F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 64H18		

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR HIGHWAY STANDARDS, SEE SHEET NO. 2

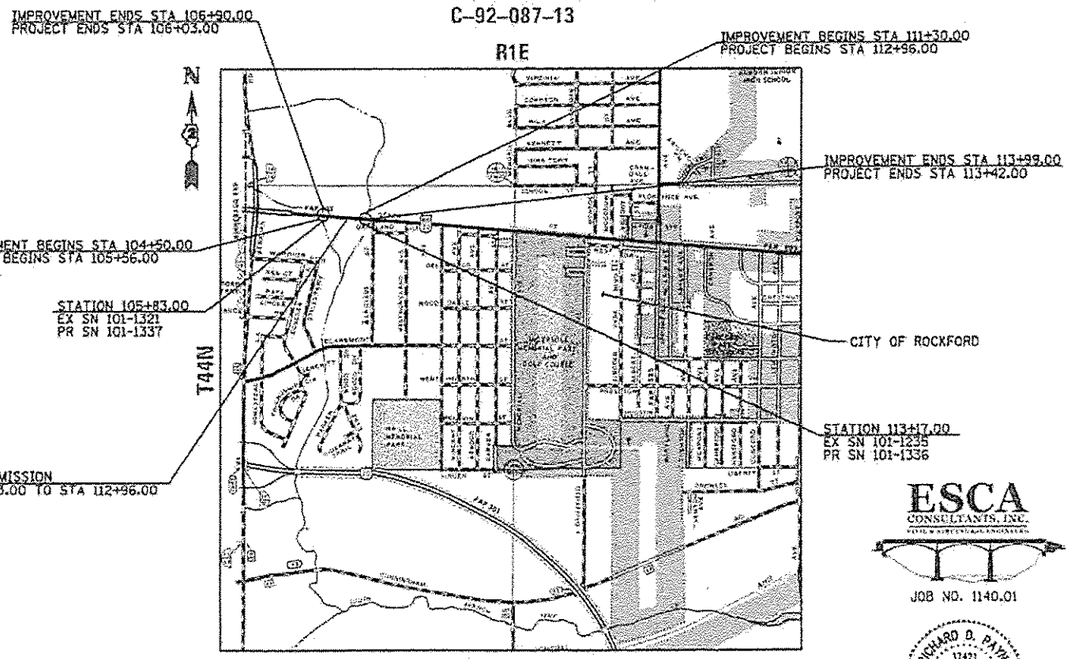
TOWNSHIP: ROCKFORD
NORTHWEST ROCKFORD SECTION 19

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

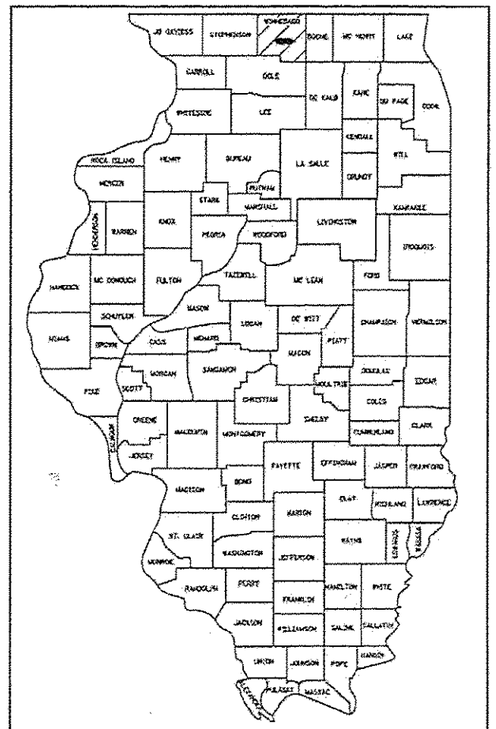
FAP ROUTE 303 (US BUS 20)
SECTION 40T-1
PROJECT: ACNHPP-0303(059)
WINNEBAGO COUNTY

BOX CULVERT REPLACEMENTS
US BUS 20 (WEST STATE STREET)
OVER BRANCHES OF KENT CREEK
C-92-087-13



LOCATION MAP

D-92-088-11



LOCATION OF SECTION INDICATED THUS: ■

0' 100' 200' 300' — 1" = 100'
0 10 20 30 — 1" = 10'
0' 50' 100' — 1" = 50'
0' 40' 80' — 1" = 40'
0' 30' 60' 90' — 1" = 30'
0' 20' 40' 60' 80' 100' — 1" = 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT MANAGER: TRACI DUDEN
815-284-5932
TRACI.DUDEN@ILLINOIS.GOV
PROJECT ENGINEER: STEVE ROBERY
CONSULTANT SERVICES: ERIC HENKEL
217-384-0505
ELH@ESCACONSULTANTS.COM

CONTRACT NO. 64H18

GROSS LENGTH = 786 FT. = 0.149 MILE
NET LENGTH = 93 FT. = 0.018 MILE
OMISSION LENGTH = 693 FT. = 0.131 MILE

ESCA CONSULTANTS, INC.

JOB NO. 1140.01

RICHARD D. PAYNE 37421 LICENSED PROFESSIONAL ENGINEER OF STATE OF ILLINOIS

EXPIRES 11-30-2015

SIGNATURE

01-22-2015
DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan 28th 20 15

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 14 20 15

ENGINEER OF DESIGN AND ENVIRONMENT

Aug 14 20 15

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

LIST OF HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-08	PAVEMENT JOINTS
420701-02	PAVEMENT FABRIC
442101-07	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
542001-04	CONCRETE END SECTIONS FOR PIPE CULVERTS 15" (375 mm) THRU 84" (2100 mm) DIAMETER
542311-05	TRAVERSABLE PIPE GRATE
542401-01	METAL END SECTION FOR PIPE CULVERTS
602416-04	MANHOLE, TYPE A, 8' (2.4 m) DIAMETER
602601-03	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS, TYPE 1
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
635001-01	DELINEATORS
666001-01	RIGHT-OF-WAY MARKERS
701101-04	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701426-07	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701602-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701901-04	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

ESCA CONSULTANTS, INC.

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 '/ in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/28/2015 9:24:05 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS AND HIGHWAY STANDARDS

SCALE : NA | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	2
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

1. THE REMOVAL OF BITUMINOUS SURFACING LESS THAN 6 INCH THICKNESS NOT ON A RIGID TYPE BASE REMOVED IN CONJUNCTION WITH THE BASE SHALL BE REMOVED AS EARTH EXCAVATION. THE REMOVAL OF BITUMINOUS SURFACING ON A RIGID TYPE BASE OR A THICKNESS OF 6 INCHES OR MORE ON A FLEXIBLE BASE REMOVED IN CONJUNCTION WITH THE BASE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL OF THE TYPE SPECIFIED.

2. THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE CAPABLE OF SUPPORTING VEGETATION. THE SOIL MUST BE FROM THE A HORIZON (ZERO TO 2' DEEP) OF SOIL PROFILES OF LOCAL SOILS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

3. ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

4. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 4 OR 2A SHALL BE USED, EXCEPT IN FRONT OF PROPERTIES WHERE THE GRASS WILL BE MOWED, THEN USE SEEDING, CLASS 1. CLASS 2A SHALL BE USED ON FRONT SLOPES AND DITCH BOTTOMS. CLASS 4 SHALL BE USED ON ALL BACKSLOPES AND AREAS BEHIND THE BACKSLOPE, AND BEYOND THE TOE OF FRONT SLOPE ON FILL SECTIONS WITHOUT DITCHES.

5. FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE RATE SPECIFIED IN SECTION 250 OF THE STANDARD SPECIFICATIONS. THIS SHALL BE INCLUDED IN THE COST OF THE SEEDING.

6. PLACEMENT AND COMPACTION OF THE BACKFILL FOR PROPOSED ACROSS ROAD CULVERTS AND STORM SEWERS AND EXISTING ACROSS ROAD CULVERTS AND STORM SEWERS THAT ARE REMOVED SHALL CONFORM TO SECTION 502.10 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT THE MATERIAL SHALL CONFORM TO ARTICLE 208.02 OF THE STANDARD SPECIFICATIONS, AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD LABORATORY DENSITY. ANY MATERIAL CONFORMING TO THE REQUIREMENTS OF ARTICLE 1003.04 OR 1004.05 WHICH HAS BEEN EXCAVATED FROM THE TRENCHES SHALL BE USED FOR BACKFILLING THE TRENCHES. THE EXCAVATION, WITHIN 2 FEET OUTSIDE OF CONCRETE CURB OR DRIVEWAY PAVEMENT, SHALL BE BACKFILLED WITH TRENCH BACKFILL MATERIAL TO THE BOTTOM OF THE PROPOSED SUBGRADE AS SHOWN IN THE PLANS. IMPERVIOUS MATERIAL SHALL BE USED ON THE OUTER 3 FEET AT EACH END OF THE CULVERT. TRENCH BACKFILL MATERIAL WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PRECAST CONCRETE BOX CULVERTS, STORM SEWERS, AND STORM SEWER REMOVAL.

7. ALL MANDATORY JOINT SEALING FOR CLASS A, CLASS B, AND CLASS B (HINGE JOINTED) PATCHES AS SHOWN ON THE PLANS WILL NOT BE MEASURED FOR PAYMENT. OPTIONAL SAWING OF THE JOINT FOR THE SEALANT RESERVOIR WILL NOT BE MEASURED FOR PAYMENT.

   FOR ALL CONCRETE PATCHING THAT WILL NOT BE RESURFACED, THE CONCRETE SHALL BE STRUCK OFF FLUSH WITH THE EXISTING PAVEMENT SURFACE AT EACH END OF THE PATCH.

   THE ENGINEER RESERVES THE RIGHT TO CHECK ALL PATCHES FOR SMOOTHNESS BY THE USE OF A 10' ROLLING STRAIGHT EDGE SET TO A 3/16" TOLERANCE IN THE WHEEL PATHS. ANY PATCH AREAS HIGHER THAN 3/16" MUST BE GROUND SMOOTH WITH AN APPROVED GRINDING DEVICE CONSISTING OF MULTIPLE SAWS. THE USE OF BUSHHAMMER OR OTHER IMPACT DEVICES WILL NOT BE PERMITTED. ANY PATCH WITH DEPRESSIONS GREATER THAN 3/16" SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER.

   THE MANDATORY SAW CUTS FOR PAVEMENT PATCHING ARE:

   CLASS A PATCH: CUT TWO TRANSVERSE SAW CUTS AT EACH END OF THE PATCH; ONE FULL DEPTH AND ONE PARTIAL DEPTH. THE LONGITUDINAL EDGES OF THE PATCH SHALL BE CUT FULL DEPTH. WHEN THE PATCH IS ADJACENT TO A PCC SHOULDER, TWO SAW CUTS ALONG THE SHOULDER WILL BE REQUIRED.

   CLASS B PATCH: CUT TWO TRANSVERSE SAW CUTS OUTLINING THE PATCH AND ONE TRANSVERSE PRESSURE RELIEF SAW CUT. THE LONGITUDINAL EDGES OF THE PATCH SHALL BE CUT FULL DEPTH. WHEN THE PATCH IS ADJACENT TO A PCC SHOULDER, TWO SAW CUTS ALONG THE SHOULDER WILL BE REQUIRED.

   THE MANDATORY SAW CUTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SAW CUTS.

8. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S):	SURFACE	BINDER
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N70	4.0 @ N70
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5	IL 19.0 FG
FRICTION AGGREGATE:	D	NA
20 YEAR ESAL:	6.0	6.0
QUALITY MANAGEMENT PROGRAM TO BE USED:	QC/QA	QC/QA
SUBLOT TONNAGE:		

9. A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.

10. THE NEW NUMBERS FOR THESE STRUCTURES WILL BE:
    STATION 105+83.00 SN 101-1337
    STATION 113+17.00 SN 101-1336

11. THE BORING LOGS FOR THIS STRUCTURE INDICATE THAT GROUNDWATER LEVELS MAY ENCROACH ON THE CONSTRUCTION LIMITS OF THIS CULVERT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL THE GROUND WATER AND DIVERT THE STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREA FREE OF WATER. THE METHOD OF CONTROLLING THE WATER SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER AND THE COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PRECAST CONCRETE BOX CULVERTS.

12. CULVERT FLOWS MUST BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOW SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOBSITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.

13. PRECAST GRATED INLET SPECIALS MAY BE SUBSTITUTED IN LIEU OF CAST-IN-PLACE UNITS WITH FLOORS UPON RECEIPT OF MANUFACTURER'S SHOP DRAWINGS WHICH HAVE BEEN APPROVED BY THE DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING NECESSARY DIMENSIONS ON THE EXISTING DRAINAGE STRUCTURE REQUIRED FOR THE ATTACHMENT. NO ADDITIONAL COST FOR THIS SUBSTITUTION SHALL BE ALLOWED.

GENERAL NOTES CONT'D

14. THE PROPOSED PIPES FOR ENTRANCES AND SIDE ROADS SHALL BE PLACED IN LINE WITH THE EXISTING OR PROPOSED DITCH LINE.

15. CONNECTING BANDS FOR CORRUGATED METAL PIPES SHALL BE METAL AND SHALL BE COATED WITH THE SAME MATERIAL AS THE PIPE SECTIONS. THE CONNECTING BANDS SHALL BE A MINIMUM OF 18" WIDE.

16. ALL FRAMES AND GRATES OF DRAINAGE STRUCTURES TO BE REMOVED OR FILLED SHALL BE CAREFULLY SALVAGED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

17. THE COST OF MAKING SEWER CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE VARIOUS CONTRACT UNIT PRICES FOR STORM SEWER.

18. LATERAL DISTANCES FROM THE CENTERLINE ON ALL INLETS ARE TO THE FACE OF THE INLET.

19. THE NEW MANHOLE LIDS ON THIS PROJECT SHALL HAVE THE WORD "STORM", "SANITARY", OR "WATER" ON THE LID. THE WORD TO BE USED IS NOTED ON THE PLANS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE WORD TO BE USED ON OTHER LIDS NOT NOTED ON THE PLANS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS WORK.

20. ALL PROPOSED MANHOLES ON THIS PROJECT SHALL BE CAST-IN-PLACE OR PRECAST. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR MANHOLE OF THE TYPE AND SIZE SPECIFIED.

21. THE CONTRACTOR SHALL DETERMINE FLOWLINES OF EXISTING SEWER LINES. THIS INFORMATION IS NECESSARY BEFORE ORDERING INLETS AND MANHOLES. THE PLAN INFORMATION SHOWN IS APPROXIMATE AND BASED ON THE SURVEY DATA AVAILABLE.

22. WHERE FIELD TILE IS ENCOUNTERED, STORM SEWER OR PIPE DRAIN WILL BE USED IN ACCORDANCE WITH SECTION 611. THE MINIMUM SIZE FOR REPLACEMENT WILL BE 6" FOR PIPE DRAINS AND 8" FOR STORM SEWER. A FIELD TILE JUNCTION VAULT WILL BE CONSTRUCTED AT THE RIGHT OF WAY TO CONNECT THE TILE AND STORM SEWER. SEE THE SUMMARY OF QUANTITIES FOR THE ESTIMATED QUANTITIES.

23. DELINEATORS SHALL BE INSTALLED AS SHOWN IN STANDARD 635001, EXCEPT THAT THE POST SHALL BE ROTATED 180° AND ONLY METAL-BACKED DELINEATORS SHALL BE PERMITTED. DELINEATORS SHALL BE PLACED AT THE ENDS OF APPROACH GUARDRAIL TERMINAL SECTIONS, AND AT EACH HEADWALL OR END SECTION OF AR CULVERTS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR DELINEATORS.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND MAINTAINING AN ELECTRONIC LOG OF ALL STAKEOUT SURVEY THAT IS PERFORMED ON THE JOB, EITHER BY HIM/HER OR ANY SUBCONTRACTOR PERFORMING THE STAKEOUT. UPON REQUEST, ALL LOGS SHALL BE SUBMITTED TO THE DEPARTMENT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS WORK, BUT SHALL BE CONSIDERED INCLUDED IN THE COST FOR CONSTRUCTION LAYOUT.

25. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

    1. ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
    2. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
    3. THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
    4. CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

26. PERMANENT SURVEY MARKERS, TYPE II, SHALL BE SET AS DIRECTED BY THE ENGINEER. BRIDGE OR CULVERT PROJECTS SHALL HAVE ONE SURVEY MARKER PLACED NEAR THE STRUCTURE. ESTIMATED: 1 EACH.

27. PERMANENT SURVEY MARKERS, TYPE II SHALL BE CAST-IN-PLACE AS SHOWN ON DISTRICT STANDARD 66.2. OPTION 2 WOULD BE TO INSTALL A VAULTED STYLE MONUMENT AS DESCRIBED BY NGS AS A 3D MONUMENT (TOP SECURITY SLEEVE ROD MONUMENT), WITH INSTALLATION INSTRUCTIONS PROVIDED BY THE DISTRICT CHIEF OF SURVEYS. IF POURED IN PLACE, THE BOTTOM OF THE MARKER SHALL BE 5'-0" BELOW THE GROUND SURFACE.

28. THE PERMANENT SURVEY MARKERS, IF POSSIBLE, SHALL BE INSTALLED AT THE BEGINNING OF THE JOB AND PROTECTED THROUGHOUT.

29. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A DESCRIPTION OF LOCATION, ELEVATION, AND COORDINATES FOR EACH PERMANENT SURVEY MARKER. THE HORIZONTAL COORDINATES MUST BE DERIVED BY GPS AND THE ELEVATION DERIVED USING AN ELECTRONIC LEVEL. THE META DATA, SUCH AS THE GEOID USED, (NGS ADJUSTMENT IE: 97 HARN, 03, 07), AND THE BASE POINT(S) NAME OR NUMBER SHALL BE SUBMITTED ALONG WITH A COMPLETE COLLECTION LOG. IF COLLECTED USING RTK METHOD, IT WILL REQUIRE EITHER 3 COLLECTIONS (AVERAGED) FROM 2 DIFFERENT BASES, OR A MINIMUM OF 3 COLLECTIONS (AVERAGED), AT LEAST 2 HOURS APART, FROM THE SAME BASE. IF USING A CORS TYPE NETWORK, THE COLLECTION PROCEDURE SHALL INCLUDE LOCALIZING WITH CHECK SHOTS ON AT LEAST 2 DIFFERENT HARN MONUMENTS BOTH BEFORE AND AFTER COLLECTION. THE LEVEL CIRCUIT SHALL BE RUN FROM FURNISHED MARK TO FURNISHED MARK AND THEN ADJUSTED. THE ERROR OF CLOSURE SHALL BE SUBMITTED WITH THE ELECTRONIC LEVEL NOTES IN A RECOGNIZED FORMAT APPROVED BY THE ENGINEER AND/OR THE CHIEF OF SURVEYS. THE ENGINEER SHALL SUBMIT THIS INFORMATION TO THE DISTRICT CHIEF OF SURVEYS.

30. TREE PLANTING LAYOUT SHALL BE PERFORMED BY THE DISTRICT ROADSIDE MANAGEMENT SPECIALIST. MULCH SHALL BE PLACED 4" THICK AND TO THE DIAMETER AROUND THE TREE AS SHOWN ON DISTRICT STANDARD 92.1. THE MULCH SHALL BE HARDWOOD WOOD CHIPS PLACED ON WEED BARRIER FABRIC. THIS WORK SHALL BE INCLUDED IN THE COST OF THE TREE.

31. RIGHT-OF-WAY MARKERS WILL BE ERECTED PER HIGHWAY STANDARD 666001 WITH THE BACK FACE OF THE MARKER ON THE RIGHT-OF-WAY LINE, UNLESS THE NEW RIGHT-OF-WAY LINE HAS BEEN SURVEYED AND PINNED, IN WHICH INSTANCE THE RIGHT-OF-WAY MARKERS WILL BE ERECTED 12 INCHES INSIDE THE NEW RIGHT-OF-WAY LINE. THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

GENERAL NOTES CONT'D

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:

WEST SHORE PIPELINE COMPANY	(847) 439-0270
COMMONWEALTH EDISON COMPANY	(815) 490-2869
AT&T	(630) 573-5465
NICOR GAS CO.	(630) 983-8676
ROCK RIVER WATER RECLAMATION DISTRICT	(815) 387-7400
COMCAST CABLE	(815) 395-8977
THERMO-FISHER SCIENTIFIC INC.	(815) 987-4640
ROCKFORD WATER DEPARTMENT	(815) 967-7060

IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFICE AT (815) 284-5469 AT LEAST 48 HOURS PRIOR TO WORK.

33. THE APPLICABLE PORTIONS OF ARTICLE 105.07 OF THE STANDARD SPECIFICATION SHALL APPLY EXCEPT FOR THE FOLLOWING: THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE VERTICAL DEPTHS OF THE UNDERGROUND UTILITIES WHICH MAY INTERFERE WITH CONSTRUCTION OPERATIONS. THIS WORK WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICE FOR THE ITEM OF CONSTRUCTION INVOLVED.

    PER SB 699 (90 DAY UTILITY RELOCATION LAW), ONCE RIGHT-OF-WAY IS CLEAR TO AWARD THE PROJECT, A NOTICE WILL BE SENT TO THE UTILITY COMPANIES INSTRUCTING THEM TO HAVE THEIR FACILITIES RELOCATED WITHIN 90 DAYS. ESTIMATED DATE RELOCATION COMPLETE = AWARD DATE + 100 DAYS.

34. TIE BARS SHALL BE INSTALLED TO TIE PCC APPURTENANCE TO ADJACENT EXISTING CONCRETE PAVEMENT.

TIE THE FOLLOWING TO THE EXISTING CONCRETE PAVEMENT		LENGTH, SIZE, AND SPACING OF TIE BARS
GUTTER OR CURB & GUTTER	STD. 606001	24" LONG NO. 6 @ 24" CENTERS
PCC BASE COURSE	STD. 353001	24" LONG NO. 6 @ 30" CENTERS
PCC PAVEMENT	STD. 420101	24" LONG NO. 6 @ 30" CENTERS

    TIE BARS TO BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF ARTICLE 420.05(b) OF THE STANDARD SPECIFICATIONS. SEE HIGHWAY STANDARD 420001 FOR DETAIL ON LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR. THE COST OF THE TIE BARS TO BE INCLUDED IN THE COST OF THE PCC APPURTENANCE ADJACENT TO THE EXISTING PAVEMENT.

35. CADD DATA WILL BE AVAILABLE TO CONTRACTORS AND CONSULTANTS WORKING ON THIS PROJECT. THIS INFORMATION WILL BE PROVIDED UPON REQUEST AS MICROSTATION CADD FILES AND GEOPAK, COORDINATE GEOMETRY FILES ONLY. IF DATA IS REQUIRED IN OTHER FORMATS IT WILL BE YOUR RESPONSIBILITY TO MAKE THESE CONVERSIONS. IF ANY DISCREPANCY OR INCONSISTENCY ARISES BETWEEN THE ELECTRONIC DATA AND THE INFORMATION ON THE HARD COPY, THE INFORMATION ON THE HARD COPY SHOULD BE USED. CONTACT THE DISTRICT'S PROJECT ENGINEER TO REQUEST THESE FILES.

36. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE MUNICIPALITY TO DETERMINE APPROVED METHODS OF UTILITY STRUCTURE ADJUSTMENT. UTILITY STRUCTURES MAY INCLUDE, BUT ARE NOT LIMITED TO, MANHOLES, WATER VALVES HANDHOLES, ETC. ALL MATERIALS AND WORK NECESSARY TO COMPLETE ADJUSTMENTS PER MUNICIPALITY REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE COST OF ASSOCIATED ADJUSTMENT PAY ITEM.

37. TEMPORARY IMPACT ATTENUATORS WILL BE MEASURED AS EACH FOR EACH ATTENUATOR SUPPLIED ON THE JOB AS SPECIFIED IN THE PLANS, AND SHALL INCLUDE THE COST OF RENTING/OWNING THE ATTENUATOR FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, TEMPORARY OF THE TYPE SPECIFIED.

    RELOCATE TEMPORARY IMPACT ATTENUATORS WILL BE PAID FOR AS EACH AND WILL BE PAID FOR EACH TIME THE ATTENUATOR IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS. RELOCATE OF THE TYPE SPECIFIED.

38. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 704 OF THE STANDARD SPECIFICATIONS. TEMPORARY CONCRETE BARRIER WILL BE MEASURED IN FEET ALONG THE CENTERLINE OF THE BARRIER AND SHALL INCLUDE THE COST OF RENTING/OWNING THE BARRIER FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY IN ACCORDANCE WITH SECTION 704 OF THE STANDARD SPECIFICATIONS. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR TEMPORARY CONCRETE BARRIER.

    RELOCATE TEMPORARY CONCRETE BARRIER WILL BE PAID FOR IN FEET ALONG THE CENTERLINE OF THE BARRIER, AND WILL BE PAID FOR EACH TIME THE BARRIER IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.

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ESCA CONSULTANTS, INC.

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 9:24:26 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND COMMITMENTS

SCALE : NA | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	3
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WATER MAIN GENERAL NOTES

THESE NOTES SUPPLEMENT THE GENERAL NOTES INDICATED ON SHEET 3 OF THIS PLAN SET AND ARE ONLY APPLICABLE TO THE WATER MAIN CONSTRUCTION.

ANY CONSTRUCTION OR WORK INDICATED IN THE PLANS OR SPECIFIED IN THE PROPOSAL SHALL BE COMPLETED BY THE CONTRACTOR. ANY CONSTRUCTION OR WORK NOT INCLUDED IN A PAY ITEM SHALL BE INCIDENTAL TO THE PROJECT COST.

ALL EXCAVATION AREAS SHALL BE KEPT DEWATERED DURING CONSTRUCTION OPERATIONS UNTIL BACKFILL IS IN PLACE.

TRENCH BACKFILL SHALL BE USED IN LOCATIONS WHERE THERE IS AN EXISTING OR PROPOSED PERMANENT SURFACE OR STRUCTURE. THE COST FOR TRENCH BACKFILL FOR WATER MAIN WORK ITEMS SHALL BE INCLUDED IN THE COST OF SAID ITEMS.

ALL UTILITY LOCATIONS AND DEPTHS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR FIELD LOCATES PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES. NOT ALL UTILITIES/SERVICES ARE SHOWN.

EXISTING WATER MAIN SHUT DOWN TIME SHALL BE KEPT TO A MINIMUM. WORK SHALL BE COORDINATED WITH CITY OF ROCKFORD WATER AND PUBLIC WORKS PERSONNEL. NO USER SHALL BE WITHOUT WATER FOR MORE THAN 24 HOURS, UNLESS SPECIAL APPROVAL IS OBTAINED.

DIMENSIONS SHOWING WATER MAIN LOCATIONS ARE APPROXIMATE. THE ALIGNMENT MAY BE ADJUSTED WITH THE ENGINEER'S APPROVAL WHERE EXISTING BURIED UTILITIES MAY CONFLICT.

LOCKING GASKETS SHALL BE USED ON ENCASED WATER MAIN TO ENSURE THE JOINTS REMAIN INTACT DURING PIPE MOVEMENTS THROUGH THE ENCASEMENT.

ALL FITTINGS (BENDS, TEES, CROSSES, PLUGS, LOCKING GASKETS, AND RESTRAINING GLANDS) REQUIRED TO COMPLETE THE INSTALLATION OF DUCTILE IRON WATER MAINS, AS SHOWN ON THE PLANS, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

WATER VALVE BOX AND DOMESTIC WATER SERVICE BOX ADJUSTMENTS SHALL BE DETERMINED ON SITE.

ALL WATER MAIN SHALL BE PRESSURE TESTED FOR ACCEPTANCE IN ACCORDANCE WITH SECTION 41-2.14 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AND THE "CITY OF ROCKFORD WATER DIVISION SPECIFICATIONS (SECTION 12)". THE COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

ALL WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 41-2.15 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AND THE "CITY OF ROCKFORD WATER DIVISION SPECIFICATIONS (SECTION 12)". THE COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

THE CONTRACTOR SHALL PROVIDE 'WHIPS' AS NECESSARY TO SUPPLEMENT HYDRANT LOCATIONS FOR FLUSHING AND AIR RELEASE ON THE NEWLY CONSTRUCTED WATER MAINS. WHIPS SHALL BE CONSTRUCTED USING 1-INCH MIN. TO 2-INCH MAX. DIAMETER CORPORATION STOPS AND COPPER TUBING. WHEN ALL TESTING AND FLUSHING OPERATIONS HAVE BEEN COMPLETED, THE CORPORATION STOPS SHALL BE CLOSED AND THE COPPER TUBING SHALL BE CUT AND CAPPED. THE COST TO FURNISH, INSTALL, AND REMOVE THE WHIPS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

REQUIREMENTS FOR SCHEDULED WATER MAIN VALVE SHUT OFF

A) THE CONTRACTOR SHALL OBTAIN THE PERMISSION OF THE WATER SUPERINTENDENT, OR HIS/HER DESIGNEE, PRIOR TO ANY WATER MAIN VALVE SHUT OFF.

B) THE CONTRACTOR SHALL NOTIFY ALL WATER CUSTOMERS AFFECTED BY THE WATER MAIN VALVE SHUT OFF AT LEAST 24 HOURS IN ADVANCE, USING FORMS SUPPLIED BY THE WATER DIVISION. CONTRACTOR IS RESPONSIBLE TO HANG TAGS ON EACH BUILDING AFFECTED.

C) THE CONTRACTOR SHALL NOTIFY THE WATER DIVISION OPERATIONS CENTER OPERATOR (987-5712) PRIOR TO ANY WATER MAIN VALVE SHUT OFF AND PROVIDE THE FOLLOWING INFORMATION (PURSUANT TO ILLINOIS MUNICIPAL CODE 65 ILCS 5/11-20-10.5):

STREETS AND BOUNDARIES OF SHUT DOWN
TIME OF SHUT DOWN
APPROXIMATE DURATION OF SHUT DOWN
NUMBER OF CUSTOMERS AFFECTED
IF NON-RESIDENTIAL CUSTOMERS (HOSPITALS, NURSING HOMES, RESTAURANTS, ETC.) ARE AFFECTED, A COUNT OF HOW MANY INDIVIDUALS AFFECTED WILL BE PROVIDED.

D) NO SHUT DOWNS ARE ALLOWED ON FRIDAYS. WORK MUST BE COMPLETED TO ENSURE COMPLETION OF BACTERIOLOGICAL TESTING.

E) THE CONTRACTOR SHALL NOTIFY WATER DIVISION OPERATIONS CENTER OPERATOR UPON COMPLETION OF REPAIRS AND RESTORATION OF WATER SERVICE.

F) THE CONTRACTOR SHALL MEET WITH WATER DIVISION PERSONNEL AT LEAST TWO (2) DAYS PRIOR TO START OF CONSTRUCTION TO COORDINATE EXERCISING VALVES AND DETERMINING VALVE SHUT OFF PATTERNS DURING CONSTRUCTION. THE SHUT DOWN SHALL BE ALLOWED TO PROCEED ONLY AFTER THE WATER DIVISION REPRESENTATIVE HAS DETERMINED THAT THE REQUIRED VALVES ARE FUNCTIONING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TURNING VALVES ON AND OFF DURING CONSTRUCTION AND ACCEPTS THE RESPONSIBILITY FOR ANY DAMAGES TO VALVES DURING CONSTRUCTION.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

REQUIREMENTS FOR UNSCHEDULED (EMERGENCY) WATER MAIN VALVE SHUT OFF

A) IN THE EVENT THE CONTRACTOR MUST PERFORM AN UNSCHEDULED WATER MAIN VALVE SHUT OFF; THE CONTRACTOR SHALL NOTIFY THE WATER DIVISION OPERATIONS CENTER OPERATOR (987-5712) AS SOON AS POSSIBLE.

B) THE CONTRACTOR SHALL NOTIFY ALL WATER CUSTOMERS AFFECTED BY THE WATER MAIN VALVE SHUT OFF AND THE NEED TO BOIL WATER AS SOON AS POSSIBLE, USING FORMS SUPPLIED BY THE WATER DIVISION.

C) THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION (PURSUANT TO ILLINOIS MUNICIPAL CODE 65 ILCS 5/11-20-10.5):

STREETS AND BOUNDARIES OF SHUT DOWN
TIME OF SHUT DOWN
APPROXIMATE DURATION OF SHUT DOWN
NUMBER OF CUSTOMERS AFFECTED
IF NON-RESIDENTIAL CUSTOMERS (HOSPITALS, NURSING HOMES, RESTAURANTS, ETC.) ARE AFFECTED, A COUNT OF HOW MANY INDIVIDUALS AFFECTED WILL BE PROVIDED.

D) IF THE CONTRACTOR IS INVOLVED IN REPAIRS, THE CONTRACTOR SHALL NOTIFY WATER DIVISION OPERATIONS CENTER OPERATOR UPON COMPLETION OF REPAIRS WHEN WATER SERVICE HAS BEEN RESTORED.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

EXCAVATION AND BACKFILL

THE WATER MAIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH DIVISION 11 OF THE ILLINOIS STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION, LATEST EDITION.

REVISE THE TERMS SELECTED GRANULAR MATERIAL IN SAID SPECIFICATION TO TRENCH BACKFILL.

BEDDING, HAUNCHING, AND INITIAL BACKFILL WILL BE INCLUDED IN THIS ITEM AND SHALL BE CONSTRUCTED OF FA-6 FINE AGGREGATE.

NATIVE MATERIALS LOCATED IN NON-STRUCTURAL AREAS SHALL BE COMPACTED TO 90% STANDARD PROCTOR OPTIMUM DENSITY.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

BACTERIOLOGICAL SAMPLING

BACTERIOLOGICAL SAMPLING SHALL BE DONE IN ACCORDANCE WITH AWWA C651-99 REGULATIONS AND EPA REGULATION SECTION 652.203. BACTERIOLOGICAL SAMPLING SHALL BE COLLECTED FROM THE PIPELINE FOLLOWING DISINFECTION AND FINAL FLUSHING. SAMPLES SHALL BE DELIVERED TO THE CITY OF ROCKFORD ENVIRONMENTAL LABORATORY (1111 CEDAR STREET) FOR ANALYSIS. SAMPLES MUST BE SUBMITTED IN CITY OF ROCKFORD LABORATORY APPROVED BOTTLES THAT MAY BE OBTAINED FROM THE LABORATORY. A COLIFORM ANALYSIS REPORT SHALL BE SUBMITTED WITH EACH SAMPLE (ALSO AVAILABLE AT THIS ADDRESS) AND SHALL INDICATE THE CHLORINE RESIDUAL (EITHER FREE OR TOTAL) AT THE TIME THE SAMPLE WAS COLLECTED. FAILURE TO RECORD THE RESIDUAL SHALL RESULT IN THE REJECTION OF THE SAMPLE. IF THE SAMPLE SHOWS THE PRESENCE OF COLIFORM ORGANISMS, THE CONTRACTOR SHALL BE NOTIFIED (CONTACT INFORMATION MUST APPEAR ON THE BACTERIOLOGICAL FORM) AND REPEAT THE DISINFECTION PROCEDURE. ON RESAMPLING, TWO (2) CONSECUTIVELY PASSING SAMPLES COLLECTED ON SUCCESSIVE DAYS (A MINIMUM OF 24 HOURS BETWEEN SAMPLING) SHALL BE REQUIRED.

IF VALVED SECTIONS OF THE PIPELINE ARE DISINFECTED SEPARATELY, EACH SECTION WILL BE CONSIDERED A SEPARATE PIPELINE FOR DISINFECTION, FLUSHING, AND SAMPLING.

THE CITY OF ROCKFORD WILL RETAIN A COPY OF ALL BACTERIOLOGICAL LABORATORY REPORTS AND SUBMIT RESULTS TO THE ILLINOIS EPA AS REQUIRED. A COPY OF THE BACTERIOLOGICAL REPORT SHALL ALSO BE SENT TO THE CITY WATER ENGINEERING SUPERVISOR AND THE CONTRACTOR. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

RECORD DRAWINGS

THE CONTRACTOR SHALL KEEP ON-SITE A SET OF THE PLANS TO BE MAINTAINED AS THE OFFICIAL PROJECT RECORD DRAWINGS. THE CONTRACTOR SHALL MARK UP THE SET OF PLANS WITH ANY REVISIONS IN THE DRAWINGS ON A DAILY BASIS.

THE CONTRACTOR SHALL RECORD MEASUREMENTS TO ALL REDUCERS, BENDS, TEES, AND OTHER BURIED FITTINGS AND APPURTENANCES ASSOCIATED WITH THE WATER CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTE FIELD MEASUREMENTS TO SURFACE APPURTENANCES SUCH AS MANHOLES, CLEANOUTS, TAPPING VALVES, GATE VALVES, CURB STOPS, AND FIRE HYDRANTS.

THE DIMENSIONS SHALL BE INDICATED FROM PHYSICAL FEATURES INDICATED ON THE DRAWINGS AND FROM THE RIGHT-OF-WAY LINES AND PROPERTY LINES INDICATED ON THE DRAWINGS.

THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND INDICATE THE MEASUREMENTS ON THE RECORD DRAWINGS WHERE THE MAINS VARY FROM PLAN DEPTH/GRADE. THE CONTRACTOR SHALL DELIVER THE RECORD DRAWINGS TO THE ENGINEER, ALONG WITH THE FINAL REQUEST FOR PAYMENT ON THE PROJECT.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DUCTILE IRON WATER MAIN.

WATER MAIN CONSTRUCTION NOTES

NO WATER SERVICES ARE EXPECTED TO BE DIRECTLY AFFECTED BY THIS PROJECT.

ALL WATER MAIN IMPROVEMENTS SHALL BE PERFORMED DURING STAGE 1 CONSTRUCTION.

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USER NAME = kah

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN GENERAL NOTES

SCALE : NA | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	4
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	101	101
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	56	56
20200100	EARTH EXCAVATION	CU YD	2130	2130
25000210	SEEDING, CLASS 2A	ACRE	1.00	1.00
25000310	SEEDING, CLASS 4	ACRE	0.50	0.50
Δ 25000750	MOWING	ACRE	1.00	1.00
25100125	MULCH, METHOD 3	ACRE	1.25	1.25
25100630	EROSION CONTROL BLANKET	SQ YD	731	731
25100900	TURF REINFORCEMENT MAT	SQ YD	383	383
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150	150
28000305	TEMPORARY DITCH CHECKS	FOOT	560	560
28000500	INLET AND PIPE PROTECTION	EACH	3	3
28100107	STONE RIPRAP, CLASS A4	SQ YD	268	268
28200200	FILTER FABRIC	SQ YD	363	363

Δ NON-PARTICIPATING (100% STATE)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NA | SHEET NO. 1 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	5
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
28500400	ARTICULATED BLOCK REVETMENT MAT	SQ YD	95	95
35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	304	304
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	907	907
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	248	248
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	30	30
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	84	84
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	186	186
44002226	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6 1/2"	SQ YD	677	677
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	663	663
44201299	DOWEL BARS 1 1/2"	EACH	324	324
44213100	PAVEMENT FABRIC	SQ YD	663	663
44213200	SAW CUTS	FOOT	509	509
44213204	TIE BARS 3/4"	EACH	190	190
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	1
50105220	PIPE CULVERT REMOVAL	FOOT	61	61
50800105	REINFORCEMENT BARS	POUND	114	114
51500100	NAME PLATES	EACH	2	2
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	1	1
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2	2
54001003	BOX CULVERT END SECTIONS, CULVERT NO. 3	EACH	2	2
54010604	PRECAST CONCRETE BOX CULVERTS 6' X 4'	FOOT	302	302
54010606	PRECAST CONCRETE BOX CULVERTS 6' X 6'	FOOT	292	292
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	65	65
54213450	END SECTIONS 15"	EACH	2	2
54215408	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 8"	EACH	1	1
54215410	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 10"	EACH	1	1
54215412	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 12"	EACH	1	1

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URBAN

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
54248510	CONCRETE COLLAR	CU YD	2.4	2.4
54260311	TRAVERSABLE PIPE GRATE	FOOT	729	729
54261642	CONCRETE END SECTION, STANDARD 542001, 42", 1:6	EACH	2	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	79	79
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	12	12
550A0180	STORM SEWERS, CLASS A, TYPE 1 42"	FOOT	85	85
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	29	29
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	21	21
55100500	STORM SEWER REMOVAL 12"	FOOT	127	127
55101200	STORM SEWER REMOVAL 24"	FOOT	115	115
55101600	STORM SEWER REMOVAL 36"	FOOT	14	14
56103400	DUCTILE IRON WATER MAIN 16"	FOOT	305	305
56105760	BUTTERFLY VALVES 16"	EACH	1	1
60100915	PIPE DRAINS 6"	FOOT	20	20

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NA | SHEET NO. 4 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	8
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
60100925	PIPE DRAINS 8"	FOOT	20	20
60100935	PIPE DRAINS 10"	FOOT	20	20
60100945	PIPE DRAINS 12"	FOOT	20	20
60224459	MANHOLES, TYPE A, 8'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2
60500060	REMOVING INLETS	EACH	5	5
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	186	186
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	40	40
61101009	STORM SEWERS PROTECTED, CLASS A, 8"	FOOT	20	20
61101011	STORM SEWERS PROTECTED, CLASS A, 10"	FOOT	20	20
61101013	STORM SEWERS PROTECTED, CLASS A, 12"	FOOT	20	20
61133200	FIELD TILE JUNCTION VAULTS, 3' DIA.	EACH	3	3
61140000	STORM SEWERS (SPECIAL), 8"	FOOT	20	20
61140100	STORM SEWERS (SPECIAL), 10"	FOOT	20	20

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URBAN

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
	61140200	STORM SEWERS (SPECIAL), 12"	FOOT	54	54
	61140900	STORM SEWERS (SPECIAL), 24"	FOOT	14	14
	63500105	DELINEATORS	EACH	6	6
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	26	26
	66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	1	1
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1770	1770
*	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4
	67100100	MOBILIZATION	L SUM	1	1
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1	1
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	736	736
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	16390	16390

* Specialty Items

SUMMARY OF QUANTITIES

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5710	5710
70400100	TEMPORARY CONCRETE BARRIER	FOOT	951	951
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	811	811
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	4	4
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	4	4
78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	126	126
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	5310	5310
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	8
78300100	PAVEMENT MARKING REMOVAL	SQ FT	850	850
* A2000114	TREE, ACER X FREEMANII AUTUMN BLAZE (AUTUMN BLAZE FREEMAN MAPLE), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	8	8
* A2001714	TREE, ACER SACCHARUM (SUGAR MAPLE), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	7	7
X0323660	DROP BOX NO. 1	EACH	1	1
X0324079	EXISTING FIELD TILE REMOVAL	FOOT	114	114
X0327241	STEEL CASING PIPE IN TRENCH, 24 INCH	FOOT	95	95

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* Specialty Items

URBAN

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE 80% FEDERAL 20% STATE MINOR STRUCTURES 0040 SN 101-1336 & 101-1337
X5011100	FOUNDATION REMOVAL	EACH	1	1
X5610716	WATER MAIN REMOVAL, 16"	FOOT	299	299
X5630716	CONNECTION TO EXISTING WATER MAIN 16"	EACH	4	4
X6024240	INLETS, SPECIAL	EACH	4	4
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	210	210
X7810400	TEMPORARY RAISED PAVEMENT MARKER	EACH	146	146
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0024476	FLEXIBLE DELINEATOR MAINTENANCE	EACH	13	13
Z0025505	PROPERTY MARKERS	EACH	6	6
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	469	469
10				

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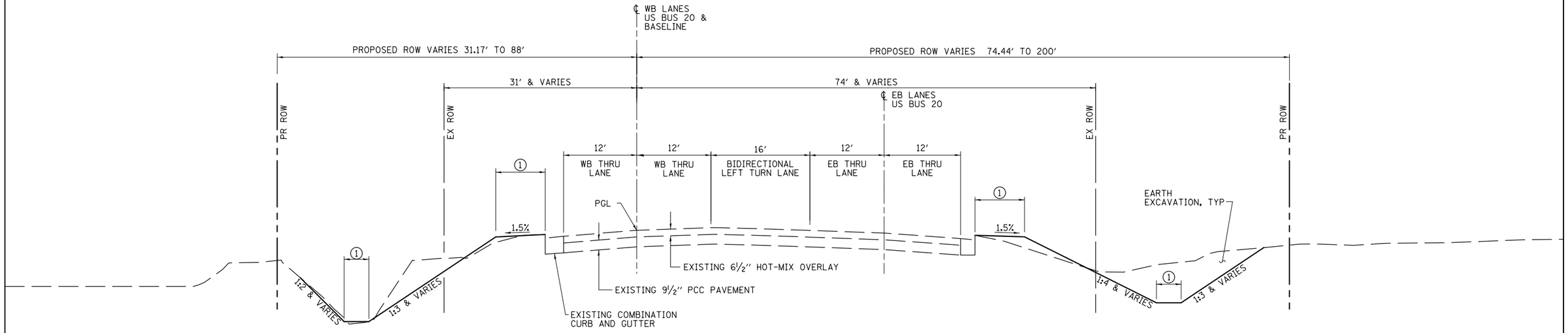
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NA | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

