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# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS HIGHLAND PARK-RIDE IMPROVEMENTS

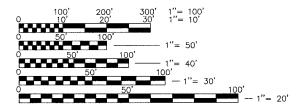
MADISON COUNTY TRANSIT DISTRICT

SECTION NO. 00-00012-00-PK PROJECT NO. CMM-5011(215) MADISON COUNTY JOB NO. C-98-173-00

# STANDARDS

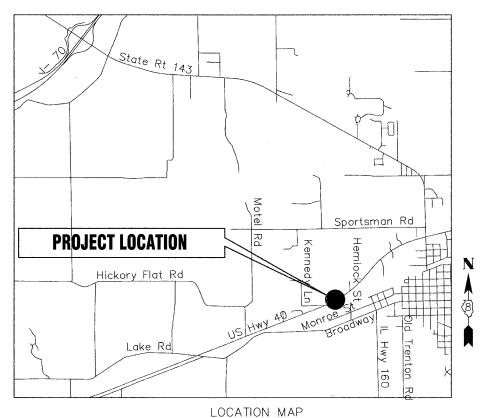
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BLR 10-5



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



SCALE: 1" = 1000' SECTION 6, T. 3 N., R. 5 W., 3RD P.M.

Ross A Krepes

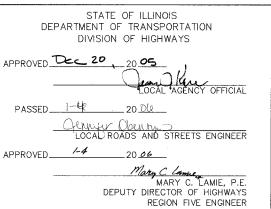
12/20/05

RONALD A. KEEPES, P.E. No. 062-48711 DATE (Printed by Authority of the State of Illinois) Job No. E054401



CONTRACT NO. 97270







# GENERAL NOTES

- 1) THE CONTRACTOR, AT HIS EXPENSE, SHALL DISPOSE OF ALL EXCESS MATERIALS EXCAVATED IN ACCORDANCE WITH SECTION 202.03 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002.
- 2) WHERE SECTION OR SUBSECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED.
- 3) THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- 4) THE STANDARDS WITH THE REVISION NUMBERS LISTED ON THE COVER SHEET AND IN THE PLANS SHALL HOLD PRECEDENCE OVER THE STANDARD NUMBERS LISTED IN THE SPECIAL PROVISIONS OR PLANS OF THIS CONTRACT.
- 5) IN ORDER TO AVOID DAMAGE TO UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES NOT BELONGING TO THE J.U.L.I.E. SYSTEM AND OBTAIN THE LOCATION AND DEPTH OF THEIR RESPECTIVE FACILITIES.
- 6) ALL AREAS DISTURBED FOR WHATEVER REASON, SHALL BE SEEDED WITH CLASS 1 SEEDING AS DESCRIBED IN THE SPECIAL PROVISIONS AND AS
- 7) SITE GRADING SHALL BE PERFORMED AS NECESSARY AT DISCHARGE AND INLET POINTS FOR PIPE CULVERT/STORM SEWERS TO ALLOW PROPER FLOW.
- THE SAW-CUTTING OF EXISTING ROAD PAVEMENT TO A SUFFICIENT DEPTH TO CREATE A CLEAN VERTICAL JOINT SHALL BE CONSIDERED INCLUDED IN
- 9) REMOVAL OF AGGREGATE, OIL AND CHIP BITUMINOUS, AND BITUMINOUS MATERIALS SHALL BE INCLUDED IN EARTH EXCAVATION.
- 10) ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON MEAN SEA LEVEL (M.S.L.) DATUM.
- 11) EXISTING UTILITIES SHOWN ON THE PLANS ARE PLOTTED FROM AVAILABLE INFORMATION. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE ONLY AND THERE MAY BE OTHERS NOT SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL UTILITIES. ANY DAMAGE TO UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR IS ADVISED THAT ONLY LIMITED UNDERGROUND INVESTIGATION OF UTILITIES HAS BEEN PERFORMED IN CONNECTION WITH THIS PROJECT. SOME PLAN INFORMATION HAS BEEN OBTAINED FROM MUSUAL SURFACE INSPECTION OR AVAILABLE DOCUMENTATION. THE COWNER AND ENGERE ASSUME NO RESPONSIBILITY FOR THE PRESENCE, SPECIFIC SIZE, LOCATION OR CONDITION OF UNDERGROUND UTILITY AND DISTRIBUTION SYSTEMS. IN ORDER TO AVOID DAMAGE TO UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CONTRACT ALL UTILITY COMPANIES BELONGING TO THE JULLIE. SYSTEM, ALONG WITH THOSE WHO DO NOT, AND OBTAIN THE LOCATION AND DEPTH OF THEIR RESPECTIVE FACILITIES. IT SHOULD BE NOTED THAT UTILITY SERVICE LINES ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CORDINATE WITH ALL UTILITY COMPANIES TO HAVE THEIR MAIN AND SERVICE LINES RELOCATED WHERE THEY CONFLICT WITH THE PROPOSED WORK.
- 12) SURVEY INFORMATION SHOWN TAKEN FROM FIELD SURVEY PROVIDED BY JUNEAU ASSOCIATES, INC., P.C., DATED JULY 2005.
- 13) CONCRETE WHEEL STOPS CURRENTLY EXIST ON SITE AROUND PERIMETER OF PROPERTY. CONTRACTOR SHALL REMOVE ALL WHEEL STOPS AND STOCKPILE, AT A LOCATION AS DIRECTED BY THE ENGINEER, FOR RE-USE FOLLOWING PARKING LOT IMPROVEMENTS. CONTRACTOR SHALL NOT DAMAGE THE EXISTING WHEEL STOPS DURING REMOVAL. ANY DAMAGED WHEEL STOPS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENCE. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR WHEEL STOP REMOVAL AND REPLACEMENT AND NO ADDITIONAL COMPENSATION WILL BE
- 14) SOIL BORINGS SHOWN IN THE PLANS CORRESPOND TO THE GEOTECHNICAL REPORT PREPARED BY QUALITY TESTING AND ENGINEERING, INC., PRÉPARED FOR PROJECT DATED OCTOBER 12, 2005 AND ARE SUPPLIED ON SHEET 11.
- 15) ALL ACCUMULATED SILT SHALL BE REMOVED FROM THE STORM SEWER UPON COMPLETION OF THE IMPROVEMENTS SHOWN AND DISTURBED AREAS ARE STABILIZED. COST OF WORK SHALL BE INCLUDED IN COST OF EARTH EXCAVATION.
- 16) CONTRACTOR SHALL RECORD DEPTHS & DIMENSIONS TO ALL LITHLITY LOCATIONS UNFARTHED DURING CONSTRUCTION AND PROVIDE ARCHITECT/ENGINEER COPY UPON COMPLETION OF PROJECT. COST OF WORK SHALL BE INCLUDED IN COST OF EARTH EXCAVATION.
- 17) POTABLE WATER SYSTEM EXTENSION TO BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF ILLINOIS STANDARDS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS DATED MAY 1996. MINIMUM COVER SHALL BE 42" FROM THE FINISHED GRADE TO THE TOP OF THE PIPE.
- 18) THE CITY OF HIGHLAND SHALL PROVIDE CONNECTION TO EXISTING WATER MAIN AND WILL PROVIDE NEW WATER SERVICE AND WATER METER CONTRACTOR SHALL COOPDINATE WORK WITH THE CITY OF HIGHLAND AND SHALL PROVIDE NEW WATER SERVICE FROM WATER METER TO GROUND HYDRANT. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR WATER SERVICE AND GROUND HYDRANT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 19) ALL PAVEMENT MARKINGS SHALL BE PAINTED WHITE WITH THE EXCEPTION OF ANY PAVEMENT MARKINGS USED FOR DELINEATION OF ACCESSIBLE PARKING, IN WHICH CASE ALL STRIPING SHALL BE YELLOW.
- 20) PROPOSED CONTOURS GENERALLY REFLECT ULTIMATE FINISHED GRADE FOR THIS CONTRACT. FINISHED GRADES SHALL BE WITHIN 0.1 FT. OF PLAN GRADE WITH THE EXCEPTION OF ELEVATIONS FOR THE ACCESSIBLE PARKING AND ACCESS AISLES, WHICH SHALL BE AT PLAN GRADE. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT HAVE SLOPES EXCEEDING 1.75% IN ANY DIRECTION. FINISH GRADES EXCEEDING PLAN GRADES IN THESE AREAS WILL REQUIRE REMOVAL AND REPLACEMENT TO CONFORM TO DESIGN GRADES AT THE DIRECTION OF THE ENGINEER.
- 21) PRIOR TO PLACEMENT OF AGGREGATE BASE COURSE FOR NEW PAVEMENT, FOLLOWING REMOVAL OF EXISTING OIL AND CHIP SURFACE, CONTRACTOR SHALL PROOF ROLL EXISTING AGGREGATE SURFACE IN THE PRESENCE OF THE ENGINEER FOR APPROVAL.
- 22) THE FOLLOWING CONSTANTS WERE USED IN THE CALCULATION OF QUANTITIES FOR THIS PROJECT:

NITROGEN FERTILIZER NUTRIENTS PHOSPHORUS FERTILIZER NUTRIENTS POTASSIUM FERTILIZER NUTRIENTS BITUMINOUS CONCRETE

BITUMINOUS MATERIALS

GRANULAR MATERIALS

90 LBS/ACRE 90 LBS/ACRE

90 LBS/ACRE 2 TONS/ACRE MULCH 112 LBS/S.Y./INCH 0.07 GAL/S.Y. (PAVED SURFACE) 0.25 GAL/S.Y (AGGREGATE SURFACE) 2.05 TONS/C.Y.

**ABBREVIATIONS** 

TBA	TO BE ADJUSTED		
TBRBO	TO BE REMOVED BY OTHERS		
TBR&R	TO BE REMOVED AND REPLACED	L	LENGTH
TBR	TO BE REMOVED	LF	Linear feet
AD	ALGEBRAIC DIFFERENCE	IN	INLET
ASPH	ASPHALT PAVEMENT	INV	INVERT
BIT	BITUMINOUS CONCRETE	MAX	MAXIMUM
BND	BEND	MH	MANHOLE
BVCE	BEGINING VERTICAL CURVE ELEVATION	MJ	MECHANICAL JOINT
BVCS	BEGINING VERTICAL CURVE STATION	MIN	MINIMUM
C	CHORD LENGTH	N N	NORTHING
C&G	CURB & GUTTER	NIC	NOT IN CONTRACT
Caco		PCC PE	PORTLAND CEMENT CONCRETE
CB	CURB INLET	PL PL	PIPE END PROPERTY LINE
	CATCH BASIN	PVC	POLYVINYL CHLORIDE PIPE
CL	CENTERLINE	PVI	POINT OF VERTICAL INTERSECTION
CMP	CORRUGATED METAL PIPE	Ŕ	RADIUS
CO	CLEAN OUT	RCBC	REINFORCED CONCRETE BOX CULVERT
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	ROW	RIGHT OF WAY
DSFL	DOWN STREAM FLOW LINE	SAN	SANITARY
DTL	DETAIL	SB	SOIL BORING
DWG	DRAWING	SHT	SHEET
E	EASTING	STA	STATION
ELEC	ELECTRIC	STM	STORM
ELEV	ELEVATION	TELE	TELEPHONE
EM	ELECTRIC METER	TBM	TEMPORARY BENCH MARK
EOP	FDGE OF PAVEMENT	TYP	TYPICAL
EVCE	ENDING VERTICAL CURVE ELEVATION	UIP	USE IN PLACE
EVCS	ENDING VERTICAL CURVE STATION	USFL	UP STREAM FLOW LINE VERTICAL CURY
EX	EXISTING	W	WEST
LA	LAGINO	VAA	WATED METED

