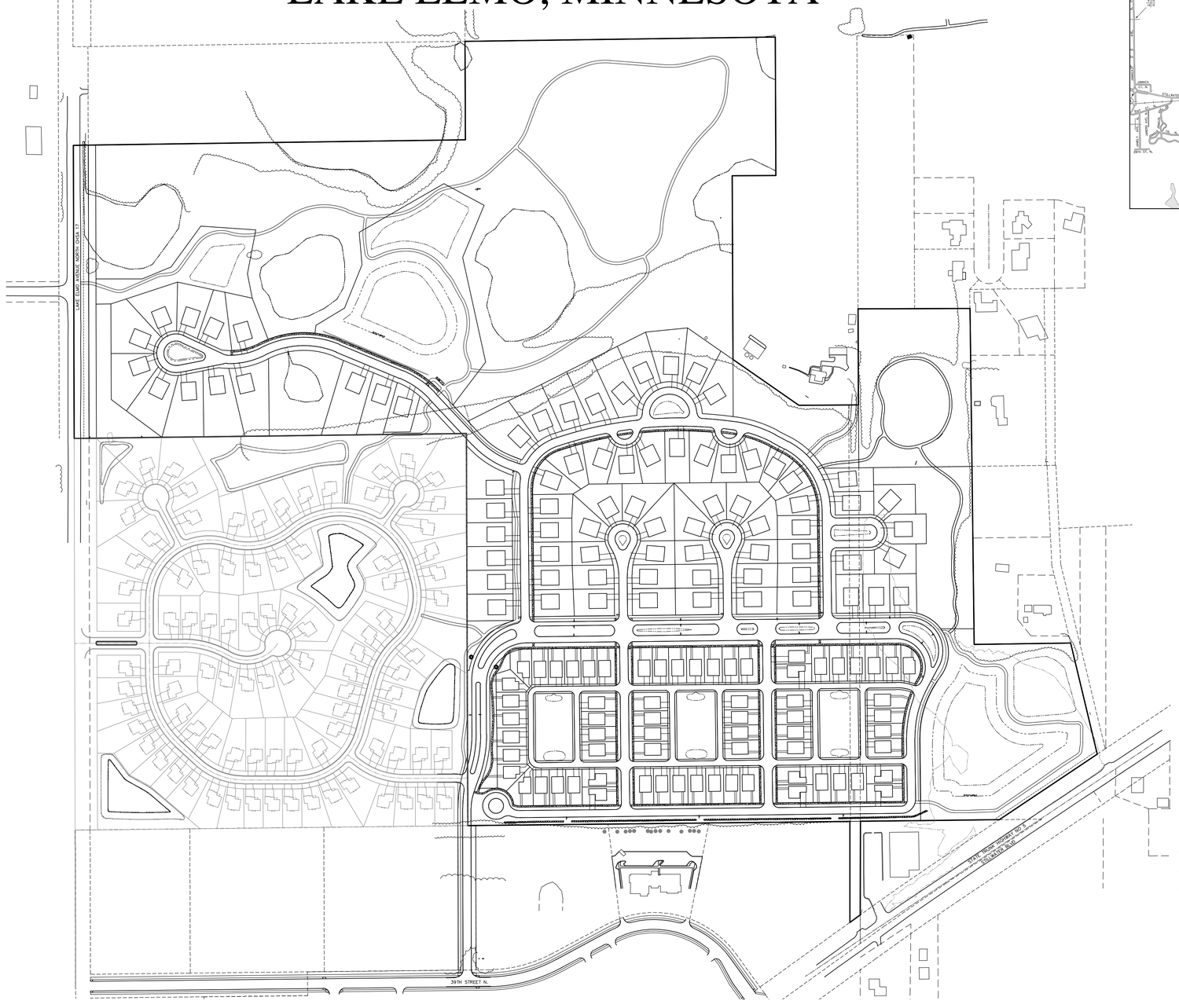
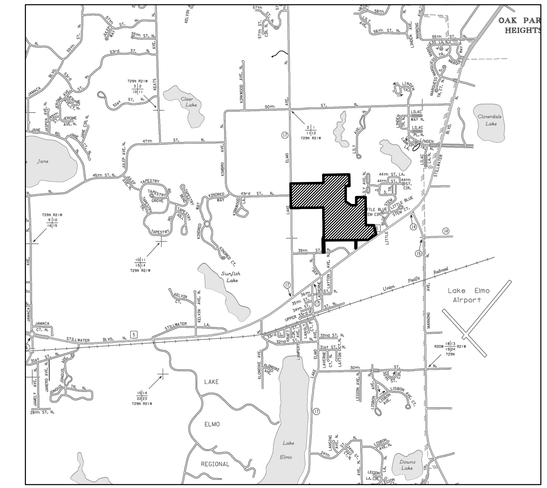
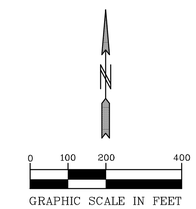
WILDFLOWER AT LAKE ELMO
PLANNED UNIT DEVELOPMENT
AND PRELIMINARY PLAT
LAKE ELMO, MINNESOTA





LOCATION MAP



PREPARED BY PIONEER ENGINEERING, P.A.

KEITH A WILLENBRING
REGISTERED PROFESSIONAL CIVIL ENGINEER

25504
REG. NO.

PETER J. HAWKINSON
REGISTERED PROFESSIONAL LAND SURVEYOR

42299
REG. NO.

DEVELOPER

ROBERT ENGSTROM COMPANIES
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MINNEAPOLIS, MINNESOTA 55437-1111
CONTACT: ROBERT ENGSTROM
ROBERTEENGRSTROM@GMAIL.COM
(952) 893-1001

LANDOWNER

ROBERT ENGSTROM COMPANIES
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(952) 893-1001

PROPOSED DEVELOPMENT PHASING
MASS GRADING TO BE PERFORMED IN ONE PHASE.
UTILITY AND STREET CONSTRUCTION TO BE PERFORMED IN THREE PHASES.

SHEET INDEX

1. COVER SHEET
2. LEGENDS
3-4. EXISTING CONDITIONS
5. OWNERSHIP AND LAND USE
6-7. PRELIMINARY PLAT
8-10. PRELIMINARY SITE PLAN
11-19. PRELIMINARY GRADING PLAN
20-21. EROSION CONTROL PLAN
22-25. STREET PROFILES
26-34. PRELIMINARY UTILITY PLAN
35-37. DETAILS

L1-5. LANDSCAPE PLAN
T1. TREE PRESERVATION PLAN

00-ENG-114058-SHEET-CVR

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Name Keith A. Willenbring
Reg. No. 25504 Date 11-05-14

Revisions
1. 02-04-15 City Comments

Date	11-05-14
Designed	KAW/BJM
Drawn	KAW/BJM

COVER SHEET

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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LEGEND

UTILITY LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SANITARY MANHOLE
			SANITARY SEWER (SANITARY & WATERMAIN PLANS)
			SANITARY SEWER (STORM SEWER PLANS)
FM FM	FM FM	FM FM	FORCE MAIN
			HYDRANT
			GATE VALVE
			REDUCER
			CURB STOP
			WATERMAIN (SANITARY & WATERMAIN PLANS)
			WATERMAIN (STORM SEWER PLANS)
			CATCH BASIN
			BEEHIVE
			STORM MANHOLE
			FLARED END SECTION
			CONTROL STRUCTURE
			STORM SEWER (SANITARY & WATERMAIN PLANS)
			STORM SEWER (STORM SEWER PLANS)
			CULVERT
PERF PERF	PERF PERF	PERF PERF	PERFORATED DRAINTILE
DT DT	DT DT	DT DT	SOLID DRAINTILE SERVICE
			CASING
e e	e e	e e	UNDERGROUND ELECTRIC LINE
fo fo	fo fo	fo fo	UNDERGROUND FIBER OPTIC LINE
g g	g g	g g	UNDERGROUND GAS LINE
lpg lpg	lpg lpg	lpg lpg	UNDERGROUND PETROLEUM LINES
t t	t t	t t	UNDERGROUND TELEPHONE LINES
tv tv	tv tv	tv tv	UNDERGROUND TELEVISION LINE
g g	oh oh	oh oh	OVERHEAD UTILITY LINES

SITE LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SURMOUNTABLE CURB & GUTTER
			B-STYLE CURB & GUTTER
			RIBBON CURB & GUTTER
			EDGE OF BITUMINOUS
			YELLOW PAVEMENT STRIPING (SINGLE/DOUBLE)
			WHITE PAVEMENT STRIPING (SINGLE/DOUBLE)
			PHASE LINE
			CENTERLINE
902 900	902 900	902 900	2' CONTOUR LINE
			10' CONTOUR LINE
	OUTLET=987.0	OUTLET=987.0	POND OUTLET LINE
	HWL=900.2	HWL=900.2	POND HIGH WATER LINE
	84.3		PROPOSED SPOT ELEVATION
			EMERGENCY OVERFLOW
			DRAINAGE FLOW ARROW
			DELINEATED / PROPOSED WETLAND LINE
			TREE LINE
FEMA	FEMA	FEMA	FEMA FLOODPLAIN BOUNDARY
			RETAINING WALL
x x	x x	x x	FENCE (BARBED WIRE)
# #	# #	# #	FENCE (CHAIN LINK)
[] []	[] []	[] []	FENCE (WOOD)
	C W		CONSERVATION AREA SIGN
			WETLAND BUFFER SIGN
			TYPE III BARRICADE
			LIGHT POLE
			STREET SIGNS
			PEDESTRIAN RAMP

SURVEY LINES

EXISTING	PROPOSED	FUTURE	DESCRIPTION
			BOUNDARY
			RIGHT OF WAY
			LOT LINE
			EASEMENT
			SET BACK LINE
			SECTION LINE
			RESTRICTED ACCESS

HATCH PATTERNS

	GRAVEL SURFACE		WETLAND
	BITUMINOUS SURFACE		WETLAND UPLAND BUFFER
	CONCRETE SURFACE		WETLAND MITIGATION
	RIP RAP		PERMANENT TURF RESTORATION
	SELECT BACKFILL MATERIAL		PERMANENT WET BASIN SEEDING
	EROSION CONTROL BLANKET MNDOT CATEGORY PER PLAN		UPLAND/NATURAL AREA SEEDING

TOPOGRAPHIC SYMBOLS

- CATCH BASIN
- CATCH BASIN BEEHIVE
- FLARED END SECTION
- GATE VALVE
- HYDRANT
- WATER SERVICE
- WATER WELL
- MONITORING WELL
- CLEANOUT
- HAND HOLE
- MANHOLE OTHER THAN SANITARY OR STORM
- SANITARY OR STORM MANHOLE
- LAWN SPRINKLER VALVE
- LAWN SPRINKLER HEAD
- UTILITY POLE
- TRANSFORMER BOX
- FIBER OPTIC BOX
- ELECTRIC BOX
- NATURAL GAS METER
- LIGHT POLE
- SEMAPHORE
- TELEPHONE BOX
- CABLE BOX
- CAST IRON MONUMENT
- FOUND IRON PIPE
- JUDICIAL LAND MARK
- PK NAIL
- CONTROL POINT
- SPIKE
- FLAG POLE
- TEST HOLE
- MAILBOX
- SIGN
- BOLLARD
- CONSERVATION POST
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB / BUSH

EROSION & SEDIMENT CONTROL

- STANDARD EROSION CONTROL
- HEAVY-DUTY EROSION CONTROL
- SECONDARY EROSION CONTROL FENCE.
- EROSION CONTROL AT BACK OF CURB.
- TREE FENCE
- CATCH BASIN INLET PROTECTION
- STRAW BIO ROLLS
- ROCK BERM
- SUMPED RIP RAP PERMANENT ENERGY DISSIPATER
- DISCHARGE LOCATION
- GRAVEL CONSTRUCTION ENTRANCE
- TEMPORARY OUTLET FLOATING SKIMMER BASIN ACCESS 8% SLOPE MAX.

CURB LEGEND

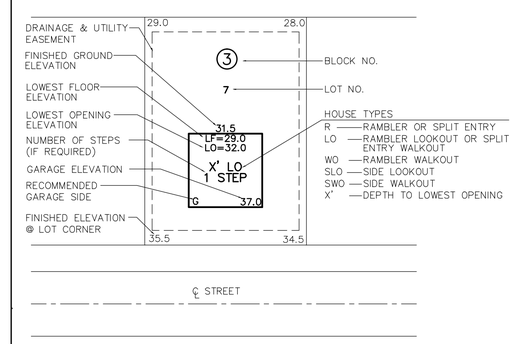
- 08.15 / 4+46.57 = TOP OF CURB ELEVATION FOR SURMOUNTABLE CURB
- 08.32 / 4+46.57 = TOP OF CURB ELEVATION FOR B618 CURB
- 07.82 / 4+46.57 = BITUMINOUS ELEVATION

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE
BV	BUTTERFLY VALVE
BMP	BEST MANAGEMENT PRACTICE
℄	CENTER LINE
CB	CATCHBASIN
CBMH	CATCHBASIN MANHOLE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CS	CURB STOP
DIP	DUCTILE IRON PIPE
DT	DRAINTILE
EL/ELEV	ELEVATION
EX	EXISTING
FES	FLARED END SECTION
F-F	FACE TO FACE
FM	FORCEMAIN
GB	GRADE BREAK
GND	GROUND
GV	GATE VALVE
HP	HIGH POINT
HYD	HYDRANT
HWL	HIGH WATER LEVEL
INV	INVERT
K	CURVE COEFFICIENT
L	LENGTH
LF	LOWEST FLOOR
LO	LOOKOUT
LO	LOWEST OPENING
LP	LIQUID PETROLEUM
LP	LOW POINT
MH	MANHOLE
PC	POINT OF CURVATURE
PCC	COMPOUND CURVE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PVT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R	RAMBLER
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OFF WAY
SSWR	SANITARY SEWER
STA	STATION
STRM	STORM SEWER
SWPPP	STORM WATER POLLUTION PROTECTION PLAN
TNH	TOP NUT HYDRANT
TYP	TYPICAL
WM	WATER MAIN
WO	WALKOUT

LOT INFORMATION

(TYPICAL SECTION NOT TO SCALE)



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Drawn	KAW/BJM

LEGENDS

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

00-ENG-114058-SHEET-LEGN

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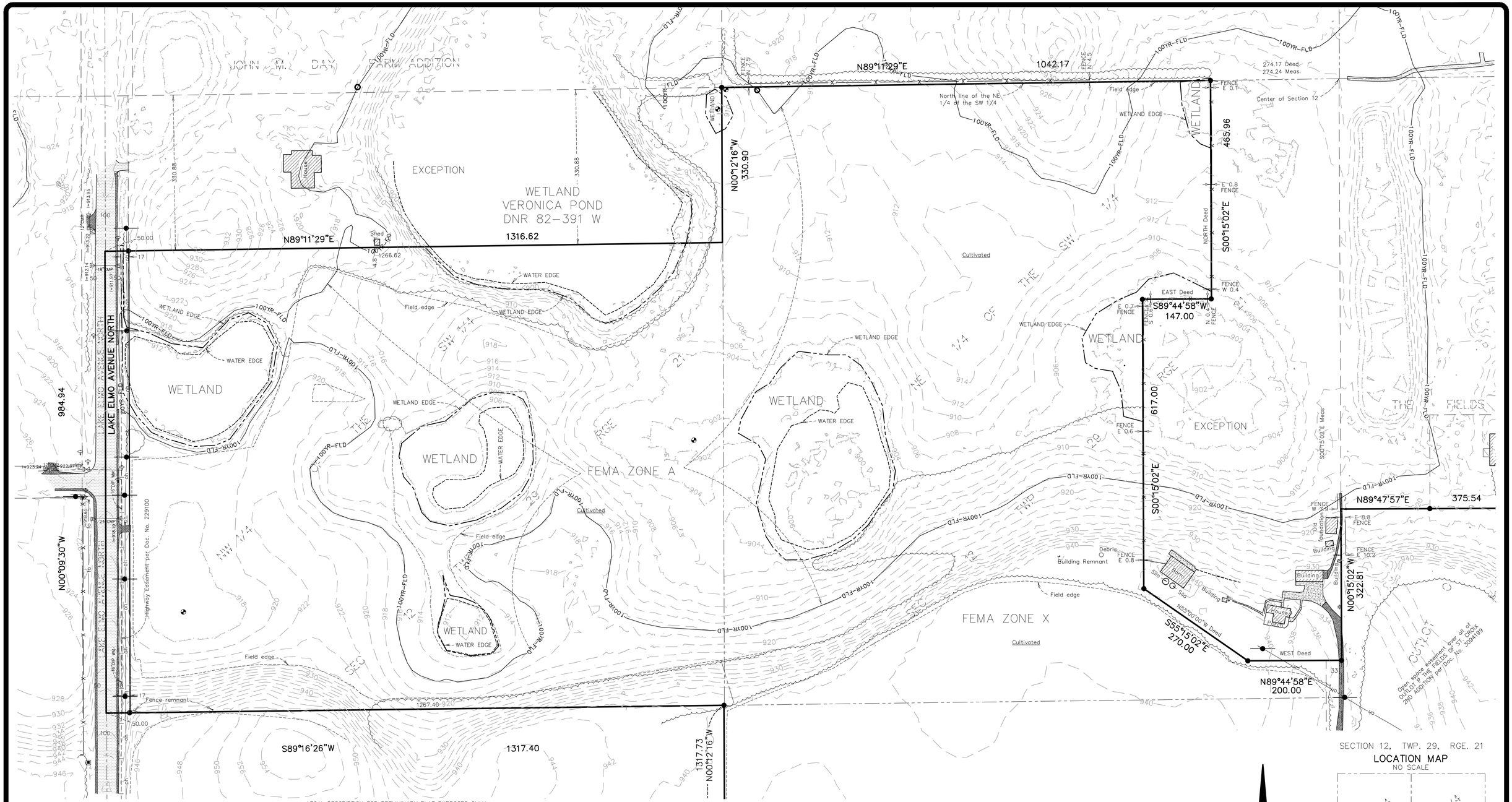
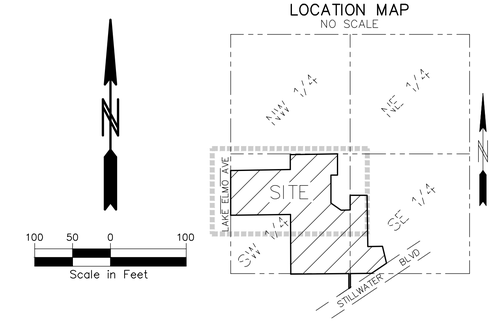


SECTION 12, TWP. 29, RGE. 21

LOCATION MAP

NO SCALE



100 50 0 100

Scale in Feet

LEGAL DESCRIPTION FOR PRELIMINARY PLAT PURPOSES ONLY

The real estate being located in the County of Washington, State of Minnesota, and legally described as follows:

The North Half of Southwest Quarter and the Southeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, save and except the following described part thereof: All that part of the Northeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, described as follows: Beginning at the center of said Section 12; thence due South along the East line of said Northeast Quarter of Southwest Quarter a distance of 1240.5 feet; thence at right angles due West a distance of 200 feet; thence North 55 degrees 00 minutes 00 seconds West a distance of 270 feet; thence due North a distance of 617 feet; thence at right angles due East a distance of 147 feet; thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast Quarter of Southwest Quarter; thence Easterly along the North line of said Northeast Quarter of Southwest Quarter a distance of 274.17 feet to the place of beginning.

And

That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows; Commencing at the Northeast corner of said Northeast Quarter of Northwest Quarter of said Section 13, thence West on the North line thereof 35 feet to a point, thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

Excepting therefrom all of the following described real property; The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.

Together with

Outlots O and P THE FIELDS OF SAINT CROIX 2ND ADDITION according to the plat thereof, Washington County, Minnesota.

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Name Peter J. Hawkinson

Reg. No. 42299 Date 11/5/14

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Designed	
Drawn	mdp

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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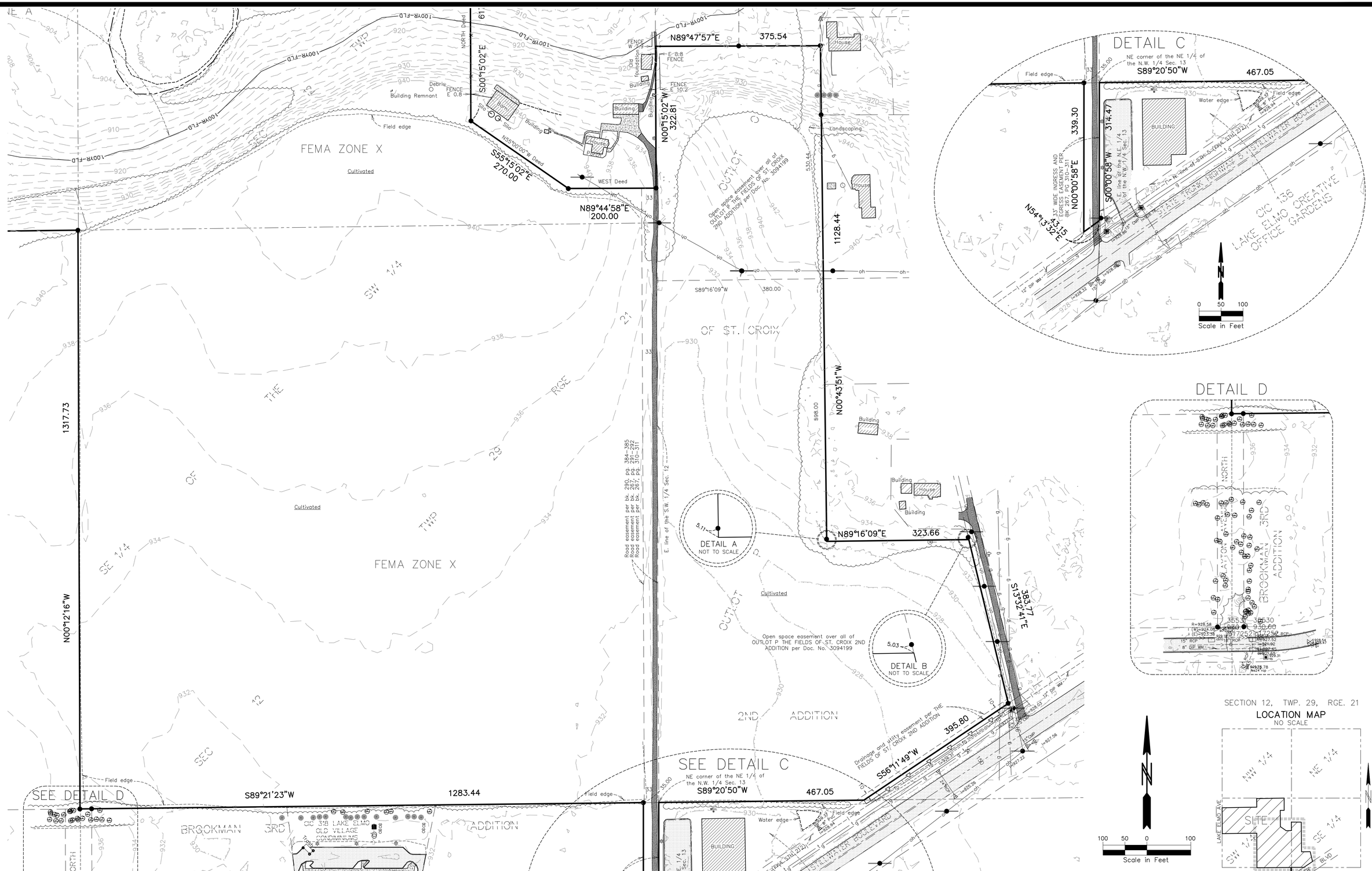

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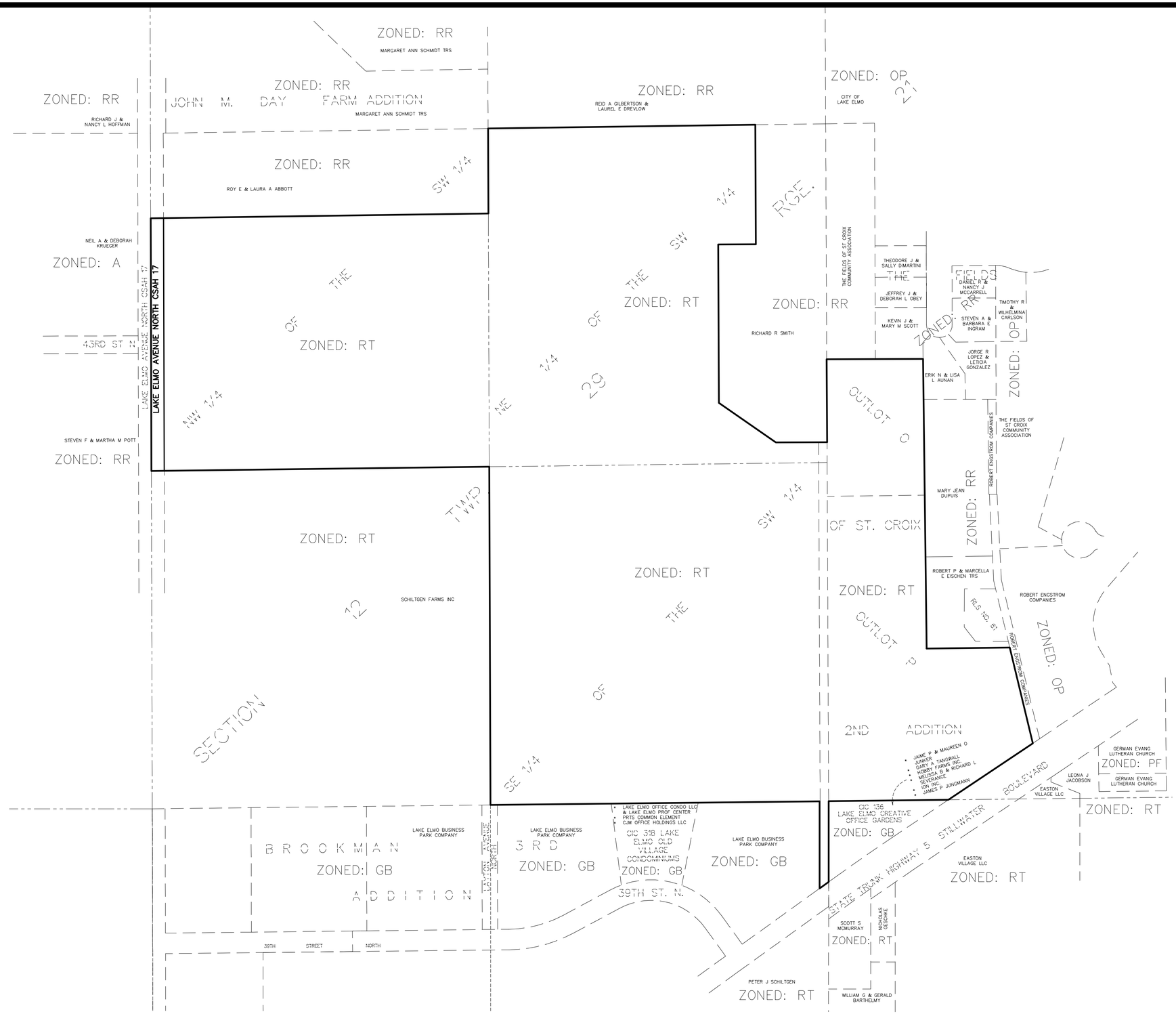

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OWNERSHIP AND LAND USE

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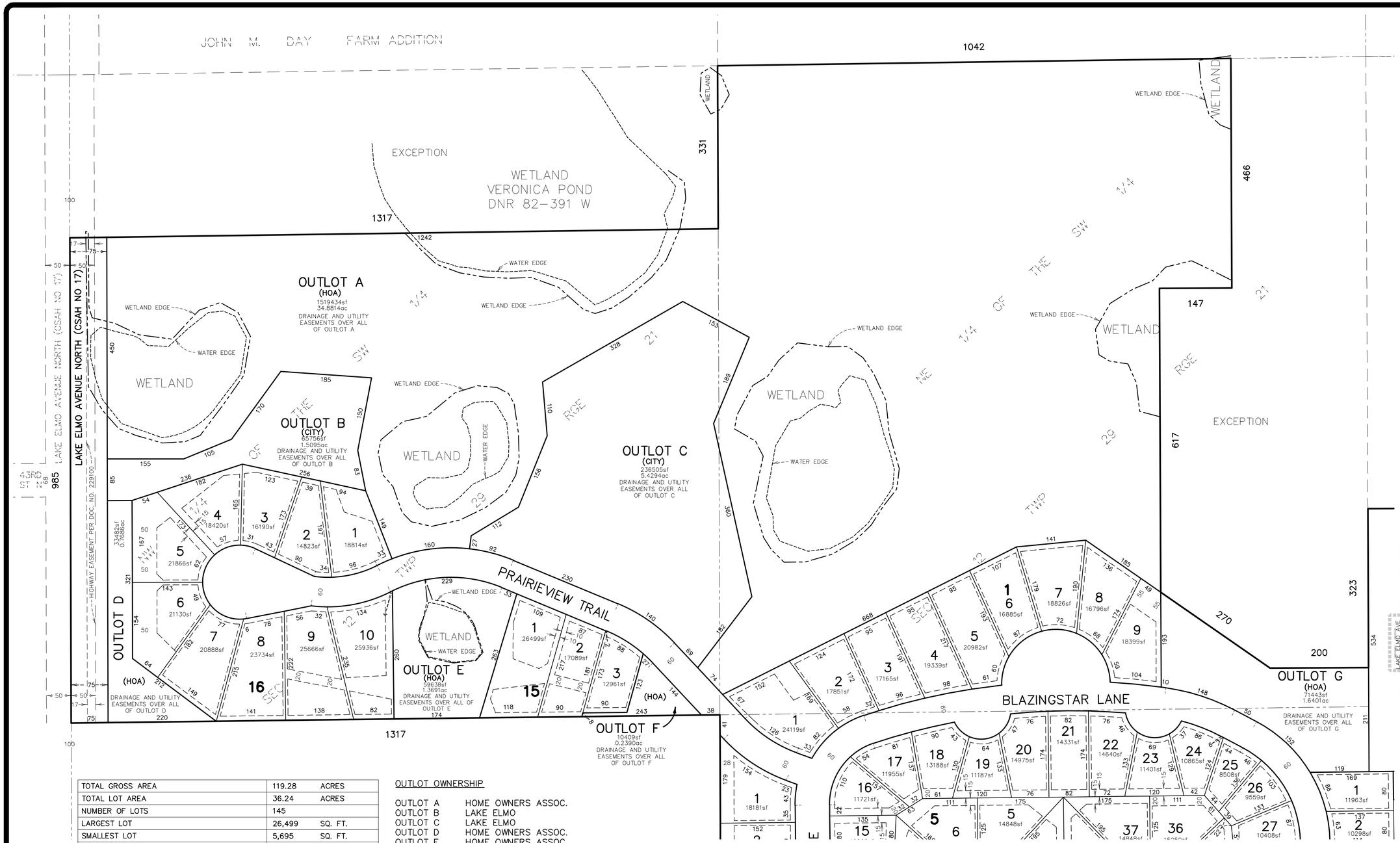

TOTAL GROSS AREA	119.28	ACRES
TOTAL LOT AREA	36.24	ACRES
NUMBER OF LOTS	145	
LARGEST LOT	26,499	SQ. FT.
SMALLEST LOT	5,695	SQ. FT.
AVERAGE LOT	10,889	SQ. FT.
NUMBER OF OUTLOTS	16	
TOTAL OUTLOT AREA	62.33	ACRES
LAKE ELMO AVE N. RIGHT OF WAY AREA	1.70	ACRES
RESIDENTIAL RIGHT OF WAY AREA	19.01	ACRES
TOTAL RIGHT OF WAY AREA	20.71	ACRES
GROSS DENSITY (EXCLUDES OUTLOTS)	2.55	LOTS/ACRE
NET DENSITY (EXCLUDES OUTLOTS & R/W)	4.00	LOTS/ACRE
ZONING	PUD	

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
OUTLOT F	HOME OWNERS ASSOC.
OUTLOT G	HOME OWNERS ASSOC.
OUTLOT H	HOME OWNERS ASSOC.
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC.
OUTLOT M	HOME OWNERS ASSOC.
OUTLOT N	HOME OWNERS ASSOC.
OUTLOT O	HOME OWNERS ASSOC.
OUTLOT P	HOME OWNERS ASSOC.

