES TO BE PROTECTED

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-TREE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

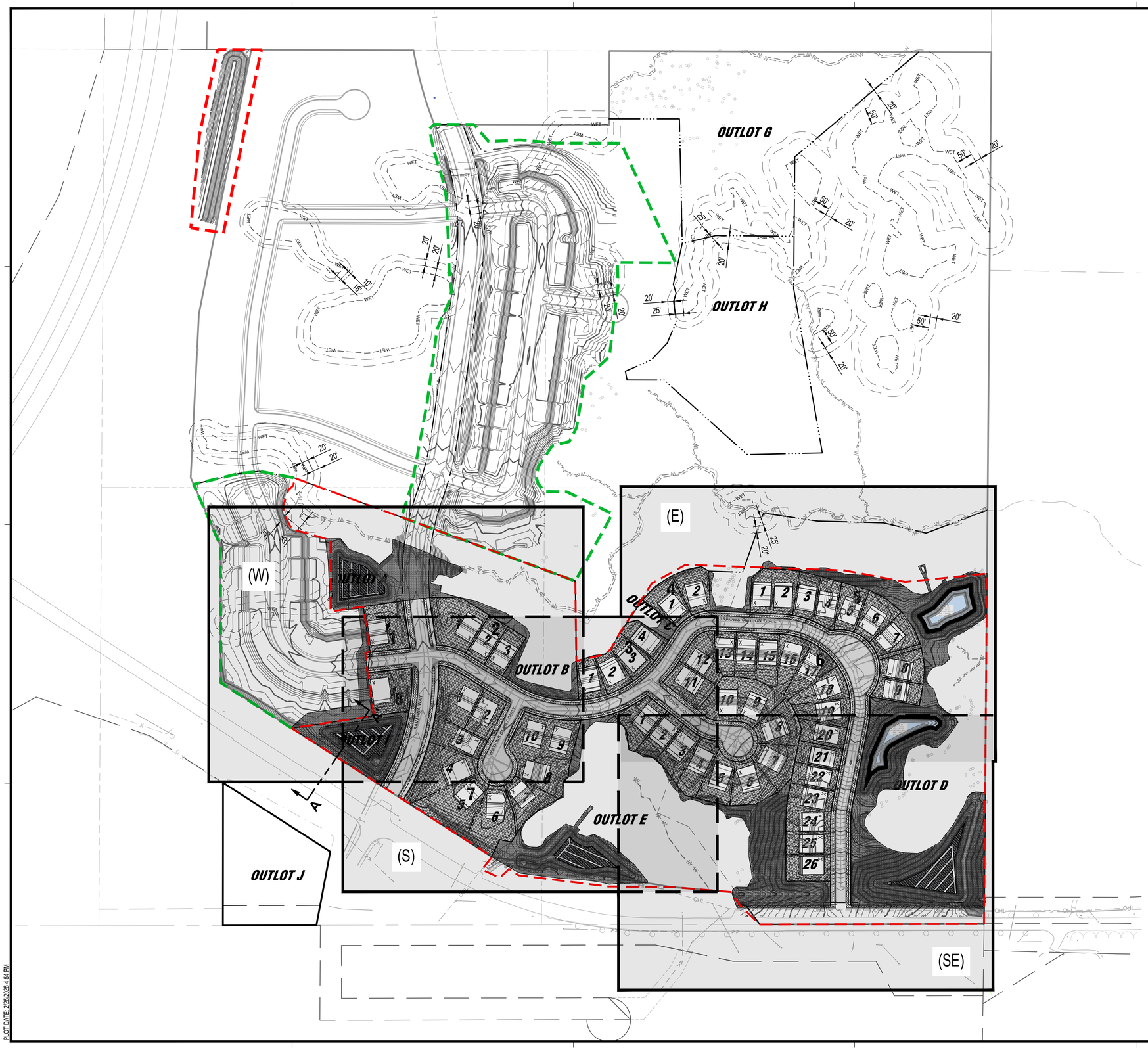
TREE INVENTORY

SHEET

80 OF 92

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:53 PM



RESTORATION SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME
SEED MIX		
	0.79 AC	DRY SWALE/POND (MNDOT 33-262)
	9.69 AC	LOW MAINTENANCE TURF (MNDOT 25-131)
	8.66 AC	MESIC PRAIRIE GENERAL (MNDOT 35-241)
	0.26 AC	STORMWATER BASIN (MNDOT 33-261)
SOD		
	1.22 AC	SALT TOLERANT SOD

NOTE: ALL MASS GRADING AREAS SHALL BE TEMPORARILY ESTABLISHED WITH MNDOT 22-111.
MNDOT BERM SHALL BE ESTABLISHED WITH MNDOT 35-241.

N

0 150 300
SCALE IN FEET

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

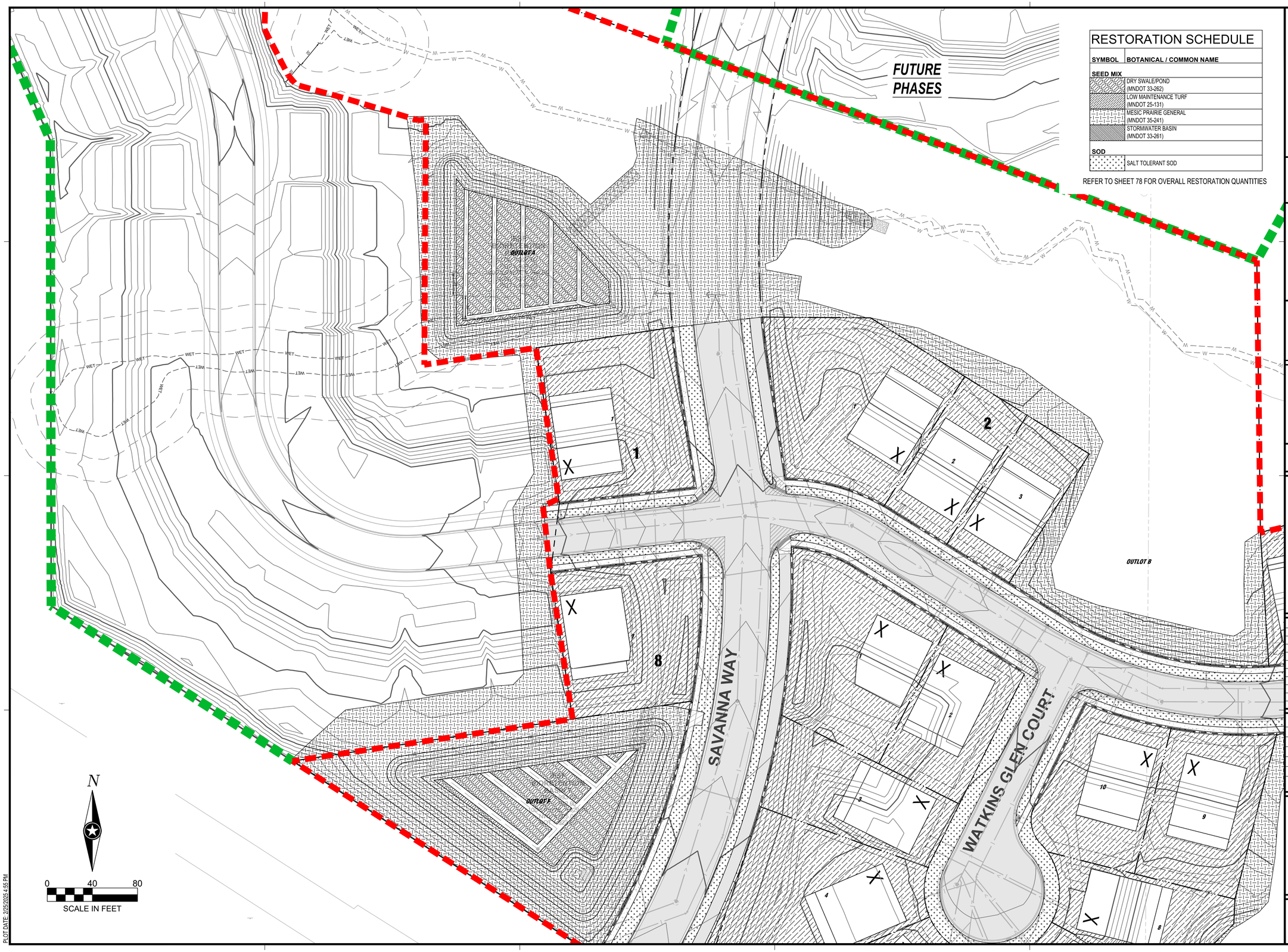
RESTORATION PLAN (OVERALL)

SHEET

81

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:54 PM



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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

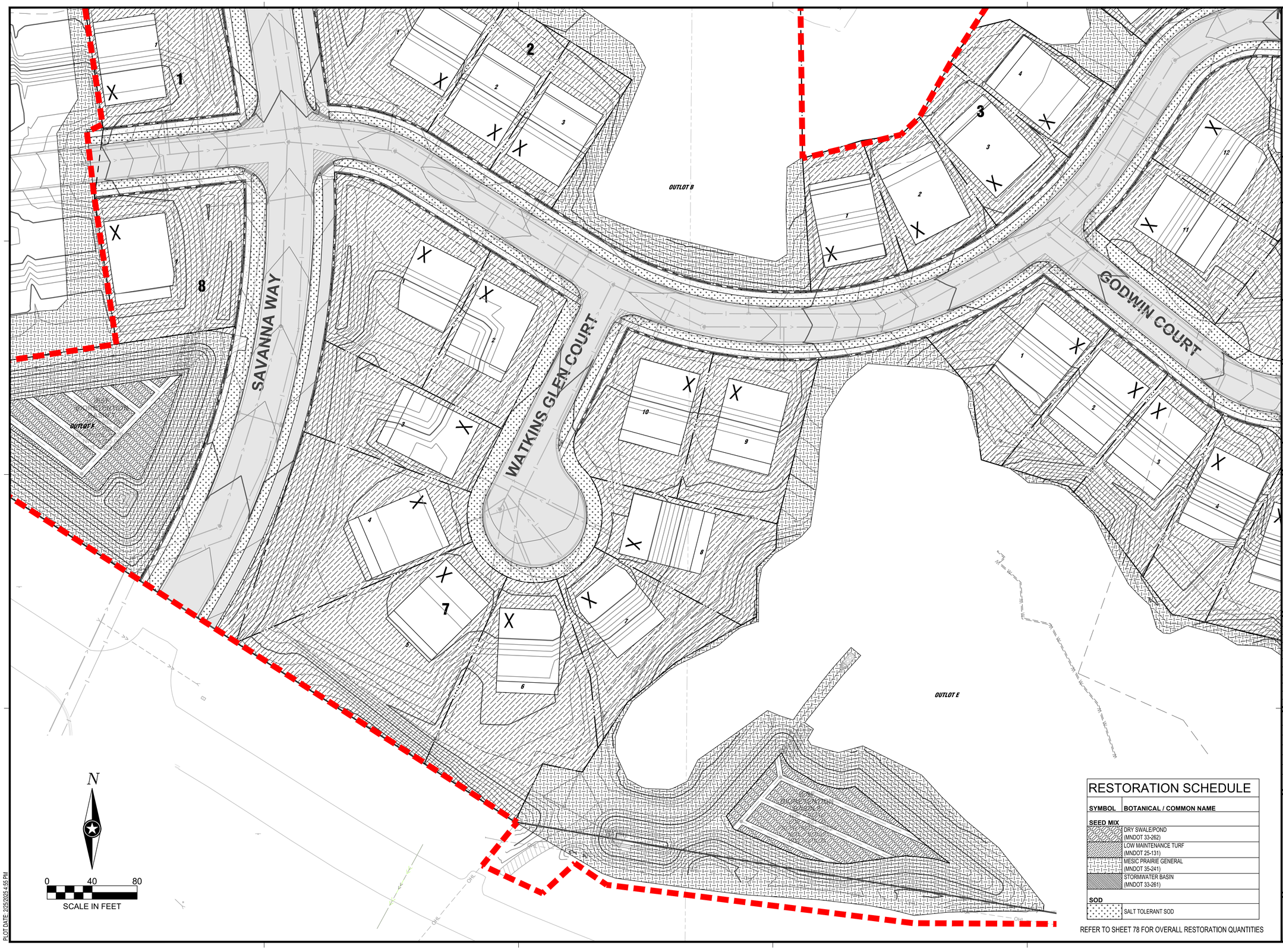
TITLE

RESTORATION PLAN (W)

SHEET

82

PRELIMINARY NOT FOR CONSTRUCTION



RESTORATION SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME
SEED MIX	
	DRY SWALE/POND (MNDOT 33-262)
	LOW MAINTENANCE TURF (MNDOT 25-131)
	MESIC PRAIRIE GENERAL (MNDOT 35-241)
	STORMWATER BASIN (MNDOT 33-261)
SOD	
	SALT TOLERANT SOD

REFER TO SHEET 78 FOR OVERALL RESTORATION QUANTITIES

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

RESTORATION PLAN (S)

SHEET

83

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:55 PM

RESTORATION SCHEDULE	
SYMBOL	**BOTANICAL / COMMON NAME**
SEED MIX	
	DRY SWALE/POND (MNDOT 33-262)
	LOW MAINTENANCE TURF (MNDOT 25-131)
	MESIC PRAIRIE GENERAL (MNDOT 35-241)
	STORMWATER BASIN (MNDOT 33-261)
SOD	
	SALT TOLERANT SOD

