TC-10 Traffic control and protection for side roads, interaction, and druckings

TC-17 traffic control details for Freeway shoulder clasures and partial range clasures

TC-21 Detour signing for closing State Highways
TC-22 Arterial Road Information sign

**GENERAL NOTES** SUMMARY OF QUANTITIES ALIGNMENT AND TIES

TYPICAL SECTIONS PLAT OF HIGHWAYS

REMOVAL PLAN

STRUCTURAL PLANS

PROJECT LOCATED IN THE CITY OF HARVARD

1-800-892-0123 OR 811

T46N, R5E, SECTION 2

DESIGN DESIGNATION

TRAFFIC DATA:

MAJOR COLLECTOR

MARENGO ROAD

ADT = 1500 (2010)

9575 W. Higgins Road, Suite 600

PROFESSIONAL DESIGN FIRM NO.: 184-001175 EXPIRATION DATE: APRIL 30, 2014

11-12

13-18

20

21

J.U.L.I.E.

ROADWAY PLAN AND PROFILE DETOUR NOTES AND PLAN MAINTENANCE OF TRAFFIC

**EROSION AND SEDIMENT CONTROL PLAN** 

LIST OF STATE STANDARDS LOCATED ON SHEET NO. 2

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

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.

POSTED/DESIGN SPEED = 35 MPH

CHRISTOPHER B. BURKE ENGINEERING, LTD.

STATE OF ILLINOIS

### **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS** 

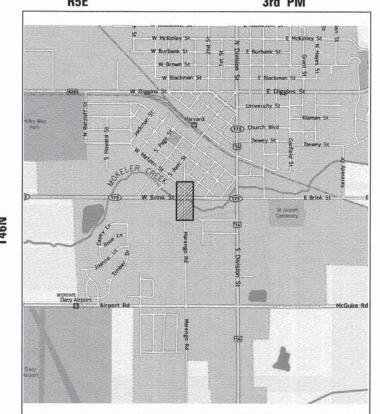
# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 0006 (MARENGO ROAD) **OVER MOKELER CREEK CULVERT REPLACEMENT** SECTION 11-00064-00-BR PROJECT NO. BRM-9003(800) CITY OF HARVARD **MCHENRY COUNTY** JOB NO. C-91-457-11

# R5E 3rd PM

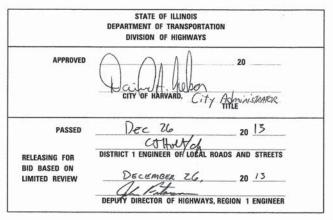
#### **LOCATION MAP**

GROSS LENGTH OF PROJECT = 199 FEET (0.04 MILES) NET LENGTH OF PROJECT = 199 FEET (0.04 MILES)



SECTION COUNTY TOTAL SHEE F.A.U.RTE. 0006 11-00064-00-BR MC HENRY 23 FED. ROAD DIST. NO.





1'' = 1500 F

GARY ROZWADOWSKI ILLINOIS REGISTRATION No. 062-051689 ENGINEER

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

-(847) 705-4406, OFFICE **PROGRAM** 

RIDDLE, CHARLES ENGINEER:

0

0

**CONTRACT NO. 63899** 

#### **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012: THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2014: THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD), "THE STANDARD SPECIFICATIONS FOR WATER AND SEVER MAIN CONSTRUCTION IN ILLINOIS" MAY 1996 SIXTH EDITION, THE "DETAILS" IN THE PLANS, LATEST EDITION OF THE MANUAL OF TEST PROCEDURE OF MATERIALS, THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS, THE AMERICANS WITH DISABILITIES ACT OF 1990 ACCESSIBILITY GUIDELINES, THE "DRAFT" REHABILITATION ACT OF 1973 (SECTION 504), AND THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF OSHA DURING CONSTRUCTION OF IMPROVEMENTS AND RESTORATION. NEITHER THE CITY NOR ITS APPOINTED ENGINEER SHALL BE RESPONSIBLE FOR THE CONTRACTOR'S COMPLIANCE WITH OSHA.
- 4. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING DIMENSIONS OR CONDITIONS.
- THE CONTRACTOR SHALL LIMIT HIS CONSTRUCTION ACTIVITIES TO THE WORK AREAS DESIGNATED ON THE PLANS. ANY DAMAGE TO AREAS OUTSIDE OF THESE LIMITS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE FINGINGER
- 6. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. THIS WORK WILL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION. IF EXISTING SIGNS ARE DAMAGED DURING THE REMOVAL AND REPLACEMENT PROCESS, THE SIGN SHALL BE REPLACED AT THE CONTACTOR'S EXPENSE.
- PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE
  ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED
  FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL SAWCUTTING SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.
- AT THE END OF EACH DAY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL STREETS ADJACENT TO THE PROJECT ARE FREE OF ALL CONSTRUCTION RELATED DEBRIS INCLUDING DIRT, STONE, NAILS, ETC. THE WORK SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF HARVARD.
- 10. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT EXCEPT FOR PERIODS OF SHORT DURATION AS APPROVED BY THE ENGINEER. A QUANTITY OF "AGGREGATE FOR TEMPORARY ACCESS" IS INCLUDED IN THE CONTRACT FOR THIS PURPOSE.
- 11. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAIN, SEWERS, GAS LINES, ETC. AS SHOWN ON THE PLANS, HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL JULIE AT (800) 892-0133 FOR LITHIUTY LOCATIONS.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR OWNER. THIS WORK WILL BE AT THE CONTRACTORS EXPENSE.

- ALL CLOSED LIDS SHALL BE STAMPED WITH THE WORD "STORM", "SANITARY" OR "WATER". THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED FRAME AND UID.
- 44. EARTH EXCAVATION: ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER, AND STATE OR LOCAL TIPPING FEES.
- DRAINAGE: DURING THE CONSTRUCTION OPERATIONS WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT IS INCLUDED IN THE COST OF THOSE DRAINAGE ITEMS.
- ALL PEDESTRIAN ROUTES CONSTRUCTED AS PART OF THIS PROJECT SHALL BE ADA COMPLIANT.
- 17. THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESSES SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.
- THE PROTECTIVE COATING SHALL BE APPLIED TO THE EXPOSED SURFACES OF THE CONCRETE CURB AND GUTTER, SIDEWALK AND DRIVEWAYS.
   CONCRETE CURING SHALL BE LIMITED TO METHODS SPECIFIED IN ARTICLE 1020.13 (A) [1], [2], AND [3].
- THE RESIDENT ENGINEER SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4407 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES ON RTE. 173.
- 20. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/ DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- SOIL BORING LOGS ARE INCLUDED IN THE PLANS. THE FULL SOILS REPORT CAN BE VIEWED AT THE CITY OF HARVARD CITY HALL, 201 W. DIGGINS STREET, HARVARD, II
- 22. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- CONTRACTOR SHALL NOTIFY THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF ANY BEGINNING WORK OF IL RTE. 178
- 24. STORM SEWER CONNECTIONS TO EXISTING MANHOLES SHALL BE INCLUDED IN THE COST OF THE STORM SEWER.

#### EROSION CONTROL NOTES:

- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A
   DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES

SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).

- THE CONTRACTOR SHALL INSTALL/MAINTAIN/ REMOVE PERIMETER EROSION BARRIER ALONG THE CREEK, AND AT ALL OTHER LOCATIONS WHERE STORM WATER SHEET FLOWS OUT OF THE WORK ZONE, AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL INSTALL/MAINTAIN/REMOVE INLET FILTERS IN ALL
  OPEN LID DRAINAGE STRUCTURES IN THE PAVEMENT THAT ARE WITHIN THE
  WORK ZONE OR ACCEPT STORMWATER THAT FLOWS OUT OF THE WORK
  ZONE, AND AT LOCATIONS AS DIRECTED BY THE ENGINER.
- THE CONTRACTOR SHALL INSTALL/MAINTAIN/REMOVE INLET AND PIPE PROTECTION IN AII OPEN LID DRAINAGE STRUCTURES IN THE PARKWAYS THAT ARE WITHIN THE WORK ZONE OR ACCEPT STORMWATER THAT FLOWS OUT OF THE WORK ZONE, AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

NOTE: BOXED ITEMS ARE INCLUDED IN THE COST OF OTHER WORK ITEMS.

#### UIST OF HIGHWAY STANDARDS 000001-06 Standard Symbols, Abbreviations, and Patterns

280001-07	Temporary Erosion Control Systems
42000107	Pavement Joints
420701-02	Pavement Fabric
424011-01	Corner Parallel Curb Ramps for Sidewalks
515001-03	Name Plate for Bridges
602001-02	Catch Basin, Type A
602301-04	Inlet, Type A
602401-04	'Manhole, Type A
604001-03	Frame and Lids, Type 1
604036-02	Grate, Type 8
606001-05	Concrete Curb Type B and Combination Concrete
	Curb end Gutter
630001-10	Steel Plate Beam Guardrail
630301-06	Shoulder Widening for Type 1 (Special) Guardrail
	Terminals
631011-09	Traffic Barrier Terminal, Type 2
631031-12	Traffic Barrier Terminal, Type 6
701011-04	Off-Road, Moving Operations, 2L, 2W, Day only
701301-04	Lane Closure, 2L, 2W, Short Time Operations
701311-03	Lane Closure, 2I, 2W, moving Operations, Day only
701501-06	Urban Lane Closure, 2L, 2W, Undivided
701502-06	Urban Lane Closure, 2L, 2W, with Bidirectional
	Left Turn Lane
701901-03	Traffic Control Devices
720001-01	Sign Panel Mounting Details

#### DISTRICT DETAILS

720006-04

TC-10	Traffic Control and Protection for Side Roads, Intersection
	And Driveways
TC-17	Traffic Control Details for Freeway Shoulder Closures and
	Partial Ramp Closures
TC-21	Detour Signing for Closing State Highway
TC_22	Arterial Road Information Sign

Sign Panel Erection Details

THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. THOSE SEEKING HISTORIC AS-BUILT OR OTHER RECORD PLANS AND DOCUMENTS MUST CONTACT THE OWNER OF RECORD TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION.

