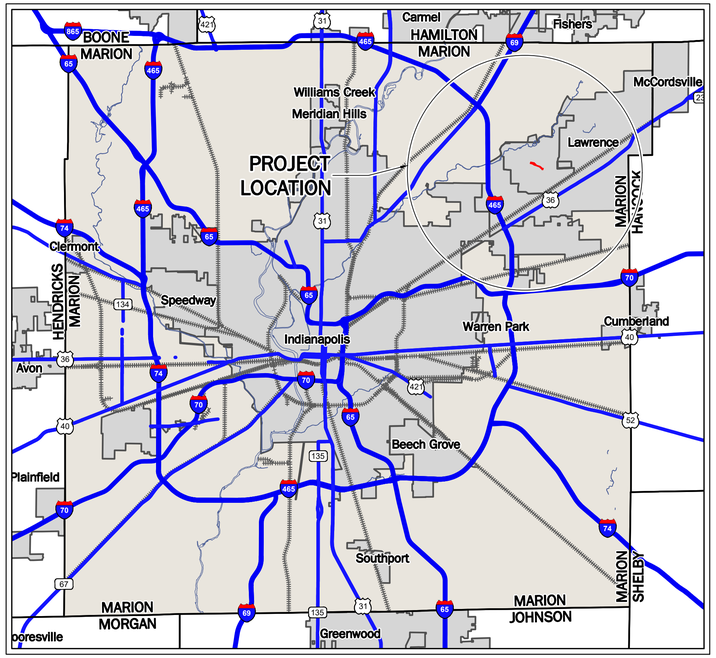
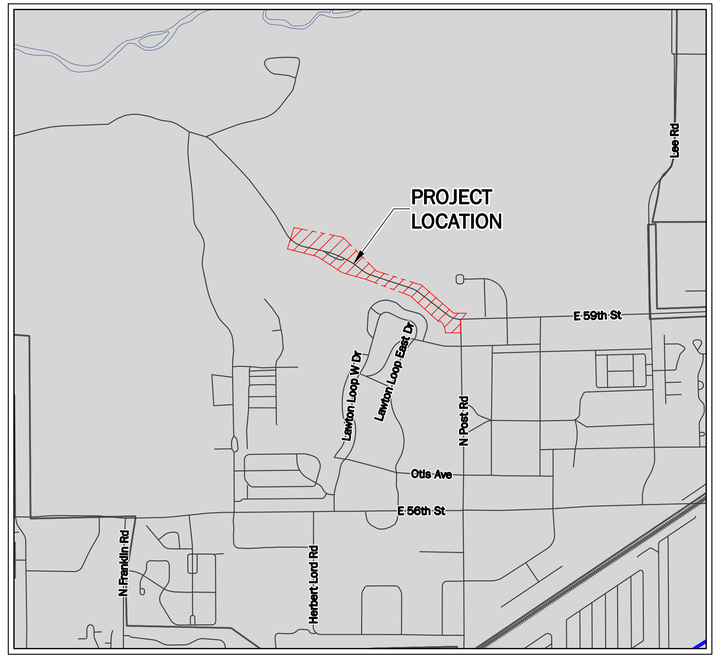
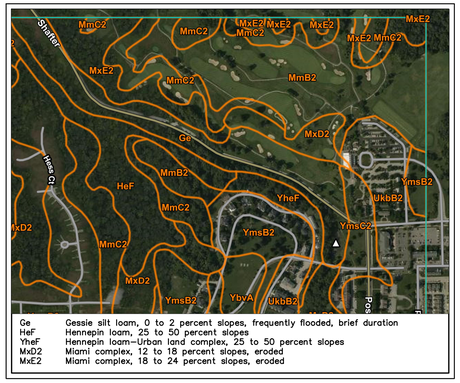
CONCEPTUAL PLANS
FOR
FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS
6000 N. POST ROAD
INDIANAPOLIS, IN 46216



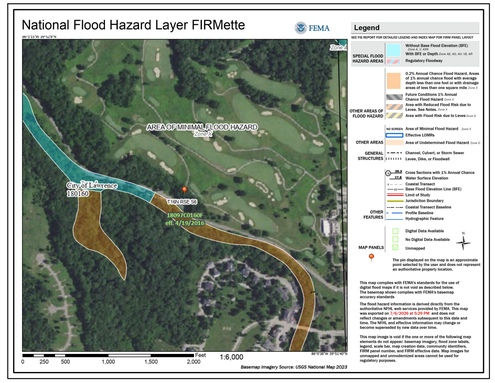
LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE



SOILS MAP
NOT TO SCALE



FEMA MAP
NOT TO SCALE

INDEX

DESCRIPTION	SHEET No.
TITLE SHEET	C001
GENERAL NOTES	C002
SPECIFICATIONS	C003
EXISTING TOPOGRAPHY PLAN	C101–C103
DEMOLITION PLAN	C111–C113
OVERALL SITE PLAN	C200
SITE PLAN	C201–C203
GRADING PLAN	C301–C303
ROAD PLAN AND PROFILES	C310–C311
EROSION CONTROL PLAN	C501–C503
STORM WATER POLLUTION PREVENTION PLAN	C510
EROSION CONTROL DETAILS	C520–C522
SITE DETAILS	C600–C602
MAINTENANCE OF TRAFFIC PLAN – PHASE 1	C700
MAINTENANCE OF TRAFFIC PLAN – PHASE 2	C701
MAINTENANCE OF TRAFFIC PLAN – PHASE 3	C702

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

UTILITY CONTACTS
(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261–8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924–3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545–5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545–6191

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1–800–382–5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANE. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

TITLE SHEET

C001

PLOT DATE: 10/15/2026 4:51 PM
PLOT SCALE: 12.5849
EDIT DATE: 7/15/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D_Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE-PE-C001-TS.dwg

GENERAL NOTES

1. ALL WORK TO CONFORM TO STATE AND LOCAL REGULATIONS.
2. CONTRACTOR SHALL KEEP ADJOINING PROPERTIES CLEAN OF CONSTRUCTION DEBRIS AND CONSTRUCTION TRAFFIC AT ALL TIMES.
3. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE BASE SURVEY CONTROL POINTS DURING DEMOLITION AND CONSTRUCTION.
4. ALL UTILITY INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR. CONTACT ENGINEER IMMEDIATELY IF ANY VARIATION EXISTS.
5. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

EXISTING TOPOGRAPHY NOTES

1. EXISTING TOPOGRAPHY IS PROVIDED BY:
   AMERICAN STRUCTUREPOINT, INC.
   PROJECT: 2012.00280
   DATED: MAY 10, 2021

DEMOLITION NOTES

1. CLEAR AND GRUB ALL TREES AND VEGETATION NECESSARY FOR CONSTRUCTION.
2. PROTECT TREES TO REMAIN DURING CONSTRUCTION.
3. PLANT MATERIALS TO REMAIN, TO BE PROTECTED BY TREE FENCE WHICH ENCOMPASSES IT'S DRIP LINE. NO CONSTRUCTION EQUIPMENT, MATERIALS OR DEBRIS SHALL BE LOCATED WITHIN TREE PROTECTION BOUNDARIES. NO DEMOLITION CAN OCCUR UNTIL TREE PROTECTION IS APPROVED BY THE OWNER.
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, FENCES, CONCRETE, ASPHALT PAVEMENT AND OTHER MISCELLANEOUS APPURTENANCES OFF SITE, UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.
5. DEMOLISH FOUNDATIONS AND OTHER BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A DEPTH OF NOT LESS THAN 48 INCHES BELOW LOWEST FOUNDATION LEVEL.
6. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES, WITH COMPACTED GRANULAR BACKFILL.
7. THE USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
8. CONDUCT DEMOLITION AND CONSTRUCTION OPERATIONS TO ENSURE MINIMAL INTERFERENCE WITH STREETS, WALKS AND OTHER ADJACENT OCCUPIED FACILITIES.
9. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY GOVERNING AUTHORITIES.
10. ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION AND CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT STRUCTURES AND OTHER FACILITIES AND INJURY TO PERSONS.
11. PROMPTLY REPAIR DAMAGE TO ADJACENT FACILITIES CAUSED BY DEMOLITION AND CONSTRUCTION OPERATIONS.
12. ALL UTILITIES TO BE REMOVED SHALL BE DISCONNECTED AND CAPPED AT THE NEAREST CONNECTION POINT.
13. NO ON-SITE BURNING IS PERMITTED.
14. CONTRACTOR SHALL USE MEASURES TO CONTROL DUST AT ALL TIMES.
15. DEMOLITION ITEMS INCLUDE BUT ARE NOT LIMITED TO DEMOLITION ITEMS INDICATED ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR RELOCATE ITEMS WHICH INTERFERE WITH NEW CONSTRUCTION.
16. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING DEMOLITION.

SITE NOTES

1. ALL PARKING STRIPES ARE TO BE 4" PAINTED (WHITE). ADA ACCESSIBLE PARKING STRIPES SHALL BE 4" PAINTED (BLUE).
2. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR FACE OF CURB, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
4. ALL DIMENSIONS ARE PARALLEL WITH, OR PERPENDICULAR TO BASE LINES, PROPERTY LINES OR BUILDING LINES, UNLESS OTHERWISE NOTED.
5. PROVIDE SMOOTH TRANSITIONS FROM NEW AREAS TO EXISTING FEATURES AS NECESSARY.
6. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
7. EXISTING PAVEMENT TO BE SAW CUT IN ALL AREAS WHERE INDICATED NEW PAVEMENT TO JOIN EXISTING.
8. THE EDGE OF THE EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING ASPHALT.
9. CONCRETE SAW CUTTING SHALL BE DONE AS SOON AS POURED CONCRETE HAS CURED AND CAN SUPPORT WEIGHT. PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
10. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
11. RADIAL JOINTS SHALL BE NO SHORTER THAN 1.5'.
12. CONTRACTOR SHALL USE A THICKENED EXPANSION JOINT AROUND THE PERIMETER OF ANY BLOCK OUT IN THE CONCRETE PAVING.
13. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH THE APPROPRIATE SEALANT ACCORDING TO MANUFACTURER'S DIRECTIONS.
14. ALL MATERIALS TO BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS RELATIVE TO MATERIAL, MIX, PLACEMENT AND WORKMANSHIP.
15. ALL SIDEWALKS SHALL COMPLY WITH ADA STANDARDS. MAXIMUM CROSS SLOPE OF 1:50 AND MAXIMUM LONGITUDINAL SLOPE OF 1:20.
16. CHAMFER ALL ENDS OF CURBS.

GRADING NOTES

1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE AT HIS/HER OWN COST.
5. AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL SHALL BE PERFORMED BY A LOADED TANDEM PNEUMATIC TIRE DUMP TRUCK MINIMUM GROSS VEHICLE WEIGHT OF 15 TONS. THE TIRES SHALL BE OPERATED AT INFLATION PRESSURES BETWEEN 70-80 PSI UNLESS OTHERWISE NOTED BY THE GEOTECHINICAL ENGINEER. THE TIRES SHALL BE INFLATED WITH AIR ONLY, NO LIQUID SHALL BE USED. THE PROOFROLL SHALL BE COMPLETED UNDER INSPECTION OF SOILS FIRM TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
6. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR TO TEST FOR, AND CORRECT, IF ANY, STANDING WATER CONDITIONS.
7. ALL PROPOSED SPOT ELEVATIONS OR CONTOURS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
8. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
9. TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF WITHIN 5 FEET OF PAVEMENT.
10. CONTRACTOR TO PERPETUATE ANY SUBSURFACE DRAIN TILES OR PIPES ENCOUNTERED DURING CONSTRUCTION AND PROVIDE POSITIVE OUTLET TO DOWNSTREAM RECEIVING SYSTEM. CONTRACTOR TO NOTIFY THE ENGINEER WITH ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.
11. DUE TO SITE CONSTRAINTS, THE EARTHWORK FOR THE SITE AS DESIGNED MAY OR MAY NOT BALANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE EXISTING CONDITIONS AND INCLUDE IN THEIR BID ALL EARTHWORK COSTS INCLUDING IMPORTS AND/OR EXPORTS NECESSARY TO MAKE THE SITE BALANCE.
12. CONTRACTOR TO STABILIZE EXPOSED EARTH AS INDICATED BY THE STORMWATER POLLUTION PREVENTION PLAN OR GOVERNING AUTHORITY.

UTILITY NOTES

1. SITE UTILITIES SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION. SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATIONS OF UTILITIES FOR THEIR OWN WORK.
4. CONTRACTOR TO ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE.
5. ALL UTILITY MATERIALS AND INSTALLATION SHALL CONFORM TO LOCAL STANDARDS FOR EACH UTILITY AGENCY HAVING JURISDICTION.
6. TRENCHES FOR ALL UTILITY LINES SHALL BE BACKFILLED COMPLETELY WITH SELECT GRANULAR MATERIAL IF THE TOP OF THE TRENCH IS WITHIN 5 FEET OF PAVEMENT.
7. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES AND CONDUITS TO AVOID CONFLICTS AND PROVIDE REQUIRED MINIMUM DEPTHS OF COVER. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL BENDS WITH THRUST BLOCKS REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS.
8. IN THE EVENT OF A CONFLICT BETWEEN WATER LINES AND STORM DRAINS, THE CONTRACTOR SHALL EITHER ADJUST THE WATER LINE DOWNWARD IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED OR THE CONTRACTOR SHALL PROVIDE APPROPRIATE BENDS AND CROSSINGS.
9. ALL COORDINATES AND DIMENSIONS ARE TO THE CENTERLINE OF UTILITIES AND STRUCTURES.
10. ALL PROPOSED STORM SEWER AND DRAINAGE APPURTENANCES SHALL BE IN CONFORMANCE WITH THE CITY OF INDIANAPOLIS STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.

EROSION CONTROL NOTES

1. CONTRACTOR SHALL INSTALL ALL PERIMETER SILT FENCE AND SEDIMENT CONTROL BARRIERS PRIOR TO CLEARING AND GRADING.
2. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
3. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
4. LAND ALTERATION WHICH STRIPS THE LAND OF VEGETATION, INCLUDING RE-GRADING, SHALL BE DONE IN A WAY THAT WILL MINIMIZE EROSION.
5. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN RECEIVING WATER. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE.
6. WASTE AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTE AND UNUSED BUILDING MATERIALS IS REQUIRED.
7. SEDIMENT BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS SHALL BE MINIMIZED. CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE SITE FOR DISPOSAL.
8. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT, AND AT LEAST ONCE A WEEK.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. THE SITE IS LOCATED WITHIN A FLOODPLAIN, FLOODWAY OR FLOODWAY FRINGE AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR MARION COUNTY, IN, MAP NUMBER 18097C0160F, DATED APRIL 19, 2016.
11. SCHEDULE OF EARTHWORK ACTIVITIES:
    a. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM. THE AREA SHALL BE STABILIZED AS SOON AS POSSIBLE. UN-VEGETATED AREAS THAT ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FIFTEEN (15) DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITH MEASURES APPROPRIATE FOR THE SEASON TO MINIMIZE EROSION POTENTIAL. ALTERNATIVE MEASURES TO SITE STABILIZATION ARE ACCEPTABLE IF THE PROJECT SITE OWNER OR THEIR REPRESENTATIVE CAN DEMONSTRATE THEY HAVE IMPLEMENTED EROSION AND SEDIMENT CONTROL MEASURES ADEQUATE TO PREVENT SEDIMENT DISCHARGE.
    b. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION AND STRUCTURAL EROSION CONTROL DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING OR AS SOON AS POSSIBLE.
    c. INSTALL INLET PROTECTION AROUND INLETS IMMEDIATELY UPON COMPLETION OF THE STRUCTURE. REMOVE INLET PROTECTION FOR PAVING OPERATION. REPLACE INLET PROTECTION AFTER PAVING IS COMPLETE. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON SEEDED AREAS BEHIND THE CURB.
12. PRIOR TO COMPLETION OF THE PROJECT, CONTRACTOR SHALL CLEAN OUT ALL STORM DRAINAGE STRUCTURES AND RESTORE ALL DITCHES AND PONDS TO DESIGNED GRADES.
13. CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL BARRIERS ONCE CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.
14. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE CITY OF INDIANAPOLIS STORMWATER SPECIFICATIONS, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE STORMWATER SPECIFICATIONS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STORMWATER SPECIFICATIONS.
15. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box	T	Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #04750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

GEOTECHNICAL & ENVIRONMENTAL NOTE:

1. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT FOR INFORMATION ABOUT SOIL CONDITIONS.
2. CONTRACTOR SHALL REFER TO THE ENVIRONMENTAL REPORT FOR INFORMATION ON ENVIRONMENTAL FINDINGS ON THE SITE.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

GENERAL NOTES

C002

PLOT DATE: 10/15/2026 4:51 PM
PLOT SCALE: 1:2.3849
EDIT DATE: 7/15/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE_PE_C002_GN.dwg

EARTHWORK:

A. GENERAL

1. EARTHWORK INCLUDES CLEARING, GRUBBING, SUBGRADE PREPARATION, REMOVAL OF TREES AND VEGETATION (INCLUDING STUMPS), PROTECTION OF TREES TO REMAIN, STRIPPING AND STORAGE OF TOPSOIL, FILL COMPACTION AND ROUGH GRADING OF ENTIRE SITE AS INDICATED ON DRAWINGS.

2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.

3. CONTRACTOR SHALL PROVIDE AND PLACE ANY ADDITIONAL FILL MATERIAL FROM OFF THE SITE AS MAY BE NECESSARY TO PRODUCE THE GRADES REQUIRED AS SHOWN ON THE DRAWINGS. FILL OBTAINED FROM OFF SITE MUST BE SUITABLE SOIL AS DEFINED IN THE SPECIFICATIONS OR AS OTHERWISE APPROVED BY OWNER.

4. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS CURRENT STATE AND SHALL REMOVE ALL TRASH, RUBBISH, AND DEBRIS FROM THE SITE PRIOR TO STARTING EXCAVATION.

5. EXCEPT FOR STRIPPED TOPSOIL AND OTHER MATERIALS INDICATED TO BE STOCKPILED OR OTHERWISE REMAIN OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.

6. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, DRIVES, FACILITIES, ETC. WITHOUT OWNER PERMISSION OR AUTHORITY HAVING JURISDICTION.

7. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING EARTHWORK AND CLEARING OPERATIONS. EROSION CONTROL MEASURES SHOULD BE PROTECTED AND MAINTAINED THROUGHOUT CONSTRUCTION.

8. CONTRACTOR SHALL CAREFULLY MAINTAIN ALL BENCHMARKS, MONUMENTS, AND OTHER REFERENCE POINTS. IF DISTURBED, CONTRACTOR SHALL ENGAGE LICENSED LAND SURVEY FOR REPLACEMENT OF REFERENCE POINTS.

9. WHERE THESE SPECIFICATIONS CONFLICT WITH CITY OF LAWRENCE STANDARDS, THE STANDARDS OF THE JURISDICTION HAVING AUTHORITY SHALL PREVAIL.

B. MATERIALS

1. CONTRACTOR TO PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.

2. SATISFACTORY (OR SUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM ACCORDING TO ASTM D2487, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATERIAL.

3. UNSATISFACTORY (OR UNSUITABLE) SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS. UNSATISFACTORY SOILS ALSO INCLUDES SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.

C. EXECUTION

1. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

2. REMOVE OBSTRUCTIONS, TREES, SHRUBS, AND OTHER VEGETATION AS REQUIRED FOR NEW CONSTRUCTION. STRIP TOPSOIL TO DEPTH AS REQUIRED IN THE FIELD TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. STOCKPILE TOPSOIL AWAY FROM EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL AND GRADE STOCKPILES TO DRAIN SURFACE WATER.

3. REMOVE EXISTING ABOVE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND NECESSARY TO FACILITATE NEW CONSTRUCTION.

4. PROTECT SUBGRADES AND FOUNDATION SOILS FROM FREEZING TEMPERATURES, FROST, AND PONDING WATER.

5. EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS FOR ALL STRUCTURES, WALKS, PAVEMENTS, AND UTILITY TRENCHES.

6. CONTRACTOR SHALL FURNISH AND OPERATE ALL DEWATERING MEASURES REQUIRED TO FACILITATE NEW CONSTRUCTION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

6. PROOF ROLL SUBGRADE BELOW BUILDING PAVEMENTS WITH A PNEUMATIC-TIRED DUMP TRUCK TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF ROLL WET OR SATURATED SUBGRADES. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER OR OWNER REPRESENTATIVE, WITHOUT ADDITIONAL COMPENSATION.

7. BACKFILL ALL UTILITY TRENCHES BENEATH PAVEMENT (AND WITHIN 5') WITH GRANULAR MATERIAL.

8. SOIL FILL: USE SATISFACTORY SOIL MATERIAL UNDER ALL WALKS, PAVEMENTS, STEPS, RAMPS, BUILDING SLABS, FOOTINGS, AND FOUNDATIONS.

9. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT EXCEEDS OPTIMUM MOISTURE CONTENT BY 2 PERCENT AND IS TOO WET TO COMPACT TO SPECIFIED UNIT WEIGHT.

10. COMPACTION OF SOIL BACKFILLS AND FILLS ARE TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS. WHERE NO GEOTECHNICAL REPORT EXISTS, COMPACT ALL FILL MATERIAL BELOW STRUCTURES, PAVEMENTS, WALKS, UTILITY TRENCHES AND STEPS (AND WITHIN 5 FEET OF SAID AREAS) TO 98 PERCENT OF THE MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D-698 (STANDARD PROCTOR DENSITY). COMPACT ALL FILL MATERIALS BELOW TURF OR UNPAVED AREAS TO 90 PERCENT OF THE MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D-698 (STANDARD PROCTOR DENSITY). ALL FILL MATERIALS TO BE COMPACTED IN MAXIMUM 8-INCH LIFTS.

11. SITE ROUGH GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
 i. TURF OR UNPAVED AREAS: PLUS OR MINUS 1 INCH
 ii. WALKS: PLUS OR MINUS I/2 INCH.
 iii. PAVEMENTS: PLUS OR MINUS 1/2 INCH
 iv. INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF $\frac{1}{2}$ INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.

12. QUALITY CONTROL: QUALIFIED GEOTECHNICAL ENGINEER TO BE ENGAGED AS TESTING AGENCY AS DIRECTED BY OWNER.

13. REPAIR AND REESTABLISH GRADES TO SPECIFIED TOLERANCES WHERE COMPLETED OR PARTIALLY COMPLETED SURFACES BECOME ERODED, RUTTED, SETTLED, OR WHERE THEY LOSE COMPACTION DUE TO SUBSEQUENT CONSTRUCTION OPERATIONS OR WEATHER

STORM SEWER:

A. GENERAL

1. STORM SEWER INCLUDES ALL PIPES, FITTINGS, MANHOLES, CLEANOUTS, TRANSITION COUPLINGS, CATCH BASINS, INLETS, END SECTIONS, AND OUTLETS.

2. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.

3. CONTRACTOR SHALL LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER UNLESS PERMISSION IS GRANTED. NOTIFY OWNER AT LEAST TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

B. PRODUCTS

1. PE PIPE AND FITTINGS: PE DRAINAGE PIPE AND FITTINGS NP 3 TO NPS 10, AASHTO M 252M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS. PE DRAINAGE PIPE AND FITTINGS NPS 12 TO NPS 60, AASHTO M 294M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS.

2. PVC PIPE AND FITTINGS: PIPE: ASTM F 949, PVC, OR ASTM 0-3034, F-1336, F-679, CORRUGATED PIPE WITH BELL AND SPIGOT ENDS FOR GASKETED JOINTS. FITTINGS: ASTM 949, PVC MOLDED OR FABRICATED, SOCKET TYPE. GASKETS: ASTM F 477, ELASTOMERIC SEALS.

3. CONCRETE PIPE AND FITTINGS: REINFORCED CONCRETE SEWER PIPE AND FITTINGS MEETING ASTM C 76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS. PIPE TO BE CLASS III UNLESS OTHERWISE INDICATED ON PLANS.

4. COMPLY WITH ASTM C 1173, ELASTOMERIC SLEEVE-TYPE REDUCING OR TRANSITION COUPLING, FOR JOINTING UNDERGROUND NON-PRESSURE PIPING. INCLUDE ENDS OF SAME SIZES AS PIPING TO BE JOINED, AND CORROSION-RESISTANT METAL TENSION BAND AND TIGHTENING MECHANISM ON EACH END.

5. CLEANOUTS: CAST IRON CLEANOUTS: ASME A112.36.2M ROUND, GRAY-IRON HOUSING WITH CLAMPING DEVICE AND ROUND, SECURED, SCORIATED, GRAY-IRON COVER. HEAVY DUTY TOP LOADING IS REQUIRED. PLASTIC CLEANOUTS: PVC BODY WITH PVC THREADED PLUG.

6. MANHOLES AND CATCH BASINS: STANDARD REINFORCED PRECAST CONCRETE MANHOLES MEETING ASTM C 478. MINIMUM 48-INCH DIAMETER UNLESS OTHERWISE INDICATED. BASE SECTION TO BE MINIMUM 6-INCH THICKNESS AND 4-INCH THICKNESS FOR WALLS AND BASE RISER SECTION. REINFORCED CONCRETE GRADE RINGS, 6-9 INCH TOTAL THICKNESS, TO MATCH DIAMETER OF MANHOLE FRAME AND COVER. MANHOLE FRAMES AND COVERS AS INDICATED ON DRAWINGS. PIPE CONNECTORS SHOULD BE PROVIDED TO MEET ASTM C293, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO THE BASE SECTION.

7. CONCRETE: CAST-IN-PLACE CONCRETE ACCORDING TO ACI 318 AND ACI 350/350R AND IN ACCORDANCE WITH THE FOLLOWING:
 i. CEMENT: ASTM C 150, TYPE III
 ii. FINE AGGREGATE: ASTM C 33, SAND
 iii. COARSE AGGREGATE: ASTM C 33, CRUSHED GRAVEL
 iv. WATER: POTABLE

8. PORTLAND CEMENT DESIGN MIX: 4,000 PSI MINIMUM WITH 0.45 MAXIMUM WATER/CEMENTIOUS MATERIALS RATIO. REINFORCING FABRIC TO MEET ASTM A 185/A 185M, STEEL, WELDED WIRE FABRIC, PLAIN. REINFORCING BARS TO MEET ASTM A 615/A 615M, GRADE 60 DEFORMED STEEL.

9. MANHOLE CHANNELS TO BE FORMED WITH AN INVERT SLOPE OF 2 PERCENT THROUGH THE MANHOLE AND BENCHES AT 4 PERCENT, SLOPED TO DRAIN INTO CHANNEL.

10. INLETS: PROVIDE INLETS WITH HEAVY DUTY CASTINGS AS SHOWN ON DRAWINGS.

11. OUTLETS: CONCRETE END SECTION SHOULD BE PROVIDED AT ALL PIPE ENDS AND AS INDICATED ON DRAWINGS. RIP RAP APRONS TO BE INSTALLED AT ALL END SECTIONS TO DIMENSIONS INDICATED. AVERAGE RIP-RAP SIZE TO BE 6-INCHES UNLESS OTHERWISE INDICATED ON DRAWINGS.

STORM SEWER (CONT.):

C. EXECUTION

1. INSTALL PIPING BEGINNING AT LOW POINT, TRUE TO GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. PLACE BELL ENDS OF PIPING FACING UPSTREAM. INSTALL GASKETS, SEALS, SLEEVES, AND OTHER COUPLINGS ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS.

2. WHEN INSTALLING PIPE UNDER STREETS OR OTHER OBSTRUCTIONS THAT CANNOT BE DISTURBED, USE PIPE-JACKING PROCESS OF MICRO-TUNNELING.

3. INSTALL PIPING PITCHED DOWN IN DIRECTION OF FLOW. INSTALL PE CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2231. INSTALL PVC PIPING ACCORDING TO ASTM D 2321 AND ASTM F 1668. INSTALL REINFORCED CONCRETE SEWER PIPING IN ACCORDANCE WITH ASTM C 1479 AND ACPA'S "CONCRETE PIPE INSTALLATION MANUAL."

4. PIPE JOINT CONSTRUCTION: JOIN CORRUGATED PE PIPE ACCORDING TO ASTM D 3212 FOR PUSH ON JOINTS. JOIN PVC CORRUGATED SEWER PIPING IN ACCORDANCE WITH ASTM D 2321 FOR ELASTOMERIC-SEAL JOINTS. JOIN REINFORCED CONCRETE PIPE ACCORDING TO ACPA'S "CONCRETE PIPE INSTALLATION MANUAL" FOR RUBBER-GASKETED JOINTS. JON DISSIMILAR PIPE MATERIALS WITH NON-PRESSURE TYPE FLEXIBLE COUPLINGS.

5. CONTRACTOR TO INSPECT INTERIOR OF PIPING AND MANHOLES FOR DEFECTS. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
 i. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
 ii. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
 iii. DAMAGE: CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
 iv. INFILTRATION: WATER LEAKAGE INTO PIPING.
 v. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING
 REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTION UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.

6. TEST NEW PIPING SYSTEMS, AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, REPAIRED, FOR LEAKS AND DEFECTS. FOR GRAVITY FLOW STORM DRAINAGE PIPING: TEST ACCORDING TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, UNI-B-6, AND THE FOLLOWING:
 i. EXCEPTION: PIPING WITH SOILTIGHT JOINTS UNLESS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
 ii. OPTION: TEST PLASTIC PIPING ACCORDING TO ASTM F 1417
 iii. OPTION: TEST CONCRETE PIPING ACCORDING TO ASTM C 924

7. SUBMIT TESTING REPORTS AS REQUIRED BY OWNER OR AUTHORITY HAVING JURISDICTION.

ASPHALT PAVING:

A. GENERAL

1. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CHANGES, ERRORS, OR OMISSIONS FOUND ON THE PLANS OR IN THE FIELD, BEFORE WORK IS STARTED OR RESUMED.

2. USE MATERIALS AND GRADATIONS THAT HAVE PERFORMED SATISFACTORILY IN PREVIOUS INSTALLATIONS.

B. PRODUCTS

1. AGGREGATES
 i. COURSE AGGREGATE: ASTM D 692/D92M, SOUND; ANGULAR CRUSHED STONE, CRUSHED GRAVEL, OR CURED, CRUSHED BLAST-FURNANCE SLAG.
 ii. FINE AGGREGATE: ASTM D 1073 OR AASHTO M 29, SHARP-EDGED NATURAL SAND OR SAND PREPARED FROM STONE, GRAVEL, CURED BLAST-FURNANCE SLAG, OR COMBINATIONS THEREOF.
  a. FOR HOT-MIX ASPHALT, LIMIT NATURAL SAND TO A MAXIMUM OF 20 PERCENT BY WEIGHT OF THE TOTAL AGGREGATE MASS.
 iii. MINERAL FILLER: ASTM D 242 OR AASHTO M 17, ROCK OR SLAG DUST, HYDRAULIC CEMENT, OR OTHER INERT MATERIAL.

2. ASPHALT MATERIALS
 i. ASPHALT BINDER: AASHTO M 320, PG 64-22 (OR AS OTHERWISE RECOMMENDED BY INDOT STANDARDS)
 ii. ASPHALT CEMENT: PER INDOT STANDARDS
 iii. CUTBACK PRIME COAT: PER INDOT STANDARDS
 iv. EMULSIFIED ASPHALT PRIME COAT: PER INDOT STANDARDS
 v. TACK COAT: PER INDOT STANDARDS
 vi. WATER: POTABLE.
 vii. UNDERSEALING ASPHALT: ASTM D 3141; PUMPING CONSISTENCY.

3. AUXILIARY MATERIALS
 i. RECYCLED MATERIALS FOR HOT-MIX ASPHALT MIXES: RECLAIMED ASPHALT PAVEMENT; RECLAIMED, UNBOUND AGGREGATE BASE MATERIAL; AND RECYCLED ASPHALT SHINGLES FROM SOURCES AND GRADATIONS THAT HAVE PERFORMED SATISFACTORILY IN PREVIOUS INSTALLATIONS, EQUAL TO PERFORMANCE OF REQUIRED HOT-MIX ASPHALT PAVING PRODUCED FROM ALL NEW MATERIALS.
 ii. HERBICIDE: COMMERCIAL CHEMICAL FOR WEED CONTROL, REGISTERED BY THE EPA, AND NOT CLASSIFIED AS "RESTRICTED USE" FOR LOCATIONS AND CONDITIONS OF APPLICATION. PROVIDE IN GRANULAR, LIQUID, OR WETTABLE POWDER FORM.
 iii. SAND: ASTM D 1073 OR AASHTO M 29, GRADE NO. 2 OR NO. 3.

4. MIXES
 i. RECYCLED CONTENT OF HOT-MIX ASPHALT: PER INDOT STANDARDS
 ii. HOT-MIX ASPHALT: DENSE-GRADED, HOT-LAID, HOT-MIX ASPHALT PLANT MIXES APPROVED BY INDOT AND COMPLYING WITH THE FOLLOWING REQUIREMENTS:
  a. PROVIDE MIXES WITH A HISTORY OF SATISFACTORY PERFORMANCE IN GEOGRAPHICAL AREA WHERE PROJECT IS LOCATED.
  b. BASE COURSE: 25.0 MM OR 19.0 MM (AS INDICATED ON DRAWINGS)
  c. SURFACE COURSE: 9.5MM

C. EXECUTION

1. EXAMINATION
 i. VERIFY THAT SUBGRADE IS DRY AND IN SUITABLE CONDITION TO BEGIN PAVING.
 ii. PROOF-ROLL SUBGRADE BELOW PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES. PROOFROLL TO BE PERFORMED BY QUALIFIED GEOTECHNICAL ENGINEER.
  a. COMPLETELY PROOF-ROLL SUBGRADE IN ONE DIRECTION LIMIT VEHICLE SPEED TO 3 MPH.
  b. PROOF ROLL WITH A LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK WEIGHING NOT LESS THAN 15 TONS
  c. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY ENGINEER, AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
  d. PROCEED WITH PAVING ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

2. SURFACE PREPARATION
 i. GENERAL: IMMEDIATELY BEFORE PLACING ASPHALT MATERIALS, REMOVE LOOSE AND DELETERIOUS MATERIAL FROM SUBSTRATE SURFACES. ENSURE THAT PREPARED SUBGRADE IS READY TO RECEIVE PAVING.
 ii. HERBICIDE TREATMENT: APPLY HERBICIDE ACCORDING TO MANUFACTURER'S RECOMMENDED RATES AND WRITTEN APPLICATION INSTRUCTIONS. APPLY TO DRY, PREPARED SUBGRADE OR SURFACE OF COMPACTED-AGGREGATE BASE BEFORE APPLYING PAVING MATERIALS.
  a. MIX HERBICIDE WITH PRIME COAT IF FORMULATED BY MANUFACTURER FOR THAT PURPOSE2
 iii. CUTBACK PRIME COAT: APPLY UNIFORMLY OVER SURFACE OF COMPACTED UNBOUND-AGGREGATE BASE COURSE AT A RATE OF 0.15 TO 0.50 GAL./SQ. YD. APPLY ENOUGH MATERIAL TO PENETRATE AND SEAL, BUT NOT FLOOD, SURFACE. ALLOW PRIME COAT TO CURE.
  a. IF PRIME COAT IS NOT ENTIRELY ABSORBED WITHIN 24 HOURS AFTER APPLICATION, SPREAD SAND OVER SURFACE TO BLOT EXCESS ASPHALT. USE ENOUGH SAND TO PREVENT PICKUP UNDER TRAFFIC. REMOVE LOOSE SAND BY SWEEPING BEFORE PAVEMENT IS PLACED AND AFTER VOLATILES HAVE EVAPORATED.
  b. PROTECT PRIMED SUBSTRATE FROM DAMAGE UNTIL READY TO RECEIVE PAVING.
 iv. TACK COAT: APPLY UNIFORMLY TO SURFACES OF EXISTING PAVEMENT AT A RATE OF 0.05 TO 0.15 GAL./SQ. YD.
  a. ALLOW TACK COAT TO CURE UNDISTURBED BEFORE APPLYING HOT-MIX ASPHALT PAVING.
  b. AVOID SMEARING OR STAINING ADJOINING SURFACES, APPURTENANCES, AND SURROUNDINGS. REMOVE SPILLAGES AND CLEAN AFFECTED SURFACES.

3. PLACING HOT-MIX ASPHALT
 i. MACHINE PLACE HOT-MIX ASPHALT ON PREPARED SURFACE, SPREAD UNIFORMLY, AND STRIKE OFF. PLACE ASPHALT MIX BY HAND IN AREAS INACCESSIBLE TO EQUIPMENT IN A MANNER THAT PREVENTS SEGREGATION OF MIX. PLACE EACH COURSE TO REQUIRED GRADE, CROSS SECTION, AND THICKNESS WHEN COMPACTED.
  a. PLACE HOT-MIX ASPHALT BASE COURSE IN NUMBER OF LIFTS AND THICKNESSES INDICATED.
  b. PLACE HOT-MIX ASPHALT SURFACE COURSE IN SINGLE LIFT.
  c. SPREAD MIX AT A MINIMUM TEMPERATURE OF 250 DEG F
  d. BEGIN APPLYING MIX ALONG CENTERLINE OF CROWN FOR CROWNED SECTIONS AND ON HIGH SIDE OF ONE-WAY SLOPES UNLESS OTHERWISE INDICATED.
  e. REGULATE PAVER MACHINE SPEED TO OBTAIN SMOOTH, CONTINUOUS SURFACE FREE OF PULLS AND TEARS IN ASPHALT-PAVING MAT.
 ii. PLACE PAVING IN CONSECUTIVE STRIPS NOT LESS THAN 10 FEET WIDE UNLESS INFILL EDGE STRIPS OF A LESSER WIDTH ARE REQUIRED.
  a. AFTER FIRST STRIP HAS BEEN PLACED AND ROLLED, PLACE SUCCEEDING STRIPS AND EXTEND ROLLING TO OVERLAP PREVIOUS STRIPS. OVERLAP MIX PLACEMENT ABOUT 1 TO 1-1/2 INCHES FROM STRIP TO STRIP TO ENSURE PROPER COMPACTION OF MIX ALONG LONGITUDINAL JOINTS.
  b. COMPLETE A SECTION OF ASPHALT BASE COURSE BEFORE PLACING ASPHALT SURFACE COURSE.
 iii. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.

4. JOINTS
 i. CONSTRUCT JOINTS TO ENSURE A CONTINUOUS BOND BETWEEN ADJOINING PAVING SECTIONS. CONSTRUCT JOINTS FREE OF DEPRESSIONS, WITH SAME TEXTURE AND SMOOTHNESS AS OTHER SECTIONS OF HOT-MIX ASPHALT COURSE.
  a. CLEAN CONTACT SURFACES AND APPLY TACK COAT TO JOINTS.
  b. OFFSET LONGITUDINAL JOINTS, IN SUCCESSIVE COURSES, A MINIMUM OF 6 INCHES
  c. OFFSET TRANSVERSE JOINTS, IN SUCCESSIVE COURSES, A MINIMUM OF 24 INCHES
  d. CONSTRUCT TRANSVERSE JOINTS AT EACH POINT WHERE PAVER ENDS A DAY'S WORK AND RESUMES WORK AT A SUBSEQUENT TIME. CONSTRUCT THESE JOINTS USING EITHER "BULKHEAD" OR "PAPERED" METHOD ACCORDING TO AI MS-22, FOR BOTH "ENDING A LANE" AND "RESUMPTION OF PAVING OPERATIONS."
  e. COMPACT JOINTS AS SOON AS HOT-MIX ASPHALT WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT.
  f. COMPACT ASPHALT AT JOINTS TO A DENSITY WITHIN 2 PERCENT OF SPECIFIED COURSE DENSITY.

