

CONSTRUCTION PLANS FOR: MACGREGOR PARK

WASHINGTON TOWNSHIP PARKS & RECREATION

August 30th, 2012



VICINITY MAP



LOCATION MAP

PROJECT INFORMATION

COUNTY: Hamilton
 TOWNSHIP: Washington
 SECTION: 18
 TOWNSHIP: 19N
 RANGE: 4E

LOCATION: Northeast corner of the intersection of SR38 and US31. Entry off MacGregor Park Drive.

PROPERTY ACRAGE: 9.04 AC
 DISTURBANCE AREA: 1.82 AC

PARKING
 TYPICAL SIZE: 20' x 10'
 PROPOSED PARKING SPACES: 19
 PROPOSED ADA SPACES: 2
 TOTAL SPACES: 21

LEGAL DESCRIPTION

EXHIBIT A

Part of the West half of Section 18, Township 19 North, Range 4 East, Hamilton County, Indiana, being more particularly described as follows: Beginning at the intersection of the West line (established as a straight line between the Northwest and Southwest corners) of said section with the centerline of State Road 38 as it now exists; thence South 57 degrees 06 minutes 34 seconds East, on and along said centerline, 112.32 feet to the P.C. of a curve to the left, said curve having a radius of 8,448.91 feet, a degree of curve of 0 degrees 40 minutes, 41 seconds and delta angle of 3 degrees 28 minutes 45 seconds; thence Southeasterly, on and along said curve and centerline of road, 513.04 feet to the P.T. of said curve; thence South 60 degrees 35 minutes 19 seconds East, on and along said centerline, 751.24 feet; thence leaving said centerline North 66 degrees 36 minutes 55 seconds East 577.07 feet measured (577.7 feet original deed) to a found iron pipe; thence North 18 degrees 51 minutes 33 seconds East 359.19 feet measured (359.5 feet deed) to a found iron pipe on the North top of bank of Lindley ditch; thence Northwesterly, along the meanderings of said north ditch; thence North 60 degrees 14 minutes 34 seconds East, on and along said west line, 140.90 feet to the point of beginning. Containing 18.99 acres, more or less. Subject to right of way for U.S.R. 31 and S.R. 38 off the West and Southwest sides, respectively, as shown on the place. Subject, also, to all other legal easements and rights of way of record.

Except:

A part of the West half of the Southwest Quarter of Section 18, Township 19 North, Range 4 East, Hamilton County, Indiana, described as follows: Commencing at a point in the center of the right of way of State Highway No. 38, 2002.0 feet north of the southwest corner of the East Half of the Southwest Quarter of Section 18, Township 19 North, Range 4 East in said county and state thence deflecting to the right 119 degrees and 26 minutes 22.2 feet (the foregoing portion of this description beginning with the words "at a point" in quoted from Instrument No. 890222); thence North 65 degrees 59 minutes 47 seconds East, along the northwestern line of the owners' land, 46.10 feet to the northeastern boundary of said S.R. 38 and the point of beginning of this description; thence North 60 degrees 50 minutes 37 seconds West, along the northeastern boundary of said S.R. 38, 131.00 feet; thence North 60 degrees 54 minutes 41 seconds West, along said boundary, -500.01 feet; thence North 58 degrees 53 minutes 00 seconds West, along said boundary, 148.07 feet; thence North 60 degrees 04 minutes 06 seconds West, along said boundary, 256.20 feet; thence North 58 degrees 23 minutes 16 seconds West, along said boundary, 299.71 feet; thence South 60 degrees 53 minutes 31 seconds East 302.23 feet; thence South 60 degrees 36 minutes 05 seconds East 299.71 feet; thence South 63 degrees 29 minutes 15 seconds East 299.71 feet; thence South 60 degrees 37 minutes 30 seconds East 400.50 feet; thence South 60 degrees 37 minutes 30 seconds East 255.53 feet to the southeastern line of the owners' land; thence South 65 degrees 59 minutes 47 seconds West, along said southeastern line, 41.12 feet to the point of beginning and said southeastern line, 41.12 feet to the point of beginning and description which are not quoted from previous instruments are based on the bearing system for Indiana Department of Transportation Project 5T-5229 (D).

SHEET INDEX

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 C106 SWPPP Information
 C107 SWPPP Information
 C401 Erosion Control Details
 C402 Storm Sewer Details
 C403 Storm Sewer Details

PROJECT TEAM

OWNER :
 Washington Township Parks & Recreation
 1549 E Greyhound Pass
 Carmel, IN 46032

LANDSCAPE ARCHITECT:

Mader Design LLC
 8880 S. Franklin Rd
 Indianapolis IN 46259

CIVIL ENGINEER:

A&F Engineering
 8365 Keystone Crossing, Suite 201
 Indianapolis IN 46240

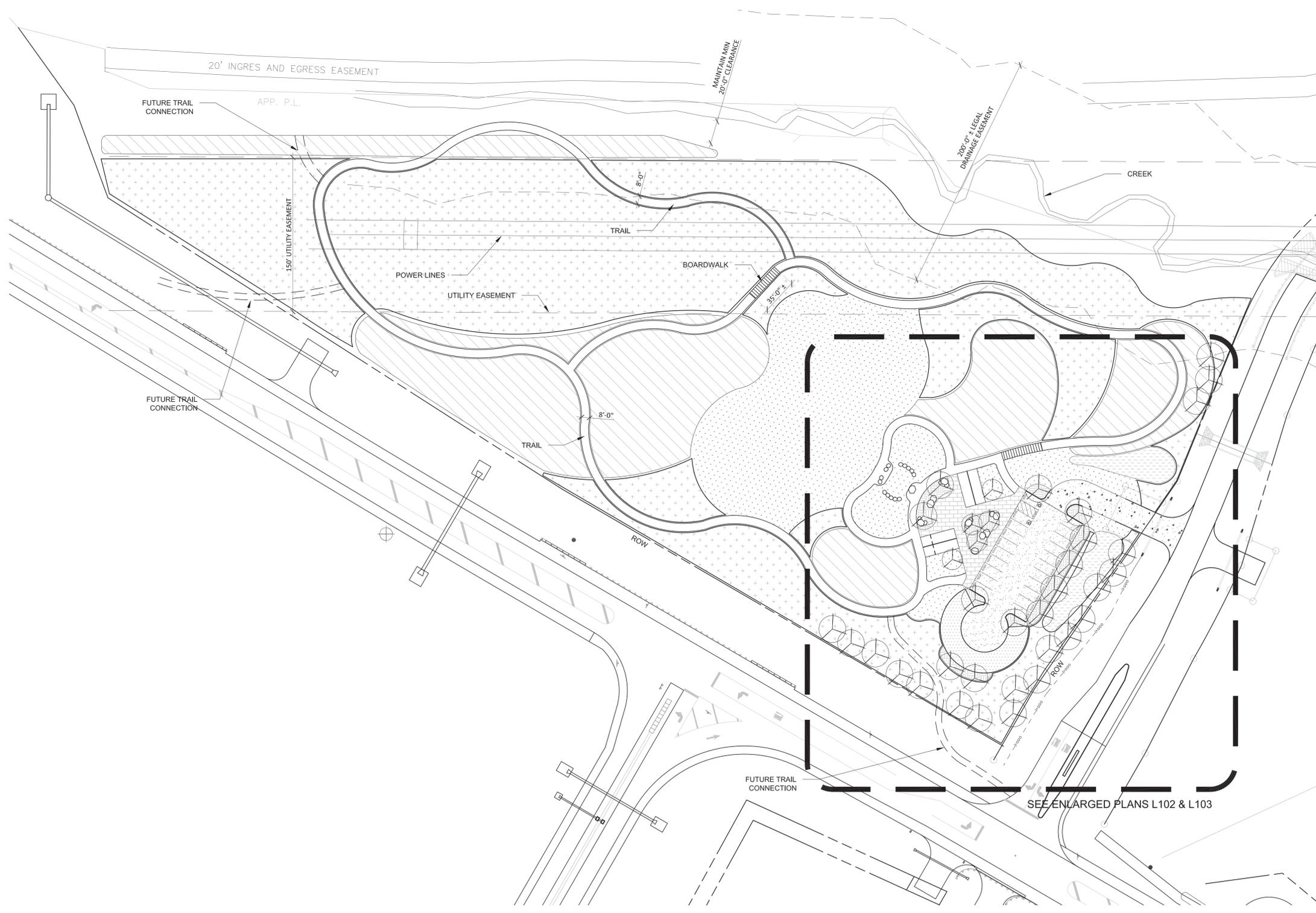
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date: August 30th, 2012
 job #:
 drawn by: mt
 checked by: jg

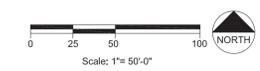
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REGULATORY REVIEW SET - NOT FOR CONSTRUCTION