FILE NAME =	USER NAME = pmagnell:	DESIGNED - GR	REVISED -	
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	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	
	PLOT DATE = 1/8/2014	DATE - 01/07/2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

			RENGO R			F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET NO.
	GENERAL NOTES					0006	11-00064-00-BR	MCHENRY	23	2
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA						CONTRACT NO. 63899				
SCALL: N.1.3.	SHEET NO.	Ur	SHEETS	SIA.	TO STA.	FED. ROAD DIST	. NO. ILLINOIS FED. AT	D PROJECT		

					QUANTITY
	CODE NO.	ITEM	UNIT	0004	0011
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	66	
	20200100	EARTH EXCAVATION	CUYD	56	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CUYD	20	
	20800150	TRENCH BACKFILL	CUYD	382	
#	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	428	
	21400100	GRADING AND SHAPING DITCHES	FOOT	117	
‡ S	25000210	SEEDING, CLASS 2A	ACRE	1	
‡ S	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	8	
# S	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	8	
# 5	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	8	
S	25100630	EROSION CONTROL BLANKET	SQ YD	428	
S	25200200	SUPPLEMENTAL WATERING	UNIT	1	
	28000305	TEMPORARY DITCH CHECKS	FOOT	20	
	28000400	PERIMETER EROSION BARRIER	FOOT	384	
	28100109	STONE RIPRAP, CLASS A5	SQYD		110
	28200200	FILTER FABRIC	SQ YD		110
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	75	
	35101200	AGGREGATE BASE COURSE, TYPE A 13"	SQ YD	174	
	40600100	BITUMINOUS MATERIAL (PRIME COAT)	GALLON	127	
	40600300	AGGREGATE (PRIME COAT)	TON	1	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	80	
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	41	
#	42000416	PORTLAND CEMENT CONCRETE PAVEMENT 9 3/4" (JOINTED)	SQ YD	135	
	42001200	PAVEMENT FABRIC	SQ YD	248	
	42300100	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 5 INCH	SQ YD	25	
	42400800	DETECTABLE WARNINGS	SQFT	20	
	44000100	PAVEMENT REMOVAL	SQ YD	174	
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	363	
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	25	
	48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	130	
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	54	
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH		1
	50200100	STRUCTURE EXCAVATION	CUYD		610
	50300225	CONCRETE STRUCTURES	CUYD		29.4
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND		1580

## SUMMARY OF QUANTITIES

					QUANTITY
-	51500100	NAME PLATES	EACH	0004	0011
	54010907	PRECAST CONCRETE BOX CULVERTS 9' X 7'	FOOT		165
					103
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	2	
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	122	
	55100500	STORM SEWER REMOVAL 12"	FOOT	31	
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD		30
	60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	
-	60206602	CATCH BASINS, TYPE B, TYPE 8 GRATE	EACH	1	
	60500040	REMOVING MANHOLES	EACH	1	
s	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	156	
S	63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT		70
S	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	
S	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	
S	66900200	NON-SPECIAL WASTE DISPOSAL	CUYD	75	
	67100100	MOBILIZATION	LSUM	1	
	7030 000	WORK ZONE PAVEMENT MARKING REMOVAL	SQFT	848	
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	698	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	217	
5	70600240 72000100	WARCT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2. SIGN PANEL - TYPE 1	EACH SQ FT	9	
S	72900100	METAL POST - TYPE A	FOOT	10	
S#	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	13	
5#	78200420	GUARDRAIL MARKERS, TYPE B	EACH	8	
5#	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	
		TREE, ALER RUBRUM (RED MAPLE), 2 1/2" CALIPER, BALLED AND			
5#	A2001020	BURLAPPED	EACH	2	
S#	B2000770	TREE, AMELANCHIER X GRANDIFLORA AUTUMN BRILLIANCE (AUTUMN BRILLIANCE SERVICE BERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	3	
#	X0426200	DEWATERING	LSUM	1	10.1
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	
#	X5121800	PERMANENT STEEL SHEET PILING	SQ FT		582
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CUYD		60
5	X6026055	SANITARY MANHOLE, SPECIAL	EACH	1	
<b>#</b>	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	
5#	XX007811	FORCE MAIN, 8"	FOOT	64	
5#	XX007814	FORCE MAIN BYPASS PUMPING			
			LSUM	1	
5#	XX007842	DIRECTIONAL BORE	FOOT	42	
5	XX008829	REMOVAL AND DISPOSAL OF EXISTING FORCE MAIN	FOOT	102	
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1	
		8. RE- 1921			
Q	1.00	tis fit width it			

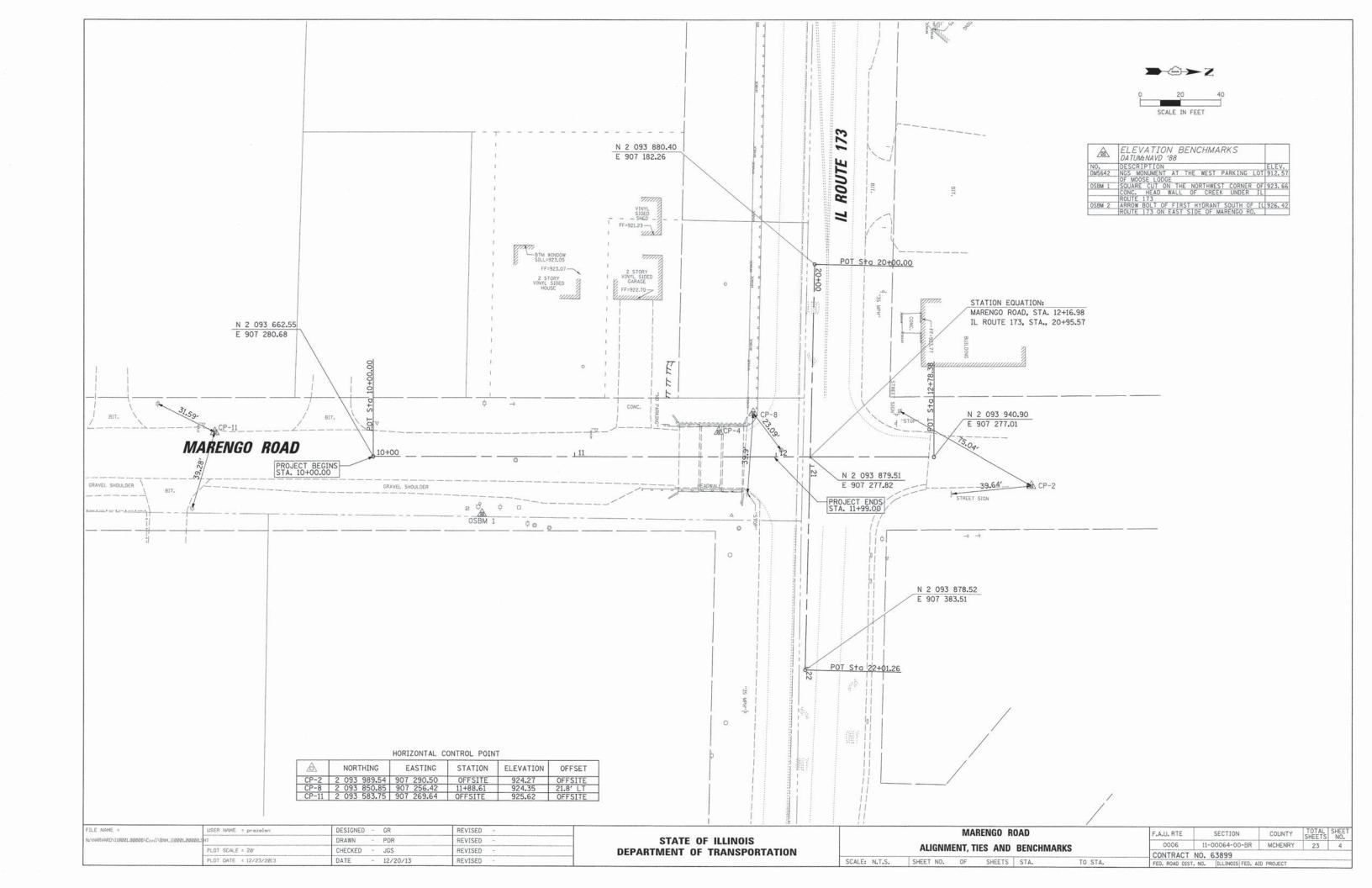
#	INDICATES SPECIAL PROVISION	
S	SPECIALTY ITEM	

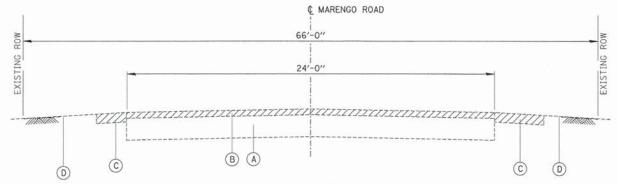
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

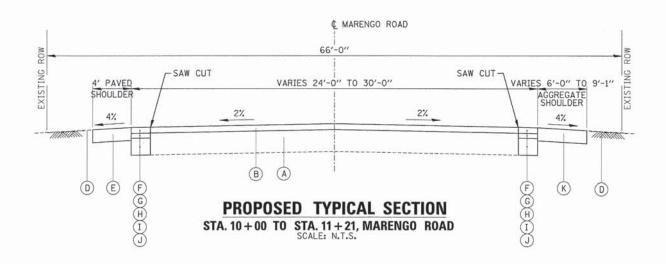
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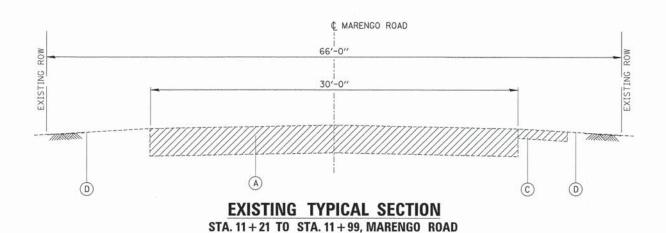
F.A.U. RTE	SECTI	ON	COUNTY	SHEETS	SHEET NO.
0006	11-00064	-00-BR	MCHENRY	23	3
CONTRACT	NO. 63899	1			
FED. ROAD DIST			AID PROJECT		





#### **EXISTING TYPICAL SECTION** STA. 10+00 TO STA. 11+21, MARENGO ROAD SCALE: N.T.S.



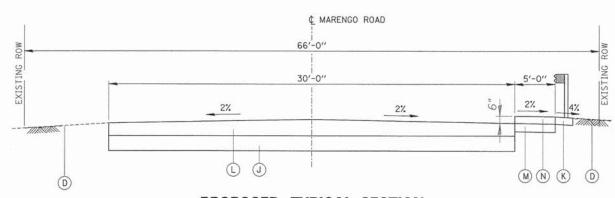


#### LEGEND:

- REMOVAL ITEMS
- A EXISTING HMA PAVEMENT
- (B) MILL AND RESURFACE, 2"
- C EXISTING AGGREGATE SHOULDER
- D EXISTING GROUND
- (E) PROPOSED HMA SHOULDER, 8"
- F) PROPOSED HMA SURFACE COURSE, 2"
- G BITUMINOUS MATERIALS (PRIME COAT)
- H PROPOSED HMA LEVELING BINDER, 2"
- (I) AGGREGATE (PRIME COAT)
- J PROPOSED AGGREGATE BASE COURSE, TYPE B, 13"
- (K) PROPOSED AGGREGATE SHOULDER, TYPE B, 6"
- PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT, (JOINTED), VARIABLE DEPTH, 9¾" TO 12¾6"
- M PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 4"
- N PROPOSED SIDEWALK