FES FFE

FL

GΥ

FLARED END SECTION

FLOW LINE GAS METER

GAS VALVE

FINISHED FLOOR ELEVATION

LEGEND

WM WATER METER

EXISTING	,	PROPOSED
	OIL & CHIP PAVEMENT	
	RIP RAP AREA	
EALVARDEN EFAFENAGE	CONCRETE PAVEMENT	
P	PROPERTY LINE	P P
	R.O.W. LINE	
576	CONTOUR LINE	(554)
	WATER LINE	w
G	GAS LINE	
OHE	OVERHEAD ELECTRIC LINE	
FO	FIBER OPTIC CABLE	
	CULVERT	
	SILT FENCE	—SF——SF—
	GROUND HYDRANT	
<del>-</del>	SIGN .	<del>-u-</del>
	BOLLARD	0
-0-	POWER POLE	-
O→Ø+	POWER POLE WITH LIGHT STANDARD	
$\bigcirc$	LIGHT STANDARD	••
<b>⊕</b> BM	BENCH MARK	
- <b>♦</b> B−102	SOIL BORING	
	CONTROL POINT	- <del></del> CP−#

SECTION SHEETS 8873 00-00012-00-PK MADISON 18 2 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

**CONTRACT NO. 97270** 

THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES LOCATED WITHIN THE THE LIMITS OF CONSTRUCTION. ADJUSTMENTS IN UTILITY LOCATIONS WILL BE MADE BY THE APPROPRIATE OWNER UNLESS OTHERWISE NOTED IN THE

UTILITY OWNER	TYPE	REMARKS
SBC 203 GOETHE COLLINSVILLE, IL. 62234 * (618) 346-6400	TELEPHONE	NO ADJUSTMENT REQUIRED
CITY OF HIGHLAND PUBLIC WORKS DEPARTMENT 2610 PLAZA DRIVE  * HIGHLAND, IL 62249-0218 (618) 654-7115	WATER	NO ADJUSTMENT REQUIRED
CHARTER COMMUNICATIONS 210 WEST DIVISION STREET MARYVILLE, IL. 62062 * (618) 345-8121	CABLE TELEVISION	NO ADJUSTMENT REQUIRED
CTY OF HIGHLAND 1115 BROADWAY HIGHLAND, IL 62249-0218 * (618) 654-7511	ELECTRIC	NO ADJUSTMENT REQUIRED
AMEREN IP 2600 NORTH CENTER STREET MARYVILLE, IL 62062 * (618) 346-1207	GAS	NO ADJUSTMENT REQUIRED
* VERIZON WIRELESS 124 POPLAR STREET HIGHLAND, IL 62249 (618) 654–8949	FIBER OPTIC	NO ADJUSTMENT REQUIRED

\* UTILITIES WHICH BELONG TO J.U.L.I.E.

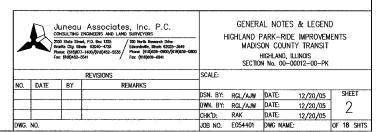
J.U.L.I.E. - JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS PHONE (800) 892-0123

J.U.L.I.E. WILL NOTIFY ALL UTILITY COMPANIES (BELONGING TO THE J.U.L.I.E. SYSTEM) INVOLVED THAT THEIR RESPECTIVE UTILITY SHOUD BE LOCATED. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED.

COUNTY: MADISON TOWNSHIP: HELVETIA

PROJECT IS LOCATED IN SECTION 6, TOWNSHIP 3 NORTH, LOCATION: RANGE 5 WEST OF THE THIRD PRINCIPLE MERIDIAN.

THE PROJECT IS LOCATED NORTH OF STATE HIGHWAY 40, WEST APROXIMATELY 0.5 MILES FROM THE CITY OF HIGHLAND IN MADISON COUNTY. ILLINOIS.



F.A.U. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
8873	00-00012-00	0-00012-00-PK MADISON		18	3	
FED. RC	AD DIST. NO.	ILLIN	OIS	FED. AID F	PROJECT	

CONTRACT NO. 97270

# SUMMARY OF QUANTITIES

Y026 TOTAL

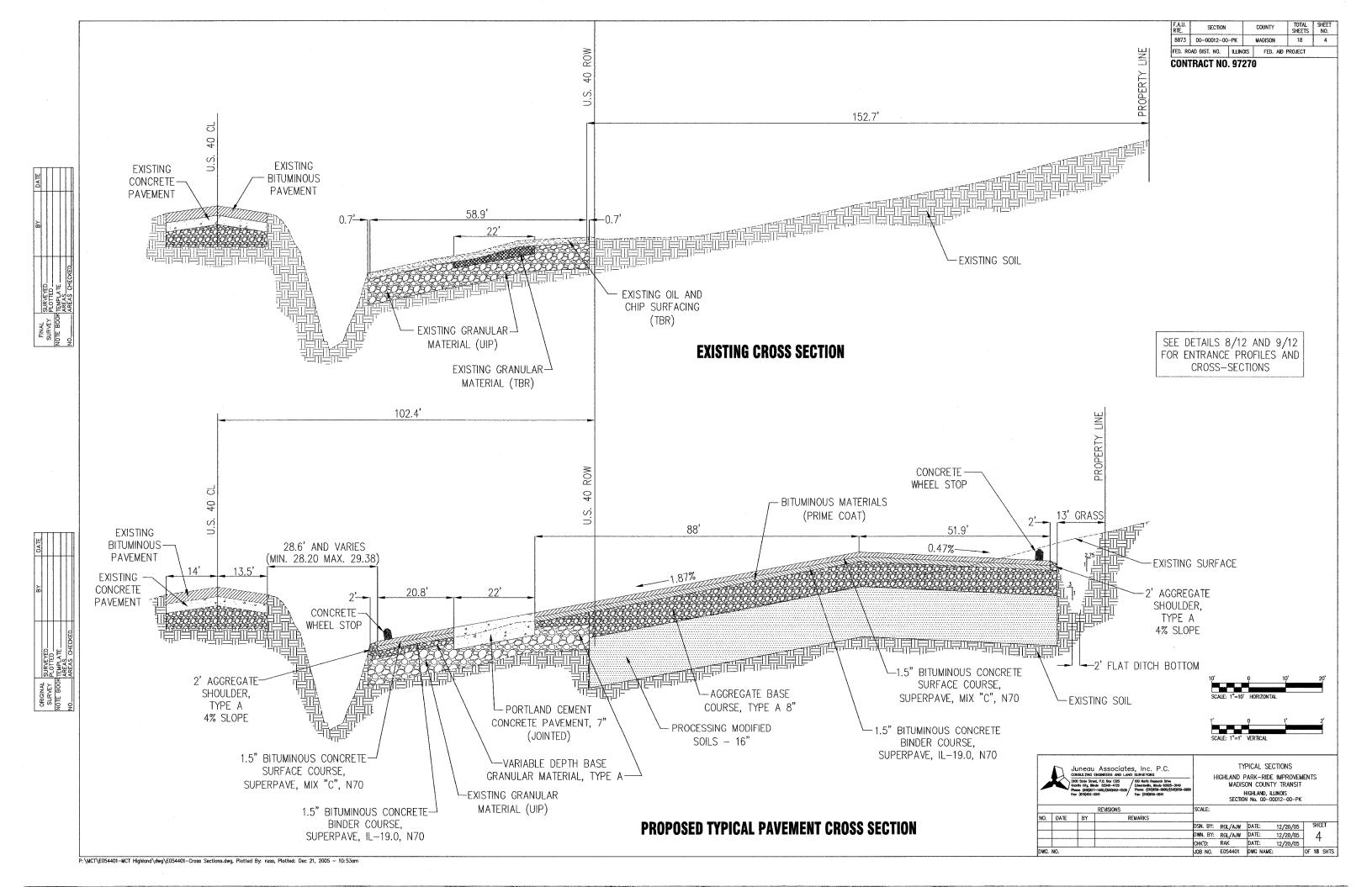
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	226
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2432
20400800	FURNISHED EXCAVATION	CU YD	1693
20800150	TRENCH BACKFILL	CU YD	20
25000100	SEEDING, CLASS 1	ACRE	1.5
25100630	EROSION CONTROL BLANKET	SQ YD	157
28000300	TEMPORARY DITCH CHECK	EACH	6
28000400	PERIMETER EROSION BARRIER	FOOT	1103
28000500	INLET AND PIPE PROTECTION	EACH	3
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	6
28200200	FILTER FABRIC	SQ YD	6
30200850	PROCESSING MODIFIED SOILS 16"	SQ YD	6615
30201500	LIME	TON	219
35100100	AGGREGATE BASE COURSE, TYPE A	TON	625
35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	6804
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	2516
42000201	PORTLAND CEMENT CONCRETE PAVEMENT, 7" (JOINTED)	SQ YD	1515
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	1224
44000030	BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	5083
48100100	AGGREGATE SHOULDER TYPE A	TON	88
542A0213	PIPE CULVERTS, CLASS A, TYPE 1 8"	FOOT	22
54200643	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE, 18"	FOOT	24

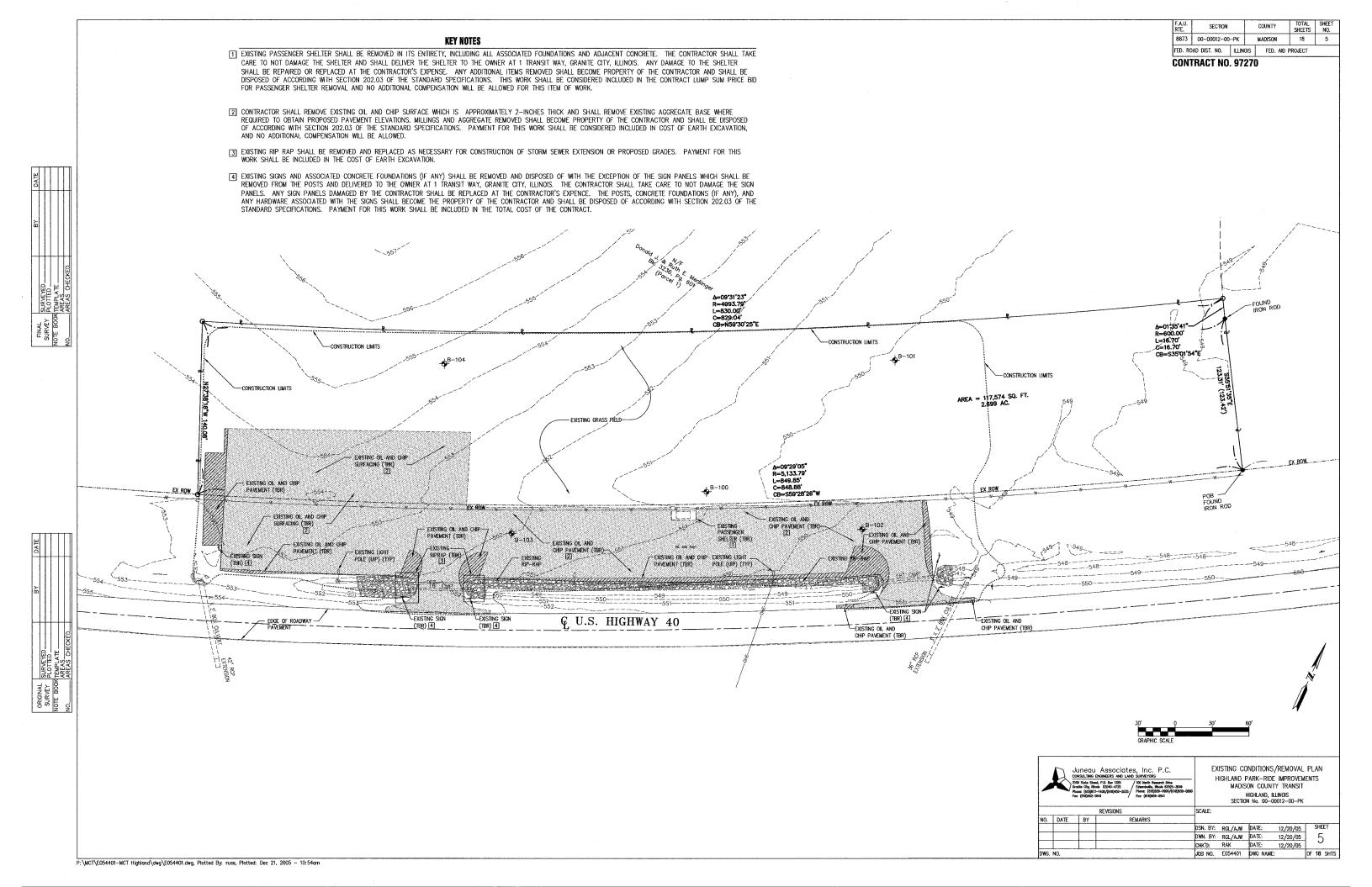
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
60615400	PAVED DITCH TYPE A-15	FOOT	106
67100100	MOBILIZATION	L SUM	1
70103700	TRAFFIC CONTROL COMPLETE	L SUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	97
73000100	WOOD SIGN SUPPORT	FOOT	360
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	9168
78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	83
78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	208
X4066416	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N70	TON	849
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	849
XX002208	6" DIAMETER PIPE BOLLARD, CONCRETE FILLED	EACH	7
XX003816	FURNISHING AND INSTALLING CONCRETE WHEEL STOPS	EACH	92
X0322 <b>33</b> 0	Handicap SIGN	EACH	8
			** ** **
XX006458	PASSENGER SHELTER	L SUM	1
XX006456	PASSENGER SHELTER REMOVAL	L SUM	1
XX0 <i>055</i> 05	OUTDOOR LIGHT : IMPROVEMENTS	L SUM	1
X4022000	TEMPORARY ACCESS (COMMERCITAL ENTRANCE)	EACH	22
XX006455	WATER SERVICE AND GROUND HYDRANT	L SUM	1
XX006457	WHEEL STOP REMOVAL AND REPLACEMENT	EACH	100