- GENERAL NOTES**
- ALL TOPOGRAPHIC AND SURVEY INFORMATION HAS BEEN OBTAINED FROM HAMILTON COUNTY GIS AND CONSTRUCTION DRAWINGS FOR INDOT WORK ON MACGREGOR PARK DRIVE AND STATE ROAD 38. CONTRACTOR SHALL VERIFY FIELD INFORMATION AS REQUIRED TO COMPLETE CONSTRUCTION.
 - RADII SHALL BE 5'-0" ON PARKING LOTS AND CONCRETE WALKS UNLESS OTHERWISE NOTED OR WHERE DRAWING APPEARS SIGNIFICANTLY DIFFERENT.
 - LOCATE AND VERIFY ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO STARTING WORK.
 - STAKE AND CONFIRM ALL DIMENSIONS AND GRADES PRIOR TO STARTING WORK. REPORT ANY DISCREPANCIES TO LANDSCAPE ARCHITECT IMMEDIATELY. DRAWINGS SHALL NOT BE SCALED FOR LAYOUT PURPOSES.
 - WHERE NEW PAVEMENT SHOWN TO MEET EXISTING, SAW CUT EXISTING PAVEMENT VERTICALLY, REMOVE DELETERIOUS MATERIAL, AND PREPARE FOR NEW WORK.
 - ALL DIMENSIONS IN CURBED AREAS SHALL BE TO FACE OF CURB. ALL DIMENSIONS IN AREAS WITHOUT CURBING SHALL BE TO EDGE OF PAVEMENT. ALL DIMENSIONS AT INTEGRAL CURB AND WALK SHALL BE TO FACE OF CURB. ALL DIMENSIONS FROM BUILDING SHALL BE FROM FACE OF BUILDING.
 - ALL DIMENSIONS ARE PARALLEL AND PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES UNLESS OTHERWISE NOTED
 - ALL RADII INDICATED SHALL BE FORMED AS CIRCULAR ARCS. ALL CURBS AND ARCS SHALL INTERSECT OTHER CURBS AND LINES AT POINTS OF TANGENCY TO FORM SMOOTH TRANSITIONS UNLESS CLEARLY SHOWN OTHERWISE.
 - TRAILS SHALL BE LAID OUT IN THE FIELD WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. LAYOUT SHOWN ON PLANS IS APPROXIMATE AND IS MEANT TO PROVIDE DESIGN INTENT FOR TRAIL LAYOUT. IN WOODED AREAS, CARE SHALL BE TAKEN TO ALIGN THE TRAIL TO AVOID EXISTING TREES AND SIGNIFICANT VEGETATION, HOWEVER SOME VEGETATION REMOVAL MAY BE REQUIRED. ALL REMOVED VEGETATION MAY BE CHIPPED AND SPREAD ON SITE.
 - TRAILS SHALL BE BUILT AT EXISTING GRADE, EXCEPT WHERE INDICATED. ALL TRAILS SHALL BE CONSTRUCTED WITH A MAXIMUM OF 5% LONGITUDINAL SLOPE AND MAXIMUM 2% CROSS SLOPE. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS IN THE FIELD TO MAINTAIN THESE LIMITS. IF EXTREME CONDITIONS ARE ENCOUNTERED IN THE FIELD, CONTACT LANDSCAPE ARCHITECT IMMEDIATELY.
 - SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT CALLED OUT TO BE PAVED OR PLANTED WITH OTHER PLANT MATERIAL.
 - PLANTING BEDS SHALL RECEIVE SPADE EDGE UNLESS OTHERWISE NOTED.
 - PROVIDE PLANT MATERIAL IN QUANTITIES AND SPECIES SHOWN ON ALL PLANS.
 - PROVIDE 3" SHREDDED HARDWOOD MULCH IN ALL PLANTING BEDS AND IN 6' DIA AROUND ALL TREES UNLESS OTHERWISE NOTED. INCORPORATE SHRUBS INTO MULCH BEDS CONNECTING TO ADJACENT PAVEMENT. ADDITIONAL MULCH AREA SHALL INCORPORATE TREES AND OPEN AREAS CAN BE USED FOR OWNER PLANTING OF NATIVE PERENNIALS.
 - PROVIDE PRE-EMERGENT HERBICIDE ON PLANTING BEDS PRIOR TO INSTALLATION OF MULCH AT RATES PER MANUFACTURER'S DIRECTIONS.
 - ACCESSIBLE RAMPS AND SIGNAGE SHALL BE IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, CITY AND LOCAL CODES (WHICHEVER HAS JURISDICTION). SEE SITE PLANS FOR LOCATIONS AND SITE DETAILS FOR SPECIFICATIONS.
 - THERE SHALL BE NO WORK, MACHINERY, STOCK PILING OR ANY OTHER KIND OF DISTURBANCE WITHIN 20'-0" FROM TOP OF CREEK BANK

- LEGEND**
- REFORESTATION AREA - CONTRACTOR TO PREPARE AND INSTALL NATIVE GRASS SEEDING. ALL TREES SHALL BE BY OWNER.
 - PRAIRIE AREA - CONTRACTOR SHALL PREPARE AND COMPLETE SITE PREPARATION AND PRAIRIE SEEDING.
 - TREES - SEE PLANTING PLAN
 - LAWN - SEE PLANTING PLAN
 - BIOSWALE - SEE PLANTING PLAN
 - PLANTING BED - SEE PLANTING PLAN
 - REINFORCED TURF - SEE SITE LAYOUT PLAN
 - CONCRETE DRIVE - SEE SITE LAYOUT PLAN
 - PERVIOUS CONCRETE - SEE SITE LAYOUT PLAN
 - PERMEABLE PAVERS - SEE SITE LAYOUT PLAN
 - LOW BOARDWALK OVER NATURAL DRAINAGE SWALE. EXTENTS TO BE LOCATED ON SITE WITH LANDSCAPE ARCHITECT.



REGULATORY REVIEW SET - NOT FOR CONSTRUCTION

Landscaping architect:
mader design
 Integrating people and nature
 8880 S. Franklin Rd., Indianapolis, IN 46259
 P: 317.759.8617 F: 317.862.5921
 www.maderdesignllc.com

consultant:
 Washington Township
 Parks & Recreation
 1549 E. Greyhound Pass
 Carmel, IN 46032



owner:
Washington Township Parks & Recreation
MacGregor Park
 US 31 & State Road 38, Westfield, Indiana
Overall Site Layout and Planting Plan

revision:	date:	description:

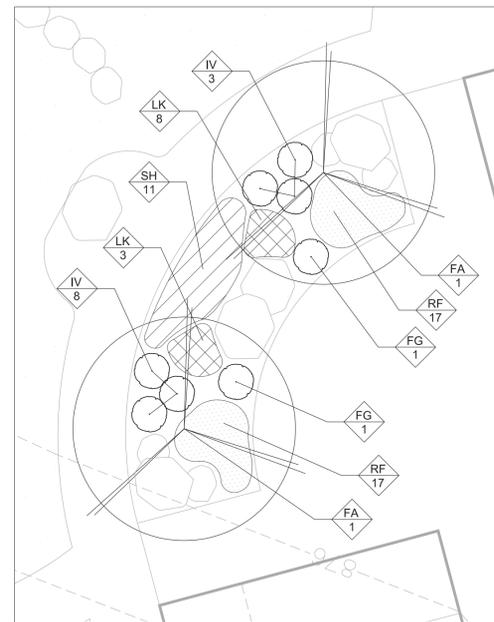


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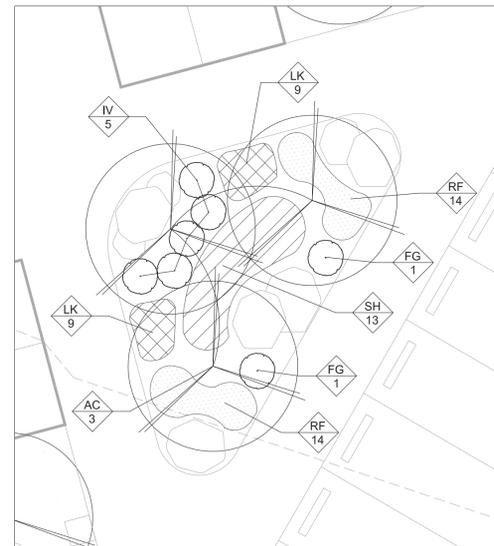
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L101