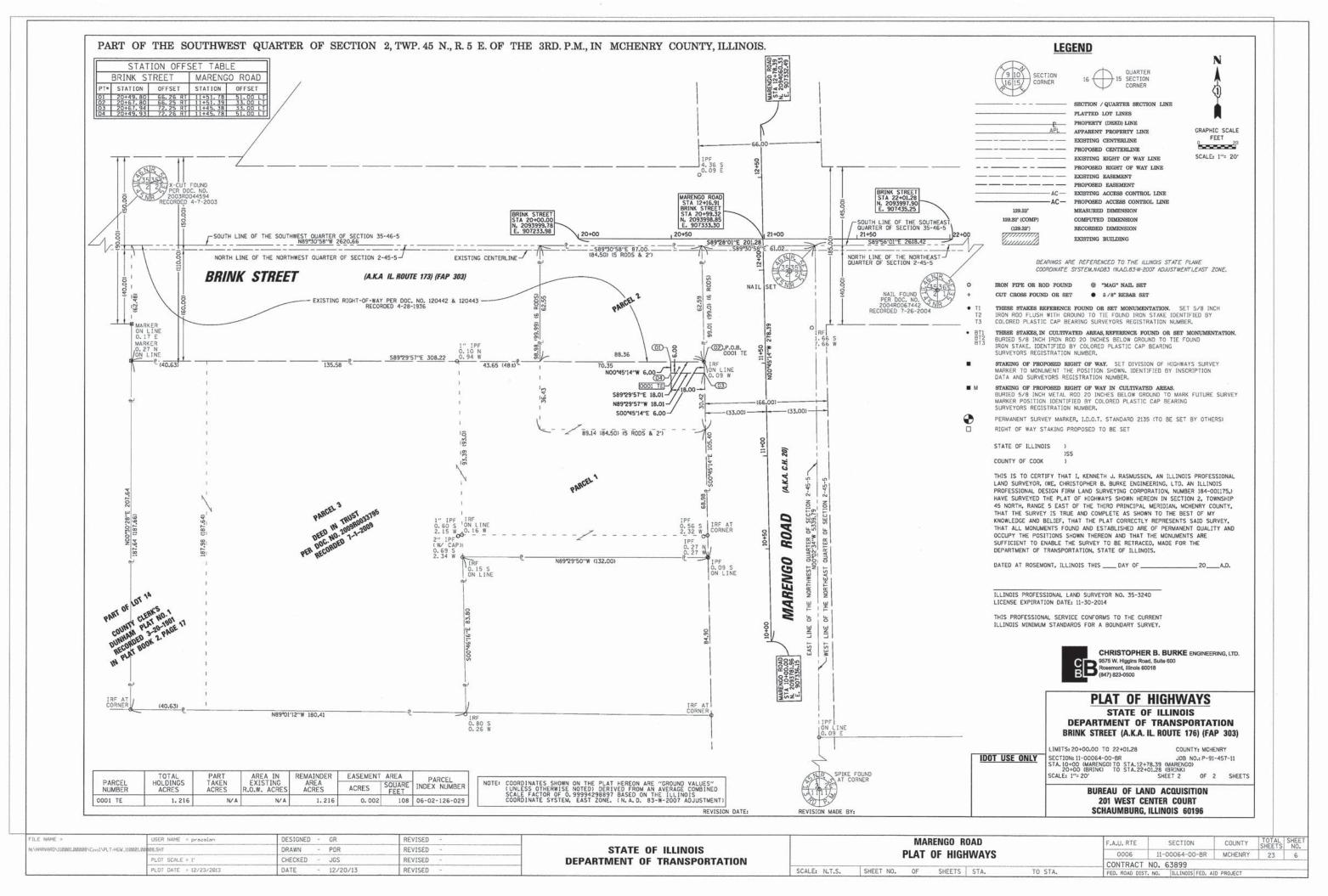
HOT-MIX ASPHALT REQUIREMENTS MIXTURE TYPE	AIR VOIDS			
RESURFACING HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50; (IL 9.5mm); 2"	4.0% <b>②</b> 50 GYR.			
FULL DEPTH PAVEMENT  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50; (IL 9.5mm); 2"  LEVELING BINDER (MACHINE METHOD), N50; (IL 9.5mm); 2"	4.0% @ 50 GYR. 4.0% @ 50 GYR.			
SHOULDERS HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19MM)	4.0% @ 50 GYR.			

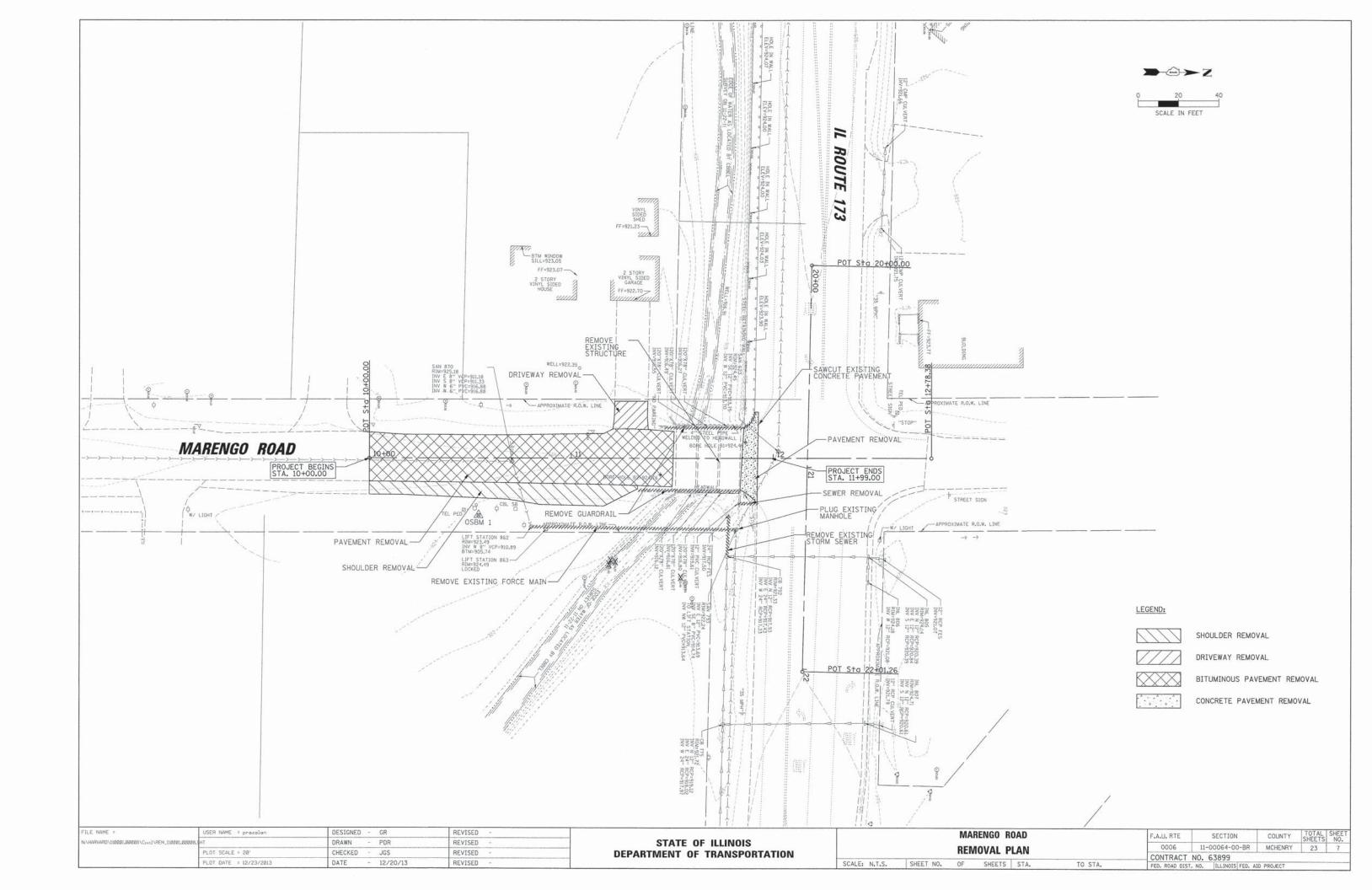
- NOTE:
  1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MATERIAL IS 112 LB/SQ YD PER INCH THICKNESS.
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR PERCENT OF "RAP" SEE DISTRICT ONE SPECIAL PROVISION.

