SEE SHEET 2 FOR SHEET INDEX

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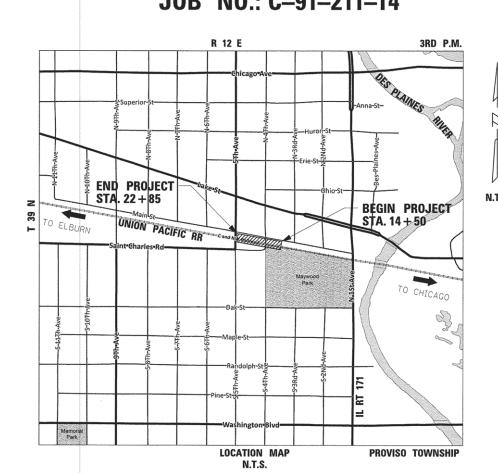
SEE SHEET 2 FOR LIST OF STATE STANDARDS

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** 

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

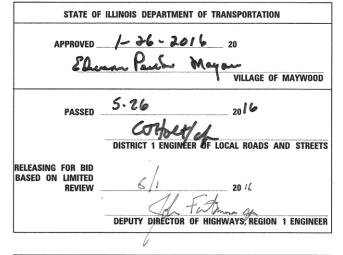
MAIN STREET - MAYWOOD COMMUTER STATION **5TH AVENUE TO 4TH AVENUE** SECTION 13-00136-00-RR **PROJECT NO. CMM-4003 (277) VILLAGE OF MAYWOOD COOK COUNTY** JOB NO.: C-91-211-14



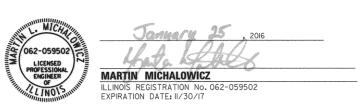
J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

COUNTY 13-00136-00-RR COOK 65 1 ILLINOIS CONTRACT NO. 61C74

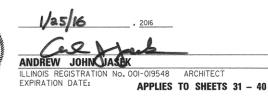




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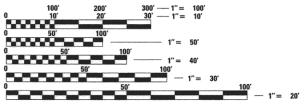
ANDREW JOH

JASEK

DESIGN DESIGNATION AND TRAFFIC DATA 5TH AVENUE (FAU 2742) FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

POSTED SPEED = 25 MPH EXISTING ADT = 8200 (2010)

FUNCTIONAL CLASSIFICATION: LOCAL ROAD POSTED SPEED = 25 MPH EXISTING ADT = 900 (2009)



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.

CONTRACT NO. 61C74



CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 W. Higgins Road, Suite 600 9575 W. Higgins Road, St. Rosemont, Illinois 60018 (847) 823-0500

FGM ARCHITECTS 1211 West 22nd Street, Suite 705 OAK BROOK, IL 60523

GROSS LENGTH = 835.00 FT. = 0.158 MILE

NET LENGTH = 835.00 FT. = 0.158 MILE

## GENERAL NOTES

- ALL DIMENSIONS SHOWN ON THE PLANS ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE SPECIFIED.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE AND PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH SHALL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME, HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER FROM TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PAVEMENT CONNECTIONS WITH THE SEWERS ARE BUILT AND IN SERVICE. ALL PUMPING SHALL ENTER A SETTLING BASIN SYSTEM, APPROVED BY THE ENGINEER, BEFORE PASSING INTO THE EXISTING DRAINAGE SYSTEM. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED DRAINAGE ITEMS.
- 3. THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES WHEN CONSIDERED NECESSARY BY THE ENGINEER, BY METHODS APPROVED BY THE ENGINEER, AND HE SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY TO PREVENT SETTLEMENT, DISPLACEMENT OR CHANGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE ITEM BEING INSTALLED.
- 4. THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF THE ROAD/ SITE DURING CONSTRUCTION OF THIS PROJECT TO IDOT AND LOCAL STANDARD.
- THE UTILITY COMPANIES OR THEIR CONTRACTORS WILL PERFORM THE REQUIRED ADJUSTMENT TO THEIR UTILITIES WITHIN THE TIMEFRAME SPECIFIED IN THIS CONTRACT.
- 6. VILLAGE DOES NOT GUARANTEE THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS REGARDING UTILITIES, EITHER PUBLIC OR PRIVATE, SUCH AS SEWERS, MANHOLES, CATCH BASINS, GAS AND WATER MAINS, TELEPHONE AND ELECTRICAL DUCT LINES AND SIMILAR STRUCTURES. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION OPERATIONS, AND SHALL REPORT TO THE ENGINEER ANY OMISSIONS AND DIFFERENCES FROM THE LOCATIONS SHOWN ON THE PLANS.
- 7. 48 HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL JULLIE. TO HAVE THE LOCATION OF EXISTING UNDERGROUND UTILITIES STAKED. 48 HOURS BEFORE ANY EXCAVATION IN OR ADJACENT TO UPRR RIGHT-OF-WAY CALL UPRR AT 312-496-4738, 312-496-4750 AND 312-496-4728.
- 8. PRIOR TO STARTING CONSTRUCTION AN INSPECTION OF EXISTING MANHOLES
  AND CATCH BASINS WILL BE MADE BY THE VILLAGE AND THE CONTRACTOR TO
  DETERMINE THE AMOUNT OF EXISTING DEBRIS IN THESE STRUCTURES. UPON
  COMPLETION OF THE CONTRACT, THE CONTRACTOR SHALL CLEAN ONLY THOSE
  STRUCTURES WHERE DEBRIS HAS BEEN ADDED DUE TO CONSTRUCTION. THIS
  WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED
  IN THE COST OF MOBILIZATION.
- 9. ALL LIVE DRAINS SHALL BE RECONNECTED TO THE PROPOSED SEWER, THIS WORK SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE STANDARD SPECI-FICATIONS (LATEST EDITION). PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAL FOOT OF THE SIZE AND TYPE OF SEWERS REQUIRED.
- 10. THE CONTRACTOR SHALL CHECK THE ELEVATIONS AT THE PROPERTY LINE BEFORE SETTING THE TOP OF CURB ELEVATIONS AND, IF NECESSARY, SHALL ALTER THE CURB EXPOSURE AND/OR GUTTER ELEVATION TO MEET ADJACENT PROPERTY LINE ELEVATIONS TO THE SATISFACTION OF THE ENGINEER.
- 11. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT ABUTTING PROPERTY, UTILITIES, PEDESTRIANS AND VEHICULAR TRAFFIC.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY IF APPLICABLE FOR ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
- 13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING FENCES AND GUARDRAILS DURING EXCAVATION AND ANY DAMAGE TO THE FENCES OR GUARDRAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPLACE THE DAMAGED FENCE OR GUARDRAIL AT HIS EXPENSE AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 14. NO EXCAVATION SHALL BE PERMITTED MORE THAN ONE FOOT (1') FROM THE BACK OF PROPOSED CURB AND GUTTER WHERE TREE IS TO REMAIN. HAND EXCAVATION SHOULD BE PERFORMED IF ROOTS ARE PRESENT AND ALL WORK REQUIRED TO PRESERVE TREE ROOTS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 15. ANY REFERENCE TO "STANDARD SPECIFICATIONS" THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERRETED TO BE THE ILLINOIS DEPART-MENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," ADDPTED APRIL 1, 2016.
- 16. WHENEVER A PORTION OF THE EXISTING SIDEWALK SHALL BE REMOVED, THE CONTRACTOR SHALL SAWCUT AND REMOVE THE SIDEWALK AS DIRECTED BY THE ENGINEER. THE SAWCUTTING SHALL BE INCLUDED IN THE COST OF SIDEWALK REMOVAL. A FULL DEPTH SAW CUT SHALL BE USED.
- 17. ONE-HALF INCH (1/2") THICK EXPANSION JOINTS SHALL BE PLACED IN THE SIDEWALK, AND AT ALL STRUCTURES SUCH AS LIGHT STANDARDS, TRAFFIC LIGHT STANDARDS AND MANHOLES WHICH EXTEND THROUGH THE SIDEWALK.
- 18. THE CONTRACTOR SHALL MAINTAIN COMPLETE ACCESS TO ALL BUILDINGS AND PROPERTY ADJACENT TO THE PROPOSED IMPROVEMENT.

- 19. IN LOCATIONS WHERE THE MAIN SEWER IS NOT BEING REPLACED AND THE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE AND REPLACE THE DAMAGED FACILITIES AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- O. THE CONTRACTOR WILL BE REQUIRED TO DISPOSE OF ALL MATERIALS INCLUDING THOSE GENERATED BY UPRR FORCES EXCAVATED OR REMOVED DUE TO UPRR CONSTRUCTION OPERATIONS. THIS WILL BE PAID FOR AS EARTH EXCAVATION. NO PAYMENT WILL BE MADE FOR HAULING OR TRUCKING THE MATERIALS.
- 21. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACEMENT OF ANY SURVEY MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION.
- SIDEWALK ACCESSIBILITY RAMPS SHALL NOT BE CONSTRUCTED DIRECTLY OVER EXISTING OR PROPOSED DRAINAGE STRUCTURES.
- 44. ALL DRAIN TILES DISCOVERED DURING CONSTRUCTION SHALL BE TIED INTO THE PROPOSED STORM SEWER WITH A STRUCTURE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE STRUCTURE WORK.
- 25. THE CONTRACTOR SHALL PROTECT ALL SPRINKLER HEADS.
- 26. THE CONTRACTOR SHALL COORDINATE WITH METRA, THE VILLAGE OF MAYWOOD AND THE UNION PACIFIC RAILROAD COMPANY REGARDING PHASING OF WORK AND ALTERNATE ROUTES WITH SIGNAGE TO MINIMIZE THE IMPACT TO THE COMMUTERS DURING CONSTRUCTION.
- 27. UPRR FLAGMAN IS REQUIRED WHEN MEN OR EQUIPMENT ARE WITHIN 25' OF THE RAILROAD TRACKS.
  WORK HOURS ARE MON. FRI. FROM 9AM TO 3:30PM CONTACT KANDICE MILLER 312-496-4738 OR
  ANESHIA LYMON-SMITH 312-496-4750 FOR FLAGGING. PROVIDE 72 HOUR ADVANCE NOTICE FOR A FLAGGER
  REQUEST, AND A 24 HOUR NOTICE FOR CANCELLATION.
- 28. THE CONTRACTOR SHALL COORDINATE HIS MATERIAL SUPPLY, DEMOLITION, DEBRIS REMOVAL AND INSTALLATION WORK WITH RAILROAD EMPLOYEES IN A TIMELY FASHION OR WITHIN 48 HOURS OF RAILROADS REQUEST SO NO CONSTRUCTION WORK IS DELAYED.
- ADA PARKING LOCATED IN SHARED LOT SHALL ACCOMMODATE COMMUTER ADA PARKING AND NOT BE SIGNED AS AN HOURLY MAX PARKING.
- 30. CONTRACTOR MUST GO THROUGH UNION PACIFIC SATEFY TRAINING THROUGH CONTRACTOR ORIENTATION, AS WELL AS E-RAILSAFE.
- 31. CONTRACTOR MUST NOTIFY METRA AND UNION PACIFIC RAILROAD 10 DAYS IN ADVANCE OF STARTING WORK.

## LIST OF HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREV, & PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424026-01	ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
424031-01	MEDIAN PEDESTRIAN CROSSINGS
602001-02	CATCH BASIN TYPE A
602401-03	MANHOLE TYPE A
604051-04	FRAME & GRATE TYPE 11
606001-06	CONCRETE CURB TYPE B AND COMINBATION CONCRETE CURB AND GUTTER
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERTIONS - DAY ONLY
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-05	TRAFFIC CONTROL DEVICES
814001-03	HANDHOLES

## DISTRICT 1 DETAILS

BD-22	PAVEMENT PATCHING FOR HMA SURFACE PAVEMENT	
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS	;

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5	ULTIMATE TYPICAL SECTIONS
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7	EXISTING CONDITIONS
8	REMOVAL PLAN
9	INTERIM SITE PLAN
10	ULTIMATE SITE PLAN
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### 

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET

SCALE:

MAYWOOD METRA STATION		.A.	SECTION	COUNTY	TOTAL	SHEET NO.	
GENERAL NOTES			13-00136-00-RR	COOK	65	2	
		CONTRACT NO. 61					
OF SHEETS STA. TO	STA.		THE THOUSE FED. AT	PROJECT			

## SUMMARY OF QUANTITIES

		SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						
	20200100	EARTH EXCAVATION	CU YD	TOTAL QUANTITY 405	0004 ROADWAY 405	0021 SAFETY	0031 LANDSCAPING	0042 TRAINEES	0043 UTILITIES	0044 OTHER	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CUYD	200	200						
	20400800	FURNISHED EXCAVATION	CYYD	550	550						
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	440	440						
		TRENCH BACKFILL	CU YD	125					125		
		SEEDING, CLASS 3	ACRE	0.25			0.25		123		
1028		NITROGEN FERTILIZER NUTRIENT	POUND	5.5			5.5				
		PHOSPHORUS FERTILIZER NUTRIENT	POUND	5.5			5.5				
		POTASSIUM FERTILIZER NUTRIENT	POUND	5,5			5.5				
A COLUMN	25200110	SODDING, SALT TOLERANT	SQ YD	275			275				
, reports	25200200	SUPPLEMENTAL WATERING	UNIT	5			5				
	28000510	INLET FILTERS	EACH	3	3						
<del></del>	35101582	AGGREGATE BASE COURSE, TYPE B 2"	SQ YD	445	445						
	35102100	AGGREGATE BASE COURSE, TYPE 8 9"	SQ YD	585	585						
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	6315	631 <b>5</b>						
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	235	235						
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	410	410						
		PORTLAND CEMENT CONCRETE PAVEMENT 6"	SQ YD	260	260						
			SQ FT	3995							
		PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH			3995						
+		DETECTABLE WARNINGS	SQ FT	9		9					
	44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	1140	1140						
	44000173	HOT-MIX ASPHALT SURFACE REMOVAL, 6"	SQ YD	1465	1465						
	44000400	GUTTER REMOVAL	FOOT	330	330						
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	925	925						
	44000600	SIDEWALK REMOVAL	SQ FT	2096	2096						
	44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	170	170						
	50200100	STRUCTURE EXCAVATION	CU YD	1250	1250						
	50300100	FLOOR DRAINS	EACH	3	3						
	50300225	CONCRETE STRUCTURES	CUYD	392	196					196	
- 1	50300285	FORM LINER TEXTURED SURFACE	SQ FT	1310		7				1310	
-		REINFORCEMENT BARS, EPOXY COATED	POUND	58800	29400					29400	
Ž.					25400					29400	
		STORM SEWERS, CLASS B, TYPE 1 10"	FOOT	2					2		
		STORM SEWER REMOVAL 10"	FOOT	13					13		
Δ	56100035	DUCTILE IRON WATER MAIN TEE, 10" X 8"	EACH	1					1		
Δ	56100700	WATER MAIN 8"	FOOT	10					10		
Δ	56100800	WATER MAIN 10"	FOOT	300	-				300		
Δ	56109410	DUCTILE IRON WATER MAIN FITTINGS 10" 22.50 DEGREE BEND	EACH	4					4		
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	85					85		
	60100925	PIPE DRAINS 8"	FOOT	100		772			100		
	60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	3				er in ter	3		
		MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2					2		
		REMOVING CATCH BASINS	EACH	3					3		
					445				,		
	00000000	CONCRETE CURB, TYPE B	FOOT	445	445						

	CODE NO.	SUMMARY OF QUANTITIES  ITEM	UNIT	TOTAL QUANTITY	0004 ROADWAY	0021 SAFETY	CONSTRUCTION 0031 LANDSCAPING		0043 UTILITIES	0044 OTHER
		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	825	825	0021 SAFETT	UUSI LANDSCAPING	0042 TRAINEES	0043 0 111111111111111111111111111111111	0044 OTHER
	60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	40	40					
· d	67100100	MOBILIZATION	LSUM	1	1					
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	810	810					
		SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	405						
<del></del>					405					
		METAL POST - TYPE A	FOOT	135	135					
Δ		THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	18.4	18.4					
Δ	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	740	740					
Δ	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	270	270					
Δ	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	500					500	
Δ	81028230	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	400					400	
Δ	81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	500					500	
Δ	81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	200					200	
Δ	81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	200					200	
Δ		UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	100					100	
Δ		HANDHOLE, COMPOSITE CONCRETE	EACH	4						
					,				4	
Δ		ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	1500					1500	
Δ	83000198	LIGHT POLE, ALUMINUM, 25 FT. M.H., 10 FT. MAST ARM	EACH	4					4	
Δ	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	40					40	
Δ	*X0322080	BUS SHELTER REMOVE AND RELOCATE	EACH	1	1	***************************************				
Δ	*X0322869	REMOVE TIMBER RETAINING WALL	LSUM	1						1
Δ	*X0323444	DECORATIVE STEEL RAILING	FOOT	365						365
Δ	*X0325789	INTERPRETIVE SIGNAGE COMPLETE	EACH	21						21
	*X0326696	SIGN AND POST	EACH	4	4					
Δ	*X0323553	ORNAMENTAL FENCE, WROUGHT IRON	FOOT	353		353				
Δ		PLUMBING EQUIPMENT, ACCESSORIES AND RELATED SYSTEMS	LSUM	1						
										1
Δ			LSUM	1		····				1
Δ			EACH	4					4	
Δ	*X5610651	ABANDON EXISTING WATER MAIN, FILL WITH CLSM	FOOT	295					295	
Δ	*X5610750	WATER MAIN LINE STOP 10"	EACH	2					2	
Δ	*X5630010	CUT AND CAP EXISTING 10" WATER MAIN	EACH	2					2	
	*X5860110	GRANULAR BACKFILL FOR STRUCTURES	CY YD	300	150					150
(879	*X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1		1				
Δ	*X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	16					16	
Δ	*XX007056	BUILDING	LSUM	1						1
Δ			LSUM	1						1
			LSUM	1		1				
					222	*				
Δ			FOOT	322	322					
4.37			SQ FT	1660						1660
Δ	*Z0044298	PRESSURE CONNECTION TO EXISTING WATER MAIN	EACH	1					1	
V. Car	*Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	LSUM	1						1
Δ	*Z0056900	SANITARY SEWER 8"	FOOT	17					17	
	*20076600	TRAINEES	HOUR	500				500		
		TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500				500		

<sup>\*</sup> SPECIAL PROVISION Δ SPECIALITY ITEMS

SCALE:

A CONTRACTOR OF THE PARTY OF TH	VILLAGE OF MAYWOO
(1) A	40 MADISON STREET
1881	MAYWOOD, IL 60153

	USER NAME = mmichalowicz	DESIGNED	-	MBT	REVISED	_	
1		DRAWN		MBT	REVISED		
-	PLOT SCALE = 10'	CHECKED	-	MEK	REVISED		
1	PLOT DATE = 2/19/2016	DATE		01/25/16	REVISED	-	

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	MAYWOOD	METRA STATION		F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
SUMMARY OF QUANTITIES					13-00136-00-RR	COOK	65	3
						CONTRAC	T NO.	61C74
SHEET	OF .	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	/ .	

## ROW METRA ME1 13' 17.6' EXISTING PLATFORM-EX & MAIN STREET € EX TRACK-EXISTING SOUTH-PLATFORM VARIES 8023 NORTH PLATFORM TYPICAL SECTION (LOOKING WEST) STA. 21+35 TO STA. 22+81.17 49.5 PROPOSED CONCRETE -WARMING STATION F.F. = 632.3 +/-PROPOSED FENCE-EX & MAIN STREET EXISTING PLATFORM-TO REMAIN € EX TRACK-EXISTING SOUTH-VARIES 13 0 023 0 5 6 WARMING STATION TYPICAL SECTION (LOOKING WEST) STA. 20+20 TO STA. 21+35 100' 49.5' € EX TRACK-EX & MAIN STREET 17.3' VARIES\_, EXISTING SOUTH PROPOSED FENCE-REGRADE EXISTING GROUND (2:1 OR LESS) -SEE DETAIL "A" EAST PARKING LOT TYPICAL SECTION (LOOKING WEST) STA. 14+55 TO STA. 20+20

## HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

AIR VOIDS @Ndes

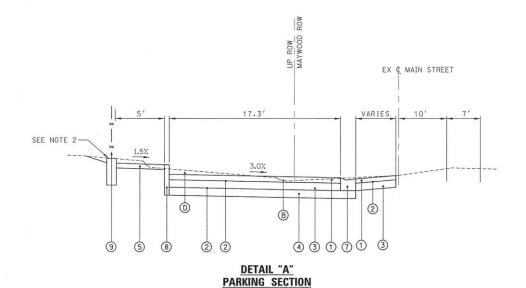
HOT-MIX ASP	HALT SURFACE COL	JRSE. MIX "D". N	N50 - 2 1/2" 4	% @ 50	Gyr.
HOT-MIX ASP	HALT BINDER COUF	RSE. IL-19.0. NE	50 - 3 1/2" 4	% @ 50	Gyr.
CLASS D PAT	CHES. TYPE II -	6"	4	% @ 70	Gyr.

## HMA NOTES:

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LB/SQ YD/IN.
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- 3. FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS.
- 4. FOR RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- 5. PATCH TO BE USED IF NEED BE.

### LEGEND:

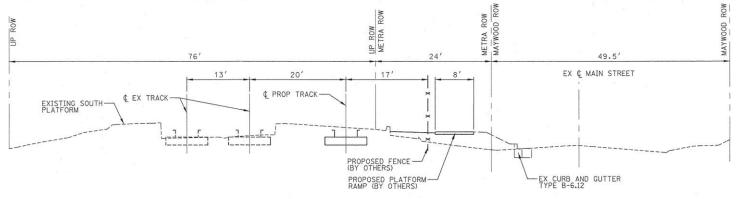
- EXISTING FENCE
- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
  - EARTH EXCAVATION
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 2 1/2"
- BITUMINOUS MATERIAL (TACK COAT)
- 3 HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 - 3 1/2"
- 4 9" AGGREGATE SUBGRADE
- 5"- PCC SIDEWALK ON 2" COMPACTED AGGREGATE
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12, DEPRESSED
- 8 CONCRETE CURB, TYPE B
- 9 PROPOSED ORNAMENTAL FENCE, WROUGHT IRON
- 10 RETAINING WALL
- 11 FURNISHED EXCAVATION
- POROUS GRANULAR EMBANKMENT



- 1. PROPOSED TRACK WILL BE CONSTRUCTED AS PART OF METRA/UPRR THIRD MAIN LINE TRACK PROJECT. SHOWN HERE FOR HORIZONTAL DISTANCE PURPOSES ONLY. SEE ULTIMATE TYPICAL SECTIONS SHEETS FOR DETAILS.
- 2. AT A MINIMUM THE TOP OF WALL IS BASED ON FUTURE UPRR THIRD TRACK TYPICAL SECTION AT 15.5° OFFSET WITH AN ADDITIONAL THREE (3) INCHES ADDED TO CREATE A LIP.

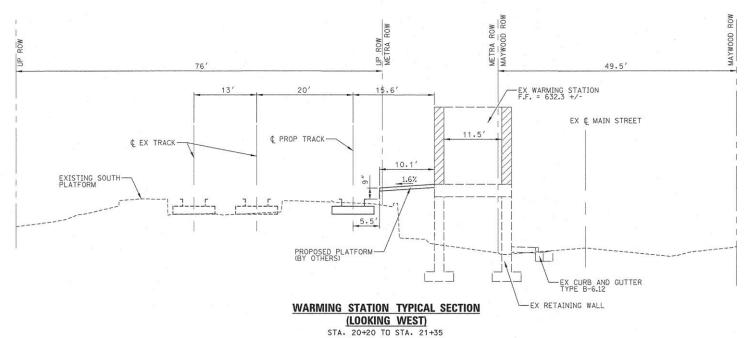
TOTAL SHEET NO.

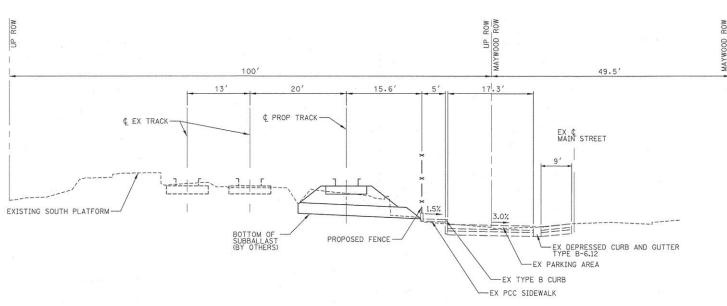
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VILLAGE	VILLAGE OF MAYWOOD  40 MADISON STREET		DRAWN -	MBT	REVISED -	STATE OF ILLINOIS	INTERIM						13-00136-00-RR	СООК	65 4
40 MADISON STREET MAYWOOD, IL 60153		PLOT SCALE = 10'	CHECKED -	MEK	REVISED -	DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS						10 00100 00 1111	CONTRAC	CT NO. 61C74
San and San an	PLOT DATE = 2/19/2016	DATE -	01/25/16	REVISED -	* ** ** ** ** ** ** ** ** ** ** ** ** *	SCALE:	SCALE: SHEET OF SH			TO STA.		ILLINOIS FED.	AID PROJECT		



## NORTH PLATFORM TYPICAL SECTION (LOOKING WEST)

STA. 21+35 TO STA. 22+75





## EAST PARKING LOT TYPICAL SECTION (LOOKING WEST)

STA. 14+55 TO STA. 20+20

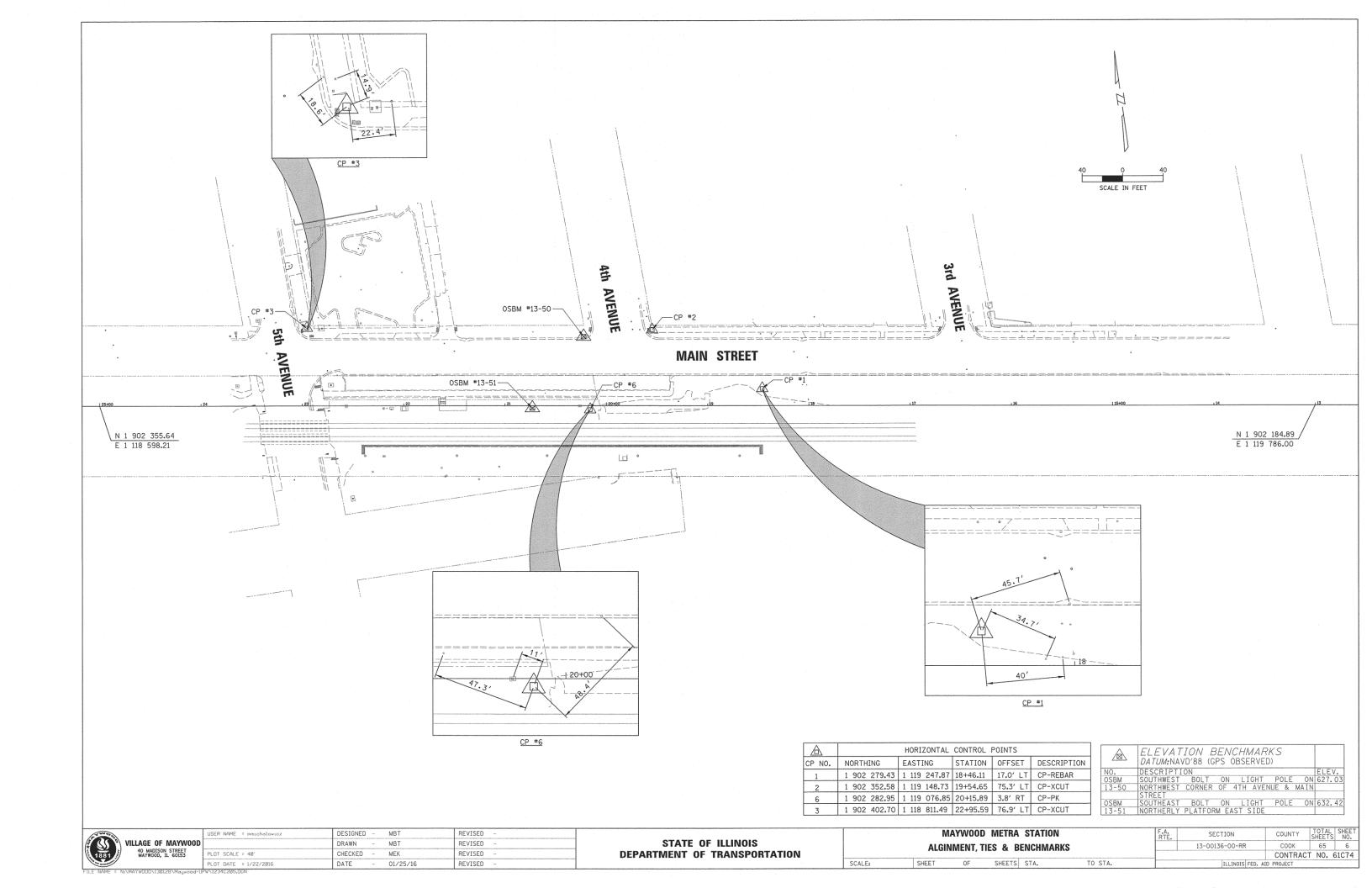
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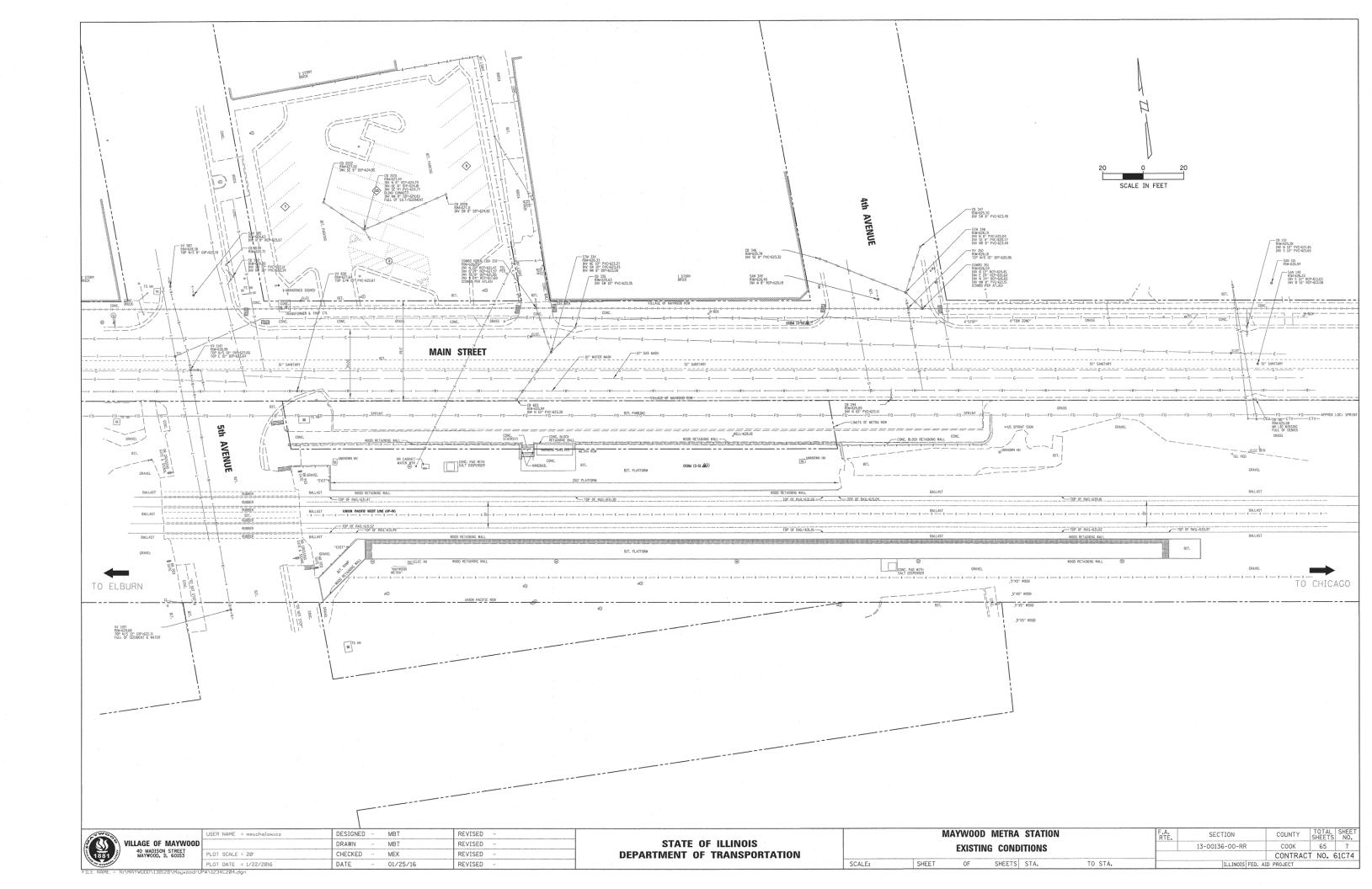
1 PROPOSED FENCE

