PRELIMINARY SITE DESIGN DOCUMENTS FOR

ENGINEER



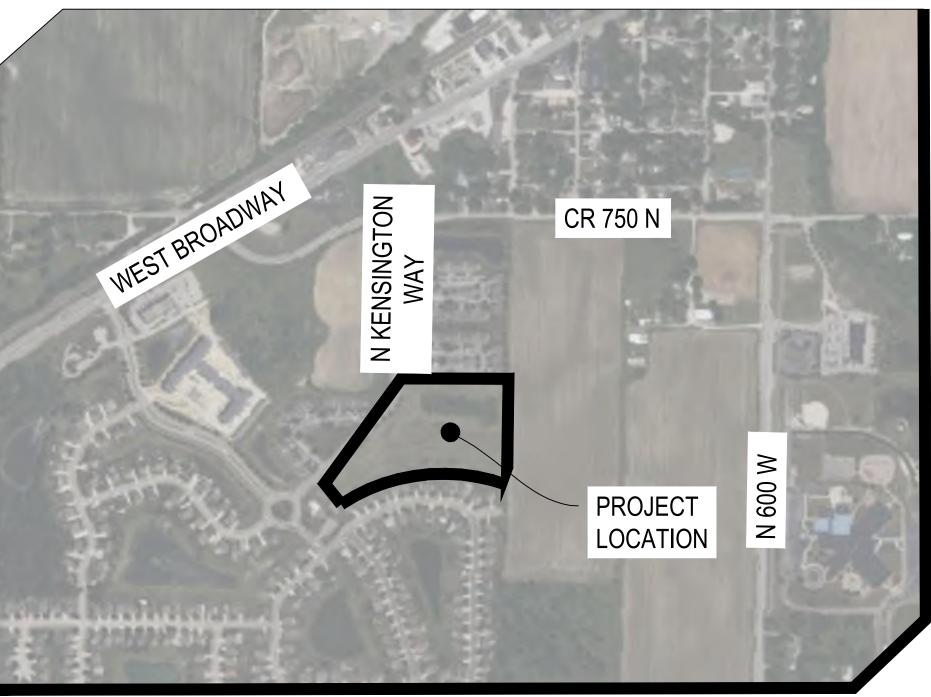
STANTEC CONSULTING SERVICES, INC. 5778 WEST 74TH STREET INDIANAPOLIS, INDIANA, 46278-1754 (E) - MICHAEL.KING@STANTEC.COM CONTACT: MICHAEL KING, P.E.

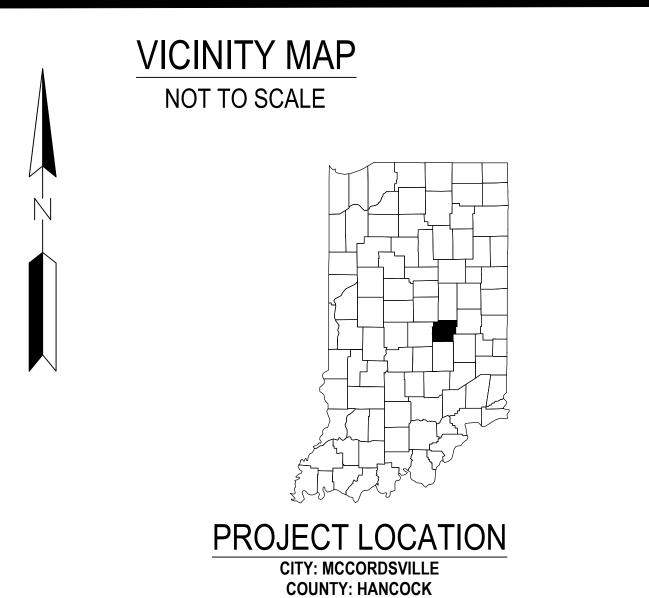
ARCHITECT



R3B ARCHITECTURE, LLC. 20560N. ALABAMA STREET INDIANAPOLIS, INDIANA, 46202 (P) - 574-850-2270 (E) - BILLY@R3BARCHITECTURE.COM CONTACT: BILLY PONKO, AIA

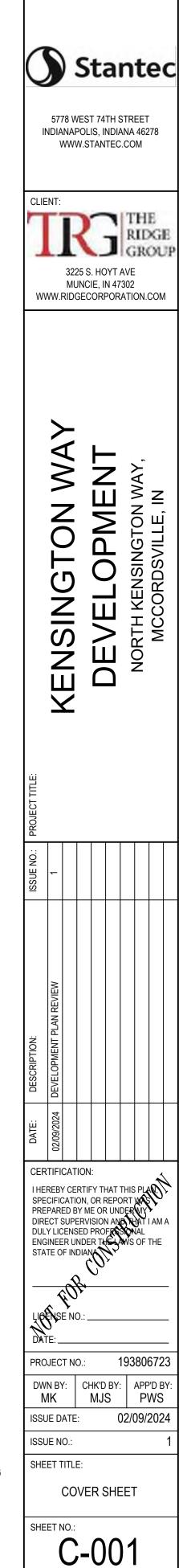
KENSINGTON WAY DEVELOPMENT MCCORDSVILLE, INDIANA







CALL BEFORE YOU DIG INDIANA811 CALL 811 OR 1-800-382-5544



THIS PLANSET CONTAINS 38 SHEETS

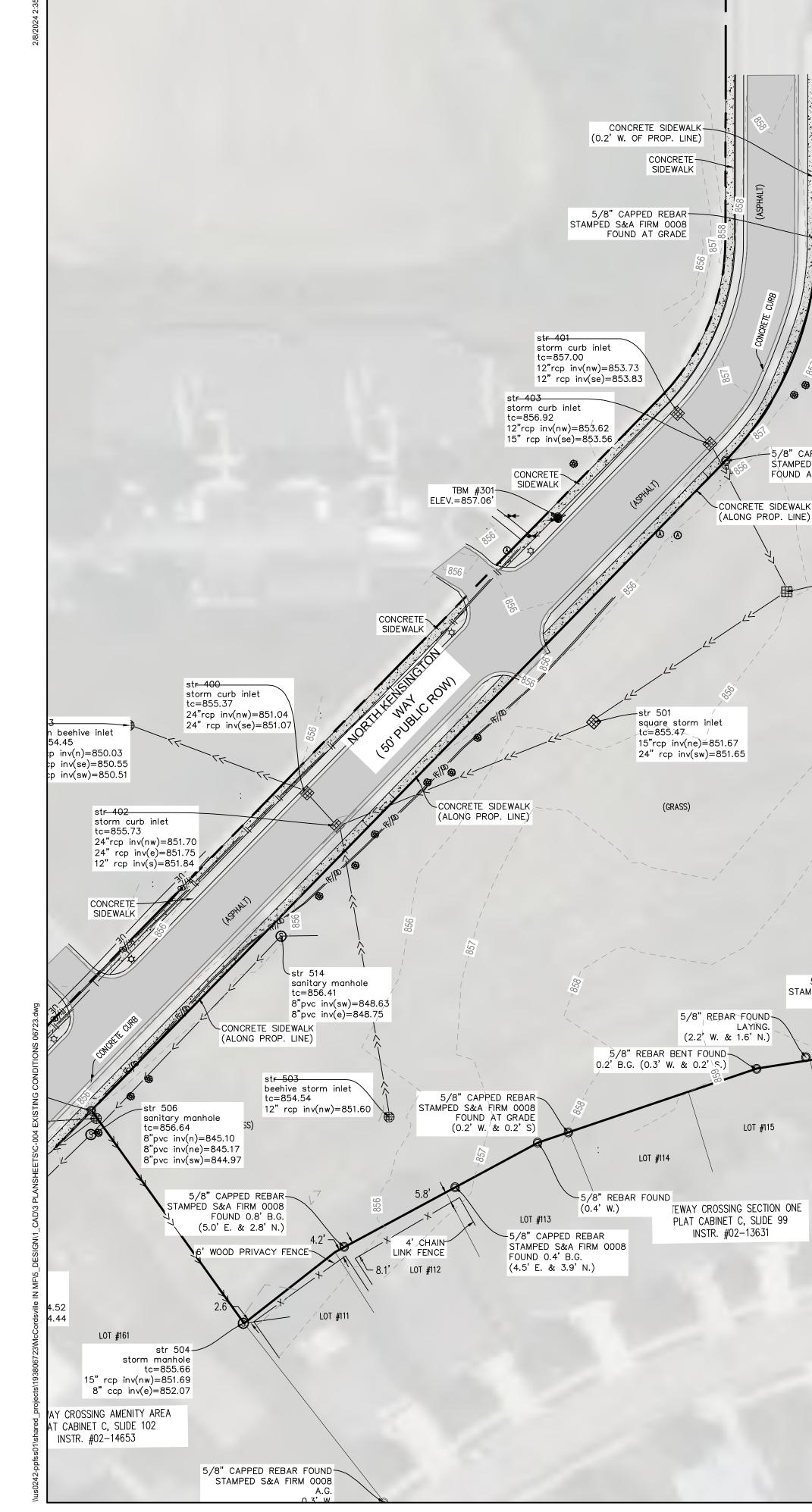
LANSET CONTAINS <u>38</u> SHEETS							
Sheet List Table							
t Number	Sheet Title						
C-001	COVER SHEET						
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C-003	REMOVALS AND PRECONSTRUCTION EROSION CONTROL PLAN						
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101	OVERALL LANDSCAPE PLAN						
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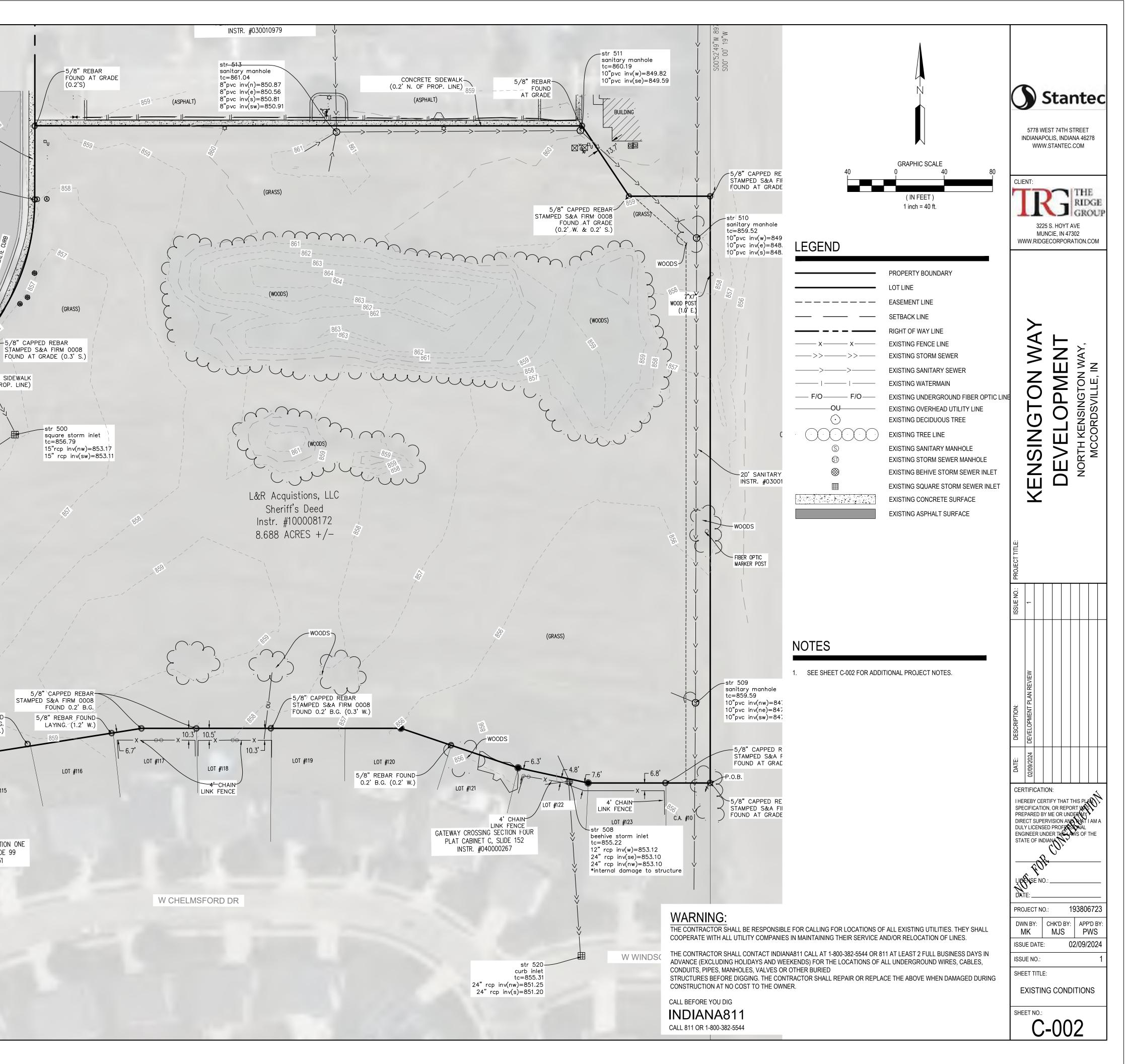
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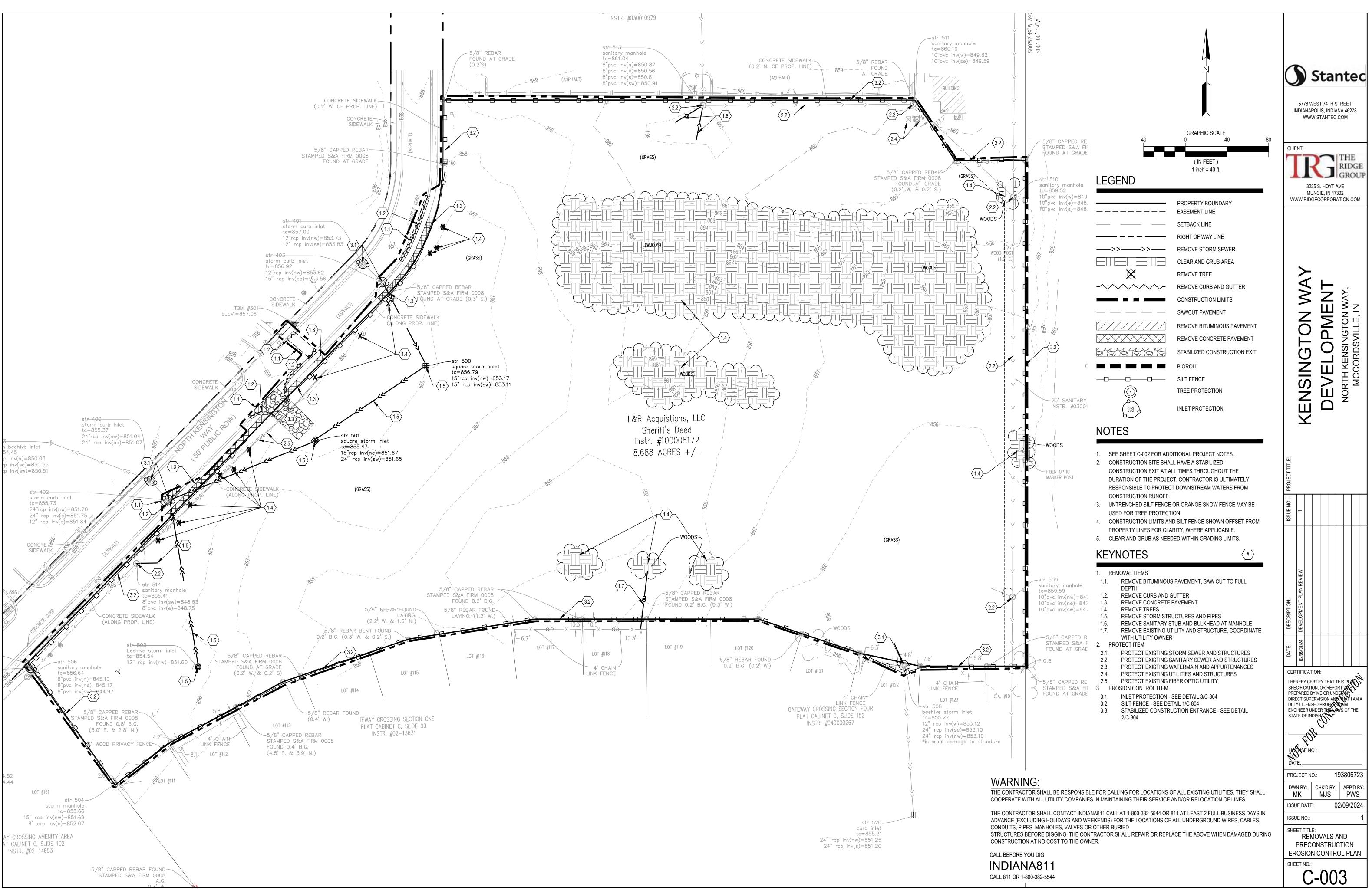
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT INDIANA811 CALL AT 1-800-382-5544 OR 811 AT LEAST 2 FULL BUSINESS DAYS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING

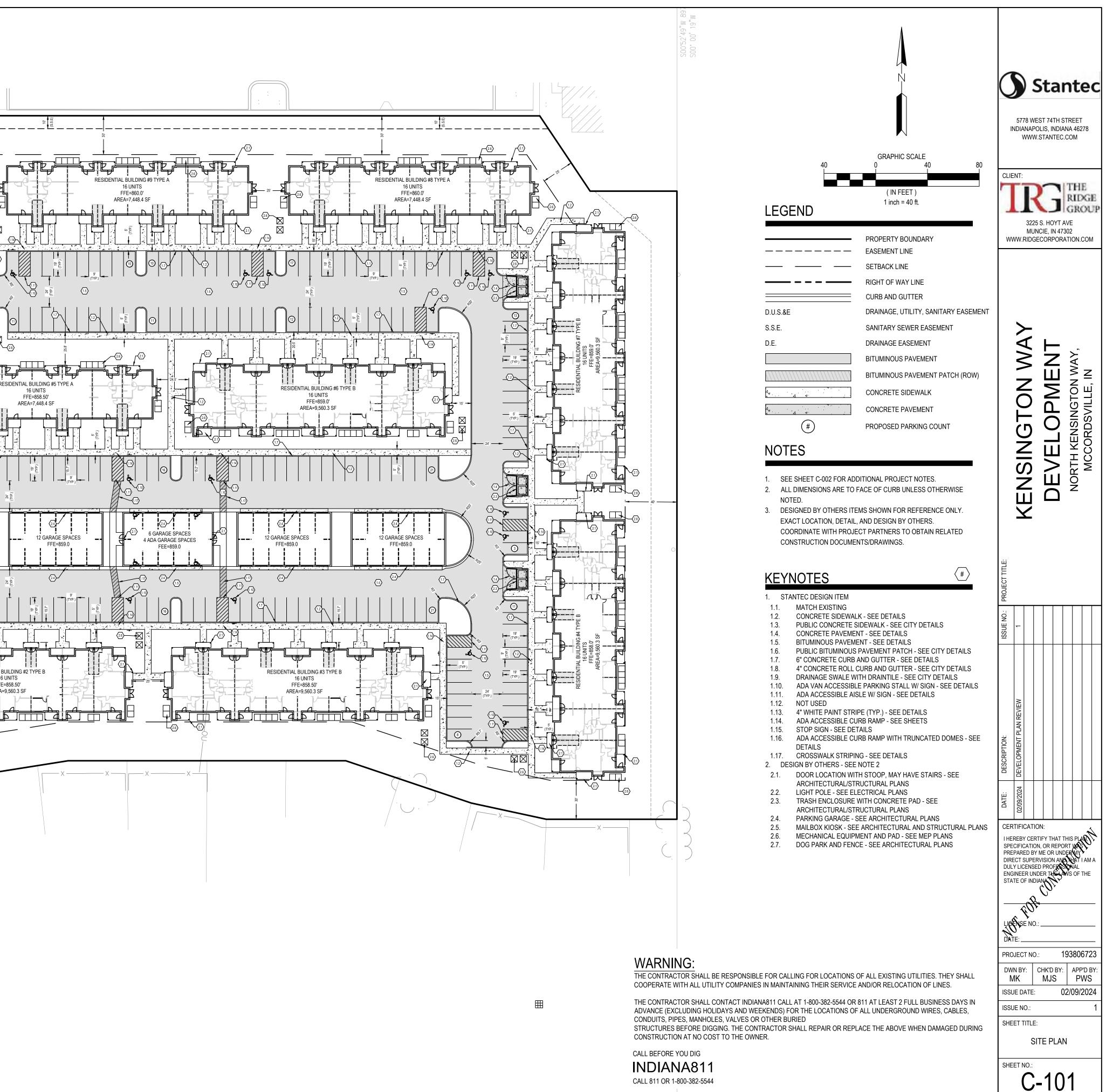
CONSTRUCTION AT NO COST TO THE OWNER.

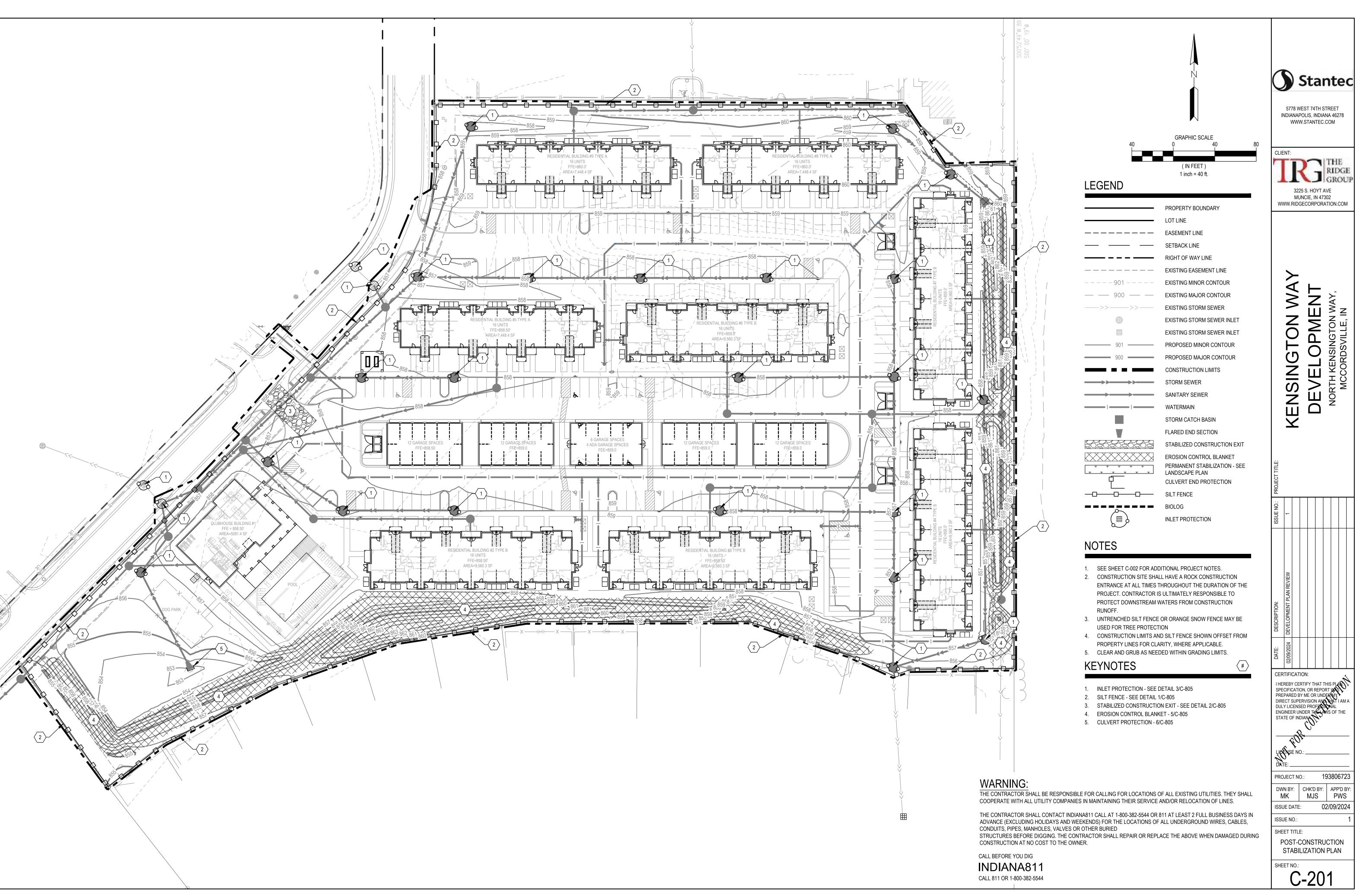


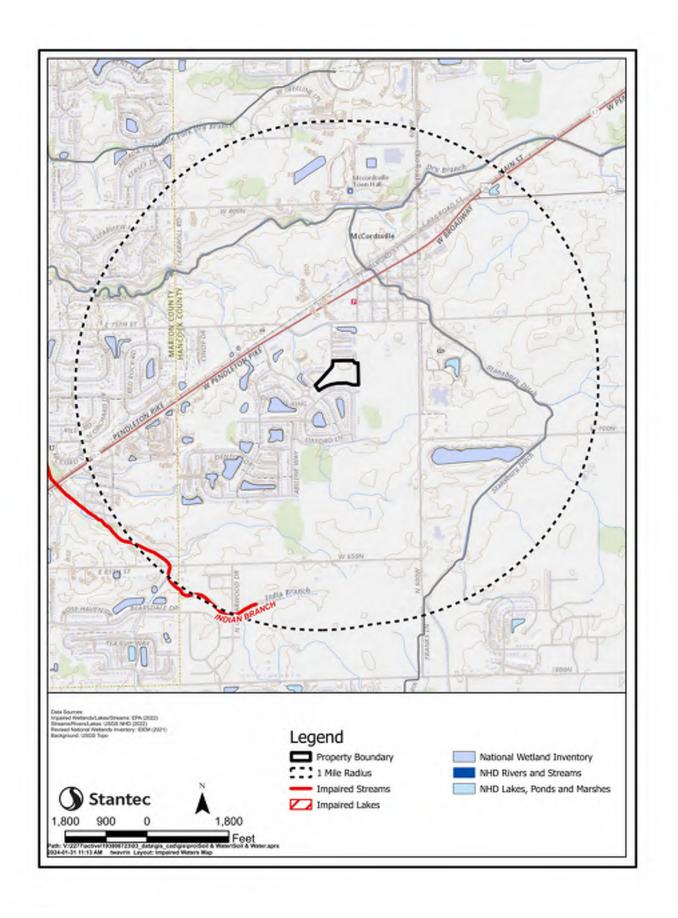




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	REAR YARD	50 Ft	40 Ft				
			:				







SOIL MAP



PROJECT INFORMATION

PROJECT NAME: KENSINGTON WAY DEVELOPMENT PROJECT LOCATION: HANCOCK COUNTY, INDIANA LATITUDE AND LONGITUDE: LAT: 39° 53' 20" LONG: 85° 55' 33" LEGAL DESCRIPTION OF THE PROJECT SITE: SECTION: 26 TOWNSHIP: 17 N RANGE: 5 E

ESTIMATED CONSTRUCTION DATES: MAY 2024 - MAY 2029

TOTAL AREA / TOTAL DISTURBED AREA BY CONSTRUCTION: 8.688/8.688 AC

PROJECT NARRATIVE AND PURPOSE OF THE PROJECT: THE PROJECT IS AN MULTI-FAMILY RESIDENTIAL PROJECT LOCATED EAST OF N KENSINGTON WAY HANCOCK COUNTY, INDIANA. THE DEVELOPMENT WILL CONSIST PAVED ACCESS ROADS, (ADD OTHERS INCLUDED) STORM WATER, AND SANITARY SYSTEM.

FOR OUR DEVELOPMENT: THE EXISTING SITE IS GENERALLY DIVIDED INTO AN EAST AND WEST DRAINAGE AREAS. STORMWATER FROM THE EXISTING BASINS SHEET FLOWS THE SOUTHWEST AND SOUTHEAST TO EXISTING STORM SEWER INLETS AND CONVEYED TO A EXISTING SYSTEM OF INTERCONNECTED RETENTION PONDS. THE PONDS ULTIMATELY DISCHARGE TO LAKE 3 WHICH IS CONNECTED TO THE AUSTIN TRACE SUBDIVISION.

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): CONTACT: TYLER BOWERS CONTACT PHONE: 765-282-3778 CONTACT EMAIL: tbowers@ridgecorporation.com PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD CONTACT: TBD CONTRACTOR PHONE: TBD CONTRACTOR EMAIL: TBD

ADJACENT PROPERTY LAND USE:

NORTH: RESIDENTIAL SOUTH: RESIDENTIAL EAST: AGRICULTURAL WEST: RESIDENTIAL

NOTICE OF INTENT:

ALL PARTIES DEFINED AS OWNERS OR OPERATORS MUST SUBMIT A CONSTRUCTION STORMWATER GENERAL PERMIT (CSGP) AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ON-SITE LAND DISTURBANCE ACTIVITIES. SUBMITTAL OF LATE A CSGP IS NOT PROHIBITED, HOWEVER, AUTHORIZATION UNDER THE CSGP IS ONLY FOR DISCHARGES THAT OCCUR AFTER PERMIT COVERAGE IS GRANTED. UNPERMITTED DISCHARGES MAY BE SUBJECT TO ENFORCEMENT ACTION BY THE EPA OR THE IDEM. FOR PURPOSES OF THIS PERMIT, AN OPERATOR IS DEFINED AS ANY PARTY MEETING THE FOLLOWING REQUIREMENTS:

- ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS.
- THE PARTY HAS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT A PROJECT THAT ARE OTHER PERMIT CONDITIONS.

SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

CIVIL CONSTRUCTION DRAWINGS BY STANTEC DATED (JANUARY 2024), INCLUDING: VICINITY MAP

EXISTING TOPOGRAPHY

STORMWATER PLAN

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION; THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION.

INSPECTIONS

IMPACTED AREAS, AS WELL AS EROSION AND SEDIMENT CONTROL DEVICES, WILL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER A RAINFALL OF 0.5 INCH OR GREATER. WHERE SITES HAVE BEEN FINAL OR TEMPORARILY STABILIZED OR ON SITES WHERE RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (E.G., SITE IS COVERED WITH SNOW, ICE, OR FROZEN GROUND EXISTS), SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

INSPECTIONS SHALL BE CONDUCTED AND A WRITTEN REPORT PREPARED, BY A DESIGNATED AND QUALIFIED PERSON FAMILIAR WITH THE USEPA NPDES STORM WATER GENERAL PERMIT, THIS SWP3, AND THE PROJECT.

