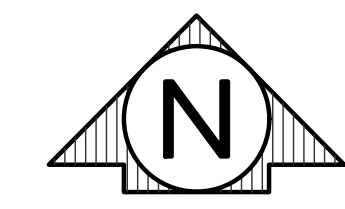


CONSTRUCTION PLAN DRAWINGS FOR ANN ARBOR PARKS & RECREATION BICENTENNIAL PARK PHASE 2 SECTION 10 T3S-R6E ANN ARBOR WASHTENAW COUNTY, MICHIGAN



UTILITIES AND MUNICIPALITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED FROM THE UTILITY OWNERS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES.

NAME OF OWNER	CONTACT	TYPE OF UTILITY
ACD.NET 1800 N GRAND RIVER AVE LANSING, MI 48906	EVAN UNVERFERTH UNVERFERTH.EVAN@ACD.NET (517) 999-3249	FIBER
ANN ARBOR CITY 301 E. HURON ANN ARBOR, MI 48104	ANDY GOSSIAUX AGOSSIAUX@A2GOV.ORG	LAND USE POTABLE WATER SANITARY SEWER STORM SEWER
AT&T 550 S MAPLE RD ANN ARBOR, MI 48103	JASON HARRIS (586) 381-9246 JH147E@ATT.COM	TELEPHONE
DTE ENERGY 982 BROADWAY ST. ANN ARBOR, MI 48105	SARA A KIPP SARA.FORCE@DTEENERGY.COM	ELECTRIC
DTE ENERGY 982 BROADWAY ST. ANN ARBOR, MI 48105	ARAS P BUTKUNAS DET_MAPPINGTEAM@DTEENERGY.COM SEMI_GASDESIGN@DTEENERGY.COM	GAS
VERIZON	NONE GIVEN	FIBER

PROJECT DESCRIPTION

THIS PROJECT INCLUDES REPLACEMENT OF AN EXISTING PAVED PARKING LOT, PAVING OF AN EXISTING GRAVEL LOT, REPLACEMENT AND EXTENSION OF THE PARK DRIVE, AND REPLACEMENT AND IMPROVEMENTS TO EXISTING PAVED PATHS.

LEGAL DESCRIPTION

PARCEL NUMBER 09-12-10-401-015
LEGAL DESCRIPTION:
PRT OF SE 1/4 OF SEC 10, T3S, R6E, COM AT SE COR OF SD SEC 10, TH S 89 DEG 56 MIN 5 SEC W 415.88 FT FOR POB, TH CONT S 89 DEG 56 MIN 5 SEC W 933.67 FT, TH N 1 DEG 22 MIN 40 SEC E 1340.11 FT, TH N 89 DEG 59 MIN 30 SEC E 580.72 FT, TH S 55 DEG 16 MIN E 991.8 FT, TH S 1 DEG W 458.23 FT, TH S 89 DEG 56 MIN 5 SEC W 32 FT, TH S 1 DEG W 45.41 FT, TH N 89 DEG W 448.81 FT, TH S 1 DEG W 277.93 FT TO POB, EXC THAT PORTION USED AS PUBLIC ROW, ALSO EXC COM AT SE COR OF SD SEC 10, TH N 1 DEG E 336.2 FT FOR POB, TH N 89 DEG W 264.44 FT, TH N 1 DEG E 417.74 FT, TH S 55 DEG 16 MIN E 317.98 FT, TH S 1 DEG W 241.16 FT TO POB, 26.27 AC M/L

GENERAL NOTES

FOR ALL CONSTRUCTION ACTIVITY THAT DISTURBS 5 ACRES OR MORE OF LAND, THE OWNER OF THE PROPERTY SHALL OBTAIN AN NPDES STORM WATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES FROM THE EGLE AS REQUIRED UNDER P.A. 245. THE NOTICE OF COVERAGE APPLICATION SHALL BE SUBMITTED THROUGH THE EGLE MIWATERS WEB SITE. THE DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY 4.88 ACRES. A NPDES PERMIT IS NOT REQUIRED FOR THIS PROJECT.

NAME OF AND DISTANCE TO NEAREST LAKE, STREAM OR DRAIN:
THE PROJECT IS LOCATED APPROXIMATELY 150 FEET EAST OF THE SWIFT DRAIN.



SHEET INDEX

SHEET NUMBER	SHEET TITLE
C100	CIVIL COVER SHEET
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C103	CIVIL PROJECT QUANTITIES
C104	CIVIL SOIL EROSION KEY
C105	CIVIL DETAILS
C106	CIVIL DETAILS
C110	CIVIL EXISTING CONDITIONS
C111	CIVIL TREE INVENTORY
C200	CIVIL DEMOLITION SHEET
C210	CIVIL OVERALL SITE PLAN
C211	CIVIL DETAILED SITE PLAN
C212	CIVIL DETAILED SITE PLAN
C300	CIVIL OVERALL GRADING AND SESC PLAN
C301	CIVIL DETAILED GRADING PLAN
C302	CIVIL DETAILED GRADING PLAN
C303	CIVIL DETAILED GRADING PLAN
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C308	CIVIL DETAILED GRADING PLAN
C400	CIVIL UTILITY PLAN
C401	CIVIL STORM SEWER PROFILES

Google Earth
Image Landsat / Copernicus

ENGINEER INFORMATION

ROWE PROFESSIONAL SERVICES COMPANY
540 S. SAGINAW ST., SUITE 200
FLINT, MI 48502
DOUG SCHULTZ, PLA
(810) 869-5170

VICINITY MAP

NOT TO SCALE

OWNER INFORMATION

ANN ARBOR PARKS & RECREATION
ADAM FERCHO, PARK PLANNER AND LANDSCAPE ARCHITECT
301 E. HURON ST.
ANN ARBOR, MICHIGAN 48104
PHONE: (734) 974-6230 EXT. 42549
EMAIL: AFERCHO@A2GOV.ORG

SCOTT SPOONER, PARKS AND RECREATION SERVICES DEPUTY MANAGER-MAINTENANCE
4251 STONE SCHOOL ROAD, ANN ARBOR, MICHIGAN 48104
PHONE: (734) 974-6230 EXT. 43319
EMAIL: SPOONER@A2GOV.ORG

SITE LOCATION

2901 E ELLSWORTH RD, ANN ARBOR, MI 48108

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: NOT TO SCALE

ROWE PROFESSIONAL SERVICES COMPANY
C: (810) 341-7500
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The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502

PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL COVER SHEET

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:
SHT# **C100**
JOB No: 2300634

SURVEY MONUMENTATION

△ TRAVERSE POINT	□ SET MONUMENT
△ BENCHMARK	■ FOUND MONUMENT
⊙ ALIGNMENT POINT	⊕ SECTION & 1/4 CORNER
○ SET IRON	⊕ 1/8 & 1/16 CORNER
● FOUND IRON	□ NGS & USGS MONUMENT
---	SECTION LINE
---	EXISTING PROPERTY LINE (APPROX)
---	PARCEL LINE / LOT LINE
---	EXISTING EASEMENT LINE
---	EXISTING RIGHT OF WAY
---	PROPOSED EASEMENT
---	PROPOSED RIGHT OF WAY
---	PROJECT CONTROL LINE

MISCELLANEOUS TOPO

⊗ SATELLITE DISH	▣ TRASH CAN
▲ ANTENNA	▣ PICNIC TABLE
□ COLUMN	▣ PARK BENCH
⋈ FLOOD LIGHT	▣ BBQ GRILL
⊕ FOUNTAIN	▣ DUMPSTER
⊕ STATUE/SCULPTURE	▣ BIKE RACK
□ GRAVE MARKER	□ AIR CONDITIONING UNIT
▣ PLANTER BOX	□ PAY PHONE/BOOTH
○ ROCK	⊕ SOIL BORING
▣ MAILBOX	▣ MONITORING WELL
○ PAPER BOX	▣ BUMPER BLOCK
×× FENCE GATE	▣ SWAMP OR WETLAND

SIGNS, SIGNALS & POSTS

○ FLAG POLE	▣ CANTILEVERED SIGN
⊕ ADVERTISING/BUSINESS SIGN	▣ PEDESTRIAN SIGNAL
○ POST (WOOD/METAL/CONCRETE/FENCE)	▣ PEDESTRIAN CROSSING BUTTON
○ HIGHWAY DELINEATOR POST	▣ TRAFFIC SIGNAL
⊕ EXISTING TRAFFIC SIGN	▣ RAILROAD CROSSING GATE
○ PARKING METER	⊕ RAILROAD CROSSING SIGNAL
▣ BILLBOARD	⊕ PROPOSED TRAFFIC SIGN
▣ CANTILEVERED TRAFFIC SIGNAL	

PLAYGROUND EQUIPMENT

⊕ SWING SET	> VOLLEYBALL POLE
▣ SLIDE (STRAIGHT)	⊕ MERRY-GO-ROUND
▣ SLIDE (SPIRAL)	⊕ BASKETBALL HOOP POST
▣ MONKEY BARS (RECTANGLE)	▣ FOOTBALL/SOCCER GOAL
⊕ MONKEY BARS (ROUND)	

MISCELLANEOUS UTILITIES

□ CABLE TV RISER	○ UTILITY HANDHOLE
○ CABLE TV MARKER POST	○ STRAIN POLE
▣ CIRCUIT BREAKER	⊕ UTILITY/LIGHT POLE
⊕ ELECTRIC METER	○ GUY WIRE
⊕ ELECTRIC OUTLET	○ GUY POLE
□ ELECTRIC RISER	○ UTILITY POLE
□ ELECTRIC TRANSFORMER PAD	⊕ WOOD LIGHT POLE
⊕ ELECTRIC TRANSMISSION TOWER	* METAL LIGHT POLE
○ ELECTRIC MANHOLE	* ORNAMENTAL LIGHT POLE
⊕ ELECTRIC MARKER POST	⊕ POLE BOX
□ TELEPHONE RISER	▣ TRAFFIC CONTROL BOX
○ TELEPHONE MANHOLE	▣ ELECTRIC VEHICLE CHARGING STATION
○ TELEPHONE MARKER POST	○ EXISTING MISCELLANEOUS MANHOLE
○ FIBER OPTIC MARKER POST	
---	EXISTING OVERHEAD UTILITY LINE
---	EXISTING U.G. ELECTRIC LINE
---	EXISTING U.G. TELEPHONE LINE
---	EXISTING U.G. FIBER OPTIC LINE
---	EXISTING U.G. CABLE TV LINE

GAS

⊕ GAS METER	▣ PROPANE TANK
□ GAS RISER	⊕ GAS TEST STATION
● GAS STOP BOX	⊕ GAS FILLPORT
⊕ GAS VALVE	⊕ GAS PUMP
⊕ GAS VENT	○ GAS MANHOLE
⊕ GAS BLOW OFF	○ GAS MARKER POST
---	EXISTING U.G. GAS LINE

WATER MAIN

⊕ EXISTING FIRE HYDRANT	▣ EXISTING WATER FAUCET/SPIGOT
⊕ EXISTING WATER GATE VALVE AND BOX	○ EXISTING WATER MANHOLE
⊕ EXISTING WATER STOP BOX	⊕ EXISTING WATER VALVE
⊕ EXISTING WATER GATE VALVE AND WELL	⊕ EXISTING WATER POST VALVE
▣ EXISTING WATER METER PIT	⊕ EXISTING WATER AIR RELEASE VALVE
○ EXISTING WATER WELL	○ EXISTING WATER MARKER POST
⊕ EXISTING SPRINKLER HEAD	⊕ PROPOSED FIRE HYDRANT
⊕ EXISTING POST HYDRANT	⊕ PROPOSED WATER GATE VALVE AND BOX
⊕ EXISTING WATER BACK FLOW PREVENTER	⊕ PROPOSED WATER STOP BOX
⊕ EXISTING WATER TOWER	⊕ PROPOSED WATER GATE VALVE AND WELL
⊕ EXISTING SPRINKLER VALVE	▣ PROPOSED WATER MAIN REDUCER
⊕ EXISTING WATER METER	▣ PROPOSED WATER MAIN SLEEVE
---	EXISTING WATER MAIN
---	REMOVE WATER MAIN
---	ABANDON WATER MAIN
---	PROPOSED WATER MAIN

STORM SEWER

⊕ EXISTING CURB INLET	▣ PROPOSED CATCH BASIN IN CURB LINE (5' DIA AND SMALLER)
▣ EXISTING SQUARE CATCHBASIN	⊕ PROPOSED CATCH BASIN IN CURB LINE (6' DIA AND LARGER)
⊕ EXISTING ROUND CATCHBASIN	⊕ PROPOSED CATCH BASIN IN GREEN SPACE (5' DIA AND SMALLER)
○ EXISTING DOWNSPOUT	⊕ PROPOSED CATCH BASIN IN GREEN SPACE (6' DIA AND LARGER)
○ EXISTING STORM SEWER CLEANOUT	● PROPOSED STORM MANHOLE (5' DIA AND SMALLER)
○ EXISTING STORM MANHOLE	● PROPOSED STORM MANHOLE (6' DIA AND LARGER)
▣ EXISTING PIPE INLET/OUTLET	▣ PROPOSED CULVERT END SECTION
○ EXISTING STORM MARKER POST	○ PROPOSED STORM SEWER CLEANOUT
EX 1812	1
---	EXISTING STORM SEWER
---	EXISTING DRIVE/CROSS CULVERT
---	REMOVE STORM SEWER
---	ABANDON STORM SEWER
---	PROPOSED STORM SEWER LESS THAN 24"
---	PROPOSED STORM SEWER 24" AND GREATER

SANITARY SEWER

○ EXISTING SANITARY MANHOLE	○ EXISTING SANITARY SEWER CLEANOUT/RISER
○ EXISTING SANITARY PUMP STATION	○ EXISTING SANITARY MARKER POST
⊕ EXISTING SANITARY SEWER VALVE	● PROPOSED SANITARY SEWER MANHOLE
▣ EXISTING SEPTIC TANK	○ PROPOSED SANITARY SEWER CLEANOUT
EX 5236	A
---	EXISTING SANITARY SEWER
---	REMOVE SANITARY SEWER
---	ABANDON SANITARY SEWER
---	EXISTING SANITARY FORCE MAIN
---	REMOVE SANITARY FORCE MAIN
---	ABANDON SANITARY FORCE MAIN
---	PROPOSED SANITARY SEWER

TREES & SHRUBS

⊕ STUMP	☀ CONIFEROUS TREE
⊕ DECIDUOUS TREE	☀ CONIFEROUS SHRUB
⊕ DECIDUOUS SHRUB	☀ DEAD TREE
---	EXISTING EDGE OF WOODS
---	EXISTING EDGE OF BRUSH
---	PROPOSED EDGE OF WOODS
---	PROPOSED EDGE OF BRUSH

PARCEL INFORMATION

401-069 PARCEL/TAX IDENTIFICATION NUMBER
 #5324 EXISTING BUILDING AND ADDRESS/BUSINESS NAME

CAUTION SYMBOLS

●●CAUTION●● HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND	USED WITH UNDERGROUND GAS & ELECTRICAL LINES
●●CAUTION●● FIBER OPTIC	USED WITH FIBER OPTIC LINES
●●CAUTION●● CRITICAL UNDERGROUND UTILITY	USED WITH CRITICAL UNDERGROUND LINES

PLAN VIEW LINETYPES

---	EXISTING CENTERLINE OF DITCH
---	EXISTING FENCE
---	EXISTING GUARDRAIL
---	EXISTING RAILROAD TRACK
---	EXISTING CONTOUR MAJOR
---	EXISTING CONTOUR MINOR
---	EXISTING EDGE OF WETLAND
---	EXISTING SHORELINE / EDGE OF WATER
---	EXISTING TOP OF BANK
---	EXISTING TOE OF SLOPE
---	PROPOSED DITCH CENTERLINE
---	PROPOSED FENCE
---	PROPOSED CONTOUR MAJOR
---	PROPOSED CONTOUR MINOR
---	PROPOSED SLOPE STAKE LINE
---	PROPOSED SILT FENCE

PROPOSED CALLOUTS

TOPO CALLOUTS	PLAN VIEW	
ADJ	ADJ	ADJUST STRUCTURE
ADJ-X	ADJ-X	ADJUST STRUCTURE W/ NEW COVER
ADJ-B/O	ADJ-B/O	ADJUST STRUCTURE BY OTHERS
REC	REC	RECONSTRUCT STRUCTURE
REL	REL	RELOCATE
REL-B/O	REL-B/O	RELOCATE BY OTHERS
REM	R	REMOVE
R&R	R&R	REMOVE AND REPLACE
SALV	SALV	SALVAGE
SAVE	S	SAVE
ABN	A	ABANDON
CLR	C	CLEARING
	B	BULKHEAD
	SR-X	SIDEWALK RAMP TYPE
	##	SOIL EROSION CONTROL MEASURE

GPR LOCATED EXISTING U.G. LINES

GPR CATV	GPR CATV	GPR CATV	U.G. CABLE TV LINE (GPR LOCATED)
GPR ELEC	GPR ELEC	GPR ELEC	U.G. ELECTRIC LINE (GPR LOCATED)
GPR FO	GPR FO	GPR FO	U.G. FIBER OPTIC LINE (GPR LOCATED)
GPR GAS	GPR GAS	GPR GAS	U.G. GAS LINE (GPR LOCATED)
GPR MISC	GPR MISC	GPR MISC	U.G. MISCELLANEOUS LINE (GPR LOCATED)
GPR SAN	GPR SAN	GPR SAN	U.G. SANITARY SEWER LINE (GPR LOCATED)
GPR STW	GPR STW	GPR STW	U.G. STORM SEWER LINE (GPR LOCATED)
GPR TELE	GPR TELE	GPR TELE	U.G. TELEPHONE LINE (GPR LOCATED)
GPR UNK	GPR UNK	GPR UNK	U.G. UNKNOWN LINE (GPR LOCATED)
GPR WTR	GPR WTR	GPR WTR	U.G. WATER LINE (GPR LOCATED)

PAVEMENT IDENTIFICATION

---	EXISTING EDGE OF GRAVEL
---	EXISTING CURB AND GUTTER
---	PROPOSED CURB AND GUTTER

REMOVAL HATCHING LEGEND

▣	REMOVE CONCRETE OR HMA PAVEMENT
▣	REMOVE GRAVEL SURFACE
---	REMOVE CURB AND GUTTER

PROPOSED HATCHING LEGEND

▣	PROPOSED HMA SIDEWALK
▣	PROPOSED HMA DRIVE
▣	PROPOSED 4" CONCRETE SIDEWALK/PAVEMENT
▣	PROPOSED 6" CONCRETE SIDEWALK/PAVEMENT

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: NOT TO SCALE

ROWE PROFESSIONAL SERVICES COMPANY
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PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL GENERAL LEGEND



Know what's below.
 Call before you dig.

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C101**
 JOB No: 2300634

GENERAL CONSTRUCTION NOTES

EMERGENCY CONTACTS

BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS. AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

UNDERGROUND UTILITY IDENTIFICATION AND LOCATION

THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

PUBLIC UTILITIES

EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

VERIFICATION OF UNDERGROUND UTILITIES

THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SUCH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE IN COST TO THE OWNER.

UTILITY SERVICE

UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

MAILBOXES

MAILBOXES LOCATED WITHIN THE LIMITS OF EXCAVATION, GRADING, OR CONSTRUCTION SHALL BE REMOVED AND PROTECTED FROM DAMAGE BY THE CONTRACTOR. TEMPORARY MAILBOXES SHALL BE PROVIDED AND MAINTAINED DURING THE PROJECT. UPON COMPLETION OF GRADING OR CONSTRUCTION ACTIVITIES, THE ORIGINAL MAILBOX SHALL BE REINSTALLED.

MAILBOXES (AND/OR SUPPORTS) WHICH ARE DAMAGED AS A RESULT OF THE PROJECT SHALL BE REPLACED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE. MAILBOXES SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS OF THE U.S. POSTAL SERVICE AND THE REGULATIONS OF THE AGENCY HAVING JURISDICTION OVER THE ROADS AND STREETS IN THE PROJECT AREA.

PRIVATE IRRIGATION SYSTEMS

WHERE IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT-OF-WAY WILL INTERFERE WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS THAT IT IS THEIR RESPONSIBILITY TO REMOVE AND PROTECT THEIR IRRIGATION SYSTEM. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF THE NOTIFICATION.

WHERE THE OWNER HAS NOT REMOVED THEIR PRIVATE IRRIGATION SYSTEM, THE CONTRACTOR SHALL CUT AND PLUG THOSE SECTIONS OF PIPING WHICH INTERFERE WITH CONSTRUCTION. SPRINKLER HEADS, VALVES, AND PIPING WHICH INTERFERES WITH THE CONTRACTOR'S WORK, SHALL BE REMOVED AND STOCKPILED ON THE OWNER'S PROPERTY.

SOIL BORINGS / PAVEMENT CORES

IF PROVIDED ON THE PLANS OR IN THE CONTRACT DOCUMENTS, LOGS OF SOIL BORINGS OR PAVEMENT CORES REPRESENT THE SUBSURFACE CONDITIONS ENCOUNTERED AT SPECIFIC POINTS. THE INFORMATION IS PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY.

MAINTAINING TRAFFIC

LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT AREA.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES IN ADVANCE.

THE CONTRACTOR SHALL NOTIFY EMERGENCY RESPONSE AGENCIES IN ADVANCE OF ROAD CLOSURES OR THE ESTABLISHMENT OF DETOURS.

TRAFFIC SIGNS

TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED AND REPLACED BY THE AGENCY HAVING JURISDICTION OVER THE STREETS OR ROADS IN THE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE AGENCY TO ARRANGE FOR REMOVAL OF THE SIGN AND IS RESPONSIBLE TO PAY ANY FEES ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF THE SIGNS.

SCHEDULE

THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

ALIGNMENT

ALIGNMENT AND GRADES FOR CURB AND GUTTER (INCLUDING THROUGH RAMPS AND DRIVEWAY OPENINGS) SHOWN ON THE PLANS ARE FOR THE TOP, BACK OF CURB, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE PLANS.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES LOCATED IN THE CURB LINE IS TO THE CENTER OF THE CASTING.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES WHICH ARE NOT IN THE CURB LINE AND FOR MANHOLES IS TO THE CENTER OF THE STRUCTURE.

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR MANHOLE CASTINGS, THE ELEVATION PROVIDED IS FOR THE TOP OF THE CASTING.

WHERE RIM ELEVATIONS ARE PROVIDED FOR INLET TYPE CASTINGS, THE ELEVATIONS ARE PROVIDED AS FOLLOWS:

- CURB INLETS – THE ELEVATION OF THE TOP OF CURB
- ALL OTHER INLETS – THE ELEVATION OF THE FLOW LINE

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR INLETS OR MANHOLE CASTINGS, THE ELEVATIONS PROVIDED ARE CONSIDERED PRELIMINARY. THE CONTRACTOR SHALL MAKE THE FINAL ADJUSTMENT FOLLOWING THE ESTABLISHMENT OF ACTUAL GRADING AND PAVEMENT ELEVATIONS.

CONSTRUCTION STAKING

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, THE CONTRACTOR SHALL REQUEST STAKING AT LEAST THREE WORKING DAYS IN ADVANCE.

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, STAKING WILL BE PROVIDED ONE TIME. THE CONTRACTOR SHALL PROTECT AND PRESERVE SURVEY CONTROL AND STAKING. RE-STAKING WILL BE AT THE CONTRACTOR'S EXPENSE.

SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS

THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS, BENCHMARKS, OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES; A LICENSED SURVEYOR SHALL WITNESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

PROTECTION OF TREES, SHRUBS, AND LANDSCAPING

ALL TREES, SHRUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SIGNING AND BARRICADING

THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE AFTER SUNSET SHALL BE LIGHTED.

THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, TRAFFIC REGULATORS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT APPROPRIATE.

TURF ESTABLISHMENT

ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH THREE INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURF WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE A NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

ADA COMPLIANCE

ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND APPLICABLE GUIDELINES OR STANDARDS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET THE ADA REQUIREMENTS, GUIDELINES, OR STANDARDS; THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE WORK DETERMINED TO BE NOT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, GUIDELINES, OR STANDARDS.

BACKFILL AND EMBANKMENT

BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND, MEETING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS III AS DESCRIBED IN THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER, AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER SOURCES.

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE, OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN CONCRETE, AND DEBRIS.

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

DENSITY TESTING

THE MAXIMUM UNIT WEIGHT OF SAND AND OTHER GRANULAR SOILS WILL BE DETERMINED BY THE ONE POINT CONE TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

THE MAXIMUM UNIT WEIGHT OF COHESIVE SOILS WILL BE DETERMINED BY THE ONE POINT PROCTOR TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

WORK HOURS

UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE OWNER:
MONDAY THROUGH FRIDAY 7 A.M. TO 8 P.M.
SATURDAY 8 A.M. TO 6 P.M.

THE CONTRACTOR SHALL NOT WORK ON SUNDAYS OR HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE OWNER.

DRAINAGE

THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE, AS A RESULT OF THE CONTRACTOR'S WORK.

DRIVEWAY CONSTRUCTION

DRIVEWAY SLOPES SHALL NOT EXCEED 10%, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE PROPERTY OWNERS WITH SUITABLE NOTICE BEFORE REMOVING AND REPLACING AN EXISTING DRIVEWAY.

SIDEWALK CONSTRUCTION

SIDEWALKS SHALL BE CONSTRUCTED TO PROVIDE POSITIVE DRAINAGE OF THE SIDEWALK AND ADJACENT SURFACES.

EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SURFACES, SIDEWALK SHALL BE CONSTRUCTED WITH A CROSS SLOPE SLOPED TOWARD THE STREET.

SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2%.

IN TURF AREAS, THE SURFACE OF THE SIDEWALK SHALL BE ABOUT 1/4 INCH HIGHER THAN THE ADJACENT GROUND SURFACES, EXCEPT WHERE NECESSARY TO PROVIDE POSITIVE DRAINAGE OR MEET EXISTING SIDEWALKS, CURBS, OR PAVEMENTS.

SIDEWALK SHALL BE CONSTRUCTED ON A SAND BASE, COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SIDEWALK FORMS HAVE BEEN SET AND THE SAND BASE PREPARED. CONCRETE SHALL NOT BE PLACED UNTIL THE ENGINEER HAS OBSERVED THE FORMS. CONCRETE DELIVERY SHALL BE SCHEDULED TO ALLOW SUFFICIENT TIME FOR ADJUSTMENT OF THE FORMS, IN THE EVENT THAT ADJUSTMENT IS NECESSARY.

THE CONTRACTOR SHALL PROTECT FRESH CONCRETE FROM DAMAGE BY THE WEATHER, TRAFFIC, OR VANDALISM. DAMAGED CONCRETE SHALL BE REPLACED BY THE CONTRACTOR'S EXPENSE.

STORM SEWER CONSTRUCTION NOTES

DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM PRECAST CONCRETE MANHOLE SECTIONS MEETING ASTM C478.

SUMPS IN DRAINAGE STRUCTURES AND PIPELINES SHALL BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF ACCEPTANCE BY THE OWNER.



Know what's below.
Call before you dig.

