31st AND GALENA
PARK RENOVATIONS

1640 N. 31st. STREET
MILWAUKEE, WISCONSIN 53208

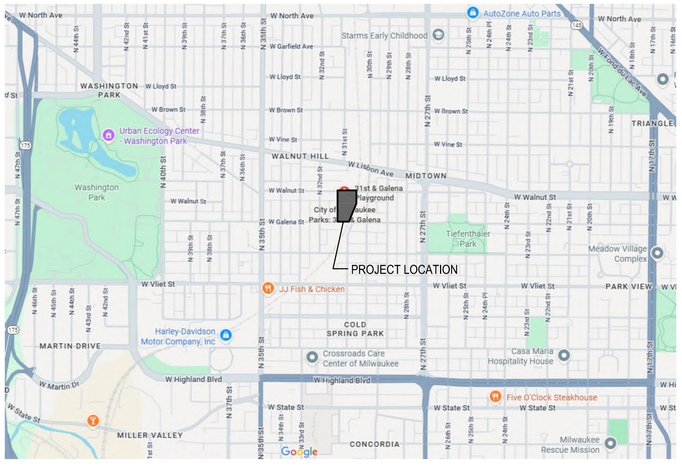
75% REVIEW SET

CITY OF MILWAUKEE PROJECT NUMBER: ??????????

DATE: OCTOBER 17, 2025

PROJECT NUMBER: 19031.01

LOCATION MAP:



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SITE AND LANDSCAPING

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PUMP TRACK

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PRELIMINARY
NOT FOR CONSTRUCTION
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City of Milwaukee
Department of Public Works
Infrastructure Services Division
Bridges & Buildings Section

ENGINEER IN CHARGE

CITY ENGINEER

COMMISSIONER OF PUBLIC WORKS

31st AND GALENA
PARK RENOVATIONS

75% REVIEW SET

Project No.: 19031.01 Date: 10/17/2025

Oct 17, 2025 - 11:45am
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PROJECT INFORMATION AND CODE ANALYSIS

ZONING INFORMATION:

EXISTING ZONING: PK (PARKS DISTRICT)
OWNER: CITY OF MILWAUKEE
TAX KEY: ??????????
HISTORIC CODE: NOT APPLICABLE
LAND USE CODE: 8870
LAND USE GROUP: 12
USE: THE SITE IS CURRENTLY A CITY-OWNED PUBLIC PARK WITH NO ENCLOSED STRUCTURES. THE PROPOSED USE OF THE SITE AFTER RENOVATIONS IS THE SAME. PARKS AND PLAYGROUND ARE AN APPROVED USE FOR ZONING PK.

CODE INFORMATION

GOVERNING CODES:

2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) WITH WISCONSIN AMENDMENTS SPS 366
2015 INTERNATIONAL BUILDING CODE (IBC) WITH WISCONSIN AMENDMENTS SPS 362
2009 ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
2014 WISCONSIN PLUMBING CODE SPS 381-387
2011 NFPA NATIONAL ELECTRICAL CODE WITH WISCONSIN AMENDMENTS SPS 316

PROJECT DESCRIPTION:

EXTERIOR SITE ALTERATION: NO NEW ENCLOSED STRUCTURES.
RENOVATION OF EXISTING PARK SPACE INCLUDING REPLACEMENT OF PAVED WALKWAYS, NEW SEATING, GRADING, PLAYGROUND ITEMS AND LANDSCAPING. ALL PATH ARE ACCESSIBLE AND CONNECTED TO THE ADJACENT CITY SIDEWALKS.

PRODUCT AND SUBMITTAL NOTES

1. ACTION SUBMITTALS
   A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
      1.1 PLANT MATERIALS: INCLUDE QUANTITIES, SIZES, QUALITY, AND SOURCES.
      1.2 PLANT PHOTOGRAPHS: INCLUDE COLOR PHOTOGRAPHS IN DIGITAL FORMAT FOR EACH REQUIRED SPECIES IN THE SIZE INDICATED IN THE PLANT SCHEDULE. TAKE PHOTOGRAPHS FROM AN ANGLE DEPICTING THE TRUE SIZE AND CONDITION OF THE PLANTS TO BE FURNISHED. INCLUDE A SCALE ROD OR OTHER MEASURING DEVICE IN EACH PHOTO. FOR SPECIES WHERE MORE THAN 20 PLANTS ARE REQUIRES, INCLUDE A MINIMUM OF 3 PHOTOGRAPHS SHOWING THE AVERAGE PLANT, THE BEST QUALITY PLANT, AND THE WORST QUALITY PLANT TO BE FURNISHED. IDENTIFY EACH PHOTOGRAPH WITH THE FULL SCIENTIFIC NAME OF THE PLANT, PLANT SIZE, AND GROWING NURSERY.
2. INFORMATIONAL SUBMITTALS
   A. QUALIFICATION DATA: FOR LANDSCAPER INSTALLER, INCLUDE A LIST OF SIMILAR PROJECTS COMPLETED NY THE INSTALLER DEMONSTRATING CAPABILITIES AND EXPERIENCE. INCLUDE NAME, ADDRESS, YEAR COMPLETED, AND CONTACT PERSON.
   B. PRODUCT CERTIFICATES: PROVIDE FOR EACH TYPE OF MANUFACTURED PRODUCT, FROM MANUFACTURER, AND COMPLYING WITH THE FOLLOWING:
      2.1 MANUFACTURER'S CERTIFIED ANALYSIS OF STANDARD PRODUCTS.
      2.2 ANALYSIS OF OTHER MATERIALS BY A RECOGNIZED LABORATORY MADE ACCORDING TO METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, WHERE APPLICABLE.
3. PESTICIDES AND HERBICIDES ARE NOT ALLOWED IN CITY PARKS WITHOUT SPECIAL APPROVAL.
4. PLANT MATERIAL
   B. GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE OR PLANT LEGEND SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
   C. PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO LANDSCAPE ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.
   D. WHERE LARGE GROUP OF SAME PLANT IS SHOWN ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.
5. PLANTING SOILS
   A. PLANTING SOIL: IMPORTED TOPSOIL OR MANUFACTURED TOPSOIL FROM OFF-SITE SOURCES WHICH ARE NATURALLY WELL-DRAINED AND WHERE TOPSOIL OCCURS AT LEAST 4 INCHES DEEP; DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, OR MARSHES.
   B. ADDITIONAL PROPERTIES OF IMPORTED TOPSOIL OR MANUFACTURED TOPSOIL:
      B.A. SCREENED AND FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION;
      B.B. FREE OF ROOTS, PLANTS, SOD, CLODS, CLAY LUMPS, POCKETS OF COARSE SAND, PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, ACID,AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH;
      B.C. FREE OF OBNOXIOUS WEEDS, INVASIVE PLANTS, PESTS, PEST EGGS, OR OTHER UNDESIRABLE ORGANISMS AND DISEASE-CAUSING PLANT PATHOGENS;
      B.D. FRIABLE AND WITH SUFFICIENT STRUCTURE TO GIVE GOOD TILTH AND AERATION.
   C. MIX IMPORTED TOPSOIL OR MANUFACTURED TOPSOIL WITH THE FOLLOWING SOIL AMENDMENTS IN THE FOLLOWING QUANTITIES TO PRODUCE PLANTING SOIL:
      C.A. RATIO OF LOOSE COMPOST TO TOPSOIL BY VOLUME: 1:4.
      C.B. RATIO OF LOOSE SPHAGNUM PEAT TO TOPSOIL BY VOLUME: 1:4.
6. MULCHES
   A. ORGANIC MULCH: FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF ONE OF THE FOLLOWING:
      1. TYPE: SHREDDED MATURE HARDWOOD OR PINE BARK FOR TREES.
      2. SIZE RANGE: 3 INCHES MAXIMUM, 1/2 INCH MINIMUM.
         a. COLOR: NATURAL.
      3. TYPE: SHREDDED LEAF MULCH AROUND PERENNIALS.
         a. COLOR: NATURAL.

MAINTENANCE AND WARRANTY NOTES

1. MAINTENANCE SERVICE
   INITIAL MAINTENANCE SERVICE: GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE UPKEEP AND CONTINUED AINTENANCE OF THE REQUIRED LANDSCAPE MATERIALS AS PER THE MAINTENANCE STANDARDS SET FORTH IN THIS PROVISION, UNTIL SUCH TIME WHEN THE CARE AND MAINTENANCE OF THE DEVELOPMENT BECOMES THE RESPONSIBILITY OF THE OWNER OR DESIGNEE. PROVIDE MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE I NSTALLER. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTS ARE INSTALLED AND CONTINUE UNTIL PLANTINGS ARE ACCEPTABLY HEALTHY AND WELL ESTABLISHED BUT FOR NOT LESS THAN MAINTENANCE PERIOD BELOW.
   A. MAINTENANCE PERIOD: THREE MONTHS FROM DATE OF PLANTING COMPLETION.
2. PLANT MAINTENANCE
   A. THE REGULAR MAINTENANCE OF ALL REQUIRED LANDSCAPE AREAS AND PLANT MATERIALS IN A VIGOROUS AND HEALTHY CONDITION, FREE FROM DISEASES, PEST, WEEDS, AND LITTER. THIS MAINTENANCE SHALL INCLUDE WEEDING, WATERING, FERTILIZING, PRUNING, MOWING EDGING, MULCHING OR OTHER NEEDED MAINTENANCE IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL PRACTICES.
   B. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESETTING TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS.
   C. FILL IN WOOD MULCH AS NECESSARY. MAINTAIN AT A 2-3" DEPTH, APPLY ANNUALLY AS NEEDED.
3. REQUIRED PLANT MATERIALS, IF DEAD, DISEASED, OR SEVERELY DAMAGED, SHALL BE REMOVED BY THE OWNER AS SOON AS POSSIBLE, BUT NO LATER THAN 60 DAYS AFTER NOTIFICATION. ALL SUCH PLANTS SHALL BE REPLACED WITHIN 60 DAYS OF NOTIFICATION OR BY THE NEXT PLANTING SEASON, WHICHEVER COMES FIRST.
4. REPLACEMENT PLANTS MUST BE OF THE SAME SIZE AND SPECIES AS SHOWN ON THE APPROVED LANDSCAPE PLAN OR MUST BE EQUIVALENT IN TERMS OF QUALITY AND SIZE. SUCH REPLACEMENT WILL NOT BE CONSIDERED AN AMENDMENT TO THE APPROVED PLAN.
5. WATER SHALL BE PROVIDED BY CONTRACTOR IN WATER TRUCKS. COORDINATE w/ OWNER ON OTHER POSSIBLE WATER SOURCES AVAILABLE.
6. WARRANTY
   A. SPECIAL WARRANTY: INSTALLER AGREES TO REPAIR OR REPLACE PLANTINGS AND ACCESSORIES THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED WARRANTY PERIOD.
   B. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
      7.1 DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM ABUSE, LACK OF ADEQUATE MAINTENANCE, OR NEGLECT BY OWNER, OR INCIDENTS THAT ARE BEYOND CONTRACTOR'S CONTROL.
      7.2 STRUCTURAL FAILURES INCLUDING PLANTINGS FALLING OR BLOWING OVER.
      7.3 FAULTY PERFORMANCE OF TREE STABILIZATION AND EDGINGS.
      7.4 DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING.
8. WARRANTY PERIODS FROM DATE OF PLANTING COMPLETION:
   A. TREES, SHRUBS, VINES, AND ORNAMENTAL GRASSES: 12 MONTHS.
   B. GROUND COVERS, BIENNIALS, PERENNIALS, AND OTHER PLANTS: 12 MONTHS.
   C. ANNUALS: THREE MONTHS.
9. INCLUDE THE FOLLOWING REMEDIAL ACTIONS AS A MINIMUM:
   A. IMMEDIATELY REMOVE DEAD PLANTS AND REPLACE UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON.
   B. REPLACE PLANTS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.
   C. A LIMIT OF ONE REPLACEMENT OF EACH PLANT WILL BE REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS.
   D. PROVIDE EXTENDED WARRANTY FOR PERIOD EQUAL TO ORIGINAL WARRANTY PERIOD, FOR REPLACED PLANT MATERIAL.

GENERAL SYMBOLS

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE REMOVED
- NEW FULL HEIGHT METAL STUD AND GYP. BD. WALLS
- NEW PARTIAL HEIGHT METAL STUD AND GYP. BD. WALLS
- NEW MASONRY WALL
- EXISTING COLUMN
- FURNITURE OR OTHER ITEMS SHOWN FOR REFERENCE
- NEW MILLWORK
- CONCRETE
- STONE
- STEEL OR METAL
- BATT INSULATION
- RIGID INSULATION
- GYPSUM BOARD
- FINISHED WOOD
- ROUGH CUT WOOD
- WOOD BLOCKING OR SHIM
- CENTER LINE
- EXISTING DATUM MARKER (T.O. FLOOR EL. 100'-0")
- NEW DATUM MARKER (T.O. FLOOR EL. 100'-0")
- EXTERIOR ELEVATION MARKER (DWG. / SHEET)
- INTERIOR ELEVATION MARKER (SINGLE) (DWG. / SHEET)
- INTERIOR ELEVATION MARKER (MULTIPLE) (# / # / SHEET)
- SECTION MARKER (DWG. / SHEET)
- DETAIL MARKER (DWG. / SHEET)
- ENLARGED PLAN OR DETAIL MARKER (DWG. / SHEET)
- CEILING TYPE MARKER (# HT AFF / TYPE)
- EXISTING SPOT ELEVATION (TOP ELEV / BOT ELEV)
- NEW SPOT ELEVATION (TOP ELEV / BOT ELEV)
- DEMOLITION NOTE
- CONSTRUCTION NOTE
- WINDOW OR GLAZING TYPE
- PARTITION TYPE
- REVISION NOTE
- SIGN OR SIGNAGE TYPE
- EXISTING COLUMN LINE HEAD
- NEW COLUMN LINE HEAD
- ROOM NAME AND NUMBER TAG (ROOM SF AS NEEDED) (ROOM NAME / # / SF)
- DOOR NUMBER (DR #)
- EXISTING SPOT ELEVATION (100.00')
- NEW SPOT ELEVATION (100.00')

DOOR SYMBOLS

WITH FRAME	WITHOUT FRAME	
		NEW DOOR
		EXISTING DOOR
		EXISTING DOOR TO BE REMOVED
		NEW DOUBLE BI-FOLD DOOR (SINGLE SIMILAR)
		NEW SLIDING DOOR
		NEW TRIPLE SLIDING DOOR
		NEW SINGLE POCKET DOOR
		NEW DOUBLE POCKET DOOR
		NEW REVOLVING DOOR
		NEW OVERHEAD DOOR

CEILING SYMBOLS

- EXISTING CEILING GRID
- EXISTING CEILING GRID TO BE REMOVED
- NEW CEILING GRID
- GYPSUM BOARD CEILING
- EXISTING 2x4 LIGHT FIXTURE TO BE REMOVED
- NEW 2x4 FLUORESCENT LIGHT FIXTURE
- NEW 2x4 24 HOUR FLUORESCENT LIGHT FIXTURE
- NEW 2x2 FLUORESCENT LIGHT FIXTURE
- NEW SURFACE MOUNTED 2x4 FLUORESCENT LIGHT FIXTURE
- RECESSED DOWN LIGHT
- RECESSED DIRECTIONAL DOWN LIGHT
- PENDANT LIGHT FIXTURE
- EXIT LIGHT
- WALL SCONCE
- WALL MOUNTED FIXTURE
- NEW SUPPLY AIR GRILLE
- NEW RETURN AIR GRILLE
- EXISTING EMERGENCY LIGHT
- EXISTING EMERGENCY LIGHT TO BE REMOVED
- NEW EMERGENCY LIGHT
- EXISTING SPRINKLER HEAD
- NEW SPRINKLER HEAD
- $ SINGLE POLE SWITCH
  3 = 3-WAY
  D = DIMMER

LIGHTING ABBREVIATIONS
N = NEW FIXTURE
R = REUSE SALVAGED FIXTURE
E = EXISTING TO REMAIN
D = REMOVE AND SALVAGE FOR

ABBREVIATIONS

AB	ANCHOR BOLT	BOT	BOTTOM	CONTR	CONTRACTOR	EB	ELECTRIC BASEBOARD	FH	FIRE HYDRANT	H/C	HOT/COLD	LBS	POUND(S)	N/A	NOT APPLICABLE	PNL	PANEL	RND	ROUND	STG	SEATING	US	URINAL SCREEN
ABV	ABOVE	BRA	BRICK RELIEF ANGLE	COORD	COORDINATE	EC	ELECTRICAL CONTRACT(OR)	FHC	FIRE HOSE CABINET	HDC	HANDICAP	LBL	LABEL	NAT	NATURAL	PT	PAINT	RO	ROUGH OPENING	STL	STEEL	UTIL	UTILITY
A/C	AIR CONDITIONING	BRDG	BRIDGING	CORR	CORRIDOR	EDF	ELECTRIC DRINKING FOUNTAIN	FIN	FINISH	HDR	HEADER	LDR	LEADER	NIC	NOT IN CONTRACT	POC	POINT OF CONNECTION	ROW	RIGHT OF WAY	STOR	STORAGE		
AC	ACOUSTIC	BRG	BEARING	CPT	CARPET			FIXT	FIXTURE	HDWD	HARDWOOD	LF	LINEAR FOOT	NRC	NOISE REDUCTION COEFFICIENT	PR	PAIR	RT	RESILIENT TILE	STRUCT	STRUCTURE, STRUCTURAL	V	VENT
ACT	ACOUSTICAL CEILING TILE	BRK	BRICK	CR	COAT RACK	EF	EXHAUST FAN	FL	FLOOR LINE	HDWR	HARDWARE	LH	LEFT HAND			PRCST	PRECAST	RTU	ROOF TOP UNIT	SUSP	SUSPENDED	VAV	VARIABLE AIR VOLUME
ACP	ACOUSTICAL CEILING PANEL	B.S.	BOTH SIDES	CRS	COURSE	EG	EXHAUST GRILLE	FLR	FLOOR	HM	HOLLOW METAL	LIN	LINEAR, LINEAL	NO	NUMBER	PREFAB	PREFABRICATE(D)			SW	SWITCH BOARD	VCP	VITREOUS CLAY PIPE
ACU	AIR CONDITIONING UNIT	BSMT	BASEMENT	CT	CERAMIC TILE	EIFS	EXTERIOR INSUL. & FINISH SYSTEM	FLASH	FLASHING	HOR	HORIZONTAL	LKR	LOCKER	NOM	NOMINAL	PREFIN	PREFINISH(ED)			SWLK	SIDEWALK	VCT	VINYL COMPOSITION TILE
AD	AREA DRAIN	BTWN	BETWEEN	CTR	CENTER			FLEX	FLEXIBLE	HP	HORSE POWER	LL	LIVE LOAD	NTS	NOT TO SCALE	PRELIM	PRELIMINARY	S	SOUTH	SY	SQUARE YARD	VERT	VERTICAL
ADDL	ADDITIONAL	BUR	BUILT-UP ROOF(ING)	CTSK	COUNTERSINK	EJ	EXP. JOINT	FLU	FLUORESCENT	HR	HOUR	LLH	LONG LEG HORIZONTAL			PREP	PREPARE	SB	SUPPORT BRACKET	SYM	SYMMETRICAL	VEST	VESTIBULE
ADDM	ADDENDUM	BVL	BEVEL	COP	COPPER	ELEV	ELEVATION	F.O.	FACE OF ___(ITEM)___	HT	HEIGHT	LLV	LONG LEG VERTICAL			PRV	POWER ROOF VENTILATOR	SC	SOLID CORE	SYN	SYNTHETIC	VG	VERTICAL GRAIN
ADJ	ADJUSTABLE	BW	BOTH WAYS	CU	CONDENSING UNIT	ELEC	ELECTRIC, ELECTRICAL	FOC	FACE OF CONCRETE	HTG	HEATING	LT	LIGHT	O/	OVER	PSF	POUNDS PER SQUARE FOOT	SCD	SEAT COVER DISPENSER	SYS	SYSTEM	VP	VAPOR PROOF
AFF	ABOVE FINISHED FLOOR			CUFT	CUBIC FOOT (FEET)	ELT	ELEVATOR	FOF	FACE OF FINISH	HTR	HEATER	LTWT	LIGHTWEIGHT	OA	OVERALL	PSI	POUNDS PER SQUARE INCH	SCHED	SCHEDULE			VT	VINYL TILE
AFG	ABOVE FINISHED GRADE	C	CONDUIT	CUYD	CUBIC YARD	EMER	EMERGENCY	FOM	FACE OF MASONRY	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	LVL	LEVEL	OBS	OBSCURE	PT	POINT	SCR	SCREW			VTR	VENT THROUGH ROOF
AGGR	AGGREGATE	C/C	CENTER TO CENTER	CUH	CABINET UNIT HEATER	ENCL	ENCLOSE, ENCLOSURE	FOS	FACE OF STUD			LVR	LOUVER	OC	ON CENTER	PTD	PAPER TOWEL DISPENSER	SDG	SIDING	T	TREAD	VWC	VINYL WALL COVERING
AHU	AIR HANDLING UNIT	CAB	CABINET	CYL	CYLINDER	ENGR	ENGINEER(ED)	FP	FIREPROOF(ING), FIRE PROTECTION	HW	HOT WATER	LW	LIGHTWEIGHT	OD	OUTSIDE DIAMETER/DIMENSION	PTDR	PAPER TOWEL DISPENSER WITH RECEPTACLE	SDS	SOAP DISPENSER SURFACE	T&B	TOP AND BOTTOM		
AL	ALUMINUM	CATV	CABLE TELEVISION	CW	COLD WATER	EP	ELECTRICAL PANEL					LWC	LIGHTWEIGHT CONCRETE					SDR	SOAP DISPENSER RECESSED	TB	TOWEL BAR		
ALT	ALTERNATE	CB	CATCH BASIN			EQ	EQUAL	FR	FIRE RATED	IBC	INSTALLED BY CONTRACTOR			OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	PTN	PARTITION	SECT	SECTION	TEL	TELEPHONE	W	WEST
ANO	ANODIZED	CEM	CEMENT			EQUIP	EQUIPMENT	FRM	FRAME	ID	INSIDE					PTR	PAPER TOWEL RECEPTACLE	SEL	SELECT	TEMP	TEMPORARY	w/	WITH
AP	ACCESS PANEL	CER	CERAMIC	D	PENNY (NAIL SIZE)	ES	EXPOSED STRUCTURE	FS	FULL SIZE		DIAMETER/DIMENSION	MAINT	MAINTENANCE	OFOI	OWNER FURNISHED OWNER INSTALLED	PVC	POLYVINYL CHLORIDE	SF	SQUARE FOOT (FEET)	TER	TERRAZZO	WC	WATER CLOSET
APPROX	APPROXIMATE	CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	DB	DECIBELS	ESMT	EASEMENT	FT	FOOT OR FEET	IE	INVERT ELEVATION	MAS	MASONRY			PVG	PAVING	SG	SUPPLY GRILLE	TERM	TERMINATE	WD	WOOD
ARCH	ARCHITECT(URAL)			DBL	DOUBLE	EST	ESTIMATE(D)	FTG	FOOTING	IN	INCH	MATL	MATERIAL	OFD	OVERFLOW DRAIN	PVMT	PAVEMENT	SH	SHELF	T&G	TONGUE & GROOVE	WDW	WINDOW
ASB	ASBESTOS	CFOI	CONTRACTOR FURNISHED OWNER INSTALLED	DEMO	DEMOLITION	ERL	EXISTING RELOCATED	FURN	FURNISH, FURNISH	INCAND	INCANDESCENT	MAX	MAXIMUM	OFF	OFFICE			SHWR	SHOWER	TG	TRANSFER GRILLE	WF	WIDE FLANGE
ASPH	ASPHALT			DEPT	DEPARTMENT	ETR	EXISTING TO REMAIN	FURR	FURRING	INCL	INCLUDE	MC	MECHANICAL CONTRACTOR	OFS	OVERFLOW SCUPPER			SHT	SHEET	THK	THICK	WH	WATER HEATER
ASSY	ASSEMBLY	CG	CORNER GUARD	DEP	DEPRESSED	EW	EACH WAY	FUT	FUTURE	INFO	INFORMATION	MCJ	MASONRY CONTROL JOINT	OH	OVERHEAD	QT	QUARRY TOWEL	SHTG	SHEATHING	THLD	THRESHOLD	WI	WROUGHT IRON
ATTEN	ATTENUATION	CH	COAT HOOK	DF	DRINKING FOUNTAIN	EWC	ELECTRIC WATER COOLER	FV	FIELD VERIFY	INSUL	INSULATE(D), INSULATION	MB	MOP BASIN	OHG	OVERHANG	QTY	QUANTITY	SHTHG	SHEATHING	THRM	THERMAL	w/o	WITHOUT
AUTO	AUTOMATIC	CI	CAST IRON	DIA	DIAMETER	EXH	EXHAUST			INT	INTERIOR	MBR	MEMBER	OPH	OPPOSITE HAND			SHWR	SHOWER	TKB	TACK BOARD	WP	WATERPROOF(ING)
AUX	AUXILIARY	CIP	CAST IN PLACE	DIAG	DIAGONAL	EXIST	EXISTING			INV	INVERT	MC	MEDICINE CABINET	OPNG	OPENING	R	RISER	SI	SQUARE INCH	TLT	TOILET	WR	WATER RESISTANT
AV	AUDIO VISUAL	CIR	CIRCLE	DIM	DIMENSION	EXPO	EXPOSED	GA	GAUGE	IP	IRON PIPE	MECH	MECHANICAL	OPP	OPPOSITE	RA	RETURN AIR	SIM	SIMILAR	T.O.	TOP OF ___(ITEM)___	WS	WORK STATION
AVG	AVERAGE	CIRC	CIRCUMFERENCE	DISP	DISPENSER	EXP	EXPAND(ED), EXPANSION	GAL	GALLON	IRRIG	IRRIGATE, IRRIGATION	MED	MEDIUM	ORD	OVERFLOW ROOF DRAIN	RAD	RADIUS	SLDG	SLIDING	TOB	TOP OF BEAM	WSCT	WAINSCOT
AWP	ACOUSTICAL WALL PANEL	CJ	CONTROL JOINT	DIV	DIVISION	EXT	EXTERIOR	GALV	GALVANIZED			MEMB	MEMBRANE			RBR	RUBBER	SM	SMOOTH	TOC	TOP OF CONCRETE OR CURB	WT	WEIGHT
		CKBD	CHALKBOARD	DL	DEAD LOAD			GB	GRAB BAR			MEZZ	MEZZANINE			RCP	REFLECTED CEILING PLAN	SM	SHEET METAL			WWF	WELDED WIRE FABRIC
		CKT	CIRCUIT	DN	DOWN			GC	GENERAL CONTRACTOR	JAN	JANITOR	MFR	MANUFACTURE(R)	PAR	PARALLEL	RD	ROOF DRAIN	SND	SANITARY NAPKIN DISPENSER	TOF	TOP OF FOOTING	WWM	WELDED WIRE MESH
BD	BOARD	CL	CENTER LINE	DO	DOOR OPENING	FA	FIRE ALARM	GEN	GENERAL	JB	JUNCTION BOX	MH	MANHOLE	PC	PLUMING CONTRACTOR	RDWD	REDWOOD			TOM	TOP OF MASONRY		
BG	BUMPER GUARD	CLG	CEILING	DP	DAMP PROOFING	FAB	FABRICATE(D)	GFRC	GLASS FIBER REINFORCED CONCRETE	JST	JOIST	MID	MIDDLE	PCC	PRECAST CONCRETE	REC	RECESS(ED)	SNR	SANITARY NAPKIN RECEPTACLE	TOP	TOP OF PAVEMENT		
BH	BULKHEAD	CLKG	CAULKING	DPR	DAMPER	FACP	FIRE ALARM CONTROL PANEL	GFRG	GLASS FIBER REINFORCED GYPSUM	JT	JOINT	MIN	MINIMUM	PED	PEDESTAL	REF	REFERENCE			TOS	TOP OF STEEL	YRD	YARDS
BITUM	BITUMINOUS	CLO	CLOSET	DR	DOOR							MIR	MIRROR	PERP	PERPENDICULAR	REFL	REFLECTED	SPEC	SPECIFICATION	TOW	TOP OF WALL		
BJ	BUTT JOINT	CLR	CLEAR	DS	DOWNSPOUT	FBO	FURNISHED BY OWNER			KB	KNOX BOX	MISC	MISCELLANEOUS	PERF	PERFORATED	REFRIG	REFRIGERATOR	SPKR	SPEAKER	TPD	TOILET PAPER DISPENSER	XFMR	TRANSFORMER
BLDG	BUILDING	CMU	CONCRETE MASONRY UNIT	DSP	DRY STANDPIPE	FCO	FLOOR CLEAN OUT	GI	GALVANIZED IRON	KD	KNOCKED DOWN	MKB	MARKER BOARD	PRIM	PERIMETER	REG	REGISTER	SPL	SPLASH	TS	TUBE STEEL		
BLK	BLOCK	CNTR	COUNTER	DT	DRAIN TILE	FCU	FAN COIL UNIT	GL	GLASS, GLAZING, GLAZE(D)	KIT	KITCHEN	MO	MASONRY OPENING	PG	PAGE	REINF	REINFORCED	SQ	SQUARE	TV	TELEVISION		
BLKG	BLOCKING	CO	CASED OPENING	DTL	DETAIL(ED)	FD	FLOOR DRAIN	GND	GROUND	KO	KNOCK OUT	MOD	MODULAR	PJ	PANEL JOINT	REQD	REQUIRED	SVS	SERVICE SINK	TYP	TYPICAL		
BM	BEAM	COL	COLUMN	DW	DISHWASHER	FDN	FOUNDATION	GRD	GRADE	KS	KNEE SPACE	MPH	MOP HOLDER	PKG	PARKING	RESIL	RESILIENT	SS	STAINLESS STEEL				
B.B.	BENCH MARK	COMB	COMBINATION	DWG	DRAWING(S)	FE	FIRE EXTINGUISHER	GWB	GYPSUM WALLBOARD			MTD	MOUNTED	PLT	PLATE	RET	RETURN	SSS	STAINLESS STEEL SHELF				
BRG	BEARING	CONC.	CONCRETE	DWR	DRAWER	FEC	FIRE EXTINGUISHER CABINET	GYP	GYPSUM			MTL	METAL	PL	PROPERTY LINE	REV	REVISE(D), REVISION	S&P	SHELF & POLE	UCR	UNDER COUNT REFRIG.		
BRK	BRICK	COND	CONDENSATE					GYP. BD	GYPSUM BOARD	L	LONG, LENGTH	MULT	MULTIPLE	PLBG	PLUMBING	RFG	ROOFING	ST	STREET	UL	UNDERWRITERS		
B.O.	BOTTOM OF ___(ITEM)___	CONF	CONFERENCE			FF	FINISH FLOOR			LAB	LABORATORY	MWS	MIRROR WITH SHELF	PLAM	PLASTIC LAMINATE	RGH	ROUGH	STA	STATION		LABORATORY		
BO	BY OTHERS	CONN	CONNECTION	E	EAST	FFE	FINISHED FLOOR ELEVATION			LAM	LAMINATE(D)			PLAS	PLASTER	RH	RIGHT HAND	STC	SOUND TRANSMISSION COEFFICIENT	UNF	UNFINISHED		
BOC	BACK OF CURB	CONST	CONSTRUCTION	EX	EXISTING	FG	FINISH GRADE	HB	HOSE BIB	LAV	LAVATORY			PLAST	PLASTIC	RI	ROUGH IN			UNO	UNLESS NOTED OTHERWISE		
BOF	BOTTOM OF FOOTING	CONT	CONTINUOUS, CONTINUE	EA	EACH			HC	HOLLOW CORE			N	NORTH	PLYWD	PLYWOOD	RM	ROOM	STD	STANDARD	UR	URINAL		

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City of Milwaukee
Department of Public Works
Infrastructure Services Division
Bridges & Buildings Section

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QUORUM ARCHITECTS, INC.