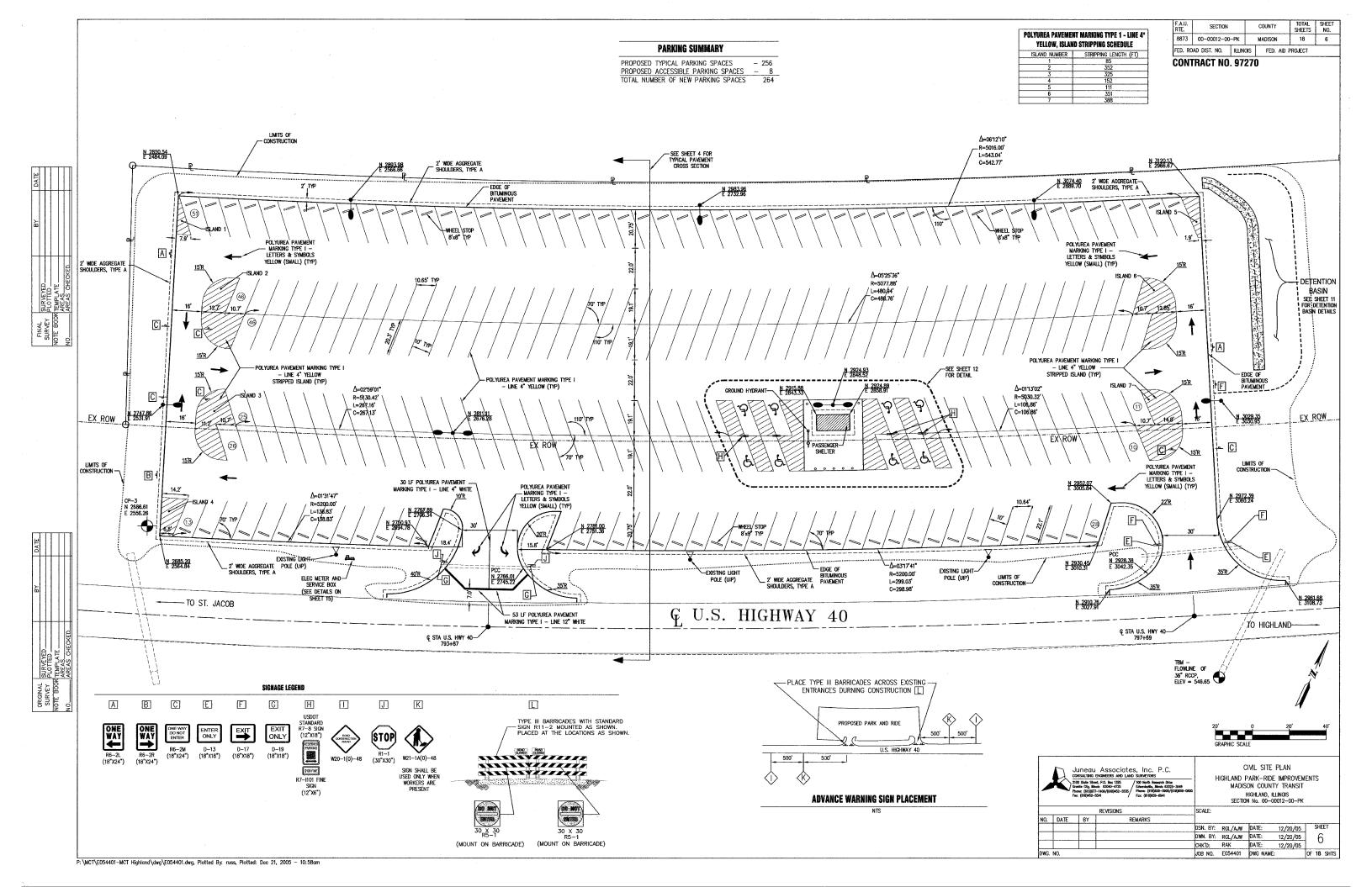
\* SPECIALTY ITEMS

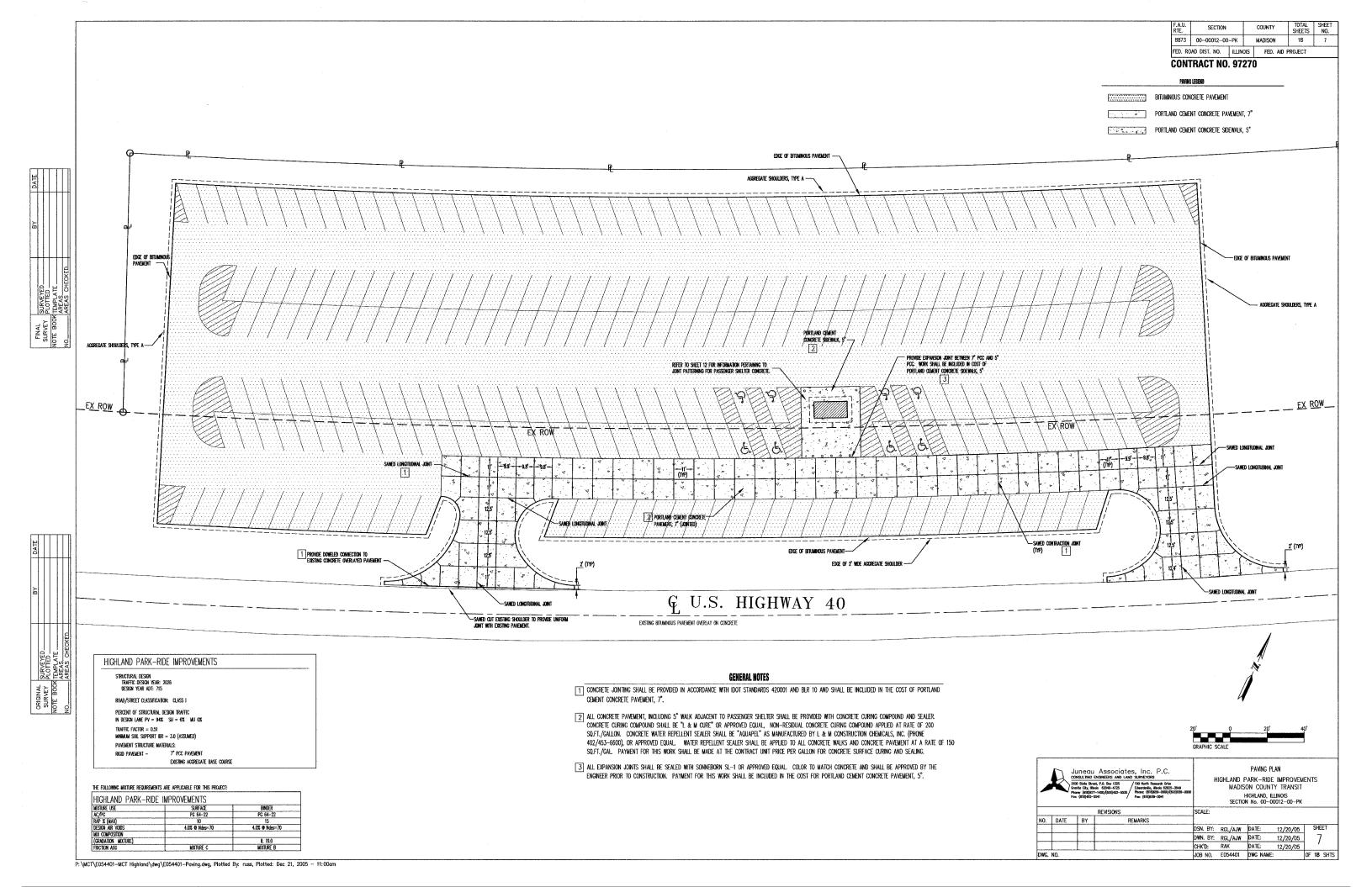
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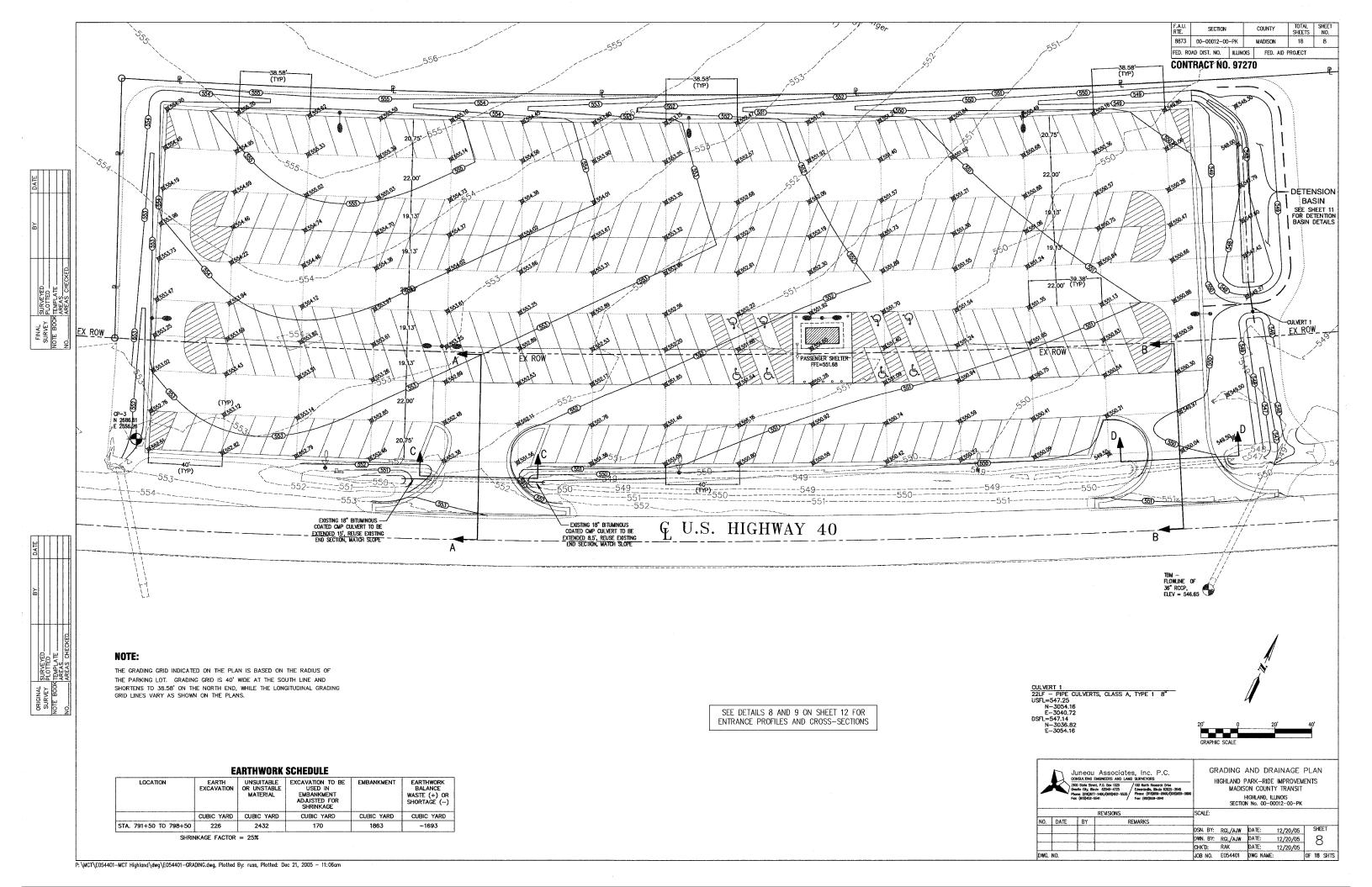
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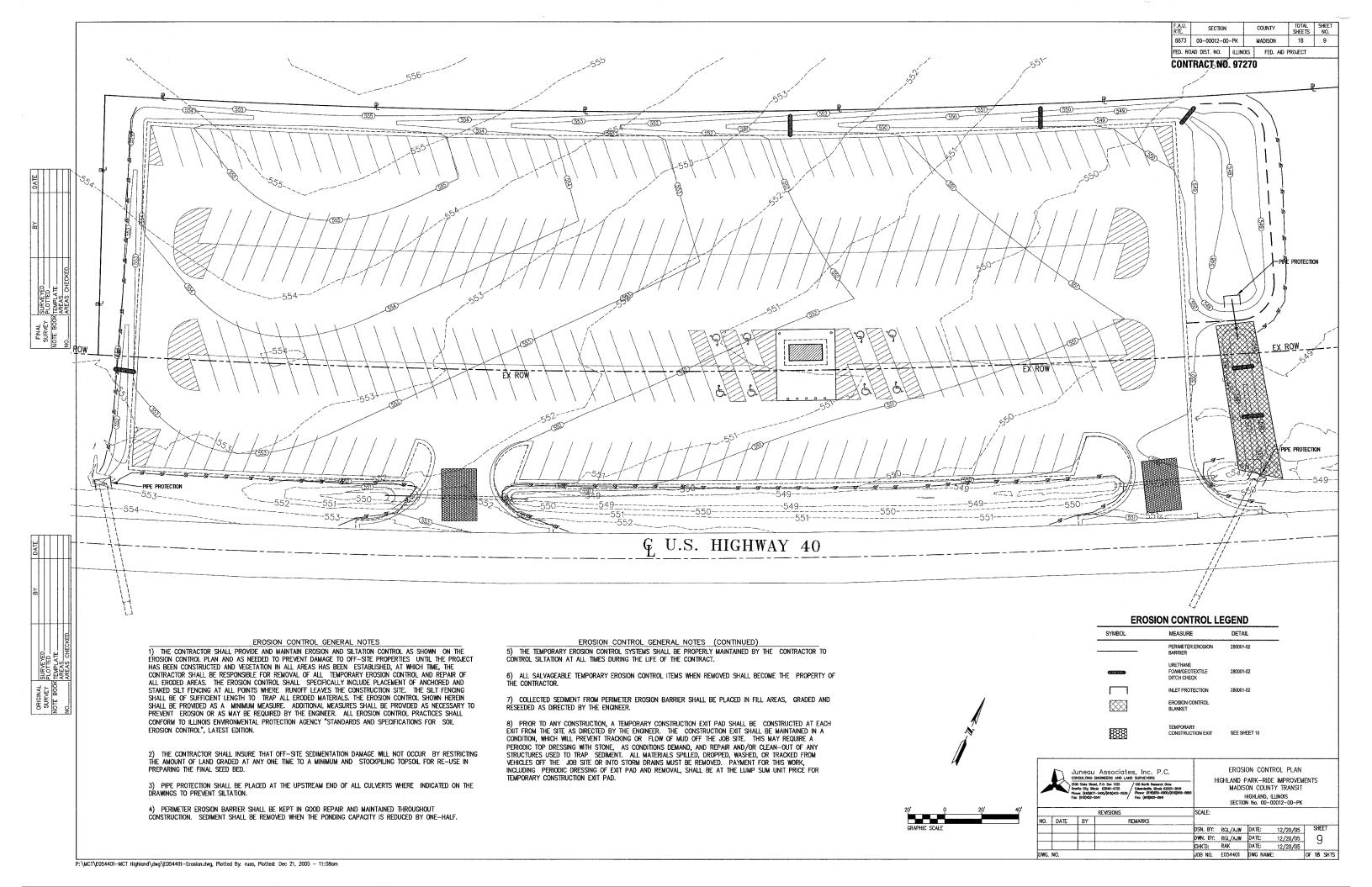












