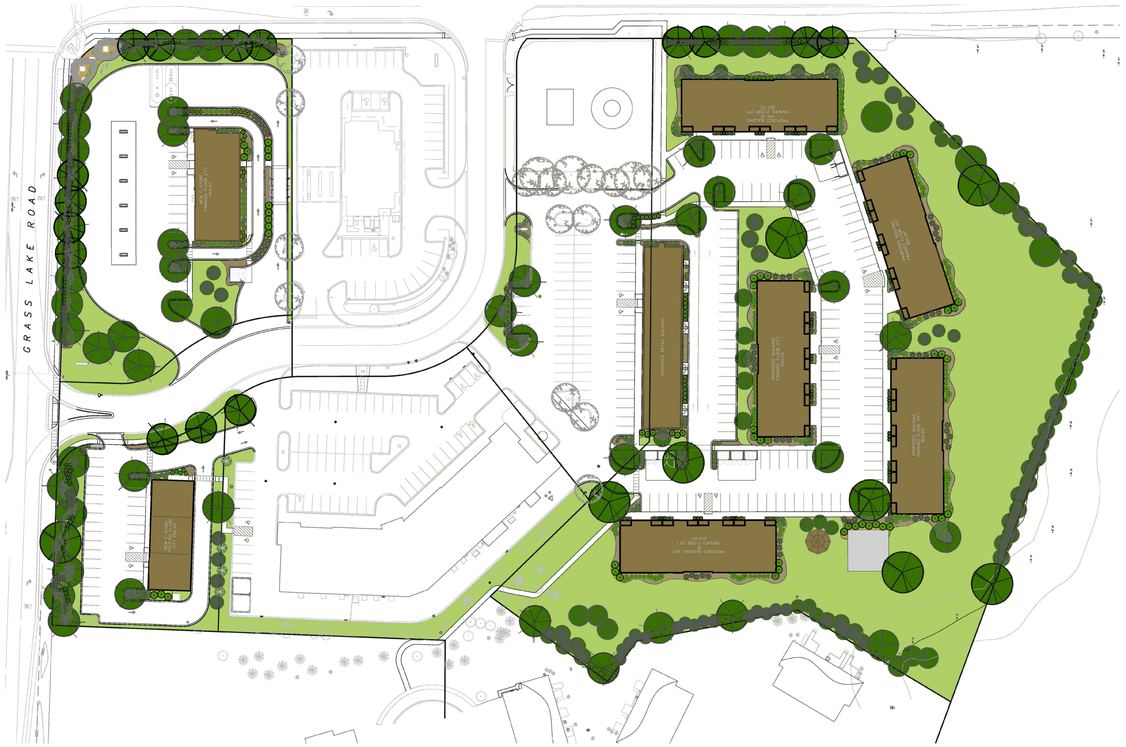
LAKE TOWER CROSSING

GRASS LAKE RD & DEEP LAKE ROAD
LAKE VILLA, IL 60046



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LOCATION MAP

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CIVIL DRAWINGS SUBMITTED UNDER SEPARATE COVER

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G001
COVER SHEET

DEEP LAKE ROAD

GRASS LAKE ROAD

TOWER DRIVE

GROUND SIGN

EXISTING SIGN TO BE REPLACED WITH GROUND SIGN

EXISTING SIGN TO BE REPLACED

166.95' PROPERTY LINE

122.85' PROPERTY LINE

196.78' PROPERTY LINE

15'-0" WATER MAIN EASEMENT

50' YARD SETBACK

40' YARD SETBACK

15'-0" UTILITY EASEMENT

50' PROPERTY LINE

10'-0" UTILITY EASEMENT

45'-0" X 22'-2" 1,000 SF BUILDING

45'-0" X 86'-8" 3,900 SF BUILDING

6 MPD AUTO CANOPY

EXISTING BANK BUILDING

PROPERTY LINE

269.78' PROPERTY LINE

WATER TOWER

105.01' PROPERTY LINE

35' PROPERTY LINE

130' PROPERTY LINE

15'-0" WATER MAIN EASEMENT

2 STORY RESIDENTIAL BUILDING

132' PROPERTY LINE

15' UTILITY EASEMENT/YARD SETBACK

APARTMENT GROUND SIGN

344.91' PROPERTY LINE

STORM WATER DETENTION EASEMENT

10' UTIL. EASEMENT

40'-0" X 180'-8" 7,270 SF NEW RETAIL BUILDING WITH APARTMENTS ABOVE

262.95' PROPERTY LINE

15' UTILITY EASEMENT

15' WATERMAIN EASEMENT

2 STORY RESIDENTIAL BUILDING

20' UTILITY EASEMENT

10' UTILITY EASEMENT

PROPERTY LINE

5' UTILITY EASEMENT

50' YARD SETBACK

EXISTING RETAIL BUILDING

41'-8" X 108'-8" 4520 SF RETAIL BUILDING

DRIVE-THRU

220.30' PROPERTY LINE

20'-0" UTILITY EASEMENT

10'-0" UTILITY EASEMENT

50' YARD SETBACK

15'-0" UTILITY EASEMENT

20' YARD SETBACK

15' UTILITY EASEMENT

162.71' PROPERTY LINE

221.53' PROPERTY LINE

106.10' PROPERTY LINE

141.31' PROPERTY LINE

48.28' PROPERTY LINE

20' DRAINAGE EASEMENT PER DOC. #2898574

GAZEBO

AMENITY AREA

PLAYGROUND

2 STORY RESIDENTIAL BUILDING

40' YARD SETBACK

15'-0" DRAINAGE EASEMENT

160.18' PROPERTY LINE

173.87' PROPERTY LINE

50'-0" WETLAND BUFFER

427.50' PROPERTY LINE

WETLAND LINE

WATER LINE

1 SITE PLAN
SCALE: 1" = 40'-0"

N

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A001
ZONING SITE PLAN

SIGN INFORMATION

SIGN TYPE / QUANTITY (ARTICLE 6 SECTION 4 LAKE VILLA ZONING ORDINANCE)	GROUND SIGNS COMMERCIAL CENTERS: WITH GREATER THAN 750 LINEAR FT STREET FRONTAGE, ALLOWED MAX (3) AT 12' TALL AND 120 SF MAX GROUND SIGNS RESIDENTIAL: MAX (1) AT 6' TALL AND 24 SF MAX WALL SIGNS: ALLOWED 0.7 SF / LINEAR FOOT OF EXTERIOR WALL THAT FRONTS PUBLIC STREET CANOPY SIGNS: ALLOWED 0.7 SF / LINEAR FT OF EXTERIOR WALL THAT FRONTS PUBLIC STREET DRIVE-THROUGH: ALLOWED MAX 10' TALL MAX 50 SF TEMPORARY WINDOW SIGNS: ALLOWED 25% COVERAGE ON GLASS NEAR ENTRANCES, OTHER WINDOW SIGNS ARE TREATED AS WALL SIGNS DIRECTIONAL SIGNS: ALLOWED 3 SF MAX PER SIGN, NO ADVERTISING		
GROUND SIGN SIZE (ARTICLE SIX SECTIONS 4.10-3B & 4.10-5)		ALLOWED	PROPOSED
	COMMERCIAL:		
	SIGN AREA (GRASS LAKE):	120 SF MAX	153 SF (INCL. 32 SF LED MESSAGE)
	SIGN HEIGHT:	12'-0" MAX	20'-0"
	SETBACK:	5' MIN.	5'-6"
	SIGN AREA (DEEP LAKE):	120 SF MAX	153 SF (INCL. 32 SF LED MESSAGE)
	SIGN HEIGHT:	12'-0" MAX	20'-0"
	SETBACK:	5' MIN.	7'
	SIGN AREA (INTERSECTION):	120 SF MAX	153 SF (INCL. 32 SF LED MESSAGE)
	SIGN HEIGHT:	12'-0" MAX	20'-0"
	SETBACK:	5' MIN.	5'
	RESIDENTIAL (TOWER DRIVE):		
	SIGN AREA:	24 SF MAX	82 SF
	SIGN HEIGHT:	6'-0" MAX	10'-0"
	SETBACK:	5' MIN.	1'
BUSINESS SIGNS (WALL SIGNS & DRIVE-THROUGH) (ARTICLE SIX SECTIONS 4.10-5)		ALLOWED	PROPOSED
	CONVENIENCE STORE		
	WEST WALL	32.2 SF	0 SF
	NORTH WALL	77.3 SF	72 SF
	EAST WALL	32.2 SF	25 SF
	DRIVE-THROUGH	50 SF 10' HEIGHT	50 SF 10'
	EXISTING RETAIL BUILDING		
	EAST WALL	EXISTING TO REMAIN	EXISTING TO REMAIN
	SOUTH RETAIL BUILDING		
	NORTH WALL	126.46 SF	100 SF
	EAST WALL	N/A	26 SF
	DRIVE-THROUGH	50 SF 10' HEIGHT	50 SF 10'
	NORTH RETAIL BUILDING		
	NORTH WALL	76.1 SF	55 SF
	EAST WALL	29.2 SF	0 SF
	DRIVE-THROUGH	50 SF 10' HEIGHT	50 SF 10'
CANOPY SIGNS (ARTICLE SIX SECTIONS 4.10-5)		ALLOWED	PROPOSED
	AUTO CANOPY		
	WEST CANOPY FACE:	16.8 SF	13 SF
	NORTH CANOPY FACE:	98 SF	13 SF
	EAST CANOPY FACE:	16.8 SF	13 SF
	TRUCK CANOPY		
	EAST CANOPY FACE:	24.5 SF	24.5 SF
TOTAL SITE SIGNAGE		ALLOWED	PROPOSED
	TOTAL AREA:	1063.56 SF	1032.5 SF

SIGNAGE KEY

1	GROUND SIGN: INTERNALLY ILLUMINATED SIGN WITH ELECTRONIC MESSAGE, 153 SF, SEE SIGNAGE ELEVATIONS FOR MORE INFORMATION. TYPICAL OF 3
2	AUTO CANOPY SIGN: INTERNALLY ILLUMINATED "MOBIL" SIGN, 13 SF
3	APARTMENT GROUND SIGN: INTERNALLY ILLUMINATED SIGN, 82 SF, SEE SIGNAGE ELEVATIONS FOR MORE INFORMATION.
4	WALL SIGN: INTERNALLY ILLUMINATED SIGN, WALL SIGN SIZES WILL VARY WITH INDIVIDUAL TENANTS NOT TO EXCEED THE MAXIMUM ALLOWED AREA.
5	DRIVE-THROUGH SIGN: INTERNALLY ILLUMINATED 50 SF SIGN, FINAL SIGN DESIGN TBD (BY TENANT)

ZONING INFORMATION NORTH RETAIL

SITE ZONING (CH. 10 SECT. 3B-2)	MUNICIPALITY / JURISDICTION: LAKE VILLA, IL EXISTING ZONING: SB - SUBURBAN BUSINESS PROPOSED ZONING: PUD ADJUSTMENT		
SITE AREA (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	LOT AREA:	40,000 SF MIN	29,961 SF
	LOT WIDTH:	150' MIN	220'-4"
	BUILDING COVERAGE:	80% MAX	15%
	IMPERVIOUS AREA:	70% MAX	73%
BUILDING HEIGHT (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	BUILDINGS:	35' MAX	26'-0"
	ACCESSORY:	25' MAX	N/A
YARD SETBACKS (CH. 10, SECT. 3C-2)		REQUIRED	PROPOSED
	FRONT YARD (GRASS LAKE):	50'	92'-0"
	SIDE YARD (TOWER):	15'	34'-8"
	SIDE YARD:	15'	37'-8"
	REAR YARD:	20'	28'-0"
PARKING / STACKING (CH. 10, SECT. 6A-2)		REQUIRED	PROPOSED
	PARKING STALLS:	30 MIN	29
	ACCESSIBLE STALLS:	2 MIN	2
	90 DEG. STALL SIZE:	9' X 18'	9' X 18'
	2-WAY AISLE:	24' MIN	24' MIN
	NUMBER OF STALLS REQUIRED:		
	RETAIL: 1 PER 250 SF @ 3,020 SF = 12		
	RESTAURANT: 1 PER 100 SF @ 1,500 SF = 15		
	1 PER EMPLOYEE = 3		

ZONING INFORMATION EXISTING RETAIL

SITE ZONING (CH. 10 SECT. 3B-2)	MUNICIPALITY / JURISDICTION: LAKE VILLA, IL EXISTING ZONING: SB - SUBURBAN BUSINESS PROPOSED ZONING: PUD ADJUSTMENT		
SITE AREA (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	LOT AREA:	40,000 SF MIN	76190 SF
	LOT WIDTH:	150' MIN	191'-2"
	BUILDING COVERAGE:	80% MAX	25%
	IMPERVIOUS AREA:	70% MAX	82%
BUILDING HEIGHT (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	BUILDINGS:	35' MAX	N/A
YARD SETBACKS (CH. 10, SECT. 3C-2)		REQUIRED	PROPOSED
	FRONT YARD (TOWER):	50'	81'-11"
	SIDE YARD:	15'	0"
	SIDE YARD:	15'	54'-10"
	REAR YARD:	20'	41'-0"
PARKING / STACKING (CH. 10, SECT. 6A-2)		REQUIRED	PROPOSED
	PARKING STALLS:	102 MIN	92
	ACCESSIBLE STALLS:	5 MIN	5
	90 DEG. STALL SIZE:	9' X 18'	9' X 18'
	2-WAY AISLE:	24' MIN	24' MIN
	NUMBER OF STALLS REQUIRED:		
	RETAIL: 1 PER 250 SF @ 15,500 SF = 62		
	RESTAURANT: 1 PER 100 SF @ 3,500 SF = 35		
	1 PER EMPLOYEE = 5		

ZONING INFORMATION C-STORE

SITE ZONING (CH. 10 SECT. 3B-2)	MUNICIPALITY / JURISDICTION: LAKE VILLA, IL EXISTING ZONING: SB - SUBURBAN BUSINESS PROPOSED ZONING: PUD ADJUSTMENT		
SITE AREA (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	LOT AREA:	40,000 SF MIN	67,197 SF
	LOT WIDTH:	150' MIN	336'-1"
	BUILDING COVERAGE:	80% MAX	6%
	IMPERVIOUS AREA:	70% MAX	68%
BUILDING HEIGHT (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	BUILDINGS:	35' MAX	24'-5"
	CANOPY:	25' MAX	19'-0"
YARD SETBACKS (CH. 10, SECT. 3C-2)		REQUIRED	PROPOSED
	FRONT YARD (GRASS LAKE):	50'	87'-8"
	SIDE YARD (TOWER):	50'	77'-1"
	SIDE YARD (DEEP LAKE):	50'	87'-8"
	REAR YARD:	20'	50'-3"
PARKING / STACKING (CH. 10, SECT. 6A-2)		REQUIRED	PROPOSED
	PARKING STALLS:	51 MIN	27 (INCL. FUEL STATIONS)
	ACCESSIBLE STALLS:	2 MIN	2
	90 DEG. STALL SIZE:	9' X 18'	9' X 18'
	2-WAY AISLE:	24' MIN	24' MIN
	NUMBER OF STALLS REQUIRED:		
	C-STORE: 1 PER 100 SF @ 3900 SF =		39
	RESTAURANT: 1 PER 100 SF @ 1,000 SF = 10		
	1 PER EMPLOYEE = 2		

ZONING INFORMATION APARTMENTS & MIXED USE APARTMENT

SITE ZONING (CH. 10 SECT. 3B-2)	MUNICIPALITY / JURISDICTION: LAKE VILLA, IL EXISTING ZONING: SB - SUBURBAN BUSINESS PROPOSED ZONING: PUD ADJUSTMENT		
SITE AREA (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	LOT AREA:	274,500 SF MIN	267,212 SF
	LOT WIDTH:	520' MIN	647'-10"
	BUILDING COVERAGE:	40% MAX	17%
	IMPERVIOUS AREA:	30% MAX	87%
BUILDING HEIGHT (CH. 10, SECT. 3C-2)		ALLOWED	PROPOSED
	BUILDINGS:	60' MAX	39'-0"
	ACCESSORY (GAZEBO):	25' MAX	15'-0"
YARD SETBACKS (CH. 10, SECT. 3C-2)		REQUIRED	PROPOSED
	FRONT YARD (TOWER):	30'	123'-0"
	SIDE YARD (DEEP LAKE):	30'	40'-0"
	SIDE YARD:	98'	40'-0"
	REAR YARD:	98'	43'-11"
PARKING / STACKING (CH. 10, SECT. 6A-2)		REQUIRED	PROPOSED
	PARKING STALLS:	173 MIN	173
	ACCESSIBLE STALLS:	6 MIN	10
	90 DEG. STALL SIZE:	9' X 18'	9' X 18'
	2-WAY AISLE:	24' MIN	24' MIN
	NUMBER OF STALLS REQUIRED:		
	APARTMENTS:		
	1.5 SPACES PER SINGLE APARTMENT (x 29 UNITS) = 43.5		
	2 SPACES PER TWO-BED APARTMENT (x 60 UNITS) = 120		
	1.5 PER TWO-BED (ADJUSTED PER VILLAGE) (x 60) = 90		
	RETAIL: 1 PER 250 SF @ 6,270 SF = 26		
	RESTAURANT: 1 PER 100 SF @ 1,000 SF = 10		
	1 PER EMPLOYEE = 3		
	TOTAL:		173

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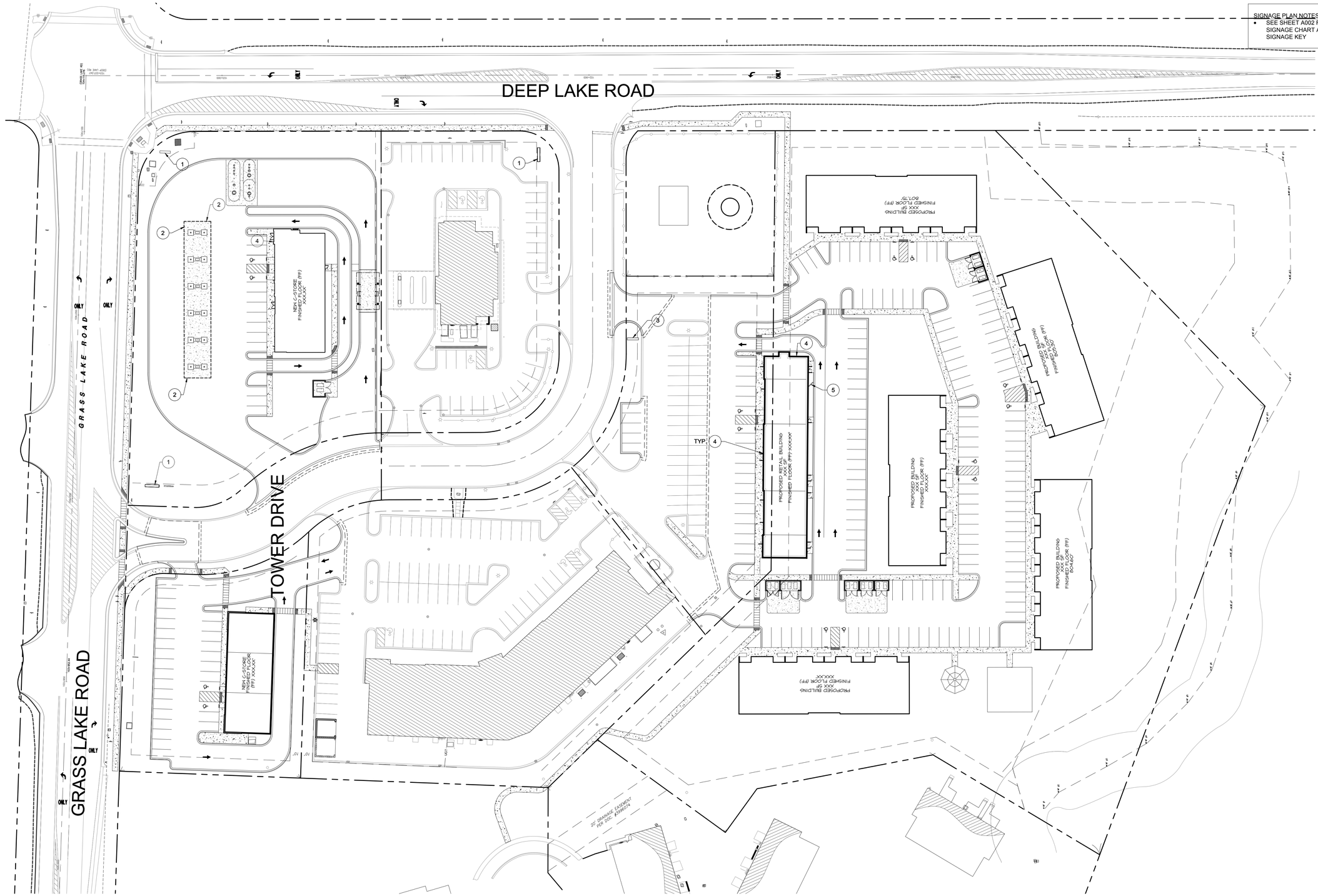
A002
ZONING SITE CHARTS

SIGNAGE PLAN NOTES:
- SEE SHEET A002 FOR SIGNAGE CHART AND SIGNAGE KEY



1 SIGNAGE PLAN
SCALE: 1" = 40'-0"

N

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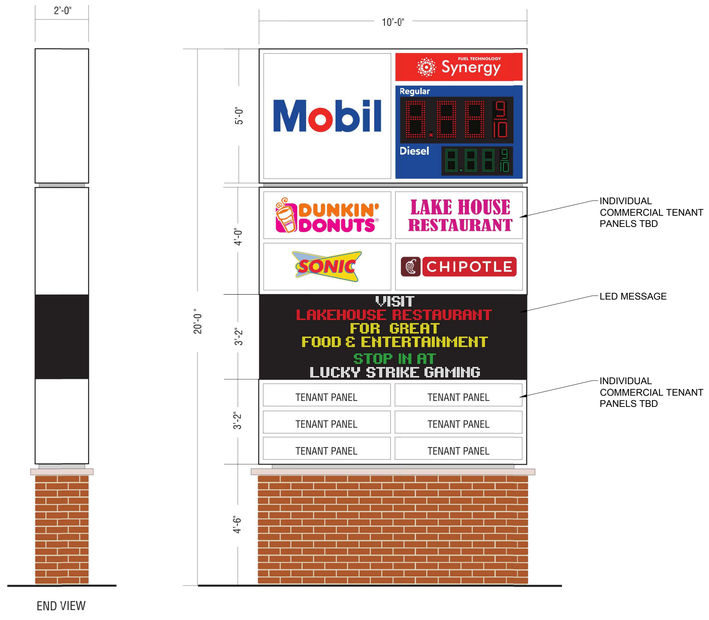
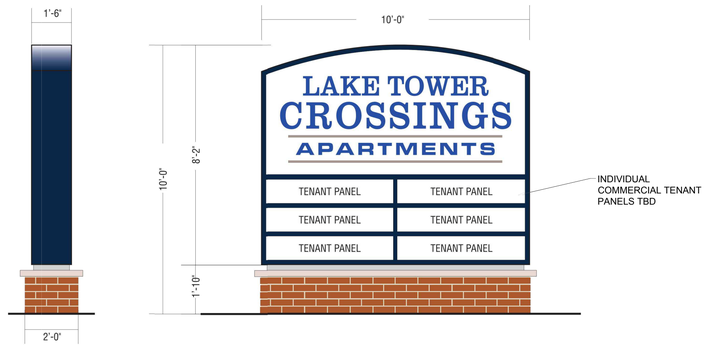
A003
SIGNAGE PLAN



1 GROUND SIGN
SCALE: N.T.S.

2 TRUCK CANOPY SIGN
SCALE: N.T.S.

3 AUTO CANOPY SIGN
SCALE: N.T.S.



4 APARTMENT GROUND SIGN
SCALE: N.T.S.

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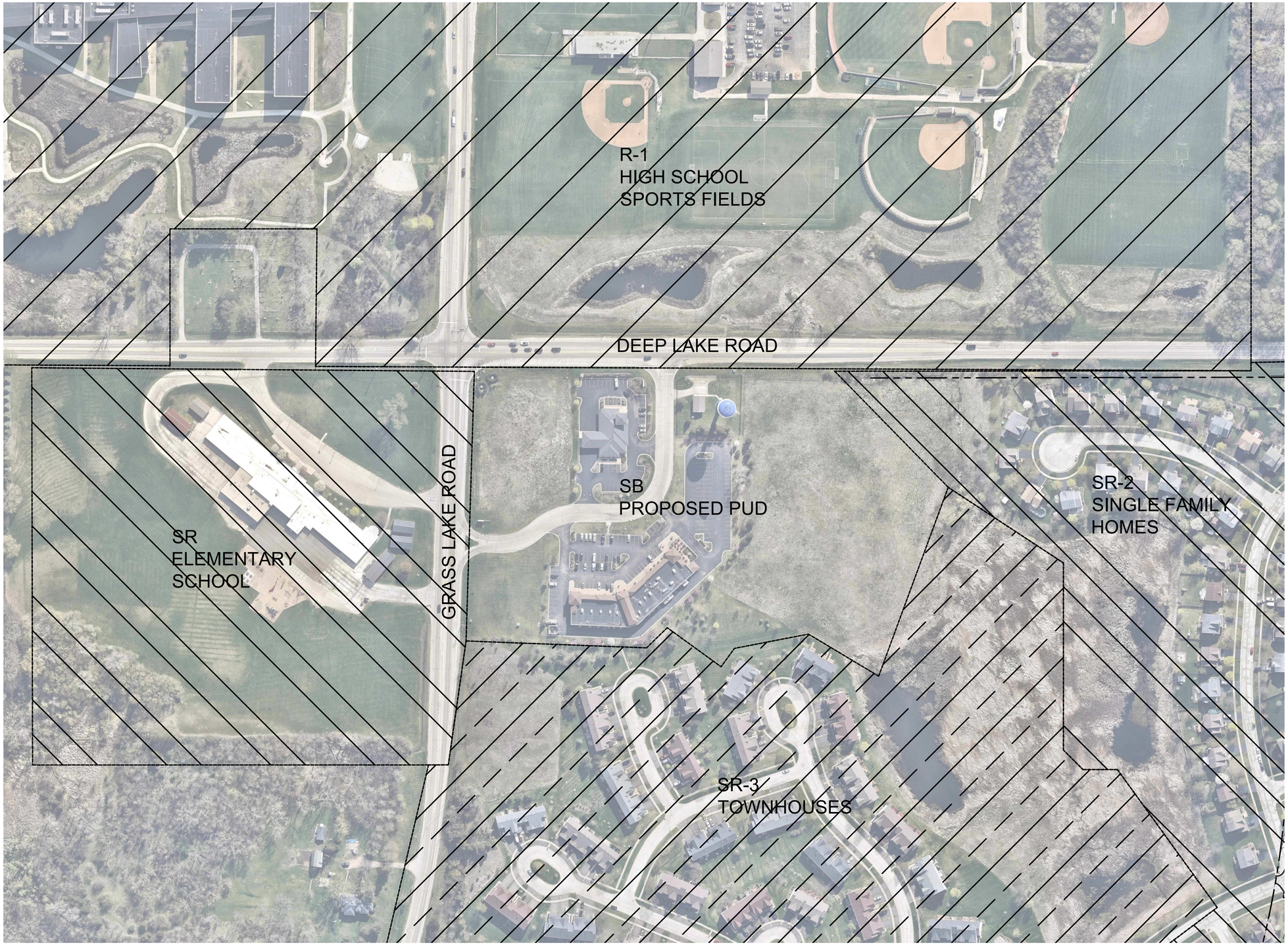
A004
SIGNAGE ELEVATIONS



1 AREA MAP
SCALE: 1" = 100'-0"

N

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A005
AREA MAP

1 SITE VIEW 1
SCALE: N.T.S.

2 SITE VIEW 2
SCALE: N.T.S.

KEY PLAN
SCALE: 1" = 100'-0"

N

3 SITE VIEW 3
SCALE: N.T.S.

4 SITE VIEW 4
SCALE: N.T.S.

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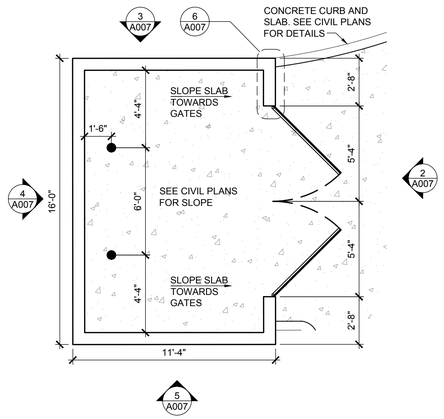
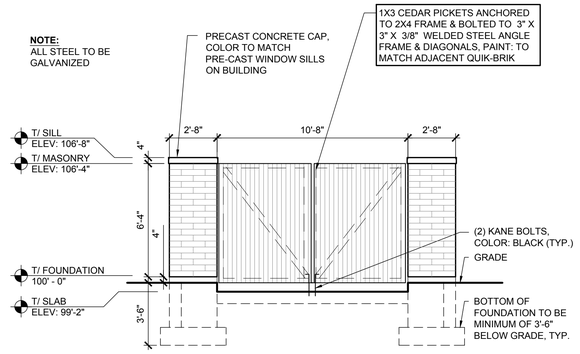
A006
EXISTING SITE PHOTOS