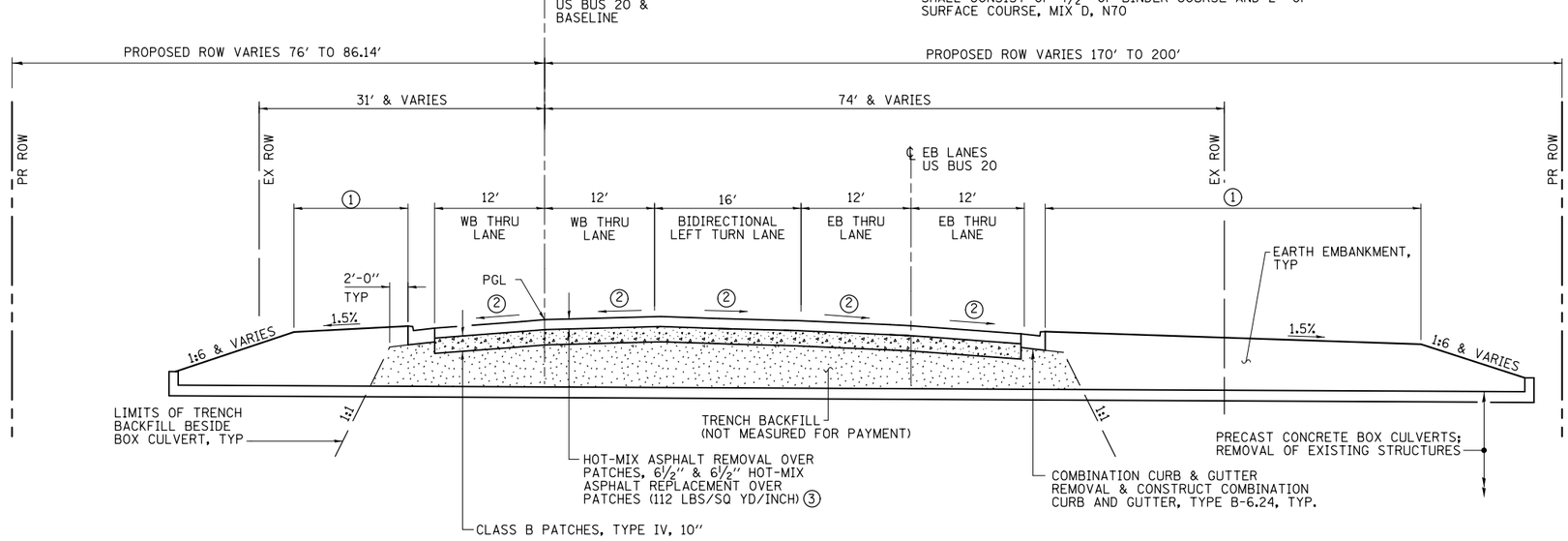
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	4OT-1	WINNEBAGO	72	12
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION

STATION 104+50 TO 105+56
STATION 106+03 TO 106+75
STATION 111+30 TO 112+96
STATION 113+42 TO 114+00

① WIDTH VARIES, SEE CROSS SECTIONS
② MAINTAIN EXISTING CROSS SLOPE
③ 6½″ HOT-MIX ASPHALT REPLACEMENT OVER PATCHES SHALL CONSIST OF 4½″ OF BINDER COURSE AND 2″ OF SURFACE COURSE, MIX D, N70



TYPICAL SECTION

STATION 105+56 TO 106+03
STATION 112+96 TO 113+42

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	13
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)

LOCATION		UNITS	COMMENTS
STA 105+64	29' LT	12	
STA 105+69	29' LT	8	
STA 105+73	26' LT	8	
STA 105+74	174' RT	12	
STA 105+75	160' RT	8	
STA 105+78	163' RT	8	
STA 105+88	160' RT	6	
STA 105+89	160' RT	6	
STA 105+90	160' RT	6	
STA 105+91	160' RT	6	
STA 105+89	72' LT	6	
STA 113+52	137' RT	15	
	TOTAL	101	

20100210 TREE REMOVAL (OVER 15 UNITS DIAMETER)

LOCATION		UNITS	COMMENTS
STA 105+66	169' RT	24	
STA 113+59	123' RT	16	
STA 113+62	150' RT	16	
	TOTAL	56	

25000210 SEEDING, CLASS 2A

LOCATION		ACRE	COMMENTS
STA 104+50 TO 106+90	LT	0.16	FORESLOPES AND DITCH BOTTOMS
STA 104+50 TO 106+80	RT	0.31	FORESLOPES AND DITCH BOTTOMS
STA 111+30 TO 113+99	LT	0.19	FORESLOPES AND DITCH BOTTOMS
STA 112+00 TO 113+99	RT	0.34	FORESLOPES AND DITCH BOTTOMS
	TOTAL	1.00	

25000310 SEEDING, CLASS 4

LOCATION		ACRE	COMMENTS
STA 104+50 TO 106+90	LT	0.05	BACKSLOPES AND BEYOND
STA 104+50 TO 106+80	RT	0.22	BACKSLOPES AND BEYOND
STA 111+30 TO 113+99	LT	0.08	BACKSLOPES AND BEYOND
STA 112+00 TO 113+99	RT	0.15	BACKSLOPES AND BEYOND
	TOTAL	0.50	

25000750 MOWING

LOCATION		ACRE	COMMENTS
STA 104+50 TO 106+90	LT	0.16	
STA 104+50 TO 106+80	RT	0.31	
STA 111+30 TO 113+99	LT	0.19	
STA 112+00 TO 113+99	RT	0.34	
	TOTAL	1.00	

25100125 MULCH, METHOD 3

LOCATION		ACRE	COMMENTS
STA 104+50 TO 106+90	LT	0.14	
STA 104+50 TO 106+80	RT	0.46	
STA 111+30 TO 113+99	LT	0.22	
STA 112+00 TO 113+99	RT	0.43	
	TOTAL	1.25	

25100630 EROSION CONTROL BLANKET

LOCATION		SQ YD	COMMENTS
STA 104+50 TO 106+80	RT	331	LOCATIONS SHOWN ON EROSION CONTROL PLANS
STA 111+30 TO 113+99	LT	116	LOCATIONS SHOWN ON EROSION CONTROL PLANS
STA 112+00 TO 113+99	RT	284	LOCATIONS SHOWN ON EROSION CONTROL PLANS
	TOTAL	731	

25100900 TURF REINFORCEMENT MAT

LOCATION		SQ YD	COMMENTS
STA 104+50 TO 105+90	LT	297	
STA 113+17	LT	86	INSTALL AT UPSTREAM END OF CULVERT
	TOTAL	383	

28000250 TEMPORARY EROSION CONTROL SEEDING

LOCATION		POUND	COMMENTS
STA 104+50 TO 113+99	LT & RT	150	ESTIMATED QUANTITY
	TOTAL	150	

28000305 TEMPORARY DITCH CHECKS

LOCATION		FOOT	COMMENTS
STA 104+75	79' RT	21	
STA 104+99	84' RT	21	
STA 105+20	99' RT	21	
STA 105+29	48' LT	17	
STA 105+34	120' RT	36	
STA 105+51	138' RT	36	
STA 106+02	156' RT	36	
STA 106+12	138' RT	36	
STA 106+22	121' RT	36	
STA 106+31	105' RT	25	
STA 106+43	90' RT	25	
STA 112+25	88' RT	29	
STA 112+41	101' RT	29	
STA 112+56	114' RT	29	
STA 112+71	127' RT	30	
STA 112+86	140' RT	30	
STA 112+91	56' LT	31	
STA 113+01	153' RT	36	
STA 113+45	154' RT	36	
	TOTAL	560	

28000500 INLET AND PIPE PROTECTION

LOCATION		EACH	COMMENTS
STA 105+83	54' LT	1	
STA 111+97	35' LT	1	
STA 113+17	81' LT	1	
	TOTAL	3	

28200200 FILTER FABRIC

LOCATION		SQ YD	COMMENTS
STA 105+83	LT	95	ARTICULATED BLOCK
STA 105+83	RT	77	STONE RIPRAP
STA 113+17	RT	191	STONE RIPRAP
	TOTAL	363	

28500400 ARTICULATED BLOCK REVETMENT MAT

LOCATION		SQ YD	COMMENTS
STA 105+83	LT	95	US END SN 101-1337
	TOTAL	95	

35102000 AGGREGATE BASE COURSE, TYPE B

LOCATION		SQ YD	COMMENTS
STA 106+26.76	LT	192	COMMERCIAL ENTRANCE
STA 112+32.54	LT	112	FIELD ENTRANCE
	TOTAL	304	

40600275 BITUMINOUS MATERIALS (PRIME COAT)

LOCATION		POUND	COMMENTS
STA 106+26.76	LT	450	COMMERCIAL ENTRANCE
	TOTAL	450	

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 10:58:49 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	14
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

40800050 INCIDENTAL HOT-MIX ASPHALT SURFACING

LOCATION	TON	COMMENTS
STA 106+26.76 LT	30	COMMERCIAL ENTRANCE
TOTAL	30	

42300300 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH

LOCATION	SQ YD	COMMENTS
STA 106+26.76 LT	84	COMMERCIAL ENTRANCE
TOTAL	84	

44000500 COMBINATION CURB AND GUTTER REMOVAL

LOCATION		FOOT	COMMENTS
STA 105+56 TO 106+03	LT	47	
STA 105+56 TO 106+03	RT	47	
STA 112+96 TO 113+42	LT	46	
STA 112+96 TO 113+42	RT	46	
TOTAL		186	

50105220 PIPE CULVERT REMOVAL

LOCATION	FOOT	COMMENTS
STA 112+32.54 LT	61	FIELD ENTRANCE, 15" RCP
TOTAL	61	

50800105 REINFORCEMENT BARS

LOCATION		POUND	COMMENTS
STA 105+50	RT	48	CONCRETE COLLAR
STA 112+99	LT	28	CONCRETE COLLAR
STA 113+47	RT	38	CONCRETE COLLAR
TOTAL		114	

542D0220 PIPE CULVERTS, CLASS D, TYPE 1 15"

LOCATION	FOOT	COMMENTS
STA 112+32.54 LT	65	FIELD ENTRANCE
TOTAL	65	

54213450 END SECTIONS 15"

LOCATION	EACH	COMMENTS
STA 112+32.54 LT	2	FIELD ENTRANCE
TOTAL	2	

54215408 CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 8"

LOCATION	EACH	COMMENTS
AS DETERMINED BY THE ENGINEER	1	
TOTAL	1	

54215410 CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 10"

LOCATION	EACH	COMMENTS
AS DETERMINED BY THE ENGINEER	1	
TOTAL	1	

54215412 CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 12"

LOCATION	EACH	COMMENTS
AS DIRECTED BY THE ENGINEER	1	
TOTAL	1	

54248510 CONCRETE COLLAR

LOCATION		CU YD	COMMENTS
STA 105+50	66' RT	1.1	SEE DISTRICT STD 33.1
STA 112+99	14' LT	0.5	SEE DISTRICT STD 33.1
STA 113+47	72' RT	0.8	SEE DISTRICT STD 33.1
TOTAL		2.4	

54260311 TRAVERSABLE PIPE GRATE

LOCATION	FOOT	COMMENTS
STA 105+64.59 RT	66.5	
STA 105+83 RT	139	
STA 113+17 RT	199	
STA 113+17 LT	258	
STA 113+30.39 RT	66.5	
TOTAL	729	

54261642 CONCRETE END SECTION, STANDARD 542001, 42", 1:6

LOCATION	EACH	COMMENTS
STA 105+64.59 142' RT	1	
STA 113+30.39 151.83' RT	1	
TOTAL	2	

550A0050 STORM SEWERS, CLASS A, TYPE 1 12"

LOCATION	FOOT	COMMENTS
STA 105+64.59, 12.0' LT TO 105+64.59, 52.0' RT	65	
STA 113+29.22, 52.0' RT TO 113+30.39, 71.86' RT	14	
TOTAL	79	

550A0160 STORM SEWERS, CLASS A, TYPE 1 36"

LOCATION	FOOT	COMMENTS
STA 105+50, 66' RT TO 105+64.59, 107.17' RT	12	
TOTAL	12	

550A0180 STORM SEWERS, CLASS A, TYPE 1 42"

LOCATION	FOOT	COMMENTS
STA 105+64.59, 67.17' RT TO 105+64.59, 110' RT	40	
STA 113+30.39, 71.86' RT TO 113+30.39, 120' RT	45	
TOTAL	85	

550A0340 STORM SEWERS, CLASS A, TYPE 2 12"

LOCATION	FOOT	COMMENTS
STA 112+99, 13' LT TO 113+10, 13' LT	15	
STA 113+24, 13' LT TO 113+38.33, 12.0' LT	14	
TOTAL	29	

550A0410 STORM SEWERS, CLASS A, TYPE 2 24"

LOCATION	FOOT	COMMENTS
STA 113+30.39, 71.86' RT TO 113+46, 72' RT	12	
STA 105+64.59, 52' RT TO 105+64.59, 67.17' RT	9	
TOTAL	21	

55100500 STORM SEWER REMOVAL 12"

LOCATION	FOOT	COMMENTS
STA 105+65, 12' LT TO 105+65, 52' RT	67	
STA 105+65, 52' RT TO 105+65, 64' RT	11	
STA 112+99, 13' LT TO 113+10, 13' LT	15	
STA 113+24, 13' LT TO 113+38, 13' LT	17	
STA 113+30, 52' RT TO 113+30, 70' RT	17	
TOTAL	127	

55101200 STORM SEWER REMOVAL 24"

LOCATION	FOOT	COMMENTS
STA 113+33, 71' RT TO 113+46, 72' RT	14	
STA 113+17, 28' LT TO STA 113+15, 73' RT	101	
TOTAL	115	

55101600 STORM SEWER REMOVAL 36"

LOCATION	FOOT	COMMENTS
STA 105+50, 66' RT TO 105+65, 67' RT	14	
TOTAL	14	

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FILE NAME

ESCA CONSULTANTS, INC.

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -
PLOT DATE = 1/26/2015 10:59:06 AM	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	15
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

56103400 DUCTILE IRON WATER MAIN 16"

LOCATION		FOOT	COMMENTS
STA 104+76.54 TO 106+63.46, 117' RT		190	
STA 112+66.18 TO 113+77.52, 102' RT		115	
TOTAL		305	

56105760 BUTTERFLY VALVES 16"

LOCATION		EACH	COMMENTS
STA 104+76.54, 117' RT		1	
TOTAL		1	

60100915 PIPE DRAINS 6"

LOCATION		FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER		20	
TOTAL		20	

60100925 PIPE DRAINS 8"

LOCATION		FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER		20	
TOTAL		20	

60100935 PIPE DRAINS 10"

LOCATION		FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER		20	
TOTAL		20	

60100945 PIPE DRAINS 12"

LOCATION		FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER		20	
TOTAL		20	

60224459 MANHOLES, TYPE A, 8'-DIAMETER, TYPE 1 FRAME, CLOSED LID

LOCATION		EACH	COMMENTS
STA 105+64.59	67.17' RT	1	
STA 113+30.39	71.86' RT	1	
TOTAL		2	

60255500 MANHOLES TO BE ADJUSTED

LOCATION		EACH	COMMENTS
STA 105+50.67	19.83' LT	1	
STA 113+54.46	21.30' LT	1	
TOTAL		2	

60500060 REMOVING INLETS

LOCATION		EACH	COMMENTS
STA 105+64.33	13.7' LT	1	
STA 105+64.41	53.2' RT	1	
STA 113+17.10	28.1' LT	1	
STA 113+38.48	13.6' LT	1	
STA 113+29.40	53.3' RT	1	
TOTAL		5	

60605000 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24

LOCATION		FOOT	COMMENTS
STA 105+56 TO 106+03	LT	47	
STA 105+56 TO 106+03	RT	47	
STA 112+96 TO 113+42	LT	46	
STA 112+96 TO 113+38	RT	46	
TOTAL		186	

61100500 EXPLORATION TRENCH 52" DEPTH

LOCATION		FOOT	COMMENTS
STA 113+09	92' LT	20	
STA 113+58	53' LT	20	
TOTAL		40	

61101009 STORM SEWERS PROTECTED, CLASS A, 8"

LOCATION	FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER	20	
TOTAL	20	

61101011 STORM SEWERS PROTECTED, CLASS A, 10"

LOCATION	FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER	20	
TOTAL	20	

61101013 STORM SEWERS PROTECTED, CLASS A, 12"

LOCATION	FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER	20	
TOTAL	20	

61133200 FIELD TILE JUNCTION VAULTS, 3' DIA.

LOCATION		EACH	COMMENTS
STA 113+09	92' LT	1	
STA 113+59	53' LT	1	
AS DIRECTED BY THE ENGINEER		1	
TOTAL		3	

61140000 STORM SEWERS (SPECIAL), 8"

LOCATION	FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER	20	
TOTAL	20	

61140100 STORM SEWERS (SPECIAL), 10"

LOCATION	FOOT	COMMENTS
AS DIRECTED BY THE ENGINEER	20	
TOTAL	20	

61140200 STORM SEWERS (SPECIAL), 12"

LOCATION	FOOT	COMMENTS
STA 113+24, 43' LT TO 113+58, 53' LT	34	
AS DIRECTED BY THE ENGINEER	20	
TOTAL	54	

61140900 STORM SEWERS (SPECIAL), 24"

LOCATION	FOOT	COMMENTS
STA 113+08, 92' LT TO 113+12, 77' LT	14	
TOTAL	14	

63500105 DELINEATORS

LOCATION		EACH	COMMENTS
STA 105+64.59	RT	1	PIPE OUTLET
STA 105+83	LT	1	BOX END SECTION
STA 105+83	RT	1	BOX END SECTION
STA 113+17	LT	1	INLET BOX
STA 113+17	RT	1	BOX END SECTION
STA 113+30.39	RT	1	PIPE OUTLET
TOTAL		6	

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ESCA CONSULTANTS, INC.

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ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 10:59:24 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	16
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

66600105 FURNISHING AND ERECTING RIGHT OF WAY MARKERS

LOCATION		EACH	COMMENTS
STA 105+00	31.17' LT	1	USE METHOD B
STA 105+50	75' LT	1	USE METHOD B
STA 105+63	82' LT	1	USE METHOD B
STA 105+76	85' LT	1	USE METHOD B
STA 106+47.08	88' LT	1	USE METHOD B
STA 106+51.86	31.19' LT	1	USE METHOD B
STA 104+00	74.44' RT	1	USE METHOD B
STA 105+00	110' RT	1	USE METHOD B
STA 105+35	170' RT	1	USE METHOD B
STA 106+30	170' RT	1	USE METHOD B
STA 106+65	100' RT	1	USE METHOD B
STA 107+00	74.47' RT	1	USE METHOD B
STA 111+00	31.18' LT	1	USE METHOD B
STA 111+25	45' LT	1	USE METHOD B
STA 112+50	60' LT	1	USE METHOD B
STA 113+00	85' LT	1	USE METHOD B
STA 113+35	85' LT	1	USE METHOD B
STA 113+50	40' LT	1	USE METHOD B
STA 114+50	40' LT	1	USE METHOD B
STA 115+00	31.18' LT	1	USE METHOD B
STA 111+00	74.50' RT	1	USE METHOD B
STA 112+00	100' RT	1	USE METHOD B
STA 112+85	200' RT	1	USE METHOD B
STA 113+55	200' RT	1	USE METHOD B
STA 114+00	140' RT	1	USE METHOD B
STA 114+24.20	140' RT	1	USE METHOD B
	TOTAL	26	

66700305 PERMANENT SURVEY MARKERS, TYPE II

LOCATION		EACH	COMMENTS
STA 112+85	27' LT	1	SEE DISTRICT STD 66.2
	TOTAL	1	

70106800 CHANGEABLE MESSAGE SIGN

LOCATION	CAL MO	COMMENTS
EAST OF PROJECT	0.5	
WEST OF PROJECT	0.5	
TOTAL	1	

70300100 SHORT TERM PAVEMENT MARKING

LOCATION		FOOT	COMMENTS
STA 98+00 TO 120+00	WHITE SKIP DASH	224	EASTBOUND LANES CENTERLINE
STA 100+00 TO 122+00	WHITE SKIP DASH	224	WESTBOUND LANES CENTERLINE
	TOTAL WHITE	448	
STA 100+30 TO 107+00	YELLOW SKIP DASH	72	CENTER LANE EDGE LINE
STA 100+30 TO 107+00	YELLOW SKIP DASH	72	CENTER LANE EDGE LINE
STA 112+00 TO 118+50	YELLOW SKIP DASH	68	CENTER LANE EDGE LINE
STA 112+00 TO 119+30	YELLOW SKIP DASH	76	CENTER LANE EDGE LINE
	TOTAL YELLOW	288	
	TOTAL	736	

70300220 TEMPORARY PAVEMENT MARKING - LINE 4"

LOCATION		FOOT	COMMENTS
STA 93+39 TO STA 119+52	SOLID WHITE	2620	STAGE I
STA 99+50 TO STA 126+70	SOLID WHITE	2720	STAGE II
	TOTAL WHITE	5340	
STA 94+80 TO STA 119+52	SOLID YELLOW	2580	STAGE I
STA 99+30 TO STA 120+20	SOLID YELLOW	2080	STAGE I
STA 120+76 TO STA 126+78	SOLID YELLOW	660	STAGE I
STA 127+72 TO STA 131+48	SOLID YELLOW	410	STAGE I
STA 93+39 TO STA 120+00	SOLID YELLOW	2670	STAGE II
STA 99+30 TO STA 120+00	SOLID YELLOW	2070	STAGE II
STA 120+90 TO STA 126+70	SOLID YELLOW	580	STAGE II
	TOTAL YELLOW	11050	
	TOTAL	16390	

70301000 WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	SQ FT	COMMENTS
SHORT TERM PAVEMENT MARKING	246	
TEMPORARY PAVEMENT MARKING	5464	
TOTAL	5710	

70400100 TEMPORARY CONCRETE BARRIER

LOCATION	FOOT	COMMENTS
STA 104+04.42 TO 108+72.92	469	STAGE I
STA 110+54.25 TO 115+35.42	482	STAGE I
TOTAL	951	

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

LOCATION	FOOT	COMMENTS
STA 103+91.75 TO 107+84.25	393	STAGE II
STA 110+54.25 TO 114+72.09	418	STAGE II
TOTAL	811	

70600240 IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2

LOCATION	EACH	COMMENTS
STA 104+04	1	STAGE I
STA 108+73	1	STAGE I
STA 110+54	1	STAGE I
STA 115+36	1	STAGE I
TOTAL	4	

70600340 IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2

LOCATION	EACH	COMMENTS
STA 103+91	1	STAGE II
STA 107+85	1	STAGE II
STA 110+54	1	STAGE II
STA 114+72	1	STAGE II
TOTAL	4	

78009000 MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS

LOCATION		SQ FT	COMMENTS
CENTER LANE	WHITE	126	TURN LANE ARROWS
TOTAL		126	

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PLOT DATE = 1/26/2015 10:59:39 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	17
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

78009004 MODIFIED URETHANE PAVEMENT MARKING - LINE 4"

LOCATION		FOOT	COMMENTS
STA 98+00 TO 120+00	WHITE SKIP DASH	560	EASTBOUND LANES CENTERLINE
STA 100+00 TO 122+00	WHITE SKIP DASH	560	WESTBOUND LANES CENTERLINE
STA 105+00 TO 107+00	SOLID WHITE	400	EDGE LINE
STA 112+00 TO 114+00, LT	SOLID WHITE	200	EDGE LINE
STA 112+00 TO 113+50, RT	SOLID WHITE	150	EDGE LINE
	TOTAL WHITE	1870	
STA 100+30 TO 107+00	SOLID YELLOW	670	CENTER LANE EDGE LINE
STA 100+30 TO 107+00	YELLOW SKIP DASH	180	
STA 100+30 TO 107+00	SOLID YELLOW	670	CENTER LANE EDGE LINE
STA 100+30 TO 107+00	YELLOW SKIP DASH	180	
STA 112+00 TO 118+50	SOLID YELLOW	650	CENTER LANE EDGE LINE
STA 112+00 TO 118+50	YELLOW SKIP DASH	170	
STA 112+00 TO 119+30	SOLID YELLOW	730	CENTER LANE EDGE LINE
STA 112+00 TO 119+30	YELLOW SKIP DASH	190	
	TOTAL YELLOW	3440	
	TOTAL	5310	

78100100 RAISED REFLECTIVE PAVEMENT MARKER

LOCATION	EACH	COMMENTS
AT SN 101-1337	4	2 WHITE; 2 YELLOW
AT SN 101-1336	4	2 WHITE; 2 YELLOW
TOTAL	8	4 WHITE; 4 YELLOW

78300100 PAVEMENT MARKING REMOVAL

LOCATION	SQ FT	COMMENTS
STA 98+79 TO 101+60	27	STAGE I, EASTBOUND LANES CENTERLINE
STA 100+48 TO 102+50	68	STAGE I, CENTER LANE EDGE LINE
STA 100+48 TO 102+50	20	STAGE I, CENTER LANE SKIP DASH
STA 102+50 TO 104+00	50	STAGE I, CENTER LANE EDGE LINE
STA 102+50 TO 104+00	17	STAGE I, CENTER LANE SKIP DASH
STA 104+00 TO 116+50	107	STAGE I, WESTBOUND LANES CENTERLINE
STA 116+40 TO 117+80	47	STAGE I, CENTER LANE EDGE LINE
STA 116+40 TO 117+80	17	STAGE I, CENTER LANE SKIP DASH
STA 117+80 TO 119+20	47	STAGE I, CENTER LANE EDGE LINE
STA 117+80 TO 119+20	17	STAGE I, CENTER LANE SKIP DASH
STA 100+40 TO 102+20	60	STAGE II, CENTER LANE EDGE LINE
STA 100+40 TO 102+20	20	STAGE II, CENTER LANE SKIP DASH
STA 103+00 TO 104+00	34	STAGE II, CENTER LANE EDGE LINE
STA 103+00 TO 104+00	14	STAGE II, CENTER LANE SKIP DASH
STA 103+00 TO 115+50	107	STAGE II, EASTBOUND LANES CENTERLINE
STA 114+90 TO 116+78	60	STAGE II, CENTER LANE EDGE LINE
STA 114+90 TO 116+78	20	STAGE II, CENTER LANE SKIP DASH
STA 117+80 TO 118+47	23	STAGE II, CENTER LANE EDGE LINE
STA 117+80 TO 118+47	10	STAGE II, CENTER LANE SKIP DASH
STA 118+00 TO 121+30	30	STAGE II, WESTBOUND LANES CENTERLINE
CENTER LANE	55	STAGES I & II, TURN ARROWS
TOTAL	850	

A2000114 TREE, AUTUMN BLAZE FREEMAN MAPLE, 1 3/4" CALIPER

LOCATION	EACH	COMMENTS
AS DETERMINED BY DISTRICT ROADSIDE MANAGEMENT SPECIALIST	8	
TOTAL	8	

A2001714 TREE, SUGAR MAPLE, 1 3/4" CALIPER

LOCATION	EACH	COMMENTS
AS DETERMINED BY DISTRICT ROADSIDE MANAGEMENT SPECIALIST	7	
TOTAL	7	

X0324079 EXISTING FIELD TILE REMOVAL

LOCATION	FOOT	COMMENTS
STA 113+09, 92' LT TO 113+17, 29' LT	65	24" DIA. STEEL
STA 113+17, 29' LT TO 113+58, 53' LT	49	12" DIA. RCP
TOTAL	114	

X0327241 STEEL CASING PIPE IN TRENCH, 24 INCH

LOCATION	FOOT	COMMENTS
STA 105+51 TO 106+01, 117' RT	50	
STA 112+99 TO 113+44, 102' RT	45	
TOTAL	95	

X5011100 FOUNDATION REMOVAL

LOCATION	EACH	COMMENTS
STA 105+35 RT	1	ABANDONED BILLBOARD FOUNDATION
TOTAL	1	

X5610716 WATER MAIN REMOVAL 16"

LOCATION	FOOT	COMMENTS
STA 104+76.54 TO 106+63.46, 117' RT	187	
STA 112+66.18 TO 113+77.52, 102' RT	112	
TOTAL	299	

X5630716 CONNECTION TO EXISTING WATER MAIN 16"

LOCATION	EACH	COMMENTS
STA 104+96.83, 117' RT	1	
STA 106+63.17, 117' RT	1	
STA 112+66.18, 102' RT	1	
STA 113+77.52, 102' RT	1	
TOTAL	4	

X6024240 INLETS, SPECIAL

LOCATION		EACH	COMMENTS
STA 105+64.59	12.0' LT	1	SEE DISTRICT STD 10.2
STA 105+64.59	52.0' RT	1	SEE DISTRICT STD 10.2
STA 113+29.22	52.0' RT	1	SEE DISTRICT STD 10.2
STA 113+38.33	12.0' LT	1	SEE DISTRICT STD 10.2
TOTAL		4	

X6640300 CHAIN LINK FENCE REMOVAL

LOCATION	FOOT	COMMENTS
STA 104+50 TO 106+03	210	
TOTAL	210	

X7810400 TEMPORARY RAISED PAVEMENT MARKER

LOCATION	EACH	COMMENTS
STA 101+49 TO 104+50	32	STAGE I
STA 116+00 TO 119+52	38	STAGE I
STA 100+48 TO 104+00	38	STAGE II
STA 114+95 TO 118+47	38	STAGE II
TOTAL	146	

Z0024476 FLEXIBLE DELINEATOR MAINTENANCE

LOCATION	EACH	COMMENTS
CENTERLINE OF STAGE CONSTRUCTION TRAFFIC LANES	13	
TOTAL	13	

Z0025505 PROPERTY MARKERS

LOCATION	EACH	COMMENTS
AS DIRECTED BY THE ENGINEER	6	
TOTAL	6	

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = jpc	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 2/26/2015 3:11:32 PM	DATE - 02/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	18
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

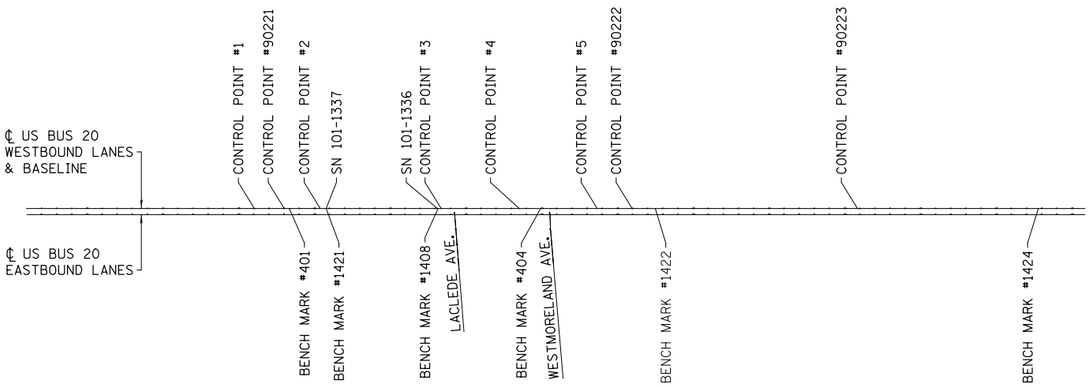
SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE					
LOCATION		20200100 EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT (NOT A PAY ITEM)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
		CU YD	CU YD	CU YD	CU YD
STAGE II					
STA 104+50 TO 105+95	LT	229	172	178	-6
STA 111+30 TO 113+50	LT	110	82	124	-42
STAGE II TOTALS		339	254	302	-48
STAGE I					
STA 104+50 TO 106+67	RT	824	618	403	+215
STA 112+00 TO 113+90	RT	967	725	298	+427
STAGE I TOTALS		1791	1343	701	+642
TOTALS		2130	1597	1003	+594

NOTES:
1. EXCAVATION USED AS EMBANKMENT = EARTH EXCAVATION*0.75
2. TABLE DOES NOT INCLUDE ANY EXCAVATION THAT IS INCLUDED IN OTHER PAY ITEMS

PATCHING SCHEDULE											
STATIONING	LENGTH	PROPOSED SURFACE OF PATCH		406000275 BITUMINOUS MATERIALS (PRIME COAT)	40601005 HMA REPLACEMENT OVER PATCHES	44002226 HMA REMOVAL OVER PATCHES, 6 1/2"	44200976 CLASS B PATCHES, TY IV, 10"	44201299 DOWEL BARS 1 1/2"	44213100 PAVEMENT FABRIC	44213200 SAWCUTS	44213204 TIE BARS 3/4"
	FT	WIDTH	SQ YD	POUND	TON	SQ YD	SQ YD	EACH	SQ YD	FOOT	EACH
105+56 TO 106+03	47	64	335	231	125	342	335	162	335	255	95
112+96 TO 113+42	46	64	328	226	123	335	328	162	328	254	95
TOTALS			663	457	248	677	663	324	663	509	190

HORIZONTAL & VERTICAL CONTROL



CURVE POINT NUMBERS					
CHAIN	CURVE	PI	CC	PC	PT
EBBUS20	11406290	11406290	11406291	11406292	11406293
WBBUS20	11406280	11406280	11406281	11406282	11406283

BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	2045873.3383	2566603.3132	772.2865	WBBUS20	103+40.17	30.3075′ LT	POWER POLE, RAIL ROAD SPIKE
404	2045645.3214	2568249.4583	775.9038	WBBUS20	119+97.88	87.1568′ RT	SIGN FOUNDATION, CHISELED SQUARE
1408	2045800.3363	2567581.5594	767.9920	WBBUS20	113+21.11	22.8632′ LT	HEADWALL, HEADWALL
1421	2045763.0758	2566839.3426	769.7330	WBBUS20	105+83.04	63.9301′ RT	HEADWALL, HEADWALL
1422	2045737.6808	2569014.0949	783.3860	WBBUS20	127+54.63	56.1109′ LT	SIGN FOUNDATION, SIGN FOUNDATION
1424	2045442.0689	2571528.5505	811.4280	WBBUS20	152+83.22	70.7518′ RT	MISC. CONCRETE SLAB, MISC. CONCRETE SLAB

Chain EBBUS20 contains:
CUR 11406290 114061067
Beginning chain EBBUS20 description
==========
Curve Data

Curve 11406290
P.I. Station 91+07.65 N 2,045,885.5807 E 2,565,368.8443
Delta = 0° 03′ 09.43″ (LT)
Degree = 0° 00′ 18.94″
Tangent = 500.0000′
Length = 1,000.0000′
Radius = 1,088,859.9392′
External = 0.1148′
Long Chord = 1,000.0000′
Mid. Ord. = 0.1148′
P.C. Station 86+07.65 N 2,045,919.4632 E 2,564,869.9936
P.T. Station 96+07.65 N 2,045,852.1564 E 2,565,867.7259
C.C. N 3,132,276.4557 E 2,638,656.5234
Course from PT 11406290 to 114061067 S 86° 10′ 01.19″ E Dist 5,983.0422′
Point 114061067 N 2,045,452.1982 E 2,571,837.3848 Sta 155+90.69
==========
Ending chain EBBUS20 description

Chain WBBUS20 contains:
CUR 11406280 114061066
Beginning chain WBBUS20 description
==========
Curve Data

Curve 11406280
P.I. Station 91+05.83 N 2,045,925.6127 E 2,565,369.7057
Delta = 0° 03′ 09.94″ (LT)
Degree = 0° 00′ 18.99″
Tangent = 500.0000′
Length = 1,000.0000′
Radius = 1,085,941.3104′
External = 0.1151′
Long Chord = 1,000.0000′
Mid. Ord. = 0.1151′
P.C. Station 86+05.83 N 2,045,959.4964 E 2,564,870.8551
P.T. Station 96+05.83 N 2,045,892.1884 E 2,565,868.5873
C.C. N 3,129,404.3875 E 2,638,462.2784
Course from PT 11406280 to 114061066 S 86° 10′ 01.19″ E Dist 5,984.8584′
Point 114061066 N 2,045,492.1088 E 2,571,840.0583 Sta 155+90.69
==========
Ending chain WBBUS20 description

Chain LACLEDE contains:
7 200
Beginning chain LACLEDE description
==========
Point 7 N 2,045,357.8814 E 2,567,691.9519 Sta 196+27.62
Course from 7 to 200 N 0° 40′ 34.76″ W Dist 372.3750′
Point 200 N 2,045,730.2305 E 2,567,687.5565 Sta 200+00.00
==========
Ending chain LACLEDE description

Chain WESTMORELAND contains:
8 210 220
Beginning chain WESTMORELAND description
==========
Point 8 N 2,045,344.6492 E 2,568,316.3069 Sta 206+56.36
Course from 8 to 210 N 1° 01′ 24.43″ W Dist 244.8240′
Point 210 N 2,045,589.4341 E 2,568,311.9339 Sta 209+01.19
Course from 210 to 220 N 1° 41′ 03.00″ E Dist 98.8121′
Point 220 N 2,045,688.2036 E 2,568,314.8380 Sta 210+00.00
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Ending chain WESTMORELAND description

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 9:28:49 AM	DATE - 09/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL AND VERTICAL CONTROL

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

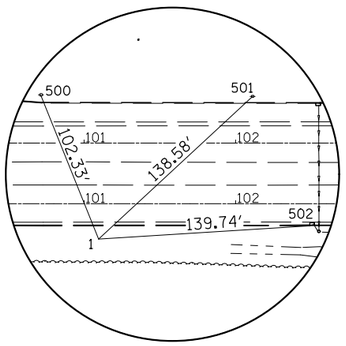
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	20
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HORIZONTAL & VERTICAL CONTROL

HORIZONTAL CONTROL POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
1	2045795.2644	2566366.9758	773.4763	WBBUS20	101+09.58	63.3906′ RT	GPS CONTROL POINT, PIN
2	2045768.4275	2566801.0857	769.7691	WBBUS20	105+44.51	61.1478′ RT	GPS CONTROL POINT, PIN
3	2045715.9205	2567596.9799	768.0368	WBBUS20	113+42.14	60.3329′ RT	GPS CONTROL POINT, PIN
4	2045759.3377	2568116.3600	772.7574	WBBUS20	118+57.45	17.707′ LT	GPS CONTROL POINT, PIN
5	2045648.4214	2568625.0196	778.6672	WBBUS20	123+72.39	58.958′ RT	GPS CONTROL POINT, PIN
90221	2045822.2263	2566566.1614	771.9921	WBBUS20	103+06.52	23.1737′ RT	PHOTO CONTROL H. & V., PK NAIL
90222	2045713.7722	2568860.0249	780.4382	WBBUS20	126+02.50	21.9564′ LT	PHOTO CONTROL H. & V., PIN
90223	2045528.7711	2570337.6854	799.9000	WBBUS20	140+89.22	63.8513′ RT	PHOTO CONTROL H. & V., PIN

SURVEY WORK POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
100	2045908.9160	2566584.1576	769.2397	WBBUS20	103+18.68	64.5251′ LT	TOPO SURVEY POINT, NAIL
101	2045570.2735	2566863.2702	768.0407	WBBUS20	106+19.81	254.7016′ RT	TOPO SURVEY POINT, PIN
102	2045863.4832	2566630.5122	771.3003	WBBUS20	103+67.97	22.2927′ LT	TOPO SURVEY POINT, NAIL
103	2045858.9287	2566689.8692	770.8803	WBBUS20	104+27.50	21.7163′ LT	TOPO SURVEY POINT, NAIL
104	2045852.6503	2566786.8951	770.3041	WBBUS20	105+24.73	21.938′ LT	TOPO SURVEY POINT, NAIL
105	2045875.7063	2566867.6322	769.3510	WBBUS20	106+03.74	50.3396′ LT	TOPO SURVEY POINT, NAIL
106	2045822.5349	2567577.0596	764.4465	WBBUS20	113+15.14	44.7114′ LT	TOPO SURVEY POINT, NAIL
115	2045843.5717	2566908.8038	770.1846	WBBUS20	106+46.97	21.0291′ LT	TOPO SURVEY POINT, PK NAIL

REFERENCE TIES						
POINT	NORTH	EAST	CHAIN	STATION	OFFSET	DESCRIPTION
500	2045892.5459	2566335.1910	WBBUS20	100+71.36	31.5485′ LT	POWER POLE WITH TRANSFORMER, SHINER
501	2045882.3887	2566474.7374	WBBUS20	102+11.28	30.7425′ LT	POWER POLE WITH TRANSFORMER, SHINER
502	2045794.6689	2566506.7157	WBBUS20	102+49.05	54.6433′ RT	CATCH BASIN, CORNER
503	2045746.3149	2566789.4236	WBBUS20	105+34.36	83.9905′ RT	SIGN POLE
504	2045758.2130	2566818.9214	WBBUS20	105+62.99	70.1472′ RT	TOP OF WINGWALL, CORNER
505	2045773.8847	2566820.0287	WBBUS20	105+63.05	54.4365′ RT	CATCH BASIN, CORNER
506	2045722.3029	2567586.1339	WBBUS20	113+30.89	54.6898′ RT	CATCH BASIN, CORNER
507	2045713.5174	2567576.2166	WBBUS20	113+21.58	64.1186′ RT	HEADWALL, CORNER
508	2045706.9942	2567587.1807	WBBUS20	113+32.96	69.8943′ RT	HEADWALL, CORNER
509	2045761.0460	2568049.0156	WBBUS20	117+90.15	14.9096′ LT	CATCH BASIN, CORNER
510	2045813.2566	2568098.2986	WBBUS20	118+35.83	70.2979′ LT	COMMERCIAL BUILDING, CORNER
511	2045767.0445	2568187.2524	WBBUS20	119+27.67	30.1356′ LT	TELEPHONE POLE, SHINER
512	2045653.8990	2568608.4016	WBBUS20	123+55.44	54.6035′ RT	CATCH BASIN, CORNER
513	2045640.8663	2568598.3595	WBBUS20	123+46.30	68.2784′ RT	POWER POLE, SHINER
514	2045650.9085	2568652.9749	WBBUS20	124+00.12	54.6077′ RT	BACK OF CURB RIGHT, END



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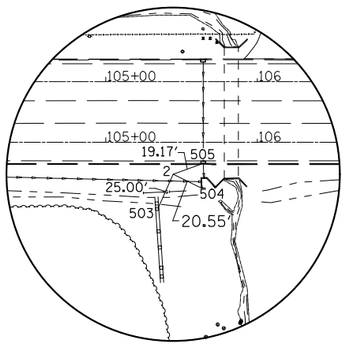

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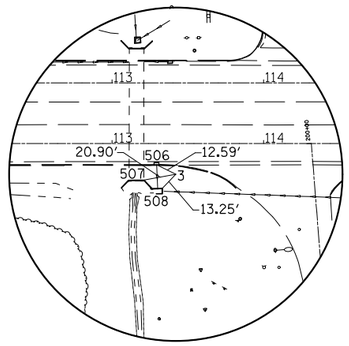

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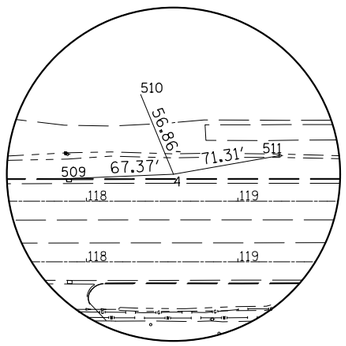
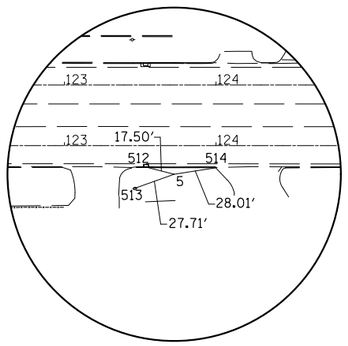


HORIZONTAL CONTROL POINT NO. 4



HORIZONTAL CONTROL POINT NO. 5

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

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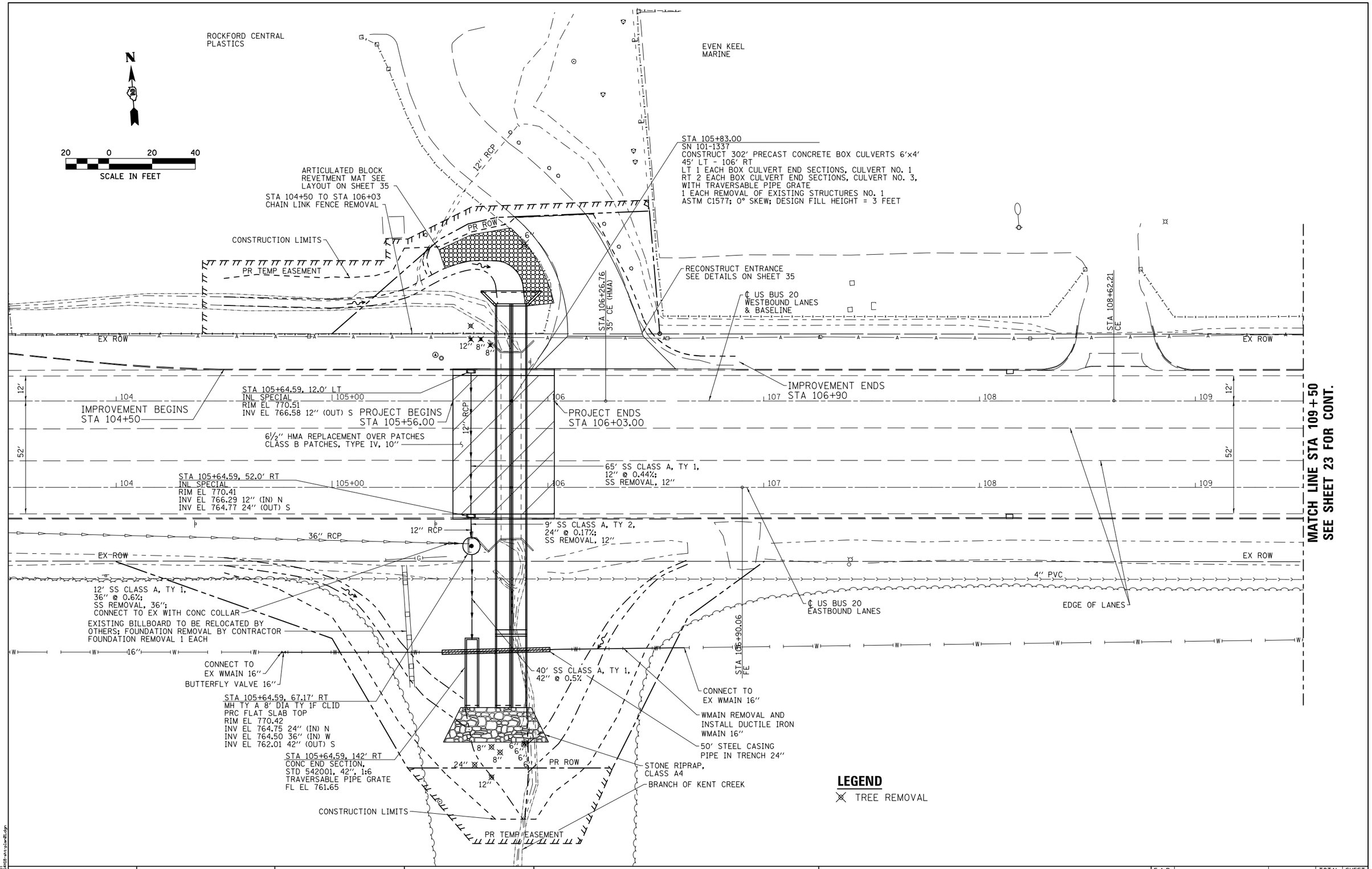
ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 9:28:58 AM	DATE - 09/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL AND VERTICAL CONTROL

SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	21
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

⊗ TREE REMOVAL

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USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 9:29:14 AM	DATE - 01/15	REVISED -	

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 PLAN

SCALE: 1"=20' | SHEET NO. 1 OF 2 SHEETS | STA. 103+50 TO STA. 109+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	22
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

N

20 0 20 40
SCALE IN FEET

MATCH LINE STA 109+50
SEE SHEET 22 FOR CONT.