31st AND GALENA PARK RENOVATION

1640 N. 31st Street
Milwaukee, Wisconsin 53208

Revisions:

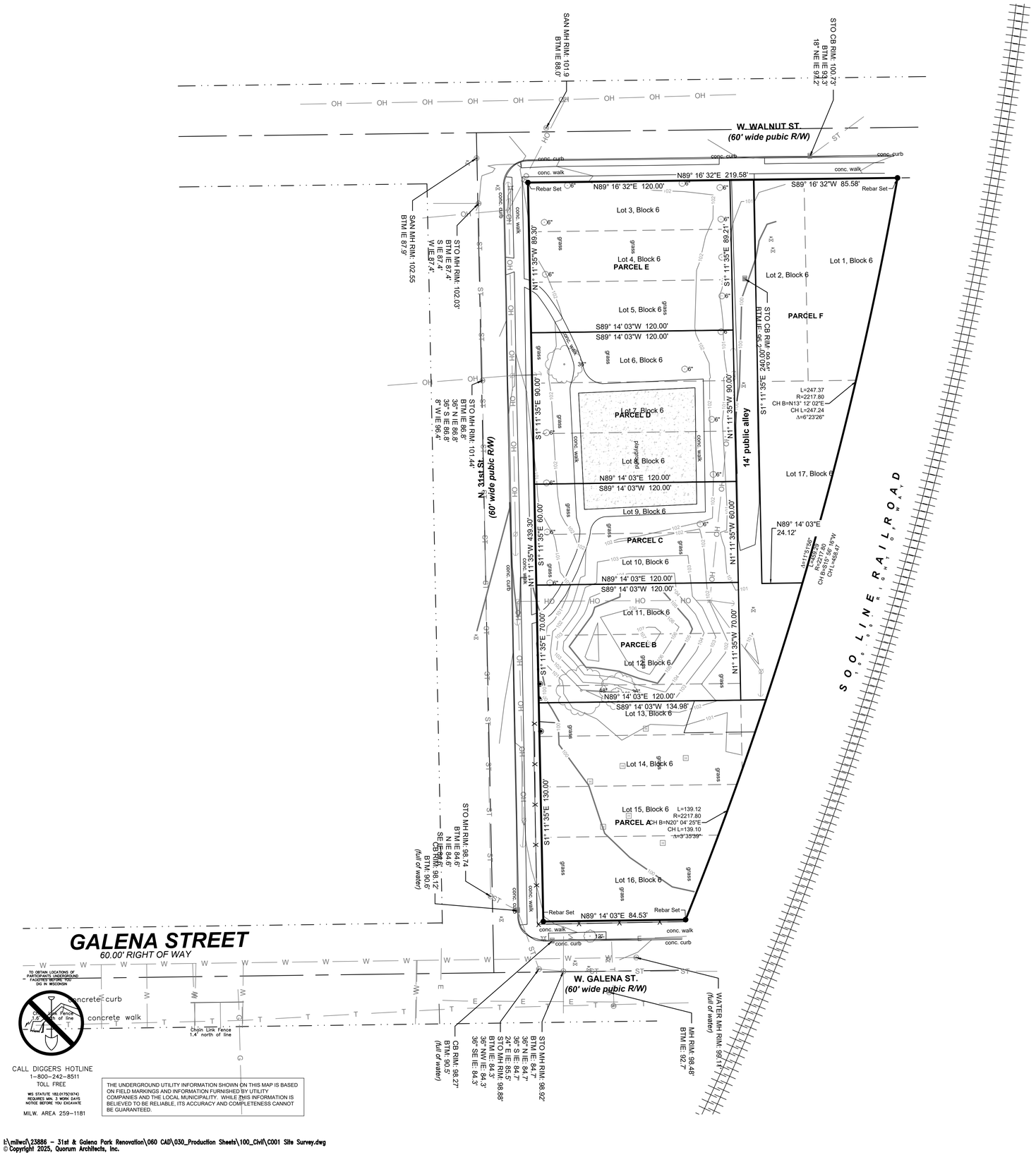
Sheet Name:
PROJECT INFORMATION, SYMBOLS, AND ABBREVIATIONS

Date: 10/17/2025
Drawn By: CLR/JC
Project No.: 19031.01

Sheet No.
CS.2

Oct 17, 2025 - 11:38am
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LEGEND:

	SECTION 1/4 SECTION LINE
	PROPERTY LINE
	EASEMENT
X X	CHAIN LINK FENCE
	GUARD RAIL
	METAL FENCE
	WOOD FENCE
	TREE LINE
OH	OVERHEAD UTILITY LINE
E	ELECTRIC
T	TELEPHONE
FO	FIBER OPTIC
CTV	CABLE TV
SAN	SANITARY SEWER
FS	FORCE MAIN
ST	STORM SEWER
W	WATER MAIN
G	GAS
670	EXISTING CONTOUR
WET	WETLAND
FP	FLOODPLAIN

UNKNOWN MANHOLE	IRON PIPE FOUND/SET
SANITARY MANHOLE	REBAR FOUND/SET
STORM MANHOLE	CHISELED CROSS FOUND/SET
ELECTRIC MANHOLE	PK NAIL FOUND/SET
MMSD MANHOLE	SPIKE/NAIL
TELEPHONE MANHOLE	MONUMENT
CLEANOUT	BENCHMARK
CATCH BASIN	SIGN
CATCH BASIN (ROUND)	PARKING METER
ROOF DRAIN	FLAG POLE
CULVERT END	8" DECIDUOUS TREE
HYDRANT	8" CONIFEROUS TREE
WATER VALVE	BUSH
GAS VALVE	POST
GAS METER	SOIL BORING
ELECTRIC METER	TRAFFIC SIGNAL
UTILITY PEDESTAL	LIGHT POLE
HANDHOLE	UTILITY POLE
VENT	GUY WIRE
MONITORING WELL	GUY POLE

GRAPHIC SCALE
0 30 60

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GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. DRAWING IS BASED ON FIELD SURVEY COMPLETED BY THE SIGMA GROUP ON 3/13/2025.

4. DATUM FOR THE PROJECT SURVEY IS CITY OF MILWAUKEE DATUM. BENCHMARK FOR THE PROJECT SURVEY IS EAST SECTION CORNER OF SECTION 24-07-21, WITH AN ELEVATION OF 91.28'.

5. CONTRACTOR TO VERIFY EXISTING CONDITIONS, CONTACT ENGINEER WITH DISCREPANCIES.

31ST & GALENA PARK RENOVATION

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SITE SURVEY

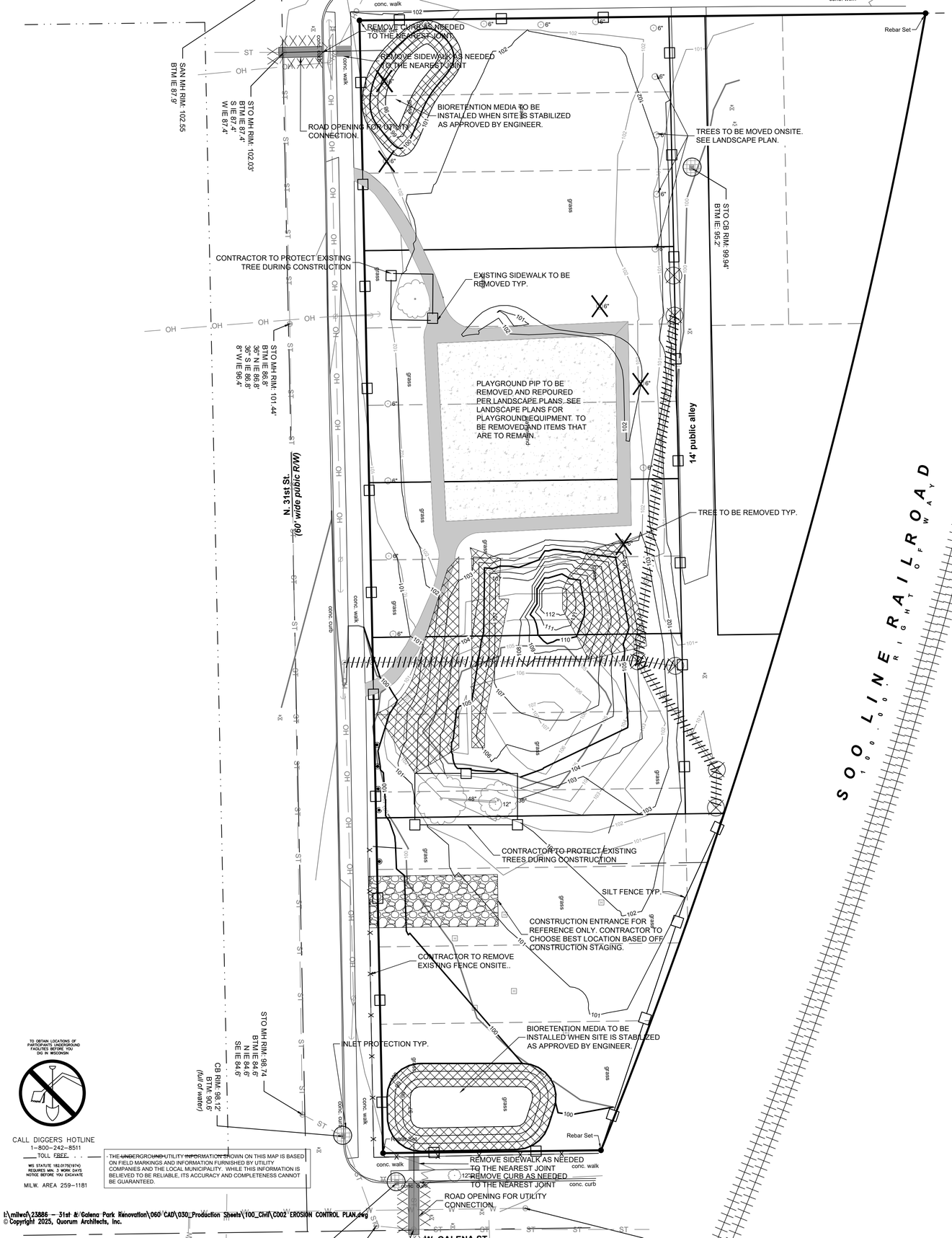
75% PLANS 10-17-2025

2025.10.16

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1-800-242-8511
TOLL FREE

WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

THE ~~UNDERGROUND~~ UTILITY ~~INFORMATION~~ SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

I:\milwc\23886 - 31st & Galena Park Renovation\060 CAD\030_Production Sheets\100_Civil\C002 EROSION CONTROL PLAN.dwg

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LEGEND:

- B C400 — PROPOSED SILT FENCE
- C C400 — PROPOSED INLET PROTECTION
- A C400 — PROPOSED TRACKING PAD
- D C400 — PROPOSED EROSION MATTING WISDOT APPROVED CLASS 1 TYPE B
- 5 — EXISTING CONTOUR
- 5 — PROPOSED CONTOUR
- UTILITY REMOVAL
- CURB REMOVAL
- SAWCUT
- STRUCTURE REMOVAL
- PAVEMENT REMOVAL

GRAPHIC SCALE
0 20 40

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31ST & GALENA PARK RENOVATION

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EROSION CONTROL PLAN

75% PLANS 10-17-2025

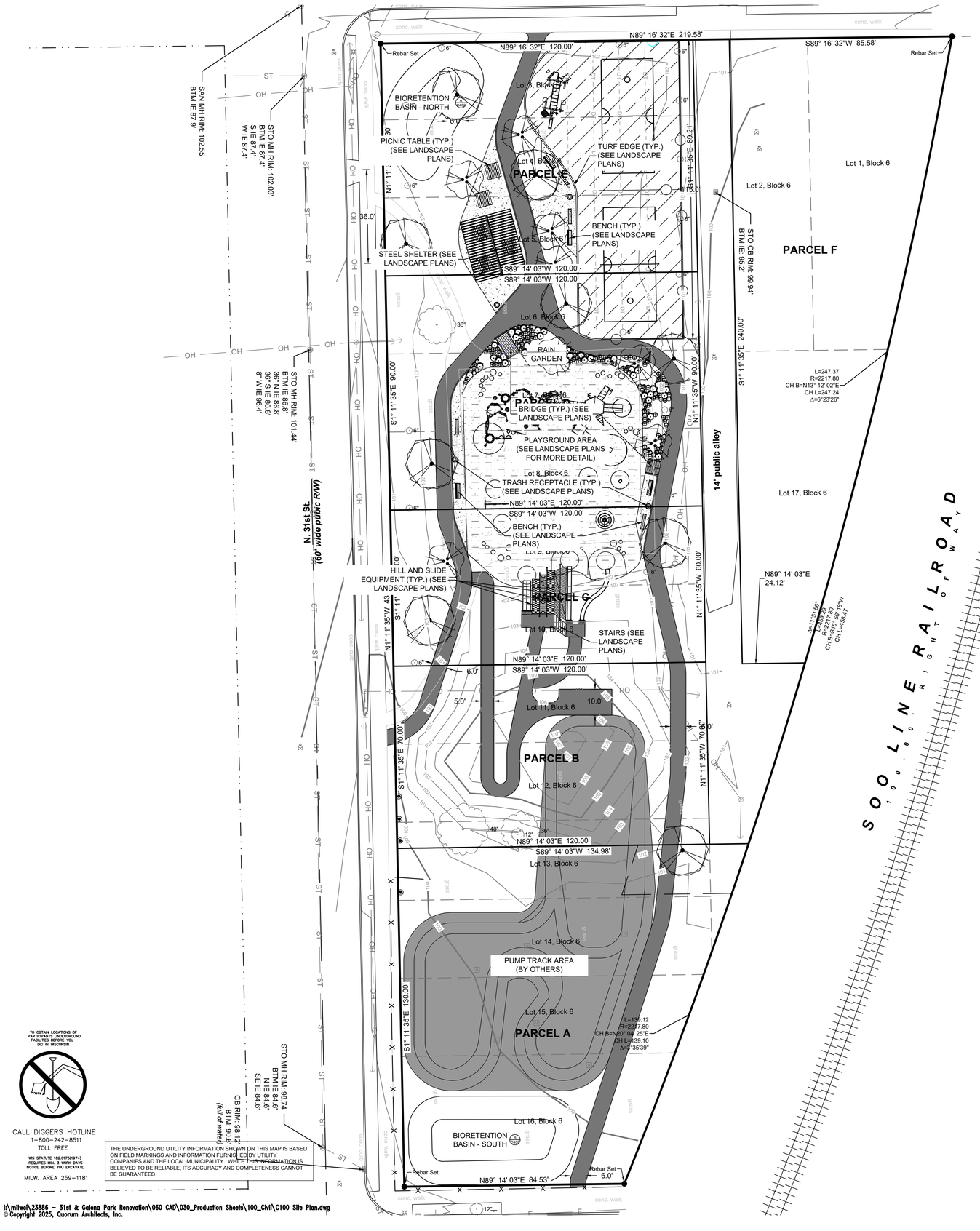
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5. SEE SHEET C400 FOR A COMPLETE LIST OF EROSION CONTROL NOTES AND DETAILS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBING ACTIVITIES.
6. DO NOT BEGIN LAND DISTURBING ACTIVITIES UNTIL AN EROSION CONTROL PERMIT IS OBTAINED FROM LOCAL JURISDICTION.



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MILW. AREA 259-1181

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SITE INFORMATION			
SITE AREA	51478	1.182 AC	
SITE DISTURBED AREA	49381	1.134 AC	
EXISTING IMPERVIOUS AREA	6984	0.160 AC	13.6 %
PROPOSED IMPERVIOUS AREA	26876	0.617 AC	52.2 %

LEGEND:

- A / C401 — ASPHALT SURFACE
- B / C401 — CONCRETE WALK
- PUMP TRACK ASPHALT SURFACE (BY OTHERS)
- C / C401 — POURED-IN-PLACE SURFACE (BY OTHERS)
- D / C401 — SYNTHETIC TURF
- PROPOSED FENCE (SEE LANDSCAPE PLANS)

GRAPHIC SCALE
0 20 40

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City of Milwaukee

31ST & GALENA PARK RENOVATION

1640 N. 31ST STREET
MILWAUKEE, WISCONSIN 53208

SITE PLAN

75% PLANS 10-17-2025

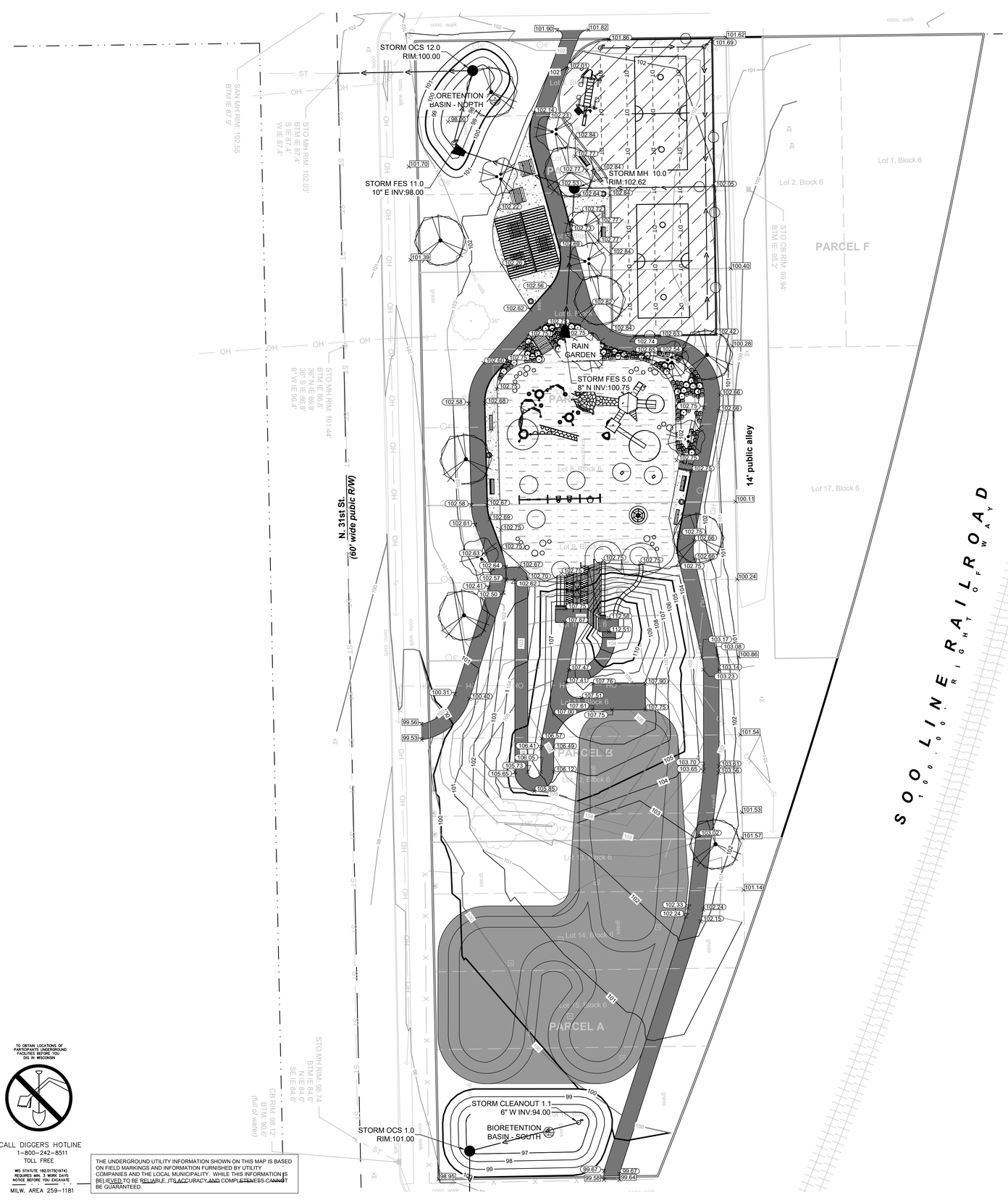
2025.10.16

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GRAPHIC SCALE
0 20 40

LEGEND:

- A C401 — ASPHALT SURFACE
- B C401 — CONCRETE WALK
- PUMP TRACK ASPHALT SURFACE (BY OTHERS)
- C C401 — POURED-IN-PLACE SURFACE (BY OTHERS)
- D C401 — SYNTHETIC TURF
- PROPOSED FENCE (SEE LANDSCAPE PLANS)
- GRADE BREAK LINE
- 5 — EXISTING CONTOUR
- 5 — PROPOSED CONTOUR
- 100.50 T/C, 100.00 FL — PROPOSED CURB & GUTTER SPOT GRADE; T/C: TOP OF CURB GRADE; FL: FLOW LINE CURB GRADE
- 100.00 — PROPOSED SURFACE SPOT GRADE
- TW: 100.00, BW: 100.00 — PROPOSED TOP OF WALL AT FINISHED GRADE; PROPOSED BOTTOM OF WALL AT FINISHED GRADE
- 100.00 — EXISTING SURFACE SPOT GRADE (MATCH)

GENERAL NOTES:

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31ST & GALENA PARK RENOVATION

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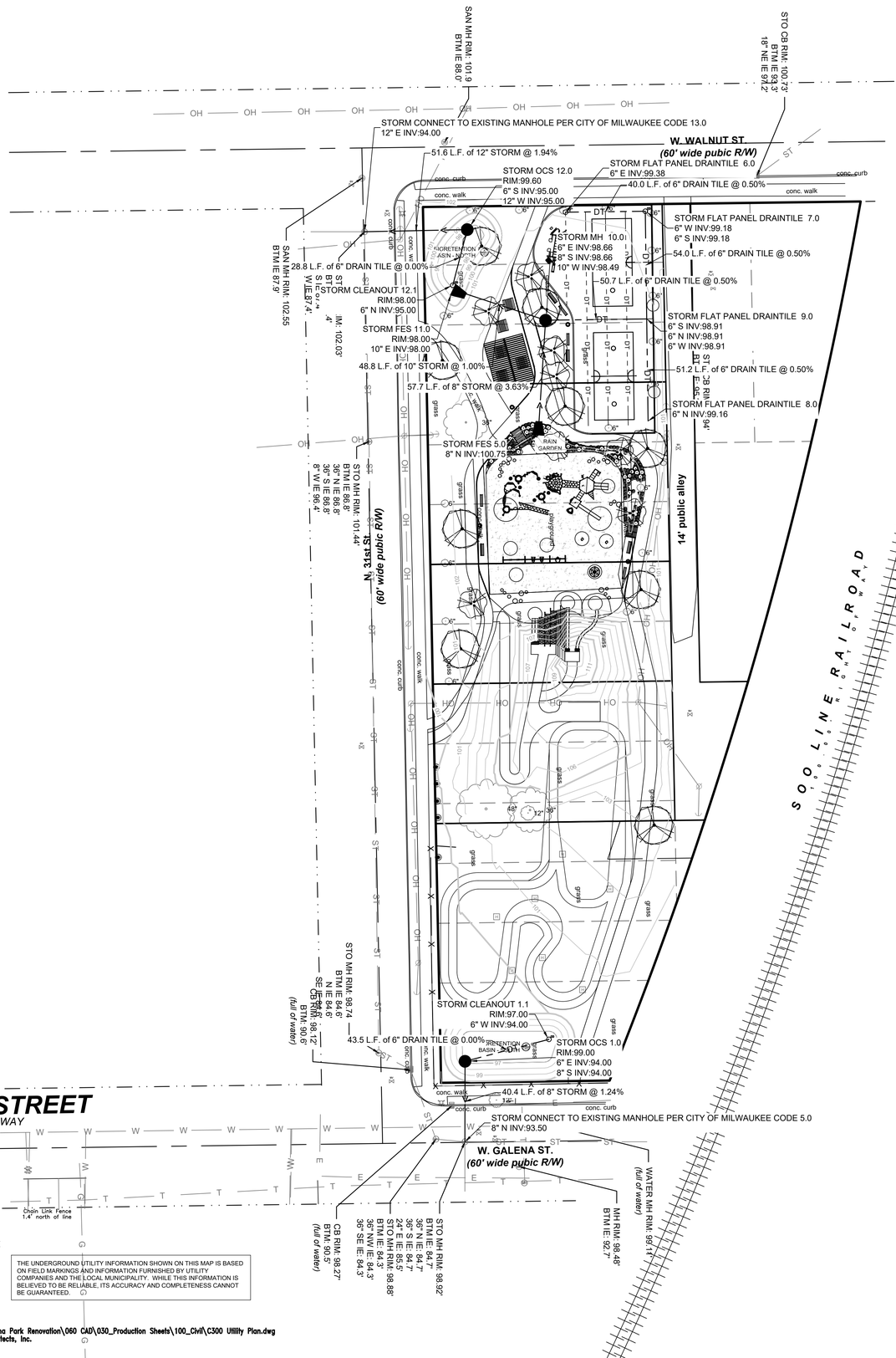
GRADING PLAN

75% PLANS 10-17-2025

2025.10.16

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C200



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LEGEND:

- ST — PROPOSED STORM SEWER
- → — PROPOSED PERFORATED FLAT PANEL DRAIN TILE
- DT — PROPOSED DRAIN TILE (UNDERDRAIN)
- ● — PROPOSED STORM MANHOLE
- C/C402 — PROPOSED STORM MANHOLE
- E/C402 — PROPOSED FLARED END SECTION

GRAPHIC SCALE
0 30 60

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5. ALL UTILITIES WITHIN 5 FEET OF PAVED AREAS SHALL REQUIRE GRANULAR BACKFILL. SLURRY BACKFILL IS REQUIRED FOR ALL WORK IN PUBLIC RIGHT OF WAY.
6. PRIVATE STORM INLETS IN PAVEMENT SHALL REQUIRE DRAIN TILE STUBS OF 10 FEET IN TWO DIRECTIONS FOR SUBDRAINAGE. RIM GRADE FOR STORM INLETS IN CURB AND GUTTER ARE FLOW LINE GRADES.
7. WORK IN PUBLIC RIGHT OF WAY SHALL FOLLOW MATERIAL AND INSTALLATION REQUIREMENTS PER MUNICIPAL AND/OR COUNTY.
8. PRIVATE STORM SEWER 12-INCH DIAMETER OR LARGER SHALL BE HDPE. BELOW 12-INCH DIAMETER SHALL BE PVC SDR-35 ASTM D3034. PRIVATE WATER MAIN SHALL BE CLASS 235 DR 18 PVC CONFORMING TO AWWA C-900. PRIVATE SANITARY SEWER SHALL BE PVC SDR-35 ASTM D3034.
9. COORDINATE FINAL LOCATION AND DESIGN OF PRIVATE UTILITY SERVICES (ELECTRIC, GAS, PHONE, CABLE) WITH UTILITY COMPANIES.
10. IF PROJECT IS DESIGN BUILD MEP, THE GENERAL CONTRACTOR IS REQUIRED TO PROVIDE FINAL SEWER AND WATER DESIGN SHOWING LOCATION, INVERTS AND SIZES TO THE ENGINEER FOR FINAL REVIEW AND VERIFICATION PRIOR TO STARTING UNDERGROUND UTILITY CONSTRUCTION.
11. WATER MAIN CONNECTION: TAP WATER MAIN WITH SIZE AND LOCATION INDICATED ON PLAN IN ACCORDANCE WITH LOCAL WATER UTILITY REQUIREMENTS. COORDINATE CONNECTION WITH LOCAL WATER UTILITY. ALL JOINTS HALL BE RESTRAINED FROM CONNECTION OF WATER MAIN TO BUILDING WALL. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS. INSTALL MEGA-LUG OR APPROVED EQUAL TIGHT TO WALL FOR RESTRAINT FOR ALL BUILDING WALL PENETRATIONS AS APPROVED BY LOCAL PLUMBING INSPECTOR AND WATER UTILITY. INSTALL THRUST BLOCKING AND MEGA-LUG AT BEND BELOW FLOOR FOR ALL FLOOR PENETRATIONS.
12. INSTALL JOINT RESTRAINT AND CONCRETE THRUST BLOCKS AT ALL OFFSET FITTINGS (TEES, BENDS, DEAD ENDS, VALVES, REDUCERS) USING MEGA-LUG OR APPROVED EQUAL. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PER FILE NO'S:44,45,46 FROM THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SEE DETAIL FOR MINIMUM LENGTH OF RESTRAINED JOINT REQUIRED. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS.