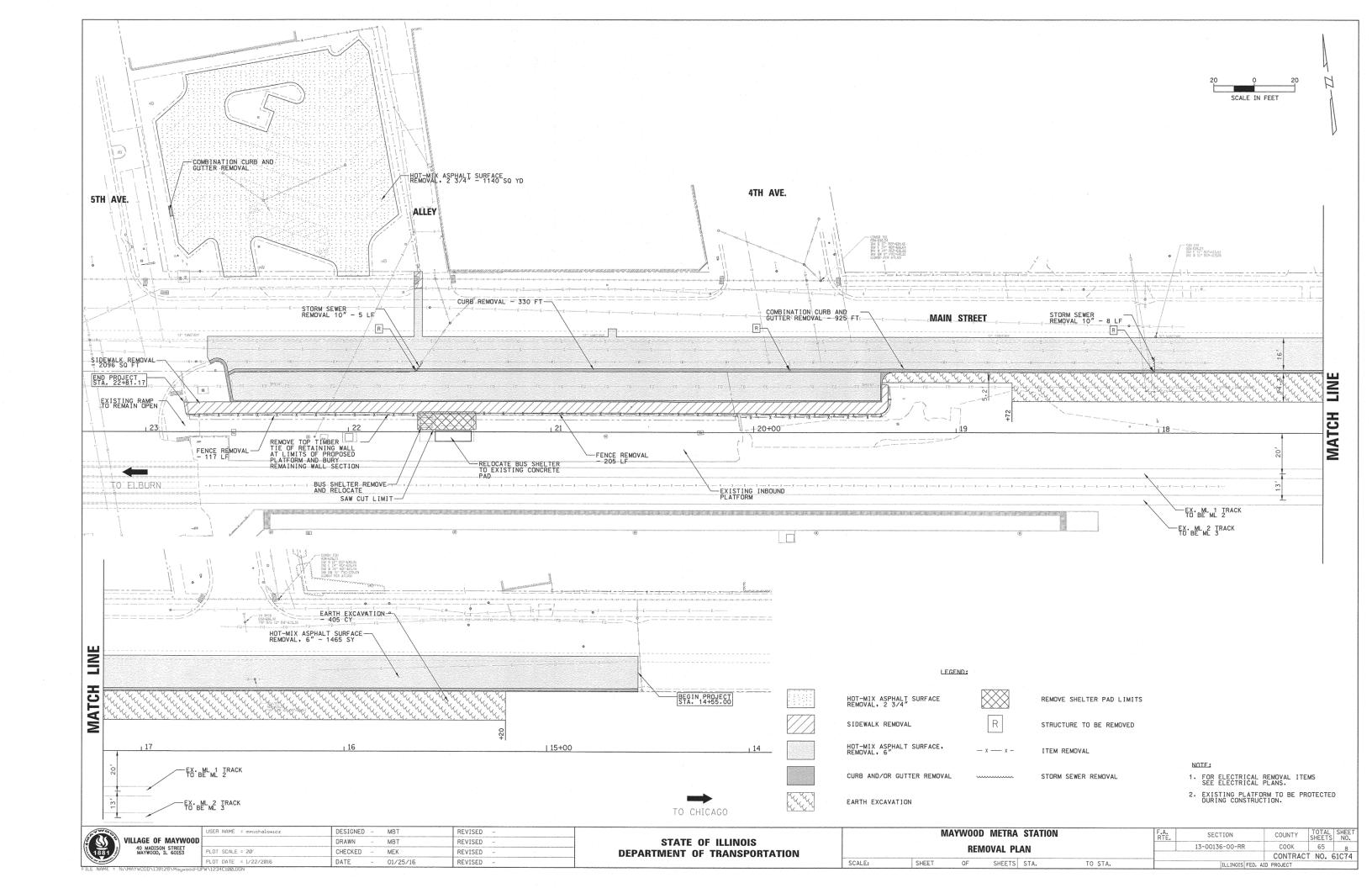
2 PROPOSED PLATFORM

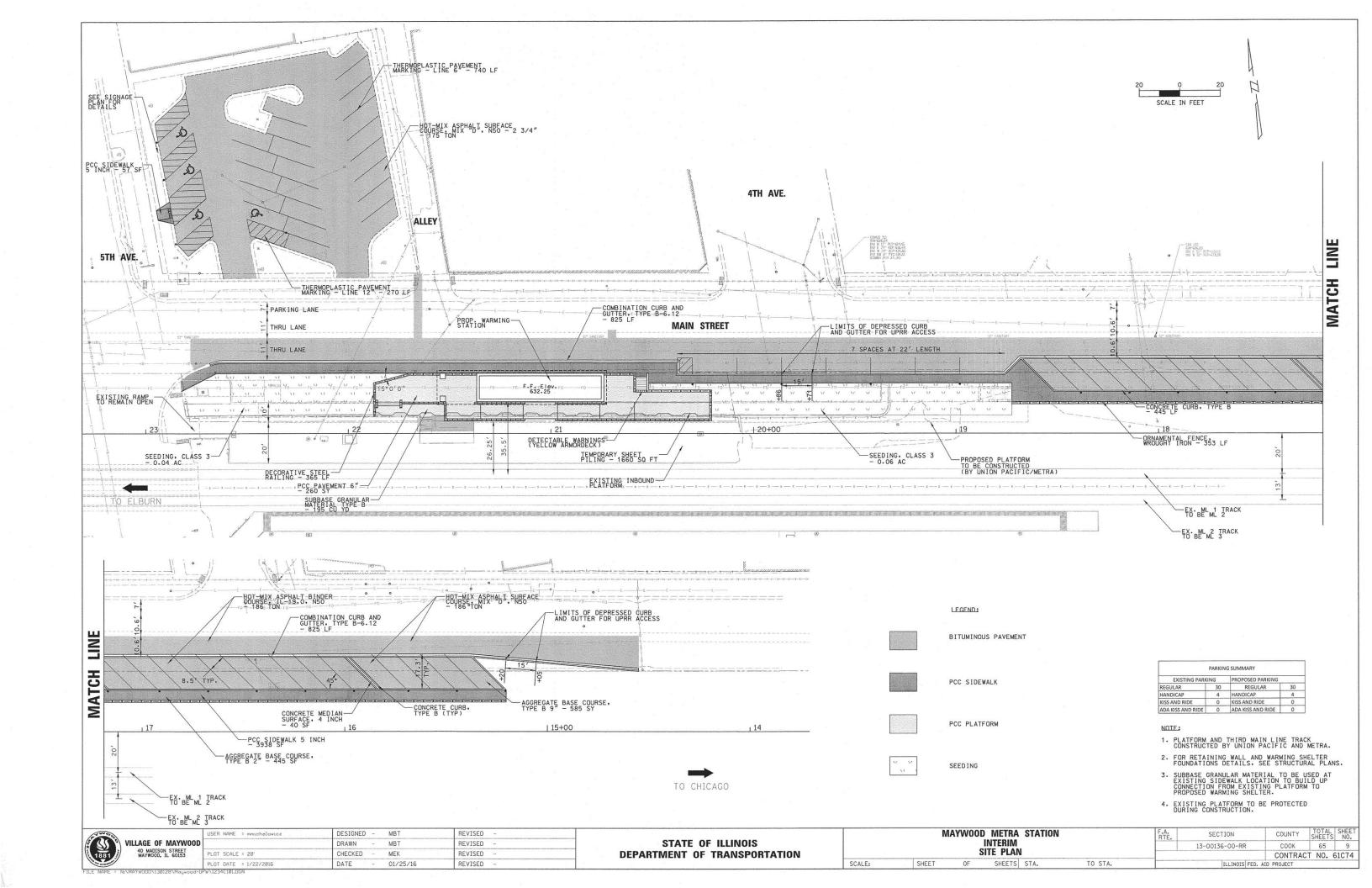
FOR INFORMATION PURPOSES ONLY

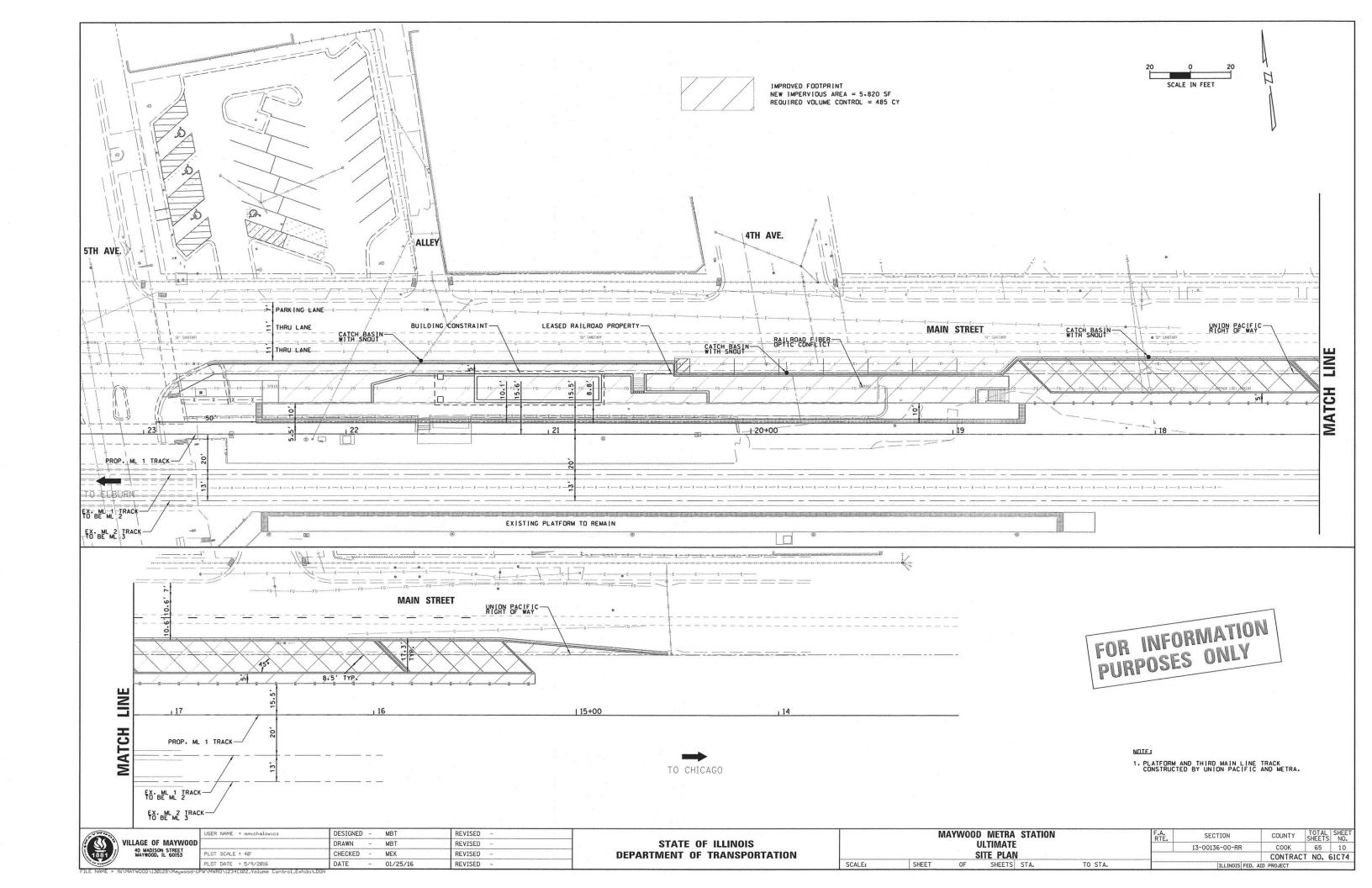
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VILLAGE OF MAYWOOD		DRAWN -	MBT	REVISED -	STATE OF ILLINOIS				ULTIMATE		11112	13-00136-00-RR	COOK	65 5
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	PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	

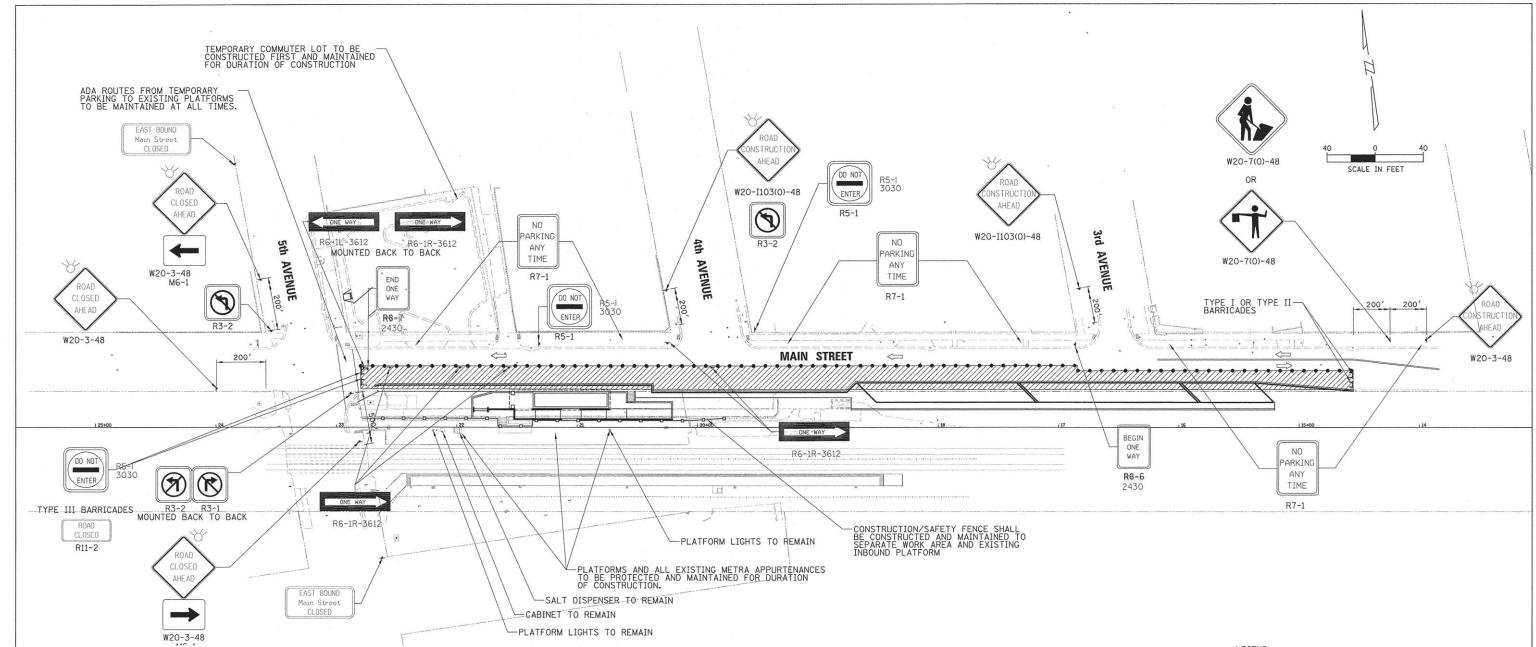












## SUGGESTED STAGES OF CONSTRUCTION

- 1. PARKING LOT AT NORTHEAST CORNER OF 5TH AVENUE AND MAIN STREET TO BE RESURFACED AND RESTRIPED. LOT TO BE USED FOR METRA COMMUTERS INCLUDING ADA SPACES.
- 2. RELOCATE BUS SHELTER AT EXISTING METRA PLATFORM.
- 3. ESTABLISH ADA ROUTES FROM TEMPORARY PARKING TO EXISTING PLATFORMS WHICH NEED TO BE MAINTAINED AT ALL TIMES.

ESTIMATED CONSTRUCTION TIME: 2 WEEKS

## STAGE 2

- 1. INSTALL CONSTRUCTION FENCE BETWEEN EXISTING PLATFORM AND PROPOSED CONSTRUCTION LIMITS.
- 2. INSTALL TRAFFIC CONTROL.
- 3. BEGIN DEMOLITION ALONG MAIN STREET FOR CONSTRUCTION OF PROPOSED WARMING SHELTER AND PARKING. ESTIMATED CONSTRUCTION TIME: 2 WEEKS

## STAGE 3

- 1. ONCE WARMING SHELTER IS COMPLETE, BEGIN CONSTRUCTION OF RAMP CONNECTION BETWEEN EXISTING PLATFORM AND PROPOSED WARMING SHELTER.
- 2. ONCE PARKING ALONG MAIN STREET IS COMPLETE, MAIN STREET PARKING IS TO BE USED. ONLY ADA SPACES WITHIN THE PARKING LOT ARE TO BE USED FOR METRA COMMUTERS. ESTIMATED CONSTRUCTION TIME: 10 WEEKS

## STAGE 4

- 1. ONCE RAMP CONNECTION IS COMPLETE, WARMING SHELTER TO BE USED AND BUS SHELTER TO BE REMOVED.
- 2. ONCE APPROVED BY RESIDENT ENGINEER, TRAFFIC CONTROL CAN BE REMOVED. ESTIMATED CONSTRUCTION TIME: 1 WEEK

## LEGEND:



WORK AREA

CONE, DRUM OR BARRICADE (NOT REQUIRED FOR MOVING OPERATIONS)

SIGN ON PORTABLE OR PERMANENT SUPPORT

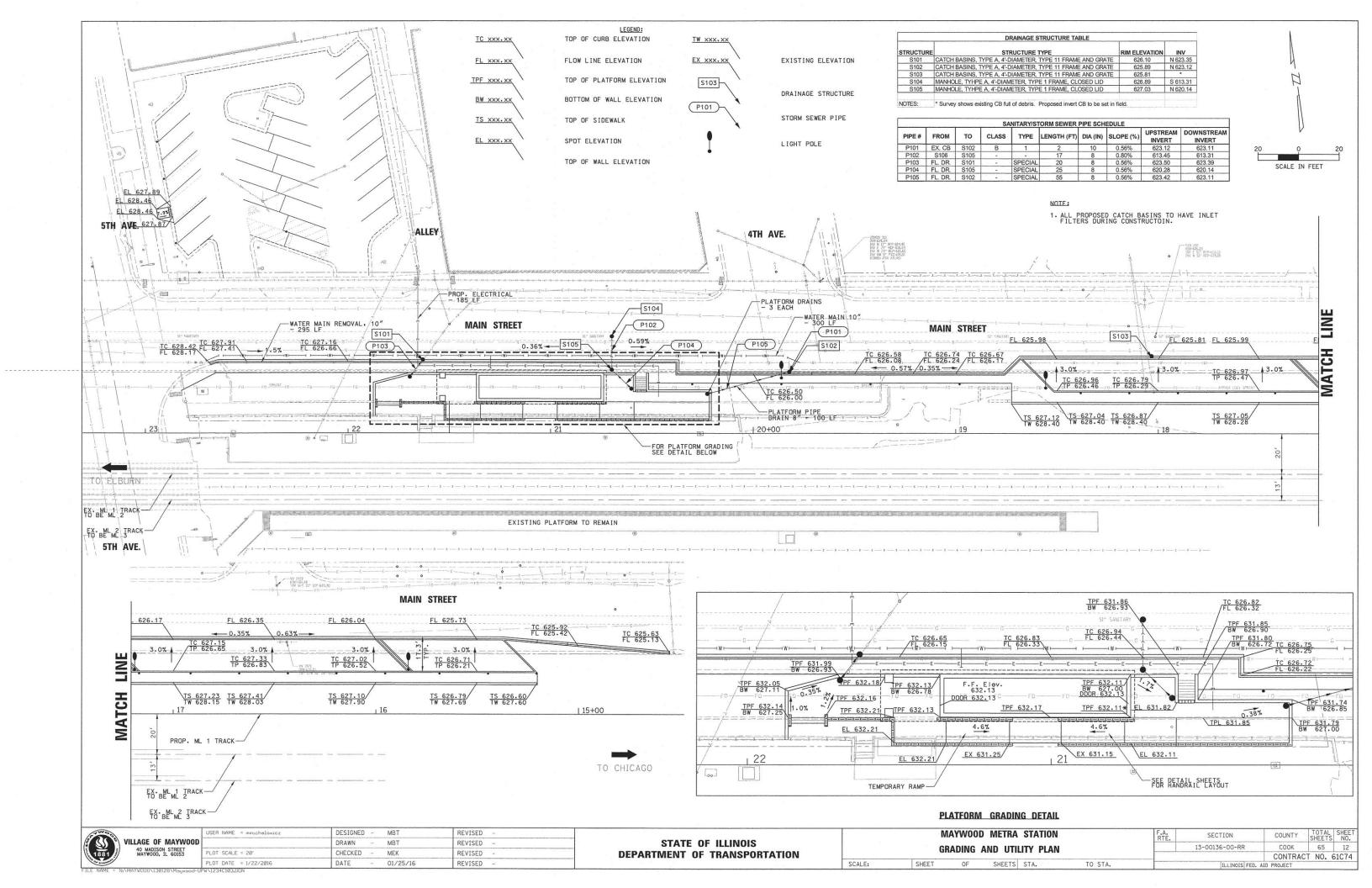
BARRICADE OR DRUM WITH FLASHING LIGHT CONSTRUCTION/SAFTEY FENCE

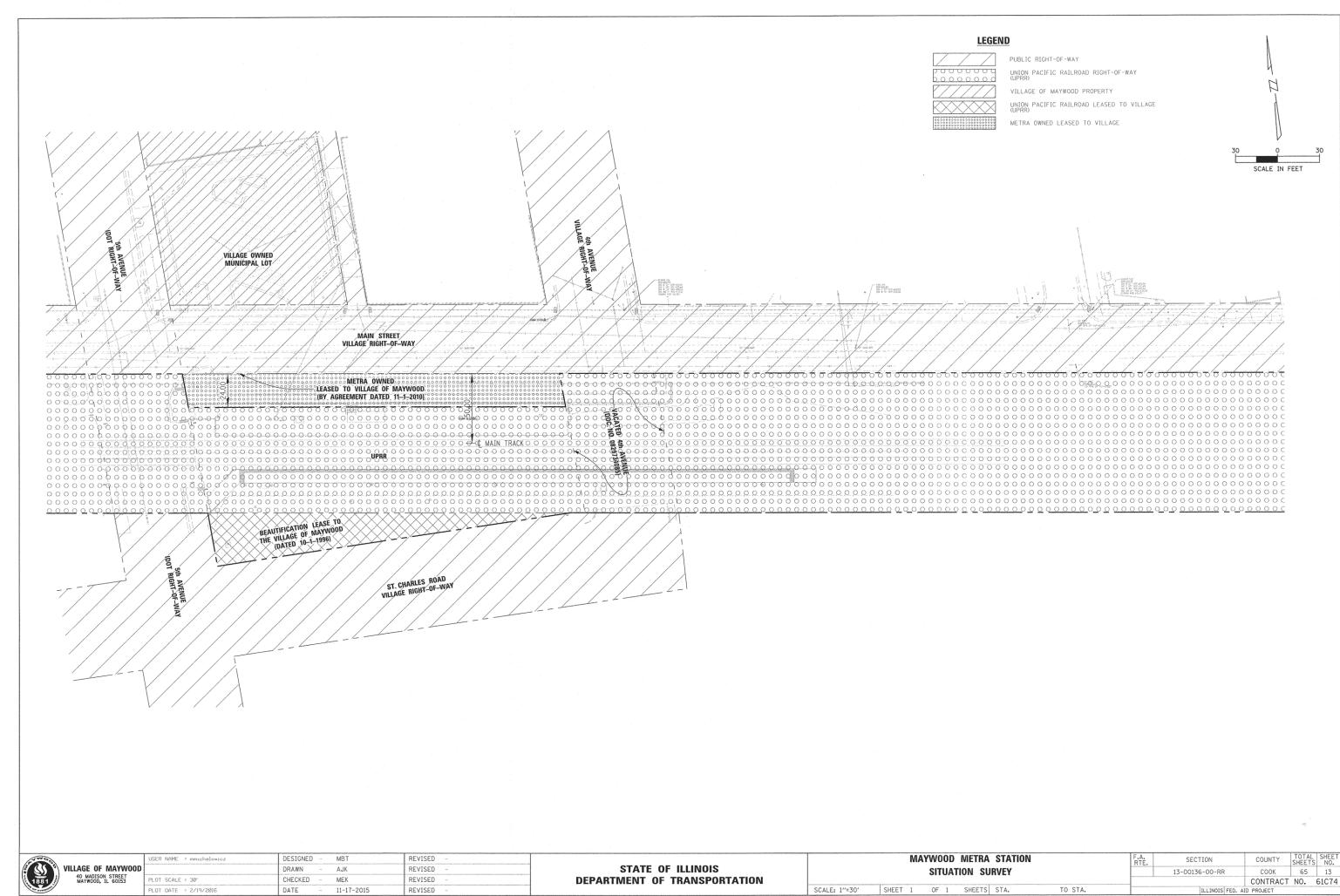
- CONES AT 25' (8m) CENTERS FOR 250' (75m). ADDITIONAL CONES MAY BE PLACED AT 50' (15m) CENTERS. WHEN DRUMS OR TYPE I OR TYPE II BARRICADES ARE USED THE INTERVAL BETWEEN DEVICES MAY BE DOUBLED. 1
- CONES, DRUMS OR BARRICADES AT 20' (6m) CENTERS.
- TO BE REMOVED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN 1 HOUR.

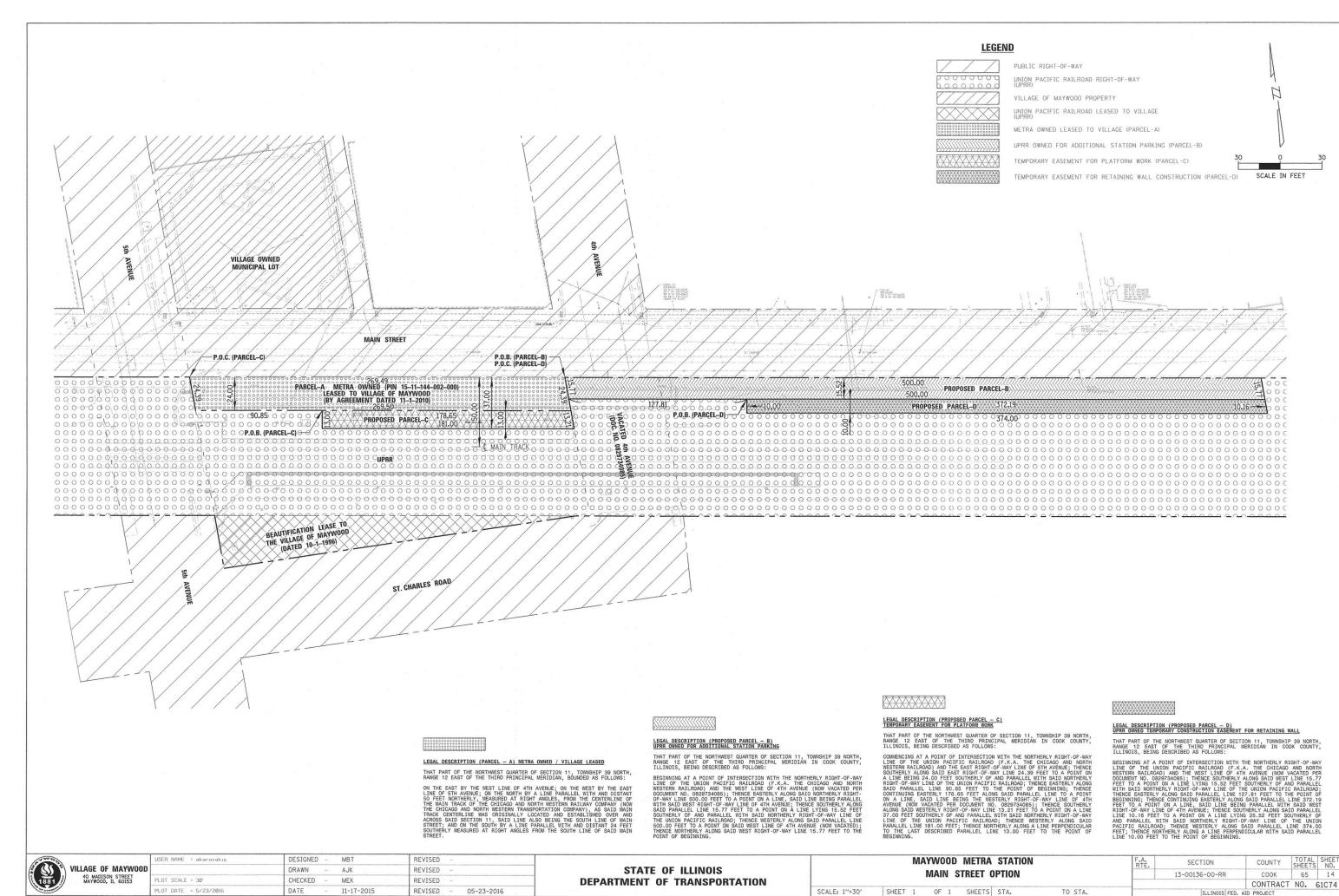
1. PROTECT EXISTING INBOUND PLATFORM DURING CONSTRUCTION.