STA 113+09, 92' LT
FIELD TILE JUNCTION VAULT, 3' DIA
RIM EL 765.0

14' SS (SPECIAL), 24";
EX FIELD TILE REM

CONSTRUCTION LIMITS

STA 113+59, 53' LT
FIELD TILE JUNCTION VAULT, 3' DIA
RIM EL 767.0

STA 113+38.33, 12.0' LT
INL SPECIAL
RIM EL 768.32
INV EL 762.41 12" (OUT) W

15' SS CLASS A, TY 2,
12" @ 8.0%; SS REMOVAL, 12";
CONNECT TO EX WITH CONC
COLLAR & TIE INTO SIDE OF
BOX CULVERT, COST INCLUDED IN PCBC

24" STEEL
PIPE

PR ROW

PR TEMP EASEMENT

34' SS (SPECIAL),
12"; EX FIELD TILE REM

STA 112+32.54
65' PIPE CULVERTS, CLASS D,
TYPE 1, 15"
2 EA. END SECTIONS 15"
US INV. 765.00, 35.9' LT END SECTION
DS INV. 763.96, 41.0' LT END SECTION

STA 112+32.54
24" RE (AGG)

STA 114+16.33
CE

EXISTING BILLBOARD AND
LIGHT POLE TO BE REMOVED
COST INCLUDED IN EARTH
EXCAVATION

℄ US BUS 20
WESTBOUND LANES & BASELINE

PIPE CULVERT REMOVAL

6" C.I.
8" PVC

IMPROVEMENT BEGINS
STA 111+30

15" RCP

12" RCP

EX ROW

EX ROW

1:1 TYP.

EDGE OF LANES

12" RCP

REMOVING INLETS

IMPROVEMENT ENDS
STA 113+99

AGGREGATE BASE COURSE,
TYPE B 8"

PROJECT BEGINS
STA 112+96.00

14' SS CLASS A,
TY 2, 12" @ 0.44%;
SS REMOVAL, 12";
CONNECT TO SIDE
OF BOX CULVERT,
COST INCLUDED IN PCBC

6½" HMA REPLACEMENT OVER PATCHES
CLASS B PATCHES, TYPE IV, 10"

PROJECT ENDS
STA 113+42.00

STA 113+29.22, 52.0' RT
INL SPECIAL
RIM EL 768.01
INV EL 764.04 12" (OUT) S

STA 113+30.39, 71.86' RT
MH TY A 8' DIA TYIF CLID
PRC FLAT SLAB TOP
RIM EL 767.82
INV EL 763.98 12" (IN) N
INV EL 762.47 24" (IN) E
INV EL 758.50 42" (OUT) S

SS REMOVAL, 24"

14' SS CLASS A, TY 1,
12" @ 0.44%;
SS REMOVAL, 12"

℄ US BUS 20
EASTBOUND LANES

12" RCP

8" C.I.

24" RCP

EX ROW

EX ROW

45' SS CLASS A, TY 1,
42" @ 0.3%

12' SS CLASS A,
TY 2, 24" @ 0.3%;
SS REMOVAL, 24";
CONNECT TO EX
WITH CONC COLLAR

4" PVC

STA 114+31.56
LACLEDE AVENUE

CONNECT TO
EX WMAIN 16"

16"

SIGN TO BE
REMOVED COST
INCLUDED IN
EARTH EXCAVATION

STA 113+17.00
SN 101-1336
CONSTRUCT 292' PRECAST CONCRETE BOX CULVERTS 6'x6'
41' LT - 105' RT
LT 1 EACH DROP BOX NO. 1, WITH TRAVERSABLE PIPE GRATE
RT 2 EACH BOX CULVERT END SECTIONS, CULVERT NO. 2,
WITH TRAVERSABLE PIPE GRATE
1 EACH REMOVAL OF EXISTING STRUCTURES NO. 2
ASTM C1577; 0° SKEW; DESIGN FILL HEIGHT = 3 FEET

15"

16"

199

CONNECT TO
EX WMAIN 16"

WMAIN REMOVAL AND INSTALL
DUCTILE IRON WMAIN 16"

45' STEEL CASING PIPE IN TRENCH 24"

CONSTRUCTION LIMITS

STA 198+66.81
PE

STA 113+30.39, 151.83'RT
CONC END SECTION
STD 542001, 42", 1:6
TRAVERSABLE PIPE GRATE
FL EL 758.27

PR ROW

PR TEMP EASEMENT

6" C.I.

8" PVC

STONE RIPRAP, CLASS A4

198

BRANCH OF KENT CREEK

LEGEND

⊗ TREE REMOVAL

USER NAME = jpc	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 2/26/2015 3:10:04 PM	DATE - 01/15	REVISED -	

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

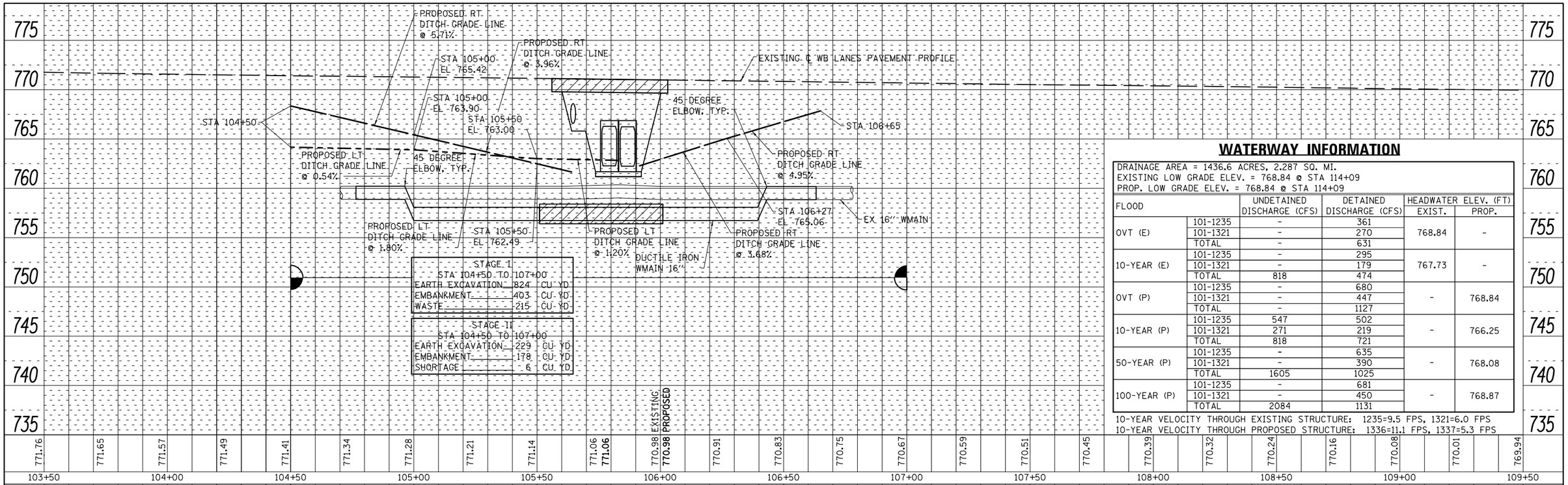
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 PLAN

SCALE: 1"=20' | SHEET NO. 2 OF 2 SHEETS | STA. 109+50 TO STA. 115+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	23
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PRINT DRIVER = LPD_E_B_4x14v7.prg
PSN = 140.01
PSET = ALL
FILE NAME = D:\64H18-sht-plan02.dgn



STAGE I
STA 104+50 TO 107+00

EARTH EXCAVATION	824	CU YD
EMBANKMENT	403	CU YD
WASTE	215	CU YD

STAGE II
STA 104+50 TO 107+00

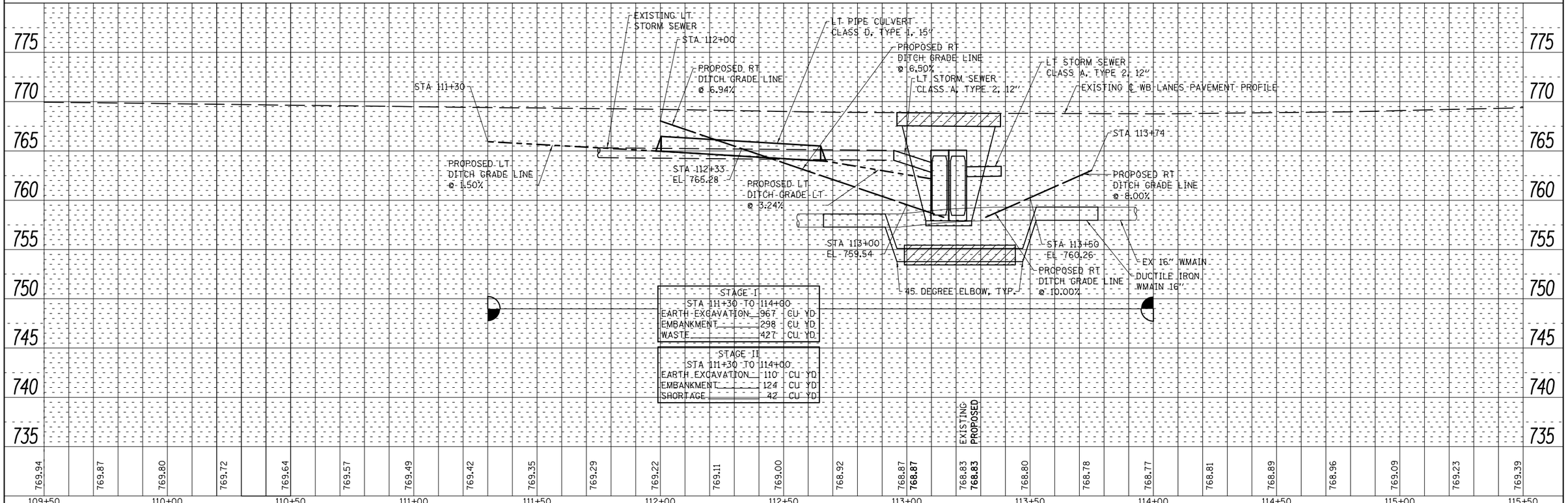
EARTH EXCAVATION	229	CU YD
EMBANKMENT	178	CU YD
SHORTAGE	6	CU YD

WATERWAY INFORMATION

DRAINAGE AREA = 1436.6 ACRES, 2.287 SQ. MI.
EXISTING LOW GRADE ELEV. = 768.84 @ STA 114+09
PROP. LOW GRADE ELEV. = 768.84 @ STA 114+09

FLOOD		UNDETAINED DISCHARGE (CFS)	DETAINED DISCHARGE (CFS)	HEADWATER ELEV. (FT) EXIST.	PROP.
OVT (E)	101-1235	-	361	768.84	-
	101-1321	-	270		
	TOTAL	-	631		
10-YEAR (E)	101-1235	-	295	767.73	-
	101-1321	-	179		
	TOTAL	818	474		
OVT (P)	101-1235	-	680	-	768.84
	101-1321	-	447		
	TOTAL	-	1127		
10-YEAR (P)	101-1235	547	502	-	766.25
	101-1321	271	219		
	TOTAL	818	721		
50-YEAR (P)	101-1235	-	635	-	768.08
	101-1321	-	390		
	TOTAL	1605	1025		
100-YEAR (P)	101-1235	-	681	-	768.87
	101-1321	-	450		
	TOTAL	2084	1131		

10-YEAR VELOCITY THROUGH EXISTING STRUCTURE: 1235=9.5 FPS, 1321=6.0 FPS
10-YEAR VELOCITY THROUGH PROPOSED STRUCTURE: 1336=11.1 FPS, 1337=5.3 FPS



STAGE I
STA 111+30 TO 114+00

EARTH EXCAVATION	967	CU YD
EMBANKMENT	298	CU YD
WASTE	427	CU YD

STAGE II
STA 111+30 TO 114+00

EARTH EXCAVATION	110	CU YD
EMBANKMENT	124	CU YD
SHORTAGE	42	CU YD

PLAN: SURVEYED; PLOTTED; ALIGNMENT CHECKED; RT. OF WAY CHECKED; CADD FILE NAME; NOTE BOOK; NO.; BY; DATE
PROFILE: SURVEYED; PLOTTED; DESIGN CHECKED; BM. NOTED; STRUCTURE NO/ATNS CHKD; NOTE BOOK; NO.; BY; DATE

PRINT DRIVER = LPD.E.B.B.Ao1v9
PEN TABLE = BDT_VER82.tbl
PEN NAME = BDT

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

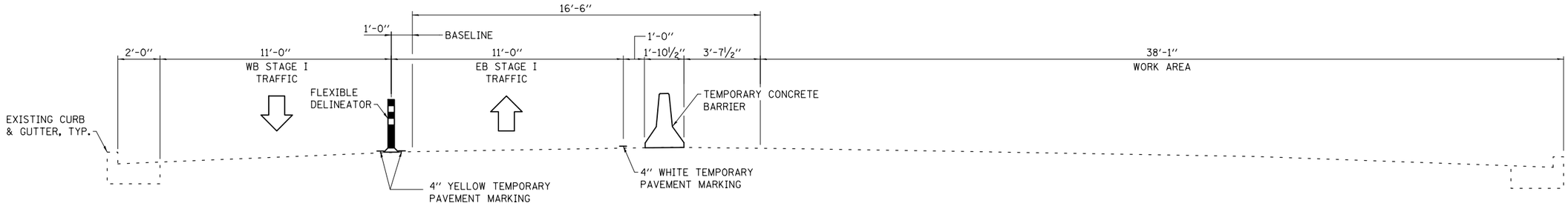
USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	CHECKED - RDP	REVISED -
PLOT DATE = 1/26/2015 9:29:40 AM	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 PROFILE

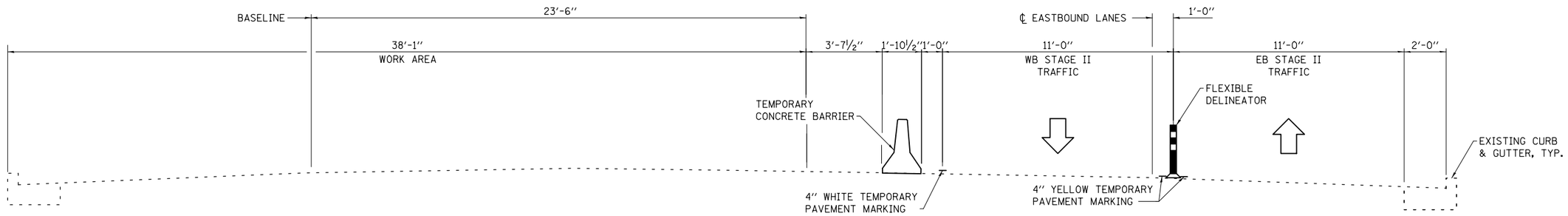
SCALE: AS SHOWN | SHEET NO. 1 OF 1 SHEETS | STA. 103+50 TO STA. 116+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	24
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT AID		



SECTION A–A

SEE SHEET 27 FOR SECTION LOCATION



SECTION B–B

SEE SHEET 31 FOR SECTION LOCATION

PRINT DRIVER = L:\PDF_B.B.\ol*.rf*
PEN TABLE = \\DOT_VER02\ctb\
PLOT STYLE = ESCA.ctb
FILE NAME = D:\64H18-sht-stagingB1.dgn

ESCA CONSULTANTS, INC.
CIVIL • STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -
PLOT DATE = 1/26/2015 9:29:54 AM	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION SECTIONS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	25
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STAGE I NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701602. SEE STANDARD FOR LOCATIONS OF ITEMS NOT SHOWN HERE.
2. CLOSE LACLEDE AVENUE AT US BUS 20 FOR STAGE I CONSTRUCTION.
3. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
4. BARRIER WALL OFFSETS SHALL BE TO THE CONSTRUCTION SIDE OF THE BARRIER WALL.
5. GAP FLEXIBLE DELINEATORS AT ENTRANCES.
6. AN ADVANCE ARROWBOARD SHALL BE PLACED WEST OF MERIDIAN ROAD.
7. NO VEHICLES, EQUIPMENT, OR MATERIAL MAY BE PARKED OR STORED WITHIN 3.5 FEET OF THE BACK OF TEMPORARY CONCRETE BARRIER OR WITHIN 25 FEET OF THE IMPACT ATTENUATORS.

LEGEND

- DRUM (OR TYPE I OR II BARRICADE) WITH STEADY BURNING LIGHT
- TRAFFIC DIRECTION
- ARROW BOARD
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
- IMPACT ATTENUATOR
- TYPE III BARRICADE
- WORK AREA

N

SCALE IN FEET: 20 0 20 40

EDGE OF LANES

STA 95+16 FE

℄ US BUS 20 WESTBOUND LANES & BASELINE

EX ROW

DRUMS AT 20′ CENTERS

STA 94+80 BEGIN PAVEMENT MARKING

MERIDIAN ROAD INTERSECTION

93 94 95+00 96 97

DIRECTION INDICATOR BARRICADES AT 20′ CENTERS

4″ YELLOW TEMPORARY PAVEMENT MARKING

℄ US BUS 20 EASTBOUND LANES

4″ WHITE TEMPORARY PAVEMENT MARKING

STA 96+45

STA 93+39 BEGIN TAPER AND PAVEMENT MARKING

ROAD CONSTRUCTION AHEAD — W20-I103(0)-48 — 500′

RIGHT LANE CLOSED AHEAD — W20-5R(0)-48 — 500′

W4-2R(0)-48 — 500′

MATCH LINE STA 98+00

MATCH LINE STA 98+00

DRUMS AT 20′ CENTERS

DRUMS AT 40′ CENTERS

STA 99+80.45 FE

STA 100+30 1′ LT END TAPER

EX ROW

STA 99+30 BEGIN TAPER & PAVEMENT MARKING

98 99 100+00 101 102 103

11′-0″

12′-0″

4″ YELLOW TEMPORARY PAVEMENT MARKING

DRUMS AT 20′ CENTERS TEMPORARY RAISED PAVEMENT MARKERS AT 20′ CENTERS BOTH SIDES

4″ WHITE TEMPORARY PAVEMENT MARKING

STA 103+60 1′ LT BEGIN FLEXIBLE DELINEATORS

STA 98+79 40′ RT END TAPER

DRUMS AT 20′ CENTERS

W1-4L(0)-48

40 MPH — W13-1(0)-2424

STA 100+48 40′ RT BEGIN STRIPING WEAVE

SEE SHEET 29 FOR STATION & OFFSET TABLE FOR STRIPING WEAVE

REVERSE CURVES DATA:
$R_1 = R_2$ = 1040.03′
PC STA 100+48.00, 40.00′ RT
PCC STA 102+24.00, 25.00′ RT
PT STA 104+00.00, 10.00′ RT

W6-3(0)-48

W1-6L(0)-6030 (ABOVE BARRICADE ON WEST SIDE)

MATCH LINE STA 104+00

SEE SHEET 27 FOR CONT.

PRINT DRIVER = I_PO_E_B_As1.prf
PEN TABLE = IDOT_VER02.tbl
PEN NAME = IDOT_VER02
FILE NAME = D:\SHEETS\stage1.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

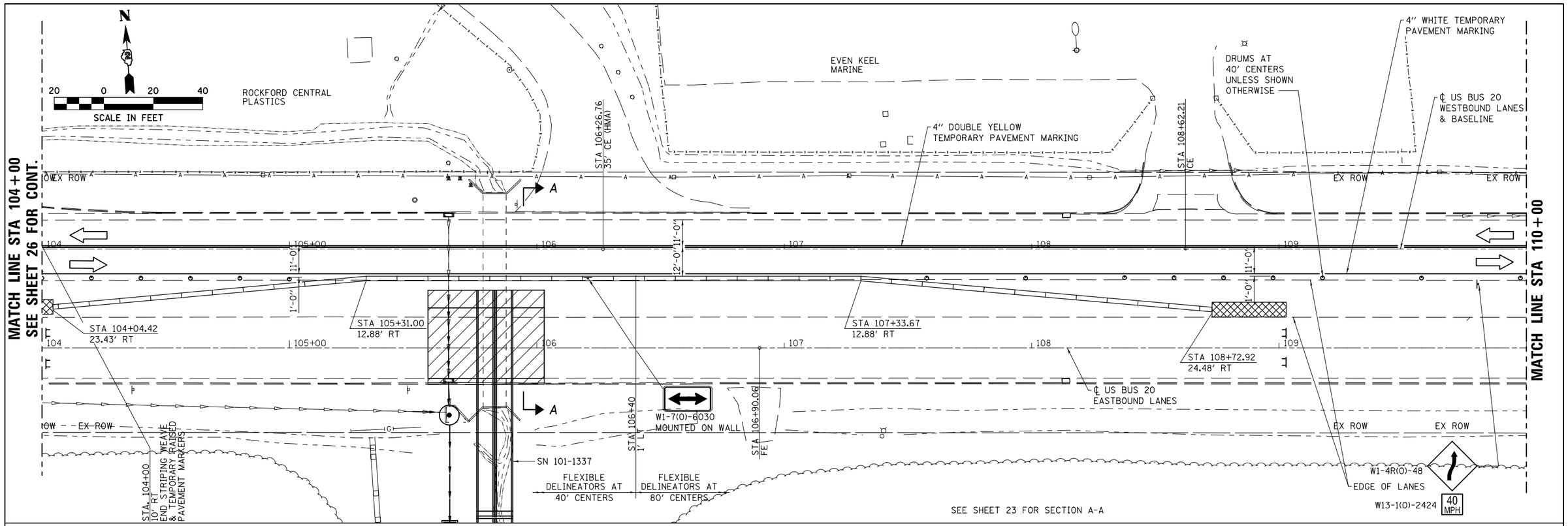
USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ′ / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:30:04 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 1″=20′ | SHEET NO. 1 OF 4 SHEETS | STA. 93+80 | TO STA. 104+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	26
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PRINT DRIVER = LRDLB_8plot9
PEN TABLE = ROCK_VENDOR.tbl
PLOT SCALE = 1.0000
FILE NAME = D:\2014\18-ent\stage1\01.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

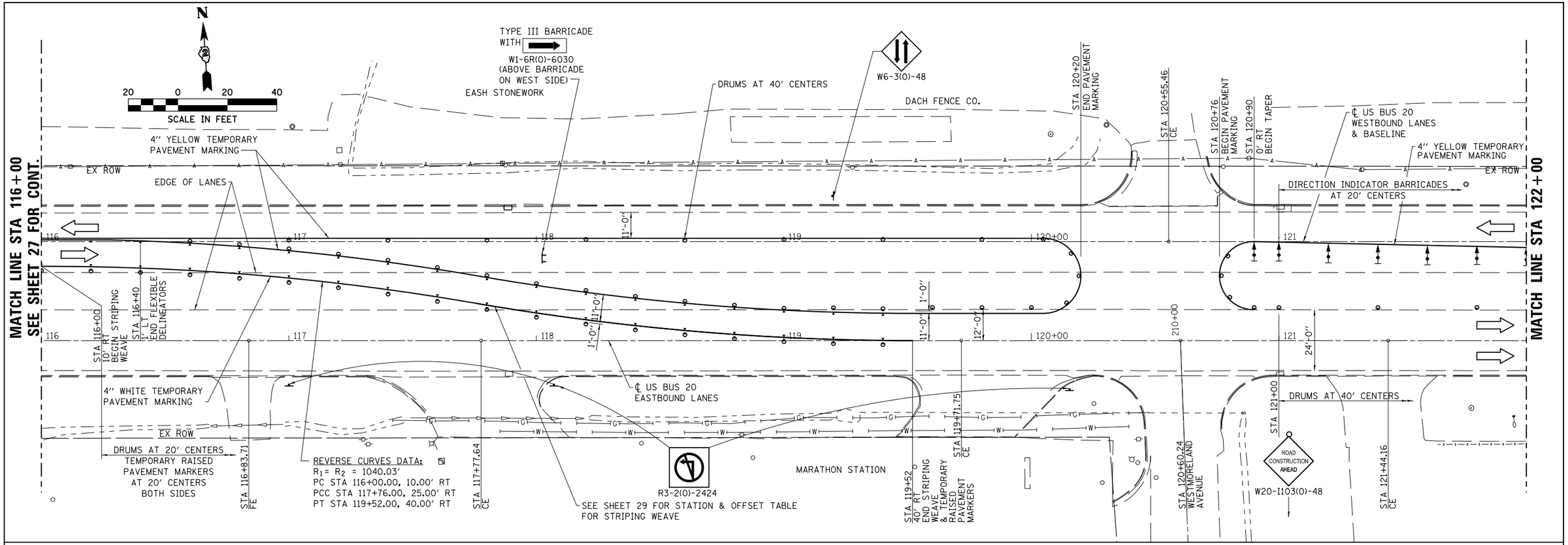
USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:30:13 AM	DATE - 01/15	REVISED -	

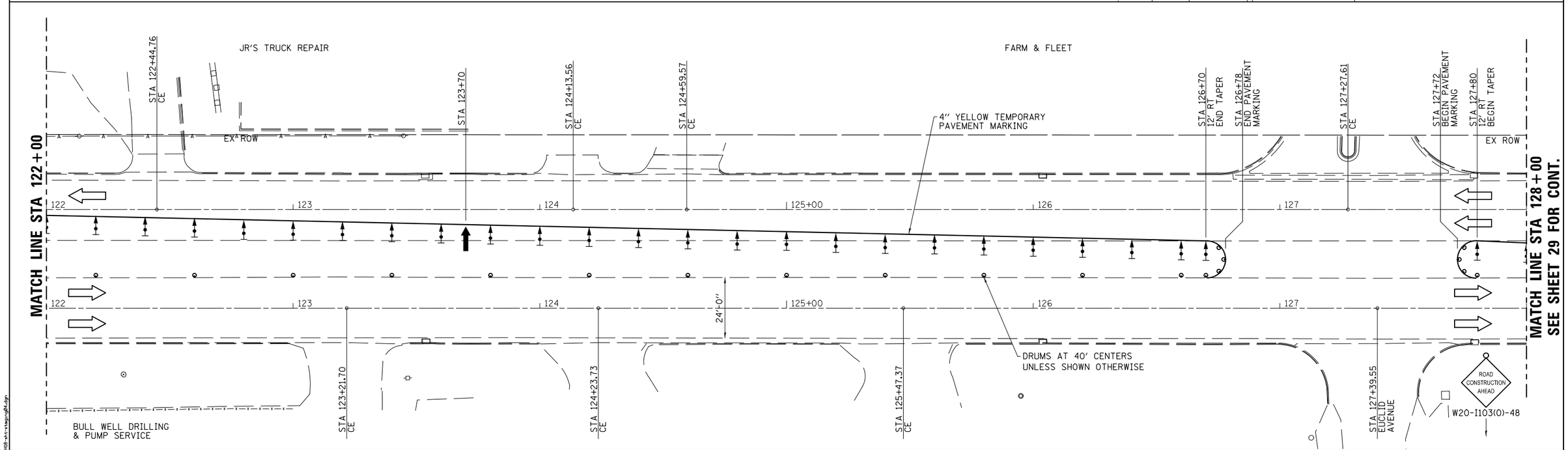
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 1"=20' | SHEET NO. 2 OF 4 SHEETS | STA. 116+00 TO STA. 128+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	27
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





PRINT DRIVER = L:\IDOT\Bin\hp9
PEN TABLE = L:\IDOT\Bin\IDOT.tbl
MICRO STATION = V8
FILE NAME = D:\064H18-sht-stage1.dgn

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:30:22 AM	DATE - 01/15	REVISED -	

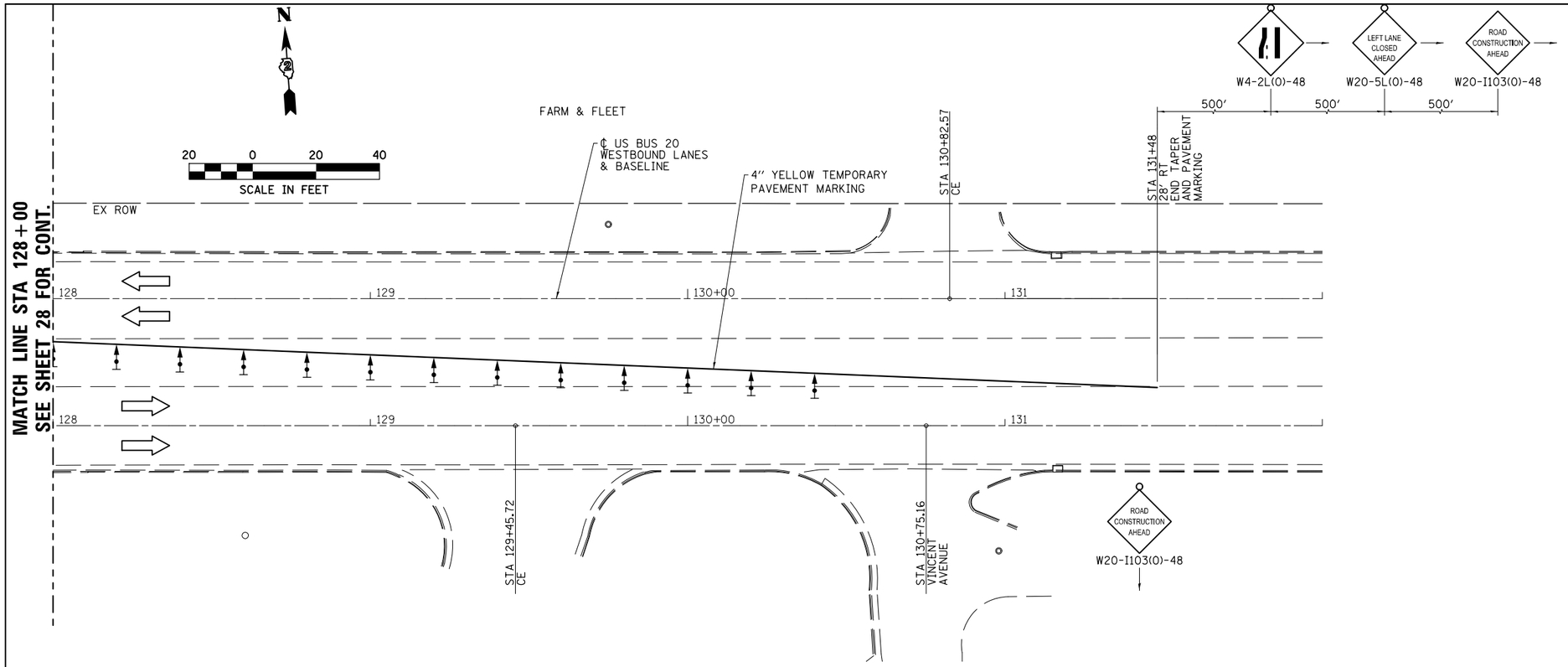
ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 1"=20' | SHEET NO. 3 OF 4 SHEETS | STA. 116+00 TO STA. 128+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	28
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STAGE I STRIPING WEAVE
STATION & OFFSET TABLES

Baseline Station	Right Stripe Offset (ft)	
100+48	40.00	RT
100+75	39.65	RT
101+00	38.70	RT
101+25	37.15	RT
101+50	34.99	RT
101+75	32.22	RT
102+00	28.83	RT
102+25	24.83	RT
102+50	20.87	RT
102+75	17.54	RT
103+00	14.82	RT
103+25	12.70	RT
103+50	11.20	RT
103+75	10.30	RT
104+00	10.00	RT

Baseline Station	Right Stripe Offset (ft)	
116+00	10.00	RT
116+25	10.31	RT
116+50	11.20	RT
116+75	12.71	RT
117+00	14.82	RT
117+25	17.54	RT
117+50	20.87	RT
117+75	24.83	RT
118+00	28.83	RT
118+25	32.22	RT
118+50	34.99	RT
118+75	37.15	RT
119+00	38.70	RT
119+25	39.65	RT
119+50	40.00	RT

STAGE II STRIPING WEAVE
STATION & OFFSET TABLES

Baseline Station	Right Stripe Offset (ft)	
100+48	0.00	RT
100+75	0.35	RT
101+00	1.30	RT
101+25	2.85	RT
101+50	5.01	RT
101+75	7.78	RT
102+00	11.17	RT
102+25	15.17	RT
102+50	19.13	RT
102+75	22.46	RT
103+00	25.18	RT
103+25	27.30	RT
103+50	28.80	RT
103+75	29.70	RT
104+00	30.00	RT

Baseline Station	Right Stripe Offset (ft)	
114+95	30.00	RT
115+25	29.57	RT
115+50	28.55	RT
115+75	26.92	RT
116+00	24.69	RT
116+25	21.84	RT
116+50	18.39	RT
116+75	14.32	RT
117+00	10.44	RT
117+25	7.18	RT
117+50	4.53	RT
117+75	2.50	RT
118+00	1.06	RT
118+25	0.23	RT
118+47	0.00	RT

PRINT DRIVER = I_PDLB_B.plt
PEN TABLE = IDOT_VER02.tbl
LEVEL NAME = D064H18-sht-tsg
FILE NAME = D064H18-sht-tsg(GR).dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah		DESIGNED - ELH		REVISED -	
ESCA PROJECT NO. 1140.01		DRAWN - HAS/KAH		REVISED -	
PLOT SCALE = 0.1667 ' / in.		CHECKED - ELH		REVISED -	
PLOT DATE = 1/26/2015	9:30:31 AM	DATE - 01/15		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 1"=20' | SHEET NO. 4 OF 4 SHEETS | STA. 128+00 TO STA. 132+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	29
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STAGE II NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701602. SEE STANDARD FOR LOCATIONS OF ITEMS NOT SHOWN HERE.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. BARRIER WALL OFFSETS ARE TO THE CONSTRUCTION SIDE OF THE BARRIER WALL.
4. AN ADVANCE ARROWBOARD SHALL BE PLACED WEST OF MERIDIAN ROAD.
5. GAP FLEXIBLE DELINEATORS AT ENTRANCE AND LACLEDE AVE.
6. NO VEHICLES, EQUIPMENT, OR MATERIAL MAY BE PARKED OR STORED WITHIN 3.5 FEET OF THE BACK OF TEMPORARY CONCRETE BARRIER OR WITHIN 25 FEET OF THE IMPACT ATTENUATORS.

LEGEND

- DRUM (OR TYPE I OR II BARRICADE) WITH STEADY BURNING LIGHT
- TRAFFIC DIRECTION
- ARROW BOARD
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURNING LIGHT
- IMPACT ATTENUATOR
- TYPE III BARRICADE
- WORK AREA

N

SCALE IN FEET: 20 0 20 40

STA 95+16 FE

EDGE OF LANES

℄ US BUS 20 WESTBOUND LANES & BASELINE

EX ROW

STA 93+39 BEGIN TAPER AND PAVEMENT MARKING

93 | 94 | 95+00 | 96 | 97

DIRECTION INDICATOR BARRICADES AT 20′ CENTERS

MERIDIAN ROAD INTERSECTION

STA 97+05

MATCH LINE STA 98+00

4″ YELLOW TEMPORARY PAVEMENT MARKING

℄ US BUS 20 EASTBOUND LANES

EX ROW

ROAD CONSTRUCTION AHEAD — W20-I103(0)-48 — 500′

LEFT LANE CLOSED AHEAD — W20-5L(0)-48 — 500′

W4-2L(0)-48 — 500′

MATCH LINE STA 98+00

STA 99+30 BEGIN PAVEMENT MARKING

STA 99+50 BEGIN TAPER AND PAVEMENT MARKING

STA 99+80.45 FE

DRUMS AT 20′ CENTERS

STA 100+48 0′ RT END TAPER & BEGIN STRIPING WEAVE

DRUMS AT 20′ CENTERS TEMPORARY RAISED PAVEMENT MARKERS AT 20′ CENTERS BOTH SIDES

4″ WHITE TEMPORARY PAVEMENT MARKING

REVERSE CURVES DATA:
$R_1 = R_2 = 1040.03'$
PC STA 100+48.00, 0.00′ RT
PCC STA 102+24.00, 15.00′ RT
PT STA 104+00.00, 30.00′ RT

TYPE III BARRICADE WITH W1-6R(0)-6030 (ABOVE BARRICADE ON EAST SIDE)

SEE SHEET 29 FOR STATION & OFFSET TABLE FOR STRIPING WEAVE

STA 104+00 30′ RT END STRIPING WEAVE & TEMPORARY RAISED PVMT. MARKERS

EX ROW

98 | 99 | 100+00 | 101 | 102 | 103

STA 103+91.75 15.53′ RT

11′-0″ | 1′-0″ | 11′-0″

DRUMS AT 40′ CENTERS

W6-3(0)-48

STA 99+24 41′ RT END TAPER

4″ YELLOW TEMPORARY PAVEMENT MARKING

STA 103+50 41′ RT BEGIN FLEXIBLE DELINEATORS

MATCH LINE STA 104+00

SEE SHEET 31 FOR CONT.

PRINT DRIVER = EPOLE.B.plt
PEN TABLE = IDOT_VER02.tbl
PEN NAME = IDOT_VER02.tbl
FILE NAME = D:\SE4H18-sht-traffic98.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ′ / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:30:44 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 1″=20′ | SHEET NO. 1 OF 3 SHEETS | STA. 93+80 | TO STA. 104+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	30
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

N

20 0 20 40
SCALE IN FEET

MATCH LINE STA 104+00
SEE SHEET 30 FOR CONT.

