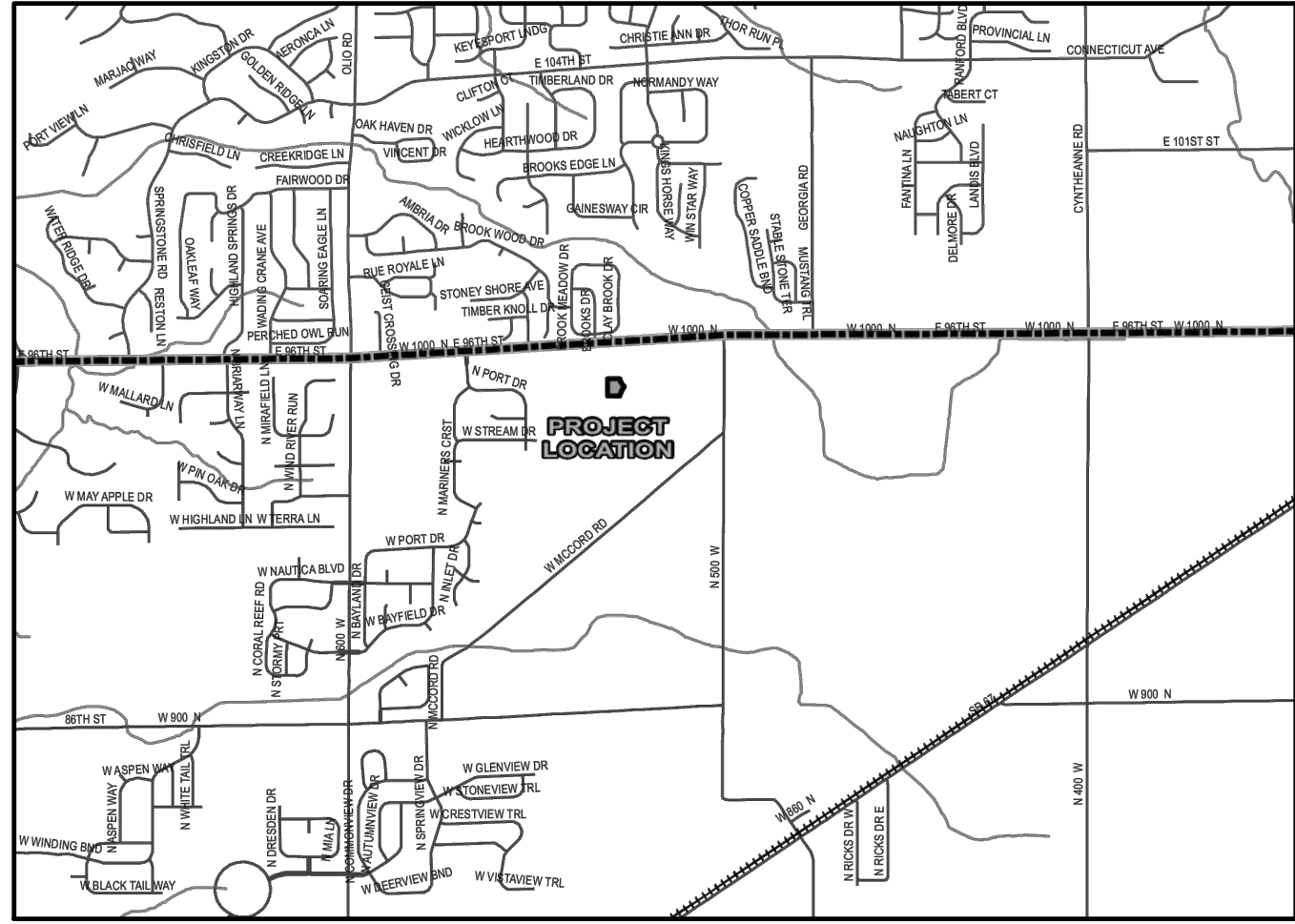


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Plot Date: Aug 22, 2022  
Plot Time: 4:42pm  
By: keichhorn



LOCATION MAP  
SCALE 1" = 1,000 FEET

# McCORD POINTE SEC. 7 AMENITY AREA

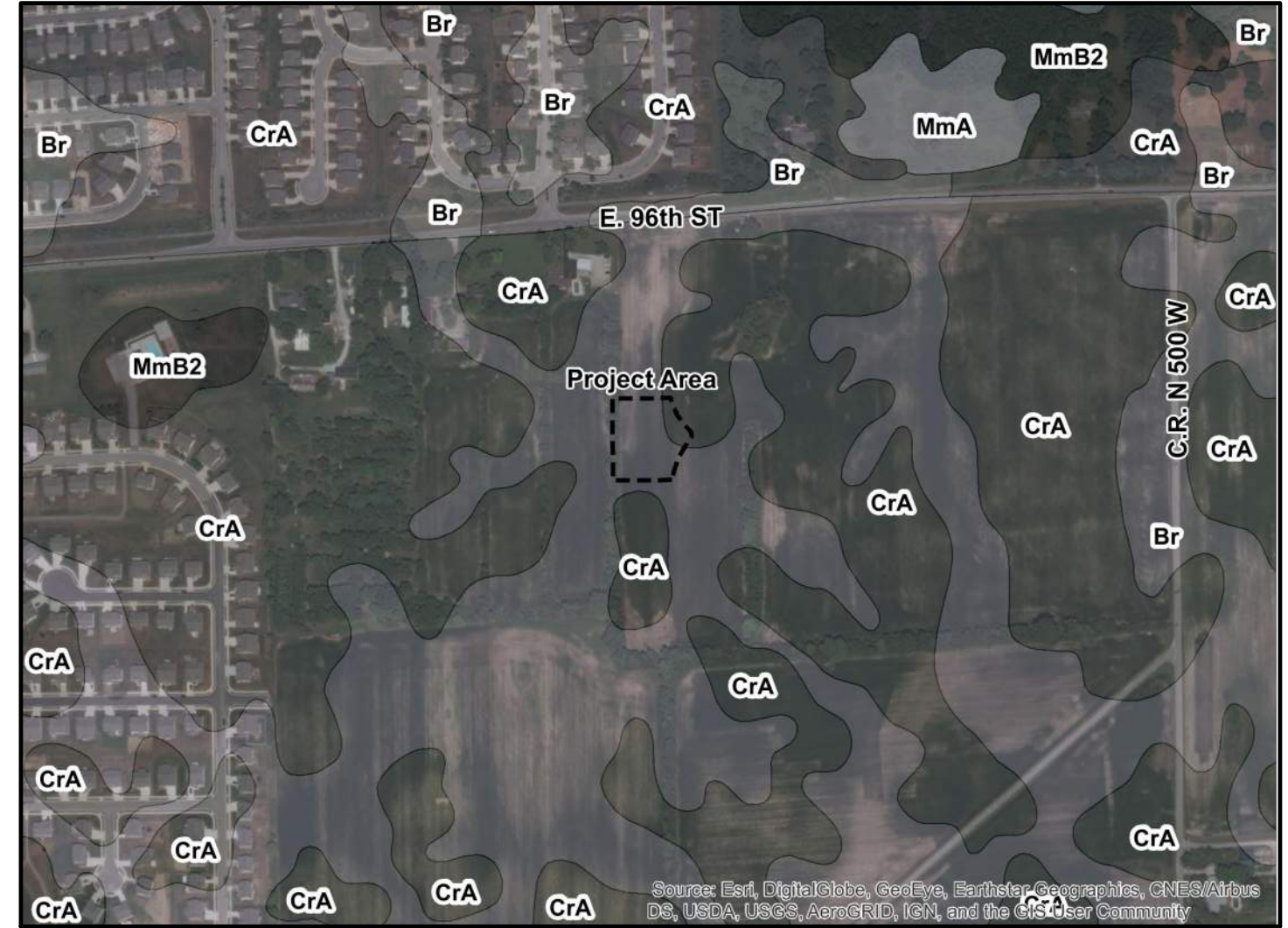
## Lennar Homes of Indiana, LLC

### DEVELOPER:

LENNAR HOMES OF INDIANA, LLC  
STUART HUCKELBERRY  
11555 N. MERIDIAN ST., SUITE 400  
CARMEL, IN 46032  
(317) 659-3200

### CIVIL ENGINEER and SURVEYOR:

HWC ENGINEERING  
135 N. PENNSYLVANIA ST., SUITE 2800  
INDIANAPOLIS, IN 46204  
(317) 347-3663  
keichhorn@hwcengineering.com



SOILS MAP  
NOT TO SCALE

### SOIL DESCRIPTIONS/LIMITATIONS

- Br** - Brookston silty clay loam, 0 to 2 percent slopes.  
For the construction of local roads and streets, this soil is rated very limited due to a high potential for ponding, limited depth to a saturated zone (water table), high potential for frost action, moderate potential for shrink/swell action, and low strength. For the construction of homes, this soil is rated very limited due to a limited depth to a saturated zone (water table) and high potential for ponding. The potential for shrink/swell action is low however.
- CrA** - Crosby silty loam, fine-loamy subsoil, 0 to 2 percent slopes.  
For the construction of local roads and streets, this soil is rated very limited due to a high potential for frost action, limited depth to a saturated zone (water table), and low strength. For the construction of homes, this soil is rated very limited due to a limited depth to a saturated zone (water table).

### SHEET LIST TABLE

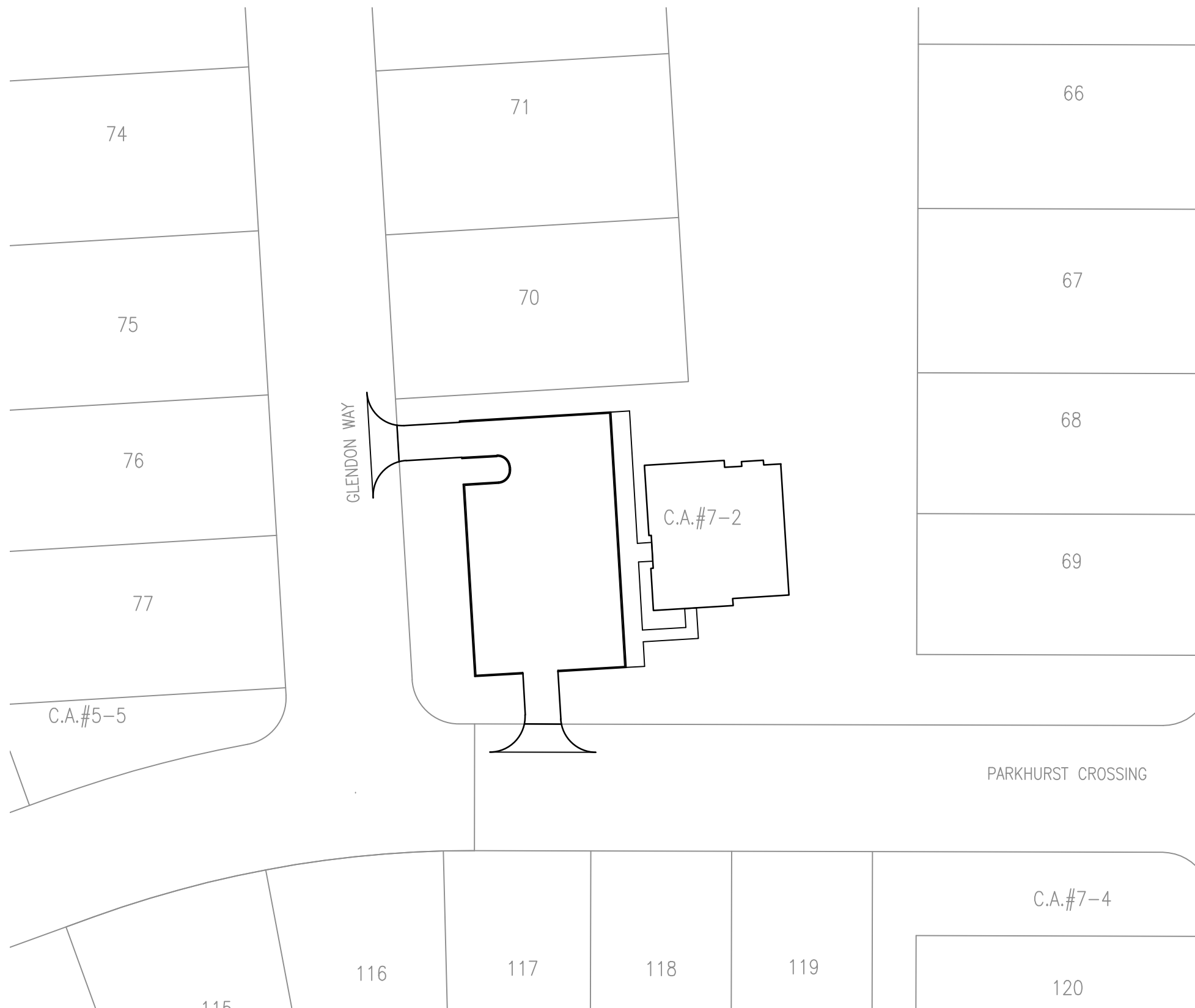
Sheet Title	Sheet Description
C1.0	COVER
C1.1	SITE IMPROVEMENTS PLAN
C1.2	GRADING PLAN
C1.3	PRE-CONSTRUCTION STORMWATER POLLUTION PREVENTION & DEMOLITION PLAN
C1.4	ACTIVE CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN
C1.5	POST CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN
C1.6	UTILITY PLAN
C8.0	STORMWATER POLLUTION PREVENTION NOTES
C8.1-C8.4	STORMWATER POLLUTION PREVENTION DETAILS
C8.5	CONSTRUCTION DETAILS

### McCORDSVILLE TOWN STANDARDS SHEET LIST TABLE

Sheet Title	Sheet Description
1	DIRECTIONS FOR USE & GENERAL NOTES
2	RIGHT-OF-WAY SECTIONS & PAVEMENT SPECIFICATIONS
3	RIGHT-OF-WAY DETAILS
4	UTILITY LOCATION GUIDELINES
5	DRIVE WAY & HANDICAP RAMP DETAILS
6	STORM SEWER STRUCTURE DETAILS
7	STORM SEWER BEDDING DETAILS AND GENERAL NOTES
8	SANITARY SEWER SPECIFICATIONS
9	SANITARY SEWER DETAILS
10	SANITARY SEWER LIFT STATION STANDARDS & GUIDELINES

### BENCHMARK INFORMATION:

CUT SQUARE ON BACK OF CURB AT INTERSECTION OF NORTH ANCHOR BEND AND NORTH MARINERS CREST. SQUARE IS AT THE NORTH EAST PORTION OF INTERSECTION 3' WEST OF A FIRE HYDRANT.  
ELEVATION = 847.28 (NGVD 29)



SITE MAP  
SCALE: 1" = 50'

### CONTACT INFORMATION:

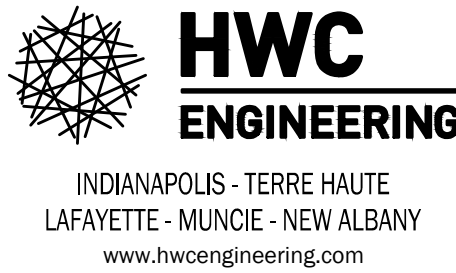
<b>CITIZENS ENERGY GROUP/ CWA AUTHORITY, INC. (WATER)</b> BRAD HOSTETLER 2150 DR. MARTIN LUTHER KING JR. STREET INDIANAPOLIS, INDIANA 46202 P: (317) 927-4351 BHOSTETLER@CITIZENSENERGYGROUP.COM	<b>NINESTAR CONNECT (Electric &amp; Telecom)</b> ERIC MEYER (317) 323-2074 2243 East Main Street Greenfield, Indiana 46140 EMEYER@NINESTARCONNECT.COM	<b>COMCAST</b> MATT STRINGER 5330 E. 65th Street Indianapolis, IN 46220 P: (317) 774-3384 F: (317) 219-5090 matthew_stringer@cable.comcast.com	<b>VECTREN</b> SANDRA CASEY 16000 Allisonville Road Noblesville, Indiana 46061 P: (317) 776-5532 F: (317) 776-5553 Mailing Address: P.O. Box 1700 Noblesville, Indiana 46061 sandra.casey@centerpointenergy.com
<b>McCORDSVILLE FIRE DEPARTMENT</b> 7580 N Form Street McCordsville, Indiana 46055 P: (317) 335-9236	<b>TOWN OF McCORDSVILLE PLANNING AND BUILDING DEPT</b> RYAN CRUM 6280 W 800 N McCordsville, Indiana 46055 P: (317) 335-3604 rcrum@mccordsvill.org	<b>TOWN OF McCORDSVILLE ENGINEERING DEPARTMENT</b> MARK WITSMAN 6280 W 800 N McCordsville, IN 46055 P: (317) 335-3604 mwitsman@mccordsvill.org	<b>TOWN OF McCORDSVILLE PUBLIC WORKS</b> RON CRIDER 6280 W 800 N McCordsville, IN 46055 P: (317) 335-3493 rcrider@mccordsvill.org

### SITE DATA

LOTS: 0  
DISTURBED AREA: 1.0 AC  
START CONSTRUCTION: SEPTEMBER 2020  
END CONSTRUCTION: APRIL 2021  
ZONED McCORD POINTE AMENDED PUD ORDINANCE NO. 101017B, AN ORDINANCE AMENDING THE TOWN OF McCORDSVILLE ZONING ORDINANCE NO. 121410, AS AMENDED.

PLAN COMMISSION APPROVAL	_____
DRAINAGE APPROVAL	_____
ADDRESS APPROVAL	_____
EROSION CONTROL APPROVAL	_____
COUNTY ENGINEER APPROVAL	_____
COUNTY SANTARIAN APPROVAL	_____
COUNTY COMMISSIONERS APPROVAL	_____

REVISIONS		
DATE	DESCRIPTION	BY



MCCORD POINTE  
MCCORDSVILLE, INDIANA  
COVER SHEET

PROFESSIONAL ENGINEER  
No. 11400758  
STATE OF INDIANA  
NOTARY PUBLIC  
K. Keichhorn  
DRAWN BY: DC  
CHECKED BY: KE  
DATE: MARCH 2022  
SCALE: AS SHOWN  
SHEET: C1.0  
COVER SHEET  
JOB NUMBER: 2019-003-A



SITE IMPROVEMENT GENERAL NOTES:

- ALL EXCAVATED TRENCHES UNDER PROPOSED PAVED AREAS INCLUDING SIDEWALKS SHALL BE BACKFILLED WITH GRANULAR MATERIAL PER INDOT STANDARD SPECIFICATIONS, SECTION 211, AND COMPACTED IN LIFTS. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE LIMITS OF THE PAVEMENT AT THE SURFACE WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
- WHERE NECESSARY, UTILITY SERVICE CONDUITS SHALL BE INSTALLED UNDER PAVED AREAS AND BACKFILLED AS SPECIFIED ABOVE BEFORE PAVEMENT IS CONSTRUCTED. COORDINATE CONDUIT REQUIREMENTS WITH UTILITY COMPANIES AND MECHANICAL CONTRACTORS.
- FOLLOWING THE COMPLETION OF ALL UNDERGROUND WORK IN PAVED AREAS, AGGREGATE BASE SHALL BE APPLIED AND COMPACTED TO THE THICKNESS INDICATED ON THE APPROPRIATE PAVEMENT DESIGN DETAIL. COMPACT BASE COURSE AT OPTIMUM MOISTURE CONTENT TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D-1557. WHEN THICKNESS OF COMPACTED BASE EXCEEDS 6 INCHES, PLACE MATERIALS IN EQUAL LAYERS, WITH NO LAYER MORE THAN 6 INCHES OR LESS THAN 3 INCHES THICK WHEN COMPACTED. COMPACT WITH A MEDIUM WEIGHT SMOOTH WHEELED ROLLER OR EQUIVALENT. ALONG CURBS, WALLS AND ALL LOCATIONS NOT ACCESSIBLE TO THE ROLLER, COMPACT AGGREGATE BASE WITH HAND OPERATED TAMPERS.
- BITUMINOUS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH INDOT STANDARD SPECIFICATIONS, SECTION 400. PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH INDOT STANDARD SPECIFICATIONS, SECTION 500. SEE CONSTRUCTION DETAILS FOR PAVEMENT DESIGN INFORMATION.
- THE CONNECTION OF NEW PAVEMENT TO EXISTING PAVEMENT IN THE PARKING LOTS AND DRIVEWAYS SHALL MATCH EXISTING GRADES AND PROFILES. A LAP JOINT IS REQUIRED FOR CONNECTIONS BETWEEN EXISTING AND PROPOSED BITUMINOUS PAVEMENTS.
- UNLESS NOTED OTHERWISE, ALL PAVEMENT STRIPING WITHIN THE PROJECT SITE SHALL BE PAINTED WITH WHITE LATEX, WATERBORNE EMULSION, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH FS TT-P-1952. APPLY PAINT WITH MECHANICAL EQUIPMENT AND/OR STENCILS TO PRODUCE CLEAN, STRAIGHT AND UNIFORM EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PRODUCE A MINIMUM 12 TO 15 MILS DRY THICKNESS.
- PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-150. ONLY ONE BRAND AND MANUFACTURER OF APPROVED CEMENT SHALL BE USED FOR ANY ONE STRUCTURE. REGULAR FINE AND COARSE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-33. ALL WATER USED SHALL BE POTABLE, CLEAN AND FREE FROM OILS, ACIDS, ALKALIS, ORGANIC MATERIAL OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO CONCRETE OR STEEL.
- REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615, GRADE 60. WELDED WIRE FABRIC OR WIRE MESH SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-185. REINFORCEMENT SHALL BE CUT AND BENT IN ACCORDANCE WITH ACI 315. COMPLY WITH ARSI RECOMMENDED PRACTICE "PLACING REINFORCING BARS" FOR PLACING AND SUPPORTING REINFORCEMENT.
- ALL CONCRETE USED ON THIS PROJECT SHALL BE CLASS A STRUCTURAL CONCRETE WITH A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. 6-1/2 BAGS, 2 TO 4 INCH SLUMP RANGE, 5% TO 8% AIR CONTENT. CLASS A CONCRETE SHALL BE PROPORTIONED IN ACCORDANCE WITH ACI 211.1. ALL READY MIXED CONCRETE SHALL BE MIXED, DELIVERED, AND PLACED IN ACCORDANCE WITH ASTM C-94.
- FORMS SHALL BE CONSTRUCTED OF WOOD, PLYWOOD, STEEL, OR OTHER APPROVED MATERIALS AND SHALL BE MORTAR TIGHT. THE FORMS AND ASSOCIATED FALSEWORK SHALL BE SUBSTANTIAL AND UNYIELDING AND SHALL BE CONSTRUCTED SO THAT THE FINISHED CONCRETE WILL CONFORM TO THE DIMENSIONS AND CONTOURS SHOWN ON THE DRAWINGS. FORM SURFACES SHALL BE SMOOTH AND FREE FROM HOLES, DENTS, SACS, AND OTHER IRREGULARITIES. THE FORMS SHALL BE COATED WITH A NON-STAINING OIL BEFORE CONCRETE IS POURED. REMOVE FORMS A MINIMUM OF 24 HOURS AFTER PLACING CONCRETE.
- ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304. FORMED CONCRETE SHALL BE UNIFORMLY CONSOLIDATED USING A MECHANICAL VIBRATOR. COMPLY WITH THE RECOMMENDATIONS OF ACI 306R FOR COLD WEATHER PLACEMENT AND ACI 305R FOR HOT WEATHER PLACEMENT. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND TO ENSURE PROPER MOISTURE CONTROL DURING CURING.