STORMWATER POLLUTION PREVENTION PLAN

THE SITE CONSISTS OF APROXIMATELY 0.85 ACRES OF OIL AND CHIP PAVEMENT AND APROXIMATELY 3.9 ACRES OF GRASSED FIELD. THE SITE BEING APROXIMATELY 4.75 ACRES TOTAL. THE SITE IS BORDERED BY STATE HIGHWAY 40 AND IS CURRENTLY USED BY MADISON COUNTY TRANSIT AS A PARK AND RIDE FACILITY. A PASSENGER SHELTER IS THE ONLY STRUCTURE ON SITE AND WILL BE REPLACED BY A NEW

THE PROPOSED DEVELOPMENT WILL CONSIST OF MINOR GRADING. CONSTRUCTION OF A DETENTION BASIN. ELECTRIC UTILITY CONSTRUCTION. CONSTRUCTION OF BITUMINOUS AND CONCRETE PAVEMENT, AND STRIPPING FOR THE PARKING LOT

THE EXISTING RUNOFF COEFFICIENT OF THE SITE, REPRESENTING THE PREVIOUSLY DEVELOPED CONDITIONS THAT EXISTS, IS 0.49. THE FUTURE RUNOFF COEFFICIENT, REPRESENTING THE NEW PARKING LOT AND SHELTER IS 0.62.

# SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF ACTIVITIES WILL BE APPROXIMATELY AS FOLLOWS: 1 - INSTALL EROSION CONTROL/SILT FENCES.

- 2 DEMOLITION.
- CLEAR AND GRUB AREAS TO BE GRADED.
- ROUGH GRADE STIE:
   APPLY TEMPORARY SEEDING ON DISTURBED AREAS NOT TO BE PAVED.
   COMPLETE FINAL GRADING FOR PAVED SURFACING.
   CONSTRUCT BITUMINOUS AND PORTLAND CEMENT CONCRETE SURFACING.
   CONSTRUCT PASSENGER SHELTER.

- 9 COMPLETE PERMANENT SEEDING/LANDSCAPING

# NAMES OF RECEIVING WATERS

THE PROPOSED DEVELOPMENT WILL DRAIN INTO A NEW DETENTION BASIN WHICH WILL THEN BE RELEASED AT THE PREDEVELOPED FLOW RATE INTO AN EXISTING CULVERT. WATER NOT ENTERING INTO THE DETENTION BASIN WILL BE RELEASED UNRESTRAINED TO STATE HIGHWAY 40. THESE WATERS ULTIMATELY DRAIN TO TRIBUTARIES OF SUGAR CREEK.

# **CONTROLS - EROSION AND SEDIMENT CONTROLS**

# **STABILIZATION PRACTICIES**

TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THE AREA. THE TEMPORARY SEED SHALL BE RYE (GRAIN) APPLIED AT THE RATE OF 120 POUNDS PER ACRE OR IDOT CLASS 7 MIX APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SEEDBED PREPARATION IS NOT REQUIRED IF SOIL IS IN LOOSE CONDITION. PRIOR TO SEEDING, 10-64 FERTILIZER SHALL BE APPLIED TO EACH ACRE TO BE STABILIZED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 4,000 POUNDS PER ACRE OF STRAW, IF NEEDED. THE STRAW MULCH IS TO BE TACKED INTO PLACE BY A DISK WITH BLADES SET NEARLY STRAIGHT. EROSION AND SEDIMENT CONTROLS WILL BE INSTALLED PER CONSTRUCTION DRAWINGS PREPARED BY JUNEAU ASSOCIATES, INC., P.C.

PERMANENT STABILIZATION:
DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED
NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL CONSIST OF 100 LBS/ACRE ALTA FESCUE
OR KY31, AND 50 LBS/ACRE PERENNIAL RYE GRASS, AND 40 LBS/ACRE OF CREEPING RED FESCUE, AND 10 LBS/ACRE OF RED TOP IN
ACCORDANCE WITH IDOT CLASS 2 MIX. PRIOR TO SEEING 10-64 FERTILIZER SHALL BE APPLIED AT THE RATE OF 250 POUNDS PER ACRE, TO
EACH ACRE TO BE STABILIZED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 4,000 POUNDS PER ACRE OF STRAW: THE STRAW MULCH IS TO BE TACKED INTO PLACE BY A DISK WITH BLADES SET NEARLY STRAIGHT.

SLOPES, DEFINED AS ALL GRADES EQUAL TO AND GREATER THAN 4 HORIZONTAL TO 1 VERTICAL, SHALL BE PERMANENTLY STABILIZED WITH IDOT CLASS 3 MIX, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS DEFINED ON THE APPROVED LANSCAPING PLANS.

EROSION CONTROL BLANKET:
WHERE INDICATED ON THE CONSTRUCTION DRAWINGS, EROSION CONTROL BLANKET SHALL BE PROVIDED. MATERIAL SHALL BE IN
ACCORDANCE WITH THE SPECIFICATIONS PROVIDED ON THE CONSTRUCTION PLANS AND ALL CONSTRUCTION SHALL BE PROVIDED IN
ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

<u>DETENTION BASIN:</u>
A DETENTION BASIN WILL BE CONSTRUCTED AS AN INTEGRAL PART OF THE STORMWATER DRAINAGE SYSTEM. DRAINAGE FROM THE PARKING
LOT WILL BE COLLECTED IN A GRASSED DITCH AND ROUTED TO THE DETENTION BASIN. THE DETENTION BASIN WILL RESTRICT FLOW RATES THAT PREVIOUSLY EXISTED FOR THE SITE FOR THE 10-YEAR AND 100-YEAR RETURN FREQUENCIES. WATERS DETAINED IN THE DETENTION BASIN WILL DUTLET TO AN EXISTING CULVERT LOCATED UNDER US HIGHWAY 40. TO PREVENT SILTATION FROM ENTERING DOWNSTREAM AREAS. THE DETENTION BASIN WILL BE CONSTRUCTED WITH A PIPE PROTECTION PLACED AROUND THE OUTLET PIPE

# STORM WATER MANAGMENT

STORM WATER DRAINAGE FOR THE DEVELOPMENT WILL BE PROVIDED BY ALLOWING SHEET FLOW TO A GRASSED DITCH USED TO ROUTE THE SITE DRAINAGE TO THE PROPOSED DETENTION BASIN.

