

Bucks County

Bridge Abutment Design

Scale:	As Indicated
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AERIAL LOCATION MAP

DESCRIPTION	F.E. +C	WALL SCONCE	ELECT/COMM OUTLETS	CCTV CAMERA OUTLETS	LIGHT SWITCH	THERMOSTAT/HUMIDISTAT	CARD READER	FIRE ALARM	ALARM ANNUNCIATOR PANEL	INTERCOM	
NOTES:	PORTABLE FIRE EXTINGUISHER - U.L. LABELED MIN. 4A-BBC 10LB RATED - WALL MTD. W/ HANDLE @ 48" A.F.F. - F.E. +C = W/ RECESSED WALL CABINET	FIXTURES CAN NOT PROJECT INTO CORRIDOR MORE THAN 4"	MOUNT HEIGHTS SHOWN FOR ABOVE FLOOR AND ABOVE COUNTER UNO. REFER TO ELEVATIONS FOR LOCATIONS. - CENTERLINE AT 18" A.F.F.		AT DOOR LOCATION - 48" MAX. TOP OF DEVICE	WALL MOUNTED AT DOOR LOCATION	REFER ELECTRICAL AND COMMUNICATION DRAWINGS.	MIN. MOUNTING HEIGHT MAX. DIM. TO TOP OF FIXTURE 6'-0".			



GENERAL PROJECT INFORMATION

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. THE REACTION LOADS USED TO DESIGN THE BRIDGE FOUNDATIONS INCLUDED IN THE FOLLOWING DRAWINGS WERE CALCULATED BY THE BRIDGE REHABILITATION ENGINEER AND PROVIDED TO JHA COMPANIES.
2. ALL DETAILS MARKED "TYPICAL" IN THE SET OF STRUCTURAL DRAWINGS SHALL BE APPLIED THROUGHOUT THE PROJECT AS REQUIRED TO SATISFY THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL COORDINATE REQUIREMENTS FOR QUANTITY AND LOCATION WHERE THE "TYPICAL" DETAILS APPLY.
3. FAILURE ON THE PART OF THE CONTRACTOR TO REVIEW THE STRUCTURAL DRAWINGS TOGETHER WITH THE FULL EXTENT OF THE PROJECT SPECIFICATIONS DOES NOT RELIEVE THEM OF THE RESPONSIBILITY TO FURNISH AND INSTALL ITEMS THAT ARE PART OF THEIR WORK. NEITHER THE CONTRACTOR NOR THE STRUCTURAL, TRUSS CONTRACTORS AND SUBCONTRACTORS ARE PROHIBITED FROM EXCLUDING STRUCTURAL WORK FROM THEIR CONTRACT NOT SHOWN IN THE STRUCTURAL DRAWINGS.
4. THE STRUCTURAL DRAWINGS FOR THIS PROJECT ARE NOT ISSUED FOR BID OR CONSTRUCTION UNLESS THE INDIVIDUAL SHEETS ARE IDENTIFIED AS 'ISSUED FOR BID' OR 'ISSUED FOR CONSTRUCTION'.

EXISTING CONDITIONS

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. DIMENSIONS AND ELEVATIONS OF EXISTING CONDITIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED ON LIMITED AVAILABLE INFORMATION CONTAINED IN EITHER VARIOUS ORIGINAL DESIGN AND CONSTRUCTION DOCUMENTS OR FIELD SURVEY. ACTUAL FIELD CONDITIONS NEED TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE START OF WORK.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS BY ACTUAL MEASUREMENT PRIOR TO BEGINNING WORK. ANY AND ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. DURING CONSTRUCTION THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE AT VARIANCE WITH THE PROJECT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL INTERFERING AND DEVIATING CONDITIONS.