ASPHALT PAVING (CONT.):

5. COMPACTION
 i. GENERAL: BEGIN COMPACTION AS SOON AS PLACED HOT-MIX PAVING WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT. COMPACT HOT-MIX PAVING WITH HOT, HAND TAMPERS OR WITH VIBRATORY-PLATE COMPACTORS IN AREAS INACCESSIBLE TO ROLLERS.
  a. COMPLETE COMPACTION BEFORE MIX TEMPERATURE COOLS TO 185 DEG F
 ii. BREAKDOWN ROLLING: COMPLETE BREAKDOWN OR INITIAL ROLLING IMMEDIATELY AFTER ROLLING JOINTS AND OUTSIDE EDGE. EXAMINE SURFACE IMMEDIATELY AFTER BREAKDOWN ROLLING FOR INDICATED CROWN, GRADE, AND SMOOTHNESS. CORRECT LAYDOWN AND ROLLING OPERATIONS TO COMPLY WITH REQUIREMENTS.
 iii. INTERMEDIATE ROLLING: BEGIN INTERMEDIATE ROLLING IMMEDIATELY AFTER BREAKDOWN ROLLING WHILE HOT-MIX ASPHALT IS STILL HOT ENOUGH TO ACHIEVE SPECIFIED DENSITY. CONTINUE ROLLING UNTIL HOT-MIX ASPHALT COURSE HAS BEEN UNIFORMLY COMPACTED TO THE FOLLOWING DENSITY:
  a. AVERAGE DENSITY: 96 PERCENT OF REFERENCE LABORATORY DENSITY ACCORDING TO ASTM D 6927 OR AASHTO T 245, BUT NOT LESS THAN 94 PERCENT OR GREATER THAN 100 PERCENT.
  b. AVERAGE DENSITY: 92 PERCENT OF REFERENCE MAXIMUM THEORETICAL DENSITY ACCORDING TO ASTM D 2041, BUT NOT LESS THAN 90 PERCENT OR GREATER THAN 96 PERCENT.
 iv. FINISH ROLLING: FINISH ROLL PAVED SURFACES TO REMOVE ROLLER MARKS WHILE HOT-MIX ASPHALT IS STILL WARM.
 v. EDGE SHAPING: WHILE SURFACE IS BEING COMPACTED AND FINISHED, TRIM EDGES OF PAVEMENT TO PROPER ALIGNMENT. BEVEL EDGES WHILE ASPHALT IS STILL HOT; COMPACT THOROUGHLY.
 vi. REPAIRS: REMOVE PAVED AREAS THAT ARE DEFECTIVE OR CONTAMINATED WITH FOREIGN MATERIALS AND REPLACE WITH FRESH, HOT-MIX ASPHALT. COMPACT BY ROLLING TO SPECIFIED DENSITY AND SURFACE SMOOTHNESS.
 viI. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED.
 viiI. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.

6. INSTALLATION TOLERANCES
 i. PAVEMENT THICKNESS: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN THE FOLLOWING TOLERANCES:
  a. BASE COURSE: PLUS OR MINUS 1/2 INCH
  b. SURFACE COURSE: PLUS 1/4 INCH NO MINUS.
 ii. PAVEMENT SURFACE SMOOTHNESS: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS:
  a. BASE COURSE: 1/4 INCH
  b. SURFACE COURSE: 1/8 INCH
  c. CROWNED SURFACES: TEST WITH CROWNED TEMPLATE CENTERED AND AT RIGHT ANGLE TO CROWN. MAXIMUM ALLOWABLE VARIANCE FROM TEMPLATE IS 1/4 INCH

7. FIELD QUALITY CONTROL
 i. TESTING AGENCY: CONTRACTOR TO ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
 ii. THICKNESS: IN-PLACE COMPACTED THICKNESS OF HOT-MIX ASPHALT COURSES WILL BE DETERMINED ACCORDING TO ASTM D 3549.
 iii. SURFACE SMOOTHNESS: FINISHED SURFACE OF EACH HOT-MIX ASPHALT COURSE WILL BE TESTED FOR COMPLIANCE WITH SMOOTHNESS TOLERANCES.
 iv. IN-PLACE DENSITY: TESTING AGENCY WILL TAKE SAMPLES OF UNCOMPACTED PAVING MIXTURES AND COMPACTED PAVEMENT ACCORDING TO ASTM D 979 OR AASHTO T 168.
  a. REFERENCE MAXIMUM THEORETICAL DENSITY WILL BE DETERMINED BY AVERAGING RESULTS FROM FOUR SAMPLES OF HOT-MIX ASPHALT-PAVING MIXTURE DELIVERED DAILY TO SITE, PREPARED ACCORDING TO ASTM D 2041, AND COMPACTED ACCORDING TO JOB-MIX SPECIFICATIONS.
  b. IN-PLACE DENSITY OF COMPACTED PAVEMENT WILL BE DETERMINED BY TESTING CORE SAMPLES ACCORDING TO ASTM D 1188 OR ASTM D 2726.
 v. ONE CORE SAMPLE WILL BE TAKEN FOR EVERY 1000 SQ. YD. OR LESS OF INSTALLED PAVEMENT, WITH NO FEWER THAN THREE CORES TAKEN.
 vi. FIELD DENSITY OF IN-PLACE COMPACTED PAVEMENT MAY ALSO BE DETERMINED BY NUCLEAR METHOD ACCORDING TO ASTM D 2950 AND CORRELATED WITH ASTM D 1188 OR ASTM D 2726.
 vii. REPLACE AND COMPACT HOT-MIX ASPHALT WHERE CORE TESTS WERE TAKEN.
 viii. REMOVE AND REPLACE OR INSTALL ADDITIONAL HOT-MIX ASPHALT WHERE TEST RESULTS OR MEASUREMENTS INDICATE THAT IT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS.

CONCRETE PAVING:

A. GENERAL

1. CONCRETE PAVING SECTION INCLUDES DRIVEWAYS, ROADWAYS, PARKING LOTS, CURBS AND GUTTERS, WALKS, AND CONCRETE APRONS.

2. ACTION SUBMITTALS
 i. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
 ii. OTHER ACTION SUBMITTALS
  a. DESIGN MIXTURES: FOR EACH CONCRETE PAVING MIXTURE. INCLUDE ALTERNATE DESIGN MIXTURES WHEN CHARACTERISTICS OF MATERIALS PROJECT CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT ADJUSTMENTS.
  b. MATERIAL TEST REPORTS: FROM A QUALIFIED TESTING AGENCY INDICATING AND INTERPRETING TEST RESULTS FOR COMPLIANCE OF THE FOLLOWING WITH REQUIREMENTS INDICATED, BASED ON COMPREHENSIVE TESTING OF CURRENT MATERIALS.

3. QUALITY ASSURANCE
 i. READY-MIX-CONCRETE MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.
 ii. ACI PUBLICATIONS: COMPLY WITH ACI 301 (ACI 301M) UNLESS OTHERWISE INDICATED.
 iii. HANDICAP STANDARDS: PROVIDE RAMPS INDICATED FOR HANDICAP ACCESS IN ACCORDANCE WITH ANSI A117 AND FEDERAL AMERICANS WITH DISABILITIES ACT (ADA).

B. PRODUCTS

1. STEEL REINFORCEMENT
 i. RECYCLED CONTENT: POST CONSUMER RECYCLED CONTENT PLUS ONE-HALF OF PRECONSUMER RECYCLED CONTENT NOT LESS THAN 25 PERCENT.
 ii. PLAIN-STEEL WELDED WIRE REINFORCEMENT: ASTM A 185/A 185M, FABRICATED FROM AS-DRAWN STEEL WIRE INTO FLAT SHEETS.
 iii. DEFORMED-STEEL WELDED WIRE REINFORCEMENT: ASTM A 497/A 497M, FLAT SHEET.
 iv. REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420); DEFORMED.
 v. PLAIN-STEEL WIRE: ASTM A 82/A 82M, AS DRAWN.
 vi. DEFORMED-STEEL WIRE: ASTM A 496/A 496M.
 vii. DOWEL BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 420) PLAIN-STEEL BARS; ZINC COATED (GALVANIZED) AFTER FABRICATION ACCORDING TO ASTM A 767/A 767M, CLASS I COATING. CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
 viii. BAR SUPPORTS: BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS, WELDED WIRE REINFORCEMENT, AND DOWELS IN PLACE. MANUFACTURE BAR SUPPORTS ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE" FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE SPECIFIED.

2. CONCRETE MATERIALS
 i. CEMENTITIOUS MATERIAL: USE THE FOLLOWING CEMENTITIOUS MATERIALS, OF SAME TYPE, BRAND, AND SOURCE THROUGHOUT PROJECT:
  a. PORTLAND CEMENT: ASTM C 150, PORTLAND CEMENT TYPE I.
  b. FLY ASH: ASTM C 618, CLASS C OR CLASS F.
  c. GROUND GRANULATED BLAST-FURNACE SLAG: ASTM C 989, GRADE 100 OR 120.
 ii. NORMAL-WEIGHT AGGREGATES: ASTM C 33,UNIFORMLY GRADED, AND AS FOLLOWS:
  a. COMBINED AGGREGATE GRADATION: WELL GRADED FROM COARSEST TO FINEST WITH NOT MORE THAN 18 PERCENT AND NOT LESS THAN 8 PERCENT RETAINED ON A INDIVIDUAL SIEVE, EXPECT THAT LESS THAN 8 PERCENT MAY BE RETAINED ON COARSEST SIEVE AND ON NO. 50 SIEVE, AND LESS THAN 8 PERCENT MAY BE RETAINED ON SIEVES FINER THAN NO. 50.
  b. USE CRUSHED LIMESTONE COARSE AGGREGATE FOR CONCRETE EXPOSED TO WEATHER.
 iii. WATER: POTABLE AND COMPLYING WITH ASTM C 94/C 94M.
 iv. AIR-ENTRAINING ADMIXTURE: ASTM C 260.
 v. CHEMICAL ADMIXTURES: ADMIXTURES CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES AND TO CONTAIN NOT MORE THAN 0.1 PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIAL.
 vi. NOTE: WHERE CLASS A, B, OR C CONCRETE IS REFERENCE IN PLANS OR SPECIFICATIONS, THE CLASS IS AS DEFINED IN ACI 347-04.

3. CURING MATERIALS
 i. ABSORPTIVE COVER: AASHTO M 182, CLASS 3, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ./SQ. YD. (305 G/SQ. M) DRY.
 ii. MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET.
 iii. WATER: POTABLE.
 iv. EVAPORATION RETARDER: WATERBORNE, MONOMOLECULAR, FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE.
 v. CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 1, CLASS B, DISSIPATING.
 vi. WHITE, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 2, CLASS B, DISSIPATING.

4. FIBER REINFORCEMENT
 i. FIBROUS REINFORCEMENT: 100% VIRGIN HOMOPOLYMER POLYPROPYLENE MULTIFILAMENT FIBERS FOR SECONDARY REINFORCEMENT OF CONCRETE, ASTM C 116, TYPE III. SHALL CONTAIN NO REPROCESSED OLEFIN MATERIALS.
  a. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING: FIBERMESH 150; PROPEX CONCRETE SYSTEMS CORP., STEALTH FIBER MICRO REINFORCEMENT; SI CONCRETE SYSTEMS, OR APPROVED EQUAL

5. RELATED MATERIALS
 i. JOINT FILLERS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER OR ASTM D 1752, CORK OR SELF-EXPANDING CORK IN PREFORMED STRIPS.
 ii. PENETRATING ANTI-SPALLING SEALER: THE SEALER SHALL BE A SILANE WATER BASED COMPOUND WHICH HAS A 96% CHLORIDE-ION SCREEN AND A REPELLENCY FACTOR OF 92% WHEN TESTED IN ACCORDANCE WITH NCHRP #244, TEST METHOD. IN ADDITION, THE SEALER-TREATED CONCRETE MUST EXHIBIT NO SCALING WHEN EXPOSED TO 120 CYCLES OF FREEZING-AND-THAWING IN ACCORDANCE WITH ASTM C 672.
  a. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING: "WEATHER WORKER HEAVY-DUTY WB (J-27 WB)"; DAYTON SUPERIOR CORP., "ENVIROSEAL 20"; HYDROZO INCORP., "PENTANE WB"; L & M CONSTRUCTION CHEMICALS, INC.

6. CONCRETE MIXTURES
 i. PREPARE DESIGN MIXTURES, PROPORTIONED ACCORDING TO ACI 301 (ACI 301M), WITH THE FOLLOWING PROPERTIES:
  a. COMPRESSIVE STRENGTH (28 DAYS): 4000 PSI (27.6 MPA).

CONCRETE PAVING (CONT.):

  b. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO AT POINT OF PLACEMENT: 0.45.
  c. SLUMP LIMIT: 5 INCHES (125 MM), PLUS OR MINUS 1 INCH (25 MM).
  d. AIR CONTENT: 6.5 PERCENT PLUS OR MINUS 1.5 PERCENT.
 ii. CHEMICAL ADMIXTURES: USE ADMIXTURES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

7. CONCRETE MIXING
 i. READY-MIXED CONCRETE: MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE ACCORDING TO ASTM C 94/C 94M. FURNISH BATCH CERTIFICATES FOR EACH BATCH DISCHARGED AND USED IN THE WORK.

B. EXECUTION

1. EXAMINATION AND PREPARATION
 i. PROOF-ROLL PREPARED SUBBASE SURFACE BELOW CONCRETE PAVING TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING.
 ii. REMOVE LOOSE MATERIAL FROM COMPACTED SUBBASE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

2. EDGE FORMS AND SCREED CONSTRUCTION
 i. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
 ii. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.

3. STEEL REINFORCEMENT
 i. GENERAL: COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT.

4. JOINTS
 i. GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGES TRUE TO LINE, WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED.
 ii. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVING AND AT LOCATIONS WHERE PAVING OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVING TERMINATES AT ISOLATION JOINTS.
 iii. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, OTHER FIXED OBJECTS, AND WHERE INDICATED.
 iv. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS.
 v. EDGING: AFTER INITIAL FLOATING, TOOL EDGES OF PAVING, GUTTERS, CURBS, AND JOINTS IN CONCRETE WITH AN EDGING TOOL TO A 1/4-INCH (6-MM) RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE EDGING-TOOL MARKS ON CONCRETE SURFACES.

5. CONCRETE PLACEMENT
 i. MOISTEN SUBBASE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
 ii. COMPLY WITH ACI 301 (ACI 301M) REQUIREMENTS FOR MEASURING, MIXING, TRANSPORTING, PLACING, AND CONSOLIDATING CONCRETE.
 iii. DEPOSIT AND SPREAD CONCRETE IN A CONTINUOUS OPERATION BETWEEN TRANSVERSE JOINTS. DO NOT PUSH OR DRAG CONCRETE INTO PLACE OR USE VIBRATORS TO MOVE CONCRETE INTO PLACE.
 iv. SCREED PAVING SURFACE WITH A STRAIGHTEDGE AND STRIKE OFF.
 v. COMMENCE INITIAL FLOATING USING BULL FLOATS OR DARBIES TO IMPART AN OPEN-TEXTURED AND UNIFORM SURFACE PLANE BEFORE EXCESS MOISTURE OR BLEED WATER APPEARS ON THE SURFACE. DO NOT FURTHER DISTURB CONCRETE SURFACES BEFORE BEGINNING FINISHING OPERATIONS OR SPREADING SURFACE TREATMENTS.

6. CONCRETE PROTECTION AND CURING
 i. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES.
 ii. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION.
 iii. EVAPORATION RETARDER: APPLY EVAPORATION RETARDER TO CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS APPROACHING 0.2 LB/SQ. FT. X H (1 KG/SQ. M X H) BEFORE AND DURING FINISHING OPERATIONS. APPLY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AFTER PLACING, SCREEDING, AND BULL FLOATING OR DARBYING CONCRETE BUT BEFORE FLOAT FINISHING.
 iv. BEGIN CURING AFTER FINISHING CONCRETE BUT NOT BEFORE FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE.
 v. CURING METHODS: CURE CONCRETE BY MOISTURE CURING, MOISTURE-RETAINING-COVER CURING, CURING COMPOUND, OR A COMBINATION OF THESE.
 vi. PENETRATING, ANTI-SPALLING SEALER TREATMENT: APPLY COMPOUNDS TO CLEAN, DRY CONCRETE SURFACES FREE OF OIL, DIRT, AND OTHER FOREIGN MATERIAL ACCORDING TO MANUFACTURER'S SPECIFICATIONS. SEALER TO BE APPLIED TO ALL EXTERIOR CONCRETE PAVING AND CURBS AFTER CONCRETE HAS CURED 28 DAYS.

7. PAVING TOLERANCES
 i. COMPLY WITH TOLERANCES IN ACI 117 AND AS FOLLOWS:
  a. ELEVATION: 3/4 INCH (19 MM).
  b. THICKNESS: PLUS 3/8 INCH (10 MM), MINUS 1/4 INCH (6 MM).
  c. SURFACE: GAP BELOW 10-FOOT- (3-M-) LONG, UNLEVELED STRAIGHTEDGE NOT TO EXCEED 1/2 INCH (13 MM).
  d. JOINT SPACING: 3 INCHES (75 MM).
  e. CONTRACTION JOINT DEPTH: PLUS 1/4 INCH (6 MM), NO MINUS.
  f. JOINT WIDTH: PLUS 1/8 INCH (3 MM), NO MINUS.
 ii. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE MARKINGS OF DIMENSIONS INDICATED WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS (0.4 MM).

8. REPAIRS AND PROTECTION
 i. REMOVE AND REPLACE CONCRETE PAVING THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION. REMOVE WORK IN COMPLETE SECTIONS FROM JOINT TO JOINT UNLESS OTHERWISE APPROVED BY ENGINEER.
 ii. PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR AT LEAST 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVING AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR.
 iii. MAINTAIN CONCRETE PAVING FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP PAVING NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

DEMOLITION:

A. GENERAL

THE CONTRACTOR SHALL REMOVE AND DISPOSE OFF SITE, ALL EXISTING STRUCTURES, FENCES, CONCRETE AND PAVEMENT ON SITE, UNLESS NOTED TO REMAIN ON THE CONTRACT DRAWINGS.

THE CONTRACTOR SHALL PROTECT AND NOT DESTROY PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.

B. SUMMARY
THIS SECTION REQUIRES REMOVAL AND DISPOSAL, OFF SITE, OF THE FOLLOWING:
1. ASPHALT PARKING LOT.
2. MISCELLANEOUS CONCRETE, STORM SEWER, PLANT MATERIAL, UNDERGROUND CONDUITS, SITE LIGHTS, ETC., LOCATED ON SITE.

C. SUBMITTALS
SUBMIT THE FOLLOWING IN ACCORDANCE WITH CONDITIONS OF CONTRACT AND DIVISION 1 SPECIFICATION SECTIONS.
1. A PROPOSED SCHEDULE OF OPERATIONS COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
2. PROVIDE A DETAILED SEQUENCE AND SCHEDULE OF DEMOLITION AND REMOVAL WORK TO BE COMPLETED.

D. JOB CONDITIONS
1. SALVAGED MATERIALS: ITEMS OF SALVAGEABLE VALUE TO CONTRACTOR MAY BE REMOVED FROM STRUCTURE AS WORK PROGRESSES. TRANSPORT SALVAGED ITEMS FROM THE SITE AS THEY ARE REMOVED.
 i. STORAGE OR SALE OF REMOVED ITEMS WILL NOT BE PERMITTED ON SITE.
2. EXPLOSIVES: USE OF ANY TYPE OF EXPLOSIVES WILL NOT BE PERMITTED.
3. TRAFFIC: CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
 i. DO NOT CLOSE OR OBSTRUCT ROADS, STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY GOVERNING AUTHORITIES.
4. PROTECTIONS: ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND OTHER FACILITIES AND INJURY TO PERSONS.
5. DAMAGES: PROMPTLY REPAIR ANY DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS.
6. UTILITY SERVICES: MAINTAIN EXISTING UTILITIES TO STAY IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DISCONNECT, CAP AND REMOVE UTILITY SERVICES PER LOCAL REQUIREMENTS. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTIONS HAVE BEEN COMPLETED TO THE SATISFACTION OF LOCAL UTILITIES.

E. DEMOLITION
1. BELOW-GRADE CONSTRUCTION: DEMOLISH FOUNDATION WALLS AND OTHER BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A DEPTH OF NOT LESS THAN 48 INCHES BELOW LOWEST FOUNDATION LEVEL.
2. FILLING VOIDS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION STRUCTURES.

F. DISPOSAL OF DEMOLISHED MATERIALS
1. GENERAL: REMOVE WEEKLY FROM SITE ACCUMULATED DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS.
2. REMOVAL: TRANSPORT MATERIALS REMOVED FROM DEMOLITION OPERATIONS AND LEGALLY DISPOSE OF OFF-SITE.

WATER:

A. ALL WATER MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF LAWRENCE STANDARDS AND SPECIFICATIONS, LATEST EDITION.

SANITARY:

A. ALL SANITARY MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF LAWRENCE STANDARDS AND SPECIFICATIONS, LATEST EDITION.

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW REGISTERED No. 11500408 STATE OF INDIANA PROFESSIONAL ENGINEER

Nathan Winslow

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE

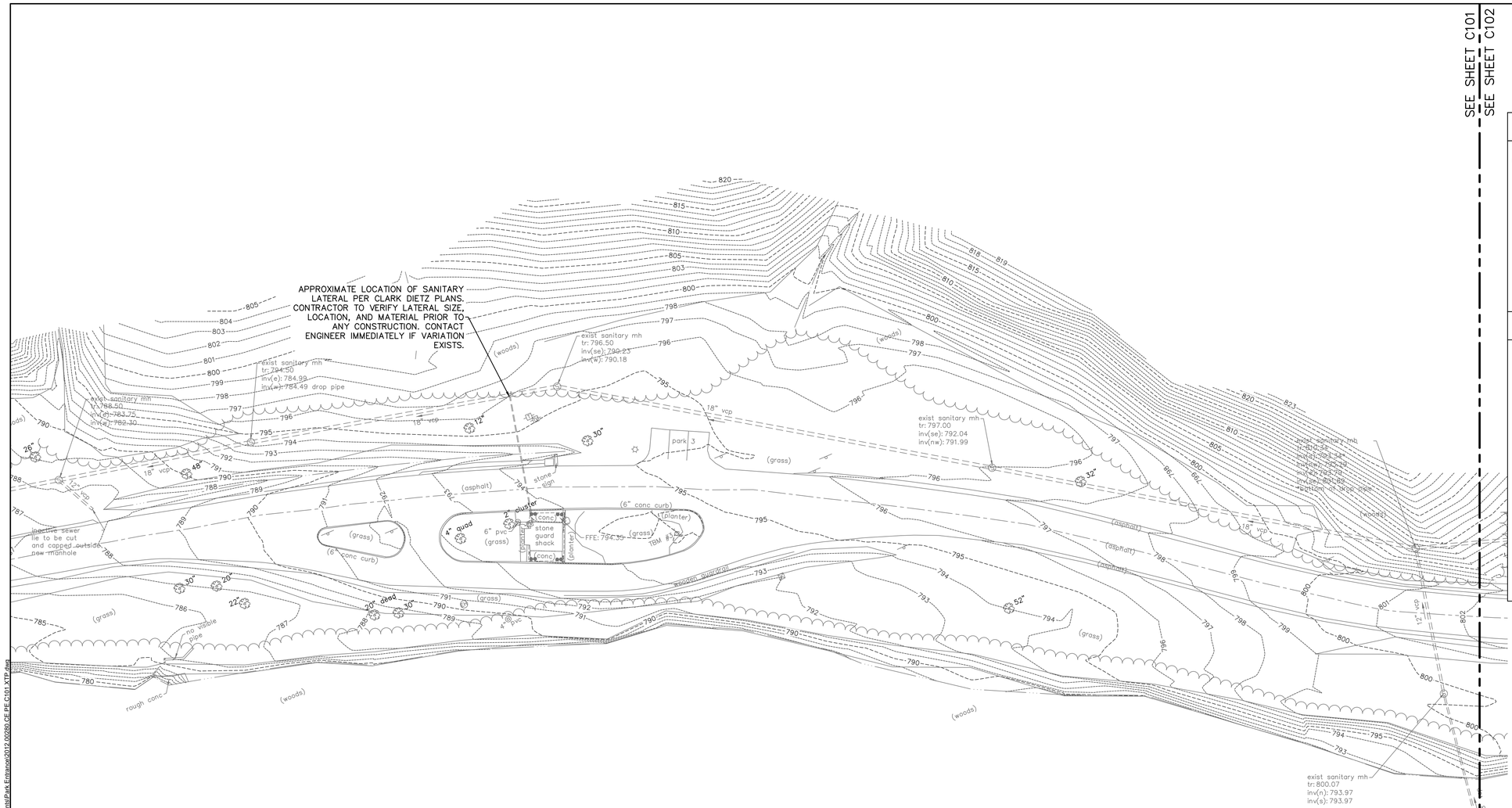
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SPECIFICATIONS

C003

PLOT DATE: 10/15/2026 4:51 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 7/15/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280.CE.PE.C003.SPEC.dwg



0' 30' 60'

SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box		Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #D4750880) WAS OBTAINED AND USED TO CONTROL THE PROJECTS VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

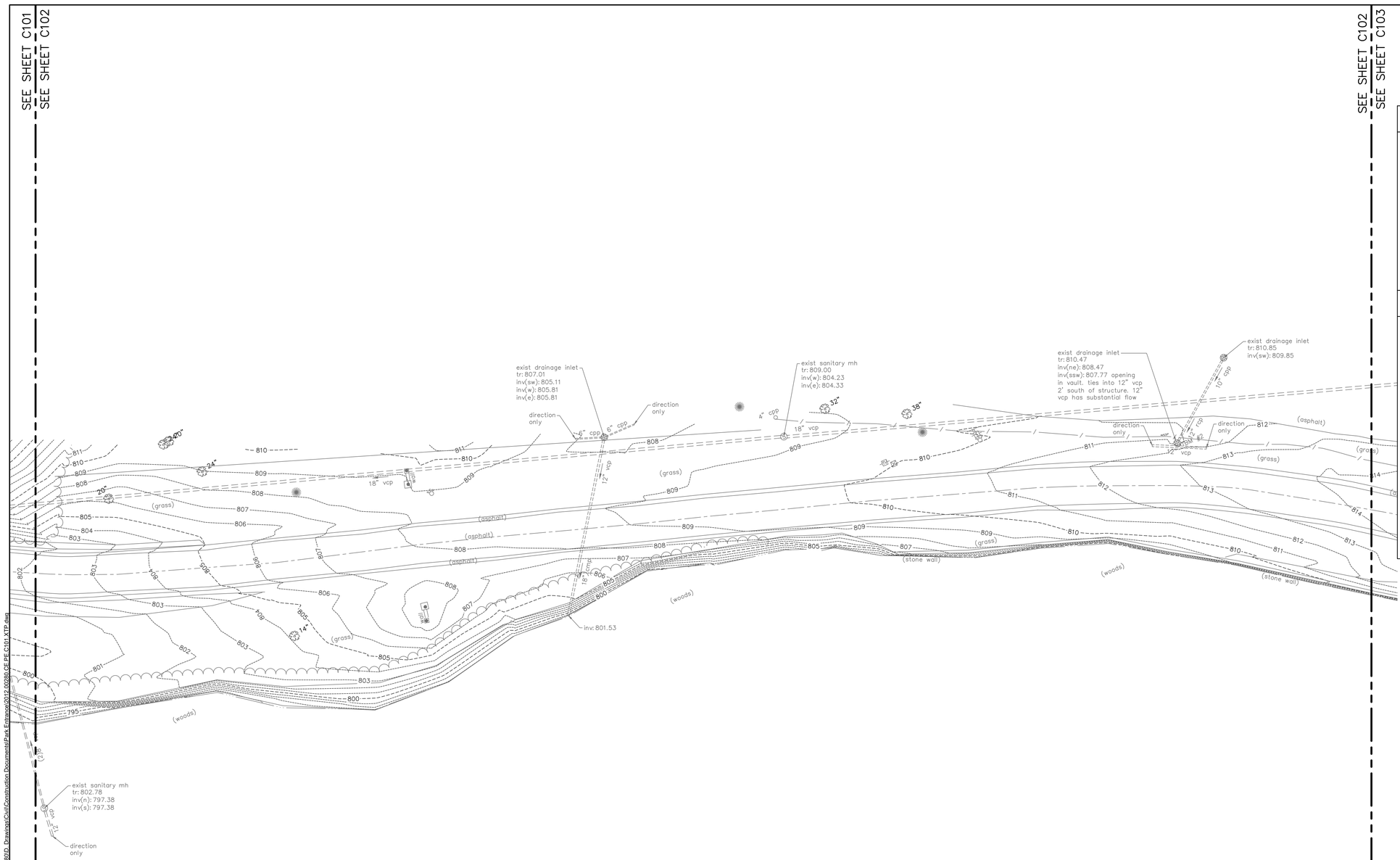
Project Number 2012.00280

EXISTING TOPOGRAPHY PLAN

C101

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 7/15/2026
EDITED BY: AQNAN
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 GE PE C101.XTP

SEE SHEET C101
SEE SHEET C102



SEE SHEET C102
SEE SHEET C103

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	TH	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
G	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #D4750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

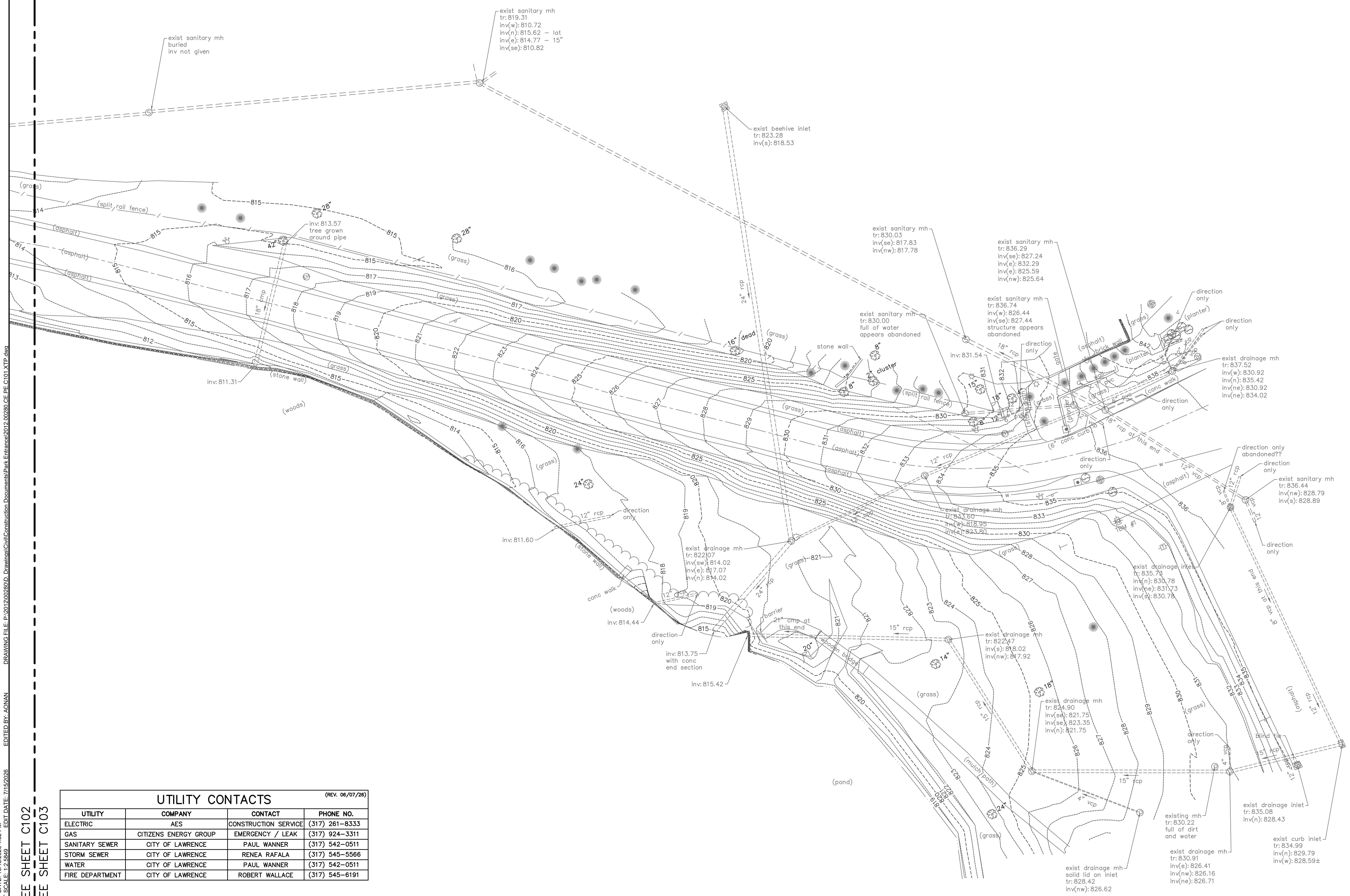
EXISTING TOPOGRAPHY PLAN

C102

SEE SHEET C101
SEE SHEET C102

PLOT DATE: 10/15/2026 4:52 PM EDIT DATE: 7/15/2026 EDITED BY: AONAN DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C101 XTP.dwg
PLOT SCALE: 1:2.3849

SEE SHEET C102
SEE SHEET C103



0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	—w— Buried Water Line
	—ohe— Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #04750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

UTILITY CONTACTS
(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261–8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924–3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545–5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545–6191

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1–800–382–5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

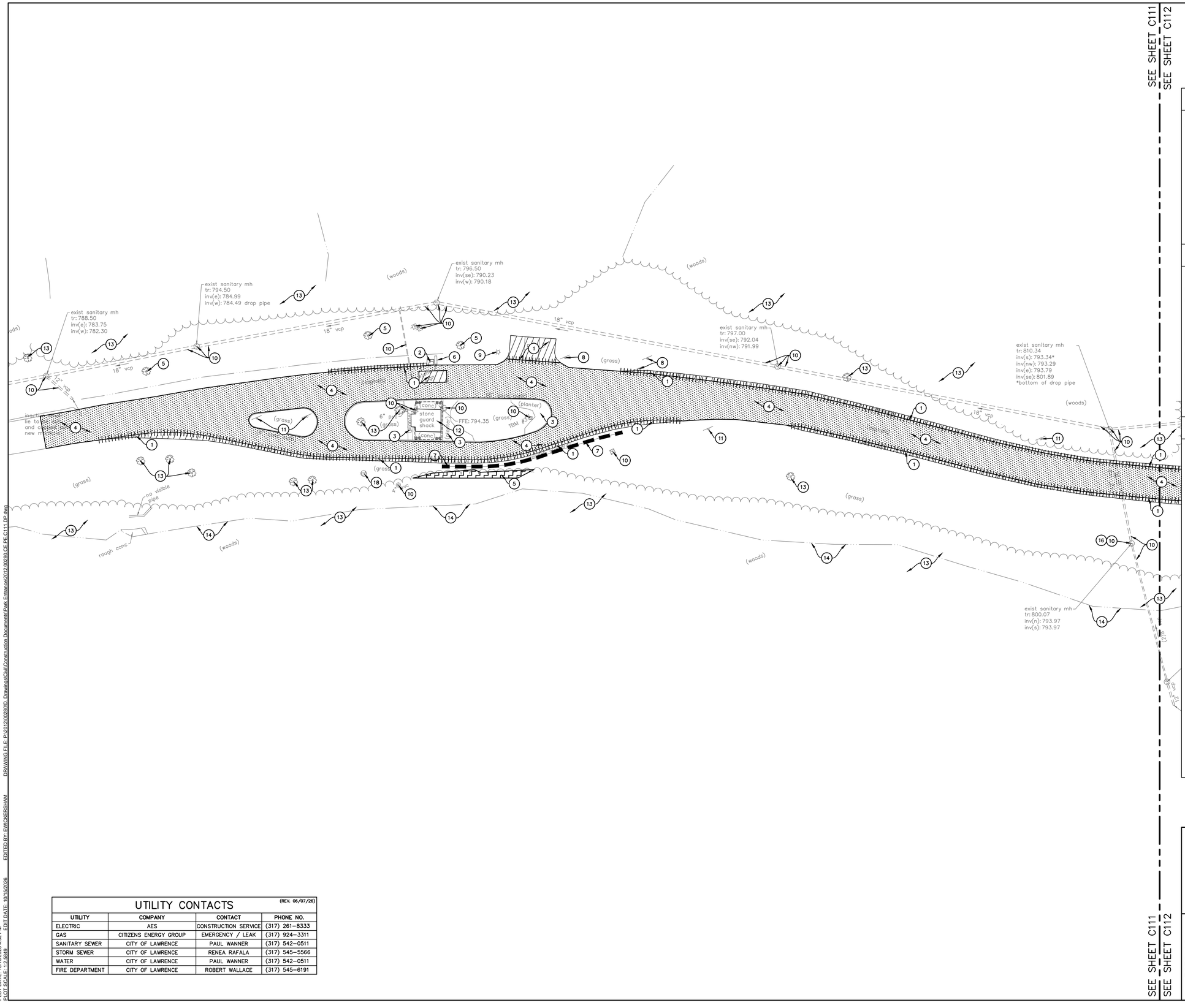
Project Number 2012.00280

EXISTING TOPOGRAPHY PLAN

C103

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 7/15/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280.CE.PE.C101.XTP.dwg

SEE SHEET C102
SEE SHEET C103



0' 30' 60'

SCALE: 1"=30'

EXISTING LEGEND

Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	Buried Water Line
	Overhead Electric Line

DEMOLITION LEGEND

- PAVEMENT TO BE SAWCUT
- EXISTING CURB TO BE REMOVED
- EXISTING GUARDRAIL TO BE RELOCATED
- EXISTING 1.5" MILL SURFACE
- EXISTING ASPHALT TO BE REMOVED
- EXISTING CONCRETE AND BASE TO BE REMOVED
- EXISTING WOODED AREA TO BE REMOVED

KEYNOTES

1. REMOVE EXISTING ASPHALT PAVEMENT AND BASE MATERIAL (SAWCUT FOR CLEAN EDGE).
2. REMOVE EXISTING CONCRETE, BASE, CONCRETE PADS AND OTHER MISCELLANEOUS CONCRETE MATERIAL (SAWCUT FOR CLEAN EDGE).
3. PROTECT EXISTING LANDSCAPING THROUGHOUT DURATION OF CONSTRUCTION.
4. 1.5" MILL & RESURFACE EXISTING ASPHALT PAVEMENT.
5. REMOVE EXISTING TREE(S) & BRUSH. CONTRACTOR TO SEEK OWNER AUTHORIZATION FOR REMOVAL OF ANY HEALTHY HARDWOOD TREE(S) OVER 6" DIA. PROPOSED GRADING NEAR ANY PRESERVED TREE(S) TO BE MODIFIED TO MAINTAIN POSITIVE DRAINAGE. NO TREE TO BE REMOVED WITHIN 5' OF THE PROPERTY LINE.
6. EXISTING MONUMENT SIGN TO BE RELOCATED.
7. EXISTING GUARDRAIL TO BE RELOCATED.
8. RELOCATE EXISTING SIGN. CONTRACTOR TO COORDINATE WITH AUTHORITY HAVING JURISDICTION PRIOR TO CONSTRUCTION.
9. RELOCATE EXISTING UTILITY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.
10. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION.
11. PROTECT EXISTING SIGN THROUGHOUT DURATION OF CONSTRUCTION.
12. PROTECT EXISTING STRUCTURE THROUGHOUT DURATION OF CONSTRUCTION.
13. PROTECT EXISTING TREE(S) THROUGHOUT DURATION OF CONSTRUCTION.
14. PROTECT EXISTING STONE CHANNEL THROUGHOUT DURATION OF CONSTRUCTION.
15. PROTECT EXISTING FENCE THROUGHOUT THE DURATION OF CONSTRUCTION.
16. ADJUST EXISTING STRUCTURE & CASTING TO PROPOSED SURFACE ELEVATION. ADJUSTMENT RINGS MAY BE USED WITH A MAX HEIGHT OF 12". ADJUSTMENTS OVER 12" REQUIRE PRECAST CONCRETE RISER OR ADDITIONAL BARREL SECTION(S).
17. RELOCATE EXISTING TELECOM EQUIPMENT. COORDINATE WITH UTILITY PROVIDER FOR RELOCATION PRIOR TO CONSTRUCTION.
18. ADJUST EXISTING UTILITY TO PROPOSED GRADE. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

