


FIGURE 1
USGS TOPOGRAPHIC LOCATION MAP
SUNBURY, PA QUADRANGLE

Construction of Fish Passage
on the Susquehanna River

Pennsylvania Department of Conservation & Natural Resources
 Pennsylvania Department of General Services

Shamokin Dam Borough, Snyder County, and
 Upper Augusta Township, Northumberland County, Pennsylvania

Legend

 Project Study Area

Feet
 2,000 1,000 0 2,000



Gannett Fleming





FIGURE 2
PROJECT LOCATION AND STUDY AREA MAP

**Construction of Fish Passage
on the Susquehanna River**

Pennsylvania Department of Conservation & Natural Resources
Pennsylvania Department of General Services

Shamokin Dam Borough, Snyder County, and
Upper Augusta Township, Northumberland County, Pennsylvania

Legend

Project Study Area

Feet
200 100 0 200



Gannett Fleming



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES

HARRISBURG, PENNSYLVANIA

TOM WOLF, GOVERNOR

CURT TOPPER, SECRETARY

CONSTRUCTION OF FISH PASSAGE ON THE
SUSQUEHANNA RIVER
SHIKELLAMY STATE PARK

SHAMOKIN DAM BOROUGH, SNYDER COUNTY, PENNSYLVANIA
UPPER AUGUSTA TOWNSHIP, NORTHUMBERLAND COUNTY, PENNSYLVANIA

PROFESSIONAL/ENGINEER
GANNETT FLEMING, INC.
207 SENATE AVE.
CAMP HILL, PA
TEL. (717) 763-7211

FISHWAY CONSULTANT
KLEINSCHMIDT ASSOCIATES
400 HISTORIC DRIVE
STRASBURG, PA

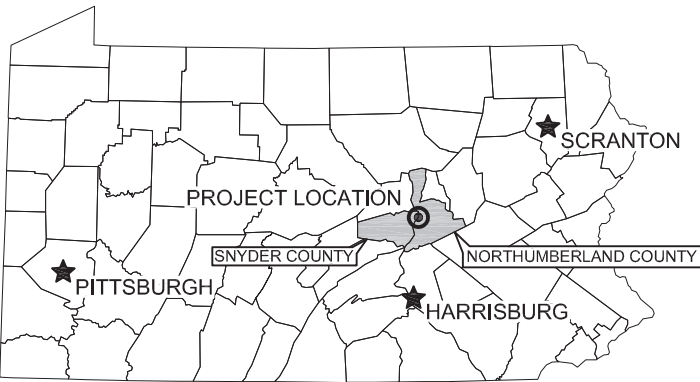
D.G.S. C-148-0001 PH 1.1 – GENERAL CONSTRUCTION

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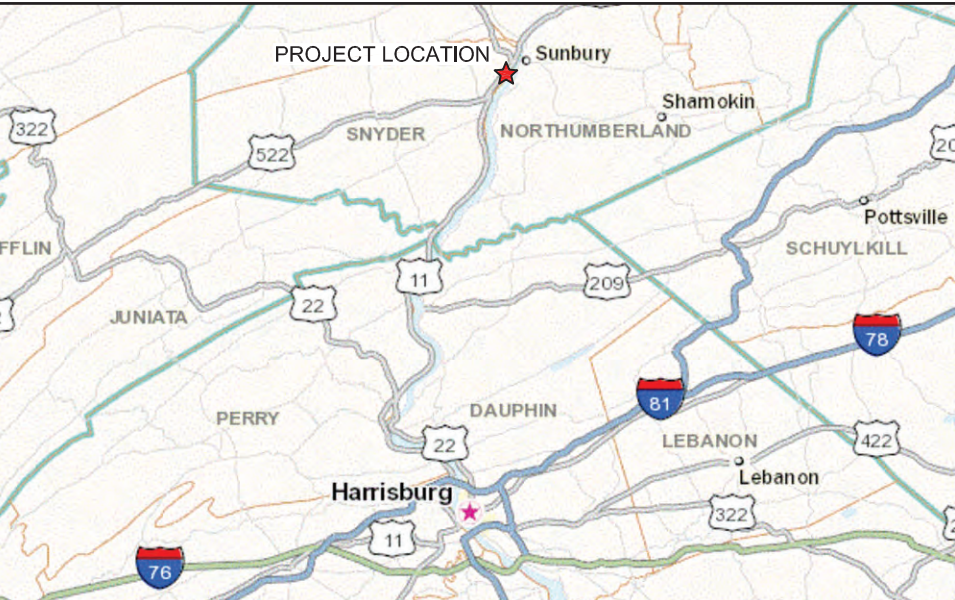
CS-1	COVER SHEET	CONSTRUCTION DOCUMENTS SUBMISSION						
GENERAL								
G-1	LOCATION MAPS, GENERAL NOTES AND UTILITIES LIST							
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C-15	TEST PIT LOGS							
C-16	TEST PIT LOGS							
C-17	TEST PIT LOGS							

