CONSTRUCTION PLANS FOR:
RILEY VILLAGE SANITARY SEWER
GREENFIELD, HANCOCK COUNTY, INDIANA

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REVISIONS :

REVISION #	REVISION DESCRIPTION	DATE

FLOOD NOTE:
THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN ON THESE PLANS IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE WITHIN DESCRIBED TRACT OF LAND LIES WITHIN FLOOD HAZARD ZONE X AS SAID TRACT PLOTS BY SCALE ON COMMUNITY PANEL NUMBER 18059C0129D DATED 12/04/2007 FOR THE FLOOD INSURANCE RATE MAPS FOR HANCOCK COUNTY, INDIANA.

DISCLAIMER:
EXISTING CONDITIONS/SURVEY INFORMATION PROVIDED BY COOR CONSULTING. RQAW IS NOT RESPONSIBLE FOR THE ACCURACY OF THE EXISTING CONDITION/SURVEY INFORMATION PROVIDED. CONTRACTOR TO FIELD VERIFY LOCATION AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND CONTACT ENGINEER AND OWNER IF DISCREPANCIES OCCUR.

PLANS PREPARED FOR:

NINESTAR CONNECT
2243 E MAIN STREET
GREENFIELD, INDIANA 46140
TELEPHONE: (317) 323-2035
CONTACT PERSON: ALAN MARTIN, MANAGER OF WATER & WASTEWATER UTILITIES
AMARTIN@NINESTARCONNECT.COM

OPERATING AUTHORITIES

SANITARY SEWER AUTHORITY
NINESTAR CONNECT
2243 E MAIN ST.
GREENFIELD, IN 46140
TELEPHONE: (317) 694-7299
ALAN MARTIN
MANAGER OF WATER & WASTEWATER UTILITES

CABLE UTILITY
COMCAST CABLE
TELEPHONE: (317) 275-6443
WILL MORRIS

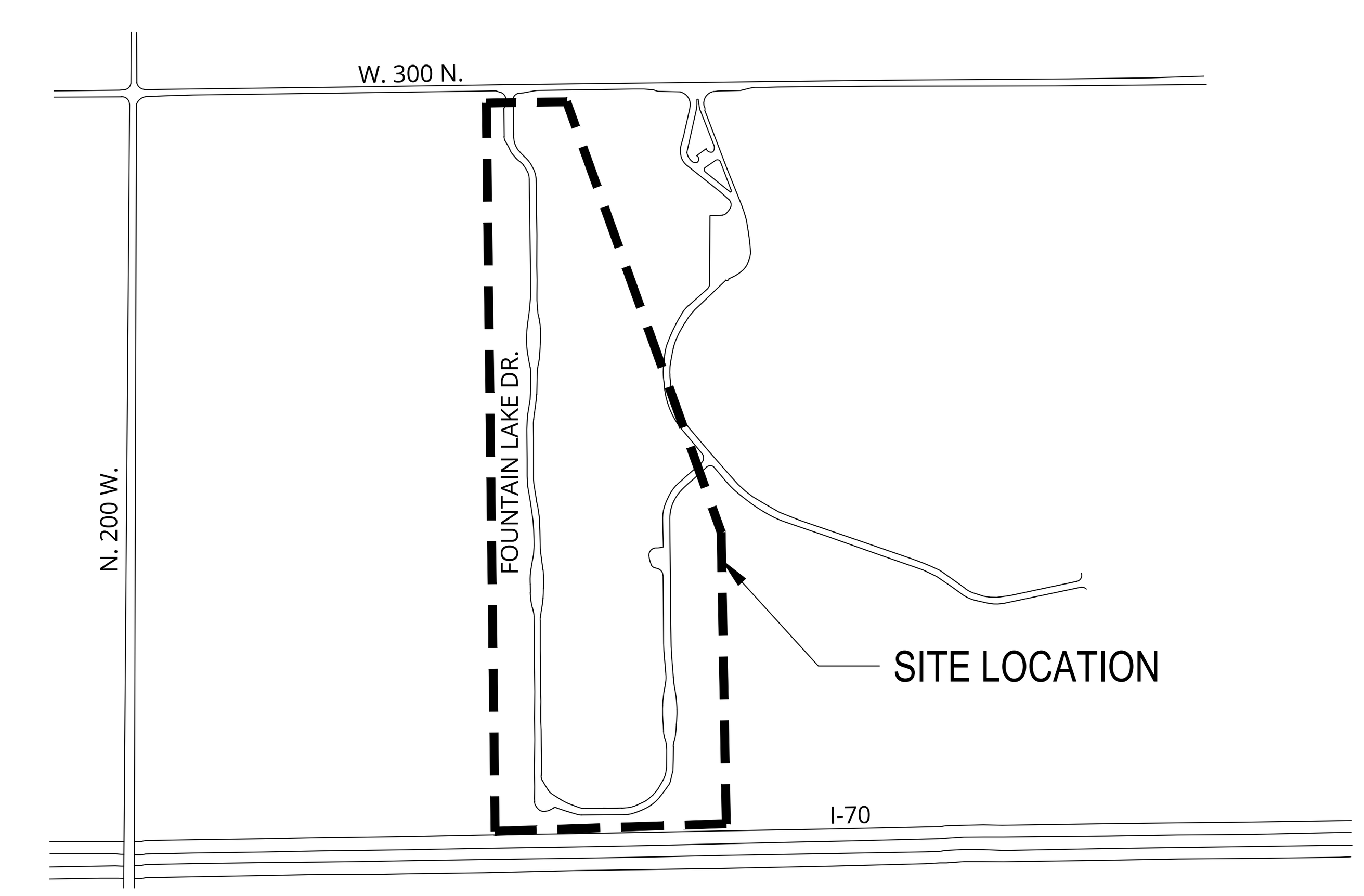
ELECTRICAL/POWER AUTHORITY
NINESTAR CONNECT
2243 E. MAIN ST.
GREENFIELD, IN 46140
TELEPHONE: (317) 477-2200
ERIC MEYER

STORM SEWER AUTHORITY
CITY OF GREENFIELD
10 S. STATE ST.
GREENFIELD, IN 46140
TELEPHONE: (317) 325-1327
DAN MILLER
STORMWATER UTILITY MANAGER

WATER AUTHORITY
NINESTAR CONNECT
2243 E MAIN ST.
GREENFIELD, IN 46140
TELEPHONE: (317) 326-3131
CONTACT PERSON
TITLE

COMMUNICATIONS UTILITY
NINESTAR CONNECT
2243 E. MAIN ST.
GREENFIELD, IN 46140
TELEPHONE: (317) 326-3141
GEORGE PLISINSKI

SITE VICINITY MAP
NOT TO SCALE



SITE LOCATION MAP
NOT TO SCALE

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544
CALL TOLL FREE
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.

PRINT DATE: 3/18/24
PLOT SCALE: 1:186.91 EDIT DATE: 2/2/23 - 10:38 AM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWER\5 ACAD\PLAN SHEETS & WORKING DRAWINGS\C000 - COVER SHEET.DWG

RQAW
INTENTIONAL INNOVATION

BIDDING SET
RILEY VILLAGE SANITARY SEWER
2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW REGISTERED No. PE11800762 STATE OF INDIANA PROFESSIONAL ENGINEER

COVER SHEET

T001

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR THIS PROJECT. ADDITIONS, DELETIONS, AND/OR REVISIONS SHALL NOT BE MADE WITHOUT PRIOR APPROVAL BY THE ENGINEER. KEEP AND MAINTAIN IN GOOD CONDITION, A COMPLETE SET OF THE CONTRACT DOCUMENTS ON THE JOB SITE AT ALL TIMES.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE NINESTAR CONNECT RULES AND REGULATIONS. COMPLY WITH LOCAL, STATE AND FEDERAL CODES, ORDINANCES, RULES, REGULATIONS, ORDERS, AND OTHER LEGAL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
3. IN THE EVENT THAT THE CONTRACTOR DISCOVERS A DISCREPANCY IN THE CONTRACT DOCUMENTS OR A POTENTIAL UTILITY CONFLICT, NOTIFY THE ENGINEER IMMEDIATELY FOR CLARIFICATION, PRIOR TO PROCEEDING WITH CONSTRUCTION OF THE PORTION OF THE WORK IN QUESTION. FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. VERTICAL AND HORIZONTAL LOCATIONS TO BE CONFIRMED. ANY NECESSARY PIPE MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL NECESSARY LOCAL PERMITS HAVE BEEN OBTAINED.
5. ALL RIGHT-OF-WAY AND PROPERTY LINES AND EASEMENTS SHOWN ON THE PLANS ARE APPARENT AND WERE DETERMINED BASED UPON AVAILABLE INFORMATION. VERIFY ALL RIGHT-OF-WAY AND PROPERTY LINES. STAKE ALL RIGHT-OF-WAY, PROPERTY, AND EASEMENT LINES THROUGHOUT THE DURATION OF CONSTRUCTION.
6. CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROPERTY LINES AND RIGHT-OF-WAY SHALL BE STAKED FOR THE DURATION OF CONSTRUCTION ACTIVITIES.
7. PROTECT ALL EXISTING UTILITIES FROM DAMAGE, IN A MANNER APPROVED BY THE UTILITY COMPANIES AND THE ENGINEER. COORDINATE WITH UTILITY COMPANIES, AS NECESSARY, TO COMPLETE THE WORK. PROTECT BENCH MARKS, SURVEY CONTROL POINTS, AND EXISTING STRUCTURES FROM NECESSARY DAMAGE OR DISPLACEMENT.
8. PROVIDE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, OR LOCAL AGENCIES. THE AMOUNT, LOCATION AND SIZE SHALL BE AS REQUIRED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
9. DURING CONSTRUCTION, IT MAY BE NECESSARY TO TRIM OR REMOVE A TREE WITHIN THE RIGHT-OF-WAY OR AN EASEMENT. NOTIFY THE ENGINEER, OWNER AND ANY AFFECTED PROPERTY OWNER PRIOR TO ANY REQUIRED TREE REMOVAL. TREE TRIMMING AS REQUIRED WITHIN THE RIGHT-OF-WAY OR EASEMENT SHALL BE MINIMIZED. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR TREE REMOVAL OR TRIMMING.
10. ALL DISTURBED AREAS INCLUDING, BUT NOT LIMITED TO, STREETS, DRIVES, WALKS, LAWNS, FENCES, RETAINING WALLS, ETC. SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL MUD, DIRT, GRAVEL AND ANY OTHER MATERIALS TRACKED ONTO ANY PUBLIC OR PRIVATE STREETS, PARKING LOTS, OR WALKS. THIS MATERIAL REMOVAL OR SWEEPING OF THE STREETS SHALL BE DONE AS FREQUENTLY AS NECESSARY TO MAINTAIN AREAS REASONABLY CLEAN. AIRBORNE DUST SHALL BE KEPT TO A MINIMUM BY USING WATER OR OTHER METHODS AS NECESSARY.
12. PROVIDE TEMPORARY GRASS SEED WITHIN 7-DAYS OF ALL EARTH DISTURBING ACTIVITIES.
13. PROVIDE AND MAINTAIN ALL NECESSARY STRAW BALES, FILTER FENCE, INLET PROTECTION, ETC. IN EXISTING AND PROPOSED DITCHES, CULVERTS, STORM PIPES & DRAINAGE STRUCTURES TO PREVENT DAMAGE. BIO-DEGRADABLE EROSION CONTROL DEVICES SHOULD BE PLACE IN ALL DISTURBED DRAINAGE DITCHES WITH DEPTHS GREATER THAN 12".
14. REGRADE AREAS AS NECESSARY WITHIN THE CONSTRUCTION LIMITS TO ALLOW PROPER DRAINAGE TO EXISTING STORM SEWER STRUCTURES.
15. MAINTAIN 10'-0" HORIZONTAL AND 1'-6" VERTICAL SEPARATION FROM SEWER AND WATER MAINS UNLESS SPECIFICALLY NOTED IN THE PLANS.
16. PROVIDE FILL AROUND PROPOSED AND EXISTING PIPING AT ALL OPEN-CUT UTILITY CROSSINGS TO ADEQUATELY SUPPORT AND PROTECT EACH CONDUIT.
17. PRESERVE EXISTING RIGHT-OF-WAY MARKERS. IF R/W MARKERS ARE DISTURBED, RESET MARKERS AT NO ADDITIONAL COST TO THE OWNER.
18. CALL LOCAL UTILITY LINE INFORMATION SERVICE NOT LESS THAN THREE WORKING DAYS BEFORE PERFORMING WORK. REQUEST UNDERGROUND UTILITIES TO BE LOCATED AND MARKED WITHIN AND SURROUNDING CONSTRUCTION AREAS. IDENTIFY REQUIRED LINES, LEVELS, CONTOURS, AND DATUM LOCATIONS.
19. ESTABLISH TEMPORARY TRAFFIC CONTROL AND DETOURS WHEN TRENCHING IS PERFORMED IN PUBLIC RIGHT-OF-WAY. RELOCATE CONTROLS AND REROUTE TRAFFIC AS REQUIRED DURING PROGRESS OF WORK.
20. DO NOT LEAVE MORE THAN 50 FEET OF TRENCH OPEN AT END OF WORKING DAY, PROTECT OPEN TRENCH TO PREVENT DANGER TO THE PUBLIC.
21. STOCKPILE EXCAVATED AND FILL MATERIALS ON SITE AT LOCATIONS APPROVED BY OWNER, STOCKPILE IN SUFFICIENT QUANTITIES TO MEET PROJECT SCHEDULE AND REQUIREMENTS. SEPARATE DIFFERENT AGGREGATE MATERIALS WITH DIVIDERS OR STOCKPILE INDIVIDUALLY TO PREVENT MIXING. DIRECT SURFACE WATER AWAY FROM STOCKPILE SITE TO PREVENT EROSION OR DETERIORATION OF MATERIALS, STOCKPILE CLEANUP: REMOVE STOCKPILE, LEAVE AREA IN CLEAN AND NEAT CONDITION. GRADE SITE SURFACE TO PREVENT FREE STANDING SURFACE WATER.
22. SOIL STOCKPILE SHALL BE LOCATED WITHIN THE TEMPORARY EASEMENTS OF THE PROJECT.
23. FINAL CONTOURS: PERFORM FINISH GRADING AND BLEND INTO CONFORMATION WITH REMAINING NATURAL GROUND SURFACES. LEAVE ALL FINISHED GRADING SURFACES SMOOTH AND FIRM TO DRAIN. BRING FINISH GRADES TO ELEVATIONS WITHIN PLUS OR MINUS 0.10 FOOT OF EXISTING OR CONTOURS SHOWN.
24. UTILIZE LOCATION OF CRAWL SPACES FOR SANITARY LATERAL INSTALLATION WHERE POSSIBLE.
25. CONTRACTOR TO ENSURE SURFACE, LANDSCAPING, AND ALL OTHER HOMEOWNER FEATURES ARE RESTORED BACK TO EXISTING CONDITIONS.
26. REFERENCE NINESTAR WATER & SANITARY SEWER RULES AND STANDARDS FOR ALL OTHER INFORMATION.
27. CONTRACTOR TO ENSURE STRUCTURAL STABILITY OF BUILDING FOUNDATIONS DURING LATERAL REROUTING. PATCH WITH FULL DEPTH STRUCTURAL MORTAR.
28. USE BYPASS PUMPING AS NEEDED TO ENSURE THAT SANITARY SERVICE IS NOT INTERRUPTED.
29. FOLLOW MANUFACTURERS RECOMMENDATIONS AS WELL AS ALL APPLICABLE AWWA AND ASTM STANDARDS FOR ALL WORK DONE TO LINE EXISTING MANHOLES AND PIPES AS INDICATED.

