



Planning & Development Division
Planning & Economic Development Department

Room 160
 411 West First Street
 Duluth, Minnesota 55802



218-730-5580



planning@duluthmn.gov

File Number	PL 21-188	Contact	Kyle Deming	
Type	Final Plat	Planning Commission Date		January 11, 2022
Deadline for Action	Application Date	December 9, 2021	60 Days	February 7, 2022
	Date Extension Letter Mailed	December 22, 2021	120 Days	April 8, 2022
Location of Subject		Northwest of intersection of Skyline Pkwy and U.S. Hwy 2 (Bayview Heights)		
Applicant	Cynthia Crawford	Contact		
Agent	Northland Consulting Engineers	Contact	David Bolf	
Legal Description		See attached		
Site Visit Date		September 9, 2021	Sign Notice Date	NA
Neighbor Letter Date		NA	Number of Letters Sent	NA

Proposal

Final Plat of Skyline View Estates to subdivide 67.71 acres into 13 lots along a public street.

Staff recommends approval, with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	RR-1	Vacant	Low density neighborhood
North	R-1	Rural residential	Low density neighborhood
South	RR-1	Vacant	Low density neighborhood
East	RR-1	Vacant	Open space
West	R-1	Mobile home park	Open space, Traditional neighborhood

Summary of Code Requirements

The planning commission shall approve the application, or approve it with modifications if it determines that the application meets the following criteria (Section 50-37.5.H.3):

- (a) Is consistent with all applicable requirements of MSA 462.358 and Chapter 505;
- (b) Is consistent with the terms and provisions of the preliminary plat approval for the property;
- (c) Demonstrates that all required improvements have been installed or that (a) the applicant has signed a development agreement committing to construct those improvements within 2 years after approval of the final plat and (b) adequate security for the construction of the required improvements has been posted with the City pursuant to Section 50-37.1.P.

Once approved, the applicant shall file the plat in the office of the County Recorder within two years or the approval will lapse per Section 50-37.5.H.4.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #7 – Create and maintain connectivity.

Governing Principle #9 – Support private actions that contribute to the public realm.

Governing Principle #12- Create efficiencies in delivery of public services.

Zoning:

Rural Residential-1 (RR-1) is established to accommodate large-lot, single-family detached residential uses, typically surrounded by significant open space, on lots of at least 5 acres each. The district encourages distinctive neighborhoods with a semi-rural character.

Future Land Use - Low density neighborhood: Single-family housing with urban services. Typified by curvilinear streets, houses with longer dimension parallel to street, and attached garages. Includes a range of house sizes and lot sizes. This land use category was specified in support of residential development of this site. The site is not proposed to have urban services for sewer or water, which will both be provided through private systems.

Related files: PL 20-107 Wetland Delineation - approved, PL21-144 Preliminary Plat - approved, PL21-145 Variance - approved, PL21-198 Wetland Replacement Plan - pending

Review and Discussion Items**Staff finds:**

- 1) The parcel for platting is located immediately south of existing rural residential areas of the city, and east of the Zenith Terrace mobile home park. The site is wooded and undeveloped. Kingsbury Creek flows along the western edge of the site. The site features rock outcrops, wetlands, and is otherwise predominately a mature maple basswood forest.
- 2) The Planning Commission's approval of the Preliminary Plat was conditioned on these items:
 - a. The approval is conditional upon the concurrent approval of the variance application in PL 21-145.
 - b. The final plat shall be drafted with modifications to the following elements depicted on the preliminary plat:
 - i. The proposed driveway serving Lot 9 shall be relocated, either through modification to the lot line between Lot 9 and Lot 10, or through alternate means, to avoid wetland impacts resultant through construction of said driveway.
 - ii. Drainage and utility easements shall be provided consistent with UDC requirements for shoreland protections to ensure the preservation of natural vegetation near Kingsbury Creek along Lots 2 and 3. Permanent metallic markers on rigid metal posts shall be placed at the location of shoreland setbacks indicating that all natural vegetation between the permanent markers and the creek is to remain in a natural state.
 - iii. Drainage and utility easements shall be established over no less than 90% of the wetlands existing on Lot 9.
 - iv. Stormwater ponds are currently depicted on Lots 1 and 13 on the submitted "Stormwater Concept Plan." All stormwater ponds shall be redesigned to be located fully outside wetland areas, including those wetlands on Lot 13.
 - v. Drainage and utility easements shall be provided consistent with UDC requirements for shoreland protections for the drainage way between Lots 10 and 11, which provides for the uplands for creeks referenced in the stormwater plan. Permanent metallic markers on rigid metal posts shall be placed at the location of shoreland setbacks indicating that all natural vegetation between the permanent markers and the creek is to remain in a natural state.
 - c. Prior to undertaking any site work, the following conditions shall be met:

- i. The development agreement and final plat shall be recorded;
- ii. All necessary permits shall be obtained;
- iii. Erosion control measures shall be installed and inspected by appropriate city officials;
- iv. Tree removal shall be exempt from this requirement so long as no grubbing, or removal of stumps, takes place during said removal.
- d. The applicant shall enter into a development agreement addressing applicable development terms as identified by City staff herein, and as further identified in the review of the Final Plat of SUGARLOAF. The development agreement shall be approved and recorded with the appropriate St. Louis County offices.
- e. The development agreement must be recorded prior to the Planning Commission President and Secretary signing the Final Plat.
- f. Wetlands shall be fully protected during construction, monitored for impacts due to silt and sediment, and restored if required upon inspection by appropriate city officials.
- g. The City Forester must approve the tree replacement plan and shall validate that the construction process does not impact the trees indicated for preservation on the site.

3) Below is staff's response on the satisfaction of the preliminary plat conditions listed above:

