

LANDSCAPE REQUIREMENTS

DETERMINING NUMBER OF PLANTS

LOT PERIMETER: 2,332 LF/50 LF = 47 TREES
 BUILDING FOOTPRINT: 72,000 SF/1,000 SF = 72 TREES
 E-3 EMPLOYMENT DISTRICT

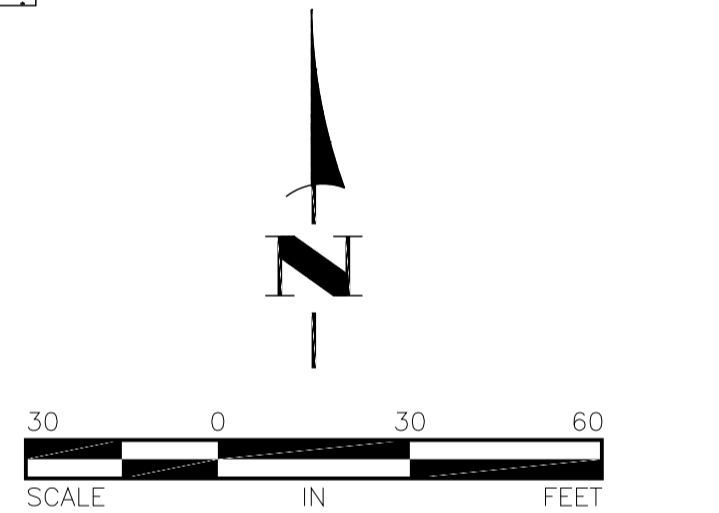
PLANTS BASED ON 72,000 SF BUILDING FOOTPRINT	REQUIRED	ON THIS PLAN
ALL DECIDUOUS/CONIFEROUS TREES PER 1,000 SF (INCLUDES 24 EXISTING OVERSTORY TREES)	72	92
SHRUBS PER 300 SF	240	240
TREE DISTRIBUTION	REQUIRED	
OVERSTORY TREES ≥ 25%	≥ 18	67
CONIFER TREES ≥ 25%	≥ 18	18
ORNAMENTAL TREES ≤ 25%	≤ 18	7
OVERSTORY TREES ADJACENT TO PUBLIC R.O.W.	REQUIRED	
PUBLIC R.O.W. 1,863 LF/35 LF	53	53
PARKING LOT LANDSCAPING - 138 STALLS	REQUIRED	
1 TREE PER 10 STALLS	14	18

NOTES:

- SEE SHEET L2 - L3 FOR PLANT SCHEDULE, PLANTING DETAILS & LANDSCAPE SPECIFICATIONS.
- ALL LANDSCAPE AREAS TO RECEIVE 4" OF TOPSOIL.
- CONTRACTOR TO PROVIDE LOAD TICKETS TO THE CITY FOR ALL TOPSOIL IMPORTED TO THE SITE PRIOR TO ANY LANDSCAPE WORK OCCURRING.
- RESTORE ALL DISTURBED AREAS WITH MNDOT LOW MAINTENANCE TURF MIX 25-131 UNLESS OTHERWISE NOTED.
- INSTALL SHRUBS IN POND AREA WITH NO EDGER.

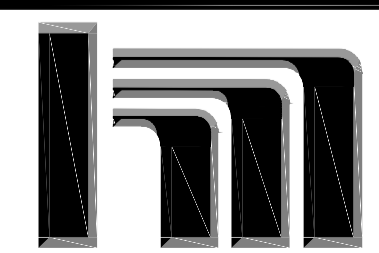


LEGEND	
	SOD 10' STRIP BEHIND ALL CURBS
	MNDOT NATIVE SEED MIX 33-262 POND AREAS



DATE _____
 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 Landscape Architect under the laws of the State of Minnesota. Name: Carmen Simonet
 Signature: *Carmen Simonet*
 License # 24236 Date: 02.03.2021

LANDSCAPE ARCHITECT:
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 www.simonetdesign.com