APPROVALS

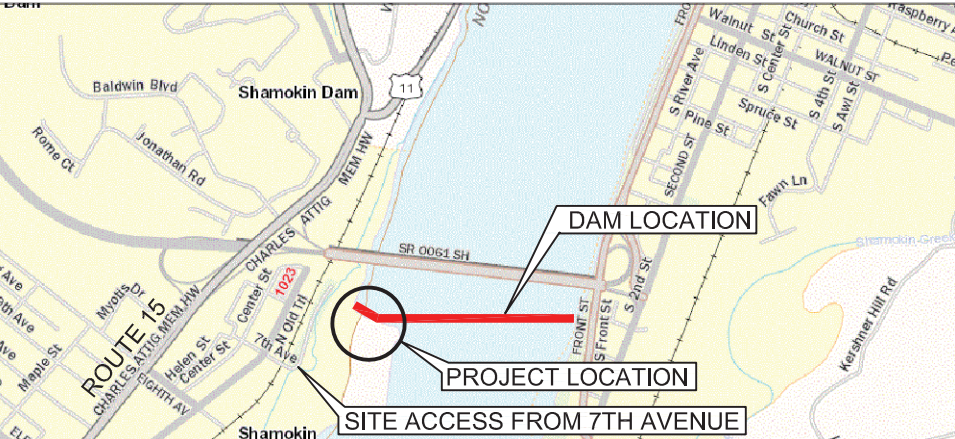
PROJECT LOCATION MAP



VICINITY MAP



CAMPUS / KEY PLAN



Eric C. Neast
PROFESSIONAL'S SIGNATURE
10-15-2021
DATE



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207 SENATE AVE.
CAMP HILL, PENNSYLVANIA



400 HISTORIC DRIVE
STRASBURG, PENNSYLVANIA

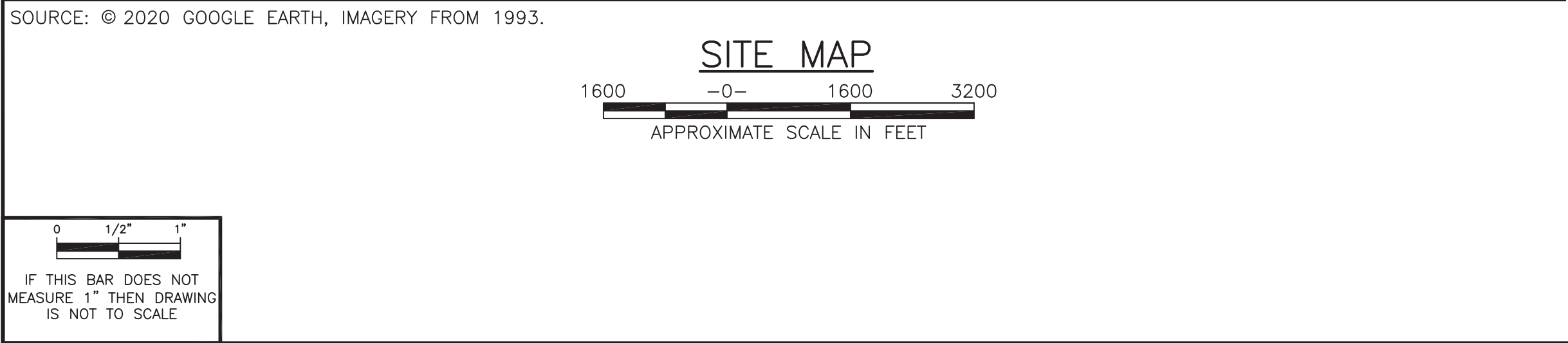
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