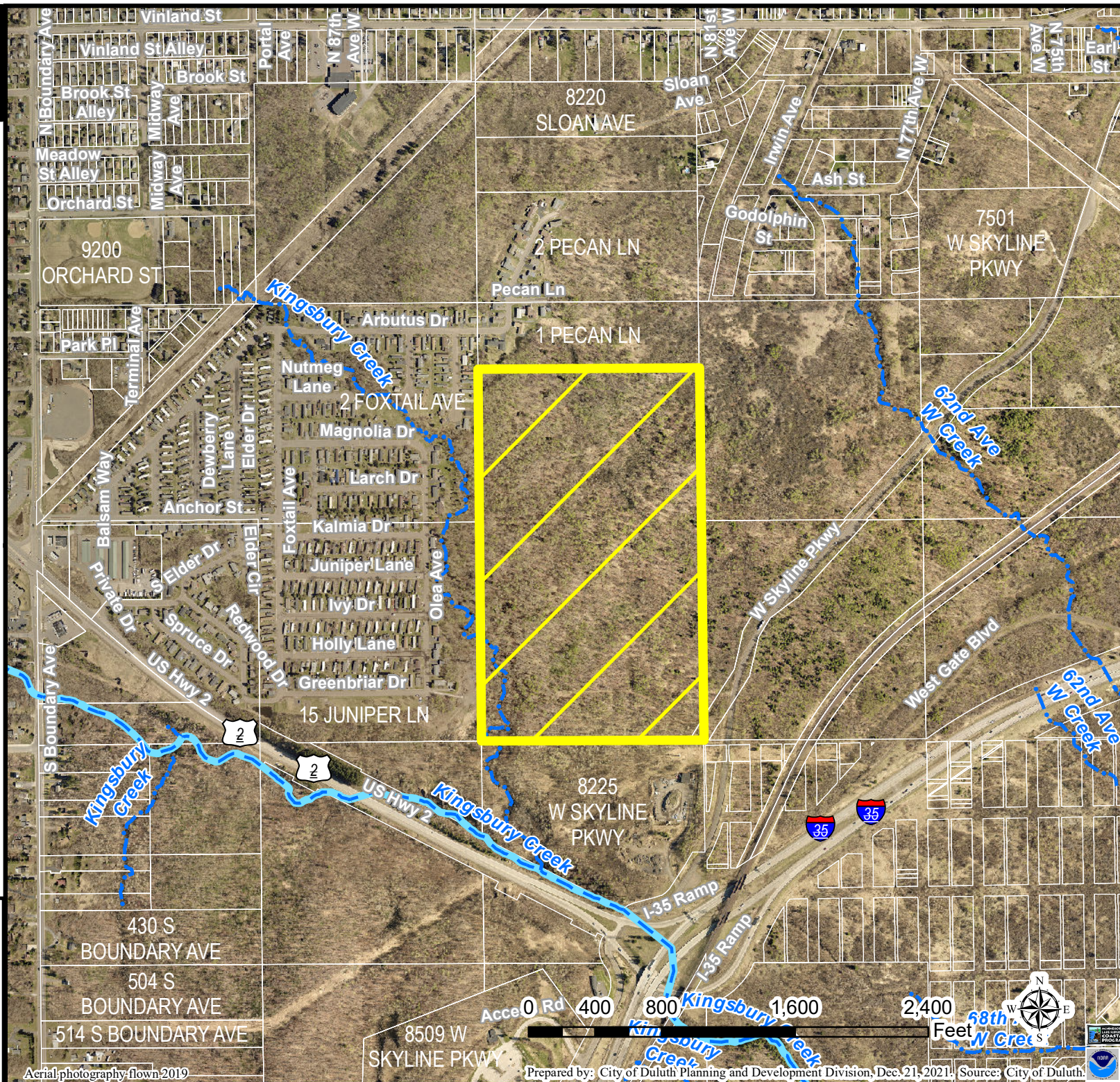
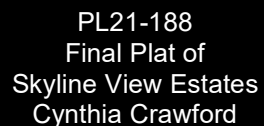
- a. Modifications to the final plat and related agreements have been made as described below:
 - i. The lot line between Lots 9 and 10 (which has been renumbered in the final plat to Lots 4 and 5, Block 1) was adjusted to provide space for a driveway that minimized wetland impacts. The portion of the wetland proposed for impact due to the driveway has been included in the wetland replacement plan application.
 - ii. A drainage and utility easement has been included on Lots 2 and 3 (which are now numbered Lots 2 and 3, Block 2) and the requirement for markers has been included in the Development Agreement.
 - iii. The required drainage and utility easement has been placed on Lot 9 (now numbered Lot 5, Block 1).
 - iv. The storm water basin is planned for the drainage and utility easement in Lot 1, Block 2 outside of delineated wetlands.
 - v. A drainage and utility easement has been established on Lots 10 and 11 (now numbered Lots 3 and 4, Block 1) and the requirement for markers has been included in the Development Agreement.
- b. The following actions will be required prior to site work, as conditioned in the preliminary plat approval:
 - i. The Development Agreement is scheduled for City Council consideration at their January 24, 2022 meeting. A condition of the agreement is that it be recorded before site work begins.
 - ii. Staff will require permits as required for the project.
 - iii. Erosion control measures will be evaluated at time of permitting and inspections conducted according to standard practice.
 - iv. A tree inventory has been submitted showing the location of all trees greater than 20 inches diameter at breast height as well as all trees within five sample plots. Per the preliminary plat approval, tree removal activities have been permitted within street rights of way areas. The Development Agreement will require tree replacement plans be approved for each building lot prior to tree removal.
- c. The Development Agreement has been drafted to address all of the terms and conditions from the preliminary and final plats. A condition stated in the agreement is that it be recorded before site work begins.
- d. A condition of approval of the final plat is that it not be signed by the President or Secretary of the Planning Commission until the Development Agreement is recorded.
- e. A Wetland Replacement Plan application has been submitted by the developer according to the State's Wetland Conservation Act (WCA) to allow impacts to 0.26 acres of wetlands due to construction of the public street and 0.05 acres of wetland impact due to private driveways on 2 lots (see attached). The WCA rules require impacts to be limited to those quantified in the application and enforcement tools are in place to require restoration of unpermitted impacts. Additionally, the Development Agreement requires construction fencing around portions of wetlands proposed for impact.

- f. As described above, tree replacement plans are required and the City Forester will be responsible for approving them.
- 4) A 2,350-foot-long dead-end public street, called Yellow Birch Trail, is to be constructed to provide access to the 13 lots. The street will include curb and gutter to direct rainwater to a public storm water detention basin at the southeast corner of the property. The storm water basin is to discharge to the ditch along Skyline Pkwy. A Memorandum of Understanding (MOU) between the City and developer will govern the construction of these improvements and financial security will be retained by the City to assure the terms of the MOU.
- 5) The proposed development is consistent with the lot configuration in the surrounding single-family area, which is generally low density and rural in character along Vinland Street and side streets as Vinland Street runs downhill from the City of Proctor toward Getchell Road / Highland Street.
- 6) Staff finds that, other than the items listed below, the final plat conforms to the requirements of Sec 50-37.5. and is consistent with all applicable requirements of MSA 462.358 and Chapter 505.
- 7) No citizen or City comments have been received to date.

Staff Recommendation

Based on the above findings, staff recommends that Planning Commission approve the application with the following conditions:

1. The Land Use Supervisor shall not sign the plat document until the City Council has approved a Development Agreement with the developer addressing all terms and conditions identified by the City and the Development Agreement is recorded in the office of the St. Louis County Recorder.
2. Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission review; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

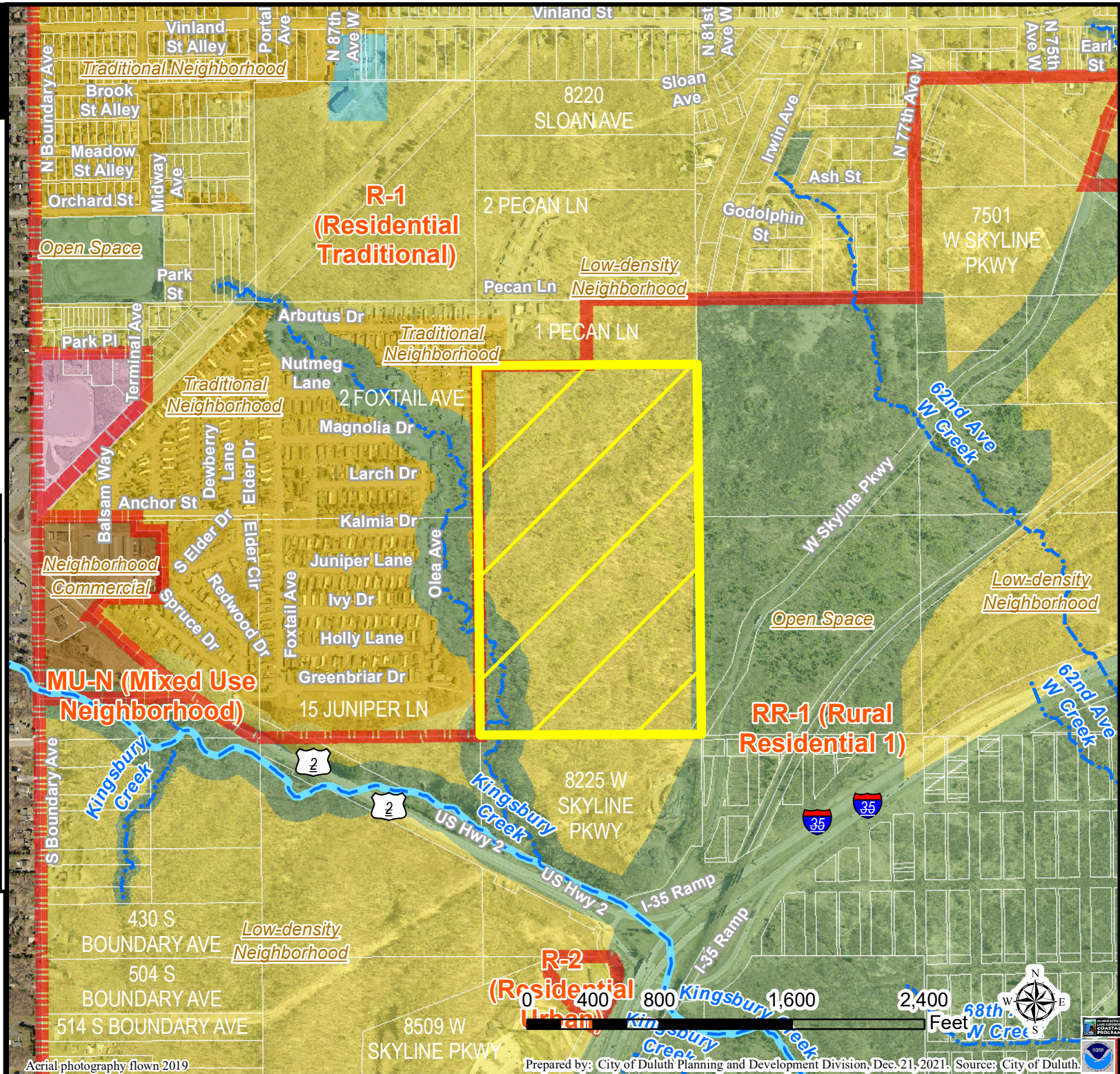




PL21-188
Final Plat of
Skyline View Estates
Cynthia Crawford

Legend	
	Zoning Boundaries
	Trout Stream (GPS)
	Other Stream (GPS)
	Open Space
	Open Space/Outside Duluth
	Rural Residential
	Low-density Neighborhood
	Traditional Neighborhood
	Urban Residential
	Neighborhood Commercial
	Central Business Secondary
	Central Business Primary
	Large-scale commercial
	Tourism/Entertainment District
	Commercial Waterfront
	General Mixed Use
	Neighborhood Mixed Use
	Light Industrial
	General Industrial
	Industrial Waterfront
	Business Park
	Transportation and Utilities
	Transportation and Utilities/Outside Duluth
	Medical District
	Institutional

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.