PROPOSED GRADING SLOPES SHALL NOT EXCEED THE SLOPES INDICATED ON THE GRADING PLAN. TYPICALLY IN MOST AREAS, THIS SHALL NOT EXCEED A 3 HORIZONTAL TO 1 VERTICAL

THE AREAS DEFINED ON THE DRAWINGS. PERMANENT SEEDING SHALL BE APPLIED ALONG WITH THE INSTALLATION OF THE BLANKET. ALL EROSION CONTROL SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS AND IN COMPLIANCE WITH ILLINOIS DEPARTMENT OF TRANSPORTATION

# **OTHER CONTROLS**

# WASTE DISPOSAL

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURED CONTAINER WHICH WILL MEET ALL LOCAL AND ANY STATE SOLID WASTE MANAGMENT REGULATIONS. ALL TRASH AND SITE CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE CONTAINER. THE CONTAINER WILL BE EMPTIED AS NEEDED. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL

STABILIZED ROCK CONSTRUCTION EXIT PADS SHALL BE LOCATED AT ALL POINTS OF EGRESS USED DURING CONSTRUCTION TO REDUCE VEHICLE TRACKING ONTO ADJACENT ROADWAYS. DETAILS OF THE CONSTRUCTION EXIT PAD ARE SHOWN ON THE CONSTRUCTION PLANS AND SHALL BE MAINTAINED AS NEEDED TO PREVENT TRACKING.

ALL STREETS SHALL BE KEPT CLEAR OF ANY MUD. DIRT OR ROCK TRACKED FROM THE SITE. MUD TRACKED ONTO THE ROADWAY, WILL BE

# **TIMING OF CONTROLS / MEASURES**

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES. THE TWO STABILIZED CONSTRUCTION ENTRANCES AND EROSION AND SEDIMENT CONTROLS WILL BE CONSTRUCTED PRIOR TO CLEANING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STARILIZED WITH A TEMPORARY SEED AND MILLICH WITHIN 14 DAYS. ONCE

# CERTIFICATION AND COMPLIANCE WITH FEDERAL. STATE AND LOCAL REGULATIONS

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE REQUIRMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL AS BY THE STATE OF ILLINOIS

# MAINTENANCE / INSPECTION PROCEDURES

THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

GREATER DURING CONSTRUCTION. A RAIN GAUGE WILL BE AVAILABLE ON SITE TO MEASURE RAIN ACCUMULATION. A LOG OF ALL EROSION CONTROL MAINTENANCE WILL BE PROVIDED AND WILL BE AVAILABLE ON SITE FOR REVIEW BY GOVERNING AUTHORITIES.

-ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE VOLUME OF THE UNDERCUT AREA IS REDUCED BY ONE-HALF

-SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

-TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

-A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.

-THE SITE CONTRACTOR WILL SELECT AS MANY AS THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT

PERSONNEL SELECTED FOR INSPECTION REPSONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE CONTRACTOR. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD

# NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING CONSTRUCTION:

-PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURED)

-UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

# **INVENTORY FOR POLLUTION PREVENTION PLAN**

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

PETROLEUM BASED PRODUCTS

# SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICIES DISCUSSED IN PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICIES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

-ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY

-THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY

-THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE

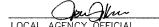
-THE SITE CONTRACTOR RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

# SECTION 8873 00-00012-00-PK MADESON 18 FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

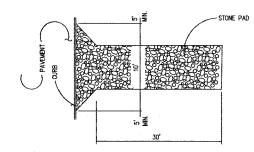
**CONTRACT NO. 97270** 

# **POLLUTION PREVENTION PLAN**

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER (LR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES. I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED BASED ON MY DESIGNED TO ASSIBILITY OF FIRE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR



12/20/05



1) STONE SIZE: ASTM D448 SIZE #1 (1 1/2 " TO 3 1/2 " DIA.)

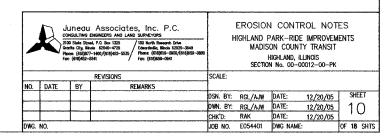
2) PAD THICKNESS 12"

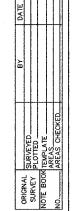
3) MAY REQUIRE PERIODIC TOP DRESSING WITH 2"

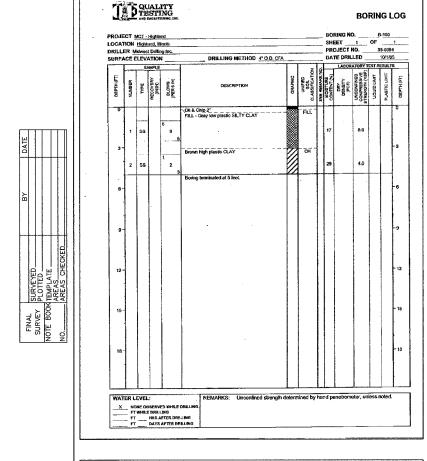
4) MAINTAIN IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC ROADS.

5) LOCATE AT ALL POINTS OF EGRESS ONTO PUBLIC ROADS.

TEMPORARY CONSTRUCTION EXIT





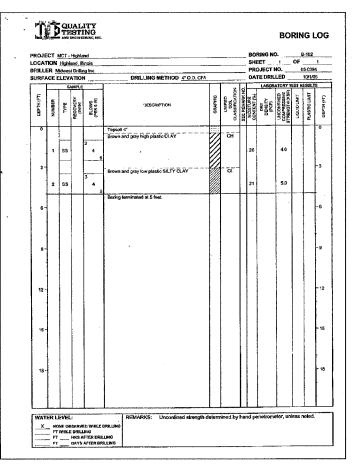


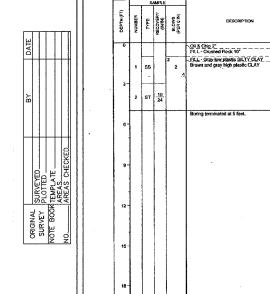
DRILLING METHOD 4" O.D. CFA

BORING LOG

| BORING NO. | B-103 | SHEET | 1 OF 1 | PROJECT NO. | 05-0384 | DATE DRILLED | 10/1/05 |

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PROJ										RING N			-101					
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SURF					DRILLING METHOD # O.D. CF	A			PROJECT NO. 05-0384  DATE DRILLED 10/1/05									
	F	S.	MPLE		3									_	LABOR	ATORY T	EST R	
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0					Topsof 12*	1000		П										
	1	SS		1 3	Brown high plastic CLAY		CH		32		4.25							
3-				2	Brown and gray low plastic SILTY CLAY		CL											
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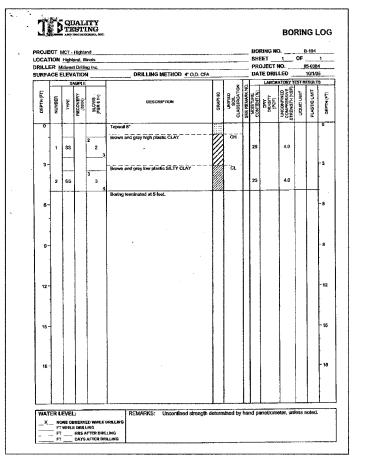


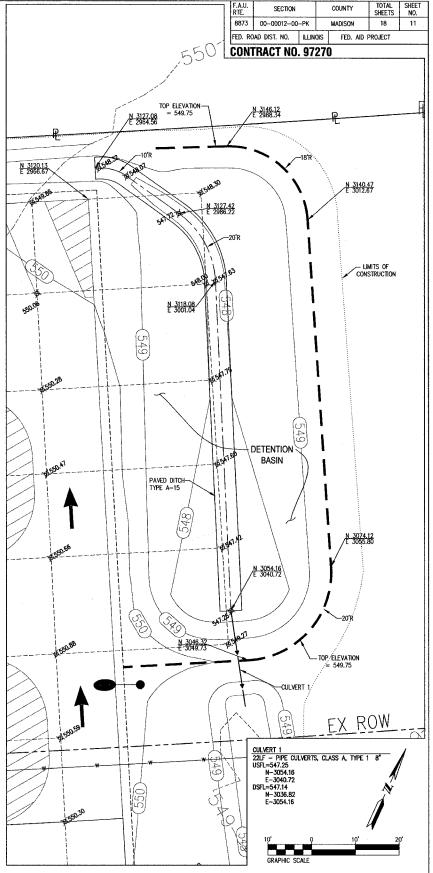
WATER LEVEL:

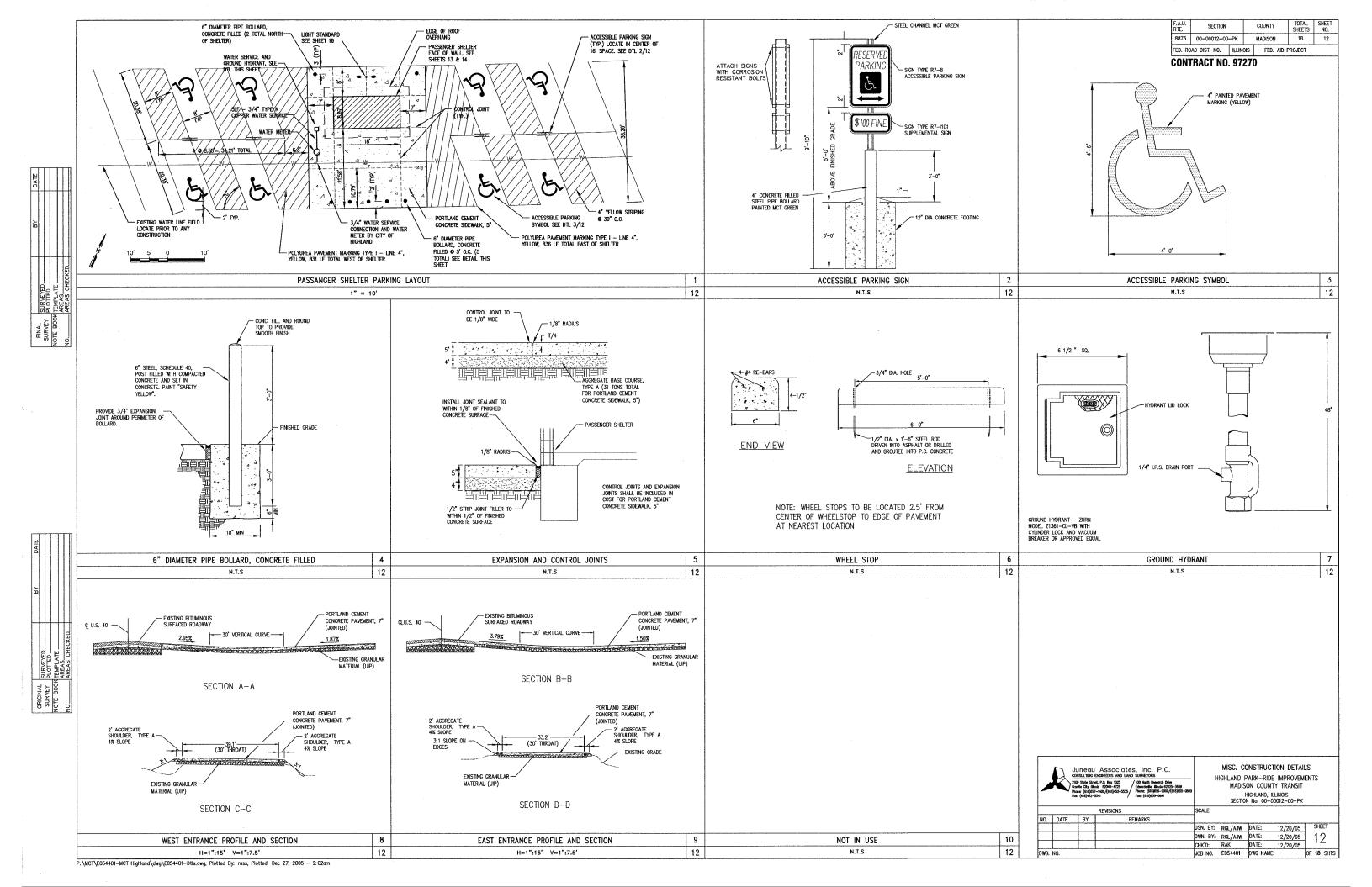
X NONE OBSERVED WHILE DRILLING
FT WHILE DRILLING
FT HRS AFTER DRILLING
FT DAYS AFTER DRILLING