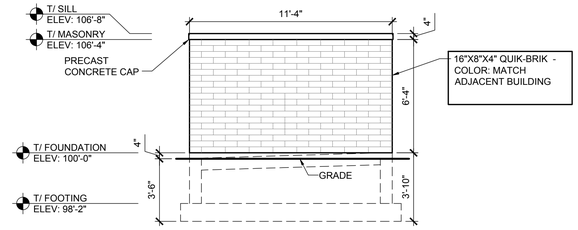
1 TYPICAL TRASH ENCLOSURE PLAN

SCALE: 1/4" = 1'-0"



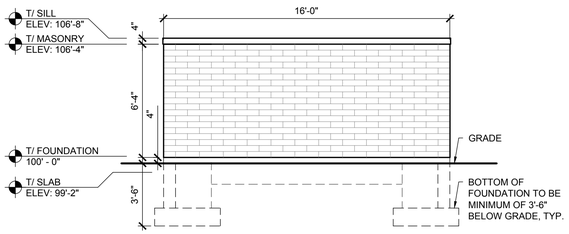
2 TRASH ENCLOSURE FRONT ELEVATION

SCALE: 1/4" = 1'-0"



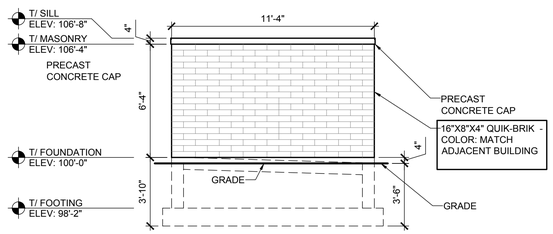
3 TRASH ENCLOSURE SIDE ELEVATION

SCALE: 1/4" = 1'-0"



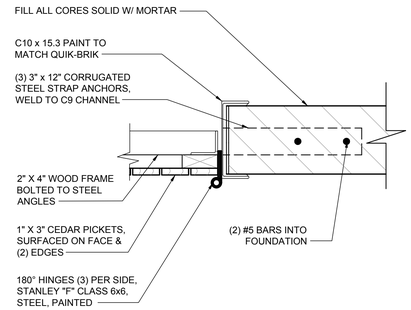
4 TRASH ENCLOSURE REAR ELEVATION

SCALE: 1/4" = 1'-0"



5 TRASH ENCLOSURE SIDE ELEVATION

SCALE: 1/4" = 1'-0"



6 CORNER DETAIL

SCALE: 1 1/2" = 1'-0"

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LAKE TOWER CROSSING
GRASS LAKE RD. & DEEP LAKE ROAD
LAKE VILLA, IL 60046

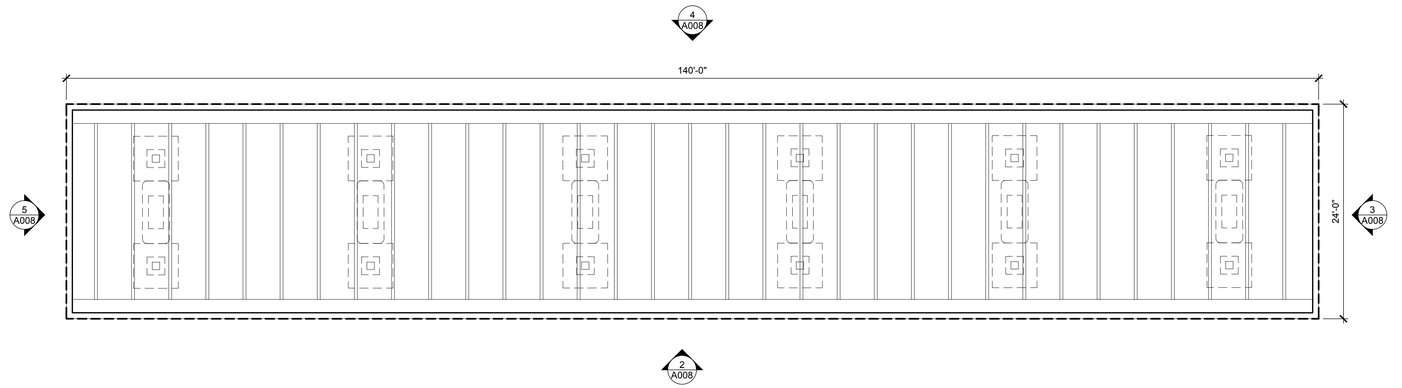
CHRIS KHAYAT

ISSUE

TO	DATE
ZONING	4/5/19
REVIEW	7/23/19
REVIEW	9/16/19
REVIEW	10/24/19
ZONING	11/08/19

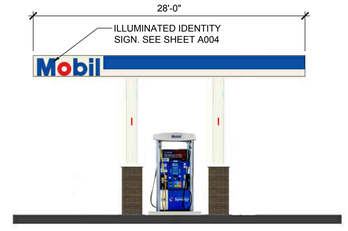
CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A007
TYPICAL TRASH ENCLOSURE DETAILS

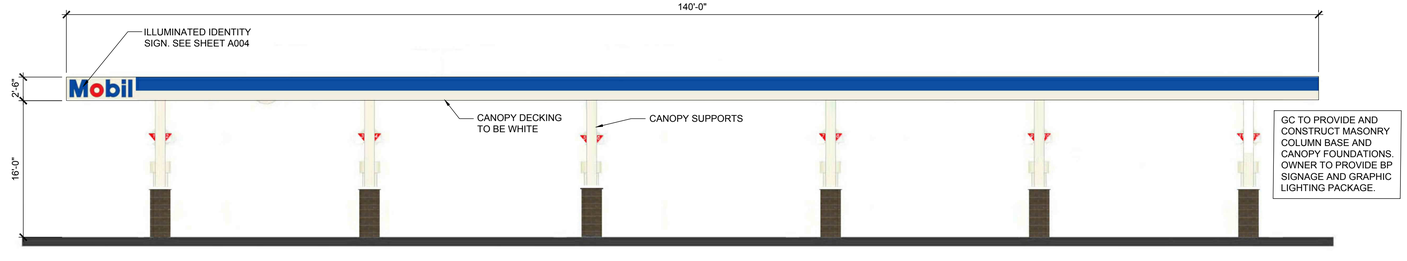


1 CANOPY PLAN
SCALE: 1/8" = 1'-0"

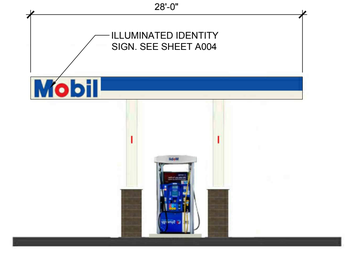
2 SOUTH CANOPY ELEVATION
SCALE: 1/8" = 1'-0"



3 EAST CANOPY ELEVATION
SCALE: 1/8" = 1'-0"



4 NORTH CANOPY ELEVATION
SCALE: 1/8" = 1'-0"



5 WEST CANOPY ELEVATION
SCALE: 1/8" = 1'-0"

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CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A008
CANOPY ELEVATIONS

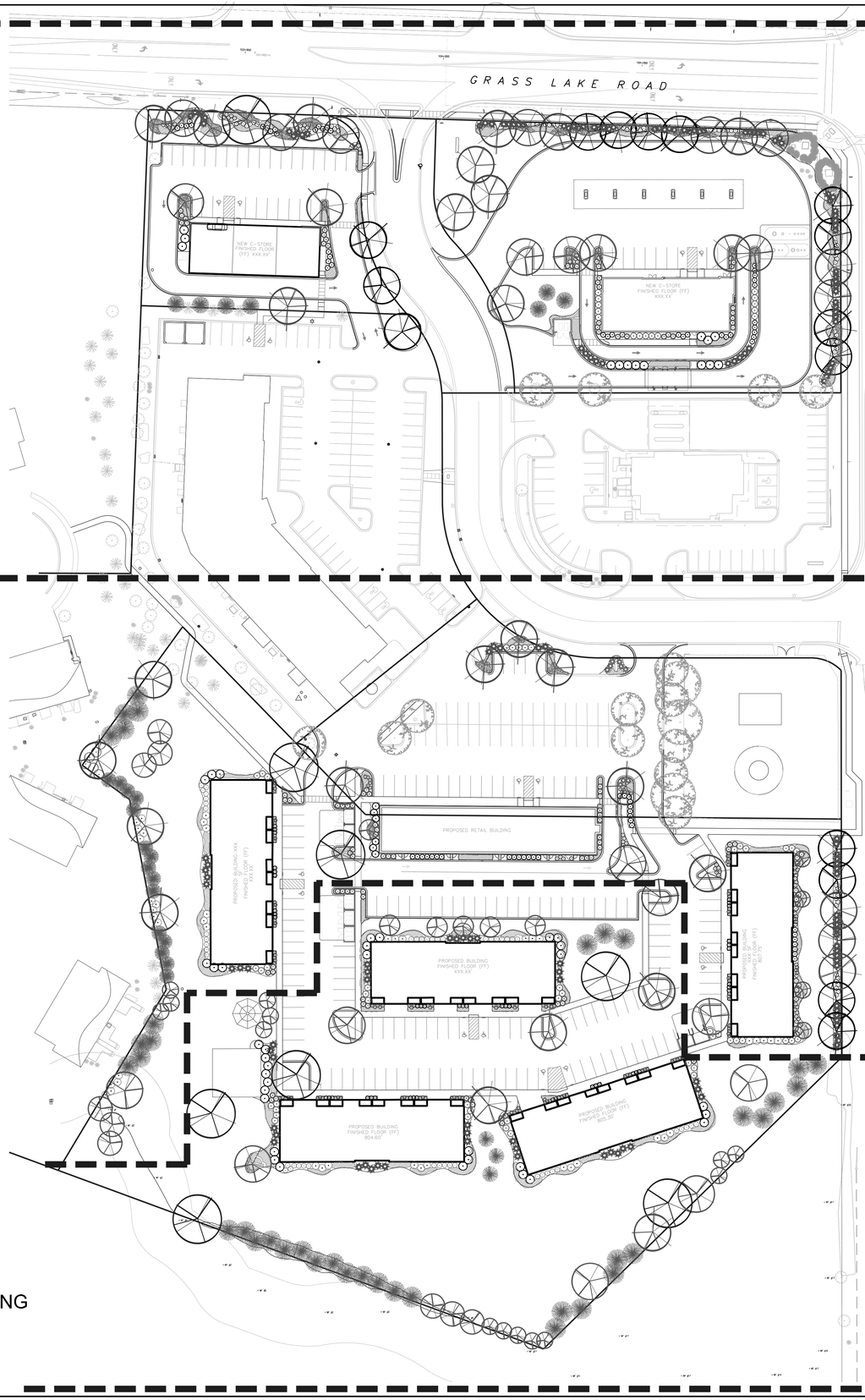
MASTER PLANT LIST

QTY	CODE	PLANT NAME		SIZE
11	GTI	GLEDITSIA TRIACANTHOS	SKYLINE HONEYLOCUST	2.5"CAL
13	ARS	ACER RUBRA	RED SUNSET MAPLE	2.5"CAL
11	AAB	ACER FREEMANI	AUTUMN BLAZE MAPLE	2.5"CAL
5	ASU	ACER SACCHARUM	SUGAR MAPLE	2.5"CAL
3	ACG	ACER GRISEUM	PAPERBARK MAPLE	2.5"CAL
7	GYM	GYMNOCLADUS SPECIES	KENTUCKY COFFEE TREE	2.5"CAL
8	ULM	ULMUS SPECIES	ACCOLADE HYBRID ELM	2.5"CAL
3	QUR	QUERCUS RUBRA	RED OAK	2.5"CAL
5	QSW	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"CAL
6	QCP	QUERCUS MUEHLENBERGI	CHINKAPIN OAK	2.5"CAL
6	COH	CELTIS OCCIDENTALIS	HACKBERRY	2.5"CAL
3	TLC	TILIA CORDATA	LITTLE LEAF LINDEN	2.5"CAL
15	TSC	TSUGA CANADENSIS	CANADIEN HEMLOCK	5' HT
3	PSW	PINUS STROBUS	WHITE PINE	8' HT
13	PMT	PINUS MUGHO	TANNENBAUM PINE	8' HT
3	PSC	PINUS STROBUS	COLUMAR WHITE PINE	8' HT
13	PBH	PICEA DENSATA	BLACK HILL SPRUCE	8' HT
13	PPB	PICEA PUNGENS	COLORADO BLUE SPRUCE	8' HT
6	CCR	CERSIS CANADENSIS	EASTERN REDBUD	8-9' HT
6	PYR	PYRUS CALLERYANA	CHANTICLEER PEAR	2.5"CAL
4	AMC	AMELANCHIER SPECIES	SERVICEBERRY	8' HT
3	BNH	BETULA NIGRA	HERITAGE RIVER BIRCH	10' HT
8	MSP	MALUS SPECIES	PRAIRIE FIRE CRAB	2.5"CAL
8	THO	THUJA OCCIDENTALIS	TECHNEY ARBORVITAE	5' HT
126	TXT	TAXUS TAUTONI	TAUTON YEW	24"
45	BUX	BUXUS KOREANA	WINTERGREEN BOXWOOD	18"
153	JCG	JUNIPERUS CHINENSIS	SEA GREEN JUNIPER	18-24"
9	JCS	JUNIPERUS CHINENSIS	SARGENT JUNIPER	18-24"
6	VLM	VIBURNUM LATANA	MOHICAN VIBURNUN	3' HT
18	VIC	VIBURNUM CARLESI	KOREAN SPICE VIBURNUM	30"
11	HMV	HAMAMELIS VERNALIS	VERNAL WITCHHAZEL	3' HT
11	EAC	EUONYMUS ALATUS	COMPACT BURNING BUSH	3' HT
55	WES	WEIGELA SPECIES	SPILLED WINE WEIGELA	18"
11	COR	CORNUS BAILEYI	RED TWIG DOGWOOD	36"
57	ROS	ROSA SPECIES	KNOCKOUT SHRUB ROSE	18"
76	ROC	ROSA SPECIES	CORAL CARPET ROSE	18"
34	FOT	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	18"
61	SPA	SPIREA BUMALDA	DOUBLE PLAY SPIREA	18"
61	RHP	RHUS COPPELIANA	PRAIRIE FLAME SUMAC	30"
14	RIB	RIBES ALPINUM	ALPINE CURRENT	24"
55	HYB	HYDRANGEA MACROPHYLLA	BLOOMSTRUCK HYDRANGEA	30"
24	HYL	HYDRANGEA SPECIES	LIMELIGHT HYDRANGEA	30"
11	HYF	HYDRANGEA PANICULATA	FIRELIGHT HYDRANGEA	30"
19	HYD	HYDRANGEA SPECIES	LITTLE LIME HYDRANGEA	24"
1728	SOK	SEDUM KAMTCHATICUM	YELLOW STONECROP	3"
144	PAC	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	3"
130	PMC	COREOPSIS VERTICILLATA	ZAGREB COREOPSIS	1 GAL
14	PRY	HEMEROCALLIS SPECIES	ROSEY RETURNS DAYLILY	1 GAL
114	PWN	NEPETA SPECIES	WALKERS LOW CATMINT	1 GAL
99	PSM	SALVIA NEMORASA	WASUWE SALVIA	1 GAL
121	PRD	HEUCHERA MICRANTHA	GEOGIA PEACH CORALBELL	1 GAL
223	PCG	GERANIUM SPECIES	MAX FREI GERANIUM	1 GAL
15	PFA	ASTILBE SPECIES	COLOR FLASH ASTILBE	1 GAL
7	PHW	HOSTA SPECIES	EMPRESS WU HOSTA	1 GAL
6	PHL	HOSTA SPECIES	LIBERTY HOSTA	1 GAL
52	PHK	HAKONECHLOA MACRA	JAPANESE FOREST GRASS	1 GAL
60	PDG	PENNISETUM HAMELN	DWARF FOUNTAIN GRASS	1 GAL
73	PAN	PANICUM VIRGATUM	SWITCH GRASS	1 GAL
196	PDS	SPOROBOLUS SPECIES	PRAIRIE DROPSEED	1 GAL
5	PKR	CALAMAGROSTIS SPECIES	KOREAN FEATHER GRASS	1 GAL
15	PKF	CALAMAGROSTIS SPECIES	KARL FOERSTER GRASS	1 GAL

SEE SHEETS - L-1.1 L-1.2 L-1.3
FOR SPECIFIC QUANTITY DETAILS

SEE SHEETS - L-2.0 L-2.1 L-2.2
FOR PLANTING SPECIFICATION & DETAILS

SEE SHEETS - L-3.0 L-3.1
FOR BIO-RETENTION BASIN / NATIVE PLANTING
SPECIFICATIONS & DETAILS



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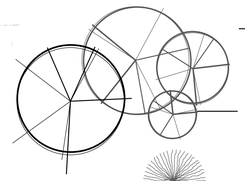
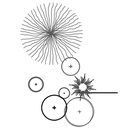


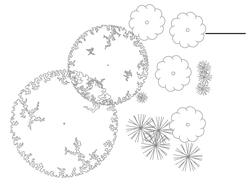
NEW EVERGREEN, DECIDUOUS, AND ORNAMENTAL TREES



NEW DECIDUOUS AND EVERGREEN SHRUBS

PERENNIAL FLOWERS / ORNAMENTAL GRASSES

GROUNDCOVERS



EXISTING TREES TO REMAIN

WARNING

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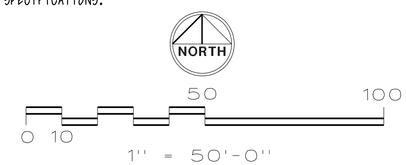
GENERAL NOTES:

1. QUANTITY LISTS ARE SUPPLIED AS A CONVENIENCE. CONTRACTOR SHALL VERIFY ALL MATERIALS QUANTITIES ON SITE.
2. ALL PLANT MATERIAL TO BE NORTHERN ILLINOIS GROWN, AND WITH THE EXCEPTION OF LOW TYPE JUNIPER, GROUNDCOVERS, AND PERENNIALS BE BALLED AND BURLAPPED 'B & B' UNLESS OTHERWISE SPECIFIED. PLANT MATERIAL TO BE GROWN IN ACCORDANCE TO STANDARDS SET BY THE AMERICAN ASSOCIATION OF NURSERYMEN
3. ALL PLANTINGS SHALL BE WATERED THOROUGHLY IN THE FIRST 24 HOURS AFTER PLANTING.ENSURE ALL AIR POCKETS ARE REMOVED AROUND ROOT BALL.
4. CONTRACTOR TO GUARANTEE PLANT MATERIAL FOR ONE YEAR FROM TIME OF PLANTING.
5. ALL PLANT BED AREAS TO BE MULCHED WITH PREMIUM SHREDDED HARDWOOD MULCH 3" DEEP AND SHALL BE SEPARATED FROM LAWN AREAS WITH A SPADED EDGING.
6. ALL LAWN AREAS TO BE A FIVE WAY MINIMUM BLUEGRASS BLEND. CONTRACTOR IS RESPONSIBLE FOR WATERING SOD UNTIL TIME OF KNITTING.
7. IT IS CONTRACTORS OPTION TO STAKE TREES, BUT HIS RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL THE END OF GUARANTEE PERIOD.
8. PLANT SIZES LISTED ARE THE MINIMUM SIZE REQUIRED. PLANTS THAT DO NOT MEET THESE MINIMUM SIZES SHALL BE REJECTED AT CONTRACTORS EXPENSE.
9. NO PLANT SPECIES OR SIZES SHALL BE SUBSTITUTED WITHOUT PRIOR APPROVAL FROM LANDSCAPE ARCHITECT.
10. SEE SHEETS L-2.0, L-2.1, L-2.2 , FOR ADDITIONAL PLANTING DETAILS AND SPECIFICATIONS.



LANDSCAPE PLAN

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Landscape Architects / Contractors
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www.CoutureLandscape.com
E-mail: couture.landscape@comcast.net
Landscape Plans Prepared By:
Paul A. Couture, P.L.A. A.S.L.A.
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LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

PAUL A. COUTURE *157-000328 REGISTERED STATE OF ILLINOIS LANDSCAPE ARCHITECT 20 YEARS

ISSUE

TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-1.0
LANDSCAPE PLAN

GRASS LAKE ROAD

PROPERTY LINE

NEW C-STORE

NEW C-STORE

15'-0" UTILITY EASEMENT

EXISTING EVERGREEN SCREENING AROUND UTILITY EQUIPMENT

DEEP LAKE ROAD

TOWER DRIVE

WARNING

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CALL BEFORE YOU DIG 800-892-0123

PLANT LIST

QTY	CODE	PLANT NAME		SIZE
6	GTI	GLEDITSIA TRIACANTHOS	SKYLINE HONEYLOCUST	2.5"CAL
12	ARS	ACER RUBRA	RED SUNSET MAPLE	2.5"CAL
2	AAB	ACER FREEMANI	AUTUMN BLAZE MAPLE	2.5"CAL
1	ASU	ACER SACCHARUM	SUGAR MAPLE	2.5"CAL
8	ULM	ULMUS SPECIES	ACCOLADE HYBRID ELM	2.5"CAL
4	OSW	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"CAL
5	OCP	QUERCUS MUEHLENBERGI	CHINKAPIN OAK	2.5"CAL
7	PMT	PINUS MUGHO	TANNENBAUM PINE	8' HT
41	TXT	TAXUS TAUTONI	TAUTON YEW	24"
79	JCG	JUNIPERUS CHINENSIS	SEA GREEN JUNIPER	18-24"
3	HMV	HAMAMELIS VERNALIS	VERNAL WITCHHAZEL	3' HT
11	EAC	EUONYMUS ALATUS	COMPACT BURNING BUSH	3' HT
22	ROS	ROSA SPECIES	KNOCKOUT SHRUB ROSE	18"
5	ROC	ROSA SPECIES	CORAL CARPET ROSE	18"
47	SPA	SPIREA BUMALDA	DOUBLE PLAY SPIREA	18"
15	RHP	RHUS COPPELIANA	PRAIRIE FLAME SUMAC	30"
34	HYB	HYDRANGEA MACROPHYLLA	BLOOMSTRUCK HYDRANGEA	30"
10	HLL	HYDRANGEA SPECIES	LITTLE LIME HYDRANGEA	24"
1368	SDK	SEDUM KAMTCHATICUM	YELLOW STONECROP	3"
30	PMG	COREOPSIS VERTICILLATA	ZAGRED COREOPSIS	1 GAL
72	PWN	NEPETA SPECIES	WALKERS LOW CATMINT	1 GAL
27	PSM	SALVIA NEMORASA	WASUME SALVIA	1 GAL
62	PRP	HEUCHERA MICRANTHA	GEOGIA PEACH CORALBELL	1 GAL
86	PGG	GERANIUM SPECIES	MAX FREI GERANIUM	1 GAL
27	PDG	PENNISETUM HAMELN	DWARF FOUNTAIN GRASS	1 GAL
6	PAN	PANICUM VIRGATUM	SWITCH GRASS	1 GAL
59	PDS	SPOROBOLUS SPECIES	PRAIRIE DROPSEED	1 GAL
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LANDSCAPE PLAN

SEE SHEET L-1.2

NORTH

1" = 20'

00 10 20 40 80

Landscape Plans Prepared By:

Paul A. Couture, P.L.A. ASLA
IL License Number 157-000328

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PAUL A. COUTURE
*157-000328
REGISTERED
STATE OF ILLINOIS
LANDSCAPE
ARCHITECT

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LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

ISSUE

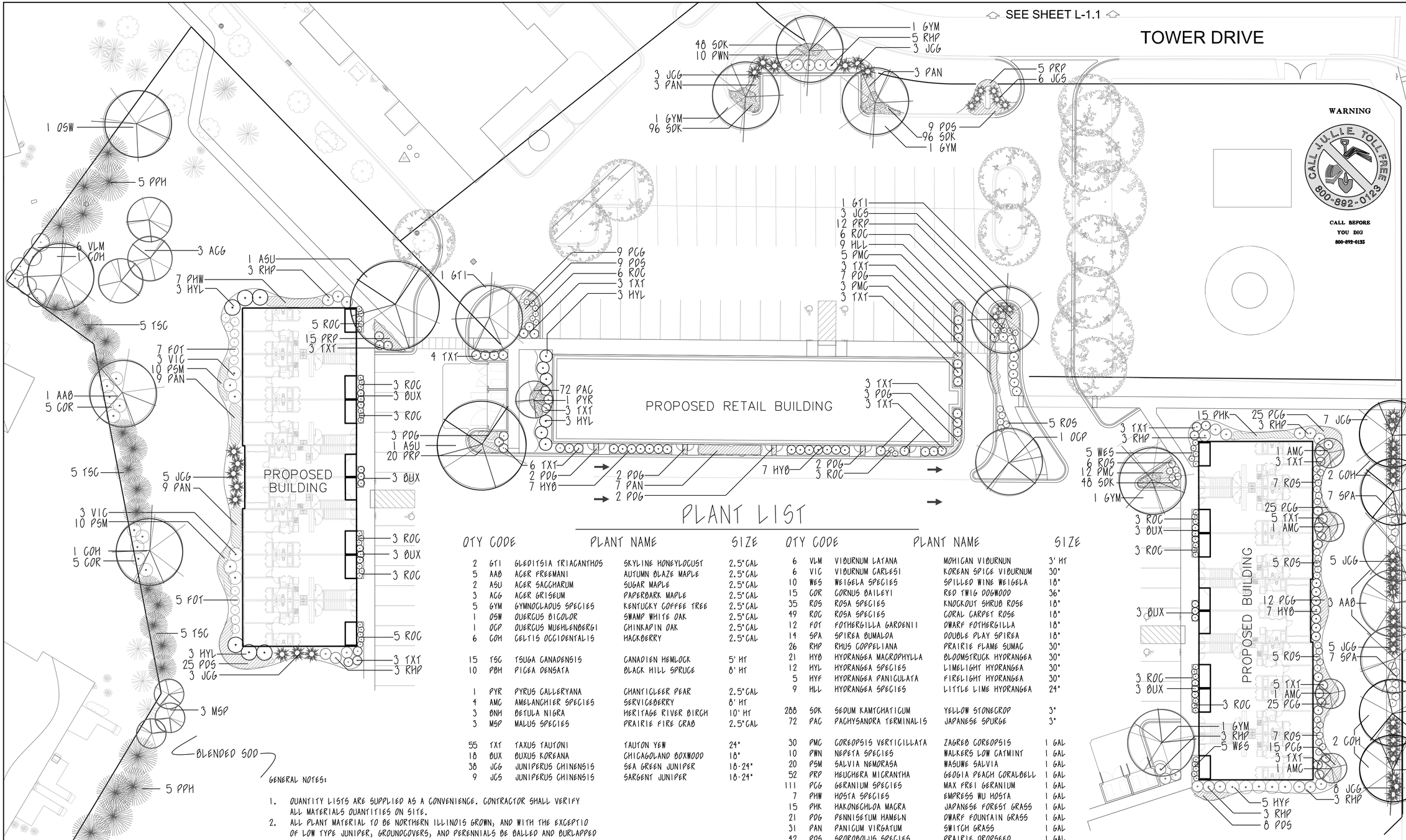
TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-1.1
LANDSCAPE PLAN

SEE SHEET L-1.1

TOWER DRIVE



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3	AGG	ACER GRISEUM	PAPERBARK MAPLE	2.5"CAL
5	GYM	GYMNOCLADUS SPECIES	KENTUCKY COFFEE TREE	2.5"CAL
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1	OGP	QUERCUS MUEHLENBERGI	CHINKAPIN OAK	2.5"CAL
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1	PYR	PYRUS CALLERYANA	CHANTICLEER PEAR	2.5"CAL
4	AMG	AMELANCHIER SPECIES	SERVICEBERRY	8' HT
3	BNH	BETULA NIGRA	HERITAGE RIVER BIRCH	10' HT
3	MSP	MALUS SPECIES	PRAIRIE FIRE CRAB	2.5"CAL
55	TXT	TAXUS TAUTONI	TAUTON YEW	24"
18	BUX	BUXUS KOREANA	CHICAGOLAND BOXWOOD	18"
38	JGG	JUNIPERUS CHINENSIS	SEA GREEN JUNIPER	18-24"
9	JGS	JUNIPERUS CHINENSIS	SARGENT JUNIPER	18-24"