GEOMETRIC LAYOUT NOTES:

- ALL DIMENSIONS ARE REFERENCED TO THE EDGE OF PAVEMENT, EDGE OF SIDEWALK, FRONT OF CURB, OR OUTSIDE SURFACE OF BUILDING WALL UNLESS OTHERWISE NOTED.
- REFER TO BUILDING PLANS FOR ALL BUILDING DIMENSIONS AND LAYOUT DETAILS.
- THE TYPICAL PARKING SPACE IS 9' WIDE BY 18' DEEP FOR PARKING SPACES.
- THE HANDICAP ACCESSIBLE PARKING SPACES (9'X18' MIN.) ARE TO BE IN ACCORDANCE WITH ADA SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED CONSTRUCTION LINE AND GRADE TO ENSURE ACCURATE LAYOUT OF SITE IMPROVEMENTS. DIGITAL FILES OF CONSTRUCTION PLANS ARE AVAILABLE UPON REQUEST.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTS. ANY PROPERTY CORNER MONUMENT DISTURBED OR DESTROYED DURING CONSTRUCTION ACTIVITY SHALL BE REPLACED BY AN INDIANA LICENSED SURVEYOR AT CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING BENCHMARKS. IF BENCHMARKS ARE TO BE DISTURBED OR REMOVED AS PART OF THE DEMOLITION PLAN ACTIVITY, CONTRACTOR SHALL HAVE A INDIANA LICENSED SURVEYOR ESTABLISH ANOTHER BENCHMARK AT A LOCATION OUT OF HARM'S WAY.
- ANY DISCREPANCIES IN LAYOUT DIMENSIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH WORK AT THAT LOCATION.

SITE IMPROVEMENT KEYNOTES: ④

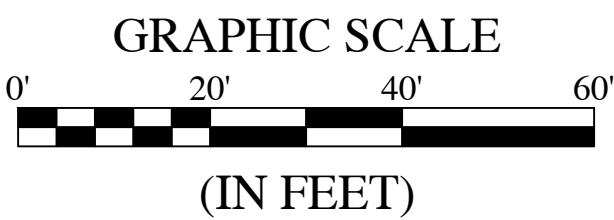
- INSTALL 2' CONCRETE ROLL CURB PER SHEET C8.5, DETAIL# 4.
- EXISTING 2' CONCRETE ROLL CURB.
- INSTALL CONCRETE WALK SHEET C8.5, DETAILS #1, 2 & 3. CONTRACTOR TO ENSURE ALL WALKS INSTALLED MEET A.D.A. GUIDELINES.
- ADA PARKING STALLS PER SHEET C8.5, DETAIL #9.
- ADA RAMP PER SHEET C8.5, DETAILS #6, 7 & 8
- INSTALL ACCESSIBLE PARKING SIGN PER SHEET C8.5 DETAIL #10.
- INSTALL PAVEMENT STRIPING PER SHEET C8.5 DETAIL #9.
- INSTALL ASPHALT PAVEMENT PER SHEET C8.5 DETAIL #5
- EXISTING STORM SEWER STRUCTURE, SEE GRADING & UTILITY PLAN SHEET C1.2.
- EXISTING FIRE HYDRANT, SEE GRADING & UTILITY PLAN SHEET C1.2.
- EXISTING SANITARY SEWER STRUCTURE, SEE GRADING & UTILITY PLAN SHEET C1.2.
- POOL DECK: 4" CONCRETE FURNISHED BY THE POOL CONTRACTOR.
- 6" BLACK ORNAMENTAL FENCE AT POOL DECK EDGE. FENCE TO BE ALONG PERIMETER EDGE OF POOL DECK, CORNERS OR COVERED PATIO TO CONNECT TO BUILDING PROVIDING FULL ENCLOSURE. - BY OTHERS
- LANDSCAPING/GRASS.
- SANITARY CLEAN OUT.
- 4" BACK ORNAMENTAL FENCE SEPARATING CHILD POOL AND POOL. - BY OTHERS

LAND DESCRIPTION

Common Area 1A-3 in McCord Pointe Section 1A, an addition in Hancock County, Indiana as set forth in the plat recorded JANUARY 9, 2019 in Plot Cabinet D, Slide 45, as Instrument No. 201900250, in the Office of the Recorder of Hancock County, Indiana.



Call 811 or 800-382-5544 Before you Dig!

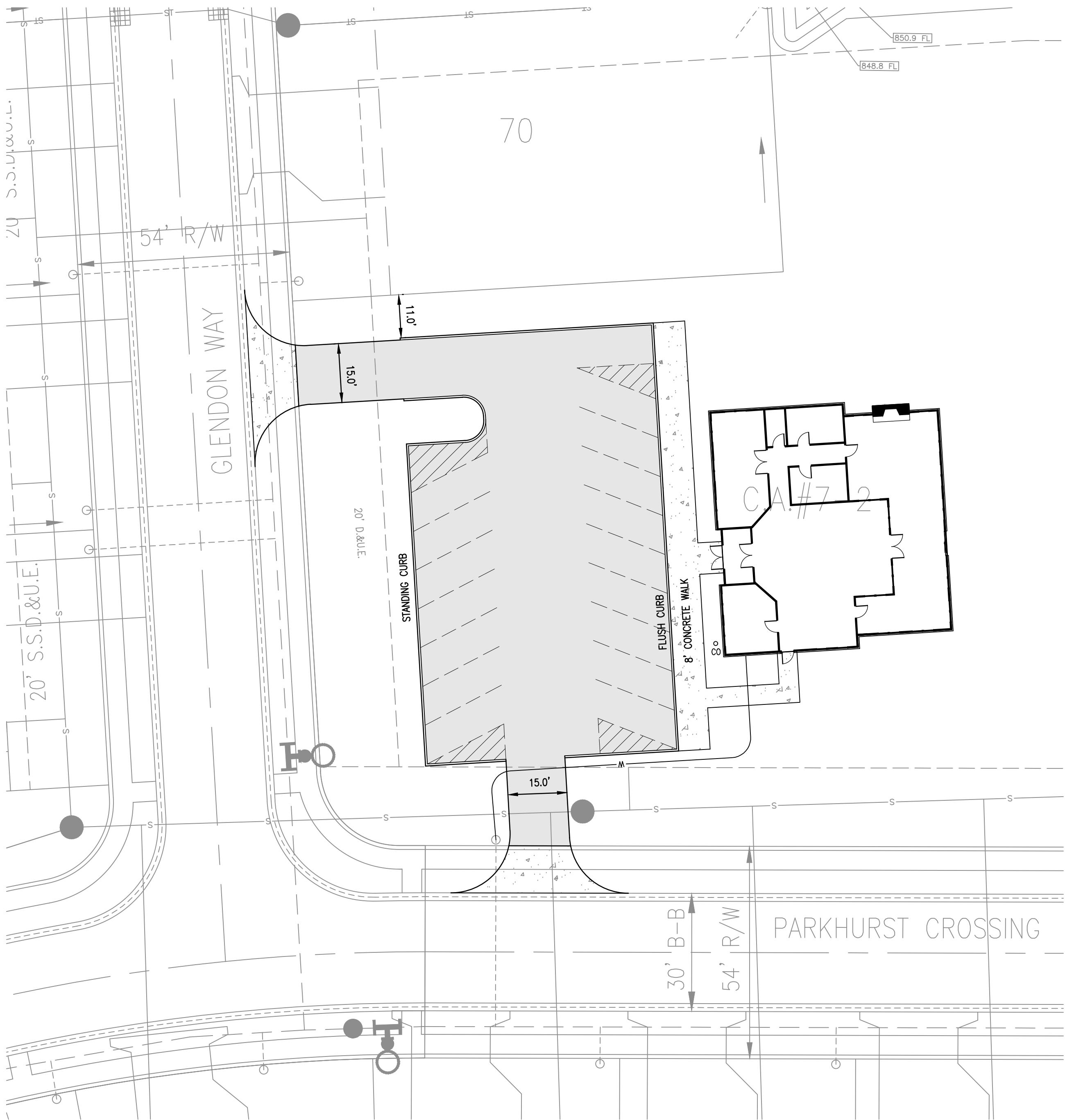


LEGEND:

EXISTING	PROPOSED
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	EASEMENT LINE
	SETBACK LINE
	CENTERLINE
	FENCE
	SANITARY MANHOLE
	STORM MANHOLE
	STORM INLET
	STORM END SECTION
	EXISTING WATER VALVE
	FIRE HYDRANT
	LIGHT POLE
	SIGN
	CLEAN OUT STRUCTURE
25	LOT NUMBER
S.F.	SQUARE FEET
D.&U.E.	DRAINAGE & UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
D.U.&S.S.E.	DRAINAGE UTILITY & SANITARY SEWER EASEMENT
C.A.	COMMON AREA
R/W	PUBLIC RIGHT OF WAY
D.&L.M.A.E.	DRAINAGE & LANDSCAPE, MAINTENANCE ACCESS EASEMENT
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT

PARKING TABLE

PROVIDED IN PLAN
17 - 9'x20' PARKING SPACES
0 - 9'x20' ACCESSIBLE SPACES



PREPARED BY:

HWC ENGINEERING  
135 N. PENNSYLVANIA ST., SUITE 2800  
INDIANAPOLIS, IN 46204  
P: 317-347-3663

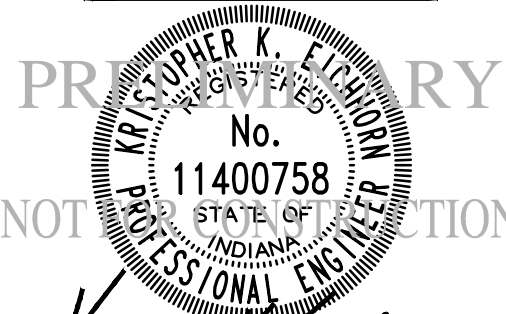
REVISIONS

DATE	DESCRIPTION	BY



MCCORD POINTE SEC. 7 AMENITY AREA  
MCCORDSVILLE, INDIANA

SITE PLAN



DRAWN BY

TS

CHECKED BY

KE

DATE

MARCH 2022

SCALE

AS SHOWN

SHEET

JOB NUMBER  
2019-003-A

C1.1

SITE PLAN

1. EARTHWORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 200 OF THE INDOT STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER'S OFFICE AND THE OWNER AT LEAST 48 HOURS BEFORE BEGINNING EXCAVATION.
2. THE CONTRACTOR SHALL EMPLOY A QUALIFIED GEOTECHNICAL ENGINEER FOR THIS PROJECT PER PROJECT SPECIFICATIONS. THE GEOTECHNICAL ENGINEER WILL INSPECT ALL SUBGRADE AND FILL AREAS TO DETERMINE THE FIELD DENSITY OF COMPACTED FILL. ALL SUBGRADES AND FILLS SHALL MEET OR EXCEED THE SPECIFIED DENSITIES, AS DISCUSSED BELOW. BASED UPON REPORTS FROM THE GEOTECHNICAL ENGINEER, SUBGRADES OR FILLS WHICH ARE BELOW SPECIFIED DENSITIES WILL REQUIRE ADDITIONAL CORRECTIVE WORK. TESTING TOO AWAY FROM LOCATIONS TO THE OWNERS VIEW ON COMPACTION TESTS SHALL BE TAKEN AT RANDOM INTERVALS AND ELEVATIONS THROUGHOUT THE FILL EMBANKMENTS.
3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE DURING FINISH GRADING AND LANDSCAPE WORK. STRIPPED TOPSOILS SHALL BE STOCKPILED AS SHOWN IN STORMWATER POLLUTION PREVENTION PLAN. TOPSOIL IS DEFINED AS FERTILE, FRABLY SOIL SURFACE SOLIDS REASONABLY FREE OF SUBSOIL, CLAY LIMES, BRUSH AND OTHER LITTER OR STONES LARGER THAN 1/2 INCH. LOOSE DEBRIS, TOPSOILS AND UNSUITABLE SUBSOILS SHALL BE STRIPPED FROM AREAS OF THE SITE THAT ARE TO BE DEVELOPED. THE CONTRACTOR SHOULD REVIEW THE GEOTECHNICAL REPORT, AS THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ANY PROBLEM AREAS FROM THE SITE. THE ENGINEER SHALL DESIGNATE ON-SITE LOCATIONS TO STORE OR DEPOSIT STRIPPED TOPSOILS. CONTRACTOR SHALL REMOVE TOPSOILS AND UNSUITABLE SUBSOILS FROM ALL AREAS TO OCCUPIED BY BUILDINGS AND PAVEMENTS. IN ADDITION, ANY AREAS TO BE UTILIZED AS DRIVEWAYS SHALL BE COVERED WITH A MINIMUM OF 6 INCHES OF TOPSOIL. IF THE AMOUNT OF STOCKPILED TOPSOIL EXCEEDS QUANTITY REQUIRED, THE EXCESS SHALL BE SPREAD ON THE SITE WHERE DIRECTED BY THE ENGINEER OR DISPOSED OF OFFSITE.
4. ALL COMPACTED FILL MATERIAL SHALL BE SATISFACTORY BORROW SOILS APPROVED BY THE GEOTECHNICAL ENGINEER. ALL FILLS, RUBBLE, SHALL BE FREE OF ORGANIC MATTER, LARGE ROCKS GREATER THAN 6 INCHES, RUSTY BARS, NAILS, OR OTHER UNDESIRABLE MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY MATERIAL APPROVAL PRIOR TO PLACEMENT. ALL FILL EMBANKMENTS UNDER PAVED AREAS, SIDEWALKS, AND PADS SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN LOOSE STATE. EACH COMPACTED LIFT SHALL BE VERIFIED BY THE CONTRACTOR USING ASTM DENSITY TEST D698. THE TOP 12 INCHES OF BUILDING SUBGRADE AND EACH 8 INCH LAYER OF BUILDING FILL EMBANKMENTS SHALL BE COMPACTED TO 100% MAXIMUM DENSITY. THE AREA OF COMPACTED FILL FOR THE BUILDING SHALL EXTEND AT LEAST 5 FEET BEYOND THE EXTERIOR FACE OF ALL WALLS. ALL TOP FILLS SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY. FILL MATERIALS SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN LOOSE THICKNESS AND SHOULD BE SPRINKLED WITH WATER AS REQUIRED TO ENSURE COMPACTION SPECIFICATIONS ARE MET. EXCESSIVELY WET MATERIALS SHALL BE REMOVED FROM THE LIFT. EXCESSIVE WATER CONTENT WILL PERMIT PROPER COMPACTION. EACH LAYER SHALL BE UNIFORMLY COMPACTED USING A VIBRATORY COMPACTOR OR OTHER APPROVED EQUIPMENT SUITED TO THE APPLICATION. MATERIALS PLACED IN LIFTS SHALL NOT EXCEED 8 INCHES IN LOOSE THICKNESS FOR MATERIAL PLACED ON HARD OPERATED TAMPERS.
5. IN-PLACE DENSITY TESTS SHALL BE PERFORMED 500 FT. FROM THE BUILDING FOOTPRINT. ONE DENSITY TEST SHALL BE PERFORMED EVERY 2000 SQ. FT. OF BACKFILL. ONE DENSITY TEST SHALL BE PERFORMED FOR EVERY 2000 SQ. FT. OF BUILDING FILL OR SUBGRADE, BUT IN NO CASE FEWER THAN 3 TESTS. WHERE THE RESULTS OF THE IN-PLACE DENSITY TESTS INDICATE COMPACTION SPECIFICATIONS ARE NOT OBTAINED, OR WHERE ADVERSE WEATHER CONDITIONS INTERFERE WITH THE CONTRACTOR'S SUBSEQUENT ACTIVITY OR ADVERSE WEATHER, THOSE AREAS SHALL BE REWORKED UNTIL COMPACTION CRITERIA ARE ACHIEVED; THE GEOTECHNICAL ENGINEER SHALL ISSUE A REPORT DOCUMENTING THE SUFFICIENCY OF THE FINAL COMPACTION TEST TO THE OWNER AND THE PROJECT ENGINEER.
6. AFTER THE PAVEMENT SUBGRADE SOILS HAVE BEEN FILLED AND COMPACTED, AND IN AREAS WHERE THERE ARE EXISTING UTILITY STRUCTURES, THE CONTRACTOR SHALL TAKE OPERATIONS, THESE AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED TRAIL-AXLE DUMP TRUCK, MEDIUM WEIGHT ROLLER OR OTHER APPROVED EQUIPMENT TO DETERMINE IF ANY POCKETS OF SOFT, UNSUITABLE MATERIALS ARE PRESENT. IF POCKETS OF SOFT, UNSUITABLE MATERIALS ARE DETECTED, THEY SHALL BE REMOVED AND REPLACED WITH SPOT SUBGRADE REINFORCEMENT OR COMPACTED GRANULAR FILL. THE GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING PROOF-ROLLING OPERATIONS AND SHALL SUBMIT A REPORT OF ACCEPTANCE TO THE ENGINEER AND OWNER.
7. WHERE THE APPROVED COMPACTED SUBGRADES ARE DISTURBED BY CONTRACTOR'S SUBSEQUENT ACTIVITY OR ADVERSE WEATHER, THE SUBGRADES SHALL BE SCARIFIED AND RECOMPACTED AS SPECIFIED ABOVE PRIOR TO THE CONTINUATION OF CONSTRUCTION.
8. FOLLOWING THE COMPLETION OF SITE GRADING AND SUBSURFACE UTILITY INSTALLATION, TOPSOIL SHALL BE REPLACED IN AREAS DESIGNATED FOR SEEDING, SODDING, OR LANDSCAPING. A MINIMUM OF 6 INCHES OF FINISHED SURFACE SHALL BE UNIFORM AND SMOOTHLY GRADED AND SHALL BE FREE OF TREE DEBRIS WHERE THE SURFACE IS TO BE PLACED. LIGHTLY COMPACT TOPSOIL AFTER PLACEMENT. THE FINISHED SURFACE GRADES SHALL NOT BE MORE THAN 0.1 FOOT ABOVE OR BELOW THE GRADES SHOWN ON THE SHEET. THE FINISHED SURFACE SHALL BE SMOOTH TRANSITION BETWEEN EXISTING GRADES AND ADJACENT FILL EMBANKMENTS.
9. EXCAVATE FOR STRUCTURES TO WITHIN 0.1 FOOT OF DESIGN ELEVATIONS AND CLEAN THE EXTERIOR SURFACE OF THE STRUCTURE. EXCAVATE THE EXTERIOR SURFACE FOR PLACING AND REMOVING CONCRETE FORMWORK. DO NOT DISTURB THE BOTTOM OF THE EXCAVATION INTENDED FOR BEARING SURFACE. EXCAVATE BY HAND TO FINAL GRADE BEFORE PLACING CONCRETE FORMWORK AND REINFORCEMENT SO FOOTINGS AND FOUNDATIONS BEAR ON UNDISTURBED SOILS.
10. BACKFILL MATERIAL SHALL BE FREE OF ROCKS, SLAG, RUBBLE AND DEBRIS. BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN LOOSE STATE. BACKFILL SHALL BE THOROUGHLY COMPACTED BY TAMPING OR ROLLING. WHERE BACKFILLING IS REQUIRED ON BOTH SIDES OF A FOUNDATION WALL, THE BACKFILL MATERIAL SHALL BE PLACED EQUALLY ON BOTH SIDES TO AVOID UNBALANCED SOIL PRESSURE ON ONE SIDE OF THE WALL.
11. TRENCHESS UNDER PAVED AREAS SHALL BE BACKFILLED AND COMPACTED WITH "B" BORROW OR APPROVED GRANULAR MATERIAL PER INDOT STANDARD SPECIFICATIONS. GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES ABOVE THE TRENCH TO THE BOTTOM OF THE TRENCH.