PROJECT NO.
D.G.S. C-0148-0001 PHASE 1

CONSTRUCTION OF FISH PASSAGE
ON THE SUSQUEHANNA RIVER
SHIKELLAMY STATE PARK
NORTHUMBERLAND AND SNYDER COUNTIES, PA

COVER SHEET

DRAWN BY J.P.H.	DATE OCTOBER 2021	DRAWING NO. CS-1
CHECKED BY P.G.S.	SCALE N/A	



PROJECT LOCATION MAP
NOT TO SCALE

GENERAL NOTES

- ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING MATERIALS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO THOROUGHLY REVIEW AND UNDERSTAND THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE USING AGENCY AND THE PROFESSIONAL OF ERRORS, OMISSIONS, AND/OR DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING MATERIALS.
- MATCH EXISTING GRADES, CURB HEIGHTS, SIDEWALKS WIDTHS, ETC. AT ALL LOCATIONS WHERE PROPOSED WORK ACTIVITIES MEET EXISTING FACILITIES.
- RAISE OR LOWER ALL EXISTING UTILITY VALVES, COVERS, GRATES, ETC. AS NEEDED TO BE FLUSH WITH THE PROPOSED FINAL GRADE, UNLESS NOTED OTHERWISE.
- ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE PROFESSIONAL DOES NOT CERTIFY THE CORRECTNESS OR COMPLETENESS OF THE EXISTING UTILITY PORTRAYAL. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND THE USING AGENCY PRIOR TO INITIATION OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR COORDINATING HIS ACTIVITIES WITH THE UTILITY COMPANIES AND THE USING AGENCY.
- THE CONTRACTOR SHALL DEVELOP A VEHICULAR AND PEDESTRIAN SAFETY PLAN THAT COVERS THE DURATION OF THE PROJECT. SAID PLAN SHALL BE SUBMITTED TO THE USING AGENCY FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION. SAID PLAN SHALL INCLUDE MEASURES SUCH AS SIGNAGE, TEMPORARY WALKWAYS, PROTECTIVE FENCING, FLAGMEN, AND/OR OTHER MEASURES AS DEEMED NECESSARY TO PROTECT THE SAFETY OF THE TRAVELING PUBLIC THROUGHOUT THE CONSTRUCTION PERIOD.
- THE PROJECT WILL INVOLVE WORK WITHIN THE SUSQUEHANNA RIVER. WATER ELEVATIONS AT THE PROJECT SITE WILL VARY DEPENDING ON RIVER FLOWS AND WEATHER CONDITIONS. THE CONTRACTOR IS MADE AWARE THAT THE RIVER STAGE WILL VARY. THE CONTRACTOR SHALL MAKE PROVISIONS FOR CONDUCTING WORK IN VARIABLE WATER CONDITIONS AND SHALL INCLUDE SUCH MEASURES IN HIS BASE BID. CONTRACTOR TO BE AWARE THAT THE DAM WILL BE INFLATED TO PROVIDE NORMAL POOL ELEVATION (428.5') FOR LAKE AUGUSTA FROM MAY THROUGH OCTOBER.
- ALL TREES LOCATED WITHIN THE WORK AREA THAT ARE TO REMAIN SHALL BE PROTECTED WITH FENCING. LOCATE PROTECTIVE FENCE AT THE DRIP LINE OF EACH TREE TO BE PROTECTED. AT NO TIME SHALL VEHICLES, EQUIPMENT, AND/OR MATERIAL BE STORED OVER EXISTING TREE ROOTS AND AT NO TIME SHALL VEHICLES OF ANY KIND BE ALLOWED TO TRAVERSE OR PARK ON EXISTING TREE ROOTS.
- THE CONTRACTOR SHALL NOTIFY THE NORTHUMBERLAND COUNTY CONSERVATION DISTRICT AND SNYDER COUNTY CONSERVATION DISTRICT AT LEAST SEVEN DAYS PRIOR TO THE START OF CONSTRUCTION AND AGAIN AT THE COMPLETION OF THE PROJECT. THE DISTRICTS SHALL MAKE A DETERMINATION IF THE SITE IS PERMANENTLY STABILIZED AND IF THE TEMPORARY EROSION CONTROL FACILITIES CAN BE REMOVED FROM SERVICE.
- UNTIL THE SITE IS PERMANENTLY STABILIZED, ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL FACILITIES AFTER EACH RAINFALL EVENT AND ON A WEEKLY BASIS, UNLESS NOTED OTHERWISE. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND ANCHORING OF SAID MULCH, SHALL BE PERFORMED IMMEDIATELY.
- PROPOSED CONTOURS REPRESENT FINISHED GRADE (I.E., TOP OF TOPSOIL, TOP OF PAVEMENT, TOP OF ROCK RIPRAP, ETC.) UNLESS NOTED OTHERWISE.
- COVER SHEET AND SHEET G-1 ARE APPLICABLE TO THE GENERAL CONSTRUCTION CONTRACTS.