SITE PREPARATION GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. THE SURFACE OF THE EXPOSED SUB-GRADE SHALL BE INSPECTED BY PROBING OR TESTING TO CHECK FOR POCKETS OF SOFT OR UNSUITABLE MATERIAL. EXCAVATE UNSUITABLE SOIL, AND REPLACE WITH LOAD BEARING FILL OR LEAN CONCRETE (2,000 PSI).
2. FILL ALL EXCAVATED AREAS WITH APPROVED CONTROLLED FILL. PLACE IN 8 INCH (8") MAXIMUM LOOSE LIFTS AND COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.
3. ALL CONTROLLED FILL MATERIAL SHALL BE A SELECT GRANULAR MATERIAL, FREE FROM ALL ORGANICS OR OTHERWISE DELETERIOUS MATERIAL WITH NO MORE THAN 20% BY WEIGHT PASSING A NO. 200 SIEVE (CLASSIFIED AS SC, SM, SP OR BETTER IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM) AND WITH A PLASTICITY INDEX NOT EXCEEDING 6%.
4. EXCAVATIONS SHALL BE KEPT DRY BY PUMPING UNTIL UNDERGROUND CONSTRUCTION IS COMPLETE.
5. LOOSENED BEARING SOILS SHALL BE RE-COMPACTED WITH A SMALL VIBRATORY PLATE COMPACTOR PRIOR TO PLACEMENT OF REINFORCING BARS.
6. ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT. ALL SOFTENED OR OTHERWISE UNSUITABLE BEARING MATERIALS SHALL BE REMOVED AND REPLACED WITH LOAD-BEARING FILL OR LEAN CONCRETE (2,000 PSI).
7. THE CONTRACTOR SHALL LAYOUT THE ENTIRE BRIDGE FOUNDATION AND FIELD VERIFY ALL DIMENSIONS PRIOR TO EXCAVATION.

CAST-IN-PLACE CONCRETE GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN THE FOLLOWING NOTES SHALL APPLY)

- CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE AC 318-19/22).
2. UNLESS OTHERWISE INDICATED, ALL CAST-IN-PLACE CONCRETE SHALL DEVELOP A STRENGTH OF 4,000 PSI AT 28 DAYS.
3. CONCRETE MIXTURES SHALL MEET THE FOLLOWING CRITERIA:
- A. MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO 0.50.
- B. SLUMP LIMIT:
- C. FOOTINGS, FOUNDATIONS & GRADE BEAMS: 4" TO 8" FOR CONCRETE WITH VERIFIED SLUMP OF 2" TO 4" BEFORE ADDING HIGH-RANGE WATER-REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE, PLUS OR MINUS 1".
- D. SLABS ON-GRADE: 4" PLUS OR MINUS 1".
- E. SUSPENDED SLABS, BEAMS, COLUMNS AND WALLS: 4" TO 10" FOR CONCRETE WITH VERIFIED SLUMP OF 2" TO 4" BEFORE ADDING HIGH-RANGE WATER-REDUCING ADMIXTURE OR PLASTICIZING ADMIXTURE, PLUS OR MINUS 1".
- F. AIR CONTENT:
- G. FOOTINGS, FOUNDATIONS & GRADE BEAMS: 6%, PLUS OR MINUS 1.5% AT POINT OF DELIVERY.
- H. SLABS ON-GRADE: DO NOT ALLOW AIR CONTENT OF TROWEL-FINISHED FLOORS TO EXCEED 3%.
- I. BEAMS, COLUMNS, AND WALLS: 6%, PLUS OR MINUS 1.5% AT POINT OF DELIVERY.
- J. SUSPENDED SLABS: DO NOT ALLOW AIR CONTENT OF TROWEL-FINISHED FLOORS TO EXCEED 3%.
- K. REINFORCEMENT SHALL BE DEFORMED BARS ASTM DESIGNATION A-615, GRADE 60.
4. CONCRETE COVER PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 318-14 SPECIFICATION OR AS FOLLOWS, MORE STRINGENT APPLIES:
- A. CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED - 3"
- B. CONCRETE EXPOSED TO EARTH OR WEATHER #6 OR LARGER ----- 2"
- C. #5 OR SMALLER ----- 1 1/2"
- D. CONCRETE NOT EXPOSED TO EARTH OR WEATHER ----- 1"
- E. SLABS, WALLS, AND JOISTS ----- 3/4"
- F. BEAMS AND COLUMNS ----- 1 1/2"
5. TEMPERATURE REINFORCING SHALL BE SUFFICIENTLY EMBEDDED TO DEVELOP FULL STRENGTH IN CONCRETE WALLS AND SLABS.
6. ALL REINFORCING SHALL BE LAPPED WITH AN ACI 318-14 CLASS B SPICE, AND BE EMBEDDED A MINIMUM OF 32 BAR DIAMETERS, UNLESS OTHERWISE NOTED.
7. PROVIDE ADEQUATE TIES FOR REINFORCEMENT IN SLABS, BEAMS, PIERS, AND WALLS. REINFORCEMENT TO BE HELD AT CORRECT DISTANCE FROM FORMS AND EARTH BY STEEL CHAIRS OR TIES.
8. FOLLOW C.R.S.I. RULES FOR PLACING OF REINFORCING STEEL AND ACCESSORIES.
9. INTERIOR CONCRETE TO RECEIVE A STEEL TROWEL FINISH. EXTERIOR CONCRETE TO RECEIVE A BROOM FINISH.
10. NO CONCRETE SHALL BE CAST UNTIL THE PRELIMINARY TESTS REQUIRED HAVE BEEN MADE, REPEATS THEREOF FILED WITH THE E.O.R. AND APPROVED THE CONTROLLED CONCRETE TO BE USED SHALL CONFORM TO THE APPROVED DESIGN MIX OBTAINED AS A RESULT OF THE PRELIMINARY TESTS. THE USE OF ANY ADDITIVES NOT PRESENT IN THE PRELIMINARY TEST MIX IS PROHIBITED.
11. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS THAT COMPLIES WITH ASTM C-94/C-94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.
12. REPRESENTATIVE TEST CYLINDERS WILL BE TAKEN FROM THE CONCRETE PLACED EACH DAY IN ACCORDANCE WITH CONCRETE SPECIFICATIONS, TESTING, AND INSPECTION.
13. TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT AGENCY, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, QUALIFIED ACCORDING TO ASTM C-1077 AND ASTM E-239 FOR TESTING INDICATED, AS DOCUMENTED ACCORDING TO ASTM E-548.
14. WELDED WIRE FABRIC SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 70,000 PSI AND SHALL CONFORM TO ASTM A-185 AND A-497.
15. WELDED WIRE MESH/WELDED WIRE FABRIC (WFW) SHALL BE SPLICED SO THAT TWO OVERLAPS BETWEEN THE OUTERMOST CROSS WIRES OF EACH SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS TWO TIMES (2"), UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
16. THIS CONTRACTOR SHALL COOPERATE WITH OTHER TRADES AND, WHERE REQUIRED, INSTALL ALL BUILT-IN WORK, SLEEVES, INSERTS, ETC., AS REQUIRED FOR A COMPLETE JOB.
17. STRUCTURAL MEMBERS SHALL BE POURED FOR THEIR FULL DEPTHS IN ONE OPERATION. CONSTRUCTION JOINTS SUCH AS A DAYS POUR JOINTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS, OR IN THE MIDDLE THIRD OF THE SPAN, MAIN REINFORCING TO RUN THROUGH THE JOINT, KEY, AND ROUGHEN JOINTS TO EXPOSE AGGREGATE FOR CHEMICAL BOND.