1. NOT ALL GAS, POWER, OR TELEPHONE LINES, WHETHER ABOVE OR BELOW GROUND, HAVE BEEN SHOWN ON THE DRAWINGS. ANY UNDERGROUND INFORMATION SHOWN ON THE DRAWINGS HAS BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONTRACTORS BENEFIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES AT THE WORK AREA WHETHER SHOWN OR NOT, AND MUST REALIZE THAT THE ACTUAL LOCATION OF THE UTILITIES MAY BE DIFFERENT FROM THAT SHOWN ON THE DRAWINGS. ALL EXISTING UTILITIES ENCOUNTERED IN THE WORK, WHETHER IN PUBLIC RIGHTS OF WAY OR ON PRIVATE PROPERTY, SHALL BE THE CONTRACTOR'S RESPONSIBILITY. UTILITIES THAT ARE REMOVED OR TO BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION TO SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR WITH THE PERMISSION OF THE UTILITY. IF MINOR CONFLICTS ARISE, THE CONTRACTOR MAY SHIFT THE PROPOSED LOCATION OF THE INSTALLATION OF THE WORK. BEFORE WORKING WITH OR AROUND UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR.
2. SAFETY PROVISIONS FOR THE WORK SHALL BE IN FULL COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS OF THE INDIANA OSHA AND ANY OTHER LOCAL STATE OR FEDERAL AGENCY HAVING JURISDICTION. THE CONTRACTOR SHALL BE FULLY AND COMPLETELY RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. CONTRACTOR SHALL AT MINIMUM, PROVIDE TRAFFIC CONTROL AS REQUIRED TO SAFELY PROTECT THE GENERAL PUBLIC, AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES IN ACCORDANCE TO THE REQUIREMENTS OF THE LATEST EDITION OF THE INDIANA MANUAL ON UNIFORM

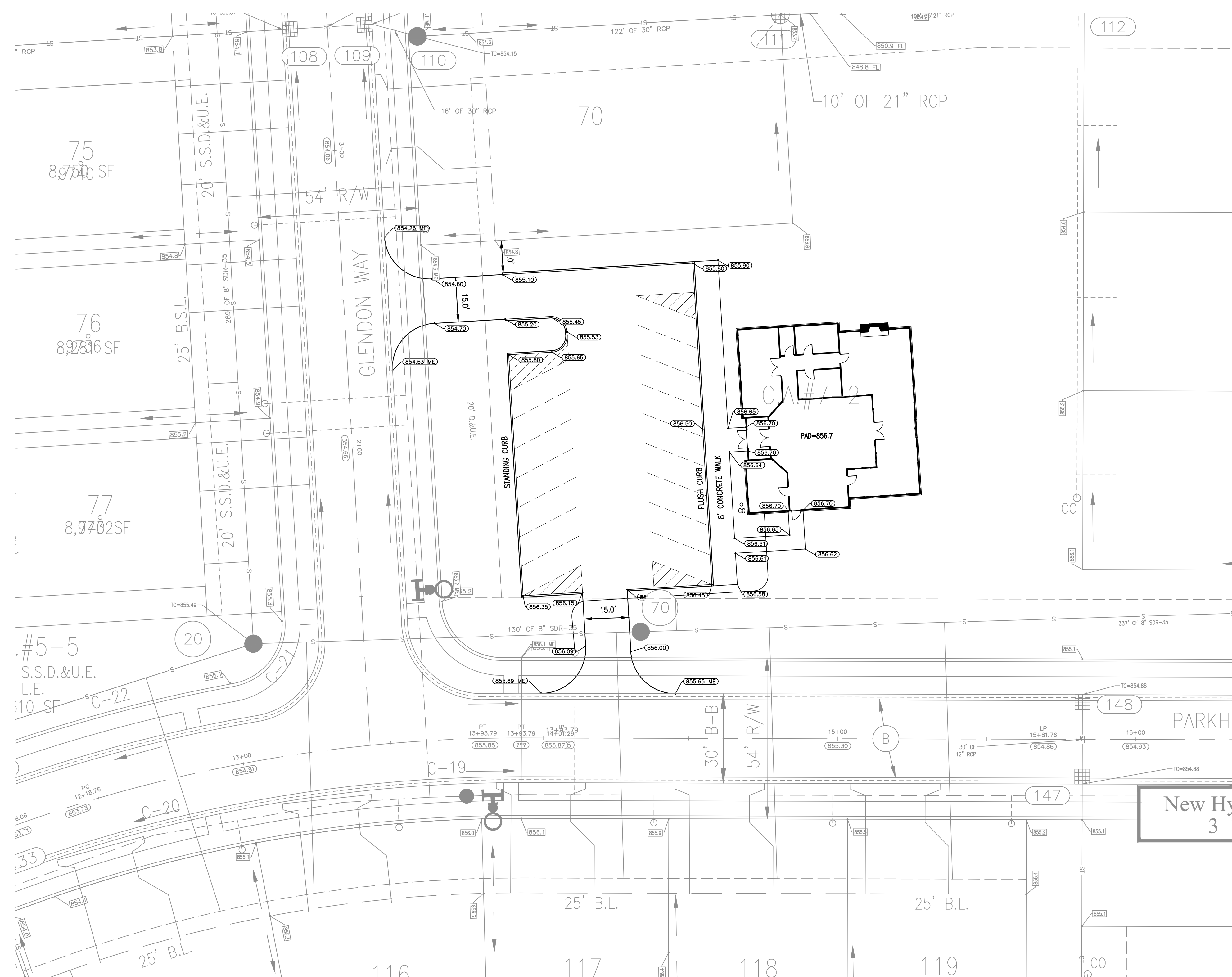
TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND THE INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, STANDARD DETAILS AND GENERAL INSTRUCTIONS TO FIELD EMPLOYEES. THE REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS. THE OPTION OF THE OWNER AND/OR ENGINEER TO CONDUCT A PRELIMINARY INSPECTION OF THE CONSTRUCTION SITE, BUT NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, FENCES, WARNING SIGNS, FLASHING LIGHTS, TEMPORARY WALKWAYS, AND TRAFFIC CONTROL DURING CONSTRUCTION. CONTRACTOR TO COMPLY WITH ALL OSHA REGULATIONS, REQUIREMENTS, SAFETY MEETING REQUIREMENTS AND AGENCY REQUIREMENTS FOR TRAFFIC CONTROL, AND SAFETY PRECAUTIONS THERE WILL BE NO SEPARATE OR ADDITIONAL PAYMENT FOR THIS WORK.

WHERE PROPERTY MARKERS, SECTION CORNERS, SURVEY MARKS OR BENCHMARKS, SUCH AS STONES, PINS, OR OTHER SUCH INSTRUMENTS ARE ENCOUNTERED AND CONFLICT WITH THE WORK, THE ENGINEER SHALL BE NOTIFIED SHOULD THEY BE DISTURBED. THE MARKERS SHALL BE PROTECTED AFTER THE OWNER, ENGINEER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR REFERENCED THEIR LOCATIONS.

ALL MATERIALS DENOTED "SALVAGED" SHALL BE STORED AND PROTECTED AT THE SITE FOR THE OWNER TO COLLECT OR FOR THE CONTRACTOR TO RE-USE AS INDICATED.

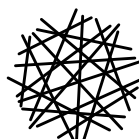
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INDIANAPOLIS, IN 46204  
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1. CONSTRUCTION OF STORM DRAINS SHALL BE IN ACCORDANCE WITH TOWN OF MCCORMSVILLE AND SECTION 715 OF THE INDOT STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS. ALL MAIN LINE STORM SEWER PIPE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (RCP), UNLESS SPECIFICALLY NOTED OTHERWISE. STORM DRAIN PIPE FOR ROOF DOWNSPOUTS AND OTHER MISCELLANEOUS CONNECTIONS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE (PVC SDR-35), IF APPLICABLE.
2. TRENCHES UNDER PAVED STREET AREAS SHALL BE BACKFILLED AND COMPACTED WITH "B" BORROW OR APPROVED GRANULAR MATERIAL PER INDOT STANDARD SPECIFICATIONS. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE PAVEMENT WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
3. THE CONTRACTOR SHALL NOTIFY THE TOWN OF MCCORMSVILLE AT LEAST 48 HOURS PRIOR TO ANY STORM SEWER EXCAVATION OR CONSTRUCTION. TOWN OF AVON PUBLIC WORKS DEPARTMENT APPROVAL IS REQUIRED BEFORE ANY MODIFICATIONS OR IMPROVEMENTS TO THE SITE DRAINAGE.
4. ALL STORM DRAINS CROSSING WITHIN 18" VERTICALLY OF A SANITARY SEWER OR WATER MAIN SHALL HAVE A CONCRETE SPACER BLOCK POURED BETWEEN THE PIPES. WHERE WATER LINES AND SEWER LINES RUN PARALLEL WITH EACH OTHER, A MINIMUM OF 10 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED.
5. PRIMARY DRAINAGE SYSTEM SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (ASTM A-76) UNLESS SPECIFICALLY NOTED OTHERWISE. PIPE FOR ROOF DRAINAGE AND DOWNSPOUTS AND SECONDARY SURFACE INLETS SHALL BE CONSTRUCTED OF PVC SDR-35 OR APPROVED EQUAL. JOINTS SHALL BE GASKETED BELT AND SPIGOT TYPE WITH THE BELL END MADE INTEGRAL WITH THE PIPE. ROOF DRAIN PIPES BETWEEN THE BUILDING AND THE STORM STRUCTURES MAY HAVE VARIABLE SLOPES BASED ON LOCAL SLOPES AND DOWNSPOUT LOCATIONS. SLOPES ON THE PLANS AND PROFILES SHALL BE IN CONNECTION TO THE ROOF DOWNSPOUTS. SEE ARCHITECTURAL PLANS FOR INFORMATION REGARDING THE BUILDING ROOF DRAINS AND DOWNSPOUTS. PIPE MATERIAL SUBSTITUTIONS SHALL BE REQUESTED IN WRITING TO THE ENGINEER. INLETS, MANHOLES, AND MANHOLES MUST BE SIZED PROPERLY TO ACCOMMODATE THE PIPES CALLED FOR.
6. PIPE LENGTHS SHOWN ON THE DRAWINGS ARE FOR HYDRAULIC CALCULATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING EXACT PIPE LENGTHS REQUIRED FOR INSTALLATION.

LEGEND:		PROPOSED	
EXISTING		PROPERTY LINE	
	_____	RIGHT-OF-WAY LINE	_____
	_____	EASEMENT LINE	_____
	_____	SETBACK LINE	_____
	_____	CENTERLINE	_____
	—○—○—○—	SWALE / FLOWLINE	—○—○—○—
	—□—□—□—	FENCE	—□—□—□—
	S	EXISTING SANITARY SEWER	
	ST	EXISTING STORM SEWER	
	W	EXISTING WATER MAIN	
	G	EXISTING GAS LINE	
	T	EXISTING TELEPHONE LINE	
	E	EXISTING ELECTRIC LINE	
	●	SANITARY MANHOLE	● (XXX)
	●	STORM MANHOLE	● (XXX)
	■	STORM INLET	■ (XXX)
	■	STORM END SECTION	■ (XXX)
	○	FIRE HYDRANT	○ (XXX)
	N/A	FLOW ARROW	→
	☼	LIGHT POLE	☼
	☼	SIGN	☼
	—	CLEAN OUT STRUCTURE	—
25	LOT NUMBER		
S.F.	SQUARE FEET		
D.&U.E.	DRAINAGE & UTILITY EASEMENT		
D.E.	DRAINAGE EASEMENT		
D.U.&S.E.	DRAINAGE UTILITY & SANITARY SEWER EASEMENT		
C.A.	COMMON AREA		
R/W	PUBLIC RIGHT OF WAY		
D.&L.M.A.E.	DRAINAGE & LANDSCAPE, MAINTENANCE ACCESS EASEMENT		
TB	TOP OF BANK GRADE		
TC	TOP OF CASTING GRADE		
ME	MATCH EXISTING GRADE		
FFE	FINISHED FLOOR ELEVATION		
MFGP	MINIMUM FLOOD PROTECTION GRADE		
MLAG	MINIMUM LOWEST ADJACENT GRADE		
→	EMERGENCY OVERTFLOW ROUTE		
XXX.X	SPOT ELEVATION	(XXX.X)	
N/A	PAVEMENT ELEVATION	(XXX.XX)	
	TOP OF CURB	XXX.XX TC	
	GUTTER	XXX.XX GUT	
	TOP OF WALL ELEVATION	(XXX.X TW)	
	BOTTOM OF WALL ELEVATION	(XXX.X BW)	


[illegible]

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**MCCORD POINTE  
SEC. 7 AMENITY AREA  
GRADING PLAN**

## GRADING PLAN



*Kristopher K. Elthorn*

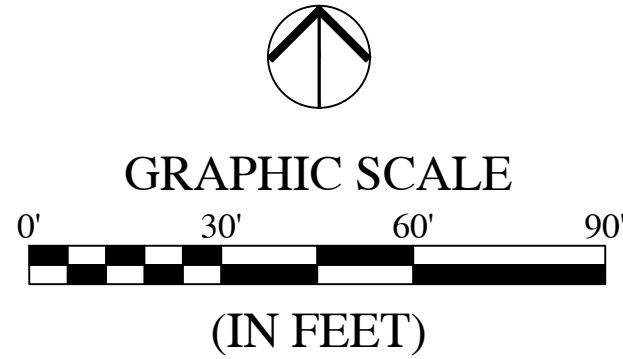
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DATE MARCH 2022	
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SHEET	

# C1.2

## GRADING PLAN

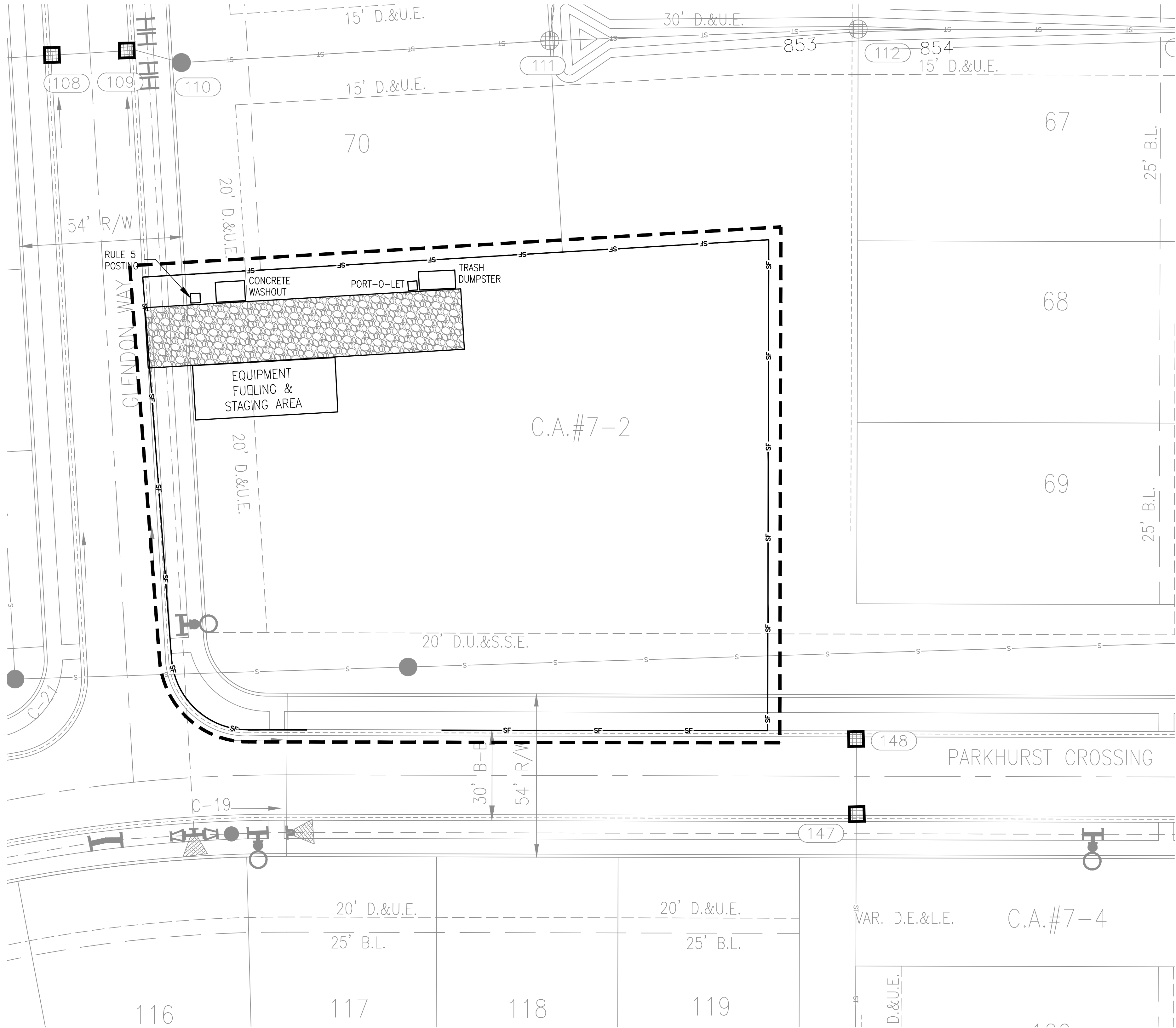


- NOTES:
1. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.
  2. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIALS IN THE STREET.
  3. THIS SHEET TO BE USED FOR STORMWATER POLLUTION PREVENTION PURPOSES ONLY.
  4. GEOTEXTILE FABRIC SHALL BE PLACED UNDER STONE LAYER OF THE CONSTRUCTION ENTRANCE.
  5. ALL PORTABLE TOILETS MUST BE ANCHORED TO PREVENT SPILLS.
  6. WHERE EXISTING DRAIN TILES OR FIELD TILES ARE ENCOUNTERED WHERE APPLICABLE, INTERCEPT EXISTING TILES AND TIE THEM INTO THE STORM SYSTEM.
  7. SHOULD THE CONTRACTOR CHOOSE TO UTILIZE LIME STABILIZATION FOR SOIL SUBGRADE UNDER PAVED AREAS, PLEASE REFERENCE NOTES ON CONSTRUCTION PLAN SHEET C8.0. WHILE THE NOTES ON SHEET C8.0 SHALL SERVE AS GENERAL GUIDELINES FOR USE OF LIME STABILIZATION, THE CONTRACTOR SHALL ADHERE TO SPECIFIC GUIDELINES AND SPECIFICATIONS FOR TRANSPORTATION, HANDLING, APPLICATION, CONTAINMENT AND SAFETY OF THE STABILIZATION MATERIAL AS OUTLINED BY THE MANUFACTURER AND/ OR SUPPLIER.



LEGEND:

EXISTING	PROPOSED
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	EASEMENT LINE
	SETBACK LINE
	CENTERLINE
	SWALE / FLOWLINE
	FENCE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATER MAIN
	EXISTING GAS LINE
	EXISTING TELEPHONE LINE
	EXISTING ELECTRIC LINE
	EXISTING "DROP INLET PROTECTION BASKET"
	EXISTING CURB INLET PROTECTION SEE SHEET C8.1 FOR DETAIL
	SILT FENCE
	CONSTRUCTION LIMITS
	TEMPORARY SITE CONSTRUCTION ENTRANCE



PERSON ONSITE RESPONSIBLE FOR EROSION CONTROL:  
STUART HUCKELBERRY  
LENNAR HOMES OF INDIANA, INC.  
PHONE: 317-659-3200  
EMAIL: STUART.HUCKELBERRY@LENNAR.COM

NOTE:  
SEE SHEET C8.0 FOR A LIST IN SEQUENCE  
OF CONSTRUCTION ACTIVITIES.

