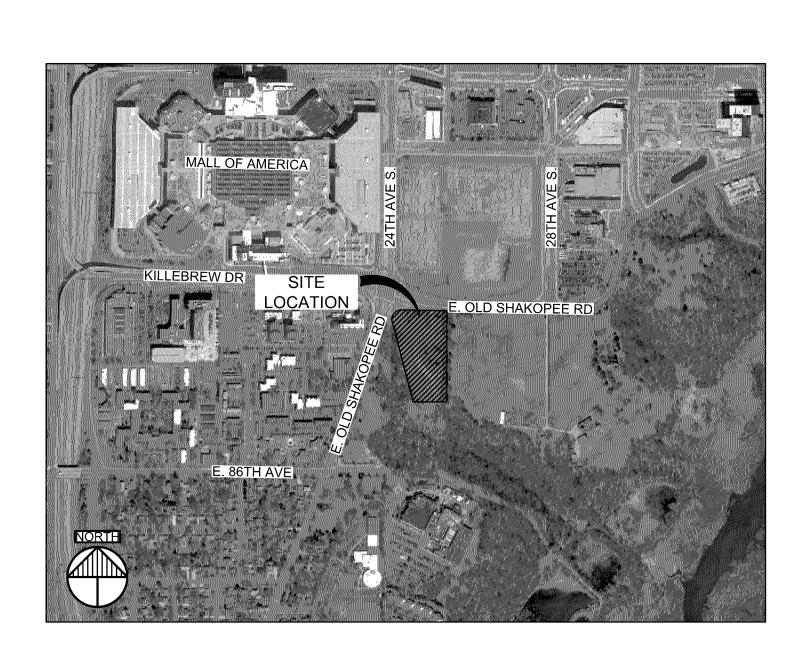
# DEVELOPMENT PLANS

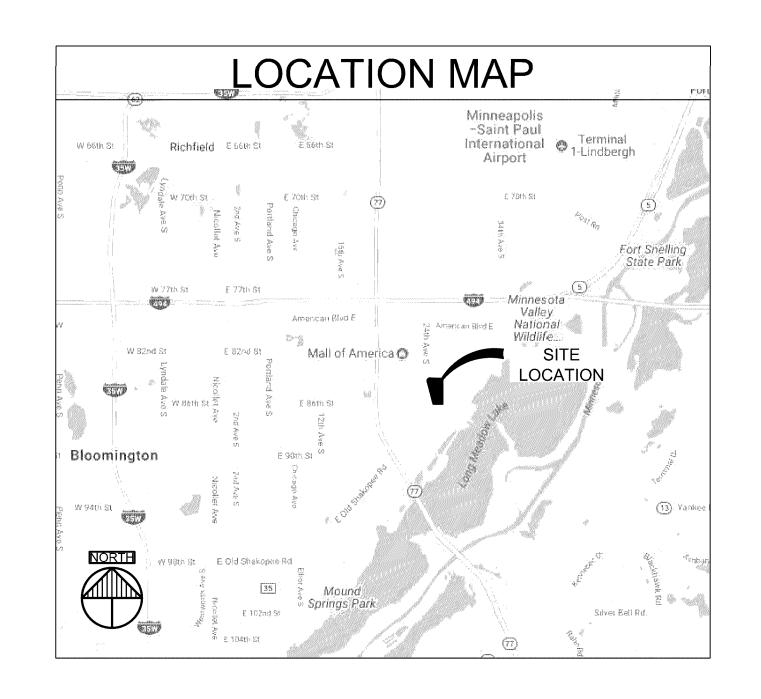
# FOR THE PROPOSED WHIRLYBALL

BLOOMINGTON, MN





DRAWING INDEX			
SHEET NO.			
C100	TITLE SHEET & DRAWING INDEX		
2016-136	CERTIFIED SURVEY SUNDE LAND SURVEYING DATED 11/01/2016		
C200	GRADING AND DRAINAGE PLAN		
C300	EROSION AND SEDIMENT CONTROL PLAN		
C400	UTILITY PLAN		
C450	SITE AND PAVING PLAN		
C500	CIVIL DETAILS		
C501	CIVIL DETAILS		
C502	CIVIL DETAILS		
C503	CIVIL DETAILS		
L100	LANDSCAPE PLAN		
L101	LANDSCAPE DETAILS		
L102	LANDSCAPE DETAILS		



OWNER: NICK LAMBRECHT 13644 80TH CIRCLE N MAPLE GROVE, MN 55369 (763) 657-1555

ARCHITECTURE: JACK AMDAL STUDIO 55 ARCHITECTS, LLP 10700 HIGHWAY 55 MINNEAPOLIS, MN 55441 (763) 544-8370

LANDSCAPE: VAA, LLC 2300 BERKSHIRE LANE #200 PLYMOUTH, MN 55441 (763) 587-7323

**ENGINEERING:** ANDREW BERENBERG VAA, LLC 2300 BERKSHIRE LANE #200 PLYMOUTH, MN 55441 (763) 587-7323

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2300 Berkshire Lane N, Suite 200

WHIRLYBALL 13644 80TH CIRCLE NORTH

MAPLE GROVE, MN 55369

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD

BLOOMINGTON, MN

ISSUE/REVISION

	DATE: 07/05/17		DRAWN: TSH	
,	DESIGNED: AMB	CHECKE PDK	ED:	APPROVED:

DRAWING TITLE:

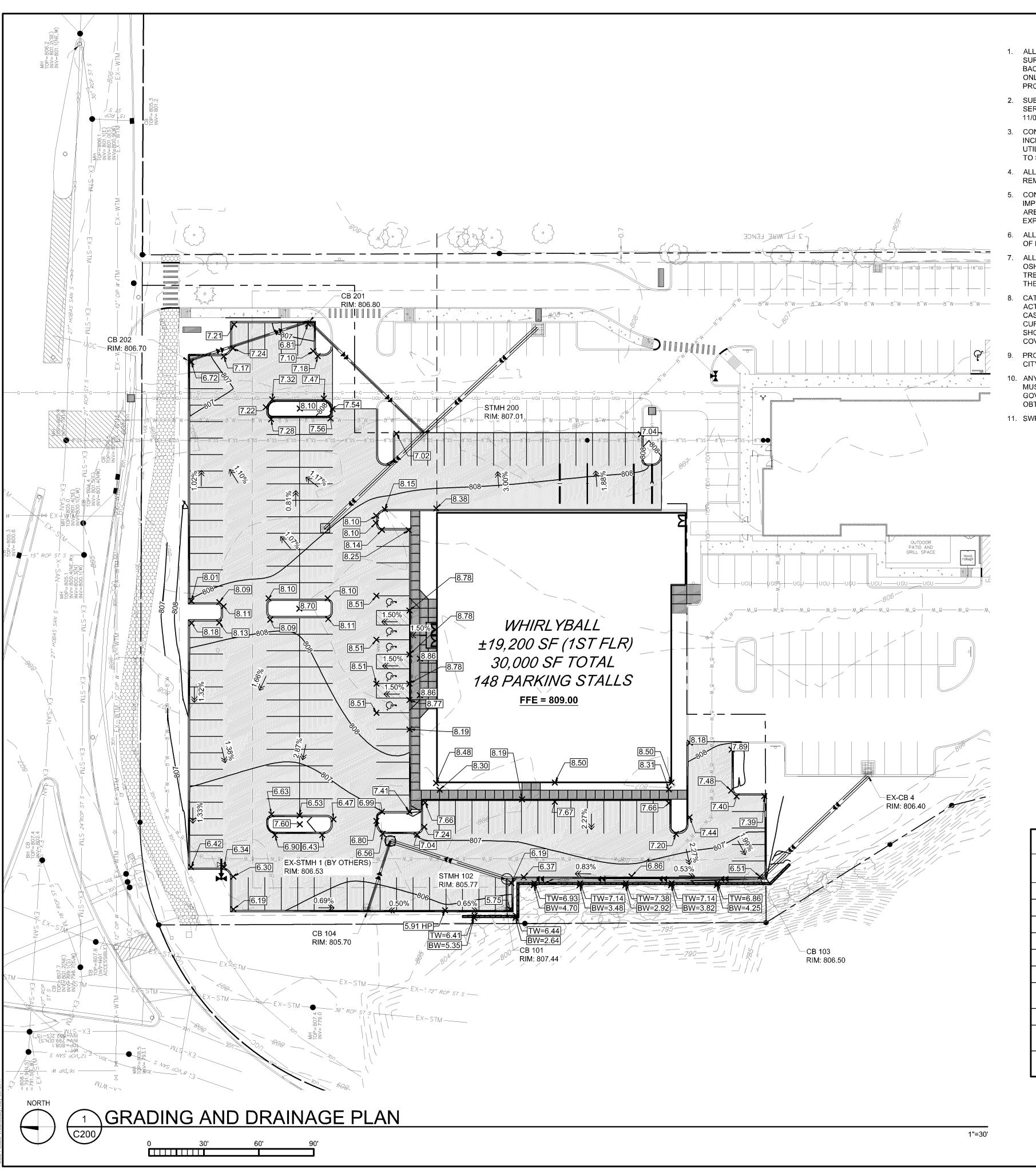
CERTIFICATION:

TITLE SHEET & DRAWING INDEX

ISSUED FOR **NOT FOR** 

UED FOR I	
	PROJECT NO
PERMIT	170002
R CONSTRUCTION	SCALE:
	AS NOTED

ECT NO:	DRAWING NO:
0002	C100
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NOTED	



#### **GENERAL NOTES**

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   BACKGROUND SURVEY ON THESE DRAWINGS IS FOR REFERENCE ONLY. REFER TO CERTIFIED SURVEY AS THE BASIS FOR ALL PROJECT WORK.
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- 8. CATCHBASINS AND MANHOLES ARE SHOWN ON PLAN LARGER THAN ACTUAL SIZE. COORDINATE LOCATION OF MANHOLE COVER AND CASTING SO THAT IT IS PROPERLY LOCATED AT THE BACK OF CURBLINE FOR THE CURB INLETS OR CENTERED IN THE AREA AS SHOWN ON THE PLAN FOR THE AREA DRAINS AND MANHOLE COVERS.
- 9. PROVIDE TRAFFIC CONTROL AT STREETS AND SIDEWALKS PER CITY OF BLOOMINGTON AND MMUTCD REQUIREMENTS.
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- 11. SWPPP PROVIDED BY SHOPPING CENTER GRADING BY KFW.

#### **GRADING NOTES**

- SEE SHEET C200 FOR GENERAL NOTES.
   PROPOSED SPOT ELEVATIONS AND CONTOURS ARE TO TOP OF GRADE, PAVEMENT OR GUTTER LINE, UNLESS OTHERWISE
- SPECIFIED.

  3. SEE SHEETS C300 FOR EROSION AND SEDIMENT CONTROL NOTES.
- 4. SEE SWPPP <C600> FOR ADDITIONAL DETAILED EROSION PREVENTION AND SEDIMENT CONTROL NOTES.
- 5. SEE SHEETS C300 FOR ADDITIONAL LOCATIONS OF EROSION AND SEDIMENT CONTROL ITEMS. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL ITEMS PRIOR TO CONSTRUCTION.

#### LEGEND

<u>LEGEND</u>		
	EXISTING PROPERTY LINE	
	EXISTING EASEMENT LINE	
	EXISTING ADJACENT LINE	
unvanne, unvann 800 varenem unvanne	EXISTING MAJOR CONTOUR	
······································	EXISTING MINOR CONTOUR	
EX-STM	EXISTING STORM SEWER	
24''SD24''SD	EXISTING STORM SEWER (KFW)	
EX-SAN	EXISTING SANITARY SEWER	
8"SS8"SS	EXISTING SANITARY SEWER (KFW)	
EX-WTM	EXISTING WATERMAIN	
8''W8''W	EXISTING WATERMAIN (KFW)	
UGUUGU	EXISTING UNDERGROUND ELECTRIC (KFW)	
UGE	EXISTING UNDERGROUND ELECTRIC	
	EXISTING UNDERGROUND COMMUNICATION	
——————————————————————————————————————	EXISTING UNDERGROUND GAS (KFW)	
	EXISTING AREA INLET / MANHOLE (KFW)	
•	EXISTING CATCHBASIN / MANHOLE	
¥	EXISTING FIRE HYDRANT (KFW)	
8	EXISTING RISER (KFW)	
-	EXISTING SIGN (KFW)	
{ o}}	EXISTING TREE	
LIMITS -	LIMITS OF CONSTRUCTION	
800	PROPOSED CONTOUR	
<del>~</del>	DENOTES SURFACE DRAINAGE	
<b>≭</b> 00.00	PROPOSED SPOT ELEVATION	
	PROPOSED GAS LINE	
<b>—</b>	PROPOSED ELECTRICAL LINE	
<del></del>	PROPOSED SANITARY SEWER	
<del></del>	PROPOSED HDPE STORM SEWER ADS N-12 WT	
	PROPOSED WATERMAIN	
	PROPOSED MH/CB	
	PROPOSED FES	
**************************************	PROPOSED RETAINING WALL	
	PROPOSED BITUMINOUS PAVEMENT	
	PROPOSED CONCRETE SIDEWALK	

MANHOLE / CATCHBASIN SCHEDULE					
STRUCTURE NAME:	SIZE:	CASTING:	RIM ELEVATION:	PIPES IN:	PIPES OUT
CB 101	2' X 3'	NEENAH 3067-V	807.44		12" HDPE INV OUT =805.89
CB 103	48"	NEENAH 3067-V	806.50	24" HDPE INV IN =802.40	24" HDPE INV OUT =802.40
CB 104	2' X 3'	NEENAH 3067-V	805.70		12" HDPE INV OUT =802.91
CB 201	48"	NEENAH 3067-V	806.80	12" HDPE INV IN =803.45	12" HDPE INV OUT =803.25
CB 202	2' X 3'	NEENAH 3067-V	806.70		12" HDPE INV OUT =803.80
EX-CB 4	BY OTHERS	BY OTHERS	806.40		24" HDPE INV OUT =802.60
EX-STMH 1 (BY OTHERS)	BY OTHERS	BY OTHERS	806.53	12" HDPE INV IN =802.71 24" HDPE INV IN =801.91	
EX-STMH 203	BY OTHERS	BY OTHERS	807.98	24" HDPE INV IN =801.91	
STMH 102	60"	NEENAH 1641	805.77	24" HDPE INV IN =802.10 12" HDPE INV IN =804.13	24" HDPE INV OUT =802.01
STMH 200	60"	NEENAH 1641	807.01	12" HDPE INV IN =802.82 24" HDPE INV IN =802.02	24" HDPE INV OUT =802.02

ISSUED FOR PERMIT
NOT FOR CONSTRUCTION

EXISTING CONCRETE SIDEWALK (KFW)

EXISTING BITUMINOUS TRAIL (KFW)



Planners and Engineers 2300 Berkshire Lane N, Suite 200 Plymouth, MN 55441

CLIENT:

WHIRLYBALL 13644 80TH CIRCLE NORTH MAPLE GROVE, MN 55369

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CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

NO	DATE	ISSUE/REVISION	BY
Α	07/03/17	ISSUED FOR PERMIT	TSH

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CERTIFICATION:

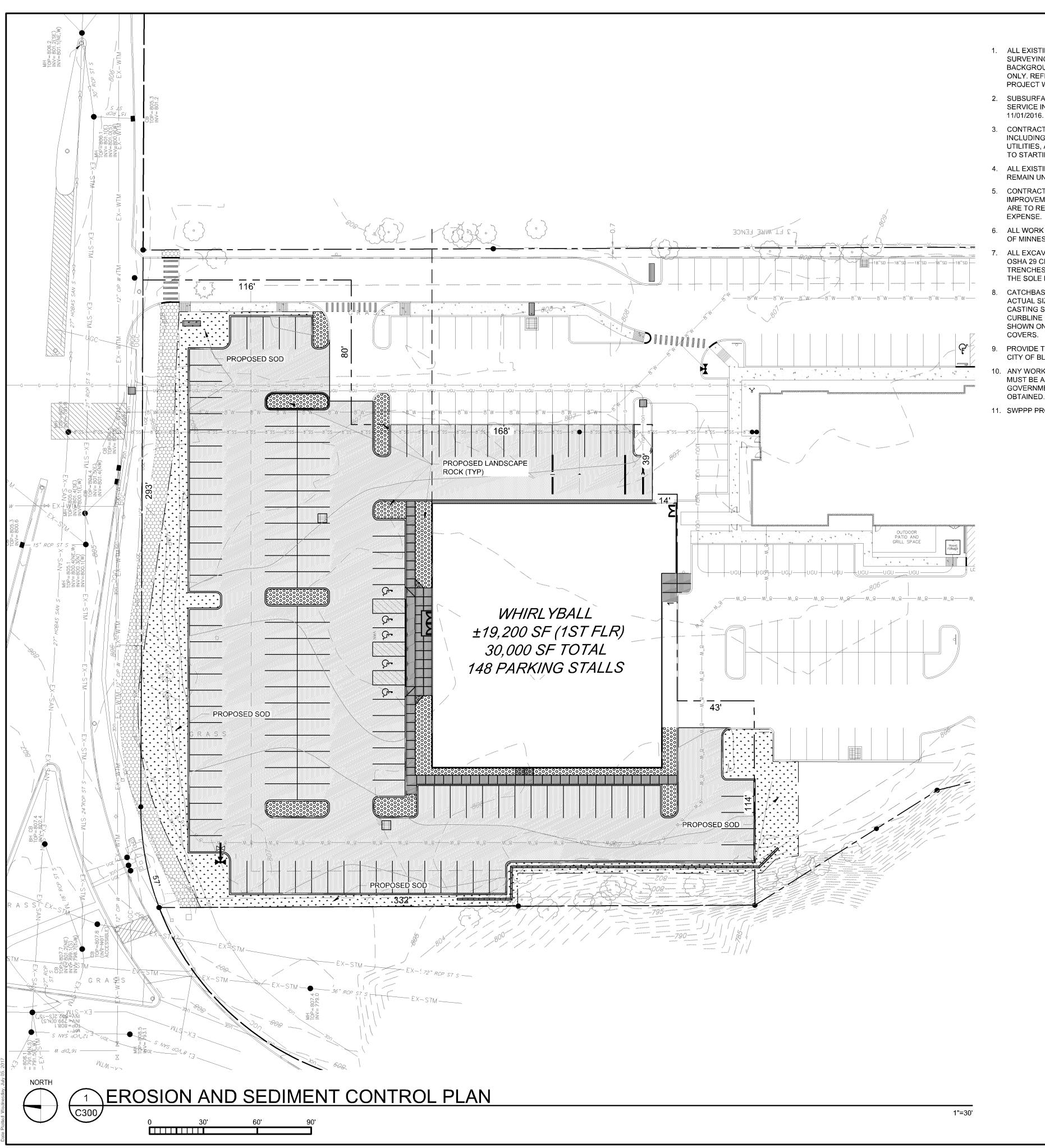
GRADING AND DRAINAGE PLAN

PROJECT NO:
170002

SCALE:
AS NOTED

DRAWING NO:

C200



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- 11. SWPPP PROVIDED BY SHOPPING CENTER GRADING BY KFW.

# EROSION AND SEDIMENT CONTROL NOTES

1. INSTALL PERIMETER AND SEDIMENT CONTROL ITEMS PRIOR TO CONSTRUCTION.

LEGEND

— — — EXISTING PROPERTY LINE

EXISTING ADJACENT LINE

EXISTING STORM SEWER (KFW)

EXISTING UNDERGROUND ELECTRIC (KFW)

EXISTING UNDERGROUND COMMUNICATION

EXISTING UNDERGROUND ELECTRIC

EXISTING UNDERGROUND GAS (KFW)

EXISTING CATCHBASIN / MANHOLE

EXISTING FIRE HYDRANT (KFW)

EXISTING RISER (KFW)

**EXISTING SIGN (KFW)** 

PROPOSED CONTOUR

PROPOSED GAS LINE

PROPOSED ELECTRICAL LINE

PROPOSED WATERMAIN

PROPOSED FES W/ RIPRAP

PROPOSED LANDSCAPE ROCK

PROPOSED RETAINING WALL

PROPOSED BITUMINOUS PAVEMENT

**EXISTING CONCRETE SIDEWALK (KFW)** 

PROPOSED CONCRETE SIDEWALK

**EXISTING BITUMINOUS TRAIL (KFW)** 

PROPOSED HDPE STORM SEWER

PROPOSED CB W/ INLET PROTECTION

PROPOSED FES W/ INLET PROTEXTION

PROPOSED SANITARY SEWER

PROPOSED SOD

EXISTING TREE

PROPOSED SILT FENCE

LIMITS OF CONSTRUCTION

EXISTING AREA INLET / MANHOLE (KFW)

EXISTING EASEMENT LINE

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

----- EX-SAN----- EXISTING SANITARY SEWER

8"W—8"W—8"W EXISTING WATERMAIN (KFW)

EXISTING WATERMAIN

----8"SS---8"SS--- EXISTING SANITARY SEWER (KFW)

EX-STM EXISTING STORM SEWER

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CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

NO	DATE	ISSUE/REVISION	BY
Α	07/03/17	ISSUED FOR PERMIT	TSH
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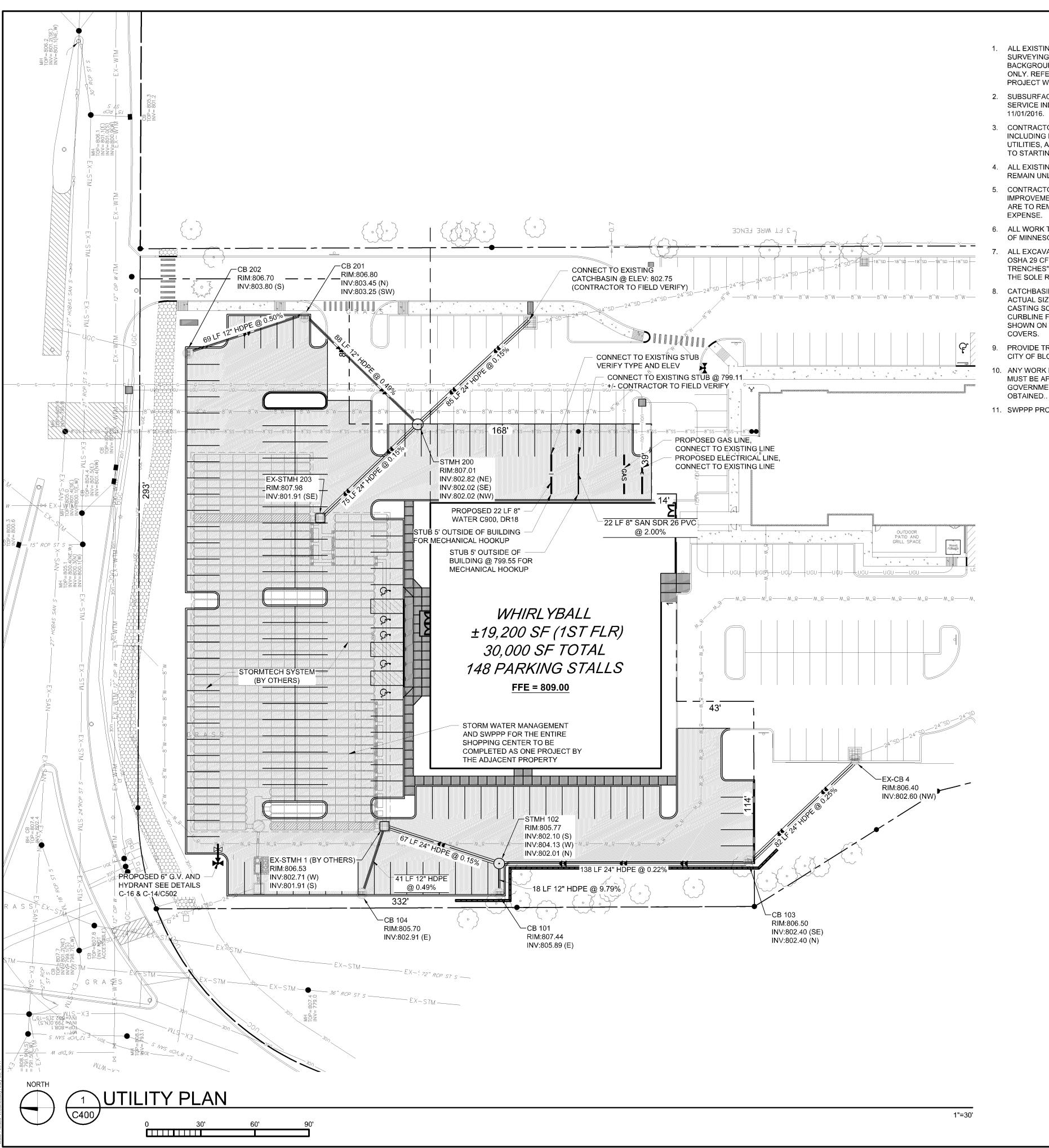
DRAWING TITLE:

**CERTIFICATION:** 

EROSION AND SEDIMENT CONTROL PLAN

ISSUED FOR PERMIT
NOT FOR CONSTRUCTION

PROJECT NO:	DRAWING NO:
170002	Cann
SCALE:	C300
AS NOTED	



#### **GENERAL NOTES**

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- 11. SWPPP PROVIDED BY SHOPPING CENTER GRADING BY KFW.

#### **UTILITY NOTES**

- 1. ALL UTILITY DEMOLITION AND/OR ABANDONMENT TO BE PERFORMED IN ACCORDANCE WITH CITY OF BLOOMINGTON AND STATE OF MINNESOTA REGULATIONS AND STANDARDS.
- EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES WHICH MAY INCLUDE BUT IS NOT LIMITED TO: ELECTRIC, TELEPHONE, GAS, CABLE TV, COMPUTER CABLE, FIBER OPTIC CABLE, SANITARY SEWER, STORM SEWER AND WATERMAIN. CONTRACTOR TO CONTACT 811 BEFORE EXCAVATING.
- REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO PUBLIC AND PRIVATE PAVEMENT AREAS. REMOVAL SHALL BE ON A DAILY BASIS THROUGHOUT THE DURATION OF THE CONSTRUCTION. CLEAN PAVED ROADWAYS BY SHOVELING OR SWEEPING. STREET WASHING IS ALLOWED ONLY AFTER SHOVELING OR SWEEPING HAS REMOVED SEDIMENT. SEE CITY OF BLOOMINGTON STANDARDS AND REGULATIONS
- PROVIDE THE FOLLOWING MINIMUM COVER OVER THE TOP OF PIPE AS FOLLOWS:
- A. 8' OVER WATERMAIN
- B. 8' OVER SANITARY SEWER
- C. 1.5' OVER STORM SEWER

#### LEOEND

LEGEND		
	EXISTING PROPERTY LINE	
	EXISTING EASEMENT LINE	
	EXISTING ADJACENT LINE	
——— EX-STM ———	EXISTING STORM SEWER	
24''SD24''SD	EXISTING STORM SEWER (KFW)	
EX-SAN	EXISTING SANITARY SEWER	
8"SS8"SS	EXISTING SANITARY SEWER (KFW)	
EX-WTM	EXISTING WATERMAIN	
8"W8"W	EXISTING WATERMAIN (KFW)	
UGU	EXISTING UNDERGROUND ELECTRIC (KFW)	
UGE	EXISTING UNDERGROUND ELECTRIC	
	EXISTING UNDERGROUND COMMUNICATION	
GG	EXISTING UNDERGROUND GAS (KFW)	
	EXISTING AREA INLET / MANHOLE (KFW)	
•	EXISTING CATCHBASIN / MANHOLE	
¥	EXISTING FIRE HYDRANT (KFW)	
8	EXISTING RISER (KFW)	
-	EXISTING SIGN (KFW)	
<b>{·}</b>	EXISTING TREE	
—— GAS ——	PROPOSED GAS LINE	
<del></del>	PROPOSED ELECTRICAL LINE	
<del></del>	PROPOSED SANITARY SEWER	
<b></b>	PROPOSED HDPE STORM SEWER ADS N-12 WT PROPOSED WATERMAIN	
	PROPOSED MH/CB	
	PROPOSED FES	
	PROPOSED RETAINING WALL	
	PROPOSED BITUMINOUS PAVEMENT	
	PROPOSED CONCRETE SIDEWALK	



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CLIENT:

WHIRLYBALL 13644 80TH CIRCLE NORTH MAPLE GROVE, MN 55369



CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

NO	DATE	ISSUE/REVISION	BY
Α	07/03/17	ISSUED FOR PERMIT	TSH

CERTIFICATION:	
I hereby certify that this plan, specification, by me or under my direct supervision and Professional Engineer under the laws of th	that I am a duly licensed
Signature	Date
Printed name	Reg. No.
My license renewal date is	
Pages or sheets covered by this seal	

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DESIGNED: AMB	CHECKE PDK	ED:	APPROVED

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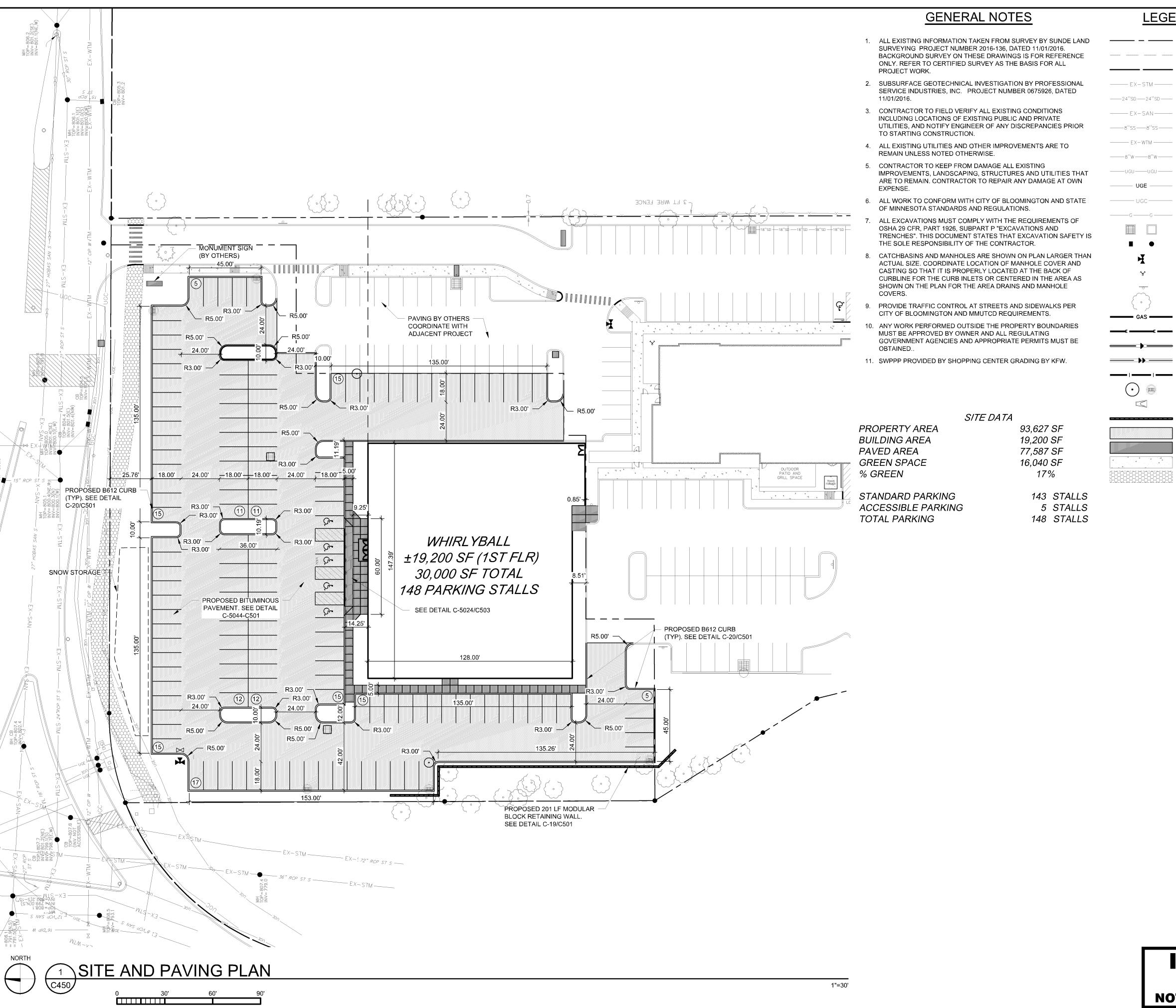
**UTILITY PLAN** 