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LAKE ELMO, MINNESOTA

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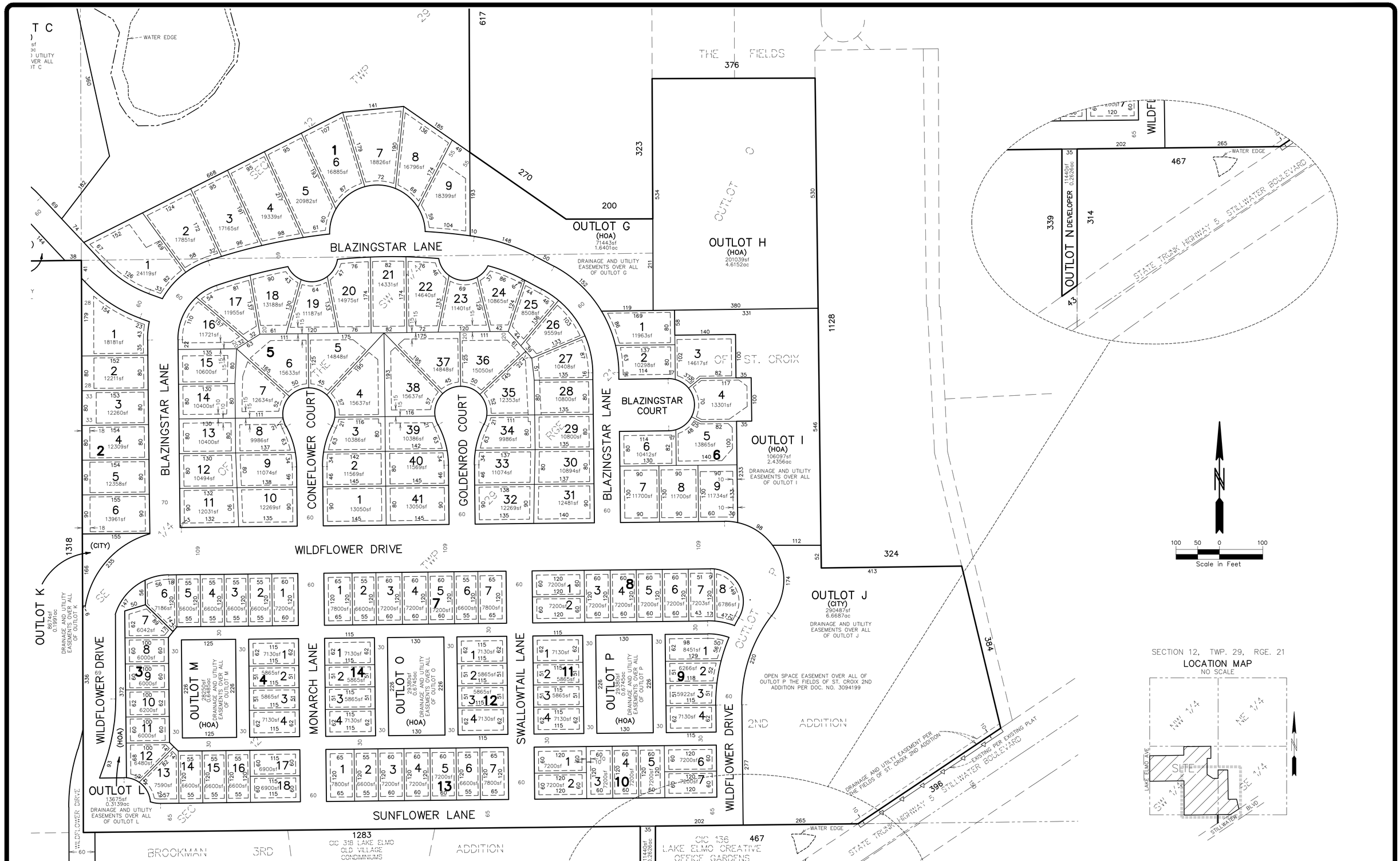

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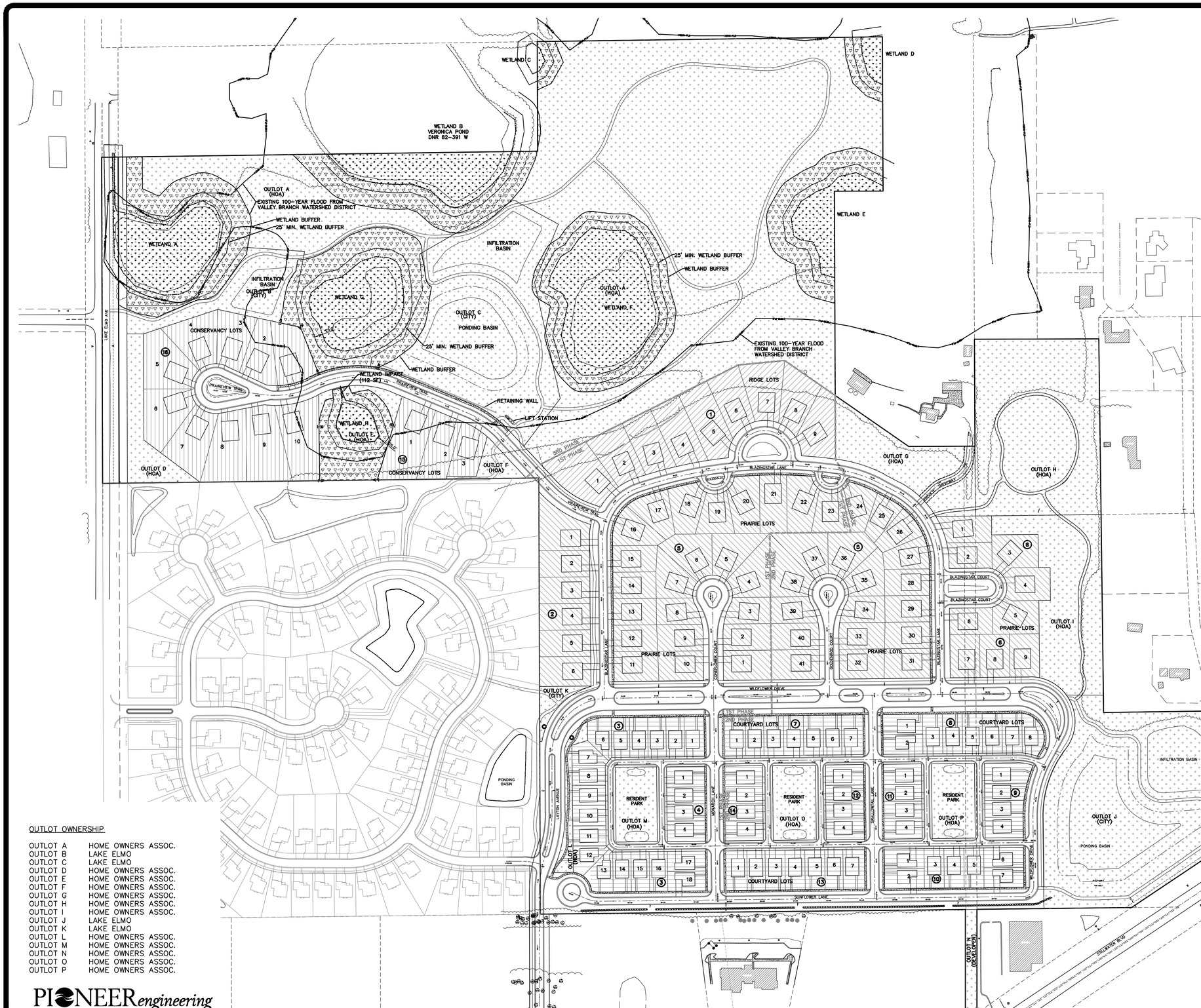

PROPOSED SETBACKS PER DESIGN FORUM

RIDGE LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

CONSERVANCY LOTS
- FRONT–25'
- SIDE HOUSE–15'
- SIDE GARAGE–10'
- SIDE STREET–25'
- REAR–VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

PRAIRIE LOTS
- FRONT–25'
- SIDE HOUSE–10'
- SIDE GARAGE–5'
- SIDE STREET–15'
- REAR–30'

COURTYARD LOTS
- FRONT–20'
- SIDE HOUSE–10'(OR 7.5')
- SIDE GARAGE–5'(OR 7.5')
- SIDE STREET–15'
- REAR–22'

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.

A. FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'–0" MAX.
B. WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'–0" MAX.
C. CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'–0" MAX.
D. FRONT PORCHES	10'–0" MAX. OR 6'–0" INSIDE FRONT P.L.
E. ROOF OVERHANGS, ALL SIDES	3–6" MAX,
F. HIGH FENCES–NOT ATTACHED TO HOUSE (MAX. HT. 5'–6:)	3'–0" MAX. SIDE YD.
G. LOW FENCES (30"–36" HT.)–FRONT & REAR YD–ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD OR 6'–0" INSIDE FRONT P.L. REAR YD:NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE.
H. DECK & PATIOS–FRONT YD.	6'–0" INSIDE FRONT P.L.
I. DECK & PATIOS–SIDE YD.	3'–0" INSIDE FRONT P.L.
J. DECK & PATIOS–REAR YD.	NOT TO EXCEED 12'–0" PAST GARAGE DOOR WALL FACE.
K. TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDENS AREAS.

KEY

- OPEN SPACE
- WETLAND
- WETLAND IMPACT (112 SF)
- WETLAND BUFFER
- RIDGE LOTS (9)
- CONSERVANCY LOTS (13)
- PRAIRIE LOTS (56)
- COURTYARD LOTS (67)
- WETLAND BUFFER SIGN

COMMON OPEN SPACE AREAS (HOA)

OUTLOT A	35.056 AC
OUTLOT D	0.769 AC
OUTLOT E	1.369 AC
OUTLOT F	0.239 AC
OUTLOT G	1.640 AC
OUTLOT I	2.436 AC
OUTLOT K	0.199 AC
OUTLOT L	0.314 AC
OUTLOT M	0.649 AC
OUTLOT O	0.674 AC
OUTLOT P	0.674 AC
TOTAL	44.083 AC

PUBLIC OPEN SPACE/PUBLIC AMENITIES (CITY)

OUTLOT B	1.510 AC
OUTLOT C	5.255 AC
OUTLOT H	0.599 AC
OUTLOT J	6.669 AC
OUTLOT K	0.199 AC
TOTAL	18.248 AC

OVERALL OPEN SPACE TOTAL 62.331 AC

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
OUTLOT F	HOME OWNERS ASSOC.
OUTLOT G	HOME OWNERS ASSOC.
OUTLOT H	HOME OWNERS ASSOC.
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC.
OUTLOT M	HOME OWNERS ASSOC.
OUTLOT N	HOME OWNERS ASSOC.
OUTLOT O	HOME OWNERS ASSOC.
OUTLOT P	HOME OWNERS ASSOC.

0 75 150 300
GRAPHIC SCALE IN FEET

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Revisions
1. 02-04-15 City Comments

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Designed	KAW/BJM
Drawn	KAW/BJM

SITE PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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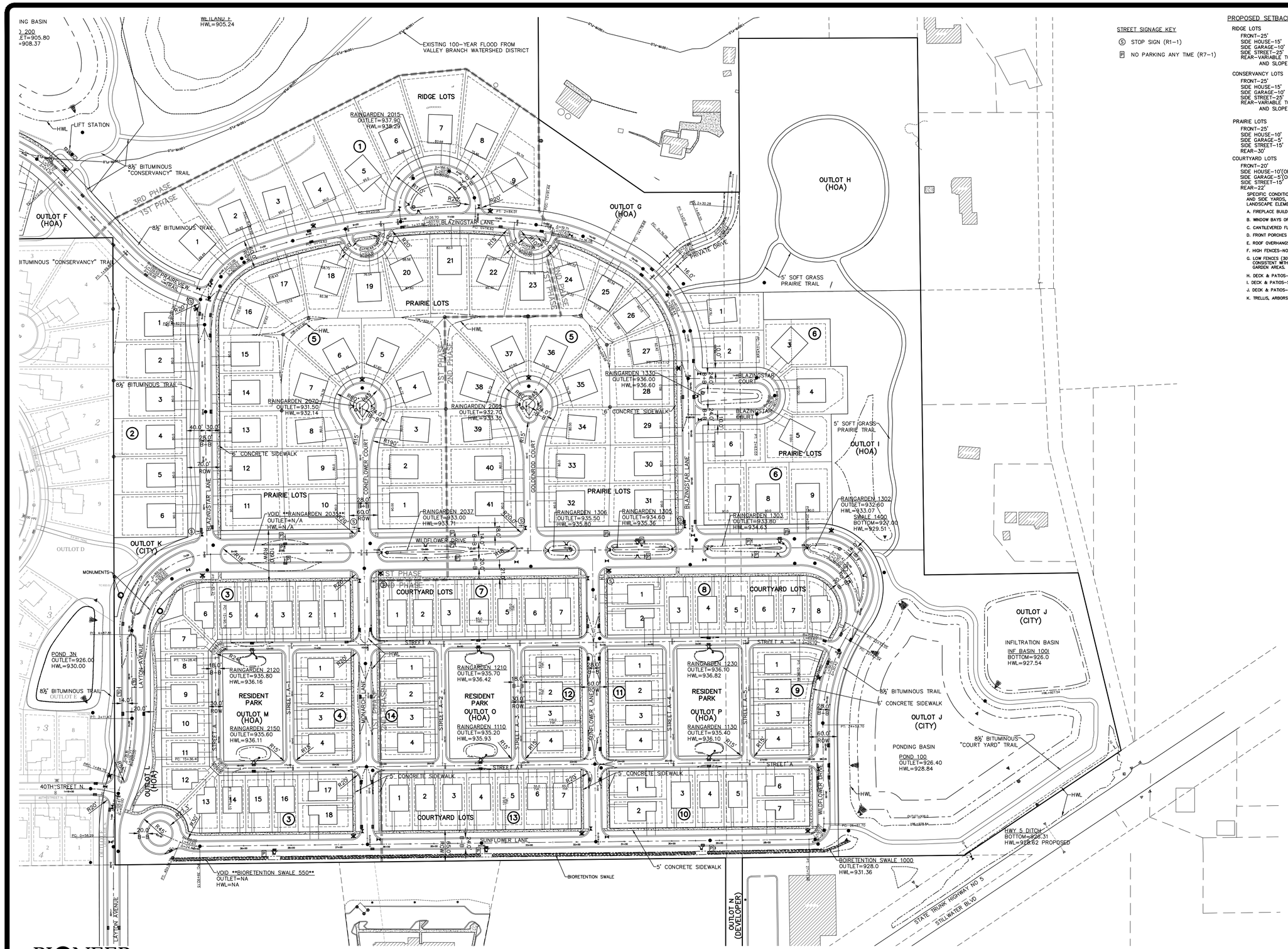


STREET SIGNAGE KEY

Ⓢ STOP SIGN (R1-1)

Ⓟ NO PARKING ANY TIME (R7-1)

PROPOSED SETBACKS PER DESIGN FORUM

RIDGE LOTS
- FRONT-25'
- SIDE HOUSE-15'
- SIDE GARAGE-10'
- SIDE STREET-25'
- REAR-VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

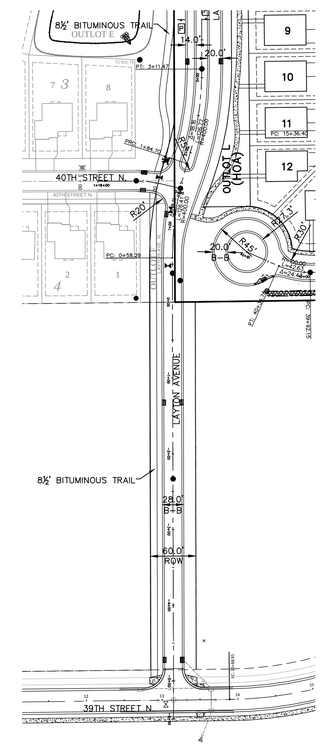
CONSERVANCY LOTS
- FRONT-25'
- SIDE HOUSE-15'
- SIDE GARAGE-10'
- SIDE STREET-25'
- REAR-VARIABLE TO MAINTIAN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMIUM)

PRAIRIE LOTS
- FRONT-25'
- SIDE HOUSE-10'
- SIDE GARAGE-5'
- SIDE STREET-15'
- REAR-30'

COURTYARD LOTS
- FRONT-20'
- SIDE HOUSE-10'(OR 7.5')
- SIDE GARAGE-5'(OR 7.5')
- SIDE STREET-15'
- REAR-22'

SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.

A. FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'-0" MAX.
B. WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'-0" MAX.
C. CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'-0" MAX.
D. FRONT PORCHES	10'-0" MAX. OR 6'-0" INSIDE FRONT P.L.
E. ROOF OVERHANGS, ALL SIDES	3-6" MAX.
F. HIGH FENCES-NOT ATTACHED TO HOUSE (MAX. HT. 5'-6:)	3'-0" MAX. SIDE YD.
G. LOW FENCES (30"-36" HT.)-FRONT & REAR YD-ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD OR 6'-0" INSIDE FRONT P.L. REAR YD:NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
H. DECK & PATIOS-FRONT YD.	6'-0" INSIDE FRONT P.L.
I. DECK & PATIOS-SIDE YD.	3'-0" INSIDE FRONT P.L.
J. DECK & PATIOS-REAR YD.	NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
K. TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDENS AREAS.



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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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STREET SIGNAGE KEY

(S) STOP SIGN (R1-1)

(P) NO PARKING ANY TIME (R7-1)

LAKE ELMO AVENUE NORTH CSAS 17

OUTLOT A (HOA)

OUTLOT B (CITY)

OUTLOT C (CITY)

OUTLOT D (HOA)

OUTLOT E (HOA)

OUTLOT F (HOA)

OUTLOT G (HOA)

OUTLOT H (HOA)

WETLAND A HWL=913.92

WETLAND B VERONICA POND DNR 82-391 W

WETLAND C

WETLAND D

WETLAND E HWL=903.58

WETLAND F HWL=905.24

WETLAND G HWL=910.27

WETLAND H HWL=913.97

WETLAND BUFFER

EDGE OF WETLAND

EXISTING 100-YEAR FLOOD FROM VALLEY BRANCH WATERSHED DISTRICT

8½' BITUMINOUS "CONSERVANCY" TRAIL

INFILTRATION BASIN

INF BASIN 300I BOTTOM=912.00 HWL=912.87

INF BASIN 200I BOTTOM=905.00 HWL=906.39

PONDING BASIN

POND 200 OUTLET=905.80 HWL=908.37

WETLAND BUFFER SIGN (TYP.)

6' CONCRETE SIDEWALK

LIFT STATION

HWL

CONSERVANCY LOTS

RAINGARDEN 2205 OUTLET=924.00 HWL=924.33

RAINGARDEN 2015 OUTLET=937.90 HWL=938.29

RAINGARDEN 2070 OUTLET=931.50 HWL=932.14

RAINGARDEN 2080 OUTLET=932.70 HWL=933.36

RAINGARDEN 1330 OUTLET=936.00 HWL=936.60

RIDGE LOTS

PRAIRIE LOTS

3RD PHASE

1ST PHASE

2ND PHASE

PRAIRIEVIEW TRAIL

BLAZINGSTAR LANE

BLAZINGSTAR COURT

GOLDENROD COURT

CONEFLOWER COURT

PRIVATE DRIVE

5' SOFT GRASS PRAIRIE TRAIL

40.0' 30.0' 25.0' B-B 70.0' ROW

R190'

R15'

R20'

R60'

R100'

R110'

R120'

0 50 100 200

GRAPHIC SCALE IN FEET

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LAKE ELMO, MINNESOTA

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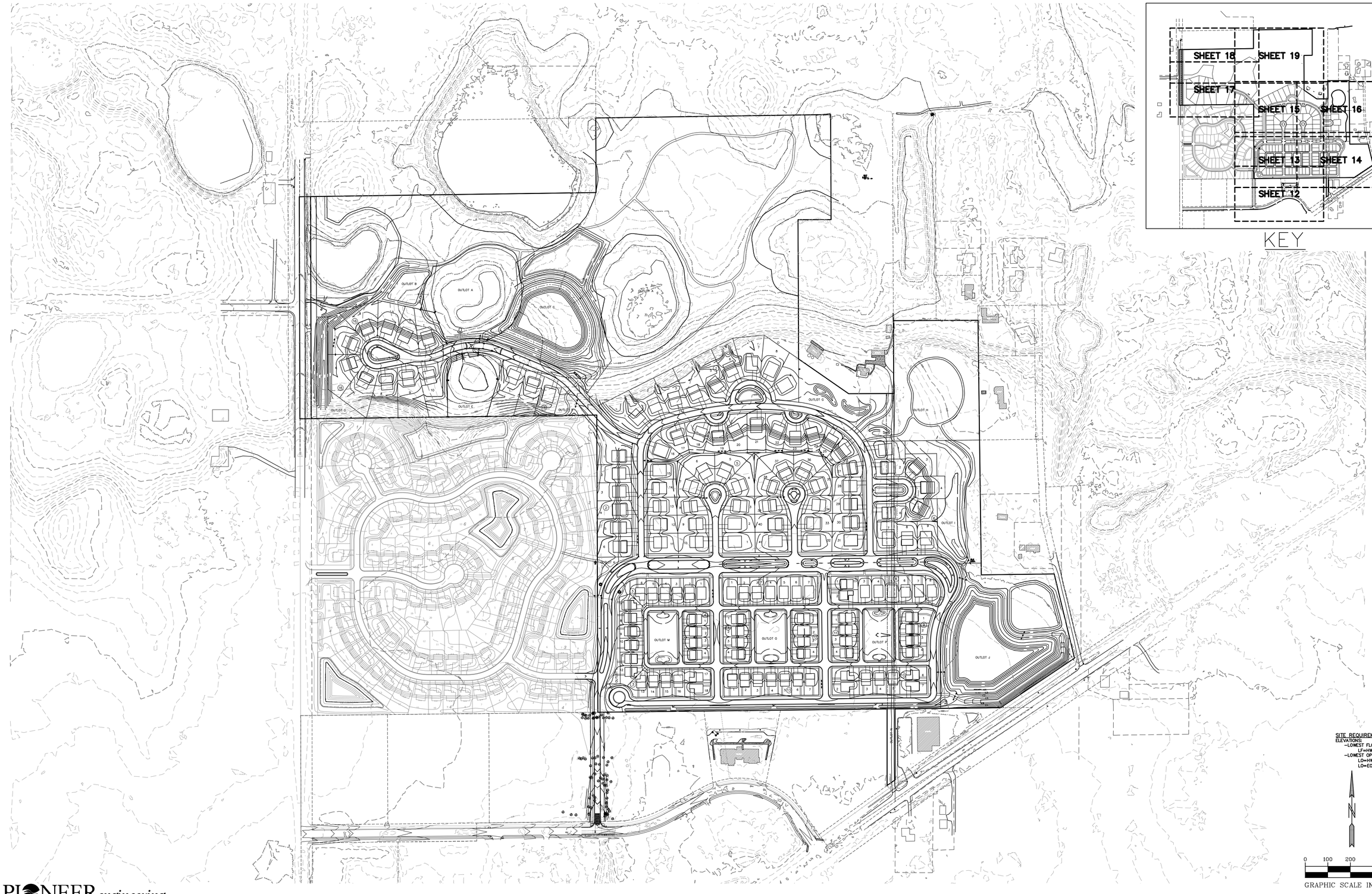

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GRADING OVERALL

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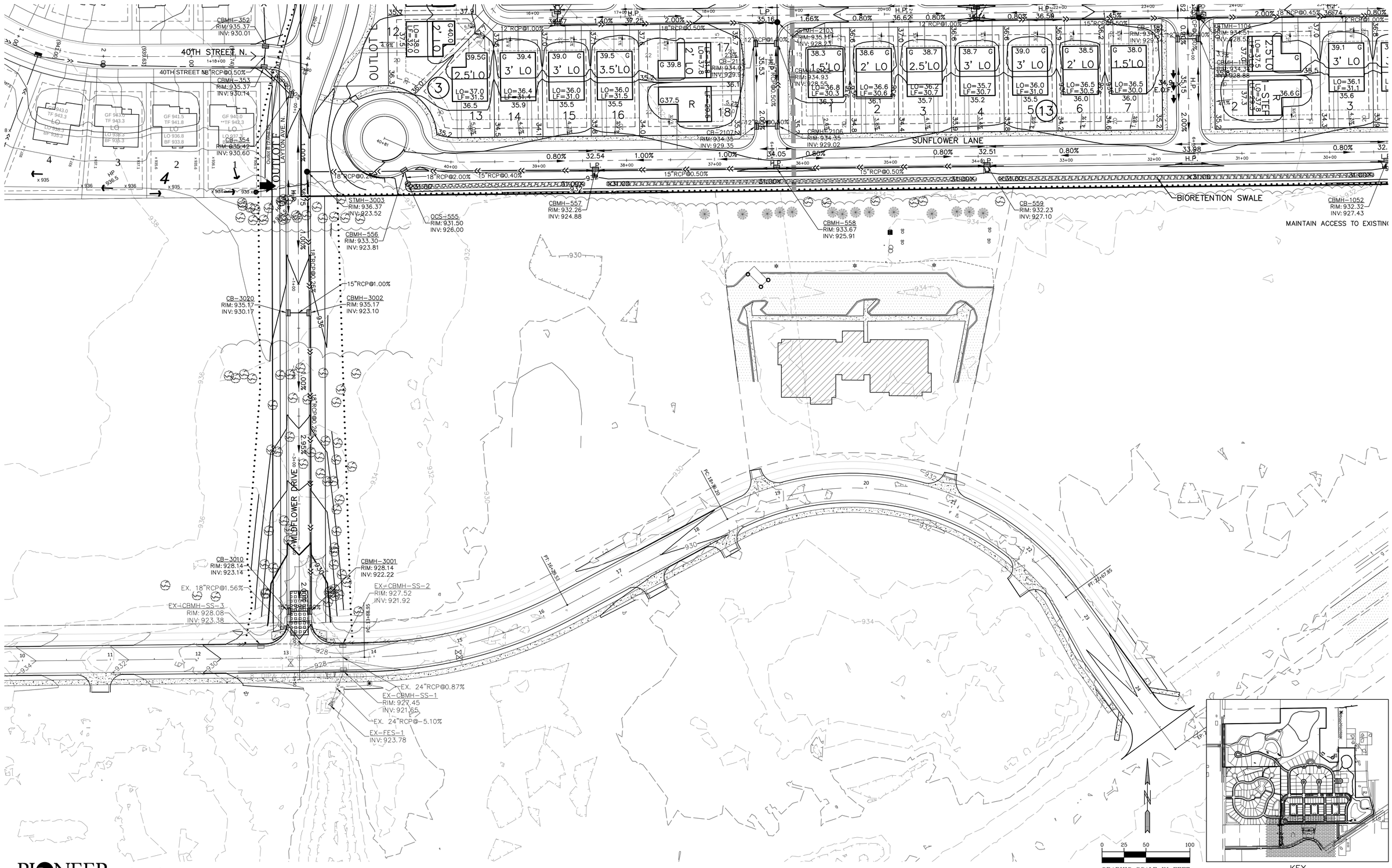

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GRADING AND EROSION CONTROL

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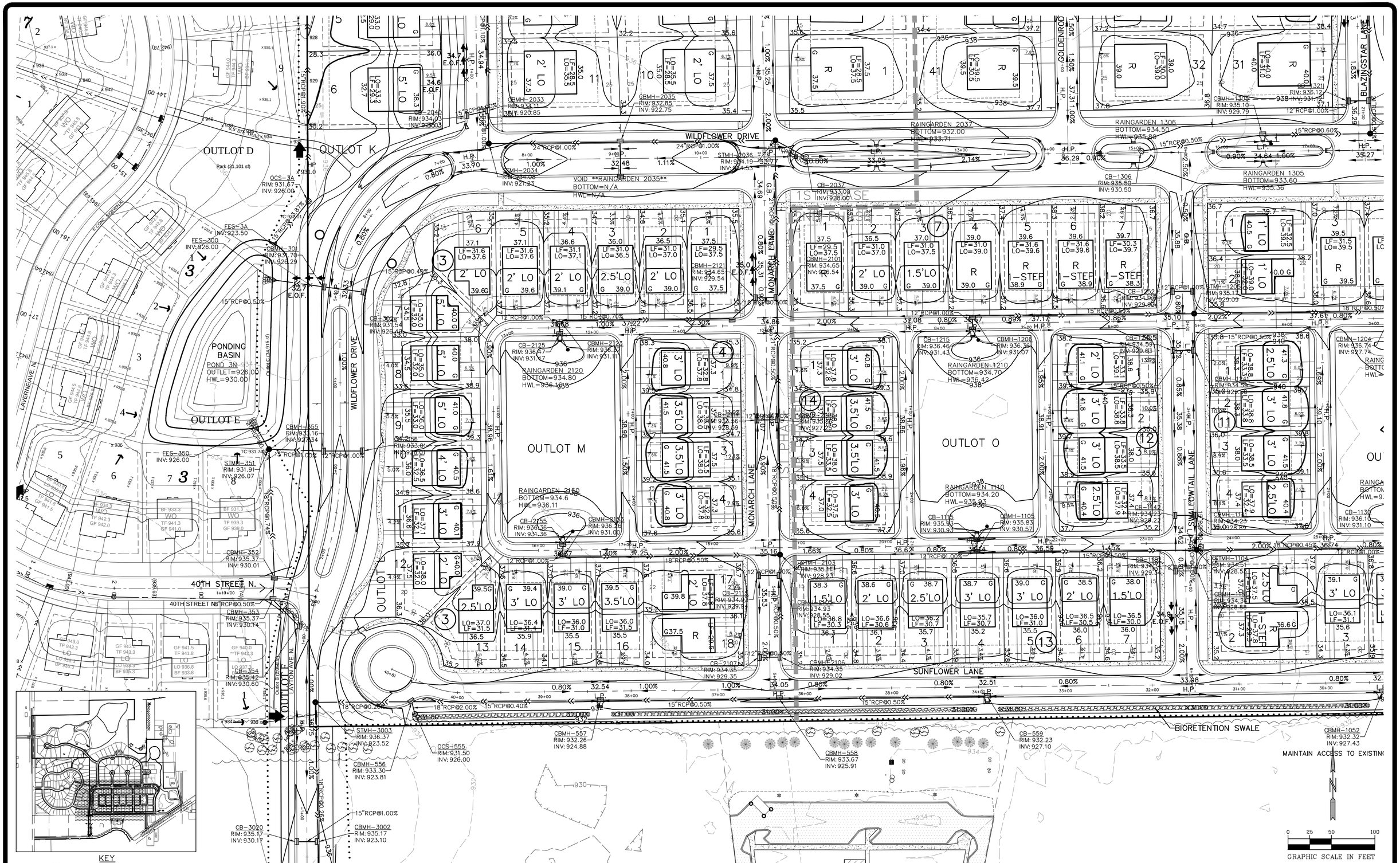

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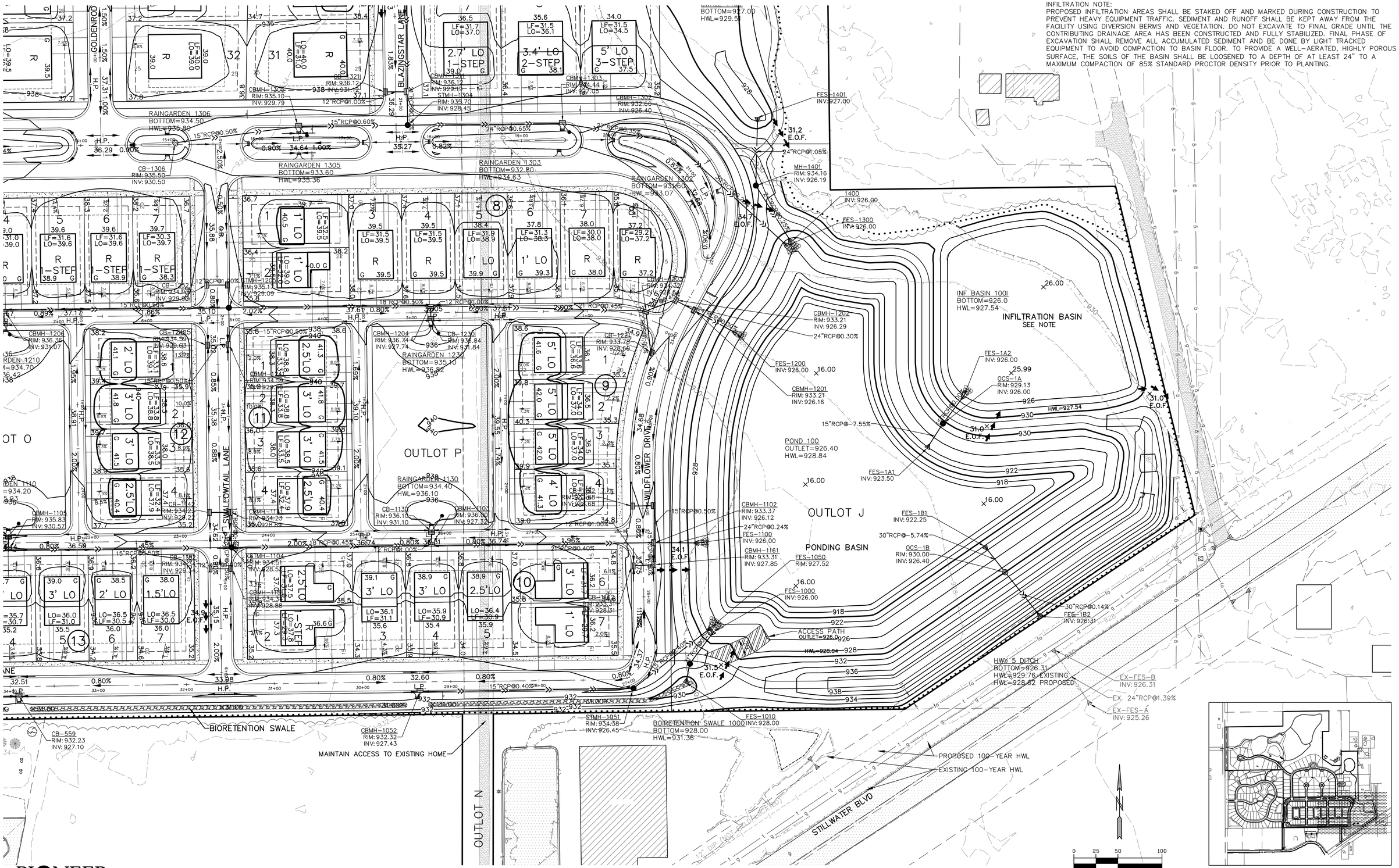
INFILTRATION NOTE:
PROPOSED INFILTRATION AREAS SHALL BE STAKED OFF AND MARKED DURING CONSTRUCTION TO PREVENT HEAVY EQUIPMENT TRAFFIC. SEDIMENT AND RUNOFF SHALL BE KEPT AWAY FROM THE FACILITY USING DIVERSION BERMS AND VEGETATION. DO NOT EXCAVATE TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. FINAL PHASE OF EXCAVATION SHALL REMOVE ALL ACCUMULATED SEDIMENT AND BE DONE BY LIGHT TRACKED EQUIPMENT TO AVOID COMPACTION TO BASIN FLOOR. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS OF THE BASIN SHALL BE LOOSENED TO A DEPTH OF AT LEAST 24" TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY PRIOR TO PLANTING.