18. NO HORIZONTAL JOINTS SHALL BE PLACED IN WALLS EXCEPT AS SHOWN ON THE DRAWINGS, WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
19. STRUCTURAL SLABS-ON-GRADE SHALL BE OF A THICKNESS AND REINFORCED AS INDICATED ON DRAWINGS.
20. SLABS ON GRADE SHALL HAVE THICKENINGS, DEPRESSIONS, OPENINGS, TRENCH DRAINS, FLOOR DRAINS, ETC., AS REQUIRED OR AS SHOWN HEREIN OR ON ENGINEERING AND PLUMBING DRAWINGS.
21. LOCATION OF CUTOFF POINTS FOR CONCRETE BEAM REINFORCEMENT SHALL BE AS SHOWN ON TYPICAL DETAILS.
22. PROVIDE 100% CONTINUITY OVER SUPPORTS FOR CONTINUOUS SLABS AND BEAMS.
23. PROVIDE TWO (2) #5 BARS AT RE-ENTRANT CORNERS AND AROUND OPENINGS IN ANY CONCRETE WALL, BEAM, SLAB, GRADE BEAM, FOOTING OR MASONRY BEARING WALL.
24. PROVIDE CLOSURES IN WALLS FOR COLUMNS, BEAMS, AND SLABS.
25. IN ANY APPROVED CONSTRUCTION JOINT, PROVIDE KEYS AS FOLLOWS:
- A. WALLS OR SLABS 6" OR LESS IN THICKNESS ----- 3/4" DEEP BY 1 1/2" HIGH
- B. WALLS OR SLABS 8" TO 12" THICK ----- 3/4" DEEP BY 2" HIGH
- C. STRIP FOOTINGS ----- 1 1/2" DEEP BY 3 1/2" HIGH
26. TOP AND BOTTOM OF KEYS SHALL BE TAPERED TO DEGREES. CONSTRUCTION JOINTS FOR POURED CONCRETE SHALL BE SPACED AT NO GREATER THAN 15' CENTER TO CENTER. REINFORCING IN STRIP FOOTINGS SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS.
27. ALL CONCRETE SLABS SHALL BE SAW CUT AS SOON AS THE CONCRETE WILL SUPPORT THE SAWING EQUIPMENT AND DOES NOT RAVEL DURING THE SAWING OPERATION. ALL SAW CUTTING SHALL BE DONE THE SAME DAY THE CONCRETE IS PLACED. SAW CUTS SHALL BE 1/8" WIDE WITH DEPTHS OF AT LEAST 25% OF THE SLAB THICKNESS. JOINTING PATTERN SHALL BE AS SHOWN ON DRAWINGS OR IN A SQUARE PATTERN WITH MAXIMUM SPACING(S) OF 15' FOR 6" SLABS OR 10' FOR 4" SLABS.
28. ALL CONCRETE PLAT WORK SHALL BE COVERED IMMEDIATELY FOLLOWING SAW CUTTING AND MAINTAINED CONTINUOUSLY WET FOR A MINIMUM OF SEVEN DAYS AFTER PLACING. CURING SHEETS SHALL BE USED AND ARE TO REMAIN IN PLACE DURING THIS PERIOD. CURING COMPOUND MAY BE USED ON VERTICAL SURFACES ONLY, AND MUST BE APPLIED PER MANUFACTURERS RECOMMENDATIONS.
29. THE USE OF FLY ASH IS PERMITTED WHEN USED IN ACCORDANCE WITH ACI DOCUMENT 232 2R-96, "USE OF FLY ASH IN CONCRETE," LIMITED TO 15% MAX CONTENT THE PERMISSIBLE TYPE OF FLY ASH, STRICTLY LIMITED TO TYPE C AND TYPE F.
30. ALL JOINTS AND CRACKS SHALL BE CONSTRUCTED WEATHER TIGHT BY CAULKING AND SEALING. USE DOW CORNING 790 SILICONE BUILDING SEALANT OR GENERAL ELASTIC "GE ELEMATH" SEALANT. COLORS SHALL MATCH THE COLOR OF THE ADJACENT MATERIALS.
31. CONCRETE SHALL BE COMPOSED OF TYPE I PORTLAND CEMENT CONFORMING TO ASTM C-150, FINE AND COARSE AGGREGATES CONFORMING TO ASTM C-33, AND MIXING WATER FREE OF OIL, ACID, OR NUJIOUS AMOUNTS OF ALKALIS AND OTHER SALTS. POLAR SET NON-CORROSIVE, NON-CHLORIDE, SET ACCELERATING ADMIXTURE, CONFORMING TO ASTM C-494 TYPE A, BUT ITS USE SHALL NOT RELAX THE MAXIMUM ALLOWABLE SLUMP NOTED HEREIN. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C-260.
32. COMPRESSIVE STRENGTH TESTS SHALL CONFORM TO ASTM C-39/C-39M. THE TESTING LABORATORY SHALL MAKE (4) 6-INCH (6") DIAMETERS BY 12-INCH (12") HIGH TEST CYLINDERS FROM EACH 400 CU YD OR FRACTION THEREOF OF CONCRETE AND FOR EACH TYPE OR CLASS OF CONCRETE AS IT IS CAST IN ANY ONE DAY. THE TESTING LABORATORY SHALL BE RESPONSIBLE FOR THE MAKING AND CURING OF TEST CYLINDERS IN STRICT ACCORDANCE WITH ASTM C-31.
33. OF THE FURNITURE FOUR (4) CYLINDERS MADE FROM EACH 400 CU YD OF CONCRETE, ONE WILL BE TESTED AT AN AGE OF SEVEN (7) DAYS, TWO AT AN AGE OF TWENTY-THREE (23) DAYS, AND ONE RETAINED AS A SPARE. EACH TEST REPORT SHALL BE SUBMITTED TO THE OWNER BY THE TESTING LABORATORY IN TRIPLICATE AND WILL INCLUDE THE FOLLOWING INFORMATION:
- A. DATE SAMPLE WAS MADE.
- B. LOCATION OF CONCRETE PLACEMENT FROM WHICH TEST SAMPLE WAS MADE.
- C. DATE OF SAMPLE TESTING.
- D. SLUMP AND AIR CONTENT OF SAMPLE AS PLACED.
- E. MIX PROPORTIONS.
- F. ADMIXTURE CONTENT.
- G. DENSITY OF CONCRETE.
- H. DESCRIPTION OF BREAK.
- I. CONCRETE STRENGTH SPECIFIED.