VILLAGE OF MAYWOOD	USER NAME = mmichalowicz	DESIGNED - MBT	REVISED -			MAYWOOD METRA STATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
40 MADISON STREET		DRAWN - MBT	REVISED -	STATE OF ILLINOIS		SUGGESTED STAGES OF CONSTRUCTION		13-00136-00-RR	соок	65 11
MAYWOOD, IL 60153	PLOT SCALE = 40'	CHECKED - MEK	REVISED -	DEPARTMENT OF TRANSPORTATION		AND TRAFFIC CONTROL			CONTRAC	CT NO. 61C74
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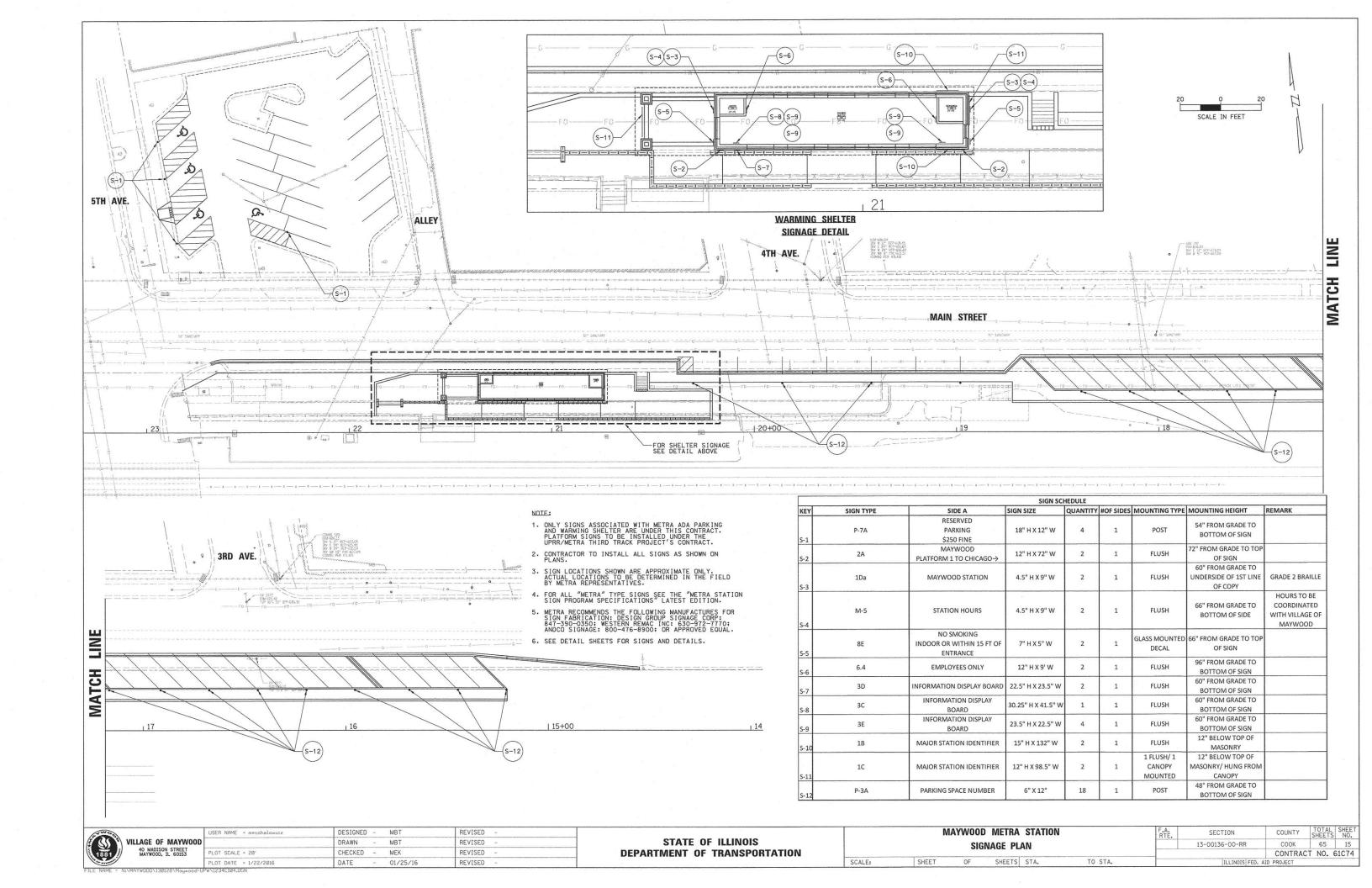
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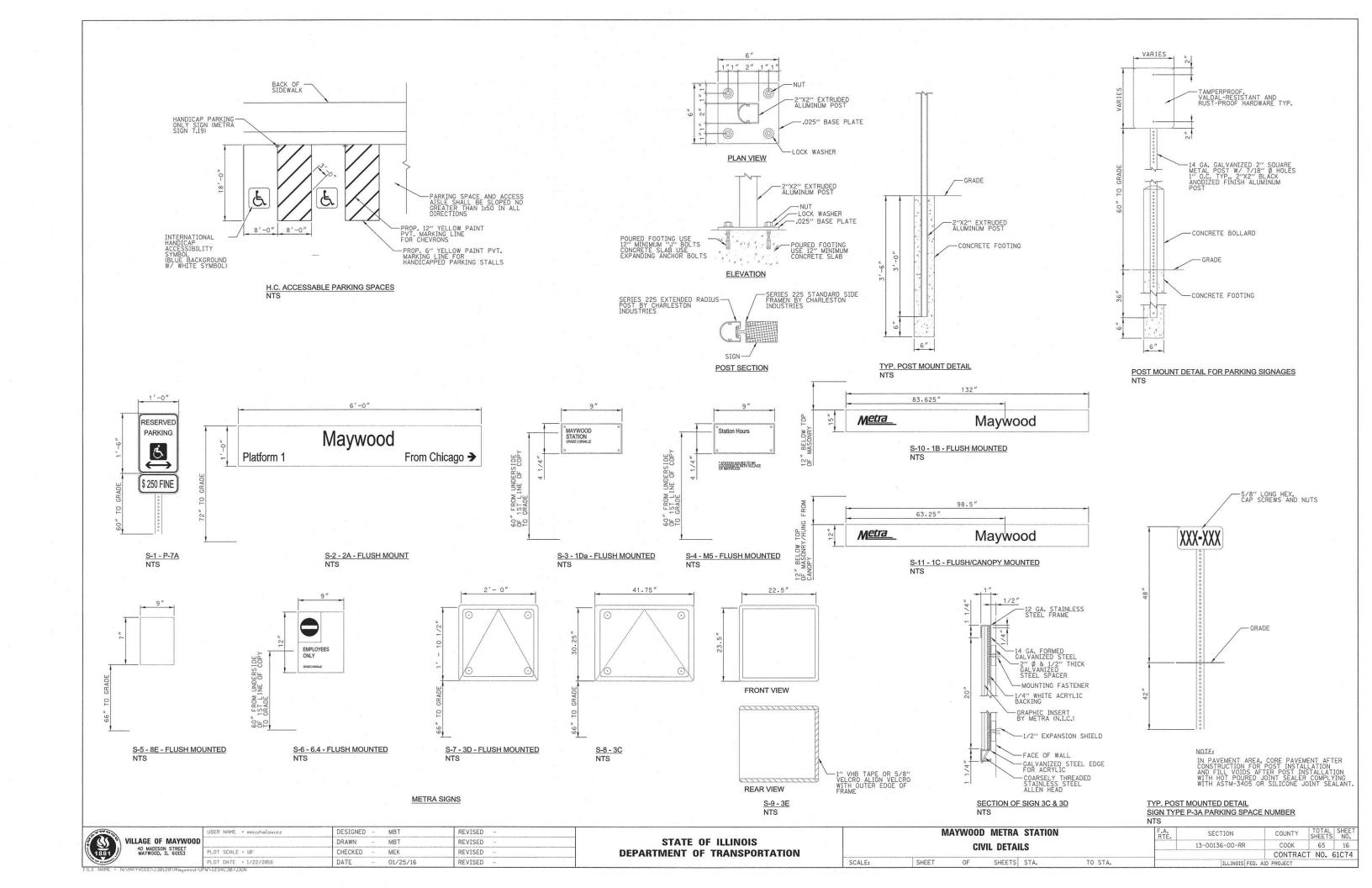


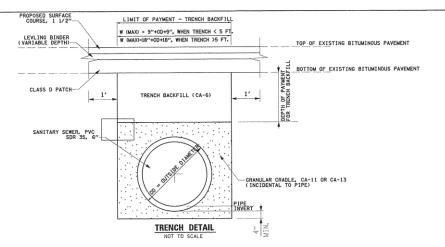




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### TRENCH BACKFILL TABLE

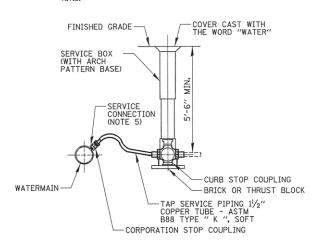
NOMINAL PIPE DIAMETER	PIPE OD	W (TRENCH WIDTH PAY LIMITS)
INCHES	INCHES	INCHES < 5' DEPTH
8"	8.5"	27"

### TRENCH BACKFILL NOTES:

- 1. BEDDING/HAUNCHING/INITIAL BACKFILL:
- A. FOR FLEXIBLE (PVC) PIPE THE BEDDING/HAUNCHING/INITIAL BACKFILL MATERIAL SHALL CONFORM TO IDOT CA-11 OR CA-13 GRADATION.

  B. FOR RIGID (D.I.) PIPE THE BEDDING MATERIAL SHALL BE CA-11, AND THE HAUNCHING/INITIAL BACKFILL SHALL MATCH THE TRENCH BACKFILL MATERIAL.
- AFTER BEDDING HAS BEEN PLACED/COMPACTED/BROUGHT TO GRADE, PLACE AND COMPACT HAUNCHING TO PIPE SPRING LINE.
- 3. PLACE INITIAL BACKFILL IN TWO STAGES AS FOLLOWS: 1st STAGE PLACE & COMPACT TO TOP OF PIPE; 2nd STAGE PLACE & COMPACT AT LEAST 12" OVER TOP OF PIPE.
- 4. VOIDS LEFT BY SHEETING/BRACING WHEN REMOVED SHALL BE FILLED WITH FINE SAND AND SHALL BE INCLUDED IN THE COST OF THE WORK. SHEETING TO BE LEFT IN PLACE WHEN SPECIFIED ON THE PLANS.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL RESTORATION BEYOND THE LIMIT OF PAYMENT AS SHOWN. THE LIMIT OF PAYMENT FOR DRIVEWAY RESTORATION MAY BE MODIFIED AS NOTED BELOW (NOTE 6).
- 6. PAVED DRIVEWAYS OR WALKWAY AREAS WHICH ARE OPEN CUT SHALL BE RECONSTRUCTED AS INDICATED ON THE CIVIL DETAILS, OR AS DIRECTED BY THE VILLAGE'S REPRESENTATIVE. COMPACTED STRUCTURAL BACKFILL (IDOT CA-6) SHALL BE PROVIDED IN LIEU OF COMMON BACKFILL, AS SHOWN ABOVE, WHEN TRENCH IS LOCATED WITHIN 2 FT. OF PAVED AREA OR AGGREGATE SHOULDER.

## TRENCH BACKFILL DETAILS



- 1. EXACT LOCATION OF WATER SERVICES TO BE DETERMINED BY CONTRACTOR.
- 2. WATER SERVICE CONNECTION & FITTINGS TO CONFORM TO VILLAGE'S STANDARDS.
- 3. PROVIDE A MINIMUM OF 18" BETWEEN TAPS, AND BETWEEN TAP AND PIPE JOINT.
- 4. TEST EXISTING SERVICES FOR FLOW PRIOR TO INSTALLING NEW SERVICE.
- 5. FOR D.I. WATERMAINS PROVIDE A DIRECT SERVICE CONNECTION. FOR TAPPING PVC AND HOPE WATERMAINS PROVIDE A WIDE BAND BRASS SERVICE SADDLE (FORD BRASS SADDLE STYLE 202BS).

## TYPICAL WATER SERVICE CONNECTION

## **SANITARY SEWER NOTES**

- 1. WHEREVER A SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS.
- 2. CONTRACTOR TO VERIFY RIM AND INVERT ELEVATIONS. RIM ELEVATIONS FOR MANHOLES AND VAULTS SHALL BE ADJUSTED TO MEET FINAL GRADE. THESE ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR AND ANY ASSOCIATED COSTS FOR THESE ADJUSTMENTS ARE TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS MAY BE REQUIRED BY THE OWNER OR VILLAGE UPON FINAL INSPECTION OF THE PROJECT. (FINAL GRADES AS MAY BE DETERMINED BY THE OWNER OR VILLAGE THE TIME OF FINAL INSPECTION MAY VARY FROM THOSE SHOWN ON THE PLANS.)
- 3. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL SANITARY SEWERS SHALL BE CONSTRUCTED OF PVC PIPE WITH PUSH-ON JOINTS CONFORMING TO ASTM D3139. THE GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477. THE FOLLOWING PIPE CLASSIFICATIONS SHALL BE USED FOR THE
- AFOR DEPTHS UP TO FIFTEEN (15'-0") FEET, USE PVC SDR 26 (PR160) CONFORMING TO ASTM D2241.
- BFOR DEPTHS OVER FIFTEEN (15'-O") FEET, USE PVC DR 18 CONFORMING TO AWWA C900 FOR PIPE SIZES 12" AND SMALLER AND AWWA C905 DR 18 FOR PIPE SIZES 14" AND LARGER.
- 4. ALL SEWER PIPE BETWEEN MANHOLES SHALL BE OF THE SAME TYPE AND CLASSIFICATION.
- 5. SEWER TESTING AND ACCEPTANCE: ALL NEW SEWERS SHALL BE TESTED FOR LEAKAGE AND DEFLECTION IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS. ALL SEWER PIPING SHALL BE TESTED FOR LEAKAGE BY MEANS OF A LOW PRESSURE AIR TEST. ALL PVC SEWER PIPING SHALL BE TESTED FOR DEFLECTION BY MEANS OF THE 5% DEFLECTION TEST IN ACCORDANCE WITH ASTM D3034. DEFLECTION TESTING SHALL NOT BE PERFORMED SOONER THAN 30 DAYS AFTER INSTALLATION IS COMPLETE.
- 6. SANITARY SEWER MANHOLES SHALL BE OF THE PRECAST CONCRETE TYPE AND SHALL COMPLY WITH ASTM C-478 (SEE DETAIL), MANHOLES SHALL BE TESTED BEFORE THE RING AND COVER AND GRADE ADJUSTMENT RINGS ARE INSTALLED, AND AFTER BACKFILL AND COMPACTION IS COMPLETE. VACUUM TESTING OF MANHOLES SHALL BE PERFORMED IN ACCORDANCE WITH ASTM C1244.
- 7. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL FORCEMAINS SHALL BE CONSTRUCTED OF PVC PIPE WITH PUSH-ON JOINTS CONFORMING TO ASTM D3139 WITH GASKETS CONFORMING TO ASTM F477. FOR FORCEMAIN SIZES 12" AND SMALLER, USE PVC DR 18 CONFORMING TO AWWA C900.
- 8. FORCEMAIN PIPING AND RELATED FITTINGS AND VALVES SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150% OF THE DESIGN WORKING PRESSURE. TESTS SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE, DURATION OF THE TEST SHALL BE AT LEAST TWO (2) HOURS. MINIMUM REQUIREMENTS FOR THE TEST METHODS AND PROCEDURES SHALL BE AS FOLLOWS:
- ATHE CONTRACTOR SHALL PERFORM THE HYDROSTATIC TESTING OF PIPES AND PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR NECESSARY TO COMPLETE THE TESTING.
- BJEST PRESSURE SHALL BE HELD FOR A MINIMUM OF 2 HOURS AS REQUIRED WITH NO NOTICEABLE LOSS IN PRESSURE WHILE ALL JOINTS ARE VISUALLY INSPECTED FOR LEAKS. AFTER PRESSURE IS APPLIED, PRESSURING DEVICE MUST BE DISCONNECTED OR ISOLATED FROM THE SYSTEM DURING THE INSPECTION PERIOD. THERE SHALL BE NO ALLOWABLE LEAKAGE AND DEFECTS SHALL BE CORRECTED IMMEDIATELY. TESTING SHALL BE REPEATED AFTER DEFECTS HAVE BEEN CORRECTED UNTIL A SUCCESSFUL TEST HAS BEEN ACCOMPLISHED.
- CALL EQUIPMENT SHALL BE ISOLATED FROM THE SYSTEM DURING TESTING OF THE PIPING SYSTEM. ALL AIR SHALL BE VENTED FROM THE SYSTEM PRIOR TO APPICATION OF TEST PRESSURE FOR HYDROSTATIC TESTS.
- 9. ALL NUTS, BOLTS, AND MISCELLANEOUS HARDWARE USED UNDERGROUND SHALL BE ANSI TYPE 304 STAINLESS STEEL AS A MINIMUM.

## **EXCAVATION AND BACKFILL NOTES**

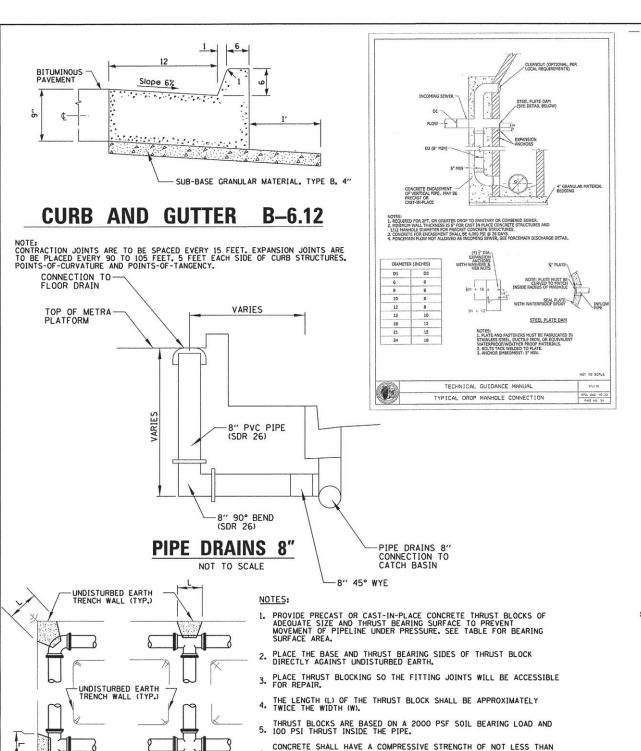
- THE CONTRACTOR SHALL EXAMINE THE CONTRACT DRAWINGS THOROUGHLY PRIOR TO BEGINNING ANY EXCAVATION, AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT ONCE OF ANY DISCREPANCIES.
- ALL WORK AREAS SHALL BE PROPERLY DRAINED DURING CONSTRUCTION, FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION AND TRAFFIC.
- 3. THE EXCAVATION FOR STRUCTURE &/OR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING STRUCTURE/PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY EXCAVATIONS/TRENCHES SHALL BE PROVIDED BY THE CONTRACTOR AND THE COST OF SUCH SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS TO WHICH THEY
- 4. DETAILED DRAWINGS FOR ANY SHEETING AND BRACING SHALL BE PROVIDED FOR REVIEW TO THE OWNER'S REPRESENTATIVE PRIOR TO IMPLEMENTATION OF THE METHOD. A TRENCH BOX SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES, AND
- 5. SUITABLE EXCAVATED MATERIALS SUBJECT TO THE REVIEW OF THE OWNER'S REPRESENTATIVE MAY BE USED TO BACKFILL THE EXCAVATED AREAS OF THE SITE.
- 6. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN REVIEWED BY OWNER.
- 7. TRENCH BACKFILL SHALL BE PROVIDED FOR THE FULL DEPTH ABOVE PIPELINES UNDER OR WITHIN TWO FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, SIDEWALKS, AND BACK OF CURB. THE TRENCH BACKFILL SHALL CONSIST OF A GRANULAR MATERIAL MEETING IDOT CRUSHED STONE CA-6 GRANDATION SPECIFICATIONS. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS AND SHALL EXTEND A MINIMUM OF ONE FOOT ON
- 8. BACKFILL IN PIPE TRENCHES IN OPEN AREAS AND LANDSCAPED AREAS SHALL CONSIST OF SUITABLE EXCAVATED MATERIALS PLACED IN LIFTS AND COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINABLE
- 9. THE CONTRACTOR SHALL REMOVE ALL EXCESS UTILITY SPOIL. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
- 10. STOCKPILING OF EXCAVATED MATERIALS ON SITE SHALL BE MINIMIZED TO THE GREATEST EXTENT PRACTICABLE. THE CONTRACTOR SHALL PROCEED PROMPTLY WITH UNDERGROUND WORK IMMEDIATELY FOLLOWING EXCAVATION, AND SHALL BACKFILL ALL EXCAVATIONS IMMEDIATELY FOLLOWING APPROVAL OF COMPLETED WORK BY THE OWNER.

## WATERMAIN AND APPURTANENCES

- ALL WATER DISTRIBUTION SYSTEM MATERIALS AND CONSTRUCTION SHALL CONFORM WITH SECTION 41 OF "THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS".
- 2. PIPE MATERIALS: ALL WATERMAINS FOR OPEN TRENCH INSTALLATION SHALL BE CONSTRUCTED OF DUCTILE PIPE (DIP) CLASS 52, CEMENT LINED ASPHALTIC COATING OR PAINT, CONFORMING TO ANSI A21.51/AWWA C151 WITH PUSH ON JOINTS CONFORMING TO ANSI A21.11/AWWA C111. ALL FITTINGS SHALL BE MECHANICAL JOINT AND IRON OR DUCTILE IRON CONFORMING TO ANSI A21.53/AWWA C153 AND ANSI A21.4/AWWA C104. ALL GASKETS FOR MECHANICAL AND PUSH ON JOINTS SHALL CONFORM TO ANSI A21.11/AWWA C111. SEE "STEEL CASING PIPE DETAIL" FOR WATERMAIN INSTALLED IN CASING PIPE.
- 3. ALL DIRECT BURIED UNDERGROUND IRON OR DUCTILE IRON PIPING, PIPE FITTINGS, AND APPURTENANCES SHALL BE ENCASED WITH POLYETHYLENE WRAP WITH TAPED JOINTS. POLYETHYLENE WRAP SHALL BE EQUAL TO ASTM 1248 AND SHALL CONFORM TO APPLICABLE REQUIREMENTS OF AWWA C105.
- 4. A MINIMUM DEPTH OF COVER OF FIVE AND A HALF (5'-6") FEET SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM COVER SHALL NOT BE GREATER THAN EIGHT (8'-0") FEET EXCEPT AT SPECIAL CROSSINGS.
- 5. ALL CONNECTIONS FOR EXTENDING EXISTING WATERMAINS SHALL BE MADE AS PRESSURE CONNECTIONS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
- PRESSURE CONNECTIONS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.

  TESTING: ALL WATERMAINS SHALL BE PRESSURE TESTED, FLUSHED, AND DISINFECTED IN ACCORDANCE WITH "THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS", AND AWWA STANDARDS (C600 AND C651). EACH VALVE SECTION SHALL BE PRESSURE TESTED FOR A MINIMUM OF 2 HOURS AT A TEST PRESSURE OF 150 PSI. ALLOWABLE LEAKAGE SHALL BE WITHIN THE LIMITS DETERMINED BY "THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS". AT NO TIME IS THERE TO BE ANY VISIBLE LEAKAGE FROM THE WATERMAIN. AFTER THE PRESSURE TEST IS PASSED AND PRIOR TO DISINFECTION, THE MAIN SHALL BE THOROUGHLY FLUSHED. IF THERE IS NO HYDRANT AT THE END OF THE MAIN, THE CONTRACTOR SHALL PROVIDE A TEMPORARY TAP LARGE ENOUGH TO EFFECT A VELOCITY IN THE MAIN OF AT LEAST TWO AND A HALF (2 1/2) FEET PER SECOND. FOLLOWING SUCCESSFUL PRESSURE TESTING AND DISINFECTION PROCEDURES, WATER SAMPLES SHALL BE COLLECTED FOR BACTERIOLOGICAL ANALYSIS ON TWO CONSECUTIVE DAYS TAKEN AT 24 HOUR INTERVALS. SATISFACTORY RESULTS OF THE ANALYSES SHALL BE OBTAINED PRIOR TO PLACING THE WATERMAIN INTO SERVICE. DISINFECTION SHALL BE PERFORMED BY AN INDEPENDENT FIRM WITH EXPERIENCE IN THE METHODS OF THIS OPERATION. THE DISINFECTION FIRM AND THE LABORATORY SHALL BE SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT OF WATER AND SEWER. DISINFECTION SHALL BE REPEATED AT THE EXPENSE OF THE CONTRACTOR UNTIL SATISFACTORY RESULTS ARE OBTAINED.
- VALVE VAULTS: THE FRAME AND LID FOR VALVUE VAULTS SHALL BE "WATER" EMBOSSED ON LID JOINTS FOR AULTS SHALL BE OF BUTYL RUBBER-TYPE GASKET CONFORMING TO ASTM C443. ADJUSTING RINGS SHALL NOT EXCEED
- 8. VALVES: ALL VALVES SHALL TURN COUNTER-CLOCKWISE TO OPEN. ALL VALVES 12" OR SMALLER SHALL BE RESILIENT WEDGE GATE TYPE, RATED FOR 250 PSI WORKING PRESSURE AND CONFORM TO AWWA C-509 AND C515 SPECIFICATIONS. ALL FITTINGS AND VALVE END CONNECTIONS SHALL BE MECHANICAL JOINT AND SHALL BE RESTRAINED USING "MEGALUG" OR APPROVED EQUAL RESTRAINING GLANDS. ALL NUTS AND BOLTS USED IN VALVE VAULTS (I.e. EXPOSED PIPING) FOR MECHANICAL JOINTS AND RESTRAINT DEVICES SHALL BE TYPE 304 STAINLESS STEEL. ALL INTERNAL AND EXTERNAL SURFACES SHALL HAVE FUSION BONDED EPOXY COATING, ALL VALVES LARGER THAN 12" SHALL BE BUTTERFLY VALVES. BUTTERFLY VALVES SHALL BE SHORT BODY CONFORMING TO THE AWWA C504 FOR RUBBER SEATED BUTTERFLY VALVES FOR CLASS 150B.
- 9. CORPORATION STOPS: CORPORATION STOPS SHALL BE SIZED APPROPRIATELY FOR THE INTENDED USE (1 INCH MIN), CONFORMING TO AWWA C-800 AND SHALL INCLUDE BEND TAIL PIECE AND COMPRESSION FITTINGS. TAPPING SADDLES SPECIFICALLY DESIGNED FOR USE WITH DIP PIPE MAY BE REQUIRED IN CONJUNCTION WITH LARGER CORPORATION STOPS. TAPPING SADDLES SHALL BE SMITH-BLAIR VINYL COATED STAINLESSTEEL BOLTS, OR JCM. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH THE MANUFACTURER'S TORQUE GUIDELINES. CORPORATION STOPS SHALL BE INSTALLED ON BOTH SIDES OF THE VALVE WITHIN VAULTS (SEE DETAIL).
- MAXIMUM DEFLECTION AT PIPE AND FITTING JOINTS SHALL NOT EXCEED CURRENT MANUFACTURER'S RECOMMENDATIONS.
- 11. WATERMAIN FITTINGS (I.E. BENDS, ELBOWS, TEES, REDUCERS, ETC.) MAY NOT BE SPECIFICALLY REFERENCED ON THE PLANS. HOWEVER, THEY ARE TO BE CONSIDERED INCIDENTAL AND INCLUDED IN THE LINEAR FOOTAGE COST OF
- 12. THRUST BLOCKING SHALL BE INSTALLED ON WATERMAINS AT ALL BENDS, TEES, CAPS, VALVES, AND HYDRANTS. FITTING THAT ARE DOWNTURNED OR UNABLE TO BE "THRUST-BLOCKED" AGAINST UNDISTURBED SOIL SHALL BE RESTRAINED WITH FIELD-LOK, IN ADDITION, EXCLUDING THE JOINTS OF ANY VALVE, BEND, CROSS OR TEE, THE FIRST TWO JOINTS BEFORE AND BEYOND ANY VALVE, BEND, CROSS,
- 13. CONTRACTOR TO VERIFY RIM AND INVERT ELEVATIONS. RIM ELEVATIONS FOR VAULTS SHALL BE ADJUSTED TO MEET FINAL GRADE. THESE ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR AND ANY ASSOCIATED COSTS FOR THESE ADJUSTMENTS ARE TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS MAY BE REQUIRED BY THE OWNER OR VILLAGE UPON FINAL INSPECTION OF THE PROJECT. (FINAL GRADES AS MAY BE DETERMINED BY THE OWNER OR VILLAGE AT THE TIME OF FINAL INSPECTION MAY VARY FROM THOSE SHOWN ON THE PLANS.)
- 14. WATERMAIN CONSTRUCTION WILL BE OCCURRING ADJACENT TO EXISTING UTILITY POLES. CONTRACTOR SHALL BRACE EXISTING POLES AS REQUIRED FOR CONSTRUCTION OF WATERMAIN OR AS DIRECTED BY UTILITY COMPANY. THE COST OF BRACING POLES SHALL BE INCLUDED IN THE COST OF WATERMAIN INSTALLATION, EMBOSSED ON THE LID. VAULTS SHALL CONFORM TO ASTM C478. TILITY COMPANY. COST OF

FOR		USER NAME = mmichalowicz	DESIGNED -	MBT	REVISED -		MAYWOOD METRA STATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	VILLAGE OF MAYWOOD		DRAWN -	MBT	REVISED -	STATE OF ILLINOIS	CIVIL DETAILS		13-00136-00-RR	COOK	65 17
1831	40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 10'	CHECKED -	MEK	REVISED -	DEPARTMENT OF TRANSPORTATION	CIVIL DETAILS			CONTRAC	CT NO. 61C74
(Page 1	,	DLOT DATE - 1/22/2016	DATE	01 /25 /16	DEVISED		SCALE SHEET OF SHEETS STA. TO STA.		TILINOIS FED AT	(D. PROJECT	

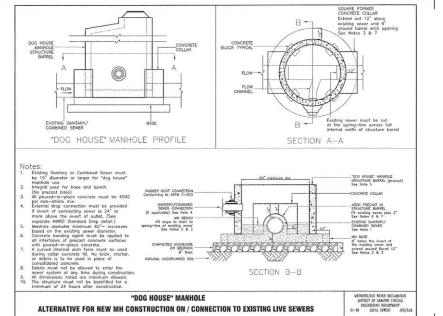


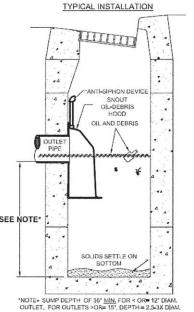
CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 6. 2000 PSI AFTER 28 DAYS.

		PIPE BEND	IN DEGREES		
PIPE SIZE	90	45	22.5	11.25	PLUG OR TEE
8"	5 SO. FT.	3 SO. FT.	2 SO. FT.	1 SO. FT.	3 SO. FT.
10"	7 SO. FT.	4 SO. FT.	2 SO. FT.	1 SO. FT.	5 SO. FT.
12"	10 SO. FT.	5 SO. FT.	3 SO. FT.	2 SO. FT.	7 SO. FT.
14"	13 SQ. FT.	7 SO. FT.	4 SO. FT.	2 SO. FT.	9 SO. FT.
16"	17 SO. FT.	9 SO. FT.	5 SO. FT.	2 SO. FT.	12 SQ. FT.
20"	26 SO. FT.	14 SQ. FT.	7 SO. FT.	4 SO. FT.	18 SO. FT.

