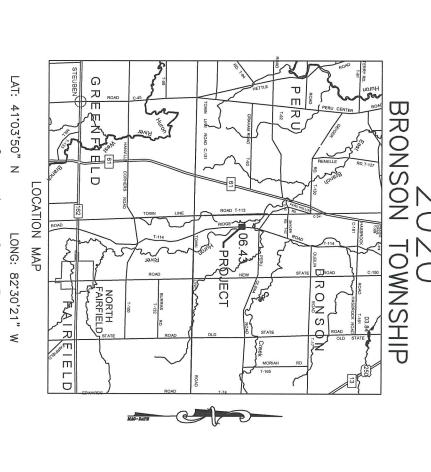
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-929-0988

U.S. ROUTES
STATE ROUTES
OTHER ROADS
CORP. LINE

CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

BEFORE YOU DIG

# E OF OHIO Y OF HURON R.114-06.43



TYPICAL SECTION \_\_
PLAN & PROFILE\_
CROSS SECTIONS
GENERAL NOTES
DETOUR PLAN \_\_\_
RIGHT OF WAY

10 - 14

4-6 7-8

INDEX OF SHEETS

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

SCALE IN MILES

HURON COUNTY ENGINEER
LEE E. TANSEY, P.E., P.S.

Plan Prepared By:

THE OFFICE OF THE HURON COUNTY ENGINEER 150 JEFFERSON STREET NORWALK OHIO 44857 PH. : (419) 668–1997 TANSEY, P.E.,

HUR-T.R. 114-06.43

RAILROAD INVOLVEMENT

CONSTRUCTION PROJECT NO.

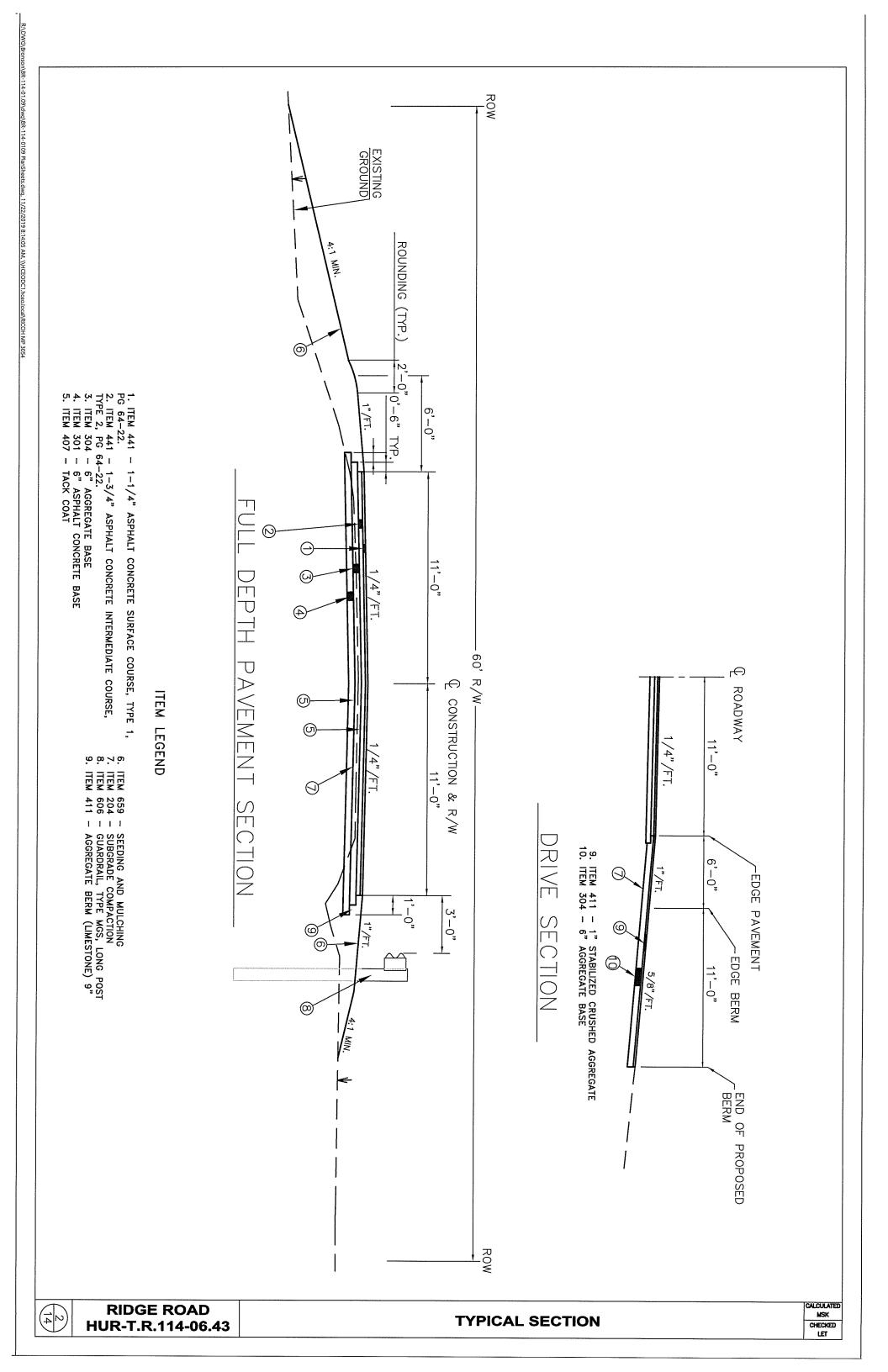
PID NO.