CAST-IN-PLACE CONCRETE GENERAL NOTES (CON'T.)

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

- ALL WORK DIRECTLY RELATED TO, AND ASSOCIATED WITH, THE PLACEMENT OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301-20 "SPECIFICATION FOR STRUCTURAL CONCRETE".
37. ALL CONCRETE SHALL BE FREE OF THE FORMATION OF LATTICE, COLD JOINTS, VOIDS, AND SURFACE DEFECTS. CONCRETE FINISHES SHALL BE AS DEFINED BY ACI 301-99 "SPECIFICATION FOR STRUCTURAL CONCRETE", AND SHALL BE APPROVED AS FOLLOWS:
- a. VERTICAL, EXPOSED FORMED SURFACES: SMOOTH FORM FINISH
 - b. HORIZONTAL SURFACES:
 - ALL SERVICE/PARTS AREA FLOORS: STEEL TROWEL FINISH
 - OFFICE AREA FLOOR: STEEL TROWEL FINISH
 - RAMPS (INTERIOR & EXTERIOR): BROOM FINISH
 - EXTERIOR SLABS: BROOM FINISH
38. THE USE OF A WATER-REDUCING PLASTICIZING ADMIXTURE TO INCREASE THE WORKABILITY OF THE CONCRETE IS PERMITTED. USE PLASTIC ADMIXTURE TO MEET THE FOLLOWING REQUIREMENTS, OR APPROVED EQUIV. S&M ADMIXTURE WILL BE ADDED DURING THE BATCHING PROCESS IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DIRECTIONS FOR USE.
39. IN ANY APPROVED CONSTRUCTION JOINT, PROVIDE A 2" x 4" KEY AND CLASS B LAP SPLICE (16" MINIMUM) OF REINFORCING, EXCEPT FOR SLABS ON GRADE.
40. COLD-WEATHER PLACEMENT: COMPLY WITH ACI 306-R16 AND AS FOLLOWS - PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES.
41. HOT-WEATHER PLACEMENT: COMPLY WITH ACI 301 AND AS FOLLOWS. MAINTAIN CURE TEMPERATURE BELOW 90 DEGS Fahrenheit AT TIME OF PLACEMENT. CHILLED MIXING WATER OR CHILLED ICE MAY BE USED TO CONTROL TEMPERATURE. PROVIDED WATER EQUIVALENT OF ICE IS CALCULATED TO TOTAL AMOUNT OF MIXING WATER. USING LIQUID NITROGEN TO COOL CONCRETE IS CONTRACTORS OPTION AT CONTRACTOR'S RISK.
42. WHEN AIR TEMPERATURE IS BETWEEN 85 DEGREES AND 90 DEGREES Fahrenheit, REDUCE MIXING AND DELIVERY TIME FROM 90 MINUTES TO 75 MINUTES. WHEN AIR TEMPERATURE IS ABOVE 90 DEGREES Fahrenheit, REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
43. FINISHING FORMED SURFACES:
- A. FOR A SMOOTH-FORM FINISH: USE AS-CAST CONCRETE TEXTURE IMPARTED BY FORM-FACING MATERIAL, ARRANGED IN AN ORDERLY AND SYMMETRICAL MANNER WITH A MINIMUM OF SEAMS. REPAIR AND PATCH THE HOLES AND DEFECTS, REMOVE FINS AND OTHER PROJECTIONS THAT EXCEED SPECIFIED LIMITS ON FORMING SURFACE IRREGULARITIES.
44. CURE CONCRETE ACCORDING TO ACI 308-1 BY THE FOLLOWING METHOD:
- A. FOR A CURING COMPOUND, APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. RE- coat AREAS SUBJECTED TO RAINFALL WITHIN THREE HOURS AFTER INITIAL APPLICATION. MAINTAIN CONTINUITY OF COATING AND REPAIR DAMAGE DURING CURE PERIOD. AFTER CURING PERIOD HAS ELAPSED, REMOVE CURING COMPOUND WITHOUT DAMAGING CONCRETE SURFACES BY METHOD RECOMMENDED BY CURING COMPOUND MANUFACTURER UNLESS MANUFACTURER CERTIFIES CURING COMPOUND WILL NOT INTERFERE WITH BONDING OF FUTURE REINFORCING.