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS

DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C102**

JOB No: 2300634

PLAN DATE: SEPTEMBER 2024

PROJECT MGR: DRS

REVIEWER: AJW

SCALE: NOT TO SCALE

ROWE PROFESSIONAL SERVICES COMPANY



O: (810) 341-7500
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www.rowepsc.com

The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502

PREPARED FOR

**CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2**

WASHTENAW COUNTY
CIVIL GENERAL NOTES

R:\Projects\2300634\0mg\Construction_Drawing\Phone_2301-230634-NOTES_72.dwg

PLotted: 9/5/2024 10:40 AM

PROVIDED BY PENCHURA (NOT IN CONTRACT)

DESCRIPTION	QUANTITY	UNITS
Splash Pad Spray Features, Mech 2.0 with Wrap, Rain Diverter, Backflow Preventor, Storage Building, Play Equipment, Swings, Site Furnishings and Forever Lawn Safety Surface and Stone Base Supply and Preparation	1	LSUM

NOTE:
EQUIPMENT PROVIDED BY PENCHURA WILL BE DELIVERED AT 4150 PLATT RD, ANN ARBOR, MI 48108 OR AS COORDINATED WITH SITE CONTRACTOR

WORK BY OTHERS (NOT IN CONTRACT)

DESCRIPTION	QUANTITY	UNITS
Solar Parking Shelters	1	LSUM
Emergency Phone	1	Ea
Park Entry Sign Improvement	1	LSUM

PHASE 1 (NOT IN CONTRACT)

DESCRIPTION	QUANTITY	UNITS
Install Splash Pad	1	LSUM
Install Playground Equipment	1	LSUM
Install Shade Sails	1	LSUM
Prepare Subbase for Safety Surface	7000	Sft
Install Site Furnishings	1	LSUM
Shower Tower and Catch Basin	1	LSUM
Pavilion Improvements	1	LSUM
Restroom Improvements	1	LSUM
Splash Pad Signage	3	Ea
Backflow Preventer, Enclosure and Concrete Pad	1	LSUM
Misc Structures, Rem	1	LSUM
Clearing	1	LSUM
Storm Sewer, Rem, Less than 24 inch	175	Ft
Pavt, Rem	2600	Syd
Concrete Curb, Rem	20	Ft
Concrete Curb	20	Ft
Chain Link Fence, Vinyl Coated, 4'	300	Ft
Ornamental Fence, 4'	330	Ft
Sidewalk, Conc, 4 inch	20000	Sft
Sidewalk, Conc, Splash Pad	1850	Sft
Water Service, Type K Copper, 1 inch, Tr Det F	175	Ft
Water Service, Type K Copper, 1 inch, Tr Det G	75	Ft
Curb Stop and Box, 1 inh	1	Ea
Water Main Tap, 8 inch	1	Ea
Sanitary Sewer, 4 inch	50	Ft
Sanitary Sewer, 6 inch	10	Ft
Sanitary Forcemain, 2.5 inch	200	Ft
Sanitary Sewer Tap, 6 inch	1	Ea
Sewer Cleanout	4	Ea
Storm Sewer, CI A, 4 inch, Tr Det A	35	Ft
Storm Sewer, RCP CI III, 12 inch, Tr Det A	49	Ft
Storm Sewer, RCP CI III, 18 inch, Tr Det A	133	Ft
Storm Sewer, RCP CI III, 18 inch, Tr Det B	6	Ft
Culv End Sect, 12 inch	2	Ea
Culv End Sect, 18 inch	1	Ea
Dr Structure, 48 inch dia	6	Ea
Outlet Control Structure	1	Ea
Storm Sewer, Tap, 12 inch	1	Ea
Storm Sewer, Tap, 15 inch	1	Ea
Dr Structure Cover, Adj, Case 2	1	Ea
Monitoring Well, Adjust	2	Ea
Electrical Conduit, 2 inch	1500	Ft
Earthwork	1	LSUM
Non Haz Contaminated Material Handling and Disposal	2	Cyd
Quercus Macrocarpa, 5 inch caliper	1	Ea
Acer Rubrum, 2.5 inch caliper	6	Ea
Betula Nigra, 2.5 inch caliper	7	Ea
Plantings, Gal	1300	Ea
Seeding, Lowland	600	Syd
Turf Establishment	1	LSUM
Erosion Control, Silt Fence	2200	Ft
Erosion Control, Inlet Protection, Fabric Drop	6	Ea
Construction Staking	1	LSUM
Mobilization	1	LSUM

PHASE 2 BASE BID

DESCRIPTION	QUANTITY	UNITS
Subbase, CIP, 6 inch	3600	Syd
Aggregate Base, 8 inch	3500	Syd
Sidewalk, Conc, 6 inch	830	Sft
Pavement Markings	1	LSUM
Permanent Traffic Signs	1	LSUM
Pavt, Rem	4150	Syd
Traffic Speed Bump	2	Ea
Curb and Gutter, Conc, Replacement	600	Ft
Detectable Warning Surface	65	Ft
Erosion Control, Gravel Access Approach	1	Ea
Erosion Control, Inlet Protection, Fabric Drop	2	Ea
Dr Structure, Rem	1	Ea
Dr Structure, 48 inch dia	1	Ea
Dr Structure Cover, Adj, Case 2	1	Ea
Earthwork	1	LSUM
Subgrade Undercutting, Type II	50	CYD
Maintaining Traffic	1	LSUM
HMA, 13A	850	Ton
Construction Staking	1	LSUM
Mobilization	1	LSUM

PHASE 2 ALTERNATE 1

DESCRIPTION	QUANTITY	UNITS
Subbase, CIP, 6 inch	4700	Syd
Aggregate Base, 8 inch	4600	Syd
Pavement Markings	1	LSUM
Permanent Traffic Signs	1	LSUM
Metal Posts and Gate, Rem	1	LSUM
Traffic Speed Bump	5	Ea
Curb and Gutter, Conc, Replacement	500	Ft
Curb and Gutter, Conc	550	Ft
Erosion Control, Inlet Protection, Fabric Drop	7	Ea
Erosion Control, Silt Fence	300	Ft
Dr Structure, Rem	1	Ea
Dr Structure, 48 inch dia	4	Ea
Dr Structure Cover, Adj, Case 2	2	Ea
Storm Sewer, RCP CI III, 12 inch, Tr Det A	160	Ft
Storm Sewer, RCP CI III, 12 inch, Tr Det B	137	Ft
Earthwork	1	LSUM
Subgrade Undercutting, Type II	50	CYD
Turf Establishment	1	LSUM
Maintaining Traffic	1	LSUM
HMA, 13A	1200	Ton
Construction Staking	1	LSUM
Mobilization	1	LSUM

PHASE 2 ALTERNATE 2

DESCRIPTION	QUANTITY	UNITS
Sidewalk, Conc, 6 inch	1170	Sft
Pavt, Rem	2350	Syd
Fence, Rem	40	Ft
Collapsible Ballard	1	Ea
Detectable Warning Surface	45	Ft
Erosion Control, Inlet Protection, Fabric Drop	4	Ea
Erosion Control, Silt Fence	2900	Ft
Earthwork	1	LSUM
Turf Establishment	1	LSUM
HMA, 13A	450	Ton
Construction Staking	1	LSUM
Mobilization	1	LSUM



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PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C103**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024

PROJECT MGR: DRS

REVIEWER: AJW

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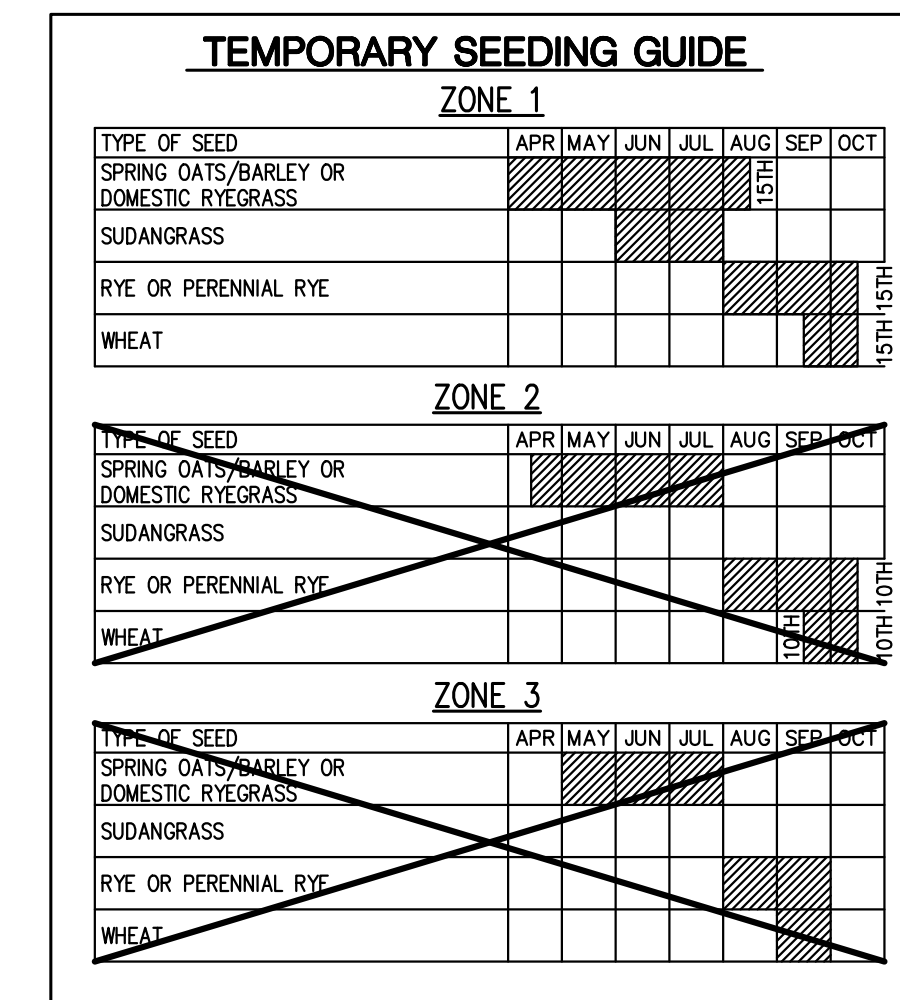
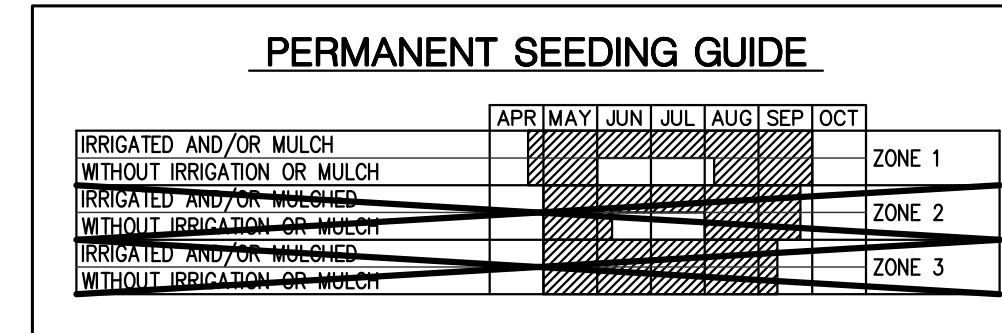
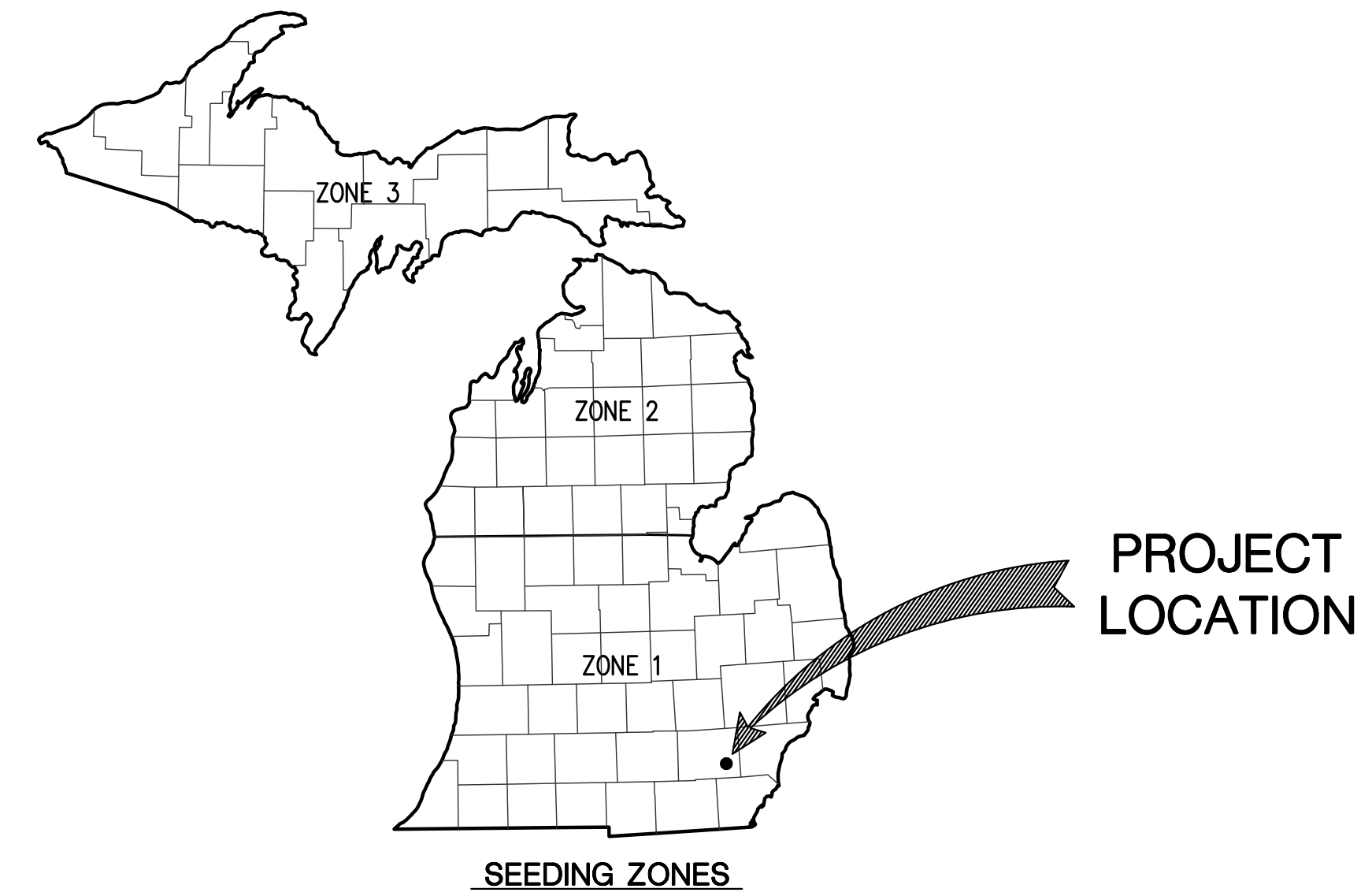
PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL PROJECT QUANTITIES

MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION SEDIMENTATION CONTROL MEASURES

* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS

KEY	DETAIL	CHARACTERISTICS	PROBLEM AREAS							KEY	DETAIL	CHARACTERISTICS	PROBLEM AREAS							
			A	B	C	D	E	F	G				A	B	C	D	E	F	G	
1	STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STRIPPED ABOVE BARRIERS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEEDED.	*				*	*		28	DROP SPILLWAY	SLOWS VELOCITY OF FLOW, REDUCING EROSION CAPACITY		*	*					
2	SELECTIVE GRADING & SHAPING	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES CAUSE EROSION PROBLEMS.	*				*	*		29	PIPE DROP	REDUCES RUNOFF VELOCITY. REMOVES SEDIMENT AND TURBIDITY. CAN BE DESIGNED TO HANDLE LARGE VOLUMES OF FLOW.			*					
3	GRUBBING OMITTED	SAVES COST OF GRUBBING, PROVIDES NEW SPROUTS, RETAINS EXISTING ROOT MAT SYSTEM, REDUCES WIND FALL AT NEW FOREST EDGE. DISCOURAGES EQUIPMENT ENTRANCE.	*				*	*		30	PIPE SPILLWAY	REMOVES SEDIMENT AND TURBIDITY FROM RUNOFF. MAY BE PART OF PERMANENT EROSION CONTROL PLAN.			*					
4	VEGETATIVE STABILIZATION	MAY UTILIZE A VARIETY OF PLANT MATERIAL. SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF.	*	*	*		*	*		31	ENERGY DISSIPATER	SLOWS RUNOFF VELOCITY TO NON-EROSIVE LEVEL. PERMITS SEDIMENT COLLECTION FROM RUNOFF.	*		*	*				
5	SEEDING	IMMEDIATE AND VERY EFFECTIVE. STABILIZES SOIL, THIS MINIMIZING EROSION. PERMITS RUNOFF TO INFILTRATE SOIL. REDUCING RUNOFF VOLUME. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*		*	*		32	LEVEL SPREADER	CONVEYS COLLECTED CHANNEL OR PIPE FLOW BACK TO SHEET FLOW. ADOPTS CHANNEL EASEMENTS AND CONSTRUCTION OFF PROJECT SITE. SIMPLE TO CONSTRUCT.			*					
6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER. EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY. EASY TO PLACE IN BANKS QUANTITIES BY MECHANIZED PERSONNEL. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*		*	*		33	SEDIMENTATION TRAP	MAY BE CONSTRUCTED OF A VARIETY OF MATERIALS. TRAPS SEDIMENT AND REDUCES VELOCITY OF FLOW. CAN BE CLEANED AND EXPANDED AS NEEDED.		*	*					
7	HYDRO-SEEDING	EFFECTIVE ON LARGE AREAS. MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION. MULCH WHICH IS WASHED SHOULD INCLUDE PREPARED TOPSOIL BED.	*				*	*		34	SEDIMENT BASIN	TRAPS SEDIMENT. RELEASES RUNOFF AT NON-EROSIVE RATES. CONVEYS RUNOFF AT SYSTEM OUTLETS. CAN BE VISUAL ADJUTANTS.		*	*	*				
8	SOODING	PROVIDES IMMEDIATE PROTECTION. CAN BE USED ON STEEP SLOPES WHERE SEED MAY BE DIFFICULT TO ESTABLISH. EASY TO PLACE. MAY BE REPAIRED IF DAMAGED. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*		*	*		35	STORM SEWER	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS. CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF. CONVEYS RUNOFF TO MUNICIPAL SEWER SYSTEM OR STABILIZED OUTFALL LOCATION. USE CATCH BASIN TO COLLECT SEDIMENT.					*	*		
9	VEGETATIVE BUFFER STRIP	SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF. REDUCES VOLUME OF RUNOFF ON SLOPES.	*	*			*	*		36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.					*	*		
10	MULCHING	USED ALONG TO PROTECT EXPOSED AREAS FOR SHORT PERIODS. PROTECTS SOIL FROM IMPACT OF FALLING BARK. PRESERVES SOIL MOISTURE AND PROTECTS GERMINATING SEED FROM TEMPERATURE EXTREMES.	*				*	*		37	SOD FILTER	HEAVYWEIGHT AND EASY TO CONSTRUCT. PROVIDES IMMEDIATE PROTECTION. PROTECTS AREAS AROUND INLETS FROM EROSION.				*				
11	ROUGHENED SURFACE	REDUCES VELOCITY AND INCREASES INFILTRATION RATES. HELDS WATER, SEEDS, AND MULCH BETTER THAN SMOOTH SURFACES.	*				*	*		38	STRAW BALE FILTER	HEAVYWEIGHT AND EASY TO CONSTRUCT. CAN BE LOCATED AS NECESSARY TO COLLECT SEDIMENT. MAY ALSO SERVE AS SWICH CHECK OR SEDIMENT TRAP.				*				*
12	COMPACTION	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.	*				*	*		39	ROCK FILTER	CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.				*				*
13	RIPRAP, RUBBLE, CARBONS	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. EFFECTIVE FOR REDUCING OR HIGH CONCENTRATIONS. PERMITS RUNOFF TO INFILTRATE SOIL. DISPERSES ENERGY FLOW AT SYSTEM OUTLETS.	*	*	*		*	*		40	INLET SEDIMENT TRAP	EASY TO SHAPE. COLLECTS SEDIMENT. MAY BE CLEANED AND EXPANDED AS NEEDED.				*				
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THIS MINIMIZING EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT EROSION CONTROL OF PAVED AREAS.					*	*		41	STONE AND ROCK CROSSING	MAY BE ROCK OR CLEAN RUBBLE. MINIMIZES STREAM TURBIDITY. HEAVYWEIGHT. MAY ALSO SERVE AS SWICH CHECK OR SEDIMENT TRAP.			*					
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VOLUME AND VELOCITY. REGULAR SURFACING WILL KEEP SLOPE VELOCITY.	*				*	*		42	TEMPORARY CULVERT	ELIMINATES STREAM TURBULENCE AND TURBIDITY. PROVIDES UNOBSTRUCTED PASSAGE FOR FISH AND OTHER WATER LIFE. CAPACITY FOR NORMAL FLOW CAN BE PROVIDED WITH STORM WATER FLOWING OVER ROADWAY.			*					
16	CURB & GUTTER	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE. COLLECTS AND CONVEYS RUNOFF TO DEDICATED DRAINAGE SYSTEM OR PREPARED DRAINWAY.					*	*		43	CULVERT SEDIMENT TRAP	EASY TO INSTALL, AT INLET. KEEPS CULVERT CLEAN AND FREE FLOWING. MAY BE CONSTRUCTED OF LUMBER OR LOGS.			*					*
17	BENCHES	REDUCES RUNOFF VELOCITY BY REDUCING EFFECTIVE SLOPE LENGTH. COLLECTS SEDIMENT. PROVIDES ACCESS TO SLOPES FOR SEEDING, MULCHING AND MAINTENANCE.	*				*	*		44	CULVERT SEDIMENT TRAP	DEFLECTS CURRENTS AWAY FROM STREAMBANK AREAS.			*					
18	DIVERSION BERM	DIVERTS WATER FROM VULNERABLE AREAS. COLLECTS AND DIVERTS WATER TO PREPARED DRAINAGEWAYS. MAY BE PLACED AS PART OF NORMAL CONSTRUCTION OPERATION.	*				*	*		45	TEMP. STREAM CHANNEL CHANGE	NEW CHANNEL KEEPS NORMAL FLOWS AWAY FROM CONSTRUCTION. REQUIRES STATE PERMIT.			*					
19	DIVERSION DITCH	COLLECTS AND DIVERTS WATER TO REDUCE EROSION POTENTIAL. MAY BE INCORPORATED IN PERMANENT PROJECT DRAINAGE SYSTEMS.	*				*	*		46	SHEET PILING	PROTECTS ERODIBLE BANK AREAS FROM STREAM CURRENTS DURING CONSTRUCTION. MINIMAL DISRUPTION WHEN REMOVED.			*					
20	BERM & DITCH	DIVERTS WATER TO A PREPARED DRAINWAY. MAY BE USED AT INTERVALS ACROSS SLOPE FACE TO REDUCE EFFECTIVE SLOPE LENGTH.	*				*	*		47	COFFERDAM	WORK CAN BE CONTINUED DURING MOST ANTICIPATED STREAM CONDITIONS. CLEAR WATER CAN BE PUMPED DIRECTLY BACK INTO STREAM.			*					
21	FILTER BERM	CONSTRUCTED OF GRAVEL OR STONE. INTERCEPTS AND DIVERTS RUNOFF TO STABILIZED AREAS OR PREPARED DRAINAGE SYSTEMS. SLOWS RUNOFF AND COLLECTS SEDIMENT.	*	*			*	*		48	CONSTRUCTION DAM	PERMITS WORK TO CONTINUE DURING NORMAL STREAM STAGES. CONTROLLED FLOODING CAN BE ACCOMPLISHED DURING PERIODS OF INACTIVITY. REQUIRE WATERING.			*					
22	BRUSH FILTER	USES SLASH AND LOGS FROM CLEARING OPERATIONS. CAN BE COVERED AND RESEED RATHER THAN REMOVED. ELIMINATES NEED FOR BURNING OR REMOVAL OF MATERIAL FROM SITE.					*	*		49	CHECK DAMS	REDUCES FLOW VELOCITY. CATCHES SEDIMENT. CAN BE CONSTRUCTED OF LOGS, STRAW, HAY, ROCK, LUMBER, MASONRY, OR SAND BAGS.			*	*				
23	BARE CHANNEL	LEAST EXPENSIVE FORM OF DRAINAGEWAY. MAY BE USED ONLY WHERE GRADIENT IS VERY LOW AND WITH SOILS OF MINIMAL EROSION POTENTIAL.					*	*		50	WEIR	CONTROLS SEDIMENTATION IN LARGE STREAMS. CAUSES MINIMAL TURBIDITY.			*	*				
24	GRASSED WATERWAY	MUCH MORE STABLE FORM OF DRAINAGEWAY THAN BARE CHANNEL. GRASS TENDS TO SLOW RUNOFF AND FILTER OUT SEDIMENT. USE WHERE BARE CHANNEL WOULD BE DROPPED.					*	*		51	RETAINING WALL	REDUCES GRADIENT WHERE SLOPES ARE EXTREMELY STEEP. PERMITS RETENTION OF EXISTING VEGETATION, HOLDING SOIL STABLE IN CRITICAL AREAS. MINIMIZES MAINTENANCE.		*	*					*
25	SLOPE DRAIN (SURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.	*				*	*		52	SEEPAGE CONTROL	PREVENTS SPRING AND SOIL SURFACE ON OUT SLOPES.		*						*
26	SLOPE DRAIN (PIPE CHUTE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.	*				*	*		53	WINDBREAK	MINIMIZES WIND EROSION. MAY BE SNOW FENCE.					*			
27	SLOPE DRAIN (SUBSURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED AS GRADING PROGRESSES.	*				*	*		54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.			*					*



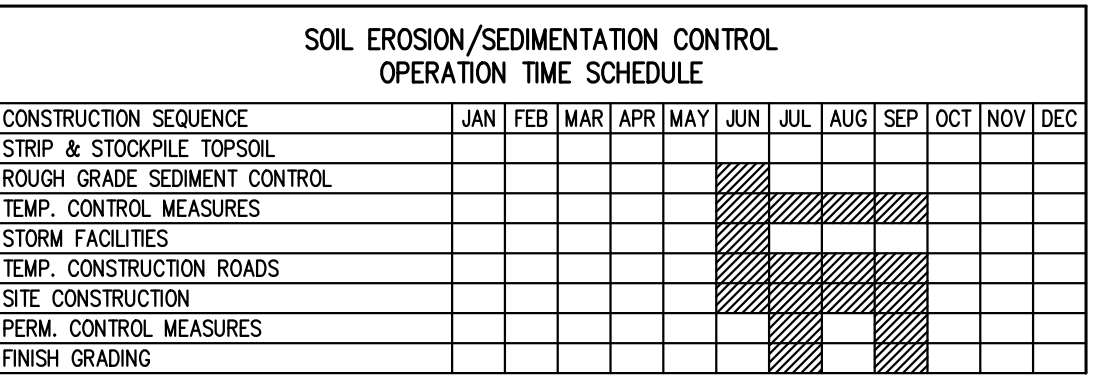
SOIL EROSION & SEDIMENTATION CONTROL

- CONTRACTOR SHALL SUBMIT A DETAILED EROSION CONTROL PLAN AND OBTAIN A SOIL EROSION & SEDIMENTATION CONTROL PERMIT PRIOR TO ANY EARTH CHANGES.
- CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING AND/OR GRADING OPERATIONS.
- BORROW AND FILL DISPOSAL AREAS WILL BE SELECTED AND APPROVED AT TIME OF PLAN REVIEW. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
- THE PROJECT WILL CONTINUALLY BE INSPECTED FOR SOIL EROSION AND SEDIMENTATION CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE DEVELOPER WITHIN 24 HOURS.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE COMPLETELY REMOVED BY THE DEVELOPER UPON ESTABLISHMENT OF PERMANENT CONTROL MEASURES.
- TEMPORARY SOIL EROSION CONTROL MEASURES MUST BE REMOVED FROM ROAD RIGHT-OF-WAY AREAS PRIOR TO ACCEPTANCE OF STREETS FOR ROUTINE MAINTENANCE.
- VEGETATION MUST BE ACCEPTABLY ESTABLISHED PRIOR TO FINAL RELEASE OF THE CONSTRUCTION GUARANTEE BY THE DESIGNATED SOIL EROSION SEDIMENTATION CONTROL AGENT.

MAINTENANCE

- WHILE VEGETATION IS BEING ESTABLISHED, HAND WEEDING OR OTHER WEED CONTROL METHODS WILL BE REQUIRED. THEREAFTER, TWICE ANNUAL WEEDING IS TYPICAL. INVASIVE PLANTS SHOULD BE CONTROLLED EARLY IN THEIR ESTABLISHMENT BEFORE THEY SPREAD.
- FALL AND SPRING CLEANUP MUST BE PERFORMED INCLUDING CUTTING DOWN DEAD PERENNIALS, REMOVAL OF WEEDS AND REMOVAL OR MULCHING OF LEAVES AND STEMS.
- MULCH MUST BE RE-SPREAD WHEN EROSION IS EVIDENT AND BE REPLENISHED ANNUALLY. ONCE EVERY 2 TO 3 YEARS THE ENTIRE AREA MAY REQUIRE MULCH REPLACEMENT.
- BIORETENTION SYSTEMS MUST BE INSPECTED FOLLOWING STORM EVENTS OF 1 INCH OR MORE AND AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC. SEDIMENT MUST BE REMOVED FROM FOREBAY AND RIPRAP/STONE PROTECTED AREAS AT LEAST TWICE PER YEAR. SEDIMENT SHOULD BE REMOVED BEFORE ITS ACCUMULATION NEGATIVELY IMPACTS THE PERFORMANCE OF THE PRETREATMENT DEVICE.
- DURING PERIODS OF EXTREME DROUGHT, BIORETENTION SYSTEMS MAY REQUIRE WATERING.
- BIORETENTION SYSTEMS CAN BE MOWED TWICE PER YEAR.
- TREES AND SHRUBS MUST BE INSPECTED TWICE PER YEAR TO EVALUATE HEALTH.
- INVASIVE SPECIES MUST BE REMOVED ON AN ANNUAL BASIS AND DISPOSED OF IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO CHEMICAL SHALL BE USED WITH ONE EXCEPTION, INVASIVE SPECIES CAN BE TREATED CHEMICALLY BY A CERTIFIED APPLICATOR.
- THE LONG-TERM WATER MAINTENANCE PLAN FOR THE FACILITY INCLUDES OVERSIGHT BY THE CITY OF ANN ARBOR PARKS AND RECREATION COMMISSION WITH AN ANNUAL STAFFING BUDGET OF OVER \$5.5 MILLION DOLLARS CITY-WIDE. THE CONTACT FOR THIS FACILITY IS ADAM FERCHO, PARK PLANNER AND LANDSCAPE ARCHITECT (734) 794-6230 EXT. 42548.
- WCRC WILL BE NOTIFIED UPON RECEIPT OF VEGETATIVE MATERIALS FOR THE RETENTION POND FOR INSPECTION AND REVIEW PRIOR TO INSTALLATION.

RESPONSIBLE PARTY	ANNUAL COST
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$200
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$100
CITY PARKS DEPT.	\$500
CITY PARKS DEPT.	TOTAL: \$1,300



CONSTRUCTION SEQUENCE

- IMPLEMENTATION OF TEMPORARY EROSION CONTROL MEASURES, SELECTIVE GRADING, DIVERSIONS AS REQUIRED IN FIELD, PROTECTION OF STORM SEWER FACILITIES.
- EXCAVATION AND STOCKPILING OF SOIL.
- PERIODIC MAINTENANCE OF AFFECTED EROSION CONTROL MEASURES.
- PERMANENT MEASURES, FINAL GRADING, SEEDING AND MULCHING.