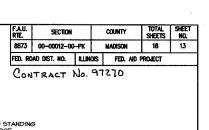
T D QUALITY TESTING

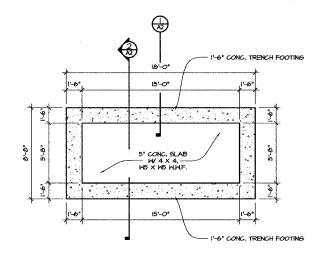
PROJECT MCT - Highland LOCATION Highland, litinois DRILLER Midwest Drilling Inc SURFACE ELEVATION

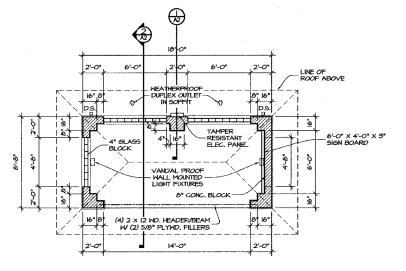


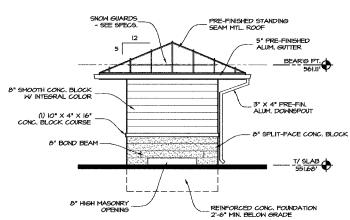














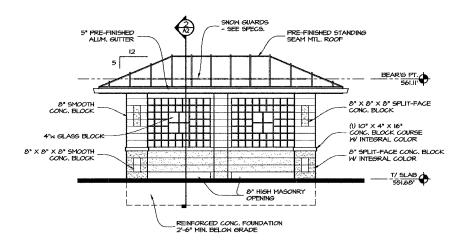
SURVEYED PLOTTED TEMPLATE AREAS CHE

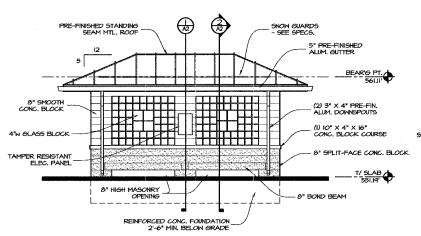
FINAL SURVEY NOTE BOOK NO.

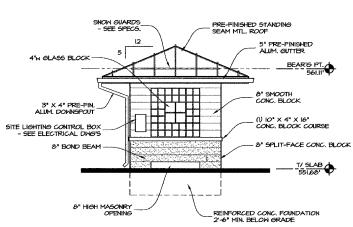
SURVEYED PLOTTED TEMPLATE AREAS CHE











SOUTH ELEVATION SCALE: 1/4" = 1'-0"

5 NORTH ELEVATION

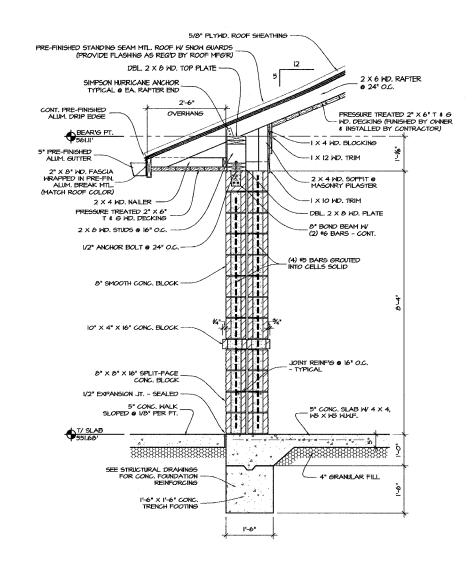
SCALE: 1/4" = 1'-0"

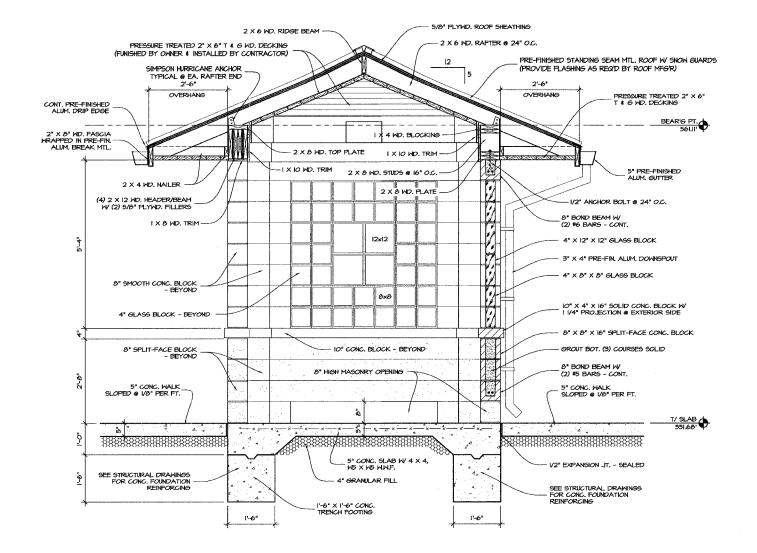
6 WEST ELEVATION

		ASSOCI	EDWARDSVILLE ILLINOIS 62025	Н	GHLAND MADIS	ELEVATIONS PARK-RIDE SON COUNTY HIGHLAND, ILL DN No. 00-00	IMPROVEN Y TRANSIT INOIS	
		REV	ISIONS	SCALE: 1	/4" = 1'-1	)"		
NO.	DATE	BY	REMARKS					
	T			DSN. BY:	JRH	DATE:	11-4-05	SHEET
				DWN. BY:	RMS	DATE:	11-11-05	13
				CHK*D:	RMS	DATE:	11-18-05	י ו
DWG.	NO.			JOB NO.	2443C	DWG NAME:	2443C	OF 18 SHTS

F.A.U. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
8873	00-00012-00	-PK		MADISON	18	14
FED. RC	AD DIST. NO.	ILIN	OIS	FED. AID F	ROJECT	

CONTRACT No. 97270





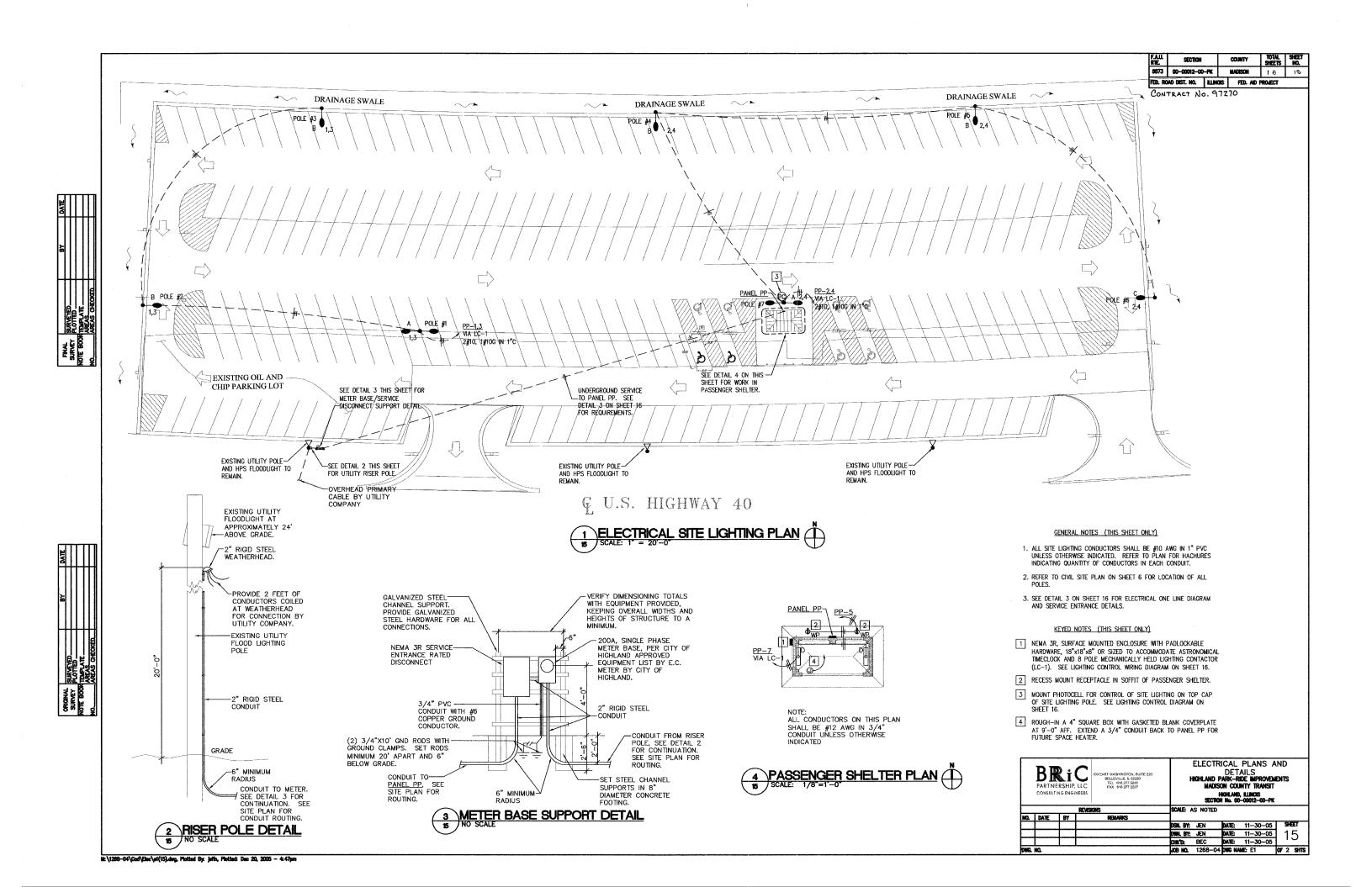
PILASTER WALL SECTION

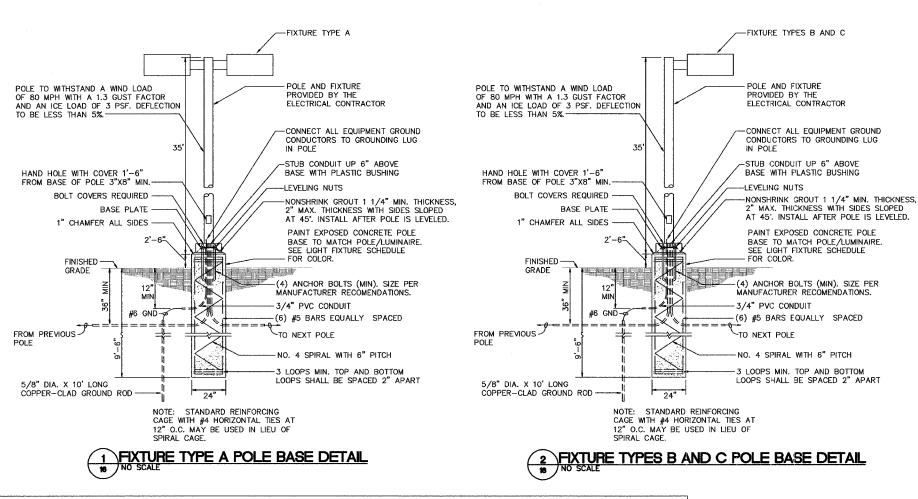
SCALE: 3/4" = 1'-0"

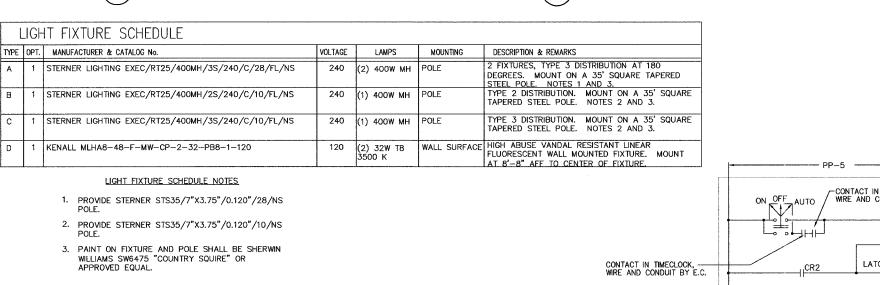
BUILDING SECTION

SCALE: 3/4" = 1'-0"

	HE	ARCHITE	icites EDWARDSVILLE ILLINOIS 62025	Hi	GHLAND I	& BUILDING PARK—RIDE SON COUNT HIGHLAND, ILL IN No. 00—00	IMPROVEN Y TRANSIT INOIS	IENTS
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				CHK'D:	RMS	DATE:	11-18-05	1 1 7
DWG.	NO.			JOB NO.	2443C	DWG NAME:	2443C	OF 18 SHTS







SITE/SHELTER LIGHTING ON VIA PHOTOCELL OFF VIA TIMECLOCK

SITE LIGHTING CONTACTOR SCHEDULE

CIRCUITS

PP-1,2,3,4,7

3 SPARE

CONTACTOR

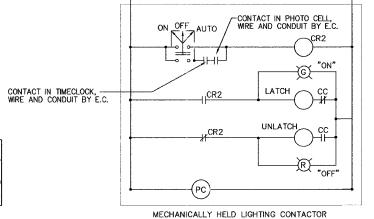
LC-1

NAME

POLES

AMPS

8/30



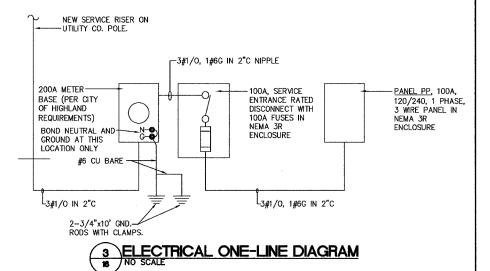
MECHANICALLY HELD LIGHTING CONTACTOR ALL WIRING SHALL BE #12 U.N.O.