MATCH LINE STA 110+00

ROCKFORD CENTRAL PLASTICS

EVEN KEEL MARINE

℄ US BUS 20 WESTBOUND LANES & BASELINE

STA 106+26.76 CE (HMA)

STA 108+62.21 CE

STA 109+30 30' RT

EX ROW

DRUMS AT 20' CENTERS UNLESS OTHERWISE SHOWN

DRUMS AT 40' CENTERS UNLESS OTHERWISE SHOWN

STA 105+31.00 27.13' RT

STA 107+33.67 27.13' RT

STA 107+84.25 22.91' RT

104 105+00 106 107 108 109

1'-0" 11'-0" 12'-0" 11'-0" 1'-0"

℄ US BUS 20 EASTBOUND LANES

STA 106+30 41' RT

STA 106+90.06 FE

4" DOUBLE YELLOW TEMPORARY PAVEMENT MARKING

4" WHITE TEMPORARY PAVEMENT MARKING

SN 101-1337

FLEXIBLE DELINEATORS AT 40' CENTERS

FLEXIBLE DELINEATORS AT 80' CENTERS

B

SEE SHEET 23 FOR SECTION B-B

W1-4R(O)-48

40 MPH W13-1(O)-2424

4" WHITE TEMPORARY PAVEMENT MARKING

STA 110+54.25 15.53' RT

STA 111+93.50 27.13' RT

STA 112+32.54 24" FE (AGG)

STA 113+96.17 27.13' RT

STA 114+16.33 CE

W1-7(O)-6030 MOUNTED ON WALL

DRUMS AT 20' CENTERS TEMPORARY RAISED PAVEMENT MARKERS AT 20' CENTERS BOTH SIDES

STA 114+95 30' RT BEGIN STRIPING WEAVE

110+00 111 112 113 114 115+00

200'-0"

STA 112+70 41' RT

STA 114+31.56 LACLEDE AVENUE

STA 115+00 41' RT END FLEXIBLE DELINEATORS

ROAD CONSTRUCTION AHEAD W20-1103(O)-48

4" DOUBLE YELLOW TEMPORARY PAVEMENT MARKING

SN 101-1336

FLEXIBLE DELINEATORS AT 80' CENTERS

FLEXIBLE DELINEATORS AT 40' CENTERS

PRINT DRIVER = L:\DLD_Batch\p
PEN TABLE = I:\DOT_TEMP2.tbl
PLOT SCALE = 1.0000
FILE NAME = D:\ESCA\18-011-1\staging\07.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

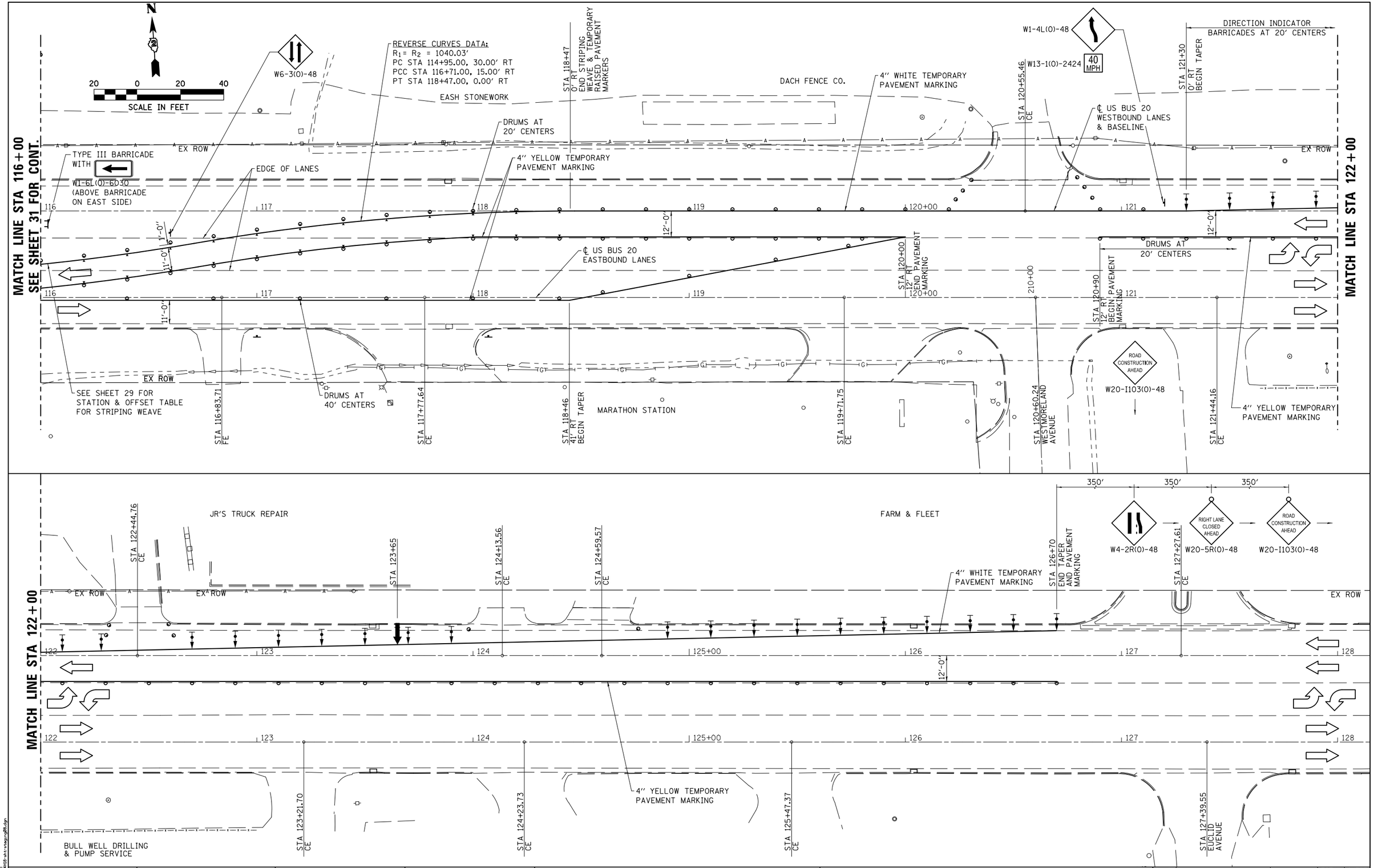
USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:30:52 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 1"=20' | SHEET NO. 2 OF 3 SHEETS | STA. 116+00 TO STA. 128+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	31
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
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PLOT DATE = 1/26/2015 9:31:00 AM	DATE - 01/15	REVISED -	

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 1"=20' | SHEET NO. 3 OF 3 SHEETS | STA. 116+00 TO STA. 128+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	32
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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N

20 0 20 40
SCALE IN FEET

GEORGE L. JOHNSON, TRUSTEE,
AND VICKI J. JOHNSON

JOHN LELAND TIBBETT AND
ROBERTA LOUISE TIBBETT, CO-TRUSTEES

LEGEND

- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- STONE RIPRAP, CLASS A4
- ARTICULATED BLOCK REVETMENT MAT
- TURF REINFORCEMENT MAT
- EROSION CONTROL BLANKET
- MULCH, METHOD 3

105+50
75' LT

105+63
82' LT

105+65
90' LT

105+76
85' LT

105+35
75' LT

105+25
75' LT

PR ROW

106+46.66
93' LT

106+47.08
88' LT

104+40
65' LT

CONSTRUCTION LIMITS

105+25
65' LT

PR TEMP EASEMENT

106+51.86
31.19' LT

℄ US BUS 20
WESTBOUND LANES
& BASELINE

104+40
31.17' LT

EX ROW

EX ROW

105+00
31.17' LT

104 105+00 106 107 108 109

MATCH LINE STA 109+50
SEE SHEET 34 FOR CONT.

EX ROW

EX ROW

104+00
74.44' RT

℄ US BUS 20
EASTBOUND LANES

STA 105+83.00
SN 101-1337

106+65
100' RT

107+00
74.47' RT

105+00
110' RT

REX A. PARKER, TRUSTEE
AND PATRICIA A. KARP, TRUSTEE

106+30
170' RT

PR ROW

105+35
170' RT

CONSTRUCTION LIMITS

PR TEMP EASEMENT

105+65
205' RT

106+15
205' RT

USE CLASS 2A ON FORESLOPE
AND DITCH BOTTOM UNLESS
NOTED OTHERWISE

USE CLASS 4 ON
BACKSLOPE AND BEYOND

3'
TYP.

USE EROSION CONTROL BLANKET
IN DITCH BOTTOM AND WITHIN
THREE FEET OF DITCH BOTTOM
UNLESS NOTED OTHERWISE

SEEDING DETAIL

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CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -
PLOT DATE = 1/26/2015 9:31:15 AM	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY AND EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. 1 OF 2 SHEETS | STA. 103+50 TO STA. 109+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	33
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

N

20 0 20 40
SCALE IN FEET

LEGEND
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- STONE RIPRAP, CLASS A4
- TURF REINFORCEMENT MAT
- EROSION CONTROL BLANKET
- MULCH, METHOD 3

MATCH LINE STA 109+50
SEE SHEET 33 FOR CONT.

JOHN LELAND TIBBETT AND
ROBERTA LOUISE TIBBETT, CO-TRUSTEES

℄ US BUS 20
WESTBOUND LANES
& BASELINE

MELVIN G. BROWN
AND PATSY E. BROWN

111+25
45' LT

111+00
31.18' LT

EX ROW

112+50
60' LT

113+00
105' LT

CONSTRUCTION LIMITS

113+00
85' LT

113+30
105' LT

113+35
85' LT

113+50
40' LT

PR ROW

PR TEMP EASEMENT

113+75
60' LT

113+75
45' LT

114+50
40' LT

115+00
31.18' LT

EX ROW

110+00 111 112 113 114 115+00

200+00

EX ROW

111+00
74.50' RT

℄ US BUS 20
EASTBOUND LANES

112+00
100' RT

REX A. PARKER, TRUSTEE
AND PATRICIA A. KARP, TRUSTEE

STA 113+17.00
SN 101-1336

114+24.20
140' RT

114+00
140' RT

198' LT

CONSTRUCTION LIMITS

PR ROW

PR TEMP EASEMENT

112+85
200' RT

112+85
215' RT

113+55
200' RT

113+55
215' RT

EX ROW

198' LT

USE CLASS 2A ON FORESLOPE
AND DITCH BOTTOM UNLESS
NOTED OTHERWISE

USE CLASS 4 ON
BACKSLOPE AND BEYOND

3'
TYP.

USE EROSION CONTROL BLANKET
IN DITCH BOTTOM AND WITHIN
THREE FEET OF DITCH BOTTOM
UNLESS NOTED OTHERWISE

SEEDING DETAIL

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MDL TABLE = I:\DOT_VER82.tbl
CELL LIBRARY = I:\DOT_VER82.cel
FILE NAME = D:\64H18-sht-ero82.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

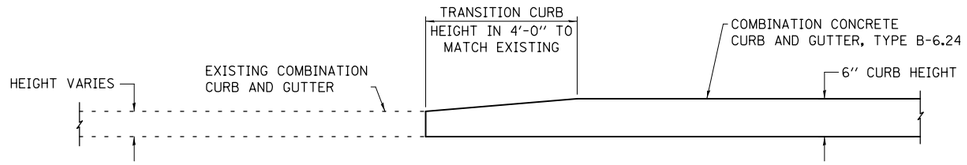
USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - RDP	REVISED -	
PLOT DATE = 1/26/2015 9:31:27 AM	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

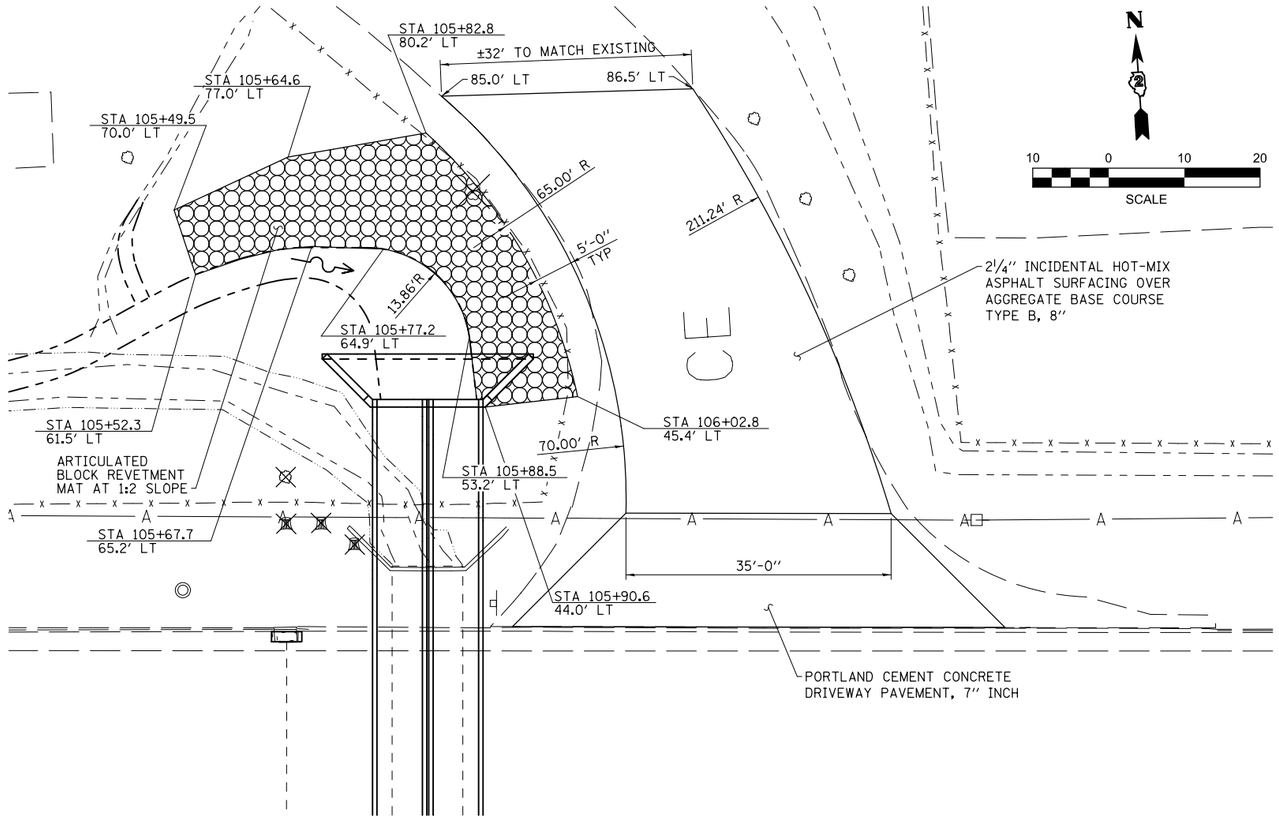
RIGHT-OF-WAY AND EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. 2 OF 2 SHEETS | STA. 109+50 TO STA. 115+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	34
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CURB AND GUTTER TRANSITION DETAIL



ARTICULATED BLOCK PLAN

ENTRANCE PLAN STATION 106+26.76

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

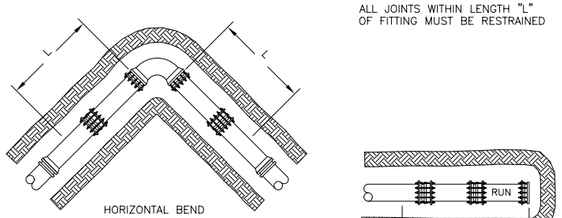
USER NAME = kah		DESIGNED - ELH		REVISED -	
ESCA PROJECT NO. 1140.01		DRAWN - HAS/KAH		REVISED -	
PLOT SCALE = 0.1667 ' / in.		CHECKED - RDP		REVISED -	
PLOT DATE = 1/26/2015	9:31:39 AM	DATE - 01/15		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ENTRANCE DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

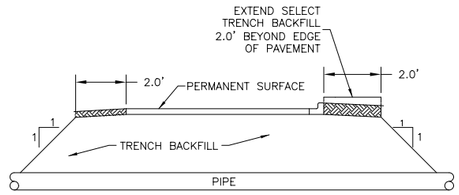
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	35
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ALL JOINTS WITHIN LENGTH "L" OF FITTING MUST BE RESTRAINED

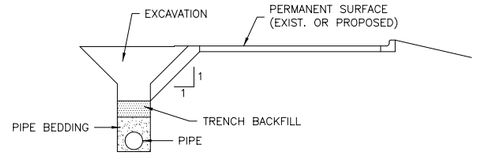
DIP diameter (inches)	L (feet) Horizontal bends 11.25°	22.5°	45°	90°	Vertical Down Bends 45°	Vertical Up Bends 45°	Dead Ends
4 to 8	1	3	6	14	15	6	36
10 to 12	2	4	8	20	21	8	51
14 to 16	3	5	11	25	27	11	66
18 to 20	3	6	13	31	33	13	80
24	4	7	15	36	39	15	94

RESTRAINING GLAND RESTRAINT
N.T.S.

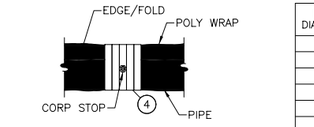


TYPICAL SECTION OF PIPE
CROSSING UNDER PERMANENT SURFACE
N.T.S.

NOTE:
THESE MINIMUM SECTIONS APPLY WHEREVER PIPE IS ADJACENT TO, OR CROSSES UNDER AN EXISTING OR NEW ROADWAY, PARKING LOT, SIDEWALK, DRIVEWAY, STRUCTURE OR PAVEMENT.

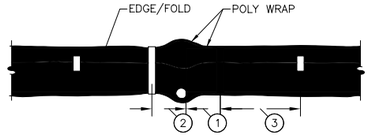


TYPICAL SECTION OF PIPE
PARALLEL TO PERMANENT SURFACE
N.T.S.



DIRECT TAP WITH POLY WRAP

PIPE DIA. (IN.)	MINIMUM POLY WRAP WIDTH (IN.) FLAT TUBE	SHEET
4	14	28
6	16	32
8	20	40
10	24	48
12	27	54
14	30	60
16	34	68

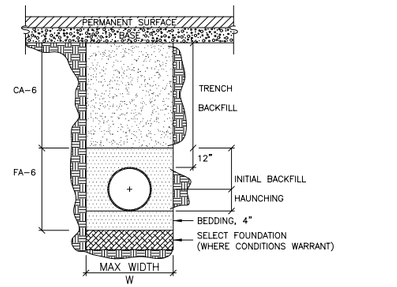


1. EXTEND POLY WRAP FOR PIPE 1 A MINIMUM OF 12" BEYOND BELL ONTO PIPE 2. SECURE TO PIPE 2 WITH TAPE OR PLASTIC TIE STRAPS.
2. EXTEND POLY WRAP FOR PIPE 2 ONTO PIPE 1 A MINIMUM OF 12" BEYOND THE PIPE 1 BELL. INSTALL OVER THE PIPE 1 POLY WRAP AND SECURE THE END WITH TAPE OR PLASTIC TIE STRAPS.
3. SECURE THE CUT EDGE ON POLY SHEETS EVERY 3'–0". SECURE THE FOLD ON POLY TUBES EVERY 4'–0". IF INSTALLED BELOW THE WATER TABLE, SECURE EVERY 2'–0".
4. INSTALL 2 TO 3 WRAPS OF POLYETHYLENE ADHESIVE TAPE COMPLETELY AROUND THE PIPE AND POLY WRAP AT TAPPING LOCATION. MOUNT TAPPING MACHINE OVER THE TAPE AND INSTALL CORPORATION THROUGH THE TAPE AND POLY WRAP. REPAIR ANY DAMAGE TO POLY WRAP IF NEEDED.
5. POLY WRAP SHALL BE A MINIMUM OF 8 MILS THICK AND SHALL BE FURNISHED IN TUBE FORM.

POLY WRAP INSTALLATION AT PIPE JOINTS

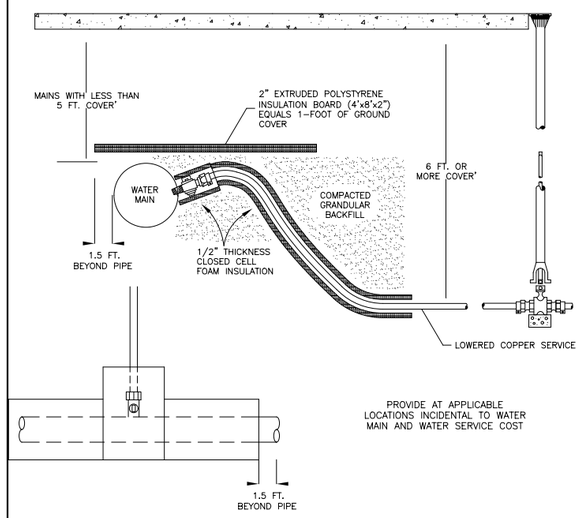
POLYETHYLENE ENCASEMENT
(POLY WRAP) INSTALLATION DETAIL
N.T.S.

PIPE DIA. (IN.)	MAX. PAY WIDTH (FT.)
<4	3.00
4	3.33
6	3.58
8	3.78
10	3.97
12	4.17
15	4.46
16	4.56
18	4.75
24	5.33

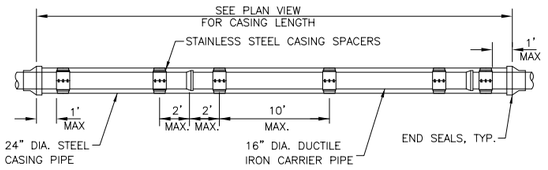


NOTE:
THESE ITEMS WILL BE INCIDENTAL.
TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED TO 95% STANDARD PROCTOR OPTIMUM DENSITY.

TRENCH BACKFILL AND SELECT FOUNDATION
N.T.S.



FREEZE PROTECTION
N.T.S.



PLACEMENT OF CASING SPACERS

STANDARD SPECIFICATION MAY BE SUPERCEDED BY MANUFACTURER'S RECOMMENDATIONS WITH ENGINEER'S APPROVAL.

ONE SPACER SHALL BE PLACED NOT MORE THAN 1' FROM EACH END OF CASING PIPE.

ONE SPACER SHALL BE PLACED NOT MORE THAN 1' FROM EACH SIDE OF A BELL AND SPIGOT.

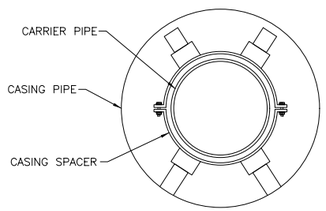
SUBSEQUENT SPACERS SHALL BE PLACED AT NOT MORE THAN 10' INTERVALS

END SEALS

PROVIDE AND INSTALL SYNTHETIC RUBBER END SEALS ON CASING PIPE, AND CARRIER PIPE ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

EACH END SEAL SHALL BE SECURED WITH T–304 STAINLESS STEEL BANDING STRAPS.

TYPICAL CASING PIPE DETAIL
N.T.S.

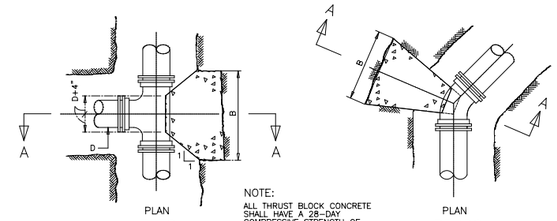


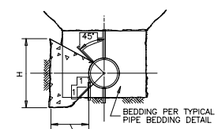
CASING SPACERS SHALL BE A TWO PIECE SHELL MADE OF 14 GAUGE T–304 STAINLESS STEEL. EACH SECTION SHALL HAVE A FLANGE FORMED WITH RIBS FOR STRENGTH AND WITH A MINIMUM OF THREE (3) 5/16 INCH STAINLESS STEEL BOLTS FOR EIGHT INCH WIDE AND FOUR (4) 5/16 INCH STAINLESS STEEL BOLTS FOR TWELVE INCH WIDE SPACERS.

EACH SHELL SHALL BE LINED WITH A RIBBED PVC EXTRUSION WITH A RETAINING RIDGE THAT OVERLAPS THE SHELL TO PREVENT SLIPPING. RUNNER SURFACE SHALL BE UHMW POLYMER FOR ABRASION RESISTANCE AND A LOW COEFFICIENT OF FRICTION. THE RUNNERS AND RISERS SHALL BE ATTACHED AT APPROPRIATE POSITIONS TO PROPERLY SUPPORT THE CARRIER WITHIN THE CASING.

ALL RISERS SHALL BE 10 GAUGE T–304 STAINLESS STEEL WELDED TO THE SHELL AND SHALL BE REINFORCED IF OVER 6 INCHES IN HEIGHT. ALL WELDS AND METAL SURFACES SHALL BE PASSIVATED.

TYPICAL CASING SPACER DETAIL
N.T.S.





SECTION A–A

BENDS AND TEES

*THRUST BLOCK DIMENSION TABLE								
PIPE SIZE	90° BENDS		45° BENDS		22 1/2 ° ELLS 11 1/4 ° ELLS		TEES	
D	H	B	H	B	H	B	H	B
6"	12	24	9	18	7	14	11	22
8"	16	32	12	24	9	18	14	28
10"	20	40	15	30	11	22	17	34
12"	24	48	18	36	13	26	21	42
16"	32	56	26	44	20	34	28	48

*DIMENSIONS SHOWN ARE MINIMUM *DIMENSIONS SHOWN ARE INCHES

THRUST BLOCK DETAILS
N.T.S.

ESCA CONSULTANTS, INC.
CIVIL • STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:31:52 AM	DATE - 12/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

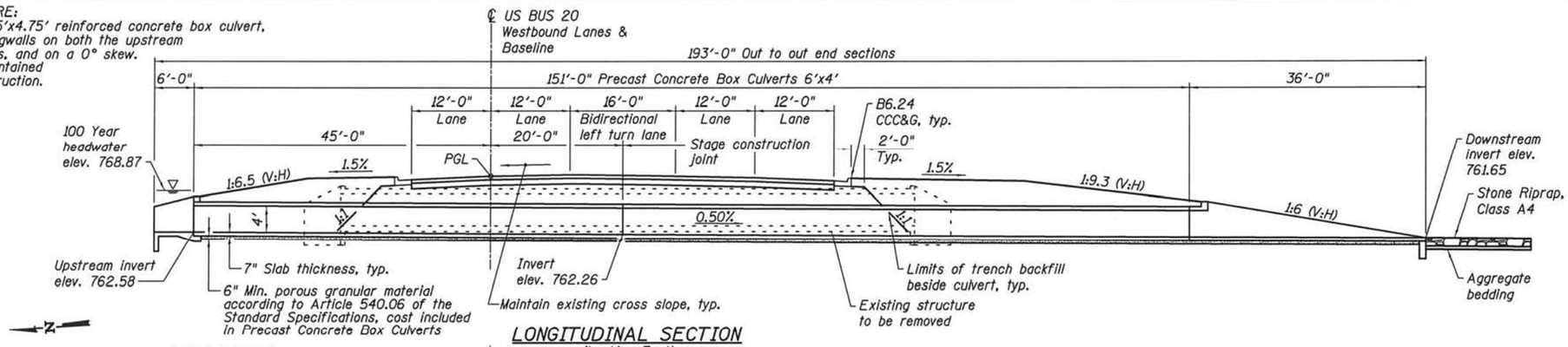
PROPOSED WATER MAIN DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	36
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING STRUCTURE:
SN 101-1321 is a 9.5'x4.75' reinforced concrete box culvert, 87 ft. in length, wingwalls on both the upstream and downstream ends, and on a 0° skew. Traffic is to be maintained utilizing stage construction.

No salvage.



PLAN

GENERAL NOTES

1. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
2. All labor and material required for the construction of the connection collar shall be included in Box Culvert End Sections.
3. The precast concrete box culvert shall conform to the requirements of ASTM C 1577. The design fill height is three feet.
4. The box culvert end sections located on the south side of US BUS 20 shall be precast and shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of ASTM C 1577 as well as the details in the plans.
5. The box culvert end section located on the north side of US BUS 20 shall be cast-in-place. Precast substitution is not allowed.
6. Earth excavation required for the culvert to the limits shown on the drawings shall be included in Removal of Existing Structures No. 1.
7. For backfilling and embankment, see the General Notes on Sheet 3 and the Standard Specifications.
8. See the roadway plans for quantities of temporary concrete barrier, storm sewer, pavement patches, and articulated block revetment mat.

WATERWAY INFORMATION

Drainage Area = 1436.6 Acres, 2.287 Sq. Mi.
Existing Low Grade Elev. = 768.84 @ sta. 114+09
Prop. Low Grade Elev. = 768.84 @ sta. 114+09

Flood		Undetained Discharge (cfs)	Detained Discharge (cfs)	Headwater Elev. (ft) Exist.	Prop.
OVT (E)	101-1235	-	361	768.84	-
	101-1321	-	270		
	Total	-	631		
10-Year (E)	101-1235	-	295	767.73	-
	101-1321	-	179		
	Total	818	474		
OVT (P)	101-1235	-	680	-	768.84
	101-1321	-	447		
	Total	-	1127		
10-Year (P)	101-1235	547	502	-	766.25
	101-1321	271	219		
	Total	818	721		
50-Year (P)	101-1235	-	635	-	768.08
	101-1321	-	390		
	Total	1605	1025		
100-Year (P)	101-1235	-	681	-	768.87
	101-1321	-	450		
	Total	2084	1131		

10-Year Velocity through Existing Structure: 1235=9.5 fps, 1321=6.0 fps
10-Year Velocity through Proposed Structure: 1336=11.1 fps, 1337=5.3 fps

SN 101-1337 TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	77
Removal of Existing Structures No. 1	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	1
Box Culvert End Sections, Culvert No. 3	Each	2
Precast Concrete Box Culverts 6'x4'	Foot	302
Temporary Soil Retention System	Sq. Ft.	217

DESIGN SPECIFICATIONS

2012 AASHTO LRFD
Bridge Design Specifications
6th Edition with 2013 Interims

LOADING HL-93

Allow 50 psf for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement bars)

PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 psi (WWF)

STATE OF ILLINOIS
ERIC L. HENKEL
No. 6159
LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-16

SIGNATURE

01-22-15
DATE

GENERAL PLAN & ELEVATION
US BUS 20 OVER
BRANCH OF KENT CREEK
F.A.P. ROUTE 303 - SECTION 40T-1
WINNEBAGO COUNTY
STATION 105+83.00
STRUCTURE NO. 101-1337

ESCA CONSULTANTS, INC.

USER NAME = skm	DESIGNED - ELH	03/14	REVISED -		
ESCA PROJECT NO. 1148.01	CHECKED - ELH	03/14	REVISED -		
PLOT SCALE = 8.2 '/ in.	DRAWN - DWH/KAH	12/14	REVISED -		
PLOT DATE = 1/22/2015 12:45:35 PM	CHECKED - ELH	01/15	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

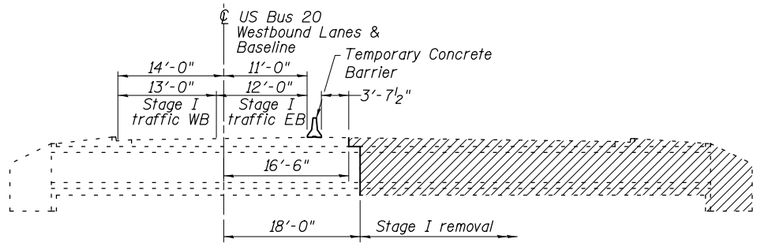
SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	37
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PRINT DRIVER = ...
PRINTED BY = ...
MODEL NAME = ...
FILE NAME = ...

STAGE CONSTRUCTION NOTES

1. All staging sections are looking in the direction of increasing stations (East).
2. Hatched areas indicate removal.
3. Removal of existing wingwalls and toe walls is included in Removal of Existing Structures No. 1.
4. See roadway plans for quantity of Temporary Concrete Barrier.



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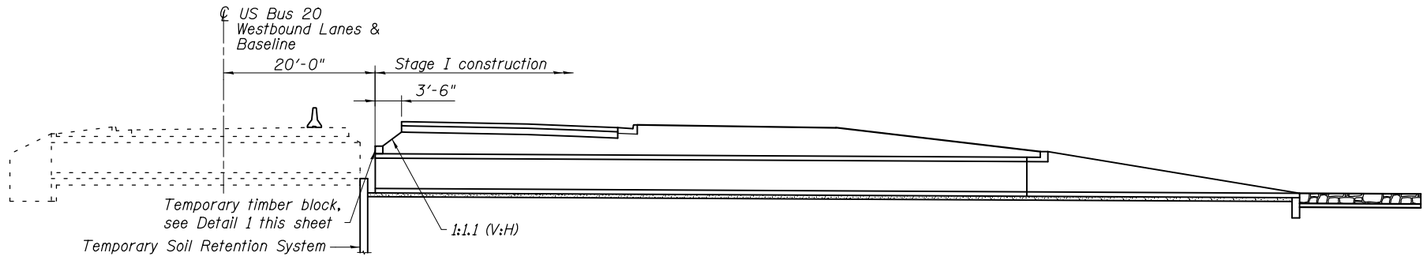
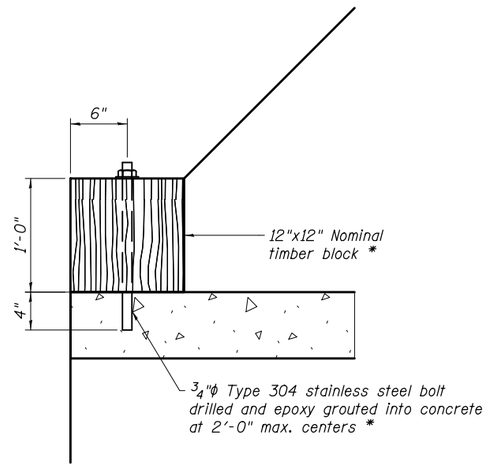
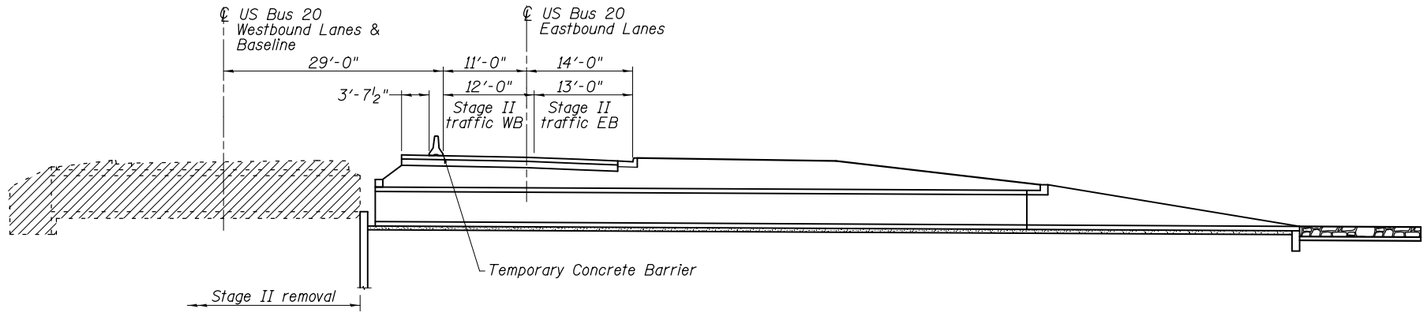


STAGE I CONSTRUCTION



* Cost of installation and removal included in Precast Concrete Box Culverts

DETAIL 1



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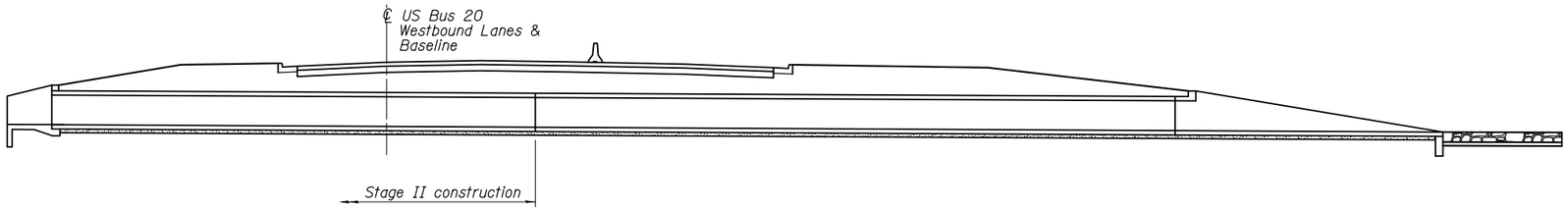

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

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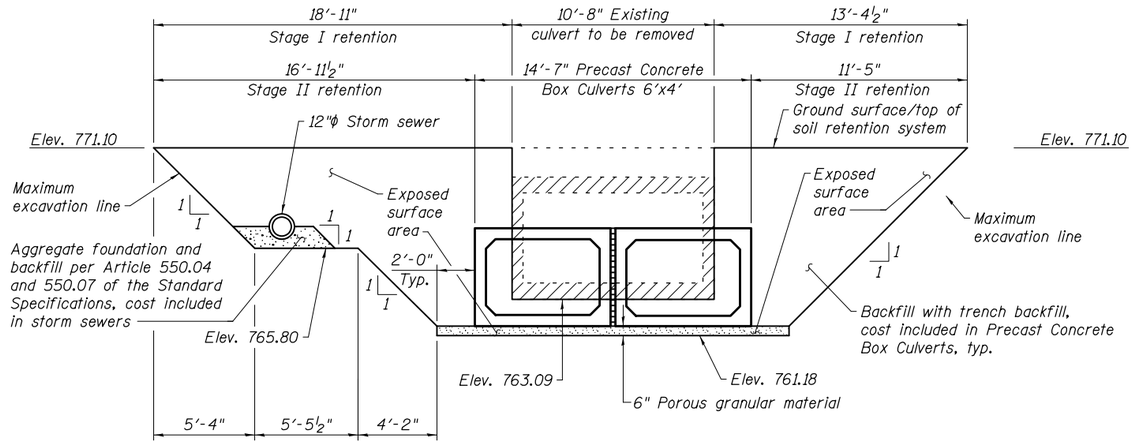
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 101-1337
SHEET NO. 2 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	38
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY SOIL RETENTION SYSTEM NOTES

1. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. Existing structure details are based on the best available information from existing structure plans.
3. Adjust retention lengths as necessary for actual precast box culvert dimensions.



SECTION THRU BARRELS SHOWING TEMPORARY SOIL RETENTION SYSTEM LIMITS

(Looking North)

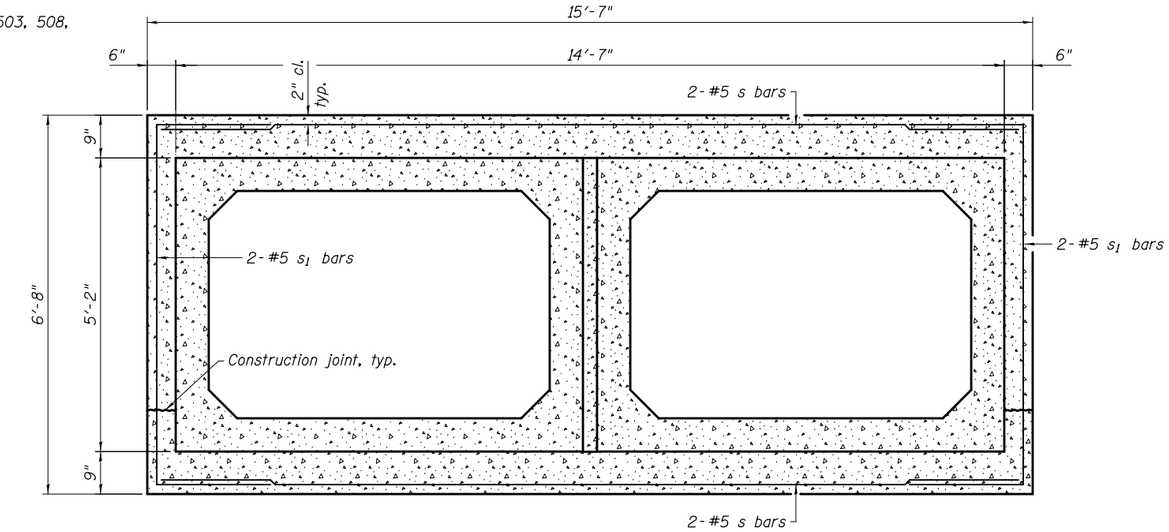
GENERAL NOTES

1. The contract unit price for Box Culvert End Sections, Culvert No. 1 shall include the concrete structures, reinforcement bars, earth excavation where required, backfilling, and necessary grading to fit the structure as shown in the plans.

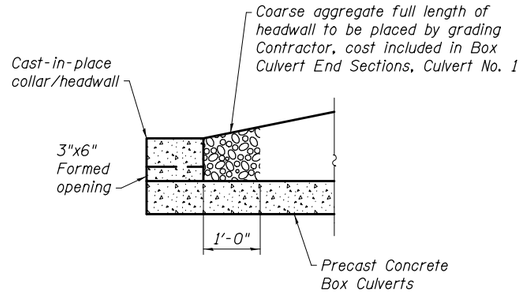
2. This work shall be done according to the applicable portions of 501, 503, 508, and 540 of the Standard Specifications.