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INDIANAPOLIS, IN 46204  
P: 317-347-3663

REVISIONS		
DATE	DESCRIPTION	BY



MCCORD POINTE  
SEC. 7 AMENITY AREA  
PRE-CONSTRUCTION SWPPP



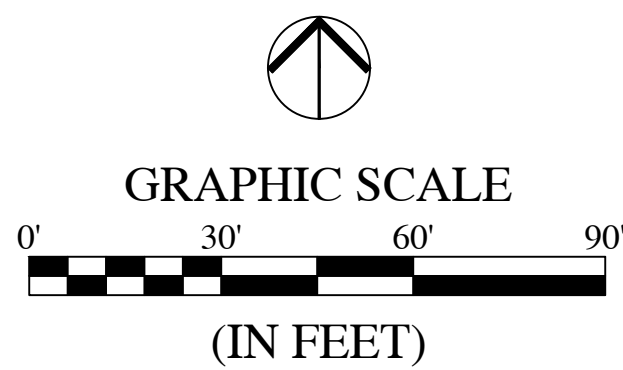
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CHECKED BY KE		
DATE MARCH 2022		
SCALE AS SHOWN		
SHEET		


C1.3  
PRE-CONSTRUCTION SWPPP



Plot Date: Aug 22, 2022 Plot Time: 4:43pm File Name: W:\cdallan\homes\2019-263-a\lennar-mccord pointe amenity\Design\CA0\section 7 amenity center\19263-A-Erosion Control Plan.dwg, Layout: C1.4 By: leichhorn

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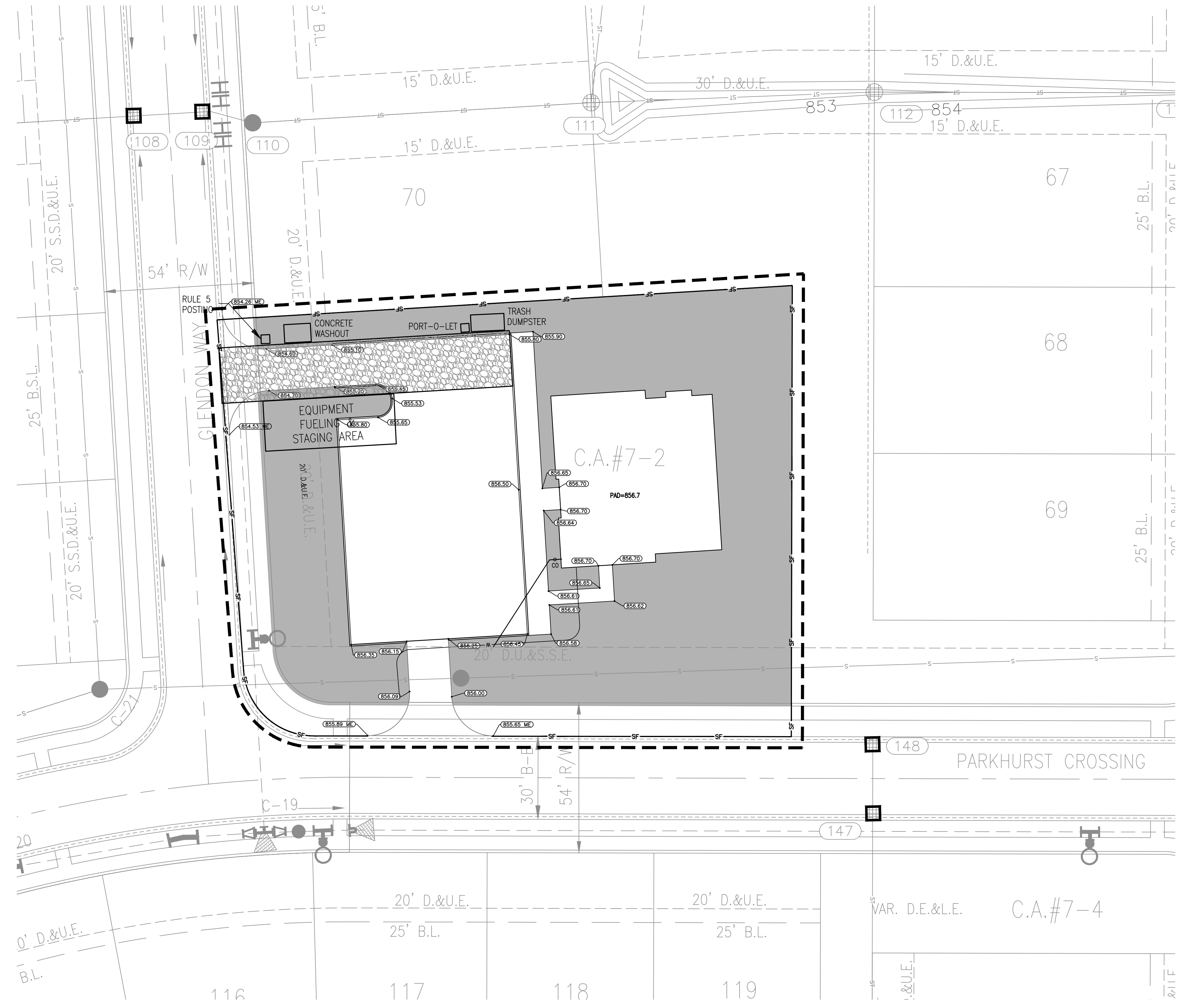


**LEGEND:**

EXISTING	PROPOSED
_____	PROPERTY LINE
_____	RIGHT-OF-WAY LINE
_____	EASEMENT LINE
_____	SETBACK LINE
_____	CENTERLINE
_____	SWALE / FLOWLINE
_____	FENCE
_____	EXISTING SANITARY SEWER
_____	EXISTING STORM SEWER
_____	EXISTING WATER MAIN
_____	EXISTING GAS LINE
_____	EXISTING TELEPHONE LINE
_____	EXISTING ELECTRIC LINE
_____	PERMANENT SEEDING / SOODING
_____	EXISTING "DROP INLET PROTECTION BASKET"
_____	EXISTING CURB INLET PROTECTION SEE SHEET C8.1 FOR DETAIL
_____	SILT FENCE
_____	CONSTRUCTION LIMITS
_____	TEMPORARY SITE CONSTRUCTION ENTRANCE
_____	EROSION CONTROL BLANKET

CURB INLET





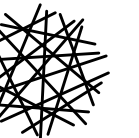
PERSON ONSITE RESPONSIBLE FOR EROSION CONTROL:  
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LENNAR HOMES OF INDIANA, INC.  
PHONE: 317-659-3200  
EMAIL: STUART.HUCKELBERRY@LENNAR.COM

NOTE:  
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OF CONSTRUCTION ACTIVITIES.

**[ THIS SHEET TO BE USED FOR  
EROSION CONTROL ONLY. ]**

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P: 317-347-3663

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DATE	DESCRIPTION	BY



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www.hwceengineering.com

MCCORD POINTE  
SEC. 7 AMENITY AREA  
ACTIVE CONSTRUCTION SWPPP

PROFESSIONAL ENGINEER

NOTED FOR CONSTRUCTION

REGISTERED No. 11400758  
STATE OF INDIANA

*Christopher K. Eichhorn*

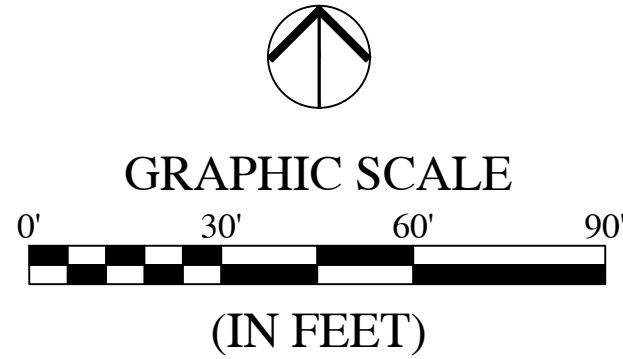
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SCALE AS SHOWN  
SHEET

JOB NUMBER 2019-003-A

**C1.4**  
ACTIVE CONSTRUCTION SWPPP

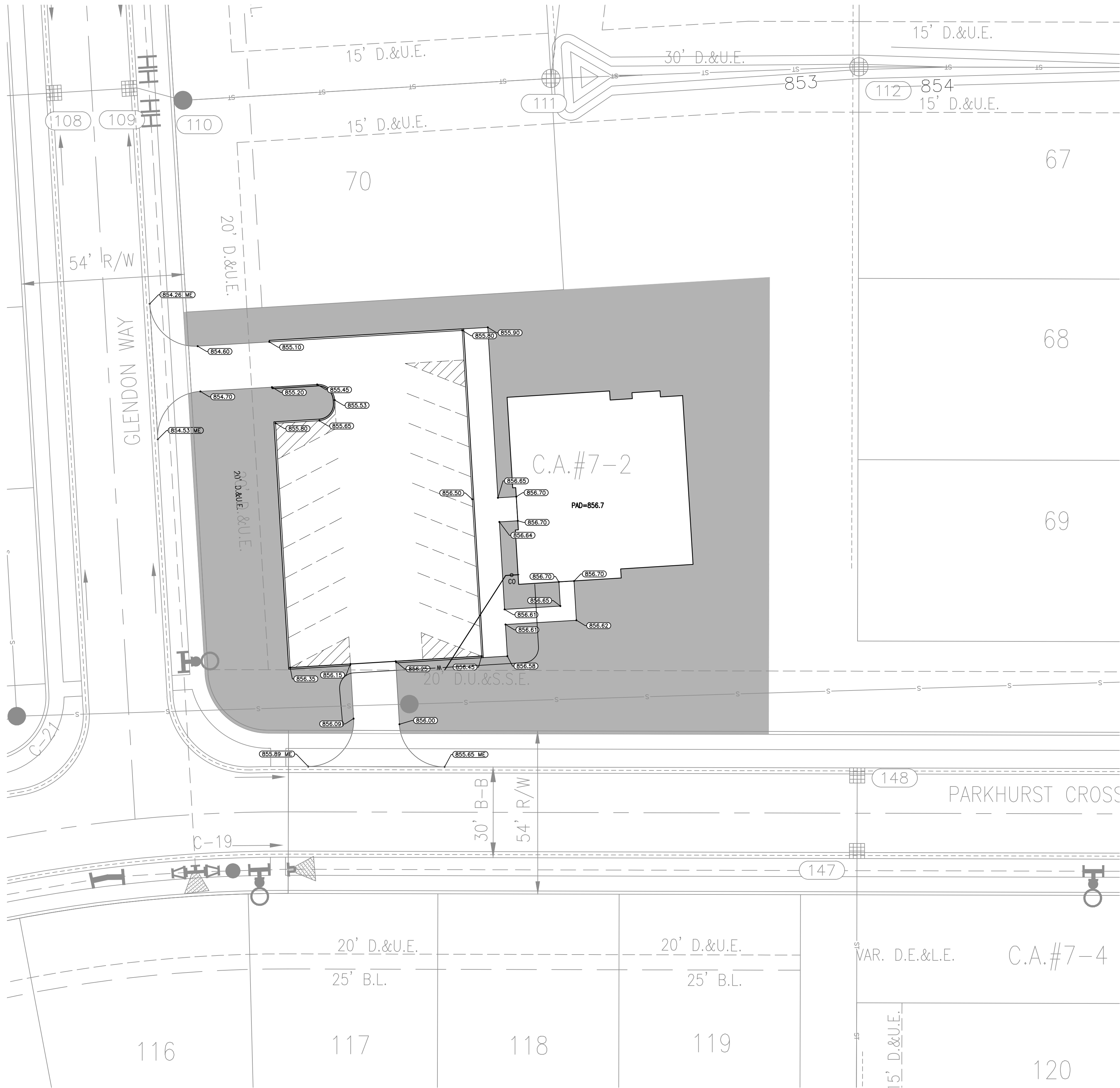


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LEGEND:

EXISTING	PROPOSED
---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	EASEMENT LINE
---	SETBACK LINE
---	CENTERLINE
---	SWALE / FLOWLINE
---	FENCE
S	EXISTING SANITARY SEWER
ST	EXISTING STORM SEWER
W	EXISTING WATER MAIN
G	EXISTING GAS LINE
T	EXISTING TELEPHONE LINE
E	EXISTING ELECTRIC LINE
(S)	PERMANENT SEEDING / SOODING
(B)	EXISTING "DROP INLET PROTECTION BASKET"
(C)	EXISTING CURB INLET PROTECTION
(C)	SEE SHEET C8.1 FOR DETAIL
(H)	EROSION CONTROL BLANKET



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EMAIL: STUART.HUCKELBERRY@LENNAR.COM

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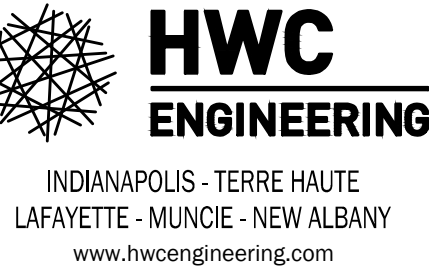
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REVISIONS

DATE	DESCRIPTION	BY
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MCCORD POINTE  
SEC. 7 AMENITY AREA  
POST CONSTRUCTION SWPPP



DRAWN BY  
TS  
CHECKED BY  
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DATE  
MARCH 2022  
SCALE  
AS SHOWN  
SHEET

C1.5  
POST CONSTRUCTION  
SWPPP

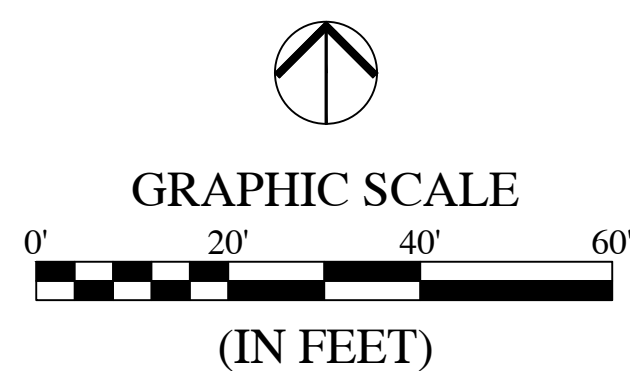


WATER SYSTEM NOTES:

1. ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITIZENS ENERGY GROUP TYPICAL CONSTRUCTION SPECIFICATIONS AND DETAILS, AND SHALL MEET THE MINIMUM REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
2. WATER MAINS AND SERVICE LINES SHALL HAVE A MINIMUM OF 4'-5" OF COVER OVER THE TOP OF THE PIPE. A MINIMUM OF 18-INCHES VERTICAL SEPARATION AND 10'-0" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND SEWERS (SANITARY AND STORM). PIPE DEPTHS SHOWN ON THESE PLANS ARE REFERENCED TO THE INVERT OF PIPE.
3. THE PROPOSED WATER SERVICE LINE WILL BE CONNECTED TO AN EXISTING WATER METER PIT. THE CONTRACTOR SHALL PERFORM ALL THE WORK ASSOCIATED WITH CONNECTIONS TO THE EXISTING FACILITIES. THE CONTRACTOR SHALL COORDINATE THE CLOSURE OF VALVES, INSPECTION, AND SERVICE SHUT-OFFS WITH CITIZENS ENERGY GROUP.
4. TRENCHES UNDER PAVED AREAS SHALL BE BACKFILLED AND COMPACTED TO 95% WITH "B-BETTER" OR APPROVED GRANULAR MATERIAL PER INDOT STANDARD SPECIFICATION SECTION 211. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE LIMITS OF THE PAVED AREA WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
5. THE COMPLETED WATER SERVICE LINE SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH CITIZENS ENERGY GROUP REQUIREMENTS.

UTILITY NOTES:

1. THE PROPOSED BUILDINGS SHALL BE CONSTRUCTED ACCORDING TO ARCHITECTURAL CONSTRUCTION PLANS.
2. REFER TO ARCHITECTURAL PLANS FOR ALL INFORMATION REGARDING UTILITY LAYOUT AND DETAILS WITHIN THE BUILDING AND EXTENDING OUT 5' FROM EXTERIOR FACE OF BUILDING. ALL MEP DESIGN AND COORDINATION IS THE RESPONSIBILITY OF ARCHITECT/CONTRACTOR. SITE WORK CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO START OF WORK.
3. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INFORMATION.
4. ALL EXCAVATED TRENCHES UNDER PROPOSED PAVED AREAS INCLUDING SIDEWALKS SHALL BE BACKFILLED WITH GRANULAR MATERIAL PER INDOT STANDARD SPECIFICATIONS SECTION 211, AND COMPACTED IN LIFTS. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE LIMITS OF THE PAVED AREAS AT THE SURFACE WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
5. ALL WATER SERVICE AND SANITARY LINES SHALL BE IN CONFORMANCE WITH APPLICABLE INDIANA STATE DEPARTMENT OF HEALTH REGULATIONS AND GUIDELINES.



KNOW WHAT'S BELOW.  
CALL BEFORE YOU DIG.  
*Call 811 or 800-382-5544 Before you Dig!*

LEGEND:

- | EXISTING    |   | PROPOSED |
|-------------|---|----------|
|             | PROPERTY LINE                                     |          |
|             | RIGHT-OF-WAY LINE                                 |          |
|             | EASEMENT LINE                                     |          |
|             | SETBACK LINE                                      |          |
|             | CENTERLINE  |          |
|             | SWALE / FLOWLINE                                  |          |
|             | FENCE   |          |
|             | EXISTING SANITARY SEWER                           |          |
|             | EXISTING STORM SEWER                              |          |
|             | EXISTING WATER MAIN                               |          |
|             | EXISTING GAS LINE                                 |          |
|             | EXISTING TELEPHONE LINE                           |          |
|             | EXISTING ELECTRIC LINE                            |          |
|             | SANITARY MANHOLE                                  |          |
|             | STORM MANHOLE                                     |          |
|             | STORM INLET                                       |          |
|             | STORM END SECTION                                 |          |
|             | FIRE HYDRANT                                      |          |
| N/A         | FLOW ARROW  |          |
|             | LIGHT POLE  |          |
|             | SIGN  |          |
|             | CLEAN OUT STRUCTURE                               |          |
| 25          | LOT NUMBER  |          |
| S.F.        | SQUARE FEET                                       |          |
| D.&U.E.     | DRAINAGE & UTILITY EASEMENT                       |          |
| D.E.        | DRAINAGE EASEMENT                                 |          |
| D.U.&S.S.E. | DRAINAGE UTILITY & SANITARY SEWER EASEMENT        |          |
| C.A.        | COMMON AREA                                       |          |
| R/W         | PUBLIC RIGHT OF WAY                               |          |
| D.&L.M.A.E. | DRAINAGE & LANDSCAPE, MAINTENANCE ACCESS EASEMENT |          |

**SITE UTILITY PLAN KEYNOTES:**

(#) (NOT ALL KEY NOTES APPLY TO THIS SHEET)

SANITARY SEWER

- SANITARY SEWER  
S1. 6" SDR35 SANITARY LATERAL AT 1.0% MIN SLOPE (2% PREFERRED). LATERAL SEWER  
CLEANOUT WITHIN 3' OF BUILDING. CONTRACTOR TO NOTIFY ENGINEER IF FIELD  
CONDITIONS DIFFER PRIOR TO CONSTRUCTION. COORDINATE LOCATION WITH  
ARCHITECTURAL PLANS

S2. SANITARY LATERAL CLEANOUT.

WATER SERVICE

- WATER SERVICE  
W1. CONNECT TO EXISTING 1" WATER METER PIT  
W2. 1" DOMESTIC WATER SERVICE LINE. 105 LF

ELECTRIC SERVICE (TO BE DETERMINED, ITEMS NOT SHOWN)

TELECOMMUNICATIONS (TO BE DETERMINED, IF REQUIRED: ITEMS NOT SHOWN)

GAS SERVICE (TO BE DETERMINED, IF REQUIRED: ITEMS NOT SHOWN)

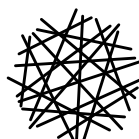
SANITARY SEWER NOTES:

7. THE SANITARY SEWER SHALL MEET THE REQUIREMENTS OF THE TOWN OF MCDONALDVILLE AND INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (DEM) AND INDIANA STATE DEPARTMENT OF HEALTH FOR SANITARY SEWER COLLECTION SYSTEMS. SANITARY SEWER LATERALS SHALL BE CONSTRUCTED OF POLYETHYLENE CHLORIDE (PVC) SDR=35 PIPE. JOINTS SHALL BE GASKETED BELT AND SPIGOT TYPE WITH THE BELL MADE INTEGRAL WITH THE PIPE. SANITARY SEWERS SHALL BE SDR=26 PIPE FOR DEPTHS OF 15 FT OR GREATER.
8. SANITARY SEWER LATERALS FOR BUILDING CONNECTIONS SHALL BE 6" DIAMETER PVC SDR=35, LAID AT A MINIMUM SLOPE OF 1.00%.
9. A MINIMUM OF 18" VERTICAL SEPARATION AND 10'-0" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAINS, HYDRANTS AND SEWERS (TO BE STORMED).
10. TRENCHES UNDER PAVED AREAS (EXCLUDING SIDEWALKS) SHALL BE BACKFILLED WITH GRANULAR MATERIAL PER INDIANA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", CURRENT EDITION, SECTION 211, AND COMPACTED IN LIFTS.
11. ALL EXISTING MATERIAL SHALL BE REMOVED TO THE LIMITS OF THE PAVED AREA A 1:1 OUTWARD SLOPE TO THE BOTTOM OF THE TRENCH.
12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND THE PIPE INVERT DEPTH WHERE THE PROPOSED CONNECTION IS MADE TO THE EXISTING SANITARY SEWER. VERTICAL DEVIATIONS GREATER THAN 0.1 FT. OR HORIZONTAL DEVIATIONS GREATER THAN 1.0 FT. SHALL BE CORRECTED TO THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION AT THAT LOCATION.
13. MANHOLE OR CLEAN-OUT CASTINGS MAY NEED TO BE ELEVATED AFTER FINAL GRADING TO INSURE DRAINAGE AWAY FROM STRUCTURES.