INSPECTION REPORTS SHALL BE COMPLETED INCLUDING SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE OF THE INSPECTION, OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWP3, AND ANY ACTIONS TAKEN AS A RESULT OF INCIDENTS OF NONCOMPLIANCE NOTED DURING THE INSPECTION. THE INSPECTION REPORT SHOULD STATE WHETHER THE SITE WAS IN COMPLIANCE OR IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE. THE CONTRACTOR SHALL KEEP A COPY OF THE INSPECTION REPORTS ON SITE AND PERMANENTLY FOR A PERIOD OF TWO YEARS FOLLOWING CONSTRUCTION. THE ON-SITE REPORTS MAY BE REQUESTED BY INSPECTIONS CONDUCTED BY THE LOCAL GOVERNING AUTHORITY.

CONSTRUCTION ENTRANCE

LOCATIONS WHERE VEHICLES EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. EACH CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION ENTRANCE AND OTHER CONTROLS AS DESCRIBED IN THIS SWP3.

MATERIAL STORAGE INSPECTIONS

INSPECTORS MUST EVALUATE AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION. THE PURPOSE IS TO ENSURE THAT MATERIALS ARE PROTECTED AND/OR IMPOUNDED SO THAT POLLUTANTS CANNOT DISCHARGE FROM STORAGE AREAS. OFF-SITE MATERIAL STORAGE AREAS USED SOLELY BY THE SUBJECT PROJECT ARE CONSIDERED TO BE PART OF THE PROJECT AND MUST BE INCLUDED IN THE EROSION CONTROL PLANS AND THE SITE INSPECTION REPORTS.

SOIL STABILIZATION INSPECTIONS

SEEDED AREAS WILL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH PAVEMENT OR HAVE A STAND OF VEGETATION WITH AT LEAST 70% OF THE BACKGROUND VEGETATION DENSITY. THE DENSITY OF 70% OR GREATER MUST BE MAINTAINED TO BE CONSIDERED AS STABILIZED. THE OPERATOR OR THEIR REPRESENTATIVE WILL WATER, FERTILIZE, AND RESEED DISTURBED AREAS AS NEEDED TO ACHIEVE THIS GOAL.

THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATIONS, INCLUDING THE

NECESSARY TO ENSURE COMPLIANCE WITH A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE OR

EROSION AND SEDIMENT CONTROL INSPECTIONS

ALL CONTROLS SHOULD BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND FOLLOWING ANY STORM EVENT OF 0.5 INCH OR GREATER. THE FOLLOWING IS A LIST OF INSPECTION/MAINTENANCE PRACTICES THAT WILL BE USED FOR SPECIFIC CONTROLS:

- 1. GEOTEXTILES/EROSION CONTROL MATS:
- MISSING OR LOOSE MATTING MUST BE REPLACED OR RE-ANCHORED 2. INLET PROTECTION
- IF SILT FENCE INLET PROTECTION IS TO BE USED, SEDIMENT SHOULD BE REMOVED WHEN IT REACHES PPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN THE VOLUME OF THE BASIN IS REDUCED BY 50%
- DIVERSION SWALES: CLEAN DEBRIS OR OTHER OBSTRUCTIONS AS NEEDED. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES (I.E., TIRE RUTS) SHALL BE REPAIRED IMMEDIATELY.
- MULCHING: INSPECT FOR THIN OR BARE SPOTS CAUSED BY NATURAL DECOMPOSITION OR WEATHER-RELATED EVENTS. MULCH IN HIGH TRAFFIC AREAS SHOULD BE REPLACED ON A REGULAR BASIS TO MAINTAIN UNIFORM PROTECTION
- SEDIMENT TRAP: ACCUMULATED SILT SHALL BE REMOVED AND THE BASIN SHALL BE RE-GRADED TO ITS ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE IMPOUNDMENT HAS BEEN REDUCED TO ONE-HALF OF ITS ORIGINAL STORAGE CAPACITY. THE REMOVED SEDIMENT SHALL BE STOCKPILED OR REDISTRIBUTED IN AREAS THAT ARE PROTECTED FROM EROSION.
- SEDIMENT BASIN: INSPECT FREQUENTLY TO CHECK FOR DAMAGE AND TO ENSURE OBSTRUCTIONS ARE NOT DIMINISHING THE EFFECTIVENESS OF THE STRUCTURES. SEDIMENT SHALL BE REMOVED AND THE BASIN SHALL BE RE-GRADED TO ITS ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE IMPOUNDMENT HAS BEEN REDUCED TO 20% OF ITS ORIGINAL STORAGE CAPACITY. THE REMOVED SEDIMENT SHALL BE STOCKPILED OR REDISTRIBUTED IN AREAS THAT ARE PROTECTED FROM EROSION.
- SILT FENCE: REMOVAL OF BUILT-UP SEDIMENT WILL OCCUR WHEN THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE FENCE
- 8. STABILIZED CONSTRUCTION ENTRANCE:
- PERIODIC RE-GRADING AND TOP DRESSING WITH ADDITIONAL STONE. 9. STRAW BALES:
- REPLACE STRAW BALES THAT SHOW SIGNS OF DETERIORATION.
- 10. VEGETATION: PROTECT NEWLY SEEDED AREAS FROM EXCESSIVE RUNOFF AND TRAFFIC UNTIL VEGETATION IS ESTABLISHED. ESTABLISH A WATERING AND FERTILIZING SCHEDULE.
- 11. GOOD HOUSEKEEPING:
- LITTER. CONSTRUCTION DEBRIS. AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES THROUGH SCREENING OF OUTFALLS AND DAILY PICKUP OF LITTER.

EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, EROSION CONTROL BLANKET) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS THAT HAVE BEEN LEFT IDLE FOR 7 DAYS WILL BE STABILIZED. STABILIZATION ACTIVITIES WILL BE COMPLETE WITHIN 14 DAYS OF INITIATION. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND. AREAS THAT HAVE BEEN COMPACTED MAY BE EXCLUDED FROM STABILIZATION WHEN THOSE AREAS ARE INTENDED TO BE IMPERVIOUS SURFACES IN THE FINAL CONDITION.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS. HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE. OR DIVERTS WATER AROUND A SITE. MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE. OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:

- BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT PIT, AND INSTALL SILT FENCE.
- 2. INSTALL INLET PROTECTION AT EXISTING STORMWATER CULVERTS AND INLETS. 3. PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
- CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS/BASINS.
- PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
- PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
- 7. BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
- START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
- 9. INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.).
- 10. PAVE CURB AND GUTTER, SIDEWALK, AND PARKING LOT/ DRIVEWAYS
- 11. TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 15 DAYS OR MORE AS REQUIRED BY THE NPDES CSGP .

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

- 1. INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
- SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
- 3. VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT
- STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEPT TO ENSURE THEY ARE FULLY CLEANED.

IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THIS PROJECT IS LOCATED WITHIN ONE MILE OF THE IMPAIRED STREAMS FORT DITCH AND CHADWICK DITCH. FORT DITCH IS LOCATED SURROUNDING THE PROJECT LOCATION AND IS LISTED AS IMPAIRED FOR E. COLI. DISCHARGE TO AN IMPAIRED WATER REQUIRES IMPLEMENTATION OF SECTION 23.1 OF THE PERMIT AS INCORPORATED INTO THIS SWPPP DOCUMENT.

THE PROJECT SITE DISCHARGES TO A WET RETENTION POND FOR STORMWATER MANAGEMENT PRIOR TO THE ULTIMATE DISCHARGE POINT ONSITE. THE PROJECT WILL NOT IMPACT WETLANDS.

SITE SOILS - SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS/IS NOT LOCATED IN A KARST AREA. KARST HAS NOT BEEN FOUND VIA GEOTECHNICAL EXPLORATION PERFORMED TO DATE.

REPAIR, OR REPLACEMENT:

- NOTIFICATION.

POLLUTION PREVENTION MEASURES

SOLID WASTE:

HAZARDOUS MATERIALS: HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MCPA REGULATIONS.

CONSTRUCTION EQUIPMENT/VEHICLES: EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

CONCRETE WASHOUT AREA: CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH IDEM RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY.

POST-DEVELOPMENT BMPS AND MAINTENANCE GUIDELINES: MAINTENANCE REQUIREMENTS FOR THE STORMWATER QUALITY MEASURES WHICH WILL REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETE, ARE DESCRIBED BELOW. REFER TO THE BMP OPERATIONS AND MAINTENANCE MANUAL FOR MORE DETAILED MAINTENANCE REQUIREMENTS.

1. VEGETATED SWALE: VEGETATED SWALES REQUIRE LITTLE MAINTENANCE IF PROPERLY DESIGNED. MOW AS NEEDED DURING THE GROWING SEASON; INSPECT FOR EROSION PROBLEMS TWICE DURING THE FIRST YEAR, ANNUALLY THEREAFTER; AND REMOVE SEDIMENT, TRASH AND DEBRIS ANNUALLY OR MORE FREQUENTLY IF NEEDED

2. DETENTION BASINS (WET):

EXISTING RETENTION BASINS WILL PROVIDE ADDITIONAL WATER QUALITY AND WATER VOLUME STORAGE FOR THE SITE. THERE ARE NO WET DETENTION BASINS LOCATED ON THE DEVELOPMENT.

GENERAL SWPPP NOTES

FINAL STABILIZATION: ALL PERVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PERVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE,

 IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.

 IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.

 IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.

 IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES. IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR

 IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS. THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS,

PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ONSITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

DEWATERING IS NOT ANTICIPATED TO BE REQUIRED DURING TRENCHING FOR UTILITY CONSTRUCTION.

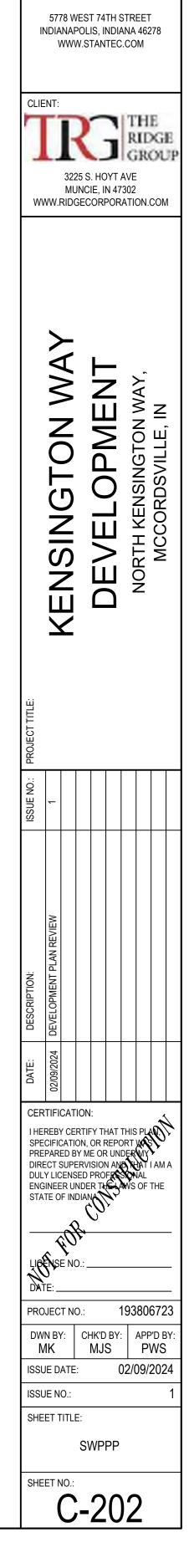
THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS.

WARNING:

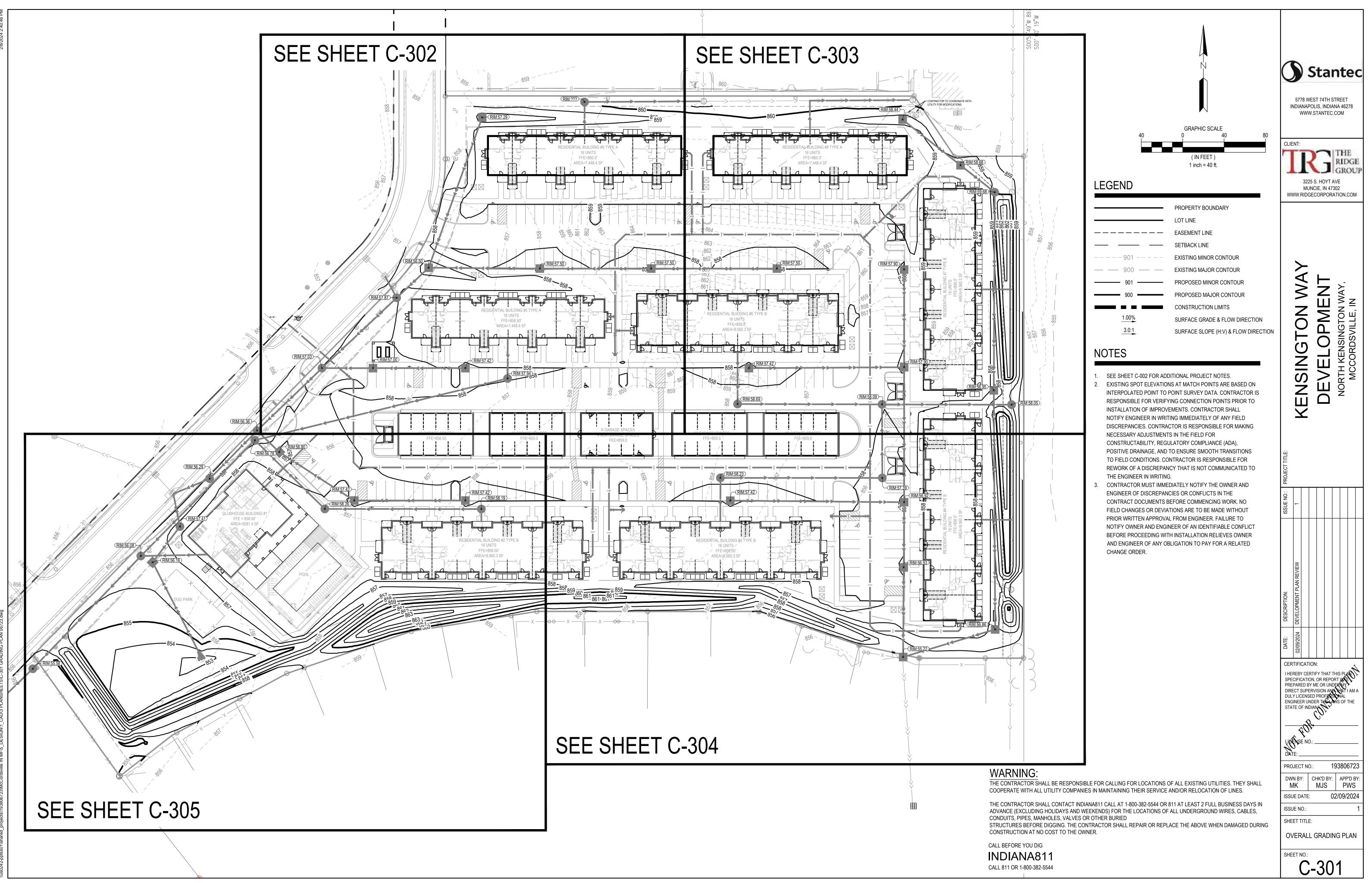
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

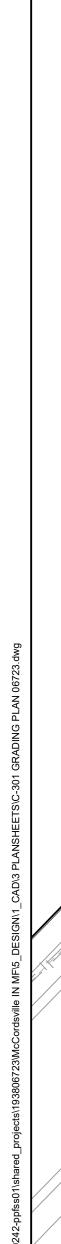
THE CONTRACTOR SHALL CONTACT INDIANA811 CALL AT 1-800-382-5544 OR 811 AT LEAST 2 FULL BUSINESS DAYS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



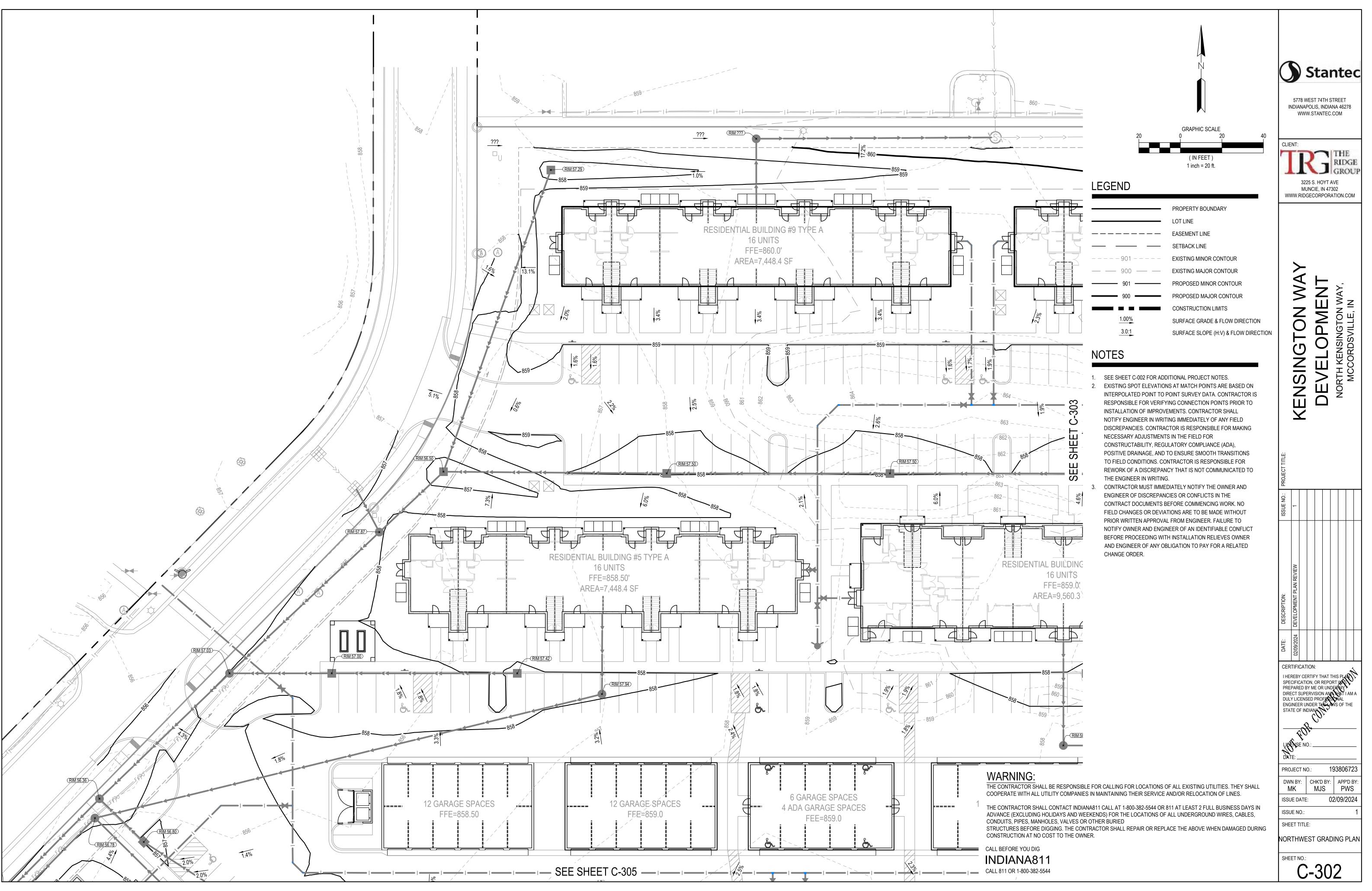


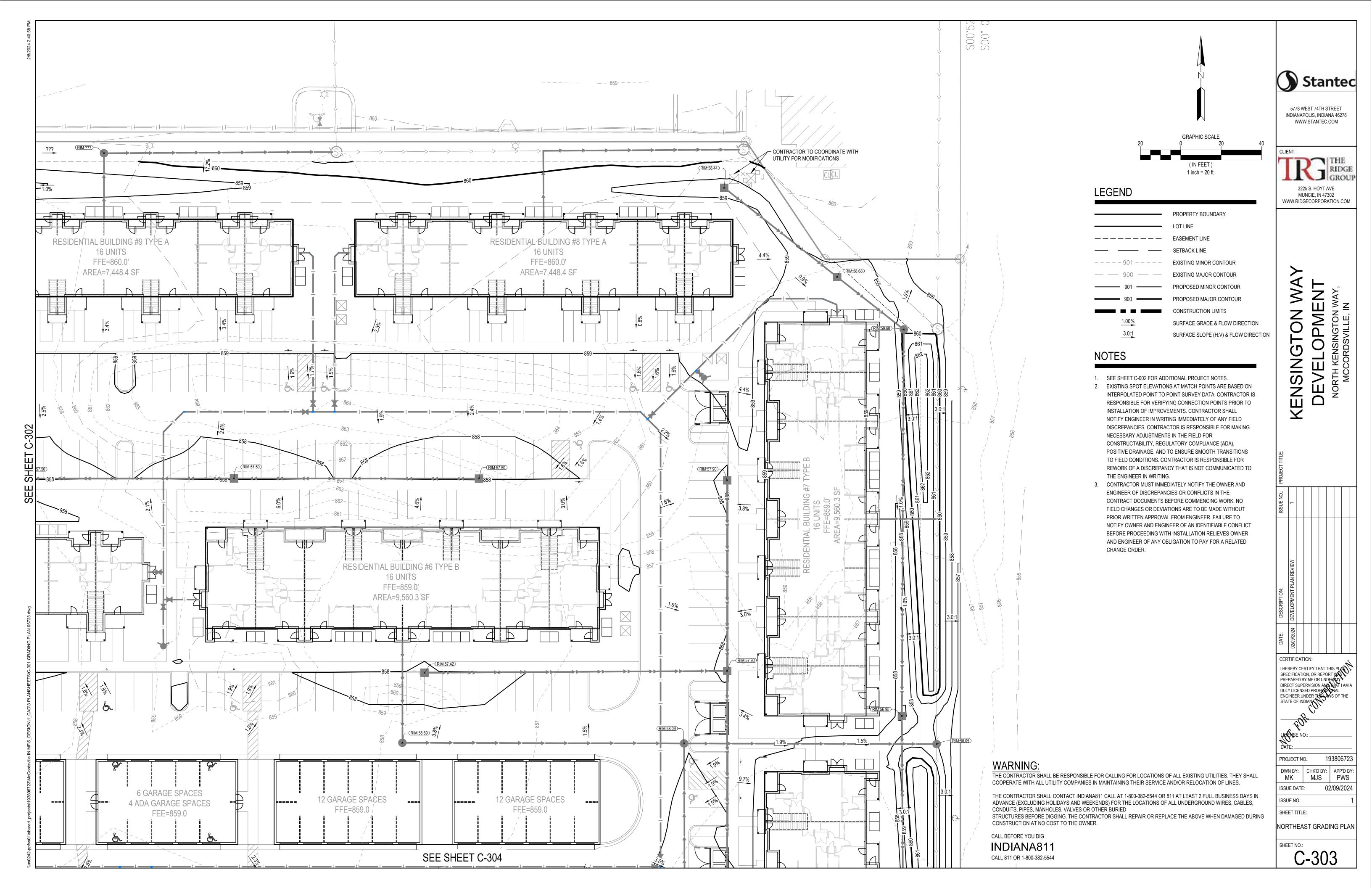
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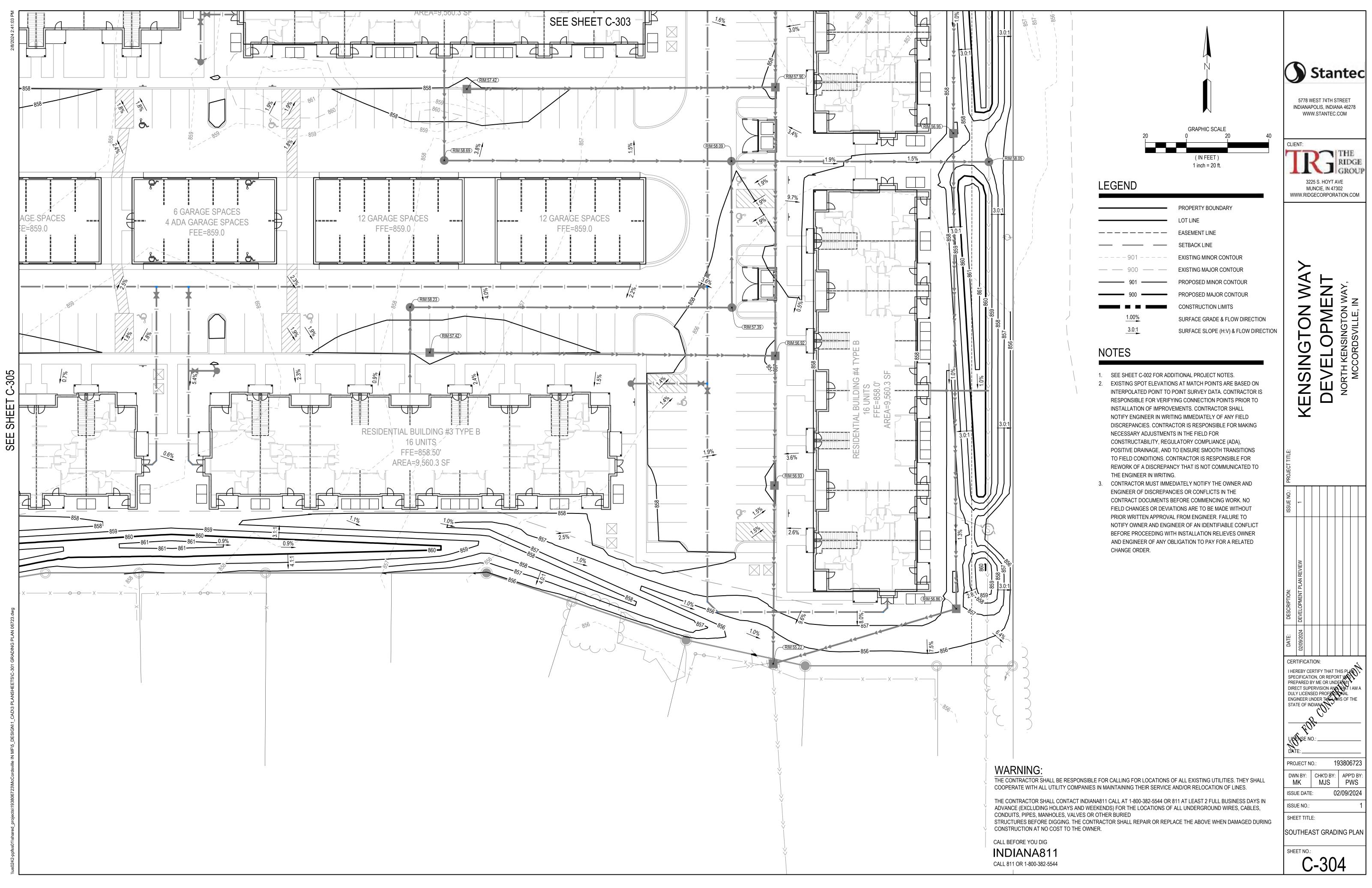




