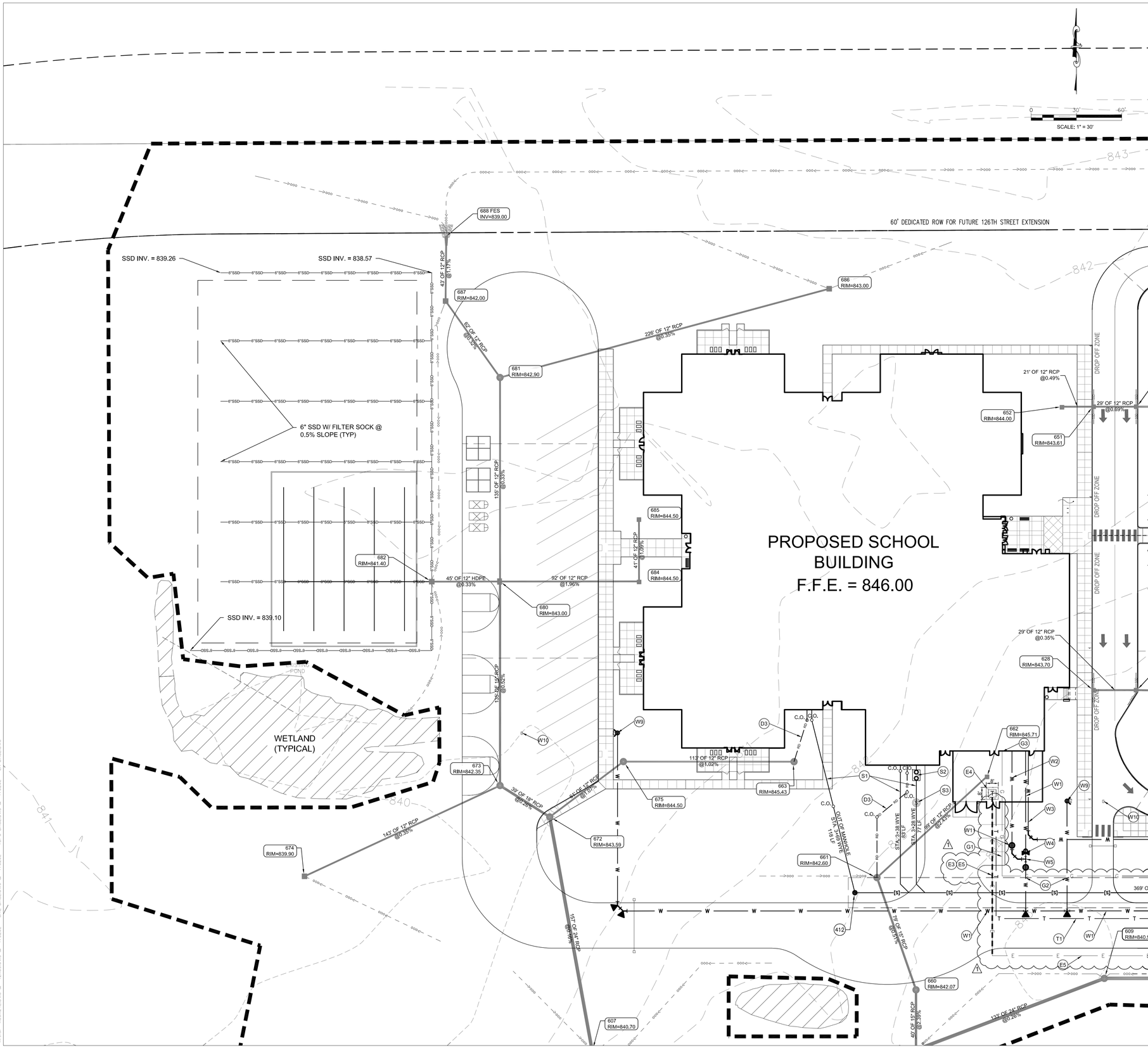

UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR CONTINUATION OF UTILITIES WITHIN 5 FEET OF STRUCTURES.
2. PRESSURE UTILITY MAINS AND SERVICE LINES MAY NEED TO BE INSTALLED AT A DEPTH GREATER THAN THAT SPECIFIED OR SHOWN ON THE DRAWINGS TO CLEAR EXISTING AND PROPOSED CROSSING UTILITIES. IN SUCH CASES, THE CONTRACTOR SHALL INSTALL VERTICAL BENDS AS REQUIRED TO ACHIEVE APPROPRIATE CLEARANCE BETWEEN THE CROSSING UTILITIES.
3. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN WATER LINES AND SEWERS SHALL BE MAINTAINED AT ALL TIMES. A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN WATER LINES AND SEWERS SHALL BE MAINTAINED AT CROSSINGS. IN THE EVENT THAT MINIMUM SEPARATION REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL UTILIZE PRESSURE-TYPE WATER PIPE FOR THE SEWER PER DETAIL SA-9.
4. WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 54 INCHES OF COVER AS MEASURED FROM THE TOP OF THE PIPE TO THE FINAL FINISH GRADE ABOVE THE PIPE.
5. THRUST BLOCKS OR JOINT RESTRAINTS SHALL BE INSTALLED ON ALL WATER LINES AT ALL BENDS, TEES AND HYDRANTS PER THE DETAILS.
6. WHERE WATER FITTINGS ARE REQUIRED, DUCTILE IRON (DI) FITTINGS SHALL BE USED. FITTING JOINTS SHALL BE OF STANDARD MJ TYPE (ANSI/AWWA C111/A21.11) OR PJ TYPE (ANSI/AWWA C111/A21.11).
7. DI FITTINGS SHALL CONFORM TO ANSI/AWWA C110/A21.10, 350 PSI AND SHALL BE CEMENT MORTAR LINED PER ANSI/AWWA C104/A21.4 AND SHALL BE OUTSIDE COATED WITH A BITUMINOUS COATING.
8. PIPE LENGTHS SHOWN ARE MEASURED FROM CENTER TO CENTER OF STRUCTURES ROUNDED TO THE NEAREST FOOT.
9. PIPE LENGTHS SHOWN FOR STORM SEWERS ARE MEASURED TO THE DOWNSTREAM END OF END SECTIONS.
10. WHERE GRADE MODIFICATIONS (CUT OR FILL) ARE SHOWN ADJACENT TO EXISTING VALVE BOX COVERS, UTILITY HANDHOLES, FIRE HYDRANTS, AND MANHOLE CASTINGS, THE VALVE BOX COVERS, CASTINGS, OR OTHER STRUCTURE SHALL BE ADJUSTED TO CONFORM WITH THE PROPOSED GRADE.
11. ADJUSTMENTS OF EXISTING MANHOLE CASTINGS TO GRADE TO A MAXIMUM OF 12 INCHES SHALL BE MADE USING PRECAST CONCRETE ADJUSTING RINGS PROVIDED THE TOTAL HEIGHT OF EXISTING AND NEW ADJUSTING RINGS DOES NOT EXCEED 12 INCHES.