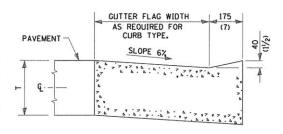
**BEARING SURFACE AREA TABLE** 

## TYPICAL THRUST BLOCK INSTALLATIONS

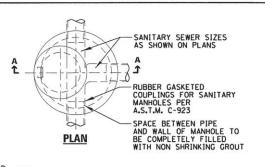


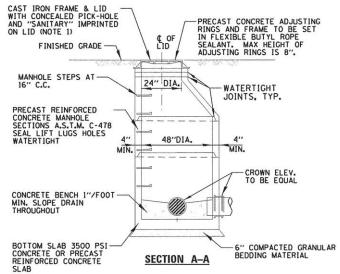


## **SNOUT DETAIL**



## **DEPRESSED CURB (TYPICAL)**

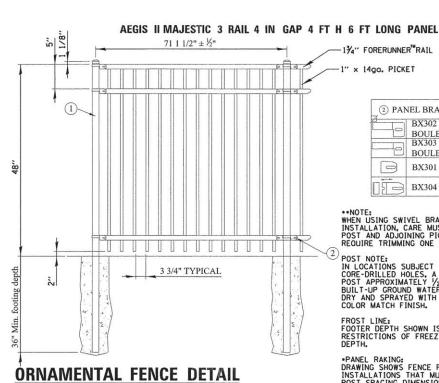




## NOTES:

- 1. MANHOLE LIDS SHALL BE NEENAH R-1077A OR EJIW 1022-1, SELF SEALING LID, NON-ROCKING TYPE. 2. EZ-STICK GASKET SHALL BE INSTALLED AT ALL JOINTS. 3. EXTERNAL CHIMNEY SEALS TO BE CANUSA, INFISHIELD. 4. EXTERNAL JOINT SEALS TO BE MAC-WRAP. 5. STEPS TO BE NEENAH R-1980-C CAST IRON OR EJIW 8501.

## STANDARD SANITARY SEWER MANHOLE



① POST TO POST 6' NOMINAL 2 PANEL BRACKET OPTIONS \*71½" ± ½" 2½'\sqrt{2} BOULEVARD BRACKET BX303 UNIVERSAL \*72" ± ½" BOULEVARD BRACKET BX301 FLAT MOUNT BRACKET BX304 SWIVEL BRACKET\*\*

\*\*NOTE:
WHEN USING SWIVEL BRACKETS ON EITHER OR BOTH ENDS OF A PANEL
INSTALLATION, CARE MUST BE TAKEN TO ENSURE THE SPACING BETWEEN
POST AND ADJOINING PICKETS MEETS APPLICABLE CODES. THIS MAY
REQUIRE TRIMMING ONE OR BOTH ENDS OF THE PANEL AS NEEDED.

POST NOTE:
IN LOCATIONS SUBJECT TO FREEZING, WHERE POSTS ARE GROUTED INTO CORE-DRILLED HOLES, A 1/4" DIAMETER HOLE SHOULD BE DRILLED IN THE POST APPROXIMATELY 1/2" ABOVE ELEVATION TO ALLOW FOR DRAINAGE OF BUILT-UP GROUND WATER, THE DRILLED HOLE MUST BE WIPED CLEAN AND DRY AND SPRAYED WITH AMERISTAR ZINC RICH PRIMER AND AMERISTAR COLOR MATCH FINISH.

FROST LINE: FOOTER DEPTH SHOWN IS MINIMUM RECOMMENDATION. IN SOME CASES LOCAL RESTRICTIONS OF FREEZING WEATHER CONDITIONS MAY REQUIRE A GREATER

\*PANEL RAKING: DRAWING SHOWS FENCE PANEL AT LEVEL GROUND ELEVATION: FOR INSTALLATIONS THAT MUST BE RAKED TO FOLLOW SLOPING GRADES, THE POST SPACING DIMENSION SHOWN MUST BE MEASURED ALONG THE GRADE.

ı	Two		USER NAME = mmichalowicz	DESIGNED	-	MBT	REVISED -	
1	(W)	VILLAGE OF MAYWOOD		DRAWN	-	MBT	REVISED -	
1	1881	40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 20'	CHECKED	-	MEK	REVISED -	
1	On STRINGS		PLOT DATE = 5/20/2016	DATE	-	01/25/16	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

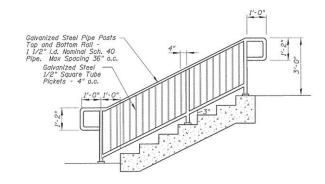
IV	1AYW00I	NETRA STATION	I	F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	CIV	/IL DETAILS			13-00136-00-RR	соок	65	18
						CONTRAC	T NO.	61C74
SHEET	OF	SHEETS STA.	TO STA.		TILL INOIS FED.	ATD PROJECT		

UNDISTURBED EARTH TRENCH WALL (TYP.)

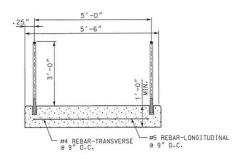
TYPICAL PLAN

TYPICAL SECTIONS

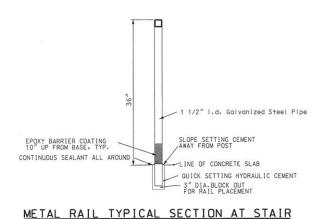
-UNDISTURBED EARTH

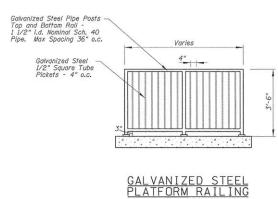


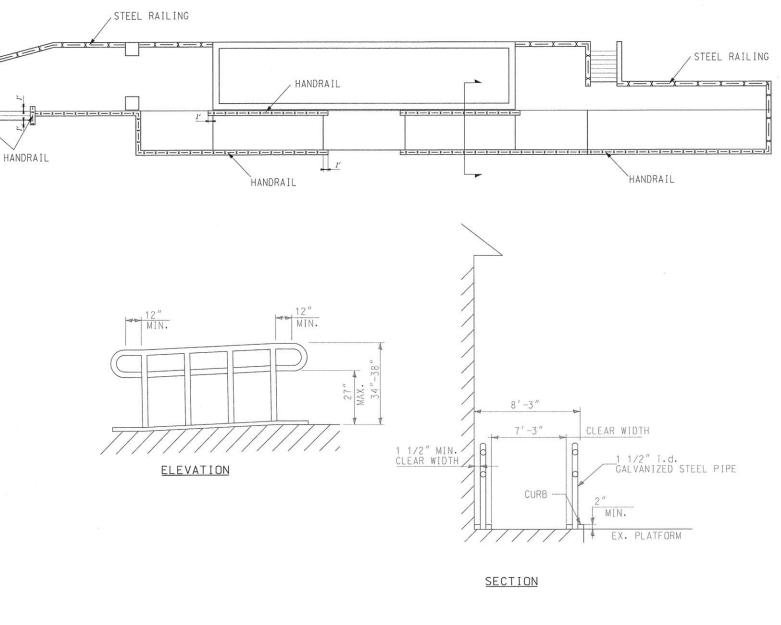
## GALVANIZED STEEL CENTER STAIR RAILING



STAIR SECTION





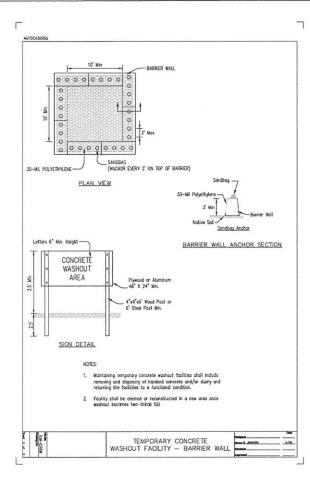


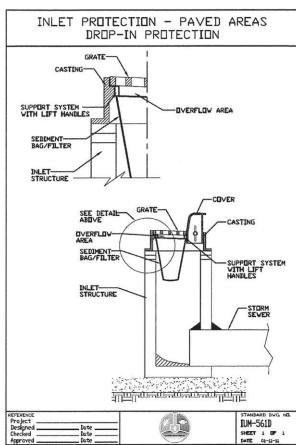
HANDRAIL DETAIL AT TEMPORARY RAMP

## NOTES:

- ALL STAIRS AND HANDRAILS SHALL COMPLY WITH ILLINOIS ACCESSIBILITY CODE.
- SEE STRUCTURAL DETAILS FOR STAIR REINFORCEMENT DETAILS.
- STEEL RAILING AND HANDRAIL IS INCLUDED IN DECORATIVE STEEL RAILING ITEM.

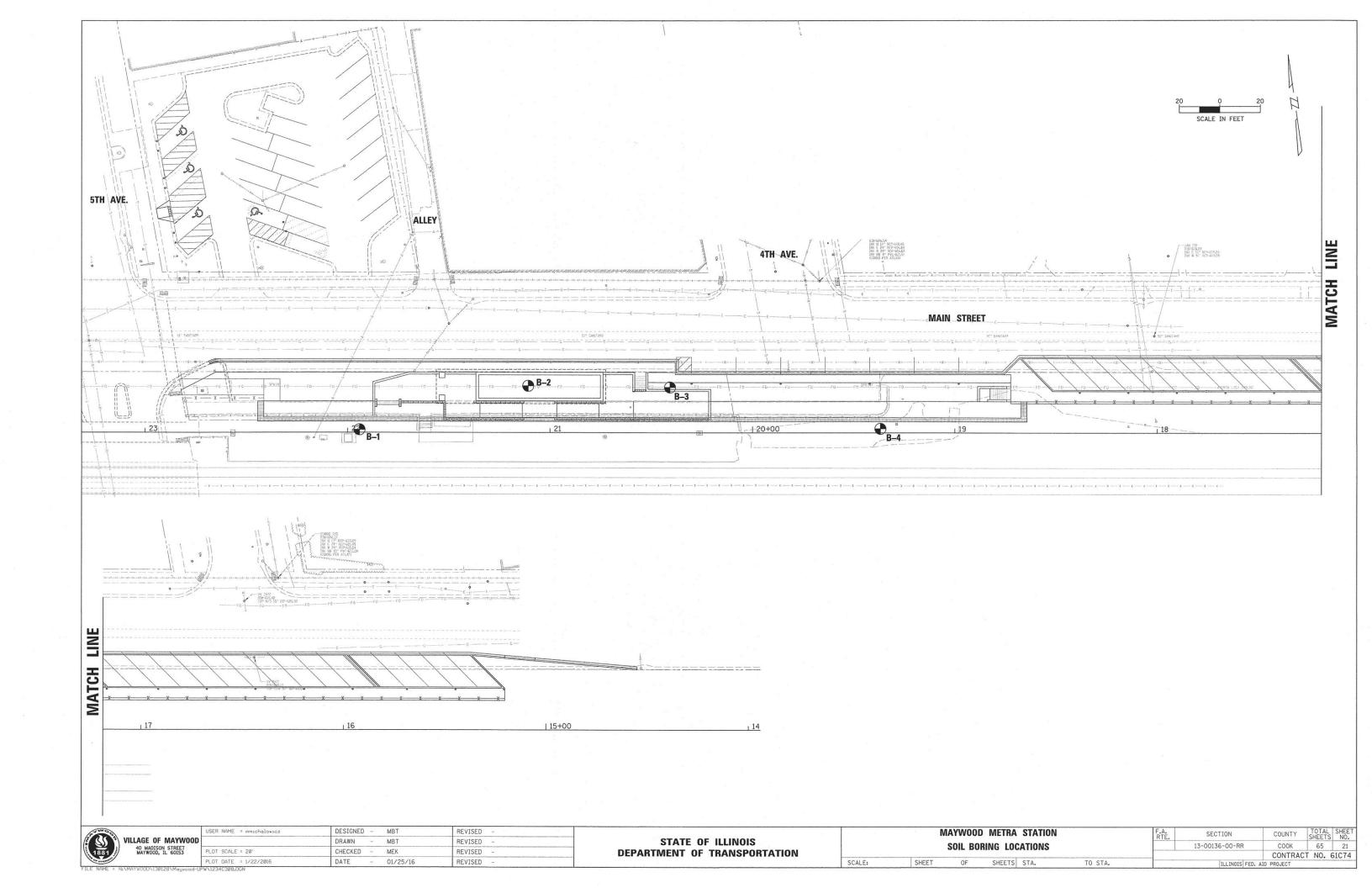
awoo	USER NAME = mmichalowicz	DESIGNED -	MBT	REVISED -			ı	00WYAN	D METRA STATION		F.A.	SECTION	COUNTY	SHEETS	SHEE NO.
VILLAGE OF MAYWOO	D	DRAWN -	MBT	REVISED -	STATE OF ILLINOIS			CI	VIL DETAILS		11112	13-00136-00-RR	соок	65	19
40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 10'	CHECKED -	MEK	REVISED -	DEPARTMENT OF TRANSPORTATION			U	VIL DETAILS				CONTRAC	T NO. F	61C74
Stor avenue.	PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT		-

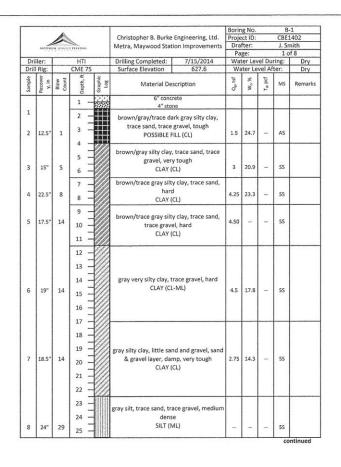




## SOIL EROSION AND SEDIMENT CONTROL PLAN

- 1. The existing land cover is paved concrete alley within a residential area. There are no flood protection areas, site discharge locations, or points of discharge to Jurisdictional Waters of the U.S. Soil data is included in the specifications and generally consists of CLAY.
- 2. A NPDES ILR-10 permit is not required since the project is located in a combined sewer area and no stormwater discharges are tributary to a waterway.
- 3. Erosion and sediment will be controlled by installing inlet filters on the proposed inlets and also on the existing adjacent downstream inlets, or as directed by the ENGINEER. The ENGINEER will inspect the inlet filters and other erosion control measures for conformity on a weekly basis or after an 0.5 inch rainfall or greater.
- 4. Schedule of Construction Activities
  - a. Installation of erosion control devices (prior to any soil disturbance)
  - b. Installation of storm sewer system
  - c. Pavement removal and earth excavation
  - d. Installation of geogrid and subbase material
  - e. Pavement installation
  - f. Driveway installation and restoration items
  - g. Removal of erosion control devices
- 5. There are no flood protection areas in or adjacent to the project.
- 6. There are no stream crossings. Erosion and sediment control devices have been designed based on performance in past projects.
- 7. The erosion control devices will be inspected by the ENGINEER on a weekly basis or after an 0.5 inch rainfall or greater. Any issues will be communicated to the contractor who will have 48 hours to correct any deficiency.
- 8. The Contractor shall provide a contact for the implementation and maintenance of the site soil erosion and sediment control plan.





Christopher B. Burke Engineering, Ltd. Metra, Maywood Station Improvements  Driller: HTI Drilling Completed: 7/15/2014 Water Level During: Dry  Briller: CME 75 Surface Elevation 627.6 Water Level During: Dry  Material Description 527.6 Water Level After: Dry  Material Description 52 Surface Elevation 627.6 Water Level After: Dry  Graph Surface Elevation 627.6 Water Level After: Dry  Material Description 52 Surface Elevation 627.6 Water Level During: Dry  Material Description 52 Surface Elevation 627.6 Water Level During: Dry  Material Description 52 Surface Elevation 627.6 Water Level During: Dry  Material Description 52 Surface Elevation 627.6 Water Level During: Dry  Elevation 627.6 Water Level During: Dry  Material Description 627.6			4													Bori					3-1
Driller: HTI   Drilling Completed: 7/15/2014   Water Level During: Dry   Dry			1	1																	
Driller: HTI   Drilling Completed: 7/15/2014   Water Level During: Dry   Dry		MATER	ALMENTE	18511	NG			Metra,	, M:	ayw	ood S	Statio	on In	prov	ements			:_			
Drill Rig:   CME 75   Surface Elevation   627.6   Water Level After:   Dry	De	lor	_	1.1	Ti	_	-	Dellie	a C		late	4. T	-	/15 /	014			l or	al D		
Second   S						-	-									VVA	ter	Lev	el Du	ftor:	
Section   Sec	-				=	_	,	Julia	ice i	LIEV	atioi	-	-	02/	.0	_	T			Ter.	DIY
9 24" 17 30 gray sandy silty clay, little gravel, very tough CLAY (CL) 2.75 10.1 SS	Sample	Recove y, in	Blow	1	neptu'	Graphi	Log			Mat	terial	Des	cript	ion		O <sub>c</sub> tsf	70. 111		Ye pot	MS	Remark
9 24" 17 30 gray sandy silty clay, little gravel, very tough CLAY (CL) 2.75 10.1 SS				_	_	1	Щ				con	ntinu	ed				L				_
9 24" 17 30 2.75 10.1 \$\$				28	=			grays	san	dy si	to	ough		grave	l, very						
FOB	9	24"	17		-						CLA	AY (C	L)			2.75	10	.1	-	ss	
	-	-	_	-	-	1/	11		-	-	-	-	_	-		_	_	_	-	_	EOB
	ege	Wate	r Level	Whi	ile S	am	plinį	3		ath C			Collina								er Drilling
Op Estimated Unconfined Compressive Strength Based Upon Calibrated Penetrometer Reading, tons/ft <sup>2</sup> Split Spoon Strength Reading, tons/ft <sup>2</sup> Split Spoon	Qp	Wate Estima Penet	ated Un romete	confi r Rea	ined ding	Con , to	mpre	ssive Str						prated		MS SS	M- Sp	it S	od of	Samp	
	Qp Wc	Wate Estima Penet Moist	romete ture Co	confi r Rea inter	ined ding nt, %	Con to	mpre ons/ft	ssive Str	/S	Wh	ile S	ampl	ing	prated		MS SS ST	Sp Sh	lit S	od of poor y Tub	Samp n e	

OFC 921 W. Van Buren St., Suite 210, Chicago, IL 60607	LAB 2462 Delta Lane, Elk Grove Village, IL 60007
P 847 787 0320   E 847 787 0321   W/s	many materials envicetesting com

							Borin	g No.		B-	-3
		1			Christopher B. Burke	Engineering, Ltd.		ct ID:		CBE1	
	MATER	AL SERVE	TISHNO		Metra, Maywood Stati	on Improvements	-	fter:		J. Sn	
_	30.000 appet 0	eses, sercia	W					ge:		5 0	
	iller:		HTI		Drilling Completed:	7/15/2014		ter Lev			Dry
	Rig:		CME 75		Surface Elevation	626.7	Wa	ter Le	vel Af	ter:	Dry
Sample	Recover y, in	Blow	Depth, ft	Graphic	Material Des	cription	O, tsf	W. %	Ye pef	MS	Remark
1			1 -		5.5" aspl 9" ston						
2	0	5	2 -		No Reco	very			_	AS	
			3 -		/				_		
			4 -		brown/gray silty clay, gravel, to	ough		20.2			
3	19.5"	3	5 -		POSSIBLE FI	LL (CL)	1.75	20.3	-	SS	
		_	6 -		brown/trace gray silty trace grave						
4	21"	15	7 -		CLAY (C		4.5+	17.3	-	ss	
			8 -								
5	19"	18	9 -		gray/trace brown silty	clay, trace sand,	4.5+	-	_	SS	
			10 -		trace grave CLAY (C						
			12 -								
			13 -								
			14 -		gray sandy silty clay, t						
6	15.5"	12	15 -		silt seams, CLAY (C		4.5+	-	-	SS	
			16 -								
			17 -								
			18 -		gray silty clay, trace sa hard						
7	16"	17	19 -		CLAY (CL)					SS	
1	10	17	20 -	111		4.5+		-	35		

Legend:
Water Level While Sampling
Qp Estimated Unconfined Compression

Penetrometer Reading, tons/ft²
Wc Moisture Content, % Ws While Sampling
Y<sub>d</sub> Dry Density, pounds/ft³ WD While Drilling

Cont.

Water Level After Drilling
MS Method of Sampling
SS Split Spoon
ST Shelby Tube
HA Hand Auger

	ller:		HTI		Drilling Completed:	7/15/2014	Wa	ge: ter Lev			Dry
	Rig:		CME 75		Surface Elevation	626.7	Wa	ter Le	vel Af	ter:	Dry
Sample	Recover y, in	Blow	Depth, ft	Graphic	Material Des	cription	Q, tsf	W. %	Y <sub>d</sub> , pcf	MS	Remark
8	20.5"	31	21 — 22 — 23 — 24 — 25 —		gray siity clay and clay trace gravel, v CLAY and SILT	ery tough	3.75	10.7	1	SS	
			26 — 27 — 28 —		gray very silty clay, t gravel, h	ard					
9	19.5"	21	29 — 30 —		CLAY (C	CL)	4.5+	12.4	1	ss	
											EOB

Legend:

Water Level While Sampling

Qp Estimated Unconfined Compressive Strength Based Upon Calibrated

Penetrometer Reading, tons/ft²
Wc Moisture Content, % WS While Sampling
Y<sub>d</sub> Dry Density, pounds/ft³ WD While Drilling

Water Level After Drilling
MS Method of Sampling
SS Split Spoon
ST Shelby Tube
HA Hand Auger

		1			Christopher B. Burke	ngineering, Ltd.		g No.	_	CBE1	
	_		1		Metra, Maywood Stati			fter:		J. Sn	
	MATTRI	AL SURVICE	HINTING		Wetra, Waywood State	on improvements		ge:		30	
Dri	ller:		HTI		Drilling Completed:	7/15/2014		er Lev	el Du		Dry
	Rig:		CME 75	;	Surface Elevation				vel Af		Dry
Sample	Recover y, in	Blow Count	Depth, ft	Graphic	Material Description		Q, tsf	W. %	Y <sub>d</sub> pcf	MS	Remark
1			1 -		5" aspha 9" ston						
2	4"	4	2 -		brown/gray sandy silty clay, little grav very tough		2	18.1		AS	
			3 -		POSSIBLE FI	1957 10		$\vdash$			
			4 -		brown/gray silty clay, gravel, very						
3	11"	2	5 -	Ш	POSSIBLE FI	LL (CL)	2.25			SS	
		6 -									
4	16"	7	7 -				4.25	18.9		ss	
			8 -		brown silty clay, trace s hard	and, trace gravel,					
			9 -		CLAY (C	L)					
5	24"	16	10 -				4.50			SS	
			11 -						_		
			12 -								
			13 -		gray silty clay, trace sa	nd, trace gravel,					
6	16.5°	15	14 -		hard CLAY (C	L)	4.5+	14.4		SS	
0	16.5	15	15 -			E.	4.5+	14.4	-	33	
			16 -								
			17 -								
					gray silty clay, trace san seams, h						
7	22"	9	19 -		CLAY (CL)		4.25			ss	
1	22"	9	20 -	111			4.25		**	22	

Penetrometer Reading, tons/ft<sup>2</sup>
Wc Moisture Content, % WS While Sampling
Y<sub>d</sub> Dry Density, pounds/ft<sup>3</sup> WD While Drilling

HA Hand Auger

SS Split Spoon ST Shelby Tube

								g No.		B-2			
		1			Christopher B. Burke	Engineering, Ltd.		Project ID: CBE1402					
ANA	4	AL MENTE	TENTRO		Metra, Maywood Stati	on Improvements	Dra	fter:		J. Sr	nith		
					1. C.		Pa	ge:		40	f 8		
Driller:	П		HTI		Drilling Completed:	7/15/2014	Wat	ter Lev	el Du	ring:	Dry		
Drill Rig	;:	ar and	CME 75	9100011000	Surface Elevation	626.3	Wa	ter Le	vel At	ter:	Dry		
Sample	y, in	Blow	Depth, ft	Graphic	Material Description		O <sub>w</sub> tsf	W. %	Ye pof	MS	Remar		
8 20	)"	15	21 - 22 - 23 - 24 - 25 - 26 -		gray very silty clay, t gravel, h CLAY (CL-	ard	4.5+	12.2	1	ss			
9 18	3"	5	27 28 29 30	-	gray sandy silt, trac SILT (M			13.7		SS			
	_			RHHI			_			_	EOE		

Qp Estimated Unconfined Community
Penetrometer Reading, tons/ft<sup>2</sup>
Wc Moisture Content, % WS While Sampling WD While Drilling Qp Estimated Unconfined Compressive Strength Based Upon Calibrated

MS Method of Sampling
SS Split Spoon
ST Shelby Tube

				Christopher B. Burke		Proje	ng No.		B- CBE1	1402			1	_		Christopher B. Burke Metra, Maywood Stat		Proje	ng No. ect ID:	
MATER	AL SPIEVE	TRATEGO		Metra, Maywood Stat	ion improvements		ge:		7 0		1	MATLE	IAI STRYE	PESTING		Wietra, Waywood Stat	ion improvements		ige:	_
ller:	_	HTI		Drilling Completed:	7/15/2014		ter Lev	el Du		Dry	Dri	ler:		HTI		Drilling Completed:	7/15/2014		ter Le	vel [
Rig:	_	CME 7	5	Surface Elevation	627.9		ater Le			Dry		Rig:		CME 75		Surface Elevation	627.9		ater Le	
Recover y, in	Blow	Depth, ft	Graphic	Material De	scription	O <sub>p</sub> , tsf	Wo %	Y <sub>d</sub> , pcf	MS	Remarks	Sample	Recover y, in	Blow	Depth, ft	Graphic Log	Material De	scription	Q, tsf	Wo.%	Y. ocf
8" 20"	3	1 - 2 - 3 - 4 - 5 -		4" conci General dark brown/brown/tra- little sand, little prill (English of the concilination of the concilinat	vel ace black silty clay, gravel, tough CL) , trace sand, hard	1.5	20.7	-	AS		8	18"	19	21 — 22 — 23 — 24 — 25 —		gray silty sandy clay, lit sand and gravel, r CLAY, SAND,	nedium dense	4	-	
12" 20"	6 22	6 - 7 - 8 - 9 - 10 - 11 - 12 -		brown silty clay, trace hare CLAY (I	4.25	11.1	-	SS SS		9	40	11"	26 — 27 — 28 — 29 — 30 —		gray silty clay, very to rock pieces CLAY, SANI	, dense	3.75	-	-	
18"	16	13 - 14 - 15 -		gray silty clay, trace s hard CLAY (I	d	4.5+	-		ss											
24"	15	17 - 18 - 19 - 20 -		gray very silty clay, t gravel, t CLAY (t	hard	4.5+	-	-	SS											

Material Description gray silty sandy clay, little gravel, hard and sand and gravel, medium dense CLAY, SAND/GRAVEL gray silty clay, very tough with sand and rock pieces, dense CLAY, SAND/ROCK Legend:

Water Level While Sampling

Qp Estimated Unconfined Compressive Strength Based Upon Calibrated

Penetrometer Reading, tons/ft<sup>2</sup>
Wc Moisture Content, % Ws While Sampling
Y<sub>d</sub> Dry Density, pounds/ft<sup>3</sup> WD While Drilling

DESIGNED мвт VILLAGE OF MAYWOOD DRAWN REVISED MBT CHECKED MEK REVISED PLOT DATE = 1/22/2016 DATE 01/25/16 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

Water Level While Sampling

Estimated Unconfined Compress

Penetrometer Reading, tons/ft<sup>2</sup>

Wc Moisture Content, %

Y<sub>d</sub> Dry Density, pounds/ft<sup>3</sup>

WS While Sampling
WD While Drilling

**MAYWOOD METRA STATION BORING LOG** 

COUNTY

Water Level After Drilling
MS Method of Sampling
SS Split Spoon
ST Shelby Tube
HA Hand Auger

TOTAL SHEET NO. 65 22 SECTION СООК 13-00136-00-RR CONTRACT NO. 61C74 SCALE: SHEET OF SHEETS STA. TO STA.

water Level After Drilling
M5 Method of Sampling
S5 Split Spoon
ST Shelby Tube
HA Hand Auger

### GENERAL NOTES

- THE BUILDING CODE APPLICABLE TO THIS PROJECT IS THE INTER NATIONAL BUILDING CODE (IBC) 2003.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE TYPICAL AND SHALL BE USED WHEREVER A SIMILAR CONDITION OCCURS UNLESS NOTED
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AS IT RELATES TO NEW CONSTRUCTION. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE E/A.
- THE STABILITY AND STRENGTH OF THE COMPLETED STRUCTURE DEPENDS UPON THE INTERACTION OF VARIOUS CONNECTED PARTS SUCH AS DIAPHRAGMS, BRACES AND/OR SHEAR WALLS. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND/OR SHORING AS NECESSARY TO COMPLETE THE WORK.
- DESIGN LOADS:

ROOF LOAD:	
DEAD LOAD	ACTUAL WEIGH
ELECTRICAL/MECHANICAL	5 PSF
ROOF SNOW LOAD:	
GROUND SNOW LOAD (Pv)	20 PSF
GROUND SNOW LOAD (Pg)	20 PSF
WIND LOAD:	
BASIC WIND SPEED	90 MPH
WIND LOAD IMPORTANCE FACTOR	1
WIND EXPOSURE CATEGORY	В
WIND DESIGN PRESSURE (P)	20 PSF
EARTHOUAKE LOADS:	
SITE CLASS	D
MAPPED SPEC. ACCEL. FOR SHORT PERIOD(Ss)	0.186
MAPPED SPEC. ACCEL, FOR 1 SEC (S1)	0.097
SEISMIC DESIGN CATEGORY	
SEISMIC USE GROUP	

### SOIL BORINGS

FOR BORING LOGS AND FOUNDATION RECOMMENDATION SEE THE PROJECT GEOTECHNICAL REPORT.

### EXCAVATION AND BACKFILLING

- MINIMUM REQUIRED NET BEARING CAPACITY IS: 3000 SF
- WHERE FOUNDATION IS OVER EXCAVATED, REMOVE ALL DISTURBED FOUNDATION SOIL AND REPLACE WITH LEAN CONCRETE OR COMPACTED STRUCTURAL BACKFILL.
- OVEREXCAVATE UNSUITABLE FOUNDATION SOIL WHERE REQUIRED BY THE E/A AND REPLACE WITH COMPACTED STRUCTURAL BACKFILL. SEE SPECIFICATIONS.

### REMOVAL AND PROTECTION

- PROVIDE SHORING AND BRACING FOR STRUCTURAL ELEMENTS DURING PARTIAL REMOVAL TO AVOID ANY DAMAGE TO THE EXISTING FACILITIES.
- EXISTING STRUCTURES SHALL BE PROTECTED FROM OVERLOADING DUE TO CONSTRUCTION LOADINGS. HEAVY EQUIPMENT SHALL NOT BE OPERATED CLOSE TO EXISTING TANKS TO AVOID HIGH LATERAL EARTH PRESSURES ON
- DAMAGE TO ADJACENT FACILITIES DURING CONSTRUCTION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.

## STRUCTURAL STEEL

- FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGIES".
- ALL WIDE FLANGE STRUCTURAL SHAPES SHALL CONFORM TO ASTM A992. ALL OTHER HOT ROLLED SHAPES SHALL CONFORM TO ASTM A36. ALL ANCHOR RODS SHALL CONFORM TO EITHER ASTM F1554 (GR. 55) WITH WELDABILITY SUPPLEMENT SI OR ASTM A36.
- ALL SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE B, Fy = 46 KSI.
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS ALL BOLTED CONNECTIONS SHALL BE MADE WITH  $344^{\circ}$  DIAMETER ASTM A325 N). SNUG TIGHTENED (ASTM A325 N).
- BOLT INSTALLATION SHALL BE INSPECTED USING THE TURN OF NUT METHOD, OR AS AN ALTERNATE, TWIST-OFF TYPE A325 BOLTS MAY BE USED.
- WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANSIAWS DI. I STRUCTURAL WELDING CODE, MADE WITH E70XX ELECTRODES AND PERFORMED BY CERTIFIED WELDERS.
- ALL STRUCTURAL STEEL SHALL BE GIVEN ONE COAT OF PRIMER BEFORE LEAVING THE SHOP AND SHALL BE GIVEN TWO COATS OF FIELD PAINT. FIELD PAINT SHALL BE BY THE SAME MANUFACTURER OF THE PRIME COAT. OWNER TO APPROVE COLORS AND PAINT MANUFACTURER.
- ALL BEAMS SHALL BE FABRICATED WITH NATURAL CAMBER UP. PROVIDE ADDITIONAL CAMBER AS NOTED ON THE DRAWINGS.

