

City of Ramsey
Agenda
Environmental Policy Board (EPB)
Monday, February 10, 2020
6:30 pm
Lake Itasca Room, 7550 Sunwood Drive NW

- 1. Call to Order**
- 2. Citizen Input**
- 3. Approve Agenda**
- 4. Approve Minutes**
 1. Approve Meeting Minutes Dated January 13, 2020
- 5. Policy Board Business**
 1. Continued Discussion on Potential Amendment to Landscape Requirements in the Employment Districts
- 6. Board/Staff Input**
- 7. Adjournment**

Environmental Policy Board (EPB)

4. 1.

Meeting Date: 02/10/2020

By: Chris Anderson, Community
Development

Information

Title:

Approve Meeting Minutes Dated January 13, 2020

Action:

Attachments

Meeting Minutes Dated January 13, 2020

Form Review

Inbox

Tim Gladhill

Form Started By: Chris Anderson

Final Approval Date: 02/06/2020

Reviewed By

Tim Gladhill

Date

02/06/2020 10:02 AM

Started On: 02/05/2020 01:46 PM

**ENVIRONMENTAL POLICY BOARD
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA**

On Monday, January 13, 2020, the Environmental Policy Board (EPB) met in the Council Chambers at the Ramsey Municipal Center, 7550 Sunwood Drive N.W., Ramsey, Minnesota.

Members Present: Chairperson Michael Valentine
 Board Member Reid Bernard
 Board Member Jane Covart
 Board Member Melissa Fetterley
 Board Member Michael Hiatt
 Board Member Laura Moore

Members Absent: None

Also Present: City Planner Chris Anderson
 City Engineer Bruce Westby
 City Council Liaison Debra Musgrove (arrived 6:39 p.m.)

1. CALL TO ORDER

Chairperson Valentine called the meeting to order at 6:30 p.m.

2. CITIZEN INPUT

None.

3. APPROVE AGENDA

Motion by Board Member Hiatt and seconded by Board Member Bernard to approve the agenda as submitted.

Motion carried. Voting Yes: Chairperson Valentine, Board Member Hiatt, Bernard, Covart, Fetterley, and Moore. Voting No: None. Absent: None.

4. APPROVE MINUTES

4.01: Approve Meeting Minutes Dated December 16, 2019

Motion by Board Member Covart and seconded by Board Member Hiatt to approve the regular meeting minutes dated December 16, 2019.

Motion carried. Voting Yes: Chairperson Valentine, Board Member Covart, Hiatt, Bernard, Fetterley, and Moore. Voting No: None. Absent: None.

City Planner Anderson stated that in reference to the November, 2019 meeting, Councilmember Musgrove had let him know that she would not be able to attend because of a conflict with a City Council budget worksession. He stated that he had failed to alert the Board at the November meeting and wanted the minutes to reflect the reason for her absence.

5. POLICY BOARD BUSINESS

5.01: Update on Multiple Water Treatment Studies

City Planner Anderson presented the staff report. He stated that in November of 2019, City staff provided a brief update to the EPB that there were multiple water supply system studies underway. Staff noted that in the coming months, the City Engineer offered to attend an EPB meeting to provide further updates and answer any questions the Board may have. He noted that a high-level update on the two water system supply studies currently in progress was provided in the Board packet.

City Engineer Westby stated that staff has been working on two water supply studies, one looking at treatment of surface water and the other treating groundwater. He stated that unfortunately staff is not as far along as he hoped they would be but would still be providing a brief presentation. He noted that he would be happy to come back in June or July when the studies are completed to provide more definitive conclusions.

Chairperson Valentine commented that he would be happy to have City Engineer Westby back when the studies are completed.

City Engineer Westby reviewed the timeline for the City's current water supply system including construction of the system, participation in the regional surface water supply study, recent levels of manganese, and centralized water treatment facility preliminary design study. He noted that future plans in the CIP include construction of a groundwater treatment facility. He provided an update on the status of the regional surface water supply study, noting that the Metropolitan Council is funding the study while the cities involved are leading the study. He stated that they are hoping to have results available next month to further review. He provided an update on the status of the centralized water treatment facility preliminary design study, noting that the study will provide three deliverables to the City. He stated that staff is hoping to have the results from this study around June or July. He confirmed that he would be willing to come back to the Board with the final study results later this summer.

Chairperson Valentine stated that it will become increasingly difficult to obtain permits for wells for this purpose as so much water is being drawn from the aquifers. He also commented on the Joint Powers Agreement that would be needed for a multiple municipality treatment facility. He asked for input on the City's relationship with the DNR, as that agency could have an impact on the City's ability to draw additional water from the aquifer.

City Engineer Westby commented that the City has a good relationship with the DNR. He stated that with ongoing discussions and the City working with the DNR on various studies, he believes that the DNR would allow additional wells to be drilled if necessary. He believed that the DNR recognizes that the costs are significant to convert a municipal water supply to a surface water

treatment system. He did not believe that the DNR would require an additional pilot study or deny the request of Ramsey to drill another well.

Board Member Hiatt asked how many cities are currently drawing surface water from the Mississippi, other than Minneapolis and St. Cloud.

City Engineer Westby stated that there are additional cities utilizing surface water treatment but was unsure if there were any located between St. Cloud and Minneapolis.

Board Member Hiatt asked if there is a model of other cities along the Mississippi that work together on a regional surface water treatment system. He noted that the City could use that information for its study.

City Engineer Westby stated that the consultant is reviewing governance models used by others that share a water treatment facility and noted that he would remind the consultant of those examples.

Board Member Hiatt asked if there is potential to perhaps drill in the northern part of the City.

City Engineer Westby explained that the aquifer disappears as you move north and west in the City. He stated that a well siting study will need to be done each time the City needs to drill a well.

Board Member Fetterley asked if there are concerns that the surface water study would show favorable and that the DNR could then deny the City's ability to drill another well in 2023.

City Engineer Westby stated that he does not have any concerns that the DNR would use the study results to pressure the City to switch to surface water but would instead show that the City has researched that option. He stated that he anticipates that the cost to change to surface water treatment would be prohibitive and therefore the DNR would not/could not force the City to take that route. He stated that the City has been collecting and saving funds for a groundwater treatment facility and therefore there are funds available in the water utility fund for that purpose.

Board Member Covart stated that it appears the life of a water treatment facility is about 50 years and asked the lifespan of a well.

City Engineer Westby stated that the City is getting good use of its wells. He noted that there are some maintenance items such as pump replacement, but the well itself lasts a long time. He stated that the City began punching wells in 1984 and they have served the City well and continue to do so.

Board Member Moore stated that it appears the City is also looking for future potential contaminants in these studies and asked if the issue of manganese is also included as an issue, specifically how the City can treat that to open the other wells.

City Engineer Westby confirmed that is a part of the second study the City is completing on its own. He noted that the City is attempting to identify as much as it can in terms of possible future contaminants to be prepared for the future.

Councilmember Musgrove stated that she does have questions but will wait until the studies are completed, as that information will most likely answer her questions. She asked if the City is looking to drill one additional well, or two, based on the City's rate of growth.

City Engineer Westby stated that in the latest update of the City's Comprehensive Water Systems Study, two wells are identified; one in 2023 and a second in 2028 or 2030. He stated that staff will talk with the consultant that completes the well siting study for the 2023 well to determine if additional work could be done in advance for the second well.

Chairperson Valentine expressed appreciation to City Engineer Westby for attending the meeting and provided an update tonight.

5.02: Overview of Framework for Water Efficiency Grant Program

City Planner Anderson presented the staff report. He stated that the City of Ramsey has been awarded \$28,000 in grant funds through the Metropolitan Council's 2019-2022 Water Efficiency Grant Program for use in a rebate program. As the name of the program implies, the purpose of the grant is to implement water efficient technologies to reduce the demand on water supply.

City Planner Anderson stated that there are two primary financial requirements of the program. First, the municipality must contribute 25 percent of the grant award, which equates to \$9,340. Second, that rebate recipients must also have a financial contribution. Other important eligibility requirements include the rebate recipient being a municipal water customer, only applicable to replacement devices, and the rebate is only applicable for the cost of the device and its installation, excluding any owner labor costs.