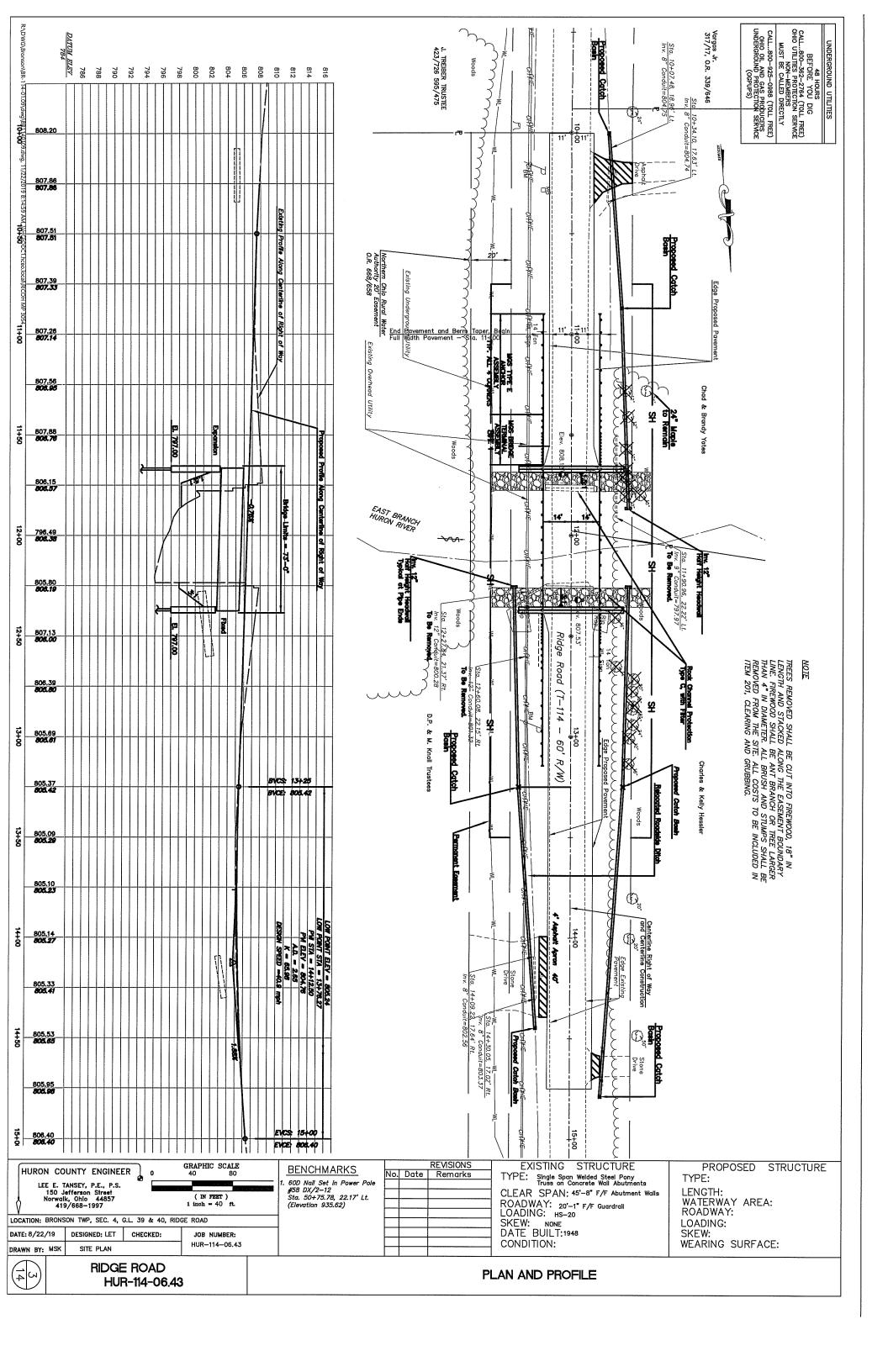
FEDERAL PROJECT NO. E161(170)

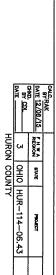
NONE

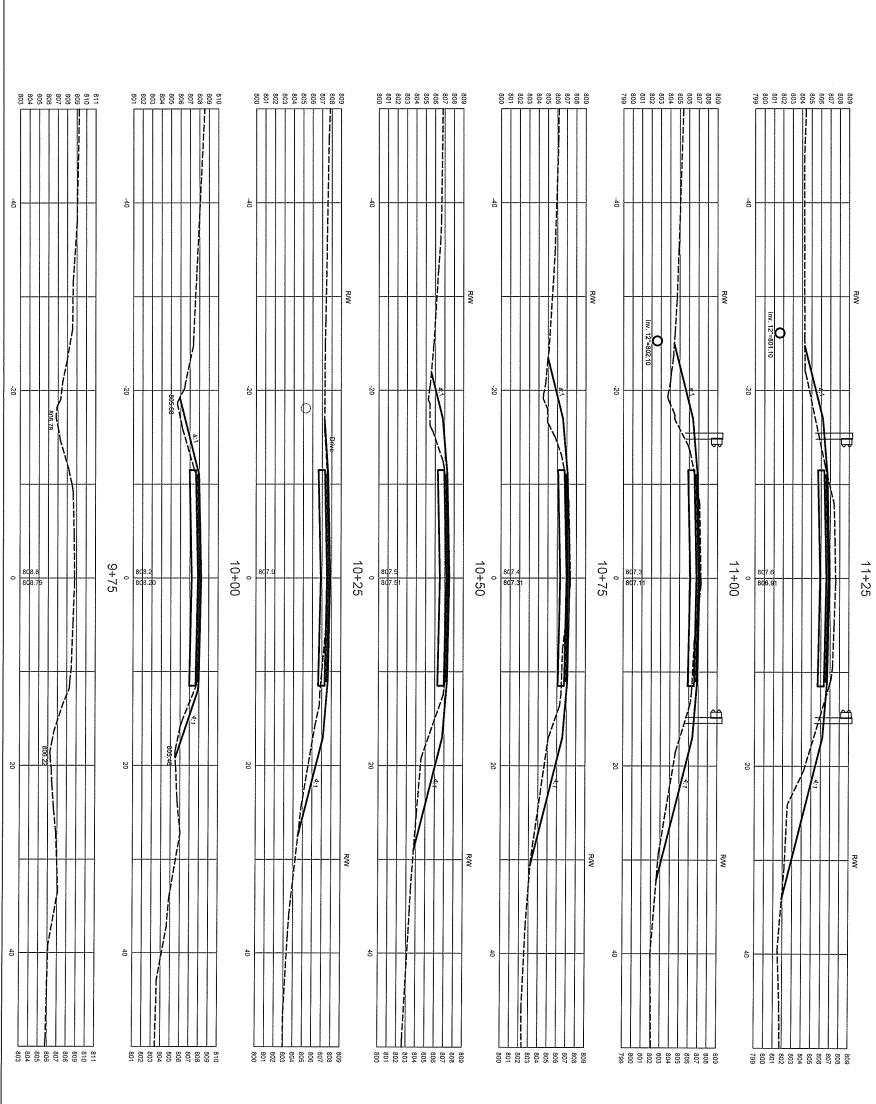
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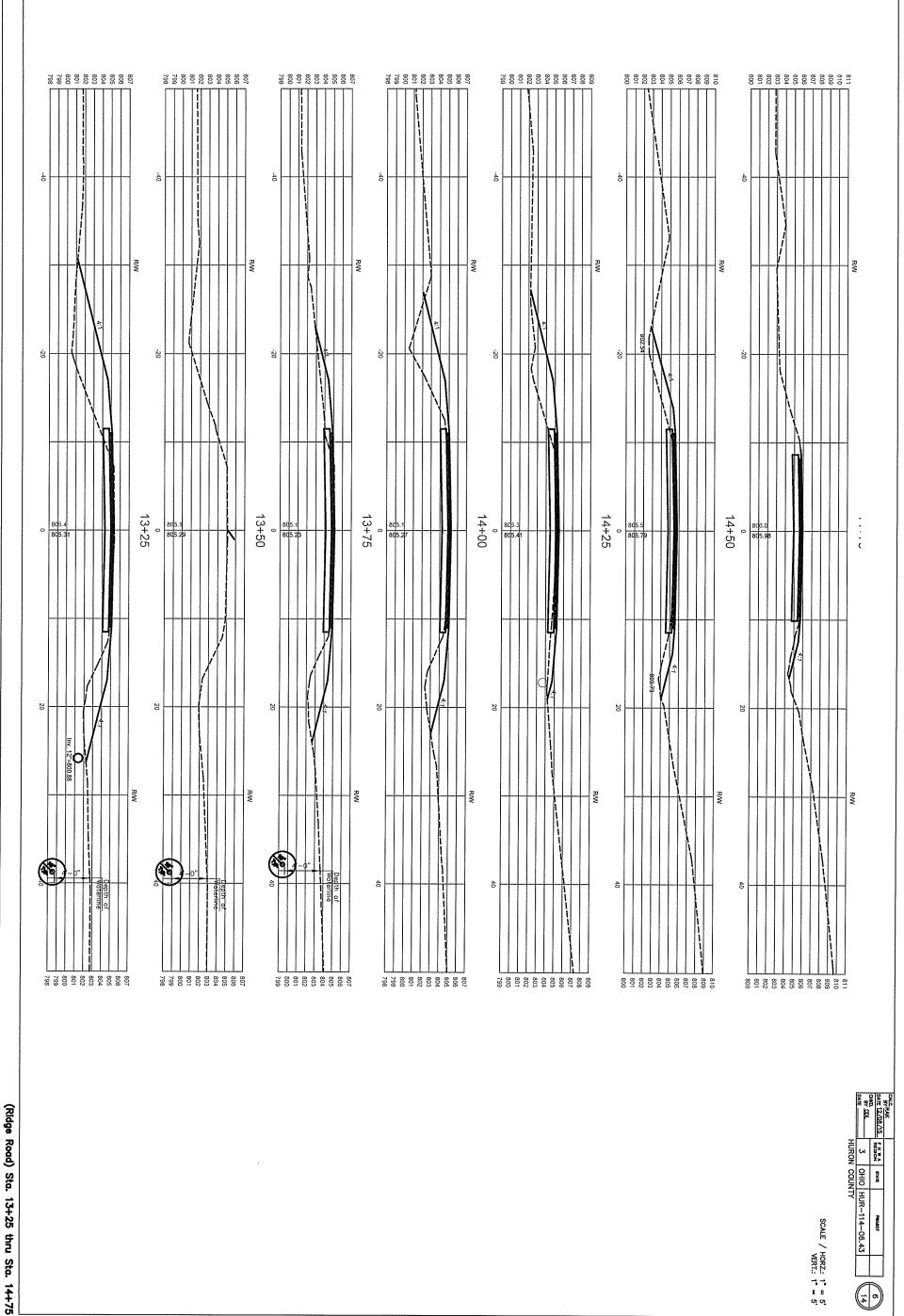