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UTILITY PLAN

75% PLANS 10-17-2025

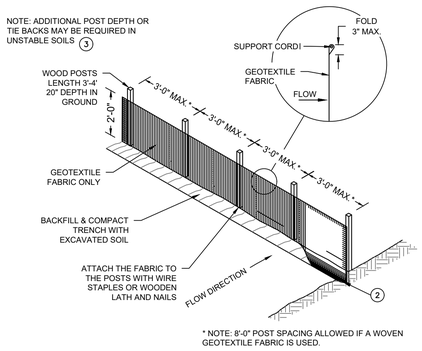
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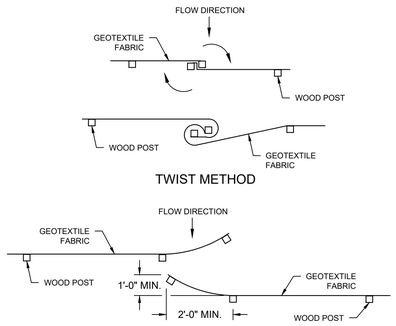
EROSION CONTROL NOTES:

1. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL MUNICIPALITY AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
2. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY. DOCUMENT AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH WDNR NR216 REQUIREMENTS.
4. SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN DEPOSITS REACH A DEPTH OF 6 INCHES. THE SILT FENCE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
6. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN ADJACENT STREETS FREE OF DUST AND DIRT.
8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ANY TOPSOIL AND FILL STOCKPILES.
9. SITE DEWATERING. WATER PUMPED FROM THE SITE SHALL BE TREATED BY SEDIMENT BASINS OR OTHER APPROPRIATE MEASURES SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
10. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
11. TRACKING. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE CITY OF MILWAUKEE, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR PRACTICE SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. NOTIFY CITY OF MILWAUKEE OF ANY CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
12. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORKDAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORKDAY.
13. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, MULCHING, SODDING, COVERING WITH TARPS, OR EQUIVALENT PRACTICE FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
14. SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILES. IF REMAINING FOR MORE THAN THIRTY DAYS, PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS OR OTHER MEANS.
15. WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY PRACTICES, SUCH AS FILTER FABRIC FENCES, STRAW BALES, SEDIMENT AND SEDIMENT TRAPS, FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS SHALL BE REMOVED.
16. NOTIFY THE LOCAL MUNICIPALITY HAVING JURISDICTION WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
17. OBTAIN PERMISSION FROM THE LOCAL MUNICIPALITY HAVING JURISDICTION PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
18. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
19. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
20. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE DISTURBANCE OF EXISTING VEGETATION DURING CONSTRUCTION.
21. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE COMPACTION OF TOPSOIL AND PRESERVE TOPSOIL IN GREENSPACE AREAS.
22. WASH WATER FROM VEHICLES AND WHEEL WASHING SHALL BE CONTAINED AND TREATED PRIOR TO DISCHARGE.
23. CONTRACTOR SHALL MAINTAIN SPILL KITS ON-SITE.
24. PERMANENT TURF SEEDING OF DISTURBED AREA MUST OCCUR PRIOR TO SEPTEMBER 15TH. IF ADEQUATE TIME IS NOT AVAILABLE TO APPLY PERMANENT SEEDING PRIOR TO SEPTEMBER 15TH, THEN DISTURBED AREAS SHALL BE TEMPORARILY SEEDED WITH AN ANNUAL RYE GRASS PER WDNR TECHNICAL STANDARD 1059, WHERE THE TEMPORARY SEEDING MUST OCCUR PRIOR TO OCTOBER 15TH.
25. IF TEMPORARY SEEDING IS NOT COMPLETED BY OCTOBER 15TH, APPLY SOIL STABILIZERS AND DORMANT SEED TO DISTURBED AREA PER WDNR TECHNICAL STANDARD 1050. INSPECT ANIONIC PAM APPLICATION AT A MINIMUM FREQUENCY OF EVERY TWO MONTHS AND REAPPLY AS NECESSARY



* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

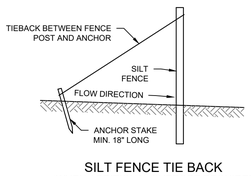
SILT FENCE



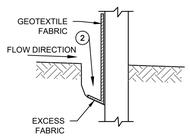
TWIST METHOD

HOOK METHOD (5)

JOINING TWO LENGTHS OF SILT FENCE



SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)



TRENCH DETAIL

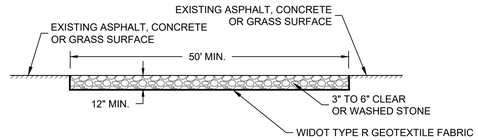
GENERAL NOTES

1. HORIZONTAL BRACE REQUIRED WITH 2"X4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. (2) TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. (3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1-1/32" X 1-1/32" OF OAK OR HICKORY.
4. WHERE SILT FENCE CROSSES A CULVERT, SILT FENCE SHALL BE DIVERTED OVER THE CULVERT OVER THE CULVERT TO NOT RESTRICT FLOW.
5. (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ON THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE LENGTHS.
6. SILT FENCE SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1056
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 9-6

B SILT FENCE - WDNR TS-1056
SCALE: 1" = 1'

CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:

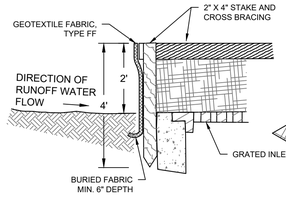
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCING AND INLET PROTECTION.
3. INITIATE STOCKPILING OF IMPORTED MATERIAL. PLACE SILT FENCE AROUND STOCKPILE(S).
4. STRIP TOPSOIL FROM STORM WATER BASIN LOCATION AND STOCKPILE.
5. CONSTRUCT STORM WATER BASIN AND INSTALL TEMPORARY OUTLET AND EMERGENCY OVERFLOW. BASIN IS TO BE USED AS A SEDIMENTATION BASIN DURING THE COURSE OF CONSTRUCTION.
6. CONSTRUCT DIVERSION SWALES, DIRECT RUNOFF TO STORM BASIN. INSTALL ASSOCIATED DITCH CHECKS.
7. STRIP TOPSOIL FROM REMAINDER OF SITE IN A PROGRESSIVE MANNER, AND STOCKPILE.
8. PERFORM ROUGH SITE GRADING. STABILIZE FINISHED AREAS AS THE WORK PROGRESSES. USE EROSION MATTING WHERE CALLED FOR ON THE PLANS. PER WDNR TECHNICAL STANDARD 1059; AREAS THAT RECEIVE TEMPORARY SEEDING SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 2 INCHES. AREAS THAT RECEIVE PERMANENT SEEDING SHALL HAVE A MINIMAL TOPSOIL DEPTH OF 4 INCHES.
9. PREPARE BUILDING PAD AND BEGIN FOUNDATIONS WORK FOR BUILDING.
10. INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER AND INSTALL RIP-RAP AT NEW STORM SEWER OUTFALLS.
11. REMOVE TEMPORARY OUTLET CONTROL STRUCTURE ON BASIN AND INSTALL PAVEMENTS.
12. STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING.
13. REMOVE EXCESS SEDIMENT FROM STORMWATER BASINS AND RETURN BASINS TO THEIR DESIGN DIMENSIONS AND VOLUMES AND INSTALL BIORETENTION ENGINEERED MEDIA.
14. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.

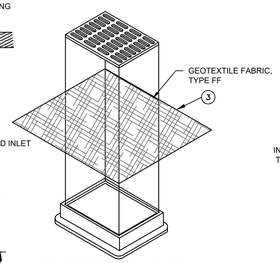


GENERAL NOTE:

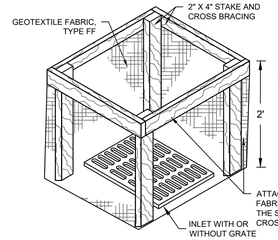
1. STONE TRACKING PAD SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1057
2. AN APPROVED MANUFACTURED TRACKOUT CONTROL DEVICE SYSTEM CONFORMING TO WDNR TECHNICAL STANDARD #1057 MAY BE USED AS AN ALTERNATIVE TO A STONE TRACKING PAD

A CONSTRUCTION ENTRANCE - WDNR TS-1057
SCALE: 1" = 1'

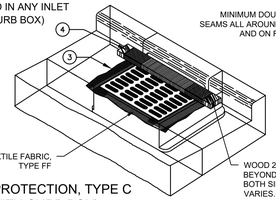




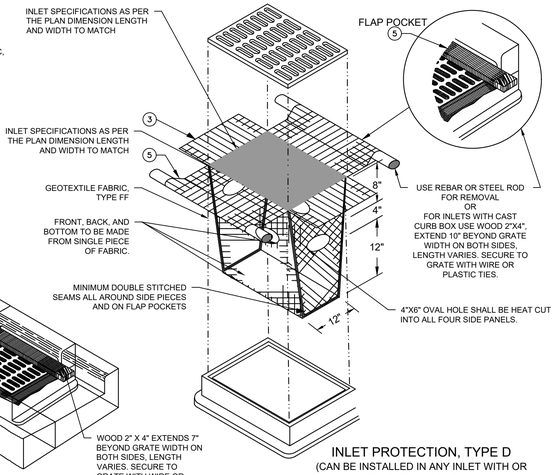
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE C
(WITH CURB BOX)

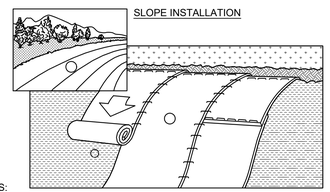


INLET PROTECTION, TYPE D
(CAN BE INSTALLED IN ANY INLET WITH OR WITHOUT A CURB BOX AS PER NOTE) (4)

GENERAL NOTES:

1. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
3. (3) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL
4. (4) FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
5. (5) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.
6. INLET PROTECTION SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1060
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 10-2

C INLET PROTECTION - WDNR TS-1060
SCALE: 1" = 1'



NOTES:

1. ECRMs (EROSION CONTROL REVEGATIVE MATS) SHALL BE INSTALLED AFTER ALL TOPSOILING, FERTILIZING, LIMING, AND SEEDING IS COMPLETE.
2. THE MAT SHALL BE IN FIRM AND INTIMATE CONTACT WITH THE SOIL. IT SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S RECOMMENDATION.
3. TRMs (TURF-REINFORCEMENT MAT) SHALL BE INSTALLED INCONJUCTION WITH THE TOPSOILING OPERATION AND SHALL BE FOLLOWED BY ECRM INSTALLATION.
4. AT TIME OF INSTALLATION, DOCUMENT THE MANUFACTURER AND MAT TYPE BY RETENTION OF MATERIAL LABELS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. RETAIN THIS DOCUMENTATION UNTIL THE SITE HAS BEEN STABILIZED.
5. EROSION MATTING SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1052.
6. INSTALL PER MANUFACTURERS SPECIFICATIONS.
7. WHERE A TRM IS INSTALLED, THE TRM LOCATION SHALL BE AS-BUILT PRIOR TO PLACEMENT OF TOPSOIL AND ECRM PLACEMENT. PROVIDE AS-BUILT LOCATION TO THE ENGINEER.

D EROSION MATTING - WDNR TS-1052
SCALE: 1" = 1'

INSTALLATION NOTES:

TYPE B & C
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACES AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

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31ST & GALENA
PARK RENOVATION
1640 N. 31ST STREET
MILWAUKEE, WISCONSIN 53208

DETAILS

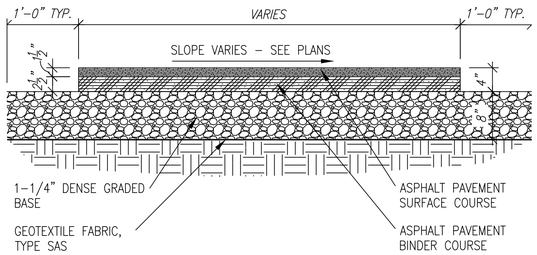
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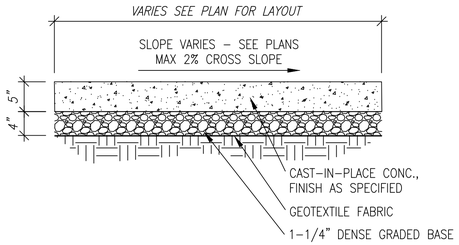
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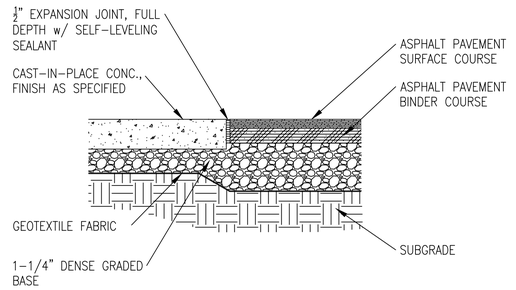
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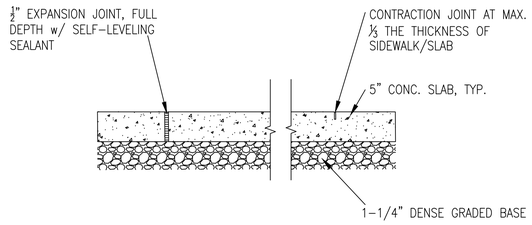
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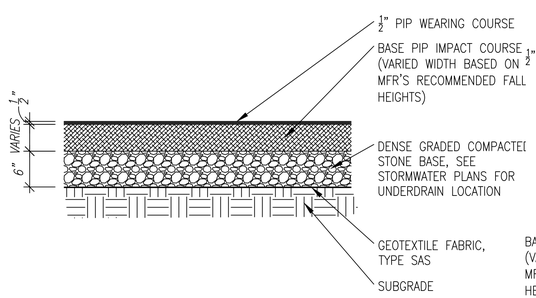
NOTE:
1. ALL CONCRETE PAVEMENT SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE





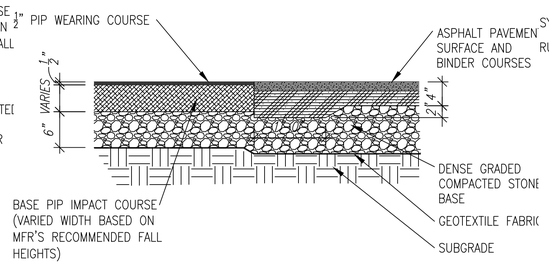
NOTE:
1. SEE PLANS AND SPECS FOR CONCRETE FINISHES
2. SEE PLANS FOR PROPOSED JOINTING LAYOUT
3. EXPANSION JOINTS SHALL BE PLACED AT A BUTTING WALKS, DRIVEWAYS, CURBS, FOUNDATION OR OTHER FIXTURES.
4. EXPANSION JOINT MAXIMUM SPACING SHALL BE 50 FEET.
5. CONTRACTION JOINT SPACING TYPICALLY EQUAL TO SIDEWALK WIDTH.

A ASPHALT PAVEMENT DETAIL
SCALE:1" = 1'



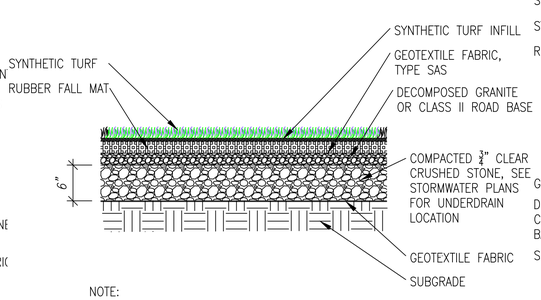
NOTE:
1. ALL POURED–IN–PLACE SURFACING SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
2. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

B CONCRETE PAVEMENT
SCALE:1" = 1'



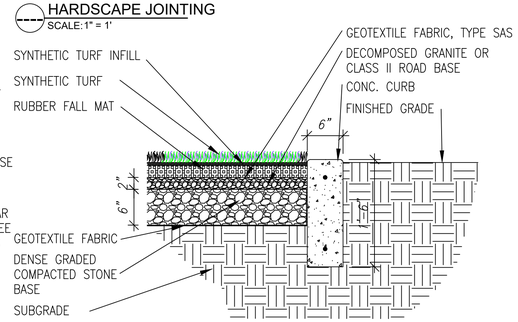
NOTE:
1. ALL POURED–IN–PLACE SURFACING AND WALKS SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
2. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

CONCRETE TO ASPHALT DETAIL
SCALE:1" = 1'



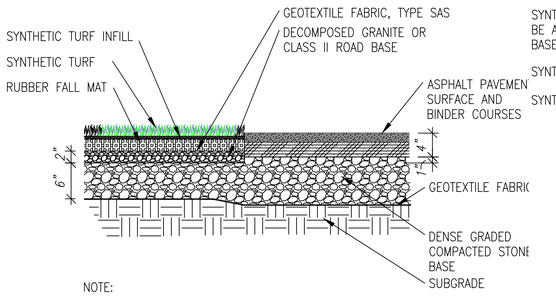
NOTE:
1. RUBBER FALL MAT WIDTH TO BE DETERMINED BASED ON MFR'S RECOMMENDATIONS
2. ALL SYNTHETIC TURF SURFACING SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
3. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

HARDSCAPE JOINTING
SCALE:1" = 1'



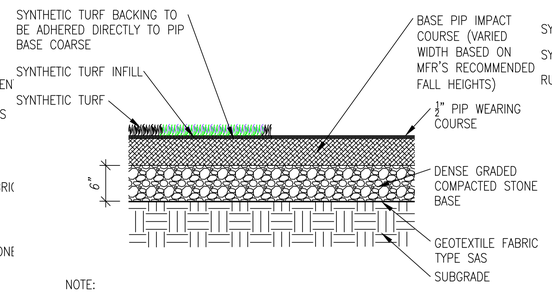
NOTE:
1. RUBBER FALL MAT WIDTH TO BE DETERMINED BASED ON MFR'S RECOMMENDATIONS
2. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

C POURED-IN-PLACE (PIP) SURFACE
SCALE:1" = 1'



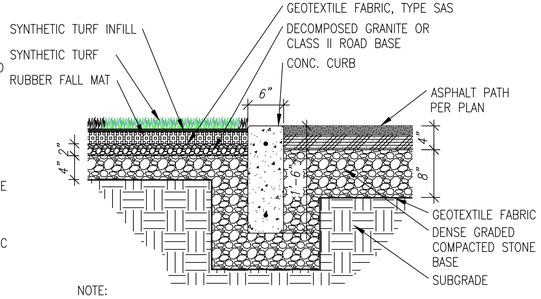
NOTE:
1. RUBBER FALL MAT WIDTH TO BE DETERMINED BASED ON MFR'S RECOMMENDATIONS
2. TOP OF SYNTHETIC TURF SURFACING TO BE FLUSH WITH TOP EDGE OF WALK
3. ALL SYNTHETIC TURF SURFACING AND WALKS SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
4. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

POURED-IN-PLACE AT ASPHALT DETAIL
SCALE:1" = 1'



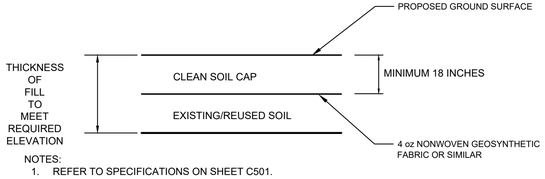
NOTE:
1. BASE PIP IMPACT COURSE WIDTH TO BE DETERMINED BASED ON MFR'S RECOMMENDATIONS
2. TOP OF SYNTHETIC TURF SURFACING TO BE 1" ABOVE TOP EDGE OF PIP SURFACING.
3. ALL SYNTHETIC TURF SURFACING AND PIP SURFACING SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
4. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

D SYNTHETIC TURF SURFACE
SCALE:1" = 1'



NOTE:
1. RUBBER FALL MAT WIDTH TO BE DETERMINED BASED ON MFR'S RECOMMENDATIONS
2. TOP OF SYNTHETIC TURF SURFACING TO BE FLUSH WITH TOP EDGE OF CONCRETE CURB
3. ALL SYNTHETIC TURF AND ASPHALT WALK SURFACING SHALL NOT EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
4. SEE STORMWATER PLANS FOR UNDER DRAIN LOCATIONS.

TURF EDGE DETAIL
SCALE:1" = 1'



NOTES:
1. REFER TO SPECIFICATIONS ON SHEET C501.

TURF AT ASPHALT WALK DETAIL
SCALE:1" = 1'

TURF AT POURED-IN-PLACE DETAIL
SCALE:1" = 1'

TURF AT ASPHALT DETAIL
SCALE:1" = 1'

18 IN SOIL CAP REQUIREMENTS FOR GREEN SPACE AREA
SCALE:1" = 1'

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31ST & GALENA PARK RENOVATION

1640 N. 31ST STREET
MILWAUKEE, WISCONSIN 53208

DETAILS

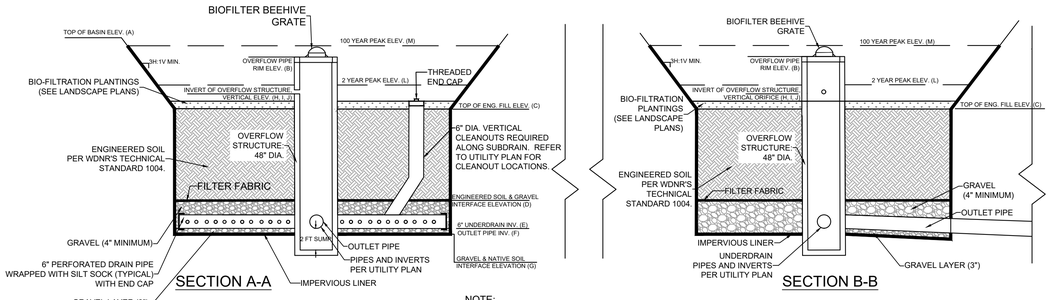
75% PLANS 10-17-2025

2025.10.16

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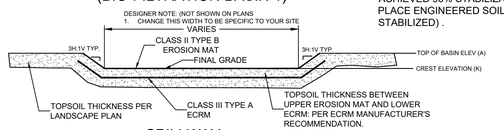
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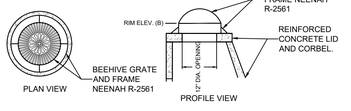


TYPICAL BIO-FILTRATION DETAILS (BIO-FILTRATION BASIN 1)

NOTE:
BIO-INFILTATRATION BASIN SHALL NOT BE BROUGHT ONLINE UNTIL AREA DRAINING TO THE BASIN HAS ACHIEVED 90% STABILIZATION FROM EROSION (I.E. DO NOT PLACE ENGINEERED SOIL UNTIL SITE HAS BEEN STABILIZED) .



SPILLWAY
PROFILE VIEW
NOT TO SCALE



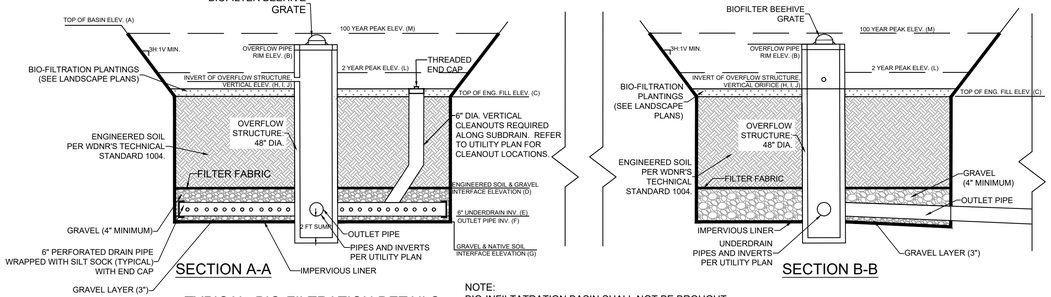
BIOFILTRATION AREA - GRATE DETAIL
NOT TO SCALE

NOTE:
1. BIO-FILTRATION BASINS THAT HAVE MULTIPLE VERTICAL ORIFICES SHALL BE INSTALLED AT THE SAME ELEVATION AS IDENTIFIED IN THE TABLE.
2. MULTIPLE VERTICAL ORIFICES SHALL HAVE A MINIMUM OF 12 INCHES HORIZONTAL SEPARATION.