Councilmember Musgrove asked if there would be a provision in the application that would require a 30-day waiting period once opened to the public. She stated that in searching smart devices, there is a wide range of pricing available. She stated that requiring residents to only pay tax is not a big commitment and asked if it would make more sense to require residents to pay an additional amount (such as \$20 or \$25) to ensure that they are being smart with their purchases, rather than the resident choosing higher priced items simply because this program is paying the cost.

Chairperson Valentine stated that it is an interesting question as there is a science to figuring out how big the rebate should be in order to attract participants. He stated that his concern would be that if the rebate is not enough, residents may not choose to participate.

Board Member Hiatt stated that he thought he read that there is a maximum rebate per device, which is \$200.

City Planner Anderson agreed that there is a wide range of prices and staff attempted to make the program as attractive as possible but also wanted to create the opportunity for as many residents to participate as possible. He used the example of toilets, noting that there is a wide variety available for \$200 or less, while there is a wide variety available above \$200. He stated that there would be a device maximum of \$200, with a household maximum of \$500. He stated that this could also be used as a pilot for the City to implement its own program in the future, if desired.

Board Member Hiatt stated that this money will greatly help with the cost for the devices, but the homeowner would also be responsible for labor costs to install the new devices. He commented that the \$500 maximum per household would help to serve the intent desired by Councilmember Musgrove. He noted that half of the City would not be eligible for the program as they are not connected to municipal water services. He hoped that the City could also investigate options for those residents that are not connected to City services in the future.

Board Member Fetterley stated that she would suspect that the majority of devices purchased will be irrigation upgrades, which will cost significantly more than \$200. She stated that this information will all be distributed to the public and did not see the purpose of a waiting period as it will already take time for residents to complete research and find the appropriate devices and contractors.

Councilmember Musgrove stated that Councilmembers, Commissioners, Board Members, and City staff have a head start on the availability of grant funds from the program, which would put them at advantage so to speak. She explained that her thinking was perhaps to provide the same amount of notice to residents.

City Planner Anderson stated that as the structure of the rebate program is finalized there will be a number of public promotions completed to notify the public. He stated that staff could incorporate a start date for applications if desired.

Chairperson Valentine agreed that it would be fair to have public notice. He noted that there would also be a seasonal concern with irrigation uses.

Board Member Covart asked if a public notice stating that the grant funds would be available in 30 days from the publication would suffice the intent of Councilmember Musgrove. She referenced audit services, which would not be covered under this grant, but noted that service would be available to those on private wells as well and is something the City could look at for a future program.

Motion by Board Member Hiatt and seconded by Board Member Bernard to recommend that the City Council adopt Resolution #20-018 to enter into the Clean Water Fund Grant Agreement with the Metropolitan Council and to accept the \$28,000 grant to implement a water efficiency rebate program.

Motion carried. Voting Yes: Chairperson Valentine, Board Member Hiatt, Bernard, Covart, Fetterley, and Moore. Voting No: None. Absent: None.

5.03: Minnesota Department of Agriculture Presentation on Emerald Ash Borer (EAB)

City Planner Anderson presented the staff report. He stated that in response to an inquiry from a concerned Ramsey resident, City staff went out to inspect an ash tree in the resident's front yard. There was a gallery visible on one of the lower limbs. City staff sent photos of the gallery to the Minnesota Department of Agriculture's Arrest the Pest site for review. A follow up inspection by City staff and MDA occurred on December 11, 2019, which ultimately confirmed the presence of Emerald Ash Borer (EAB). EAB is an invasive insect that attacks all native variety of ash trees.

Jonathan Osthus, Minnesota Department of Agriculture, stated that EAB was first found in Minnesota in 2009 and since that time has continued to spread throughout the State. He provided background information and reviewed the life cycle of the EAB. He provided information on host trees and displayed photographs of what residents should look for, specifically the “S” shaped galleries and EAB larva. He stated that adult EAB leave a “D” shaped exit hole but can be harder to find. He displayed a photograph of look alike insects that the Department of Agriculture often receives calls on. He reviewed the symptom progression that occurs during the different years of infestation and provided photographs as well. He also provided photograph examples of native damage to trees. He provided a national perspective of how EAB has spread, explaining that people have moved EAB much faster than it would have spread on its own. He reported that EAB is currently in 22 counties in Minnesota and is spreading up the 94 corridor, which is still spreading slower than the national average. He reviewed some of the regulations within Minnesota that help to regulate the spread of EAB and also provided information on tree removal and treatments available for EAB. He noted that it can sometimes be less costly to treat an EAB tree compared to removal of the tree. He stated that the best place to start would be to complete a tree inventory, or at least an Ash tree inventory. He encouraged residents to report infested trees, so that information can be added to the database.

Board Member Moore stated that she would assume that information will be included in the next City newsletter. She asked if there would be information on how residents should dispose of wood from a tree that they have removed themselves.

City Planner Anderson stated that there is information on the City website but noted that he would verify that information is still up to date and conduct any needed refreshing. He stated that information on proper management for removed trees as well as available treatment would be available on the website. He explained that EAB was identified in Anoka County (Ham Lake) about five years ago and therefore the quarantine on the County went into effect at that time. He stated that winter is a great time to look for signs and symptoms of infected trees. He noted that concerned residents can contact City staff to verify whether EAB is present.

Board Member Fetterley asked if the City needs to be concerned, as the City has not completed its own inventory. She asked if additional funds should be committed in the budget for possible tree removal and/or treatment.

Mr. Osthus stated that the best place to start would be to complete an inventory, which can then be used to plan for possible future costs.

City Planner Anderson stated that the City attempted to complete a tree inventory. He explained that through the Resilient Communities Program (RCP), the City, in conjunction with University of Minnesota Urban Forestry students, trained volunteers in species identification. Unfortunately, we were not able to obtain a large enough group of volunteers to complete the inventory. He stated that the City’s tree population is fairly young and from a public perspective, the designed and planted right of way trees do not include significant mature Ash trees. He stated that from a budget perspective, as of right now, if boulevard trees become infested the City would lean towards removal and replanting rather than considering treatments. He stated that there may be valuable larger Ash trees in some parks that may warrant consideration for treatment. He noted in terms of private trees, the City can act as an educational resource, but the decision and responsibility would ultimately be the homeowners.

5.04: Review Landscape Plan for Amended Preliminary Plat of Riverstone Addition

City Planner Anderson presented the staff report. He stated that Riverstone LLC has applied for a revised Preliminary Plat for the subdivision known as Riverstone, which is located south of Alpine Drive, north of the railroad tracks, and on the west side of Puma St NW. The proposed revision is in the northern portion of the site and would eliminate the previously approved attached townhomes and replace with more detached villas, which is the primary product offered in Riverstone. The proposed amendment to the Preliminary Plat does have a minor impact on the approved Landscape Plan for the subdivision.

Motion by Board Member Fetterley and seconded by Board Member Covart to recommend approval of the revised Landscape Plan for Riverstone.

Motion carried. Voting Yes: Chairperson Valentine, Board Member Fetterley, Covart, Bernard, Hiatt, and Moore. Voting No: None. Absent: None.

6. BOARD / STAFF INPUT

No additional comments.

7. ADJOURNMENT

Motion by Board Member Hiatt and seconded by Board Member Bernard to adjourn the meeting.

The meeting adjourned at 8:19 p.m.

Respectfully submitted,

Chris Anderson
City Planner

ATTEST:

JoAnn Shaw
Community Development Secretary
Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

Environmental Policy Board (EPB)

Meeting Date: 02/10/2020

By: Chris Anderson, Community Development

Information

Title:

Continued Discussion on Potential Amendment to Landscape Requirements in the Employment Districts

Purpose/Background:

At the December, 2019 Environmental Policy Board (EPB) meeting, there was continued discussion about potential amendments to the landscaping requirements for the Employment Districts (E-1, E-2, and E-3), which originated as a result of the DeltaMod Tech Landscape Plan. The EPB had reviewed what various peer communities (Andover, Coon Rapids, Dayton, and Elk River) had for landscaping requirements. Additionally, the EPB expressed a desire to explore what the results would be if the Canopy Cover Formula, which is applied to multi-family developments, were applied. Staff was directed to prepare exhibits (Landscape Plans) to assist the EPB in understanding what the various code requirements would look like. Those exhibits are attached.

Observations/Alternatives:

In the following table, the originally approved landscaping numbers for DeltaMod Tech are outlined along with the required number of trees and shrubs for that same site after applying the various communities' landscaping requirements. It seems apparent that the shrub requirements of a couple communities are significantly higher than Ramsey's standard. While shrubs can be an important element of a landscape, Staff would encourage a greater emphasis on trees rather than shrubs.