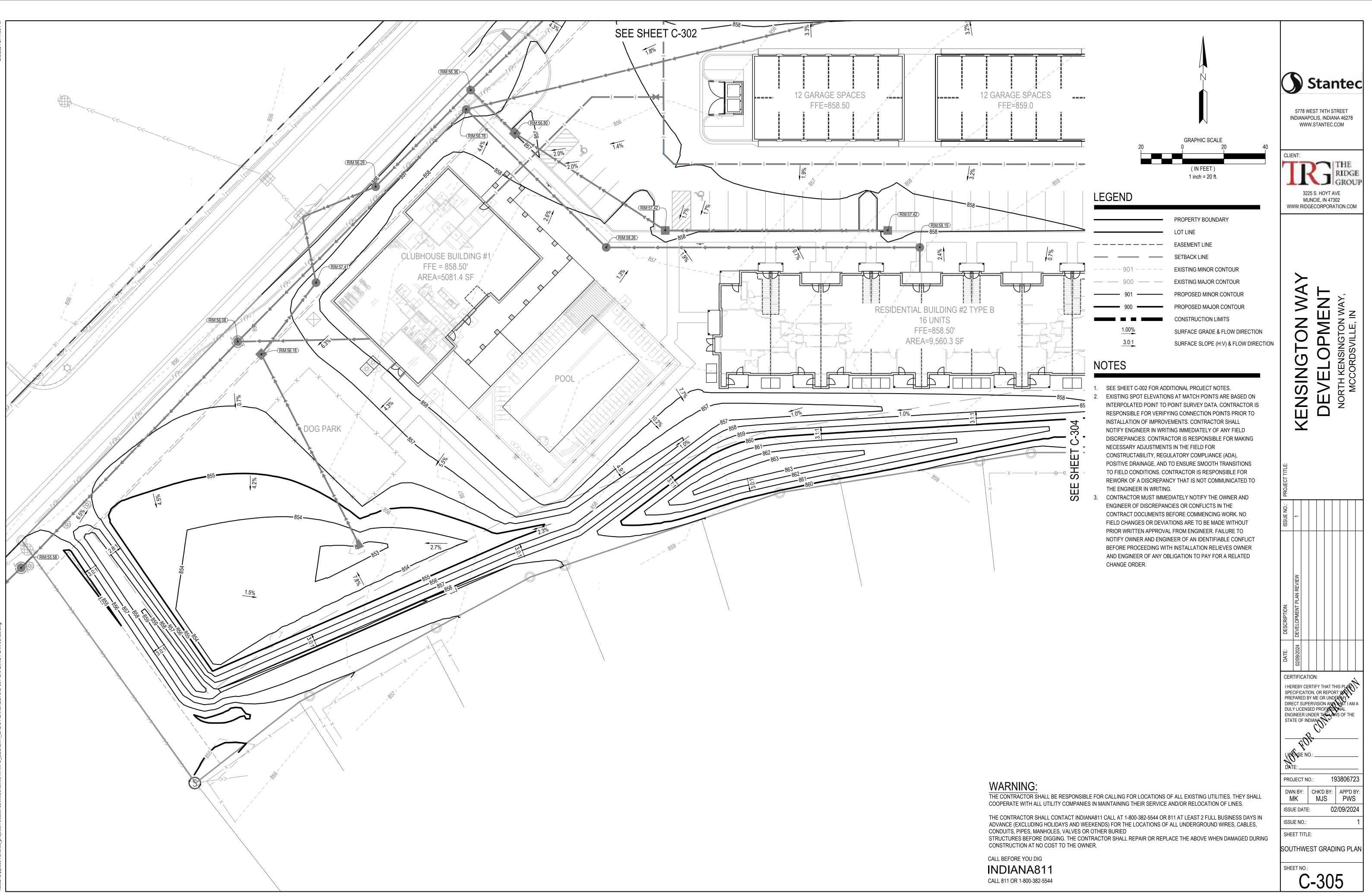


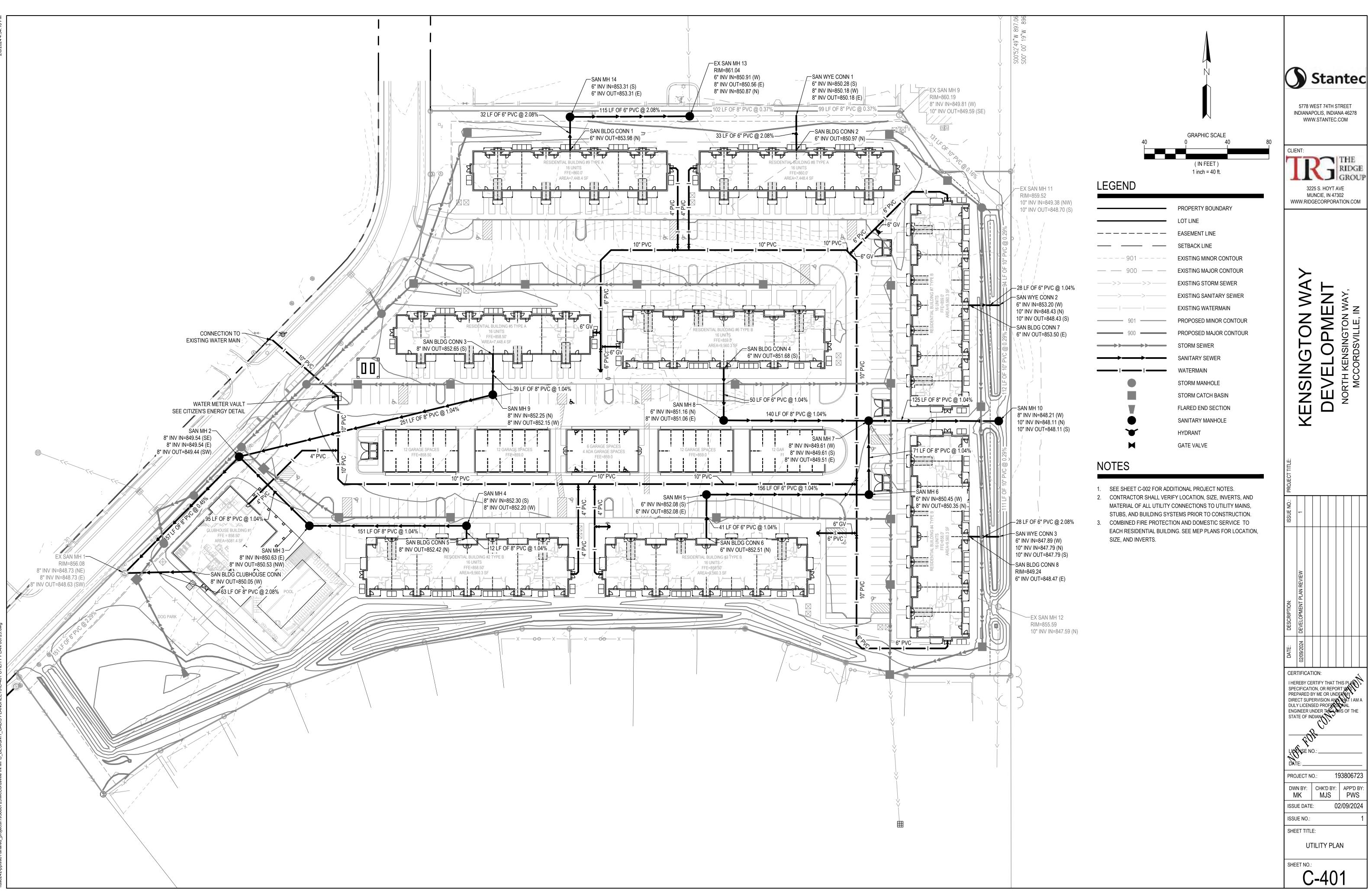




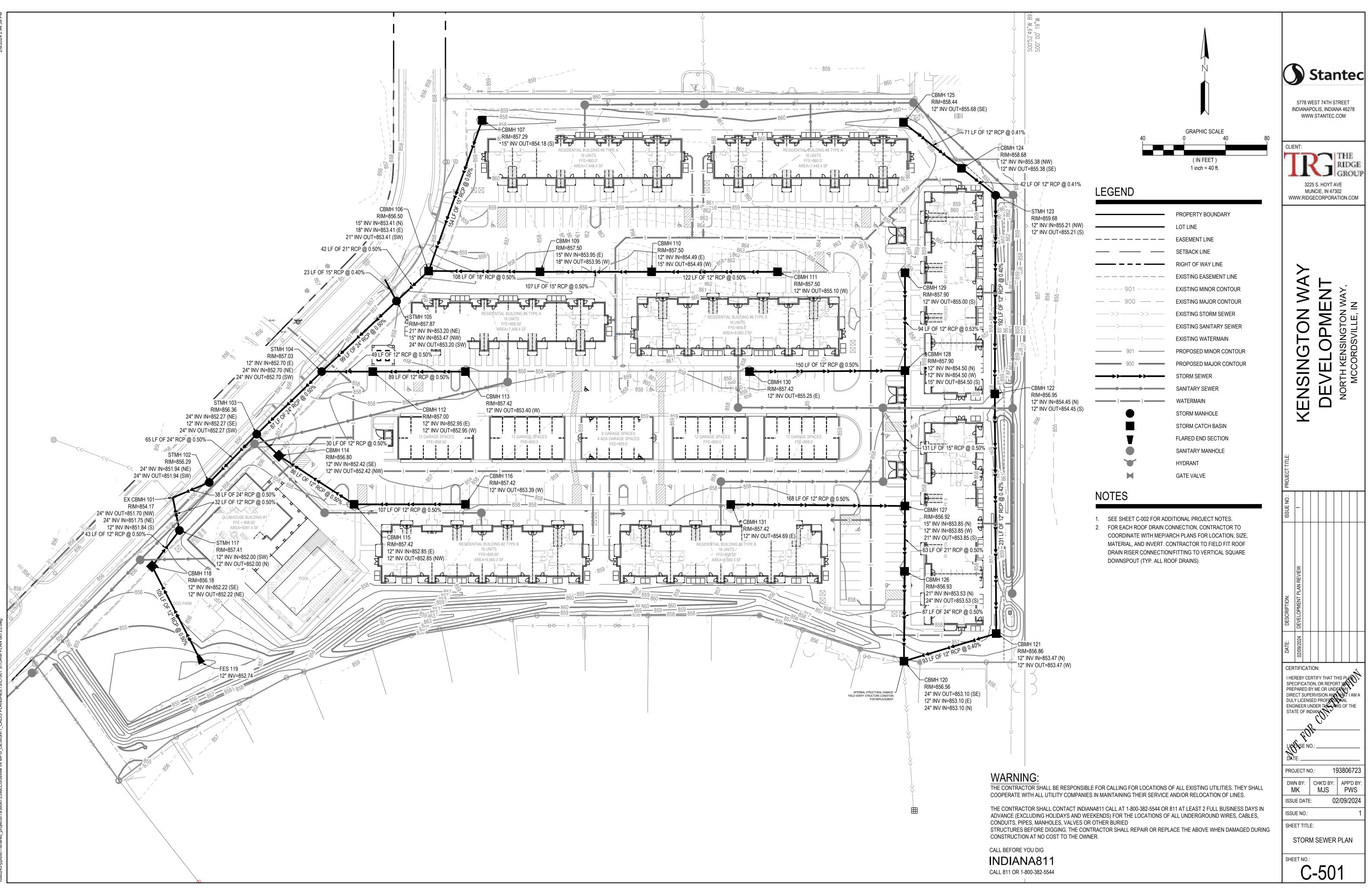




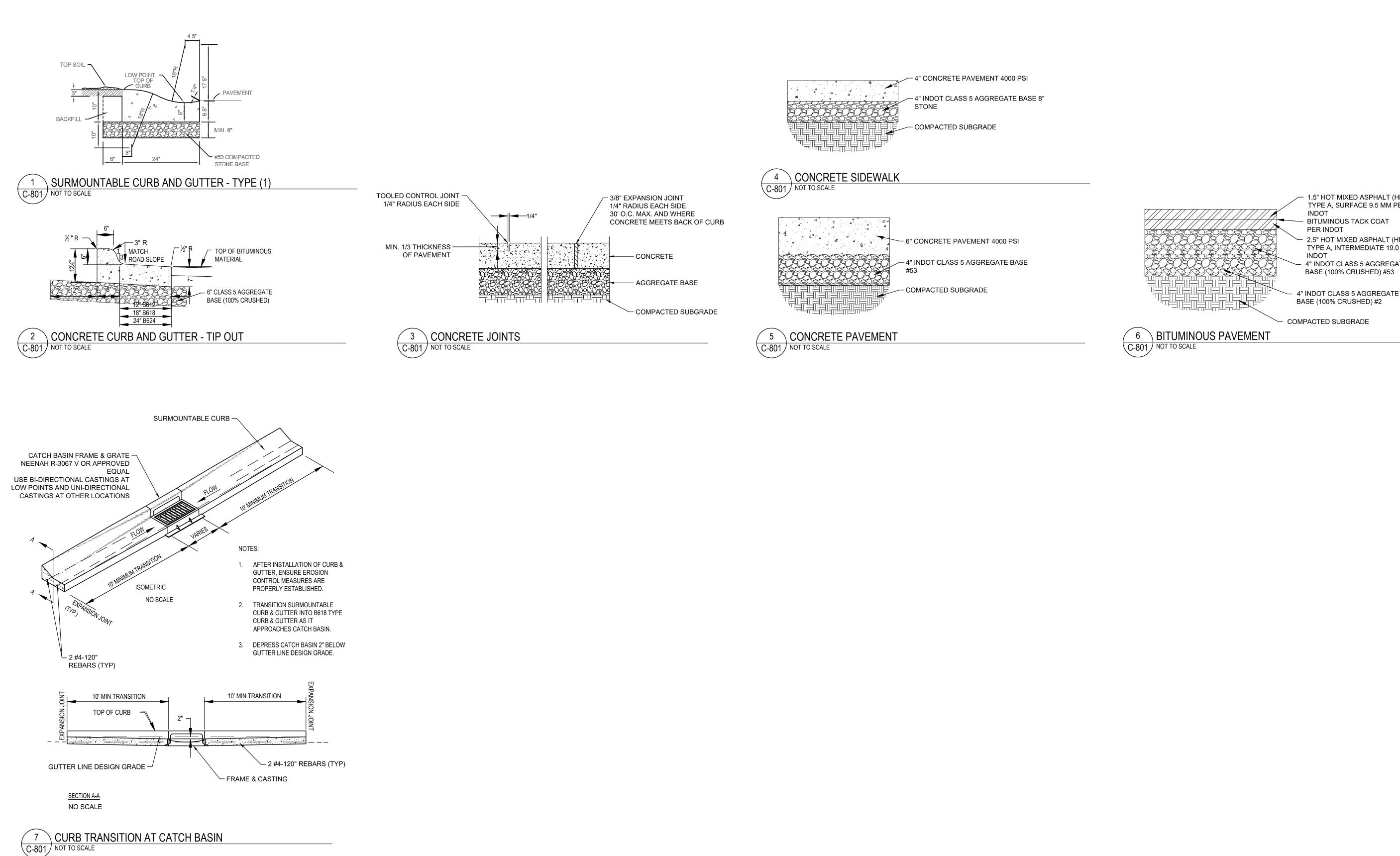


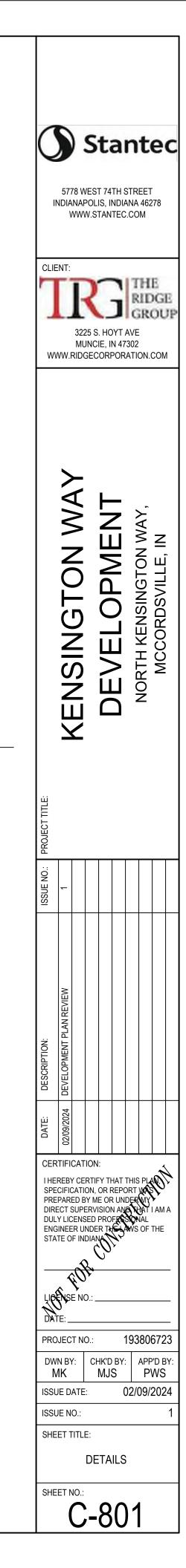


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INDOT

PER INDOT

1.5" HOT MIXED ASPHALT (HMA) TYPE A, SURFACE 9.5 MM PER

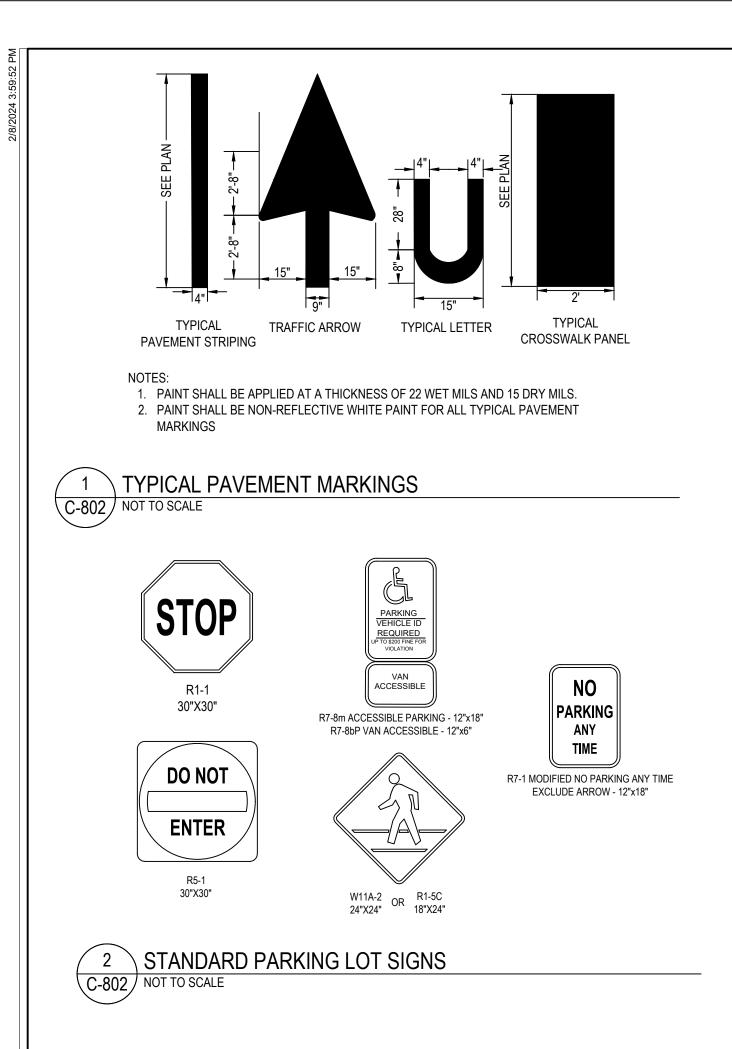
2.5" HOT MIXED ASPHALT (HMA) TYPE A, INTERMEDIATE 19.0 MM PER INDOT

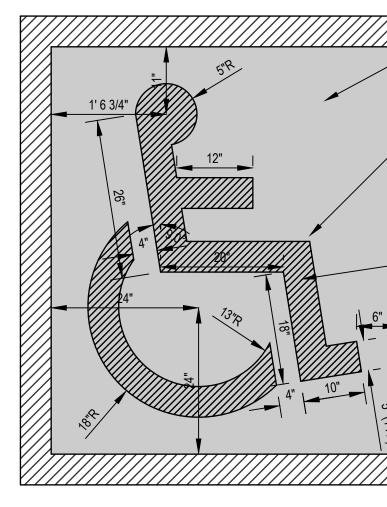
4" INDOT CLASS 5 AGGREGATE

BASE (100% CRUSHED) #53

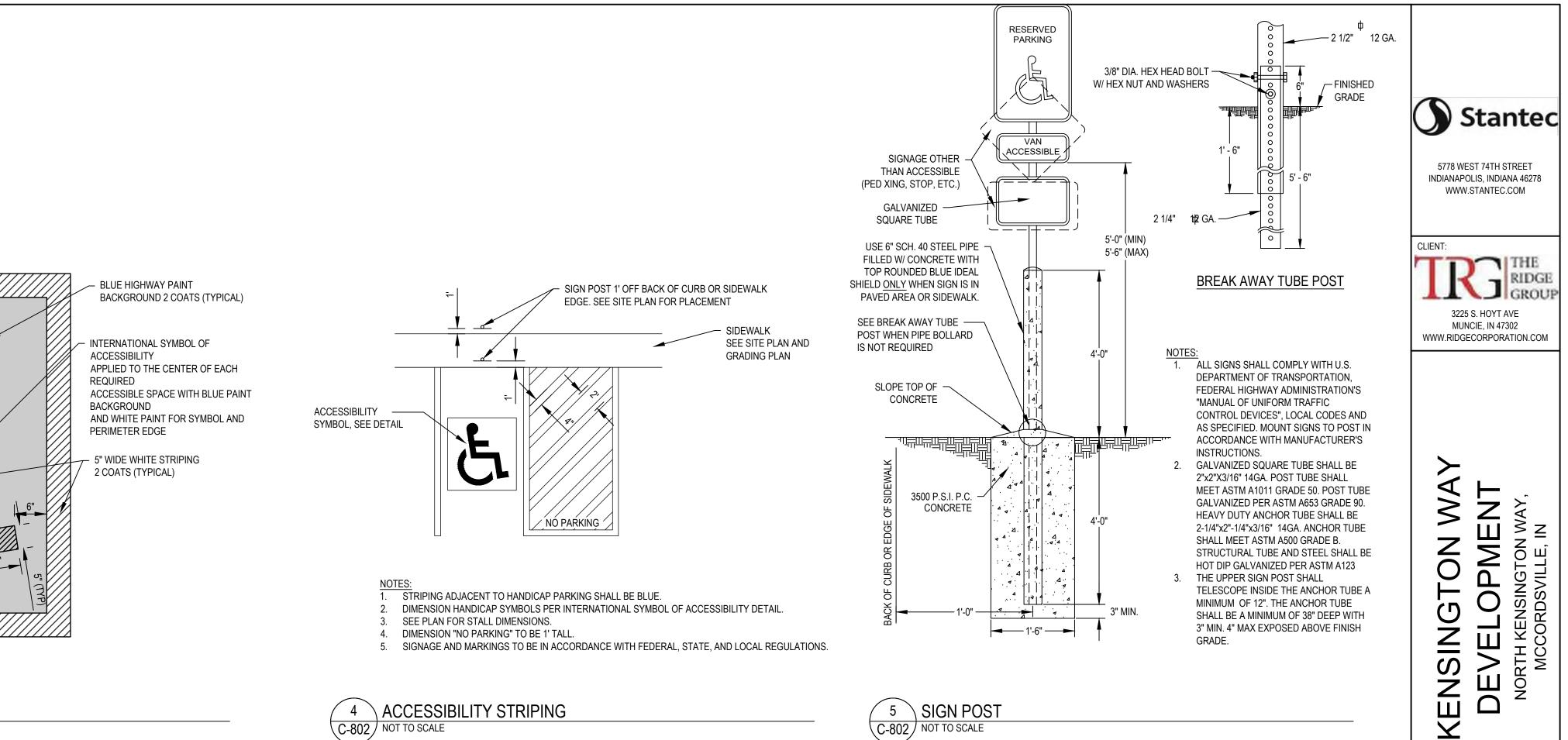
· BITUMINOUS TACK COAT

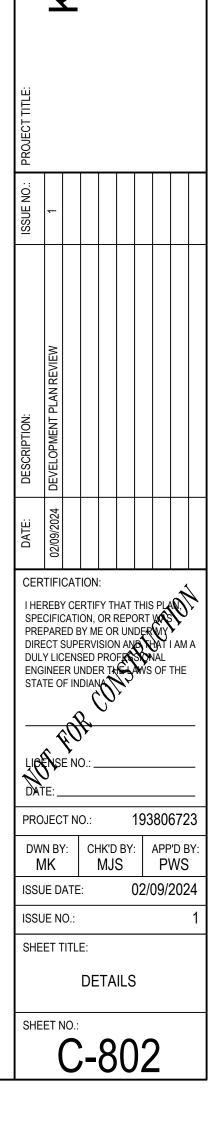
COMPACTED SUBGRADE

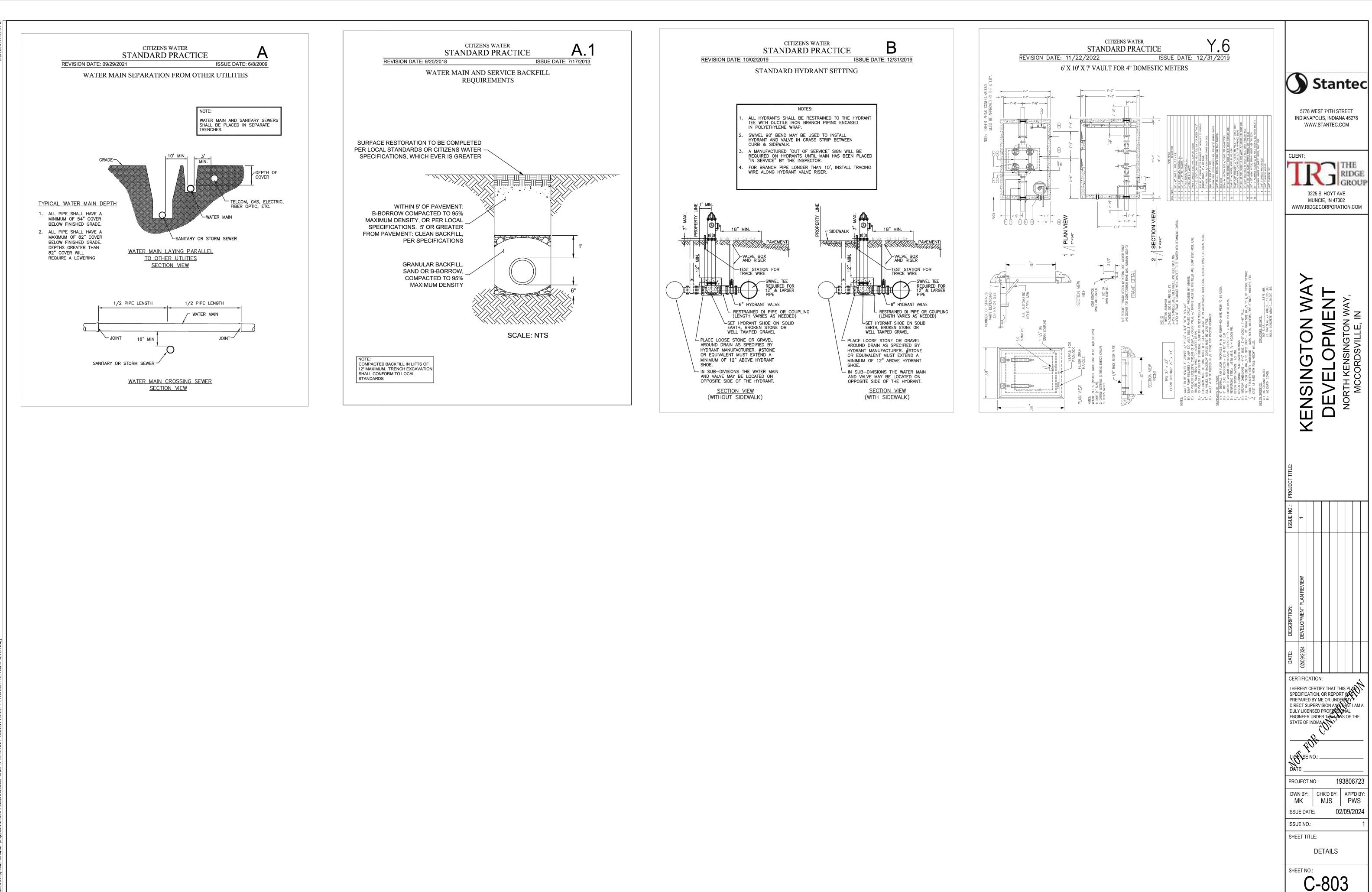


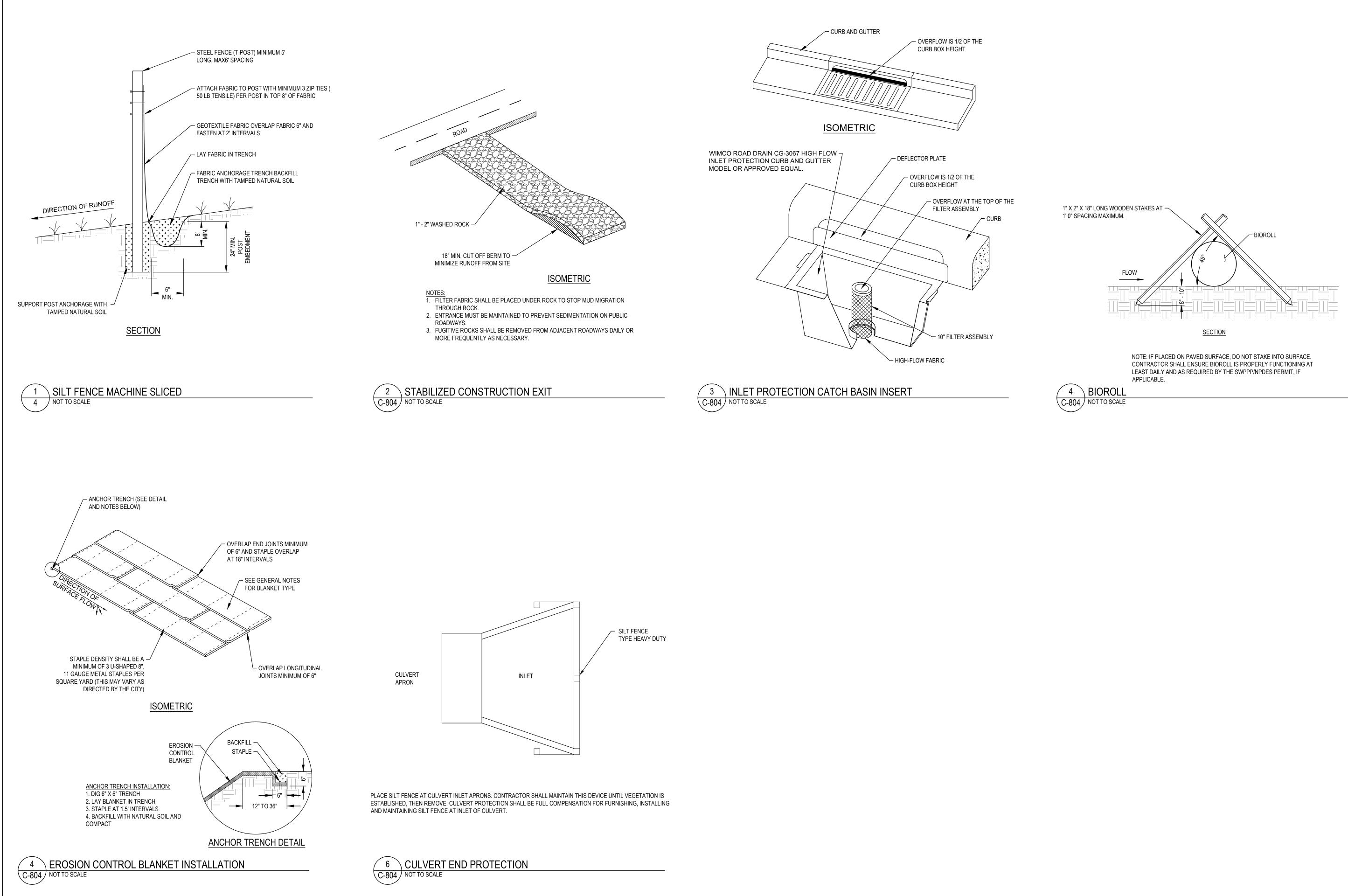


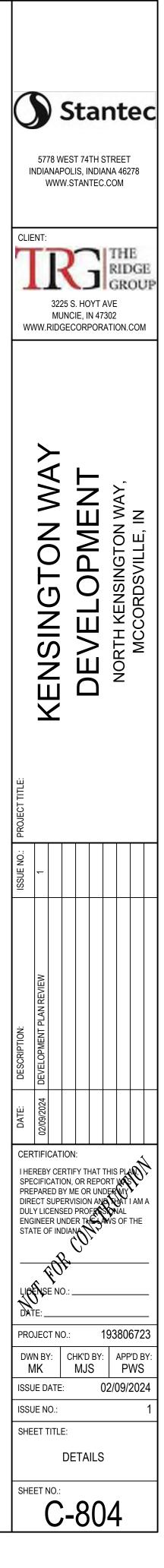


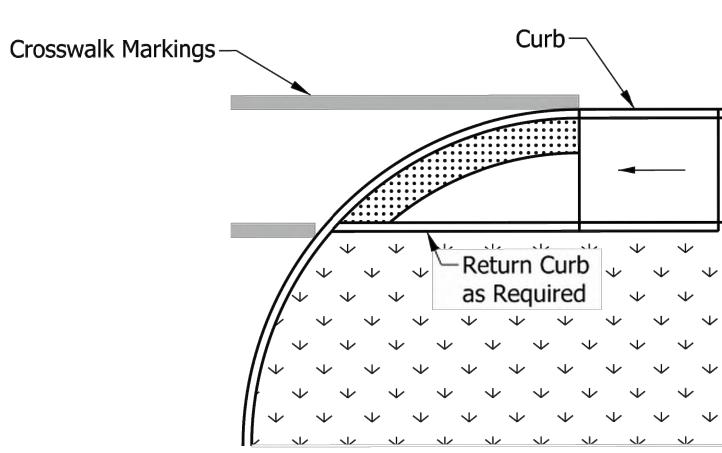




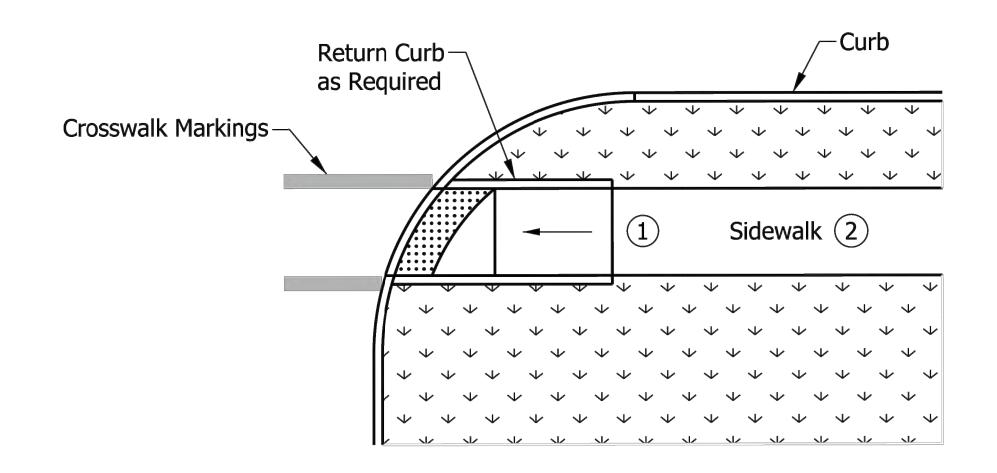








ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP ADJACENT CURB

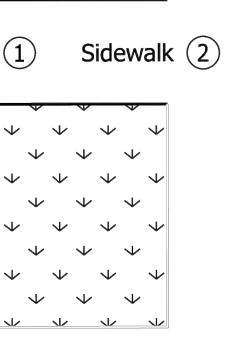


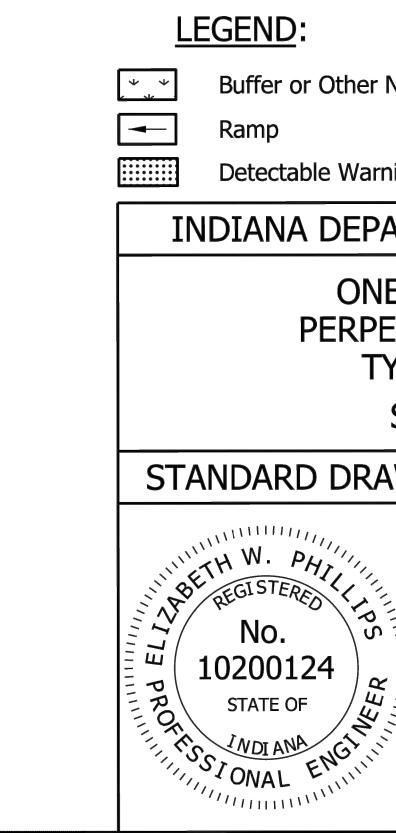
ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP WITH BUFFER

NOTES:

(1) A turning space is not required at the top of the ramp for a one-way directional perpendicular curb ramp.