STATION 105+83.00
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 303 SEC. 40T-1
LOADING HL-93
STRUCTURE NO. 101-1337

NAME PLATE
See Std. 515001



SECTION THRU CONNECTION COLLAR/ HEADWALL

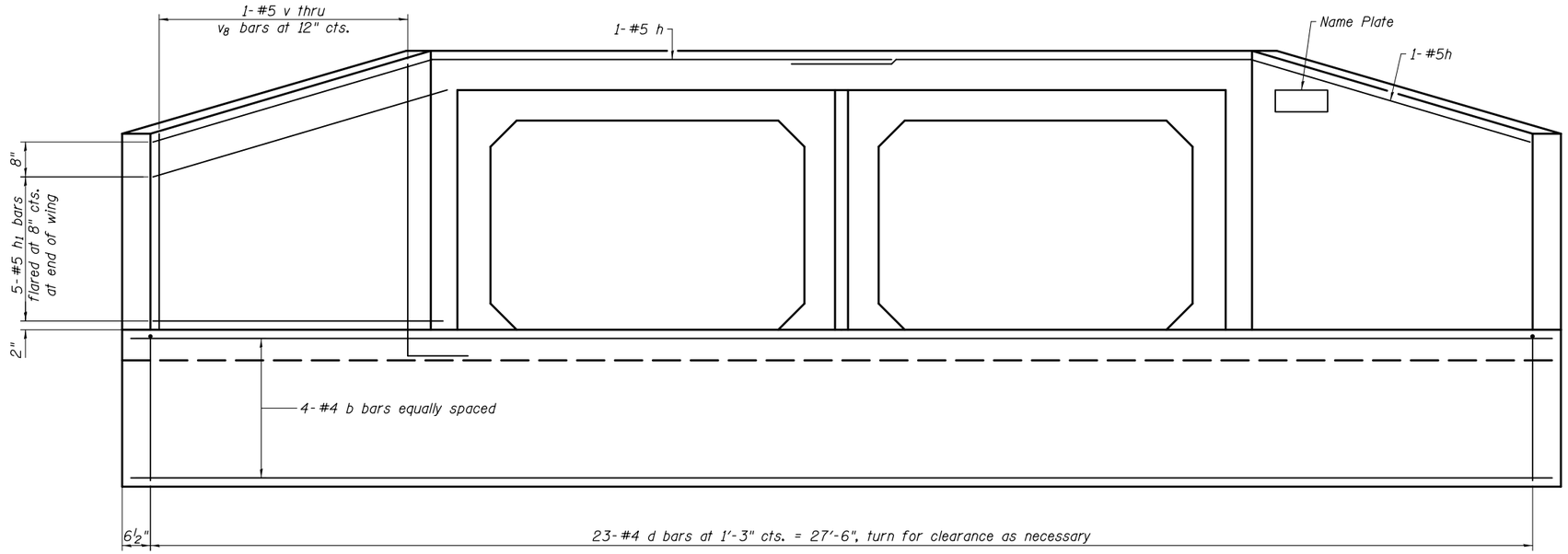


DRAIN DETAIL

CAST-IN-PLACE END SECTION TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Box Culvert End Sections, Culvert No. 1	Each	1

MIN. BAR LAP
#5 bar = 2'-7"



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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTIONS, CULVERT NO. 1
STRUCTURE NO. 101-1337
SHEET NO. 4 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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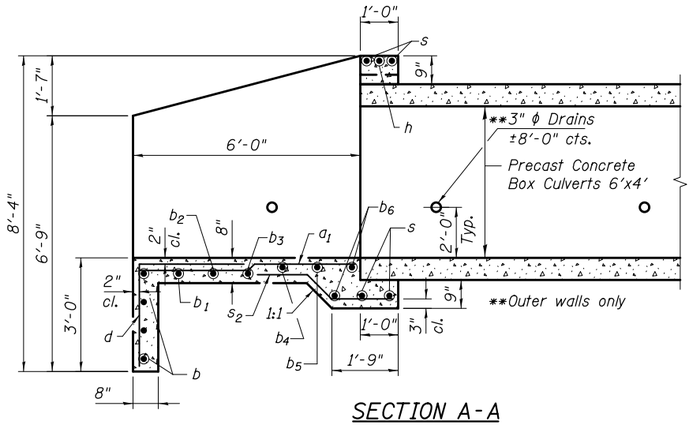
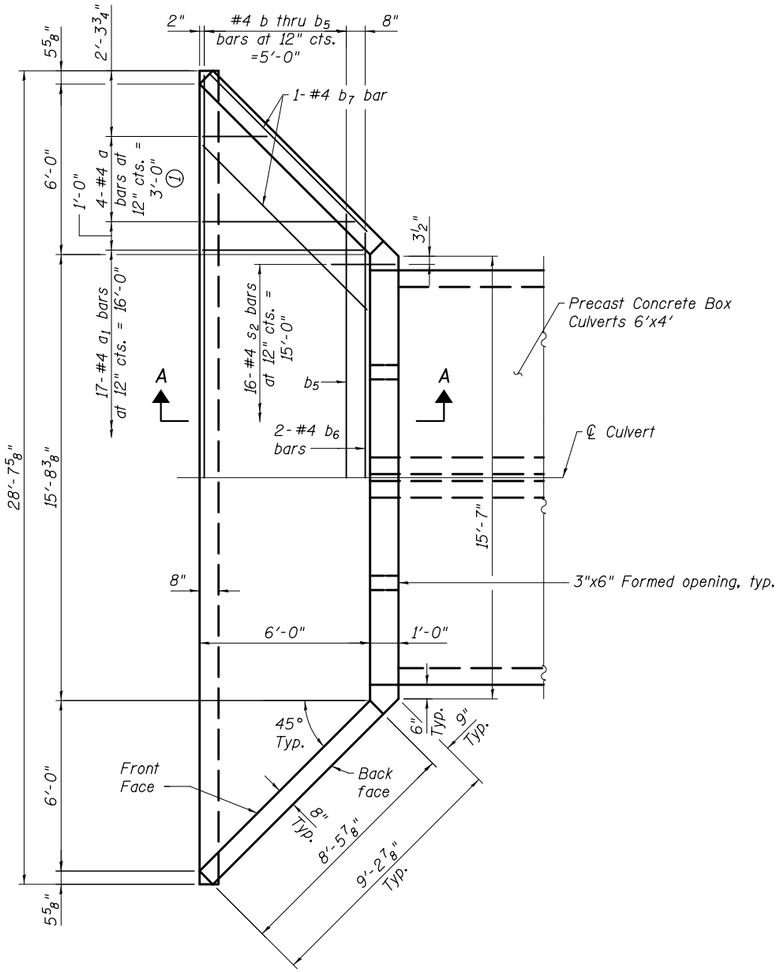
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



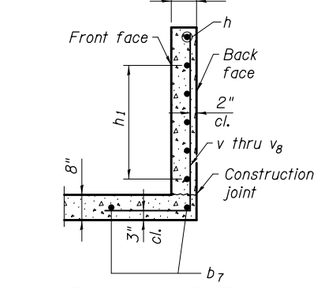
SECTION A-A



PLAN

(Showing apron partial reinforcement)

① Field cut to fit and use remaining pieces on other side, see Field Cutting Diagram



WING TYPICAL SECTION

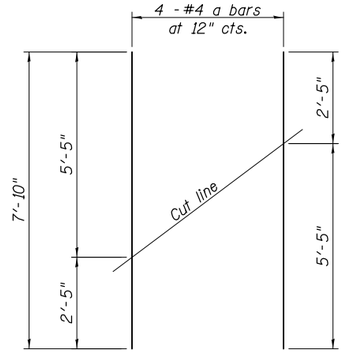
(Both wings)

BILL OF MATERIAL

(For Information Only)

Bar	No.	Size	Length	Shape
a	4	#4	7'-10"	
a1	17	#4	5'-8"	
b	4	#4	28'-3"	
b1	1	#4	26'-9"	
b2	1	#4	24'-9"	
b3	1	#4	22'-9"	
b4	1	#4	20'-9"	
b5	1	#4	18'-9"	
b6	2	#4	17'-5"	
b7	4	#4	8'-0"	
d	23	#4	5'-4"	
h	2	#5	18'-1"	
h1	10	#5	8'-10"	
s	4	#5	15'-3"	
s1	4	#5	11'-5"	
s2	16	#4	3'-7"	
v	2	#5	6'-0"	
v1	2	#5	6'-2"	
v2	2	#5	6'-4"	
v3	2	#5	6'-7"	
v4	2	#5	6'-9"	
v5	2	#5	6'-11"	
v6	2	#5	7'-1"	
v7	2	#5	7'-4"	
v8	2	#5	7'-6"	
* Concrete Structures			Cu. Yd.	8.7
* Reinforcement Bars			Pound	769

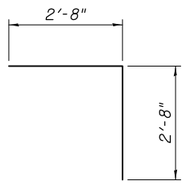
*Included in Box Culvert End Sections, Culvert No. 1



BARS a

FIELD CUTTING DIAGRAM

Order bars full length, cut as shown, and use remainder of bars in opposite end



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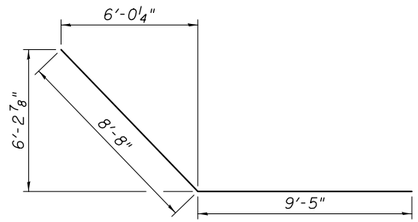
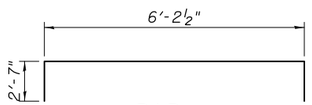
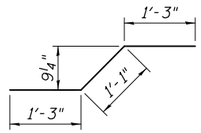


BAR h

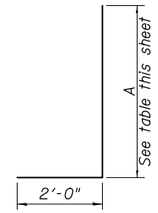


BAR s1



BAR s2

BAR BENDING DETAILS



Bar	A Ft.	A In.
v	4	0
v1	4	2
v2	4	4
v3	4	7
v4	4	9
v5	4	11
v6	5	1
v7	5	4
v8	5	6

BARS v THRU v8

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTIONS, CULVERT NO. 1
STRUCTURE NO. 101-1337

SHEET NO. 5 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	41
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 7/24/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .3 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-1a
Station 21' E. of culv.
Offset 19.00ft S EOP
Ground Surface Elev. 96.5 ft

Surface Water Elev. ft
Stream Bed Elev. 92.0 ft

Groundwater Elev.:
First Encounter 84.5 ft
Upon Completion Wash ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF brown SILTY CLAY LOAM			1.8 P	22
	94.50			
HARD brown SILTY CLAY LOAM		5 10 14	4.5 P	18
	93.00			
HARD black TAN	-5	1 2 100/5"		
	90.50			
SOFT black SILTY LOAM with 30% ORGANICS		1 2 1	0.4 P	140
	87.50			
LOOSE light gray dirty moist SANDY GRAVEL	-10	2 3 6		
	85.50			
MEDIUM tan SANDY GRAVEL		7 11 15		
	83.00			
MEDIUM tan SANDY GRAVEL	-15	13 10 9		
	80.00			
STIFF light gray SANDY LOAM TILL		11 4 4	1.1 P	11
	78.00			
No Recovery	-20	4		
No Recovery *(continued)*		4 6		
	75.50			
MEDIUM light gray SANDY LOAM TILL		4 4 7	0.7 B	9
	73.00			
STIFF light gray SANDY LOAM TILL	-25	3 5 8	1.4 B	10
	70.50			
MEDIUM light gray SANDY LOAM TILL		2 4 6	0.9 B	11
	68.00			
SOFT light gray SANDY LOAM TILL	-30	2 3 6	0.3 P	11
	65.50			
VERY SOFT light gray SANDY LOAM TILL		1 3 4	0.2 B	11
	62.50			
STIFF gray CLAY LOAM with fine SAND lens	-35	2 4 5	1.9 B	21
	60.50			
Wash VERY SOFT gray SILT		2 3 4	0.2 P	24
	57.50			
	-40	12		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 7/24/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .3 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-1a
Station 21' E. of culv.
Offset 19.00ft S EOP
Ground Surface Elev. 96.5 ft

Surface Water Elev. ft
Stream Bed Elev. 92.0 ft

Groundwater Elev.:
First Encounter 84.5 ft
Upon Completion Wash ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Wash MEDIUM tan clean medium coarse SAND *(continued)*	55.50	12 16		
End of Boring				
	-45			
	-50			
	-55			
	-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 101-1337
SHEET NO. 6 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	42
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 7/25/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .3 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-2a
Station 25' W. of culv.
Offset 27.00ft N CL
Ground Surface Elev. 99.5 ft

Surface Water Elev. ft
Stream Bed Elev. 92.0 ft

Groundwater Elev.:
First Encounter 85.0 ft
Upon Completion Wash ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.7" Asphalt, 9.4" Concrete				
	97.50			
MEDIUM brown LOAM		2 2 2	0.5 P	14
	96.00			
No Recovery	-5	2 3 3		
	93.50			
MEDIUM gray SILTY LOAM with SAND lens		2 3 5	0.8 P	19
	90.50			
MEDIUM tan fine SAND	-10	5 7 13		
	88.50			
MEDIUM tan SANDY GRAVEL		7 6 6		
	86.00			
MEDIUM tan SANDY GRAVEL	-15	6 9 10		
	83.50			
Wash MEDIUM tan SANDY GRAVEL		5 8 9		
	81.00			
LOOSE tan SANDY GRAVEL	-20	4		
LOOSE tan SANDY GRAVEL *(continued)*		2 4		
	78.00			
VERY STIFF light gray SANDY LOAM TILL		3 4 7	2.1 P	10
	76.00			
STIFF light gray SANDY LOAM TILL	-25	4 5 7	1.9 B	10
	73.50			
MEDIUM light gray SANDY LOAM TILL		3 5 6	0.9 B	10
	71.00			
MEDIUM light gray SANDY LOAM TILL	-30	3 4 6	0.5 B	9
	68.50			
SOFT light gray SANDY LOAM TILL		2 4 4	0.3 P	12
	65.50			
VERY STIFF gray CLAY LOAM with SAND lens	-35	2 3 6	3.3 B	22
	63.50			
Wash STIFF tan SILTY CLAY		3 4 7	1.2 B	23
	60.50			
	-40	2		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 7/25/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .3 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-2a
Station 25' W. of culv.
Offset 27.00ft N CL
Ground Surface Elev. 99.5 ft

Surface Water Elev. ft
Stream Bed Elev. 92.0 ft

Groundwater Elev.:
First Encounter 85.0 ft
Upon Completion Wash ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
LOOSE tan fine SAND with SILT lens *(continued)*		2 4		
	59.50			
End of Boring				
	-45			
	-50			
	-55			
	-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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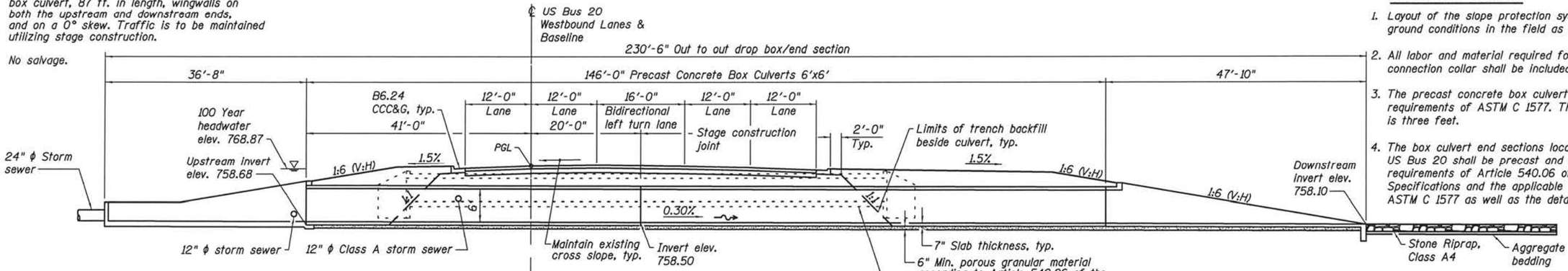
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 101-1337
SHEET NO. 7 OF 7 SHEETS

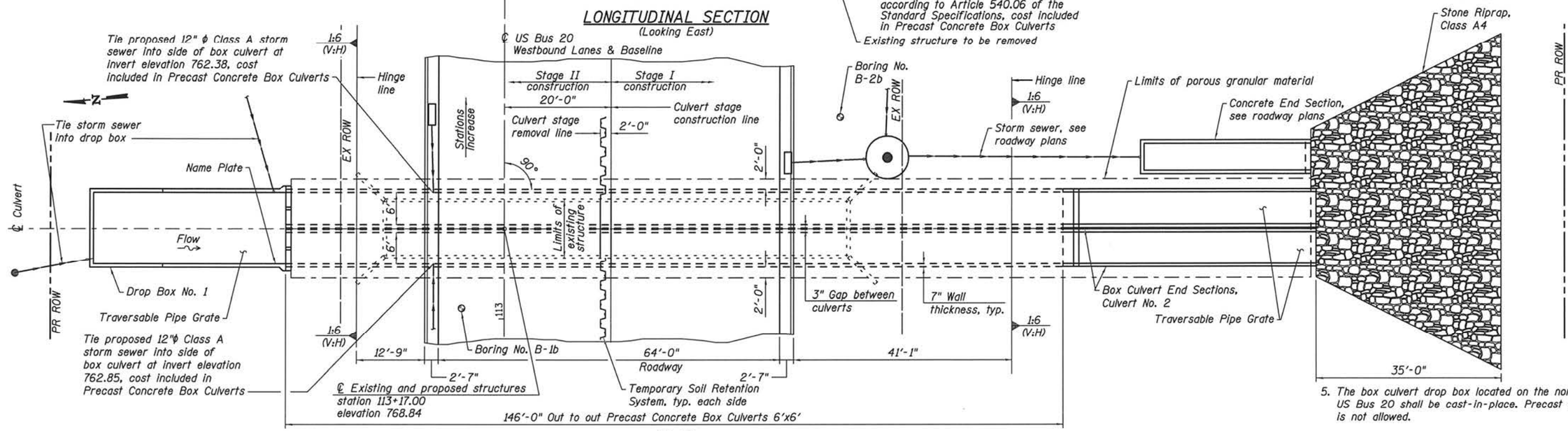
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	43
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING STRUCTURE:
SN 101-1235 is a 10'x4' reinforced concrete box culvert, 87 ft. in length, wingwalls on both the upstream and downstream ends, and on a 0° skew. Traffic is to be maintained utilizing stage construction.

No salvage.



LONGITUDINAL SECTION
(Looking East)



PLAN

WATERWAY INFORMATION

Drainage Area = 1436.6 Acres, 2.287 Sq. Mi.
Existing Low Grade Elev. = 768.84 ℄ sta. 114+09
Prop. Low Grade Elev. = 768.84 ℄ sta. 114+09

Flood		Undetained Discharge (cfs)	Detained Discharge (cfs)	Headwater Elev. (ft) Exist.	Prop.
OVT (E)	101-1235	-	361	768.84	-
	101-1321	-	270		
	Total	-	631		
10-Year (E)	101-1235	-	295	767.73	-
	101-1321	-	179		
	Total	818	474		
OVT (P)	101-1235	-	680	-	768.84
	101-1321	-	447		
	Total	-	1127		
10-Year (P)	101-1235	547	502	-	766.25
	101-1321	271	219		
	Total	818	721		
50-Year (P)	101-1235	-	635	-	768.08
	101-1321	-	390		
	Total	1605	1025		
100-Year (P)	101-1235	-	681	-	768.87
	101-1321	-	450		
	Total	2084	1131		

10-Year Velocity through Existing Structure: 1235=9.5 fps, 1321=6.0 fps
10-Year Velocity through Proposed Structure: 1336=11.1 fps, 1337=5.3 fps

DESIGN SPECIFICATIONS

2012 AASHTO LRFD
Bridge Design Specifications
6th Edition with 2013 Interims

LOADING HL-93

Allow 50 psf for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement bars)

PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 psi (WWF)

SN 101-1336 TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	191
Removal of Existing Structures No. 2	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 2	Each	2
Precast Concrete Box Culverts 6'x6'	Foot	292
Drop Box No. 1	Each	1
Temporary Soil Retention System	Sq. Ft.	252

GENERAL NOTES

1. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
2. All labor and material required for the construction of the connection collar shall be included in Drop Box.
3. The precast concrete box culvert shall conform to the requirements of ASTM C 1577. The design fill height is three feet.
4. The box culvert end sections located on the south side of US Bus 20 shall be precast and shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of ASTM C 1577 as well as the details in the plans.
5. The box culvert drop box located on the north side of US Bus 20 shall be cast-in-place. Precast substitution is not allowed.
6. Earth excavation required for the culvert to the limits shown on the drawings shall be included in Removal of Existing Structures No. 2.
7. For backfilling and embankment, see the General Notes on Sheet 3 and the Standard Specifications.
8. The cost of connecting the proposed storm sewer to the box culvert is included in the cost of Precast Concrete Box Culverts.
9. See the roadway plans for quantities of temporary concrete barrier, storm sewer, and pavement patches.

STATE OF ILLINOIS
ERIC L. HENKEL
No. 6159
LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-16

SIGNATURE

01-22-15
DATE

GENERAL PLAN & ELEVATION
US BUS 20 OVER
BRANCH OF KENT CREEK
F.A.P. ROUTE 303 - SECTION 40T-1
WINNEBAGO COUNTY
STATION 113+17.00
STRUCTURE NO. 101-1336

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ESCA CONSULTANTS, INC.

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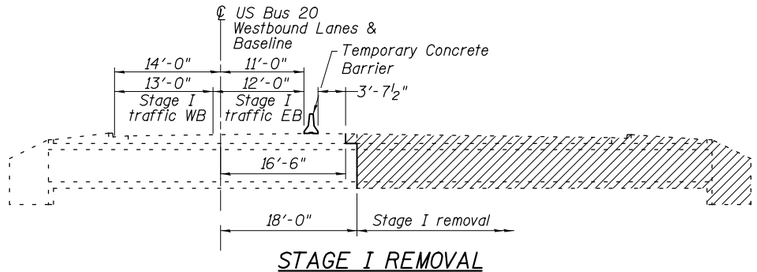
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 7 SHEETS

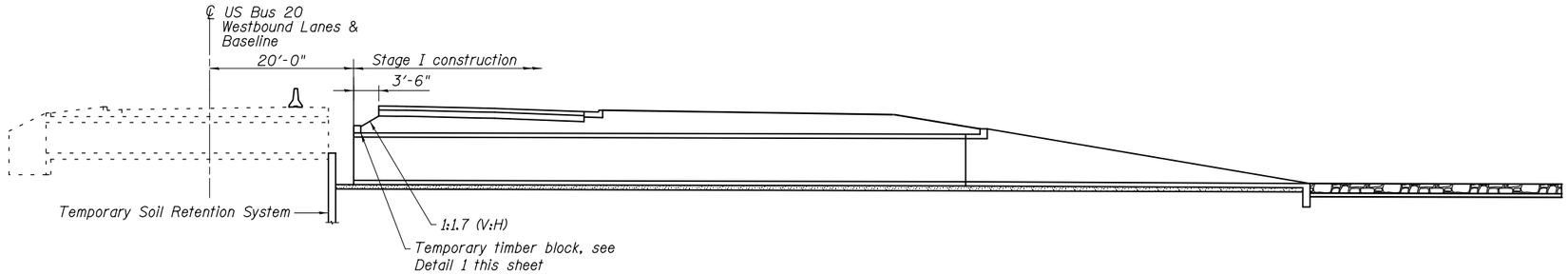
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	44
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STAGE CONSTRUCTION NOTES

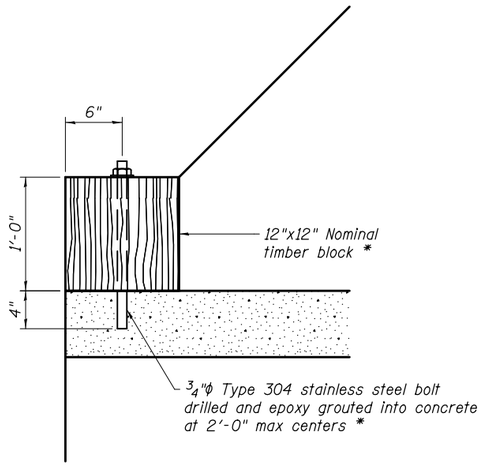
1. All staging sections are looking in the direction of increasing stations (East).
2. Hatched areas indicate removal.
3. Removal of existing wingwalls and toe walls is included in Removal of Existing Structures No. 2.
4. See roadway plans for quantity of Temporary Concrete Barrier.



STAGE I REMOVAL

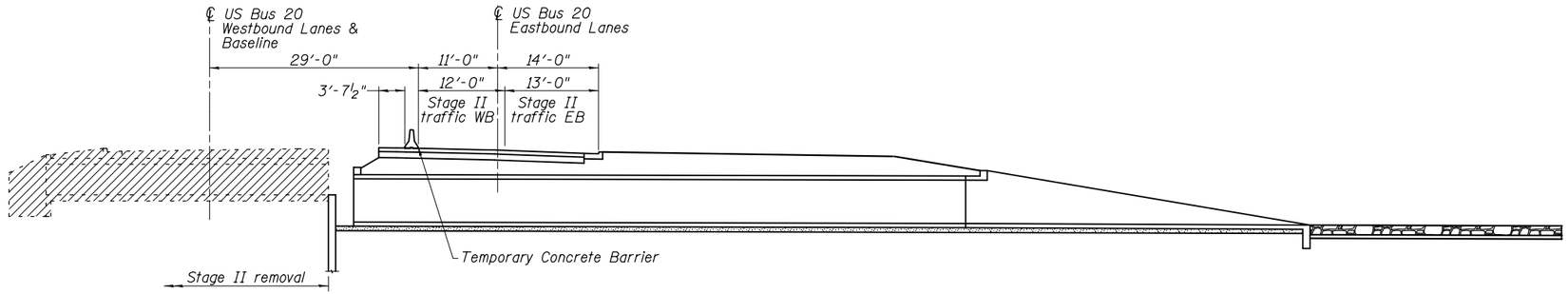


STAGE I CONSTRUCTION

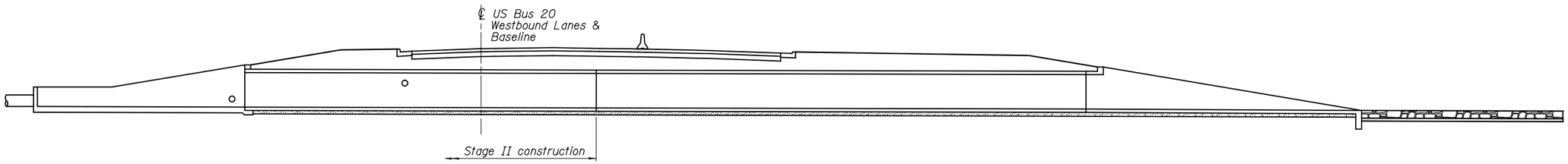


* Cost of installation and removal included in Precast Concrete Box Culverts

DETAIL 1



STAGE II REMOVAL



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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

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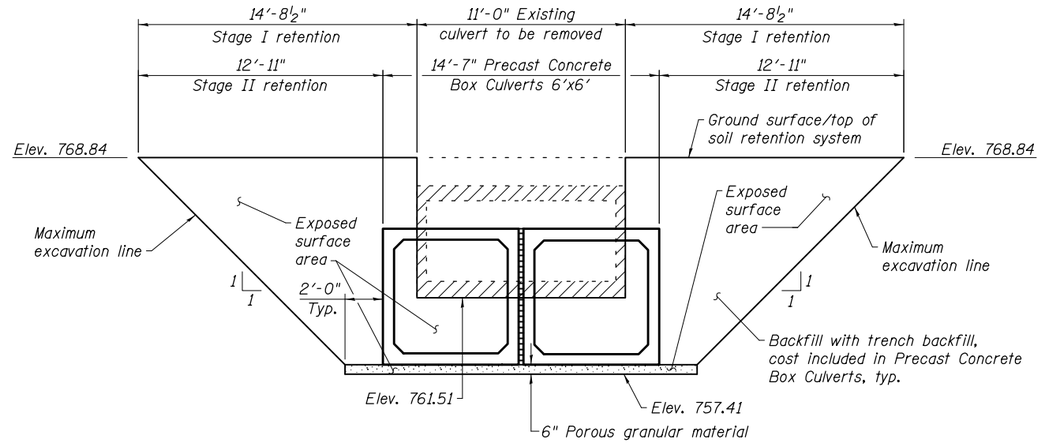
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 101-1336
SHEET NO. 2 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	45
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY SOIL RETENTION SYSTEM NOTES

1. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. Existing structure details are based on the best available information from existing structure plans.
3. Adjust retention lengths as necessary for actual precast box culvert dimensions.



SECTION THRU BARRELS SHOWING TEMPORARY SOIL RETENTION SYSTEM LIMITS

(Looking North)

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 101-1336
SHEET NO. 3 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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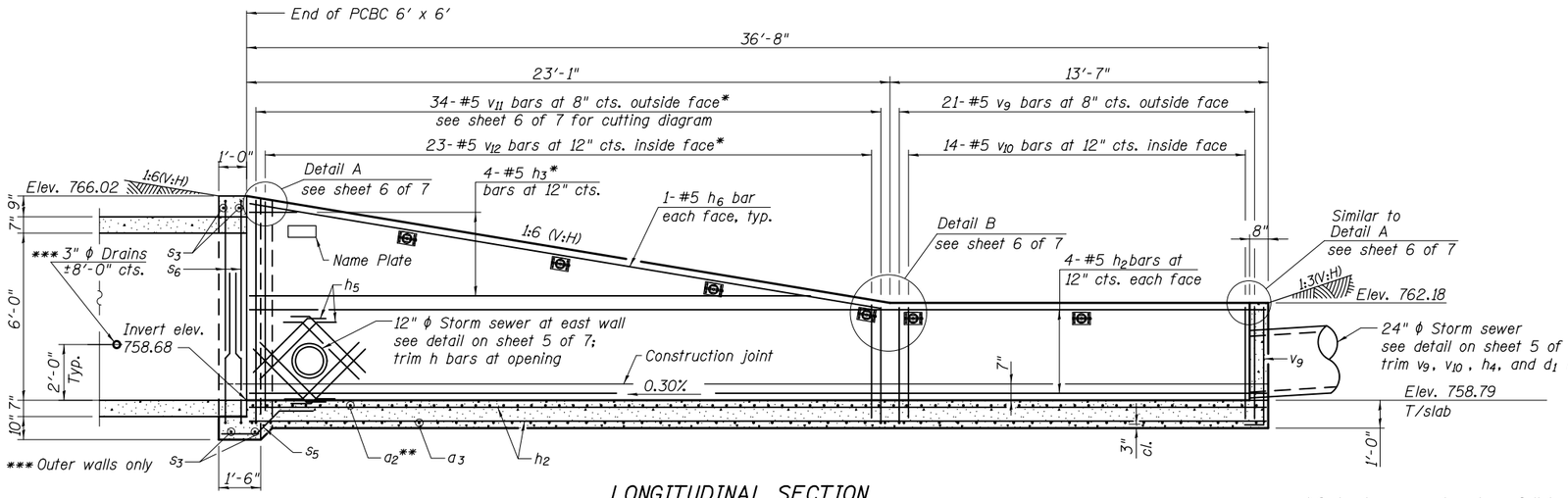
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



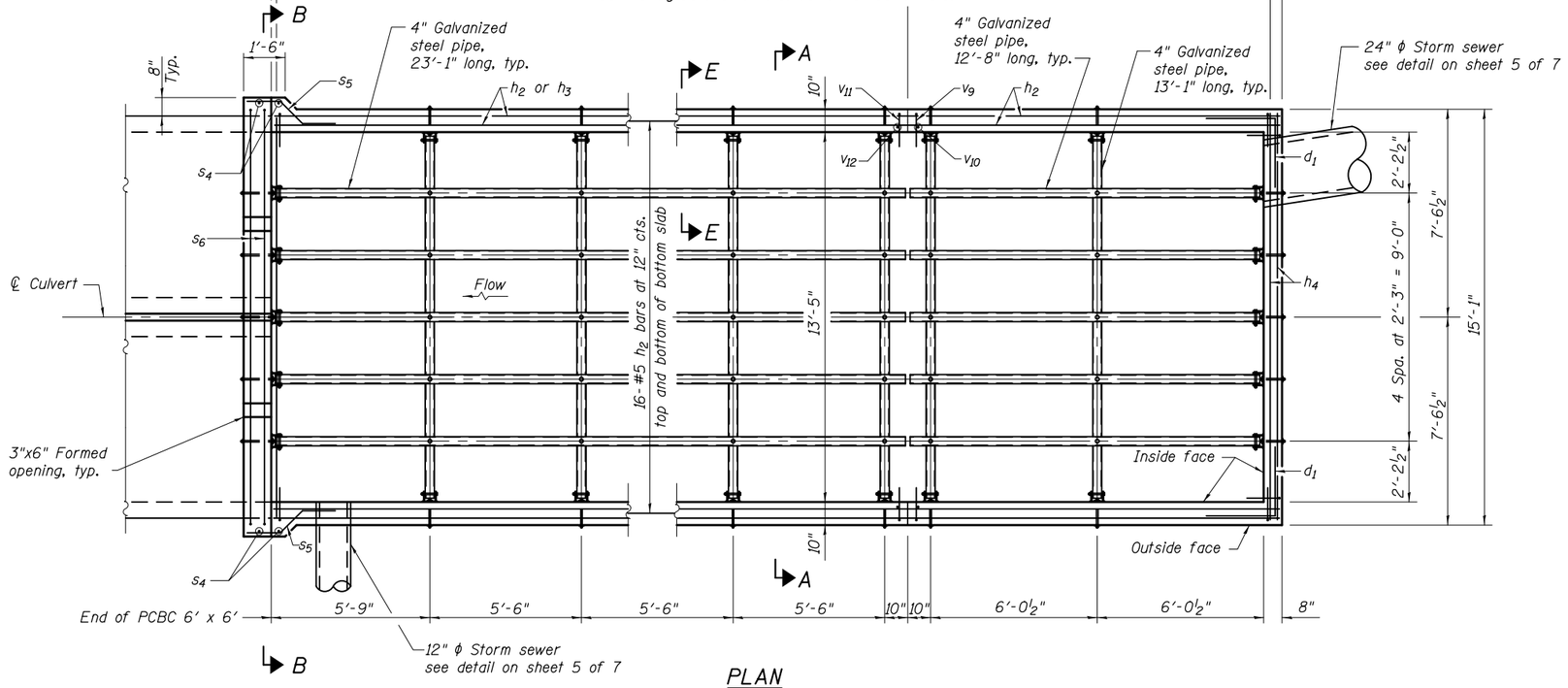
LONGITUDINAL SECTION

* Order h_3, v_{11}, and v_{12} bars full length. Cut to fit as shown and use remainder in opposite wall or face.

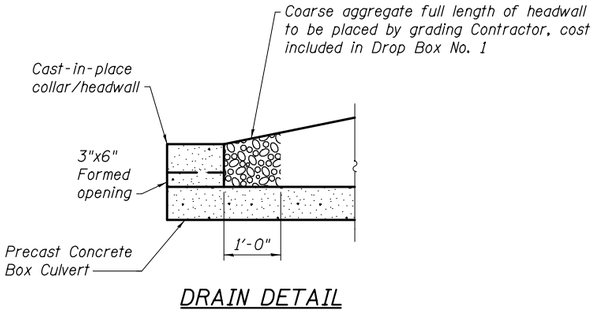
** Tilt a_2 bars as required to maintain clear cover.

MIN BAR LAP

#5 Bar = 2′-7"



PLAN



DRAIN DETAIL

GENERAL NOTES

1. The contract unit price for Drop Box No. 1 shall include the concrete structures, reinforcement bars, earth excavation where required, backfilling and necessary grading to fit the structure as shown in the plans or to the slope.
2. The contract unit price for Traversable Pipe Grate shall include the steel pipe grate system, steel plates, bolts, nuts and washers.
3. Steel pipes shall conform to ASTM A-53 (Type E or S) Grade B, Schedule 40 & shall be galvanized conforming to ASTM A-120.
4. Steel plates shall conform to AASHTO M-183 & shall be galvanized conforming to AASHTO M-111.
5. Bolts, nuts, & washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.
6. Contractor shall field verify galvanized pipe length.
7. The minimum distance from the center of a hole to the free edge of a structural shape or plate shall be 1½" unless noted otherwise.
8. Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench.
9. This work shall be done according to the applicable portions of 501, 503, 505, 508, and 540 of the Standard Specifications.
10. Fabrication of the Steel Pipe Grate System shall conform to the requirements in Section 505 of the Standard Specifications unless noted otherwise.
11. 12" & 24" diameter storm sewers will be incorporated into construction of the drop box walls.
12. Traversable Pipe Grate is designed for Test Level 3.

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

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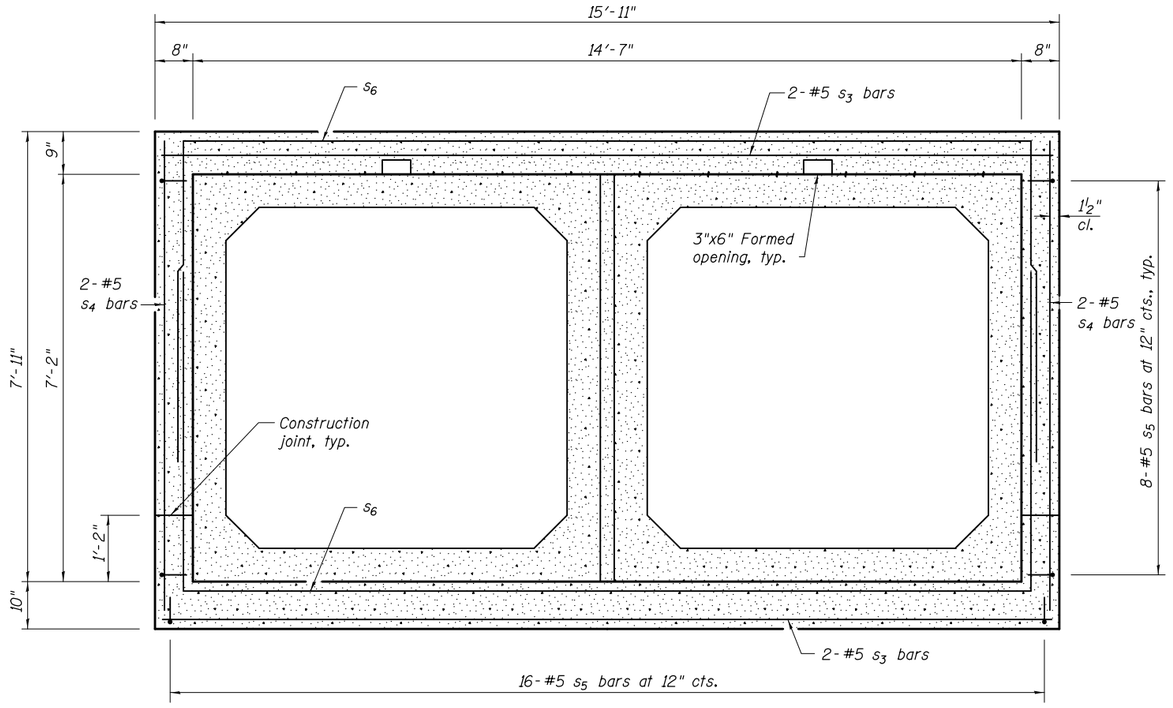
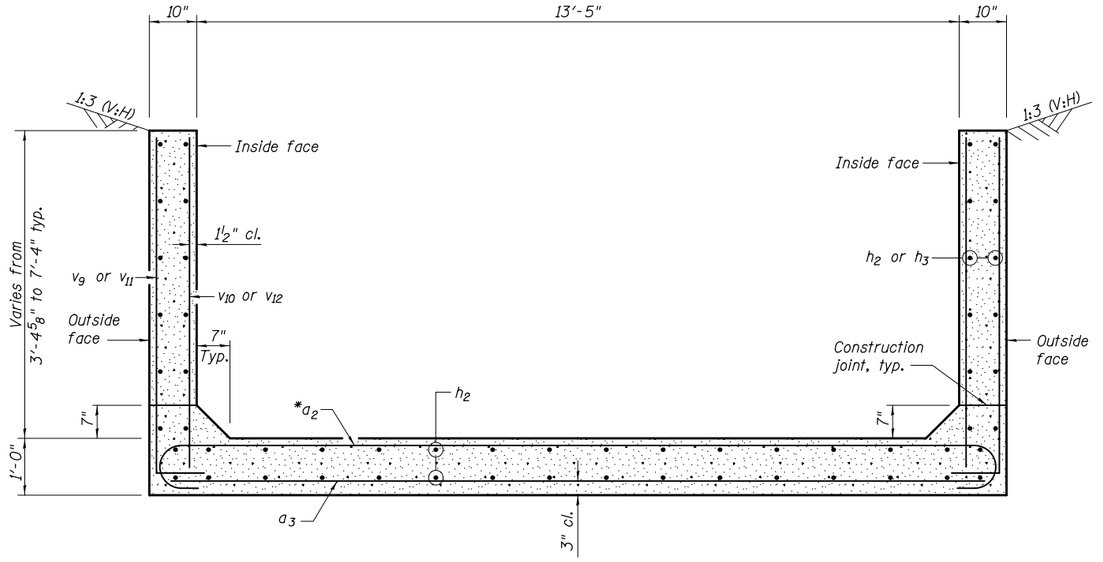
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DROP BOX NO. 1
STRUCTURE NO. 101-1336
SHEET NO. 4 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	47
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

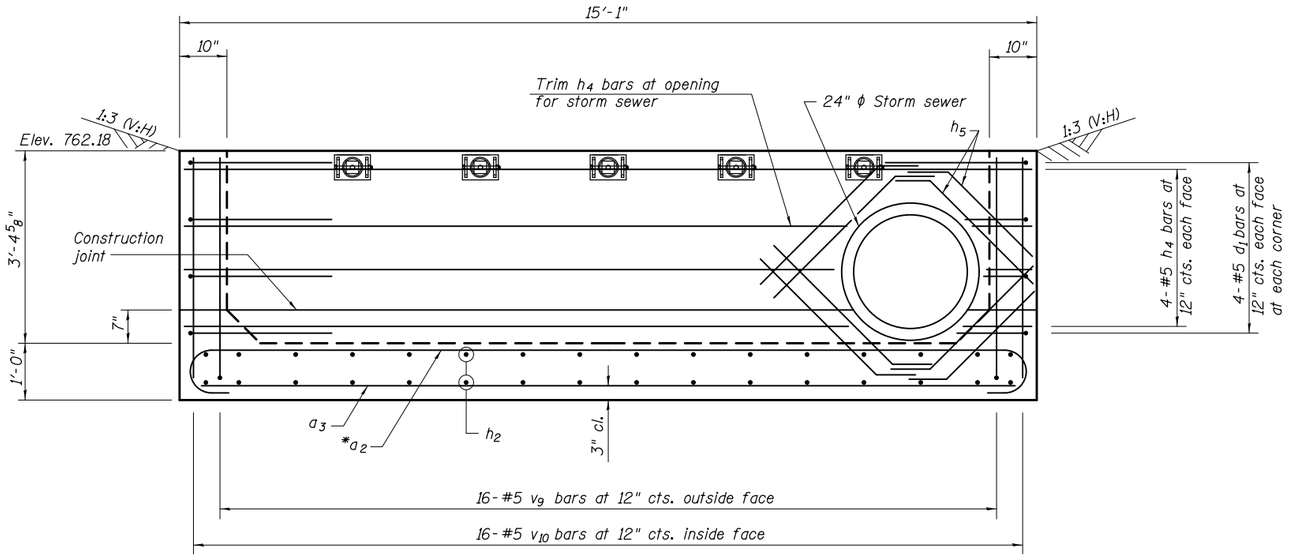


SECTION B-B
HEADWALL AND CONNECTION COLLAR

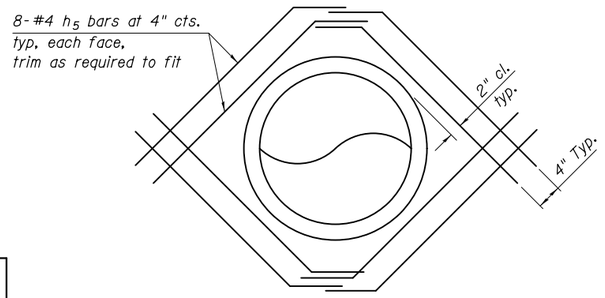


SECTION A-A

*Tilt a_2 bars as required to maintain clear cover



END WALL ELEVATION



DETAIL FOR STORM SEWER

STATION 113+17.00
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 303 SEC. 40T-1
LOADING HL-93
STRUCTURE NO. 101-1336

NAME PLATE
See Std. 515001

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

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ESCA PROJECT NO. 1140.01	CHECKED - RDP 03/14	REVISED -		
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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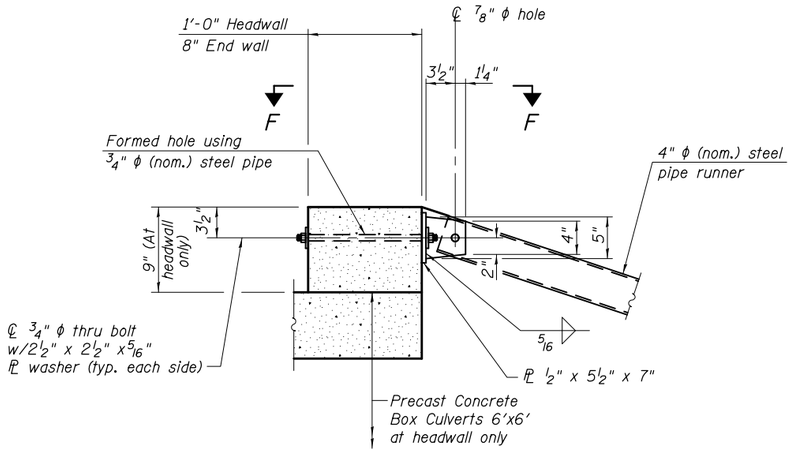
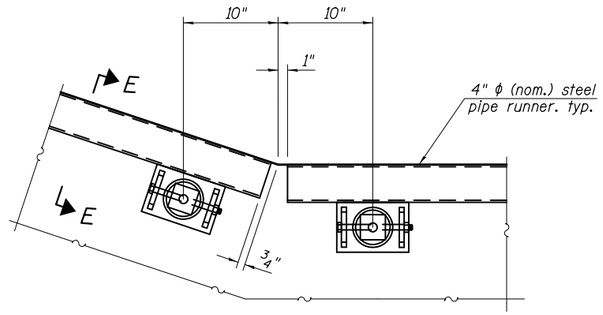
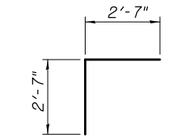
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



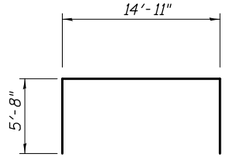
DETAIL A



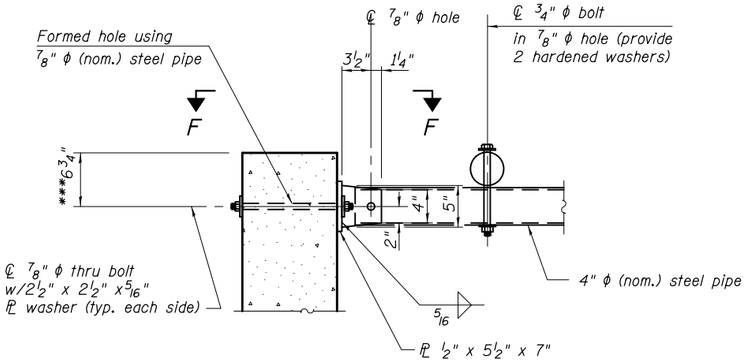
DETAIL B



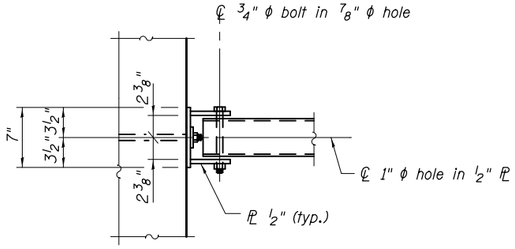
BAR d_1



BAR s_6



SECTION E-E



VIEW F-F

*** Measured perpendicular to top of side wall. In addition, formed hole shall be located a minimum of 6" measured horizontally from any vertical joints necessary for construction of the drop box.

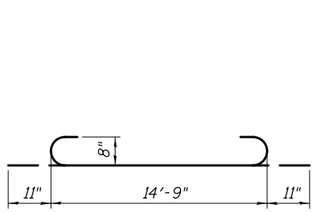
BILL OF MATERIAL

(For information only)

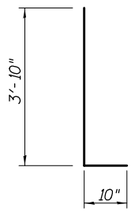
	Bar	No.	Size	Length	Shape
	a_2	73	#8	16'-7"	
	a_3	55	#5	14'-5"	
	d_1	16	#5	5'-2"	
	h_2	48	#5	36'-4"	
	h_3	8	#5	22'-8"	
	h_4	8	#5	14'-9"	
	h_5	32	#4	3'-8"	
	h_6	4	#5	23'-0"	
	s_3	4	#5	15'-7"	
	s_4	4	#5	8'-4"	
	s_5	32	#5	3'-9"	
	s_6	4	#5	26'-3"	
	v_9	58	#5	4'-8"	
	v_{10}	44	#5	3'-10"	
	v_{11}	34	#5	13'-2"	
	v_{12}	23	#5	11'-6"	
*	Concrete Structures			Cu. Yd.	34.1
*	Reinforcement Bars			Pound	7986
**	4" Galv. Steel Pipe			5 @	12'-8"
				6 @	13'-1"
				5 @	23'-1"
**	3/4" Galv. Steel Bolts			Each	30
**	Side Assembly			Each	22

* Included in Drop Box No. 1

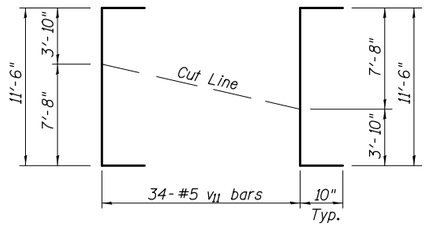
** Included in Traversable Pipe Grate with all hardware and steel for assemblies



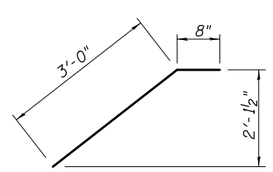
BAR a_2



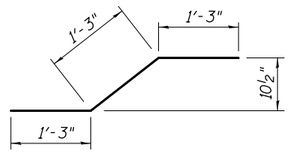
BAR v_9



BAR v_{11} CUTTING DIAGRAM



BAR h_5



BAR s_5

BAR BENDING DETAILS

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ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS	USER NAME = kah	DESIGNED - ELH 03/14	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DROP BOX NO. 1 STRUCTURE NO. 101-1336
	ESCA PROJECT NO. 1140.01	CHECKED - RDP 03/14	REVISED -		
	PLOT SCALE = 0.2 '/ in.	DRAWN - DWH 03/14	REVISED -		SHEET NO. 6 OF 7 SHEETS
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	49
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS
STA 113+17.00
SN 101-1336

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 7/25/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .4 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-1b
Station 15' W
Offset 28.00ft N CL
Ground Surface Elev. 99.5 ft

Surface Water Elev. ft
Stream Bed Elev. 94.5 ft

Groundwater Elev.:
First Encounter 87.5 ft
Upon Completion Wash ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7" Asphalt, 9.7" Concrete			
97.50			
LOOSE brown dirty SAND	4 2 3		
96.00			
MEDIUM black SILTY CLAY LOAM with 11% ORGANICS	-5 2 1 3	0.6 P	40
93.50			
SOFT gray SILTY LOAM with SAND lens	0 2 2	0.3 B	34
90.50			
MEDIUM light gray medium coarse moist SAND	-10 6 9 11		
88.50			
MEDIUM light gray SANDY GRAVEL	5 10 13		
86.00			
MEDIUM light gray SANDY GRAVEL	-15 11 11 12		
83.50			
DENSE tan SANDY GRAVEL with LIMESTONE fragments	17 19 21		
81.00			
	-20 18		
Wash			
DENSE tan SANDY GRAVEL (continued)			
78.50			
MEDIUM tan SANDY GRAVEL with SANDY LOAM lens	10 8 10	1.5 P	10
76.00			
End of Boring	-25		
	-30		
	-35		
	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 7/26/12

ROUTE West State Street DESCRIPTION P92-088-11 Culvert, .4 m. E. of Meridian Road LOGGED BY W. Garza

SECTION LOCATION , SEC. , TWP. , RNG.