Community	Number of Trees	Number of Shrubs
DeltaMod Tech	218	762
Andover	70	350
Coon Rapids	409	3,282
Dayton	192	2,882
Elk River	90	0

As part of this exercise, several exhibits were also created to demonstrate multiple alternatives if the Canopy Cover Formula were applied to this site. When applying the Canopy Cover Formula, there is a lot of flexibility in terms of number of trees (meeting a minimum amount of square footage of canopy cover rather than a minimum number of trees/shrubs), so this is not really an apples to apples comparison with the numbers outlined in the above table. This option would afford the project's design team to be more creative in designing the landscape. But, some thresholds may need to be incorporated to ensure a mix of species is included to avoid focusing on just a couple species that have the greatest assigned square footage (e.g. Bur Oak, White Oak, American Elm, each are assigned almost 4,000 square feet in value). Finally, it may be helpful to also consider a cap on the amount of square footage accomplished via shrubs and ornamental trees, as this helps shift more emphasis to shade trees that generally provide more benefits, both environmentally and economically.

If the EPB supports amending the landscape requirements, Staff would recommend including intended objectives of landscaping within the ordinance. This may assist in outlining what the intent of the requirements are, such as improving the aesthetics from public roads, enhancing energy efficiency, etc. Attached to this case are some examples of possible objectives. If the EPB supports the inclusion of objectives, Staff can revise and refine the draft for consideration as part of a formal draft ordinance amendment.

One other item that the EPB may wish to consider is a standard or requirement for a certain amount of native landscaping (wildflowers and grasses). This could potentially be tied to a certain percentage of building footprint, as an example. This could help reduce the amount of maintained turf grass and thus, reduce the amount of water and fertilizer applied to the site over time. While Staff does not have any specific recommended standard, if this is of interest to the EPB, Staff can attempt to vet this more and incorporate into an ordinance amendment, if that's the ultimate direction of the EPB.

Funding Source:

This case is being handled as part of Staff's regular duties.

Action:

Motion to direct Staff to proceed with drafting an Ordinance Amendment for landscaping requirements in the Employment Districts.

Attachments

[Memo Summarizing Various Options](#)

[Original Approved DeltaModTech Landscaping Plan](#)

[Planting Plan Example Based on Andover's Requirements](#)

[Planting Plan Example Based on Coon Rapids' Requirements](#)

[Planting Plan Example Based on Dayton's Requirements](#)

[Planting Plan Example Based on Elk River's Requirements](#)

[Canopy Cover Example A](#)

[Canopy Cover Example B](#)

[Canopy Cover Example C](#)

[Draft Objectives](#)

Form Review

Inbox

Tim Gladhill

Form Started By: Chris Anderson

Final Approval Date: 02/06/2020

Reviewed By

Tim Gladhill

Date

02/06/2020 11:20 AM

Started On: 01/30/2020 03:07 PM

Ramsey Landscape Ordinance Analysis

Environmental Policy Board Meeting

Date: 1/10/2020

At the request of City staff, we have prepared a series of planting plans for the Delta ModTech project based on peer community ordinance requirements. Each of the city codes are shown on the individual PDFs along with an example of a layout showing what the requirements could look like for the Delta ModTech site. Additional layouts were created by changing certain species with smaller canopy coverage to those with a larger coverage. By doing so, one plan will meet existing code while the other well exceeds the Ramsey code with over 191,000 square feet of coverage while keeping the same number of trees. Below is an overview of quantities needed for each City based on the proposed Delta ModTech project.

Original Proposed Plan

Trees: 218
Shrubs 762

Andover

Trees: 70
Shrubs 350

Coon Rapids

Trees: 409
Shrubs 3,282

Dayton

Trees: 192
Shrubs 2,882

Elk River

Trees: 90
Shrubs 0

Ramsey

153,167 square feet of canopy cover (required)

Proposed Plan A: Trees from existing planting plan were removed and certain species were changed to meet the Ramsey Code. No shrubs were modified.

Trees: 199
Shrubs 648

Canopy Cover: 153,702 square feet

Proposed Plan B: Trees from existing planting plan were removed and certain species were changed to maximize coverage. No shrubs were modified.

Trees: 199

Shrubs 648

Canopy Cover: 191,743 square feet

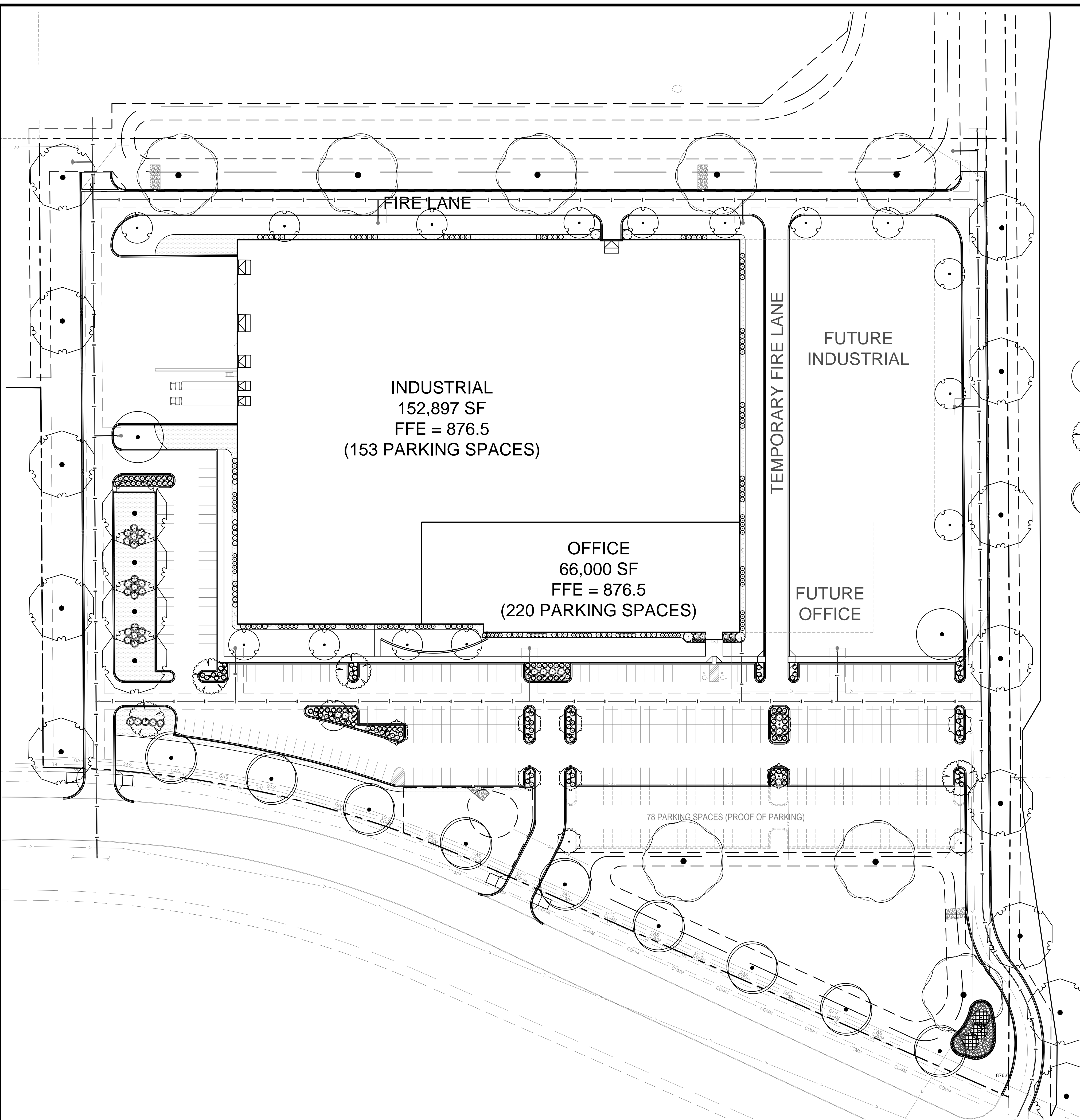
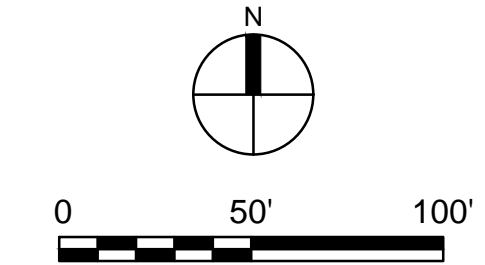
Proposed Plan C: Trees from existing planting plan were removed and certain species were changed to maximize coverage. No shrubs were modified.