(Ridge Road) Sta. 9+75 thru Sta. 11+25

SCALE / HORZ.: 1" = 5' VERT.: 1" = 5'



(Ridge Road) Sta. 11+50 thru Sta. 13+00



| PART |

SCALE / HORZ.: 1" = 5' VERT.: 1" = 5'

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, ITEM SPECIAL, MAILBOX SUPPORT.

¥∃

2 6

MAX. FOR ALL METAL POSTS

ELEVATION

STONE APPROACH

PROJECT SCHEDULE
PROJECT SHALL NOT BEGIN UNTIL MARCH 15, 2020
COMPLETED BY SEPTE-BER 2020.
AUGUST
ALL DAYS BEYOND THE SCHEDULED COMPLETION D.
ASSESSED LIQUIDATED DAMAGES ACCORDING TO OD
108.017-1. WILL.

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION 2019 CONSTRUCTION AND MATERIAL SPECIFICATIONS.

TO THE DEPARTMENT, DCE, DDD, STANDARD SPECIFICATIONS SHALL DESIGNATED REPRESENTATIVE OF DET, ENGINEER, OR INSPECTOR IN THE BE CONSIDERED REFERENCES TO THE THE HURON COUNTY ENGINEERS OFFICE.

ALL WORK MUST COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN ALL RESPECTS, INCLUDING COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

THE ROUNDING APPLIES TO AL AT SLOPE BREAKPOINTS
L CROSS-SECTIONS EVEN SHOWN ON THE TYPICAL SECTIONS THOUGH OTHERWISE SHOWN.

FIRELANDS ELECTRIC COOPERATIVE
1 ENERGY PLACE
NEW LONDON, OHIO 44851 CONSTRUCTION ARE ALL UTILITIES LOCATED WITHIN THE PROJECT LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

#### THE LOCATION OF THE UNDERGROUND ARE AS OBTAINED FROM THE OWNERS O.R.C. LONDON, OHIO 44851 E: 1-800-533-8658 AS REQUIRED BY ON THE I

ALL EXPENSES INVOLVED IN ADJUSTMENT OR RELOCATION OF ANY AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY. CONTRACTOR SHALL NOTIFY THE UTILITY OWNER AT THEIR ADDRESS IF UTILITY LINE IS TO BE ADJUSTED, RELOCATED, DE—ENERGIZED OR REMOVED DURING PILE DRIVING OPERATIONS.

## CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER." THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

### AND GRUBBING

REMOVE ALL STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT. REMOVE ALL STUMPS AS SET FORTH IN THE SPECIFICATIONS UNDER THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING. FIREWOOD TO REMAIN FOR PROPERTY OWNERS.

Mai

203 — EMBANKMENT

STEEPER

YARD

THAN 2 TO 1 RD BID PRICE

FOR ITEM

E STABILIZED 1 670, SLOPE

12

## CONSTRUCTION STAKING

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH, PLACE A MAINTAIN THE CONSTRUCTION STAKES NECESSARY FOR PROPER CONSTRUCTION. THE ENGINEER HAS ESTABLISHED THE PRIMARY HORIZONTAL AND VERTICAL CONTROL FOR THIS PROJECT. ADDITIONAL HORIZONTAL AND VERTICAL CONTROL INFORMATION IS AVAILABLE FROM COUNTY ENGINEER. ₽NB THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX OR EXISTING MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED OR DIRECTED BY THE ENGINEER TO REMOVE AND REPLACE EXISTING NON-CONFORMING MAILBOX SUPPORTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY MAILBOX DAMAGED NIPPROPER HANDLING ON HIS PART, AS DIRECTED BY THE ENGINEER. EMBANKMENT SLOPES STEEPI ACCORDING TO THE SQUARE EROSION PROTECTION.

MAILBOX SUPPORTS

# <u>DRAINAGE</u> DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

IREES OR STUMPS REMOVED, LANDSCAPING CONTRACTOR IS TO CONTACT THE PROPERTY OWNERS BEFORE TREES, STUMPS OR LANDSCAPING IS REMOVED TO ARRANGE FOR THEIR REMOVAL ALL TREES FOR FREWOOD OR LUMBER AND LANDSCAPING IS TO BECOME THE PROPERTY OF THE PROPERTY OWNERS, DO NOT DISTURB OR REMOVE THESE ITEMS UNTIL THESE ARRANGEMENTS HAVE BEEN MADE. CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL BRUSH AND UNWANTED ITEMS.