(2) Where there is no buffer between the sidewalk and curb the preferred minimum sidewalk width is 6 ft. Where a buffer is placed between the sidewalk and curb, the preferred minimum sidewalk width is 5 ft. See Standard Drawing Series E 604-SDWK for sidewalk details.





Buffer or Other Non-Walkable Surface

Detectable Warning Surface

INDIANA DEPARTMENT OF TRANSPORTATION

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP TYPICAL PLACEMENT SEPTEMBER 2016

STANDARD DRAWING NO. E 604-SWCR-05

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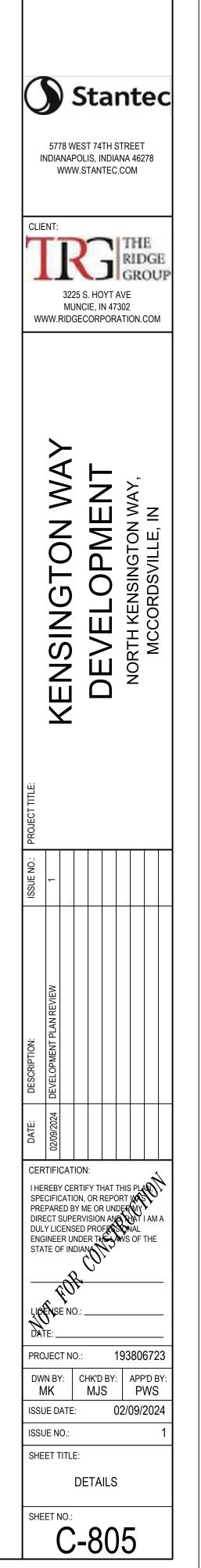
ER

/s/ Elizabeth W. Phillips *03/15/16* DESIGN STANDARDS ENGINEER

DATE

/s/ Mark A. Miller CHIEF ENGINEER

03/18/16 DATE

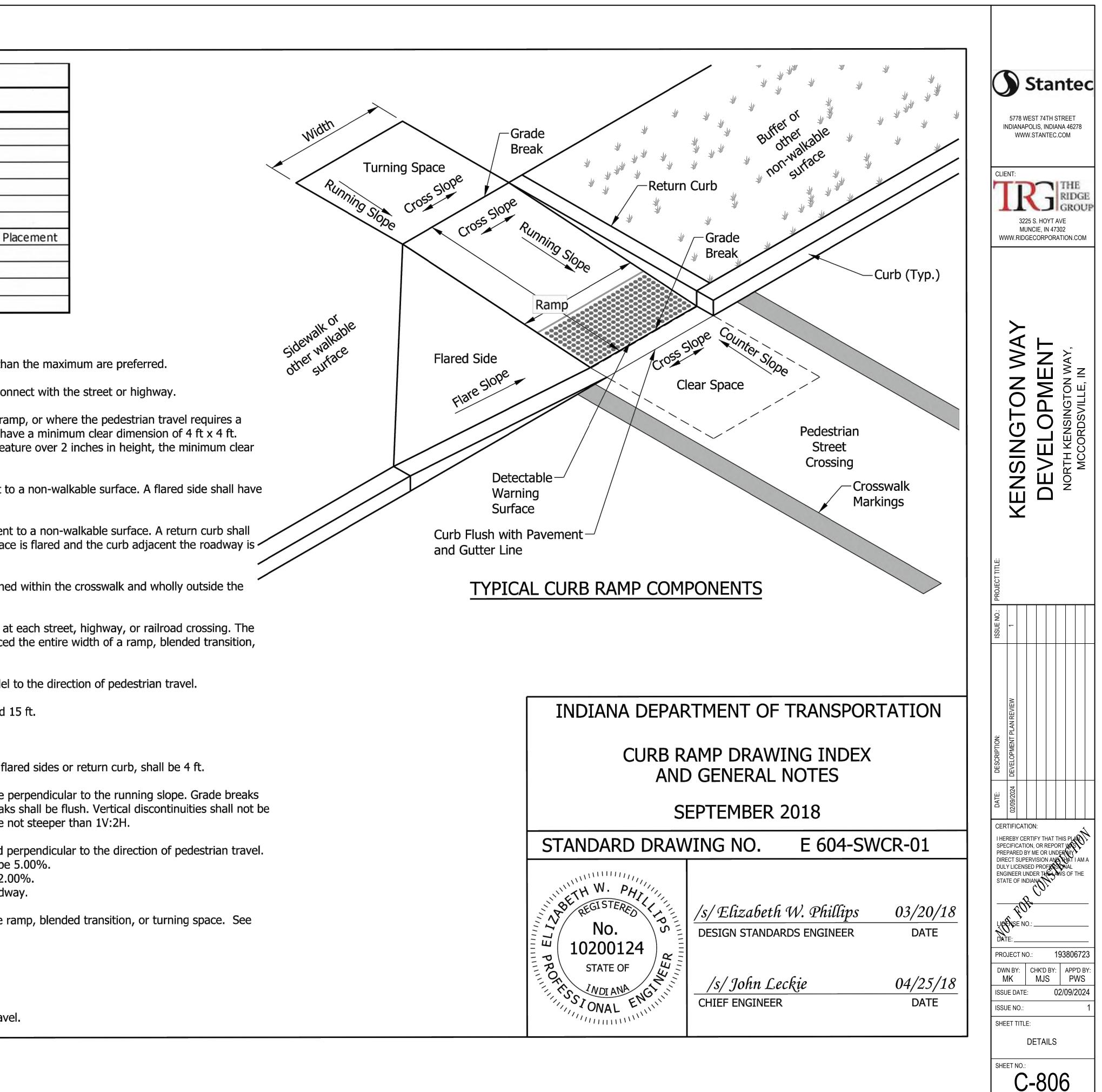


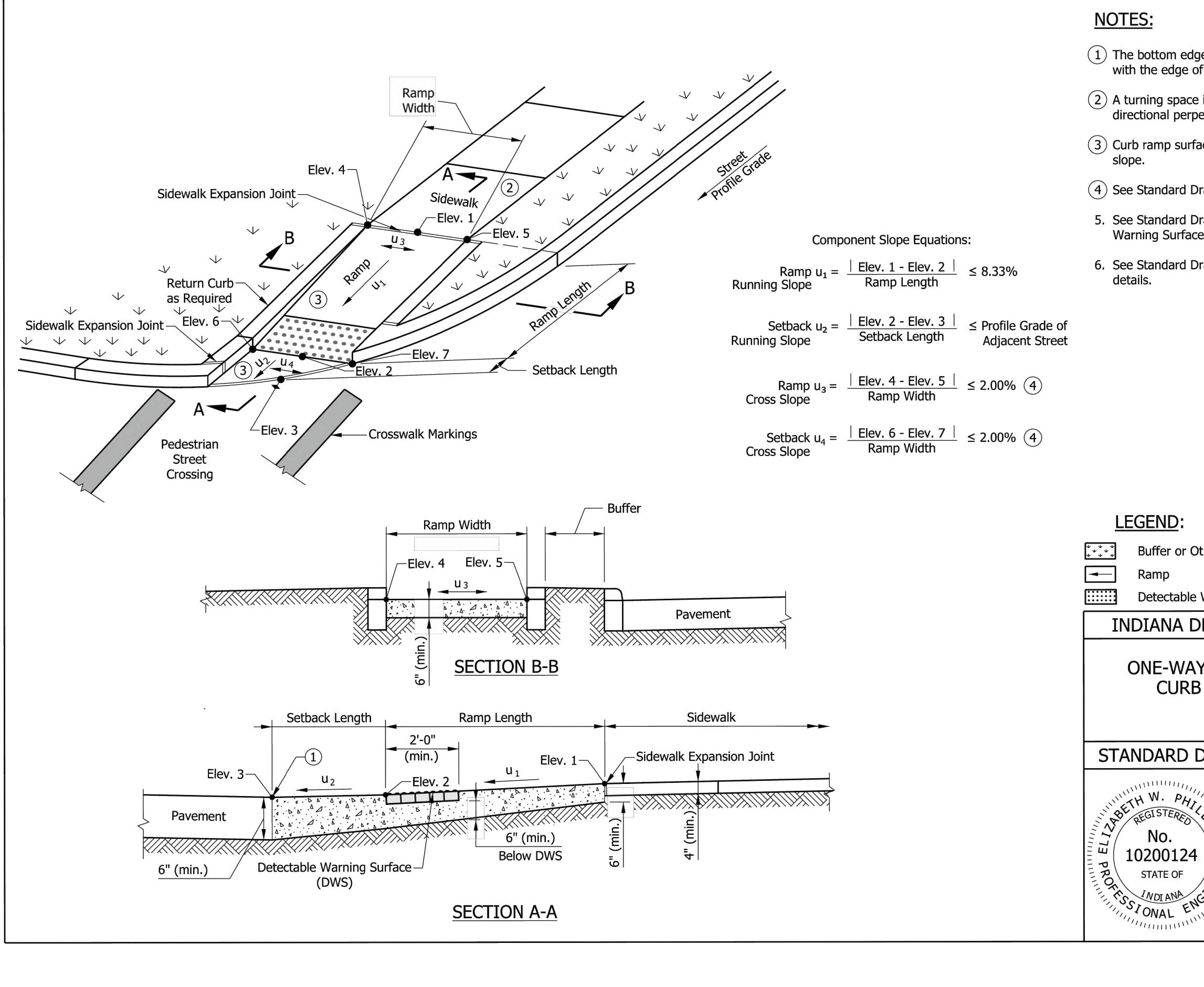
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	INDEX
SHEET NO.	SUBJECT
1	Curb Ramp Drawing Index and General Notes
2-3	Perpendicular Curb Ramp Typical Placement
4	Perpendicular Curb Ramp Component Details
5	One-Way-Directional Perpendicular Curb Ramp Typical Placement
6	One-Way-Directional Perpendicular Curb Ramp Component Details
7	Parallel Curb Ramps Typical Placement
8	Parallel Curb Ramp Component Details
9	Blended Transition Curb Ramp, Depressed Curb Ramp and Diagonal Curb Ramp Typical F
10	Blended Transition Curb Ramp Component Details
11	Median Cut-Through and Median Perpendicular Curb Ramp Typical Placement
12-13	Detectable Warning Surface Placement and Configuration
14	Detectable Warning Surface Details

GENERAL NOTES:

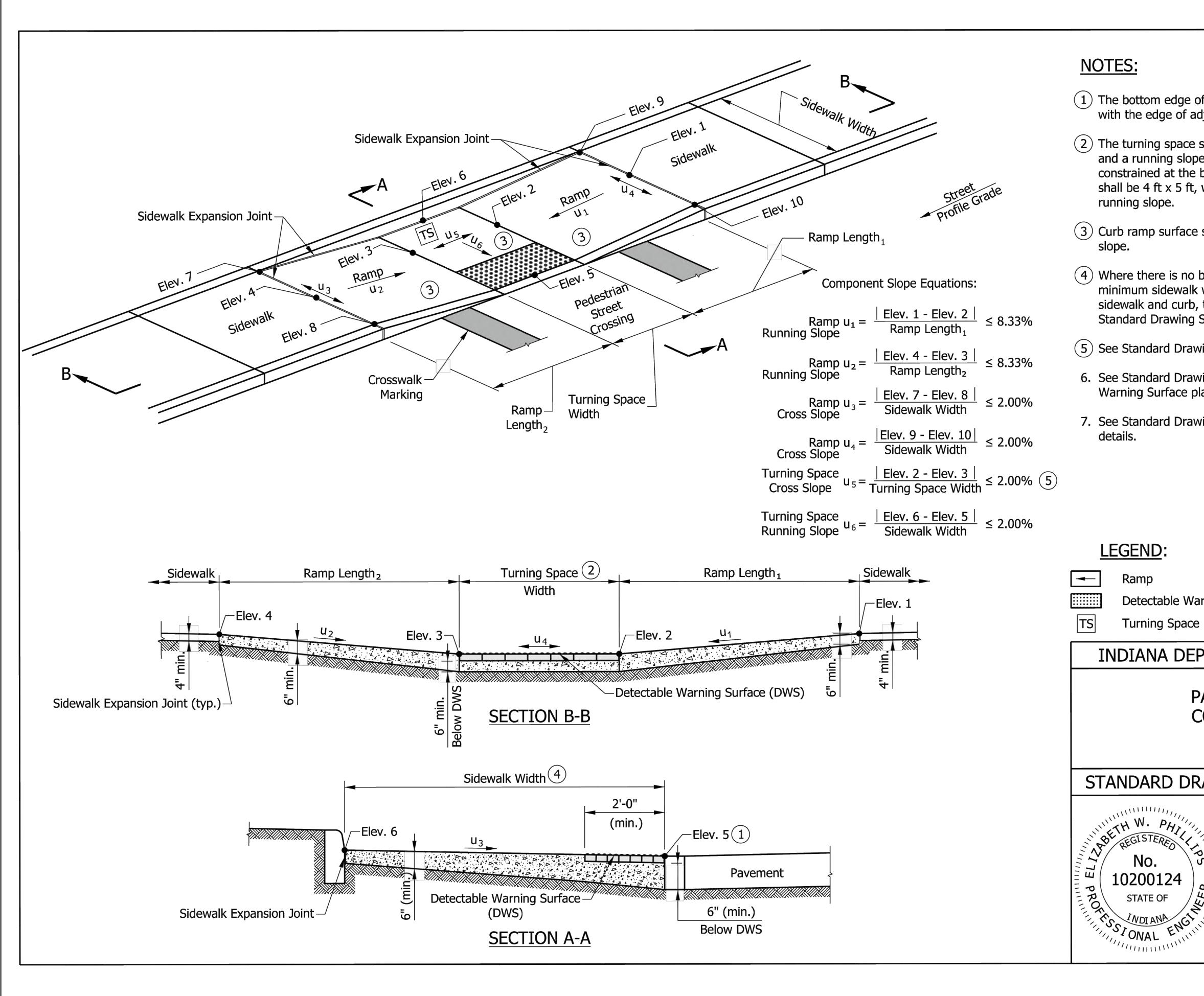
- 1. All slopes are absolute rather than relative to the sidewalk or roadway grade. Slopes at least 0.50% less than the maximum are preferred.
- 2. Ramp or Blended Transition. A ramp or blended transition shall be used to lower or raise the sidewalk to connect with the street or highway.
- 3. Turning Space. A turning space shall be provided at the top of a perpendicular ramp, bottom of a parallel ramp, or where the pedestrian travel requires a change in direction. A common turning space may be shared by adjacent ramps. The turning space shall have a minimum clear dimension of 4 ft x 4 ft. Where the turning space is constrained at the back of the sidewalk by a curb, retaining wall, building, or feature over 2 inches in height, the minimum clear dimension shall be 4 ft x 5 ft, with the 5-ft dimension in the direction of the ramp running slope.
- 4. Flared Side. A flared side shall be used adjacent to a walkable surface. A flared side may be used adjacent to a non-walkable surface. A flared side shall have a maximum slope of 10.00% measured parallel to the back of the curb.
- 5. Return Curb. A return curb is placed perpendicular to the roadway curb. A return curb may be used adjacent to a non-walkable surface. A return curb shall not be used adjacent to a walkable surface. The return curb may be omitted where the non-walkable surface is flared and the curb adjacent the roadway is rapered to meet the flush curb at the bottom of the ramp.
- 6. Clear Space. A clear space shall be provided beyond the bottom grade break of a curb ramp wholly contained within the crosswalk and wholly outside the parallel vehicular travel path. The clear space shall have a minimum clear dimension of 4 ft x 4 ft.
- Detectable Warning Surface. A detectable warning surface shall consist of truncated domes and be placed at each street, highway, or railroad crossing. The detectable warning surface shall extend a minimum of 2 ft in the direction of pedestrian travel and be placed the entire width of a ramp, blended transition, or turning space.
- Running Slope. The running slope of a ramp, blended transition, or turning space shall be measured parallel to the direction of pedestrian travel.
 a. A running slope of 2.00% or less is considered level.
 - b. A ramp shall have a maximum running slope of 8.33% but shall not require a ramp length to exceed 15 ft.
 - c. A blended transition shall have a maximum running slope of 5.00%.
 - d. A turning space shall have a maximum running slope of 2.00%.
- 9. Width. Unless otherwise noted, minimum width of a ramp, blended transition, or turning space, excluding flared sides or return curb, shall be 4 ft.
- 10. Grade Break. A grade break at the top and bottom of a ramp, blended transition, or turning space shall be perpendicular to the running slope. Grade breaks shall not be within the ramp, blended transition, turning space, or detectable warning surface. Grade breaks shall be flush. Vertical discontinuities shall not be greater than 1/2 in. Where a discontinuity is greater than 1/4 in. the surface shall be beveled with a slope not steeper than 1V:2H.
- 11. Cross Slope Exceptions. The cross slope of a ramp, blended transition, or turning space shall be measured perpendicular to the direction of pedestrian travel. a. The maximum cross slope at a pedestrian street crossing without posted yield or stop control shall be 5.00%.
 - b. The maximum cross slope at a pedestrian street crossing with posted yield or stop control shall be 2.00%.
 - c. The maximum cross slope at a midblock crossing shall be the established grade of the adjacent roadway.
- 12. Counter Slope. A counter slope is the cross slope of the gutter or street adjacent the running slope of the ramp, blended transition, or turning space. See Standard Drawing E 604-SWCR-14 for counter slope details.
- 13. Objects such as a utility cover, vault frame, and grating shall be placed outside the curb ramp.
- 14. Curb ramps shall be placed within the marked crosswalk area.
- 15. Drainage inlets should be located uphill from a curb ramp to prevent ponding in the path of pedestrian travel.





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Drawing	E 604-SWCR-01 for cross slope e	exceptions.					
-	E 604-SWCR-12, -13, and -14 for ment, configuration, and details.	r Detectable					
Drawing	E 604-CCSJ-01 for sidewalk expa	insion joint		KENSINGTON WAY	DEVELOPMENT		MCCORDSVILLE, IN
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(1) The bottom edge of the turning space and top of curb shall be flush with the edge of adjacent pavement and gutter line.

(2) The turning space shall have a minimum clear dimension of 4 ft x 4 ft and a running slope of 2.00% maximum. Where the turning space is constrained at the back of the sidewalk, the minimum clear dimension shall be 4 ft x 5 ft, with the 5-ft dimension in the direction of the ramp

(3) Curb ramp surface shall be coarse broomed transverse to the running

(4) Where there is no buffer between the sidewalk and curb, the preferred minimum sidewalk width is 6 ft. Where a buffer is placed between the sidewalk and curb, the preferred minimum sidewalk width is 5 ft. See Standard Drawing Series E 604-SDWK for sidewalk details.

(5) See Standard Drawing E 604-SWCR-01 for cross slope exceptions.

6. See Standard Drawing E 604-SWCR-12, -13, and -14 for Detectable Warning Surface placement, configuration, and details.

7. See Standard Drawing E 604-CCSJ-01 for sidewalk expansion joint

Detectable Warning Surface

INDIANA DEPARTMENT OF TRANSPORTATION

PARALLEL CURB RAMP COMPONENT DETAILS

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-08

> S ER

/s/Elizabeth W. Phillips 03/29/18 DESIGN STANDARDS ENGINEER

DATE

/s/ John Leckie CHIEF ENGINEER

04/25/18 DATE

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McCORDSVILLE, INDIANA **TOWN STANDARDS**

DIRECTIONS FOR USE

1.) The entire set of full size drawings shall be attached to the construction drawings and shall be considered part thereto. A partial set may be used for small projects when whole sections are not applicable. Approval of use of a partial set will be made by the Town Engineer at the time of approval of the construction drawings.

2.) Details prepared by outside sources shall not be included in the construction drawings when the said drawings cover work which is covered by McCordsville Standards.

3.) Individual McCordsville Standards that do not apply may be crossed out by the design engineer through placement of a single large X over the detail. Minor reference notations may be placed adjacent to individual standard titles for coordination. However, the standards themselves shall not be modified in any way.

Details prepared by outside sources covering work which is not covered by the 4.) McCordsville Standards are the sole responsibility of the design engineer and shall be placed on sheets other than the McCordsville Standards.

GENERAL NOTES

Contractor shall verify the exact location of all existing utilities at least 48 hours 1.) prior to any construction or excavation. All utilities shall be adequately supported to minimize damage. The contractor shall be responsible for repairing damaged utilities to the satisfaction of the Town of McCordsville and the owner of the utility.

2.) All benchmarks and elevations shall be from NAD 1983 (Conus) Datum. All coordinates shall conform with the Hancock County GIS standard.

3.) Wherever proprietary equipment is specified, all proposals for substitution shall be submitted in writing to the Town Engineer and shall be subject to the findings of the Town Engineer and may be appealed to the Public Works Committee.

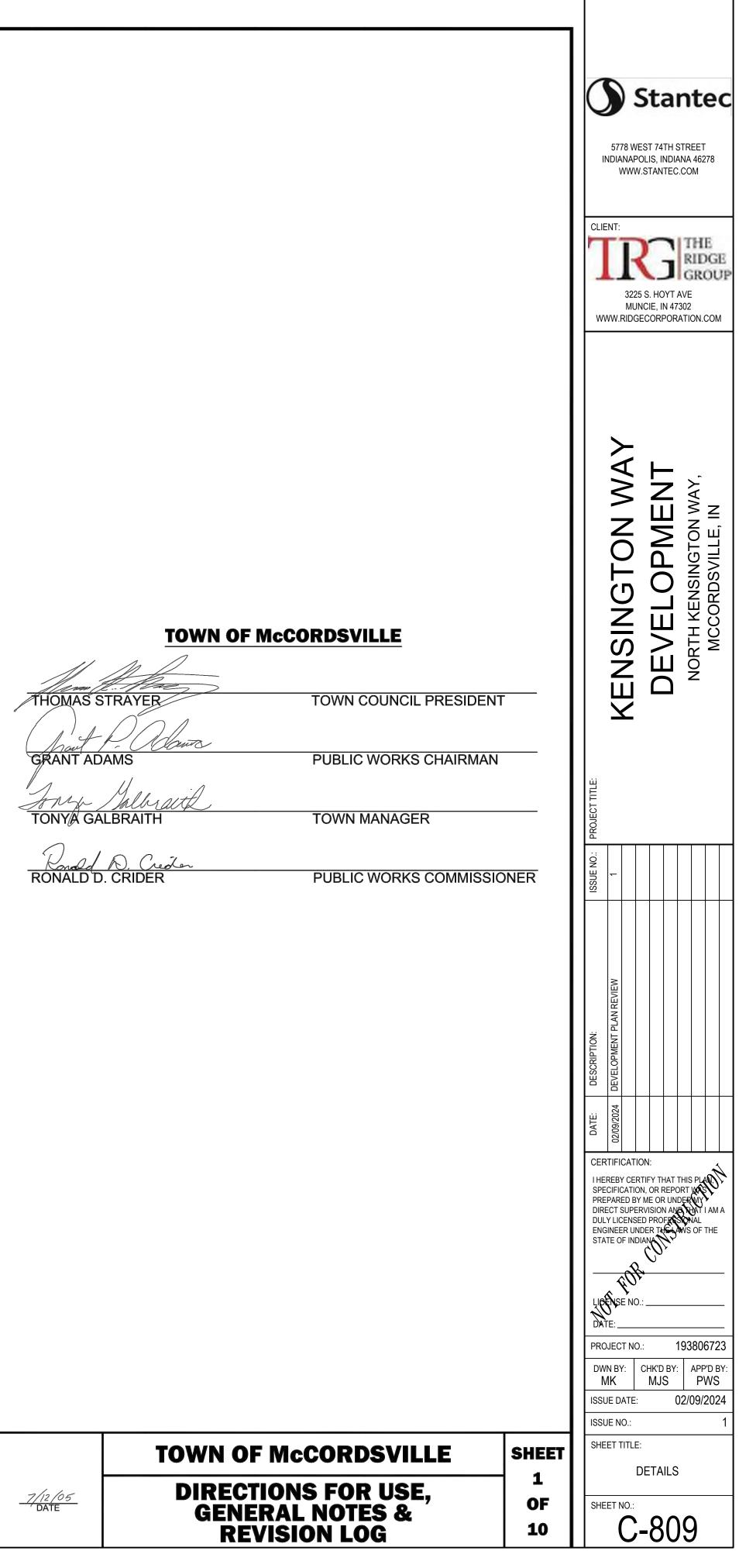
Whenever trench opening encroaches within 5 feet of an existing or proposed 4.) street or sidewalk, "B"-Borrow compacted in accordance with the most recent INDOT standard specifications shall be required. Approved backfill may be used under proposed sidewalks provided sidewalks are constructed six months after backfilling of the trench.

Installation of or provisions for installation of all underground utilities (including 5.) service laterals) to be placed under pavement areas shall be established prior to the construction of pavements including lime stabilization.

> HOLEY MOLEY SAYS "DIG SAFELY"



	REVISION LOG								
SHEET NO.	SHEET DESCRIPTION	ISSUED	REVISED	REVISED	REVISED	REVISED			
SHEET 1	DIRECTIONS FOR USE, GENERAL NOTES & REVISION LOG	06/14/05	05/02/2023						
SHEET 2	RIGHT-OF-WAY SECTIONS & PAVEMENT SPECIFICATIONS	06/14/05	05/02/2023						
SHEET 3	RIGHT-OF-WAY DETAILS	06/14/05	05/02/2023						
SHEET 4	UTILITY LOCATION GUIDELINES	06/14/05	05/02/2023						
SHEET 5	DRIVE WAYS, SIDEWALKS, AND HANDICAP RAMPS	06/14/05	05/02/2023						
SHEET 6	STORM SEWER STRUCTURE DETAILS	06/14/05	05/02/2023						
SHEET 7	STORM SEWER BEDDING DETAILS AND GENERAL NOTES	06/14/05	05/02/2023						
SHEET 8	SANITARY SEWER SPECIFICATIONS	06/14/05							
SHEET 9	SANITARY SEWER DETAILS	06/14/05							
SHEET 10	SANITARY SEWER LIFT STATION STANDARDS & GUIDELINES	06/14/05	05/02/2023						



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LIME STABILIZATION

DESCRIPTION: This work shall consist of upgrading of mostly fine grained soils by uniformly mixing small amounts of lime (3 to 6%) by weight to provide a working platform for the road subbase.

MATERIALS: Material shall meet the requirements of the Section 913 of the INDOT Standard Specification Cement (3% by weight) may be used as an alternative.

LIME:

- a) High calcium or dolomite Hydrated Lime (Ca(oH)2 +Mg(oH)2) shall have a minimum of 90% total available calcium hydroxide content and the hydrates must contain no more than 5 % carbon dioxide content if sampled at the lime plant, or no more than 7 % if sampled at the job site.
- b) High calcium hydrated lime shall have a minimum available calcium hydroxide Ca(oH)2 content of 90%. The method used for determination of available lime shall conform to AASHTO T219-72 or ASTM C25.
- c) Maximum Mechanical Moisture content shall be 4%.
- d)Gradation: All hydrated lime shall conform to the following gradation requirement. At least 85% passing a #200 sieve (0.075 mm). Determination of particle size shall conform to the provision for wet sieving on ASTM C110.
- e) Quicklime or Kiln dust shall not be used.
- e)Other time products such as quicklime high calcium (CaO) or Dolomite (Ca whe substituted with written enproved by the Town Engineer . By product lime (kilr dust) shall not be used.

WATER: Water used for lime modification shall be in accordance with all applicable requirements of 913 and 913.01 of the INDOT Specifications, except that the minimum acceptable pH is 6.5.

STORAGE AND HANDLING

- a)Hydrated lime shall be stored and handled in closed weatherproof containers until immediately before distribution on the subgrade. Hydrated lime in bags shall be stored in weather protected conditions with adequate protection from ground dampness, and the facility shall be approved by the Town Engineer prior to commencement of any lime work.
- b) Each shipment shall be accompanied by a bill of loading and by a certificate of compliance stating conformance to the applicable specification requirements. The certificate of compliance shall be submitted to the Town Engineer prior to the proof roll on the subgrade.
- c) The Contractor shall take appropriate preventive and protective (safety) measure that shall be exercised by those working with this material. All safety measures shall comply with applicable OSHA requirements.

MIXTURE COMPOSITION:

- a) Mix Design: Lime will be proportioned within a range of 3 to 6 percent of soil (oven dry basis). The required proportion of lime will be recommended by the Contractor and approved by the Town Engineer prior to construction using samples of soil and lime. The Town Engineer reserves the right to make such adjustments of lime proportioning as are considered necessary during the progress of the work within the range specified.
- b) Source or type of lime shall not be changed during the progress of the work without permission of the Town Engineer. However, the Town Engineer may choose to use different types of lime on different portions of the project, but shall not be mixed.