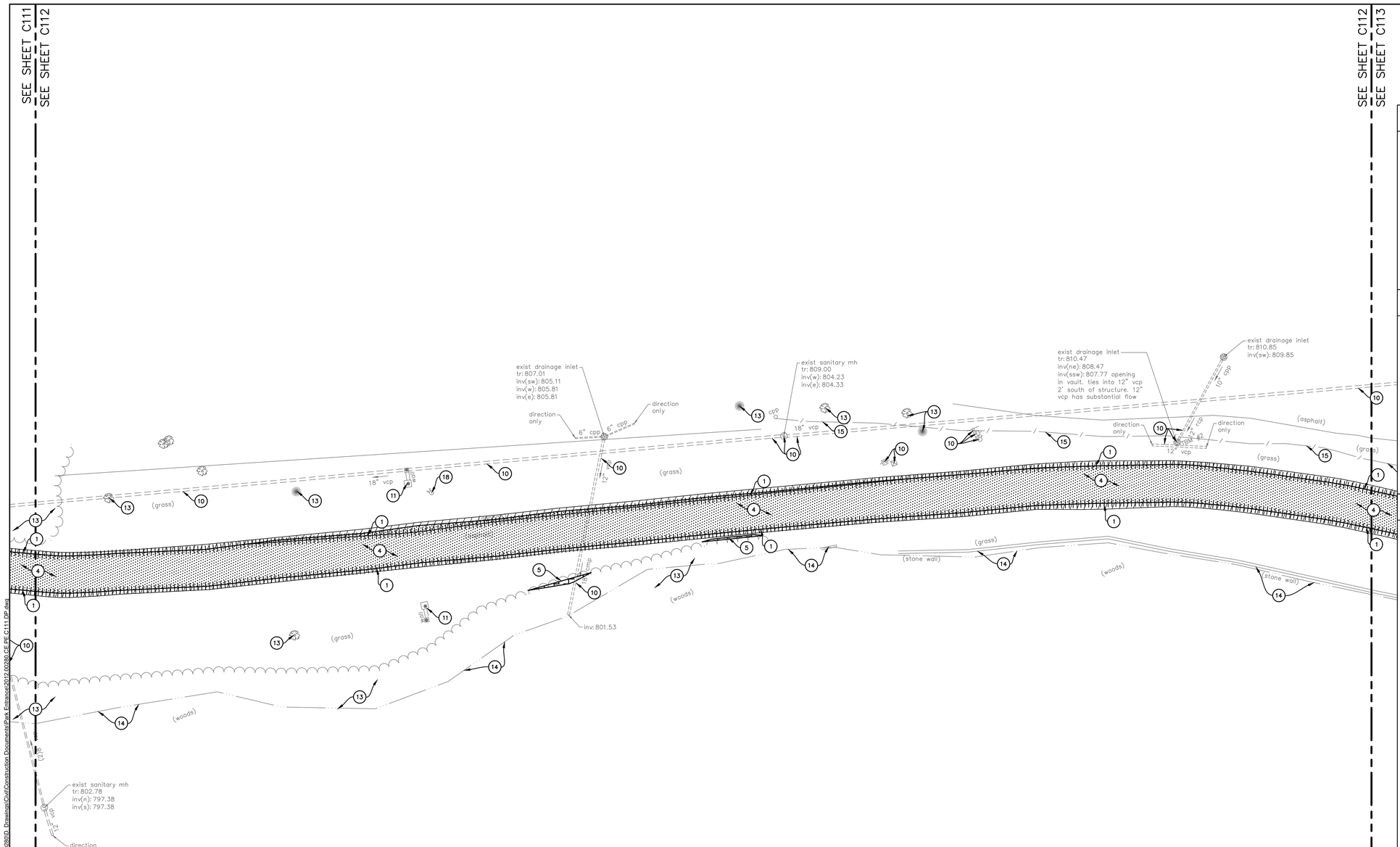
Project Number 2012.00280

DEMOLITION PLAN

C111

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.3849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE PE C111.DP.dwg

SEE SHEET C111
SEE SHEET C112



SEE SHEET C112
SEE SHEET C113

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole	W	Water Meter
G	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

DEMOLITION LEGEND

- PAVEMENT TO BE SAWCUT
- EXISTING CURB TO BE REMOVED
- EXISTING GUARDRAIL TO BE RELOCATED
- EXISTING 1.5" MILL SURFACE
- EXISTING ASPHALT TO BE REMOVED
- EXISTING CONCRETE AND BASE TO BE REMOVED
- EXISTING WOODED AREA TO BE REMOVED

KEYNOTES

1. REMOVE EXISTING ASPHALT PAVEMENT AND BASE MATERIAL (SAWCUT FOR CLEAN EDGE).
2. REMOVE EXISTING CONCRETE, BASE, CONCRETE PADS AND OTHER MISCELLANEOUS CONCRETE MATERIAL (SAWCUT FOR CLEAN EDGE).
3. PROTECT EXISTING LANDSCAPING THROUGHOUT DURATION OF CONSTRUCTION.
4. 1.5" MILL & RESURFACE EXISTING ASPHALT PAVEMENT.
5. REMOVE EXISTING TREE(S) & BRUSH. CONTRACTOR TO SEEK OWNER AUTHORIZATION FOR REMOVAL OF ANY HEALTHY HARDWOOD TREE(S) OVER 6" DIA. PROPOSED GRADING NEAR ANY PRESERVED TREE(S) TO BE MODIFIED TO MAINTAIN POSITIVE DRAINAGE. NO TREE TO BE REMOVED WITHIN 5' OF THE PROPERTY LINE.
6. EXISTING MONUMENT SIGN TO BE RELOCATED.
7. EXISTING GUARDRAIL TO BE RELOCATED.
8. RELOCATE EXISTING SIGN. CONTRACTOR TO COORDINATE WITH AUTHORITY HAVING JURISDICTION PRIOR TO CONSTRUCTION.
9. RELOCATE EXISTING UTILITY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.
10. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION.
11. PROTECT EXISTING SIGN THROUGHOUT DURATION OF CONSTRUCTION.
12. PROTECT EXISTING STRUCTURE THROUGHOUT DURATION OF CONSTRUCTION.
13. PROTECT EXISTING TREE(S) THROUGHOUT DURATION OF CONSTRUCTION.
14. PROTECT EXISTING STONE CHANNEL THROUGHOUT DURATION OF CONSTRUCTION.
15. PROTECT EXISTING FENCE THROUGHOUT THE DURATION OF CONSTRUCTION.
16. ADJUST EXISTING STRUCTURE & CASTING TO PROPOSED SURFACE ELEVATION. ADJUSTMENT RINGS MAY BE USED WITH A MAX HEIGHT OF 12". ADJUSTMENTS OVER 12" REQUIRE PRECAST CONCRETE RISER OR ADDITIONAL BARREL SECTION(S).
17. RELOCATE EXISTING TELECOM EQUIPMENT. COORDINATE WITH UTILITY PROVIDER FOR RELOCATION PRIOR TO CONSTRUCTION.
18. ADJUST EXISTING UTILITY TO PROPOSED GRADE. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

SEE SHEET C112
SEE SHEET C113

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

DEMOLITION PLAN

C112

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.4849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE FE C111 DP.dwg

SEE SHEET C112
SEE SHEET C113

exist sanitary mh buried inv not given

exist sanitary mh tr: 819.31 inv(w): 810.72 inv(n): 815.62 – lat inv(e): 814.77 – 15" inv(se): 810.82

exist beehive inlet tr: 823.28 inv(s): 818.53

exist sanitary mh tr: 830.03 inv(se): 817.83 inv(nw): 817.78

exist sanitary mh tr: 836.29 inv(se): 827.24 inv(e): 832.29 inv(e): 825.59 inv(nw): 825.64

exist sanitary mh tr: 836.74 inv(w): 826.44 inv(se): 827.44 structure appears abandoned

exist sanitary mh tr: 830.00 full of water appears abandoned

exist drainage mh tr: 837.52 inv(w): 830.92 inv(n): 835.42 inv(ne): 830.92 inv(ne): 834.02

exist drainage mh tr: 833.60 inv(w): 818.95 inv(e): 823.80

exist drainage mh tr: 822.07 inv(sw): 814.02 inv(e): 817.07 inv(n): 814.02

exist drainage mh tr: 822.47 inv(s): 818.02 inv(nw): 817.92

exist drainage mh tr: 824.90 inv(se): 821.75 inv(se): 823.35 inv(n): 821.75

exist drainage inlet tr: 835.73 inv(n): 830.78 inv(ne): 831.73 inv(s): 830.78

exist drainage inlet tr: 835.08 inv(n): 828.43

exist sanitary mh tr: 836.44 inv(nw): 828.79 inv(e): 828.89

exist drainage mh tr: 830.91 inv(e): 826.41 inv(nw): 826.16 inv(ne): 826.71

exist drainage mh solid lid on inlet tr: 828.42 inv(nw): 826.62

existing mh tr: 830.22 full of dirt and water

exist curb inlet tr: 834.99 inv(n): 829.79 inv(w): 828.59±

inv: 811.31
inv: 811.60
inv: 814.44
inv: 813.75 with conc end section
inv: 815.42
inv: 813.57 tree grown ground pipe
inv: 831.54

TBM #1

(grass) (split rail fence) (woods) (pond) (asphalt) (brick wall) (planter) (conc walk) (mulch path) (opaque)

stone wall barrier 24" cmp at this end wooden bridge conc walk

12" rcp 24" rcp 18" rcp 15" rcp 4" rcp 6" rcp 8" rcp 12" cpp 4" pvc 6" pvc 8" pvc 4" vcp

direction only direction only abandoned?? blind tie

dp 5% dp 2% dp 8%

UTILITY CONTACTS (REV. 06/07/26)			
UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush		Post
	Clean Out		Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box		Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

DEMOLITION LEGEND

- PAVEMENT TO BE SAWCUT
- EXISTING CURB TO BE REMOVED
- EXISTING GUARDRAIL TO BE RELOCATED
- EXISTING 1.5" MILL SURFACE
- EXISTING ASPHALT TO BE REMOVED
- EXISTING CONCRETE AND BASE TO BE REMOVED
- EXISTING WOODED AREA TO BE REMOVED

KEYNOTES

1. REMOVE EXISTING ASPHALT PAVEMENT AND BASE MATERIAL (SAWCUT FOR CLEAN EDGE).
2. REMOVE EXISTING CONCRETE, BASE, CONCRETE PADS AND OTHER MISCELLANEOUS CONCRETE MATERIAL (SAWCUT FOR CLEAN EDGE).
3. PROTECT EXISTING LANDSCAPING THROUGHOUT DURATION OF CONSTRUCTION.
4. 1.5" MILL & RESURFACE EXISTING ASPHALT PAVEMENT.
5. REMOVE EXISTING TREE(S) & BRUSH. CONTRACTOR TO SEEK OWNER AUTHORIZATION FOR REMOVAL OF ANY HEALTHY HARDWOOD TREE(S) OVER 6" DIA. PROPOSED GRADING NEAR ANY PRESERVED TREE(S) TO BE MODIFIED TO MAINTAIN POSITIVE DRAINAGE. NO TREE TO BE REMOVED WITHIN 5' OF THE PROPERTY LINE.
6. EXISTING MONUMENT SIGN TO BE RELOCATED.
7. EXISTING GUARDRAIL TO BE RELOCATED.
8. RELOCATE EXISTING SIGN. CONTRACTOR TO COORDINATE WITH AUTHORITY HAVING JURISDICTION PRIOR TO CONSTRUCTION.
9. RELOCATE EXISTING UTILITY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.
10. PROTECT EXISTING UTILITY THROUGHOUT DURATION OF CONSTRUCTION.
11. PROTECT EXISTING SIGN THROUGHOUT DURATION OF CONSTRUCTION.
12. PROTECT EXISTING STRUCTURE THROUGHOUT DURATION OF CONSTRUCTION.
13. PROTECT EXISTING TREE(S) THROUGHOUT DURATION OF CONSTRUCTION.
14. PROTECT EXISTING STONE CHANNEL THROUGHOUT DURATION OF CONSTRUCTION.
15. PROTECT EXISTING FENCE THROUGHOUT THE DURATION OF CONSTRUCTION.
16. ADJUST EXISTING STRUCTURE & CASTING TO PROPOSED SURFACE ELEVATION. ADJUSTMENT RINGS MAY BE USED WITH A MAX HEIGHT OF 12". ADJUSTMENTS OVER 12" REQUIRE PRECAST CONCRETE RISER OR ADDITIONAL BARREL SECTION(S).
17. RELOCATE EXISTING TELECOM EQUIPMENT. COORDINATE WITH UTILITY PROVIDER FOR RELOCATION PRIOR TO CONSTRUCTION.
18. ADJUST EXISTING UTILITY TO PROPOSED GRADE. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS
6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW REGISTERED No. 11500408 STATE OF INDIANA PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

DEMOLITION PLAN

C113

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE.PE.C111.DP.dwg



0' 100' 200'

SCALE: 1"=100'

EXISTING LEGEND

Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	Buried Water Line
	-ohe- Overhead Electric Line

SITE LEGEND

- ASPHALT PAVEMENT
- 1.5" MILL AND RESURFACE
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- BICYCLE LANE CROSSING (GREEN PAINT)

SITE DATA TABLE

PROJECT AREA:	3.14± ACRES
ADDITIONAL IMPERVIOUS AREA:	0.76± ACRES
STANDARD PARKING (10'x20'):	3
ADA PARKING PROVIDED:	1
(INCLUDES 1 VAN ACCESSIBLE)	
TOTAL PROPOSED PARKING:	4

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No.
11500408
STATE OF
INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

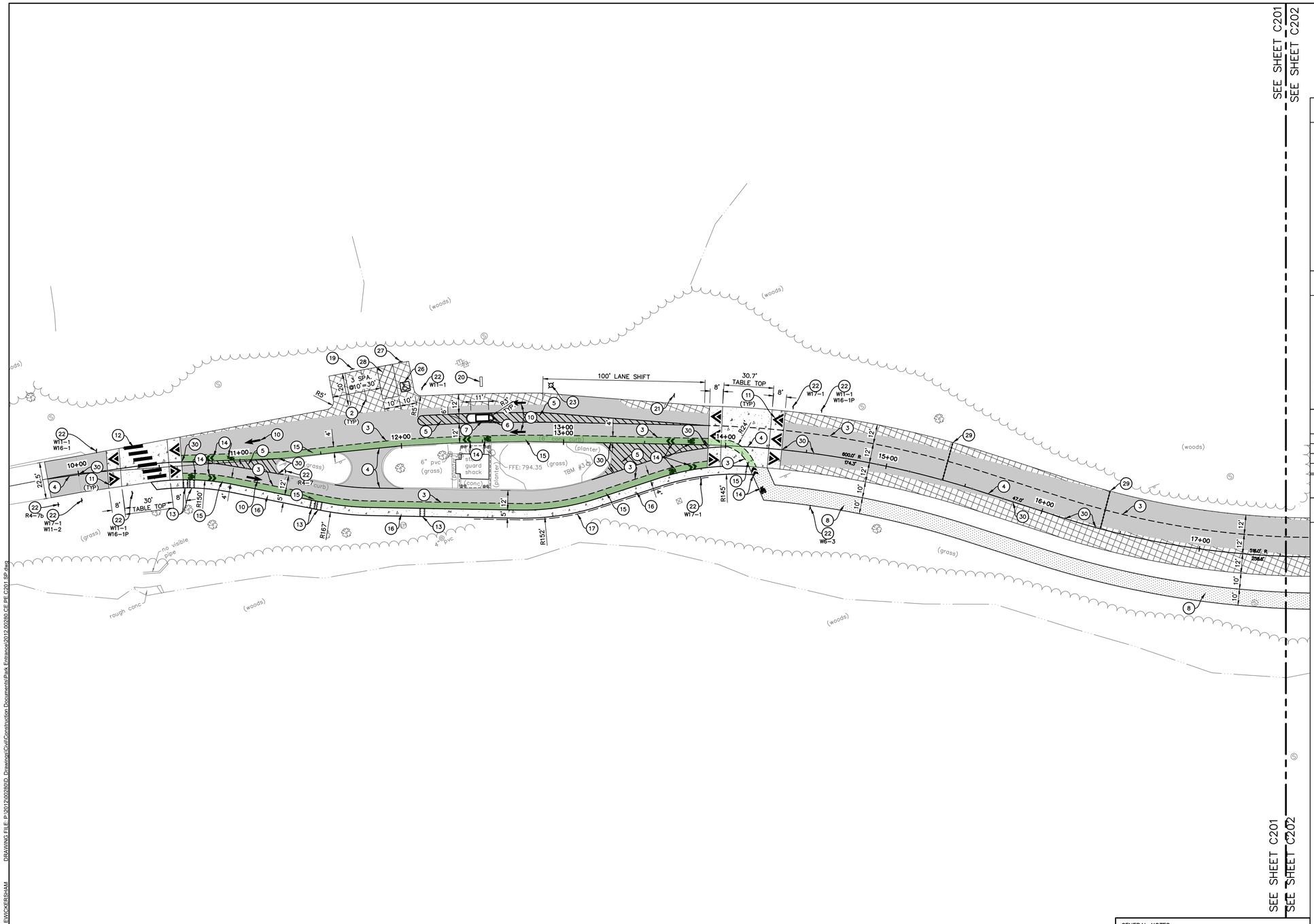
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

OVERALL SITE PLAN

C200

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 7/17/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C200 CSP.dwg



SCALE: 1"=30'

EXISTING LEGEND

Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	Buried Water Line
	—ohe— Overhead Electric Line

SITE LEGEND

- ASPHALT PAVEMENT
- 1.5" MILL AND RESURFACE
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- BICYCLE LANE CROSSING (GREEN PAINT)

SITE DATA TABLE

PROJECT AREA:	3.14± ACRES
ADDITIONAL IMPERVIOUS AREA:	0.76± ACRES
STANDARD PARKING (10'x20'):	3
ADA PARKING PROVIDED:	1
(INCLUDES 1 VAN ACCESSIBLE)	
TOTAL PROPOSED PARKING:	4

KEYNOTES

1. TRUNCATED DOMES
2. PARKING SPACE (4" WHITE PAINT STRIPE, SOLID)
3. PAVEMENT STRIPE (4" WHITE PAINT STRIPE, DASHED)
4. PAVEMENT STRIPE (4" DOUBLE YELLOW PAINT STRIPE, SOLID)
5. NO PARKING STRIPING (4" WHITE PAINT STRIPE, SOLID)
6. CONCRETE BOLLARD
7. CONTROLLED ACCESS GATE (REFER TO ARCHITECTURAL PLANS)
8. ASPHALT PATH
9. CONCRETE SIDEWALK
10. LANE INDICATION ARROW (STRAIGHT)
11. RAISED PEDESTRIAN PAVEMENT MARKING
12. CROSSWALK, WHITE PAINT, 24" WIDE BARS 48" O.C.
13. 2' CONCRETE FLUME
14. BICYCLE PAVEMENT MARKING SYMBOL AND ARROW (REFER TO CITY OF INDIANAPOLIS DPW DESIGN MEMO 2019.04)
15. BICYCLE LANE (4' WIDE GREEN PAINT, SOLID)
16. COMBINED CONCRETE CURB AND WALK
17. TIMBER GUARDRAIL
18. CURB TAPER
19. RELOCATED WOODEN SIGN 'EMPLOYEE PARKING ONLY'
20. RELOCATED STONE MONUMENT SIGN
21. RELOCATED WOODEN SIGN 'WELCOME' AND PRICING
22. TRAFFIC SIGN (MUTCD CODE AS IDENTIFIED IN CALLOUT)
23. RELOCATED LIGHT POLE
24. 24" CONCRETE CURB W/RAILING
25. CONCRETE CENTER CURB
26. ADA PARKING SYMBOL
27. ADA ACCESSIBLE PARKING SIGN
28. NO PARKING STRIPING (4" BLUE PAINT STRIPE, SOLID)
29. TRANSVERSE MILLED RUMBLE STRIPS W/SINGLE LINE, WHITE PAINT, 8" WIDE, ½" DEPTH MILL
30. STIMSONITE CAST IRON LENS CRADLE, MODEL 101 (YELLOW) PAVEMENT MARKER. 20' O.C. SPACING
31. REMOVABLE BOLLARDS
32. TIMBER GUARDRAIL WITH PEDESTRIAN RAIL

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANIEL WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

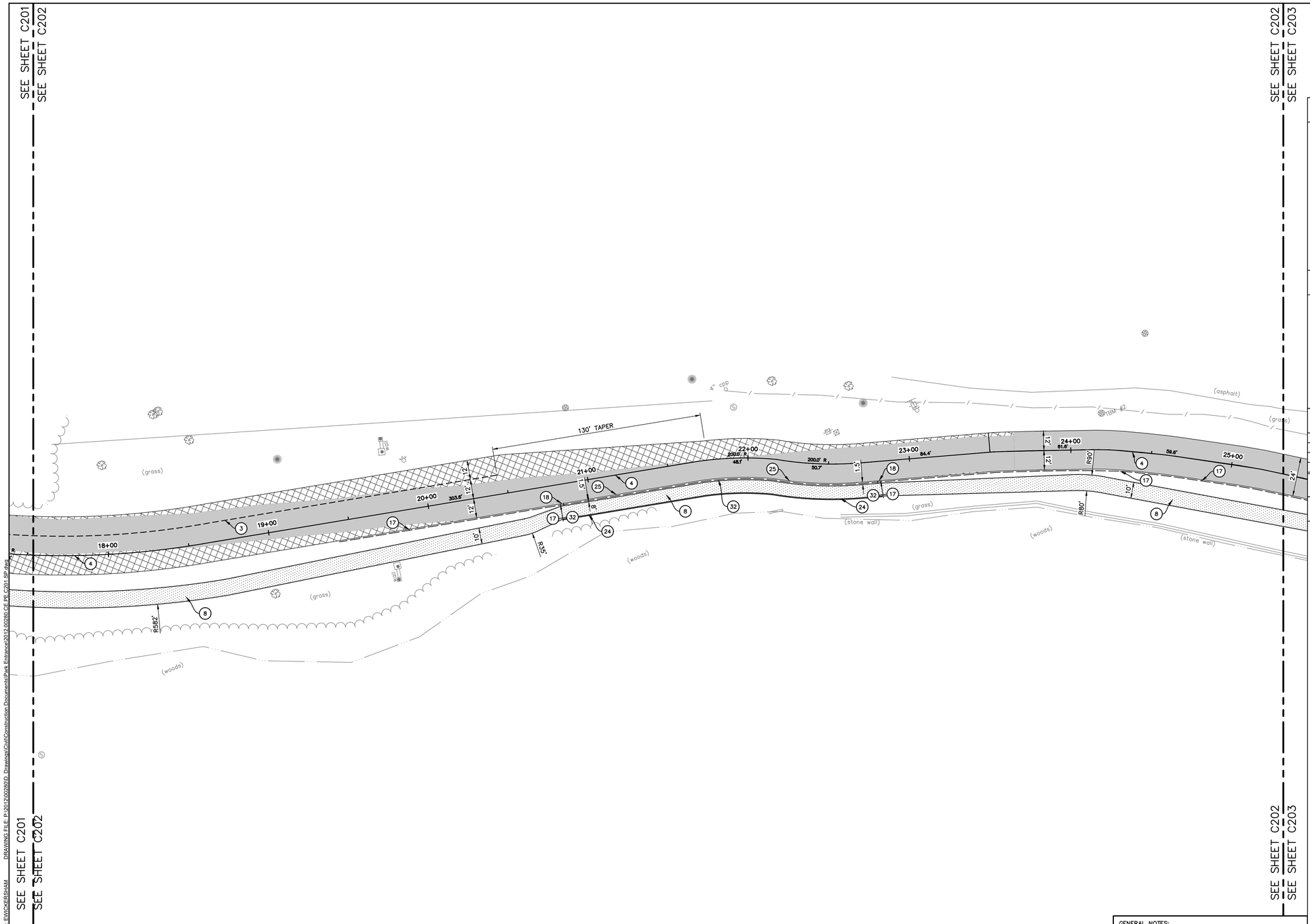
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SITE PLAN

C201

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE PE C201 SP.dwg



0' 30' 60'

SCALE: 1"=30'

EXISTING LEGEND

Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	Buried Water Line
	—ohe— Overhead Electric Line

SITE LEGEND

- ASPHALT PAVEMENT
- 1.5" MILL AND RESURFACE
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- BICYCLE LANE CROSSING (GREEN PAINT)

SITE DATA TABLE

PROJECT AREA:	3.14± ACRES
ADDITIONAL IMPERVIOUS AREA:	0.76± ACRES
STANDARD PARKING (10'x20'):	3
ADA PARKING PROVIDED:	1
(INCLUDES 1 VAN ACCESSIBLE)	
TOTAL PROPOSED PARKING:	4

KEYNOTES

1. TRUNCATED DOMES
2. PARKING SPACE (4" WHITE PAINT STRIPE, SOLID)
3. PAVEMENT STRIPE (4" WHITE PAINT STRIPE, DASHED)
4. PAVEMENT STRIPE (4" DOUBLE YELLOW PAINT STRIPE, SOLID)
5. NO PARKING STRIPING (4" WHITE PAINT STRIPE, SOLID)
6. CONCRETE BOLLARD
7. CONTROLLED ACCESS GATE (REFER TO ARCHITECTURAL PLANS)
8. ASPHALT PATH
9. CONCRETE SIDEWALK
10. LANE INDICATION ARROW (STRAIGHT)
11. RAISED PEDESTRIAN PAVEMENT MARKING
12. CROSSWALK, WHITE PAINT, 24" WIDE BARS 48" O.C.
13. 2' CONCRETE FLUME
14. BICYCLE PAVEMENT MARKING SYMBOL AND ARROW (REFER TO CITY OF INDIANAPOLIS DPW DESIGN MEMO 2019.04)
15. BICYCLE LANE (4' WIDE GREEN PAINT, SOLID)
16. COMBINED CONCRETE CURB AND WALK
17. TIMBER GUARDRAIL
18. CURB TAPER
19. RELOCATED WOODEN SIGN 'EMPLOYEE PARKING ONLY'
20. RELOCATED STONE MONUMENT SIGN
21. RELOCATED WOODEN SIGN 'WELCOME' AND PRICING
22. TRAFFIC SIGN (MUTCD CODE AS IDENTIFIED IN CALLOUT)
23. RELOCATED LIGHT POLE
24. 24" CONCRETE CURB W/RAILING
25. CONCRETE CENTER CURB
26. ADA PARKING SYMBOL
27. ADA ACCESSIBLE PARKING SIGN
28. NO PARKING STRIPING (4" BLUE PAINT STRIPE, SOLID)
29. TRANSVERSE MILLED RUMBLE STRIPS W/SINGLE LINE, WHITE PAINT, 8" WIDE, ¼" DEPTH MILL
30. STIMSONITE CAST IRON LENS CRADLE, MODEL 101 (YELLOW) PAVEMENT MARKER. 20' O.C. SPACING
31. REMOVABLE BOLLARDS
32. TIMBER GUARDRAIL WITH PEDESTRIAN RAIL

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANE. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

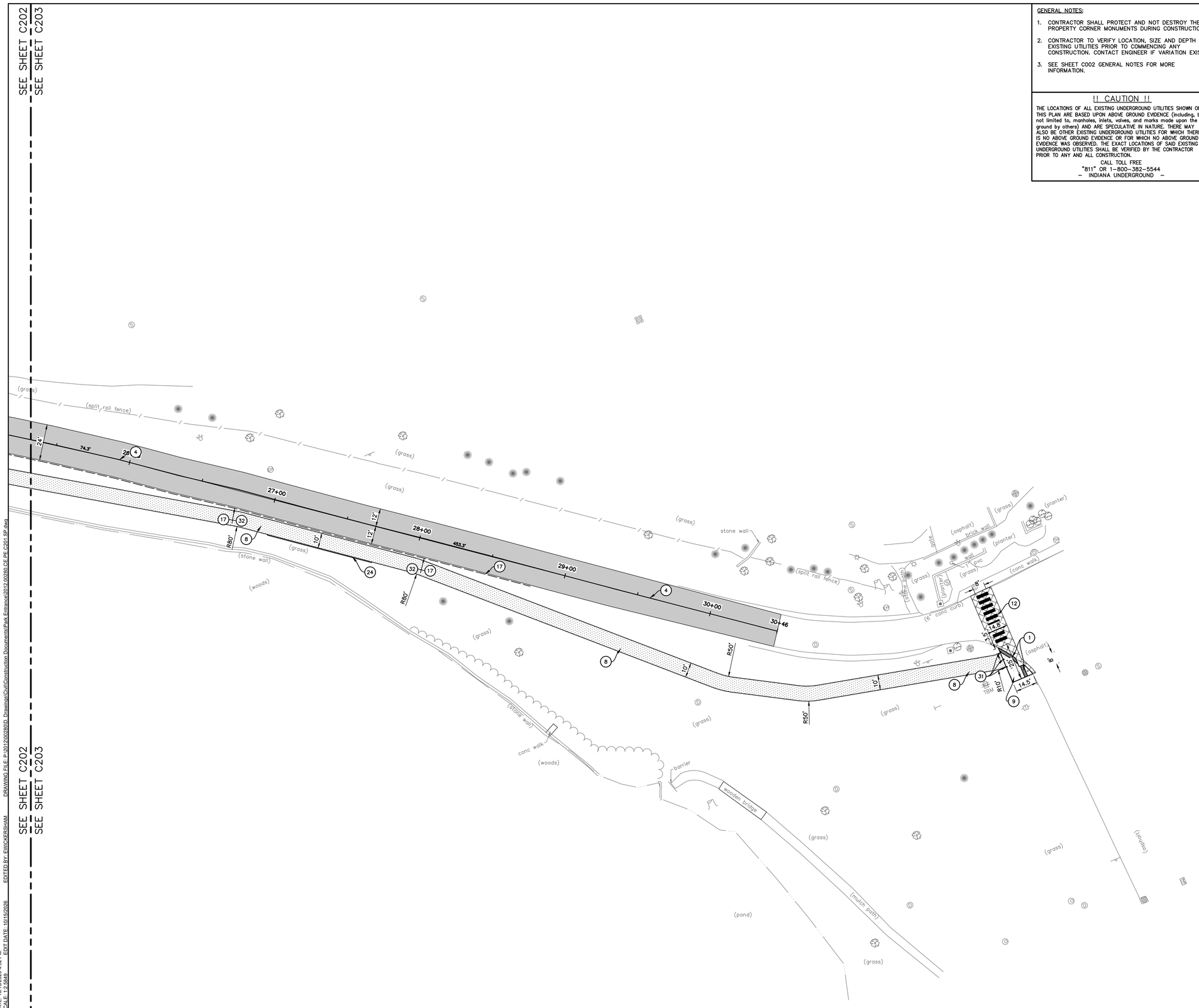
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SITE PLAN

C202

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\ID Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE PE C201 SP.dwg



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
	Electric Box	TH	Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
G	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

SITE LEGEND

- ASPHALT PAVEMENT
- 1.5" MILL AND RESURFACE
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- BICYCLE LANE CROSSING (GREEN PAINT)

SITE DATA TABLE

PROJECT AREA:	3.14± ACRES
ADDITIONAL IMPERVIOUS AREA:	0.76± ACRES
STANDARD PARKING (10'x20'):	3
ADA PARKING PROVIDED:	1
(INCLUDES 1 VAN ACCESSIBLE)	
TOTAL PROPOSED PARKING:	4

KEYNOTES

1. TRUNCATED DOMES
2. PARKING SPACE (4" WHITE PAINT STRIPE, SOLID)
3. PAVEMENT STRIPE (4" WHITE PAINT STRIPE, DASHED)
4. PAVEMENT STRIPE (4" DOUBLE YELLOW PAINT STRIPE, SOLID)
5. NO PARKING STRIPING (4" WHITE PAINT STRIPE, SOLID)
6. CONCRETE BOLLARD
7. CONTROLLED ACCESS GATE (REFER TO ARCHITECTURAL PLANS)
8. ASPHALT PATH
9. CONCRETE SIDEWALK
10. LANE INDICATION ARROW (STRAIGHT)
11. RAISED PEDESTRIAN PAVEMENT MARKING
12. CROSSWALK, WHITE PAINT, 24" WIDE BARS 48" O.C.
13. 2' CONCRETE FLUME
14. BICYCLE PAVEMENT MARKING SYMBOL AND ARROW (REFER TO CITY OF INDIANAPOLIS DPW DESIGN MEMO 2019.04)
15. BICYCLE LANE (4' WIDE GREEN PAINT, SOLID)
16. COMBINED CONCRETE CURB AND WALK
17. TIMBER GUARDRAIL
18. CURB TAPER
19. RELOCATED WOODEN SIGN 'EMPLOYEE PARKING ONLY'
20. RELOCATED STONE MONUMENT SIGN
21. RELOCATED WOODEN SIGN 'WELCOME' AND PRICING
22. TRAFFIC SIGN (MUTCD CODE AS IDENTIFIED IN CALLOUT)
23. RELOCATED LIGHT POLE
24. 24" CONCRETE CURB W/RAILING
25. CONCRETE CENTER CURB
26. ADA PARKING SYMBOL
27. ADA ACCESSIBLE PARKING SIGN
28. NO PARKING STRIPING (4" BLUE PAINT STRIPE, SOLID)
29. TRANSVERSE MILLED RUMBLE STRIPS W/SINGLE LINE, WHITE PAINT, 8" WIDE, ½" DEPTH MILL
30. STIMSONITE CAST IRON LENS CRADLE, MODEL 101 (YELLOW) PAVEMENT MARKER, 20' O.C. SPACING
31. REMOVABLE BOLLARDS
32. TIMBER GUARDRAIL WITH PEDESTRIAN RAIL

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SITE PLAN

C203

PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C201 SP.dwg

SEE SHEET C301
SEE SHEET C302

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box		Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #D4750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

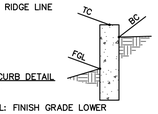
TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

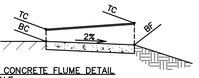
GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
BC	BOTTOM OF CURB
TC	TOP OF CURB
HP	HIGH POINT
LP	LOW POINT
000	CONTOURS
	SWALE
TC 000.50 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
	STRUCTURES
	RIDGE LINE



GRADING 24" CURB DETAIL
NOT TO SCALE

FGL: FINISH GRADE LOWER



GRADING 2' CONCRETE FLUME DETAIL
NOT TO SCALE

BF: BOTTOM OF FLUME

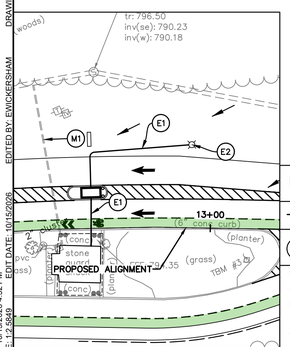
GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -



UTILITY PLAN DETAIL
SCALE: 1" = 30'

UTILITY LEGEND

-ETC-	ELECTRIC / TELECOMMUNICATIONS LINE

KEYNOTES

ELECTRIC \ TELECOMMUNICATIONS

E1. ELECTRIC\TELECOM SERVICE LINE

E2. RELOCATED LIGHT POLE. CONTRACTOR TO COORDINATE PROPOSED LOCATION WITH OWNER AND UTILITY PROVIDER.

MISCELLANEOUS

M1. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH AND SIZE OF EXISTING UTILITIES TO ENSURE CONFLICTS DO NOT EXIST WITH PROPOSED UTILITIES.

M2. 0" TO 6" CURB TRANSITION. VARIABLE CURB HEIGHT

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012-00280-CE-PE-C301.GP.dwg
EDITED BY: EWICKERSHAM
EDIT DATE: 10/15/2026
PLOT DATE: 10/15/2026 4:52 PM
PLOT SCALE: 1:2.5849

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

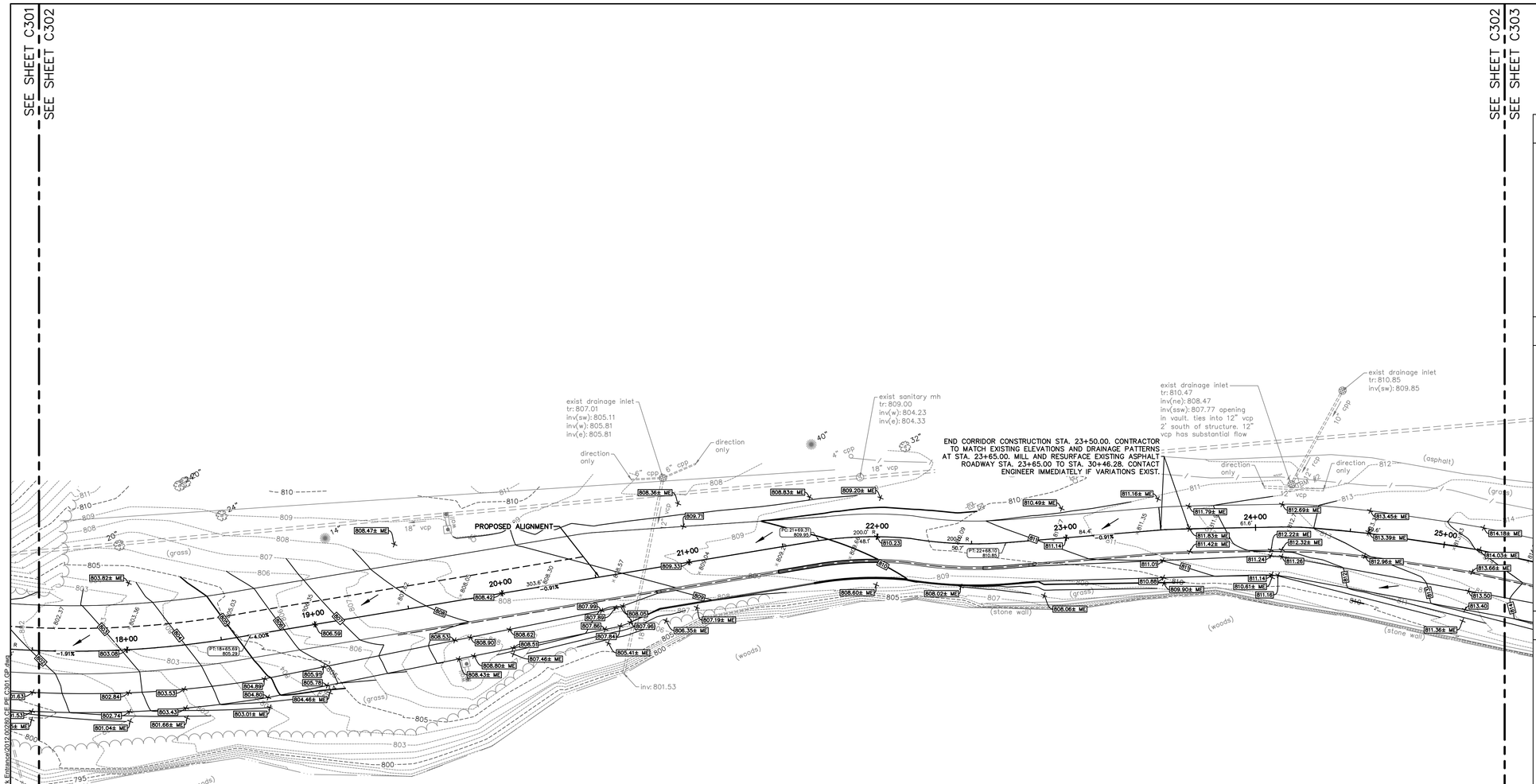
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

GRADING PLAN

C301

SEE SHEET C301
SEE SHEET C302



SEE SHEET C301
SEE SHEET C302

SEE SHEET C302
SEE SHEET C303

0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box	TH	Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #D4750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

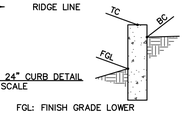
TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

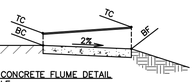
GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
BC	BOTTOM OF CURB
TC	TOP OF CURB
HP	HIGH POINT
LP	LOW POINT
000	CONTOURS
	SWALE
TC 000.50 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
	STRUCTURES
	RIDGE LINE



GRADING 24" CURB DETAIL
NOT TO SCALE

FGL: FINISH GRADE LOWER



GRADING 2' CONCRETE FLUME DETAIL
NOT TO SCALE

BF: BOTTOM OF FLUME

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

GRADING PLAN

C302

PLOT DATE: 10/15/2026 4:53 PM
EDIT DATE: 10/15/2026
PLOT SCALE: 1:2.3849
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE FIRE C301 GP.dwg

SEE SHEET C301
SEE SHEET C302

SEE SHEET C302
SEE SHEET C303

exist sanitary mh
buried
inv not given

exist sanitary mh
tr: 819.31
inv(w): 810.72
inv(n): 815.62 – lat
inv(e): 814.77 – 15"
inv(se): 810.82

exist beehive inlet
tr: 823.28
inv(s): 818.53

inv: 813.57
tree grown
ground pipe

PROPOSED ALIGNMENT

END CORRIDOR CONSTRUCTION STA. 30+46.28. CONTRACTOR TO MILL AND RESURFACE EXISTING ASPHALT ROADWAY STA. 23+65.00 TO 30+46.28. CONTACT ENGINEER IMMEDIATELY IF VARIATIONS EXIST.

exist sanitary mh
tr: 830.03
inv(se): 817.83
inv(nw): 817.78

exist sanitary mh
tr: 836.29
inv(se): 827.24
inv(e): 832.29
inv(e): 825.59
inv(nw): 825.64

exist sanitary mh
tr: 836.74
inv(w): 826.44
inv(se): 827.44
structure appears abandoned

exist sanitary mh
tr: 830.00
full of water
appears abandoned

exist drainage mh
tr: 837.52
inv(w): 830.92
inv(n): 835.42
inv(ne): 830.92
inv(ne): 834.02

exist sanitary mh
tr: 836.44
inv(nw): 828.79
inv(e): 828.89

exist drainage mh
tr: 822107
inv(sw): 814.02
inv(e): 817.07
inv(n): 814.02

exist drainage mh
tr: 822147
inv(s): 818.02
inv(nw): 817.92

exist drainage mh
tr: 824.90
inv(se): 821.75
inv(se): 823.35
inv(n): 821.75

exist drainage inlet
tr: 835.73
inv(n): 830.78
inv(ne): 831.73
inv(s): 830.78

existing mh
tr: 830.22
full of dirt
and water

exist drainage mh
tr: 830.91
inv(e): 826.41
inv(nw): 826.16
inv(ne): 826.71

exist drainage mh
solid lid on inlet
tr: 828.42
inv(nw): 826.62

exist drainage inlet
tr: 835.08
inv(n): 828.43

exist curb inlet
tr: 834.99
inv(n): 829.79
inv(w): 828.59±

inv: 811.31
inv: 811.60
inv: 814.44
inv: 815.42

(grass)
(split rail fence)
(woods)
(pond)
(asphalt)
(concrete)
(stone wall)
(mulch path)
(planter)
(conc walk)