SKYLINE VIEW ESTATES

LOCATED IN PART OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 49 NORTH, RANGE 15 WEST OF THE FOURTH PRINCIPAL MERIDIAN, ST. LOUIS COUNTY, MINNESOTA

KNOW ALL PERSONS BY THESE PRESENTS: That Crawford Excavating LLC, a Minnesota limited liability company, owner of the following described property:
Certificate of Title 331414
NW1/4 of SE1/4 EXCEPT the N1/4 400 feet thereof Section 11 Township 49 North Range 15 West of the Fourth Principal Meridian
AND
SW1/4 of SE1/4 Section 11 Township 49 North Range 15 West of the Fourth Principal Meridian EXCEPT that part described as follows: Commencing at the SE corner of said SW1/4 of SE1/4; thence North along the E1/4 line of said of said SW1/4 of SE1/4 a distance of 137 feet, more or less to a point; thence SW1/4 in a staight line to a point on the S1/4 boundary line of said SW1/4 of SE1/4 distant 84.85 feet West of the SE corner of said SW1/4 of SE1/4; thence E1/4 along the S1/4 line of said SW1/4 of SE1/4 a distance of 84.85 feet to the SE corner of said SW1/4 of SE1/4 which is the point of beginning and ending, as set out in Book 625 of Deeds page 273.
EXCEPT all minerals and mineral rights.
(TORRENS PROPERTY)

Has caused the same to be surveyed and platted as SKYLINE VIEW ESTATES and does hereby dedicate to the public for public use the public way(s) and/or the drainage and utility easement(s) as created by this plat.

In witness whereof said Crawford Excavating LLC, a Minnesota limited liability company, have hereunto set their hand his ____day of _____, 2021.

Richard H. Crawford, Manager

STATE OF MINNESOTA
COUNTY OF ST LOUIS

This instrument was acknowledged before me on this ____day of _____, 2021 by Richard H. Crawford.

Notary Public, _____County, Minnesota
My Commission Expires _____

I, David R. Evanson, 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 _____, 2021.

David R. Evanson, Licensed Land Surveyor
Minnesota License Number 49505

STATE OF MINNESOTA
COUNTY OF ST. LOUIS

The foregoing Surveyor's Certificate was acknowledged before me this ____day of _____, 2021 by David R. Evanson, Minnesota License Number 49505.

Notary Public, St. Louis County, Minnesota
My Commission Expires _____

CITY OF DULUTH PLANNING COMMISSION
Approved by the Planning Commission of the City of Duluth, St. Louis County, Minnesota, at a regular meeting thereof, on the ____day of _____, 2021.

President, Duluth City Planning Commission Executive Secretary, Duluth City Planning Commission

ST. LOUIS COUNTY SURVEYOR
I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this ____day of _____, 2021.

Nick C. Stewart Deputy
County Surveyor

ST. LOUIS COUNTY AUDITOR
Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, and to Minnesota Statutes, Section 272.12, taxes payable in the year 20____ on the land hereinbefore described have been paid; there are no delinquent taxes and transfer entered this ____day of _____, 2021.

Nancy Nilsen Deputy
County Auditor

ST. LOUIS COUNTY REGISTRAR OF TITLES
I hereby certify that this plat of SKYLINE VIEW ESTATES was filed in this office of the Registrar of Titles for public record on this ____day of _____, 2021, at ____o'clock ____M., as Document No. _____ affecting Certificate(s) of Title No. 331414.

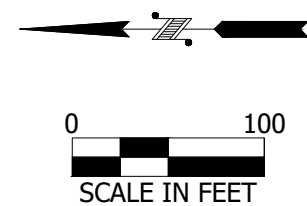
Wendy Levitt Deputy
Registrar of Titles

ST. LOUIS COUNTY RECORDER
I hereby certify that this plat of SKYLINE VIEW ESTATES was filed in this office of the County Recorder for public record on this ____day of _____, 2021, at ____o'clock ____M., as Document No. _____.

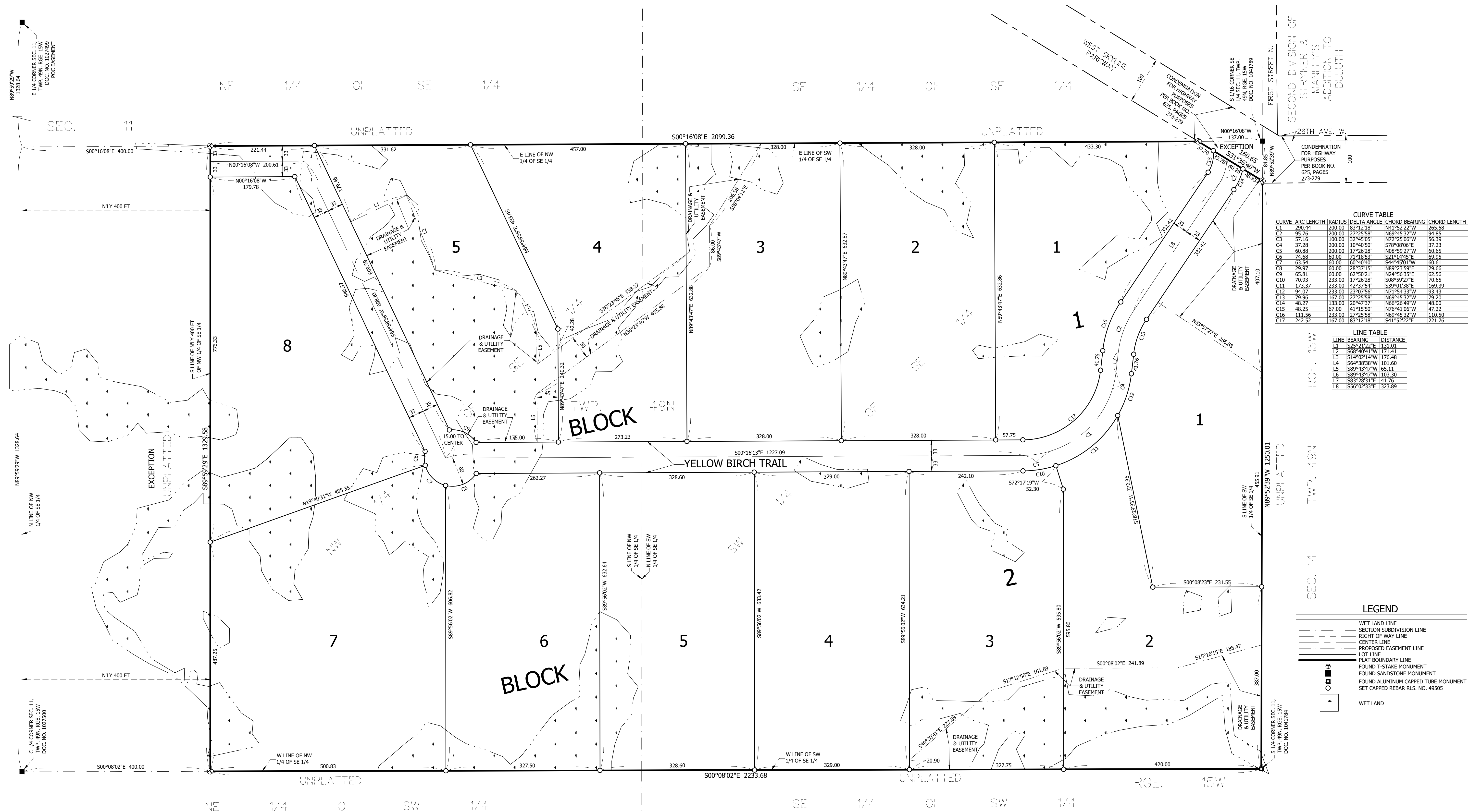
Wendy Levitt Deputy
County Recorder

SKYLINE VIEW ESTATES

LOCATED IN PART OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER AND PART OF THE
SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 49 NORTH,
RANGE 15 WEST OF THE FOURTH PRINCIPAL MERIDIAN, ST. LOUIS COUNTY, MINNESOTA



SURVEYOR'S NOTES
BEARINGS ARE BASED ON THE SOUTH LINE OF THE SE 1/4
OF SEC. 11, TWP. 49N, RGE. 15W, WHICH IS SAID TO HAVE
A BEARING OF S89°52'39"E.



CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	290.44	200.00	83°12'18"	N41°52'22"W	265.58
C2	95.76	200.00	127°25'58"	N69°45'32"W	94.85
C3	57.16	100.00	32°45'05"	N72°25'06"W	56.39
C4	37.28	200.00	10°40'50"	S78°08'06"E	37.23
C5	60.88	200.00	17°26'28"	N08°59'27"W	60.65
C6	74.68	60.00	71°18'53"	S21°14'45"E	68.59
C7	63.54	60.00	60°40'40"	S44°45'01"W	60.61
C8	29.97	60.00	28°37'15"	N89°23'59"E	29.66
C9	65.81	60.00	62°50'21"	N24°56'35"E	62.56
C10	70.93	233.00	17°26'28"	S08°59'27"E	70.65
C11	173.37	233.00	42°37'54"	S39°01'38"E	169.39
C12	94.07	233.00	23°07'56"	N71°54'33"W	93.43
C13	79.96	167.00	27°25'58"	N69°45'32"W	79.20
C14	48.27	133.00	20°47'37"	N66°26'49"W	48.00
C15	48.25	67.00	41°15'50"	N76°41'06"W	47.22
C16	111.56	233.00	27°25'58"	N69°45'32"W	110.50
C17	242.52	167.00	83°12'18"	S41°52'22"E	221.76

LINE	BEARING	DISTANCE
L1	S25°21'22"E	131.01
L2	S68°40'41"W	171.41
L3	S14°02'14"W	176.48
L4	S64°38'38"W	101.60
L5	S89°43'47"W	65.11
L6	S89°43'47"W	103.30
L7	S89°23'31"E	41.76
L8	S56°02'33"E	323.89

RGE. 15W

TWP. 49N

SEC. 14

UNPLATTED

SEC. 11

TWP. 49N

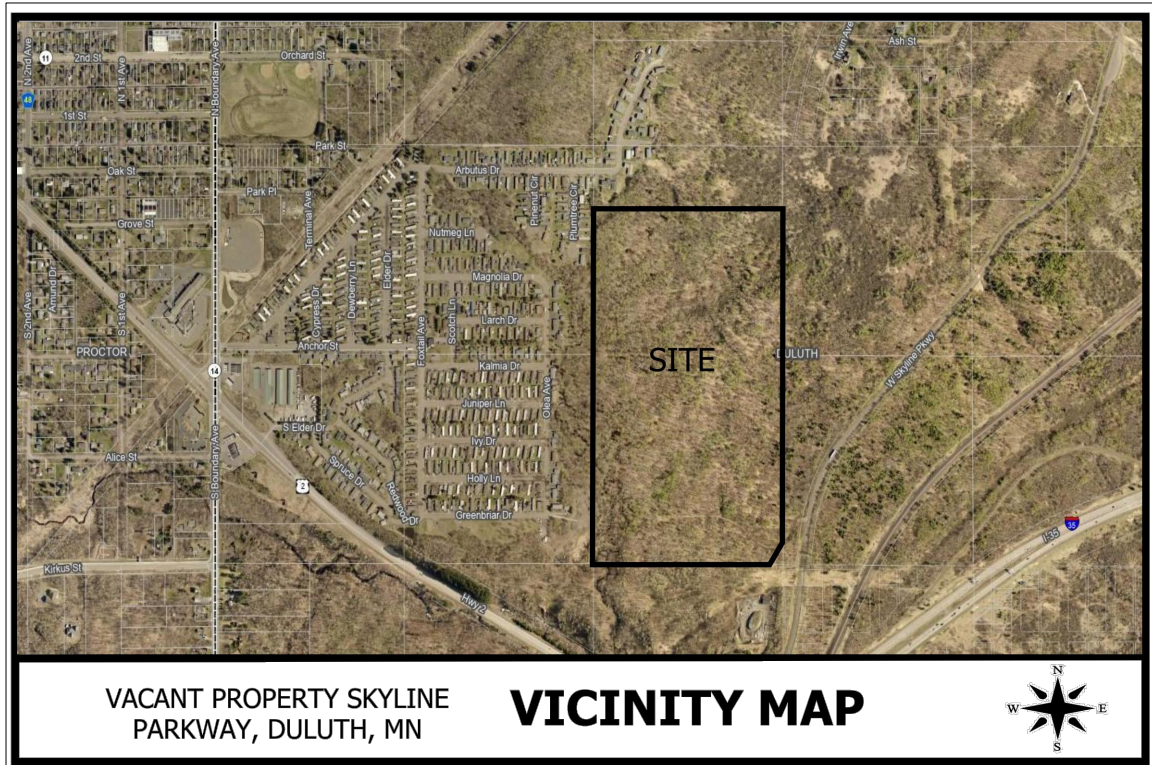
RGE. 15W

LEGEND

- WET LAND LINE
- SECTION SUBDIVISION LINE
- RIGHT OF WAY LINE
- CENTER LINE
- PROPOSED EASEMENT LINE
- LOT LINE
- PLAT BOUNDARY LINE
- FOUND T-STAKE MONUMENT
- FOUND SANDSTONE MONUMENT
- FOUND ALUMINUM CAPPED TUBE MONUMENT
- SET CAPPED REBAR RLS. NO. 49505
- WET LAND

PRELIMINARY PLAT OF SKYLINE VIEW ESTATES

LOCATED IN PART OF SEC. 11, TWP.49 N, RGE. 15W ST. LOUIS COUNTY MINNESOTA



OWNER/DEVELOPER
RICK & CYNTHIA CRAWFORD
28 EAST PINE MOUNTAIN RD,
GRAND MARAIS, MN 55604

CIVIL ENGINEER
NORTHLAND CONSULTING ENGINEERS L.L.P.
102 S 21ST AVENUE WEST, SUITE 1
DULUTH, MN 55806
PHONE (218) 727-5995
EMAIL info@nce-duluth.com

SURVEYOR
ALTA LAND SURVEY COMPANY
DAVID R. EVANSON, MN STATE REG. NO. 49505
P.O. BOX 161138
102 S 21ST AVENUE WEST, SUITE 4
DULUTH, MN 55816-1138
PHONE (218) 727-5211
EMAIL info@altasurveyduluth.com
PRELIMINARY PLAT COMPLETED AUGUST 2, 2021

LEGAL DESCRIPTION PER CERTIFICATE OF TITLE NO. 313414
NW 1/4 of SE 1/4 EXCEPT the Nly 400 feet thereof Section 11 Township 49 North Range 15 West of the Fourth Principal Meridian
AND
SW 1/4 of SE 1/4 Section 11 Township 49 North Range 15 West of the Fourth Principal Meridian EXCEPT that part described as follows:
Commencing at the SE corner of said SW 1/4 of SE 1/4; thence North along the Ely line of said SW 1/4 of SE 1/4 a distance of 137 feet, more or less, to a point; thence SW 1/4 in a straight line to a point on the Sly boundary line of said SW 1/4 of SE 1/4 distant 84.85 feet West of the SE corner of said SW 1/4 of SE 1/4; thence Ely along the Sly line of said SW 1/4 of SE 1/4 a distance of 84.85 feet to the SE corner of said SW 1/4 of SE 1/4 which is the point of beginning and ending, as set out in Book 625 of Deeds page 273.