PREPARED BY:

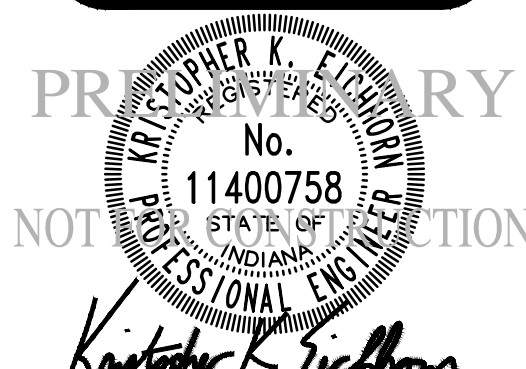
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## REVISIONS

[illegible]

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[www.hwcengineering.com](http://www.hwcengineering.com)

**MCCORD POINTE  
SEC. 7 AMENITY AREA  
UTILITY PLAN**



DRAWN BY TS
CHECKED BY KE
DATE MARCH 202
SCALE AS SHOWN
SHEET

JOB NUMBER  
2010 003 A

## C1.6



File Name: W:\catalantic homes\2019-263-a lennar- mccord pointe amenity\Design\CA0\section 7 amenity center\ 19263-A-SWPP Notes and Details.dwg, Layout: C8.0 By: keichhorn Plot Date: Aug 22, 2022 Plot Time: 4:44pm

STORMWATER POLLUTION PREVENTION PLAN INDEX

A1	PLAN INDEX	SEE COVER SHEET C1.0
A2	11X17 PLAT	PROVIDED IN OVERALL SUBMITTAL.
A3	PROJECT TYPE	THIS PROJECT IS: MCCORD POINTE AMENITY AREA.
A4	VICINITY MAP	SEE SHEET C1.0
A5	LEGAL DESCRIPTION	SEE SHEET C1.1 FOR LEGAL DESCRIPTION. THE LATITUDE IS 39°55'35" N AND LONGITUDE IS 85°54'19" W.
A6	SITE IMPROVEMENTS	SEE SHEET C1.1.
A7	14 DIGIT HYDROLOGIC UNIT CODE	05120201100150
A8	STATE OR FEDERAL WATER QUALITY PERMITS	IDEM RULE 5
A9	POINTS WHERE STORMWATER WILL DISCHARGE SITE	STORMWATER FROM LAKE 1 OUTLETS TO AN EXISTING SWALE NORTH OF 96TH STREET, IN HAMILTON COUNTY, WHICH ULTIMATELY DRAINS NORTH TO THE BEE CAMP CREEK DRAIN WHICH OUTLETS INTO GEIST RESERVOIR.
A10	LOCATION OF WETLANDS, LAKES, WATER COURSES ADJACENT TO SITE	DELINEATED ON PLANS.
A11	RECEIVING WATERS	BEE CAMP CREEK DRAIN TO GEIST RESERVOIR.
A12	IDENTIFICATION OF POTENTIAL DISCHARGE TO GROUNDWATER	NONE
A13	100 YEAR FLOODPLAINS, FLOODWAYS, AND FLOOD FRINGES	NONE
A14	PRE CONSTRUCTION AND POST CONSTRUCTION PEAK DISCHARGE	10-YR ALLOWABLE RELEASE RATE: 0.50 CFS 10-YR POST CONSTRUCTION RATE: 0.49 CFS
A15	ADJACENT LAND USES	SEE SHEET C1.1 NORTH: RESIDENTIAL LOTS EAST: RESIDENTIAL LOTS SOUTH: RESIDENTIAL LOTS WEST: AGRICULTURAL
A16	LOCATIONS AND BOUNDARIES OF DISTURBED AREAS	SEE SHEETS C1.3
A17	IDENTIFICATION OF EXISTING VEGETATIVE COVER	SEE SHEETS C1.3
A18	SOILS MAP	SEE SHEET C1.0
A19	LOCATIONS, SIZES, DIMENSIONS OF PROPOSED STORMWATER SYSTEM	NONE
A20	LOCATIONS, SIZES, DIMENSIONS OF PROPOSED OFFSITE CONSTRUCTION ACTIVITIES	NONE
A21	LOCATION OF SOIL STOCKPILE	NONE
A22	EXISTING SITE TOPOGRAPHY	SEE SHEETS C1.3.
A23	PROPOSED SITE TOPOGRAPHY	SEE SHEETS C1.2
B1	POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES	ERODED SOILS AND SEDIMENTS, OILS, GREASES, COOLANTS, CONCRETE WASHOUT, PETROLEUM FUELS AND OTHER FLUIDS ASSOCIATED WITH OPERATION AND MAINTENANCE OF CONSTRUCTION EQUIPMENT PRESENT ON THE SITE; DEBRIS INCLUDING CUTTINGS, SEALANTS, ADHESIVES, AND COATINGS ASSOCIATED WITH INSTALLATION OF UNDERGROUND PIPES, INFRASTRUCTURE AND CONSTRUCTION OF THE BUILDING; PAINTS ASSOCIATED WITH PAVEMENT MARKING; FERTILIZERS ASSOCIATED WITH SEEDING AND PLANTING.
B2	SCHEDULE OF STORMWATER QUALITY MEASURES RELATED TO LAND DISTURBING ACTIVITIES	STORMWATER POLLUTION PREVENTION PLAN HAS BEEN DEVELOPED TO ELIMINATE SEDIMENT FROM LEAVING THE PROJECT DURING CONSTRUCTION ACTIVITIES PROTECTING ADJOINING PROPERTIES AND THE RECEIVING WATERS.
PRE-CONSTRUCTION SCHEDULE		
The following local regulation, ordinances and requirements have been included for reference and are not intended to be enforceable by federal governments but may be enforceable by state governments. (Local Qualified or State Delegated Programs)		
1. CONTRACTOR TO CALL INDIANA UNDERGROUND 811 BY CALLING 811 OR 800-382-5544 TO VERIFY LOCATION OF EXISTING UTILITIES TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION.		
2. CONTRACTOR SHALL INSTALL STONE CONSTRUCTION ENTRANCE PRIOR TO THE START OF EARTHWORK IN ACCORDANCE WITH THE PLAN LOCATION ON SHEETS C1.3 AND C1.7.		
3. CONTRACTOR TO INSTALL RULE 5 INFORMATION POSTING, TRASH DUMPSTER, AND PORT-O-LET AS SHOWN ON SHEETS C1.3 AND C1.4.		
4. CONTRACTOR SHALL INSTALL ALL REQUIRED SILT FENCE AROUND THE PERIMETER OF THE IMMEDIATE PHASE (SECTION) AS WELL AS THE LIMITS OF OFFSITE GRADING PRIOR TO ANY EARTHWORK ACTIVITIES SUCH AS EARTH MOVING OR STRIPPING.		
5. CONTRACTOR SHALL INSTALL CONCRETE WASHOUT AREA AND CONSTRUCTION STAGING AREA PRIOR TO THE START OF EARTHWORK ACTIVITIES AS SHOWN ON SHEETS C1.2 AND C1.3.		
6. CONTRACTOR TO EVALUATE LOCATION OF SOIL STOCKPILE AREAS AND PREPARE BY PLACING SILT FENCE DEFINING LIMITS. SEE SHEETS C1.3 AND C1.4.		
7. ONCE PERIMETER ELEMENTS ARE INSTALLED, ANY UTILITY MODIFICATION OR RELOCATION PER SHEETS C1.1 CAN COMMENCE IN FINAL PREPARATION FOR MASS EARTHWORK OPERATIONS. ALL INTERIM FLOW REQUIREMENTS SUCH AS TEMPORARY SEDIMENT BASINS AND TEMPORARY DIVERSION SWALES SHALL BE COMPLETED PRIOR TO MASS EARTHWORK OPERATIONS. THESE MEASURES SHALL BE MAINTAINED AND ADJUSTED AS NEEDED UNTIL COMPLETION OF MASS EARTHWORK. EROSION CONTROL ADJUSTMENTS DURING DIFFERENT PHASES OF CONSTRUCTION LIKELY REQUIRED AND SUBJECT TO WEATHER CONDITIONS.		
CONSTRUCTION SCHEDULE		
8. BEGIN CLEARING AND GRADING ACTIVITIES AFTER EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND ITEMS 1-7 OF THE PRE-CONSTRUCTION SCHEDULE ARE COMPLETE. EARTHMOVING SHALL BE DONE IN A MANNER TO MINIMIZE EROSION. CONTRACTOR SHALL VERIFY ALL EXISTING STORM SEWER AND UTILITY CONNECTION LOCATIONS AND ELEVATION PRIOR TO MOVING EARTH. CONTACT ENGINEER WITH ANY DISCREPANCIES. AS GRADING PROGRESSES, INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES TO CONTAIN SEDIMENT ON SITE.		
9. CONTRACTOR SHALL STRIP TOPSOIL AND GRADE THE SITE PER PLAN AND PLACE PERMANENT AND TEMPORARY SEED AS INDICATED ON THE PLAN, INCLUDING SEEDING WITH FIBER BLANKET ON MOUNDS, POND BANKS, SWALES. DURATION OF EXPOSED AREAS SHALL BE KEPT MINIMAL DEPENDANT ON WEATHER. ALL POTENTIALLY IDLE AREAS FOR 15 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED PER IDEM RULE 5.		
10. INSTALL SANITARY SEWERS		
11. INSTALL STORM SEWER SYSTEM, SUBSURFACE DRAINAGE SYSTEM, AND SWALES. ALL STORM SEWER INLET PROTECTION AND OUTFALL RIP RAP SHALL BE INSTALLED AT THE TIME EACH INLET IS CONSTRUCTED PER SHEETS C1.5-C1.6.		
12. PERMANENT AND FINAL VEGETATION, IN ADDITION TO STRUCTURAL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICAL PER SHEET C1.5-C1.6.		
13. CONTRACTOR SHALL INSTALL REMAINING UTILITIES AND RE-SEED ALL DISTURBED AREAS.		
14. CONTRACTOR SHALL INSTALL ALL STREETS AS INDICATED ON PLANS.		
15. INSTALL LOT SPECIFIC BMPs INCLUDING WASTER RECEPTACLES, CURB LINE BMPs, WASHOUTS, AND STABILIZED ENTRANCES.		
16. BUILDING FOUNDATION EXCAVATIONS		
17. VERTICAL CONSTRUCTION AND HOME BUILDING		
18. INSTALL PERMANENT OR TEMPORARY SOIL STABILIZATION AND LANDSCAPING		
19. CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AND UNTIL SEDIMENTATION OF STREETS AND STORM SEWERS NO LONGER OCCURS. CONTRACTOR SHALL INSPECT ON A WEEKLY BASIS OR AFTER A SIGNIFICANT STORM EVENT. SEE SHEETS C8.0-C8.1 FOR DETAILS AND SPECIFICATIONS.		
20. COMPLETE FINAL GRADING AND INSTALL SEEDING AND LANDSCAPING (IF APPLICABLE). STABILIZE ALL REMAINING EXPOSED AREAS AS A RESULT OF CONSTRUCTION RELATED ACTIVITIES.		
21. ALL EROSION AND SEDIMENT CONTROL SHALL COMPLY WITH INDIANA 327 IAC 15-5 AND RULE #5.		

B3	STABLE CONSTRUCTION ENTRANCE LOCATION AND SPECIFICATIONS	SEE SHEET C1.3-C1.5, C8.0-C8.1
B4	SEDIMENT CONTROL FOR SHEET FLOW AREAS	EE SHEET C1.3-C1.5, C8.0-C8.1S
B5	SEDIMENT CONTROL FOR CONCENTRATED FLOW AREAS	SEE SHEET C1.3-C1.5, C8.0-C8.1
B6	STORM SEWER PROTECTION MEASURES, LOCATIONS, SPECIFICATIONS	SEE SHEET C1.3-C1.5, C8.0-C8.1
B7	RUNOFF CONTROL MEASURES	SEE SHEET C1.3-C1.5, C8.0-C8.1
B8	STORMWATER OUTLET PROTECTION	SEE SHEET C1.3-C1.5, C8.0-C8.1
B9	GRADE STABILIZATION STRUCTURES	SEE SHEET C1.3-C1.5, C8.0-C8.1
B10	LOCATION, DIMENSION, SPECIFICATIONS AND DETAILS FOR STORMWATER QUALITY MEASURES	SEE SHEET C1.3-C1.5, C8.0-C8.1
B11	TEMPORARY SURFACE STABILIZATION FOR EACH SEASON	SEE SHEET C1.3-C1.5, C8.0-C8.1
B12	PERMANENT SURFACE STABILIZATION	SEE SHEET C1.3-C1.5, C8.0-C8.1
B13	MATERIAL HANDLING AND SPILL PREVENTION PLAN	THE CONTRACTOR SHALL PROVIDE A STONE SURFACE MATERIAL STAGING AREA. ALL LIQUID MATERIAL SHALL BE STORED IN A WEATHER-PROOF, VANDALISM RESISTANT ENCLOSURE OR REMOVED FROM THE SITE DURING NON-WORK HOURS. AN ON-SITE FUELING AREA SHALL BE DESIGNATED AWAY FROM DRAINAGE CHANNELS AND INLETS THAT WOULD PERMIT THE RAPID MOVEMENT OF SPILLED FUEL TO ADJACENT WATERWAYS. IF MORE THAN 200 GALLONS OF FUEL IS STORED ON-SITE, APPROPRIATE TEMPORARY CONTAINMENT FACILITIES SHALL BE INSTALLED TO PREVENT MIGRATION OF SPILLS. ALL MATERIALS SHALL BE HANDLED, APPLIED, AND DISPOSED OF IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ANY ACCIDENTS AND SPILLS MUST BE IMMEDIATELY REPORTED TO INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF EMERGENCY RESPONSE AT (317) 233-7745. CONTACT CITY FIRE AND POLICE DEPARTMENT BY DIALING 911. CLEAN UP MEASURES SHALL BE APPROVED AND AUTHORIZED BY INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.
B14	MONITORING AND MAINTENANCE OF POLLUTION PREVENTION MEASURES	SEE SHEET C1.3-C1.5, C8.0-C8.1
B15	EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS	SEE SHEET C8.0-C8.1
C1	DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE	POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH A SINGLE FAMILY RESIDENTIAL PROJECT INCLUDE, BUT ARE NOT LIMITED TO: VEHICULAR SOURCES SUCH AS LEAKING OIL, FUEL CONTAINERS, GREASE, BRAKE FLUID/DUST, WINDOW WASHER FLUID AND ANTIFREEZE. RUBBER FROM WEAR AND TEAR OF TIRES ON STREETS, GARBAGE FROM LITTERING; DEBRIS FROM LAWN SUCH AS MULCH AND LEAVES. HOME IMPROVEMENT MATERIALS SUCH AS PAINT AND CLEANING MATERIALS AND ELEVATED STORMWATER TEMPERATURES.
C2	SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION	THE MOST SIGNIFICANT POST CONSTRUCTION POLLUTANT IS SOIL AND SEDIMENT DISCHARGE. THE POST CONSTRUCTION MEASURES USED TO MINIMIZE SEDIMENTATION IN WATERWAYS INCLUDE SWALES AND PONDS. THE SWALES WILL COLLECT RUNOFF FROM THE HOMES AND MAJORITY OF PAVEMENT. THE DESIGN OF THE SWALES WILL ALLOW SEDIMENT TO BE PARTIALLY INFILTRATED BEFORE STORMWATER ENTERS THE DESIGNED STORM SEWER SYSTEM. BEEHIVE INLETS WILL PREVENT LARGE ITEMS FROM ENTERING THE STORM PIPES AND LEAVING THE SITE. THE DETENTION BASINS WHICH ARE DESIGNED TO HAVE WATER IN IT AT ALL TIMES WILL ALSO HELP REDUCE SEDIMENT AND TRASH BY ALLOWING IT TO DROP OUT PRIOR TO LEAVING LEAVING THE SITE. INSPECTION AND MAINTENANCE OF INFRASTRUCTURE IMPROVEMENTS IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER UNTIL PROJECT COMPLETION.
C3	DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES	THE PRIMARY POST CONSTRUCTION MEASURES ARE MASTER PLANNED PONDS AND WATER QUALITY SWALES TO ADDRESS WATER QUALITY LOCATED THROUGHOUT THE SANCTUARY AT STEEPLCHASE. SECONDARY TREATMENT MEASURES INCLUDE VEGETATED STRIPS OR GRASS FILTER STRIPS, SWALES, PERMANENT SEEDING AND PLANTINGS, OUTLET PROTECTION, AND ENERGY/VELOCITY DISSIPATION
C4	LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE	SEE SHEET C1.3-C1.5, C8.0-C8.1
C5	DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY MEASURES	SEE BMP OPERATIONS AND MAINTENANCE MANUAL FOR THE SANCTUARY AT STEEPLCHASE SECTION 6. IN GENERAL, THE SANCTUARY AT STEEPLCHASE DEVELOPMENT HAS BEEN MASTER PLANNED WITH PONDS AND WATER QUALITY SWALES IN ORDER TO ADDRESS WATER QUALITY. SECONDARY TREATMENT SYSTEMS SUCH AS SWALES, AND ENERGY DISSIPATION SUCH AS RIP-RAP ARE PRESENT THROUGHOUT THE DEVELOPMENT. THE HOME OWNERS ASSOCIATION WILL MAINTAIN POST CONSTRUCTION CONTROLS/BMP'S AFTER FILING THE NOT.
C6	DUST CONTROL/OFFSITE VEHICLE TRACKING	DURING CONSTRUCTION WATER TRUCKS SHOULD BE USED, AS NEEDED, BY EACH CONTRACTOR OR SUBCONTRACTOR TO REDUCE DUST. CONSTRUCTION TRAFFIC SHOULD ENTER AND EXIT THE SITE AT A CONSTRUCTION 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 INTO EXISTING STREETS. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS.
C7	STREET CLEANING AND STREET SWEEPING	PUBLIC OR PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. CLEARING SHOULD BE DONE BY DRY SWEEPING OR VACUUM TECHNIQUES. FOR HARD TO REMOVE SEDIMENT OR OTHER MATERIALS, WATER SPRAYERS ATTACHED TO A VACUUM BASED STREET SWEEPER MAY BE USED AS LONG AS ALL WATER LADEN MATERIAL IS REMOVED FROM THE STREET BY THE VACUUM SYSTEM.

PERSON ONSITE RESPONSIBLE FOR EROSION CONTROL:

STUART HUCKELBERRY  
LENNAR HOMES OF INDIANA, LLC  
Phone: (317) 659-3200

OWNERS INFORMATION

LENNAR HOMES OF INDIANA, LLC  
11555 N. MERIDIAN ST., SUITE 400  
CARMEL, IN 46032  
Phone: (317) 659-3200  
CONTACT: STUART HUCKELBERRY

INSPECTORS INFORMATION

STUART HUCKELBERRY  
LENNAR HOMES OF INDIANA, LLC  
Phone: (317) 659-3200  
Lennar SWPPP Certified  
Responsible landscaper - temporary  
and permanent stabilization, along  
with erosion /sediment controls  
stuart.huckelberry@lennar.com

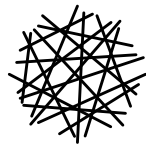
SEEDING SCHEDULE

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
TEMPORARY SEEDING DATES												
												WHEAT OATS OR RYE
												PERENNIAL RYGRASS
												DORMANT SEEDING
PERMANENT SEEDING DATES												
												NON-IRRIGATED
												IRRIGATED
												DORMANT SEEDING

- NOTES:
- PERMANENT SEEDING INFORMATION SHOWN ON THIS PLAN IS FOR EROSION CONTROL PURPOSES ONLY. IF THE LANDSCAPING PLANS AND SPECIFICATIONS CONTAIN INFORMATION CONCERNING PERMANENT LAWN SEEDING AND/OR SODDING, THEN THAT INFORMATION SHALL SUPERSEDE SIMILAR INFORMATION INDICATED ON THIS SHEET.
  - AREAS TO BE SEEDED SHALL BE SMOOTH AND UNIFORM AND SHALL BE IN ACCORDANCE WITH THE FINISHED GRADE AND CROSS SECTION SHOWN ON THE PLANS.
  - AREAS TO BE SEEDED SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 6 INCHES. LIGHTLY COMPACT PLACED TOPSOIL BY ROLLING OR TAMPING.
  - PRIOR TO REPLACING TOPSOIL, LOOSEN SUBSOIL TO ENSURE GOOD BOND WITH TOPSOIL.
  - APPLY SEEDING WITH 800 LB/ACRE OF 12-12-12 FERTILIZER AND MULCH WITH A CONTINUOUS BLANKET OF STRAW AT A RATE OF 2 TONS/ACRE, OR USE HYDROSEEDING TECHNIQUES WITH EQUIVALENT APPLICATION RATES.
  - APPLY TEMPORARY SEEDING WITH 200 LB/ACRE OF 12-12-12 FERTILIZER AND MULCH WITH A CONTINUOUS BLANKET OF STRAW AT A RATE OF 2 TONS/ACRE, OR USE HYDROSEEDING TECHNIQUES WITH EQUIVALENT APPLICATION RATES.
  - ON SLOPES GRADED AT 3:1 OR STEEPER, STRAW MULCH SHALL BE HELD IN PLACE WITH POLYMERIC PLASTIC NET TACKED WITH WIRE STAPLES, OR EQUIVALENT METHOD.
  - SEED MIXTURES AND APPLICATION RATES:  
GRASS MIX APPLIED AT 170 LB/ACRE (4 LB/1000 SQ.FT.) COMPRISED OF THE FOLLOWING:  
KENTUCKY 31 FESCUE - 95 LB/ACRE  
PERENNIAL RYGRASS - 65 LB/ACRE  
JASPER RED FESCUE - 10 LB/ACRE

REVISIONS

DATE	DESCRIPTION	BY



**HWC**  
**ENGINEERING**  
INDIANAPOLIS - TERRE HAUTE  
LAFAYETTE - MUNCIE - NEW ALBANY  
www.hwcengineering.com

MCCORD POINTE  
MCCORDSVILLE, INDIANA

SWPPP NOTES

PROFESSIONAL ENGINEER  
No. 11400758  
STATE OF INDIANA  
NOTARY PUBLIC  
Kirsten K. Hickman  
DRAWN BY TD/GM  
CHECKED BY KE  
DATE MARCH 2022  
SCALE AS SHOWN  
JOB NUMBER 2019-003-A  
SHEET

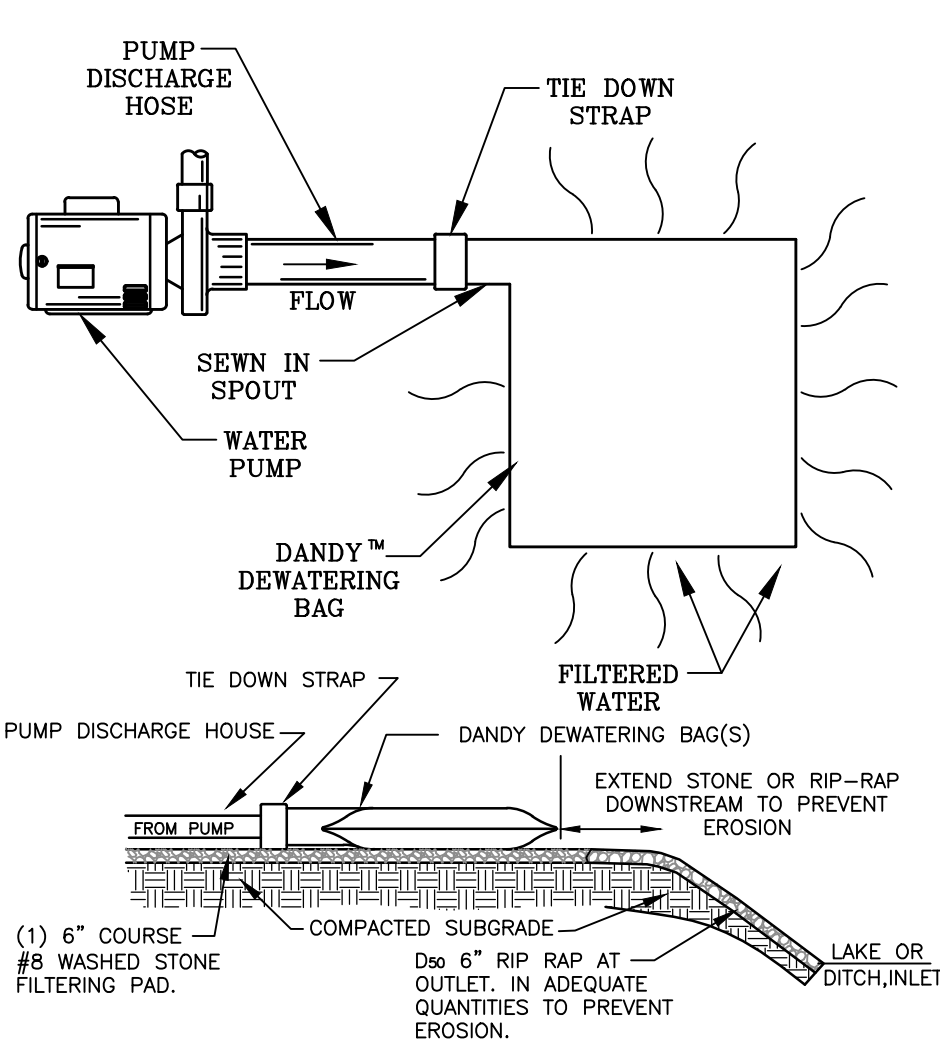
THIS SHEET TO BE USED FOR  
EROSION CONTROL ONLY.