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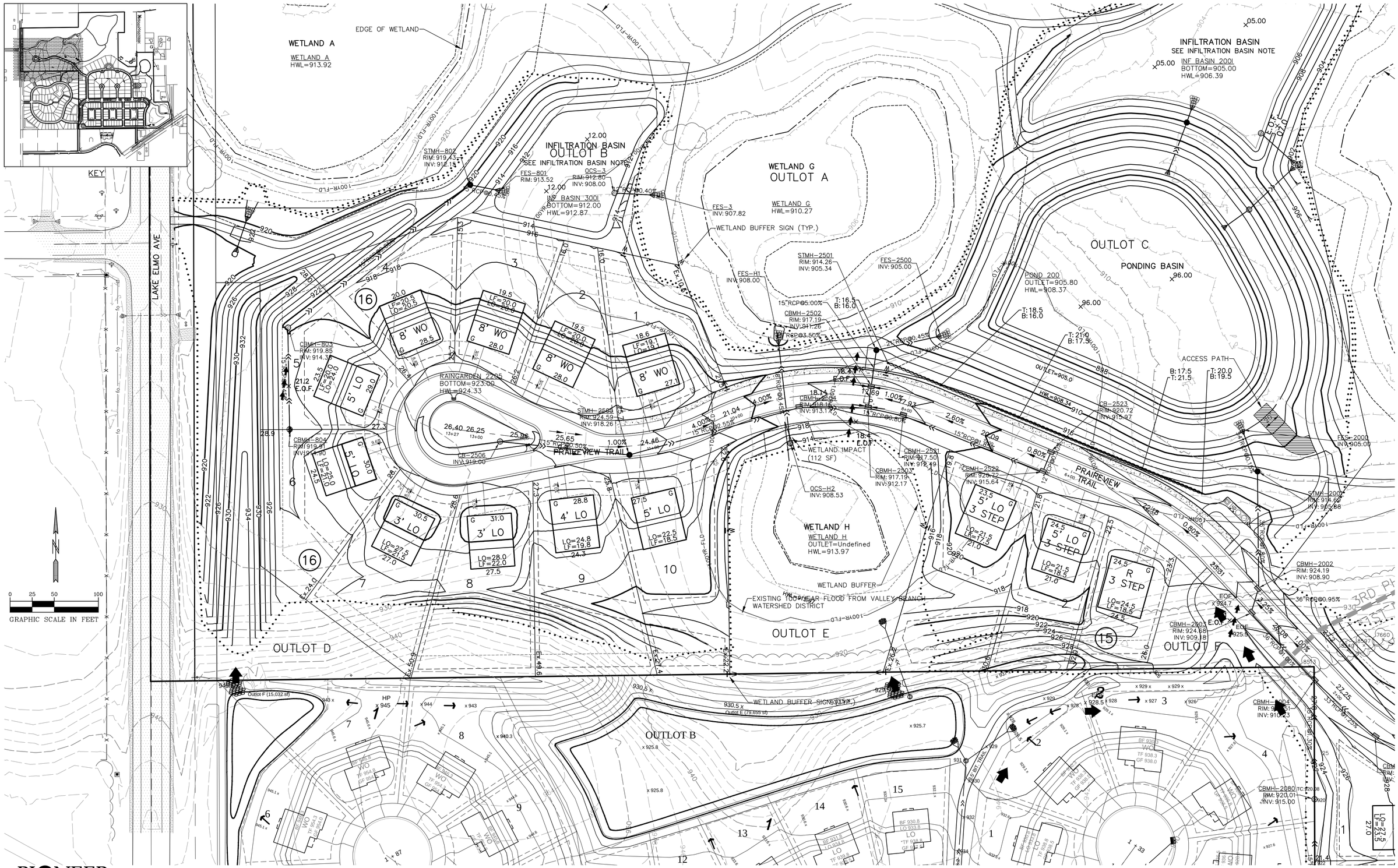

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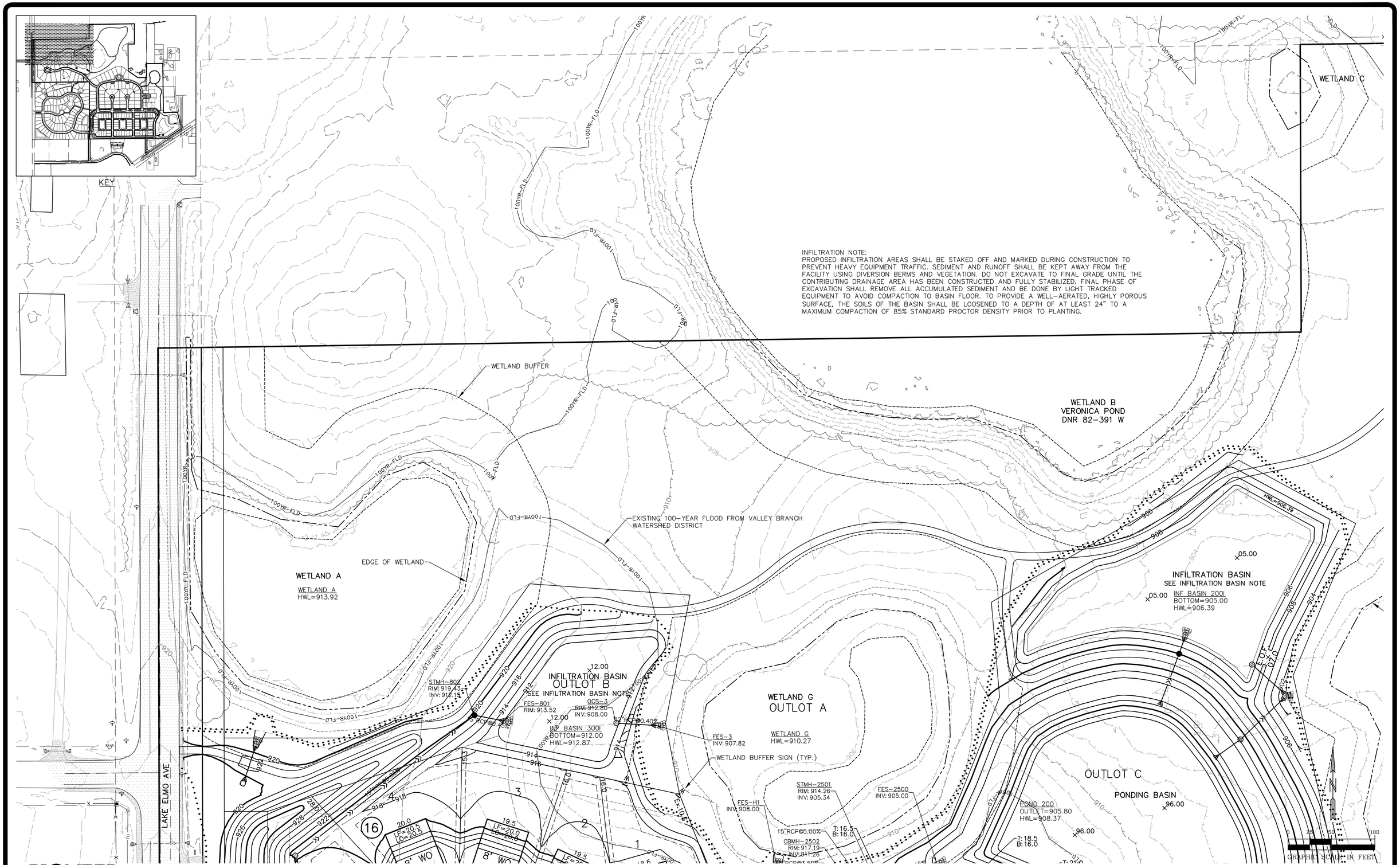

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WETLAND C

WETLAND D

WETLAND B
VERONICA POND
DNR 82-391 W

INFILTRATION BASIN
SEE INFILTRATION BASIN NOTE

INF BASIN 200I
BOTTOM=905.00
HWL=906.39

HWL=906.39

EDGE OF WETLAND

WETLAND BUFFER

OUTLOT A

WETLAND F

WETLAND F
HWL=905.24

WETLAND E

OUTLOT C

PONDING BASIN

POND 200
OUTLET=905.80
HWL=908.37

EXISTING 100-YEAR FLOOD FROM VALLEY BRANCH WATERSHED DISTRICT

100YR-FLD

10.7
E.O.F.

0 25 50 100
GRAPHIC SCALE IN FEET

KEY

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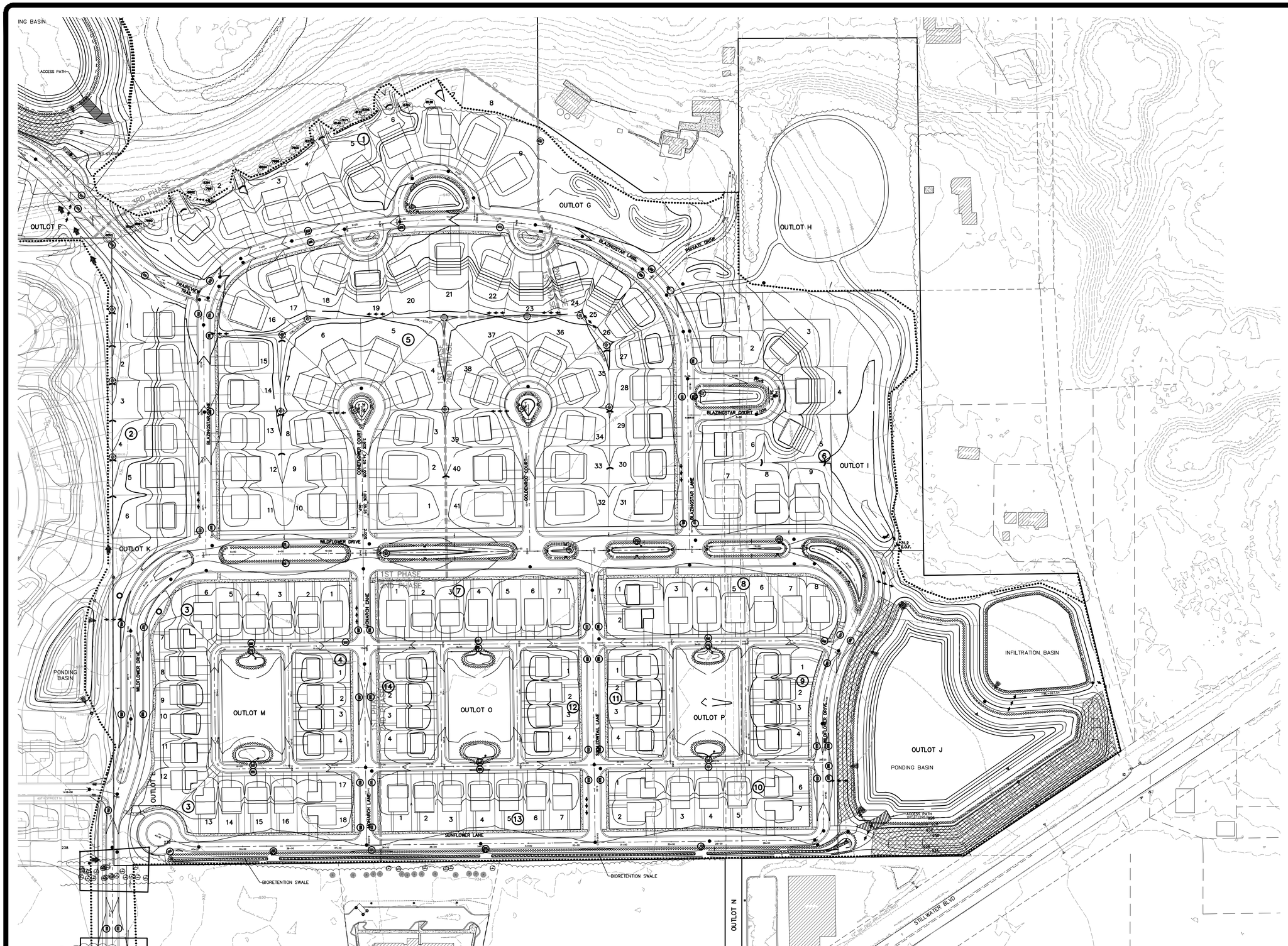

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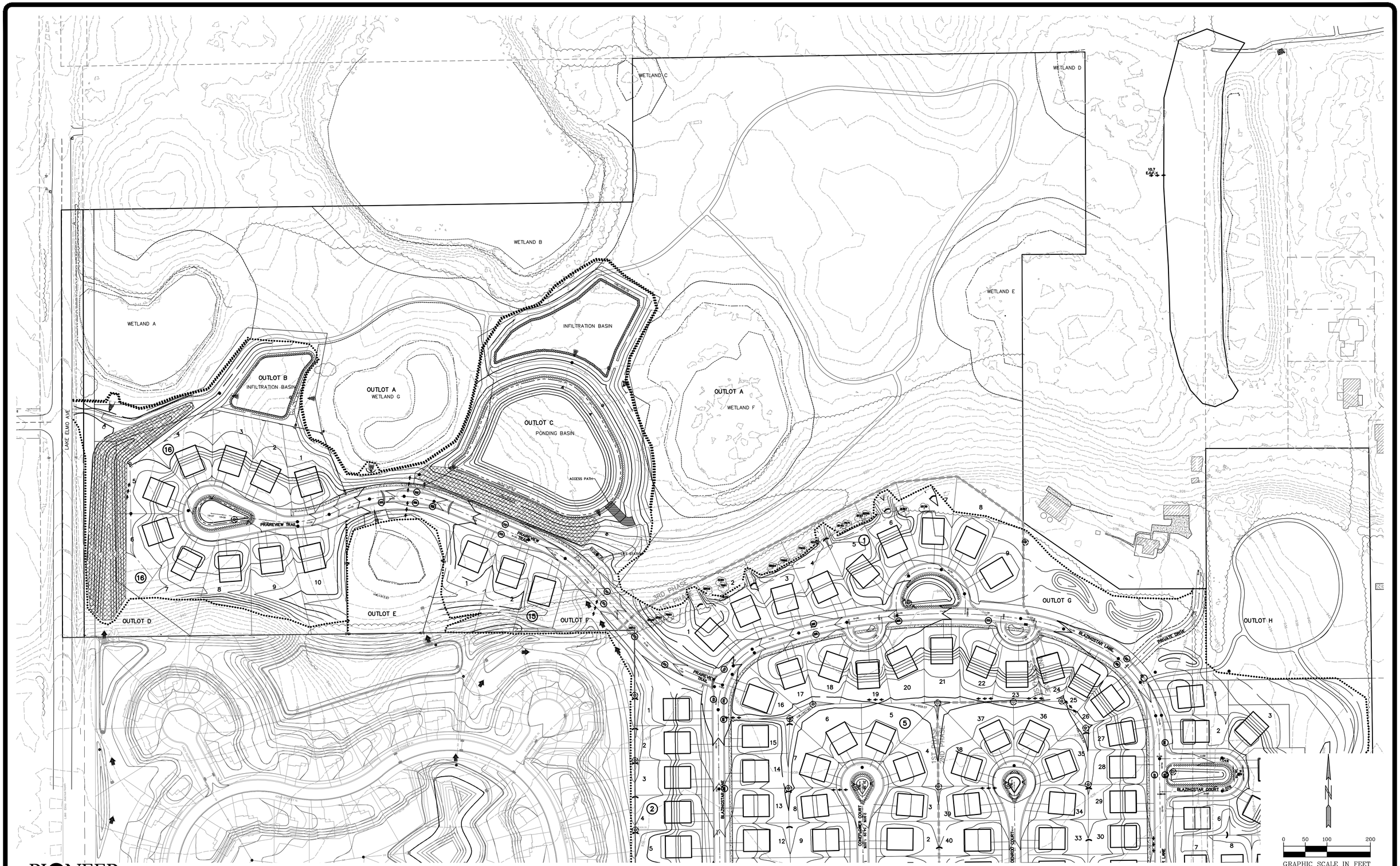

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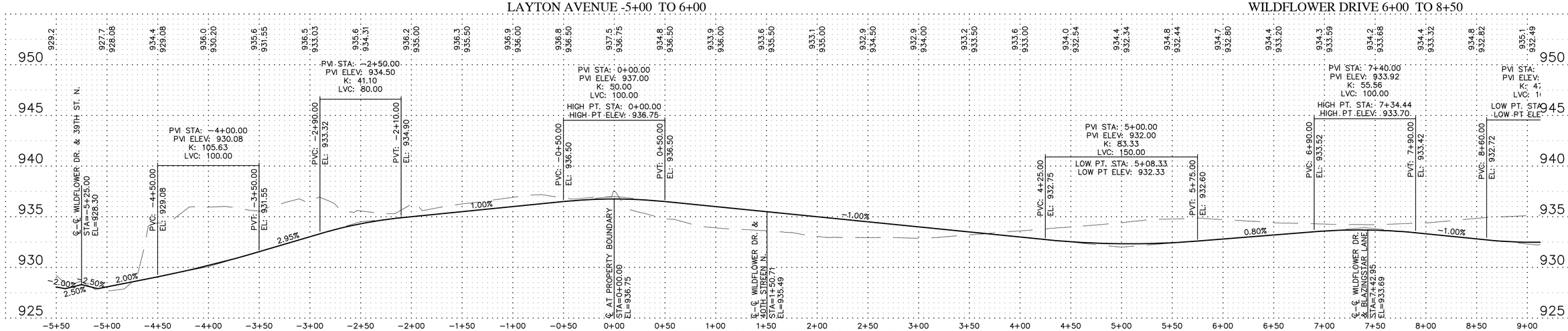
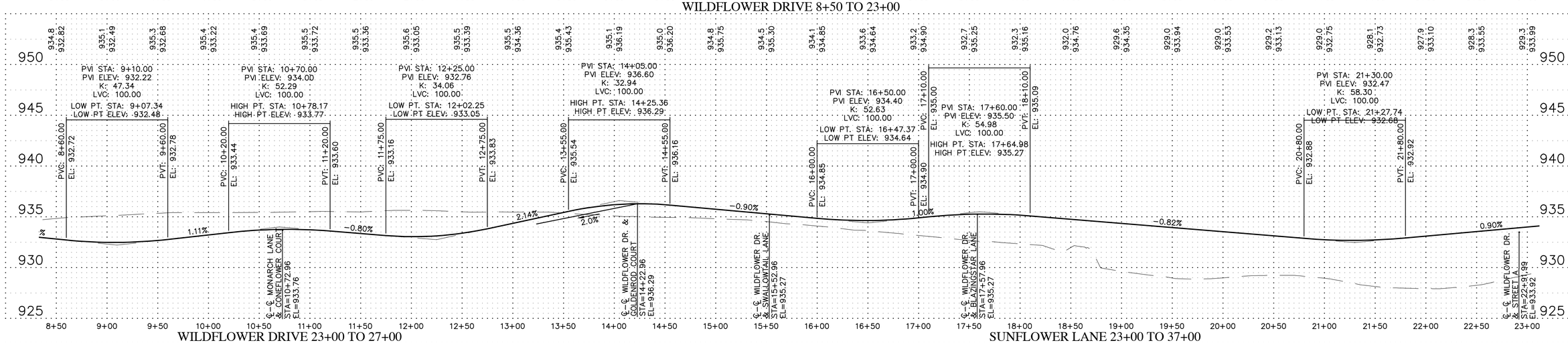
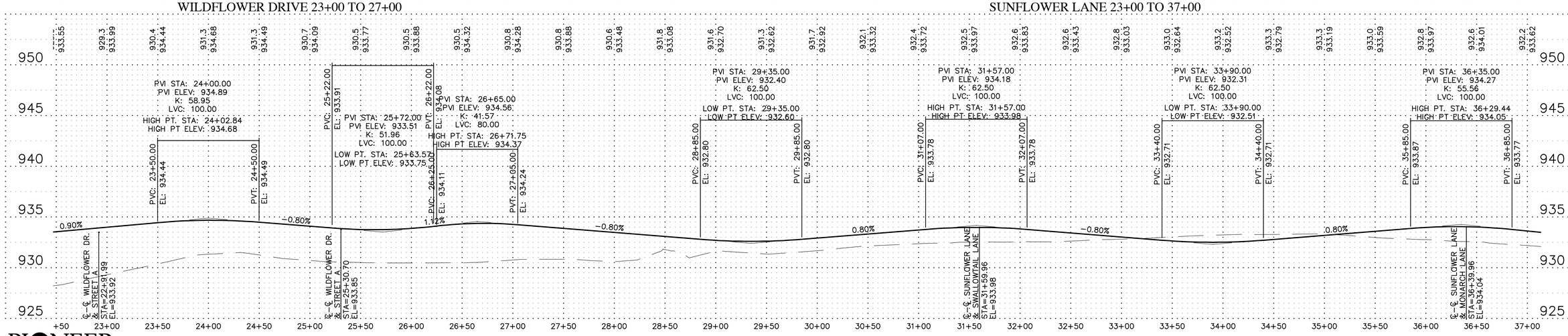
LAYTON AVENUE -5+00 TO 6+00 / WILDFLOWER DRIVE 6+00 TO 8+50



WILDFLOWER DRIVE 8+50 TO 23+00



WILDFLOWER DRIVE 23+00 TO 27+00 / SUNFLOWER LANE 23+00 TO 37+00



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Name: Keith A. Willenbring
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Drawn	KAW/BJM

STREET PROFILES

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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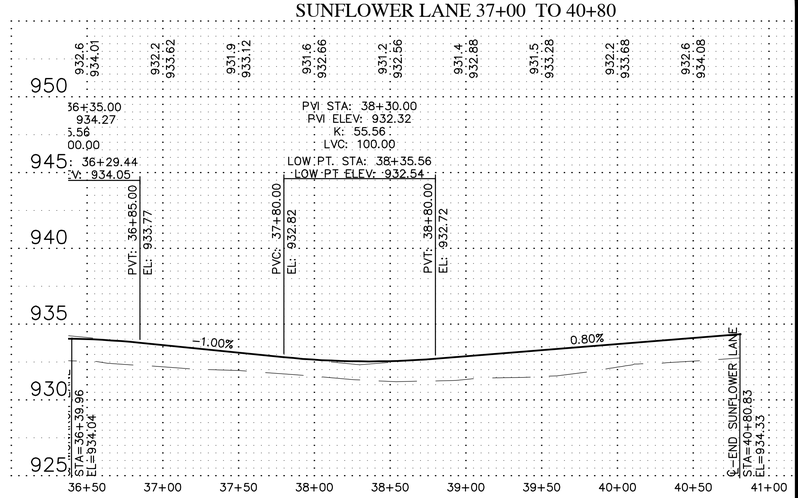
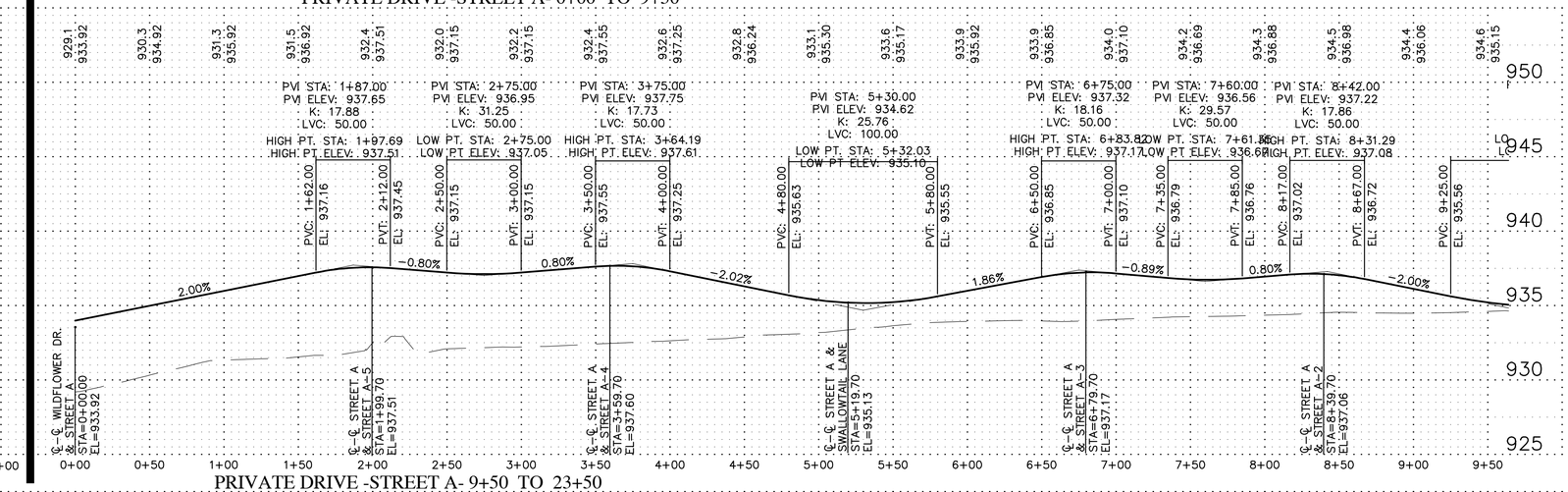
SUNFLOWER LANE 37+00 TO 40+80



PRIVATE DRIVE -STREET A- 0+00 TO 9+50



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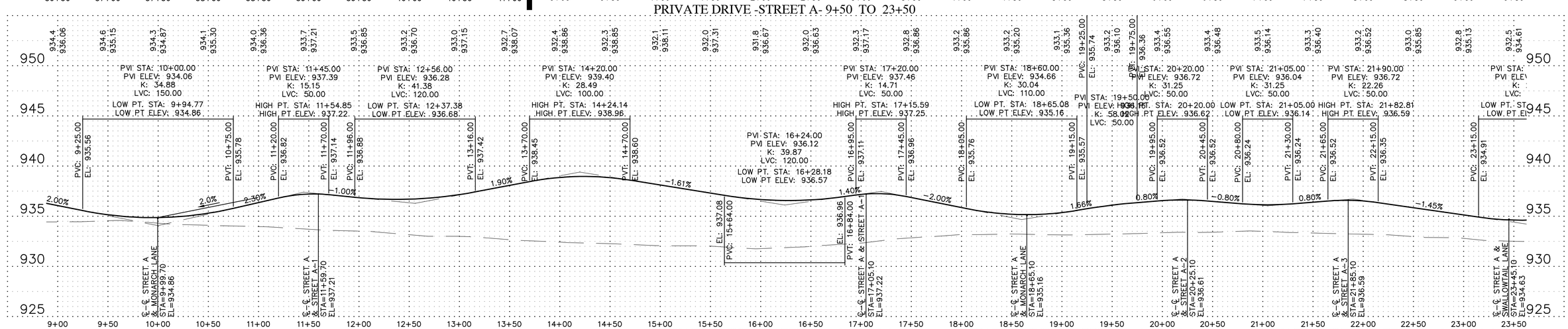
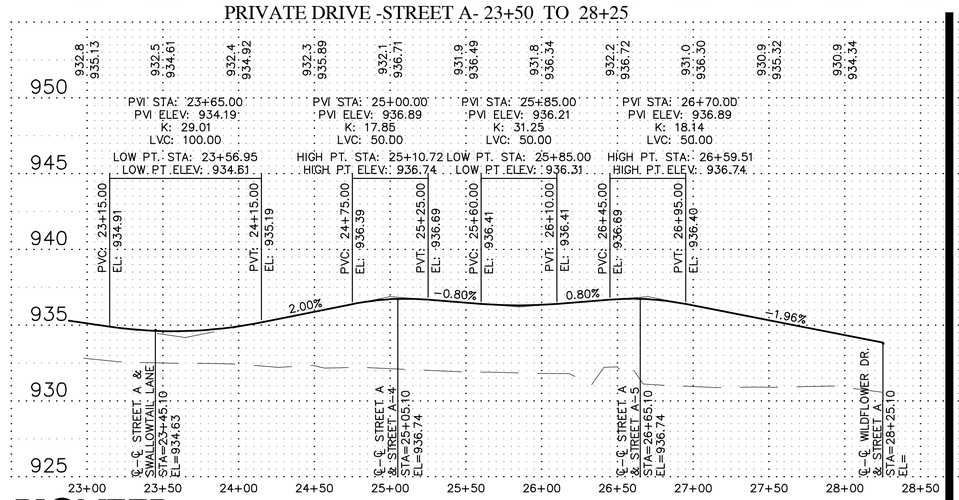
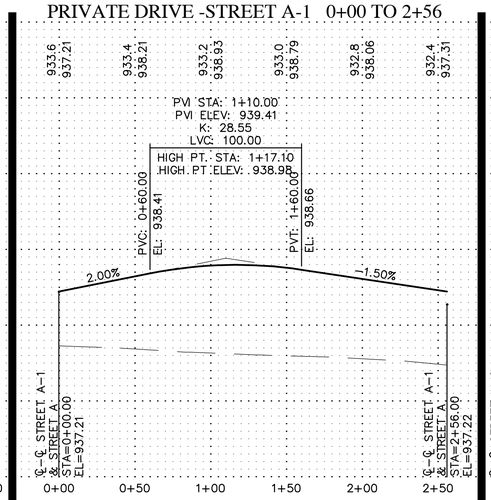


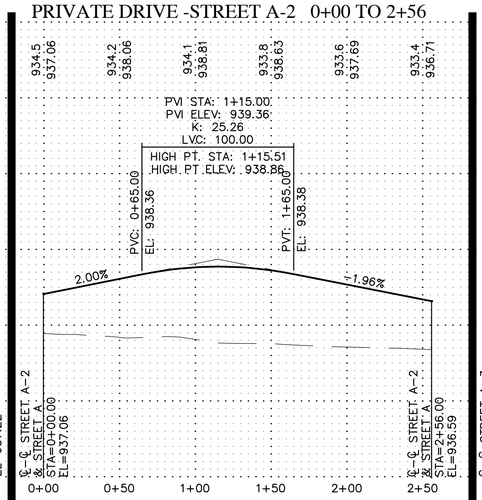
PRIVATE DRIVE -STREET A- 23+50 TO 28+25



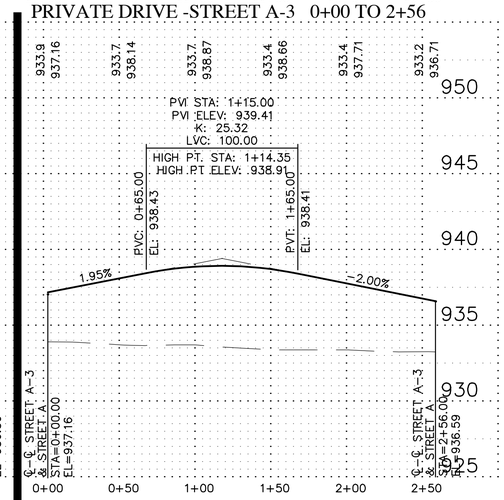
PRIVATE DRIVE -STREET A-1 0+00 TO 2+56



PRIVATE DRIVE -STREET A-2 0+00 TO 2+56



PRIVATE DRIVE -STREET A-3 0+00 TO 2+56



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LAKE ELMO, MINNESOTA

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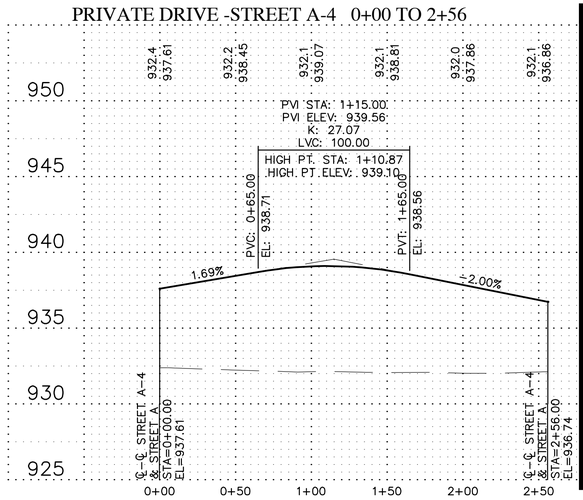