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**BUNKER LAKE INDUSTRIAL PARK
 BUILDING #4 SITE IMPROVEMENTS**

LANDSCAPE PLAN
 CITY OF RAMSEY, MINNESOTA

SHEET
 L1
 OF
 L3
 SHEETS

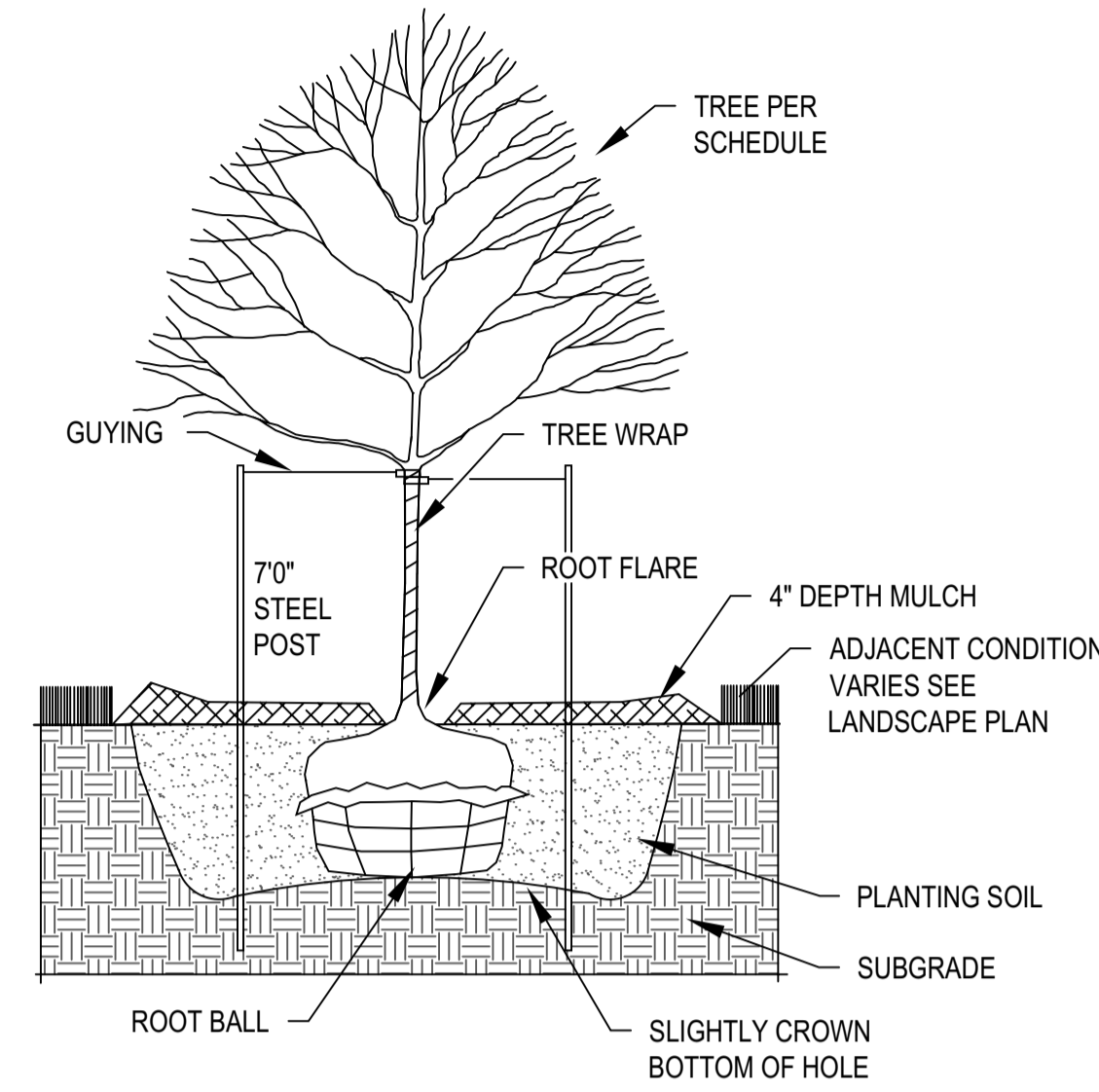
1 - Topsoil

Created by: Chris Anderson
On: 03/02/2021 01:18 PM

Topsoil shall contain no more than 35% sand content. Amend Note 2 to specify this.

