

GEAUGA PROPANE & FUELING INFRASTRUCTURE GEAUGA COUNTY, OHIO

July, 2024

ADMINISTRATION:

JOANNA SANTILLI...... DIRECTOR OF GEAUGA COUNTY TRANSIT

BEN CAPELLE CHIEF EXECUTIVE OFFICER

ANDREA AABY DIRECTOR OF COMPLIANCE AND DEVELOPMENT

KEITH BARE...... DIRECTOR OF MAINTENANCE
MATT CLARKE...... DIRECTOR OF FINANCE

EMILY GILLIAM...... DIRECTOR OF HUMAN RESOURCES

MATT MAIER DIRECTOR OF OPERATIONS

MARC McLAIN..... ASSISTANT DIRECTOR OF FACILITY MAINTENANCE TONY MELARAGNO.... DIRECTOR OF INFORMATION TECHNOLOGY

JULIA SCHICK DIRECTOR OF COMMUNICATIONS

LAKETRAN BOARD OF TRUSTEES:

BRIAN J. FALKOWSKI PRESIDENT

CHUCK ZIBBEL, PE. VICE-PRESIDENT

DONNA P McNAMEE OPERATIONS CHAIR

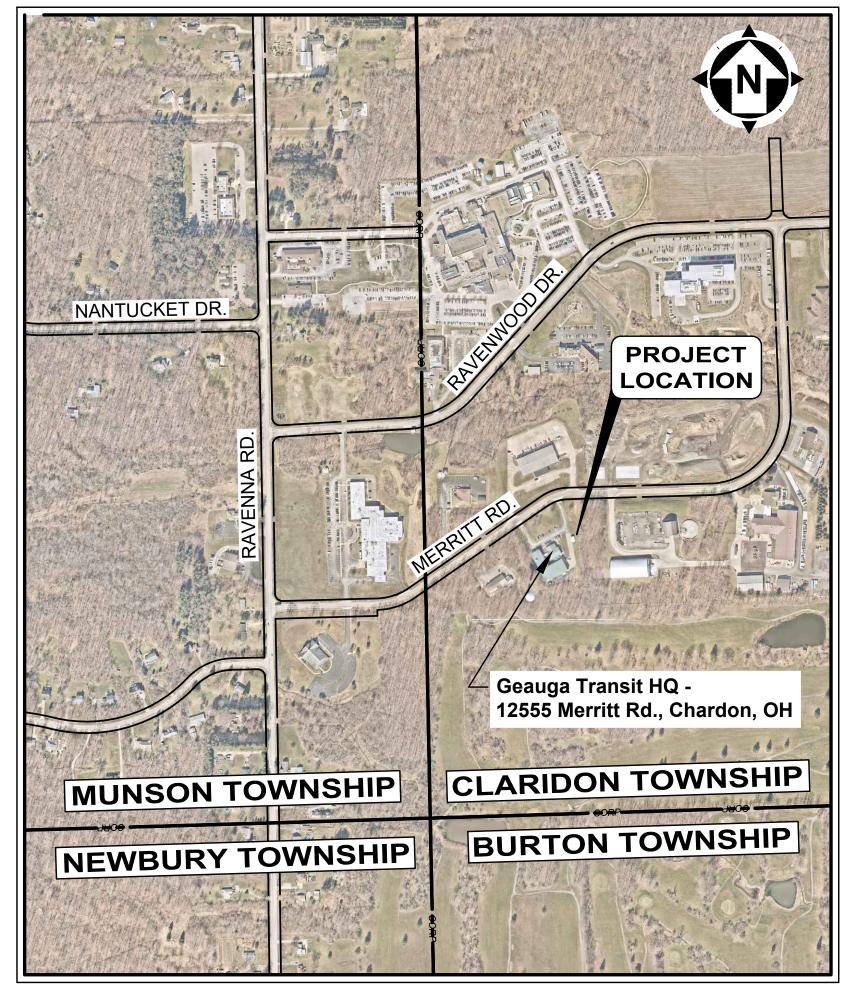
GARY SWANSON SPECIAL PROJECTS CHAIR

DR. JOE GLAVAN
RENEE OCHAYA
MICHAEL PIZMOHT
LANE H. SHEETS
KIM STENGER



CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)

- THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER PURPOSE.
- 2. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO
- 3. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.



SITE 1 LOCATION MAP



ENGINEER'S PROJECT No. 241176

INDEX OF SHEETS

..... COVER SHEET

..... GENERAL NOTES

4 SITE & GRADING PLAN

5 CONSTRUCTION DETAILS

..... EXISTING CONDITIONS

6-7..... ELECTRIC PLAN & DETAILS





GENERAL

- 1. THE CONTRACTOR SHALL PERFORM ALL OF THE WORK AND FURNISH ALL OF THE LABOR AND MATERIALS NECESSARY FOR THE FINAL COMPLETION OF THIS CONTRACT IN THE MANNER AND UNDER THE CONDITIONS HEREIN SPECIFIED AND PROVIDED AND IN ACCORDANCE WITH THE CONTRACT DRAWINGS
- CONTRACT DRAWINGS.

 2. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED BY THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48-HOUR
- NOTICE TO THE OWNER, AND THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.

 3. ACCESS TO ALL DRIVEWAYS WILL BE MAINTAINED AT ALL TIMES; WORK SHALL BE STAGGERED, SO AS TO KEEP ACCESS TO THE FRONT PARKING AND REAR GARAGE ALWAYS FUNCTIONING.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING A SITE FOR DISPOSAL OF ALL EXCAVATED MATERIAL THAT IS UNSUITABLE FOR USE AS BACKFILL AND ALL OTHER EXCESS EXCAVATED MATERIALS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE LOCATION OF THE DISPOSAL SITE AND WRITTEN PERMISSION FOR USE OF THE SITE FROM THE RESPECTIVE PROPERTY OWNER.
- 5. ALL OVER-THE-ROAD VEHICLES USED ON THE PROJECT BY ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE CLEARLY MARKED SHOWING ITS COMPANY SYMBOL.
- 6. BEFORE THE OWNER WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTY RETAINER, THE CONTRACTOR WILL FURNISH THE OWNER A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO: NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTOR HANDLING THE CLAIM, HOW THE CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.
- 7. ALL SHOP DRAWINGS WILL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

PROJECT SPECIFICATIONS

ALL WORK REQUIRED TO COMPLETE THIS IMPROVEMENT SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILED PLANS AND SPECIFICATIONS AND THE CURRENT OHIO DEPARTMENT OF TRANSPORTATION'S STANDARD CONSTRUCTION DRAWINGS (SCDs), STANDARDS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATION/REQUREMENTS, THE MORE STRINGENT OF THE TWO WILL GOVERN, AS DETERMINED BY THE ENGINEER.

PROJECT SAFETY

THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL PROPERLY SUPPORT AND/OR MAINTAIN ALL EXCAVATIONS PER APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL OSHA REGULATIONS. ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC., SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS TO THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS TO UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL. PUBLIC STREETS, AS WELL AS ADJACENT PARKING AREAS, SHALL BE KEPT CLEAN AND FREE OF DEBRIS (i.e. MUD, STONE, ETC.) AT ALL TIMES. THE CONTRACTOR SHALL CONTACT ALL LOCAL EMERGENCY AGENCIES TO THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

UTILITY NOTIFICATION

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE, AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT, CONTACT THE OHIO UTILITY PROTECTION SERVICE (OUPS) AT 1-800-362-2764.

PROTECTION OF UTILITIES

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO LOCATE, ISOLATE, PROTECT AND SUPPORT ANY EXISTING UTILITIES WITHIN OR ADJACENT TO THE PROJECT SITE WHICH MAY BE ENCOUNTERED DURING THE COMPLETION OF THE PROPOSED IMPROVEMENTS. UTILITIES MUST BE KEPT IN SERVICE AT ALL TIMES.