BIO-FILTRATION SUMMARY TABLE

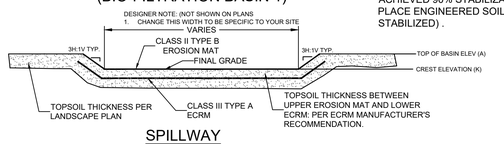
	(A)	(B)	(C)	(D)	(E)		(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
BIO-FILTRATION AREA	TOP OF POND (CURB FLOW LINE)	OVERFLOW RIM ELEVATION	TOP OF ENGINEERED FILL ELEVATION	ENGINEERED SOIL AND GRAVEL INTERFACE ELEVATION	6" DIAMETER UNDERDRAIN ELEVATION	OUTLET PIPE SIZE	OUTLET PIPE ELEVATION	GRAVEL AND NATIVE SOIL INTERFACE ELEVATION	VERTICAL ORIFICE DIAMETER (INCH)	VERTICAL ORIFICE ELEVATION	# OF VERTICAL ORIFICES	SPILLWAY CREST ELEVATION	2 YR WATER ELEVATION	100 YR WATER ELEVATION
NORTH BIO	101.00	99.60	98.00	96.00	95.00	10"	95.00	95.00	-	-	-	-	96.68	99.56

A NORTH BIOFILTRATION BASIN
SCALE: 1" = 1'

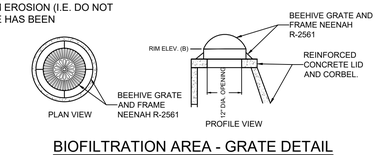


TYPICAL BIO-FILTRATION DETAILS (BIO-FILTRATION BASIN 1)

NOTE:
BIO-INFILTATRATION BASIN SHALL NOT BE BROUGHT ONLINE UNTIL AREA DRAINING TO THE BASIN HAS ACHIEVED 90% STABILIZATION FROM EROSION (I.E. DO NOT PLACE ENGINEERED SOIL UNTIL SITE HAS BEEN STABILIZED) .



SPILLWAY
PROFILE VIEW
NOT TO SCALE



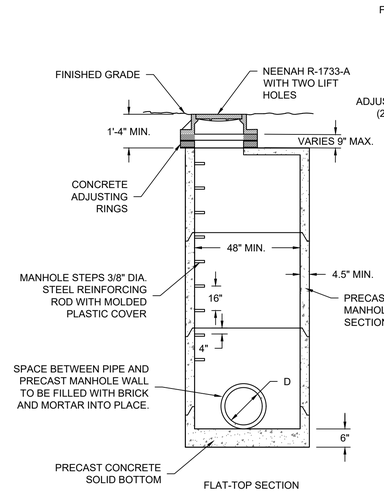
BIOFILTRATION AREA - GRATE DETAIL
NOT TO SCALE

NOTE:
1. BIO-FILTRATION BASINS THAT HAVE MULTIPLE VERTICAL ORIFICES SHALL BE INSTALLED AT THE SAME ELEVATION AS IDENTIFIED IN THE TABLE.
2. MULTIPLE VERTICAL ORIFICES SHALL HAVE A MINIMUM OF 12 INCHES HORIZONTAL SEPARATION.

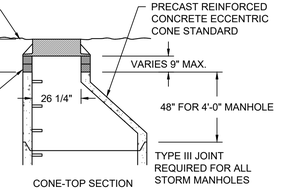
BIO-FILTRATION SUMMARY TABLE

	(A)	(B)	(C)	(D)	(E)		(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
BIO-FILTRATION AREA	TOP OF POND (CURB FLOW LINE)	OVERFLOW RIM ELEVATION	TOP OF ENGINEERED FILL ELEVATION	ENGINEERED SOIL AND GRAVEL INTERFACE ELEVATION	4" DIAMETER UNDERDRAIN ELEVATION	OUTLET PIPE SIZE	OUTLET PIPE ELEVATION	GRAVEL AND NATIVE SOIL INTERFACE ELEVATION	VERTICAL ORIFICE DIAMETER (INCH)	VERTICAL ORIFICE ELEVATION	# OF VERTICAL ORIFICES	SPILLWAY CREST ELEVATION	2 YR WATER ELEVATION	100 YR WATER ELEVATION
SOUTH BIO	100.00	98.00	97.00	95.00	94.00	8"	94.00	94.00	-	-	-	-	95.53	97.71

B SOUTH BIORETENTION BASIN
SCALE: 1" = 1'



FLAT-TOP SECTION

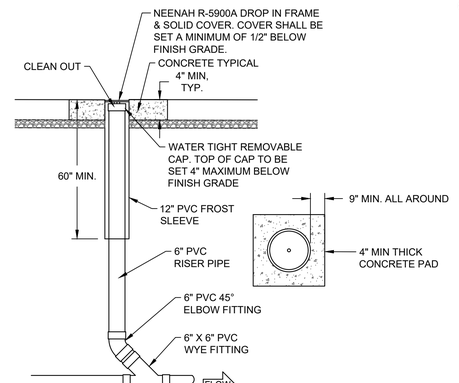


CONE-TOP SECTION

NOTES:

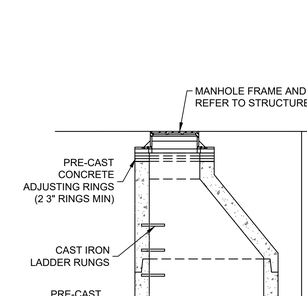
1. CONSTRUCT MANHOLE IN ACCORDANCE WITH FILE NO. 12 OF THE STATE STANDARD SPECIFICATIONS FOR SEWER AND WATER.
2. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.
3. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
4. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING MORTAR, OR FLEXIBLE RUBBER TYPE GASKETS FOR STORM MANHOLES.
5. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT MIN.
6. 3" OF BEDDING STONE UNDER BASE.
7. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL MANHOLE SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

C PRECAST STORM MANHOLE
SCALE: 1" = 1'



COMM TABLE 82.35		
DIA. OF LATERAL	MIN. DI. OF CLEANOUT RISER	MIN. DI. OF RISER CAP
1.5	1.5	1.5
2	1.5	1.5
3	3	2.5
4	4	3.5
5	5	4
6	6	5
8+	6	6

D CLEANOUT
SCALE: 1" = 1'



NOTES:
1. INSTALL RIP-RAP WHERE SHOWN ON PLANS.
2. FOR PERMANENT POOL (WET) DETENTION BASINS: EXTEND RIP-RAP FROM OUTFALL TO AT LEAST 10 FEET BEYOND THE NORMAL WATER LEVEL.
3. RIP-RAP SHALL BE MEDIUM RIP-RAP PER WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
4. GEOTEXTILE FABRIC SHALL BE TYPE R PER WISDOT STANDARD SPECIFICATIONS PER HIGHWAY AND STRUCTURE CONSTRUCTION.

E RIP-RAP DISCHARGE APRON
SCALE: 1" = 1'

NOTES:
1. FOR SEWER PIPE SIZES AND INVERT ELEVATIONS SEE UTILITY PLAN.
2. INSTALL PER MUNICIPAL SPECIFICATIONS AND STANDARDS.

F TRAPPED CATCH BASIN WITH CLEANOUT - OUTLET CONTROL STRUCTURE
SCALE: 1" = 1'

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31ST & GALENA PARK RENOVATION

1640 N. 31ST STREET
MILWAUKEE, WISCONSIN 53208

DETAILS

75% PLANS 10-17-2025

2025.10.16

23886

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GENERAL:

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR THEIR ACCURACY OR COMPLETENESS.
2. CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL HAVE SITE MARKED BY DIGGER'S HOTLINE AND SHALL HAVE PRIVATE UTILITIES MARKED BY A PRIVATE UTILITY LOCATOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL UTILITY CROSSINGS AND PROPOSED CONNECTIONS FOR CONFLICTS/DISCREPANCIES PRIOR TO INITIATING CONSTRUCTION. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED.
3. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLANS. LENGTHS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

SITE CLEARING:

1. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
2. MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
3. SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
4. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
5. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.
6. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
7. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
8. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION; RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
9. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED; ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
10. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY THE OWNER AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES.
11. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED; PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
12. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
13. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
14. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
15. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
16. SAWCUT ALL PAVEMENTS FULL DEPTH PRIOR TO REMOVAL; SAWCUTS SHALL BE IN STRAIGHT LINES PERPENDICULAR AND/OR PARALLEL TO EXISTING PAVEMENT JOINTS AND PAVEMENT EDGES.
17. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
18. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

STORM DRAINAGE:

1. ALL PRIVATE STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
2. ALL PUBLIC STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS.
3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
4. REINFORCED CONCRETE PIPE: ASTM C76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS IN ACCORDANCE WITH CHAPTER 8.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
5. HDPE PIPE: ADS N12 PIPE AS APPROVED ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCT REGISTER.
6. CATCH BASINS: STANDARD PRECAST CONCRETE CATCH BASINS CONFORMING TO CHAPTER 3.6.0 OF THE STANDARD SPECIFICATIONS AND IN GENERAL CONFORMANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS. DEPTH AND DIAMETER AS INDICATED ON PLANS. CATCH BASIN SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
7. FRAMES AND GRATES: AS INDICATED ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SPECIFIED FRAME/GRATE IS COMPATIBLE WITH STRUCTURE; IF NOT, NOTIFY ENGINEER.
8. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
9. MANHOLES AND CATCH BASINS DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
10. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORDANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
11. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
12. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
13. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
14. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
15. CATCH BASIN INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.6 OF THE STANDARD SPECIFICATIONS. CATCH BASIN EXCAVATION AND PREPARATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.4(A) AND (B) OF THE STANDARD SPECIFICATIONS. FRAMES AND GRATES SHALL BE SET TO THE ELEVATIONS SHOWN ON THE PLANS.
16. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS.

EARTH MOVING:

1. ALL EARTH WORK SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND PROVIDED REPORTS. IN THE FIELD AND THESE SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
2. CONTRACTOR SHALL PROVIDE MATERIAL TEST REPORTS FROM A QUALIFIED TESTING AGENCY INDICATING TEST RESULTS FOR CLASSIFICATION ACCORDING TO ASTM D2487 AND LABORATORY COMPACTION CURVES ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND OFF-SITE SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
3. CONTRACTOR SHALL PROVIDE PREEXCAVATION PHOTOS OR VIDEOS SHOWING EXISTING CONDITIONS OF ADJOINING STRUCTURES AND SITE IMPROVEMENTS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS.
4. THE SITE IS KNOWN TO CONTAIN ENVIRONMENTALLY CONTAMINATED SOILS. REFER TO THE REMEDIAL ACTION PLAN PREPARED BY THE SIGMA GROUP, INC. FOR DETAILS. SOILS SHALL BE MANAGED IN ACCORDANCE WITH THE SOIL MANAGEMENT PLAN. ANY SOILS OR MATERIAL HAULED OFF SITE SHALL BE DISPOSED OF IN A LEGAL FASHION.
5. OLD BUILDING FOUNDATIONS, BUILDING REMNANTS OR UNSUITABLE BACKFILL MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND THE NEW BUILDING PAD AREAS. THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL.
6. FOUNDATIONS, FOUNDATION WALLS OR CONCRETE FLOOR SLABS SHALL BE REMOVED TO A MINIMUM OF TWO FEET BELOW PROPOSED SUBGRADE WITHIN PROPOSED PARKING AND GREENSPACE AREAS. BASEMENT SLABS LOCATED BELOW 2 FEET FROM PLANNED SUBGRADE ELEVATION MAY BE LEFT IN PLACE BUT SHALL BE BROKEN INTO MAXIMUM 6 INCH PIECES TO FACILITATE DRAINAGE.
7. SATISFACTORY SOILS FOR FILL: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER.
8. UNSATISFACTORY SOILS FOR FILL: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS UNLESS DEEMED SATISFACTORY BY THE PROJECT GEOTECHNICAL ENGINEER. UNSATISFACTORY SOILS ALSO INCLUDE SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM SOIL MOISTURE CONTENT AT THE TIME OF COMPACTION.
9. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
10. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE OR ANY SOIL DEEMED ACCEPTABLE FOR ENGINEERED FILL BY THE PROJECT GEOTECHNICAL ENGINEER. ENGINEERED FILL SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE LESS THAN 3 INCHES. CLAY FILLS SHALL HAVE A LIQUID LIMIT OF LESS THAN 49 AND PLASTICITY INDEX BETWEEN 11 AND 25.
11. BEDDING COURSE FOR SEWERS AND WATER SERVICE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
12. DRAINAGE COURSE BENEATH BUILDING SLABS: NARROWLY GRADED MIXTURE OF WASHED, CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
13. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
14. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
15. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
16. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKWEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
17. EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
18. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH FULLY LOADED TANDEM AXLE DUMP TRUCK OR RUBBER TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT, TYPICALLY 9 TONS/AXLE, WHERE COHESIVE SOILS ARE ENCOUNTERED OR WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PRESENT. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES AND PROOFROLL IN DRY WEATHER. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER OR TECHNICIAN. SOILS THAT ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD (TYPICALLY >1") SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL. IN PAVEMENT AREAS WHERE UNDERCUTS ARE PERFORMED, THE EDGES OF THE OVEREXCAVATIONS SHALL BE FEATHERED INOT THE SURROUNDING SUITABLE SOIL SO THAT EDGE FAILURE OF THE OVEREXCAVATED AREA DOES NOT OCCUR.
19. DUE TO CLAYEY SOILS, IF UNDERCUTS OCCUR WITHIN PAVEMENT AREAS AND THEY ARE BACKFILLED WITH GRANULAR SOILS, THE BOTTOM OF THE OVEREXCAVATION SHALL BE SLOPED TO A DRAINTILE THAT IS IN KIND SLOPED TOWARD THE NEAREST STORM SEWER. MINIMUM SLOPES OF SUCH DRAINTILES SHALL BE 0.5%.
20. CONVENTIONAL DISKING AND AERATION TECHNIQUES SHALL BE USED TO DRY SOILS BEFORE PROOF ROLLING. ALLOT FOR PROPER DRYING TIME IN PROJECT SCHEDULE.
21. ENGINEERED FILL SHALL BE PLACED IN MAXIMUM LIFTS OF EIGHT INCHES OF LOOSE MATERIAL AND COMPACTED WITHIN 3% OF OPTIMUM SOIL MOISTURE CONTENT VALUE AND A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST ASTM D1557. EACH LIFT OF COMPACTED ENGINEERED FILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
22. EXISTING OLD FILL MATERIAL SHALL BE REMOVED BELOW FOOTINGS OR FOUNDATION SUPPORTING FILL. ENGINEERED FILL BELOW FOOTINGS SHOULD HAVE AN IN-PLACE DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. ENGINEERED FILL BELOW FOOTINGS SHALL BE EVALUATED BY IN-FIELD DENSITY TESTS DURING CONSTRUCTION.
23. WHERE UNSUITABLE BEARING SOILS ARE ENCOUNTERED IN A FOOTING EXCAVATION, THE EXCAVATION SHALL BE DEEPENED TO COMPETENT BEARING SOIL AND THE FOOTING LOWERED OR AN OVEREXCAVATION AND BACKFILL PROCEDURE PERFORMED. OVEREXCATION AND BACKFILL TREATMENT REQUIRES WIDENING THE DEEPENED EXCAVATION IN ALL DIRECTIONS AT LEAST 6 INCHES BEYOND THE EDGE OF THE FOOTING FOR EACH 12 INCHES OF OVEREXCAVATION DEPTH. THE OVEREXCAVATION SHALL BE BACKFILLED UP TO FOOTING BASE ELEVATION IN MAXIMUM 8 INCH LOOSE LIFTS WITH SUITABLE GRANULAR FILL MATERIAL AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. SOILS AT FOUNDATION BEARING ELEVATION IN THE FOOTING EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
24. A MINIMUM OF FOUR INCHES OF DRAINAGE COURSE MAT SHALL BE PLACED BELOW BUILDING FLOOR SLABS. DRAINAGE COURSE SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557)
25. UTILITY TRENCHES FOR SEWER AND WATER SHALL CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
26. BACKFILL UTILITY TRENCHES IN 4 TO 6 INCH LOOSE LIFTS COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557. BACKFILL SHALL BE MOISTURE CONDITIONED TO BE WITH 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557.
27. UTILITY BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. BEDDING MATEERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557).
28. COMPACTION TESTING OF UTILITY TRENCHES SHALL BE PERFORMED FOR EVERY 200 CUBIC YARDS OF BACKFILL PLACED OR EACH LIFT WITHIN 200 LINEAR FEET OF TRENCH, WHICHEVER IS LESS.
29. AGGREGATE BASE COURSE BENEATH PAVEMENTS SHALL BE PLACED AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. AGGREGATE BASE SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
30. GRADING GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING.
31. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
32. FOOTING SUBGRADE TESTING: EACH ISOLATED FOOTING SHALL INCLUDE AT LEAST ONE TEST PROBE. TEST PROBES SHALL BE PERFORMED EVERY 20 LINEAR FEET IN CONTINUOUS FOOTINGS.
33. BUILDING SLAB AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
34. PAVEMENT AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY LIFT FOR EVERY 2,500 SQUARE FEET OF PAVEMENT AREA, BUT IN NO CASES FEWER THAN 3 TESTS.
35. UTILITY TRENCH BACKFILL TESTING: ONE TEST FOR EACH 200 CUBIC YARDS OF FILL BACKFILL PLACED OR ONE TEST PER 200 LINEAR FEET OF TRENCH FOR EACH LIFT; WHICHEVER IS LESS.
36. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EACH 50 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
37. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
38. DISPOSAL: REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.

CONCRETE PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF CONCRETE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTIONS 415, 416, 501, 601, AND 602 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS AND SPECIFICATIONS.
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER OF READY-MIXED CONCRETE PRODUCTS WHO COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT AND APPROVED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
4. CONCRETE GRADE: GRADE A, CONFORMING TO SECTION 501.3.2.2.1 OF THE WISDOT STANDARD SPECIFICATIONS
5. AGGREGATES: CONFORM TO SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
6. WATER: ASTM C 94/C 94M AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
7. AIR-ENTRAINING ADMIXTURE: ASTM C 260 AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
8. CHEMICAL ADMIXTURES: PER SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
9. CURING MATERIALS IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
10. EXPANSION JOINT MATERIAL: CONFORM TO SECTION 415.2.3 OF THE WISDOT STANDARD SPECIFICATIONS.
11. MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE IN ACCORDANCE WITH SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
12. GENERAL EXECUTION: CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS.
13. PROOFROLL SUBGRADE AND AGGREGATE BASE AS OUTLINED IN EARTH MOVING SPECIFICATION PRIOR TO PLACEMENT OF PAVEMENTS.
14. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
15. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.
16. JOINTS GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS
17. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVEMENT AND AT LOCATIONS WHERE PAVEMENT OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVEMENT TERMINATES AT ISOLATION JOINTS.
18. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.
19. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS TO MATCH JOINTING OF EXISTING ADJACENT CONCRETE PAVEMENT.
20. EDGING: TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES.
21. CURBING: COMPLY WITH SECTION 601 OF THE WISDOT STANDARD SPECIFICATIONS.
22. SIDEWALKS: COMPLY WITH SECTION 602 OF THE WISDOT STANDARD SPECIFICATIONS.
23. MOISTEN AGGREGATE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
24. FINISH CURBING IN ACCORDANCE WITH SECTION 601.3.5 OF THE WISDOT STANDARD SPECIFICATIONS.
25. FINISH SIDEWALK AND PATIO IN ACCORDANCE WITH SECTION 602.3.2.3 OF THE WISDOT STANDARD SPECIFICATIONS (LIGHT BROOM FINISH).
26. FINISH CONCRETE VEHICULAR PAVEMENTS AND PADS IN ACCORDANCE WITH SECTION 415.3.8 OF THE WISDOT STANDARD SPECIFICATIONS (ARTIFICIAL TURF DRAG FINISH).
27. PROTECT AND CURE SIDEWALK IN ACCORDANCE WITH SECTION 602.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
28. PROTECT AND CURE CURBING IN ACCORDANCE WITH SECTION 601.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
29. PROTECT AND CURE VEHICULAR CONCRETE PAVING IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
30. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION.
31. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 7 DAYS AFTER PLACEMENT.
32. MAINTAIN CONCRETE PAVEMENT FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PAVEMENT NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

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SEGMENTAL RETAINING WALL:

1. WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT AND SUPERVISION TO INSTALL A SEGMENTAL RETAINING WALL SYSTEM IN ACCORDANCE WITH PLANS AND SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN AND DIMENSIONS SHOWN ON PLANS.
2. MATERIALS SUBMITTALS: THE CONTRACTOR SHALL SUBMIT MANUFACTURERS' CERTIFICATIONS TWO WEEKS PRIOR TO START OF WORK STATING THAT THE SRW UNITS AND GEOSYNTHETIC REINFORCEMENT MEET THE REQUIREMENTS OF THE DESIGN.
3. DESIGN SUBMITTAL: THE CONTRACTOR SHALL SUBMIT TWO SETS OF DETAILED DESIGN CALCULATIONS AND FINAL RETAINING WALL PLANS FOR APPROVAL AT LEAST TWO WEEKS PRIOR TO THE BEGINNING OF WALL CONSTRUCTION. ALL CALCULATIONS AND DRAWINGS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL CIVIL ENGINEER (P.E.) - (WALL DESIGN ENGINEER) EXPERIENCED IN SRW DESIGN AND LICENSED IN THE STATE WHERE THE WALL IS TO BE BUILT.
4. SEGMENTAL RETAINING WALL (SRW) UNITS SHALL BE MACHINE FORMED, PORTLAND CEMENT CONCRETE BLOCKS SPECIFICALLY DESIGNED FOR RETAINING WALL APPLICATIONS. SRW UNITS SHALL BE VERSA-LOK STANDARD RETAINING WALL UNITS, KEYSTONE RETAINING WALL UNITS, ROCKWOOD RETAINING WALL UNITS OR APPROVED EQUAL.
5. COLOR AND STYLE OF SRW UNITS SHALL BE AS SELECTED BY ARCHITECT AND OWNER FROM MANUFACTURER'S FULL RANGE.
6. SRW UNITS SHALL BE CAPABLE OF BEING ERECTED WITH THE HORIZONTAL GAP BETWEEN ADJACENT UNITS NOT EXCEEDING 1/8 INCH.
7. SRW UNITS SHALL BE SOUND AND FREE OF CRACKS OR OTHER DEFECTS THAT WOULD INTERFERE WITH THE PROPER PLACING OF THE UNIT OR SIGNIFICANTLY IMPAIR THE STRENGTH OR PERMANENCE OF THE STRUCTURE. ANY CRACKS OR CHIPS OBSERVED DURING CONSTRUCTION SHALL FALL WITHIN THE GUIDELINES OUTLINED IN ASTM C 1372.
8. CONCRETE SRW UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM 1372 AND HAVE A MINIMUM NET AVERAGE 28 DAYS COMPRESSIVE STRENGTH OF 3000 PSI. COMPRESSIVE STRENGTH TEST SPECIMENS SHALL CONFORM TO THE SAW-CUT COUPON PROVISIONS OF ASTM C140.
9. SRW UNITS' MOLDED DIMENSIONS SHALL NOT DIFFER MORE THAN ± 1/8 INCH FROM THAT SPECIFIED, AS MEASURED IN ACCORDANCE WITH ASTM C 140. THIS TOLERANCE DOES NOT APPLY TO ARCHITECTURAL SURFACES, SUCH AS SPLIT FACES.
10. SRW UNITS SHALL BE INTERLOCKED WITH CONNECTION PINS. THE PINS SHALL CONSIST OF GLASS-REINFORCED NYLON MADE FOR THE EXPRESSED USE WITH THE SRW UNITS SUPPLIED.
11. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF HIGH-TENACITY PET GEOGRIDS, HDPE GEOGRIDS, OR GEOTEXTILES MANUFACTURED FOR SOIL REINFORCEMENT APPLICATIONS. THE TYPE, STRENGTH AND PLACEMENT OF THE GEOSYNTHETIC REINFORCEMENT SHALL BE DETERMINED BY PROCEDURES OUTLINED IN THIS SPECIFICATION AND THE NCMA DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS (3RD EDITION 2009) AND MATERIALS SHALL BE SPECIFIED BY WALL DESIGN ENGINEER IN THEIR FINAL WALL PLANS AND SPECIFICATIONS. THE MANUFACTURERS/SUPPLIERS OF THE GEOSYNTHETIC REINFORCEMENT SHALL HAVE DEMONSTRATED CONSTRUCTION OF SIMILAR SIZE AND TYPES OF SEGMENTAL RETAINING WALLS ON PREVIOUS PROJECTS.
12. THE TYPE, STRENGTH AND PLACEMENT OF THE REINFORCING GEOSYNTHETIC SHALL BE AS DETERMINED BY THE WALL DESIGN ENGINEER, AS SHOWN ON THE FINAL, P.E.-STAMPED RETAINING WALL PLANS.
13. MATERIAL FOR LEVELING PAD SHALL CONSIST OF COMPACTED SAND, GRAVEL, OR COMBINATION THEREOF (USCS SOIL TYPES GP,GW, SP, & SW) AND SHALL BE A MINIMUM OF 6 INCHES IN DEPTH. LEAN CONCRETE WITH A STRENGTH OF 200-300 PSI AND 3 INCHES THICK MAXIMUM MAY ALSO BE USED AS A LEVELING PAD MATERIAL. THE LEVELING PAD SHOULD EXTEND LATERALLY AT LEAST A DISTANCE OF 6 INCHES FROM THE TOE AND HEEL OF THE LOWERMOST SRW UNIT.
14. DRAINAGE AGGREGATE SHALL BE ANGULAR, CLEAN STONE OR GRANULAR FILL MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422:

SIEVE SIZE	PERCENT PASSING
1 INCH	100
3/4 INCH	75-100
NO. 4	0-60
NO. 40	0-50
NO. 200	0-5

15. THE DRAINAGE COLLECTION PIPE SHALL BE A PERFORATED OR SLOTTED PVC, OR CORRUGATED HDPE PIPE. THE DRAINAGE PIPE MAY BE WRAPPED WITH A GEOTEXTILE TO FUNCTION AS A FILTER. DRAINAGE PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F 405 OR ASTM F 758.
16. THE REINFORCED SOIL MATERIAL SHALL BE FREE OF DEBRIS. UNLESS OTHERWISE NOTED ON THE FINAL, P.E.-SEALED, RETAINING WALL PLANS PREPARED BY THE WALL DESIGN ENGINEER, THE REINFORCED MATERIAL SHALL CONSIST OF THE INORGANIC USCS SOIL TYPES GP, GW, SW, SP, SM, MEETING THE FOLLOWING GRADATION, AS DETERMINED IN ACCORDANCE WITH ASTM D422:

SIEVE SIZE	PERCENT PASSING
1 INCH	100
NO. 4	20-100
NO. 40	0-60
NO. 200	0-35

17. THE MAXIMUM PARTICLE SIZE OF POORLY-GRADED GRAVELS (GP) (NO FINES) SHOULD NOT EXCEED 3/4 INCH UNLESS EXPRESSLY APPROVED BY THE WALL DESIGN ENGINEER AND THE LONG-TERM DESIGN STRENGTH (LTDS) OF THE GEOSYNTHETIC IS REDUCED TO ACCOUNT FOR ADDITIONAL INSTALLATION DAMAGE FROM PARTICLES LARGER THAN THIS MAXIMUM.
18. THE PLASTICITY OF THE FINE FRACTION SHALL BE LESS THAN 20.
19. THE PH OF THE BACKFILL MATERIAL SHALL BE BETWEEN 3 AND 9 WHEN TESTED IN ACCORDANCE WITH ASTM G 51.
20. DRAINAGE GEOTEXTILE SHALL CONSIST OF GEOSYNTHETIC SPECIFICALLY MANUFACTURED FOR USE AS A PERMEABLE SOIL FILTER THAT RETAINS SOIL WHILE STILL ALLOWING WATER TO PASS THROUGHOUT THE LIFE OF THE STRUCTURE. THE TYPE AND PLACEMENT OF THE GEOTEXTILE FILTER MATERIAL SHALL BE AS REQUIRED BY THE WALL DESIGN ENGINEER IN THEIR FINAL WALL PLANS AND SPECIFICATIONS.
21. THE DESIGN ANALYSIS FOR THE FINAL, P.E.-STAMPED RETAINING WALL PLANS PREPARED BY THE WALL DESIGN ENGINEER SHALL CONSIDER THE EXTERNAL STABILITY AGAINST SLIDING AND OVERTURNING, INTERNAL STABILITY AND FACIAL STABILITY OF THE REINFORCED SOIL MASS, AND SHALL BE IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICE AND THESE SPECIFICATIONS. THE INTERNAL AND EXTERNAL STABILITY ANALYSIS SHALL BE PERFORMED IN ACCORDANCE WITH THE "NCMA DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS, 3RD EDITION" USING THE RECOMMENDED MINIMUM FACTORS OF SAFETY IN THIS MANUAL.
22. EXTERNAL STABILITY ANALYSIS FOR BEARING CAPACITY, GLOBAL STABILITY, AND TOTAL AND DIFFERENTIAL SETTLEMENT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE OWNER'S GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL PERFORM BEARING CAPACITY, SETTLEMENT ESTIMATES, AND GLOBAL STABILITY ANALYSIS BASED ON THE FINAL WALL DESIGN PROVIDED BY THE WALL DESIGN ENGINEER AND COORDINATE ANY REQUIRED CHANGES WITH THE WALL DESIGN ENGINEER.
23. THE GEOSYNTHETIC PLACEMENT IN THE WALL DESIGN SHALL HAVE 100% CONTINUOUS COVERAGE PARALLEL TO THE WALL FACE. GAPPING BETWEEN HORIZONTALLY ADJACENT LAYERS OF GEOSYNTHETIC (PARTIAL COVERAGE) WILL NOT BE ALLOWED.
24. CONTRACTOR'S FIELD CONSTRUCTION SUPERVISOR SHALL HAVE DEMONSTRATED EXPERIENCE AND BE QUALIFIED TO DIRECT ALL WORK AT THE SITE.
25. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE PROJECT GRADING PLANS. CONTRACTOR SHALL TAKE PRECAUTIONS TO MINIMIZE OVER-EXCAVATION. OVER-EXCAVATION SHALL BE FILLED WITH COMPACTED INFILL MATERIAL, OR AS DIRECTED BY THE WALL DESIGN ENGINEER, AT THE CONTRACTOR'S EXPENSE.
26. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING STRUCTURES AND UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES ARE PROTECTED FROM THE EFFECTS OF WALL EXCAVATION. EXCAVATION SUPPORT, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR.
27. FOLLOWING THE EXCAVATION, THE FOUNDATION SOIL SHALL BE EXAMINED BY THE OWNER'S ENGINEER TO ASSURE ACTUAL FOUNDATION SOIL STRENGTH MEETS OR EXCEEDS THE ASSUMED DESIGN BEARING STRENGTH. SOILS NOT MEETING THE REQUIRED STRENGTH SHALL BE REMOVED AND REPLACED WITH INFILL SOILS, AS DIRECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER.
28. FOUNDATION SOIL SHALL BE PROOF-ROLLED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY AND INSPECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF LEVELING PAD MATERIALS.
29. LEVELING PAD SHALL BE PLACED AS SHOWN ON THE FINAL, P.E.-SEALED RETAINING WALL PLANS WITH A MINIMUM THICKNESS OF 6 INCHES. THE LEVELING PAD SHOULD EXTEND LATERALLY AT LEAST A DISTANCE OF 6 INCHES FROM THE TOE AND HEEL OF THE LOWERMOST SRW UNIT.
30. GRANULAR LEVELING PAD MATERIAL SHALL BE COMPACTED TO PROVIDE A FIRM, LEVEL BEARING SURFACE ON WHICH TO PLACE THE FIRST COURSE OF UNITS. WELL-GRADED SAND CAN BE USED TO SMOOTH THE TOP 1/4 INCH TO 1/2 INCH OF THE LEVELING PAD. COMPACTION WILL BE WITH MECHANICAL PLATE COMPACTORS TO ACHIEVE 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D 698).
31. ALL SRW UNITS SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL, P.E.-SEALED WALL PLANS AND DETAILS OR AS DIRECTED BY THE WALL DESIGN ENGINEER. THE SRW UNITS SHALL BE INSTALLED IN GENERAL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE SPECIFICATIONS AND DRAWINGS SHALL GOVERN IN ANY CONFLICT BETWEEN THE TWO REQUIREMENTS.
32. FIRST COURSE OF SRW UNITS SHALL BE PLACED ON THE LEVELING PAD. THE UNITS SHALL BE LEVELED SIDE-TO-SIDE, FRONT-TO-REAR AND WITH ADJACENT UNITS, AND ALIGNED TO ENSURE INTIMATE CONTACT WITH THE LEVELING PAD. THE FIRST COURSE IS THE MOST IMPORTANT TO ENSURE ACCURATE AND ACCEPTABLE RESULTS. NO GAPS SHALL BE LEFT BETWEEN THE FRONT OF ADJACENT UNITS. ALIGNMENT MAY BE DONE BY MEANS OF A STRING LINE OR OFFSET FROM BASE LINE TO THE BACK OF THE UNITS.
33. ALL EXCESS DEBRIS SHALL BE CLEANED FROM TOP OF UNITS AND THE NEXT COURSE OF UNITS INSTALLED ON TOP OF THE UNITS BELOW.