PROPOSED LEGEND:

	PROPERTY LINE
S S S	EXISTING SANITARY SEWER PER SURVEY
	EXISTING SANITARY SEWER PER SURVEY
W W	EXISTING WATER LINE
T	EXISTING COMMUNICATIONS LINE
E E	EXISTING ELECTRIC LINE
	EXISTING BUILDING OUTLINE
X X X X X X X X X	EXISTING FENCE
SS SS	PROPOSED SANITARY SEWER
CO	PROPOSED CLEANOUT
S	PROPOSED SANITARY MANHOLE
TRAN	EXISTING ELECTRICAL TRANSFORMER
W	EXISTING WATER METER
WV	EXISTING WATER VALVE

RQAW
INTENTIONAL INNOVATION

BIDDING SET

RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

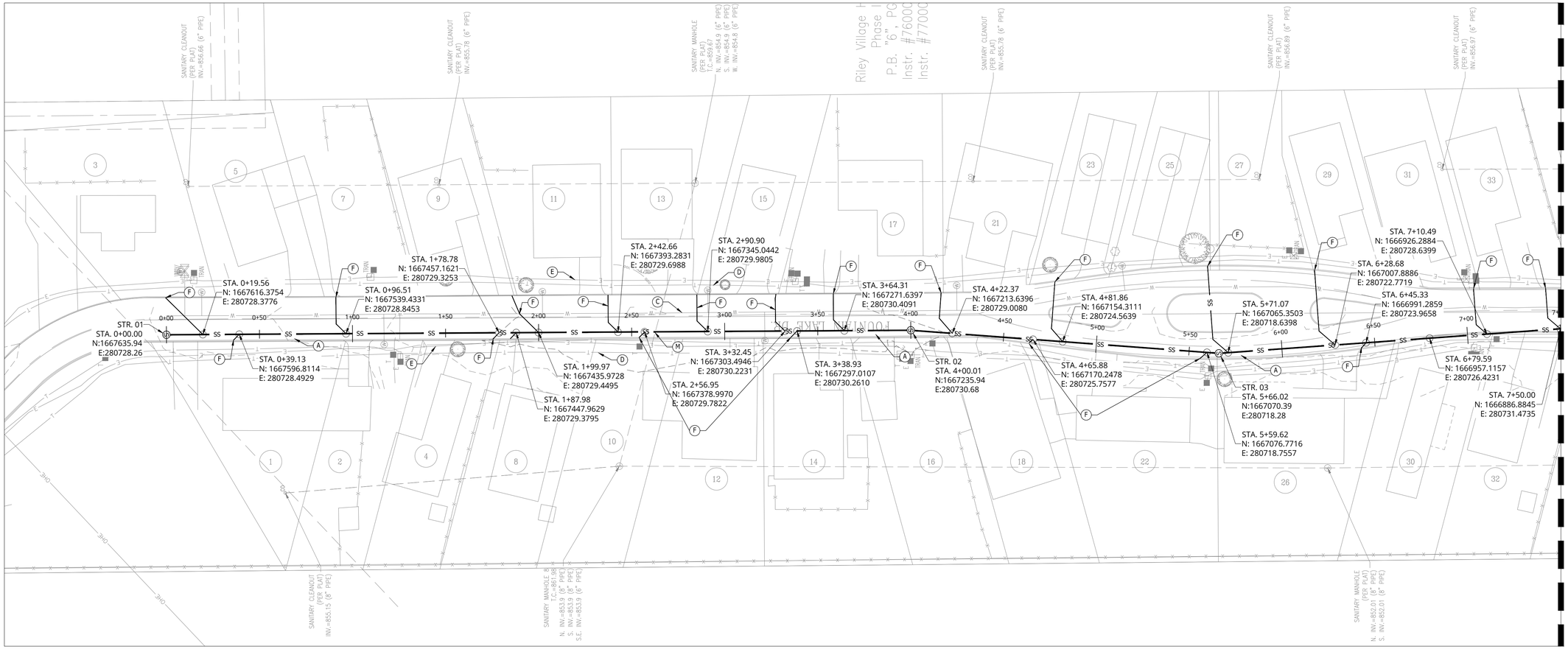
Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW
REGISTERED
No. PE11800762
STATE OF INDIANA
PROFESSIONAL ENGINEER

0 90 180 Feet

GENERAL NOTES & SYMBOLS

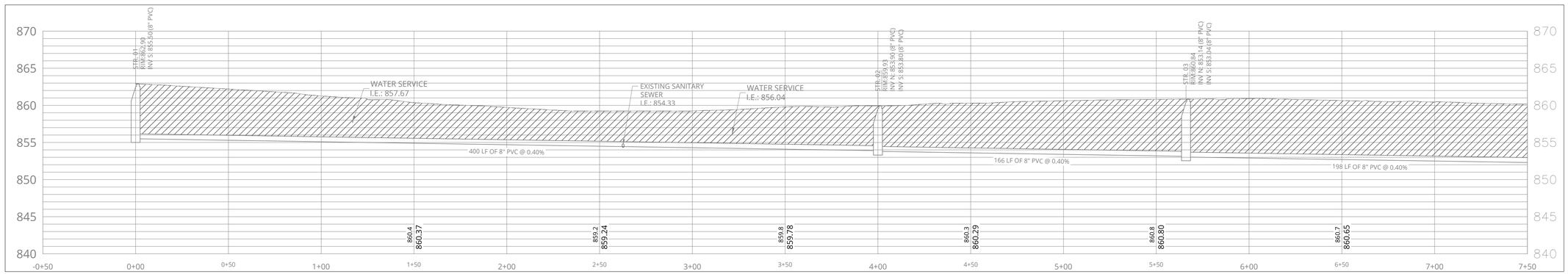
G001



KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
- (K) LINE EXISTING SANITARY SEWER FROM EX. MANHOLE TO TIE-IN AT SUGAR CREEK WWTP.
- (L) CORE IN NEW SANITARY SEWER TO EXISTING MANHOLE. SEE DETAIL ON SHEET C602.
- (M) CUT AND CAP EXISTING SANITARY SEWER. USE BYPASS PUMPING TO ALLOW FOR INSTALLATION OF PROPOSED SANITARY SEWER.
- (N) USE INTERNAL DROP IN MANHOLE. SEE DETAIL ON SHEET C602.
- (O) REPLACE EXISTING PIPE TO REPAIR SAG. MATCH EXISTING VERTICAL AND HORIZONTAL ALIGNMENT.

= GRANULAR BACKFILL



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STATE OF INDIANA
PROFESSIONAL ENGINEER

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

SANITARY SEWER PLAN & PROFILES

C200

PRINT DATE: 3/18/24
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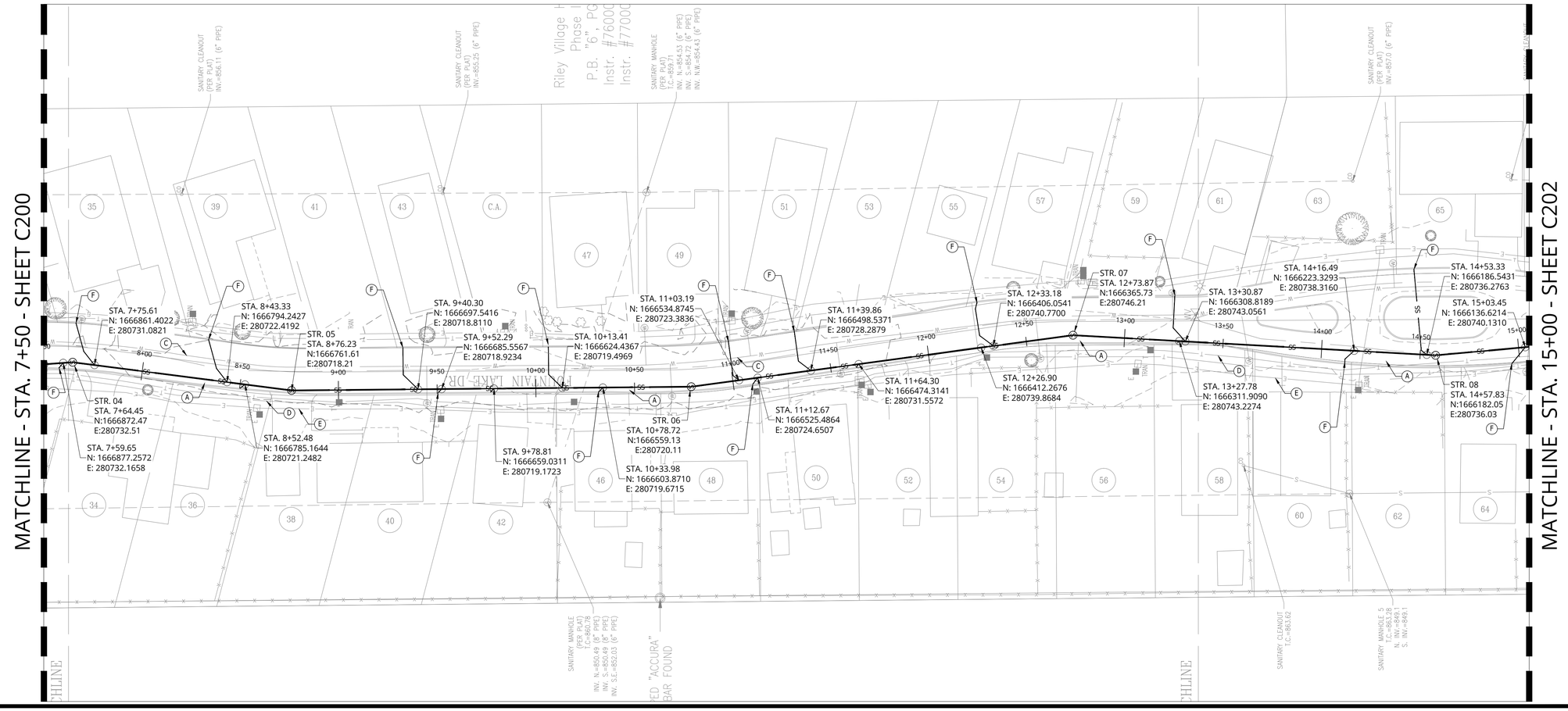
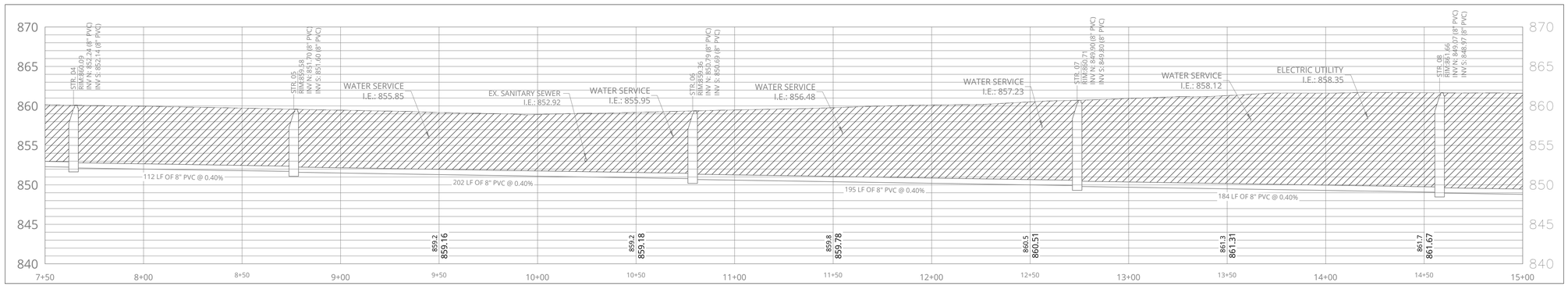


KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
- (K) LINE EXISTING SANITARY SEWER FROM EX. MANHOLE TO TIE-IN AT SUGAR CREEK WWTP.
- (L) CORE IN NEW SANITARY SEWER TO EXISTING MANHOLE. SEE DETAIL ON SHEET C602.
- (M) CUT AND CAP EXISTING SANITARY SEWER. USE BYPASS PUMPING TO ALLOW FOR INSTALLATION OF PROPOSED SANITARY SEWER.
- (N) USE INTERNAL DROP IN MANHOLE. SEE DETAIL ON SHEET C602.
- (O) REPLACE EXISTING PIPE TO REPAIR SAG. MATCH EXISTING VERTICAL AND HORIZONTAL ALIGNMENT.