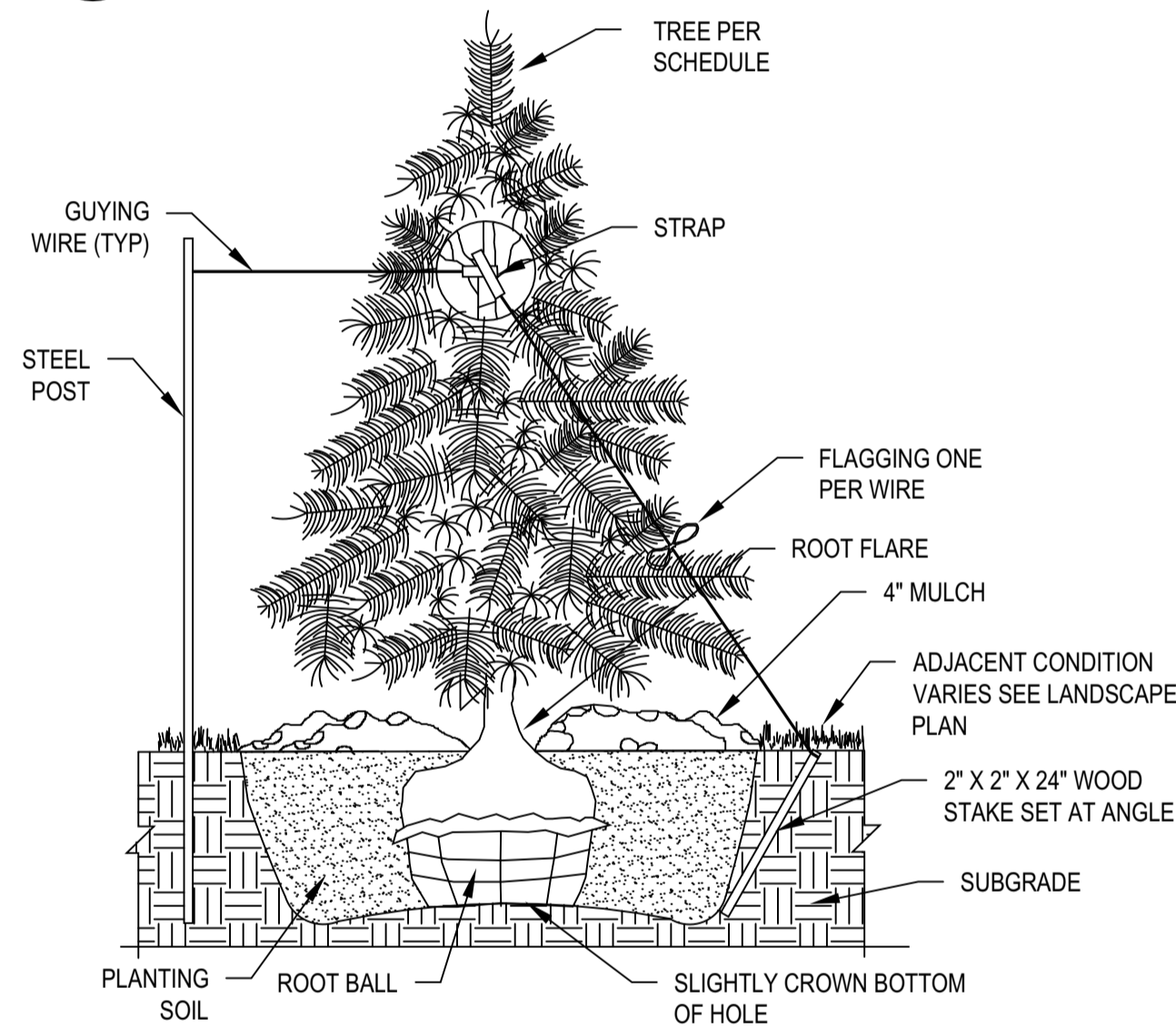
----- 0 Replies -----

PLANTING DETAILS



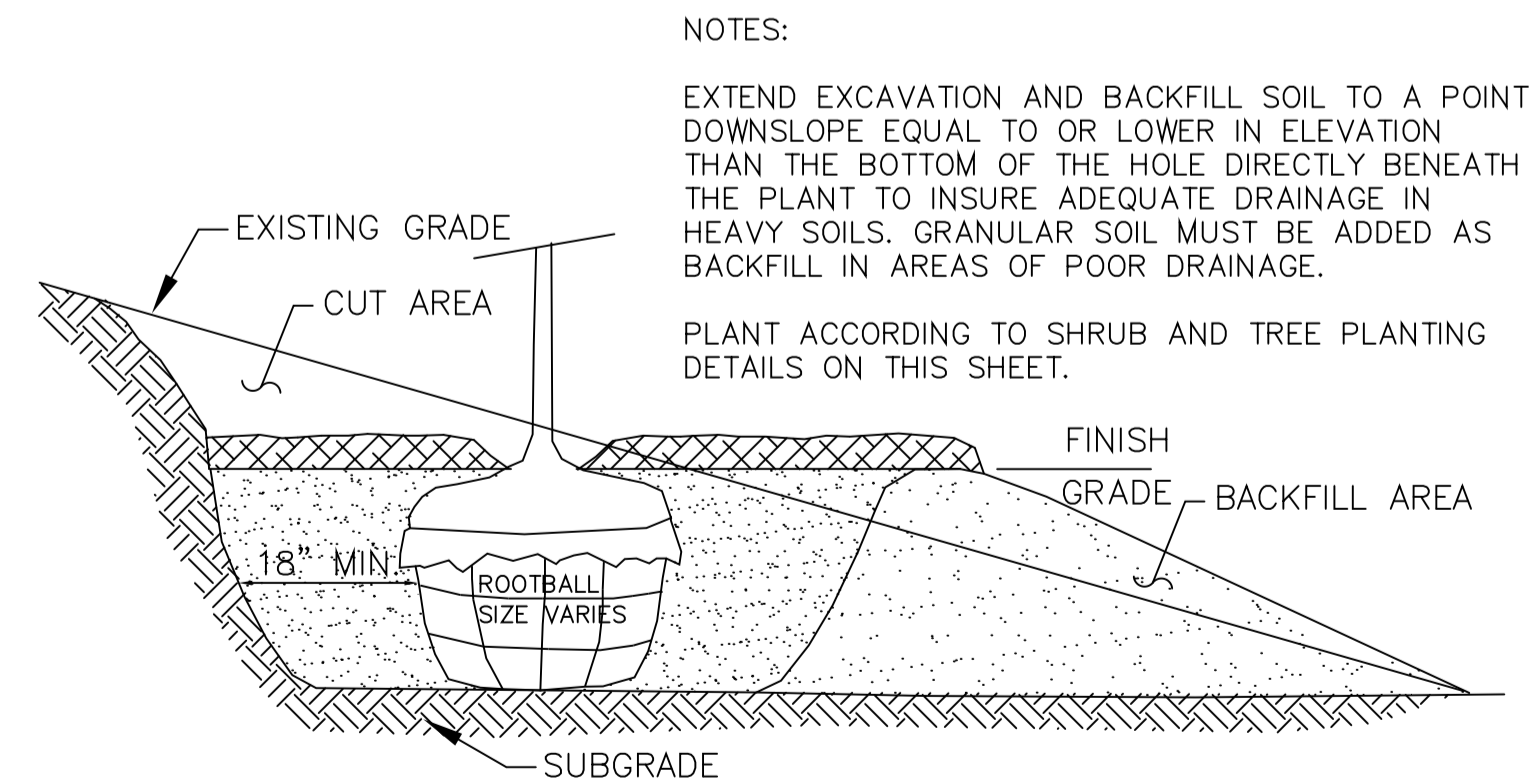
- NOTES:**
1. Remove dead or damaged branches. Retain the natural form of the tree. Do not cut the leader.
 2. Width of planting hole: 18" min. larger than root ball, on all sides.
 3. Depth of hole: root flare to sit at or up to 2" above the top of the finished soil elevation. Leave soil undisturbed beneath the root ball.
 4. Scarify bottom and sides of hole prior to planting.
 5. Set plant on undisturbed soil or thoroughly compacted planting soil.
 6. Remove top 1/3 of the basket or the top two horizontal rings whichever is greater. Remove all burlap from top 1/3 of root ball. Remove all twine.
 7. Remove or correct stem girdling roots or reject plant.
 8. Slit remaining burlap at 6" intervals.
 9. Plumb & backfill with planting soil. Thoroughly water in tree within 2 hours to settle plants and fill voids.
 10. Backfill voids and water a second time.
 11. Place double shredded hardwood mulch within 48 hours of the second watering. No mulch to be in contact w/ trunk.
 12. Contractor is responsible for maintaining trees in a plumb position throughout the guarantee period. Stake trees if site conditions, such as soil and wind, prevent the trees from staying plumb. Use 16" x 1.5" polypropylene or polyethylene straps, attach to post with 10 gauge wire. Remove within one year.
 13. Wrap trunk in fall, remove wrap in spring.
 14. Refer to plan and specs. for additional information.