**ISSUED FOR PERMIT NOT FOR CONSTRUCTION** 

EXISTING CONCRETE SIDEWALK (KFW)

**EXISTING BITUMINOUS TRAIL (KFW)** 

PROJECT NO:	DRAWING NO:
170002	C400
SCALE:	T C400
AS NOTED	



#### **LEGEND**

——— — EXISTING PROPERTY LINE EXISTING EASEMENT LINE EXISTING ADJACENT LINE ----- EX-STM ----- EXISTING STORM SEWER ——24"SD—24"SD— EXISTING STORM SEWER (KFW) EXISTING SANITARY SEWER ----8"SS---8"SS--- EXISTING SANITARY SEWER (KFW) ----- EX-WTM ----- EXISTING WATERMAIN ----8"W -----8"W EXISTING WATERMAIN (KFW) EXISTING UNDERGROUND ELECTRIC (KFW) EXISTING UNDERGROUND ELECTRIC EXISTING UNDERGROUND COMMUNICATION

EXISTING AREA INLET / MANHOLE (KFW) EXISTING CATCHBASIN / MANHOLE

EXISTING FIRE HYDRANT (KFW) EXISTING RISER (KFW)

PROPOSED WATERMAIN

PROPOSED MH/CB

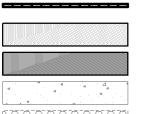
EXISTING UNDERGROUND GAS (KFW)

EXISTING SIGN (KFW) EXISTING TREE

 GAS — PROPOSED GAS LINE PROPOSED ELECTRICAL LINE

PROPOSED SANITARY SEWER PROPOSED HDPE STORM SEWER ADS N-12 WT

PROPOSED FES PROPOSED RETAINING WALL



PROPOSED BITUMINOUS PAVEMENT PROPOSED CONCRETE SIDEWALK

EXISTING CONCRETE SIDEWALK (KFW) EXISTING BITUMINOUS TRAIL (KFW)

Planners and Engineers 2300 Berkshire Lane N, Suite 200 Plymouth, MN 55441

CLIENT:

WHIRLYBALL 13644 80TH CIRCLE NORTH MAPLE GROVE, MN 55369

763.559.9100

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CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

NO	DATE	ISSUE/REVISION	BY
Α	07/03/17	ISSUED FOR PERMIT	TSH

CERT	ΓΙΓΙCATION:		
	•	this plan, specification, or report was prepared	
	•	direct supervision and that I am a duly lice er under the laws of the State of Minnesot	
1 10	coolonal Engine	of and and are laws of the state of Minimoso.	
Signatur	re	Date	
Printed r	name	Reg. No.	
My licen	se renewal date is		
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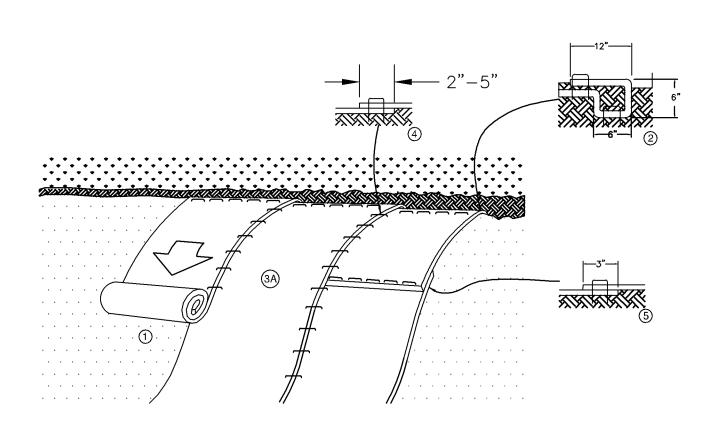
DATE: 07/05/17		DRAWN: TSH	
DESIGNED: AMB	CHECKE PDK	D:	APPROVED: 

DRAWING TITLE:

SITE AND PAVING PLAN

**ISSUED FOR PERMIT NOT FOR CONSTRUCTION** 

PROJECT NO:	DRAWING NO:
170002	C450
SCALE:	−  C450
AS NOTED	



- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET
- 6. FOLLOW MANUFACTURER'S RECOMMENDED STAPLE PATTERN, FOR THE SLOPE FOR THE SPECIFIED BLANKET.

IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

STANDARD STAPLE PATTERN
STD\_STAPLE\_PATTERN.dwg 4/2009

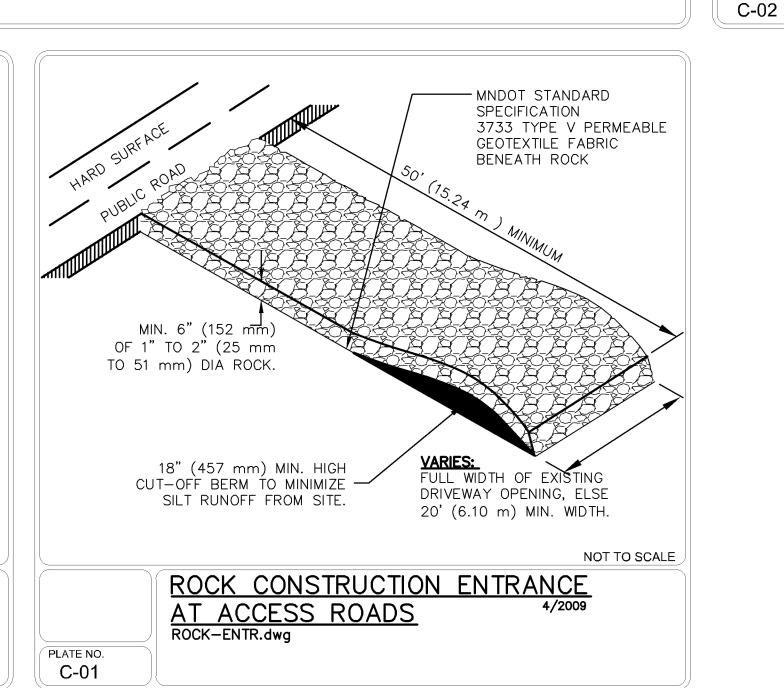
CATEGORY 3 EROSION CONTROL-BLANKET (SPEC. 3885) 4" x 4" TRENCH BACKFILLED OVER EROSION CONTROL BLANKET (SPEC. -8", 11 GA. STAPLES SPACED 1'-0" ON CENTER STRAW OR WOOD FIBER 6" OR 12" "  $\times$  2"  $\times$  18" LONG WOODEN STAKES AT DIAMETER ROLL ENCLOSED IN PLASTIC OR 2'-0" SPACING. DRIVE THROUGH NETTING POLYESTER NETTING AND FIBER ROLL NOT TO SCALE

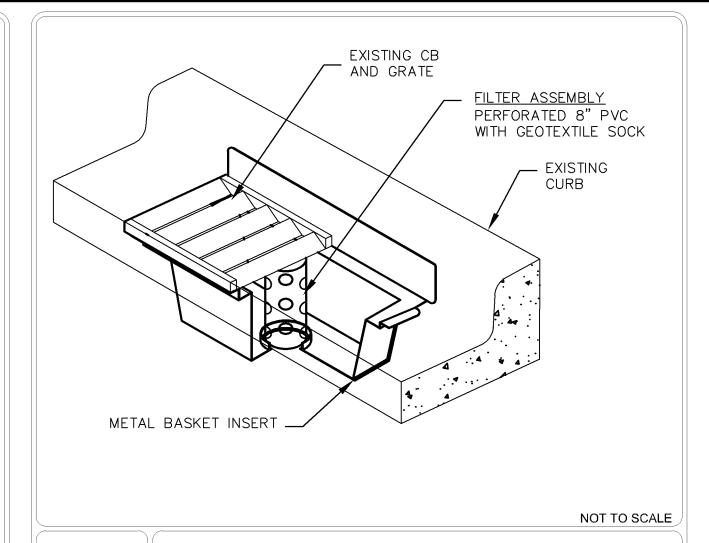
PLATE NO.

C-04

PLATE NO.

C-03





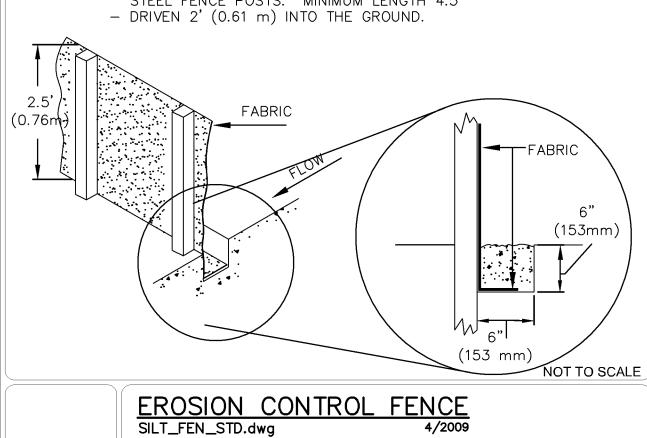
INLET PROTECTION, METAL BASKET TYPe WIMCO\_CB.dwg

PLATE NO. C-01

PLATE NO.

NOT TO SCALE

- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP TRENCH AND BACKFILLED IMMEDIATELY. - POSTS SHALL BE: 4' (1.22 m) ON CENTER - 2" (50.8 mm) X 2" (50.8 mm) HARDWOOD, PINE OR STEEL FENCE POSTS. MINIMUM LENGTH 4.5' - DRIVEN 2' (0.61 m) INTO THE GROUND.



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CIVIL DETAILS

C500

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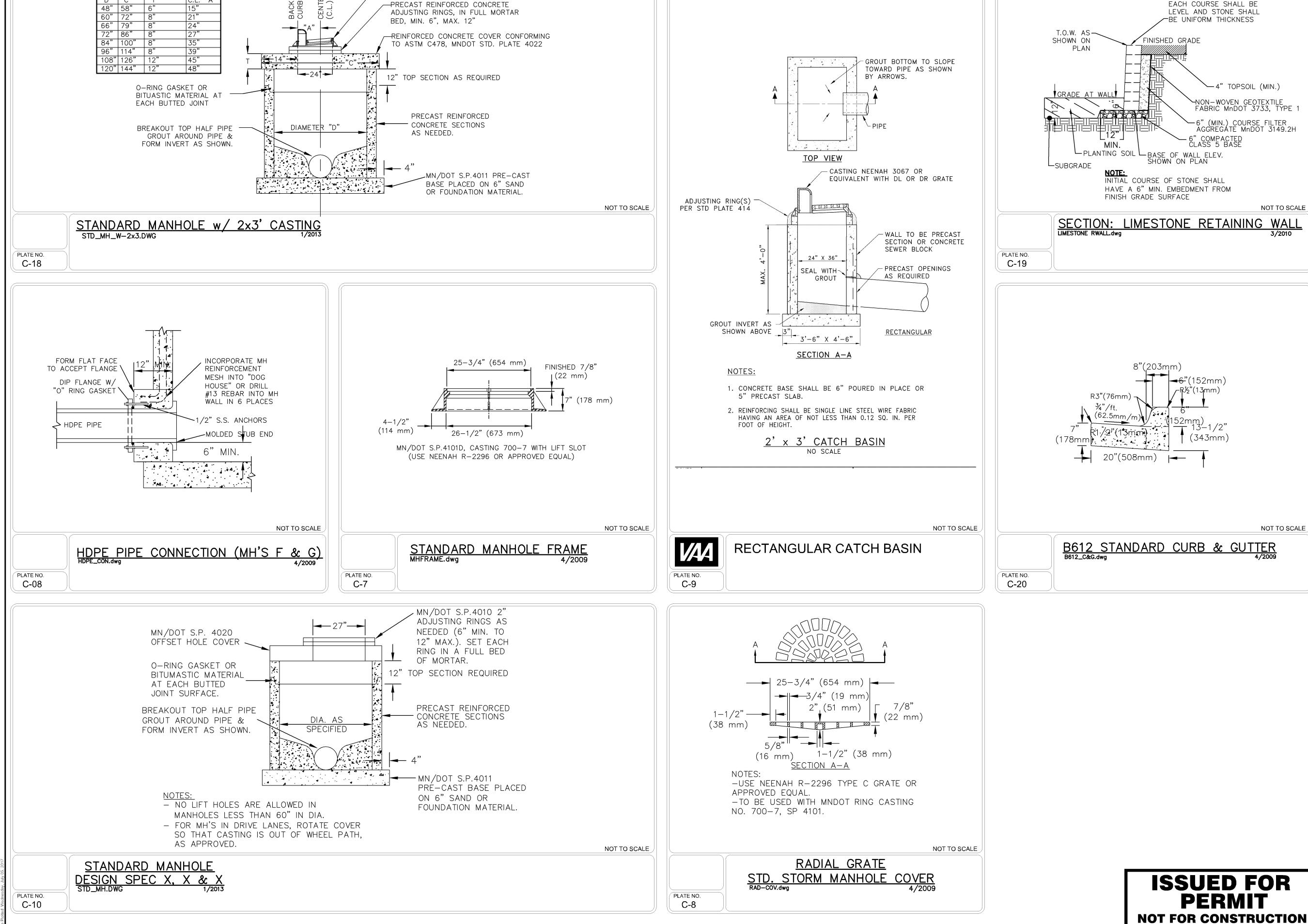
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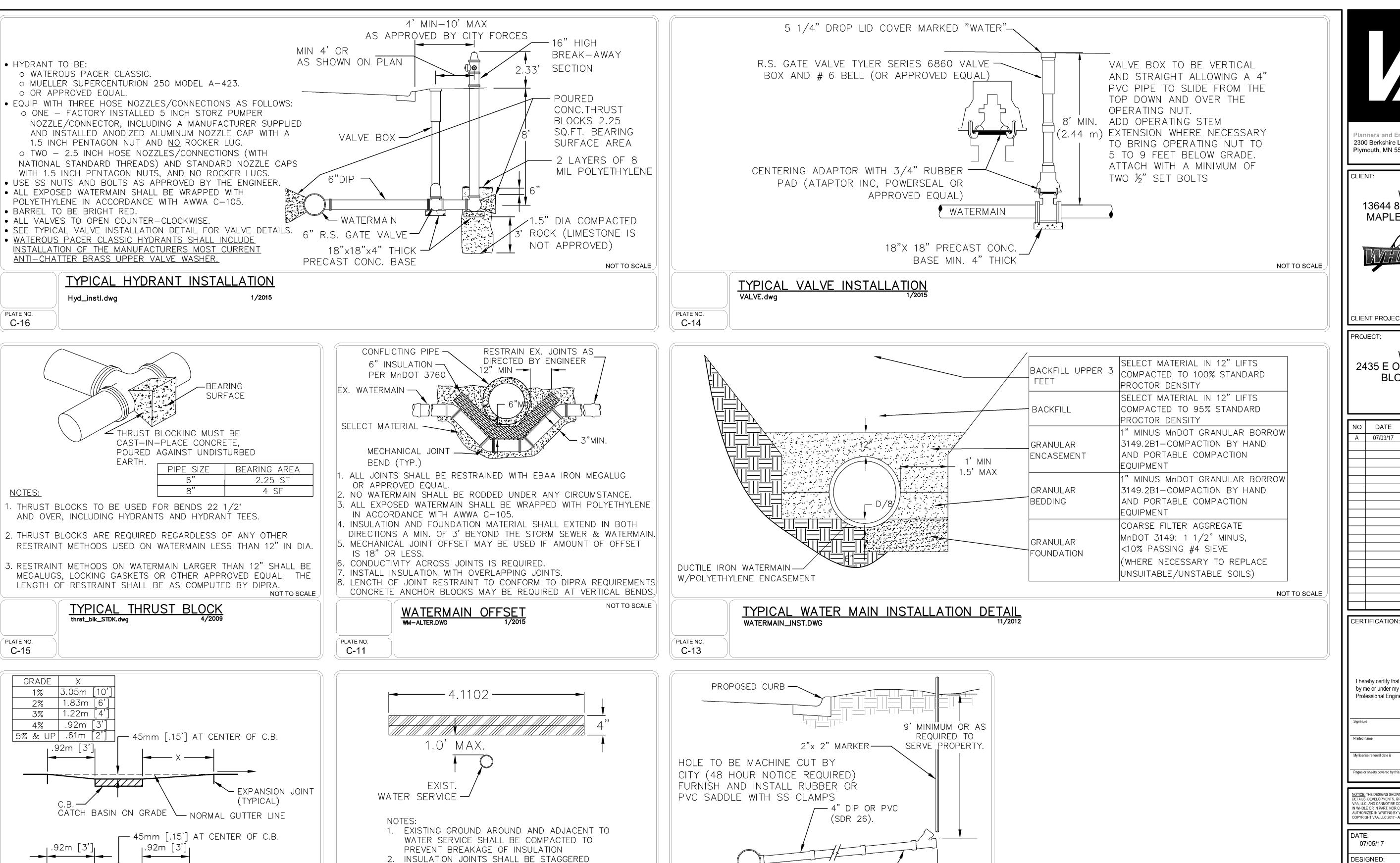
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MINIMUM GRADE -

—PAY LENGTH——

NOT TO SCALE

1/4" PER 1'

STANDARD CONNECTION FOR

CUT-IN SANITARY SERVICE

EX. SAN. SEWER

Cut-in\_san\_serv.dwg

3. LOCATING SERVICE AND EXCAVATION ARE

4. ADJUSTMENT OF CURB STOP (WHEN REQUIRED)

NOT TO SCALE

PLATE NO.