PLANT SCHEDULE

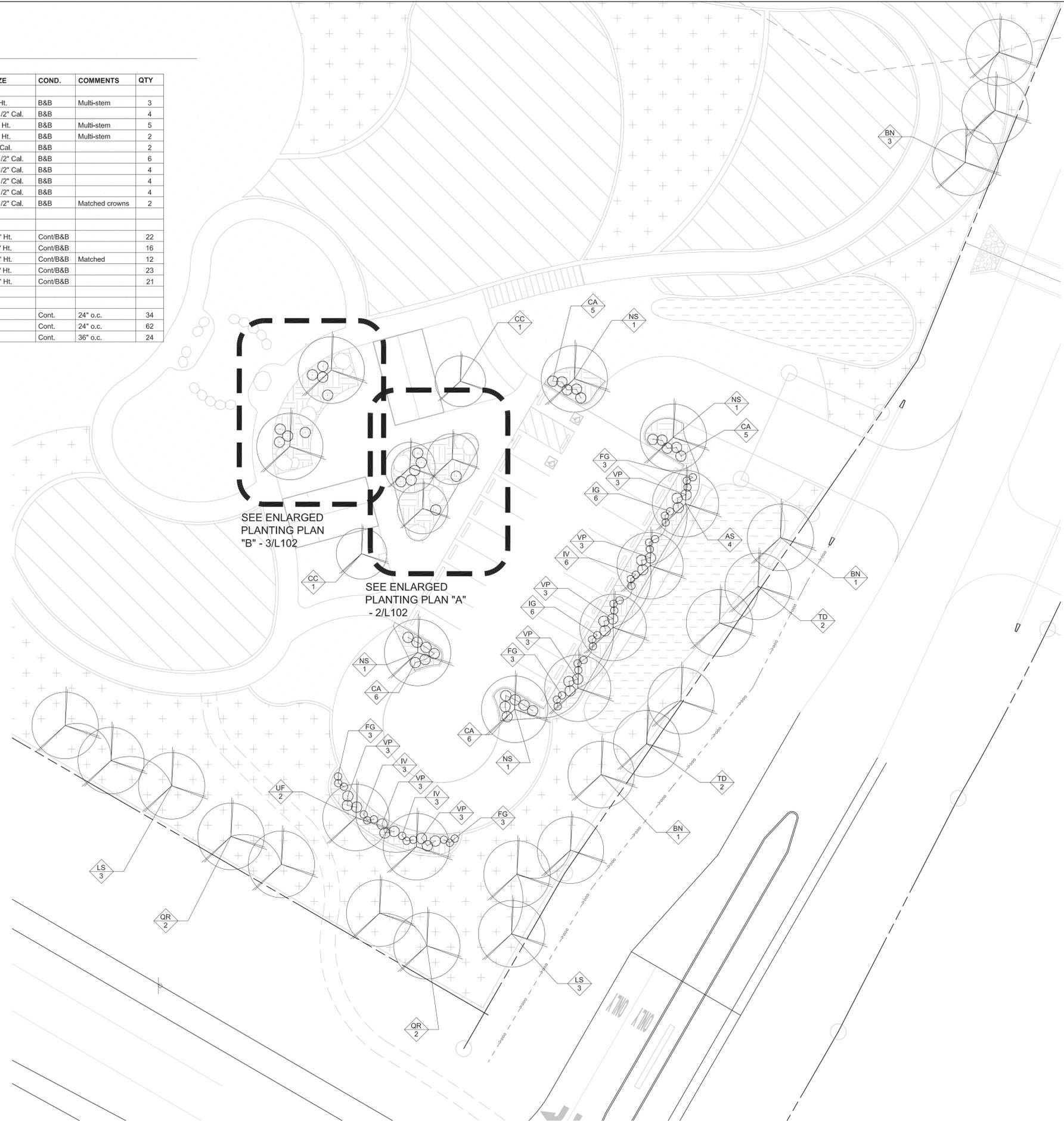
PLANT	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS	QTY
TREES						
AC	Amelanchier canadensis 'Lamarkii'	Lamarkii Serviceberry	6' Ht.	B&B	Multi-stem	3
AS	Acer saccharum 'Commemoration'	Commemoration Sugar Maple	2 1/2" Cal.	B&B		4
BN	Betula nigra	River Birch	12' Ht.	B&B	Multi-stem	5
CC	Cercis canadensis	Eastern Redbud	12' Ht.	B&B	Multi-stem	2
FA	Fagus grandifolia	American Beech	4" Cal.	B&B		2
LS	Liquidambar styraciflua 'Cherokee'	Sweetgum	2 1/2" Cal.	B&B		6
NS	Nyssa sylvatica	Black Gum	2 1/2" Cal.	B&B		4
QR	Quercus rubra	Red Oak	2 1/2" Cal.	B&B		4
TD	Taxodium distichum	Bald Cypress	2 1/2" Cal.	B&B		4
UF	Ulmus x 'Frontier'	Frontier Elm	2 1/2" Cal.	B&B	Matched crowns	2
SHRUBS						
CA	Clethra alnifolia 'Hummingbird'	Hummingbird Summersweet	24" Ht.	Cont/B&B		22
FG	Fothergilla gardenii	Dwarf Fothergilla	18" Ht.	Cont/B&B		16
IG	Ilex glabra 'Densa'	Densa Compact Inkberry	24" Ht.	Cont/B&B	Matched	12
IV	Itea virginica 'Sprich'	Little Henry Dwarf Sweetspire	18" Ht.	Cont/B&B		23
VP	Viburnum plicatum t. 'Summer Snowflake'	Summer Snowflake Viburnum	36" Ht.	Cont/B&B		21
GRASSES & PERENNIALS						
LK	Liatris spicata 'Kobold'	Kansas City Gayfeather	#1	Cont.	24" o.c.	34
RF	Rudbeckia fulgida 'Goldstrum'	Goldstrum Black-Eyed Susan	#1	Cont.	24" o.c.	62
SH	Sporobolus heterolepis	Prairie Dropseed	#3	Cont.	36" o.c.	24



3 ENLARGED PLANT "B"
Scale: 1" = 10'-0"



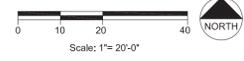
2 ENLARGED PLAN "A"
Scale: 1" = 10'-0"



1 ENLARGED PLANTING PLAN
Scale: 1" = 20'-0"

- GENERAL PLANTING NOTES**
- LOCATE AND VERIFY ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO STARTING WORK.
 - SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT CALLED OUT TO BE PAVED OR PLANTED WITH OTHER PLANT MATERIAL.
 - PLANTING BEDS SHALL RECEIVE SPADE EDGE UNLESS OTHERWISE NOTED.
 - SEE L403 FOR PLANTING DETAILS.
 - PROVIDE PLANT MATERIAL IN QUANTITIES AND SPECIES SHOWN ON ALL PLANS.
 - SPECIES SUBSTITUTION WILL NOT BE ALLOWED. IF PLANTS ARE UNAVAILABLE CONTRACTOR MUST SUBMIT SUBSTITUTION REQUEST FOR ARCHITECT APPROVAL.
 - PROVIDE 3" SHREDDED HARDWOOD MULCH IN ALL PLANTING BEDS AND IN 6" DIA AROUND ALL TREES UNLESS OTHERWISE NOTED.
 - PROVIDE PRE-EMERGENT HERBICIDE ON PLANTING BEDS PRIOR TO INSTALLATION OF MULCH AT RATES PER MANUFACTURER'S DIRECTIONS.
 - TREES SHALL NOT BE STAKED UNLESS REQUIRED FOR ENVIRONMENTAL CONCERNS WITH APPROVAL FROM LANDSCAPE ARCHITECT