- SOURCE OF MAPPING
- DATE OF GANNETT FLEMING LAND SURVEY: FEBRUARY 2009
 - DATE OF GANNETT FLEMING BATHYMETRIC SURVEY: MARCH 2009
 - GANNETT FLEMING SURVEY SUPPLEMENTED WITH LIDAR MAPPING COMPLETED IN 2008 BY PAMAP PROGRAM – DCONR.
 - VERTICAL DATUM: NGVD 29
 - HORIZONTAL DATUM: PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE)
 - ALL ELEVATIONS SHOWN ARE PER THE VERTICAL DATUM, NGVD 29 AS NOTED ABOVE. THE VERTICAL CONVERSION FROM NGVD29 TO NAVD88 IS: (-0.76 FEET)

- GENERAL NOTES:
- EDGE OF WATER SHOWN UPSTREAM OF THE INFLATABLE DAM IS THE NORMAL POOL (EL. 428.5) WITH DAM INFLATED.
 - DOWNSTREAM EDGE OF WATER SURVEYED AT 420.8± ON MARCH 26, 2009 (25,300 CFS).
 - PROPERTY LINES FROM SNYDER COUNTY GIS DATABASE. LOCATIONS ARE APPROXIMATE AND HAVE NOT BEEN VERIFIED.

PUBLIC UTILITIES AND ADDRESSES

EASTERN SNYDER COUNTY REGIONAL AUTHORITY/
SELINGSGROVE BOROUGH
P.O. BOX 330
SELINGSGROVE, PA 17870
ATTN: OFFICE PERSONNEL
EMAIL: ESCRA@VERIZON.NET

NORTHEASTERN ITS, LLC
C/O WILLIAMS COMMUNICATIONS
5524 BEE CAVE ROAD, SUITE C-1
AUSTIN, TX 78746
ATTN: NICK WILLIAMS
EMAIL: NICKW@CATUDESIGN.COM