= GRANULAR BACKFILL



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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

Project #: 20-400-286-2
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Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW
REGISTERED
No. PE11800762
STATE OF INDIANA
PROFESSIONAL ENGINEER

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

SANITARY SEWER PLAN & PROFILES

C201

PRINT DATE: 3/18/24
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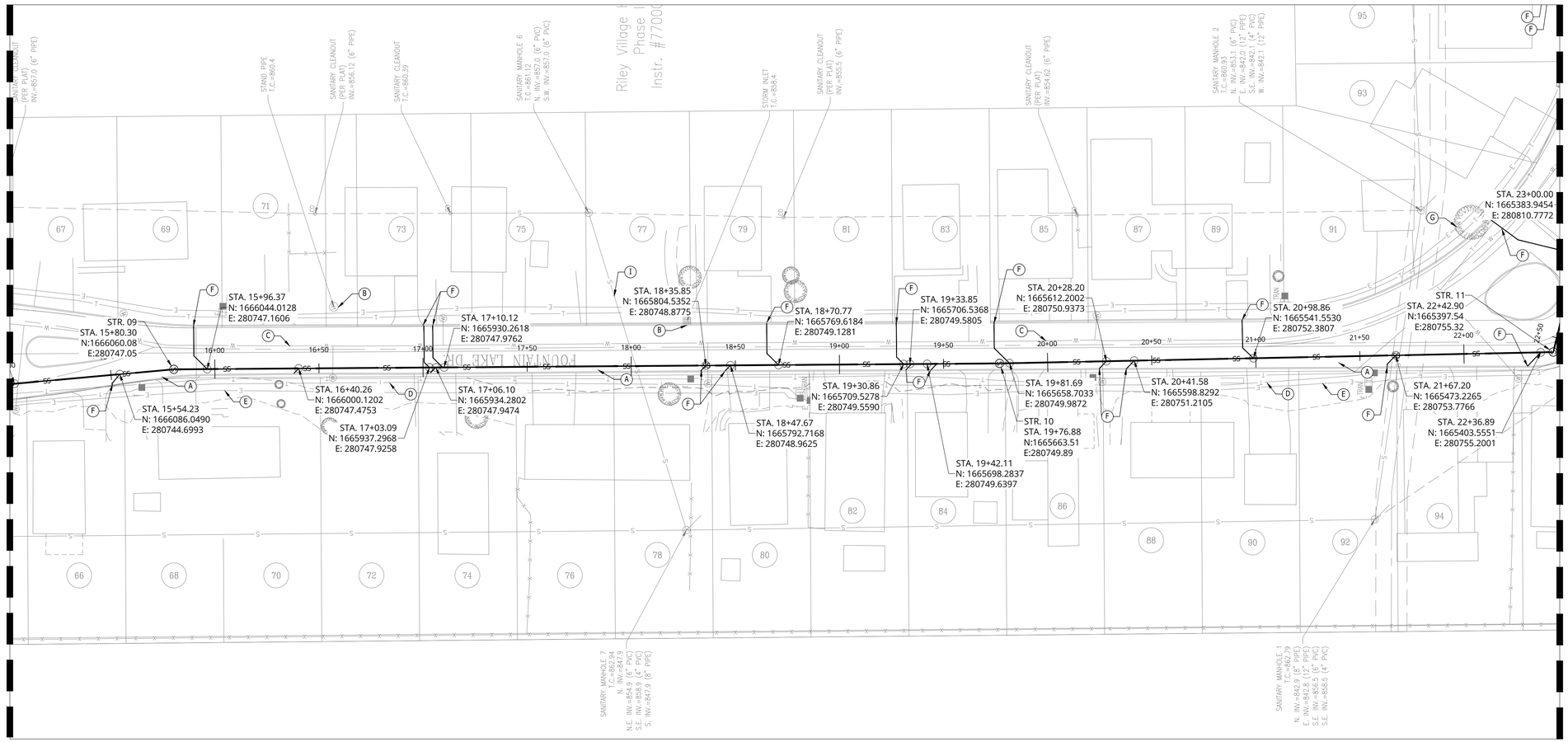
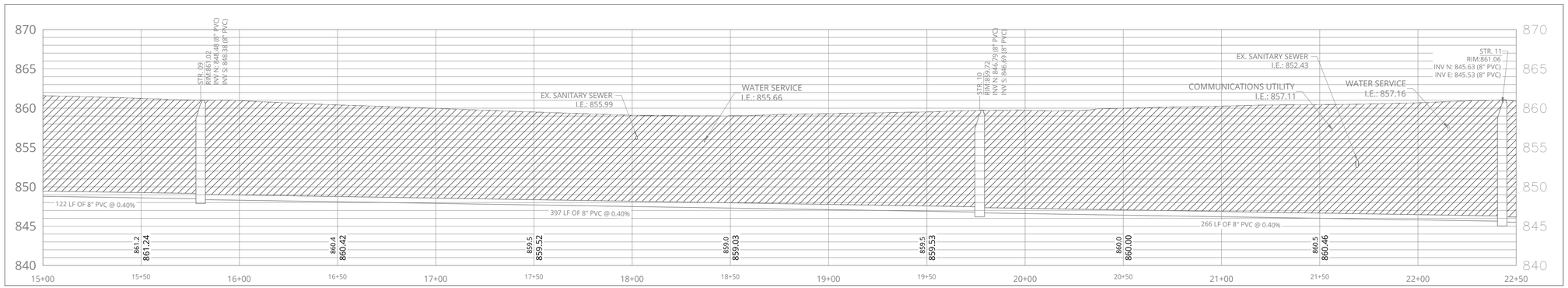


KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
- (K) LINE EXISTING SANITARY SEWER FROM EX. MANHOLE TO TIE-IN AT SUGAR CREEK WWTP.
- (L) CORE IN NEW SANITARY SEWER TO EXISTING MANHOLE. SEE DETAIL ON SHEET C602.
- (M) CUT AND CAP EXISTING SANITARY SEWER. USE BYPASS PUMPING TO ALLOW FOR INSTALLATION OF PROPOSED SANITARY SEWER.
- (N) USE INTERNAL DROP IN MANHOLE. SEE DETAIL ON SHEET C602.
- (O) REPLACE EXISTING PIPE TO REPAIR SAG. MATCH EXISTING VERTICAL AND HORIZONTAL ALIGNMENT.

= GRANULAR BACKFILL



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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

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AARON L. CROW
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No.
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PROFESSIONAL ENGINEER

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

SANITARY SEWER
PLAN & PROFILES

C202

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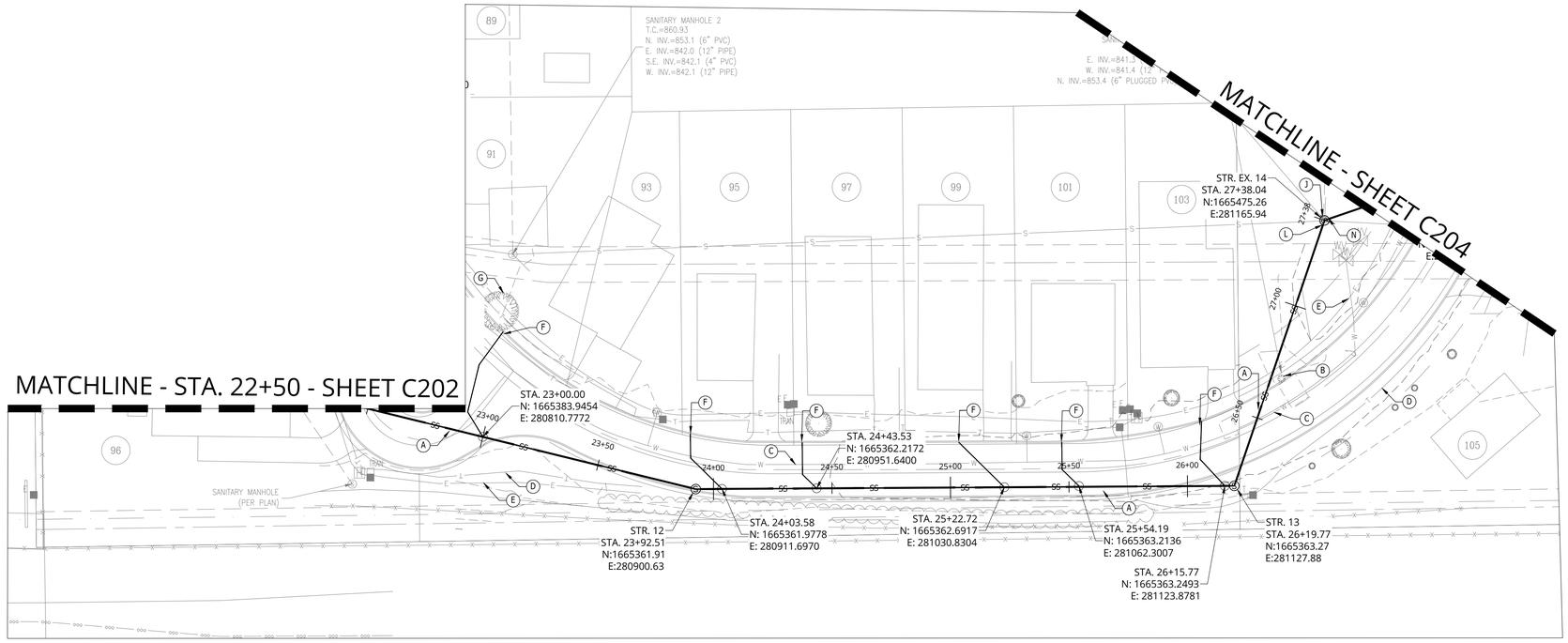
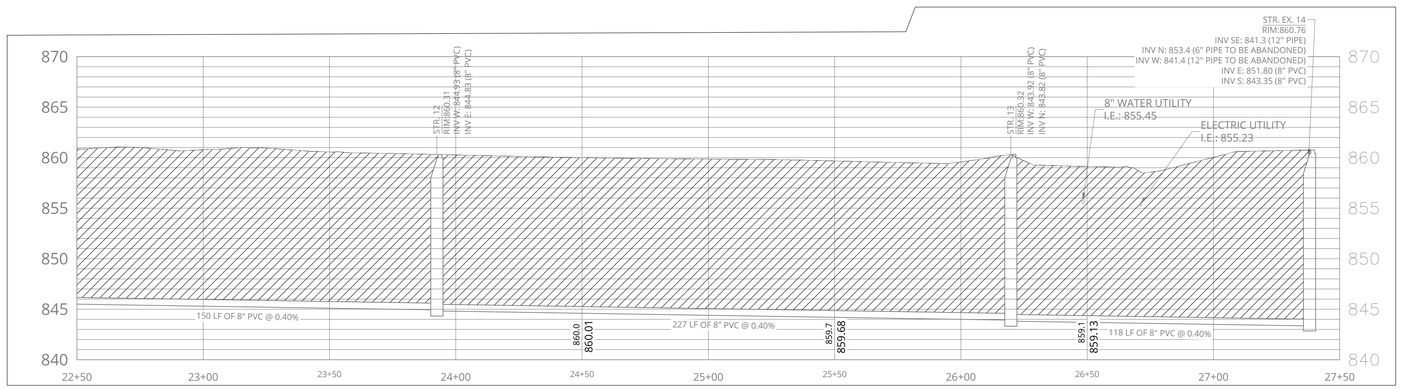


KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
- (K) LINE EXISTING SANITARY SEWER FROM EX. MANHOLE TO TIE-IN AT SUGAR CREEK WWTP.
- (L) CORE IN NEW SANITARY SEWER TO EXISTING MANHOLE. SEE DETAIL ON SHEET C602.
- (M) CUT AND CAP EXISTING SANITARY SEWER. USE BYPASS PUMPING TO ALLOW FOR INSTALLATION OF PROPOSED SANITARY SEWER.
- (N) USE INTERNAL DROP IN MANHOLE. SEE DETAIL ON SHEET C602.
- (O) REPLACE EXISTING PIPE TO REPAIR SAG. MATCH EXISTING VERTICAL AND HORIZONTAL ALIGNMENT.

= GRANULAR BACKFILL



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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

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AARON L. CROW
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No.
PE11800762
STATE OF
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PROFESSIONAL ENGINEER

1" = 20'
0 20' 40'
GRAPHIC SCALE

SANITARY SEWER
PLAN & PROFILES

C203

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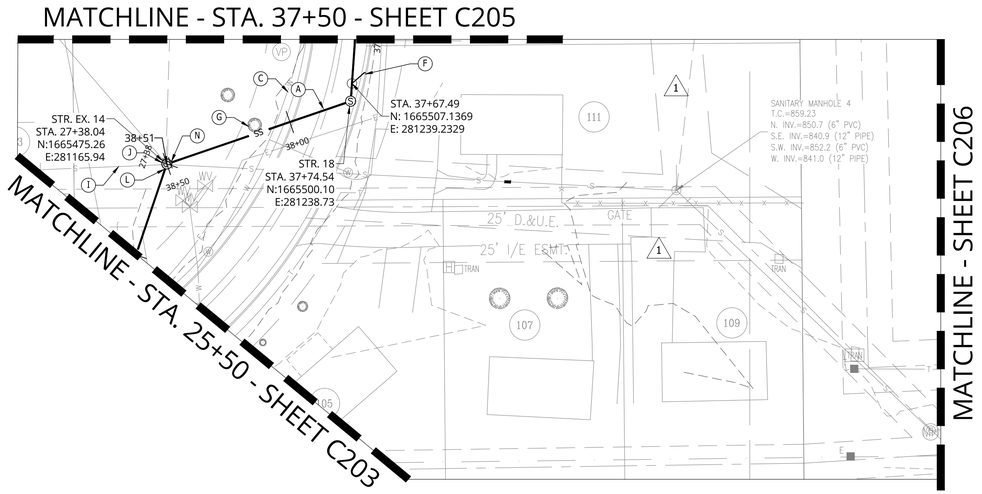

KEY NOTES

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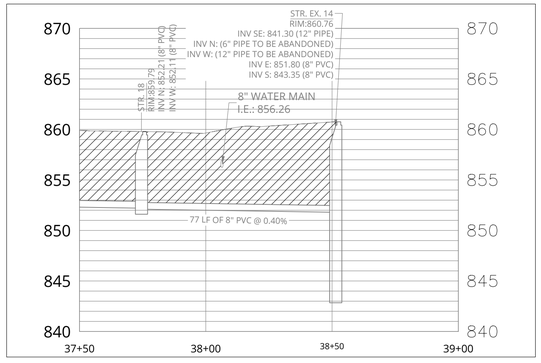
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
- (K) LINE EXISTING SANITARY SEWER FROM EX. MANHOLE TO TIE-IN AT SUGAR CREEK WWTP.
- (L) CORE IN NEW SANITARY SEWER TO EXISTING MANHOLE. SEE DETAIL ON SHEET C602.
- (M) CUT AND CAP EXISTING SANITARY SEWER. USE BYPASS PUMPING TO ALLOW FOR INSTALLATION OF PROPOSED SANITARY SEWER.
- (N) USE INTERNAL DROP IN MANHOLE. SEE DETAIL ON SHEET C602.
- (O) REPLACE EXISTING PIPE TO REPAIR SAG. MATCH EXISTING VERTICAL AND HORIZONTAL ALIGNMENT.