 BIOSWALE PLANTINGS. SEE DETAIL 4/L403



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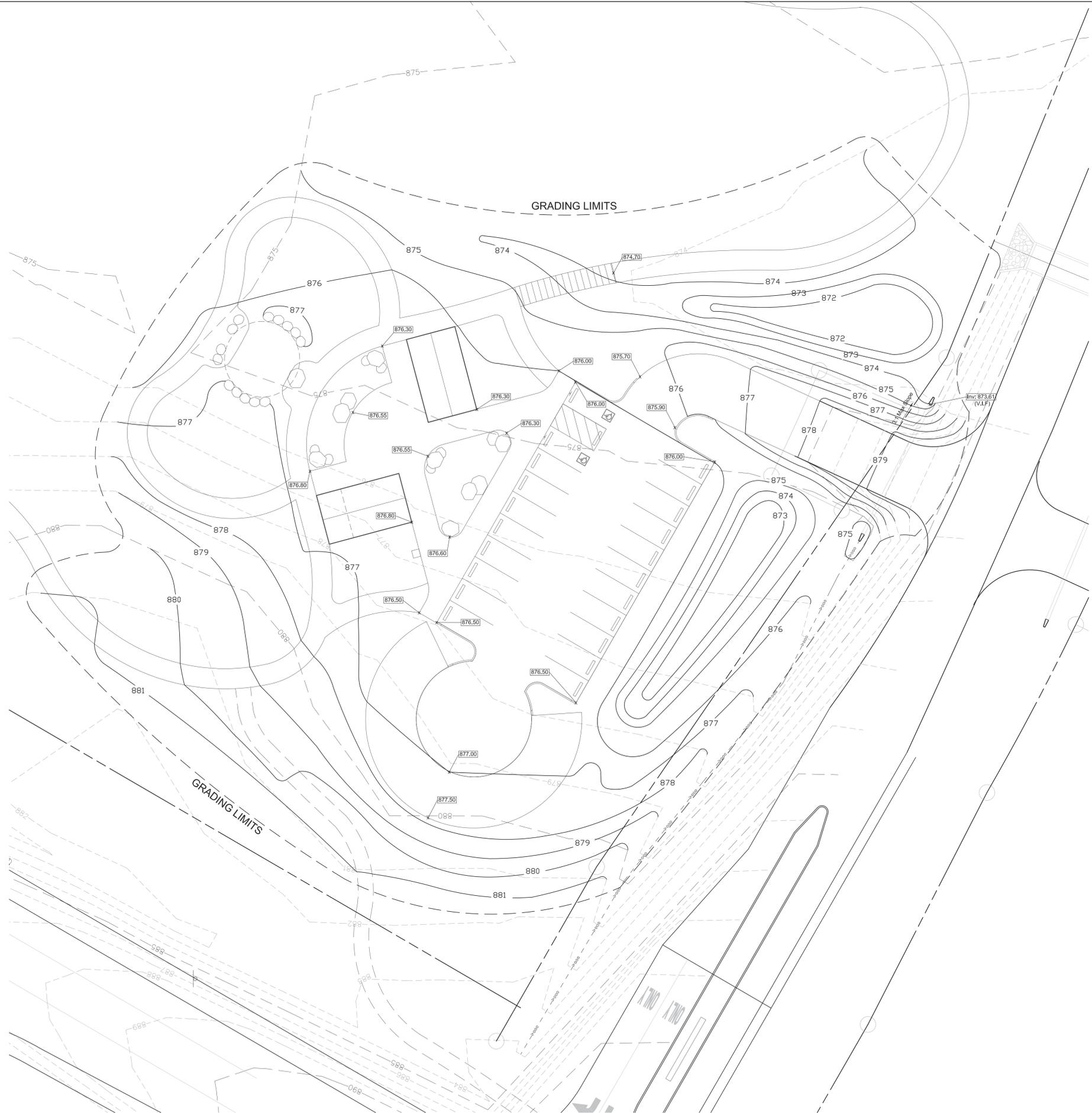
 owner:

project:
**Washington Township Parks
 MacGregor Park**
 US 31 & State Road 38, Westfield, Indiana
 Enlarged Planting Plan

revision:	date:	description:

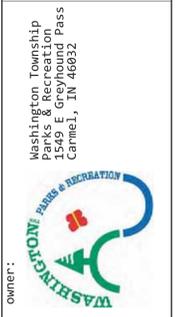
certified by:


date: August 30th, 2022
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 draw by: st
 checked by: ja



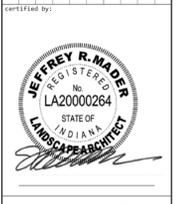
1 ENLARGED GRADING PLAN
Scale: 1" = 20'-0"

- GENERAL NOTES**
- A. GRADING WORK SHALL BE COMPLETED ENTIRELY WITH MATERIALS AVAILABLE ON SITE. IF EXCESS CUT IS AVAILABLE, CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT TO DETERMINE LOCATION ON SITE TO SPREAD EXCESS. IF FILL IS REQUIRED, GRADES SHALL BE ADJUSTED IN THE FIELD IN PRAIRIE AREAS TO ACCOMMODATE AVAILABLE MATERIALS.
 - B. CONTOUR LINES SHOWN HAVE BEEN OBTAINED FROM HAMILTON COUNTY GIS AND CONSTRUCTION DRAWINGS FOR INDOT WORK ON MACGREGOR PARK DRIVE AND STATE ROAD 38, AND SHALL BE USED FOR REFERENCE. PROPOSED CONTOURS ARE SHOWN TO INDICATE DESIGN INTENT AND SHALL BE USED AS A GRAPHIC REFERENCE TO DEFINE LANDFORMS. SPOT ELEVATIONS, WHERE PROVIDED SHALL DICTATE PROPOSED HARDSCAPE ELEVATIONS.
 - C. LOCATE AND VERIFY ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO STARTING WORK.
 - D. SEE EROSION CONTROL PLANS FOR EARTHWORKS AND SWPPP INFORMATION.
 - E. STRIP 6" TOPSOIL AND STOCKPILE WITHIN GRADING LIMITS. DISTRIBUTE IN PLANTING, LAWN AND PRAIRIE AREAS TO MEET PROPOSED GRADES.



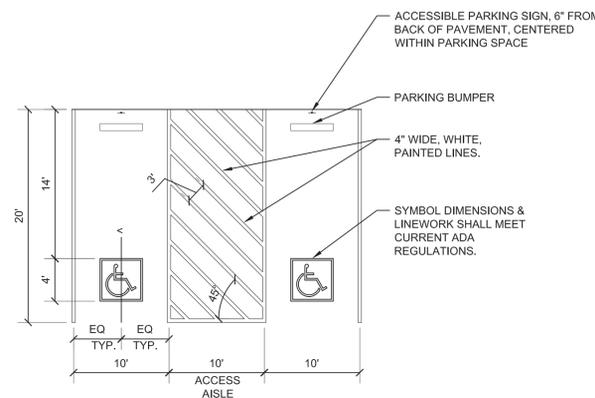
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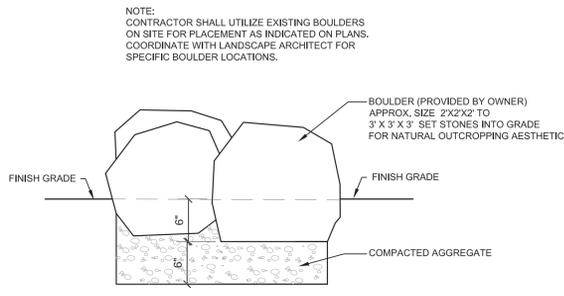


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 draw by: st
 checked by: ja

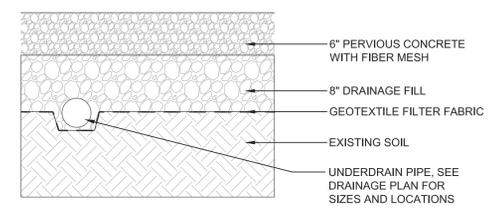
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 sheet number:
L104



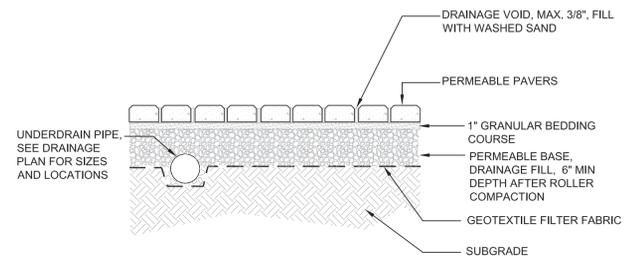
12 ACCESSIBLE PARKING SPACE
SCALE: 1/8"=1'-0"



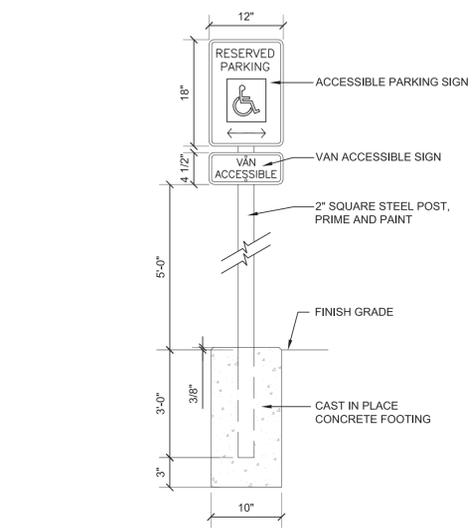
9 BOULDER PLACEMENT
SCALE: 1"=1'-0"



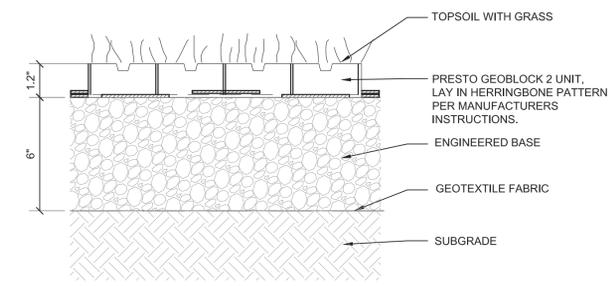
6 PERVIOUS CONCRETE
SCALE: 1"=1'-0"



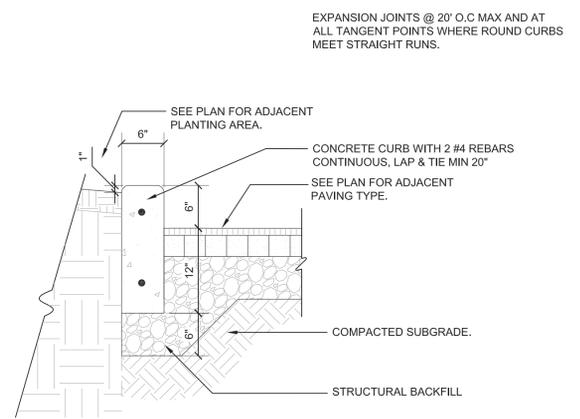
3 PERMEABLE PAVERS
SCALE: 1"=1'-0"