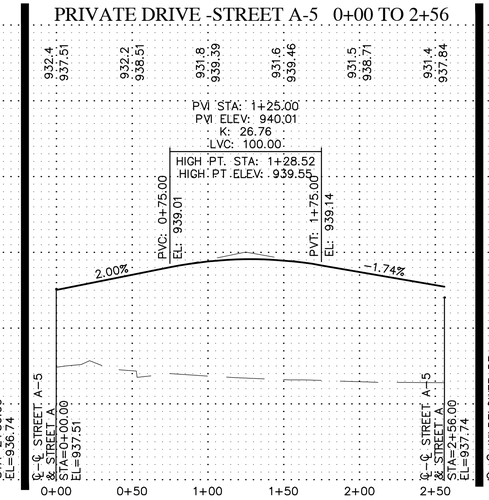

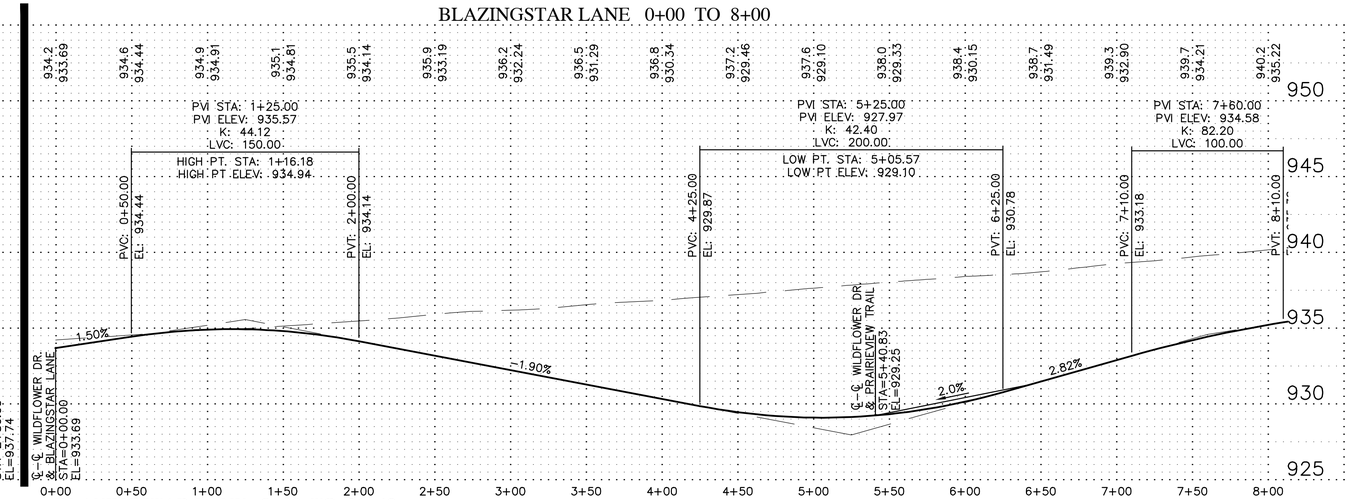

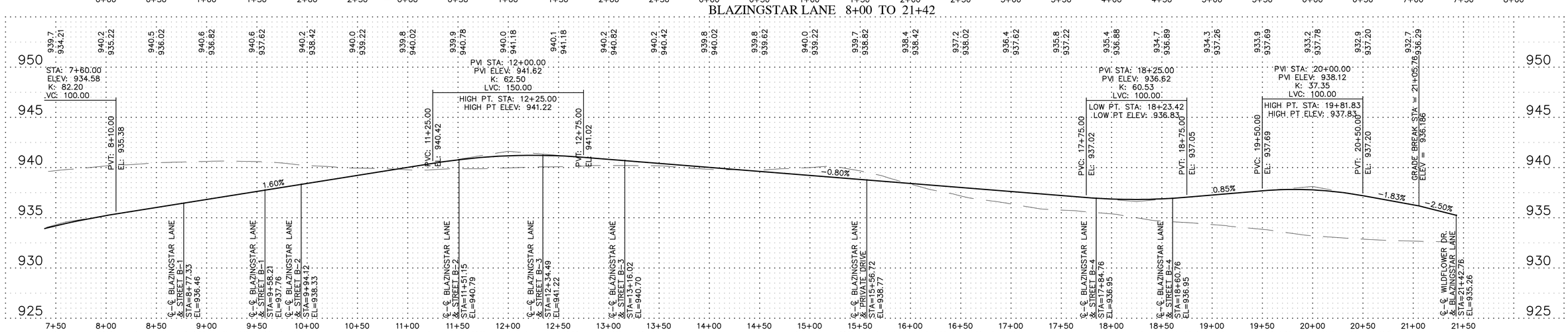

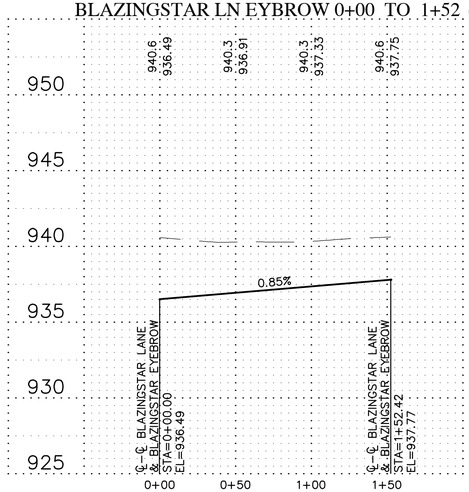

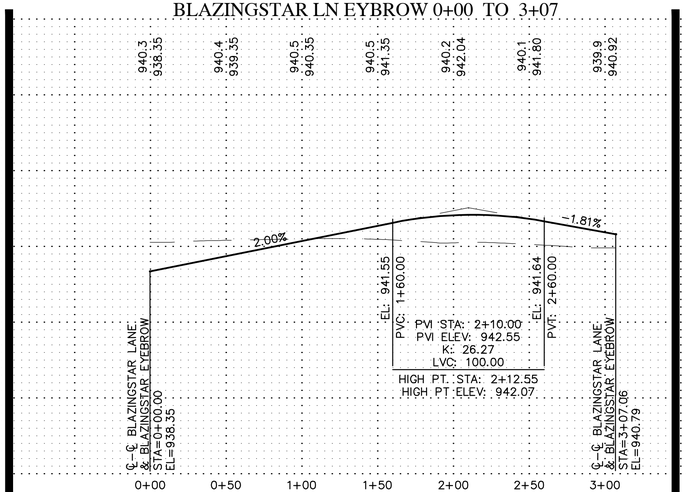

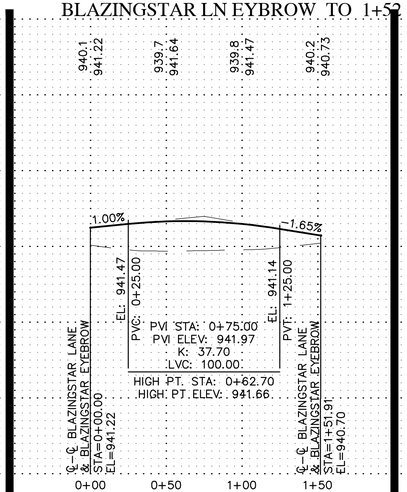

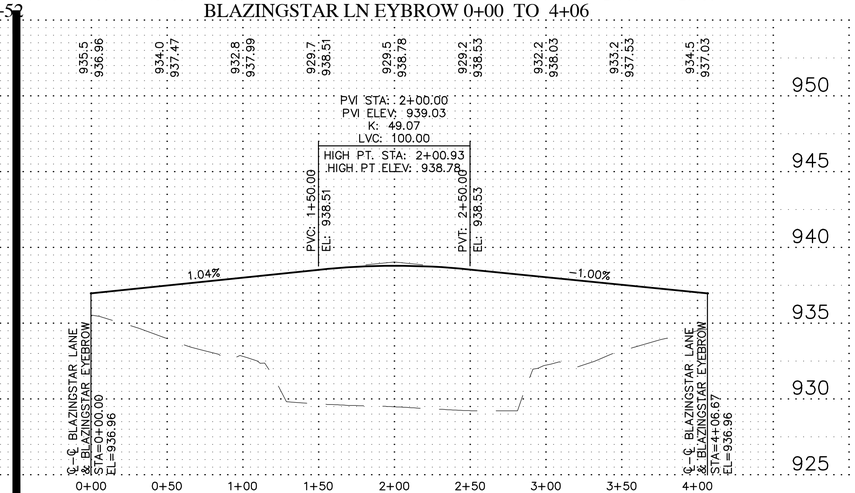

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LAKE ELMO, MINNESOTA

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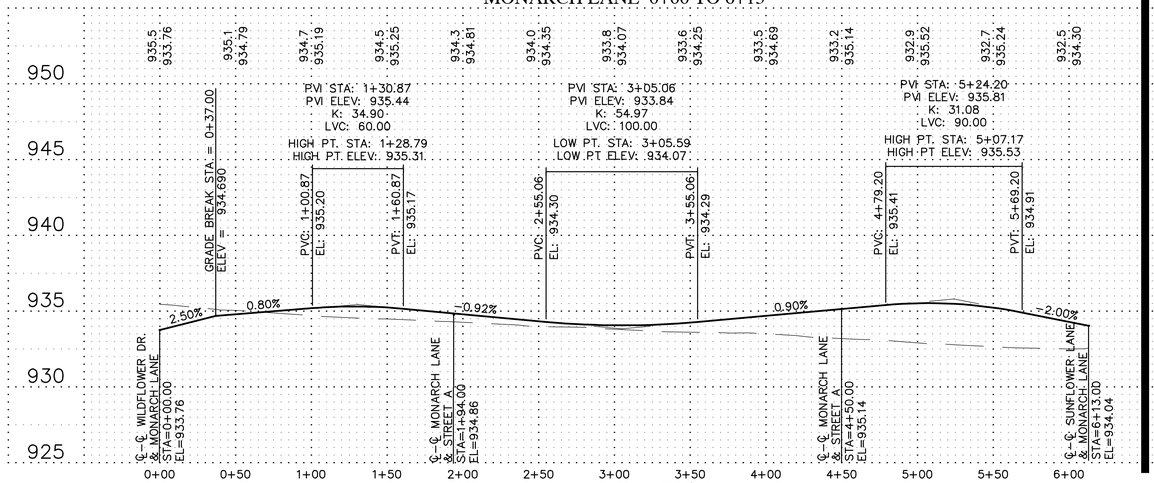
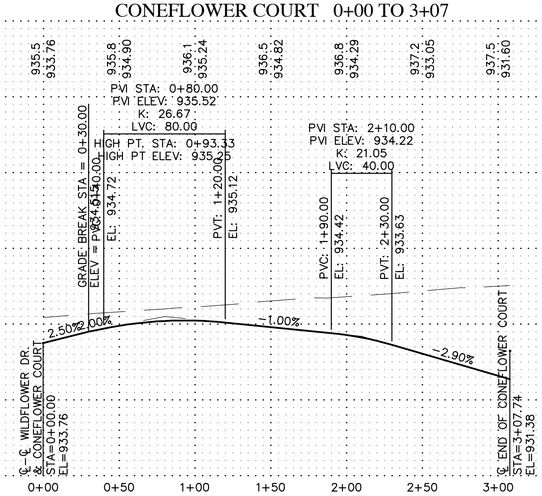
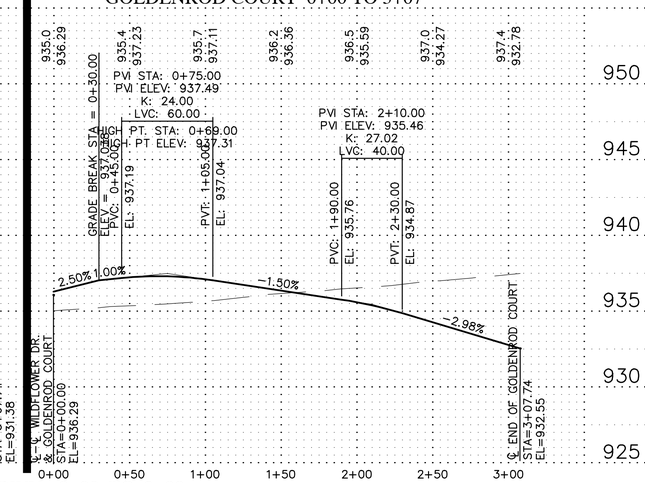
MONARCH LANE 0+00 TO 6+13



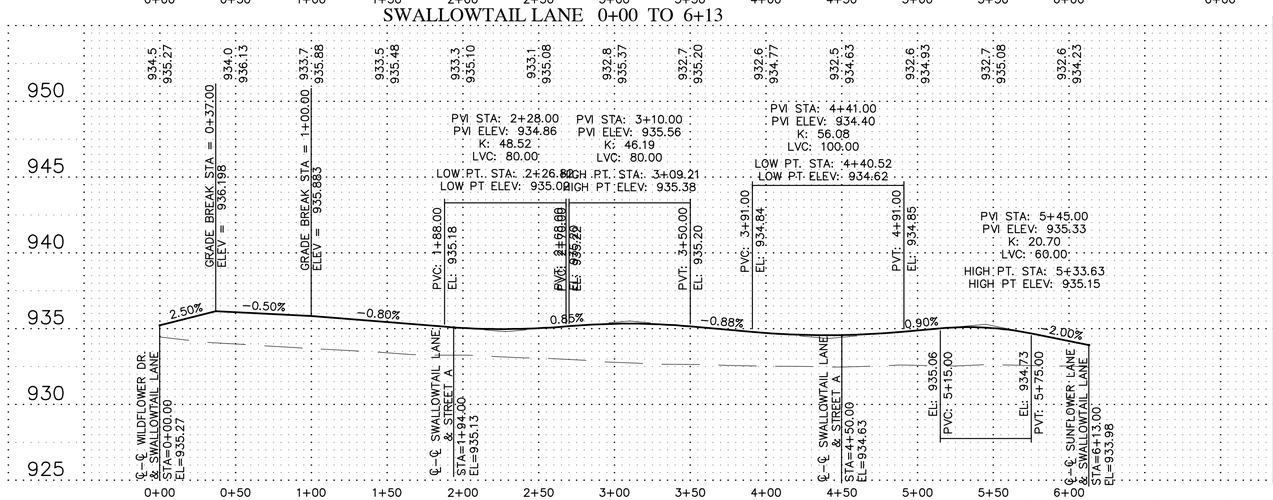
CONEFLOWER COURT 0+00 TO 3+07



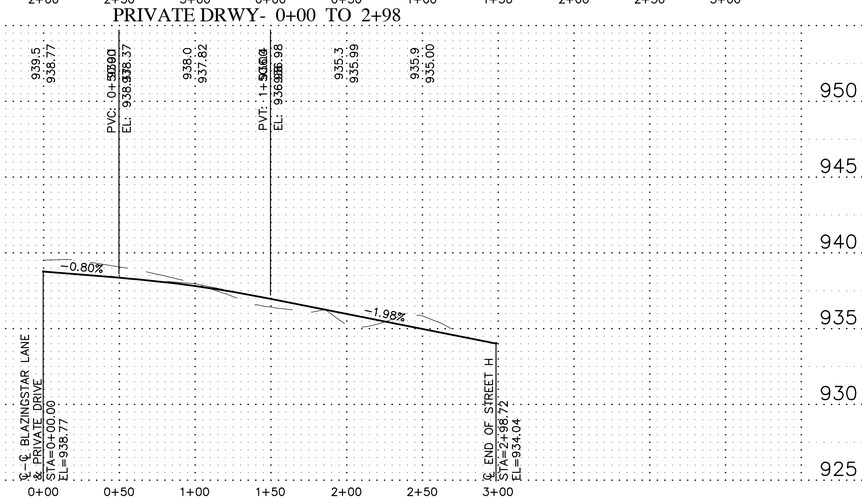
GOLDENROD COURT 0+00 TO 3+07



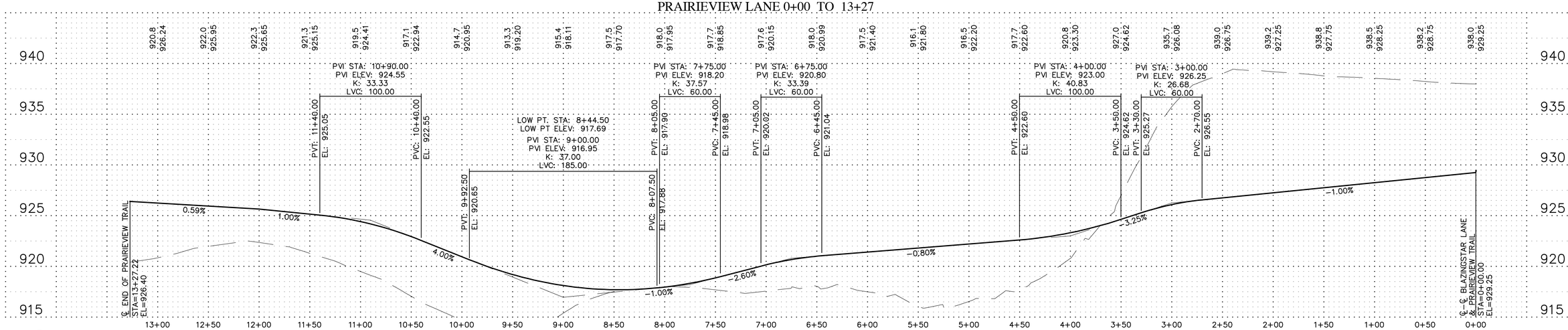
SWALLOWTAIL LANE 0+00 TO 6+13



PRIVATE DRWY- 0+00 TO 2+98



PRAIRIEVIEW LANE 0+00 TO 13+27



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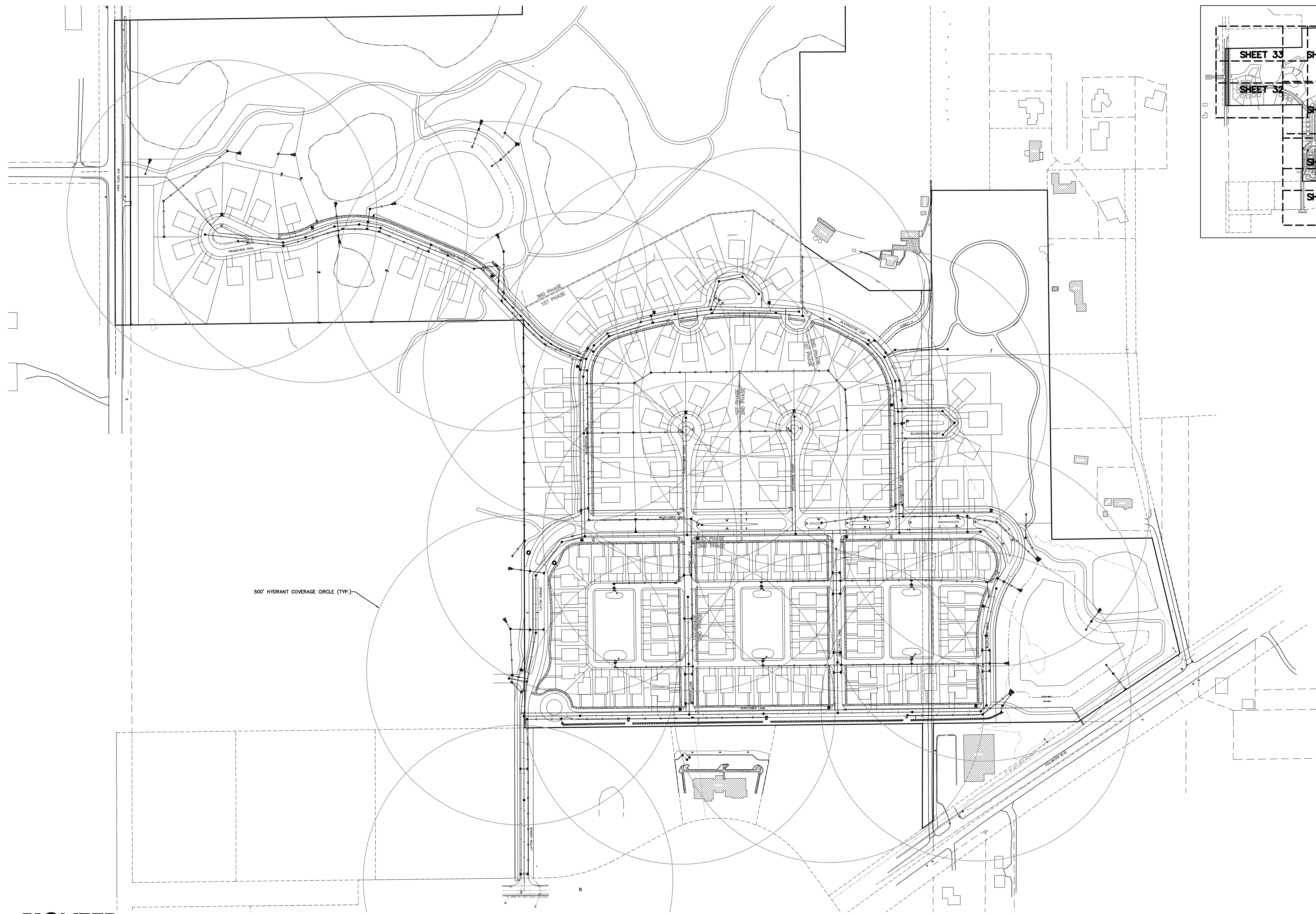

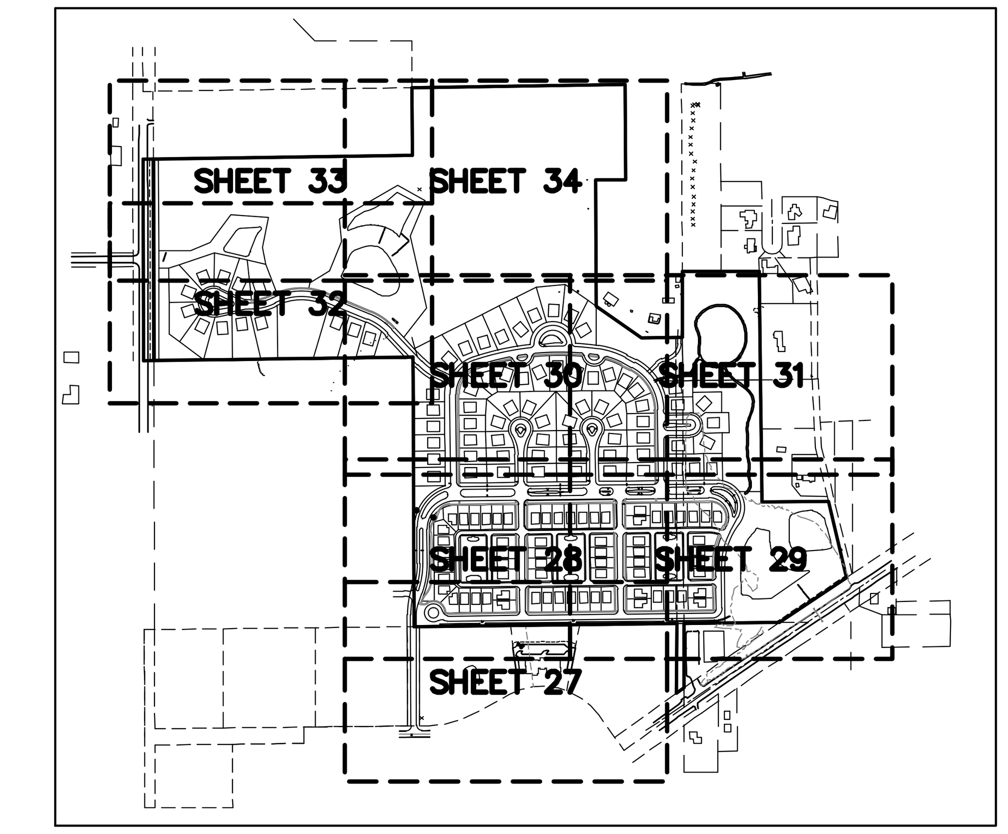

KEY

0 100 200 400
GRAPHIC SCALE IN FEET

00-ENG-114058-SHEET-UTIL-OVER.DWG

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UTILITY OVERALL PLAN

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LAKE ELMO, MINNESOTA

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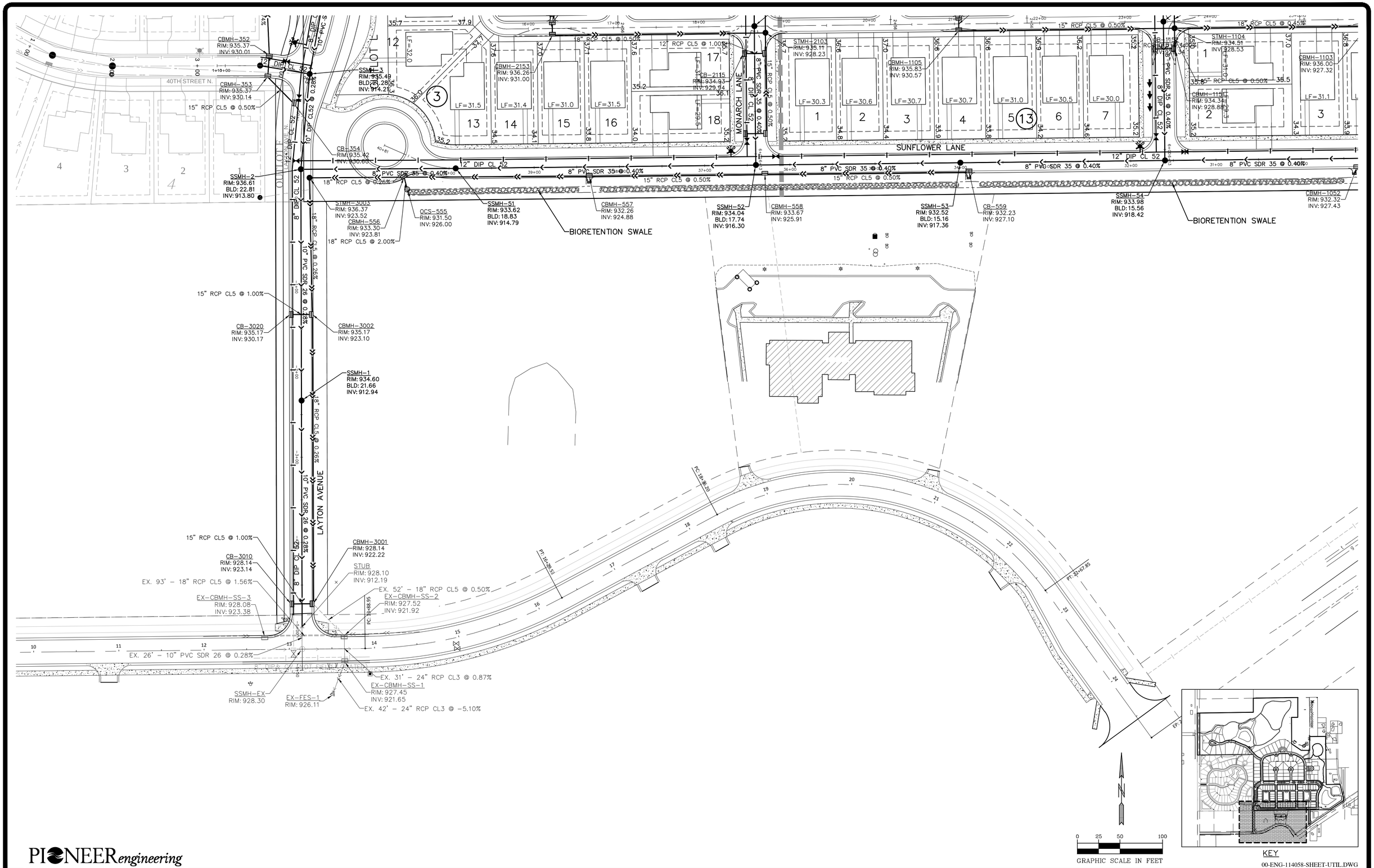

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LAKE ELMO, MINNESOTA

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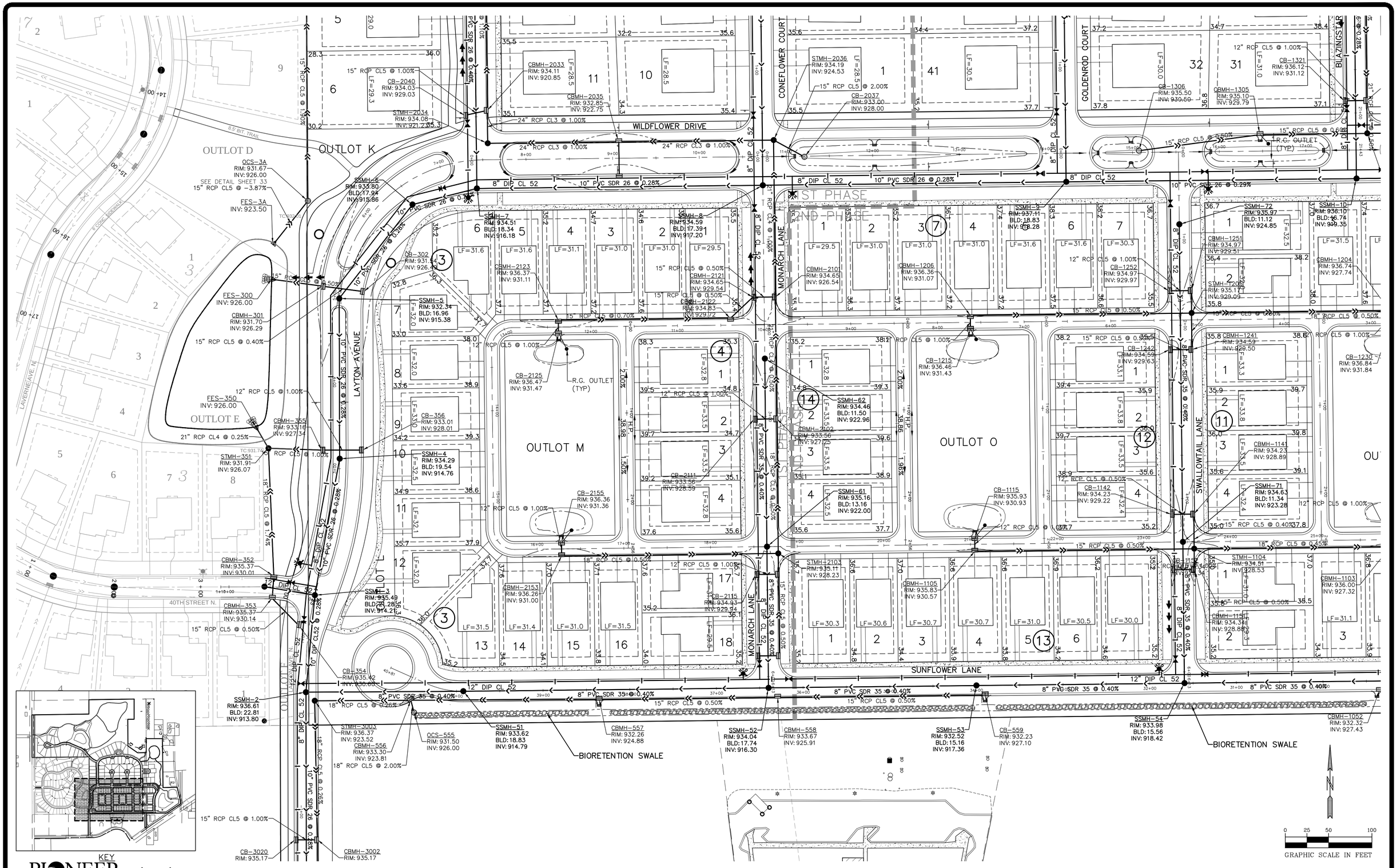

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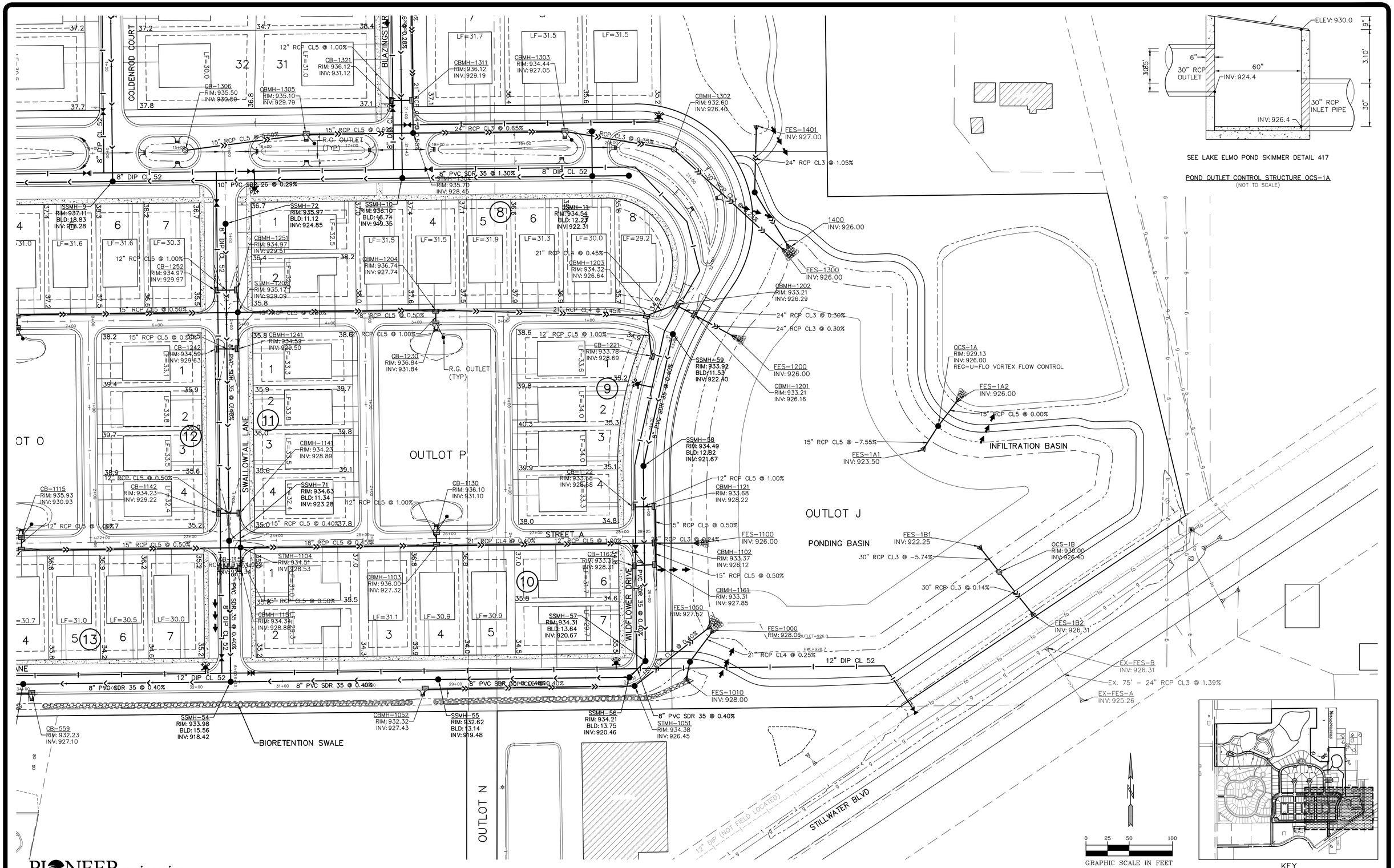