# LIEM SPECIAL SANDSTONE PLACEMENT FOR EROSION ALL UNDAMAGED SANDSTONES REMOVED SHALL BE UCONTROL.

ITEM 518. POROUS BACKFILL WITH FILTER FABRIC, POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO POROUS BACKFILL WHITH FILTER FABRIC, 2 FEET THICK SHALL EXHED ON DETAIL SHEET. THE POROUS BACKFILL SHALL BE INSTALLED ALONG BOTH SIDES OF THE BOX CULVERT FROM THE SUBGRADE TO AT LEAST 6" BELOW THE PERFORATED UNDERDRAIN AND ALONG INSIDE OF ALL WINGWALLS.

ALL FOUR SIDES OF THE POROUS BACKFILL SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC. FLITER FABRIC SHALL CONFORM TO 712.08, TYPE A AND BE INCLUDED WITH ITEM 518, POROUS BACKFILL WITH FILTER FABRIC FOR PAYMENT.

POSTS SHALL BE SET IN ACCORDANCE WITH THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED WITH CONCRETE. DEPTH OF EMBEDMENT SHALL BE 18" MINIMUM (24" MAXIMUM FOR STEEL POSTS,) OF EMBEDMENT SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE INSTALLATION OF THE LOCAL POST MASTER REGARDING THE TIMING OF THE INSTALLATION OF THE MAIL BOX AND POST SUPPORT. PROVIDE ACCESS FOR MAIL DELIVERY AT MAIL BOX AND POST SUPPORT. PAYMENT FOR THIS ITEM SHALL BE LIMITED TO FINAL PERTINENT INSTALLATION, TEMPORARY INSTALLATION SHALL BE IN ACCORDANCE 107.10, HOWEVER, THE SAME MATERIAL AND SIZE SHALL APPLY.

#### TACK COAT FOR INTERMEDIATE COURSE

TEM 407

THE TACK COAT OPERATION SHALL BE AS DIRECTED BY THE ENGINEER. THE RATE OF APPLICATION OF THE TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANITITIES INDICATE AN AVERAGE APPLICATION RATE OF:

407 -407 -TACK COAT FOR INTERMEDIATE COURSE - C 0.05 0.10 GAL./SQ. 5 GAL./SQ. YD.

## SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE SOIL. QUANTITY CALCULATIONS FOR ON THESE LIMITS. APPLIED TO ALL AREAS O G ARE BASED

#### 619 EIEID

FIELD OFFICE

8

THE CONTRACTOR SHOPERATIONS IN A MACOWNERS/TENANTS AFFORMERS AGREED OTHERWISE AGREED SHALL COORDINATE ALL CONSTRUCTION PHASES MANNER THAT PROVIDES ACCESS TO PROPERTY AFFECTED BY THE WORK AT ALL TIMES, UNLESS TO BY THE OWNER/TENANT. UNLESS AND

### CONSTRUCTION LIMITS

Æ TIMES CONDUCT 돐 OPERATIONS

PLANS N 153.64

CONTRACTOR MUST AT PUBLIC RIGHT-OF-WAY. MHTIN

## BEST MANAGEMENT PRACTICES

BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL SUPPLEMENTAL SPECIFICATIONS 832, AND STANDARD DRAWINGS SHALL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL, ALONG WITH ADDITIONAL PROTECTIVE MEASURES TO AVOID IMPACTS. TO ADJACENT PROPERTIES AND WETLANDS FROM CONSTRUCTION

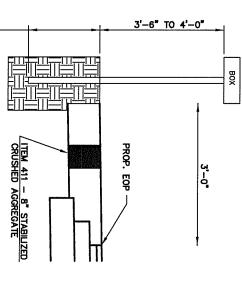
EROSION/SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION AND SEDIMENT CONTROL MIEASURES AS SPECIFIED IN THE PLAN SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER. THEY SHALL ALSO COMPLY WITH ODOT'S "HANDBOOK FOR SEDIMENT AND EROSION CONTROL."

OUTLETS.
ROADWAY
SHALL BE
611 CONI
EXISTING ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE CYCTURE CONTURE.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE PROVIDED WITH AN OUTLET INTO THE ROADWAY DITCH BY 611 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 611, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

MEM

THE CONTRACTOR S
COUNTY ENGINEER,
IN ACCORDANCE WIT THE CONTRACTOR MEASURES AS DIR TOR SHALL PROVIDE FOR APPROVAL BY THE HURON IEER, A STORM WATER POLLUTION PREVENTION PLAN E WITH ODOT SUPPLEMENTAL SPECIFICATION 832. TOR SHALL REMOVE THE EROSION CONTROL DIRECTED BY THE ENGINEER.



WOOD POSTS SHALL BE NOMINAL 4"x4" SQUARE OR A 41" DIAMETER ROUND, AND SHALL CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE, SIZE 2" 1.D. AND SHALL CONFORM TO AASHTO M-181, AND SHALL BE FURNISHED WITH ANTI-TWIST PLATES, ANY MATERIAL WITH BREAKAWAY CROSS SECTION CHARACTERISTICS EQUIVALENT TO THE ABOVE MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER, HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.

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TREE REMOVAL WILL ONLY BE PERFORMED BEFORE APRIL OR AFTER SEPTEMBER 30TH WHEN BAT SPECIES WOULD N BE USING ROOST OR BROOD-REARING HABITAT. FIREWOOD REMAIN FOR PROPERTY OWNERS.

REMAINING DISTURBED SOILS THAT ARE NOT COVERED BY HARD SURFACES WILL BE RE—SEEDED WITH NATIVE VEGETATION.

WETLANDS IN THE AREA. AWAY FROM THE

C/C SP, PIPES TI APPROV.

PACING OF THE REINFORCING STEEL SHALL BE ADJUSTED TO ALLOW TO ENTER THE WALLS WITHOUT INTERFERENCE AND ONLY WITH VAL FROM THE ENGINEER.

INFORCING STEEL THAT MUST BE CUT IN THE FIELD SHALL HAVE XXY COATING APPLIED TO ALL AREAS WHERE UNCOATED IS ID, COST TO BE INCLUDED IN ITEM 509.

PRIOR TO REMOVAL OF THE BRIDGE, THE UNDERSIDE WILL CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1ST TO SEPTEMBER 30TH, IF ANY BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF THE BRIDGE, ODNR WILL BE CONTACTED IMMEDIATELY WITH THIS INFORMATION.

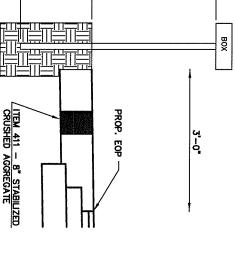
HURON COUNTY ENGINEER'S STAFF WILL NOTIFY IN WRITING LEAST 10 DAYS PRIOR TO THE DETOUR THE FOLLOWING AGENCIES: TOWNSHIP TRUSTIEES, LOCAL FIRE DEPARTMENT, LOCAL SCHOOL DISTRICT, AND HURON COUNTY SHERIFF'S DEPARTMENT.