CONSTRUCTION REQUIREMENTS:

- a) Temperature and Weather Limitations: No lime modification shall be performed at a soil temperature less than 45 degrees Fahrenheit (7 degrees C) and the air temperature rising, of subgrade soil when it is measured 4" (100 mm) below the surface. Lime shall not be mixed with frozen soils or with soil containing frost.
- b) Preparation of Existing Roadway: All deleterious material, such as stumps, roots, turf, etc. and aggregate larger than 3" (75 mm) shall be removed. Any soft organic soils shall be removed as directed by the Town Engineer.
- c) Spreading of Lime: The roadbed shall be scarified or disked prior to distribution of the lime. The machine shall be of such design that a visible indication is given at all times that the machine is cutting to the required depth; The lime shall than be distributed uniformly over the surface by means of cyclone, screw-type, or pressure manifold type distributor. The Town Engineer may reject any procedure which does not provide even distribution of lime.

Lime shall not be applied when wind conditions are such that blowing lime becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent roadways.

The spreading of lime shall be limited to the amount which can be incorporated after mixing. In no case shall compaction be started later than three (3) days after mixing into the soil. In the event that rain intervenes causing cessation of work and exposure of the lime to washing or blowing, the Town Engineer may require additional lime to be spread.

- inches (355 mm) if a rotary speed mixer Is used.
- light rolling immediately after mixing.

Compaction shall be continued until the Contractor has shown that the lime modified layer has a density not less than 100 percent within the special subgrade treatment zone and/or 95 percent below special subgrade treatment zone, of the maximum dry density.

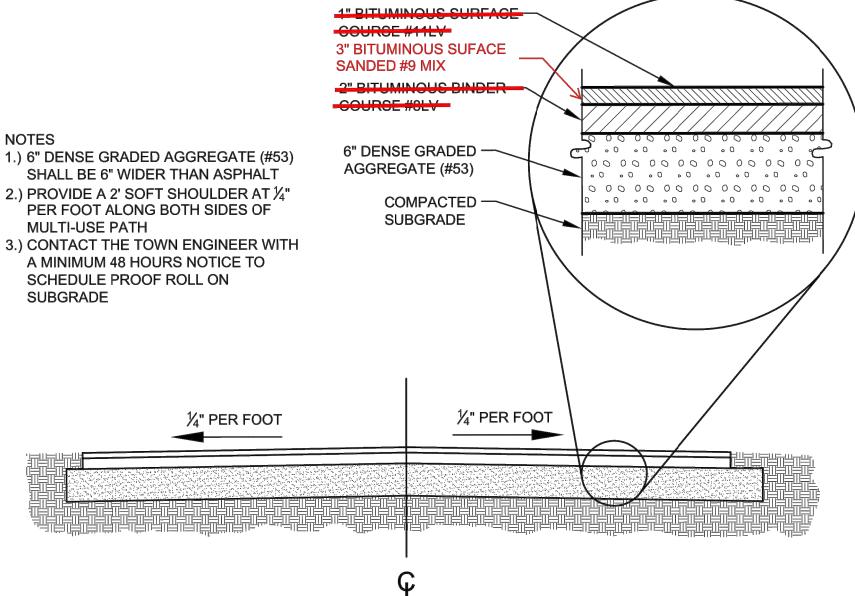
The standard dry density of the lime treated soil shall be obtained by AASHTO 99. The field in-place dry density will be obtained by the Contractor in accordance with AASHTO T 191.

Aeration by means of further mixing, or the addition of water and further mixing, may be required by the Town Engineer to achieve the required compaction.

The Town Engineer reserves the right to determine the actual thickness of the completed and cured layer by coring or other means at the owner's expense, and any deficient areas shall be acceptably corrected.

NOTES

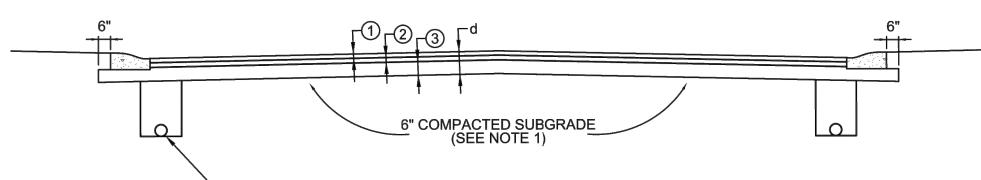
- SCHEDULE PROOF ROLL ON



d)Mixing: The lime, soil and water (if necessary) shall be thoroughly blended by rotary speed mixers or a disc harrow. The mixing shall continue until a homogeneous layer of the required thicknesses has been obtained and clods are broken down so that 100 %, exclusive of rock particle, will pass a one-inch (25 mm) sieve and at least 60% will pass a 4 sieve (4.75 mm). The loose thickness of a single lime modified layer shall not exceed eight (8) inches (200 mm) if a disc harrow is used and fourteen (14)

e)Compaction: Compaction of the mixture shall begin as soon as is practicable mixing unless approved by the Town Engineer. If compaction is to be delayed, the surface of the lime modified soil shall be crown-graded and sealed by either blade dragging or

f) Finishing: When compaction of the lime modified soil is nearing completion, the surface shall be shaped to the required line, grades and cross section, and compaction continued until uniform and adequate compaction if obtained.



SEE UNDERDRAIN DETAIL (SHEET 3)

LOCAL ROAD

- d = 12" (1) HMA, TYPE A, 9.5 MM SURFACE 2
- (3)

- (1) HMA, TYPE A, 9.5 MM SURFACE
- 2.5" (2) → HMA, TYPE A, 19.0 MM INTERMEDIATE

d = 15'

- (3) 3" HMA, TYPE A, 25.0 MM BASE
- (4)

COLLECTOR ROAD

d = 18" $(\mathbf{1})$ HMA, TYPE B, 19.0 MM INTERMEDIATE 6" HMA, TYPE B, 25.0 MM BASE 3 (4) 4" COMPACTED AGGREGATE BASE #53

PAVEMENT CONSTRUCTION

SCALE: NONE

PAVEMENT CONSTRUCTION

1.) Subgrade shall be lime stabilized per the lime stabilization specification on this sheet.

2.) Adequacy of existing subgrades shall be determined solely by the town based on a contractor performed proof roll with a fully loaded tri-axle dump truck. A proof roll shall be performed on all street subgrade prior to placing stone, under drains and installing curb. A second proof roll shall be performed on the stone prior to placing the asphalt base. The adequacy of the stone and subgrade shall be determined solely by the town.

3.) Place tack coat in accordance with the most recent INDOT standard specifications for asphalt pavement sections.

4.) Local Arterial Road is defined as a low capacity and low speed roads within subdivisions whose function is to become a collector street for local subdivision traffic and move traffic from within the community to other locations in the community and to the existing county roads. Whether a street is defined as a Local Arterial Road is at the sole discretion of the Public Works Commissioner.

5.) Installation of or provisions for installation of all underground utilities (including service lines and laterals) shall be placed prior to the construction of pavement including lime stabilization.

6.) Paving of base and/or intermediate shall occur when temperatures are 32 degrees and rising. Surface paving of 1.5" or greater shall be when temperatures are 40 degrees and rising. Surface paving of 1" or less shall be when temperatures are 45 degrees and rising.

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NOTES:

64-22

1. HMA SHALL BE PRODUCED FROM AN INDOT CERTIFIED HMA PLANT, IN ACCORDANCE WITH

2. THE CONTRACTOR SHALL PROVIDE A COPY OF THE

3. PG BINDER MATERIAL (LIQUID) SHALL BE PG 64-22

4. RECYCLED MATERIALS, UP TO 25%, MAY BE USED

BASE. IF OVER 15% RECYCLED MATERIAL IS USED,

PG BINDER 58-28 SHALL BE USED RATHER THAN PG

CERTIFICATION TO THE TOWN ENGINEER AT OR

BEFORE THE INSTALLATION OF THE HMA.

INDIANA TEST METHOD (ITM) 583.

FOR TYPE A AND TYPE B MIXES.

MULTI-USE PATH DETAIL

SCALE: NONE

HMA, TYPE A, 19.0 MM INTERMEDIATE

4" COMPACTED AGGREGATE BASE #53 4" COMPACTED AGGREGATE BASE #2

LOCAL ARTERIAL ROAD

4" COMPACTED AGGREGATE BASE #53 4" COMPACTED AGGREGATE BASE #2

HMA, TYPE B, 9.5 MM SURFACE

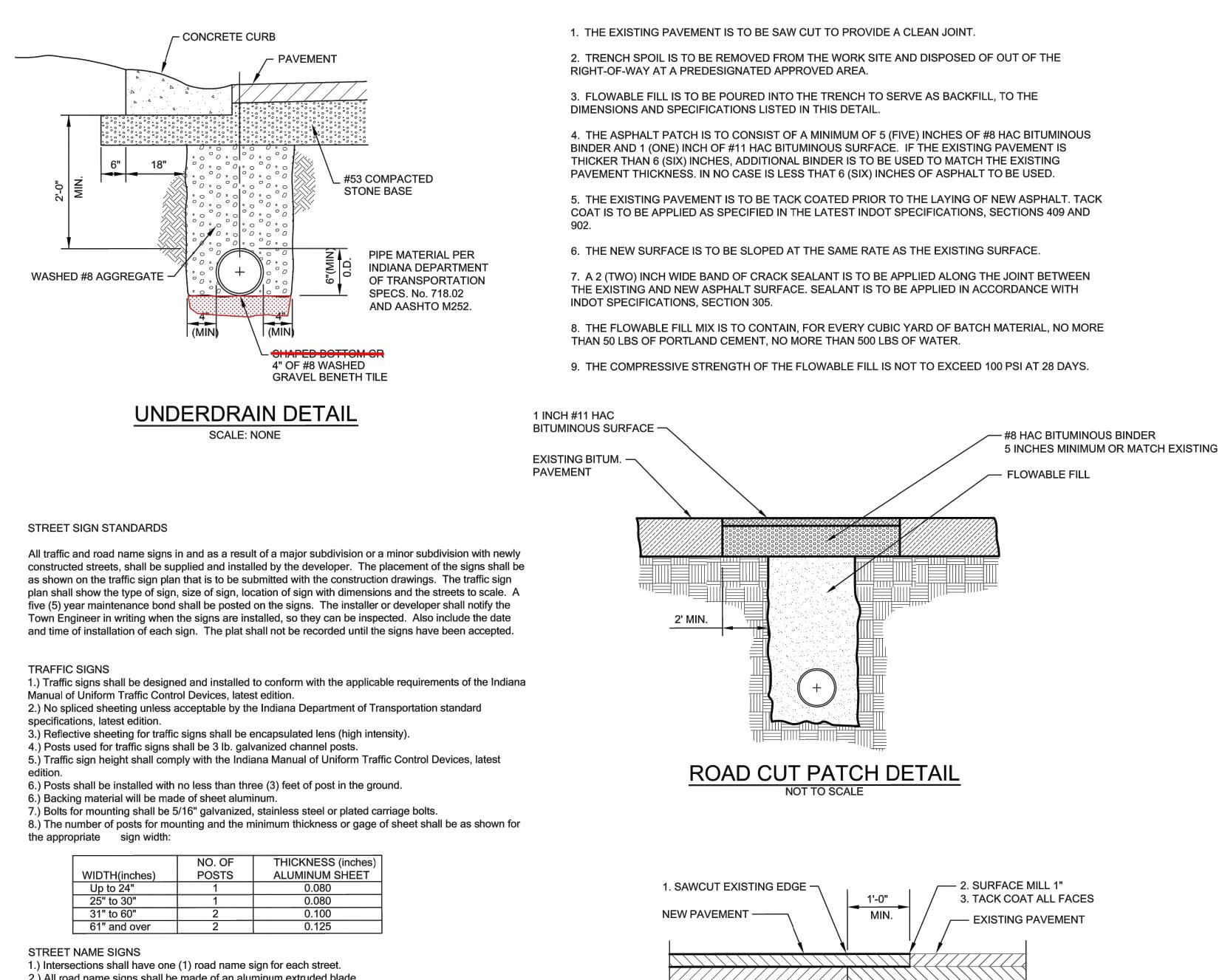
4" COMPACTED AGGREGATE BASE #2

	Stantec S778 WEST 74TH STREET INDIANAPOLIS, INDIANA 46278 WWW.STANTEC.COM CLIENT:			
	KENSINGTON WAY DEVELOPMENT NORTH KENSINGTON WAY, MCCORDSVILLE IN			
	ISSUE NO.: PROJECT TITLE:			
	ISSUE NO :: 1			
	DATE: DESCRIPTION: 02/09/2024 DEVELOPMENT PLAN REVIEW			
	CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDERVIT DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF INDIAN			
	LIGENSE NO.: DATE: DATE: PROJECT NO.: 193806723 DWN BY: CHK'D BY: MK MJS PWS ISSUE DATE: 02/09/2024			
SHEET 2	ISSUE NO.: SHEET TITLE: DETAILS	1		

10

TOWN STANDARDS RIGHT-OF-WAY SECTIONS & PAVEMENT SPECIFICATIONS

TOWN OF McCORDSVILLE





	NO. OF	THICKNESS (inches)
WIDTH(inches)	POSTS	ALUMINUM SHEET
Up to 24"	1	0.080
25" to 30"	1	0.080
31" to 60"	2	0.100
61" and over	2	0.125

2.) All road name signs shall be made of an aluminum extruded blade.

4.) Reflective sheeting for road name signs shall be inclosed lens (high intensity), green in color. 5.) Letters and numerals for the road name signs shall be high intensity reflective sheeting, series B

letters, and white in color.

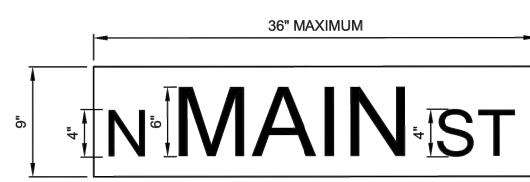
3.) Posts used for road name signs shall be 2 lb. galvanized channel posts.

6.) Minimum height to bottom of sign for road name signs shall be seven (7) feet.

7.) Posts shall be installed with no less than three (3) feet of post in the ground.

8.) Material for posts shall be galvanized steel.

7.) Bolts for mounting shall be 5/16" galvanized, stainless steel or plated carriage bolts.



ROAD NAME SIGN DETAIL

SCALE: NONE



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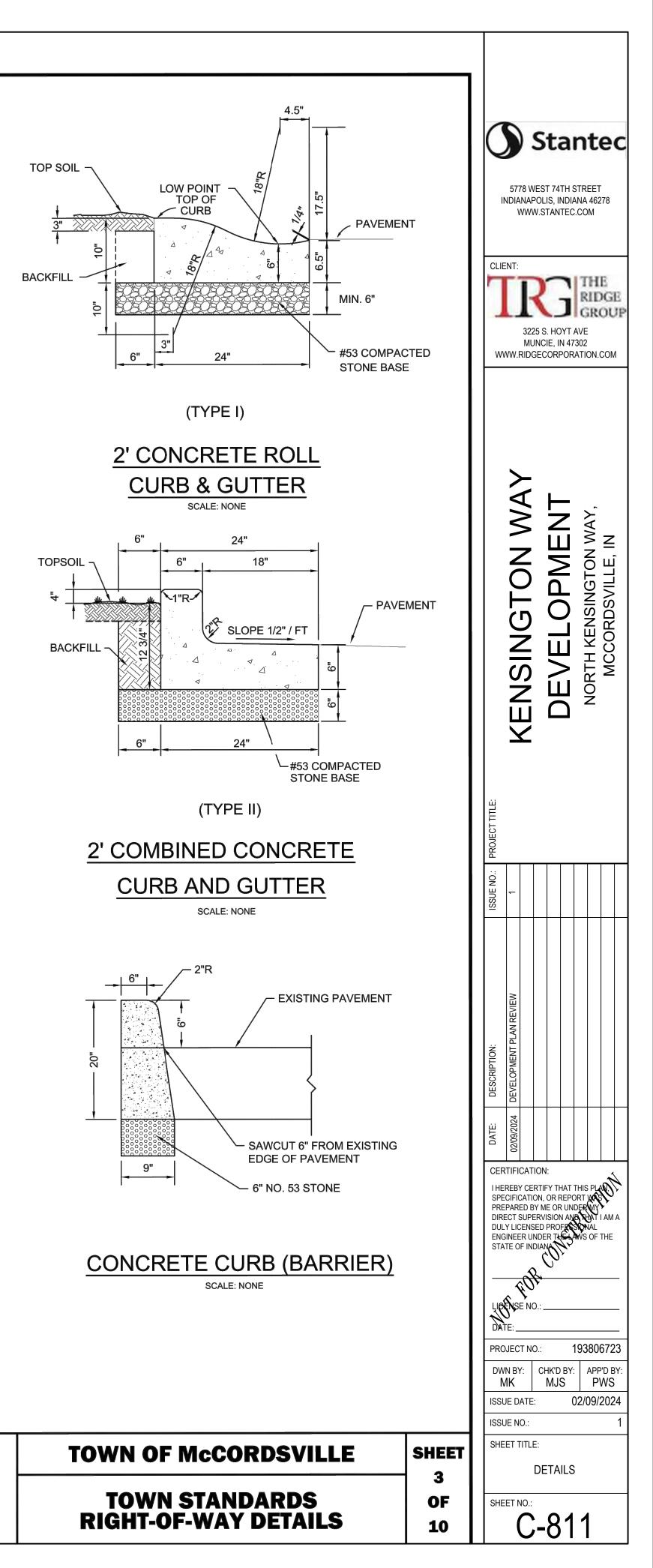
PREPARED SUBGRADE PER INDOT No. 207

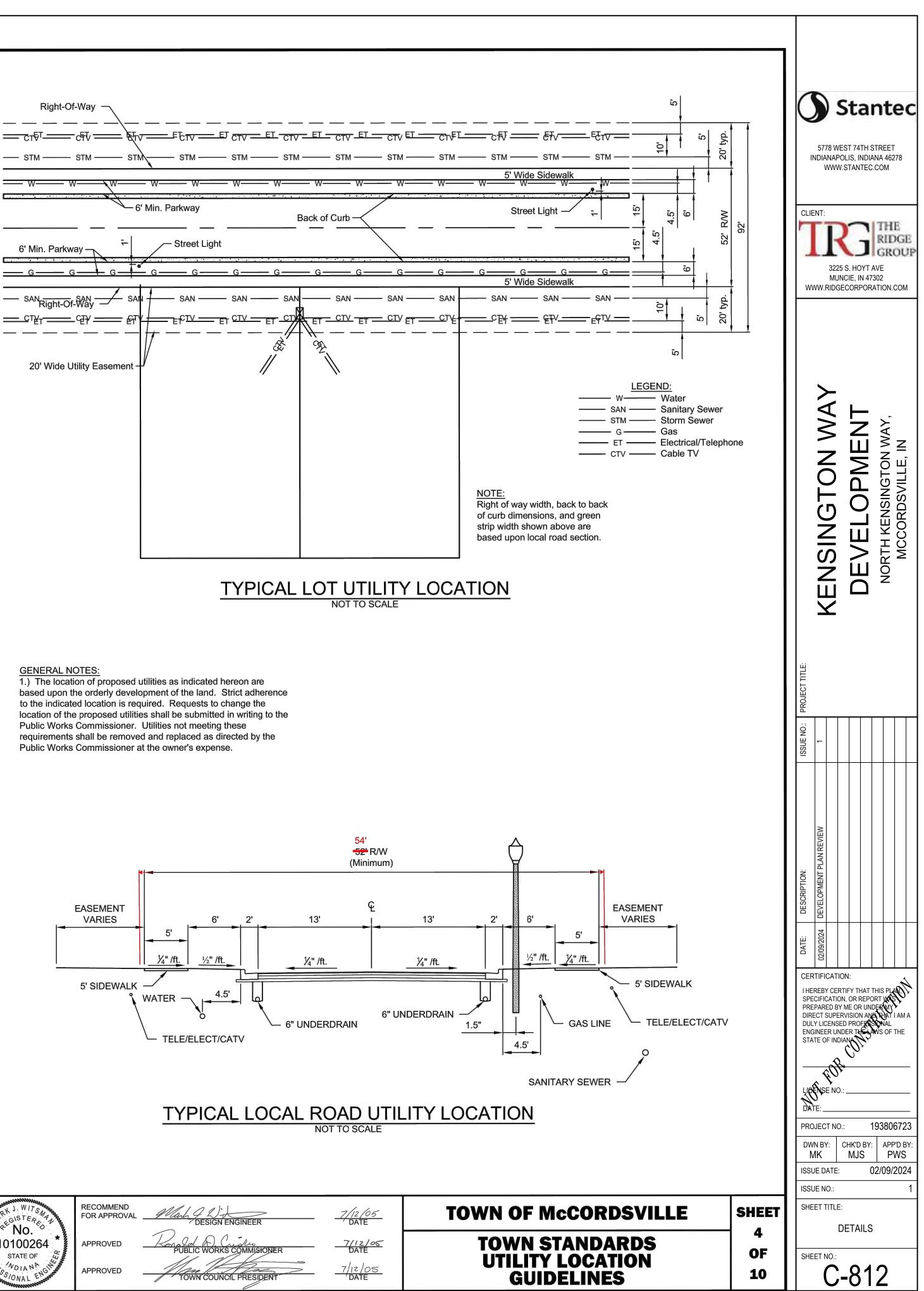
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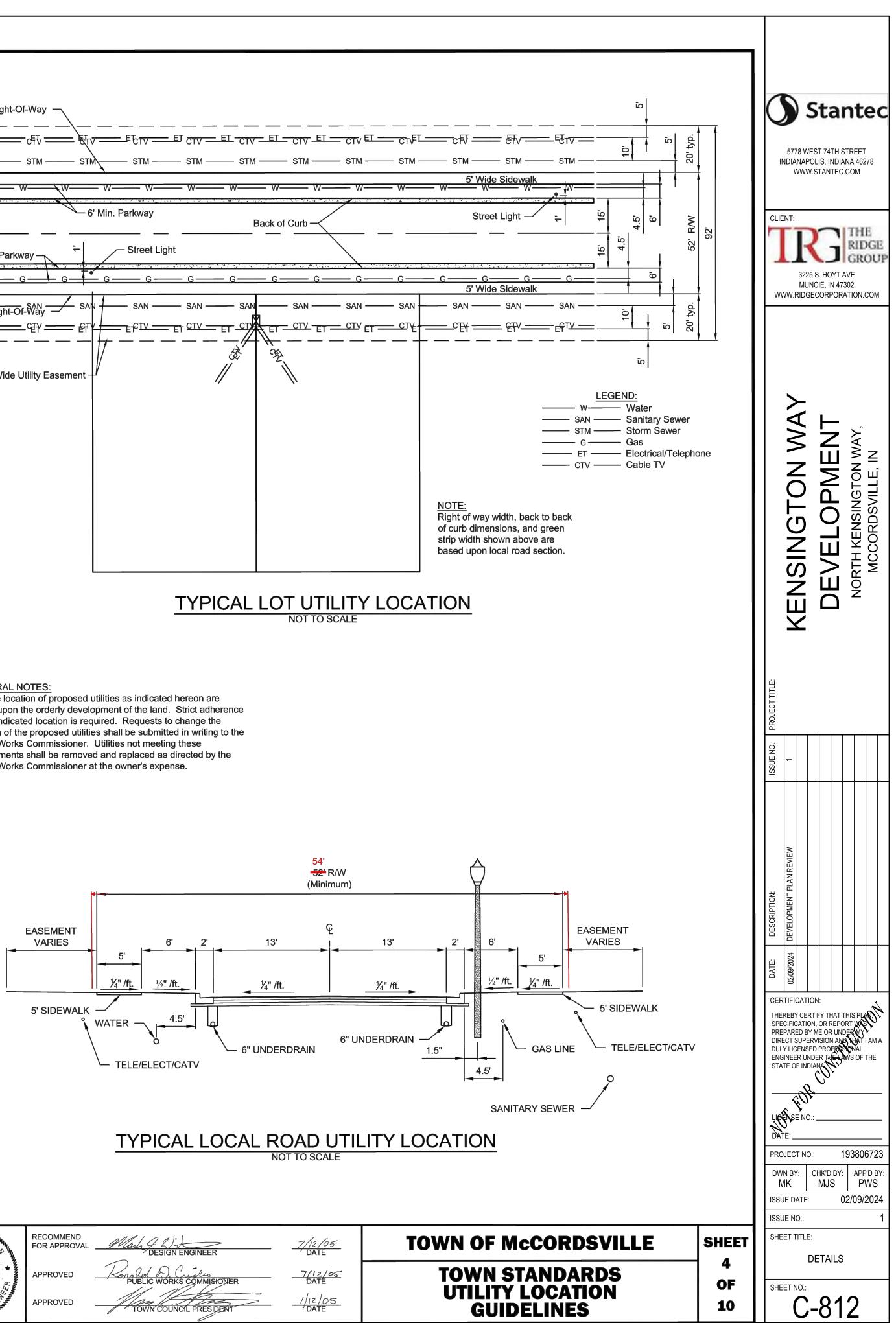
TYPICAL PAVEMENT TIE-IN

SCALE: NONE

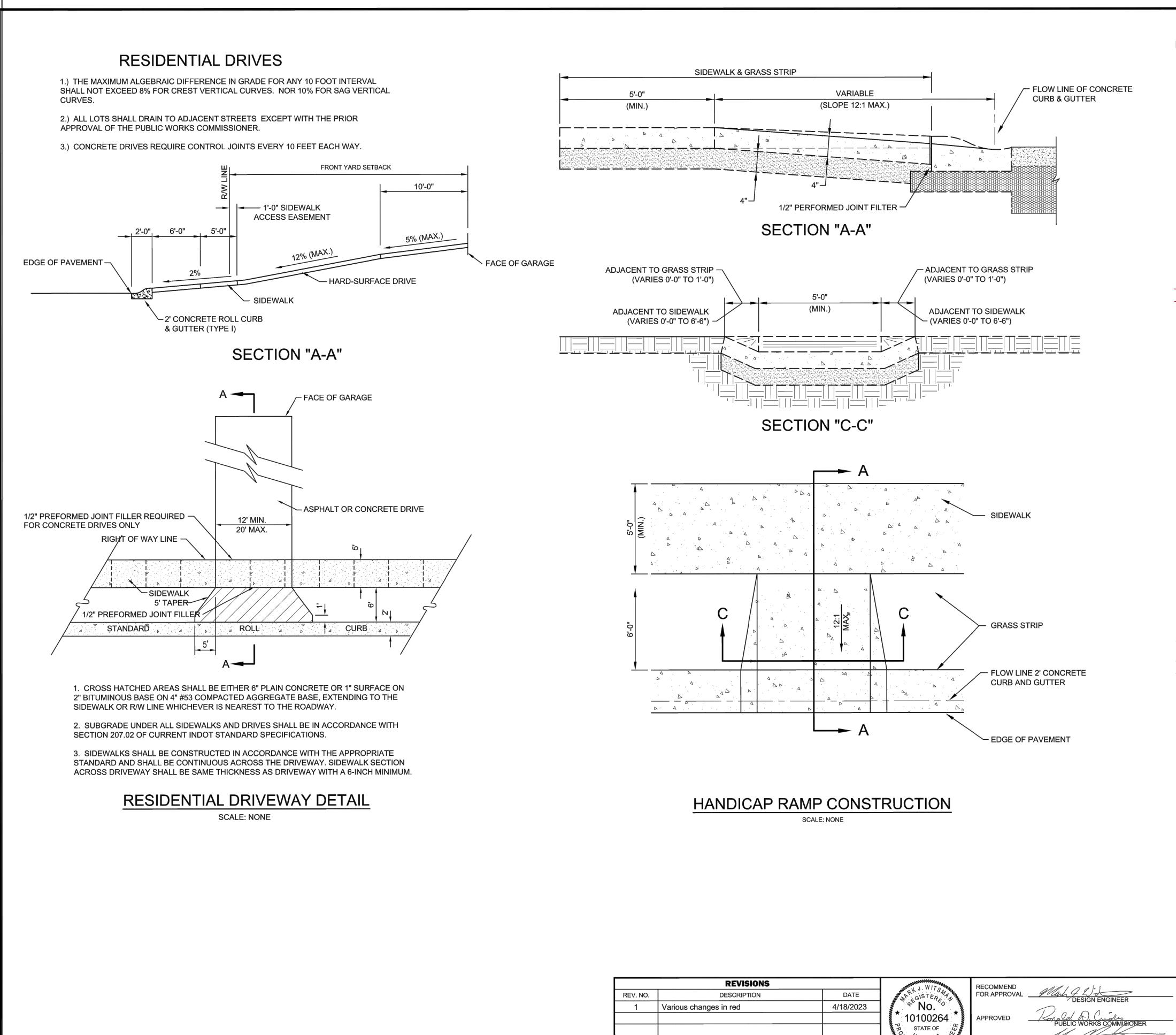
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HANDICAP RAMP CONSTRUCTION

construction.

2.) Minimum width of curb ramp shall be 5 feet not including flares. Maximum slope of ramps and flares shall be 12:1.

3.) Handicap ramps are to be located as shown on the plans or as directed by the Public Works Commissioner.

4.) Ramps shall be provided at the centerline of radius at all corners of every street intersection where there is an existing or proposed sidewalk and curb. Ramps shall also be provided at walk locations at mid-block in vicinity of hospitals, medical centers, or athletic stadiums. The use of details contrary to those shown hereon shall require the prior written approval of the Public Works Commissioner.

5.) Surface texture of the ramp shall be ramp groves located 2" on center and 0.3" deep.

6.) Care shall be taken to assure a uniform grade on all ramps with no breaks in grade.

7.) Drainage structures shall not be placed in line with the ramps except where existing drainage structures are being utilized in the new construction. Location of the ramps shall take precedence over location of drainage structures.

8.) The normal gutter line profile shall not be maintained through the area of the ramp. Drainage inlets should be located uphill from the curb ramps to prevent puddles at the path of travel.

concrete.

10.) Crosswalk and stop line marking, if used, shall be so located as to stop traffic short of ramp crossing.

SIDEWALK CONSTRUCTION

1.) Sidewalks shall be constructed of plain concrete four (4) inches thick except where crossing driveways where the sidewalk shall be a minimum of six (6) inches thick.

2.) Sidewalks shall be constructed on 2" of crushed stone or sand.

3.) Control joints shall be placed every 5 feet on center.

4.) Expansion joints shall be placed every 40 feet on center.