QTY	CODE	PLANT NAME		SIZE
6	VLM	VIBURNUM LATANA	MOHICAN VIBURNUN	3' HT
6	VIG	VIBURNUM CARLESI	KOREAN SPICE VIBURNUM	30"
10	WES	WEIGELA SPECIES	SPILLED WINE WEIGELA	18"
15	COR	CORNUS BAILEYI	RED TWIG DOGWOOD	36"
35	ROS	ROSA SPECIES	KNOCKOUT SHRUB ROSE	18"
49	ROC	ROSA SPECIES	CORAL CARPET ROSE	18"
12	FOT	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	18"
14	SPA	SPIREA BUMALDA	DOUBLE PLAY SPIREA	18"
26	RHP	RHUS COPPELIANA	PRAIRIE FLAME SUMAC	30"
21	HYD	HYDRANGEA MACROPHYLLA	BLOOMSTRUCK HYDRANGEA	30"
12	HYL	HYDRANGEA SPECIES	LIMELIGHT HYDRANGEA	30"
5	HYF	HYDRANGEA PANICULATA	FIRELIGHT HYDRANGEA	30"
9	HLL	HYDRANGEA SPECIES	LITTLE LIME HYDRANGEA	24"
288	SDK	SEDUM KAMTCHATICUM	YELLOW STONECROP	3"
72	PAC	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	3"
30	PMC	COREOPSIS VERTICILLATA	ZAGREB COREOPSIS	1 GAL
10	PWN	NEPETA SPECIES	WALKERS LOW CATMINT	1 GAL
20	PSM	SALVIA NEMORASA	WASUWE SALVIA	1 GAL
52	PRP	HEUCHERA MICRANTHA	GEORGIA PEACH CORALBELL	1 GAL
111	PCG	GERANIUM SPECIES	MAX FREI GERANIUM	1 GAL
7	PHW	HOSTA SPECIES	EMPRESS WU HOSTA	1 GAL
15	PHK	HAKONECHLOA MACRA	JAPANESE FOREST GRASS	1 GAL
21	PDG	PENNISETUM HAMELN	DWARF FOUNTAIN GRASS	1 GAL
31	PAN	PANICUM VIRGATUM	SWITCH GRASS	1 GAL
42	PDS	SPOROBOLUS SPECIES	PRAIRIE DROPSEED	1 GAL

GENERAL NOTES:

1. QUANTITY LISTS ARE SUPPLIED AS A CONVENIENCE. CONTRACTOR SHALL VERIFY ALL MATERIALS QUANTITIES ON SITE.
2. ALL PLANT MATERIAL TO BE NORTHERN ILLINOIS GROWN, AND WITH THE EXCEPTIO OF LOW TYPE JUNIPER, GROUNDCOVERS, AND PERENNIALS BE BALLED AND BURLAPPED 'B & B' UNLESS OTHERWISE SPECIFIED. PLANT MATERIAL TO BE GROWN IN ACCORDANCE TO STANDARDS SET BY THE AMERICAN ASSOCIATION OF NURSERYMEN
3. ALL PLANTINGS SHALL BE WATERED THOROUGHLY IN THE FIRST 24 HOURS AFTER PLANTING.ENSURE ALL AIR POCKETS ARE REMOVED AROUND ROOT BALL.
4. CONTRACTOR TO GUARANTEE PLANT MATERIAL FOR ONE YEAR FROM TIME OF PLANTING.
5. ALL PLANT BED AREAS TO BE MULCHED WITH PREMIUM SHREDDED HARDWOOD MULCH 3" DEEP AND SHALL BE SEPARATED FROM LAWN AREAS WITH A SPADED EDGING.
6. ALL LAWN AREAS TO BE A FIVE WAY MINIMUM BLUEGRASS BLEND. CONTRACTOR IS RESPONSIBLE FOR WATERING SOD UNTIL TIME OF KNITTING.
7. IT IS CONTRACTORS OPTION TO STAKE TREES, BUT HIS RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL THE END OF GUARANTEE PERIOD.
8. PLANT SIZES LISTED ARE THE MINIMUM SIZE REQUIRED. PLANTS THAT DO NOT MEET THESE MINIMUM SIZES SHALL BE REJECTED AT CONTRACTORS EXPENSE.
9. NO PLANT SPECIES OR SIZES SHALL BE SUBSTITUTED WITHOUT PRIOR APPROVAL FROM LANDSCAPE ARCHITECT.
10. SEE SHEETS L-2.0, L-2.1, L-2.2 FOR ADDITIONAL PLANTING DETAILS AND SPECIFICATIONS.

SEE SHEET L-1.3

LANDSCAPE PLAN

NORTH

1" = 20'

00 10 20 40 80

Landscape Plans Prepared By:

Paul A. Couture, P.L.A. 1561
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REGISTERED
STATE OF ILLINOIS
LANDSCAPE ARCHITECT
SCOTS

LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

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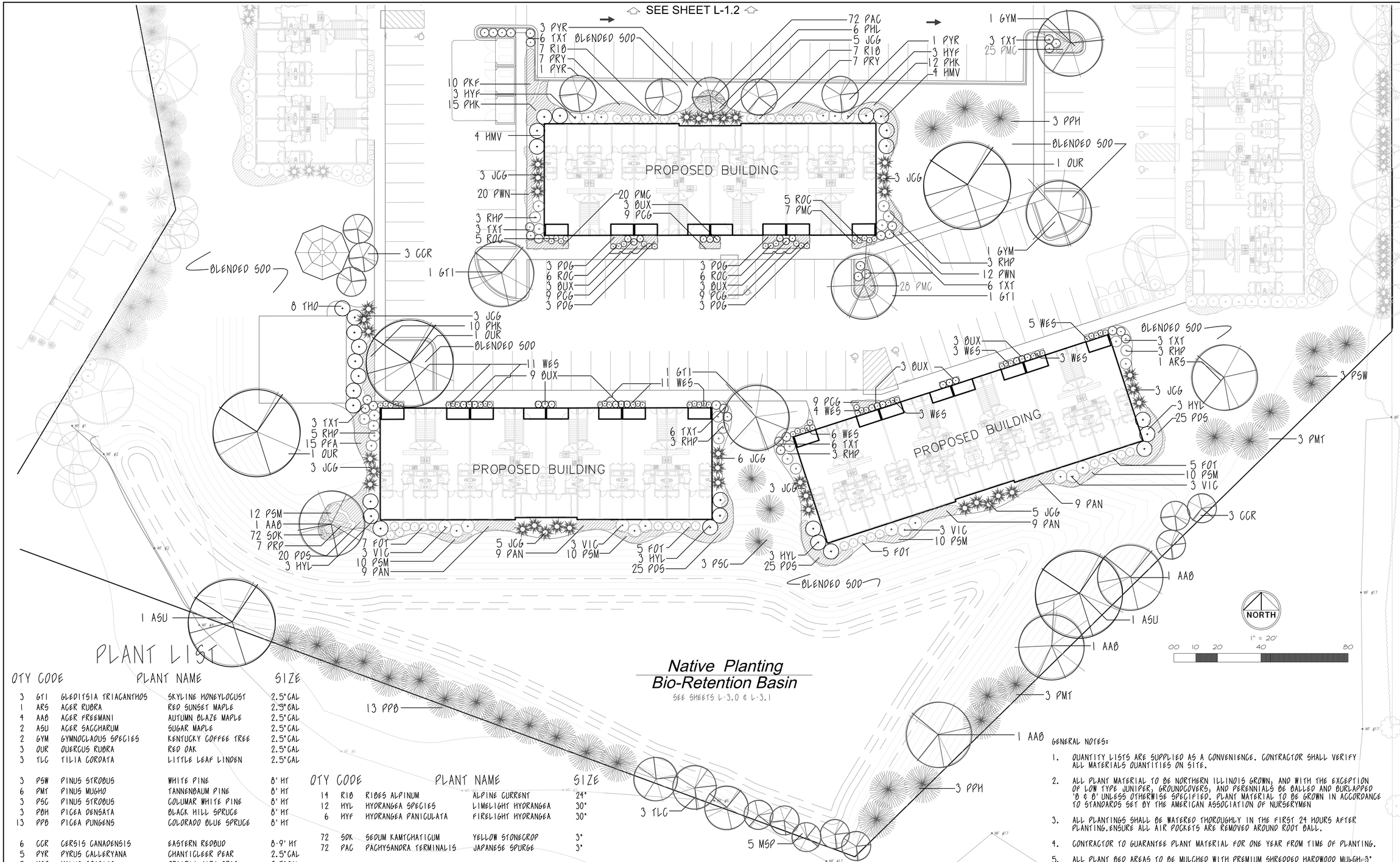
L-1.2
LANDSCAPE PLAN



PLANT LIST

QTY	CODE	PLANT NAME		SIZE
3	GTI	GLEDITSIA TRIACANTHOS	SKYLINE HONEYLOCUST	2.5" CAL
1	ARS	ACER RUBRA	RED SUNSET MAPLE	2.5" CAL
4	AAB	ACER FREEMANI	AUTUMN BLAZE MAPLE	2.5" CAL
2	ASU	ACER SACCHARUM	SUGAR MAPLE	2.5" CAL
2	GYM	GYMNOCLADUS SPECIES	KENTUCKY COFFEE TREE	2.5" CAL
3	QUR	QUERCUS RUBRA	RED OAK	2.5" CAL
3	TLC	TILIA CORDATA	LITTLE LEAF LINDEN	2.5" CAL
3	PSW	PINUS STROBUS	WHITE PINE	8' HT
6	PMT	PINUS MUGHO	TANNENBAUM PINE	8' HT
3	PSC	PINUS STROBUS	COLUMAR WHITE PINE	8' HT
3	PBH	PICEA DENSATA	BLACK HILL SPRUCE	8' HT
13	PPB	PICEA PUNGENS	COLORADO BLUE SPRUCE	8' HT
6	CCR	CERSIS CANADENSIS	EASTERN REDBUD	8-9' HT
5	PYR	PYRUS CALLERYANA	CHANTICLEER PEAR	2.5" CAL
5	MSP	MALUS SPECIES	PRAIRIE FIRE CRAB	2.5" CAL
8	THO	THUJA OCCIDENTALIS	TECHNEY ARBORVITAE	5' HT
30	TXT	TAXUS TAUTONI	TAUTON YEW	24"
27	BUX	BUXUS KOREANA	CHICAGOLAND BOXWOOD	18"
36	JCG	JUNIPERUS CHINENSIS	SEA GREEN JUNIPER	18-24"
12	VIC	VIBURNUM CARLESI	KOREAN SPICE VIBURNUM	30"
8	HMV	HAMAMELIS VERNALIS	VERNAL WITCHHAZEL	3' HT
15	WES	WEIGELA SPECIES	SPILLED WINE WEIGELA	18"
22	ROC	ROSA SPECIES	CORAL CARPET ROSE	18"
22	FOT	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	18"
20	RHP	RHUS COPPELIANA	PRAIRIE FLAME SUMAC	30"

QTY	CODE	PLANT NAME		SIZE
14	RIB	RIBES ALPINUM	ALPINE CURRENT	24"
12	HYL	HYDRANGEA SPECIES	LIMELIGHT HYDRANGEA	30"
6	HYF	HYDRANGEA PANICULATA	FIRELIGHT HYDRANGEA	30"
72	SOK	SEDUM KAMTCHATICUM	YELLOW STONECROP	3"
72	PAC	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	3"
70	PMG	COREOPSIS VERTICILLATA	ZAGREB COREOPSIS	1 GAL
14	PRY	HEMEROCALLIS SPECIES	ROSEY RETURNS DAYLILY	1 GAL
32	PWN	NEPETA SPECIES	WALKERS LOW CATMINT	1 GAL
52	PSM	SALVIA NEMORASA	WASUWE SALVIA	1 GAL
7	PRP	HEUCHERA MICRANTHA	GEOGIA PEACH CORALBELL	1 GAL
36	PGG	GERANIUM SPECIES	MAX FREI GERANIUM	1 GAL
15	PFA	ASTILBE SPECIES	COLOR FLASH ASTILBE	1 GAL
6	PHL	HOSTA SPECIES	LIBERTY HOSTA	1 GAL
37	PHK	HAKONECHLOA MAGRA	JAPANESE FOREST GRASS	1 GAL
12	PDG	PENNISETUM HAMELN	DWARF FOUNTAIN GRASS	1 GAL
36	PAN	PANICUM VIRGATUM	SWITCH GRASS	1 GAL
95	PDS	SPORODOLUS SPECIES	PRAIRIE DROPSEED	1 GAL
10	PKF	CALAMAGROSTIS SPECIES	KARL FOERSTER GRASS	1 GAL

Native Planting
Bio-Retention Basin
SEE SHEETS L-3.0 & L-3.1

LANDSCAPE PLAN

GENERAL NOTES:

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9. NO PLANT SPECIES OR SIZES SHALL BE SUBSTITUTED WITHOUT PRIOR APPROVAL FROM LANDSCAPE ARCHITECT.
10. SEE SHEETS L-2.0, L-2.1, L-2.2 , FOR ADDITIONAL PLANTING DETAILS AND SPECIFICATIONS.

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PAUL L. CRAWFORD
*157-000326
REGISTERED
STATE OF ILLINOIS
LANDSCAPE ARCHITECT
EXPIRES

LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

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L-1.3
LANDSCAPE PLAN

LANDSCAPE SPECIFICATIONS

SECTION 0001

LANDSCAPE WORK

PART 1 GENERAL

1.01 DESCRIPTION

THESE GENERAL REQUIREMENTS APPLY TO ALL LANDSCAPE OPERATIONS. REFER TO SPECIFICATION SECTIONS FOR SPECIFIC GENERAL, PRODUCT, AND EXECUTION REQUIREMENTS.

1.02 QUALITY ASSURANCE

A. COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING MATERIALS, METHODS OF WORK, AND DISPOSAL OF EXCESS AND WASTE MATERIALS.
B. OBTAIN AND PAY FOR ALL REQUIRED INSPECTIONS, PERMITS, AND FEES. PROVIDE NOTICES REQUIRED BY GOVERNMENTAL AUTHORITIES.
C. OWNER SHALL APPOINT A QUALIFIED REPRESENTATIVE TO OVERSEE THE WORK AND ASSURE ITS ADHERENCE TO THE PLANS AND THESE SPECIFICATIONS. HENCEFORTH, THIS PERSON SHALL BE DESIGNATED AS OWNER'S REPRESENTATIVE.
D. CONTRACTOR TO HAVE AN EXPERIENCED ENGLISH SPEAKING SUPERVISOR / FOREMAN ONSITE AT ALL TIMES THAT CAN ADEQUATELY COMMUNICATE WITH OWNER'S REPRESENTATIVE WHEN NECESSARY, AND HAVE EXPERIENCED INSTALLERS WHO HAVE COMPLETED LANDSCAPING WORK SIMILAR IN MATERIAL, DESIGN, AND EXTENT AS TO THAT INDICATED FOR THIS PROJECT WITH A RECORD OF SUCCESSFUL LANDSCAPE ESTABLISHMENT.
E. CONTRACTORS WORKFORCE SHALL BE KNOWLEDGEABLE AND OR MAKE THEMSELVES KNOWLEDGEABLE OF ALL SAFETY REGULATIONS AND REQUIREMENTS PERTAINING TO THIS PROJECT INCLUDING WEARING ALL PROTECTIVE GEAR NEEDED TO COMPLY WITH THESE REQUIREMENTS. WORKMAN NOT IN COMPLIANCE CAN AND WILL BE DENIED ACCESS TO THE JOBSITE BY THE GENERAL CONTRACTOR . A SAFETY CLASS FOR WORKERS MAY BE REQUIRED BY THE GENERAL CONTRACTOR.

1.03 PROJECT CONDITIONS

A. LOCATE AND IDENTIFY EXISTING UNDERGROUND AND OVERHEAD SERVICES AND UTILITIES WITHIN CONTRACT LIMIT WORK AREAS. CONTACT J.U.L.I.E AT 800-892-0123. PROVIDE ADEQUATE MEANS OF PROTECTION OF UTILITIES AND SERVICES DESIGNATED TO REMAIN. REPAIR UTILITIES DAMAGED DURING SITE WORK OPERATIONS AT CONTRACTORS EXPENSE.
B. WHEN UNCHARTED OR INCORRECTLY CHARTED UNDERGROUND PIPING OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
C. LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS AT CONTRACTORS EXPENSE.
D. OBTAIN GOVERNING AUTHORITIES WRITTEN PERMISSION WHEN REQUIRED TO CLOSE OR OBSTRUCT STREET, WALKS AND ADJACENT FACILITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS WHEN REQUIRED BY GOVERNING AUTHORITIES.
E. CONTROL DUST CAUSED BY THE WORK. DAMPEN SURFACES AS REQUIRED. COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
F. PROTECT EXISTING BUILDINGS, PAVING, AND OTHER SERVICES OR FACILITIES ON SITE AND ADJACENT TO THE SITE FROM DAMAGE CAUSED BY WORK OPERATIONS. COST OF REPAIR AND RESTORATION OF DAMAGED ITEMS AT CONTRACTORS EXPENSE.
G. PROTECT AND MAINTAIN STREETLIGHTS, UTILITY POLES AND SERVICES, TRAFFIC SIGNAL CONTROL BOXES, CURB BOXES, VALVES AND OTHER SERVICES, EXCEPT ITEMS DESIGNATED FOR REMOVAL. REMOVE OR COORDINATE THE REMOVAL OF TRAFFIC SIGNS, PARKING METERS AND POSTAL MAILBOXES WITH THE APPLICABLE GOVERNMENTAL AGENCY.
H. AT THE CONCLUSION OF EACH WORK DAY, THE CONTRACTOR IS RESPONSIBLE FOR LEAVING THE SITE IN A CLEAN AND SAFE CONDITION.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. MATERIALS AND EQUIPMENT: AS SELECTED BY CONTRACTOR, EXCEPT AS INDICATED.
B. EQUIPMENT: ARTICLES IN SECTION 600 - 1001 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
C. MATERIALS: ARTICLES IN SECTION 781 - 1001 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

PART 3 EXECUTION

3.01 PREPARATION

A. EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.
B. CONSULT THE AVAILABLE RECORDS AND DRAWINGS OF ADJACENT WORK AND OF EXISTING SERVICES AND UTILITIES WHICH MAY AFFECT WORK OPERATIONS, AS PROVIDED BY OWNER.

END OF SECTION 0001

SECTION 0002

TREE AND SHRUB PLANTING

PART 1 GENERAL

1.01 DESCRIPTION

A. PROVIDE TREES AND SHRUBS AS SHOWN AND SPECIFIED. THE WORK INCLUDES:
1. SOIL PREPARATION.
2. TREES, SHRUBS.
3. PLANTING MIXES.
4. MULCH AND PLANTING ACCESSORIES.
5. EXISTING PLANT RELOCATION.
B. RELATED WORK:
1. SECTION 00000: EARTHWORK.
2. SECTION 00004: SEEDING.
3. SECTION 00005: SODDING.
4. SECTION 00003: PERENNIAL , ORNAMENTAL GRASS, GROUNDCOVER PLANTING.

1.02 QUALITY ASSURANCE

A. COMPLY WITH SECTION 02900 REQUIREMENTS.
B. COMPLY WITH SECTION 02491 REQUIREMENTS WHEN APPLICABLE .
C. PROVIDE STOCK TRUE TO BOTANICAL NAME. DO NOT SUBSTITUTE WITHOUT PERMISSION OF OWNER OR OWNERS REPRESENTATIVE. NONCONFORMING PLANTS WILL BE REJECTED AT CONTRACTORS EXPENSE.
D. COMPLY WITH SIZING AND GRADING STANDARDS OF THE LATEST EDITION OF 'AMERICAN STANDARD FOR NURSERY STOCK'. A PLANT SHALL BE DIMENSIONED AS IT STANDS IN ITS NATURAL POSITION. NONCONFORMING PLANTS WILL BE REJECTED AT CONTRACTORS EXPENSE.
E. ALL PLANTS SHALL BE NORTHERN ILLINOIS NURSERY GROWN UNDER CLIMATIC AND SOIL CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
F. STOCK FURNISHED SHALL BE AT LEAST THE MINIMUM SIZE INDICATED. LARGER STOCK IS ACCEPTABLE WITHIN REASON, AT NO ADDITIONAL COST TO OWNER. ROOT SYSTEMS MUST MEET ANLA STANDARDS AS SPECIFIED. PLANTS SHOULD NOT BE ALTERED BY PRUNING OR OTHER MEANS TO MEET SPECIFICATIONS.
G. PROVIDE 'SPECIMEN' PLANTS WITH A SPECIAL HEIGHT, SHAPE OR CHARACTER OF GROWTH. SPECIMEN TREES OR SHRUBS MAY BE TAGGED AT THE SOURCE OF SUPPLY. THE OWNER'S REPRESENTATIVE MAY CHOOSE TO INSPECT SPECIMEN SELECTIONS AT THE SOURCE OF SUPPLY FOR SUITABILITY AND ADAPTABILITY TO SELECTED LOCATION. WHEN SPECIMEN PLANTS CANNOT BE PURCHASED LOCALLY, PROVIDE SUFFICIENT PHOTOGRAPHS OF THE PROPOSED SPECIMEN PLANTS FOR APPROVAL IF SO REQUESTED. NO 'PARK GRADE' MATERIAL WILL BE ACCEPTED.
H. PLANTS MAY BE INSPECTED AND APPROVED AT THE PLACE OF GROWTH, FOR COMPLIANCE WITH SPECIFICATION REQUIREMENTS FOR QUALITY, SIZE AND VARIETY.

CONTINUE SECTION 0002 TREE AND SHRUB PLANTING

1.03 SUBMITTALS

A. SUBMIT THE FOLLOWING MATERIAL SAMPLES, IF REQUESTED:
1. MULCH -BULK OR BAGGED.
2. DECORATIVE STONE OR GRAVEL -BAG OR BULK
B. SUBMIT THE FOLLOWING MATERIALS CERTIFICATION, IF REQUESTED:
1. TOPSOIL SOURCE AND PH VALUE.
2. PEAT MOSS, COMPOST, OR OTHER ORGANIC SOIL AMENDMENTS
3. PLANT FERTILIZER.

1.04 DELIVERY, STORAGE, AND HANDLING

A. DELIVER FERTILIZER MATERIALS IN ORIGINAL, UNOPENED AND UNDAMAGED CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. STORE IN MANNER TO PREVENT WETTING AND DETERIORATION.
B. TAKE ALL PRECAUTIONS CUSTOMARY IN GOOD NURSERY PRACTICE TO PREPARE PLANTS FOR TRANSPORT. WORKMANSHIP, WHICH FAILS TO MEET THE HIGHEST STANDARDS, WILL BE REJECTED. SPRAY DECIDUOUS PLANTS IN FOLIAGE WITH AN APPROVED ANTI- DESICCANT IMMEDIATELY BEFORE DIGGING TO PREVENT DEHYDRATION WHEN IN LEAF. DIG, PACK, TRANSPORT, AND HANDLE PLANTS WITH CARE TO ENSURE PROTECTION AGAINST INJURY.
C. COVER PLANTS TRANSPORTED ON OPEN VEHICLES WITH A PROTECTIVE COVERING TO PREVENT WINDBURN.
D. MOISTEN ALL BURLAP ROOT BALL BEFORE TRANSPORTING. PREVENT SURFACE FROM DRYING DURING TRANSPORTING

1.05 PROJECT CONDITIONS

A. WORK NOTIFICATION: NOTIFY OWNERS REPRESENTATIVE AT LEAST TWO *2* WORKING DAYS PRIOR TO INSTALLATION OF PLANT MATERIAL.
B. PROTECT EXISTING UTILITIES, PAVING, AND OTHER FACILITIES FROM DAMAGE CAUSED BY LANDSCAPING OPERATIONS. CALL J.U.L.I.E TO MARK UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE DIGGING.
C. A COMPLETE LIST OF PLANTS, INCLUDING A SCHEDULE OF SIZES, QUANTITIES, AND OTHER REQUIREMENTS IS SHOWN ON THE DRAWINGS. IN THE EVENT THAT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANT MATERIALS LIST, THE PLANTING PLANS SHALL GOVERN. PAYMENT SHALL BE BASED ON ACTUAL INSTALLED PLANT COUNT.

1.06 WARRANTY

A. WARRANT PLANT MATERIAL TO REMAIN ALIVE AND BE IN A HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF ONE (1) YEAR AFTER ACCEPTANCE, PROVIDED PLANTS ARE GIVEN PROPER CARE BY OWNER DURING THIS PERIOD.
1. CONTRACTOR TO CALL FOR FINAL INSPECTION OF PLANTS.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT THE WATERING, CULTIVATION AND OTHER MAINTENANCE OPERATIONS PERFORMED BY THE OWNER DURING THE WARRANTY PERIOD.
3. ANY METHODS OR PRACTICES, WHICH THE CONTRACTOR CONSIDERS UNSATISFACTORY AND NOT IN ACCORD WITH STANDARD HORTICULTURAL PRACTICES SHALL BE REPORTED TO THE OWNER IN WRITING.
B. REMOVE AND IMMEDIATELY REPLACE ALL PLANTS, AS DETERMINED BY THE OWNER*S REPRESENTATIVE, TO BE UNSATISFACTORY DURING THE INITIAL PLANTING INSTALLATION.
C. REPLACE ONCE, IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ALL PLANTS THAT ARE DEAD OR, AS DETERMINED BY OWNER'S REPRESENTATIVE, ARE IN A SEVERELY UNHEALTHY CONDITION WITHIN WARRANTY PERIOD. REPLACEMENTS TO BE INSTALLED AT NEXT BEST PLANTING SEASON.
D. WARRANTY SHALL NOT INCLUDE DAMAGE OR LOSS OF TREES, PLANTS, OR GROUND COVERS CAUSED BY FIRES, FLOODS, DROUGHT, FREEZING RAIN, LIGHTNING STORMS, OR WINDS OVER 75 MILES PER HOUR, WINTER KILL CAUSED BY EXTREME COLD AND SEVERE WINTER CONDITIONS NOT TYPICAL OF PLANTING AREAS; ACTS OF VANDALISM, ANIMAL OBSTRUCTION OR NEGLIGENCE ON THE PART OF THE OWNER. ANY REPLACEMENT ATTRIBUTED TO THESE CAUSES MUST BE IN ADDITION TO THE CONTRACT AMOUNT.

PART 2 PRODUCTS

2.01 MATERIALS

A. PLANTS: PROVIDE PLANTS TYPICAL OF THEIR SPECIES OR VARIETY; WITH NORMALLY DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS. PROVIDE ONLY SOUND, HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, DISFIGURING KNOTS, SUNSCALD INJURIES, FROST CRACKS, ABRASIONS OF THE BARK, PLANT DISEASES, INSECT EGGS, BORERS, AND ALL FORMS OF INFESTATION.
1. DIG BALLED AND BURLAPPED PLANTS WITH FIRM, NATURAL BALLS OF EARTH OF SUFFICIENT DIAMETER AND DEPTH AS NECESSARY FOR FULL RECOVERY OF THE PLANT. PROVIDE BALL SIZES COMPLYING WITH THE LATEST EDITION OF THE 'AMERICAN STANDARD FOR NURSERY STOCK'. CRACKED OR MUSHROOMED BALLS ARE NOT ACCEPTABLE.
2. CONTAINER-GROWN STOCK SHALL HAVE GROWN IN A CONTAINER FOR SUFFICIENT LENGTH OF TIME FOR THE ROOT SYSTEM TO HAVE DEVELOPED TO HOLD ITS SOIL TOGETHER, FIRM AND WHOLE.
A. NO PLANTS SHALL BE LOOSE IN THE CONTAINER.
B. CONTAINER STOCK SHALL NOT BE POT BOUND.
3. IF THE USE OF LARGER THAN SPECIFIED PLANTS IS ACCEPTABLE, INCREASE THE SPREAD OF ROOTS OR ROOT BALL IN PROPORTION TO THE SIZE OF THE PLANT.
4. THE HEIGHT OF THE TREES, MEASURED FROM THE GROWN OF THE ROOTS TO THE TOP OF THE TOP BRANCH, SHALL NOT LESS THAN THE MINIMUM SIZE AND VARIETY DESIGNATED IN THE PLANT LIST AND ACCORDING TO THE ANLA STANDARDS FOR NURSERY STOCK.
5. SHRUBS AND SMALL PLANTS SHALL MEET THE REQUIREMENTS FOR SPREAD AND/OR HEIGHT INDICATED IN THE PLANT LIST AND BE IN ACCORDANCE WITH ANLA STANDARDS.