1
L2
TREE PLANTING DETAIL
NOT TO SCALE



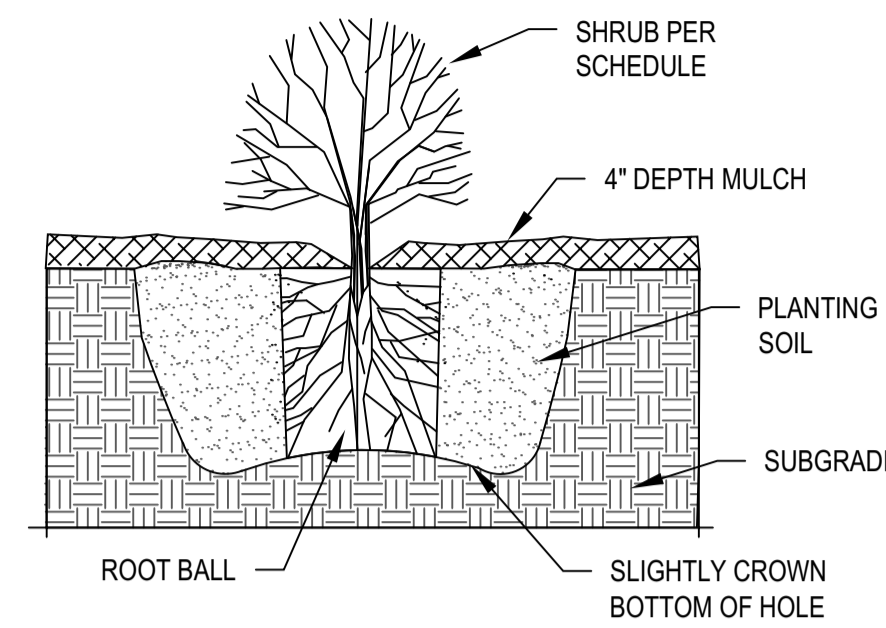
- NOTES:**
1. Width of planting hole: 18" min. larger than root ball, on all sides.
 2. Depth of hole: root flare to sit at or up to 2" above the top of the finished soil elevation. Leave soil undisturbed beneath the root ball.
 3. Scarify bottom and sides of hole prior to planting.
 4. Set plant on undisturbed soil or thoroughly compacted planting soil.
 5. Remove top 1/3 of the basket or the top two horizontal rings whichever is greater. Remove all burlap from top 1/3 of root ball. Remove all twine.
 6. Remove or correct stem girdling roots or reject plant.
 7. Slit remaining burlap at 6" intervals.
 8. Plumb & backfill with planting soil. Thoroughly water in tree within 2 hours to settle plant and fill voids.
 9. Backfill voids and water a second time.
 10. Place double shredded hardwood mulch within 48 hours of the second watering. No mulch to be in contact w/ trunk or branches.
 11. Two alternate methods of staking trees are illustrated in detail.
 12. Contractor is responsible for maintaining trees in a plumb position throughout the guarantee period. Stake trees if site conditions, such as soil and wind, prevent the trees from staying plumb. Use 16" x 1.5" polypropylene or polyethylene straps, attach to post or stake with 10 gauge wire. Remove within one year.
 13. Refer to plan and specs. for additional information.

2
L2
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



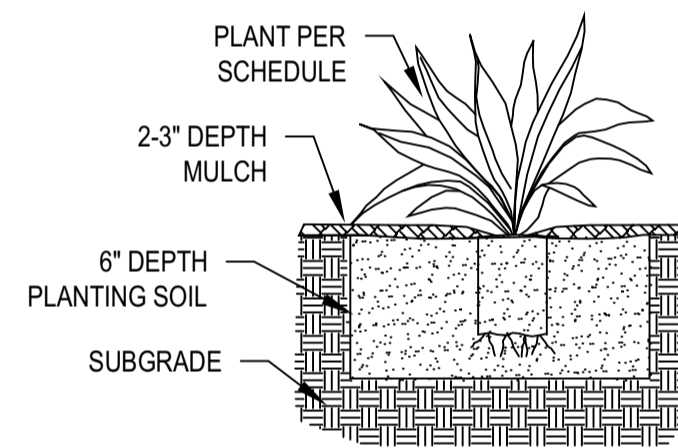
- NOTES:**
- EXTEND EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.
- PLANT ACCORDING TO SHRUB AND TREE PLANTING DETAILS ON THIS SHEET.

3
L2
PLANTING ON A SLOPE DETAIL
NOT TO SCALE



- NOTES:**
1. Dig shrub hole 12" min. larger than container size, all sides.
 2. Scarify bottom and sides of hole prior to planting.
 3. Remove dead or damaged branches. Retain the natural form of the shrub.
 4. Hand loosen roots of containerized material. Score outside of soil mass to redirect circling fibrous roots.
 5. Set shrub on undisturbed soil or on thoroughly compacted planting soil. Install plant so the top of the root flare is at or up to 2" above the finished grade.
 6. Plumb and backfill with planting soil. Thoroughly water in shrub prior to placing mulch.
 7. Place double shredded hardwood mulch. Do not place any mulch on vegetation or in contact with trunk/stems.
 8. Refer to plan and specs. for additional information.

4
L2
SHRUB PLANTING DETAIL
NOT TO SCALE



- NOTES:**
1. Plant into prepared planting bed.
 2. Plant at same depth as in container.
 3. Place double shredded hardwood mulch over perennial bed. Do not place any mulch on vegetation.
 4. Thoroughly water in plants.
 5. Refer to plan and specs. for additional information.