REFER TO SHEET 78 FOR OVERALL RESTORATION QUANTITIES

NARROWS CANYON TRAIL

GODWIN COURT

OUTLOT C

POND 10
EOP = 901.00
EOF = 900.00
100-YR HWL = 899.07
NWL = 894.00
BOT = 888.00

POND 11
EOP = 893.00
EOF = 892.00
100-YR HWL = 890.09
NWL = 886.00
BOT = 881.00

N

0 40 80
SCALE IN FEET

PLOT DATE: 2/25/2025 4:56 PM

ISG

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

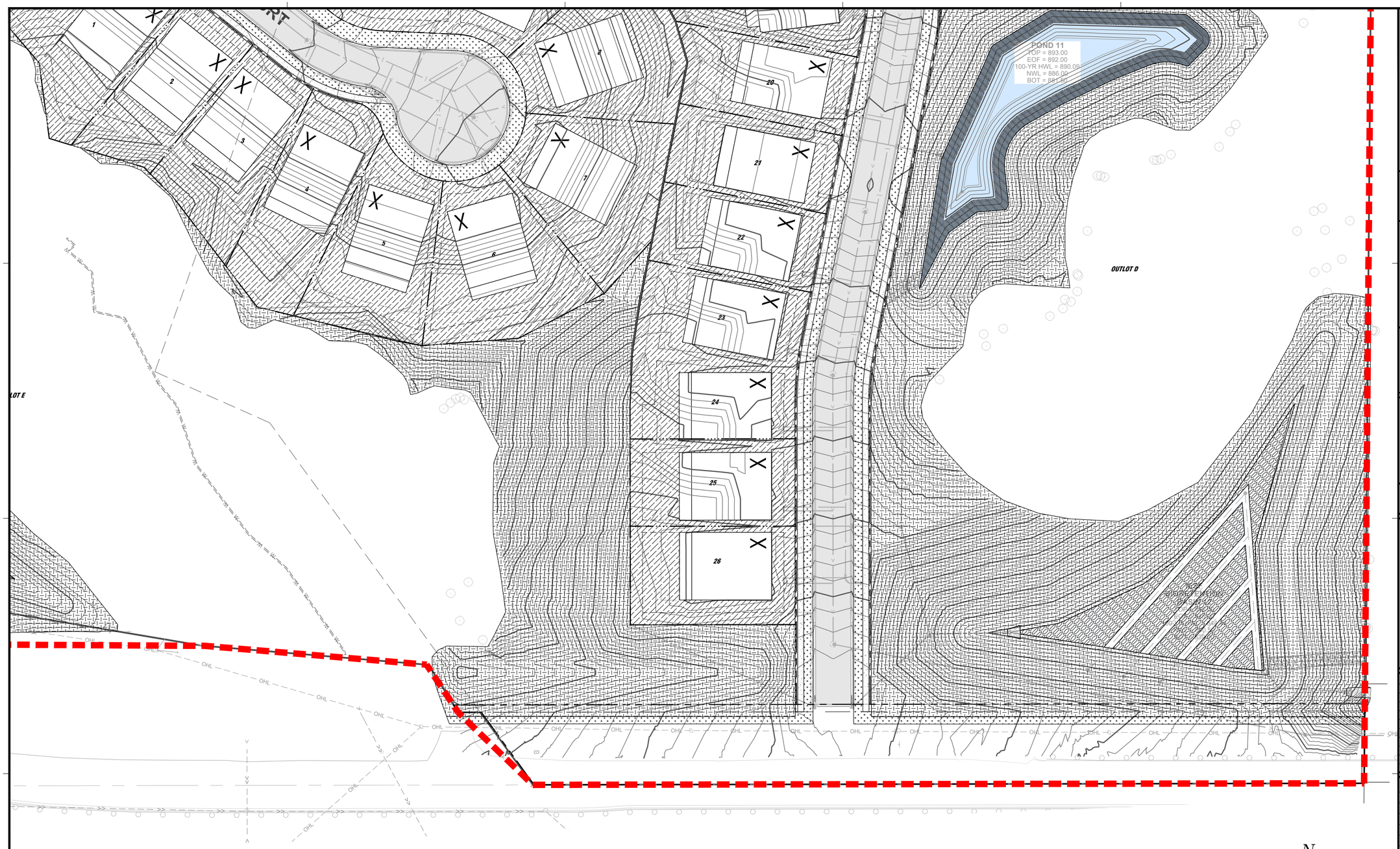
TITLE

RESTORATION PLAN (E)

SHEET

84

PRELIMINARY NOT FOR CONSTRUCTION



RESTORATION SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME
SEED MIX	
	DRY SWALE/POND (MNDOT 33-262)
	LOW MAINTENANCE TURF (MNDOT 25-131)
	MESIC PRAIRIE GENERAL (MNDOT 35-241)
	STORMWATER BASIN (MNDOT 33-261)
SOD	
	SALT TOLERANT SOD

REFER TO SHEET 78 FOR OVERALL RESTORATION QUANTITIES

N

0 40 80

SCALE IN FEET

PLOT DATE: 2/25/2025 4:56 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

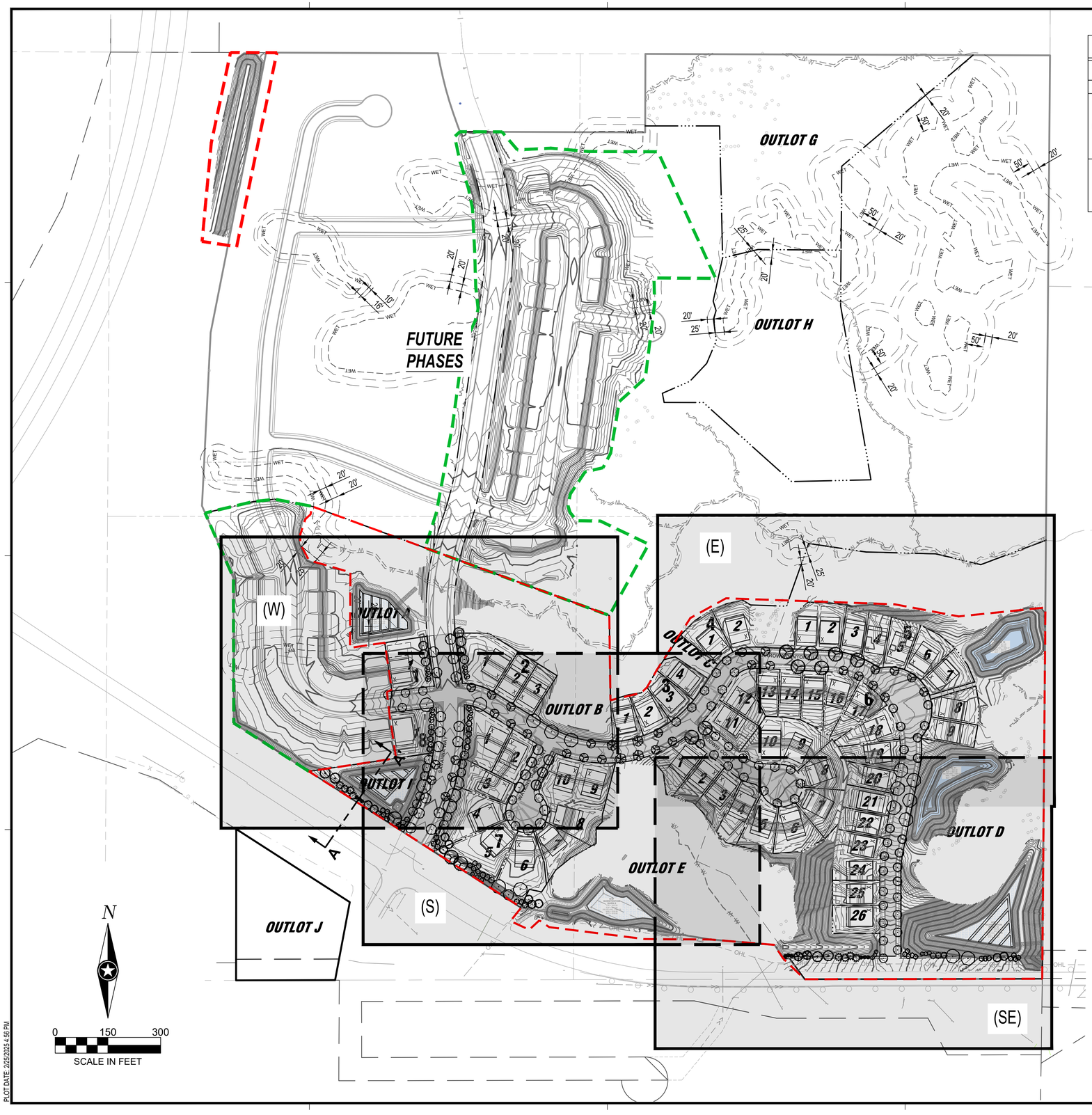
TITLE

RESTORATION PLAN (SE)

SHEET

85

PRELIMINARY NOT FOR CONSTRUCTION



LANDSCAPE REQUIREMENTS

AS REQUIRED IN CHASKA, MN

LOCATION	TYPE	REQUIRED	PROVIDED
ENTIRE SITE	STREET TREES	(1) OVERSTORY TREE SHALL BE PROVIDED FOR EVERY 50 FT ALONG PUBLIC STREETS, ON EACH SIDE, AT A MINIMUM 2.5" CAL. TREES TO BE PLACED NO LESS THAN 40 FT APART AND MAY BE DISTRIBUTED THROUGHOUT THE SUBDIVISION AND NEED NOT BE SPACED 50 FT APART. (1) OVERSTORY TREE REQUIRED PER LOT.	3,528 LF OF CENTERLINE X (2) (EACH SIDE) = 141 TREES REQUIRED, 163 PROVIDED.
PERIMETER	SCREENING	ALONG COLLECTOR AND ARTERIAL STREETS, EARTH BERMS AND PLANT MATERIAL SHALL BE PROVIDED FOR VISUAL SCREENING.	EVERGREEN AND OVERSTORY TREES HAVE BEEN PROVIDED FOR VISUAL SCREENING FROM ADJACENT COLLECTOR AND ARTERIAL STREETS.

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
EVERGREEN TREES					
	AB	17	ABIES BALSAMEA BALSAM FIR	6' HT MIN	B & B
	PA	8	PICEA ABIES NORWAY SPRUCE	6' HT MIN	B & B
	PB	16	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6' HT MIN	B & B
	PN	2	PINUS NIGRA AUSTRIAN PINE	6' HT MIN	B & B
	PR	10	PINUS RESINOSA NORWAY PINE	6' HT MIN	B & B
	PW	4	PINUS STROBUS EASTERN WHITE PINE	6' HT MIN	B & B
	TP	9	THUJA OCCIDENTALIS 'HETZ WINTERGREEN' HETZ WINTERGREEN ARBORVITAE	6' HT MIN	B & B
ORNAMENTAL TREES					
	AG	12	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE APPLE SERVICEBERRY	6' HT. MIN.	B & B
	MS	16	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE	2.5" CAL	B & B
	SI	9	SYRINGA RETICULATA 'IVORY SILK' IVORY SILK JAPANESE TREE LILAC	2" CAL	B & B
OVERSTORY TREES					
	AF	15	ACER X FREEMANII 'AF#1' FIREFALL™ MAPLE	2.5" CAL	B & B
	AS	20	ACER X FREEMANII `SIENNA` SIENNA GLEN® MAPLE	2.5" CAL	B & B
	BN	9	BETULA NIGRA RIVER BIRCH	2.5" CAL	B & B
	CO	4	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL	B & B
	GA	36	GINKGO BILOBA 'AUTUMN GOLD' TM AUTUMN GOLD MAIDENHAIR TREE	2.5" CAL	B & B
	GT	20	GLEDITSIA TRIACANTHOS 'SKYCOLE' F. INERMIS THORNLESS SKYLINE HONEYLOCUST	2.5" CAL	B & B
	QB	19	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
	QR	11	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
	PE	29	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PLANTING PLAN (OVERALL)

SHEET

86

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:56 PM

PLANT SCHEDULE AREA 1

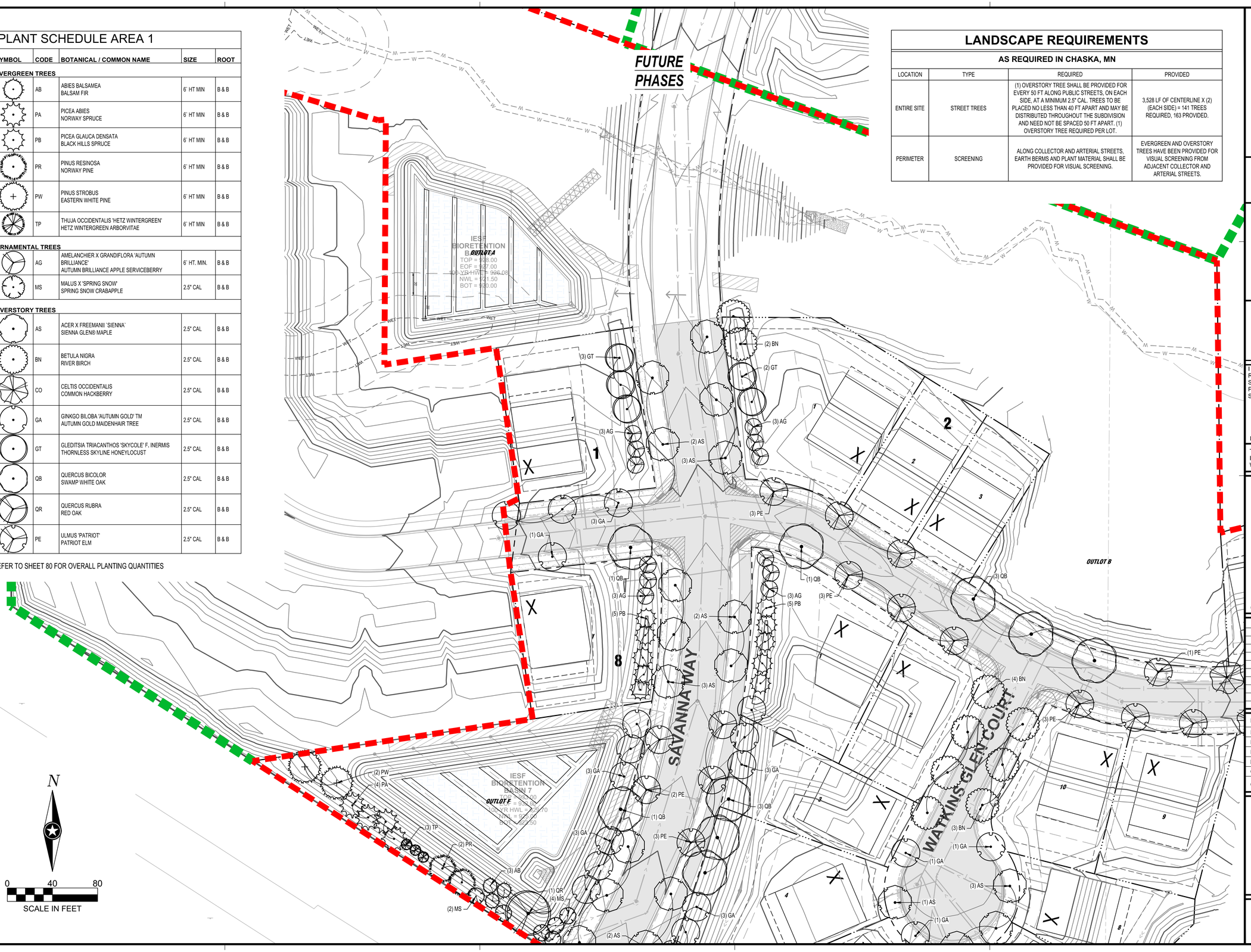
SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	ROOT
EVERGREEN TREES				
	AB	ABIES BALSAMEA BALSAM FIR	6` HT MIN	B & B
	PA	PICEA ABIES NORWAY SPRUCE	6` HT MIN	B & B
	PB	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6` HT MIN	B & B
	PR	PINUS RESINOSA NORWAY PINE	6` HT MIN	B & B
	PW	PINUS STROBUS EASTERN WHITE PINE	6` HT MIN	B & B
	TP	THUJA OCCIDENTALIS 'HETZ WINTERGREEN' HETZ WINTERGREEN ARBORVITAE	6` HT MIN	B & B
ORNAMENTAL TREES				
	AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE APPLE SERVICEBERRY	6` HT. MIN.	B & B
	MS	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE	2.5" CAL	B & B
OVERSTORY TREES				
	AS	ACER X FREEMANII `SIENNA` SIENNA GLEN® MAPLE	2.5" CAL	B & B
	BN	BETULA NIGRA RIVER BIRCH	2.5" CAL	B & B
	CO	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL	B & B
	GA	GINKGO BILOBA 'AUTUMN GOLD' TM AUTUMN GOLD MAIDENHAIR TREE	2.5" CAL	B & B
	GT	GLEDITSIA TRIACANTHOS 'SKYCOLE' F. INERMIS THORNLESS SKYLINE HONEYLOCUST	2.5" CAL	B & B
	QB	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
	QR	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
	PE	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