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-2b
Station 21' E
Offset 43.00ft S CL
Ground Surface Elev. 98.7 ft

Surface Water Elev. ft
Stream Bed Elev. 94.5 ft

Groundwater Elev.:
First Encounter 86.7 ft
Upon Completion Wash ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM		0.5 P	15
96.70			
STIFF brown SANDY LOAM	4 3 4	1.6 P	18
95.20			
SOFT light gray SANDY LOAM	-5 3 3 5	0.3 P	18
92.20			
MEDIUM light gray dirty SANDY GRAVEL	4 8 5		
90.20			
MEDIUM light gray moist SANDY GRAVEL	-10 7 9 10		
87.70			
MEDIUM light gray SANDY GRAVEL	7 8 16		
85.20			
DENSE light gray SANDY GRAVEL	-15 16 14 17		
82.70			
Wash DENSE light gray SANDY GRAVEL	16 19 20		
80.20			
	-20 13		
MEDIUM light gray SANDY GRAVEL (continued)	11 10		
77.20			
HARD gray TILL with SAND lens	8 9 12	4.0 P	10
74.70			
End of Boring	-25		
	-30		
	-35		
	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

PRINT DRIVER = LPD_E_B_8x11x9
PEN TABLE = IDOT_VER82.tbl
PLOT STYLE = * * * * *
FILE NAME = I:\B1336-64H18-87-Soil.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

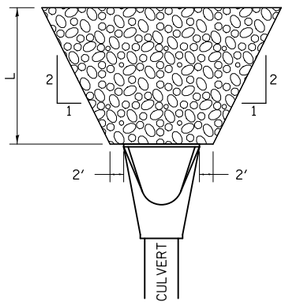
USER NAME = kah	DESIGNED - ELH	01/14	REVISED -	
ESCA PROJECT NO. 1140.01	CHECKED - RDP	01/14	REVISED -	
PLOT SCALE = 0.2 '/ in.	DRAWN - DWH	01/14	REVISED -	
PLOT DATE = 1/26/2015 9:33:56 AM	CHECKED - ELH	12/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

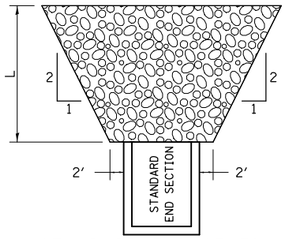
SOIL BORING LOGS
STRUCTURE NO. 101-1336
SHEET NO. 7 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	50
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RIPRAP AT END SECTIONS



FLARED END SECTION



STANDARD END SECTION

THIS WORK SHALL BE DONE IN ACCORDANCE TO THE APPLICABLE PORTIONS OF SECTION 281 OF THE STANDARD SPECIFICATIONS FOR RIPRAP AND SECTION 282 OF THE STANDARD SPECIFICATIONS FOR FILTER FABRIC.

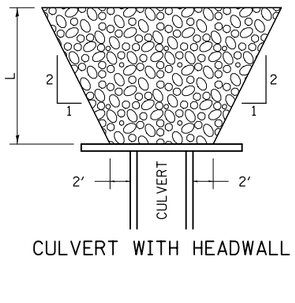
THE LENGTH OF RIPRAP (L) IS TO BE THREE (3) TIMES THE 10 YEAR CULVERT OUTLET VELOCITY, FROM THE WATERWAY INFORMATION TABLE (WIT).

IF THE CULVERT OUTLETS INTO A DEFINED CHANNEL, RIPRAP BANK TO BANK FOR LENGTH (L).

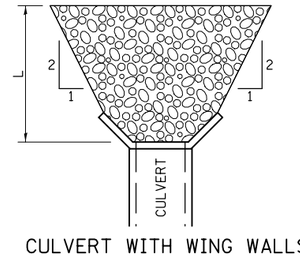
STANDARD END SECTION:
542001 (PIPE), 542011 (ELLIPTICAL)
DISTRICT STANDARD 34.1 (BOX).

RIPRAP SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP OF CLASS SPECIFIED.

FILTER FABRIC SHALL BE PAID FOR AT THE CONTRCT UNIT PRICE PER SQUARE YARD.



CULVERT WITH HEADWALL

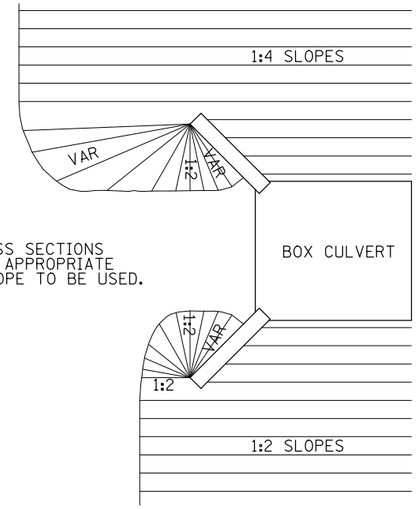


CULVERT WITH WING WALLS

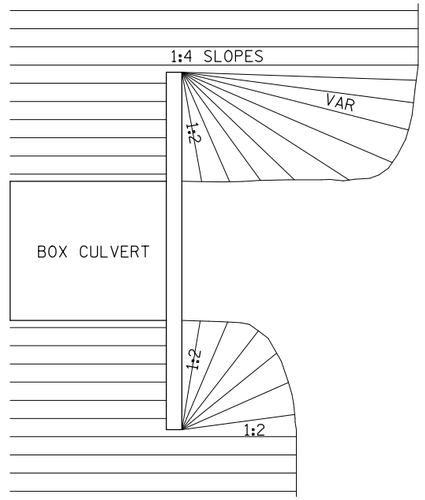
REVISED - 2-10-14

RIPRAP AT END SECTIONS 19.4

GRADING AROUND WINGWALLS



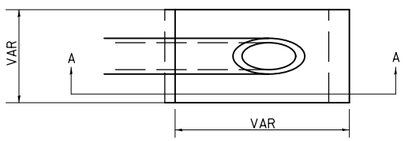
NOTES
SEE CROSS SECTIONS FOR THE APPROPRIATE FRONTSLOPE TO BE USED.



REVISED - 5-27-09

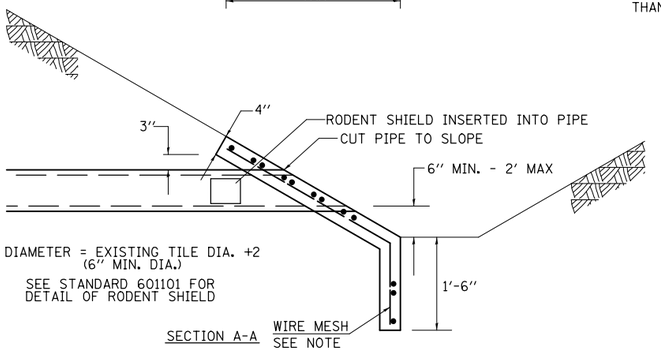
GRADING AROUND WINGWALLS 20.4

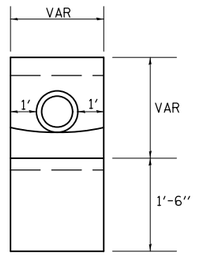
CAST–IN–PLACE REINFORCED CONCRETE END SECTIONS



NOTES

1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH OF THE SIZE SPECIFIED. WIRE MESH TO WEIGH NOT LESS THAN 58* PER 100 SQ. FT.

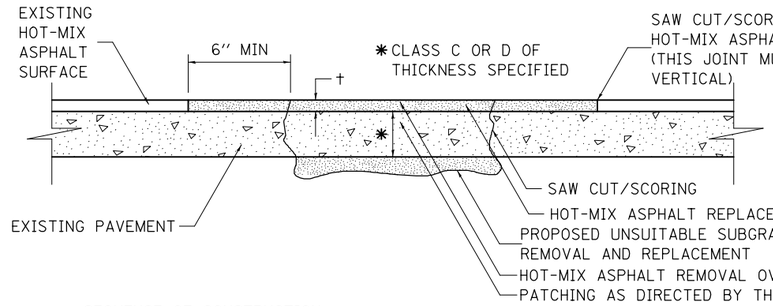




REVISED - 10-09-12

CAST–IN–PLACE REINFORCED CONCRETE END SECTIONS 28.4

PAVEMENT PATCHING FOR HOT–MIX ASPHALT SURFACED PAVEMENT



LIFT PLACEMENT:

† < 4'' MAY BE PLACED IN ONE LIFT.

† > 4'' TO BE PLACED IN TWO LIFTS WITH 2'' MIN. COMPACTED TOP LIFT.

SEQUENCE OF CONSTRUCTION:

1. REMOVE THE EXISTING HOT-MIX ASPHALT SURFACE.
2. RESIDENT ENGINEER WILL DETERMINE IF LOCATION IS TO BE PATCHED OR TO ONLY REPLACE HOT-MIX ASPHALT SURFACE.
3. REMOVE AND REPLACE FULL DEPTH PATCHES AT LOCATIONS DIRECTED BY THE ENGINEER.
4. REPLACE HOT-MIX ASPHALT SURFACE OVER FULL DEPTH PATCHES AND AT LOCATIONS OF HOT-MIX ASPHALT SURFACE REMOVAL.

GENERAL NOTES:

1. FOR BASIS OF PAYMENT: SEE THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11

PAVEMENT PATCHING FOR HOT–MIX ASPHALT SURFACED PAVEMENT 32.4

PRINT DRIVER = LPD.E.B.RpInf9
PEN TABLE = ILDOT_VERDOC.tbl
PLOT SCALE = 1.0000 '/ in.
FILE NAME = D:\2014\18-int-details\51.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 '/ in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:34:28 AM	DATE - 01/15	REVISED -	

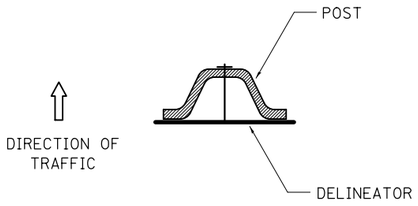
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

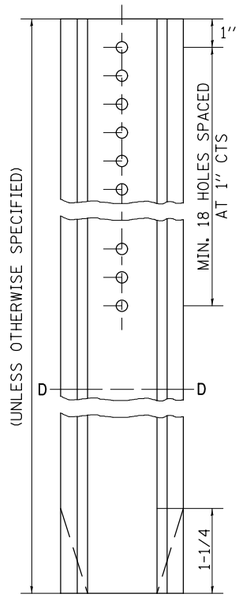
SCALE: NONE | SHEET NO. 1 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	51
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DELINEATOR AND POST ORIENTATION



SECTION D-D



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11

DELINEATOR AND POST ORIENTATION 37.4

PRINT DRIVER = L:\PDF_B.B\drv\f9
PEN TABLE = ROOT_VERDC.tbl
PLOT SCALE = 1.0000
FILE NAME = D:\2014\18-int-details\52.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015 9:34:35 AM	DATE - 01/15	REVISED -

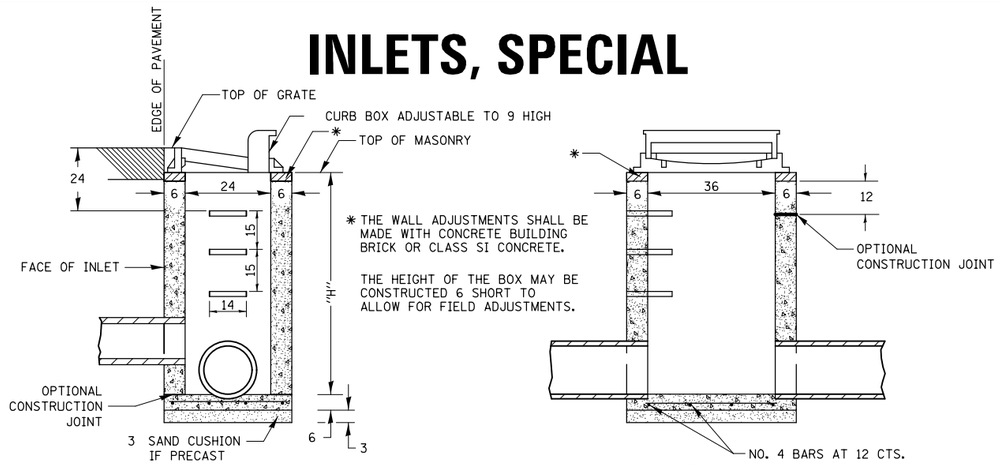
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

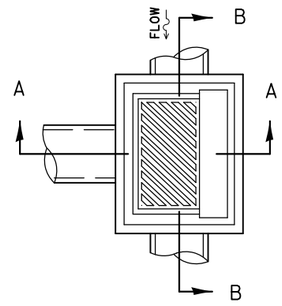
DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 2 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	52
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INLETS, SPECIAL





NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

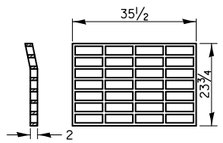
WEIGHT OF CAST IRON FRAME & GRATE = 530 lbs. ± . STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 ft.

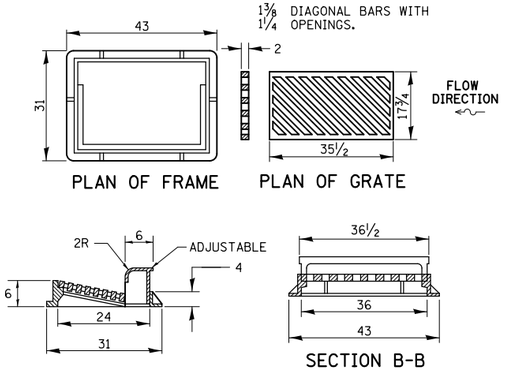
DETAIL OF FRAME & GRATE

NOTES

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.





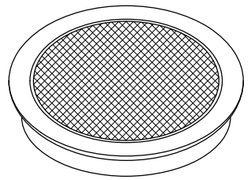
* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 6-27-14
10-13-11

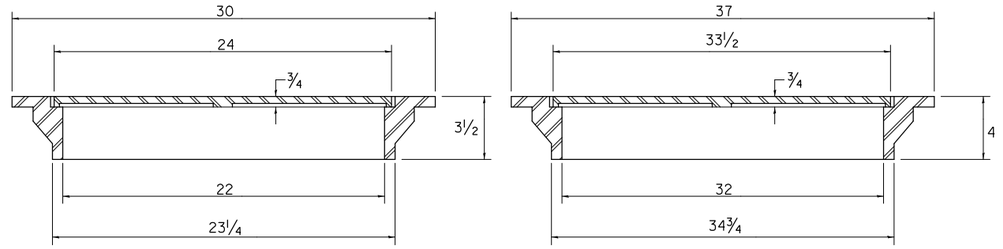
INLETS, SPECIAL 10.2

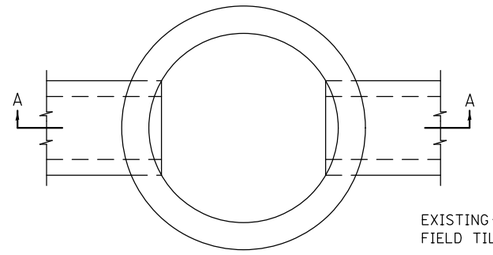
FIELD TILE JUNCTION VAULTS 2' AND 3' DIA.



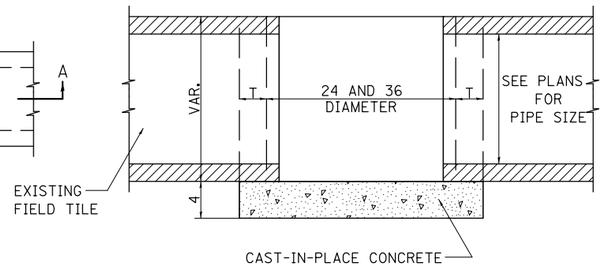
FRAME & LID FOR 2' VAULT

FRAME & LID FOR 3' VAULT





PLAN

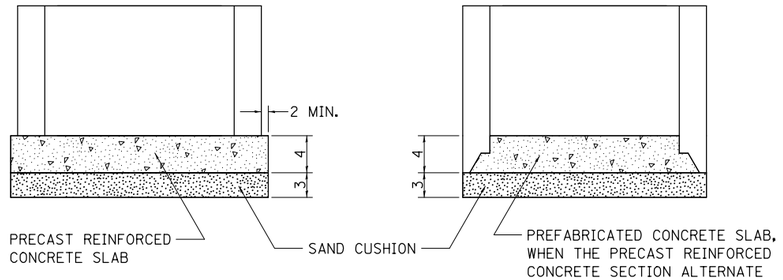


SECTION A-A

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8
CAST-IN-PLACE CONCRETE	6
CONCRETE MASONRY UNIT	5
PRECAST REINFORCED CONCRETE SECTION	3

NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



ALTERNATE METHODS

REVISED - 6-27-14
10-14-11

FIELD TILE JUNCTION VAULTS 2' AND 3' DIA. 30.2

PRINT DRIVER = LPD.E.B.A1v4fg
PEN TABLE = IDOT_VER02.tbl
USER NAME = kah
FILE NAME = D:\ESCA\18-ahl-data\p53.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:34:43 AM	DATE - 09/14	REVISED -	

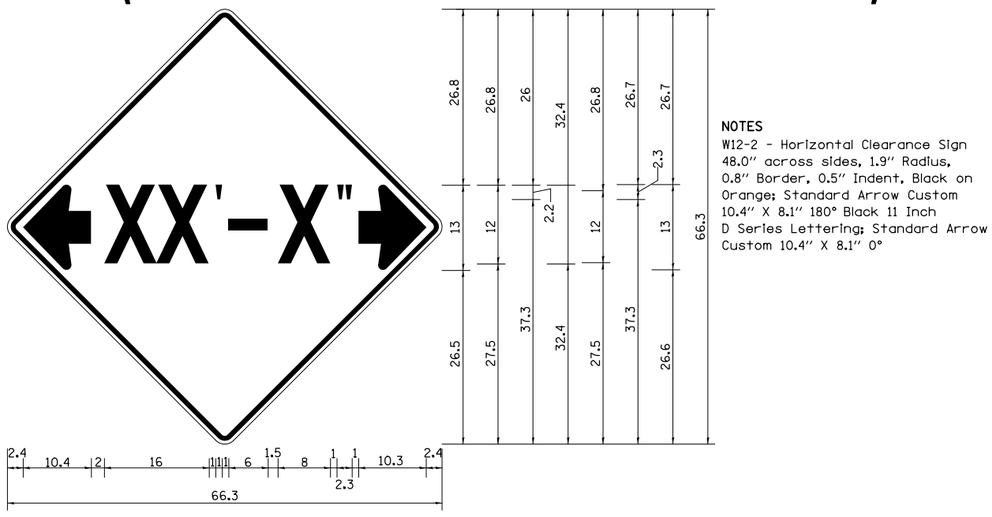
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

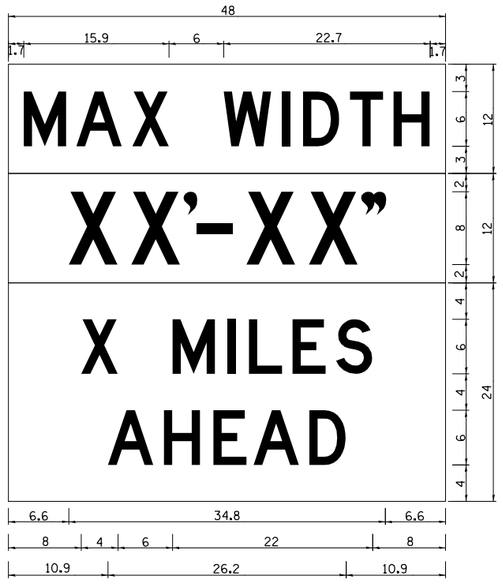
SCALE: NONE | SHEET NO. 3 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	53
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
W12-2 - Horizontal Clearance Sign
48.0" across sides, 1.9" Radius,
0.8" Border, 0.5" Indent, Black on
Orange; Standard Arrow Custom
10.4" X 8.1" 180° Black 11 Inch
D Series Lettering; Standard Arrow
Custom 10.4" X 8.1" 0°



W12-I103 (Width is 8D);
No border, Black on White;
[MAX WIDTH] D;

No border, Black on Orange;
[XX'-XX"] D;

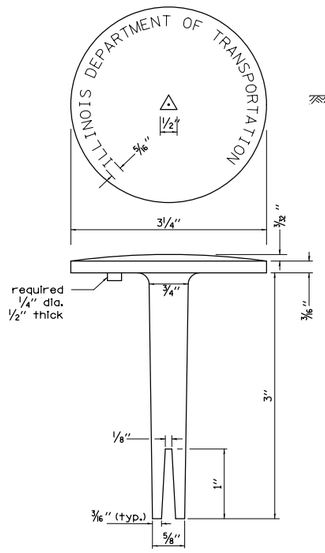
No border, Black on White;
[X MILES] D; [AHEAD] D;

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

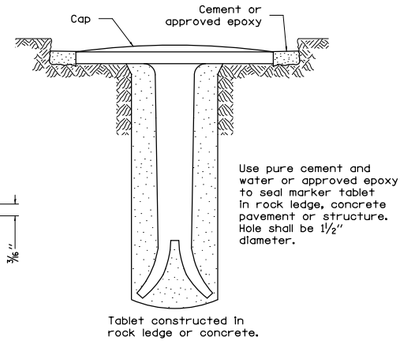
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

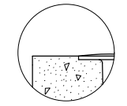
PERMANENT SURVEY MARKERS, TYPE II



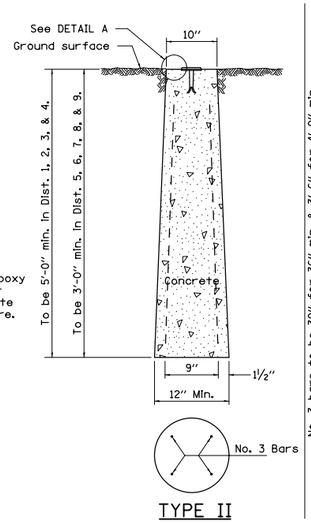
BRASS OR ALUMINUM TABLET



TYPE II



DETAIL A

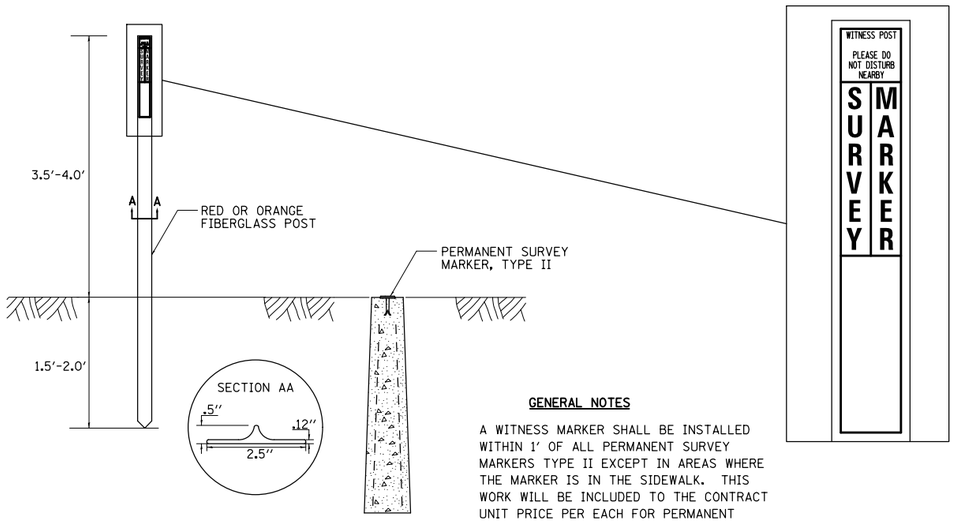


TYPE II

CAST-IN-PLACE MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

6-27-14
10-14-11

PRINT DRIVER = LPD_E_B_8_01v19
PEN TABLE NAME = IDOT_VER82.tbl
SCALE = 1.000000
FILE NAME = D:\BIM\B-Units\B54.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS/KAH	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015 9:34:50 AM	DATE - 12/14	REVISED -

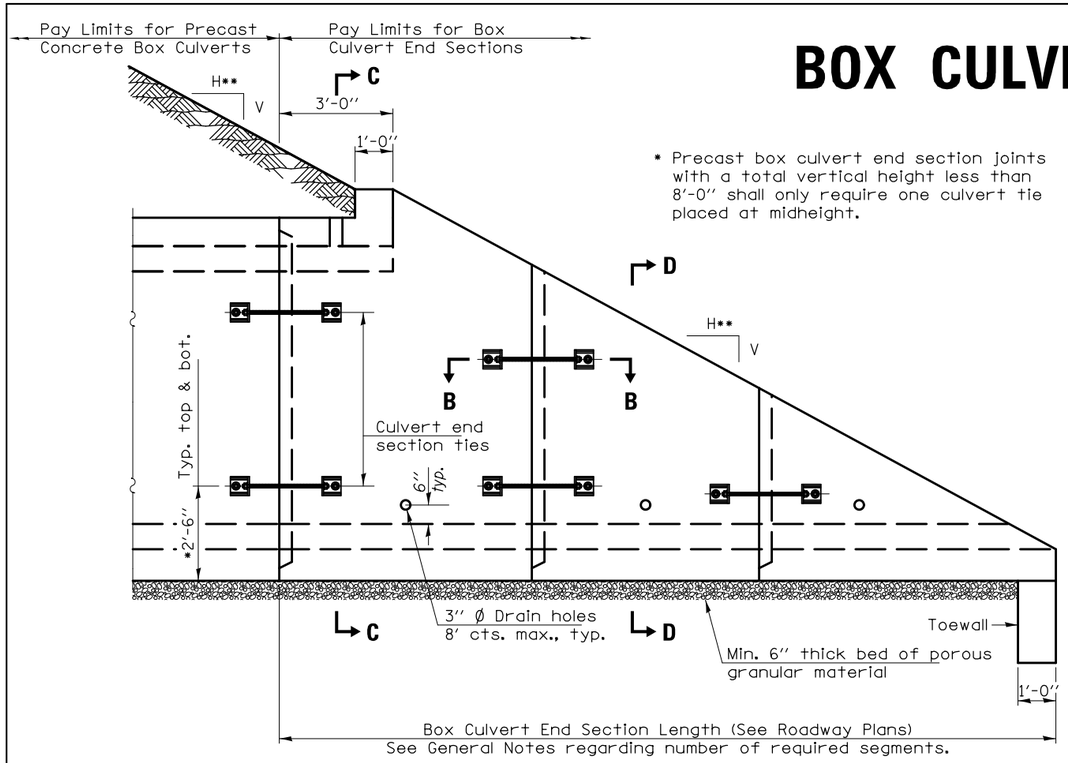
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 4 OF 14 SHEETS | STA. | TO STA.

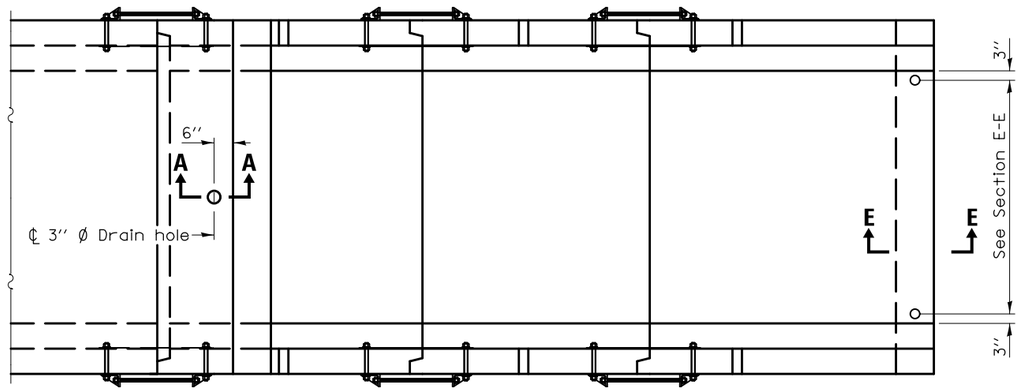
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	54
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BOX CULVERT END SECTIONS

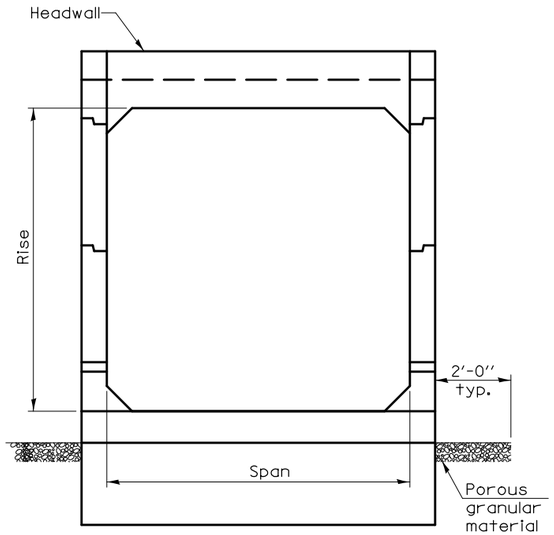


* Precast box culvert end section joints with a total vertical height less than 8'-0" shall only require one culvert tie placed at midheight.

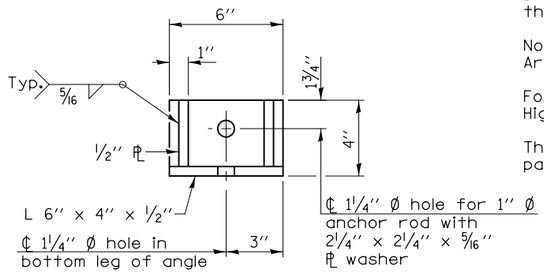
ELEVATION



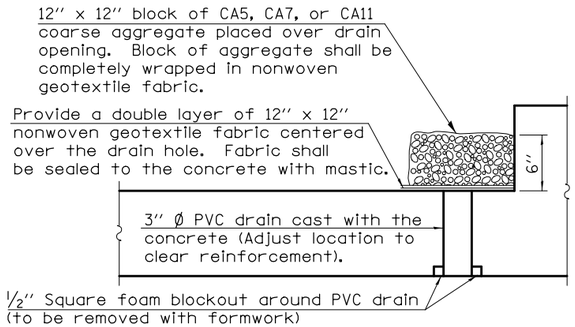
PLAN



END VIEW

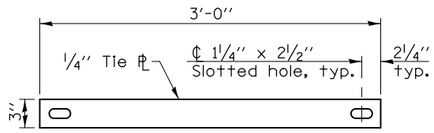


RESTRAINT ANGLE DETAIL

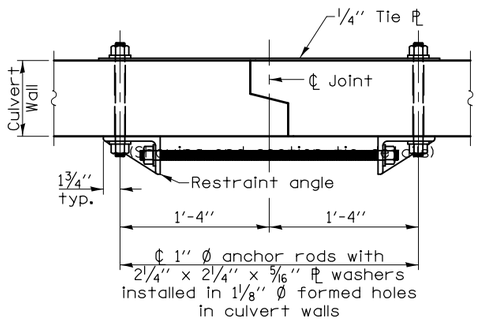


SECTION A–A

(All costs associated with furnishing and constructing the above drain details will not be measured for payment but shall be included in the contract unit price for the end section.)



TIE PLATE DETAIL



SECTION B–B

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. This work will be measured for payment as each, with each end of each culvert being one each. End sections will be paid for at the contract unit price per each for Box Culvert End Sections of the culvert number specified.

Typical box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements of ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

Number of segments shown in Side Elevation is for example only. Length and number of precast box sections required to construct Box Culvert End Sections shall be determined by the Contractor.

**See roadway plans for embankment slope (V:H). The Slope Must Match.

1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2¼" x 2¼" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional ½ turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

All costs associated with furnishing and installing or constructing the geotextile fabric, toewall, and culvert ties will not be measured for payment but shall be included in the contract unit price for Box Culvert End Sections of the culvert number specified.

Reinforcement bars designated (E) shall be epoxy coated.

Drain holes shall conform to the requirements of Article 503.11 of the Standard Specifications unless noted otherwise.

Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01. The minimum weight of the fabric shall be 6 oz. / sq. yd..

For end sections with traversable pipe grate systems, see Highway Standard 542311 for required modifications.

This standard can be used for either cross drainage structures or parallel drainage structures.

5-09-14

BOX CULVERT END SECTIONS SHEET 1 OF 2 **10.1**

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015 9:34:59 AM	DATE - 12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 5 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	55
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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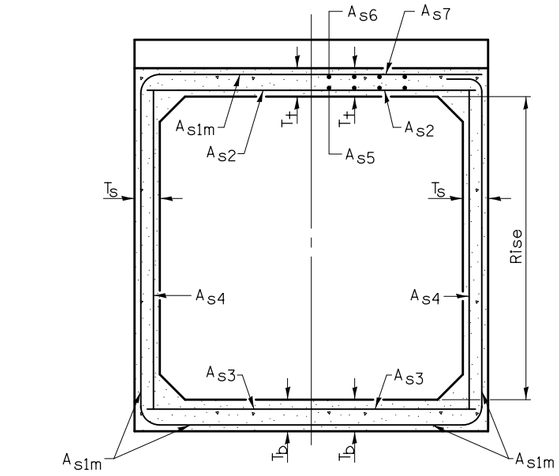
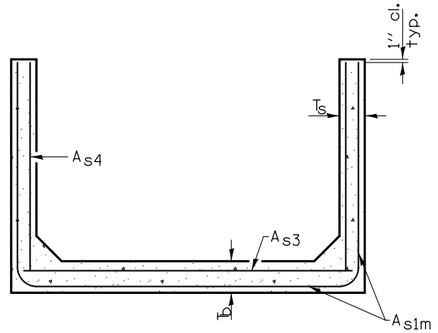
BOX CULVERT END SECTIONS

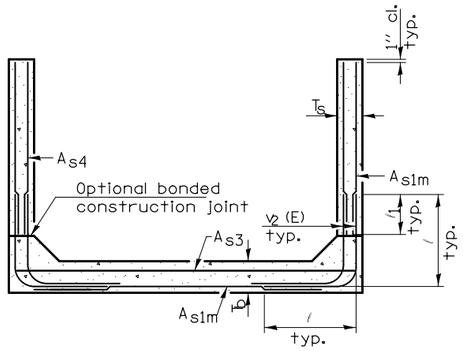


(Design Earth Cover < 2 ft.) (Design Earth Cover > 2 ft.)

SECTION C–C



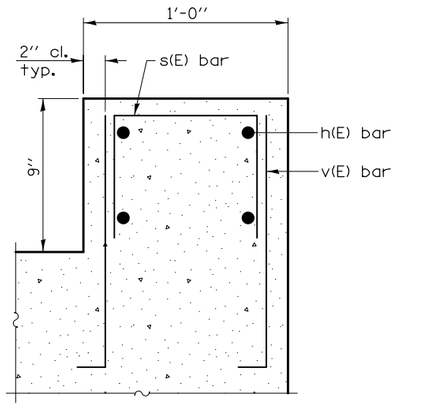
SECTION D–D



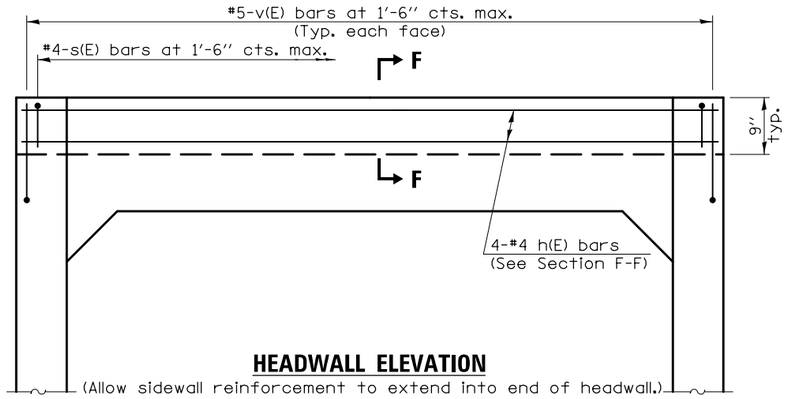
ALTERNATE SECTION D–D

Rise (ft.) / T(in.), Ts (in.)	Reinforcing Steel A_{s1m} (in.^{2}/ft.)										
	2	3	4	5	6	7	8	9	10	11	12
4	0.19	0.17									
5	0.26	0.21	0.18								
6		0.26	0.23	0.22							
7		0.33	0.59	0.27	0.28						
8			0.43	0.39	0.36	0.34	0.40				
9				0.43	0.40	0.37	0.36	0.48			
10				0.47	0.44	0.41	0.38	0.42	0.56		
11			0.54		0.46		0.41		0.50	0.65	
12			0.58		0.50		0.45		0.46		0.75

(A_{s1m} reinforcement based upon welded wire fabric conforming to AASHTO M 55 or M 221).



SECTION F–F



HEADWALL ELEVATION

(Allow sidewall reinforcement to extend into end of headwall.)

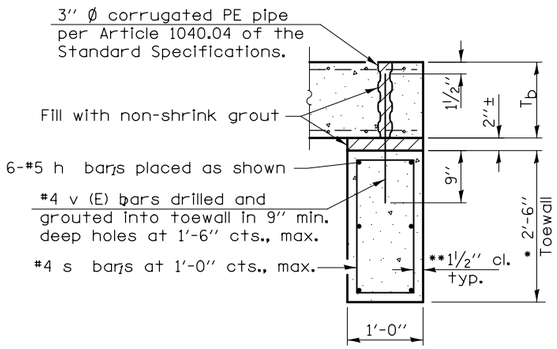
l_1 DIMENSION

#3 bar = 2'-0''
#4 bar = 2'-8''
#5 bar = 3'-4''
#6 bar = 3'-11''

Notes:
Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.

The size and spacing of the v_2(E) bars shall provide a minimum reinforcement area along each face of the walls (in.^{2}/ft.) equal to 1.10*(A_{s1m}). v_2(E) bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.



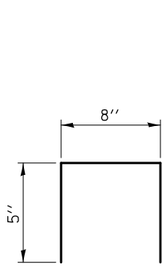
SECTION E–E

TOEWALL CONSTRUCTION SEQUENCE

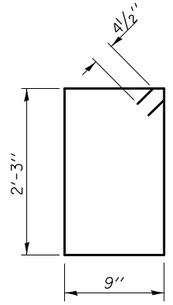
1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and grout reinforcement in toewall using approved chemical adhesive in accordance with Section 1027 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

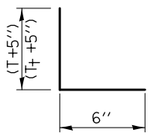
** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3'' by increasing the thickness of the toewall.