THE LOCATIONS OF THE UNDERGROUND UTILITIES ARE NOT PLOTTED. ALL CARE SHALL BE TAKEN TO NOT DAMAGE ANY UNDERGROUND UTILITIES.

IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL EXPENSE TO THE PROJECT OR THE OWNER, INCLUSIVE OF INSPECTION FEES, MAINTENANCE CREWS, ETC.

UTILITY OWNERSHIP

THE WORK LIMITS OF THIS PROJECT ARE OUT OF THE PUBLIC RIGHT OF WAY. THE LOCATION OF UTILITIES ON THIS PROPERTY ARE NOT SHOWN. LOCAL UTILITIES ARE LISTED BELOW FOR REFERENCE:

COUNTY ENGINEER'S OFFICE 12665 MERRITT RD. CHARDON, OHIO 44024 PHONE (440) 279-1800

CEI FIRST ENERGY 6896 MILLER RD., SUITE 101 BRECKSVILLE, OHIO 44141 ATTN: JOHN M. ZASSICK PHONE: 440 546-8706

470 CENTER STREET, BUILDING #3

EMAIL: MATHEW.HANNAH@CHARTER.COM

SEWER & WATER

ATT: MATHEW HANNAH

PHONE: 216.575.8016

DOMINION EAST OHIO GAS CO. 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OHIO 44333 PHONE: 330.664.2409 EMAIL: relocation@dominionenergy.com

PHONE AT&T / OHIO 13630 LORAIN AVE., 2ND FLOOR CLEVELAND, OHIO 44111 ATT: JAMES JANIS PHONE: 216.476.6142 CHARDON, OHIO 44024
ATTN: GERARD R. MORGAN
PHONE: 440.279.1970
EMAIL: GERRYM@GCDWR.ORG

CABLE TV
TIME WARNER CABLE / CHARTER COMMUNICATIONS
7820 DIVISION DRIVE
MENTOR, OHIO 44060

GEAUGA COUNTY DEPARTMENT OF WATER RESOURCES

ROADWAY EXCAVATION & PAVEMENT

ALL PAVEMENT REMOVAL AND REPLACEMENT, NEW PAVEMENT AND ASSOCIATED ROADWAY WORK WILL BE IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS, 2013 EDITION, WITH THE MODIFICATIONS AS SET FORTH IN THESE SPECIFICATIONS.

MAINTAINING TRAFFIC

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ADJACENT TO THE PROJECT AS DESCRIBED WITHIN THESE SPECIFICATIONS AND IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT 614 - MAINTAINING

CONTRACTOR SHALL MAINTAIN ACCESS TO THE PARKING AREA AND REAR GARAGE FOR GEAUGA TRANSIT VISITORS AND EMPLOYEES AT ALL TIMES.

TEMPORARY SOIL EROSION & SEDIMENTATION CONTROL

THE CONTRACTOR SHALL PREVENT AND/OR REDUCE AND CONTROL SOIL EROSION RESULTING FROM THE PROPOSED IMPROVEMENTS. THE USE OF SILT FENCING, JUTE MATTING, TEMPORARY SEEDING, SILT CHECKS, INLET PROTECTION, STABILIZED CONSTRUCTION ENTRANCES, ETC., WILL BE REQUIRED. SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUED INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS SET FORTH IN THE ODNR PUBLICATION RAINWATER AND LAND DEVELOPMENT, THIRD EDITION (2006).

RESTORATION OF DISTURBED AREAS

EXISTING DRIVES, BERMS, LAWNS, PAVEMENTS, CURBS, SIDEWALKS, SIGNS, MAILBOXES, OR OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL/REPLACEMENT SHALL BE RESTORED TO A CONDITION EQUAL TO THAT WHICH EXISTED PRIOR TO CONSTRUCTION AND TO THE COMPLETE SATISFACTION OF GEAUGA TRANSIT. RESTORATION OF EXISTING ROADWAYS SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY HAVING AUTHORITY. THE COST FOR RESTORATION OF THE AFOREMENTIONED SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY. NO PUBLIC ROADWAY SHALL BE DISTURBED WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY OF CHARDON AND RESPECTIVE PERMITS OBTAINED.

EASEMENTS AND RIGHTS-OF-WAY

THE CONTRACTOR SHALL PERFORM HIS WORK WITHIN THE PROPERTIES, EASEMENTS, WORK LIMITS, AND RIGHTS-OF-WAY PROVIDED AT ALL TIMES. NO MATERIAL IS PERMITTED TO BE STORED ON ADJACENT PROPERTIES UNLESS PRIOR WRITTEN PERMISSION HAS BEEN GRANTED.

PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS

THE CONTRACTOR WILL CAREFULLY PRESERVE BENCH MARKS, PROPERTY CORNERS REFERENCE POINTS, AND STAKES AND IN CASE OF DISTURBANCE, HE SHALL ENGAGE A REGISTERED SURVEYOR TO REPLACE THEM AT NO COST TO THE OWNER OR THE PROJECT AND SHALL BE RESPONSIBLE FOR ANY MISTAKES THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE.

AIR/NOISE CONTROL

- 1. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO WEEKDAY DAYTIME HOURS AS DESCRIBED FURTHER IN THE "SPECIFIC PROJECT REQUIREMENTS" IN THE SPECIFICATION BOOK, UNLESS OTHERWISE APPROVED IN ADVANCE BY THE OWNER.
- 2. CONSTRUCTION EQUIPMENT SHALL BE PROVIDED WITH INTAKE SILENCERS AND MUFFLERS, AS REQUIRED BY SAFETY STANDARDS.
- 3. ALL CONSTRUCTION VEHICLES SHOULD BE EQUIPPED WITH PROPER EMISSIONS CONTROL
- 4. PERIODICALLY CHECK EQUIPMENT AND MACHINERY FOR PROPER TUNING TO MINIMIZE EXHAUST EMISSIONS AND DUST.

PROTECTION AGAINST VANDALISM

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SUFFICIENT SITE SECURITY MEASURES AND/OR PERSONNEL TO PROTECT ALL NEW CONCRETE WORK FROM VANDALISM UNTIL THE CONCRETE IS SUFFICIENTLY CURED AT NO ADDITIONAL COST TO THE PROJECT OR THE OWNER.

SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO THE SUBMITTAL OF A BID PROPOSAL TO DETERMINE THE EXISTING CONDITIONS.

SITE DEMOLITION

GENERAL - ALL SITE DEMOLITION SHALL BE PERFORMED IN ACCORDANCE WITH ODOT ITEM 202. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETELY REMOVING THE EXISTING PAVEMENT, FENCE, AND CANOPY AS SHOWN ON THE PLANS AT THE LOCATIONS SHOWN. ALL MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

SITE GRADING - ALL GRADING SHALL BE PERFORMED IN ACCORDANCE WITH ODOT ITEM 203 - LINEAR GRADING, USING SUITABLE ON-SITE MATERIALS (FREE FROM LARGE DIAMETER AGGREGATE) AND AT THE ELEVATIONS SHOWN ON THE GRADING PLAN.

SAMPLING AND TESTING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF TESTING AND CERTIFICATION OF SAME ALL CERTIFICATIONS OF TESTS AND/OR GRADATIONS FOR MATERIALS TO BE UTILIZED IN THE WORK AND ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LABORATORY (NOT AFFILIATED WITH, OWNED BY, OR MANAGED BY THE CONTRACTOR). THE LABORATORY SHALL BE ACCREDITED BY THE AASHTO MATERIALS REFERENCE LABORATORY FOR THE TYPE OF TESTING PERFORMED.

