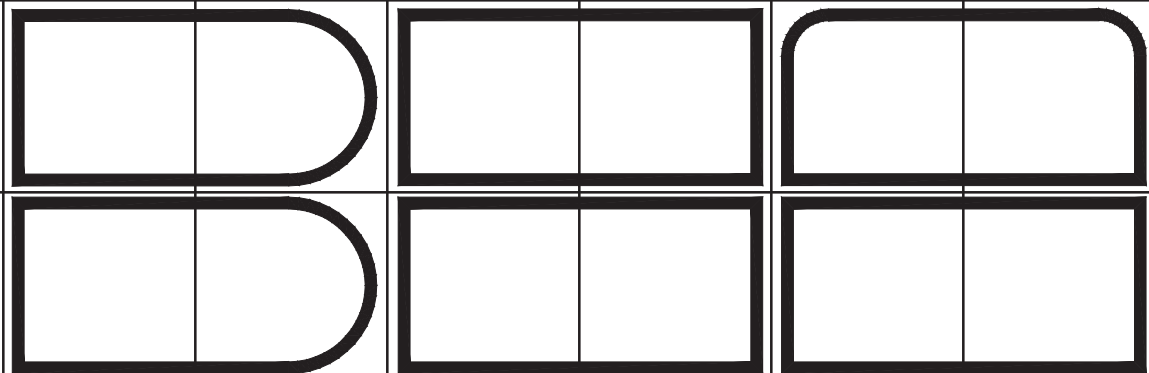


PROPOSED:
STONE CARVER DRIVE EXTENSION

N STONE BRANCH DRIVE
BLOOMINGTON, IN. 47404
FROM N. LINTEL DRIVE TO
W. WOODYARD ROAD

UTILITY CONTACT INFORMATION

GAS VECTREN 205 S. MADISON ST. BLOOMINGTON, IN 47401 DOUG ANDERSON (812)330-4009	SEWER AND WATER CITY OF BLOOMINGTON UTILITIES 600 E. MILLER DR. BLOOMINGTON, IN 47402 NANCY AXSOM (812)349-3689	ELECTRIC DUKE ENERGY 1619 W. DEFFENBAUGH ROAD KOKOMO, INDIANA 46902 JIM SHIELDS (317)375-2071
TELEPHONE AT&T P.O. BOX 56 BLOOMINGTON, IN 47402 BRENT McCABE (812)334-4521	CABLE TELEVISION COMCAST 2450 SOUTH HENDERSON STREET BLOOMINGTON, IN 47404 SCOTT TEMPLETON (812)355-7822	UNDERGROUND UTILITY LOCATION INDIANA UNDERGROUND PLANT PROTECTION 1-(800)382-5544



BYNUM FANYO & ASSOCIATES, INC.
528 North Walnut Street
Bloomington, Indiana 47404 (812) 332-8030

SHEET INDEX

SHEET NO.	SHEET NO.
C101	GENERAL NOTE, DETAILS, & LEGENDS
C201-C202	SITE PLAN
C301-C302	GRADING & DRAINAGE PLAN
C401-C402	'R-1' GRADING PLAN & PROFLING
C501	LANDSCAPE PLAN
C601-C602	MISCELLANEOUS DETAILS
C701-C704	STORM WATER POLLUTION PREVENTION PLAN, INFORMATION, AND DETAILS



VICINITY/LOCATION MAP
NOT TO SCALE

DIAL '811' BEFORE YOU DIG
PER INDIANA STATE LAW IC8-1-26
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE
UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS
BEFORE COMMENCING WORK.

architecture
civil engineering
planning

OWNER/DEVELOPER:
INDIANA UNIVERSITY HEALTH
950 N MERIDIAN ST. #1100,
INDIANAPOLIS, IN. 46204

THE CURRENT EDITION OF THE INDIANA DEPARTMENT OF
TRANSPORATION, MANUAL ON UNIFORM TRAFFIC CONTROL
DEVICES & CITY OF BLOOMINGTON UTILITIES STANDARD
SPECIFICATIONS IS TO BE USED WITH THESE PLANS

Certified By:

JEFFREY S. FANYO, P.E.
IND. REG. NO. 18283

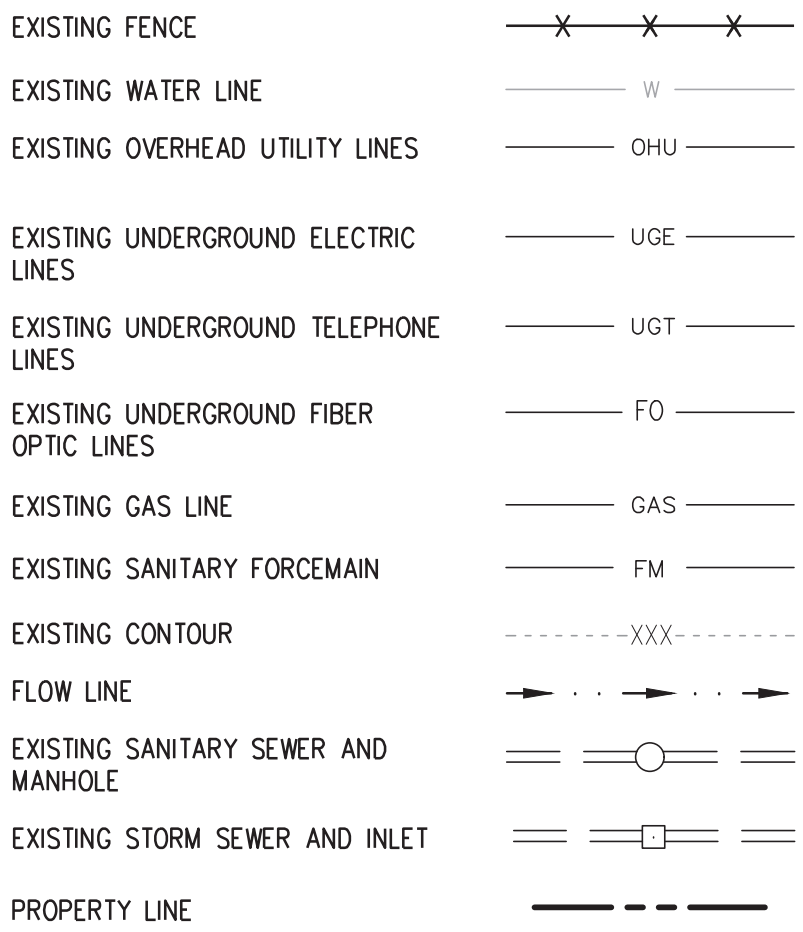
Revisions

STONE CARVER DRIVE EXTENSION
PROJECT NO. 402337

GENERAL NOTES

- 1. BOUNDARY AND TOPO BY BYNUM FANYO AND ASSOCIATES, 528 NORTH WALNUT STREET, BLOOMINGTON, INDIANA 47404. PHONE (812) 332-8030
- 2. DEVELOPER: INDIANA UNIVERSITY HEALTH, SUZAN KALLUS, DIRECTOR SOUTH CENTRAL REGION
- 3. PROJECT ADDRESS: N. STONE BRANCH DRIVE, BLOOMINGTON, INDIANA 47404
- 4. ALL WORK IS TO BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
- 5. ALL PERMITS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
- 6. HYDRANT LOCATION SHALL BE APPROVED BY THE LOCAL FIRE MARSHALL.
- 7. EXISTING UTILITIES ON SITE SHALL BE RELOCATED AS REQUIRED. CONTRACTOR SHALL PAY ALL COSTS ASSOCIATED WITH RELOCATION.
- 8. SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.

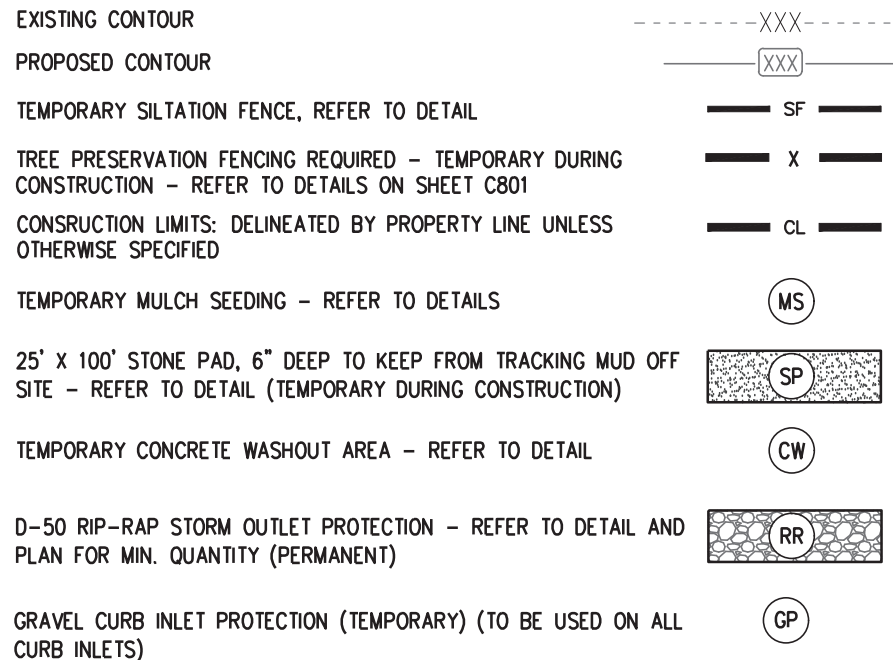
EXISTING LEGEND



PARKING AND PAVEMENT NOTES

- 1. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC DEVICES, 1988 EDITION AS AMENDED.
- 2. ALL PAVEMENT MARKINGS SHALL BE PAINTED WHITE ON ASPHALT PAVEMENT / YELLOW ON CONCRETE PAVEMENT AND SHALL BE FOUR (4) INCHES WIDE UNLESS INDICATED OTHERWISE.
- 3. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS INDICATED OTHERWISE. ALL CURB RADIUS ARE TO BE 5' UNLESS INDICATED OTHERWISE.
- 4. CONTRACTOR SHALL FURNISH AND INSTALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
- 5. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES WITH OTHER CONTRACTORS ON THE SITE.
- 6. JOINTS OR SCORE MARKS ARE TO BE SHARP AND CLEAN WITHOUT SHOWING EDGES OF JOINING TOOLS.
- 7. CONTRACTOR SHALL SAW-CUT TIE-INS AT EXISTING CURBS AS NECESSARY TO INSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAW-CUT AND TRANSITION TO MEET EXISTING PAVEMENT AS NECESSARY AND AS DIRECTED BY INSPECTOR TO INSURE POSITIVE DRAINAGE. (TYPICAL AT ALL INTERSECTIONS).
- 8. CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY A.C.C. OF AMERICA, INC. AND THE HEALTH AND SAFETY REGULATIONS FOR CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.

EROSION CONTROL LEGEND



GRADING NOTES

- 1. NEW FINISHED CONTOURS SHOWN ARE TOP OF FUTURE PAVING IN AREAS TO RECEIVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDD OR PLANTED.
- 2. AREAS OUTSIDE OF THE PARKING LOT PERIMETERS SHOWN TO BE SEEDD OR PLANTED SHALL RECEIVE 6" OF TOPSOIL. THIS TOPSOIL IS TO BE PLACED AND LEVELED BY THE CONTRACTOR.
- 3. CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING, OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF THE FACILITY.
- 4. ALL AREAS NOT COVERED BY BUILDING OR PAVING ARE TO BE VEGETATED (SEEDED OR PER LANDSCAPE PLAN).
- 5. UNUSABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE BY CONTRACTOR.
- 6. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
- 7. BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. THE LACK OF PROPER WORKING POINTS AND GRADE STAKES MAY REQUIRE CESSATION OF OPERATIONS UNTIL SUCH POINTS AND GRADES HAVE BEEN PLACED TO THE OWNER'S SATISFACTION.
- 8. CONTRACTOR SHALL COMPACT AND MAINTAIN A 30,000 SQ. FT. STONEBASE CONSTRUCTION LAYDOWN AREA W/ STONE ACCESS FROM THE CONSTRUCTION ENTRANCE AND STONE ACCESS TO THE BUILDING PAD.
- 9. THESE DOCUMENTS ARE SCHEMATIC IN NATURE AND CANNOT SHOW EVERY ITEM NEEDED FOR A COMPLETE OPERATIONAL STORM SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE OPERATING STORM SYSTEM.
- 10. ALL FILL SHALL BE FREE OF VEGETABLE MATTER, RUBBISH, LARGE ROCK, AND OTHER DELETERIOUS MATERIAL. THE FILL MATERIAL SHOULD BE PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES IN LOOSE THICKNESS AND SHOULD BE SPRINKLED WITH WATER AS REQUIRED TO SECURE SPECIFIED COMPACTION. EACH LAYER SHOULD BE UNIFORMLY COMPACTED BY MEANS OF SUITABLE EQUIPMENT AS DICTATED BY THE TYPE OF FILL MATERIAL. UNDER NO CIRCUMSTANCES SHOULD A BULLDOZER OR SIMILARLY TRACKED VEHICLE BE USED AS COMPACTING EQUIPMENT. MATERIAL CONTAINING AN EXCESS OF WATER SHOULD BE SPREAD AND DRIED TO A MOISTURE CONTENT THAT WILL PERMIT PROPER COMPACTION. ALL FILL SHOULD BE COMPACTED TO THE SPECIFIED PERCENTAGE OF THE MAXIMUM DENSITY OBTAINED IN ACCORDANCE WITH ASTM DENSITY TEST D-698 (95 PERCENT OF MAXIMUM DRY DENSITY). IF THE SPECIFIED COMPACTION LIMITS ARE NOT MET, SUCH AREAS SHOULD BE REWORKED AND RETESTED AS REQUIRED UNTIL THE SPECIFIED LIMITS ARE REACHED.

THE CURRENT EDITION OF THE INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ARE TO BE USED WITH THESE PLANS

LANDSCAPE NOTES

- 1. ALL PLANT MATERIAL SHALL ARRIVE ONSITE IN A HEALTHY, VIGOROUS CONDTION AND BE FREE OF PESTS AND DISEASE.
- 2. ALL PLANTS SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
- 3. ALL TREES SHALL BE STRAIGHT-TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
- 4. ALL TREES SHALL BE GUYED OR STAKED PLUMB AS SHOWN IN THE DETAILS.
- 5. ALL PLANTING MASS BEDS SHALL BE SPADE CUT UNLESS SPECIFIED WITH A MOW STRIP OR OTHER INSTALL EDGING. TREES TO HAVE A 5' DIAMETER MULCH RING.
- 6. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED WHERE SPECIFIED.
- 7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION. PLANTING LOCATIONS MAY REQUIRE ADJUSTMENTS IN FIELD TO AVOID OVERHEAD AND UNDERGROUND UTILITIES.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND SPECIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING AND LAWN AREAS INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, PRUNING, FERTILIZING, ETC., UNTIL WORK IS ACCEPTED IN FULL BY THE OWNER.
- 10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
- 11. THE OWNER SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION.
- 12. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST OR DRIP IRRIGATION SYSTEM PRIOR TO INSTALLATION. WATER ALL SPECIMENS WITHIN 24 HOURS OF PLANTING.
- 13. ANY NEW OR TRANSPLANTED PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFLOLIATES PRIOR TO TOTAL ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY AND SIZE TO MEET ALL PLANT LIST SPECIFICATIONS.
- 14. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- 15. ALL SHRUB, GROUNDCOVER, ANNUAL AND HERBACEOUS PERENNIAL PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH HARDWOOD MULCH TO A MINIMUM DEPTH OF FOUR INCHES.
- 16. DURING THE GROWING SEASON ALL ANNUALS AND HERBACEOUS PERENNIALS SHALL REMAIN IN A HEALTHY CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- 17. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN ON PLANS.
- 19. ALL DISTURBED AREAS NOT INCLUDED IN LANDSCAPE MULCH BEDS ARE TO BE DEBRIS-RAKED AND FINED-GRADED AS NEEDED, THEN MULCH SEEDED (OR SODDED, PER PLAN) AND WATERED UNTIL A HEALTHY STAND OF TURF IS ESTABLISHED.
- 20. ANY PLANT OR OTHER LANDSCAPE MATERIAL SUBSTITUTIONS INSTALLED WITHOUT DESIGNER AND/OR OWNER APPROVAL SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNER BEFORE, DURING AND AFTER INSTALLATION.