AREA SUMMARY	
TOTAL AREA	68.22 AC
TOTAL LOT AREA INCLUDING R/W	68.22 AC
TOTAL ROAD R/W AREA	4.52 AC
NUMBER OF LOTS	13
NUMBER OF BLOCKS	2
NUMBER OF OUTLOTS	0
LARGEST LOT IN SQ. FT INCLUDING R/W	288,295 SQ. FT
SMALLEST LOT IN SQ. FT INCLUDING R/W	218,008 SQ. FT

- ### LEGEND
- BITUMINOUS SURFACE
 - PROPOSED ROAD & DRIVEWAY S
 - PROPOSED WET LAND FILL AREA
 - EXPOSED LEDGE ROCK PER OTHERS
 - WET LAND PER OTHERS
 - 4,800 Sq. Feet PROPOSED BUILDING PAD
 - C/L OF CREEK PER OTHERS
 - CREEK BANK PER OTHERS
 - TREE/BRUSH LINE PER OTHERS
 - PROPOSED SEPTIC LINE
 - DITCH/SWALE
 - SETBACK LINE
 - WET LAND LINE PER OTHERS
 - SECTION SUBDIVISION LINE
 - RIGHT OF WAY LINE
 - CENTER LINE
 - PROPOSED EASEMENT LINE
 - BOUNDARY LINE AS SURVEYED
 - PROPOSED PARCEL LINE
 - STORM SEWER
 - ALUM CAPPED MONUMENT
 - FOUND T-STAKE MONUMENT
 - FOUND SANDSTONE MONUMENT
 - SET CAPPED REBAR RLS. NO. 49505
 - PROPOSED WELL LOCATION
 - CATCH BASIN
 - CULVERT

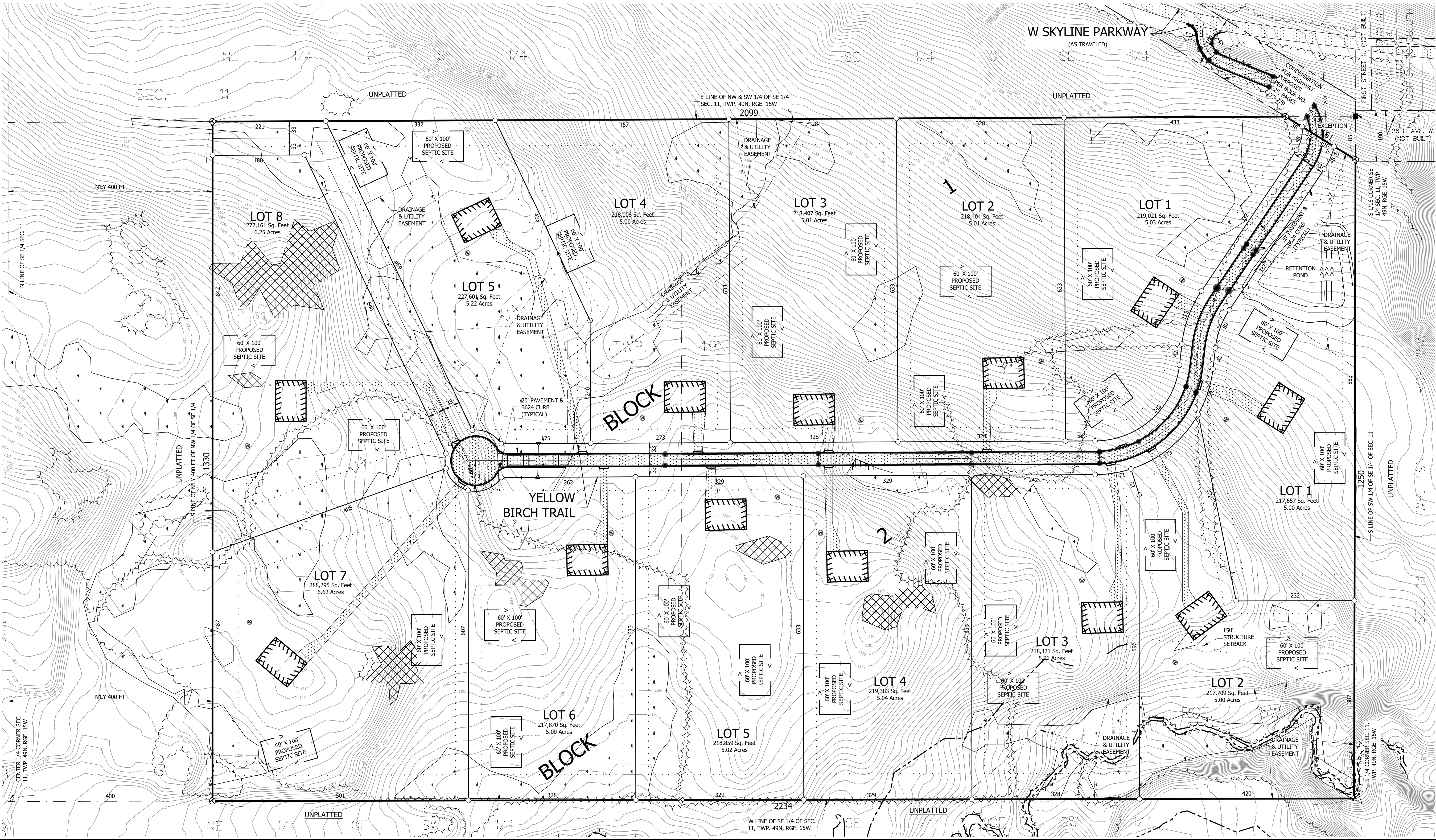
- ### SURVEYOR'S NOTES
- THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE COMMITMENT OR TITLE OPINION. A TITLE SEARCH FOR RECORDED OR UNRECORDED EASEMENTS WHICH MAY BENEFIT OR ENCUMBER THIS PROPERTY HAS NOT BEEN COMPLETED BY ALTA LAND SURVEY COMPANY. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR SHOWING THE LOCATION OF RECORDED OR UNRECORDED EASEMENTS OR OTHER ENCUMBRANCES NOT PROVIDED TO THE SURVEYOR AS OF THE DATE OF THE SURVEY.
 - BEARINGS ARE BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR COORDINATE SYSTEM OF 1995. (NAD 83 2011)
 - NO SPECIFIC SOILS INVESTIGATION HAS BEEN COMPLETED ON THIS LOT BY ALTA LAND SURVEY COMPANY. THE SUITABILITY OF SOILS TO SUPPORT THE SPECIFIC STRUCTURE PROPOSED IS NOT THE RESPONSIBILITY OF ALTA LAND SURVEY COMPANY OR THE SURVEYOR.
 - CONTOUR DATA SHOWN HEREON WAS DERIVED FROM LIDAR DATA PROVIDED BY THE MINNOR. IT IS RECOMMENDED ON THE GROUND MEASUREMENTS BE INCORPORATED INTO ANY AREA OF PROPOSED DESIGN AND CONSTRUCTION.
 - EXISTING FEATURES SHOWN HEREON, WERE PROVIDED BY OTHERS.

ZONING AND BUILDING SETBACKS PER THE CITY OF DULUTH
CURRENTLY ZONED- RR-1 RESIDENTIAL RURAL. SEE TABLE 50-14.3 FOR DISTRICT DIMENSIONAL STANDARDS.