FOUNDATION DESIGN AND CONSTRUCTION CRITERIA

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. THE FOUNDATION FOR THIS STRUCTURE HAS BEEN DESIGNED FOR A 3,000 PSF ASSUMED ALLOWABLE SOIL BEARING PRESSURE AT A BEARING DEPTH OF APPROXIMATELY 42" BELOW EXTERIOR GRADE ELEVATION, WITH APPROPRIATE GROUND INSULATION.
2. MINIMUM DEPTH BELOW GRADE REQUIRED FOR FROST PROTECTION TO BOTTOM OF FOUNDATION = (-3'-5") APPLIES TO ALL FOOTINGS.
3. BACKFILL SHALL BE BROUGHT UP EQUALLY ON BOTH SIDES OF FOUNDATION WALLS UNTIL THE FINAL ELEVATION IS ACHIEVED.

POST-INSTALLED ANCHOR GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. ALL POST-INSTALLED ANCHORS SHALL BE FROM THE FOLLOWING APPROVED MANUFACTURERS: HILTI, THE MANUFACTURER, DIAMETER, TYPE, SPACING, ETC. SPECIFIED IN THE SECTIONS AND DETAILS OF THIS PROJECT CONTROL.
2. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY JHA COMPANIES PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE REQUESTED PRODUCT. SUBSTITUTION SHALL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CAPABILITY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR INSTALLATION WILL ALSO CONSIDER CREEP. IN SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.
3. INSTALL ANCHORS PER THE MANUFACTURER'S INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
4. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS. DO NOT STRAY FROM STATED DIMENSIONS ON SECTIONS AND DETAILS.
5. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS OTHERWISE NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS (ANCHOR HILTI PR 1000 X 130mm, GFR ANCHOR, X-BAY, CHIPPING, OR OTHER MEANS MAY ALSO BE USED). DESTRUCTIVE INVESTIGATIVE METHODS MUST BE APPROVED BY THE ENGINEER OF RECORD. REINFORCING BARS SHALL NOT BE CUT WITHOUT THE APPROVAL OF JHA COMPANIES.
6. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS (ACI 318-11 D.2.2.2/ACI318-11 4.7.1.2).