## CAST-IN-PLACE CONCRETE

- CONCRETE WORK ON THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION ACI 301, STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE, PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE (ACI), EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
- ALL CONCRETE SHALL BE PROVIDED WITH A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 14 DAYS (fc) OF:

4000 PSI - FOR SLAB-ON-GRADE 4000 PSI - FOR BUILDING FOUNDATION AND RETAINING WALLS

- ALL EXTERIOR CONCRETE, BUILDING FOUNDATIONS AND CONCRETE SUBJECT TO FREEZE-THAW SHALL HAVE 4% 10.7% AIR CONTENT BY VOLUME MEASURED IN ACCORDANCE WITH ASTM C231. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260. THE SILUMP SHALL NOT EXCEED 4 NOHES MEASURED IN ACCORDANCE WITH ASTM C143.
- REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

- SUBMIT SHOP DRAWINGS OF THE REINFORCEMENT BARS PREPARED IN ACCORDANCE WITH ACI 315, DETAILS AND DETAILING OF CONCRETE REINFORCEMENT, AND SUBMITTED FOR REVIEW.
- FOR ALL EXPOSED CONCRETE PROVIDE CLASS I (PLASTIC PROTECTED) BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH THE ACI 315 DETAILING MANUAL.
- WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED.
- NO CALCIUM CHLORIDE WILL BE USED IN CONCRETE
- DUSTING WITH ANY MATERIAL TO ABSORB SURFACE WATER IS PROHIBITED.
- CURING PROCEDURES IN ACCORDANCE WITH ACI 301 SHALL CONTINUE FOR A PERIOD OF AT LEAST 7 DAYS.
- DO NOT MIX SALT, CHEMICALS OR OTHER FOREIGN MATERIALS WITH THE CONCRETE TO PREVENT FREEZING. MAINTAIN THE TEMPERATURE OF THE CONCRETE ABOVE 50 DEGREES FAHRENHEIT FOR FIVE DAYS AFTER
- COVER FOR REINFORCEMENT FOR CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 6 THROUGH NO. 18 BARS NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER	2 1 1/2
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS:	3/4
BEAMS, COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1 1/2

13. UNLESS SHOWN OTHERWISE ON PLANS, LAP SPLICES OF UNCOATED REINFORCEMENT BARS SHALL BE AS FOLLOWS:

	L	AP L	ENG?	TH - I	NCHI	ES (S	MAL	LER I	3AR)*	
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11	
HORIZONTAL BARS SO PLACED THAT MORE THAN 12 INCHES OF CONCRETE WILL BE CAST BELOW THE	24	32	40	48	70	80	91	102	113	

B) HORIZONTAL BARS SO PLACED THAT LESS THAN 12 INCHES OF CONCRETE WILL BE CAST BELOW THE BARS 19 25 31 37 54 62 70 79 87

C) VERTICAL BARS 19 25 31 37 54 62 70 79 87

\* LAP LENGTHS ARE CALCULATED FOR UNCOATED BARS IN ACCORDANCE WITH ACI 318, CLASS B SPLICES AND fc = 4000 PSI. MINIMUM CLEAR SPACING BETWEEN BARS IS TWO BAR DIAMETERS AND MINIMUM COVER IS ONE BAR DIAMETER. FOR OTHER CONDITIONS, CALCULATE SPLICES IN ACCORDANCE WITH ACI 318, CLASS B SPLICES REQUIRED UNLESS NOTED

- OTHERWISE.

  OBTAIN E/A'S WRITTEN APPROVAL FOR ANY ADDITIONAL OR RELOCATED CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON DRAWINGS.
- UNLESS SHOWN OTHERWISE, CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4 INCH.
- SEE MECHANICAL, ELECTRICAL, ARCHITECTURAL, AND PIPING DRAWINGS AND EQUIPMENT MANUFACTURER'S SHOP DRAWINGS FOR LOCATION OF SLEEVES, HOLES, OPENINGS, RECESSES IN SLABS AND WALLS, CASTINGS, ANCHOR BOLTS, ETC.
- PROVIDE CONTROL JOINTS IN ALL NON-STRUCTURAL SLABS ON GRADE. SEE SPECIFICATIONS.
- VERTICAL CONTRACTION AND CONSTRUCTION JOINT SPACING IN WALLS SHALL NOT EXCEED 40 FEET.
- 19. ALL REINFORCEMENT IS TO BE EPOXY COATED.

## MASONRY

- MASONRY WORK ON THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF ACI 530.1, BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES, EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
- CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE WITH ASTM C90, GRADE N, TYPE I.
- BRICK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI ON THE GROSS AREA.
- MORTAR SHALL CONFORM TO ASTM C270, TYPE S MORTAR
- COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'M) SHALL BE 1500 PSI MINIMUM.
- COMPRESSIVE STRENGTH OF BRICK MASONRY (F'M) SHALL BE 1500 PSI MINIMUM.
- BAR REINFORCEMENT SHALL CONFORM TO ASTM A615 GRADE 60
- LENGTH OF BAR SPLICES SHALL BE EQUAL TO 48 BAR DIAMETERS.

3-9 GA, WIRE, TRUSS TYPE - FOR CAVITY WALLS 3-9 GA, WIRE, LADDER TYPE - FOR COMPOSITE WALLS 2-9 GA, WIRE, LADDER TYPE - FOR SINGLE WYTHE WALLS

JOINT REINFORCEMENT, TIES AND ANCHORS SHALL BE GALVANIZED IN ACCORDANCE WITH ACI 530.1.

JOINT REINFORCEMENT SHALL BE MADE OF COLD DRAWN WIRE AND SHALL CONFORM TO ASTM A82. JOINT REINFORCEMENT SHALL BE:

- JOINT REINFORCEMENT SHALL BE PLACED IN ALL MASONRY WALLS AND SPACED 16" O.C., UNLESS OTHERWISE NOTED.
- ALL CELLS WITH REINFORCEMENT, BOND BEAMS, MASONRY LINTELS AND SILLS SHALL BE FULLY GROUTED. GROUT SHALL CONFORM TO ASTM C47A AND SHALL HAVE 28-DAY COMPRESSIVE STRENGTH OF 2000 PSI MINIMUM.
- MASONRY CONTROL JOINTS SHALL BE PLACED IN REGULAR INTERVALS, AS SHOWN ON ARCHITECTURAL DRAWINGS. BOND BEAM REINFORCEMENT SHALL BE CARRIED THROUGH CONTROL JOINTS.

- LAY CONCRETE MASONRY UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS AND WEBS.
- WYTHES IN REINFORCED COMPOSITE BRICK WALLS SHALL BE BONDED WITH 9 GA. WIRE TIES SPACED 16" O.C. VERTICALLY AND 32" HORIZONTALLY. TIES IN ALTERNATE COURSES SHALL BE STAGGERED.
- WYTHES IN MULTIPLE-WYTHE BRICK WALLS SHALL BE BONDED BY MEANS
- ALL BRICK/CMU WALLS WITH NO CAVITY ARE COMPOSITE. PARGE (BACK PLASTER) FIRST WYTHE LAID WITH MORTAR NOT LESS THAN 3/8" THICK.

### LIGHT GAGE STEEL NOTES:

- ALL AXIAL OR WIND LOADED LIGHT GAGE STEEL STUDS, TRACK, JOISTS, TRUSSES, BRIDGING AND RELATED ACCESSORIES ARE AS INDICATED ON THE CONTRACT DRAWINGS AND SPECIFIED HEREIN.
- 2. WORK SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS
  - AMERICAN IRON AND STEEL INSTITUTE (A.I.S.I.) DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS, 2007

  - AMERICAN WELDING SOCIETY (A.W.S.) D.1.3, 2008 STRUCTURAL WELDING CODE-SHEET STEEL. AMERICAN SOCIETY FOR TESTING AND MATERIALS (A.S.T.M.) AMERICAN INSTITUTE OF STEEL CONSTRUCTION (A.I.S.C) MANUAL
  - OF STEEL CONSTRUCTION, 13TH EDITION ALL PERTINENT FEDERAL, STATE AND LOCAL CODES.
- THE MOST STRINGENT REQUIREMENTS SHALL GOVERN IN CONFLICTS
- SUBMIT STRUCTURAL CALCULATIONS FOR DESIGN OF TRUSSES, COMPRESSION AND TENSION CHORDS, SHEAR WALL AND CONNECTIONS, STAMPED AND SEALED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS PREPARED BY THE MANUFACTURER FOR APPROVAL ECT ARCHITECT AND PROJECT ENGINEER. CALCULATION

BETWEEN SPECIFIED CODES AND STANDARDS.

- DESCRIPTION OF DESIGN CRITERIA.
  SELECTION OF BRIDGING COMPONENTS AND ACCESSORIES.
- VERIFICATION OF ATTACHMENTS TO STRUCTURE AND/OR ADJACENT FRAMING COMPONENTS.
- SUBMIT DRAWINGS STAMPED AND SEALED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS PREPARED BY THE MANUFACTURER FOR APPROVAL BY THE PROJECT ARCHITECT AND PROJECT ENGINEER. THESE DRAWINGS SHOULD INCLUDE:
  - CROSS-SECTIONS, PLANS AND/OR ELEVATIONS DEPICTING COMPONENT LOCATIONS.
  - CONNECTION DETAILS SHOWING SCREW TYPES AND LOCATIONS WELD LENGTHS AND LOCATIONS OR OTHER RELATED FASTENER REQUIREMENTS.
- WHERE THE CONTRACTOR INTENDS ON ERECTING PREFABRICATED/PREFINISHED PANELS, DRAWINGS DEPICTING PANEL CONFIGURATIONS, DIMENSIONS AND LOCATIONS WOULD BE DEVELOPED BY THE CONTRACTOR.
- UPON DELIVERY, MATERIAL SHALL BE PROTECTED FROM RAIN AND SNOW BY IMPERVIOUS COVERING OR SHELTER.
- ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING TEN (10) DAYS PRIOR TO BID DATE, BY THE ARCHITECT AND/ OR ENGINEER OF RECORD.
- ALL GALVANIZED STUDS, JOISTS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF A.S.T.M. A653.
- FRAMING COMPONENTS MAY BE PREASSEMBLED INTO PANELS PRIOR TO ERECTING. PREFABRICATED PANELS SHALL BE SQUARE, WITH COMPONENTS ATTACHED IN A MANNER AS TO PREVENT
- ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
- 11. SPLICES IN AXIALLY LOADED STUDS SHALL NOT BE PERMITTED.
- 12. FASTENING OF COMPONENTS SHALL BE WITH SELF TAPPING SCREWS OR WELDING OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE
- WELDS SHALL BE PERFORMED BY OPERATORS QUALIFIED IN ACCORDANCE WITH SECTION 6.0 OF THE AMERICAN WELDING SOCIETYS STRUCTURAL WELDING CODE-SHEET METAL (AWS D1.3-81). ALL WELDS SHALL BE TOUCHED UP WITH ZINC RICH PAINT.
- 14. IMMEDIATELY NOTIFY ARCHITECT AND ENGINEER OF ALL DISCREPANCIES.
- DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCIES UNTIL SUCH DISCREPANCY HAS BEEN FULLY RESOLVED.
- ERECT ROOF TRUSSES, LEVEL, PLUMB, AND ALIGNED IN STRICT ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.
- 17. HANDLING AND LIFTING OF PREFABRICATED TRUSSES SHALL BE DONE IN A MANNER AS TO NOT CAUSE DISTORTION IN ANY MEMBER.
- TRUSSES SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE AS SHOWN ON THE ERECTION DRAWINGS.
- TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.
- JOIST SHALL BE LOCATED DIRECTLY OVER BEARING STUDS OR A LOAD DISTRIBUTION MEMBER SHALL BE PROVIDED AT THE TOP TRACK.
- PROVIDE WEB STIFFENERS AS REQUIRED BY THE LIGHT GAGE MANUFACTURER.
- 22. END BLOCKING SHALL BE PROVIDED WHERE JOIST ENDS ARE NOT OTHERWISE RESTRAINED FROM ROTATION.

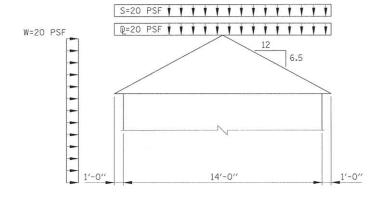
### FORM LINER TEXTURED SURFACE NOTE

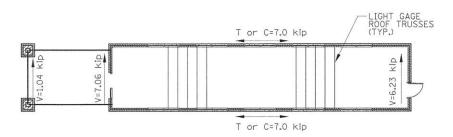
WALLS SHALL HAVE A FORM LINER TEXTURED SURFACE WHERE SHOWN IN THE PLANS. THE FORM LINER SHALL HAVE A MAXIMUM RELIEF OF 1.5 INCHES. THE PATTERN OF THE FORM LINER SHALL BE APPROVED BY THE VILLAGE OF

## DESIGN LOADS

LIVE LOAD: SNOW = 20 PSF WIND = 20 PSF

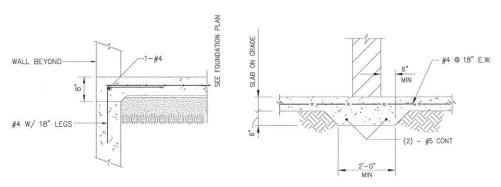
DEAD LOAD: ROOF + MEMBRANE = 15 PSF TRUSS = 5 PSF





## WIND LOAD ON END TRUSSES

THE LIGHT GAGE TRUSS MANUFACTURER SHALL DESIGN THE END TRUSSES TO TRANSFER THE WIND LOADS SHOWN ON FRAMING PLANS TO THE SUPPORTING STRUCTURES, THE CONNECTION OF END TRUSSESS TO THE SUPPORTING MEMBERS, AND CHORD MEMBERS TO HAVE ENOUGH CAPACITY FOR THE SHOWN COMPRESSION OR TENSION LOADS. SUBMIT DRAWINGS STAMPED AND SEALED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS PREPARED BY THE MANUFACTURER FOR APPROVAL BY THE PROJECT ARCHITECT AND PROJECT ENGINEER.

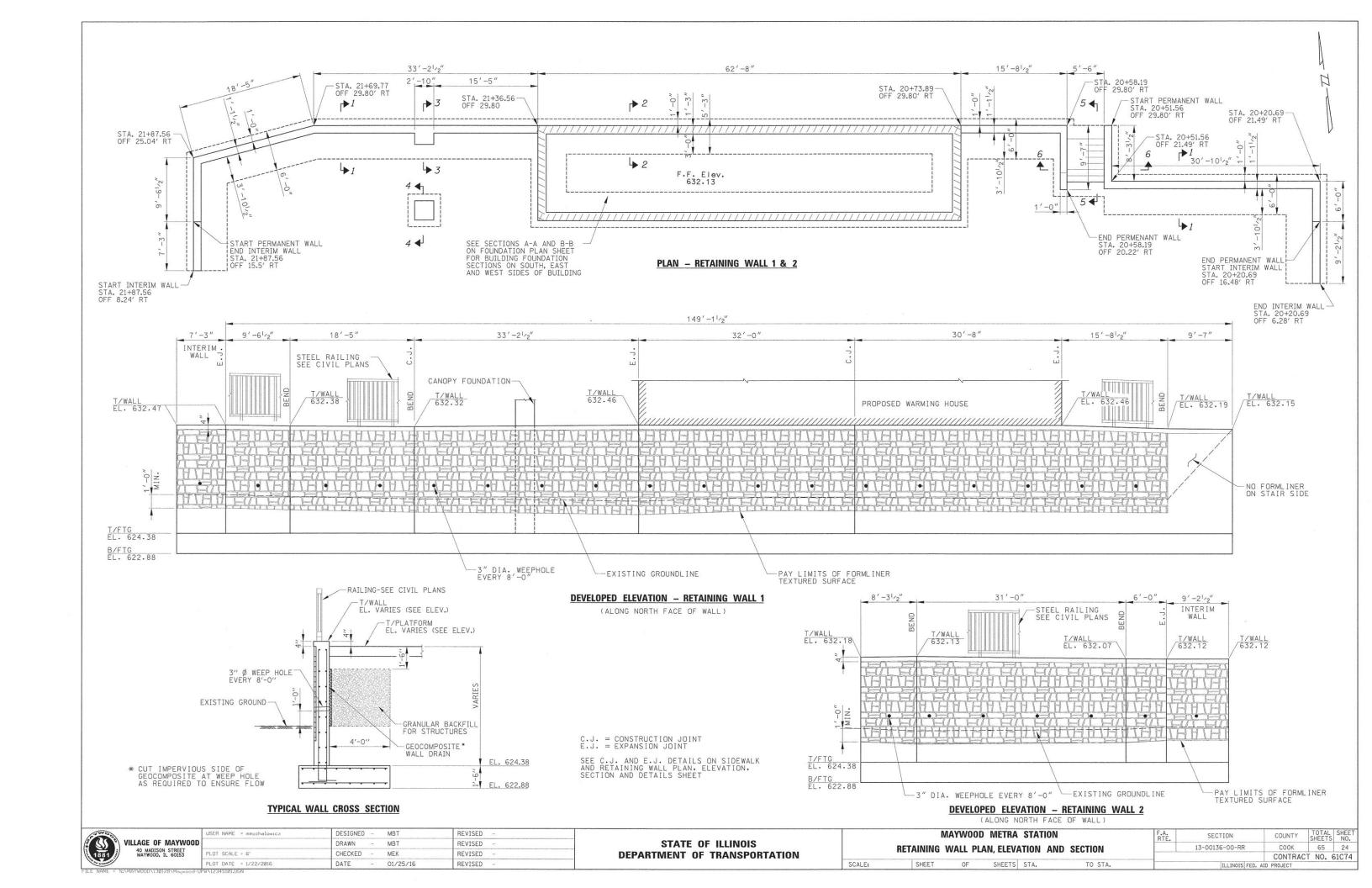


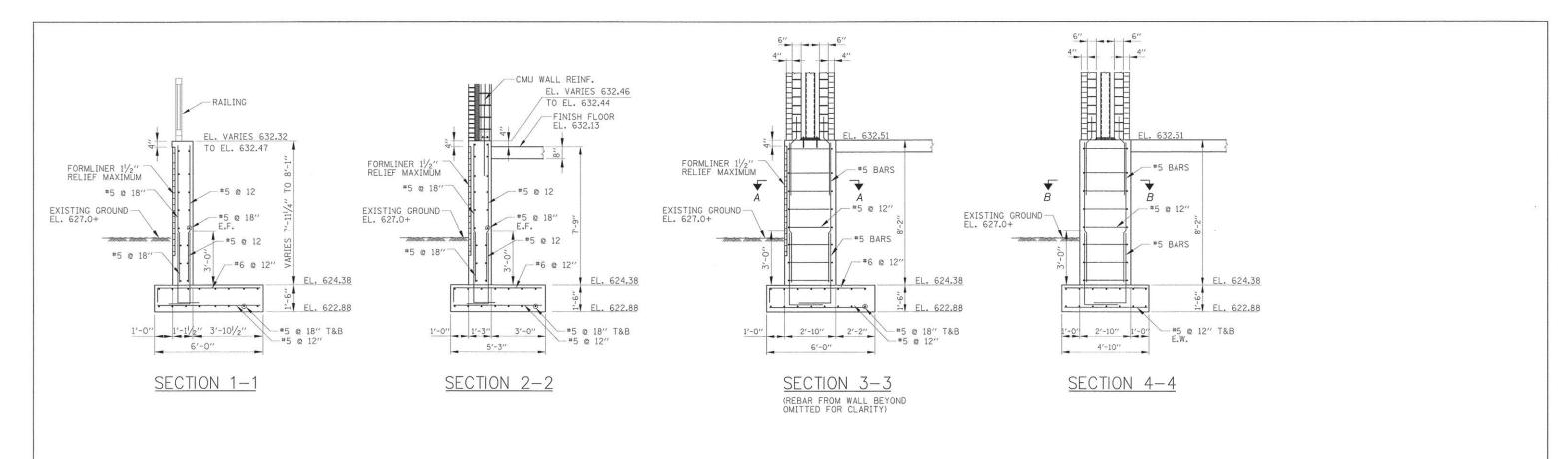
## SECTION

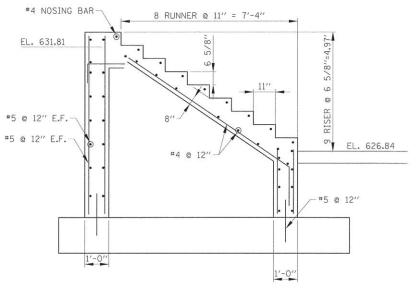
TYPICAL THICKENED SLAB DETAIL

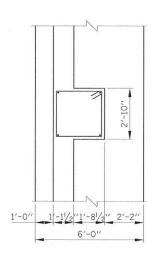
UNDER ALL INTERIOR NON-BEARING MASONRY WALLS

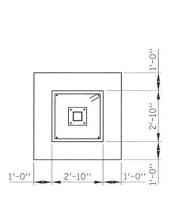
DESIGNED MAYWOOD METRA STATION SECTION COUNTY VILLAGE OF MAYWOOD DRAWN MBT REVISED STATE OF ILLINOIS STRUCTURAL NOTES AND DETAILS 13-00136-00-RR COOK 65 CHECKED MEK **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61C74 PLOT DATE = 1/22/2016 DATE SCALE. SHEET SHEETS STA. TO STA. 01/25/16 REVISED

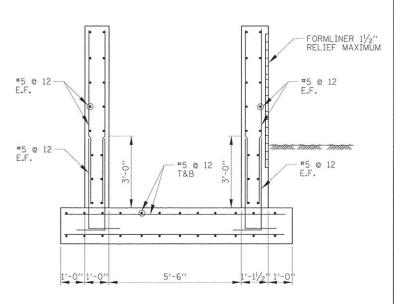












TYPICAL STAIR DETAIL
SECTION 5-5

SECTION A-A

SECTION B-B

SHEET

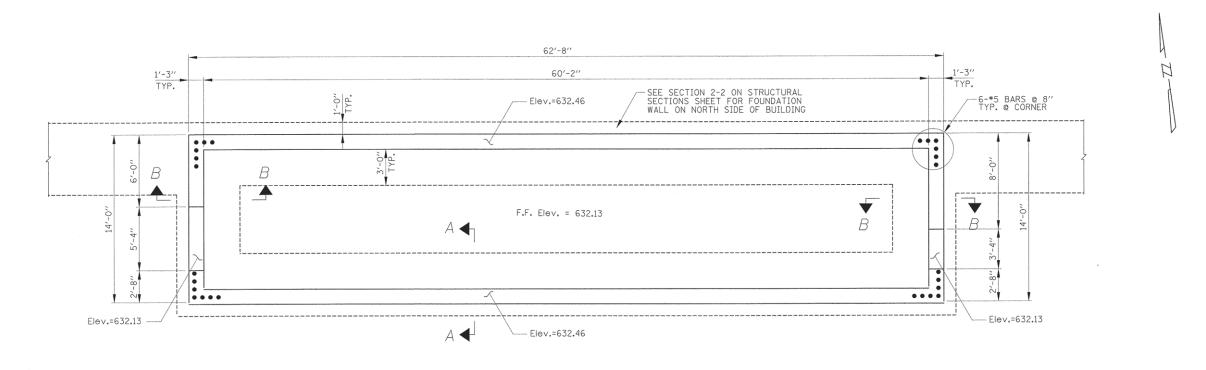
SECTION THRU STAIR SECTION 6-6

Two	1
VILLAGE OF MAYWOOD	Г
40 MADISON STREET MAYWOOD, IL 60153	i
On STREET	1

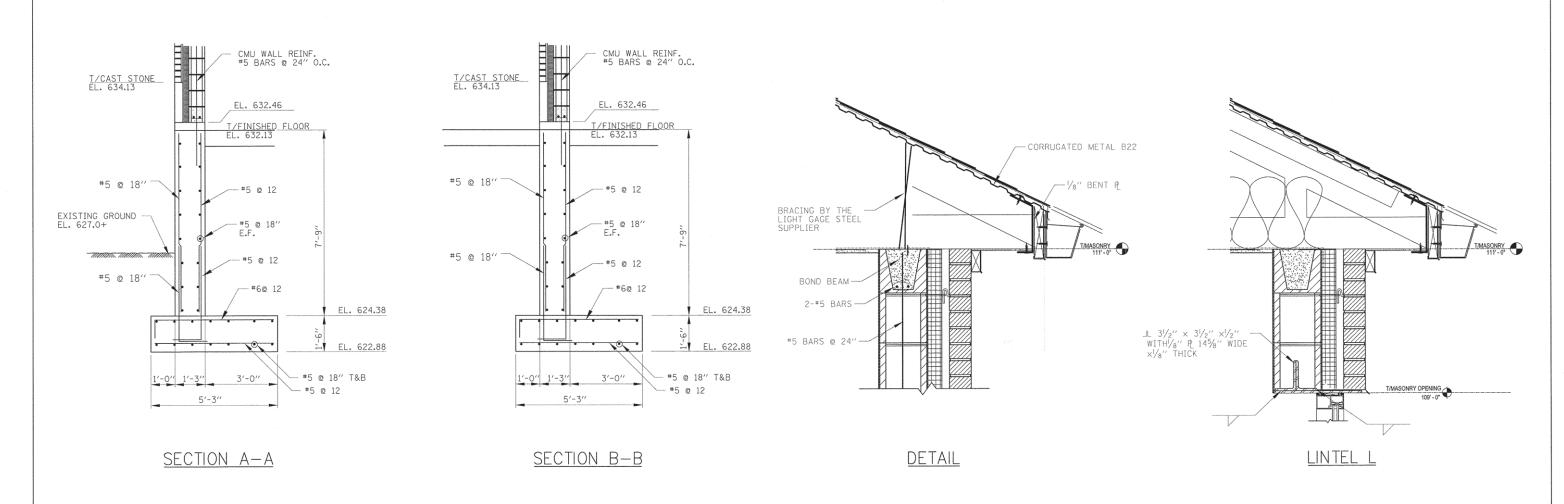
	USER NAME = mmichalowicz	DESIGNED -	MBT	REVISED -	Ī
)		DRAWN -	MBT	REVISED -	
	PLOT SCALE = 1'	CHECKED -	MEK	REVISED -	
	PLOT DATE = 2/19/2016	DATE -	01/25/16	REVISED -	
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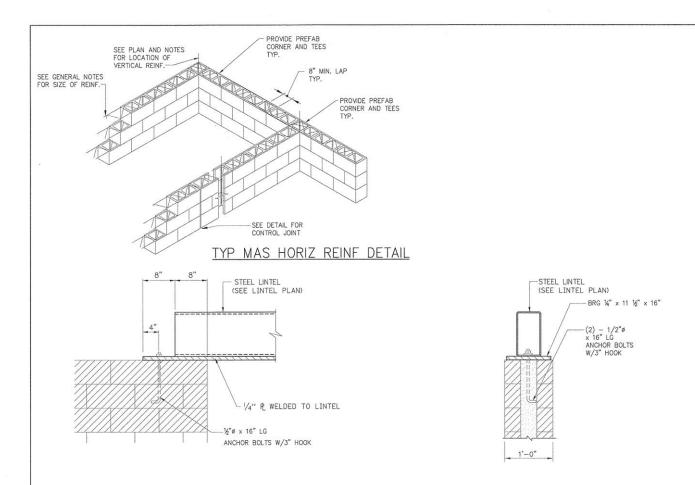
MAYWOOD METRA STATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURAL SECTIONS		25			
			CONTRA	CT NO. 6	51C74
OF SHEETS STA TO STA		THE THOTE COD	ATD DOO ICCT		Constitution of Security Security



## FOUNDATION PLAN



	2000	USER NAME = mmichalowicz	DESIGNED -	MBT	REVISED -			M	AYW00D	METRA STATION		F.A. RTE.	SECTION	COUNTY	SHEETS	SHEET NO.
\\\\	VILLAGE OF MAYWOOD		DRAWN -	MBT	REVISED -	STATE OF ILLINOIS			FOLINI	DATION DIAN			13-00136-00-RR	соок	65	26
1/2	1881 40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 4'	CHECKED -	MEK	REVISED -	DEPARTMENT OF TRANSPORTATION		www.aa	FUUNI	JATIUN PLAN		_		CONTRAC	T NO. f	51074
\	1881 MAYWOOD, IL 60153	PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. /	ID PROJECT		101110-0110-010-010-0110-0110-010-010-010-010-010-0110-010-



# TYP. LINTEL BEARING DETAILS (ON MASONRY)

USER NAME = mmichalowicz

PLOT DATE = 1/22/2016

PLOT SCALE = 1

VILLAGE OF MAYWOOD

DESIGNED

CHECKED

DRAWN

DATE

MBT

MBT

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01/25/16

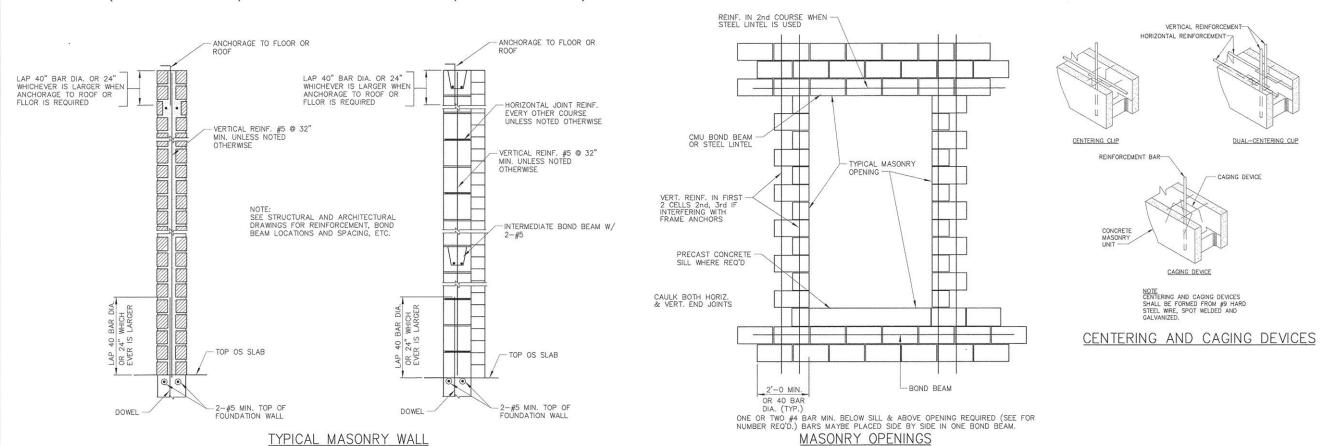
# TYP. LINTEL BEARING DETAILS (ON MASONRY)

REVISED

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STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

TOTAL SHEET NO. 65 27

CONTRACT NO 61C74

COUNTY

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SECTION

13-00136-00-RR

MAYWOOD METRA STATION

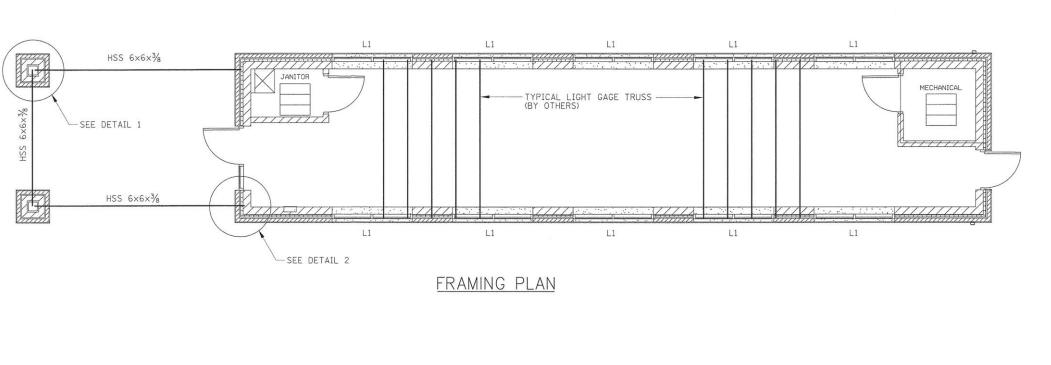
STRUCTURAL DETAILS

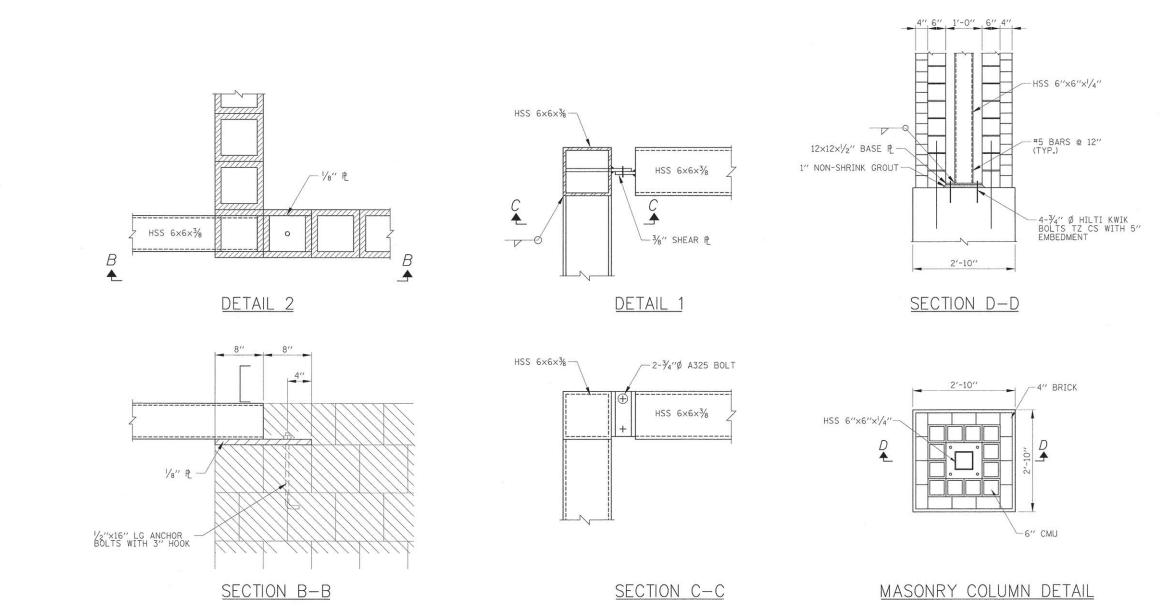
SHEETS STA.