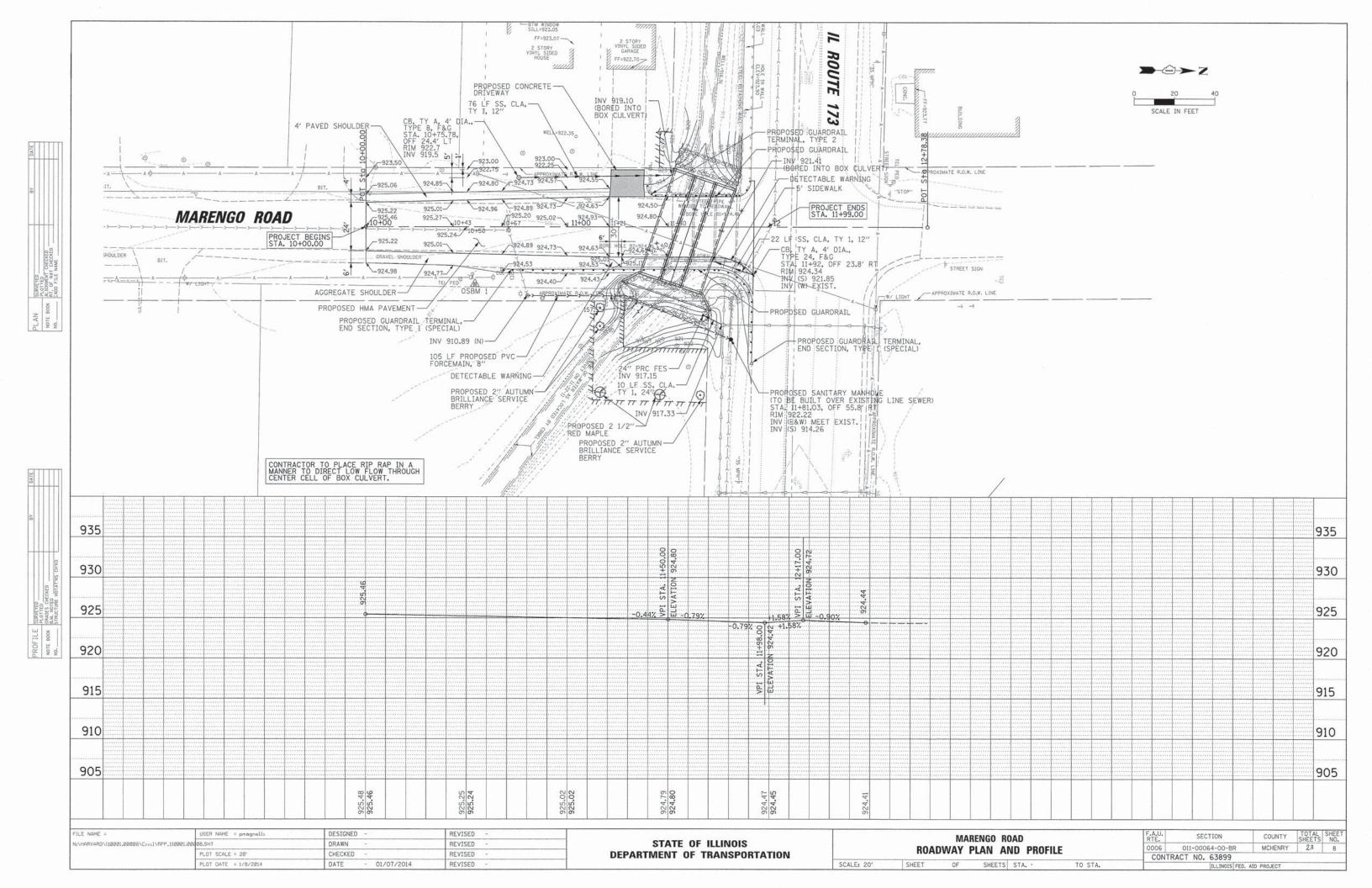


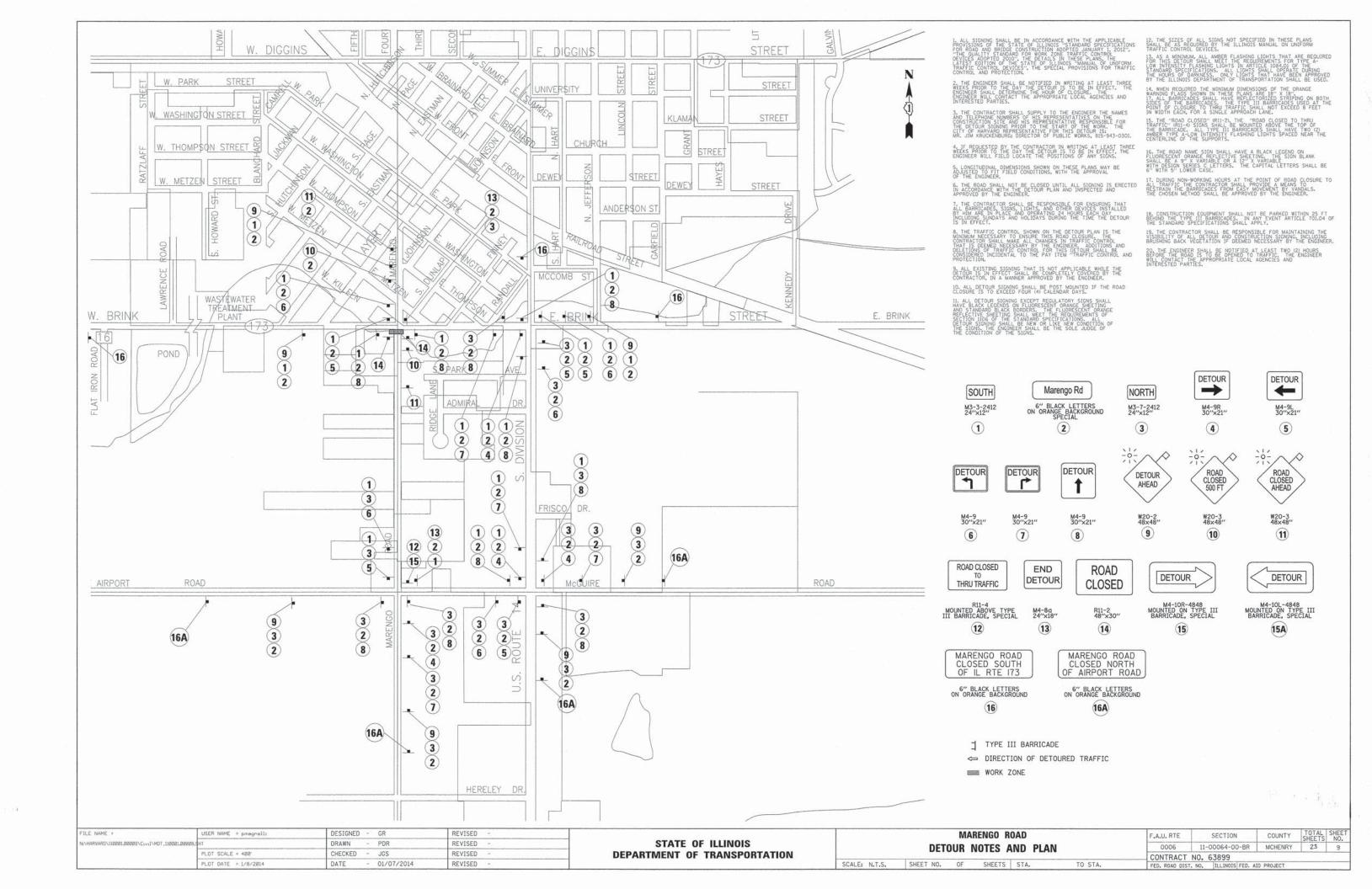
#### PROPOSED TYPICAL SECTION STA. 11 + 21 TO STA. 11 + 99, MARENGO ROAD SCALE: N.T.S.

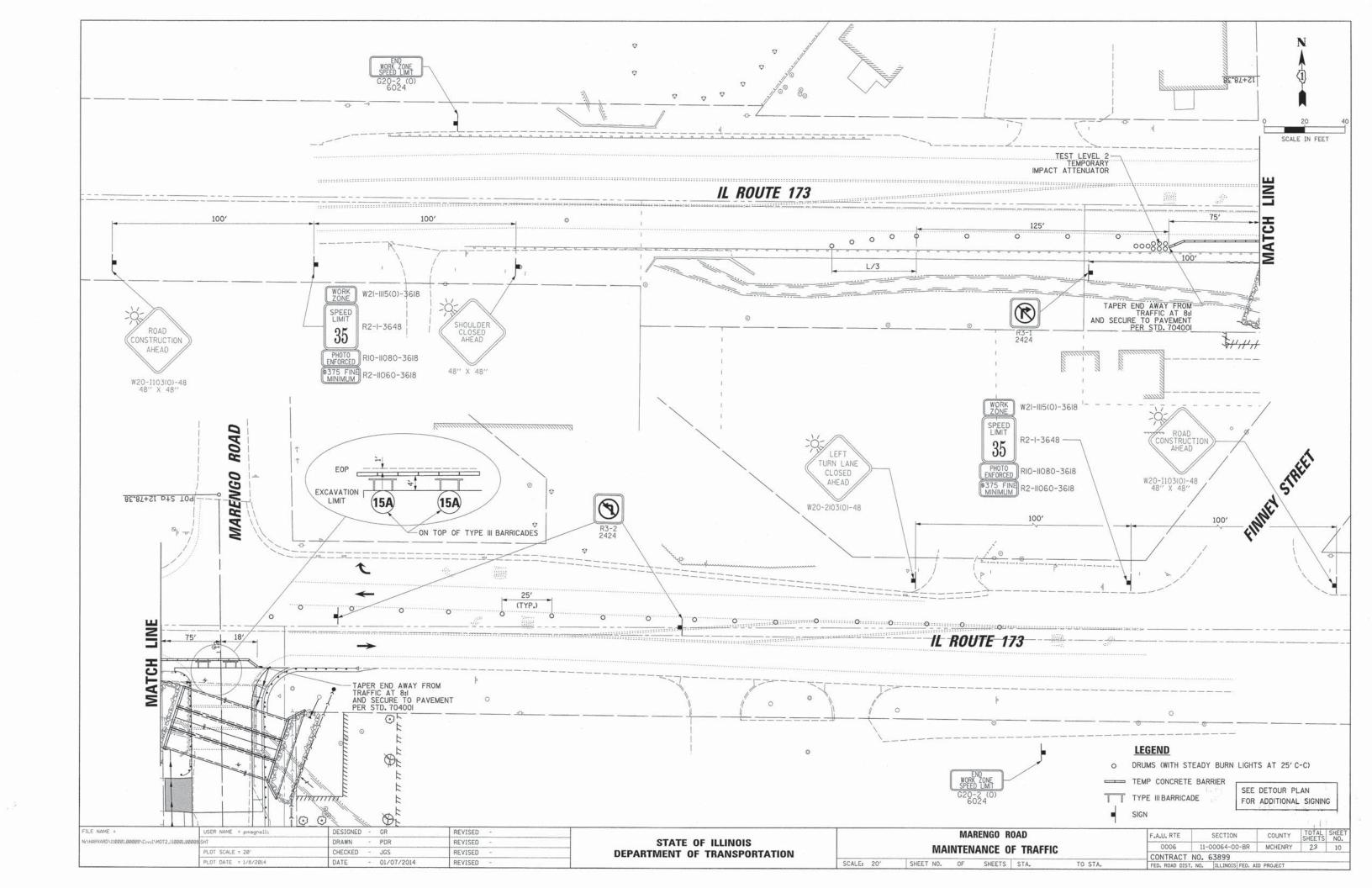
FILE NAME =	USER NAME = prozolon	DESIGNED - GR	REVISED -		MARENGO ROAD	F.A.U. RTE	SECTION	COUNTY	TOTAL SHE
N:\HARVARD\110001.00008\C:v:1\TYP_110001.00008_	II.SHT	DRAWN - PDR	REVISED -	STATE OF ILLINOIS		0006	11-00064-00-BR	MCHENRY	SHEETS NO
	PLOT SCALE = 5'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	CONTRACT	NTDACT NO 63000		
	PLOT DATE = 12/23/2013	DATE - 12/20/13	REVISED -		SCALE: NONES. SHEET NO. 2 OF 2 SHEETS STA. TO STA.	FED. ROAD DIS	T. NO. ILLINOIS FED. A	ID PROJECT	

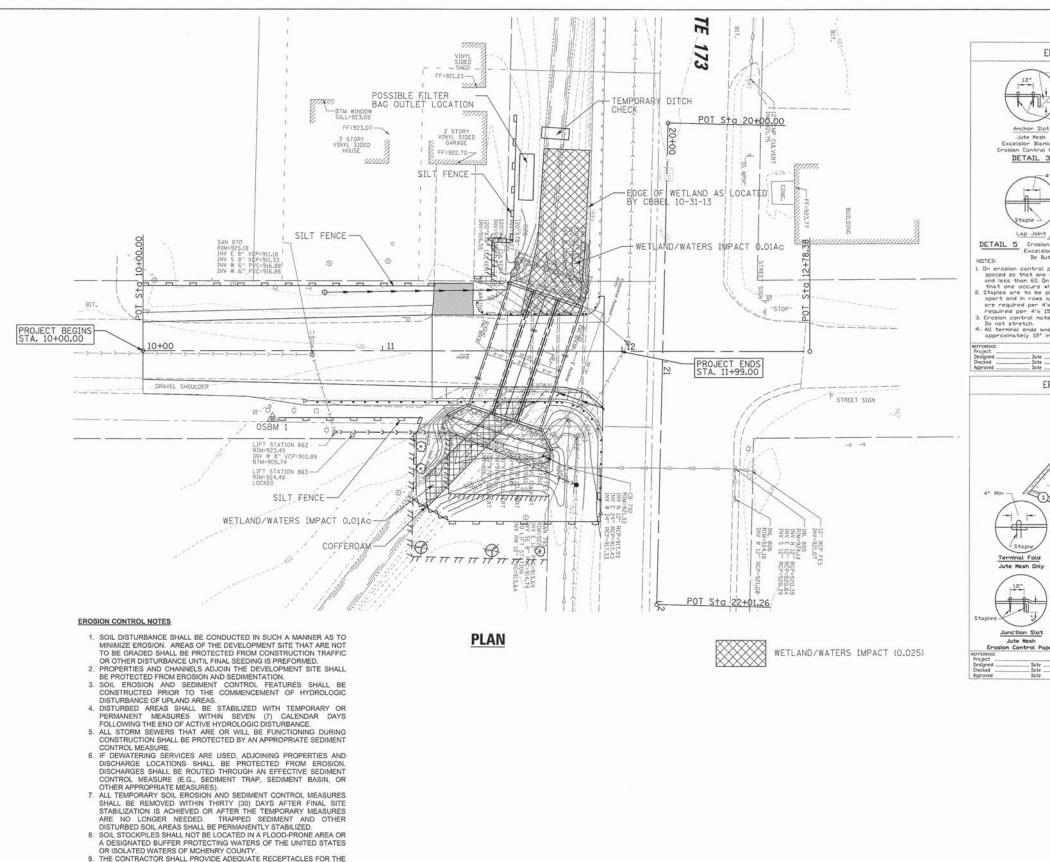


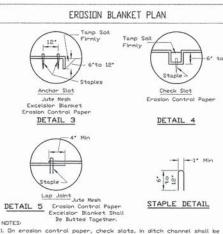












EROSION BLANKET PLAN

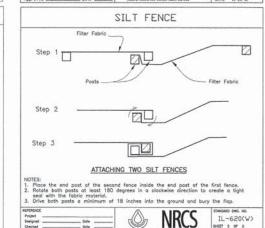
DETAIL 1

Terminal Fold

Junction Slot

STANDARD DWG. ND. IL-530 SECET 1 DF 2 DATE 5-24-34





In the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grad and site stabilization.