2.02 ACCESSORIES

A. TOPSOIL FOR PLANTING BEDS: FERTILE, FRIABLE, NATURAL TOPSOIL WITHOUT ADMIXTURE OF SUBSOIL MATERIAL, OBTAINED FROM A WELL-DRAINED ARABLE SITE, REASONABLY FREE FROM CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIALS, WITH ACIDITY RANGE OF BETWEEN PH 5.5 TO 6.0 AND BE TYPICAL OF THE AREA.
1. IDENTIFY SOURCE LOCATION OF TOPSOIL PROPOSED FOR USE ON THE PROJECT.
2. PROVIDE TOPSOIL FREE OF SUBSTANCES HARMFUL TO THE PLANTS WHICH WILL BE GROWN IN THE SOIL.
B. PEAT MOSS: BROWN TO BLACK IN COLOR, WEED AND SEED FREE GRANULATED RAW PEAT OR BALED PEAT, CONTAINING NOT MORE THAN 9% MINERAL ON A DRY BASIS.
C. ORGANIC MATTER- ORGANIC MATTER CAN BE FROM PEAT MOSS, COMPOST, OR LOCALLY AVAILABLE ORGANIC WASTE. ORGANIC MATTER SHOULD BE WELL COMPOSTED, FREE FROM DEBRIS, WEED SEEDS, AND INSECTS OR DISEASES WHICH MAY BE HARMFUL TO THE INTENDED PLANTING.
D. MULCH: DARK PREMIUM GRADE , DOUBLE PROCESSED SHREDDED HARDWOOD UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.
E. FERTILIZER:
1. PLANT FERTILIZER: COMMERCIAL TYPE APPROVED BY THE OWNER*S REPRESENTATIVE, CONTAINING 10% NITROGEN, 10% PHOSPHORIC ACID AND 10% POTASH BY WEIGHT OR EQUIVALENT IN A SLOW RELEASED GRANULAR FORM.
F. PRE EMERGENT HERBICIDE: TREFLAN, RONSTAR-G OR APPROVED EQUIVALENT APPLIED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS TO ALL PLANT BED AREAS UNLESS OTHERWISE INDICATED.
G. ANTI-DESICCANT: PROTECTIVE FILM EMULSION PROVIDING A PROTECTIVE FILM OVER PLANT SURFACES; PERMEABLE TO PERMIT TRANSPIRATION. MIXED AND APPLIED IN ACCORDANCE WITH MANUFACTURER*S INSTRUCTIONS.
H. WATER: HOSES OR OTHER METHODS OF TRANSPORTATION TO BE FURNISHED BY CONTRACTOR. WATER TO BE PROVIDED BY THE OWNER AT THE SITE.
I. STAKES FOR STAKING: HARDWOOD, 2" X 2" 6-0" LONG 2X4 PINE IS PERMISSIBLE.
J. STAKES FOR GUYING: HARDWOOD, 2" X 2" X 24" LONG OR 'DUCKBILL' OR 'SPEED STAKE' EARTH ANCHORS.
K. GUYING/STAKING WIRE: 12- OR 14-GAUGE GALVANIZED WIRE.
1. TURNBUCKLES: GALVANIZED STEEL OF SIZE AND GAUGE REQUIRED TO PROVIDE TENSILE STRENGTH EQUAL TO THAT OF THE WIRE. TURNBUCKLE OPENINGS SHALL BE AT LEAST 3".
L. STAKING AND GUYING HOSE: TWO-PLY, REINFORCED GARDEN HOSE NOT LESS THAN 1/2" INSIDE DIAMETER. SHALL BE UNIFORM IN COLOR.
M. PLASTIC GUY MATERIAL NO LESS THAN 1/4". SHALL BE UNIFORM IN COLOR AND LEVEL AS APPLIED.
N. TWINE: TWO-PLY JUTE MATERIAL.
O. WEED CONTROL BARRIER: 'IF INDICATED' ROT RESISTANT POLYPROPYLENE FABRIC OR EQUIVALENT, WATER AND AIR PERMEABLE.

PART 3 EXECUTION

3.01 INSPECTION

A. EXAMINE PROPOSED PLANTING AREAS AND CONDITIONS BEFORE INSTALLATION. DO NOT START PLANTING WORK UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

3.02 PREPARATION

A. COORDINATION AND SCHEDULING - TIME OF PLANTING
COORDINATE INSTALLATION OF PLANTING MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF PLANT MATERIAL REQUIRED. NORMAL SEASONS FOR THE INSTALLATION OF PLANT MATERIAL SHALL BE AS FOLLOWS:
1. SPRING PLANTING: PERFORM FROM TIME SOIL BECOMES WORKABLE TO JUNE 15. INSTALL EVERGREEN TREES PRIOR TO NEW GROWTH BEGINNING IN THE SPRING.
2. FALL PLANTING: PERFORM FROM SEPTEMBER 1 TO NOVEMBER 15. PERENNIALS AND GROUND COVERS SHALL BE COMPLETED BY OCTOBER 15.
3. SUMMER PLANTING: PLANTING PERFORMED BETWEEN JUNE 15 AND AUGUST 31, SHALL BE CONSIDERED UNSEASONABLE AND WILL REQUIRE OWNER'S APPROVAL.

B. PLANTING SHALL BE PERFORMED ONLY BY EXPERIENCED WORKMEN FAMILIAR WITH PLANTING PROCEDURES UNDER THE SUPERVISION OF A QUALIFIED SUPERVISOR.

C. LOCATE PLANTS AS INDICATED ON DRAWINGS. IF OBSTRUCTIONS ARE ENCOUNTERED THAT ARE NOT SHOWN ON THE DRAWINGS, DO NOT PROCEED WITH PLANTING OPERATIONS UNTIL OWNER'S REPRESENTATIVE HAS SELECTED ALTERNATE PLANT LOCATIONS.

D. EXCAVATE CIRCULAR PLANT PITS WITH VERTICAL SIDES, EXCEPT FOR PLANTS SPECIFICALLY INDICATED TO BE PLANTED IN BEDS. PROVIDE SHRUB PITS AT LEAST TWICE AS WIDE AS THE ROOT SYSTEM AND 24" GREATER FOR TREES. DEPTH OF PIT SHALL BE NO GREATER THAN THE ROOT BALL DEPTH. SCARIFY BOTTOM OF THE PIT. REMOVE EXCESS EXCAVATED MATERIALS FROM THE SITE.

E. PLANTING MIXTURE FOR USE AROUND THE BALLS AND ROOTS OF TREES AND SHRUBS SHALL CONSIST OF FIVE (5) PARTS EXISTING SOIL TO ONE (1) PART PEAT MOSS AND LB. PLANT FERTILIZER FOR EACH CUBIC YARD OF MIXTURE OR EQUIVALENT. BAGGED BARK PROFESSIONAL MIXES ARE AN EQUIVALENT SUBSTITUTE FOR PEAT MOSS.

3.03 INSTALLATION

A. SET PLANT MATERIAL IN THE PLANTING PIT TO PROPER GRADE AND ALIGNMENT. SET PLANTS UPRIGHT, PLUM AND FACED TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO EACH OTHER OR ADJACENT STRUCTURE. SET PLANT MATERIAL NO LOWER THAN THE FINISH GRADE OR 2"-3" ABOVE FINISHED GRADE. NO FILLING WILL BE PERMITTED AROUND TRUNKS OR STEMS. BACK FILL THE PIT WITH EXISTING SOIL OR APPROVED TOP SOIL OR MIX. FORM A RING OF SOIL AROUND THE EDGE OF EACH PLANTING PIT TO RETAIN WATER.

B. AFTER PLANTS ARE SET, MUDDLE PLANTING SOIL MIXTURE AROUND BASES OF BALLS AND FILL ALL VOIDS.
I. REMOVE ALL SYNTHETIC BURLAP AND ROPES, AND WIRES FROM THE COLLAR OF BALLS.

G. SPACE PLANTS IN ACCORDANCE WITH SCALED DRAWINGS.

D. WATERING: WATER PLANTING THOROUGHLY TO FILL SOILS AGAINST ROOT BALL AND SETTLE AIR POCKETS. ADDITIONAL SOIL MAY BE NEEDED, WATER AGAIN TO ENSURE COMPLETE COMPACTION.

E. MULCHING: TREES AND SHRUBS SHALL HAVE MULCH APPLIED IMMEDIATELY AFTER PLANTING. AFTER WATERING, RAKE MULCH TO PROVIDE A UNIFORM FINISHED SURFACE.
I. MULCH TREES AND SHRUBS WITH REQUIRED MULCHING MATERIAL 3-4"
2. MULCH PERENNIAL BEDS 2- 3" DEEP
3. MULCH GROUND COVER BEDS TO A DEPTH OF 1-2" (NO MORE THAN 2") BEFORE INSTALLING GROUNDCOVER PLANTS. BRUSH MULCH OFF OF FOLIAGE.

F. WRAPPING, GUYING, STAKING: IT IS THE CONTRACTORS TO OPTION TO STAKE TREES, BUT HIS RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL END OF THE GUARANTEE PERIOD.
I. WRAPPING SHOULD BE DONE ONLY ON AN AS NEED BASIS.
2. STAKING/GUYING (IF NEEDED)
A. STAKE/GUY SHOULD ONLY BE USED WHEN TREES ARE LOOSE OR WEAK STEMMED.
SEE STAKING DETAILS ON THE DRAWINGS

G. PRUNING:
I. REMOVE OR CUT BACK BROKEN, DAMAGED AND ASYMMETRICAL GROWTH OF NEW WOOD.
2. UNLESS OTHERWISE DIRECTED, PRUNE EVERGREENS ONLY TO REMOVE BROKEN OR DAMAGED BRANCHES.

H. EXISTING PLANT RELOCATION:
I. TRANSPLANT TREES AND SHRUBS DESIGNATED FOR RELOCATION TO LOCATIONS SHOWN ON THE DRAWINGS. PRUNE, DIG, BALL AND BURLAP, MOVE AND PLANT IN ACCORDANCE WITH SPECIFIED TREE PLANTING REQUIREMENTS.
2. PRUNE, DIG, BALL AND BURLAP, AND MOVE DESIGNATED TREES FOR RELOCATION TO THE DESIGNATED PLANT STORAGE AREA FOR HEELING-IN OF MATERIALS UNTIL FINAL PLANTING AREAS ARE PREPARED, IF REQUIRED.
A. MAINTAIN PLANTS IN STORAGE AREAS BY BRACING PLANTS IN VERTICAL POSITION AND SETTING BALLS IN AN ENCLOSED BERM OF TOPSOIL OR BARK. WATER AS REQUIRED TO MAINTAIN ADEQUATE ROOT MOISTURE.
B. RE-BURLAP PLANT BALLS IF REQUIRED BEFORE FINAL TRANSPLANTING OPERATIONS.
C. MOVE TO FINAL LOCATIONS SHOWN ON THE DRAWINGS AND PLANT IN ACCORDANCE WITH SPECIFIED TREE PLANTING REQUIREMENTS.
3. TRANSPLANTS ARE NOT UNDER WARRANTY UNLESS INDICATED.

3.04 MAINTENANCE

A. MAINTENANCE OF INSTALLED AND ACCEPTED PLANTINGS WILL BE PERFORMED BY THE OWNER.
B. CONTRACTOR'S MAINTENANCE SHALL INCLUDE PRUNING, CULTIVATING, WEEDING, WATERING, AND APPLICATION OF APPROPRIATE INSECTICIDES AND FUNGICIDES NECESSARY TO MAINTAIN PLANTS FREE OF INSECTS AND DISEASE UNTIL ACCEPTANCE.
I. RE-SET SETTLED PLANTS TO PROPER GRADE AND POSITION. RESTORE PLANTING SAUCER AND ADJACENT MATERIAL AND REMOVE DEAD MATERIAL.
2. TIGHTEN AND REPAIR GUY WIRES AND STAKES AS REQUIRED, ONLY IF ORIGINALLY NEEDED.
3. CORRECT DEFECTIVE WORK AS SOON AS POSSIBLE AFTER DEFICIENCIES BECOME APPARENT AND WEATHER AND SEASON PERMIT.
4. WATER ALL PLANT MATERIAL AS NECESSARY .

3.05 ACCEPTANCE

A. PLANTED AREAS WILL BE INSPECTED AT COMPLETION OF INSTALLATION AND ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS.
B. INSPECTION UPON CONTRACTORS REQUEST TO DETERMINE ACCEPTANCE OF PLANTED AREAS WILL BE MADE BY THE OWNER'S REPRESENTATIVE.
I. PLANTED AREAS WILL BE ACCEPTED PROVIDED ALL REQUIREMENTS HAVE BEEN COMPLIED WITH AND PLANT MATERIALS ARE ALIVE AND IN A HEALTHY, VIGOROUS CONDITION.
C. SECTIONS OF THE WORK MAY BE ACCEPTED WHEN COMPLETE UPON AGREEMENT OF THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR.
D. UPON ACCEPTANCE, THE OWNER WILL ASSUME PLANT MAINTENANCE.

3.06 CLEANING

A. PERFORM CLEANING DURING INSTALLATION AND UPON COMPLETION OF THE WORK. REMOVE FROM SITE ALL EXCESS MATERIALS, SOIL, DEBRIS, AND EQUIPMENT. REPAIR DAMAGE RESULTING FROM PLANTING OPERATIONS.

END OF SECTION 0002

Landscape Plans Prepared By:

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STATE OF ILLINOIS
LANDSCAPE ARCHITECT
EXPIRES 11/30/2019

LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

ISSUE

TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-2.0
LANDSCAPE SPECIFICATIONS

LANDSCAPE SPECIFICATIONS

SECTION 0003

PERENNIALS - ORNAMENTAL GRASSES - GROUNDCOVER PLANTING

PART 1 GENERAL

1.01 DESCRIPTION

A. PROVIDE PERENNIALS, ORNAMENTAL GRASSES AND GROUND COVERS AS SHOWN AND SPECIFIED. THE WORK INCLUDES:
   1. SOIL PREPARATION.
   2. PERENNIAL, ORNAMENTAL GRASSES AND GROUNDCOVERS.
   3. PLANTING MIXES.
   4. MULCH AND PLANTING ACCESSORIES.
B. RELATED WORK:
   1. SECTION 00000: EARTHWORK.
   2. SECTION 00004: SEEDING.
   3. SECTION 00005: SODDING.
   4. SECTION 00002: TREE AND SHRUB PLANTING.

1.02 QUALITY ASSURANCE

A. COMPLY WITH SECTION 02900 REQUIREMENTS.
   COMPLY WITH SECTION 02490 WHEN APPLICABLE.
B. LANDSCAPE CONTRACTORS SHALL PROVIDE STOCK TRUE TO BOTANICAL NAME AND LEGIBLY TAGGED. DO NOT SUBSTITUTE WITHOUT PERMISSION OF LANDSCAPE ARCHITECT.
C. COMPLY WITH SIZING AND GRADING STANDARDS OF THE LATEST EDITION OF 'AMERICAN STANDARD FOR NURSERY STOCK'. A PLANT SHALL BE DIMENSIONED AS IT STANDS IN ITS NATURAL POSITION.
   1. SPECIFIED POT SIZES AND PLANT GRADES SHOULD COMPLY WITH THE STANDARDS ACCEPTED BY THE ANLA. THESE STANDARDS LIST MINIMUM DIMENSIONS FOR CONTAINERS IN VARIOUS CLASSES AND DEFINE MINIMUM STANDARDS FOR BARE ROOT LINERS, DIVISIONS, AND FIELD CLUMPS.
D. ALL PLANTS SHALL BE NORTHERN ILLINOIS NURSERY GROWN UNDER CLIMATIC AND SOIL CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
E. STOCK FURNISHED SHALL BE AT LEAST THE MINIMUM SIZE INDICATED. LARGER STOCK IS ACCEPTABLE WITHIN REASON, AT NO ADDITIONAL COST TO OWNER. ROOT SYSTEMS MUST MEET ANLA STANDARDS AS SPECIFIED. PLANTS SHOULD NOT BE ALTERED BY PRUNING OR OTHER MEANS TO MEET SPECIFICATIONS.
F. PLANTS MAY BE INSPECTED AND APPROVED AT THE PLACE OF GROWTH, FOR COMPLIANCE WITH SPECIFICATION REQUIREMENTS FOR QUALITY, SIZE AND VARIETY.

1.03 SUBMITTALS

A. AFTER PREPARATION, A SAMPLE OF THE PLANTING SOIL SHALL BE SUBMITTED TO THE LANDSCAPE IF REQUESTED, PRIOR TO INSTALLATION OF THE PLANTS. ADDITIONAL ORGANIC MATTER AND PREPARATION MAY BE REQUIRED BASED ON THE PHYSICAL PROPERTIES OF THE SAMPLE SUBMITTED. A SEPARATE SAMPLE FROM EACH PLANTING BED SHALL BE SUBMITTED IF REQUESTED.
B. A SAMPLE OF THE ORGANIC MATTER SPECIFIED SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO USE. A LABORATORY ANALYSIS MAY BE REQUESTED IF DEEMED NECESSARY.
C. PRIOR TO USE, LABELS OF ALL SOIL AMENDMENTS SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT TO VERIFY COMPLIANCE WITH THE DESIGN SPECIFICATIONS. SAMPLES MAY BE REQUESTED FOR LABORATORY ANALYSIS.
D. EACH SEPARATELY CONTAINERIZED PLANT BROUGHT TO THE SITE SHALL BE LABELED WITHIN REASON. FLATS OF THE SAME PLANTS MAY HAVE ONE LABEL PER FLAT. EACH BUNDLE OF BARE ROOT PLANTS SHALL BE LABELED. THESE LABELS MUST SHOW THE BOTANICAL NAME OF THE PLANT. THE LANDSCAPE ARCHITECT SHALL INSPECT THE LABELS, CONTAINER SIZES, AND DIVISION SIZES OF BARE ROOT PLANTS FOR COMPLIANCE TO THE DESIGN SPECIFICATIONS PRIOR TO PLANTING. THE LANDSCAPE ARCHITECT SHALL ALSO VERIFY THAT THE PLANTS DELIVERED TO THE SITE ARE LABELED TRUE TO NAME. UPON ACCEPTANCE OF THE PLANTS BY THE OWNER, THE LANDSCAPE CONTRACTOR SHALL PROVIDE WRITTEN MAINTENANCE PROCEDURES FOR MAINTENANCE OF THE PLANTS.
E. FOLLOWING THE INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE LANDSCAPE ARCHITECT WITH A COPY OF THE ORIGINAL PLAN NOTING ANY SITE ADJUSTMENTS TO THAT ORIGINAL PLAN

PART 2 PRODUCTS

2.01 MATERIALS

A. PLANTS: PROVIDE PLANTS TYPICAL OF THEIR SPECIES OR VARIETY; WITH NORMALLY DEVELOPED HABIT AND VIGOROUS ROOT SYSTEMS. PROVIDE ONLY SOUND, HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, SUNSCALD INJURIES, PLANT DISEASES, INSECT EGGS, AND ALL FORMS OF INFESTATION.
   1. CONTAINER-GROWN STOCK SHALL HAVE GROWN IN A CONTAINER FOR SUFFICIENT LENGTH OF TIME FOR THE ROOT SYSTEM TO HAVE DEVELOPED TO HOLD ITS SOIL TOGETHER, FIRM AND WHOLE.
      A. NO PLANTS SHALL BE LOOSE IN THE CONTAINER.
      B. CONTAINER STOCK SHALL NOT BE POT BOUND.
   2. IF THE USE OF LARGER THAN SPECIFIED PLANTS IS ACCEPTABLE, INCREASE THE SPREAD OF ROOTS OR CONTAINER SIZE IN PROPORTION TO THE SIZE OF THE PLANT.
   3. PLANTS SHALL MEET THE REQUIREMENTS FOR SPREAD AND/OR HEIGHT INDICATED IN THE PLANT LIST AND BE IN ACCORDANCE WITH ANLA STANDARDS.

2.02 PLANT SPECIFICATIONS

A. PERENNIAL AND GROUNDCOVER PLANTS ARE SPECIFIED FOR DESIGN BY THE CONTAINER CLASS AND SIZE (I.E. 2" SQUARE CONTAINER OR 1 QUART CONTAINER, ETC.) OR, IF BARE ROOT, BY GRADE AS ACCEPTED BY ANLA STANDARDS FOR NURSERY STOCK AND THE PRODUCTION TRADE (I.E. 1-EYE DIVISION, 2-3 EYE DIVISION, FIELD CLUMP, ETC.).
B. PERENNIALS ARE SPECIFIED BY TYPE:
   1. CONTAINER-GROWN - GROWN TO A SPECIFIED SIZE IN A CONTAINER.
   2. BARE ROOT - PURCHASED FREE OF ANY GROWING MEDIUM REGARDLESS OF GROWING METHOD.
   3. FIELD-POTTED - FIELD-GROWN PLANTS WHICH ARE POTTED FOR DELIVERY AS THEY ARE DUG FROM THE FIELD.

2.03 SOIL REQUIREMENTS

DEPENDING ON EXISTING CONDITIONS OF TOPSOIL ONSITE, REQUIRED SOIL MIX MAY BE PREPARED ONSITE THROUGH MANUAL AND MECHANICAL MEANS, OR IN THE EVENT EXISTING SOIL IS IN UNACCEPTABLE CONDITION AND MAKEUP , NEW TOPSOIL OR A COMPLETE MIX TO BE INSTALLED AFTER EXISTING SOIL IS EXCAVATED TO PROPER DEPTH AND REMOVED / DISPOSED OFFSITE.
FINAL SOIL COMPOSITION IN PERENNIAL , ORNAMENTAL GRASS AND GROUNDCOVER BEDS TO BE
40% TOPSOIL , 30% ORGANIC MATTER, 30% COARSE SAND, PLUS 1 LB. FERTILIZER PER CUBIC YARD OF SOIL MIX

A. SOIL FOR PERENNIAL BEDS SHOULD BE ROTOTILLED 8 INCHES DEEP MINIMUM. GROUNDCOVER BEDS AT 6" MINIMUM UNLESS OTHERWISE NOTED. TOP SOIL SHOULD BE DRY, LOOSE, AND FREE OF DEBRIS. WHERE HARDPAN EXISTS BENEATH THE PREPARED BED, DEEPER PREPARATION MAY BE SPECIFIED. ADDITIONALLY, THE LANDSCAPE CONTRACTOR SHOULD IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT IF ANY BEDS DO NOT DRAIN PROPERLY.
BAGGED BARK PROFESSIONAL MIXES ARE AN EQUIVALENT SUBSTITUTE FOR PEAT MOSS.

2.04 AMENDMENTS

A. TOPSOIL: TOPSOIL FOR PLANTING BEDS: FERTILE, FRIABLE, NATURAL TOPSOIL WITHOUT ADMIXTURE OF SUBSOIL MATERIAL, OBTAINED FROM A WELL-DRAINED ARABLE SITE, REASONABLY FREE FROM CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIALS, WITH ACIDITY RANGE OF BETWEEN PH 5.5 TO 6.0 AND BE TYPICAL OF THE AREA.
   1. IDENTIFY SOURCE LOCATION OF TOPSOIL PROPOSED FOR USE ON THE PROJECT.
   2. PROVIDE TOPSOIL FREE OF SUBSTANCES HARMFUL TO THE PLANTS WHICH WILL BE GROWN IN THE SOIL.

B. ORGANIC MATTER- ORGANIC MATTER CAN BE FROM PEAT MOSS, COMPOST, OR LOCALLY AVAILABLE ORGANIC WASTE. ORGANIC MATTER SHOULD BE WELL COMPOSTED, FREE FROM DEBRIS, WEED SEEDS, AND INSECTS OR DISEASES WHICH MAY BE HARMFUL TO THE INTENDED PLANTING

C. FERTILIZERS: TO BE DELIVERED TO THE JOB SITE IN THEIR ORIGINAL PACKAGING WITH LEGIBLE, INTACT LABELS INDICATING NUTRIENT CONTENT AND SOURCE. LABELS SHOULD BE CHECKED PRIOR TO USE AND A SAMPLE MAY BE REQUESTED FOR LABORATORY ANALYSIS.
   1. COMMERCIAL TYPE APPROVED BY THE OWNER'S REPRESENTATIVE, CONTAINING 10% NITROGEN, 10% PHOSPHORIC ACID AND 10% POTASH BY WEIGHT OR EQUIVALENT IN A SLOW RELEASED GRANULAR FORM.

D. COARSE SAND: GRADATION FA-2

PART 3 EXECUTION

3.01 PRE-PLANTING AND POST-PLANTING INSTRUCTIONS

A. PRE-PLANTING.
1. PLANTS SHALL BE BROUGHT TO THE SITE THE DAY THEY ARE TO BE INSTALLED, IF POSSIBLE. IF SITUATIONS ARISE WHERE EARLIER DELIVERY CAN'T BE AVOIDED OR IF PLANTING IS DELAYED AFTER THE PLANTS HAVE BEEN DELIVERED, THEY SHALL BE STORED WHERE THEY CAN BE PROPERLY WATERED, SHELTERED FROM DIRECT SUNLIGHT, AND PROTECTED FROM MECHANICAL DAMAGE BY CONSTRUCTION EQUIPMENT, ANIMALS, ETC. IF STORAGE NEEDS TO BE MORE THAN TWO DAYS, THE PLANTS SHALL BE SEPARATED FAR ENOUGH FROM EACH OTHER TO PROVIDE GOOD AIR CIRCULATION TO THEIR TOPS, REDUCING THE RISK OF FUNGUS. BARE ROOT PLANTS WHICH MUST BE HELD SHALL BE HEALED-IN WHERE THEY CAN BE WATERED AS NEEDED.
2. ALL PLANTS SHALL BE WATERED THOROUGHLY AND ALLOWED TO DRAIN PRIOR TO PLANTING.
3. WHILE PLANTING, BARE ROOT PLANTS MUST BE PROTECTED FROM HOT SUN AND DRYING WIND BY SHADING THEM WITH BURLAP, LANDSCAPE FABRIC, STRAW OR OTHER BREATHABLE MATERIAL. PLASTIC IS UNACCEPTABLE. CONTAINERIZED PLANTS MUST BE LEFT IN THEIR CONTAINERS UNTIL EACH IS PLANTED. THEY SHALL NOT BE REMOVED FROM THE CONTAINERS TO BE LAID OUT ON THE BED WHERE SUN AND WIND WILL DAMAGE THE ROOTS PRIOR TO PLANTING.
4. ANY DEAD OR DAMAGED PLANT PARTS SHALL BE REMOVED FROM THE PLANTS UPON PLANTING.
5. SPACING: SPACE GROUNDCOVERS AND PERENNIALS IN ACCORDANCE WITH DESIGNATED AREAS ON DRAWINGS. IN CASE OF AREA SIZE DISCREPANCIES , A TIGHTER SPACING IS PREFERRED .

B. POST-PLANTING
   1. MULCH: WHERE MULCHING IS SPECIFIED, THE MULCH MUST BE PULLED AWAY FROM THE STEMS AND CROWNS OF PERENNIALS AND GROUNDCOVERS TO REDUCE THE OCCURRENCE OF ROT OR RODENT DAMAGE.* MULCH THICKNESS IN BED AREAS SHOULD BE 2-3" FOR PERENNIALS AND 1-2" FOR GROUNDCOVERS.*
   2. PERENNIAL AND GROUNDCOVER BED AREAS TO BE THOROUGHLY WATERED IMMEDIATELY AFTER INSTALLATION AND CLEANUP.