TO STA.

SCALE:

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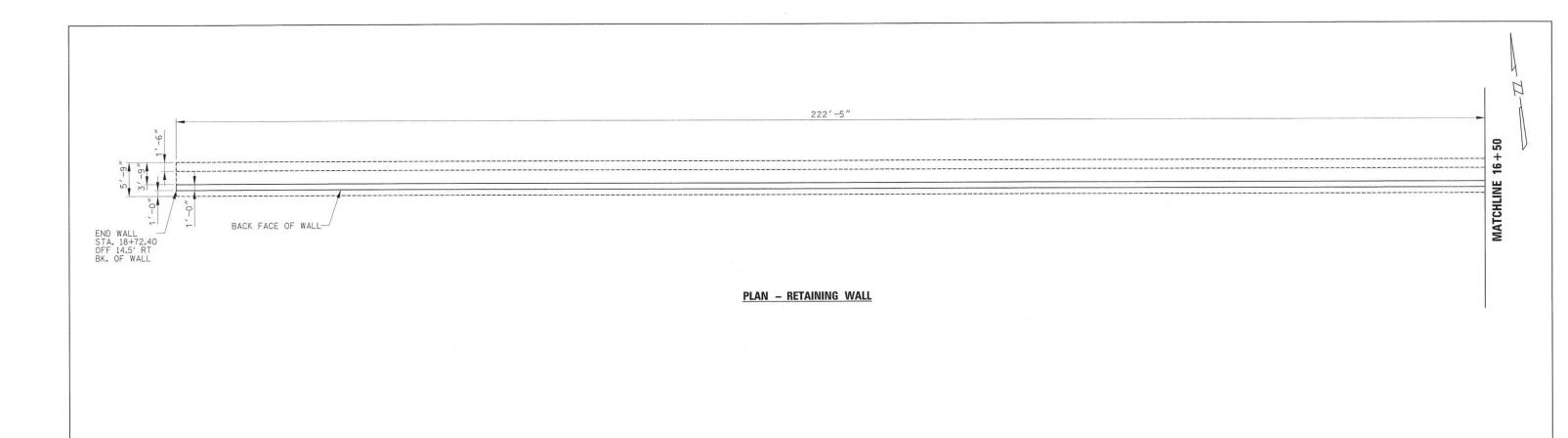


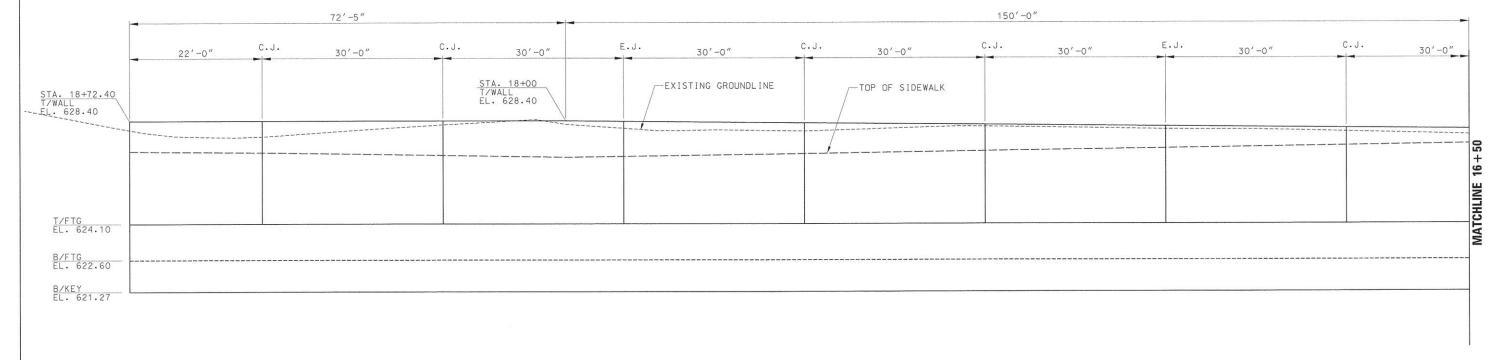


COUNTY SHEETS NO.

COOK 65 28

CONTRACT NO. 61C74 DESIGNED REVISED MAYWOOD METRA STATION SECTION VILLAGE OF MAYWOOD STATE OF ILLINOIS DRAWN MBT REVISED 13-00136-00-RR STRUCTURAL SECTIONS CHECKED MEK REVISED **DEPARTMENT OF TRANSPORTATION** PLOT DATE = 1/22/2016 DATE 01/25/16 REVISED SCALE: SHEET SHEETS STA. TO STA.





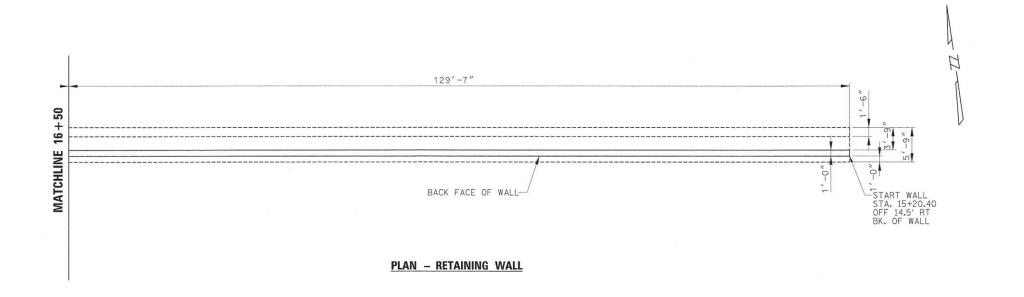
## **ELEVATION - RETAINING WALL**

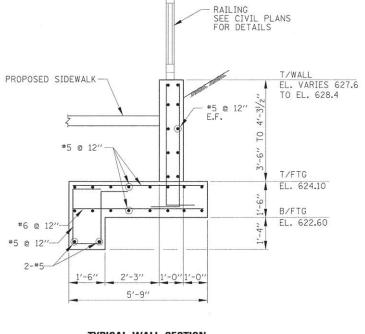
(FENCE OMITTED FOR CLARITY)

C.J. = CONSTRUCTION JOINT

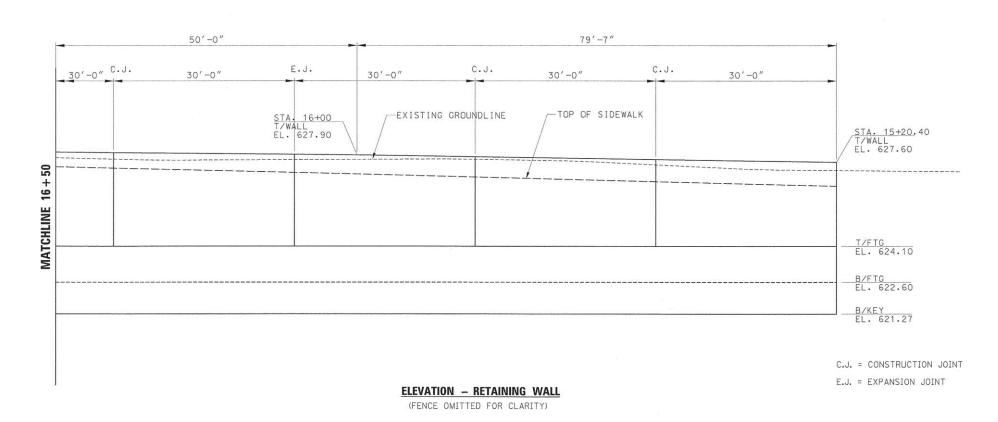
E.J. = EXPANSION JOINT

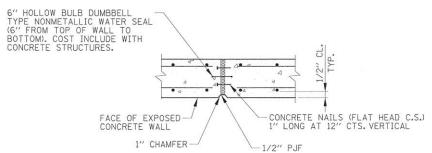
(Two)	USER NAME ≈ mmichalowicz	DESIGNED -	MBT	REVISED -				MAYWOO	D METRA ST	ATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
VILLAGE OF MAYWOOD		DRAWN -	MBT	REVISED -	STATE OF ILLINOIS		SIDEWALK I	DETAININ	C WALL DIAM	AND ELEVATION		13-00136-00-RR	соок	65 29
40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 8'	CHECKED -	MEK	REVISED -	DEPARTMENT OF TRANSPORTATION		SIDLWALK I	IL I AIIVIIV	U WALL ILAN	AND LELVATION			CONTRA	CT NO. 61C74
	PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE:	SHEET	OF	SHEETS STA	. TO STA.		ILLINOIS FED.	AID PROJECT	





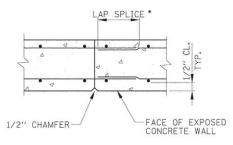
## TYPICAL WALL SECTION





## **EXPANSION JOINT DETAILS**

(FORMLINER FOR MAIN STATION WALLS OMITTED FOR CLARITY)

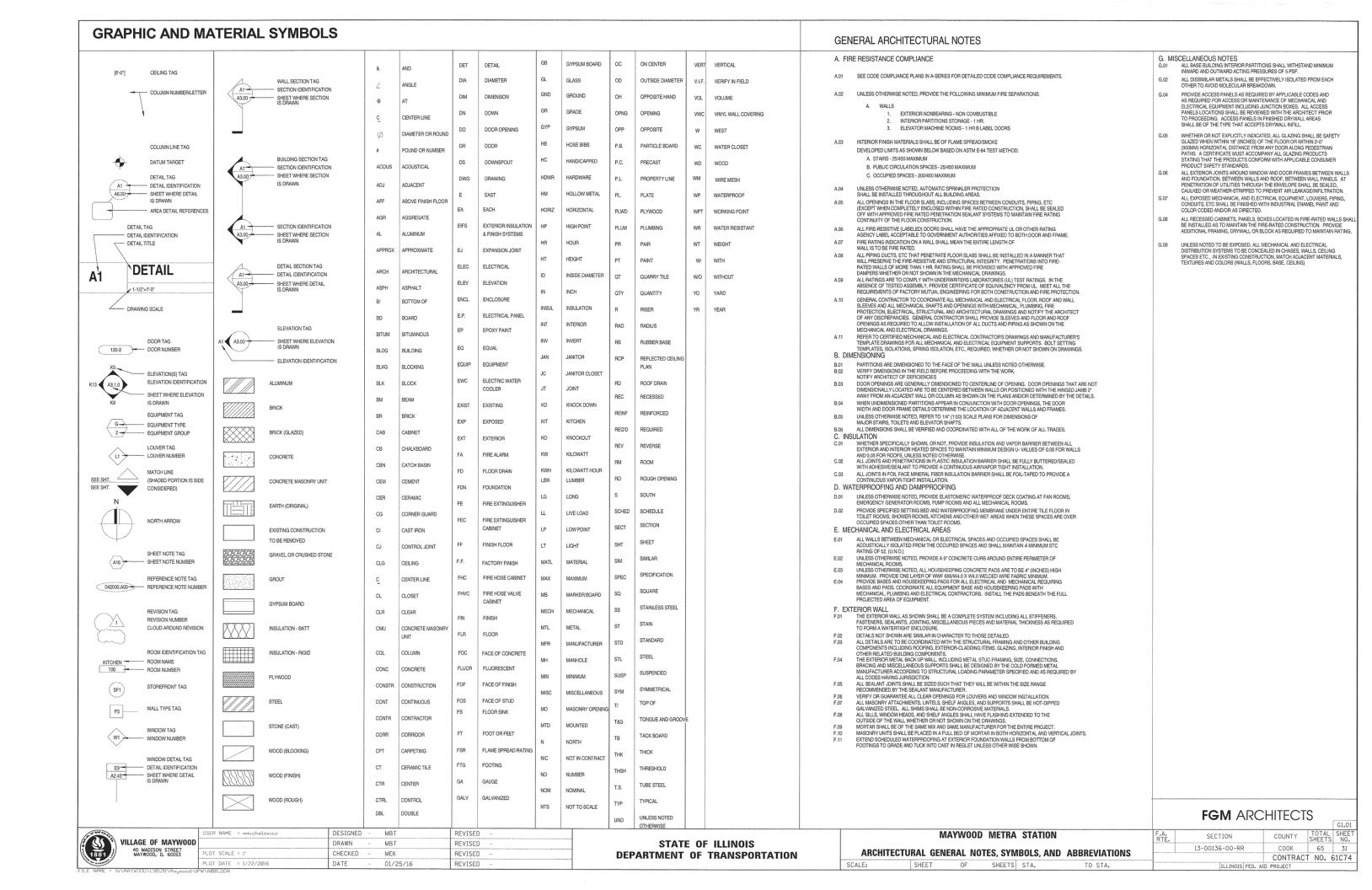


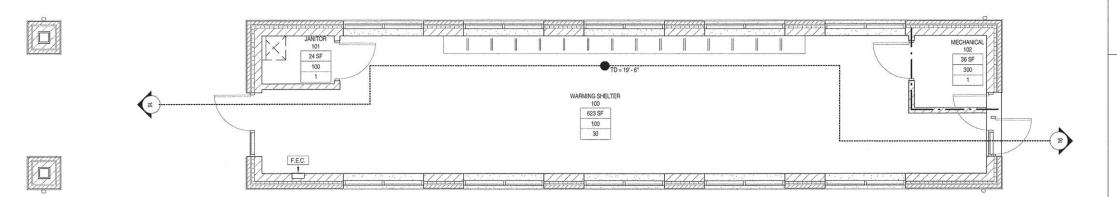
\* SEE STRUCTURAL NOTES AND DETAILS SHEET FOR LAP SPLICE LENGTH

## CONSTRUCTION JOINT DETAILS

(FORMLINER FOR MAIN STATION WALLS OMITTED FOR CLARITY)

(Two	USER NAME = mmichalowicz	DESIGNED MBT	REVISED -				<b>MAYW00</b>	D METR	RA STATION	V	F.A.	SECTION	COUNTY	TOTAL SHE
VILLAGE OF MAYWOO	D	DRAWN - MBT	REVISED -	STATE OF ILLINOIS	+	SIDEWAL	K RETAIN	VING WA	ALL PLAN, E	ELEVATION,	KIE.	13-00136-00-RR	COOK	65 3
40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 8'	CHECKED - MEK	REVISED -	DEPARTMENT OF TRANSPORTATION			SECTIO	ON AND	DETAILS			15 00150 00 101	CONTRA	CT NO. 61C7
S. Arrange	PLOT DATE = 1/22/2016	DATE - 01/25/16	REVISED -		SCALE:	SHEET	OF	SHEET	IS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	71 1101 0101





**CODE PLAN** 

1/4" = 1'-0"

## 7. MAXIMUM TRAVEL DISTANCE

TD = 105' - 4" DISTANCE TO EXIT (Table 1016.1):

BUSINESS B: MAX. 300 FEET

COMMON PATH OF TRAVEL:

100 FEET

MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE	1019.1
OCCUPANT LOAD (per story)	MIN. NO. OF EXITS (per story)
1 - 500	2
500 - 1000	3
More than 1000	4

DEAD END: MAX. 50 FEET (Section 1017.3)

8. F.E.C. FIRE EXTINGUISHER CABINET RECESSED - U.N.O.

F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (Section 906)

S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (Section 410.7) (Section 905)

## Fire-Resistive Requirements:

For Type 2B Construction

Ratings for Building Elements (in hours);

Fire Resistance Rating Requirements for building elements (Table 601) :

1. a. Structural Frame: (columns, girders, beams, joists, spandrels and bracing)
b. Exterior Bearing Walls:
c. Interior Bearing Walls:
d. Non-bearing walls and partitions - Exterior;
e. Non-bearing walls and partitions - Interior:
f. Floor Construction, including supporting beams and joists;
g. Roof Construction, including supporting beams and joists;

Fire Walls and Party Walls : Fire Separation Assemblies : a. Exit (stair) enclosures

N/A, refer to Section 707.2 (Shaft Opening Protected by Draft Curtain and NA, refer to Section 707.2 (Shaft Opening Protected by Draft Cut Closely Spaced Sprinkler Heads) 1 hr. (Section 708) 1 hr. (Business B, Institutional I-3, Storage S-2) (Table 508.3.3) NA NA

(1 PER 3,000 SF & 75 FT. MAX. TRAVEL)

Shaft Enclosures / Elevator Hoistways
 Mixed Use / Fire Separation Assemblies
 Other Separation Assemblies
 Shafts

Fire Partitions:

a. Exit Access Corridors: 0 hr. (Table 1017.1)
b. Combustibility (Sections 602.2, 602.3, 602.4, 602.5, 603)
1. Exterior Walls: Non-combustible
2. Interior Clements: Non-combustible
3. Roof: Non-combustible

2. Other Requirements: Incidental Use Areas (Table 508.2) / (Table 715.4):

a. Mechanical / Electrical /Pump

SCALE:

## 1 hr. / 60 min. doors

## GENERAL NOTES

- FIRE RATED WALLS AND PARTITIONS SHALL BE CONTINUOUS, WITHOUT GAPS IN HORIZONTAL AND VERTICAL DIRECTIONS. SEAL ALL PENETRATIONS ACCORDING TO SPECIFIED OR SELECTED ULTESTS.
- IN ADDITION TO SIGNS REQUIRED BY THE SPECIFICATIONS FOR EACH PENETRATION, PROVIDE STENDILLED SIGNS AT ALL ACCESSIBLE CONCEALED FLOOR, CELLING OR ATTIC SPACE WHICH INCORPORATES THE WORDS: "FIRE ANDIOR SMOKE BARRIER PROTECT ALL PENINGS," PROVIDE AT LEAST ONE OR MORE SIGNS ON BOTH SIDES OF EACH WALL SEGMENT SPACED AT LEAST 15' APART. LETTERING SHALL BE AT LEAST 2" IN HEIGHT.

## VILLAGE OF MAYWOOD APPLICABLE CODES:

INTERNATIONAL BUILDING CODE
ILLINOIS PLUMBING CODE (ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 980)
INTERNATIONAL ENERGY CONSERVATION CODE
ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
NFPA 101, LIFE SAFETY CODE
INTERNATIONAL PREOPERTY MAINTENANCE CODE
INTERNATIONAL FIRE CODE
NATIONAL ELECTRICAL CODE 2003 2004 2012 1997 2000 2006 2003 1999

## **BUILDING AREAS:**

FIRST FLOOR GROSS ENCLOSED AREA: 880 SF
TOTAL GROSS ENCLOSED AREA: 880 SF

## CODE COMPLIANCE NOTES:

BUILDING USES: BUSINESS B, BUILDING TYPE: 28 (Table 601) FIRE PROTECTION SYSTEMS: NA OCCUPANCY CLASSIFICATIONS: (Sections 302-312, 408)

### 3 AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

ITEM	% FACTOR	FRONTAGE (Section 506.2)	N - 62' E - 0' W - 0' S - 0'	
% OF ALLOWABLE TABULAR AREA	100	l <del></del>		
% REDUCTION FOR HEIGHT	0	TOTAL FRONTAGE	62 FT 148 FT 25 FT .13 (13%)	
% INCREASE FOR OPEN PERIMETER	13	PERIMETER		
% INCREASE FOR AUTOMATIC SPRINKLER	0	WIDTH OF OPEN SPACE		
TOTAL PERCENTAGE FACTOR	113%	AREA INCREASE - FRONTAGE		
CONVERSION FACTOR (TOTAL PERCENTAGE FACTOR / 100%)	1.13	I = [(F/P)-0.25]xW/30		

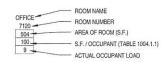
ALLOWABLE TABULAR AREA (SF) 23,000 0 0 0  ACTUAL FLOOR AREA - TOTAL (SF)  GROUND FLOOR (SF) 880 0 0 0  ADJUSTED FLOOR AREA: ACTUAL AREA / CONVERSION FACTOR  GROUND FLOOR (SF) 778 0 0 0		H-3	S-1	1-3	В	USE GROUP
GROUND FLOOR (SF)         880         0         0         0           ADJUSTED FLOOR AREA: ACTUAL AREA / CONVERSION FACTOR		0	0	0	23,000	ALLOWABLE TABULAR AREA (SF)
ADJUSTED FLOOR AREA: ACTUAL AREA / CONVERSION FACTOR	RATIO					ACTUAL FLOOR AREA - TOTAL (SF)
	ADJUSTED FLOOR AREA / ALLOWABLE	0	0	0	880	GROUND FLOOR (SF)
GROUND FLOOR (SF) 778 0 0 0	AREA (Must be = 3.0)</td <td></td> <td></td> <td>OR</td> <td>/ CONVERSION FACTO</td> <td>ADJUSTED FLOOR AREA: ACTUAL AREA</td>			OR	/ CONVERSION FACTO	ADJUSTED FLOOR AREA: ACTUAL AREA
	0.03	0	0	0	778	GROUND FLOOR (SF)
TOTAL	0.03		TOTAL			

## 4. FIRE-RESISTANCE LEGEND:

OCCUPANCY LEGEND:

1-HR. FIRE SEPARATION ASSEMBLY

OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2003 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ("0" INDICATES THAT THE ACTUAL OCCUPANT WAS USED)



## EXITING LEGEND:

TO STA.



· NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON STAIRS: NO EGRESS STAIR IN PROJECT

## **FGM** ARCHITECTS

	. •	3111120		G1.0
.A. RTE.	SECTION	COUNTY	TOTAL	SHE
	13-00136-00-RR	COOK	65	32
		CONTRAC	T NO. F	1C7

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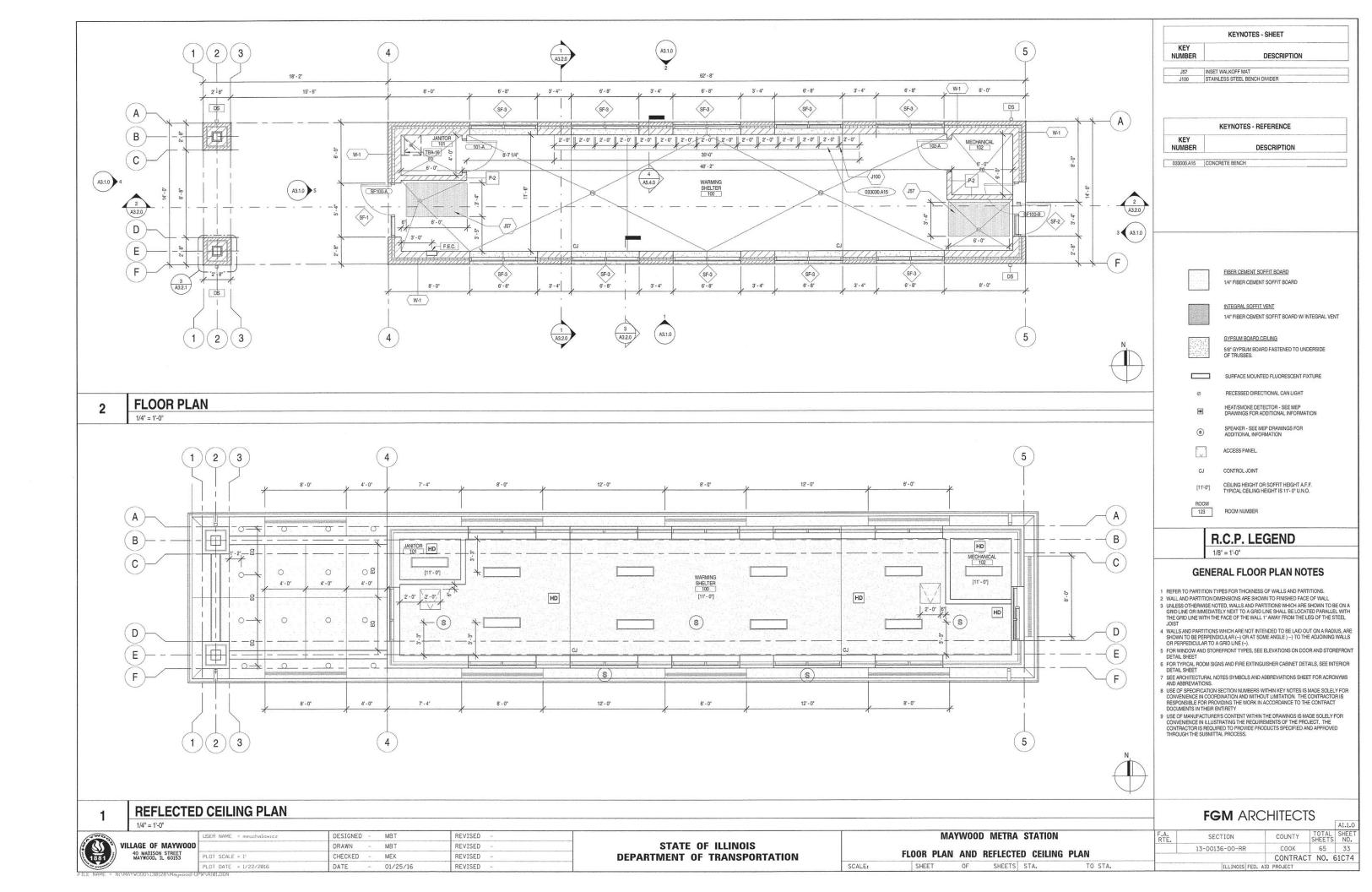
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

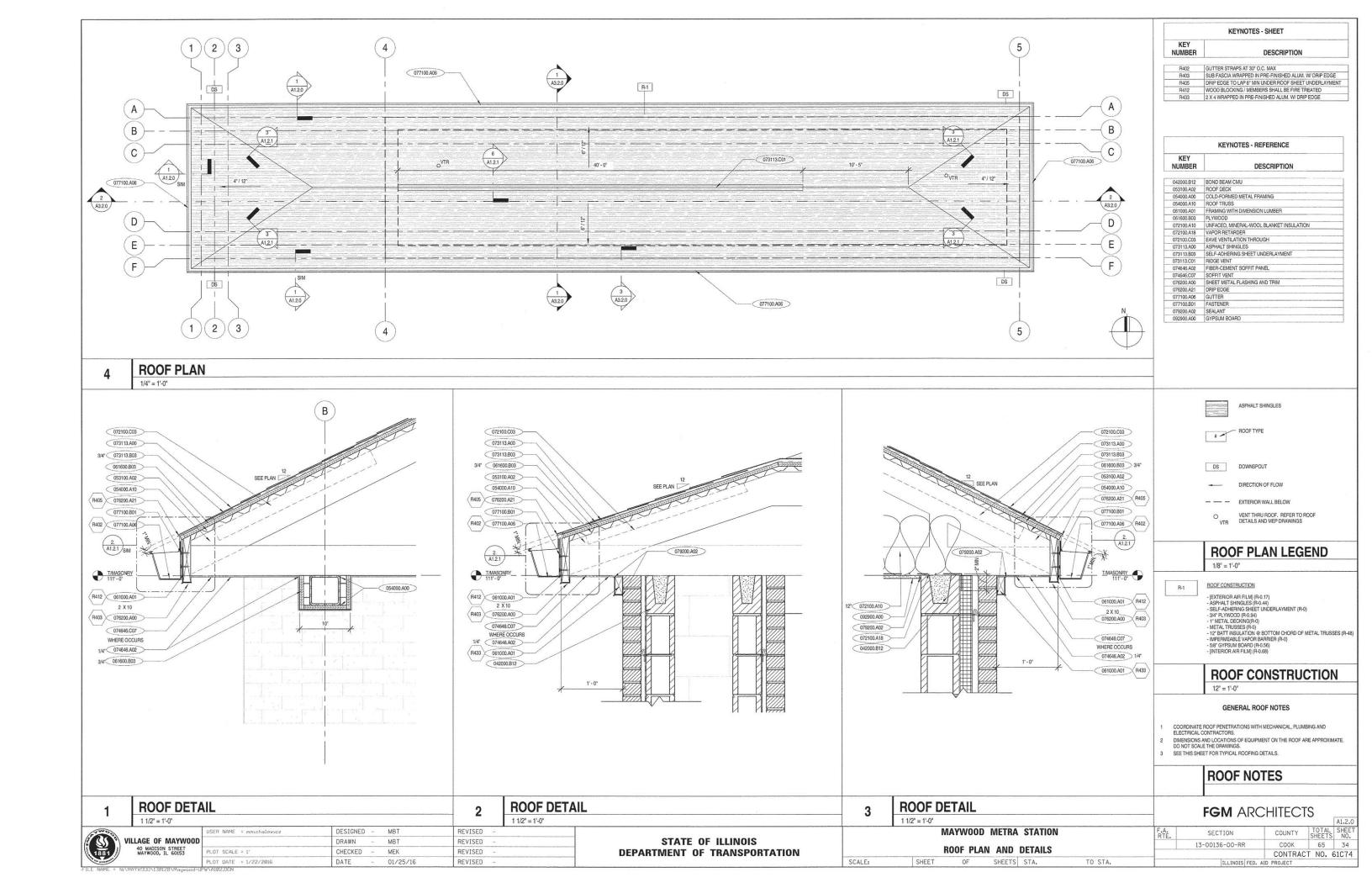
MAYWOOD METRA STATION ARCHITECTURAL CODE PLAN

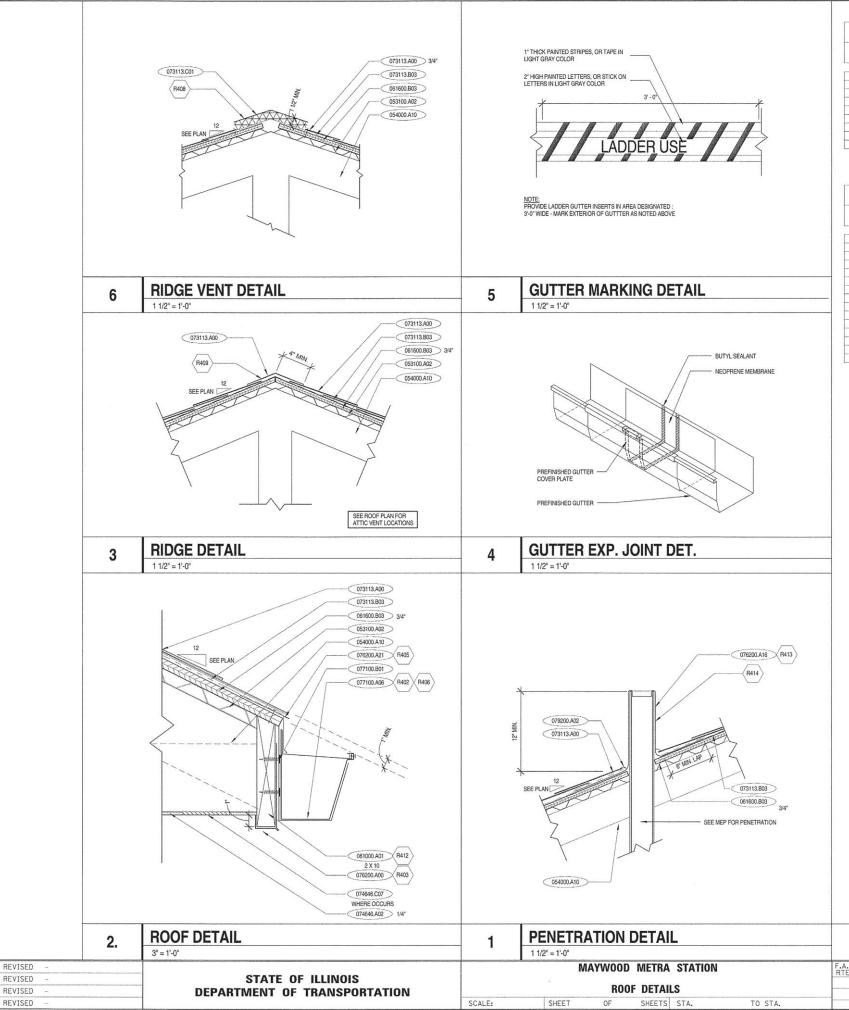
SHEET OF SHEETS STA.