5
L2
PERENNIAL PLANTING DETAIL
NOT TO SCALE

PLANT SCHEDULE

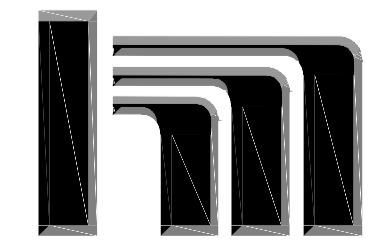
QTY	CODE	SCIENTIFIC NAME/COMMON NAME	SIZE	ROOT	REMARKS
OVERSTORY TREES					
9	AF	Acer x freemanii 'Jeffersred' Autumn Blaze maple	2.5" cal.	BB	straight trunk, single leader space 30' o.c.
12	CO	Celtis occidentalis Hackberry	2.5" cal.	BB	straight trunk, single leader space 30 - 35' o.c.
6	GD	Gymnocladus dioicus 'Espresso-JFS' Espresso Kentucky coffeetree	2.5" cal.	BB	straight trunk, single leader space 35' o.c.
6	GT	Gleditsia triacanthos inermis 'Skycole' Skyline honeylocust	2.5" cal.	BB	straight trunk, single leader see plan
5	TA	Tilia americana 'McKSentry' American Sentry linden	2.5" cal.	BB	straight trunk, single leader space 30' o.c.
5	QM	Quercus macrocarpa Bur oak	2.5" cal.	BB	straight trunk, single leader space 30' o.c.
ORNAMENTAL TREES					
7	CC	Crataegus crusgallis inermis Thornless hawthorne	2" cal.	BB	straight trunk, single leader see plan for spacing
EVERGREEN TREES					
11	PG	Picea glauca densata Black Hills Spruce	6' ht.	BB	straight trunk, single leader space 16-20' o.c.
7	PR	Pinus resinosa Norway pine	6' ht.	BB	straight trunk, single leader space 16-20' o.c.
SHRUBS (24" MIN. SHRUB SIZE AT TIME OF INSTALLATION)					
16	AA	Amelanchier alnifolia 'Regent' Regent serviceberry	#5	cont.	space 5' o.c.
14	CS	Cornus sericea 'Alleman's Compact' Alleman's compact redbud dogwood	#5	cont.	space 5' o.c.
12	CB	Cornus sericea 'Bailey' Redbud dogwood	#5	cont.	space 6' o.c.
56	DL	Diervilla lonicera Dwarf bush honeysuckle	#5	cont.	space 4' o.c.
22	HP	Hydrangea paniculata 'Little Quick Fire' Little Quick Fire hydrangea	#5	cont.	space 4' o.c.
24	PF	Potentilla fruticosa 'McKay's White' McKay's White potentilla	#5	cont.	space 3' o.c.
64	RA	Rhus aromatica 'Gro-Low' Gro-Low fragrant sumac	#5	cont.	space 4' o.c.
18	VD	Viburnum dentatum 'Christom' Blue Muffin viburnum	#5	cont.	space 6' o.c.
14	VT	Viburnum trilobum 'Wentworth' Wentworth American cranberry bush	#5	cont.	space 6' o.c.
PERENNIALS					
64	HR	Hosta 'Royal Standard' Royal Standard hosta	#1	cont.	space 2' o.c.
24	NF	Nepeta fassenii 'Walker's Low' Walker's Low catmint	#1	cont.	space 2-2.5' o.c.
26	PV	Panicum Virgatum 'Northwind' Northwind switchgrass	#1	cont.	space 3' o.c.



DATE	

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 Landscape Architect under the laws of the State of Minnesota. Name: Carmen Simonet
 Signature: *Carmen Simonet*
 License # 24236 Date 02.03.2021