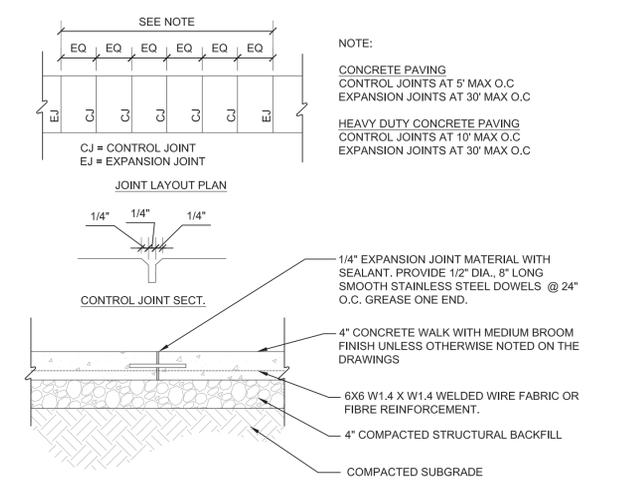
11 ACCESSIBLE PARKING SIGN
SCALE: NTS



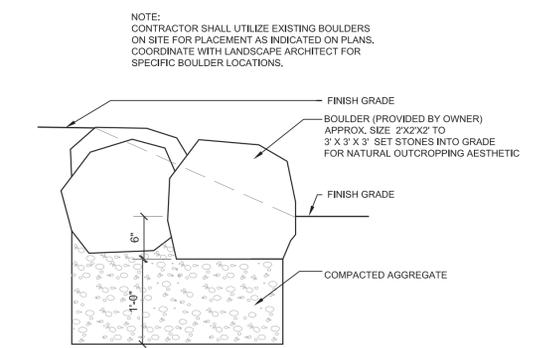
8 REINFORCED TURF
SCALE: 1"=1'-0"



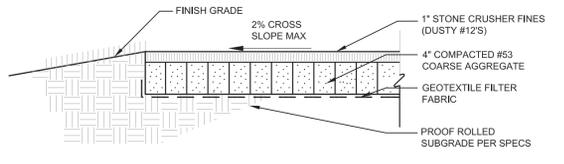
5 STAND UP CURB
SCALE: 1"=1'-0"



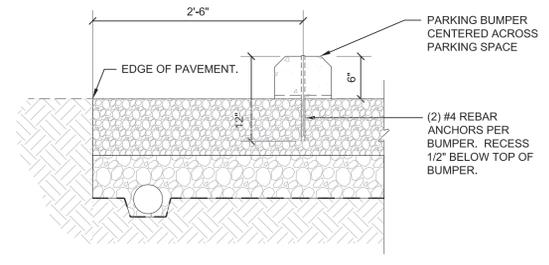
2 CONCRETE PAVING AND JOINT DETAIL
SCALE: VARIES



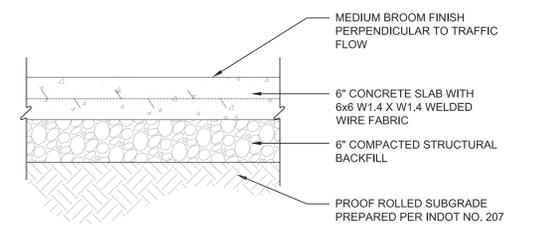
10 RECESSED BOULDER PLACEMENT
SCALE: 1"=1'-0"



7 CRUSHED STONE TRAIL
SCALE: 1"=1'-0"



4 PARKING BUMPER
SCALE: 1"=1'-0"



1 HEAVY DUTY CONCRETE PAVEMENT
SCALE: 1"=1'-0"

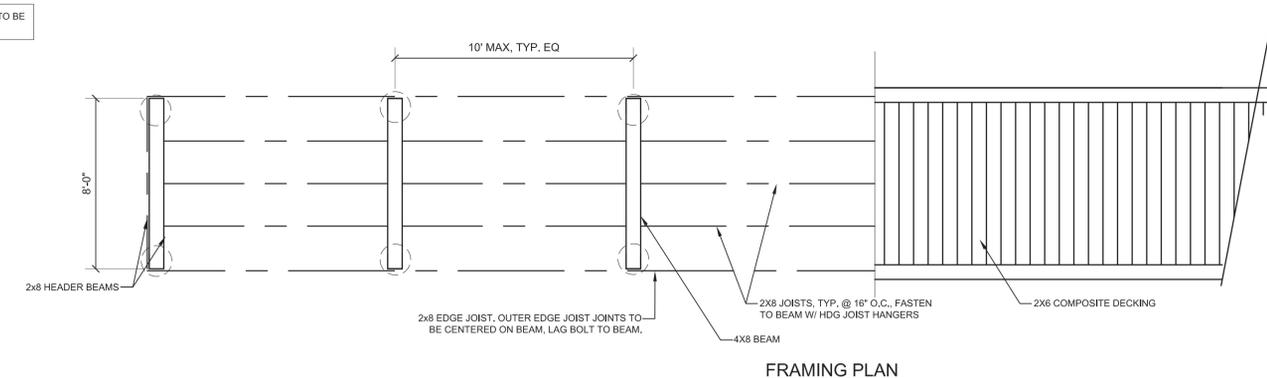
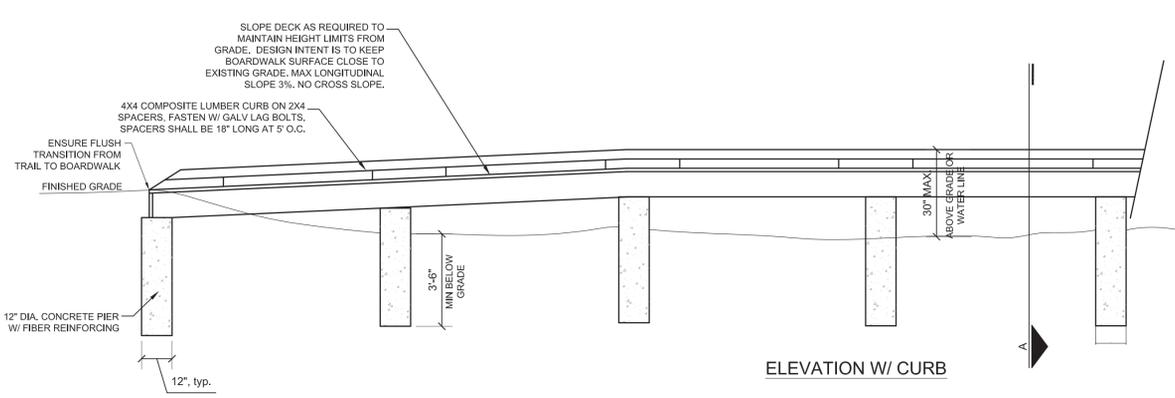
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NOTE: ALL HARDWARE TO BE HOT DIP GALVANIZED

1 BOARDWALK DETAILS
SCALE: NTS

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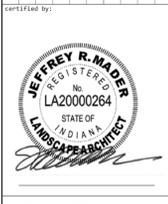
Landscaper architect:
mader design
Integrating people and nature®
8889 S. Franklin Rd., Indianapolis, IN 46259
P: 317.759.8617 F: 317.862.5221
www.maderdesignllc.com

owner:
WASHINGTON TOWNSHIP PARKS & RECREATION
Washington Township Parks & Recreation
1549 E Greyhound Pass
Carmel, IN 46032

project:
**Washington Township Parks
MacGregor Park**
US 31 & State Road 38, Westfield, Indiana