ON-SITE UTILITY NOTES

- 1. ALL WATER PIPE 6" AND SMALLER SHALL BE PRESSURE CLASS 350 DIP WATER PIPE CONFORMING TO ALL STATE AND LOCAL STANDARDS. IT SHALL BE DUCTILE IRON CONFORMING TO AWWA/ANSI STANDARD SPECIFICATIONS C153/A21.53, LATEST REVISION.
- 2. 8" WATER PIPE AND LARGER AND FITTINGS SHALL BE AWWA C900 (DR-14) PIPE WITH TRACER WIRE.
- 3. 2" WATER MAINS SHALL BE SDR-21 (PR200) AND 4" PIPE MAY BE EITHER SDR-21 (PR200) OR C900 (DR-14).
- 4. ALL WATER SERVICE LINES CONNECTING TO MAINS SHALL BE 1" TYPE "K" COPPER. ALL SERVICE LINES FROM MAIN TO METER SHALL BE TYPE "K" COPPER WITH FLARED ENDS.
- 5. MECHANICAL RESTRAINTS SHALL BE PROVIDED AT ALL WATER LINE BENDS, OFFSETS, TEES, PLUGS, ETC...
- 6. ALL WATER LINE GATE VALVES OTHER THAN AIR RELEASE VALVES AND TAPPING VALVES SHALL BE CAST IRON BODY, FULLY BRONZE MOUNTED, WITH RESILIENT SEAT AND NON-RISING STEM AND SHALL BE MANUFACTURED BY M & H VALVE COMPANY, AMERICAN FLOW CONTROL, KENNEDY VALVE COMPANY, MUELLER COMPANY, OR U.S. PIPE AND FOUNDRY COMPANY.
- 7. FLUSH HYDRANTS SHALL BE PLACED AT THE ENDS OF ALL WATER MAINS AND AT ANY HIGH POINTS IN THE LINE.
- 8. AIR RELEASE VALVES SHALL BE PROVIDED AT ALL HIGH POINTS OF WATER MAINS AND SHALL BE VAL-MATIC BRAND AND SHALL INCORPORATE THE OPTIONAL VACUUM-CHECK FEATURE.
- 9. ALL FIRE HYDRANTS SHALL BE MANUFACTURED BY KENNEDY GUARDIAN OR MUELLER CENTURION.
- 10. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
- 11. WATER AND SANITARY SEWER MAINS SHALL HAVE A MINIMUM COVER OF 4'-0" ABOVE TOP OF PIPE.
- 12. ALL SPRINKLER, DOMESTIC, AND SANITARY LEADS TO THE BUILDING SHALL END AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
- 13. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN INCHES (18").
- 14. GRAVITY SANITARY SEWER PIPE 6" TO 15" SHALL BE CONSTRUCTED OF SDR-35 PVC.
- 15. THE UPSTREAM ENDS OF ALL SANITARY SEWER LATERALS SHALL BE CLEARLY MARKED WITH A 4x4 TREATED POST EXTENDING 3' BELOW GRADE AND 1' ABOVE GRADE.
- 16. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- 17. SEE SITE SPECIFICATIONS FOR BACKFILLING AND COMPACTION REQUIREMENTS.
- 18. SITE CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
- 19. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH SITE WORK SPECIFICATIONS. CURRENT CBU SPECIFICATIONS CAN BE FOUND ONLINE AT: BLOOMINGTON.IN.GOV/UTILITIES/CONTRACTORS
- 20. ALL CATCH BASIN GRATE AND FRAMES ARE TO BE BY EAST JORDAN IRON WORKS.
- 21. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
- 22. BUILDING CONTRACTOR SHALL PROVIDE & INSTALL A PERMANENT INDICATING VALVE 12" ABOVE THE FLOOR ON THE FIRE LINE AT THE TERMINATION POINT. THIS VALVE WILL BE USED TO HYDROSTATIC PRESSURE TEST AGAINST & WILL REMAIN AS PART OF THE SYSTEM ONCE ALL TESTING IS COMPLETED. THE FIRE LINE MAIN WILL NOT BE DISMANTLED FOR CONNECTION TO THE FIRE SUPPRESSION SYSTEM. SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FIRE MAIN WITH THE BUILDING CONTRACTOR.
- 23. ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT UTILITIES TECHNICIAN AT (812)349-3676 TO SCHEDULE THE MEETING.
- 24. CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT AT (812)349-3660.

revisions:

ARCHITECTURE	PLANNING	bloomington, indiana
CIVIL ENGINEERING		(812) 332-8030 (Fax)
BYNUM FANYO & ASSOCIATES, INC.		
528 north walnut street		

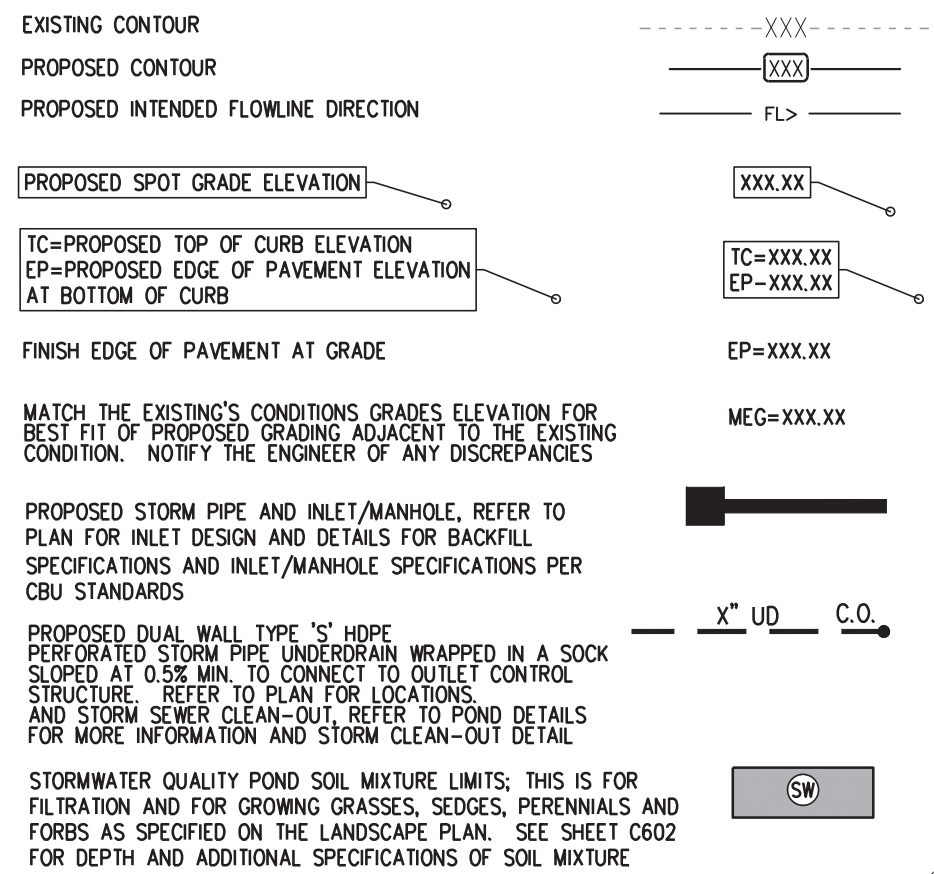
certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION
N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: GENERAL NOTES & LEGENDS

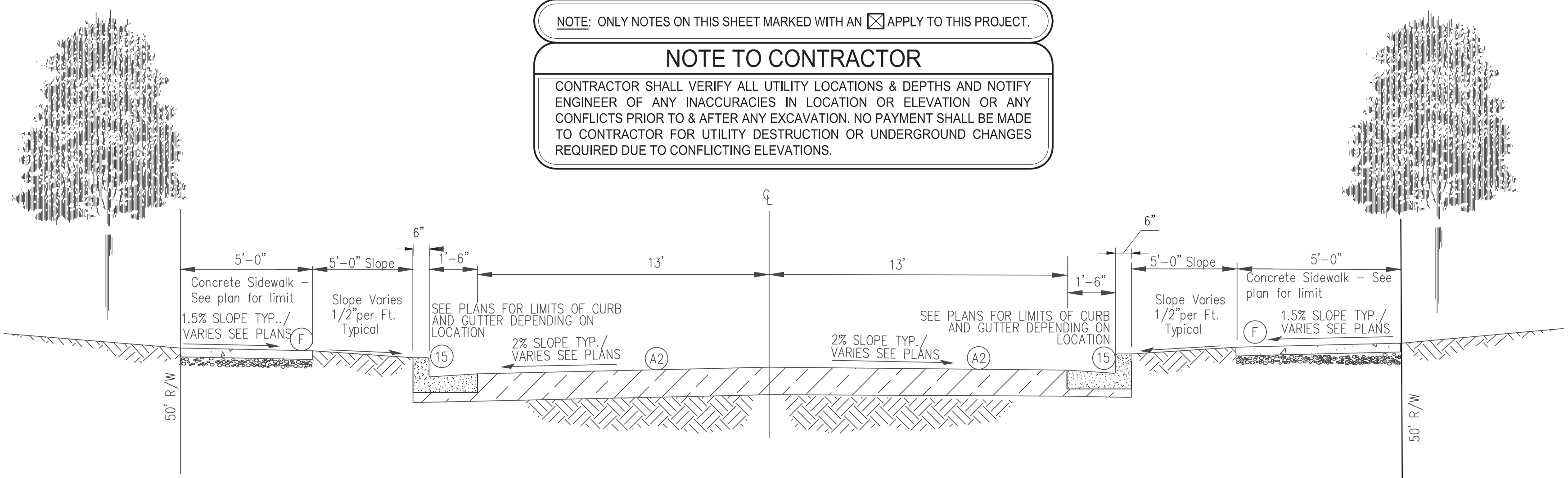
designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C101
project no.: 402337

GRADING/DRAINAGE LEGEND



SITE IMPROVEMENT LEGEND

- (A) PROPOSED ROAD BITUMINOUS PAVING - REFER TO DETAIL
- (A1) PROPOSED ACCELERATION/DECELERATION TAPER ROAD BITUMINOUS PAVING - REFER TO DETAIL
- (A2) PROPOSED HEAVY-DUTY ROAD BITUMINOUS PAVING - REFER TO DETAIL
- (C) PROPOSED CONCRETE PAVING - REFER TO DETAIL
- (F) PROPOSED CONCRETE PATIO OR SIDEWALK. REFER TO PLAN FOR LOCATIONS AND REFER TO DETAIL.
- (15) PROPOSED 6" MONOLITHIC CURB AND GUTTER - REFER TO DETAIL
- (R) PROPOSED INDOT SIDEWALK ACCESSIBLE RAMP WITH CAST IRON DETECTIBLE WARNING SURFACES - REFER TO DETAILS ON SHEET C0(3)
- (36) PROPOSED STOP BAR PAVEMENT MARKING; THERMOPLASTIC, SOLID, WHITE, 24" WIDE, 12" LONG FROM CENTER LINE OF ROAD AS INDICATED. 4' SEPERATION FROM CROSS-WALK MARKINGS
- (38) PROPOSED CROSSWALK PAVEMENT MARKING; THERMOPLASTIC, SOLID, 24" WIDE, 24" SPACING, WHITE, WIDTH TO MATCH SIDEWALK OR ALL-PURPOSE PATH, SEE PLAN (CROSSWALK PER INDOT STANDARD 808.07)
- (33) PROPOSED TURN LANE INDICATION ARROW PAVEMENT MARKING; THERMOPLASTIC, SOLID, WHITE, 6'-1" WIDE, 8'-0" TALL (TRANSVERSE MARKING LANE INDICATION ARROW PER INDOT STANDARD SPECIFICATION 808.07 AND STANDARD DRAWING E808-MRPM-02)
- (R1-1) PROPOSED INDOT 30" x 30" ROAD "STOP" SIGN - REFER TO DETAILS
- EXISTING DEDICATED OPEN SPACE AREA PER NORTH PARK PUD OPEN SPACE REQUIREMENTS



STONE CARVER DRIVE EXTENSION TYPICAL CROSS SECTION

NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING
bloomington, indiana
(812) 339-2990 (Fax)

BYNUM FANYO & ASSOCIATES, INC.
528 north walnut street
(812) 332-8030

certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION
N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: SITE & UTILITY PLAN
(SOUTH)

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C201
project no.: 402337

SITE IMPROVEMENT LEGEND

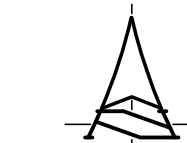
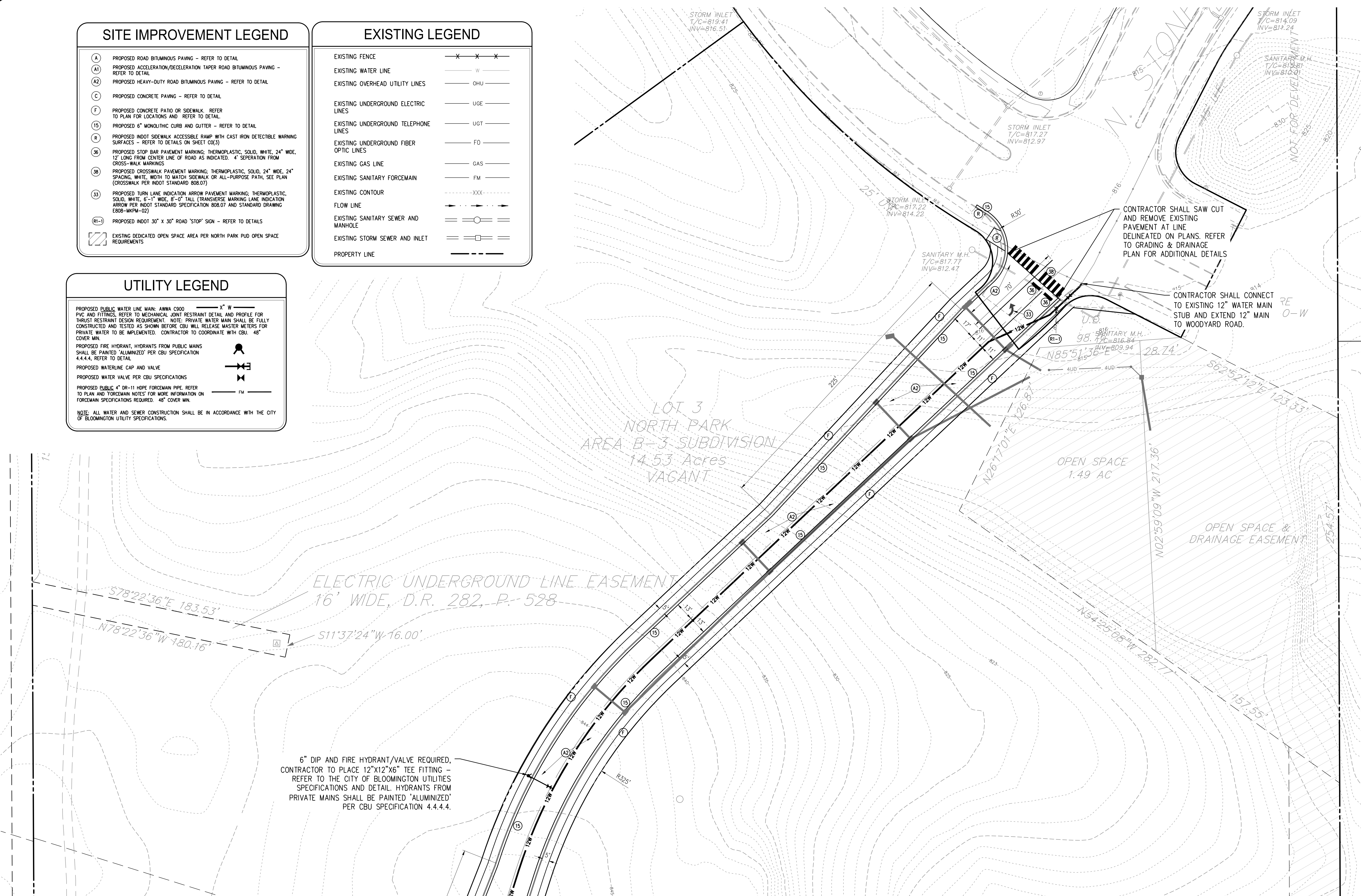
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(R1-1) PROPOSED INDOT 30" X 30" ROAD 'STOP' SIGN - REFER TO DETAILS
EXISTING DEDICATED OPEN SPACE AREA PER NORTH PARK PUD OPEN SPACE REQUIREMENTS

UTILITY LEGEND

- PROPOSED PUBLIC WATER LINE MAIN: AWWA C900 12" W
PVC AND FITTINGS, REFER TO MECHANICAL JOINT RESTRAINT DETAIL AND PROFILE FOR THRUST RESTRAINT DESIGN REQUIREMENT. NOTE: PRIVATE WATER MAIN SHALL BE FULLY CONSTRUCTED AND TESTED AS SHOWN BEFORE CBU WILL RELEASE MASTER METERS FOR PRIVATE WATER TO BE IMPLEMENTED. CONTRACTOR TO COORDINATE WITH CBU, 48" COVER MIN.
PROPOSED FIRE HYDRANT, HYDRANTS FROM PUBLIC MAINS SHALL BE PAINTED 'ALUMINIZED' PER CBU SPECIFICATION 4.4.4.4, REFER TO DETAIL
PROPOSED WATERLINE CAP AND VALVE
PROPOSED WATER VALVE PER CBU SPECIFICATIONS
PROPOSED PUBLIC 4" DR-11 HDPE FORCEMAIN PIPE, REFER TO PLAN AND 'FORCEMAIN NOTES' FOR MORE INFORMATION ON FORCEMAIN SPECIFICATIONS REQUIRED, 48" COVER MIN.
NOTE: ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BLOOMINGTON UTILITY SPECIFICATIONS.

EXISTING LEGEND

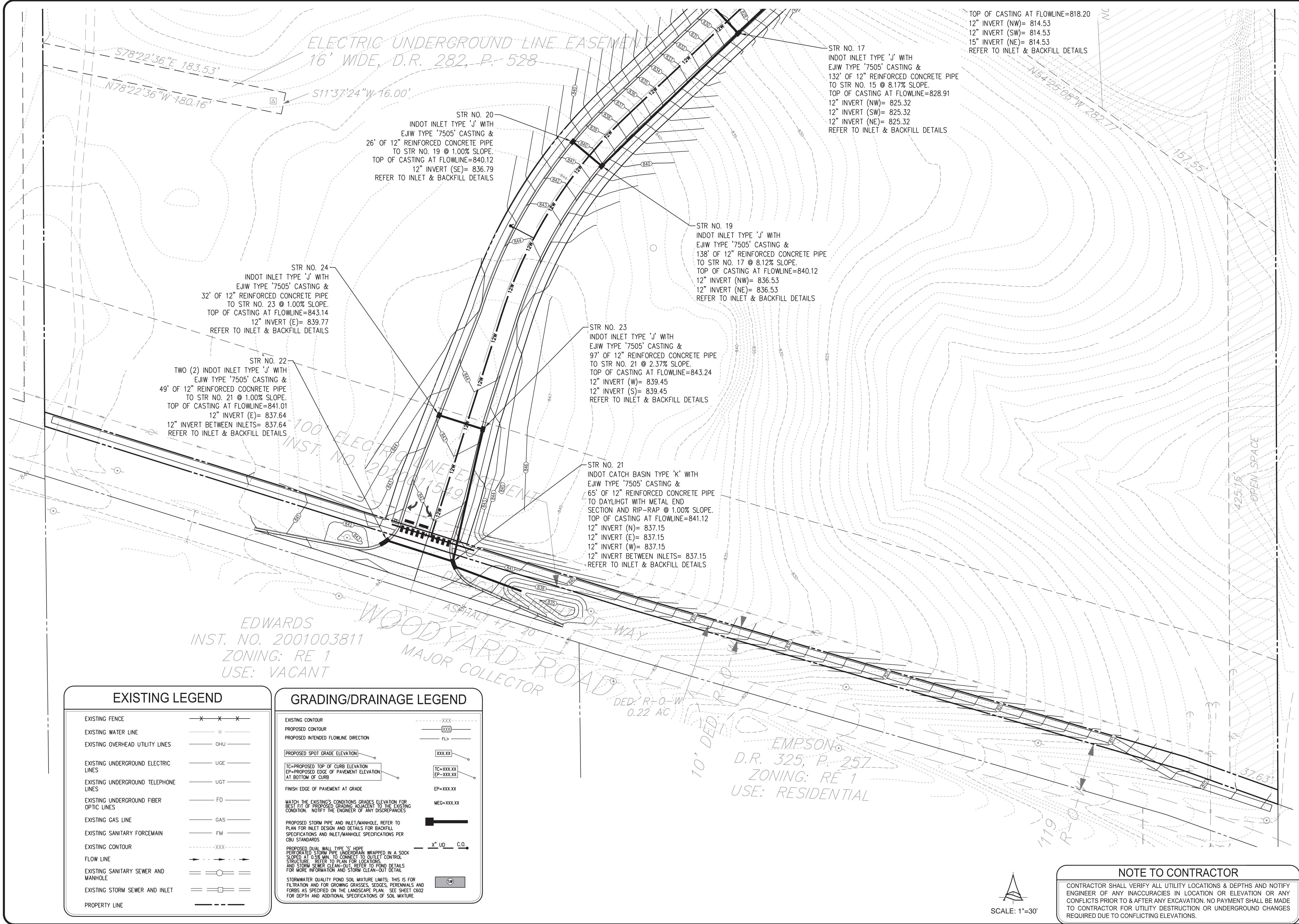
- EXISTING FENCE
EXISTING WATER LINE
EXISTING OVERHEAD UTILITY LINES
EXISTING UNDERGROUND ELECTRIC LINES
EXISTING UNDERGROUND TELEPHONE LINES
EXISTING UNDERGROUND FIBER OPTIC LINES
EXISTING GAS LINE
EXISTING SANITARY FORCEMAIN
EXISTING CONTOUR
FLOW LINE
EXISTING SANITARY SEWER AND MANHOLE
EXISTING STORM SEWER AND INLET
PROPERTY LINE