PLOT DATE = 1/22/2016

VILLAGE OF MAYWOOD







DESIGNED

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DATE

CHECKED

VILLAGE OF MAYWOOD

PLOT DATE = 1/22/2016

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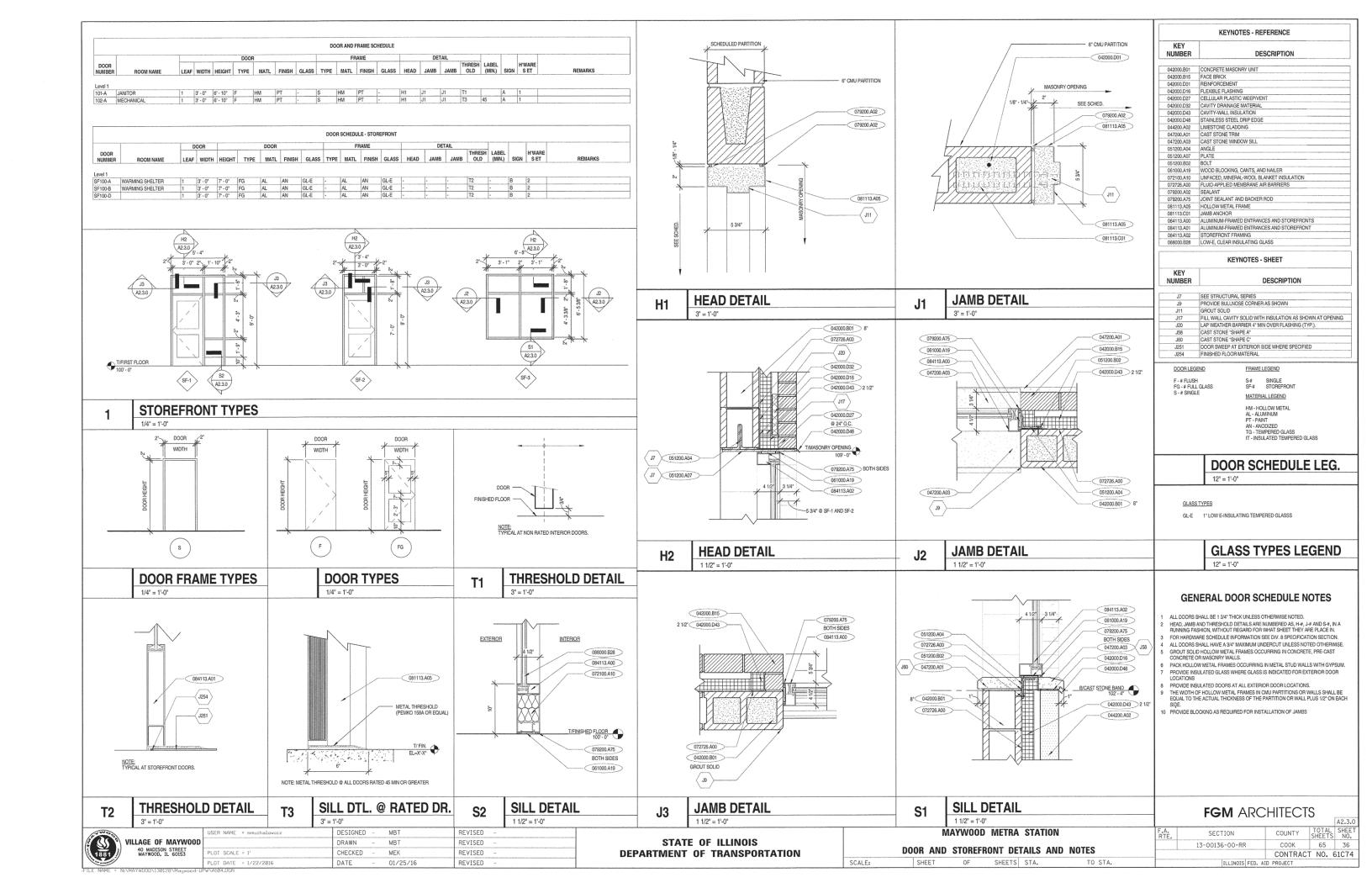
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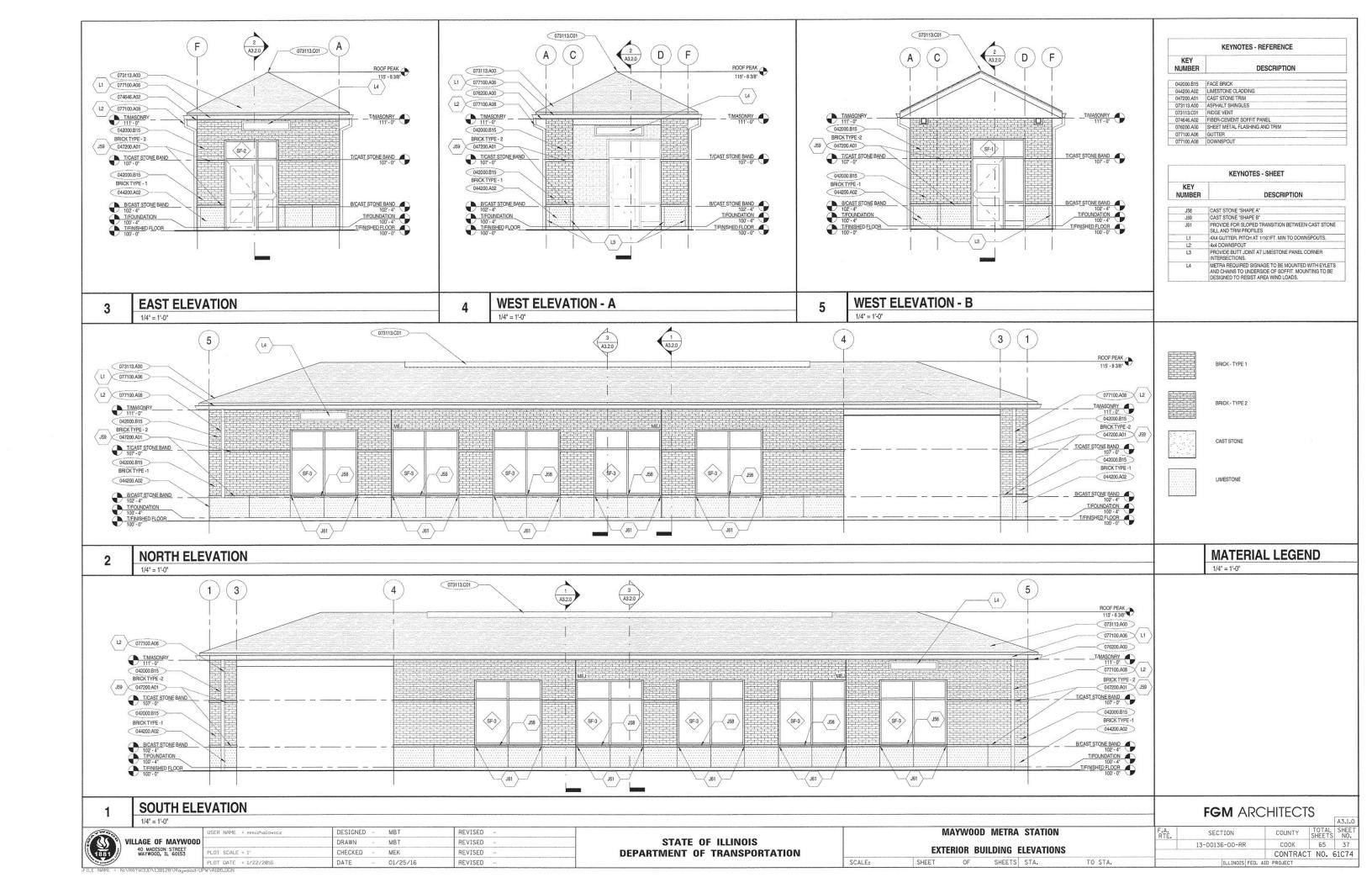
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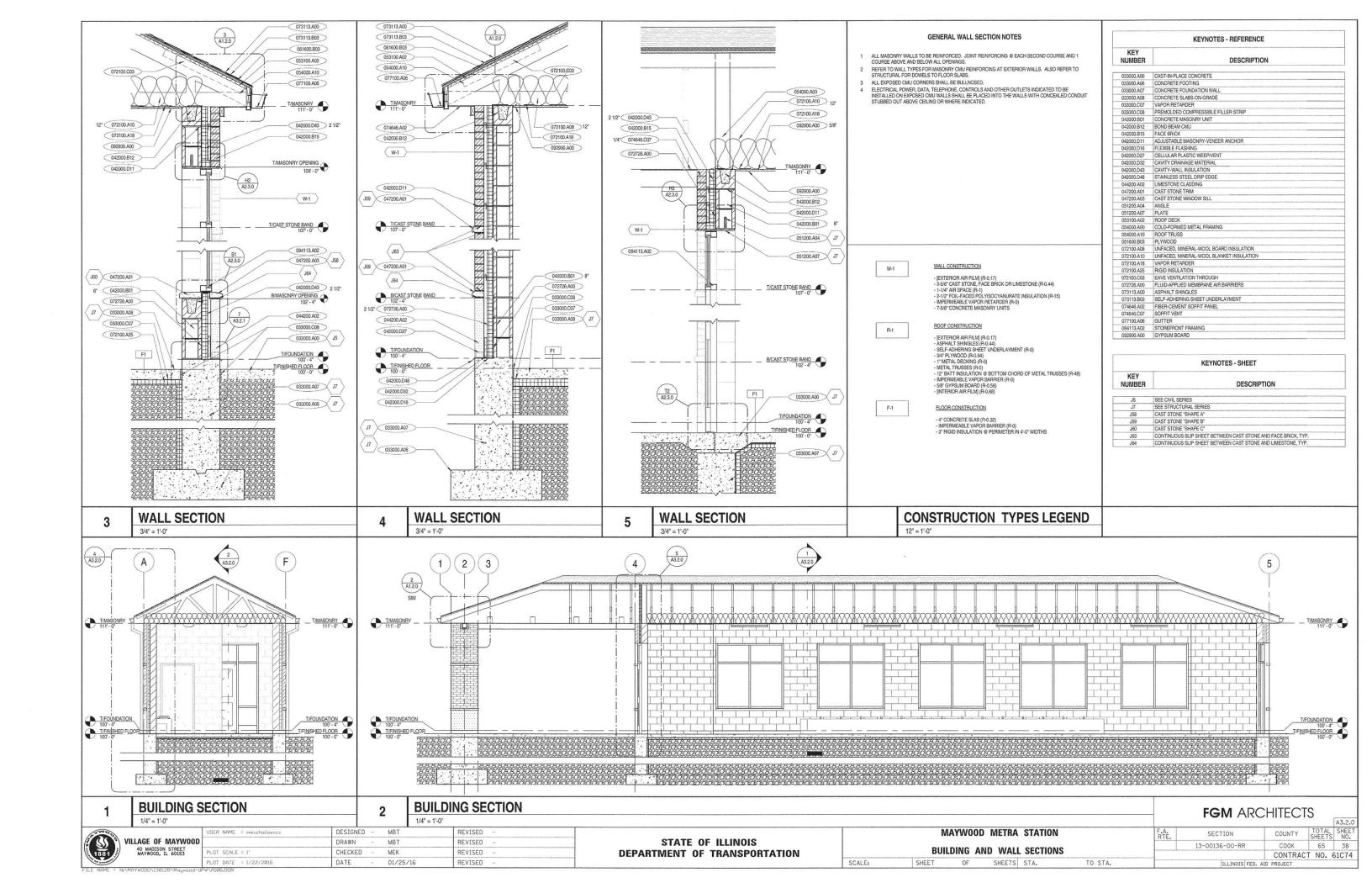
KEYNOTES - SHEET					
KEY NUMBER	DESCRIPTION				
R402	GUTTER STRAPS AT 30° O.C. MAX				
R403	SUB FASCIA WRAPPED IN PRE-FINISHED ALUM. W/ DRIP EDGE				
R405	DRIP EDGE TO LAP 6" MIN UNDER ROOF SHEET UNDERLAYMENT				
R406	4x4 METAL GUTTER				
R408	INSTALL RIDGE VENT PER MANUFACTURER'S RECOMMENDATIONS				
R409	PRE-FORMED RIDGE/HIP SHINGLES				
R412	WOOD BLOCKING / MEMBERS SHALL BE FIRE TREATED				
R413	TURN PIPE SLEEVE DOWN INTO PLUMBING VENT PIPE				
R414	PIPE SLEEVE W/ FLANGE SET IN ROOF CEMENT				

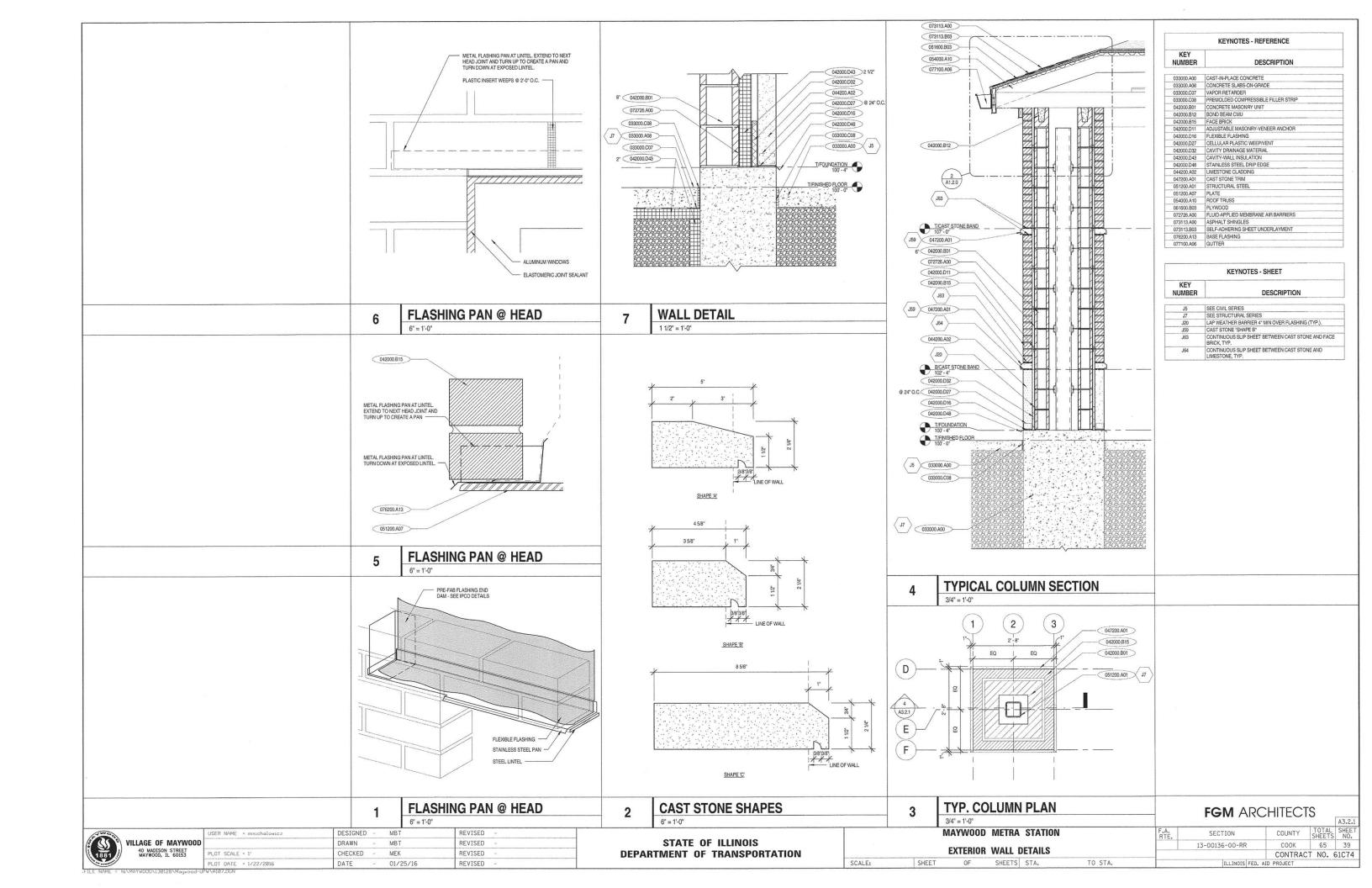
	KEYNOTES - REFERENCE					
KEY NUMBER DESCRIPTION						
053100.A02	ROOF DECK					
054000.A10	ROOF TRUSS					
061000,A01	FRAMING WITH DIMENSION LUMBER					
061600.B03	PLYWOOD					
073113.A00	ASPHALT SHINGLES					
073113.B03	SELF-ADHERING SHEET UNDERLAYMENT					
073113.C01	RIDGE VENT					
074646.A02	FIBER-CEMENT SOFFIT PANEL					
074646.C07	SOFFIT VENT					
076200.A00	SHEET METAL FLASHING AND TRIM					
076200.A16	ROOF-PENETRATION FLASHING					
076200.A21	DRIP EDGE					
077100.A06	GUTTER					
077100.B01	FASTENER					
079200.A02	SEALANT					

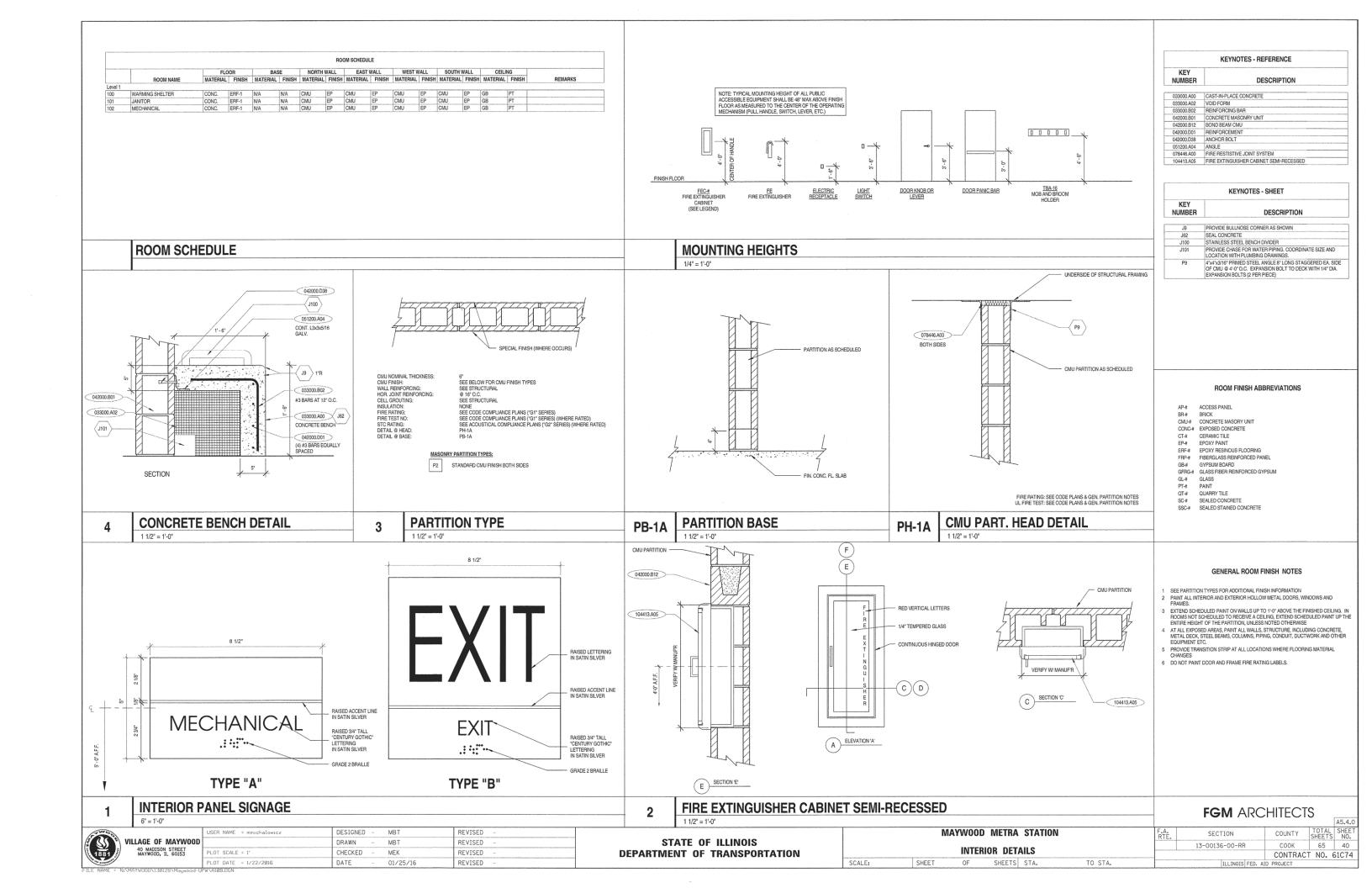
FGM ARCHITECTS











### **LIGHTING & ELECTRICAL GENERAL NOTES**

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
  - A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", AS PREPARED BY IDOT.
    B. "THE NATIONAL ELECTRICAL CODE."
  - B. "THE NATIONAL ELECTRICAL CODE."
    C. MUNICIPAL CODE & ORDINANCE.

ANY MODIFICATIONS AND/OR ADDITIONS TO THESE PLANS REQUIRED FOR PROPER COMPLIANCE TO ANY APPLICABLE CODES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN HIS BID PRICES.

- 2. THE CONTRACTOR SHALL PROVIDE LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ELECTRICAL SYSTEMS AS DESCRIBED IN THE DIVISION OF WORK AND IN THE SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SECONDARY SERVICE CONDUCTORS IN CONDUITS FROM COM ED SERVICE DROP LOCATION TO METRA ELECTRIC AND PARKING LOT CONTROLLER CABINETS.
- 4. MATERIALS AND EQUIPMENT SHALL BE LISTED AND/OR LABELED BY U.L., ETL, CSA OR ANOTHER RECOGNIZED TESTING LAB.
- 5. ALL MATERIALS, AND EQUIPMENT SHALL BE ERECTED, INSTALLED, TOOLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
- 6. ALL CUTTING, DRILLING AND PATCHING OF MASONRY MUST BE DONE BY THE CONTRACTOR IN ORDER THAT HIS WORK MAY BE PROPERLY INSTALLED, BUT UNDER NO CONDITIONS SHALL ANY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE.
- 7. VERIFY CLEARANCES FOR ALL ELECTRICAL WORK BEFORE PROCEEDING WITH CONSTRUCTION. COORDINATE USAGE OF AVAILABLE SPACE WITH ALL TRADES. IN THE EVENT OF CONFLICTS, NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.
- 8. THE ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL LICENSES REQUIRED BY THE GOVERNING BODIES TO OPERATE AS AN ELECTRICAL CONTRACTOR FOR THIS PROJECT. ELECTRICAL PERMIT FEE SHALL BE PAID BY THE ELECTRICAL CONTRACTOR.
- 9. PLACE A GROUND ROD ¾4" IN DIAMETER BY 10 FEET IN LENGTH APPROXIMATELY 2 FEET FROM EVERY POLE AND CONNECT TO THE GROUNDING LUG VIA A \*6 BARE COPPER WIRE WITH AN EXOTHERMIC WELD AT THE GROUND ROD.
- 10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL WAS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.

### LIGHTING & ELECTRICAL INSTALLATION NOTES

- 1. ALL CABLE SHALL BE OF THE AWG SIZE AS INDICATED.
- 2. NO UNDERGROUND SPLICING OF CABLE SHALL BE ALLOWED.
- 3. ALL SPLICING SHALL BE MADE IN THE BASE OF LIGHT POLE OR IN ABOVE GRADE JUNCTION BOXES IN PROPOSED WARMING HOUSE AND EXISTING BUILDING TO REMAIN.
- 4. ALL LIGHTING POLES SHALL BE LOCATED AS SHOWN ON THE PLANS.
- 5. ALL THE LUMINARIES SHALL BE MOUNTED AT A ZERO TILT.
- 6. ALL LUMINAIRES SHALL BE IES DISTRIBUTION PATTERN TYPE III.
- ALL CONDUITS IN THE TRENCH SHALL BE OF GALVANIZED STEEL OR AS SPECIFIED ON LIGHTING PLAN.
- 8. ALL JUNCTION BOXES, LIGHT FIXTURES, & ELECTRIC BOXES INSTALLED IN WARMING HOUSES OR DEPOT BUILDINGS SHALL BE SECURED WITH TAMPERPROOF COVERS AND SCREWS.
- 9. ALL ELECTRICAL CONDUITS SHALL BE CONCEALED.

PLOT DATE

### **GROUNDING NOTES**

VILLAGE OF MAYWOOD

40 MADISON STREET
MAYWOOD, IL 60153

- 1. FURNISH AND INSTALL A GROUND FIELD AS SHOWN ON THE LIGHTING DETAILS. GROUNDING CONDUCTOR SHALL BE INSTALLED 1-FT. MINIMUM BELOW GROUND.
- 2. GROUND ALL EXPOSED METAL WORK SUCH AS HATCHES, METAL CABINETS AND EQUIPMENT FRAMES, ETC. CONNECTIONS TO HATCHES, AND OTHER METAL WORK SHALL BE FUSION WELDED. CONNECTIONS TO THE GALVANIZED EQUIPMENT AND TO EQUIPMENT WHICH MAY BE REMOVED FOR MAINTENANCE SHALL BE MADE WITH BOLTED CLAMP TYPE CONNECTIONS OF SOLID COPPER, WELDED TO THE GROUNDING CONNECTOR.
- 3. CONCRETE SLAB REINFORCEMENT SHALL BE GROUNDED CONNECTIONS. REINFORCEMENT CONNECTIONS SHALL BE FUSION WELDED.
- 4. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF SYSTEM GROUNDING CONDUCTOR SHALL BE NO. 8 AWG.
- 5. EACH CONDUIT RUN SHALL BE GROUNDED TO THE COMMON GROUNDING BUS IN THE PANEL WHERE IT ORIGINATES. THE MINIMUM SIZE OF GROUNDING CONDUCTOR SHALL BE PER NEC SECTION 250.122 OR AS OTHERWISE SHOWN ON THE DRAWINGS.
- 6. GROUNDING RODS SHALL BE COPPERWELD, MINIMUM ¾-IN. DIAMETER X 10-FT. LONG. CABLE-TO-CABLE AND CABLE-TO-GROUND ROD CONNECTIONS SHALL BE MADE BY THE FUSION WELDING PROCESS.

# FOR PROPOSED IMPROVEMENTS

PAYMENT FOR LIGHTING AND ELECTRICAL ITEMS SHALL BE ON A LUMP SUM BASIS, AND SHALL CONSIST OF, BUT NOT LIMITED TO THE BELOW MAJOR COMPONENTS. THE SCHEDULE OF WORK IS INTENDED TO LIST MAJOR COMPONENTS AND NOT INTENDED TO LIST ALL ITEMS, EQUIPMENT, AND MATERIALS. ITEMS NOT LISTED SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROPOSED IMPROVEMENTS.