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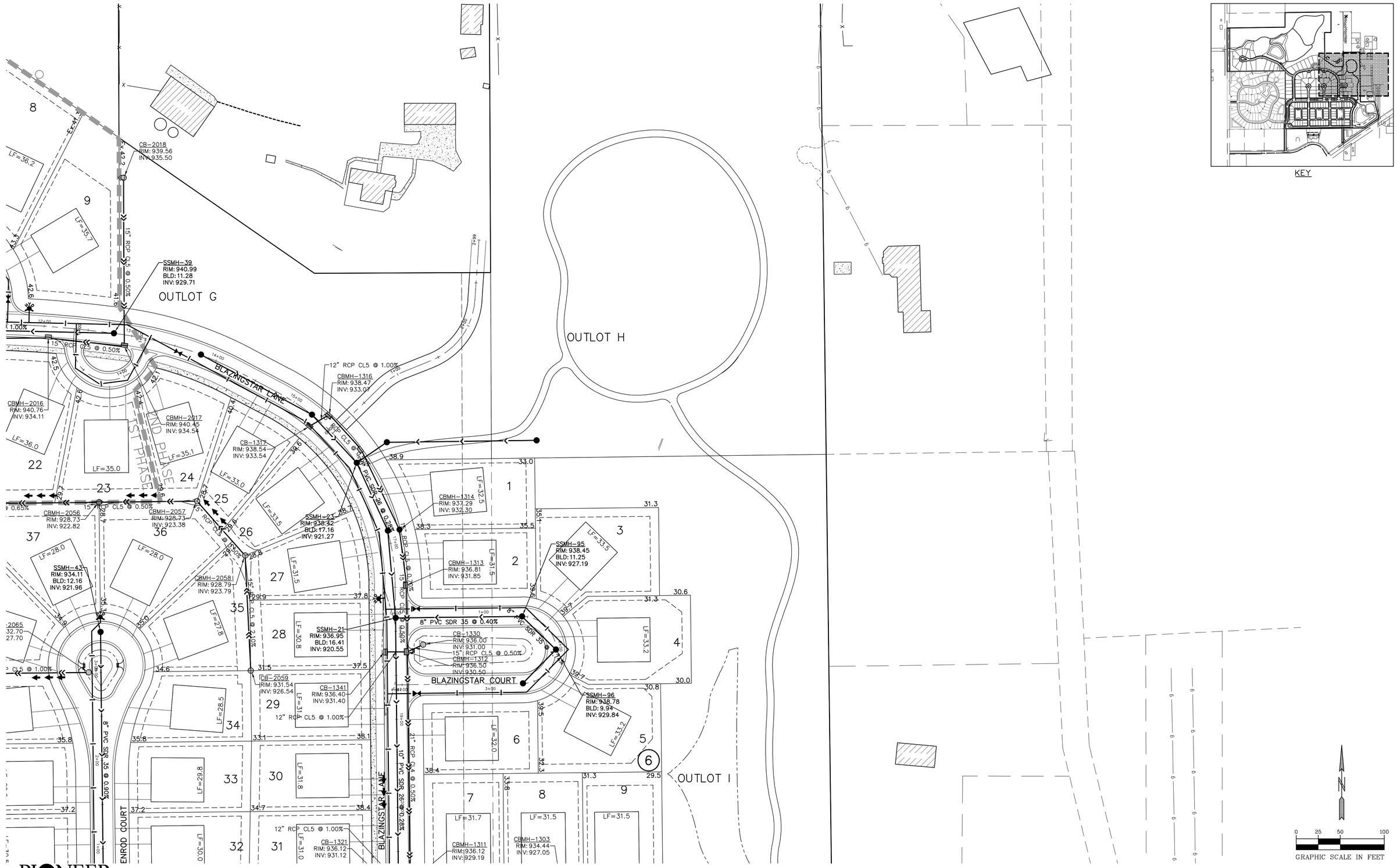

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WETLAND A

INFILTRATION BASIN
OUTLOT B
15" RCP CL5 @ 0.40%
FES-801
RIM: 913.52

STMH-802
RIM: 919.43
INV: 912.15

FES-701
RIM: 919.83
24" RCP CL3 @ 1.20%

OCS-3
RIM: 912.80
INV: 908.00

FES-3
RIM: 909.07
12" RCP CL5 @ 0.40%

OUTLOT A
WETLAND G

INFILTRATION BASIN
FES-2A2
INV: 905.00
15" RCP CL5 @ 0.00%
OCS-2A
RIM: 910.01
INV: 905.00
CBMH-2A
RIM: 906.30
INV: 901.50
15" RCP CL5 @ 0.40%
FES-2A3
RIM: 902.82
FES-2B2
INV: 901.30
24" RCP CL3 @ 0.48%
15" RCP CL5 @ -4.00%
FES-2A1
INV: 902.50
24" RCP CL3 @ -8.98%
OCS-2B
RIM: 908.30
INV: 901.65

OUTLOT C
PONDING BASIN
FES-2B1
INV: 901.75

LAKE ELMO AVE
8" DIP CL 52
FES-702
INV: 918.00
15" RCP CL5 @ 0.85%
CBMH-803
RIM: 919.85
INV: 914.38
CBMH-804
RIM: 919.91
INV: 914.90
SSMH-88
RIM: 926.15
BLD: 11.58
INV: 914.57

PRAIREVIEW TRAIL
8" DIP CL 52
8" PVC SDR 35 @ 2.42%
15" RCP CL5 @ 0.50%
8" PVC SDR 35 @ 2.00%
8" PVC SDR 35 @ 2.35%
15" RCP CL5 @ 2.55%
8" PVC SDR 35 @ 0.70%
15" RCP CL5 @ 1.20%
8" PVC SDR 35 @ 0.40%
8" PVC SDR 35 @ 0.40%
15" RCP CL5 @ 1.85%
8" PVC SDR 35 @ 0.40%
8" PVC SDR 35 @ 0.40%
8" PVC SDR 35 @ 0.40%
15" RCP CL5 @ 0.80%
12" RCP CL5 @ 0.50%
21" RCP CL4 @ 0.53%

SSMH-86
RIM: 923.01
BLD: 11.50
INV: 911.51
SSMH-87
RIM: 924.90
BLD: 11.50
INV: 913.40
SSMH-84
RIM: 917.79
BLD: 9.04
INV: 908.76
FES-H1
INV: 908.00
STMH-2501
RIM: 914.26
INV: 905.34
15" RCP CL5 @ 5.00%
15" RCP CL5 @ 3.50%
FES-2500
INV: 905.00
CBMH-2502
RIM: 917.19
INV: 911.26
CBMH-2503
RIM: 917.11
INV: 912.17
CBMH-2504
RIM: 918.16
INV: 913.17
CBMH-2521
RIM: 917.50
INV: 912.49
OCS-H2
INV: 908.53
CB-2523
RIM: 920.72
INV: 915.97
CBMH-2522
RIM: 920.72
INV: 915.64
SSMH-82
RIM: 921.66
BLD: 14.22
INV: 907.44
SSMH-81
RIM: 922.42
BLD: 15.46
INV: 906.96
8" PVC SDR 35 @ 0.40%

FES-2000
INV: 905.00
STMH-2001
RIM: 914.69
INV: 905.08
LIFT STATION
RIM: 922.10
BLD: 15.43
36" RCP CL3 @ 1.80%
CBMH-2002
RIM: 924.19
INV: 908.90
36" RCP CL3 @ 0.95%
36" RCP CL3 @ 1.00%
CBMH-2003
RIM: 924.68
INV: 909.18
36" RCP CL3 @ 1.25%
CBMH-2004
RIM: 926.51
INV: 910.23
15" RCP CL5 @ 1.50%
CBMH-2080
RIM: 920.01
INV: 915.00
TC: 920.18

STMH-2505
RIM: 924.59
INV: 918.26
CB-2506
RIM: 924.00
INV: 919.00

OUTLOT D
OUTLOT E
OUTLOT F
OUTLOT B
3RD PH
1ST T

GRAPHIC SCALE IN FEET
0 25 50 100

KEY

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
2422 Enterprise Drive
Mendota Heights, MN 55120
(651) 681-1914
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan 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

Name Keith A. Willenbring
Reg. No. 25504 Date 11-05-14

Revisions

Date	11-05-14
Designed	KAW/BJM
Drawn	KAW/BJM

UTILITY PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

00-ENG-114058-SHEET-UTIL.DWG

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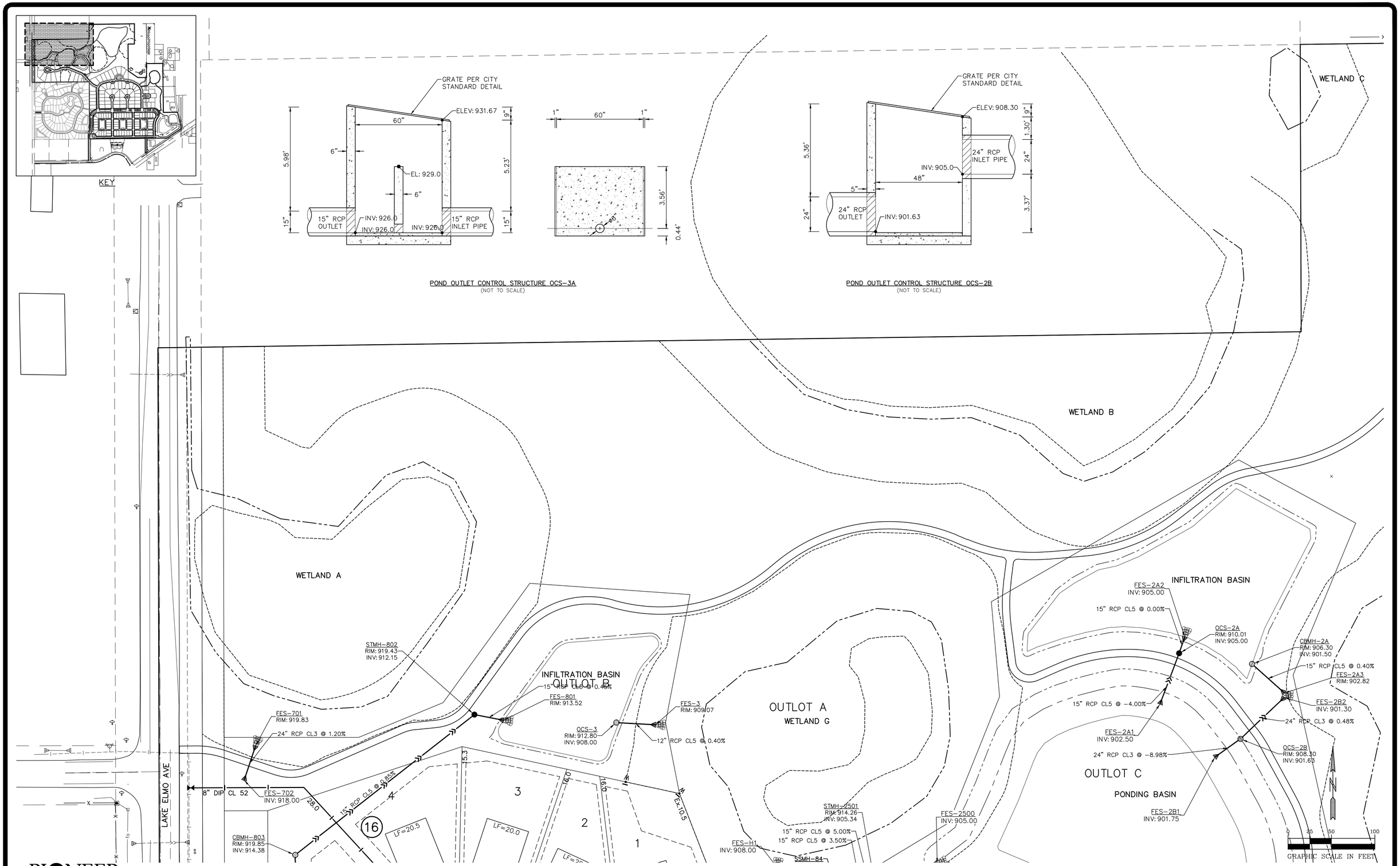

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WETLAND C

WETLAND D

WETLAND B

WETLAND E

INFILTRATION BASIN

FES-2A2
INV: 905.00

15" RCP CL5 @ 0.00%

OCS-2A
RIM: 910.01
INV: 905.00

CBMH-2A
RIM: 906.30
INV: 901.50

15" RCP CL5 @ 0.40%

FES-2A3
RIM: 902.82

FES-2B2
INV: 901.30

15" RCP CL5 @ -4.00%

24" RCP CL3 @ 0.48%

FES-2A1
INV: 902.50

OCS-2B
RIM: 908.30
INV: 901.63

24" RCP CL3 @ -8.98%

OUTLOT C

PONDING BASIN

FES-2B1
INV: 901.75

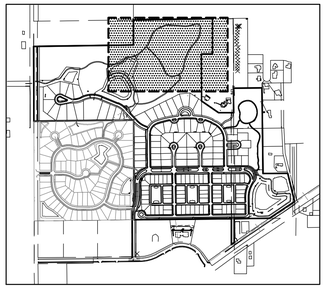
OUTLOT A

WETLAND F

N

0 25 50 100

GRAPHIC SCALE IN FEET



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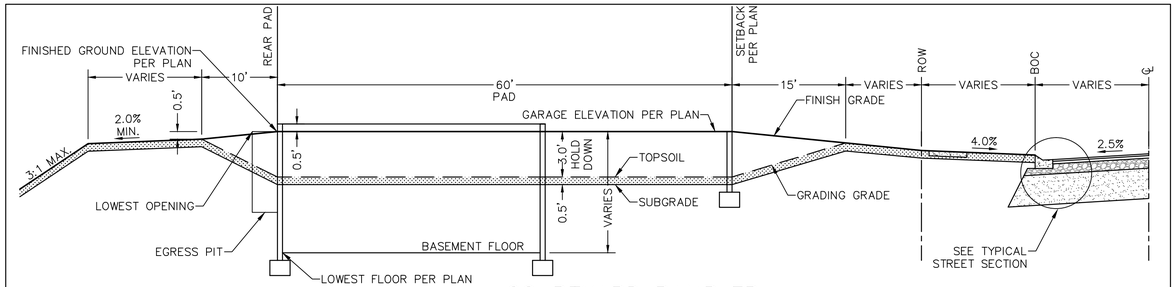
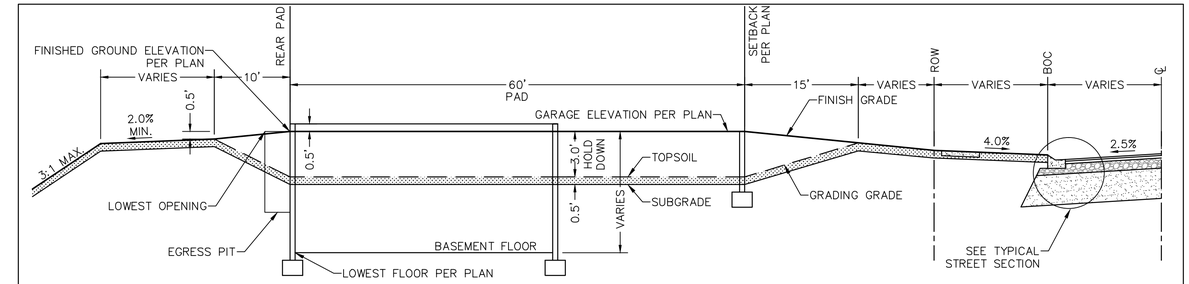


COURTYARD RAMBLER
(TYPICAL SECTION NOT TO SCALE)



RAMBLER
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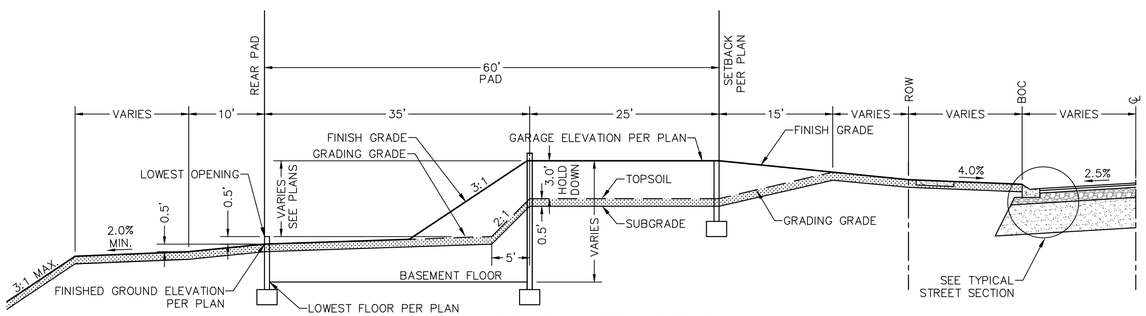

COURTYARD LOOKOUT
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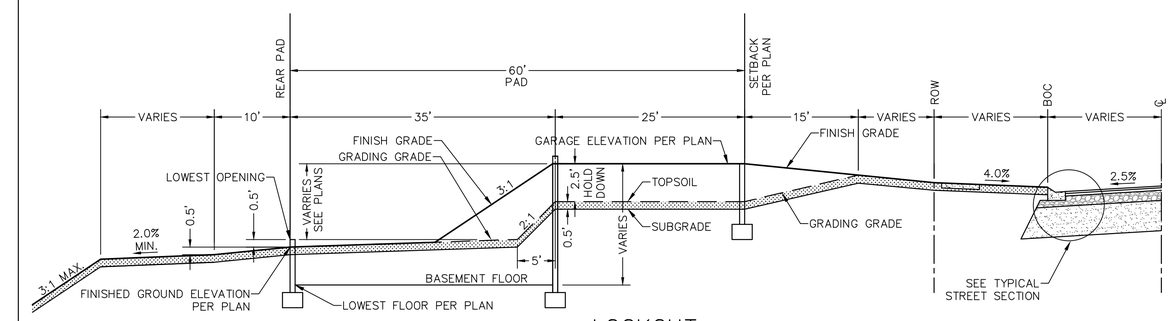

LOOKOUT
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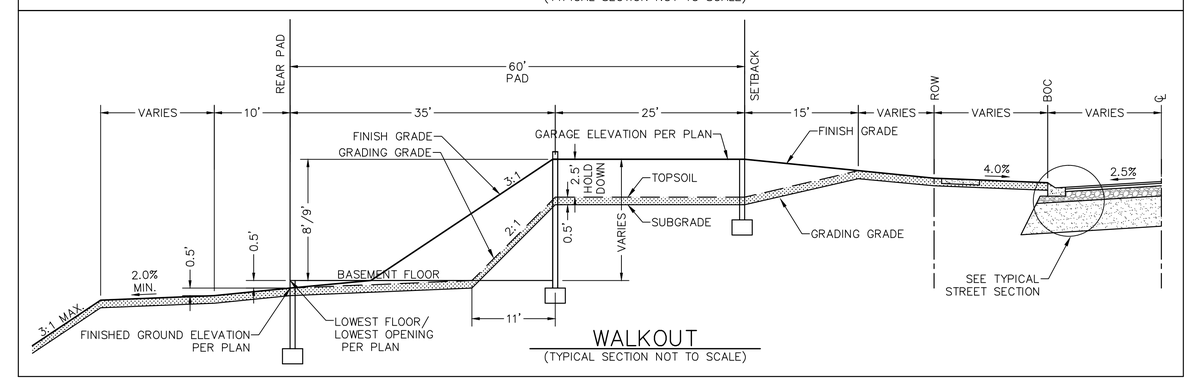

WALKOUT
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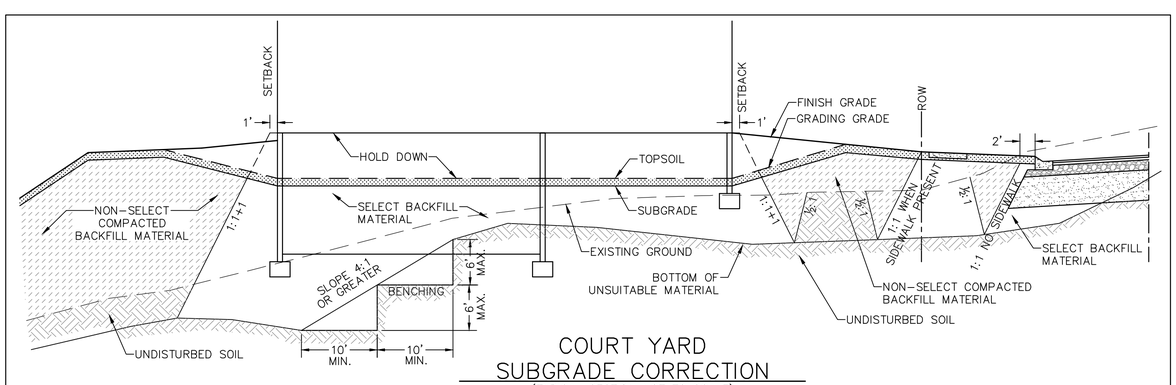
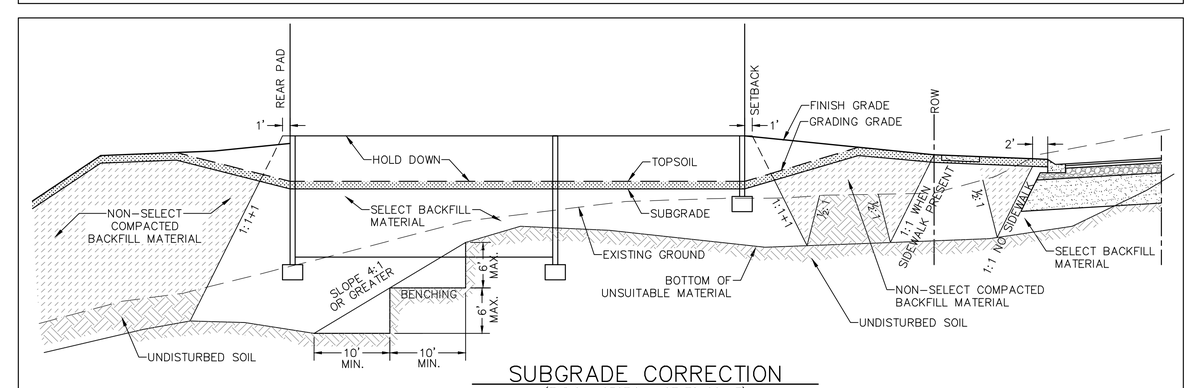


COURT YARD
SUBGRADE CORRECTION
(TYPICAL SECTION NOT TO SCALE)



SUBGRADE CORRECTION
(TYPICAL SECTION NOT TO SCALE)

00-ENG-1140S8-SHEET-GRAD-DTLS

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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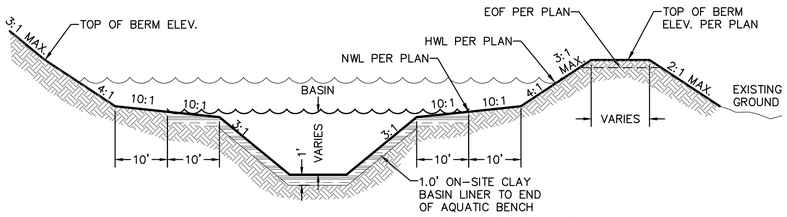


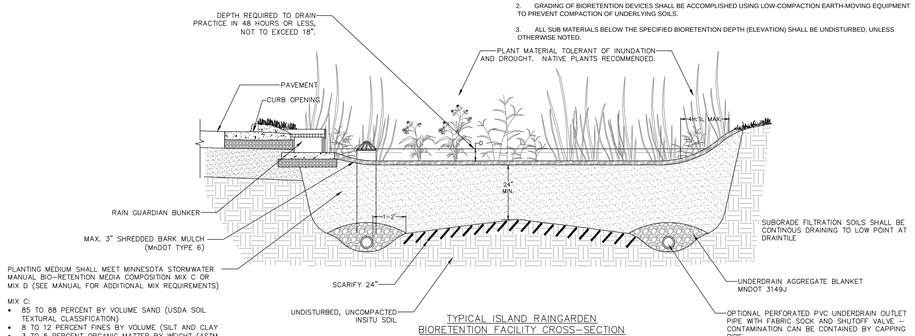
STORM WATER BASIN BERM SECTION
(TYPICAL SECTION NOT TO SCALE)

CONSTRUCTION SEQUENCING

1. INSTALL SILT FENCE AND/OR OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.
2. ALL DOWN-GRADIENT PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.
3. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
4. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.
5. ROUGH GRADE THE SITE. IF BIORETENTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 3 FEET OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM CLOGGING.
6. PERFORM ALL OTHER SITE IMPROVEMENTS.
7. SEED AND MULCH ALL AREAS AFTER DISTURBANCE.
8. CONSTRUCT BIORETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.
9. IMPLEMENT TEMPORARY AND PERMENATE EROSION CONTROL PRACTICES.
10. PLANT AND MULCH BIORETENTION DEVICE.
11. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.

GENERAL NOTES

1. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION.
2. GRADING OF BIORETENTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.
3. ALL SUB MATERIALS BELOW THE SPECIFIED BIORETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.



PLANTING MEDIUM SHALL MEET MINNESOTA STORMWATER MANUAL BIO-RETENTION MEDIA COMPOSITION MIX C OR MIX D (SEE MANUAL FOR ADDITIONAL MIX REQUIREMENTS)

MIX C:
- 85 TO 88 PERCENT BY VOLUME SAND (USDA SOIL TEXTURAL CLASSIFICATION)
- 8 TO 12 PERCENT FINES BY VOLUME (SILT AND CLAY
- 3 TO 5 PERCENT ORGANIC MATTER BY WEIGHT (ASTM D 2974 METHOD C) MnDOT GRADE 2 COMPOST IS RECOMMENDED

OR

MIX D
- COARSE SAND: 50 TO 60 PERCENT
- TOPSOIL: 25 TO 35 PERCENT
- COMPOST (ASSUMING MnDOT GRADE 2 COMPOST IS BEING USED): 10 TO 15 PERCENT

http://stormwater.pca.state.mn.us/index.php/Design_criteria_for_bioretention

TYPICAL ISLAND RAINGARDEN
BIORETENTION FACILITY CROSS-SECTION
NOT TO SCALE

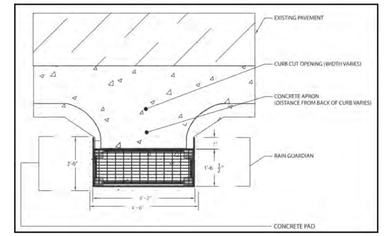
RAIN GUARDIAN

BUNKER
TYPICAL DETAIL

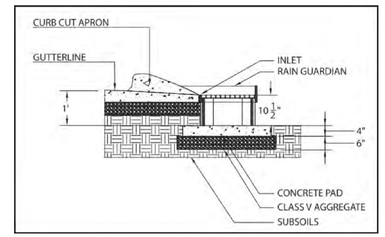
1318 MCKAY DR. NE, SUITE 300
HAM LAKE, MN 55304
(763) 434-2030 (M-F 8:00-4:30)
WWW.ANOKASWCD.ORG

ANOKA CONSERVATION DISTRICT

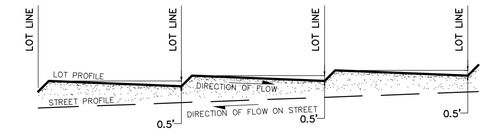
PLAN VIEW — PATENT PENDING



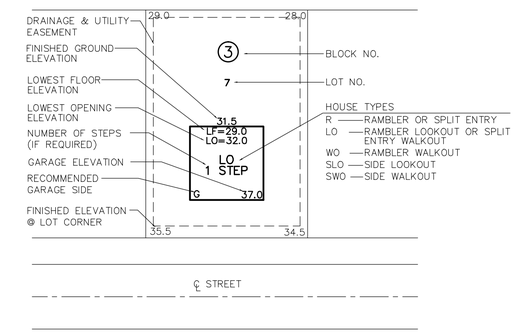
CROSS-SECTION VIEW — PATENT PENDING

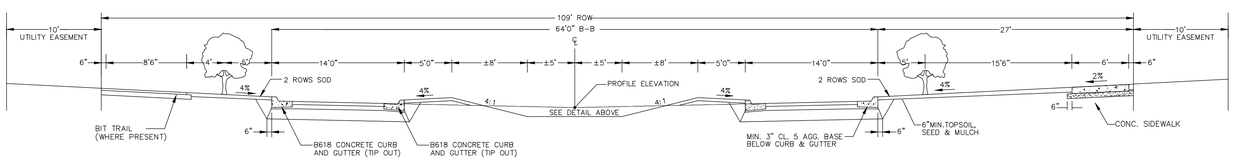


SLAB DIMENSIONS, DISTANCE FROM CURB, AND CHAMBER ELEVATION MAY VARY WITH SITE CONDITIONS. THE TOP OF THE METAL GRATE, HOWEVER, SHOULD BE 1.5" - 2" BELOW THE OVERFLOW ELEVATION AND THE CONCRETE SLAB SHOULD EXTEND WELL BEYOND THE FILTER WALL TO SERVE AS A SPLASH DISSIPATER.

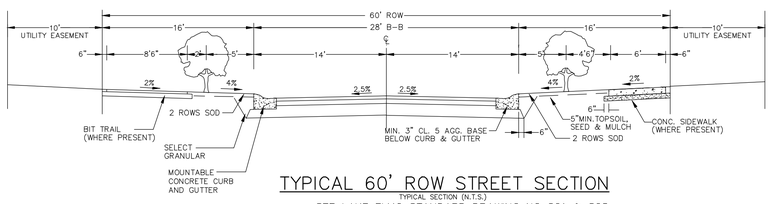


LOT BENCHING DETAIL
NO SCALE

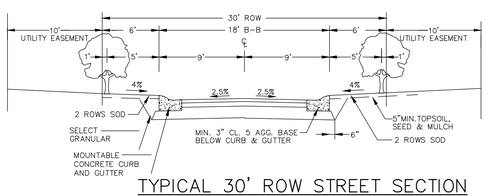




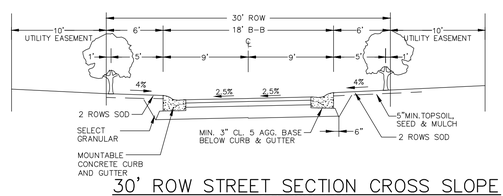
WILDFLOWER DRIVE – 109' ROW STREET SECTION
TYPICAL SECTION (N.T.S.)
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



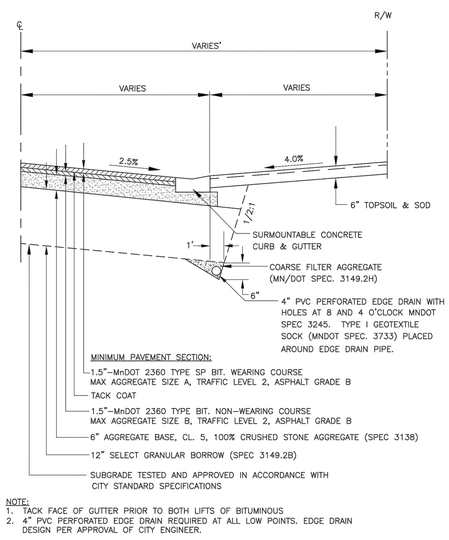
TYPICAL 60' ROW STREET SECTION
TYPICAL SECTION (N.T.S.)
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL 30' ROW STREET SECTION
TYPICAL SECTION (N.T.S.)
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



30' ROW STREET SECTION CROSS SLOPE
TYPICAL SECTION (N.T.S.)
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805

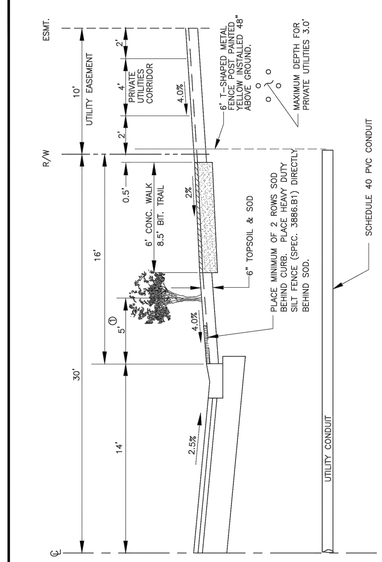


NOTE:
1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

TYPICAL LOCAL RESIDENTIAL STREET SECTION
(MINIMUM 7-TON DESIGN)

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 801 — LAKE ELMO



NOTES:
1. PLACE BOULEVARD TREES 5 FEET BACK OF CURB WHEN SIDEWALK OR TRAIL IS PRESENT; 8 FEET BACK OF CURB WITH NO SIDEWALK OR TRAIL.
2. STREET LIGHTS/HYDRANTS SHALL BE LOCATED 5 FEET BACK OF CURB.

TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 805 — LAKE ELMO

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1. 02-04-15 City Comments

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

00-ENG-114058-SHEET-GRAD-DTLS

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1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.

2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.

5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

9. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600A — LAKE ELMO

10. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

11. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

12. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48–HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.

13. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.

14. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.

15. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600B — LAKE ELMO

16. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.

17. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK–PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600C — LAKE ELMO

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.

2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.

3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.

4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.

5. A MINIMUM OF 2 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.

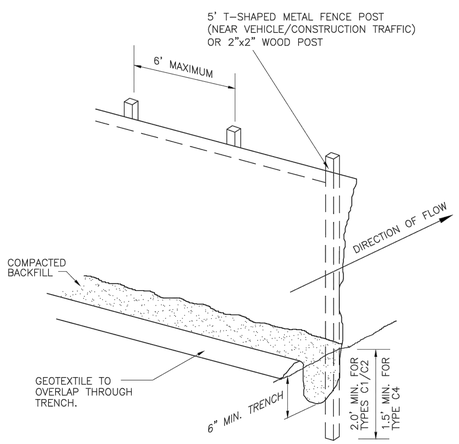
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES

SITE RESTORATION PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600D — LAKE ELMO

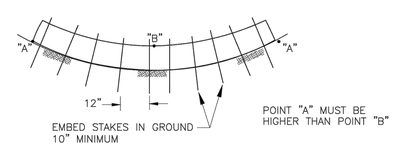


NOTE : –SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE C1/C2 NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE C4 AT ALL OTHER LOCATIONS.
–MATERIALS SHALL CONFORM TO MNDOT 3886.

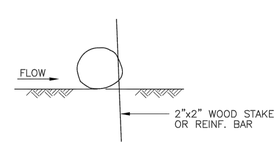
SILT FENCE

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 601 — LAKE ELMO



DITCH SECTION



FIBER ROLL SECTION

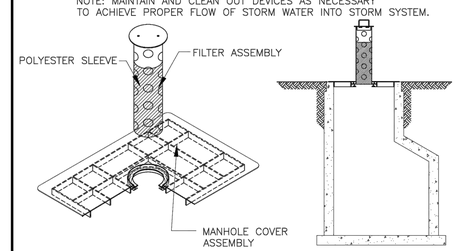
NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

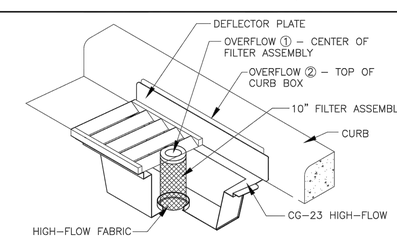
FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 603 — LAKE ELMO

NOTE: MAINTAIN AND CLEAN OUT DEVICES AS NECESSARY TO ACHIEVE PROPER FLOW OF STORM WATER INTO STORM SYSTEM.



WIMCO RD–23 OR APPROVED EQUAL

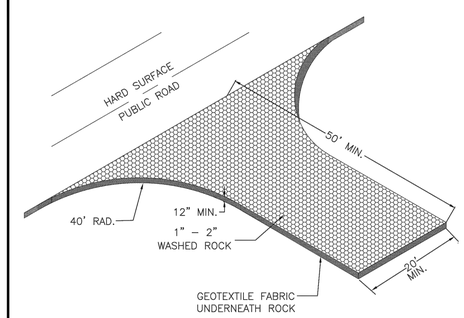


WIMCO CG–23 HIGH–FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 604 — LAKE ELMO



NOTES:

① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.

② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.

④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.

⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 605 — LAKE ELMO

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www.pioneereng.com

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Name Keith A. Willenbring
Reg. No. 25504 Date 11-05-14

Revisions
1. 02-04-15 City Comments

Date	11-05-14
Designed	KAW/BJM
Drawn	KAW/BJM

CITY DETAILS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

00-ENG-114058-SHEET-GRAD-DTLS

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LANDSCAPE NOTES

– THE LANDSCAPE CONTRACTOR SHALL VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.

– THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF PROPOSED PHYSICAL START DATE AT LEAST 7 DAYS IN ADVANCE.

– THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL EXISTING UTILITY LOCATIONS ON THE PROJECT SITE WITH GOPHER STATE ONE CALL 1–800–252–1166 PRIOR TO COMMENCING WORK. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF EXISTING UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.

– GRADING TO BE PERFORMED BY OTHERS.

– NO PLANT MATERIAL SHALL BE INSTALLED UNTIL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

– ALL PLANT MATERIAL SHALL MEET THE STANDARDS FOUND IN THE AMERICAN ASSOCIATION OF NURSERYMEN–AMERICAN STANDARD FOR NURSERY STOCK.

– ALL CONTAINER MATERIAL TO BE GROWN IN THE CONTAINER A MINIMUM OF SIX (6) MONTHS PRIOR TO PLANTING ON SITE.

– DECIDUOUS AND CONIFEROUS TREES SHALL NOT BE STAKED, BUT THE LANDSCAPE CONTRACTOR MUST GUARANTEE STANDABILITY TO A WIND SPEED OF 60 M.P.H.

– THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM GUARANTEE OF ONE YEAR ONE TIME REPLACEMENT ON NEW PLANT MATERIALS. GUARANTEE SHALL BE AGREED UPON BY DEVELOPER/BUILDER AND LANDSCAPE CONTRACTOR.

– THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING OR AFTER INSTALLATION.

– IF THERE IS A DESCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER SHOWN ON THE PLANT LIST, THE NUMBER SHOWN ON THE PLAN WILL TAKE PRECEDENCE.

–THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE WORK SHOWN ON THE PLAN. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANT SCHEDULE.

– COMMERCIAL GRADE POLY LAWN EDGING SHALL BE INSTALLED WHERE NOTED.

– THE LANDSCAPE CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE SITE CAUSED BY THE PLANTING OPERATION AT NO COST TO THE OWNER.

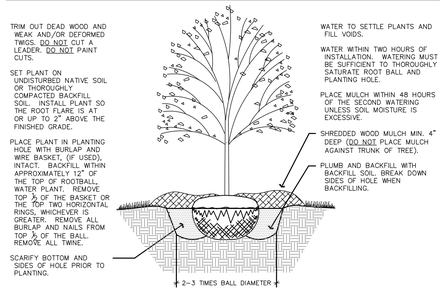
– THE LANDSCAPE CONTRACTOR SHALL KEEP PAVEMENTS CLEAN UNSTAINED. ALL PEDESTRIAN AND VEHICLE ACCESS TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ALL WASTES SHALL BE PROMPTLY REMOVED FROM THE SITE. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

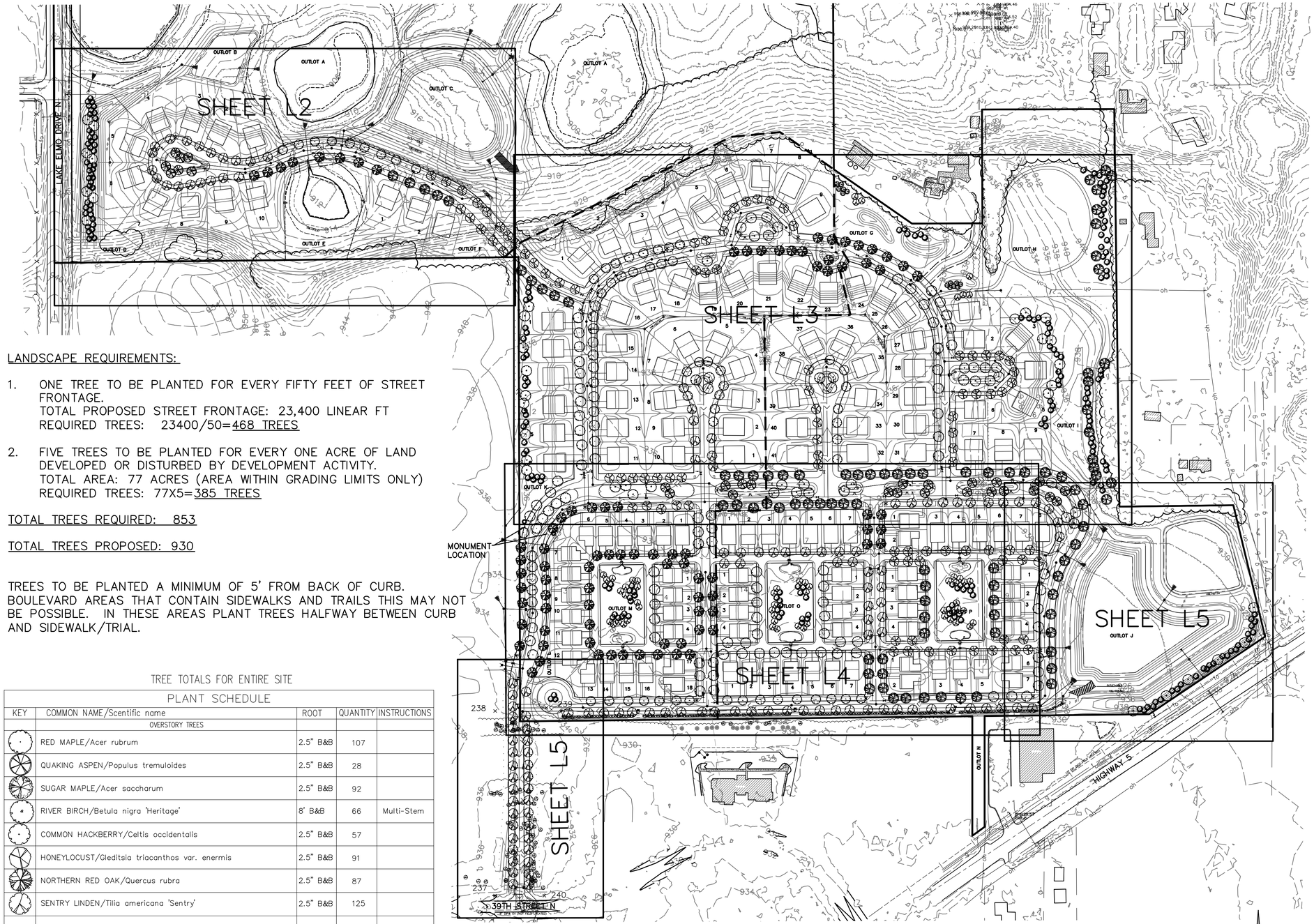
– THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS AND PERMITS GOVERNING THE WORK.

– STORAGE OF MATERIALS OR SUPPLIES ON–SITE WILL NOT BE ALLOWED.

CONIFEROUS TREE PLANTING DETAIL

DECIDUOUS TREE PLANTING DETAIL





LANDSCAPE REQUIREMENTS:

1. ONE TREE TO BE PLANTED FOR EVERY FIFTY FEET OF STREET FRONTAGE.
   TOTAL PROPOSED STREET FRONTAGE: 23,400 LINEAR FT
   REQUIRED TREES: 23400/50=468 TREES

2. FIVE TREES TO BE PLANTED FOR EVERY ONE ACRE OF LAND DEVELOPED OR DISTURBED BY DEVELOPMENT ACTIVITY.
   TOTAL AREA: 77 ACRES (AREA WITHIN GRADING LIMITS ONLY)
   REQUIRED TREES: 77X5=385 TREES

TOTAL TREES REQUIRED: 853

TOTAL TREES PROPOSED: 930

TREES TO BE PLANTED A MINIMUM OF 5' FROM BACK OF CURB. BOULEVARD AREAS THAT CONTAIN SIDEWALKS AND TRAILS THIS MAY NOT BE POSSIBLE. IN THESE AREAS PLANT TREES HALFWAY BETWEEN CURB AND SIDEWALK/TRIAL.

TREE TOTALS FOR ENTIRE SITE

PLANT SCHEDULE

KEY	COMMON NAME/Scentific name	ROOT	QUANTITY	INSTRUCTIONS
	OVERSTORY TREES			
	RED MAPLE/Acer rubrum	2.5" B&B	107	
	QUAKING ASPEN/Populus tremuloides	2.5" B&B	28	
	SUGAR MAPLE/Acer saccharum	2.5" B&B	92	
	RIVER BIRCH/Betula nigra 'Heritage'	8' B&B	66	Multi-Stem
	COMMON HACKBERRY/Celtis occidentalis	2.5" B&B	57	
	HONEYLOCUST/Gleditsia triacanthos var. enermis	2.5" B&B	91	
	NORTHERN RED OAK/Quercus rubra	2.5" B&B	87	
	SENTRY LINDEN/Tilia americana 'Sentry'	2.5" B&B	125	
	EVERGREEN TREES			
	BLACK HILLS SPRUCE/Picea glauca densata	6' B&B	211	
	ORNAMENTAL TREES			
	PRAIRIEFIRE CRAB/Malus 'prairiefire'	1.5" B&B	53	
	ALLEGHENY SERVICEBERRY/Amelanchier laevis	1.5" B&B	13	

0 75 150 300
GRAPHIC SCALE IN FEET

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www.pioneereng.com

I hereby certify that this plan 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 Jennifer L. Thompson
Reg. No. 44763 Date

Revisions
1. 02-04-15 City Comments

Date	11-05-14
Designed	jlt
Drawn	jlt/tml

LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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SEE SHEET L1 FOR TREE SCHEDULE

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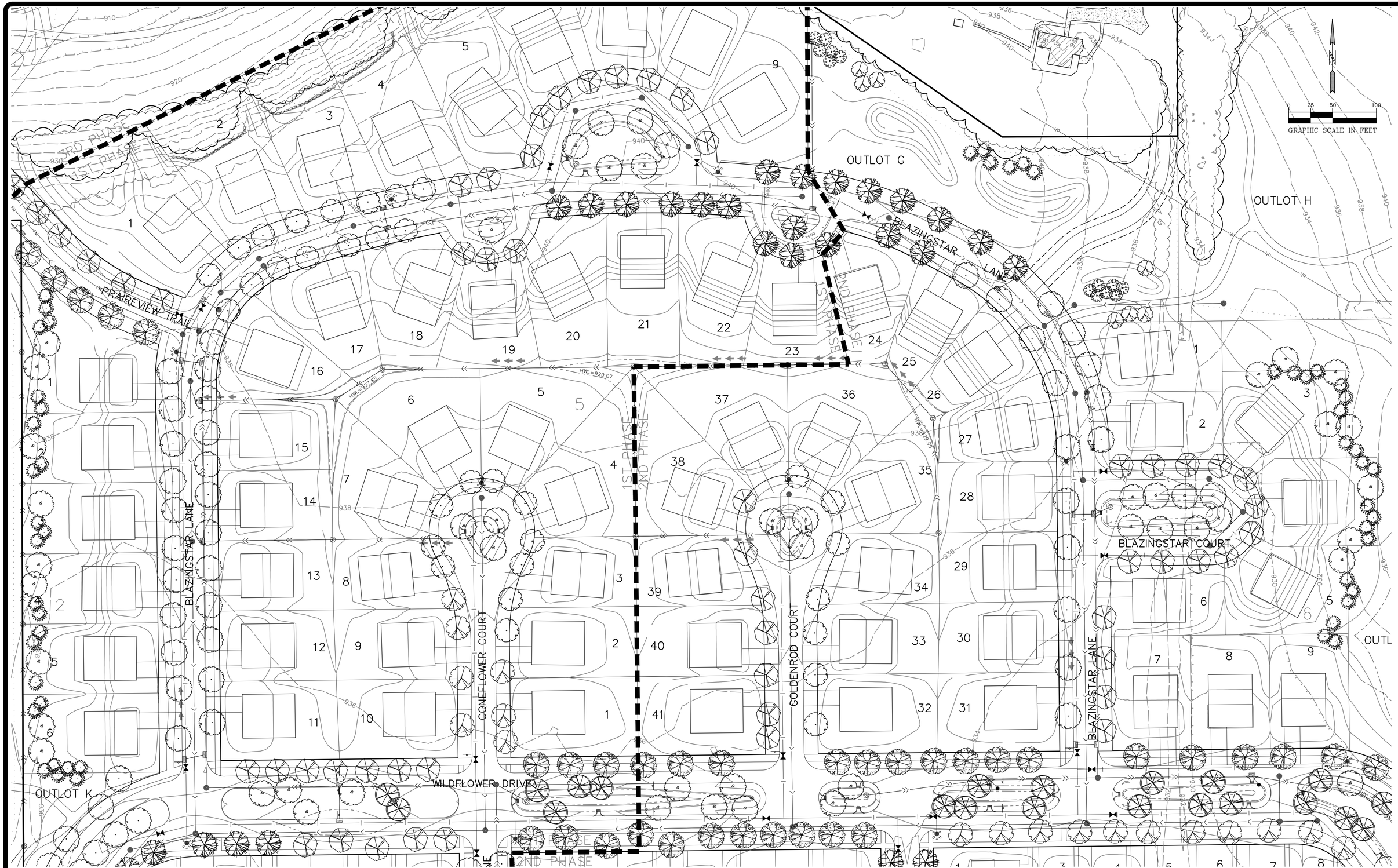

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LAKE ELMO, MINNESOTA

L3 OF 5

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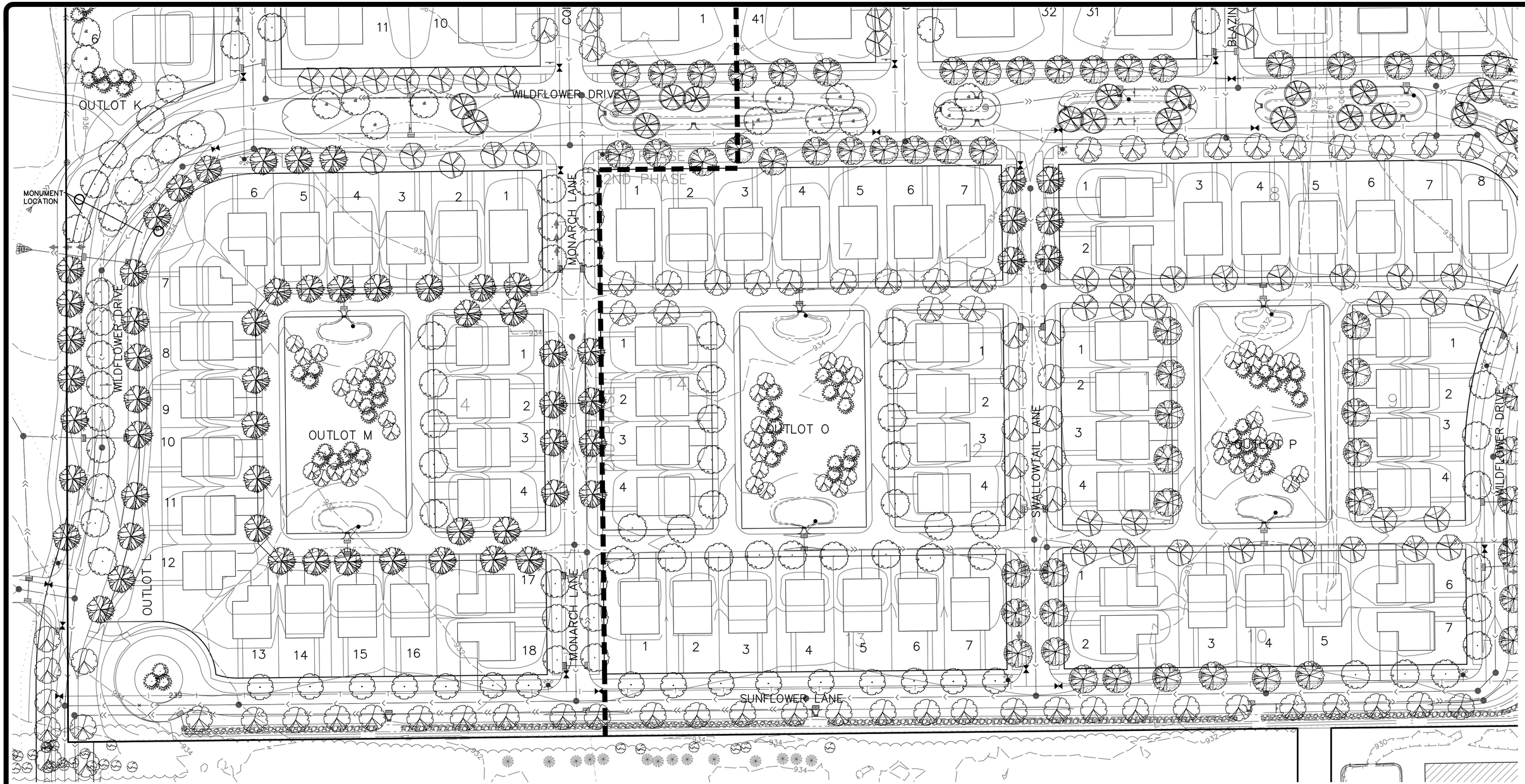

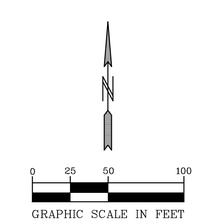

SEE SHEET L1 FOR TREE SCHEDULE

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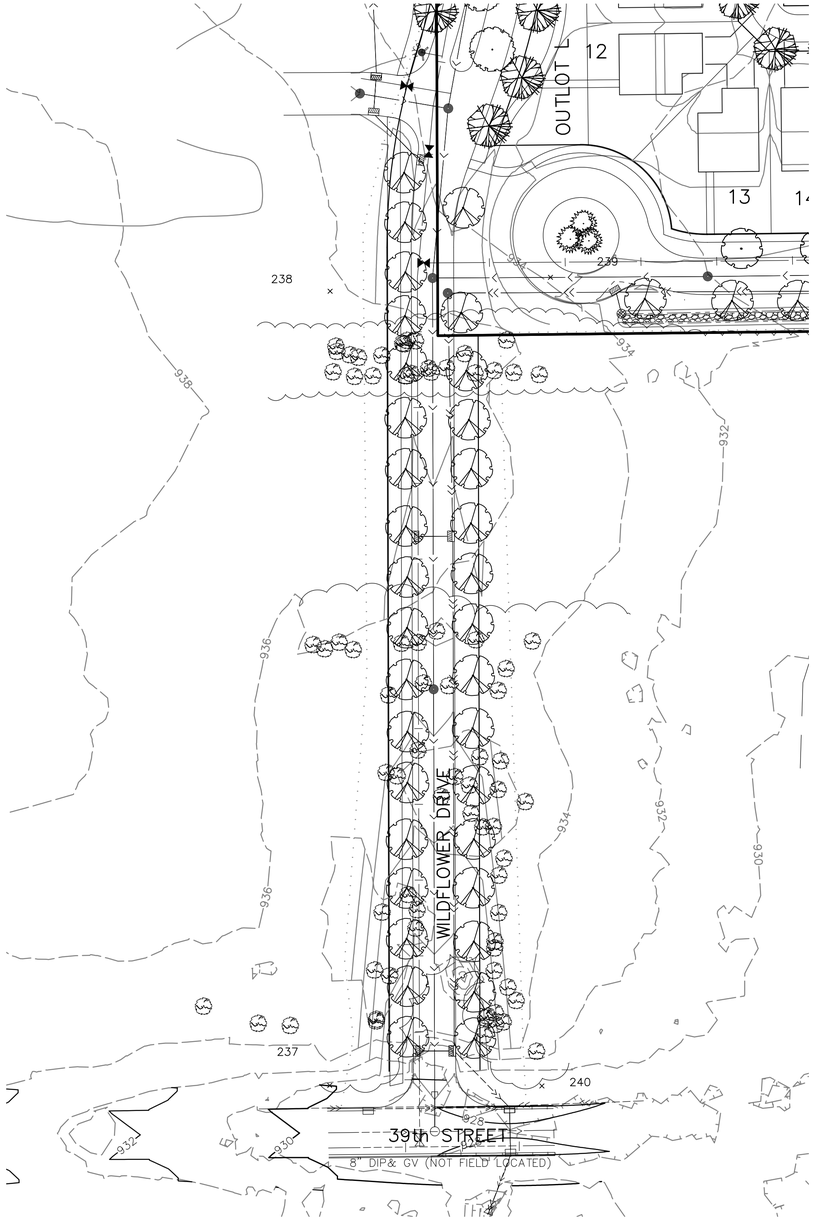
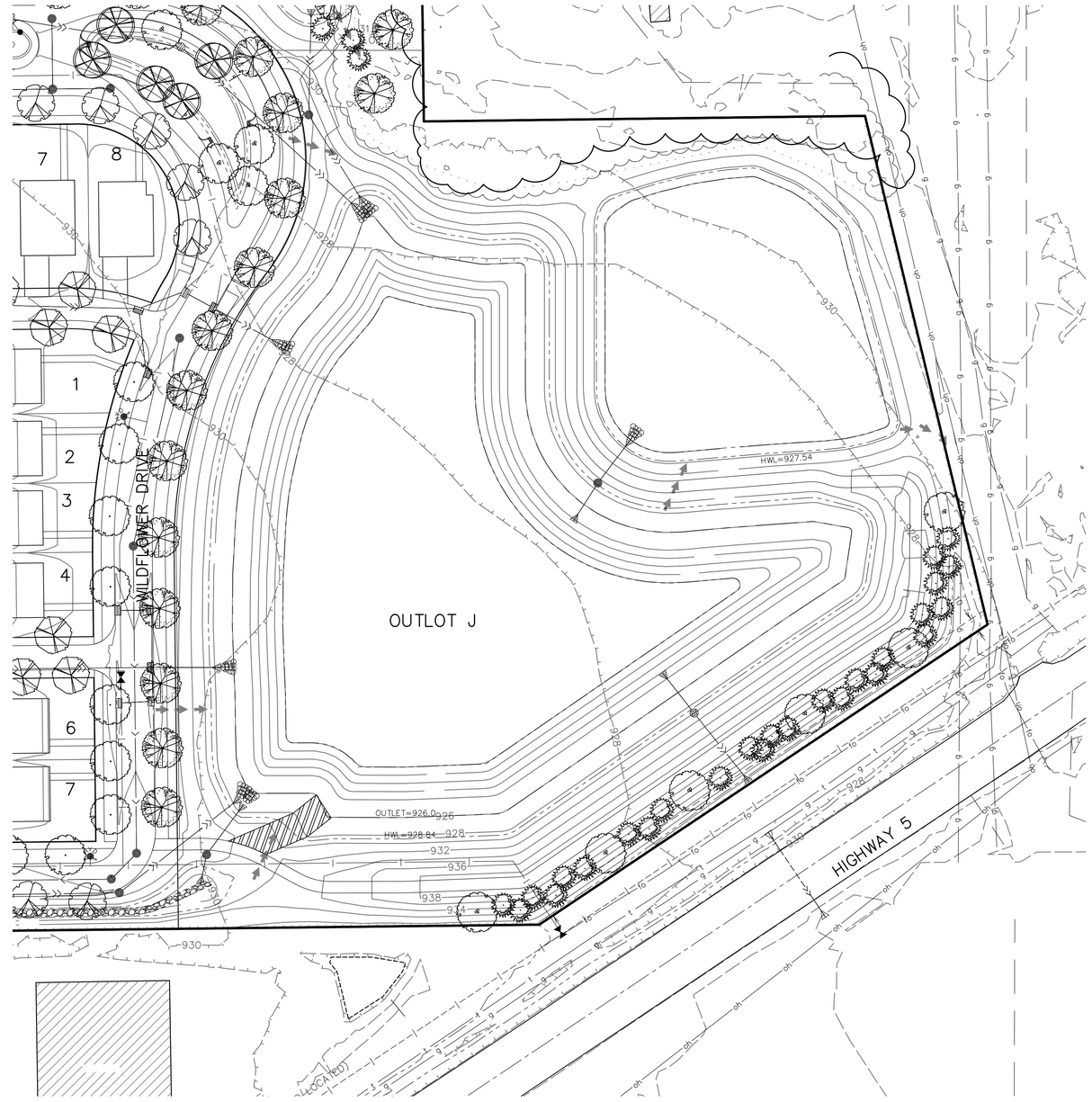
ENTRANCE DETAIL





SEE SHEET L1 FOR TREE SCHEDULE

N

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GRAPHIC SCALE IN FEET

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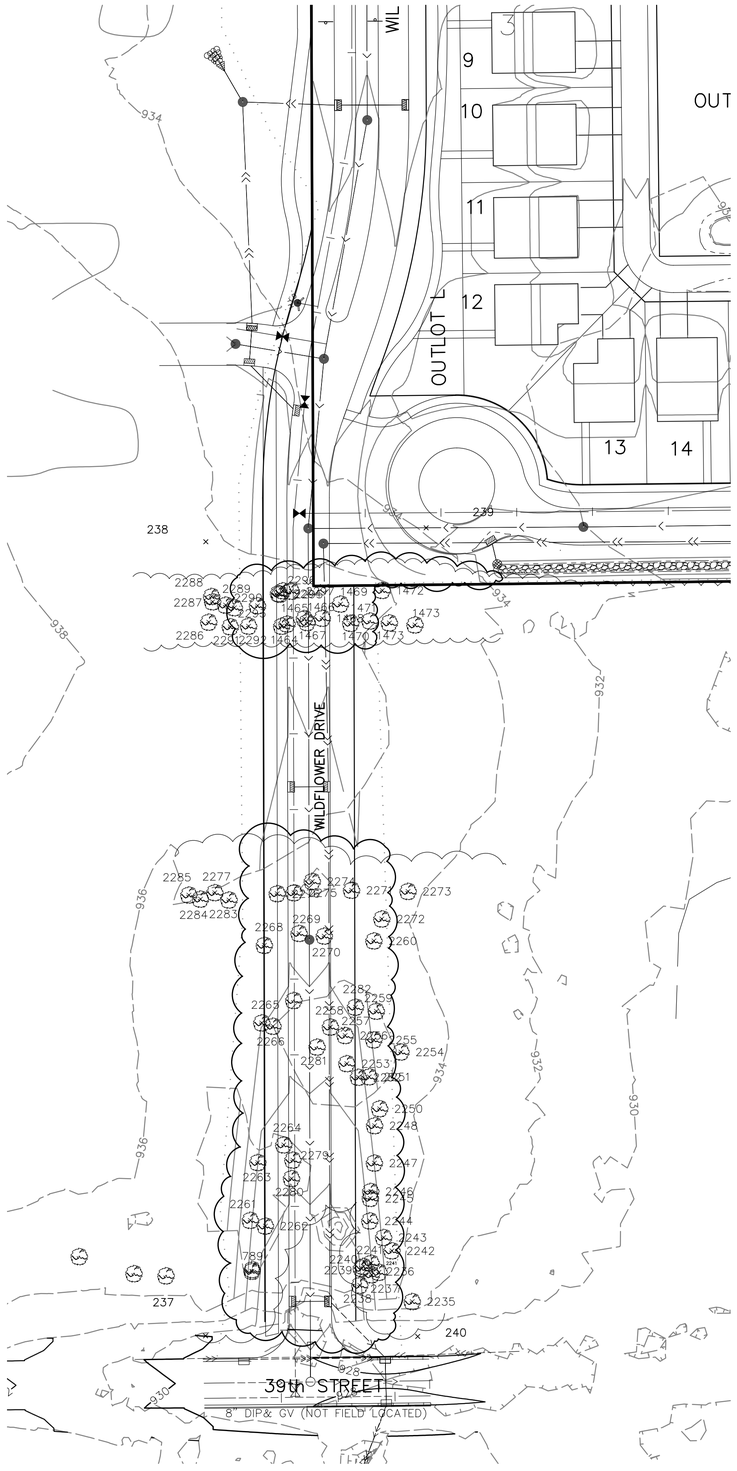

SOUTH ENTRANCE TREE INVENTORY

#	Tree Tag #	Size (DBH ")	Common Name	Scientific Name	Significant Tree	Notes	Status
1	789	24	Honeylocust	*Gleditsia triacanthos*	Y		Remove
2	1464	6	Box Elder	*Acer negundo*	N		Remove
3	1465	5	Colorado spruce	*Picea pungens*	N		Remove
4	1466	9	Box Elder	*Acer negundo*	N		Remove
5	1467	6	Colorado spruce	*Picea pungens*	N		Remove
6	1468	7	Box Elder	*Acer negundo*	N		Remove
7	1469	13	Box Elder	*Acer negundo*	Y		Remove
8	1470	6	Colorado spruce	*Picea pungens*	N	60% shade suppresed	Remove
9	1471	8	Colorado spruce	*Picea pungens*	N	70% shade suppresed	Remove
10	1472	14/12	Box Elder	*Acer negundo*	Y	Offsite	Offsite save
11	1473	7	Box Elder	*Acer negundo*	N	Offsite	Offsite save
12	1474	7	Colorado spruce	*Picea pungens*	N	Offsite	Offsite save
13	2235	7/7/6	Box Elder	*Acer negundo*	N	Offsite	Offsite save
14	2236	11	Box Elder	*Acer negundo*	N		Remove
15	2237	11	Box Elder	*Acer negundo*	N		Remove
16	2238	8	Box Elder	*Acer negundo*	N	60% top missing	Remove
17	2239	14/11/7	Box Elder	*Acer negundo*	Y		Remove
18	2240	15	Hackberry	*Celtis occidentalis*	Y		Remove
19	2241	15	Box Elder	*Acer negundo*	Y		Remove
20	2242	11	Box Elder	*Acer negundo*	N		Remove
21	2243	11	Box Elder	*Acer negundo*	N		Remove
22	2244	20	Box Elder	*Acer negundo*	Y		Remove
23	2245	8	Box Elder	*Acer negundo*	N		Remove
24	2246	16	Box Elder	*Acer negundo*	Y		Remove
25	2247	9	Box Elder	*Acer negundo*	N		Remove
26	2248	18	Box Elder	*Acer negundo*	N	30% top missing, decay at base of tree	Remove
27	2250	10	Box Elder	*Acer negundo*	N		Remove
28	2251	9	Box Elder	*Acer negundo*	N		Remove
29	2252	10	Box Elder	*Acer negundo*	N		Remove
30	2253	12/12	Box Elder	*Acer negundo*	Y		Remove
31	2254	13	Box Elder	*Acer negundo*	N	30% top missing	offsite save
32	2255	13	Box Elder	*Acer negundo*	Y		Remove
33	2256	13	Box Elder	*Acer negundo*	Y		Remove
34	2257	10	Box Elder	*Acer negundo*	N		Remove
35	2258	9	Box Elder	*Acer negundo*	N		Remove
36	2259	13	Box Elder	*Acer negundo*	Y		Remove
37	2260	17	Box Elder	*Acer negundo*	Y		Remove
38	2261	6	Box Elder	*Acer negundo*	N		Remove
39	2262	6	Box Elder	*Acer negundo*	N		Remove
40	2263	6	Honeylocust	*Gleditsia triacanthos*	N		Remove
41	2264	6	Box Elder	*Acer negundo*	N		Remove
42	2265	16	Box Elder	*Acer negundo*	Y		Remove
43	2266	7	Box Elder	*Acer negundo*	N		Remove
44	2267	19	Box Elder	*Acer negundo*	N	40% top missing, split at base	Remove
45	2268	16	Box Elder	*Acer negundo*	Y		Remove
46	2269	15	Box Elder	*Acer negundo*	Y		Remove
47	2270	15/14/12/6	Box Elder	*Acer negundo*	Y		Remove
48	2271	13	Box Elder	*Acer negundo*	Y		Remove
49	2272	22/21	Box Elder	*Acer negundo*	N	22" 100% top missing, 21" decay along main trunk	Remove
50	2273	21	Box Elder	*Acer negundo*	Y	Offsite	Offsite save
51	2274	19	Box Elder	*Acer negundo*	Y		Remove
52	2275	16	Box Elder	*Acer negundo*	N	50% top missing	Remove
53	2276	16	Box Elder	*Acer negundo*	Y		Remove
54	2277	18	Box Elder	*Acer negundo*	N	40% top missing	Offsite save
55	2279	7	Siberian elm	*Ulmus pumila*	N		Remove
56	2280	6	Honeylocust	*Gleditsia triacanthos*	N		Remove
57	2281	10	Box Elder	*Acer negundo*	N	heavy lean to tree	Remove
58	2282	12	Box Elder	*Acer negundo*	Y		Remove
59	2283	17	Box Elder	*Acer negundo*	N	major damage from tree #2285 which has toppled onto #2283	Offsite save
60	2284	17	Box Elder	*Acer negundo*	Y	Offsite	Offsite save
61	2285	18	Box Elder	*Acer negundo*	N	toppled	Offsite save
62	2286	6	Box Elder	*Acer negundo*	N	Offsite	Offsite save
63	2287	7	Box Elder	*Acer negundo*	N	Offsite	Offsite save
64	2288	10	Box Elder	*Acer negundo*	N	Offsite	Offsite save
65	2289	11	Box Elder	*Acer negundo*	N	Offsite	Offsite save
66	2290	10	Box Elder	*Acer negundo*	N		Remove
67	2291	8	Box Elder	*Acer negundo*	N	Offsite	Offsite save
68	2292	9/8	Box Elder	*Acer negundo*	N		Remove
69	2293	6	Box Elder	*Acer negundo*	N		Remove
70	2294	11	Box Elder	*Acer negundo*	N	top split at 8' up from base of tree	Remove
71	2295	6	Box Elder	*Acer negundo*	N		Remove
72	2296	10	Box Elder	*Acer negundo*	N		Remove
73	2297	11	Box Elder	*Acer negundo*	N		Remove

NOTES:
1. NON-SIGNIFICANT TREES ARE DUE TO SIZE NOT MEETING ORDINANCE REQUIREMENTS OR;
2. TREES THAT ARE DAMAGED, SPLIT, LEANING, OR HAVE SIGNIFICANT MISSING CANOPIES.