SEGMENTAL RETAINING WALL CONT.:

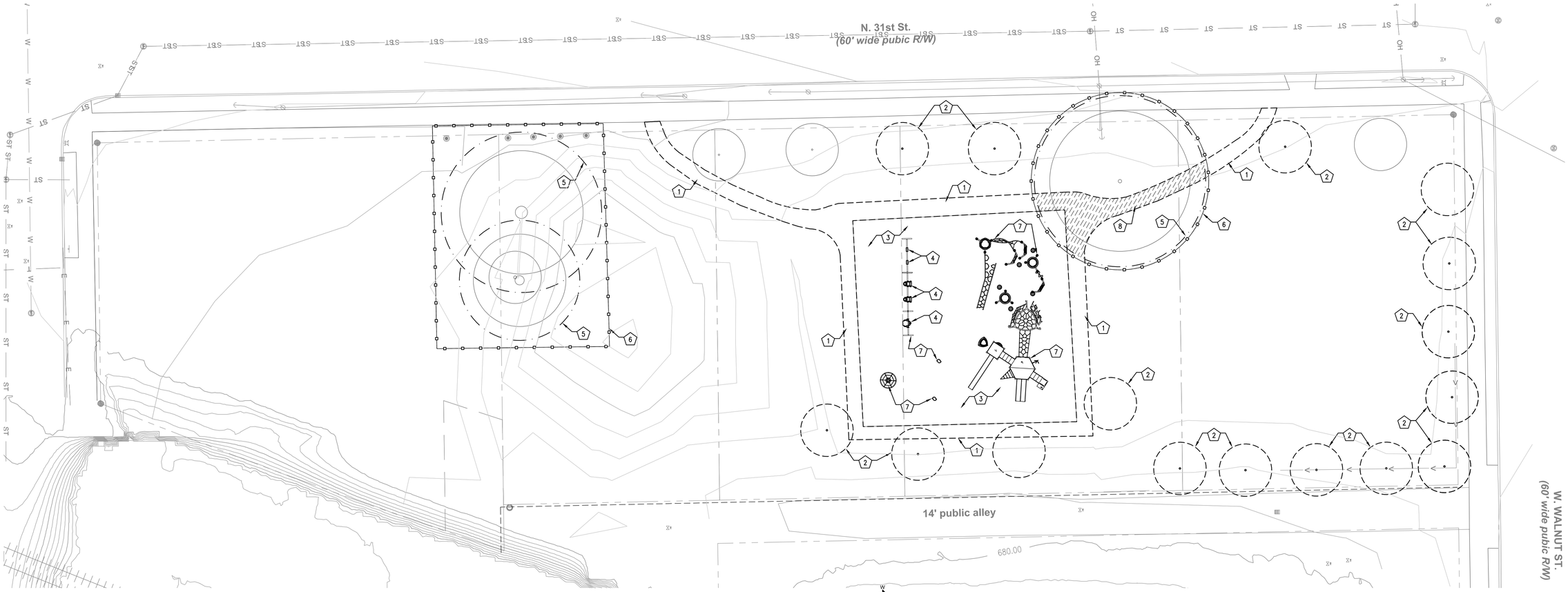
34. CONNECTION PINS SHALL BE INSERTED THROUGH THE PIN HOLES OF EACH UPPER-COURSE UNIT INTO RECEIVING SLOTS IN LOWER-COURSE UNITS. PINS SHALL BE FULLY SEATED IN THE PIN SLOT BELOW. UNITS SHALL BE PUSHED FORWARD TO REMOVE ANY LOOSENESS IN THE UNIT-TO-UNIT CONNECTION.
35. PRIOR TO PLACEMENT OF NEXT COURSE, THE LEVEL AND ALIGNMENT OF THE UNITS SHALL BE CHECKED AND CORRECTED WHERE NEEDED.
36. LAYOUT OF CURVES AND CORNERS SHALL BE INSTALLED IN ACCORDANCE WITH THE WALL PLAN DETAILS OR IN GENERAL ACCORDANCE WITH SRW MANUFACTURER'S INSTALLATION GUIDELINES. WALLS MEETING AT CORNERS SHALL BE INTERLOCKED BY OVERLAPPING SUCCESSIVE COURSES.
37. PROCEDURES ABOVE SHALL BE REPEATED UNTIL REACHING TOP OF WALL UNITS, JUST BELOW THE HEIGHT OF THE CAP UNITS. GEOSYNTHETIC REINFORCEMENT, DRAINAGE MATERIALS, AND REINFORCED BACKFILL SHALL BE PLACED IN SEQUENCE WITH UNIT INSTALLATION.
38. ALL GEOSYNTHETIC REINFORCEMENT SHALL BE INSTALLED AT THE PROPER ELEVATION AND ORIENTATION AS SHOWN ON THE FINAL P.E.-SEALED RETAINING WALL PLAN PROFILES AND DETAILS, OR AS DIRECTED BY THE WALL DESIGN ENGINEER.
39. AT THE ELEVATIONS SHOWN ON THE FINAL PLANS, (AFTER THE UNITS, DRAINAGE MATERIAL AND BACKFILL HAVE BEEN PLACED TO THIS ELEVATION) THE GEOSYNTHETIC REINFORCEMENT SHALL BE LAID HORIZONTALLY ON COMPACTED INFILL AND ON TOP OF THE CONCRETE SRW UNITS, TO WITHIN 1 INCH OF THE FRONT FACE OF THE UNIT BELOW. EMBEDMENT OF THE GEOSYNTHETIC IN THE SRW UNITS SHALL BE CONSISTENT WITH SRW MANUFACTURER'S RECOMMENDATIONS. CORRECT ORIENTATION OF THE GEOSYNTHETIC REINFORCEMENT SHALL BE VERIFIED BY THE CONTRACTOR TO BE IN ACCORDANCE WITH THE GEOSYNTHETIC MANUFACTURER'S RECOMMENDATIONS. THE HIGHEST-STRENGTH DIRECTION OF THE GEOSYNTHETIC MUST BE PERPENDICULAR TO THE WALL FACE.
40. GEOSYNTHETIC REINFORCEMENT LAYERS SHALL BE ONE CONTINUOUS PIECE FOR THEIR ENTIRE EMBEDMENT LENGTH. SPLICING OF THE GEOSYNTHETIC IN THE DESIGN-STRENGTH DIRECTION (PERPENDICULAR TO THE WALL FACE) SHALL NOT BE PERMITTED. ALONG THE LENGTH OF THE WALL, HORIZONTALLY ADJACENT SECTIONS OF GEOSYNTHETIC REINFORCEMENT SHALL BE BUTTED IN A MANNER TO ASSURE 100% COVERAGE PARALLEL TO THE WALL FACE.
41. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON THE GEOSYNTHETIC REINFORCEMENT. A MINIMUM OF 6 INCHES OF BACKFILL IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOSYNTHETIC. TURNING SHOULD BE KEPT TO A MINIMUM. RUBBER-TIRED EQUIPMENT MAY PASS OVER THE GEOSYNTHETIC REINFORCEMENT AT SLOW SPEEDS (LESS THAN 5 MPH).
42. THE GEOSYNTHETIC REINFORCEMENT SHALL BE FREE OF WRINKLES PRIOR TO PLACEMENT OF SOIL FILL. THE NOMINAL TENSION SHALL BE APPLIED TO THE REINFORCEMENT AND SECURED IN PLACE WITH STAPLES, STAKES OR BY HAND TENSIONING UNTIL REINFORCEMENT IS COVERED BY 6 INCHES OF FILL.
43. DRAINAGE AGGREGATE SHALL BE INSTALLED TO THE LINE, GRADES AND SECTIONS SHOWN ON THE FINAL P.E.-SEALED RETAINING WALL PLANS. DRAINAGE AGGREGATE SHALL BE PLACED TO THE MINIMUM THICKNESS SHOWN ON THE CONSTRUCTION PLANS BETWEEN AND BEHIND UNITS (A MINIMUM OF 1 CUBIC FOOT FOR EACH EXPOSED SQUARE FOOT OF WALL FACE UNLESS OTHERWISE NOTED ON THE FINAL WALL PLANS).
44. DRAINAGE COLLECTION PIPES SHALL BE INSTALLED TO MAINTAIN GRAVITY FLOW OF WATER OUTSIDE THE REINFORCED-SOIL ZONE. THE DRAINAGE COLLECTION PIPE SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE FINAL CONSTRUCTION DRAWINGS. THE DRAINAGE COLLECTION PIPE SHALL DAYLIGHT INTO A STORM SEWER OR ALONG A SLOPE, AT AN ELEVATION BELOW THE LOWEST POINT OF THE PIPE WITHIN THE AGGREGATE DRAIN. DRAINAGE LATERALS SHALL BE SPACED AT A MAXIMUM 50-FOOT SPACING ALONG THE WALL FACE.
45. THE REINFORCED BACKFILL SHALL BE PLACED AS SHOWN IN THE FINAL WALL PLANS IN THE MAXIMUM COMPACTED LIFT THICKNESS OF 8 INCHES AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D 698) AT A MOISTURE CONTENT WITHIN -1% POINT TO +3% POINTS OF OPTIMUM. THE BACKFILL SHALL BE PLACED AND SPREAD IN SUCH A MANNER AS TO ELIMINATE WRINKLES OR MOVEMENT OF THE GEOSYNTHETIC REINFORCEMENT AND THE SRW UNITS.
46. ONLY HAND-OPERATED COMPACTION EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE WALL UNITS. COMPACTION WITHIN THE 3 FEET BEHIND THE WALL UNITS SHALL BE ACHIEVED BY AT LEAST THREE PASSES OF A LIGHTWEIGHT MECHANICAL TAMPER, PLATE, OR ROLLER.
47. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LEVEL OF BACKFILL AWAY FROM THE WALL FACING AND REINFORCED BACKFILL TO DIRECT WATER RUNOFF AWAY FROM THE WALL FACE.
48. AT COMPLETION OF WALL CONSTRUCTION, BACKFILL SHALL BE PLACED LEVEL WITH FINAL TOP OF WALL ELEVATION. IF FINAL GRADING, PAVING, LANDSCAPING AND/OR STORM DRAINAGE INSTALLATION ADJACENT TO THE WALL IS NOT PLACED IMMEDIATELY AFTER WALL COMPLETION, TEMPORARY GRADING AND DRAINAGE SHALL BE PROVIDED TO ENSURE WATER RUNOFF IS NOT DIRECTED AT THE WALL NOR ALLOWED TO COLLECT OR POND BEHIND THE WALL UNTIL FINAL CONSTRUCTION ADJACENT TO THE WALL IS COMPLETED.
49. SRW CAPS SHALL BE PROPERLY ALIGNED AND GLUED TO UNDERLYING UNITS WITH VERSA-LOK ADHESIVE, A FLEXIBLE, HIGH-STRENGTH CONCRETE ADHESIVE. RIGID ADHESIVE OR MORTAR ARE NOT ACCEPTABLE.
50. CAPS SHALL OVERHANG THE TOP COURSE OF UNITS BY 3/4 INCH TO 1 INCH. SLIGHT VARIATION IN OVERHANG IS ALLOWED TO CORRECT ALIGNMENT AT THE TOP OF THE WALL.
51. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION BY OTHERS ADJACENT TO THE WALL DOES NOT DISTURB THE WALL OR PLACE TEMPORARY CONSTRUCTION LOADS ON THE WALL THAT EXCEED DESIGN LOADS, INCLUDING LOADS SUCH AS WATER PRESSURE, TEMPORARY GRADES, OR EQUIPMENT LOADING. HEAVY PAVING OR GRADING EQUIPMENT SHALL BE KEPT A MINIMUM OF 3 FEET BEHIND THE BACK OF THE WALL FACE. EQUIPMENT WITH WHEEL LOADS IN EXCESS OF 150 PSF LIVE LOAD SHALL NOT BE OPERATED WITHIN 10 FEET OF THE FACE OF THE RETAINING WALL DURING CONSTRUCTION ADJACENT TO THE WALL. CARE SHOULD BE TAKEN BY THE GENERAL CONTRACTOR TO ENSURE WATER RUNOFF IS DIRECTED AWAY FROM THE WALL STRUCTURE UNTIL FINAL GRADING AND SURFACE DRAINAGE COLLECTION SYSTEMS ARE COMPLETED.

BIOFILTRATION BASIN:

1. BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH WDNR TECHNICAL STANDARD 1004: BIORETENTION FOR INFILTRATION AND THESE SPECIFICATIONS.
2. ENGINEERED SOIL MIX SHALL CONSIST OF A MIX OF 70 TO 85% SAND AND 15 TO 30% COMPOST BASED ON VOLUME. SAND SHALL MEET THE REQUIREMENTS FOR FINE AGGREGATE SAND SPECIFIED SECTION 501.2.5.3.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION OR MEET ASTM C33 (FINE AGGREGATE CONCRETE SAND).
3. PRIOR TO PLACEMENT IN THE BIOFILTRATION BASIN, THE ENGINEERED SOIL SHALL BE PREMIXED AND THE MOISTURE CONTENT SHALL BE LOW ENOUGH TO PREVENT CLUMPING AND COMPACTION DURING PLACEMENT.
4. THE ENGINEERED SOIL SHALL BE PLACED IN MULTIPLE LIFTS, EACH APPROXIMATELY 12 INCHES IN DEPTH.
5. ENGINEERED SOIL MIX SHALL BE FREE OF ROCKS, STUMPS, ROOTS, BRUSH OR OTHER MATERIAL OVER ONE INCH IN DIAMETER. NO OTHER MATERIALS SHALL BE MIXED WITH THEE PLANTING SOIL THAT MAY BE HARMFUL TO PLANT GROWTH OR BE A HINDRANCE TO PLANTING OR MAINTENANCE.
6. ENGINEERED SOIL AND GRAVEL SHALL BE IN ACCORDANCE WITH THE LATEST WDNR TECHNICAL STANDARD 1004.
7. PEA GRAVEL SHALL BE GRADED SUCH THAT MINIMUM PARTICLE SIZE IS LARGE ENOUGH TO PREVENT FALLING THROUGH PERFORATIONS OF THE UNDERDRAIN PIPE.
8. BIOFILTRATION BASIN DRAIN PIPE: 6-INCH SCHEDULE 40 PVC PIPE MEETING PERFORATION REQUIREMENTS OF AASHTO M278 HIGHWAY UNDERDRAIN SPECIFICATIONS WITH 3/8" PERFORATIONS ON 6" CENTERS WITH 4 HOLES PER ROW.
9. BEEHIVE INLET: NEENAH R-256I, OR EQUAL
10. RISER STRUCTURE: 36" DIAMETER PRECAST CATCH BASIN STRUCTURE WITH 24" TOP OPENING TO ACCOMMODATE BEEHIVE INLET. IN GENERAL ACCORDANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
11. GRAVEL STORAGE LAYER (IF INDICATED ON PLANS): COURSE AGGREGATE #2 IN ACCORDANCE WITH SECTION 501.2.5.4.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
12. FILTER FABRIC: GEOTEXTILE FABRIC IN ACCORDANCE WITH SECTION 645.2.2.4 OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
13. EXCAVATE TO GRADES AS INDICATED ON PLANS.
14. CONSTRUCT TEMPORARY DIVERSION SWALES OR PROVIDE OTHER MEANS AS NECESSARY TO PREVENT CONSTRUCTION SITE RUNOFF FROM DISTURBED AREAS, AND RUNOFF FROM PERVIOUS AREAS WHICH HAVE NOT YET BEEN STABILIZED, FROM ENTERING THE BIORETENTION AREA.
15. CONSTRUCTION SHALL BE SUSPENDED DURING PERIODS OF RAINFALL OR SNOWMELT. CONSTRUCTION SHALL REMAIN SUSPENDED IF PONDED WATER IS PRESENT OR IF RESIDUAL SOIL MOISTURE CONTRIBUTES SIGNIFICANTLY TO THE POTENTIAL FOR SOIL SMEARING, CLUMPING OR OTHER FORMS OF COMPACTION.
16. COMPACTION AND SMEARING OF THE ENGINEERED SOIL AND TOP SOIL BENEATH THE FLOORS, IN THE SOIL PLANTING BED, AND THE SIDE SLOPES OF THE BASIN, AND COMPACTION OF THE ENGINEERED SOILS IN THE BASIN SHALL BE MINIMIZED. DURING SITE DEVELOPMENT, THE AREA DEDICATED TO THE BIOFILTRATION BASIN SHALL BE CORDONED OFF TO PREVENT ACCESS BY HEAVY EQUIPMENT. ACCEPTABLE EQUIPMENT FOR CONSTRUCTING THE BIOFILTRATION BASIN INCLUDES EXCAVATION HOES, LIGHT EQUIPMENT WITH TURF TYPE TIRES, MARSH EQUIPMENT OR WIDE-TRACK LOADERS.
17. IF COMPACTION OCCURS AT THE BASE OF THE BIOFILTRATION BASIN, THE SOIL SHALL BE REFRACTURED TO A DEPTH OF AT LEAST 12 INCHES. IF SMEARING OCCURS, THE SMEARED AREAS OF THE INTERFACE SHALL BE CORRECTED BY RAKING OR ROTO-TILLING.
18. STEPS MAY BE TAKEN TO INDUCE MILD SETTLING OF THE ENGINEERED SOIL BED AS NEEDED TO PREPARE A STABLE PLANTING MEDIUM AND TO STABILIZE THE PONDING DEPTH. VIBRATING PLATE-STYLE COMPACTORS SHALL NOT BE UTILIZED.
19. ANY SEDIMENT ACCUMULATED IN THE BASIN DUE TO CONSTRUCTION ACTIVITIES SHOULD BE REMOVED AND THE ENGINEERED SOIL SHALL BE DEEP TILLED PRIOR TO PLANTING.
20. IMPERVIOUS LINER SHALL BE 45 MIL FIRESTONE EPDM (GSI PRODUCTS), OR 30 MIL PVC (GSI PRODUCTS), OR EQUAL.

ASPHALTIC PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF ASPHALTIC PAVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460, 465, AND 475 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS).
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT IS LOCATED.
4. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET: APPLY TACK COAT WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES FAHRENHEIT FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION; PLACE ASPHALTIC CONCRETE SURFACE COURSE WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT; BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES FAHRENHEIT AND RISING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.
5. AGGREGATES SHALL BE IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS.
6. ASPHALT MATERIALS SHALL BE IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS.
7. PAVEMENT MARKING PAINT: PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON PLANS.
8. HOT-MIX ASPHALT: ASPHALTIC BINDER COURSE AND SURFACE COURSE SHALL BE MIXTURE LT FOR REGULAR DUTY PAVEMENT AND LT FOR HEAVY DUTY PAVEMENT COMPLYING WITH THE WISDOT STANDARD SPECIFICATIONS. ASPHALTIC BINDER SHALL BE 58-28 S UNLESS NOTED.
9. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE WISDOT STANDARD SPECIFICATIONS.
10. PAVEMENT PLACEMENT GENERAL: ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS.
11. PREPARE AND PROOFROLL SUBGRADES AND AGGREGATE BASE COURSE AS OUTLINED IN EARTH MOVING SPECIFICATIONS PRIOR TO PLACEMENT OF ASPHALT PAVEMENTS.
12. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF AGGREGATE BASE COURSE PRIOR TO PAVEMENT PLACEMENT. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.
13. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS. PAVEMENT THICKNESSES SHALL BE AS INDICATED ON THE PLANS.
14. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.
15. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
16. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
17. THICKNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS ¼ INCH FOR BINDER COURSE AND PLUS ¼ INCH FOR SURFACE COURSE, NO MINUS.
18. SURFACE SMOOTHNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS: BINDER COURSE: ¼ INCH; SURFACE COURSE: 1/8 INCH. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES.
19. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ENGINEER.
20. APPLY MARKINGS TO A DRY SURFACE FREE FROM FROST. REMOVE DUST, DIRT, OIL, GREASE, GRAVEL, DEBRIS OR OTHER MATERIAL THAT MAY PREVENT BONDING TO THE PAVEMENT.
21. APPLY PAINT AS THE MANUFACTURER SPECIFIES WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH U



1 DEMOLITION SITE PLAN
SCALE: 1/16" = 1'-0"

TREE PROTECTION NOTES

1. REQUIRED DIAMETER FOR TREE PROTECTION AS SHOWN IS APPROXIMATELY:
   D = BREAST HEIGHT X 1.25. SOME VARIATION TO ACCOMMODATE PROPERTY LINES AND SIDEWALK EDGES. DIMENSIONS ARE APPROXIMATE AND MINIMUM. CRITICAL TREE PROTECTION ZONE IS GREATER THAN DRIPLINE.
2. TREE PROTECTION FENCING SHALL BE CONTINUOUS AND IN ACCORDANCE WITH ALL DETAILS ON SHEET L4.0
3. INSTALL TREE PROTECTION FENCING PRIOR TO SITE WORK AND MAINTAIN THROUGHOUT CONSTRUCTION PERIOD. NO STORAGE OF MATERIALS, VEHICULAR ACCESS OR ANY OTHER CONSTRUCTION ACTIVITIES PERMITTED WITHIN THE TREE PROTECTION ZONE.
4. ALL PLANT AND SITE PROTECTION FENCING TO BE INSTALLED PRIOR TO HARDSCAPE DEMOLITION AND/OR CONSTRUCTION OPERATIONS.
5. ADJUST PLANT PROTECTION FENCING AS NEEDED THROUGHOUT CONSTRUCTION OPERATIONS TO PROTECT CRITICAL ROOT ZONES OF ALL TREES.
6. PROVIDE 2 INCH (AFTER SETTLING) MULCH LAYER WITHIN CRITICAL ROOT ZONE OF EXISTING TREES AS MIN. PROTECTION DURING CONSTRUCTION OPERATIONS. COORDINATE WITH A CERTIFIED ARBORIST AND LANDSCAPE ARCHITECT FOR ADDITIONAL MEASURES IF CRITICAL ROOT ZONES NEED TO BE ACCESSED FOR ANY REASON DURING CONSTRUCTION OPERATIONS. MULCH LAYER TO BE A 3" SHREDDED DOUBLE PROCESSED HARDWOOD BARK FINES.

DEMOLITION NOTES

NOTE: CITY CREWS WILL BE REMOVING ANY TRASH RECEPTACLES PRESENT IN THE PARK. COORDINATE REMOVAL AS NEEDED.

1. REMOVE EXISTING ASPHALT PATH
2. EXIST. TREE TO BE REMOVED, VERIFY w/ OWNER IF RELOCATION OF TREE IS DESIRED.
3. EXIST. POURED-IN-PLACE (PIP) RUBBER SURFACE TO REMAIN AND BE RESURFACED AND EXPANDED PER NEW SITE PLAN.
4. EXIST. SWING TO BE REMOVED AND REPLACED w/ NEW. SEE NEW PLAN AND EQUIPMENT SCHEDULE.
5. TEMPORARY TREE PROTECTION FENCING, TYP.
6. TREE PROTECTION ZONES AT EACH TREE, TYP.
7. EXIST. PLAYGROUND EQUIPMENT TO REMAIN
8. REMOVE EXIST. ASPHALT PATH BY HAND IN TREE PROTECTION ZONE AND BACKFILL GENTLY WITHOUT EXCESS COMPACTION TO PROVIDE LEVEL GROUND SURFACE AS REQUIRED.