Trees: 101

Shrubs 648

Canopy Cover: 153,186 square feet

\\wsb\files\01\projects\013243-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_andover.dwg 1/16/2020 1:37:31 PM



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	16
	FFM	Acer saccharum 'Bailista' TM / Fall Fiesta Sugar Maple	2
	AX2	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	10
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	4
	QBO	Quercus macrocarpa / Burr Oak	9
	TIL LI2	Tilia americana / American Basswood	9
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	BHS	Picea glauca 'Densata' / Black Hills Spruce	3
DECIDUOUS TREES	CODE	BOTANICAL / COMMON NAME	QTY
	UAM	Ulmus americana 'Valley Forge' / Valley Forge American Elm	17
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	92
	IVE	Ilex verticillata / Winterberry	35
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	65
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	150
	VTR	Viburnum trilobum / American Cranberrybush	4
PERENNIALS	CODE	BOTANICAL / COMMON NAME	QTY
	PFL	Potentilla fruticosa 'Lemon Meringue' / Lemon Meringue Potentilla	87
	SSM	Salvia x sylvestris 'May Night' / Sage	240

TOTAL TREES= 70 TOTAL SHRUBS= 350
 ANDOVER CODE: 1 TREE PER 50 LINEAL FEET OF SITE PERIMETER; 1 SHRUB PER 20 LINEAL FEET OF SITE PERIMETER; 1 SHRUB PER 10 LINEAL FEET OF BUILDING PERIMETER.

1 PLANTING PLAN
 SCALE: 1"=50'



WSB PROJECT NO.:
 013321-000

SCALE: DESIGN BY:
 SCALE BAK
 PLAN BY: CHECK BY:
 BAK JAF

NO.	DATE	DESCRIPTION

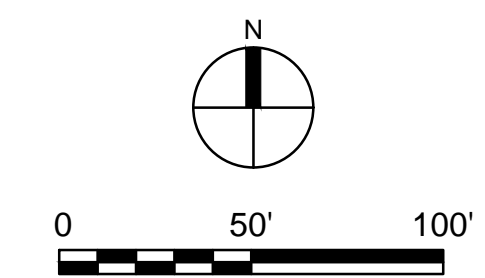
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: _____ LIC. NO: _____
 PE: _____ LIC. NO: _____

NEW BUILDING
 RAMSEY, MINNESOTA

ANDOVER
 PLANTING
 PLAN

C.P. SHEET
 ### OF
 ###



WSB PROJECT NO.:
013321-000

SCALE: DESIGN BY:
SCALE BAK
PLAN BY: CHECK BY:
BAK JAF

NO.	DATE	DESCRIPTION

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.

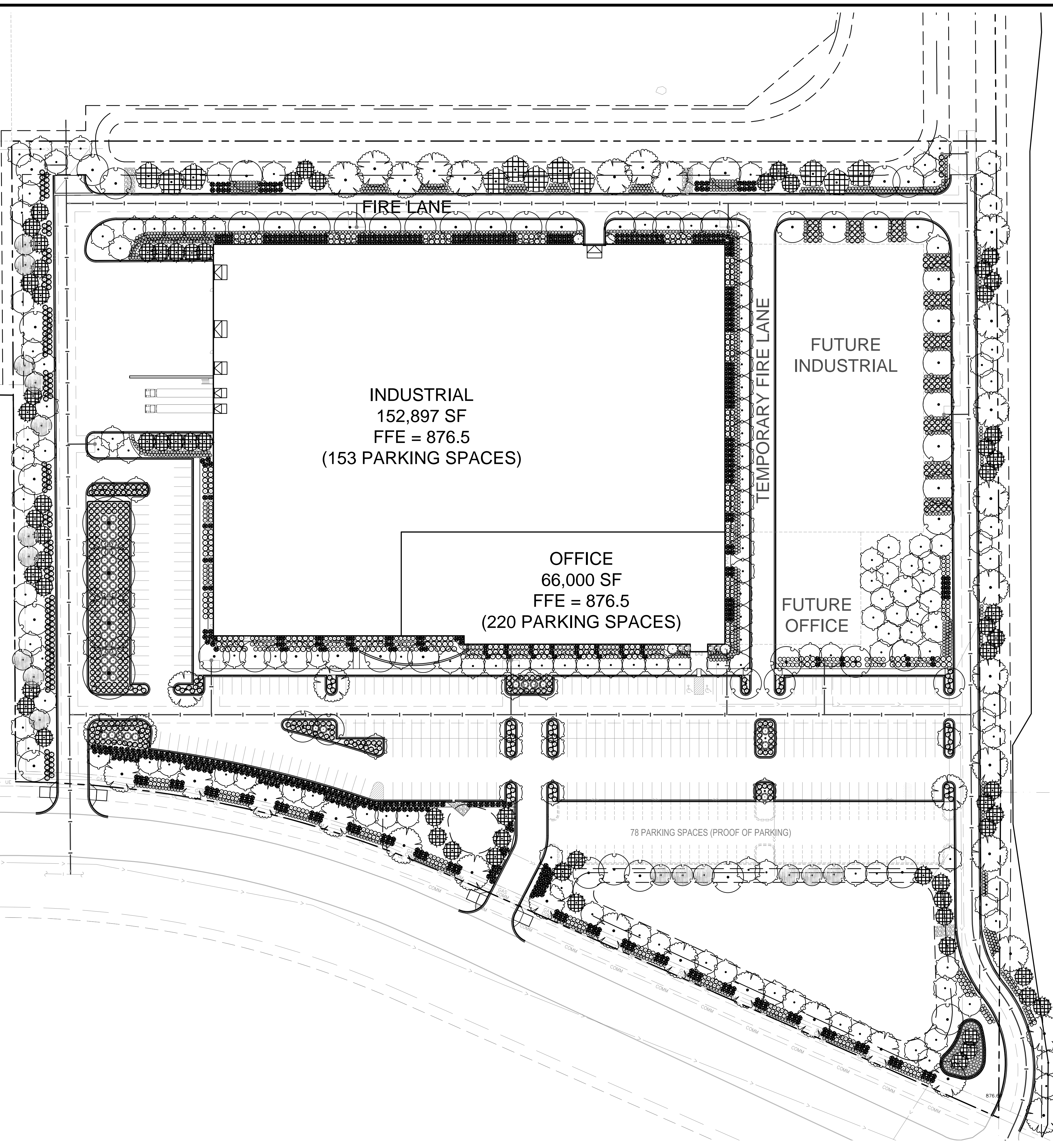
PE_NAME _____
DATE: SIGNING_DATE _____ LIC. LICENSE_NUMBER _____

NEW BUILDING
RAMSEY, MINNESOTA

COON RAPIDS
PLANTING
PLAN

C.P. ###
OF

\\wsb\files\01\projects\013243-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_Coon Rapids.dwg 1/6/2020 1:43:03 PM

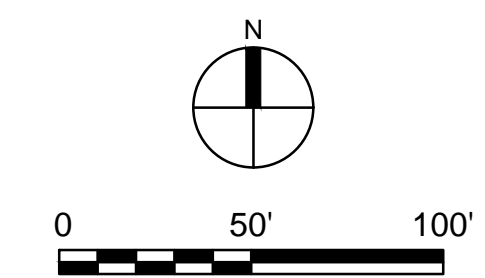


PLANT SCHEDULE			
TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	57
	FFM	Acer saccharum 'Bailista' TM / Fall Fiesta Sugar Maple	4
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	37
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABF	Abies balsamea / Balsam Fir	16
	LAL	Larix laricina / Tamarack	11
	BHS	Picea glauca 'Densata' / Black Hills Spruce	69
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	167
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	240
	IVE	Ilex verticillata / Winterberry	54
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	LXE	Lonicera xylosteum 'Emerald Mound' / Emerald Mound Honeysuckle	1,351
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	373
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	564
	TMT	Taxus x media 'Tautonii' / Tauton Yew	662
	VTR	Viburnum trilobum / American Cranberrybush	4
PERENNIALS	CODE	BOTANICAL / COMMON NAME	QTY
	PFL	Potentilla fruticosa 'Lemon Meringue' / Lemon Meringue Potentilla	87
	SSM	Salvia x sylvestris 'May Night' / Sage	206

TOTAL TREES= 409 TOTAL SHRUBS= 3,282

COON RAPIDS CODE: 1 OVERSTORY TREE PER 40 FEET OF STREET FRONTAGE AND 1 DECIDUOUS AND 1 EVERGREEN SHRUB PER 5 FEET OF FRONTAGE; 1 OVERSTORY AND 1 EVERGREEN TREE PER 3,000 SQUARE FEET OF OPEN SPACE; 1 ORNAMENTAL TREE PER 1,500 SQUARE FEET OF OPEN SPACE; 1 DECIDUOUS OR EVERGREEN SHRUB PER 100 SQUARE FEET OF OPEN SPACE.