M.511. CLASS QC1 CONCRETE FOR STRUCTURES (AS PER PLAN)
L EXPOSED EDGES OF CONCRETE WINGWALLS AND HEADWALLS SHALL
CEIVE A \$\frac{3}{2}^{\circ}\$ CHAMFER. CONCRETE SHALL BE IN ACCORDANCE WITH ITEM
I. THE CONCRETE IS TO BE CLASS QC1 WITH A MINIMUM 28-DAY
MPRESSIVE STRENGTH OF 4,000 PSI. 4" DEAIN OUTLETS SHALL
NFORM TO ITEM 508 FALSEWORK AND FORMS. COST INCLUDED IN ITEM
I, CLASS QC1ED CONCRETE. ALL CONCRETE MUST CURE FOR 7 DAYS
FORE ANY BACKFILLING OR LOADING OF CONCRETE TAKES PLACE,
ILESS OTHERWISE DIRECTED BY THE ENGINEER.
RM WORK: SYMONS/PLYWOOD FORMS-SNAP TIES WITH PLASTIC CONES.
RMOVE CONES AND FILL ALL VOIDS WITH NON-SHRINK GROUT. MEYA-TIE
MEYE COMPLETELY GROUT ENTIRE WIDTH OF WALL WITH NON-SHRINK

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM -1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

# STORM WATER POLLUTION PREVENTION PLAN



# 20 TO TO TO

RAK

CHECKED CDL

09 EPOXY COATED REINFORCING STEEL

RCING STEEL - ASTM A615, A616 OR A617 GRADE 60, MINIMUM STRENGTH = 60,000 P.S.I. AND IN ACCORDANCE WITH ITEM 509 SINFORCING STEEL SHALL BE EPOXY COATED AS PER O.D.O.T. S.S AL SPECIFICATIONS ALL MATERIALS AND CONSTRUCTION SHALL ACCORDANCE WITH HURON COUNTY AND THE STATE OF OHIO, TMENT OF TRANSPORTATION 2016 CONSTRUCTION AND MATERIAL ICATIONS.

₹

## FARM DRAINS

ALL EXC WINGWAI OF EXC. SHALL I

CAVATION AND BACKFILL REQUIRED FOR CONSTRUCTION OF NLLS/HEADWALLS SHALL BE INCLUDED WITH ITEM 503. ALL AREAS NAVATION WITHIN 1:1 INFLUENCE FROM THE EDGE OF PAVEMENT BE BACKFILLED WITH 304 AGGREGATE, ALL COST INCLUDED WITH

FORMS SHALL BE USED IN CONSTRUCTION OF ALL FOOTERS AND WALLS, COST INCLUDED IN ITEM 511. IL FURNISHED AND PLACED — 4"
AL OF STONES 1 INCH OR GREATER FROM ALL AREAS ON THE
DIT. REFER TO ODOT ITEMS 653.03 AND 659.10 FOR SITE
DIT. REFER TO ODOT ITEMS 653.03 AND 659.10 FOR SITE
RATION, AREAS WHERE FILL REQUIREMENTS AND DISTURBED AREAS
T ALLOW A FULL 4" THICKNESS OF TOPSOIL, FEATHER TO EXISTING
AS REQUIRED PER TYPICAL SECTION AND/OR CROSS SECTION. FILL
THES AS SHOWN ON CROSS SECTION SHEETS FOR EMBANKMENT
TO THE PROPERTY OF THE PROPERT

ALL AGGREGATE MATERIALS SHALL BE LIMESTONE, SUPPLIED BY AN ODOT APPROVED SOURCE.

GRANU

AR MATERIAL

141. 3" ASPHALT CONCRETE TYPE 1, DRIVE APRONER PLAN) JIEM 441, ASPHALT CONCRETE FOR DRIVE 4 SHALL INCLUDE ALL WORK NECESSARY TO PAVE US AGGREGATE APRON, INCLUDING ALL WORK ASPHALT DRIVE CONSTRUCTION OF EXISTING ASPHALT DRIVE

OZ— TACK COAT AND ITEM 407—TACK COAT FOR INTERMEDIATE E. THE TACK COAT OPERATION SHALL BE AS DIRECTED BY THE ER. THE RATE OF APPLICATION OF THE TACK COAT SHALL BE TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR TING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN GE APPLICATION RATE OF:

#### 407, TACK COAT

# 407, TACK COAT FOR INTERMEDIATE COURSE

ITEM 659—COMMERCIAL FERTILIZER
FERTILIZER SHALL BE APPLIED TO ALL AREAS THAT ARE DESIGNATED FOR SEEDING AND MULCHING AT RATE OF 20LBS/1000 SF. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

TEM 659. CLASS 1-SEEDING AND MULCHING TEM 659-COMMERCIAL FERTILIZER 19-19-19 ANTITY FOR ITEM 659-SEEDING AND MULCHING, ARE BASED ON LIMITS. AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED

#### TOPSOIL FURNISHED AND PLACED-4"

THESE LI

AL STONES 1—INCH OR GREATER FROM ALL AREAS ON THE 27 REFER TO ODDI ITEMS 653.03 AND 6259.10 FOR SITE RATION. AREAS WHERE FILL REQUIREMENTS AND INDISTURBED DO NOT ALLOW A FULL 4" THICKNESS OF TOPSOIL, FEATHER TO IG GRADE AS REQUIRED PER TYPICAL SECTION AND/OR CROSS N. FILL QUANTITIES AS SHOWN ON CROSS SECTION SHEETS AREA MBANKMENT TOTALS ONLY.

4

RIDGE ROAD HUR-T.R.114-06.43

**GENERAL NOTES** 

## DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, THE CURRENT ODOT BRIDGE DESIGN MANUAL, AND THE AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS, 2011 EDITION.

#### DESIGN LOADING

HL-93 FUTURE WEARING SURFACE OF 60 LBS 胺

#### DESIGN DATA

CONCRETE, CLASS QC 1 -

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

COMPRESSIVE STRENGTH AT 28 DAYS, f'c=4.0 KSI (SUBSTRUCTURE)

SQ. 긔

#### CONCRETE FOR PRESTRESSED BEAMS COMPRESSIVE STRENGTH (AT 28 DAYS) COMPRESSIVE STRENGTH (RELEASE) — 5.0 ₹<u>.</u>0

쟔

# PRESTRESSING STRANDS — ASTM A416 GRADE 270, 1/2" DIAMETER, SEVEN WIRE, UNCOATED, LOW RELAXATION STRANDS, HAVING As = 0.167 SQ. IN., f's = 270,000 P.S.I., INITIAL STRESS 0.75 f's = 202,500 P.S.I., INITIAL TENSION LOAD = 33,818 LBS. / STRAND AND STRESS AT RELEASE 0.69 f's = 186,300 P.S.I. (ASSUMED AT SECTION OF MAX. MOMENT.)

## DECK PROTECTION METHOD

TYPE 3 WATERPROOFING AND STEEL DRIP STRIP WITH ASPHALT OVERLAY.