REFER TO SHEET 80 FOR OVERALL PLANTING QUANTITIES

LANDSCAPE REQUIREMENTS

AS REQUIRED IN CHASKA, MN

LOCATION	TYPE	REQUIRED	PROVIDED
ENTIRE SITE	STREET TREES	(1) OVERSTORY TREE SHALL BE PROVIDED FOR EVERY 50 FT ALONG PUBLIC STREETS, ON EACH SIDE, AT A MINIMUM 2.5" CAL. TREES TO BE PLACED NO LESS THAN 40 FT APART AND MAY BE DISTRIBUTED THROUGHOUT THE SUBDIVISION AND NEED NOT BE SPACED 50 FT APART. (1) OVERSTORY TREE REQUIRED PER LOT.	3,528 LF OF CENTERLINE X (2) (EACH SIDE) = 141 TREES REQUIRED, 163 PROVIDED.
PERIMETER	SCREENING	ALONG COLLECTOR AND ARTERIAL STREETS, EARTH BERMS AND PLANT MATERIAL SHALL BE PROVIDED FOR VISUAL SCREENING.	EVERGREEN AND OVERSTORY TREES HAVE BEEN PROVIDED FOR VISUAL SCREENING FROM ADJACENT COLLECTOR AND ARTERIAL STREETS.



PLOT DATE: 2/25/2025 4:57 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

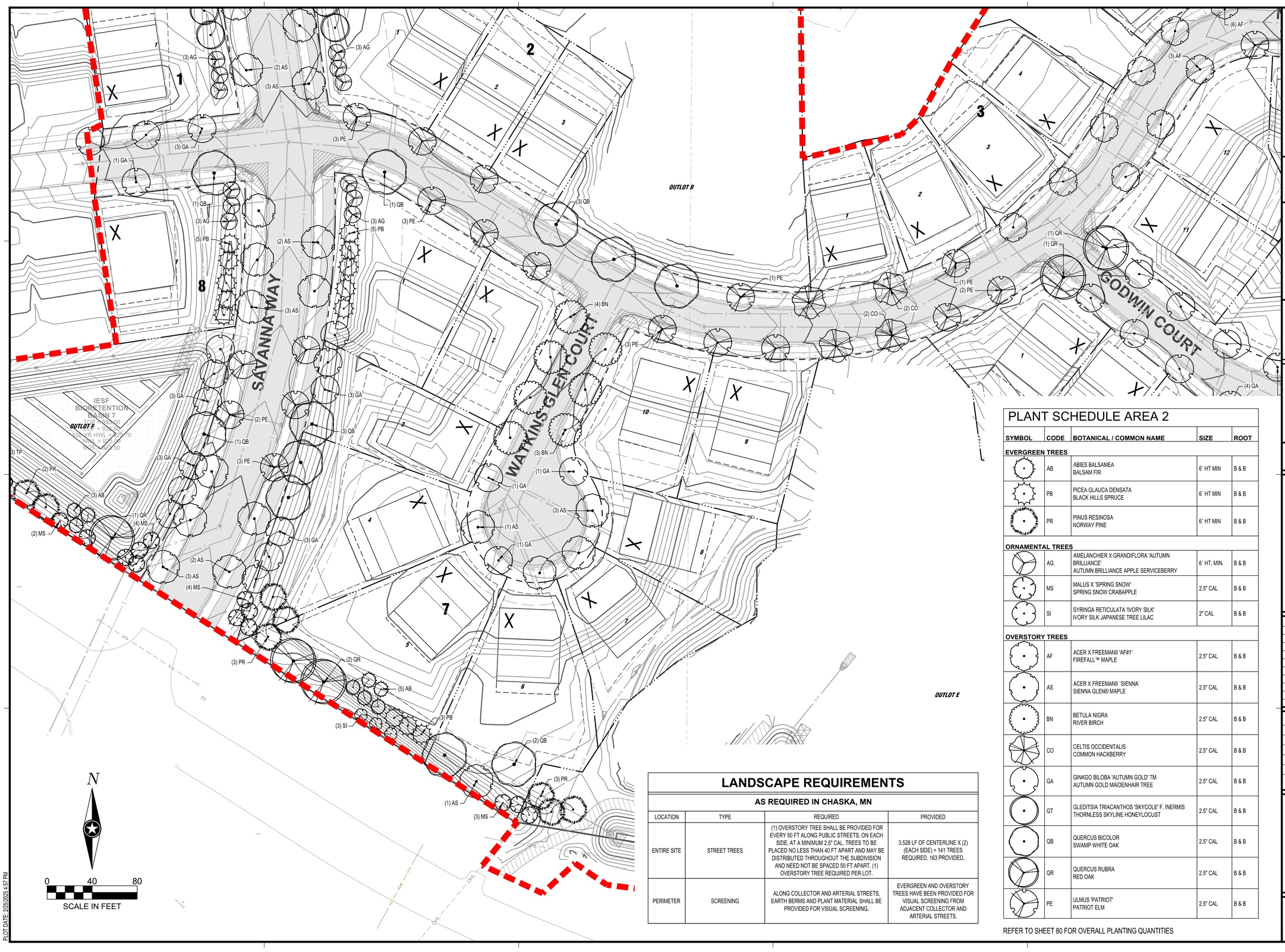
PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PLANTING PLAN (W)

SHEET

87



LANDSCAPE REQUIREMENTS

AS REQUIRED IN CHASKA, MN

LOCATION	TYPE	REQUIRED	PROVIDED
ENTIRE SITE	STREET TREES	(1) OVERSTORY TREE SHALL BE PROVIDED FOR EVERY 50 FT ALONG PUBLIC STREETS. ON EACH SIDE, AT A MINIMUM 2.5" CAL. TREES TO BE PLACED NO LESS THAN 40 FT APART AND MAY BE DISTRIBUTED THROUGHOUT THE SUBDIVISION AND NEED NOT BE SPACED 50 FT APART. (1) OVERSTORY TREE REQUIRED PER LOT.	3,528 LF OF CENTERLINE X (2) (EACH SIDE) = 141 TREES REQUIRED, 163 PROVIDED.
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PLANT SCHEDULE AREA 2

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	ROOT
EVERGREEN TREES				
	AB	ABIES BALSAMEA BALSAM FIR	6` HT MIN	B & B
	PB	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6` HT MIN	B & B
	PR	PINUS RESINOSA NORWAY PINE	6` HT MIN	B & B
ORNAMENTAL TREES				
	AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE APPLE SERVICEBERRY	6` HT. MIN.	B & B
	MS	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE	2.5" CAL	B & B
	SI	SYRINGA RETICULATA 'IVORY SILK' IVORY SILK JAPANESE TREE LILAC	2" CAL	B & B
OVERSTORY TREES				
	AF	ACER X FREEMANII 'AF#1' FIREFALL™ MAPLE	2.5" CAL	B & B
	AS	ACER X FREEMANII `SIENNA` SIENNA GLEN® MAPLE	2.5" CAL	B & B
	BN	BETULA NIGRA RIVER BIRCH	2.5" CAL	B & B
	CO	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL	B & B
	GA	GINKGO BILOBA 'AUTUMN GOLD' TM AUTUMN GOLD MAIDENHAIR TREE	2.5" CAL	B & B
	GT	GLEDITSIA TRIACANTHOS 'SKYCOLE' F. INERMIS THORNLESS SKYLINE HONEYLOCUST	2.5" CAL	B & B
	QB	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
	QR	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
	PE	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

REFER TO SHEET 80 FOR OVERALL PLANTING QUANTITIES

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

PLANTING PLAN (S)

SHEET

88

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 2/25/2025 4:57 PM

LANDSCAPE REQUIREMENTS

AS REQUIRED IN CHASKA, MN

LOCATION	TYPE	REQUIRED	PROVIDED
ENTIRE SITE	STREET TREES	(1) OVERSTORY TREE SHALL BE PROVIDED FOR EVERY 50 FT ALONG PUBLIC STREETS, ON EACH SIDE, AT A MINIMUM 2.5" CAL. TREES TO BE PLACED NO LESS THAN 40 FT APART AND MAY BE DISTRIBUTED THROUGHOUT THE SUBDIVISION AND NEED NOT BE SPACED 50 FT APART. (1) OVERSTORY TREE REQUIRED PER LOT.	3,528 LF OF CENTERLINE X (2) (EACH SIDE) = 141 TREES REQUIRED, 163 PROVIDED.
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PLANT SCHEDULE (E)

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	ROOT
OVERSTORY TREES				
	AF	ACER X FREEMANII 'AF#1' FIREFALL™ MAPLE	2.5" CAL	B & B
	GA	GINKGO BILOBA 'AUTUMN GOLD' TM AUTUMN GOLD MAIDENHAIR TREE	2.5" CAL	B & B
	GT	GLEDITSIA TRIACANTHOS 'SKYCOLE' F. INERMIS THORNLESS SKYLINE HONEYLOCUST	2.5" CAL	B & B
	QB	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B
	QR	QUERCUS RUBRA RED OAK	2.5" CAL	B & B
	PE	ULMUS 'PATRIOT' PATRIOT ELM	2.5" CAL	B & B

REFER TO SHEET 80 FOR OVERALL PLANTING QUANTITIES

NARROWS CANYON TRAIL

GODWIN COURT

OUTLOT C

(1) PE
(4) QR
(6) AF
(2) PE
(1) QR
(3) AF
(4) PE
(1) QR
(1) QR
(1) PE
(2) PE
(4) GA
(4) GA
(6) AF
(3) GT
(4) GT
(3) QB
(3) QB

POND 11
EOP = 893.00
EOF = 892.00
100-YR HWL = 890.00
NWL = 886.00
BOT = 881.50

N

0 40 80
SCALE IN FEET

PLOT DATE: 2/25/2025 4:59 PM

ISG

FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
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CLIENT PROJECT NO.	-

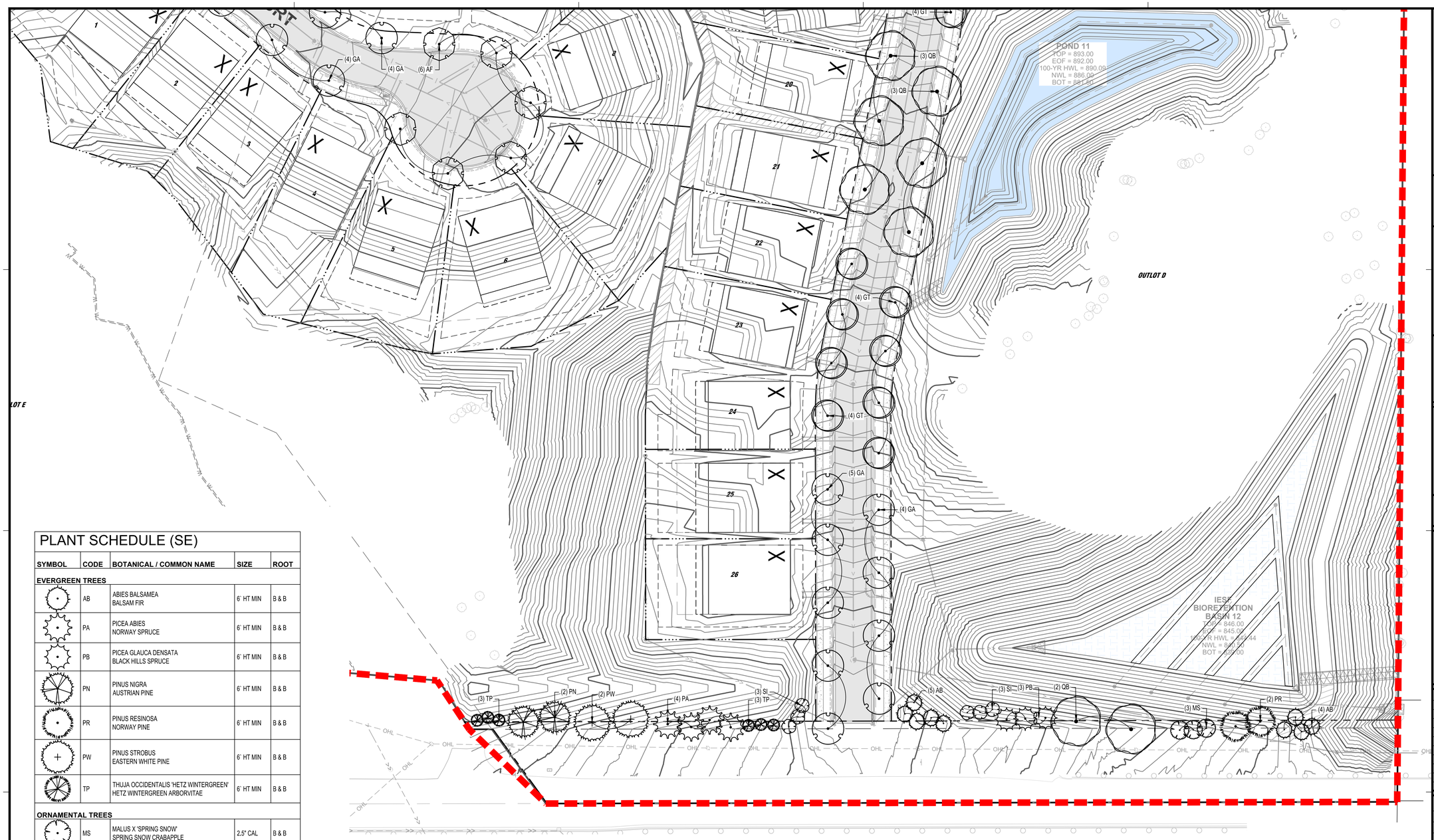
TITLE

PLANTING PLAN (E)