1 PLANTING ENLARGEMENT
SCALE: 1"=50'



WSB PROJECT NO.:
013321-000

SCALE: DESIGN BY:
SCALE BAK
PLAN BY: CHECK BY:
BAK JAF

NO.	DATE	DESCRIPTION

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.

PE_NAME _____
DATE: SIGNING_DATE _____ LIC. LICENSE_NUMBER _____

NEW BUILDING
RAMSEY, MINNESOTA

DAYTON
PLANTING
PLAN

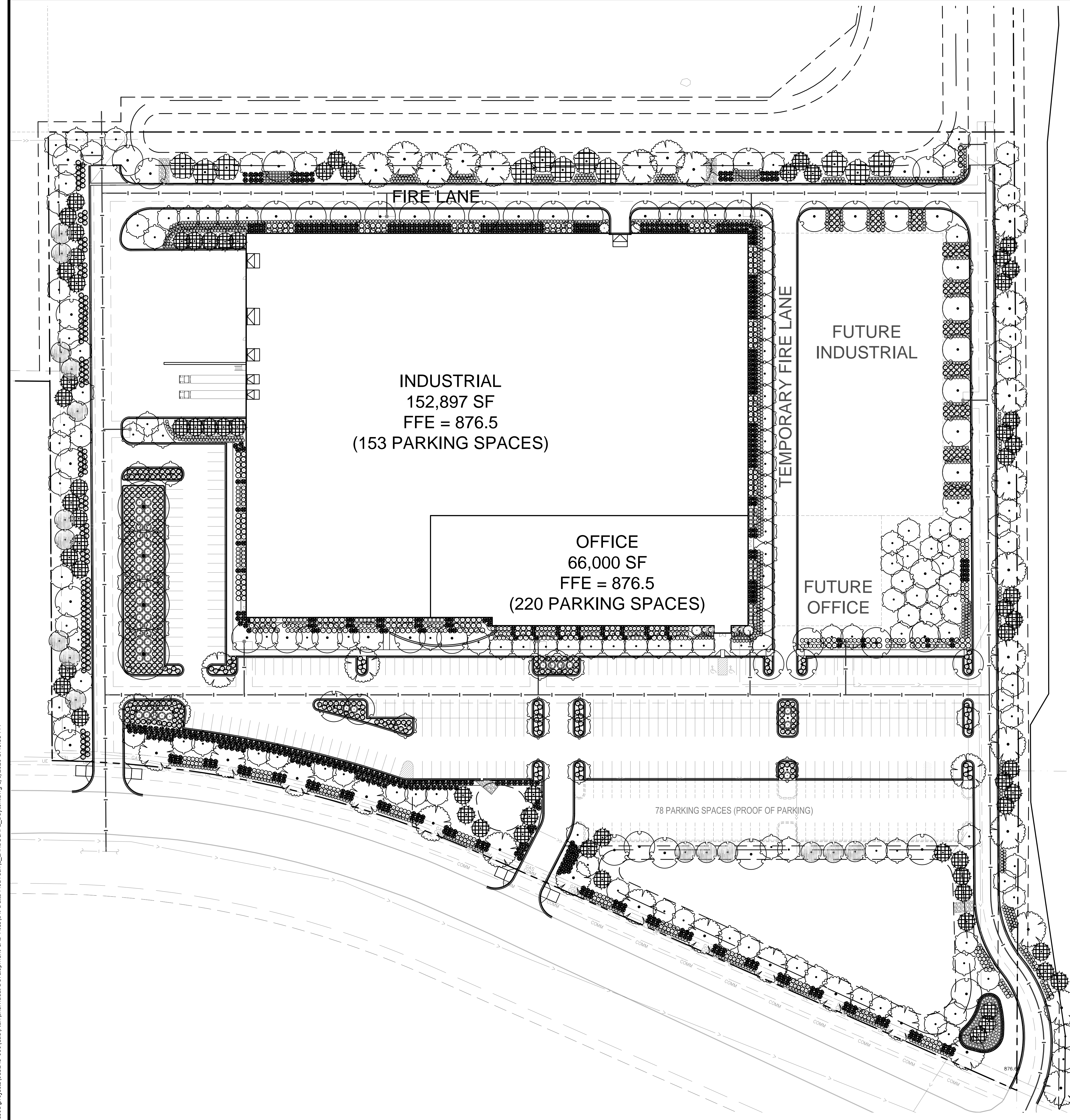
C.P. ###
OF

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	57
	FFM	Acer saccharum 'Bailista' TM / Fall Fiesta Sugar Maple	4
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	37
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABF	Abies balsamea / Balsam Fir	16
	LAL	Larix laricina / Tamarack	11
	BHS	Picea glauca 'Densata' / Black Hills Spruce	69
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	167
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	240
	IVE	Ilex verticillata / Winterberry	54
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	LXE	Lonicera xylosteum 'Emerald Mound' / Emerald Mound Honeysuckle	1,351
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	373
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	564
	TMT	Taxus x media 'Tauntonii' / Tauton Yew	662
	VTR	Viburnum trilobum / American Cranberrybush	4
PERENNIALS	CODE	BOTANICAL / COMMON NAME	QTY
	PFL	Potentilla fruticosa 'Lemon Meringue' / Lemon Meringue Potentilla	87
	SSM	Salvia x sylvestris 'May Night' / Sage	206