Fence posts shall be either standard steel po Minimum cross-sectional area of 3.0 sq. in.

SILT FENCE PLAN

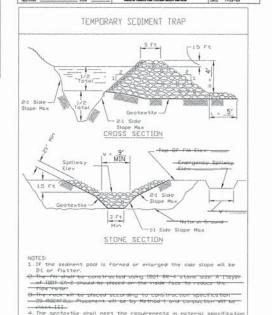
Fastener - Min. No. 10 Gage Wire 4 Per Post Required. (Typ.

ELEVATION

- Direction Of Flow Undisturbed Ground Line

FABRIC ANCHOR DETAIL

Filter Fabric



IL-660



F.A.U. RTE SECTION COUNTY 0006 11-00064-00-BR MCHENRY 23 CONTRACT NO. 63899 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJEC



DRAWN

CHECKED

DATE

DESIGNED - GR

PDR

JGS

12/20/13

REVISED

REVISED

REVISED

REVISED

9. THE CONTRACTOR SHALL PROVIDE ADEQUATE RECEPTACLES FOR THE DEPOSITION OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING,

DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, WATER OF THE U.S. OR ISOLATED WATERS OF MCHENRY COUNTY. THE CONTRACTOR SHALL MAINTAIN THE DEVELOPMENT SITE FREE OF CONSTRUCTION MATERIAL

PLOT SCALE = 20

PLOT DATE = 12/23/2013

FILE NAME =

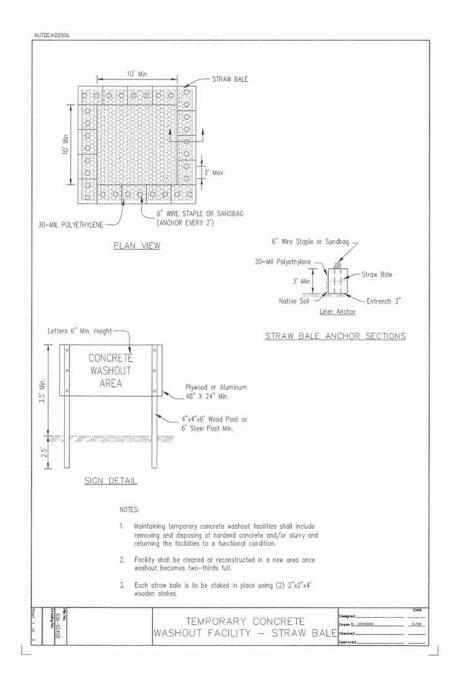
HARVARD\110001.00008\C:v:1\ECP\_110001.0000

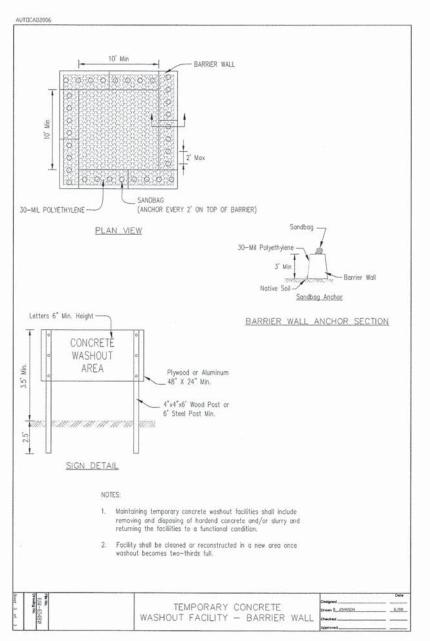
SHEET NO.

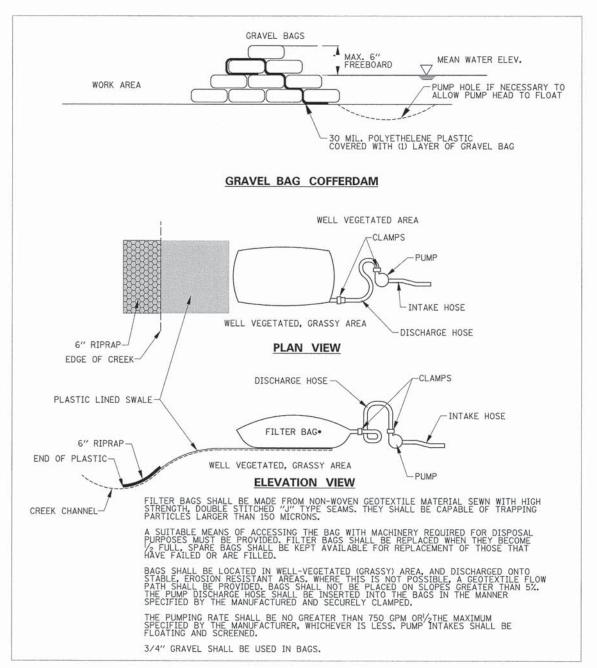
Terminal Fold

12'

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 









STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.

			MA	RENGO R	OΔD		F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET
ERO	SION	AND				DETAILS	0006	11-00064-00-BR	MCHENRY	SHEETS 23	NO. 12
-							CONTRACT	NO. 63899			
	SHEET	NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST	. NO. ILLINOIS FED. A	D PROJECT		

#### GENERAL NOTES

- 1. All work and materials shall be in accordance with the Illinois Department Transportation (IDOT) Standard Specifications for Road and Bridge Construction adopted January 1, 2012 and latest supplemental
- specifications and recurring special provisions, unless noted otherwise.

  2. The Contractor shall verify all dimensions in the field prior to commencing work. The engineer shall be notified of any discrepancies which may exist, prior to proceeding with the work.
- Any information concerning type or location of underground and other utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of the utilities as may be necessary to avoid damage thereto. Contractor shall call J.U.L.I.E. prior to excavation. 4. The contractor is responsible for design, installation and removal of all
- excavation support systems.
- 5. The excavation and work area shall be properly drained at all times during construction. All wet, loose, frozen or other unsuitable material shall be removed prior to placement of concrete or compacted backfill. The cost of any pumping required shall be included in the cost of Precast Concrete Box Culverts.
- Foundation design is based on soil information provided by TSC, Report L-77.765. Contractor shall have a geotechnical engineer to field verify the allowable bearing capacity under the box culvert and wingwall exceeds 3000 psf. Cost included in "Precast Concrete Box Culverts".
- It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and cost shall be included with "Precast Concrete Box Culvert".
- Layout of slope protection system may be varied in the field to suit
- ground conditions as directed by the Engineer. For backfilling and embankment, see Standard Specifications.
- 10. Use of CCDD fill operations: per Public Act 97-0137, if the Contractor chooses to dispose of uncontaminated soil or uncontaminated soil mixed with clean construction and demolition debris (CCDD) at a CCDD fill operation, it shall be the Contractor's responsibility to perform all necessary field and laboratory analysis and to obtain the Licensed Professional Engineer's certification required as per Public Act 96-1416 to use the site. This work shall be considered incidental to Earth Excavation or related excavation or removal item, and no additional compensation will be provided.

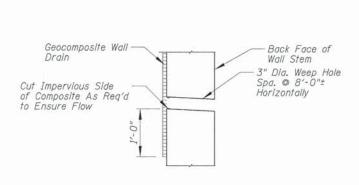
#### CAST-IN-PLACE CONCRETE NOTES

- All cast-in-place concrete work shall be in accordance with section 503 of the Illinois Department of Transportation (IDOT) Standard Specifications for Road and Bridge Construction adopted January 1, 2012, supplemental
- specifications and recurring special provisions and as noted below. Reinforcement bars shall conform to the requirements of ASTM A 706
- Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
- Exposed edges of cast-in-place concrete shall be beveled 34".
- All construction joints shall be bonded. Concrete mix designs shall be submitted to the Engineer for review and
- approval a minimum of 7 days prior to ordering or placing concrete.

  Cover from the face of concrete to face of reinforcement bars shall be 3" for surfaces cast against earth and 2" for all other surfaces unless
- Contractor shall coordinate with Precast Box Culvert Manufacturer to account for possible creep between box segments. Creep shall be determined prior to constructing second cast-in-place end section.

#### PRECAST CONCRETE BOX CULVERT

- 1. All precast concrete box culvert work shall be in accordance with sections 504 and 540 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted January 1, 2012, supplemental specifications and recurring special provisions and as noted below.
- 2. The precast concrete box culvert is a performance based system. The contractor shall be responsible for providing the design, engineering, fabrication and installation of the precast concrete box culvert. The contractor shall submit to the engineer calculations and shop drawings sealed by a Structural Engineer licensed in the state of Illinois for review prior to fabricating the precast concrete box culvert. Precast concrete box culverts shall conform to the requirements of ASTM C1577. The shop drawings shall include the ferrule loop locations and details.
- 3. Ferrule loop inserts shall be installed at the locations shown on the drawings by the precast concrete box culvert manufacturer. Install the ferrule loop inserts per the ferrule loop manufacturer's requirements. The ferrule loop insert shall be f-64, x 4'8", NC threaded inserts with an allowable tension load of 3000 lbs and allowable shear load of 1800 lbs by Dayton/Richmond concrete accessories, phone number - (800) 745-3700, website - www.daytonrichmond.com or approved equal. Cost of ferrule loop inserts are included in Precast Box Culverts.