SYMBOL LEGEND

EXITING TREE TO REMOVED

EXITING TREE TO REMAIN

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Revisions:

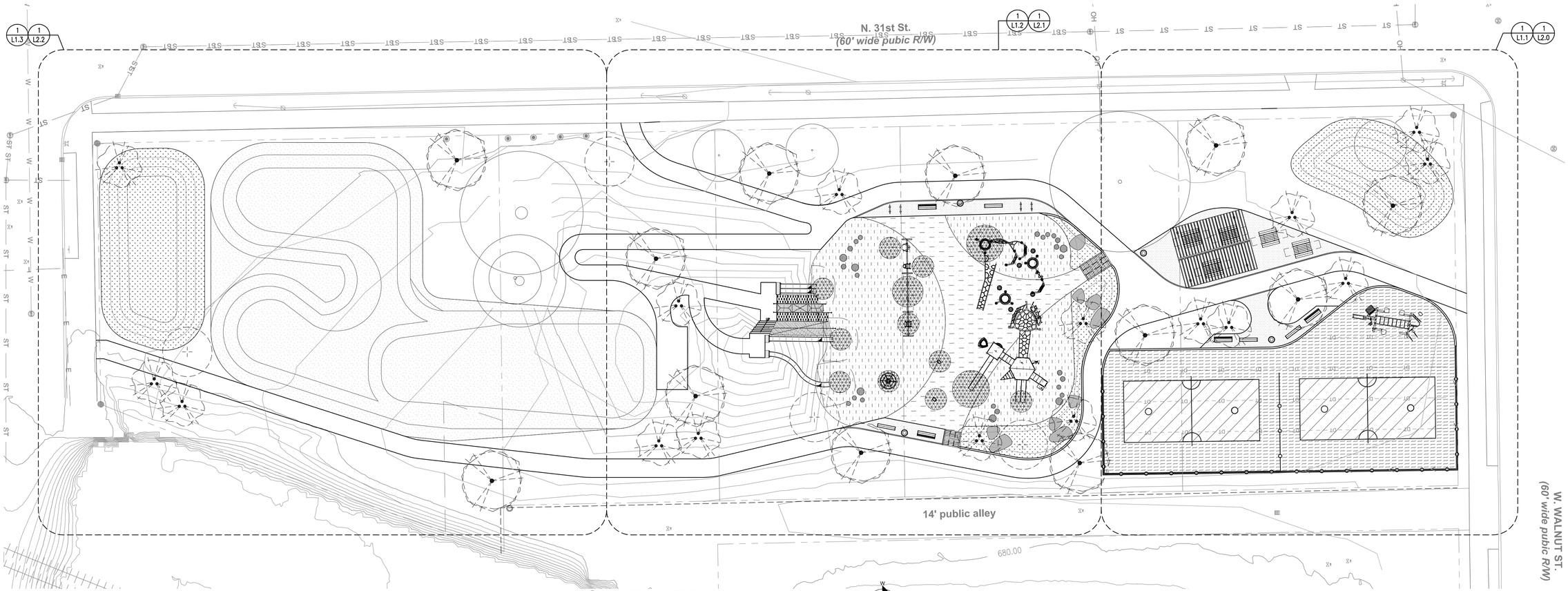
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Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

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1 OVERALL SITE PLAN
SCALE: 1/16" = 1'-0"

SITE SURFACES SCHEDULE

ITEMS	PRODUCT NAME	MANUFACTURER	REMARKS
	SYNPLAY 60 ARTIFICIAL TURF	SYNLAWN	CONTRAST COLOR COURT MARKINGS, NO PAD, COLOR TBD
	SYNPLAY 60 ARTIFICIAL TURF	SYNLAWN	NO PAD, OPTIONAL PAD UNDER FITNESS STUCTURE, COLOR TBD
	PLAYBOUND POURED-IN-PLACE RUBBER SURFACING	SURFACE AMERICA	COLOR A, TBD
	PLAYBOUND POURED-IN-PLACE RUBBER SURFACING	SURFACE AMERICA	COLOR B, TBD
	PLAYBOUND POURED-IN-PLACE RUBBER SURFACING	SURFACE AMERICA	COLOR C, TBD
	ASPHALT WALKWAY	NA	
	ASPHALT w/ COLORED AGGREGATE HAND SPREAD ON FINAL LIFT	NA	AGGREGATE COLOR MIXTURE TBD
	LANDSCAPE/RAIN GARDEN AREA	NA	SEE LANDSCAPE PLAN

SITE EQUIPMENT SCHEDULE

ITEMS	QTY.	PRODUCT NAME	MANUFACTURER	REMARKS
	1	THRIVE 450 OUTDOOR GYM. MODEL #14912	GAME TIME	COLOR TBD
	2	BELT SWING, MODEL #5287	GAME TIME	INCLUSIVE OF ALL HANGING HARDWARE AND CHAINS, COLOR TBD
	1	ZERO-G ADAPTABLE SWING, AGES 5-12, MODEL #5376	GAME TIME	INCLUSIVE OF ALL HANGING HARDWARE AND CHAINS, COLOR YELLOW
	1	EXPRESSION SWING, MODEL #5295	GAME TIME	INCLUSIVE OF ALL HANGING HARDWARE AND CHAINS, COLOR TBD
	1	EXPRESSION SWING TANDEM, MODEL #5297	GAME TIME	INCLUSIVE OF ALL HANGING HARDWARE AND CHAINS, COLOR TBD
S M L S	5	EURO-FLEX EPDM HALF BALLS	GORIC	SIZES VARY: SMALL 1'-1⅝" DIA, MEDIUM 1'-7⅝" DIA AND LARGE 2'-3⅝" DIA, SEE PLAN, COLORS TBD
	1	CUSTOM BUILT PLAY DECK	-	-
	2	PLAY NET	KEEPER GOALS	LENGTH VARIES, SEE PLANS
	4	NET POST	KEEPER GOALS	

SITE FURNITURE SCHEDULE

ITEMS	QTY	PRODUCT NAME	MANUFACTURER	DIMENSIONS AND MATERIALS	REMARKS
	1	NORTHERN SKYLINE 24X34 CLERESTORY RECTANGULAR STEEL SHELTER	POLIGON	24'X34', 7'-6" SIDEWALL CLEARANCE, 17'9" TO PEAK	COLUMNS, BASEPLATE COVERS, FINISHES, COLORS, AND FOOTINGS TO BE DETERMINED
ADA CLEAR SPACE ADA CLEAR SPACE	5	WINGRA TABLE	THOMAS STEELE	SEE DETAILS SHEET L4.1	INSTALL PER MANUFACTURER SPECIFICATIONS.
	4	WINGRA BACKED BENCH	THOMAS STEELE	SEE DETAILS SHEET L4.1	INSTALL PER MANUFACTURER SPECIFICATIONS.
	4	WINGRA BACKLESS BENCH	THOMAS STEELE	SEE DETAILS SHEET L4.1	INSTALL PER MANUFACTURER SPECIFICATIONS
	2	URBASTYLE GALET CONCRETE III BENCH, MODEL# ZB.GL.03	WAUSAU TILE	94" L X 52" W X 17" H	INSTALL PER MANUFACTURER SPECIFICATIONS.
	9	URBASTYLE GALET CONCRETE I BENCH, MODEL# ZB.GL.01	WAUSAU TILE	50" L X 50" W X 16" H	INSTALL PER MANUFACTURER SPECIFICATIONS.
	4	STATE STREET 32 GAL. LITTER RECEPTACLE WITH LARGE ELEVATED LID	THOMAS STEELE	SEE DETAILS SHEET L4.1	INSTALL PER MANUFACTURERS SPECIFICTIONS.
	4	ORION BIKE RACK, 2 BIKE, SURFACE MOUNT, MODEL# ORN-2-SF	MADRAX	SEE DETAILS SHEET L4.1	INSTALL PER MANUFACTURERS SPECIFICTIONS.

SYMBOL LEGEND

EXITING TREE TO REMAIN

NEW TREE (SEE LANDSCAPE PLAN)

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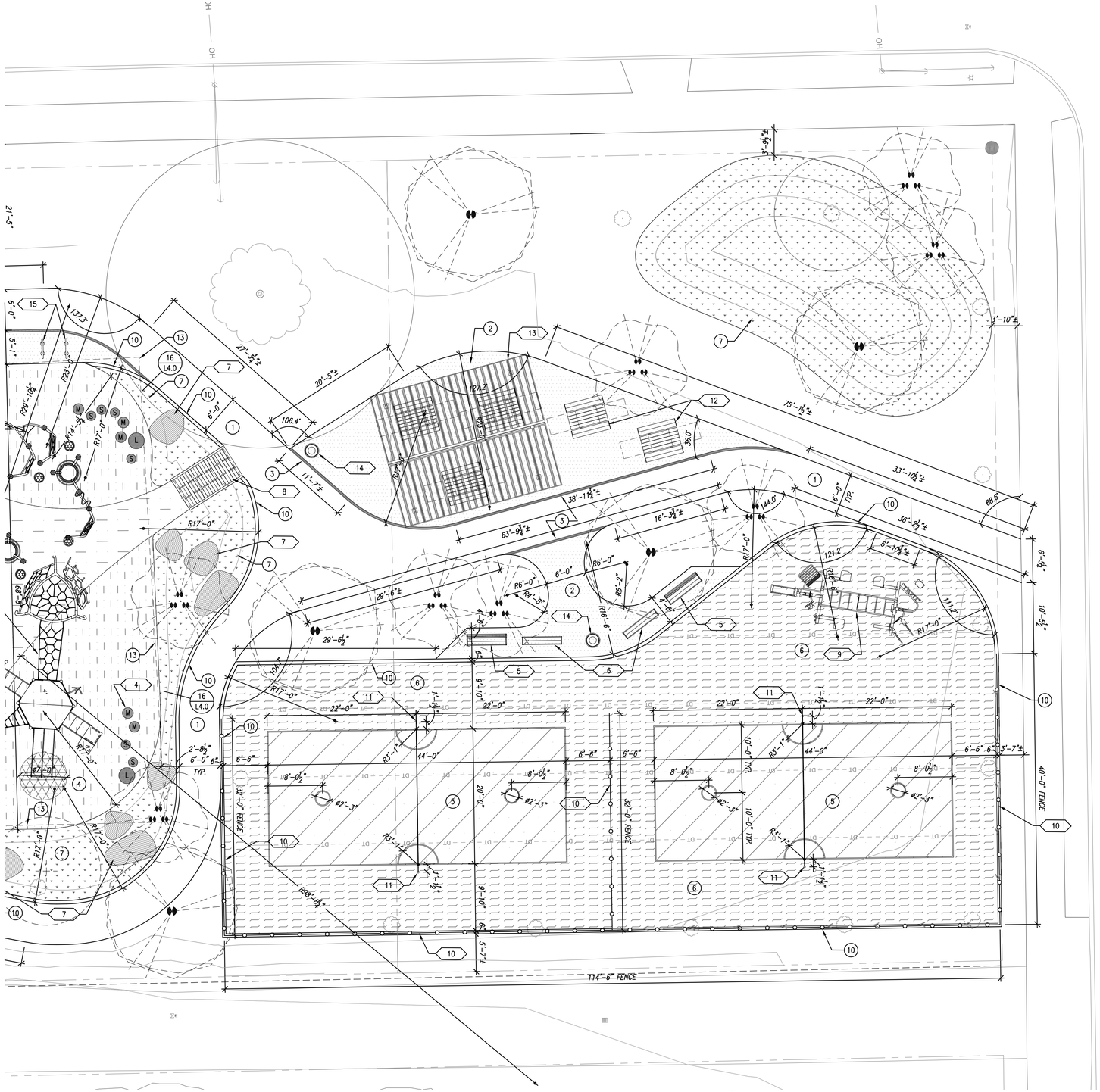
Sheet Name:
OVERALL SITE PLAN

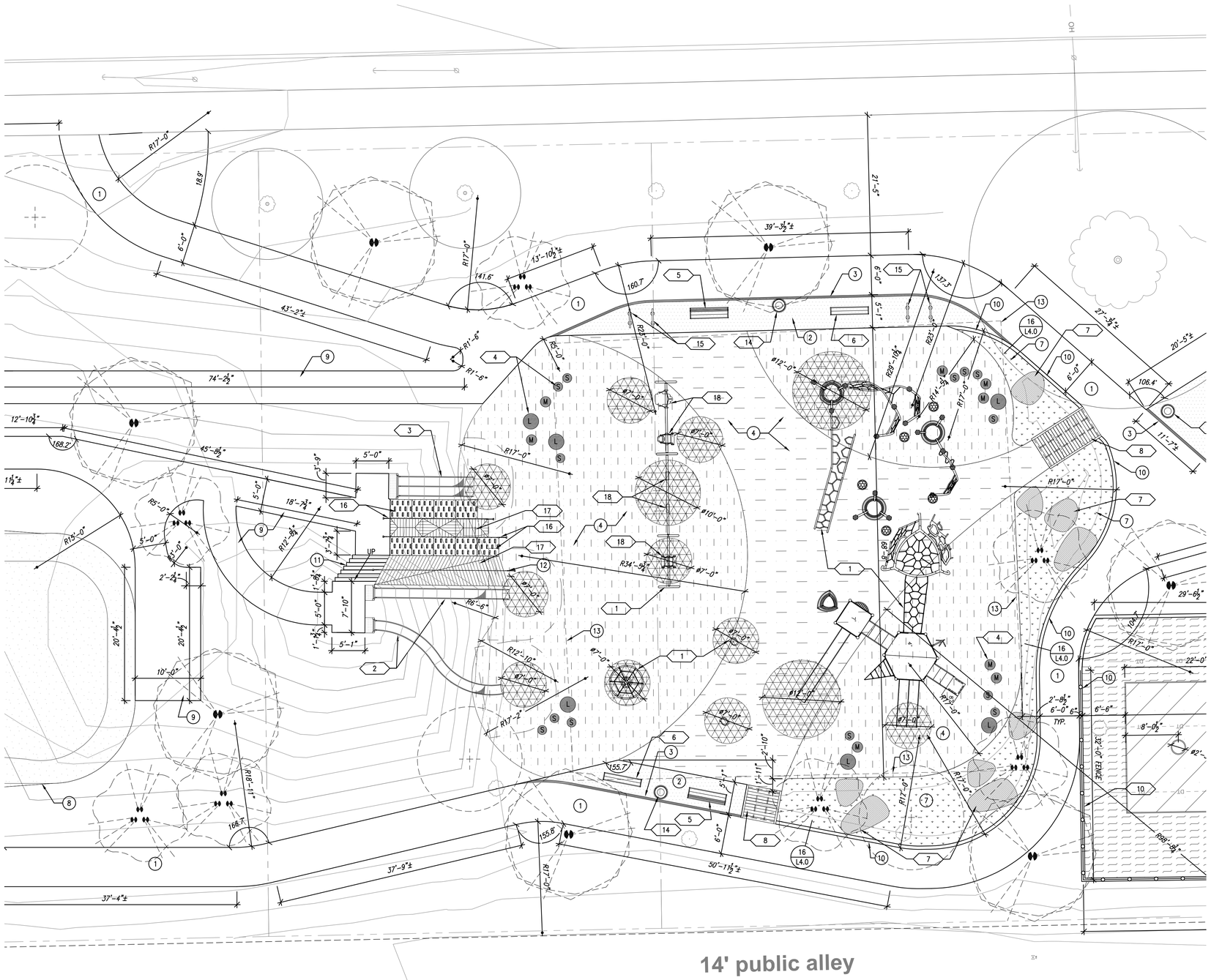
Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
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Oct 17, 2025 - 1:47pm
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HK
HK
21'-5"
6'-0"
5'-1"
137.5'
R23'-10"
R23'-10"
R14'-5"
R17'-0"
R17'-0"
R17'-0



1 PLAYGROUND AREA ENLARGED PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. IF CLARIFICATION OR ADDITIONAL DIMENSIONS ARE REQUIRED THE CONTRACTOR SHOULD VERIFY WITH QUORUM ARCHITECTS.
2. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND REPORT ANY DISCREPANCIES AND/OR UNUSUAL CONDITIONS TO QUORUM ARCHITECTS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. NO ALLOWANCES WILL BE MADE DUE TO THE CONTRACTORS UNFAMILIARITY WITH THE JOB SITE CONDITIONS.
3. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL OBTAIN A COPY OF ANY CITY, STATE OR FEDERAL CODES OR REGULATIONS WHICH HAVE JURISDICTION OVER THIS WORK AND AS CALLED OUT IN THESE PLANS. NO ALLOWANCES WILL BE MADE DUE TO THE CONTRACTOR'S UNFAMILIARITY WITH THESE REGULATIONS AND CODES.
4. ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES, LAWS, ORDINANCES, RULES AND REGULATIONS OF PUBLIC AUTHORITIES GOVERNING THE WORK.
5. ALL CONTRACTORS SHALL SECURE ALL REQUIRED APPROVALS, PERMITS, AND LICENSES AS IT APPLIES TO HIS/HER DISCIPLINE PRIOR TO ANY EXECUTION OF WORK. THIS PROJECT IS A CITY OF MILWAUKEE PROJECT, PERMIT FEES ARE ELIGIBLE TO BE WAIVED.
6. ALL WORK IS TO BE COMPLETED USING ACCEPTABLE CONSTRUCTION PRACTICES AND QUALITY MATERIALS. IF QUESTIONS ARISE AS TO THE SPECIFIC MATERIALS TO BE USED, THE CONTRACTOR MAY PRESENT SUBSTITUTIONS TO THE OWNER AND ARCHITECT FOR THEIR REVIEW AND APPROVAL. ANY SUBSTITUTIONS MUST BE APPROVED BY THE OWNER AND ARCHITECT.
7. EACH CONTRACTOR IS RESPONSIBLE FOR PATCHING AND REPAIRING ANY CONSTRUCTION OR DAMAGE THAT RESULTS FROM THEIR CONTRACTED PORTION OR TRADE. PROVIDE A "LIKE NEW FINISH" AS REQUIRED.
8. EACH CONTRACTOR SHALL PROVIDE ADEQUATE, NECESSARY AND REQUIRED BARRICADES, FENCES AND SAFETY PRECAUTIONS FOR THE GENERAL PUBLIC'S SAFETY NEAR THE SITE. GENERAL CONTRACTOR SHALL PROVIDE ANY AND ALL TEMPORARY BARRICADES AND DUST BARRIERS AS REQUESTED BY THE OWNER.
9. PER ADA 403.3, WALKING SURFACES MAY NOT EXCEED 1:20 FOR RUNNING SLOPE OR 1:48 FOR CROSS SLOPES.

GENERAL SITEWORK NOTES

1. SPOT ELEVATIONS BASED UPON SURVEY BY CIVIL ENGINEER. CONTRACTOR TO VERIFY SPOT ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION.
2. REFER TO SITE PLANS FOR PAVING TYPES AND LOCATIONS
3. REFER TO CIVIL PLANS FOR SURFACE AND UNDERGROUND UTILITY INFORMATION.
4. LAYOUT DIMENSIONS ARE FOR REFERENCE AND MAY BE APPROXIMATE DUE TO SITE CONDITIONS. FIELD VERIFY ALL DIMENSIONS.
5. LANDSCAPE ARCHITECT AND/OR ARCHITECT TO FIELD VERIFY ALL FURNITURE LOCATIONS PRIOR TO INSTALL.
6. CONTACT DIGGERS HOT LINE AND HAVE SITE MARKED PRIOR TO ANY DIGGING.

SYMBOL LEGEND

EXITING TREE TO REMAIN

NEW TREE (SEE LANDSCAPE PLAN)

CONSTRUCTION NOTES

1. ASPHALT WALKWAY
2. ASPHALT AREA w/ COLORED AGGREGATE
3. 4" WIDE PAINTED LINE
4. POURED IN PLACE SAFETY SURFACE
5. ARTIFICIAL TURF SPORT SURFACE – COLOR 1
6. ARTIFICIAL TURF SPORT SURFACE – COLOR 2
7. RAIN GARDEN, SEE LANDSCAPE PLAN
8. ASPHALT PUMP TRACK/PARK, SEE PUMP TRACK DRAWINGS
9. ASPHALT WALKING PATH UP NEWLY BUILT-UP HILI SEE CIVIL FOR GRADING AND HILL HEIGHTS
10. CONC. CURB, SEE CIVIL DETAILS AND TURF MFR SPECIFICATIONS FOR ARTIFICIAL TURF LOCATIONS.
11. WOOD OR COMPOSITE STEPS UP FROM LOWER SLIDE AREA TO UPPER SLIDE AREA. (8 RISERS / 7¼" EACH)
12. CLIMBING ROPE OR CABLE BETWEEN BOLLARDS, MATCH EMBANKMENT BLOCK CLIMBING ROPE.
13. LOCATION OF EXIST. P.I.P SURFACE.

FURNITURE NOTES

NOTE: SEE ALSO FURNITURE SCHEDULE AND DETAILS

1. EXISTING PLAY EQUIPMENT TO REMAIN
2. LARGE S.S. HILL SLIDE, SEE DETAILS
3. SMALL S.S. HILL SLIDE, SEE DETAILS
4. EPDM HALF BALLS (3 SIZES: SMALL, MEDIUM, AND LARGE), SEE DETAILS
5. BENCH, BACKED – SEE DETAILS
6. BENCH, BACKLESS – SEE DETAILS
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8. BOARDWALK BRIDGE – SEE DETAILS
9. FITNESS EQUIPMENT
10. AMERISTAR WIREWORKS PLUS STEEL MESH FENCE, 8'-0" HT, SEE DETAILS
11. MULTI-SPORT NET, STEEL POSTS, SEE DETAILS
12. PICNIC TABLE – SEE DETAILS
13. POLIGON SHADE STRUCTURE
14. TRASH RECEPTACLE , SEE DETAILS
15. BIKE RACK, 2 –BIKE, SEE DETAILS
16. EMBANKMENT BLOCK CLIMBER w/ CLIMBING ROPE BETWEEN BOLLARDS, SEE DETAILS (COLUMBIA CASCADE OR EQUAL)
17. CUSTOM PRESSURE TREATED WOOD OR COMPOSITE WARPED CLIMBING DECK
18. REPLACEMENT SWINGS

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31st AND GALENA PARK RENOVATION

1640 N. 31st Street
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Revisions:

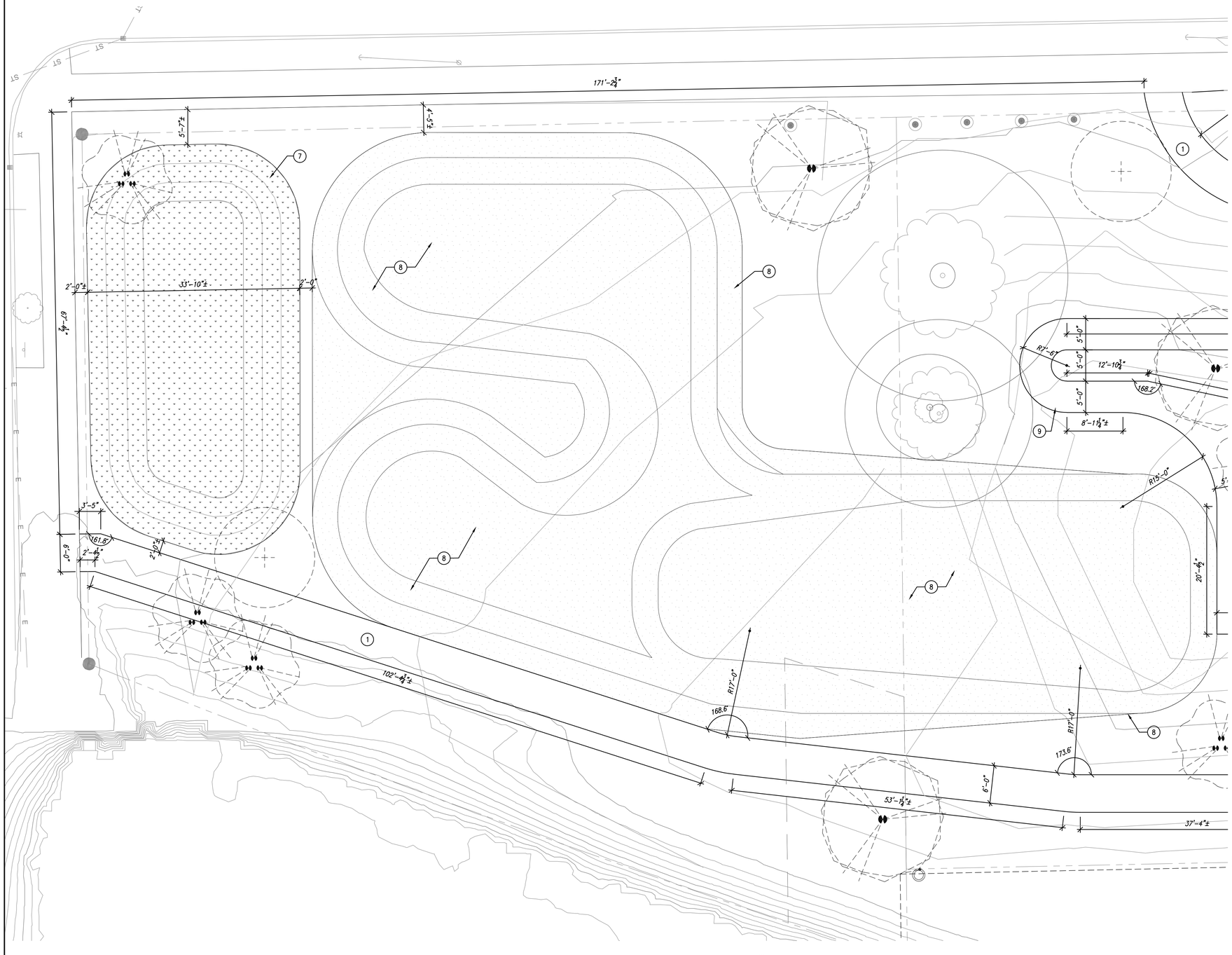
Sheet Name:
ENLARGED SITE PLAN - PLAYGROUND

Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
L1.2

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Oct 17, 2025 - 1:56pm
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1 PUMP TRACK AREA ENLARGED PLAN
SCALE: 1/8" = 1'-0"

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SYMBOL LEGEND

EXITING TREE TO REMAIN

NEW TREE (SEE LANDSCAPE PLAN)

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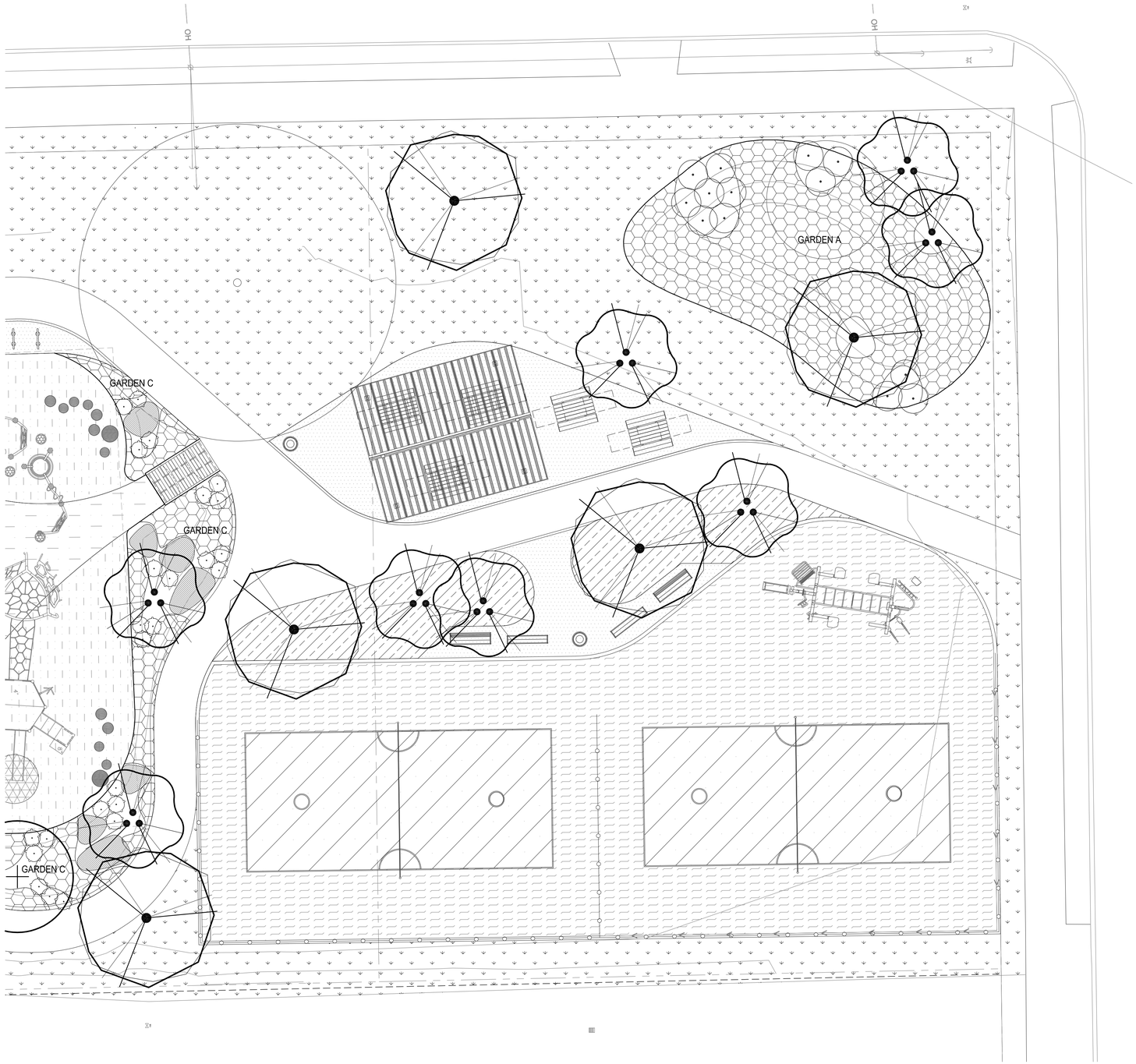
Revisions:

Sheet Name:
ENLARGED SITE PLAN - PUMP TRACK

Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
L1.3

Oct 17, 2025 - 2:00pm
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1 PLAY FIELD AREA LANDSCAPE PLAN
SCALE: 1/8" = 1'-0"

GENERAL LANDSCAPE NOTES

1. QUALITY ASSURANCE
   - A. PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS IN ANSI Z60.1.
   - B. MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.
2. DELIVERY, STORAGE, AND HANDLING
   - C. DELIVER BARE-ROOT STOCK PLANTS FRESHLY DUG. IMMEDIATELY AFTER DIGGING UP BARE-ROOT STOCK, PACK ROOT SYSTEM IN WET STRAW, HAY, OR OTHER SUITABLE MATERIAL TO KEEP ROOT SYSTEM MOIST UNTIL PLANTING.
   - D. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.
   - E. HANDLE PLANTING STOCK BY ROOT BALL.
   - F. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
3. PROJECT CONDITIONS
   - A. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
   - B. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.
     1. DECIDUOUS TREES AND SHRUBS: APRIL 1 TO SEPTEMBER 30
     2. PERENNIALS: MAY 15 TO SEPTEMBER 30
   - C. DO NOT INSTALL PLANT MATERIALS WHEN AMBIENT TEMPERATURES MAY DROP BELOW 35 DEGREES F OR RISE ABOVE 90 DEGREES F OR WHEN WIND VELOCITIES EXCEED 30 MPH.
   - D. COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS AND OTHER PLANTS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS OTHERWISE INDICATED.