Site Details

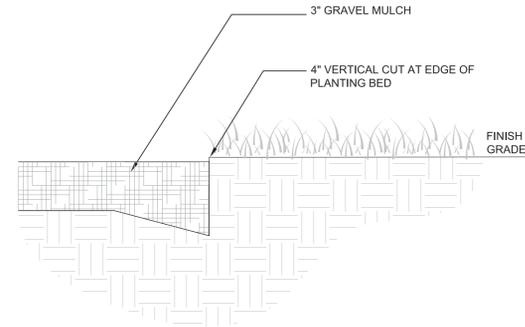
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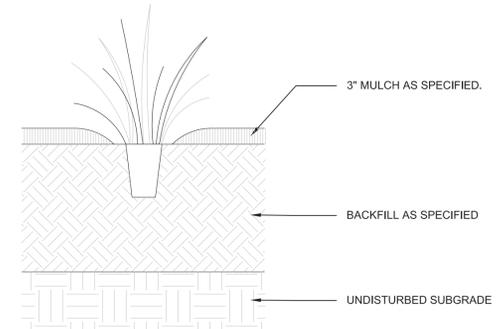
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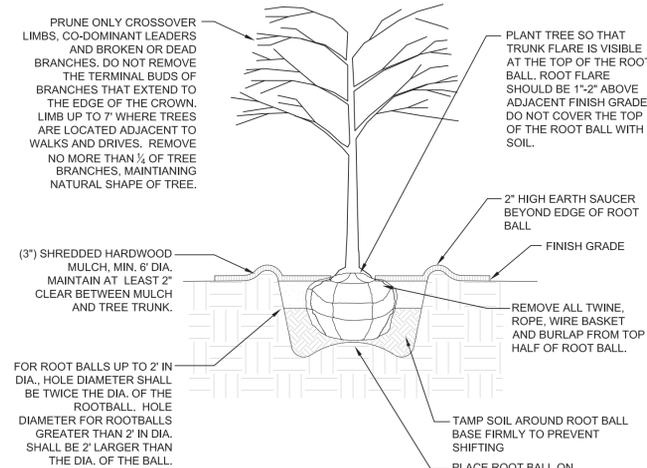
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6 SPADE EDGE
 SCALE: NTS*

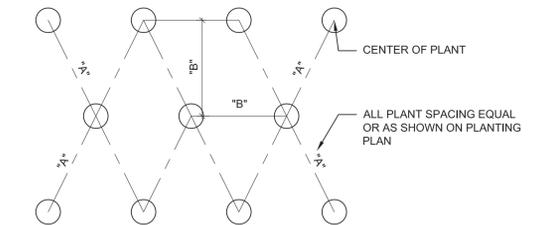


3 PERENNIAL AND GRASS PLANTING
 SCALE: NTS



5 TREE PLANTING
 SCALE: NTS

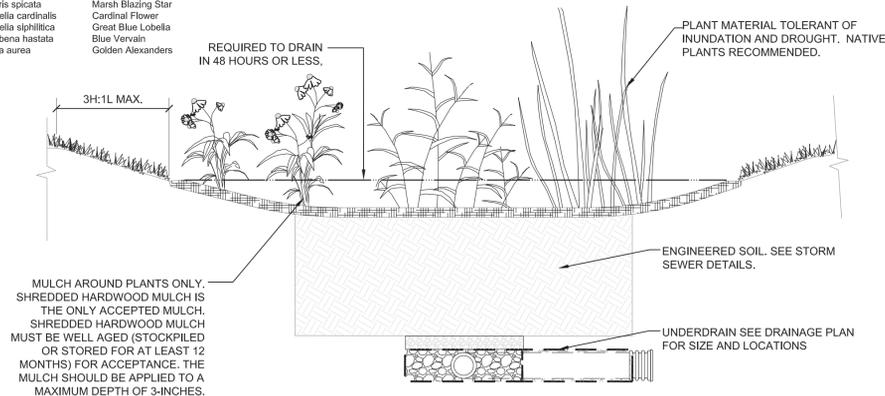
"A"	"B"	No. of Plants/SF
6" O.C.	5.2"	4.61
8" O.C.	6.93"	2.6
10" O.C.	8.66"	1.66
12" O.C.	10.4"	1.15
15" O.C.	13.0"	.738
18" O.C.	15.6"	.512
24" O.C.	20.8"	.29
30" O.C.	26.0"	.185
36" O.C.	30.0"	.128



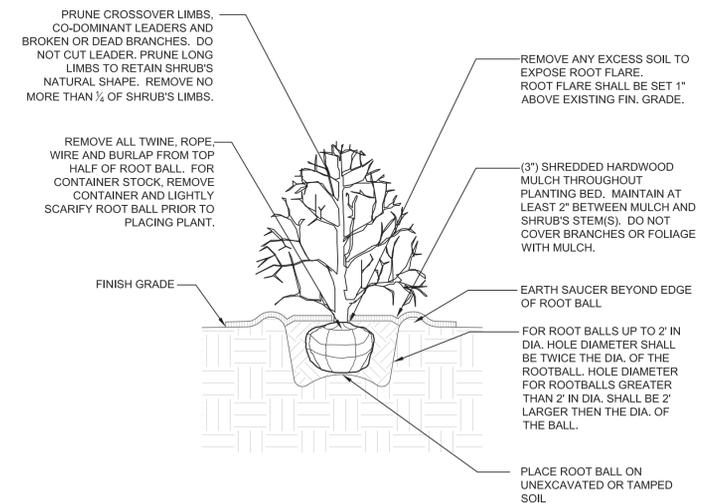
2 PLANT SPACING
 SCALE: NTS

RAIN GARDEN PLANTS
 PROVIDE EQUAL QUANTITIES OF EACH PLANT SPECIES IN 2 1/2" PLUG.
 PLANT IN DRIFTS OF 3-5 PLANTS OF EACH SPECIES PER CLUSTER.

- | | |
|---------------------|--------------------|
| Carex lurida | Bottlebrush Sedge |
| Carex vulpinoidea | Brown Fox Sedge |
| Panicum virgatum | Switch Grass |
| Liatris spicata | Marsh Blazing Star |
| Lobelia cardinalis | Cardinal Flower |
| Lobelia siphilitica | Great Blue Lobelia |
| Verbena hastata | Blue Yervain |
| Zizia aurea | Golden Alexanders |



4 BIOSWALE
 SCALE: NTS



1 SHRUB PLANTING
 SCALE: NTS



STORM SEWER NOTES

1. ALL STORM SEWER CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS OF THE AGENCY OR AGENCIES HAVING JURISDICTION OF THE STORM SEWER SYSTEM AND CONSTRUCTION AREA.
2. ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS WELL GROUTED, TROWELED SMOOTH AND BRUSH FINISHED.
3. ALL STRUCTURES (IE MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS. THE FLOW LINES AND BENCHWALLS SHALL BE TROWELED SMOOTH AND BRUSH FINISHED.
4. FIELD ADJUSTMENTS OF RIM ELEVATIONS OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. MAXIMUM HEIGHT OF ADJUSTING RINGS SHALL NOT EXCEED 12 INCHES.
5. STORM STRUCTURES WITH INLET CASTINGS SHALL BE SET TO MAINTAIN A POSITIVE DRAINAGE FLOW INTO THE STRUCTURE.
6. STORM PIPE INVERTS AT OUTLET STRUCTURES (IE END SECTIONS), AND PIPE LENGTHS MAY REQUIRE FIELD ADJUSTMENTS TO MEET ACTUAL FIELD CONDITIONS.
7. FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN (5) FEET OF ALL PAVED AREAS, INCLUDING CURBS, EDGE OF PAVEMENT, AND SIDEWALKS.
8. PIPES LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE END SECTIONS.
9. ALL STORM CASTINGS SHALL HAVE A "NO DUMPING, DRAINS TO WATERWAY" MESSAGE ON THEM.
10. ALL PROPOSED STORM SEWERS, DETENTION STRUCTURES, AND STORMWATER QUALITY TREATMENT BMP'S ARE PRIVATE.