SHEET

89

PRELIMINARY NOT FOR CONSTRUCTION



PLANT SCHEDULE (SE)

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	ROOT
EVERGREEN TREES				
	AB	ABIES BALSAMEA BALSAM FIR	6` HT MIN	B & B
	PA	PICEA ABIES NORWAY SPRUCE	6` HT MIN	B & B
	PB	PICEA GLAUCA DENSATA BLACK HILLS SPRUCE	6` HT MIN	B & B
	PN	PINUS NIGRA AUSTRIAN PINE	6` HT MIN	B & B
	PR	PINUS RESINOSA NORWAY PINE	6` HT MIN	B & B
	PW	PINUS STROBUS EASTERN WHITE PINE	6` HT MIN	B & B
	TP	THUJA OCCIDENTALIS 'HETZ WINTERGREEN' HETZ WINTERGREEN ARBORVITAE	6` HT MIN	B & B
ORNAMENTAL TREES				
	MS	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE	2.5" CAL	B & B
	SI	SYRINGA RETICULATA 'IVORY SILK' IVORY SILK JAPANESE TREE LILAC	2" CAL	B & B
OVERSTORY TREES				
	AF	ACER X FREEMANII 'AF#1' FIREFALL™ MAPLE	2.5" CAL	B & B
	GA	GINKGO BILOBA 'AUTUMN GOLD' TM AUTUMN GOLD MAIDENHAIR TREE	2.5" CAL	B & B
	GT	GLEDITSIA TRIACANTHOS 'SKYCOLE' F. INERMIS THORNLESS SKYLINE HONEYLOCUST	2.5" CAL	B & B
	QB	QUERCUS BICOLOR SWAMP WHITE OAK	2.5" CAL	B & B

REFER TO SHEET 80 FOR OVERALL PLANTING QUANTITIES

LANDSCAPE REQUIREMENTS

AS REQUIRED IN CHASKA, MN

LOCATION	TYPE	REQUIRED	PROVIDED
ENTIRE SITE	STREET TREES	(1) OVERSTORY TREE SHALL BE PROVIDED FOR EVERY 50 FT ALONG PUBLIC STREETS, ON EACH SIDE, AT A MINIMUM 2.5" CAL. TREES TO BE PLACED NO LESS THAN 40 FT APART AND MAY BE DISTRIBUTED THROUGHOUT THE SUBDIVISION AND NEED NOT BE SPACED 50 FT APART. (1) OVERSTORY TREE REQUIRED PER LOT.	3,528 LF OF CENTERLINE X (2) (EACH SIDE) = 141 TREES REQUIRED, 163 PROVIDED.
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N

0 40 80

SCALE IN FEET

PLOT DATE: 2/25/2025 4:58 PM

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FORESTAR

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

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CLIENT PROJECT NO.	-

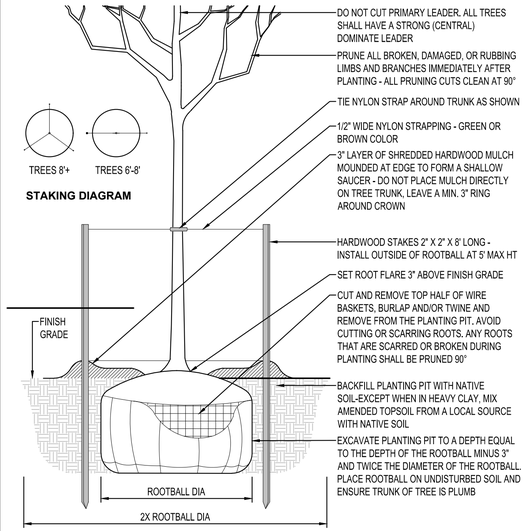
TITLE

PLANTING PLAN (SE)

SHEET

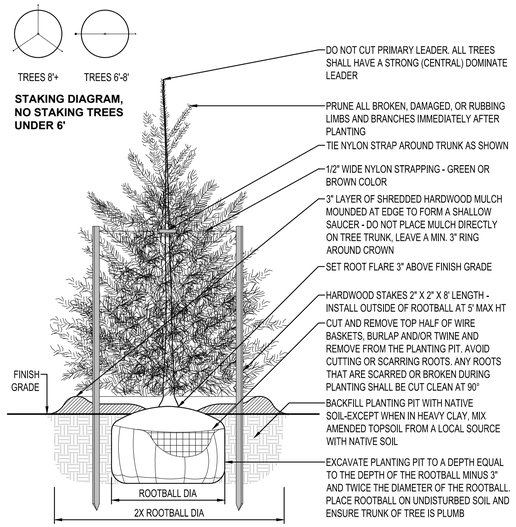
90

PRELIMINARY NOT FOR CONSTRUCTION



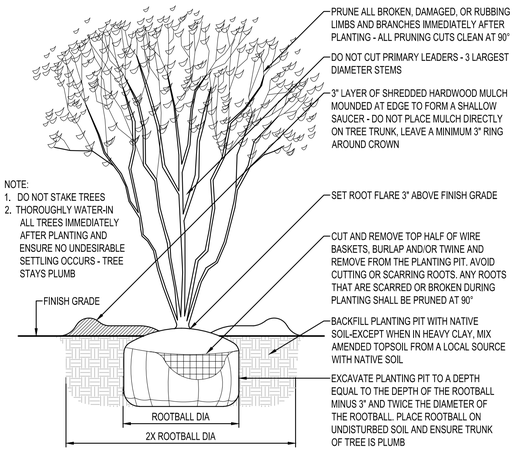
DECIDUOUS TREE PLANTING

NTS



EVERGREEN TREE PLANTING

NTS

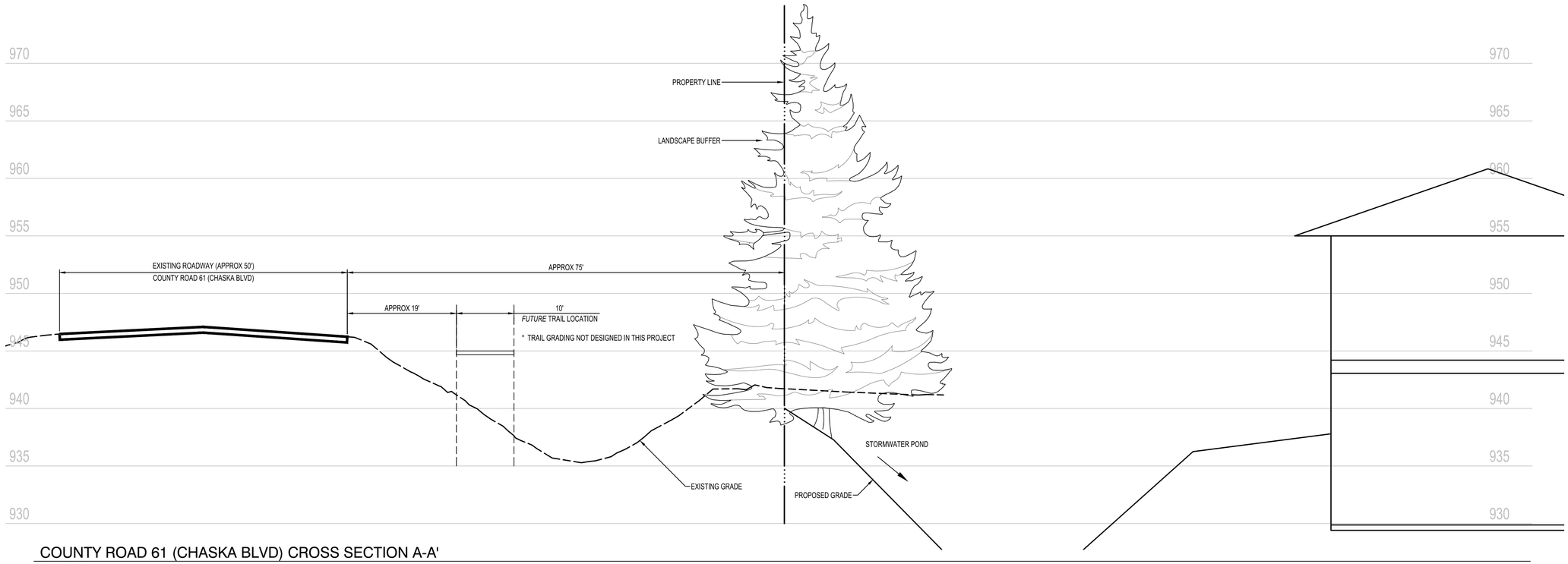


MULTI-STEM TREE PLANTING

NTS

PLANTING NOTES

1. COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED LANDSCAPE ELEMENTS (FENCE, FOOTINGS, TREE ROOTBALLS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONTINUING WORK.
2. SAVE AND PROTECT ALL EXISTING TREES NOT NOTED TO BE REMOVED.
3. REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
4. REFER TO PLANTING DETAILS FOR AMENDED SOIL DEPTH SURROUNDING TREES.
5. FIELD STAKE PLANTINGS ACCORDING TO PLAN. OWNER'S REPRESENTATIVE SHALL APPROVE ALL PLANT LOCATIONS PRIOR TO INSTALLATION. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REVISE PLANTING LAYOUT AT TIME OF INSTALLATION.
6. ALL PLANT MATERIALS SHALL BE TRUE TO THEIR SCIENTIFIC NAME AND SIZE AS INDICATED IN THE PLANT SCHEDULE.
7. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE SCHEDULE, THE PLANTING PLAN SHALL GOVERN.
8. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
9. ALL PLANT MATERIALS MUST CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1), LATEST EDITION PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON D.C. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO ANSI Z60.1.
10. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN A LIVE AND HEALTHY GROWING CONDITION FOR ONE FULL GROWING SEASON (ONE YEAR) AFTER FINAL PROJECT ACCEPTANCE OR SHALL BE REPLACED BY THE CONTRACTOR FREE OF CHARGE WITH THE SAME GRADE AND SPECIES.
11. ALL TREES SHALL HAVE A STRONG CENTRAL LEADER. ANY TREES DEEMED NOT TO HAVE A STRONG CENTRAL LEADER SHALL BE REJECTED.
12. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO CONSTRUCTION OPERATIONS. ANY AREAS THAT ARE DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
13. PROVIDE SHREDDED HARDWOOD MULCH SURROUNDING ALL PROPOSED TREES (5' Ø) TO A 3" MINIMUM DEPTH IN ALL AREAS LOCATED ON PLAN. DO NOT USE AN UNDERLAYMENT SUCH AS PLASTIC SHEET OR LANDSCAPE FABRIC. REFER TO PLANS FOR ADDITIONAL DETAILS. REFER TO STORMWATER DETAILS FOR BASIN CONSTRUCTION AND MULCH APPLICATION.
14. HARDWOOD MULCHING MATERIAL SHALL BE SHREDDED HARDWOOD MULCH, WITH NO INDIVIDUAL PIECES LARGER THAN 3", FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS, 3" MINIMUM DEPTH. MINIMUM DEPTHS AT LOCATIONS INDICATED ON DRAWINGS.
15. CONTRACTOR SHALL PROVIDE SAMPLE OF MULCH TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
16. INDICATED QUANTITIES ARE ESTIMATES AND SHALL BE CONFIRMED BY THE CONTRACTOR.
17. ADJUST SPACING OF PLANT MATERIALS AROUND ADJACENT UTILITY STRUCTURES.
18. ALL TURF AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED.



COUNTY ROAD 61 (CHASKA BLVD) CROSS SECTION A-A'

1" = 10'-0" * EXISTING GRADE IS APPROXIMATE, FOR REFERENCE ONLY

PLOT DATE: 2/25/2025 4:58 PM

ISG

FORESTAR

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-LAND
DRAWN BY	MNA
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

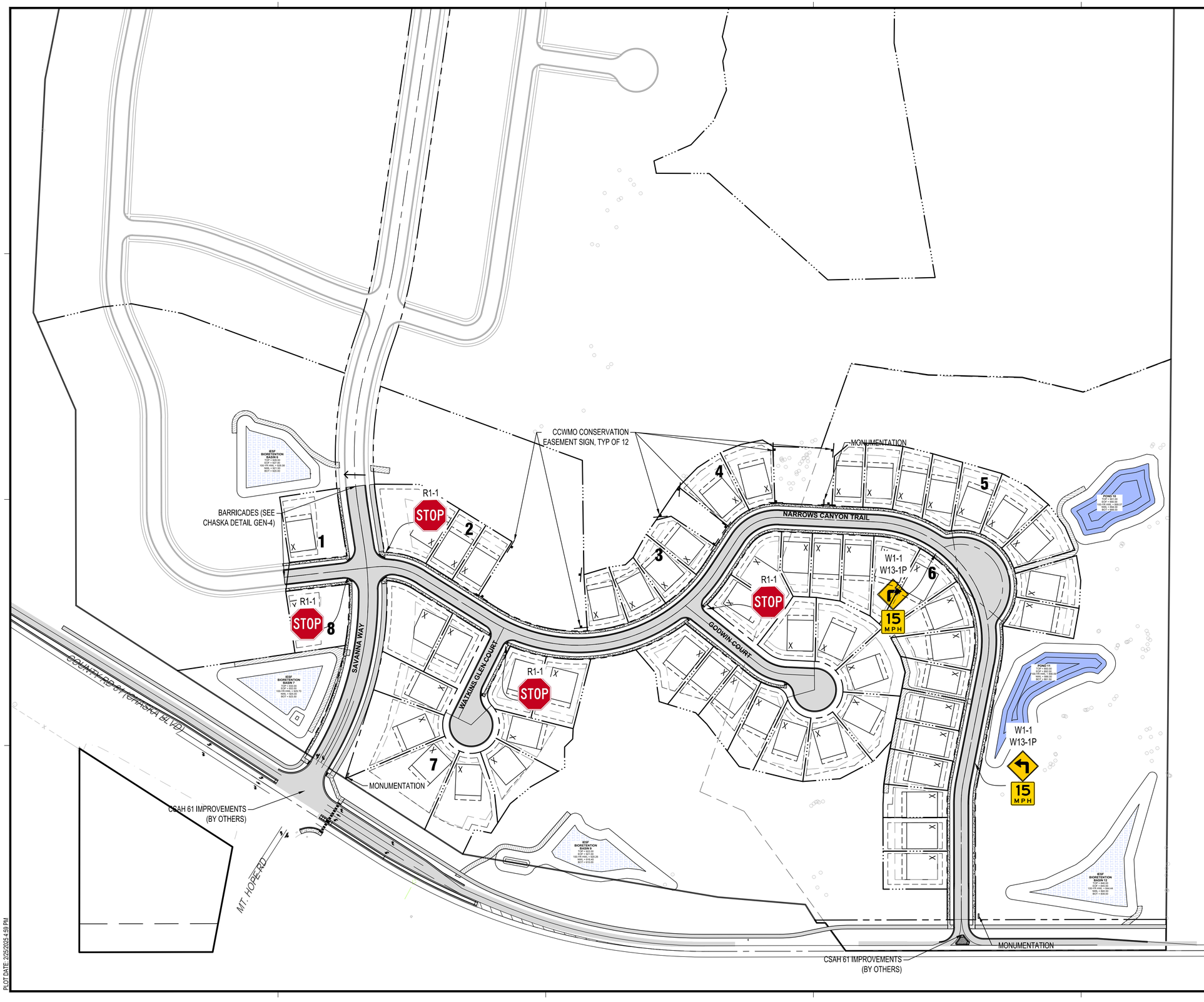
TITLE

PLANTING NOTES AND DETAILS

SHEET

91

PRELIMINARY NOT FOR CONSTRUCTION



PLOT DATE: 2/25/2025 4:59 PM

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PROJECT

FORESTAR

HIGHPOINT VISTAS (PHASE 1)