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

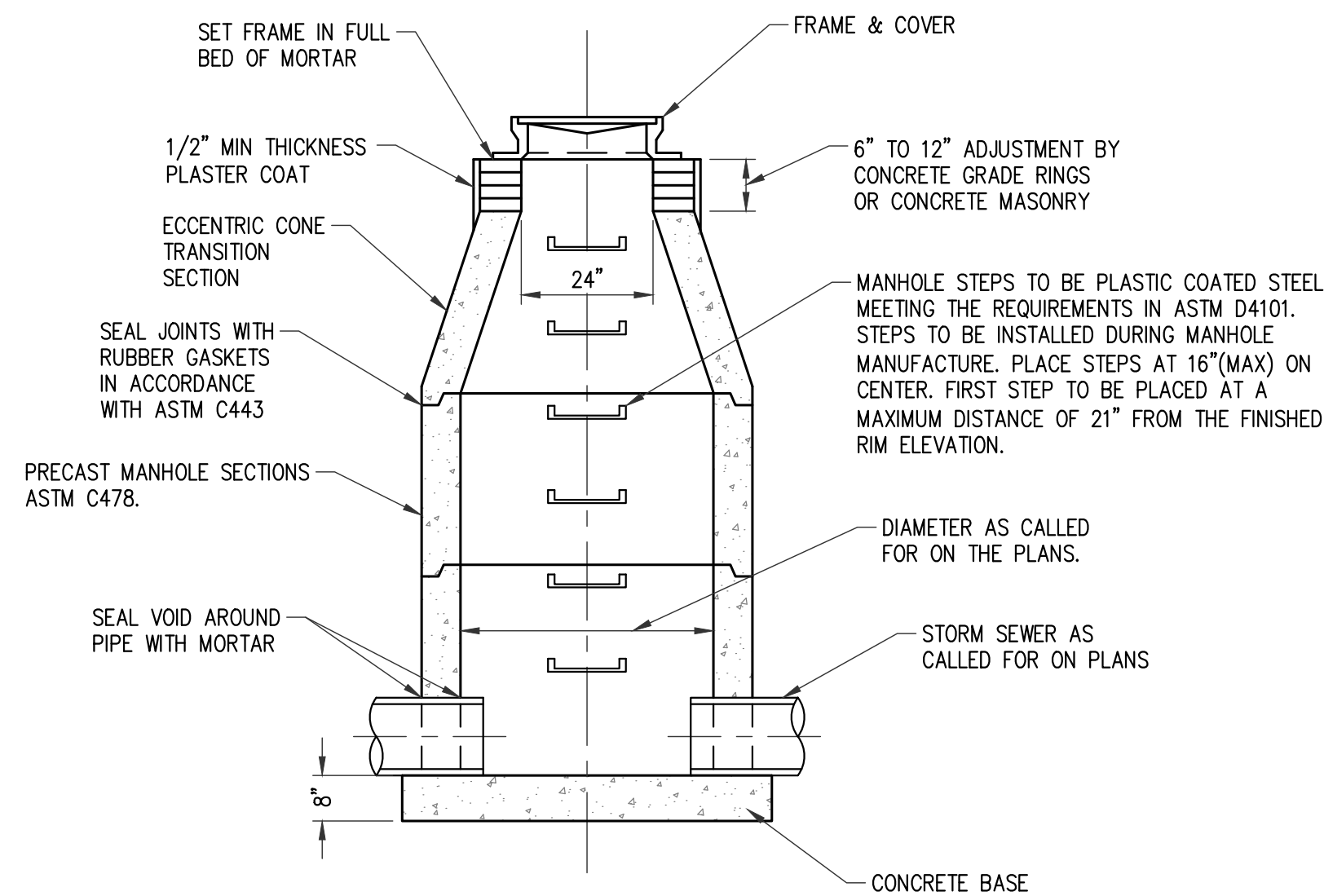
SHT# **C104**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: NOT TO SCALE

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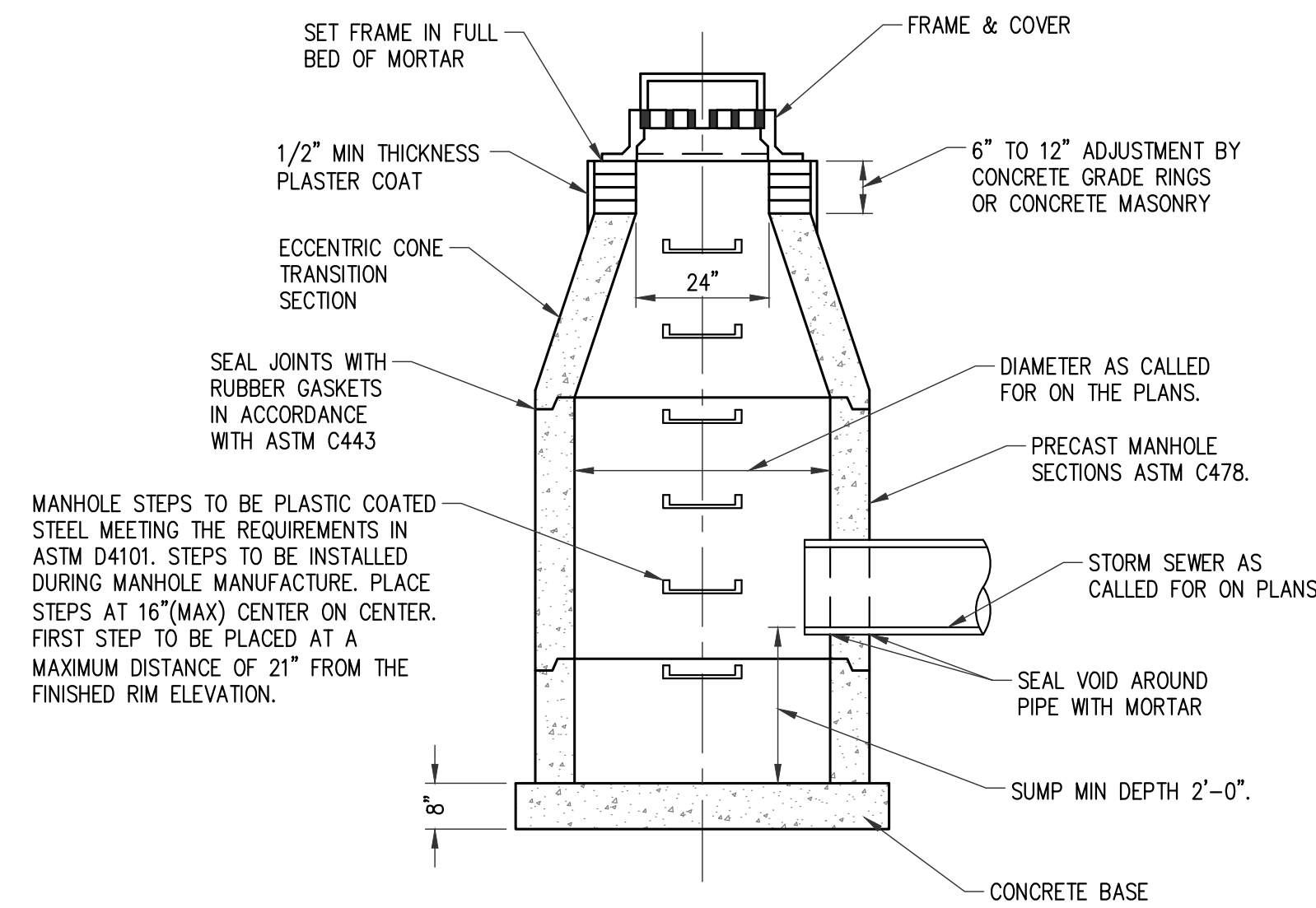
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WASHTENAW COUNTY
CIVIL SOIL EROSION KEY



STANDARD DRAINAGE STRUCTURE

NOT TO SCALE



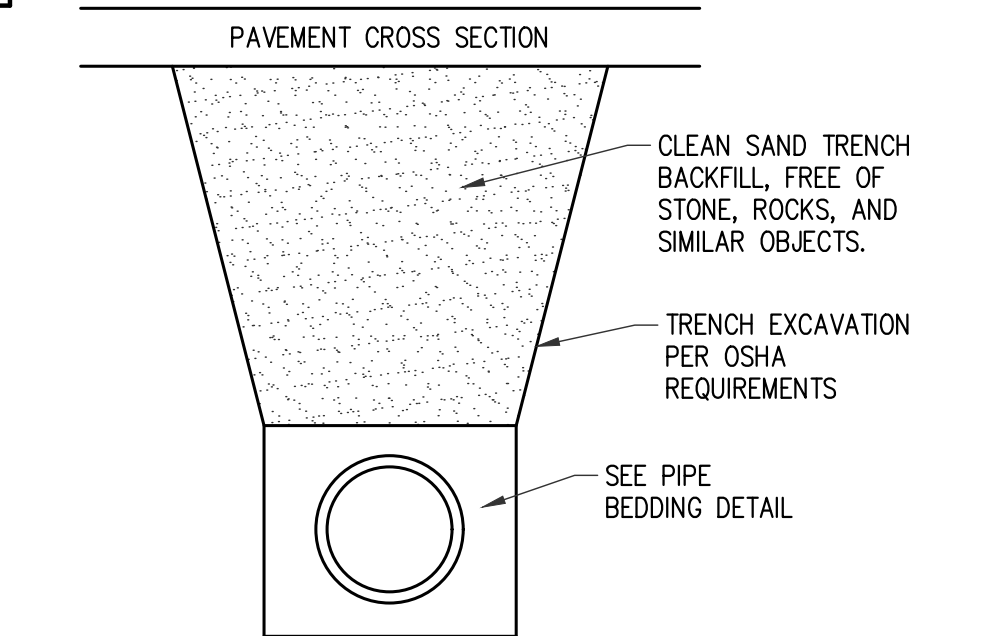
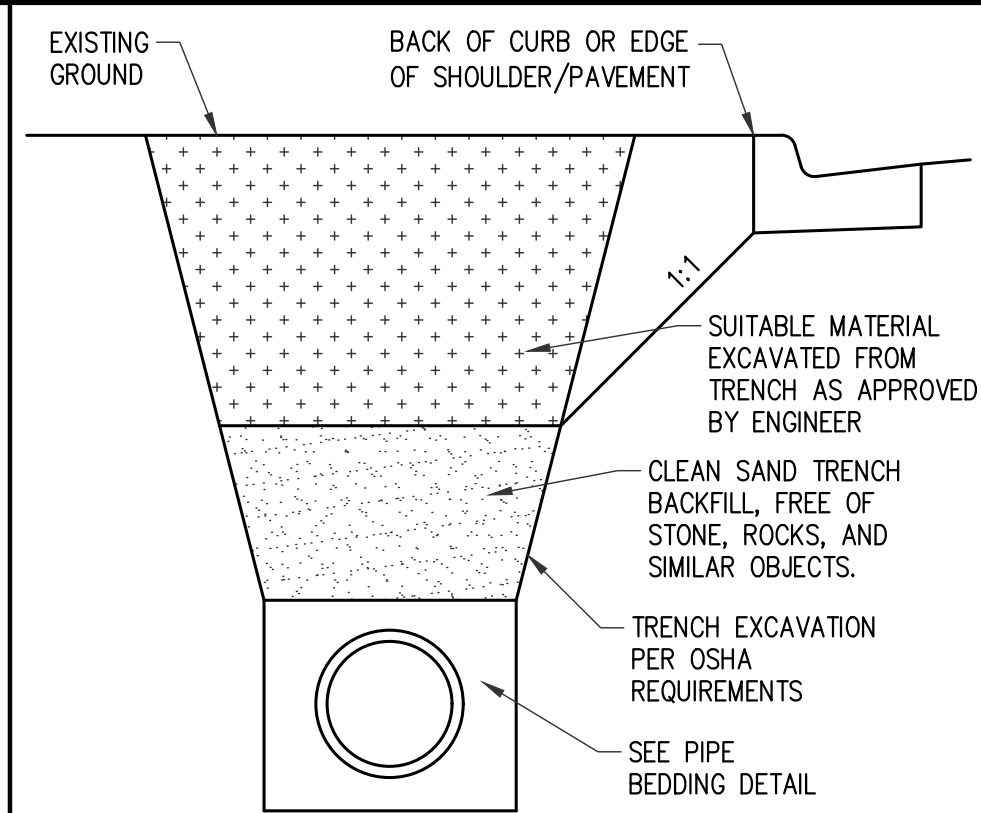
STANDARD DRAINAGE STRUCTURE WITH 2' SUMP

NOT TO SCALE

NOTES:

- SUFFICIENT TRENCH WIDTH SHALL BE PROVIDED TO ALLOW FREE WORKING SPACE AND TO PERMIT COMPACTING THE BACKFILL AROUND THE PIPE.
- THE FOLLOWING ARE MINIMUM TRENCH WIDTHS:

I.D. PIPE SIZE (INCHES)	18 OR SMALLER	21	24	30	36	42	48	54	
"W" TRENCH WIDTH (FEET)	3.0	3.5	4.0	5.0	6.0	7.0	8.0	9.5	
I.D. PIPE SIZE (INCHES)	60	66	72	78	84	90	96	102	108
"W" TRENCH WIDTH (FEET)	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0

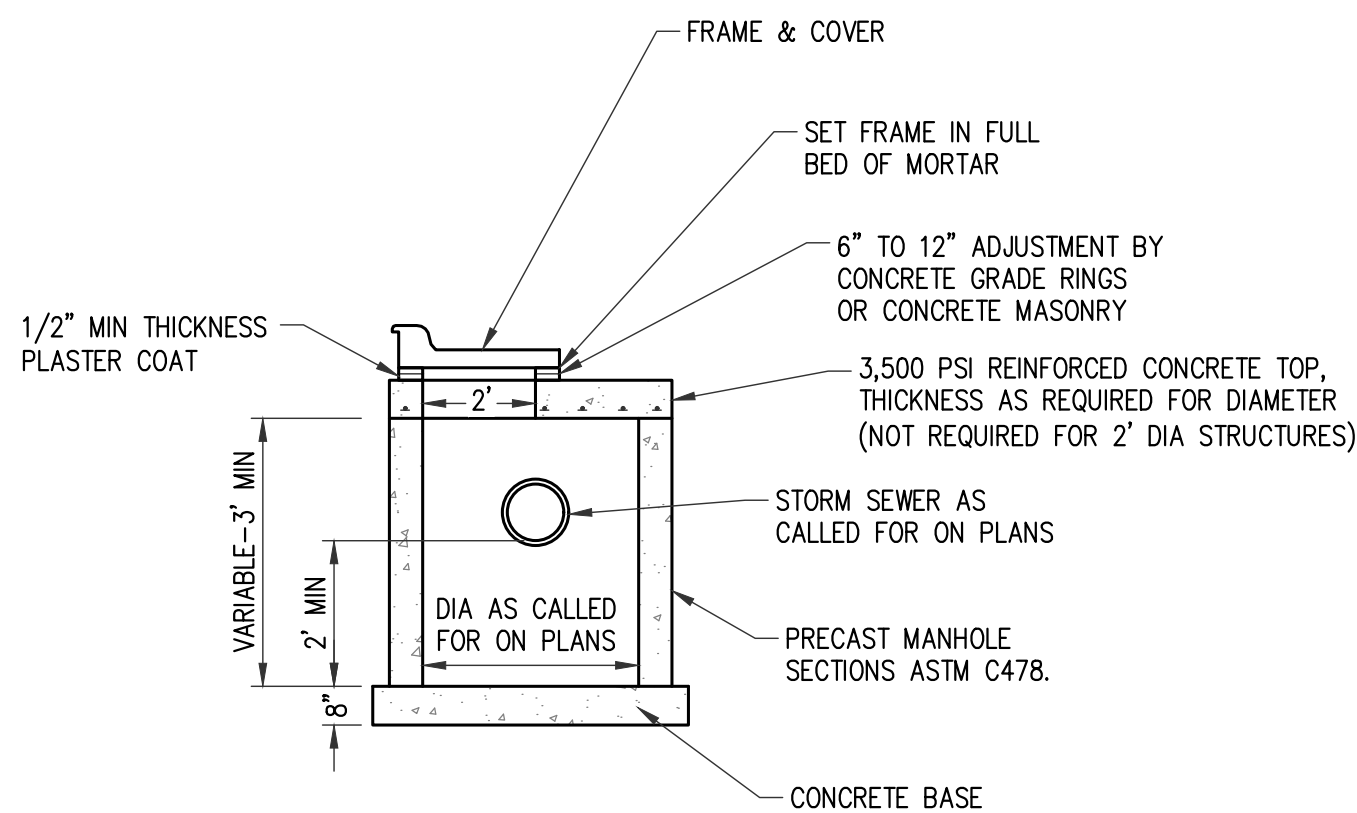


NOTES:

- SAND SHALL BE MDOT GRANULAR MATERIAL CLASS II.
- SAND SHALL BE COMPACTED TO 95% OF ITS MAXIMUM UNIT WEIGHT.

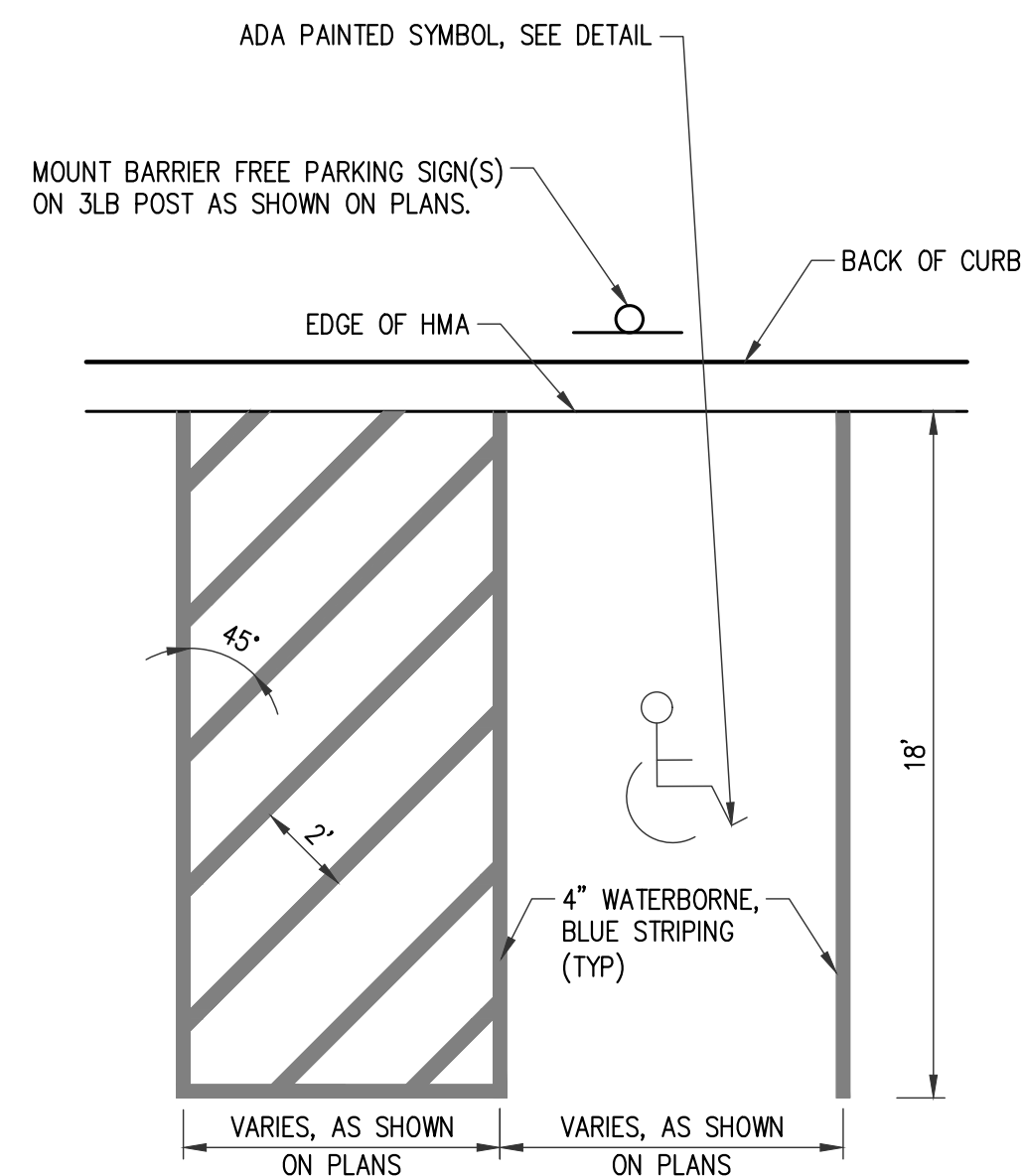
TRENCH DETAIL B BACKFILL DETAIL

NOT TO SCALE



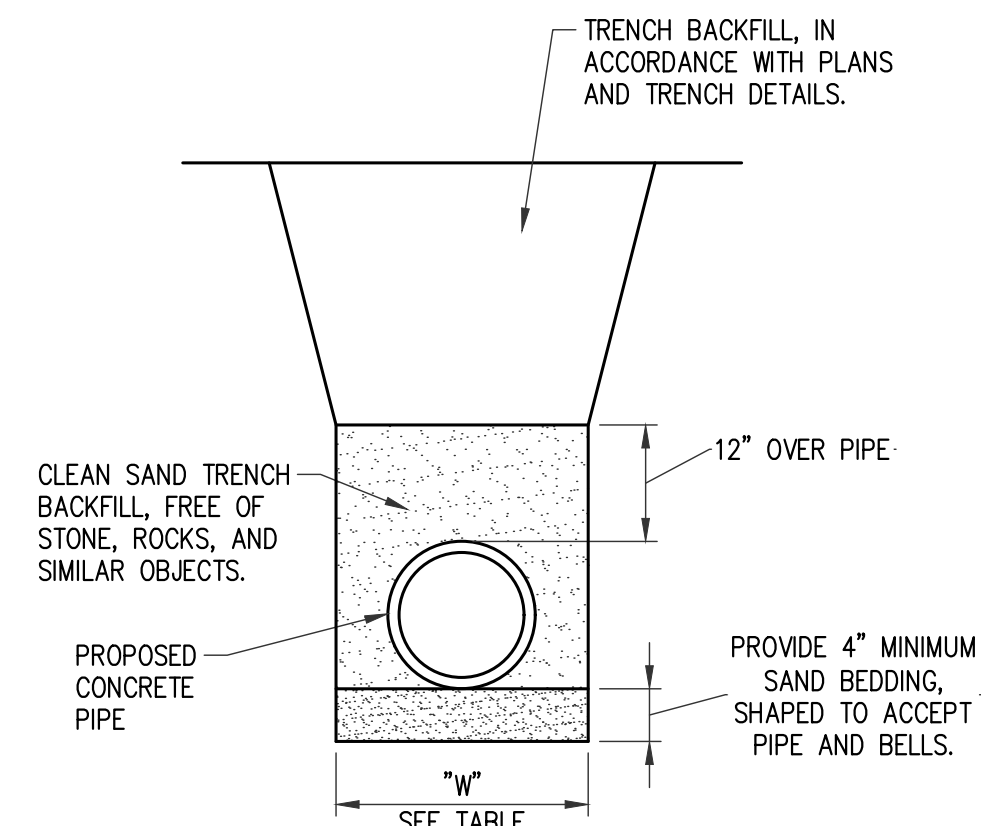
LOW COVERAGE (FLAT TOP) STRUCTURE DETAIL

NOT TO SCALE



BARRIER FREE PARKING SIGNAGE AND PAVEMENT MARKINGS

NOT TO SCALE



NOTES:

- SAND SHALL BE MDOT GRANULAR MATERIAL CLASS II.
- SAND SHALL BE COMPACTED TO 95% OF ITS MAXIMUM UNIT WEIGHT.

RIGID GRAVITY PIPE SAND BEDDING DETAIL

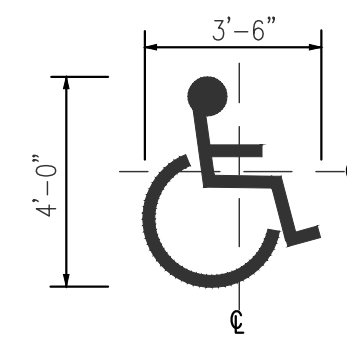
NOT TO SCALE



RESERVED PARKING ONLY
BARRIER FREE SIGN
MDOT R7-8
NO SCALE



VAN ACCESSIBLE
BARRIER FREE VAN ACCESSIBLE SIGN
MDOT R7-8P
NO SCALE



NOTES:

- SYMBOL SHALL BE WATERBORNE AND APPLIED AT A WIDTH OF 4" AND PAINTED BLUE.
- CENTERLINE OF SYMBOL SHALL BE PARALLEL TO PARKING STALL STRIPE AND IN CENTER OF STALL.

BARRIER FREE SIGNS AND SYMBOLS DETAILS

NOT TO SCALE



Know what's below.
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PLAN SUBMITTALS AND CHANGES

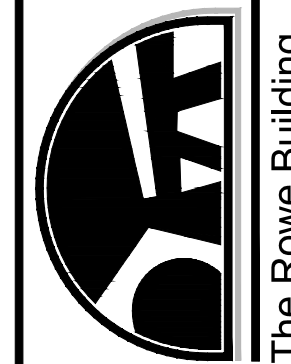
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DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C105**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: NOT TO SCALE