TEST CRITERIA: THE FOLLOWING TESTS AT A MINIMUM SHALL BE INCLUDED WITH THE CONTRACTOR'S QUALITY CONTROL PLAN:

- 1. <u>COMPACTION:</u> COMPACTION TESTS OR FIELD DENSITY TESTS SHALL BE TAKEN ON ALL EMBANKMENT, TRENCH BACKFILL, SUBGRADE, AND SUBBASE MATERIAL IN ACCORDANCE WITH ODOT 203. MINIMUM TESTING SHALL BE AS FOLLOWS: EMBANKMENT TESTING SHALL BE AT LEAST ONE (1) TEST/3,000 S.F. OF EACH LIFT, TRENCH BACKFILL TESTING SHALL BE AT LEAST ONE (1) TEST/50 L.F. OF EACH LIFT, SUBGRADE AND/OR SUBBASE SHALL BE AT LEAST ONE (1) TEST/3,000 S.F. OF SLABS OR PAVEMENT. PROCTORS OR RELATIVE DENSITY TESTS SHALL BE PERFORMED AS OFTEN AS NECESSARY FOR THE DIFFERING SOILS OR GRANULAR MATERIALS UTILIZED.
- AGGREGATES: FOR EACH MATERIAL AND/OR DIFFERENT SOURCE, THE LABORATORY SHALL PERFORM SOUNDNESS, GRADATION AND OTHER TESTS FOR ALL PARAMETERS SPECIFIED. AGGREGATES INCORPORATED INTO CONCRETE OR ASPHALT MIXES SHALL ALSO BE TESTED FOR MOISTURE CONTENT ON A DAILY BASIS.
- 3. <u>CONCRETE:</u> TEMPERATURE AND UNIT WEIGHT SHALL BE RUN ON FRESH CONCRETE AT INTERVALS SUFFICIENT FOR THE TYPE OF STRUCTURE BEING PLACED AT A MINIMUM OF ONCE PER DAY. SLUMP AND AIR CONTENT TESTS SHALL BE TAKEN A MINIMUM OF ONE TEST PER 20 C.Y., OR AT LEAST ONCE PER DAY. ALL FIELD AND LABORATORY TESTING SHALL BE PERFORMED BY TECHNICIANS CERTIFIED BY THE AMERICAN CONCRETE INSTITUTE (ACI) FOR THE TYPE OF TESTING PERFORMED.
- 4. <u>ASPHALT MIX DESIGN:</u> FOR EACH TYPE OF ASPHALT MIX, SUBMIT JOB MIX FORMULA (JMF) PREPARED BY AN ODOT PRE-QUALIFIED LABORATORY FROM TESTS PERFORMED ON THE AGGREGATES PROPOSED FOR USE. SAMPLE AND TEST FOR GRADATION AND BITUMEN CONTENT AS PER ODOT 441.

GRASS RESTORATION

- 1. GRASS AREAS TO BE RESTORED OR OTHERWISE CONSTRUCTED SHALL BE HYDRO-SEEDED.
- 2. HYDRO-SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 02901 OF THE DETAILED SPECIFICATIONS. RESTORATION SHALL INCLUDE 4" TOPSOIL AND HANDRAKING.

RESTORATION

- THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM HIS
 OPERATION AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS
 ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. ANY DITCHES DISTURBED
 DURING CONSTRUCTION SHALL BE RE-GRADED BY THE END OF THE SAME WORKDAY.
- 2. ALL EXISTING STORM AND SANITARY SEWER FACILITIES, INCLUDING TILE, DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR RECONNECTED TO THE EXISTING OR PROPOSED SYSTEM AS DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER.

ENVIRONMENTAL PROTECTION - PROHIBITED CONSTRUCTION ACTIVITIES

- LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS.
 INDISCRIMINATE, ARBITRARY OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM
- CORRIDORS, WETLANDS, SURFACE WATERS OR OUTSIDE THE EASEMENT LIMITS.

 3. PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, STREAM CORRIDORS, WETLANDS OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE.
- 4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF STREAMS, WETLANDS, SURFACE WATERS, IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING
- 5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF ANY STREAM.
- 6. DAMAGING ANY VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
- 7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, WETLANDS, SURFACE WATERS OR AT UNDISCLOSED LOCATIONS.
- 8. OPEN-BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
- 9. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, WHETHER PRIVATE OR PUBLIC, NOT PREVIOUSLY SPECIFIED ON THE PLANS BY THE ENGINEER FOR SUCH PURPOSES.
- 10. RUNNING WELL POINT OR PUMP DISCHARGE LINES THROUGH PRIVATE PROPERTY OR PUBLIC PROPERTY AND RIGHTS-OF-WAY WITHOUT THE WRITTEN PERMISSION OF HTE OWNER AND THE CONSENT OF THE ENGINEER.
- 11. OPERATIONS ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS OUTSIDE THE HOURS OF 8:00 AM AND 4:30 PM OR OUTSIDE THE HOURS ALLOWED FOR CONSTRUCTION BY LOCAL ORDINANCES OR REGULATIONS.
- 12. CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS AND THE ENGINEER, AND CLOSING CLEAR ACCESS:
- 12.1. BY FIRE PROTECTION EQUIPMENT AND EMERGENCY VEHICLES;
- 12.2. BY THE PUBLIC TO ANY COMMERCIAL OR PROFESSIONAL PLACE OF BUSINESS, QUASI-PUBLIC OR PUBLIC ESTABLISHMENT, OR PLACE OF RESIDENCE;
- 12.3. BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS OF BUILDING INGRESS AND EGRESS.

NOTIFICATION OF EMERGENCY PROVIDERS

THE CONTRACTOR IS REQUIRED TO CONTACT EMERGENCY SERVICE PROVIDERS BEFORE CONSTRUCTION STARTS TO INFORM THE AGENCIES WHOSE SERVICES SHOULD BE AFFECTED BY CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE LOCAL ROADWAY IMPACTS.

THE NOTIFICATION TO CHARDON AND GEAUGA COUNTY SHOULD INCLUDE:

1. FIRE CHIEF, JUSTIN GEISS, (440.285.4665 DISPATCH NON-EMERGENCY)

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS, SPECIFICATIONS, AND REFERENCES AND PROVISIONS OF ODOT ITEM 614 WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.



NO REVISION DATE

GEAUGA TRANSIT

PROPANE & FUELING INFRASTRUCTURE

12555 MERRITT RD., CHARDON, OH 44024 GEAUGA COUNTY, OHIO ISSUED FOR: BID SET - REBID

ISSUE DATE: 7-16-2024

SCALE: AS SHOWN

DESIGNED BY: PJF/GMS

DRAWN BY: GMS

CHECKED BY: PJF

GENERAL NOTES

PROJECT NO.