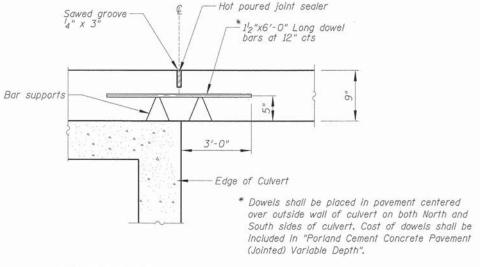


WEEP HOLE DRAIN DETAIL

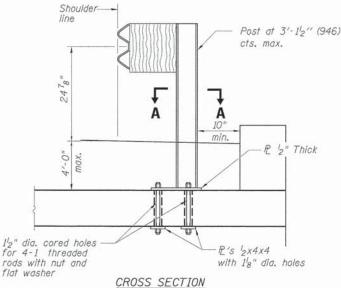
# 3" 6"x3" Formed Opening Top Of Culvert w/ Coarse Aggregate Wrapped In Filter Fabric Behind

€ Culvert

#### TYPICAL FORMED DRAIN DETAIL



TRANSVERSE CONSTRUCTION JOINT



Top Of Headwall

INDEX OF SHEETS

Upstream Details

Boring Logs

5-2

5-3

5-4

5-5

5-6

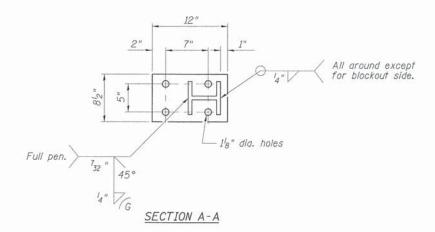
General Notes and Details

General Plan and Elevation

Culvert Section and Upstream Elevation

Downstream Elevation and Details

(Maximum Post Spacing 6'-3")



THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION

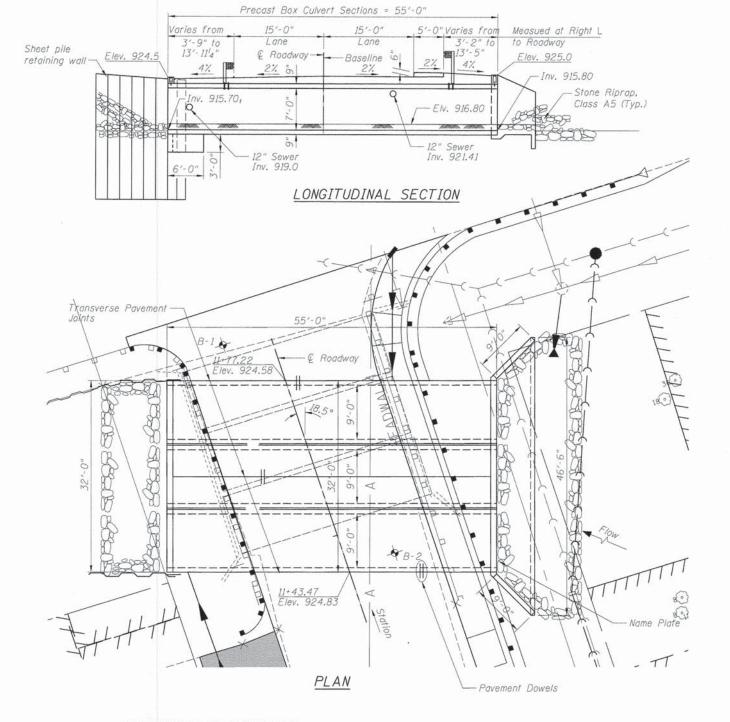
#### STEEL PLATE BEAM GUARDRAIL ATTACHED TO STRUCTURES

For Details of Guardrail Elements Not Shown. See Standard 630101

#### FILE NAME : JSER NAME = prozolo DESIGNED -GR MARENGO ROAD COUNTY F.A.U. RTE SECTION DRAWN REVISED STATE OF ILLINOIS **GENERAL NOTES AND DETAILS** MCHENRY 23 13 0006 11-00064-00-BR PLOT SCALE = 1 CHECKED JIGS REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 63899 PLOT DATE = 12/23/2013 12/20/13 REVISED SHEET NO. S-1 OF S-6 SHEETS | STA. TO STA.

Benchmark: OSBM 1 - Square cut on the northwest corner of the concrete headwall of creek under Illinois Route 173. Elev. 923.66.

Existing structure: S.N. 056-5002 was constructed in 1933 and consists of 3-6.5'H x10'W cast-in-place culverts. There are cast-in-place wingwalls on all four corners, Guardrail was added in 1988. Heavy silt limits the flow to only the southern most cell. Existing structure will be completely removed during full road closure.



#### WATERWAY INFORMATION

Drainage Are	$a = \pm 4.$	89 sq. n	ni Low G	Grade Ele	ev. 924.4	42 @ S	ta. 11+9	98.00		
Flood	Freq.	0	Opening	Sq. Ft.	Nat.	Head	- Ft.	Headwater El.		
71000	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.	
	10	490	168.1	141.2	922.29	0.00	0.00	922.29	922.29	
Design	30	656	182.4	148.5	922.80	0.00	0.00	922.80	922.80	
Base	100	850	192.8	159.8	923.35	0.03	0.00	923.38	923.35	
Overtopping										
Max. Calc.	500	1130	195.0	162.0	924.22	0.05	0.00	924.27	924.22	

DESIGNED - GR

JGS

06/22/07

DRAWN

DATE

CHECKED

REVISED

REVISED

REVISED

REVISED

USER NAME = prozolan

PLOT DATE = 12/5/2013

TILE NAME

#### DESIGN SCOUR ELEVATION TABLE

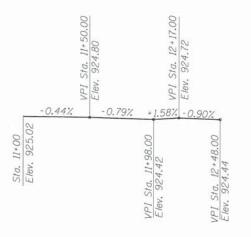
Design Scour	Upstream	Downstream
Elevation (ft.)	913.8'	913.7'

I Certify That To The Best Of My Knowledge, Information And Belief, This Bridge Design Is Structurally Adequate For The Design Loading Shown On The Plans. The Design Is An Economical One For The Syle Of Structure And Complies With Requirements Of The Current "AASHTO Standard Specification For Highway And Bridges".

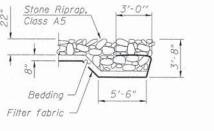
#### TOTAL BILL OF MATERIAL

	ITEM	UNIT	TOTAL
28100109	Stone Riprap, Class A5	Sq Yd	110
28200200	Filter Fabric	Sq Yd	110
50100100	Removal of Existing Structure	Each	1
50200100	Structure Excavation	Cu Yd	610
50300225	Concrete Structures	Cu Yd	29.4
50800205	Reinforcement Bars, Epoxy Coated	Pound	1580
51500100	Name Plates	Each	1
54011007	Precast Concrete Box. Culverts 9' x 7'	Foot	165
59100100	Geocomposite Wall Drain	Sq Yd	30
63000025	Steel Plate Beam Guardrail, Attached to Structures	Foot	70
X5121800	Permanent Steel Sheet Piling	Sq Ft	582
X5860110	Granular Backfill for Structures	Cu Yd	60

\* See Special Provisions



#### PROFILE GRADE

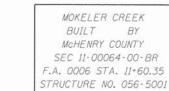


SECTION B-B

MAJID MOBASSERI

ILLINOIS REGISTRATION No. 081-005058

SCALE: N.T.S.



PROJECT

LOCATION

NAME PLATE
See Std. 515001

LOCATION SKETCH

#### LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

#### DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications and Current Intrims.

# DESIGN STRESSES FIELD UNITS

f'c = 3.500 psify = 60,000 psi (Reinforcement)

fy = 60,000 psi (Reinforcement) fy = 50,000 psi (Permanent Sheet Piling)

#### PRECAST UNITS

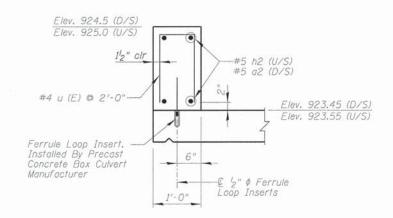
f'c = 5.000 psi fy = 60.000 psi (Reinforcement)

GENERAL PLAN
MARENGO ROAD OVER
MOKELER CREEK
F.A.U. 006 - SECTION 11-00064-00-BR
MCHENRY COUNTY
STATION 11+60.35
STRUCTURE NO. 056-5001

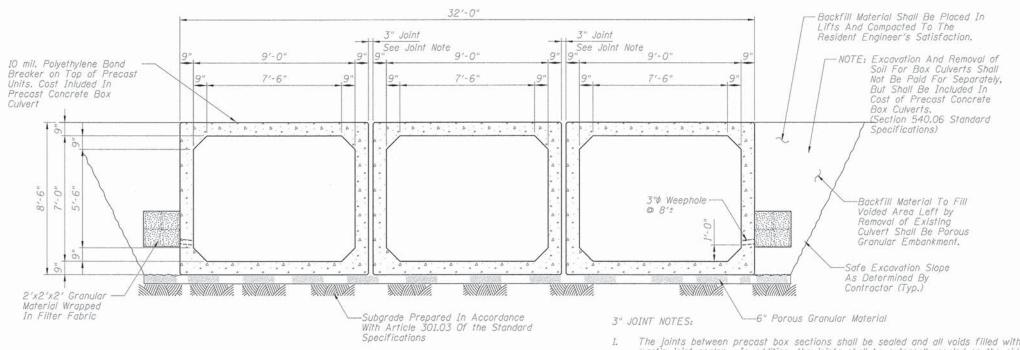
STATE OF	HILIMOIS
SIAIL OI	ILLINOIS
DEPARTMENT OF 1	TRANSPORTATION

MARENGO R GENERAL PLAN ANI		nn	F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET NO.
GENERAL I EAST AND	LLLVAIN	, in	0006	11-00064-00-BR	MCHENRY	23	14
T			CONTRACT	NO. 63899			
SHEET NO. S-2 OF S-6 SHEETS	STA.	TO STA.	FED. ROAD DIST	. NO. ILLINOIS FED. A	ID PROJECT		