CHASKA MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	23-27575
FILE NAME	27575-SIGNAGE
DRAWN BY	AJR/LMM/LHH
DESIGNED BY	AJR/LMM/LHH
REVIEWED BY	RAG
ORIGINAL ISSUE DATE	10/01/24
CLIENT PROJECT NO.	-

TITLE

SIGNAGE PLAN

SHEET

92

OF 92

PRELIMINARY NOT FOR CONSTRUCTION

REQUEST FOR ACTION
CHASKA PLANNING COMMISSION
3/12/2025

Subject: **EDCO – Creek Road – Concept Plan**

Applicant: Pope Design Group

Location: North of Creek Road, south of Engler Boulevard

Case No.: P.C. No. 2025-02

Synopsis: The applicant is requesting Concept Plan approval for a two-story office/manufacturing/warehouse building totaling approximately 240,000 square feet

Prepared By: Elizabeth Hanson

Staff Recommendation: Motion to recommend approval

Introduction

The property in question is located on the west edge of the City. The following exhibit below is intended to show the general site area and adjoining uses:

Figure 1: Existing Site & Adjoining Uses

Neighborhood Meeting – January 30, 2025

The developer held a neighborhood meeting on Thursday, January 30th from 5:00pm-7:00pm. 4 neighbors attended the meeting, and shared questions regarding:

- Water usage/wastewater
- Potential truck traffic
- Screening on western property line

Concept Plan

The applicant is requesting approval of a Concept Plan. The following is intended to summarize the applicant's request:

- **Existing Conditions.** The site is comprised of almost 28 acres and is located north of Creek Road, south of Engler Boulevard (CR10), west of Chaska Creek Center, and east of Dahlgren Township. Rural residential properties abut the west edge of the site and are located south of Creek Road. The site is currently farmland and contains natural amenities like gently rolling hills, a creek which runs along the south property boundary, wetlands located on the north and south property boundaries, and tree cover along the north, east, and west property boundaries. A 20 foot wide electric easement encumbers the north edge of the site.

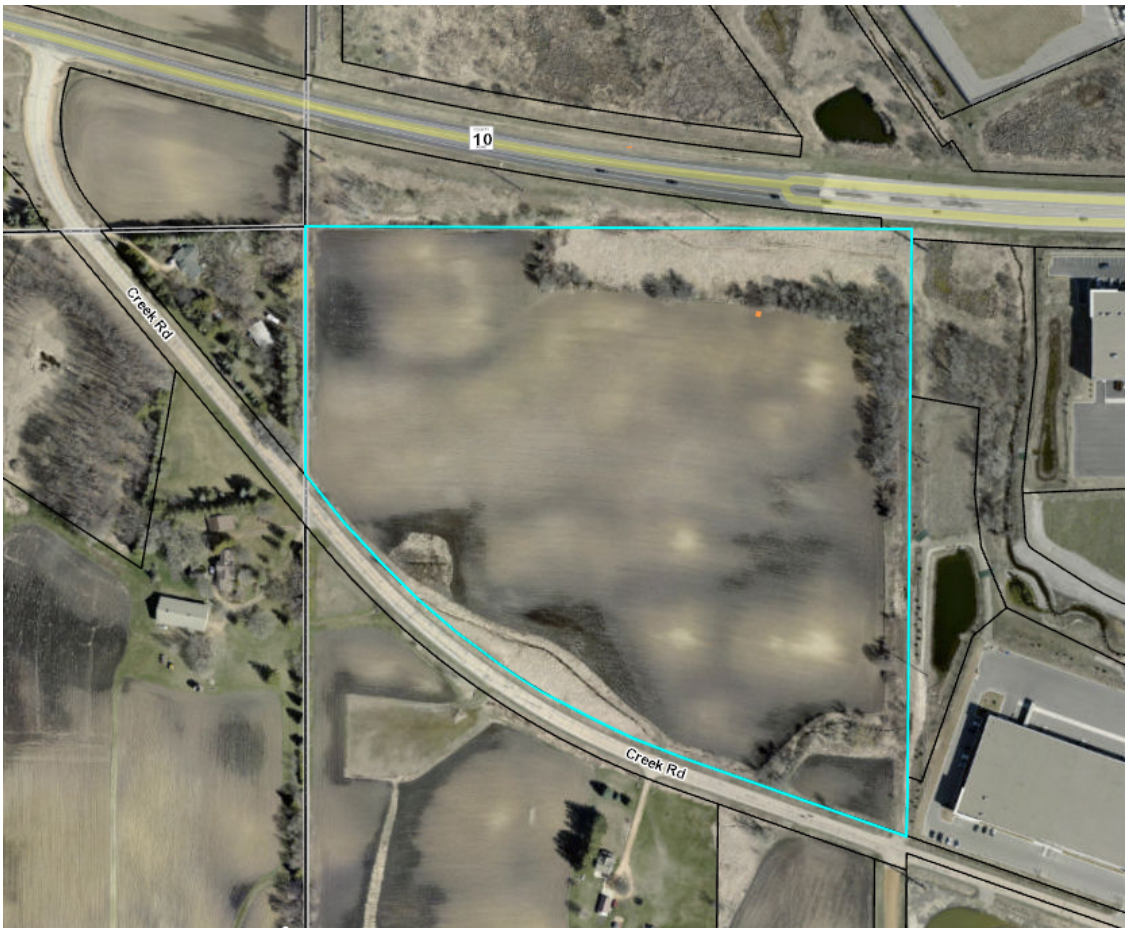

Figure 2: Existing Conditions

- **Concept Plan.** The concept plan contemplates a two-story building totaling 240,000 square feet for the business known as EDCO. A potential expansion area of approximately 120,000 square feet is shown east of the proposed building. The building would encompass office, manufacturing and warehouse functions for the business.

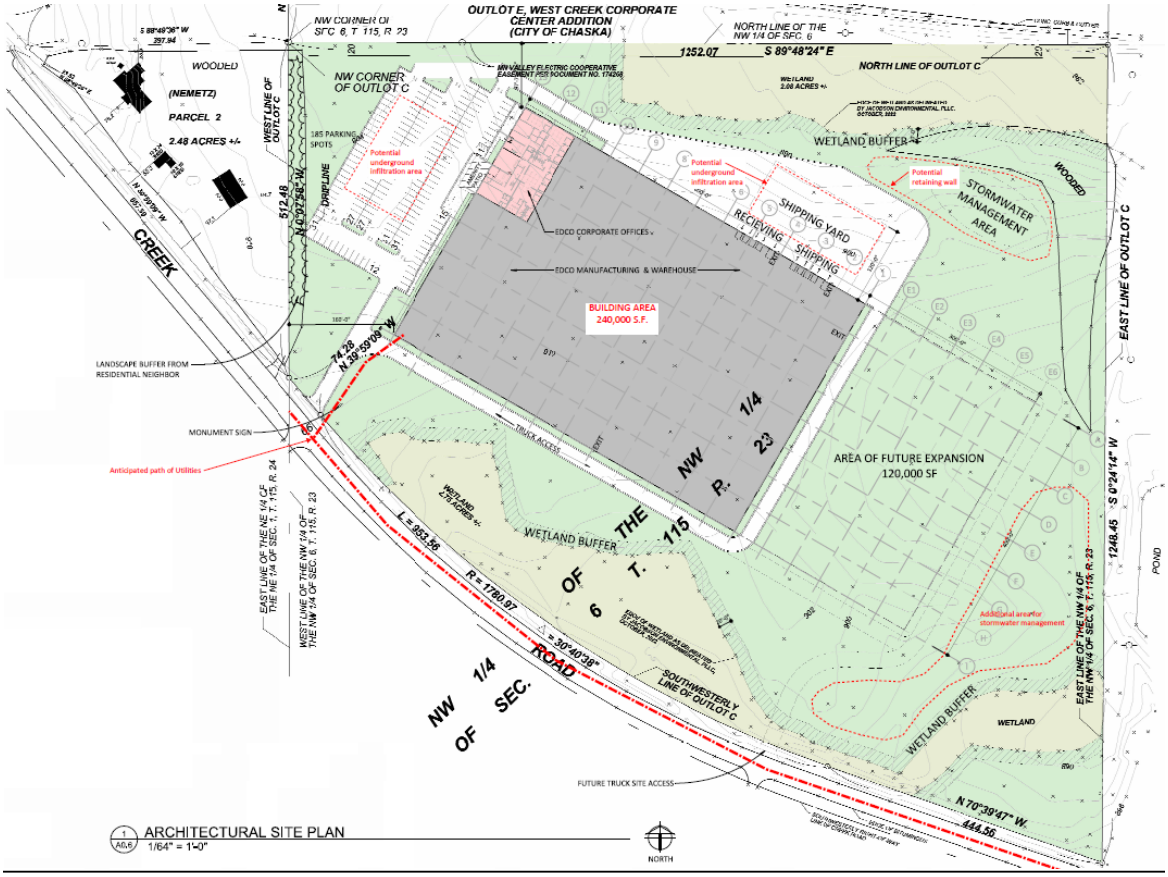

Figure 3: Proposed Concept Plan

EDCO: Started in 1946 in Hopkins, EDCO is one of the oldest and continuous running domestic metal fabricators, and is the largest manufacturer of prefinished metal siding products in the United States. Today, as the only true full-line manufacturer of exterior building materials, their product offering includes a comprehensive line of siding, roofing, soffit, fascia, and gutter systems.

EDCO currently has 2 sites in Hopkins. The south site on Excelsior Boulevard has 2 buildings that house the production portion of the business. This is the part that will be relocated to Chaska, along with warehouse space to accommodate build up of product during the winter months. The building at the intersection of Tyler and 2nd street is the distribution warehouse and will remain in Hopkins for this function.

Goals: The applicant has identified the following goals and guiding principles for the project:

- *Commitment to excellence* -
  - Proposed development creates a signature manufacturing facility in Chaska, while preserving key areas of open space on the site to maintain a rural feel.
- *Enhance Chaska's high quality of life*-
  - Providing trail connections, additional high-quality development, and manufacturing, warehousing, and office jobs to the community will enrich Chaska's already fantastic quality of life.
- *Maintain a sense of community and small town values* –
  - Planning for pedestrian connections and conservation of open space as an amenity will be guiding forces for the site as we move forward.

Parking: 185 parking stalls are provided on site west of the building.

Building Design: The building is a rectangular, 38 foot high, 240,000 square foot building, primarily one story with an office area that will be two-stories. The building proposes to use precast concrete panels with ribbed banding, a glazed two-story storefront, and colored metal accent panels. The site is also showing a potential expansion up to 120,000 square feet on the east side of the building.

Access: One point of access is proposed off of Creek Road. A second Creek Road access is proposed on the east side of the site, but would be installed after the building is occupied and as soon as wetland mitigation is approved.

Utilities and Stormwater: Utilities are available from Creek Road near the existing roundabout. These will be extended along Creek Road to the west access point into the site.

Stormwater facilities are proposed on the northeast, southeast and west sides of the site. The west stormwater facility is proposed to be an underground infiltration area.

- **Land Use.** The property is currently zoned Rural Residential (RR-2). The 2040 Comprehensive Plan guides this site as Business Park (see below).

Concept Plan - Staff Analysis

The applicant is requesting approval of a Concept Plan for EDCO on Creek Road. The following is intended to summarize staff's analysis of the applicants request:

Figure 4: 2040 Comprehensive Plan

- **Comprehensive Plan**
  The comprehensive plan guides the site as Business Park (purple). The proposed use is consistent with this.

  Business Park
  Areas guided for the integration of office and light industrial uses in order to create employment centers on large sites that provide a greater diversity of jobs, higher development densities and jobs per acre, higher

quality site and architectural design, and increased tax revenues. Office, office-showroom-warehousing, research and development services, high-tech electronic manufacturing, medical, and lodging are typical business uses appropriate for this land use category. Supporting retail and services, such as healthcare, fitness, child daycare, dry cleaning, bank, coffee shop, restaurant, and convenience store, should only be allowed as secondary uses, provided no more than 10 percent of the overall business park area is used for these purposes.

Land Use
EDCO is proposing to construct a new building on the property that would house their office, manufacturing and warehouse uses. The building is planned to accommodate one production shift (7:00am-3:00pm) consisting of 100 staff, one office shift (8:00am-4:30pm) consisting of 35 staff, and one distribution shift (3:30pm-11:00pm) consisting of 20 staff.

The parcel of land that this development encompasses is currently zoned Rural Residential (RR-2). The property will be rezoned during the preliminary request to a zoning district consistent with the Business Park guidance and proposed use.