SCALE: 1"=30'

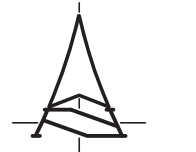
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EXISTING LEGEND	
EXISTING FENCE	— X — X — X —
EXISTING WATER LINE	— W —
EXISTING OVERHEAD UTILITY LINES	— OHU —
EXISTING UNDERGROUND ELECTRIC LINES	— UGE —
EXISTING UNDERGROUND TELEPHONE LINES	— UGT —
EXISTING UNDERGROUND FIBER OPTIC LINES	— FO —
EXISTING GAS LINE	— GAS —
EXISTING SANITARY FORCEMAIN	— FM —
EXISTING CONTOUR	--- XXX ---
FLOW LINE	→ ———→
EXISTING SANITARY SEWER AND MANHOLE	— ○ —
EXISTING STORM SEWER AND INLET	— □ —
PROPERTY LINE	- - - - -

GRADING/DRAINAGE LEGEND	
EXISTING CONTOUR	--- XXX ---
PROPOSED CONTOUR	--- XXX ---
PROPOSED INTENDED FLOWLINE DIRECTION	— FL —
PROPOSED SPOT GRADE ELEVATION	XXX.XX
TC=PROPOSED TOP OF CURB ELEVATION EP=PROPOSED EDGE OF PAVEMENT ELEVATION AT BOTTOM OF CURB	TC=XXX.XX EP=XXX.XX
FINISH EDGE OF PAVEMENT AT GRADE	EP=XXX.XX
MATCH THE EXISTING'S CONDITIONS GRADES ELEVATION FOR BEST FIT OF PROPOSED GRADING ADJACENT TO THE EXISTING CONDITION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES	MEG=XXX.XX
PROPOSED STORM PIPE AND INLET/MANHOLE. REFER TO PLAN FOR INLET DESIGN AND DETAILS FOR BACKFILL SPECIFICATIONS AND INLET/MANHOLE SPECIFICATIONS PER CBU STANDARDS	— X" UD C.O. —
PROPOSED DUAL WALL TYPE 'S' HDPE PERFORATED STORM PIPE UNDERDRAIN WRAPPED IN A SOCK SLOPED AT 0.5% MIN. TO CONNECT TO OUTLET CONTROL STRUCTURE. REFER TO PLAN FOR LOCATIONS AND STORM SEWER CLEAN-OUT. REFER TO POND DETAILS FOR MORE INFORMATION AND STORM CLEAN-OUT DETAIL	— SW —
STORMWATER QUALITY POND SOIL MIXTURE LIMITS: THIS IS FOR FILTRATION AND FOR GROWING GRASSES, SEDGES, PERENNIALS AND FORBS AS SPECIFIED ON THE LANDSCAPE PLAN. SEE SHEET C602 FOR DEPTH AND ADDITIONAL SPECIFICATIONS OF SOIL MIXTURE	



SCALE: 1"=30'

NOTE TO CONTRACTOR

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revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING

BYNUM FANYO & ASSOCIATES, INC.

528 north walnut street
(812) 332-8030

bloomington, indiana
(812) 339-2990 (Fax)

certified by:

**PROPOSED
STONE CARVER DRIVE EXTENSION**

N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: GRADING &
DRAINAGE PLAN
(SOUTH)

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C301
project no.: 402337

revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING
BYNUM FANYO & ASSOCIATES, INC.
bloomington, indiana
(812) 339-2990 (Fax)

certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION
N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: GRADING &
DRAINAGE PLAN
(NORTH)

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C302
project no.: 402337

EXISTING LEGEND

EXISTING FENCE	— X — X — X —
EXISTING WATER LINE	— W —
EXISTING OVERHEAD UTILITY LINES	— OHU —
EXISTING UNDERGROUND ELECTRIC LINES	— UGE —
EXISTING UNDERGROUND TELEPHONE LINES	— UGT —
EXISTING UNDERGROUND FIBER OPTIC LINES	— FO —
EXISTING GAS LINE	— GAS —
EXISTING SANITARY FORCEMAIN	— FM —
EXISTING CONTOUR	--- XXX ---
FLOW LINE	—> —> —> —>
EXISTING SANITARY SEWER AND MANHOLE	— () —
EXISTING STORM SEWER AND INLET	— [] —
PROPERTY LINE	— - - - -

GRADING/DRAINAGE LEGEND

EXISTING CONTOUR	--- XXX ---
PROPOSED CONTOUR	--- XXX ---
PROPOSED INTENDED FLOWLINE DIRECTION	—> FLO —>
PROPOSED SPOT GRADE ELEVATION	XXX.XX
TC=PROPOSED TOP OF CURB ELEVATION EP=PROPOSED EDGE OF PAVEMENT ELEVATION AT BOTTOM OF CURB	TC=XXX.XX EP=XXX.XX
FINISH EDGE OF PAVEMENT AT GRADE	EP=XXX.XX
MATCH THE EXISTING'S CONDITIONS GRADES ELEVATION FOR BEST FIT OF PROPOSED GRADING ADJACENT TO THE EXISTING CONDITION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES	MEG=XXX.XX
PROPOSED STORM PIPE AND INLET/MANHOLE. REFER TO PLAN FOR INLET DESIGN AND DETAILS FOR BACKFILL SPECIFICATIONS AND INLET/MANHOLE SPECIFICATIONS PER CBI STANDARDS	X" UD C.O.
PROPOSED DUAL WALL TYPE 'S' HOPE PERFORATED STORM PIPE UNDERBRAIN WRAPPED IN A SODK SLOPED AT 0.5% MIN. TO CONNECT TO OUTLET CONTROL STRUCTURE. REFER TO PLAN FOR LOCATIONS AND STORM SEWER CLEAN-OUT. REFER TO POND DETAILS FOR MORE INFORMATION AND STORM CLEAN-OUT DETAIL	SW
STORMWATER QUALITY POND SOIL MIXTURE LIMITS: THIS IS FOR FILTRATION AND FOR GROWING GRASSES, SEDGES, PERENNIALS AND FORBS AS SPECIFIED ON THE LANDSCAPE PLAN. SEE SHEET 0802 FOR DEPTH AND ADDITIONAL SPECIFICATIONS OF SOIL MIXTURE	

STR NO. 11
TWO (2) INDOT INLET TYPE 'E' WITH
EJW TYPE '6610 BEEHIVE' CASTING &
92' OF 15" REINFORCED COCNRETE PIPE
TO DAYLIGHT WITH METAL END SECTION
AND RIP RAP @ 1.89% SLOPE.
TOP OF CASTING AT FLOWLINE=814.50
12" INVERT (SE)= 811.49
REFER TO INLET & BACKFILL DETAILS

STR NO. 14
TWO (2) INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
38' OF 12" REINFORCED CONCRETE PIPE
TO STR. NO. 13 @ 1.00% SLOPE.
TOP OF CASTING AT FLOWLINE=814.62
12" INVERT (SE)= 811.24
12" INVERT BETWEEN INLETS= 811.24
REFER TO INLET & BACKFILL DETAILS

STR NO. 13
TWO (2) INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
28' OF 12" REINFORCED CONCRETE PIPE
TO DAYLIGHT WITH METAL END
SECTION AND RIP-RAP @ 1.25% SLOPE.
TOP OF CASTING AT FLOWLINE=814.88
12" INVERT (NW)= 810.85
12" INVERT (SE)= 810.85
12" INVERT BETWEEN INLETS= 810.85
REFER TO INLET & BACKFILL DETAILS

STR NO. 12
POND #1 CONCRETE RISER STRUCTURE
REFER TO POND DETAILS

STR NO. 16
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
33' OF 12" REINFORCED COCNRETE PIPE
TO STR NO. 15 @ 1.00% SLOPE.
TOP OF CASTING AT FLOWLINE=818.20
12" INVERT (SE)= 814.86
REFER TO INLET & BACKFILL DETAILS

STR NO. 18
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
26' OF 12" REINFORCED CONCRETE PIPE
TO STR NO. 17 @ 1.00% SLOPE.
TOP OF CASTING AT FLOWLINE=828.91
12" INVERT (SE)= 825.58
REFER TO INLET & BACKFILL DETAILS

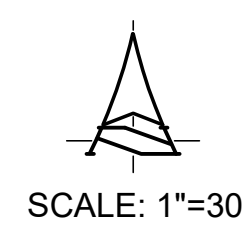
STR NO. 15
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
92' OF 12" REINFORCED CONCRETE PIPE
TO DAYLIGHT WITH METAL END
SECTION AND RIP-RAP @ 2.75% SLOPE.
TOP OF CASTING AT FLOWLINE=818.20
12" INVERT (NW)= 814.53
12" INVERT (SW)= 814.53
15" INVERT (NE)= 814.53
REFER TO INLET & BACKFILL DETAILS

STR NO. 17
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
132' OF 12" REINFORCED CONCRETE PIPE
TO STR NO. 15 @ 8.17% SLOPE.
TOP OF CASTING AT FLOWLINE=828.91
12" INVERT (NW)= 825.32
12" INVERT (SW)= 825.32
12" INVERT (NE)= 825.32
REFER TO INLET & BACKFILL DETAILS

STR NO. 19
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
138' OF 12" REINFORCED CONCRETE PIPE
TO STR NO. 17 @ 8.12% SLOPE.
TOP OF CASTING AT FLOWLINE=840.12
12" INVERT (NW)= 836.53
12" INVERT (NE)= 836.53
REFER TO INLET & BACKFILL DETAILS

STR NO. 20
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
26' OF 12" REINFORCED CONCRETE PIPE
TO STR NO. 19 @ 1.00% SLOPE.
TOP OF CASTING AT FLOWLINE=840.12
12" INVERT (SE)= 836.79
REFER TO INLET & BACKFILL DETAILS

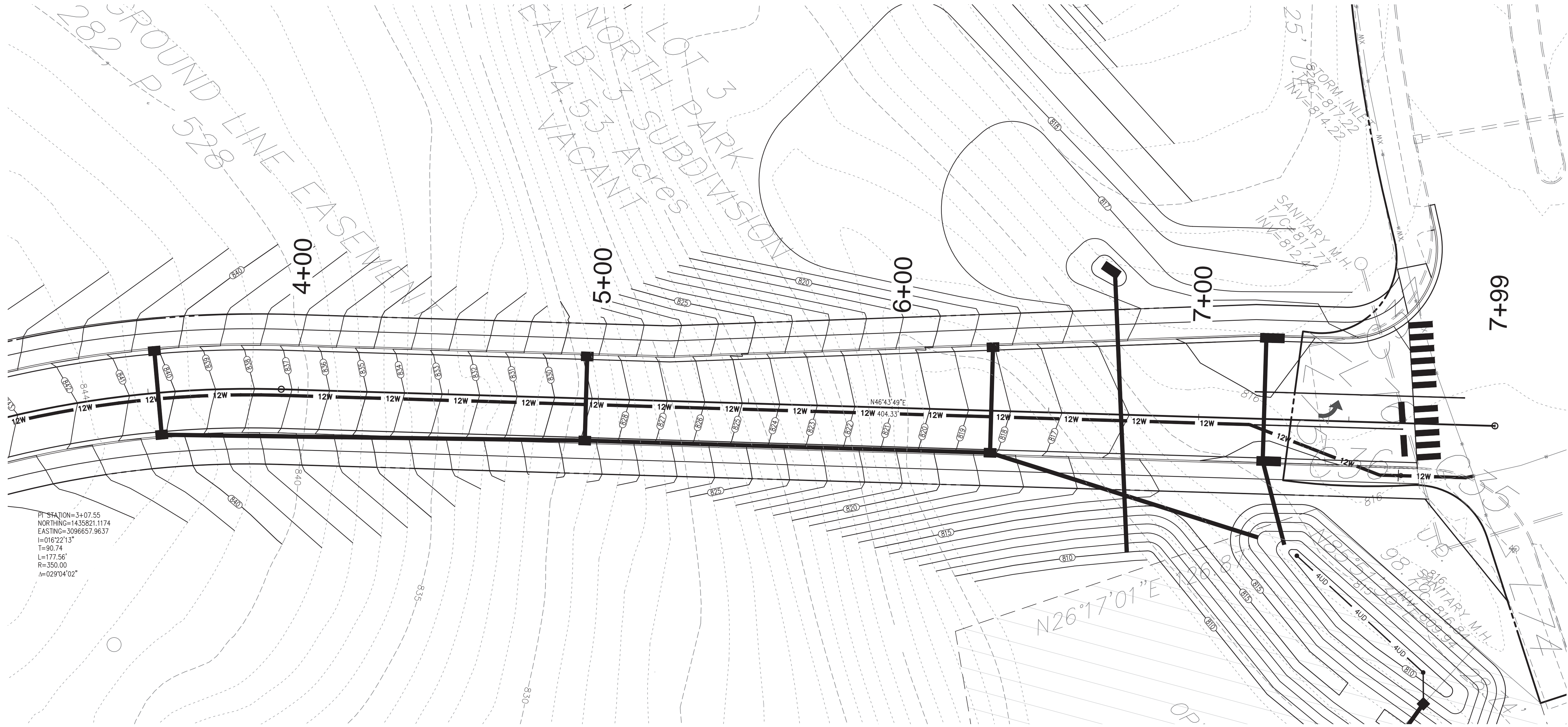
STR NO. 24
INDOT INLET TYPE 'J' WITH
EJW TYPE '7505' CASTING &
32' OF 12" REINFORCED CONCRETE PIPE
TO STR NO. 23 @ 1.00% SLOPE.
TOP OF CASTING AT FLOWLINE=843.14
12" INVERT (E)= 839.77
REFER TO INLET & BACKFILL DETAILS



SCALE: 1"=30'

NOTE TO CONTRACTOR

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TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES
REQUIRED DUE TO CONFLICTING ELEVATIONS.



EXISTING LEGEND	
EXISTING FENCE	— X — X — X —
EXISTING WATER LINE	— W —
EXISTING OVERHEAD UTILITY LINES	— OHU —
EXISTING UNDERGROUND ELECTRIC LINES	— UGE —
EXISTING UNDERGROUND TELEPHONE LINES	— UGT —
EXISTING UNDERGROUND FIBER OPTIC LINES	— FO —
EXISTING GAS LINE	— GAS —
EXISTING SANITARY FORCEMAIN	— FM —
EXISTING CONTOUR	--- XXX ---
FLOW LINE	→ → → →
EXISTING SANITARY SEWER AND MANHOLE	— () —
EXISTING STORM SEWER AND INLET	— () —
PROPERTY LINE	— - - -

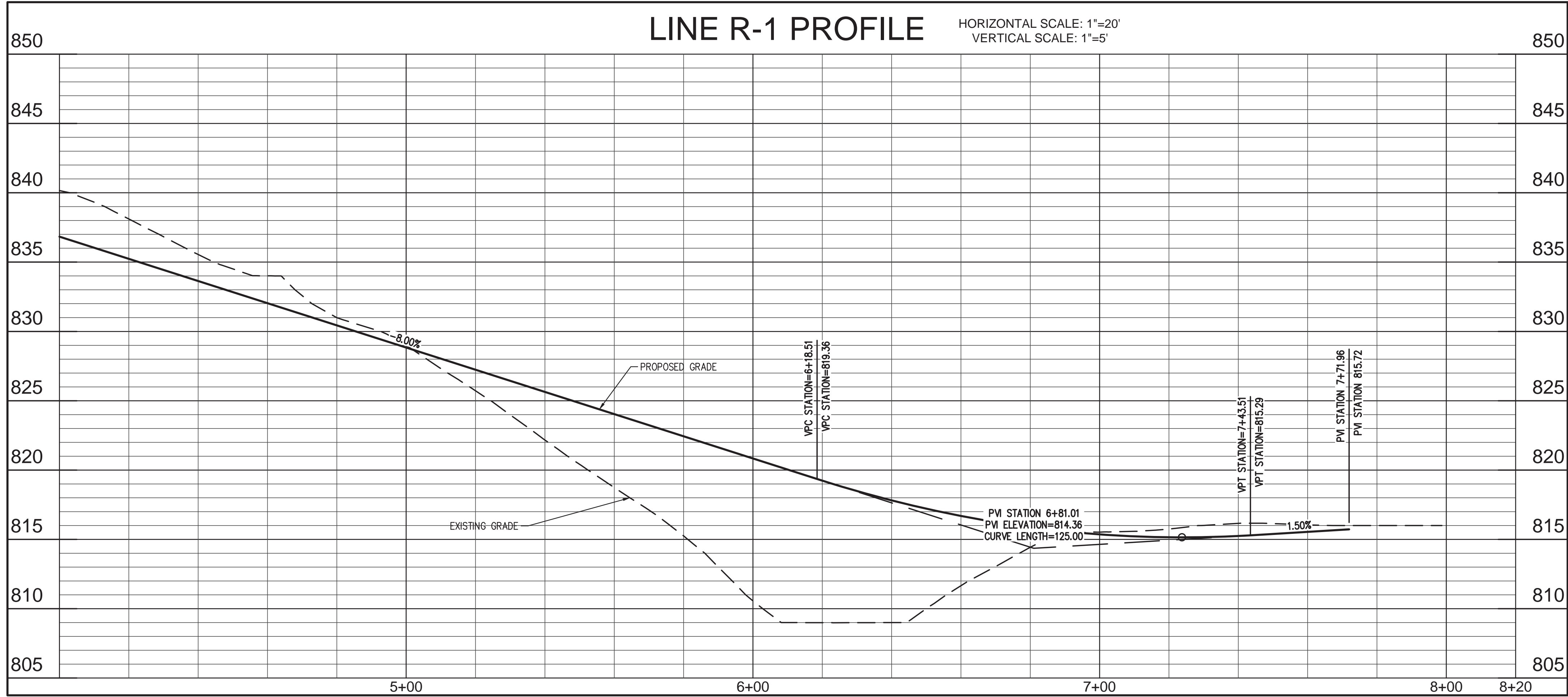
revisions:

ARCHITECTURE
CIVIL ENGINEERING
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528 north walnut street
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bloomington, indiana
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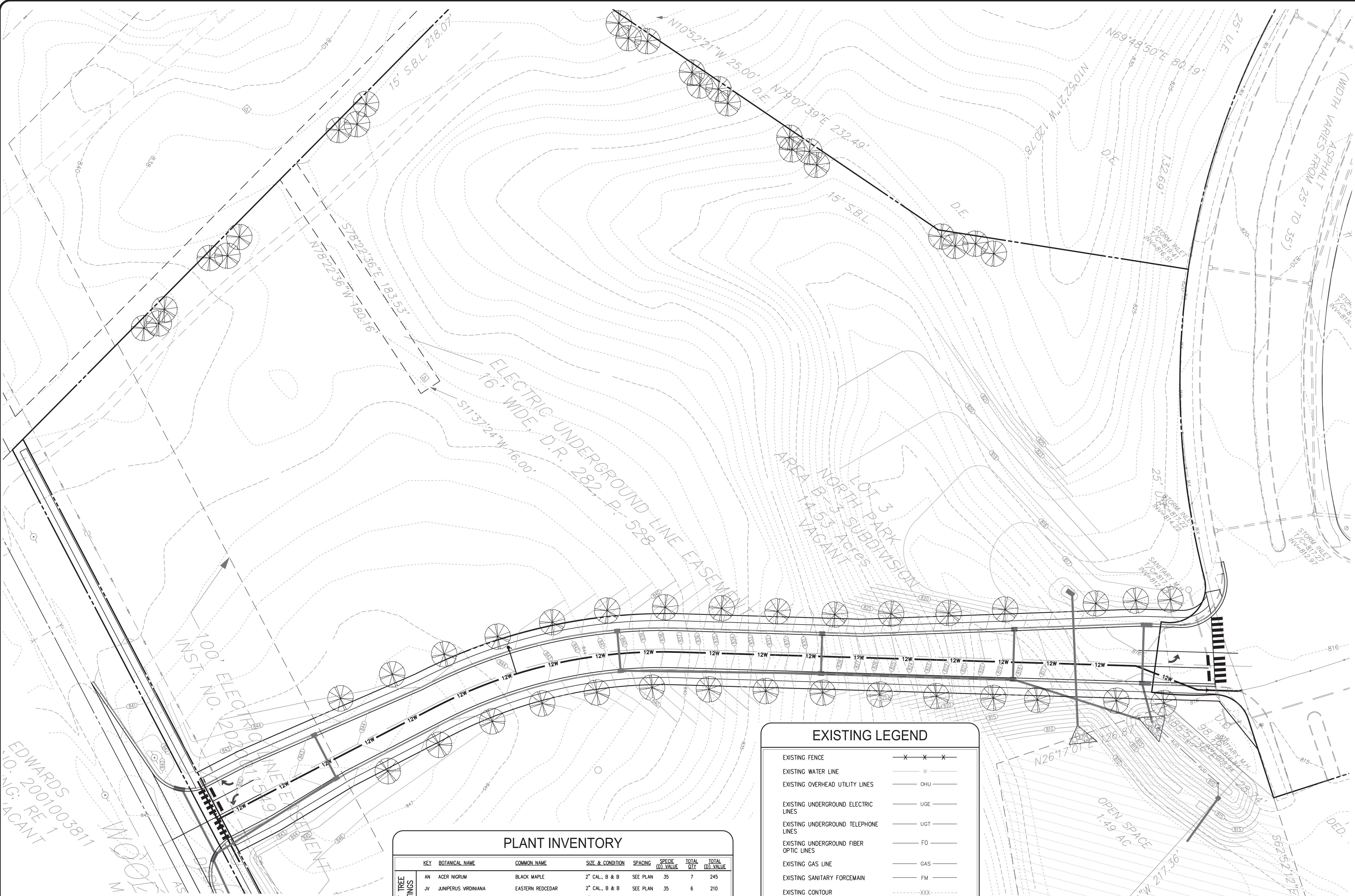
certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION

N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C402
project no.: 402337

title: "R-1" GRADING PLAN
& PROFILE



EDWARDS
NO. 2001003811
VACANT

PLANT INVENTORY							
KEY	BOTANICAL NAME	COMMON NAME	SIZE & CONDITION	SPACING	SPECIE (D) VALUE	TOTAL QTY	TOTAL (D) VALUE
AN	ACER NIGRUM	BLACK MAPLE	2" CAL., B & B	SEE PLAN	35	7	245
JV	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	2" CAL., B & B	SEE PLAN	35	6	210
TD	TAXODIUM DISTICHUM	BALD CYPRESS	2" CAL., B & B	SEE PLAN	35	6	210
PO	PLATANUS OCCIDENTALIS	SYCAMORE	2" CAL., B & B	SEE PLAN	35	6	210
QC	QUERCUS COCONEA	SCARLET OAK	2" CAL., B & B	SEE PLAN	35	6	210
						(D) VALUE SUBTOTAL:	39,121
						STREET PLANTING (D) VALUE:	-3,343
						TOTAL (D) VALUE PROVIDED:	35,778

XX

PLANT QUANTITY

XX

PLANT KEY DESIGNATION

XX

REQUIREMENT DESIGNATION

PL= PARKING LOT PERIMETER PLANTINGS

BP= BIG-RETENTION PLANTINGS

IP= INTERNAL PARKING LOT PLANTINGS

SS= STREETSCAPE AREA PLANTINGS

BY= BUFFERYARD PLANTINGS

EXISTING LEGEND	
EXISTING FENCE	— X — X — X —
EXISTING WATER LINE	— W —
EXISTING OVERHEAD UTILITY LINES	— OHU —
EXISTING UNDERGROUND ELECTRIC LINES	— UGE —
EXISTING UNDERGROUND TELEPHONE LINES	— UGT —
EXISTING UNDERGROUND FIBER OPTIC LINES	— FO —
EXISTING GAS LINE	— GAS —
EXISTING SANITARY FORCEMAIN	— FM —
EXISTING CONTOUR	— XXX —
FLOW LINE	—> —> —>
EXISTING SANITARY SEWER AND MANHOLE	—> —○—
EXISTING STORM SEWER AND INLET	—> —□—
PROPERTY LINE	— — — —

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PLANNING

BYNUM FANYO & ASSOCIATES, INC.
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bloomington, indiana
(812) 339-2890 (Fax)