# ASHTO Standard Specification For Highway And Bridges". EXPIRATION DATE: 11/30/14



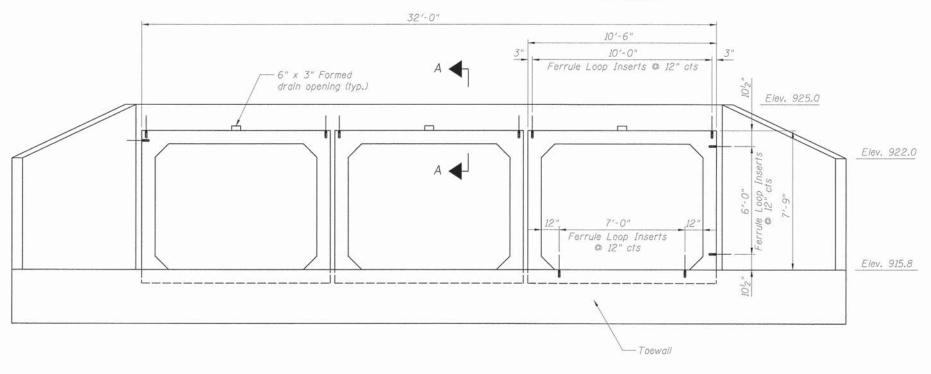
SECTION A-A HEADWALL DETAIL



TYPICAL SECTION THRU PRECAST CULVERT

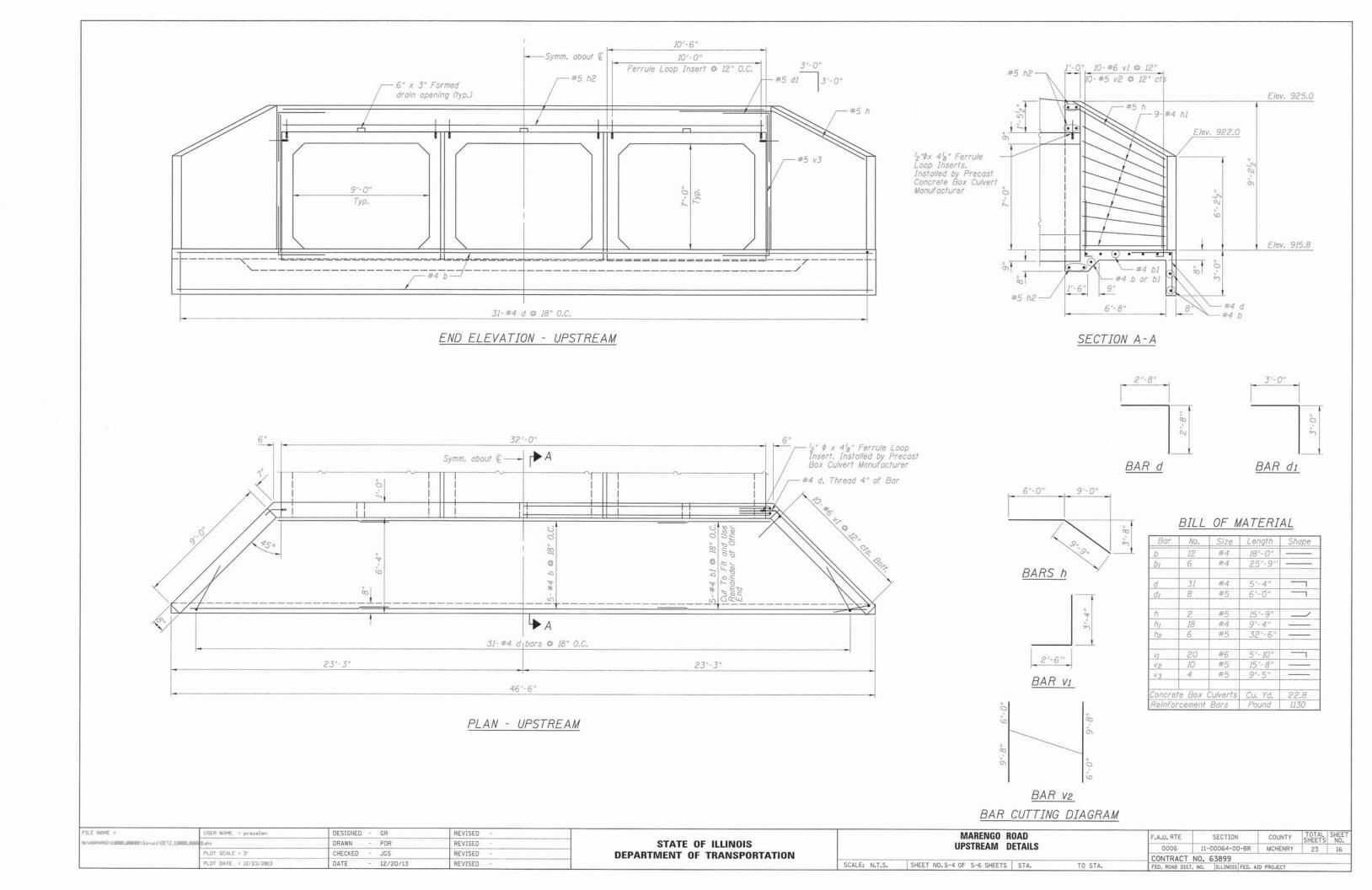
- The joints between precast box sections shall be sealed and all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on the sides and top using 13 in. wide external sealing brands. Prior to applying the sealing band, the concrete surface shall be cleaned to remove dirt or laitance and allowed to dry. The sealing band shall be centered over the joint, secured in place, and
- profested from damage during the backfilling operation.

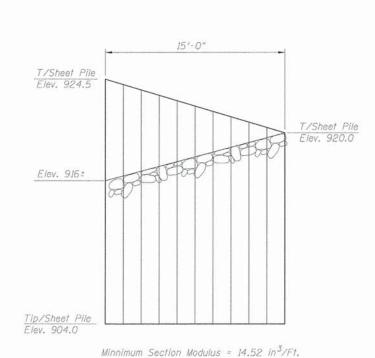
  When multi-cells are used, a 3 in. nominal space shall be left between adjacent sections. After the precast cells are in place and backfill has been placed to
- sections. After the precast cells are in place and backfill has been placed to midheight of the precast concrete box sections on each side, the space between the cells shall be filled with Class SI concrete. The Class SI concrete shall be according to Section 1020, except the maximum size coarse aggregate shall be <sup>3</sup><sub>8</sub> in Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar. shall be filled with mastic or mortar.
- The cost of mastic, sealing bands and SI concrete is incidental to Precast Concrete Box Culverts.



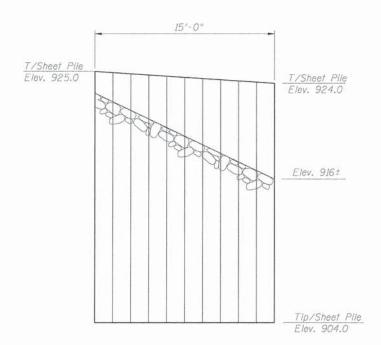
#### EAST END VIEW - UPSTREAM

FILE NAME =	USER NAME = prozolon	DESIGNED - GR	REVISED -			MARENGO R	OAD		F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET
Nt/H4RVARO\118881.08888\5truct\DET1.118881.08888.sht PLOT SCALE = 1'		DRAWN - PDR REVISED - CHECKED - JGS REVISED -		STATE OF ILLINOIS	CULVERT SECTION AND UPSTREAM ELEVATION				0006 11-000	11-00064-00-BR	MCHENRY	SHEETS	15
				DEPARTMENT OF TRANSPORTATION					CONTRACT NO 63899		I MONETHIN 23		15
100-110-110-110-110-110-110-110-110-110	PLOT DATE = 12/23/2013	DATE - 12/20/13	REVISED -		SCALE: N.T.S.	SHEET NO. S-3 OF S-6 SHEETS	STA.	TO STA.	FED. ROAD DIST	NO. ILLINOIS FED. A	ID PROJECT		-



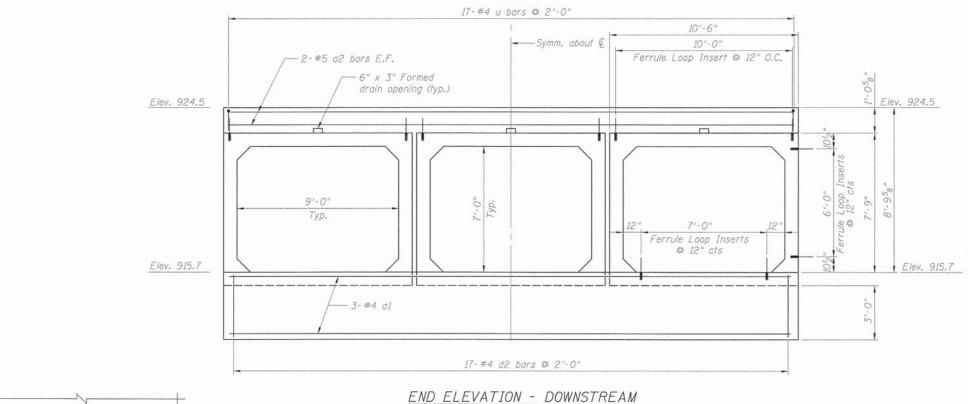


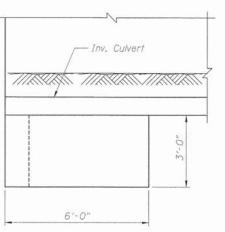
# ELEVATION - S.W. PERMANENT SHEET PILING (Looking South)



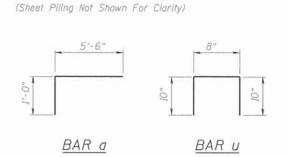
Minnimum Section Modulus = 14.52 in 3/Ft.

# ELEVATION - N.W. PERMANENT SHEET PILING (Looking North)

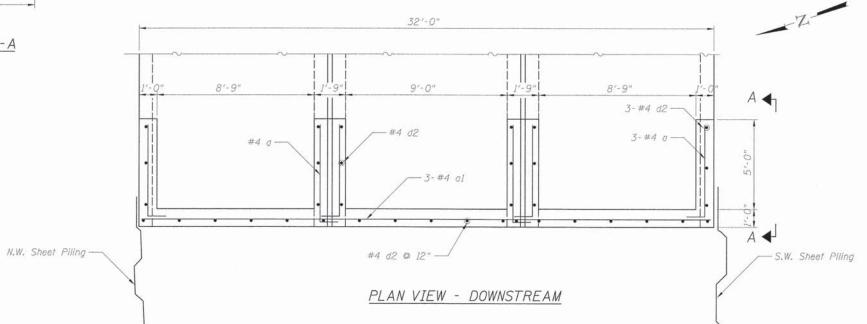




SECTION A-A



# BILL OF MATERIAL Bar No. Size Length Shape a 18 #4 6'-6" — a<sub>1</sub> 3 #4 31'-6" — a<sub>2</sub> 4 #5 31'-6" — d<sub>2</sub> 35 #4 6'-6 — u 17 #4 2'-4" — Concrete Box Culverts Cu, Yd. 6.6 Reinforcement Bars Pound 450



FILE NAME =	USER NAME = prazalan	DESIGNED -	GR	REVISED -	T
N;\HARVARD\110001.00008\Struct\DET3_110001.000	8.sht	DRAWN -	PDR	REVISED -	
	PLOT SCALE = 1'	CHECKED -	JGS	REVISED -	
	PLOT DATE = 12/23/2013	DATE -	12/20/13	REVISED -	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.