3.02 MAINTENANCE

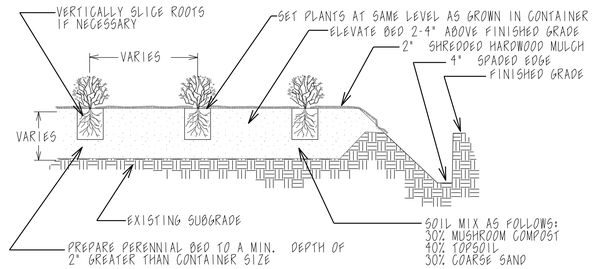
A. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF THE PERENNIALS FROM THE TIME THEY ARE BROUGHT ONTO THE JOB SITE UNTIL THEY ARE PLANTED AND ACCEPTED BY THE LANDSCAPE ARCHITECT .
1. PLANTS SHALL BE WATERED often ENOUGH TO PREVENT WILTING PRIOR TO PLANTING. AFTER PLANTING, THEY SHALL BE WATERED INITIALLY TO SETTLE THE SOIL, THEN TO PREVENT WILTING AND TO ALLOW THEM TO BECOME ESTABLISHED ON THE SITE.
2. THE BEDS SHALL BE FREE OF WEEDS AT PLANTING TIME AND SHALL BE MAINTAINED WEED FREE BY THE CONTRACTOR UNTIL THE PLANTING IS ACCEPTED BY THE CLIENT.
3. SHOULD INSECTS OR DISEASES ATTACK THE PLANTS AFTER INSTALLATION AND PRIOR TO ACCEPTANCE OF THE PLANTING, APPROPRIATE PESTICIDES SHALL BE PROPERLY APPLIED TO CORRECT THE SITUATION.
4. THE BEDS SHOULD BE CHECKED REGULARLY FOR SOIL SETTLING WHICH MAY EXPOSE THE ROOT BALLS OR OTHERWISE ENDANGER THE HEALTH OF THE PLANTING. SHOULD THIS OCCUR, THE CONTRACTOR SHALL CORRECT THE SETTLING PROBLEMS.
5. NEWLY PLANTED PERENNIALS AND GROUNDCOVERS MAY BE HEAVED OUT OF THE GROUND BY ALTERNATE FREEZES AND THAWS. SHOULD THIS OCCUR PRIOR TO ACCEPTANCE OF THE PLANTING, THE CONTRACTOR SHALL RE-SET THOSE AFFECTED PLANTS.
6. ANY NOTED DEFECTS, SUCH AS REVERSIONS, ERRANT GROWTH OR COLOR NOT TYPICAL FOR THE SPECIES OR CULTIVAR, SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE RECOMMENDATIONS OF THE LANDSCAPE ARCHITECT SHALL BE FOLLOWED TO CORRECT THE SITUATION. RECOMMENDATIONS MAY INCLUDE REMOVAL OF THE ENTIRE PLANT.

B. THE CLIENT OR THE CLIENT'S ASSIGNED AGENT BECOMES RESPONSIBLE FOR THE MAINTENANCE OF THE PLANTS AFTER THE PLANTING HAS BEEN ACCEPTED BY THE LANDSCAPE ARCHITECT. FAILURE TO PROPERLY MAINTAIN THE PLANTING SHALL VOID ANY WARRANTY.
1. THE CLIENT SHALL WATER THE PLANTS TO PREVENT WILTING. THE SCHEDULE WILL VARY WITH THE GROWTH OF THE PLANTS AND PREVAILING CLIMATE. GENERALLY, NEW PLANTINGS WILL NEED TO RECEIVE 1 INCH OF WATER PER WEEK. A RAIN GAUGE SHOULD BE PLACED IN THE PLANTING TO CATCH BOTH RAINFALL AND IRRIGATION WATER TO VERIFY THE AMOUNT OF APPLICATION.
2. THE CLIENT SHALL PROPERLY PINCH, PRUNE, AND DEADHEAD THE HERBACEOUS PERENNIALS AS NEEDED AND AS REQUIRED TO MEET THE AESTHETIC GOAL OF THE PLANTING.
3. THE CLIENT SHALL MAINTAIN THE PLANTING FREE FROM COMPETING WEEDS.
4. THE CLIENT SHALL REGULARLY INSPECT THE PLANTING FOR INSECTS AND DISEASES, NOTIFYING THE LANDSCAPE ARCHITECT OF ANY NOTED OCCURRENCES. IF PESTICIDES ARE DEEMED NECESSARY, THEY SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
5. AFTER THE ACCEPTANCE OF THE PLANTING, THE CLIENT IS RESPONSIBLE FOR CORRECTING ANY SETTLING OF THE PLANTING BEDS.
6. AFTER ACCEPTANCE, THE CLIENT IS RESPONSIBLE FOR SETTING ANY PLANTS WHICH ARE HEAVED OUT OF THE GROUND IN WHOLE OR IN PART BY CLIMATE CHANGES.
7. UNSATISFACTORY PERFORMANCE OF THE PERENNIALS AND GROUNDCOVERS NOTED BY THE CLIENT AFTER ACCEPTANCE OF THE PLANTING SHOULD IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.

3.03 WARRANTY

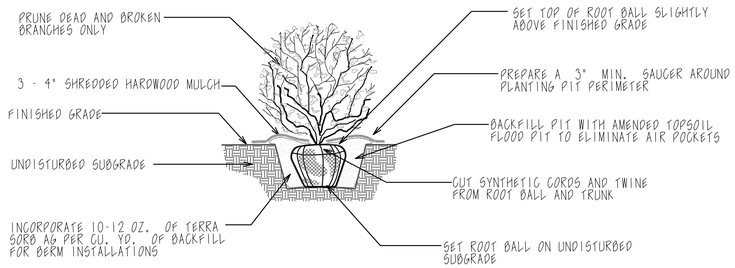
ALL PLANTS WILL BE GUARANTEED TO BE TRUE TO NAME AS LABELED AND FREE FROM INSECTS, DISEASES, AND MECHANICAL DAMAGES WHEN DELIVERED TO THE SITE. ALL PLANTS WILL BE GUARANTEED TO RESUME ACTIVE GROWTH IN THE APPROPRIATE SEASON AND TO SURVIVE FOR A MINIMUM OF ONE YEAR AFTER ACCEPTANCE BY THE CLIENT, PROVIDED THE RECOMMENDED MAINTENANCE PROCEDURES ARE FOLLOWED BY THE CLIENT. MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO WATERING, FERTILIZING, MULCHING, PRUNING, PROTECTING FROM UNSEASONABLE WEATHER AND ALL OTHER NORMAL CULTURAL PRACTICES.

END OF SECTION 0003



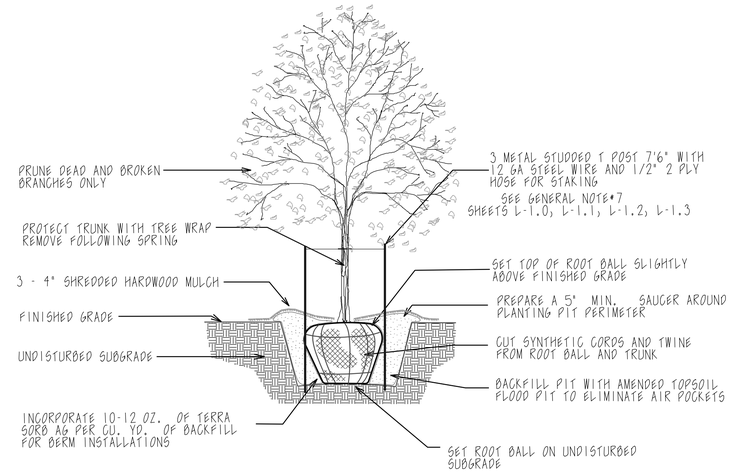
PERENNIAL PLANTING DETAIL

NOT TO SCALE USE ONLY NORTHERN ILLINOIS GROWN NURSERY STOCK



SHRUB PLANTING DETAIL

NOT TO SCALE USE ONLY NORTHERN ILLINOIS GROWN NURSERY STOCK



TREE PLANTING DETAIL

NOT TO SCALE USE ONLY NORTHERN ILLINOIS GROWN NURSERY STOCK

PLANTING DETAILS

Landscape Plans Prepared By:

Paul A. Couture, P.L.A. ASLA
I.L. License Number 157-00328

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PAUL A. COUTURE
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REGISTERED
STATE OF ILLINOIS
LANDSCAPE
ARCHITECT

LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

ISSUE

TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-2.1
LANDSCAPE SPECIFICATIONS

LANDSCAPE SPECIFICATIONS

SECTION 00004

SEEDING

PART 1 GENERAL

1.01 DESCRIPTION

A. PROVIDE SEEDED LAWNS AS SHOWN AND SPECIFIED. THE WORK INCLUDES:
   1. SOIL PREPARATION.
   2. SEEDING LAWNS, AND OTHER INDICATED AREAS.
   3. MULCHING.
   4. RECONDITIONING EXISTING LAWNS.

B. RELATED WORK:
   1. SECTION 00000: EARTHWORK.
   2. SECTION 00004: SODDING.
   3. SECTION 00002: TREES AND SHRUB PLANTING,
   4. SECTION 00003: PERENNIAL, ORNAMENTAL GRASS, GROUNDCOVER PLANTING

1.02 QUALITY ASSURANCE

A. COMPLY WITH SECTION 00001 REQUIREMENTS.
B. COMPLY WITH ALL ILLINOIS STATE CERTIFICATION SEED STANDARDS.

1.03 DELIVERY, STORAGE, AND HANDLING

A. DELIVER SEED AND FERTILIZER MATERIALS IN ORIGINAL UNOPENED CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. STORE IN SUCH A MANNER TO PREVENT WETTING AND DETERIORATION.

1.04 PROJECT CONDITIONS

A. WORK NOTIFICATION: NOTIFY OWNER'S REPRESENTATIVE AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF SEEDING OPERATIONS.
B. PROTECT EXISTING UTILITIES, PAVING, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SEEDING OPERATIONS.
C. PERFORM SEEDING WORK ONLY AFTER PLANTING AND OTHER WORK AFFECTING GROUND SURFACE HAS BEEN COMPLETED.
D. THE OWNER IS RESPONSIBLE FOR RESTRICTING TRAFFIC FROM LAWN AREAS UPON NOTIFICATION OF COMPLETION OF WORK.
E. PROVIDE HOSE AND LAWN WATERING EQUIPMENT AS REQUIRED. OWNER TO PROVIDE WATER ON SITE.

WARRANTY

A. THE CONTRACTOR WARRANTIES ALL SEEDED AREAS TO BE INSTALLED ACCORDING TO SPECIFICATIONS, UNTIL ACCEPTED BY OWNER'S REPRESENTATIVE.

B. DISCLAIMER - ACTS OF GOD AND OTHER CONDITIONS BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL SUCH AS VANDALISM SHALL NOT BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. ANY OVER-SEEDING OR RE-GRADING CONTRIBUTED TO THIS MUST BE IN ADDITION TO THE CONTRACT AMOUNT.

PART 2 PRODUCTS

MATERIALS

A. LAWN SEED: RECOMMENDATION OF SEED MIX FROM LOCAL EXTENSION SERVICE FOR THAT AREA. FRESH, CLEAN, AND NEW CROP SEED MIXTURE.

B. SEED TYPE: AS SPECIFIED ON DRAWINGS OR RECOMMENDED FROM LOCAL EXTENSION SERVICE.

C. FERTILIZER:
   1. GRANULAR, NON-BURNING PRODUCT COMPOSED OF NOT LESS THAN 50% ORGANIC, SLOW ACTING, GUARANTEED ANALYSIS PROFESSIONAL FERTILIZER.
   2. STARTER FERTILIZER CONTAINING 5% NITROGEN, 20% PHOSPHORIC ACID, AND 20% POTASH BY WEIGHT, OR SIMILAR APPROVED COMPOSITION.

D. MULCH: TYPE / METHOD SPECIFIED ON DRAWING
   1. STRAW: CLEAN OAT OR WHEAT STRAW, WELL SEASONED BEFORE BALING, FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS. SHOULD BE FREE OF ROT AND MILDEW.
   2. HYDRO-SEED : CELLULON FIBER MULCH OR EQUAL.
   3. EROSION BLANKET: NORTH AMERICAN GREEN SC150, CURLEX, OR APPROVED EQUAL. (TYPICAL ROLL 6'X90')72090'

E. WATER: FREE OF SUBSTANCES HARMFUL TO SEED GROWTH. HOSES OR OTHER METHODS OF TRANSPORTATION FURNISHED BY CONTRACTOR. WATER PROVIDED BY OWNER ON SITE.

PART 3 EXECUTION

3.01 INSPECTION

A. EXAMINE FINISH SURFACES, GRADES, TOPSOIL QUALITY, AND DEPTH. DO NOT START SEEDING WORK UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

3.02 PREPARATION

A. LIMIT PREPARATION TO AREAS WHICH WILL BE IMMEDIATELY SEEDED.

B. LOOSEN TOPSOIL OF LAWN AREAS TO MINIMUM DEPTH OF 3", IF COMPACTED. REMOVE STONES OVER 1" IN ANY DIMENSION, STICKS, ROOTS, RUBBISH, AND EXTRANEOUS MATTER.

C. APPLY FERTILIZER TO INDICATED TURF AREAS AT A RATE EQUAL TO 1.0 LB. OF ACTUAL NITROGEN PER 1,000 SQ. FT.(220 LBS./ACRE.)

D. GRADE LAWN AREAS TO A SMOOTH, FREE-DRAINING, EVEN SURFACE WITH A LOOSE, MODERATELY COARSE TEXTURE.

E. RESTORE PREPARED AREAS TO SPECIFIED CONDITION IF ERODED, SETTLED, OR OTHERWISE DISTURBED AFTER FINE GRADING AND PRIOR TO SEEDING.

3.03 INSTALLATION

A. SEEDING:
   1. SEED IMMEDIATELY AFTER PREPARATION OF BED. SPRING SEEDING BETWEEN APRIL 1 AND JUNE 15 AND FALL SEEDING BETWEEN AUGUST 15 AND OCTOBER 15, OR AT SUCH OTHER TIMES ACCEPTABLE TO THE OWNER'S REPRESENTATIVE.
   2. SEED INDICATED AREAS WITHIN CONTRACT LIMITS. AREAS OUTSIDE CONTRACT LIMITS DISTURBED AS A RESULT OF CONSTRUCTION OPERATIONS WILL BE CHARGED ACCORDING TO AREA AND IN ADDITION TO CONTRACT.
   3. APPLY SEED WITH A ROTARY OR DROP TYPE DISTRIBUTOR. INSTALL SEED EVENLY BY SOWING EQUAL QUANTITIES IN TWO(2) DIRECTIONS, AT RIGHT ANGLES TO EACH OTHER.
   4. SOW GRASS SEED AT A RATE RECOMMENDED BY TYPE OF SEED USED. TYPICAL BLUEGRASS BLEND -5 LB. PER 1000 SQ'
   5. INCORPORATE SEED INTO TOP 1/8" OF SOIL AND ROLL.

B. MULCHING:
   1. PLACE STRAW ,FIBER MULCH , OR EROSION BLANKET ON SEEDED AREAS WITHIN 24 HOURS AFTER SEEDING.
   2. (A). PLACE STRAW MULCH UNIFORMLY IN CONTINUOUS BLANKET AT THE RATE OF 2.5 TONS PER ACRE, OR 2 BALES PER 1,000 SQ. FT. OF AREA.
      A MECHANICAL BLOWER MAY BE USED FOR STRAW MULCH APPLICATION WHEN ACCEPTABLE TO THE OWNER'S REPRESENTATIVE.
      (B) A CELLULOSE FIBER OR APPROVED EQUAL MAY BE USED IN AQUEOUS MIXTURE AT THE RATE OF 1500 LBS./ACRE.
   3. SECURE STRAW TO SOIL BY APPROVED METHODS.
   4. SECURE EROSION BLANKET TO SOIL AS PER MANUFACTURERS SPECIFICATION.

CONTINUE SECTION 00004 - SEEDING

3.04 RECONDITIONING EXISTING LAWNS

A. ANALYZE THE CONDITION OF EXISTING TURF AREAS TO REMAIN, AND DETERMINE THE EXTENT OF NECESSARY RECONDITIONING. PROVIDE UNIT COST AND ESTIMATE OF WORK. OBTAIN OWNER'S APPROVAL PRIOR TO COMMENCEMENT OF WORK.
B. RECONDITION EXISTING LAWN AREAS DAMAGED BY CONTRACTOR'S OPERATIONS, INCLUDING STORAGE OF MATERIALS OR EQUIPMENT AND MOVEMENT OF CONSTRUCTION VEHICLES, AND EXISTING LAWN AREAS AS INDICATED.
C. PROVIDE FERTILIZER, SEED AND SOIL AMENDMENTS AS SPECIFIED FOR NEW LAWNS AND AS REQUIRED TO PROVIDE A SATISFACTORILY RECONDITIONED LAWN. PROVIDE TOPSOIL AS REQUIRED TO FILL LOW AREAS AND MEET NEW FINISHED GRADES.
D. CULTIVATE BARE AND COMPACTED AREAS THOROUGHLY.
E. REMOVE DISEASED OR UNSATISFACTORY LAWN AREAS. DO NOT BURY INTO SOIL. REMOVE TOPSOIL CONTAINING FOREIGN MATERIALS RESULTING FROM CONTRACTOR'S OPERATIONS, INCLUDING OIL DRIPPINGS, STONE, GRAVEL, AND OTHER CONSTRUCTION MATERIALS.
F. WHERE SUBSTANTIAL BUT THIN LAWN REMAINS, RAKE, AERATE IF COMPACTED, OR CULTIVATE SOIL; FERTILIZE AND SEED.

3.05 MAINTENANCE

A. MAINTENANCE OF INSTALLED AND ACCEPTED SEEDED LAWNS WILL BE PERFORMED BY THE OWNER.

3.06 ACCEPTANCE

A. SEEDED AREAS WILL BE INSPECTED AT COMPLETION OF INSTALLATION AND ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS.
B. SECTIONS OF THE WORK MAY BE ACCEPTED WHEN COMPLETE UPON AGREEMENT OF THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR.
C. UPON ACCEPTANCE, THE OWNER WILL ASSUME LAWN MAINTENANCE.

3.07 CLEANING

A. PERFORM CLEANING DURING INSTALLATION OF THE WORK AND UPON COMPLETION OF THE WORK. REMOVE FROM SITE ALL EXCESS MATERIALS, DEBRIS, AND EQUIPMENT. REPAIR DAMAGE RESULTING FROM SEEDING OPERATIONS.

END OF SECTION 00004

SECTION 00005

SODDING

PART 1 GENERAL

1.01 DESCRIPTION

A. PROVIDE SODDED LAWNS AS SHOWN AND SPECIFIED. THE WORK INCLUDES:
   1. SOIL PREPARATION.
   2. SODDING LAWNS.

B. RELATED WORK:
   1. SECTION 02200: EARTHWORK.
   2. SECTION 00004: SEEDING.
   3. SECTION 00002: TREES AND SHRUB PLANTING,
   4. SECTION 00003: PERENNIAL, ORNAMENTAL GRASS, GROUNDCOVER PLANTING

1.02 QUALITY ASSURANCE

A. COMPLY WITH SECTION 00001 REQUIREMENTS.
B. SOD: COMPLY WITH AMERICAN SOD PRODUCERS ASSOCIATION (ASPA) CLASSES OF SOD MATERIALS.

1.03 SUBMITTALS

A. SUBMIT SOD GROWER'S CERTIFICATION OF GRASS SPECIES. IDENTIFY SOURCE LOCATION.

1.04 DELIVERY, STORAGE, AND HANDLING

A. CUT, DELIVER AND INSTALL SOD WITHIN A 24-HOUR PERIOD.
   1. DO NOT HARVEST OR TRANSPORT SOD WHEN MOISTURE CONTENT MAY ADVERSELY AFFECT SOD SURVIVAL.
   2. PROTECT SOD FROM DEHYDRATION PRIOR TO INSTALLATION.

1.05 PROJECT CONDITIONS

A. WORK NOTIFICATION: NOTIFY OWNER'S REPRESENTATIVE AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF SODDING OPERATIONS.
B. PROTECT EXISTING UTILITIES, PAVING, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SODDING OPERATIONS.
C. PROVIDE HOSE AND LAWN WATERING EQUIPMENT AS REQUIRED. OWNER TO PROVIDE WATER ON SITE.

1.06 WARRANTY

A. DISCLAIMER - ACTS OF GOD AND OTHER CONDITIONS BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL SUCH AS VANDALISM SHALL NOT BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. ANY RE-SODDING OR RE-GRADING CONTRIBUTED TO THIS MUST BE AN ADDITION TO THE CONTRACT AMOUNT.

PART 2 PRODUCTS

2.01 MATERIALS

A. SOD: TO BE HARVESTED FROM LOCAL SOD NURSERY AND UNLESS OTHERWISE INDICATED TO BE A(5) FIVE WAY MINIMUM BLUEGRASS BLEND. (FIVE VARIETIES OF BLUEGRASS)
B. PROVIDE WELL-ROOTED, HEALTHY SOD. PROVIDE SOD UNIFORM IN COLOR, LEAF TEXTURE, DENSITY AND DEVELOPMENT WHEN PLANTED.
   1. FURNISH SOD UNIFORMLY MACHINE-STRIPPED FROM 3/4" - 1 1/2" THICK WITH CLEAN CUT EDGES.
C. FERTILIZER:
   1. GRANULAR, NON-BURNING PRODUCT COMPOSED OF NOT LESS THAN 50% ORGANIC SLOW ACTING, GUARANTEED ANALYSIS PROFESSIONAL FERTILIZER.
   2. STARTER FERTILIZER CONTAINING 5% NITROGEN, 10% PHOSPHORIC ACID AND 10% POTASH BY WEIGHT, OR ACCORDING TO SPECIAL PROVISIONS.
D. WATER: FREE OF SUBSTANCE HARMFUL TO SOD GROWTH. HOSES OR OTHER METHODS OF TRANSPORTATION FURNISHED BY CONTRACTOR. WATER WILL BE PROVIDED BY THE OWNER ON SITE.

CONTINUE SECTION 00005 - SODDING

PART 3 EXECUTION

3.01 INSPECTION

A. EXAMINE FINISH SURFACES, GRADES, TOPSOIL QUALITY, AND DEPTH. DO NOT START SODDING WORK UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

3.02 PREPARATION

A. LIMIT PREPARATION TO AREAS WHICH WILL BE IMMEDIATELY SODDED.
B. ROTOTILL TOPSOIL OF LAWN AREAS TO MINIMUM DEPTH OF 3", IF COMPACTED. REMOVE STONES OVER 1" IN ANY DIMENSION, STICKS, ROOTS, RUBBISH, AND EXTRANEOUS MATTER.
D. APPLY FERTILIZER AT THE RATE EQUAL TO 1.0 LB. OF ACTUAL NITROGEN PER 1,000 SQ. FT. (220 LBS./ACRE). APPLY FERTILIZER BY MECHANICAL ROTARY OR DROP TYPE DISTRIBUTOR; THOROUGHLY AND EVENLY INCORPORATE IT INTO THE SOIL TO A DEPTH OF 3" BY DISKING OR OTHER APPROVED METHODS. FERTILIZE AREAS INACCESSIBLE TO POWER EQUIPMENT WITH HAND TOOLS AND INCORPORATE IT INTO SOIL.
E. GRADE LAWN AREAS TO SMOOTH, FREE-DRAINING AND EVEN SURFACE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
F. RESTORE PREPARED AREAS TO SPECIFIED CONDITION IF RODDED, SETTLED, OR OTHER WISE DISTURBED AFTER FINE GRADING AND PRIOR TO SODDING.

3.03 INSTALLATION

A. TIME OF INSTALLATION: THE ACCEPTABLE TIME TO INSTALL SOD AND BE CONSIDERED 'IN SEASON' ARE AS FOLLOWS.
   1. SPRING - FROM THE TIME THE SOIL IS WORKABLE AND SOD IS BEING HARVESTED, UNTIL JUNE 15TH.
   2. FALL - FROM AUGUST 15TH TO NOVEMBER 1ST.

   ALL OTHER TIMES ARE CONSIDERED 'OUT OF SEASON' AND ARE NOT ACCEPTABLE TO INSTALL SOD AT THIS TIME WITHOUT APPROVAL OF LANDSCAPE ARCHITECT (LA) AND WITH THE ADDITIONAL CONDITIONS AS FOLLOWS:
   1. JUNE 16TH TO AUGUST 14TH
      A. SOD TO BE IRRIGATED BY AUTOMATIC SPRINKLER SYSTEM OR
      B. SOD TO BE IRRIGATED BY MANUAL MEANS WITH SUFFICIENT QUANTITIES OF HOSE AND SPRINKLER HEADS SO AS TO KEEP SOD LUSH AND HEALTHY UNTIL TIME OF KNITTING AND MOWING MAINTENANCE HAS BEGUN.
      WATERING TO BE MONITORED DAILEY.
   2. AFTER NOVEMBER 1ST. SOD MAY ONLY BE INSTALLED WITH (LA) APPROVAL AND MILD TEMPERATURES / CONDITIONS EXIST. SOD MAY NOT BE INSTALLED ON FROZEN GROUND AND UNTIL FINAL (FINE) GRADING AND GROUND PREPARATION HAS BEEN APPROVED FOR SOD INSTALLATION BY LANDSCAPE ARCHITECT.

B. SODDING:
1. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY-FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS. DO NOT OVERLAY EDGES. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. REMOVE EXCESS SOD TO AVOID SMOTHERING OF ADJACENT GRASS. PROVIDE SOD PAD TOP FLUSH WITH ADJACENT CURBS, SIDEWALKS, DRAINS, AND SEEDED AREAS.
2. INSTALL INITIAL ROW OF SOD IN A STRAIGHT LINE, BEGINNING AT BOTTOM OF SLOPES, PERPENDICULAR TO DIRECTION OF THE SLOPED AREA. PLACE SUBSEQUENT ROWS PARALLEL TO AND LIGHTLY AGAINST PREVIOUSLY INSTALLED ROW.
3. TAMP OR ROLL WITH ROLLER TO ENSURE CONTACT WITH SUB- GRADE SOIL.
4. WATER SOD THOROUGHLY IMMEDIATELY AFTER LAYING.
5. STAKE SOD ON SLOPES OVER 2:1 TO ANCHOR.
C. SOD INDICATED AREAS WITHIN CONTRACT LIMITS. AREAS OUTSIDE CONTRACT LIMITS DISTURBED AS A RESULT OF CONSTRUCTION OPERATIONS ARE TO BE CHARGED ACCORDING TO SIZE OF AREA.

3.04 MAINTENANCE

A. MAINTENANCE OF INSTALLED AND ACCEPTED SODDED LAWNS WILL BE PERFORMED BY THE OWNER.

3.05 ACCEPTANCE

A. SODDED AREAS WILL BE INSPECTED AT COMPLETION OF INSTALLATION AND ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS.
B. INSPECTION TO DETERMINE ACCEPTANCE OF SODDED LAWNS WILL BE MADE BY THE OWNER'S REPRESENTATIVE, UPON CONTRACTOR'S REQUEST.
   1. SODDED AREAS WILL BE ACCEPTABLE PROVIDED ALL REQUIREMENTS HAVE BEEN COMPLIED WITH, AND A HEALTHY, EVEN-COLORED VIABLE LAWN IS PROVIDED.
C. SECTIONS OF THE WORK MAY BE ACCEPTED WHEN COMPLETE UPON AGREEMENT OF THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR.
D. UPON ACCEPTANCE, THE OWNER WILL ASSUME LAWN MAINTENANCE.

3.06 CLEANING

A. PERFORM CLEANING DURING INSTALLATION OF THE WORK AND UPON COMPLETION OF THE WORK. REMOVE FROM SITE ALL EXCESS MATERIALS, DEBRIS, AND EQUIPMENT. REPAIR DAMAGE RESULTING FROM SODDING OPERATIONS.