4 EXTERIOR LIGHTING CONTROL (LC-1) DIAGRAM
18 NO SCALE

SECTION COUNTY IS 16 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT No. 97270

PANEL	NO: PP (NEMA 3R)							22000 AIC
VA	FUNCTION	SIZE	СКТ	PH	СКТ	SIZE	FUNCTION	VA
930	PARKING LOT LIGHTS	20A/2P	1	Α	2	20A/2P	PARKING LOT LIGHTS	1163
930			3	В	4			1163
360	GFI RECEPTACLES	20A/1P	5	Α	6	30A/2P	FUTURE HEATER	2500
124	PASSENGER SHELTER LTG	20A/1P	7	В	8			2500
	SPARE	20A/1P	9	Α	10	20A/1P	SPARE	
	SPARE	20A/1P	11	В	12	20A/1P	SPARE	
	SPARE	20A/1P	13	Α	14	20A/1P	SPARE	
	SPARE	20A/1P	15	В	16	20A/1P	SPARE	
	SPARE	20A/1P	17	Α	18	20A/1P	SPARE	
	SPARE	20A/1P	19	В	20	20A/1P	SPARE	
VOLTAN PHASE MAINS:		17 POLES:	20 PC		OTAL 967 NS	S VOLT	rs: 240V/120, 1¢, 3W NTING: RECESSED	



# **SYMBOLS**

• PROPOSED 400W MH SHOEBOX FIXTURE ON 35' POLE.

PROPOSED TWIN 400W MH SHOEBOX FIXTURE ON 35' POLE.

FLUORESCENT FIXTURE

----- UNDERGROUND CONDUIT ROUTING.

CONDUIT ROUTING CONCEALED WITHIN FINISHES.

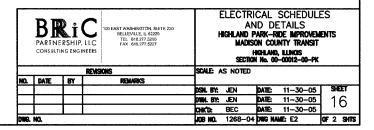
GFI DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE

ELECTRIC SERVICE METER

ELECTRIC PANEL. SEE PLAN FOR DESCRIPTION.

(PC) PHOTOCELL

JUNCTION BOX



F.A.U. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
8873	00-00012-00		MADISON	18	17	
FED. ROAD DIST. NO.		ILLINOIS		FED. AID F		

# CONTRACT NO. 97270

# GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWINGS AND REPORT ANY DISCREPANCY TO THE ARCHITECT.
- SEE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ANY FLOOR AND ROOF DENINGS, TRENCHES, PITS, PIPE SLEEVES, CHAMFERS, ANCHORS, MISCELLANEOUS STEEL ETC. WHICH WILL BE REQUIRED.
- COST OF FURNISHING ALL LABOR, AND MATERIALS NECESSARY AND REQUIRED TO SATISFACTORILY COMPLETE THE WORK FOR THE PASSENGER SHELTER AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS SHALL BE CONSIDERED COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR "PASSENGER SHELTER", PER LUMP SUM.

# CODES AND STANDARDS

BUILDING: 2003 INTERNATIONAL BUILDING CODE

CONCRETE: 1. FOR REINFORCED CONCRETE - ACI LATEST EDITION
2. FOR CONCRETE MASSINRY STRUCTURES ACI 531 - LATEST EDITION
3. CRSI HANDBOOK
4. CONCRETE DETAILS - DESIGN, DETAILING FABRICATION AND ERECTION SHALL
COMPLY WITH THE ACI "MANUAL DE STANDARD PRACTICE FOR DETAILING
REINFORCED CONCRETE" AND "SPECIFICATION FOR STRUCTURAL CONCRETE FOR
BUILDINGS

STRUCTURAL STEEL: AISC 'SPECIFICATIONS FOR DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS' - LATEST EDITION.

WELDING: AMERICAN WELDING SCICIETY (AWS) 'STRUCTURAL WELDING CODE'

COLD FORMED STEEL: AISI 'SPECIFICATIONS FOR THE DESIGN OF COLD - FORMED STEEL STRUCTURAL MEMBERS' - LATEST EDITION

# DESIGN LOADS

DESIGN LUADS

FLOOR LIVE LOADS: SLAB ON GRADE	=	125 PSF
RDOF LIVE LOAD	=	20 PSF
ROOF SNOW LOAD: GROUND SNOW LOAD (PG) SNOW EXPOSURE FACTOR (CE) SNOW LOAD IMPORTANCE (D) ROOF THERMAL FACTOR (CT)	=	20 PSF 0.9 1.0 1.2
WIND LOAD: BASIC WIND SPEED (3 SECOND GUST) EXPOSURE C WIND LOAD IMPORTANCE (D		90 MPH 1.0
EARTHQUAKE LDAD; SEISMIC USE GROUP I SPECTRAL RESPONSE CUEFFICIENT; S DS S DI SITE CLASS C BASIC SEISMIC FÜRCE RESISTING SYSTEM: MÜMENT FRAME ANALYSIS PROCEDURE	=	0.48 0.'9  EQUIVALENT LATERAL FORCE PROCEDURY
WINNET 1979 LYCICE DOKE	_	EMOTAMENT ENTERME LAKEE LARGEDOKE

# **FOUNDATIONS**

- THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT PREPARED BY QUALITY TESTING AND ENGINEERING, INC. DATED OCTOBER 12, 2005 AND ADDENDUM DATED NOVEMBER 25, 2005.
- FOOTINGS SHALL BEAR ON UNDISTURBED EXISTING FILL MATERIAL OR NEVLY PLACED LEAN CONCRETE IN ACCORDANCE WITH THE ABOVE REFERENCED GEOTECHNICAL REPORT CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 2,500 PSF. UNDER FULL SERVICE AND DEAD LOADS.
- 3. ALL BEARING MATERIAL FOR SUPPORTING FOOTINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THEIR CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL BE THE SILE JUDGE AS ID THE SUITABILITY OF THE BEARING MATERIAL. THE CONTRACTOR SHALL NOTIFY THE OWNER (3) VORKING DAYS IN ADVANCE FOR INSPECTION BY THE GEOTECHNICAL ENGINEER.
- 4. DO NOT BACKFILL UNTIL CONCRETE HAS REACHED ITS 28 DAY STRENGTH.

# CONCRETE AND REINFORCING

- REINFORCED CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- ALL REINFORCING STEEL SHALL BE GRADE 60, 60,000 PSI YIELD POINT DEFORMED BARS IN ACCORDANCE WITH THE LATEST ASTM SPECIFICATIONS.
- 3. MINIMUM CONCRETE PROTECTION. SEE TABLE BELOW:

	<u>ITEMS</u>	MINIMUM COVER (IN.)
A.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B.	CONCRETE EXPOSED TO EARTH WEATHER OR SEWERAGE #6 THRU #18 BARS #5 BARS OR SMALLER	ž 2 1/2
C.	BEAMS AND COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, OR SPIRALS	1 1/2
D.	CONCRETE NOT EXPOSED TO WEATHER, SEWAGE OR IN CONTACT WITH GROUND: #14 AND #18 BARS #11 BAR AND SMALLER	1 1 1/2

- 4. ALL REINFORCING BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS BOTH WAYS. ALL BAR DOWELS AND ANCHOR BOLTS MUST BE POSITIONED BEFORE CONCRETE IS PLACED.
- 5. ALL REINFORCING BARS ARE TO BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACT "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". SHRINKAGE AND TEMPERATURE STELL SHALL HAVE A MINIMUM 30 BAR DI
- 6. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
- 7. PROVIDE CONSTRUCTION JOINTS OR CONTROL JOINTS IN THE SLAB ON GRADE AS SHOWN ON THE PLANS.

# CONSTRUCTION AND CONTROL JOINTS

- 1. CONSTRUCTION JOINTS SHALL BE LOCATED NEAR THE CENTER OF SPANS OF SLABS, BEAMS OR GIRDERS EXCEPT AT INTERSECTIONS OF BEAMS OR GIRDERS, IN WHICH CASE, JUINTS SHALL BE OFFSET A DISTANCE EQUAL TO TWICE THE WIDTH OF THE BEAM AND PROVISIONS SHALL BE MADE FOR TRANSFER OF SHEAR AND OTHER FORCES THROUGH THE CONSTRUCTION JOINT UNLESS THERWISE SHOWN ON THE DRAVINGS.
- 2. REINFORCING STEEL SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS.
- WHERE A JOINT IS MADE, THE SURFACE OF THE CONCRETE SHALL BE ROUGHENED, THOROUGHLY CLEANED AND ALL LAITANCE REMOVED. IN ADDITION, VERTICAL JOINTS SHALL BE THOROUGHLY WEITED AND SLUSHED WITH A COAT OF NEAT CEMENT GROUT IMMEDIATELY BEFORE PLACING NEW CONCRETE.
- SLABS ON GRADE OR NON-STRUCTURAL SLABS SHALL HAVE CONTROL JOINTS IN BOTH DIRECTIONS SPACED AT NOT MORE THAN 10-0° ON CENTER. ISJUATION JOINTS SHALL BE PROVIDED ARGUND COLUMNS AND AT INTERSECTIONS OF SLABS AND WALLS. CONTROL JOINTS SHALL BE PROVIDED ON EXPOSED SURFACES OF WALLS, SPACED AT NOT MORE THAN 25-0° ON CENTER.

# MASONRY

- ALL CONCRETE BLOCK MASONRY SHALL CONFORM TO ASTM C90 FOR NORMAL WEIGHT (135PCF) BLOCK WITH MINIMUM NET AREA COMPRESSIVE STRESS OF 1900 PSI.
- 2. ALL MASONRY WALLS SHALL HAVE TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT WITH TWO W 1.7 SIDE RODS. SPACE HORIZONTAL REINFORCEMENT AT 16° D.C. VERTICALLY.
- 3. ALL REINFORCING SHALL BE SECURED IN PLACE AND INSPECTED BEFORE GROUTING.
- 4. ALL BOND BEAMS SHALL BE GROUTED SOLID AND HAVE 2- #5 CONTINUOUS BARS UNLESS DTHERVISE NOTED. HORIZONTAL BOND BEAM REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS OF THE STRUCTURE. REINFORCEMENT SHALL BE DETAILED AND PLACED TO PROVIDE PROPER ANCHORAGE WITH HOURS OF BENDS.
- 5. ALL BOLTS, ANCHORS, ETC. INSERTED INTO THE MASONRY WALLS SHALL BE HOT-DIPPED GALVANIZED AND SOLIDLY GROUTED IN PLACE.
- 6. FILL CELLS WITH GROUT AT ALL BOND BEAMS, REINFORCED PILASTERS, AND FOR 3 COURSES UNDER BEARING OF LINTELS AND BEAMS, UNLESS NOTED OTHERWISE.
- 7. VERTICAL REINFORCING STEEL SHALL HAVE A MINIMUM CLEARANCE OF 3/4' FROM THE MASDINRY.
- 8. ALL REINFORCING STEEL FOR THE MASONRY SHALL BE GRADE 60, 60,000 PSI YIELD POINT DEFORMED BARS IN ACCORDANCE WITH THE LATEST ASTM SPECIFICATIONS.