## PRESTRESSED BEAM SHOP DRAWINGS

MANUFACTURER SHALL FURNISH THE HURON COUNTY ENGINEERS OFFICE WITH DESIGN SPECIFICATIONS, CALCULATIONS AND SHOP DRAWINGS FOR THE PRESTRESSED CONCRETE BOX BEAMS, SEALED BY A REGISTERED PROFESSIONAL ENGINEER. HURON COUNTY SHALL REVIEW AND APPROVE SHOP DRAWINGS PRIOR TO THE MANUFACTURING OF THE BEAMS.

MANUFACTURER SHALL ALSO FURNISH THE HURON COUNTY ENGINEERS OFFICE WITH A LOAD RATING ANALYSIS REPORT PER ODOT BRIDGE DESIGN MANUAL, SECTION 900.

#### ITEM 512

ALL EXPOSED CONCRETE SURFACES OF THE ABUTMENTS, INCLUDING WINGWALLS, AND LIMITS OF THE CONCRETE SUPERSTRUCTURE, AS PER PLAN DETAILS, SHALL BE SEALED. EPOXY—URETHANE.

# ITEM 516 - BEARING PAD SHIMS, AS PER PLAN

1/8 INCH THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 6 INCHES BY 12 INCHES SHALL BE PLACED UNDER THE ELASTOMERIC BEARING PADS WHERE REQUIRED FOR PROPER BEARING. PAYMENT WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 516 — 1/8 INCH PREFORMED BEARING PADS. ANY UNUSED SHIMS SHALL BECOME THE PROPERTY OF THE COUNTY.

#### DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE RIVER. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

## OVERHEAD (O/H) UTILITY LINES

DURING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL GIVE SPECIAL ATTENTION TO THE EXISTING 0/H UTILITY LINES LOCATED WITHIN THE GENERAL AREA OF THE PROJECT.

IN PLANNING CONSTRUCTION AND REMOVAL OPERATIONS, THE CONTRACTOR SHALL CONSIDER THE POTENTIAL CONFLICT OF THE O/H UTILITY LINES WITH THE MOVEMENT, TRAVERSING AND OPERATIONS OF HIS CONSTRUCTION EQUIPMENT. THE CONTRACTOR SHALL MODIFY HIS CONSTRUCTION PROCEDURES AND METHODS AS NECESSARY TO ELIMINATE THE CONFLICT MENTIONED ABOVE. THE CONTRACTOR SHALL OBSERVE ALL OSHA RULES AND REGULATIONS, AND PROTECT AND SAFEGUARD THE SAFETY OF THE PERSONNEL AND PROPERTY AT ALL TIMES.

## ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE RIDGE ROAD BRIDGE OVER THE HURON RIVER, SCHEDULED FOR REPLACEMENT, WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA)
NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY
COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO
THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM
AND SUBMIT IT TO:

SHANNON NABORS
OHIO EPA
NORTHWEST DISTRICT OFFICE
347 N. DUNBRIDGE ROAD
BOWLING GREEN, OHIO 43402
(419) 352-8461 FAX (419) 352-8468

AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER.

- INFORMATION REQUIRED ON THE FORM WILL INCLUDE:

  1) THE CONTRACTOR'S NAME AND ADDRESS.

  2) THE SCHEDULED DATES FOR THE START AMD COMPLETION OF BRIDGE REMOVAL.

  3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED

THE ASBESTOS SURVEY SPECIAL PROVISION.

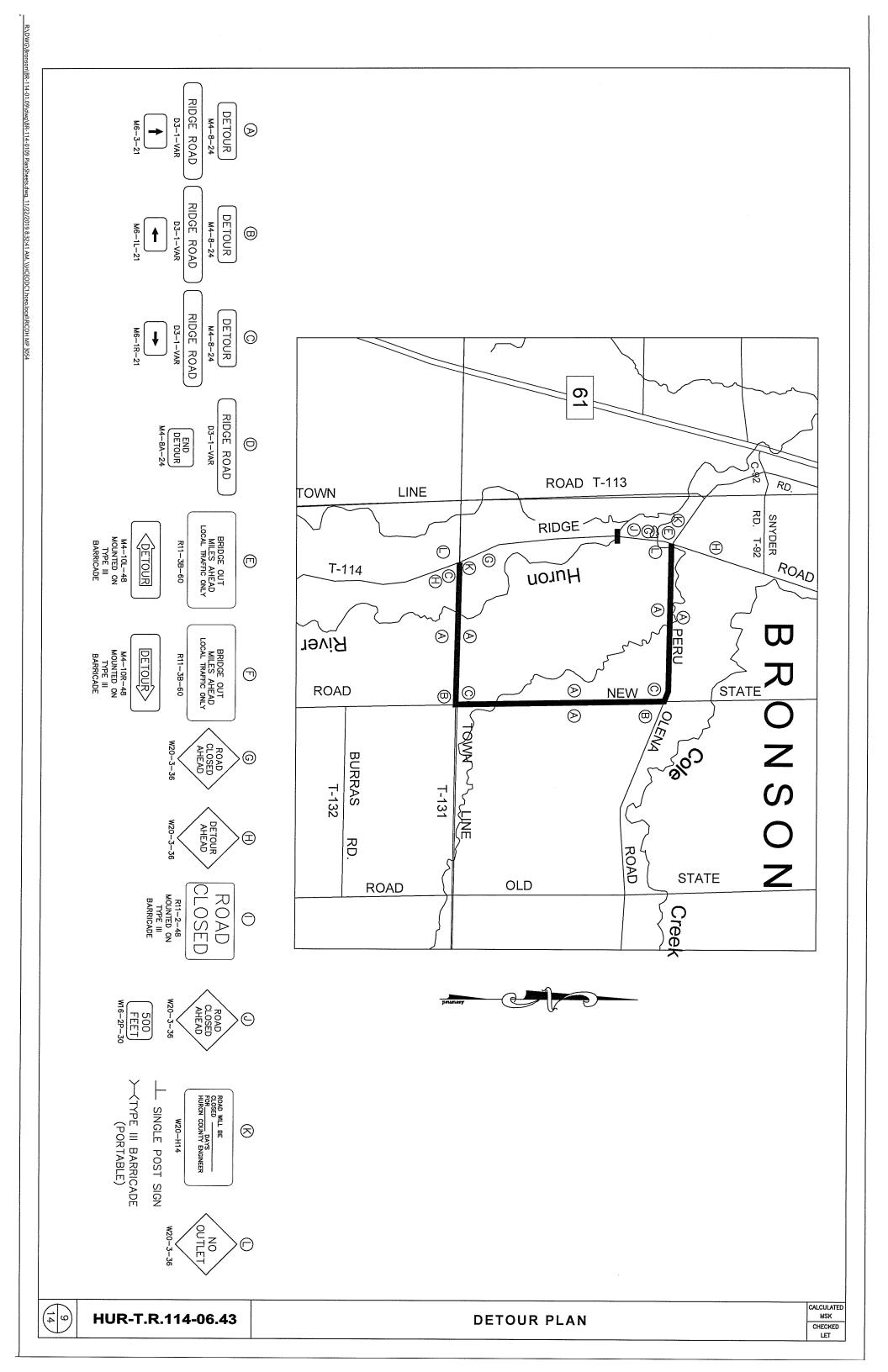
THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR AND MATERIAL NECESSARY TO COMPLETE AND SUBMUIT THE OEPA NOTITICATION FORM.