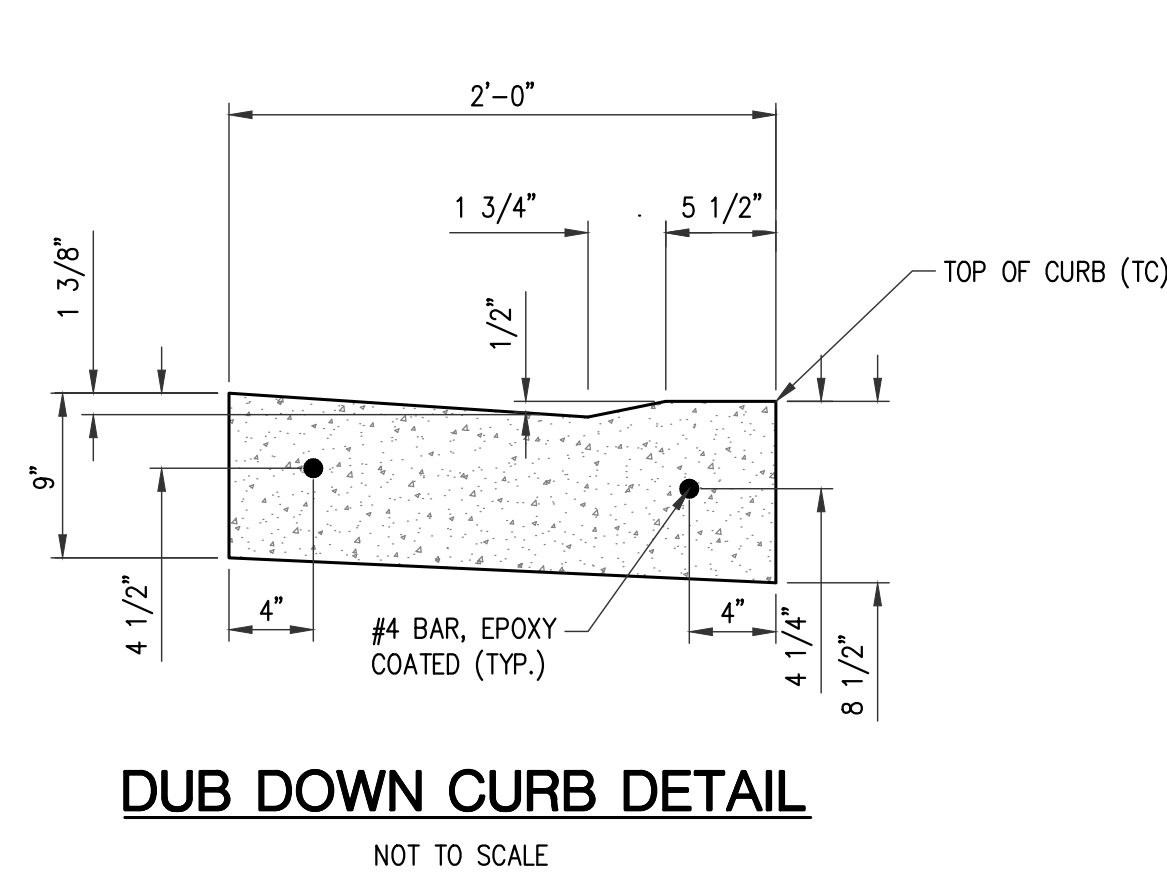
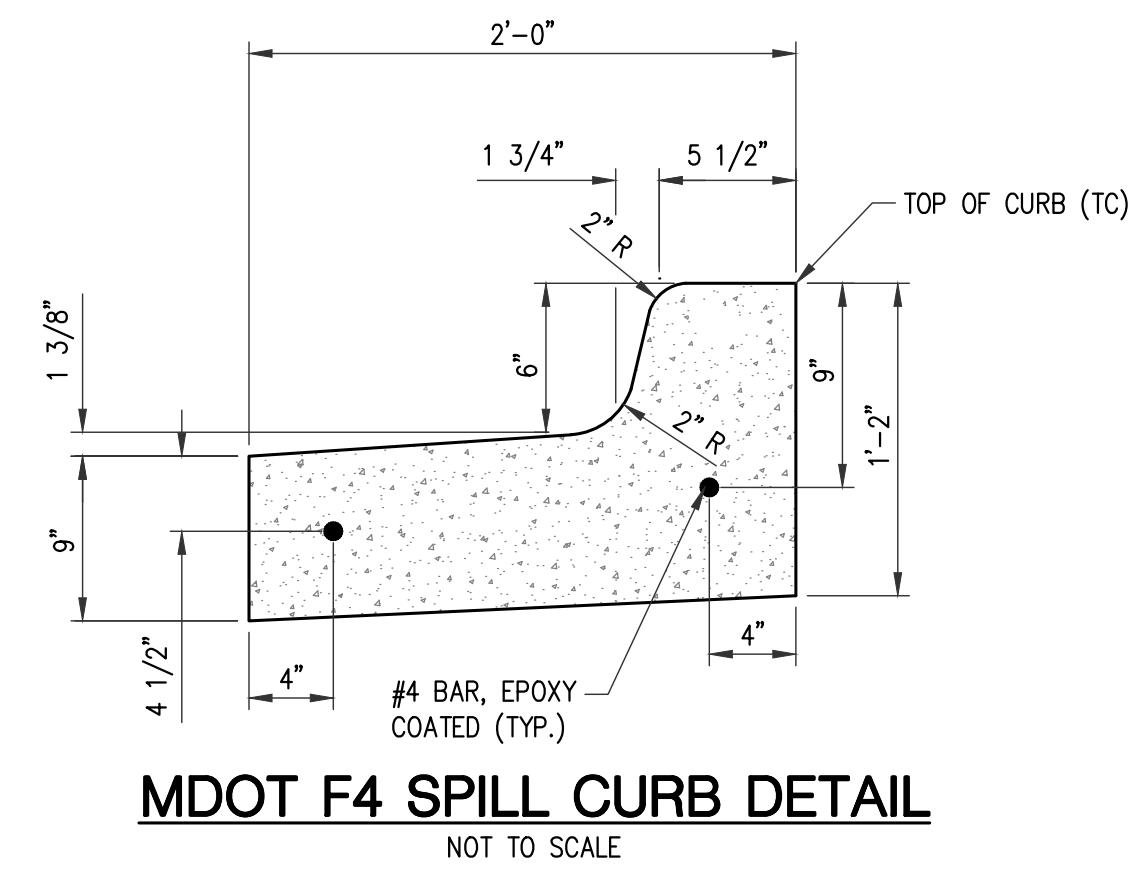
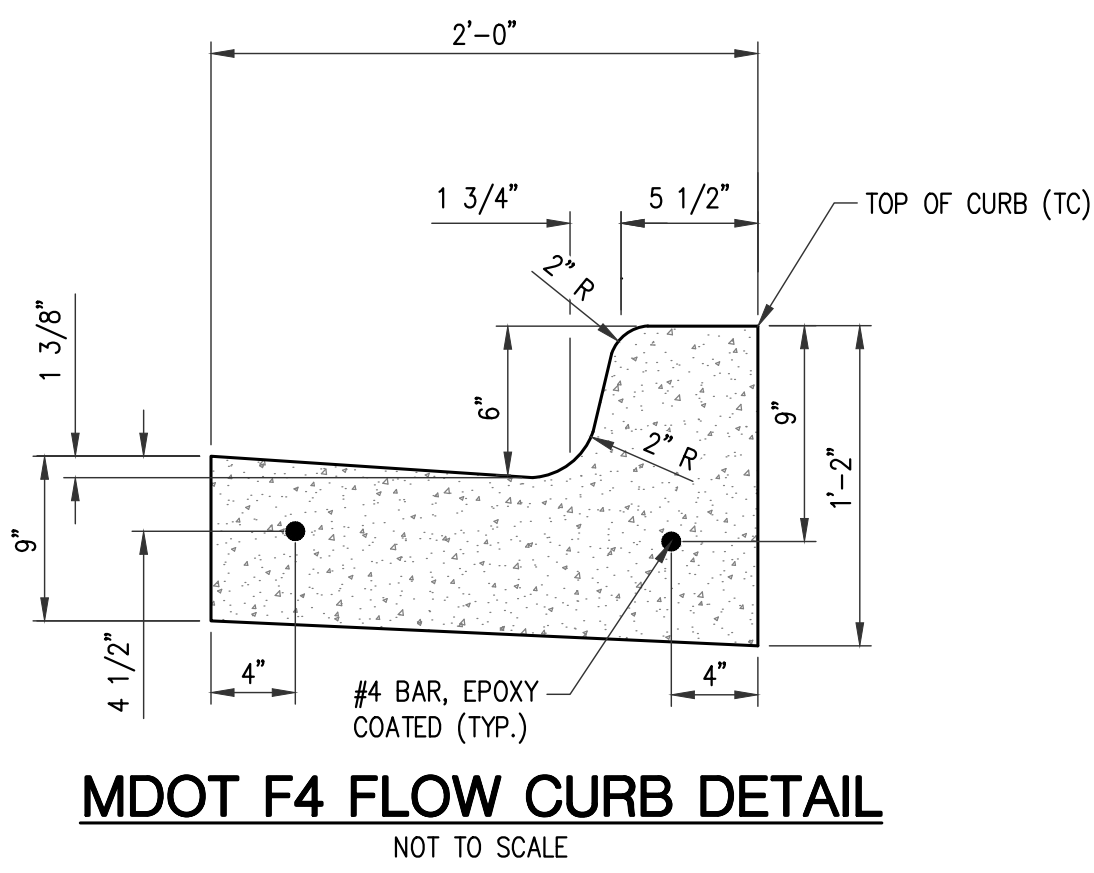
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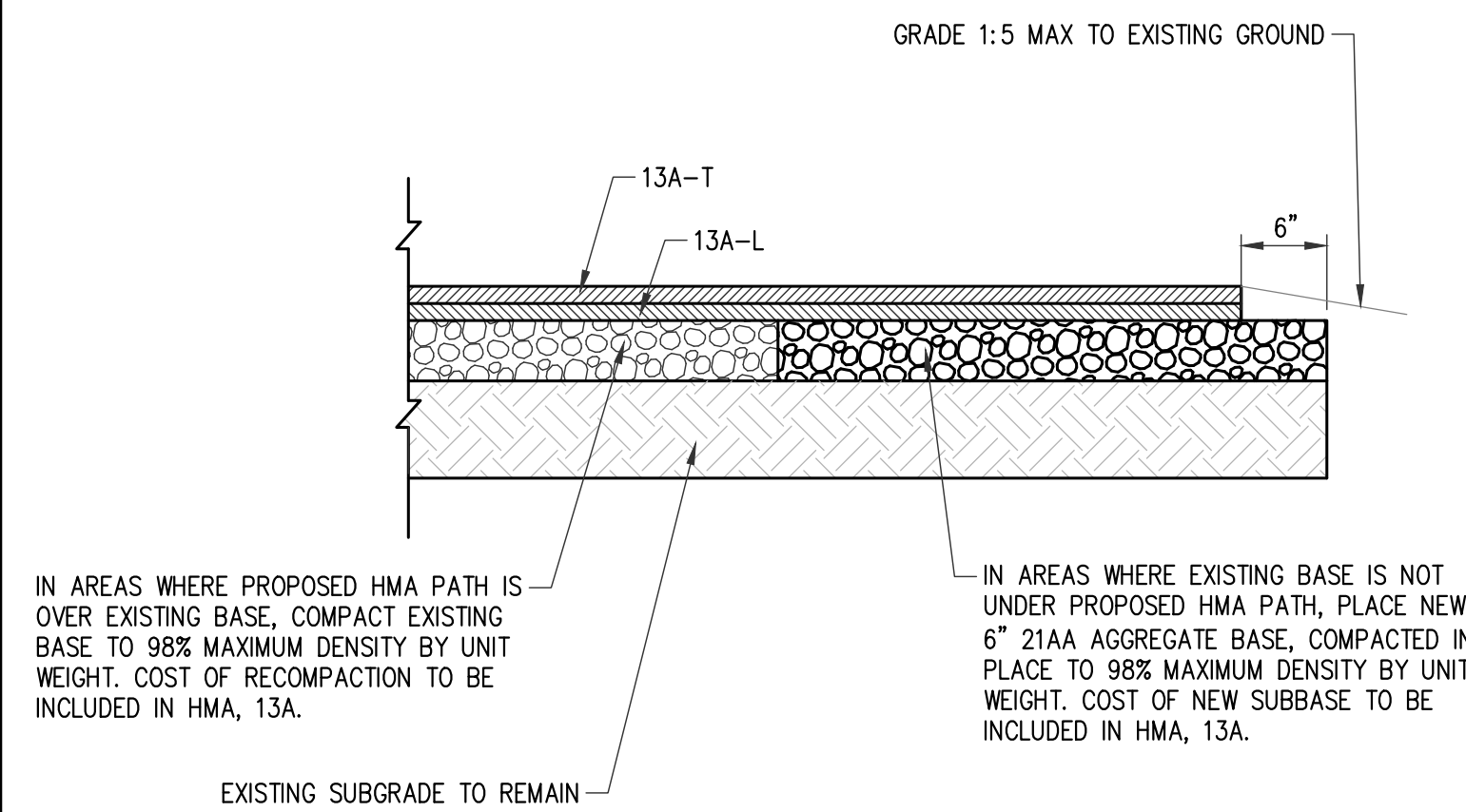
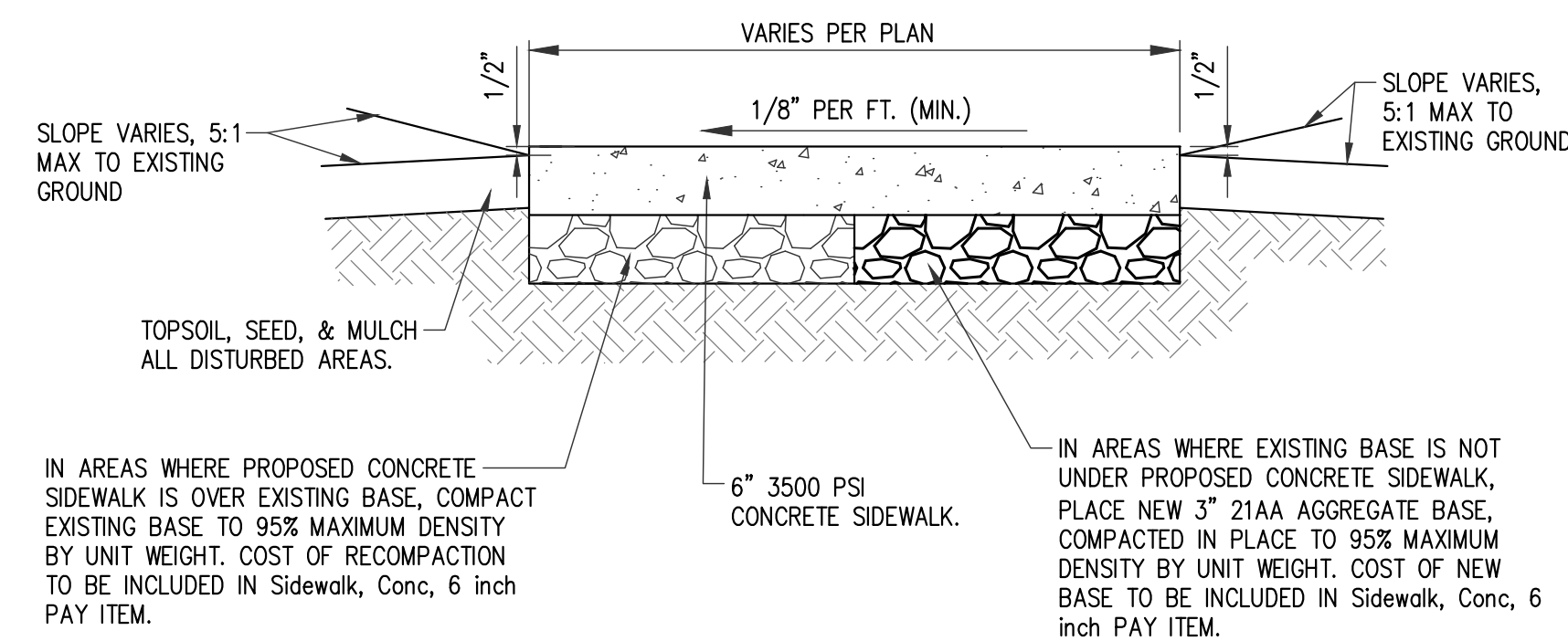
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PREPARED FOR
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BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL DETAILS

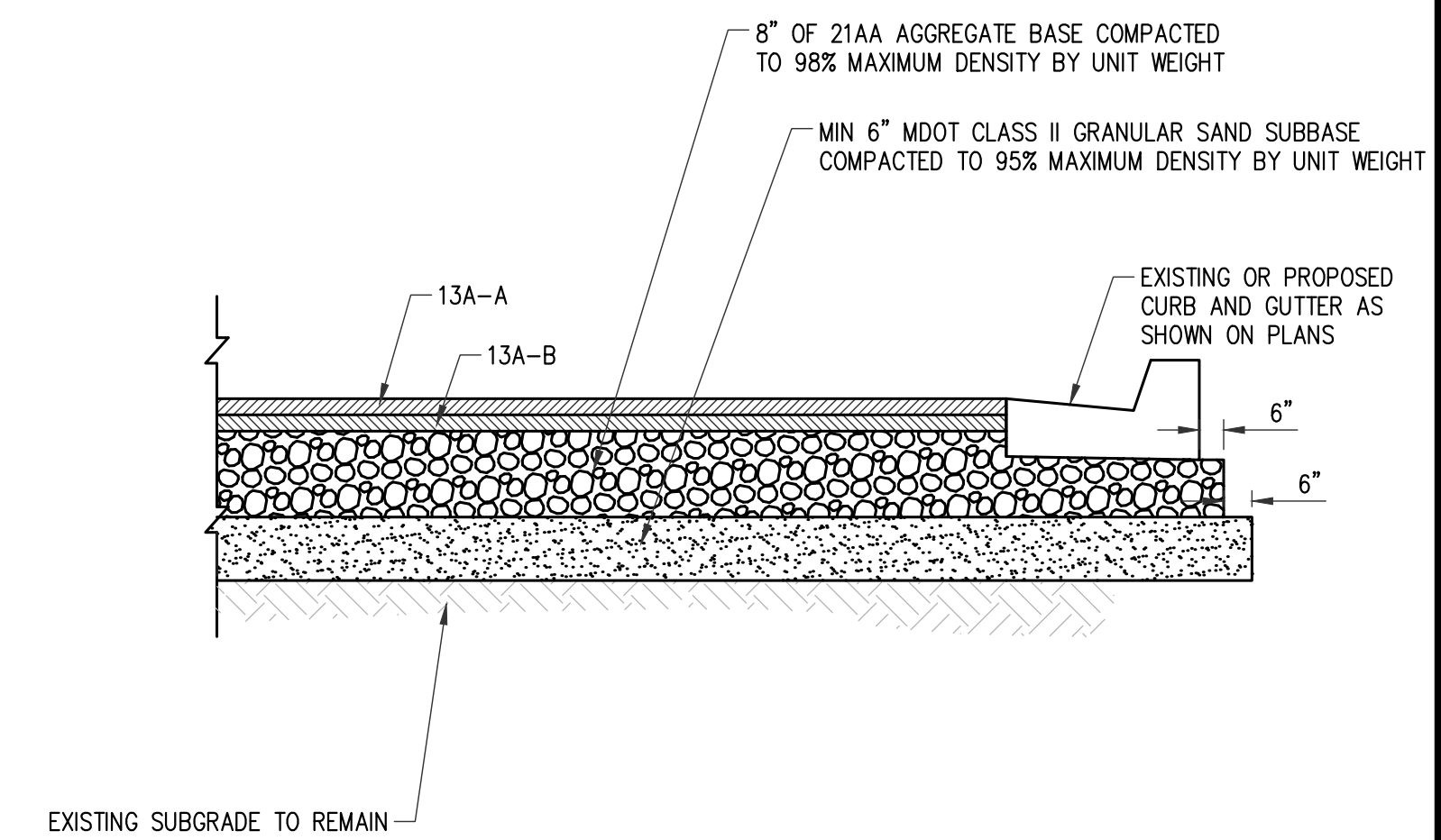


- NOTES:
- SEAL ALL EXPANSION JOINTS, BUILDING TO SIDEWALK JOINTS, SIDEWALK TO BRICK JOINTS, AND CURB TO BRICK JOINTS WITH SELF LEVELING POLYURETHANE JOINT SEALANT (GRAY) OR EQUAL.



HMA APPLICATION CHART					
IDENT NO	ITEM	HMA PAVEMENT	THICKNESS	PERFORMANCE GRADE	COMMENTS
13A-T	HMA, 13A	HMA, 13A	1.5"	58-28	TOP COURSE
13A-L	HMA, 13A	HMA, 13A	1.5"	58-28	LEVELING COURSE

RAP SHALL BE LIMITED TO TIER 1 DESIGN (17% MAX RAP BY BINDER WEIGHT)
BOND COAT RATE SHALL BE 0.05 TO 0.15 GAL/SYD
TOP COURSE AGG. WEAR INDEX (AWI) EL = 220 MIN



HMA APPLICATION CHART					
IDENT NO	ITEM	HMA PAVEMENT	THICKNESS	PERFORMANCE GRADE	COMMENTS
13A-A	HMA, 13A	HMA, 13A	1.5"	58-28	TOP COURSE
13A-B	HMA, 13A	HMA, 13A	2.5"	58-28	LEVELING COURSE

RAP SHALL BE LIMITED TO TIER 1 DESIGN (17% MAX RAP BY BINDER WEIGHT)
BOND COAT RATE SHALL BE 0.05 TO 0.15 GAL/SYD
TOP COURSE AGG. WEAR INDEX (AWI) EL = 220 MIN



Know what's below.
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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C106**
JOB No: 2300634

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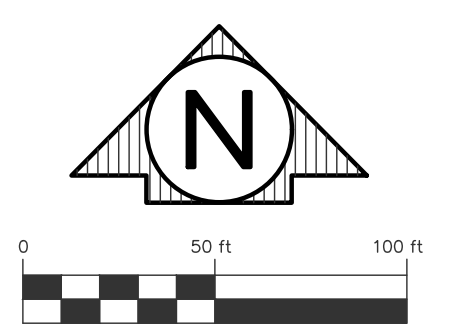
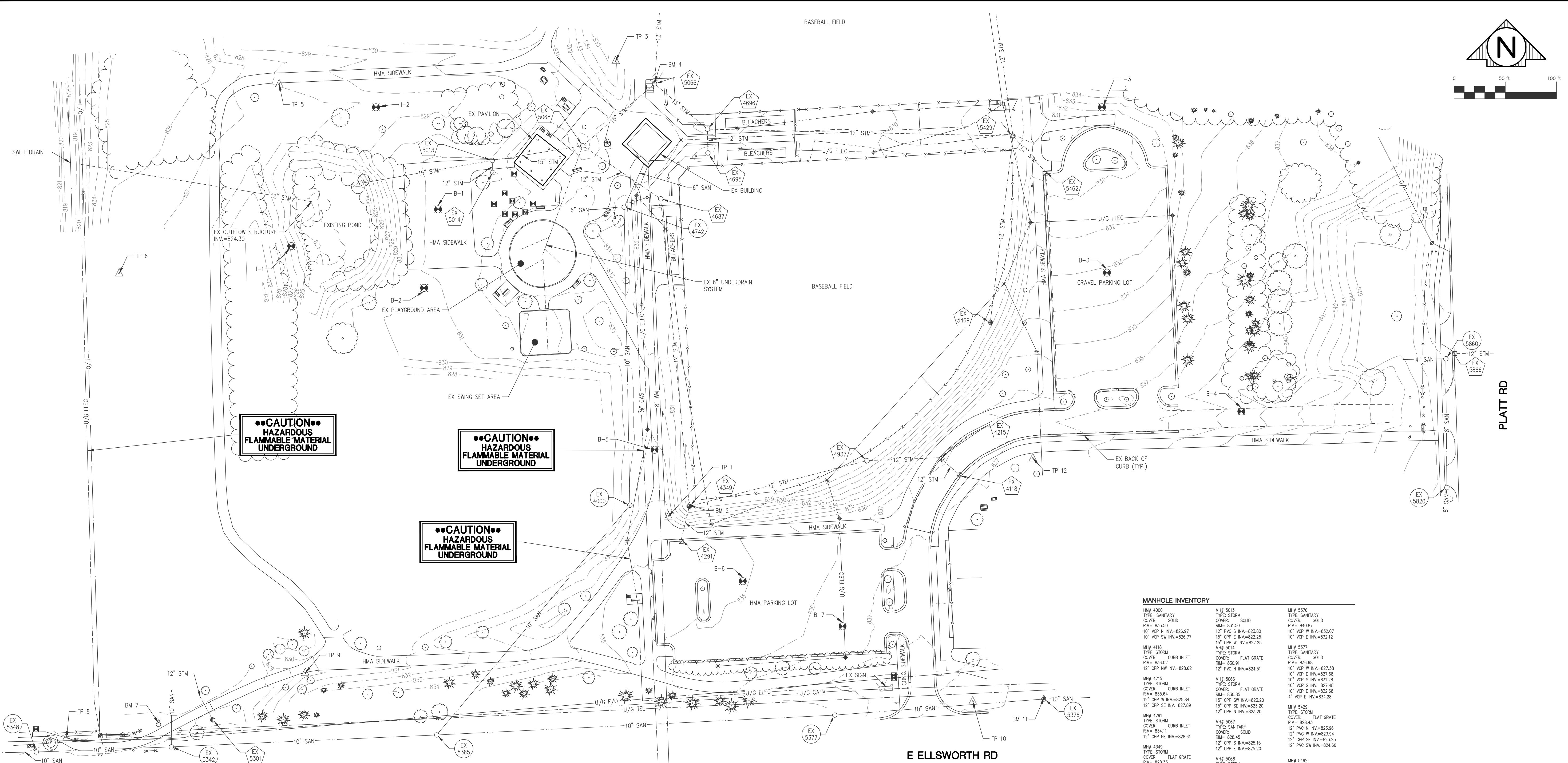


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WASHTENAW COUNTY
CIVIL DETAILS

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: NOT TO SCALE



CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

MANHOLE INVENTORY

MH# 4000 TYPE: SANITARY COVER: SOLID RM# 831.50 10" VCP N INV=828.97 10" VCP SW INV=826.77	MH# 5013 TYPE: STORM COVER: SOLID RM# 831.50 10" VCP S INV=823.30 10" VCP SW INV=822.25	MH# 5376 TYPE: SANITARY COVER: SOLID RM# 843.87 10" VCP W INV=832.07 10" VCP E INV=832.12
MH# 4118 TYPE: STORM COVER: CURB INLET RM# 835.02 12" CPP NW INV=828.62	MH# 5014 TYPE: STORM COVER: FLAT GRATE RM# 830.91 12" CPP NW INV=824.51	MH# 5377 TYPE: SANITARY COVER: SOLID RM# 836.68 10" VCP W INV=827.38 10" VCP E INV=827.68
MH# 4215 TYPE: STORM COVER: CURB INLET RM# 835.64 12" CPP W INV=825.84 12" CPP SE INV=827.89	MH# 5066 TYPE: STORM COVER: FLAT GRATE RM# 830.85 10" VCP SW INV=823.20 10" VCP SE INV=823.20	MH# 5378 TYPE: SANITARY COVER: SOLID RM# 824.43 12" PVC W INV=823.96 12" PVC W INV=823.94
MH# 4291 TYPE: STORM COVER: CURB INLET RM# 834.11 12" CPP NE INV=828.61	MH# 5067 TYPE: SANITARY COVER: SOLID RM# 828.45 12" CPP S INV=825.15 12" CPP E INV=825.20	MH# 5429 TYPE: STORM COVER: FLAT GRATE RM# 824.43 12" PVC W INV=823.96 12" PVC W INV=823.94
MH# 4369 TYPE: STORM COVER: FLAT GRATE RM# 828.33 12" CPP SW INV=825.33 12" CPP E INV=823.73	MH# 5068 TYPE: STORM COVER: FLAT GRATE RM# 830.35 12" CPP SE INV=822.35 10" VCP W INV=822.35	MH# 5469 TYPE: SANITARY COVER: SOLID RM# 828.21 No Flow Data
MH# 4687 TYPE: STORM COVER: FLAT GRATE RM# 830.69 12" CPP S INV=822.89 12" CPP NW INV=822.89	MH# 5301 TYPE: STORM COVER: FLAT GRATE RM# 828.07 12" CO NW INV=823.47	MH# 5800 TYPE: SANITARY COVER: SOLID RM# 846.08 8" PVC N INV=833.08 8" PVC S INV=832.08
MH# 4698 TYPE: STORM COVER: FLAT GRATE RM# 830.56 12" VCP S INV=824.16 10" VCP NW INV=823.26	MH# 5342 TYPE: SANITARY COVER: SOLID RM# 828.45 10" VCP N INV=824.44 10" VCP W INV=824.09	MH# 5860 TYPE: SANITARY COVER: SOLID RM# 847.26 4" VCP W INV=837.16 8" PVC S INV=837.06
MH# 4742 TYPE: SANITARY COVER: SOLID RM# 833.75 6" VCP N INV=823.74 6" VCP W INV=828.84	MH# 5348 TYPE: SANITARY COVER: SOLID RM# 827.94 10" VCP E INV=823.14 10" VCP W INV=822.94	MH# 5866 TYPE: STORM COVER: SOLID RM# 847.08 12" CO E INV=844.08
MH# 4937 TYPE: STORM COVER: FLAT GRATE RM# 830.69 12" CPP SW INV=825.25 12" CPP E INV=825.55 6" CPP NE INV=824.75 6" CPP W INV=824.55	MH# 5365 TYPE: SANITARY COVER: SOLID RM# 828.45 10" VCP SW INV=825.25 10" VCP NE INV=825.30 6" CPP NE INV=824.75 6" CPP W INV=824.55	

BENCHMARK DATA TABLE

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM 2	267093	13303200	828.33	CUT "X" IN NORTH RIM OF ROUND CATCH BASIN, ±10 FEET SOUTHWEST OF SOUTHWEST CORNER OF SOUTHERLY BASEBALL FIELD FENCE, ±25 FEET NORTHWEST OF LIGHT POLE, ±20 FEET NORTH OF ASPHALT PATH
BM 4	267506	13303166	830.89	CUT "X" IN NORTH RIM OF ROUND CATCH BASIN, ±25 FEET SOUTH OF BASEBALL FIELD LIGHT POLE, ±40 FEET NORTH-NORTHEAST OF NORTHERLY CORNER OF CONCESSIONS BUILDING, ±10 FEET SOUTHWEST OF NORTHWEST CORNER OF CONCRETE
BM 7	266881	13302682	827.38	CUT "X" IN NORTH RIM OF GAS MANHOLE NEAR SOUTHWEST CORNER OF SITE, ±5 FEET NORTH OF ASPHALT PATH, ±30 FEET NORTHEAST OF WESTERLY GATE POST OF OLD METAL GATE, ±110 FEET EAST OF TP8
BM 11	266905	13303546	840.89	CUT "X" IN NORTH RIM OF SANITARY MANHOLE, ±110 FEET EAST OF CENTERLINE OF PARK ENTRANCE DRIVE, ±10 FEET NORTH OF BACK OF CURB OF ELLSWORTH ROAD, ±5 FEET SOUTH OF ASPHALT PATH

TRAVERSE POINT DATA TABLE

NUMBER	NORTHING	EASTING	DESCRIPTION
TP 1	267082.2350	13303179.5980	SET IRON WITH ROWE TRAVERSE CAP, ±30 FEET SOUTHWEST OF SOUTHERLY BASEBALL FIELD FENCE, ±55 FEET NORTH-NORTHEAST OF HANDICAP PARKING SIGN, ±2 FEET NORTHEAST OF ASPHALT PATH
TP 3	267526.0590	13303128.0050	SET IRON WITH ROWE TRAVERSE CAP, ±65 FEET NORTH OF NORTHERLY CORNER OF CONCESSIONS BUILDING, ±40 FEET WEST OF NORTHERLY BASEBALL FIELD LIGHT POLE, ±60 FEET EAST-NORTHEAST OF BBQ GRILL
TP 5	267504.0500	13302795.6790	SET IRON WITH ROWE TRAVERSE CAP, ±2 FEET SOUTH OF ASPHALT PATH, ±400 FEET WEST OF NORTHERLY BASEBALL FIELD, ±27 FEET EAST-NORTHEAST OF 6" DECIDUOUS TREE
TP 6	267319.4200	13302643.6020	SET IRON WITH ROWE TRAVERSE CAP, ±30 FEET EAST OF POWER LINES RUNNING NORTH-SOUTH IN DITCH NEAR WEST SIDE OF SITE, ±90 FEET WEST OF ASPHALT PATH, ±95 FEET SOUTH OF BRUSH LINE
TP 8	266866.4660	13302592.2490	SET IRON WITH ROWE TRAVERSE CAP, ±2 FEET NORTH OF ASPHALT PATH, ±30 FEET WEST OF SOUTHWEST CORNER OF CHAINLINK FENCE SURROUNDING DITCH NEAR SOUTHWEST CORNER OF SITE, ±10 SOUTHWEST OF SOUTHWEST CORNER OF CHAINLINK FENCE
TP 9	266929.4290	13302825.2240	SET IRON WITH ROWE TRAVERSE CAP, ±1 FOOT SOUTH OF ASPHALT PATH, ±150 FEET EAST OF BM7, ±30 SOUTHWEST OF "TAMARA STEWART" MEMORIAL STONE
TP 10	266901.6820	13303476.4850	SET IRON WITH ROWE TRAVERSE CAP, ±10 FEET NORTH OF BACK OF CURB OF ELLSWORTH ROAD, ±45 FEET EAST OF CENTERLINE PARK ENTRANCE DRIVE, ±25 FEET SOUTH OF ASPHALT PATH
TP 12	267138.9400	13303535.0970	SET IRON WITH ROWE TRAVERSE CAP, ±5 FEET SOUTH OF ASPHALT PATH, ±100 FEET NORTHEAST OF NORTHERLY BASKETBALL HOOP, ±20 FEET EAST OF 8" DECIDUOUS TREE

NOTES:

- VERTICAL DATUM IS NAVD88
- HORIZONTAL DATUM IS MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD83 (2011)
- UNITS ARE INTERNATIONAL FEET.