241176

DISCIPLINE

CIVIL

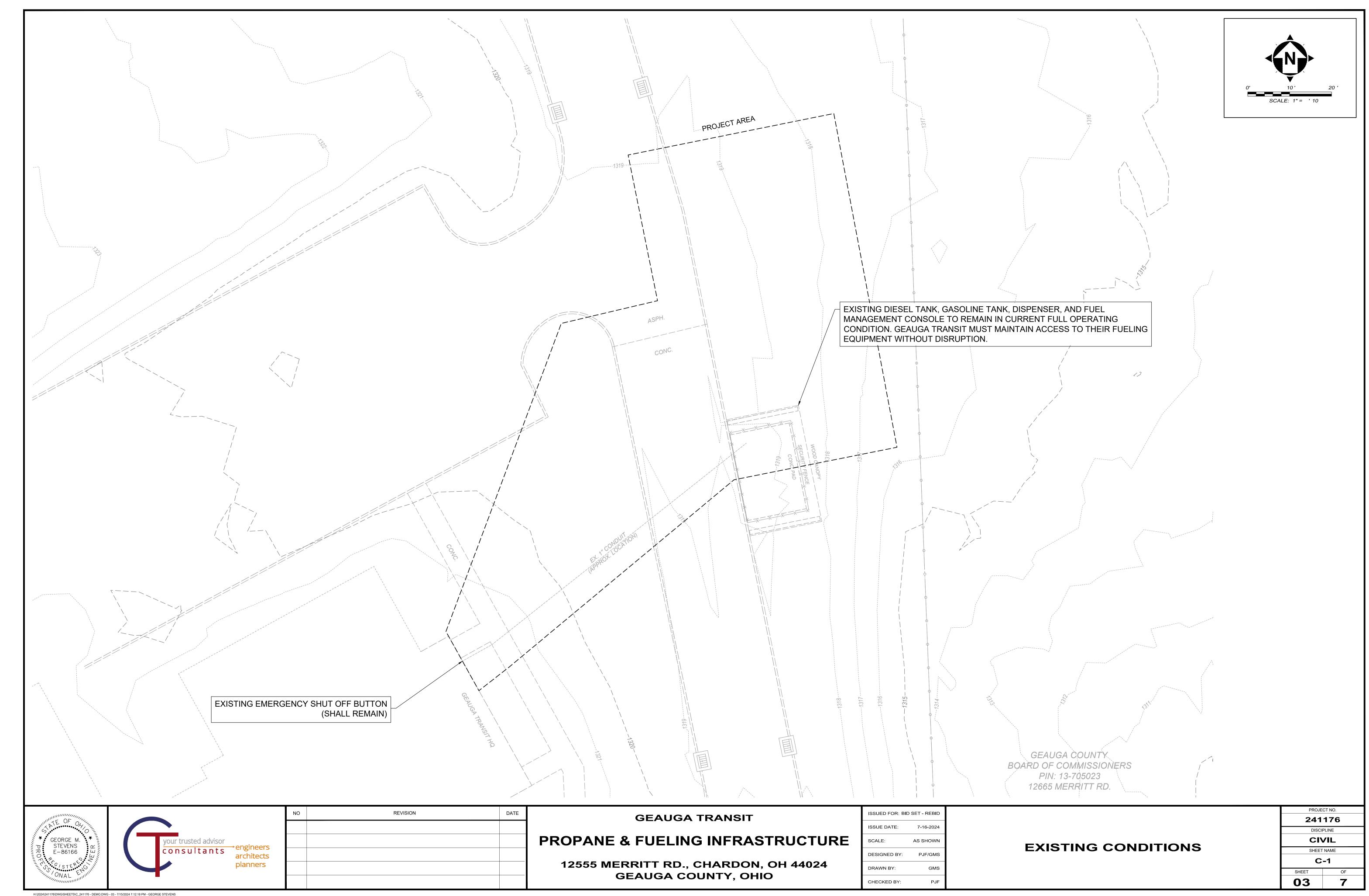
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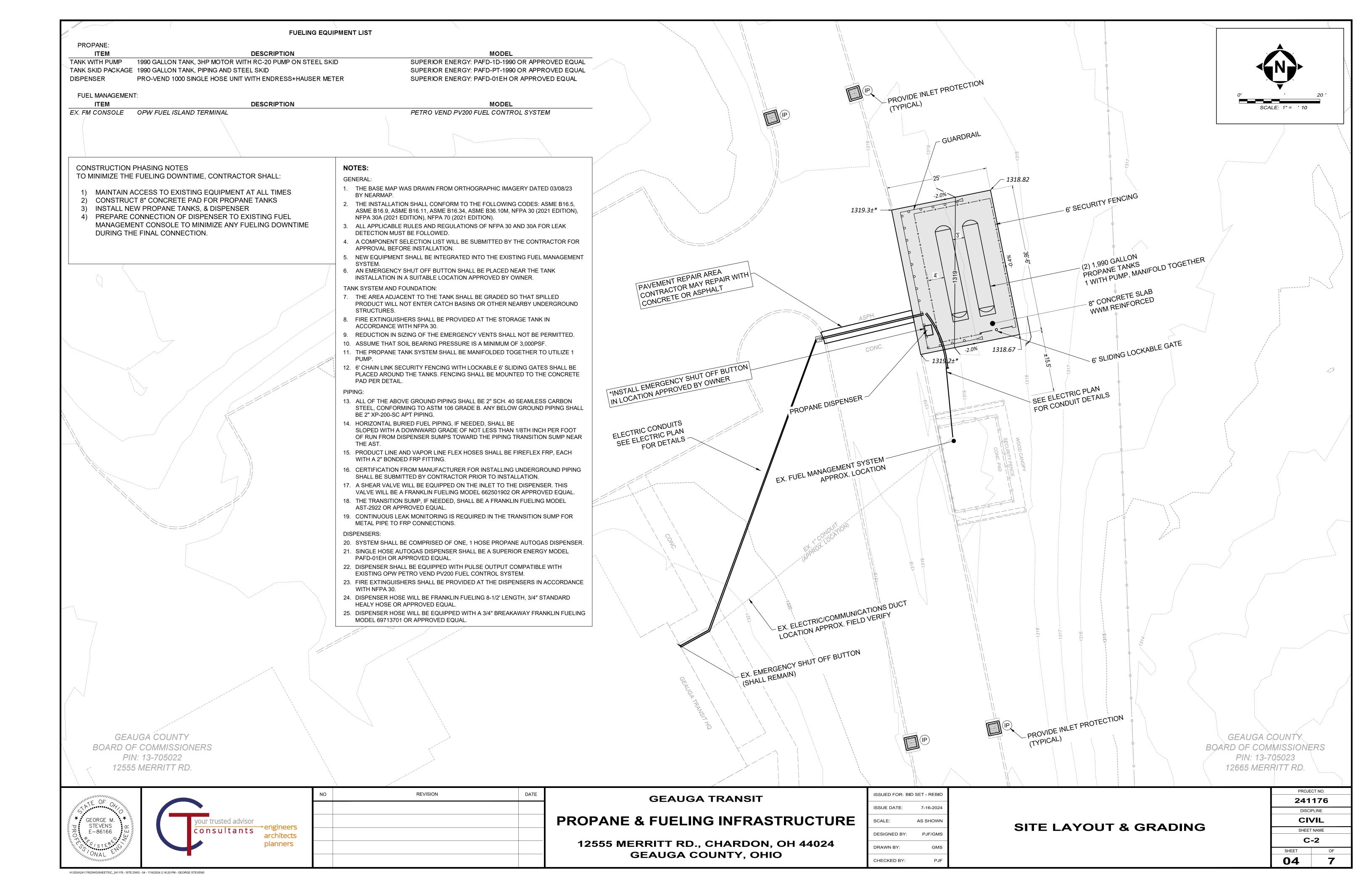
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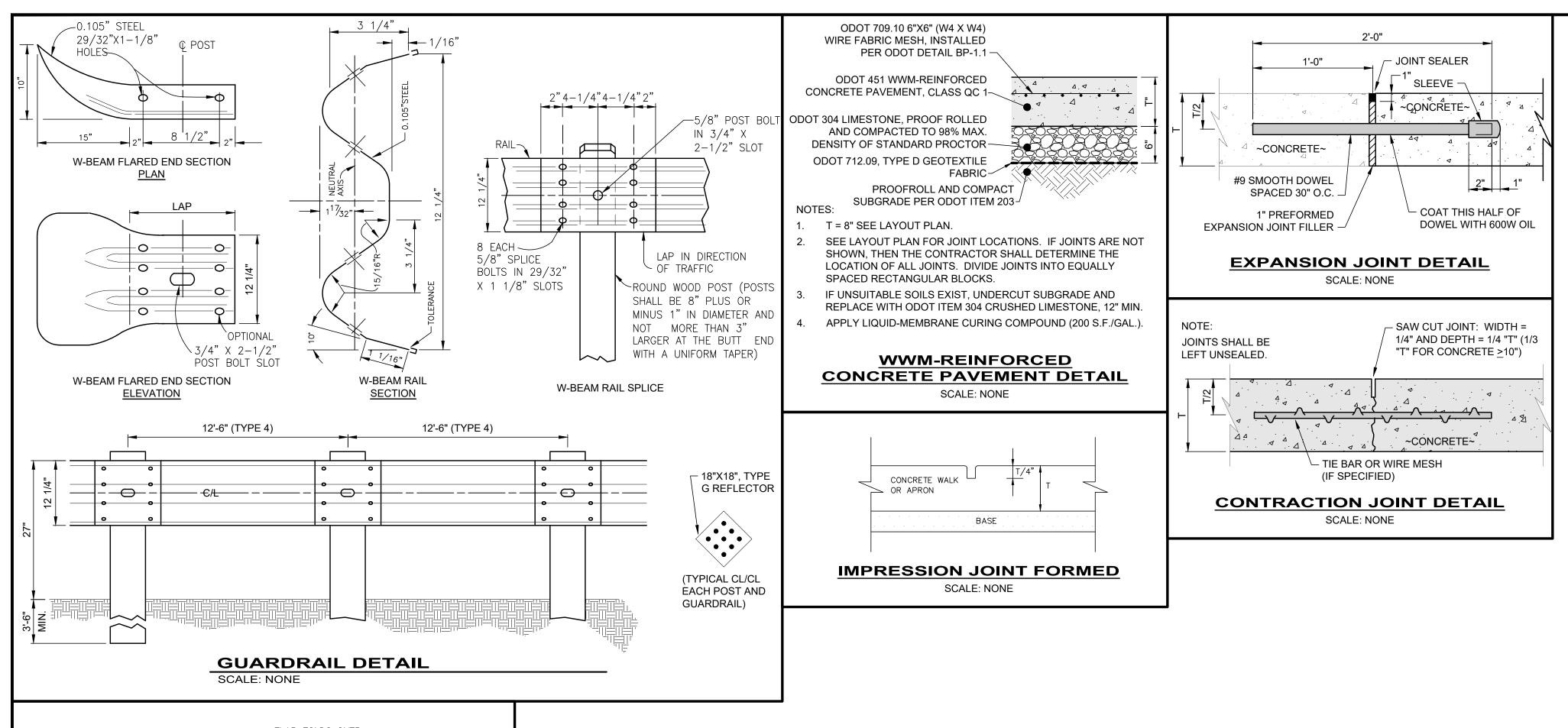