12. ADJUSTMENTS OF CASTINGS WHERE THE TOTAL HEIGHT OF ADJUSTING RINGS WOULD EXCEED 12 INCHES SHALL BE MADE BY REPLACING THE CONE AND/OR BARREL SECTION OF THE STRUCTURE.
13. PAVEMENTS, WALKS, CURBS AND OTHER SURFACE IMPROVEMENTS REQUIRING REMOVAL FOR INSTALLATION OF UNDERGROUND UTILITIES SHALL BE RESTORED TO THEIR PRESENT CONDITION UNLESS OTHERWISE SHOWN.
14. ALL INLET CASTINGS LOCATED WITHIN ASPHALT PAVEMENT AREAS SHALL INCLUDE A CONCRETE PAVED COLLAR EXTENDING A MINIMUM OF 24 INCHES IN ALL DIRECTIONS FROM THE EDGE OF THE CASTING PER THE DETAILS.
15. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS, ETC. WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNER, UTILITY COMPANIES, AND GOVERNING AUTHORITIES. THE CONTRACTOR SHALL INSTALL AS NECESSARY, TEMPORARY SITE LIGHTING, GAS, SANITARY, WATER, STORM, ELECTRIC, TELEPHONE, AND CABLE SERVICES TO SERVICE BUILDING(S) TO REMAIN OPEN.
16. CONTRACTOR TO PROVIDE SLEEVES UNDER FOOTINGS OR THROUGH FOUNDATIONS FOR UTILITY CONNECTIONS.
17. CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC. AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING/CANOPY STUB OUTS. INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM.
18. CONTRACTOR TO PROVIDE AND INSTALL CONDUIT FOR SITE LIGHTING PER SITE LIGHTING PLAN (BY OTHERS).
19. ALL UTILITY CROSSINGS OF EXISTING RIGHT-OF-WAY PAVEMENT SHALL BE MADE UTILIZING TRENCHLESS CONSTRUCTION. OPEN CUTS WITHIN EXISTING PAVEMENT SHALL NOT BE ALLOWED.
20. UTILITY WORK WITHIN 5' OF EXISTING RIGHT-OF-WAY PAVEMENT REQUIRES FLOWABLE FILL.
21. A CITY OF FISHERS RIGHT-OF-WAY ACTIVITY IS REQUIRED FOR UTILITY WORK CROSSING PUBLIC RIGHT-OF-WAY.
22. STRUCTURES RECEIVING SUB-SURFACE DRAIN (SSD) SHALL HAVE BOTH PORTS CORE DRILLED. "T" OR "Y" BLIND CONNECTIONS ARE NOT ALLOWED.
23. HSE UTILITIES IS THE LOCAL SANITARY SEWER UTILITY.
24. WATER SERVICE LINE MATERIALS SHALL CONFORM TO SECTION 3.03 OF THE CITIZENS WATER STANDARDS FROM THE TAP TO THE METER.