PPL ELECTRIC UTILITIES CORPORATION
4810 LYCOMING MALL DRIVE
MONTGOMERY, PA 17754
ATTN: KATHIE FRANTZ
EMAIL: KJFRANTZ@PPLWEB.COM

SERVICE ELECTRIC CABLEVISION INC.
500 GRANT STREET
SUNBURY, PA 17801
ATTN: JOHN KURTZ

LEVEL 3 COMMUNICATIONS, LLC
1025 ELDORADO BLVD BUILDING
BROOMFIELD, CO 80021
ATTN: LEVEL 3 OPERATOR
EMAIL: NETWORKRELOCATIONS@LEVEL3.COM

UPPER AUGUSTA TOWNSHIP
2087 SNYDERTOWN ROAD
SUNBURY, PA 17801
EMAIL: UPPERAUGUSTATWP@GMAIL.COM

CITY OF SUNBURY MUNICIPAL AUTHORITY
462 SOUTH 4TH STREET
SUNBURY, PA 17801
ATTN: DANNY RAMER
EMAIL: DRAMER@PTD.NET

SHAMOKIN DAM BOROUGH
210 WEST 8TH AVENUE, SUITE 1
P.O. BOX 273
SHAMOKIN DAM, PA 17876
ATTN: EDWARD J. HOVENSTINE
EMAIL: EHOVENSTINE@SHAMOKINDAM.NET

UGI PENN NATURAL GAS
1 PEI CENTER
WILKES BARRE, PA 18711
ATTN: CAROL JOHNS
EMAIL: CJOHNS@UGIPNG.COM

VERIZON PENNSYLVANIA, INC.
901 NATNALL STREET 2ND FLOOR
WILMINGTON, DE 19801
ATTN: OFFICE PERSONNEL

VERIZON NORTH
2201 EAST 30TH STREET
ERIE, PA 16510
ATTN: MICHAEL A. GEARY
EMAIL: MICHAEL.GEARY@VERIZON.COM

CONTACT INFORMATION

SHIKELLAMY STATE PARK: 570-988-5557
GANNETT FLEMING, INC.: 717-763-7211
KLEINSCHMIDT ASSOCIATES: 717-687-7211
DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF DAM SAFETY: 717-772-5957
NORTHUMBERLAND COUNTY CONSERVATION DISTRICT: 570-286-7114
SNYDER COUNTY CONSERVATION DISTRICT: 570-837-3000
PENNSYLVANIA ONE CALL SYSTEM FOR UNDERGROUND UTILITIES: 800-242-1776

LIST OF ABBREVIATIONS

AC	ACRE	MAC	MACADAM
ATTN	ATTENTION	MAX	MAXIMUM
AVG	AVERAGE	MIL	MILLIMETER
BOT	BOTTOM	MDPE	MEDIUM DENSITY POLYETHYLENE
BMP	BEST MANAGEMENT PRACTICE	MIN	MINIMUM
C.C.	CENTER-TO-CENTER	MISC	MISCELLANEOUS
CIP	CAST-IN-PLACE	NO	NUMBER
C/L	CENTERLINE	OC	ON CENTER
CLR	CLEARANCE	OD	OUTSIDE DIAMETER
CONC	CONCRETE	OZ	OUNCE
CO	COUNTY	PA	PENNSYLVANIA
CY	CUBIC YARD	PL	PLATE
DIA	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIP	DUCTILE IRON PIPE	PSI	POUNDS PER SQUARE INCH
EA	EACH	PVC	POLYVINYL CHLORIDE
E.F.	EACH FACE	R	RADIUS
EL	ELEVATION	REINF	REINFORCING
EXP JT	EXPANSION JOINT	RF	REAR FACE
E.W.	EACH WAY	RT	ROUTE
FT	FEET	SCH	SCHEDULE
GAL	GALLON	STA	STATION
GCL	GEOSYNTHETIC CLAY LINER	S.S.	STAINLESS STEEL
GPM	GALLON PER MINUTE	SQ	SQUARE
HORZ	HORIZONTAL	SQ FT	SQUARE FEET
HP	HIGH POINT	TYP	TYPICAL
ID	INSIDE DIAMETER	VCP	VITRIFIED CLAY PIPE
IN	INCH	VERT	VERTICAL
INV	INVERT		
L	LENGTH		
LBS	POUNDS		
LG	LONG		