N

0 25 50 100
GRAPHIC SCALE IN FEET

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
2422 Enterprise Drive
Mendota Heights, MN 55120
(651) 681-1914
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan 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 Jennifer L. Thompson
Reg. No. 44763 Date

Revisions
1. 02-04-15 City Comments

Date 2-2-15
Designed jlt
Drawn jlt/tml

SOUTH ENTRANCE TREE INVENTORY

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

T1 OF 1

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THE CITY OF LAKE ELMO

MAYOR & COUNCIL COMMUNICATION

DATE: **April 7, 2015**
REGULAR
ITEM # **15**

AGENDA ITEM: 39th Street North: Street and Sanitary Sewer Improvements - Change Order No. 4

SUBMITTED BY: Chad Isakson, Project Engineer

THROUGH: Dean A. Zuleger, City Administrator

REVIEWED BY: Jack Griffin, City Engineer
Cathy Bendel, Finance Director

SUGGESTED ORDER OF BUSINESS:

- Introduction/Staff Presentation ..... City Engineer
- Questions from Council to Staff ..... Mayor Facilitates
- Public Input, if Appropriate.....Mayor Facilitates
- Call for Motion ..... Mayor & City Council
- Discussion ..... Mayor & City Council
- Action on Motion ..... Mayor Facilitates

POLICY RECOMMENDER: Engineering.

FISCAL IMPACT: $154,440.00.

This change order increases the contract amount for the project by $154,440.00 bringing the revised construction contract to $2,075,522.80. With this change order the project is over the project budget and contingencies by $111,000.

The cost increase is necessary to complete the project but incurs an unfunded amount. The additional amount of $111,000 could be added to the 2015 bond with the bond payments made from the sanitary sewer enterprise fund. This pipe is critical to serve all existing properties and future development planned to occur in the Municipal Sewer Area north of the Union Pacific Railroad Tracks.

SUMMARY AND ACTION REQUESTED:

The City Council is respectfully requested to consider approving Change Order No. 4 for the 39th Street North: Street and Sanitary Sewer Improvements, thereby increasing the contract amount by $154,440.00. The recommended motion for the action is as follows:

"Move to approve Change Order No. 4 for the 39th Street North: Street and Sanitary Sewer Improvements thereby increasing the contract amount by $154,440.00."

LEGISLATIVE HISTORY/BACKGROUND INFORMATION:

This change order is being processed due to unforeseen subsurface conditions found by the Contractor in the trenchless installation of a 30-inch casing pipe within the Union Pacific Railroad Right-of-Way. An obstruction was encountered during the installation and the casing pipe could not be further advanced, in the opinion of the Contractor, utilizing the construction methods employed by the Contractor.

The Contractor has therefore made a claim that differing or unusual subsurface conditions have been encountered that does not allow the casing installation to be successfully installed using the casing pipe and methods specified. The Contractor mobilized equipment and employed a ramming method to hammer the pipe in an attempt to advance it past the obstruction located at approximately Station 0+40. This attempt was completed at the direction of the City and Engineer and was covered by Change Order No. 3. However, the attempt to hammer the 30-inch casing did not work. Boulder and cobble obstructions in the soil caused the casing pipe to remain stuck in place. Hand excavation was halted as the sand collapsed into the casing pipe putting the integrity of the above gas pipe and railroad tracks at risk.

After extensive technical review meetings and negotiations between the City, Bolton and Menk and the Contractor, Change Order No. 4 was prepared to request the Contractor to install a larger diameter casing pipe (48-inch) with a thicker casing wall that is suitable for pipe ramming. The cost for this work was extensively negotiated relative to several other options. In addition, this change order was prepared to address all claims made to date on the project by the Contractor as well as provide assurances to the City that the project will be successfully completed.

This crossing is critical to service 39th Street property owners, future development north of the railroad tracks, and the Old Village Area.

RECOMMENDATION:

Staff is recommending that the City Council consider approving Change Order No. 4 for the 39th Street North: Street and Sanitary Sewer Improvements, thereby increasing the contract amount by $154,440.00. The recommended motion for the action is as follows:

"Move to approve Change Order No. 4 for the 39th Street North: Street and Sanitary Sewer Improvements thereby increasing the contract amount by $154,440.00."

ATTACHMENT(S):

1. Change Order No. 4

CONTRACT CHANGE ORDER FORM

CITY OF LAKE ELMO, MINNESOTA
39TH ST N: STREET AND SANITARY SEWER IMP
PROJECT NO. 2014.131

FOCUS ENGINEERING, inc.

CHANGE ORDER NO. 4 **DATE:** March 26, 2015

TO: GEISLINGER & SONS, INC, 511 CENTRAL AVE S, PO BOX 437, WATKINS, MINNESOTA 55389

This Document will become a supplement to the Contract and all provisions will apply hereto. The Contract Documents are modified as follows upon execution of this Change Order.

CHANGE ORDER DESCRIPTION / JUSTIFICATION:

During the trenchless installation of a 30-inch casing pipe crossing the Union Pacific Railroad, the contractor claims an obstruction was encountered and the casing pipe cannot be further advanced, in the opinion of the Contractor, utilizing the construction methods employed by the Contractor. The Contractor has therefore made a claim that the City has rejected. In the interest of resolving this dispute, this Change Order provides compensation to complete the installation of a casing pipe under the Union Pacific Railroad tracks by the installation of a 48-inch steel casing by the pipe ramming method, in conjunction with auguring. The casing may also be installed by open cutting once the casing has reached a sufficient distance beyond the railroad tracks. Regardless of method, the Contractor shall employ techniques to control the tunnel face. The Contractor shall provide daily documentation of progress, and frequently check and record the alignment and grade of the boring. The Contractor shall notify the Owner a minimum of 48-hours in advance of any work occurring on the Project and shall immediately notify the Owner of any deviations from the design. The Contractor shall use a minimum casing wall thickness in accordance with Union Pacific Railroad standards for E80 loading.

Obstructions were encountered throughout the installation of the pilot rods for the 30-inch casing, and in particular at approximately 45 feet and at 120 feet from the beginning of the casing (station 0+40 and 1+15). Based on this and the soil types encountered in the boring installation to date, there is a very high likelihood additional obstructions will be encountered during the casing installation. The 48-inch casing pipe shall be measured by the Linear Foot, complete in place, and paid at the per lineal foot price agreed upon in this Change Order. This unit price payment shall include excavation and backfill, temporary sheeting and shoring, casing pipe, ramming, augering, jacking, obstruction removal, grouting of voids, sand fill, joint restraints, spacers, end seal and all associated work required to install the casing pipe as shown on the plans. The Contractor understands varying methods may be needed (such as hand shoveling) for removing obstructions hindering installation of the casing. As part of the work, the Contractor shall also fill the existing void created at the termination of the existing 30-inch casing, as well as any additional voids created during completion of the work.

By executing this change order the contractor is stating that all claims made to date relating to the 39th Street: Street and Sanitary Sewer Improvements project are resolved in full, and contractor warrants that no claims will be made now or in the future regarding any work completed for any costs incurred on this project to the date of this change order.

Attachments (list documents supporting change): Sheet C401 - Revised March 16, 2015

ITEM	DESCRIPTION OF PAY ITEM	UNIT	QTY	UNIT PRICE	INCREASE/(DECREASE)
CO4-1	48-INCH CASING PIPE	LF	164	$1,300.00	$213,200.00
CO4-2	DEDUCT 28-INCH CASING PIPE (NOT INSTALLED)	LF	-104	$565.00	($58,760.00)
				NET CONTRACT CHANGE	**$154,440.00**

Amount of Original Contract	$ 1,760,458.80
Sum of Additions/Deductions approved to date (CO Nos. 1, 2, 3)	$ 160,624.00
Contract Amount to date	$ 1,921,082.80
Amount of this Change Order (ADD) (~~DEDUCT~~) (~~NO CHANGE~~)	$ 154,440.00
Revised Contract Amount	$ 2,075,522.80

The Contract Period for Final Completion will be (UNCHANGED) (~~INCREASED~~) (~~DECREASED~~) 0 days

APPROVED BY ENGINEER: FOCUS Engineering, Inc.

ENGINEER

~~3/26/2015~~ 4/2/2015

DATE

APPROVED BY CONTRACTOR

BY

4/2/2015

DATE

APPROVED BY OWNER: CITY OF LAKE ELMO, MINNESOTA

BY

DATE

BY

DATE

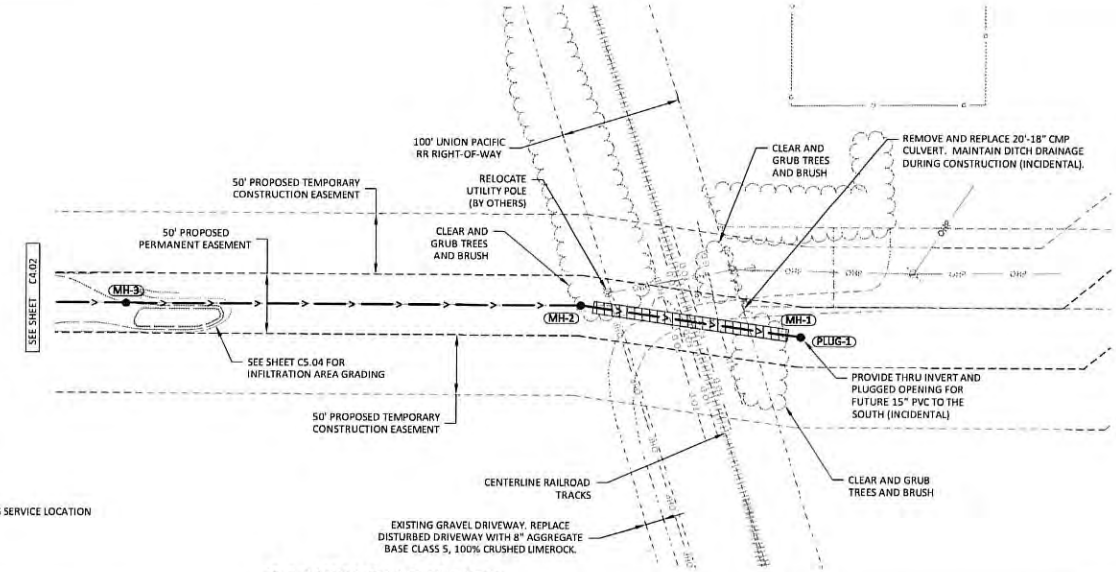
SANITARY SEWER NOTES:
1. STATIONING IN PROFILE REFLECTS PIPE STATIONING.
2. SHADED STATIONING IN PLAN REFLECTS STREET STATIONING.
3. ALL SANITARY SEWER SHALL BE PVC, SDR 26 UNLESS OTHERWISE NOTED.
4. SEE SHEET C0.02 FOR REMOVALS.

WATER MAIN NOTES:
1. ALL WATER MAIN PIPE SHALL BE DIP CLASS 52 WRAPPED IN POLYETHYLENE UNLESS OTHERWISE NOTED.
2. WATER MAIN SHALL HAVE 7.5 FOOT MINIMUM COVER UNLESS OTHERWISE NOTED.
3. HYDRANT ELEVATIONS ARE GIVEN TO TOP NUT.
4. SEE SHEET C0.02 FOR REMOVALS.

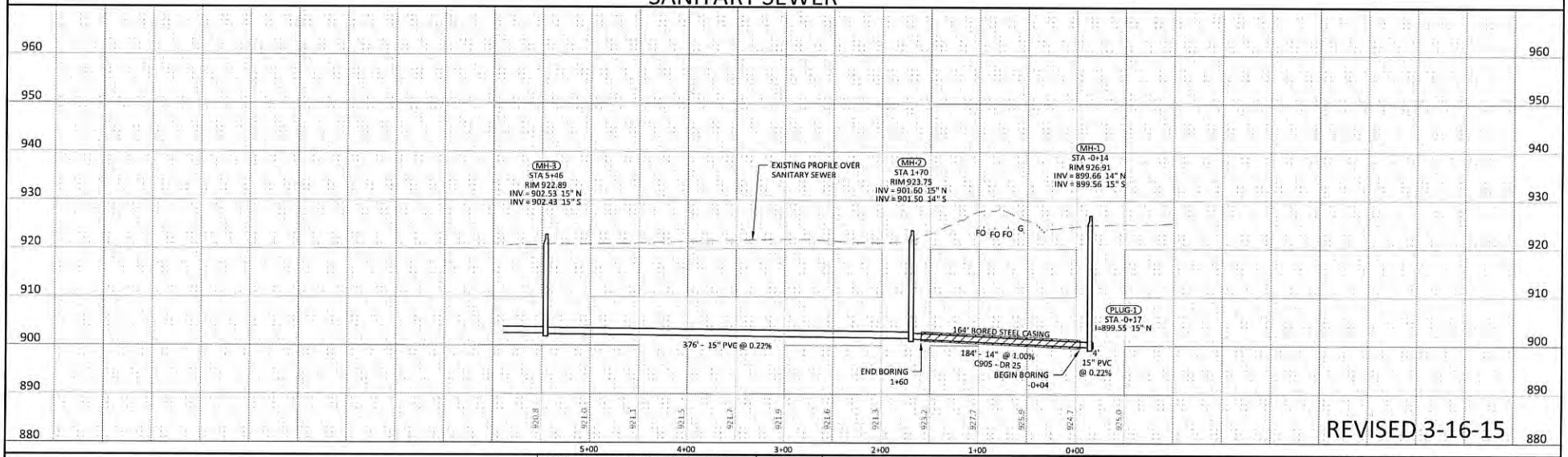
SERVICE NOTES:
1. ALL SANITARY SEWER SERVICE PIPE SHALL BE 6" PVC, SCH 40 UNLESS OTHERWISE NOTED.

TYPICAL SERVICE INFORMATION:

1+50	INDICATES WYE STATION ALONG SEWER ALIGNMENT
1+50*	INDICATES WYE LOCATION IS APPROXIMATE AND SHOULD BE FIELD VERIFIED TO MATCH EXISTING SERVICE LOCATION
897.0	INDICATES TOP OF SEWER RISER ELEVATION AT PROPERTY LINE (WHEN APPLICABLE)
892.0	INDICATES INVERT ELEVATION OF SEWER SERVICE AT PROPERTY LINE
(891.1)	INDICATES TOP OF SEWER RISER ELEVATION AT MAIN (WHEN APPLICABLE)



SANITARY SEWER



REVISED 3-16-15

HORZ. 0 50 100 SCALE FEET
VERT. 0 10 20 SCALE FEET

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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.

MICHAEL R. WARNER
LIC NO. 44693 DATE 3/26/2015

DESIGNED MRW
DRAWN MRW
CHECKED JRR

BOLTON & MENK, INC.
Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE
1	MRW	7/2/14
2	MRW	11/19/14
3	MRW	3/10/15

LAKE ELMO, MINNESOTA
39TH STREET NORTH:
STREET AND SANITARY SEWER IMPROVEMENTS
SANITARY SEWER

SHEET C4.01

THE CITY OF LAKE ELMO

MAYOR & COUNCIL COMMUNICATION

DATE: **April 7, 2015**
REGULAR
ITEM # **16**

AGENDA ITEM: Discussion of City Hall Water Dispensing Solution
SUBMITTED BY: Adam Bell, City Clerk/Assistant City Administrator
THROUGH: Dean Zuleger, City Administrator
REVIEWED BY: Jill Lundgren, Council Member
Beckie Gumatz, Deputy Clerk

SUGGESTED ORDER OF BUSINESS:

- Introduction of Item ..... City Clerk
- Questions from Council to Staff..... Mayor Facilitates
- Call for Motion ..... Mayor & City Council
- Discussion ..... Mayor & City Council
- Action on Motion ..... Mayor Facilitates

POLICY RECOMMENDER: Council Member Lundgren

FISCAL IMPACT: Based on current water consumption rates, the multiple options have the following costs:

Option 1 – Carbon Filter System: Installation cost of $150+; Filter lease costs: $38.48 per month/$461.70 per year.

Option 2 – Water Cooler: One-time equipment purchase of $100-$150; Water costs: $5.49 per month/$65.88 per year.

Option 3 – Individual Bottles: Water costs: $12.76 per month/$153.12 per year.

SUMMARY AND ACTION REQUESTED: It is respectfully requested that the City Council approve one of the following options by making the following motions or a combination thereof:

OPTION 1: "Move to approve the practice of providing drinking water for City Hall by means of purchasing and installing a water filtration system."

OPTION 2: "Move to approve the practice of providing drinking water for City Hall Water by means of purchasing and installing a water cooler system."

OPTION 3: "Move to approve the practice of providing drinking water for City Hall meetings by means of individual water bottles."

BACKGROUND INFORMATION (SWOT):
Due to complaints about the quality and taste of water obtained from the current City Hall water, the City currently provides drinking water for all public meetings as well as for visitors and staff. The current method of providing drinking water is using disposable individual plastic water bottles. Providing clean and safe drinking water is a minimal expense with tremendous health benefits. The water currently provided is the least expensive purified water easily available.

Council Member Lundgren asked staff to look into alternative options for providing drinking water that would have a lesser impact on the environment and reduce the amount of waste produced by the

use of disposable water bottles. Staff currently recycles all plastic, paper, and metal goods, including the plastic water bottles, on a bi-monthly basis as part of its solid waste disposal.

The current method of providing drinking water via disposable bottles goes back to at least 2012. For some time, staff has been researching alternative methods to the bottles and has implemented providing drinking water by means of a water cooler with replaceable 3-5 gallon bottles in the North Building location. Because the City leases space in the facility, installing a water filtration system is not a feasible option at this time.

Option 1 – Carbon Filter System:

Strengths Nearly endless supply of drinking water. Most environmentally friendly solution – nothing to recycle or waste. Can replace current drinking fountain that is rarely used. Option would be the strongest move towards being a more ecological government – one that is concerned about the environment.

Weaknesses Highest cost for providing water based on current consumption, but lowest cost per gallon with higher consumption. Requires equipment lease. Option 1 expenses were not budgeted for in 2015. Space and water source requirements limit placement of dispenser. Need to provide some form of beverage container to drink from. Containers for guests pose a potential source of waste, but paper cups, if used, can be recycled. Requires cleaning.

Option 2 – Water Cooler:

Strengths Most economic option for providing water. Lowest cost per gallon based on current water consumption. City Hall guests would have easier access to water. No individual bottles to recycle. No installation required. Can be placed almost anywhere and moved if needed. Option would be a move towards being a more ecological government in reducing the need of plastic recycling.

Weaknesses Requires initial investment of cooler equipment or lease. Bottles must be replaced periodically. Replacement bottles must be procured or refilled. User needs some form of beverage container to drink from. Containers for guests pose a potential source of waste, but paper cups, if used, can be recycled. Requires cleaning.

Option 3 – Individual Bottles:

Strengths Most convenient, portable, and sanitary option. Relatively low cost. Current costs budgeted for in 2015. No installation required.

Weaknesses Not as convenient to provide self-service water for City Hall guests as dispensing system. Least environmentally friendly solution. Often partially drank bottles are left in room after meetings. Bottles are often thrown in the trash instead of being recycled. Staff is required to frequently purchase the bottles. Harmful Bisphenol (BPA, BPS) chemicals can be released into water from polycarbonate (PCB) bottles.

Opportunities Additional recycling receptacles would increase recycling rate.

RECOMMENDATION: Staff respectfully recommends that the City Council approve one of the following options by making the following motions:

OPTION 1: "Move to approve the practice of providing drinking water for City Hall by means of purchasing and installing a water filtration system."

OPTION 2: "Move to approve the practice of providing drinking water for City Hall Water by means of purchasing and installing a water cooler system."

OPTION 3: "Move to approve the practice of providing drinking water for City Hall meetings by means of individual water bottles."

THE CITY OF LAKE ELMO

MAYOR & COUNCIL COMMUNICATION

DATE: April 7, 2015
REGULAR
ITEM #18
RESOLUTION 2015-25

AGENDA ITEM: Boulder Ponds Planned Residential Subdivision – Developer's Agreement

SUBMITTED BY: Nick M. Johnson, City Planner

THROUGH: Dean Zuleger, City Administrator

REVIEWED BY: Jack Griffin, City Engineer
Dave Snyder, City Attorney
Kyle Klatt, Community Development Director
Stephen Mastey, Landscape Consultant

SUGGESTED ORDER OF BUSINESS:

- Introduction of Item .....Community Development Director
- Report/Presentation.....Community Development Director
- Questions from Council to Staff ..... Mayor Facilitates
- Call for Motion ..... Mayor & City Council
- Discussion ..... Mayor & City Council
- Action on Motion ..... Mayor Facilitates

POLICY RECCOMENDER: Staff is recommending that the City Council approve a developer's agreement associated with the 1st phase of the Boulder Ponds planned residential development. The agreement has been drafted based on a model agreement previously reviewed by the Council and the agreement that was executed for other residential subdivisions.

FISCAL IMPACT: Direct Payments to Developer: The agreement includes sanitary sewer oversizing in the payment amount of $20,633.55. This payment would be made out of the sanitary sewer fund to the developer once the City accepts all of the public improvements. In addition, the agreement includes a credit to the developer for the acquisition of necessary right-of-way from Bremer Bank for the 5th Street minor collector road. The credit amount is $41,846, and is reflected as a reduction to the cash requirements paid to the City. Future financial impacts of the development include maintenance of streets, trails, sanitary sewer mains, watermains and other public infrastructure, maintenance of storm water ponding areas (after three years), maintenance of the landscaping in public areas, monthly lease payments for street lights

(estimated at $76.34 for 11 lights), and other public financial responsibilities typically associated with a new development.

SUMMARY AND ACTION REQUESTED: The City Council is being asked to authorize execution of a developer's agreement related to the Boulder Ponds Final Plat. The attached agreement has been reviewed by the City Attorney, City Engineer, Community Development Director and the City's Landscape Consultant, and all recommend changes specific to the Boulder Ponds project have been incorporated into the document as drafted. This agreement must be executed before any construction activity, outside of the previously authorized grading work, may proceed on the site. The recommended motion to take action on the request is as follows:

"Move to adopt Resolution 2015-25, approving the developer's agreement for the Boulder Ponds planned residential development."

LEGISLATIVE HISTORY/STAFF REPORT: One of the conditions included as part of the Planning Commission recommendation to the Council concerning the Boulder Ponds Final Plat specifies that the developer enter into a Developer's Agreement prior to the execution of the plat by City officials. Staff has drafted such an agreement consistent with the City's developer's agreement template, and this document is attached for consideration by the City Council. Please note that the document as drafted contains some modifications to the original template based on some of the unique aspects of the Boulder Ponds development. The key aspects of the agreement include the following components:

- That all improvements to be completed by October 31, 2016.

- That the developer provide a letter of credit in the amount of 125% of the total cost of the proposed improvements. The construction estimates provided have been reviewed by the City Engineer and found to be accurate. The necessary letter of credit to secure the construction activity and expenses will be $3,610,725.87 for the 1st phase of the Boulder Ponds development.

- That the developer provide a cash deposit of $435,893.46 for SAC and WAC charges, engineering administration, one year of street light operating costs, park land dedication fee, and other City fees.

Regarding City payments to the developer, there are two proposed actions of note in the development agreement:

- The first action is a payment related to the oversizing of sanitary sewer in phase 1 of the Boulder Ponds development. The developer has been directed by the City to oversize segments of sanitary sewer from 8-in pipe to 12-inch pipe in order to accommodate the City's broader sanitary sewer system. The oversizing payment amount had been reviewed by the City Engineer and is $20,633.55. This payment would be made to the

developer once all of the public improvements for the subdivision have been accepted by the City.

- The second action is a credit to the developer for the acquisition costs of public right-of-way related to the 5th Street minor collector road at the Bremer Bank and Stonegate Park pinch-point. In the northwest corner of the Boulder Ponds development, a pinch-point exists between the Bremer Bank financial services facility and Stonegate Park. This pinch-point has always presented a difficulty, as the City's planned minor collector road, 5th Street, must travel through the pinch-point in order to connect to the Inwood development and ultimately Inwood Avenue (CSAH 13). Due to this situation, public-right-of-way must be acquired from the Bremer Bank facility in order to accommodate the minor collector road. When discussing this situation with the developer, City staff presented multiple options to resolve the issue: 1) the City could acquire the necessary right-of-way for the collector road, or 2) the developer could acquire the necessary right-of-way and receive a credit from the City for doing so. Ultimately, the developer decided to acquire the right-of-way, as it was a time-sensitive solution needed to advance the development plans. In selecting this approach, there was an added benefit to the City that it reduced the City's administrative and legal costs needed to acquire the property from Bremer. Staff is recommending that the City provide the developer a credit as a reduction to the Cash requirements in the amount of the purchase price of the property ($41,846). Given the properties' relationship to Stonegate Park, it makes sense from staff's perspective that the offset come out of the parkland dedication funds. To summarize, the developer acquired the necessary right-of-way for the 5th Street minor collector road outside of the developer's property, thereby facilitating the platting and construction of the collector road, resulting in a definite benefit to the City.

STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS:

Strengths: The developer's agreement has been drafted to guarantee that the improvements associated with Boulder Ponds plans will installed in accordance with City specifications. Execution of the developer's agreement and compliance with all conditions in the agreement will allow the developer to record the Boulder Ponds Final Plat. In addition, approval of the Developers Agreement will allow the City to collect the necessary SAC and WAC fees to help finance the City's investments in the municipal sanitary sewer and watermain systems.

Weaknesses: The City will assume responsibility for future maintenance of the public improvements.

Opportunities: The proposed improvements include the extension of the 5th Street minor collector road, the transportation improvement needed to provide adequate public facilities for Stage 1 of the I-94 Corridor Planning Area.

Threats: The City will need to provide construction observation throughout the course of the project (these costs will be covered under an Engineering Administration Escrow).

RECOMMENDATION:

Based on the above Staff Report, Staff is recommending that the City Council approve the Developer's Agreement for Boulder Ponds and that the Council direct the Mayor and Staff to execute this document once the financial security and cash requirements have been recieved. The suggested motion to adopt the Staff recommendation is as follows:

"Move to adopt Resolution 2015-25, approving the developer's agreement for the Boulder Ponds planned residential development."

ATTACHMENTS:

1. Resolution 2015-25
2. Boulder Ponds Development Agreement

CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA

RESOLUTION NO. 2015-25

A RESOLUTION APPROVING THE DEVELOPER'S AGREEMENT FOR THE FIRST PHASE OF THE BOULDER PONDS PLANNED RESIDENTIAL DEVELOPMENT

WHEREAS, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

WHEREAS, OP4 Boulder Ponds, LLC, 11455 Viking Drive, Suite 350, Eden Prairie, MN ("Applicant") has previously submitted an application to the City of Lake Elmo ("City") for a Final Plat for Boulder Ponds; and

WHEREAS, the Lake Elmo City Council considered and approved the Preliminary Plat request for Boulder Ponds at a meeting held on September 16, 2014; and

WHEREAS, The Lake Elmo City Council adopted Resolution No. 2015-23 on April 7, 2015 approving the Final Plat for Boulder Ponds; and

WHEREAS, Condition (3) of said Resolution No. 2015-23 establishes that, prior to the execution of the Final Plat by City officials, the Applicant is to enter into a Developer's Agreement with the City; and

WHEREAS, the Applicant and City have agreed to enter into such a contract, and a copy of the Developer's Agreement was submitted to the City Council for consideration at its April 7, 2015 meeting.

NOW, THEREFORE, based on the information received, the City Council of the City of Lake Elmo does hereby approve the Developer's Agreement for Boulder Ponds and authorizes the Mayor and City Clerk to execute the document.

Passed and duly adopted this 7th day of April 2015 by the City Council of the City of Lake Elmo, Minnesota.

_____
Mike Pearson, Mayor

ATTEST:

_____
Adam Bell, City Clerk

(reserved for recording information)

DEVELOPMENT CONTRACT

(Site grading, public sewer and water)

Boulder Ponds

THIS DEVELOPMENT CONTRACT (the "Contract") dated_____ _____, 2015, is entered into by and between the **CITY OF LAKE ELMO,** a Minnesota municipal corporation ("City"), and OP4 Boulder Ponds, LLC (the "Developer").

1. REQUEST FOR PLAT APPROVAL. The Developer has asked the City to approve the plat for Boulder Ponds (referred to in this Contract as the "plat"). The land is situated in the County of Washington, State of Minnesota, and legally described in Exhibit "A".

2. CONDITIONS OF PLAT APPROVAL. The City hereby approves the plat on condition that the Developer enter into this Contract, furnish the security required as and when required by it, and record the plat with the County Recorder or Registrar of Titles within (180) days after the City Council approves the final plat.

3. RIGHT TO PROCEED. Unless separate written approval has been given by the City, within the plat or land to be platted, the Developer may not grade or otherwise disturb the earth, remove trees, construct sewer lines, water lines, streets, utilities, public or private improvements, or any buildings until all the following conditions have been satisfied: 1) this Contract has been fully executed by both parties and filed with the City Clerk, 2) the necessary security has been received by the City, 3) the plat and

required homeowner's association documents have been recorded with the Washington County Recorder's Office, and 4) the City's Community Development Director has issued a letter that all conditions have been satisfied, a preconstruction conference has been held, and that the Developer may proceed.

4. PHASED DEVELOPMENT. This plat is a phase of a multi-phased preliminary plat, the City may refuse to approve final plats of subsequent phases if the Developer has breached this Contract and the breach has not been remedied. Development of subsequent phases may not proceed until Development Contracts for such phases are approved by the City. Park charges and area charges for sewer and water referred to in this Contract are not being imposed on outlots, if any, in the plat that are designated in an approved preliminary plat for future subdivision into lots and blocks. Such charges will be calculated and imposed when the outlots are final platted into lots and blocks unless previously paid as part of an earlier development phase.

5. PRELIMINARY PLAT STATUS. The plat is a phase of a multi-phased preliminary plat, the preliminary plat approval for all phases not final platted shall lapse and be void unless final platted into lots and blocks, not outlots, within five (5) years after preliminary plat approval.

6. CHANGES IN OFFICIAL CONTROLS. For two (2) years from the date of this Contract, no amendments to the City's Comprehensive Plan or official controls shall apply to or affect the residential use, development density, lot size, lot layout or dedications of the approved final plat unless required by state or federal law or agreed to in writing by the City and the Developer. Thereafter, notwithstanding anything in this Contract to the contrary, to the full extent permitted by state law, the City may require compliance with any amendments to the City's Comprehensive Plan, official controls, platting or dedication requirements enacted after the date of this Contract.

7. DEVELOPMENT PLANS. The plat shall be developed in accordance with the following plans and at the Developer's sole expense. The plans shall not be attached to this Contract. If the plans vary from the written terms of this Contract, the written terms of this Contract shall control. The plans are:

Plan A – Final Plat

Plan B – Final Grading, Drainage, and Erosion Control Plans

Plan C – Final Sanitary Sewer, Water Main, Storm Sewer, and Street Plans

Plan D – Final Landscape Plan

8. IMPROVEMENTS. The Developer shall install and pay for the following:

A. Streets
B. Sanitary Sewer
C. Watermain
D. Surface Water Facilities (pipe, ponds, rain gardens, etc.)
E. Grading and Erosion Control
F. Sidewalks/Trails
G. Street Lighting
H. Underground Utilities
I. Street Signs and Traffic Control Signs
J. Landscaping and Street Trees
K. Tree Preservation and Reforestation
L. Wetland Mitigation and Buffers
M. Monuments Required by Minnesota Statutes

The improvements shall be installed in accordance with the City subdivision ordinance and the City's Engineering Design and Construction Standards Manual and pursuant to the direction of the City Engineer. The Developer shall submit plans and specifications which have been prepared by a competent registered professional engineer to the City for approval by the City Engineer. The Developer shall instruct its engineer to provide adequate field inspection personnel to assure an acceptable level of quality control to the extent that the Developer's engineer will be able to certify that the construction work meets the approved City standards as a condition of City acceptance. In addition, the City may, at the City's discretion and at the Developer's expense, have one or more City inspectors and a soil engineer inspect the work on a full or part-time basis. The Developer's engineer shall provide for on-site project management. The Developer's engineer is responsible for design changes and contract administration between the Developer

and the Developer's contractor. The Developer or its engineer shall schedule a pre-construction meeting at a mutually agreeable time at the City Hall with all parties concerned, including the City staff, to review the program for the construction work.

All labor and work shall be done and performed in the best and most workmanlike manner and in strict conformance with the approved plans and specifications. No deviations from the approved plans and specifications will be permitted unless approved in writing by the City Engineer. The Developer agrees to furnish to the City a list of contractors being considered for retention by the Developer for the performance of the work required by the Contract. The Developer shall not do any work or furnish any materials not covered by the plans and specifications and special conditions of this Contract, for which reimbursement is expected from the City, unless such work is first ordered in writing by the City Engineer as provided in the specifications.

9. CITY ENGINEERING ADMINISTRATION AND CONSTRUCTION OBSERVATION. Prior to the commencement of any construction activity authorized under this agreement, the Developer shall submit an escrow for City Engineering Administration and Construction Observation in an amount provided under paragraph 36. Summary of Cash Requirements. Thereafter, the Developer shall reimburse the City each month, within 30 days of receiving an invoice, for all engineering administration and construction observation performed during the construction of the plat. If the amounts remain unpaid after 30 days of the date of the invoice, the City may draw upon the escrow and stop the work on site until said escrow has been replenished in its full amount. City engineering administration will include monitoring of construction progress and construction observation, consultation with Developer and its engineer on status or problems regarding the project, coordination for testing, final inspection and acceptance, project monitoring during the warranty period, and processing of requests for reduction in security. Construction observation may be performed by the City's in-house staff or consulting engineer. Construction observation shall include, at the discretion of the City, part or full time inspection of proposed public utilities and street construction. Services will be billed on an hourly basis.