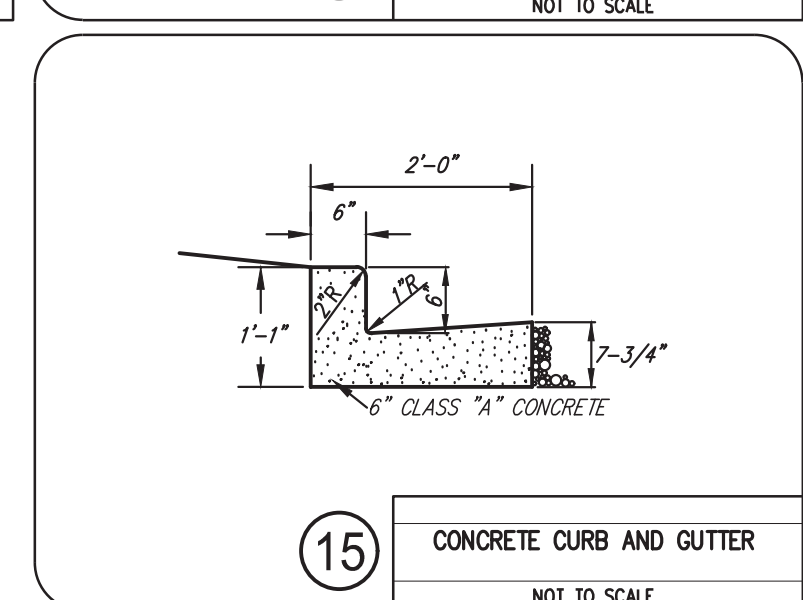
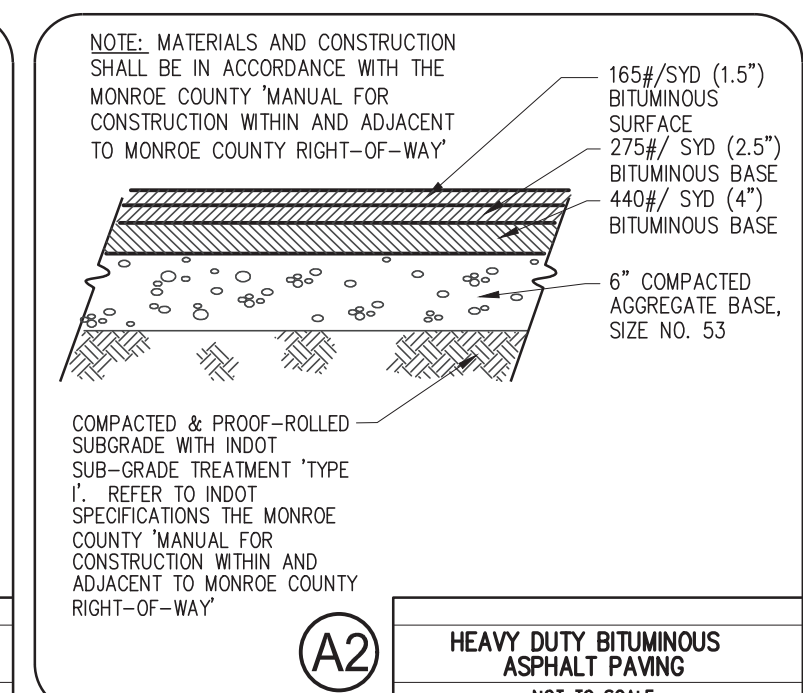
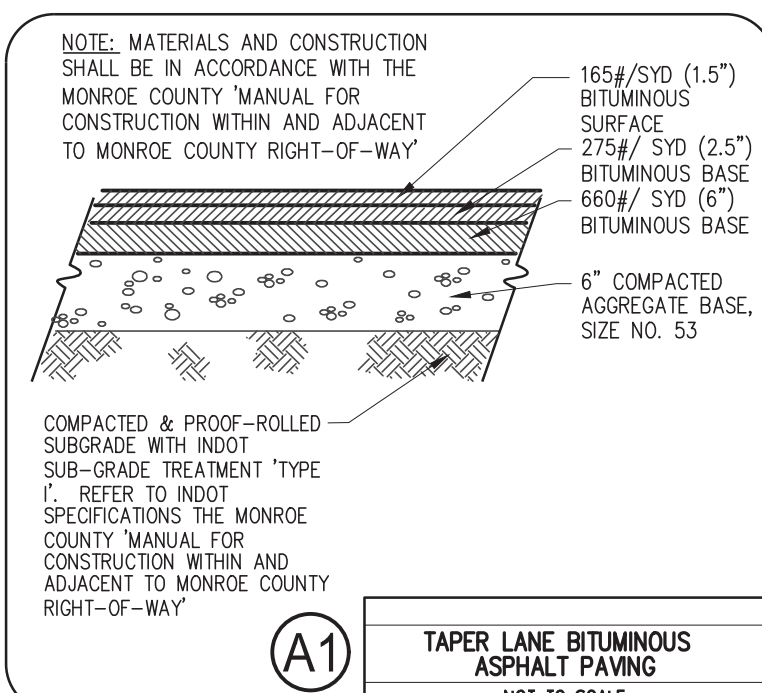
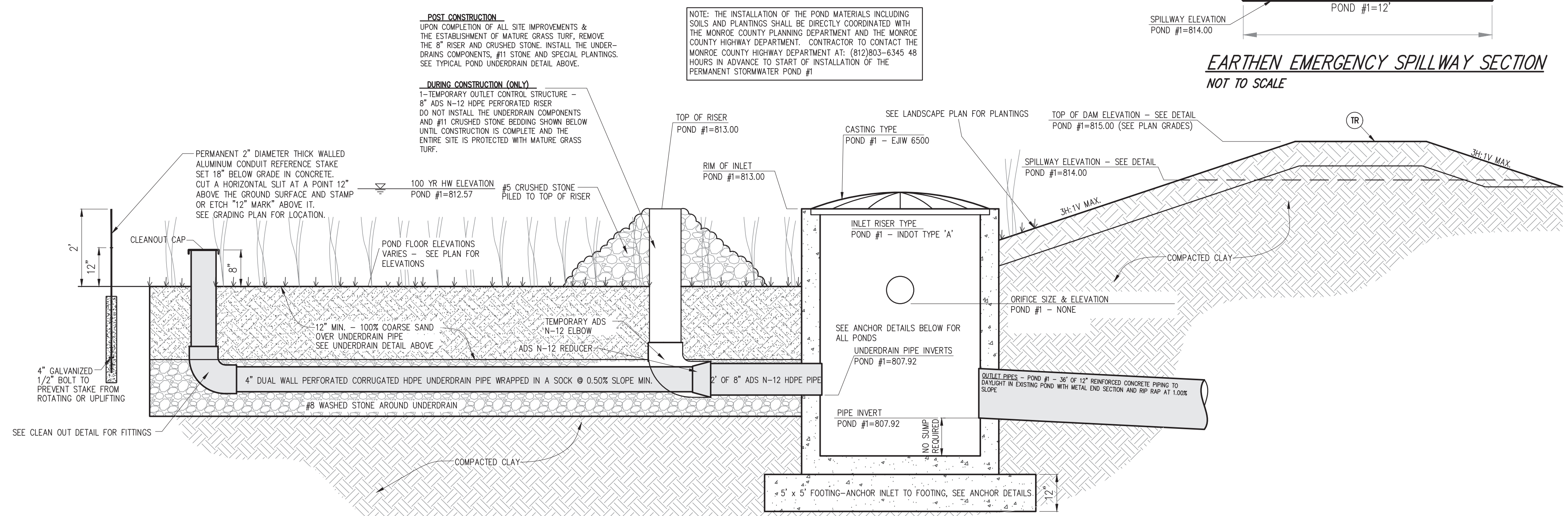
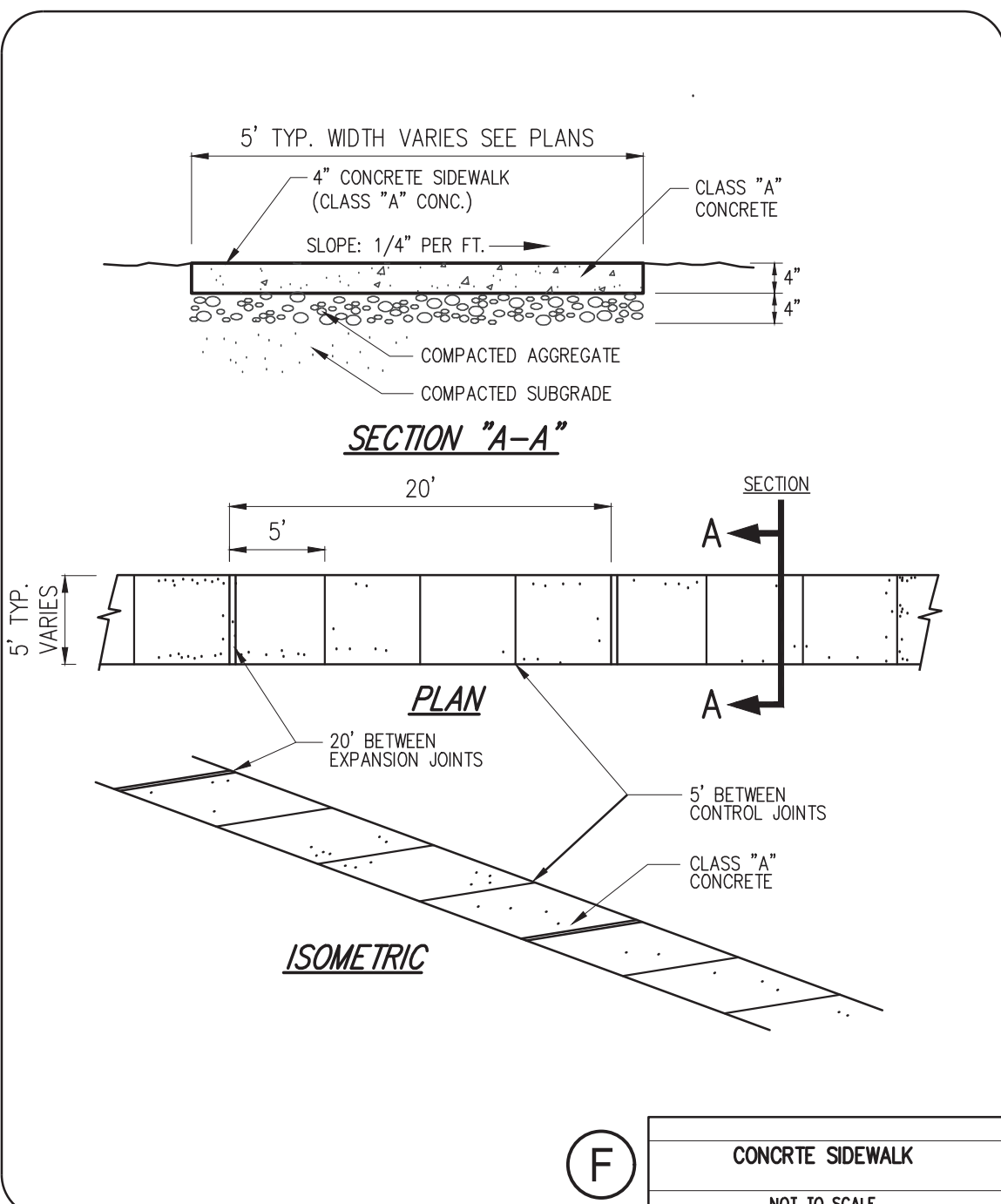
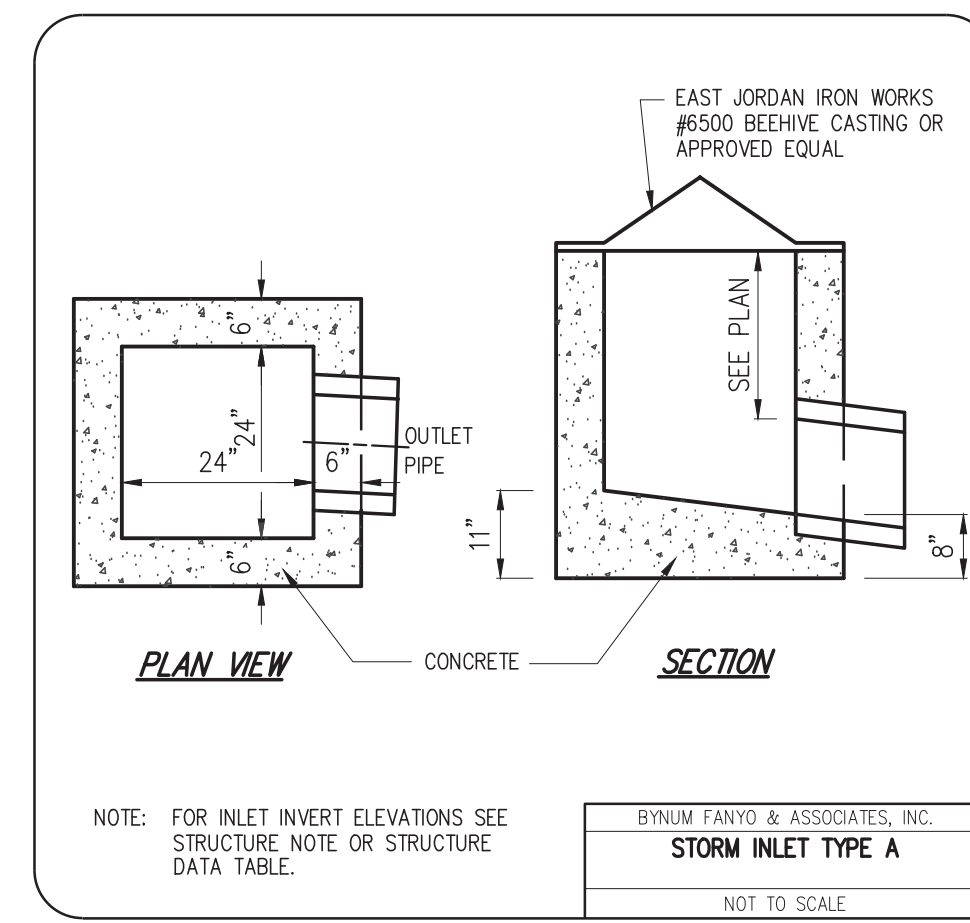
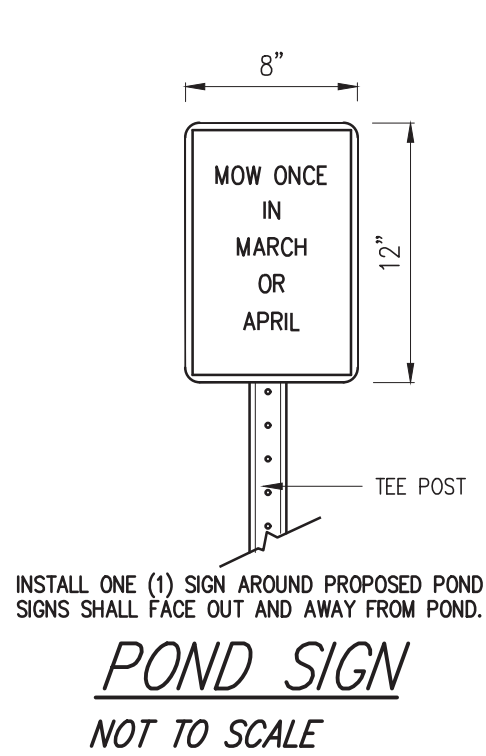
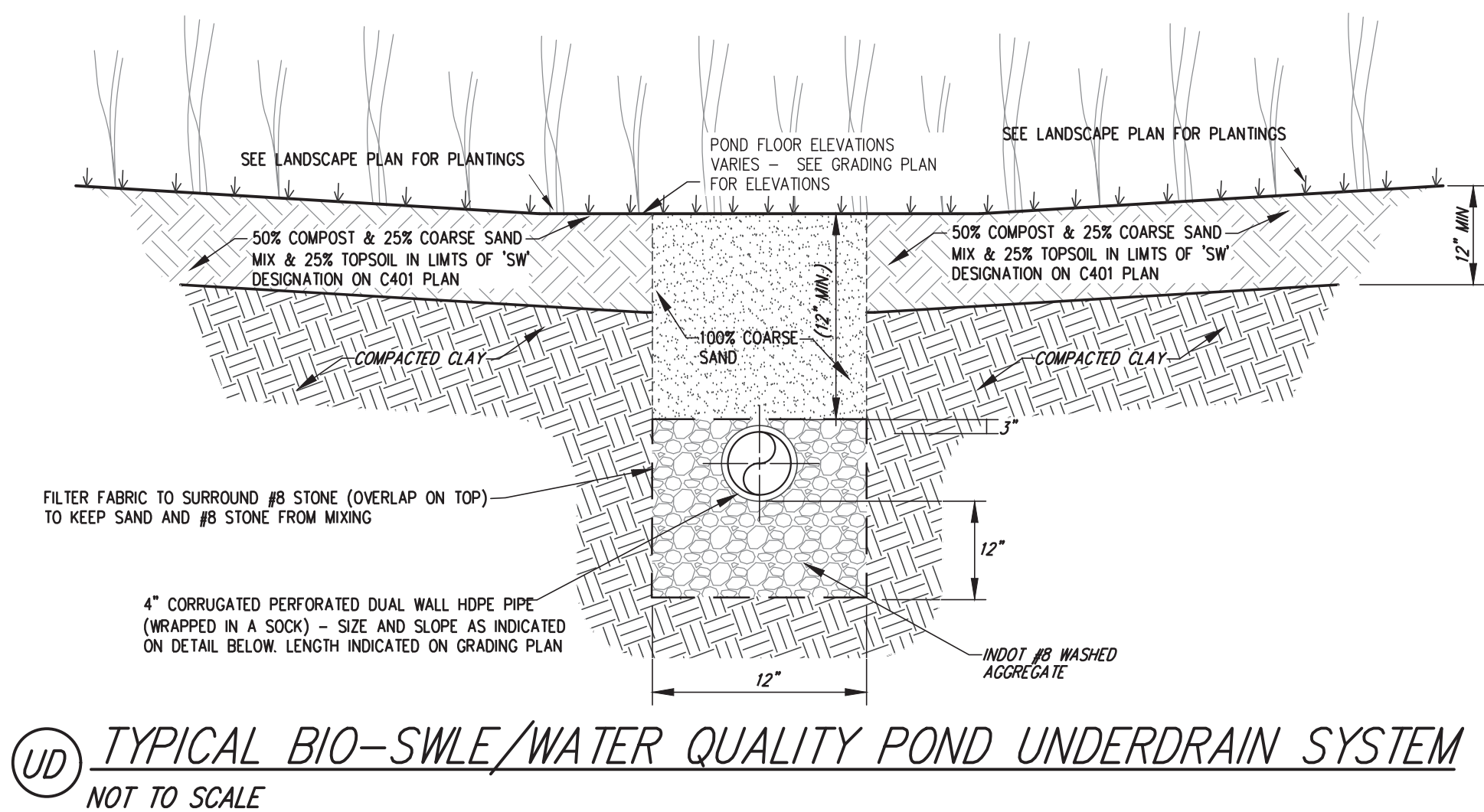
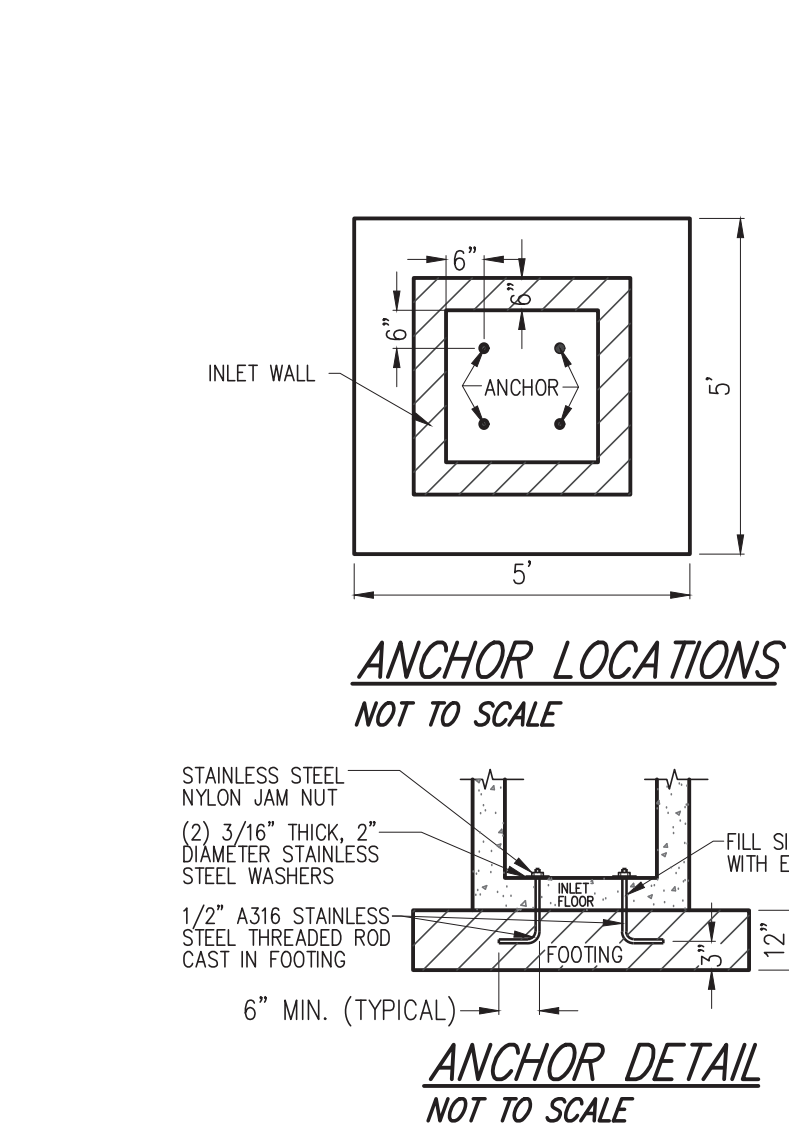
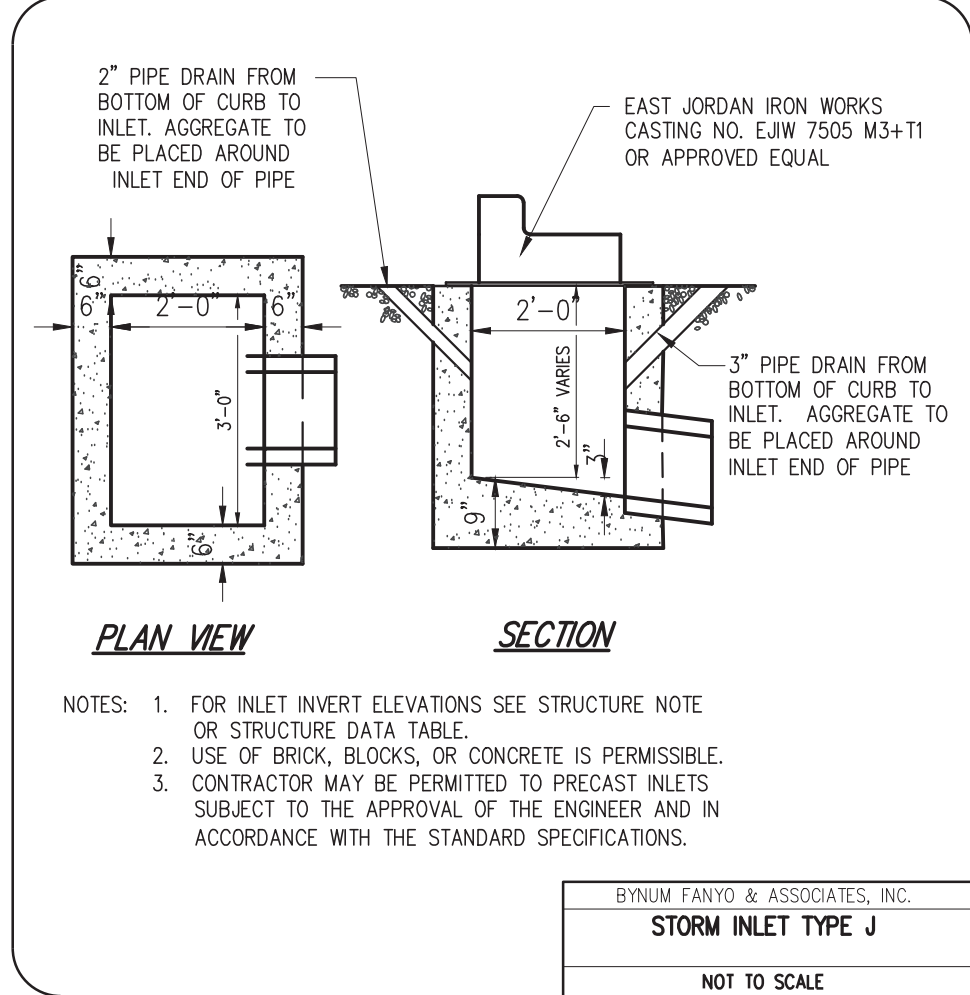
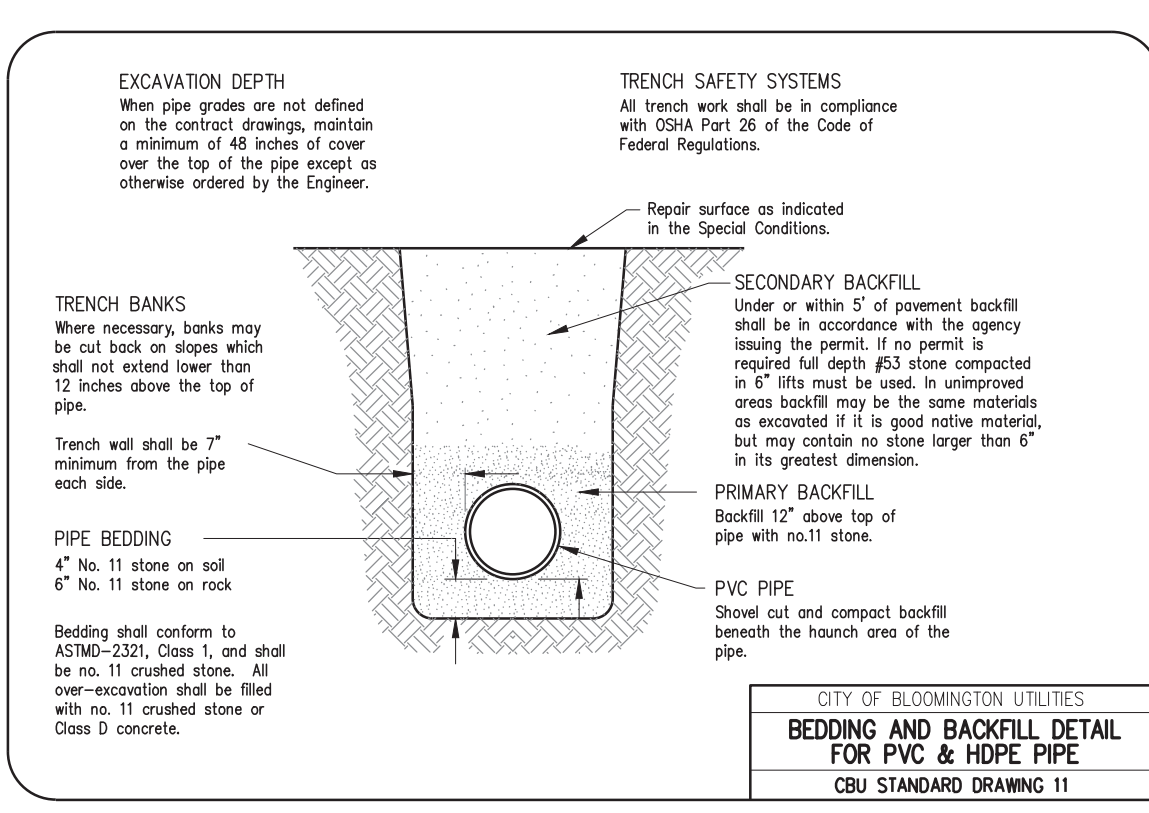
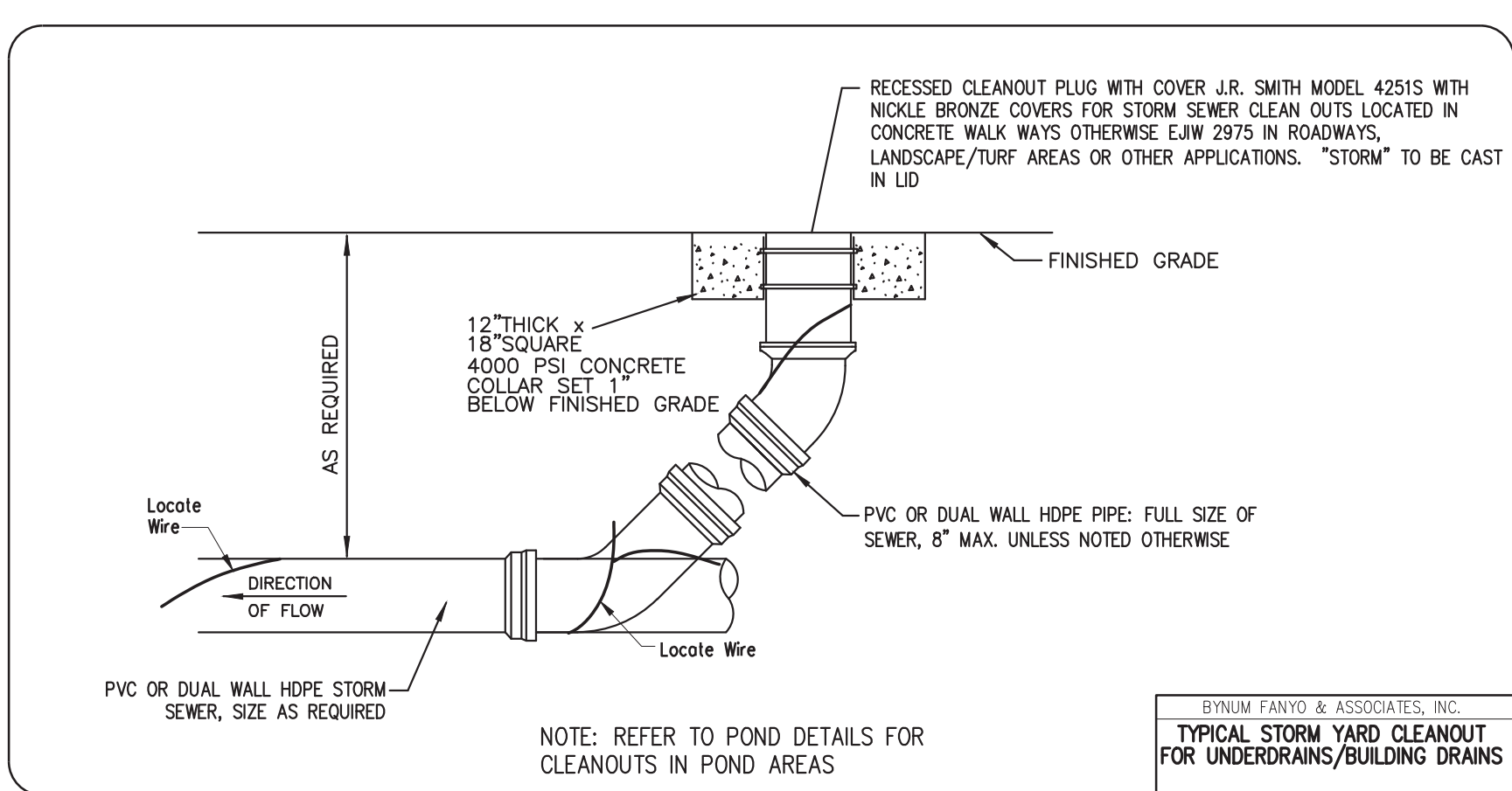
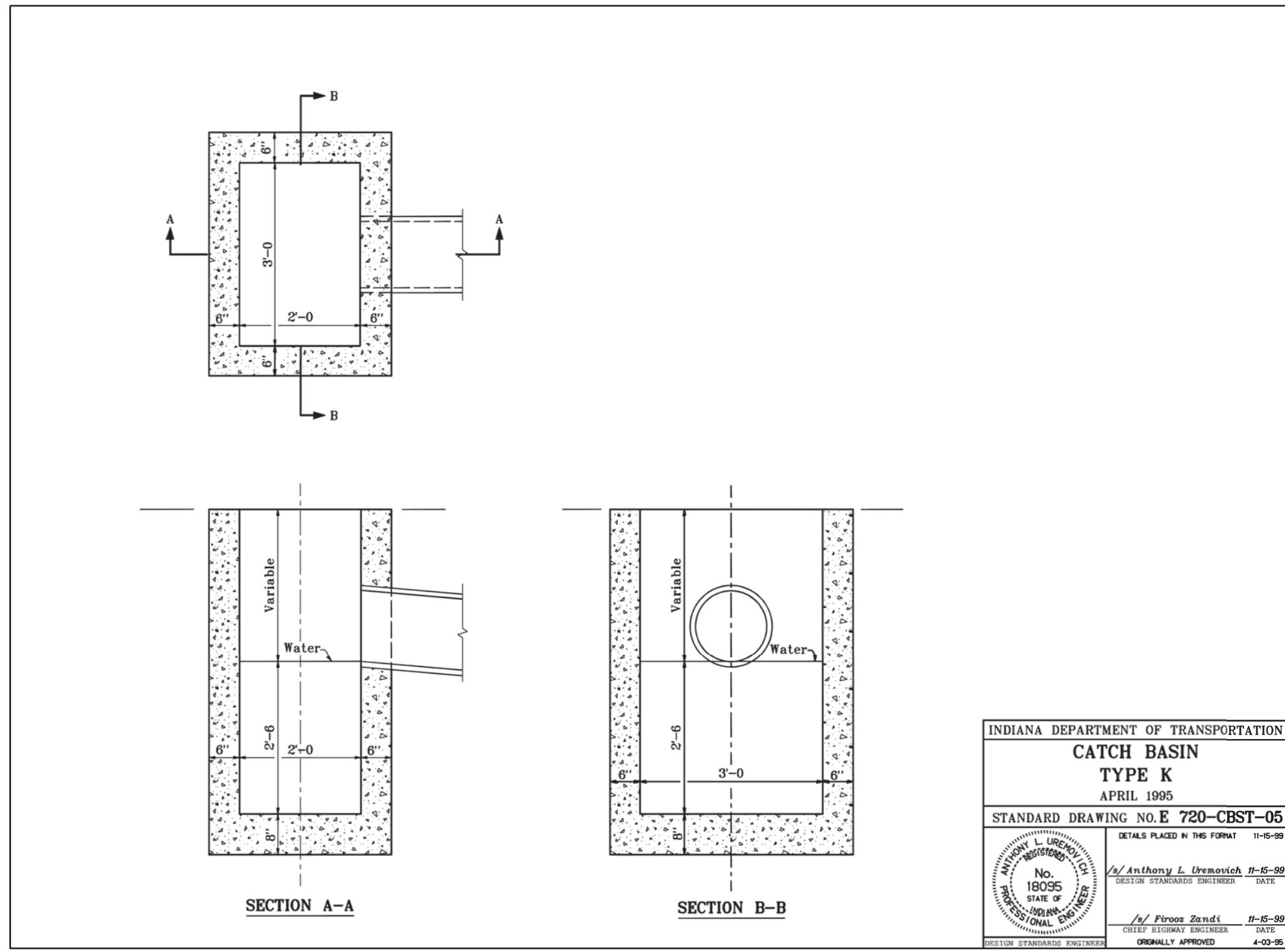
certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION

N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: LANDSCAPE PLAN

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C501
project no.: 402337



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revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING

BYNUM FANYO & ASSOCIATES, INC.

52B north walnut street
(812) 332-8030

certified by:

**PROPOSED
STONE CARVER DRIVE EXTENSION**

N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: MISCELLANEOUS
DETAILS

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C601
project no.: 402337

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	Flared Curb Ramp Typical Placement
8	Flared Curb Ramp Component Details
9	Blended Transition Curb Ramp, Depressed Curb Ramp and Depressed Curb Ramp Typical Placement
10	Blended Transition Curb Ramp Component Details
11	Heated Curb Through and Under Depressed Curb Ramp Typical Placement
12-13	Detectable Warning Surface Placement and Configuration
14	Detectable Warning Surface Details

GENERAL NOTES:

- All slopes are absolute rather than relative to the sidewalk or roadway grade. Slopes at least 5.00% less than the maximum are preferred.
- 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.
- 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 for 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.
- 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 5.00% measured parallel to the back of the curb.
- 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 tapered to meet the flush curb at the bottom of the ramp.
- 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 vehicle 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 running slope of 2.00% or less is considered level.
 - A ramp shall have a maximum running slope of 8.33% but shall not require a ramp length to exceed 15 ft.
 - A blended transition shall have a maximum running slope of 5.00%.
 - A turning space shall have a maximum running slope of 2.00%.
- Width: Unless otherwise noted, minimum width of a ramp, blended transition, or turning space, excluding flared sides or return curbs, shall be 4 ft.
- 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.
- Cross Slope Exceptions: The cross slope of a ramp, blended transition, or turning space shall be measured perpendicular to the direction of pedestrian travel.
 - The maximum cross slope of a pedestrian street crossing without yield or stop control shall be 5.00%.
 - The maximum cross slope of a pedestrian street crossing with yield or stop control shall be 2.00%.
 - The maximum cross slope at a midblock crossing shall be the established grade of the adjacent roadway.
- 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-4 for counter slope details.
- Objects such as a utility cover, vault frame, and grating shall be placed outside the curb ramp.
- Curb ramps shall be placed within the marked crosswalk area.
- Drainage inlets should be located uphill from a curb ramp to prevent ponding in the path of pedestrian travel.

INDIANA DEPARTMENT OF TRANSPORTATION

CURB RAMP DRAWING INDEX AND GENERAL NOTES

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-01

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP ADJACENT CURB

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP WITH BUFFER

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

INDIANA DEPARTMENT OF TRANSPORTATION

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP TYPICAL PLACEMENT

SEPTEMBER 2016

STANDARD DRAWING NO. E 604-SWCR-05

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/15/16

CHECKED BY

MARK A. MILLER

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/18/16

BLENDING TRANSITION CURB RAMP WITH RUNNING SLOPE > 2.00%

BLENDING TRANSITION CURB RAMP WITH RUNNING SLOPE < 2.00%

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

Turning Space

Clear Space

INDIANA DEPARTMENT OF TRANSPORTATION

BLENDING TRANSITION CURB RAMP, DEPRESSED CORNER CURB RAMP AND DIAGONAL CURB RAMP TYPICAL PLACEMENT

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-09

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

PAIRED PERPENDICULAR CURB RAMP AT LARGE RADIUS

PAIRED PERPENDICULAR CURB RAMP AT SMALL RADIUS

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

Turning Space

Clear Space

INDIANA DEPARTMENT OF TRANSPORTATION

PAIRED PERPENDICULAR CURB RAMP TYPICAL PLACEMENT

SEPTEMBER 2016

STANDARD DRAWING NO. E 604-SWCR-03

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/15/18

CHECKED BY

MARK A. MILLER

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/18/16

MIDBLOCK CROSSING CURB RAMP

PAIRED PARALLEL CURB RAMP ALONG LARGE RADIUS

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

Turning Space

Clear Space

INDIANA DEPARTMENT OF TRANSPORTATION

PAIRED PARALLEL CURB RAMP AND MIDBLOCK CROSSING CURB RAMP TYPICAL PLACEMENT

SEPTEMBER 2016

STANDARD DRAWING NO. E 604-SWCR-07

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/15/16

CHECKED BY

MARK A. MILLER

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/18/16

PERPENDICULAR CURB RAMP

PARALLEL CURB RAMP

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface (DWS)

Ramp

Grade Break

INDIANA DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE PLACEMENT AND CONFIGURATION

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-12

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

PERPENDICULAR CURB RAMP COMPONENT DETAILS

SECTION A-A

SECTION B-B

LEGEND:

Buffer or Other Non-Walkable Surface

Ramp

Detectable Warning Surface

Turning Space

INDIANA DEPARTMENT OF TRANSPORTATION

PERPENDICULAR CURB RAMP COMPONENT DETAILS

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-04

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

PARALLEL CURB RAMP COMPONENT DETAILS

SECTION A-A

SECTION B-B

LEGEND:

Ramp

Detectable Warning Surface

Turning Space

INDIANA DEPARTMENT OF TRANSPORTATION

PARALLEL CURB RAMP COMPONENT DETAILS

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-08

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

BRICK DETECTABLE WARNING SURFACE WITH CONCRETE BORDER

TYPICAL RAMP AND BRICK SURFACE CONSTRUCTION DETAIL

ALTERNATE CURB CONSTRUCTION

LEGEND:

Ramp

Detectable Warning Surface

Turning Space

INDIANA DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE DETAILS

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-14

DESIGNED BY

ELIZABETH W. PHILLIPS

DESIGN STANDARDS ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

03/29/18

CHECKED BY

JOHN LACKIE

CHIEF ENGINEER

STATE OF INDIANA

PROFESSIONAL ENGINEER

DATE

04/25/18

NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

revisions:

ARCHITECTURE

CIVIL ENGINEERING

PLANNING

BYNUM FANYO & ASSOCIATES, INC.

528 north walnut street

(812) 332-8030

(812) 332-2990 (Fax)

certified by:

PROPOSED

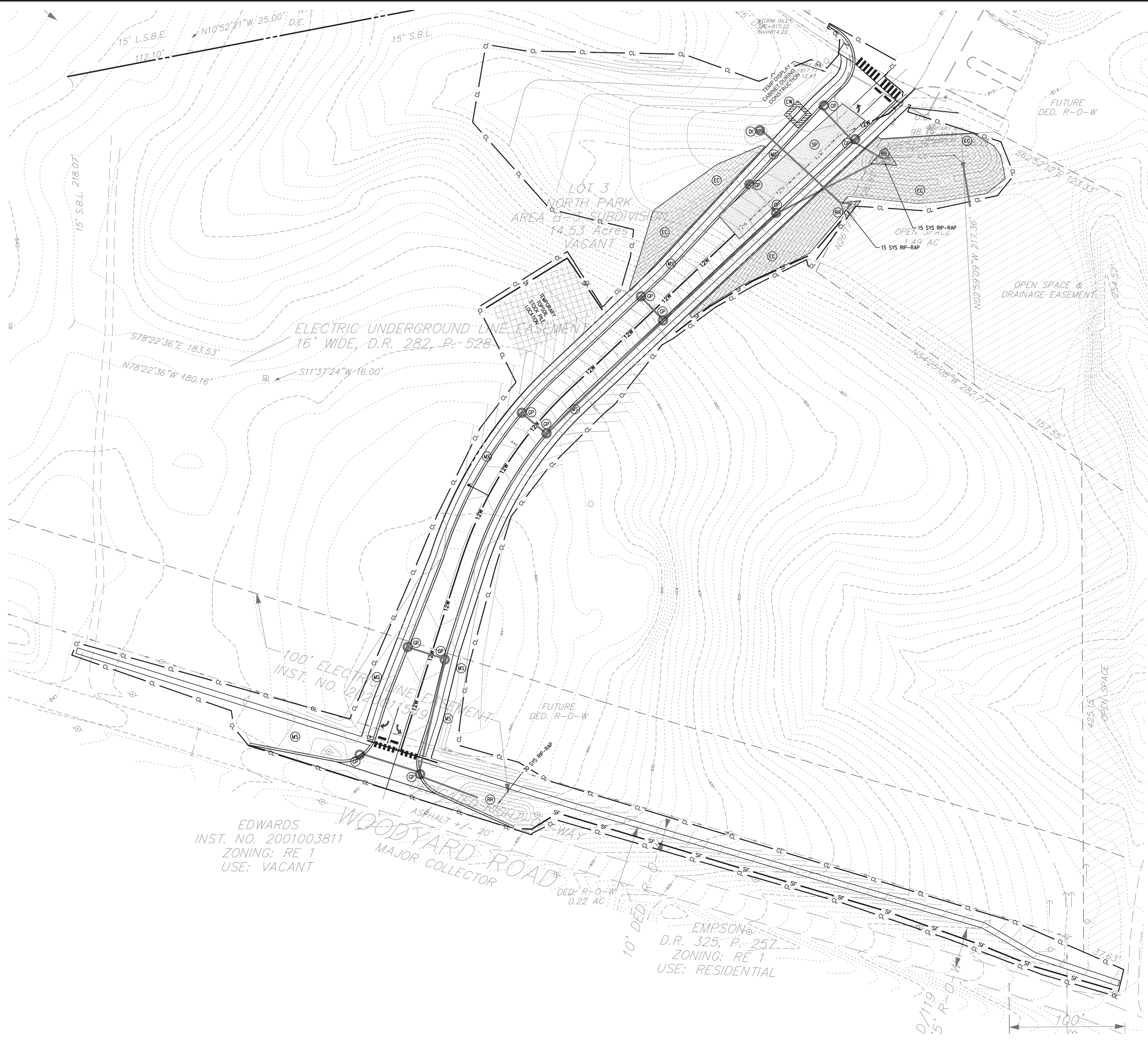
STONE CARVER DRIVE EXTENSION

N. STONE CARVER DRIVE, BLOOMINGTON, IN 47404

FROM N LINTEL DR. TO W. WOODYARD ROAD

title: MISCELLANEOUS DETAILS

designed by: AJW
drawn by: JSF
sheet no: C602
project no.: 402337

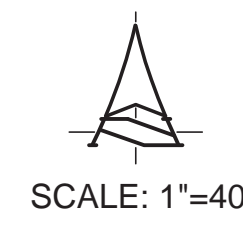


EXISTING LEGEND

EXISTING FENCE	— X — X — X —
EXISTING WATER LINE	— W —
EXISTING OVERHEAD UTILITY LINES	— OHU —
EXISTING UNDERGROUND ELECTRIC LINES	— UGE —
EXISTING UNDERGROUND TELEPHONE LINES	— UGT —
EXISTING UNDERGROUND FIBER OPTIC LINES	— FO —
EXISTING GAS LINE	— GAS —
EXISTING SANITARY FORCEMAIN	— FM —
EXISTING CONTOUR	--- XXX ---
FLOW LINE	→ ——— →
EXISTING SANITARY SEWER AND MANHOLE	— ○ —
EXISTING STORM SEWER AND INLET	— □ —
PROPERTY LINE	- - - - -

EROSION CONTROL LEGEND

EXISTING CONTOUR	--- XXX ---
PROPOSED CONTOUR	— (XXX) —
TEMPORARY SILTATION FENCE, REFER TO DETAIL	— SF —
TREE PRESERVATION FENCING REQUIRED - TEMPORARY DURING CONSTRUCTION - REFER TO DETAILS ON SHEET C801	— X —
CONSTRUCTION LIMITS: DELINEATED BY PROPERTY LINE UNLESS OTHERWISE SPECIFIED	— CL —
TEMPORARY MULCH SEEDING - REFER TO DETAILS	— (MS) —
25' X 100' STONE PAD, 6" DEEP TO KEEP FROM TRACKING MUD OFF SITE - REFER TO DETAIL (TEMPORARY DURING CONSTRUCTION)	— (SP) —
TEMPORARY CONCRETE WASHOUT AREA - REFER TO DETAIL	— (CW) —
D-50 RIP-RAP STORM OUTLET PROTECTION - REFER TO DETAIL AND PLAN FOR MIN. QUANTITY (PERMANENT)	— (RR) —
GRAVEL CURB INLET PROTECTION (TEMPORARY) (TO BE USED ON ALL CURB INLETS)	— (GP) —



NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING

BYNUM FANYO & ASSOCIATES, INC.

528 north walnut street
(812) 332-8030

bloomington, indiana
(812) 339-2990 (Fax)

certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION

N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: STORMWATER
POLLUTION
PREVENTION PLAN

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no: C701
project no.: 402337

CONSTRUCTION STORMWATER GENERAL PERMIT

SECTION A – CONSTRUCTION PLAN ELEMENTS

A1. INDEX OF THE LOCATION OF REQUIRED PLAN ELEMENTS IN THE CONSTRUCTION PLAN: REFER TO THIS SHEET.

A2. A VICINITY MAP DEPICTING THE PROJECT SITE LOCATION IN RELATIONSHIP TO RECOGNIZABLE LOCAL LANDMARKS, TOWNS, AND MAJOR ROADS: REFER TO THE COVER SHEET.

A3. NARRATIVE OF THE NATUR AND PURPOSE OF THE PROJECT: THE PROJECT CONSISTS OF THE EXTENSION OF N STONE CARVER DRIVE FROM N LINTEL DRIVE TO W WOODYARD RD

A4. LATITUDE AND LONGITUDE TO THE NEAREST FIFTEEN (15) SECONDS: 39.189761, -86.575116

A5. LEGAL DESCRIPTION: REFER TO FINAL PLAT.

A6. 11 X 17-INCH PLAT SHOWING BUILDING LOT NUMBERS/BOUNDARIES AND ROAD LAYOUT/NAMES: REFER TO FINAL PLAT.

A7. BOUNDARIES OF THE ONE HUNDRED (100) YEAR FLOODPLAINS, FLOODWAY FRINGES, AND FLOODWAYS: DOES NOT APPLY.

A8. LAND USE OF ALL ADJACENT PROPERTIES: THE LAND USE TO THE NORTH IS A MEDICAL FACILITY, THE LAND USE TO THE SOUTH IS SINGLE FAMILY RESIDENTIAL, AND THE LAND USED TO THE EAST AND WEST IS VACANT.

A9. IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL: DOES NOT APPLY.

A10. NAME(S) OF THE RECEIVING WATERS: PRIMARY – STOUT CREEK, SECONDARY – BEANBLOSSOM CREEK, TERTIARY – WHITE RIVER

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

A12. SOILS MAP OF THE PREDOMINATE SOIL TYPES: REFER TO THIS SHEET.

A13. IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE (CONSTRUCTION PLAN, EXISTING SITE LAYOUT): DOES NOT APPLY.

A14. IDENTIFICATION OF ANY OTHER STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORIZATIONS THAT ARE REQUIRED FOR CONSTRUCTION ACTIVITIES: DOES NOT APPLY.