C8.0  
SWPPP NOTES







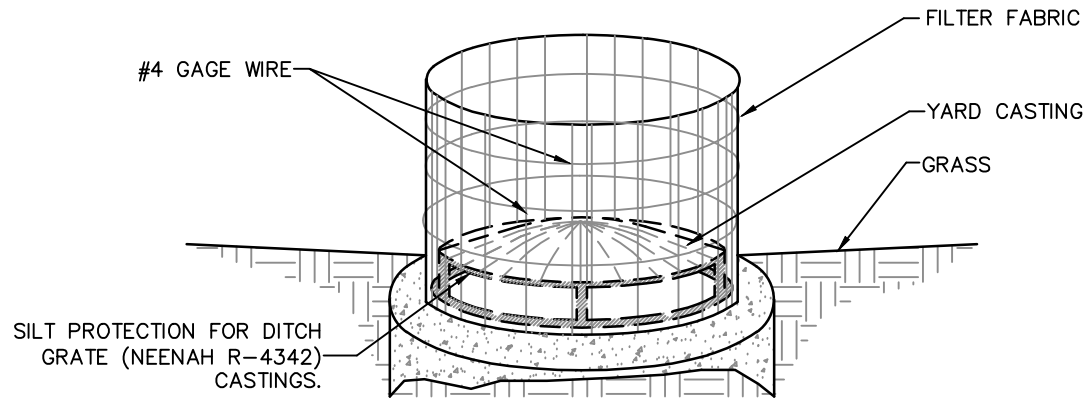


### DANDY DEWATERING BAG

NOT-TO-SCALE  
DANDY DEWATERING BAG™  
SPECIFICATIONS

NOTE: THE DANDY DEWATERING BAG™ WILL BE MANUFACTURED IN THE U.S.A. FROM A NONWOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	KN (lbs)	0.9 (205) x 0.9 (205)
Grab Tensile Elongation	ASTM D 4632	%	50 x 50
Puncture Strength	ASTM D 4853	KN (lbs)	0.58 (130)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	66.18 (9.60)
Tensile Tear Strength	ASTM D 4633	KN (lbs)	0.36 (80) x 0.36 (80)
UV Resistance	ASTM D 4355	%	70
Apparent Opening Size	ASTM D 4751	Mm (US Std. Sieve)	0.180 (60)
Flow Rate	ASTM D 4491	l/min/m² (gal./min./ft²)	3866 (65)
Permeability	ASTM D 4491	sec	1.2



**MAINTENANCE**  
1. INSPECT THE DROP INLET PROTECTION AFTER EACH STORM EVENT, AND MAKE NEEDED REPAIRS IMMEDIATELY.  
2. REMOVE SEDIMENT FROM THE POOL AREA TO ENSURE ADEQUATE RUNOFF STORAGE FOR THE NEXT RAIN.  
3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ALL BARRELS, CONSTRUCTION MATERIAL, AND SEDIMENT AND DISPOSE OF PROPERLY.  
4. GRADE THE DISTURBED AREA TO THE ELEVATION OF THE TOP OF THE INLET AND STABILIZE.

### Drop Inlet Protection Basket

It is the intent of this device to detain water for the purpose of allowing suspended solids in the water to settle out before the water enters the storm structure. Some filtering will occur as water passes through the device. The bottom of this device is to seal against the flat outer part of the casting. The overall dimension of the basket shall be no smaller than the water inlet perforations in the casting and no larger than the outer dimensions of the casting. The height shall be 15". The basket frame shall be welded wire mesh rolled or bent and welded to itself to fit the casting. The wire size shall be no smaller than .149" dia. and openings no larger than 18 sq. in. It is important that the bottom of the wire frame be smooth so as not to allow any leakage between the basket and casting. The top of the basket shall be open to prevent flooding during heavy storm events. Fabric shall be woven polypropylene allowing 15-25gal/min.sq. in. If non-woven fabric is used, the maintenance intervals should be increased to replace silt laden fabric. The fabric shall be attached to the frame and folded under the bottom to help seal against the casting.

This device should be used in conjunction with other Best Management Practices to maximize the efficiency of the erosion control plan. Suppliers for this product include: Lakeside Supply Inc. (317) 281-2661, Turfgrass Inc (317) 894-3276.

### BEEHIVE PROTECTION DETAIL

NOT-TO-SCALE

### INSERT (BASKET) CURB INLET PROTECTION

#### Location

- At curb inlets on paved roads and parking lots.
- Down grade from construction activities (e.g., individual home sites).

#### Materials

- The metal frame or basket with a top width and length such that the frame fits into the inlet. (The frame is supported by the structural integrity of the storm sewer.)
- The metal frame or geotextile should be designed with a bypass to allow storm water to flow into the storm sewer system during excessive storm events.
- The system should be designed for ease of maintenance.
- Geotextile fabric.

Table 1. Geotextile Fabric Specifications

Physical Property	Woven	Non-Woven
Filtering Efficiency	85%	85%
UV Resistance	70%	85%
Tensile Strength at 20% Elongation	30 lbs./linear inch 50 lbs./linear inch	50 lbs./linear inch 70 lbs./linear inch
Slurry Flow Rate	0.3 gal./min./sq. ft.	4.5 gal./min./sq. ft.
Water Flow Rate	15 gal./min./sq. ft.	220 gal./min./sq. ft.

#### Installation

- Remove the storm sewer grate and place the frame into the grate opening.
- Place geotextile fabric into the frame and secure according to the manufacturer's recommendations.
- Replace the storm sewer grate.

### GEOTEXTILE FABRIC DROP INLET PROTECTION

- Use the wrap joint method when joining posts (see Silt Fence on page 215).
  - 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.
  - Backfill the trench with soil material and compact it in place.
  - 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 (see Excavated Drop Inlet Protection on page 145).

#### 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.

### INSERT (BASKET) CURB INLET PROTECTION

#### Location

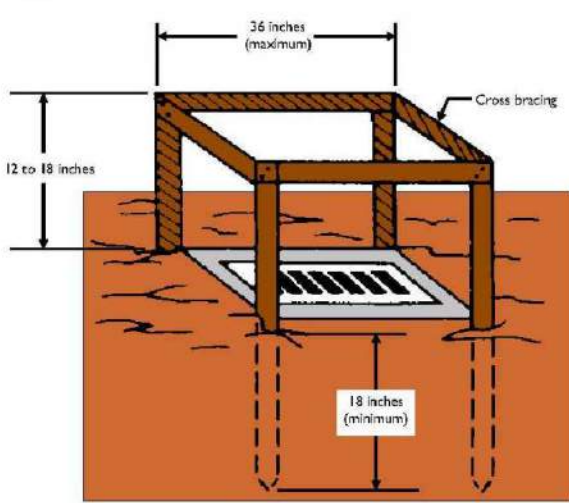
- At curb inlets on paved roads and parking lots.
- Down grade from construction activities (e.g., individual home sites).

#### Materials

- The metal frame or basket with a top width and length such that the frame fits into the inlet. (The frame is supported by the structural integrity of the storm sewer.)
- The metal frame or geotextile should be designed with a bypass to allow storm water to flow into the storm sewer system during excessive storm events.
- The system should be designed for ease of maintenance.
- Geotextile fabric.

### GEOTEXTILE FABRIC DROP INLET PROTECTION

Exhibit 1



(Source: Adapted from North Carolina Erosion and Sediment Control Planning and Design Manual, 1993)

### GEOTEXTILE FABRIC DROP INLET PROTECTION

#### Location

- At curb inlets on paved roads and parking lots.
- Down grade from construction activities (e.g., individual home sites).

#### Materials

- The metal frame or basket with a top width and length such that the frame fits into the inlet. (The frame is supported by the structural integrity of the storm sewer.)
- The metal frame or geotextile should be designed with a bypass to allow storm water to flow into the storm sewer system during excessive storm events.
- The system should be designed for ease of maintenance.
- Geotextile fabric.

Table 1. Geotextile Fabric Specifications

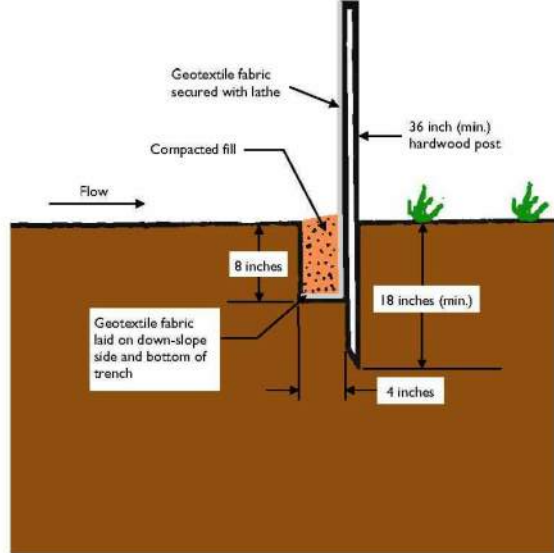
Physical Property	Woven	Non-Woven
Filtering Efficiency	85%	85%
UV Resistance	70%	85%
Tensile Strength at 20% Elongation	30 lbs./linear inch 50 lbs./linear inch	50 lbs./linear inch 70 lbs./linear inch
Slurry Flow Rate	0.3 gal./min./sq. ft.	4.5 gal./min./sq. ft.
Water Flow Rate	15 gal./min./sq. ft.	220 gal./min./sq. ft.

#### Installation

- Dig an eight-inch deep, four-inch wide trench around the perimeter of the inlet.
  - 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 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 lath over the fabric and fastening it to the post (stretching the fabric between posts as it is fastened).

### GEOTEXTILE FABRIC DROP INLET PROTECTION

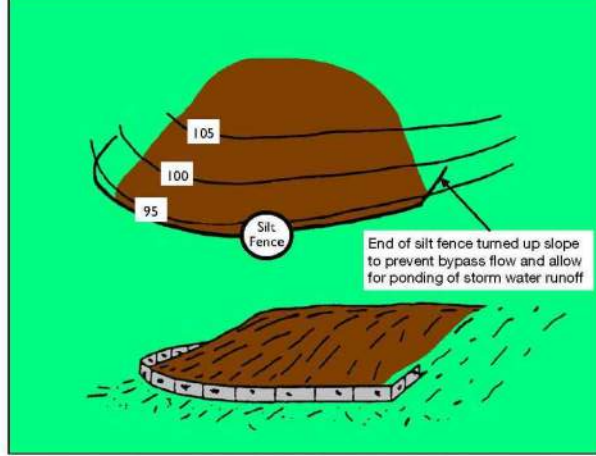
Exhibit 2



(Source: Adapted from North Carolina Erosion and Sediment Control Planning and Design Manual, 1993)

### SILT FENCE

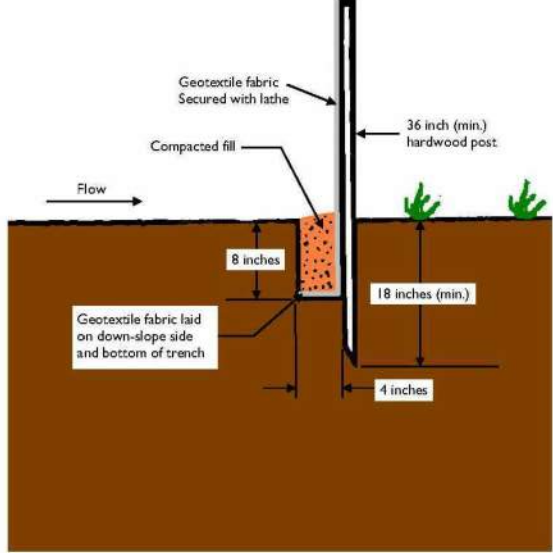
Exhibit 1



(Source: Adapted from Commonwealth of Pennsylvania Erosion and Sediment Pollution Control Manual, 1993)

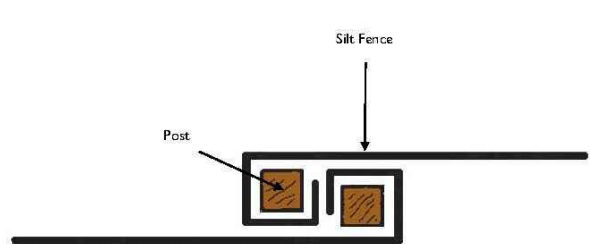
### SILT FENCE

Exhibit 2



### SILT FENCE

Exhibit 3



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### SEDIMENT BARRIERS & FILTERS

#### Silt Fence



A silt fence is a temporary barrier of entrenched geotextile fabric stretched across and attached to supporting posts and installed on the contour to intercept and treat sediment-laden storm water runoff from small, unvegetated drainage areas.

#### Purpose

To trap sediment from small, disturbed areas by reducing the velocity of sheet flow. Silt fences capture sediment by ponding water to allow deposition, not by filtration.

Note: Silt fence is not recommended for use as a diversion and should not be used across a stream, channel, ditch, road, or anywhere that concentrated flow is anticipated.

#### 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).

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### SILT FENCE

#### Spacing

Table 1. Slope Steepness Restrictions

Percent Slope	Maximum Distance
< 2%	< 50:1
2% - 5%	50:1 to 20:1
5% - 10%	20:1 to 10:1
10% - 20%	10:1 to 5:1
> 20%	> 5:1

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 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.

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### SILT FENCE

Table 2. Geotextile Fabric Specifications for Silt Fence (minimum)

Physical Property	Woven Geotextile Fabric	Non-Woven Geotextile Fabric
Filtering efficiency	85%	85%
Tensile strength at 20% elongation	30 lbs. per linear inch	50 lbs. per linear inch
Standard strength Extra strength	50 lbs. per linear inch	70 lbs. per linear 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 lath.
- Support Posts
  - 2 x 2 inch hardwood posts. Steel fence posts may be substituted for hardwood posts (wood posts should have projections for fabricing fabric).
  - Spacing
    - Eight feet maximum if fence is supported by wire mesh fencing.
    - Six feet maximum for extra-strength fabric without wire backing.

#### Installation

Prefabricated silt fence (see Exhibits 1, 2, and 3)

- Lay out the location of the fence so that it 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. Then the ends of the fence on slope shall be the points 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 (see Exhibit 1).
- Excavate an eight-inch deep by four-inch wide trench along the entire length of the fence line (see Exhibit 2). Installation by plowing is also acceptable.
- 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.

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### PROTOCOL FOR STAGING PORTABLE TOILETS

Portable toilets (port-o-lets) will be provided on the construction site for Associates and trade workers in compliance with applicable statutes and regulations. In accordance with **Indiana 327 IAC 15-5-7 General requirements for storm water quality control**; appropriate measures shall be implemented to minimize or eliminate wastewater (i.e. objectionable substances from a portable toilet unit) being carried from the project site by run-off.

All portable toilet units be will provided by a professional sanitation service contractor who will transport, deliver, stage, and maintain each unit in accordance with applicable statutes and regulations. Each unit shall be equipped with one urinal, one toilet, and one hand sanitizer dispenser / handwash sink. Objectionable waste contained within the unit will be disposed of by the professional sanitation service contractor in compliance with applicable statutes and regulations.

The Builder will prepare a designated location for placement and staging of each portable toilet unit. The preferred location for each unit will promote long term staging, and discourage frequent relocation of the unit; however, the Builder may relocate the unit more frequently, as long as sequencing protocol is implemented. The following staging protocol will be implemented for portable toilets units:

- Each unit will be staged on a reasonably level / flat ground; this may include a gravelled construction entrance when site conditions are appropriate;
- Each unit, when located on an individual lot, must be placed behind or within perimeter BMPs;
- On occasion, units may be temporarily staged on a non-permeable surface when appropriate perimeter BMPs are utilized;
- When possible, units may be staged within a concrete washout area;
- The provision of reasonable access to units is expected. To prevent slips, trips and falls, optimal staging may include the installation of a gravel / stone pathway from curb to unit. Pathways will never be fabricated from scrap lumber or trash material, nor in likeness of any bridge or gangplank approach;
- Each unit will be staged a minimum of 6' from any curb, and never located near any stormwater inlet or conveyance;
- Each unit will be staged in a manner that is easily accessible for routine maintenance;
- Each unit will be properly secured by staking all four corners of the unit to the ground;
- Units will never be staged on or within any public walkway or street;
- Units will be inspected weekly for proper staging and to verify any evidence of leaking.

In accordance with **Indiana Rule 6.1: 327 IAC 2-6.1-1 Spills; Reporting, Containment, and response**: spills of objectionable substances, that exceed a quantity of one pound or one pint (i.e. from a portable toilet unit) shall be contained, cleaned, removed, and properly disposed. Spills of reportable quantity, as defined by Indiana Rule 6.1 will be managed in accordance with applicable statutes and regulations.

LENNAR

Author: Kevin Rager

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12/11/19

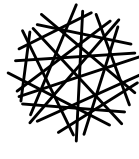
THIS SHEET TO BE USED FOR  
EROSION CONTROL ONLY.

PERSON ONSITE RESPONSIBLE FOR EROSION CONTROL:

STUART HUCKELBERRY  
LENNAR HOMES OF INDIANA, LLC  
Phone: (317) 659-3200

### REVISIONS

DATE	DESCRIPTION	BY

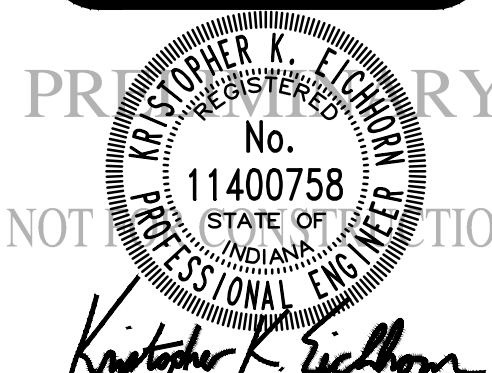


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MCCORD POINTE  
MCCORDSVILLE, INDIANA

SWPPP DETAILS



Christopher K. Eickhorn

DRAWN BY TS	JOB NUMBER 2019-003-A
CHECKED BY KE	
DATE MARCH 2022	
SCALE AS SHOWN	
SHEET	

C8.2

SWPPP DETAILS



By: keichhorn  
C8.3  
File Name: W:\cadd\atlantic\_homes\2019-263-a lennar- mccord pointe center\CAD\section 7 amenity center\19263-A-SWPP Notes and Details.dwg, Layout: C8.3  
Plot Time: 4:54pm  
Plot Date: Aug 22, 2022

Sequence Describing Storm Water Quality Measure Implementation Relative to the Vertical Construction Activity on an Individual Lot within a Larger Development.

Introduction – The project site owner has identified eight (8) phases within the vertical construction sequence. During the period of construction activities, all storm water quality measures necessary to meet the requirements of the Indiana storm water Rule shall be maintained in working order. The SWPPP shall serve as a guideline for storm water quality, but should not be interpreted to be the only basis for implementing, in accordance with the Rule, all measures to adequately prevent polluted storm water run-off. Alternative measures to site stabilization are acceptable if the site owner or their representative can demonstrate they have implemented erosion and sediment control measures adequate to prevent sediment discharge. Generally, the project site owner will have permitted projects with multiple municipalities; therefore, BMP practices will be modified as required by the enforcement of applicable regulation. Please make reference to: "Protocol for when BMP Maintenance is Required".

From time construction activity begins, and until the individual lot is stabilized, the lot owner will:

- Protect adjacent properties from sedimentation;
- Prevent mud/sedimentation from depositing on the public street;
- Protect drainage ways from erosion and sedimentation;
- Prevent sediment laden water from entering storm sewer inlets.

The following storm water quality measures will take place on an individual lot/home– site:

Phase 1 – Foundation – During the period of construction activities:

- A qualified professional shall install silt fence at front curb and rear swale; wattles may be utilized as permitted by applicable regulations (i.e. frozen ground conditions, feasibility for site access, transitional BMP, etc. Additional silt fence will be installed adjacent to establish lots or common areas, or the full perimeter of lot/home–site, as required by the enforcement of applicable regulation. A qualified professional shall verify the presence of appropriate BMP protection for nearby storm water inlets; if not present, the CM will be notified and these BMP devices will be installed promptly.
- The installation of the following House Keeping BMPs will be installed upon start of construction as required by enforcement of applicable regulations:
  - o Portable toilet(s) will be appropriately staged throughout the project site. Note: Please make reference to: "Protocol for Staging Portable Toilets";
  - o Trash containers or location of trash placement;
  - o Concrete washout (May be a stationary location for the entire site, or may be portable devices on an individual lot).

• Townhome Projects: Typically, a gravel staging area will be established on the site to accommodate storage of construction materials and equipment, concrete washout, and portable toilets. Perimeter silt fence or silt sock will be installed around the staging area. The Project Construction Manager will evaluate each site for the appropriate location for the staging area.

- A temporary construction entrance shall be installed, as required by the enforcement of applicable regulations.
- Foundation soil stock pile may remain active throughout the Foundation Phase. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil stock piles will be distributed on site by machine grade in a timely manner.
- Up to two loads of soil may remain on site after backfill of foundation. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- All concrete washout will occur at the designated concrete washout area. Washout may occur onsite of an individual lot utilizing portable washout devices.
- All construction trash/debris will be contained on site in a manner permitted the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater "toolbox talks".