= GRANULAR BACKFILL

RQAW
INTENTIONAL INNOVATION

BIDDING SET

RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW
REGISTERED
No. PE11800762
STATE OF INDIANA
PROFESSIONAL ENGINEER

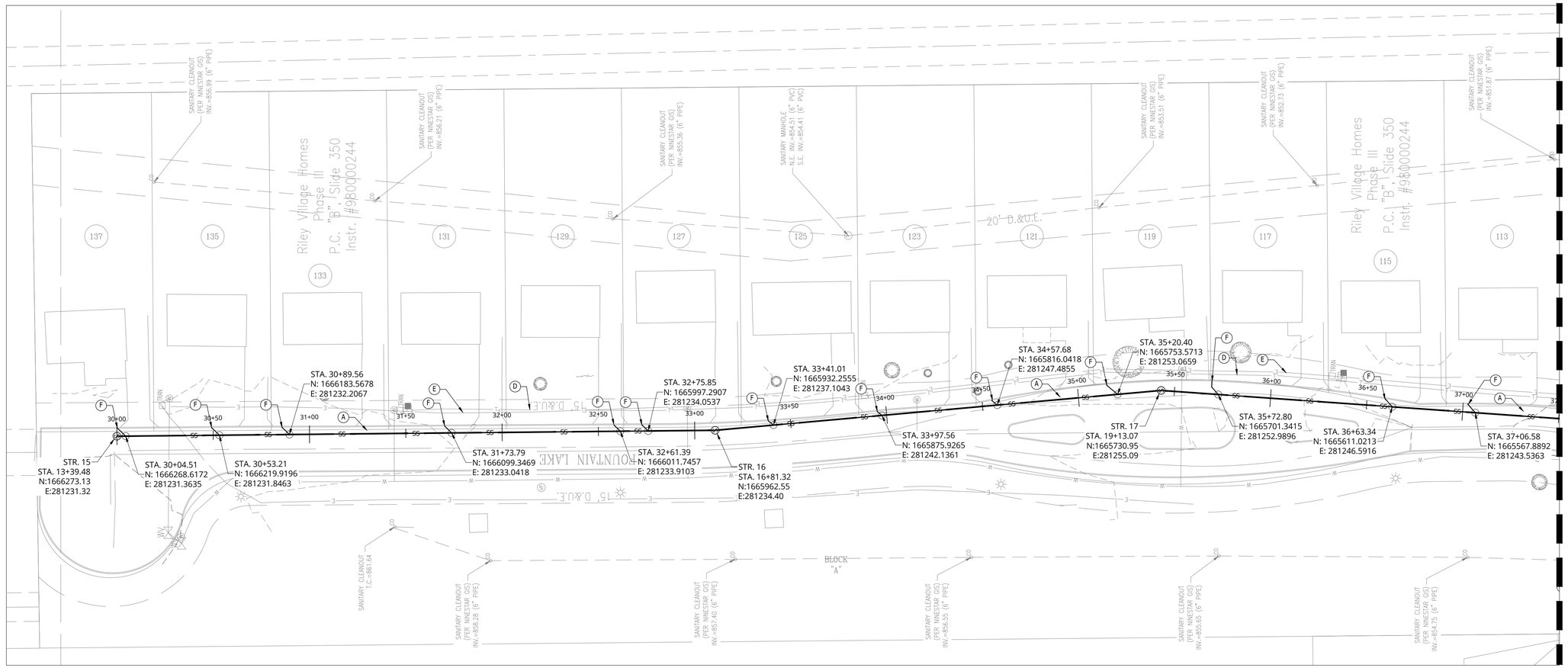
1" = 30'
0 30' 60'
GRAPHIC SCALE

N

SANITARY SEWER
PLAN & PROFILES

C204

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 3/21/23 - 1:37 PM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWER\5 ACAD\PLAN SHEETS & WORKING DRAWINGS\C200 - SANITARY PLAN & PROFILES.DWG



MATCHLINE - STA. 37+50 - SHEET C206

KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (C) EXISTING WATER MAIN. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
- (D) EXISTING COMMUNICATIONS UTILITY
- (E) EXISTING ELECTRIC UTILITY
- (F) PROPOSED 6" SANITARY LATERAL, INSIDE RIGHT-OF-WAY. CONTRACTOR TO CAP FOR FUTURE CONNECTION
- (G) REPLACE DEMOLISHED TREES IN KIND
- (H) REMOVE TOP 5' OF MANHOLE AND BACKFILL. SEE DETAIL ON SHEET C602.
- (I) GROUT AND ABANDON EXISTING SANITARY SEWER.
- (J) LINE EXISTING MANHOLE.
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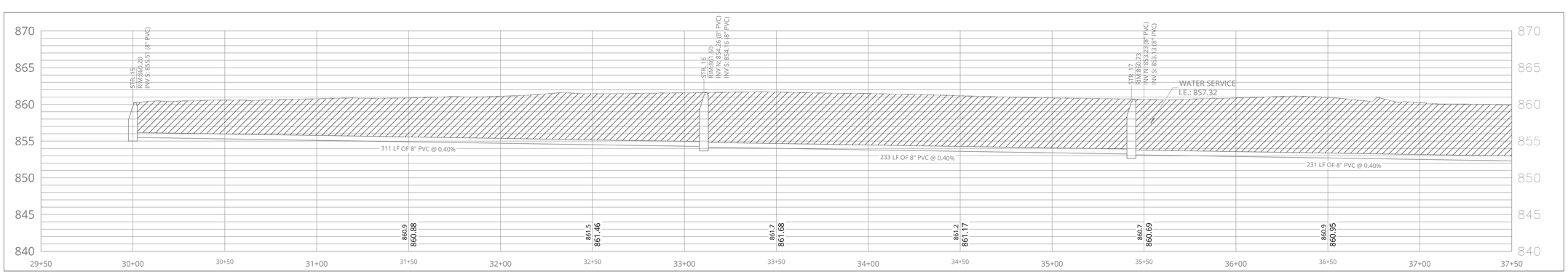
▨ = GRANULAR BACKFILL



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INTENTIONAL INNOVATION

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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

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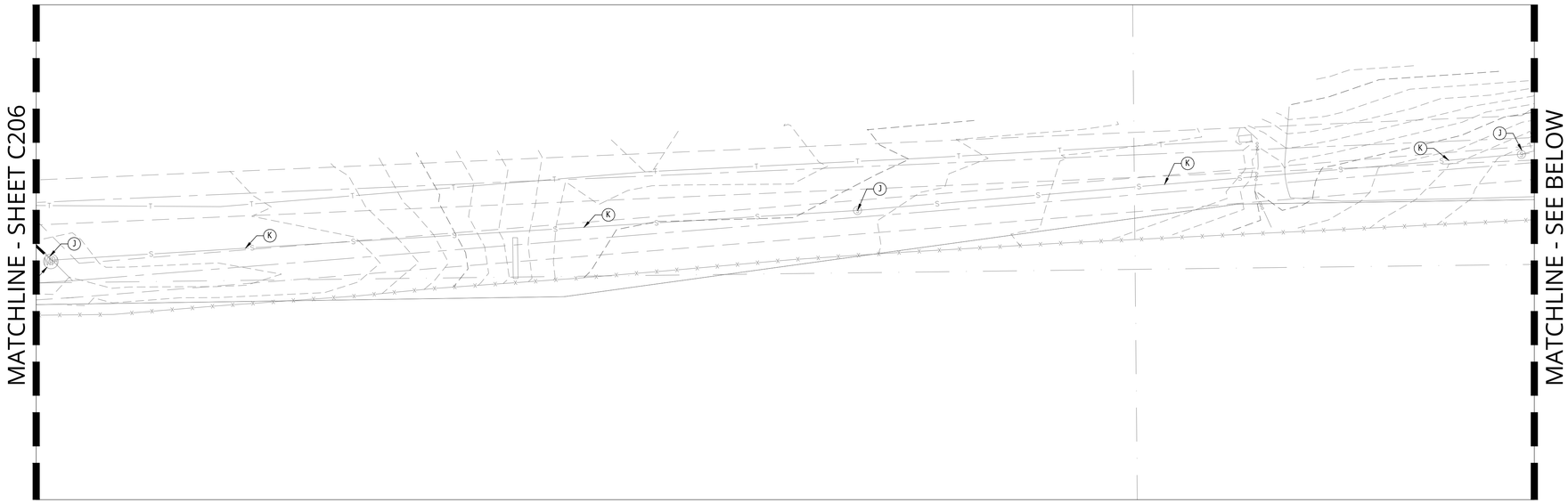
AARON L. CROW REGISTERED No. PE11800762 STATE OF INDIANA PROFESSIONAL ENGINEER

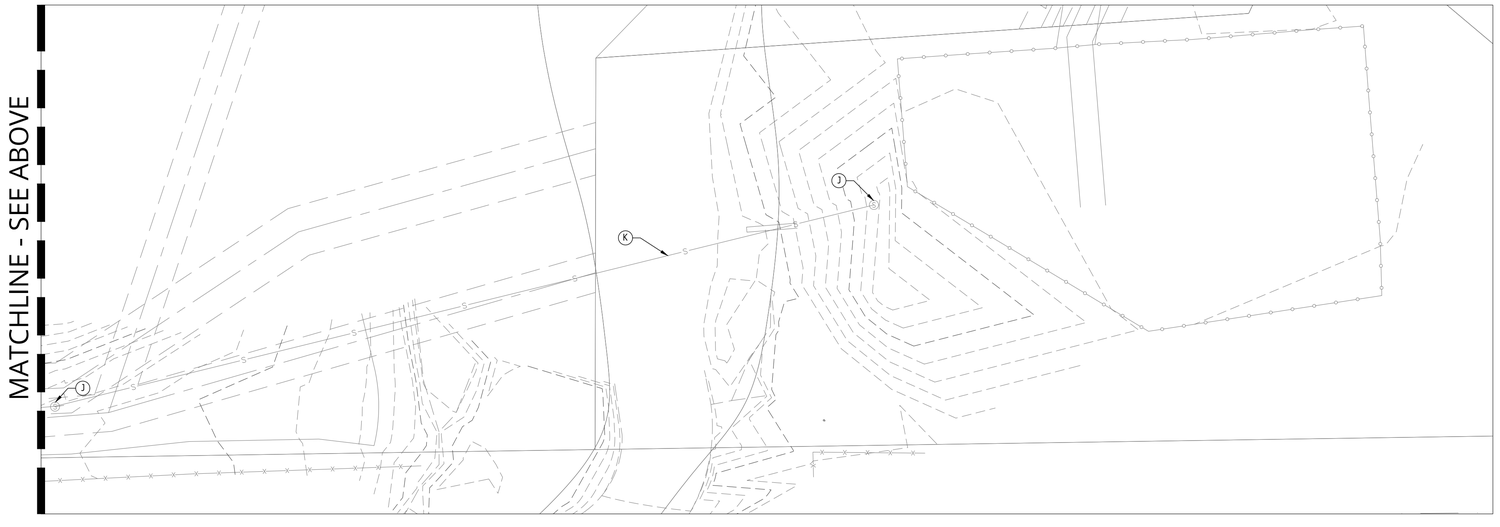
1" = 30'
0 30' 60'
GRAPHIC SCALE

SANITARY SEWER PLAN & PROFILES

C205

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 3/21/23 - 1:37 PM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWER\5 ACAD\PLAN SHEETS & WORKING DRAWINGS\C200 - SANITARY PLAN & PROFILES.DWG





KEY NOTES

- (A) REPLACE DISTURBED ROAD WITH ASPHALT PAVEMENT. SEE DETAIL ON SHEET C601.
- (B) EXISTING STORM SEWER. MAINTAIN SUFFICIENT WATER & SEWER SEPARATION. SEE DETAIL ON SHEET C601.
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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

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1" = 30'
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GRAPHIC SCALE

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SANITARY SEWER
PLAN & PROFILES

C206

PRINT DATE: 3/18/24
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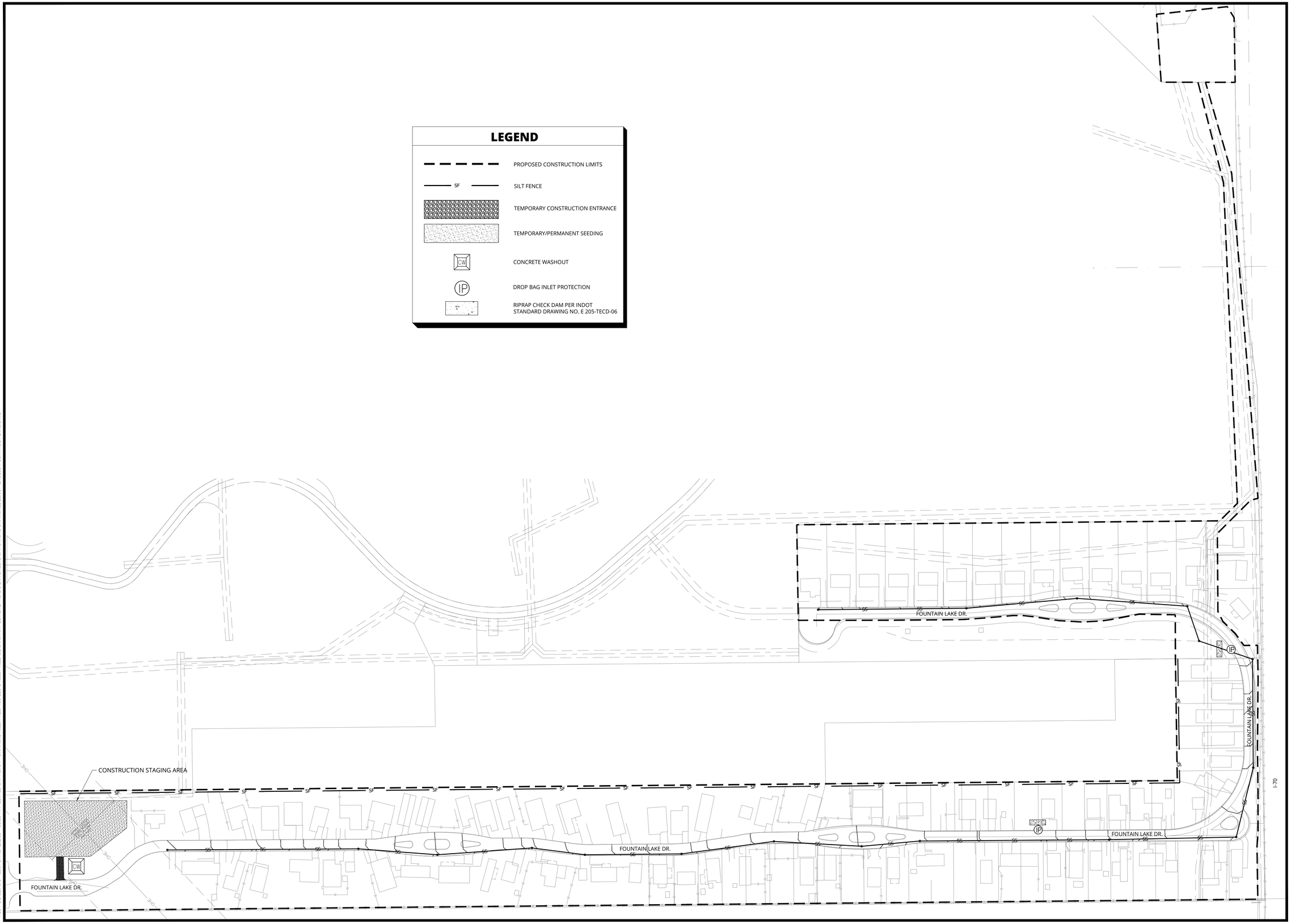
LEGEND