UTILITY KEY NOTE LEGEND

D - DRAINAGE / STORM SEWER

- D1 STRUCTURE 602: OUTLET CONTROL STRUCTURE; SEE SHEET C602 FOR DETAILS
- D2 72 LF EMERGENCY OVERFLOW WEIR; SEE SHEET C601 FOR DETAILS
- D3 12" ROOF DRAIN; TIE INTO PROPOSED STORM STRUCTURE AS SHOWN
- D4 OUTLET STRUCTURE (SEE DETAIL, SHEET C602)

C.O. STORM SEWER CLEANOUT

—6"SSD—6"SSD— STORM SEWER PIPE

S - SANITARY SEWER

- S1 6" PVC SDR-26 SANITARY LATERAL @ 1.04% MIN. SLOPE.
- S2 GREASE TRAP (SEE MEP PLANS)
- S3 SAMPLING MANHOLE; INV. 834.50
- S4 CONNECT 8" PVC TO EXISTING MANHOLE WITH EXTERNAL DROP (INV. 831.20) ROTATE STEPS TO N.E. WALL; ROTATE CONE SECTION FOR STEPS

C.O. SANITARY CLEANOUT

SANITARY LATERAL

W - WATER / FIRE PROTECTION

- W1 6" FIRE PROTECTION LINE
- W2 4" DOMESTIC WATER LINE
- W3 6" WATERMAIN TO FDC
- W4 POST INDICATOR VALVE
- W5 4" X 6" TEE
- W6 16" X 6" TAPPING SLEEVE W/6" TAPPING VALVE (COORDINATE WITH CITIZENS ENERGY GROUP)
- W7 INSTALL NEW FIRE DEPARTMENT CONNECTION (5" STORZ CONNECTION MEETING FISHERS FIRE DEPARTMENT STANDARDS)
- W8 RELOCATE PUBLIC FIRE HYDRANT WORK TO BE PERFORMED BY CITIZENS ENERGY GROUP. COORDINATE WITH UTILITY.
- W9 PROPOSED FIRE HYDRANT
- W11 INDOT APPROVED SNOWPLOWABLE RAISED PAVEMENT MARKER (WITH BLUE REFLECTIVE LENS) SEE FISHERS DETAIL SHEET #10
- W1 ISOLATION VALVE

T - TELECOM

- T1 FIBER OPTIC OR TELECOM LINE (COORDINATE WITH PROJECT OWNER)

G - GAS

- G1 NEW GAS SERVICE LINE; SIZE PER MEP PLANS (COORDINATE WITH VECTREN ENERGY)
- G2 PROVIDE A MINIMUM 12" SEPARATION BETWEEN CROSSING UTILITIES
- G3 GAS METER TO BE INSTALLED BY VECTREN ENERGY

E - ELECTRIC

- E1 EXISTING POWER POLE TO REMAIN (COORDINATE WITH DUKE ENERGY)
- E2 POLE TO BE RELOCATED BY DUKE ENERGY (COORDINATE WITH DUKE ENERGY)
- E3 6" PVC SCHEDULE 40 CONDUIT
- E4 TRANSFORMER PAD PER DUKE ENERGY SPECIFICATIONS
- E5 MAIN ELECTRIC SERVICE BY DUKE ENERGY (30" - 36" DEPTH)

HAMILTON SOUTHEASTERN SCHOOL
13485 CUMBERLAND ROAD
FISHERS, IN 46038

CSO Architects
ARCHITECTURE - INTERIOR DESIGN
8831 Keystone Crossing Indianapolis, IN 46240
Main 317.848.7800 Fax 317.574.0957 csoinc.net

© 2007 CSO Architects, Inc. All Rights Reserved

A&F ENGINEERING
Transportation & Site Engineering
Crossing Over Since 1962
8365 Keystone Crossing, Suite 201
Indianapolis, IN, 46240 (317) 202-0864

CONSTRUCTION PLANS FOR
HSE NEW ELEMENTARY #13
12500 CYNTHEANNE ROAD
FISHERS, INDIANA

Scope Drawings:
These drawings indicate the general scope of the project in terms of architectural design, concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all items required for the complete performance in accordance with the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Revisions:
1. ADDENDUM #1 10/26/17

Issue Date	Drawn By	Checked By
10/13/2017	JES	KKC

Drawing Title:
UTILITY PLAN

Certified By:
KAREN K. COLLINS REGISTERED No. 10404538 STATE OF INDIANA PROFESSIONAL ENGINEER

Drawing Number:
C502

Project Number:
17026L

Z:\2017\17026L - HSE CYNTHEANNE ROAD ELEMENTARY\DWGS\C502 - UTILITY PLAN.DWG plotted by KAREN COLLINS on 10/25/2017 6:39:25 PM last saved by KCOLLINS on 10/25/2017 6:05:17 PM
Xrefs: X-B0242.DWG & 42X50.DWG & 17026L - SITE BASE.DWG & 17026L - TOPO BASE.DWG & 17026L - LA BASE.DWG