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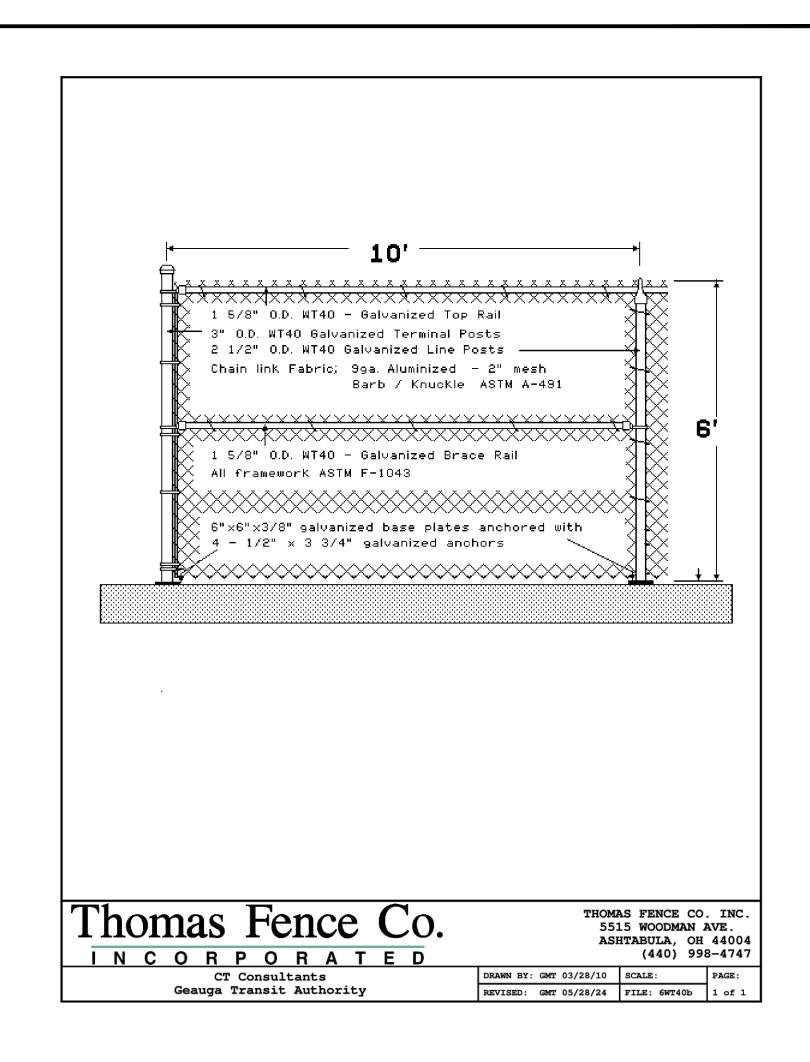
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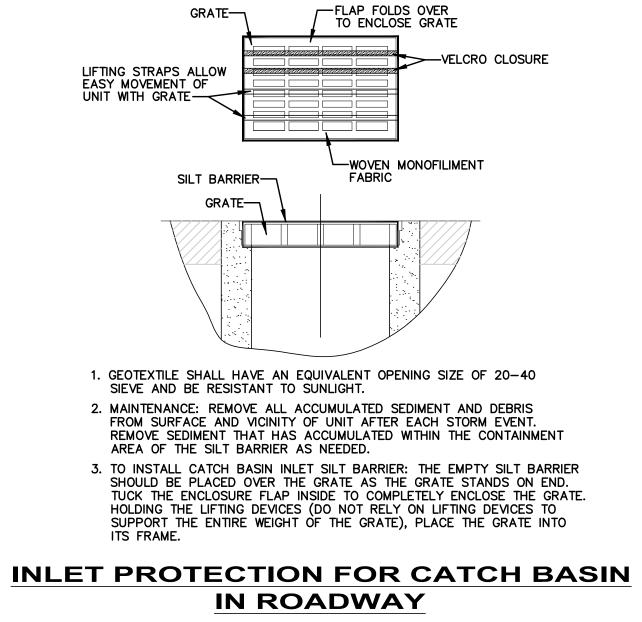
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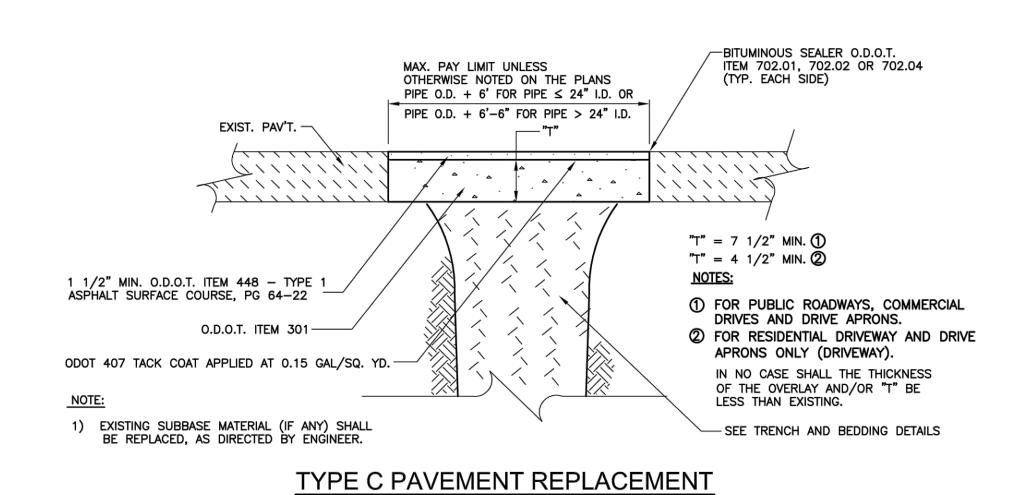