<u>FIELD CONDITION</u>	<u>ANCHOR SYSTEM (OR EQUIVALENT)</u>
ADHESIVE FOR ANCHORING THREADED ROD BARS INTO EXISTING CONCRETE	HDBG THREADED ROD (GR. 55 MIN) WITH HAMMER DRILL BIT, HILTI HIT RE 500 V3 SAFESSET SYSTEM (ESR-2322) WITH REBAR AND HOLLOW DRILL BIT (ESR-2322) SYSTEM



PA - NY - OH - WV
3939 Birney Ave
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[illegible]

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S61



Project Notes

Project Notes

South Perkasi Covered Bridge

10466 Sunnyside Rd SE Box 70
Jefferson, OR 97352
Attn: Client Contact: Kim W. King

Project Location:
149 W Walnut St,
Perkasie, PA 18944

Bridge Abutment Design

Sheet Title

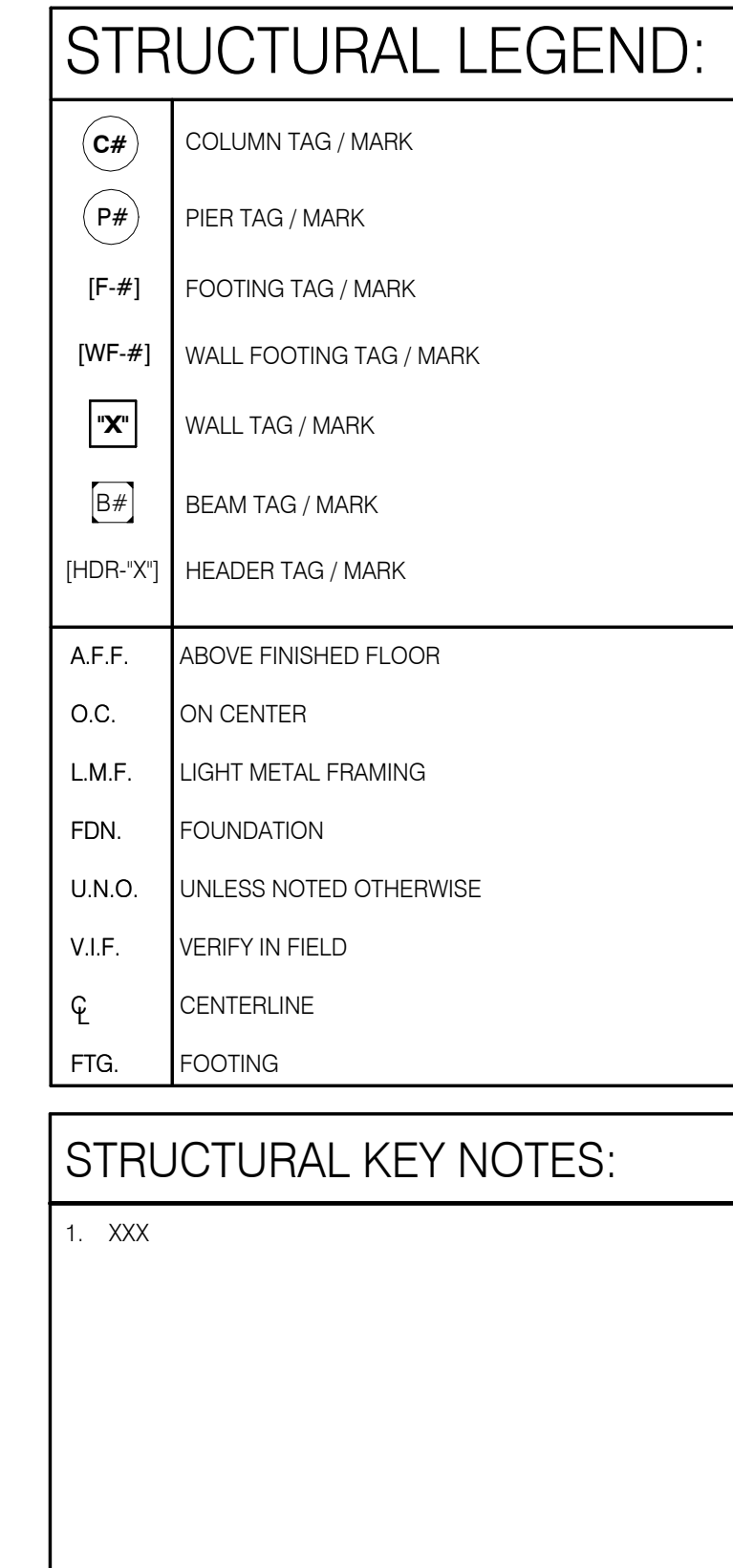
GENERAL STRUCTURAL NOTES

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Sheet Issue Date:	06/19/202
Project Issue Date:	03/18/202
Checked By:	MH
Plan Status:	FOR BIDDING