PLANTING NOTES

1. ALL PLANTING SHALL COMPLY WITH STANDARDS AS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.0 1986. ANY PLANT SUBSTITUTION MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. ALL PLANTS MUST BE INSTALLED AS PER SIZES SHOWN ON PLAN.
2. PREPARATION
   - A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
   - B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
   - C. LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. STAKE LOCATIONS, OUTLINE AREAS, ADJUST LOCATIONS WHEN REQUESTED, AND OBTAIN ARCHITECT'S ACCEPTANCE OF LAYOUT BEFORE EXCAVATING OR PLANTING. MAKE MINOR ADJUSTMENTS AS REQUIRED.
   - D. LAY OUT PLANTS AT LOCATIONS DIRECTED BY ARCHITECT. STAKE LOCATIONS OF INDIVIDUAL TREES AND SHRUBS AND OUTLINE AREAS FOR MULTIPLE PLANTINGS.
3. PLANTING AREA ESTABLISHMENT
   - A. LOOSEN SUBGRADE OF PLANTING AREAS TO A MINIMUM DEPTH OF 12 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
     1. APPLY INSERT TYPE FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING.
     2. THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING OR SPREAD TOPSOIL, APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.
     3. SPREAD PLANTING SOIL TO A DEPTH OF 12 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
4. EXCAVATION FOR TREES AND SHRUBS
   - A. PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS APPROXIMATELY THREE TIME AS WIDE AS BALL DIAMETER WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING.
   - B. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY NOT BE USED AS PLANTING SOIL.
5. TREE AND SHRUB PLANTING
   - A. BEFORE PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1.
   - B. REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.
   - C. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 2 INCHES ABOVE ADJACENT FINISH GRADES AND USE PLANTING SOIL FOR BACKFILL.
   - D. PLANT ALL TREES SLIGHTLY HIGHER THAN FINISHED GRADE AT ROOT FLARE. BACK FILL HOLE WITH 2/3 EXISTING SOIL, 1/3 PEAT MOSS. AVOID ANY AIR POCKETS. DISCARD ANY GRAVEL, CLAY, OR STONES.
   - E. ALL SHRUBS TO BE POCKED PLANTED WITH A 50/50 MIX OF PLANT STARTER AND EXISTING SOIL.
   - F. SET CONTAINER-GROWN STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES AND USE PLANTING SOIL FOR BACKFILL.
   - G. PROVIDE 3'-4' DIAMETER MULCH RINGS AROUND ALL LAWN TREES
   - H. ALL SHRUB BEDS RECEIVE A 2-3" LAYER OF SHREDDED HARDWOOD BARK MULCH (OR BROWN ENVIROMULCH.) EDGE ALL BEDLINES WITH A 4" DEEP SHOVEL SPADED EDGE.
6. PERENNIAL, GRASS, VINE, GROUND COVER, AND ANNUAL PLANTINGS
   - A. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES PER PLANTING PLAN.
   - B. ALL AREAS TO RECEIVE A BLEND OF ORGANIC SOIL AMENDMENTS PRIOR TO PLANTING. ROTOTILL THE FOLLOWING MATERIALS INTO EXISTING TOPSOIL TO A DEPTH OF APPROX. 8". (NOTE: PROPORTIONS AND QUANTITIES MAY REQUIRE ADJUSTMENT DEPENDING ON CONDITION OF EXISTING SOIL.)
     6.1 PER EVERY 100 SQUARE FEET ADD:
     ONE 2 CU. FT. BALE OF PEAT MOSS
     2 LBS. OF 5-10-5 GARDEN FERTILIZER
     ONE CU. YARD OF COMPOSTED MANURE, PLANT STARTER OR OTHER COMPOSTED, ORGANIC MATERIAL
   - C. USE PLANTING SOIL FOR BACKFILL.
   - D. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.
7. LAWN INSTALLATION: SEE PLANTING SCHEDULE TO DETERMINE IF SOD OR SEED TO BE USED. CONTRACTOR TO FURNISH AND PREPARE TOPSOIL (MIN. 3") AND SEED BED (REMOVE ALL STONES 1" OR LARGER), APPLY STARTER FERTILIZER AND SEED UNIFORMLY AND PROVIDE A MULCH COVERING SUITABLE TO GERMINATE AND ESTABLISH TURF. EROSION CONTROL MESH TO BE USED IN SWALES AND STEEP GRADES WHERE APPLICABLE. METHODS OF INSTALLATION MAY VARY AT DISCRETION OF CONTRACTOR ON HIS/HER RESPONSIBILITY TO ESTABLISH AND GUARANTEE A SMOOTH, UNIFORM, QUALITY TURF. IF STRAW MULCH IS USED AS A COVERING, A TACKIFIER MAY BE NECESSARY TO AVOID WIND DAMAGE. RECOMMENDED SEED MIX: PROGREEN RENEW AVAILABLE AT PROGREEN PLUS, OR EQUIVALENT QUALITY SEED MIX WHICH WILL GERMINATE QUICKLY.
8. PLANTING AREA MULCHING
   - A. INSTALL WEED-CONTROL BARRIERS BEFORE MULCHING ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. COMPLETELY COVER AREA TO BE MULCHED, OVERLAPPING EDGES A MINIMUM OF 6 INCHES AND SECURE SEAMS WITH GALVANIZED PINS.
   - B. MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS INDICATED IN SECTION 2.5 KEEPING 4 INCHES FORM TRUNKS OR STEMS.
9. ALL PLANTING TO BE WATERED AT TIME OF PLANTING, THROUGHOUT CONSTRUCTION AND UPON COMPLETION OF PROJECT AS REQUIRED.

SYMBOL LEGEND

- EXITING TREE TO REMAIN
- NEW TREES SEE SCHEDULE
- SODDED AREA
- NO MOW FESCUE

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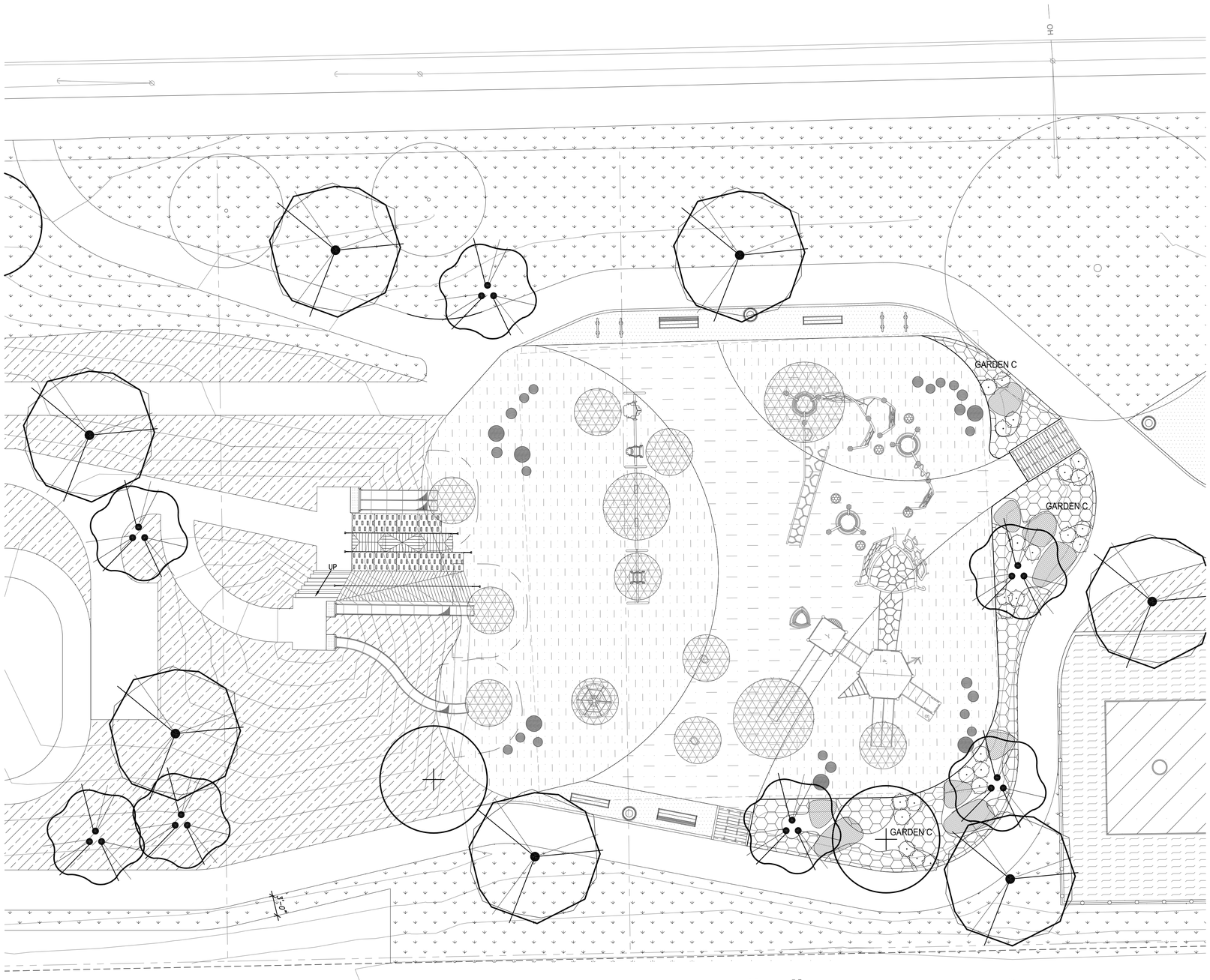
Revisions:

Sheet Name:
ENLARGED LANDSCAPE PLAN - PLAY FIELDS

Date: 10/17/2025
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1 PLAYGROUND AREA LANDSCAPE PLAN
SCALE: 1/8" = 1'-0"

GENERAL LANDSCAPE NOTES

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   - E. HANDLE PLANTING STOCK BY ROOT BALL.
   - F. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
3. PROJECT CONDITIONS
   - A. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
   - B. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.
     1. DECIDUOUS TREES AND SHRUBS: APRIL 1 TO SEPTEMBER 30
     2. PERENNIALS: MAY 15 TO SEPTEMBER 30
   - C. DO NOT INSTALL PLANT MATERIALS WHEN AMBIENT TEMPERATURES MAY DROP BELOW 35 DEGREES F OR RISE ABOVE 90 DEGREES F OR WHEN WIND VELOCITIES EXCEED 30 MPH.
   - D. COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS AND OTHER PLANTS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS OTHERWISE INDICATED.

PLANTING NOTES

1. ALL PLANTING SHALL COMPLY WITH STANDARDS AS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.0 1986. ANY PLANT SUBSTITUTION MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. ALL PLANTS MUST BE INSTALLED AS PER SIZES SHOWN ON PLAN.
2. PREPARATION
   - A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
   - B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
   - C. LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. STAKE LOCATIONS, OUTLINE AREAS, ADJUST LOCATIONS WHEN REQUESTED, AND OBTAIN ARCHITECT'S ACCEPTANCE OF LAYOUT BEFORE EXCAVATING OR PLANTING. MAKE MINOR ADJUSTMENTS AS REQUIRED.
   - D. LAY OUT PLANTS AT LOCATIONS DIRECTED BY ARCHITECT. STAKE LOCATIONS OF INDIVIDUAL TREES AND SHRUBS AND OUTLINE AREAS FOR MULTIPLE PLANTINGS.
3. PLANTING AREA ESTABLISHMENT
   - A. LOOSEN SUBGRADE OF PLANTING AREAS TO A MINIMUM DEPTH OF 12 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
     1. APPLY INSERT TYPE FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING.
     2. THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING OR SPREAD TOPSOIL, APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.
     3. SPREAD PLANTING SOIL TO A DEPTH OF 12 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
4. EXCAVATION FOR TREES AND SHRUBS
   - A. PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS APPROXIMATELY THREE TIME AS WIDE AS BALL DIAMETER WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING.
   - B. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY NOT BE USED AS PLANTING SOIL.
5. TREE AND SHRUB PLANTING
   - A. BEFORE PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1.
   - B. REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.
   - C. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 2 INCHES ABOVE ADJACENT FINISH GRADES AND USE PLANTING SOIL FOR BACKFILL.
   - D. PLANT ALL TREES SLIGHTLY HIGHER THAN FINISHED GRADE AT ROOT FLARE. BACK FILL HOLE WITH 2/3 EXISTING SOIL, 1/3 PEAT MOSS. AVOID ANY AIR POCKETS. DISCARD ANY GRAVEL, CLAY, OR STONES.
   - E. ALL SHRUBS TO BE POCKED PLANTED WITH A 50/50 MIX OF PLANT STARTER AND EXISTING SOIL.
   - F. SET CONTAINER-GROWN STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES AND USE PLANTING SOIL FOR BACKFILL.
   - G. PROVIDE 3'-4' DIAMETER MULCH RINGS AROUND ALL LAWN TREES
   - H. ALL SHRUB BEDS RECEIVE A 2-3" LAYER OF SHREDDED HARDWOOD BARK MULCH (OR BROWN ENVIROMULCH.) EDGE ALL BEDLINES WITH A 4" DEEP SHOVEL SPADED EDGE.
6. PERENNIAL, GRASS, VINE, GROUND COVER, AND ANNUAL PLANTINGS
   - A. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES PER PLANTING PLAN.
   - B. ALL AREAS TO RECEIVE A BLEND OF ORGANIC SOIL AMENDMENTS PRIOR TO PLANTING. ROTOTILL THE FOLLOWING MATERIALS INTO EXISTING TOPSOIL TO A DEPTH OF APPROX. 8". (NOTE: PROPORTIONS AND QUANTITIES MAY REQUIRE ADJUSTMENT DEPENDING ON CONDITION OF EXISTING SOIL.)
     6.1 PER EVERY 100 SQUARE FEET ADD:
     ONE 2 CU. FT. BALE OF PEAT MOSS
     2 LBS. OF 5-10-5 GARDEN FERTILIZER
     ONE CU. YARD OF COMPOSTED MANURE, PLANT STARTER OR OTHER COMPOSTED, ORGANIC MATERIAL
   - C. USE PLANTING SOIL FOR BACKFILL.
   - D. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.
7. LAWN INSTALLATION: SEE PLANTING SCHEDULE TO DETERMINE IF SOD OR SEED TO BE USED. CONTRACTOR TO FURNISH AND PREPARE TOPSOIL (MIN. 3") AND SEED BED (REMOVE ALL STONES 1" OR LARGER), APPLY STARTER FERTILIZER AND SEED UNIFORMLY AND PROVIDE A MULCH COVERING SUITABLE TO GERMINATE AND ESTABLISH TURF. EROSION CONTROL MESH TO BE USED IN SWALES AND STEEP GRADES WHERE APPLICABLE. METHODS OF INSTALLATION MAY VARY AT DISCRETION OF CONTRACTOR ON HIS/HER RESPONSIBILITY TO ESTABLISH AND GUARANTEE A SMOOTH, UNIFORM, QUALITY TURF. IF STRAW MULCH IS USED AS A COVERING, A TACKIFIER MAY BE NECESSARY TO AVOID WIND DAMAGE. RECOMMENDED SEED MIX: PROGREEN RENEW AVAILABLE AT PROGREEN PLUS, OR EQUIVALENT QUALITY SEED MIX WHICH WILL GERMINATE QUICKLY.
8. PLANTING AREA MULCHING
   - A. INSTALL WEED-CONTROL BARRIERS BEFORE MULCHING ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. COMPLETELY COVER AREA TO BE MULCHED, OVERLAPPING EDGES A MINIMUM OF 6 INCHES AND SECURE SEAMS WITH GALVANIZED PINS.
   - B. MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS INDICATED IN SECTION 2.5 KEEPING 4 INCHES FORM TRUNKS OR STEMS.
9. ALL PLANTING TO BE WATERED AT TIME OF PLANTING, THROUGHOUT CONSTRUCTION AND UPON COMPLETION OF PROJECT AS REQUIRED.

SYMBOL LEGEND

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Revisions:

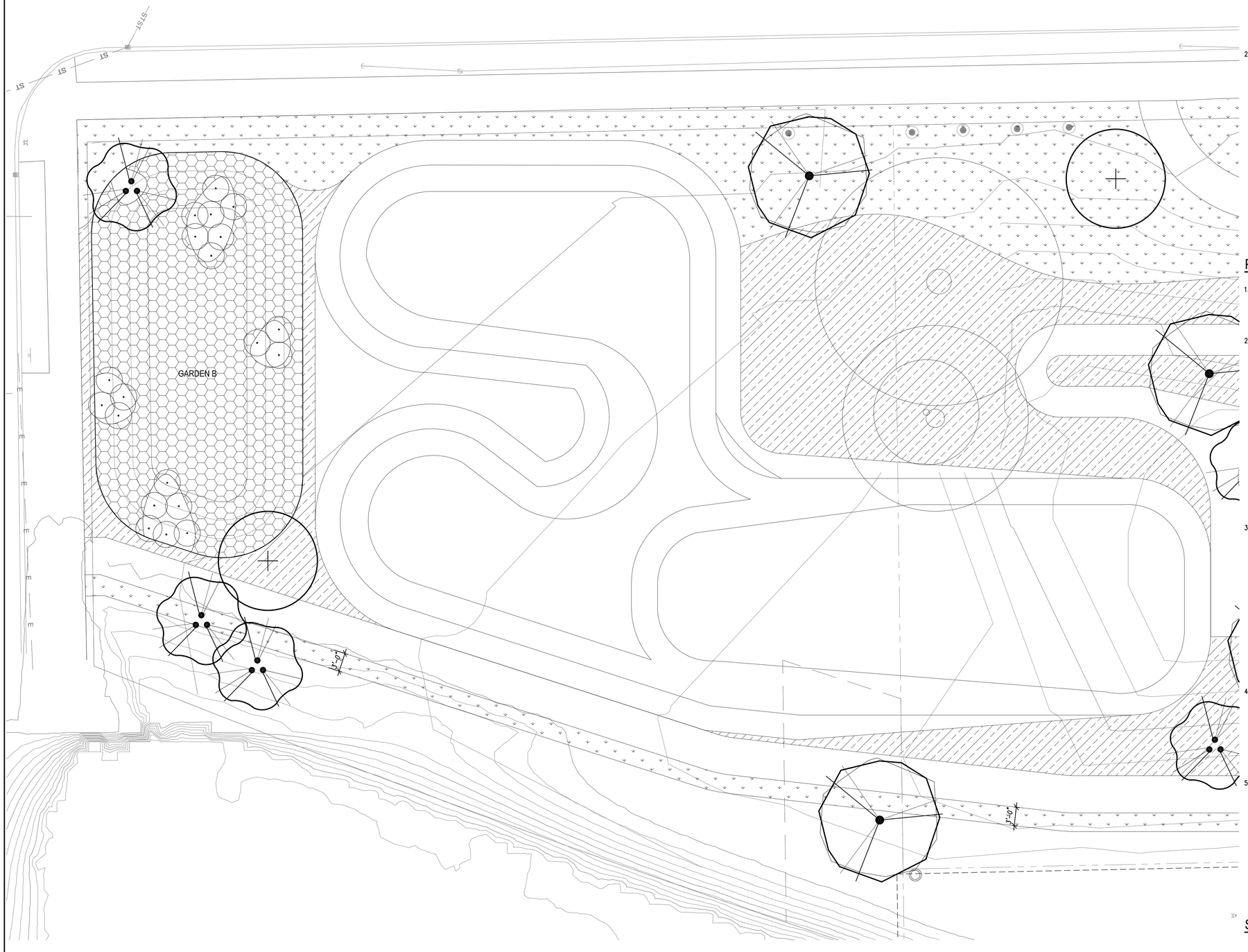
Sheet Name:
ENLARGED LANDSCAPE PLAN - PLAYGROUND

Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
L2.1

Oct 17, 2025 - 2:08pm
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1 PUMP TRACK AREA LANDSCAPE PLAN
SCALE: 1/8" = 1'-0"

GENERAL LANDSCAPE NOTES

1. QUALITY ASSURANCE

A. PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS IN ANSI Z60.1.

B. MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.

2. DELIVERY, STORAGE, AND HANDLING

C. DELIVER BARE-ROOT STOCK PLANTS FRESHLY DUG. IMMEDIATELY AFTER DIGGING UP BARE-ROOT STOCK, PACK ROOT SYSTEM IN WET STRAW, HAY, OR OTHER SUITABLE MATERIAL TO KEEP ROOT SYSTEM MOIST UNTIL PLANTING.

D. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.

E. HANDLE PLANTING STOCK BY ROOT BALL.

F. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.

3. PROJECT CONDITIONS

A. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.

B. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.

1. DECIDUOUS TREES AND SHRUBS: APRIL 1 TO SEPTEMBER 30

2. PERENNIALS: MAY 15 TO SEPTEMBER 30

C. DO NOT INSTALL PLANT MATERIALS WHEN AMBIENT TEMPERATURES MAY DROP BELOW 35 DEGREES F OR RISE ABOVE 90 DEGREES F OR WHEN WIND VELOCITIES EXCEED 30 MPH.

D. COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS AND OTHER PLANTS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS OTHERWISE INDICATED.

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A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.

B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

C. LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. STAKE LOCATIONS, OUTLINE AREAS, ADJUST LOCATIONS WHEN REQUESTED, AND OBTAIN ARCHITECT'S ACCEPTANCE OF LAYOUT BEFORE EXCAVATING OR PLANTING. MAKE MINOR ADJUSTMENTS AS REQUIRED.

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3. PLANTING AREA ESTABLISHMENT

A. LOOSEN SUBGRADE OF PLANTING AREAS TO A MINIMUM DEPTH OF 12 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.

1. APPLY INSERT TYPE FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING.

2. THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING OR SPREAD TOPSOIL, APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.

3. SPREAD PLANTING SOIL TO A DEPTH OF 12 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.

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F. SET CONTAINER-GROWN STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES AND USE PLANTING SOIL FOR BACKFILL.

G. PROVIDE 3'-4' DIAMETER MULCH RINGS AROUND ALL LAWN TREES

H. ALL SHRUB BEDS RECEIVE A 2-3" LAYER OF SHREDDED HARDWOOD BARK MULCH (OR BROWN ENVIROMULCH.) EDGE ALL BEDLINES WITH A 4" DEEP SHOVEL SPADED EDGE.

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A. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES PER PLANTING PLAN.

B. ALL AREAS TO RECEIVE A BLEND OF ORGANIC SOIL AMENDMENTS PRIOR TO PLANTING. ROTOTILL THE FOLLOWING MATERIALS INTO EXISTING TOPSOIL TO A DEPTH OF APPROX. 8". (NOTE: PROPORTIONS AND QUANTITIES MAY REQUIRE ADJUSTMENT DEPENDING ON CONDITION OF EXISTING SOIL.)

6.1 PER EVERY 100 SQUARE FEET ADD:
ONE 2 CU. FT. BALE OF PEAT MOSS
2 LBS. OF 5-10-5 GARDEN FERTILIZER
ONE CU. YARD OF COMPOSTED MANURE, PLANT STARTER OR OTHER COMPOSTED, ORGANIC MATERIAL

C. USE PLANTING SOIL FOR BACKFILL.

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B. MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS INDICATED IN SECTION 2.5 KEEPING 4 INCHES FORM TRUNKS OR STEMS.