- PROPOSED CONSTRUCTION LIMITS
- SF — SILT FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- TEMPORARY/PERMANENT SEEDING
- CW — CONCRETE WASHOUT
- IP — DROP BAG INLET PROTECTION
- RIPRAP CHECK DAM PER INDOT STANDARD DRAWING NO. E 205-TECD-06



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INTENTIONAL INNOVATION

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RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
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AARON L. CROW
REGISTERED
No. PE11800762
STATE OF INDIANA
PROFESSIONAL ENGINEER

1" = 90'
0 90 180 Feet

EROSION CONTROL PLAN

C500

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 2/2/23 - 10:25 AM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWERS ACAD\PLAN SHEETS & WORKING DRAWINGS\C500 - EROSION CONTROL PLANS.DWG

SILT FENCE

LOCATION

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

INSTALLATION

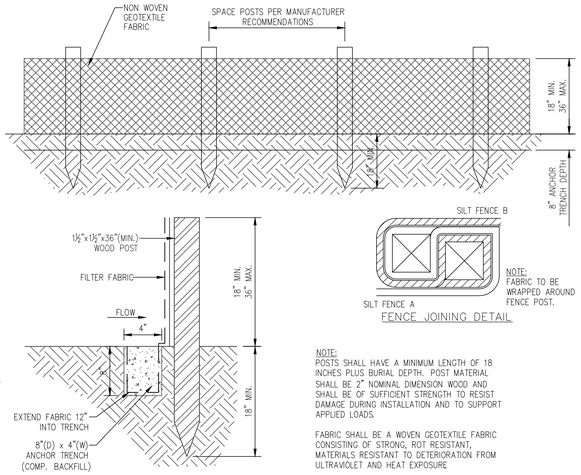
1. LAYOUT THE LOCATION OF THE FENCE SO THAT IT IS PARALLEL TO THE CONTOUR OF THE SLOPE AND AT LEAST 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP SLOPE SUCH THAT THE POINT OF CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES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

MAINTENANCE

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

EROSION AND SEDIMENT CONTROL NOTES:

1. FURNISH AND INSTALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE INDIANA STORM WATER QUALITY MANUAL.
2. DURING ALL PHASES OF CONSTRUCTION, THE SITE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL EXERCISE MEASURES TO PREVENT THE EROSION OF SOILS DUE TO THE ACTION OF WATER AND WIND. ALL STORM WATER POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
3. THE USE OF ALTERNATIVE MATERIALS/PRODUCTS, SUCH AS FILTER SOCK, ETC., IN LIEU OF SILT FENCE, IS PERMITTED SUBJECT TO APPROVAL BY ENGINEER. ALTERNATIVE MATERIALS/PRODUCTS SHALL MEET OR EXCEED THE PERFORMANCE OF STORMWATER POLLUTION PREVENTION MEASURES SPECIFIED.
4. OILS, HYDRAULIC FLUIDS, FUEL, GREASE, CONCRETE AND OTHER SPILLS ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF ACCORDING TO ANY AND ALL APPLICABLE REGULATIONS.
5. IF DEWATERING IS NECESSARY, CONTRACTOR SHALL USE TEMPORARY ROCK CHECK DAMS AND/OR TEMPORARY SEDIMENT TRAPS TO CONTROL STORMWATER POLLUTION AND IS NOT PERMITTED TO DISCHARGE DIRECTLY INTO ANY WATER BODY OR STORM SEWER SYSTEM UNLESS PUMP DISCHARGE BAGS ARE USED.
6. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE WITH TEMPORARY OR PERMANENT SEEDING. NO DISTURBED AREA SHALL BE EXPOSED FOR MORE THAN 14 DAYS.
7. CONTRACTOR SHALL MONITOR AND MAINTAIN STORMWATER POLLUTION PREVENTION MEASURES AND DEVICES FROM THE BEGINNING OF CONSTRUCTION UNTIL SUCH A TIME THAT SOIL IS STABILIZED IN ACCORDANCE WITH THE SCHEDULE ON THIS SHEET.
8. CONTRACTOR SHALL REMOVE AND DISPOSE OF TEMPORARY STORMWATER POLLUTION PREVENTION DEVICES ONCE RISK OF ONSITE EROSION AND SITUATION NO LONGER EXIST.
9. THE OWNER OR ENGINEER HAS THE AUTHORITY TO EITHER REQUEST ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES OF TO AMEND THE STORMWATER POLLUTION PREVENTION PLANS IN ORDER TO MEET ACTUAL SITE CONDITIONS.



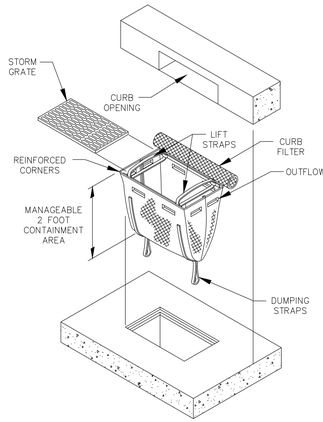
SILT FENCE DETAIL
NOT TO SCALE

NOTE: FABRIC TO BE WRAPPED AROUND FENCE POST.

FENCE JOINING DETAIL

NOTE:
POSTS SHALL HAVE A MINIMUM LENGTH OF 18 INCHES PLUS BURIAL DEPTH. POST MATERIAL SHALL BE 2" NOMINAL DIMENSION WOOD AND SHALL BE OF SUFFICIENT STRENGTH TO RESIST DAMAGE DURING INSTALLATION AND TO SUPPORT APPLIED LOADS.

FABRIC SHALL BE A WOVEN GEOTEXTILE FABRIC CONSISTING OF STRONG, ROT RESISTANT, MATERIALS RESISTANT TO DETERIORATION FROM ULTRAVIOLET AND HEAT EXPOSURE

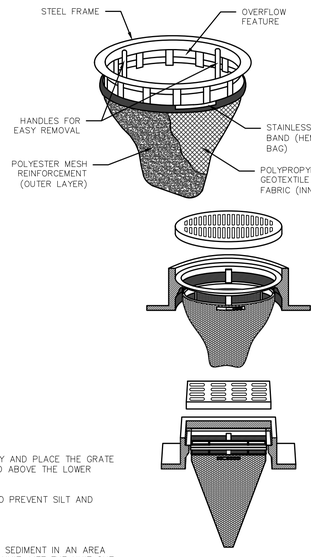


INSTALLATION AND MAINTENANCE GUIDELINES

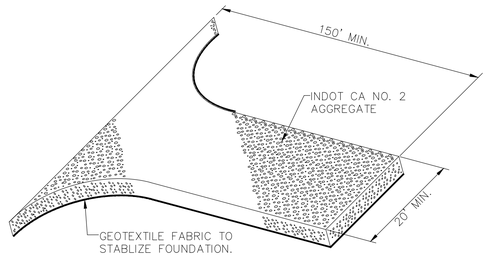
INSTALLATION:
1. REMOVE THE GRATE FROM THE CATCH BASIN.
2. IF USING OPTION OIL ABSORBENTS, PLACE ABSORBENT PILLOW IN UNIT.
3. STAND THE GRATE ON END, MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS.
4. HOLDING THE LIDTING DEVICES, INSTER THE GRATE INTO THE INLET.
5. MAKE SURE THE CYLINDRICAL PORTION IS UP AGAINST THE CURB OPENING TO PREVENT SILT AND DEBRIS FROM ENTERING THE INLET.

MAINTENANCE:
- INSPECT DAILY.
- REMOVE ALL ACCUMULATED SEDIMENT AFTER EACH STORM EVENT. DISPOSE OF SEDIMENT IN AN AREA WHERE IT WILL NOT REENTER THE PAVED AREA OR STORM DRAINS. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET BY USING THE LIFTING STRAPS AND REMOVE THE GRATE.
- WHEN CONTRIBUTING DRAINAGE AREA HAD BEEN STABILIZED, REMOVE INLET PROTECTION.

DROP BAG INLET PROTECTION
NOT TO SCALE



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



INSTALLATION NOTES:

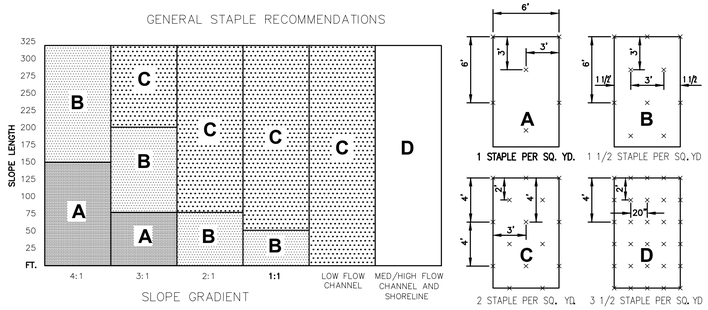
1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE. IF THE SLOPE OF THE CONSTRUCTION ENTRANCE IS TOWARD A PUBLIC ROAD AND EXCEEDS TWO PERCENT, CONSTRUCT AN EIGHT INCH HIGH DIVERSION RIDGE WITH A RATIO OF 3-TO-1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD.
3. INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
4. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
5. PLACE AGGREGATE (INDOT CA NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. TOP-DRESS THE FIRST 50 FEET ADJACENT TO THE PUBLIC ROADWAY WITH TWO TO THREE INCHES OF WASHED AGGREGATE (INDOT CA NO. 53) [OPTIONAL, USED PRIMARILY WHERE THE PURPOSED OF THE PAD IS KEEP SOIL FROM ADHERING TO VEHICLE TIRES]
7. WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE INGRESS,/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.

MAINTENANCE NOTES:

1. INSPECT DAILY.
2. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
3. TOP DRESS WITH CLEAN AGGREGATE AS NEEDED.
4. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS.
5. FLUSHING SHOULD ONLY BE USED IF THE WATER CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

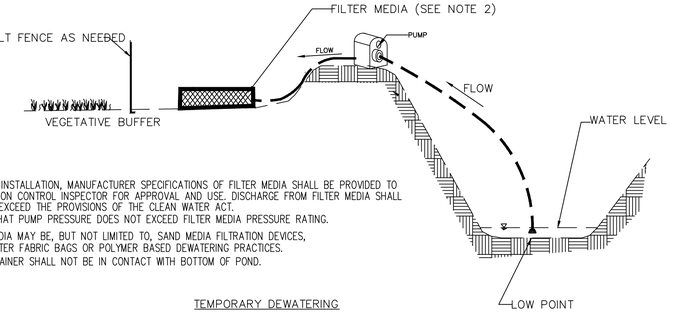
TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

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



NOTE:
1. CHANNEL LINING UTILIZE STAPLE PATTERN "C" WITH ADDITIONAL STAPLES ON SIDE SLOPES AT PROJECTED WATER LINE.
2. STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS STAPLE PATTERNS MAY VERY DEPENDING UPON SOIL TYPE AND AVERAGE RAINFALL.
3. AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

EROSION CONTROL MAT INSTALLATION GUIDE DETAIL
NOT TO SCALE



NOTE:
1. PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE PROVIDED TO THE EROSION CONTROL INSPECTOR FOR APPROVAL AND USE. DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT.
2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING.
3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES.
4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.

TEMPORARY DEWATERING

PERMANENT SEEDING

Application

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

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

Seeding

OPTIMUM SEEDING DATES ARE MARCH 1 TO MAY 10 AND AUGUST 10 TO SEPTEMBER 30. PERMANENT SEEDING DONE BETWEEN MAY 10 AND AUGUST 10 MAY NEED TO BE IRRIGATED. SEEDING OUTSIDE OR BEYOND OPTIMUM SEEDING DATES IS STILL POSSIBLE WITH THE UNDERSTANDING THAT RESEEDING OR OVERSEEDING MAY BE REQUIRED IF ADEQUATE SURFACE COVER IS NOT ACHIEVED. RESEEDING OR OVERSEEDING CAN BE EASILY ACCOMPLISHED IF THE SOIL SURFACE REMAINS WELL PROTECTED WITH MULCH.

1. SELECT A SEEDING MIXTURE AND RATE FROM TABLE 1 PERMANENT SEEDING RECOMMENDATIONS. SELECT SEED MIXTURE BASED ON SITE CONDITIONS, SOIL PH, INTENDED LAND USE, AND EXPECTED LEVEL OF MAINTENANCE.
2. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER THE SEED TO A DEPTH OF ONE-FOURTH TO ONE-HALF INCH. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEEDING OPERATIONS. (IF SEEDING IS DONE WITH A HYDROSEEDER FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.)
3. MULCH ALL SEEDED AREAS AND USE APPROPRIATE METHODS TO ANCHOR THE MULCH IN PLACE. CONSIDER USING EROSION CONTROL BLANKETS ON SLOPING AREAS AND CONVEYANCE CHANNELS.

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

Table 1 Permanent Seeding Recommendations

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

Open Low-Maintenance Areas (Remaining idle more than six months)

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Perennial ryegrass – white clover 1	70 lbs. 2 lbs.	5.6 to 7.0
2. Perennial ryegrass – tall fescue 2	70 lbs. 50 lbs.	5.6 to 7.0
3. Tall fescue 2 – white clover 1	70 lbs. 2 lbs.	5.5 to 7.5

RQAW
INTENTIONAL INNOVATION

BIDDING SET

RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW REGISTERED No. PE11800762 STATE OF INDIANA PROFESSIONAL ENGINEER

EROSION CONTROL DETAILS

C501

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 2/2/23 - 10:25 AM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWER\3 ACAD\PLAN SHEETS & WORKING DRAWINGS\C200 - EROSION CONTROL PLANS.DWG

CONSTRUCTION/STORMWATER POLLUTION PREVENTION PLAN

ASSESSMENT OF CONSTRUCTION PLAN ELEMENTS (SECTION A)

A1 PLAN INDEX SHOWING LOCATIONS OF REQUIRED ITEMS:
See cover sheet for index of construction plan sheets and this sheet for index of required SWPPP components – Sections A, B, and C.