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**BUNKER LAKE INDUSTRIAL PARK
 BUILDING #4 SITE IMPROVEMENTS**

**PLANTING DETAILS &
 PLANT SCHEDULE**
 CITY OF RAMSEY, MINNESOTA

SHEET
 L2
 OF
 L3
 SHEETS

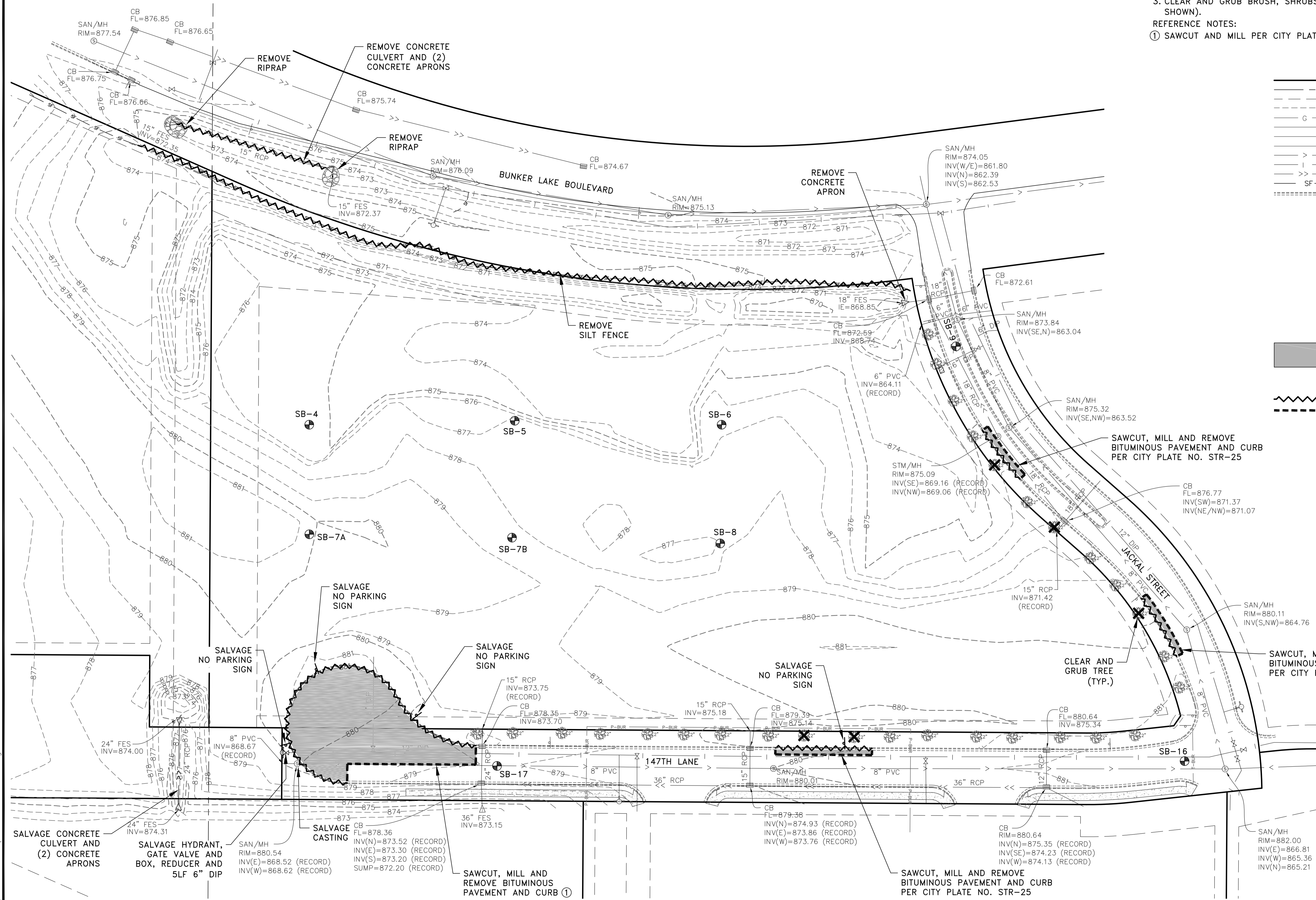
1 - Tree Sizes

Created by: Chris Anderson
On: 03/02/2021 04:27 PM

Due to the reforestation requirements yet to be fulfilled for all of Bunker Lake Industrial Park (BLIP), consideration should be given to increasing the size of trees to account for more total caliper inches being installed.

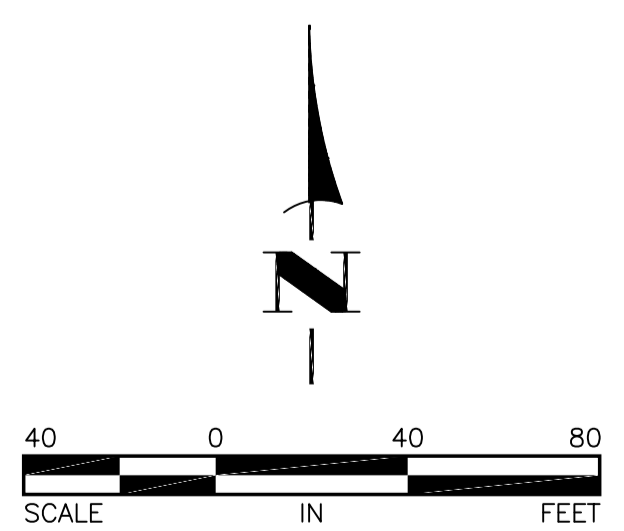
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- GENERAL NOTES:
- SILT FENCE SHALL BE IN PLACE PRIOR TO THE START OF ANY REMOVAL ACTIVITIES. SEE THE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR SILT FENCE LOCATIONS.
 - CLEARING OF ANY OAK TREES SHALL NOT OCCUR PRIOR TO JULY 15TH. IF OAK TREE CLEARING IS NECESSARY PRIOR TO JULY 15TH, AN OAK WILT MANAGEMENT PLAN MUST BE PREPARED AND SUBMITTED TO THE CITY FOR REVIEW TO ENSURE ADEQUATE MEASURES ARE IMPLEMENTED TO PROTECT FROM THE INTRODUCTION OF OAK WILT.
 - CLEAR AND GRUB BRUSH, SHRUBS AND SMALL TREES WITHIN THE CONSTRUCTION LIMITS (NOT SHOWN).
- REFERENCE NOTES:
- SAWCUT AND MILL PER CITY PLATE NO. STR-31.



LEGEND

- PROPERTY LINE
- - - SECTION LINE
- - - EASEMENT LINE
- - - XXX EXISTING CONTOUR
- G BURIED GAS MAIN
- T-BUR BURIED TELEPHONE LINE
- P-OH OVERHEAD UTILITY LINE
- P-BUR BURIED ELECTRIC LINE
- I EXISTING SANITARY SEWER
- I EXISTING WATERMAIN/WATER SERVICE
- >> EXISTING STORM SEWER
- SF EXISTING SILT FENCE
- ===== EXISTING CONCRETE CURB AND GUTTER
- ⊙ EXISTING SANITARY MANHOLE
- ⊞ EXISTING CATCH BASIN
- △ EXISTING APRON
- ⊕ HYDRANT
- ⊗ EXISTING WATERMAIN VALVE
- SIGN
- ⊕ DECIDUOUS TREE
- SB-X ⊕ SOIL BORING LOCATION
- ⊗ DETAIL NUMBER
- ⊗ SHEET NUMBER
- █ REMOVE BITUMINOUS PAVEMENT
- ⊗ CLEAR AND GRUB TREE
- ⊗ REMOVE CURB, CULVERT OR SILT FENCE
- ⊗ SAWCUT AND MILL BITUMINOUS PAVEMENT



Feb 10, 2021 10:00am K:\PRIVATE\2325.11\ENGINEERING\232511_EXISTING.dwg

DATE	

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.