DOWNSTREAM ELEVATION AND DETAILS 0006 11-00064-00-BR MCHENRY 23	MARENGO R		F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET NO.
CONTRACT NO 67900	DOWNSTREAM ELEVATION	ON AND DETAILS	0006	11-00064-00-BR	MCHENRY	23	17
SHEET NO. S-5 OF S-6 SHEETS STA TO STA	1		CONTRACT	NO. 63899			

	BORING	1			DAT	E STAR	TED _	12-29-	11	DATE COMPLETED 12-29-11	JOB <b>L-77,76</b>		
	CROUND	CLIDE			ATION						EVEL OBSERVATION:		
	GROUND END OF B			7. (2			_			<ul> <li>▼ WHILE DRILLING</li> <li>▼ AT END OF BORING</li> </ul>	11.0 '		
			_	1111						▼ 24 HOURS	11.0		
	STH												
y	LENGTH	NO.	TYPE	Ν	wc	Qu	YDRY	DEPTH	ELEV.	SOIL DESCRIPTION	ONS		
0-	HINH							1.0		12" P.C. Concrete			
		1	SS	7	10.3			1.2		2" Crushed Stone Base FILL - Br & blk silty SAND, little crushed Concrete, trace	Cinders and clay v. moist		
5-		2	ss	5	17.8			18250		FILL - Brown clayey SAND, tra moist (SC)	ce gravel, very		
	3 SS 6 34.7 0.5*					0.5*		5.5		Soft dark brown silty CLAY, tra organic, very moist (CL/CH)	ce sand, trace		
,		A 24.6						8.0 9.0	Î	Firm brown silty SAND, trace g	ravel, trace organic		
10-	4 SS 25									very moist (SM) Firm brown SAND and GRAVE (SP/GP)	L, saturated		
,	5 SS 11 11.7 0.83 1.0*							10.5		Stiff to tough brown and gray s gravel, very moist (CL-ML)	andy CLAY, trace		
15-		6	ss	16	15.0	2.5*		13.0		Very tough gray very silty CLA occasional silt seams, moist (0			
		7	SS	13	19.4	1.5*		15.5					
20		8	SS	21	21.0	1.75*				Tough gray silty CLAY, little sa occasional silt seams, very mo			
		9	ss	27	18.4	1.75*		23.0					
25 –		10	SS	23	11.7	1.89 1.5*		23.0					
		11	ss	18	10.1	3.75*				Tough to hard gray sandy CLA moist (CL-ML)	Y, trace gravel,		
30 —		12	ss	40	9.6	4.5+*							
	-									End of Boring at 30.0'			
,										<ul> <li>* Approximate unconfined con based on measurements with pocket penetrometer.</li> </ul>	npressive strength n a calibrated		
35 —													

	BORING	3	2			DAT	E STAR	TED	12-29	-11	DATE COMPLETED	12-29-11	JOB	L-77,76		
						ATION	S						EVEL OB	SERVATION		
	GROUN				-						WHILE DRILLING		8.0 '			
	END OF		RIN	G _			100-100	_					14.0			
	<b>33</b>	ERY									4 241100110					
	ENGT	2		IPLE	N	wc	Qu	YDRY	DEPTH	ELEV.	SOI	L DESCRIPTION	ONS	11111		
0-	ā	8	NO.	TYPE		1.70.000	- State				40" Dituminana Ca		X.011/21			
-	×××							Frank	0.8		10" Bituminous Co 3" Crushed Stone	Base				
-	-XXXX		1	SS	9	10.7	1.75*	122	1.1		FILL - Brown sand (CL-ML)	y CLAY, trac	e grave	l, moist		
-	1111	Ш							3.0			21 AV 4				
-			2	SS	8	33.4	1.5*				Tough black silty ( very moist (CL/CH	CLAY, trace s	sand, tra	ice organic,		
5-		1							5.0		,					
-			3	ss	5	26.4	0.25*				Soft brown and gra	ay silty CLAY	, little sa	and, very		
				00	٠	20.4	0.20				moist (CL/CH)   ▼					
	999								8.0		_					
10 —	X		4	SS	25	12.1										
-	-605-	Ш									Firm brown and gr moist to wet (SP/0	ay SAND an 3P)	d GRAV	EL, very		
-			5	SS	23	8.3										
		П							13.0							
-	4111117		6	ss	14	17.2					Firm gray clayey S	III T trane sa	nd wet	(ML)		
15 —	-111114			37.53	100.00	10.050			15.5		r iiii giay dayey e	, udoc oc	ma, mot	(WIL)		
-	-111	H							15.5							
-	1112		7	SS	17	24.0					Firm gray silty SAN	ND, trace gra	ivel, satu	urated (SM)		
-	1//	Ш							18.0							
			8	SS	20	12.6	3.5*									
20 —		11														
			9	ss	22	10.7	2.0*									
	1/1		10	ss	20	14.9	2.5*				Very tough gray sa	andy CLAY, t	race gra	vel, moist		
25 —	1//		10	55	20	11.3	2.5				(CL-ML)					
	1//	Ш														
<u></u>	VIX		11	SS	27	10,6	2.75*									
7	1//	Ш														
17	1//X		12	ss	27	9.9	2.75*									
30 —	1//	П					-				F-4-/ D-4	20.01				
											End of Boring at 3	0.0				
											<ul> <li>Approximate und based on measu</li> </ul>	confined com	pressive	e strength		
											pocket penetron	eter.	i a calib	aleu		
35 —	-															
74	-															
0	+															
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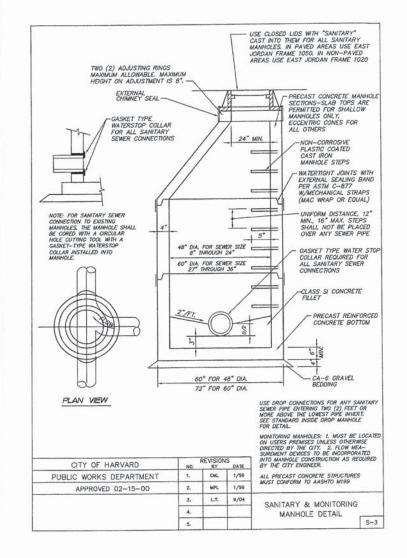
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	PLOT SCALE = 0'	CHECKED - JGS	REVISED -	
	PLOT DATE = 12/23/2013	DATE - 12/20/13	REVISED -	

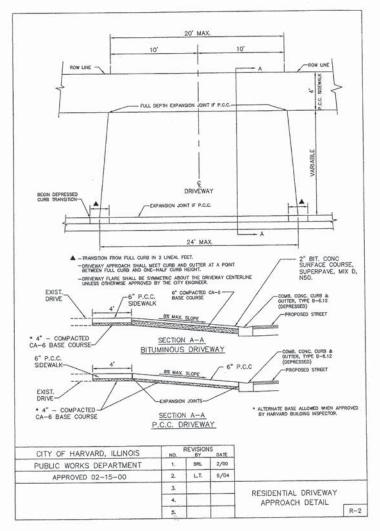
DRILL RIG NO. 275

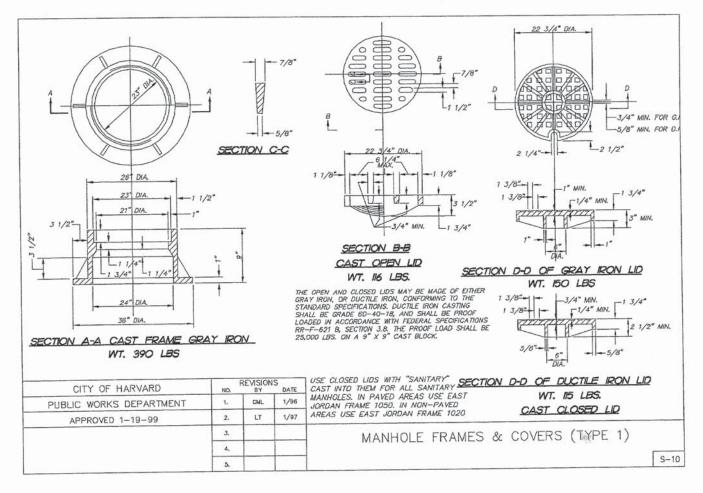
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.

MARENGO ROAD		F.A.U. RTE	F.A.U. RTE SECTION COUNTY							
BORING LOGS	0006	11-00064-00-BR	MCHENRY	23	18					
	CONTRACT NO. 63899									
SHEET NO. S-6 OF S-6 SHEETS STA.	TO STA.	FED. ROAD DIST	T. NO. ILLINOIS FED. A	ID PROJECT	PARKET					



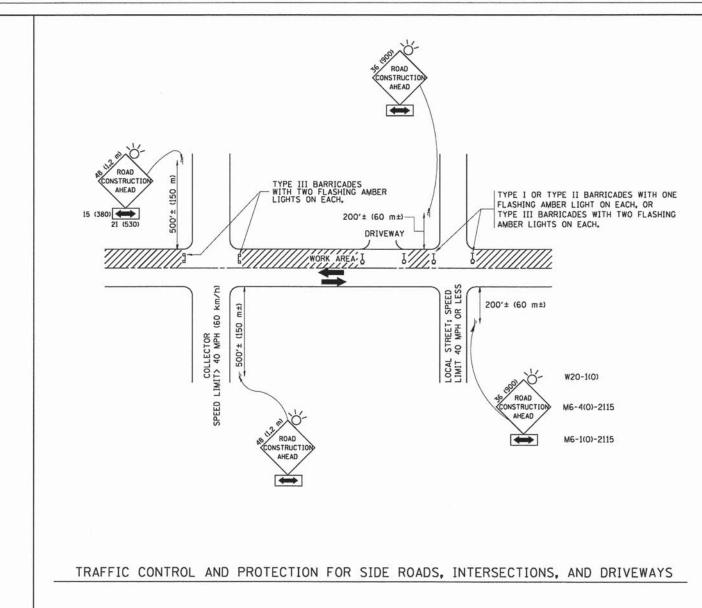




FILE NAME =	USER NAME = prozolon	DESIGNED	-	GR	REVISED -	
N:\HARVARD\110001.00008\Civi1\STD_110001.00008.	ILSHT	DRAWN	-	PDR	REVISED -	
	PLOT SCALE = 1'	CHECKED	-	JGS	REVISED -	
	PLOT DATE = 12/23/2013	DATE	-	12/20/13	REVISED -	

STATE	E 01	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

			RENGO R			F.A.U. RTE	SECTION	COUNTY	SHEETS	SHEET NO.			
		STAN	DARD I	DETAILS		0006	11-00064-00-BR	MCHENRY	23	19			
						CONTRACT NO. 63899							
SCALE: N.T.S.	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST	FED. ROAD DIST. NO.   ILLINOIS FED. AID PROJECT						



#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900×900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON 1T APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = geglienobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95			TRAFFIC CONTROL AND PROTECTION FOR	F.A.	SECTION	COUNTY	TOTAL SHEF
W:\d:ststd\22x34\tol0.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96	STATE OF ILLINOIS	RIE.	383,11311		SHEETS NO.		
100000000000000000000000000000000000000	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96	DEPARTMENT OF TRANSPORTATION		SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS		TC-10	CONTRACT	r NO
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD		ED. AID PROJECT	1402

USER NAME = prezelen	DESIGNED - GR	REVISED -				MA	RENGO I	ROAD		F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET
08.01.SHT	DRAWN - PDR	REVISED -	STATE OF ILLINOIS							0006			SHEETS	NO.
PLOT SCALE = 1'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION							CONTRACT	The second secon	MCHENKI	25	1 0
PLOT DATE = 12/23/2013	OT DATE = 12/23/2013 DATE - 12/20/13 REVISED -		SCALE: N.T.S.	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DI	IST. NO. ILLINOIS FE	, AID PROJECT			
200	USER NAME = prozelen  18.01.5HT  PLOT SCALE = 1'  PLOT DATE = 12/23/2013	DRAMN - FDR	DRAWN - FUN REVISED		PLOT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	PLOT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	R8. \$1.59IT DRAWN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	R8. \$1.59IT DRAWN - PDR REVISED - STATE OF ILLINOIS PLOT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	R8. MISHT DRAWN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	RR-MIN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION	RR-MIN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION CONTRAC	RR. U.SHT DRAWN - PDR REVISED - STATE OF ILLINOIS PLOT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION  STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CONTRACT NO. 63899	RR-BLISHT DRAWN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION  RE-VISED - O006 11-00064-00-BR MCHENRY DEPARTMENT OF TRANSPORTATION  CONTRACT NO. 63899	RR-MISST DRAWN - PDR REVISED - STATE OF ILLINOIS PLDT SCALE = 1' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION  STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION  CONTRACT NO. 63899