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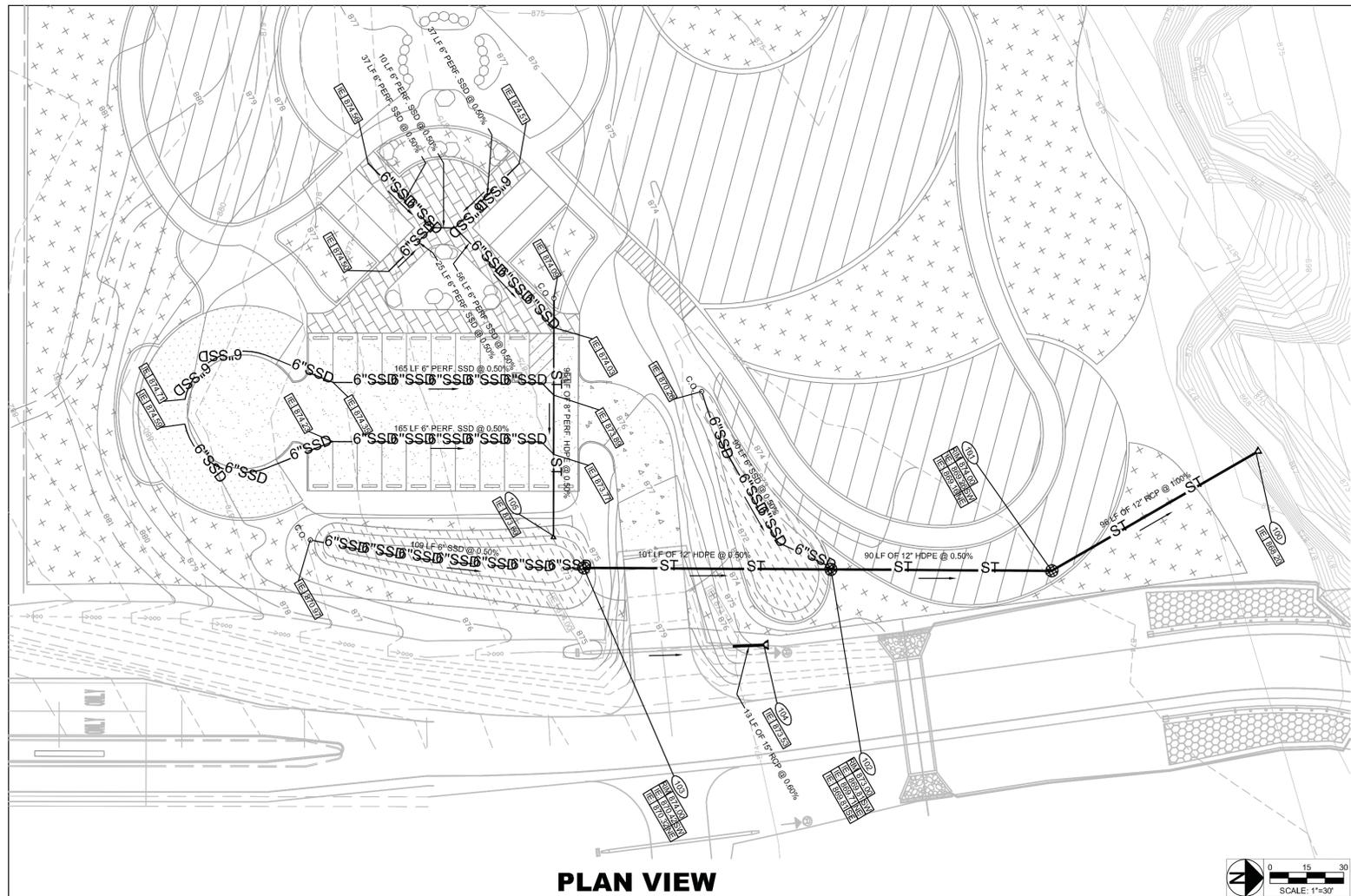


owner:
**Washington Township Parks
 MacGregor Park**
 US 31 & State Road 38, Westfield, Indiana
DRAINAGE PLAN

revision:	date:	description:

certified by:

 date: August 27, 2012
 job #: 128451
 drawn by: KS/OS
 checked by: BK
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 sheet number:
C101



PLAN VIEW



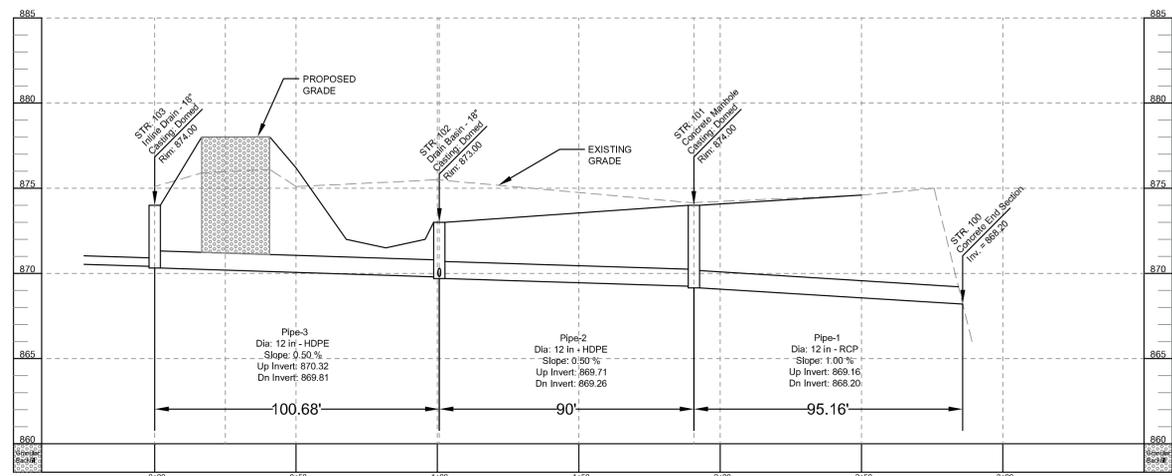
STORM SEWER DATA TABLE											
STRUCTURE DATA				PIPE DATA						Connect to Str.	Comment
Str. No.	Type	Casting	RIM	depth	U/S IE	Length	Size in	Slope %	Type		
100	END SECTION				869.16	96	12	1.00%	CONC	868.20	
101	MANHOLE	DOME	874.00	4.84	869.71	90	12	0.50%	HDPE	869.26	102
102	NP-18" DB	DOME	873.00	3.29	870.32	101	12	0.50%	HDPE	869.81	103
103	NP-18" ID	DOME	874.00	3.68	870.97	109	6	0.50%	HDPE	870.42	
104	END SECTION				874.00	77	15	0.60%	CONC	873.53	
105	END SECTION				874.03	96	8	0.50%	HDPE	873.60	

NP = NYLOPLAST DB = DRAIN BASIN ID = INLINE DRAIN

NOTE:
INLET CASTINGS SHALL HAVE THE WORDS "NO DUMPING, DRAINS TO STREAM" CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM 1" HEIGHT.
A SYMBOL OF A FISH SHALL ALSO BE CAST WITH THE LETTERS.

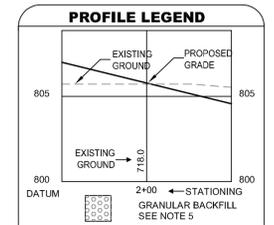
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PROFILE STR: 100 to 103

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'



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OWNER:

**Washington Township Parks
MacGregor Park**
US 31 & State Road 38, Westfield, Indiana

STORM SEWER PLAN & PROFILES

project: Washington Township Parks
MacGregor Park
US 31 & State Road 38, Westfield, Indiana

revision: date: description:

certified by:

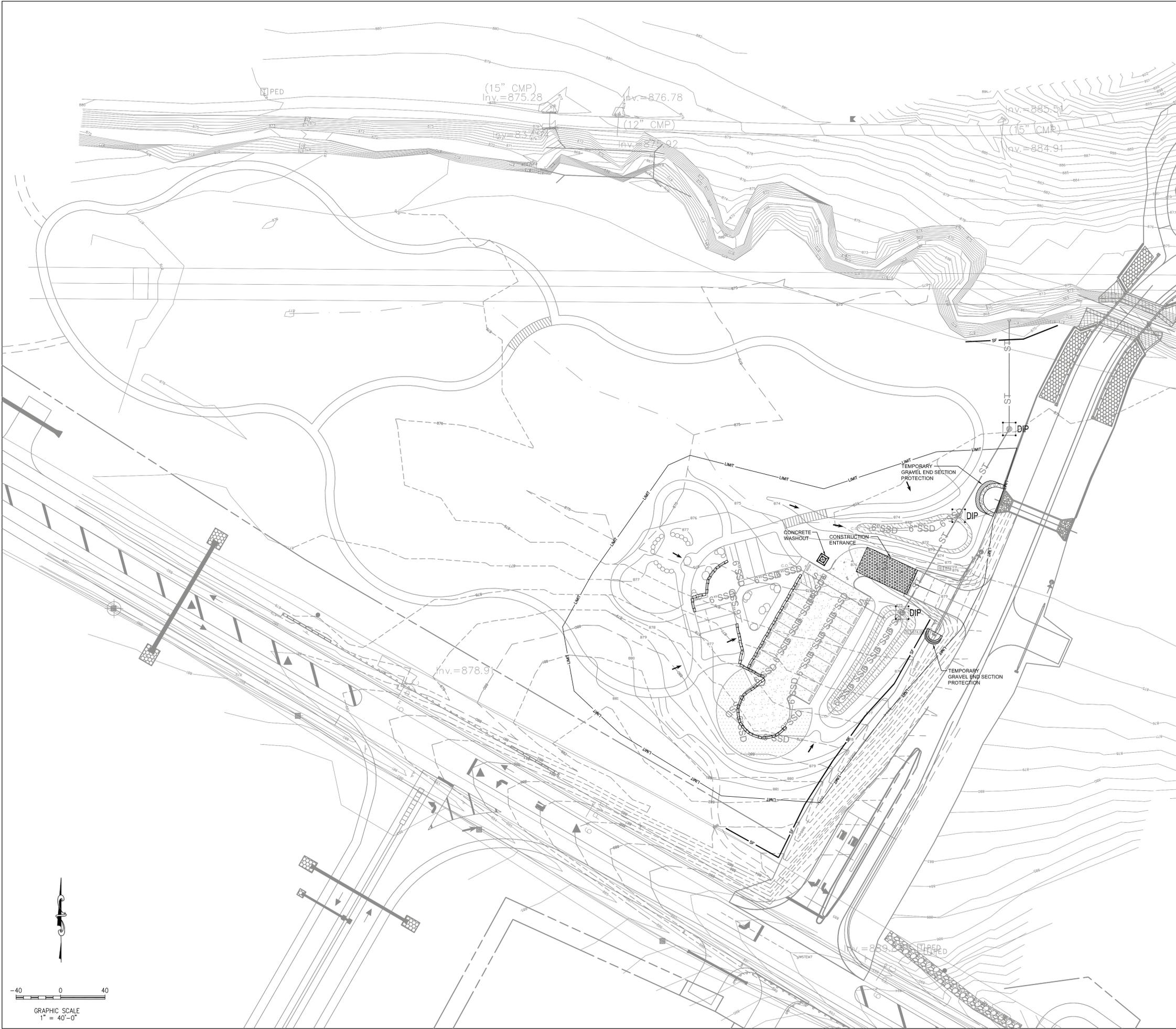
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date: August 27, 2012
job #: 128451
drawn by: KS/05
checked by: BK