A2 18X24 PLAT SHOWING SITE, BUILDINGS, PARKING LOTS, STREETS:
See G001 for an overall plat showing existing site, buildings, lots, lot numbers, and streets.

A3 NARRATIVE DESCRIBING PROJECT NATURE AND PURPOSE:
The proposed project includes the installation of approximately 3,600 linear feet of 8" gravity sewer with 48" manholes and 6" laterals.

A4 VICINITY MAP SHOWING PROJECT LOCATION:
See cover sheet

A5 LEGAL DESCRIPTION OF THE PROJECT SITE:
The project is located in the NW quarter, Section 23, Township 16N, Range 6E in Center Township. The latitude and longitude are 39°49'36.36"N, 85°50'6.99"W

A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS:
See sheet(s) C200–C206

A7 HYDROLOGIC UNIT CODE-14 DIGIT:
0512020406040 – Sugar Creek–Boyd Ditch

A8 NOTATION OF ANY STATE OR FEDERAL WATER QUALITY PERMITS:
IDEM Rule 5 Permit

A9 SPECIFIC POINTS WHERE STORMWATER DISCHARGE WILL LEAVE THE SITE:
Stormwater runoff will discharge to Fountain Lake.

A10 LOCATION AND NAME OF ALL WETLANDS, LAKES AND WATER COURSES ON AND ADJACENT TO THE SITE:
Fountain Lake, a manmade water body, is adjacent to the project site.

A11 IDENTIFICATION OF ALL RECEIVING WATERS:
The stormwater runoff from the site will discharge to Sugar Creek.

A12 IDENTIFICATION OF POTENTIAL DISCHARGE TO GROUNDWATER:
None

A13 100 YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES:
This project is not located within a floodplain or a floodway.

A14 PRE-CONSTRUCTION AND POST CONSTRUCTION ESTIMATE OF PEAK DISCHARGE:
10YR PRE = 0.11 CFS 100YR PRE = 0.16 CFS
10YR POST = 0.11 CFS 100YR POST = 0.16 CFS

A15 ADJACENT LAND USE, INCLUDING UPSTREAM WATERSHED:
South–Agricultural
North–Agricultural
East–Residential
West–Agricultural/Industrial

A16 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS:
See sheet(s) C501 for construction limits.

A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER:
See sheets C201–C207

A18 SOILS MAP INCLUDING DESCRIPTIONS AND LIMITATIONS:
See this sheet for soils descriptions and limitations.

A19 LOCATION, SIZE AND DIMENSIONS OF PROPOSED STORMWATER SYSTEMS:
See sheet C501

A20 PLAN FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT:
None.

A21 LOCATIONS OF PROPOSED SOIL STOCKPILES, BORROW AND/OR DISPOSAL AREAS:
The Contractor may place proposed soil stockpiles and borrow in the area located to the northeast of the neighborhood entrance. No disposal areas are proposed for this project.

A22 EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO SHOW DETAILED DRAINAGE PATTERNS:
See existing topographic survey

A23 PROPOSED FINAL TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO SHOW DETAILED DRAINAGE PATTERNS:
See Sheet(s) C500

ASSESSMENT OF STORMWATER POLLUTION PREVENTION PLAN-CONSTRUCTION COMPONENT (SECTION B)

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES:
The primary pollutant associated with construction activities is sediment. Additional pollutants may be generated by construction vehicle operation and maintenance (e.g. fueling, changing hydraulic fluids and oils); concrete washout; improper storage of construction materials; improper disposal of construction trash and debris; improper application or over application of fertilizers and pesticides; and improper storage, application, and disposal of soluble materials or other materials that may be mobilized by storm water runoff. Equipment and fuel will be stored in a central location and the contractor shall institute methods and procedures to prevent discharge of pollutants.

ASSESSMENT OF STORMWATER POLLUTION PREVENTION PLAN-CONSTRUCTION COMPONENT (SECTION B) CONTINUED

B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES:
See erosion and sediment control sequences and implementation on this sheet.

B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS:
The proposed construction entrance can be found on Sheet C500.
See Sheet C501 for detail.

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS:
Preliminary grading and stabilization must be completed to ensure adequate drainage to the temporary or permanent runoff conveyance facilities. Silt fencing must also be implemented prior to any construction activity to ensure silt collection. Stabilize disturbed areas directly after earth disturbing activities, temporary seed areas scheduled to be idle for up to 15 days. Permanently seed all areas that are at final grade, phase projects where each subsequent phase will not begin for 8 months or more, and areas to be idle for more than one year. Erosion control measures to be installed in sheet flow area. See Avon Town Standards for details as well as installation and maintenance procedures. see this sheet for seeding guidelines.

B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS:
Adequate erosion control measures must be installed within these areas prior to opening for runoff acceptance. Stabilize disturbed areas directly after earth disturbing activities. Temporary seed areas scheduled to be idle for up to one year. Ensure that the project is not idle for more than 7 days without temporary seeding. Permanently seed all areas that are at final grade, phase projects where each subsequent phase will not begin for 8 months or more, and areas to be idle for more than one year. See sheet C501 for erosion control measures to be installed in concentrated flow areas.

B6 SEDIMENT CONTROL MEASURES FOR STORM SEWER INLETS PROTECTION:
See sheet C500 and this sheet.

B7 RUNOFF CONTROL MEASURES:
See sheet C500 and this sheet.

B8 STORMWATER OUTLET PROTECTION SPECIFICATIONS:
See sheet C501.

B9 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS:
See sheet C500.

B10 LOCATION, DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS FOR EACH STORMWATER QUALITY MEASURE:
See sheet(s) C500, this sheet, and associated erosion control details on sheet C502.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON:
See sheet(s) C501 and "General Seeding & Surface Stabilizing Procedures" on this sheet.

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS:
See sheet(s) C501 and "General Seeding & Surface Stabilizing Procedures" on this sheet.

B13 MATERIAL HANDLING AND SPILL PREVENTION:
Expected construction materials on site may include vehicle lubricants, oils, vehicular fuels, concrete wash-out, acids, curing compounds, paints, mulch, pesticides, herbicides, fertilizer, and trash. Any toxic waste materials are to be disposed of according to local and state laws. Small spills and leaks of these materials onto non-paved areas will be shoveled into containers or dumpsters for proper disposal. Fueling trucks will be equipped with spill prevention kits for smaller fuel spills. All vehicular maintenance shall be performed in the same designated area throughout the construction time frame. If possible, vehicular maintenance shall be done off-site at facilities that are designed to handle any material spillage. This shall include fueling of vehicles whenever possible. In case of spill call 911. Call the Indiana Department of Environmental Management, office of emergency response (800)-233-7745, Shall be notified immediately for larger spills or leaks. The National Response Center (800)-424-8802 shall be notified and provided with the following information: time of spill, location of spill, material, source of spill, approximate volume and length of spillage, weather conditions at time of spill, personal present at time of spill, and all action taken for post spill cleanup. Contractor shall contact a waste recovery agency immediately for removal of contaminates and coordination of monitoring the site during cleanup until all of the hazardous material has been removed. Contractor shall cooperate with idem during and after the spill to insure all required cleanup and filing reports are properly submitted. The developer shall be continually informed of any contamination concerns occurring on the site. The construction manager shall keep on site a list of qualified contractors for spill remediation. All site personnel, including maintenance employees, shall be made aware of proper spill prevention and remediation techniques. All materials used to absorb spills shall be properly disposed of in an approved manor with local and state laws. Do not flush spill materials with water unless directed to do so by a governing agency. It is important that all manufacturer's instructions be followed when using or applying all fertilizers, herbicides, and pesticides.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORM WATER QUALITY MEASURE:
See sheet(s) C501 for each storm water quality measure.

B15 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS:
N/A

ADDITIONAL EROSION AND SEDIMENT CONTROL INFORMATION (WHERE APPLICABLE)

EROSION AND SEDIMENT CONTROL PROVISION FOR STREAM / CHANNEL CROSSINGS: NONE

SEDIMENT CONTROL ASSOCIATED WITH DEWATERING AND DIRECTIONAL BORING OPERATION:
Sediment laden water shall not be pumped to storm sewer outlets or natural drainage ways. Disposal shall be confined to areas not subject to sheet flow runoff where the effluent can be dried out. This restriction shall apply to areas where lime stabilization has been implemented. maintenance and inspection are required for proper de-watering procedures.

ASSESSMENT OF STORMWATER POLLUTION PREVENTION POST-CONSTRUCTION COMPONENT (SECTION C)

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE:
Potential pollutant sources post construction include fertilizers, herbicides, pesticides and other lawn treatment applications along with assorted fuels, oils and liquids associated with vehicular traffic throughout the developed site. There are downstream water quality effects due to channeling discharges to a single point. This can result in bank erosion, down cutting of the channel bottom.

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION:
the post-construction stormwater quality measure implementation shall begin after substantial completion of the construction activities for the proposed project. Following construction, all erosion control measures shall be inspected and maintained until all permanent measures and vegetation has been established and construction is complete.

After site is permanently vegetated, temporary erosion control measures may be removed including the following; silt fence and inlet protection.

INSPECTION AND MAINTENANCE OF ALL COMMON AREAS, LANDSCAPE AREAS AND INFRASTRUCTURE IMPROVEMENTS ARE THE RESPONSIBILITY OF THE DEVELOPER/OWNER AND OR LOCAL AGENCIES TAKING JURISDICTION OVER THE INFRASTRUCTURE IMPROVEMENTS.

See this sheet for detailed sequence and implementation.

C3 DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES:
Project site will be completely stabilized with permanent stabilization measures. Stormwater will sheet flow across grass areas and through grass lined swales which will treat runoff by removing Total Suspended Solids (TSS).

C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE:
See sheet(s) C500, C501, and this sheet.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY MEASURES:
Grass areas shall be maintained on a regular mowing cycle. trash and debris shall be removed from grass and gravel areas.

All stormwater management facilities and infrastructure will be inspected monthly. Debris and trash around or obstructing inlets will be removed. Damage to storm structures and/or pipes should be repaired as soon as possible.

EROSION AND SEDIMENT CONTROL SEQUENCE AND IMPLEMENTATION

1. A PRE-CONSTRUCTION CONFERENCE MUST BE SCHEDULED WITH HANCOCK COUNTY'S MS4 OPERATOR, SO THAT ALL REPORTING AND OTHER CONSTRUCTION REQUIREMENTS ARE MET. HANCOCK COUNTY MS4 IS THE REVIEW AUTHORITY FOR THIS PROJECT.
2. INSTALL SILT FENCING AS SHOWN ON SHEET(S) C500. DUST SHALL BE KEPT TO A MINIMUM BY UTILIZING SPRINKLING, CALCIUM CHLORIDE, VEGETATIVE COVER, SPRAY ON ADHESIVE OR OTHER APPROVED METHODS.
4. IDENTIFY CONTRACTOR STAGING, MATERIAL STORAGE, AND STOCKPILE AREAS. EACH AREA SHALL BE PROPERLY PROTECTED AND DELINEATED PRIOR TO CONSTRUCTION.
5. THE NOTICE OF INTENT AND CONTACT INFORMATION FOR THE PERSON WITH ONSITE RESPONSIBILITIES MUST BE POSTED.
6. IDEM AND HANCOCK COUNTY MS4 OPERATOR MUST BE NOTIFIED WITHIN 48 HOURS OF COMMENCING EARTH MOVEMENT ACTIVITIES.
7. CONTACT INDIANA UNDERGROUND PLANNED PROTECTION SYSTEMS, INC. (INDIANA 811) FOR UNDERGROUND UTILITY LOCATIONS. (1-800-382-5544)
8. FIRST, CLEAR & GRUB AND STRIP TOPSOIL AREAS. TOPSOIL WILL BE STOCKPILED OFFSITE.
9. BEGIN MASS EARTHWORK FOR LIFT STATION PAD AND GRAVEL AREAS. INSTALL AND COMPLETE ALL UNDERGROUND UTILITY WORK. SEE "GENERAL SEEDING AND SURFACE STABILIZATION PROCEDURES" FOR SEEDING GUIDELINES ON THIS SHEET.
10. REPAIR ANY SILT FENCING IF DAMAGED. IF SEDIMENT IS 1/3 HEIGHT OF FABRIC, REMOVE SEDIMENT AND REPLACE TO ORIGINAL CONDITION.
11. IMMEDIATELY AFTER FINAL GRADING, APPLY SURFACE STABILIZATION PRACTICES ON ALL GRADED AREAS, USING PERMANENT MEASURES IN ACCORDANCE WITH THE EROSION CONTROL PLAN. HOWEVER, IF WEATHER DELAYS PERMANENT STABILIZATION, TEMPORARY SEEDING AND/OR MULCHING MAY BE NECESSARY AS A PROVISIONAL MEASURE. ALSO STABILIZE (USING TEMPORARY SEEDING/MULCHING OR OTHER SUITABLE MEANS) ANY DISTURBED AREA WHERE ACTIVE CONSTRUCTION WILL NOT TAKE PLACE FOR 15 WORKING DAYS.
12. AFTER CONSTRUCTION AND FINAL GRADING, PERMANENTLY STABILIZE ALL DISTURBED AREAS. ALSO REMOVE TEMPORARY MEASURES AND ANY UNSTABLE SEDIMENT AROUND THEM, AND STABILIZE THOSE AREAS WITH PERMANENT SEEDING AND EROSION CONTROL BLANKET AS NECESSARY TO ACHIEVE COMPLETE STABILIZATION OF ALL DISTURBED AREAS.
13. MAINTAIN ALL EROSION AND SEDIMENT CONTROL PRACTICES UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
14. NOTICE OF TERMINATION OF NOTICE OF INTENT SHALL BE FILED WITH IDEM AND HANCOCK COUNTY WHEN WORK IS COMPLETE AND SITE IS STABILIZED.