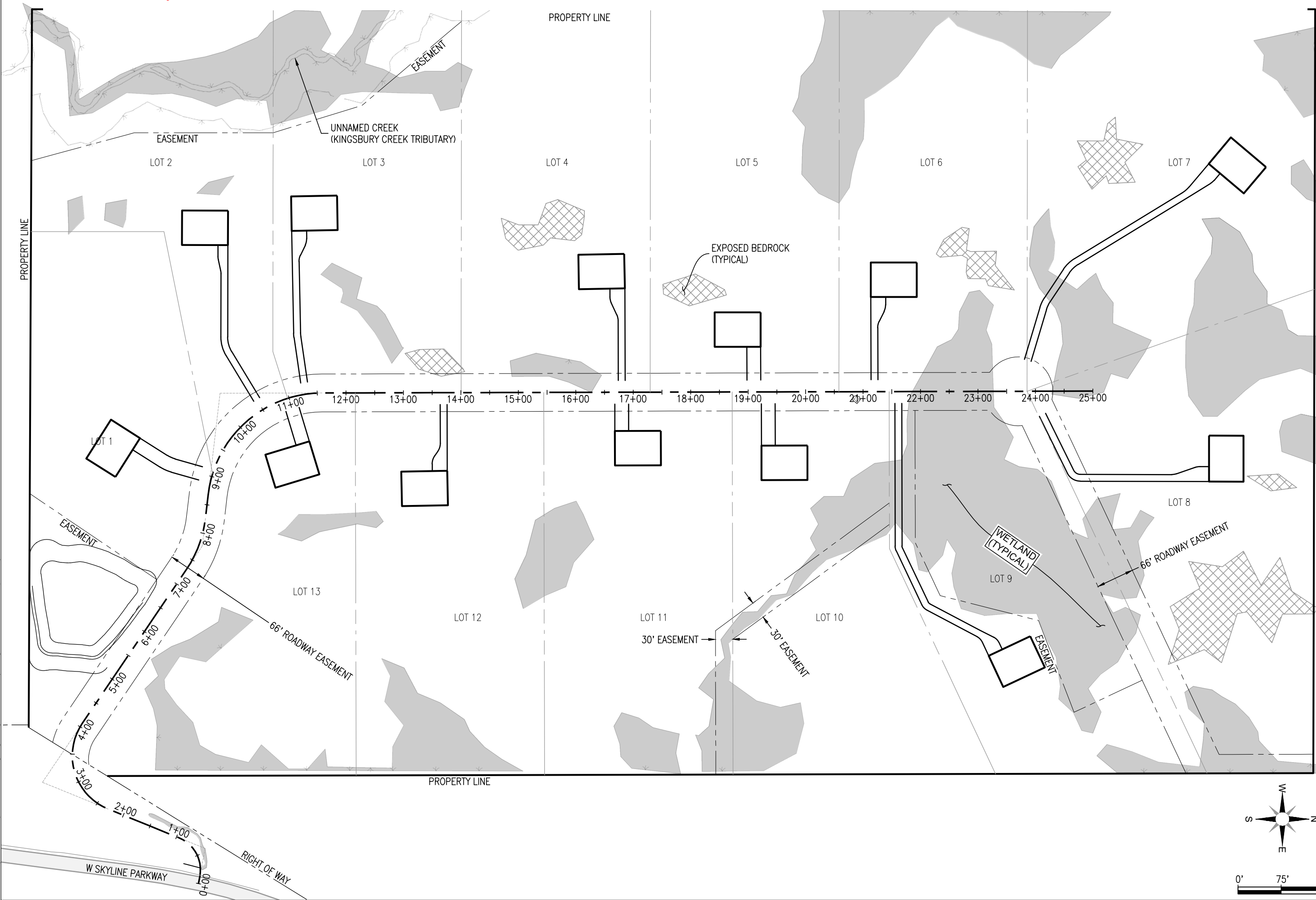
FLOOD ZONE INFORMATION
BUILDINGS LOCATED WITHIN ZONE C (AREAS MINIMAL FLOODING). PER FIRM FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 270421 0035 C, EFFECTIVE DATE: APRIL 2, 1982.

SITE ADDRESS
VACANT PROPERTY
PID NO. 010-2741-01076

ALTA
LAND SURVEY COMPANY
PHONE: (218) 727-5211
WWW.ALTLANDSURVEYDULUTH.COM



Current Lot Layout.

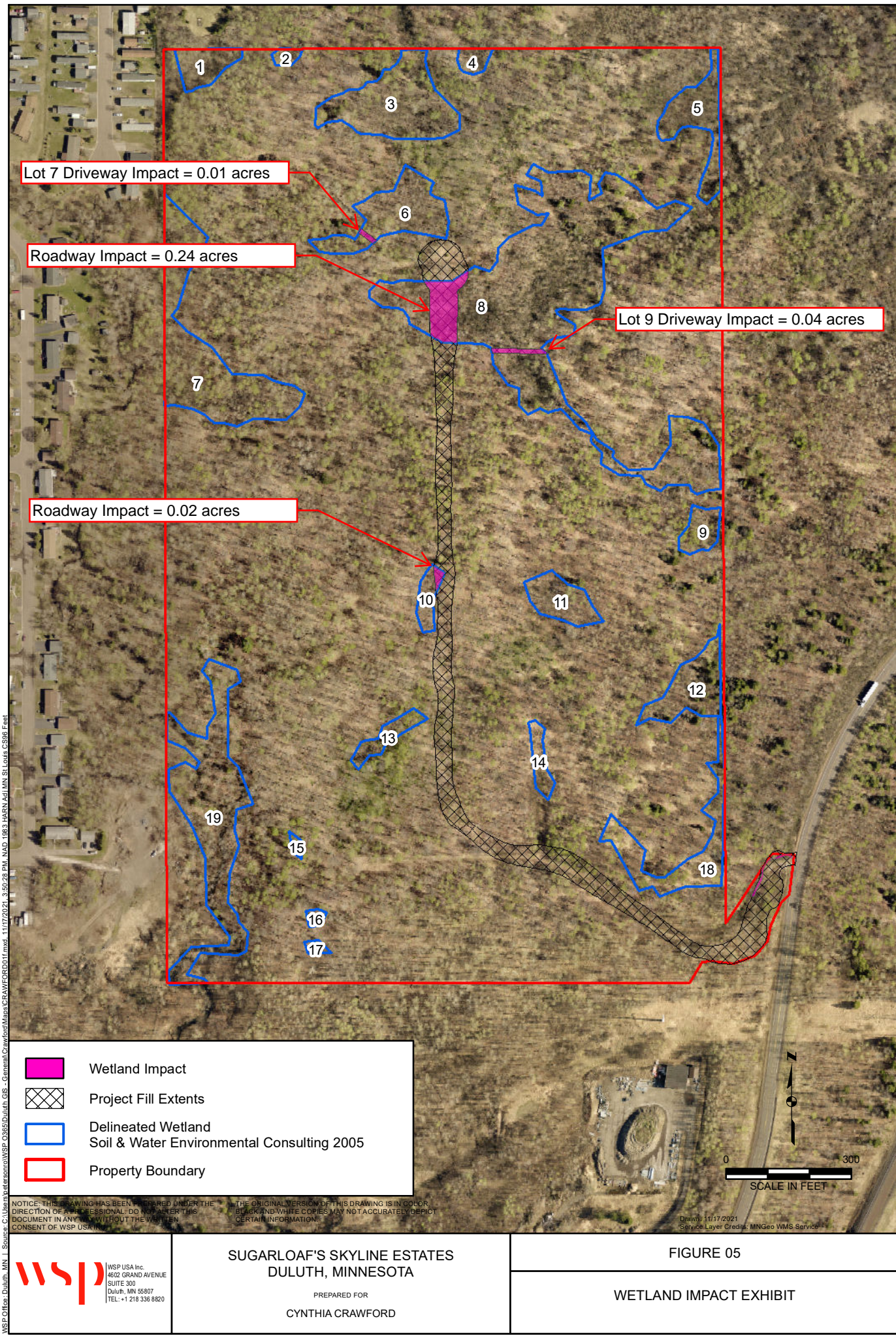


Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
Voice: (218)727-5995
Fax: (218)727-7779
www.nce-engineers.com

SKYLINE VIEW ESTATES
WEST SKYLINE PARKWAY DULUTH, MN

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.
PRELIMINARY
NOT FOR CONSTRUCTION
XX/XX/XX
Lic. No: 40926
Engineer: David G. Bolf

revision	
Proj: 21-308	
Date: 11/17/21	
Drawn: JDO	
Checked: DGB	
GENERAL LAYOUT	
Sheet Title	
Sheet Number	2