12" rcp
15" rcp
24" rcp
4" rcp
stone wall
16" dead
24" cmp at this end
wooden bridge
direction only
direction only abandoned??
bind 14"

SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
G	Manhole	–w–	Buried Water Line
		–ohe–	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #04750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

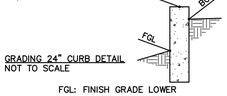
TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

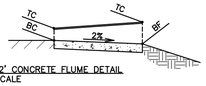
GRADING LEGEND

ME	MATCH EXISTING
FL	FLOWLINE
BC	BOTTOM OF CURB
TC	TOP OF CURB
HP	HIGH POINT
LP	LOW POINT
000	CONTOURS
	SWALE
TC 000.50 BC 000.00	CURB ELEVATIONS
000.00	SPOT ELEVATIONS
	FLOW ARROW
	STORM SEWER LINE
	PAVEMENT UNDERDRAIN
	STRUCTURES
	RIDGE LINE



GRADING 24" CURB DETAIL
NOT TO SCALE

FGL: FINISH GRADE LOWER



GRADING 2' CONCRETE FLUME DETAIL
NOT TO SCALE

BF: BOTTOM OF FLUME

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

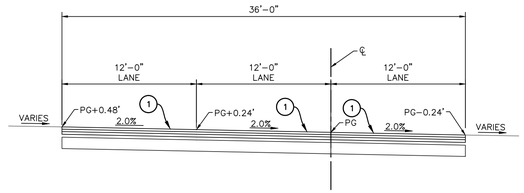
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

GRADING PLAN

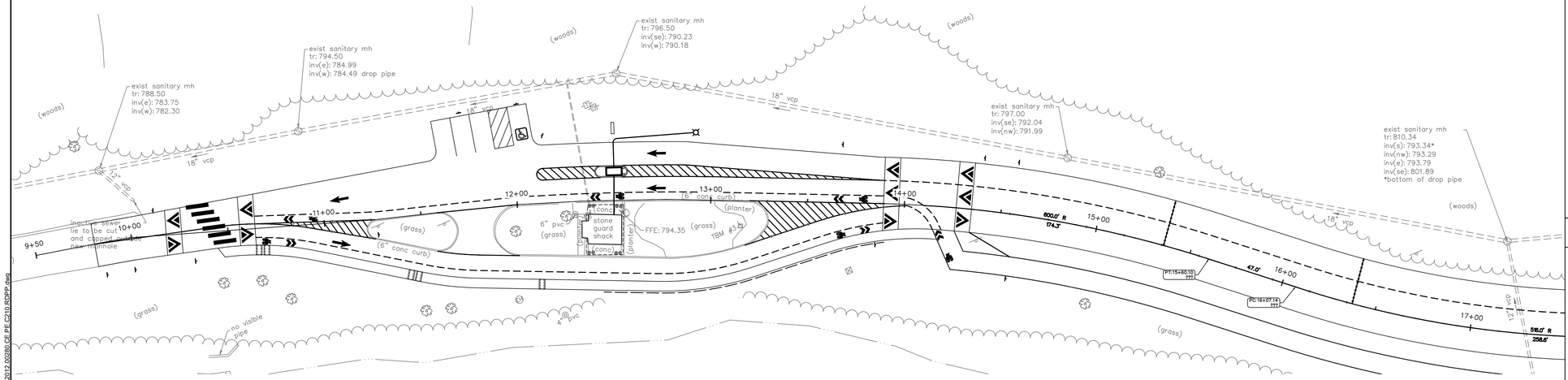
C303

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C301 GP.dwg



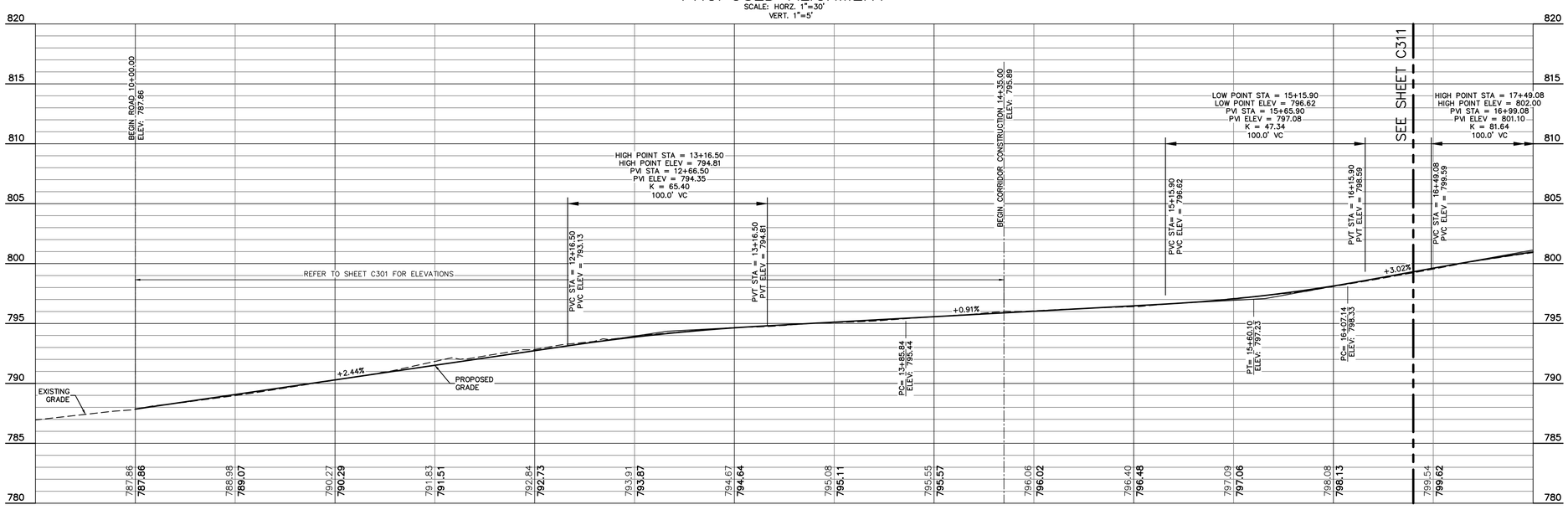
TYPICAL 3 LANE CROSS SECTION
NOT TO SCALE
STA. 14+35.00 TO 20+45.04

KEYNOTES
1. MILL AND RESURFACE / HEAVY DUTY ASPHALT PAVEMENT SECTION



PROPOSED ALIGNMENT

SCALE: HORZ. 1"=30'
VERT. 1"=5'



0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush		Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
G	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #04750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

PROPOSED LEGEND

	SWALE (1.00% MIN SLOPE)
000	PROPOSED CONTOUR
000.00	SPOT ELEVATION
000.00	PAVEMENT ELEVATION
	FLOW ARROW
B/B	BACK TO BACK
FL	FLOWLINE
HP	HIGH POINT
INV	INVERT ELEVATION
TR	TOP OF RIM ELEVATION
ME	MATCH EXISTING
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
	STREET LIGHT
	SIGN
PG	PROFILE GRADE

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANIEL WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

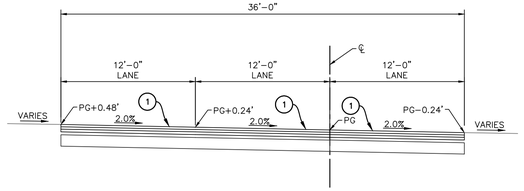
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

ROAD PLAN AND PROFILES

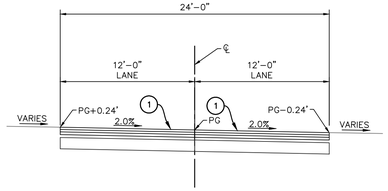
C310

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 12.5849
EDIT DATE: 7/17/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE-PE-C210.RDPP.dwg



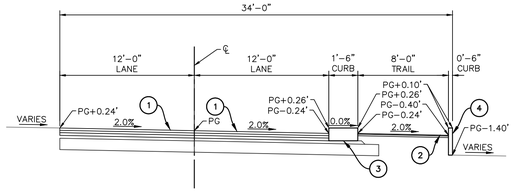
TYPICAL 3 LANE CROSS SECTION
NOT TO SCALE
STA. 14+35.00 TO 20+45.04

KEYNOTES
1. MILL AND RESURFACE / HEAVY DUTY ASPHALT PAVEMENT SECTION



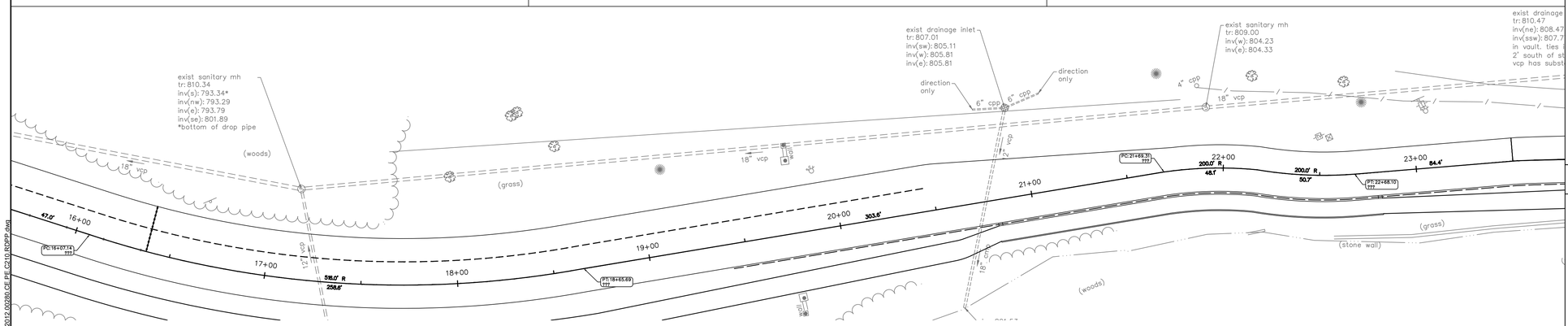
TYPICAL 2 LANE CROSS SECTION
NOT TO SCALE
STA. 20+45.04 TO 20+80.75
STA. 22+81.28 TO 23+52.52

KEYNOTES
1. MILL AND RESURFACE / HEAVY DUTY ASPHALT PAVEMENT SECTION



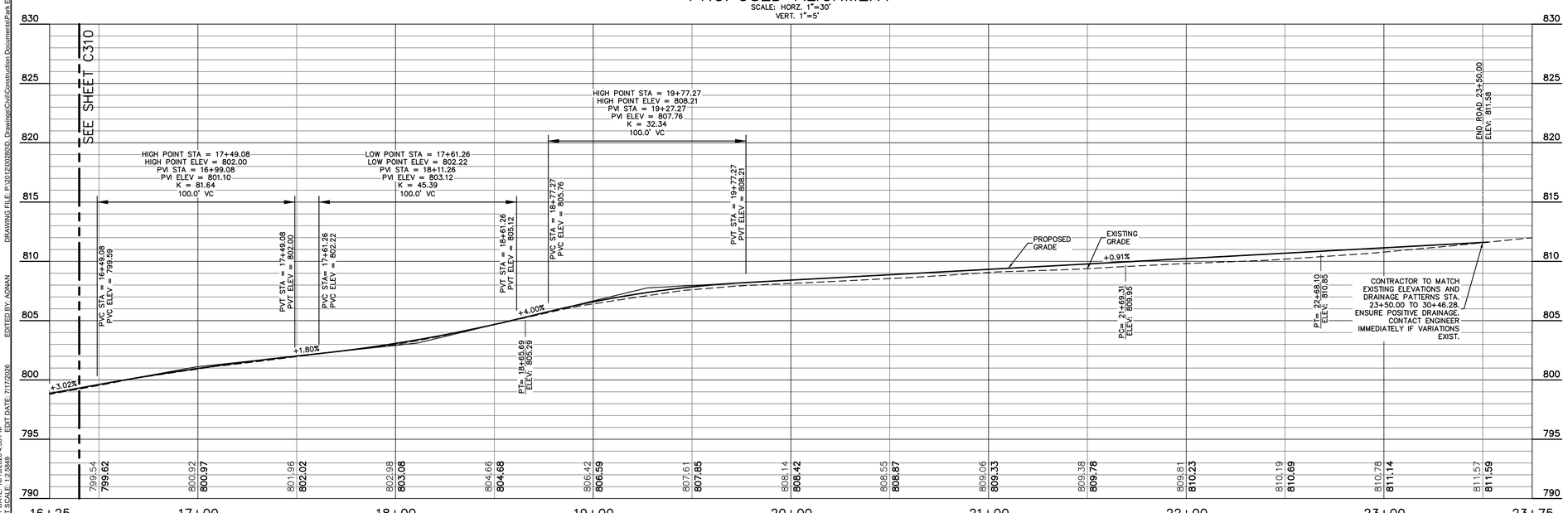
TYPICAL 2 LANE W/ TRAIL CROSS SECTION
NOT TO SCALE
STA. 20+80.75 TO 22+81.28

KEYNOTES
1. MILL AND RESURFACE / HEAVY DUTY ASPHALT PAVEMENT SECTION
2. ASPHALT PATH PAVEMENT SECTION
3. CONCRETE CENTER CURB
4. 24" CONCRETE CURB



PROPOSED ALIGNMENT

SCALE: HORZ. 1"=30'
VERT. 1"=5'



0' 30' 60'
SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box		Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

BENCHMARK DATA

BENCHMARK INFORMATION (NAVD 88 DATUM)

BENCHMARK ELEVATIONS WERE ESTABLISHED FROM GPS OBSERVATIONS ON THE IDENTIFIED BASE STATION DESCRIBED WITHIN. AN NGS OPUS SOLUTION (FILE #04750880) WAS OBTAINED AND USED TO CONTROL THE PROJECT'S VERTICAL DATUM. THE ELEVATIONS WERE THEN TRANSFERRED TO THE SITE USING DIFFERENTIAL LEVELING.

TBM #1
MAG SPIKE IN A POWER POLE, 60'± SOUTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 833.39'

TBM #2
CHISELED SQUARE ON THE SOUTHWEST CORNER OF AN INLET, 25'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD, 775'± NORTHWEST OF INTERSECTION OF POST ROAD AND 56th STREET.
ELEV: 810.43'

TBM #3
CHISELED SQUARE IN THE NORTH CORNER OF A CONCRETE FLAG POLE BASE, 60'± SOUTHEAST OF EAST CORNER GUARD SHACK, 25'± SOUTHWEST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 795.02'

TBM #4
CHISELED "X" ON TH ENORTHEAST SIDE OF A SANITARY MANHOLE, 550'± WEST NORTHWEST OF GUARD SHACK, 30'± NORTHEAST OF THE CENTERLINE OF PARK ENTRANCE ROAD.
ELEV: 788.47'

PROPOSED LEGEND

	SWALE (1.00% MIN SLOPE)
000	PROPOSED CONTOUR
000.00 x	SPOT ELEVATION
(000.00) x	PAVEMENT ELEVATION
	FLOW ARROW
B/B	BACK TO BACK
FL	FLOWLINE
HP	HIGH POINT
INV	INVERT ELEVATION
TR	TOP OF RIM ELEVATION
ME	MATCH EXISTING
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
	STREET LIGHT
	SIGN
PG	PROFILE GRADE

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

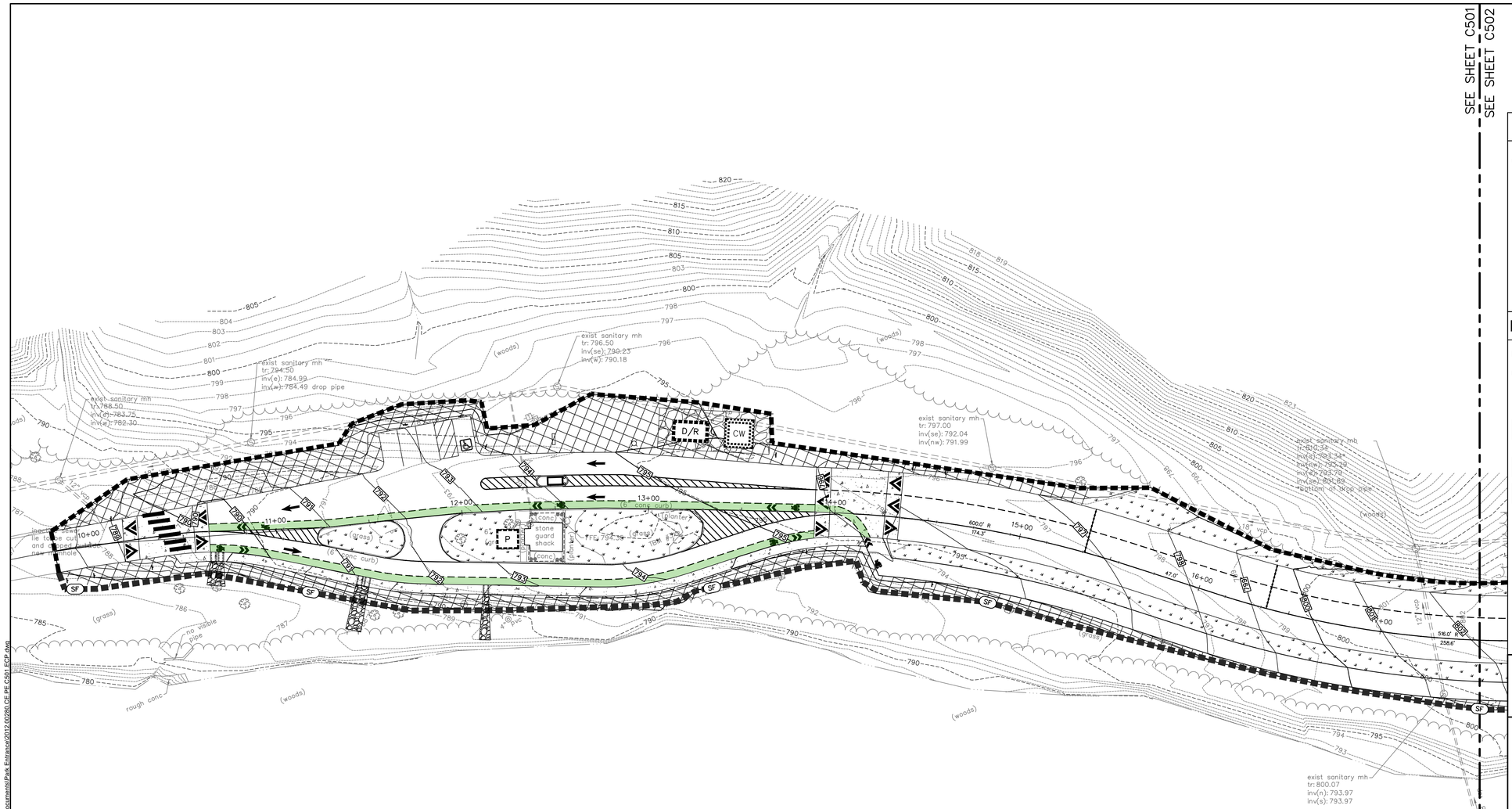
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

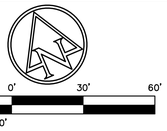
Project Number 2012.00280

ROAD PLAN AND PROFILES

C311

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.4849
EDIT DATE: 7/17/2026
EDITED BY: AQNAN
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C210 ROPP.dwg





EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush		Post
	Clean Out		Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box		Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire		TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

EROSION CONTROL LEGEND

- SF — SILT FENCE (SILT FENCE AT BOUNDARY OF THE SITE IS THE CONSTRUCTION LIMITS)
- CONSTRUCTION LIMITS
- IP — INLET PROTECTION
- AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AFTER CONSTRUCTION IS COMPLETE
- EROSION CONTROL BLANKET WITH SEEDING
- STAGING AREA
- CW — CONCRETE WASHOUT
- D/R — DUMPSTER / RECYCLING AREA
- P — PORT-O-LET
- N.O.I. — N.O.I. SIGN POSTING
- RIPRAP APRON
- ROCK CHECK DAM

OPERATORS INFORMATION (TRAINED INDIVIDUAL):

NAME:	INDIANA DNR
ADDRESS:	402 W WASHINGTON STREET, ROOM W299 INDIANAPOLIS, IN 46204
REPRESENTATIVE:	JOMARY BALLER
TELEPHONE:	(877) 463-6367

EROSION CONTROL NOTES:

1. ALL PROPOSED EROSION AND SEDIMENT CONTROLL SHALL BE IN CONFORMANCE WITH CHAPTER 600 OF THE CITY OF INDIANAPOLIS STORMWATER DESIGN AND SPECIFICATIONS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS SET FORTH IN THE MANUAL.
2. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY IDEM, MCSW, AND/OR THE CITY INSPECTOR.
3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGO SHALL REMOVE SEDIMENT FORM PUBLIC RIGHTS-OF-WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
4. SEEDING OR EROSION CONTROL STABILIZATION SHALL BE INITIATED BY THE END OF THE SEVENTH (7TH) DAY THAT AN AREA WAS LEFT IDLE. STABILIZATION MUST BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER INITIATION.
5. THE FLOODWAY LIMITS SHOULD BE STAKED PRIOR TO CONSTRUCTION. ANY DISTURBANCE WITHIN THE FLOODWAY LIMITS, OUTSIDE THE EXEMPTED OUTLET PIPE, WILL REQUIRE ADDITIONAL PERMITTING BY THE INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR).

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

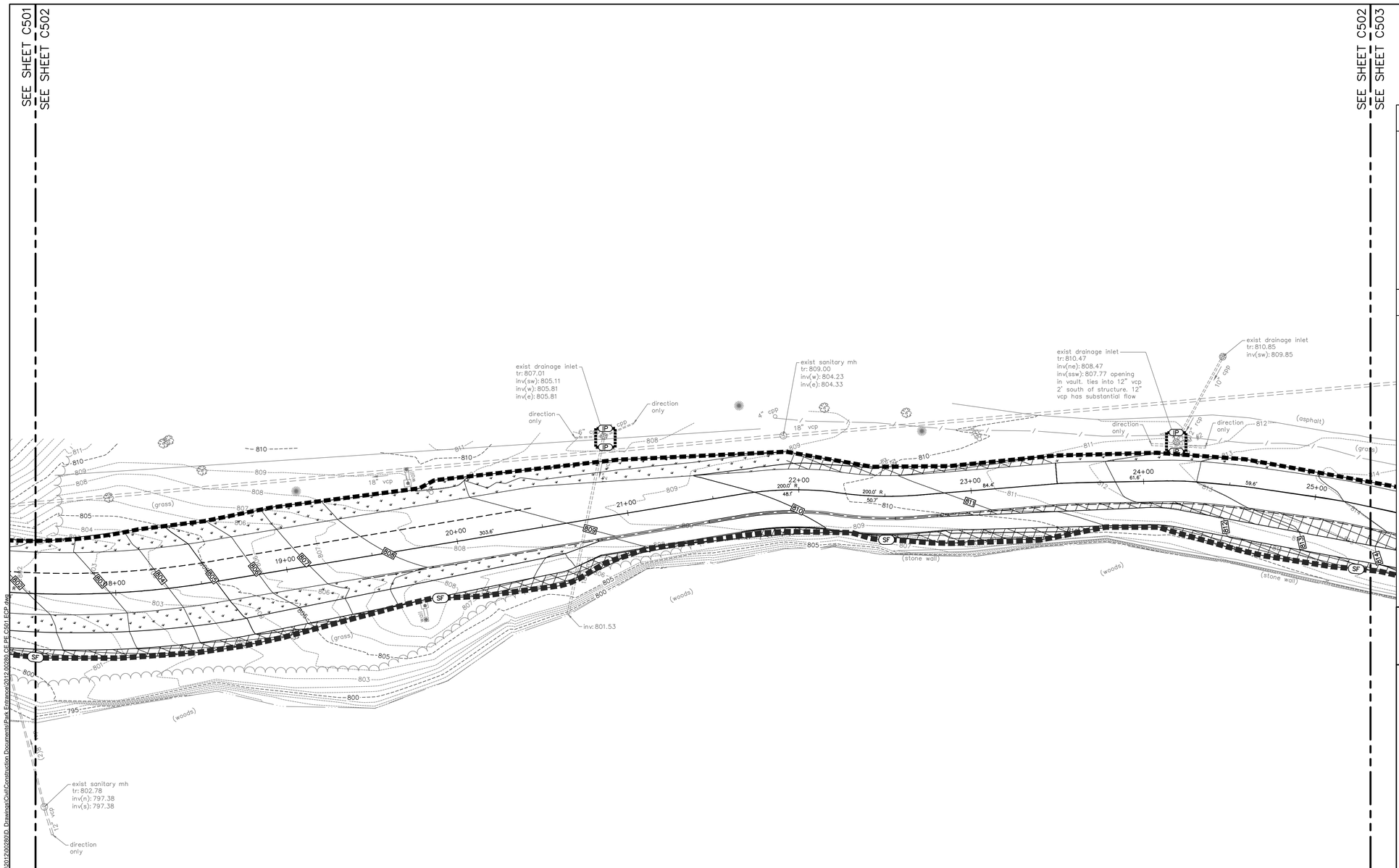
Project Number 2012.00280

EROSION CONTROL PLAN

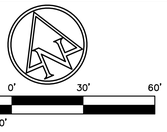
C501

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE PE C501 EOP.dwg

SEE SHEET C501
SEE SHEET C502



SEE SHEET C502
SEE SHEET C503



EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
	Electric Box	T	Telephone Handhole
	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
	Manhole	-w-	Buried Water Line
		-ohe-	Overhead Electric Line

EROSION CONTROL LEGEND

- SF — SILT FENCE (SILT FENCE AT BOUNDARY OF THE SITE IS THE CONSTRUCTION LIMITS)
- CONSTRUCTION LIMITS
- IP — INLET PROTECTION
- AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AFTER CONSTRUCTION IS COMPLETE
- EROSION CONTROL BLANKET WITH SEEDING
- STAGING AREA
- CW — CONCRETE WASHOUT
- D/R — DUMPSTER / RECYCLING AREA
- P — PORT-O-LET
- N.O.I. — N.O.I. SIGN POSTING
- RIPRAP APRON
- ROCK CHECK DAM

OPERATORS INFORMATION (TRAINED INDIVIDUAL):

NAME:	INDIANA DNR
ADDRESS:	402 W WASHINGTON STREET, ROOM W299 INDIANAPOLIS, IN 46204
REPRESENTATIVE:	JOMARY BALLER
TELEPHONE:	(877) 463-6367

EROSION CONTROL NOTES:

1. ALL PROPOSED EROSION AND SEDIMENT CONTROLL SHALL BE IN CONFORMANCE WITH CHAPTER 600 OF THE CITY OF INDIANAPOLIS STORMWATER DESIGN AND SPECIFICATIONS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS SET FORTH IN THE MANUAL.
2. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY IDEM, MCSW, AND/OR THE CITY INSPECTOR.
3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGO SHALL REMOVE SEDIMENT FORM PUBLIC RIGHTS-OF-WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
4. SEEDING OR EROSION CONTROL STABILIZATION SHALL BE INITIATED BY THE END OF THE SEVENTH (7TH) DAY THAT AN AREA WAS LEFT IDLE. STABILIZATION MUST BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER INITIATION.
5. THE FLOODWAY LIMITS SHOULD BE STAKED PRIOR TO CONSTRUCTION. ANY DISTURBANCE WITHIN THE FLOODWAY LIMITS, OUTSIDE THE EXEMPTED OUTLET PIPE, WILL REQUIRE ADDITIONAL PERMITTING BY THE INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR).

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261-8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924-3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545-5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542-0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545-6191

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

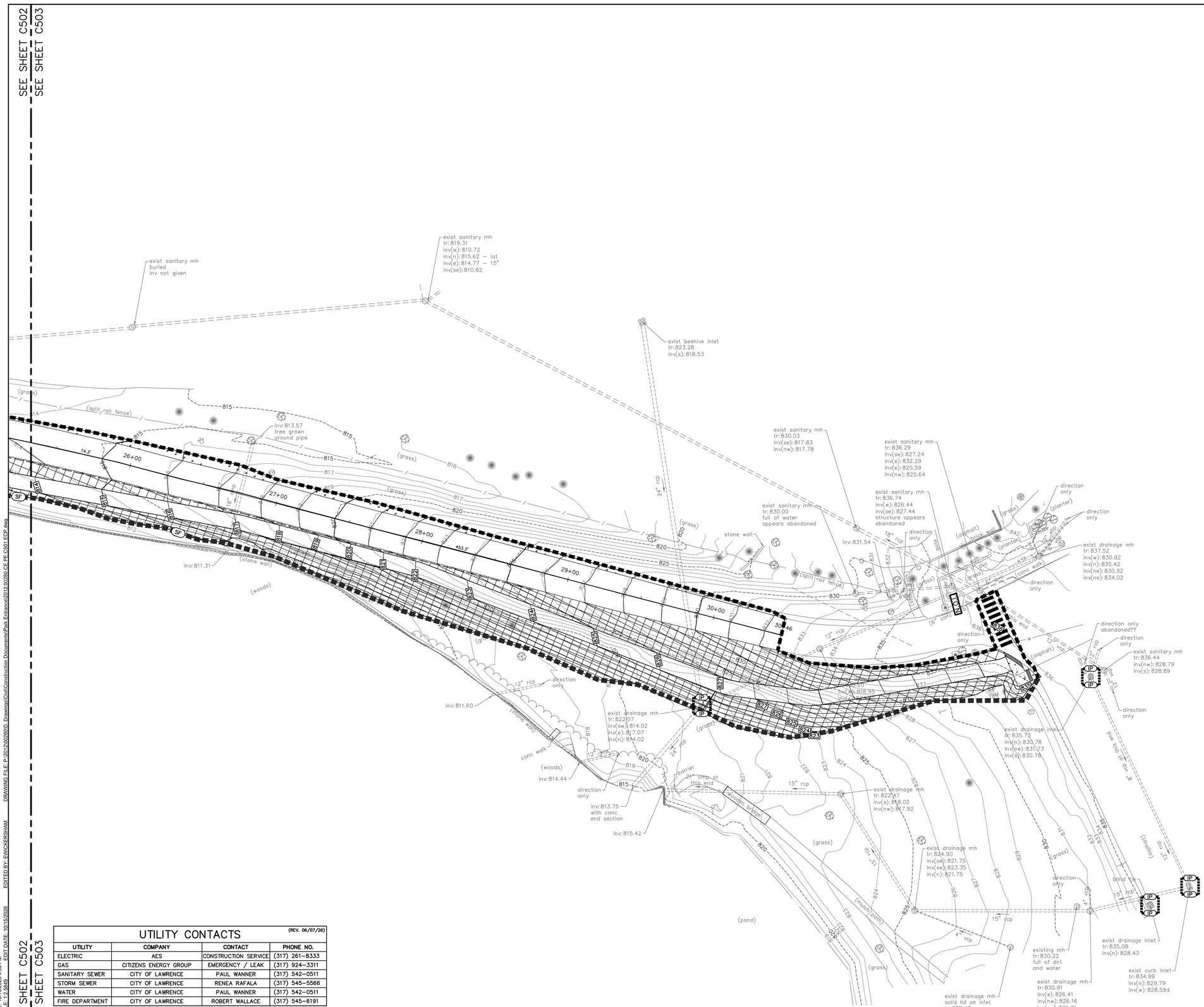
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

EROSION CONTROL PLAN

C502

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 GE FE C501 EOP.dwg



0' 30' 60'

SCALE: 1"=30'

EXISTING LEGEND

	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
G	Manhole	–w–	Buried Water Line
		–ohe–	Overhead Electric Line

EROSION CONTROL LEGEND

SF	SILT FENCE (SILT FENCE AT BOUNDARY OF THE SITE IS THE CONSTRUCTION LIMITS)
	CONSTRUCTION LIMITS
IP	INLET PROTECTION
	AREA SUBJECT TO TEMPORARY SEEDING DURING CONSTRUCTION AND PERMANENT SEEDING AFTER CONSTRUCTION IS COMPLETE
	EROSION CONTROL BLANKET WITH SEEDING
	STAGING AREA
CW	CONCRETE WASHOUT
D/R	DUMPSTER / RECYCLING AREA
P	PORT–O–LET
N.O.I.	N.O.I. SIGN POSTING
	RIPRAP APRON
	ROCK CHECK DAM

OPERATORS INFORMATION (TRAINED INDIVIDUAL):

NAME: INDIANA DNR
ADDRESS: 402 W WASHINGTON STREET, ROOM W299
INDIANAPOLIS, IN 46204
REPRESENTATIVE: JOMARY BALLER
TELEPHONE: (877) 463–6367

EROSION CONTROL NOTES:

1. ALL PROPOSED EROSION AND SEDIMENT CONTROLL SHALL BE IN CONFORMANCE WITH CHAPTER 600 OF THE CITY OF INDIANAPOLIS STORMWATER DESIGN AND SPECIFICATIONS MANUAL, LATEST EDITION. DISCREPANCIES BETWEEN THE PLANS AND THE MANUAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS SET FORTH IN THE MANUAL.
2. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY IDEM, MCSW, AND/OR THE CITY INSPECTOR.
3. PUBLIC AND PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. PROJECTS SUBJECT TO IDEM'S CSGO SHALL REMOVE SEDIMENT FORM PUBLIC RIGHTS–OF–WAY NOT EXCLUSIVE OF CONSTRUCTION TRAFFIC AT THE END OF EACH DAY PER THE CSGP REQUIREMENTS.
4. SEEDING OR EROSION CONTROL STABILIZATION SHALL BE INITIATED BY THE END OF THE SEVENTH (7TH) DAY THAT AN AREA WAS LEFT IDLE. STABILIZATION MUST BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER INITIATION.
5. THE FLOODWAY LIMITS SHOULD BE STAKED PRIOR TO CONSTRUCTION. ANY DISTURBANCE WITHIN THE FLOODWAY LIMITS, OUTSIDE THE EXEMPTED OUTLET PIPE, WILL REQUIRE ADDITIONAL PERMITTING BY THE INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR).

GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1–800–382–5544
– INDIANA UNDERGROUND –

UTILITY CONTACTS

(REV. 06/07/26)

UTILITY	COMPANY	CONTACT	PHONE NO.
ELECTRIC	AES	CONSTRUCTION SERVICE	(317) 261–8333
GAS	CITIZENS ENERGY GROUP	EMERGENCY / LEAK	(317) 924–3311
SANITARY SEWER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
STORM SEWER	CITY OF LAWRENCE	RENEA RAFALA	(317) 545–5566
WATER	CITY OF LAWRENCE	PAUL WANNER	(317) 542–0511
FIRE DEPARTMENT	CITY OF LAWRENCE	ROBERT WALLACE	(317) 545–6191

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

EROSION CONTROL PLAN

C503

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.3849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CTE PE C503 ECP.dwg

SITE NAME

The area scheduled for construction is known as "Fort Harrison State Park Entrance Improvements" (hereinafter referred to as the "Project").

PROJECT LOCATION

The property is located at 6000 N Post Rd., between N Post Rd. and Clark Rd. along Shafter Rd. in Lawrence, Indiana.

NOTICE OF INTENT

All parties defined as owners or operators must submit a Construction Stormwater General Permit (CSGP) at least 48 hours prior to commencement of on-site construction activities. Submittal of late CSGP's is not prohibited; however, authorization under the construction general permit is only for discharges that occur after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the EPA. For the purposes of this permit, an operator is defined as any party meeting either of the following requirements:

a) The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.
b) The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions.

A1 INDEX OF THE LOCATION OF REQUIRED PLAN ELEMENTS IN THE CONSTRUCTION PLAN:

Refer to the Sheet Index on the Title Sheet.

A2 VICINITY MAP DEPICTING THE PROJECT SITE LOCATION IN RELATIONSHIP TO RECOGNIZABLE LOCAL LANDMARKS, TOWNS, AND MAJORE ROADS:

Refer to the Title Sheet for the Vicinity Map.

A3 NARRATIVE OF THE NATURE AND PURPOSE OF THE PROJECT:

This project consists of the construction of a paved path along Shafter Rd, a mill and resurface of the road, a pad for a secondary gatehouse, and associated infrastructure.

A4 LATITUDE AND LONGITUDE TO THE NEAREST FIFTEEN (15) SECONDS:

The project is located at a latitude of 39°51'45.29" N and a longitude of 86°0'39.66".

A5 LEGAL DESCRIPTION OF THE PROJECT SITE:

The site is located in NE Quarter, Section 06, Township 16 N, Range 5 E in 2nd Principal Meridian Township.

A6 11x17-INCH PLAT SHOWING BUILDING LOT NUMBERS/BOUNDARIES AND ROAD LAYOUT/NAMES:

Refer to the Overall Site Plan, not to scale.

A7 BOUNDARIES OF THE ONE HUNDRED (100) YEAR FLOODPLAINS, FLOODWAY FRINGES, AND FLOODWAYS:

Refer to Title Sheet. The project is located in a 100 Year Floodplain, Floodway Fringe, or Floodway as indicated on the Marion, IN, Flood Insurance Rate Map 18097C0160F dated April 19, 2016.

A8 LAND USE OF ALL ADJACENT PROPERTIES:

North: Recreational (Golf Course)
East: Institutional (Government)
South: Commercial, Residential, Recreational (State Park)
West: Recreational (State Park)

A9 IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL:

There are identified pollutants for this project's watershed per the available TMDL Reports. The identified pollutant is E. coli.

A10 NAME(S) OF THE RECEIVING WATER(S):

Lawrence Creek is the receiving water of the project.

A11 IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303(D) LIST OF IMPAIRED WATERS AND THE POLLUTANT(S) FOR WHICH IT IS IMPAIRED:

The receiving water of this project is not on the current 303(d) List of Impaired Waters.

A12 SOILS MAP OF THE PREDOMINATE SOIL TYPES:

Refer to the Title Sheet. The on-site soil will be treated as recommended by the geotechnical engineer if the conditions are unsuitable for the proposed construction. Remedial treatments may include, but are not limited to, removal of unsuitable soil and backfilling with engineered material, installation of a geofabric within or under the pavement system, or treatment of the subgrade with lime.

A13 IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE (CONSTRUCTION PLAN, EXISTING SITE LAYOUT):

Refer to the Existing Topography Plan. There are not wetlands, lakes, or water courses on or adjacent to this site.

A14 IDENTIFICATION OF ANY OTHER STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORIZATIONS THAT ARE REQUIRED FOR CONSTRUCTION ACTIVITIES:

Construction in a Floodway from DNR
CSGP from IDEM

A15 IDENTIFICATION AND DELINEATION OF EXISTING COVER, INCLUDING NATURAL BUFFERS:

Refer to the Existing Topography Plan. There are not required natural buffers.

A16 EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS:

Refer to the Existing Topography Plan.

A17 LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE:

Refer to the Existing Topography Plan. Offsite stormwater sheet flows onto the site from the adjacent golf course to the north and sheet flows south toward Lawrence Creek along the southern border of the site.

A18 LOCATION(S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE:

Refer to the Existing Topography Plan. The project's stormwater discharges from the site via sheet flow to Lawrence Creek along the southern boundary of the project.

A19 LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE:

Refer to the Demolition Plan. There are existing buildings, ponds, or other infrastructure on the project site.

A20 EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PURPOSE OF STORMWATER MANAGEMENT:

Refer to the Demolition Plan. There are not existing permanent retention or detention facilities.

A21 LOCATIONS WHERE STORMWATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER, SUCH AS ABANDONED WELLS, SINKHOLES, OR KARST FEATURES:

Refer to the Existing Topography Plan. There are not locations where stormwater may be directly discharged into groundwater.

A22 SIZE OF THE PROJECT AREA EXPRESSED IN ACRES:

Refer to the Existing Topography Plan. The project area is ±3.14 acres.

A23 TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES:

Refer to the Grading Plan. The disturbed area is ±3.14 acres.

A24 PROPOSED FINAL TOPOGRAPHY:

Refer to the Grading Plan for the proposed grading of the project.

A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS:

Refer to the Erosion Control Plan for construction limits.