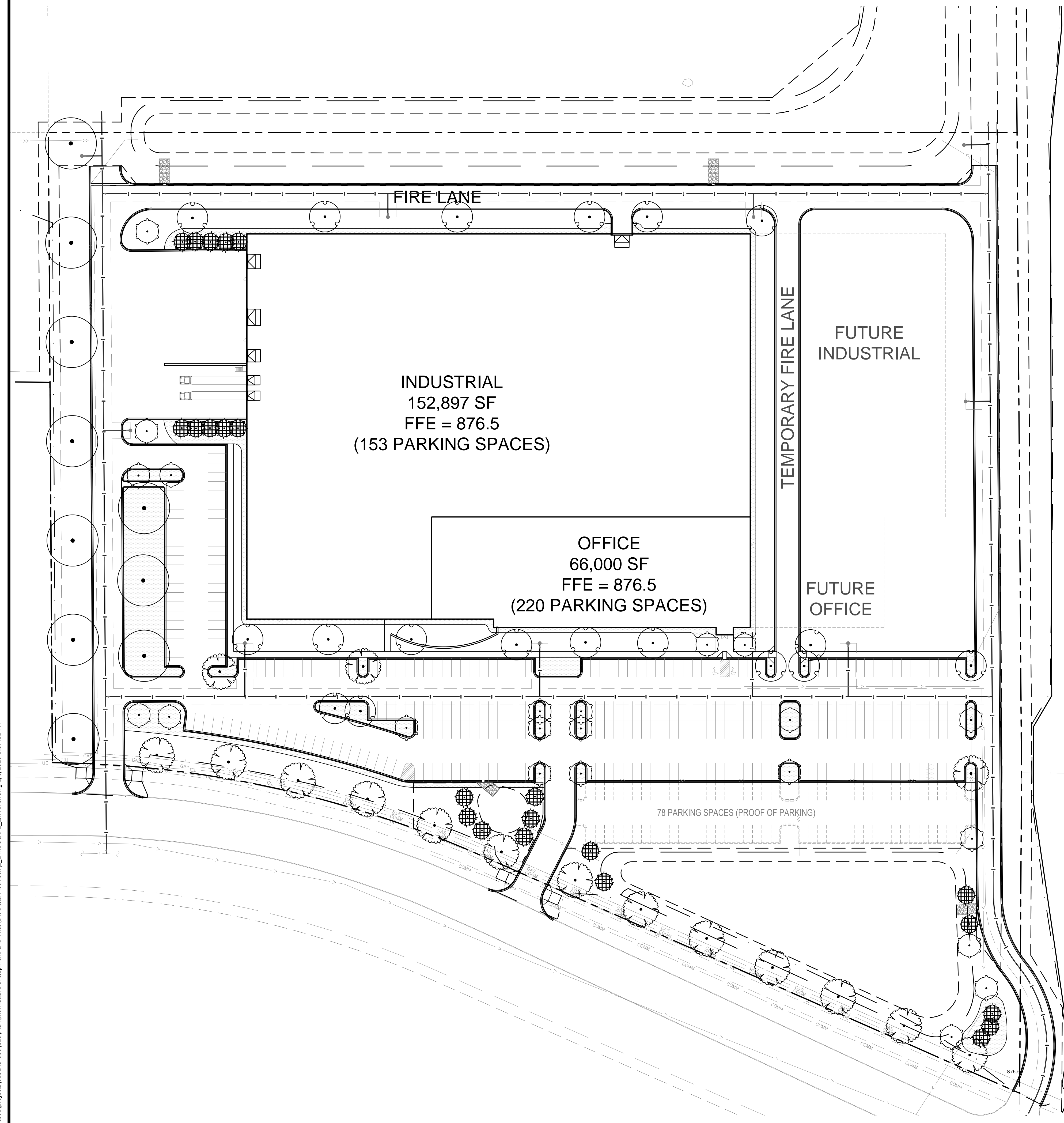
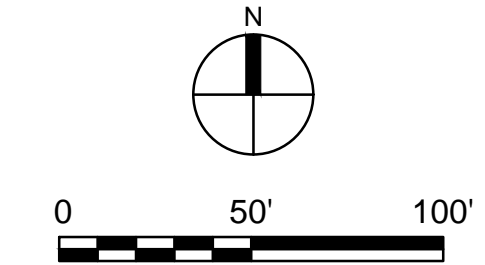
TOTAL TREES= 192 TOTAL SHRUBS= 2,882

DAYTON CODE: REQUIRED TO PROVIDE AT LEAST 3 OF THE FOLLOWING REQUIRED NUMBERS OF TREES AND SHRUBS: 1 OVERSTORY AND 1 EVERGREEN TREE PER 3,000 SQUARE FEET OF OPEN SPACE; 1 ORNAMENTAL TREE PER 1,500 SQUARE FEET OF OPEN SPACE; 1 DECIDUOUS OR EVERGREEN SHRUB PER 100 SQUARE FEET OF OPEN SPACE. APPLICANT CAN PICK WHICH 3 OF 4 TO INSTALL ON SITE.



1 PLANTING ENLARGEMENT
SCALE: 1"=50'

\\wsb\files\01\projects\013243-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_Dayton.dwg 1/6/2020 1:46:35 PM



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	18
	FFM	Acer saccharum 'Bailista' TM / Fall Fiesta Sugar Maple	10
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	16
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	BHS	Picea glauca 'Densata' / Black Hills Spruce	23
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	23

TOTAL TREES= 90 TOTAL SHRUBS= 0

ELK RIVER CODE: REQUIRED TO PROVIDE A MINIMUM OF 3 TREES, PLUS THE PERIMETER OF THE PARCEL AS MEASURED IN FEET DIVIDED BY 40. SPECIFIES THAT 50% OF THE REQUIRED TREES SHALL BE OVERSTORY; 25% OF REQUIRED TREES SHALL BE CONIFEROUS; AND 25% OF THE REQUIRED TREES SHALL BE ORNAMENTAL.



WSB PROJECT NO.: 013321-000

SCALE: DESIGN BY:
SCALE BAK
PLAN BY: CHECK BY:
BAK JAF

NO.	DATE	DESCRIPTION

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

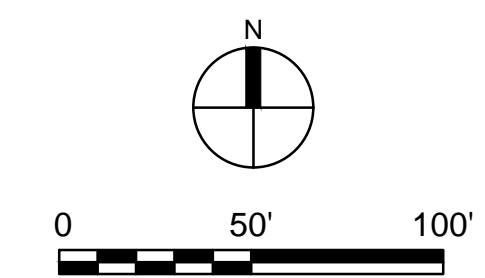
PE_NAME _____
DATE: SIGNING_DATE _____ LIC. NO: LICENSE_NUMBER _____

NEW_BUILDING
RAMSEY, MINNESOTA

ELK RIVER
PLANTING
PLAN

C.P. ###
OF

\\wsb\files\01\projects\013243-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_EHK_River.dwg 1/16/2020 1:57:01 PM



WSB PROJECT NO.:
013321-000

SCALE: DESIGN BY:
SCALE BAK
PLAN BY: CHECK BY:
BAK JAF

NO.	DATE	DESCRIPTION

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.

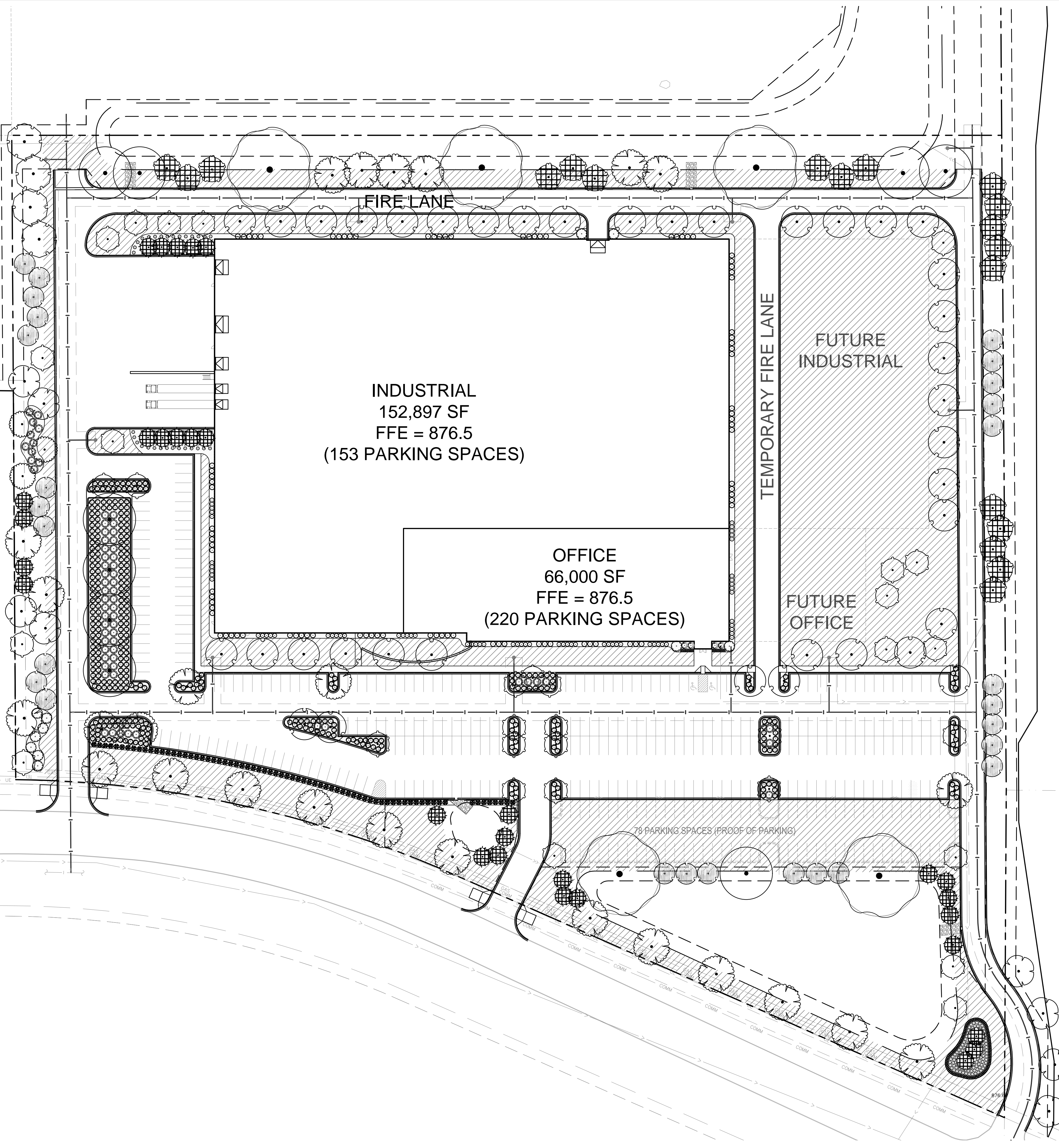
PE_NAME _____
DATE SIGNING DATE LIC. LICENSE NUMBER _____