Lot 7 Driveway Impact = 0.01 acres

Roadway Impact = 0.24 acres

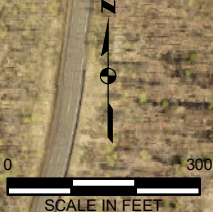
Lot 9 Driveway Impact = 0.04 acres

Roadway Impact = 0.02 acres

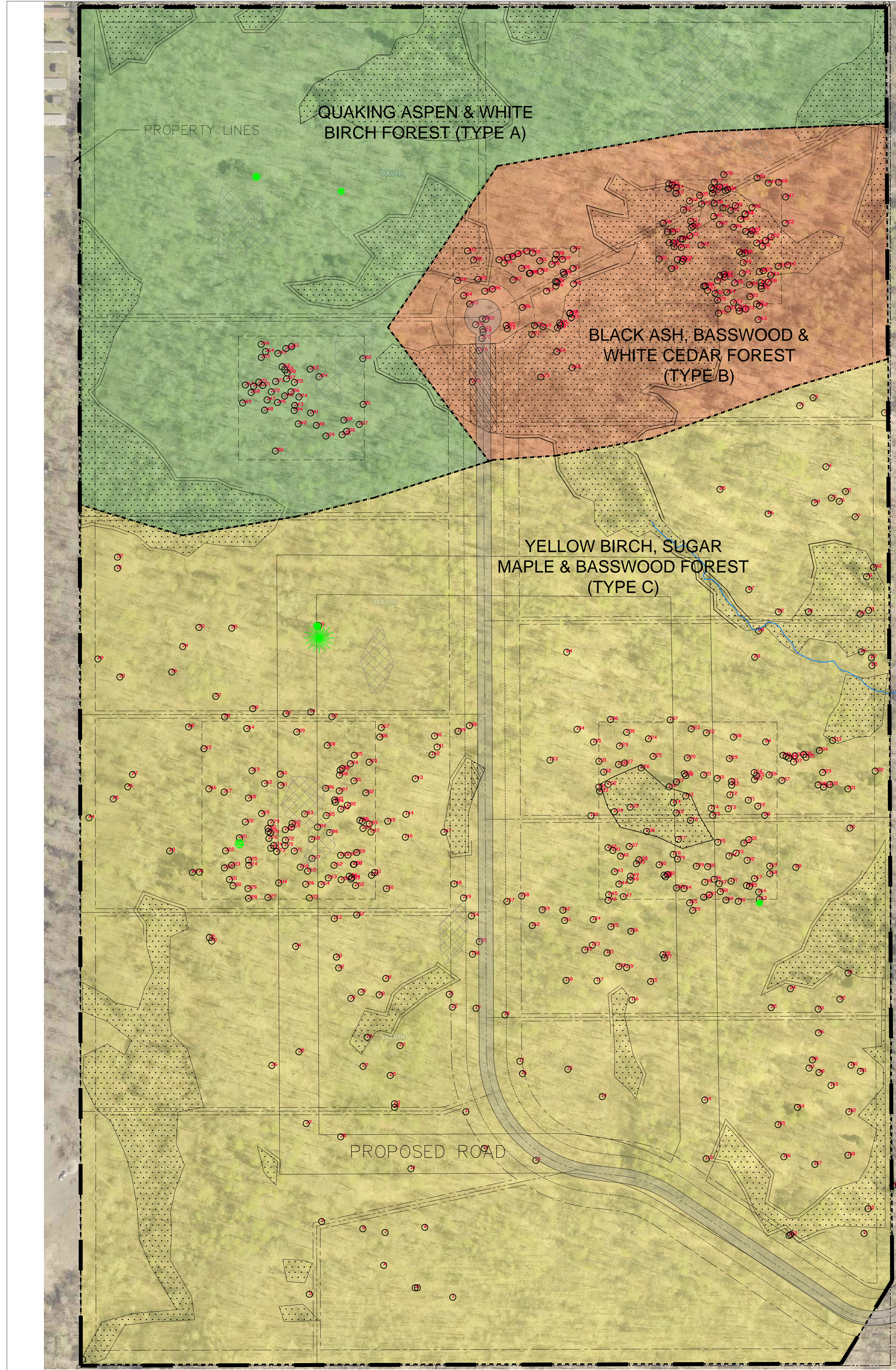
- Wetland Impact
- Project Fill Extents
- Delineated Wetland
Soil & Water Environmental Consulting 2005
- Property Boundary

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL DO NOT REPRODUCE THIS DOCUMENT IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.



WSP Office: Duluth, MN | Source: C:\Users\jeferson\OneDrive\WSP\03610\03610.dwg - General\Crawford\Mapa\CRAWFORD011.mxd, 11/17/2021, 3:40:28 PM, NAD 1983 HARN AD, MN S1 Left, CS96 Feet