A26 LOCATIONS, SIZE, AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEM SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNELS:

Refer to the Grading Plan for the locations, size and dimensions of the proposed stormwater drainage system.

A27 LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE:

Refer to the Grading Plan for where stormwater discharges from the site. The discharge points for this site are located along the south boundary into Lawrence Creek.

A28 LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS:

Refer to the Site Plan for the location of all site improvements.

A29 LOCATION OF ALL ON-SITE AND OFF-SITE SOIL STOCKPILES AND BORROW AREAS:

There are no soil stockpiles planned for this project.

A30 CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT:

Refer to the Erosion Control Plan for location of staging area, concrete washout, port-o-let, dumpster, etc.

A31 LOCATION OF ANY IN-STREAM ACTIVITIES THAT ARE PLANNED FOR THE PROJECT INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS AND PUMP AROUNDS:

Refer to the Grading Plan. There are not any in-stream activities planned as part of this project.

B1 DESCRIPTION OF POTENTIAL POLLUTANT GENERATING SOURCES AND POLLUTANTS, INCLUDING ALL POTENTIAL NON-STORMWATER DISCHARGES:

The following potential pollutant sources may be associated with construction activities on site:

- Material storage areas (more specifically described below)
- Construction waste material
- Fuel storage areas and fueling stations
- Exposed soils
- Leaking vehicles and equipment
- Sanitary waste from temporary toilet facilities
- Litter
- Windblown dust
- Soil tracking off site from construction equipment

The following construction materials may be staged or stored on site at various points during development of the site:

- Structural fill
- Pavement Base Stone
- HDPE, HP, PVC, RCP or Ductile Iron pipe
- Precast concrete, HDPE or PVC drainage and sanitary structures
- Rock rip-rap

B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS:

A stabilized construction entrance is not provided due to the linear nature of the project. Construction access will occur from existing paved roadways along project corridor. Sediment tracking will be minimized through routine inspection and sweeping and removal of tracked material as necessary.

B3 SPECIFICATIONS FOR TEMPORARY AND PERMANENT STABILIZATION:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. Surface stabilization is required on any bare or thinly vegetated area that is scheduled or likely to remain inactive for a period of 15 days or more. Refer to the Temporary and Permanent Seeding Details for specifics on soil amendments, seed mixtures and mulching.

B4 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. Proposed swales will be stabilized with erosion control blankets and rock check dams & rock donuts will be installed to slow runoff to inlets/end sections. Straw bales and silt fences will not be allowed as concentrated flow protection measures.

B5 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. Sheet flow areas will be protected by seed and mulch or hydroseeding. Erosion control blankets will be installed on sloped areas where the slope exceeds 6:1 (horizontal to vertical). Silt Fencing will be utilized to prevent sedimentation from leaving the site.

B6 RUN-OFF CONTROL MEASURES:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. This project includes the use of rock check dams.

B7 STORMWATER OUTLET PROTECTION LOCATION AND SPECIFICATIONS:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. Stormwater outlets will be protected by riprap aprons (Riprap Outlet Protection) to prevent scour erosion.

B8 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS:

Refer to the Erosion Control Plan for location and Erosion Control Details for details/specifications. This project does not utilize grade stabilization measures. These measures include rock chutes, toe wall, and drop structures.

B9 DEWATERING APPLICATIONS AND MANAGEMENT METHODS:

Refer to the Erosion Control Details for details/specifications of dewatering.

Installation
- Locate the desired outflow location for the dewatering system and coordinate the filter and stabilization method to be used with the installer.
- Construct a secondary containment BMP such as a rock filter berm or sediment trap near the waterway.
- Place filter bag on a flat stable surface outside of the waterway.
- Place filter bag in a location that can be removed efficiently without causing damage or losing sediment.

Inspection
- Inspect daily during dewatering operations.
- Inspect the filter location and condition for necessary repair.
- Review the piping system for leakage, kinks and conditions for needed repair.
- Inspect the filer bag for tears and sediment and water capacity.
- Look for erosion between filter bag and waterway.

Maintenance
- Repair any pumps damaged or not operating properly.
- Repair or replace filters that exhibit leakage or failure.
- Filters may need to be replaced when they become laden with sediment.
- Repair or replace leaking or damaged piping.
- Repair eroded areas and stabilize.

B10 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES:

There is not any work within waterbodies for this project.

B11 MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE:

Inspection Schedule/Reporting
All impacted areas, as well as all erosion and sediment control devices, will be inspected every seven (7) calendar days and within 24 hours after a rainfall of 0.5 inch or greater. Where sites have been final or temporarily stabilized or on sites where runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), such inspections shall be conducted at least once every month.

Inspections shall be conducted and a written report prepared, by a designated and qualified person familiar with the USEPA NPDES Storm Water General Permit, this SWP3, and the Project.

Inspection reports shall be completed including scope of the inspection, name(s) and qualifications of personnel making the inspection, the date of the inspection, observations relating to the implementation of the SWP3, and any actions taken as a result of incidents of noncompliance noted during the inspection. The inspection report should state whether the site was in compliance or identify any incidents of noncompliance. The contractor shall keep a copy of the inspection reports on site and permanently for a period of two years following construction. The on-site reports may be requested by inspections conducted by the local governing authority.

Site Entrance
Locations where vehicles exit the site shall be inspected for evidence of off-site sediment tracking. Each contractor and subcontractor shall be responsible for sweeping and removal of tracked material as described in this SWP3.

Material Storage Inspections
Inspectors must evaluate areas used for storage of materials that are exposed to precipitation. The purpose is to ensure that materials are protected and/or impounded so that pollutants cannot discharge from storage areas. Off-site material storage areas used solely by the subject project are considered to be part of the project and must be included in the erosion control plans and the site inspection reports.

Soil Stabilization Inspections
Seeded areas will be inspected to confirm that a healthy stand of vegetation is maintained. The site has achieved final stabilization once all areas are covered with pavement or have a stand of vegetation with at least 70% of the background vegetation density. The density of 70% or greater must be maintained to be considered as stabilized. The operator or their representative will water, fertilize, and reseed disturbed areas as needed to achieve this goal.

Erosion and Sediment Control Inspections
All controls should be inspected at least once every seven (7) calendar days and following any storm event of 0.5 inch or greater. The following is a list of inspection/maintenance practices that will be used for specific controls:

1. Geotextiles/Erosion Control Mats: Missing or loose matting must be replaced or re-anchored.
2. Inlet Protection: If silt fence inlet protection is to be used, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.
3. Diversion Swales: Clean debris or other obstructions as needed. Damage from storms or normal construction activities (i.e., tire ruts) shall be repaired immediately.
4. Mulching: Inspect for thin or bare spots caused by natural decomposition or weather-related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.
5. Sediment Trap: Accumulated silt shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
6. Sediment Basin: Inspect frequently to check for damage and to ensure obstructions are not diminishing the effectiveness of the structures. Sediment shall be removed and the basin shall be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to 20% of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas that are protected from erosion.
7. Silt Fence: Removal of built-up sediment will occur when the sediment reaches one-third the height of the fence.
8. Straw Bales: Replace straw bales that show signs of deterioration.
9. Vegetation: Protect newly seeded areas from excessive runoff and traffic until vegetation is established. Establish a watering and fertilizing schedule.
10. Good Housekeeping: Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges through screening of outfalls and daily pickup of litter.

In the event that sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize adverse impacts. An example of this may be the situation where sediment has washed into the street and could be carried into the storm sewers by the next rainfall and/or pose a safety hazard to users of public streets.

Modifications/Revisions to SWP3
Based on inspection results, any necessary modification to this SWP3 shall be implemented within seven calendar days of the inspection. A modification is necessary if a control measure or operational procedure does not provide adequate pollutant control. All revisions shall be recorded on a Record of Revisions within seven calendar days of the inspection.

It is the responsibility of the operator to maintain effective pollutant discharge controls. Physical site conditions or contractor/subcontractor practices could make it necessary to install more controls than were originally planned. For example, localized concentrations of surface runoff or unusually steep areas could require additional silt barrier or other structural controls. Assessing the need for and installing additional controls will be a continuing contractor/subcontractor responsibility until final stabilization is achieved. Contractors and subcontractors implementing this SWP3 must remain alert to the need to periodically refine and update this SWP3 in order to accomplish the intended goals.

Notice of Termination
Compliance of the site with the CSGP remains the responsibility of all operators that have submitted a CSGP until such time as they have submitted a Notice of Termination (NOT). The permittee's authorization to discharge under the CSGP terminates at midnight of the day the NOT is signed.

All permittees must submit an NOT within thirty (30) days after one or more of the following conditions have been met:

1. Final stabilization has been achieved on all portions of the site for which the permittee was responsible.
2. Another operator/permittee has assumed control over all areas of the site that have not been finally stabilized.
3. In residential construction operations, temporary stabilization has been completed and the residence has been transferred to the homeowner.

B12 PLANNED CONSTRUCTION SEQUENCE THAT DESCRIBES THE IMPLEMENTATION OF STORMWATER QUALITY MEASURES IN RELATION TO LAND DISTURBANCE:

Preconstruction Activity
- The exact locations of all existing utilities within the project limits are to be verified prior to construction.
- Schedule pre-construction meeting with local stormwater authority.
- Install protection fencing for existing trees to remain in place within the project limits.
- Install protection fencing for existing karst in areas adjacent to project limits.

Construction Site Access
- Post the NOI at the location specified on the Erosion Control Plan.
- Install construction staging pads, fueling station, material storage areas, concrete washout, construction parking areas and stabilize construction routes.

Perimeter Controls
- Install the perimeter silt fence. Add stone if needed.

Initial Land Clearing and Grading Activities
- Add protection measures to existing inlets.
- Strip the topsoil and stabilize the topsoil stockpile.

Secondary Land Grading Activities
- Begin site grading/construction of detention basins and stabilize any soil stockpiles that will be left dormant for more than 15 days.
- Complete the cut and fills on the site. Final grade and seed the pond slopes. Install check dams and stabilize slopes with erosion control blankets.
- Install storm sewer system and install inlet protection immediately upon completion of the inlet and install riprap outlet protection prior to installing outlets.

Surface Stabilization
- Apply temporary seeding and stabilize slopes in areas where rough grading has been completed.
- Apply permanent seeding and stabilize slopes in areas where final grading has been completed.

Building Construction
- Prior to building construction install stone surface for paved areas.
- Building pads left dormant for more than 10 days, must be temporarily seeded.
- Start building construction. Install staging area for building materials and stabilize.

Final Shaping/Landscaping
- Utilize topsoil salvage in applicable areas and apply permanent seeding.
- Apply permanent seeding the perimeter of the site.
- Complete utility installation, curbs, paving and building construction.
- Install landscaping plant material and stabilize all disturbed areas.
- Remove all erosion and sediment control practices when areas have a uniform grass cover.

B13 PROVISIONS FOR EROSION AND SEDIMENT CONTROL ON INDIVIDUAL RESIDENTIAL BUILDING LOTS REGULATED UNDER THE PROPOSED PROJECT:

This section does not apply to this project.

B14 MATERIAL HANDLING AND SPILL PREVENTION AND SPILL RESPONSE PLAN MEETING THE REQUIREMENT IN 327 IAC 2-6.1:

Material Handling and Spill Prevention
Discharge of hazardous substances or oil into stormwater is subject to reporting requirements. In the event of a spill of a hazardous substance, the operator is required to notify the National Response Center (1-800-424-8802) to properly report the spill. In addition, the operator shall submit a written description of the release (including the type and amount of material released, the date of the release, the circumstances of the release, and the steps to be taken to prevent future spills) to the local governing authority. The SWP3 must be revised within 14 calendar days after the release to reflect the release, stating the information above along with modifications to minimize the possibility of future occurrences. Each contractor and subcontractor is responsible for complying with these reporting requirements.

Spill Response Plan
Minor – Small spills that typically involve oil, gasoline, paint, hydraulic fluid, etc., can be controlled by the first responder at the discovery of the spill.
- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spill material and any subsequently contaminated soil and dispose of properly.

Semi-Significant Spills – Approximately ten gallons or less of pollutant with no contamination of ground or surface waters. Minor spills can typically be managed by the first responder with help from other site personnel. This response may require other operations to stop to make sure the spill is quickly and safely addressed. At the discovery of the spill:
- Contain spill to prevent material from entering storm or ground water. Do not flush with water or bury.
- Use absorbent material to clean-up spills and dispose of properly. Spills on impervious surfaces should be disposed of as soon as possible to prevent migration deeper into the soil and groundwater. Dispose of contaminated soils or absorbents properly.
- Contact 911 if the spill could be a safety issue.
- Contact supervisors and designated site inspectors immediately.
- Contaminated solids are to be removed to an approved landfill.

Major or Hazardous Spills – More than ten gallons, there is the potential for death, injury or illness to humans or animals, or has the potential for surface or groundwater pollution.
- Control or contain the spill without risking bodily harm. Temporarily plug storm drains if possible to prevent migration of the spill into the stormwater systems.
- Immediately contact the local Fire Department at 911 to report any hazardous material spill.
- Contact supervisors and designated site inspectors immediately. Governing authorities responsible for storm water facilities should be contacted as well. The contractor is responsible for having these contact numbers available at the job site. A written report should be submitted to the owner as soon as possible.
- As soon as possible but within 2 hours of discovery, contact the local agency responsible for spill management. The following information should be noted for future reports to the agency:
  - Name, address and phone number of person making the spill report
  - The location of the spill
  - The time of the spill
  - Identification of the spilled substance
  - Approximate quantity of the substance that has been spilled or may be further spilled
  - The duration and source of the spill
  - Name and location of the damaged waters
  - Name of spill response organization
  - What measures were taken in the spill response
  - Other information that may be significant

Additional regulations or requirements may be present. A spill response professional should be consulted to make sure all appropriate and required steps have been taken. Contaminated solids should only be removed from the site after approval is given by the appropriate agency.

B15 MATERIAL HANDLING AND STORAGE PROCEDURES ASSOCIATED WITH CONSTRUCTION ACTIVITY:

Solid Waste Disposal
No solid material, including building materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials, including disposable materials incidental to the construction activity, must be collected in containers or closed dumpsters. The collection containers must be emptied periodically and the collected material hauled to a landfill permitted by the State and/or appropriate local municipality to accept the waste for disposal.

A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper solid waste procedures.

Dust Control/Off-Site Vehicle Tracking

During construction, water trucks should be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the site should be stabilized to reduce dust.

Construction traffic should enter and exit the site at a Site Entrance with a rock pad or equivalent device. The purpose of the rock pad is to minimize the amount of soil and mud that is tracked onto existing streets. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts.

Hazardous Material Storage & Waste

Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials will be disposed in the manner specified by federal, state, or local regulations or by the manufacturer.

Chemicals, paints, solvents, fertilizers, and other toxic or hazardous materials should be stored in their original containers (if original container is not resealable, store the products in clearly labeled, waterproof containers). Except during application, the containers should be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site, and disposed of in accordance with the federal, state, and local regulations. Use containment berms in fueling and maintenance areas and where potential for spills is high.

As may be required by federal, state or local regulations, the Contractor should have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. A foreman or supervisor should be designated in writing to oversee, enforce, and instruct construction workers on proper hazardous materials storage and handling procedures. The location of any hazardous material storage areas should be indicated on the stormwater pollution prevention plan by the operator following on-site location of the storage areas.

Sanitary/Septic
Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet, or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities should be utilized by all construction personnel and be serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors. The location of any sanitary facilities should be indicated on the stormwater pollution prevention plan by the operator following on-site location of said facilities.

Water Source
Water used to establish and maintain grass, to control dust, and for other construction purposes must originate from a public water supply or private well approved by the State or local health department.

Equipment Fueling and Storage Areas
Equipment fueling, maintenance, and cleaning should only be completed in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids will be collected and not allowed to discharge onto soil where they may be washed away during a rain event.

Equipment wash down (except for wheel washes) should take place within an area surrounded by a berm. The use of detergents is prohibited.

Concrete Washout
All concrete trucks waste material shall be completely contained and disposed in accordance with all local, state, and federal regulations. A pit or container is required when cleaning concrete chutes.

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE:

The proposed land use is an entry to Fort Benjamin Harrison State Park. The pollutants and sources of each pollutant normally expected from this type of land use are listed below:

Pollutant Source: Passenger vehicles, delivery vehicles
Type of Pollutant: Oil, gasoline, diesel fuel, any hydrocarbon associated with vehicular fuels and lubricants, grease, antifreeze, windshield cleaner solution, brake fluid, brake dust, rubber, glass, metal and plastic fragments, grit, road de-icing materials.

Pollutant Source: Building
Type of Pollutant: Cleaning solutions or solvents, leaks from HVAC equipment, grit from roof drainage, aggregate or rubber fragments from roofing system.

Pollutant Source: Trash dumpster
Type of Pollutant: Cleaning solutions or solvents, litter (paper, plastic, general refuse associated with distribution operations), uneaten food products, bacteria.

Pollutant Source: Parking lot
Type of Pollutant: Any pollutant associated with vehicular sources, grit from asphalt wearing surface, bituminous compounds from periodic maintenance (sealing, resurfacing and patching), pavement de-icing materials, paint fragments from parking stall stripes, concrete fragments, wind-blown litter from off-site sources, elevated water temperatures from contact with impervious surfaces.

Pollutant Source: Lawn and landscape areas
Type of Pollutant: Fertilizers, soil, organic material (leaves, mulch, grass clippings)

C2 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES:

This project was designed to meet local run-off rates per the City of Lawrence. These reduced run-off rates ensure the post-development run-off discharge is less than the pre-development discharge. Below is a summary of the proposed post-construction stormwater measures used to meet these rates.

Vegetated Swale: Vegetated swales are designed to reduce pollutants and sediment loads in storm water runoff. Storm water runoff is directed into the swale which conveys the runoff from the site. While moving through the swale, runoff velocity is greatly descreased allowing biofiltration (uptake of nutrients by plants), infiltration (percolation of water through the swale's porous soil substrate), and sedimentation (settling out of later suspended particles.)

Permanent Vegetation: Topsoil will be placed in lawn areas and seeded with grass, and graded not to exceed 3:1 slopes. Proposed landscape trees and shrubs will also be added. These Bio areas will act as a natural filter strip to help improve storm water quality. The vegetated areas will slow the velocities of storm water runoff, reduce sediment runoff, and reduce problems associated with mud or dust from bare soils.

Good Housekeeping Measures
Good Housekeeping measures such as regular street sweeping, installation of trash receptacles, and reduction in fertilizer overspray can be incorporated by the owner and/or occupant.

C3 PLAN DETAILS FOR EACH STORMWATER MEASURE:

Refer to the Erosion Control Plan for location of the stormwater measures in Section C2.

C4 SEQUENCE DESCRIBING STORMWATER MEASURE IMPLEMENTATION:

Refer to Section B12 for sequence steps.

Vegetated Swale: The swales are to be graded in the Secondary Land Grading Activities after the downstream inlet and/or water quality measure is established. and temporarily stabilized as part of Surface Stabilization. Upon completion of site grading, Final Shaping/Landscaping should take place to ensure positive drainage/slope and adequate surface cover is established.

Permanent Vegetation: The permanent vegetation is to be installed as part of the Final Shaping/Landscaping step to ensure positive drainage and adequate ground cover without disturbance from construction activities. Temporary vegetation should be maintained throughout preceding steps..

C5 MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORMWATER QUALITY MEASURES:

Maintenance requirements for the stormwater quality measures which will remain in place after construction is complete, are described below. Refer to the BMP Operations and Maintenance Manual for more detailed maintenance requirements.

Vegetated Swale: Vegetated swales require little maintenance if properly designed. Mow as needed during the growing season; inspect for erosion problems twice during the first year, annually thereafter; and remove sediment, trash and debris annually or more frequently if needed.

C6 ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STOMWATER MEASURES:

Owner's Information:
Name: Indiana Department of Natural Resources
Address: 402 W Washington Street, Room W299
Indianapolis, IN 46204
Representative: Jamary Baller
Title: Project Manager
Telephone: (877) 463-6367

Operator's Information (Trained Individual)
Name: Indiana Department of Natural Resources
Address: 402 W Washington Street, Room W299
Indianapolis, IN 46204
Representative: Jamary Baller
Title: Project Manager
Telephone: (877) 463-6367

DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012 00280 CE PE C510 SWPPP.dwg
EDITED BY: ADNAN
PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1-2.3849
EDIT DATE: 7/17/2026

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

NATHANF. WINSLOW
REGISTERED
No.
11500408
STATE OF
INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

STORM WATER POLLUTION PREVENTION PLAN

C510

SPECIFICATIONS

NOTE: ALTERNATIVE SUPPORT SYSTEMS MAY BE SUBSTITUTED FOR HARDWOOD POSTS AND CROSS BRACES.

CONTRIBUTING DRAINAGE AREA
- ONE ACRE MAXIMUM.

EFFECTIVE LIFE
- SIX MONTHS (MAXIMUM).

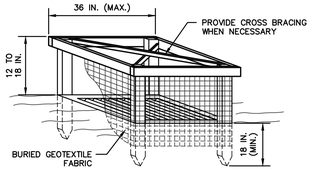
CAPACITY
- RUNOFF FROM A TWO-YEAR FREQUENCY, 24-HOUR STORM EVENT ENTERING A STORM DRAIN WITHOUT BYPASS FLOW.

GEOTEXTILE STRUCTURE
- HEIGHT – 12 TO 18 INCHES, MEASURED FROM THE TOP OF STORM DRAIN INLET.
- POST SPACING – 36-INCH MAXIMUM SPACING BETWEEN POSTS.
- FRAME SUPPORT – BRACING TO STRENGTHEN INTEGRITY OF THE STRUCTURE. (STRUCTURE MUST WITHSTAND ½-FOOT HEAD OF WATER AND SEDIMENT WITHOUT COLLAPSING OR WITHSTANDING.)

MATERIALS
- SUPPORT POSTS
  - 2 x 2 INCH OR 2 x4 INCH HARDWOOD POSTS.
  - THREE FEET LENGTH, MINIMUM.
- 1 x 2 INCH OR 1 x 3 INCH HARDWOOD CROSS BRACING LUMBER.
- LATHE.
- STAPLES OR NAILS.
- GEOTEXTILE FABRIC.

TABLE 2. GEOTEXTILE FABRIC SPECIFICATIONS FOR SILT FENCE (MINIMUM)

PHYSICAL PROPERTY	WOVEN GEOTEXTILE FABRIC	NON-WOVEN GEOTEXTILE FABRIC
FILTERING EFFICIENCY	85%	85%
UV RESISTANCE (INHIBITORS AND STABILIZERS TO ENSURE SIX MONTH MINIMUM LIFE AT TEMPERATURES 0° TO 120° F)	70%	85%
TEXTILE STRENGTH AT 20% ELONGATION STANDARD STRENGTH EXTRA STRENGTH	 30 LBS. PER LINEAL INCH 50 LBS. PER LINEAL INCH	 50 LBS. PER LINEAL INCH 70 LBS. PER LINEAL INCH
SLURRY FLOW RATE	0.3 GAL./MIN./SQUARE FOOT	4.5 GAL./MIN./SQUARE FOOT
WATER FLOW RATE	15 GAL./MIN./SQUARE FOOT	220 GAL./MIN./SQUARE FOOT

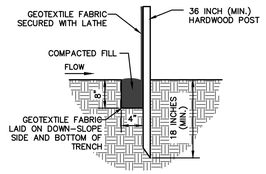


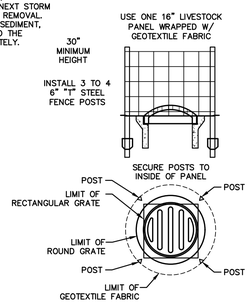
INSTALLATION
1. DIG AN EIGHT-INCH DEEP, FOUR-INCH WIDE TRENCH AROUND THE PERIMETER OF THE INLET.
2. IF USING PRE-ASSEMBLED GEOTEXTILE FABRIC AND POSTS, DRIVE THE POSTS INTO THE SOIL, TIGHTLY STRETCHING THE GEOTEXTILE FABRIC BETWEEN POSTS AS EACH IS DRIVEN. (POSTS MUST BE PLACED ON THE INLET SIDE OF THE ANCHOR TRENCH WITH THE GEOTEXTILE FABRIC ON THE SIDE OF THE TRENCH FARTHEST FROM THE INLET.)

   NOTE: IF ASSEMBLING THE GEOTEXTILE FABRIC AND POSTS ON-SITE, DRIVE THE POSTS INTO THE SOIL AND THEN SECURE THE GEOTEXTILE FABRIC TO THE POSTS BY PLACING A PIECE OF LATHE OVER THE FABRIC AND FASTENING IT TO THE POST (STRETCHING THE FABRIC BETWEEN POSTS AS IT IS FASTENED).
3. USE THE WRAP JOIN METHOD WHEN JOINING POSTS.
4. PLACE THE BOTTOM 12 INCHES OF GEOTEXTILE FABRIC INTO THE EIGHT-INCH DEEP TRENCH, LAYING THE REMAINING FOUR INCHES IN THE BOTTOM OF THE TRENCH AND EXTENDING AWAY FROM THE INLET.
5. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.
6. BRACE THE POSTS BY NAILING BRACES INTO EACH CORNER POST OR UTILIZE RIGID PANELS TO SUPPORT FABRIC.

   NOTE: IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER:
   - SET THE TOP OF THE GEOTEXTILE FABRIC FILTER AT LEAST SIX INCHES LOWER THAN THE GROUND ELEVATION ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET,
   - BUILD A TEMPORARY DIKE, COMPACTED TO SIX INCHES HIGHER THAN THE FABRIC, ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR
   - USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTION.

MAINTENANCE
- INSPECT DAILY.
- INSPECT GEOTEXTILE FABRIC AND MAKE NEEDED REPAIRS IMMEDIATELY.
- REMOVE SEDIMENT FROM POOL AREA TO PROVIDE STORAGE FOR THE NEXT STORM EVENT. AVOID DAMAGING OR UNDERCUTTING FABRIC DURING SEDIMENT REMOVAL.
- WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE SEDIMENT, PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL, GRADE AREA TO THE ELEVATION OF THE STORM DRAIN INLET TOP, THEN STABILIZE IMMEDIATELY.





NOTE: THIS MEASURE IS NOT RECOMMENDED FOR PAVED SURFACES DUE TO INABILITY TO ENTRENCH THE FABRIC AND LACK OF AN ANCHORING SYSTEM.

SILT FENCE INLET PROTECTION
NOT TO SCALE (REV. 01/17)

SPECIFICATIONS

DRAINAGE AREA
- LIMITED TO ONE-QUARTER ACRE PER 100 LINEAR FEET OF FENCE.
- FURTHER RESTRICTED BY SLOPE STEEPNESS (SEE TABLE 1).

EFFECTIVE LIFE
- SIX MONTHS (MAXIMUM).

LOCATION
- INSTALLED PARALLEL TO THE SLOPE CONTOUR.
- MINIMUM OF 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A BROAD, SHALLOW SEDIMENT POOL.
- ACCESSIBLE FOR MAINTENANCE (REMOVAL OF SEDIMENT AND SILT FENCE REPAIR).

SPACING

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

PERCENT SLOPE		MAXIMUM DISTANCE
< 2%	< 50:1	100 FEET
2% – 5%	50:1 TO 20:1	75 FEET
5% – 10%*	20:1 TO 10:1	50 FEET
10% – 20%*	10:1 TO 5:1	25 FEET
> 20%	> 5:1	15 FEET

*CONSIDER OTHER ALTERNATIVES.

NOTE: MULTIPLE ROWS OF SILT FENCE ARE NOT RECOMMENDED ON THE SAME SLOPE.

TRENCH
- DEPTH: EIGHT INCHES MINIMUM.
- WIDTH: FOUR INCHES MINIMUM.
- AFTER INSTALLING THE FENCE, BACKFILL WITH SOIL MATERIAL AND COMPACT (TO BURY AND ANCHOR THE LOWER PORTION OF THE FENCE FABRIC).

  NOTE: AN ALTERNATIVE TO TRENCHING IS TO USE MECHANICAL EQUIPMENT TO PLOW IN THE SILT FENCE.

MATERIALS AND SILT FENCE SPECIFICATIONS
- FABRIC – WOVEN OR NON-WOVEN GEOTEXTILE FABRIC, MEETING SPECIFIED MINIMUMS OUTLINED IN TABLE 2.

TABLE 2. GEOTEXTILE FABRIC SPECIFICATIONS FOR SILT FENCE (MINIMUM)

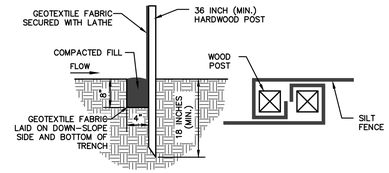
PHYSICAL PROPERTY	WOVEN GEOTEXTILE FABRIC	NON-WOVEN GEOTEXTILE FABRIC
FILTERING EFFICIENCY	85%	85%
TEXTILE STRENGTH AT 20% ELONGATION STANDARD STRENGTH EXTRA STRENGTH	 30 LBS. PER LINEAL INCH 50 LBS. PER LINEAL INCH	 50 LBS. PER LINEAL INCH 70 LBS. PER LINEAL INCH
SLURRY FLOW RATE	0.3 GAL./MIN./SQUARE FOOT	4.5 GAL./MIN./SQUARE FOOT
WATER FLOW RATE	15 GAL./MIN./SQUARE FOOT	220 GAL./MIN./SQUARE FOOT
UV RESISTANCE	70%	85%
POST SPACING	7 FEET	5 FEET

NOTE: SILT FENCES CAN BE PURCHASED COMMERCIALLY.
- HEIGHT – A MINIMUM OF 18 INCHES ABOVE GROUND LEVEL (30 INCHES MAXIMUM).
- REINFORCEMENT – FABRIC SECURELY FASTENED TO POSTS WITH WOOD LATHE.
- SUPPORT POSTS – 2x2 INCH HARDWOOD POSTS. STEEL FENCE POSTS MAY BE SUBSTITUTED FOR HARDWOOD POSTS (STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING FABRIC).
- SPACING – EIGHT FEET MAXIMUM IS FENCE IS SUPPORTED BY WIRE MESH FENCING, SIX FEET MAXIMUM FOR EXTRA-STRENGTH FABRIC WITHOUT WIRE BACKING.

INSTALLATION
1. LAY OUT THE LOCATION OF THE FENCE SO THAT IS IS PARALLEL TO THE CONTOUR OF THE SLOPE AND AT LEAST 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP SLOPE SUCH THAT THE POINT OF CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES AT A HIGHER ELEVATION THAN THE TOP OF THE FENCE AT ITS LOWEST POINT.
2. EXCAVATE AN EIGHT-INCH DEEP BY FOUR-INCH WIDE TRENCH ALONG THE ENTIRE LENGTH OF THE FENCE LINE. INSTALLATION BY PLOWING IS ALSO ACCEPTABLE.
3. INSTALL THE SILT FENCE WITH THE FILTER FABRIC LOCATED ON THE UP-SLOPE SIDE OF THE EXCAVATED TRENCH AND THE SUPPORT POSTS ON THE DOWN-SLOPE SIDE OF THE TRENCH.
4. DRIVE THE SUPPORT POSTS AT LEAST 18 INCHES INTO THE GROUND, TIGHTLY STRETCHING THE FABRIC BETWEEN THE POSTS AS EACH IS DRIVEN INTO THE SOIL. A MINIMUM OF 12 INCHES OF THE FILTER FABRIC SHOULD EXTEND INTO THE TRENCH. (IF IT IS NECESSARY TO JOIN THE ENDS OF TWO FENCES, USE THE JOINT METHOD SHOWN.
5. LAY THE FOUR INCHES OF FILTER FABRIC ON THE BOTTOM OF THE TRENCH AND EXTEND IT TOWARD THE UP-SLOPE SIDE OF THE TRENCH.
6. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.

   NOTE: IF THE SILT FENCE IS BEING CONSTRUCTED ON-SITE, ATTACH THE FILTER FABRIC TO THE SUPPORT POSTS (REFER TO TABLES 1 AND 2 FOR SPACING AND GEOTEXTILE SPECIFICATIONS) AND ATTACH WOODEN LATHE TO SECURE THE FABRIC TO THE POSTS. ALLOW FOR AT LEAST 12 INCHES OF FABRIC BELOW GROUND LEVEL. COMPLETE THE SILT FENCE INSTALLATION, FOLLOWING STEPS 1 THROUGH 6 ABOVE.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. ALL REPAIRS SHOULD MEET SPECIFICATIONS AS OUTLINED WITHIN THIS MEASURE.
- REMOVE DEPOSITED SEDIMENT WHEN IT IS CAUSING THE FILTER FABRIC TO BULGE OR WHEN IT REACHES ON-HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, GRADE THE SITE TO BLEND WITH THE SURROUNDING AREA, AND STABILIZE.



NOTE: SILT FENCE IS NOT RECOMMENDED FOR USE AS A DIVERSION AND SHOULD NOT BE USED ACROSS A STREAM, CHANNEL, DITCH, SWALE, OR ANYWHERE THAT CONCENTRATED FLOW IS ANTICIPATED.

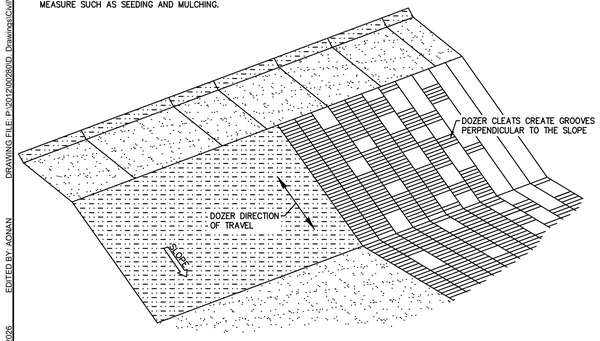
SILT FENCE CONSTRUCTION
NOT TO SCALE (REV. 01/17)

DESCRIPTION
SURFACE ROUGHENING (OR TRACKING), IS THE CREATION OF RIDGES AND DEPRESSIONS PARALLEL TO THE CONTOUR OF THE SLOPE TO REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION.

INSTALLATION
1. ALL SLOPES SHALL BE ROUGHENED UNTIL PERMANENT EROSION CONTROL MEASURES ARE PLACED. ROUGHENING SHALL TAKE PLACE EACH DAY AFTER WORK IS PERFORMED ON THE SLOPES OR AS DIRECTED TO RE-ESTABLISH THE ROUGHENING.
2. SLOPES SHALL BE ROUGHENED TO CREATE A SERIES OF RIDGES AND DEPRESSIONS PARALLEL TO THE CONTOUR MAKING GROOVES AT LEAST 1" DEEP AND NOT MORE THAN 15" APART.

INSPECTION
1. INSPECT WEEKLY AND WITHIN 24 HOURS AFTER A ½" OR MORE RAIN EVENT.
2. ENSURE THAT THE RIDGES AND DEPRESSIONS CREATED BY THE TRACK MARKS ARE IN A HORIZONTAL DIRECTION AND PARALLEL TO THE CONTOUR OF THE SLOPE.
3. CHECK FOR RILLS AND GULLIES

MAINTENANCE
1. PROMPTLY REPAIR ANY SMALL RILLS THAT FORM AND RE-ROUGHEN THE REPAIRED AREA WHEN DIRECTED OR REQUIRED.
2. AS SOON AS POSSIBLE, REINFORCE THE SLOPE ROUGHENING WITH AN APPROPRIATE EROSION CONTROL MEASURE SUCH AS SEEDING AND MULCHING.



SURFACE ROUGHENING
NOT TO SCALE

SEEDING SPECIFICATIONS
SEEDBED PREPARATION
- GRADE AND APPLY SOIL AMENDMENTS.

SEEDING FREQUENCY
- SEED ROUGH GRADED AREAS DAILY WHILE SOIL IS STILL LOOSE AND MOIST.

DENSITY OF VEGETATIVE COVER
- EIGHTY PERCENT OR GREATER OVER THE SOIL SURFACE.

MATERIALS
- SOIL AMENDMENTS – SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES) OR 400 TO 600 POUNDS OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT. CONSIDER THE USE OF REDUCED PHOSPHORUS APPLICATION WHERE SOIL TESTS INDICATE ADEQUATE PHOSPHOROUS LEVELS IN THE SOIL PROFILE.
- SEED – SELECT APPROPRIATE PLANT SPECIES SEED OR SEED MIXTURES ON THE BASIS OF QUICK GERMINATION, GROWTH, AND TIME OF YEAR TO BE SEEDED (SEE TABLE 1).
- MULCH – STRAW, HAY, WOOD FIBER, ETC. (TO PROTECT SEEDBED, RETAIN MOISTURE, AND ENCOURAGE PLANT GROWTH), ANCHORED TO PREVENT REMOVAL BY WIND OR WATER OR COVERED WITH MANUFACTURED EROSION CONTROL BLANKETS.

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

SEED SPECIES*	RATE PER ACRE	PLANTING DEPTH	OPTIMUM DATES**
WHEAT OR RYE	150 LBS.	1 TO 1-1/2 INCHES	SEPT. 15-OCT. 30
SPRING OATS	100 LBS.	1 INCH	MARCH 1-APRIL 15
ANNUAL RYEGRASS	40 LBS.	1/4 INCH	MARCH 1-MAY 1 AUG. 1-SEPT. 1
GERMAN MILLET	40 LBS.	1 TO 2 INCHES	MAY 1-JUNE 1
SUDANGRASS	35 LBS.	1 TO 2 INCHES	MAY 1-JULY 30
BUCKWHEAT	60 LBS.	1 TO 2 INCHES	APRIL 15-JUNE 1
CORN (BROADCAST)	300 LBS.	1 TO 2 INCHES	MAY 11-AUG. 10
SORGHUM	35 LBS.	1 TO 2 INCHES	MAY 1-JULY 15

*PERENNIAL SPECIES MAY BE USED AS A TEMPORARY COVER, ESPECIALLY IF THE AREA TO BE SEEDED WILL REMAIN IDLE FOR MORE THAN ONE YEAR.
**SEEDING DONE OUTSIDE THE OPTIMUM SEEDING DATES INCREASES THE CHANCES OF SEEDING FAILURE. DATES MAY BE EXTENDED OR SHORTENED BASED ON THE LOCATION OF THE PROJECT WITHIN THE STATE.

NOTES:
MULCH ALONE IS AN ACCEPTABLE TEMPORARY COVER AND MAY BE USED IN LIEU OF TEMPORARY SEEDING, PROVIDED THAT IT IS APPROPRIATELY ANCHORED.

A HIGH POTENTIAL FOR FERTILIZER, SEED, AND MULCH TO WASH EXISTS ON STEEP BANKS, CUTS, AND IN CHANNELS AND AREAS OF CONCENTRATED FLOW.

SEEDING APPLICATION
SEEDBED PREPARATION
1. TEST SOIL TO DETERMINE pH AND NUTRIENT LEVELS.
2. APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST. IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT.
3. WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL WITH A DISK OR RAKE OPERATED ACROSS THE SLOPE.

SEEDING
1. SELECT A SEED SPECIES OR AN APPROPRIATE SEED MIXTURE AND APPLICATION RATE FROM TABLE 1.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER SEED TO THE DEPTH SHOWN IN TABLE 1.

   NOTES:
   1. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEED OPERATIONS.
   2. DAILY SEEDING WHEN THE SOIL IS MOIST IS USUALLY MOST EFFECTIVE.
   3. IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.
3. APPLY MULCH AND ANCHOR IT IN PLACE.

SEEDING MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH AND REPAIR IMMEDIATELY.
- MONITOR FOR EROSION DAMAGE AND ADEQUATE COVER (80 PERCENT DENSITY); RESEED, FERTILIZE, AND APPLY MULCH WHERE NECESSARY.
- IF NITROGEN DEFICIENCY IS APPARENT, TOP-DRESS FALL SEEDED WHEAT OR RYE SEEDING WITH 50 POUNDS PER ACRE OF NITROGEN IN FEBRUARY OR MARCH.

MULCH SPECIFICATIONS
MATERIALS

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

MATERIAL*	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIRABLE SEEDS. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2).
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE WITH TACKING AGENT.

*MULCHING IS NOT RECOMMENDED IN CONCENTRATED FLOWS. CONSIDER EROSION CONTROL BLANKETS OR OTHER STABILIZATION METHODS.

COVERAGE
- THE MULCH SHOULD HAVE A UNIFORM DENSITY OF AT LEAST 75 PERCENT OVER THE SOIL SURFACE.

ANCHORING

TABLE 2. MULCH ANCHORING METHODS

ANCHORING METHOD*	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIMP OR PUNCH THE STRAW OR HAY TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIPS SHOULD OVERLAP WITH EACH UP-SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN-SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

*ALL FORMS OF MULCH MUST BE ANCHORED TO PREVENT DISPLACEMENT BY WIND AND/OR WATER.