NEW BUILDING
RAMSEY, MINNESOTA

RAMSEY
PLANTING
PLAN A

C.P. ###
OF

\\wsb\files\01\projects\013243-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_BK reduced.dwg 1/6/2021 4:35:05 PM



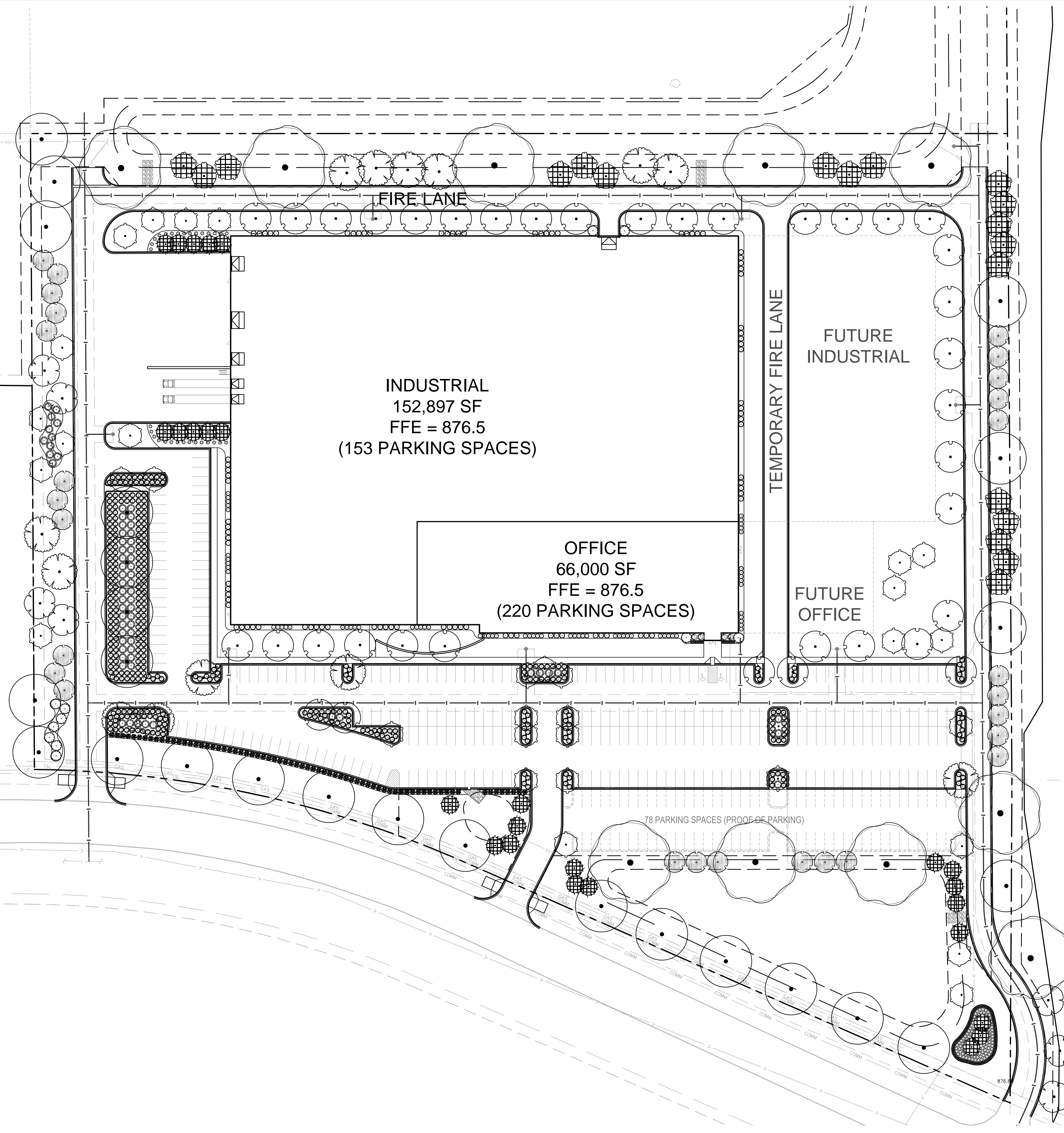
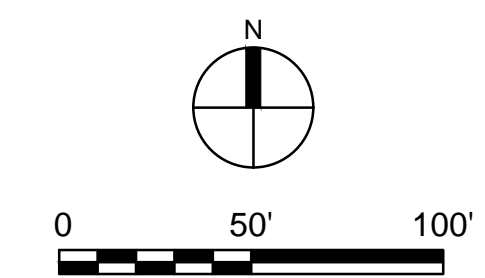
PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	38
	FFM	Acer saccharum 'Baillista' TM / Fall Fiesta Sugar Maple	9
	GBM	Ginkgo biloba / Maidenhair Tree	8
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	26
	QBO	Quercus macrocarpa / Burr Oak	5
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABF	Abies balsamea / Balsam Fir	27
	LAL	Larix laricina / Tamarack	19
	BHS	Picea glauca 'Densata' / Black Hills Spruce	30
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	34
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	MSS	Malus x 'Spring Snow' / Spring Snow Crab Apple	3
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	92
	IVE	Ilex verticillata / Winterberry	65
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	LXE	Lonicera xylosteum 'Emerald Mound' / Emerald Mound Honeysuckle	30
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	65
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	337

TOTAL TREES= 199(138,723 sf)
TOTAL SHRUBS= 648 (14,979 sf)

RAMSEY CODE: DETERMINE RATIO OF IMPERVIOUS AREA TO ENTIRE SITE AREA; MULTIPLY THIS RATIO BY THE SQUARE FOOTAGE OF THE PERVIOUS AREA TO DETERMINE TOTAL SQUARE FOOTAGE OF CANOPY COVER REQUIRED. REFER TO RAMSEY TREE BOOK TO SEE ASSIGNED SQUARE FOOTAGE OF INDIVIDUAL SPECIES. NO MORE THAN 25% OF THE REQUIRED CANOPY COVER CAN CONSIST OF ORNAMENTAL TREES AND/OR SHRUBS.

1 PLANTING ENLARGEMENT
SCALE: 1"=50'



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	37
	FFM	Acer saccharum 'Baista' TM / Fall Fiesta Sugar Maple	25
	GBM	Ginkgo biloba / Maidenhair Tree	7
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	13
	QBO	Quercus macrocarpa / Burr Oak	10
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABF	Abies balsamea / Balsam Fir	27
	LAL	Larix laricina / Tamarack	19
	BHS	Picea glauca 'Densata' / Black Hills Spruce	26
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry	35
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	92
	IVE	Ilex verticillata / Winterberry	65
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	LXE	Lonicera xylosteum 'Emerald Mound' / Emerald Mound Honeysuckle	30
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	65
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	337
	TMT	Taxus x media 'Tauntonii' / Tauton Yew	71
	VTR	Viburnum trilobum / American Cranberrybush	11

TOTAL TREES= 199(176,764 sf)
 TOTAL SHRUBS= 648 (14,979 sf)

RAMSEY CODE: DETERMINE RATIO OF IMPERVIOUS AREA TO ENTIRE SITE AREA; MULTIPLY THIS RATIO BY THE SQUARE FOOTAGE OF THE PERVIOUS AREA TO DETERMINE TOTAL SQUARE FOOTAGE OF CANOPY COVER REQUIRED. REFER TO RAMSEY TREE BOOK TO SEE ASSIGNED SQUARE FOOTAGE OF INDIVIDUAL SPECIES. NO MORE THAN 25% OF THE REQUIRED CANOPY COVER CAN CONSIST OF ORNAMENTAL TREES AND/OR SHRUBS.