END OF SECTION 00005

END

Landscape Plans Prepared By:

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LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

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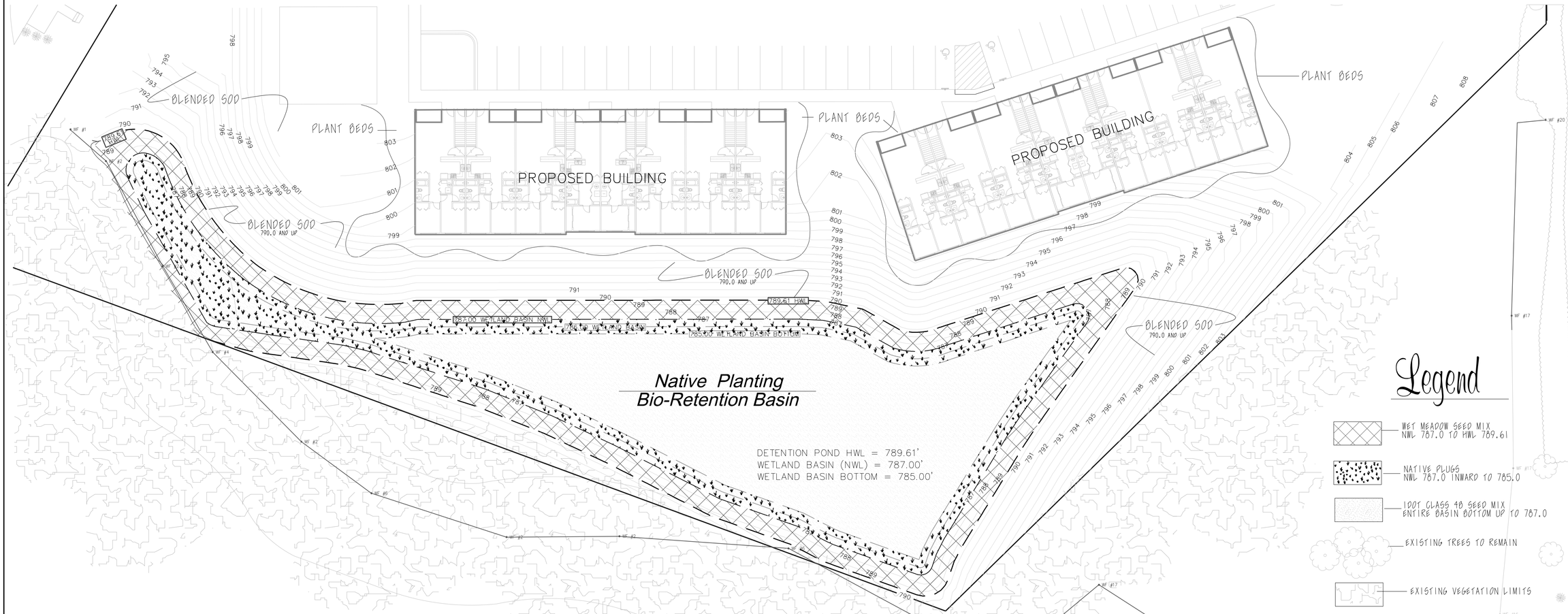
LANDSCAPE SPECIFICATIONS



Legend

- WET MEADOW SEED MIX NWL 787.0 TO HWL 789.61
- NATIVE PLUGS NWL 787.0 INWARD TO 785.0
- IDOT CLASS 4B SEED MIX ENTIRE BASIN BOTTOM UP TO 787.0
- EXISTING TREES TO REMAIN
- EXISTING VEGETATION LIMITS

LOWER SLOPE OF BASIN N.W.L TO H.W.L.
WET MEADOW SEED MIXTURE

SPECIES	COMMON NAME	LB/ACRE
ASCLEPIAS INCARNATA	SWAMP MILKWEED	0.125
BIDENS CERNUA	NODDING BUR MARIGOLD	0.190
BOLTORIA ASTEROIDES	FALSE ASTER	0.031
CAREX BEBBII	BEBB'S SEDGE	0.250
CAREX BICKNELLII	BICKNELL'S OVAL SEDGE	0.125
CAREX BREVIOR	"SHORTER" SEDGE	0.250
CAREX CRISTATELLA	CRESTED SEDGE	0.060
CAREX MOLESTA	ROUNDED HEADED SEDGE	0.250
CAREX NORMALIS	NORMAL SEDGE	0.015
CAREX SCOPARIA	POINTED BROOM SEDGE	0.190
CAREX STIPATA	AWL-FRUITED SEDGE	0.060
CAREX VULPINOIDEA	FOX SEDGE	0.250
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	0.188
ELYMUS VERGINICUS	VIRGINIA WILD RYE	3.000
EUPATORIUM PERFOLIATUM	THOROUGHWORT	0.015
EUTHAMIA GRAMINIFOLIA	GRASS LEAFED GOLDENROD	0.300
GLYCERIA STRIATA	FOUL MANNA GRASS	0.130
HELENIUM AUTUMNALE	SNEEZEWEED	0.063
IRIS VIRGINICA SHREVEI	BLUE FLAG	1.000
JUNCUS DUDLEYI	DUDLEY'S RUSH	0.020
JUNCUS TORREYI	TORREY'S RUSH	0.031
LOBELIA SIPHILITICA	BLUE LOBELIA	0.031
MIMULUS RINGENS	MONKEY FLOWER	0.031
PANICUM VIRGATUM	PRAIRIE SWITCH GRASS	3.000
PYCNANTHEMUM VIRGINIANUM	COMMON MT MINT	0.063
RUDBECKIA SPECIOSA SULIVANTII	SHOWY BLACK EYED SUSAN	0.250
SCIRPUS ATROVIRENS	DARK GREEN RUSH	0.060
SCIRPUS CYPERINUS	WOL GRASS	0.030
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.250
ZIZIA AUREA	GOLDEN ALEXANDER	0.500

10.75 LBS. / ACRE

7893 SQ' AREA =
2.0 LBS. SEED MIX REQUIRED

BIO RETENTION NATIVE PLUG LIST

SPECIES	COMMON NAME
CALAMAGROSTIS CANADENSIS	BLUE JOINT GRASS
CAREX LACUSTRIS	LAKE SEDGE
CAREX SLIPATA	AWL-FRUITED SEDGE
CARAX STRICTA	TUSSOCK SEDGE
CARAX VULPINOIDES	FOX SEDGE
ELEOCHARIS ACICULORIS	NEEDLE SPIKE RUSH
ELEOCHARIS OBTUSA	BLUNT SPIKE RUSH
ELYMUS CANADENSIS	WILD RYE
GLYCERIA STRIATA	FOWL MANNA GRASS
JUNCUS TENUIS	SLENDER RUSH
JUNCUS TORREYI	TORREY'S RUSH
LEERSIA ORYZOIDES	RICE CUT GRASS
PANICUM VIRGATUM	SWITCH GRASS
SCIRPUS ACUTUS	HARD STEM BULRUSH
SCIRPUS ATROVIRENS	DARK GREEN RUSH
SPARTINA PECTINATA	CORD GRASS
ASTER AZUREUS	SKY BLUE ASTER
COREOPSIS PALMATA	PRAIRIE COREOPSIS
LIATRIS ASPERA	ROUGH BLAZING STAR
RATIBIDA PINNATA	YELLOW CONEFLOWER
SOLIDAGO RIGIDA	RIGID GOLDENROD
VERONICASTRUN VIRGINICUM	CULVERSROOT

QUANTITY OF 1540 NATIVE PLUGS TOTAL
70 PLUGS OF EACH VARIETY PLANTED ON 24" CENTERS
WITHIN 6' WIDE STRIP AND AS SHOWN
FROM N.W.L.787.0 INWARD TO 785.0

BASIN BOTTOM - IDOT CLASS 4B
WETLAND GRASS & SEDGE MIXTURE

COMMON NAME	AMOUNT / ACRE
PERMANENT MATRIX	SEED
44.64 % ANNUAL RYEGRASS	25 LBS.
44.64 % SPRING OATES	25 LBS.
10.72 % WETLAND GRASSES (BELOW)	6 LBS
	56 LBS. / ACRE
12 % BLUE JOINT GRASS	
6 % LAKE-BANK SEDGE	
6 % AWL-FRUITED SEDGE	
6 % TUSSOCK SEDGE	
6 % FOX SEDGE	
3 % NEEDLE SPIKE RUSH	
3 % BLUNT SPIKE RUSH	
14 % FOWL MANNA GRASS	
6 % COMMON RUSH	
6 % SLENDER RUSH	
6 % TORREY'S RUSH	
10 % RICE CUT GRASS	
3 % HARD-STEMMED BULRUSH	
3 % DARK GREEN RUSH	
3 % RIVER BULRUSH	
3 % SOFTSTEM BULRUSH	
4 % CORD GRASS	

18,215 SQ' AREA =
24 LBS. SEED MIX REQUIRED

LANDSCAPE PLAN

Bio-Retention Basin - Native Planting

ADDITIONAL NOTES:

PERFORMANCE STANDARDS -1 YEAR MONITORING PERIOD-

1. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING AT LEAST 90% OF THE PLUGS WILL BE PRESENT AND THRIVING.
2. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, THE AREA SHALL BE FREE OF INVASIVE OR NON-NATIVE SPECIES.
3. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, NO MORE THAN 0.5 SQUARE METERS IN SIZE SHALL BE DEVOID OF VEGETATION.
4. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, 100% OF ANY PLANTED TREES AND SHRUBS SHALL BE ALIVE AND APPARENT.

SPECIFICATIONS FOR PLUGGING

1. PLANTS SHALL MEET THE CURRENT AMERICAN STANDARDS OF NURSERY STOCK.
2. TAKE CARE NOT TO COMPACT THE NEW SOIL MIX DURING CONSTRUCTION.
3. HERBICIDE OR REMOVE SOD AND WEEDY OR NON-NATIVE VEGETATION.
4. PREPARE THE SOIL. SEE NOTES BELOW.
5. USE A BIODEGRADABLE EROSION CONTROL BLANKET, STAKED IN WITH SLITS FOR PLUGS.
6. PLUGS MUST BE WATERED IMMEDIATELY AND THEN AS OFTEN AS NECESSARY DURING THE FIRST GROWING SEASON TO ENSURE SURVIVAL.
7. PLANTING TIME IS TO BE BETWEEN APRIL 15TH - SEPTEMBER 15TH.

3 YEAR MAINTENANCE / MONITORING & REPORTING

1. CONTRACTOR TO MAINTAIN AND MONITOR NATIVE PLANTINGS FOR A 3 YEAR PERIOD. CONTRACTOR TO SUBMIT YEARLY WRITTEN REPORTS AS TO PERFORMANCE WITH THE APPROPRIATE AGENCIES.
2. THE PLANTING AREA MUST BE KEPT FREE OF WEEDS DURING THE GROWING SEASON. THE WORK MAY CONSIST OF HAND WEEDING, HERBICIDING, CUTTING OR MOWING, PRUNING AND WATERING THE PLANTED AREA.
3. THE CONTRACTOR IS TO CONTINUOUSLY MAINTAIN THE LANDSCAPE AND EROSION CONTROL FEATURES AFTER INSTALLATION, DURING THE PROGRESS OF THE WORK, AND FOR A PERIOD OF 1 YEAR FROM INSTALLATION COMPLETION UNTIL FINAL ACCEPTANCE.
4. PLUGS THAT ARE DEAD, MISSING, OR NOT THRIVING SHALL BE REPLACED IMMEDIATELY.

SEE SHEET L-3.1 FOR BIO RETENTION BASIN SPECIFICATIONS AND DETAILS

NORTH
1" = 20'
0 10 20 40 80

Landscape Plans Prepared By:

Paul A. Couture, PLA ASLA
IL License Number 157-00328

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PAUL A. COUTURE
*157-000328
REGISTERED
STATE OF ILLINOIS
LANDSCAPE ARCHITECT
2019

LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

ISSUE

TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-3.0
BIO-RETENTION BASIN
NATIVE PLANTING PLAN

SPECIFICATIONS

DETENTION AREA - NATIVE ECOSYSTEM

SPECIFICATIONS / MAINTENANCE

SPECIAL PROVISIONS

ALL APPLICABLE PROVISIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2002, HEREIN REFERRED TO AS THE STANDARD SPECIFICATIONS, SHALL GOVERN THE WORK EXCEPT AS AMENDED BY THESE SPECIAL PROVISIONS. IF A CONFLICT EXISTS BETWEEN THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS, THEN THESE SPECIAL PROVISIONS SHALL GOVERN. THE WORDS 'WETLAND CONSULTANT' SHALL REFER TO THE OWNER OR HIS DESIGNATED REPRESENTATIVE.

EXISTING UTILITIES

EXISTING UTILITIES ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION OBTAINED FROM UTILITY COMPANIES, MUNICIPALITIES AND SURVEYS. HAMILTON PARTNERS AND THEIR CONSULTANTS DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH THE EXISTENCE AND VERIFY THE LOCATION OF ALL UTILITIES. UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO THE COUNTY'S SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT. NOTIFY JULIE 48 HOURS PRIOR TO COMMENCING THE WORK.

TOPSOIL / SPREADING

TOPSOIL TO BE LOCAL VIRGIN TOPSOIL *BLACK* APPROVED BY WETLAND CONSULTANT.

THE WORK SHALL CONFORM TO SECTION 211 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE MINIMUM LIFT FOR PLACEMENT SHALL BE 12" FOR TOPSOIL SPREADING. TOPSOIL SHALL BE PLACED WHERE REQUIRED IN AREAS OF EXCAVATION. EXCAVATED AREAS SHALL BE EXCAVATED TO 12" BELOW GRADE PRIOR TO TOPSOIL PLACEMENT. TOPSOIL PLACEMENT SHALL CONFORM TO FINAL GRADE AS INDICATED ON THE PLANS. TOPSOIL SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 8" UPON COMPLETION OF THE WORK. THE MATERIAL SHALL THEN BE "GIL"-RAKED AND ALL STONES SHALL BE REMOVED FROM THE SITE.

TOPSOIL SHALL MEET THE REQUIREMENTS OF SECTION 1081.05 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR MAY OBTAIN TOPSOIL FROM THE AREA OF DISTURBANCE AND FROM OTHER STOCKPILES SUBJECT TO COORDINATION WITH THE WETLAND CONSULTANT.

TOPSOIL PLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 211.03, 211.04, 211.05 AND 211.06 OF THE STANDARD SPECIFICATIONS AS MODIFIED HEREIN. THE CONTRACTOR SHALL PLACE THE TOPSOIL IN SUCH A MANNER AS TO MINIMIZE COMPACTION OF TOPSOIL. TOPSOIL SHALL BE PLACED A MINIMUM OF 12" THICK. ONCE THE TOPSOIL HAS BEEN PLACED, NO VEHICLES, EXCEPT A SCARIFIER AND SEED INSTALLATION EQUIPMENT, WILL BE PERMITTED ON THE TOPSOIL. ALL TOPSOIL SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 8" UPON COMPLETION OF THE WORK. UPON COMPLETION OF THE SCARIFICATION, A 150 TO 200 POUND PERSON SHOULD SINK 1" TO 2" IN THE MATERIAL WHEN WALKING ACROSS THE TOP. TOPSOIL SPREADING MAY DEVIATE FROM THE LINES AND GRADES SHOWN ON THE PLANS BY +0.25 TO -0.20 FEET.

SEED BED PREPARATION

PRIOR TO SEEDING OPERATIONS IN AREAS WHERE TOPSOIL HAS NOT BEEN PLACED, THE CONTRACTOR WILL BE REQUIRED TO DISC OR TILL WHERE THE SURFACE HAS BECOME HARDENED OR CAKED AND TO TILL UNDER ANY EXISTING TEMPORARY SEEDING. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO REPAIR ANY AREAS OF ERODED SOILS BY RAKING AND REWORKING THE SLOPE, SALVAGING EXISTING TOPSOIL FROM THE BOTTOM OF THE SLOPE WHERE NECESSARY.

THE BUFFER SEED BED SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES. THE SURFACE OF THE SEED BED SHOULD BE PREPARED SO THAT NO CLODS OVER 1.5 INCHES IN DIAMETER, WEEDS, STICKS, CRUSTING OR GULLYING IS PRESENT. UPON COMPLETION OF THE SEED BED SCARIFICATION, A NORMAL WEIGHT *150-200 LB.* PERSON SHOULD SINK 1 TO 2 INCHES IN TO THE SEED BED.

SEEDING

THE WORK SHALL CONSIST OF PREPARING THE SEED BED AND PLACING THE SEED AND OTHER MATERIALS IN THE SEED BED.

THE AREA TO BE SEEDED MAY NEED PRESCRIBED BURNING PRIOR TO PLANTING.

THE AREA TO BE SEEDED SHALL BE WORKED TO A MINIMUM DEPTH OF 3 INCHES WITH A DISK TILLER OR OTHER EQUIPMENT APPROVED BY THE WETLAND CONSULTANT, REDUCING ALL SOIL PARTICLES TO A SIZE NOT LARGER THAN 1.5 INCHES IN THE LARGEST DIMENSION. THE PREPARED SURFACE SHALL BE RELATIVELY FREE FROM WEEDS, CLODS, STONES, RIVULETS, GULLIES, CRUSTING AND CAKING.

NO SEED SHALL BE SOWN DURING HIGH WINDS OR WHEN THE GROUND IS NOT IN PROPER CONDITION FOR SEEDING, NOR SHALL ANY SEED BE SOWN UNTIL THE PURITY TESTING HAS BEEN COMPLETE FOR THE SEEDS TO BE USED, AND SHOWS THE SEED MEETS THE NOXIOUS WEEK REQUIREMENTS.

SEEDING SHALL OCCUR PRIOR TO ANY PLANTING. SEEDING SHALL BE ACCOMPLISHED BY UTILIZING A "NO TILL" ATTACHMENT MEETING THE SPECIFICATIONS OF THE WETLAND CONSULTANT OR A RANGELAND TYPE GRASS DRILL MEETING THE SPECIFICATIONS OF THE STANDARD SPECIFICATION 1101.08*G*. GRASSES AND FORB MIXTURES WILL BE SEEDED SEPARATELY. THE MACHINE USED TO SEED SHOULD BE RESET TO DRILL THE FORBS AT A DEPTH RECOMMENDED BY THE SEED SUPPLIER OR WETLAND CONSULTANT. GRASS AND FORB MIXTURES SHALL BE AS NOTED ON THE PLANS.

HYDRAULIC SEEDING OR HAND BROADCAST SEEDING WILL BE ALLOWED AS APPROVED BY THE WETLAND CONSULTANT AND ONLY FOR INACCESSIBLE AREAS WHERE THE USE OF THE EQUIPMENT SPECIFIED IS PHYSICALLY IMPOSSIBLE.

THE SEEDING SHALL BE COMPLETED BEFORE JUNE 15 OR AFTER NOVEMBER 1. PRIOR TO STARTING WORK SEEDERS SHALL BE CALIBRATED AND ADJUSTED TO SOW SEEDS AT THE REQUIRED SEEDING RATE AND TO THE PROPER DEPTH. EQUIPMENT SHALL BE OPERATED IN A MANNER TO ENSURE COMPLETE COVERAGE OF THE ENTIRE AREA TO BE SEEDED. THE WETLAND CONSULTANT SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING THE SEEDING OPERATION SO THAT THE WETLAND SPECIALIST MAY DETERMINE BY TRIAL RUNS THAT THE SEEDER WILL PROVIDE UNIFORM DISTRIBUTION.

SEEDING - CONTINUED

THE CLASSES OF SEED MIXTURES AND COMBINATIONS OF MIXTURES ARE DESIGNATED ON THE PLANS. SEED MIXTURES SPECIFIED TO BE INSTALLED IN THE SAME SEASON SHALL BE SEEDED WITHIN 3 DAYS OF EACH OTHER. VARIATIONS IN SEED MIXTURE MUST BE APPROVED IN WRITING BY THE WETLAND CONSULTANT.

SEED QUALITY MUST MEET THE APPLICABLE STANDARDS SET FORTH IN STANDARD SPECIFICATION 1081.04.

PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT SHALL BE 90 DAYS FOLLOWING SEEDING. NINETY PERCENT AERIAL COVER SHALL BE EVIDENT AT THE END OF THE 90 DAY PERIOD OF ESTABLISHMENT. THE WETLAND CONSULTANT SHALL MAKE THE COVER DETERMINATION.

THE OWNER MAY RETAIN 10% OF THE TOTAL INVOICE TO BE RELEASED UPON FULFILLMENT OF THE PERIOD OF ESTABLISHMENT.

PLANTING

NURSERY STOCK. THE CONTRACTOR SHALL FURNISH A SHIPPING TICKET OR LABEL DOCUMENTING PROVENENCE OF PLANT MATERIALS TO WETLAND SPECIALIST PRIOR TO INSTALLATION.

REPAIRS

CONTRACTOR SHALL BEAR ALL COSTS FOR REPAIRING ANY DAMAGES TO THE SITE SUCH AS EXISTING TURF AREAS, BRIDGES, TRAILS AND/OR ANY OTHER EXISTING SITE FEATURES.

MAINTENANCE

THE WORK MAY CONSISTS OF HAND WEEDING, HERBICIDING, CUTTING OR MOWING, PRUNING AND WATERING THE PLANTED AND AREAS. THE CONTRACTOR IS TO CONTINUOUSLY MAINTAIN THE LANDSCAPE AND EROSION CONTROL FEATURES AFTER INSTALLATION, DURING THE PROGRESS OF THE WORK, AND FOR A PERIOD OF 3 YEARS FROM INSTALLATION COMPLETION UNTIL FINAL ACCEPTANCE.

SUPPLEMENTAL WATERING. SUPPLEMENTAL WATERING SHALL BE CARRIED OUT IF RAINFALL IS LESS THAN 1" PER TWO WEEKS EXCEPT FOR THE SODDED AREAS WHICH REQUIRE DAILY WATERING.

WEED MANAGEMENT. WEED MANAGEMENT IS THE CONTROL OF PLANTS DEEMED TO BE UNDESIRABLE BY THE ENGINEER. SPOT TREATMENT WITH HERBICIDES WILL BE REQUIRED, PARTICULARLY FOR PURPLE LOOSESTRIFE, CATTAILS AND REED CANARY GRASS.

MOWING. MOWING OF ALL NATIVE UPLAND AREAS SHALL BE COMPLETED THREE TIMES DURING THE FIRST GROWING SEASON. MOWING SHALL BE DONE AT A HEIGHT BETWEEN 5 AND 8-INCHES.

PREDATOR GUARDS. ALL GOOSE GUARDS INSTALLED SHALL BE CONSCIENTIOUSLY MAINTAINED UNTIL THE PERFORMANCE CRITERIA ARE MET AT THE FINAL ACCEPTANCE. SHOULD THE CONTRACTOR FAIL TO MONITOR AND MAINTAIN THE GOOSE GUARD, THE OWNER SHALL HAVE THE RIGHT TO PERFORM THE WORK AND RECOVER ALL COSTS.

WETLAND MAINTENANCE SHALL BE DONE IN ACCORDANCE OF SECTION 253.15 EXCEPT THAT THE PERIOD OF ESTABLISHMENT SHALL BE 90 DAYS.

EROSION BLANKET TYPE II

THIS WORK SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO PLACE EROSION BLANKET IN ALL AREAS ABOVE NORMAL WATER TO TOP OF BERM IN DETENTION AREA, AND DRAINAGE SWALE PLANTED AND SEEDED AREAS OR AS DIRECTED BY THE ENGINEER.

EROSION BLANKET TYPE II *SPECIAL* SHALL BE NAG S75ON BLANKET ON UP-SLOPE NATIVE SEEDED AREAS INDICATED ON PLAN . MANUFACTURED BY NORTH AMERICAN GREEN OR AN APPROVED EQUAL.

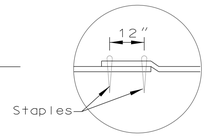
EROSION BLANKET TYPE II *SPECIAL* SHALL BE NAG SC-150 BLANKET IN DESIGNATED BOIFILTRATION SWAIL INDICATED ON PLAN. MANUFACTURED BY NORTH AMERICAN GREEN OR AN APPROVED EQUAL.

EROSION BLANKET TYPE II *SPECIAL* SHALL CONTAIN 100 STRAW AT 0.5 LBS./SQ.YD. OVERLAIN ON ONE SIDE BY A 100% BIODEGRADABLE MESH, AND SEWN WITH A BIODEGRADABLE THREAD.

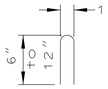
THE BLANKET SHALL BE PROVIDED IN ROLLS 6.67 FT. WIDE BY 108 FT. LONG. THE WEIGHT SHALL BE .58 LBS PER SQUARE YARD.

THE BLANKET SHALL BE PLACED WITHIN 24 HOURS AFTER SEEDING OPERATIONS HAVE BEEN COMPLETED ON THE AREAS SPECIFIED. PRIOR TO PLACING THE BLANKET, THE AREAS TO BE COVERED SHALL BE RELATIVELY FREE OF ALL ROCKS OR CLODS OVER 40 MM 1.5 INCH IN DIAMETER, AND ALL STICKS OR OTHER FOREIGN MATERIAL WHICH WILL PREVENT THE CLOSE CONTACT OF THE BLANKET WITH THE SEED BED. IF, AS A RESULT OF RAIN, THE PREPARED SEED BED BECOMES CRUSTED OR ERODED, OR IF ERODED PLACES, RUTS OR DEPRESSIONS EXIST FOR ANY REASON, THE CONTRACTOR WILL BE REQUIRED TO REWORK THE SOIL UNTIL IT IS SMOOTH AND TO RESEED SUCH AREAS WHICH ARE REWORKED. AFTER THE AREA HAS BEEN PROPERLY SHAPED AND SEEDED, THE BLANKET SHALL BE LAID OUT FLAT, EVENLY AND SMOOTHLY, WITHOUT STRETCHING THE MATERIAL. THE BLANKET SHALL BE PLACED HORIZONTAL TO THE SLOPE WITH THE NETTING ON TOP AND THE FIBERS IN CONTACT WITH THE SOIL OVER THE ENTIRE AREA. BUTT ENDS AND SIDES AND THEN STAPLE.

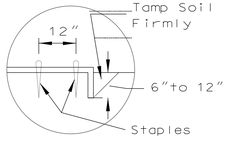
STAPLES SHALL BE PLACED AT A RATE OF 3.5 STAPLES PER SQUARE YARD. THE BLANKET SHALL OVERLAP BETWEEN 3" AND 4" WITH ADJACENT BLANKET.



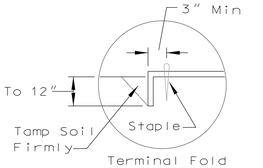
Junction Slot
Excelsior Blanket
DETAIL 2



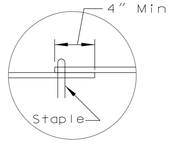
STAPLE DETAIL



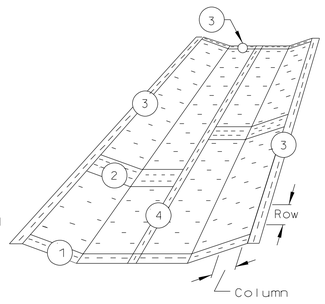
Anchor Slot
Jute Mesh
Excelsior Blanket
Erosion Control Paper
DETAIL 3



Terminal Fold
Excelsior Blanket
Erosion Control Paper
DETAIL 1



Lap Joint
Jute Mesh
Erosion Control Paper
Excelsior Blanket Shall
Be Butted Together.
DETAIL 4



NOTES:

1. Staples are to be placed alternately, in columns approximately 2' apart and in rows approximately 3' apart. Approximately 175 staples are required per 4'x 225' roll of material and 125 staples are required per 4'x 150' roll of material.
2. Erosion control material shall be placed loosely over ground surface. Do not stretch.
3. All terminal ends and transverse laps shall be stapled at approximately 12" intervals.

EROSION BLANKET PLAN

NRCS
Natural Resources Conservation Service
IL-530

ADDITIONAL NOTES:

PERFORMANCE STANDARDS -1 YEAR MONITORING PERIOD-

1. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING AT LEAST 90% OF THE PLUGS WILL BE PRESENT AND THRIVING.
2. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, THE AREA SHALL BE FREE OF INVASIVE OR NON-NATIVE SPECIES.
3. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, NO MORE THAN 0.5 SQUARE METERS IN SIZE SHALL BE DEVOID OF VEGETATION.
4. AT THE END OF THE FIRST GROWING SEASON AND ONE FULL YEAR AFTER PLANTING, 100% OF ANY PLANTED TREES AND SHRUBS SHALL BE ALIVE AND APPARENT.

SPECIFICATIONS FOR PLUGGING

1. PLANTS SHALL MEET THE CURRENT AMERICAN STANDARDS OF NURSERY STOCK.
2. TAKE CARE NOT TO COMPACT THE NEW SOIL MIX DURING CONSTRUCTION.
3. HERBICIDE OR REMOVE SOD AND WEEDY OR NON-NATIVE VEGETATION.
4. PREPARE THE SOIL. SEE NOTES BELOW.
5. USE A BIODEGRADABLE EROSION CONTROL BLANKET, STAKED IN WITH SLITS FOR PLUGS.
6. PLUGS MUST BE WATERED IMMEDIATELY AND THEN AS OFTEN AS NECESSARY DURING THE FIRST GROWING SEASON TO ENSURE SURVIVAL.
7. PLANTING TIME IS TO BE BETWEEN APRIL 15TH - SEPTEMBER 15TH.

3 YEAR MAINTENANCE / MONITORING & REPORTING

1. CONTRACTOR TO MAINTAIN AND MONITOR NATIVE PLANTINGS FOR A 3 YEAR PERIOD. CONTRACTOR TO SUBMIT YEARLY WRITTEN REPORTS AS TO PERFORMANCE WITH THE APPROPRIATE AGENCIES.
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4. PLUGS THAT ARE DEAD, MISSING, OR NOT THRIVING SHALL BE REPLACED IMMEDIATELY.