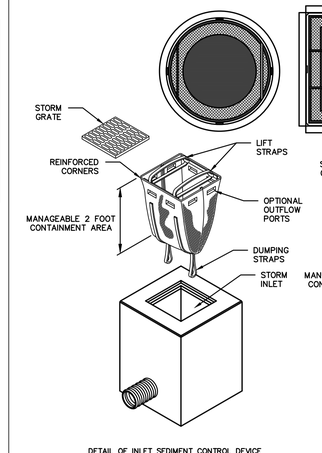
MULCH APPLICATION
1. APPLY MULCH AT THE RECOMMENDED RATE SHOWN IN TABLE 1.
2. SPREAD THE MULCH MATERIAL UNIFORMLY BY HAND, HAYFORK, MULCH BLOWER, OR HYDRAULIC MULCH MACHINE. AFTER SPREADING, NO MORE THAN 25 PERCENT OF THE GROUND SHOULD BE VISIBLE.
3. ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION. THE MULCH CAN BE ANCHORED USING ONE OF THE METHODS LISTED BELOW:
   a. CRIMP WITH A MULCH ANCHORING TOOL, A WEIGHTED FARM DISK WITH DULL SERRATED BLADES SET STRAIGHT, OR TRACK CLEATS OF A BULLDOZER,
   b. APPLY HYDRAULIC MULCH WITH SHORT CELLULOSE FIBERS,
   c. APPLY A LIQUID TACKIFIER, OR
   d. COVER WITH NETTING SECURED BY STAPLES.

MULCH MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH; REPAIR DAMAGED AREAS, RESEED, APPLY NEW MULCH AND ANCHOR THE MULCH IN PLACE.
- CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- IF EROSION IS SEVER OR RECURRING, USE EROSION CONTROL BLANKETS OR OTHER MORE SUBSTANTIAL STABILIZATION METHODS TO PROTECT THE AREA.

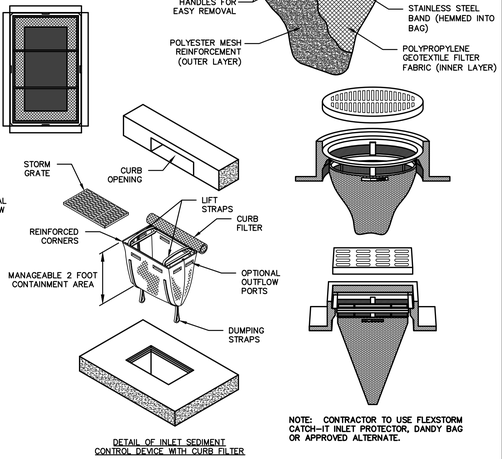
TEMPORARY SEEDING WITH MULCH
NOT TO SCALE (REV. 01/17)

INSTALLATION
1. REMOVE THE STORM SEWER GRATE AND PLACE THE FRAME INTO THE GRATE OPENING.
2. PLACE GEOTEXTILE FABRIC INTO THE FRAME AND SECURE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
3. REPLACE THE STORM SEWER GRATE.

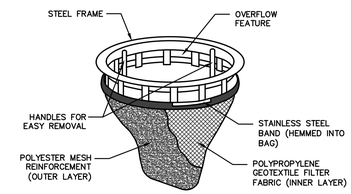
MAINTENANCE
- INSPECT DAILY.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS AFTER EACH STORM EVENT. DEPOSIT SEDIMENT IN AN AREA WHERE IT WILL NOT RE-ENTER THE PAVED AREA OR STORM DRAINS.
- REPLACE OR CLEAN GEOTEXTILE FABRIC AS NEEDED.
- WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE INLET PROTECTION.



DETAIL OF INLET SEDIMENT CONTROL DEVICE



DETAIL OF INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER



NOTE: CONTRACTOR TO USE FLEXSTORM CATCH-IT INLET PROTECTOR, DANDY BAG OR APPROVED ALTERNATE.

DROP-IN INLET PROTECTION TO BE USED IN PAVED AREAS.

DROP-IN INLET PROTECTION
NOT TO SCALE (REV. 01/17)

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW REGISTERED No. 11500408 STATE OF INDIANA PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE: 10/16/2026
PROJECT PHASE: ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

EROSION CONTROL DETAILS

C520

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.4849
EDIT DATE: 7/16/2026
EDITED BY: AQNAN
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C520 ECD.dwg

SEEDING SPECIFICATIONS
SEEDBED PREPARATION
- GRADE AND APPLY SOIL AMENDMENTS.

SEEDING FREQUENCY
- SEED FINAL GRADED AREAS DAILY WHILE SOIL IS STILL LOOSE AND MOIST.

DENSITY OF VEGETATIVE COVER
- NINETY PERCENT OR GREATER OVER THE SOIL SURFACE.

MATERIALS
- SOIL AMENDMENTS – SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES) OR 400 TO 600 POUNDS OF 12–12–12 ANALYSIS FERTILIZER, OR EQUIVALENT. CONSIDER THE USE OF REDUCED PHOSPHOROUS APPLICATION WHERE SOIL TESTS INDICATE ADEQUATE PHOSPHOROUS LEVELS IN THE SOIL PROFILE.
- SEED – SELECT APPROPRIATE PLANT SPECIES SEED OR SEED MIXTURES ON THE BASIS OF SOIL TYPE, SOIL pH, REGION OF THE STATE, TIME OF YEAR, AND INTENDED LAND USE OF THE AREA TO BE SEEDED (SEE TABLE 1).
- MULCH – STRAW, HAY, WOOD FIBER, ETC. (TO PROTECT SEEDBED, RETAIN MOISTURE, AND ENCOURAGE PLANT GROWTH). ANCHORED TO PREVENT REMOVAL BY WIND OR WATER OR COVERED WITH PREMANUFACTURED EROSION CONTROL BLANKETS.

SEEDING APPLICATIONS
SITE PREPARATION
1. GRADE THE SITE TO ACHIEVE POSITIVE DRAINAGE.
2. ADD TOPSOIL TO ACHIEVE NEEDED DEPTH FOR ESTABLISHMENT OF VEGETATION. (COMPOST MATERIAL MAY BE ADDED TO IMPROVE SOIL MOISTURE HOLDING CAPACITY, SOIL FRIABILITY, AND NUTRIENT AVAILABILITY.)

SEEDBED PREPARATION
1. TEST SOIL TO DETERMINE pH AND NUTRIENT LEVELS.
2. APPLY SOIL AMENDMENTS AS RECOMMENDED BY THE SOIL TEST AND WORK INTO THE UPPER TWO TO FOUR INCHES OF SOIL. IF TESTING IS NOT DONE, APPLY 400 TO 600 POUNDS PER ACRE OF 12–12–12 ANALYSIS FERTILIZER, OR EQUIVALENT.
3. TILL THE SOIL TO OBTAIN A UNIFORM SEEDBED. USE A DISK OR RAKE, OPERATED ACROSS THE SLOPE, TO WORK THE SOIL AMENDMENTS INTO THE UPPER TWO TO FOUR INCHES OF THE SOIL.

SEEDING
OPTIMUM SEEDING DATES ARE MARCH 1 TO MAY 10 AND AUGUST 10 TO SEPTEMBER 30. PERMANENT SEEDING DONE BETWEEN MAY 10 AND AUGUST 10 MAY NEED TO BE IRRIGATED. SEEDING OUTSIDE OR BEYOND OPTIMUM SEEDING DATES IS STILL POSSIBLE WITH THE UNDERSTANDING THAT RESEEDING OR OVERSEEDING MAY BE REQUIRED IF ADEQUATE SURFACE COVER IS NOT ACHIEVED. RESEEDING OR OVERSEEDING CAN BE EASILY ACCOMPLISHED IF THE SOIL SURFACE REMAINS WELL PROTECTED WITH MULCH.
1. SELECT A SEEDING MIXTURE AND RATE FROM TABLE 1. SELECT SEED MIXTURE BASED ON SITE CONDITIONS, SOIL pH, INTENDED LAND USE, AND EXPECTED LEVEL OF MAINTENANCE.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER THE SEED TO A DEPTH OF ONE–FOURTH TO ONE–HALF INCH. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED–TO–SOIL CONTACT BY FIRMING, THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEEDING OPERATIONS. (IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.)
3. MULCH ALL SEEDED AREAS AND USE APPROPRIATE METHODS TO ANCHOR THE MULCH IN PLACE. CONSIDER USING EROSION CONTROL BLANKETS ON SLOPING AREAS AND CONVEYANCE CHANNELS.

SEEDING MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS UNTIL THE VEGETATION IS SUCCESSFULLY ESTABLISHED.
- CHARACTERISTICS OF A SUCCESSFUL STAND INCLUDE VIGOROUS DARK GREEN OR BLUISH–GREEN SEEDLINGS WITH A UNIFORM VEGETATIVE COVER DENSITY OF 90 PERCENT OR MORE.
- CHECK FOR EROSION OR MOVEMENT OF MULCH.
- REPAIR DAMAGED, BARE, GULLIED, OR SPARSELY VEGETATED AREAS AND THEN FERTILIZE, RESEED, AND APPLY AND ANCHOR MULCH.
- IF PLANT COVER IS SPARSE OR PATCHY, EVALUATE THE PLANT MATERIALS CHOSEN, SOIL FERTILITY, MOISTURE CONDITION, AND MULCH APPLICATION; REPAIR AFFECTED AREAS EITHER BY OVERSEEDING OR PREPARING A NEW SEEDBED AND RESEEDING. APPLY AND ANCHOR MULCH ON THE NEWLY SEEDED AREAS.
- IF VEGETATION FAILS TO GROW, CONSIDER SOIL TESTING TO DETERMINE SOIL pH OR NUTRIENT DEFICIENCY PROBLEMS. (CONTACT YOUR SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE.)
- IF ADDITIONAL FERTILIZATION IS NEEDED TO GET A SATISFACTORY STAND, DO SO ACCORDING TO SOIL TEST RECOMMENDATIONS.
- ADD FERTILIZER THE FOLLOWING GROWING SEASON. FERTILIZE ACCORDING TO SOIL TEST RECOMMENDATIONS.
- FERTILIZE TURF AREAS ANNUALLY. APPLY FERTILIZER IN A SPLIT APPLICATION. FOR COOL–SEASON GRASSES, APPLY ONE–HALF OF THE FERTILIZER IN LATE SPRING AND ONE–HALF IN EARLY FALL. FOR WARM–SEASON GRASSES, APPLY ONE–THIRD IN EARLY SPRING, ONE–THIRD IN LATE SPRING, AND THE REMAINING ONE–THIRD IN MIDDLE SUMMER.

TABLE 1. PERMANENT SEEDING RECOMMENDATIONS

THIS TABLE PROVIDES SEVERAL SEED MIXTURE OPTIONS. ADDITIONAL SEED MIXTURES ARE AVAILABLE COMMERCIALLY. WHEN SELECTING A MIXTURE, CONSIDER INTENDED LAND USE AND SITE CONDITIONS, INCLUDING SOIL PROPERTIES (E.G., SOIL pH AND DRAINAGE), SLOPE ASPECT, AND THE TOLERANCE OF EACH SPECIES TO SHADE AND DROUGHT.

OPEN LOW–MAINTENANCE AREAS
(REMAINING IDLE MORE THAN SIX MONTHS)

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. PERENNIAL RYEGRASS WHITE CLOVER*	70 LBS. 2 LBS.	5.6 TO 7.0
2. PERENNIAL RYEGRASS TALL FESCUE**	70 LBS. 50 LBS.	5.6 TO 7.0
3. TALL FESCUE** WHITE CLOVER*	70 LBS. 2 LBS.	5.5 TO 7.5

STEEP BANKS AND CUTS, LOW–MAINTENANCE AREAS
(NOT MOWED)

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. SMOOTH BROME GRASS RED CLOVER*	35 LBS. 20 LBS.	5.5 TO 7.0
2. TALL FESCUE** WHITE CLOVER*	50 LBS. 2 LBS.	5.5 TO 7.5
3. TALL FESCUE** RED CLOVER*	50 LBS. 20 LBS.	5.5 TO 7.5
4. ORCHARD GRASS RED CLOVER* WHITE CLOVER*	30 LBS. 20 LBS. 2 LBS.	5.6 TO 7.0
5. CROWNVETCH* TALL FESCUE**	12 LBS. 30 LBS.	5.6 TO 7.0

LAWNS AND HIGH–MAINTENANCE AREAS

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. BLUEGRASS	140 LBS.	5.5 TO 7.0
2. PERENNIAL RYEGRASS (TURF TYPE)	60 LBS. 90 LBS.	5.6 TO 7.0
3. TALL FESCUE (TURF TYPE)** BLUEGRASS	170 LBS. 30 LBS.	5.6 TO 7.5

SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
1. PERENNIAL RYEGRASS WHITE*	150 LBS. 2 LBS.	5.5 TO 7.0
2. KENTUCKY BLUEGRASS SMOOTH BROMEGRASS SWITCHGRASS TIMOTHY PERENNIAL RYEGRASS WHITE CLOVER**	20 LBS. 10 LBS. 3 LBS. 4 LBS. 10 LBS. 2 LBS.	5.5 TO 7.5
3. TALL FESCUE* WHITE CLOVER**	150 LBS. 2 LBS.	5.5 TO 7.5
4. TALL FESCUE** PERENNIAL RYEGRASS KENTUCKY BLUEGRASS	150 LBS. 20 LBS. 20 LBS.	5.5 TO 7.5

*FOR BEST RESULTS: (A) LEGUME SEED SHOULD BE INOCULATED; (B) SEEDING MIXTURES CONTAINING LEGUMES SHOULD PREFERABLY BE SPRING–SEEDED, ALTHOUGH THE GRASS MAY BE FALL–SEEDED AND THE LEGUME FROST–SEEDED; AND (C) IF LEGUMES ARE FALL–SEEDED, DO SO IN EARLY FALL.

**TALL FESCUE PROVIDES LITTLE COVER FOR, AND MAY BE TOXIC TO SOME SPECIES OF WILDLIFE. THE INDIANA DEPARTMENT OF NATURAL RESOURCES RECOGNIZES THE NEED FOR ADDITIONAL RESEARCH ON ALTERNATIVES SUCH AS BUFFALOGRASS, ORCHARDGRASS, SMOOTH BROMEGRASS, AND SWITCHGRASS. THIS RESEARCH, IN CONJUNCTION WITH DEMONSTRATION AREAS, SHOULD FOCUS ON EROSION CONTROL CHARACTERISTICS, WILDLIFE TOXICITY, TURF DISABILITY, AND DROUGHT RESISTANCE.

NOTES:
1. AN OAT OR WHEAT COMPANION OR NURSE CROP MAY BE USED WITH ANY OF THE ABOVE PERMANENT SEEDING MIXTURES, AT THE FOLLOWING RATES:
   A. SPRING OATS – ONE–FOURTH TO THREE–FOURTHS BUSHEL PER ACRE
   B. WHEAT – NO MORE THAN ONE–HALF BUSHEL PER ACRE
2. A HIGH POTENTIAL FOR FERTILIZER, SEED, AND MULCH TO WASH EXISTS ON STEEP BANKS, CUTS, AND IN CHANNELS AND AREAS OF CONCENTRATED FLOW.

MULCH SPECIFICATIONS
MATERIALS

TABLE 1. SLOPE STEEPNESS RESTRICTIONS

MATERIAL*	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIRABLE SEEDS. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2).
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE WITH TACKING AGENT.

*MULCHING IS NOT RECOMMENDED IN CONCENTRATED FLOWS. CONSIDER EROSION CONTROL BLANKETS OR OTHER STABILIZATION METHODS.

COVERAGE
- THE MULCH SHOULD HAVE A UNIFORM DENSITY OF AT LEAST 75 PERCENT OVER THE SOIL SURFACE.

ANCHORING

TABLE 2. MULCH ANCHORING METHODS

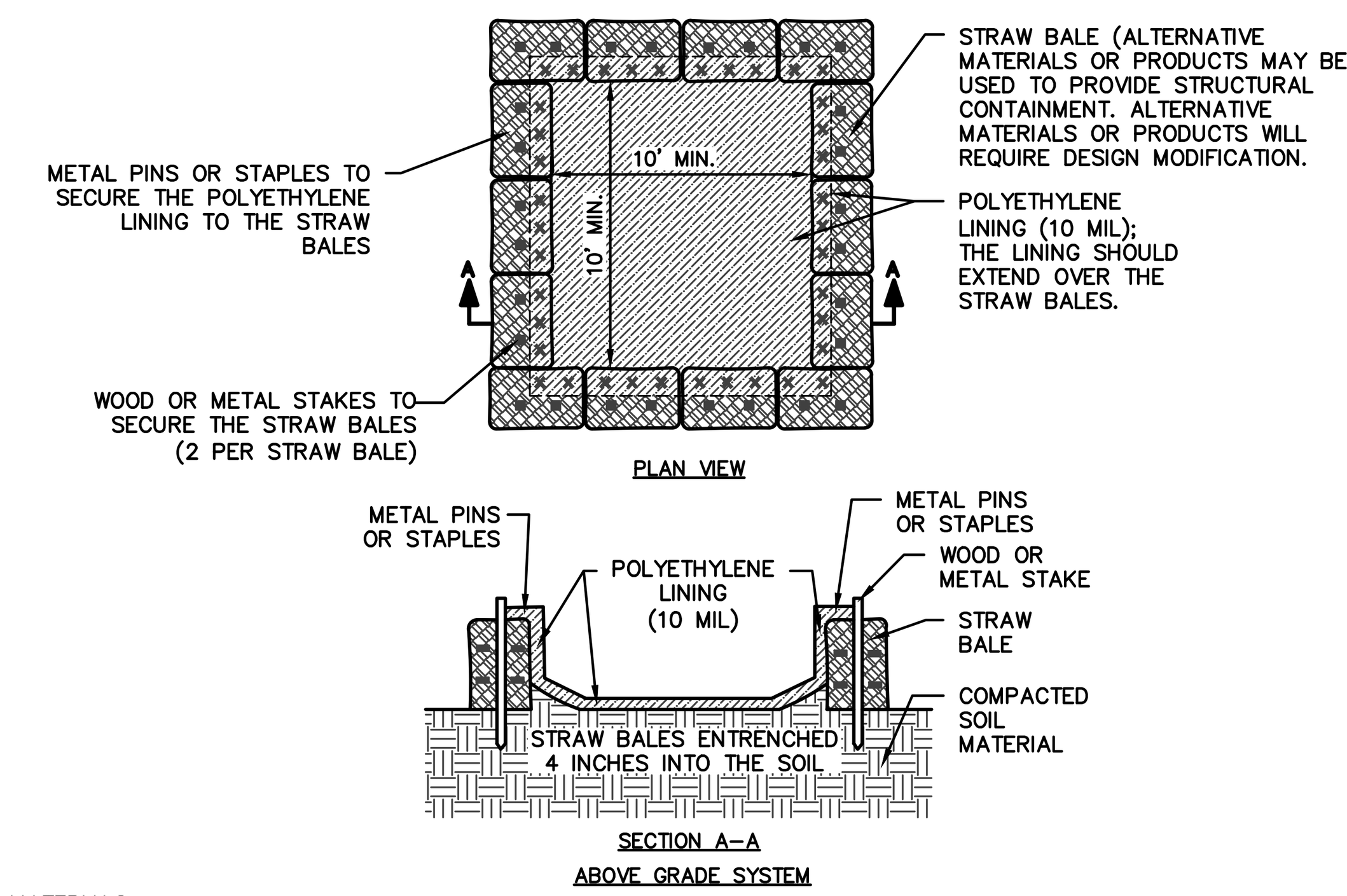
ANCHORING METHOD*	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIMP OR PUNCH THE STRAW OR HAY TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIPS SHOULD OVERLAP WITH EACH UP–SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN–SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

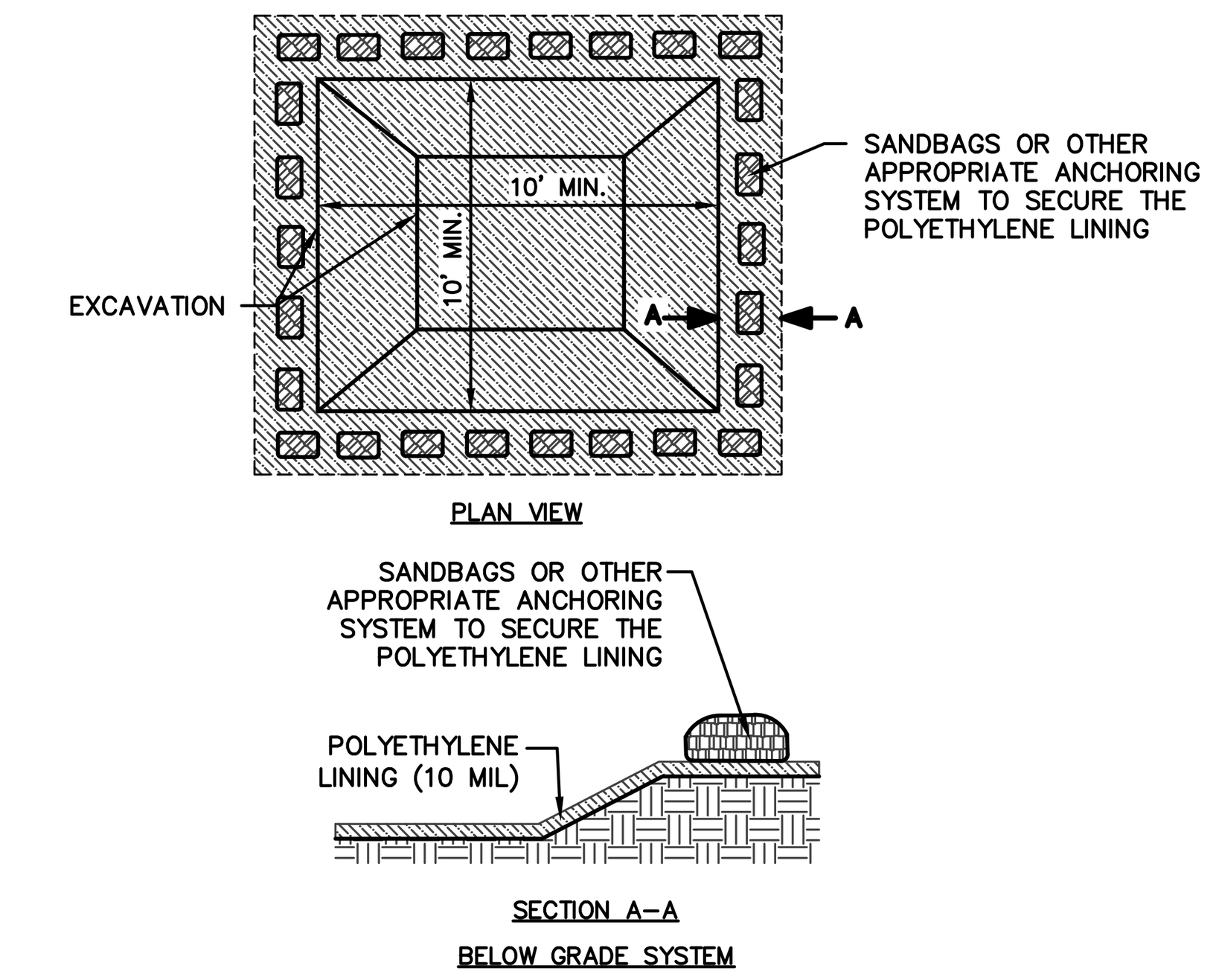
*ALL FORMS OF MULCH MUST BE ANCHORED TO PREVENT DISPLACEMENT BY WIND AND/OR WATER.

MULCH APPLICATION
1. APPLY MULCH AT THE RECOMMENDED RATE SHOWN IN TABLE 1.
2. SPREAD THE MULCH MATERIAL UNIFORMLY BY HAND, HAYFORK, MULCH BLOWER, OR HYDRAULIC MULCH MACHINE. AFTER SPREADING, NO MORE THAN 25 PERCENT OF THE GROUND SHOULD BE VISIBLE.
3. ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION. THE MULCH CAN BE ANCHORED USING ONE OF THE METHODS LISTED BELOW:
   a. CRIMP WITH A MULCH ANCHORING TOOL, A WEIGHTED FARM DISK WITH DULL SERRATED BLADES SET STRAIGHT, OR TRACK CLEATS OF A BULLDOZER,
   b. APPLY HYDRAULIC MULCH WITH SHORT CELLULOSE FIBERS,
   c. APPLY A LIQUID TACKIFIER, OR
   d. COVER WITH NETTING SECURED BY STAPLES.

MULCH MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR MOVEMENT OF MULCH; REPAIR DAMAGED AREAS, RESEED, APPLY NEW MULCH AND ANCHOR THE MULCH IN PLACE.
- CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- IF EROSION IS SEVER OR RECURRING, USE EROSION CONTROL BLANKETS OR OTHER MORE SUBSTANTIAL STABILIZATION METHODS TO PROTECT THE AREA.

PERMANENT SEEDING WITH MULCH
NOT TO SCALE (REV. 01/17)





MATERIALS
- MINIMUM OF TEN MIL POLYETHYLENE SHEETING THAT IS FREE OF HOLES, TEARS, AND OTHER DEFECTS. THE SHEETING SELECTED SHOULD BE OF AN APPROPRIATE SIZE TO FIT THE WASHOUT SYSTEM WITHOUT SEAMS OR OVERLAP OF THE LINING (DESIGNED AND INSTALLED SYSTEMS).
- SIGNAGE.
- ORANGE SAFETY FENCING OR EQUIVALENT.
- STRAW BALES, SANDBAGS (BAGS SHOULD BE ULTRAVIOLET–STABILIZED GEOTEXTILE FABRIC), SOIL MATERIAL, OR OTHER APPROPRIATE MATERIALS THAT CAN BE USED TO CONSTRUCT A CONTAINMENT SYSTEM (ABOVE GRADE SYSTEMS).
- METAL PINS OR STAPLES AT A MINIMUM OF SIX INCHES IN LENGTH, SANDBAGS, OR ALTERNATIVE FASTENER TO SECURE POLYETHYLENE LINING TO THE CONTAINMENT SYSTEM.
- NON–COLLAPSING AND NON–WATER HOLDING COVER FOR USE DURING RAIN EVENTS (OPTIONAL).

INSTALLATION
PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- INSTALL AND LOCATE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED SYSTEMS
- UTILIZE AND FOLLOW THE DESIGN IN THE STORM WATER POLLUTION PREVENTION PLAN TO INSTALL THE SYSTEM.
- DEPENDENT UPON THE TYPE OF SYSTEM, EITHER EXCAVATE THE PIT OR INSTALL THE CONTAINMENT SYSTEM.
- A BASE SHALL BE CONSTRUCTED AND PREPARED THAT IS FREE OF ROCKS AND OTHER DEBRIS THAT MAY CAUSE TEARS OR PUNCTURES IN THE POLYETHYLENE LINING.
- INSTALL THE POLYETHYLENE LINING. FOR EXCAVATED SYSTEMS, THE LINING SHOULD EXTEND OVER THE ENTIRE EXCAVATION. THE LINING FOR BERMED SYSTEMS SHOULD BE INSTALLED OVER THE POOLING AREA WITH ENOUGH MATERIAL TO EXTEND THE LINING OVER THE BERM OR CONTAINMENT SYSTEM. THE LINING SHOULD BE SECURED WITH PINS, STAPLES, OR OTHER FASTENERS.
- PLACE FLAGS, SAFETY FENCING, OR EQUIVALENT TO PROVIDE A BARRIER TO CONSTRUCTION EQUIPMENT AND OTHER TRAFFIC.
- PLACE A NON–COLLAPSING, NON–WATER HOLDING COVER OVER THE WASHOUT FACILITY PRIOR TO A PREDICTED RAINFALL EVENT TO PREVENT ACCUMULATION OF WATER AND POSSIBLE OVERFLOW OF THE SYSTEM (OPTIONAL).
- INSTALL SIGNAGE THAT IDENTIFIES CONCRETE WASHOUT AREAS.
- POST SIGNS DIRECTING CONTRACTORS AND SUPPLIERS TO DESIGNATED LOCATIONS.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS OR ALTERNATIVE APPROACH PAD FOR CONCRETE WASHOUT SYSTEMS.

MAINTENANCE
- INSPECT DAILY AND AFTER EACH STORM EVENT.
- INSPECT THE INTEGRITY OF THE OVERALL STRUCTURE INCLUDING, WHERE APPLICABLE, THE CONTAINMENT SYSTEM.
- INSPECT THE SYSTEM FOR LEAKS, SPILLS, AND TRACKING OF SOIL BY EQUIPMENT.
- INSPECT THE POLYETHYLENE LINING FOR FAILURE, INCLUDING TEARS AND PUNCTURES.
- ONCE CONCRETE WASTES HARDEN, REMOVE AND DISPOSE OF THE MATERIAL.
- EXCESS CONCRETE SHOULD BE REMOVED WHEN THE WASHOUT SYSTEM REACHES 50 PERCENT OF THE DESIGN CAPACITY. USE OF THE SYSTEM SHOULD BE DISCONTINUED UNTIL APPROPRIATE MEASURES CAN BE INITIATED TO CLEAN THE STRUCTURE. PREFABRICATED SYSTEMS SHOULD ALSO UTILIZE THIS CRITERION, UNLESS THE MANUFACTURER HAS ALTERNATE SPECIFICATIONS.
- UPON REMOVAL OF THE SOLIDS, INSPECT THE STRUCTURE. REPAIR THE STRUCTURE AS NEEDED OR CONSTRUCT A NEW SYSTEM.
- DISPOSE OF ALL CONCRETE IN A LEGAL MANNER. REUSE THE MATERIAL ON SITE, RECYCLE OR HAUL THE MATERIAL TO AN APPROVED CONSTRUCTION/DEMOLITION LANDFILL SITE. RECYCLING OF MATERIAL IS ENCOURAGED. THE WASTE MATERIAL CAN BE USED FOR MULTIPLE APPLICATIONS INCLUDING BUT NOT LIMITED TO ROADBEDS AND BUILDING. THE AVAILABILITY FOR RECYCLING SHOULD BE CHECKED LOCALLY.
- THE PLASTIC LINER SHOULD BE REPLACED AFTER EVERY CLEANING; THE REMOVAL OF MATERIAL WILL USUALLY DAMAGE THE LINING.
- THE CONCRETE WASHOUT SYSTEM SHOULD BE REPAIRED OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE.
- CONCRETE WASHOUT SYSTEMS ARE DESIGNED TO PROMOTE EVAPORATION. HOWEVER, IF THE LIQUIDS DO NO EVAPORATE AND THE SYSTEM IS NEAR CAPACITY IT MAY BE NECESSARY TO VACUUM OR REMOVE THE LIQUIDS AND DISPOSE OF THEM IN AN ACCEPTABLE METHOD. DISPOSAL MAY BE ALLOWED AT THE LOCAL SANITARY SEWER AUTHORITY PROVIDED THEIR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS ALLOW FOR ACCEPTANCE OF THIS MATERIAL. ANOTHER OPTION WOULD BE TO UTILIZE A SECONDARY CONTAINMENT SYSTEM OR BASIN FOR FUTURE DEWATERING.
- PREFABRICATED UNITS ARE OFTEN PUMPED AND THE COMPANY SUPPLYING THE UNIT PROVIDES THIS SERVICE.
- INSPECT CONSTRUCTION ACTIVITIES ON A REGULAR BASIS TO ENSURE SUPPLIERS, CONTRACTORS, AND OTHERS ARE UTILIZING DESIGNATED WASHOUT AREAS. IF CONCRETE WASTE IS BEING DISPOSED OF IMPROPERLY, IDENTIFY THE VIOLATORS AND TAKE APPROPRIATE ACTION.
- WHEN CONCRETE WASHOUT SYSTEMS ARE NO LONGER REQUIRED, THE CONCRETE WASHOUT SYSTEMS SHALL BE CLOSED. DISPOSE OF ALL HARDENED CONCRETE AND OTHER MATERIALS USED TO CONSTRUCT THE SYSTEM.
- HOLES, DEPRESSIONS AND OTHER LAND DISTURBANCES ASSOCIATED WITH THE SYSTEM SHOULD BE BACKFILLED, GRADED, AND STABILIZED.

SPECIFICATIONS
SITE MANAGEMENT
- COMPLETE CONSTRUCTION/INSTALLATION OF THE SYSTEM AND HAVE WASHOUT LOCATIONS OPERATIONAL PRIOR TO CONCRETE DELIVERY.
- DO NOT WASH OUT CONCRETE TRUCKS OR EQUIPMENT INTO STORM DRAINS, WETLANDS, STREAMS, RIVERS, CREEKS, DITCHES, OR STREETS.
- NEVER WASH OUT INTO A STORM SEWER DRAINAGE SYSTEM. THESE SYSTEMS ARE TYPICALLY CONNECTED TO A NATURAL CONVEYANCE SYSTEM.
- WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS.
- IT IS RECOMMENDED THAT WASHOUT SYSTEMS BE RESTRICTED TO WASHING CONCRETE FROM MIXER AND PUMP TRUCKS AND NOT USED TO DISPOSE OF EXCESS CONCRETE OR RESIDUAL LOADS DUE TO THE POTENTIAL TO EXCEED THE DESIGN CAPACITY OF THE WASHOUT SYSTEM. SMALL AMOUNTS OF EXCESS OR RESIDUAL CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- INSTALL SYSTEMS AT STRATEGIC LOCATIONS THAT ARE CONVENIENT AND IN CLOSE PROXIMITY TO WORK AREAS AND IN SUFFICIENT NUMBER TO ACCOMMODATE THE DEMAND FOR DIPOSAL.
- INSTALL SIGNAGE IDENTIFYING THE LOCATION OF CONCRETE WASHOUT SYSTEMS.

LOCATION
- LOCATE CONCRETE WASHOUT SYSTEMS AT LEAST 50 FEET FROM ANY CREEKS, WETLANDS, DITCHEST, KARST FEATURES, OR STORM DRAINS/MANMADE CONVEYANCE SYSTEMS.
- TO THE EXTENT PRACTICAL, LOCATE CONCRETE WASHOUT SYSTEMS IN RELATIVELY FLAT AREAS THAT HAVE ESTABLISHED VEGETATIVE COVER AND DO NOT RECEIVE RUNOFF FROM ADJACENT LAND AREAS.
- LOCATE IN AREAS THAT PROVIDE EASY ACCESS FOR CONCRETE TRUCKS AND OTHER CONSTRUCTION EQUIPMENT.
- LOCATE AWAY FROM OTHER CONSTRUCTION TRAFFIC TO REDUCE THE POTENTIAL FOR DAMAGE TO THE SYSTEM.

GENERAL DESIGN CONSIDERATIONS
- THE STRUCTURE OR SYSTEM SHALL BE DESIGNED TO CONTAIN THE ANTICIPATED WASHOUT WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- THE SYSTEM SHALL BE DESIGNED, TO THE EXTENT PRACTICAL, TO ELIMINATE RUNOFF FROM ENTERING THE WASHOUT SYSTEM.
- RUNOFF FROM A RAINSTORM OR SNOWMELT SHOULD NOT CARRY WASTES AWAY FROM THE WASHOUT LOCATION.
- WASHOUT WILL NOT IMPACT FUTURE LAND USES (I.E., OPEN SPACES, LANDSCAPED AREAS, HOME SITES, PARKS).
- WASHOUT SYSTEMS/CONTAINMENTS MEASURES MAY ALSO BE UTILIZED ON SMALLER INDIVIDUAL BUILDING SITES. THE DESIGN AND SIZE OF THE SYSTEM CAN BE ADJUSTED TO ACCOMMODATE THE EXPECTED CAPACITY.

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS
- SELF–CONTAINED STURDY CONTAINMENT SYSTEMS THAT ARE DELIVERED TO A SITE AND LOCATED AT STRATEGIC LOCATIONS FOR CONCRETE DISPOSAL.
- THESE SYSTEMS ARE MANUFACTURED TO RESIST DAMAGE FROM CONSTRUCTION EQUIPMENT AND PROTECT AGAINST LEAKS OR SPILLS.
- MANUFACTURER OR SUPPLIER PROVIDES THE CONTAINERS. THE PROJECT SITE MANAGER MAINTAINS THE SYSTEM OR THE SUPPLIER PROVIDES COMPLETE SERVICE THAT INCLUDES MAINTENANCE AND DISPOSAL.
- UNITS ARE OFTEN AVAILABLE WITH OR WITHOUT RAMPS. UNITS WITH RAMPS LEND THEMSELVES TO ACCOMMODATE PUMP TRUCKS.
- MAINTAIN ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED UNITS
THESE UNITS ARE DESIGNED AND INSTALLED ON SITE. THEY TEND TO BE LESS RELIABLE THAN PREFABRICATED SYSTEMS ARE OFTEN PRONE TO FAILURE. CONCRETE WASHOUT SYSTEMS CAN BE CONSTRUCTED ABOVE OR BELOW GRADE. IT IS NOT UNCOMMON TO HAVE A SYSTEM THAT IS PARTLY BELOW GRADE WITH AN ADDITIONAL CONTAINMENT STRUCTURE ABOVE GRADE.
- WASHOUT SYSTEMS SHALL UTILIZE A PIT OR BERMED AREA DESIGNED AND MAINTAINED AT A CAPACITY TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- THE VOLUME OF THE SYSTEM MUST ALSO BE DESIGNED TO CONTAIN RUNOFF THAT DRAINS TO THE SYSTEM AND RAINFALL THAT ENTERS THE SYSTEM FOR A TWO–YEAR FREQUENCY, 24–HOUR STORM EVENT.

BELOW GRADE SYSTEM
- A WASHOUT SYSTEM INSTALLED BELOW GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE PIT MAY BE LIMITED BY THE SIZE OF THE POLYETHYLENE AVAILABLE. THE POLYETHYLENE LINING SHOULD BE ADEQUATE SIZE TO EXTEND OVER THE ENTIRE EXCAVATION.
- INCLUDE A MINIMUM 12–INCH FREEBOARD TO REASONABLY ENSURE THAT THE STRUCTURE WILL NOT OVERTOP DURING A RAIN EVENT.
- LINE THE PIT WITH TEN MIL POLYETHYLENE LINING TO CONTROL SEEPAGE.
- THE BOTTOM OF EXCAVATED PIT SHOULD BE ABOVE THE SEASONAL HIGH WATER TABLE.

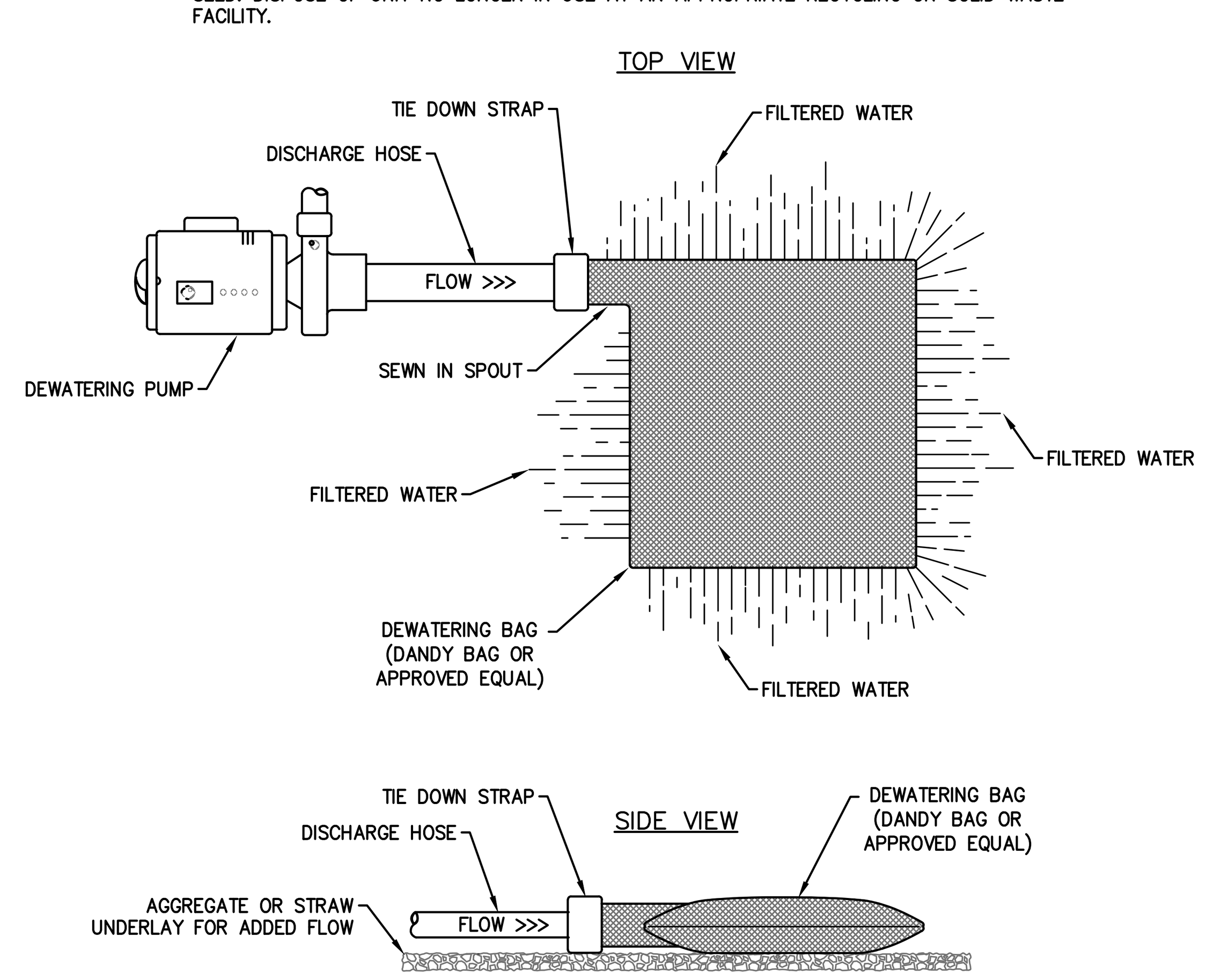
ABOVE GRADE SYSTEM
- A SYSTEM DESIGNED AND BUILT ABOVE GRADE SHOULD BE A MINIMUM OF TEN FEET WIDE BY TEN FEET LONG, BUT SIZED TO CONTAIN ALL LIQUID AND WASTE THAT IS EXPECTED TO BE GENERATED BETWEEN SCHEDULED CLEANOUT PERIODS. THE SIZE OF THE CONTAINMENT SYSTEM MAY BE LIMITED BY THE SIZE OF POLYETHYLENE AVAILABLE. THE POLYETHYLENE LINING SHOULD BE OF ADEQUATE SIZE TO EXTEND OVER THE BERM OR CONTAINMENT SYSTEM.
- THE SYSTEM DESIGN MAY UTILIZE AN EARTHEN BERM, STRAW BALES, SANDBAGS, OR OTHER ACCEPTABLE BARRIERS THAT WILL MAINTAIN ITS SHAPE AND INTEGRITY AND SUPPORT THE POLYETHYLENE LINING.
- INCLUDE A MINIMUM FOUR–INCH FREEBOARD AS PART OF THE DESIGN.