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sheet number:

C102



EROSION CONTROL NOTES

1. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE DRAWINGS ARE CONSIDERED THE MINIMUM PRACTICES NECESSARY FOR COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY AS IDENTIFIED UNDER SECTION 327-IAC-15-5 OF THE INDIANA ADMINISTRATIVE CODE. HOWEVER, SITE CONDITIONS, CONSTRUCTION METHODS, SEQUENCING OF WORK AND GENERAL PRACTICE MAY WARRANT VARIATION AND/OR ADDITIONS TO THE QUANTITIES AND LOCATIONS OF MEASURES AS SHOWN.
2. UNLESS OTHERWISE SHOWN, TEMPORARY CONTROL MEASURES SHALL BE REMOVED UPON SATISFACTORY ESTABLISHMENT OF PERMANENT VEGETATION.
3. SEE SHEET C401 FOR DETAILS REFERENCED ON THIS SHEET.
4. PERIMETER CONTROL MEASURES (I.E. SILT FENCE, DIVERSION DITCHES, TREE PROTECTION FENCING) SHALL BE INSTALLED PRIOR TO COMMENCING EARTHWORK ACTIVITIES.
5. IN ADDITION TO THE MAINTENANCE REQUIREMENTS IDENTIFIED FOR INDIVIDUAL MEASURES, ALL EROSION CONTROL MEASURES INSTALLED UNDER THIS PROJECT SHALL BE INSPECTED WEEKLY TO ENSURE THEY ARE FUNCTIONING PROPERLY. MEASURES FOUND TO BE DEFICIENT SHALL BE REPAIRED OR REPLACED IMMEDIATELY THEREAFTER.
6. THE CONTRACTOR SHALL MAINTAIN A STABLE CONSTRUCTION ENTRANCE AT ALL TIMES AND SHALL MAKE EFFORTS TO MINIMIZE THE ACCUMULATION OF SOIL, MUD AND DEBRIS ON ADJOINING ROADWAYS.
7. TEMPORARY STOCKPILES SHALL BE CONSTRUCTED IN A MANNER SUCH THAT PROPER DRAINAGE OF THE SITE IS NOT IMPAIRED. STOCKPILES SHALL BE CONTAINED WITHIN A PERIMETER CONTROL MEASURE (I.E. SILT FENCE) TO TRAP SEDIMENT.
8. SYMBOLS FOR INLET PROTECTION MEASURES ARE SHOWN LARGER THAN ACTUAL SIZE
9. REFER TO SHEET L101 FOR PERMANENT SEEDING AND PLANTING.

EROSION CONTROL LEGEND

LINE TYPE / SYMBOL	DESCRIPTION	LINE TYPE / SYMBOL	DESCRIPTION
	TEMPORARY CONSTRUCTION ENTRANCE 6 INCHES OF 2 1/2" COARSE AGGREGATE (20'W x 50'L) Minimum - EC-22		EC-2 SILT FENCE (SEDIMENT FENCE)
	PERMANENT SEEDING WITH EROSION CONTROL BLANKET - S75 4:1 - 3:1 SLOPES		TREE PROTECTION FENCE EC-12, EC-12A
	FLOW ARROW		GRADING LIMITS
	EC-25 CONCRETE WASHOUT		TEMPORARY DROP INLET PROTECTION CONTRACTOR CAN OPT. TO USE: EC-3A, EC-3B, EC-3C
			TEMPORARY GRAVEL END SECTION PROTECTION EC-6
			EC-3D FLAT INLET PROTECTION

EROSION CONTROL SEQUENCE AND NOTES

1. BEFORE CONSTRUCTION, MARK PROJECT LIMITS AND ANY AREA WITH SUITABLE VEGETATION FOR FILTER STRIPS IN PERIMETER AREAS.
2. INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
3. INSTALL INITIAL PERIMETER PRACTICES, INCLUDING PERIMETER SILT FENCE AND INLET PROTECTION PRACTICES FOR EXISTING STORM STRUCTURES.
4. STRIP TOPSOIL IN AREAS OF INFILTRATION BASINS. EXCAVATE INFILTRATION BASINS AND INSTALL EMERGENCY SPILLWAYS AND PRIMARY DISCHARGE STRUCTURES. TEMPORARY SEED BASIN SLOPES AND BOTTOM. CONSTRUCT DIVERSIONS TO DIRECT RUNOFF FROM SITE TO THE BASIN.
5. STRIP TOPSOIL. STOCKPILE QUANTITIES NECESSARY FOR COMPLETION OF THE PROJECT AND REMOVE EXCESS FROM THE SITE. SEED STOCKPILES.
6. BEGIN MASS EARTHWORK. CONSTRUCT TEMPORARY DIVERSIONS TO DIRECT RUNOFF TO INFILTRATION BASINS. INSTALL STORM SEWER OUTLETS FOR INFILTRATION BASINS, INSTALL EROSION CONTROL BLANKETS AND SEED INFILTRATION BASIN BANKS.
7. INSTALL STORM SEWER SYSTEMS. INSTALL INLET PROTECTION AS INLETS ARE INSTALLED.
8. COMPLETE MASS GRADING.
9. INSTALL STONE BASE FOR ROADS AND DRIVES AS SOON AS GRADE IS ESTABLISHED.
10. INSTALL ROADS, CURBS, PAVEMENT AND FINISH BACKFILL. SEED RIGHT-OF-WAYS AND OTHER DISTURBED AREAS NOT PREVIOUSLY SEEDED.
11. FINISH PERIMETER AND COMMON AREA LANDSCAPING. SEED OR SOD AREAS PER PLAN.
12. FINISH PERIMETER SEEDING AND LANDSCAPING PER OVERALL PLANTING PLAN L101 AND ENLARGED PLANTING PLAN L103.
13. REMOVE TEMPORARY EROSION CONTROL PRACTICES AFTER VEGETATION IS ESTABLISHED AND PROJECT SITE IS PERMANENTLY STABILIZED.
14. MAINTAIN EROSION AND SEDIMENT PRACTICES THROUGHOUT THE DURATION OF THE PROJECT.

MULCH APPLICATION GUIDELINES

MULCH APPLICATION GUIDELINES
 MULCH MAY BE APPLIED BY HAND OR BLOWN BY MACHINE. THE DEPTH OF COVERAGE SHALL BE A UNIFORM DEPTH OF 2 TO 3 INCHES.

MULCH SHALL BE ANCHORED BY HAND PUNCHING, ROLLER PUNCHING, DISC ANCHORING, PLASTIC NETTING OR BY THE USE OF A TACKIFYING AGENT.

MULCH MATERIALS
 STRAW MULCH: PROVIDE AIR DRY, CLEAN, MILDEW AND SEED FREE, SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS OR BARLEY.
 FIBER MULCH: BIODEGRADABLE DYED WOOD CELLULOSE FIBER MULCH, NONTOXIC, FREE OF PLANT GROWTH OR GERMINATION INHIBITORS, WITH MAXIMUM MOISTURE CONTENT OF 15 PERCENT AND A PH RANGE OF 4.5 TO 6.5.

TACKIFYING MATERIALS
 ASPHALT EMULSION TACKIFIER: ASPHALT EMULSION, ASTM D 977, GRADE SS-1, NONTOXIC AND FREE OF PLANT GROWTH OR GERMINATION INHIBITORS.
 NONASPHALTIC TACKIFIER: COLLOIDAL TACKIFIER RECOMMENDED BY FIBER-MULCH MANUFACTURER FOR SLURRY APPLICATION, NONTOXIC AND FREE OF PLANT GROWTH OR GERMINATION INHIBITORS.

MAINTENANCE
 ADD NEW MULCH IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS SUFFICIENTLY TO NULLIFY ITS PURPOSE. ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.

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project:
**Washington Township Parks
 MacGregor Park**
 US 31 & State Road 38, Westfield, Indiana
 EROSION CONTROL PLAN FINAL MEASURES

revision:	date:	description:

certified by:

 RICHARD J. KELLY
 No. PE16500055
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

date: August 27, 2023
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