C-6

SHALL BE PAID PER THE UNIT BID PRICE

WATER SERVICE INSULATION

CONSIDERED INCIDENTAL

WAT\_SERV\_INSUL.dwg

PLATE NO.

C-12

EXPANSION JOINT

(TYPICAL)

CATCH BASIN AT LOW POINT \\_\_ NORMAL GUTTER LINE

PLATE NO.

C-5

**DEPRESSION AT CATCH BASIN** 

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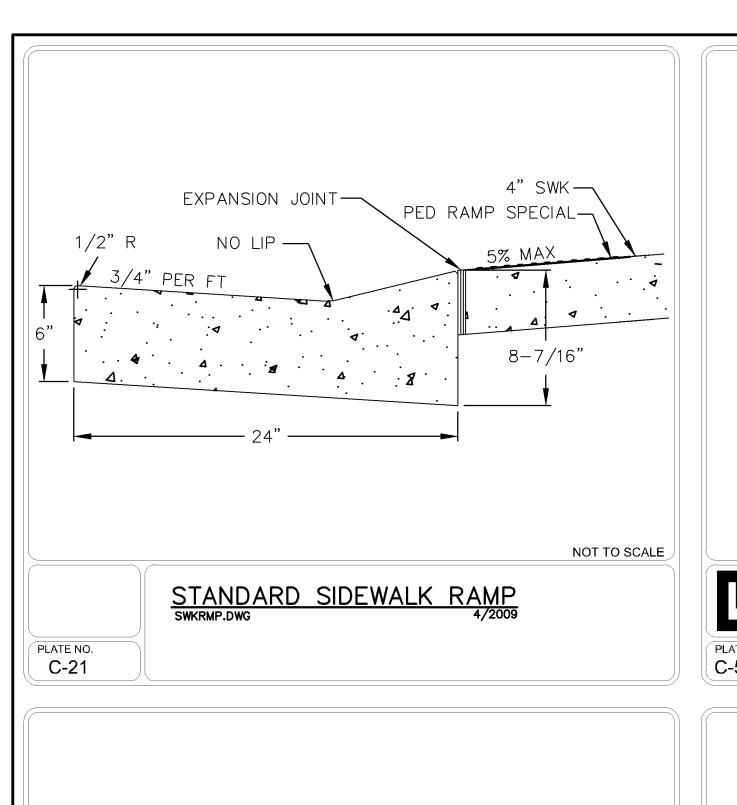
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EX. CURB & GUTTER—

1:4 MAX.

TYPICAL SIDEWALK INSTALLATION
TYP\_CONC\_WALK.dwg 11/2012

└-4" SELECT TOPSOIL

NOT TO SCALE

BORROW & SOD

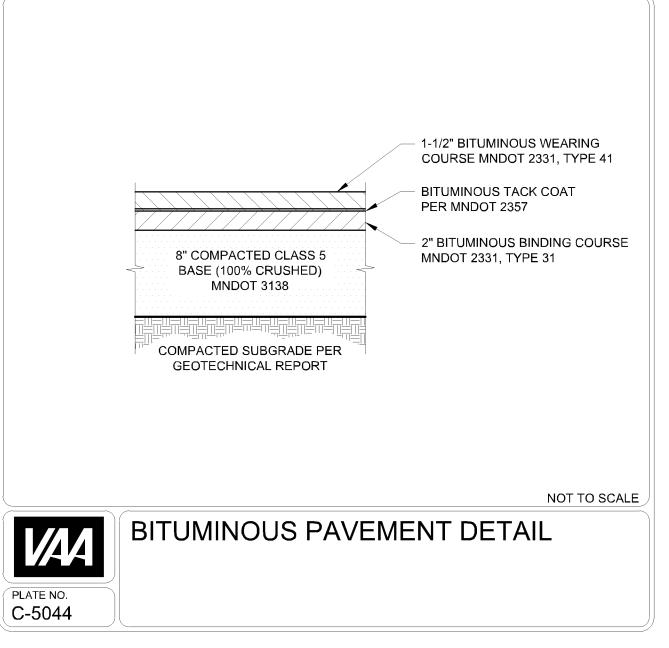
4" CONCRETE

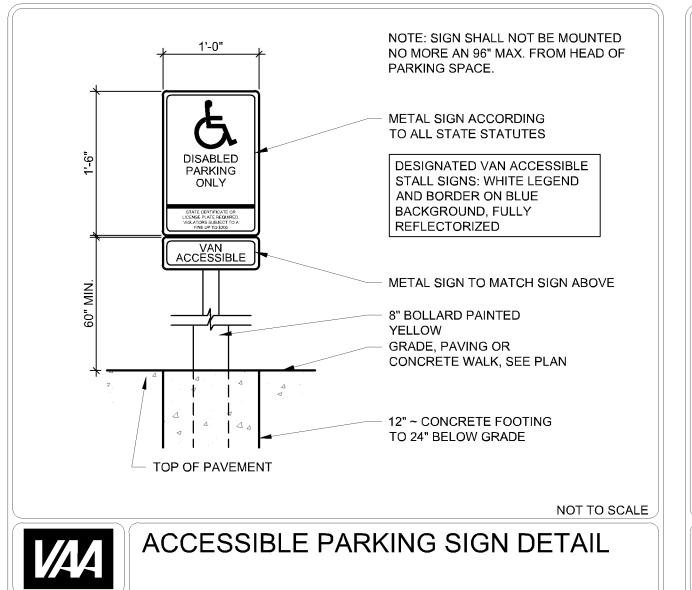
1: 4 MAX.

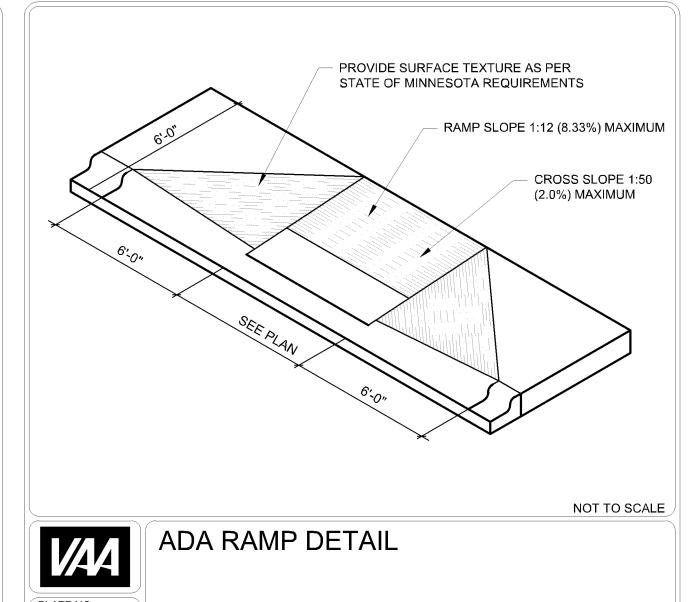
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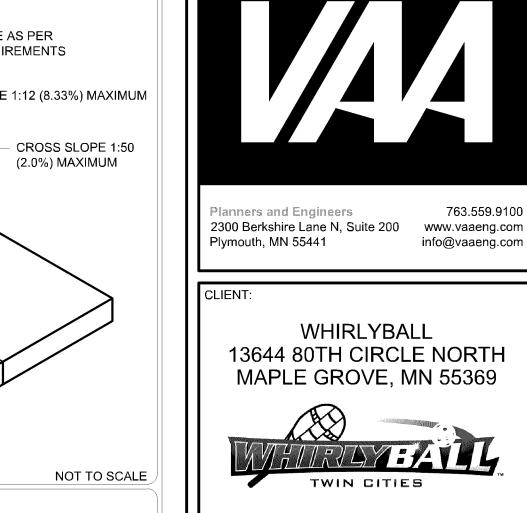
C-22