WASHOUT PROCEDURES
- DO NOT LEAVE EXCESS MUD IN THE CHUTES OR HOPPER AFTER THE POUR. EVERY EFFORT SHOULD BE MADE TO EMPTY THE CHUTES AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
- AT THE WASHOUT LOCATION, SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON–WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
- REMOVE AS MUCH MUD AS POSSIBLE WHEN WASHING OUT.
- STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE CONTAINMENT SYSTEM IS LEAKING OR OVERFLOWING AND INEFFECTIVE.
- DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE. BACK FLUSHING SHOULD BE RESTRICTED TO THE PLANT AS IT GENERATES LARGE VOLUMES OF WASTE THAT MORE THAN LIKELY WILL EXCEED THE CAPACITY OF MOST WASHOUT SYSTEMS. IF AN EMERGENCY ARISES, BACK FLUSH SHOULD ONLY BY PERFORMED WITH THE PERMISSION OF AN ON–SITE MANAGER FOR THE PROJECT.
- DO NOT USE ADDITIVES WITH WASH WATER. DO NOT USE SOLVENTS OR ACIDS THAT MAY BE USED AT THE TARGET PLANT.

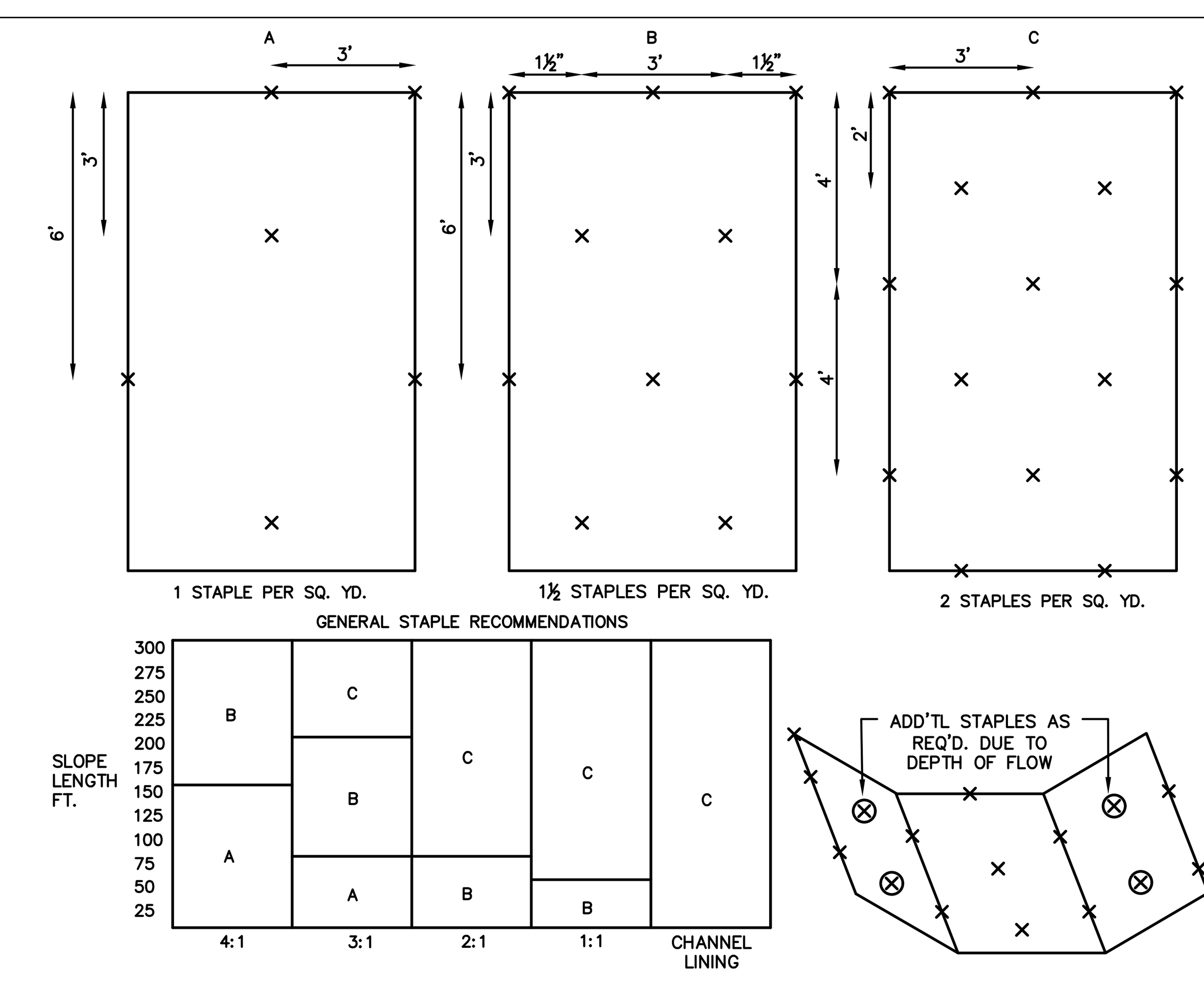
CONCRETE WASH OUT
NOT TO SCALE (REV. 01/17)

INSTALLATION
1. PLACE LIFTING STRAPS UNDER THE UNIT TO FACILITATE REMOVAL AFTER USE.
2. UNFOLD DANDY DEWATERING BAG (OR APPROVED EQUAL) ON STABILIZED AREA OVER DENSE VEGETATION, STRAW, OR GRAVEL.
3. INSERT DISCHARGE HOSE FROM PUMP INTO DANDY DEWATERING BAG (OR APPROVED EQUAL) A MINIMUM OF SIX INCHES AND TIGHTLY SECURE WITH ATTACHED STRAP TO PREVENT WATER FROM FLOWING OUT OF THE UNIT WITHOUT BEING FILTERED. IF USING OPTIONAL ABSORBENTS, PLACE ABSORBENT PILLOW INTO THE DANDY DEWATERING BAG (OR APPROVED EQUAL).

MAINTENANCE
1. REPLACE THE UNIT WHEN 1/2 FULL OF SEDIMENT OR WHEN SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL RATE. IF USING OPTIONAL ABSORBENTS, REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.
2. REMOVE AND DISPOSE OF THE SEDIMENT IN A MANNER SATISFACTORY TO THE INSPECTOR OR MOVE THE UNIT AND SEDIMENT FROM THE ENVIRONMENTALLY SENSITIVE AREA TO AN APPROVED DISPOSAL SITE. SLIT THE UNIT, REMOVE THE SEDIMENT, GRADE SMOOTHLY INTO THE EXISTING TOPOGRAPHY AND SEED. DISPOSE OF UNIT NO LONGER IN USE AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.



DEWATERING BAG
NOT TO SCALE



SPECIFICATIONS
EFFECTIVE LIFE
- THE FUNCTIONAL LIFE OF AN EROSION CONTROL BLANKET IS DEPENDENT ON THE MATERIALS USED.

ANCHORING
- STAPLES, PINS OR STAKES USED TO PREVENT MOVEMENT OR DISPLACEMENT OF BLANKET. (FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS.)

MATERIALS
- ORGANIC (STRAW, EXCELSIOR, WOVEN PAPER, COCONUT FIBER, ETC.) OR SYNTHETIC MULCH INCORPORATED WITH A POLYPROPYLENE, NATURAL FIBER OR SIMILAR NETTING MATERIAL. (THE NETTING MAY BE BIODEGRADABLE, PHOTODEGRADABLE OR PERMANENT.)

NOTE: SOME EROSION CONTROL BLANKET NETTINGS MAY POSE A THREAT TO CERTAIN SPECIES OF WILDLIFE IF THEY BECOME ENTANGLED IN THE NETTING MATRIX.

- SIX TO 12–INCH STAPLES, PINS, OR STAKES.

INSTALLATION
1. SELECT THE TYPE AND WEIGHT OF EROSION CONTROL BLANKET TO FIT THE SITE CONDITIONS (E.G., SLOPE, CHANNEL, FLOW VELOCITY) PER THE MANUFACTURER'S RECOMMENDATIONS.
2. PREPARE THE SEEDBED, ADD SOIL AMENDMENTS, AND PERMANENTLY SEED THE AREA IMMEDIATELY FOLLOWING SEEDBED PREPARATION.
3. LAY EROSION CONTROL BLANKETS ON THE SEEDED AREA SO THAT THEY ARE IN CONTINUOUS CONTACT WITH THE SOIL WITH EACH UP–SLOPE OR UP–STREAM BLANKET OVERLAPPING THE DOWN–SLOPE OR DOWN–STREAM BLANKET BY AT LEAST EIGHT INCHES, OR FOLLOW MANUFACTURER'S RECOMMENDATIONS.
4. TUCK THE UPPERMOST EDGE OF THE UPPER BLANKETS INTO A CHECK SLOT (SLIT TRENCH), BACKFILL WITH SOIL AND TAMP DOWN. IN CERTAIN APPLICATIONS, THE MANUFACTURER MAY REQUIRE ADDITIONAL CHECK SLOTS AT SPECIFIC LOCATIONS DOWN SLOPE FROM THE UPPERMOST EDGE OF THE UPPER BLANKETS.
5. ANCHOR THE BLANKETS IN PLACE BY DRIVING STAPLES, PINS, OR STAKES THROUGH THE BLANKET AND INTO THE UNDERLYING SOIL. FOLLOW AN ANCHORING PATTERN APPROPRIATE FOR THE SITE CONDITIONS AND AS RECOMMENDED BY THE MANUFACTURER.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET.
- IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THE ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

NOTES
CHANNEL LININGS UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES AT PROJECTED WATER LINE.

STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE RAINFALL.

AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

EROSION CONTROL BLANKET
NOT TO SCALE (REV. 01/17)

INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

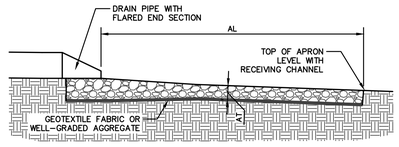
NO.	DESCRIPTION	DATE

Project Number 2012.00280

EROSION CONTROL DETAILS

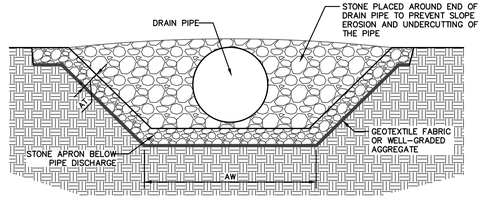
C521

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 7/16/2026
EDITED BY: AONAN
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280.CE.PE.C520.ECD.dwg



AL = APRON LENGTH (FEET)
AW = APRON WIDTH (FEET)
AT = APRON THICKNESS (FEET)= 3X MEDIAN RIPRAP DIAMETER

NOTE: AW IS THE APRON WIDTH AT THE NARROW END OF THE APRON.



SPECIFICATIONS

CAPACITY
- PEAK RUNOFF FROM A 10-YEAR FREQUENCY, 24-HOUR STORM EVENT OR THE DESIGN DISCHARGE OF THE WATER CONVEYANCE STRUCTURE, WHICHEVER IS GREATER.

MAXIMUM VELOCITY
- TEN FEET PER SECOND.

APRON
- ALIGNED STRAIGHT WITH CHANNEL FLOW. IF A CURVE IS NECESSARY TO ALIGN THE APRON WITH THE RECEIVNG STREAM, LOCATE THE CURVE IN THE UPSTREAM SECTION OF THE APRON.
- THICKNESS
  - 1.2 TIMES THE MAXIMUM STONE DIAMETER FOR A d_{50}STONE SIZE OF 15 INCHES OR LARGER.
  - 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR A d_{50}STONE SIZE OF 15 INCHES OR LESS.

TABLE 1. SIZING FOR FLOW DISSIPATERS AT CULVERT PIPE OUTLETS

PIPE SIZE	MEDIAN RIPRAP DIAMETER	APRON WIDTH*	APRON LENGTH**
8 IN.	6 IN. MIN.	2 TO 3 FT.	5 TO 7 FT.
12 IN.	6 IN. MIN.	3 TO 4 FT.	6 TO 10 FT.
15 IN.	6 IN. MIN.	4 TO 6 FT.	6 TO 12 FT.
18 IN.	6 IN. MIN.	4 TO 6 FT.	8 TO 16 FT.
21 IN.	6 IN. MIN.	6 TO 8 FT.	8 TO 16 FT.
24 IN.	9 IN. MIN.	6 TO 8 FT.	12 TO 18 FT.
30 IN.	9 IN. MIN.	8 TO 10 FT.	14 TO 20 FT.
36 IN.	9 IN. MIN.	10 TO 12 FT.	16 TO 22 FT.
42 IN.	9 IN. MIN.	12 TO 14 FT.	18 TO 24 FT.
48 IN.	12 IN. MIN.	12 TO 14 FT.	18 TO 26 FT.
54 IN.	12 IN. MIN.	14 TO 16 FT.	22 TO 28 FT.
60 IN.	12 IN. MIN.	15 TO 17 FT.	22 TO 32 FT.
66 IN.	12 IN. MIN.	17 TO 19 FT.	24 TO 36 FT.
72 IN.	12 IN. MIN.	18 TO 20 FT.	26 TO 40 FT.
84 IN.	18 IN. MIN.	21 TO 23 FT.	30 TO 44 FT.

*APRON WIDTH AT THE NARROW END OF APRON (PIPE OR CHANNEL OUTLET).
**SELECT LENGTH TAKING INTO CONSIDERATION THE LOW FLOW (NO PRESSURE HEAD) OR HIGH FLOW (PRESSURE HEAD) CONDITIONS OF THE CULVERT PIPE.

MATERIALS
- RIPRAP
  - HARD, ANGULAR, HIGHLY WEATHER RESISTANT.
  - SPECIFIC GRAVITY OF AT LEAST 2.5.
  - SIZE AND GRADATION THAT WILL WITHSTAND VELOCITIES OF STORM WATER DISCHARGE FLOW DESIGN.
  - WELL-GRADED MIXTURE OF STONE WITH 50 PERCENT OF THE STONE PIECES, BY WEIGHT, LARGER THAN THE d_{50}SIZE AND THE DIAMETER OF THE LARGEST STONE EQUAL TO 1.5 TIMES THE d_{50}SIZE.
- GEOTEXTILE FABRIC OR WELL-GRADED AGGREGATE (INDOT CA NO. 9, 11, OR 12).

INSTALLATION
1. DIVERT SURFACE WATER RUNOFF AROUND THE STRUCTURE DURING CONSTRUCTION SO THAT THE SITE CAN BE PROPERLY DEWATERED FOR FOUNDATION PREPARATION.
2. EXCAVATE FOUNDATION AND APRON AREA SUBGRADES BELOW DESIGN ELEVATION TO ALLOW FOR THIS THICKNESS OF FILTER MEDIUM AND RIPRAP.
3. COMPACT ANY FILL USED IN SUBGRADE PREPARATION TO THE DENSITY OF SURROUNDING UNDISTURBED SOIL MATERIAL.
4. SMOOTH SUBGRADE ENOUGH TO PROTECT GEOTEXTILE FABRIC FROM TEARING.
5. PLACE GEOTEXTILE FABRIC OR AGGREGATE BEDDING MATERIAL (FOR STABILIZATION AND FILTRATION) ON THE COMPACTED AND SMOOTHED FOUNDATION.
6. INSTALL RIPRAP TO THE LINES AND ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS. BLEND RIPRAP SMOOTHLY TO SURROUNDING GRADE. IF THE CHANNEL IS WELL DEFINED, EXTEND THE APRON ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION OF SIX INCHES ABOVE THE MAXIMUM TAILWATER DEPTH OR THE TOP OF THE BANK, WHICHEVER IS LESS.
7. IF GEOTEXTILE FABRIC TEARS WHEN PLACING RIPRAP, REPAIR IMMEDIATELY BY LAYING AND STAPLING A PIECE OF FABRIC OVER DAMAGED AREA, OVERLAPPING THE UNDAMAGED AREAS BY AT LEAST 12 INCHES.
8. CONSTRUCT A SMALL PLUNGE POOL WITHIN THE OUTLET APRON. (RIPRAP APRONS MUST BE LEVEL WITH OR SLIGHTLY LOWER THAN THE RECEIVING CHANNEL AND SHOULD NOT PRODUCE AN OVERFALL OR RESTRICT FLOW OF THE WATER CONVEYANCE STRUCTURE.)

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- INSPECT FOR STONE DISPLACEMENT; REPLACE STONES ENSURING PLACEMENT AT FINISHED GRADE.
- CHECK FOR EROSION OR SCOURING AROUND SIDES OF THE APRON; REPAIR IMMEDIATELY.
- CHECK FOR PIPING OR UNDERCUTTING; REPAIR IMMEDIATELY.

RIPRAP OUTLET PROTECTION DETAIL FOR CONCRETE FLUME

NOT TO SCALE (REV. 12/17)

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No.
11500408
STATE OF
INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

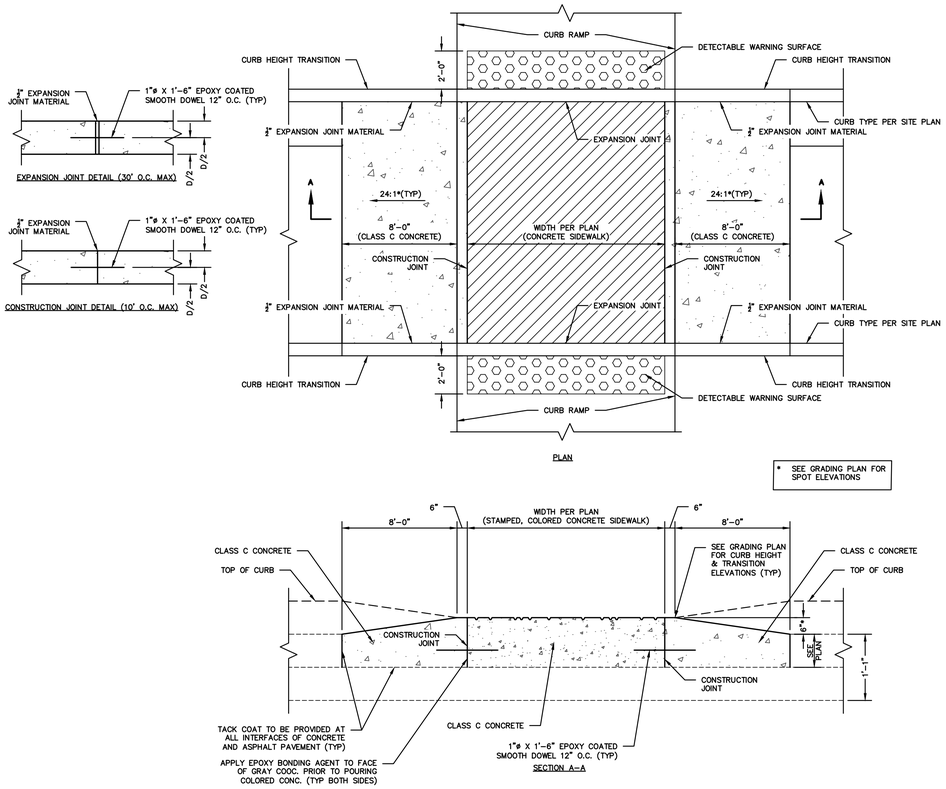
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

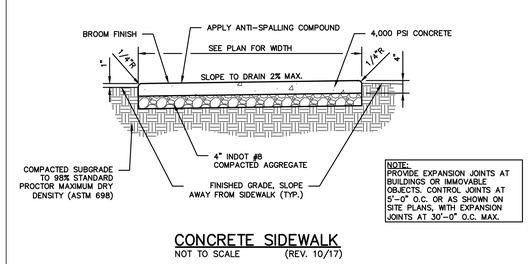
EROSION CONTROL DETAILS

C522

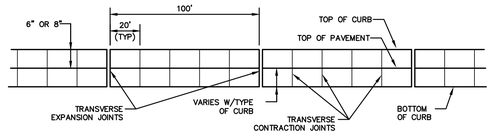
PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.4849
EDIT DATE: 7/16/2026
EDITED BY: AQNAN
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C520 ECD.dwg



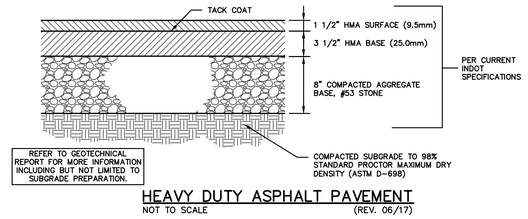
RAISED PEDESTRIAN CROSSING DETAIL
NOT TO SCALE (REV. 02/23)



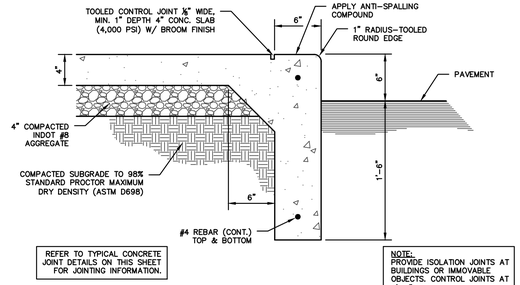
CONCRETE SIDEWALK
NOT TO SCALE (REV. 10/17)



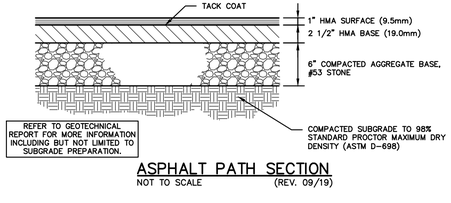
CURB JOINT DETAIL
NOT TO SCALE (REV. 01/17)



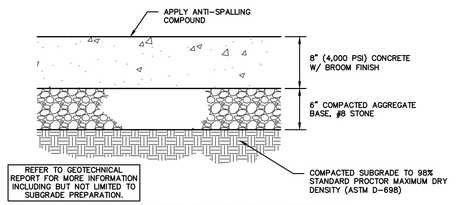
HEAVY DUTY ASPHALT PAVEMENT
NOT TO SCALE (REV. 06/17)



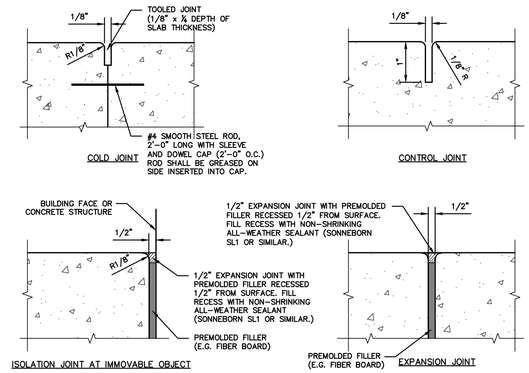
COMBINED CONCRETE CURB AND WALK
NOT TO SCALE (REV. 01/17)



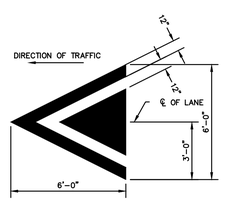
ASPHALT PATH SECTION
NOT TO SCALE (REV. 09/19)



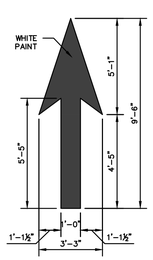
CONCRETE PAVEMENT SECTION
NOT TO SCALE (REV. 03/18)



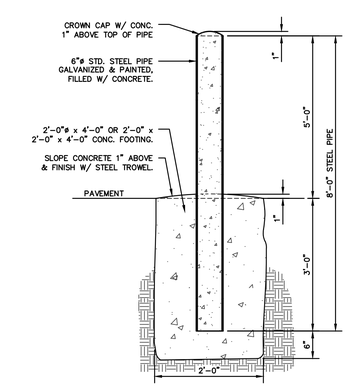
TYPICAL CONCRETE JOINT DETAILS
NOT TO SCALE (REV. 01/17)



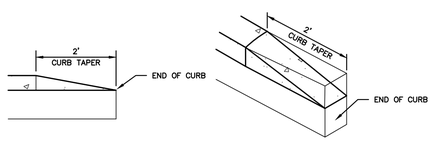
RAISED PEDESTRIAN PAVEMENT MARKING DETAIL
NOT TO SCALE (REV. 02/23)



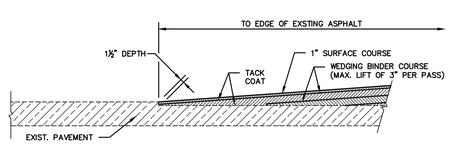
TYP. LANE INDICATION ARROW DETAILS
NOT TO SCALE (REV. 01/17)



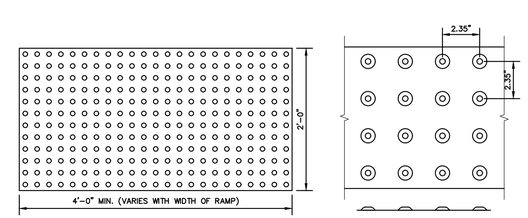
CONCRETE BOLLARD DETAIL
NOT TO SCALE (REV. 02/20)



CURB TAPER DETAIL
NOT TO SCALE (REV. 01-17)



TRANSITION WEDGE DETAIL
NOT TO SCALE (REV. 01/17)



TRUNCATED DOMES PLAN AND CROSS-SECTION
NOT TO SCALE (REV. 01/17)

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANF. WINSLOW REGISTERED No. 11500408 STATE OF INDIANA PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

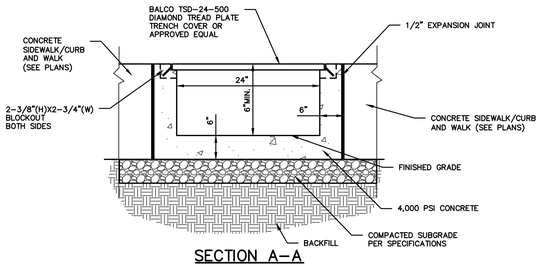
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

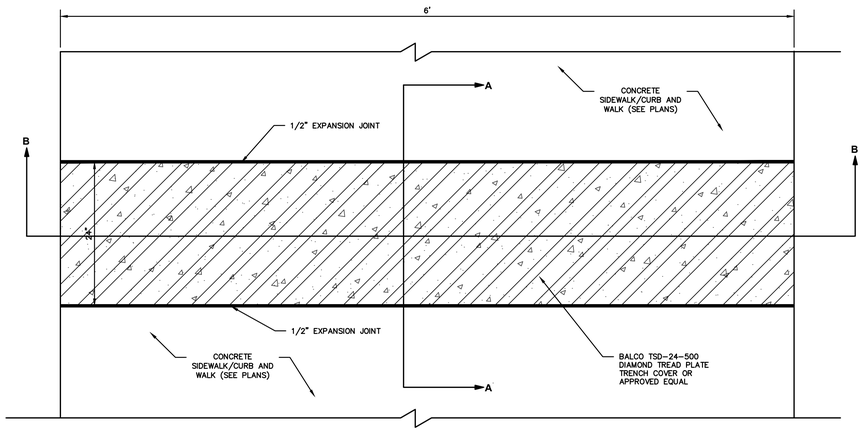
SITE DETAILS

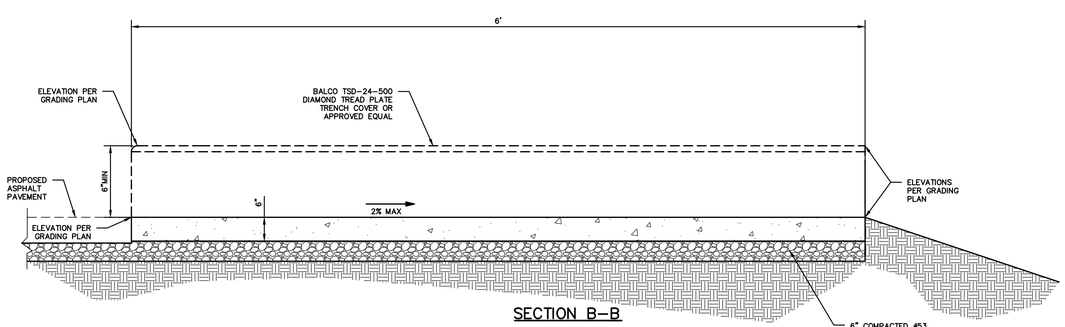
C600

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280-CE-PE C600 SD.dwg



SECTION A–A





SECTION B–B

2' CONCRETE FLUME

NOT TO SCALE (REV. 07/26)

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 10/15/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\2012028\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CIE PE C600 SD.dwg

THE CITY OF INDIANAPOLIS
DEPARTMENT OF PUBLIC WORKS
EST. 1821

October 31, 2019

Design Memorandum No. 2019.04

TO: **All DPW Engineering and Construction Staff, and Consultants**

THRU: **David Borden**
Deputy Director of Engineering
Department of Public Works

FROM: **Mark H. Zwoyer, PE**
City Engineer
Department of Public Works

RE: **Shared Roadway Signage and Pavement Markings**

EFFECTIVE: **Immediately**

Bike routes that are in shared lanes shall use the R4-11 sign. The previously used W11-1 combined with W16-1P shall not be used with shared lanes. The W11-1 may still be used for bike crossing signage.



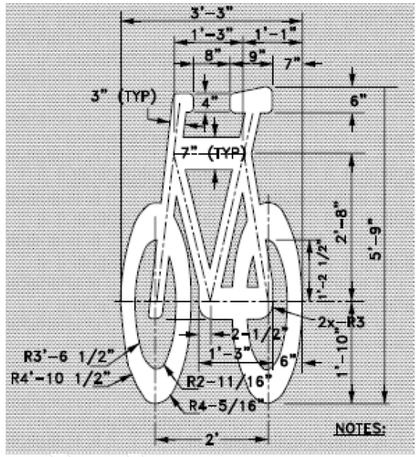
W11-1

W16-1P

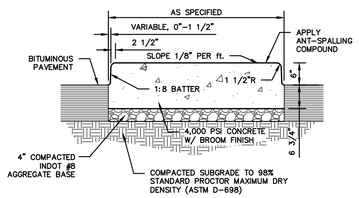


R4-11

A variety of bike symbol pavement markings have been constructed to some confusion. The following detail shall be used for bike symbol pavement markings on all DPW projects with bike symbols:

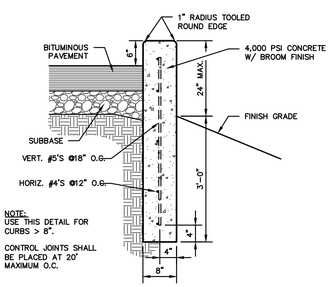


THE CITY OF INDIANAPOLIS



CONCRETE CENTER CURB

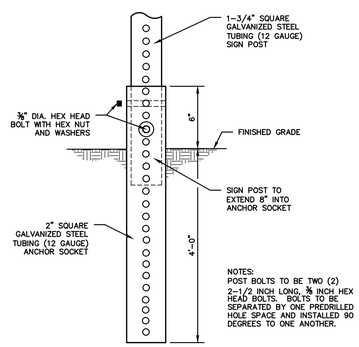
NOT TO SCALE (REV. 12/17)



24" CONCRETE CURB DETAIL

NOT TO SCALE (REV. 03/17)

THE CITY OF INDIANAPOLIS



BREAKAWAY POST DETAIL

NOT TO SCALE (REV. 01/17)

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANE WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow

CERTIFIED BY

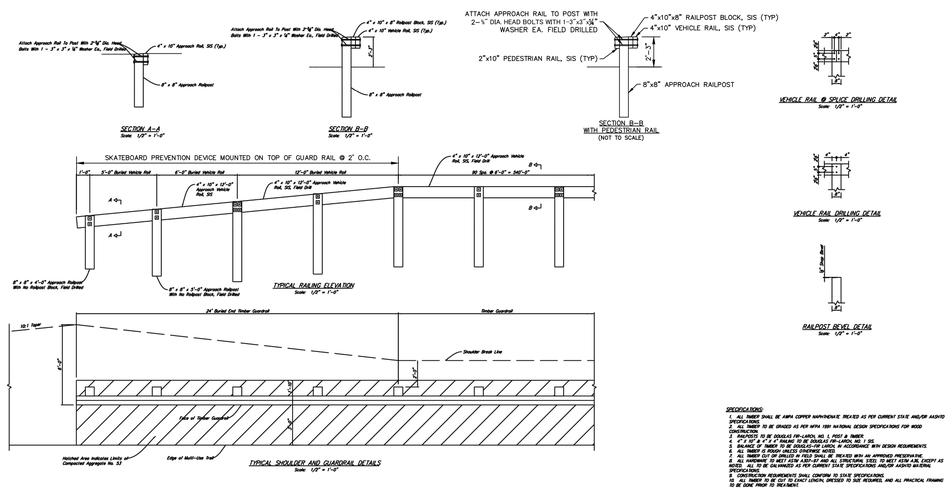
ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SITE DETAILS

C601



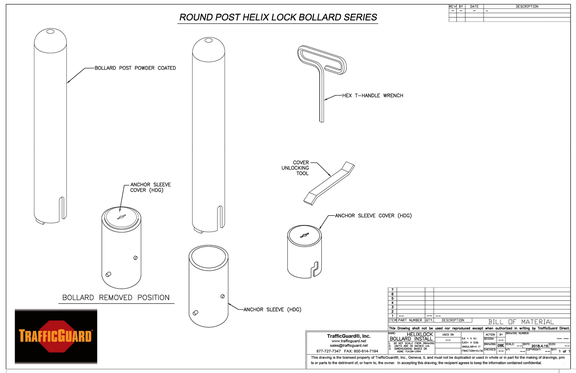
SPECIFICATIONS

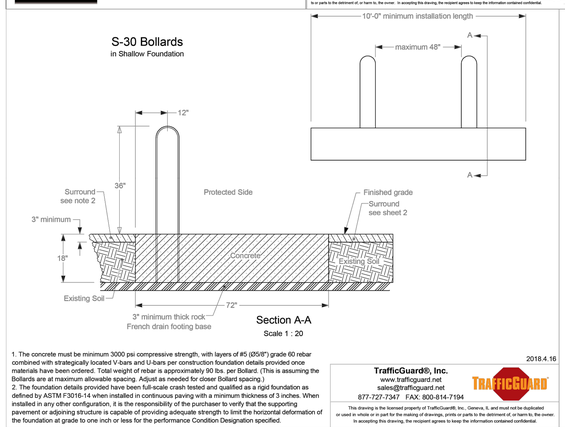
1. ALL TIMBER SHALL BE AWPA COPPER NAPHTHENATE TREATED AS PER CURRENT STATE AND/OR AASHTO SPECIFICATIONS.
2. ALL TIMBER TO BE GRADED AS PER NFPA 1991 NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
3. RAILROADS TO BE DOUGLAS FIR-LARCH, NO. 1 POST & TIMBER.
4. ALL BOLTS TO BE ASTM A307 GRADE A UNLESS NOTED OTHERWISE.
5. BOLHOLES IN TIMBER TO BE DRILLED FOR LARGE, IN ACCORDANCE WITH DESIGN REQUIREMENTS.
6. ALL TIMBER IS ROUGH UNLESS OTHERWISE NOTED.
7. ALL CUTS, NOTCHES, AND HOLES MUST BE TREATED WITH AN APPROVED PRESERVATIVE.
8. ALL HARDWARE TO MEET ASTM A307-07 AND ALL STRUCTURAL STEEL TO MEET ASTM A36, EXCEPT AS NOTED. ALL TO BE GALVANIZED AS PER CURRENT STATE SPECIFICATIONS AND/OR AASHTO M-180 MIL.
9. ALL WELDING TO BE AWS D1.1.
10. CONSTRUCTION REQUIREMENTS SHALL CONFORM TO STATE SPECIFICATIONS.
11. ALL TIMBER TO BE CUT TO EXACT LENGTH, DRILLED TO SIZE REQUIRED, AND ALL PRACTICAL FRAMING TO BE DONE PRIOR TO TREATMENT.

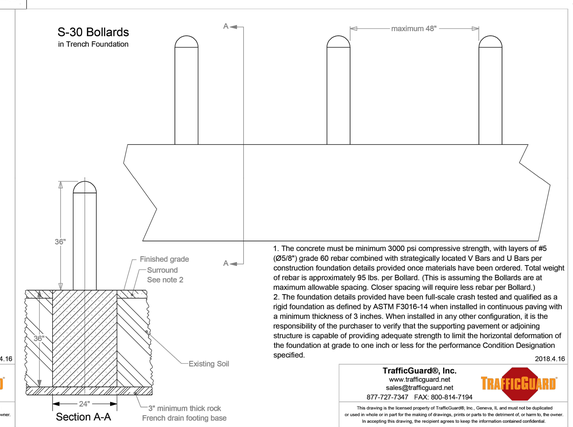
CONSTRUCTION NOTES:

1. ALL HOLES DRILLED IN FIELD WHERE SPACES ARE USED ARE TO BE SMALLER THAN SPIKE SIZE.
2. HOLES DRILLED FOR BOLTS ARE TO BE 1/16" LARGER THAN BOLT SIZE.
3. HOLES DRILLED FOR LAG BOLTS ARE TO BE 70% OF DIAMETER FOR THE THREADED PORTION OF THE BOLT LENGTH FOR THE SHANK.
4. WASHERS ARE USED UNDER BOLT HEAD OR NUT IN DIRECT CONTACT WITH THE TIMBER SHALL HAVE ONE PLATE.
5. LAG BOLTS ARE USED IN TIMBER TO TIMBER OR STEEL TO TIMBER.
6. ANY NUT OR MACHINE BOLT HEAD IN DIRECT CONTACT WITH STEEL SHALL HAVE ONE CUT WASHER BETWEEN NUT & STEEL, OR BOLT HEAD & STEEL.
7. SET THREADS ON ALL BOLTS AT NUT WITH A CENTER PUNCH AFTER TIGHTENING.

TIMBER GUARDRAIL DETAILS







GENERAL WARNINGS AND CAUTIONARY STATEMENTS
FOR REMOVABLE BOLLARDS

In order to safely and effectively use any TrafficGuard®, Inc. ASTM F3016 Crash Rated product, please read and understand the General Warnings and Cautionary Statements contained below. If you have any questions about any of these General Warnings and Cautionary Statements, or about any aspect of TrafficGuard®, Inc.'s products or literature, please contact TrafficGuard®, Inc. at 877-727-7347, or email sales@trafficguard.net.

BOLLARD SELECTION AND PLACEMENT
based on vehicle weight, speed and other site specific factors to be determined by owner.

FAILURE TO UTILIZE TRAFFICGUARD®, INC., INC. AUTHORIZED PARTS, OR MODIFICATIONS to the TrafficGuard®, Inc. products, or failure to follow the recommended installation procedures, will result in your warranty being null and void.