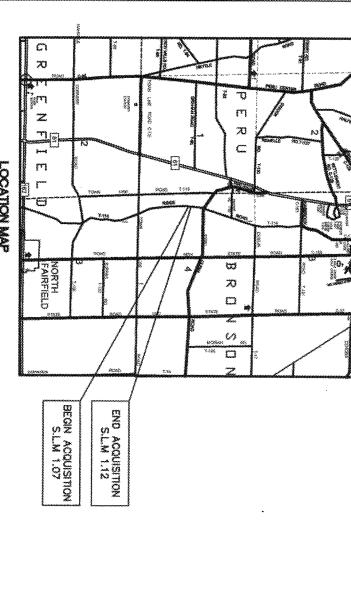
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**RIDGE ROAD** HUR-T.R.114-06.43

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## LATITUDE: 41'-09'-21" LONGITUDE: 82"-38"-03"

	UTILITY OWNERS		
772	NAME & ADDRESS	345	NAME & ADDRESS
TELEPHONE	FRONTIER COMMUNICATIONS B3 TOWNSEND AVENUE NORWALK OHIO 44857 419-744-3613 SCOTT WETZEL	<b>₹</b> A TER	NORTHERN OHIO RURAL WATER 2205 U.S. RTE. 20 NORWALK OHIO 44857 419-688-7213 BRIAN PUDER
ELECTRIC	FIRELANDS ELECTRIC COOPERATIVE INC. 1 ENERGY PLACE NEW LONDON OHIO 44851 1-800-533-8658 DENNY MARUGO		

NOTES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

## COMPATIONAL SYMBOLS

County Line Township Line Section Line Corporation Line Fence Line Fence Line Center Line Right of Way (Ex.) Right of Way (Pr.) Right of Way (Pr.) Right of Way (Pr.) Right of Way I temporary Right of Way Utility Ease. Rairoad Utility Ease. Rairoad Guardrall (Ex.) Construction Limits Edge of Pavement (Ex.) Edge of Pavement (Ex.) Edge of Shoulder (Pr.) Edge of Shoulder (Pr.)
Prop Hispania
or (Pr.)
Ditch / Creek Ditch / Creek Tree Line (Ex) Ownership Hook Property Line Sym Tree (Pr.) Break Line Sym Tree (Remove) Evergreen (Ex) Wetland (Pr) # Fost (Ex) * Light (Ex) * Fire Hydrant (E Water Valve (E) Telephone Pole Light Pole (Ex)
Ditch / Creek (Ex) ————————————————————————————————————
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X*** =
To was as a second with the se
Example Exampl
<b>■   } , , , ≥ </b>
id Target EXX (Pr)

LEGEND

WD = WARRANTY DEED

SH = STANDARD HIGHWAY EASEMENT

SL = SLOPE EASEMENT

CH = CHANNEL EASEMENT

PR = PROPERTY RIGHT

T = TEMPORARY EASEMENT

### 

COMMERCIAL RESIDENTIAL

ONT-BUILDING

# BASIS FOR BEARINGS: ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY AND HAVE BEEN ASSUMED.

LEGEND 0

1 1

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5/8"¢ iron Bar Monument Set
 30" Long, With Plastic Cap
 Stamped "Huron County Engineer"
 Unless Otherwise Noted.
 Monument Found As Noted
 Road Record

**66** þ

Osed Plat Record

Existing Fence Calculated Original Township Survey

CISS STAN

Plan Prepared

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# I, GARY L. GILLEN, P.S. 7617 HAVE CONDUCTED A SURVEY OF THE EXISTING CONDITIONS FOR THE HURON COUNTY ENGINEER IN 2016. THE RESULTS OF THAT SURVEY ARE CONTAINED HEREIN. THE HORIZONTAL COORDINATES EXPRESSED HEREIN ARE BASED ON AN ASSUMED COORDINATE SYSTEM. AS A PART OF THIS PROJECT! HAVE REESTABLISHED THE LOCATIONS OF THE EXISTING PROPERTY LINES AND CENTERLINE OF EXISTING RIGHT OF WAY FOR PROPERTY TAKES CONTAINED HEREIN. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH OHIO ADMINISTRATIVE CODE 4433-37 COMMONLY KNOWN AS "A MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO" UNLESS NOTED. THE WORKING UNDER MY DIRECT SUPERVISION. GARY L. GILLEN, PROPESSIONAL LAND SURVEYOR NO. 7817

HUR-TR/14-06.43

#### STEWARDS

LEE E. TANSEY, P.E., P.S. 150 JEFFERSON STREET NORWALK (MID 44857 PH. : (418) 688-1997

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O 0

### **工界工工工406.43**

GREAT LOTS 39 & 40, SEC T 3 N, R 22 W BRONSON TOWNSHIP HURON COUNTY SECTION 4

## 

LEGEND SHEET
CENTERLINE PLAT
PROPERTY MAP
SUMMARY OF ADDITIONAL RIGHT OF
RIGHT OF WAY DETAIL

(A & (A K) ---

PLAN COMPLETION DATE: 08/25/2017

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FIRM NAME: HURON COUNTY ENGINEERS OFFICE

R/W DESIGNER: GARY L GILLEN PS. R/W REVIEWER: LEE\_TANSEY\_P.E.\_P.S.

REMEMER: GARY L. GILLEN, P.S.

OWNERSHIP UPDATED BY GARY L. GILLEN. P.S. TRACINGS FIELD REVIEW DATE: 08/24/2017 PRELIMINARY FIELD REVIEW DATE: 07/14/2017