-4" MIN. GRAN BASE





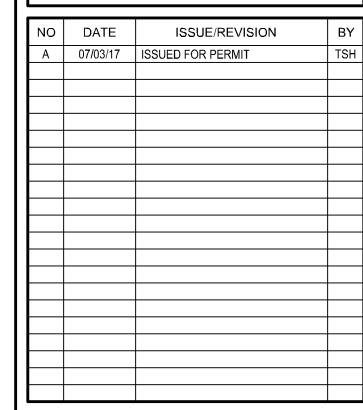




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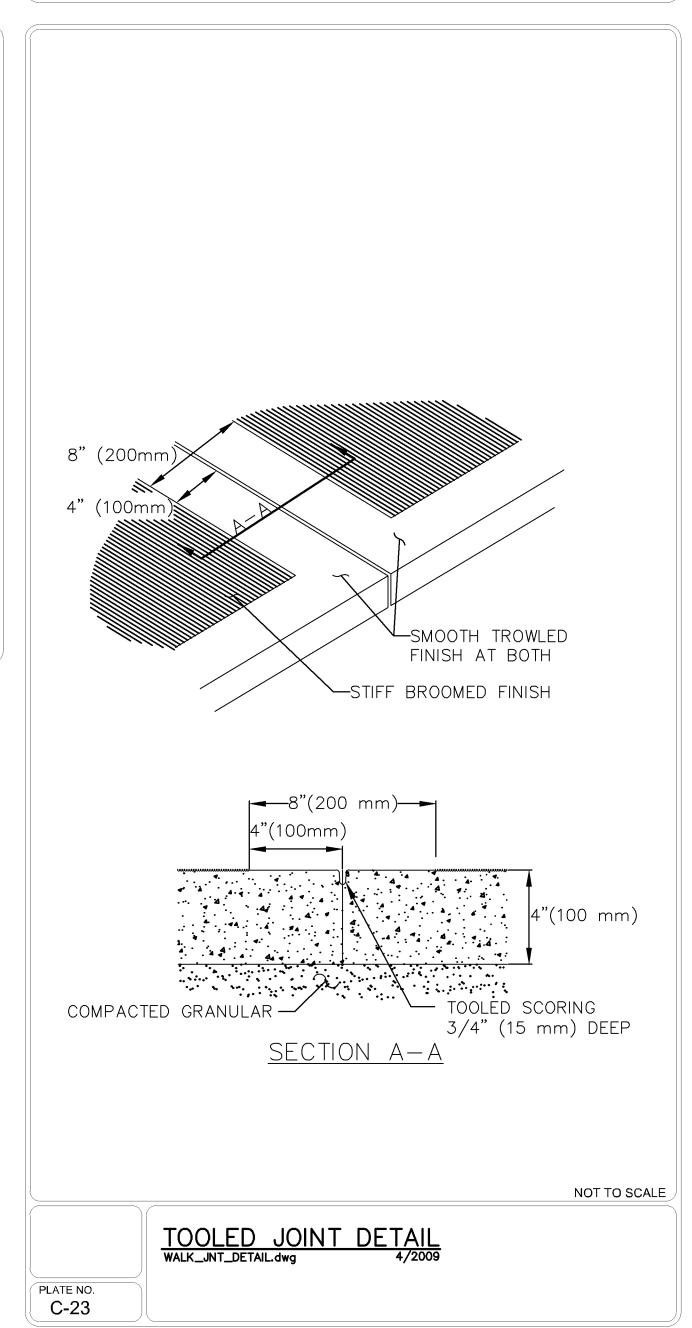
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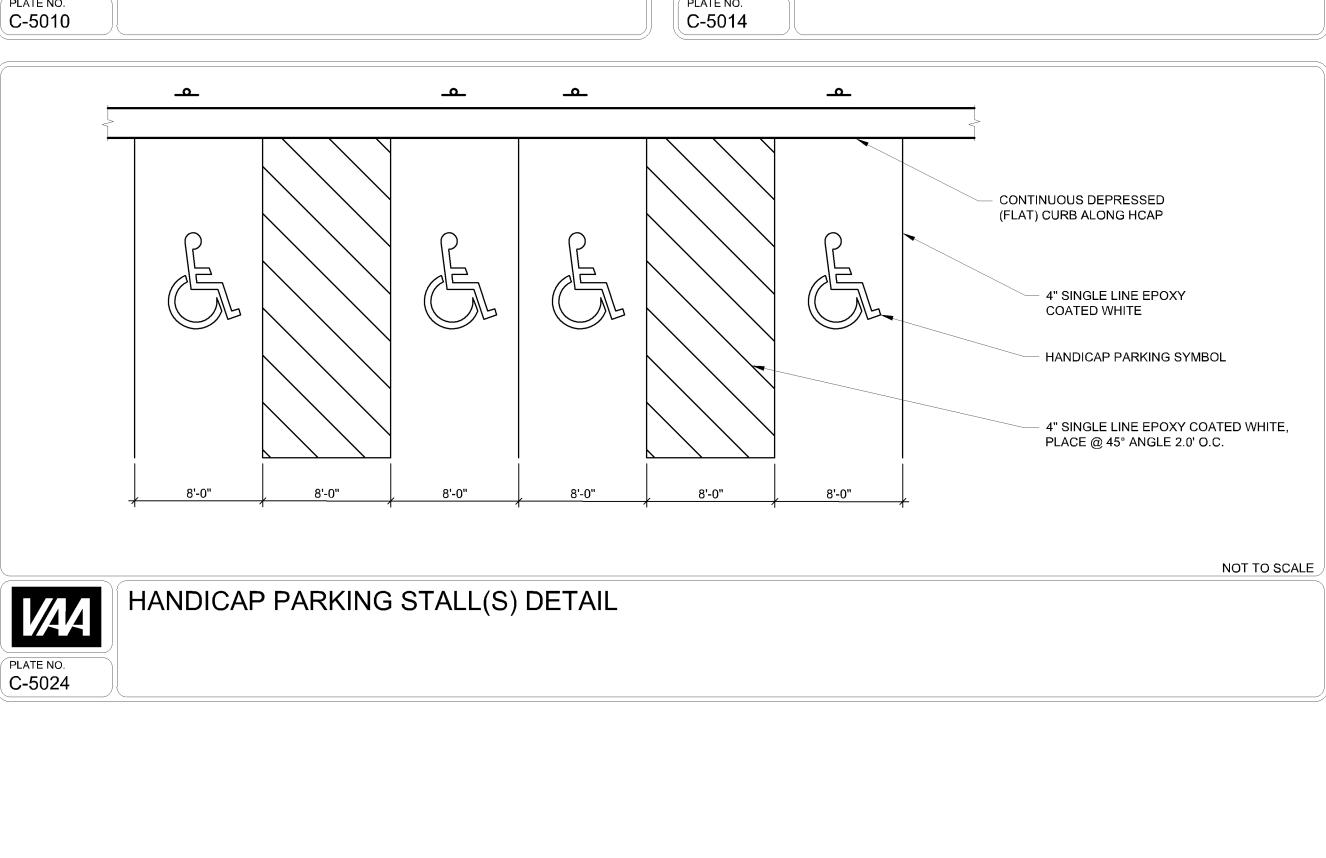
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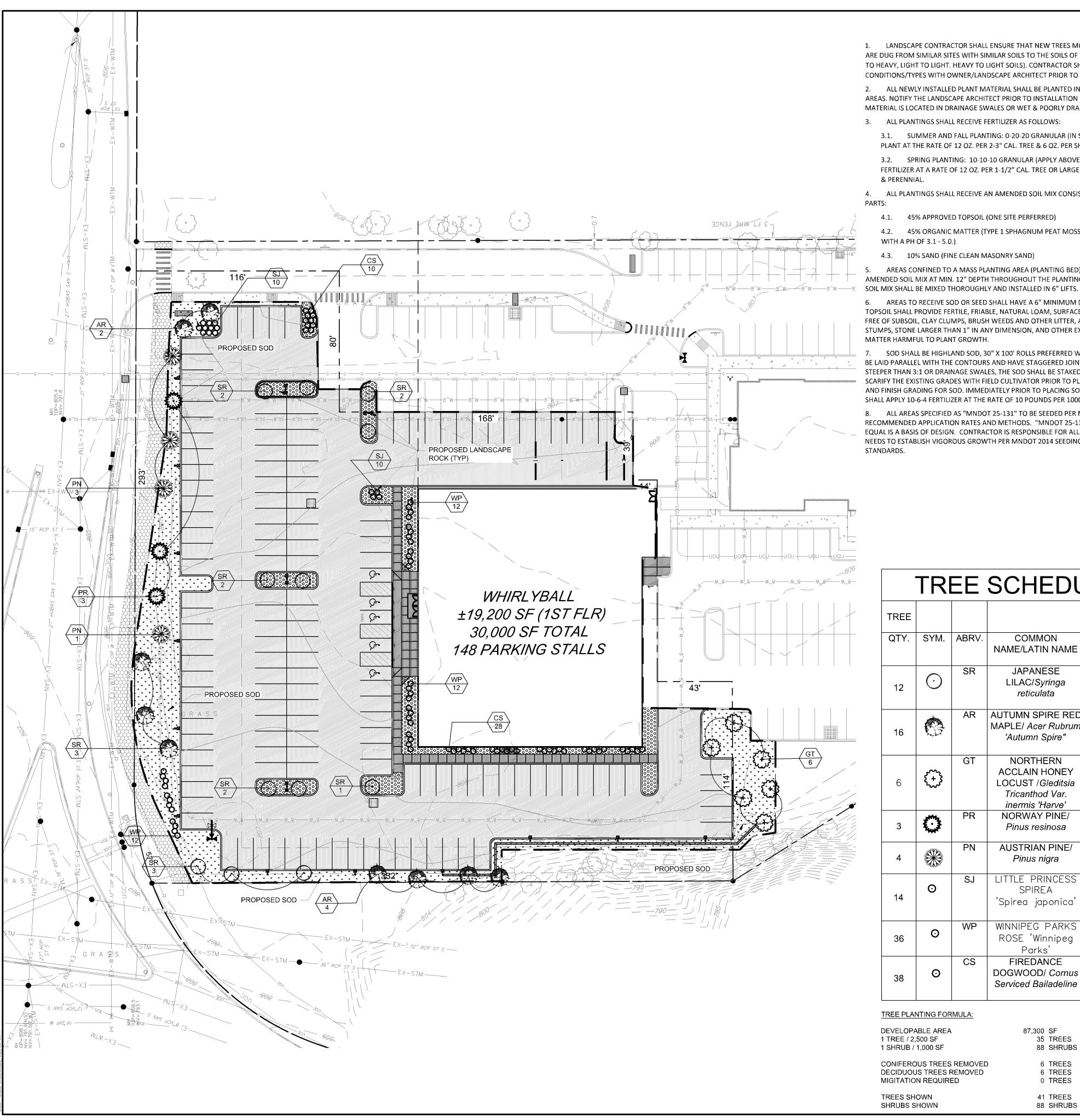
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- 1. LANDSCAPE CONTRACTOR SHALL ENSURE THAT NEW TREES MOVED ONTO THE SITE ARE DUG FROM SIMILAR SITES WITH SIMILAR SOILS TO THE SOILS OF THIS PROJECT (HEAVY TO HEAVY, LIGHT TO LIGHT. HEAVY TO LIGHT SOILS). CONTRACTOR SHALL REVIEW SOIL CONDITIONS/TYPES WITH OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 2. ALL NEWLY INSTALLED PLANT MATERIAL SHALL BE PLANTED IN WELL-DRAINED AREAS. NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION IF ANY PLANT MATERIAL IS LOCATED IN DRAINAGE SWALES OR WET & POORLY DRAINED AREAS.
- 3. ALL PLANTINGS SHALL RECEIVE FERTILIZER AS FOLLOWS:
- 3.1. SUMMER AND FALL PLANTING: 0-20-20 GRANULAR (IN SAUCER AROUND PLANT AT THE RATE OF 12 OZ. PER 2-3" CAL. TREE & 6 OZ. PER SHRUB).
- 3.2. SPRING PLANTING: 10-10-10 GRANULAR (APPLY ABOVE REFERENCED FERTILIZER AT A RATE OF 12 OZ. PER 1-1/2" CAL. TREE OR LARGER & 6 OZ. PER SHRUB
- ALL PLANTINGS SHALL RECEIVE AN AMENDED SOIL MIX CONSISTING OF THREE (3)
- 4.1. 45% APPROVED TOPSOIL (ONE SITE PERFERRED)
- 4.2. 45% ORGANIC MATTER (TYPE 1 SPHAGNUM PEAT MOSS FINELY DIVIDED WITH A PH OF 3.1 - 5.0.)
- 4.3. 10% SAND (FINE CLEAN MASONRY SAND)
- AREAS CONFINED TO A MASS PLANTING AREA (PLANTING BED) SHALL RECEIVE THE AMENDED SOIL MIX AT MIN. 12" DEPTH THROUGHOUT THE PLANTING AREA. AMENDED
- 6. AREAS TO RECEIVE SOD OR SEED SHALL HAVE A 6" MINIMUM DEPTH OF TOPSOIL. TOPSOIL SHALL PROVIDE FERTILE, FRIABLE, NATURAL LOAM, SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY CLUMPS, BRUSH WEEDS AND OTHER LITTER, AND FREE OF ROOTS, STUMPS, STONE LARGER THAN 1" IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
- SOD SHALL BE HIGHLAND SOD, 30" X 100' ROLLS PREFERRED WHERE APPLICABLE, TO BE LAID PARALLEL WITH THE CONTOURS AND HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR DRAINAGE SWALES, THE SOD SHALL BE STAKED INTO THE GROUND. SCARIFY THE EXISTING GRADES WITH FIELD CULTIVATOR PRIOR TO PLACING OF TOPSOIL AND FINISH GRADING FOR SOD. IMMEDIATELY PRIOR TO PLACING SOD, CONTRACTOR SHALL APPLY 10-6-4 FERTILIZER AT THE RATE OF 10 POUNDS PER 1000 SQ. FT.
- 8. ALL AREAS SPECIFIED AS "MNDOT 25-131" TO BE SEEDED PER MNDOT RECOMMENDED APPLICATION RATES AND METHODS. "MNDOT 25-131" OR APPROVED EQUAL IS A BASIS OF DESIGN. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL NEEDS TO ESTABLISH VIGOROUS GROWTH PER MNDOT 2014 SEEDING MANUAL

# TREE SCHEDULE

TREE					
QTY.	SYM.	ABRV.	COMMON NAME/LATIN NAME	SIZE	ROOT
12	$\odot$	SR	JAPANESE LILAC/Syringa reticulata	2.0" DIA CALIP ER	B & B
16	0	AR	AUTUMN SPIRE RED MAPLE/ Acer Rubrum 'Autumn Spire"	2.0" DIA CALIP ER	B&B
0	5000 5000 5000	GT	NORTHERN ACCLAIN HONEY LOCUST /Gleditsia Tricanthod Var. inermis 'Harve'	2.0" DIA CALIP ER	B&B
3	A STANKE	PR	NORWAY PINE/ Pinus resinosa	6' HT.	B&B
4		PN	AUSTRIAN PINE/ Pinus nigra	6' HT.	В&В
14	0	SJ	LITTLE PRINCESS SPIREA 'Spirea japonica'	#3	CONT.
36	0	WP	WINNIPEG PARKS ROSE 'Winnipeg Parks'	#3	CONT.
38	0	CS	FIREDANCE DOGWOOD/ Cornus Serviced Bailadeline	#3	CONT.

#### TREE PLANTING FORMULA:

DEVELOPABLE AREA 1 TREE / 2,500 SF 1 SHRUB / 1,000 SF		SF TREES SHRUBS
CONIFEROUS TREES REMOVED DECIDUOUS TREES REMOVED MIGITATION REQUIRED	6	TREES TREES TREES
TREES SHOWN SHRUBS SHOWN		TREES SHRUBS

- 1. NO PLANTING SHALL BE INSTALLED UNTIL ALL GRADING, BUILDING, CONSTRUCTION UTILITY WORK & IRRIGATION (IF APPLICABLE) HAS BEEN COMPLETED IN THE AREAS TO BE
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ALL UNDERGROUND CABLES, CONDUITS, WIRES, ETC., ON THE PROPERTY.
- 3. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER OF PLANTS SHOWN IN THE PLANT LIST, THE NUMBER OF PLANTS SHOWN ON THE PLAN WILL TAKE PRECEDENCE.
- 4. ALL PROPOSED PLANT MATERIAL SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLAN. IF THE CONTRACTOR BELIEVES AN ERROR HAS BEEN MADE REGARDING SPACING OR LOCATION OF THE PLANT MATERIAL INDICATED ON THE PLAN, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETE MAINTENANCE OF THE PLANT MATERIAL (WATERING, SPRAYING, FERTILIZING, MOWING, ETC.) UNTIL THE WORK HAS BEEN ACCEPTED, BY THE OWNER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS TO PROPERTY DAMAGE FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
- 7. ALL NEWLY PLANTED PLANT MATERIAL SHALL BE GUARANTEED THROUGH ONE CALENDAR YEAR STARTING FROM THE DATE OF ACCEPTANCE ESTABLISHED BY THE OWNER.
- 8. THE CONTRACTOR SHALL MEET WITH THE OWNER OR OWNERS REPRESENTATIVE ON SITE WHEN THEY FEEL THE PROJECT IS COMPLETE ACCORDING TO THE CONTRACT DOCUMENTS. IF ALL WORK IS SATISFACTORY AND COMPLETE ACCORDING TO THE CONDITIONS OF THE CONTRACT DOCUMENTS, THEN THE OWNER MUST DECLARE THE PROJECT COMPLETE. THIS DECLARATION WILL CONSTITUTE AS THE BEGINNING OF THE ONE (1) YEAR WARRANTEE PERIOD FOR ALL PLANT MATERIAL. THE OWNER SHALL PROVIDE A
- WIND BURN OR OTHERWISE DAMAGED PLANT MATERIAL WILL NOT BE ACCEPTED.

LETTER WITH SIGNATURE STATING THE DATE OF ACCEPTANCE.

- CONTRACTOR CAN SUBSTITUTE MACHINE MOVED MATERIAL USING APPROPRIATE SIZE TREE SPADE FOR B & B WITH OWNER APPROVAL.
- 11. THE PRACTICE OF STAKING SHOULD NOT ALLOW NAILS, SCREWS, WIRES, ETC. TO PENETRATE THE OUTER SURFACE OF THE TREES.
- 12. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ALL TREE STAKES, GUYS, STRAPS AND TRUNK PROTECTION MEASURES FOLLOWING THE COMPLETION OF THE WARRANTEE PERIOD OR AS DIRECTED BY THE OWNER.
- 13. LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE THE OWNER WITH MAINTENANCE INFORMATION DURING THE GUARANTEE PERIOD RELATING TO WATERING, FERTILIZING, PRUNING, PEST CONTROL, AND RELATED ITEMS. THIS WILL BE PREPARED AND DELIVERED TO THE OWNER AFTER PROVISIONAL INSPECTION APPROVAL HAS BEEN GIVEN BY THE OWNER AND/OR LANDSCAPE ARCHITECT.
- 14. INSTALL CORRUGATED PLASTIC TREE GUARDS, WHITE IN COLOR, WITH THE SIZE OF TUBE 1" DIA. (MIN.) LARGER THAN THE CALIPER OF THE TREE TO BE PROTECTED.
- 15. CONTRACTOR TO FURNISH & INSTALL METAL EDGING AS SHOWN ON THE PLANS & DETAILS. METAL EDGING SHALL BE ALUMINUM OR STEEL, GREEN IN COLOR, WITH A MINIMUM THICKNESS OF 3/16" AND 4" DEEP. INSTALL 1 METAL STAKE EVERY 3-1/2 FEET OF
- 16. LANDSCAPE FABRIC (FILTER MAT) TO HAVE A COMBINED WEIGHT OF 3.0 OZ. PER S.Y. FABRIC SHOULD BE U.V. STABILIZED AND HAVE A FIVE YEAR MINIMUM WEATHERABILITY FACTOR IN FULL SUNLIGHT. FABRIC TO BE PHILLIPS DUON R OR EQUIVALENT. SAMPLE REQUIRED FOR APPROVAL.
- 17. 3" DEPTH SHREDDED HARDWOOD MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS THAT ARE ISOLATED FROM GROUNDCOVER AREAS AND GENERAL SHRUB
- 18. 3" DEPTH 1"TO 1-1/2" WASHED RIVER ROCK SHALL BE INSTALLED OVER LANDSCAPED FABRIC AS INDICATED ON THE PLANS & DETAILS.
- 19. CALIPER OF TREES UP TO AND INCLUDING 4" SHALL BE MEASURED AT 6" ABOVE GROUND LEVEL, AND 12" ABOVE GROUND LEVEL FOR LARGER SIZES.
- 20. FOR BALLED & BURLAP PLANT MATERIAL, REMOVE THE TOP HALF OF THE BURLAP FROM THE ROOT BALL. WIRE CAGES, STRAPS, ETC. SHALL BE REMOVED FROM THE TOP HALF OF THE ROOTBALL BEFORE INSTALLATION.
- 21. ALL CONTAINER MATERIAL SHALL HAVE BEEN GROWN IN CONTAINER FOR A MINIMUM OF 6 MONTHS PRIOR TO INSTALLATION.
- 22. SHRUBS AND GROUNDCOVER SHALL BE PLANTED A MINIMUM OF ONE HALF THEIR ON-CENTER SPACING FROM PAVING EDGE UNLESS OTHERWISE NOTED.
- 23. DECIDUOUS SHRUBS SHALL HAVE MINIMUM OF FIVE (5) CANES AT SPECIFIED HEIGHT UNLESS OTHERWISE NOTED IN PLANT SCHEDULE.
- 24. ALL PERENNIAL BEDS TO RECEIVE ROCK MULCH SHALL HAVE LANDSCAPE FABRIC INSTALLED WITH HOLES FOR PLANTS CUT 2.5 TIMES THE DIAMETER OF THE CONTAINER.
- 25. LANDSCAPE CONTRACTOR SHALL PROVIDE AND INSTALL NURSERY GROWN PLANT MATERIAL CONFORMING TO THE REQUIREMENTS AND RECOMMENDATIONS OF THE LATEST EDITION OF ANSI Z60.1 STANDARDS UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS.