1.) All handicap ramps shall meet the requirements of the American Disabilities Act, the most recent INDOT standard specifications, and the Town of McCordsville's most recent standards. Curb modifications required for handicap ramps shall be provided at time of initial

9.) Expansion joint for the ramp shall be a maximum 1/2" wide. The top of the joint filler for all ramp types shall be flush with adjacent

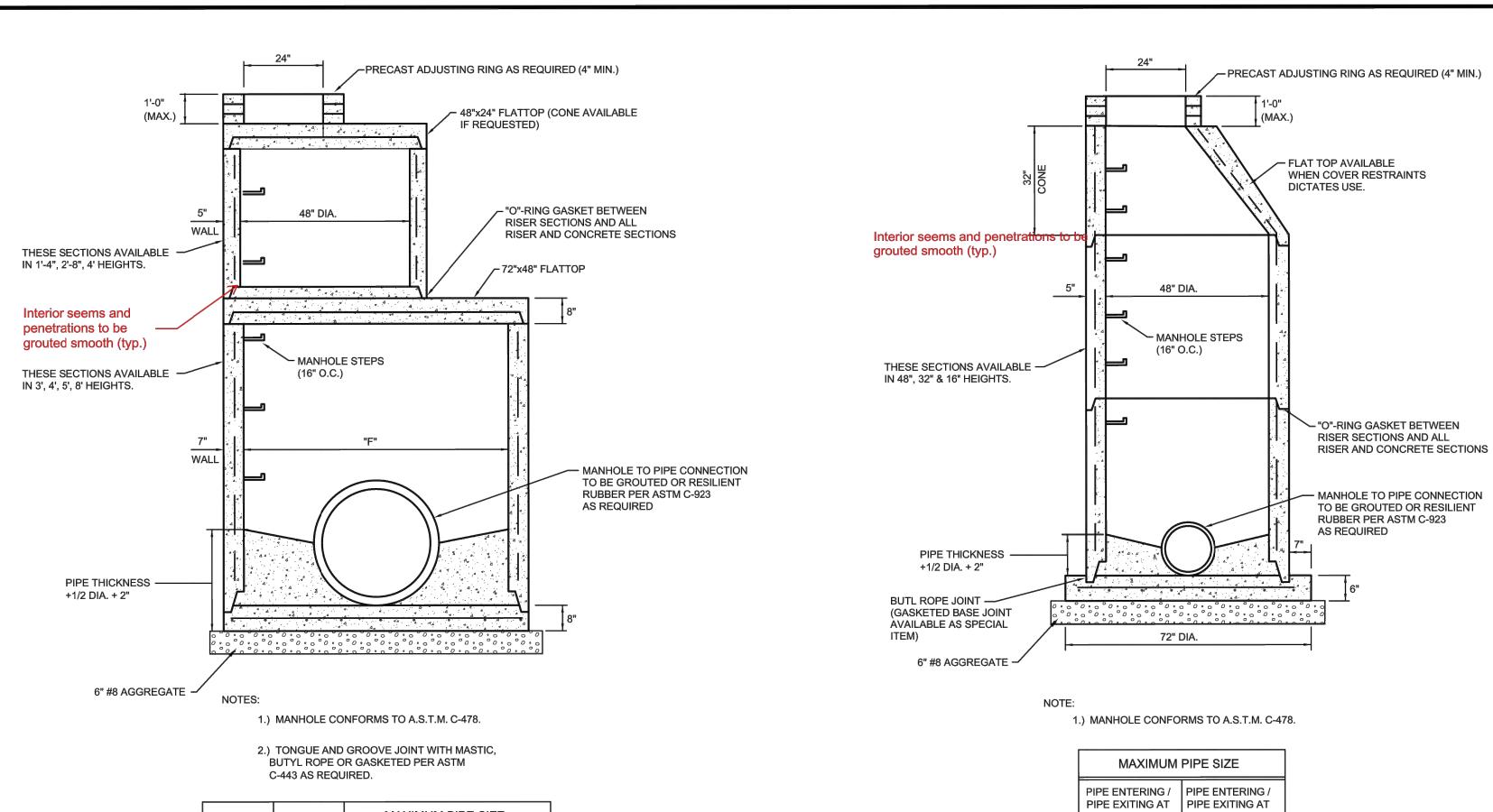
5.) Broom finish across the direction of travel and include a 1" steel trowel finish along both sides of the sidewalk and along either side of all expansion and control joints.

TOWN OF McCORDSVILLE

TOWN STANDARDS DRIVE WAY AND

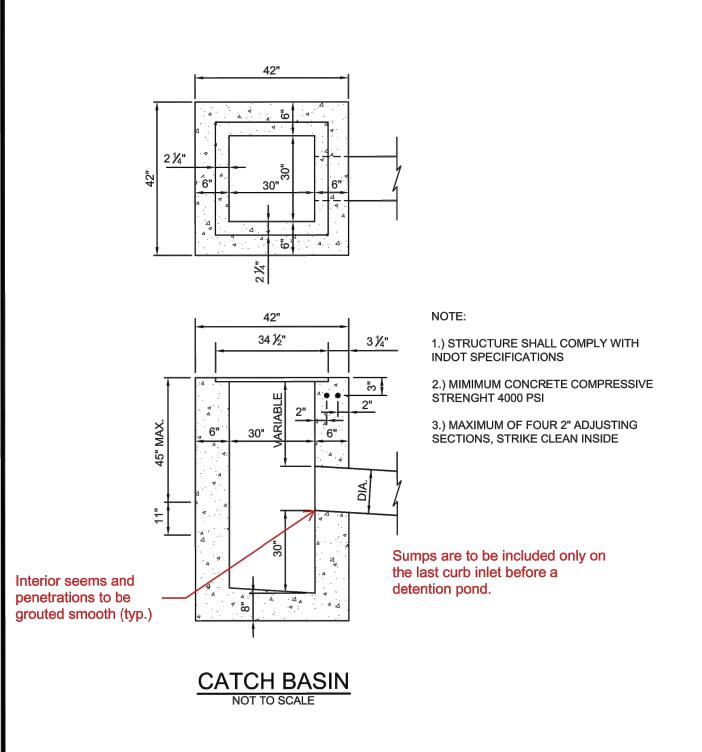
HANDICAP RAMP DETAILS

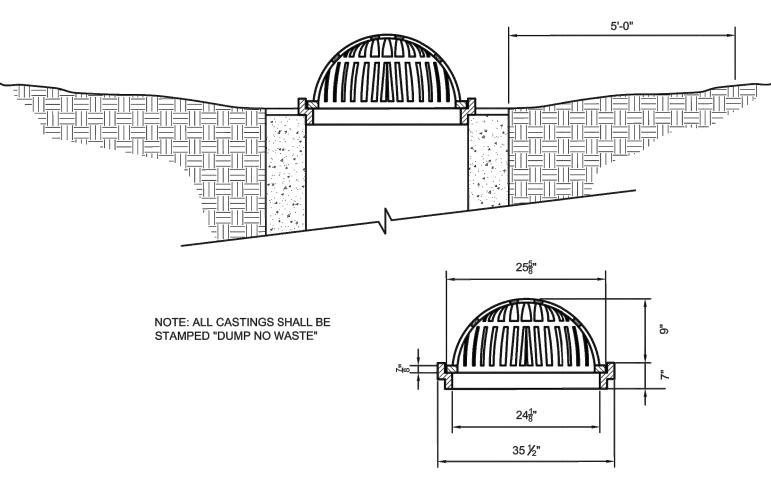
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		MAXIMUM PIPE SIZE				
MANHOLE TYPE	MANHOLE DIAMETER "F"	PIPE ENTERING / PIPE EXITING AT 0°-45° BEND	PIPE ENTERING / PIPE EXITING AT 45°-90° BEND			
J	60"	36"	33"			
к	72"	48"	36"			
L	96"	54"	48"			
М	102"	72"	66"			
N	108"	84"	72"			

STORM MANHOLES TYPE "J - K - L - M & N" NOT TO SCALE





MAXIMUM PIPE SIZE						
PIPE ENTERING / PIPE EXITING AT 0°-45° BEND	PIPE ENTERING / PIPE EXITING AT 45°-90° BEND					
24"	21"					

STORM MANHOLES TYPE "C" NOT TO SCALE

MANHOLE NOTES:

1.) Type "J, K, L, M & N" manholes as detailed hereon require a c cases where the depth of the storm sewer is not sufficient to mee detail, "F" diameter manhole section may be used required by the section may be used throughout the depth of the manhole.

2.) Manholes shall conform to ASTM C-478. Joints shall conform cast-in-place concrete structures shall require the prior written ap Regardless of the type of casting used, the casting shall be cente

3.) Manhole steps shall be made from a steel reinforcing rod enc polypropylene resin. The manhole steps shall equal or exceed O steps, PS1-PF as manufactured by M.A. Industries, Inc. Peachtre equal.

STORM SEWER TELEVISING: 1.) All storm lines 12" in diameter and prior to the expiration of the maintenance bond shall be televised. Sma televised by the Town Engineer at his discretion if it is necessary to en operation. The storm sewer shall also be jetted clean if necessary in t representative after observing the televising.

CASTING NOTES:

1.) Castings which drain combined curb and gutter, Type II curbin R-3286-8V or Neenah R-3287-10V or as approved by the Town I be used to drain combined curb and gutter, Type II curbing.

2.) Castings which drain roll curb and gutter, Type I curbing shall Neenah R-3501-TL or as approved by the Town Engineer. Manh drain roll curb and gutter, Type I curbing.

3.) Castings for inlets which drain open pavement areas without of R-3402-E or as approved by the Town Engineer.

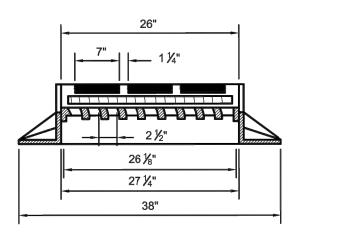
4.) Castings for manholes which drain open pavement areas with R-2501 or as approved by the Town Engineer.

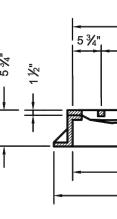
5.) Castings for use on inlets or manholes which drain swales or shall be Neenah R-2560 or as approved by the Town Engineer.

6.) Castings for manholes which do not collect surface water shal approved by the Town Engineer.

7.) All castings shall be stamped "DUMP NO WASTE".

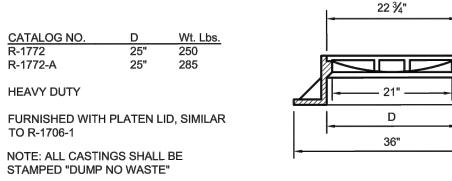
BEEHIVE GRATE CASTING WITH FRAME - NEENAH R-2560-E2 NOT TO SCALE





NOTE: AL STAMPE

R-3501-T(L&R) NEENAH CURB INLET



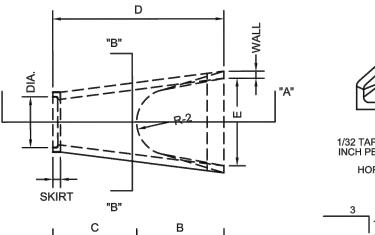
STORM MANHOLE R-1772-A

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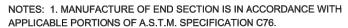
certain minimum depth. In et the minimum depth as by the e detail, "F" diameter manhole		Stantec 5778 WEST 74TH STREET
m to ASTM C-443. The use of oproval of the Town Engineer. ered over the manhole steps. capsulated in a copolymer OSHA requirements manhole ee City, Georgia, or approved I greater upon completion and 3 months haller lines may be required to be house proper installation and/or		INDIANAPOLIS, INDIANA 46278 WWW.STANTEC.COM
the judgment of the Town's ng shall be Neenah Engineer. Manholes shall not I be Neenah R-3501-TR, or holes shall not be used to curbing shall be Neenah hout curbing shall be Neenah		KENSINGTON WAY DEVELOPMENT NORTH KENSINGTON WAY, MCCORDSVILLE, IN
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TOWN OF McCORDSVILLE	SHEET	MKMJSPWSISSUE DATE:02/09/2024ISSUE NO.:1SHEET TITLE:
TOWN STANDARDS STORM SEWER STRUCTURE DETAILS	6 OF 10	DETAILS SHEET NO.: C-814

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7	6	12520	34	78	21	99	108	73	38 5/8	
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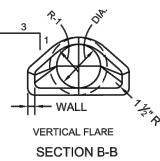


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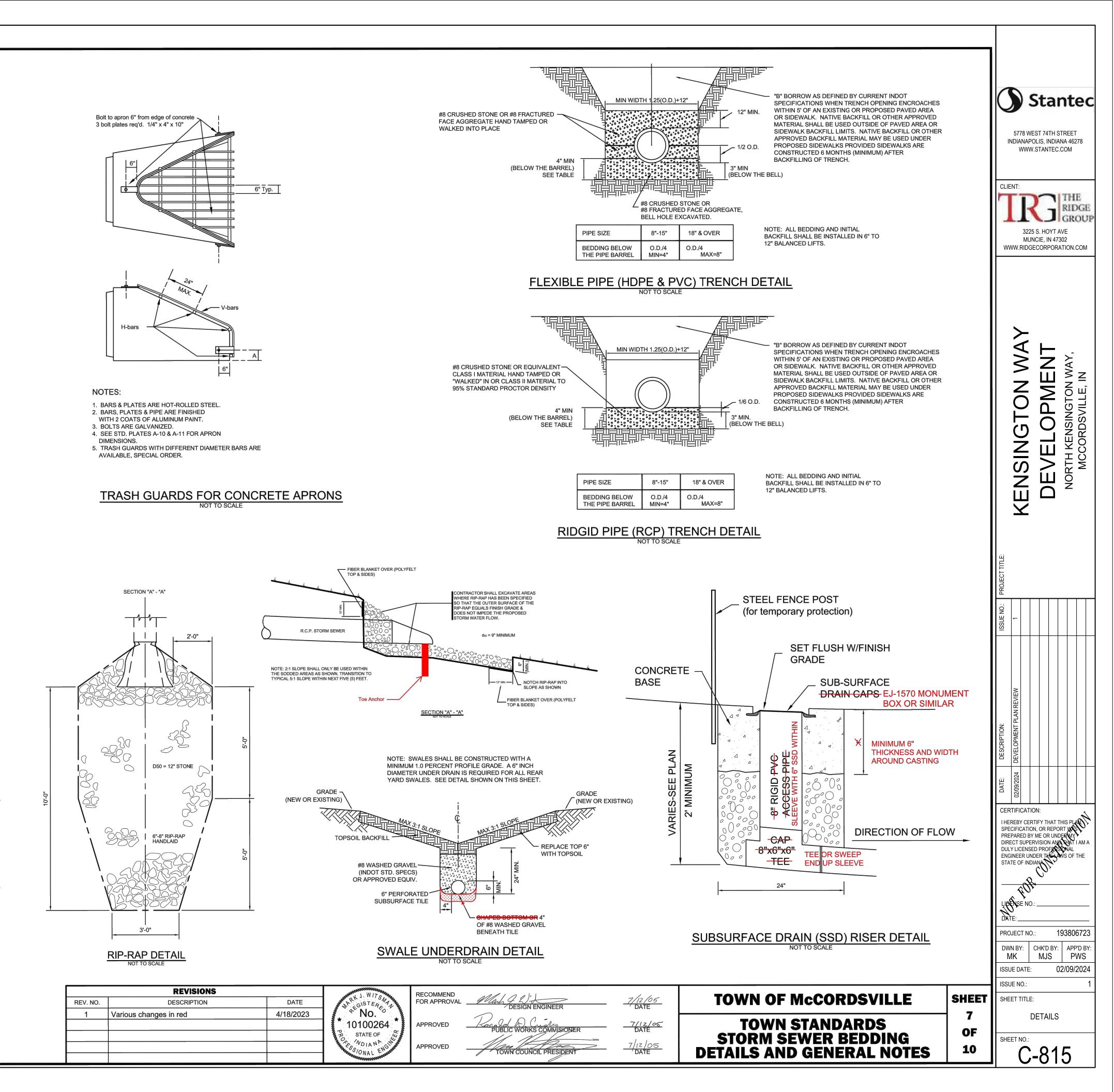






4등" (GROOVE-OUTLET END) (TONGUE-INLET END) SECTION A-A

PRECAST CONCRETE END SECTION DETAIL



GENERAL NOTES

- 1.) Sanitary sewer pipe of other material not meeting Town of McCordsville Standards shall require the prior written approval of the Town Engineer.
- 2.) The Contractor shall submit information to the Town Engineer showing conformance with these
- specifications upon request. 3.) Forty-eight (48) hours notice shall be given to the Town Engineer prior to the start of sewer
- construction and prior to any testing
- 4.) The contractor shall be responsible for verifying that all state highways, city, and county permits have been obtained by the developer prior to start of construction.
- 5.) Backfill around all structures and all cuts under paved areas with B-barrow as defined by current INDOT specifications. Trenches opening within 5-feet of paved roadways shall be backfilled with B-barrow as defined by current INDOT specifications. Backfill under sidewalks shall be B-barrow; unless the walks are constructed a minimum of 6 months after backfill has been in place. The Town of McCordsville may require an analysis of the B-barrow to confirm its compliance with INDOT specifications at the contractor's expense.
- 6.) Water and sewer line crossings and separations shall be in accordance with 327 IAC 3-6-9. 7.) Trench shall be opened sufficiently ahead of pipe laying to reveal obstruction, and shall be properly protected and/or barricaded when left unattended
- 8.) No water shall be permitted to flow into the sanitary sewer system during construction. The contractor shall utilize a pump to keep the water level below the pipe. Pump discharge shall be directed to a storm outlet in accordance with local, state and federal laws and regulations. Any pipe entering existing sewers shall be plugged with screw type mechanical, braced plug and tied in place until such time as all tests on the sewers have been completed and the lines have passed all punch lists.
- 9.) The contractor shall use a laser and target wherever possible to insure proper construction at the planned grade. 10.) The contractor shall provide measurements of the slope of the sewer for each manhole section as
- construction progresses. Such measurements shall be certified by a registered land surveyor or engineer and be available on-site for observation by the Town Engineer. No more than three manhole sections can be constructed in advance of such measurements
- 11.) The contractor shall be required to furnish the developer's engineer with a set of prints, marked in red pencil, showing actual sewer location and invert, to include lateral location, depth and length. Such asbuilt prints must be received by the developer's engineer before the final contract payment can be authorized. The sanitary sewer laterals and stubs termination shall be indicated on the surface with a 2"x4" wood board or other appropriate marker set immediately above the said termination point.
- 12.) Record drawings shall be provided to the Town Engineer for review and approval. Once approved, two copies and electronic images of the approved record drawings will be provided. The electronic images will be in an acceptable format approved by the Town Engineer. A site plan in state plane coordinates compatible with the Hancock County GIS system will also be provided with the electronic files showing the property lines, easements, streets and right-of-ways and as-built locations of the sanitary sewer, storm sewer and water lines.

SANITARY SEWER PIPE

- 1.) Sanitary sewer pipe between 6 and 15 inches in diameter shall be SDR 35 PVC in accordance with ASTM D3034 and ASTM 2321. Sanitary sewer pipe buried 15 feet or greater shall be SDR 26 PVC in accordance with ASTM D3034. PVC pipe shall have grooved bell and gasket. The pipe shall be made of PVC plastic in accordance with ASTM D1784.
- 2.) Sanitary sewer pipe greater than 15 inches in diameter shall be either:
- a. PVC SDR 35 in accordance with ASTM D3034 and ASTM 2321. PVC pipe shall have grooved bell and gasket. The pipe shall be made of PVC plastic as defined in ASTM D1784. Sanitary sewer pipe buried 15 feet or greater shall be SDR 26 PVC in accordance with ASTM D3034.
- b. Profile sewer in accordance with ASTM F949. The pipe and fittings shall have a minimum cell classification of 12454 in accordance with ASTM D1784. The joints shall be push-on bell and spigot type using elastomeric ring gaskets conforming to ASTM D3212 and ASTM F477. The pipe shall have a minimum stiffness of 46 PSI when measured in accordance with ASTM D2412. Profile sewer pipe is not permitted at depths 15 feet or greater.
- 3.) PVC sewer fittings shall be SDR 26 in accordance with ASTM D3034. Fittings in sizes through 8-inches shall be molded in one piece with elastomeric joints and minimum socket depths as specified in sections 6.2 and 7.3.2. Fittings 10-inches and larger shall be molded or fabricated in accordance with section 7.11 with manufacturers standard pipe bells and gaskets. Gaskets for elastomeric joints shall be molded with a minimum cross-sectional area of 0.20 square inches and conform to ASTM F-477 specification.
- 4.) The minimum slope for sewer acceptance by the Town of McCordsville are:

Size of pipe	Minimum constructed sl
8-inch	0.40%
10-inch	0.28%
12-inch	0.22%
15-inch	0.15%
18-inch	0.12%
21-inch	0.10%
24-inch	0.08%

In the event the contractor does not meet the minimum slopes, the sewer section and any other affected sewer sections shall be reconstructed to meet such minimum slopes.

SANITARY SEWER LATERALS OUTSIDE OF THE RIGHT OF WAY/EASEMENT

- 1.) Only approved contractors may install sewer laterals. Contractors must provide proof of liability insurance and a reference list for consideration to be added to the approved list.
- 2.) If working within an existing right-of-way, the contractor must obtain a right-of-way permit from the appropriate local jurisdiction.
- 3.) Contractors are responsible for obtaining all appropriate permits prior to construction. No deviations from the approved plot plan are permitted unless instructed by the Office of Public Works. Immediately notify the office of Public Works of any conflicts or discrepancies noted on the approved plot plan. It is the sole responsibility of the owner to ensure all contractors and subcontractors comply with the approved plot plan. A copy of the approved plot plan is to be provided to the Inspector at the time of inspection.
- 4.) The portion of the lateral installed from the right-of-way/easement to the building shall be inspected by the Office of Public Works prior to being backfilled.
- 5.) Lateral inspections shall be scheduled forty-eight (48) hours in advance with the Office of Public Works.
- 6.) A 6" diameter pipe Type I clean out shall be installed 3' away from building. A threaded plug shall be used to ensure the pipe is 100% watertight. For laterals greater than 100 LF as measured along the pipe, clean outs shall be installed at the right-of-way or property line or at 100 feet increments to provide access every 100 feet.
- 7.) Clean outs are not to be installed in sidewalks, driveways, or any other paved or unpaved traffic areas or pedestrian paths.
- 8.) All clean outs except within 3 feet of the building are to be Type II cleanouts.
- 9.) The connection of the building plumbing to the lateral shall be made with a fernco coupling within three (3) feet of the building before the cleanout except when the building has a basement. If the connection is made at the basement and there is not an adjacent slab or craw space, then a glued joint connection shall be made.
- 10.) The connection point shall not be made under porches or foundations.
- 11.) The fernco coupling shall be sealed watertight using steel band clamps. The piping on either side of the connection point shall be aligned and have no offsets or angles.

- material.

- TESTING

>15 feet 90 seconds For manholes five (5) feet in diameter, add an additional fifteen (15) seconds and for manholes six (6) feet in diameter, add an additional thirty (30) seconds to the time requirements for four (4) foot diameter manholes. d. If manhole joint sealants are pulled out during the vacuum test, the manhole must be disassembled and the joint sealants replaced. e. Manholes will be subject to visual inspection with all visual leaks being repaired. 2.) All sanitary sewer lines upon completion will be required to pass a low pressure air test. The test shall be conducted according to ASTM 1417-92, and witnessed by a representative of the Town of McCordsville. The testing shall be in accordance with Table 1. Add 0.5 psig for each foot of water above the sewer line being tested.

1.) All new commercial of industrial entities, which either generate and/or waste oil, grease or their by-products, shall construct a 1,000 gallon (minimum) grease trap. The design engineer shall submit detailed calculations for size justification of the trap. Calculations shall be accompanied with references, specifically denoted origin of sizing calculation method.

SANITARY SEWER LATERALS - GENERAL NOTES

1.) Laterals are to be constructed to the right-of-way/easement line and plugged tight with a braced plastic disc or cap capable of withstanding a low pressure air test without leakage. Only after the sanitary sewer has been tested and accepted by the Town Engineer is further installation of the laterals outside

the right-of-way/easement permitted 2.) Normal lateral slope is 1/4" per foot. Minimum lateral slope is 1/8" per foot. Any areas found not to comply with the minimum slope shall be removed and reinstalled

3.) Lateral pipe shall be a minimum of 6" diameter and shall be SDR 35 PVC in accordance with ASTM D3034 and ASTM 2321. Laterals with any portion buried 15 feet or greater shall be SDR 26 PVC in accordance with ASTM D3034 to the terminus point either the right-of-way or easement line. PVC pipe shall have grooved bell and gasket. The pipe shall be made of PVC plastic conforming to ASTM D1784. Size and conformance shall be clearly labeled on pipe for inspection.

4.) All PVC sewer fittings shall be SDR 26 in accordance with ASTM D3034. Fittings shall be molded in one piece with elastomeric joints and minimum socket depths as specified in sections 6.2 and 7.3.2. Gaskets for elastomeric joints shall be molded with a minimum cross-sectional area of 0.20 square inches and conform to ASTM F-477 specification.

5.) All sewer laterals shall be bedded the same as the main line sewer. A minimum D/4 or 6-inches of compacted #8 stone under the pipe, 6-inches on either side of the pipe, and 12" above the pipe are required.

6.) Laterals are not to be installed under driveways.

7.) Full depth granular backfill is required for the lateral trench in areas within five (5) feet of drive ways, sidewalks or other traffic areas.

8.) Laterals are to be traced along the top of the pipe with a minimum size of 14 gauge wire from the wye to the clean out within three (3) feet of the building and extended above grade. The contractor will install the tracer wire utilizing a method does not require any splices in the tracer wire. The tracer wire will be mounted to the top of the pipe in at least three locations along each stick of pipe. Any splices that become necessary during construction will be sealed water tight.

9.) Laterals will be separated from water mains and water service lines by ten (10) feet when measured horizontally from the outside edge of the lateral to the outside edge of any existing or proposed water mains or water service lines except when crossing water mains or water service lines which shall be separated by eighteen (18) inches when measured vertically. Crossings must be at a minimum angle of 45 degrees.

SANITARY MANHOLES AND CASTINGS

1.) All sanitary manholes shall be precast concrete manholes in accordance with ASTM C-478 and section 720. O-rings shall conform to C-443. Kent seal or approved equal shall also be applied to all joints and between riser rings and castings. Manhole step spacing shall be no more than 16-inches. 2.) The casting elevations are set by plan. However, the castings are to be adjusted in the field by the Town's representative should a discrepancy occur between plan grade and existing grade. A new manhole ring and cover shall be installed to establish grade. Maximum height of adjusting rings from the top of the cone to the bottom of the casting shall be 12-inches.

3.) Butyl rubber coating shall be applied around each manhole joint from 6-inches above to 6-inches below each joint. The appropriate primer shall be applied prior to applying the double row of kent seal. Each manhole joint will then be wrapped four times with minimum 15 inch wide 80 gage (0.8 mil) polyethylene plastic stretch wrap. Inside joints to be filled with non-shrink grout or precoat plug

4.) The manhole chimneys, including all riser rings shall be sealed the same as the manhole joints. The butyl rubber and plastic stretch wrap shall extend over the flange of the casting.

5.) Manhole castings shall be East Jordan casting 1022-2 or approved equal with a heavy duty self-sealing lid stamped "SANITARY SEWER." Waterproof castings shall be East Jordan casting 1022-2 WT with a heavy duty lid stamped "SANITARY SEWER" or approved equal.

1.) Manholes shall be air tested for leakage in accordance with ASTM C1244-93, standard test method for concrete sewer manholes by the negative air pressure (vacuum) test.

a. Installation and operation of vacuum equipment and indicating devices must be in accordance with manufacturer's recommendations and performance specifications which have been provided by the manufacturer and accepted by the engineer.

b. With the vacuum tester set in place:

1. Using a plate testing device, connect the vacuum pump to the outlet port with the valve

2. Draw a vacuum of ten (10) inches of hg. And close the valve.

c. Accepted standards for leakage will be established from the elapsed time for a negative pressure change from ten (10) inches to nine (9) inches of mercury. The maximum allowable leakage rate for a four (4) foot diameter manhole must be in accordance with the following: Minimum elapsed time for a manhole depth pressure change of 1 inch hg

iapseu unie ior a mannoie	s depiti pressur
10 feet or less	60 seconds
>10 feet but <15 feet	75 seconds

3.) Deflection tests shall be performed on all flexible* pipe after the final backfill has been in place at least 30 days. No pipe shall exceed a vertical deflection of 5% deflection test results. (*the following are considered non-flexible pipes: concrete pipe, ductile iron pipe, and cast iron pipe). The deflection test shall be performed with a nine-point mandrel. Proving rings shall be available.

4.) All sanitary sewer lines upon completion and six months prior to the expiration of the maintenance bond will be televised. The sanitary sewer lines will also be cleaned if necessary in the judgment of the Town's representative after observing the televising tapes.

5.) All testing shall be observed by a representative of the Town of McCordsville.