Native Planting
Bio-Retention Basin

LOWER SLOPE OF BASIN N.W.L TO H.W.L.
WET MEADOW SEED MIXTURE

SPECIES	COMMON NAME	LB/ACRE
ASCLEPIAS INCARNATA	SWAMP MILKWEED	0.125
BIDENS CERNUA	NODDING BUR MARIGOLD	0.190
BOLTORIA ASTEROIDES	FALSE ASTER	0.031
CAREX BEBBII	BEBB'S SEDGE	0.250
CAREX BICKNELLII	BICKNELL'S OVAL SEDGE	0.125
CAREX BREVIOR	"SHORTER" SEDGE	0.250
CAREX CRISTATELLA	CRESTED SEDGE	0.060
CAREX MOLESTA	ROUNDED HEADED SEDGE	0.250
CAREX NORMALIS	NORMAL SEDGE	0.015
CAREX SCOPARIA	POINTED BROOM SEDGE	0.190
CAREX STIPATA	AWL-FRUITED SEDGE	0.060
CAREX VULPINOIDEA	FOX SEDGE	0.250
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	0.188
ELYMUS VERGINICUS	VIRGINIA WILD RYE	3.000
EUPATORIUM PERFOLIATUM	THOROUGHWORT	0.015
EUTHAMIA GRAMINIFOLIA	GRASS LEAFED GOLDENROD	0.300
GLYCERIA STRIATA	FOUL MANNA GRASS	0.130
HELENIUM AUTUMNALE	SNEEZEWEED	0.063
IRIS VIRGINICA SHREVEI	BLUE FLAG	1.000
JUNCUS DUDLEYI	DUDLEY'S RUSH	0.020
JUNCUS TORREYI	TORREY'S RUSH	0.031
LOBELIA SIPHILITICA	BLUE LOBELIA	0.031
MIMULUS RINGENS	MONKEY FLOWER	0.031
PANICUM VIRGATUM	PRAIRIE SWITCH GRASS	3.000
PYCNANTHEMUM VIRGINIANUM	COMMON MT MINT	0.063
RUDBECKIA SPECIOSA SULIVANTII	SHOWY BLACK EYED SUSAN	0.250
SCIRPUS ATROVIRENS	DARK GREEN RUSH	0.060
SCIRPUS CYPERINUS	WOLL GRASS	0.030
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.250
ZIZIA AUREA	GOLDEN ALEXANDER	0.500

10.75 LBS. / ACRE

7893 SQ' AREA =
2.0 LBS. SEED MIX REQUIRED

BIO RETENTION NATIVE PLUG LIST

SPECIES	COMMON NAME
CALAMAGROSTIS CANADENSIS	BLUE JOINT GRASS
CAREX LACUSTRIS	LAKE SEDGE
CAREX STIPATA	AWL-FRUITED SEDGE
CARAX STRICTA	TUSSOCK SEDGE
CARAX VULPINOIDES	FOX SEDGE
ELEOCHARIS ACICULORIS	NEEDLE SPIKE RUSH
ELECOCHARIS OBTUSA	BLUNT SPIKE RUSH
ELYMUS CANADENSIS	WILD RYE
GLYCERIA STRIATA	FOWL MANNA GRASS
JUNCUS TENUIS	SLENDER RUSH
JUNCUS TORREYI	TORREY'S RUSH
LEERSIA ORYZOIDES	RICE CUT GRASS
PANICUM VIRGATUM	SWITCH GRASS
SCIRPUS ACUTUS	HARD STEM BULRUSH
SCIRPUS ATROVIRENS	DARK GREEN RUSH
SPARTINA PECTINATA	CORD GRASS
ASTER AZUREUS	SKY BLUE ASTER
COREOPSIS PALMATA	PRAIRIE COREOPSIS
LIATRIS ASPERA	ROUGH BLAZING STAR
RATIBIDA PINNATA	YELLOW CONEFLOWER
SOLIDAGO RIGIDA	RIGID GOLDENROD
VERONICASTRUN VIRGINICUM	CULVERSROOT

QUANTITY OF 1540 NATIVE PLUGS TOTAL
70 PLUGS OF EACH VARIETY PLANTED ON 24" CENTERS
WITHIN 6' WIDE STRIP AND AS SHOWN
FROM N.W.L. 787.0 INWARD TO 785.0

BASIN BOTTOM - IDOT CLASS 4B
WETLAND GRASS & SEDGE MIXTURE

PERMANENT MATRIX	COMMON NAME AMOUNT / ACRE SEED
44.64 % ANNUAL RYEGRASS	25 LBS.
44.64 % SPRING OATES	25 LBS.
10.72 % WETLAND GRASSES (BELOW)	6 LBS
	56 LBS. / ACRE
12 % BLUE JOINT GRASS	
6 % LAKE-BANK SEDGE	
6 % AWL-FRUITED SEDGE	
6 % TUSSOCK SEDGE	
6 % FOX SEDGE	
3 % NEEDLE SPIKE RUSH	
3 % BLUNT SPIKE RUSH	
14 % FOWL MANNA GRASS	
6 % COMMON RUSH	
6 % SLENDER RUSH	
6 % TORREY'S RUSH	
10 % RICE CUT GRASS	
3 % HARD STEMMED BULRUSH	
3 % DARK GREEN RUSH	
3 % RIVER BULRUSH	
3 % SOFTSTEM BULRUSH	
4 % CORD GRASS	

18,215 SQ' AREA =
24 LBS. SEED MIX REQUIRED

Landscape Plans Prepared By:

Paul A. Couture, P.E. / L.A.
I.L. License Number 157-00328

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REGISTERED
STATE OF ILLINOIS
LANDSCAPE ARCHITECT
SEAL

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

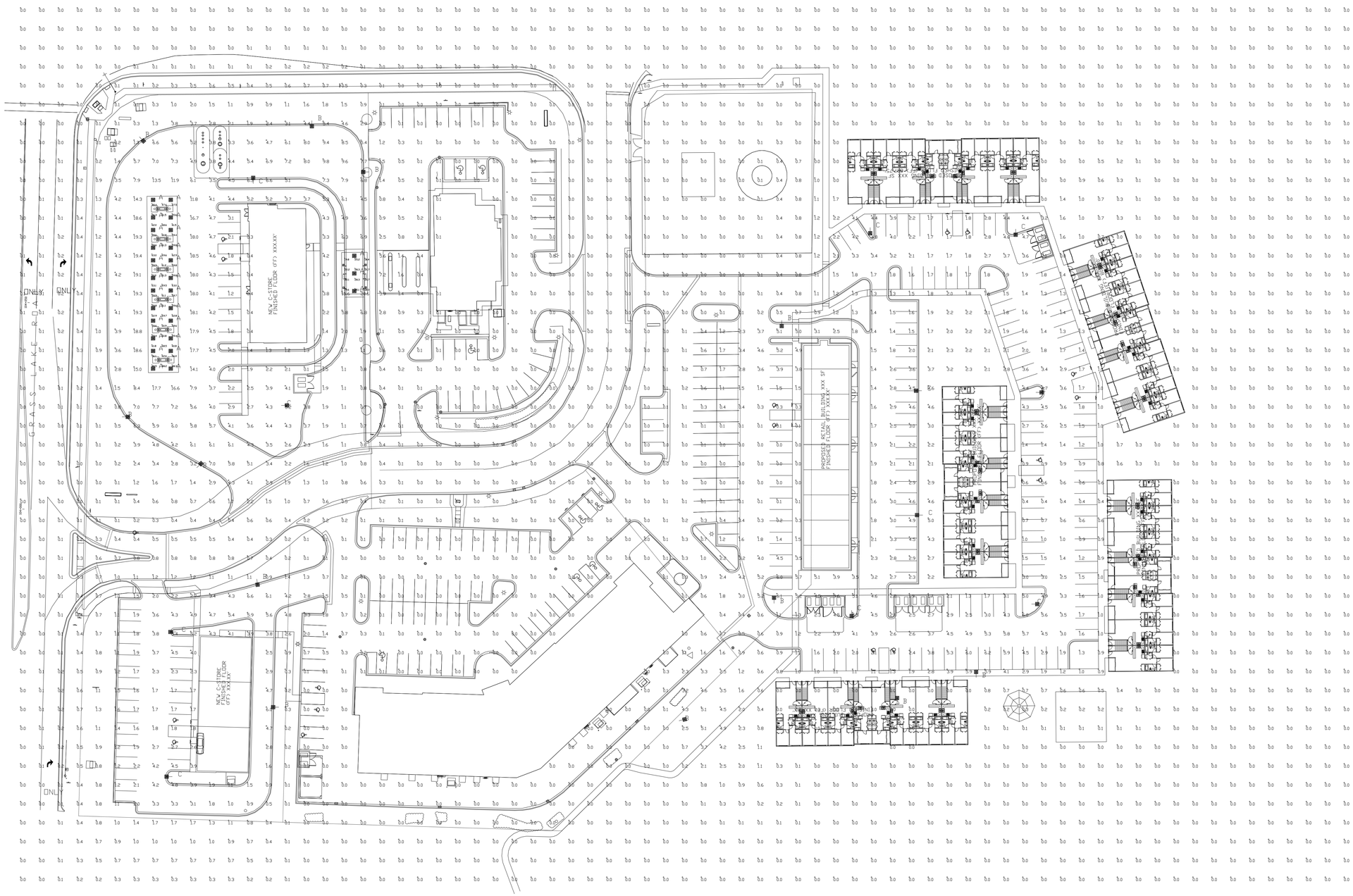
LAKE TOWER CROSSING PHASE 2 & 3
GRASS LAKE AND DEEP LAKE ROADS
LAKE VILLA, ILLINOIS

ISSUE

TO	DATE
REVIEW	11/6/19

CHECK: CK
DRAWN: PC
JOB:D18057

L-3.1
BIO-RETENTION BASIN SPECIFICATIONS



Click image to open Product Page

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	LLD	UDF	LLF	Arr. Lum. Lumens	Arr. Watts
	27	A	SINGLE	SCV-LED-15L-SC-50 MTD @ 15'	1.000	1.000	1.000	15410	103
	12	B	SINGLE	MRM-LED-30L-SIL-FT-50-70CRI-ILSINGLE-25' MT HGT	1.000	1.000	1.000	20690	247
	11	C	SINGLE	MRM-LED-30L-SIL-5W-50-70CRI-SINGLE-25' MT HGT	1.000	1.000	1.000	31177	247

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS	Illuminance	Fc	0.91	20.6	0.0	N.A.	N.A.
DIESEL CANOPY	Illuminance	Fc	22.39	28.3	18.3	1.22	1.55
GAS CANOPY	Illuminance	Fc	59.80	69.7	47.5	1.26	1.47
INSIDE CURB APARTMENTS	Illuminance	Fc	2.43	6.2	0.4	6.08	15.50
INSIDE CURB C-STORE	Illuminance	Fc	2.88	6.6	0.9	3.20	7.33
INSIDE CURB C-STORE W CANOPIES	Illuminance	Fc	6.06	19.4	0.3	20.20	64.67

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Total Project Watts
Total Watts = 8462

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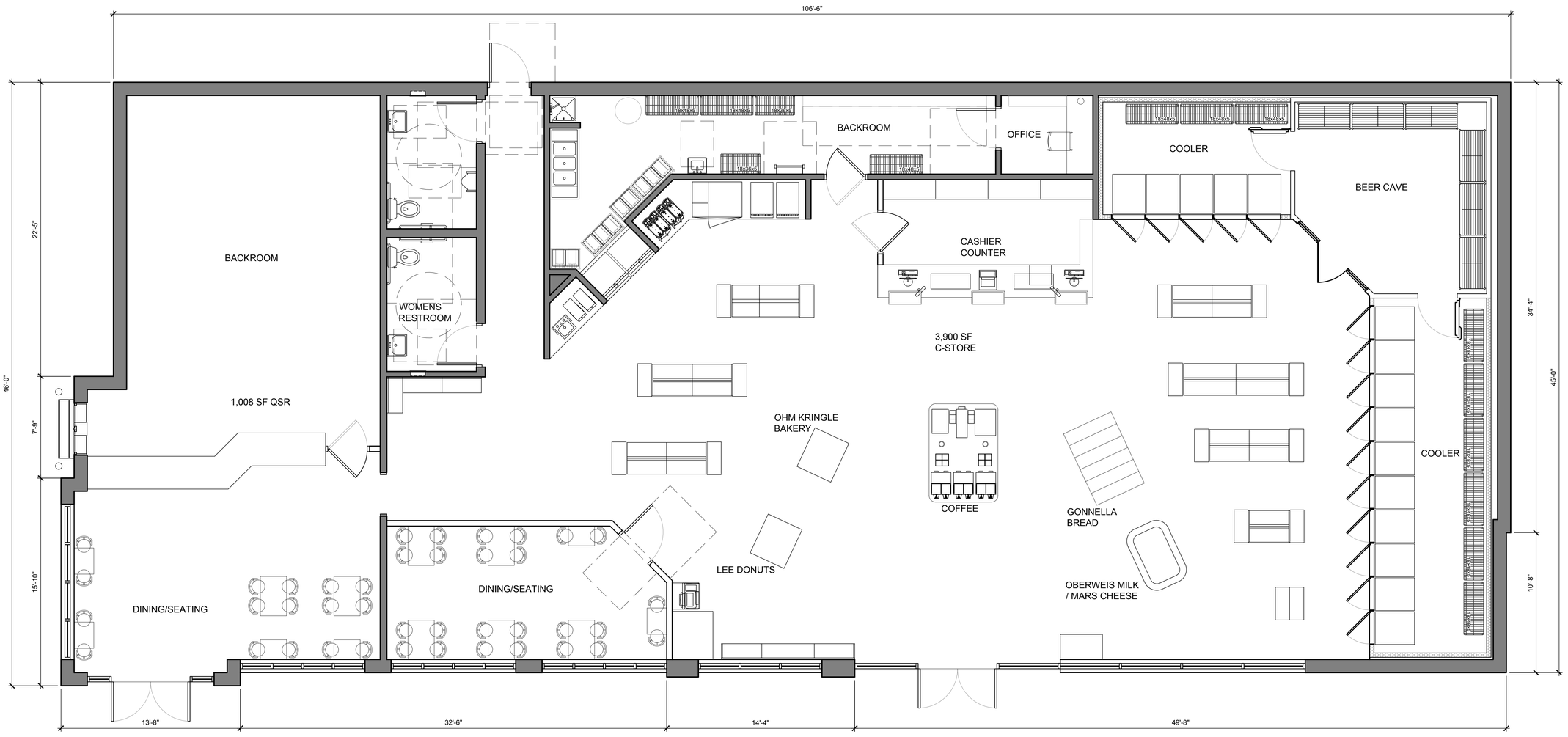
(513) 793-3200 ▪ FAX (513) 793-4003

LIGHTING PROPOSAL LO-147065-1

LAKE TOWER CROSSING
GRASS LAKE ROAD
LAKE VILLA,IL

BY:MWE	DATE:4-03-19	REV:11-05-19	SHEET 1 OF 1

SCALE: 1"=40' 0 40



1 C-STORE FLOOR PLAN
SCALE: 1/4" = 1'-0"

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ISSUE

TO	DATE
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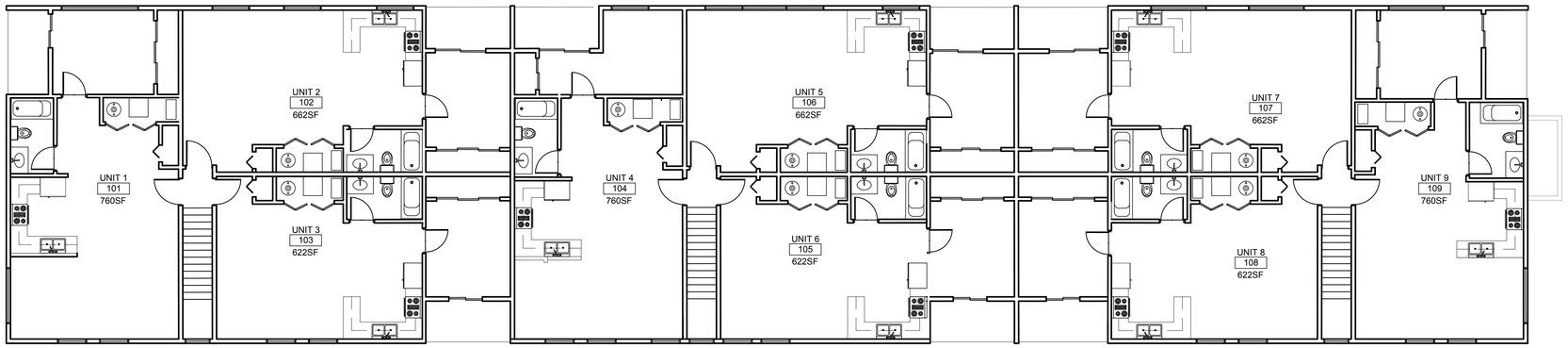
REVIEW	7/23/19
REVIEW	9/16/19
REVIEW	10/24/19
ZONING	11/08/19

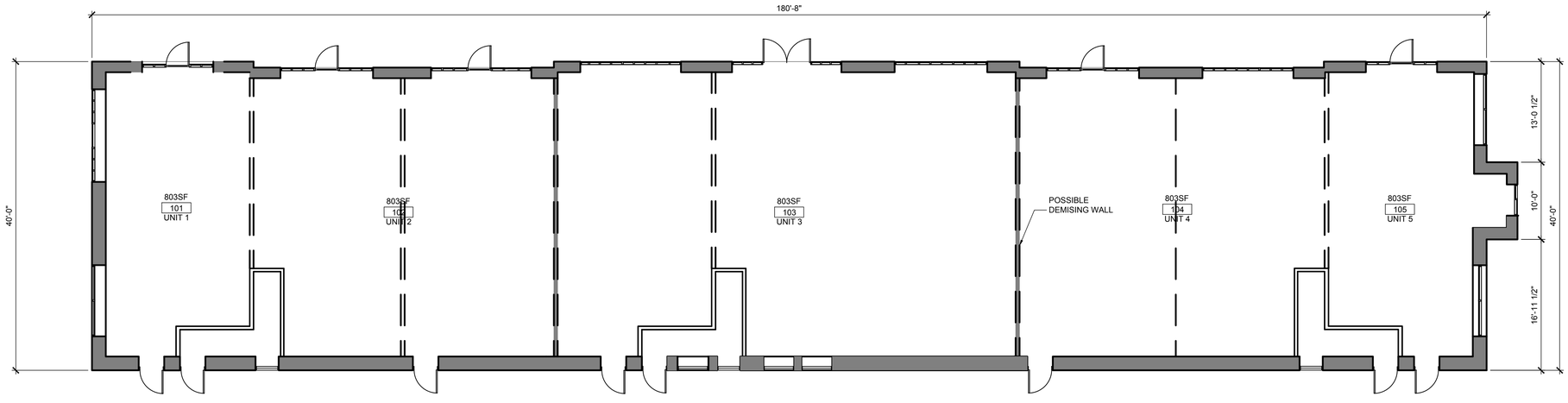
CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A101
C-STORE FLOOR PLAN



2 RETAIL APARTMENTS 2NDFLOOR PLAN
SCALE: 1/8" = 1'-0"

N



1 RETAIL APARTMENTS 2ND FLOOR PLAN
SCALE: 1/8" = 1'-0"

N

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ZONING	11/08/19

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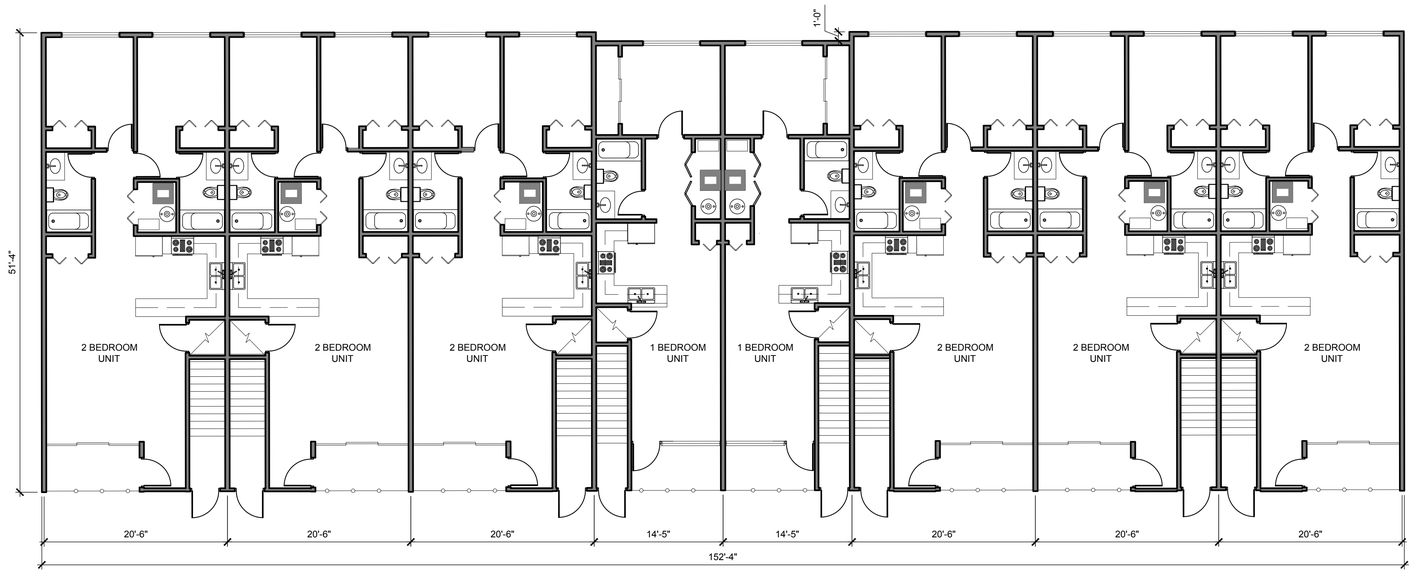
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A102
RETAIL FLOOR PLAN



1 TYPICAL APARTMENT BUILDING OVERALL PLAN
SCALE: 1/8" = 1'-0"

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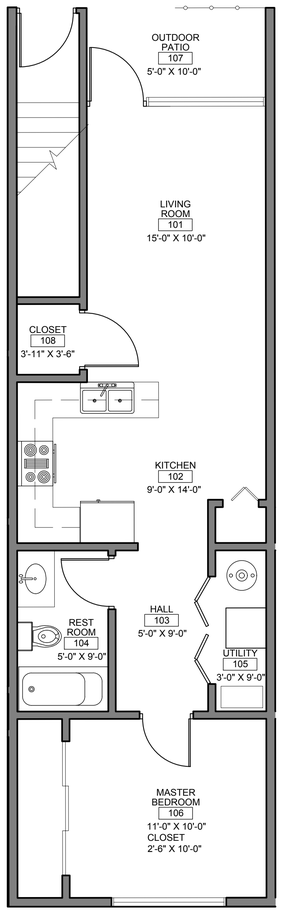
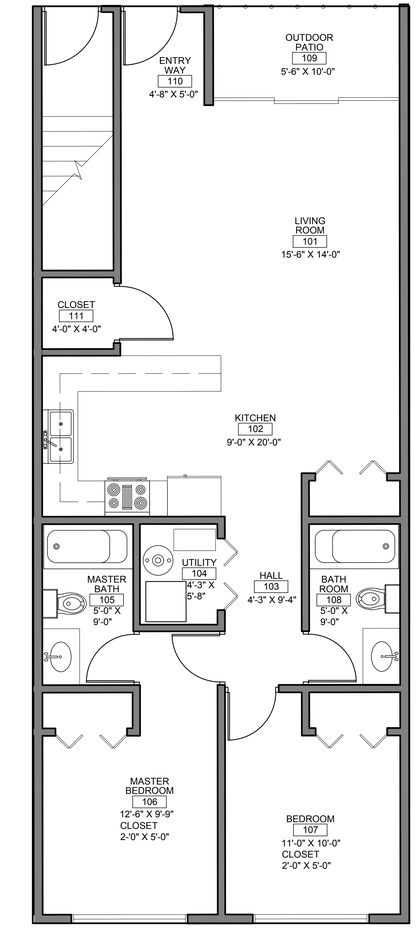
CHECK:CW
DRAWN:MA, MJ, GP, JB, NR
JOB:D18057

A103
APARTMENT OVERVIEW FLOOR PLAN



1 SINGLE UNIT
SCALE: 1/4" = 1'-0"



1 DOUBLE UNIT
SCALE: 1/4" = 1'-0"

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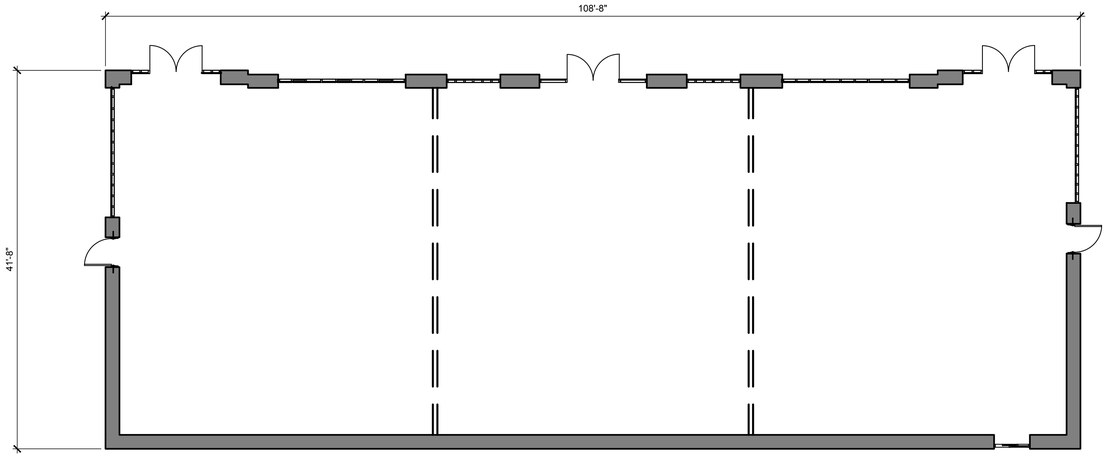
JOB:D18057

A104
APARTMENT UNIT FLOOR PLAN



1 NORTH RETAIL FLOOR PLAN
SCALE: 1/8" = 1'-0"

N

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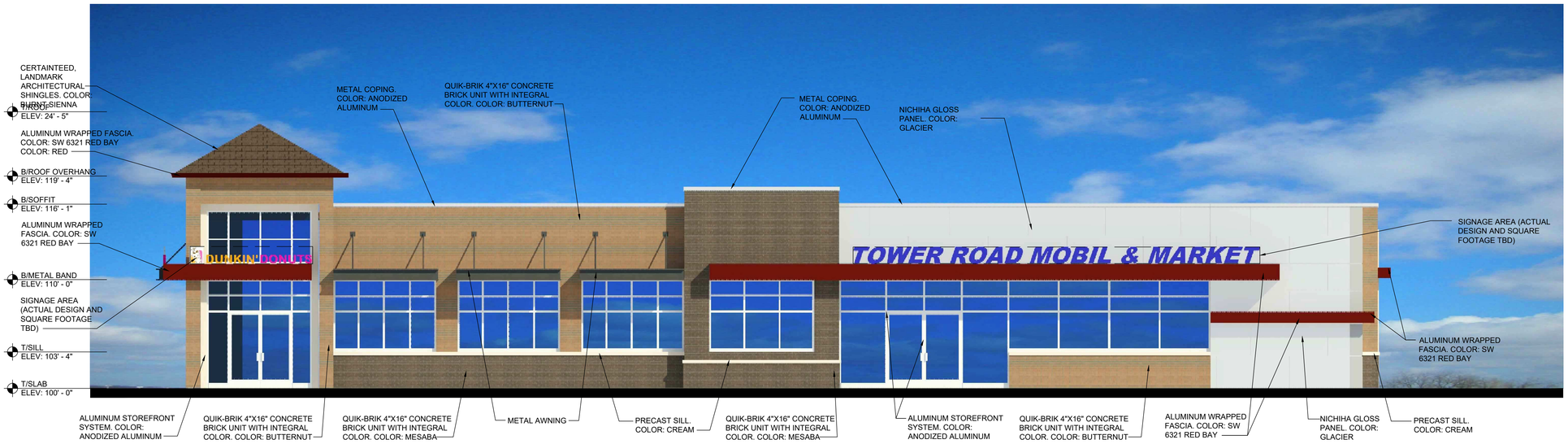
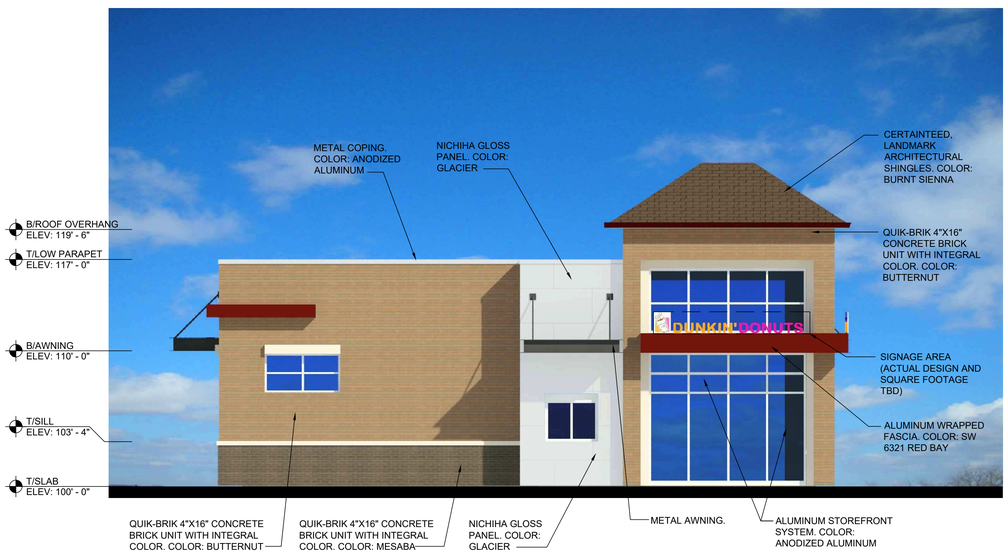
JOB:D18057