COMPLETED: 08/28/2017

FIGHT OF WAY LEGEND SHEET

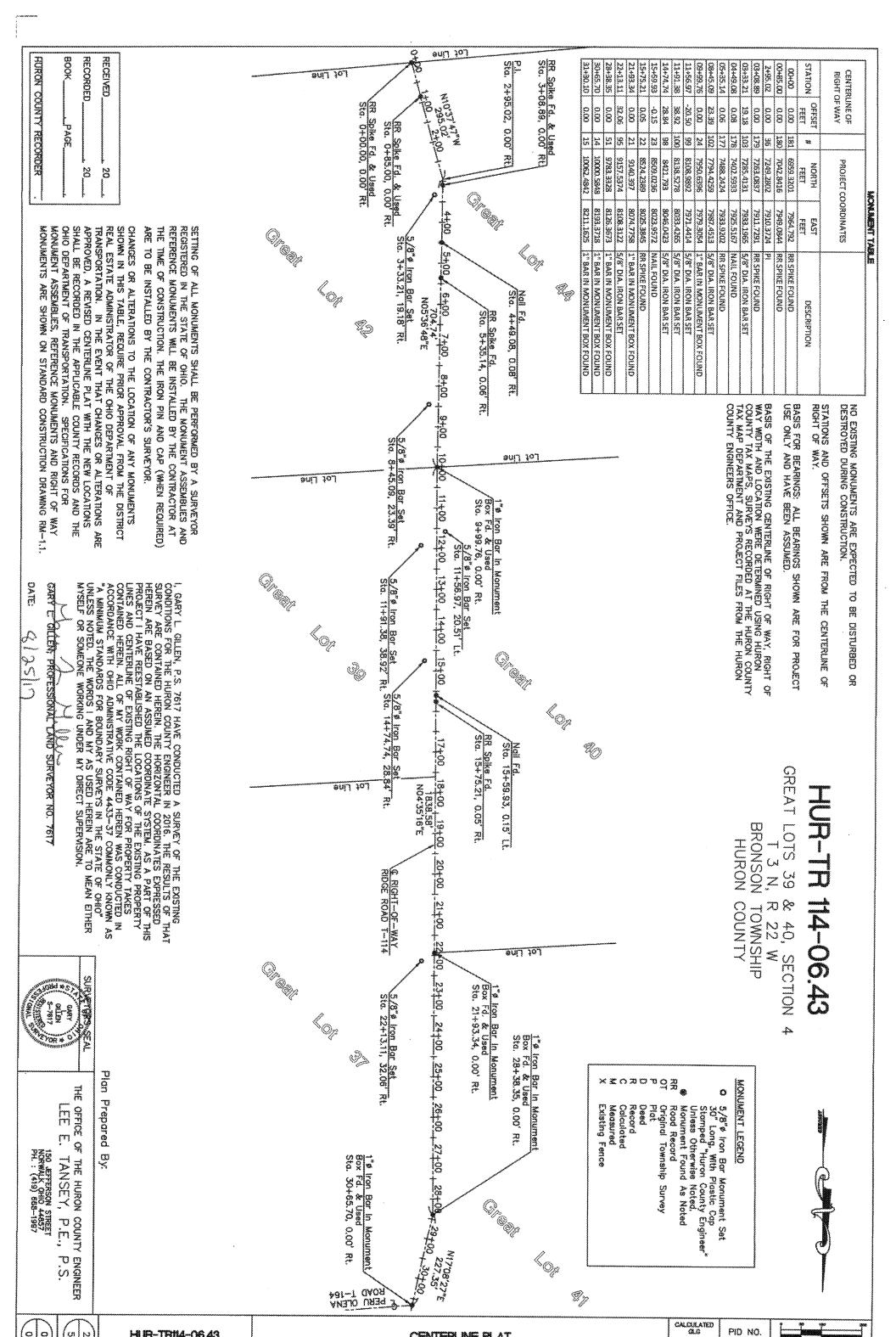
PID NO. 93990

THE EXISTING AND PROPOSED RIGHT OF WAY SHALL BE REFERENCED FROM THE CENTERLINE OF RIGHT OF WAY.

FEDERAL PROJECT NO. E161170

9

IMPROVEMENT OF 0.15 MILE OF TOWNSHIP ROAD 114 (RIDGE ROAD) BY REPLACEMENT OF AN EXISTING STEEL TRUSS OVER THE EAST BRANCH OF THE HURON RIVER WITH A CONCRETE BOX BEAM TYPE STRUCTURE INCLUDING APPROACH ROADWAY WORK.



CENTERLINE PLAT

(0)

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HUR-TRII4-06.43

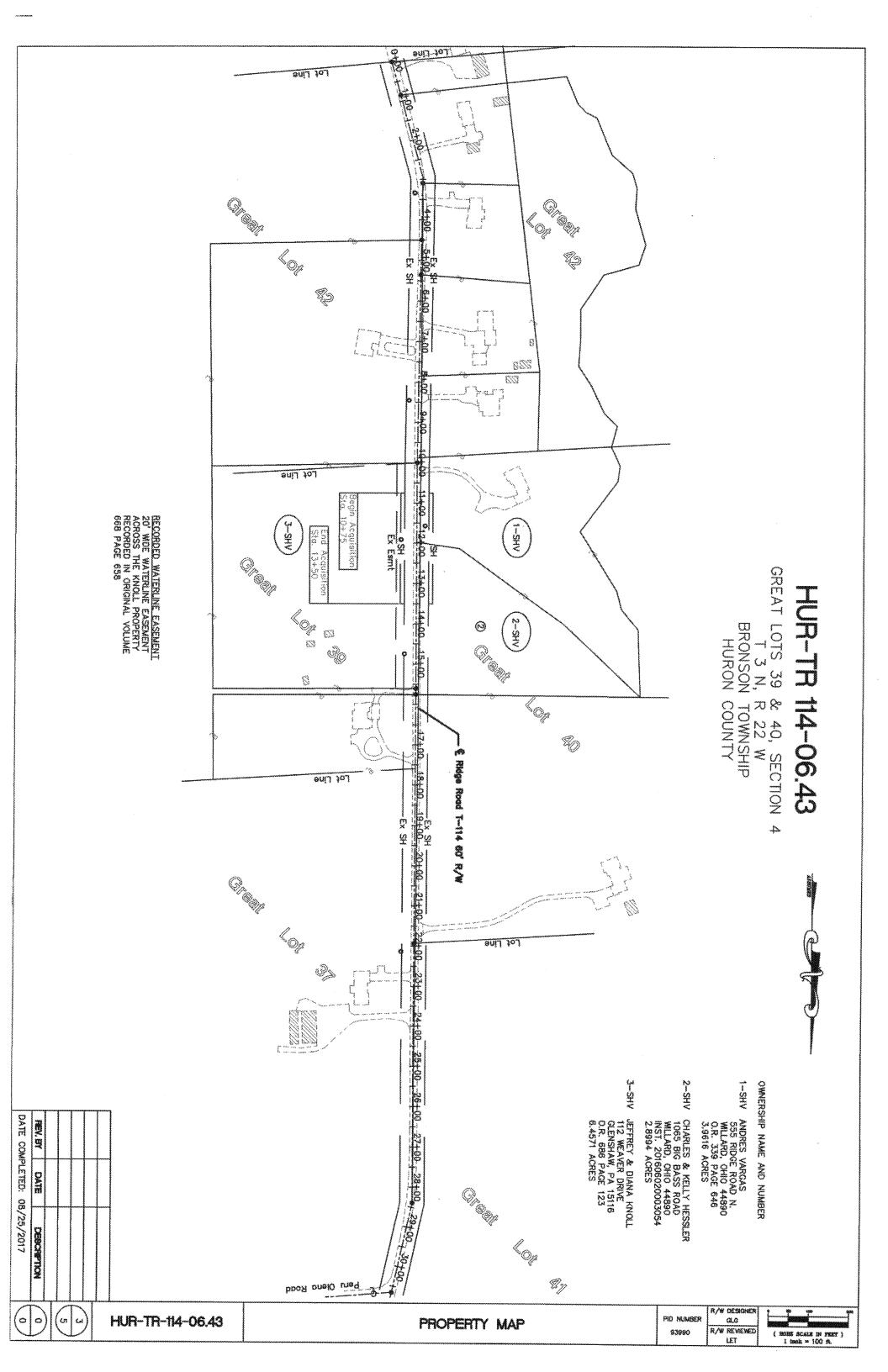
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PID NO.

93990

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