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: 1" = 50'

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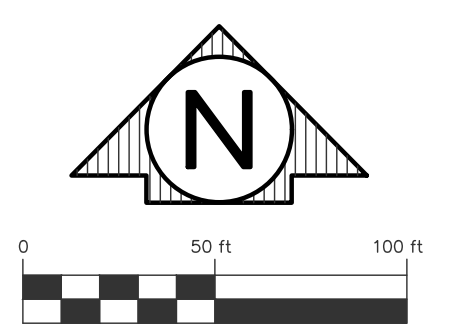
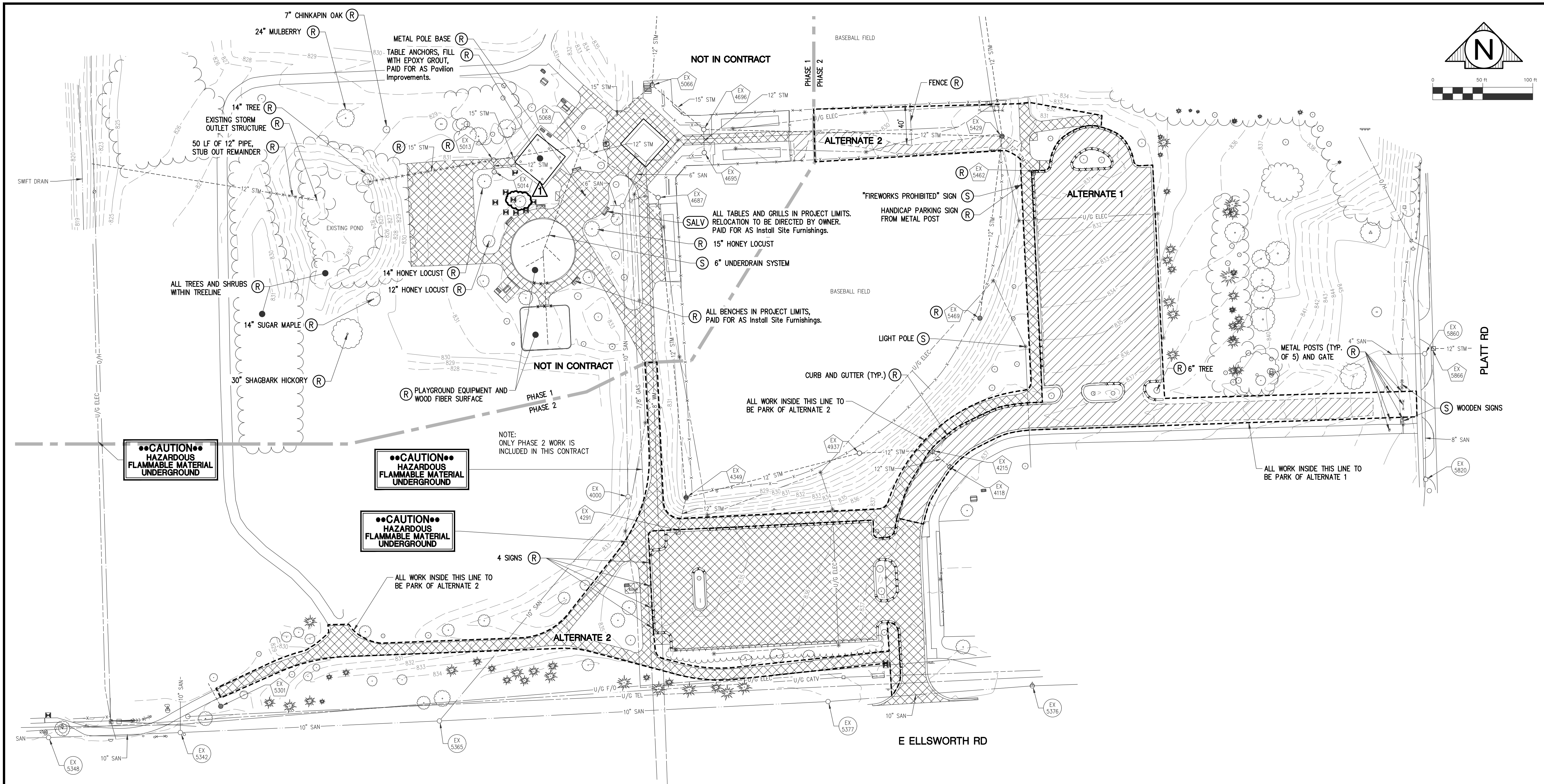
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CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL EXISTING CONDITIONS



PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV: _____
SHT# **C110**
JOB No: 2300634



CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

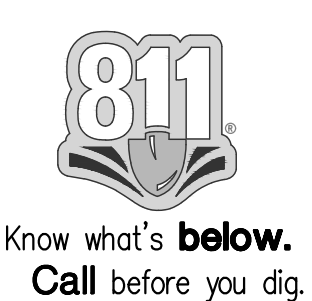
CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 50'

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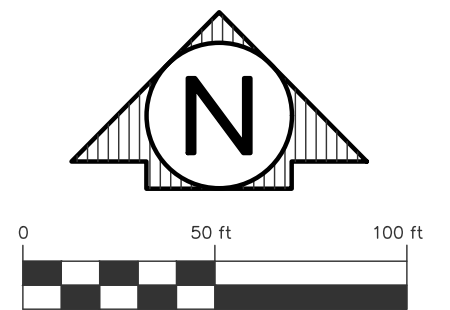
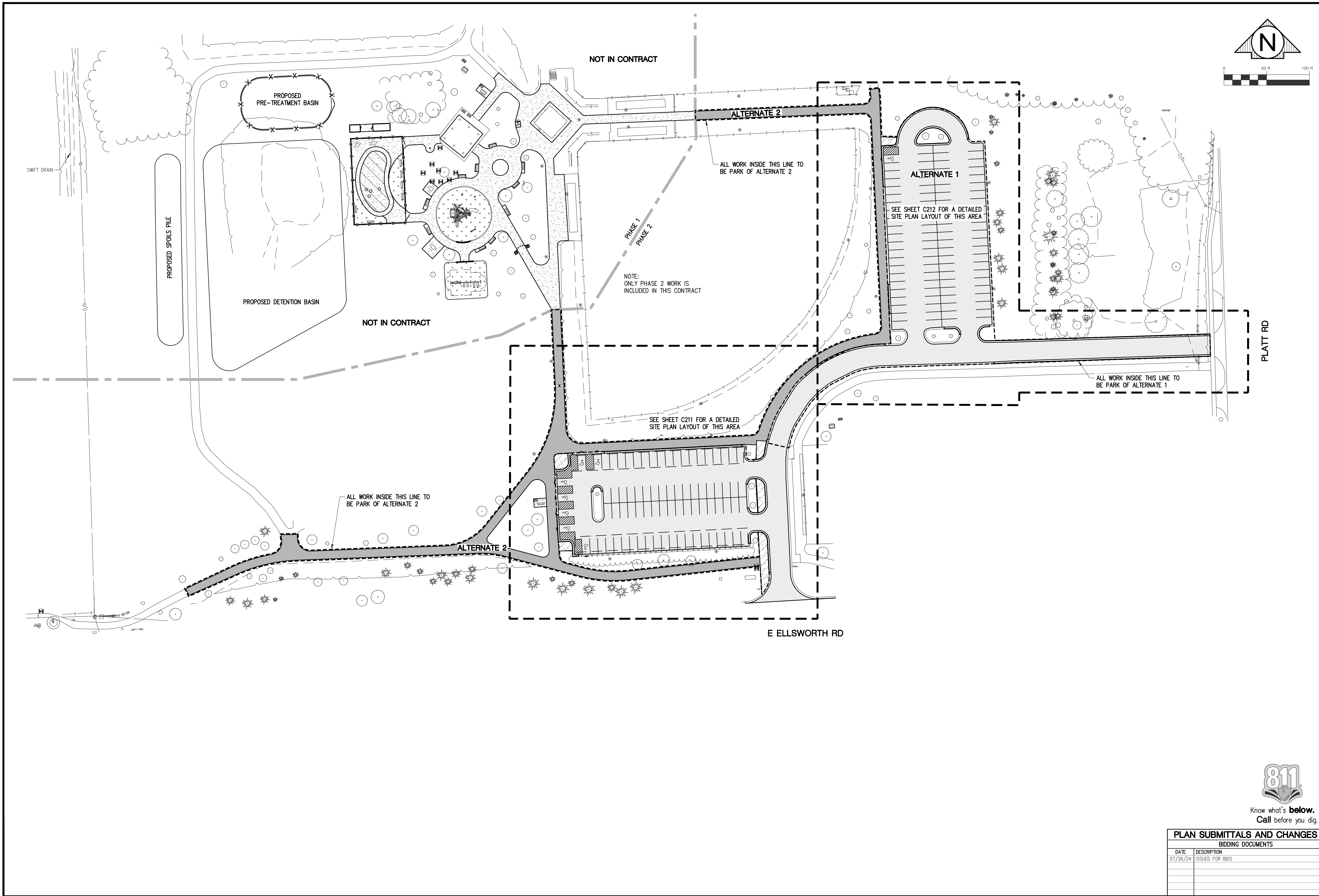
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BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL DEMOLITION SHEET



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:
 SHT# **C200**
 JOB No: 2300634

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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

PREPARED FOR
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BICENTENNIAL PARK PHASE 2
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 CIVIL OVERALL SITE PLAN

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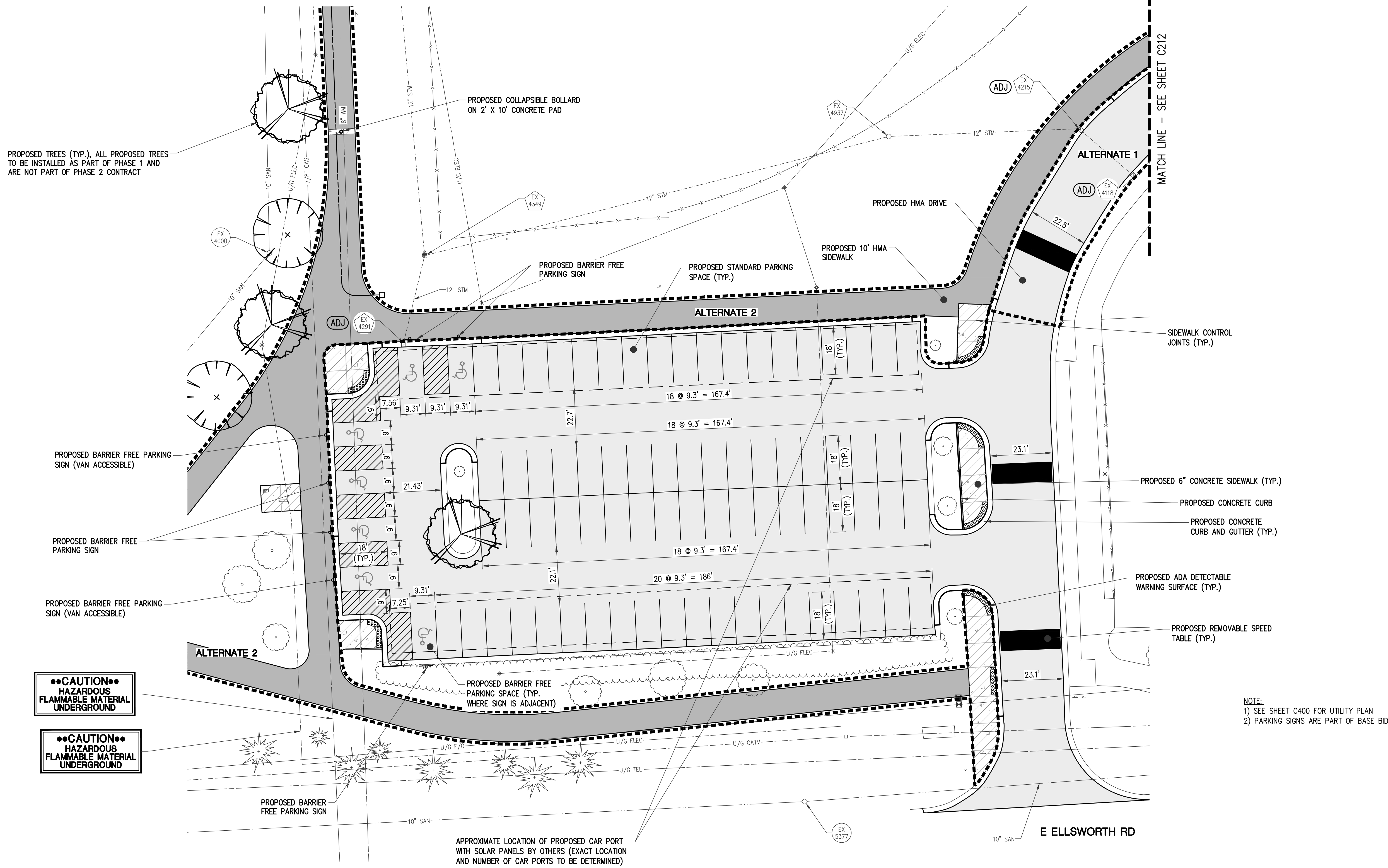
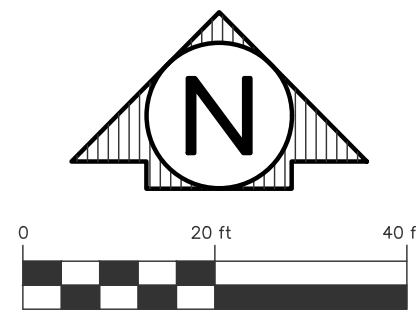
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PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 50'

REV:

SHT# **C210**
 JOB No: 2300634

R:\Projects\2300634\Drawings\Construction\Drawings\Phase 2\Site-2300634-SITE.P2.dwg PLOTTED: 9/25/2024 10:40 AM



PROPOSED TREES (TYP.). ALL PROPOSED TREES TO BE INSTALLED AS PART OF PHASE 1 AND ARE NOT PART OF PHASE 2 CONTRACT

PROPOSED BARRIER FREE PARKING SIGN (VAN ACCESSIBLE)

PROPOSED BARRIER FREE PARKING SIGN

PROPOSED BARRIER FREE PARKING SIGN (VAN ACCESSIBLE)

••CAUTION••
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

••CAUTION••
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

PROPOSED BARRIER FREE PARKING SIGN

APPROXIMATE LOCATION OF PROPOSED CAR PORT WITH SOLAR PANELS BY OTHERS (EXACT LOCATION AND NUMBER OF CAR PORTS TO BE DETERMINED)

PROPOSED HMA DRIVE

PROPOSED 10' HMA SIDEWALK

ALTERNATE 2

ALTERNATE 1

MATCH LINE - SEE SHEET C212

SIDEWALK CONTROL JOINTS (TYP.)

PROPOSED 6" CONCRETE SIDEWALK (TYP.)

PROPOSED CONCRETE CURB

PROPOSED CONCRETE CURB AND GUTTER (TYP.)

PROPOSED ADA DETECTABLE WARNING SURFACE (TYP.)

PROPOSED REMOVABLE SPEED TABLE (TYP.)

E ELLSWORTH RD

NOTE:
1) SEE SHEET C400 FOR UTILITY PLAN
2) PARKING SIGNS ARE PART OF BASE BID



PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C211**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: 1" = 20'

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CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL DETAILED SITE PLAN

PROPOSED PRETREATMENT BASIN
 BOTTOM ELEVATION = 821.50
 STATIC ELEVATION = 823.75
 TOP OF STORAGE = 828.00
 TOP OF BANK = 829.00
 1' FREEBOARD PROVIDED
 BASIN WILL HAVE PERMANENT POOL
 AND BE SURROUNDED BY FENCE
 SIDE SLOPES = 4:1

PROPOSED LOCATION OF
 EMERGENCY SPILLWAY

PROTECT EXISTING
 PATH DURING
 CONSTRUCTION OF
 SPOILS PILE

PROPOSED DETENTION BASIN
 BOTTOM ELEVATION = 823.30
 TOP OF STORAGE = 827.00
 TOP OF BANK = 828.00
 1' FREEBOARD PROVIDED
 BASIN INTENDED TO DRAIN DRY
 SIDE SLOPES = 5:1
 BOTTOM SLOPE = 1.0%

••CAUTION••
 HAZARDOUS
 FLAMMABLE MATERIAL
 UNDERGROUND

••CAUTION••
 HAZARDOUS
 FLAMMABLE MATERIAL
 UNDERGROUND

••CAUTION••
 HAZARDOUS
 FLAMMABLE MATERIAL
 UNDERGROUND

ALL WORK INSIDE THIS LINE TO
 BE PARK OF ALTERNATE 2

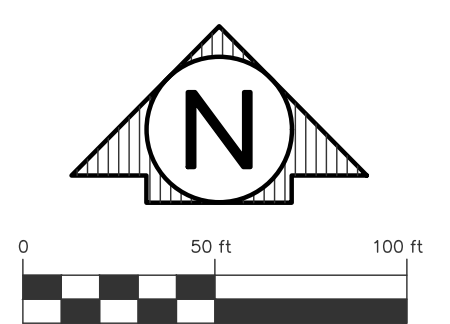
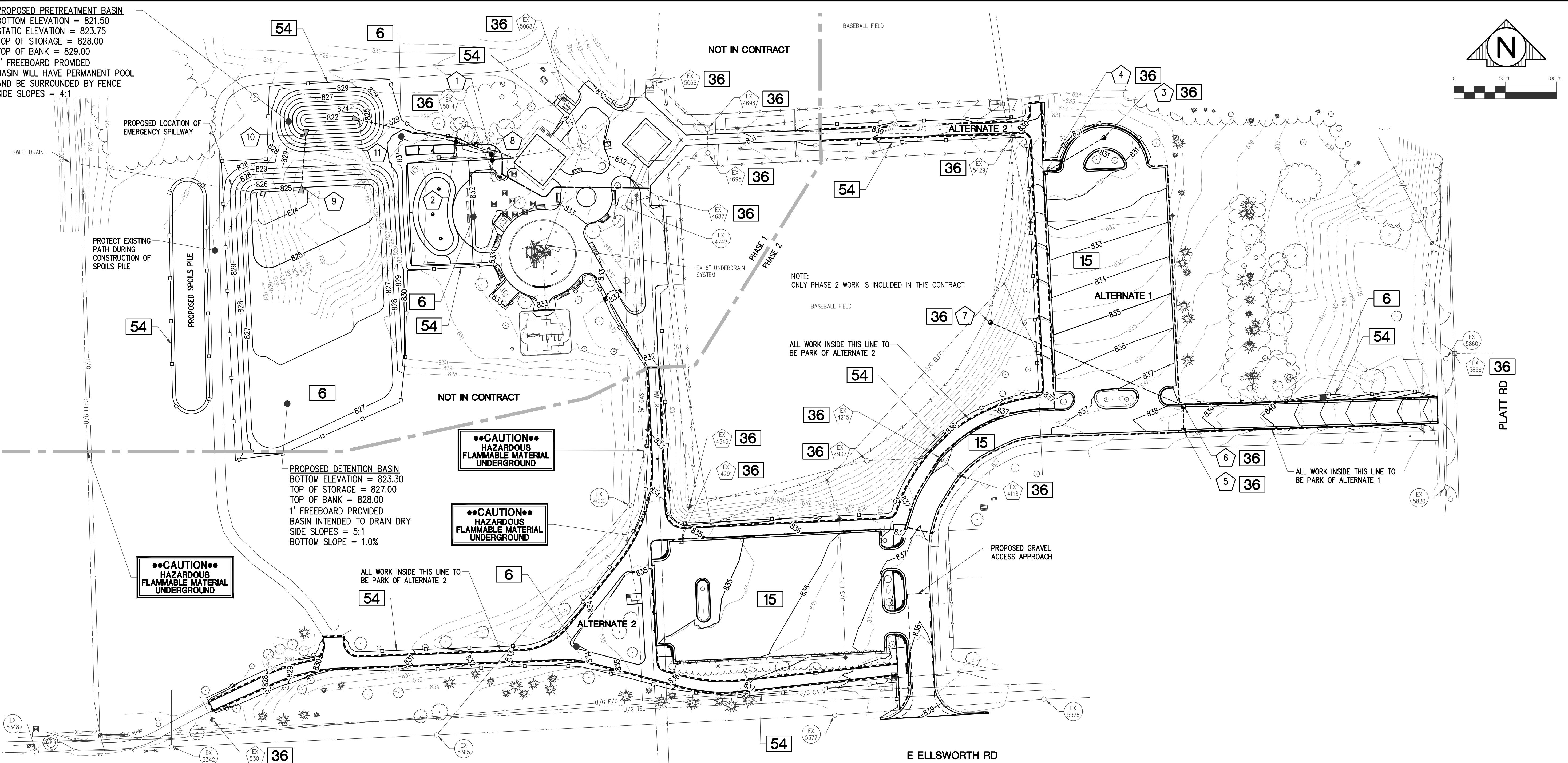
ALL WORK INSIDE THIS LINE TO
 BE PARK OF ALTERNATE 2

ALL WORK INSIDE THIS LINE TO
 BE PARK OF ALTERNATE 1

NOT IN CONTRACT

NOT IN CONTRACT

NOTE:
 ONLY PHASE 2 WORK IS INCLUDED IN THIS CONTRACT



PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 50'

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BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL OVERALL GRADING AND SECC PLAN

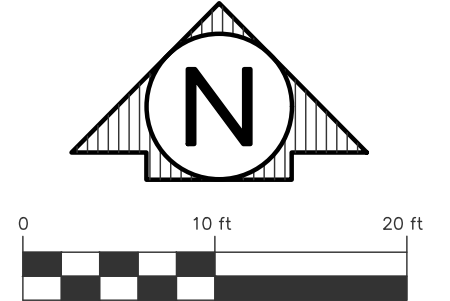
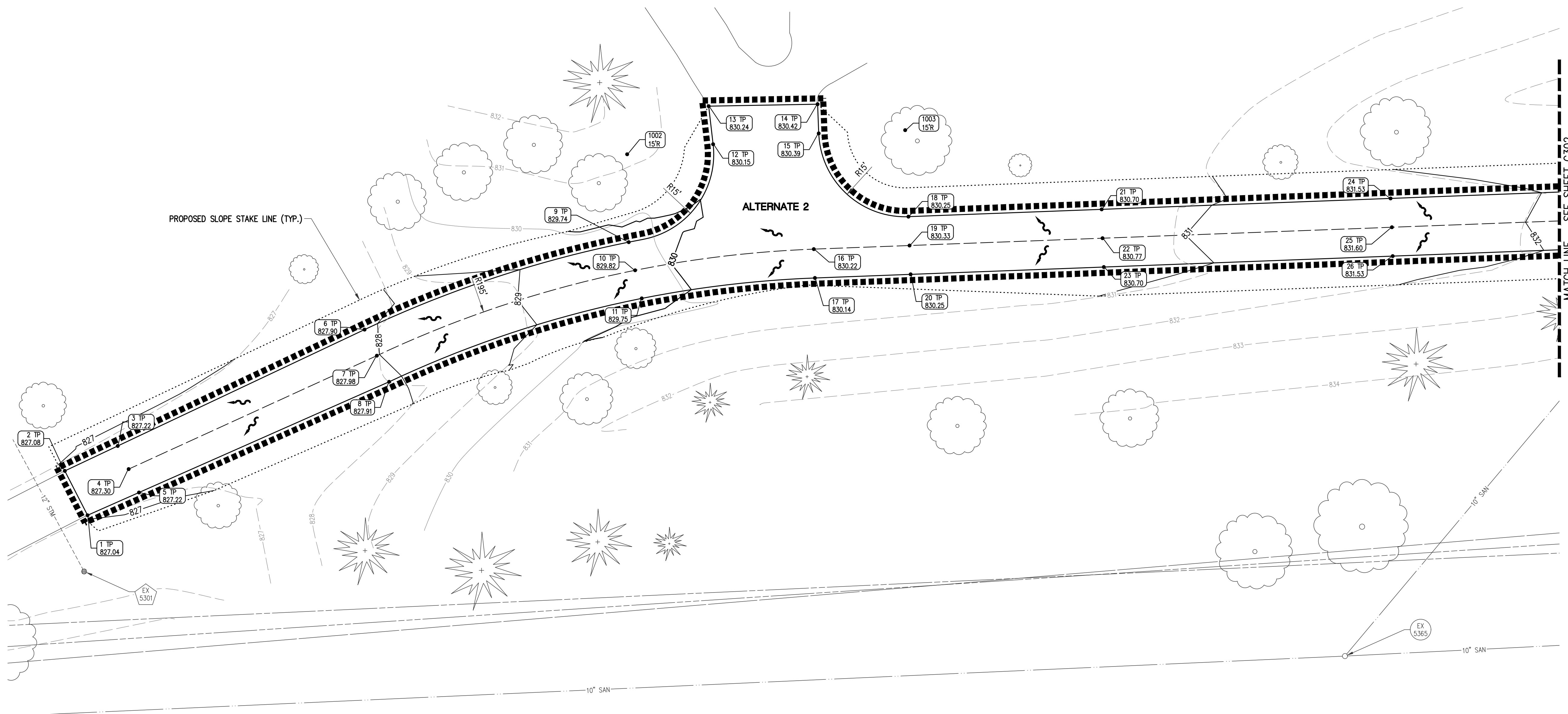


Know what's below.
 Call before you dig.

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:
 SHT# **C300**
 JOB No: 2300634

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GRADING LEGEND

- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
- FG - FINISH GRADE
- SW - TOP OF SIDEWALK
- TC - TOP OF CURB
- TP - TOP OF PAVEMENT
- TF - TOP OF TURF
- SP - TOP OF SPLASH PAD
- PC - POINT OF CURVATURE
- CR - CROWN/MIDPOINT
- DD - DUB DOWN
- ME - MATCH EXISTING
- PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- FLOW DIRECTION

GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
1	TP=827.04	ME	266893.19	13302735.38
2	TP=827.08	ME	266900.87	13302731.44
3	TP=827.22		266905.20	13302740.62
4	TP=827.30	CR	266901.19	13302742.51
5	TP=827.22		266897.13	13302744.30
6	TP=827.90	PC	266925.36	13302783.40
7	TP=827.98	CR, PC	266920.84	13302785.53
8	TP=827.91	PC	266916.31	13302787.67
9	TP=829.74	PC	266940.51	13302829.20
10	TP=829.82	CR	266935.63	13302830.31
11	TP=829.75		266930.76	13302831.46
12	TP=830.15	PC	266957.47	13302843.82
13	TP=830.24	ME	266964.06	13302843.06
14	TP=830.42	ME	266964.41	13302861.94
15	TP=830.39	PC	266959.34	13302862.13
16	TP=830.22	CR, PC	266939.30	13302861.28
17	TP=830.14		266934.30	13302861.47
18	TP=830.25	PC	266944.92	13302877.69
19	TP=830.33	CR	266939.92	13302877.88
20	TP=830.25		266934.93	13302878.07
21	TP=830.70		266946.19	13302911.18
22	TP=830.77	CR	266941.19	13302911.33
23	TP=830.70		266936.19	13302911.56
24	TP=831.53		266948.08	13302961.26
25	TP=831.60	CR	266943.09	13302961.50
26	TP=831.53		266938.09	13302961.64

RADIUS POINTS			
POINT	DESCRIPTION	NORTHING	EASTING
1001	195' RADIUS (TP)	266744.44	13302868.65
1002	15' RADIUS (TP)	266955.73	13302828.92
1003	15' RADIUS (TP)	266959.91	13302877.12

NOTES:
1. POINT 1001 NOT SHOWN ON SHEET



Know what's below.
Call before you dig.