A105
RETAIL FLOOR PLAN



1 FRONT ELEVATION
SCALE: 3/ 16" = 1'-0"



2 RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

COLOR PALETTE

ALUMINUM WRAPPED FASCIA. COLOR RED BAY

NICHIHA GLOSS PANEL. COLOR: GLACIER

CERTAINTEED, LANDMARK ARCHITECTURAL SHINGLES. COLOR: BURNT SIENNA

QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: BUTTERNUT

QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: MESABA

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ZONING	11/08/19

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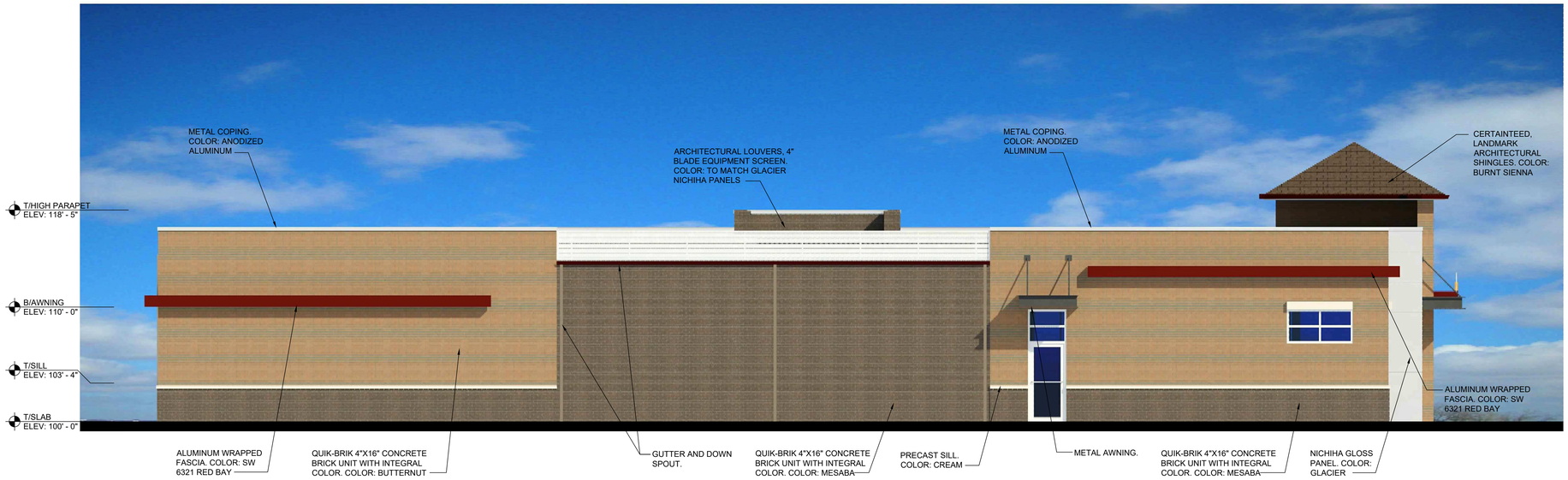
JOB:D18057

A201
C-STORE EXTERIOR ELEVATIONS



1 REAR ELEVATION
SCALE: 3/16" = 1'-0"

2 LEFT ELEVATION
SCALE: 3/16" = 1'-0"

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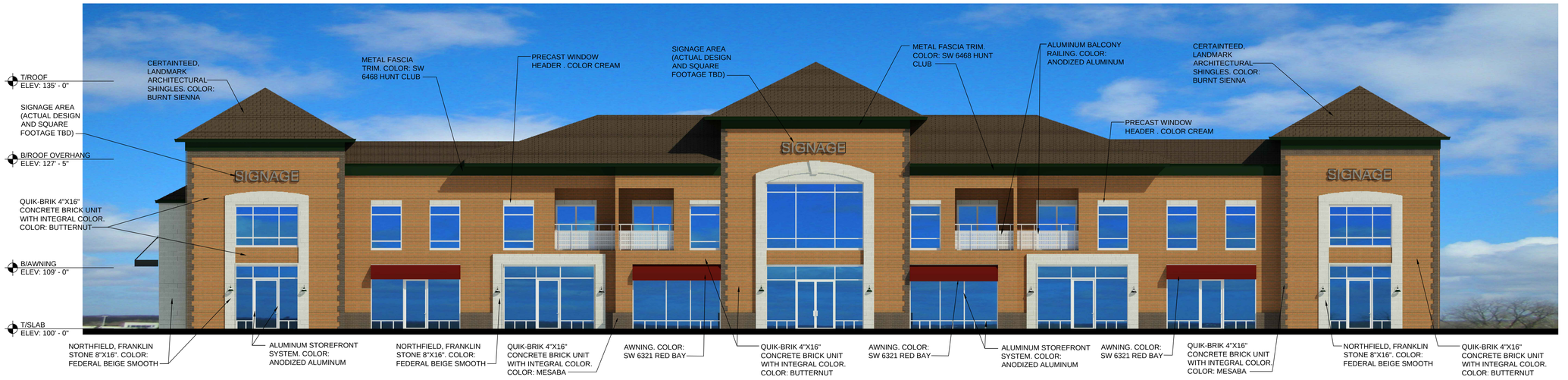
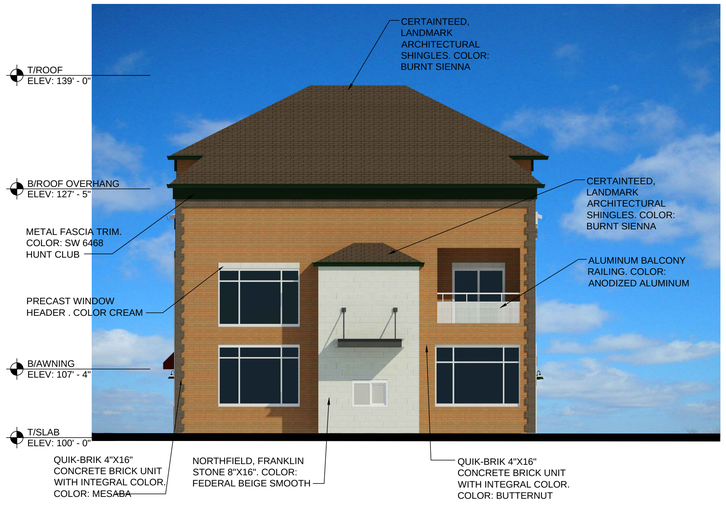
ZONING	11/08/19

CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A202
C-STORE EXTERIOR ELEVATIONS



1 FRONT ELEVATION
SCALE: 1/8" = 1'-0"



1 RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

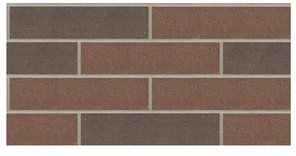
COLOR PALETTE

CERTAINTEED, LANDMARK ARCHITECTURAL SHINGLES. COLOR: BURNT SIENNA

NORTHFIELD, FRANKLIN STONE 8"X16". COLOR: FEDERAL BEIGE SMOOTH

METAL FASCIA TRIM. COLOR: SW 6468 HUNT CLUB

QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: BUTTERNUT



QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: MESABA

AWNING. COLOR: SW 6321 RED BAY

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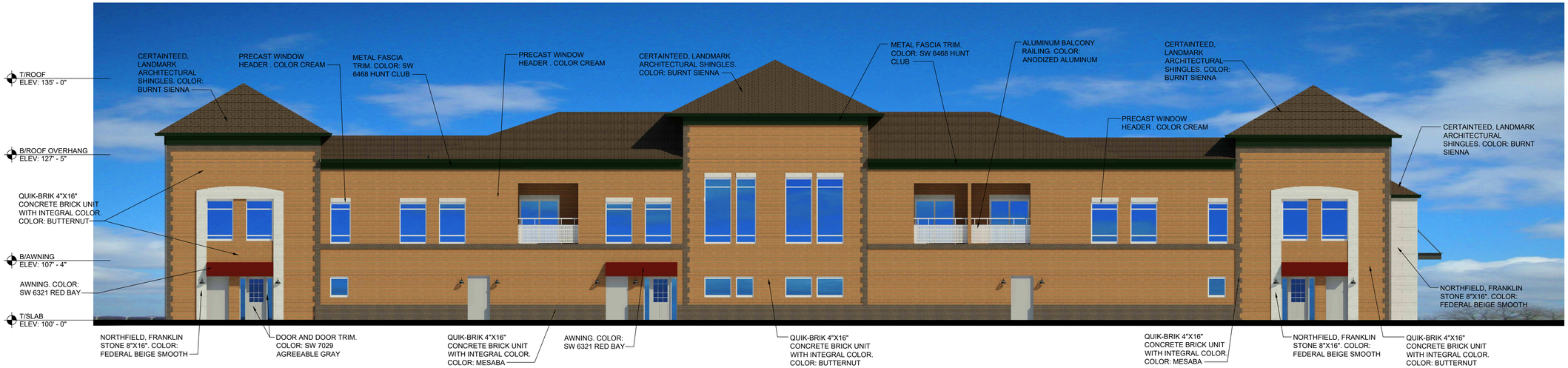
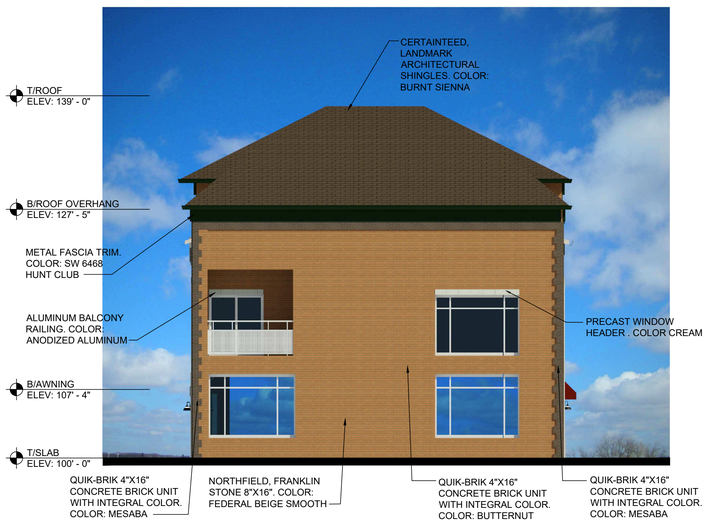
ZONING	11/08/19

CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A203
MIXED USE APARTMENTS AND RETAIL EXTERIOR ELEVATIONS



1 REAR ELEVATION
SCALE: 1/8" = 1'-0"



2 LEFT ELEVATION
SCALE: 1/8" = 1'-0"

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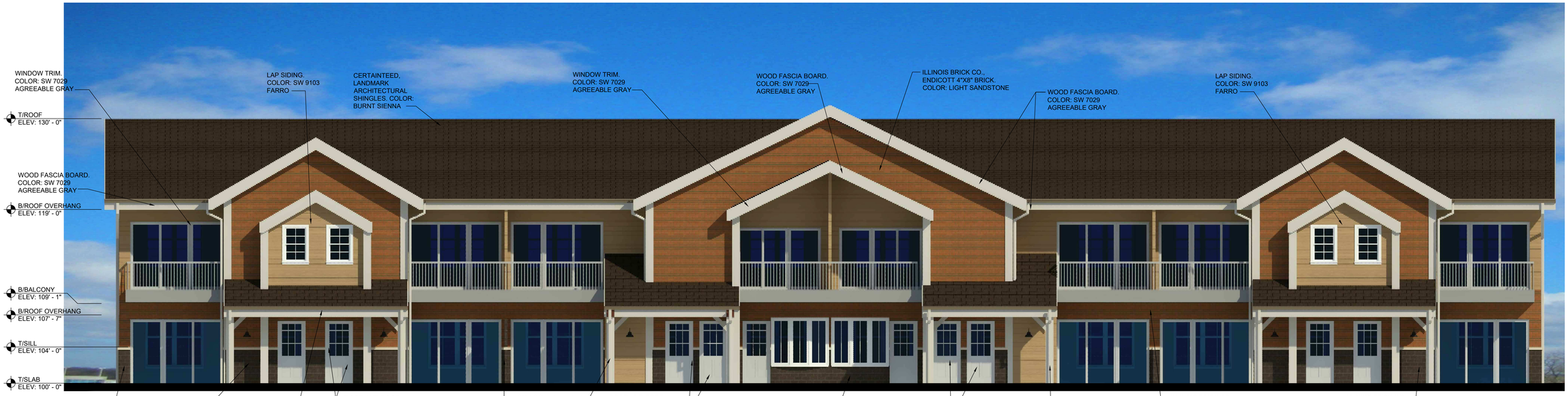
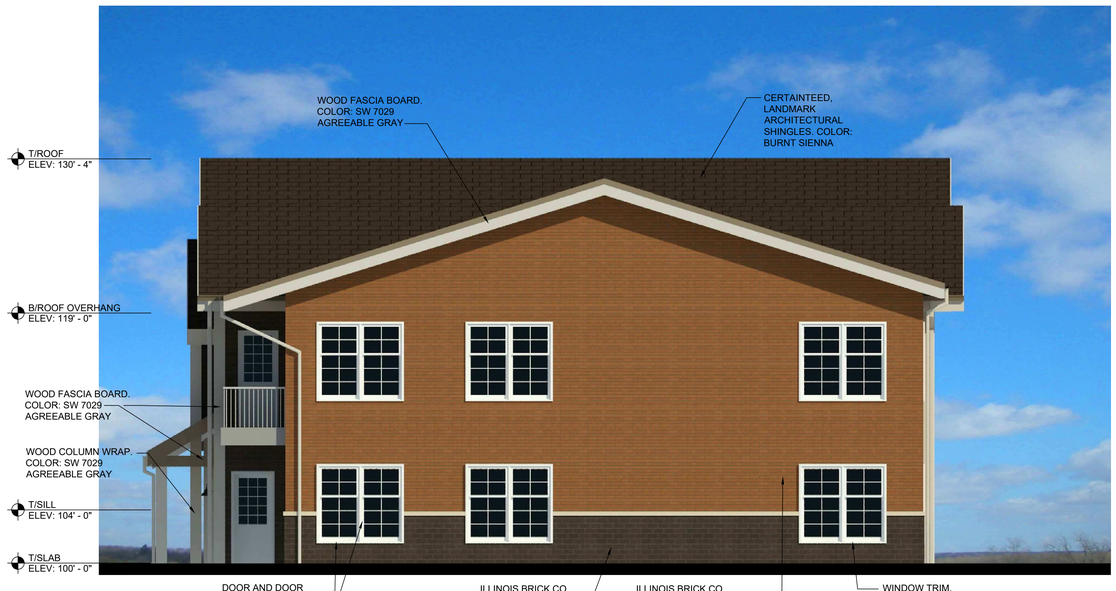
CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A204
MIXED USE APARTMENTS AND RETAIL EXTERIOR ELEVATIONS



1 FRONT ELEVATION
SCALE: 3/16" = 1'-0"



2 RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

COLOR PALETTE

CERTAINTEED, LANDMARK ARCHITECTURAL SHINGLES. COLOR: BURNT SIENNA

WOOD FASCIA BOARD. COLOR: SW 7029 AGREEABLE GRAY

LAP SIDING. COLOR: SW 9103 FARRO

ILLINOIS BRICK CO., ENDICOTT BRICK WAINSCOT. COLOR: LIGHT SANDSTONE

ILLINOIS BRICK CO., ENDICOTT BRICK WAINSCOT. COLOR: DARK SANDSTONE

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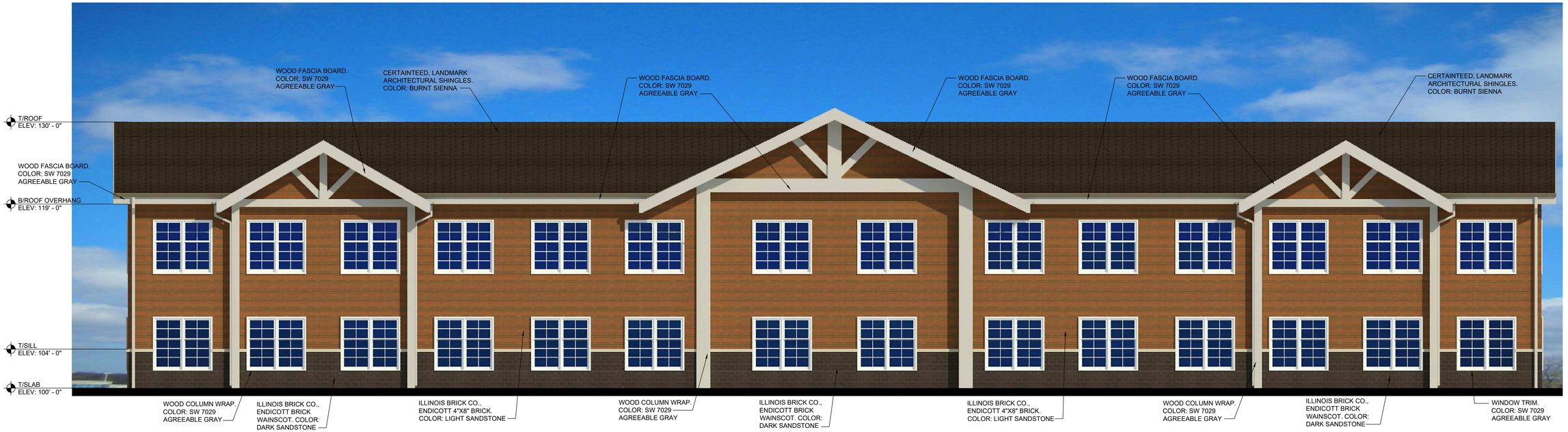
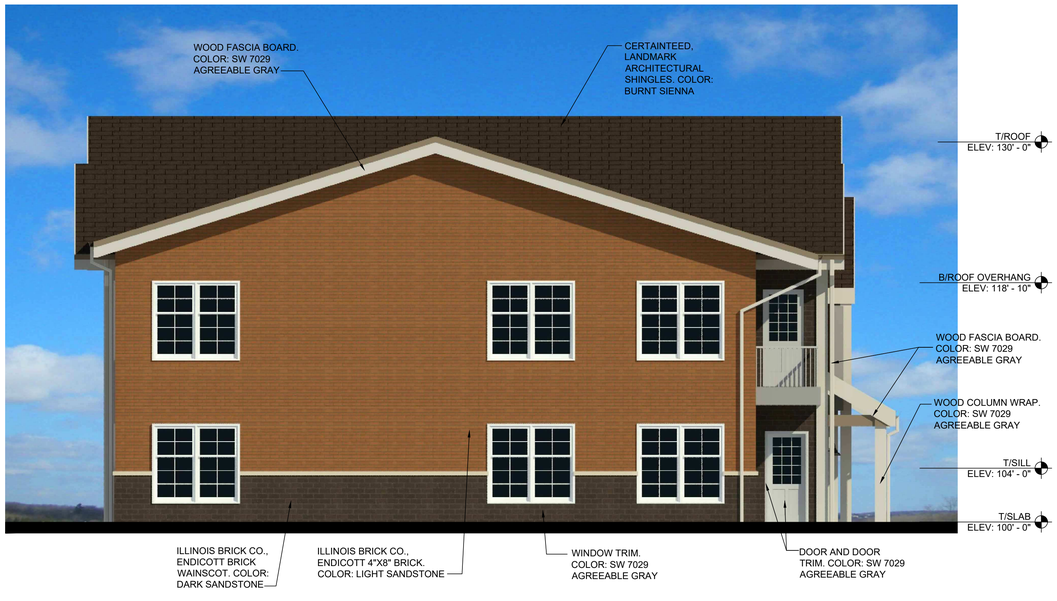
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A205
LARGE APARTMENT EXTERIOR ELEVATIONS



1 REAR ELEVATION
SCALE: 3/16" = 1'-0"



2 LEFT ELEVATION
SCALE: 3/16" = 1'-0"

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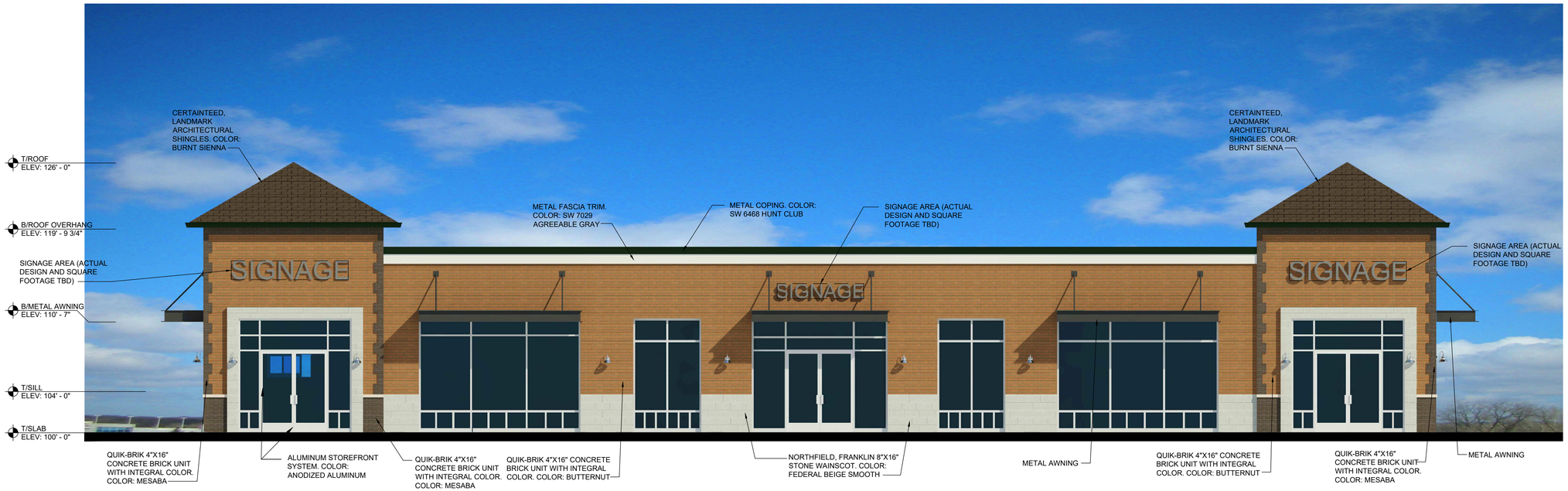
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A206
LARGE APARTMENT EXTERIOR ELEVATIONS



1 FRONT ELEVATION
SCALE: 3/16" = 1'-0"

2 RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

COLOR PALETTE

CERTAINTEED, LANDMARK ARCHITECTURAL SHINGLES. COLOR: BURNT SIENNA

NORTHFIELD, FRANKLIN STONE 8"X16". COLOR: FEDERAL BEIGE SMOOTH

METAL FASCIA TRIM. COLOR: SW 6468 HUNT CLUB

QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: BUTTERNUT

QUIK-BRIK 4"X16" CONCRETE BRICK UNIT WITH INTEGRAL COLOR. COLOR: MESABA

METAL FASCIA TRIM. COLOR: SW 7029 AGREEABLE GRAY

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LAKE TOWER CROSSING
GRASS LAKE RD. & DEEP LAKE ROAD
LAKE VILLA, IL 60046

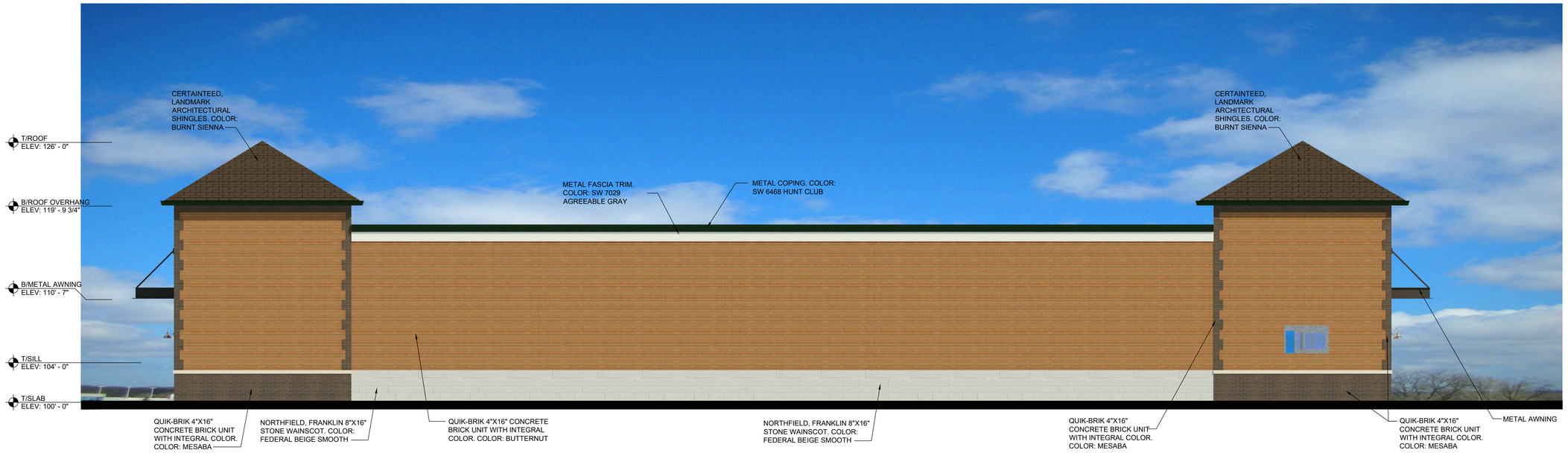
CHRIS KHAYAT

ISSUE

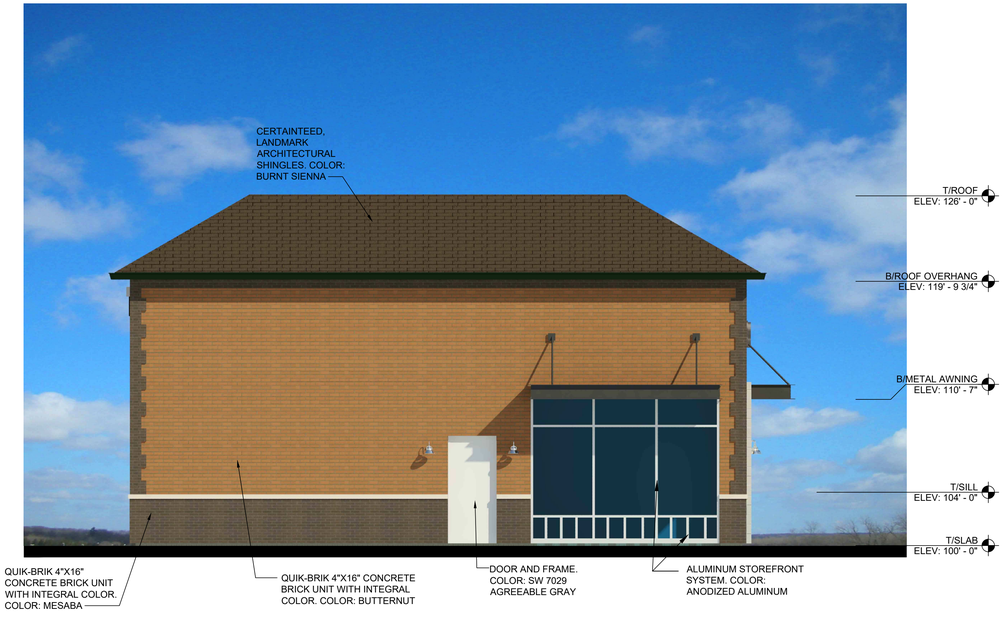
TO	DATE
ZONING	4/5/19
REVIEW	7/23/19
REVIEW	9/16/19
REVIEW	10/24/19
ZONING	11/08/19

CHECK:CW
DRAWN:MA, MJ, CP, JB, NR
JOB:D18057

A207
NORTH RETAIL
EXTERIOR ELEVATIONS



1 REAR ELEVATION
SCALE: 3/16" = 1'-0"



2 LEFT ELEVATION
SCALE: 3/16" = 1'-0"

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

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