SOILS MAP

HANCOCK COUNTY SOILS CHARACTERISTICS AND LIMITATIONS

Br – BROOKSTON SILTY CLAY LOAM, 0 TO 2 % SLOPES

CrA – CROSBY SILT LOAM, NEW CASTLE TILL PLAIN, 0 TO 2 % SLOPES

MmB2 – MIAMI SILT LOAM, 2 TO 6 % SLOPES, ERODED

Or – ORTHENTS

W – WATER

EROSION CONTROL SPECIFICATIONS

A. SCOPE OF WORK

1. The work required under this section includes erosion and sediment control measures for construction activities as required by local, state and federal jurisdictions including by not limited to County Soil & Water District, Local MS4, Indiana Department of Environmental Management and the Environmental Protection Agency.

B. MATERIALS

1. Materials required for this section are provided under the Stormwater Pollution Prevention Plans, Erosion & Sediment Control Notes, and Details.

C. GENERAL

1. This plan is designed as an attempt to prevent any and all sediment from leaving the construction site by way of erosion. If erosion of sediment from the site is taking place, the owner shall take preventative action immediately. The Engineer shall be consulted in the event this happens.
2. This plan is designed to be applied within 7 days if no work is anticipated in an area of disturbed soil within 15 days.
3. Permanent seeding is to be applied immediately to areas that have achieved final and finished grade.
4. Preserve existing vegetation on the site whenever possible to prevent topsoil erosion.
5. All sediment capturing measures are to be implemented prior to the disturbance of the construction area they are intended to service.
6. All erosion control measures proposed are to be properly maintained to continue their effectiveness.
7. If all grades occur during December, January or February dormant seeding procedures shall be used.
8. During dry weather, keep lawns watered with sprinklers or other approved methods. Reseed any areas not germinating or damaged at intervals as may be required according to seasonal condition and/or construction activity. Water grass and execute necessary weeding until full stand of grass has been obtained.
9. The implementation and maintenance of the erosion control is the sole responsibility of the contractor and/or owner.
10. It shall be the Contractor's and/or Owner's responsibility to minimize sedimentation (from on-site construction activities) from being deposited onto adjacent properties and receiving streams/ditches in strict compliance with the United States Environmental Protection Agency (U.S. EPA) and the Indiana Department of Environmental Management (IDEM) Storm Water Phase II criteria. It shall also be the Contractor's and/or owner's responsibility to obtain approvals required from the local authority having jurisdiction and to submit a complete Notice of Intent form to the Indiana Department of Environmental Management (IDEM) prior to the start of any construction activities.
11. Provide 12" minimum of INDOT #2 crushed stone on filter fabric construction entrance(s) to site from streets/roads. See details for additional information.
12. Contractor shall at all times insure that erosion control measures protecting draining facilities be placed prior to the commencement of any phase of construction or land alteration activity.
13. As soon as areas are brought to finished grade or new drainage facilities are constructed, contractor shall construct the applicable erosion control measure required by and delineated on the approved plan.
14. During site construction activity, the contractor shall:
    a. Construct all perimeter silt barriers.
    b. Install and maintain clean crushed stone at all construction entrances/exits to the site and any areas used for parking.
    c. Prevent construction silts from leaving the site at all times and place excavated materials away from any direct flow runoff from the site.
15. Temporary vegetation shall be installed within 7 days following completion of any phase of grading.
16. Contractor shall inspect all erosion control measures daily and repair as necessary to prevent erosion. Siltation shall be removed from areas where failures have occurred, and corrective action shall be taken within 24 hours to maintain all erosion control.
17. Perimeter siltation barriers shall be maintained at all times.
18. At such time that rough grading of the site is complete and drainage diverts to inlets, inlet erosion control measures shall be installed at all inlet structures to keep piping system free of siltation.
19. Erosion control measures, construction entrances and siltation barriers shall remain in place until a good stand of grass has been obtained and/or paving operations are complete. After this has been accomplished, all silt in pipes, detention facilities and swales be removed within 10 days so finished grades are met.
20. Once construction is complete and prior and prior to the contractor handing over the project to the owner, the contractor shall clean all debris, pollutants, and sediment from the detention pond and forebay.

SPILL PREVENTION PLAN

All fueling and servicing of vehicles on site will be conducted near the construction entrance/staging area. This area shall be contained with a row of staked strawbales around the perimeter. Secondary containment in the for of drip pans or drop cloths shall be used to contain any spills. The contractor shall maintain a supply of oil-absorbent material to clean up any small spills that may occur. Any spillage will be removed immediately. Used absorbent material shall be removed from the site and disposed of in accordance with the laws of the State of Indiana. Contaminated soils will be placed on heavy plastic and covered or placed into approved containers to prevent contact with storm water. All fuel tanks we be in the containment area. Oils, other vehicle fluids, paints and solvents will be stored in the construction trailer. Any spills in excess of two gallons will be reported to a representative of the contractor.

If a release containing hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period, the contractor will immediately notify the permittee who shall then do the following: notify National Response Center (NRC) (800-424-8802) and the Indiana State Emergency Management Agency (317-232-3986); as well as Local/County Emergency Management, the Local Fire Department (911), and Hendricks County Engineering Department. Also, the engineer will prepare a revision to this document to identify measures to prevent the reoccurrence of such releases.

Concrete trucks will wash out at the designated area near the construction entrance. The contractor shall take care to unsure that no waste materials are discharges into the waters of the state. Each contractor is responsible to provide litter control for trash generated by his crew. All trash including but not limited to; solid waste, paint cans, oil cans, used oil and filters will be contained and disposed of by the contractor in accordance with the laws and regulations of the State of Indiana and Local/County requirements.

The contractor shall furnish and maintain sanitary facilities for this project. The facilities shall be cleaned as necessary and the waste materials shall be disposed of in accordance with the laws and regulations of the State of Indiana and Local/County requirements.

GENERAL EROSION AND SEDIMENT CONTROL STAGING NOTES

1. The Contractor shall schedule and hold a pre-construction meeting with the Hancock County MS4 Operator prior to any construction activities.
2. All erosion and sediment control practices shall be in accordance with the Indiana Stormwater Quality Manual, Indiana Department of Environmental Management, and the Avon Town Standards.
3. The Notice of Intent (NOI) and public notice for the project, along with the MS4 SWPPP Approval, shall be posted on a sign installed at or near the site construction entrance. The NOI shall list the contact information for the site person. The sign and information shall be maintained and remain legible throughout construction.
4. A copy of this Erosion and Sediment Control Plan and Erosion and Sediment Control Report shall be available at the project site throughout the entire construction period.
5. The contractor shall control waste, garbage, debris, wastewater, and other substances on the site so they will not be transported from the site by the action of wind, storm water runoff, or other forces. Proper disposal or management of all wastes and unused building material appropriate to the nature of the waste or material required.
6. Public or private roadways shall be kept clear of accumulated sediment. All sediment that is cleared must be returned to the likely point of origin or other suitable location. Clearing of large amounts of sediment shall not include flushing the area with water.
7. Minimize the exposure of bare earth by limiting the work area to that necessary to perform the work, and by proper scheduling of manpower and equipment.
8. All erosion and sediment control measures shall be inspected, cleaned, and maintained following each storm event of 0.5 inches or greater.
9. Wherever possible, maintain existing vegetative cover. Use non-vegetative material including mulch, erosion control blankets, or stone to control erosion from disturbed areas.
10. A log shall be maintained of all inspections (weekly and following storm events), maintenance and repair of erosion and sediment control measures. The log shall be maintained on site and be available upon request to the owner's representative and operating authorities having jurisdiction over the site.
11. The following erosion control measures shall be in place prior to any land disturbing activities:
    11.11. Create a stabilized construction entrance.
    11.12. Install Temporary Inlet Protection Measures on existing storm inlets.
    11.13. Install Temporary Silt Fence Protection as shown on approved plans.
    11.14. Install Temporary Concrete Washout.
12. Once land disturbing activities begin, the following practices shall be provided:
    12.1. Once earth disturbing begins, the adjacent road, W CR300 S, shall be continuously monitored for sediment tracking.
    12.1. Once new storm structures/pipes (if proposed) are in place, the appropriate type of inlet protection measure shall be in placed.
    12.2. Continued monitoring of all exposed areas shall be performed in order to verify the surrounding areas are not becoming sediment laden from construction activities on site.
    12.3. As the construction occurs, disturbed areas shall be stabilized as soon as they are at final grade or will be left bare for more than 15 days.
    12.4. Provide final grade stabilization upon final grading of all areas including erosion control blanketing, seeding and sodding as appropriate.
    12.5. Storm sewer shall be flushed with clean water in the event they become silted from construction activities onsite.
13. Whenever possible, erosion and sediment control measures shall be constructed and installed prior to performing other earth disturbing activities.
14. Minimized erosion from exposed areas by providing and maintaining temporary or permanent stabilization measures. Erosion control measures to protect exposed areas shall be installed at the end of each day's work or within 24 hours of the completion of the earth disturbing activity.
15. All disturbed area shall be seeded and/or stabilized upon completion of the earth disturbing activity.
16. All graded areas (lawns, banks, mounds, etc.) with slopes equal or steeper than 3h:1v shall be stabilized with an erosion control blanket unless noted otherwise. All constructed swales channels shall be stabilized with an erosion control blanket to the top of the bank. Soil stockpiles shall be seeded and mulched to minimize erosion.
17. All other lawn and planting areas shall be seeded and stabilized with an anchored, crimped or tackified mulch and seed mixture.
18. Areas to be paved shall be stabilized with temporary stone cover. The temporary stone stabilization shall be equivalent to the proposed stone sub-base material. Adequate sub-base depths shall be maintained during construction, verified and restored, if necessary, prior to final paving. Stone stabilization shall be installed per paving specifications and details.
19. Install pipe and grate inlet protection measures and pipe outlet protection as new pipes or pipe extensions are installed. Limit excavation to the work that can be performed that day. Trenches shall be seeded and mulched as part of the backfill operation.
20. Install inlet protection measures to prevent debris and sediment from entering storm system. Check weekly and after each storm event for debris and sediment. Clear blockages as identified. Torn, damaged or ineffective measures shall be replaced.
21. Soil stockpiles shall have appropriate perimeter protection to prevent sedimentation of the surrounding acres. Any stockpile that will not be disturbed for 15 days or longer shall be seeded and protected with much or erosion control blanket.
22. All disturbed areas where work will potentially cease for 15 days or longer shall be seeded and stabilized immediately upon completion of the activity.
23. Erosion and sediment control measures shall be maintained until the site has 70% vegetative stand.
24. Once construction is complete and prior to the contractor handing over the project to the owner, the contractor shall clean all debris, pollutants, and sediment from the site.

RQAW
INTENTIONAL INNOVATION

BIDDING SET

RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

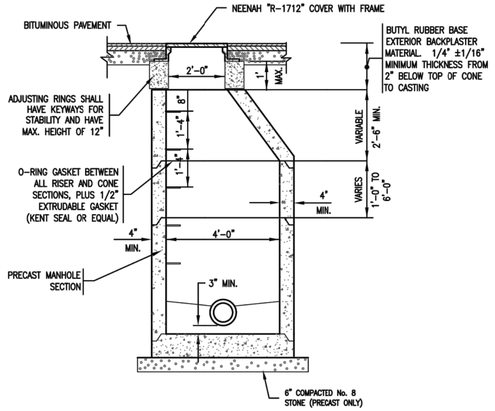
Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW
REGISTERED
No.
PE11800762
STATE OF
INDIANA
PROFESSIONAL ENGINEER

STORMWATER POLLUTION PREVENTION PLAN

C502

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 2/2/23 - 10:25 AM EDITED BY: MLYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWER\3 ACAD\PLAN SHEETS & WORKING DRAWINGS\C200 - EROSION CONTROL PLANS.DWG

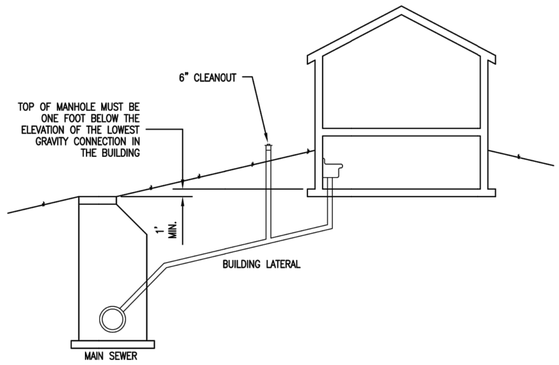


NOTES:

1. MANHOLE STEPS SHALL BE POLYPROPYLENE, POLYPROPYLENE COATED STEEL REINFORCING OR APPROVED NON-CORROSIVE FIBERGLASS MATERIAL. COPOLYMER POLYPROPYLENE SHALL MEET ASTM D-4101 REINFORCED WITH DEFORMED 3/8" STEEL MEETING ASTM A-615, GRADE 60.
2. MANHOLE CONFORMS TO ASTM C-478
   JOINT CONFORMS TO ASTM C-443

TYPICAL MANHOLE DETAIL

NOT TO SCALE



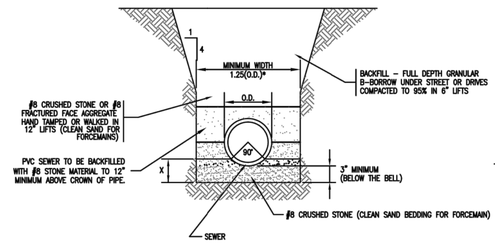
NOTE:

IF THE NEAREST MANHOLE IS NOT AT LEAST ONE (1) FOOT BELOW THE ELEVATION OF THE LOWEST AREA TO BE SERVED, A GRINDER STATION WILL BE REQUIRED.

GRAVITY CONNECTION DETAIL

NOT TO SCALE

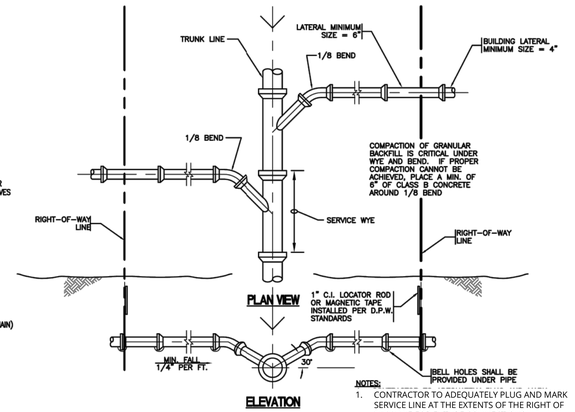
PIPE SIZE	BELOW 8"	8" TO 15"	18" & OVER
BEDDING BELOW THE PIPE BARREL – "X"	O.D./8 4" MIN.	O.D./8 4" MIN.	O.D./8 4" MAX.