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C301**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: 1" = 10'

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BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL DETAILED GRADING PLAN

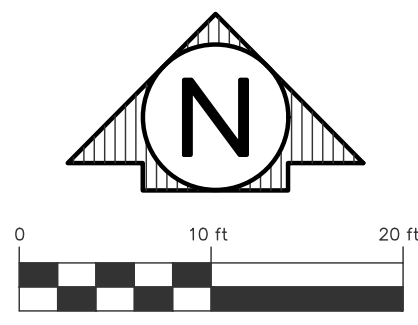
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GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
97	TP=834.95	PC	26707.37	13303195.14
98	TP=834.20	PC	267087.52	13303176.30
99	TP=834.50		267089.80	13303158.61
100	TP=834.90		267069.80	13303151.45
101	TP=834.86	SW, PC	267058.80	13303167.04
102	TP=834.89	SW, PC	267053.46	13303162.29
103	TP=834.60	PC	267037.19	13303131.82
104	TP=834.66	PC	267024.84	13303134.80
105	TP=834.51		267029.98	13303126.12
106	TP=834.34		267019.97	13303118.20
107	TP=834.49		267014.92	13303126.96
108	TP=834.02		267001.52	13303103.62
109	TP=834.17		266996.05	13303112.04
110	TP=833.58	PC	266975.49	13303083.04
111	TP=833.73		266969.29	13303090.88
112	TP=833.44		266967.71	13303075.89
113	TP=833.54	PC	266961.83	13303084.98
114	TP=833.47	PC	266953.89	13303087.63
115	SW=835.48		266996.16	13303139.19
116	SW=835.48		267006.12	13303138.60
117	TP=835.32	SW	266997.02	13303153.87
118	TP=835.26	SW	267006.99	13303153.32
119	TP=835.17	PC	267019.19	13303152.63
120	TP=835.24		266959.56	13303203.95
121	TP=835.17		266958.99	13303194.66
122	TP=835.02		266967.48	13303186.85
123	TP=834.92		266976.47	13303186.33
124	TP=834.81		266985.45	13303185.82
125	TP=834.73		266994.44	13303185.37
126	TP=834.64		267003.43	13303184.91
127	TP=834.60		267012.42	13303184.46
128	TP=834.55		267021.41	13303184.00
129	TP=834.50		267030.40	13303183.54
130	TP=834.46		267039.39	13303190.68
131	TP=834.47		267040.19	13303199.98
132	TP=834.55		267040.65	13303209.28
133	TP=834.67		267041.10	13303218.57
134	TP=835.18		267020.00	13303212.50
135	TC=835.16	ME, PC	267014.58	13303207.90
136	TP=834.65	ME, PC	267014.36	13303205.82
137	TC=835.25	ME, PC	267014.92	13303217.63
138	TP=834.75	ME, PC	267014.96	13303219.64
139	TP=834.83	ME	266986.13	13303220.99
140	TP=834.89	ME	266978.94	13303214.99
141	TP=834.97	ME	266984.88	13303207.30

RADIUS POINTS				
POINT	DESCRIPTION	NORTHING	EASTING	
1004	65' RADIUS (TP)	267015.80	13303032.05	
1005	5' RADIUS (TP)	266958.73	13303088.91	
1006	7' RADIUS (TP)	266944.73	13303149.80	
1007	10' RADIUS (TP)	267018.63	13303142.65	
1008	5' RADIUS (SW)	267053.81	13303167.28	
1009	8' RADIUS (TC)	267048.66	13303171.26	
1010	18' RADIUS (TP)	267088.35	13303194.28	
1011	155' RADIUS (TP)	267070.61	13303233.22	
1012	5' RADIUS (TC)	267015.12	13303212.75	
1013	5' RADIUS (TC)	266951.22	13303178.82	
1014	3' RADIUS (SW)	266942.63	13303170.74	
1015	10' RADIUS (TP)	266940.31	13303178.30	
1016	105' RADIUS (TP)	266942.45	13303078.83	
1017	150' RADIUS (TP)	267130.23	13303041.15	

GRADING LEGEND

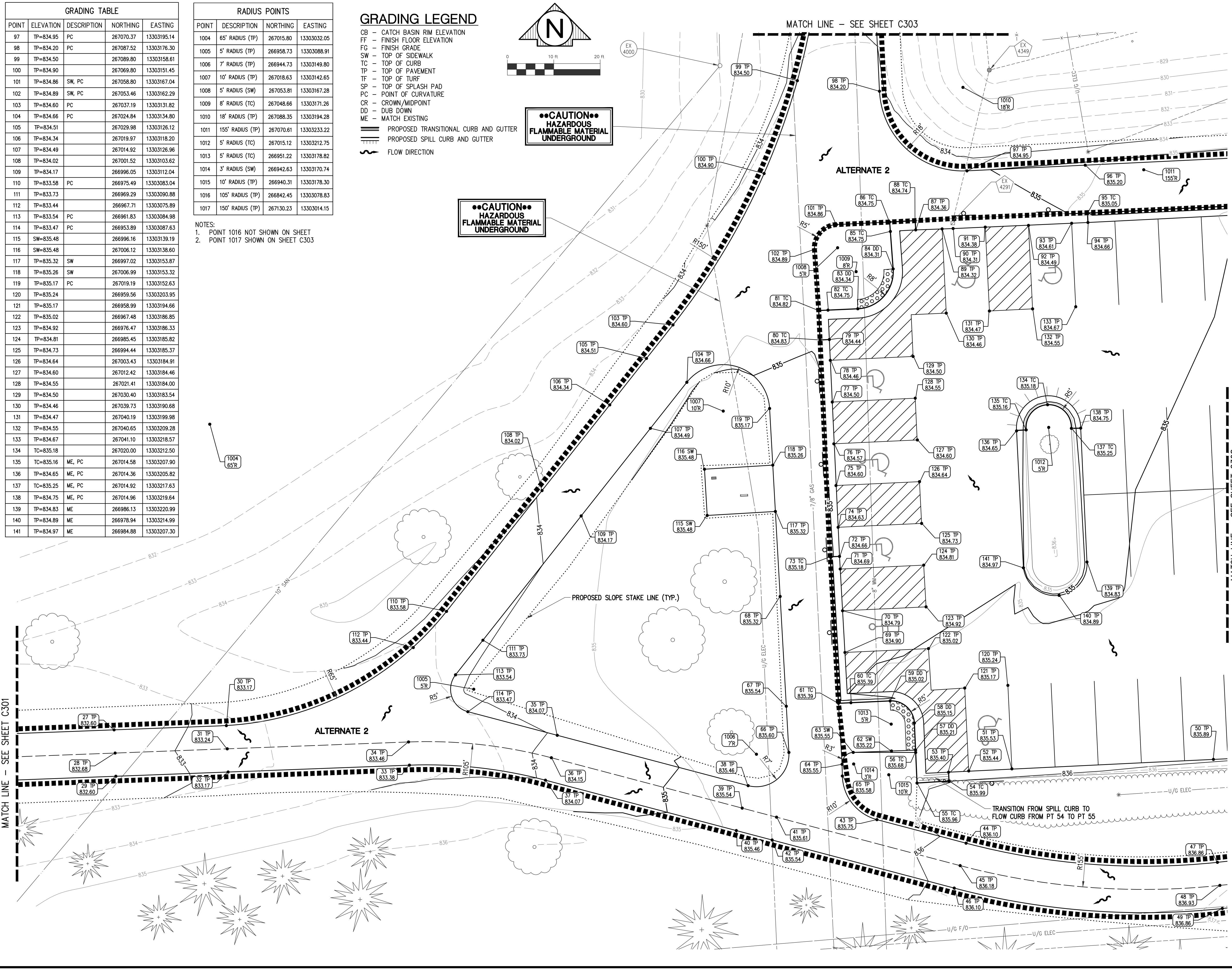
- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
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- SW - TOP OF SIDEWALK
- TC - TOP OF CURB
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- PC - POINT OF CURVATURE
- CR - CROWN/MIDPOINT
- DD - DUB DOWN
- ME - MATCH EXISTING
- == PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- ~ FLOW DIRECTION



CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

- NOTES:
- POINT 1016 NOT SHOWN ON SHEET
 - POINT 1017 SHOWN ON SHEET C303



GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
27	TP=832.68		266949.98	13303011.44
28	TP=832.68	CR	266944.98	13303011.66
29	TP=832.60		266939.99	13303011.82
30	TP=833.17	PC	266950.89	13303035.62
31	TP=833.24	CR	266945.90	13303035.81
32	TP=833.17		266940.90	13303036.00
33	TP=833.38	PC	266942.38	13303075.06
34	TP=833.46	CR, PC	266947.37	13303074.87
35	TP=834.07		266948.61	13303106.90
36	TP=834.15	CR, PC	266943.97	13303105.62
37	TP=834.07	PC	266939.14	13303104.35
38	TP=835.46	PC	266937.96	13303148.01
39	TP=835.54	CR	266933.12	13303146.74
40	TP=835.46		266928.29	13303145.46
41	TP=835.61	CR	266931.18	13303154.12
42	TP=835.54		266926.25	13303153.18
43	TP=835.75	PC	266930.64	13303175.75
44	TP=836.10	PC	266925.57	13303194.95
45	TP=836.18	CR, PC	266920.74	13303193.67
46	TP=836.10	PC	266915.91	13303192.40
47	TP=836.86	PC	266921.45	13303249.09
48	TP=836.93	CR, PC	266916.48	13303249.62
49	TP=836.86	PC	266911.51	13303250.15
50	TP=835.89	ME	266943.62	13303248.23
51	TP=835.53	ME	266941.58	13303204.82
52	TP=835.44	ME	266941.13	13303195.52
53	TP=835.40	ME	266940.86	13303191.18
54	TC=835.99	ME	266938.96	13303191.27
55	TC=835.96		266938.53	13303184.39
56	TC=835.68	SW	266945.12	13303184.09
57	DD=835.21	TC, SW	266945.62	13303184.07
58	DD=835.15	TC, SW	266951.44	13303183.82
59	DD=835.02	TC, SW	266956.21	13303178.59
60	TC=835.39	SW	266955.82	13303170.15
61	TC=835.39	TP, SW	266955.70	13303167.47
62	SW=835.22		266945.43	13303178.89
63	SW=835.55	PC	266945.12	13303170.64
64	TP=835.55	SW, PC	266942.56	13303168.24
65	TP=835.58	PC	266940.05	13303168.30
66	TP=835.60	PC	266945.12	13303166.79
67	TP=835.54		266955.07	13303156.23
68	TP=835.32		266978.71	13303154.90
69	TP=834.90		266966.65	13303168.86
70	TP=834.79		266975.63	13303168.35
71	TP=834.69		266984.62	13303167.84
72	TP=834.66	ME	266987.34	13303167.69
73	TP=835.18	TP, ME	266987.24	13303165.69
74	TP=834.63	ME	266993.61	13303167.39
75	TP=834.60	ME	267002.60	13303166.93
76	TP=834.57	ME	267011.58	13303166.48
77	TP=834.50	ME	267020.58	13303166.13
78	TP=834.46	ME	267029.57	13303165.71
79	TP=834.44	ME	267034.04	13303165.50
80	TC=834.83	TP, ME	267033.95	13303163.50
81	TC=834.82	TP, SW	267040.29	13303163.21
82	TC=834.75	SW	267040.38	13303165.21
83	DD=834.34	TC, SW, PC	267040.67	13303171.63
84	DD=834.31	TC, SW, PC	267049.25	13303179.24
85	TC=834.75	SW	267057.32	13303178.64
86	TC=834.75	TP, SW	267059.35	13303178.49
87	TP=834.36	ME	267057.65	13303184.10
88	TC=834.74	TP, ME	267059.65	13303183.99
89	TP=834.32	ME	267057.86	13303189.79
90	TP=834.31	ME	267057.95	13303192.05
91	TP=834.38	ME	267058.25	13303199.08
92	TP=834.49	ME	267058.62	13303208.39
93	TP=834.61	ME	267059.08	13303217.69
94	TP=834.66	ME	267059.25	13303221.20
95	TC=835.05	TP, ME	267061.37	13303221.10
96	TP=835.20		267071.59	13303220.61



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

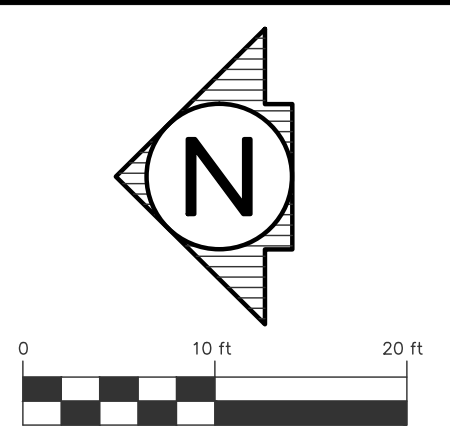
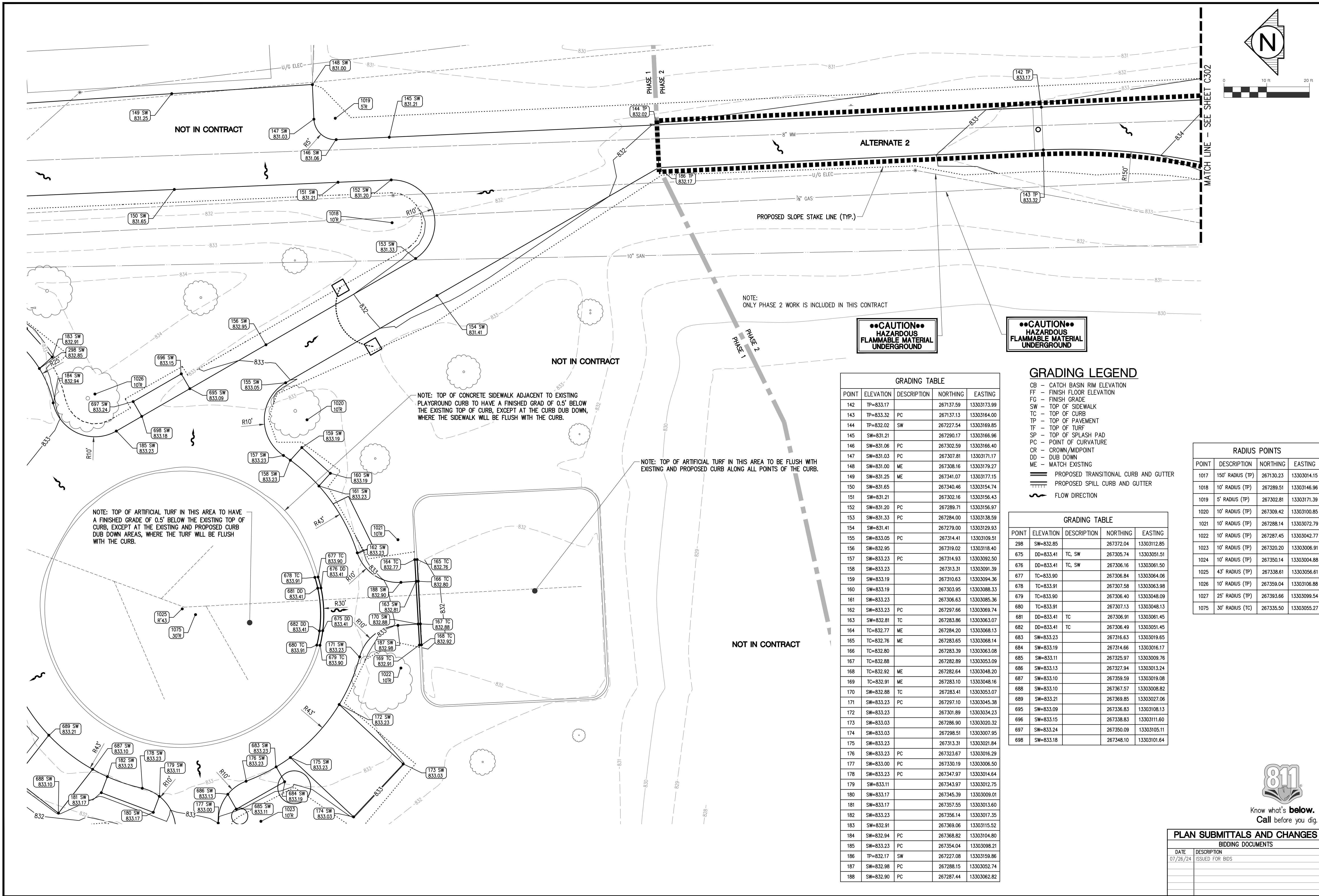
PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 10'

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PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL DETAILED GRADING PLAN

REV: _____
 SHEET# **C302**
 JOB No: 2300634

PLN: 2300634 (07/26/24) (08:41 AM) R:\Projects\2300634\07\Construction\Drawings\Phase 2\301-2300634-DE-C302.dwg



NOTE:
ONLY PHASE 2 WORK IS INCLUDED IN THIS CONTRACT

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
142	TP=833.17		267137.59	13303173.99
143	TP=833.32	PC	267137.13	13303164.00
144	TP=832.02	SW	267227.54	13303169.85
145	SW=831.21		267290.17	13303166.96
146	SW=831.06	PC	267302.59	13303166.40
147	SW=831.03	PC	267307.81	13303171.17
148	SW=831.00	ME	267308.16	13303179.27
149	SW=831.25	ME	267341.07	13303177.15
150	SW=831.65		267340.46	13303154.74
151	SW=831.21		267302.16	13303156.43
152	SW=831.20	PC	267289.71	13303156.97
153	SW=831.33	PC	267284.00	13303138.59
154	SW=831.41		267279.00	13303129.93
155	SW=833.05	PC	267314.41	13303109.51
156	SW=832.95		267319.02	13303118.40
157	SW=833.23	PC	267314.93	13303092.50
158	SW=833.23		267313.31	13303091.39
159	SW=833.19		267310.63	13303094.36
160	SW=833.19		267303.95	13303088.33
161	SW=833.23		267306.63	13303085.36
162	SW=833.23	PC	267297.66	13303069.74
163	SW=832.81	TC	267283.86	13303063.07
164	TC=832.77	ME	267284.20	13303068.13
165	TC=832.76	ME	267283.65	13303068.14
166	TC=832.80		267283.39	13303063.08
167	TC=832.88		267282.89	13303053.09
168	TC=832.92	ME	267282.64	13303048.20
169	TC=832.91	ME	267283.10	13303048.16
170	SW=832.88	TC	267283.41	13303053.07
171	SW=833.23	PC	267297.10	13303045.38
172	SW=833.23		267301.89	13303034.23
173	SW=833.03		267286.90	13303020.32
174	SW=833.03		267298.51	13303007.95
175	SW=833.23		267313.31	13303021.84
176	SW=833.23	PC	267323.67	13303016.29
177	SW=833.00	PC	267330.19	13303006.50
178	SW=833.23	PC	267347.97	13303014.64
179	SW=833.11		267343.97	13303012.75
180	SW=833.17		267345.39	13303009.01
181	SW=833.17		267357.55	13303013.60
182	SW=833.23		267356.14	13303017.35
183	SW=832.91		267369.06	13303115.52
184	SW=832.94	PC	267368.82	13303104.80
185	SW=833.23	PC	267354.04	13303098.21
186	TP=832.17	SW	267227.08	13303159.86
187	SW=832.98	PC	267288.15	13303052.74
188	SW=832.90	PC	267287.44	13303062.82

GRADING LEGEND

- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
- FG - FINISH GRADE
- SW - TOP OF SIDEWALK
- TC - TOP OF CURB
- TP - TOP OF PAVEMENT
- TF - TOP OF TURF
- SP - TOP OF SPLASH PAD
- PC - POINT OF CURVATURE
- CR - CROWN/MIDPOINT
- DD - DUB DOWN
- ME - MATCH EXISTING
- == PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- ~ FLOW DIRECTION

RADIUS POINTS			
POINT	DESCRIPTION	NORTHING	EASTING
1017	150' RADIUS (TP)	267130.23	13303014.15
1018	10' RADIUS (TP)	267289.51	13303146.96
1019	5' RADIUS (TP)	267302.81	13303171.39
1020	10' RADIUS (TP)	267309.42	13303100.85
1021	10' RADIUS (TP)	267288.14	13303072.79
1022	10' RADIUS (TP)	267287.45	13303042.77
1023	10' RADIUS (TP)	267320.20	13303006.91
1024	10' RADIUS (TP)	267350.14	13303004.88
1025	43' RADIUS (TP)	267338.61	13303056.61
1026	10' RADIUS (TP)	267359.04	13303106.88
1027	25' RADIUS (TP)	267393.66	13303099.54
1025	30' RADIUS (TC)	267335.50	13303055.27

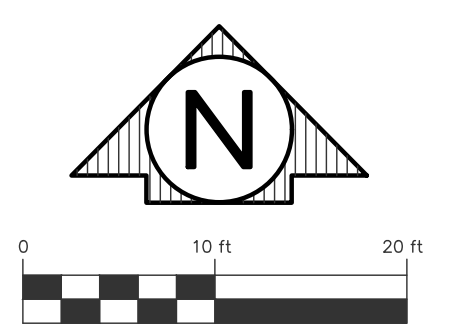
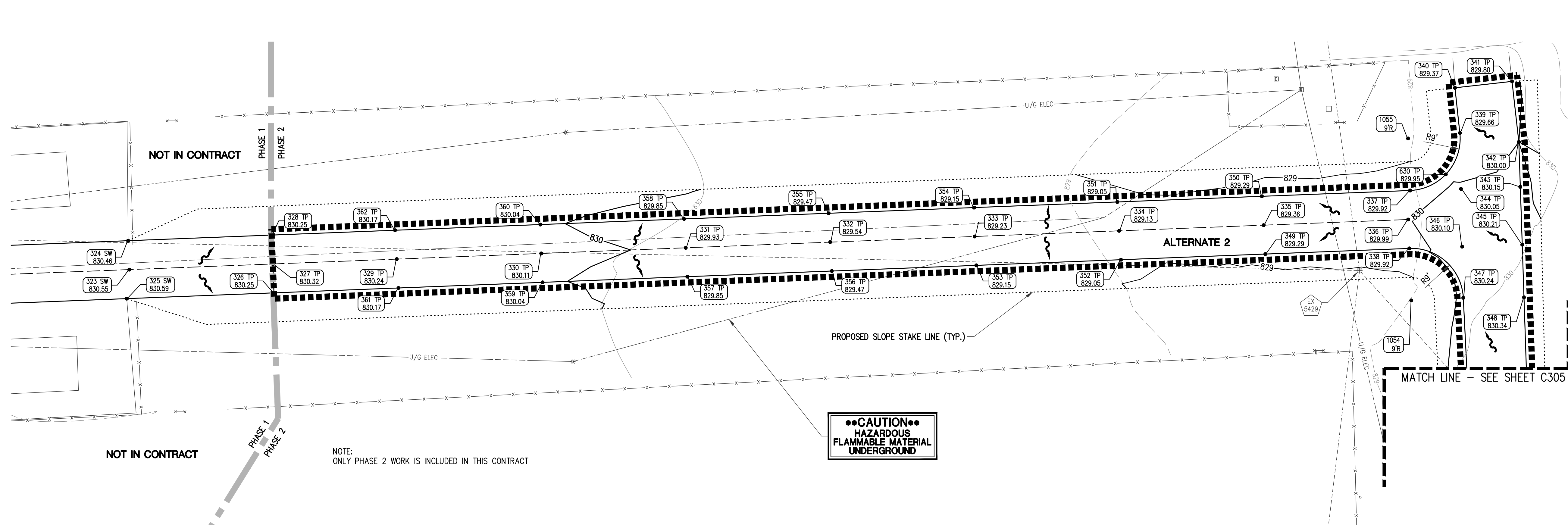
GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
298	SW=832.85		267372.04	13303112.85
675	DD=833.41	TC, SW	267305.74	13303051.51
676	DD=833.41	TC, SW	267306.16	13303061.50
677	TC=833.90		267306.84	13303064.06
678	TC=833.91		267307.58	13303063.98
679	TC=833.90		267306.40	13303048.09
680	TC=833.91		267307.13	13303048.13
681	DD=833.41	TC	267306.91	13303061.45
682	DD=833.41	TC	267306.49	13303051.45
683	SW=833.23		267316.63	13303019.65
684	SW=833.19		267314.66	13303016.17
685	SW=833.11		267325.97	13303009.76
686	SW=833.13		267327.84	13303013.24
687	SW=833.10		267359.59	13303019.08
688	SW=833.10		267367.57	13303008.82
689	SW=833.21		267369.85	13303027.06
695	SW=833.09		267336.83	13303108.13
696	SW=833.15		267338.83	13303111.60
697	SW=833.24		267350.09	13303105.11
698	SW=833.18		267348.10	13303101.64



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 10'
ROWE PROFESSIONAL SERVICES COMPANY
 O: (810) 341-7500
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 PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL DETAILED GRADING PLAN
 REV: _____
 SHT# **C303**
 JOB No: 2300634

PLOTED: 9/5/2024 10:41 AM P:\Projects\2300634\Eng\Construction\Drawings\Phase 2\Site-2300634-BE-C303.rvt



NOT IN CONTRACT

NOT IN CONTRACT

NOTE:
ONLY PHASE 2 WORK IS INCLUDED IN THIS CONTRACT

●●CAUTION●●
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
323	SW=830.55	CR	267453.55	13303303.08
324	SW=830.46	ME	267458.55	13303302.88
325	SW=830.59	ME	267448.53	13303302.64
326	TP=830.25	SW	267449.53	13303328.10
327	TP=830.32	CR	267454.53	13303327.90
328	TP=830.25	SW	267459.52	13303327.70
329	TP=830.24	CR	267455.37	13303349.33
330	TP=830.11	CR	267456.34	13303374.31
331	TP=829.93	CR	267457.32	13303399.29
332	TP=829.54	CR	267458.30	13303424.27
333	TP=829.23	CR	267459.28	13303449.25
334	TP=829.13	CR	267460.26	13303474.23
335	TP=829.36	CR	267461.24	13303499.21
336	TP=829.99	CR	267462.21	13303524.19
337	TP=829.92	PC	267467.23	13303524.53
338	TP=829.92	PC	267457.22	13303524.39
339	TP=829.66	PC	267477.18	13303533.13
340	TP=829.37	ME	267484.98	13303532.29
341	TP=829.80	ME	267486.10	13303542.16
342	TP=830.00		267475.64	13303543.33
343	TP=830.15		267467.86	13303543.59
344	TP=830.05		267467.52	13303533.33
345	TP=830.21		267457.87	13303543.92
346	TP=830.10		267457.52	13303533.54
347	TP=830.24	PC	267448.67	13303533.73
348	TP=830.34		267448.74	13303544.23
349	TP=829.29		267456.25	13303499.51
350	TP=829.29		267466.23	13303498.91
353	TP=829.15		267454.29	13303449.53
354	TP=829.15		267464.28	13303449.14
355	TP=829.47		267463.29	13303424.00
356	TP=829.47		267453.31	13303424.54
357	TP=829.85		267452.33	13303399.56
358	TP=829.85		267462.32	13303399.02
359	TP=830.04		267451.35	13303374.54
360	TP=830.04		267461.34	13303374.15
361	TP=830.17		267450.37	13303349.62
362	TP=830.17		267460.36	13303349.03
630	TP=829.95		267470.03	13303530.71

POINT	DESCRIPTION	NORTHING	EASTING
1054	9' RADIUS (TP)	267448.23	13303524.74
1055	9' RADIUS (TP)	267476.22	13303524.18

GRADING LEGEND

CB - CATCH BASIN RIM ELEVATION
 FF - FINISH FLOOR ELEVATION
 FG - FINISH GRADE
 SW - TOP OF SIDEWALK
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 TF - TOP OF TURF
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===== PROPOSED TRANSITIONAL CURB AND GUTTER
 - - - - - PROPOSED SPILL CURB AND GUTTER

~ FLOW DIRECTION



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 10'

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PREPARED FOR
CITY OF ANN ARBOR
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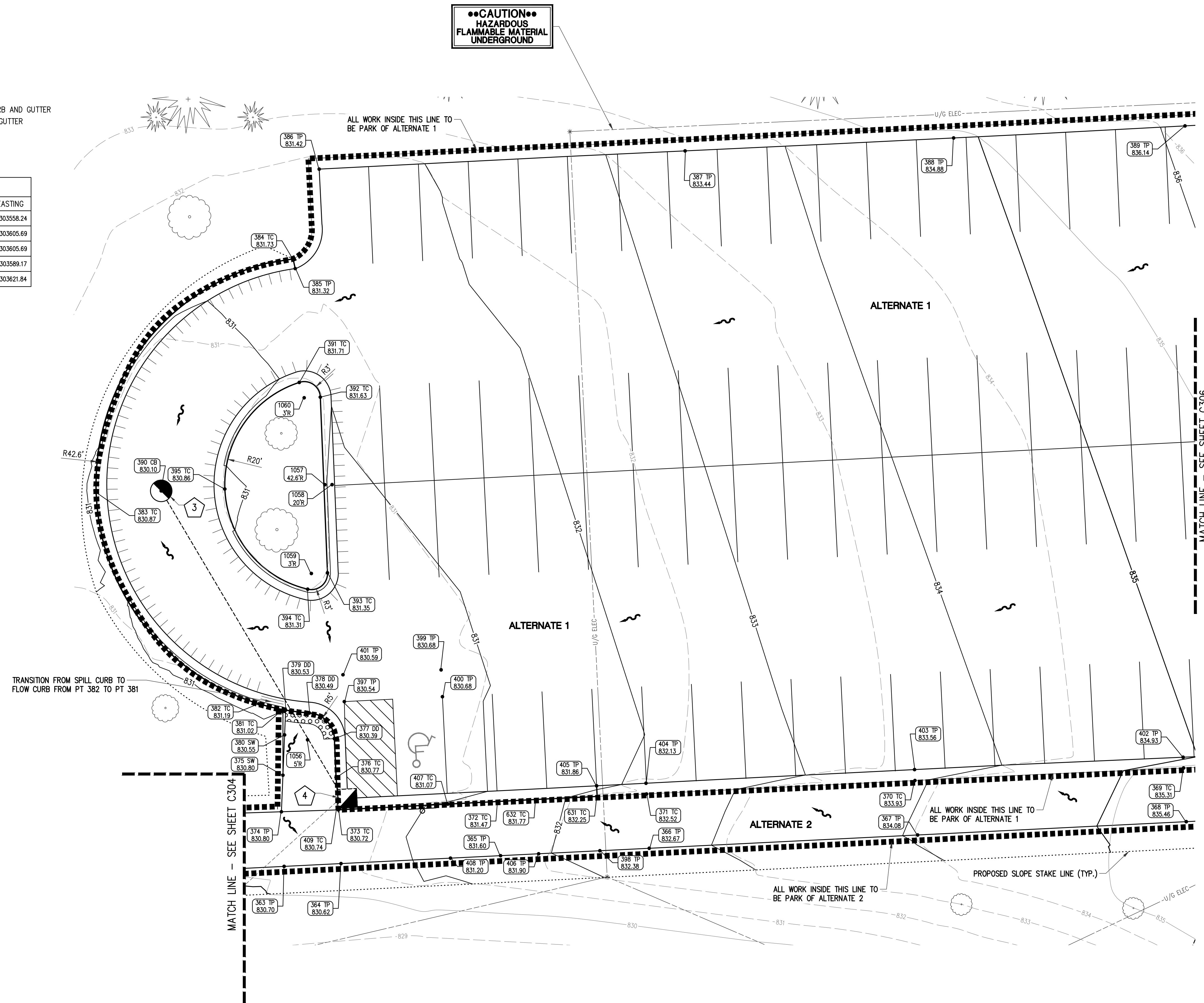
REV: _____
 SHT# **C304**
 JOB No: 2300634