- **Setbacks**
  The following tables summarize the required setbacks for the site:

BUILDING SETBACKS		
Direction	**Required Setback**	**Proposed Setback**
Interior Property Lines	15 feet	Unknown
West Property Line	100 feet	160 feet
Engler Blvd Centerline	125 feet	Unknown
Creek Road Centerline	100 feet	Unknown
Wetlands	Varies based on wetland type	Unknown

PARKING SETBACKS		
Direction	**Required Setback**	**Proposed Setback**
Street ROW/Residential	10 feet	10 feet
Interior Property Lines	5 feet	5 feet
Wetlands	Varies based on wetland type	Unknown

The applicant will have to show in their preliminary submittal if they meet these setbacks.

- **Layout**
  Access is proposed on the southwest edge of the property off of Creek Road. The proposed building will be located near the center of the site with parking on the west

side of the building. A truck driveway is shown on the south side of the site which would provide access to the shipping yard oriented on the northeast side of the building facing Engler Boulevard. A second point of access is shown on the southeast side that would be installed after the building is occupied and the wetland mitigation is approved. An expansion area is anticipated on the east side of the building totaling approximately 60,000-120,000 square feet.

The proposed EDCO site is currently owned by the Haasken family. The Haasken family also owns a 2.5 acre property that touches the northwest corner of the property (see Figure 5 below). Being that this 2.5 acre property is located on a corner of a major county highway, there is a question on how access spacing will be achieved off of Creek Road. The family is starting to discuss access options here that may involve the EDCO site. It will be important as the development prepares for preliminary that the access to this 2.5 acre site is properly being evaluated.

Figure 5: Exhibit showing 2.5 acre Haasken property

- **Parking, Circulation & Loading Docks**

The site is proposing to incorporate 185 parking spaces. The following chart summarizes the overall parking demand on site, based on the City's parking code.

Uses	Approx. Size	Code Req.	Est. Parking Req.
Office	22,500 sf	1ps/250 sf	90
Manufacturing	Unknown	1ps/350 sf	Unknown
Warehousing	Unknown	1ps/2,000 sf	Unknown
		REQUIRED	**90+ parking spaces**
		PROVIDED	**185 parking spaces**

According to the table above it is unclear if the building is meeting parking requirements based on the proposed uses. As noted above under Land Use, the building could have a maximum of 160 employees on site at one time if shifts overlap – it appears, at a minimum, the proposed parking will accommodate the proposed employee needs in overlapping situations.

With a building expansion anticipated in the next 5 years it will be important for the applicant to show area for parking expansion as well – with approximately 120,000 square feet of added manufacturing space it would require 343 parking spaces to meet parking code. The applicant will have to show in their preliminary submittal how they meet parking requirements for the proposed and future expansion areas and explain the parking needs of the facility.

The applicant states that they will have approximately 10-12 tractor/trailer visits per day. The loading docks are proposed on the northeast side of the building. Truck access can be achieved from the main access point and via a drive aisle south and east of the proposed building. This truck access loop also serves as a fire access loop around the entirety of the building. A second point of access is shown on the southeast side that would act as the main truck access into the site once constructed. This access point will be installed once the building is occupied and wetland mitigation has been approved. Staff would advise reorienting the loading dock area to the southeast corner of the building facing Creek Road. Engler Boulevard has more traffic than Creek Road so moving the loading docks away from Engler is more ideal. It will still be important that with reorientation of the loading docks that adequate screening and berming is achieved on the edge facing Creek Road and residential areas. The applicant will have to address this in their preliminary submittal.

- **Landscaping & Screening**
  The table below indicates the landscaping requirements for this building:

LANDSCAPING REQUIREMENTS & PROPOSED		
	Required	**Proposed**
Overstory Trees	750 caliper inches (~300 trees)	Unknown
Understory Trees	75	Unknown
Shrubs	800	Unknown

The applicant will have to show in their preliminary submittal how they meet the landscape ordinance (Section 15.28.070), including but not limited to planting island requirements.

In addition, screening will be important for this site along sides that abut major vehicular thoroughfares and residential uses. The west neighbor is a residential use so it will be important that the west edge and parking lot of the site is properly screened via landscaping and berming. The proposed concept plan is contemplating a buffer edge here (see below).

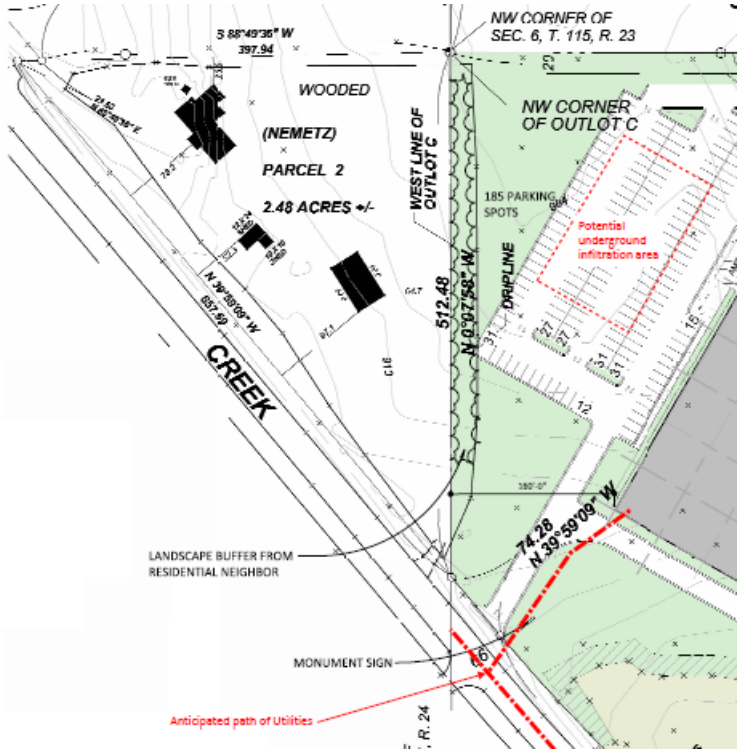

Figure 6: Buffer plan

The loading dock area also needs to be screened. Staff would advise that berming and landscaping be used to properly screen this area.

- **Building Design & Materials**
  The building is a rectangular, 38 foot high, 240,000 square foot building, primarily one story with an office area that will be two-stories. The building proposes to use precast concrete panels with ribbed banding, a glazed two-story storefront, and colored metal accent panels. The site is also showing a potential expansion up to 120,000 square feet on the east side of the building.

Figure 7: Rendering of proposed building (northwest elevation)

The City of Chaska has certain building design and material requirements for industrial buildings (Section 15.28.120). A portion of it is stated as follows:

Industrial and warehouse buildings shall use at least two (2) different Class I materials and shall be composed of at least thirty (30) percent Class I material, and at least one (1) Class II materials and be composed of at least thirty (30) percent Class II materials; and not more than forty (40) percent of Class III materials.

The applicant will have to show in their preliminary submittal how they plan to meet these requirements.

- **Pedestrian Connections & Gathering Areas**
  The site currently does not contain any pedestrian connections. The concept plan is showing nearby pedestrian connections and the extension of the trail on the north side of Creek Road that stubs at the intersection of Creek Road and Chaska Creek Boulevard. This trail will be required to be installed up to the development limits at the time of Creek Road's reconstruction.

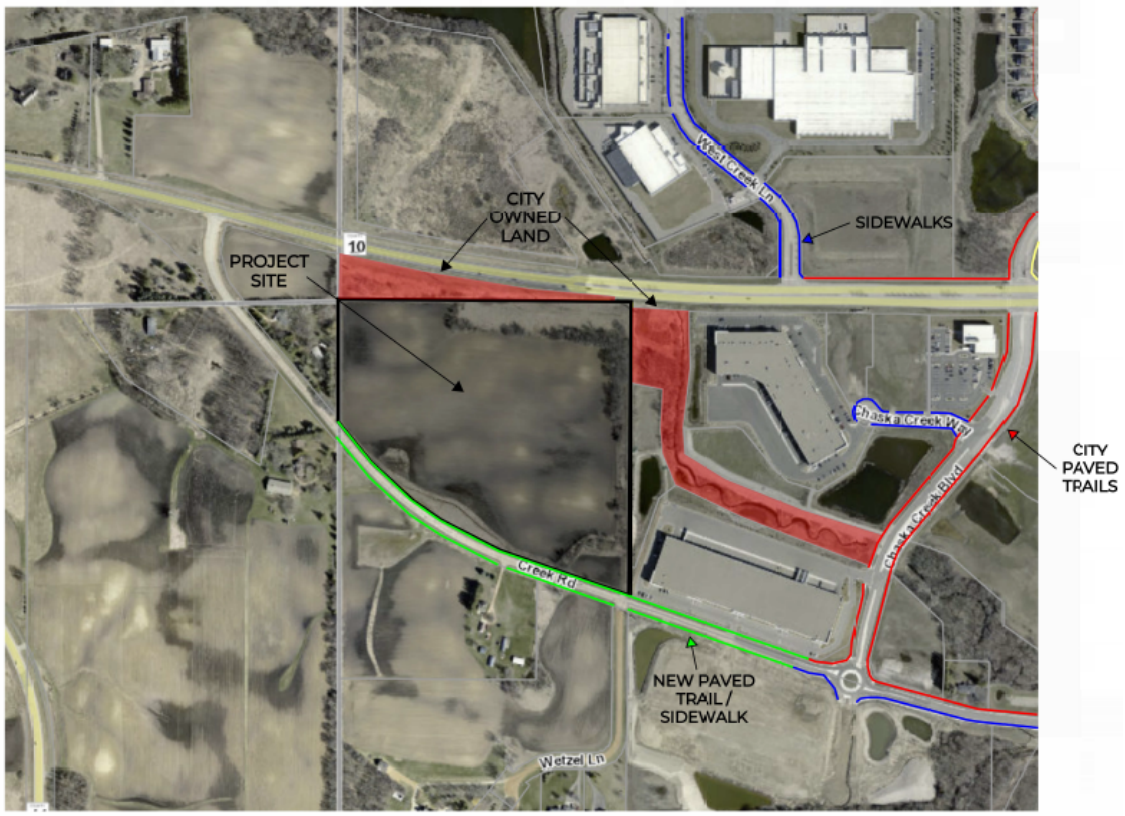

Figure 8: Exhibit showing pedestrian connections

The proposed building is located west of the business park known as Chaska Creek Business Center. At the concept plan approval of Chaska Creek Business Center, one of the main concepts that was approved was *the incorporation of pedestrian gathering places for employees to benefit from, and also connecting people to the natural amenities of the site*. The business park's industrial site plans directly east of the subject site included outdoor picnic areas that were nestled into the landscaping of the site; one on the south

side of the site, and one on the southwest side of the site off the mowed pathway proposed along the stormwater ponds and creek. Several benches, or 'Repose' areas, were proposed along these same mowed pathways, offering people to sit and enjoy a more natural area overlooking the creek. The mowed pathway would provide access from the south side of Lot 1, Block 1's site and on the east side to connect into the paved pedestrian trail on Chaska Creek Boulevard.

Like the adjacent business park it will be required that the EDCO site also incorporate similar provisions. For preliminary submittal the applicant will have to show how they will incorporate pedestrian gathering places and connecting people to the natural amenities. Additionally, they will have to show how they connect into adjacent pedestrian facilities.

- **Creek Road**
  The site plan currently shows access off Creek Road, which is designated as a city municipal state aid route. The road is intended to be reconstructed to an urban section road with curb and gutter. The city continues to refine the plan and timing for this road reconstruction. The applicant will be required to coordinate with the city engineering department on this item.

- **Utilities**
  Utilities are able to serve the building. There is an existing trunk sewer and water line that stubs near the Creek Road/Chaska Creek Boulevard roundabout.

- **Stormwater**
  Stormwater management is shown as above ground systems on the northeast and southeast sides of the site. An underground system is also contemplated under the proposed parking lot. Stormwater will need to meet City and County requirements. A stormwater plan will be required at preliminary submittal.

- **Wetlands**
  Because there are known wetlands on site and a proposal to impact a portion of the south wetland with the secondary vehicle access, the applicant will have to conduct a wetland delineation report and mitigation/impact analysis for their preliminary submittal. Any wetland impacts need to be reviewed and approved by the Technical Evaluation Panel (TEP).

Deadline for Agency Decisions

Complete Application Received	60-day review *	120 – day **
February 27, 2025	April 28, 2025	June 27, 2025
* Pursuant to MN State Statutes the City must act on the request within 60-days. ** The city can provide the applicant with a written letter requesting an additional 60-day review period.		

Planning Commission Action Requested:
Motion to recommend approval to the City Council approval of the concept plan for the EDCO building on Creek Road, subject to the following conditions:

1. Approvals shall be based on the following graphic exhibits unless modified by the conditions below:
    a. Narrative (pgs 1-4), prepared by Pope Design Group, dated February 4, 2025 and revised February 25, 2025
    b. Proposed EDCO Development Neighborhood Meeting, prepared by Pope Design Group, dated January 30, 2025
    c. Existing Conditions, prepared by Pope Design Group, dated February 4, 2025
    d. Existing Land Use, prepared by Pope Design Group, dated February 4, 2025
    e. City Land Proximity Map, prepared by Pope Design Group, dated February 4, 2025
    f. Existing Conditions with photos, prepared by Pope Design Group, dated February 4, 2025
    g. Future Conditions, prepared by Pope Design Group, dated February 4, 2025
    h. Architectural Site Plan, prepared by Pope Design Group, dated February 4, 2025
    i. Exterior Elevations, prepared by Pope Design Group, dated February 4, 2025
    j. Rendering, prepared by Pope Design Group, dated February 4, 2025
2. Adherence to the City Engineer memo dated March 12, 2025.
3. Adherence to the Carver County memo when made available.
4. Compliance with City Code Sec. 15.28 (Special Regulations), including but not limited to the following, and to be submitted with the preliminary site plan application:
    a. Tree inventory and preservation plan;
    b. Landscaping plans in conformance with City Code Sec. 15.28.070;
    c. Grading plans;
    d. Stormwater plan; and
    e. Wetland Mitigation Plan
    f. Truck turning exhibit
    g. Fire truck turning exhibit
    h. Lighting plans in conformance with City Code Sec. 15.28.250
    i. Parking plan meeting proposed and future needs of the site and in conformance with City Code Sec. 15.28.030
    j. Cross sections showing adjacent residential, street grades, screening/landscaping, parking areas, loading dock areas and building
    k. Trail extension along Creek Road up to the western property limits
5. Evaluation and provision of the following to be submitted at preliminary submittal:
    a. Pedestrian gathering places for employees, and connecting people to the natural amenities of the site that could also connect with the adjacent Chaska Creek Business Center's site
    b. Reorientation of the loading dock to the southeast portion of the site/building
    c. Screening in the form of landscaping and berming from the proposed parking and loading dock areas and to be high enough to screen the top of the dock doors
    d. Access options to 2.5 acre Haasken property through EDCO's site
6. Coordination with:
    a. City Engineer regarding utilities, grading, drainage, access, and Creek Road reconstruction.
    b. Electrical agency Minnesota Valley on electric service requirements.
    c. Carver County Public Works on platting and right-of-way requirements along County Road 10
7. Building setbacks are as follows:

    a. Interior Property Lines: 15 – feet
    b. West Property Line: 100 - feet
    c. Engler Boulevard Centerline: 125 – feet
    d. Creek Road Centerline: 100 - feet
    e. Wetlands: Varies based on wetland type
8. Parking setbacks are as follows:
    a. Right-of-way or residential: 10 – feet
    b. Interior Property Lines: 5 – feet
    c. Wetlands: Varies based on wetland type
9. Provision of a storm water management plan meeting City and Carver County WMO standards for both proposed and future needs of the site.
10. Provision of a wetland mitigation plan to be completed and approved prior to issuance of a grading permit and prior to preliminary submittal.
11. Cost participation agreement between the developer and city on the utility extensions and street reconstruction of Creek Road.