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CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

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Signature	Date

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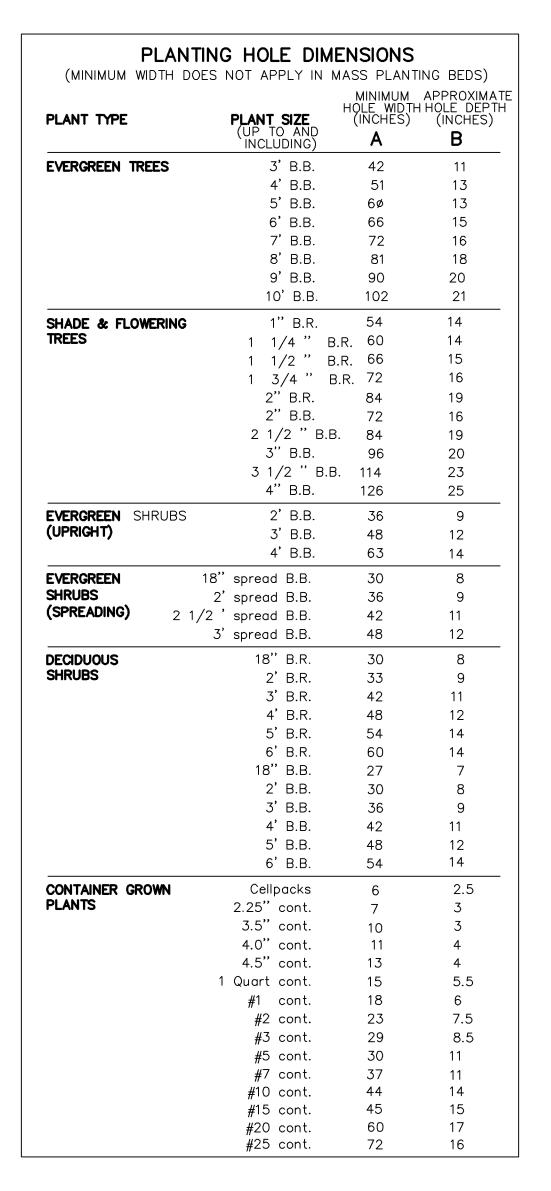
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LANDSCAPE PLAN

**ISSUED FOR** PROJECT NO: **PERMIT NOT FOR CONSTRUCTION** SCALE:

**DRAWING NO:** L100



- INPLACE WALL

CHAIN-LINK FENCE-

- 1"X 36" WOOD LATH

- FINISHED GRADE-

(DRIVE 12" INTO SOIL AT AN ANGLE SO THAT TOP

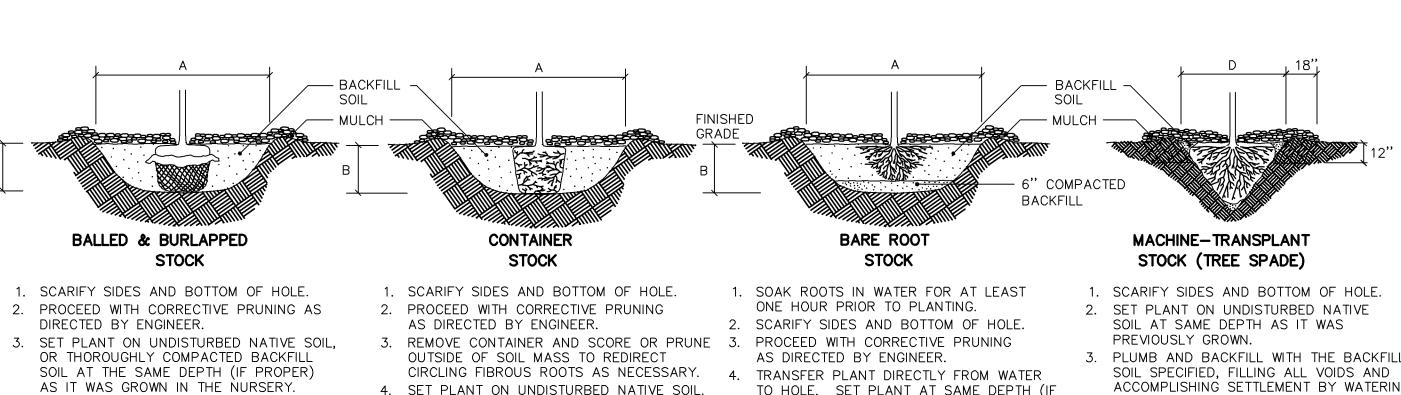
RESTS SNUGLY ON WALL)

- 3" DEPTH WATERING BASIN-

1. PLANT ACCORDING TO PLANTING

DETAILS ABOVE AS APPLICABLE

FENCE WITH BIODEGRADABLE



PROPER) AS IT WAS GROWN IN THE

WITH THE BACKFILL SOIL SPECIFIED.

FILL VOIDS THEN CONSTRUCT 3" DEPTH

5. APPLY WATER TO SETTLE PLANTS AND

WATERING BASIN.

AS IT WAS GROWN IN THE NURSERY.

4. PLANT SHALL BE PLACED IN PLANTING HOLE WITH BURLAP AND WIRE BASKET, INTACT. ONCE IN PLACE, REMOVE THE TOP 1/3 OR THE TOP TWO HORIZONTAL RINGS OF THE WIRE BASKET. REMOVE THE BURLAP AND NAILS TO EXPOSE THE TOP 1/3 OF THE SOIL BALL. REMOVE ALL ROPÉ OR TWINE AND DISPOSE OFF OF THE SITE. CUT VERTICAL SLITS AT 6" INTERVALS INTO THE BURLAP.

5. PLUMB AND BACKFILL WITH THE BACKFILL SOIL SPECIFIED. 6. APPLY WATER TO SETTLE PLANTS AND FILL VOIDS THEN CONSTRUCT 3" DEPTH

WATERING BASIN. 7. WATER THOROUGHLY WITHIN 2 HOURS.

8. PLACE MULCH (INCIDENTAL) WITHIN 48 HOURS 2. ON 2:1 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN. OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

9. BIODEGRADABLE TWINE MAY BE LEFT ON AS SUPPORT BETWEEN THE ROOT BALL AND ROOT COLLAR UNTIL THE END OF THE PLANT ESTABLISHMENT PERIOD AT WHICH TIME IT MUST BE CUT AND TOTALLY REMOVED FROM THE ROOT COLLAR, THE TWINE MUST BE TIED OR RETIED TO MID-LEVEL LOOPS OR POINTS ON THE BASKET. USE OF NONBIODEGRADABLE TWINE SHALL NOT BE PERMITTED.

PLANT-AB.DWG

4. SET PLANT ON UNDISTURBED NATIVE SOIL.

SOIL AT THE SAME DEPTH (IF PROPER) AS IT WAS GROWN IN THE NURSERY. 5. APPLY WATER TO SETTLE PLANTS AND FILL VOIDS THEN CONSTRUCT 3" DEPTH WATERING BASIN.

DRAINED OR IMPERVIOUS SOILS.

OR THOROUGHLY COMPACTED BACKFILL

6. WATER THOROUGHLY WITHIN 2 HOURS. 6. WATER THOROUGHLY WITHIN 2 HOURS. 7. PLACE MULCH WITHIN 48 HOURS OF THE 7. PLACE MULCH WITHIN 48 HOURS OF SECOND WATERING UNLESS SOIL MOISTURE THE SECOND WATERING UNLESS SOIL IS EXCESSIVE. MOISTURE IS EXCESSIVE.

ON WET, POORLY DRAINED SOILS, DO NOT CONSTRUCT WATERING BASIN.

ACCOMPLISHING SETTLEMENT BY WATERING. 4. AFTER PLANTING, THE SOIL IMMEDIATELY NURSERY. PLUMB AND IMMEDIATELY BACKFILL ADJACENT TO THE SPADE MOVED SOIL FOR A MINIMUM DISTANCE OF 18" SHALL BE TURNED OVER AND/OR ROTOTILLED TO A MINIMUM DEPTH OF 12".

GENERAL NOTES

PLANTING HOLE

BACKFILL SOIL:

AND BED

FERTILIZER:

COMPOST:

MULCH

MATERIAL:

STAKING:

TREE

PAINTING:

RODENT

MASS

PROTECTION:

PLANTINGS:

PLANTING

WATERING

**GUIDELINES:** 

PLAN:

CULTIVATION

- SEE SPECIAL PROVISIONS FOR SPECIFIC

ALL ISOLATED TREE PLANTING LOCATIONS AND PLANTING

BEDS SHALL BE CULTIVATED BY TILLING TO A MINIMUM

FROM PLANTING HOLES. REMOVE ALL DEBRIS INCLUDING

Mn/DOT 3882 TYPE 6. UNLESS OTHERWISE SPECIFIED.

TREES IN A PLUMB CONDITION WHERE VANDALISM, SOIL,

PAINT OAKS, LINDENS, LOCUSTS, MAPLES, CRABAPPLES,

AND MOUNTAIN ASHES, ONLY UNDILUTED EXTERIOR

PROVIDE ON ALL DECIDUOUS TREES AND PINE TREES

PLANT SPACING OF 10' OR LESS SHALL BE MASS

ON THE PERIMETER FIRST, THEN UNIFORMLY FILL

IN WITH REMAINING QUANTITY USING TRIANGULAR

SPACING, UNLESS SPECIFIED OTHERWISE. PROVIDE

DECIDUOUS TREE AND 8' RADIUS AROUND EACH

5' RADIUS CLEAR OF SHRUBS AROUND EACH

EVERGREEN TREE. THIS RADIUS (CLEARANCE)

OF THE TREE TO THE CENTER OF THE SHRUB.

NOTIFY ENGINEER OF GROSS PLANT QUANTITY

RESPECT STATED DIMENSIONS BEFORE SCALING

1) THE WATERING GUIDELINES ASSUME A SOIL

POOR DRAINAGE. WATERING INTERVALS AND

PREVAILING SOIL MOISTURE AND WEATHER

CONDITION WITH ADEQUATE BUT NOT EXCESSIVE OR

CONDITIONS THROUGHOUT THE GROWING SEASON. ADEQUATE BUT NOT EXCESSIVE SOIL MOISTURE IN

AMOUNT OF APPLICATION MUST BE VARIED CONSIDERING

THE ROOT ZONE OF NEW PLANTINGS MUST BE MAIN-

TAINED AT ALL TIMES THROUGHOUT THE GROWING

WATERING GUIDELINES ARE NOT REQUIREMENTS OF

DEFICITS BY SUPPLEMENTAL WATERING OR FAILURE

PLANTS LEADING TO REDUCED OR NO PAYMENT.

TO COMPENSATE FOR EXCESSIVE SOIL MOISTURE AND

DRAINAGE PROBLEMS MAY RESULT IN UNACCEPTABLE

THE CONTRACT ALTHOUGH FAILURE TO CORRECT WATER

SEASON FOR THE FIRST TWO YEARS FOLLOWING PLANTING. WATERING MAY BE REQUIRED WEEKLY OR

INFREQUENTLY. THIS DETERMINATION SHALL BE

2) THE CONTRACTOR IS ADVISED THAT THE

AVERAGE AMOUNT OF WATER PER APPLICATION (GALLONS)

50-100

 $20\pm$ 

15±

 $10 \pm$ 

7 ±

4 ±

 $3\pm$ 

SHALL BE MEASURED FROM THE CENTER

SURPLUS OR DEFICIENCY IMMEDIATELY.

PLANT SPACINGS OF <u>15'</u> OR LESS

SHALL BE MASS MULCHED.

MACHINE TRANSPLANTED

BALLED & BURLAPPED TREES

BALLED & BURLAPPED SHRUBS

BARE ROOT OR CONTAINER

HERBACEOUS GROUNDCOVERS

MADE BY THE CONTRACTOR.

TREES (3" CALIPER+)

BARE ROOT TREES

WOODY SEEDLINGS

FROM PLAN.

PLANT TYPE

SHRUBS

AND VINES

CULTIVATED BY TILLING. PLANT IN STAGGERED ROWS

TREE STAKING (ALL SIZES) WILL NOT BE REQUIRED

UNLESS SPECIFIED OR NECESSARY TO MAINTAIN

OR WIND CONDITIONS ARE A PROBLEM OR AS

WHITE LATEX BASE PAINT IS ACCEPTABLE.

DEPTH OF 10". SOIL AMENDMENTS SHALL BE APPLIED

USE CULTIVATED AND AMENDED SOIL EXCAVATED

PROJECT REQUIREMENTS

DURING CULTIVATION.

X NONE

\_\_\_ MN/DOT 3881

NONE

ROCKS LARGER THAN 3" DIA.

REQUESTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED.

CONSTRUCT 3" DEPTH WATERING BASIN.

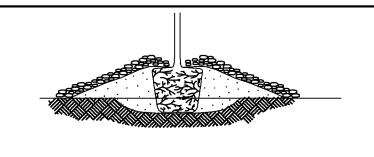
6. WATER THOROUGHLY WITHIN 2 HOURS. 7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING. UNLESS SOIL MOISTURE IS EXCESSIVE.

MINIMUM TREE SPADE SIZE REQUIREMENTS DECIDUOUS/ OAK (DIAMETER) TREES TREES TREES (CALIPER) (CALIPER) (HEIGHT) 1.0" to 1.5" 2" to 3" 5' to 7

#### PLANTS SHOULD BE SET AT THE PROPER DEPTH WHEREBY THE BEGINNING TAPER OF THE ROOT FLARE IS AT THE SAME ELEVATION AS THE FINISHED SOIL GRADE. THIS SHOULD BE

#### SHOULD EXERCISE DISCRETION IN SETTING PLANTS 1"-3" HIGHER IN POORLY DRAINED SOILS. 1.5" to 2.5" 3" to 4" 7' to 9' 2.5" to 3.5" 4" to 6" 9' to 14' 85" 3.5" to 5.0" 6" to 8" 14' to 18' COVERED BY MORE THAN 4" OF SOIL IN THE TOP OF THE BALL OR IF THE SOIL BALL IS BROKEN. DELAY MULCH PLACEMENT (INCIDENTAL) IF NECESSARY TO ALLOW MORE TIME FOR EXCESS SOIL

#### PLANTING DETAILS FOR ISOLATED PLANTING LOCATIONS



#### INSTALL MINI-BERM

- 1 . EXCAVATE HOLE OR BED 1/4 THE DEPTH OF THE ROOT MASS.
- 2. SET ROOT MASS IN HOLE. CONSTRUCT BERM WITH SANDY LOAM
- TOPSOIL EXTENDING THE BERM BASE TO A
- WIDTH 3 TIMES THE HEIGHT OF THE BERM. 4. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.

4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE IN HEAVY POORLY

THE SAME DEPTH AS THE PLANTS WERE GROWN AT IN THE NURSERY. NOTE THAT THE

ROOTS OF BALLED AND BURLAPPED PLANTS ARE UNACCEPTABLE WHEN THEY ARE

MOISTURE TO EVAPORATE FROM PLANTING AREAS BEFORE PLACING MULCH.

#### INSTALL GRANULAR FILTER

- 1 . EXCAVATE HOLE OR BED TO ALLOW PLACING TOP OF ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
- 2. AUGER 8" DIAMETER HOLES ENTIRELY THROUGH IMPERVIOUS OR POORLY DRAINED HARD PAN SOIL LAYER TO ADEQUATELY DRAINED SUBSOIL
- 3. BACKFILL AUGER HOLES WITH A THOROUGHLY INCORPORATED MIXTURE OF 50% SAND AND 50% INPLACE SOIL.
- 4. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.