READ AND FULLY UNDERSTAND THE INSTALLATION INSTRUCTIONS
before attempting to install any TrafficGuard®, Inc. bollard product.

SUBSTITUTION OF COMPONENTS MAY IMPAIR THE PROPER FUNCTION
of TrafficGuard®, Inc. bollards products. If you need replacement parts, please contact TrafficGuard®, Inc. at the number and email above.

WARNING: **FAILURE TO FILL/COVER AN OPEN GROUND SLEEVE ON ALL REMOVABLE BOLLARDS MAY RESULT IS DAMAGE TO VEHICLES OR INJURY TO PEDESTRIANS. ALWAYS FILL/COVER THE GROUND SLEEVE PER TRAFFICGUARD®, INC. INSTRUCTIONS.**

REPLACEMENT GROUND SLEEVE FILLER PIECES ARE AVAILABLE
for purchase at TrafficGuard®, Inc. For purchase of replacement ground sleeve filler pieces or other components, please contact TrafficGuard®, Inc. at the number or email above.

CAUTION: **BOLLARD MUST ALWAYS BE SECURED WITH LOCK MECHANISM WHEN BOLLARD IS IN THE GROUND SLEEVE TO AVOID MISUSE.**

FOR MAXIMUM EFFECTIVENESS
of TrafficGuard®, Inc. bollard products, be sure to properly maintain bollards by replacing any damaged, corroded or missing components, and reapply paint as required to maximize visibility. Failure to properly maintain product can negatively impact the bollards performance over time.

TO ENSURE VISIBILITY
of bollards, be sure to apply all decals that are provided with the product, and in the manner recommended by TrafficGuard®, Inc.

IF IN DOUBT CALL TRAFFICGUARD® INC. 877-727-7347

Copyright © 2021 TrafficGuard®, Inc. www.trafficguard.net 877-727-7347 sales@trafficguard.net General Warnings Removable rev. 1.0

TrafficGuard®, Inc. Care & Maintenance

Ensure optimal appearance and long term performance

All TrafficGuard® ASTM F3016 crash rated products are manufactured with high quality materials for premium aesthetics and long term durability. With proper care and maintenance, our products will withstand years of service with minimal wear and corrosion in most North American environments.

General Care & Maintenance

Inspection: All TrafficGuard® products should receive routine inspection and cleaning every 6 months. To avoid progression of damage, identify and address problems as early as possible. Loose or missing parts should be tightened or replaced immediately. Some environments, including high-saline locations subject to saltwater spray or de-icing salts, or high-traffic areas with abundant particulates or other pollutants, will require more frequent attention. Pay close attention to the powder coated finish. Any signs of deterioration of the finish or rusting of the steel should be addressed immediately. **Never allow leaves, mulch or other moisture holding materials to be placed around the area where the pipe meets the foundation.**

Cleaning: Routine (at least every 6 months) cleaning with soap and water is usually sufficient to maintain TrafficGuard® products. Use a soft nylon brush to remove any accumulated dirt. Wash with mild soap or detergent, then rinse in clean water and wipe dry with a soft cloth. Neglected or damaged products may require additional care. Refer to Stainless Steel Care and Maintenance and Powder Coating Care and Maintenance.

Removable Bollards: Bollard posts, ground sleeve lids or filler pieces should be used periodically – six times per year at a minimum to insure functionality and to check all parts for damage or deterioration that may be hidden from observation.

Heavily damaged products: Heavy damage includes structural compromises such as visible dents, cracks, breaks and rust that can undermine the integrity of a product. Heavily damaged products should be removed from service until a repair or replacement can be made. To prevent worsening of damage, any significant rust should be removed as soon as possible. If any parts are broken or missing, contact TrafficGuard®'s Sales Department to determine the availability of replacements.

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHANE WINSLOW REGISTERED No. 11500408 STATE OF INDIANA PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

SITE DETAILS

C602

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 12.5849
EDIT DATE: 10/15/2026
EDITED BY: EVICKERS1AM
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrances\2012.00280_GE PE C600 SD.dwg

ENNIS-FLINT by PPG

Stimsonite®

Raised Pavement Markers

Snow-plowable raised pavement markers

Model 201 Polycarbonate Plastic Lens Cradle
Model 101 Cast-Iron Lens Cradle
Model C40 Replaceable Lens



Proven to improve lane delineation and increase preview time

The ENNIS-FLINT® by PPG STIMSONITE® Model 201 polycarbonate plastic and Model 101 cast-iron lens cradles feature a replaceable C40 lens inside the casting bed. The casting is placed in a recessed cutout that allows the marker lens and casting to rest below the road surface for protection against snow plows.

The recommended tandem application increases total retroreflectivity over traditional recessed markers.



Design

Model 201 is a lightweight, lower-cost, rust-free alternative to Model 101 cast-iron castings

Dual tab design places the casting at the optimal depth to prevent snowplow strikes

Replaceable C40 lens works with either lens cradle model

Installation

Tandem application of Model 201 is less expensive than a single iron casting application

Shallow grooves have less initial clean-out than typical sun marker recessed applications

Easy installation of replaceable reflectors

Driver Safety

Shallow groove depth is less jarring for drivers

Tandem application increases reflective area and features better wet-night retroreflectivity than traditional recessed markers

Compliance/Certification

Initial Specific Intensity (SI) values engineered to at least double ASTM standards

Facility is ISO 9001:2015 certified for the design, development and manufacturing of raised pavement markers

WARNING: Certain colors of this product may contain chemicals known to the State of California to cause cancer and/or reproductive harm. For more information go to P65Warnings.ca.gov.
This document contains general information only and should not be construed as creating any warranties, express or implied.
The PPG Logo and We protect and beautify the world are registered trademarks of PPG Industries Ohio, Inc. Ennis-Flint and Stimsonite are registered trademarks of the PPG Group of Companies. The N Logo is a registered trademark of LinkedIn Corporation. ©2020 PPG Industries, Inc. All rights reserved. 1025 7S/20

PPG's Traffic Solutions Business • 4181 Piedmont Parkway, Suite 370, Greensboro, NC 27410 • 1.800.331.8118 • ppg.com/trafficIN

PPG We protect and beautify the world®

RAISED PAVEMENT MARKERS

STIMSONITE®
Lens Cradle with C40 Replaceable Lens
Model 201

ENNIS-FLINT by PPG Product data sheet

ENNIS-FLINT® by PPG Stimsonite raised pavement markers are safety devices used on roads to improve delineation and increase preview time, particularly under wet conditions. Highways with raised pavement marker center lines have been shown to decrease crash rates by approximately 0.5 crashed per million vehicle miles.

Raised pavement markers play an important safety function on roads, communicating both the travel path for short and long range vehicle operation.

Product highlights

- Dual tab design places the casting at the optimal depth to prevent snowplow blade hits while maintaining superior wet night reflectivity
- Abrasion-resistant coating provides enhanced retained reflectivity
- Advanced optics deliver high reflectivity and durability
- Initial SI values engineered to at least double ASTM standards
- Recommended for high ADT and high intensity conditions

Associated products

- Lightweight polycarbonate lens cradle
- Replaceable C40 polycarbonite lens with ABS plastic body, available in white, yellow, red, blue, green and flourescent orange

Technical data

Physical Characteristics															
Cradle															
Size	5.00" x 3.00" x 0.70" (12.70 cm x 7.62 cm x 1.78 cm)														
Installed Height	0.10" (0.25 cm)														
Weight	2.12 oz. (60 grams)														
Lens															
Size	1.93 sq.in. (12.48 sq. cm.)														
Slope of Lens	35° to base														
C40 Lens Test Properties	Test Method	White		Yellow		Red		Green		Blue		Orange			
		0°	20°	0°	20°	0°	20°	0°	20°	0°	20°	0°	20°	0°	20°
Compressive Strength	ASTM D4280	> 6,000 lbs. (2,722 kg)													
Coefficient of Luminous Intensity (mcd/lx)	ASTM D4280	279	112	167	67	70	28	93	37	26	10	?	?		
Specific Intensity (cd/fc)	ASTM D4280	3.8	1.2	1.8	0.7	0.8	0.3	1.0	0.4	0.3	0.1	?	?		
Coefficient of Luminous Intensity After Abrasion Resistance Testing (mcd/lx)	ASTM D4280	140	56	84	34	35	14	47	19	13	5	?	?		
Specific Intensity After Abrasion Resistance Testing (cd/fc)	ASTM D4280	1.50	0.60	0.90	0.36	0.38	0.15	0.50	0.20	0.14	0.06	?	?		

Packaging

Available in 50-piece boxes per color and casting style. Available as a one-way marker with one lens and one plug, a two-way marker with two lenses of the same color, or a two-way marker with two different colored lenses.

Storage

Store the markers indoors.

PPG

STIMSONITE®
Lens Cradle with C40 Replaceable Lens
Model 201

Product data sheet

Installation and surface preparations

Surface Preparation

To ensure the best adhesion and properties, the surface must be clean and dry. The surface preparation includes, but is not limited to, cleaning and removal of sealing and curing compounds. All pavements shall be cleaned free of grease, oil, dust dirt, grass, loose gravel, loose or flaking paint and other deleterious materials. The pavement surface to be prepared shall be wider than the material line to be applied, such that a prepared area shall be clean and visible on all sides of the material after application. New asphalt, concrete and seal coated surfaces shall be in place a minimum of two weeks prior to application and all curing compounds must be removed. Any existing marking which may interfere with the performance of the material must be physically removed by any Agency approved method except for the use of chemicals. It would be best practice for all existing markings to be at least 90 percent removed. The material may be applied over temporary paint markings which are well adhered to the substrate and are thinner than 8 mils. The material is not designed to be used as a temporary marking. Upon completion of the surface preparation, the pavement surface preferably should first be power broomed and vacuumed. An additional compressed air operation, separate from the compressed air guns on the striping applicator, preferably used to remove residue and debris resulting from the cleaning work. Compressed air must be used during the striping application.

Weather Conditions

Installation of the material shall only take place during dry conditions. Ambient and surface temperature must be 35°F. The road surface shall be completely dry with no dew or frost.

Equipment

Refer to adhesive supplier for equipment recommendations.

Dry Time

Refer to adhesive supplier for dry time application.

Safety

Before working on this product, the user is required to read and understand the information provided in the Safety Data Sheets and to follow the safety precautions and good industrial hygiene.

Specifications (Effective Date): 06/14/2024

WARNING: Certain colors of this product may contain chemicals known to the State of California to cause cancer and/or reproductive harm. For more information go to P65Warnings.ca.gov.
This document contains general information only and should not be construed as creating any warranties, express or implied.
The PPG Logo and We protect and beautify the world are registered trademarks of PPG Industries Ohio, Inc. Ennis-Flint and Stimsonite are registered trademarks of the PPG Group of Companies. The N Logo is a registered trademark of LinkedIn Corporation. ©2024 PPG Industries, Inc. All rights reserved. 06/24

PPG Traffic Solutions • 4181 Piedmont Parkway, Suite 370, Greensboro, NC 27410 • 1.800.331.8118 • ppg.com/trafficIN

PPG We protect and beautify the world®

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No.
11500408
STATE OF
INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

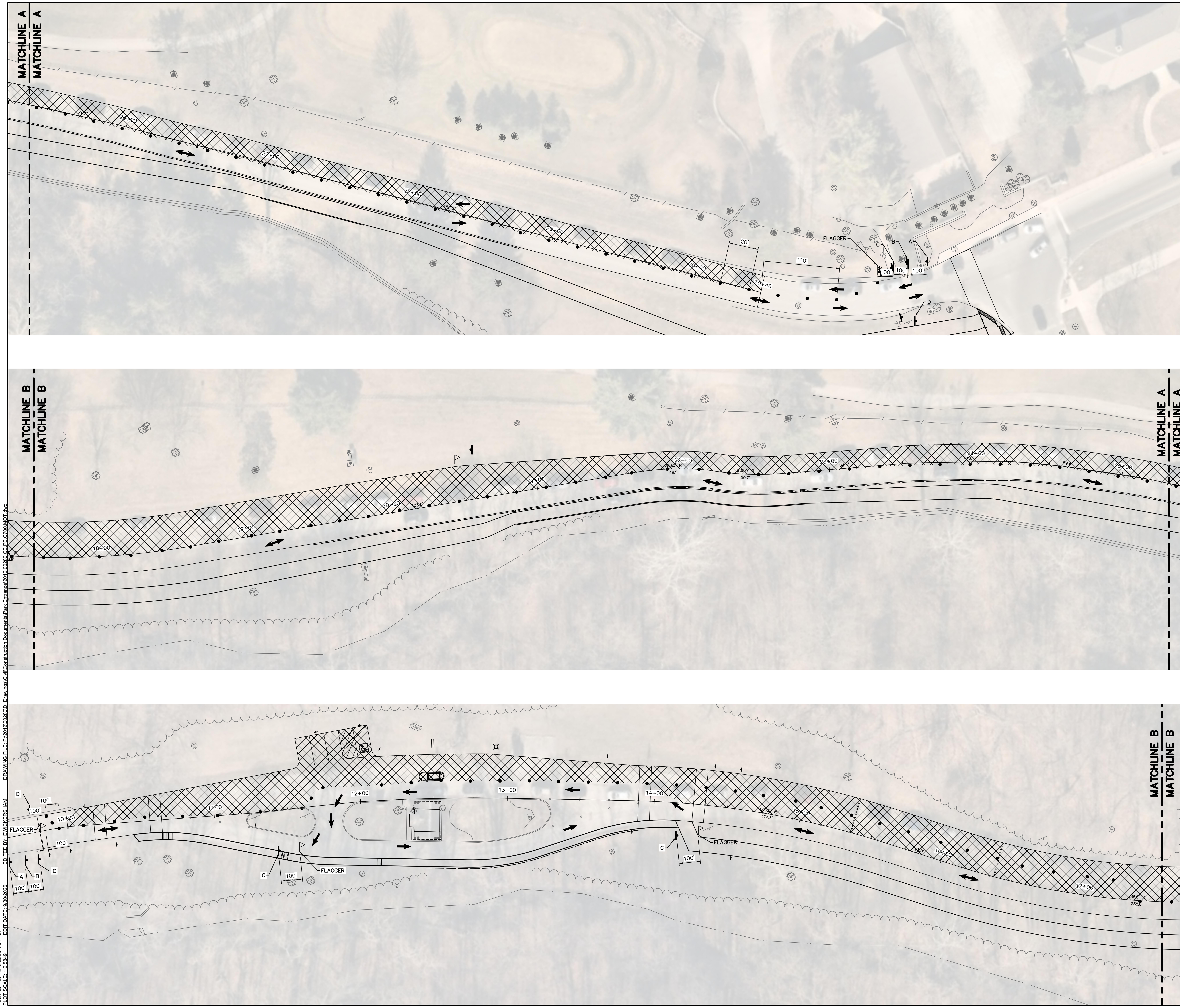
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

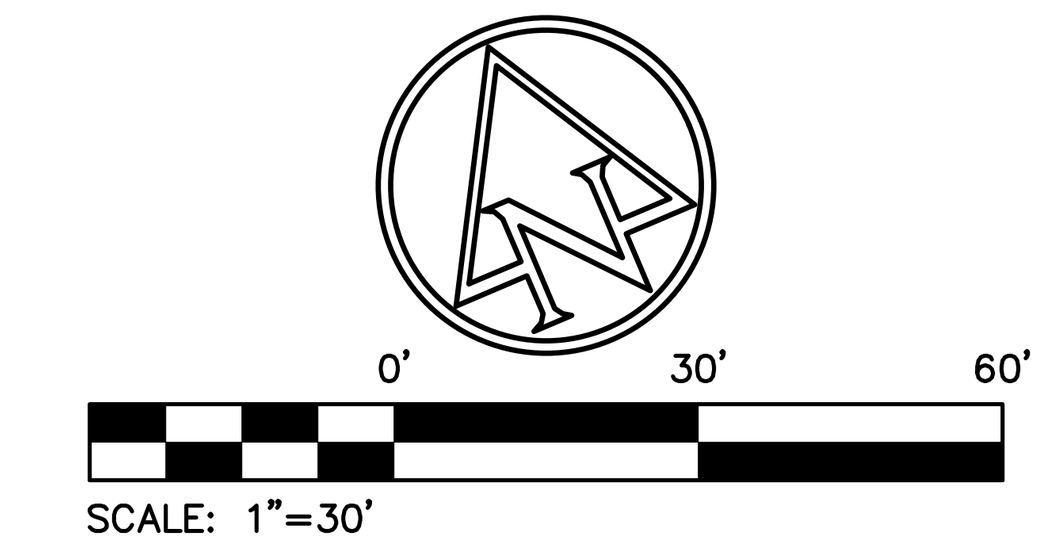
Project Number 2012.00280

SITE DETAILS

C603

PLOT DATE: 10/15/2026 4:53 PM
PLOT SCALE: 1:2.4849
EDIT DATE: 10/15/2026 EDITED BY: EWICKERSHAM DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280.CE.FE.C600.SD.dwg





EXISTING LEGEND

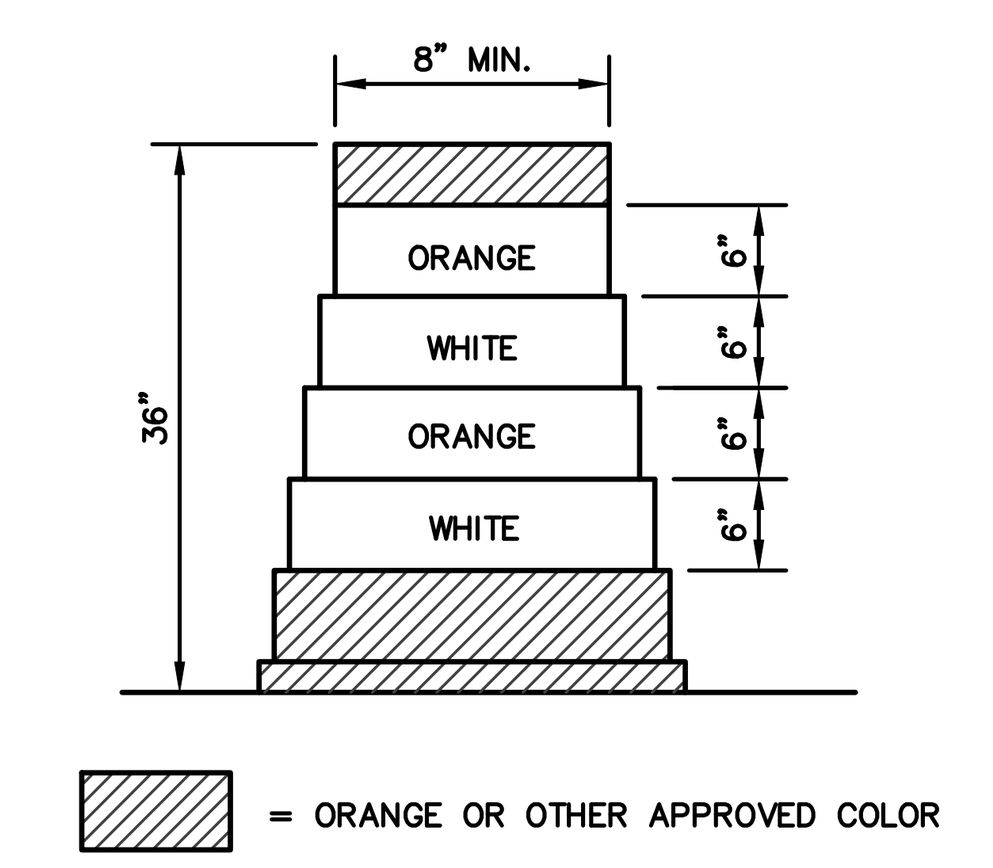
Beehive Inlet	Pine Tree
Bush	Post
Clean Out	Sanitary MH
Combination Pole	Sign
Curb Inlet	Sprinkler Control Valve
Drainage Inlet	Stand Pipe
Drainage MH	Stump
Electric Box	Telephone Handhole
Electric Handhole	Telephone Pedestal
FFE: Finished Floor Elevation	Transformer
Flag Pole	Tree
Guy Wire	TV Pedestal
Light Pole	Water Meter
Manhole	—w— Buried Water Line
	—ohe— Overhead Electric Line

MOT LEGEND

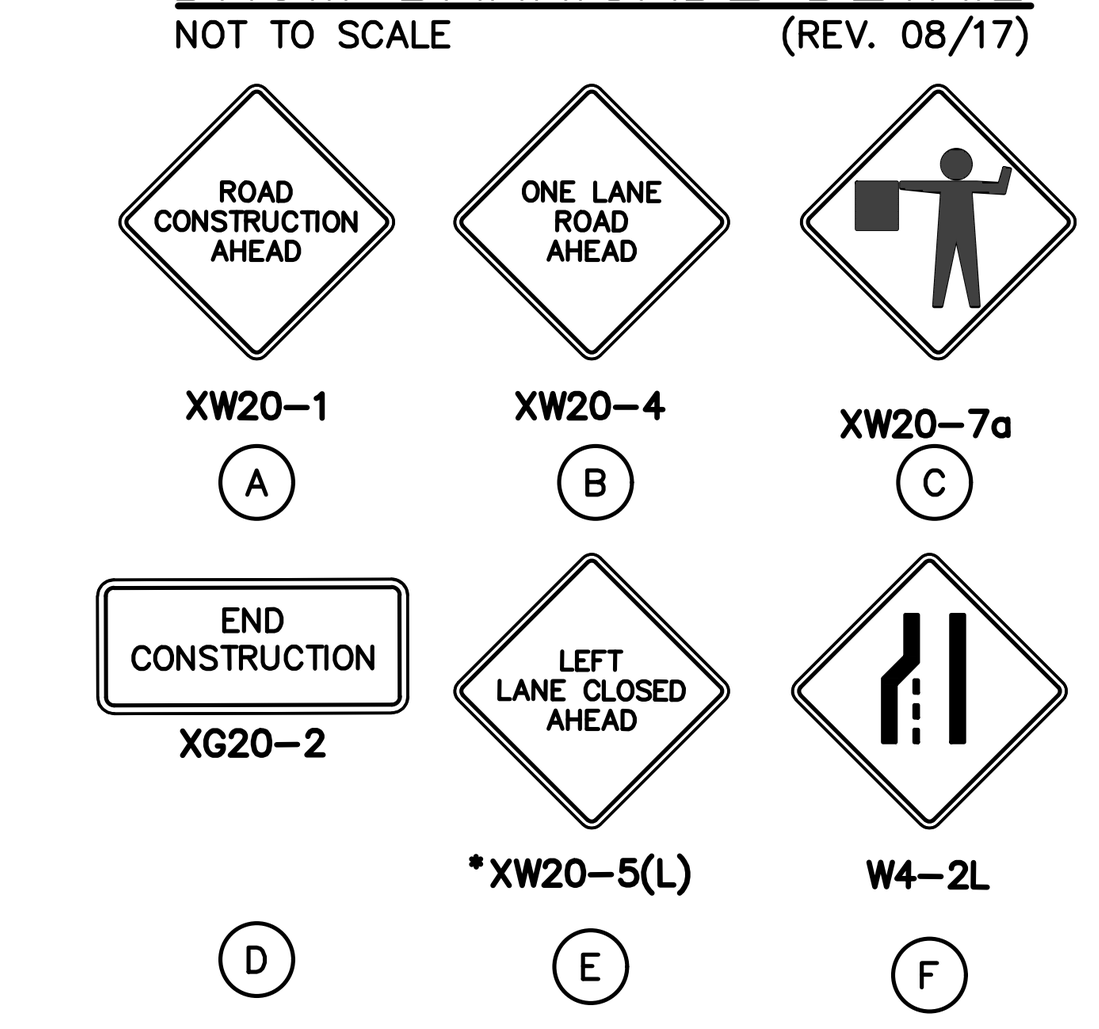
●	STANDARD DRUM BARRICADE WITH "STEADY-BURN" WARNING LIGHTS SPACED AT 20' O.C.
	CONSTRUCTION SIGN
	LOCATION OF FLAGGER
	AREA UNDER CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES:

1. ALL MAINTENANCE OF TRAFFIC SIGNAGE METHODS, MATERIALS AND CONSTRUCTION DETAILS FOR WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF INDIANAPOLIS REQUIREMENTS, INDOT STANDARD DETOUR SHEETS AND SPECIFICATIONS AND THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THIS INCLUDES PLACING ROAD CONSTRUCTION SIGNS, FLASHING ARROW SIGNS, CONSTRUCTION BARRELS, TEMPORARY BARRIERS, ETC.
2. REPAIR OR REPLACE ANY EXISTING PAVEMENT MARKINGS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
3. CONTRACTOR MAY PHASE THE MAINTENANCE OF TRAFFIC AS NECESSARY TO COMPLETE THE PROJECT.
4. CONTRACTOR SHALL MAINTAIN PARK ACCESS THROUGHOUT THE DURATION OF THE PROJECT.



DRUM BARRICADE DETAIL
NOT TO SCALE (REV. 08/17)



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

Nathan Winslow
CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE

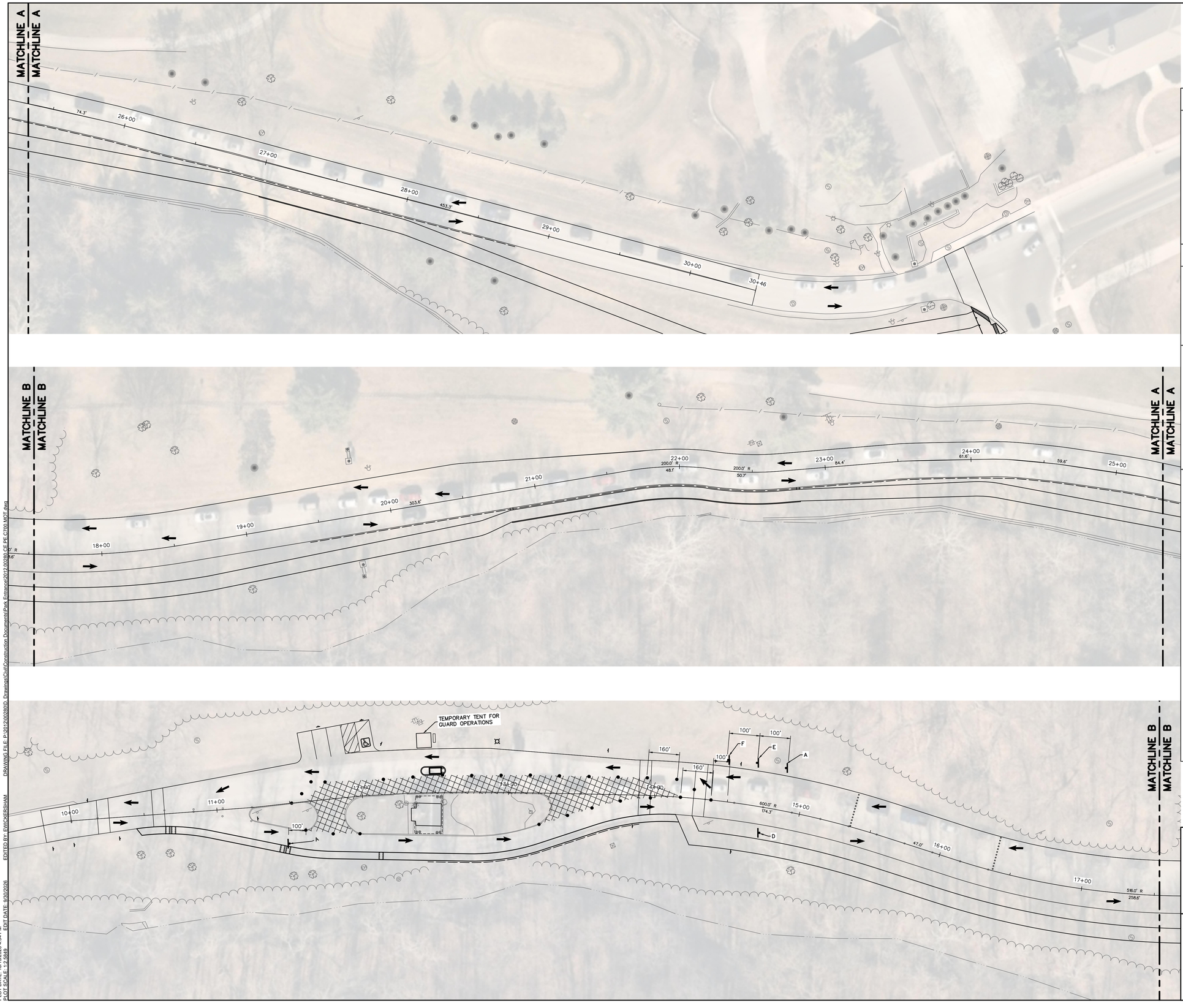
NO.	DESCRIPTION	DATE

Project Number 2012.00280

MAINTENANCE OF TRAFFIC PLAN - PHASE 1

C701

PLOT DATE: 10/15/2026 4:54 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 9/30/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D. Drawings\Civil\Construction Documents\Park Entrance\2012.00280.CE.PE.C700.MOT.dwg



SCALE: 1"=30'

EXISTING LEGEND

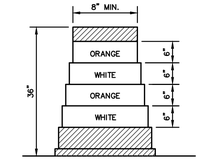
	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
	Manhole	—w—	Buried Water Line
		—ohe—	Overhead Electric Line

MOT LEGEND

- STANDARD DRUM BARRICADE WITH "STEADY–BURN" WARNING LIGHTS SPACED AT 20' O.C.
- CONSTRUCTION SIGN
- LOCATION OF FLAGGER
- AREA UNDER CONSTRUCTION

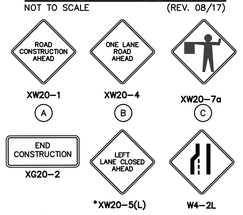
MAINTENANCE OF TRAFFIC NOTES:

1. ALL MAINTENANCE OF TRAFFIC SIGNAGE METHODS, MATERIALS AND CONSTRUCTION DETAILS FOR WORK WITHIN PUBLIC RIGHT–OF–WAY SHALL CONFORM TO THE CITY OF INDIANAPOLIS REQUIREMENTS, INDOT STANDARD DETOUR SHEETS AND SPECIFICATIONS AND THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THIS INCLUDES PLACING ROAD CONSTRUCTION SIGNS, FLASHING ARROW SIGNS, CONSTRUCTION BARRELS, TEMPORARY BARRIERS, ETC.
2. REPAIR OR REPLACE ANY EXISTING PAVEMENT MARKINGS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
3. CONTRACTOR MAY PHASE THE MAINTENANCE OF TRAFFIC AS NECESSARY TO COMPLETE THE PROJECT.
4. CONTRACTOR SHALL MAINTAIN PARK ACCESS THROUGHOUT THE DURATION OF THE PROJECT.



= ORANGE OR OTHER APPROVED COLOR

DRUM BARRICADE DETAIL
NOT TO SCALE (REV. 08/17)



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1–800–382–5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES

402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216

NATHAN F. WINSLOW
REGISTERED
No. 11500408
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

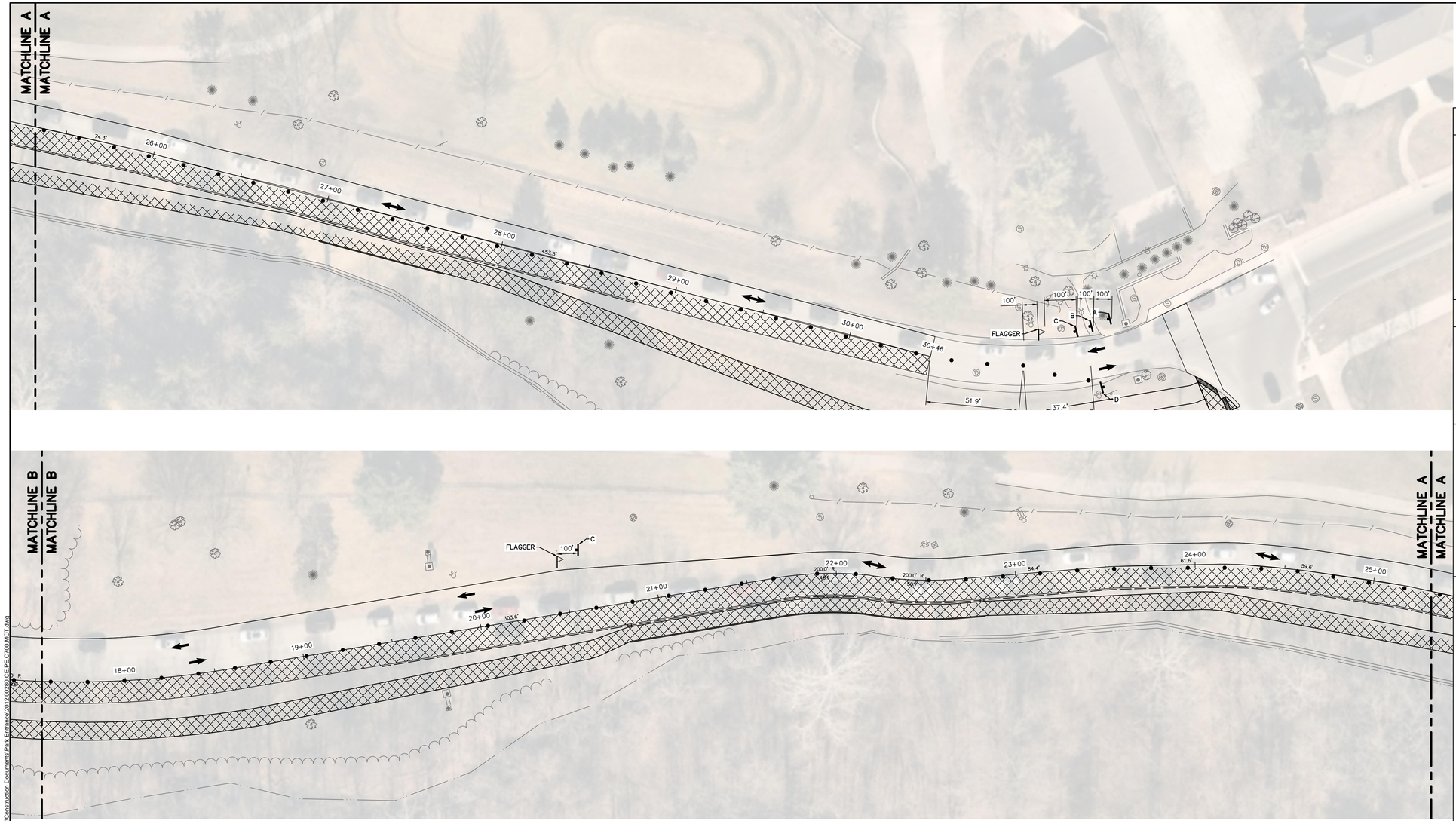
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

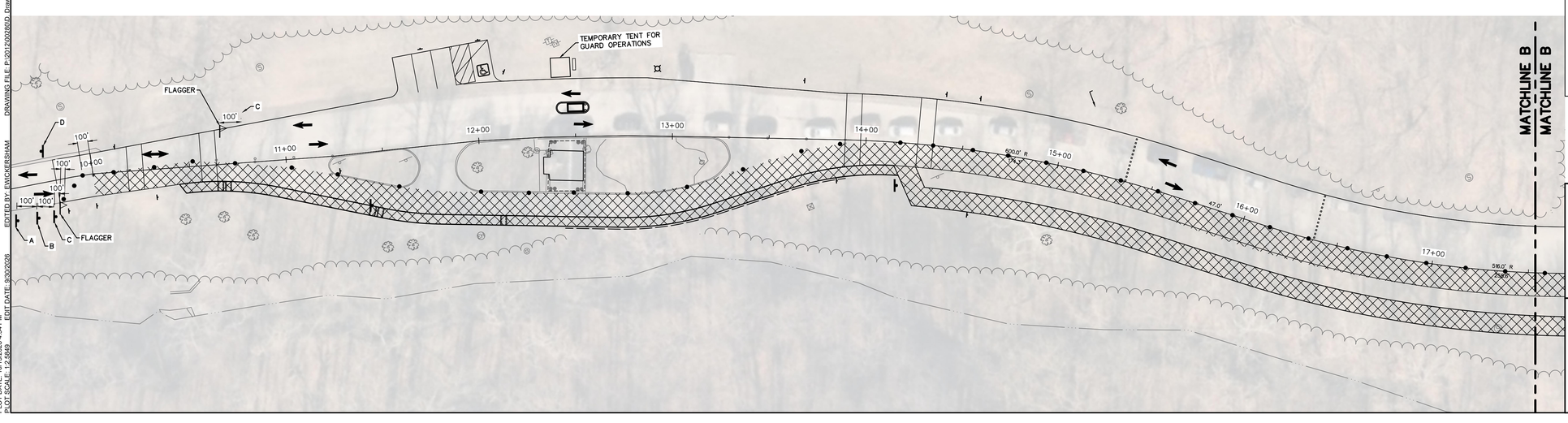
Project Number 2012.00280

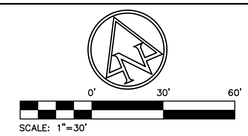
MAINTENANCE OF TRAFFIC PLAN - PHASE 2

C702

PLOT DATE: 10/15/2026 4:54 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 9/30/2026
EDITED BY: EWICKERSHAM
DRAWING FILE: P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280 CE PE C700 MOT.dwg







EXISTING LEGEND

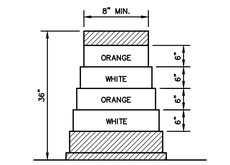
	Beehive Inlet		Pine Tree
	Bush	•	Post
	Clean Out	S	Sanitary MH
	Combination Pole		Sign
	Curb Inlet		Sprinkler Control Valve
	Drainage Inlet		Stand Pipe
D	Drainage MH		Stump
E	Electric Box	T	Telephone Handhole
E	Electric Handhole		Telephone Pedestal
FFE:	Finished Floor Elevation		Transformer
	Flag Pole		Tree
	Guy Wire	TV	TV Pedestal
	Light Pole		Water Meter
G	Manhole	—w—	Buried Water Line
		—ohe—	Overhead Electric Line

MOT LEGEND

- STANDARD DRUM BARRICADE WITH "STEADY–BURN" WARNING LIGHTS SPACED AT 20' O.C.
- CONSTRUCTION SIGN
- LOCATION OF FLAGGER
- AREA UNDER CONSTRUCTION

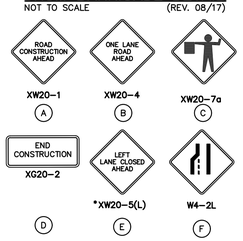
MAINTENANCE OF TRAFFIC NOTES:

1. ALL MAINTENANCE OF TRAFFIC SIGNAGE METHODS, MATERIALS AND CONSTRUCTION DETAILS FOR WORK WITHIN PUBLIC RIGHT–OF–WAY SHALL CONFORM TO THE CITY OF INDIANAPOLIS REQUIREMENTS, INDOT STANDARD DETOUR SHEETS AND SPECIFICATIONS AND THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THIS INCLUDES PLACING ROAD CONSTRUCTION SIGNS, FLASHING ARROW SIGNS, CONSTRUCTION BARRELS, TEMPORARY BARRIERS, ETC.
2. REPAIR OR REPLACE ANY EXISTING PAVEMENT MARKINGS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
3. CONTRACTOR MAY PHASE THE MAINTENANCE OF TRAFFIC AS NECESSARY TO COMPLETE THE PROJECT.
4. CONTRACTOR SHALL MAINTAIN PARK ACCESS THROUGHOUT THE DURATION OF THE PROJECT.



= ORANGE OR OTHER APPROVED COLOR

DRUM BARRICADE DETAIL
NOT TO SCALE (REV. 08/17)



GENERAL NOTES:

1. CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
3. SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

!! CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1–800–382–5544
– INDIANA UNDERGROUND –

DNR
INDIANA DEPARTMENT OF NATURAL RESOURCES
402 W Washington Street
Room W299
Indianapolis, IN 46204

AMERICAN STRUCTUREPOINT INC.
9025 River Road, Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

FORT HARRISON STATE PARK ENTRANCE IMPROVEMENTS

6000 N. Post Road
Indianapolis, IN 46216



CERTIFIED BY

ISSUANCE INDEX
DATE:
10/16/2026
PROJECT PHASE:
ISSUE FOR BID

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2012.00280

MAINTENANCE OF TRAFFIC PLAN - PHASE 3

C703

PLOT DATE: 10/15/2026 4:54 PM
PLOT SCALE: 1:2.5849
EDIT DATE: 9/30/2026
EDITED BY: EWICKERSHAM
DRAWING FILE P:\2012\00280\D Drawings\Civil\Construction Documents\Park Entrance\2012.00280_CE PE C700 MOT.dwg