OIL/GREASE TRAP REQUIREMENTS

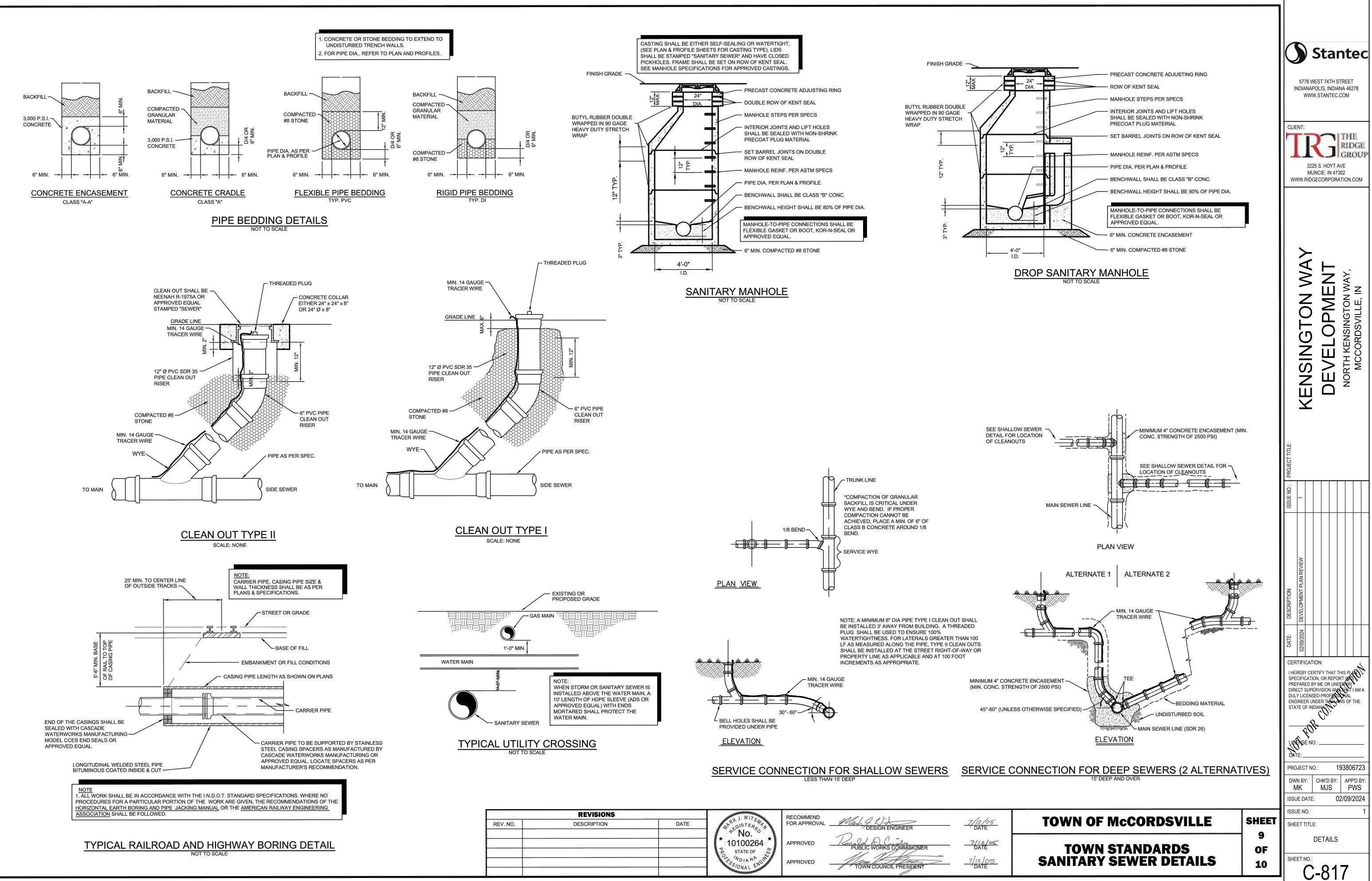
2.) Toilets, urinals and other similar fixtures shall not waste through the grease interceptor. All other waste shall enter through the grease interceptor, through the inlet pipe only.

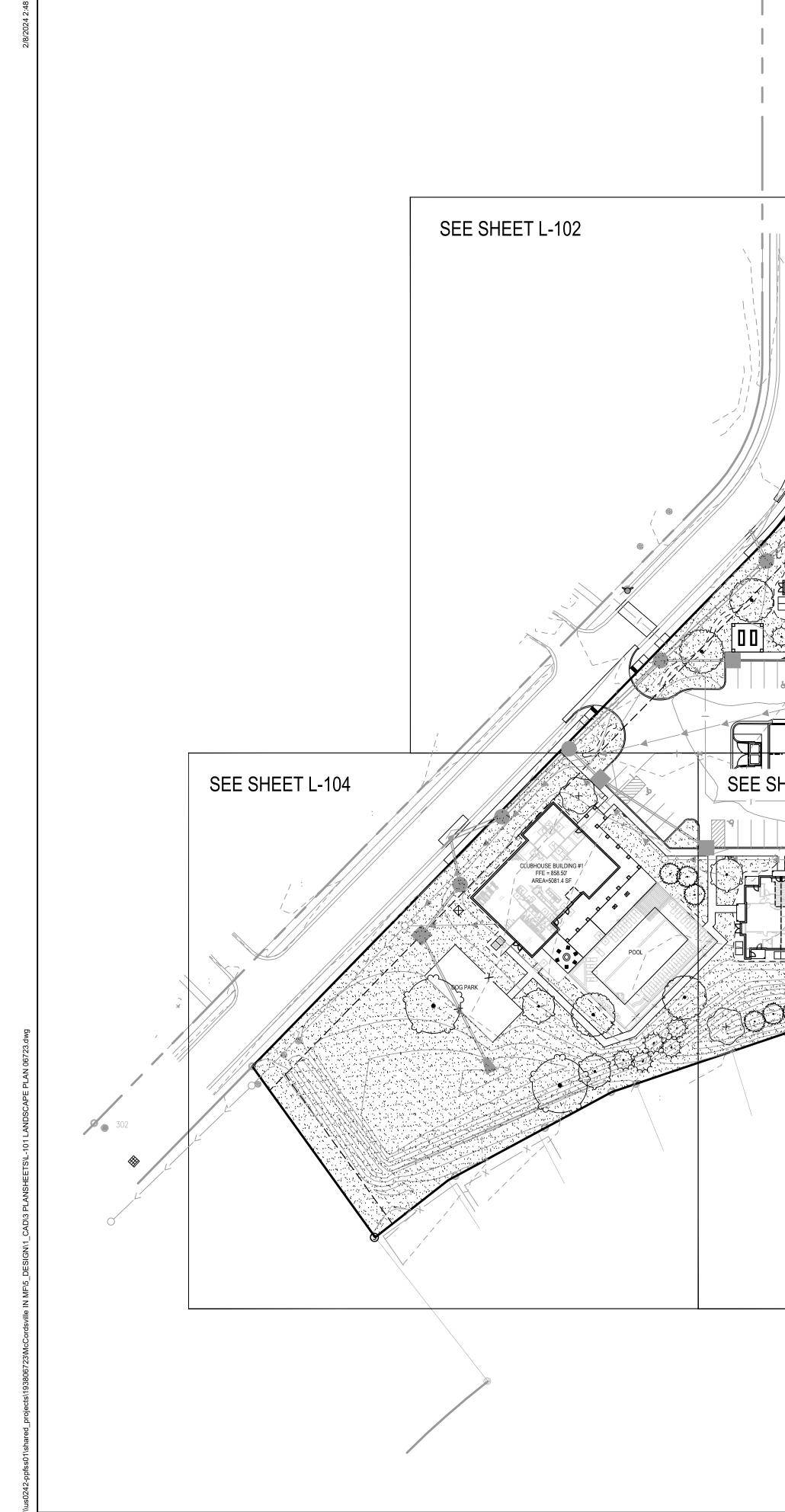
3.) The grease interceptor and grease trap shall be sized such that it is easily accessible at all times for inspection/sampling and cleaning. The grease trap shall have a minimum of two (2) compartments

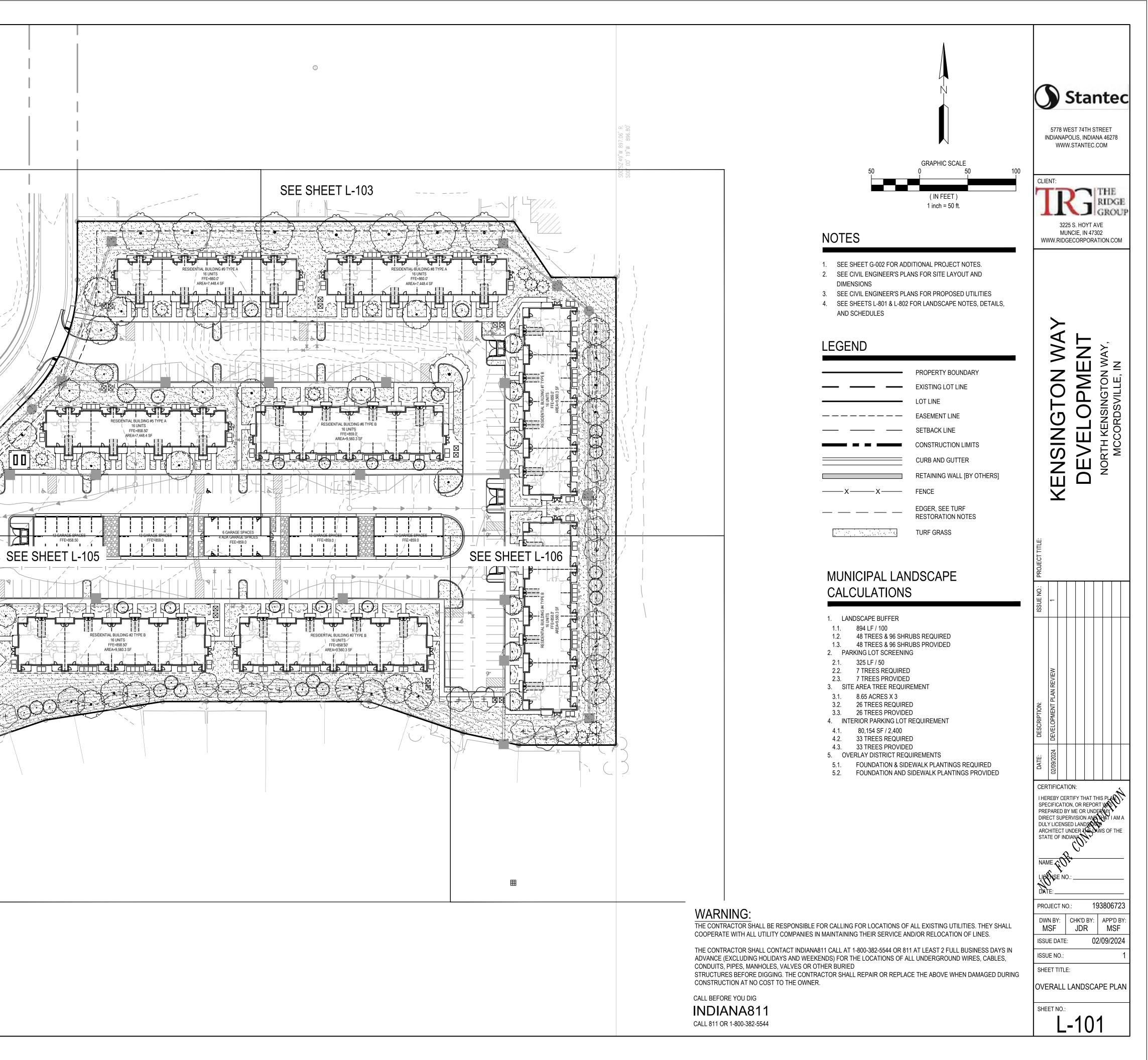
with fittings designed for grease interception. 4.) The oil/ grease trap shall be located outside the building and at a distance far enough to allow soluble grease/oil to become insoluble.

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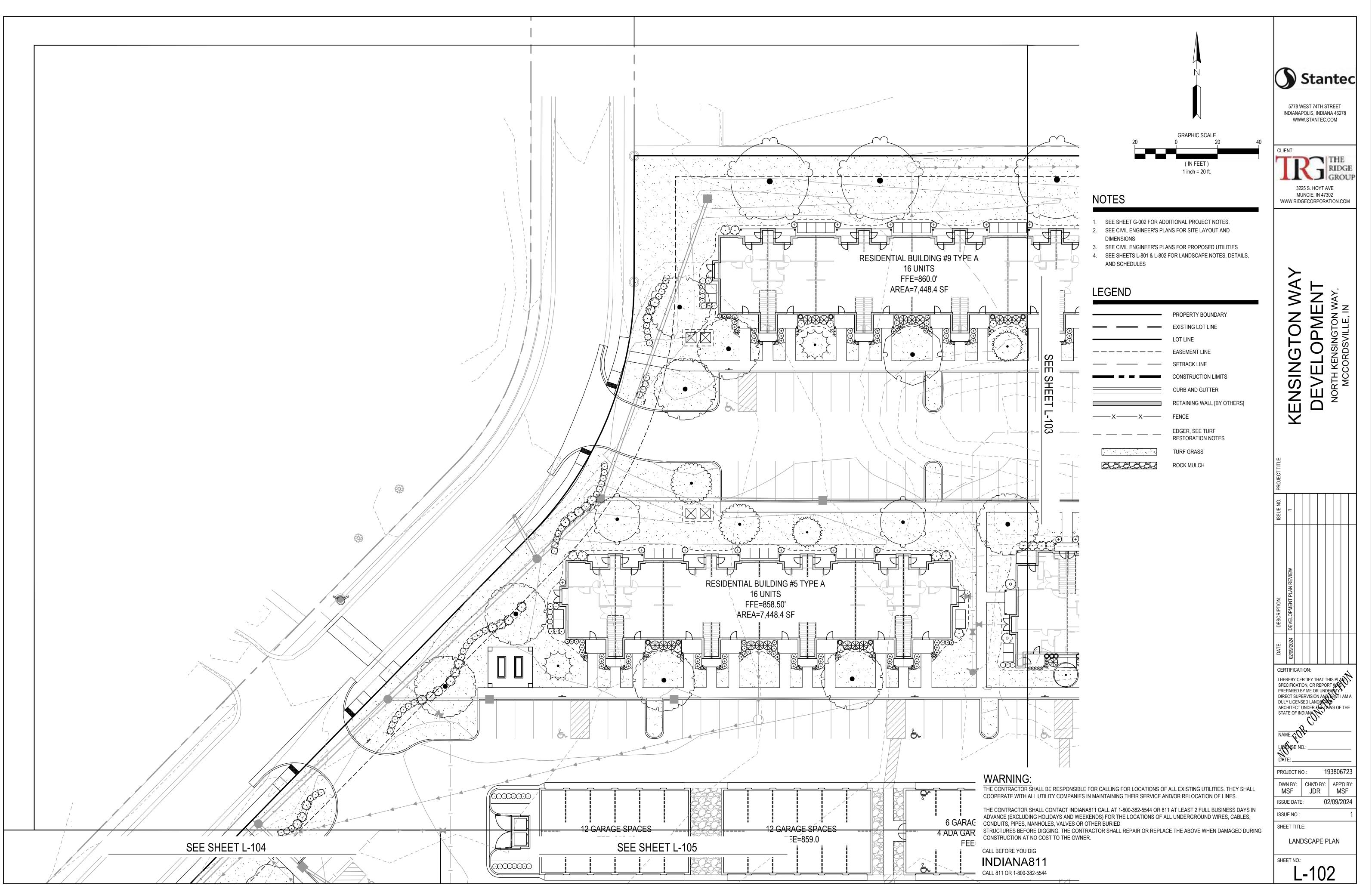
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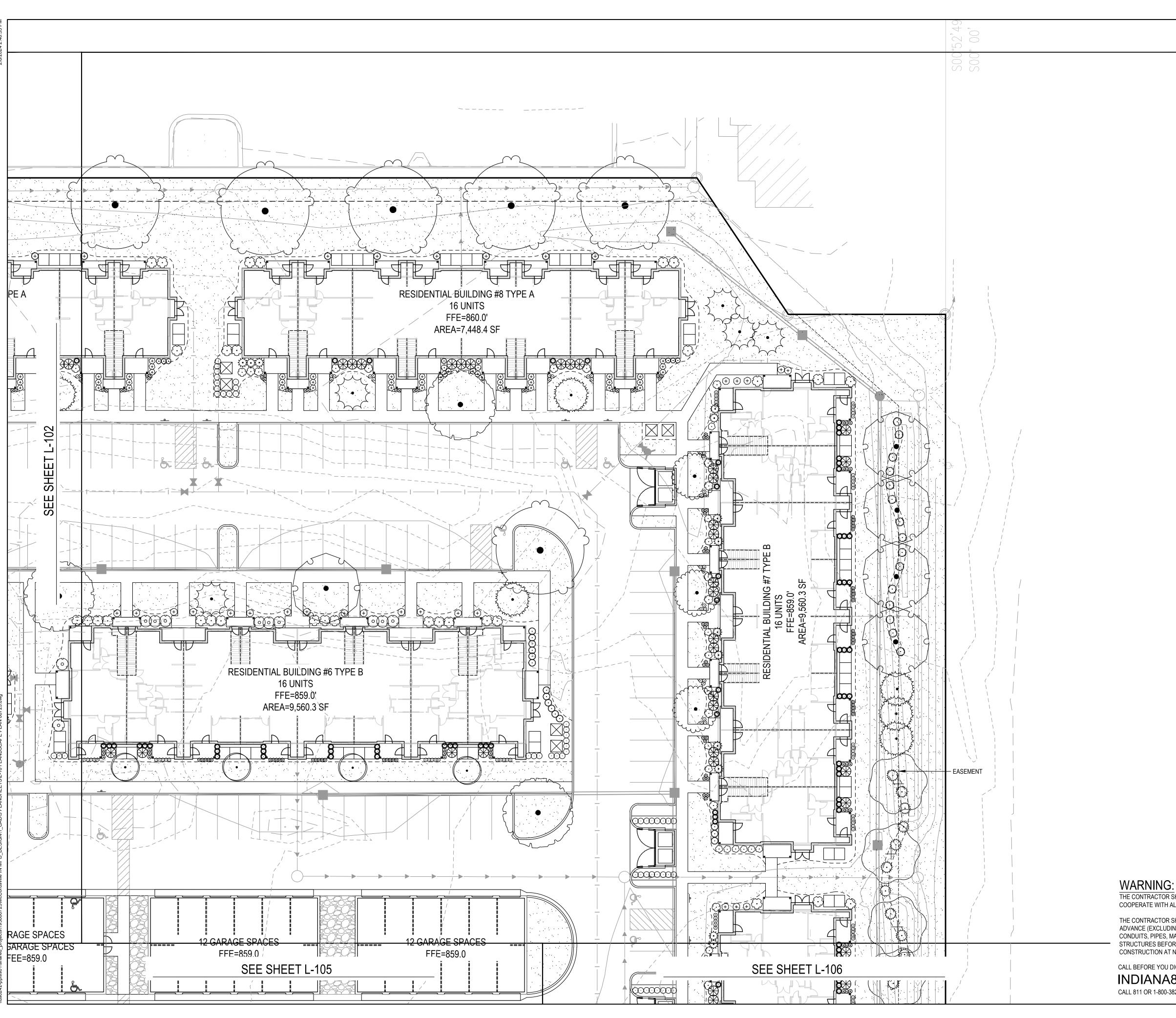