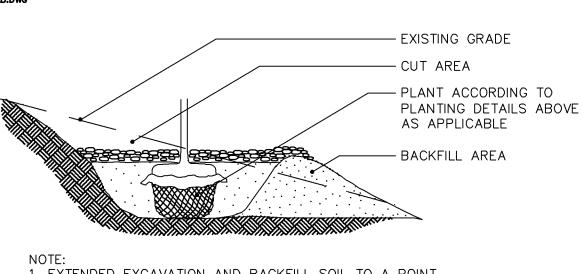
# 1 . THE PLANTING DETAILS REPRESENT ADEQUATELY DRAINED SOIL CONDITIONS. THE CONTRACTOR ORNAMENTÁL EVERGREEN

#### INSTALL TILE DRAINAGE

- 1 . EXCAVATE HOLE OR BED TO ALLOW PLACEMENT OF THE TOP OF THE ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
- 2. INSTALL 4" MINIMUM DIAMETER DRAIN TILE DAYLIGHTING AT A LOWER GRADE AS APPROVED BY THE ENGINEER
- 3. COMPLETE PLANTING ACCORDING TO PLANTING DETAILS ABOVE AS APPLICABLE.

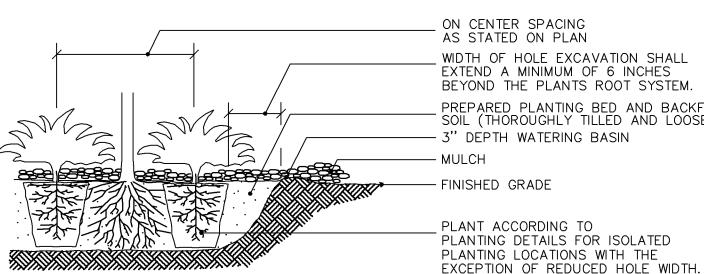
## ALTERNATIVE PLANTING DETAILS IN POORLY DRAINED SOIL

CONTRACTOR SUBJECT TO APPROVAL BY THE ENGINEER.)



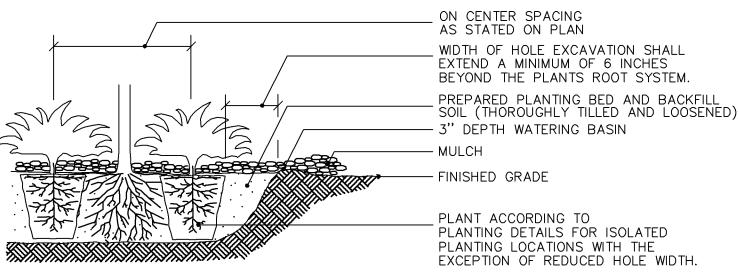
1. EXTENDED EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.

PLANTING DETAIL FOR STEEP SLOPES



PLANTING DETAIL FOR MASS PLANTING BEDS

(NEED AND ALTERNATIVE SELECTION SHALL BE DETERMINED BY



STANDARD PLANTING DETAILS (A) DATED JANUARY, 2012

**ISSUED FOR PERMIT NOT FOR CONSTRUCTION** 



Planners and Engineers 2300 Berkshire Lane N, Suite 200 Plymouth, MN 55441

CLIENT:

WHIRLYBALL 13644 80TH CIRCLE NORTH MAPLE GROVE, MN 55369

763.559.9100

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info@vaaeng.com



CLIENT PROJECT NO: 170002

PROJECT:

WHIRLYBALL 2435 E OLD SHAKOPEE ROAD BLOOMINGTON, MN

NO	DATE	ISSUE/REVISION	B,
Α	07/03/17	ISSUED FOR PERMIT	TS

by me or under my direc	plan, specification, or report was pre ct supervision and that I am a duly lic under the laws of the State of Minnes
Signature	Date

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DATE: 07/05/17		DRAWN: TSH	
DESIGNED: AMB	CHECKE PDK	ED:	APPROVED:

DRAWING TITLE:

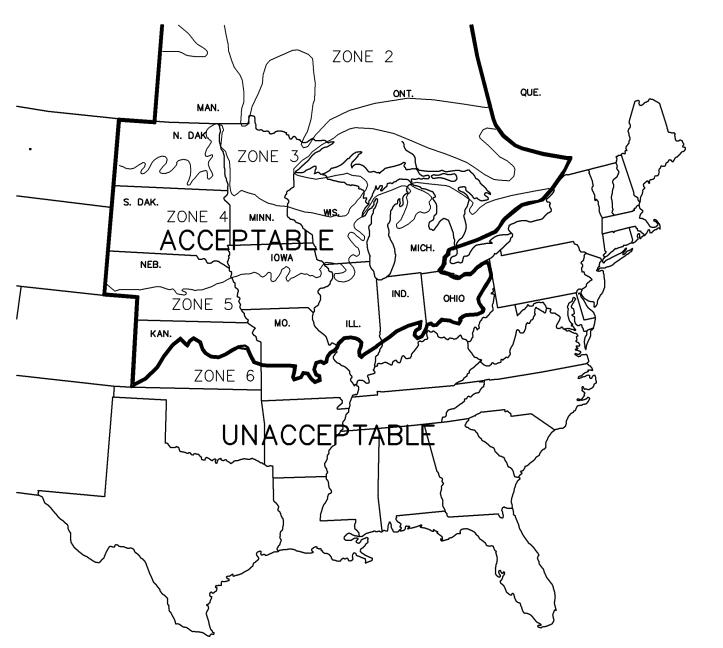
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**CERTIFICATION:** 

LANDSCAPE DETAILS

PROJECT NO: DRAWING NO: 170002 L101 SCALE: AS NOTED

VINE PLANTING DETAIL



ZONE 1	BELOW -5° F
ZONE 2	-50° to -40°
ZONE 3	$-40^{\circ}$ to $-30^{\circ}$

ZONE 4

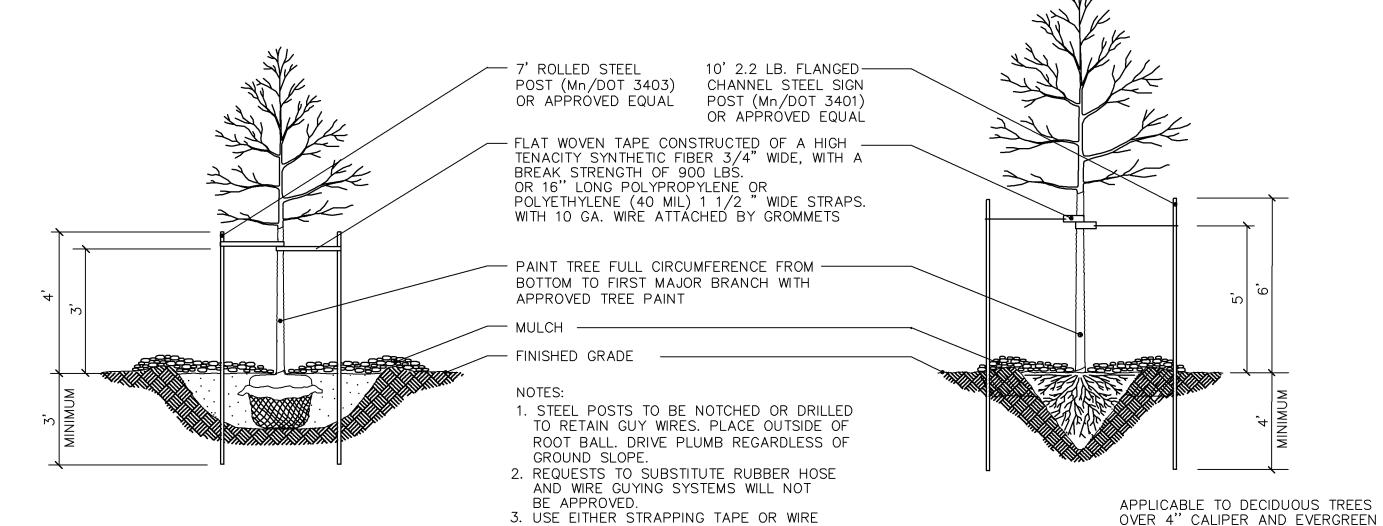
STATE INSPECTED PLANTS GROWN WITHIN ZONES 1-4 AND THE ACCEPTABLE GROWING RANGE FOR A MINIMUM OF 2 YEARS MAY BE USED ON ALL PROJECTS UNLESS OTHERWISE SPECIFIED.

 $-30^{\circ}$  to  $-20^{\circ}$ 

 $-20^{\circ}$  to  $-10^{\circ}$ 

STATE INSPECTED PLANTS GROWN WITHIN ZONE 5 AND THE ACCEPTABLE GROWING RANGE FOR A MINIMUM OF 2 YEARS ARE ALLOWED ONLY ON PROJECTS WITHIN ZONE 4 IN MINNESOTA. UNLESS CERTIFIED AS MINNESOTA ZONE HARDY IN ZONES 3 AND 2.

PLANT STOCK NOT GROWN WITHIN THE THE ACCEPETABLE ZONES AND GROWING RANGE FOR A MINIMUM OF 2 YEARS MAY BE ACCEPTED IF THE SEED SOURCE OR ROOT AND GRAFT STOCK IS CERTIFIED AND DOCUMENTED AS MIDWEST AND NORTHERN GROWN AND MINNESOTA ZONE HARDY.



#### STANDARD TREE STAKING / GUYING AND PAINTING DETAIL

PLANT-AB.DWG

LARGE MACHINE - TRANSPLANT TREE STAKING / GUYING AND PAINTING DETAIL

WITH POLYPROPYLENE STRAPS.

SOURCE: U.S.D.A. PLANT HARDINESS ZONE MAP

PLANT-AB.DWG

	SPRING			FAI	_L
	SEEDLING	DECIDUOUS	EVERGREEN	DECIDUOUS	EVERGREEN
1	APRIL 15 TO MAY 15	APRIL 21 TO JUNE 1	APRIL 21 TO JUNE 1	OCT. 1 TO NOV. 1	AUG. 25 TO SEPT. 15
2	APRIL 7 TO MAY 15	APRIL 14 TO JUNE 1	APRIL 14 TO MAY 24	OCT. 1 TO NOV. 6	AUG. 25 TO SEPT. 15
3	APRIL 1 TO MAY 15	APRIL 7 TO JUNE 1	APRIL 7 TO MAY 17	OCT. 10 TO NOV. 15	AUG. 25 TO SEPT. 15
4	APRIL 1 TO MAY 15	APRIL 1 TO MAY 25	APRIL 1 TO MAY 15	OCT. 15 TO NOV. 20	SEPT. 5 TO OCT. 1

ACCEPTABLE GROWING RANGE FOR MIDWEST AND NORTHERN GROWN PLANT STOCK

- 1. SEEDLING INCLUDES DECIDUOUS AND EVERGREEN STOCK. 2. ACTUAL DATES MAY CHANGE DEPENDING UPON SEASONAL CONDITIONS
- AS DETERMINED BY THE ENGINEER.
- 3. FALL PLANTING MAY NOT BE RECOMMENDED OR ALLOWED. SEE SPECIAL PROVISIONS FOR SPECIFIC PROJECT REQUIREMENTS. THE O – INDICATES PROJECT LOCATION FOLLOWING PLANTS ARE NOT RECOMMENDED FOR FALL INSTALLATION. HAWTHORNE, RUSSIAN OLIVE, DOGWOOD, POPLAR, HACKBERRY, LINDEN, IRONWOOD, HONEYLOCUST, BIRCH, MOUNTAIN ASH, MAPLE, WILLOW, CRABAPPLE, PLUM/CHÉRRY, OAKS, SUMAC.

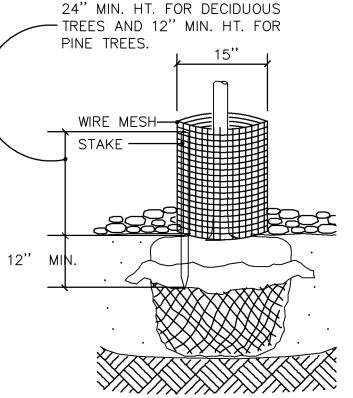
# STAKE —

LAYERED CYLINDER WITH A 2" OVERLAP OF THE

#### NOTE:

THE BOTTOM WHORL OF BRANCHES MAY HAVE TO BE REMOVED TO PERMIT INSTALLATION OF 12" MIN. HT. RODENT GUARDS ON PINE TREES.

#### RODENT PROTECTION DETAIL



CUT ENDS. IMBED A 1" X 1" WHITE OAK STAKE INTO THE GROUND AT A RADIUS POINT OF 7" FROM THE CENTER OF THE TREE STEM. SECURE THE MESH CYLINDER TO THE OUTSIDE OF THE STAKE USING GALVANIZED 1/8" DIAM. X 3/4" LONG ROUND HEAD SCREWS WITH WASHERS SPACED APPROXIMATELY 4" ON CENTER ALONG THE OVERLAP. THE LOWER EDGE OF THE MESH CYLINDER SHALL BE IMBEDDED 1" BELOW THE SURFACE OF THE SOIL WITHOUT DISTURBING THE TREE ROOTS. CUT EDGES WILL NOT BE PERMITTED AT THE TOP OF THE CYLINDER. THE STAKE SHALL BE CUT OFF FLUSH WITH THE TOP OF THE CYLINDER. MULCH WITHIN THE CYLINDER SHALL NOT EXCEED 3" DEPTH.

USE 1/4" GRID GALVANIZED AND WELDED WIRE

MESH (HARDWARE CLOTH) TO FORM A DOUBLE

## NOTE:

REMOVE MULCH PLACED TO A DEPTH GREATER THAN THAT SPECIFIED WHEN DIRECTED BY THE ENGINEER.

#### MULCH PLACEMENT DETAIL

SUBSIDENCE OR DETERIORATION OF MULCH THROUGHOUT THE CONTRACT IS ACCEPTABLE TO THE EXTENT THAT THE MULCH DEPTH IS MAINTAINED AT A MINIMUM DEPTH OF 3 INCHES AT ALL TIMES AND UPON FINAL ACCEPTANCE. REPLACEMENT MULCH SHALL BE REQUIRED TO PROVIDE THE MINIMUM MULCH DEPTH SPECIFIED WHEN SUBSIDENCE OR LOSS IS EXCESSIVE OR WHEN THE CONTRACTOR'S OPERATIONS HAVE CONTAMINATED THE MULCH WITH SOIL.

TREES OVER 10' IN HEIGHT ONLY WHEN NECESSARY OR SPECIFIED.