181 Sugar Maple	>10m	white birch	3324964.930	4819037.181	3325835.634	4818611.401
182 Other	>10m	white birch	3324968.614	4819040.411	3325837.717	4818698.750
183 Sugar Maple	6-20m	rotten	3324966.420	4819055.354	3325839.432	4818717.848
184 Other	6-20m	white birch	3324945.384	4819067.730	3325821.118	4818701.000
185 Yellow Birch	>10m	rotten	3324921.846	4819177.058	3325842.633	4818706.634
186 Yellow Birch	6-20m		3324911.176	4819190.148	3325775.450	4818544.698
187 Yellow Birch	6-20m		3324893.022	4819189.034	3325763.186	4818504.205
188 Yellow Birch	6-20m		3324943.333	4819127.598	3325735.520	4818508.079
189 Other	>10m	quaking aspen	3324926.548	4819136.189	3325760.438	4818506.179
190 Yellow Birch	6-20m		3324924.605	4819155.174	3325774.865	4818673.097
191 Yellow Birch	>10m	multiple trunk	3324957.622	4819165.276	3325764.399	4818677.371
192 Other	>10m	balsam poplar, dam	3324992.038	4819171.414	3325781.408	4818694.681
193 Other	>10m	balsam poplar	3325003.977	4819153.355	3325755.932	4818632.913
194 Yellow Birch	6-20m		3324999.191	4819141.828	3325763.891	4818618.691
195 Other	>10m	balsam poplar	3325021.897	4819123.488	3325832.598	4818632.899
196 Yellow Birch	6-20m		3324960.974	4819117.295	3325832.426	4818634.091
197 Yellow Birch	6-20m	damaged	3324953.502	4819125.504	3325833.235	4818636.409
198 Yellow Birch	6-20m	damaged	3324950.874	4819102.085	3325867.441	4818635.441
199 Other	>10m	black ash	3324982.303	4819108.128	3325875.030	4818624.807
200 Other	>10m	balsam poplar	3324981.575	4819106.122	3325884.775	4818635.096
201 Yellow Birch	6-20m	damaged	3325000.622	4819166.172	3325883.873	4818641.079
202 Other	>10m	balsam poplar	3325026.262	4819174.665	3325909.077	4818614.334
203 Other	>10m	white birch	3325124.846	4819188.729	3325933.022	4818604.409
204 Sugar Maple	6-20m		3325136.733	4819188.493	3325873.961	4818674.641
205 Sugar Maple	6-20m		3325131.400	4819186.950	3325903.402	4819001.179
206 Sugar Maple	6-20m		3325132.940	4819190.894	3325948.486	4818985.942
207 Sugar Maple	6-20m		3325123.660	4819429.139	3325967.854	4819000.173
208 Sugar Maple	6-20m		3325195.231	4819439.218	3325985.833	4818977.134
209 Yellow Birch	6-20m		3325159.440	4819184.354	3325976.540	4818971.318
210 Other	>10m	white birch	3325127.030	4819122.270	3325981.871	4818962.756
211 Sugar Maple	6-20m		3325122.126	4819146.089	3325981.788	4818920.897
212 Other	>10m	quaking aspen	3325116.033	4819146.944	3325996.103	4818910.766
213 Yellow Birch	6-20m		3325098.262	4819170.647	3325947.768	4818894.840
214 Other	>10m		3325086.823	4819149.990	3325949.938	4818928.304
215 Sugar Maple	6-20m		3325070.195	4819154.647	3325933.165	4818913.816
216 Other	>10m	quaking aspen	3325113.266	4819143.079	3325930.279	4818898.478
217 Other	>10m	quaking aspen	3325121.321	4819125.187	3325959.522	4819102.834
218 White Spruce	6-20m		3325131.661	4819107.688	3325960.083	4819113.816
219 Yellow Birch	>10m		3325134.661	4819108.333	3325963.123	4819103.131
220 Yellow Birch	>10m		3325163.902	4819173.350	3325983.415	4819109.875
221 Other	>10m	white birch	3325132.699	4819100.020	3325991.232	4819118.130
222 Other	>10m	quaking aspen	3325202.304	4819190.470	3325996.407	4819108.281
223 Other	>10m	quaking aspen	3325208.668	4819179.575	3325992.261	4819094.029
224 Yellow Birch	6-20m	rotten	3325221.338	4819109.027	3325987.497	4818985.469
225 Yellow Birch	6-20m		3325163.457	4819116.850	3325974.547	4819149.930
226 Yellow Birch	6-20m		3325143.530	4819197.029	3325982.560	4819105.440
227 Yellow Birch	6-20m		3325152.354	4819169.653	3325991.010	4819106.918
228 Yellow Birch	6-20m		3325149.977	4819159.711	3325982.635	4819107.224
229 Other	>10m		3325161.455	4819151.455	3325999.586	4819105.479
230 Sugar Maple	6-20m	white birch	3325202.382	4819173.124	3325967.957	4819108.491
231 Yellow Birch	6-20m		3325155.235	4819127.495	3325961.508	4819108.336
232 Other	>10m	black ash	3325113.148	4819142.666	3325970.712	4819107.126
233 Yellow Birch	>10m		3325105.732	4819128.533	3325944.800	4819106.398
234 Other	>10m	black ash	3325072.262	4819152.837	3325946.229	4819106.100
235 Other	>10m	black ash	3325079.265	4819178.943	3325946.649	4819106.649
236 Yellow Birch	>10m		3325039.648	4819105.904	3325930.415	4819101.032
237 Yellow Birch	>10m		3325014.872	4819177.447	3325942.280	4819105.683
238 Yellow Birch	6-20m		3324993.940	4819193.613	3325939.417	4819119.317
239 Yellow Birch	6-20m		3324986.630	4819189.196	3325886.662	4819101.905
240 Sugar Maple	6-20m		3324998.658	4819163.140	3325877.886	4819102.826
241 Sugar Maple	6-20m	rotten	3325008.175	4819163.343	3325902.942	4819101.942
242 Sugar Maple	6-20m		3325012.832	4819142.430	3325911.306	4819149.395
243 Sugar Maple	>10m	multiple trunk	3324973.178	4819153.551	3325928.270	4819138.488
244 Sugar Maple	6-20m		3324962.899	4819160.468	3325913.380	4819123.181
245 Sugar Maple	6-20m		3324935.257	4819143.540	3325926.353	4819118.942
246 Sugar Maple	6-20m		3324924.196	4819142.676	3325931.358	4819106.194
247 Sugar Maple	6-20m		3324912.291	4819167.048	3325939.120	4819102.841
248 Sugar Maple	6-20m		3324909.076	4819178.930	3325983.409	4819106.640
249 Sugar Maple	>10m		3324965.944	4819179.303	3326002.416	4819103.497
250 Other	>10m	white birch	3324967.786	4819124.199	3326009.943	4819105.170
251 Sugar Maple	6-20m		3324967.443	4819125.099	3326010.288	4819103.201
252 Sugar Maple	6-20m		3324959.190	4819178.331	3326021.788	4819177.766
253 Sugar Maple	6-20m		3324961.115	4819184.070	3326079.050	4819174.611
254 Sugar Maple	6-20m		3324963.530	4819157.991	3326088.100	4819193.527
255 Sugar Maple	>10m		3324960.051	4819102.403	3326101.526	4819112.866
256 Other	>10m		3324960.869	4819173.728	3326091.834	4819114.444
257 Other	>10m	quaking aspen	3324985.424	4819173.555	3326075.394	4819117.332
258 Sugar Maple	6-20m		3324988.321	4819172.817	3326076.976	4819126.974
259 Sugar Maple	6-20m		3325004.908	4819128.042	3326053.316	4819116.600
260 Other	>10m	quaking aspen	3324990.711	4819133.849	3326067.861	4819133.970
261 Other	>10m	quaking aspen	3324992.190	4819169.433	3326099.256	4819126.438
262 Other	>10m	quaking aspen	3324983.944	4819169.736	3326095.904	4819127.332
263 Sugar Maple	6-20m		3324963.048	4819181.230	3326098.399	4819133.964
264 Other	>10m		3324962.190	4819169.433	3326099.701	4819133.964
265 Yellow Birch	6-20m		3324974.262	4819167.227	3325977.251	4819105.288
266 Other	>10m	quaking aspen	3324980.923	4819165.104	3326085.566	4819145.453
267 Yellow Birch	6-20m		3324995.254	4819165.104	3326123.814	4819145.453
268 Other	>10m	quaking aspen	3325026.757	4819163.788	3326108.615	4819106.623
269 Sugar Maple	>10m		3325046.621	4819160.059	3326116.855	4819108.026
270 Other	>10m	quaking aspen	3325016.420	4819160.013	3326014.900	4819101.316
271 Other	>10m	quaking aspen	3325007.317	4819162.309	3326019.974	4819111.141
272 Other	>10m	quaking aspen	3325025.502	4819160.076	3326042.281	4819144.934
273 Other	>10m	quaking aspen	3325066.407	4819196.171	3326056.730	4819110.175
274 Other	>10m	quaking aspen	3325016.611	4819189.547	3325964.097	4819108.035
275 Other	>10m	quaking aspen	3325012.097	4819186.512	3325962.402	4819191.947
276 Other	>10m	quaking aspen	3325028.027	4819183.486	3325944.105	4819194.611
277 Other	>10m	quaking aspen	3325039.468	4819182.404	3325945.237	4819106.824
278 Other	>10m	quaking aspen	3325037.322	4819186.029	3325971.427	4819142.889
279 Other	>10m	balsam poplar	3325033.478	4819186.198	3325973.233	4819148.979
280 Other	>10m	white birch	3325044.733	4819181.981	3325938.593	4819194.752
281 Other	>10m	balsam poplar	3325042.525	4819181.042	3325968.105	4819190.103
282 Sugar Maple	6-20m		3325052.895	4819182.140	3325983.400	4819196.189
283 Other	>10m	quaking aspen	3325068.472	4819184.412	3325830.788	4819168.350
284 Other	>10m	quaking aspen	3325046.474	4819183.481	3325834.032	4819168.338
285 Other	>10m	quaking aspen	3325065.939	4819187.922	3325844.791	4819179.781
286 Other	>10m	quaking aspen	3325037.602	4819188.424	3325873.894	4819103.748
287 Other	>10m	quaking aspen	3325038.790	4819175.199	3325869.236	4819106.897
288 Other	>10m	quaking aspen	3325044.753	4819178.399	3325871.787	4819103.045
289 Other	>10m	quaking aspen	3325052.037	4819184.848	3325873.743	4819101.306
290 Sugar Maple	6-20m		3325058.079	4819173.486	3325868.419	4819107.099
291 Yellow Birch	6-20m	rotten	3325056.461	4819177.278	3325868.100	4819176.105
292 Sugar Maple	6-20m		3325082.969	4819172.728	3325788.842	4819103.785
293 Sugar Maple	6-20m		3325070.195	4819170.194	3326086.042	4819139.779
294 Sugar Maple	6-20m		3325087.829	4819160.847	3326101.898	4819126.676
295 Sugar Maple	6-20m		3325091.537	4819169.763	3326098.195	4819115.713
296 Oak	6-20m	red oak	3325110.647	4819176.916	3326110.267	4819117.811
297 Sugar Maple	>10m	rotting	3325106.498	4819169.477	3326122.435	4819133.305
298 Sugar Maple	6-20m		3325132.578	4819169.997	3326095.801	4819136.263
299 Sugar Maple	6-20m		3325140.671	4819170.848	3326063.412	4819144.811
300 Sugar Maple	6-20m		3325143.496	4819170.376	3326071.259	4819152.257
301 Sugar Maple	>10m	multiple trunk	3325123.123	4819123.567	3326068.290	4819179.937
302 Yellow Birch	>10m		3325133.142	4819143.114	3326057.755	4819168.427
303 Other	>10m	white birch	3325153.963	4819148.673	3326057.271	4819168.283
304 Other	>10m	white birch	3325151.173	4819127.549	3326048.667	4819161.042
305 Other	>10m	quaking aspen	3325165.143	4819124.117	3326035.327	4819149.120
306 Other	>10m	white birch	3325195.452	4819166.086	3326040.390	4819125.885
307 Other	>10m	white birch	3325130.909	4819168.658	3326028.900	4819169.475
308 Other	>10m	white birch	3325181.530	4819179.503	3326020.131	4819179.828
309 Yellow Birch	6-20m		3325203.680	4819129.295	3326024.222	4819177.021
310 Yellow Birch	6-20m		3325134.132	4819160.036	3326009.711	4819187.545
311 Other	>					