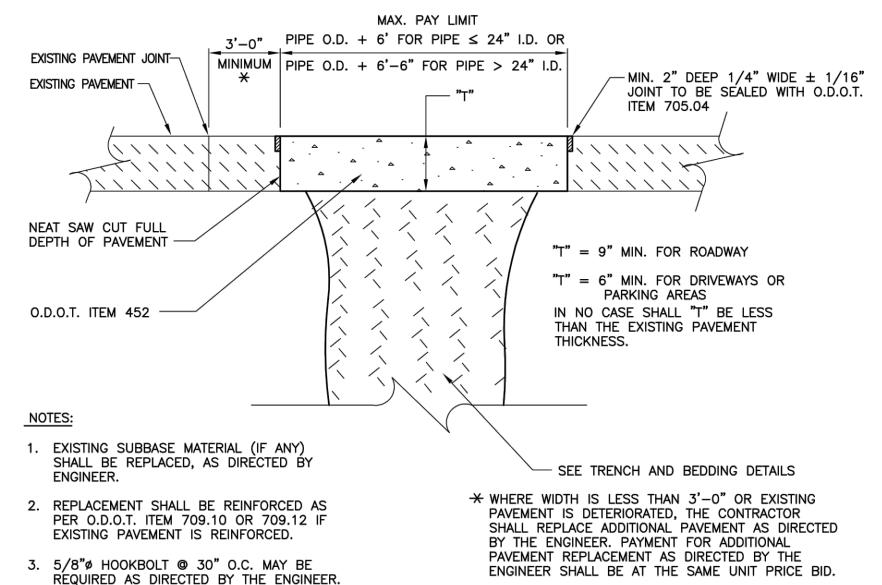












TYPE A PAVEMENT REPLACEMENT

(CONCRETE)

PAVEMENT REPAIR DETAILS

SCALE: NONE

GEORGE M. * STEVENS
E-86166

BROFTE STEVENS
GEORGE M. * WILLIAM STEVENS
GEORGE M. * WI



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GEAUGA TRANSIT

10/10

PROPANE & FUELING INFRASTRUCTURE

12555 MERRITT RD., CHARDON, OH 44024 GEAUGA COUNTY, OHIO

ISSUED FOR: BID SET - REBID	
ISSUE DATE:	7-16-2024
SCALE:	AS SHOWN
DESIGNED BY:	PJF/GMS
DRAWN BY:	GMS
CHECKED BY:	PJF

CONSTRUCTION DETAILS

SD-5-1

PROJECT NO.

241176

DISCIPLINE

CIVIL

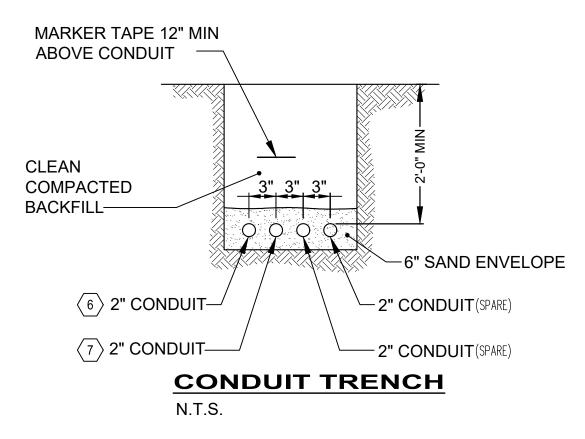
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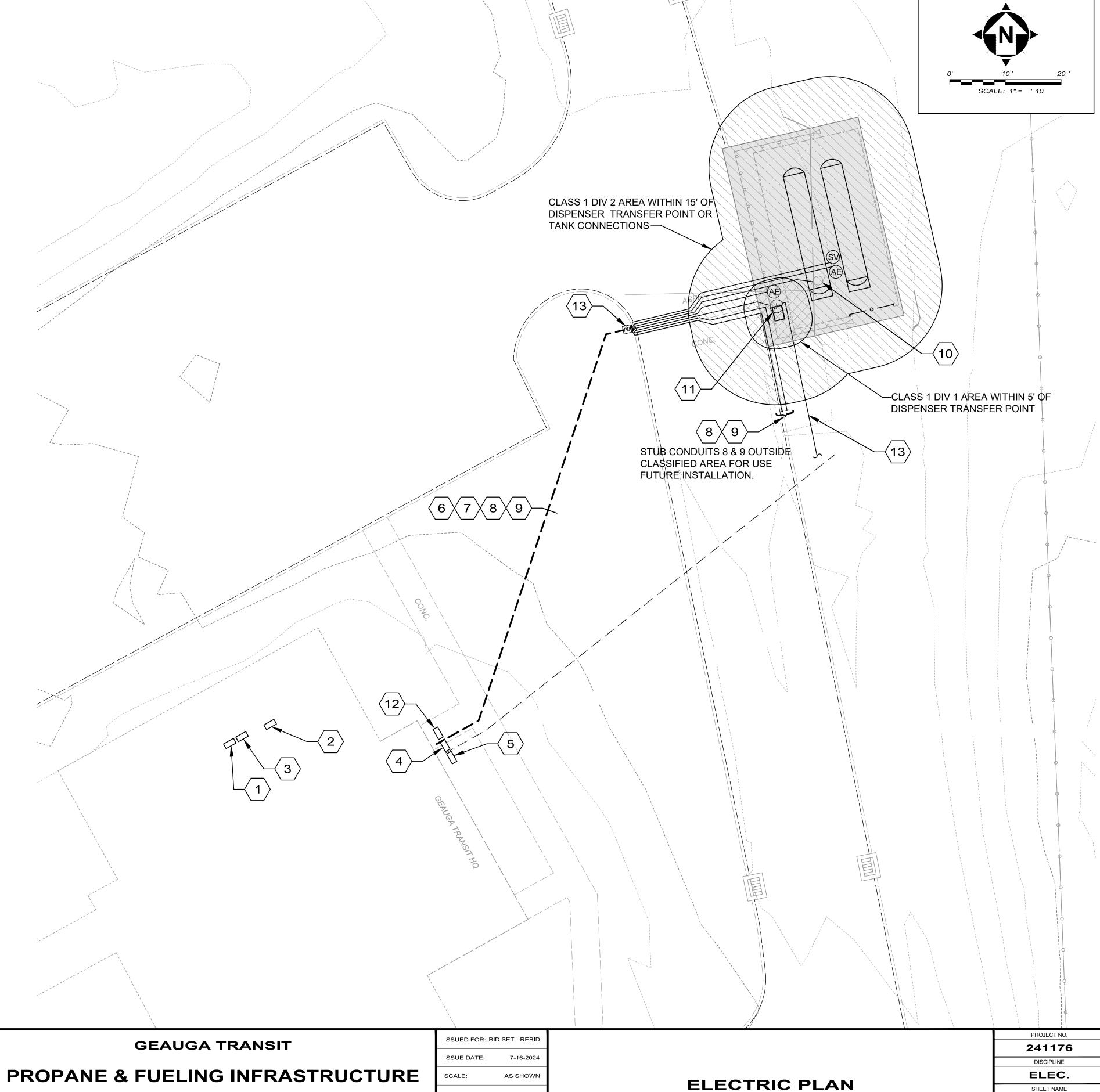
\langle X angle CODED NOTES:

- EXISTING 120/240V, 1Ø DISTRIBUTION PANEL WITH NEW CIRCUIT BREAKERS AS REQUIRED
- 2. NEW PROPANE PUMP MOTOR STARTERS, GAS DETECTOR MONITOR, AND GASOLINE SYSTEM CONTROL PANEL TO BE WALL MOUNTED IN THE EXISTING BUILDING NEAR THE EXISTING PANEL EMDP. DETERMINE EXACT LOCATION IN FIELD.
- NEW 120/240V DISTRIBUTION PANEL LOCATED APPROXIMATELY 3' DUE WEST FROM THE EXISTING PANEL. VERIFY SPARE CAPACITY AND PROVIDE NEW CIRCUIT BREAKERS AS REQUIRED.
- NEW NEMA 4X SS SURFACE MOUNTED PULL BOX FOR POWER WIRING TO THE NEW FUEL STATION AREA. SIZE PULL BOX PER NEC. LOCATE ON THE EXTERIOR WALL OF THE BUILDING. EXTEND CONDUIT AND WIRE FROM THIS BOX TO PANELS AND STARTERS INSIDE THE BUILDING. SEAL ALL BUILDING PENETRATIONS.
- NEW NEMA 4X SS SURFACE MOUNTED PULL BOX FOR CONTROL/NETWORK WIRING TO THE NEW FUEL STATION ISLAND. 24"X36"X8" MINIMUM. LOCATE ON THE EXTERIOR WALL OF THE BUILDING. EXTEND CONDUIT AND WIRE FROM THIS BOX TO PANELS INSIDE THE BUILDING AS NOTED. STUB CONDUITS LISTED AS SPARE INTO THE BUILDING AND TO ABOVE THE EXISTING CEILING. SEAL ALL ENVELOPE PENETRATIONS.
- 6. (2) #8 & (1) #8 GND 1 1/2" C FOR PROPANE PUMP POWER.
- 7. (12) #10, (1) #10 GND & (1) #10 ISO GND 1 1/2" C FOR DISPENSING STATION POWER/ CONTROL. VERIFY ALL WIRING REQUIREMENTS WITH THE SYSTEM SUPPLIERS.
- 8. 1 1/2" C FOR FUTURE.
- 9. 1 1/2" C. SPARE.
- 10. LIQUID PROPANE FUEL PUMP MOTOR LOCATED IN CLASS 1, DIVISION 1 HAZARDOUS AREA. PROVIDE (2) #8 & (1) #8 GND IN 1" RGS UNDERGROUND CONDUIT. INSTALL EXPLOSION PROOF SEAL OFF FITTING BETWEEN THE UNDERGROUND CONDUIT RUN AND THE MOTOR. VERIFY REQUIREMENTS WITH THE EQUIPMENT SUPPLIER.
- 11. LIQUID PROPANE DISPENSING STATION, PROVIDED WITH AN EXPLOSION PROOF JUNCTION BOX, LOCATED IN CLASS 1, DIVISION 1 HAZARDOUS AREA. PROVIDE (3) #12, (1) #12 GND & (1) #12 ISO GND IN 1" RGS UNDERGROUND CONDUIT. INSTALL EXPLOSION PROOF SEAL OFF FITTING BETWEEN THE UG CONDUIT AND THE J-BOX. WIRE PER EQUIPMENT SUPPLIER'S DRAWINGS. VERIFY POWER AND INSTRUMENTATION WIRING REQUIREMENTS WITH THE EQUIPMENT SUPPLIER. PROVIDE ONE ADDITIONAL 1" RGS CONDUIT BETWEEN THE STATION AND THE NEW BOOTH, CAPPED ABOVE GROUND FOR FUTURE CONNECTION TO NEW FMS SYSTEM.
- 12. EMERGENCY SHUT DOWN BUTTON(S) PER NFPA. WIRE PER EQUIPMENT SUPPLIER'S DRAWINGS, SEE FUELING SYSTEM MANUFACTURERS DRAWINGS FOR ADDITIONAL INFORMATION.
- 13. INGROUND PRECAST POLYMER CONCRETE PULL-BOX, OUTSIDE OF THE NEC HAZARDOUS AREAS, PROTECTED FROM TRAFFIC BY GUARDRAIL. BOX SHALL BE INSTALLED ON 6" OF CRUSHED STONE, COVER SHALL BE FLUSH WITH THE PAVEMENT AROUND IT AND STAMPED WITH THE WORD "COMMUNICATIONS". MINIMUM SIZE -24"X36"X18"DEEP, MINIMUM TIER 15. PROVIDE (2) 2" CONDUITS BETWEEN THIS BOX AND THE NEW PULL-BOX ON THE EXISTING BUILDING.
- 14. 1 1/2" CONDUIT WITH CIRCUITS TO PROPANE DISPENSER FROM EXISTING FUEL MANAGEMENT SYSTEM. INSTALL EXPLOSION PROOF SEAL OFF FITTING BETWEEN THE UG CONDUIT AND THE J-BOX. WIRE PER EQUIPMENT SUPPLIER'S DRAWINGS. VERIFY POWER AND INSTRUMENTATION WIRING REQUIREMENTS WITH THE EQUIPMENT SUPPLIER.



GENERAL NOTES:

- 1. ALL EXISTING EQUIPMENT LOCATIONS ARE APPROXIMATE. VERIFY LOCATIONS AND SPARE CAPACITY IN FIELD PRIOR TO BID.
- 2. FOR THE PROPANE AND GASOLINE DISPENSING SYSTEMS AND ANCILLARY DEVICES -VERIFY SYSTEM CONTROL, INTERCONNECTION, ALARM AND MONITORING WIRING WITH THE SYSTEM SUPPLIERS. INCLUDE IN BID ALL COSTS FOR ADDITIONAL CONDUIT AND WIRE REQUIRED, INCLUDING FOR ANY ADDITIONAL DEVICES THAT MAY BE NOT SHOWN ON THIS







REVISION DATE

12555 MERRITT RD., CHARDON, OH 44024 GEAUGA COUNTY, OHIO

DESIGNED BY DRAWN BY:

CHECKED BY:

ELEC-1 06

ELECTRICAL SPECIFICATIONS

- THE ELECTRICAL CONTRACTOR SHALL APPLY FOR AND SECURE ALL COSTS AND CHARGES FOR PERMITS. CONSTRUCTION. AND MISCELLANEOUS WORK ASSOCIATED WITH AND REQUIRED FOR THE COMPLETION OF THE PROJECT ELECTRICAL WORK.
- THE ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS OF ELECTRICAL WORK BY ALL INSPECTION AUTHORITIES HAVING JURISDICTION. COPIES OF INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST. AND THREE (3) COPIES OF THE APPROVED FINAL INSPECTION REPORT SHALL ACCOMPANY THE REQUEST FOR FINAL PAYMENT.
- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, OHIO BUILDING CODE, LOCAL CODES AND ORDINANCES WHERE APPLICABLE, AND REQUIREMENTS OF O.S.H.A.
- 4. ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE NEW, U.L. LISTED OR LABELED, AND CONFORM TO NEMA AND ANSI STANDARD WHERE APPLICABLE.
- THE CONTRACTOR SHALL VISIT THE SITE AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS WHICH AFFECT HIS WORK PRIOR TO BID. COORDINATE AND SCHEDULE WORK WITH OTHER TRADES TO ENSURE SATISFACTORY PERFORMANCE. AVOID DELAYS AND DUPLICATIONS AND MEET THE OWNER'S COMPLETION SCHEDULE FOR THE USE OF THE BUILDING.
- ALL WORK SHALL BE INSTALLED BY WORKMEN FULLY SKILLED IN THE WORK TO BE PERFORMED. REPAIR OR REPLACE EXISTING EQUIPMENT OR PROPERTY OF THE OWNER DAMAGED BY ELECTRICAL TRADES WORKMEN.
- 7. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE MATERIALS AND WORKMANSHIP PROVIDED BY HIM FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF OWNER'S FINAL ACCEPTANCE. REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER WITHIN THE GUARANTEE PERIOD.
- ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE EMT, INTERMEDIATE, OR RIGID GALVANIZED IN ACCORDANCE WITH AND AS PERMITTED BY THE NATIONAL ELECTRICAL CODE OR LOCAL/STATE CODES AS APPLICABLE. UNLESS NOTED OTHERWISE, UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, 1" MINIMUM, USE RGS SWEEPS AND LISTED PVC TO RGS COUPLINGS TO TRANSITION TO ABOVE GRADE.
- 9. FURNISH AND INSTALL PULL BOXES, JUNCTION, AND DEVICE BOXES OF SUITABLE CODE GAUGE AND SIZE. ALL TERMINATIONS IN IN-GROUND PULL BOXES SHALL BE LIQUID-TIGHT.
- 10. ELECTRICAL WIRES SHALL BE MINIMUM #12 AWG, COPPER, 600 V RATED. #14 AWG COPPER SHALL BE PERMISSIBLE FOR CONTROL CIRCUITRY. AMPACITY RATINGS SHALL BE BASED UPON 75°C RATINGS
 - A. #14. #12. AND #10 AWG CONDUCTORS SHALL BE "THHN/THWN".
 - B. #8 AND LARGER SHALL BE STRANDED "THHN/THWN".
- 11. FLEXIBLE METAL CONDUIT INCLUDING LIQUIDTIGHT SHALL BE PERMITTED WHERE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL CODE PROVISIONS. FLEXIBLE METAL CONDUIT SHALL CONTAIN A SEPARATE GROUNDING CONDUCTOR AND BE TERMINATED WITH APPROPRIATE FITTINGS.
- THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DESCRIBE THE WORK REQUIRED. THE ELECTRICAL CONTRACTOR SHALL ACCURATELY FIELD MEASURE AND LAY OUT HIS WORK TO EFFECTIVELY ACHIEVE A COORDINATED INSTALLATION WITH THE SITE LAYOUT AND OTHER TRADES.
- 13. DISCONNECTION, RECONNECTION, AND RELOCATION OF EQUIPMENT SHALL BE COORDINATED SO AS TO CAUSE MINIMAL DISRUPTION OF SERVICE.
- 14. ELECTRICAL DISTRIBUTION PANELS ARE EXISTING TO REMAIN, VERIFY LOCATIONS AND SPARE CAPACITY. PROVIDE ALL NEW CIRCUIT BREAKERS FOR THE NEW EQUIPMENT.
- 15. PROVIDE UPDATED TYPEWRITTEN PANELBOARD CIRCUIT DIRECTORIES IN EACH PANELBOARD DOOR IDENTIFYING ALL ACTIVE CIRCUITS AND SPARES. ACTIVE CIRCUITS SHALL DESIGNATE EQUIPMENT SERVED.
- IDENTIFY PANELBOARDS AND USAGE OF PANELBOARD CIRCUIT BREAKERS WITH PLASTIC LAMINOID NAMEPLATES. NAMEPLATES SHALL INDICATE PANEL DESIGNATION, VOLTAGE. AND USE.
- 17. BALANCE ALL LOADS IN PANELBOARDS.
- 18. THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL NECESSARY DEMOLITION WORK AS INDICATED ON THE DRAWINGS.

ELECTRICAL SYMBOL LEGEND

MOTOR

IN-GROUND PULL-BOX

SURFACE MOUNTED JUNCTION BOX

EXISTING DISTRIBUTION PANEL

SOLENOID VALVE

GAS DETECTOR

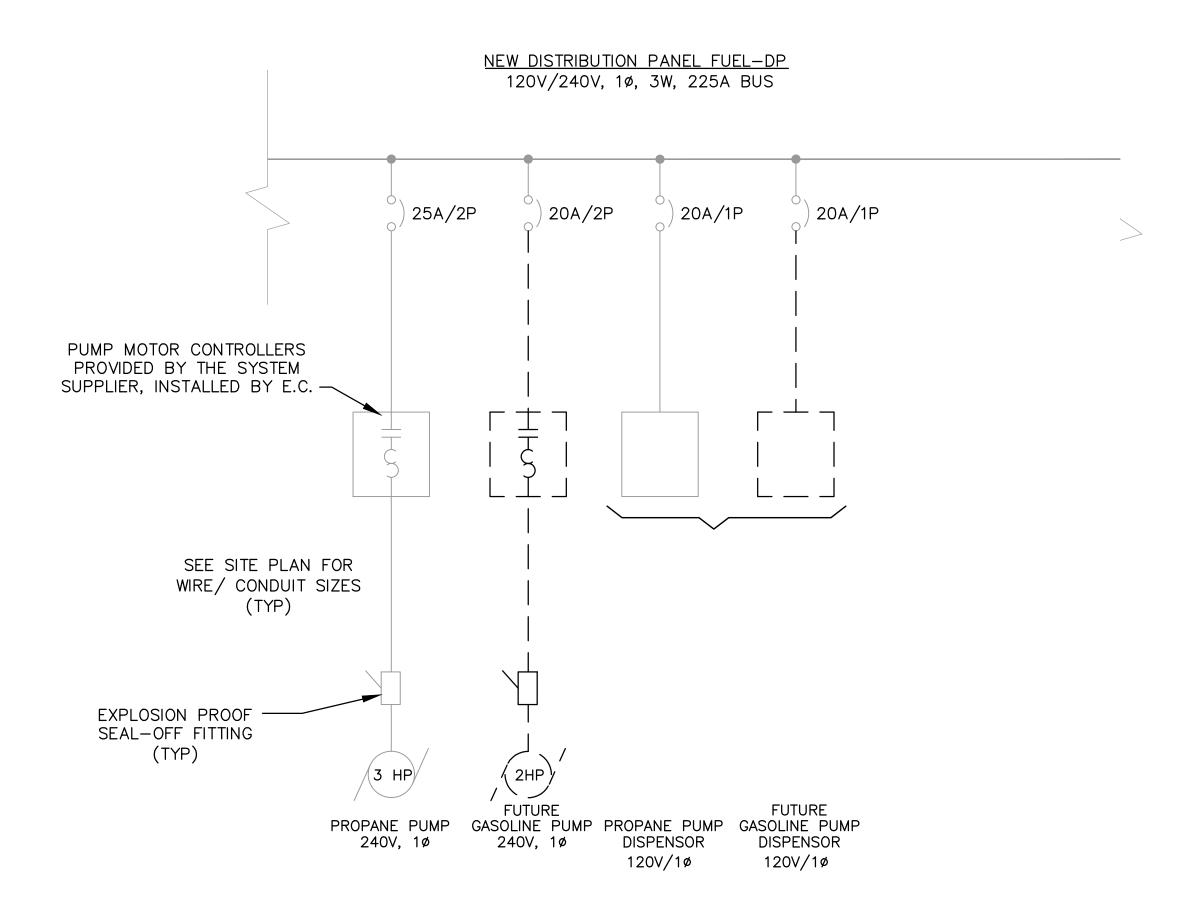
LEAK SENSOR

CIRCUIT BREAKER

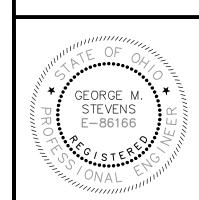
CONTACTOR

OVERLOAD RELAY

EXPLOSION PROOF CONDUIT SEAL



PARTIAL ONE-LINE DIAGRAM NTS





REVISION DATE

GEAUGA TRANSIT

PROPANE & FUELING INFRASTRUCTURE

12555 MERRITT RD., CHARDON, OH 44024 GEAUGA COUNTY, OHIO

ISSUED FOR: BID SET - REBID ISSUE DATE: 7-16-2024 SCALE: AS SHOWN DESIGNED BY DRAWN BY: ELE CHECKED BY:

ELECTRIC DETAILS & SPECS

PROJECT NO. 241176 DISCIPLINE ELEC. SHEET NAME ELEC-2