Shane M. Nelson
 SHANE M. NELSON, P.E.
 Date 2/3/21 Lic. No. 43381

DESIGNED BY:	TAE
DRAWN BY:	TAE
CHECKED BY:	SMN

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**BUNKER LAKE INDUSTRIAL PARK
 BUILDING #4 SITE IMPROVEMENTS**

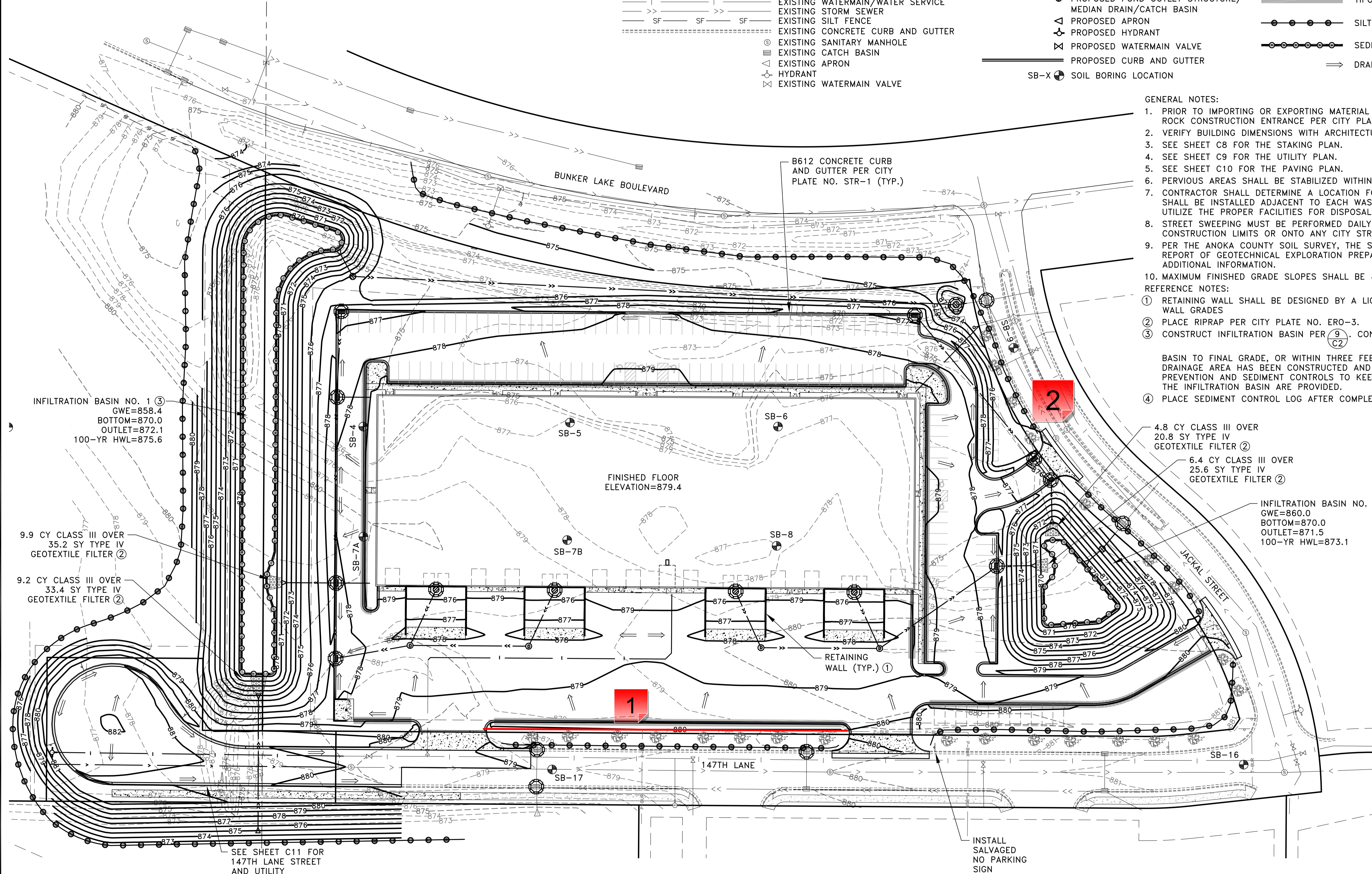
**EXISTING TOPOGRAPHY
 AND REMOVALS PLAN**
 CITY OF RAMSEY, MINNESOTA

SHEET
 C6
 OF
 C12
 SHEETS

---	PROPERTY LINE
---	SECTION LINE
---	EASEMENT LINE
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	BURIED GAS MAIN
G	T-BUR
G	P-OH
G	P-BUR
---	BURIED TELEPHONE LINE
---	OVERHEAD UTILITY LINE
---	BURIED ELECTRIC LINE
---	EXISTING SANITARY SEWER
---	EXISTING WATERMAIN/WATER SERVICE
---	EXISTING STORM SEWER
---	EXISTING SILT FENCE
---	EXISTING CONCRETE CURB AND GUTTER
⊙	EXISTING SANITARY MANHOLE
⊙	EXISTING CATCH BASIN
△	EXISTING APRON
⊕	HYDRANT
⊕	EXISTING WATERMAIN VALVE

---	SIGN
⊕	DECIDUOUS TREE
---	PROPOSED SANITARY SEWER
---	PROPOSED WATERMAIN
---	PROPOSED STORM SEWER
⊙	PROPOSED SANITARY SEWER MANHOLE
⊙	PROPOSED STORM MANHOLE
⊕	PROPOSED STORM MANHOLE
⊕	PROPOSED POND OUTLET STRUCTURE/ MEDIAN DRAIN/CATCH BASIN
△	PROPOSED APRON
⊕	PROPOSED HYDRANT
⊕	PROPOSED WATERMAIN VALVE
---	PROPOSED CURB AND GUTTER
SB-X	SOIL BORING LOCATION

⊕	DETAIL NUMBER
⊕	SHEET NUMBER
⊕	PROPOSED RIPRAP
⊕	STORM DRAIN INLET PROTECTION DEVICE PER (6), (7) AND (8) C2
---	TIPOUT CURB PER (4) C2
---	SILT FENCE PER CITY PLATE NO. ERO-1
---	SEDIMENT CONTROL LOG PER CITY PLATE NO. ERO-4 (4)
---	DRAINAGE ARROW