Phase 2 – Framing – During the period of construction activity:

- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up. Please refer to Builders Trash Act protocol.)
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater "toolbox talks".

Phase 3 – Mechanical Rough – During the period of construction activity:

- All point washout shall be done utilizing paint containers. All paint containers shall be removed from the lot/home– site by the paint contractor.
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater "toolbox talks".

Phase 4 – Insulation/Drywall – During the period of construction activity:

- All drywall scrap and debris shall be removed from the lot/home site by the drywall contractor. The drywall contractor will be responsible for the appropriate disposal of all drywall material. Washout of drywall spackling compounds shall be contained in buckets and removed from the lot/home site by the drywall contractor.
- While in the process of installing brick veneer, bagged dry mix mortar and brick material will be covered by a vapor barrier material to prevent exposure to a rain event. A vapor barrier material will be applied to the soil surface where brick mortar will be mixed. Washout of mortar material may occur on site when utilizing appropriate portable washout container. Hardened mortar debris and brick trash will be staged at curb side by the brick contractor for removal, or placed in the provided trash container (i.e. dumpster) as required by enforcement of applicable regulations. In addition to the aforementioned guidance, the following requirements shall apply for washout of brick mortar for all Lennar Townhome construction sites:
  - o The staging area for mixing brick mortar shall be adjacent to the Site concrete washout.
  - o All brick mortar washout shall occur (in semi-solid condition) directly into the concrete washout in lieu of utilizing a washout bag.
  - o Lennar will not provide a washout container bag for Townhome construction sites.
  - o Note: Please make reference to: Brick Mortar Washout Protocol – Lennar BMP for detailed staging guidance.
- All concrete washout will occur at the designated concrete washout area. Washout may occur onsite utilizing portable washout devices.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater toolbox talks.

Phase 5 – Exterior Finish – During the period of construction activity:

- A machine grade will occur on site to prepare for the installation of the permanent concrete driveway and walkways. During this transition, Curb back out and/or wattles may be utilized as submittal BMP measures to adequately prevent polluted storm water run-off from the construction site.
- All concrete washout will occur at the designated concrete washout area. Washout may occur onsite utilizing portable washout devices.
- Washout of drywall spackling compounds, paint, tile grout, etc., shall be contained in buckets and removed from the lot/home site by the appropriate contractor.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater toolbox talks.

Phase 6 – Interior Finish – During the period of construction activity:

- Washout of drywall spackling compounds, paint, tile grout, etc., shall be contained in buckets and removed from the lot/home–site by the appropriate contractor.
- All concrete washout will occur at the designated concrete washout area. Washout may occur onsite utilizing portable washout devices.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater toolbox talks.

Phase 7 – Mechanical Trim – During the period of construction activity:

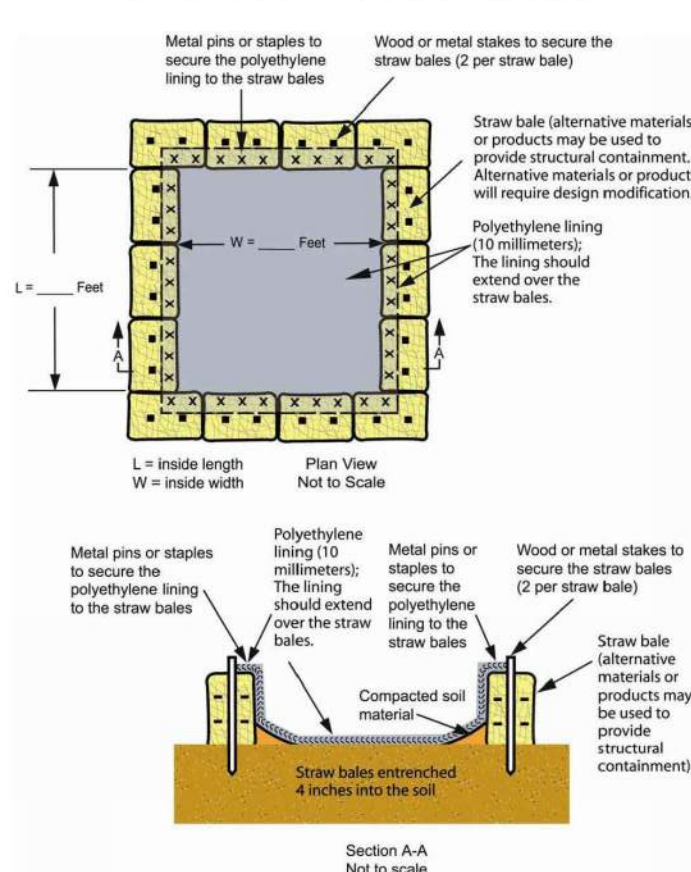
- A machine grade will be accomplish on site for purposes of filling ground settlement and surface erosion.
- Washout of drywall spackling compounds, paint, tile grout, etc., shall be contained and removed from the lot/home site by the appropriate contractor.
- All concrete washout will occur at the designated concrete washout area. Washout may occur onsite utilizing portable washout devices.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- Up to two loads of soil may remain on site. Soil stock piles shall be placed on the lot/home site in a manner as not to challenge the integrity of perimeter BMPs. Soil will be distributed on site by machine grade in a timely manner.
- A qualified person(s) shall inspect and maintain all storm water measures. Lennar site Associates will participate in bi-weekly stormwater toolbox talks.

Phase 8 – Home Site Finish – During the period of construction activity:

- During seasonal conditions, all silt fence will be removed, wattles or turf mat may be utilized as transitional BMP while awaiting final stabilization, a machine grade will be accomplished on site in preparation for final stabilization (Note: adverse soil conditions may limit winter grading). Sod will be installed at front yard to front corners of house structure. Side and rear yards will be seeded and PenMulch soil stabilizer/fertilizer applied to soil surface, a row of turf matting will be installed at the rear swale easement line, and one piece of sod will placed at each downslope located within a seeded area of the lot. Other turf matting may be positioned on seeded areas due to extreme lot slope. When full sod option is chosen, sod will be installed at side and rear yard in-lieu of seed, no turf mat will be applied rear easement line, rear swale shall be over seeded. During the New Home Orientation, the new property owner will be informed of the requirement for, and benefits of, final stabilization, and the prevention of stormwater pollution.
- Upon the completion of construction activity, and during unseasonable conditions, existing erosion and sediment control measures will remain in place on site, wattles or turf mat may be applied at curb in-lieu of silt fence. A qualified person shall inspect and maintain all storm water measures. During the New Home Orientation, the new property owner will be informed of the requirement for, and benefits of, final stabilization, and the prevention of stormwater pollution.
- When seasonal conditions return, all perimeter BMPs will be removed, wattles or turf mat may be utilized as transitional BMP while awaiting final stabilization, sod will be installed at front yard, side and rear yards will be seeded and PenMulch soil stabilizer/fertilizer w/ lockifier applied to soil surface, and one piece of sod will placed at each downslope located within a seeded area of the lot. A single row of turf matting will be installed at the rear swale easement line. If full sod option is chosen, sod will be installed at side and rear yard in-lieu of seed, no turf mat will be applied rear easement line, rear swale shall be over seeded.
- Washout of drywall spackling compounds, paint, tile grout, etc., shall be contained in buckets and removed from the lot/home site by the appropriate contractor.
- All concrete washout may occur at the designated concrete washout area; or, washout may occur on site of an individual lot utilizing portable washout devices.
- All construction trash/debris will be contained on site in a manner permitted by the enforcement of applicable regulations (i.e. trash containers utilized as enforced by municipal authority, fly-a-way trash will be appropriately contained on site by end of day. Where permitted lumber trash /debris may be set at curb for weekly trash pick-up.)
- A qualified person(s) shall inspect and maintain all storm water measures, until transfer of ownership has occurred and the new property owner has been informed of the requirement for, and benefits of, final stabilization. Lennar site Associates will participate in bi-weekly stormwater toolbox talks.

#### CONCRETE WASHOUT

##### Concrete Washout (Above Grade System) Worksheet



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#### CONCRETE WASHOUT

- Metal pins or staples at a minimum of six inches in length, sandbags, or alternative faster 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.
  - Depend 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 (see Temporary Construction Ingress/Egress plan on page 17) or alternative (optional) pad for concrete washout systems.

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#### ROCK CHECK DAM

- Overflow Areas
  - Stabilized to reduce erosion/exposed along sides and below the dam.

##### Filter Medium

- Height – to base of overflow weir notch.

##### Materials

- Geotextile fabric (8 ounce or heavier; nonwoven).
- Indiana Department of Transportation Revestment riprap (see Appendix D) for dam.
- INDOT CA No. 5 aggregate (see Appendix D) for use as filter medium (Aggregate must be well-graded).

Note: INDOT CA No. 8 aggregate is acceptable if No. 5 aggregate is not available. The use of No. 8 aggregate may result in more frequent overtopping of the structure and will increase the frequency of structure maintenance.

##### Installation

1. Lay out the location of the check dam.
2. Excavate a cutoff trench into the channel bottom and ditch banks, extending it a minimum of 18 inches beyond the top of the ditch bank.
3. Install and anchor filter fabric in the channel and cutoff trench.
4. Place riprap in the cutoff trench and channel to the flow and dimensions shown in the construction plans. The center of each dam must be at least nine inches lower than the upstream points of contact between the riprap dam and channel banks (see Rock Check Dam Worksheet on page 101).
5. Extend the riprap at least 18 inches beyond the top of the channel banks to keep overflow water from eroding areas adjacent to the channel banks before it re-enters the channel.
6. Place filter medium (INDOT CA No. 5 aggregate) on the up-slope side of the dam. Place filter medium over the entire face of the dam up to the base of the overflow weir notch.
7. Stabilize the channel above the upstream dam.
8. Install an erosion-resistant lining in the channel below the downstream dam. The lining should extend a minimum distance of six feet below the dam.

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#### CONCRETE WASHOUT

residual loads due to potential to exceed the design capacity of the washout system. Install protection of erosion 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 signage at strategic locations that are convenient and in close proximity to work areas and in sufficient number to accommodate the demand for disposal.
- Install signage identifying the location of concrete washout systems.

##### Location

- Locate concrete washout systems at least 50 feet from any creeks, wetlands, ditches, larval features, or storm drain/roadside 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/containers/concrete washout systems may also be utilized on individual building sites. The design and size of the system can be adjusted to accommodate the expected capacity.

##### Prefabricated Washout Systems/Containers

- Self-contained study containment systems that are delivered to a site and installed at strategic locations for concrete disposal.

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#### CONCRETE WASHOUT

##### 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 90 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 land 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 roadways 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 not 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 further 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 violator and take appropriate action.

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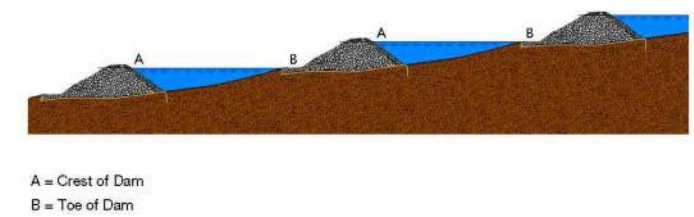
#### ROCK CHECK DAM

- 9. Additional sediment storage can be provided by excavating a small sediment trap on the upstream side of the check dam.

##### Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days.
- If significant erosion occurs between dams, install an erosion-resistant liner in that portion of the channel.
- Remove accumulated sediment when it reaches one-half the height of the dam to maintain channel capacity, allow drainage through the dam, and prevent large flow from displacing sediment.
- Add riprap and aggregate as needed to maintain design height and cross section of the dam.
- When dams are no longer needed, remove the riprap and aggregate and stabilize the channel, using an erosion-resistant lining if necessary. (Riprap and aggregate from the dam may be removed or utilized to stabilize the channel.)

##### Exhibit 1



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#### CONCRETE WASHOUT

- These systems are manufactured to resist damage from construction equipment and prevent spillage leaks or spills.
- Manufacturer or supplier provides the containers. The project site manager maintain the system or the supplier provides complete service that includes maintenance and support the polyethylene lining.
- Units are often available with or without ramps. Units with ramps tend themselves to accommodate pump trucks.
- Maintain according to the manufacturer's recommendations.

##### Designed and Installed Units

- These units are designed and installed on site. They tend to be less reliable than prefabricated systems and 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 need 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 polyethylene available. The polyethylene lining should be of adequate size to extend over the entire excavation.
- Include a minimum 12-inch freboard to reasonably ensure that the structure will not overlap during a rain event.
- Line the pit with ten millimeter 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 need 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

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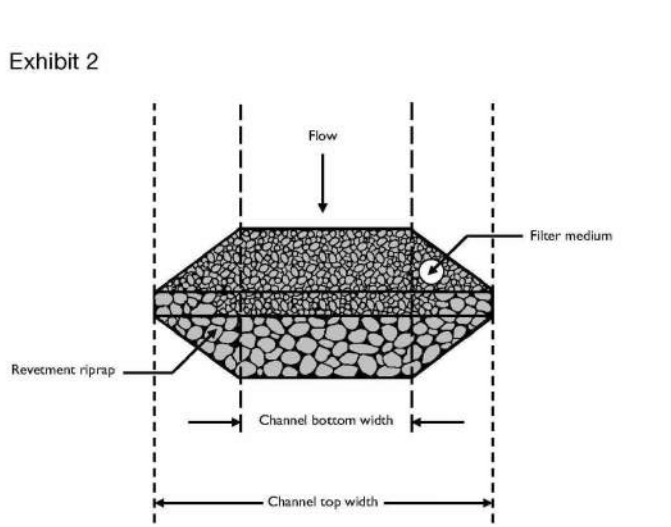
#### CONCRETE WASHOUT

- When concrete washout systems are no longer required, the concrete washout system 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.

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#### ROCK CHECK DAM

##### Exhibit 2



#### CONCRETE WASHOUT

- 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 support the polyethylene lining.
- Include a minimum four-inch freboard 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 be 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 on the target plant.

##### Materials

- Minimum of ten millimeter 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).

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#### RUNOFF CONTROL

##### Rock Check Dam



A rock check dam is a series of runoff control structures, consisting of geotextile fabric and aggregate, placed across drainage channels to slow storm water runoff. This measure may also provide limited effectiveness as a sediment control measure.

##### Purpose

- To reduce erosion in a drainage channel by slowing velocity of flow. (Check dams are commonly used (a) in channels that are eroding, but where permanent stabilization is impractical due to their short period of usefulness, and (b) in eroding channels where construction delays or weather conditions prevent timely installation of erosion-resistant linings.)
- To reduce flow velocities in a drainage channel.

Note: Do not use check dams in perennial streams.

##### Specifications

###### Contributing Drainage Area

Two acres maximum.

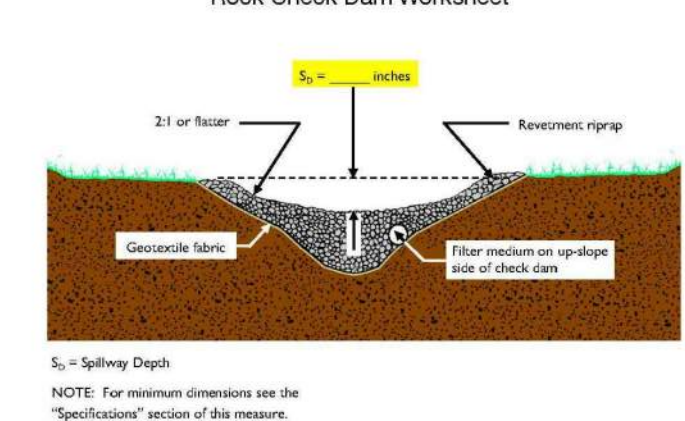
###### Riprap Check Dam

- Dam height
  - Two feet maximum.
  - Center of the dam at least nine inches lower than the points of contact between the upstream points of the riprap dam and channel banks.
- Side slope ratio of 2:1 or flatter.
- Spacing: Use of the upstream dam at same elevation as overflow weir of the downstream dam.

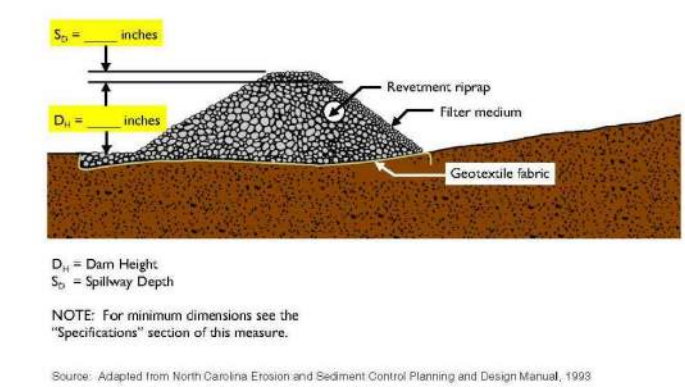
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#### ROCK CHECK DAM

##### Rock Check Dam Worksheet



NOTE: For minimum dimensions see the "Specifications" section of this measure.



NOTE: For minimum dimensions see the "Specifications" section of this measure.

Source: Adapted from North Carolina Erosion and Sediment Control Planning and Design Manual, 1980

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THIS SHEET TO BE USED FOR  
EROSION CONTROL ONLY.

PERSON ONSITE RESPONSIBLE FOR EROSION CONTROL:

STUART HUCKLEBERRY  
LENNAR HOMES OF INDIANA, LLC  
Phone: (317) 659-3200

REVISIONS		
DATE	DESCRIPTION	BY

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www.twcengineering.com

MCCORD POINTE  
MCCORDSVILLE, INDIANA  
SWPPP DETAILS

PROFESSIONAL ENGINEER  
K. E. ELLIOTT  
No. 11400750  
STATE OF INDIANA  
NOTARY PUBLIC  
K. E. Elliott  
DRAWN BY  
TS  
CHECKED BY  
KE  
DATE  
MARCH 2022  
SCALE  
AS SHOWN  
SHEET  
JOB NUMBER  
2019-003-A

C8.3  
SWPPP DETAILS



Holds a half yard of material and 2,600 pounds. It has an open top and a closed bottom. It is perfect to deliver smaller quantities of product. It can be used as a washout bag too.

**Size:** 31" w x 31" l x 24" h  
**Capacity:** 1/2 Cubic Yard, 2,600 lbs.

Author: Kevin Rager      Page 1 of 1      12/11/19

Author: Kevin Rager      Page 1 of 1      12/11/19

Author: Kevin Rager      Page 1 of 1      12/11/15

## Author: Kevin Raper Page 1 of 4 12/11/19

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✓ The following has been provided to the Vertical Construction Manager