PENNSYLVANIA ONE CALL SYSTEM

CALL BEFORE YOU DIG
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 90 WORKING DAYS IN DESIGN STAGE STOP CALL

POCS SERIAL NUMBER: NORTHUMBERLAND COUNTY: 20203181384
SNYDER COUNTY: 20203181385
POCS CALL DATE: NOVEMBER 13, 2020

PA ONE CALL NOTE:
GANNETT FLEMING, INC. (GANNETT FLEMING) ADVISES THAT IT HAS COMPLIED WITH THE PROVISIONS OF THE PENNSYLVANIA UNDERGROUND UTILITY LINE PROTECTION LAW, ACT 287 OF 1974 AS AMENDED, IN PREPARING THESE PLANS. ALTHOUGH GANNETT FLEMING MADE THE TELEPHONE CALL(S) LISTED ON THESE PLANS ON THE DATE(S) SHOWN, THE INFORMATION SHOWN MAY BE PRELIMINARY AS OF THE DATE OF BIDDING. THE DATA PERTAINING TO UTILITIES SHOWN ON THE PLANS IS FOR GENERAL INFORMATION AND GUIDANCE ONLY AND GANNETT FLEMING MAKES NO REPRESENTATIONS, WARRANTY, GUARANTY OR ASSURANCES THAT THE INFORMATION RECEIVED PURSUANT TO SAID CALL(S) AND REFLECTED ON THE PLANS IS COMPLETE, CORRECT OR ACCURATE; BUT IS REFLECTING SAID INFORMATION IN ACCORDANCE WITH THE REQUIREMENTS OF SUCH ACT AS OF THE DATE OF SAID CALL(S). THE AREAS IN WHICH NEW UNDERGROUND FACILITIES AND APPURTENANCES ARE TO BE CONSTRUCTED UNDER THIS CONTRACT MAY CONTAIN EXISTING UNDERGROUND UTILITIES AND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS OR ARE IN LOCATIONS OTHER THAN AS SHOWN. CONTRACTORS ARE ADVISED OF THEIR OBLIGATIONS TO NOTIFY ALL FACILITY OWNERS, NOT LESS THAN 3 OR MORE THAN 10 DAYS PRIOR TO EXCAVATION, VIA ONE CALL(S) IN ACCORDANCE WITH THE REQUIREMENTS OF THE ACT [1-800-242-1776 OR 412-464-7100 (PITTSBURGH)], AND TO PRECISELY IDENTIFY THE LOCATION OF, AVOID DAMAGE TO AND REPAIR DAMAGED UNDERGROUND UTILITIES.



NO.	DATE	REVISION	APPR.
AS-BUILT REVISIONS			
Eric C. Neast		10-15-2021	
PROFESSIONAL'S SIGNATURE DATE			
207 SENATE AVE. CAMP HILL, PENNSYLVANIA			
400 HISTORIC DRIVE STRASBURG, PENNSYLVANIA			
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES HARRISBURG, PENNSYLVANIA			
PROJECT NO. D.G.S. C-0148-0001 PHASE 1			
CONSTRUCTION OF FISH PASSAGE ON THE SUSQUEHANNA RIVER SHIKELLAMY STATE PARK NORTHUMBERLAND AND SNYDER COUNTIES, PA			
LOCATION MAPS, GENERAL NOTES AND UTILITIES LIST			
DRAWN BY J.P.H.	DATE OCTOBER 2021	DRAWING NO. G-1	
CHECKED BY P.G.S.	SCALE AS SHOWN		