A15. IDENTIFICATION AND DELINEATION OF EXISTING COVER, INCLUDING NATURAL BUFFERS: REFER TO PLAN SHEETS C201–C501..

A16. EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS: THE EXISTING SITE TOPOGRAPHY ID DEPICTED ON THE PLAN SHEETS C201–C501.

A17. LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE: DOES NOT APPLY. .

A18. LOCATION (S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE: RUNOFF DISCHARGES FROM THE SITE IN ALL DIRECTIONS.

A19. LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE: EXISTING STRUCTURES ARE SHOWN ON THE PLAN SHEETS C201–C501.

A20. EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PURPOSED OF STORMWATER MANAGEMENT: DOES NOT APPLY.

A21. LOCATIONS WHERE STORMWATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER, SUCH AS ABANDONED WELLS, SINKHOLES, OR KARST FEATURES: NO KNOW DISCHARGES TO GROUND WATER.

A22. SIZE OF THE PROJECT AREA EXPRESSED IN ACRES: THE CONSISTS OF 0.89 ACRES OF DEDICATED MONROE COUNTY RIGHT-OF-WAY.

A23. TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES:1.50 ACRES

A24. PROPOSED FINAL TOPOGRAPHY: PROPOSED FINAL TOPOGRAPHY IS SHOWN ON GRADING & DRAINAGE PLAN ON SHEET C301.

A25. LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS: THE CONSTRUCTION LIMITS ARE SHOWN ON THE SWPPP PLAN SHEET C701.

A26. LOCATIONS, SIZE, AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEM SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNELS: PROPOSED STORMWATER DRAINAGE SYSTEMS ARE SHOWN ON THE GRADING & DRAINAGE PLAN ON SHEET C301. DRAINAGE DETAILS ARE ON SHEET C601.

A27. LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE:DISCHARGE LOCATIONS ARE SHOWN ON THE GRADING & DRAINAGE PLAN ON SHEET C301.

A28. LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS: ALL PROPOSED SITE IMPROVEMENTS ARE SHOWN ON THE PLAN SHEETS C201–C501.

A29. LOCATION OF ALL ON-SITE AND OFF-SITE SOIL STOCKPILES AND BORROW AREAS: STOCKPILE LOCATIONS ARE SHOWN ON THE SWPPP PLAN SHEET C701. OFF-SITE SOIL STOCKPILES AND BORROW AREAS ARE YET TO BE DETERMINED.

A30. CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT: DOES NOT APPLY.

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

SECTION B – CONSTRUCTION COMPONENT

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

A. THE MOST ABUNDANT POLLUTANT CAUSED BY CONSTRUCTION WOULD BE SOIL SUSPENDED IN STORM WATER RUNOFF.
B. FUEL, OILS, AND OTHER FLUIDS ASSOCIATED WITH THE CONSTRUCTION EQUIPMENT COULD POSSIBLY RUNOFF AS WELL.
C. TRASH ASSOCIATED WITH HUMAN ACTIVITY, INCLUDING CONSTRUCTION MATERIALS.

B2. STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS: REFER TO THE SWPP PLAN SHEET C701 AND THE SWPPP DETAILS ON SHEET C703–C704 FOR DIMENSIONS OF THE CONSTRUCTION ENTRANCE.

B3. SPECIFICATIONS FOR TEMPORARY AND PERMANENT STABILIZATION: A COMBINATION OF SILT FENCE AND VEGETATED COVER ARE PROPOSED TO CONTROL EROSION FROM SHEET FLOW AREAS/NEWLY GRADED AREAS.

B4. SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS: RIP-RAP APRONS ARE PROPOSED AT STORM SEWER DISCHARGE LOCATIONS. CATCH BASINS ARE PROPOSED FOR THE LAST STORM STRUCTURE BEFORE THE DISCHARGE LOCATION.

B5. SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS: A COMBINATION OF SILT FENCE, EROSION CONTROL BLANKET AND VEGETATED COVER ARE PROPOSED TO CONTROL EROSION FROM SHEET FLOW AREAS/NEWLY GRADED AREAS.

B6. RUN-OFF CONTROL MEASURES: RUN-OFF CONTROL MEASURES INCLUDE STORM SEWER INFRASTRUCTURE.

B7. STORMWATER OUTLET PROTECTION LOCATION AND SPECIFICATIONS: RIP-RAP APRONS ARE SHOWN ON THE SWPP PLAN SHEETS C701. RIP-RAP DETAILS ARE SHOWN IN THE SWPP DETAILS ON SHEETS C703 AND C704.

B8. GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS: DOES NOT APPLY.

B9. DETERWATER APPLICATIONS AND MANAGEMENT METHODS: DOES NOT APPLY.

B10. MEASURES UTILIZED FOR WORK WITHIN WATERBODIES: DOES NOT APPLY.

B11. MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE: MONITORING AND MAINTENANCE OF ALL POLLUTION PREVENTION MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INSPECT ALL MEASURES AT LEAST ONCE A WEEK AND AFTER EACH STORM EVENT, THE CONTRACTOR SHALL PREPARE A WRITTEN REPORT FOR EACH INSPECTION NOTING CONDITIONS AND MAINTENANCE PROVIDED. A COPY OF EACH REPORT SHALL BE KEPT ON FILE AT THE PROJECT SITE. REFER TO EACH PREVENTION MEASURE DETAIL FOR CONSTRUCTION AND MAINTENANCE GUIDELINES.

B12. PLANNED CONSTRUCTION SEQUENCE THAT DESCRIBES THE IMPLEMENTATION OF STORMWATER QUALITY MEASURES IN RELATION TO LAND DISTURBANCE: SEE THE EROSION CONTROL SEQUENCE ON THIS SHEET.

B13. PROVISIONS FOR EROSION AND SEDIMENT CONTROL ON INDIVIDUAL RESIDENTIAL BUILDING LOTS REGULATED UNDER THE PROPOSED PROJECT: DOES NOT APPLY.

B14. MATERIAL HANDLING AND SPILL PREVENTION AND SPILL RESPONSE PLAN MEETING THE REQUIREMENTS IN 327 IAC 2-6-1: ALL MATERIALS ON-SITE WILL BE HANDLED PER THE REQUIREMENTS OF THE MSDS SHEETS. THE CONTRACTOR SHALL HAVE AN EMERGENCY SPILL CLEAN-UP KIT ON SITE FOR RECOVERY OF PETROLEUM PRODUCT SPILLS AT ALL TIMES. IF A REPORTABLE AMOUNT OF SEDIMENT LADEN WATER OR OTHER POLLUTANT IS ALLOWED TO LEAVE THE SITE, THE CONTRACTOR IS OBLIGATED TO NOTIFY IDEM'S SPILL LINE AT (317) 233-7745 WITHIN 24 HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINES AND ANY LIABILITY ASSOCIATED WITH SUCH AN EVENT. SEDIMENT LADEN WATER, WHICH OTHERWISE WOULD FLOW FROM THE PROJECT SITE, SHALL BE TREATED BY EROSION AND SEDIMENT CONTROL MEASURES APPROPRIATE TO MINIMIZE SEDIMENTATION. ALL WATER (INCLUDING STORMWATER, GROUNDWATER, OR ANY OTHER WATER) THAT LEAVES THE CONSTRUCTION SITE MUST HAVE A TOTAL SUSPENDED SOLIDS LEVEL OF LESS THAN 50 PARTS PER MILLION OR HAVE NO VISIBLE SEDIMENT. THIS CAN BE DETERMINED ON SITE BY TAKING A SETTLEABLE SOLIDS SAMPLE WITH AN IMHOFF CONE WITH A RESULT OF LESS THAN 0.5 ML PER LITER. IT SHOULD BE EXPECTED THAT ALL MATERIALS NECESSARY TO CONSTRUCT THE PROPOSED SITE IMPROVEMENTS WILL BE ENCOUNTERED ON SITE AT ONE TIME OR ANOTHER. ALL MATERIALS THAT APPEAR ON SITE WILL BE ACCOMPANIED WITH MSDS SHEETS IN ACCORDANCE WITH OSHA GUIDELINES AND THE CODE OF FEDERAL REGULATION (CFR). MSDS SHEETS PROVIDE AMONG OTHER THINGS, THE PROCEDURES FOR CLEAN-UP OF SPILLS AND LEAKS. REFER TO ITEM B1 ABOVE FOR ADDITIONAL INFORMATION.

B15. MATERIAL HANDLING PROCEDURES ASSOCIATE WITH CONSTRUCTION ACTIVITY: REFER TO B14 IN THIS NARRATIVE.

SECTION C – POST CONSTRUCTION COMPONENT

C1. DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH WITH THE PROPOSED LAND USE: THE MAIN POST CONSTRUCTION POLLUTANTS MAY COME FROM AUTOMOTIVE USE.

C2. DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER MEASURES: THE CATCH BASINS ARE PROPOSED TO CAPTURE AND TRAP POLLUTED SEDIMENT. THE CATCH BASINS WILL BE REGULARLY CLEANED AND MAINTAINED BY THE MONROE COUNTY HIGHWAY DEPARTMENT.

C3. PLAN DETAILS FOR EACH STORMWATER MEASURE: CATCH BASINS ARE DETAILED ON SHEET C601.

C4. SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION:

1. CONTACT THE MONROE COUNTY SWCD AT (812) 334-4325 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

2. INSTALL CONSTRUCTION ENTRANCE AS SHOWN ON PLANS

3. PRIOR TO ANY EARTH MOVING PLACE SILTATION FENCE ALONG THE DOWN STREAM SIDE OF ALL GRADING ACTIVITY.

4. REMOVE VEGETATION IN AREAS TO BE DISTURBED ONLY.

5. STRIP TOP SOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCK PILE AT LOCATIONS ABOVE SILT FENCE. SEED WITH TEMPORARY SEED MIXTURE TYPE 1, IMMEDIATELY.

6. MAINTAIN SILT FENCE DURING CONSTRUCTION AND KEEP CLEAR OF DEBRIS.

7. PERFORM CONSTRUCTION ACTIVITIES AS SHOWN ON THE PLANS. DO NOT DISTURB TURF AREAS OUTSIDE OF CONSTRUCTION LIMITS SO THAT TURF ACTS AS A VEGETATIVE FILTER STRIP.

8. ALL EROSION CONTROL STRUCTURES SHALL BE KEPT IN WORKING ORDER AND INSPECTED UPON COMPLETION OF EVERY RAIN EVENT. ADD ADDITIONAL MEASURES WHEN NECESSARY.

9. UPON COMPLETION OF CONSTRUCTION OF ALL IMPROVEMENTS REDISTRIBUTE TOP SOIL TO ALL PROPOSED GRASSED AREAS.

10. MULCH SEED ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF ALL EARTHMOVING AND UNDERGROUND UTILITY WORK IN ACCORDANCE WITH INDOT SS-621 SEED MIXTURE TYPE U.

11. FERTILIZE AND WATER SEEDED AREAS UNTIL MATURE TURF IS ESTABLISHED. 14. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON THE ESTABLISHMENT OF THE TURF.

C5. DESCRIPTION OF MAINTENANCE GUIDELINES FOR PROPOSED POST CONSTRUCTION WATER QUALITY MEASURES: SEE THE MAINTENANCE NOTE AND GUIDELINES FOR EACH POST CONSTRUCTION MEASURE WITHIN THE DETAILS.

C6. ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STORMWATER MEASURES: MONROE COUNTY HIGHWAY DEPARTMENT.

Monroe County, Indiana
CaD–Caneyville silt loam, 12 to 18 percent slopes

Map Unit Setting

National map unit symbol: 2z8ys

Elevation: 500 to 960 feet

Mean annual precipitation: 37 to 52 inches

Mean annual air temperature: 43 to 63 degrees F

Frost-free period: 173 to 212 days

Farmland classification: Not prime farmland

Map Unit Composition

Caneyville and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caneyville

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Clayey residuum weathered from limestone

Typical profile

Ap – 0 to 5 inches: silt loam

Bt – 5 to 35 inches: clay

R – 35 to 45 inches: bedrock

Properties and qualities

Slope: 12 to 18 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: F122XY002KY – Deep Well Drained Limestone Uplands

Other vegetative classification: Trees/Timber (Woody Vegetation)

Hydric soil rating: No

Monroe County, Indiana

CrC–Crider silt loam, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2vp3r

Elevation: 440 to 990 feet

Mean annual precipitation: 37 to 58 inches

Mean annual air temperature: 43 to 68 degrees F

Frost-free period: 150 to 212 days

Farmland classification: Not prime farmland

Map Unit Composition

Crider and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Crider

Setting

Landform: Hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Fine-silty noncalcareous loess over clayey residuum weathered from limestone

Typical profile

Ap – 0 to 7 inches: silt loam

Bt1 – 7 to 36 inches: silty clay loam

2Bt2 – 36 to 80 inches: clay

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

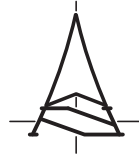
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F122XY004KY – Loess Veneered Uplands

Other vegetative classification: Trees/Timber (Woody Vegetation)

Hydric soil rating: No



SOILS MAP N.T.S.

revisions:

ARCHITECTURE	
CIVIL ENGINEERING	
PLANNING	
BYNUM FANYO & ASSOCIATES, INC.	
528 north walnut street (812) 332-8030	Bloomington, Indiana (812) 339-2990 (Fax)

certified by:

PROPOSED
STONE CARVER DRIVE EXTENSION
N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: SWPPP
INFORMATION

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no.: C702
project no.: 402337

EROSION CONTROL SEQUENCE

1. CONTACT MONROE COUNTY STORMWATER INSPECTOR AT: (812) 803-6345 TO SCHEDULE A PRE-CONSTRUCTION MEETING PRIOR TO ANY EARTH MOVING ACTIVITY ON-SITE.
2. CREATE OPENING AT LOCATION TO INSTALL CONSTRUCTION ENTRANCE AS SHOWN ON PLANS
3. PRIOR TO ANY EARTH MOVING INSTALL INITIAL EROSION CONTROLS. POST PERMITS IN A PUBLIC ACCESSIBLE LOCATION WITH THE FOLLOWING INFORMATION: CONTACT PHONE NUMBERS, EMERGENCY NUMBERS, IDEM SPILL LINE 1-888-233-7745, PRINTED PLAN SET LOCATION, SPILL KIT LOCATION, SELF-MONITORING INSPECTION SHEET LOCATION, AND CONTRACTOR TRAINING ITEMS.
4. REMOVE TREES THAT HAVE BEEN VERIFIED IN CONSTRUCTION ZONE OF THIS SITE.
5. STRIP TOPSOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCK PILE AT LOCATIONS ABOVE SILT FENCE. SEED WITH TEMPORARY SEED MIXTURE TYPE 1, IMMEDIATELY. DISCARD ANY UNSUITABLE SOILS OFF SITE AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
6. MAINTAIN SILT FENCE DURING CONSTRUCTION AND KEEP CLEAR OF DEBRIS.
7. PERFORM CONSTRUCTION ACTIVITIES AS SHOWN ON THE PLANS. DO NOT DISTURB TURF AREAS OUTSIDE OF CONSTRUCTION LIMITS SO THAT TURF ACTS AS A VEGETATIVE FILTER STRIP.
8. ALL EROSION CONTROL STRUCTURES SHALL BE KEPT IN WORKING ORDER AND INSPECTED UPON COMPLETION OF EVERY MEASURABLE RAIN EVENT ($\frac{1}{2}$ " OF RAINFALL. ADD ADDITIONAL MEASURES WHEN NECESSARY.
9. UPON COMPLETION OF CONSTRUCTION OF ALL IMPROVEMENTS REDISTRIBUTE TOP SOIL STOCKPILE TO ALL PROPOSED GRASSED AREAS OR VEGETATE THE STOCKPILE.
10. MULCH SEED ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF ALL EARTHMOVING AND UNDERGROUND UTILITY WORK IN ACCORDANCE WITH INDOT SS-621 SEED MIXTURE TYPE U.
11. FERTILIZE AND WATER SEEDED AREAS UNTIL MATURE TURF IS ESTABLISHED.
12. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON THE ESTABLISHMENT OF THE TURF. CONTACT THE MONROE COUNTY HIGHWAY DEPARTMENT STORMWATER INSPECTOR AT: (812) 803-6345 TO SCHEDULE A FINAL VEGETATION INSPECTION.

NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

CD PRACTICE 3.25
ROCK CHECK DAM

REQUIREMENTS (Exhibit 3.25-B and C)

Contributing drainage area: 2 acres maximum.
Dam center: 2 ft. maximum height but at least 9 in. lower than the outer edges at natural ground elevation.
Dam side slope: 2:1 or flatter.
Distance between dams: Spaced so the toe of the upstream dam is the same elevation as the top of the downstream dam.
Overflow areas along channel: Stabilized to resist erosion.
Rock size: INDOT Revetment Riprap.

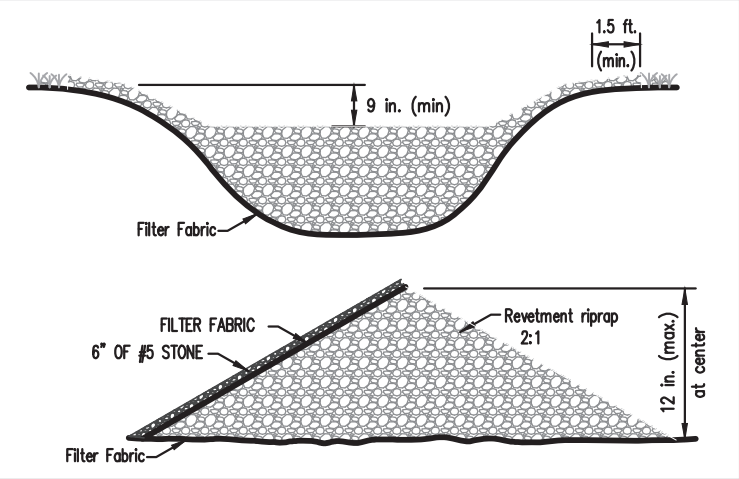


Exhibit 3.25-B. Forward and cross-section views of a rock check dam.

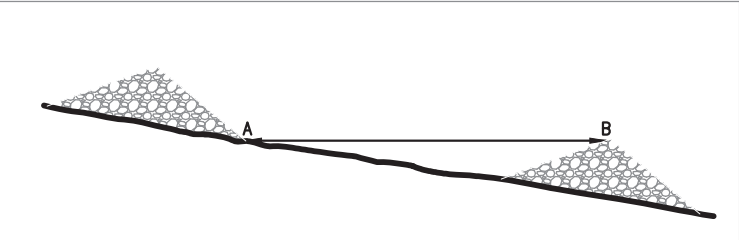


Exhibit 3.25-C. Space check dams in the channel so the up-stream dam toe elevation (A) and down-stream dam toe elevation (B) are the same.