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GRADING LEGEND

- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
- FG - FINISH GRADE
- SW - TOP OF SIDEWALK
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- ===== PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- ~~~~~ FLOW DIRECTION

RADIUS POINTS			
POINT	DESCRIPTION	NORTHING	EASTING
1056	5' RADIUS (TC)	267424.67	13303558.24
1057	42.6' RADIUS (TC)	267421.46	13303605.69
1058	20' RADIUS (TC)	267420.11	13303605.69
1059	3' RADIUS (TC)	267423.97	13303589.17
1060	3' RADIUS (TC)	267425.30	13303621.84



GRADING TABLE				
POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
363	TP=830.70		267429.03	13303534.70
364	TP=830.62		267418.45	13303535.23
365	TP=831.60		267388.79	13303536.70
366	TP=832.67		267361.14	13303538.07
367	TP=834.08		267311.22	13303540.54
368	TP=835.46		267261.27	13303543.02
369	TC=835.31	TP, ME	267261.77	13303553.00
370	TC=833.93	TP, ME	267311.72	13303550.67
371	TC=832.52	TP, ME	267361.64	13303548.17
372	TC=831.47	TP	267389.29	13303546.77
373	TC=830.72	TP	267418.95	13303545.22
374	TP=830.80	SW	267429.54	13303544.86
375	SW=830.80		267429.25	13303551.66
376	TC=830.77	SW	267419.38	13303551.25
377	DD=830.39	TC, SW, PC	267419.68	13303558.45
378	DD=830.49	TC, SW, PC	267424.34	13303563.23
379	DD=830.53	TC, SW	267428.75	13303563.76
380	SW=830.55		267428.94	13303559.16
381	TC=831.02	SW	267429.25	13303563.85
382	TC=831.19		267433.72	13303564.94
383	TC=830.87		267463.99	13303604.23
384	TC=831.73	ME	267427.37	13303647.67
385	TP=831.32	ME	267426.97	13303645.86
386	TP=831.42	ME	267422.51	13303664.36
387	TP=833.44	ME	267354.47	13303667.75
388	TP=834.88	ME	267304.53	13303670.15
389	TP=836.14	ME	267261.50	13303672.40
390	CB=830.10		267451.89	13303604.53
391	TC=831.71	PC	267426.22	13303624.70
392	TC=831.63	PC	267422.31	13303621.96
393	TC=831.35	PC	267420.97	13303589.29
394	TC=831.31	PC	267424.65	13303586.25
395	TC=830.86		267440.06	13303604.88
397	TP=830.54		267417.84	13303565.35
398	TP=832.38		267370.32	13303537.61
399	TP=830.68		267399.84	13303571.25
400	TP=830.68		267399.59	13303566.26
401	TP=830.59		267418.09	13303570.34
402	TP=834.93	ME	267261.86	13303555.00
403	TP=833.56	ME	267311.80	13303552.71
404	TP=832.13	ME	267361.74	13303550.17
405	TP=831.86	ME	267370.92	13303549.69
406	TP=831.90		267381.71	13303537.05
407	TC=831.07	TP	267398.59	13303546.28
408	TP=831.20		267398.09	13303536.24
409	TC=830.74	CB	267419.00	13303547.23
631	TC=832.25	TP, ME	267370.82	13303547.71
632	TC=831.77	TP	267382.21	13303547.14

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 10'

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 WASHTENAW COUNTY
 CIVIL DETAILED GRADING PLAN



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV: _____
 SHT# **C305**
 JOB No: 2300634

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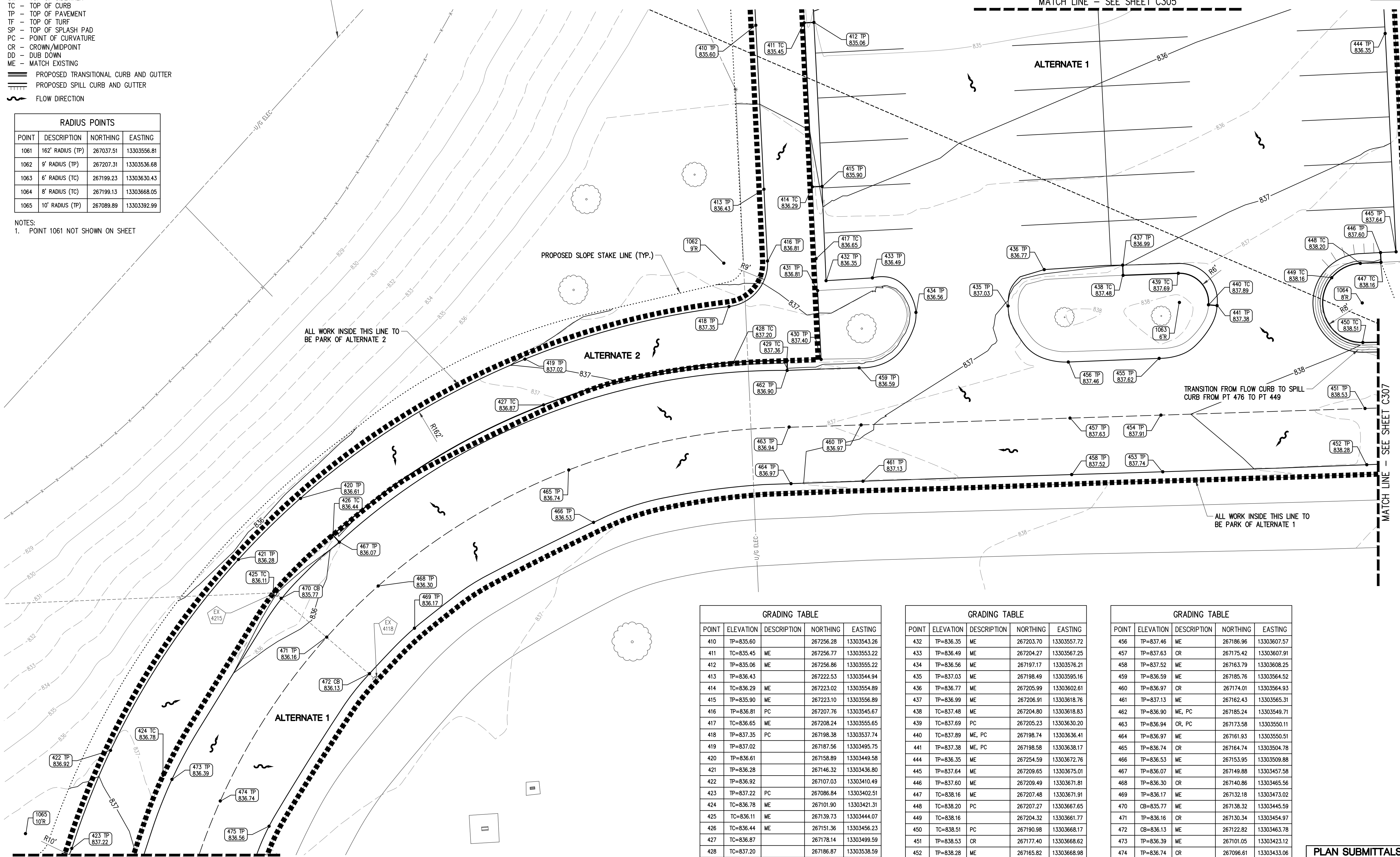
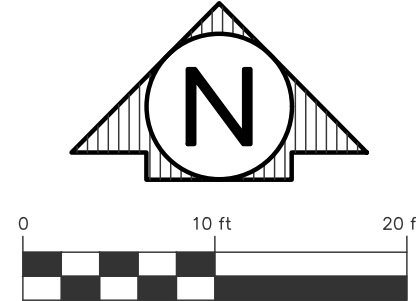
GRADING LEGEND

- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
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- SW - TOP OF SIDEWALK
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- ME - MATCH EXISTING
- PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- FLOW DIRECTION

POINT	DESCRIPTION	NORTHING	EASTING
1061	162' RADIUS (TP)	267037.51	13303556.81
1062	9' RADIUS (TP)	267207.31	13303536.68
1063	6' RADIUS (TC)	267199.23	13303630.43
1064	8' RADIUS (TC)	267199.13	13303668.05
1065	10' RADIUS (TP)	267089.89	13303392.99

NOTES:
1. POINT 1061 NOT SHOWN ON SHEET

CAUTION
HAZARDOUS
FLAMMABLE MATERIAL
UNDERGROUND



POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
410	TP=835.60		267256.28	13303543.26
411	TC=835.45	ME	267256.77	13303553.22
412	TP=835.06	ME	267256.86	13303555.22
413	TP=836.43		267222.53	13303544.94
414	TC=836.29	ME	267223.02	13303554.89
415	TP=835.90	ME	267223.10	13303556.89
416	TP=836.81	PC	267207.76	13303545.67
417	TC=836.65	ME	267208.24	13303555.65
418	TP=837.35	PC	267198.38	13303557.74
419	TP=837.02		267187.56	13303495.75
420	TP=836.61		267158.89	13303449.58
421	TP=836.28		267146.32	13303436.80
422	TP=836.92		267107.03	13303410.49
423	TP=837.22	PC	267086.84	13303402.51
424	TC=836.78	ME	267101.90	13303421.31
425	TC=836.11	ME	267139.73	13303444.07
426	TC=836.44	ME	267151.36	13303456.23
427	TC=836.87		267178.14	13303499.59
428	TC=837.20		267186.87	13303538.59
429	TC=837.36	ME, PC	267187.24	13303549.73
430	TP=837.40	TC, ME	267187.50	13303556.71
431	TP=836.81	TC, ME	267201.66	13303555.98

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
432	TP=836.35	ME	267203.70	13303557.72
433	TP=836.49	ME	267204.27	13303567.25
434	TP=836.56	ME	267197.17	13303576.21
435	TP=837.03	ME	267198.49	13303595.16
436	TP=836.77	ME	267205.99	13303602.61
437	TP=836.99	ME	267206.91	13303618.76
438	TC=837.48	ME	267204.80	13303618.83
439	TC=837.69	PC	267205.23	13303630.20
440	TC=837.89	ME, PC	267198.74	13303636.41
441	TP=837.38	ME, PC	267198.58	13303638.17
444	TP=836.35	ME	267254.59	13303672.76
445	TP=837.84	ME	267209.65	13303675.01
446	TP=837.60	ME	267209.49	13303671.81
447	TC=838.16	ME	267207.48	13303671.91
448	TC=838.20	PC	267207.27	13303667.65
449	TC=838.16		267204.32	13303661.77
450	TP=838.51	PC	267190.98	13303668.17
451	TP=838.53	CR	267177.40	13303668.62
452	TP=838.28	ME	267185.82	13303668.98
453	TP=837.74	ME	267164.37	13303627.00
454	TP=837.91	CR	267176.04	13303626.63
455	TP=837.62	ME	267187.71	13303626.26

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
456	TP=837.46	ME	267186.96	13303607.57
457	TP=837.63	CR	267175.42	13303607.91
458	TP=837.52	ME	267163.79	13303608.25
459	TP=836.59	ME	267185.76	13303564.52
460	TP=836.97	CR	267174.01	13303564.83
461	TP=837.13	ME	267162.43	13303565.31
462	TP=836.90	ME, PC	267185.24	13303549.71
463	TP=836.94	CR, PC	267173.58	13303550.11
464	TP=836.97	ME	267161.93	13303550.51
465	TP=836.74	CR	267164.74	13303504.78
466	TP=836.53	ME	267153.95	13303509.88
467	TP=836.07	ME	267149.88	13303457.58
468	TP=836.30	CR	267140.86	13303465.56
469	TP=836.17	ME	267132.18	13303473.02
470	CB=835.77	ME	267138.32	13303445.59
471	TP=836.16	CR	267130.34	13303454.97
472	CB=836.13	ME	267122.82	13303463.78
473	TP=836.39	ME	267101.05	13303423.12
474	TP=836.74	CR	267096.61	13303433.06
475	TP=836.56	ME	267091.41	13303443.11

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
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PLAN DATE: SEPTEMBER 2024
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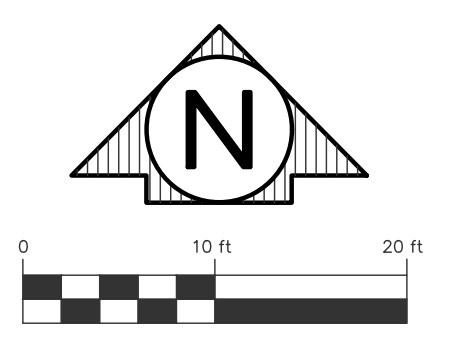


REV: _____
SHT# **C306**
JOB No: 2300634

PROJECT: 2300634 (Civ) Construction Drawings Phase 2 (S) 2300634-DET-CR03_22.dwg

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
476	TC=838.63		267191.10	13303676.38
477	TC=838.76		267191.19	13303682.16
478	TC=839.19		267191.50	13303701.84
479	TC=839.58		267192.39	13303729.24
480	TC=840.09		267193.21	13303754.23
481	TC=840.75		267194.03	13303779.22
482	TC=841.74		267194.84	13303804.20
483	TC=842.73		267195.66	13303829.19
484	TC=843.73		267196.48	13303854.18
485	TC=844.72		267197.29	13303879.16
486	TC=845.71		267198.11	13303904.15
487	TC=846.33		267198.62	13303919.71
488	TC=846.65	ME, SW	267198.95	13303929.78
489	TP=846.65	ME, SW	267196.95	13303929.85
490	TP=846.57	ME, SW	267185.95	13303930.13
491	TP=846.17	CR	267185.63	13303920.14
492	TP=845.55	CR	267185.12	13303904.58
493	TP=844.56	CR	267184.30	13303879.59
494	TP=843.56	CR	267183.48	13303854.60
495	TP=842.57	CR	267182.67	13303829.62
496	TP=841.57	CR	267181.85	13303804.63
497	TP=840.58	CR	267181.03	13303779.64
498	TP=839.92	CR	267180.22	13303754.66
499	TP=839.50	CR	267179.40	13303729.67
500	TP=839.03	CR	267178.50	13303702.26
501	TP=838.73	CR	267177.85	13303682.33
502	TP=838.65	CR	267177.67	13303676.82
503	TP=838.38	ME	267166.14	13303677.18
504	TC=838.71	ME	267164.10	13303677.29
505	TC=838.81		267164.39	13303682.56
506	TC=839.19		267165.51	13303702.69
507	TC=839.66		267166.41	13303730.09
508	TC=840.09		267167.22	13303755.08
509	TC=840.75		267168.04	13303780.07
510	TC=841.74		267168.86	13303805.05
511	TC=842.73		267169.67	13303830.04
512	TC=843.73		267170.49	13303855.03
513	TC=844.72		267171.31	13303880.01
514	TC=845.71		267172.13	13303905.00
515	TC=846.33		267172.63	13303920.56
516	TC=846.48	ME, SW	267172.96	13303930.42
517	TP=846.48	ME, SW	267174.96	13303930.35

- GRADING LEGEND**
- CB - CATCH BASIN RIM ELEVATION
 - FF - FINISH FLOOR ELEVATION
 - FG - FINISH GRADE
 - SW - TOP OF SIDEWALK
 - TC - TOP OF CURB
 - TP - TOP OF PAVEMENT
 - TF - TOP OF TURF
 - SP - TOP OF SPLASH PAD
 - PC - POINT OF CURVATURE
 - CR - CROWN/MIDPOINT
 - DD - DUB DOWN
 - ME - MATCH EXISTING
 - == PROPOSED TRANSITIONAL CURB AND GUTTER
 - PROPOSED SPILL CURB AND GUTTER
 - ~ FLOW DIRECTION

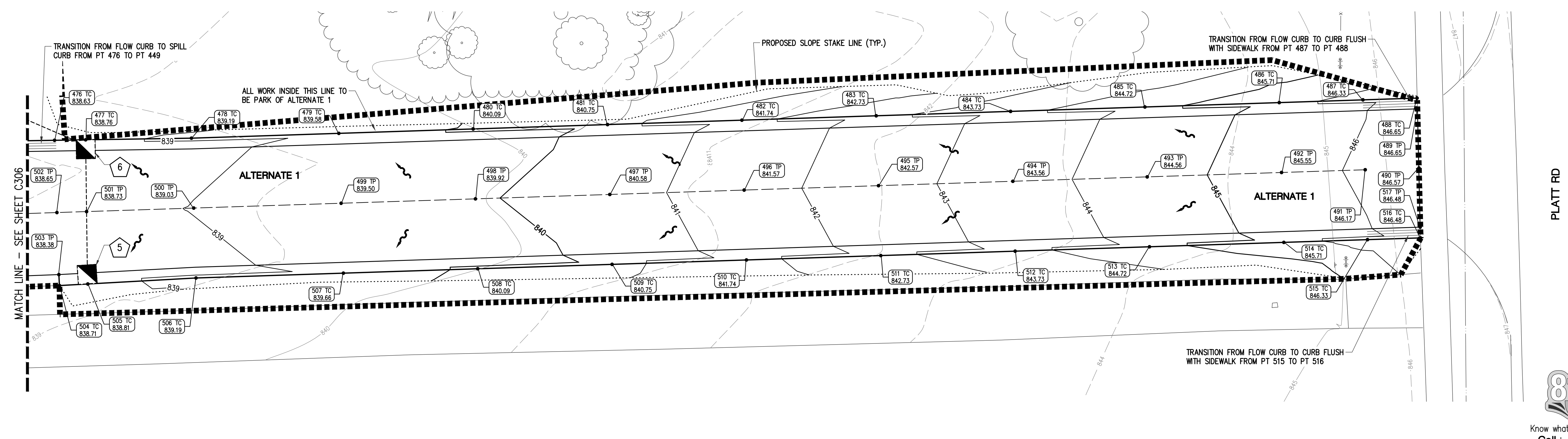


PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVISED: AJW
 SCALE: 1" = 10'

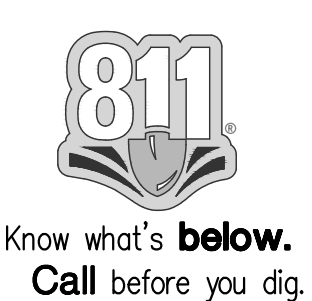
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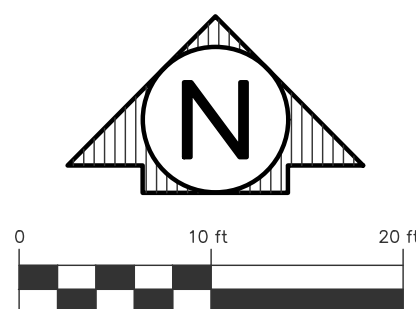
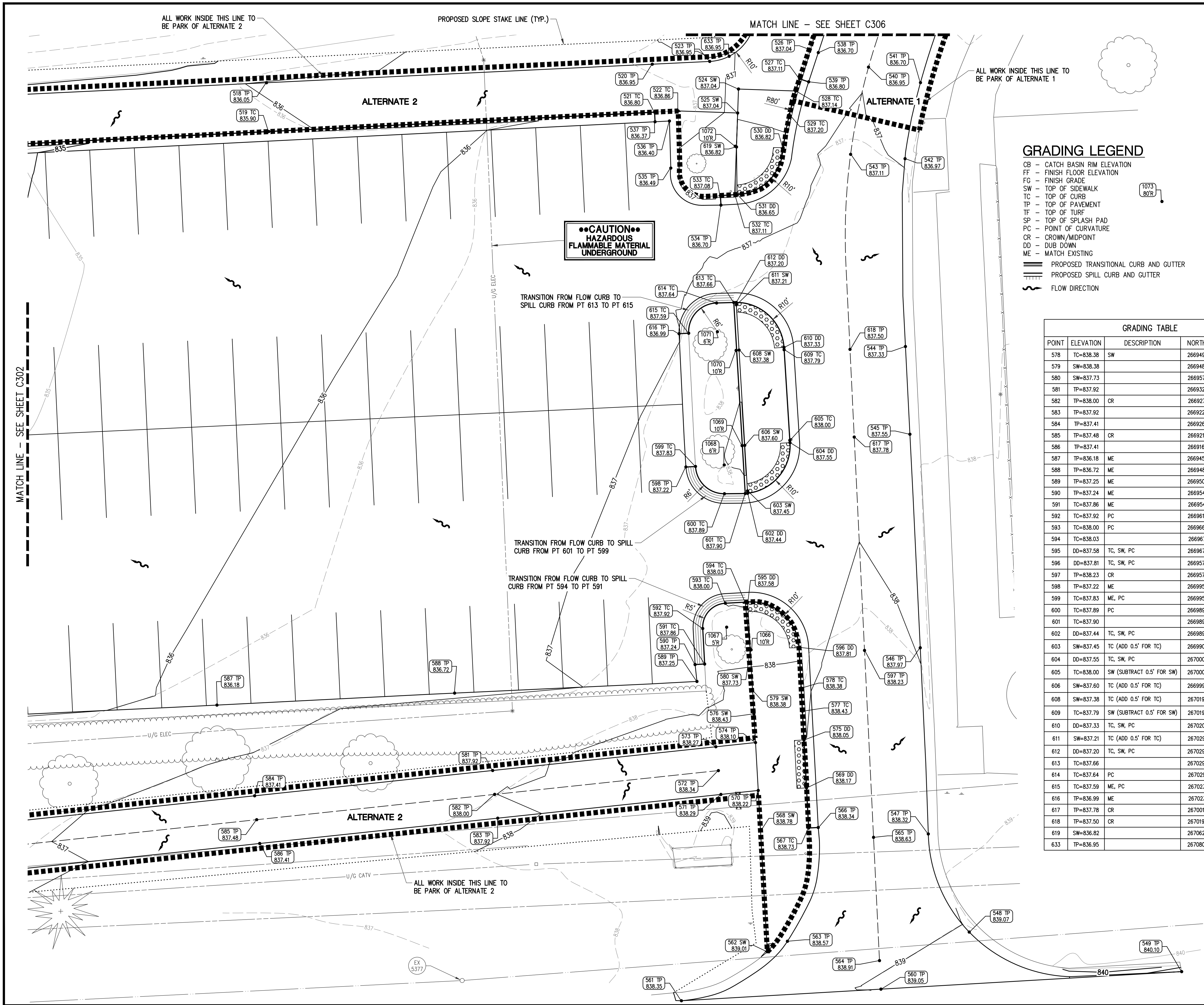


PLAN SUBMITTALS AND CHANGES

DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV: _____
 SHT# **C307**
 JOB No: 2300634

R:\Projects\2300634\Drawings\Construction\Drawings\Phase 2\341-7500-2300634-BE-C307.dwg



GRADING LEGEND

- CB - CATCH BASIN RIM ELEVATION
- FF - FINISH FLOOR ELEVATION
- FG - FINISH GRADE
- SW - TOP OF SIDEWALK
- TC - TOP OF CURB
- TP - TOP OF PAVEMENT
- TF - TOP OF TURF
- SP - TOP OF SPLASH PAD
- PC - POINT OF CURVATURE
- CR - CROWN/MIDPOINT
- DD - DUB DOWN
- ME - MATCH EXISTING
- PROPOSED TRANSITIONAL CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- ~ FLOW DIRECTION

GRADING TABLE

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
578	TC=838.38	SW	266949.20	13303412.54
579	SW=838.38		266948.63	13303402.41
580	SW=837.73		266957.12	13303401.83
581	TP=837.92		266932.00	13303348.21
582	TP=838.00	CR	266927.01	13303348.62
583	TP=837.92		266922.05	13303349.28
584	TP=837.41		266926.72	13303298.57
585	TP=837.48	CR	266921.73	13303299.01
586	TP=837.41		266916.77	13303299.63
587	TP=837.18	ME	266945.64	13303290.71
588	TP=836.72	ME	266948.14	13303340.27
589	TP=837.25	ME	266950.57	13303390.80
590	TP=837.24	ME	266954.10	13303390.41
591	TC=837.86	ME	266954.21	13303392.41
592	TC=837.92	PC	266961.62	13303392.00
593	TC=838.00	PC	266966.89	13303396.72
594	TC=838.03		266967.11	13303400.86
595	DD=837.58	TC, SW, PC	266967.13	13303401.36
596	DD=837.81	TC, SW, PC	266957.69	13303412.08
597	TP=838.23	CR	266957.05	13303425.74
598	TP=837.22	ME	266995.32	13303388.50
599	TC=837.83	ME, PC	266995.42	13303390.50
600	TC=837.89	PC	266989.73	13303396.53
601	TC=837.90		266989.78	13303400.87
602	DD=837.44	TC, SW, PC	266989.82	13303401.36
603	SW=837.45	TC (ADD 0.5' FOR TC)	266990.32	13303401.33
604	DD=837.55	TC, SW, PC	267000.38	13303410.20
605	TC=838.00	SW (SUBTRACT 0.5' FOR SW)	267000.88	13303410.17
606	SW=837.60	TC (ADD 0.5' FOR TC)	266999.82	13303400.77
608	SW=837.38	TC (ADD 0.5' FOR TC)	267019.70	13303399.58
609	TC=837.79	SW (SUBTRACT 0.5' FOR SW)	267019.78	13303408.98
610	DD=837.33	TC, SW, PC	267020.26	13303408.95
611	SW=837.21	TC (ADD 0.5' FOR TC)	267029.13	13303399.02
612	DD=837.20	TC, SW, PC	267029.63	13303398.98
613	TC=837.66		267029.62	13303398.48
614	TC=837.64	PC	267029.51	13303394.89
615	TC=837.59	ME, PC	267023.21	13303389.08
616	TP=836.99	ME	267023.11	13303387.07
617	TP=837.78	CR	267001.55	13303423.59
618	TP=837.50	CR	267019.84	13303422.71
619	SW=836.82		267062.06	13303399.05
633	TP=836.95		267080.97	13303397.52

GRADING TABLE

POINT	ELEVATION	DESCRIPTION	NORTHING	EASTING
518	TP=836.05		267075.46	13303301.05
519	TC=835.90	TP	267065.28	13303301.54
520	TP=836.95		267079.32	13303381.49
521	TC=836.80	TP, ME	267069.33	13303381.97
522	TC=836.86	TP, ME	267069.57	13303386.89
523	TP=836.95	PC	267079.90	13303393.47
524	SW=837.04	TP	267074.14	13303399.46
525	SW=837.04	TP	267069.15	13303399.29
526	TP=837.04	TC, ME	267082.45	13303414.22
527	TC=837.11	TP, ME, PC	267076.28	13303412.19
528	TC=837.14	SW	267073.73	13303411.38
529	TC=837.20	SW	267068.78	13303410.06
530	DD=836.82	TC, SW, PC	267061.90	13303408.77
531	DD=836.65	TC, SW, PC	267052.13	13303399.16
532	TC=837.11	SW	267052.10	13303398.66
533	TC=837.08	ME	267051.93	13303395.69
534	TP=836.70	ME	267049.83	13303395.80
535	TP=836.49	ME	267057.66	13303385.35
536	TP=836.40	ME	267067.47	13303385.06
537	TP=836.37	ME	267067.31	13303382.07
538	TP=836.70	ME	267081.74	13303416.10
539	TP=836.80	ME	267075.65	13303414.09
540	TP=836.95	CR	267078.72	13303426.57
541	TP=836.70	ME	267075.48	13303437.40
542	TP=836.97	ME	267059.61	13303434.19
543	TP=837.11	CR	267060.53	13303422.84
544	TP=837.33	ME	267020.43	13303434.27
545	TP=837.55	ME	267002.14	13303435.20
546	TP=837.97	ME	266957.60	13303437.36
547	TP=838.32	ME	266918.76	13303439.04
548	TP=839.07	ME	266898.30	13303447.57
549	TP=840.10	ME	266890.04	13303491.87
560	TP=839.05	ME	266886.39	13303429.16
561	TP=838.35	ME	266883.97	13303387.57
562	SW=839.01	TC, ME	266894.20	13303405.48
563	TP=838.57	ME	266896.38	13303409.66
564	TP=838.91	CR	266892.34	13303428.86
565	TP=838.63	CR	266918.06	13303427.62
566	TP=838.34	ME	266920.11	13303416.09
567	TC=838.73	SW, ME	266920.00	13303414.09
568	SW=838.78		266919.44	13303404.05
569	DD=838.17	TC, SW	266928.37	13303413.65
570	TP=838.22	SW	266927.83	13303403.58
571	TP=838.29		266927.00	13303395.80
572	TP=838.34	CR	266931.98	13303395.27
573	TP=838.27		266936.95	13303394.74
574	TP=838.10	SW	266937.83	13303403.02
575	DD=838.05	TC, SW	266938.37	13303413.11
576	SW=838.43		266943.82	13303402.68
577	TC=838.43	SW	266944.36	13303412.79

RADIUS POINTS

POINT	DESCRIPTION	NORTHING	EASTING
1065	10' RADIUS (TP)	267089.89	13303392.99
1066	10' RADIUS (TC)	266957.17	13303402.10
1067	5' RADIUS (TC)	266961.89	13303397.00
1068	6' RADIUS (TC)	266955.73	13303396.49
1069	10' RADIUS (TC)	266999.75	13303400.22
1070	10' RADIUS (TC)	267019.63	13303398.97
1071	6' RADIUS (TC)	267023.52	13303395.06
1072	10' RADIUS (TC)	267062.21	13303398.79
1073	80' RADIUS (TC)	267050.69	13303487.76

NOTES:
1. POINT 1065 SHOWN ON SHEET C306

Know what's below.
Call before you dig.