City of Chaska
Memorandum

To: **Planning Commission**
From: **Alex Mollenkamp, Assistant City Engineer**
Date: **March 12, 2025**
Subject: **Edco / Haasken Concept Plan – Engineer's Memo**

The Haasken property being considered for development is located within the city's southwest development area between Creek Road and Engler Boulevard (County Highway 10). The project proposes a new industrial building that requires extension of City utilities along with new access(s) along Creek Road.

The site contains several wetlands areas requiring agency review and acceptance prior to preliminary City approvals. Any wetland areas proposed to be impacted must be approved prior to a grading permit being issued. The wetlands located near the SE corner of the property is prioritized in the City's surface water plan for potential restoration. The City's policy in terms of wetlands would be to ensure high priority wetlands are protected with the intent for opportunities to enhance or restore the areas back to previous conditions.

For preliminary plan approval, the project requires all agency storm water standards are met. The City's stormwater standards are outlined in the surface water management plan. For a grading permit for the site to be considered, all the wetland and storm water agency approvals must be secured.

In terms of city utilities, the site requires extensions of trunk water main and gravity sewer. The previous industrial park projects along Chaska Creek Boulevard combined with the extension of trunk sewer along Creek Road have provided trunk utilities with adequate capacity to support the new building site. Both trunk water and sewer stubs are located east of the property near the roundabout at Chaska Creek Boulevard and Creek Road.

The site plan currently shows access off Creek Road, which is a designated City municipal state aid route. Both the utility extension and street reconstruction require a development cost participation agreement between the City and Developer.

Concept Plan Narrative

02/04/2025
Revised 02/25/25

Re: TCWG, LLC – New Industrial Development
Section 06 Township 115 Range 023
Parcel 30.6940070
Project No. 71830-25009

Subject: **Concept plan narrative for proposed development**

To: City of Chaska – Planning Department

From: Brock Martinson, Pope Design Group

Dear Planning Staff,

We are submitting on behalf of our client TCWG, LLC who is currently in the process of acquiring the referenced property from Cal Haasken for the purpose of constructing a new build-to-suit industrial development to house EDCO Products' manufacturing, warehousing, and office space on the 27.91 acre site. The building will be primarily single story with a second level constructed to house office area near the main entry feature.

Response to Staff Comments (some comments are addressed in specific topic sections below)

EDCO has 2 sites in Hopkins. The south site on Excelsior Blvd. has 2 buildings that house the production portion of the business. This is the part that will be relocated to Chaska, along with warehouse space to accommodate build up of product during the winter months. The building at the intersection of Tyler and 2nd street is the distribution warehouse and will remain in Hopkins for this function.

Expansion needs are anticipated at 60,000 – 120,000 s.f., not likely for 4-5 years.

The secondary truck access is due to a preference for trucks and employee vehicle access to the site to be separate. Since the desired truck access crosses what appears to be wetlands, it is assumed that it will take longer to get approved, and mitigation plans in place. EDCO's desire is to get the building operational as soon as possible. The intent is the truck access would be added after the building is operational as soon as wetland mitigation can be approved.

The neighboring western properties were reviewed to determine if the Project would be improved by obtaining one or both, but it was determined that it would not be beneficial.

Anticipated utilities path and building area has been added to the site plan. The proposed building height is 38'+/- and a note has been added to the elevations.

Based on a survey prepared by Premier Land Surveying on 11/9/22, there does not appear to be an electrical easement on the East property line. This will be reviewed and verified by this Project's Civil Engineer before the Preliminary Site Plan submittal.

767 N. Eustis St., Ste 190
St. Paul, Minnesota 55114
651.642.9200
popedesign.com

Neighborhood Meeting

A neighborhood meeting was held on Thursday, January 30th from 5:00 pm to 7:00 pm. Meeting notices were mailed to property owners within 500 feet of the site. At the meeting location, our team presented a conceptual site plan, preliminary building elevations, and a building rendering conveying the character of the proposed building. Several neighbors were in attendance and shared questions related to water usage/wastewater and potential truck traffic. It was noted on site that EDCO's process is not heavily water or wastewater dependent, and that likely truck traffic would consist of 10-12 trucks per day. In further conversations with City Staff, our team learned of a follow up question related to screening along the western property line between the proposed site and the adjacent neighbor. Our team intends to provide the required visual buffering in this area per city code.

4 neighbors attended the meeting, all in person. See attached list. As noted above, we have shown an area of landscape screening to the Nemetz property to the West per their request.

Understanding of Place & Site Forces

The site is currently farmland located adjacent to an industrial development to the east and residential properties on the west and south. The site's primary natural amenities are gently rolling hills, a creek which runs along the south property boundary, a wetland located on the north property boundary, and tree cover along the north, east, and west property boundaries. The site has a charming, rural character which is highly visible from Creek Road. Views from Engler Blvd. are partially obscured by tree cover, but the site is still prominently visible from this viewshed as well.

The site's existing grade slopes from west to east with a significant berm occurring near the midpoint of the site. Site elevations range from a high point of 914.1 at the SW corner of the site to a low point of 881.2 at the NE corner of the site. The most gradually sloping portion of the site extends along a line running west-northwest to east-southeast near the middle portion of the site. Given the grading of the site, the middle portion accommodates the building footprint well with a loading dock oriented to the north to take advantage of existing site grade. Parking along the west side of the building would be near the likely finished floor height, and would minimize regrading needed in this area. Potential future expansion could be accommodated further to the west with stormwater ponding being located near the NE corner of the site, which is the existing low point. Site access is proposed at the SW corner of the site to avoid disrupting the existing creek and wetland that extend along the southern portion of the site, although a future second access is being considered near the SE corner of the site.

Adjacent uses include city owned property on the north and east sides of the site, industrial development on the east side of the site, and residential located at the south and west sides of the site. Existing city owned land includes a public trail system, wetlands, and an improved creek. An existing trail currently terminates near the SE corner of the project site and will be extended as part of the project.

Development of the site is dictated primarily by site grading and wetland boundaries. By placing the building footprint in the configuration illustrated, existing grading and site features are used to their full advantage and minimal disturbance to existing wooded areas is possible. We understand that the property owner to the west would like us to consider potential screening options at the west side and we are open to proposing options for how to best address those concerns.

Utility Services

Our understanding of the site is that adequate utilities are not currently available and will need to be extended as part of the extension of Creek Road. We will work with City Staff to determine planned utility sizes for our site and will size utility mains serving the building accordingly.

We anticipate the utilities will enter the building in the Southeast corner, coming from Creek Road adjacent to the main drive aisle to the parking lot. A line has been added to the site plan showing anticipated path of utilities.

Grading and Stormwater Ponding

The project site slopes west to east with an elevation change of approximately 33 feet. The building footprint will occupy the central portion of the site running west-northwest to east-southeast along the most favorably sloped portion of the site. Areas of retaining wall may be required to maintain the integrity of existing wetland areas and their associated buffers. Stormwater ponding is currently anticipated in the NE corner of the site to take advantage of existing site grades. Future stormwater ponding would likely be planned in this area as well, since it's the natural low point of the site.

Red dashed lines have been added to the Architectural Site plan to show additional pond and potential underground infiltration areas. Specific calculations of sizes needed will be included in the Preliminary Site Plan application. The intent is to utilize surface ponding and infiltration as much as possible with underground only as needed. As noted in the staff comments, the anticipated stormwater area is on a hill and will need significant reshaping. Due to the sloping site and the large building footprint, the intent is to use soil from the pond excavations as fill for the building pad and dock areas. Retaining walls may be required.

Stormwater management for potential future additions will be calculated to determine if the pond areas for Phase 1 can accommodate the expansion or if underground infiltration under the expansion truck dock area would be utilized at the time of the addition.

Parking and Turning Movements

Vehicle traffic will consist primarily of employees and limited truck traffic. Currently, the building is being planned to accommodate one (1) production shift consisting of 100 staff working between the hours of 7:00 am – 3:00 pm, one (1) office shift consisting of 35 staff working between the hours of 8:00 am – 4:30 pm, and one (1) distribution shift consisting of 20 staff working between the hours of 3:30 pm to 11:00 pm. Occasionally overtime will be required, so the hours may shift slightly over the course of the year. Approximately 10-12 Tractor/Trailer visits per day are anticipated. The primary parking area is located along the west side of the site to take advantage of the existing site grade relative to the finish floor height of the proposed building. This also allows easy access to the building entry via the main site entrance. Employees would enter through the main office area in the NW corner and report to their respective departments within the building.

We have included a truck access loop along the south side of the building to segregate truck traffic and personal vehicle traffic. This also serves as a fire access loop around the entirety of the building and would connect to the loading dock on the north side of the site.

Building Occupants

EDCO is one of the oldest and continuous running domestic metal fabricators, and is the largest manufacturer of pre-finished metal siding products in the United States. Today, as the only true full-line manufacturer of exterior building materials, their product offering includes a comprehensive line of siding, roofing, soffit, fascia, and gutter systems.
In 1946, EDCO officially incorporated by Arthur Edwards Sr. and his two sons, Arthur Edwards Jr. and John Edwards, in Hopkins, Minnesota. This began a journey with a laser-focused commitment on innovation, quality and service. When Art Edwards Jr. returned from the war and wanted to capitalize on the housing boom that was taking place across the United States, it was their vision to bring to market a lasting and affordable residential siding product. With that as the objective, the company built a manufacturing facility and began producing and distributing asphalt siding. As material advancements became available, the company shifted from asphalt to aluminum and eventually steel. Art would take this vision to new heights in the late 90's when EDCO entered the steel roofing market – and experienced immediate success. Art passed

away in 2012 however his innovative, visionary and entrepreneurial spirit live on today through all of EDCO's 200+ employees.

Chaska's Core Strategies

Though current land use is agricultural, the 2040 Comprehensive Plan indicates that the preferred land use is Business Park. The comprehensive plan outlines that these are "areas guided for the integration of office and light industrial uses in order to create employment centers on large sites that provide a greater diversity of jobs, higher development densities and jobs per acre, higher quality site and architectural design, and increased tax revenues. Office, office-showroom-warehousing, research and development services, high-tech electronic manufacturing, medical, and lodging are typical business uses appropriate for this land use category."

The proposed development fulfills these goals and enhances Chaska's Mission statement of being the **best small town in Minnesota.** The plan presented strives to meet the city's core strategies in the following ways:

- **Commitment to excellence**
  - Proposed development creates a signature manufacturing facility in Chaska, while preserving key areas of open space on the site to maintain a rural feel.
- **Enhance Chaska's high quality of life**
  - Providing trail connections, additional high-quality development, and manufacturing, warehousing, and office jobs to the community will enrich Chaska's already fantastic quality of life.
- **Maintain a sense of community and small town values**
  - Planning for pedestrian connections and conservation of open space as an amenity will be guiding forces for the site as we move forward.

Thank you for your review, and please don't hesitate to contact me with any questions or concerns.

Regards,

POPE DESIGN GROUP

Brock Martinson
Principal

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Proposed EDCO Development Neighborhood Meeting
January 30, 2025

Sign In

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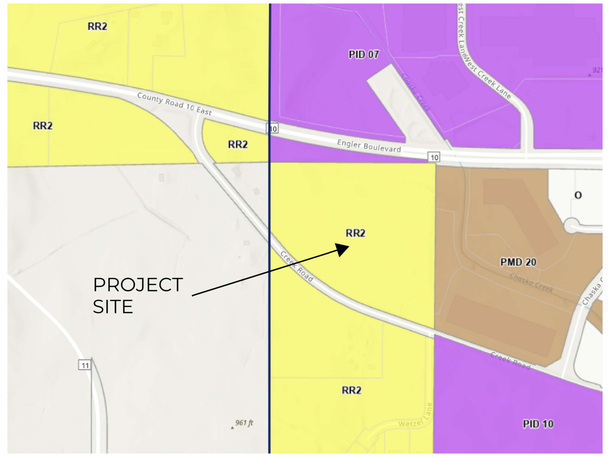
PHIL SAWYER	WETHER LANE		952 917 9442.
Nathan Hacker		NHacker@gmail.com	952-448-4925
Larry VanDeVeire		VandeVeire@AOL.Com	612-517-4320

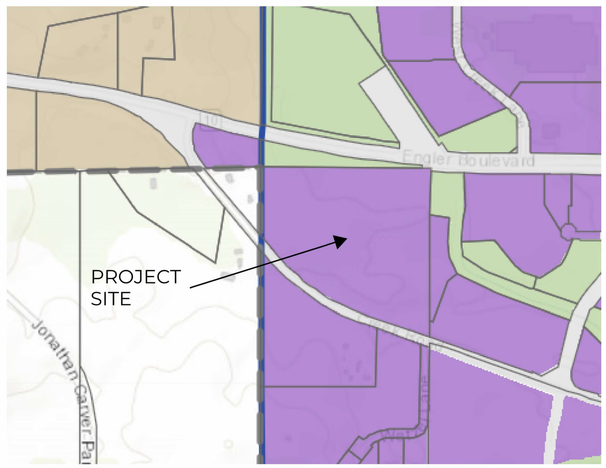
767 N. Eustis Street, Suite 190
St. Paul, Minnesota 55114
651.642.9200

popedesign.com

PROJECT SITE
Oak Creek pass playground
Captured By Crystal Ann Photography
Little Blue Ox Grooming
Clover Field Dr
Schoolmaster Dr
Clover Ridge Dr
Grimm Rd
Giga Garage Doors Repair
Blue Lotus Training & Consulting, Formerly
Legacy Ln
Shamrock
Kerber Pass
Sunset Park
Temporary Chaska Fire
Victoria Dr
Jason's Helicopter Services
Engler Blvd
Chaska Creek
Westbrook Community Church
Town Dental - Chaska
Swagelok Minnesota | North Dakota | Appleton
Newterra Corporation Inc
Liberty Heights Abstract
DANCO Commercial Painters Inc
Twin Cities Property Finder
Guernsey Ave
Image © 2025 Airbus