- INSTALLATION**
- Excavate a cutoff trench into the ditch banks, and extend it a minimum of 18 in. beyond the abutments.
 - Place the rock in the cutoff trench and channel to the lines and dimensions shown in Exhibit 3.25-B--i.e., center a maximum of 2 ft. high yet 9 in. below where the dam abuts the channel banks.
 - Extend the rock at least 18 in. beyond the channel banks to keep overflow water from undercutting the dam as it re-enters the channel.
 - Install as many dams as necessary to satisfy the spacing requirement shown in Exhibit 3.25-C.
 - Stabilize the channel above the uppermost dam.
 - Recognizing that water will flow over and around the lowermost dam, protect the channel downstream from it with an erosion-resistant lining for a distance of 6 ft. unless the channel is protected through other means.

- MAINTENANCE**
- Inspect check dams and the channel after each storm event, and repair and damage immediately.
 - If significant erosion occurs between dams, install a riprap liner in that portion of the channel (Practice 3.32).
 - Remove sediment accumulated behind each dam as needed to maintain channel capacity, to allow drainage through the dam, and to prevent large flows from displacing sediment.
 - Add rock to the dams as needed to maintain design height and cross section.
 - When the dams are no longer needed, remove the rock and stabilize channel, using an erosion-resistant lining if necessary.

RR PRACTICE 3.16
RIPRAP

PURPOSE

- To protect slopes, streambanks, channels, or similar areas subject to erosion by water.

REQUIREMENTS

Rock: Hard, angular, and weather-resistant, having a specific gravity of at least 2.5.
Gradation: Well-graded stone, 50% (by weight) larger than the specified d_{50} ; however, the largest pieces should not exceed two times the specified d_{50} and no more than 15% of the pieces (by weight) should be less than 3 in.
Filter: Use geotextile fabric for stabilization and filtration or sand/gravel layer placed under all permanent riprap installations.
Slope: 2:1 or flatter, unless approved in the erosion and sediment control plan.
Minimum thickness: Two times the specified d_{50} stone diameter.

- INSTALLATION** (Exhibit 3.16-B)
- Remove brush, trees, stumps, and other debris.
 - Excavate only deep enough for both filter and riprap; over-excavation increases the amount of spoil considerably (Practice 3.32).
 - Compact any fill material to the density of the surrounding undisturbed soil.

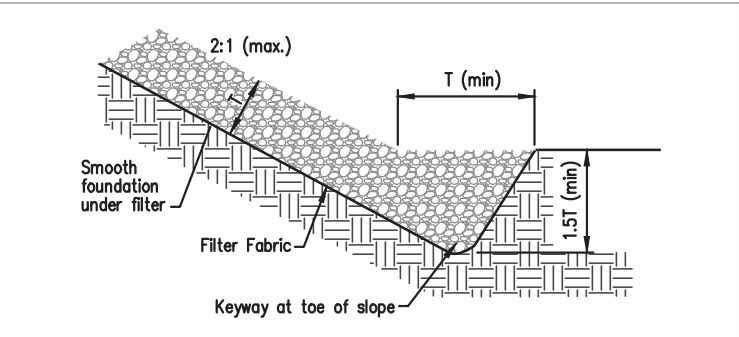


Exhibit 3.16-B. Proper riprap installation on a slope.

- Cut a keyway in stable material at the base of the slope to reinforce the toe; keyway depth should be 1 1/2 times the design thickness of the riprap and should extend a horizontal distance equal to the design thickness.
- Smooth the graded foundation.

- FILTER PLACEMENT:**
- If using geotextile fabric, place it on the smoothed foundation, overlap the edges at least 12 in., and secure with anchor pins spaced every 3 ft. along the overlap. (For large riprap, consider a 4-in. layer of sand to protect the fabric.)
 - If using a sand/gravel filter, spread the well-graded aggregate in a uniform layer to the required thickness (6 in. minimum); if two or more layers are specified, place the layer of smaller gradation first, and avoid mixing the layers.

- RIPRAP PLACEMENT:**
- Immediately after installing the filter, add the riprap to full thickness in one operation. (Do not dump through chutes or use any method that causes segregation of rock sizes or that will dislodge or damage the underlying filter material.)
 - If fabric is damaged, remove the riprap and repair by adding another layer of fabric, overlapping the damaged area by 12 in.
 - Place smaller rock in voids to form a dense, uniform, well-graded mass. (Selective loading at the quarry and some hand placement may be needed to ensure an even distribution of rock material.)
 - Blend the rock surface smoothly with the surrounding area to eliminate protrusions or overfalls.

- MAINTENANCE**
- Inspect periodically for displaced rock material, slumping, and erosion at edges, especially downstream or downslope. (Properly designed and installed riprap usually requires very little maintenance if promptly repaired.)

SP PRACTICE 3.01
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD

PURPOSE

- To provide a stable entrance/exit condition from the construction site.
- To keep mud and sediment off public roads.

REQUIREMENTS (Exhibit 3.01-B)

Material: 2–3 in. washed stone (INDOT CA No. 2) over a stable foundation.
Thickness: 6 in. minimum.
Width: 50 ft. minimum or full width of entrance/exit roadway, whichever is greater.
Length: 200 ft. minimum. The length can be shorter for small sites such as for an individual home.
Washing facility (optional): Level area with 3 in. washed stone minimum or a commercial rack, and waste water diverted to a sediment trap or basin (Practice 3.72).
Geotextile fabric underliner: May be used under wet conditions or for soils within a high seasonal water table to provide greater bearing strength.

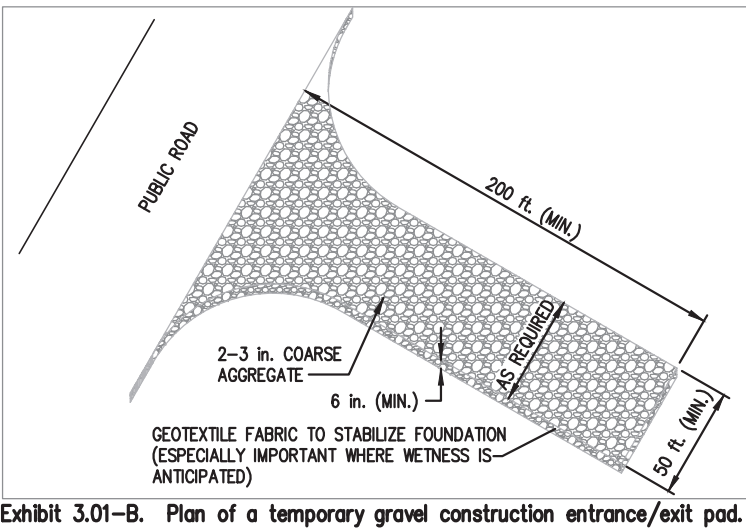


Exhibit 3.01-B. Plan of a temporary gravel construction entrance/exit pad.

- INSTALLATION** (Exhibit 3.01-C)
- Avoid locating on steep slopes or at curves in public roads.
 - Remove all vegetation and other objectionable material from the foundation area, and grade and crown for positive drainage.
 - If slope towards the road exceeds 2%, construct a 6–8 in.-high water bar (ridge) with 3:1 side slopes across the foundation area about 15 ft. from the entrance to divert runoff away from the road (Practice 3.24) (see Exhibit 3.01-C).
 - Install pipe under the pad if needed to maintain proper public road drainage.
 - If wet conditions are anticipated, place geotextile fabric on the graded foundation to improve stability.
 - Place stone to dimensions and grade shown in the erosion/sediment control plan, leaving the surface smooth and sloped for drainage.
 - Divert all surface runoff and drainage from the stone pad to a sediment trap or basin.

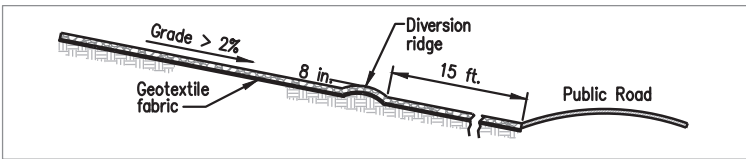


Exhibit 3.01-C. Temporary construction entrance/exit pad with diversion ridge where grade exceeds 2%.

- MAINTENANCE**
- Inspect entrance pad and sediment disposal area weekly and after storm events or heavy use.
 - Reshape pad as needed for drainage and runoff control.
 - Top dress with clean stone as needed.
 - Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used if the water is conveyed into a sediment trap or basin.
 - Repair any broken road pavement immediately.

GP PRACTICE 3.61-B
GRAVEL CURB INLET PROTECTION

REQUIREMENTS (Exhibit 3.61-B)

Contributing drainage area: 1 acre maximum.
Capacity: Runoff from a 2–yr. frequency, 24-hr. duration storm event entering the storm drain without bypass flow.
Location: At curb inlets where ponding is not likely to cause inconvenience or damage.
Gravel: 1–2 in. diameter (INDOT CA No. 2).
Wire mesh: Chicken wire or hardware cloth with 1/2-in. openings.
Geotextile fabric (optional): For filtration.

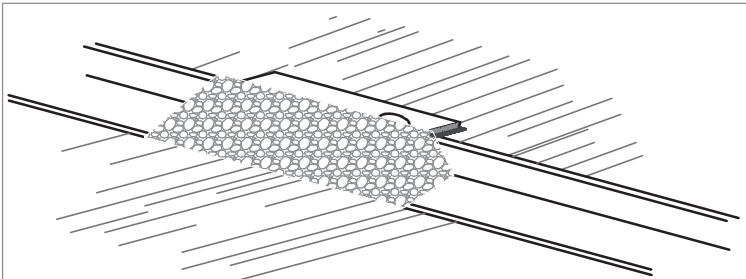


Exhibit 3.61-B. Perspective view of a gravel curb inlet protection.

- INSTALLATION** (Exhibit 3.61-B)
- Install gravel curb inlet protections as soon as the streets are paved in a new development situation or before land-disturbing activities in stabilized areas.
 - Place wire mesh over the curb inlet opening and/or grate so it extends at least 12 in. beyond both top and bottom of the opening/grate.
 - Install geotextile fabric over the wire mesh for additional filtration (optional).
 - Pile gravel over the wire mesh to anchor it against the curb, covering the inlet opening completely.

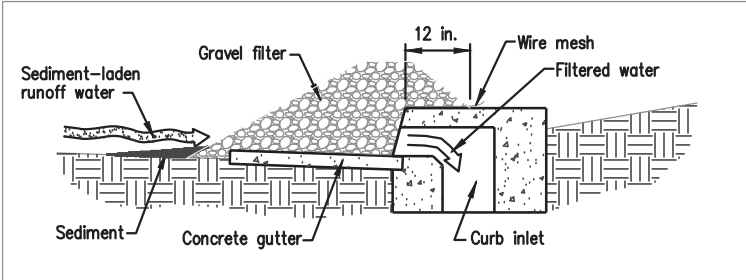


Exhibit 3.61-C. Cross-section detail of a gravel curb inlet protection.

- MAINTENANCE**
- After each storm event, remove sediment and replace the gravel; replace the geotextile filter fabric if used.
 - Periodically remove sediment and tracked-on soil from the street (but not by flushing with water) to reduce the sediment load on the curb inlet practice.
 - Inspect periodically, and repair damage caused by vehicles.
 - When the contributing drainage area has been stabilized, remove the gravel, wire mesh, geotextile fabric, and any sediment, and dispose of them properly.

SF PRACTICE 3.74
SILT FENCE (SEDIMENT FENCE)

PURPOSE

To retain sediment from small, sloping disturbed areas by reducing the velocity of sheet flow.

(NOTE: Silt fence captures sediment by ponding water to allow deposition, not by filtration. Although the practice usually works best in conjunction with temporary basins, traps, or diversions, it can be sufficiently effective to be used alone. A silt fence is not recommended for use as a diversion; nor is it to be used across a stream, channel or anywhere that concentrated flow is anticipated.)

REQUIREMENTS (Exhibit 3.74-B and C)

Drainage Area: Limited to 1/4 acre per 100 ft. of fence; further restricted by slope steepness (see Exhibit 3.74-B).

Location: Fence nearly level, approximately following the land contour, and at least 10 ft. from toe of slope to provide a broad, shallow sediment pool.

Trench: 8 in. minimum depth, flat-bottom or v-shaped, filled with compacted soil or gravel to bury lower portion of support wire and/or fence fabric.

Support posts: 2 x 2-in. hardwood posts (if used) or steel fence posts set at least 1 ft. deep.* (Steel posts should project for fastening fabric.)

Spacing of posts: 8 ft. maximum if fence supported by wire, 6 ft. for extra-strength fabric without wire backing.

Fence height: High enough so depth of impounded water does not exceed 1 1/2 ft. at any point along fence line.

Support wire (optional): 14 gauge, 6 in. wire fence (needed if using standard-strength fabric).

Fence fabric: Woven or non-woven geotextile fabric with specified filtering efficiency and tensile strength (see Exhibit 3.74-C) and containing UV inhibitors and stabilizers to ensure 6-mo. minimum life at temperatures 0°–120°.

Land slope	Max. distance above fence
Less than 2%	100 ft.
2 to 5%	75 ft.
5 to 10%	50 ft.
10 to 20%	25 ft.
More than 20%	15 ft.

* Some commercial silt fences come ready to install, with support posts attached and requiring now wire support.

Exhibit 3.74-C. Specifications Minimums for Silt Fence Fabric.		
Physical Property	Woven Fabric	Non-woven fabric
Filtering efficiency	85%	85%
Tensile strength at 20% elongation		
Standard strength	30lbs./linear in.	50lbs./linear in.
Extra strength	50lbs./linear in.	70lbs./linear in.
Slurry flow rate	0.3 gal./min./sq.ft.	4.5 gal./min./sq.ft.
Water flow rate	15 gal./min./sq.ft.	220 gal./min./sq.ft.
UV resistance	70%	85%

Outlet (optional): To allow for safe storm flow bypass without overtopping fence. Placed along fence line to limit water depth to 1 1/2 ft. maximum; crest—1 ft. high maximum; weir width—4 ft. maximum; splash pad—5 ft. wide, 3 ft. long, 1 ft. thick minimum.

- INSTALLATION**
- SITE PREPARATION:**
- Plan for the fence to be at least 10 ft. from the toe of the slope to provide a sediment storage area.
 - Provide access to the area if sediment cleanout will be needed.

OUTLET CONSTRUCTION (OPTIONAL)

- Determine the appropriate location for a reinforced, stabilized bypass flow outlet.

- Set the outlet elevation so that water depth cannot exceed 1 1/2 ft. at the lowest point along the fence line.
- Locate the outlet weir support posts no more than 4 ft. apart, and install a horizontal brace between them. (Weir height should be no more than 1 ft. and water depth no more than 1 1/2 ft. anywhere else along the fence.)
- Excavate the foundation for the outlet splash pad to minimums of 1 ft. deep, 5 ft. wide and 5 ft. long on level grade.
- Fill the excavated foundation with INDOT CA No. 1 stone, being careful that the finished surface blends with the surrounding area, allowing no overfall.
- Stabilize the area around the pad.

OUTLET CONSTRUCTION (OPTIONAL)

- Along the entire intended fence line, dig an 8 in. deep flat-bottomed or V-shaped trench.

- On the downslope side of the trench, drive the wood or steel support posts at least 1 ft. into the ground, spacing them no more than 8 ft. apart if the fence is supported by wire or 6 ft. if extra strength fabric is used without support wire. Adjust spacing, if necessary, to ensure that posts are set at the low points along the fence line. (NOTE: If the fence has pre-attached posts or stakes, drive them deep enough so the fabric is satisfactory in the trench as described in step 6.)
- Fasten support wire fence to the upslope side of the posts, extending it 8 in. into the trench.
- Run a continuous length of geotextile fabric in front of the support wire and posts avoiding joints, particularly at low points in the fence line.
- If a joint is necessary, nail the overlap to the nearest post with a lath.
- Place the bottom 1 ft. of fabric in the 8 in. deep trench, extending the remaining 4 in. toward the upslope side.
- Backfill the trench with compacted earth or gravel.

NOTE: If using a pre-packed commercial silt fence rather than constructing one, follow the manufacturer's installation instructions.

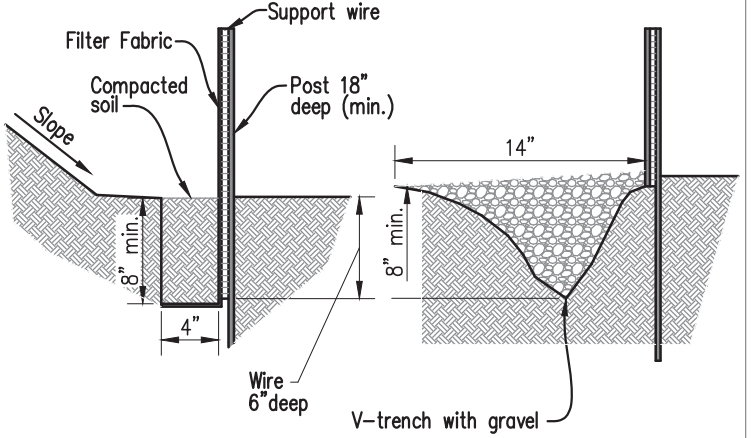
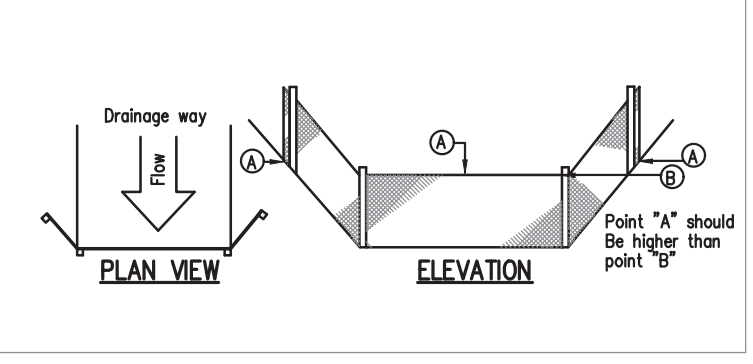


Exhibit 3.74-E. Detailed example of silt fence installation.



- MAINTENANCE**
- Inspect the silt fence periodically and after each storm event.
 - If fence fabric tears, starts to decompose or in any way becomes ineffective, replace the affected portion immediately.
 - Remove deposited sediment when it reaches half the height of the fence at its lowest point or is causing the fabric to bulge.
 - Take care to avoid undermining the fence during clean out.
 - After the contributing area has been stabilized, remove the fence and sediment deposits, bring the disturbed area to grade, and stabilize.

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revisions:

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PROPOSED
STONE CARVER DRIVE EXTENSION
N. STONE CARVER DRIVE,
BLOOMINGTON, IN 47404
FROM N LINTEL DR. TO W. WOODYARD ROAD

title: SWPPP DETAILS

designed by: AJW
drawn by: AJW
checked by: JSF
sheet no.: C703
project no.: 402337