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SYMBOL LEGEND

EXITING TREE TO REMAIN

NEW TREES SEE SCHEDULE

SODDED AREA

NO MOW FESCUE

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31st AND GALENA PARK RENOVATION

1640 N. 31st Street
Milwaukee, Wisconsin 53208

Revisions:

Sheet Name:
ENLARGED LANDSCAPE PLAN - PUMP TRACK

Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
L2.2

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Oct 17, 2025 - 2:09pm
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PLANT SCHEDULE

TREES	QTY	COMMON NAME	CAL		REMARKS
	12	CANOPY TREE	5.5" CAL MIN		SOME CANOPY TREES MAY BE SUBSTITUTED WITH UNDERSTORY TREES WITH APPROVAL, NOT TO EXCEED >35% SUB. RATE
	4	UNDERSTORY TREE	3.5" CAL		
	16	ORNAMENTAL TREE	3" CAL OR #25 MULTI-STEM		
SHRUBS	QTY	COMMON NAME	CONTAINER SIZE		REMARKS
	58	WOODY SHRUB	3 GAL - 5 GAL TYP.		FULL/DENSE SPECIMENS
GARDEN AREAS	QTY	COMMON NAME	CONTAINER SIZE	SPACING	REMARKS
	~1076 SF	RAIN GARDEN / BIOSWALE A	1 GAL. PERENNIALS AND GRASSES OR MAT	15" o.c.	~690 1 GALLON PLANTS OR ~120 SQUARE YARDS NATIVE VEGETATED MAT
	~1776 SF	RAIN GARDEN / BIOSWALE B	1 GAL. PERENNIALS AND GRASSES OR MAT	15" o.c.	~1140 1 GALLON PLANTS OR ~135 SQUARE YARDS NATIVE VEGETATED MAT
	~470 SF	GARDEN C	1 GAL. PERENNIALS AND GRASSES	15" o.c.	~310 1 GALLON PLANTS
GROUND COVERS	QTY	COMMON NAME			REMARKS
	~12,775 SF	SOD, FESCUE AND BLUEGRASS MIX, TYP			
	~6700 SF	NO-MOW FESCUE BLEND, TYP			EQUAL MIX HARD FESCUE, CHEWING FESCUE, CREEPING RED FESCUE, SHEEPS FESCUE

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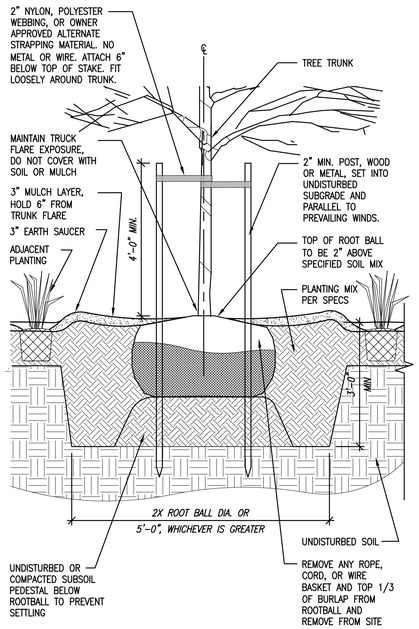
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LANDSCAPE SCHEDULES

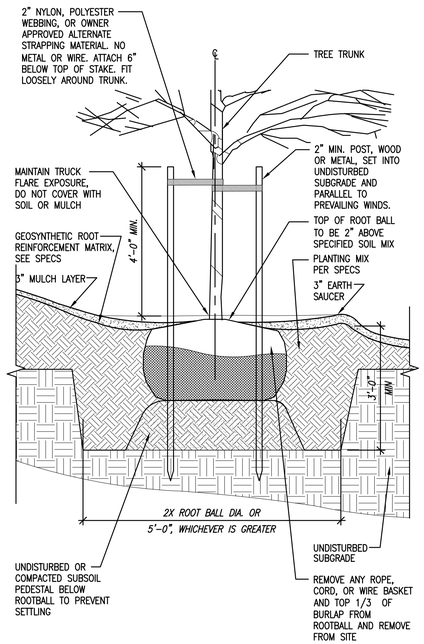
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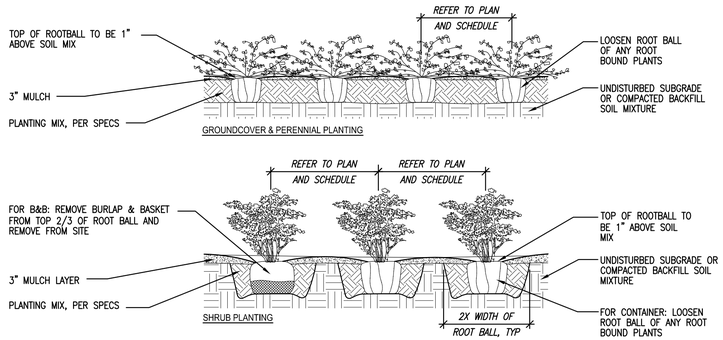
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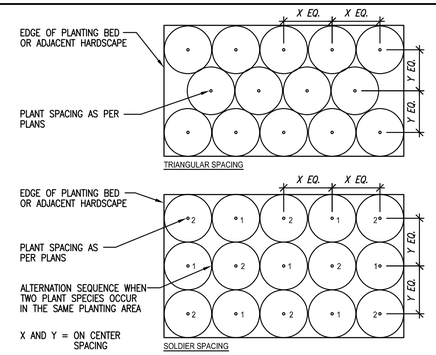
3 TREE PLANTING IN LANDSCAPE AREA
SCALE: 1/2" = 1'-0"



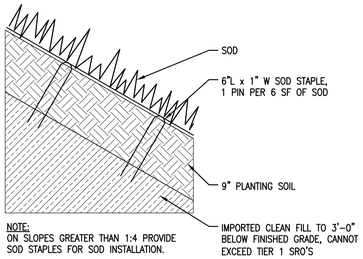
4 TREE PLANTING ON A SLOPE
SCALE: 1/2" = 1'-0"



1 SHRUB AND GROUNDCOVER PLANTING
SCALE: 1/2" = 1'-0"



2 SHRUB AND GROUNDCOVER SPACING
SCALE: 1/4" = 1'-0"

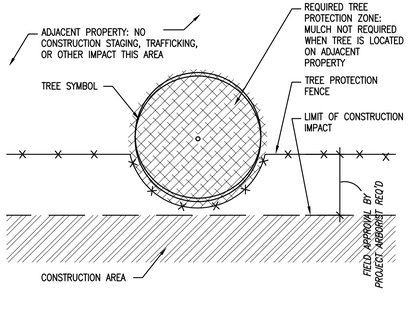


5 SOD ON SLOPE DETAIL
SCALE: NOT TO SCALE

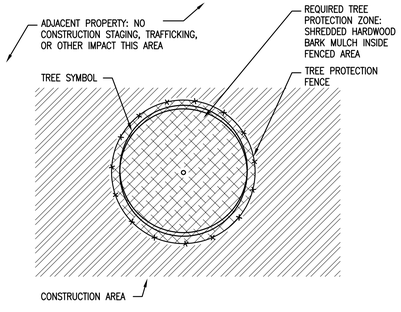
TREE PROTECTION	FLAG TAPE COLOR	RADIUS OF TREE PROTECTION FENCE FROM TRUNK	MULCH TREE PROTECTION ZONE
ADJACENT PROPERTY	NONE	NONE, TREE PROTECTED BY TREE PROTECTION FENCE AT PROJECT LIMITS	NO
TREE WITH TREE PROTECTION FENCE	GREEN	1' (30 cm) RADIUS FOR EACH 1" (2.54 cm) DBH*, OR AS APPROVED BY ARCHITECT OR PROJECT ARBORIST	YES, 3" DEPTH OF HARDWOOD BARK MULCH, NOT IN CONTACT WITH THE TRUNK
TREE WITH TREE PROTECTION FENCE, ROOTPRUNED	GREEN & YELLOW	1' (30 cm) RADIUS FOR EACH 1" (2.54 cm) DBH*, OR AS APPROVED BY ARCHITECT OR PROJECT ARBORIST	YES, 3" DEPTH OF HARDWOOD BARK MULCH, NOT IN CONTACT WITH THE TRUNK
TREE TO BE RELOCATED	BLUE	1' (30 cm) RADIUS FOR EACH 1" (2.54 cm) DBH*, OR AS APPROVED BY ARCHITECT OR PROJECT ARBORIST	YES, 3" DEPTH OF HARDWOOD BARK MULCH, NOT IN CONTACT WITH THE TRUNK
TREE TO BE REMOVED	RED	NONE, TREES MUST BE REMOVED PRIOR TO START OF CONSTRUCTION	NO

*DBH – DIAMETER AT BREAST HEIGHT MEASURED AT 4.5' FROM BASE OF TREE.

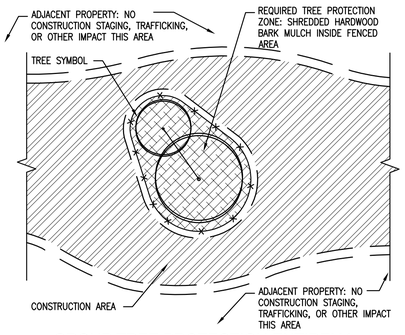
6 TREE PROTECTION TABLE AND NOTES
SCALE: NOT TO SCALE



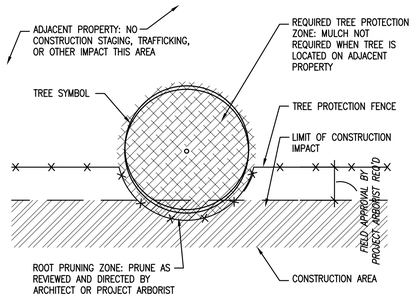
7 TREE PROTECTION INTERSECTS PROPERTY LIMIT; NO ROOT PRUNING REQ'D PLAN
SCALE: NOT TO SCALE



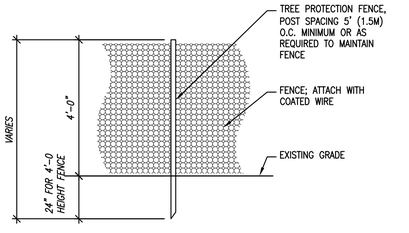
8 TREE PROTECTION ENTIRELY WITHIN CONSTRUCTION AREA PLAN
SCALE: NOT TO SCALE



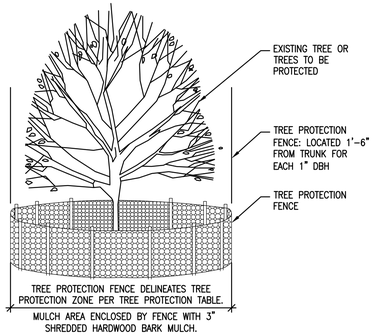
9 GROUP TREE PROTECTION ENTIRELY WITHIN CONSTRUCTION AREA PLAN
SCALE: NOT TO SCALE



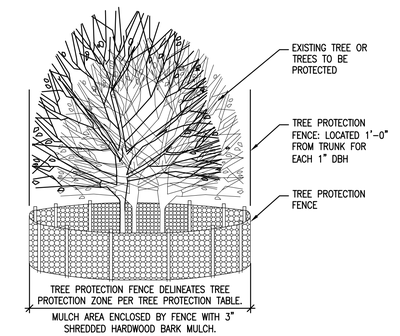
10 TREE PROTECTION INTERSECTS PROPERTY LIMIT; ROOT PRUNING REQ'D PLAN
SCALE: NOT TO SCALE



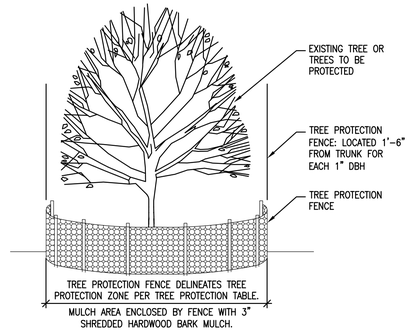
11 TREE PROTECTION FENCE
SCALE: NOT TO SCALE



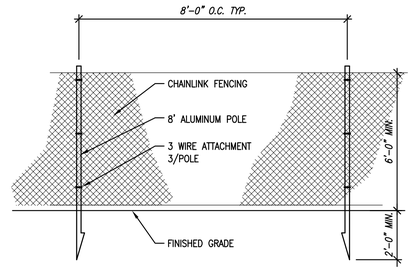
12 TREE PROTECTION ENTIRELY WITHIN CONSTRUCTION AREA ELEVATION
SCALE: NOT TO SCALE



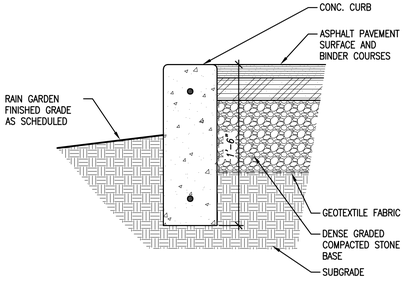
13 GROUP TREE PROTECTION ENTIRELY WITHIN CONSTRUCTION AREA ELEVATION
SCALE: NOT TO SCALE



14 TREE PROTECTION INTERSECTS PROPERTY LIMIT; NO ROOT PRUNING REQ'D ELEVATION
SCALE: NOT TO SCALE



15 6'-0" CONSTRUCTION FENCE ELEVATION
SCALE: NOT TO SCALE



16 TYPICAL ASPHALT WALK EDGE AT RAIN GARDENS
SCALE: 1 1/2" = 1'-0"

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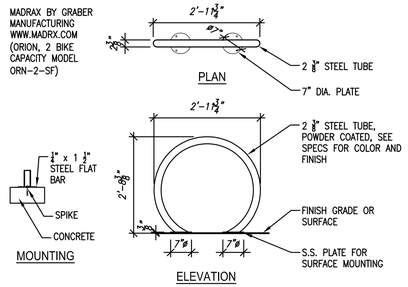
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LANDSCAPE AND PLAYGROUND DETAILS

Date: 10/17/2025
Drawn By: JC/CLR
Project No.: 19031.01

Sheet No.
L4.0

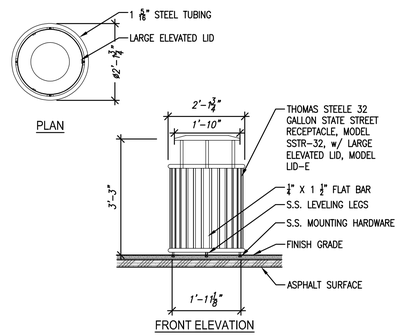
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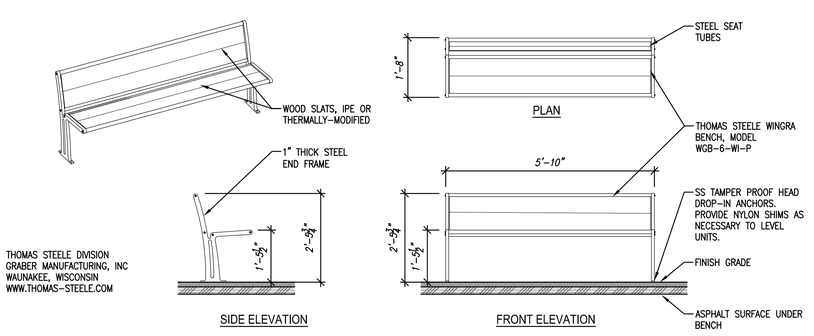


NOTE:
INSTALLATION TO BE COMPLETED IN ACCORDANCE w/ MFR'S SPECIFICATIONS.

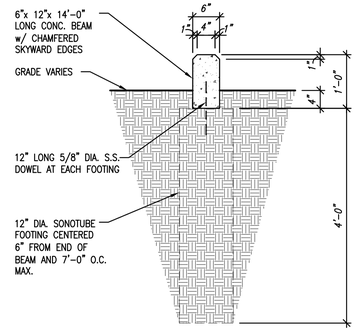
1 BIKE RACK - SURFACE MOUNTED
SCALE: 1/2" = 1'-0"



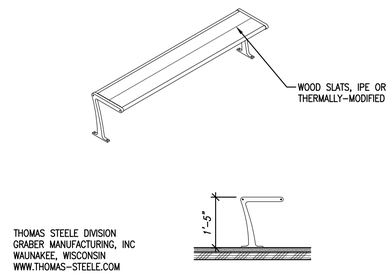
2 TRASH CAN DETAIL
SCALE: 1/2" = 1'-0"



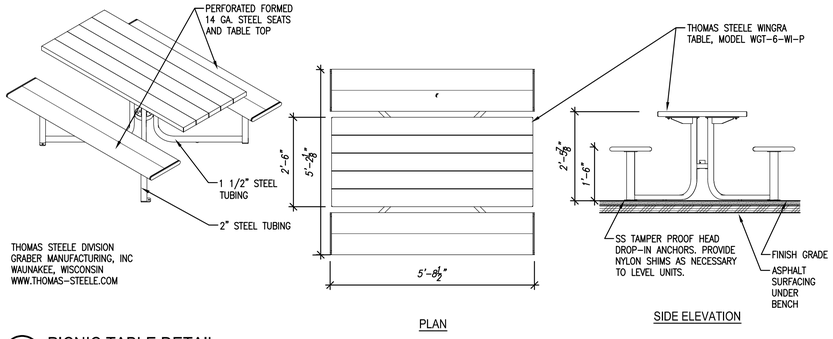
3 BENCH DETAIL
SCALE: 1/2" = 1'-0"



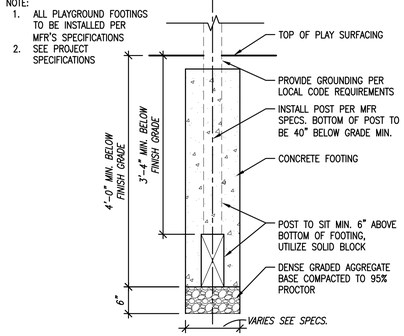
4 CONCRETE BEAM DETAIL
SCALE: 3/4" = 1'-0"



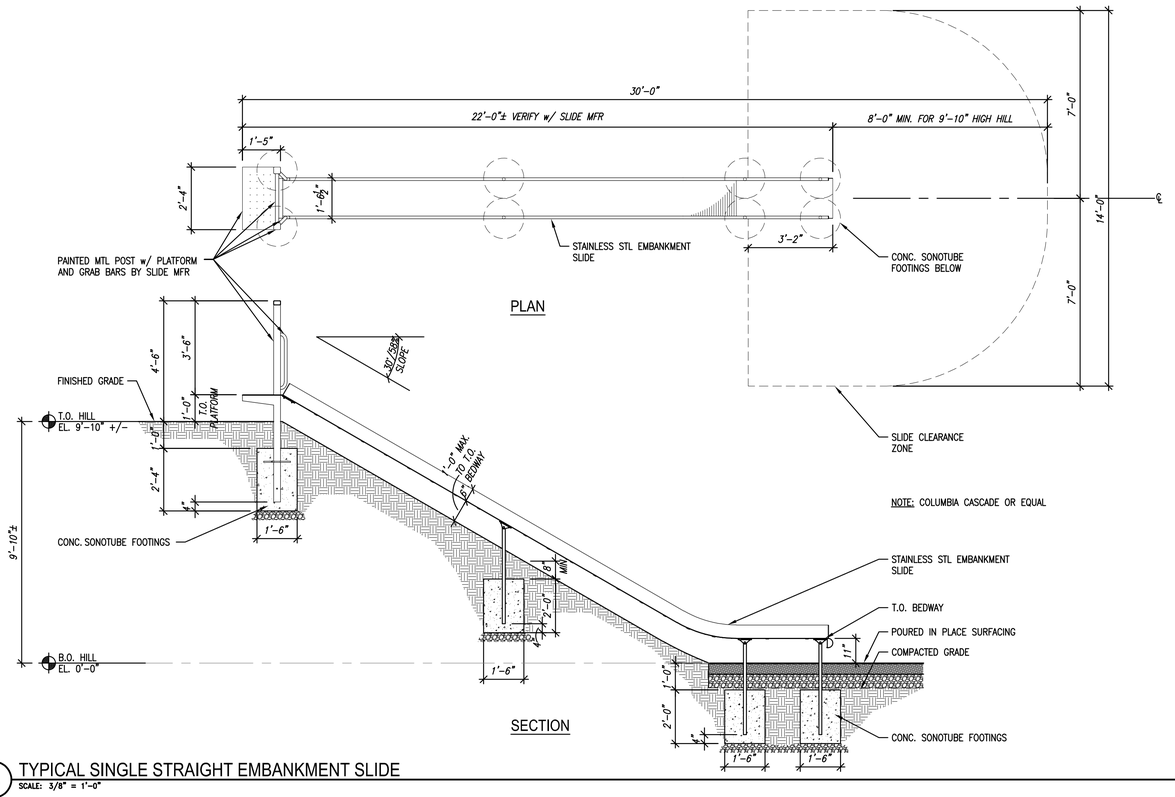
5 BENCH DETAIL - ARMLESS / BACKLESS
SCALE: 1/2" = 1'-0"



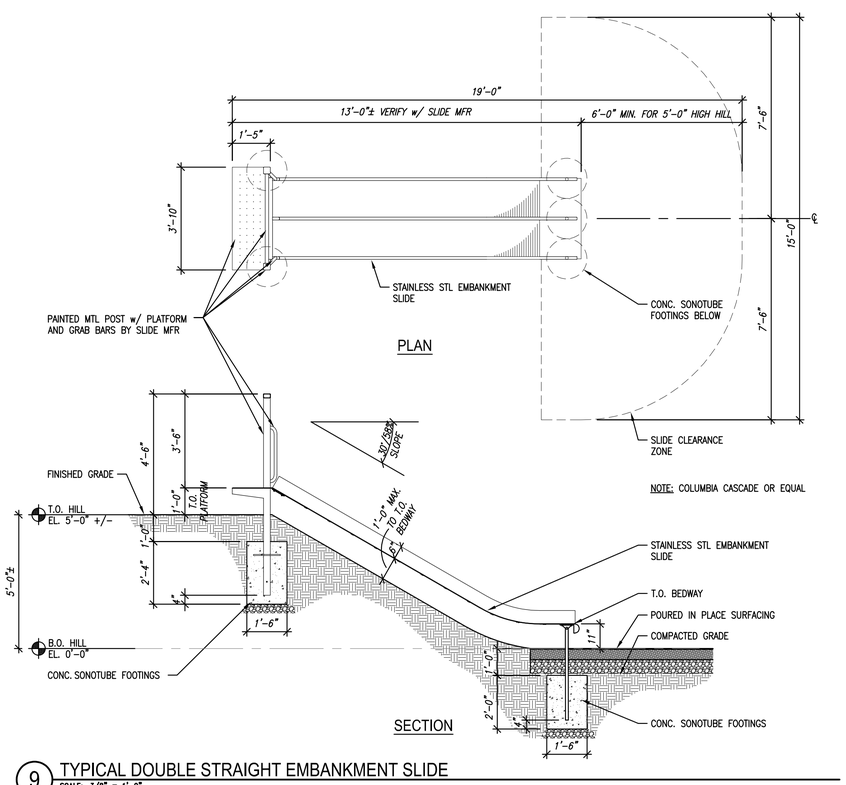
6 PICNIC TABLE DETAIL
SCALE: 1/2" = 1'-0"



7 TYPICAL PLAY EQUIPMENT FOOTING
SCALE: 3/4" = 1'-0"



8 TYPICAL SINGLE STRAIGHT EMBANKMENT SLIDE
SCALE: 3/8" = 1'-0"



9 TYPICAL DOUBLE STRAIGHT EMBANKMENT SLIDE
SCALE: 3/8" = 1'-0"

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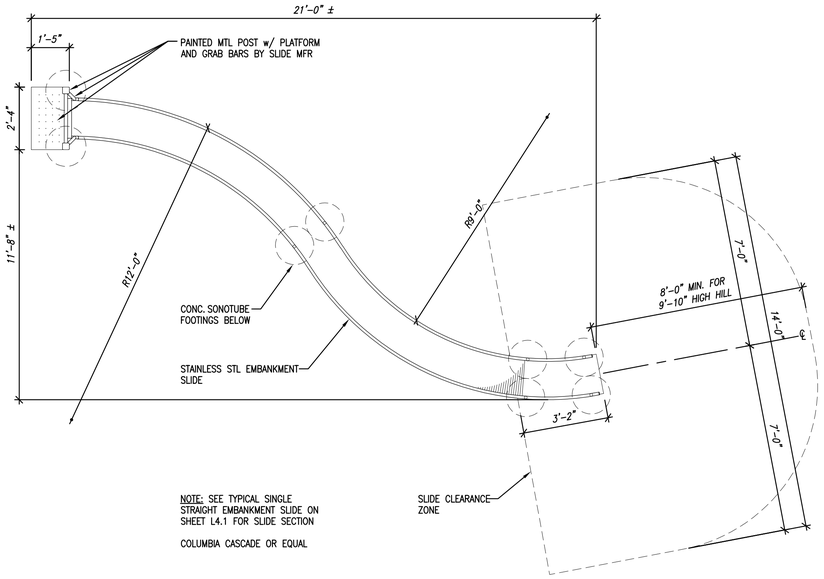
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Project No.: 19031.01

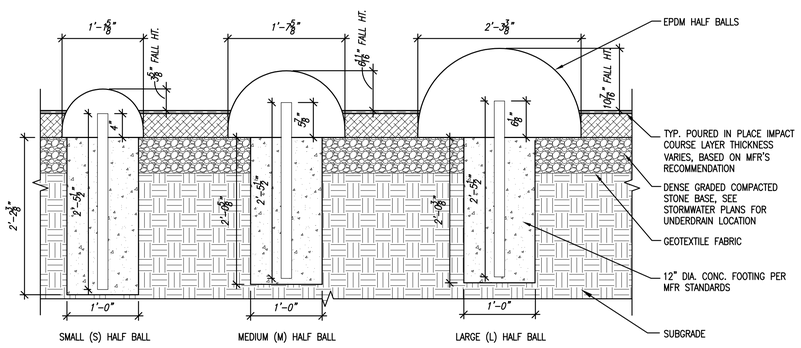
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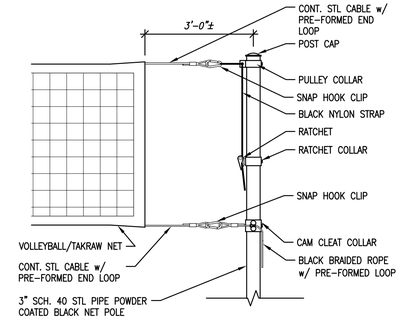
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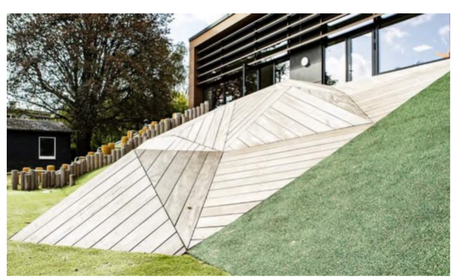
3 TYPICAL SINGLE CURVED EMBANKMENT SLIDE PLAN
SCALE: 3/8" = 1'-0"



1 EPDM BALLS AT P.I.P. PLAY SURFACING
SCALE: 1" = 1'-0"

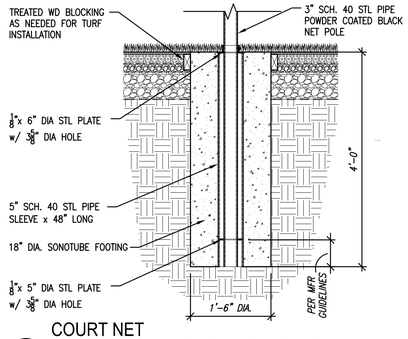


2 COURT NET CONNECTION
SCALE: 3/4" = 1'-0"

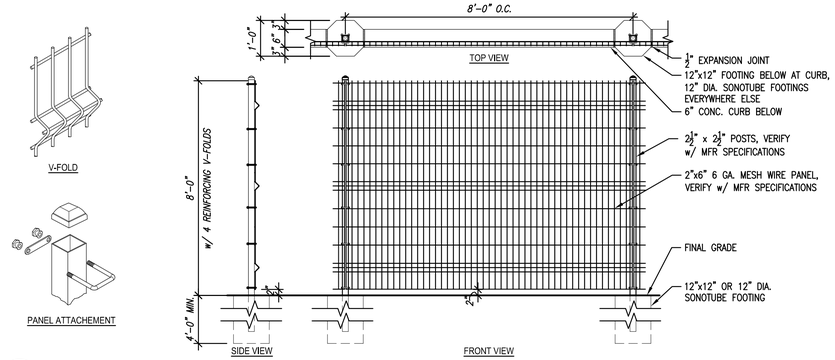




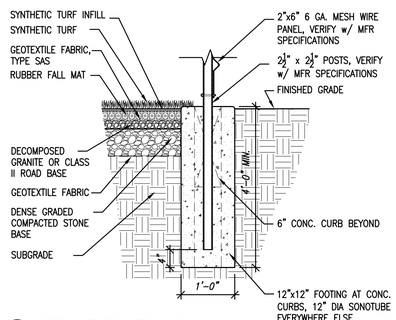
4 WARPED CLIMBING DECK EXAMPLES
SCALE: 1/8" = 1'-0"



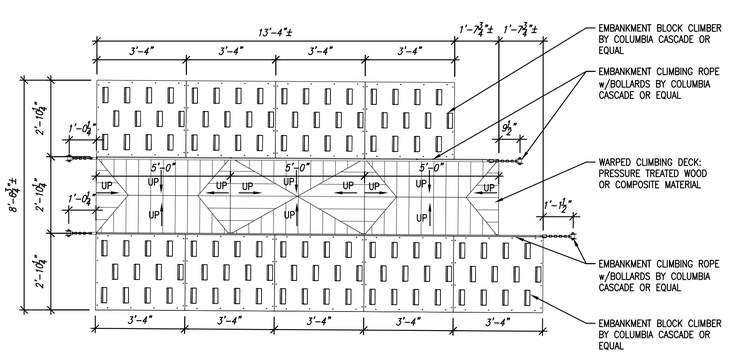
5 COURT NET ANCHORAGE AND FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"



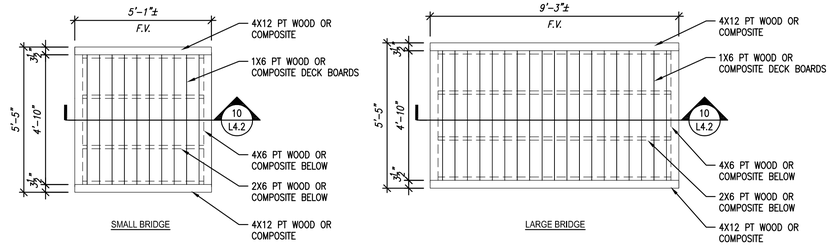
6 PARTIAL FENCE DETAIL AND COMPONENTS
SCALE: 1/2" = 1'-0"



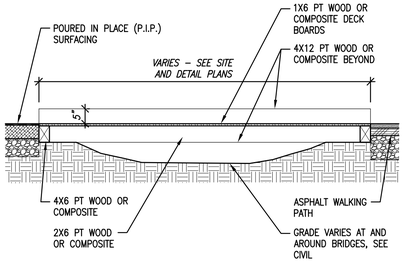
7 FENCE FOOTINGS
SCALE: 3/4" = 1'-0"



8 EMBANKMENT BLOCK CLIMBER AND WARPED DECK PLAN
SCALE: 3/8" = 1'-0"



9 BOARDWALK BRIDGE TYPE PLANS
SCALE: 3/8" = 1'-0"



10 TYPICAL BOARDWALK BRIDGE SECTION
SCALE: 1/2" = 1'-0"

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