- GENERAL NOTES:**
- PRIOR TO IMPORTING OR EXPORTING MATERIAL FROM THE SITE, CONTRACTOR SHALL CONSTRUCT A ROCK CONSTRUCTION ENTRANCE PER CITY PLATE NO. ERO-5.
 - VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
 - SEE SHEET C8 FOR THE STAKING PLAN.
 - SEE SHEET C9 FOR THE UTILITY PLAN.
 - SEE SHEET C10 FOR THE PAVING PLAN.
 - PERVIOUS AREAS SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 - CONTRACTOR SHALL DETERMINE A LOCATION FOR CONCRETE AND OTHER WASHOUT WASTE. A SIGN SHALL BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASTES.
 - STREET SWEEPING MUST BE PERFORMED DAILY IF SEDIMENT IS TRACKED OUTSIDE THE CONSTRUCTION LIMITS OR ONTO ANY CITY STREETS.
 - PER THE ANOKA COUNTY SOIL SURVEY, THE SITE CONSISTS OF HUBBARD LOAMY SANDS. SEE THE REPORT OF GEOTECHNICAL EXPLORATION PREPARED BY NORTHERN TECHNOLOGIES, INC. FOR ADDITIONAL INFORMATION.
 - MAXIMUM FINISHED GRADE SLOPES SHALL BE 4:1.
- REFERENCE NOTES:**
- RETAINING WALL SHALL BE DESIGNED BY A LICENSED ENGINEER. SEE SHEET C8 FOR RETAINING WALL GRADES
 - PLACE RIPRAP PER CITY PLATE NO. ERO-3.
 - CONSTRUCT INFILTRATION BASIN PER (9) C2. CONTRACTOR SHALL NOT EXCAVATE THE INFILTRATION BASIN TO FINAL GRADE, OR WITHIN THREE FEET OF FINAL GRADE, UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION BASIN ARE PROVIDED.
 - PLACE SEDIMENT CONTROL LOG AFTER COMPLETION OF GRADING.

INFILTRATION BASIN NO. 1 (3)
GWE=858.4
BOTTOM=870.0
OUTLET=872.1
100-YR HWL=875.6

9.9 CY CLASS III OVER
35.2 SY TYPE IV
GEOTEXTILE FILTER (2)

9.2 CY CLASS III OVER
33.4 SY TYPE IV
GEOTEXTILE FILTER (2)

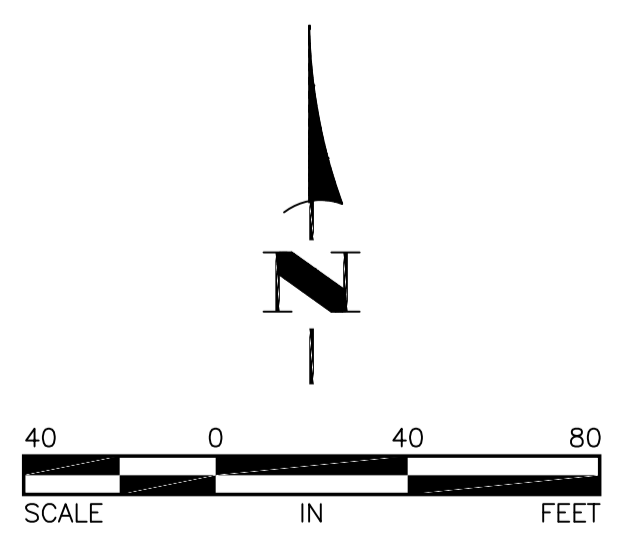
4.8 CY CLASS III OVER
20.8 SY TYPE IV
GEOTEXTILE FILTER (2)

6.4 CY CLASS III OVER
25.6 SY TYPE IV
GEOTEXTILE FILTER (2)

INFILTRATION BASIN NO. 2 (3)
GWE=860.0
BOTTOM=870.0
OUTLET=871.5
100-YR HWL=873.1

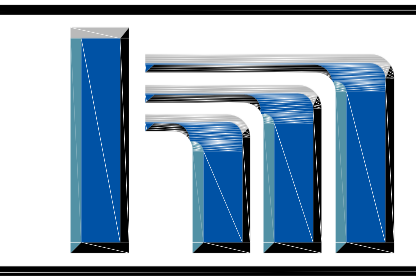
SEE SHEET C11 FOR
147TH LANE STREET
AND UTILITY
CONSTRUCTION PLAN

INSTALL
SALVAGED
NO PARKING
SIGN



Feb 10, 2021 10:01am K:\PRIVATE\232511\ENGINEERING\232511_GRADING.dwg

DATE	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.	DESIGNED BY: TAE
	<i>Shane M. Nelson</i> SHANE M. NELSON, P.E. Date 2/3/21 Lic. No. 43381	DRAWN BY: TAE
		CHECKED BY: SMN



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**BUNKER LAKE INDUSTRIAL PARK
BUILDING #4 SITE IMPROVEMENTS**

**GRADING, DRAINAGE AND
EROSION CONTROL PLAN**
CITY OF RAMSEY, MINNESOTA

SHEET
C7
OF
C12
SHEETS
2325.11

1 - Tree Save Fence

Created by: Chris Anderson
On: 03/09/2021 09:51 AM

Need to add tree save fencing on the north side of boulevard trees as well to protect during construction of curb, gutter and asphalt work.

----- 0 Replies -----

2 - Tree Save Fence

Created by: Chris Anderson
On: 03/09/2021 09:54 AM

Either add additional tree save fencing on the west side of existing boulevard trees or adjust silt fence so it is west of trees to protect against grading activity.

----- 0 Replies -----