ZONING MAP



COMP MAP

pope DESIGN GROUP

EDCO PRODUCTS - NEW FACILITY | CITY LAND PROXIMITY MAP

CHASKA, MN | 02/04/25 | 22156-24140

EDCO

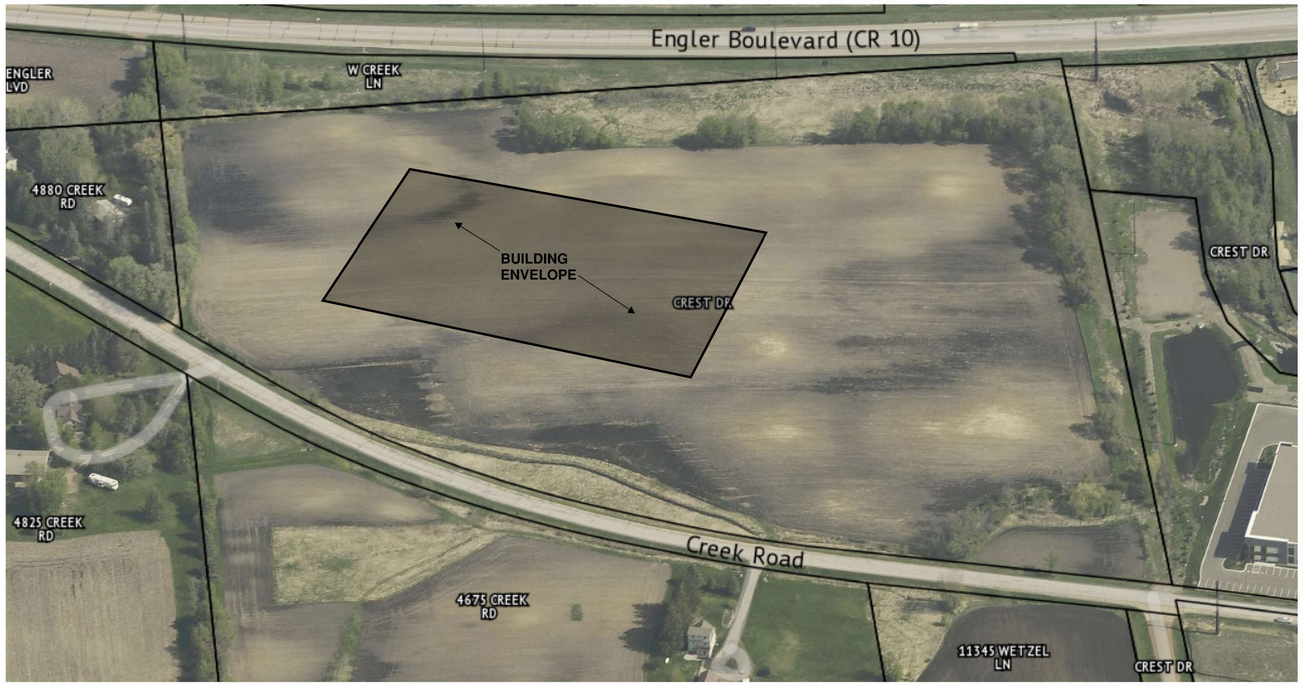
PROJECT CONTEXT MAP

1. CREEK RD VIEW LOOKING NORTH EAST

2. CREEK RD VIEW LOOKING NORTH WEST

3. ENGLER BLVD VIEW LOOKING SOUTH EAST

SITE PLAN

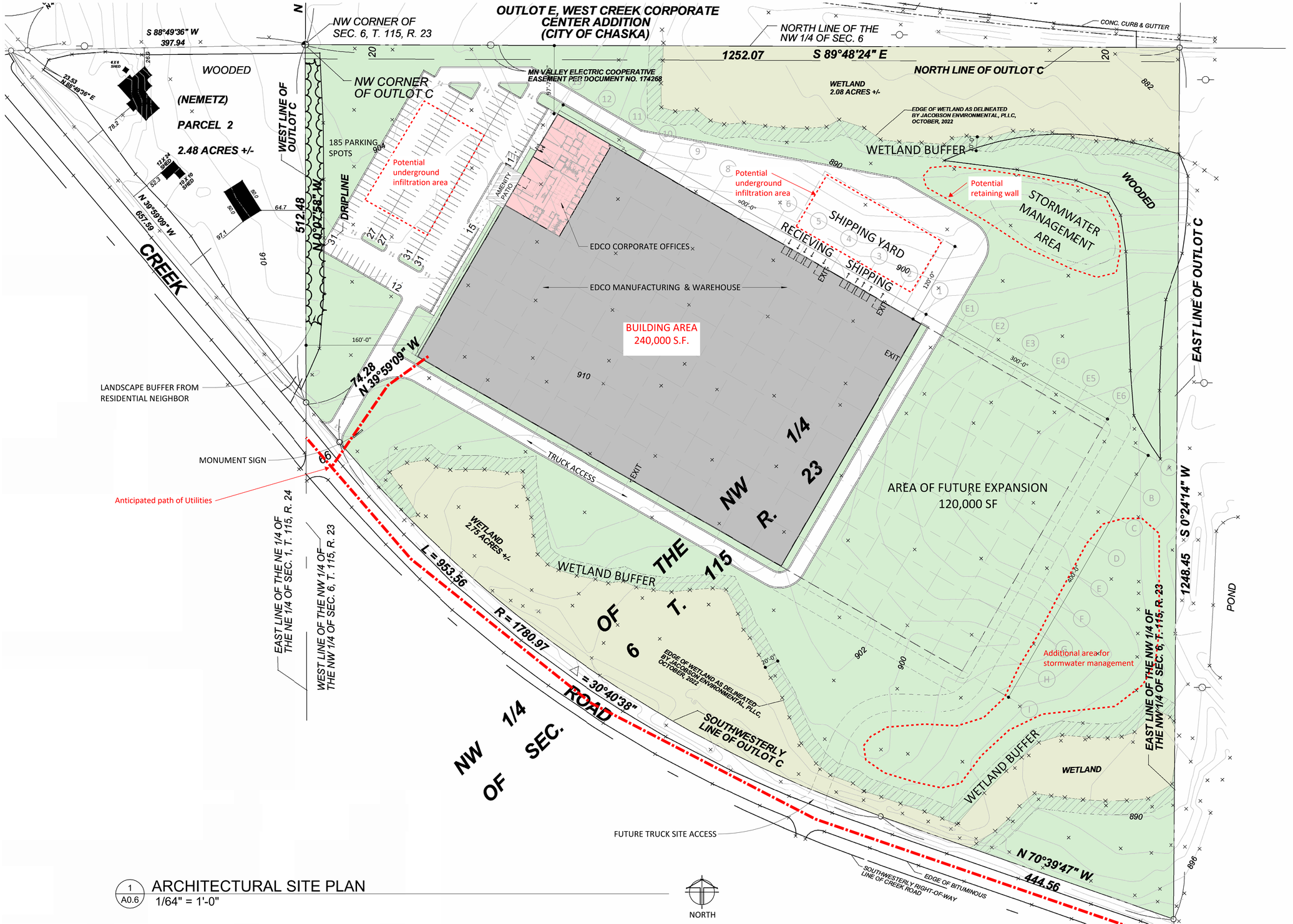


1. BIRDS-EYE VIEW FROM SOUTH

2. CREEK RD VIEW LOOKING NORTHEAST

3. CREEK RD VIEW LOOKING NORTHWEST

4. ENGLER BLVD VIEW LOOKING SOUTH



1 A0.6 ARCHITECTURAL SITE PLAN
1/64" = 1'-0"

EDCO PRODUCTS - NEW FACILITY | ARCHITECTURAL SITE PLAN

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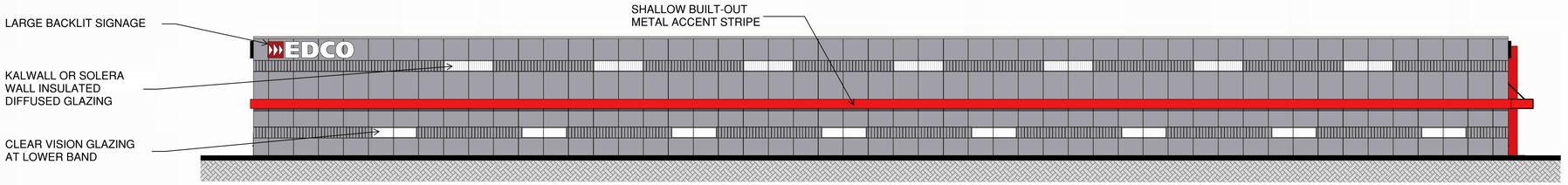
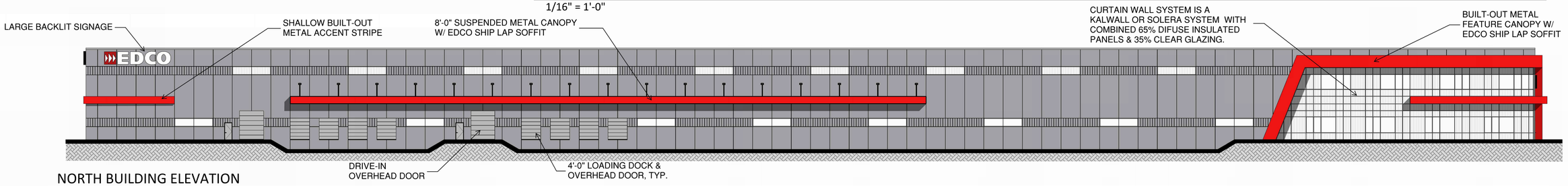
Autodesk Docs://22156-24140_EDCO New Facility/22156-24140_EDCO New Facility_R23.rvt



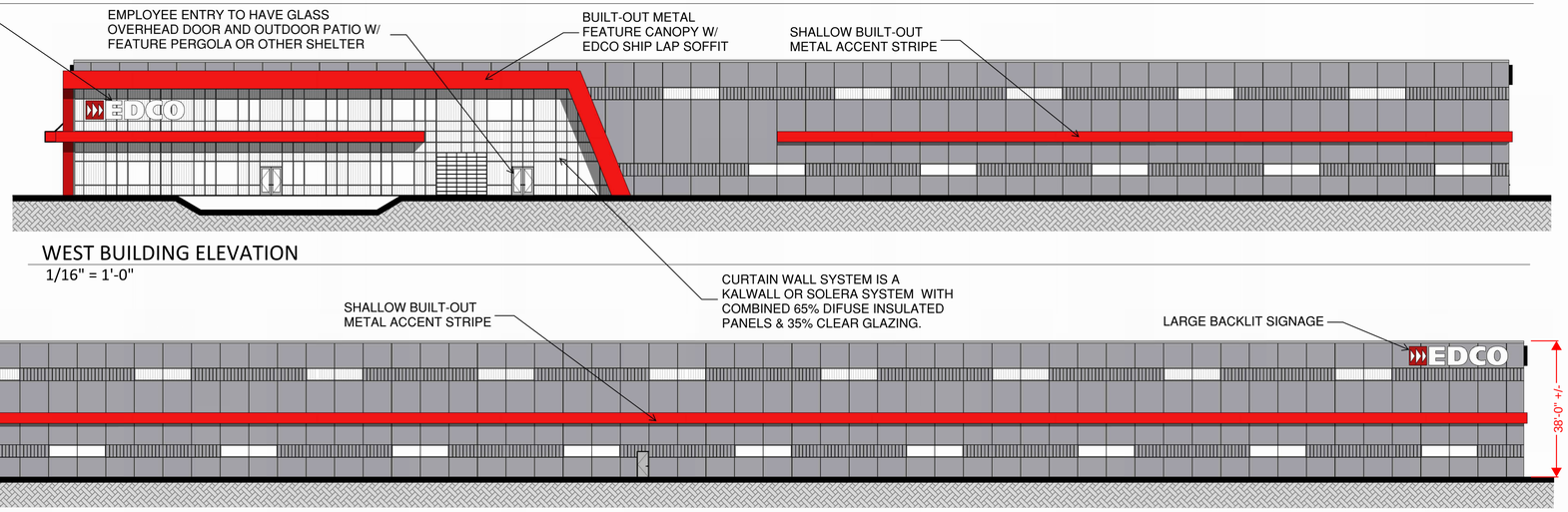
EAST BUILDING ELEVATION

1/16" = 1'-0"



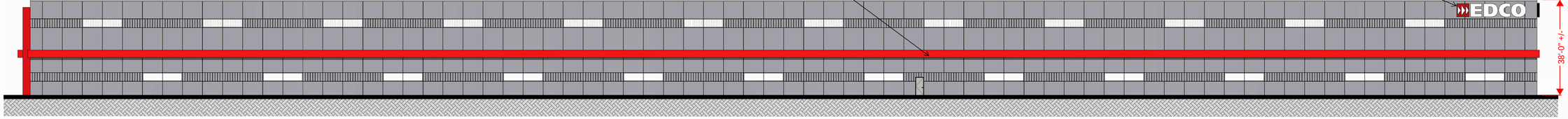
NORTH BUILDING ELEVATION

1/16" = 1'-0"



WEST BUILDING ELEVATION

1/16" = 1'-0"



SOUTH BUILDING ELEVATION

1/16" = 1'-0"

GLASS CORNER AT OFFICES

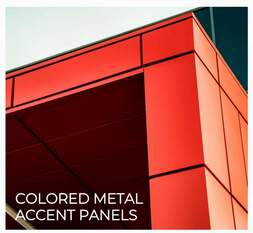
CANOPY OVER ENTRANCE

RIBBED BAND

OPAQUE GLASS

OPAQUE GLASS

FABCON CHARCOAL SANDBLASTED PCAST


COLORED METAL ACCENT PANELS

OPAQUE GLASS WALL SYSTEM

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EDCO PRODUCTS - NEW FACILITY | EXTERIOR ELEVATIONS

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EDCO PRODUCTS - NEW FACILITY | RENDERING

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