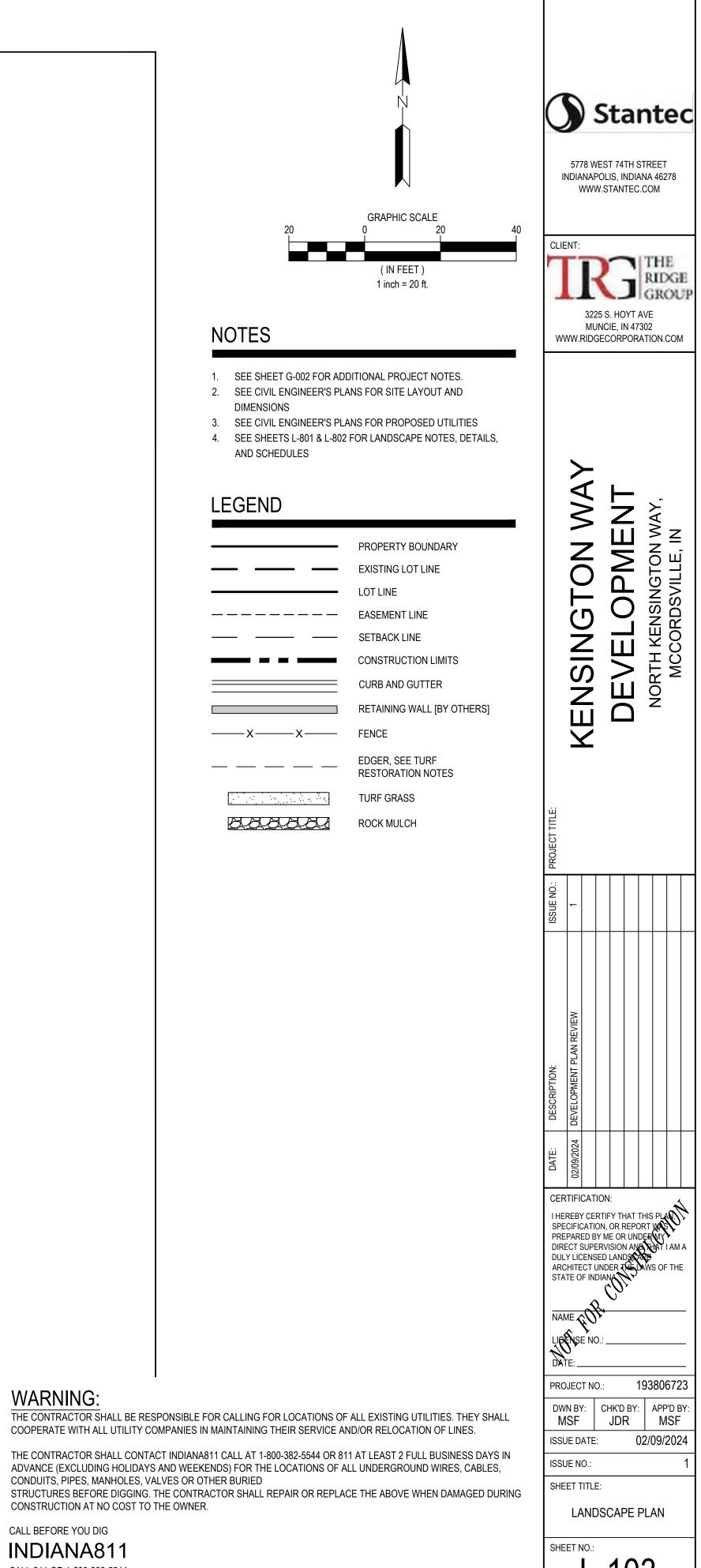






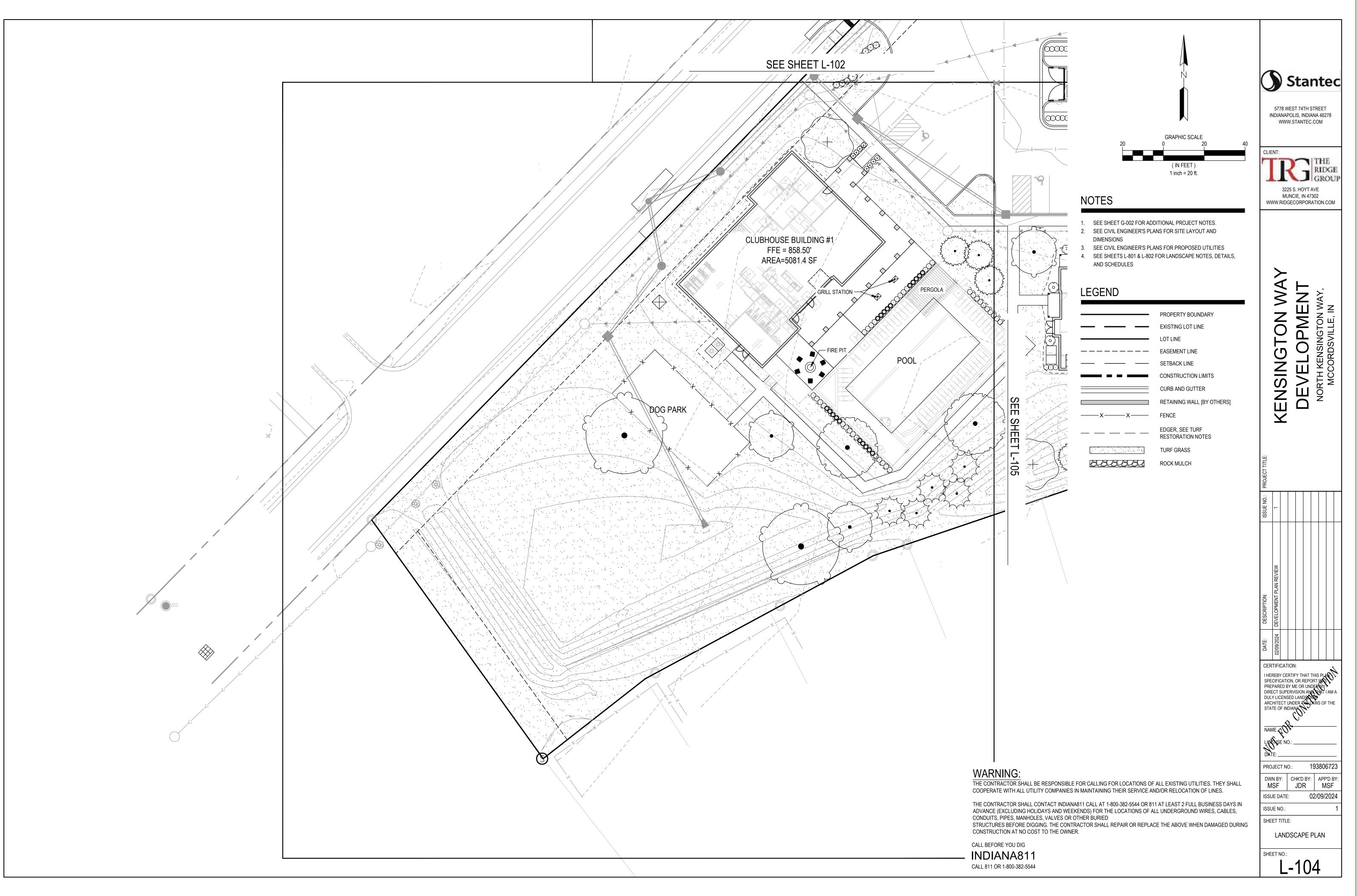


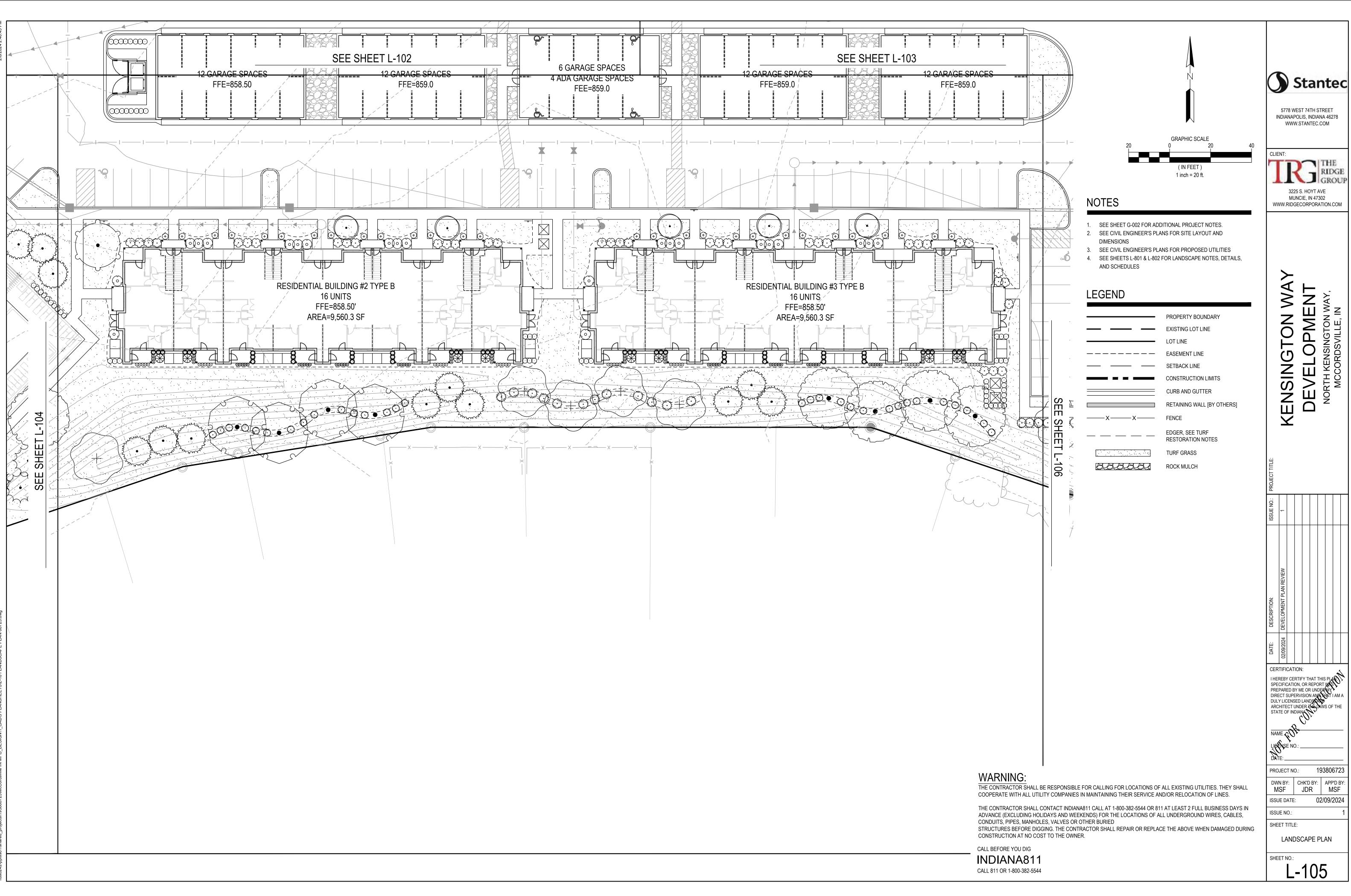


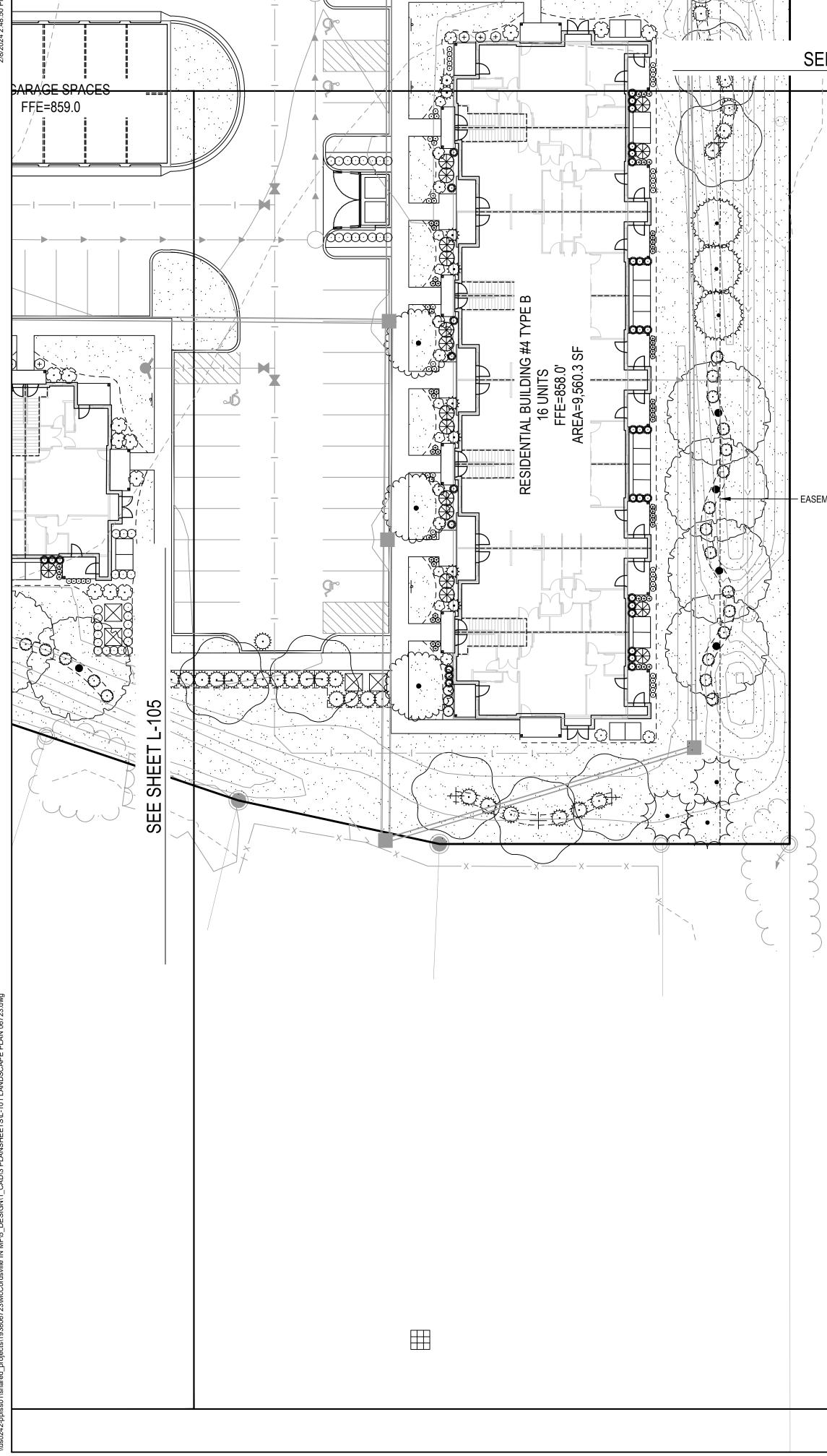


CALL 811 OR 1-800-382-5544

L-103

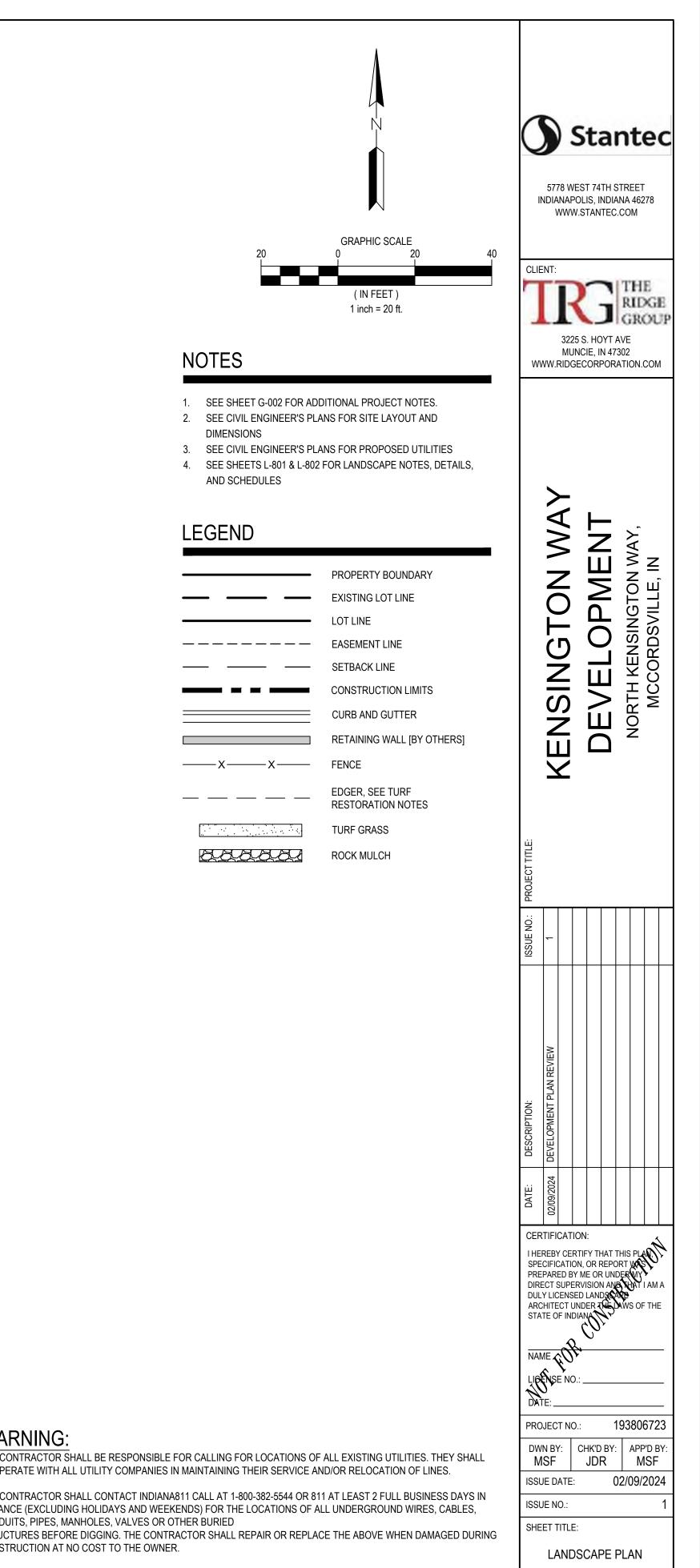






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	WARNING:
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	CALL BEFORE YOU DIG INDIANA8 CALL 811 OR 1-800-382



SHEET NO .:

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CALL BEFORE YOU DIG
INDIANA811
CALL 811 OR 1-800-382-5544

SYMBOL	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT	CAL
VERGREE	N TREES	<u> </u>				
John Contraction	PD	22	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	B&B	6` HT
	PC	15	PINUS CEMBRA	SWISS STONE PINE	B&B	6` HT
OVERSTOR	Y TREES	<u> </u>				-1
< • }	AS	20	ACER X FREEMANII 'SIENNA'	SIENNA GLEN® MAPLE	B&B	2.5"
+	АН	15	ALNUS HIRSUTA 'HARBIN'	PRAIRIE HORIZON® MANCHURIAN ALDER	B&B	2.5"
	CO2	10	CELTIS OCCIDENTALIS	COMMON HACKBERRY	B&B	2.5"
	GI	10	GLEDITSIA TRIACANTHOS INERMIS 'HARVE'	NORTHERN ACCLAIM® HONEY LOCUST	B&B	2.5"
	GD	5	GYMNOCLADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	B&B	2.5"
JNDERSTO	RY TREE	S			1	
	CN	8	CERCIS CANADENSIS 'NORTHERN STRAIN'	NORTHERN STRAIN EASTERN REDBUD	B&B	1.5"
$\overbrace{\hspace{1.5cm}}^{\hspace{1.5cm}}$	MP	9	MALUS X 'PRAIRIE ROSE'	PRAIRIE ROSE CRABAPPLE	B&B	1.5"
SYMBOL	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT	
SHRUBS					1	
\bigcirc	CR	73	CORNUS ALBA 'REGNZAM'	RED GNOME™ TATARIAN DOGWOOD	3 GAL	
	DL	18	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE	3 GAL	
	JF	69	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL	
$\left(\cdot \right)$	SM2	33	SPIRAEA X BUMALDA 'GOLDMOUND'	GOLD MOUND SPIREA	3 GAL	
	SC	6	SYRINGA X 'SMNJRPU'	BLOOMERANG® DWARF PURPLE LILAC	3 GAL	
	тт	75	TAXUS X MEDIA 'TAUNTONII'	TAUNTON'S YEW	3 GAL	
	тв	152	THUJA OCCIDENTALIS 'BAIL JOHN'	TECHNITO® ARBORVITAE	5 GAL	
\square	TT2	71	THUJA OCCIDENTALIS 'TECHNY GLOBE'	TECHNY GLOBE ARBORVITAE	3 GAL	
<u> </u>	VB					
	VD	60	VIBURNUM TRILOBUM 'BAILEY COMPACT'	BAILEY'S COMPACT CRANBERRYBUSH	5 GAL	
DRNAMENT					4.041	
Willing Common and Com	СО	170	CALAMAGROSTIS X ACUTIFLORA 'OVERDAM'	OVERDAM FEATHER REED GRASS	1 GAL	
۲۰۰۲ ۲۰۲۲	MP2	19	MISCANTHUS X 'PURPURASCENS'	PURPLE FLAME GRASS	1 GAL	
₹• }	SS2	21	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	STANDING OVATION LITTLE BLUESTEM	1 GAL	
•	НО	185	HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL	
(+) 	HC	211	HEUCHERA X 'PALACE PURPLE'	PALACE PURPLE CORAL BELLS	1 GAL	
	HE	33	HOSTA X 'EMPRESS WU'	EMPRESS WU HOSTA	1 GAL	
(+)	HG	51	HOSTA X 'GUACAMOLE'	GUACAMOLE HOSTA	1 GAL	
{(+)}	MS2	18	MATTEUCCIA STRUTHIOPTERIS	OSTRICH FERN	1 GAL	
(+)	NW	113	NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	1 GAL	
(+)	NW	113	NEPETA X FAASSENII 'WALKER'S LOW' PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE'	WALKER'S LOW CATMINT	1 GAL	_

INSPECTION AND ACCEPTANCE

- LANDSCAPE WORK WILL BE INSPECTED FOR ACCEPTANCE IN PARTS AGREEABLE TO THE OWNER, PROVIDED WORK OFFERED FOR INSPECTION IS COMPLETE, INCLUDING MAINTENANCE, FOR THE PORTION IN QUESTION.
- AT THE CONCLUSION OF THE ESTABLISHMENT PERIOD, WHICH WILL BE ONE YEAR FOLLOWING INITIAL 2. INSTALLATION A FINAL INSPECTION OF PLANTING WILL BE MADE TO DETERMINE THE CONDITIONS OF AREAS SPECIFIED FOR LANDSCAPING.
- WHEN INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY OWNER AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS FROM SITE.

PLANTING NOTES

- UPON APPROVAL OF STAKING LOCATIONS CONTRACTOR SHALL EXCAVATE PLANTING HOLES CENTERED AT STAKED LOCATIONS.
- DIG HOLES AS DETAILED AND TO A DIAMETER A MINIMUM OF TWO TIMES THE DIAMETER OF THE ROOT 2. BALL OR CONTAINER.
- REMOVE STICKS, RUBBISH, FOREIGN MATERIALS AND UNDESIRABLE PLANTS AND THEIR ROOTS. REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSIONS.
- SET BALLED AND BURLAPPED (B&B) STOCK ON LAYER OF COMPACTED PLANTING SOIL MIXTURE, PLUMB AND IN CENTER OF PIT OR TRENCH WITH TOP OF ALL AT SAME ELEVATION AS ADJACENT FINISHED
- LANDSCAPE GRADES. ROOT FLARE OF THE TREE MUST BE ABOVE FINISHED GRADE.
- CUT ALL CORDS AND TWIN AND REMOVE WIRE BASKET AND BURLAP FROM TOP AND SIDES OF BALLS: RETAIN BURLAP ON BOTTOMS.
- WHEN SET, PLACE ADDITIONAL PLANTING SOIL BACKFILL AROUND BASE AND SIDES OF BALL, AND WORK
- EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN EXCAVATION IS APPROXIMATELY 2/3 FULL. WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL
- REPEAT WATERING UNTIL NO MORE IS ABSORBED. WATER AGAIN AFTER PLACING FINAL LAYER OF 9.
- BACKFILL FOR CONTAINER GROWN STOCK, SAME AS FOR BALLED AND BURLAPPED STOCK, EXCEPT CUT 10. CONTAINERS ON SIDES INTO QUARTERS WITH SHEAR. REMOVE CONTAINER BEFORE SETTING PLANT SO AS NOT TO DAMAGE ROOT BALLS.
- 11. WATER EACH PLANT WITHIN 2 HOURS OF PLANTING.
- ALL PLANTINGS TO BE MULCHED UNLESS OTHERWISE NOTED ON THE PLAN. 12.
- 13. PLACE 3-INCH THICKNESS OF MULCH AROUND TREES AND SHRUBS WITHIN A PERIOD OF 48 HOURS AFTER THE SECOND WATERING. DO NOT PLACE MULCH IN DIRECT CONTACT WITH TRUNKS OR STEMS.
- 14. PLACE 3-INCH THICKNESS LOCALLY AVAILABLE DOUBLE SHRED HARD WOOD MULCH AROUND ALL TREES OUTSIDE OF PLANT BEDS.
- UNLESS OTHERWISE NOTED / INDICATED, ALL PLANT BEDS AND FOUNDATION MAINTENANCE STRIPS SHALL RECEIVE LOCALLY AVAILABLE 3" DEPTH OF 3/4" LIMESTONE ROCK MULCH OVER WEED BARRIER FABRIC. SUBMIT MULCH SAMPLE FOR OWNER APPROVAL

MAINTENANCE NOTES

- 1. WHEN INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY OWNER AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS FROM SITE.
- BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING. MAINTAIN TREES AND BUSHES INCLUDING WATERING FOR ONE YEAR AFTER ACCEPTANCE BY OWNER.
- IT IS CONTRACTORS RESPONSIBILITY FOR COORDINATE WATERING. TRIM. PRUNE, REMOVE CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREAT PRUNED AREAS AND OTHER WOUNDS.
- IT IS THE CONTRACTOR'S OPTION WHETHER OR NOT TO STAKE TREES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN AN UPRIGHT POSITION THROUGHOUT THE ONE-YEAR GUARANTEE PERIOD.

GUARANTEE AND REPLACEMENTS

- PLANT MATERIAL SHALL BE GUARANTEED FOR TWO FULL YEARS AFTER OWNER ACCEPTANCE AND SHALL BE ALIVE AND IN SATISFACTORY CONDITION AT THE END OF THE GUARANTEE PERIOD. SUCH GUARANTEE EXCLUDES VANDALISM.
- 2. AT THE END OF THE TWO-YEAR GUARANTEE PERIOD, INSPECTION WILL BE MADE BY THE OWNER UPON WRITTEN NOTICE BY THE CONTRACTOR AT LEAST FIVE DAYS BEFORE THE ANTICIPATED DATE. ANY PLANT MATERIAL REQUIRED UNDER THE CONTRACT THAT IS DEAD OR NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE OWNER, SHALL BE REMOVED FROM THE SITE, AND SHALL BE REPLACED AS SOON AS CONDITIONS PERMIT DURING THE NORMAL PLANTING SEASONS.
- THE OPINION OF THE OWNER SHALL GOVERN IN ANY AND ALL DISPUTES BY THE CONTRACTOR REGARDING THE CONDITION AND DISPOSITION OF UNSATISFACTORY MAINTENANCE PROCEDURES OR REJECTED PLANTS.
- ALL REPLACEMENTS SHALL BE PLANT MATERIAL OF THE SAME KIND AND SIZE AS SPECIFIED IN THE 4 PLANT LIST. REPLACEMENT COSTS SHALL BE BORNE BY THE CONTRACTOR.
- REPLACEMENT PLANTINGS REQUIRED AT THE END OF THE GUARANTEE PERIOD ARE NOT TO BE GUARANTEED. THE PLANT MATERIAL IS SUBJECT TO INSPECTION AND REJECTION BY THE OWNER BEFORE AND AFTER PLANTING.

LANDSCAPE NOTES

- TREES AND SHRUBS SHALL BE PROVIDED IN THE QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY AS CHOSEN BY THE OWNER/OWNER AS LISTED ON THE PLANT SCHEDULE ON L-801.
- TREES AND SHRUBS SHALL BE HEALTHY, VIGOROUS STOCK, GROWN IN RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS.
- OWNER RETAINS THE RIGHT TO INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF BALLS AND 3 ROOT SYSTEMS, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK.
- NURSERY STOCK SHALL BE DELIVERED DIRECTLY FROM NURSERY. HEEL IN IMMEDIATELY UPON 4 DELIVERY IF NOT TO BE PLANTED WITHIN FOUR HOURS, COVERING WITH MOIST SOIL OR MULCH TO PROTECT FROM DRYING. STORE PLANTS IN SHADE AND PROTECT FROM WEATHER.
- PROTECTION FROM EXTREMES IN EXPOSURE AND ROUGH HANDLING SHALL BE PROVIDED FOR ALL PLANT MATERIALS DURING TRANSPORT AND STORAGE.
- THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO PLANTING SO THAT A MUTUALLY AGREEABLE TIME MAY BE ARRANGED FOR INSPECTION. LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS WITH STAKES CENTERED AT PROPOSED PLANTING 7
- LOCATIONS FOR APPROVAL BY OWNER.
- DO NOT START PLANTING WORK UNTIL LAYOUT IS APPROVED BY THE OWNER. TO ENSURE PROPER INFILTRATION THE LANDSCAPE CONTRACTOR MUST PROVE THE OPEN SUB-GRADE OF ALL PLANTING AREAS AFTER THEIR EXCAVATION IS COMPACTED LESS THAN 200 PSI. THE OWNER OR OWNER'S REPRESENTATIVE MUST BE ONSITE DURING COMPACTION TESTING.
- ALL GRADED AREAS OF THE SITE THAT ARE DESIGNATED FOR SHRUBS, TREES AND PERENNIALS SHALL 10 HAVE NO LESS THAN 12" OF IMPORTED TOPSOIL CONFORMING TO INDOT SPEC 914.01.

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- CONSTRUCTION DOCUMENTS.

PROTECTION OF EXISTING CONDITIONS

TURF RESTORATION NOTES

EDGE RESTRAINT BETWEEN PLANTING BEDS AND TURF SHALL BE SURE-LOC STEEL EDGING OR

- APPROVED EQUAL, 3/16" X 4" X16'. THE ESTABLISHMENT PERIOD FOR SEED AND SOD SHALL BEGIN IMMEDIATELY AFTER INSTALLATION, WITH THE APPROVAL OF THE OWNER, AND CONTINUE UNTIL THE DATE THAT THE OWNER PERFORMS A FINAL INSPECTION.
- SOD SHALL CONFORM TO INDOT SPECIFICATIONS FOR MINERAL SOD.
- FERTILIZER SHALL CONFORM TO INDOT SPECIFICATIONS.
- FERTILIZER SHALL HAVE A FORMULA (N-P-K) AS DETERMINED BY THE RESULTS OF A SOIL TEST. CONTRACTOR TO CONDUCT SOIL TEST AND PROVIDE RESULTS ALONG WITH RECOMMENDED FERTILIZER FORMULA TO OWNER FOR REVIEW AND APPROVAL PRIOR TO APPLICATION. TOPSOIL SHALL BE CONFORM TO INDOT SPEC 914.01. 6" OF TOP SOIL SHALL BE PLACED IN ALL SEED AND
- SOD AREAS. SEE LANDSCAPE NOTES FOR PLANTING AREAS. INSTALLATION OF SEED AND SOD SHALL OCCUR WITHIN ONE (1) WEEK OF COMPLETING THE GRADING.
- PLACE ALL SOD STRIPS WITH LONG EDGES PARALLEL TO THE CONTOURS. STAGGER ALL JOINTS ALTERNATELY WITHOUT SPACE BETWEEN. SECURE THE SOD TO SLOPES WITH BIODEGRADABLE ANCHOR SYSTEMS.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR WATER DURING THE PLANTING ESTABLISHMENT PERIOD.

IRRIGATION

GATION SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:

- ORDINATION WITH ALL OTHER TRADES.
- TAILED DESIGN OF AN IRRIGATION SYSTEM TO INCLUDE ALL TURF SOD AND PLANT BED AREAS.. SIGN SHALL INCLUDE PIPE SIZING, HEAD SELECTION, LOCATIONS OF HEADS, ZONING, AND CONTROL TEMS. DESIGN SHALL PROVIDE NO OVERSPRAY ONTO WALKS. IRRIGATION PLAN, DESIGN DETAILS PRODUCT SHEETS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER FOR REVIEW AND PROVAL PRIOR TO PURCHASING ANY MATERIALS.
- BOR AND MATERIALS NECESSARY TO INSTALL A NEW IRRIGATION SYSTEM. THE IRRIGATION
- ITRACTOR SHALL ALSO BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE IRRIGATION ITROL SYSTEM ALONG WITH ANY CONNECTIONS MADE TO THE WATER SERVICE.
- TING OF THE COMPLETE IRRIGATION SYSTEM.
- ARTUP AND ADJUSTMENT OF THE SYSTEM.
- PROVIDE OWNER'S EMPLOYEES WITH OPERATIONAL TRAINING ONSITE AND SUBMIT OPERATION AND MAINTENANCE MANUALS FOR ALL COMPONENTS.
- 7. AS-BUILT DRAWINGS SHOWING THE LOCATION AND FEATURES OF ALL IRRIGATION COMPONENTS.

CODES AND INSPECTION

1. THE ENTIRE INSTALLATION SHALL FULLY COMPLY WITH ALL LOCAL AND STATE LAWS AND ORDINANCES AND WITH THE ESTABLISHED CODES ALLOCABLE THERETO. THE CONTRACTOR SHALL TAKE OUT ALL REQUIRED PERMITS, ARRANGE FOR ALL NECESSARY

INSPECTION, AND PAY ANY FEES AND EXPENSES IN CONJUNCTION WITH THE SAME AS PART OF THE WORK UNDER THIS CONTRACT.

QUALITY ASSURANCE

1. ALL WORK AND MATERIALS TO BE IN FULL ACCORDANCE WITH LATEST RULES AND REGULATIONS OF THE DIVISION OF INDUSTRIAL SAFETY, THE UNIFORM PLUMBING CODE, NATIONAL ELECTRIC CODE, AMERICANS WITH DISABILITIES, AND OTHER APPLICABLE LAWS OR REGULATION. 2. NOTHING IN THESE DRAWINGS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT

CONFORMING TO THESE CODES. 3. FURNISH, WITHOUT EXTRA CHARGE, ANY ADDITIONAL MATERIAL AND LABOR AS REQUIRED TO COMPLY WITH THESE RULES AND REGULATIONS, THOUGH THE WORK IS NOT MENTIONED IN THESE PARTICULAR

1. BECOME ACQUAINTED WITH ALL SITE CONDITIONS. LOCATE EXISTING UTILITIES AND EQUIPMENT TO REMAIN. SHOULD UTILITIES OR OTHER WORK NOT SHOWN ON THE DRAWINGS BE FOUND DURING EXCAVATIONS, PROMPTLY NOTIFY ENGINEER. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR ANY AND ALL DAMAGE ARISING FROM OPERATIONS SUBSEQUENT TO DISCOVERY OF SUCH UTILITIES NOT SHOWN ON DRAWINGS.

2. TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SITE CONDITIONS. REPAIR ANY DAMAGED ITEM TO ITS ORIGINAL CONDITION OR FURNISH AND INSTALL EQUIVALENT REPLACEMENT AT NO ADDITIONAL COST TO OWNER.

COORDINATION

1. SCHEDULE AND COORDINATE WORK WITH OTHER TRADES TO FACILITATE WORK AND AVOID CONFLICTS IN CONSTRUCTION SEQUENCE AND EQUIPMENT INSTALLATION. REVIEW ENTIRE PLAN SET AND COORDINATE WITH OTHER TRADES AS REQUIRED BY SEQUENCE OF CONSTRUCTION TO ENSURE PROVISION OF MAINLINE AND ELECTRICAL CONDUIT STUB-OUTS AT ALL REQUIRED LOCATIONS.



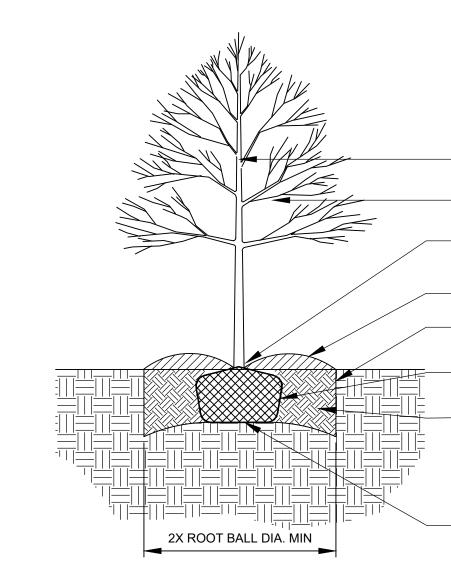
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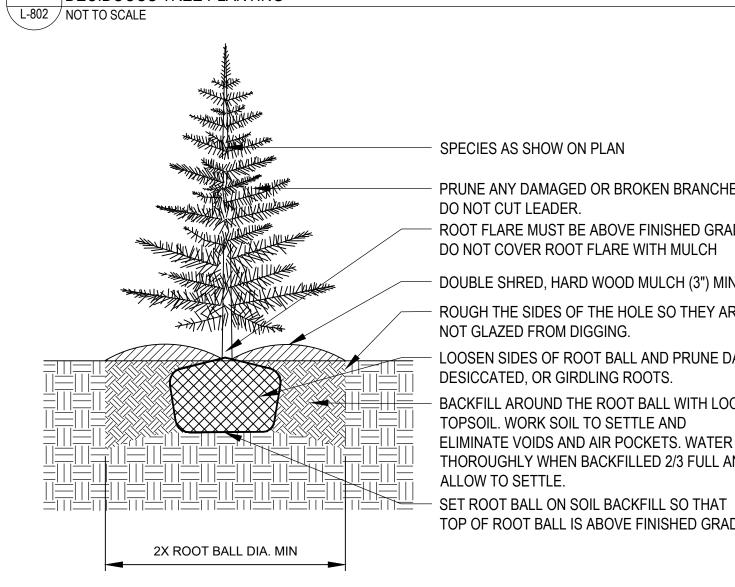
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SHEET NO .:



DECIDUOUS TREE PLANTING



2 CONIFEROUS TREE PLANTING L-802 NOT TO SCALE

2X ROOT DIA. MIN

3 SHRUB PLANTING

L-802 NOT TO SCALE

PRUNE ANY DAMAGED OR BROKEN BRANCHES. DO NOT CUT LEADER.

ROOT FLARE MUST BE ABOVE FINISHED GRADE. ROCK MULCH, SEE LANDSCAPE NOTES

- EDGING, SEE LANDSCAPE NOTES

EDGING INSTALLED AT ALL LOCATIONS TO

SEPARATE MULCH & TURF AREAS

PRUNE DAMAGED OR DESICCATED ROOTS.

- CONTAINER GROW MATERIALS SHALL HAVE ROOTS HAND LOOSENED UPON PLANTING

• ROUGH THE SIDES OF THE HOLE SO THEY ARE NOT GLAZED FROM DIGGING. - BACKFILL AROUND THE ROOTS WITH LOOSE SOIL. WORK SOIL TO SETTLE AND ELIMINATE VOIDS AND AIR POCKETS. WATER THOROUGHLY WHEN BACKFILLED 2/3 FULL AND ALLOW TO SETTLE.

- 12" DEPTH TOPSOIL, SEE LANDSCAPE NOTES

- EXCAVATE HOLE SO THAT ROOTS ARE VERTICAL AND FULLY EXTENDED. SCARIFY PIT BOTTOM (6") MIN.

SPECIES AS SHOW ON PLAN

PRUNE ANY DAMAGED OR BROKEN BRANCHES. DO NOT CUT LEADER. ROOT FLARE MUST BE ABOVE FINISHED GRADE. DO NOT COVER ROOT FLARE WITH MULCH

DOUBLE SHRED, HARD WOOD MULCH (3") MIN.

ROUGH THE SIDES OF THE HOLE SO THEY ARE NOT GLAZED FROM DIGGING.

LOOSEN SIDES OF ROOT BALL AND PRUNE DAMAGED, DESICCATED, OR GIRDLING ROOTS. BACKFILL AROUND THE ROOT BALL WITH LOOSE TOPSOIL. WORK SOIL TO SETTLE AND ELIMINATE VOIDS AND AIR POCKETS. WATER THOROUGHLY WHEN BACKFILLED 2/3 FULL AND ALLOW TO SETTLE.

SET ROOT BALL ON SOIL BACKFILL SO THAT TOP OF ROOT BALL IS ABOVE FINISHED GRADE.

SPECIES AS SHOW ON PLAN

PRUNE ANY DAMAGED OR BROKEN BRANCHES. DO NOT CUT LEADER.

ROOT FLARE MUST BE ABOVE FINISHED GRADE. DO NOT COVER ROOT FLARE WITH MULCH

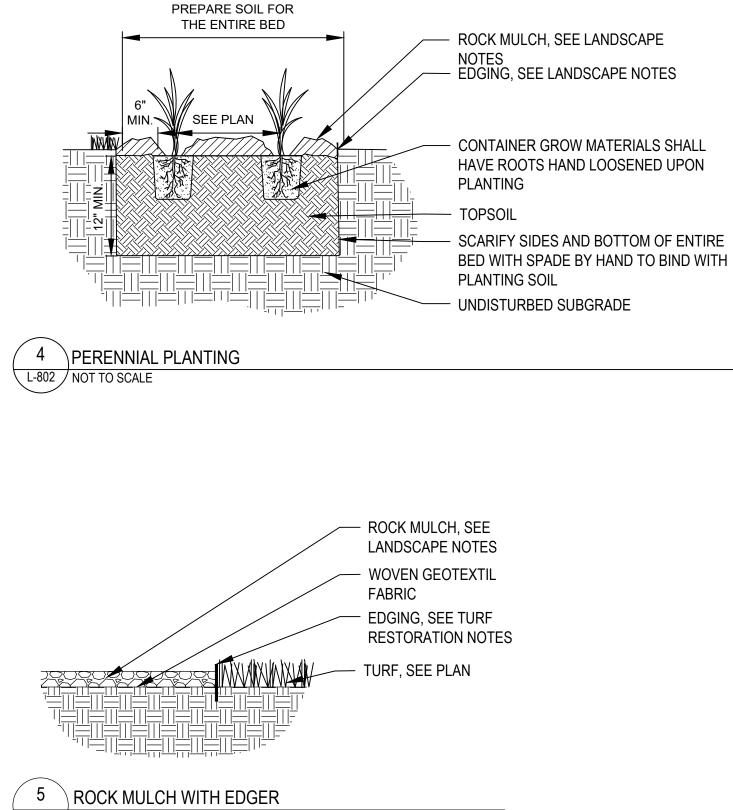
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BACKFILL AROUND THE ROOT BALL WITH LOOSE TOPSOIL. WORK SOIL TO SETTLE AND ELIMINATE VOIDS AND AIR POCKETS. WATER THOROUGHLY WHEN BACKFILLED 2/3 FULL AND ALLOW TO SETTLE.

TOP OF ROOT BALL IS ABOVE FINISHED GRADE.



L-802 NOT TO SCALE