The direction and review provided through the inspection of the improvements should not be considered a substitute for the Developer required management of the development. Developer will cause the contractor(s) to furnish the City with a schedule of proposed operations at least five (5) days prior to the commencement of construction of each type of Improvement. City shall inspect all Developer installed improvements during and after construction for compliance with approved plans and specifications. Developer will notify the City Engineer at such times during construction as the City Engineer requires for inspection purposes. Such inspection is pursuant to the City's governmental authority, and no agency or joint venture relationship between the City and Developer is thereby created.

10. CONTRACTORS/SUBCONTRACTORS. City Council members, City employees, and City Planning Commission members, and corporations, partnerships, and other entities in which such individuals have greater than a 25% ownership interest or in which they are an officer or director may not act as contractors or subcontractors for the public improvements identified in Paragraph 8 above.

11. PERMITS. The Developer shall obtain or require its contractors and subcontractors to obtain all necessary permits, including but not limited to:

A. Right-of-Way Excavations and Obstructions:
- City of Lake Elmo, Right-of-Way Utility Installation(s)
- City of Lake Elmo, Right-of-Way Obstruction(s)
- Washington County, Utility Installations(s)
- Washington County, Street or Driveway Access(s)
- Minnesota Department of Transportation, Utility Installation
- Minnesota Department of Transportation, Right-of-Way Permit

B. Watermain Extensions:
- Minnesota Department of Health

C. Sanitary Sewer Extensions:
- Minnesota Pollution Control Agency
- Metropolitan Council Environmental Services

D. Stormwater Management:
- Valley Branch, Brown's Creek or South Washington Watershed District Permit

E. Erosion, Sedimentation Control:
- Minnesota Pollution Control Agency, General NPDES Stormwater Permit
- SWPPP (Stormwater Pollution Prevention Plan)

F. Wetland Mitigation:
- Board of Water and Soil Resources, WCA

G. Construction Dewatering:
- Minnesota Department of Natural Resources

12. TIME OF PERFORMANCE. The Developer shall install all required public improvements by October 31, 2016, with the exception of the final wear course of asphalt on streets. The Developer shall have the option of installing the wearing course of streets within one (1) year following initial commencement of work on the required basic improvements or installing it after the first course has weathered a winter season, consistent with warranty requirements, however final acceptance of the improvements will not be granted until all work is completed including the final wear course. The Developer may, however, request an extension of time from the City. If an extension is granted, it shall be conditioned upon updating the security posted by the Developer to reflect cost increases and amending this Contract to reflect the extended completion date. Final wear course placement outside of this time frame must have the written approval of the City Engineer.

13. LICENSE. The Developer hereby grants the City, its agents, employees, officers and contractors a license to enter the plat to perform all work and inspections deemed appropriate by the City in conjunction with plat development.

14. CONSTRUCTION ACCESS. Construction traffic access and egress for grading, public utility construction, and street construction is restricted to access the subdivision via the planned construction access off of Hudson Boulevard North. No construction traffic is permitted on other adjacent local streets.

15. CONSTRUCTION SEQUENCE AND COMPLIANCE. The City will require the Developer to construct the improvements in a sequence which will allow progress and compliance points to be measured and evaluated. The Developer and/or its representatives are required to supervise and coordinate all construction activities for all improvements and must notify the City in writing stating when the work is ready for the inspection at each of the measurable points defined in the following paragraphs 16., 17. and 18. For the purpose of this paragraph, Electronic message (email) shall be

deemed an acceptable method of notification provided it is captioned "Notice pursuant to Development Agreement".

16. EROSION CONTROL. Prior to initiating site grading, the erosion control plan, Plan B, shall be implemented by the Developer and inspected and approved by the City. Erosion control practices must comply with the approved plans and specifications for the plat, with all watershed district permits and with Minnesota Pollution Control Agency's Best Management Practices. The City may impose additional erosion control requirements as deemed necessary. The parties recognize that time is of the essence in controlling erosion. If the Developer does not comply with the erosion control plan and schedule or supplementary instructions received from the City, the City may take such action as it deems appropriate to control erosion. The City will endeavor to notify the Developer in advance of any proposed action, but failure of the City to do so will not affect the Developer's and City's rights or obligations hereunder. If the Developer does not reimburse the City for any cost the City incurred for such work within ten (10) days after submitting an invoice for such costs, the City may draw down the security to pay any costs incurred by the City. No development, utility or street construction will be allowed and no building permits will be issued unless the plat is in full compliance with the approved erosion control plan.

If building permits are issued prior to the acceptance of public improvements, the Developer assumes all responsibility for erosion control compliance throughout the plat until such time as the public improvements are accepted and the City may take such action as allowed by this Contract against the Developer for any noncompliant issue as stated above. Erosion control plans for individual lots will be required in accordance with the City's building permit requirements, or as required by the City or City Engineer.

17. GRADING PLAN. The plat shall be graded in accordance with the approved grading drainage and erosion control plan, Plan "B". The plan shall conform to Engineering Design and Construction Standards Manual. All grading shall be completed within the subdivision prior to the preparation and submittal of the as-constructed grading plan.

Within thirty (30) days after completion of the grading, the Developer shall provide the City with a

"record" grading plan certified by a registered land surveyor or engineer that all trails, ponds, swales, and ditches have been constructed on public easements or land owned by the City. The "record" plan shall contain site grades and field verified elevations of the following: a) cross sections of ponds; b) location and elevations along all swales, emergency overflows, wetlands, wetland mitigation areas if any, ditches, locations and dimensions of borrow areas/stockpiles; c) lot corner elevations and house pads; and d) top and bottom of retaining walls. The City will not issue any building permits until the approved certified record grading plan is on file with the City.

18. STREET AND UTILITY IMPROVEMENTS. All storm sewers, sanitary sewers, watermain, and streets shall be installed in accordance with the approved Plans and Specifications for Public Improvements, Plan "C". The plan shall conform to the City's Engineering Design and Construction Standards Manual. Curb and gutter and the first lift of the bituminous streets, sidewalks, the boulevards graded, street signs installed, and all restoration work on the site shall be completed in accordance with the approved plans. Once the work is completed, the Developer or its representative shall submit a written request to the City asking for an inspection of the initial improvements. The City will then schedule a walk-through to create a punch list of outstanding items to be completed. Upon receipt of the written punch list provided by the City, the punch list items must be completed by the Developer and the City notified to re-inspect the improvements. The final bituminous wear course may be installed in accordance with paragraph 12. above.

19. STREET MAINTENANCE DURING CONSTRUCTION. The Developer shall be responsible for all street maintenance until the streets are accepted by the City in writing. Warning signs shall be placed when hazards develop in streets to prevent the public from traveling on same and to direct attention to detours. If and when streets become impassable, such streets shall be barricaded and closed. In the event residences are occupied prior to completing streets, the Developer shall maintain a smooth surface and provide proper surface drainage to insure that the streets are passable to traffic and emergency vehicles. The Developer shall be responsible for keeping streets within and without the subdivision clean of dirt and debris that may spill, track, or wash onto the street from Developer's operation. The Developer may request, in writing, that the City keep the streets open during the winter

months by plowing snow from the streets prior to final acceptance of said streets. The City shall not be responsible for repairing the streets because of snow plowing operations. Providing snow plowing service does not constitute final acceptance of the streets by the City. The Developer shall contract for street cleaning within and immediately adjacent to the development. At a minimum, scraping and sweeping shall take place on a weekly basis. A copy of this contract shall be approved by the City before grading is started. The contract shall provide that the City may direct the contractor to clean the streets and the contractor will bill the Developer.

20. OWNERSHIP OF IMPROVEMENTS. Upon completion of the work and construction required by this Contract, the improvements lying within public easements shall become City property. Prior to acceptance of the improvements by the City, the Developer must furnish the City with a complete set of reproducible "record" plans, an electronic file of the "record" plans in accordance with the City's Engineering Design and Construction Standards Manual together with the following affidavits:

- Developer/Developer Engineer's Certificate
- Land Surveyor's Certificate

certifying that all construction has been completed in accordance with the terms of this Contract. All necessary forms will be furnished by the City. Upon receipt of "record plans" and affidavits, and upon review and verification by the City Engineer, the City Engineer will accept the completed public improvements.

21. PARK DEDICATION. The Developer shall pay a cash contribution of $143,648.38 in satisfaction of the City's park dedication requirements. This charge is based on the park dedication requirement for all the residential areas to be platted within Boulder Ponds Preliminary Plat. No additional fees in lieu of land dedication will be charged for future residential developments within the preliminary plat area. The charge was calculated as follows: 2.57 acres (1.77 acres of park land provided subtracted from 4.34 acres of park land required) at $55,894.31 per acre per the agreed upon appraisal for the property.

22. SANITARY SEWER AND WATER UTILITY AVAILABILITY CHARGES (SAC AND WAC). The Developer shall be responsible for the payment of all sewer availability charges (SAC)

and all water availability charges (WAC) with respect to the Improvements required by the City and any stat or metropolitan government agency. The sewer availability charge (SAC) in the amount of $3,000.00 per REU shall be paid by the Developer prior to the City recording the final plat. The total SAC amount to be paid by the Developer is $141,000. The water availability charge (WAC) in the amount of $3,000.00 per REU shall be paid by the Developer prior to the City recording the final plat. The total WAC amount to be paid by the Developer is $141,000. In addition, a sewer connection charge in the current amount of $1,000.00 per REU, a Met Council sewer availability charge in the current amount of $2,435.00 per REU, and a water connection charge in the current amount of $1,000.00 per REU will be collected by the City at the time the building permit is issued for each lot. These amounts are charged at the time of building permit in accordance with the latest City fee schedule.

23. TRAFFIC CONTROL SIGNS. Traffic control signs shall be included as part of the public street improvements, and the installation costs shall be included in the street construction calculations.

24. STREET LIGHTS. The Developer is responsible for the installation of street lights consistent with a street lighting plan approved by the City. The Developer shall coordinate the installation of street lights with Xcel Energy in conjunction with the other improvements, and agrees to pay Xcel Energy for all upfront costs associated with the street lighting system, including underground cables, posts, lamps, ballasts, starters, photocells, and glassware. All street lights will be leased by the City upon final acceptance of the system. The Developer shall also pay $916.08 in payment for the first year operating costs for street lights.

25. WETLAND MITIGATION. The Developer shall complete wetland mitigation/restoration in accordance with the approved Plans and Specifications and in accordance with any applicable Watershed or agency Permits. If the mitigation work is found to be incomplete or restoration is unsuccessful the City may draw down the security at any time during the warranty period to be used by the City to perform the work if the Developer fails to perform the work.

26. BUILDING PERMITS/CERTIFICATES OF OCCUPANCY.

A. Public sewer and water, curbing, and one lift of asphalt shall be installed on all public and private streets prior to issuance of any building permits, except two model homes on lots acceptable to the Community Development Director.

B. Prior to issuance of building permits, wetland buffer monuments shall be placed in accordance with the City's zoning ordinance. The monument design shall be approved by the Community Development Department.

C. Written certification of the as-constructed grading must be on file at the City for the block where the building is to be located.

D. Breach of the terms of this Contract by the Developer, including nonpayment of billings from the City, shall be grounds for denial of building permits and/or withholding of other permits, inspection or actions, including lots sold to third parties, and the halting of all work in the plat.

E. If building permits are issued prior to the acceptance of public improvements, the Developer assumes all liability and costs resulting in delays in completion of public improvements and damage to public improvements caused by the City, Developer, their contractors, subcontractors, materialmen, employees, agents, or third parties.

F. No sewer and water connection permits may be issued until the streets needed for access have been paved with a bituminous surface and the utilities are tested and approved by the City Engineer.

G. The City will not issue a certificate of occupancy for any building constructed on any lot or parcel in the plat, including any model homes authorized under this agreement, until Public sewer and water, curbing, and one lift of asphalt is installed on all public and private streets; all utilities are tested and approved by the City Engineer; the as-constructed grading must be on file at the City for the block where the building is to be located; and the required homeowner's association documents have been recorded with the Washington County Recorder's Office.

27. RESPONSIBILITY FOR COSTS.

A. In the event that the City receives claims from labor, materialmen, or others that work required by this Contract has been performed, the sums due them have not been paid, and the laborers, materialmen, or others are seeking payment from the City, the Developer hereby authorizes the City to commence an Interpleader action pursuant to Rule 22, Minnesota Rules of Civil Procedure for the District Courts, to draw upon the letters of credit in an amount up to 125 percent of the claim(s) and deposit the funds in compliance with the Rule, and upon such deposit, the Developer shall release, discharge, and dismiss the City from any further proceedings as it pertains to the letters of credit deposited with the District Court, except that the Court shall retain jurisdiction to determine payment of attorneys' fees pursuant to this Contract.

B. Except as otherwise specified herein, the Developer shall pay all costs incurred by it or the City in conjunction with the development of the plat, including but not limited to legal, planning, engineering and inspection expenses incurred in connection with approval and acceptance of the plat, the preparation of this Contract, review of construction plans and documents, and all costs and expenses incurred by the City in monitoring and inspecting development of the plat. All amounts incurred and due at the time, must be fully paid prior to execution and release of the final plat for recording.

C. The Developer shall hold the City and its officers, employees, and agents harmless from claims made by itself and third parties for damages sustained or costs incurred resulting from plat approval and development. The Developer shall indemnify the City and its officers, employees, and agents for all costs, damages, or expenses which the City may pay or incur in consequence of such claims, including attorneys' fees.

D. The Developer shall reimburse the City for costs incurred in the enforcement of this Contract, including reasonable engineering and attorneys' fees.

E. The Developer shall pay, or cause to be paid when due, and in any event before any penalty is attached, all special assessments referred to in this Contract. This is a personal obligation of the Developer and shall continue in full force and effect even if the Developer sells one or more lots, the entire plat, or any part of it.

F. The Developer shall pay in full all bills submitted to it by the City for obligations

incurred under this Contract within thirty (30) days after receipt. Bills not paid within thirty (30) days shall be assessed a late fee per the City's adopted Fee Schedule. Upon request, the City will provide copies of detailed invoices of the work performed.

28. CITY PAYMENTS. In the event City payments are required by Section 29.A below, within thirty (30) days of the City's final acceptance of the Improvements, pursuant to Section 20 of the Contract, but only if the Developer is not in default to this Contract, the City shall pay to the Developer the sums set forth in the attachment to this Contract as Exhibit B. The actual amount of the reimbursement shall be based on actual construction costs which will be verified by the Developer to the City in the Plans submitted to the City as required in Section 20. This payment by the City shall be the City's only responsibility with regard to construction of the Improvements and in no case shall act as a waiver of any other right of the City under this Contract or under applicable laws, ordinances or rules.

A. City payments pursuant to this Contract shall be: $20, 633.55.

29. SPECIAL PROVISIONS. The following special provisions shall apply to plat development:

A. Implementation of the recommendations listed in the March 4, 2015 and March 13, 2015 Engineering memorandums.

B. Before the City signs the final plat, the Developer shall convey Outlots D, E, G, I and L to the City by warranty deed, free and clear of any and all encumbrances.

C. The Developer shall install a temporary turnaround on any streets that will be extended into adjacent developments in the future as directed by the City Engineer.

D. The Developer must obtain a sign permit from the City Building Official prior to installation of any permanent subdivision identification signs.

E. The Developer shall provide for a minimum green belt/buffer of 100 feet around all of the adjacent Stonegate subdivision. This buffer shall be secured by a covenant running in favor of the City.

F. All trails shall be located within the easements or dedicated to the City. Title

commitments shall be provided for all land so dedicated.

G. The Developer shall enter into a maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public park and open space on the final plat.

H. Any unencumbered land under which public trails are located will be accepted as park land provided the Developer constructs said trails within the dedicated areas as part of the public improvements for the subdivision and easements are provided where required by the City.

I. (Other requirements).

30. MISCELLANEOUS.

A. The Developer may not assign this Contract without the written permission of the City. The Developer's obligation hereunder shall continue in full force and effect even if the Developer sells one or more lots, the entire plat, or any part of it.

B. Retaining walls that require a building permit shall be constructed in accordance with plans and specifications prepared by a structural or geotechnical engineer licensed by the State of Minnesota. Following construction, a certification signed by the design engineer shall be filed with the City Engineer evidencing that the retaining wall was constructed in accordance with the approved plans and specifications. All retaining walls identified on the development plans or by special conditions referred to in this Contract shall be constructed before any other building permit is issued for a lot on which a retaining wall is required to be built.

C. Appropriate legal documents regarding Homeowner Association documents, covenants and restrictions relating to the plat approval and outlots and conveyances, as approved by the City Attorney, shall be filed with the final plat. . No third- party beneficiary status is hereby conferred. All outlots (except Outlots D, E, G, I and L) and common areas, including Outlots C, H, J and K, shall be maintained in good order and repair by the Developer or a homeowner's association depending on which party owns the applicable Outlot, and, they it do not do so when requested by the City, then the City may perform the work and assess the costs against the Developer or the individual

lots within the plat of Boulder Ponds, as applicable, and without regard to the formalities or requirements of Minn. Stat. § 429.

D. Developer shall take out and maintain or cause to be taken out and maintained until six (6) months after the City has accepted the public improvements, public liability and property damage insurance covering personal injury, including death, and claims for property damage which may arise out of Developer's work or the work of its subcontractors or by one directly or indirectly employed by any of them. Limits for bodily injury and death shall be not less than $500,000 for one person and $1,000,000 for each occurrence; limits for property damage shall be not less than $200,000 for each occurrence; or a combination single limit policy of $1,000,000 or more. The City shall be named as an additional insured on the policy, and the Developer shall file with the City a certificate evidencing coverage prior to the City signing the plat. The certificate shall provide that the City must be given thirty (30) days advance written notice of the cancellation of the insurance.

E. Third parties shall have no recourse against the City under this Contract.

F. If any portion, section, subsection, sentence, clause, paragraph, or phrase of this Contract is for any reason held invalid, such decision shall not affect the validity of the remaining portion of this Contract.

G. The action or inaction of the City shall not constitute a waiver or amendment to the provisions of this Contract. To be binding, amendments or waivers shall be in writing, signed by the parties and approved by written resolution of the City Council. The City's failure to promptly take legal action to enforce this Contract shall not be a waiver or release.

H. This Contract shall run with the land and may be recorded against the title to the property. The Developer covenants with the City, its successors and assigns, that the Developer has fee title to the property being final platted and/or has obtained consents to this Contract, in the form attached hereto, from all parties who have an interest in the property; that there are no unrecorded interests in the property being final platted ; and that the Developer will indemnify and hold the City harmless for any breach of the foregoing covenants.

I. Each right, power or remedy herein conferred upon the City is cumulative and in addition to every other right, power or remedy, express or implied, now or hereafter arising, available to City, at law or in equity, or under any other agreement, and each and every right, power and remedy herein set forth or otherwise so existing may be exercised from time to time as often and in such order as may be deemed expedient by the City and shall not be a waiver of the right to exercise at any time thereafter any other right, power or remedy.

J. The Developer represents to the City that the plat complies with all city, county, metropolitan, state, and federal laws and regulations, including but not limited to: subdivision ordinances, zoning ordinances, and environmental regulations. If the City determines that the plat does not comply, the City may, at its option, refuse to allow construction or development work in the plat until the Developer does comply. Upon the City's demand, the Developer shall cease work until there is compliance.

31. EVENTS OF DEFAULT. The following shall be "Events of Default" under this Agreement and the term "Event of Default" shall mean, whenever it is used in this Agreement, any one or more of the following events:

A. Subject to Unavoidable Delays, failure by Developers to commence and complete construction of the public improvements pursuant to the terms, conditions and limitations of this Contract.

B. Failure by Developers to substantially observe or perform any material covenant, condition, obligation or agreement on their part to be observed or performed under this Contract.

32. REMEDIES ON DEFAULT. Whenever any Event of Default occurs, the City, subject to any rights of third parties agreed to by the City pursuant to this Contract, or otherwise by written, executed instrument of the City, may take any one or more of the following:

A. The City may suspend its performance under this Contract until it receives assurances from Developer, deemed adequate by the City, that Developer will cure its default and continue its performance under this Contract. Suspension of performance includes the right of the City to withhold permits including, but not limited to, building permits.

B. The City may initiate such action, including legal or administrative action, as is necessary for the City to secure performance of any provision of this Contract or recover any amounts due under this Contract from Developer, or immediately draw on the Letter of Credit, as set forth in this Contract. In the event of any uncorrected failure to maintain any common area or landscape areas, the City may undertake to do the work and assess the costs to the individual lots within the plat without regard to the formalities or requirements of Minn. Stat. § 429.

33. ENFORCEMENT BY CITY; DAMAGES. The Developer acknowledges the right of the City to enforce the terms of this Contract against the Developer, by action for specific performance or damages, or both, or by any other legally authorized means. The Developer also acknowledges that its failure to perform any or all of their obligations under this Contract may result in substantial damages to the City; that in the event of default by the Developer, the City may commence legal action to recover all damages, losses and expenses sustained by the City; and that such expenses may include, but are not limited to, the reasonable fees of legal counsel employed with respect to the enforcement of this Contract.

34. WARRANTY. The Developer warrants all improvements required to be constructed by it pursuant to this Contract against poor material and faulty workmanship. The Developer shall submit either a letter of credit or cash escrow or a combination cash escrow and letter of credit in the amount of twenty-five percent (25%) of the amount of the original cost of the improvements.

A. The required warranty period for materials and workmanship for the utility contractor installing public sewer and water mains shall be two (2) years from the date of final written City acceptance of the work.

B. The required warranty period for all work relating to street construction, including concrete curb and gutter, sidewalks and trails, materials and equipment shall be one (1) year from the date of final written acceptance, unless the wearing course is placed during the same construction season as the bituminous base course. In those instances, the Developer shall guarantee all work, including street construction, concrete curb and gutter, sidewalks and trails, material and equipment for a period of two (2) years from the date of final written City acceptance of the work.

C. The required warranty period for sod, trees, and landscaping is two growing seasons following installation.

D. The required warranty for landscaping within storm water infiltration areas (Outlot D and Outlot J) shall be three (3) years following installation. The Developer shall also enter into a maintenance agreement with the City for a period of three (3) years prior to acceptance of the landscaping within these storm water infiltration areas. Said maintenance agreement shall include requirements for the proper care of native plantings and the elimination of weeds and invasive species.

35. SUMMARY OF SECURITY REQUIREMENTS. To guarantee compliance with the terms of this Contract, payment of special assessments, payment of the costs of all public improvements, and construction of all public improvements, the Developer shall furnish the City with an irrevocable letter of credit, in the form attached hereto, from a bank, cash escrow or a combination cash escrow and Letter of Credit ("security") for **$3,610,725.87**. The amount of the security was calculated as follows:

CONSTRUCTION COSTS:

Streets (includes Sidewalks/Trails & Street Signs/ Traffic Control Signs)	$ 1,084,326.92
Sanitary Sewer	$ 405,450.61
Watermain	$349,673.91
Surface Water Facilities (pipe, ponds, rain gardens, etc.)	$ 721,027.26
Grading	$68,194.00
Erosion Control	$48,406.00
Street Lighting	Xcel to Install, to be pre-paid directly by Developer
Landscaping	$ 204,302.00
Tree Preservation and Restoration	$0 (included with Erosion Control)
Wetland Mitigation and Buffers	Separate letter of credit through Watershed District
Monuments	$4,700.00 (100 per single family lot; $50 per townhome lot)

Miscellaneous Facilities	N/A
Developer's Record Drawings	$2,500
Construction Sub-Total	**$ 2,888,580.70**
Total Project Securities (at 125% Construction Costs)	**$ 3,610,725.87**

This breakdown is for historical reference; it is not a restriction on the use of the security. The bank shall be subject to the approval of the City Administrator. The City may draw down the security, without notice, for any violation of the terms of this Contract or if the security is allowed to lapse prior to the end of the required term. If the required public improvements are not completed at least thirty (30) days prior to the expiration of the security, the City may also draw it down. If the security is drawn down, the proceeds shall be used to cure the default.

35. REDUCTION OF SECURITY. Upon written request by the Developer and upon receipt of proof satisfactory to the City Engineer that work has been completed and financial obligations to the City have been satisfied, with City Engineer approval the security may be reduced as follows:

A. Up to 50%, or $1,805,362.94 of the security provided in accordance with paragraph 34. above may be released when: (1) Developer's obligations under this Contract have been completed and the public improvements have been found to be complete to the satisfaction of the City including all corrective work for any identified punch list items, but not including the final wear course; and (2) completion of the improvements is done to the satisfaction of the City and evidence of such is provided by the City in writing and satisfactory evidence of payment, such as lien waivers are provided.

B. Up to an additional 25%, or $902,681.48 of the security provided in accordance with paragraph 34. above may be released when: (1) Developer's obligations under this Contract have been completed and the improvements have been found to be complete to the satisfaction of the City including all corrective work for any identified punch list items and including the final wear course; and (2) the improvements are accepted by the City in writing and satisfactory evidence of payment, such as lien waivers, are provided.

C. Twenty percent (25%) of the amounts certified by the Developer's engineer shall be retained as security until: (1) all improvements have been completed, (2) iron monuments for lot corners have been installed, (3) all financial obligations to the City satisfied, (4) the required "record" plans have been received and approved by the City, (5) a warranty security is provided, and (6) the public improvements are accepted by the City.

36. SUMMARY OF CASH REQUIREMENTS. The following is a summary of the cash requirements under this Contract which must be furnished to the City at the time of final plat approval:

Sewer Availability Charge (SAC)	$141,000.00
Water Availability Charge (WAC)	$141,000.00
Park Dedication	$143,648.38
Street Light Operating Fee	$916.08
City Base Map Upgrading	$1,175.00
City Engineering Administration Escrow	$50,000 (Based on two months of administration/observation)
Total Cash Requirements	**$477,739.46**
Less Credit for 5th Street ROW Acquisition Costs	**$41,846.00**
Adjusted Total Cash Requirements	**$435,893.46**

37. NOTICES. Required notices to the Developer shall be in writing, and shall be either hand delivered to the Developer, its employees or agents, or mailed to the Developer by certified mail at the following address: 11455 Viking Drive, Suite 350, Eden Prairie, MN 55344. Notices to the City shall be in writing and shall be either hand delivered to the City Administrator, or mailed to the City by certified mail in care of the City Administrator at the following address: Lake Elmo City Hall, 3800 Laverne Avenue N. Lake Elmo, Minnesota 55042.

38. EVIDENCE OF TITLE. Developer shall furnish the City with evidence of its fee ownership of the property being platted by way of an attorney's title opinion or title insurance policy dated not earlier

than thirty (30) days prior to the execution of the plat.

CITY OF LAKE ELMO

BY: _____
, Mayor

(SEAL)

AND _____
, City Clerk

STATE OF MINNESOTA)
(ss.
COUNTY OF WASHINGTON)

The foregoing instrument was acknowledged before me this_____day of_____, 2015, by_____and by_____, the Mayor and City Clerk of the City of Lake Elmo, a Minnesota municipal corporation, on behalf of the corporation and pursuant to the authority granted by its City Council.

_____
NOTARY PUBLIC

DEVELOPER:

BY: _____
Its

STATE OF MINNESOTA)
(ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me this_____day of _____, 2_____, by _____the _____ of OP4 Boulder Ponds, LLC, a Minnesota limited liability company.

_____
NOTARY PUBLIC

DRAFTED BY:
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042
(651) 747-3901

FEE OWNER CONSENT
TO
DEVELOPMENT CONTRACT

_____, fee owners of all or part of the subject property, the development of which is governed by the foregoing Development Contract, affirm and consent to the provisions thereof and agree to be bound by the provisions as the same may apply to that portion of the subject property owned by them.

Dated this_____day of_____, 2_____.

_____

_____

STATE OF MINNESOTA)
(ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me this_____day of_____, 2____, by_____.

_____
NOTARY PUBLIC

DRAFTED BY:
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042
(651) 747-3901

MORTGAGE CONSENT
TO
DEVELOPMENT CONTRACT

_____, which holds a mortgage on the subject property, the development of which is governed by the foregoing Development Contract, agrees that the Development Contract shall remain in full force and effect even if it forecloses on its mortgage.

Dated this_____day of_____, 2_____.

_____

_____

STATE OF MINNESOTA)
(ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me this _____ day of_____, 2_____, by_____.

_____
NOTARY PUBLIC

DRAFTED BY:
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042
(651) 747-3901

_____
_____

_____

EXHIBIT "A" TO
DEVELOPMENT CONTRACT

Legal Description of Property Being Final Platted as Boulder Ponds

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That part of the East Half of the Northwest Quarter of the Southwest Quarter and the West Half of the West Half of the Southwest Quarter in Section 34, Township 29, Range 21, Washington County, Minnesota, lying North of the North line of Minnesota Department of Transportation Right of Way Plat No. 82-43 filed March 22, 1982, as Document No. 429592.

AND

That part of the East Half of the Southwest Quarter of Section 34, Township 29, Range 21,Washington County, Minnesota as described as commencing at the northwest corner of said East Half of the Southwest Quarter; thence South 00 degrees 02 minutes 55 seconds West, assumed bearing, along the west line of said East Half a distance of 7S6.99 feet to the point of beginning of the parcel to be described; thence South 16 degrees 08 minutes SS seconds East, along the centerline of the pipeline Easement described in Document No. 3172091, a distance of 437.96 feet; thence South 89 degrees 55 minutes 22 seconds West a distance of 122.17 feet to said west line of said East Half; thence North 00 degrees 02 minutes SS seconds East along said west line a distance of 420.85 feet to the point of beginning.

AND

That part of Lot I, Block 1, Eagle Point Business Park 3rd Addition, Washington County, Minnesota described as beginning at the northeast corner of said Lot I, Block 1; thence South 89 degrees 38 minutes 02 seconds West, assumed bearing, along the north line of said Lot 1 a distance of 28.08 feet; thence South 03 degrees 47 minutes 08 seconds East a distance of 426.49 feet to the east line of said Lot 1; thence North 00 degrees 00 minutes 40 seconds West along said east line of Lot 1 a distance of 425.74 feet to the point of beginning.

EXHIBIT "B" TO DEVELOPMENT CONTRACT

City Oversizing Payment Calculation

Boulder Ponds Phase I - Oversizing Sanitary Sewer

			Costs based on Enebak's Unit Pricing 3/5/15					
	Description	Unit	Preliminary Quan	Final Quan	Unit Price	Preliminary Total	Final Total	
SANITARY SEWER								
	8" PVC SDR35 (10' - 12')	LF	372	0	$ 27.13	$ 10,092.36	$ -	
	8" PVC SDR35 (12' - 14')	LF	225	0	$ 27.63	$ 6,216.75	$ -	
	8" PVC SDR35 (14' - 16')	LF	52	0	$ 28.13	$ 1,462.76	$ -	
	8" PVC SDR35 (16' - 18')	LF	130	0	$ 78.53	$ 10,208.90	$ -	
	8" PVC SDR35 (18' - 20')	LF	235	0	$ 78.53	$ 18,454.55	$ -	
	8" PVC SDR26 (20' - 22')	LF	200	0	$ 78.53	$ 15,706.00	$ -	
	8" PVC SDR26 (22' - 24')	LF	186	0	$ 78.53	$ 14,606.58	$ -	
	8" PVC SDR26 (24' - 26')	LF	180	0	$ 78.53	$ 14,135.40	$ -	
	8" PVCSDR26 (26' - 28')	LF	295	0	$ 78.53	$ 23,166.35	$ -	
	8" PVCSDR26 (28' - 30')	LF	308	0	$ 78.53	$ 24,187.24	$ -	
	12" PVC SDR35 (10' - 12')	LF	0	372	$ 33.90	$ -	$ 12,610.80	
	12" PVC SDR35 (12' - 14')	LF	0	225	$ 34.40	$ -	$ 7,740.00	
	12" PVC SDR35 (14' - 16')	LF	0	52	$ 34.90	$ -	$ 1,814.80	
	12" PVC SDR35 (16' - 18')	LF	0	130	$ 85.30	$ -	$ 11,089.00	
	12" PVC SDR35 (18' - 20')	LF	0	235	$ 85.30	$ -	$ 20,045.50	
	12" PVC SDR26 (20' - 22')	LF	0	200	$ 87.86	$ -	$ 17,572.00	
	12" PVCSDR26 (22' - 24')	LF	0	186	$ 89.86	$ -	$ 16,713.96	
	12" PVCSDR26 (24' - 26')	LF	0	180	$ 89.86	$ -	$ 16,174.80	
	12" PVCSDR26 (26' - 28')	LF	0	295	$ 89.86	$ -	$ 26,508.70	
	12" PVCSDR26 (28' - 30')	LF	0	308	$ 92.86	$ -	$ 28,600.88	
								Oversizing Difference
						$ 138,236.89	$ 158,870.44	**$ 20,633.55**

IRREVOCABLE LETTER OF CREDIT

No. _____
Date: _____

TO: City of Lake Elmo

Dear Sir or Madam:

We hereby issue, for the account of____(Name of Developer)____and in your favor, our Irrevocable Letter of Credit in the amount of $_____, available to you by your draft drawn on sight on the undersigned bank at its offices in Minnesota.

The draft must:

a) Bear the clause, "Drawn under Letter of Credit No._____, dated_____, 2_____, of (Name of Bank)____";

b) Be signed by the Mayor or City Administrator of the City of Lake Elmo.

c) Be presented for payment at_____(Address of Bank)_____, on or before 4:00 p.m. on November 30, 2_____.

This Letter of Credit shall automatically renew for successive one-year terms unless, at least forty-five (45) days prior to the next annual renewal date (which shall be November 30 of each year), the Bank delivers written notice to the Lake Elmo City Administrator that it intends to modify the terms of, or cancel, this Letter of Credit. Written notice is effective if sent by certified mail, postage prepaid, and deposited in the U.S. Mail, at least forty-five (45) days prior to the next annual renewal date addressed as follows: City Administrator, City Hall, 3800 Laverne Ave. N. Lake Elmo Minnesota 55042 and is actually received by the City Administrator at least thirty (30) days prior to the renewal date.

This Letter of Credit sets forth in full our understanding which shall not in any way be modified, amended, amplified, or limited by reference to any document, instrument, or agreement, whether or not referred to herein.

This Letter of Credit is not assignable. This is not a Notation Letter of Credit. More than one draw may be made under this Letter of Credit.

This Letter of Credit shall be governed by the most recent revision of the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 500.

We hereby agree that a draft drawn under and in compliance with this Letter of Credit shall be duly honored upon presentation.

BY: _____

Its _____