BAR s(E)



BAR s_1



BAR v(E)

BOX CULVERT END SECTIONS 2 OF 2 10.1

5-09-14

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS	USER NAME = kah	DESIGNED - ELH	REVISED -
	ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -
	PLOT SCALE = 0.1667 '/ in.	CHECKED - ELH	REVISED -
	PLOT DATE = 1/26/2015 9:35:07 AM	DATE - 12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 6 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	56
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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TRAVERSABLE PIPE GRATE FOR BOX CULVERT END SECTIONS

PIPE-GRATE SCHEDULE FOR BOX CULVERT END SECTIONS

Precast Box Culvert Dimensions			Slope of End Section								
			1:3			1:4			1:6		
S (ft)	R (ft)	T_1 (in)	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe
4	2	7.5	1 @ 8'-10"	N/A	8'-10"	1 @ 11'-7"	N/A	11'-7"	1 @ 17'-2"	N/A	17'-2"
4	2	5	1 @ 8'-2"	N/A	8'-2"	1 @ 10'-8"	N/A	10'-8"	1 @ 15'-11"	N/A	15'-11"
4	3	7.5	1 @ 12'-0"	N/A	12'-0"	1 @ 15'-8"	N/A	15'-8"	1 @ 23'-3"	1 @ 3'-7"	26'-10"
4	3	5	1 @ 11'-4"	N/A	11'-4"	1 @ 14'-10"	N/A	14'-10"	1 @ 22'-0"	1 @ 3'-7"	25'-7"
4	4	7.5	1 @ 15'-2"	N/A	15'-2"	1 @ 19'-10"	1 @ 3'-7"	23'-5"	1 @ 29'-4"	2 @ 3'-7"	36'-6"
4	4	5	1 @ 14'-6"	N/A	14'-6"	1 @ 18'-11"	N/A	18'-11"	1 @ 28'-1"	2 @ 3'-7"	35'-3"
5	2	8	1 @ 8'-11"	N/A	8'-11"	1 @ 11'-9"	N/A	11'-9"	1 @ 17'-5"	N/A	17'-5"
5	2	6	1 @ 8'-5"	N/A	8'-5"	1 @ 11'-1"	N/A	11'-1"	1 @ 16'-5"	N/A	16'-5"
5	3	8	1 @ 12'-1"	N/A	12'-1"	1 @ 15'-10"	N/A	15'-10"	1 @ 23'-6"	1 @ 4'-7"	28'-1"
5	3	6	1 @ 11'-7"	N/A	11'-7"	1 @ 15'-2"	N/A	15'-2"	1 @ 22'-6"	1 @ 4'-7"	27'-1"
5	4	8	1 @ 15'-3"	N/A	15'-3"	1 @ 20'-0"	1 @ 4'-7"	24'-7"	1 @ 29'-7"	2 @ 4'-7"	38'-9"
5	4	6	1 @ 14'-9"	N/A	14'-9"	1 @ 19'-3"	N/A	19'-3"	1 @ 28'-7"	2 @ 4'-7"	37'-9"
5	5	8	1 @ 18'-5"	N/A	18'-5"	1 @ 24'-1"	2 @ 4'-7"	33'-3"	1 @ 35'-8"	3 @ 4'-7"	49'-5"
5	5	6	1 @ 17'-11"	N/A	17'-11"	1 @ 23'-5"	1 @ 4'-7"	28'-0"	1 @ 34'-8"	2 @ 4'-7"	43'-10"
6	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
6	2	7	2 @ 8'-8"	N/A	17'-4"	2 @ 11'-5"	N/A	22'-10"	2 @ 16'-11"	N/A	33'-10"
6	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	1 @ 5'-7"	52'-7"
6	3	7	2 @ 11'-10"	N/A	23'-8"	2 @ 15'-6"	N/A	31'-0"	2 @ 23'-0"	1 @ 5'-7"	51'-7"
6	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	1 @ 5'-7"	45'-7"	2 @ 29'-7"	2 @ 5'-7"	70'-4"
6	4	7	2 @ 15'-0"	N/A	30'-0"	2 @ 19'-8"	1 @ 5'-7"	44'-11"	2 @ 29'-1"	2 @ 5'-7"	69'-4"
6	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	2 @ 5'-7"	59'-4"	2 @ 35'-8"	3 @ 5'-7"	88'-1"
6	5	7	2 @ 18'-2"	N/A	36'-4"	2 @ 23'-9"	2 @ 5'-7"	58'-8"	2 @ 35'-2"	2 @ 5'-7"	81'-6"
6	6	8	2 @ 21'-7"	1 @ 5'-7"	48'-9"	2 @ 28'-3"	2 @ 5'-7"	67'-8"	2 @ 41'-9"	3 @ 5'-7"	100'-3"
6	6	7	2 @ 21'-4"	1 @ 5'-7"	48'-3"	2 @ 27'-11"	2 @ 5'-7"	67'-0"	2 @ 41'-3"	3 @ 5'-7"	99'-3"
7	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
7	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	2 @ 6'-7"	60'-2"
7	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	2 @ 6'-7"	53'-2"	2 @ 29'-7"	3 @ 6'-7"	78'-11"
7	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	3 @ 6'-7"	67'-11"	2 @ 35'-8"	4 @ 6'-7"	97'-8"
7	6	8	2 @ 21'-7"	2 @ 6'-7"	56'-4"	2 @ 28'-3"	3 @ 6'-7"	76'-3"	2 @ 41'-9"	5 @ 6'-7"	116'-5"
7	7	8	2 @ 24'-9"	3 @ 6'-7"	69'-3"	2 @ 32'-4"	4 @ 6'-7"	91'-0"	2 @ 47'-10"	6 @ 6'-7"	135'-2"
8	2	8	3 @ 8'-11"	N/A	26'-9"	3 @ 11'-9"	N/A	35'-3"	3 @ 17'-5"	N/A	52'-3"
8	3	8	3 @ 12'-1"	N/A	36'-3"	3 @ 15'-10"	N/A	47'-6"	3 @ 23'-6"	2 @ 7'-7"	85'-8"
8	4	8	3 @ 15'-3"	N/A	45'-9"	3 @ 20'-0"	2 @ 7'-7"	75'-2"	3 @ 29'-7"	3 @ 7'-7"	111'-6"
8	5	8	3 @ 18'-5"	N/A	55'-3"	3 @ 24'-1"	3 @ 7'-7"	95'-0"	3 @ 35'-8"	4 @ 7'-7"	137'-4"
8	6	8	3 @ 21'-7"	2 @ 7'-7"	79'-11"	3 @ 28'-3"	3 @ 7'-7"	107'-6"	3 @ 41'-9"	5 @ 7'-7"	163'-2"
8	7	8	3 @ 24'-9"	3 @ 7'-7"	97'-0"	3 @ 32'-4"	4 @ 7'-7"	127'-4"	3 @ 47'-10"	6 @ 7'-7"	189'-0"
8	8	8	3 @ 27'-11"	3 @ 7'-7"	106'-6"	3 @ 36'-6"	4 @ 7'-7"	139'-10"	3 @ 53'-11"	6 @ 7'-7"	207'-3"
9	2	9	3 @ 9'-3"	N/A	27'-9"	3 @ 12'-1"	N/A	36'-3"	3 @ 17'-11"	N/A	53'-9"
9	3	9	3 @ 12'-4"	N/A	37'-0"	3 @ 16'-2"	N/A	48'-6"	3 @ 24'-0"	3 @ 8'-7"	97'-9"
9	4	9	3 @ 15'-6"	N/A	46'-6"	3 @ 20'-4"	2 @ 8'-7"	78'-2"	3 @ 30'-1"	3 @ 8'-7"	116'-0"
9	5	9	3 @ 18'-8"	N/A	56'-0"	3 @ 24'-5"	3 @ 8'-7"	99'-0"	3 @ 36'-2"	4 @ 8'-7"	142'-10"
9	6	9	3 @ 21'-10"	2 @ 8'-7"	82'-8"	3 @ 28'-7"	3 @ 8'-7"	111'-6"	3 @ 42'-3"	5 @ 8'-7"	169'-8"
9	7	9	3 @ 25'-0"	3 @ 8'-7"	100'-9"	3 @ 32'-8"	4 @ 8'-7"	132'-4"	3 @ 48'-4"	6 @ 8'-7"	196'-6"
9	8	9	3 @ 28'-2"	3 @ 8'-7"	110'-3"	3 @ 36'-10"	4 @ 8'-7"	144'-10"	3 @ 54'-5"	6 @ 8'-7"	214'-9"
9	9	9	3 @ 31'-4"	3 @ 8'-7"	119'-9"	3 @ 40'-11"	5 @ 8'-7"	165'-8"	3 @ 60'-6"	7 @ 8'-7"	241'-7"
10	2	10	3 @ 9'-6"	N/A	28'-6"	3 @ 12'-5"	N/A	37'-3"	3 @ 18'-5"	N/A	55'-3"
10	3	10	3 @ 12'-8"	N/A	38'-0"	3 @ 16'-6"	N/A	49'-6"	3 @ 24'-6"	3 @ 9'-7"	102'-3"
10	4	10	3 @ 15'-10"	N/A	47'-6"	3 @ 20'-8"	2 @ 9'-7"	81'-2"	3 @ 30'-7"	3 @ 9'-7"	120'-6"
10	5	10	3 @ 19'-0"	N/A	57'-0"	3 @ 24'-9"	3 @ 9'-7"	103'-0"	3 @ 36'-8"	4 @ 9'-7"	148'-4"
10	6	10	3 @ 22'-1"	2 @ 9'-7"	85'-5"	3 @ 28'-11"	3 @ 9'-7"	115'-6"	3 @ 42'-9"	5 @ 9'-7"	176'-2"
10	7	10	3 @ 25'-3"	3 @ 9'-7"	104'-6"	3 @ 33'-0"	4 @ 9'-7"	137'-4"	3 @ 48'-10"	6 @ 9'-7"	204'-0"
10	8	10	3 @ 28'-5"	3 @ 9'-7"	114'-0"	3 @ 37'-2"	4 @ 9'-7"	149'-10"	3 @ 54'-11"	6 @ 9'-7"	222'-3"
10	9	10	3 @ 31'-7"	4 @ 9'-7"	133'-1"	3 @ 41'-3"	5 @ 9'-7"	171'-8"	3 @ 61'-0"	7 @ 9'-7"	250'-1"
10	10	10	3 @ 34'-9"	4 @ 9'-7"	142'-7"	3 @ 45'-5"	5 @ 9'-7"	184'-2"	3 @ 67'-1"	8 @ 9'-7"	277'-11"
11	2	11	4 @ 9'-9"	N/A	39'-0"	4 @ 12'-9"	N/A	51'-0"	4 @ 18'-11"	N/A	75'-8"
11	3	11	4 @ 12'-11"	N/A	51'-8"	4 @ 16'-11"	N/A	67'-8"	4 @ 25'-0"	3 @ 10'-7"	131'-9"
11	4	11	4 @ 16'-1"	N/A	64'-4"	4 @ 21'-0"	2 @ 10'-7"	105'-2"	4 @ 31'-1"	3 @ 10'-7"	156'-1"
11	6	11	4 @ 22'-5"	2 @ 10'-7"	110'-10"	4 @ 29'-3"	3 @ 10'-7"	148'-9"	4 @ 43'-3"	5 @ 10'-7"	225'-11"
11	8	11	4 @ 28'-9"	3 @ 10'-7"	146'-9"	4 @ 37'-6"	4 @ 10'-7"	192'-4"	4 @ 55'-5"	6 @ 10'-7"	285'-2"
11	10	11	4 @ 35'-0"	4 @ 10'-7"	182'-4"	4 @ 45'-9"	5 @ 10'-7"	235'-11"	4 @ 67'-7"	8 @ 10'-7"	355'-0"
11	11	11	4 @ 38'-2"	4 @ 10'-7"	195'-0"	4 @ 49'-10"	6 @ 10'-7"	262'-10"	4 @ 73'-8"	9 @ 10'-7"	389'-11"
12	2	12	4 @ 10'-0"	N/A	40'-0"	4 @ 13'-1"	N/A	52'-4"	4 @ 19'-5"	N/A	77'-8"
12	3	12	4 @ 13'-2"	N/A	52'-8"	4 @ 17'-3"	N/A	69'-0"	4 @ 25'-6"	3 @ 11'-7"	136'-9"
12	4	12	4 @ 16'-4"	N/A	65'-4"	4 @ 21'-4"	2 @ 11'-7"	108'-6"	4 @ 31'-7"	4 @ 11'-7"	172'-8"
12	6	12	4 @ 22'-8"	2 @ 11'-7"	113'-10"	4 @ 29'-7"	3 @ 11'-7"	153'-1"	4 @ 43'-9"	5 @ 11'-7"	232'-11"
12	8	12	4 @ 29'-0"	3 @ 11'-7"	150'-9"	4 @ 37'-10"	4 @ 11'-7"	197'-8"	4 @ 55'-11"	7 @ 11'-7"	304'-9"
12	10	12	4 @ 35'-4"	4 @ 11'-7"	187'-8"	4 @ 46'-1"	5 @ 11'-7"	242'-3"	4 @ 68'-1"	8 @ 11'-7"	365'-0"
12	12	12	4 @ 41'-8"	5 @ 11'-7"	224'-7"	4 @ 54'-4"	6 @ 11'-7"	286'-10"	4 @ 80'-3"	10 @ 11'-7"	436'-10"

GENERAL NOTES

For layout of traversable pipe grate system, see Highway Standard 542311.

This table is only to be used for cross drainage structures.

5-09-14

TRAVERSABLE PIPE GRATE FOR BOX CULVERT END SECTIONS 13.1

PRINT DRIVER = LPD_E_B_4_1.rf*g
PEN TABLE = ROOT_VER82.ctb
PLOT NAME = D:\SE4H18-src-desk\s57.dgn
FILE NAME

USER NAME = kah	DESIGNED -	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN -	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2015 9:35:15 AM	DATE - 01/15	REVISED -	

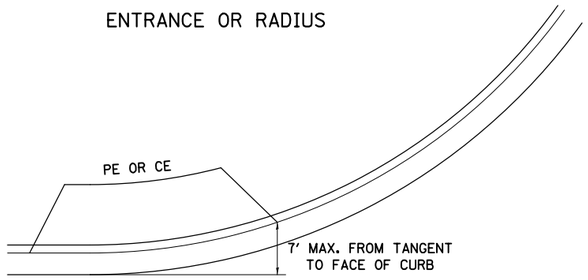
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

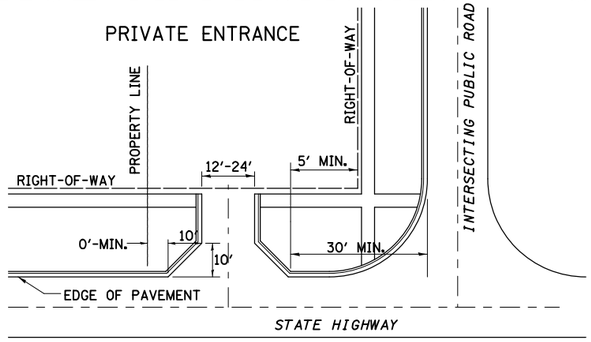
DISTRICT 2 STANDARDS

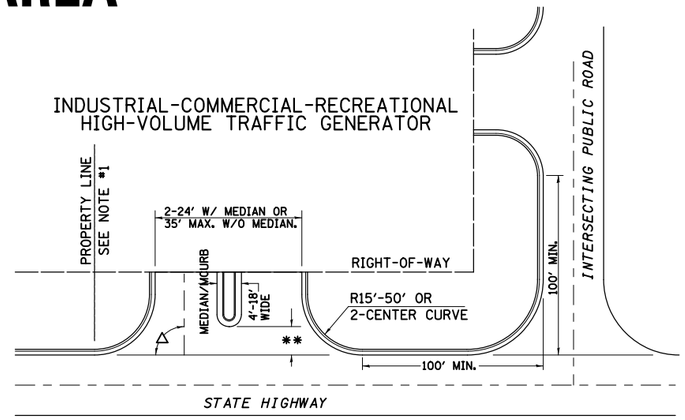
SCALE: NONE | SHEET NO. 7 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	57
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ENTRANCE APPROACHES – URBAN AREA



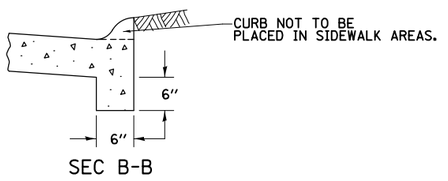




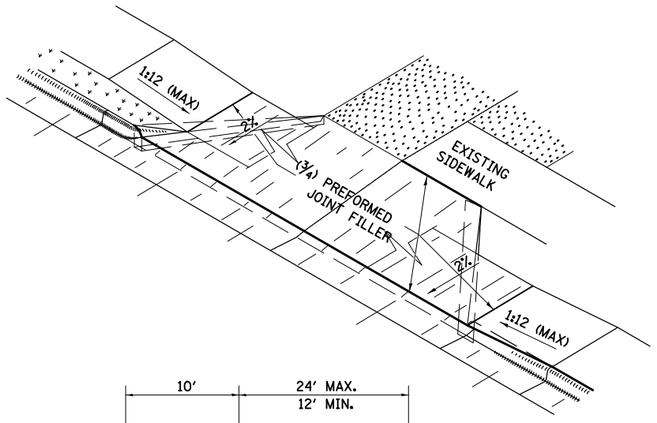
A MINIMUM OF 440 FEET SHALL BE MAINTAINED BETWEEN CENTER LINES OF ADJACENT DRIVEWAYS.
△ 90° DESIRABLE, 45° MIN. ANGLE PERMITTED ONLY FOR ONE-WAY DRIVEWAYS.
60° MIN. ANGLE FOR TWO-WAY DRIVEWAYS.

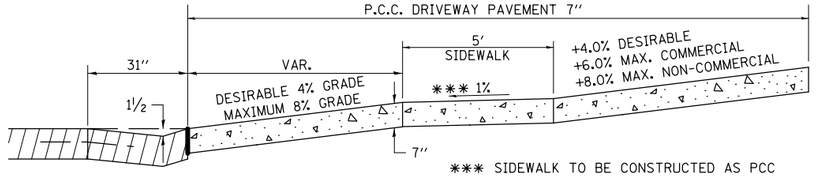
NOTE: *1 ENCROACHMENT ON THE ADJACENT PROPERTY OWNER LAND REQUIRES HIS OR HER WRITTEN APPROVAL.

** 4′-10′ IF HIGHWAY CURBED.
AT EDGE OF SHOULDER IF HIGHWAY UNCURBED.



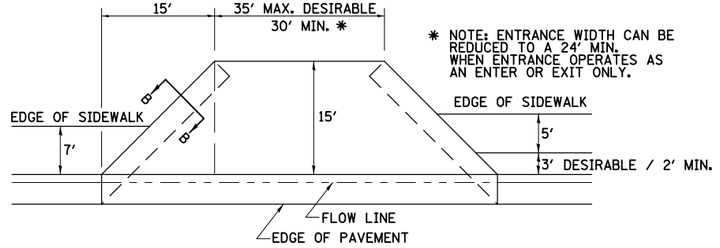
SEC B-B





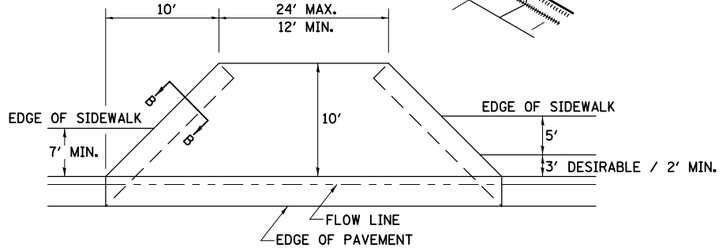
*** SIDEWALK TO BE CONSTRUCTED AS PCC DRIVEWAY PAVEMENT 7″ THROUGH THE WIDTH OF THE DRIVEWAY. SEE DIST. STD. 35.4

ASCENDING APPROACH

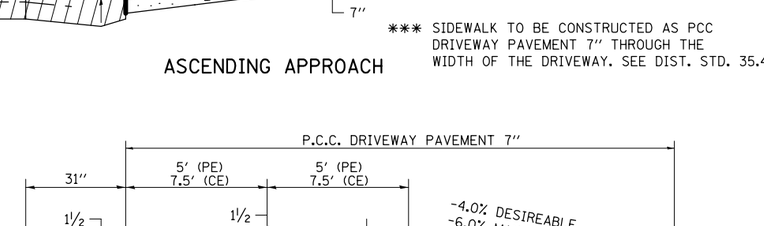


* NOTE: ENTRANCE WIDTH CAN BE REDUCED TO A 24′ MIN. WHEN ENTRANCE OPERATES AS AN ENTER OR EXIT ONLY.

LOW TO MODERATE VOLUME COMMERCIAL ENTRANCE

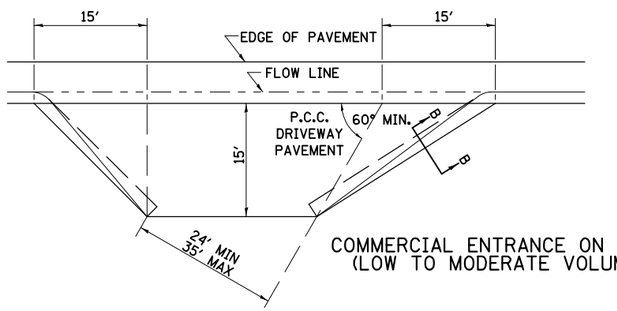


PRIVATE ENTRANCE

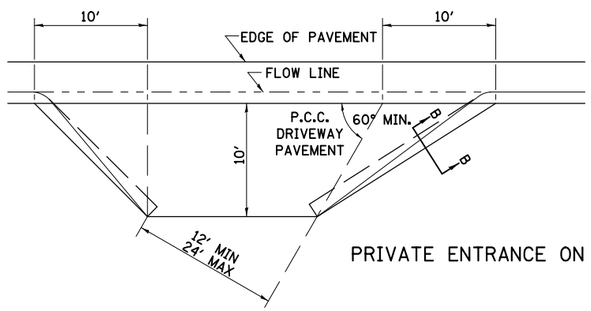


DESCENDING APPROACH
(NO SIDEWALK)

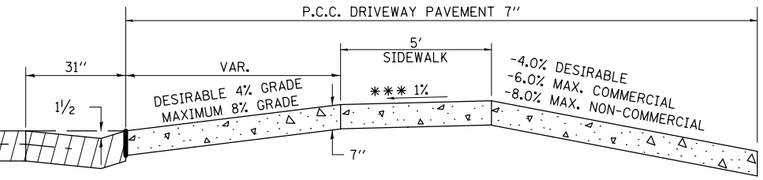
NOTE: CURVED ENTRANCE RETURNS MAY BE USED FOR LOW TO MODERATE VOLUME LOCATIONS WITH REVIEW ON A CASE-BY-CASE BASIS.



COMMERCIAL ENTRANCE ON SKEW
(LOW TO MODERATE VOLUME)



PRIVATE ENTRANCE ON SKEW



DESCENDING APPROACH
(WITH SIDEWALK)

ENTRANCE APPROACHES – URBAN AREA 25.1

6-27-14

PRINT DRIVER = LPD_E_8_0_c1v1r9
PEN TABLE = IDOT_V08D2.tbl
WORK MODE = Color
FILE NAME = D:\Cadd\Projects\Standards\Urban\25-1.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - KAH	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015 9:35:23 AM	DATE - 12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 8 OF 14 SHEETS | STA. | TO STA.

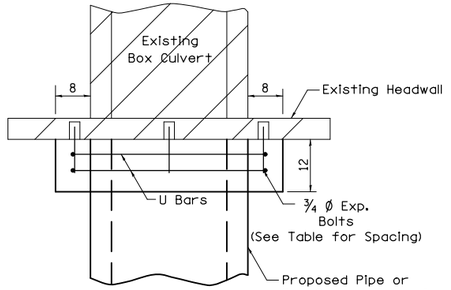
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	58
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS

Bill of Materials

h BAR	U BAR DIMENSIONS				U_1 BAR DIMENSIONS				REINF. BARS	EXPANSION BOLTS	CONCRETE COLLAR
Quantity	X	Y	Length	Quantity	X	Z	Length	Quantity	LBS	EACH	Cu. Yds.
20	4'-6"	2'-11"	10'-4"	4					48	0	1.1
12	2'-2"	1'-9"	5'-8"	4					28	0	0.5
16	3'-4"	2'-4"	8'-0"	4					38	0	0.8
								Totals	114	0	2.4

All h Bars 18 Long



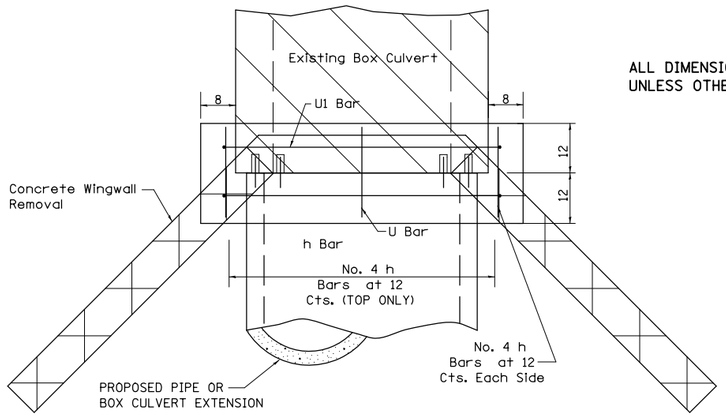
PLAN OF CULVERT WITH STRAIGHT HEADWALL

General Notes

Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications

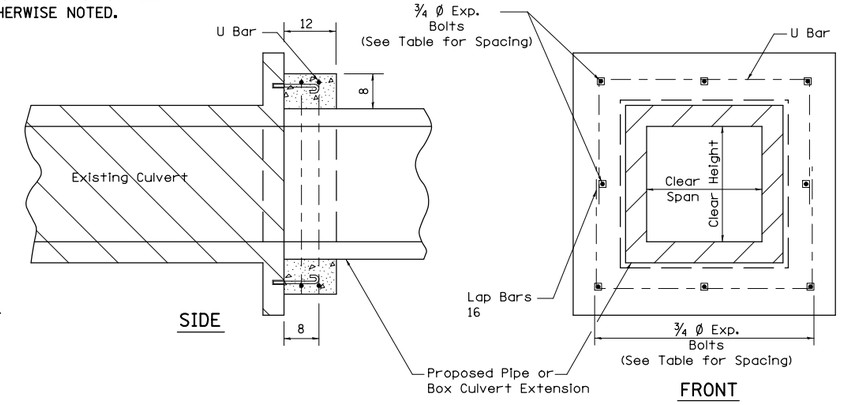
Reinforcement bars shall conform to Section 508 of the Standard Specifications.

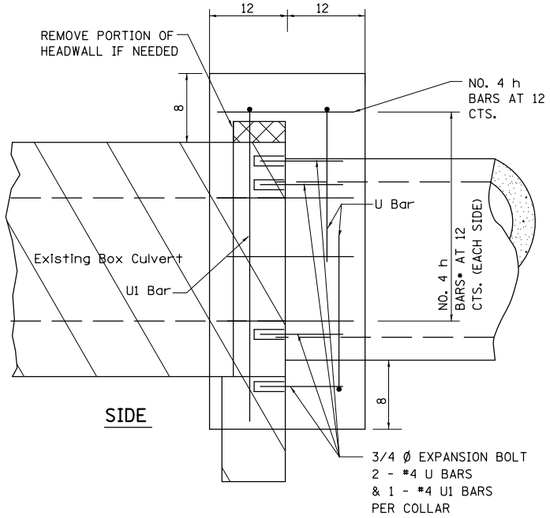
The concrete will be paid for at the contract unit price per cubic yard for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per pound for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS of the size indicated, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 8 inches into the new concrete.

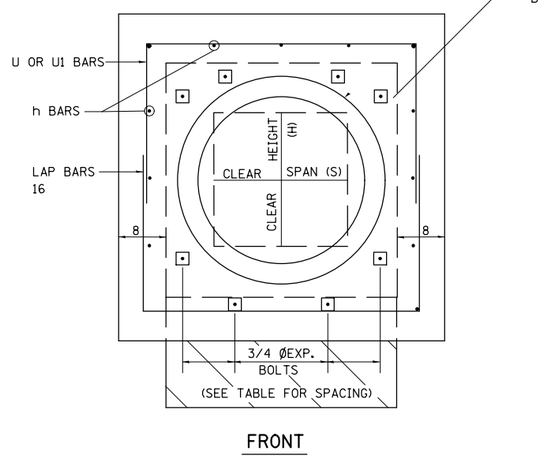


PLAN OF CULVERT WITH ANGLED WING WALLS

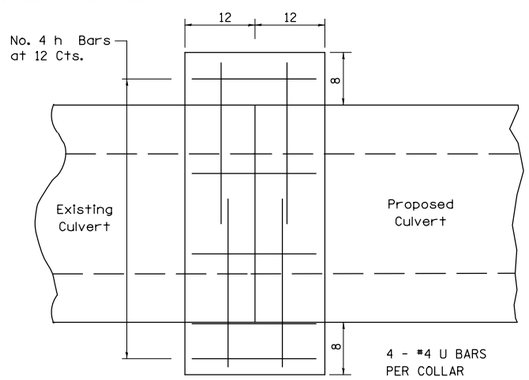
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



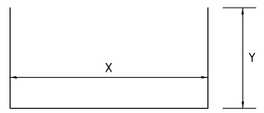




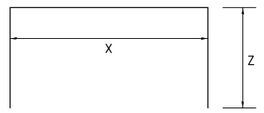
FRONT



CULVERT CONNECTION WITHOUT EXISTING HEADWALL



(#4) U BAR



(#4) U1 BAR

PLACEMENT DETAILS FOR EXPANSION BOLTS

H OR S	NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE			
	EXTENSIONS < 15'		EXTENSIONS > 15'	
	NUMBER	SPACING	NUMBER	SPACING
24	*		*	
30	2	18	2	18
36	2	24	2	24
48	3	18	3	18
60	4	16	3	24
72	5	15	4	20
84	5	18	4	24
96	6	15	5	21
108	6	19	5	24
120	7	18	6	21
132	8	17	6	24
144	8	19	7	22

* MINIMUM ONE PER SIDE

6-27-14

PRINT DRIVER = LPD.E.B.@plotfig
PEN TABLE = DOT_VER02.tbl
STYLE TABLE = DOT_VER02.stb
FILE NAME = D:\64H18-sht-details09.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:35:33 AM	DATE - 12/14	REVISED -	

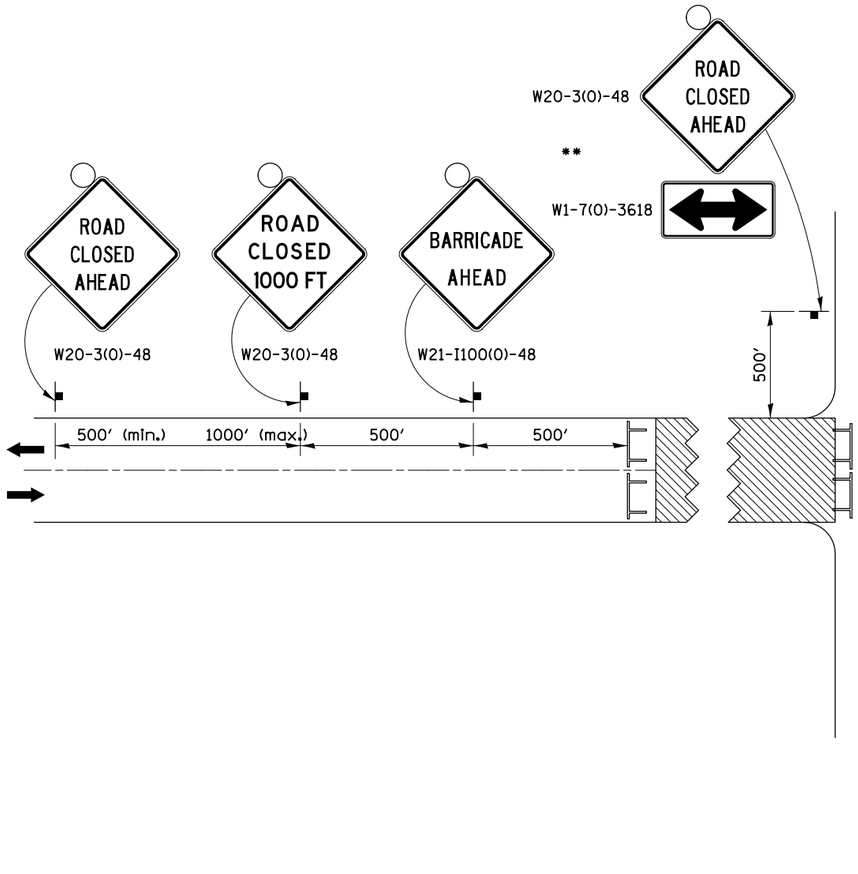
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

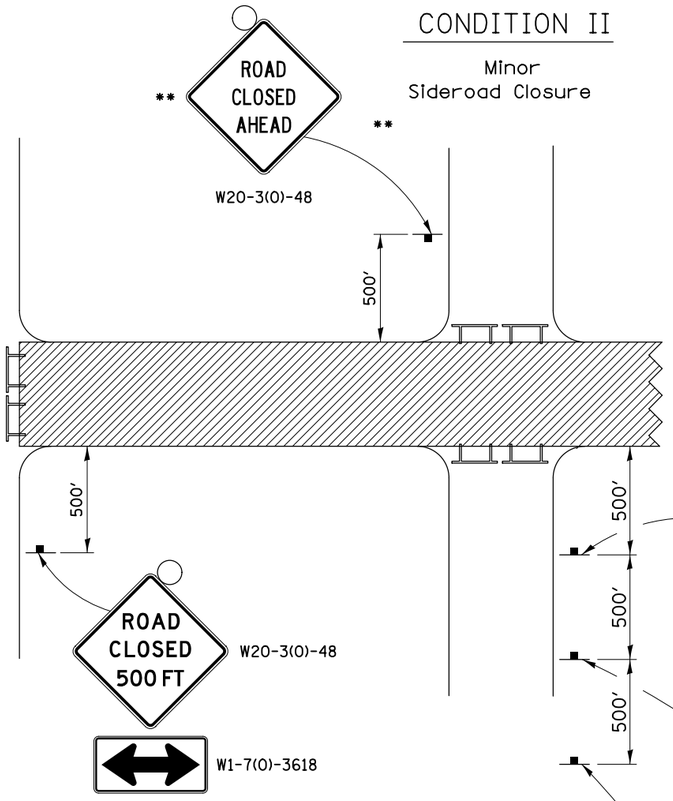
DISTRICT 2 STANDARDS

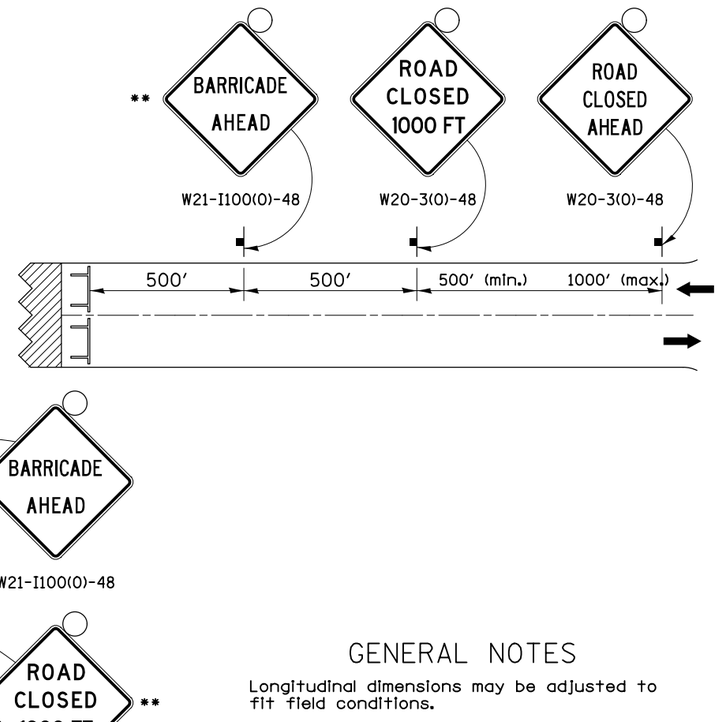
SCALE: NONE | SHEET NO. 9 OF 14 SHEETS | STA. | TO STA.

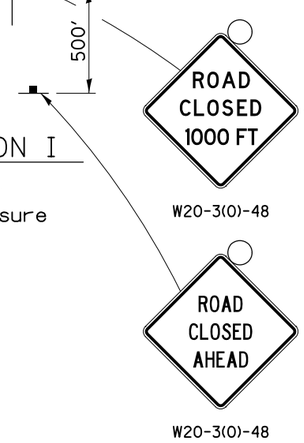
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	59
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC CONTROL FOR ROAD CLOSURE





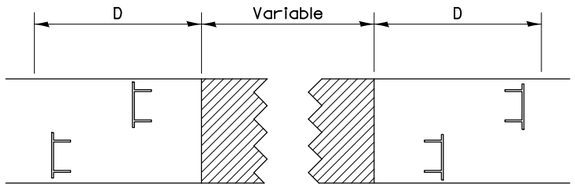




CONDITION I

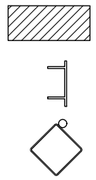
Major
Sideroad Closure

ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 2000′ an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

SYMBOLS



Work area

Type III Barricade with Flashers

Sign with flashing light

GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250′ and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

** Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic. Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

All dimensions are in inches unless otherwise shown.

TRAFFIC CONTROL FOR ROAD CLOSURE **40.1**

TYPICAL APPLICATION FOR ROAD CLOSURE

10-17-11

PRINT DRIVER = LPD_E_B_B_1.tcf
PEN TABLE = IDOT_V8XM.tbl
LEVELS = DGNLEVELS.dat
FILE NAME = C:\ESCA\IDOT-Art-Details\40.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:35:40 AM	DATE - 12/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

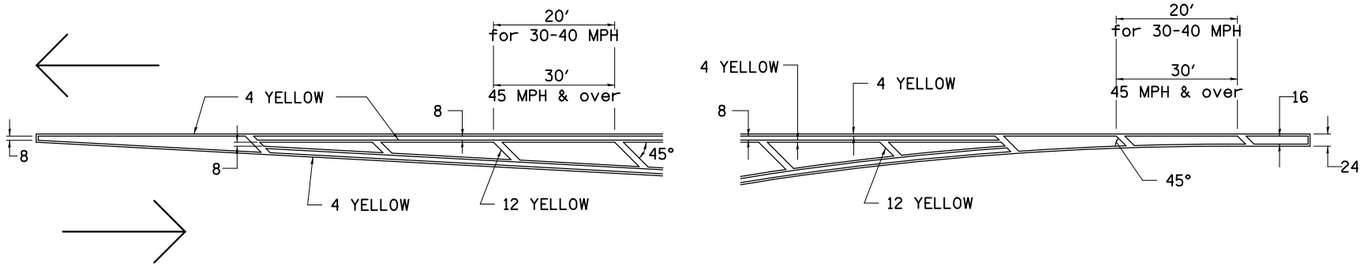
DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 10 OF 14 SHEETS | STA. | TO STA.

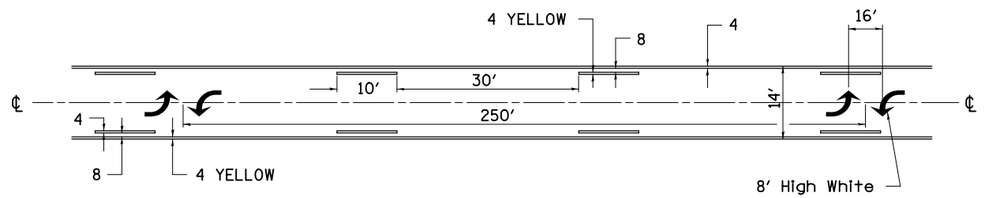
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	60
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

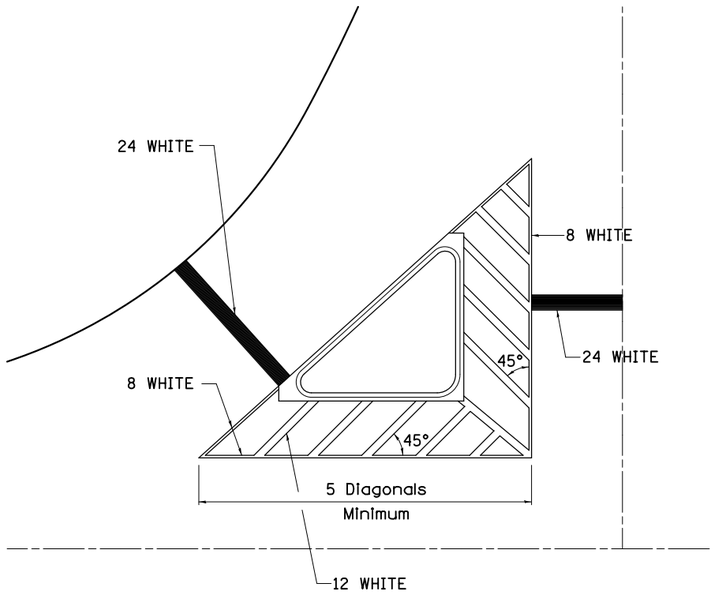


MEDIAN PAVEMENT MARKING



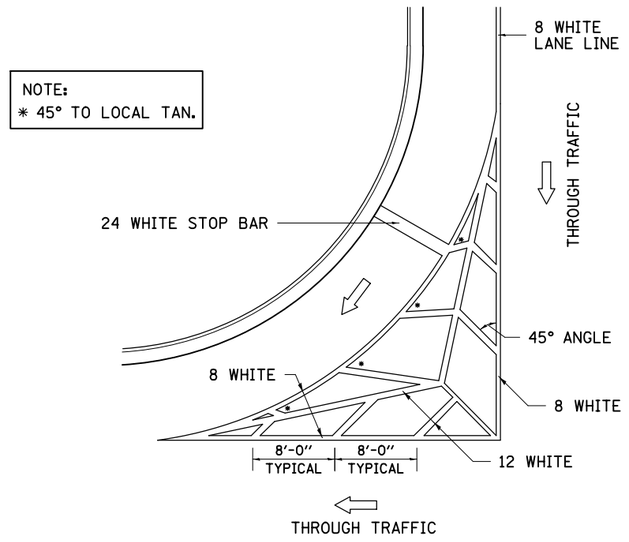
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



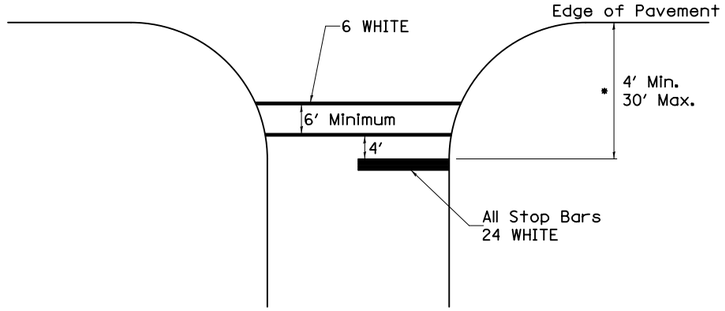
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

REVISED - 6-27-14

TYPICAL PAVEMENT MARKINGS SHEET 1 OF 3 41.1

PRINT DRIVER = I_HP5_E_B_color1.prs
PEN TABLE = IDOT_VER82.tbl
LEVEL NAME = D284118-sht-details01.dgn
FILE NAME

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015 9:35:53 AM	DATE - 12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

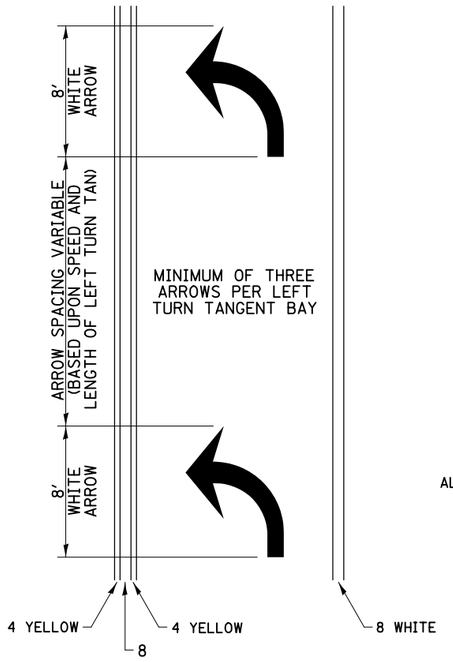
DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 11 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	61
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT



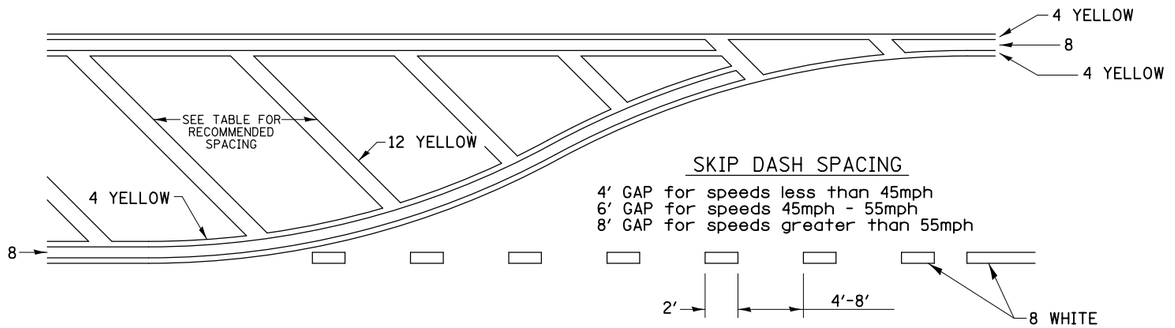
◀ ONE-WAY AMBER MARKER

◁ ONE-WAY CRYSTAL MARKER

◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

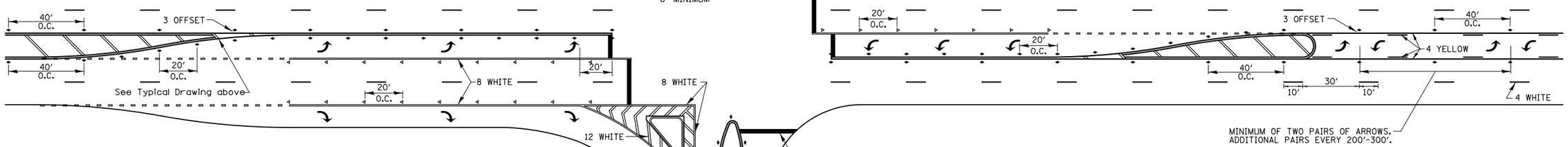
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



REVISED - 6-27-14

TYPICAL PAVEMENT MARKINGS SHEET 2 OF 3 41.1

PRINT DRIVER = L:\PDF_B_Style\pdf9
PEN TABLE = \\DOT_VENDOR.tbl
PLOT SCALE = 1.000 '/ in.
FILE NAME = D:\02H18-src-details02.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:36:04 AM	DATE - 12/14	REVISED -	

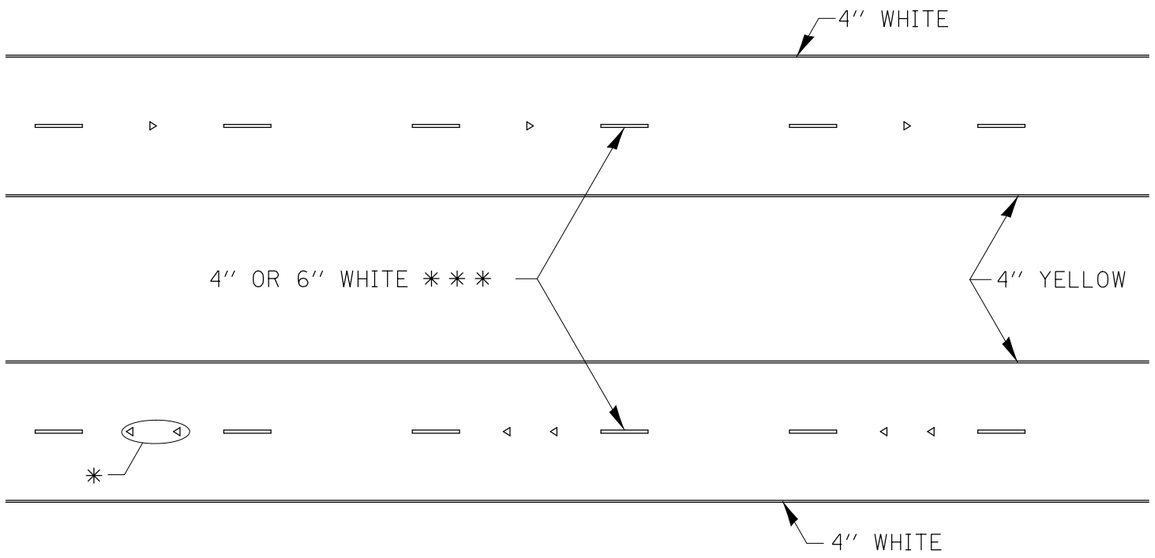
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 12 OF 14 SHEETS | STA. | TO STA.