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: 1" = 10'

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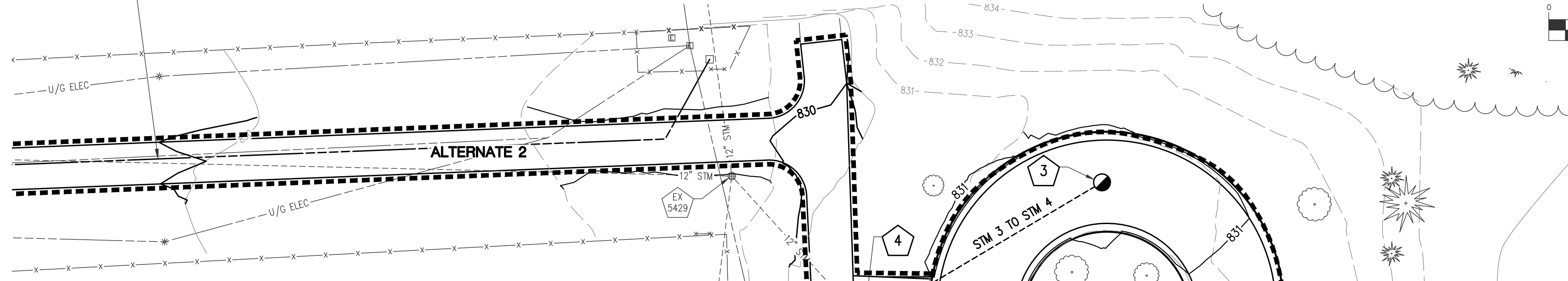
PREPARED FOR
CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL DETAILED GRADING PLAN

REV:
SHT# **C308**
JOB No: 2300634

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	NORTHING	EASTING
3	48"	EJ 1040 M1	RIM=830.10	12" 826.33 SW (PR)	267451.89	13303604.53
4	48"	EJ 7000 M2	T/C=830.74	12" 826.00 NW (EX) 12" 826.00 NE (PR)	267418.00	13303547.30
5	48"	EJ 7000 M2	T/C=838.80	12" 834.62 N (PR)	267165.42	13303682.49
6	48"	EJ 7000 M2	T/C=838.76	12" 834.50 NW (PR) 12" 834.50 S (PR)	267190.19	13303682.17
7	48"	EJ 1040 M1	RIM=828.21	12" 824.80 N (EX) 12" 825.00 SE (PR)	267271.44	13303493.61

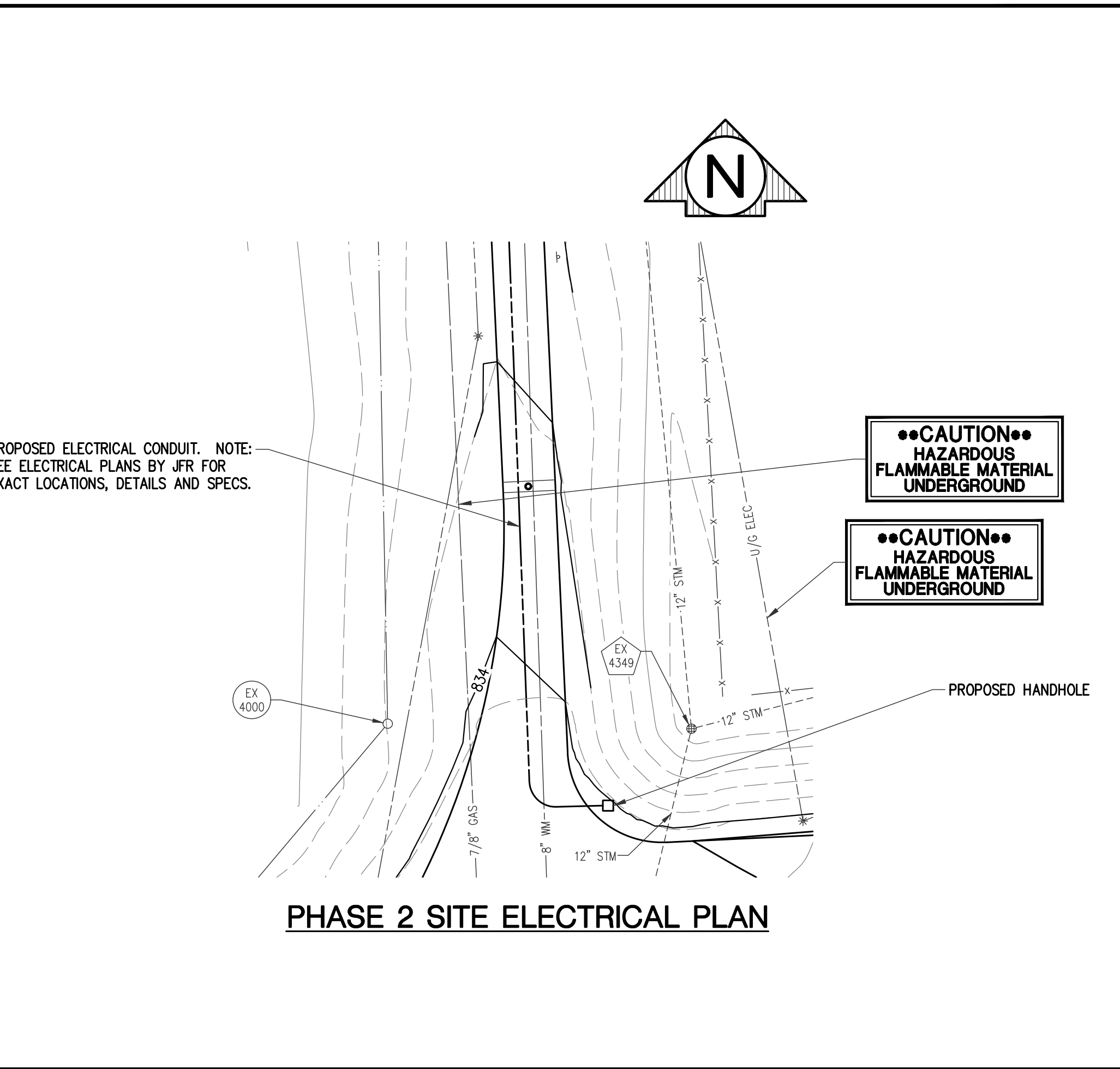
NOTE: STRUCTURES 3,4,5, AND 6 ARE TO BE INCLUDED IN ALTERNATE 1. STRUCTURE 7 WILL BE PART OF PHASE 2 BASE BID.

PROPOSED ELECTRICAL CONDUIT. NOTE: SEE ELECTRICAL PLANS BY JFR FOR EXACT LOCATIONS, DETAILS AND SPECS.

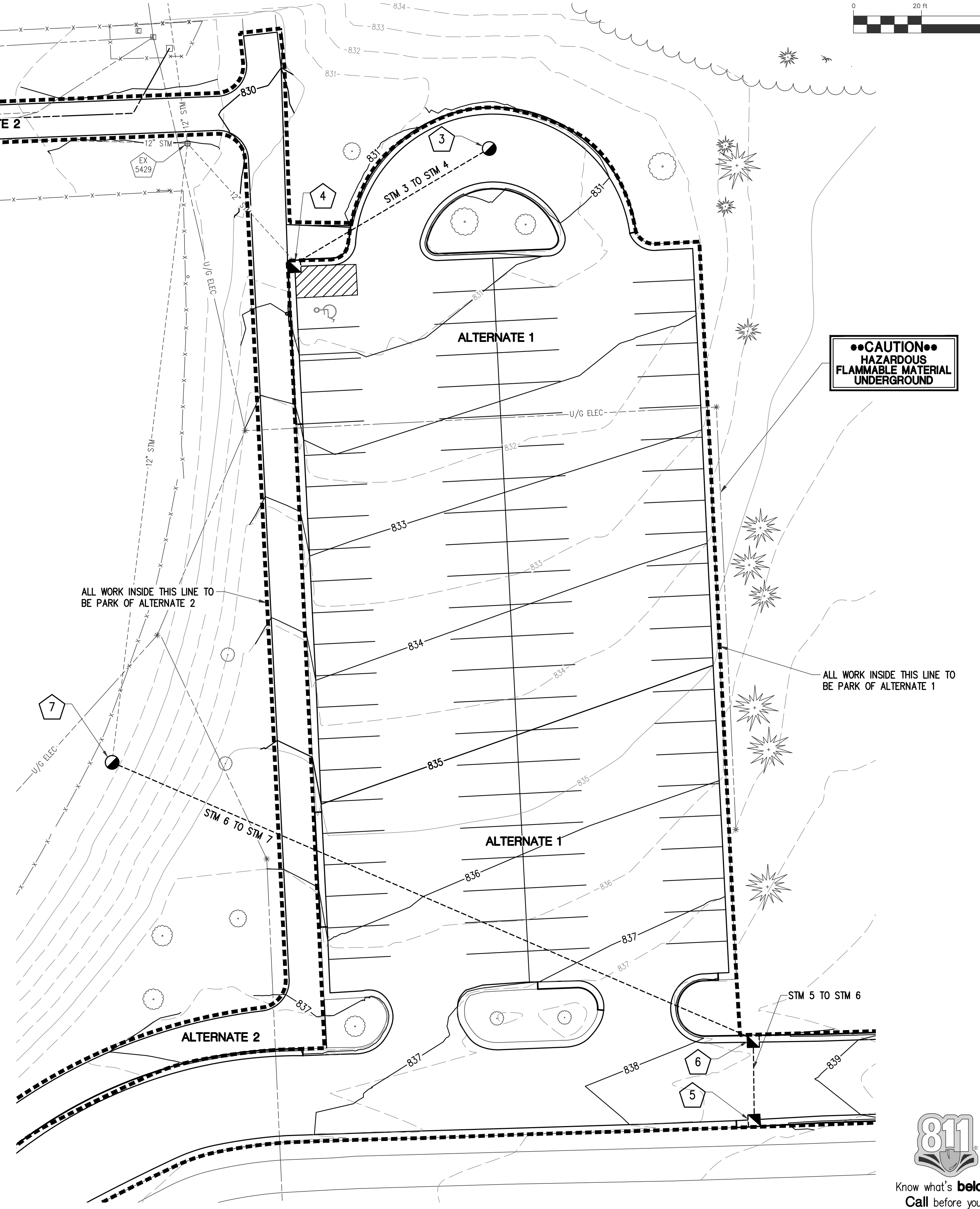


PROPOSED STORM SEWER PIPE TABLE (ALTERNATE 1)												
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	START INVERT	START INVERT NORTHING	START INVERT EASTING	END INVERT	END INVERT NORTHING	END INVERT EASTING
STM 3 TO STM 4	12"	Storm Sewer, RCP Cl III, ___ inch, Tr Det ___	67'	0.50%	0'	67'	826.33	267451.8933	13303604.5289	826.00	267417.9995	13303547.3007
STM 5 TO STM 6	12"	Storm Sewer, RCP Cl III, ___ inch, Tr Det ___	25'	0.50%	0'	25'	834.62	267165.4218	13303682.4949	834.50	267190.1923	13303682.1710
STM 6 TO STM 7	12"	Storm Sewer, RCP Cl III, ___ inch, Tr Det ___	205'	4.63%	160'	45'	834.50	267190.1923	13303682.1710	825.00	267271.4413	13303493.6144

NOTE: ALL PIPES INCLUDED IN THIS TABLE ARE TO BE PART OF ALTERNATE 1.



PHASE 2 SITE ELECTRICAL PLAN



PHASE 2 STORM SEWER PLAN

HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND



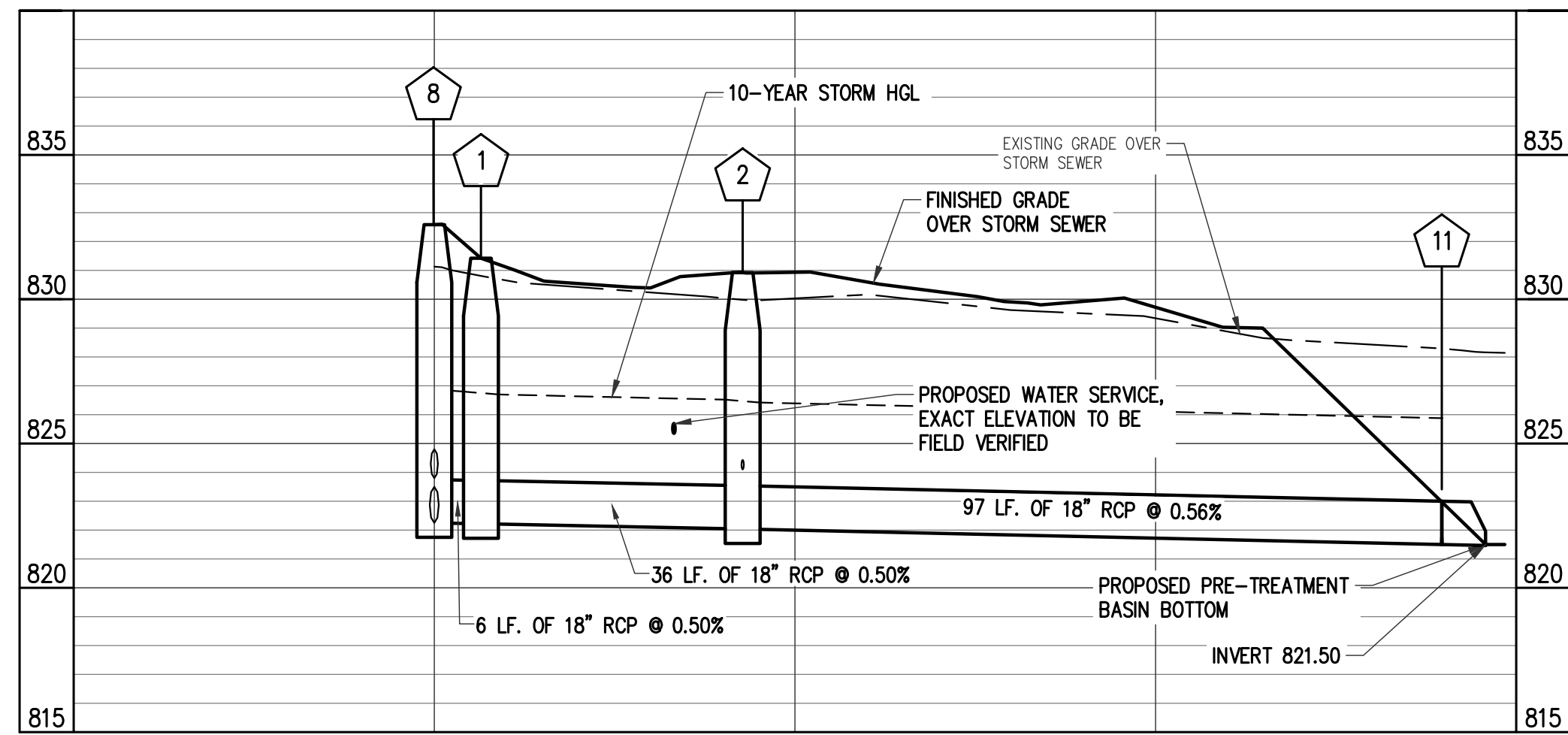
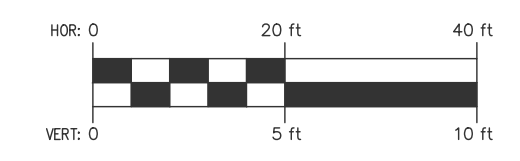
PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

PLAN DATE: SEPTEMBER 2024
 PROJECT MGR: DRS
 REVIEWER: AJW
 SCALE: 1" = 20'

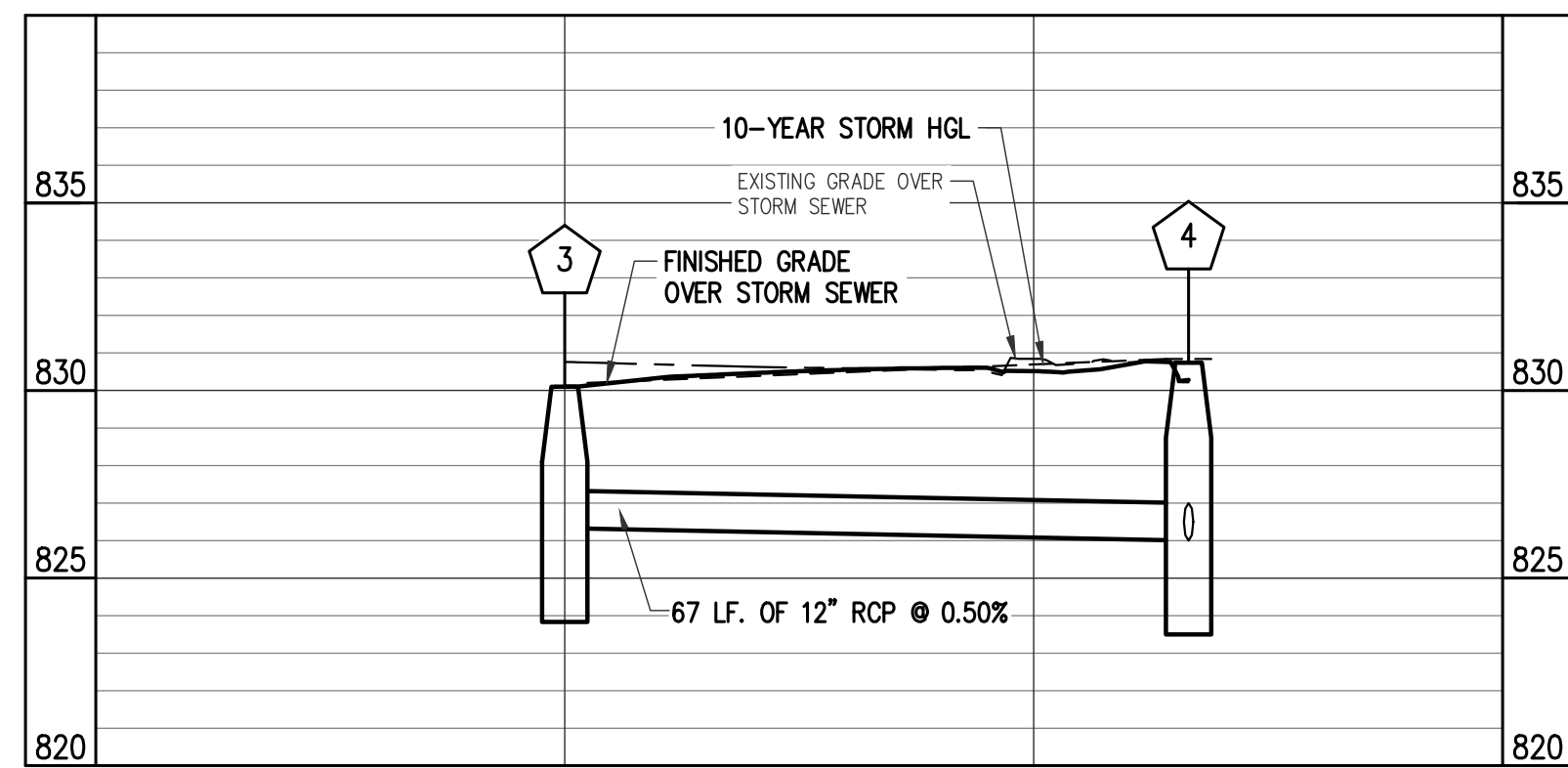
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CITY OF ANN ARBOR
BICENTENNIAL PARK PHASE 2
 WASHTENAW COUNTY
 CIVIL UTILITY PLAN

REV:
 SHT# **C400**
 JOB No: 2300634

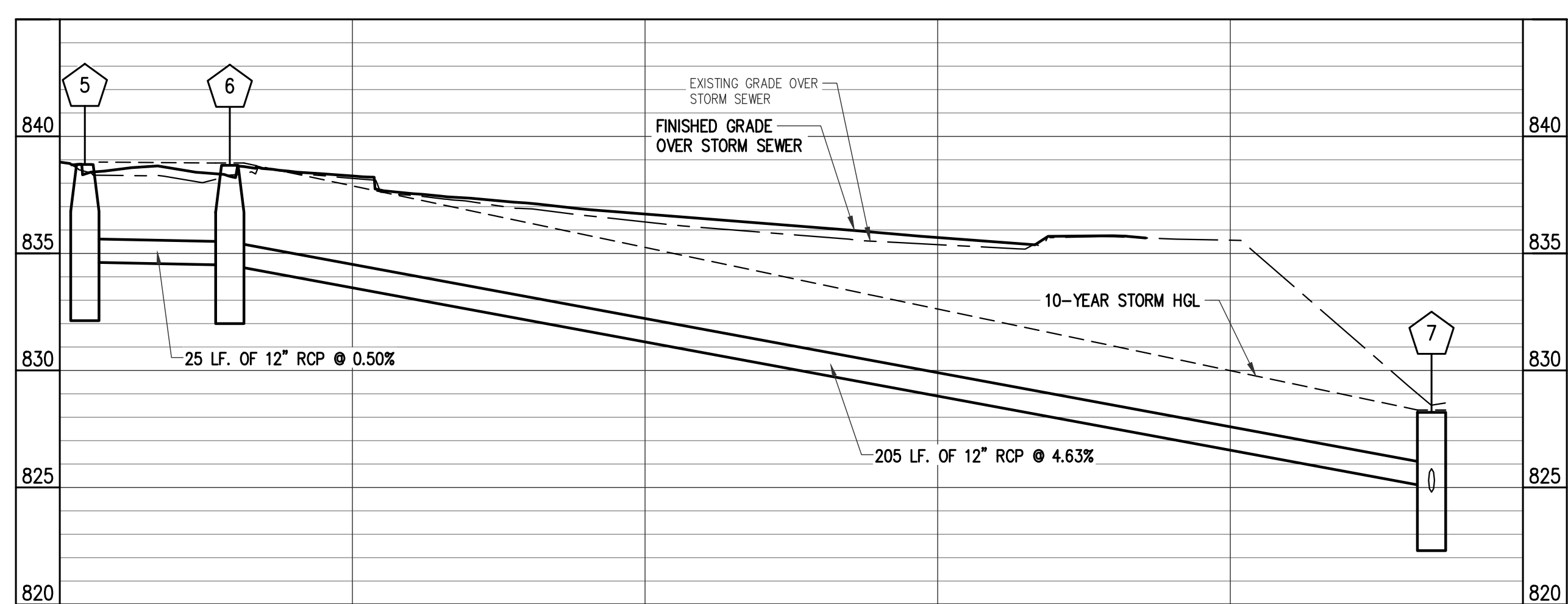


MH EX 5013 TO PROPOSED POND (PHASE 1)



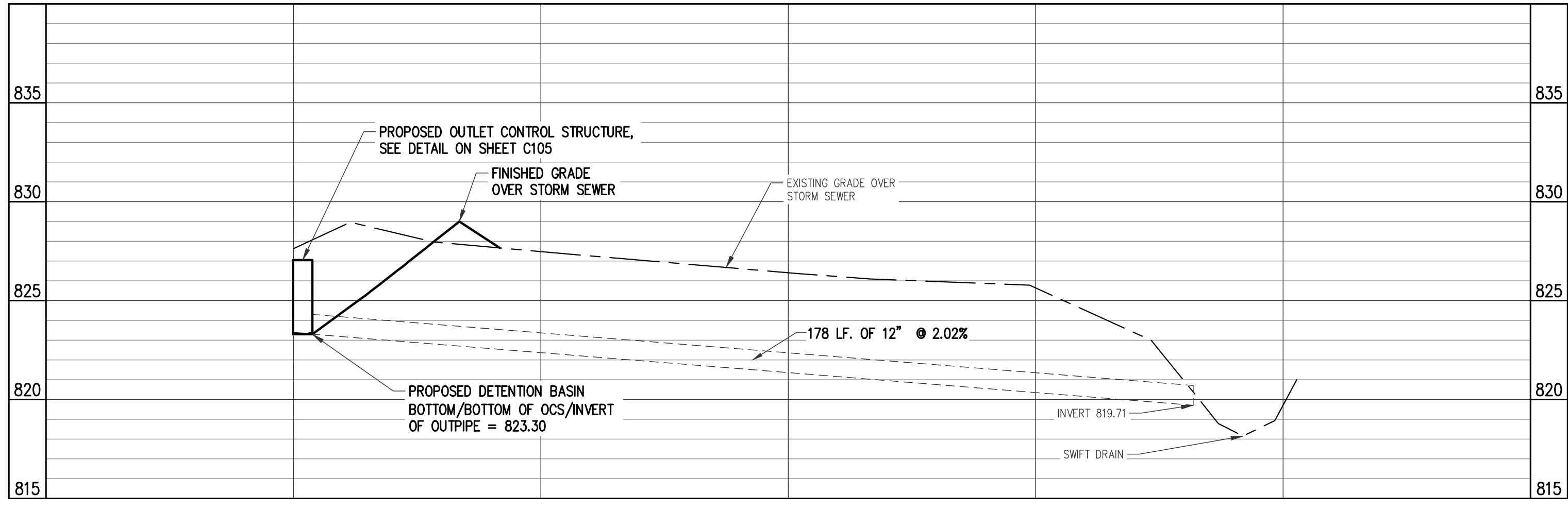
CB 3 TO CB 4 (PHASE 2 ALTERNATE 1)

NOTE: THE 10-YEAR STORM HGL OVERTOPS STRUCTURES 3 AND 4.

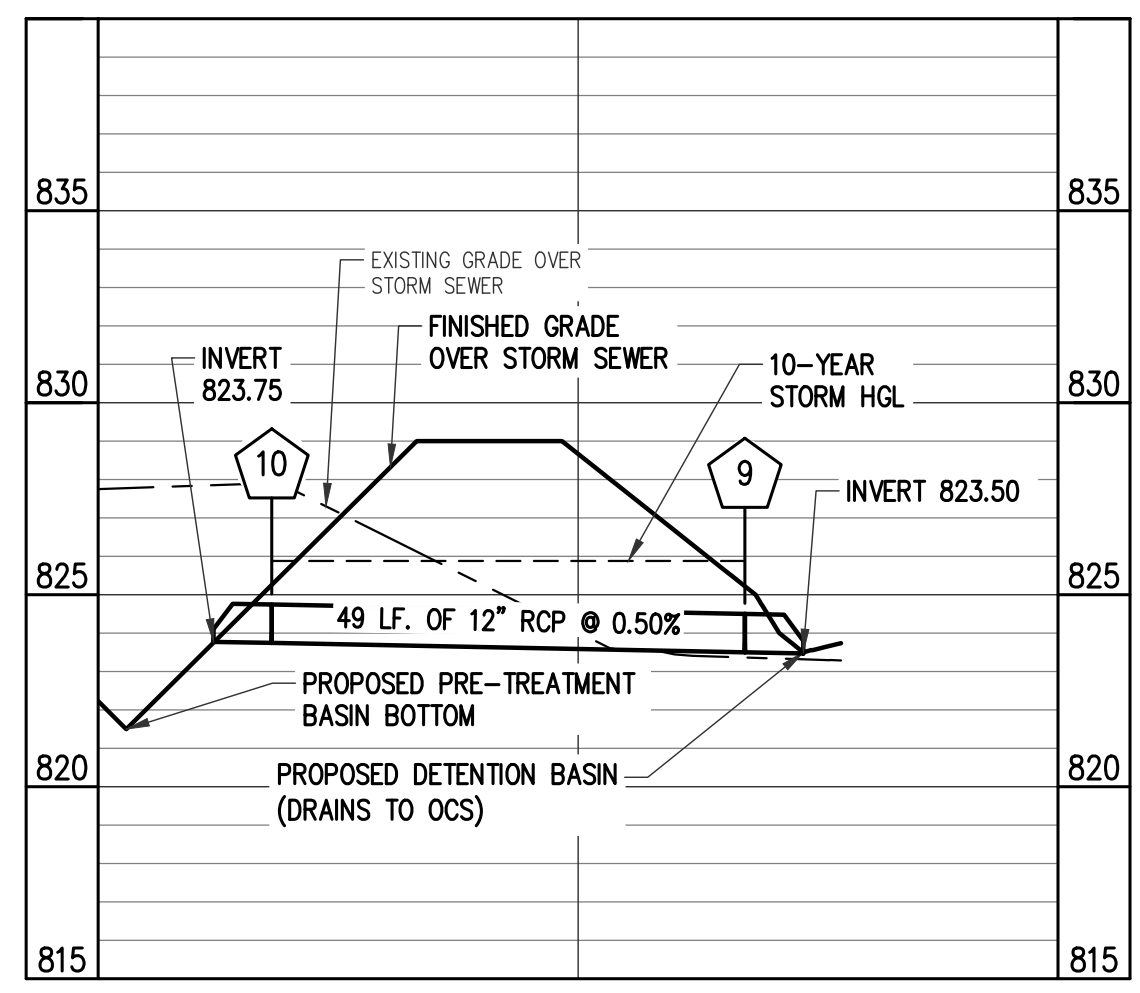


CB 5 TO CB 7 (PHASE 2 ALTERNATE 1)

NOTE: THE 10-YEAR STORM HGL OVERTOPS STRUCTURES 5, 6 AND 7.



PROPOSED DETENTION BASIN TO SWIFT DRAIN (PHASE 1)



PROPOSED PRE-TREATMENT BASIN TO PROPOSED DETENTION BASIN (PHASE 1)



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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
07/26/24	ISSUED FOR BIDS

REV:

SHT# **C401**
JOB No: 2300634

PLAN DATE: SEPTEMBER 2024
PROJECT MGR: DRS
REVIEWER: AJW
SCALE: 1" = 20' HORZ, 1" = 5' VERT

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BICENTENNIAL PARK PHASE 2
WASHTENAW COUNTY
CIVIL STORM SEWER PROFILES