* TRENCH WIDTHS AND BEDDING REQUIREMENTS TO BE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.

TYPICAL SANITARY SEWER TRENCH AND PIPE BEDDING DETAIL

NOT TO SCALE

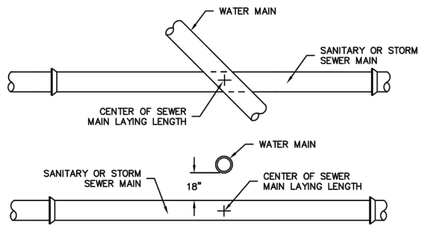


NOTES:

1. CONTRACTOR TO ADEQUATELY PLUG AND MARK SERVICE LINE AT THE EXTENTS OF THE RIGHT OF WAY LINE FOR FUTURE CONNECTIONS.
2. LATERALS FOR FUTURE USE SHALL BE CAPPED IN A WATERTIGHT MANNER.

SANITARY SERVICE CONNECTION DETAIL

NOT TO SCALE

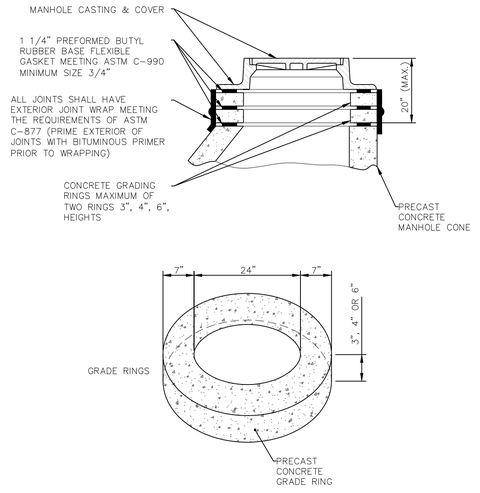


NOTES:

1. WATER MAIN AND SEWER MINIMUM SEPARATION: 18" VERTICAL SEPARATION 10'-0" HORIZONTAL SEPARATION.

SEPARATION REQUIREMENTS FOR WATER & SEWER

NOT TO SCALE

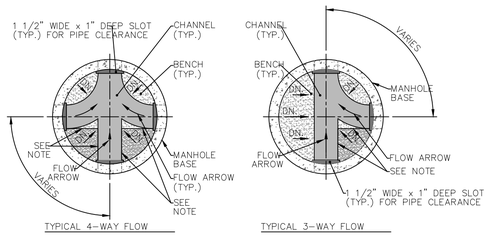


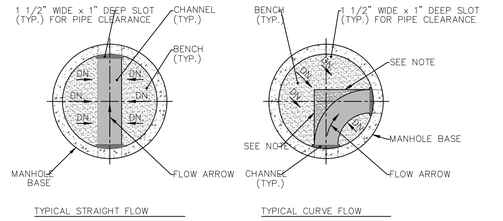
NOTE:

1. MINIMUM CONCRETE STRENGTH: 4500 PSI AT 28 DAYS.
2. PRECAST GRADE RINGS SHALL CONTAIN WATER PROOFING ADDITIVE, XYPEX OR EQUIVILENT.

STANDARD CASTING ADJUSTMENT & GRADE RINGS

NOT TO SCALE



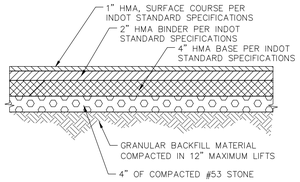


NOTE:

1. WALLS SHALL BE FLARED OUT AS REQUIRED SO THAT TESTING EQUIPMENT CAN BE SAFELY REMOVED.
2. ALL NON-TYPICAL BENCHES AND CHANNELS WILL REQUIRE A SPECIAL DETAIL ON THE PLANS.

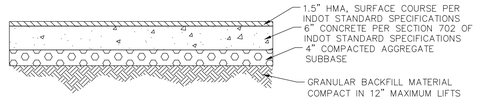
STANDARD MANHOLE - BENCHES AND CHANNELS

NOT TO SCALE



ASPHALT PAVEMENT REPLACEMENT

NOT TO SCALE



CONCRETE PAVEMENT REPLACEMENT

NOT TO SCALE

TYPICAL CLEANOUT DETAIL

NOT TO SCALE

PRINT DATE: 3/18/24
PLOT SCALE: 1:1 EDIT DATE: 2/2/23 - 10:18 AM EDITED BY: ALYDY DRAWING FILE: P:\20-400-286-2 RILEY VILLAGE SANITARY SEWERS\ACAD\PLAN SHEETS & WORKING DRAWINGS\C600 - STANDARD DETAILS.DWG

RQAW
INTENTIONAL INNOVATION

BIDDING SET

RILEY VILLAGE SANITARY SEWER

2243 E MAIN STREET
GREENFIELD, IN 46140

#	Revision	Date

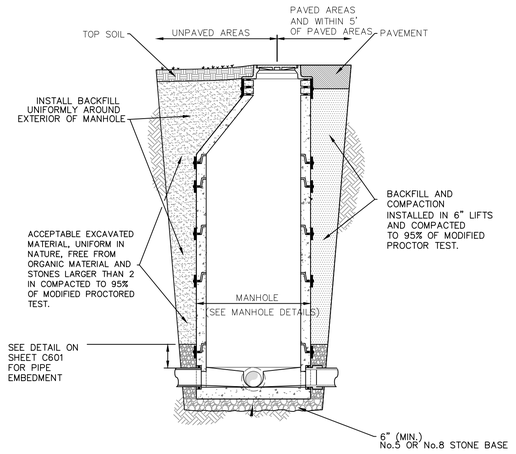
Project #: 20-400-286-2
Designed By: TAC
Drawn By: JLB
Checked By: ALC
Date: 02/02/2023

AARON L. CROW REGISTERED No. PE11800762 STATE OF INDIANA PROFESSIONAL ENGINEER

1" = 20'
0 20' 40'
GRAPHIC SCALE
N

CONSTRUCTION DETAILS

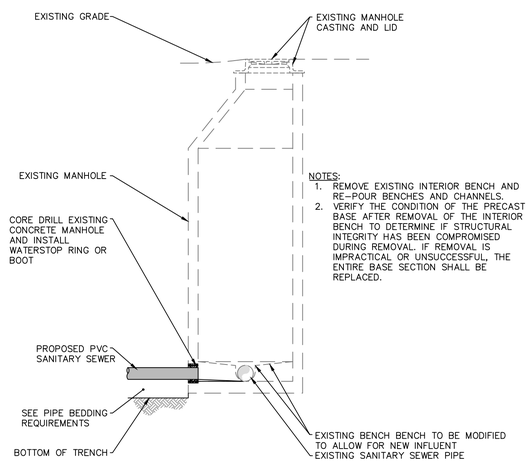
C600



NOTES:
1. PROVIDE CLEARANCE AROUND SIDEWALLS STRUCTURE FOR CONSTRUCTION OPERATIONS.
2. IF GROUNDWATER IS ENCOUNTERED, PREVENT ACCUMULATION OF WATER IN EXCAVATION.
3. WHERE POSSIBILITY EXISTS OF STRUCTURE BECOMING BUOYANT IN FLOODED EXCAVATION, ANCHOR STRUCTURE TO AVOID FLOTATION, AS APPROVED BY ENGINEER.

STANDARD MANHOLE BACKFILL

NOT TO SCALE

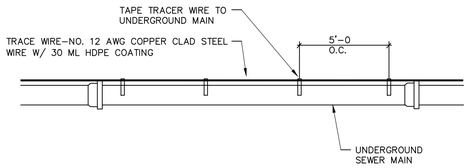


NOTES:
1. REMOVE EXISTING INTERIOR BENCH AND RE-POUR BENCHES AND CHANNELS.
2. VERIFY THE CONDITION OF THE PRECAST BASE AFTER REMOVAL OF THE INTERIOR BENCH TO DETERMINE IF STRUCTURAL INTEGRITY HAS BEEN COMPROMISED DURING REMOVAL. IF REMOVAL IS IMPRACTICAL OR UNSUCCESSFUL, THE ENTIRE BASE SECTION SHALL BE REPLACED.

NEW PIPE CONNECTION TO EXISTING MANHOLE

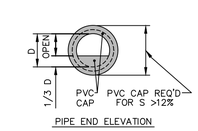
NOT TO SCALE

NOTES:
1. TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. WHERE JOINTS ARE NECESSITATED IN THE WIRE, THE JOINTS SHALL BE SECURELY BONDED TOGETHER WITH AN APPROVED, DIRECT BURY, ELECTRICAL CONNECTOR.
2. PROVIDE TEST STATIONS AT A MINIMUM OF 500'-0 ON LONG RUNS OF PIPE.
3. INSTALL TRACE WIRE WITH ALL SERVICE LATERAL TRACE WIRES PROPERLY CONNECTED TO THE MAINLINE TRACE WIRE.
4. LAY MAINLINE TRACE WIRE CONTINUOUSLY, BY-PASSING AROUND THE OUTSIDE OF MANHOLES/STRUCTURES ON THE NORTH OR EAST SIDE.
5. TRACE WIRE ON ALL SANITARY SERVICE LATERALS MUST TERMINATE AT AN APPROVED TRACE WIRE ACCESS BOX, COLOR CODED GREEN, AND LOCATED DIRECTLY ABOVE THE SERVICE LATERAL.
6. PROVIDE TEST STATIONS AT ANY GATE VALVE, FIRE HYDRANTS, WATER METERS, CORPORATION STOPS, AIR VALVES, BLOW OFF STATIONS AND ALL SANITARY SEWER CLEAN OUT LOCATIONS AS REQUIRED.
7. TEST STATIONS TO BE LIKE COPPERHEAD INDUSTRIES SNAKEPIT SYSTEM OR APPROVED EQUAL.
8. PROVIDE GROUNDING ANODE LOCATIONS FOR SIGNAL STRENGTH ASSURANCE.
9. PROVIDE CONDUCTIVITY TEST AT PROJECT CLOSE OUT WITH AUTHORITY HAVING JURISDICTION.

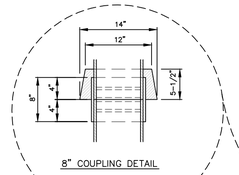


TRACER WIRE INSTALLATION DETAIL

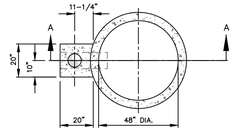
SCALE : NOT TO SCALE



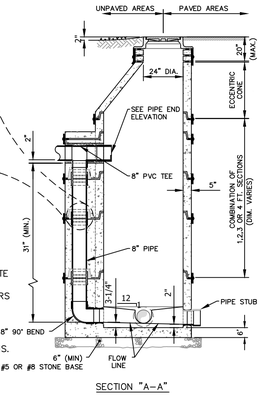
PIPE END ELEVATION



8" COUPLING DETAIL



MANHOLE BASE/RISER PLAN

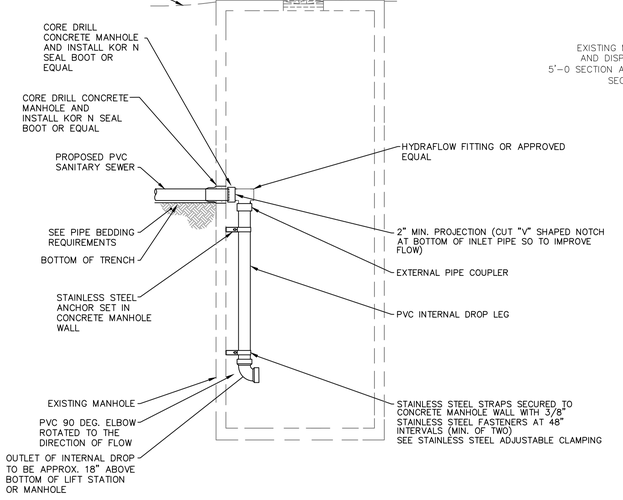


SECTION "A-A"

NOTES:
1. ALL MATERIAL, DESIGN, MANUFACTURE, PHYSICAL TEST REQUIREMENTS, FINISH MARKING, INSPECTION, REJECTION AND REPAIRS TO MEET / OR EXCEED "SPECIFICATIONS FOR PRECAST-REINFORCED CONCRETE MANHOLE SECTIONS". PER ASTM C-478 (LATEST REVISION).
2. RESILIENT CONNECTORS MEET "SPECIFICATIONS FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE MANHOLE STRUCTURES, PIPES AND LATERALS". PER ASTM C-923 (LATEST REVISION). RESILIENT CONNECTORS SHALL MEET AND/OR EXCEED ASTM C-478 GASKET REQUIREMENTS. 1" MASTIC BUTYL WILL BE ADDED BETWEEN THE JOINTS OF THE PRECAST DROP AND SHALL BE TIED INTO THE BARREL SECTION SEALANT. ALL ANGLES AND FALL SHALL BE ACCORDING TO PLANS.
3. 33" DROP MINIMUM REQUIRED. DROP IS 8" PIPE ONLY.IF DROP REQUIRES GREATER THAN 8" PIPE, A SPECIAL DETAIL WILL BE REQUIRED FOR APPROVAL.
4. REQUIRED ON ALL DROPS GREATER THAN 24".

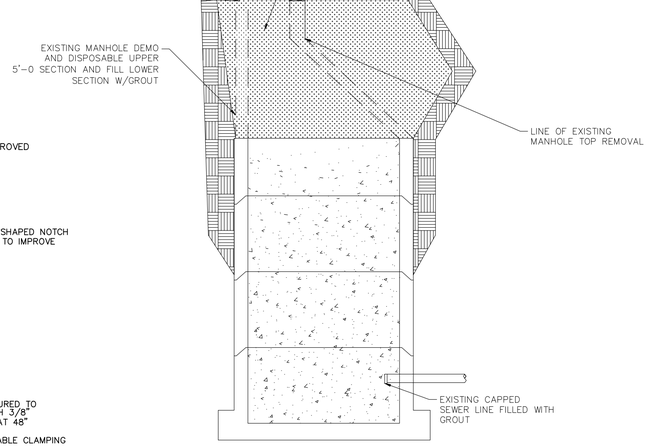
PRECAST EXTERNAL DROP MANHOLE

SCALE : NOT TO SCALE



INTERNAL DROP MANHOLE

NOT TO SCALE



EXISTING MANHOLE BACKFILL

NOT TO SCALE

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CONSTRUCTION DETAILS

C601