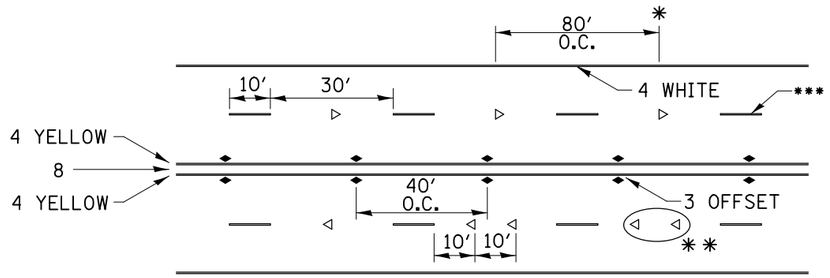
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	62
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS



✳ SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT > 20,000.

MULTI–LANE / DIVIDED



SYMBOLS

* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

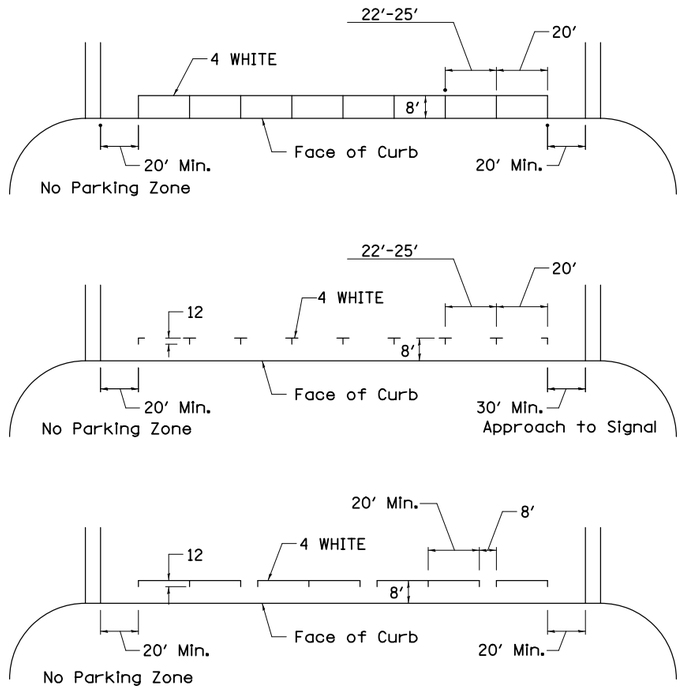
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4'' LINE. SPEED LIMIT 40 MPH AND OVER USE 6'' LINE.

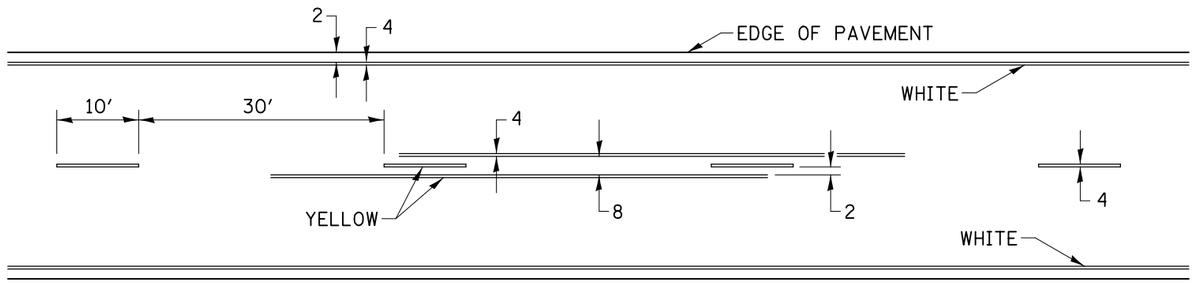
MULTI–LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PARKING SPACING



TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



REVISED - 6-27-14

TYPICAL PAVEMENT MARKINGS SHEET 3 OF 3 41.1

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS	USER NAME = kah	DESIGNED - ELH	REVISED -
	ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -
	PLOT SCALE = 0.1667 '/ in.	CHECKED - ELH	REVISED -
	PLOT DATE = 1/26/2015 9:36:12 AM	DATE - 12/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 13 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	63
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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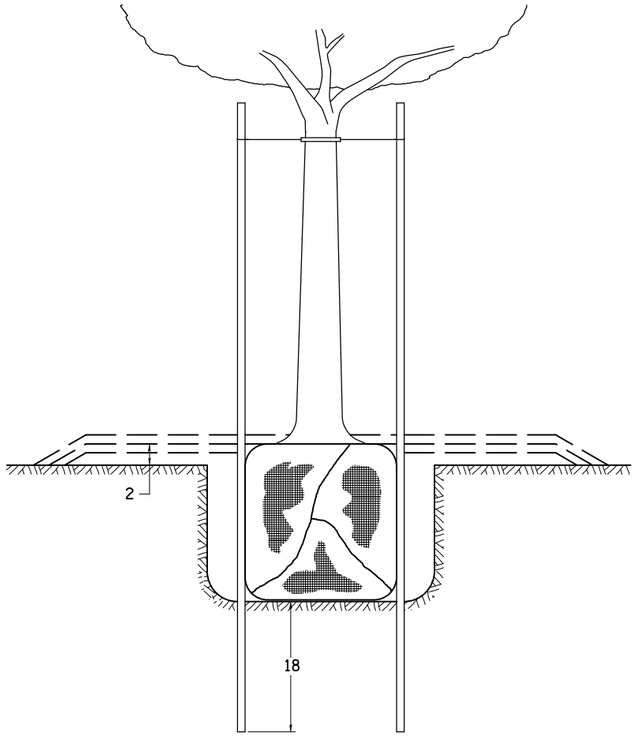
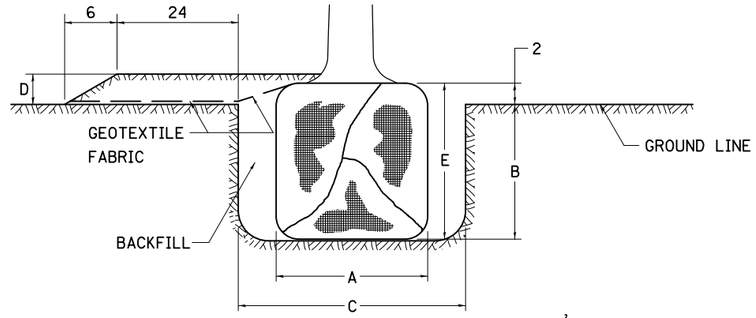
DETAILS OF PLANTING AND BRACING TREES

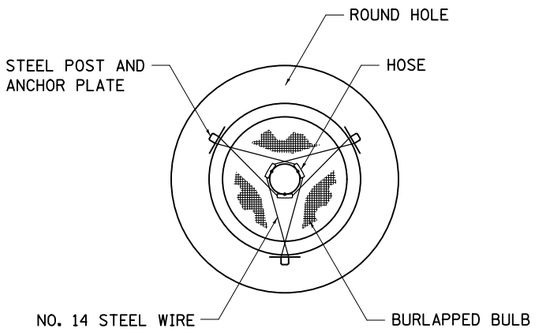


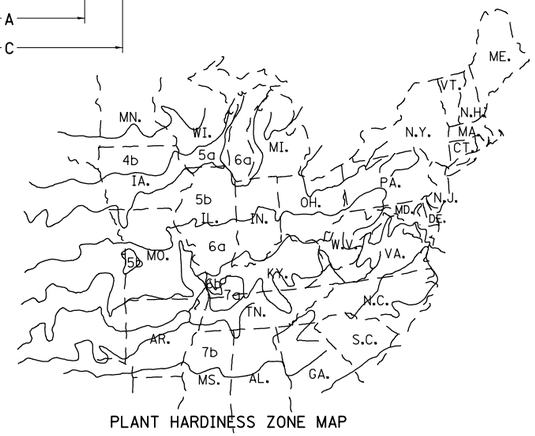
TREES SMALLER THAN 4½ IN DIAMETER

SMALL TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER CU. YDS.
5′-6′	16	10	30	4	12	0.54
5′-6′ BB	16	10	30	4	12	0.54
6′-7′ BB	18	12	30	4	14	0.54
7′-8′ BB	20	11	30	4	13	0.54
8′-10′ BB	24	14	36	4	16	0.61
10′-12′ BB	26	15	36	4	17	0.61

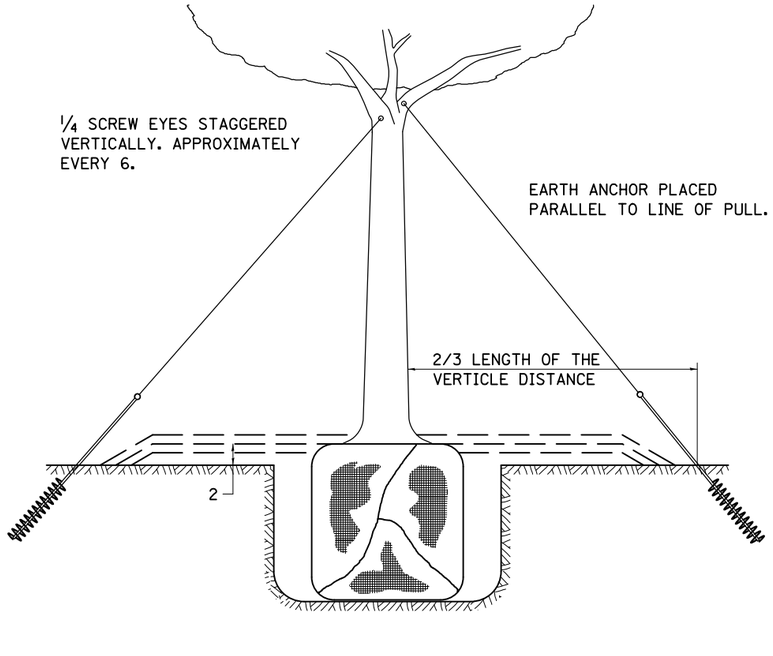
LARGE TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER CU. YDS.
0-2	20	11	36	4	13	0.61
2-2½ BB	24	14	48	4	16	0.78
2½-3 BB	28	17	48	4	19	0.78
3-3½ BB	32	17	60	4	19	0.96
3½-4 BB	36	20	60	4	22	0.96
4-4½ BB	40	22	72	4	24	1.16
4½-5 BB	44	24	72	4	26	1.16
5-5½ BB	48	27	84	4	29	1.38



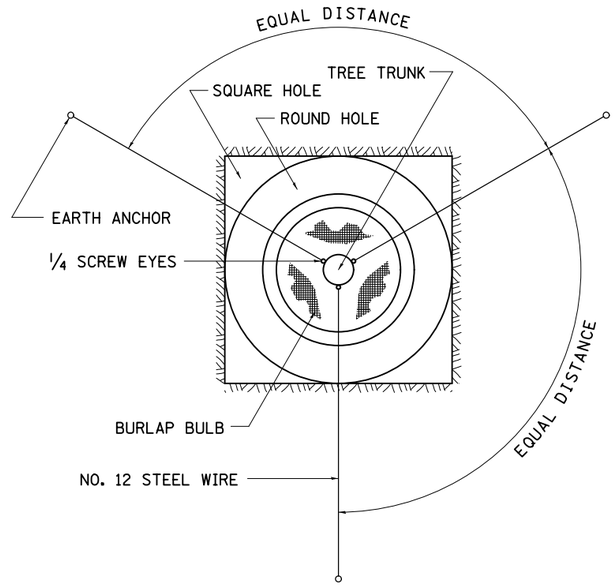




PLANT HARDINESS ZONE MAP



TREES OVER 4½ IN DIAMETER



DETAILS OF PLANTING AND BRACING TREES 92.1

REVISED - 10-18-11

PRINT DRIVER = LPD.E.8.8a1sf9
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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

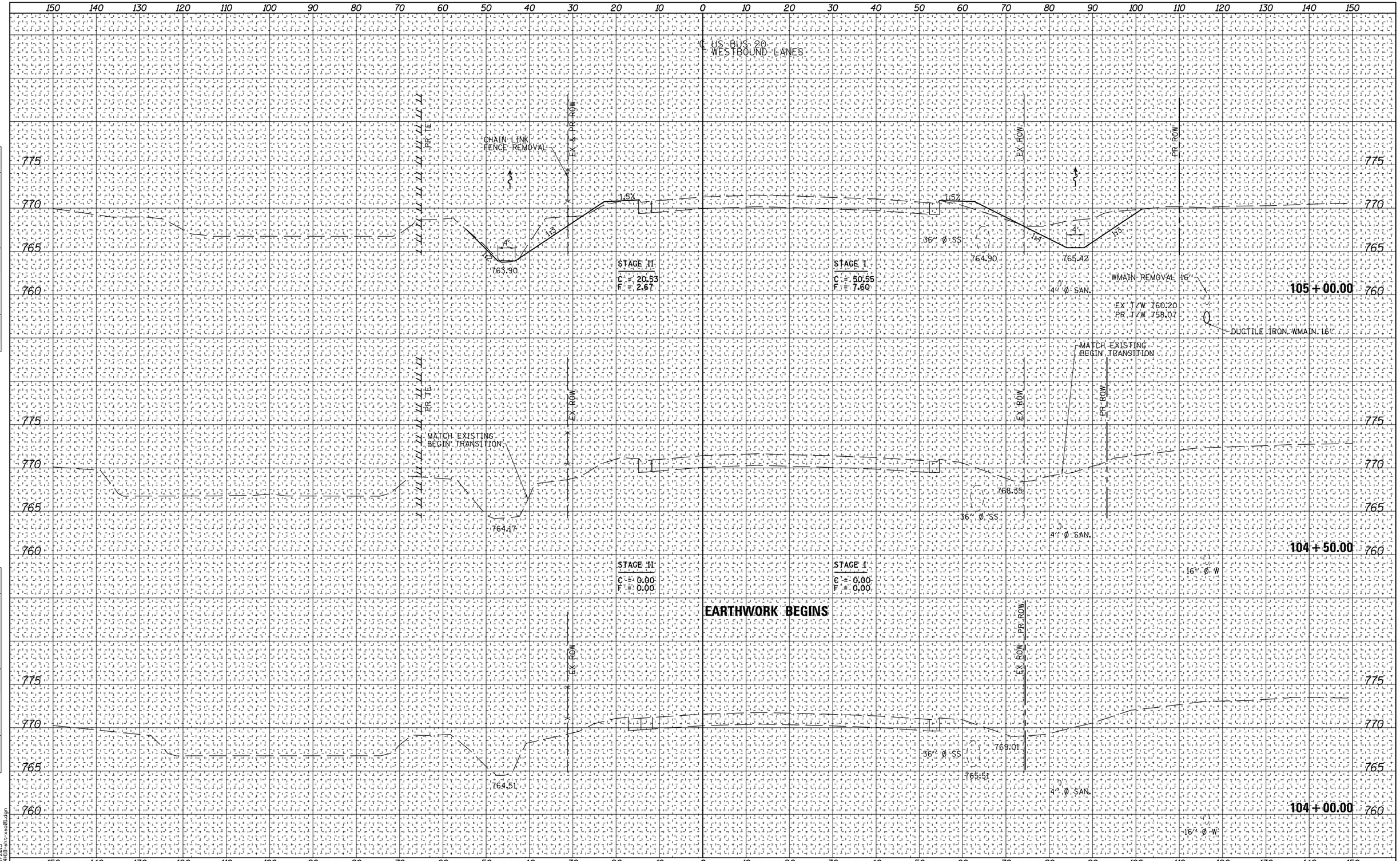
USER NAME = kah	DESIGNED - ELH	REVISED -	
ESCA PROJECT NO. 1140.01	DRAWN - HAS	REVISED -	
PLOT SCALE = 0.1667 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015 9:36:22 AM	DATE - 09/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NONE | SHEET NO. 14 OF 14 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	64
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.

SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.

SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

BY — DATE

USER NAME = kah
PRINT DATE = 1/26/2015
FILE NAME = D2264H18-sht-xs01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF/HAS	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

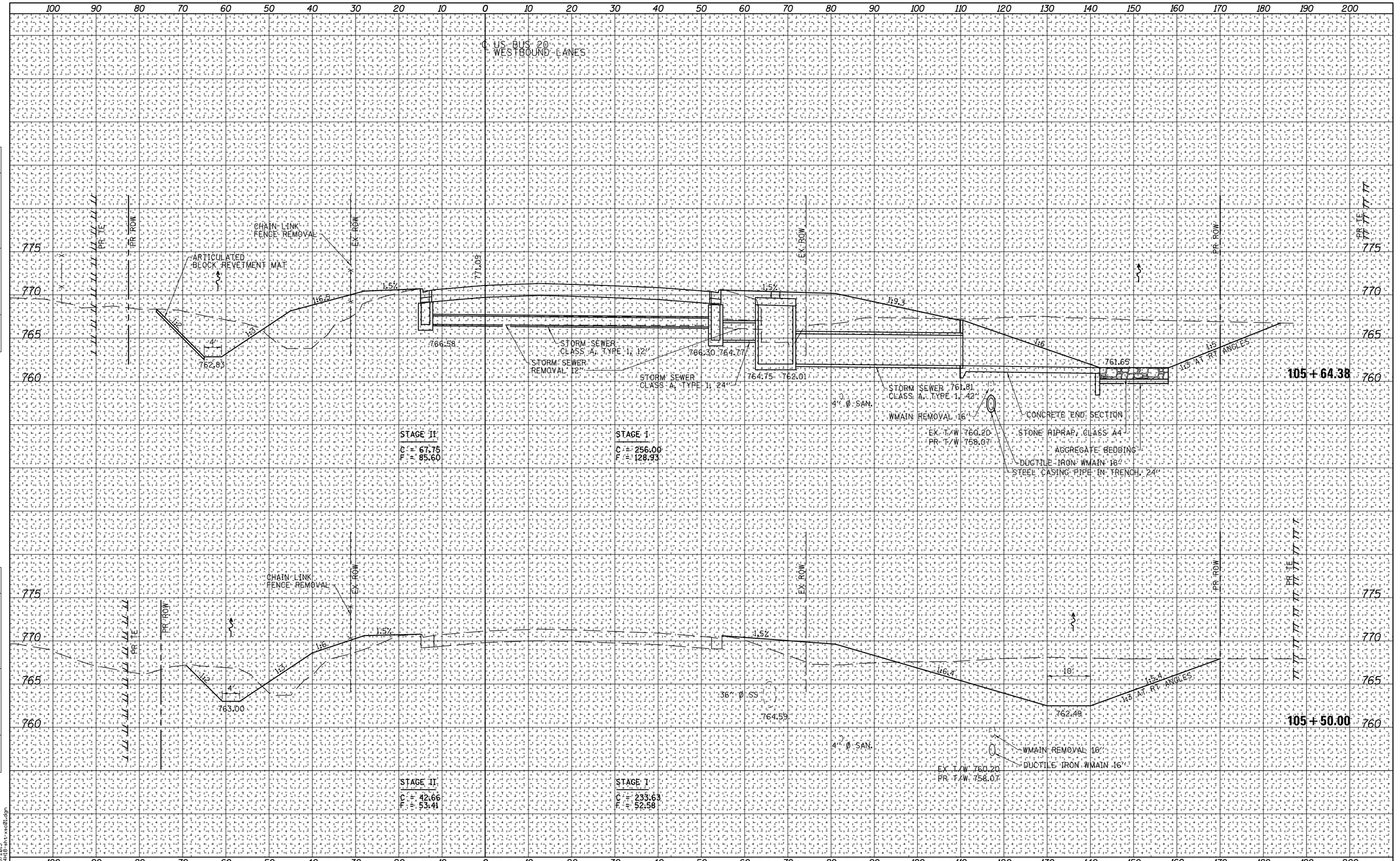
US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 1 OF 8 SHEETS | STA. 104+00.00 | TO STA. 105+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	65

CONTRACT NO. 64H18

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

USER NAME = kah
PLOT DATE = 1/26/2015
FILE NAME = D264H18-sht-xsc01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

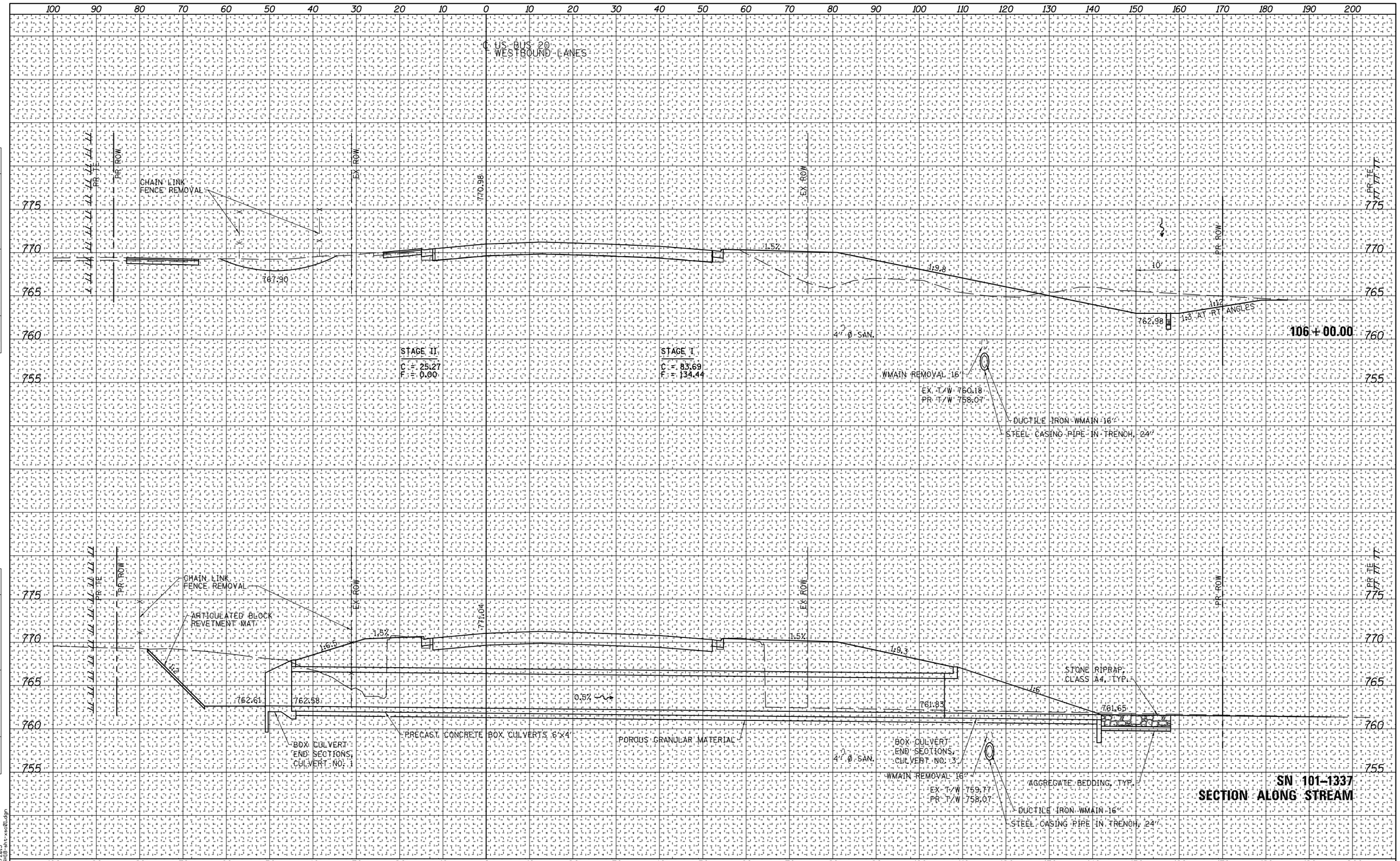
USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF/HAS	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 2 OF 8 SHEETS | STA. 105+50.00 TO STA.105+64.38

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	66
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SN 101-1337

SECTION ALONG STREAM

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

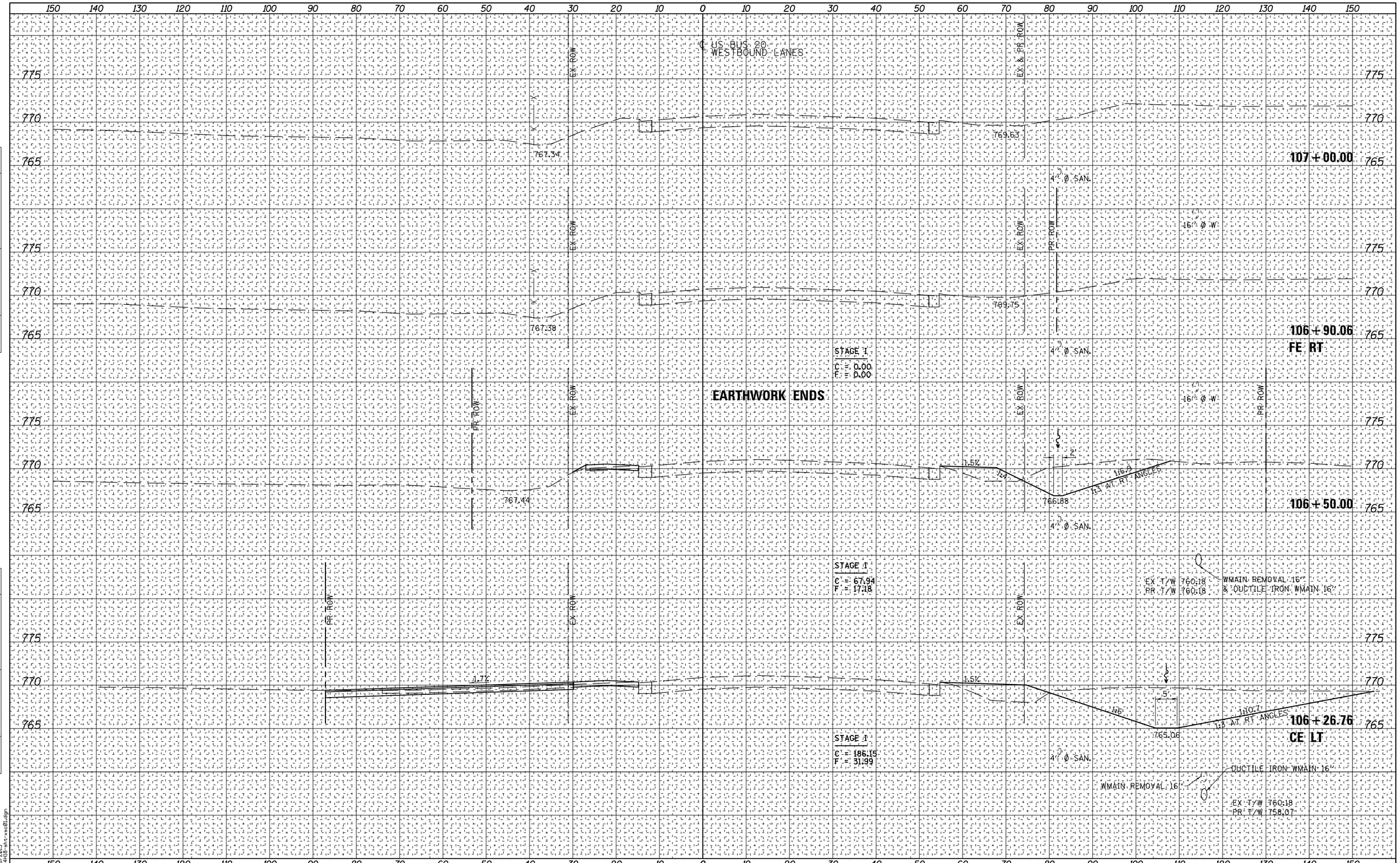
USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF/HAS	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 3 OF 8 SHEETS | STA. 105+83.00 TO STA. 106+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	67
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

USER NAME = kah
PRINT DATE = 1/26/2015
FILE NAME = D264118-sht-xsc01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

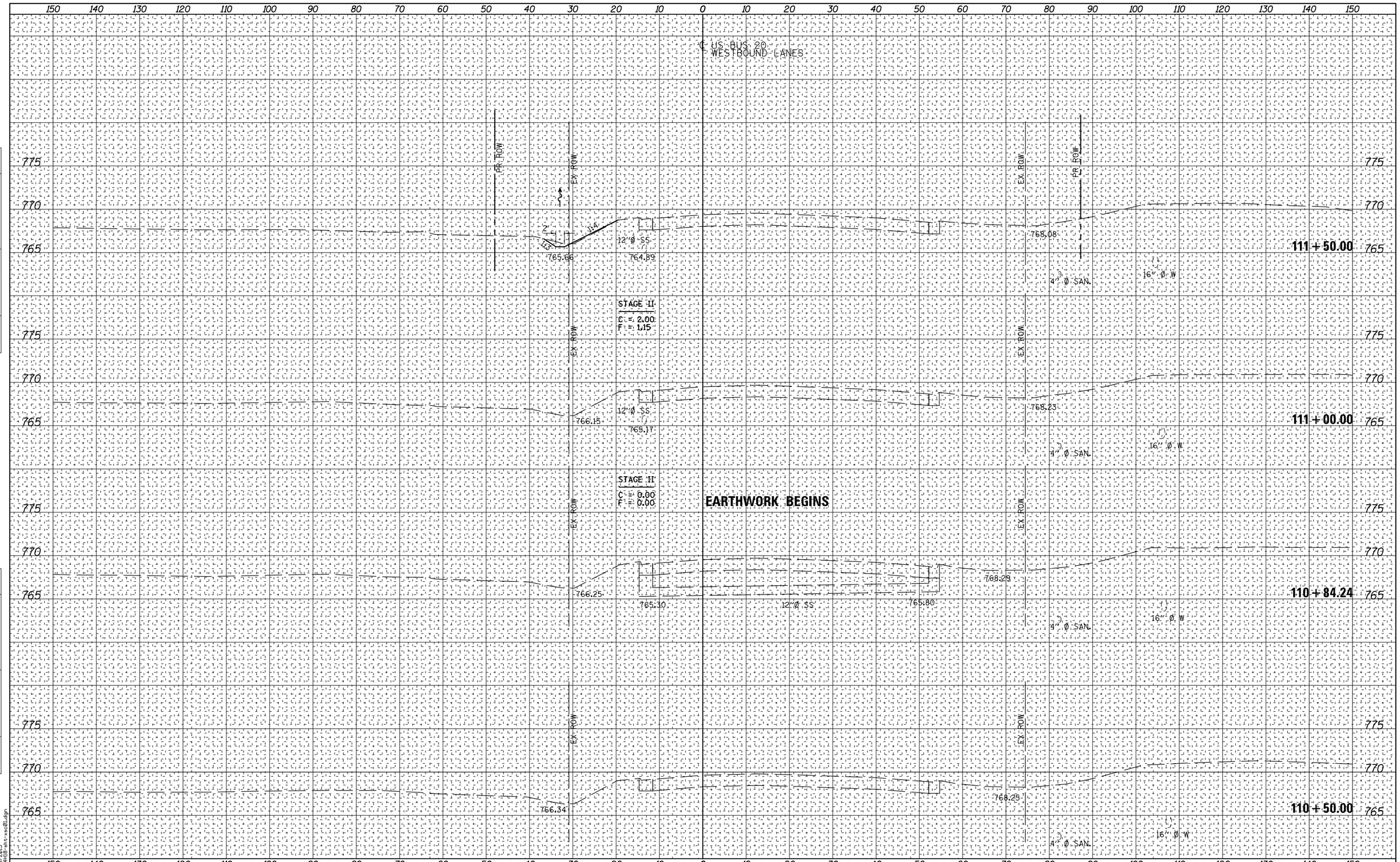
USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 4 OF 8 SHEETS | STA. 106+26.76 TO STA.107+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	68
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

USER NAME = kah
PRINT DATE = 1/26/2015
FILE NAME = D264H18-sht-xsc01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

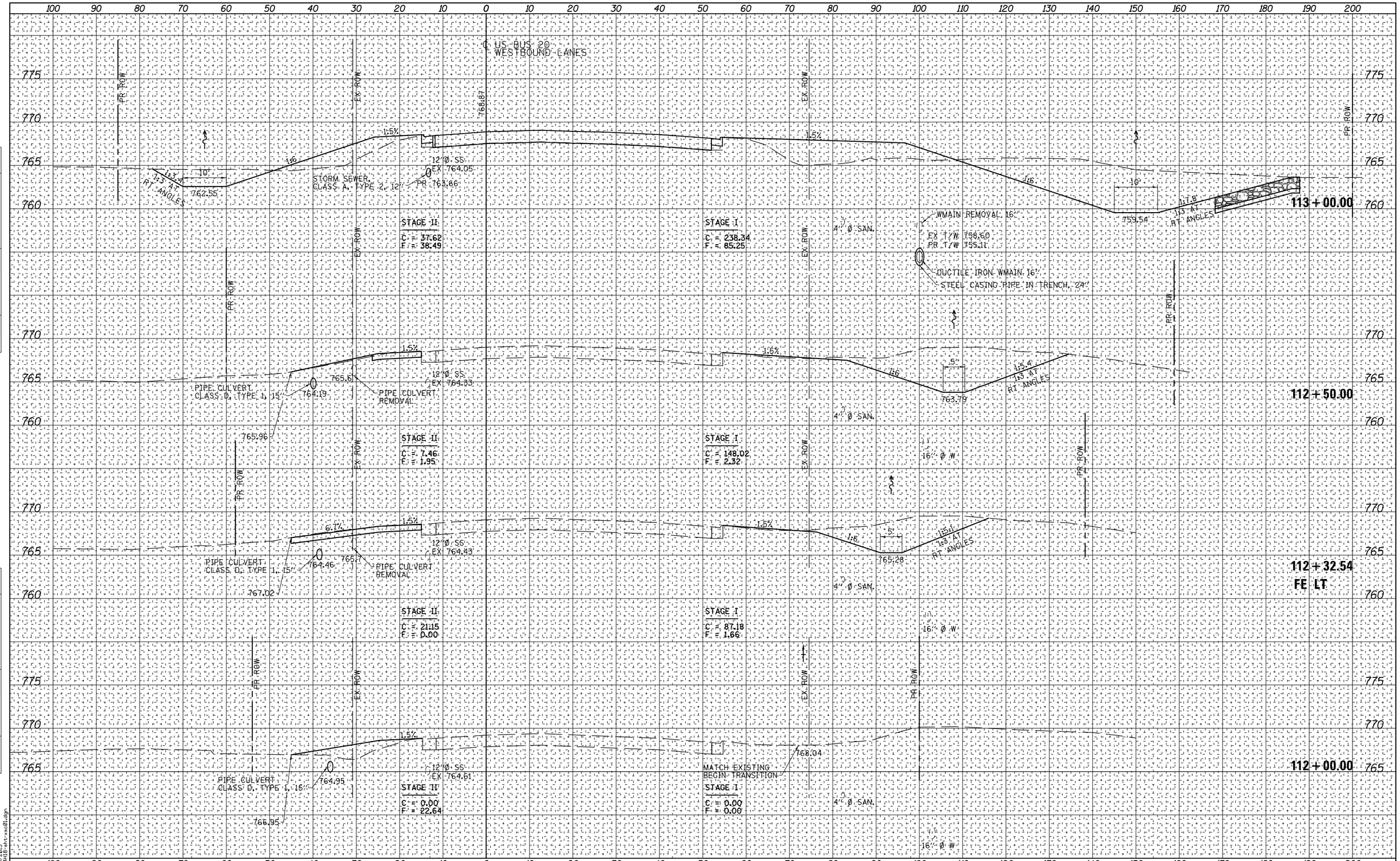
USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF/HAS	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 5 OF 8 SHEETS | STA. 110+50.00 TO STA. 111+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	69
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

USER NAME = kah
PLOT DATE = 1/26/2015
FILE NAME = D264H18-sht-xsc01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

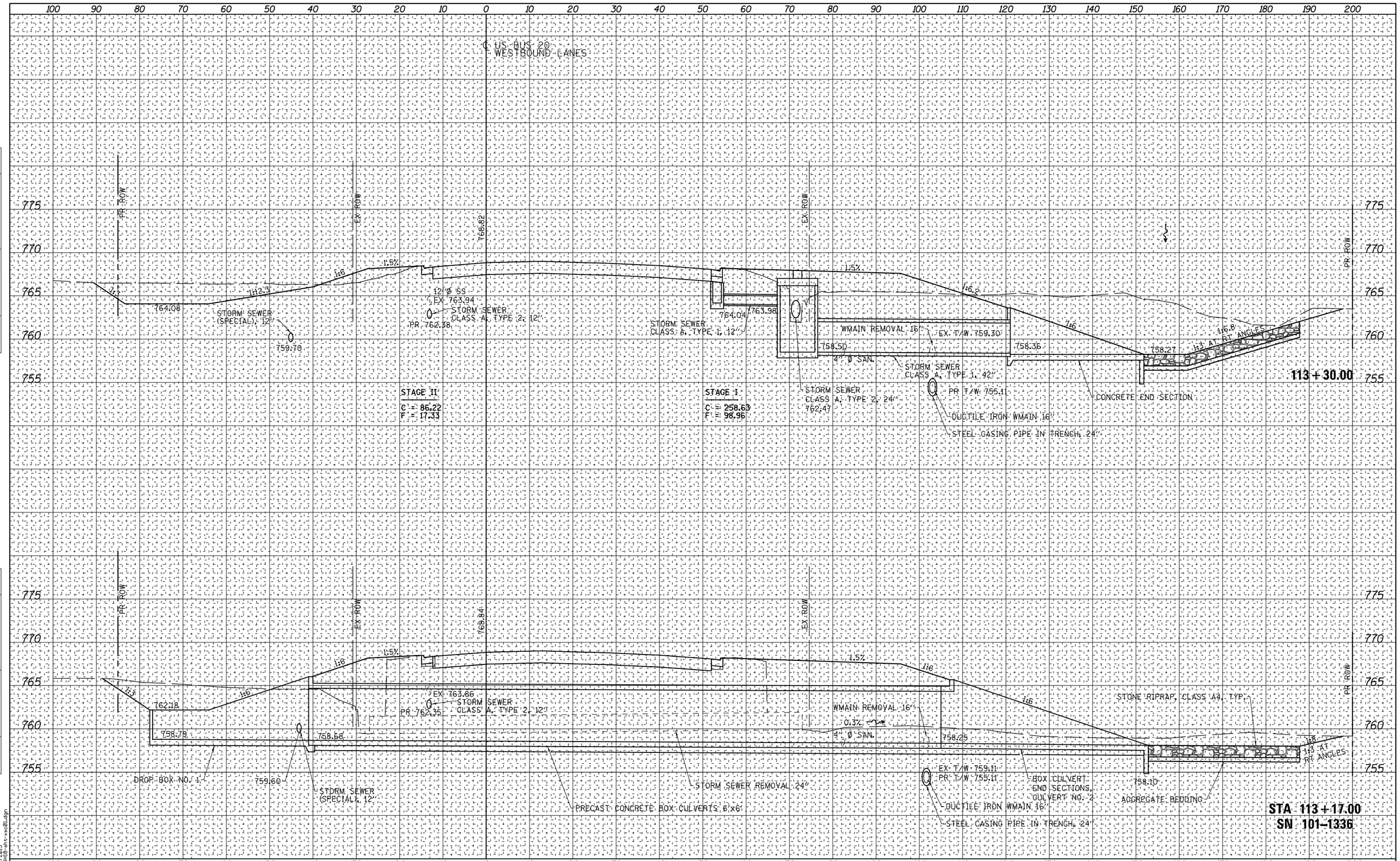
USER NAME = kah	DESIGNED - ELH	REVISED -	
	DRAWN - JLF/HAS	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 6 OF 8 SHEETS | STA. 112+00.00 | TO STA. 113+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	70
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

USER NAME = kah
PLOT DATE = 1/26/2015
FILE NAME = D:\64H18-sht-xsc01.dgn

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -
	DRAWN - JLF/HAS	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

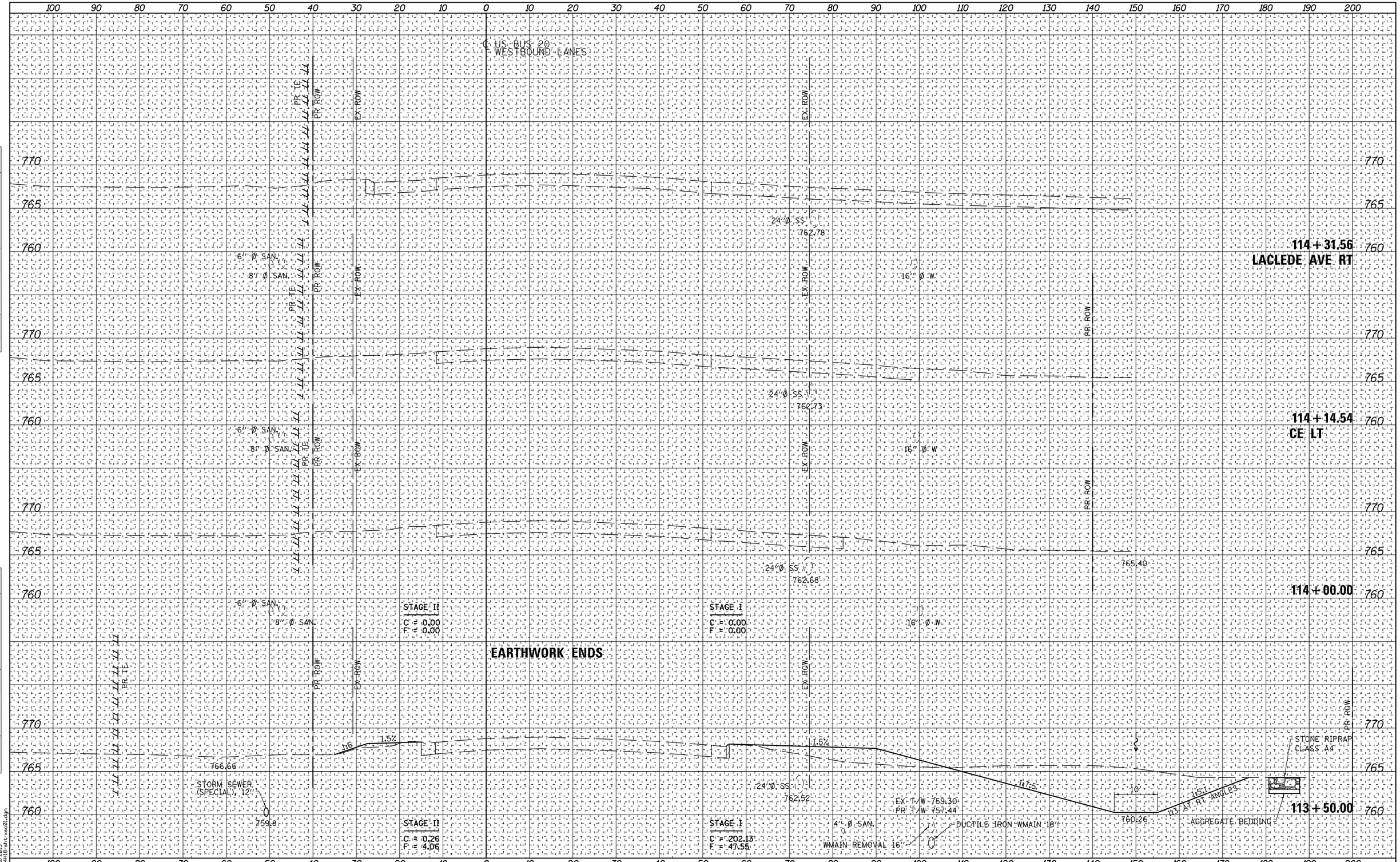
US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 7 OF 8 SHEETS | STA. 113+17.00 | TO STA. 113+30.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	71
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



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ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

USER NAME = kah	DESIGNED - ELH	REVISED -	
	DRAWN - JLF/HAS	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED - ELH	REVISED -	
PLOT DATE = 1/26/2015	DATE - 01/15	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US BUS 20 CROSS SECTIONS

SCALE: AS SHOWN | SHEET NO. 8 OF 8 SHEETS | STA. 113+50.00 | TO STA. 114+31.56

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	40T-1	WINNEBAGO	72	72
		CONTRACT NO. 64H18		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		