WSB PROJECT NO.:
013321-000

SCALE: DESIGN BY:
SCALE: BAK
PLAN BY: CHECK BY:
BAK JAF

NO.	DATE	DESCRIPTION

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: _____ SIGNING_DATE
 LIC. NO: _____ LIC. NO: _____

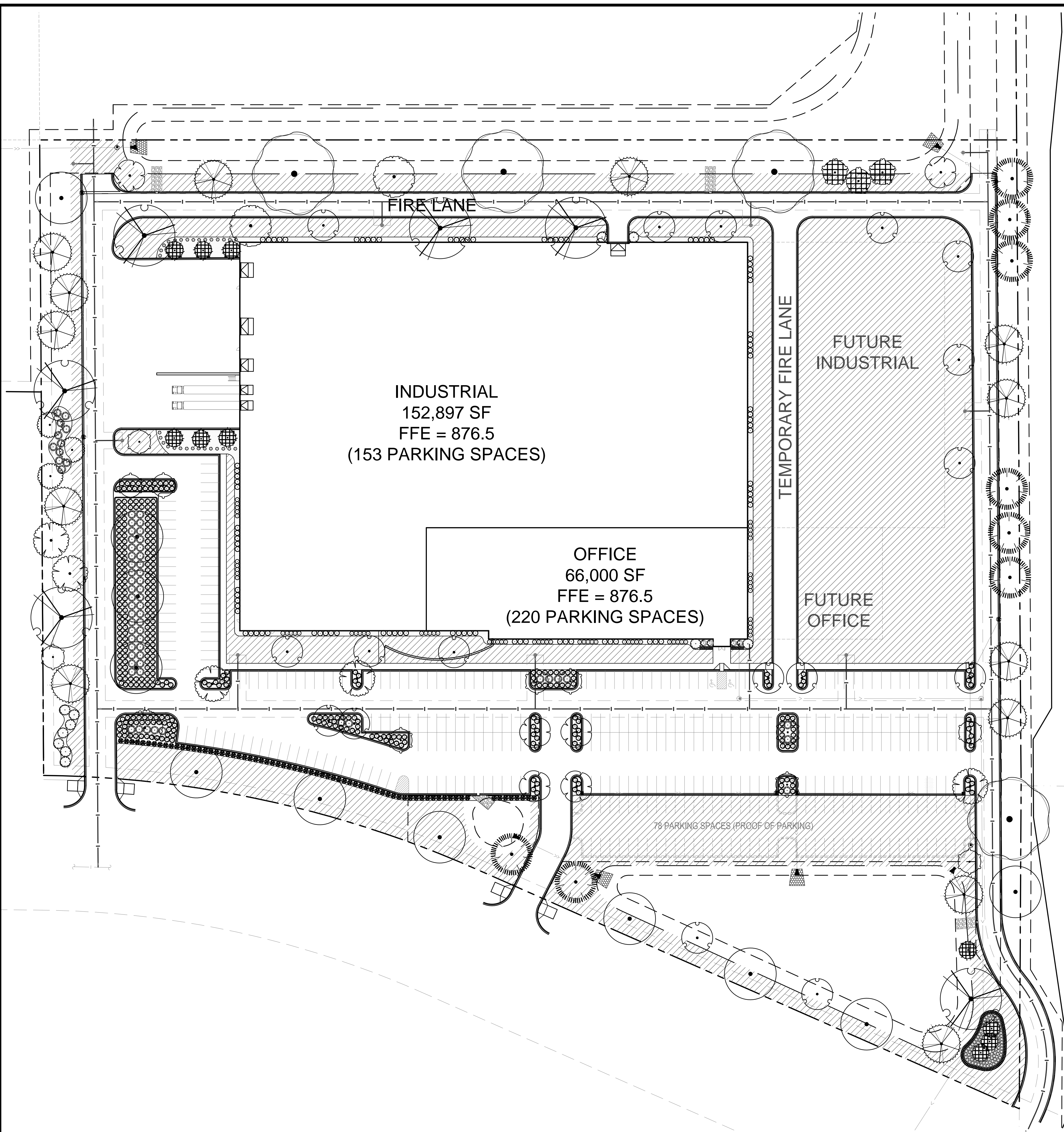
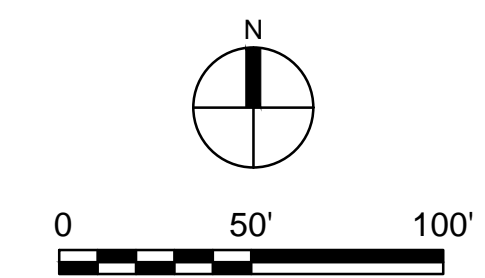
NEW BUILDING
 RAMSEY, MINNESOTA

RAMSEY
 PLANTING
 PLAN B

C.P. ###
 OF ###

I:\wsb\files\01\projects\013321-000\Cad\Plan\Individual Development CAD Files\14_Delta ModTech\LANDSCAPE_BK.dwg 17/2020 8:30:57 AM

K:\013243-000\Cad\Plan\Individual Development CAD Files\14_ Delta Mod\Tech\LANDSCAPE_BK reduced 2.dwg 1/10/2020 3:14:28 PM



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QTY
	CKM	Acer platanoides 'Crimson King' / Crimson King Maple	17
	FFM	Acer saccharum 'Bailsta' TM / Fall Fiesta Sugar Maple	11
	GBM	Ginkgo biloba / Ginkgo	6
	GSL	Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust	6
	QUE ALB	Quercus alba / White Oak	6
	QBO	Quercus macrocarpa / Burr Oak	4
	ULM AME	Ulmus americana / American Elm	2
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	QTY
	LAL	Larix laricina / Tamarack	3
	BHS	Picea glauca 'Densata' / Black Hills Spruce	10
	PIN PON	Pinus ponderosa / Ponderosa Pine	13
	PIN STR	Pinus strobus / White Pine	8
ORNAMENTAL TREES	CODE	BOTANICAL / COMMON NAME	QTY
	ABS	Amelanchier x grandiflora 'Autumn Brilliance' / Atm B. Serviceberry	12
	MSS	Malus x 'Spring Snow' / Spring Snow Crab Apple	3
SHRUBS	CODE	BOTANICAL / COMMON NAME	QTY
	AME	Aronia melanocarpa / Chokeberry	92
	IVE	Ilex verticillata / Winterberry	65
	JSS	Juniperus scopulorum 'Sutherland' / Sutherland Juniper	4
	LXE	Lonicera xylosteum 'Emerald Mound' / Emerald Mound Honeysuckle	30
	POL	Physocarpus opulifolius 'Little Devil' TM / Dwarf Ninebark	65
	RAG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	337
	TMT	Taxus x media 'Tauntonii' / Tauton Yew	71
	VTR	Viburnum trilobum / American Cranberrybush	11
PERENNIALS	CODE	BOTANICAL / COMMON NAME	QTY
	PFL	Potentilla fruticosa 'Lemon Meringue' / Lemon Meringue Potentilla	87
	SSM	Salvia x sylvestris 'May Night' / Sage	240

TOTAL TREES= 101 (138,207 sf)
 TOTAL SHRUBS= 648 (14,979 sf)

RAMSEY CODE: DETERMINE RATIO OF IMPERVIOUS AREA TO ENTIRE SITE AREA; MULTIPLY THIS RATIO BY THE SQUARE FOOTAGE OF THE PERVIOUS AREA TO DETERMINE TOTAL SQUARE FOOTAGE OF CANOPY COVER REQUIRED. REFER TO RAMSEY TREE BOOK TO SEE ASSIGNED SQUARE FOOTAGE OF INDIVIDUAL SPECIES. NO MORE THAN 25% OF THE REQUIRED CANOPY COVER CAN CONSIST OF ORNAMENTAL TREES AND/OR SHRUBS.



SCALE: DESIGN BY:
 SCALE BAK
 PLAN BY: CHECK BY:
 BAK JAF

NO.	DATE	DESCRIPTION

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.

PE_NAME: _____ LIC. NUMBER: _____
 DATE: _____ SIGNING_DATE: _____

NEW_BUILDING
 RAMSEY, MINNESOTA

RAMSEY
 PLANTING
 PLAN C

Objectives

- Enhance image and site characteristics of proposed development
- Improve energy efficiency
- Reduce storm water runoff
- Create attractive and active open spaces
- Soften hardscape by providing building accents
- Establish and/or restore native landscapes
- Reduce demand for inputs such as water and fertilizers
- Enhance view from public roads
- Reduce heat island effects