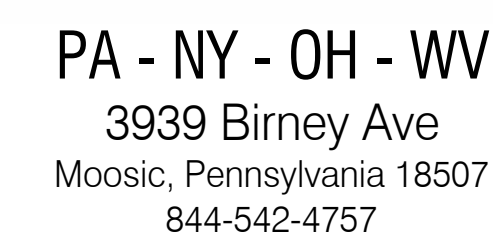
Plan Status: **FOR BIDDING**

S-0.1

Scale: As Indicate

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3 WALL REBAR PLAN
S-1.0 SCALE: 1/4" = 1'-0"

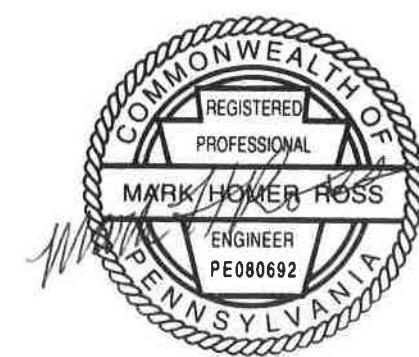
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Sea



Project Notes

10466 Sunnyside Rd SE Box 70
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Project Location:
149 W Walnut St,
Perkasie, PA 18944

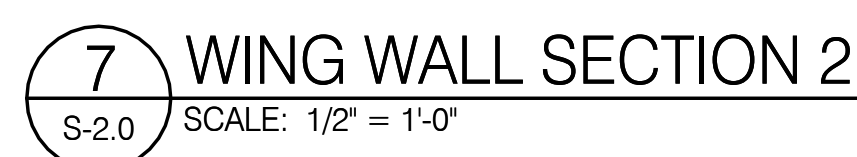
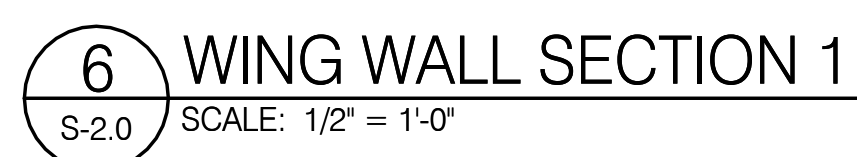
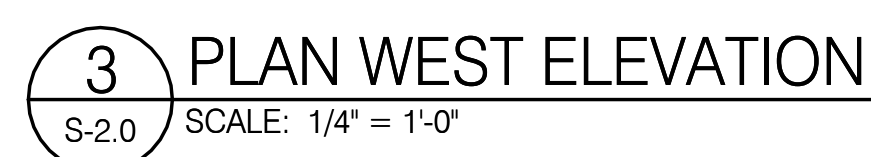
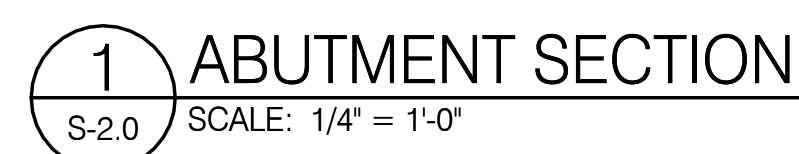
Sheet Title:

FOUNDATION PLAN

Project No:	2025-030
Sheet Issue Date:	06/19/2022
Project Issue Date:	03/18/2022
Checked By:	MH
Plan Status:	FOR BIDDING

S-1.0

Scale: As Indicate



A.F.F.	ABOVE FINISHED FLOOR
O.C.	ON CENTER
L.M.F.	LIGHT METAL FRAMING
FDN.	FOUNDATION
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
CL	CENTERLINE
FTG.	FOOTING

PA - NY - OH - WV
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[illegible]

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Project Notes

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