# SPLIT FACE CONCRETE MASONRY UNITS

- 1. 8'x8'x16' MODULAR SIZE SPLIT FACE LOAD BEARING CONCRETE MASONRY UNITS FOR EXTERIOR USE AS SELECTED BY OWNER FROM MANUFACTURE'S STANDARD.
- INSTALL IN RUNNING BOND, FORM VERTICAL AND HORIZONTAL JOINTS OF UNIFORM THICKNESS.
- 3. PROVIDE MATCHING CORNER, BOND BEAMS, LINTEL, INFILL, ETC. CONCRETE MASONRY UNIT PLACES AS REQUIRED.
- 4. MORTAR FOR REINFORCED MASONRY: ASTM C270, TYPE S USING THE PROPERTY METHOD. COLOR SELECTED BY DWNER, CONCAVE MORTAR JOINTS.
- 5. REINFORCING STEEL: ASTM A615, 60 KSI YIELD GRADE, DEFORMED BILLET STEEL BARS.
- 6. HORIZONTAL REINFORCING TRUSS TYPE, HOT DIPPED GALVANIZED COLD DRAWN STEEL CONFORMING TO ANSI/ASTM A82, %6' SIDE RODS WITH NO. 9 CROSS TIES, AT 16' D.C.
- INSTALL EXPANSION AND CONTROL JOINTS AS REQUIRED BY STANDARD MASONRY PRACTICE, VERIFY LOCATIONS WITH ARCHITECT PRIOR TO CONSTRUCTION.

# STANDARD CONCRETE MASONRY UNITS

- 8'x8'x16' MEDULAR SIZE CONCRETE MASONRY UNITS, ASTM C90, GRADE N, TYPE 1 -MOISTURE CONTROLLED, NORMAL WEIGHT.
- 2. INSTALL IN RUNNING BOND, FORM VERTICAL AND HORIZONTAL JOINTS OF UNIFORM THICKNESS.
- PROVIDE MATCHING CORNER, BOND BEAMS, LINTEL, INFILL, ETC. CONCRETE MASONRY UNIT PIECES AS REQUIRED.
- MORTAR FOR REINFORCED MASONRY: ASTM C270, TYPE S USING THE PROPERTY METHOD. COLOR SELECTED BY OWNER, CONCAVE MORTAR JOINTS.
- 5. REINFORCING STEEL: ASTM A615, 60 KSI YIELD GRADE, DEFORMED BILLET STEEL BARS.
- 6. HORIZONTAL REINFORCING TRUSS TYPE, HOT DIPPED GALVANIZED COLD DRAWN STEEL CONFORMING TO ANSI/ASTM A82, 16 SIDE RODS WITH NO. 9 CROSS TIES, AT 16 D.C.
- INSTALL EXPANSION AND CONTROL JOINTS AS REQUIRED BY STANDARD MASTORY
  PRACTICE, VERIFY LOCATIONS WITH ARCHITECT PRIOR TO CONSTRUCTION.

# GROUT MIXES

- GROUT FOR MASONRY WALLS: 5,000 PSI STRENGTH AT 28 DAYS, PREMIXED TYPE IN ACCORDANCE WITH ASTM C94, MIXED IN ACCORDANCE WITH ASTM C476 FINE GROUT.
- 2. REFER TO DRAWINGS FOR LOCATION OF GROUTED MASONRY WALLS
- 3. GROUT LIFT HEIGHTS SHALL BE LIMITED TO 5 FEET. A LIFT OF GROUT SHALL BE PERMITTED TO SET FOR MORE THAN 2 HOURS PRIOR TO PLACING ANY SUBSEQUENT LIFTS.

# STRUCTURAL STEEL

- 1. ALL STRUCTURAL STEEL SHALL BE ASTM A-36, FY=36,000 PSI YIELD POINT OR GREATER.
- 2. ALL STRUCTURAL STEEL SHALL BE PROPERLY GUYED AND BRACED UNTIL THE COMPLETE FLOOR AND ROOF FRAMING IS COMPLETED.
- ALL BOLTS CONNECTIONS SHALL BE DESIGNED FOR LOADS BASED UPON AISC LOAD SPAN TABLES USING 3/4' ROUND A-325 HIGH STRENGTH BOLT, UNLESS OTHERWISE NOTED.
- SEE MECHANICAL DRAWINGS FOR ANY ROOF OPENINGS, PIPE SLEEVES, ETC. WHICH WILL BE REQUIRED.
- 5. ALL TESTING OF WELDS SHALL CONFORM TO THE ANSI/AWS SPECIFICATIONS FOR ULTRASONIC TESTING.
- 6. ALL BEAMS BEARING ON MASONRY SHALL HAVE 8' MINIMUM BEARING ON REINFORCED PILASTERS.
- 7. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A-307, AND SHALL BE HOT-DIPPED GALVANIZED.
- 8. ALL WELDS SHALL BE MADE BY CERTIFIED WELDERS.
- 9. ALL STEEL SHALL BE PRIMED AND PAINTED.

# FRAMING WOOD

- 1. ALL FRAMING WOOD SHALL BE NO. 2 SOUTHERN PINE (SPF) OR BETTER.
- 2. ALL NAILING & FASTENING SHALL BE IN ACCORDANCE WITH THE 2003 IBC CODE FASTENING SCHEDULE, TABLE 2304.9.1, UNLESS NOTED OTHERWISE.
- 3. PROVIDE SIMPSON STRONG TIE CONNECTORS, JOIST HANGERS ETC. AS INDICATED ON DRAWINGS.
- 4. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY AND FOR EXTERIOR USE SHALL BE WOLMANIZED (PRESERVATIVE PRESSURE TREATED)
- 5. BUILDING PAPER: 15# BUILDING PAPER.

# PREFABRICATED WOOD TRUSS OPTION

IF THE CONTRACTOR CHOOSES TO USE PREFABRICATED VOOD TRUSSES, THE FOLLOWING NOTES SHALL APPLY:

- 1. DESIGN OF WOOD TRUSSES IS THE SOLE RESPONSIBILITY OF THE MANUFACTURER FABRICATION AND DESIGN SHALL MEET THE FOLLOWING CRITERIA (LATEST EDITIONS)
  - 1. "NATIONAL DESIGN SPECIFICATION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
    2. "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES" BY THE TRUSS
  - PLATE INSTITUTE.

    3. "TIMBER CONSTRUCTION MANUAL" BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
- 2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS THAT HAVE BEEN SEALED BY A LICENSED STRUCTURAL ENGINEER FOR THE STATE OF ILLINOIS FOR REVIEW. DRAWINGS SHALL SHOW THE DESIGN LOBDS, MEMBER STRESES, AND MEMBER DESIGNS. THE CONTRACTOR SHALL ALSO PROVIDE AN ERECTION DRAWING ALONG WITH THE SHOP DRAWINGS.
- 3. ERECTION AND TEMPORARY BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE COST FOR FURNISHING AND INSTALLING THIS BRACING SHALL BE INCLUDED IN THE CONTRACTORS BID. BRACING REQUIREMENTS SHALL MEET THE TRUSS PLATE INSTITUTES PUBLICATION BYT-76, 'BRACING VOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS.
- 4. TRUSSES SHOWN ARE FOR SCHEMATIC AND DIMENSIONS ONLY. THE MANUFACTURE SHALL DETERMINE THE WEB CONFIGURATION, MEMBER SIZE, MEMBER STRESSES AND LUMBER GRADES.
- 5. WOOD ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS:

  1. TOP CHORD LIVE LOAD = 20 POUNDS PER SQUARE FOOT

  2. TOP CHORD DEAD LOAD = 16 POUNDS PER SQUARE FOOT

  3. BOTTOM CHORD DEAD LOAD = 10 POUNDS PER SQUARE FO
- 6. CAMBER TRUSSES FOR THE DEAD LOAD PLUS 1/2 OF THE LIVE LOAD.
- 7. SEE THE ARCHITECTURAL DRAWINGS FOR ROOF FRAMING

# GUTTERS AND DOWN SPOUTS

1. VERIFY LOCATION AND CONNECTION OF ALL DOWN SPOUTS WITH ARCHITECTURAL DRAWINGS.

# MISCELLANEOUS

- DIMENSION VERIFICATION VERIFY DIMENSIONS OF OPENINGS IN FLOORS, ROOFS, WALLS, AND ASSOCIATED SURROUNDING FRAMING AND ANCHOR BOLT SIZES AND LOCATIONS WITH ANY MECHANICAL EQUIPMENT WITH THE ACTUAL EQUIPMENT FURNISHED FOR THE PROJECT.
- FOR OPENING SLEEVES, BLOCK DUTS AND EMBEDDED ITEMS, NOT SHOWN ON THE STRUCTURAL DRAWTHOS. REFER TO THE ARCHITECTURAL, MECHANICAL, CIVIL, AND ELECTRICAL DRAWTHOS.
- 3. SEE THE ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND SPECIFICATIONS FOR TYPES AND LOCATIONS OF FLOOR AND WALL FINISHES.
- ALL GROUT SHALL BE NONMETALLIC, NON-SHRINK GROUT INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
- 5. THE GRANULAR BASE COURSE SHALL BE APPROVED BY THE ARCHITECT
- 6, ALL COLUMNS AND FOOTINGS ARE CENTERED ON COLUMN LINES, EXCEPT WHERE OTHERWISE SHOWN ON THE PLANS OR SECTIONS.
- DURING CONSTRUCTION OPERATIONS, TEMPORARY BRACING AND/OR SHORING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING EQUIPMENT AND THE DEFRATION OF SAME. SUCH BRACING AND/OR SHORING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY.
- 8. NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
- 9, NO CHANGE IN SIZES OR DIMENSIONS OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
- 10. OPENING'S 1'-0' AND LESS ON THE RODF ARE GENERAL NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO THE ARCHITECTURAL AND MECHANICAL DRAWINGS
- 11. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON THE STRUCTURAL FRAMING AND LOAD BEARING WALLS. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF STRUCTURAL ELEMENTS AT ANY TIME DURING THE CONSTRUCTION.
- 12. DO NOT SCALE THESE DRAWINGS. USE DIMENSIONS.
- 13. THE CUNTRACTUR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD. EXPANSION JOINTS SHOWN ON THE DRAVINGS HAVE BEEN DESIGNED TO ACCOMMODATE ANTICIPATED THERMAL MOVEMENT AFTER
- 14. THE CONTRACTOR SHALL INFORM THE ARCHITECT IN VRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR SUCH DEVIATION BY THE ARCHITECT'S APPROVAL OF THE SHOP DRAWINGS, PRODUCT DATA, ETC. UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ARCHITECT OF SUCH DEVIATIONS AT THE TIME OF SUBMISSION, AND THE ARCHITECT HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
- 15. ALL ITEMS WHICH IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, DMISSIONS, CONTRADICTIONS OR AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. PLANS AND/OR SPECIFICATIONS WILL BE CORRECTED, OR WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, DMISSION, CONTRADICTION OR AMBIGUITY WILL BE MADE BY THE ARCHITECT BEFORE THE EFFECTED VORK PROCEEDS.



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