TYPE OF PLANT	X CENTER OF PLANT TO MULCH LINE	X <sub>1</sub> EDGE OF BRANCHING TO MULCH LINE	DEP1	Y TH OF LCH MAX.		Z IH OF LCH MAX.
EVERGREEN TREES	VARIES	3' MIN.	4''	6"	4"	6''
DECIDUOUS TREES	3' MIN.	N/A	4''	6"	4"	6''
EVERGREEN SHRUBS	VARIES	3' MIN.	3"	4"	4''	6"
DECIDUOUS SHRUBS	3' MIN.	N/A	4''	6''	4''	6"
VINES	2' MIN.	N/A	4''	6"	4"	6"
GROUNDCOVERS	VARIES	2' MIN.	3''	4"	3"	4''
MACHINE-TRANSPLANTED TREES	12" BEYOND	EDGE OF HOLE	4''	6"	4''	6"

CERTIFICATION:

Planners and Engineers

Plymouth, MN 55441

CLIENT:

2300 Berkshire Lane N, Suite 200

CLIENT PROJECT NO: 170002

A 07/03/17 ISSUED FOR PERMIT

PROJECT:

NO DATE

WHIRLYBALL

13644 80TH CIRCLE NORTH

MAPLE GROVE, MN 55369

WHIRLYBALL

2435 E OLD SHAKOPEE ROAD

BLOOMINGTON, MN

ISSUE/REVISION

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

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DATE: 07/05/17		DRAWN: TSH	
DESIGNED: AMB	CHECKEI PDK	D:	APPROVED:

DRAWING TITLE:

LANDSCAPE DETAILS

**ISSUED FOR** 

	_	

PROJECT NO: DRAWING NO: 170002 L102 SCALE: AS NOTED

### OPTIMUM PLANTING DATE ZONES IN MINNESOTA

NETTING -TUBE SHELTER PREVAILING WIND -STAKE -(LENGTH VARIES) RATCHET TIE TO-SECURE STAKE IN FORMED TUBE RECESS

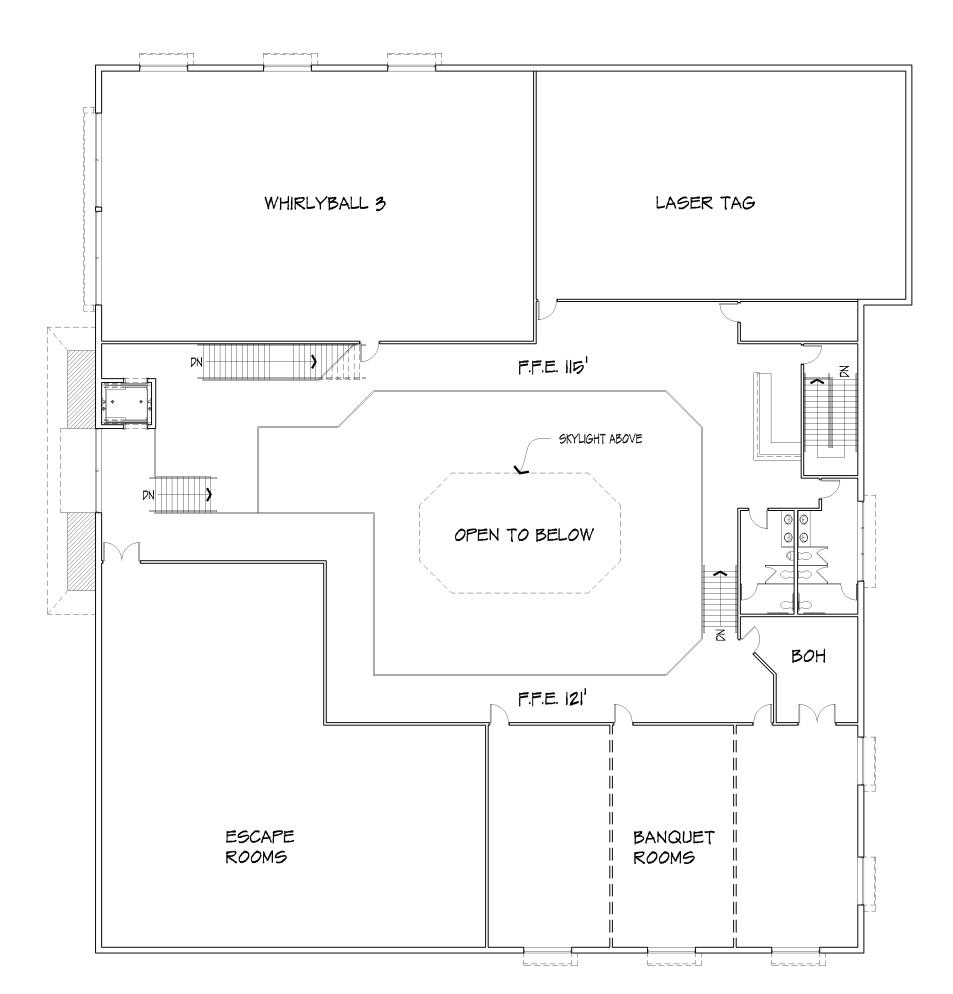
USE SEAMLESS, EXTRUDED, TWIN-WALL, RIGID AND SEMI TRANSLUCENT POLYPROPYLENE TUBES WITH A TOP RIM FLARED OUTWARD TO PREVENT ABRASION TO STEMS AND BRANCHES. THE SHELTERS WILL BE SECURED WITH NYLON RACHET-LOCKING TIES ATTACHED TO A 1" x 1" WHITE OAK STAKE IN A SECURE MANNER TO PREVENT DISLODGING OR TWISTING. THE BOTTOM OF THE TUBE WILL BE IMBEDDED A MINIMUM OF 1" BELOW THE SURFACE OF THE SOIL WITHOUT DISTURBING THE TREE ROOTS. A PLASTIC PHOTO DEGRADABLE NETTING COVER AND SLEEVE SHALL BE INSTALLED OVER THE TOP OF THE TUBE TO PREVENT ENTRAPMENT OF BIRDS.

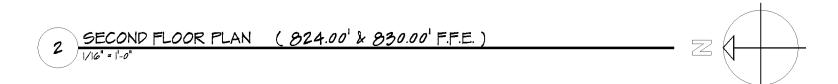
SEEDLING TREE SHELTER DETAIL

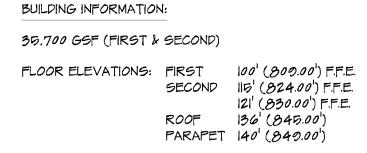
**PERMIT NOT FOR CONSTRUCTION** 

STANDARD PLANTING DETAILS (B) DATED OCTOBER 27, 1995

PLANT-AB.DWG

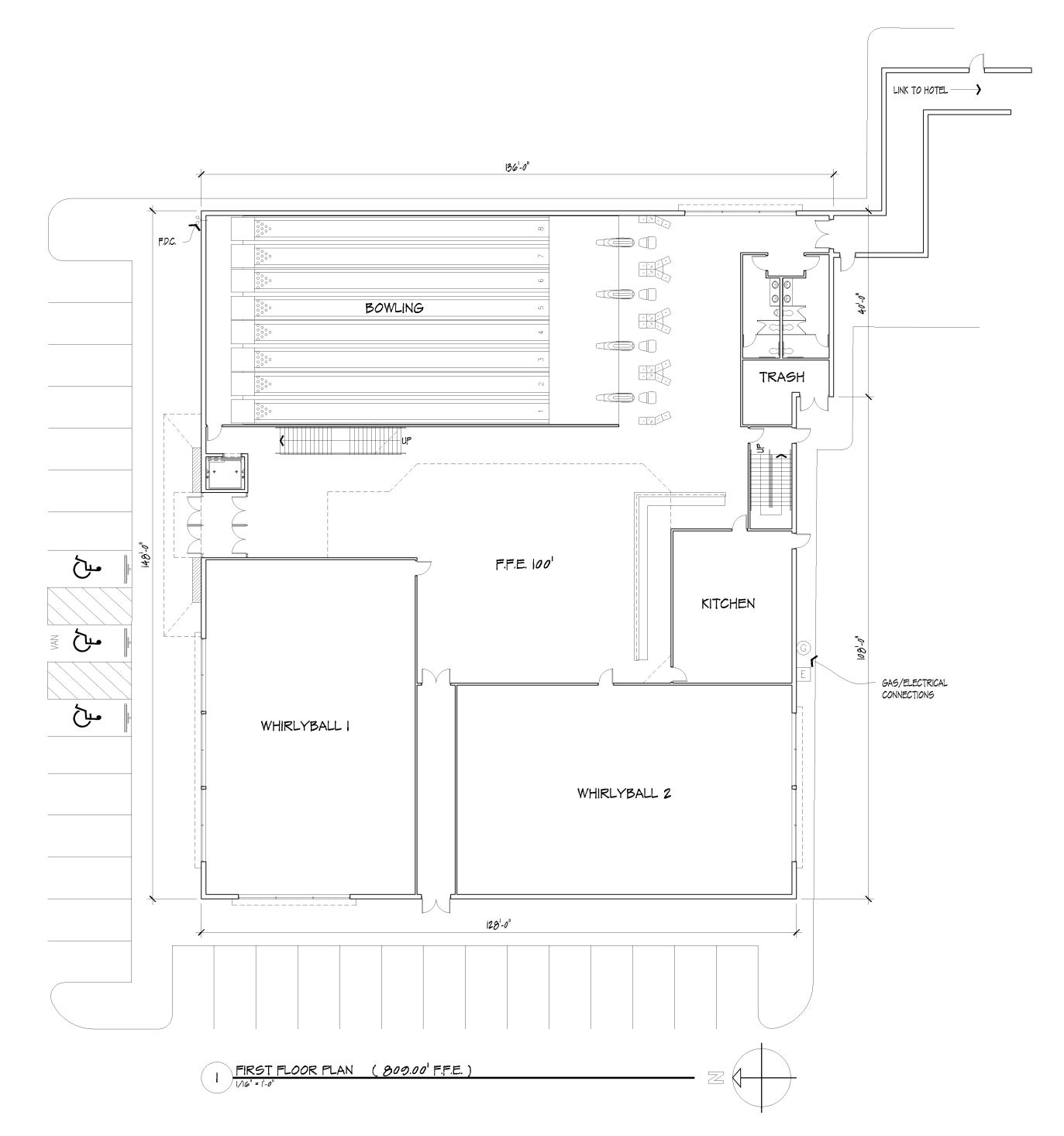






CONSTRUCTION TYPE: II B

OCCUPANCY GROUPS: A2, A3





Studio 55 Architects, LLP 10700 Highway 55, suite 275 Plymouth, MN 55441 763.544.8370 studio55architects.com



2405 E Old Shakopee RD Bloomington, MN

No. Date Revision

07-05-17 CITY SUBMITTAL

specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Printed Name:

Printed Name Signature:

Signature:

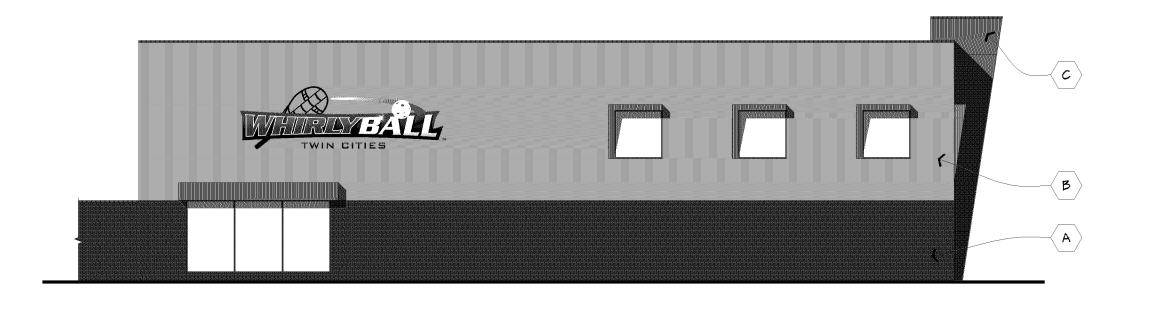
Date: License #:

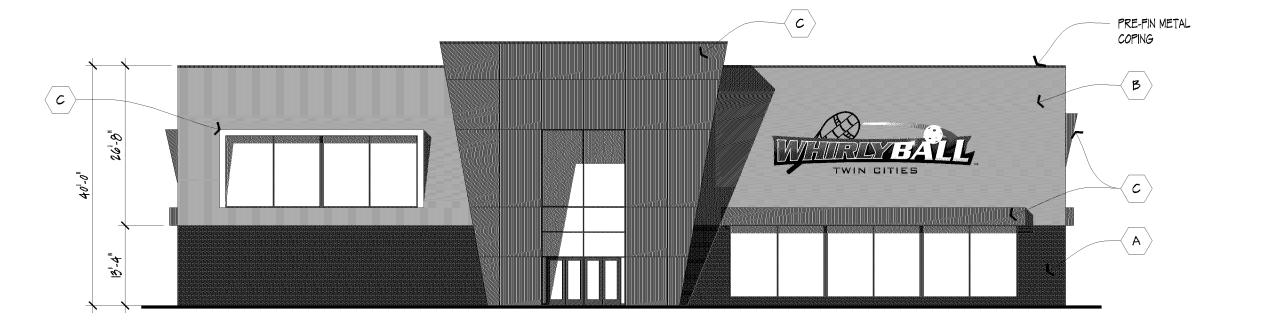
Project -

Date 07-05-17
Drawn by

Drawn by
Checked by

Drawing Number





MATERIAL PERCENTAGES:

BRICK 27%
STUCCO 58%
METAL 7%
GLAZING 8%

EAST ELEVATION

MATERIAL PERCENTAGES:

BRICK 15% STUCCO 36% METAL 20% GLAZING 20% NORTH ELEVATION

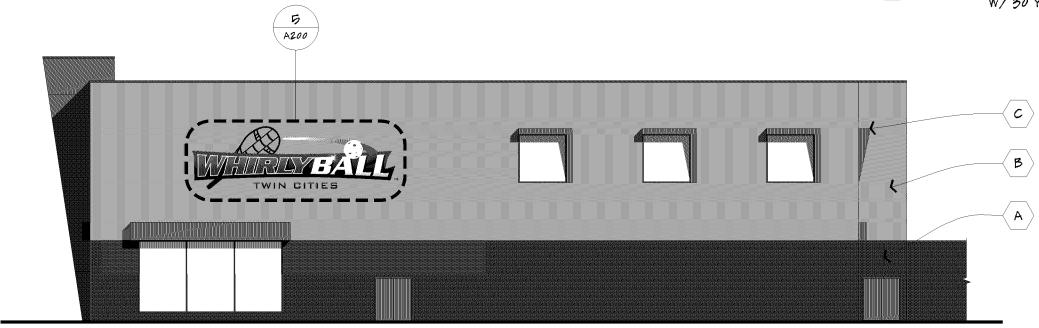
1/16" = 1'-0"

MATERIAL SPECIFICATIONS:

A BRICK ENDICOTT CLAY PRODUCTS
MANGANESE IRONSPOT SMOOTH MODULAR

B STUCCO ACRYLIC PAINT FINISH COLOR T.B.D.

C METAL FIRESTONE OR METL-SPAN CUSTOM COLOR W/30 YEAR WARRANTY OR EQUIVALENT



В	
A	

MATERIAL PERCENTAGES:

BRICK 25% STUCCO 57% METAL 10% GLAZING 8% 3 WEST ELEVATION

MATERIAL PERCENTAGES:

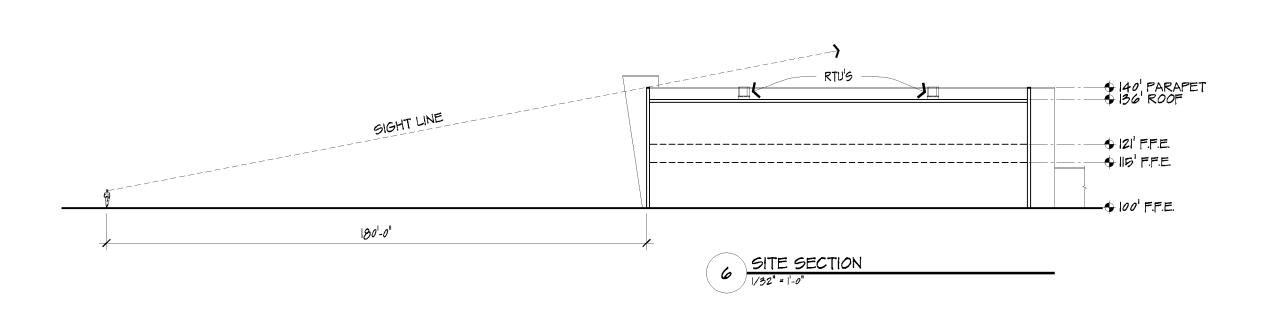
BRICK 25%

STUCCO 61%

METAL 5%

GLAZING 9%

2 SOUTH ELEVATION





5 TYPICAL SIGN



Studio 55 Architects, LLP 10700 Highway 55, suite 275 Plymouth, MN 55441 763.544.8370 studio55architects.com



2405 E Old Shakopee RD Bloomington, MN

140.	Date	Revision
	07-05-17	CITY SUBMITTAL
speci by m super Licen	fication, or e or under vision, and	that I am a duly ct under the laws o
Printe	ed Name: _	
Signa	ture: _	

Project —

Date 07-05-17

Drawn by

Checked by

Drawing Number

A200