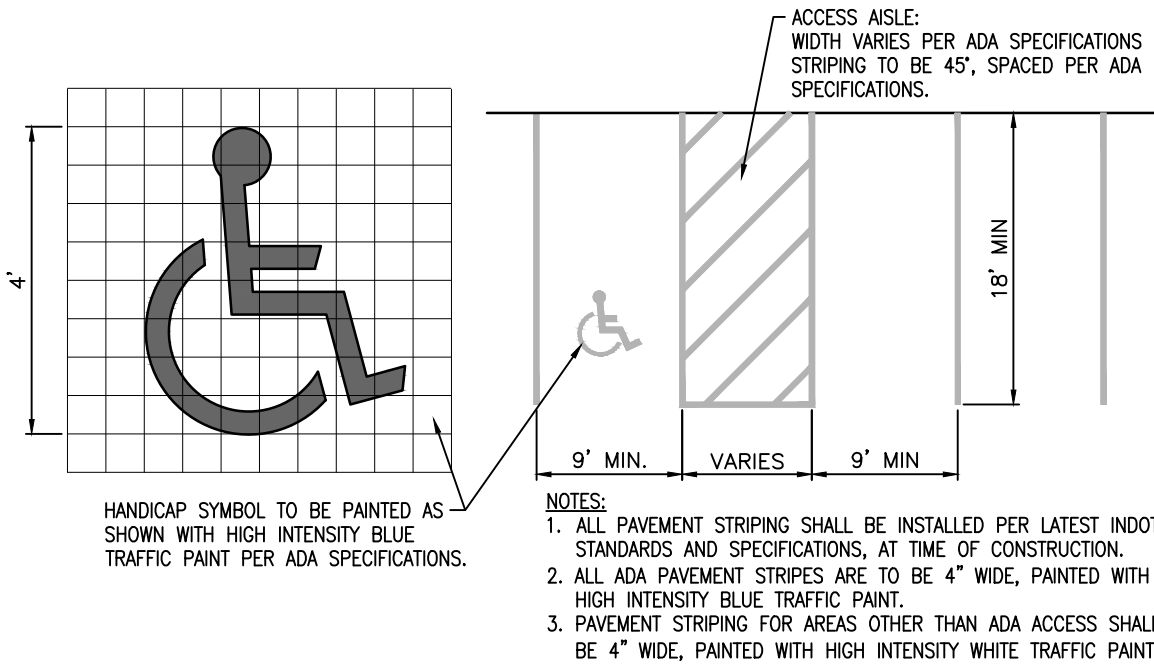
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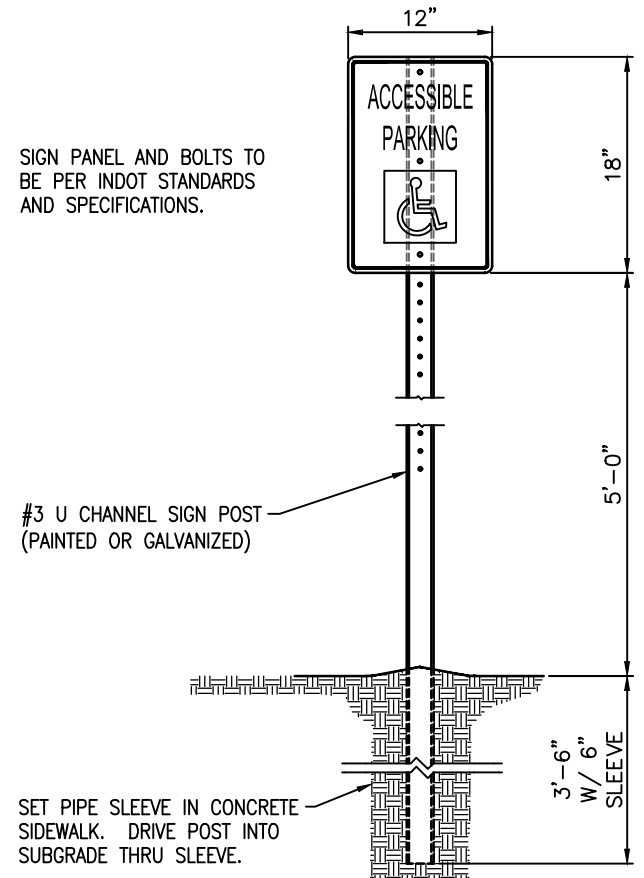
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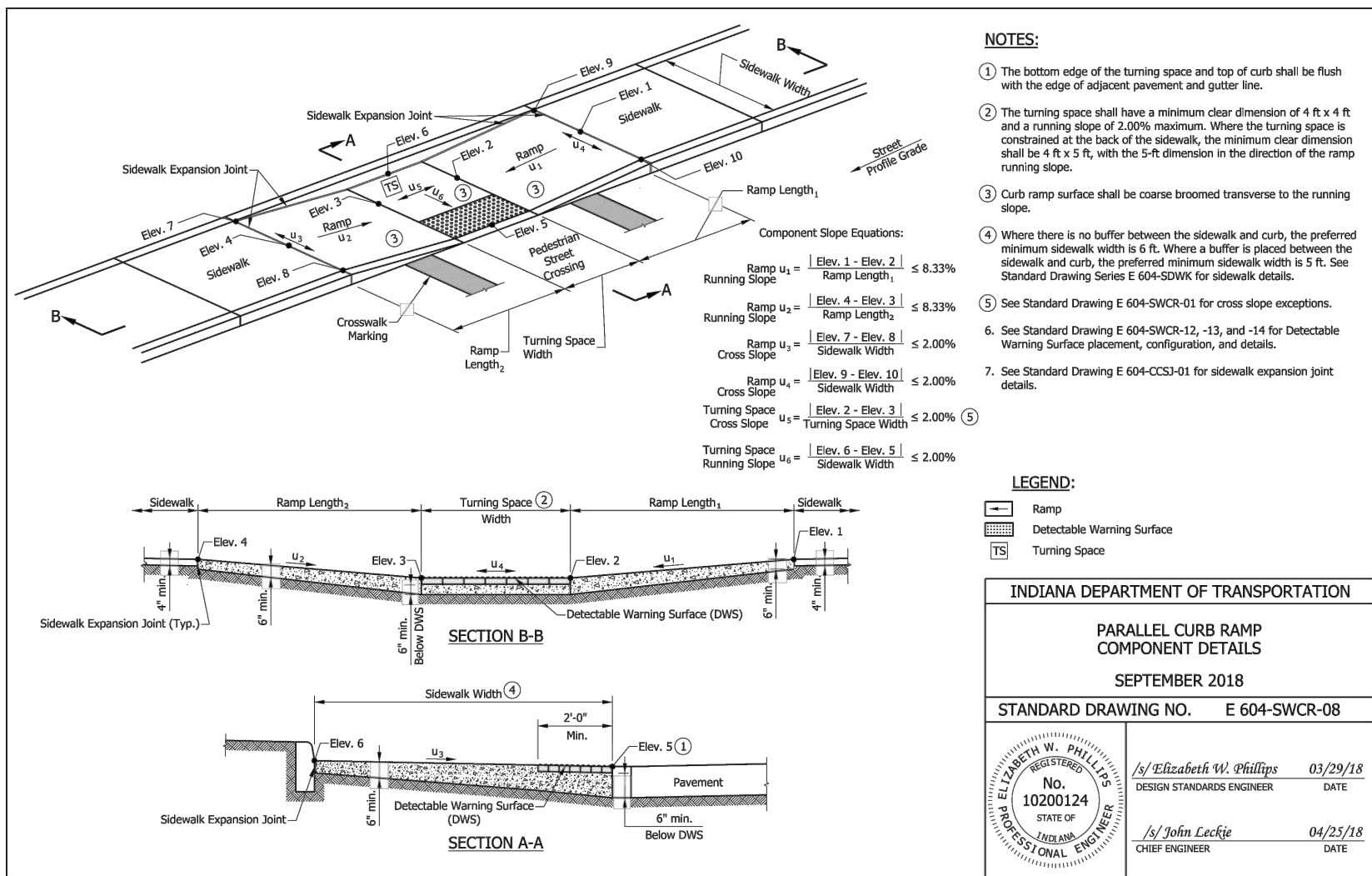




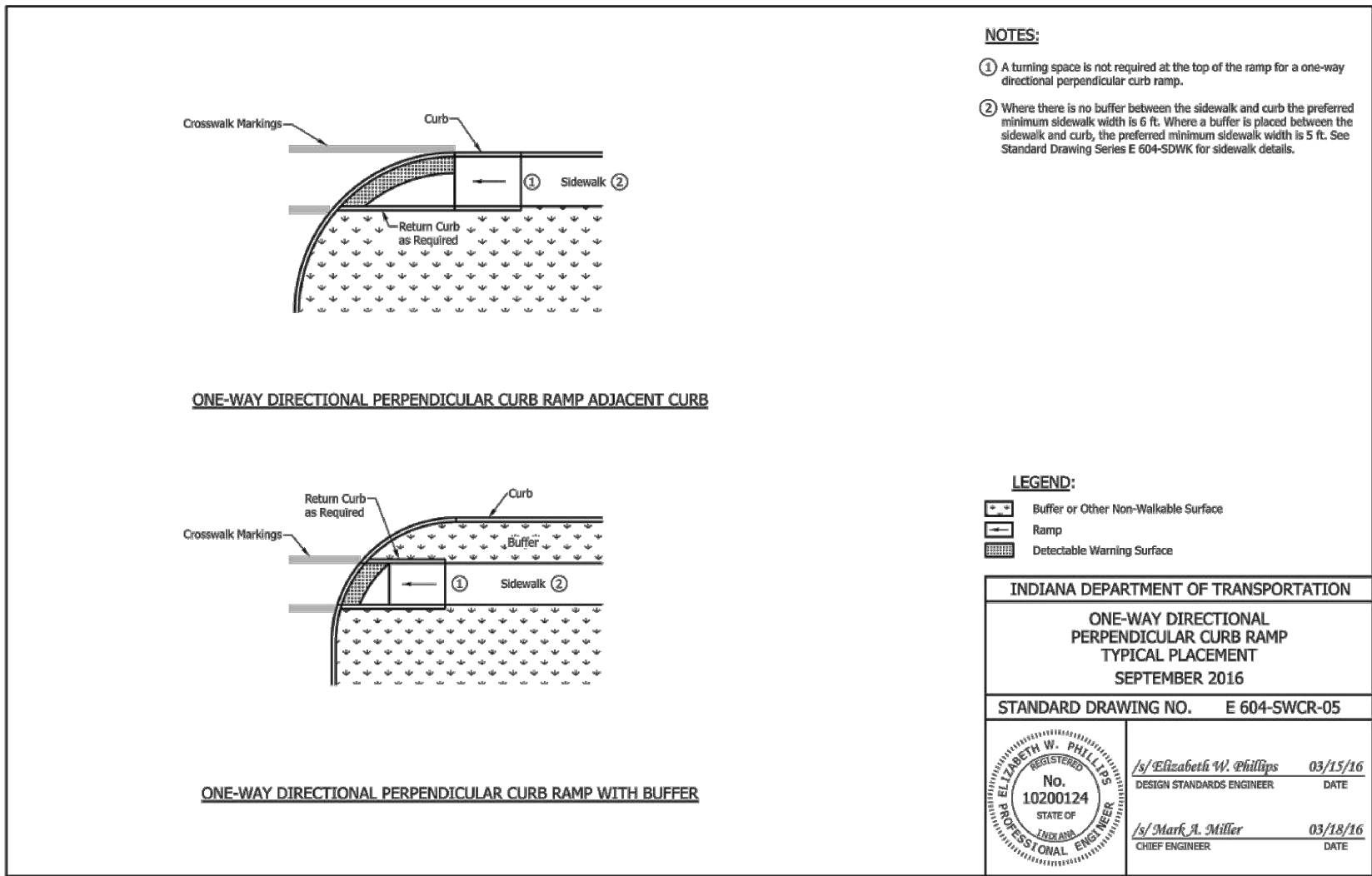
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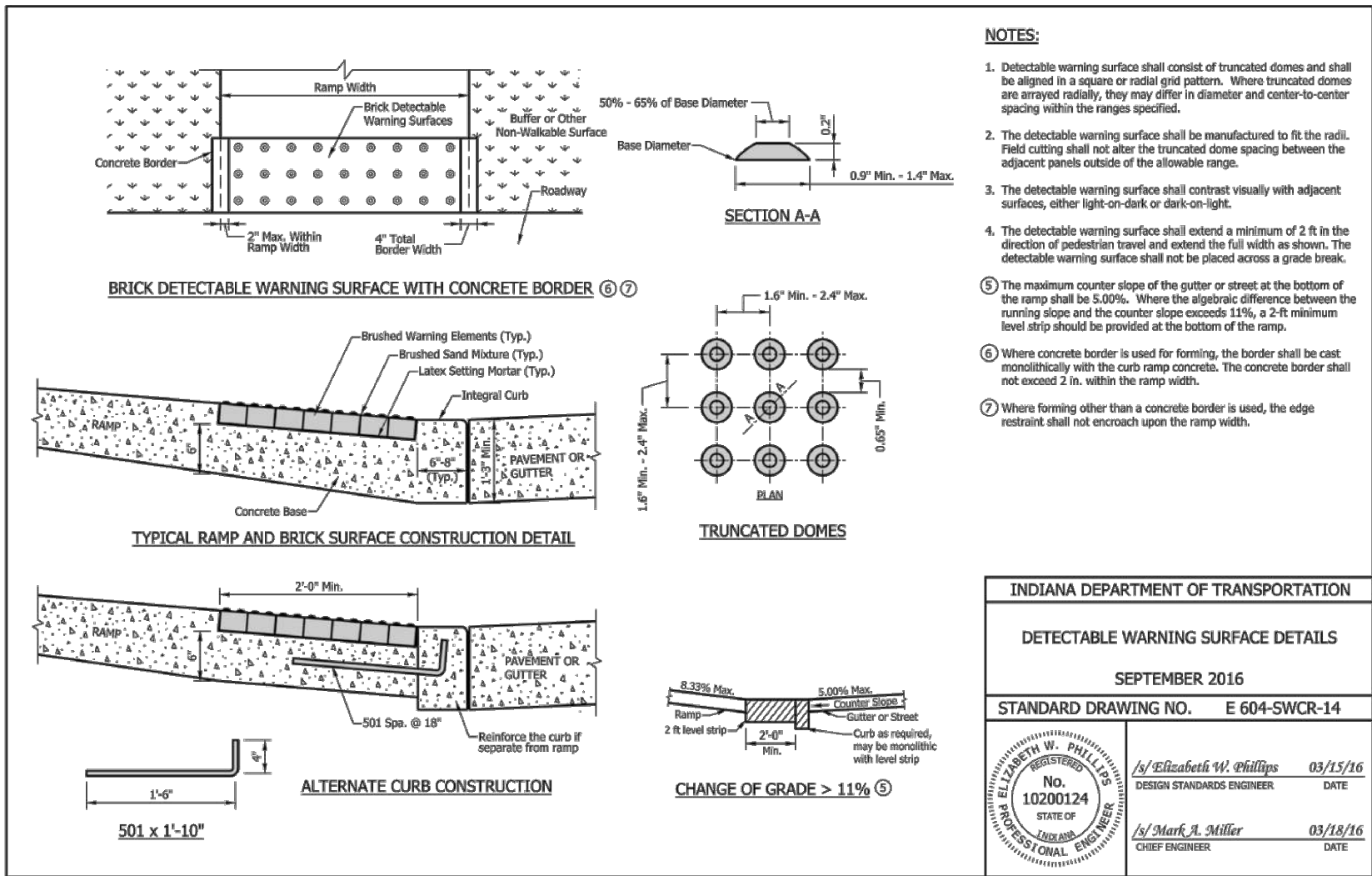
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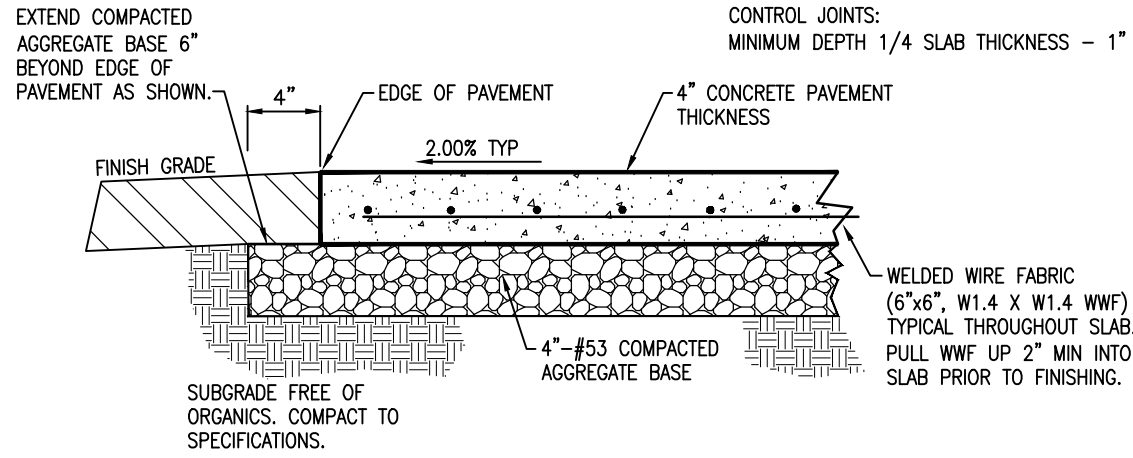
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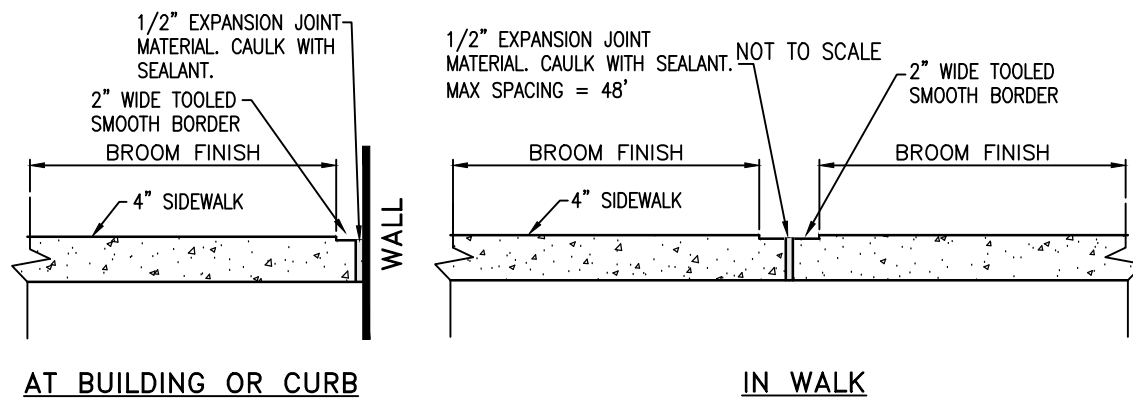
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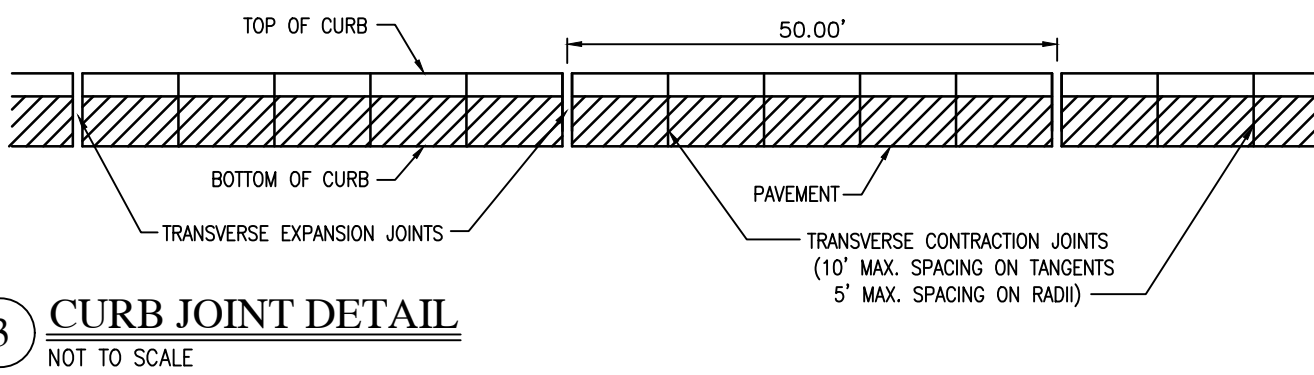
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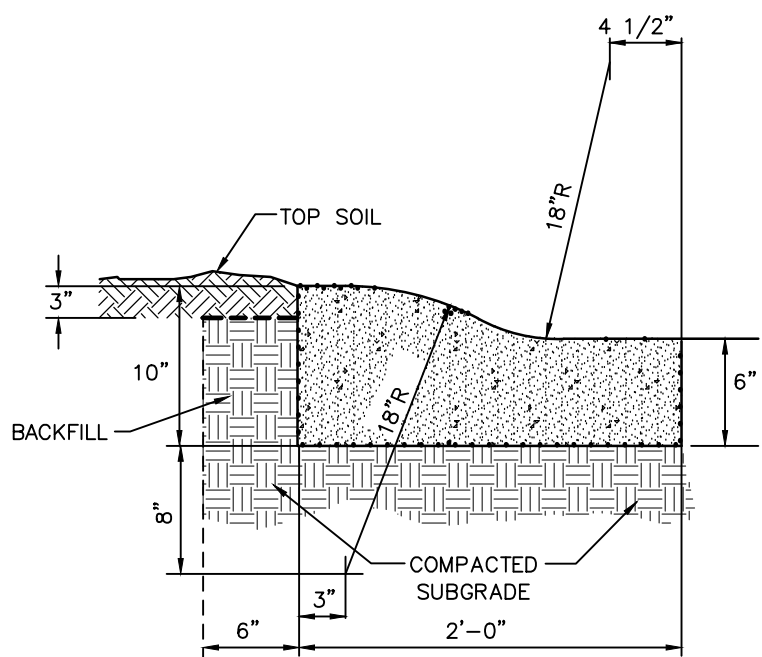
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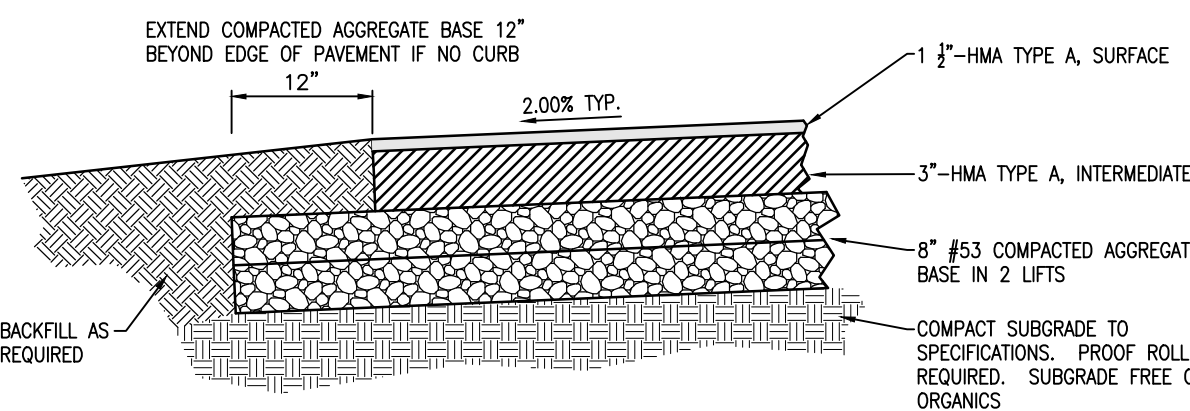
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3 CURB JOINT DETAIL  
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4 2' CONCRETE ROLL CURB (REVERSE SLOPE)  
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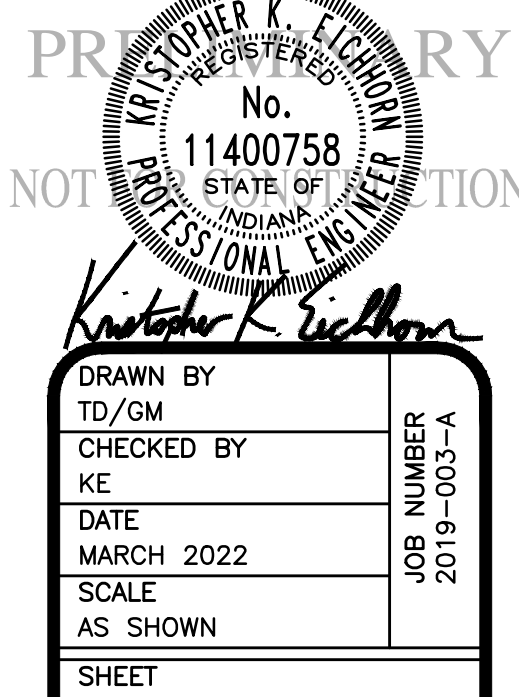
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CONSTRUCTION DETAILS



C8.5  
CONSTRUCTION  
DETAILS