SPECIFICATION NO.	DESCRIPTION	UNIT	QUANTITY
	SITE ELECTRICAL WORK		
	SEE OVERALL PLAN SUMMARY OF QUANTITIES		
	BUILDING ELECTRICAL WORK		
3303	VIS SIGN	EACH	1
3303	VIS SIGN FOUNDATION	FOOT	11
8111	DOOR ACCESS CONTROL SYSTEM DEPOT AND WARMING SHELTER	LSUM	1
16100	ELECTRIC SERVICE AND DISTRIBUTION	LSUM	1
16136	VOICE OF METRA CABINET INSTRUMENT CABINET	EACH	1
16450	3/4" × 10' GROUND RODS	EACH	4
16510	INTERIOR & EXTERIOR WARMING SHELTER LIGHTING & ELECTRIC	LSUM	1
16532	CABLES IN CONDUIT	FOOT	1500
16534	METRA ELECTRIC CABINET AND PAD	EACH	1
16535	REDISTRIBUTION OF EXISTING SITE PLATFORM LIGHTING CONTROLLER	LSUM	1
16536	ELECTRICAL CONNECTIONS FOR SITE EQUIPMENT & WARMING SHELTER	LSUM	1
16537	MAINTENANCE OF EXISTING LIGHTING SYSTEMS	LSUM	1
16538	REMOVAL OF EXISTING LIGHTING CONTROLLER, SALVAGE	EACH	1
16538	REMOVAL OF EXISTING METRA ELECTRIC CABINET AND FOUNDATION	EACH	1
16538	REMOVAL OF EXISTING VOM CABINET & FOUNDATION	EACH	1
16538	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2
16538	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
16539	VOICE OF METRA SPEAKERS	EACH	6
16720	AUTO DIALER	EACH	1
16470	TELEPHONE SERVICE	LSUM	1
	BUILDING PLUMBING WORK		
15065	COPPER WATER SERVICE AND ACCESSORIES	LSUM	1
15410	PROPOSED WARMING SHELTER PLUMBING	LSUM	1
15450	PLUMBING FIXTURES AND ACCESSORIES	LSUM	1
	BUILDING MECHANICAL WORK		
15820	HEATED FLOOR SYSTEM	LSUM	1
15820	NATURAL GAS SERVICE AND PIPING	LSUM	1
15820	NATURAL GAS FIRED UNIT HEATERS	EACH	2
15820	EXHAUST FANS AND VENT WORK	EACH	3
15820	FORCED AIR FURNACE AND RELATED DUCT WORK	LSUM	1
10020	* PLUMBING ITEMS (SEE PLUMBING DETAIL SHEETS)	200,41	•

= mmichalowicz	DESIGNED -	GAH	REVISED -			V	JOOWYAN	METRA S	STATION		F.A.	SECTION	COUNTY	TOTAL SH	ET
	DRAWN	DRK	REVISED -	STATE OF ILLINOIS		L	LIGHTING/	ELECTRICAL	NOTES		KIE.	13-00136-00-RR	COOK	65	1
E = 30'	CHECKED -	JPC	REVISED	DEPARTMENT OF TRANSPORTATION			AND SCH	HEDULE OF	WORK			10 00100 00 1111	CONTRAC	T NO. 610	
= 1/22/2016	DATE -	01/25/16	REVISED		SCALE. &SCALES	SHEET	OF	SHEETS S	TA	TO STA		THE THORS SEE	ATO DOO FOT	1 1101 010	-

### **ELECTRICAL & LIGHTING SYMBOLS** GFCI DUPLEX RECEPTACLE 20A, 125V, 2P, 3W, GRD, NEMA 5-20R, WITH HINGED COVER $\Phi^H$ GFCI DUPLEX RECEPTACLE 20A, 125V, 2P, 3W, GRD, MOUNTED ABOVE COUNTER ΦC GFCI DUPLEX RECEPTACLE 20A, 125V, 2P, 3W, GRD, WITH WEATHERPROOF COVER $\Phi^{WP}$ <u>S−1</u> → MOTOR OUTLET. S-1/5 HP. REFERS TO MECHANICAL TAG AND HORSE-POWER RATING LIGHTING OR POWER AND/OR COMBINATION UTILITY ELECTRIC METER MTD. REMOTELY FROM ELECTRICAL CABINET 0-10 SWITCH AND FUSE CIRCUIT BREAKER SERVICE ENTRANCE GROUNDING POINTS PER CODE REQUIREMENTS THERMOSTAT TC TIME CLOCK P PHOTOCONTROL CELL GROUND CONNECTION OR GROUND ROD AS RECESSED VOICE OF METRA SPEAKER (ALTEC LANSING CAT # CF404-8T & ACCESSORIES) (\$) TELEPHONE TERMINAL CABINET JB JUNCTION BOX HD HEAT DETECTOR FIRE ALARM PULL STATION (\$) OCCUPANCY SENSOR \$ LIGHT SWITCH $\Box$ ELECTROMAGNETIC DOOR LOCK $\bigcirc \otimes$ RECESSED CAN LIGHT FIXTURE EXHAUST FAN FIXTURE 000 EXIT LIGHT EMERGENCY LIGHT FLEXIBLE CONDUIT CONDUIT CONCEALED IN CEILING OR WALL. CROSS LINES REPRESENT THE NUMBER OF EXPOSED CONDUIT RUN CONCEALED CONDUIT CONDUIT SYSTEM FOR TELEPHONE, OTHER SYSTEMS, PA, CCTV, TV, ETC. CONDUIT STUB UP CONDUIT STUB DOWN CONDUIT CAPPED WIRE AND CONDUIT AS SHOWN ON CABLE AND CONDUIT SCHEDULE ON ELECTRICAL PLANS PARKING LIGHT STANDARD 25' SPUN ALUMINUM POLE WITH 6' MAST ARM AND 180W LED GE ERS2 LUMINAIRE WITH INTEGRAL PHOTO CELL MOUNTED ON A 2'-6" ABOVE GRADE CONCRETE FOUNDATION PLATFORM LIGHT STANDARD 25' SQUARE STEEL POLE WITH SPLITFITTER MOUNT AND 78W LED RAB ALED3T78 LUMINAIRE WITH TYPE II OPICS MOUNTED ON A 2'-6" ABOVE GRADE CONCRETE FOUNDATION PROPOSED CONTROLLER CABINET DOOR SWING PROPOSED COMPOSITE CONCRETE HANDHOLE POLE NUMBER P1-CKT B-- CIRCUIT IDENTIFIER STA. 10+51-- POLE STATION LOCATION 12' FOP-

POLE SETBACK FROM FACE OF PLATFORM

PLOT DATE = 1/22/2016

VILLAGE OF MAYWOOD

DESIGNED

CHECKED

DRK

01/25/16

DRAWN

DATE

### LIGHTING/ELECTRICAL FIXTURE SCHEDULE

SYMBOL	MANUFACTURER & CATALOG NUMBER	NO. OF LAMPS	VOLT	LUMINAIRE MOUNTING HEIGHT	LUMINAIRE LOCATION	REMARKS
	LUMINAIRE: GE MODEL NO. ERS2-O-L2-AI-5-4O-A-GRAY-DCR LIGHT POLE: VALMONT MODEL NO. RTSA-25	(1) 180W LED	120V	27-6" ABOVE GRADE	PARKING	LIGHT POLE. PROVIDE CONCRETE LIGHT POLE FOUNDATION - SEE LIGHTING DETAILS.
•	LUMINAIRE: RAB MODEL NO. 2T-78-1-N-B-240-N-N LIGHT POLE: RAB MODEL NO. PS4-07-25WT	(1) 78W LED	240V	27-6" ABOVE GRADE	PLATFORM	LIGHT POLE. PROVIDE CONCRETE LIGHT POLE FOUNDATION - SEE LIGHTING DETAILS.
0	KENALL CO. MODEL NO.: MILLENIUM HADL13L40K-DU-9	(1) 13W LED	120V	RECESSED IN CEILING	WARMING SHELTER (EXTERIOR)	WET/DRY LOCATION RATED, GASKETED RECESSED ROUND LENS W/ VANDAL RESISTANT HOUSING
	KENALL CO. MODEL NO.: MILLENIUM MHLAB48FLGPP90L40KDCL	(1) 100W LED	120V	MOUNTED TO CEILING	WARMING SHELTER (INTERIOR)	WET/DRY LOCATION RATED, GASKETED RECESSED ROUND LENS W/ VANDAL RESISTANT HOUSING
$\Box$	KENALL- MILLENIUM MODEL NO.: METEL4ONMW4652DT	(2) 6.2W	120V	WALL MOUNTED	WARMING SHELTER	INCANDESCENT EMERGENCY LIGHT
∞	COOPER/SURE-LITE LIGHTING MODEL NO.: LPX-70-RWHDH-SD	(2) 5.4W	120V	WALL MOUNTED	WARMING SHELTER	INCANDESCENT EXIT SIGNS WITH DOUBLE HEAD LIGHTS
В	SCHLAGE - LOCKNETICS MODEL NO.: MAG FORCE 390 SERIES MAGNETIC LOCKS		24V DC	UNDERSIDE OF DOOR HEADER	WARMING SHELTER	ELECTROMAGNETIC LOCKS W/ A 1200LB HOLDING FORCE RATING & EXIT PUSH-BUTTOM OVERRIDE SWITCH
<b>S</b>	METRA SPEAKER ALTEC LANSING	1441	120V	CEILING MOUNTED	WARMING SHELTER	VOM
P	FISHER PIERCE MODEL NO. FPFA-105M		120V	ROOF OVERHANG	WARMING SHELTER	PHOTOCELL MOUNTED IN SOFFIT OR WOOD FASCIA
=	RAB WALL PACK MODEL NO. WPLED8/480/PC54		120V	SOUTH ELEVATION	WARMING SHELTER	INTEGRAL SWIVEL PHOTOCELL

• CATALOG NUMBERS INDICATED ABOVE DO NOT REFLECT ALL FIXTURE REQUIREMENTS.

ALSO SEE PROJECT SPECIFICATIONS.

### NOTES:

REVISED

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REVISED

REVISED

- VERIFY TYPE OF CEILING OR WALL FOR ALL RECESSED LIGHTING FIXTURES PRIOR TO ORDERING. ARCHITECT IS TO DETERMINE THE FINISH FOR ALL FIXTURES.
- 2. PROVIDE ALL ADDITIONAL HARDWARE FOR FIXTURE MOUNTING AS REQUIRED AT NO EXTRA COST.
- 3. ALL WIRE WITHIN (3) THREE INCHES OF BALLASTS OR DRIVERS SHALL BE RATED A MINIMUM OF 90° C.
- 4. MINIMUM LENS THICKNESS TO BE .125 INCHES, WHERE LENSES ARE USED.
- 5. SEE LIGHTING FIXTURE SECTION IN SPEC'S FOR ADDITIONAL INFORMATION.
- 6. THE FIXTURE SCHEDULE DOES NOT NECESSARILY LIST ALL ACCESSORIES AND HARDWARE NECESSARY FOR THE COMPLETION OF INSTALLATION, NOR DOES IT DETAIL THE CEILING CONSTRUCTION TO BE ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DETERMINE AND PROVIDE CORRECT COMPONENTS, ACCESSORIES, AND HARDWARE AS REQUIRED FOR THE INSTALLATION.
- 7. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS AND CEILING CONTRACTOR FOR EXACT LIGHTING FIXTURE LOCATION.
- 8. ALL LAMPS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR, OR AS NOTED ON THE PLANS.
- 9. ANY OF THE ABOVE MANUFACTURERS AND MODEL NUMBERS, OR APPROVED EQUALS, MAY BE PROVIDED FOR THE SCHEDULED FIXTURES

STATE OF ILLINOIS

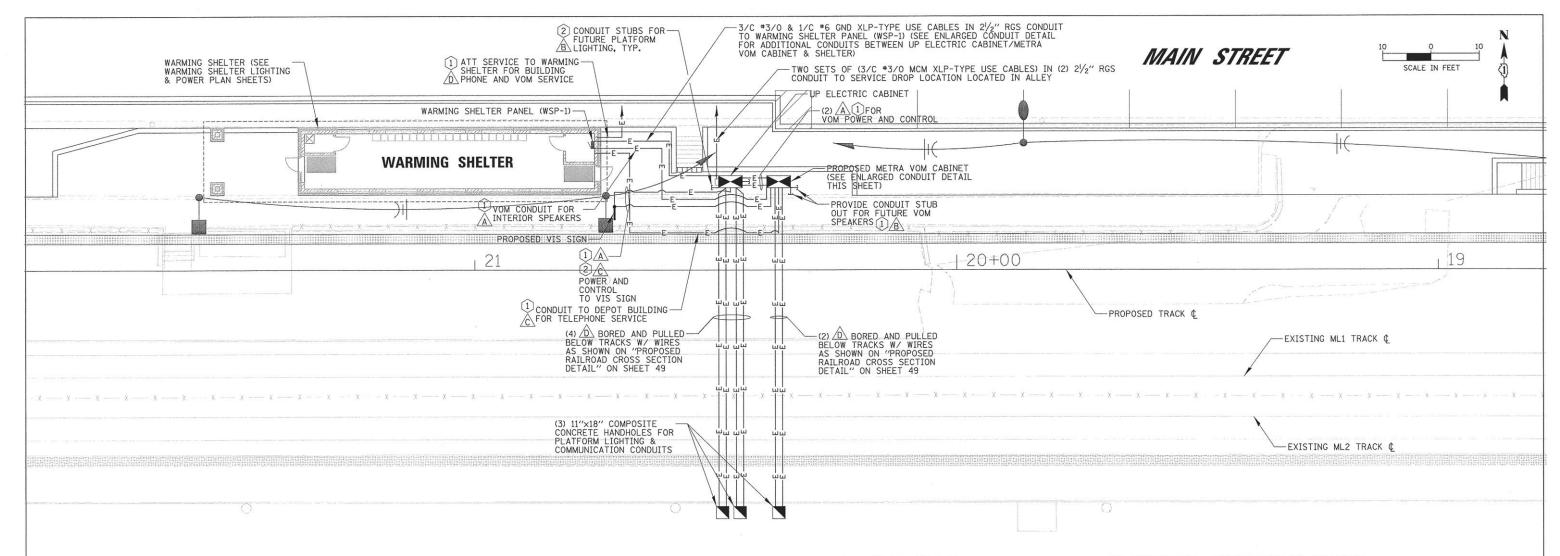
**DEPARTMENT OF TRANSPORTATION** 

### FIRE PREVENTION DEVICE SCHEDULE

SYMBOL	VOLTAGE	MANUFACTURER & CATALOG CUT	MOUNTING
HD	120V	COMBINATION SMOKE/HEAT DETECTOR 900 SQ. FT COVERAGE, MIN.	SURFACE/ CEILING
<b>-</b>	DC	FIRE ALARM PULL STATION	WALL MTD

### LIGHTING ABBREVIATIONS

		-	
	AMPERES	MAX.	MAXIMUM
AFF.	ABOVE FINISHED FLOOR	MIN.	MINIMUM
AWG	AMERICAN WIRE GAUGE	MH	MANHOLE, METAL HALIDE
AIC	AMPERES INTERRUPTING CAPACITY		OR MOUNTING HEIGHT
C.	CONDUIT	MLO	MAIN LUGS ONLY
C/B	CIRCUIT BREAKER	MTD.	MOUNTED
CCT	CIRCUIT	MTG.	MOUNTING
CLG	CEILING		NATIONAL ELECTRICAL CODE
CT	CURRENT TRANSFORMER	NO.	NUMBER
DIA.	DIAMETER	NTS	NOT TO SCALE
DISC.	DISCONNECT	P	POLE
DN.	DOWN	PA	PUBLIC ADDRESS
DWG.	DRAWING	PB	PULL BOX
EA.	EACH	PH	PHASE
EC	ELECTRICAL CONTRACTOR OR	PNL	PANEL
	EMPTY CONDUIT	PWR.	POWER
ELEC.	ELECTRICAL	RGS	RIGID GALVANIZED STEEL
EWC	ELECTRIC WATER COOLER	RM	ROOM
EQUIP.	EQUIPMENT		SINGLE POLE DOUBLE THROW
F	FUSE	SEC.	SECONDARY
FL.	FLOOR	SHT.	SHEET
FLUOR.	FLUORESCENT	SW.	SWITCH
G.	GROUND OR GROUND BUS	SWBD.	SWITCHBOARD
GRD.	GROUND	SPEC.	SPECIFICATION
	GROUND FAULT INTERRUPTER		
GFP	GROUND FAULT PROTECTION	U/G	UNDERGROUND
HP	HORSEPOWER	U.L.	UNDERWRITERS LABORATORY
HTR.	HEATER	V	VOLTS
HPS	HIGH PRESSURE SODIUM	W	WATT OR WIRE
INC.	INCANDESCENT	WP	WEATHERPROOF
INFO.	INFORMATION	XFORM.	VOLTS WATT OR WIRE WEATHERPROOF TRANSFORMER AND
KW	KILOWATT	&	AND
KVA	KILOVOLT AMPERES	VIS	VISUAL INFORMATION SYSTEM
LTG.	LIGHTING		



## PROPOSED PLATFORM ELECTRICAL PLAN

SCALE: AS SHOWN

### 100A-120/240V, 10 UP --ELECTRIC CABINET TO BE OWNED & MAINTAINED -(2) 1 C STUB & CAP TWO PARALLEL SETS OF — (3/C #3/O MCM XLP-TYPE USE CABLES) IN (2) 21/2" RGS CONDUIT TO SERVICE TO POLE P4 METRA VOM CABINET DROP LOCATION TO BE OWNED & MAINTAINED BY METRA 3/C #3/O & 1/C #6 GROUND XLP-TYPE USE CABLES IN 21/2" RGS CONDUIT TO DEPOT BUILDING PANEL WSP-1 TO VIS SIGN (3) SERVICE METERS MOUNTED TO METRA -NOTE 3 TO HANDHOLE ELECTRIC CABINET SPARE CONDUIT TO DEPOT BUILDING 1" CONDUIT TO-GROUND GRID 1 c CONDUIT TO DEPOT BUILDING VOM SPEAKERS 1 TO HANDHOLE-1 TO HANDHOLE-1 C CONDUIT TO DEPOT BUILDING FOR TELEPHONE SERVICE 1 TO HANDHOLE-1 A TO VIS SIGN -1" RGS CONDUITS WITH PULL ROPE

**ENLARGED CONDUIT DETAIL** 

### CABLE SCHEDULE

- 1 PULL ROPE
- 2 4/C \*8 (LIGHTING CKTS), 1/C \*8, 1/C \*8 NEUTRAL (RECEPTACLE CKT) & 1/C \*8 GND
- 3 1/C #8, 1/C #8 NEUTRAL & 1/C #8 GROUND
- 4 2/C #6, 1/C #6 NEUTRAL & 1/C #6 GROUND
- 5 1/C #10, 1/C #10 NEUTRAL (EXIT LITE CKT), 2/C #8 (INFRARED HEATING) & 1/C #8 GROUND
- 6 2/C #14 CLASS 2 SHIELD CABLES (DOOR LOCK CKT)
- 7) 2/C #10, 2/C #10 NEUTRAL (LITE CKT), 1/C #10, 1/C #10 NEUTRAL (EMERGENCY LITE CKT) & 1/C #10 GND
- (8) 2/C #10, 1/C #10 NEUTRAL (HEAT DETECTOR CKT), 2/C #10 (EMERGENCY FIRE ALARM CKT) & 1/C #10 GND

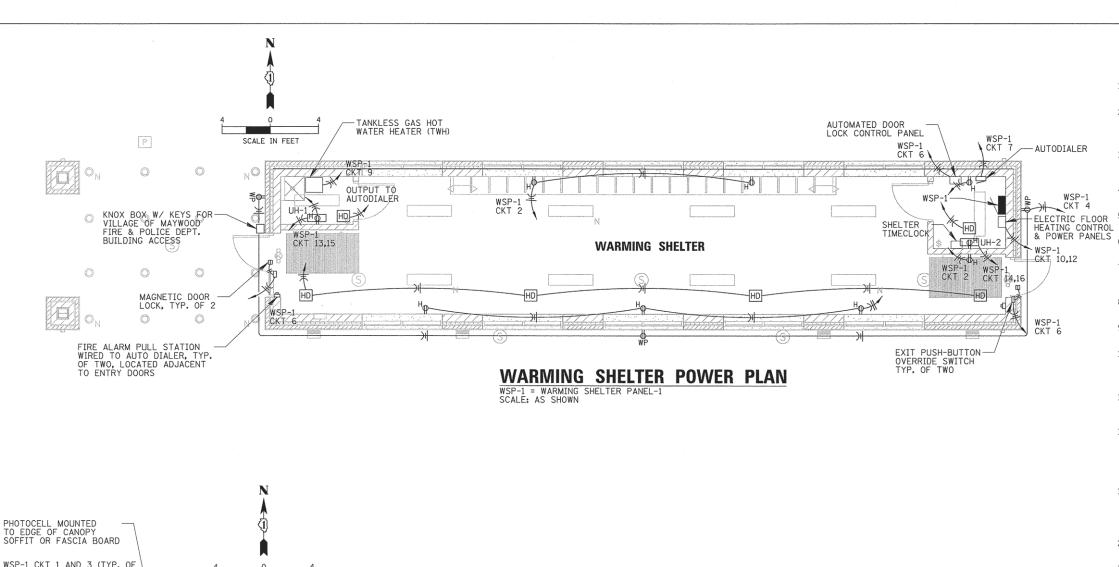
### CONDUIT SCHEDULE

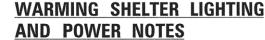
- A 1" SCH 40 UNIT DUCT BORED AND PULLED
- B 11/4" SCH 40 UNIT DUCT BORED AND PULLED
- 11/2" SCH 40 UNIT DUCT BORED AND PULLED
- 2" RGS CONDUIT BORED AND PULLED
- £ 2" SCH 40 UNIT DUCT BORED AND PULLED

### PLATFORM ELECTRICAL NOTES

- 1. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL ROPE FOR FUTURE USE.
- 2. ALL HANDHOLES SHALL BE IDOT STANDARD 814001 COMPOSITE CONCRETE HANDHOLES AND HAVE "LIGHTING" AND "COMMUNICATIONS" ENGRAVED ON COVER.
- ALL END OF RUN LIGHT POLE FOUNDATIONS SHALL HAVE SPARE RACEWAYS.
- 4. THE (2) EXISTING LIGHTING CONTROLLER CABINETS & VOM CABINET LOCATED ALONG THE PLATFORM SHALL BE REMOVED AND RETURNED, AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY EXISTING CIRCUITRY AND CONDUIT RUNS PRIOR TO REMOVING ANY EXISTING PLATFORM LIGHT POLES AND LIGHTING CONTROLLERS. THE CONTRACTOR SHALL NOT REMOVE EXISTING LIGHTING CONTROLLERS UNTIL THE PROPOSED CONTROLLER CABINETS HAVE BEEN PUT INTO OPERATION AND ACCEPTED BY METRA, THE UNION PACIFIC RAILROAD (UPRR) AND THE VILLAGE.
- 5. CONTRACTOR SHALL TAKE FULL MAINTENANCE OF EXISTING PLATFORM LIGHTING SYSTEMS DURING CONSTRUCTION. THIS WORK SHALL INCLUDE MAINTENANCE OF LIGHTING UNITS, CABLE RUNS, AND LIGHTING CONTROLS. IN CASE OF A POLE KNOCKDOWN OR EQUIPMENT DAMAGED BY EITHER THE MOTORING PUBLIC OR CONTRACTOR OPERATIONS, THE CONTRACTOR SHALL CLEAR AND RESTORE THE EXISTING SYSTEM TO ORIGINAL CONDITION (SEE CONTRACT SPECIFICATIONS).
- 6. EXISTING PLATFORM LIGHT POLES, LUMINAIRES, CONCRETE FOUNDATIONS AND ASSOCIATED CONDUIT & WIRES SHALL BE REMOVED, AS INDICATED ON THE PLANS. THE LIGHT POLES AND LUMINAIRES SHALL BE REMOVED AND RETURNED TO THE VILLAGE OF MAYWOOD PUBLIC WORKS DEPARTMENT. THE EXISTING CONCRETE FOUNDATIONS SHALL BE REMOVED TO 2 FT. BELOW GRADE AND REMOVED MATERIAL DISPOSED ACCORDINGLY. EXISTING WIRES CONNECTED TO THE FOUNDATIONS SHALL BE REMOVED AND CONDUITS SHALL BE CUT TO 2 FT. BELOW GRADE AND ABANDONED. THE CONTRACTOR SHALL NOT REMOVE EXISTING PLATFORM LIGHTING UNTIL THE PROPOSED PLATFORM LIGHTING HAS BEEN PUT INTO OPERATION AND ACCEPTED BY METRA.
- 7. RELOCATION OF EXISTING LIGHT POLES SHOULD NOT EFFECT THE OPERATION OF THE REMAINING LIGHTING. CONTRACTOR SHALL LOCATE AND INTERCEPT EXISTING CONDUIT & WIRES FEEDING THE LIGHT POLES, TO EXTEND THE EXISTING CIRCUITS TO THE NEW ELECTRIC CABINET. CONTRACTOR SHALL SPLICE NEW CONDUIT TO THE EXISTING CONDUIT PER MANUFACTURER RECOMMENDED SPLICING METHODS. ALL NEW SPLICES, FUSES AND FUSEHOLDERS SHALL BE FURNISHED AND INSTALLED FOR RECONNECTING THE LIGHTING CIRCUIT.
- 8. CONTRACTOR SHALL WORK IN CONJUNCTION WITH METRA TO TERMINATE ALL CIRCUITS IN LIGHTING/ELECTRIC PANELS.

WILLAGE OF MANAGOOD	USER NAME = mm;chalowicz	DESIGNED - GAH	REVISED -			N	πανννοο	D METRA STATION	<b>u</b>	F.A.	SECTION	COUNTY	TOTAL SHEET
VILLAGE OF MAYWOOD		DRAWN - DRK	REVISED -	STATE OF ILLINOIS							13-00136-00-RR	соок	65 43
40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 10'	CHECKED - JPC	REVISED -	DEPARTMENT OF TRANSPORTATION		PROPOSED PLATFORM ELECTRICAL PLAN				CONTRAC	T NO. 61C74		
De avanuali.	PLOT DATE = 1/22/2016	DATE - 01/25/16	REVISED -		SCALE: \$SCALE\$	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	

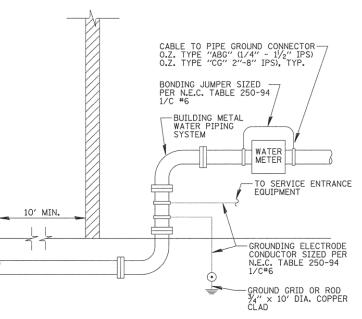




- L. SEE ARCHITECTURAL PLANS FOR DETAILED LOCATION/INSTALLATION INFORMATION FOR THE HAND DRYER, LIGHT FIXTURES, SWITCHES, AND RECEPTACLES.
- 2. ALL WIRE FOR LIGHTING AND POWER SHALL BE SINGLE COPPER CONDUCTOR TYPE THHN/THWN, UNLESS OTHERWISE SHOWN. MINIMUM WIRE SIZE SHALL BE NO. 12 AWG. WIRE SIZES NO. 10 AND SMALLER MAY BE SOLID. WIRE SIZES NO. 8 AND LARGER SHALL BE STRANDED.
- 3. ALL INTERIOR CONDUIT SHALL BE ELECTRIC METALLIC TUBING (EMT) MINIMUM SIZE SHALL BE 1/2". ALL CONDUITS SHALL BE CONCEALED; EXCEPT CONDUITS LOCATED IN THE MECH ROOM, WHICH SHALL RUN EXPOSED, OR AS DIRECTED BY OWNER.
- 4. ALL ELECTRICAL APPURTENANCES INCLUDING SWITCH PLATES, JUNCTION BOXES, AND PULL BOXES SHALL BE LABELED WITH THE PROPER CIRCUIT IDENTIFIERS.
- EXACT LOCATION OF LIGHTING FIXTURES TO BE COORDINATED BY CONTRACTOR, SUBJECT TO REVIEW OF OWNER'S REPRESENTATIVE.
- ALL CONDUITS SHALL INCLUDE AN INSULATED GROUND WIRE. CONDUIT SHALL NOT BE SOLELY USED FOR GROUND.
- 7. PROVIDED 6" ROUND DUCT BETWEEN EXHAUST FAN AND VENT (SEE DEPOT HVAC PLAN FOR LOCATION). EXHAUST VENT SHALL BE PROVIDED WITH A 6" COLLAR AND BE MOUNTED FLUSH WITH CANOPY SOFFIT.
- 8. ALL LIGHT SWITCHES & RECEPTACLES SHALL BE OF THE COMMERCIAL GRADE SPECIFICATION TYPE WITH A 20 AMP RATING.
- 9. SEE BUILDING LIGHTING CONTROLS ON SHEET E602 FOR BUILDING LIGHTING OPERATION.
- 10. PROPOSED LOCATION FOR AUTOMATIC DOOR LOCK CONTROLS SHALL BE LOCATED IN THE MECHANICAL ROOM. CONTRACTOR TO PROVIDE POWER AS REQUIRED FOR DOORS TO BE ARRANGED FOR AUTOMATIC LOCKING (SEE ONE LINE DIAGRAM ON WARMING SHELTER PARKING LOT LIGHTING PLAN).
- 11. WAITING AND CANOPY AREA LIGHTING CIRCUIT SHALL ALWAYS REMAIN ON UNTIL LAST TRAIN AND THEN NIGHT LIGHT CICUIT UNTIL 1/2 HOUR PRIOR TO FIRST TRAIN.
- 12. TRIP RATINGS SHOWN OR SPECIFIED ARE FOR ELECTRIC/HVAC ANTICIPATED EQUIPMENT. SELECTED EQUIPMENT MAY BE LARGER OR SMALLER THAN INDICATED. CONTRACTOR SHALL PROVIDE THE NECESSARY TRIP RATINGS AS REQUIRED BY NEC FOR THE ACTUAL EQUIPMENT PROVIDED.

### **WARMING SHELTER VOM NOTES**

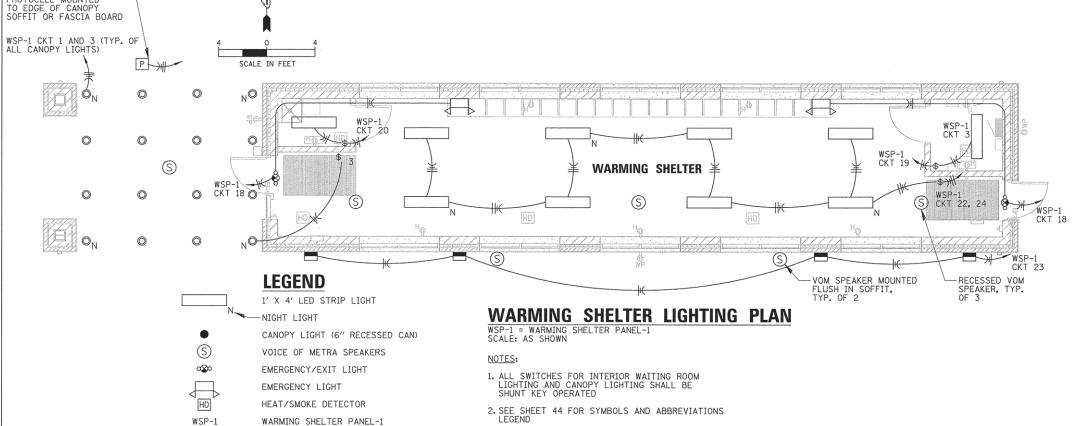
- THE CONTRACTOR SHALL FURNISH AND INSTALL THE CONDUITS AS REQUIRED FOR COMPLETE INSTALLATION OF THE ELECTRICAL POWER TO THE STATION AND VOICE OF METRA. CONDUITS SHALL BE PROVIDED WITH PULL STRINGS FOR DEPOT VOICE OF METRA EQUIPMENT. CONTRACTOR SHALL CONTACT METRA FOR CONNECTION TO ANY VOM CONTROLLERS/ENCLOSURES.
- CONTRACTOR SHALL FURNISH ALL INDOOR SPEAKERS, INCLUDING BAFFLES AND BACK BOXES, FOR METRA FORCES TO INSTALL.
- 3. SEE VOM SPEAKER ONE LINE DIAGRAM ON WIRING DIAGRAMS SHEET.



# **GROUNDING DETAIL WITH METAL PIPING**N.T.S.

COUNTY

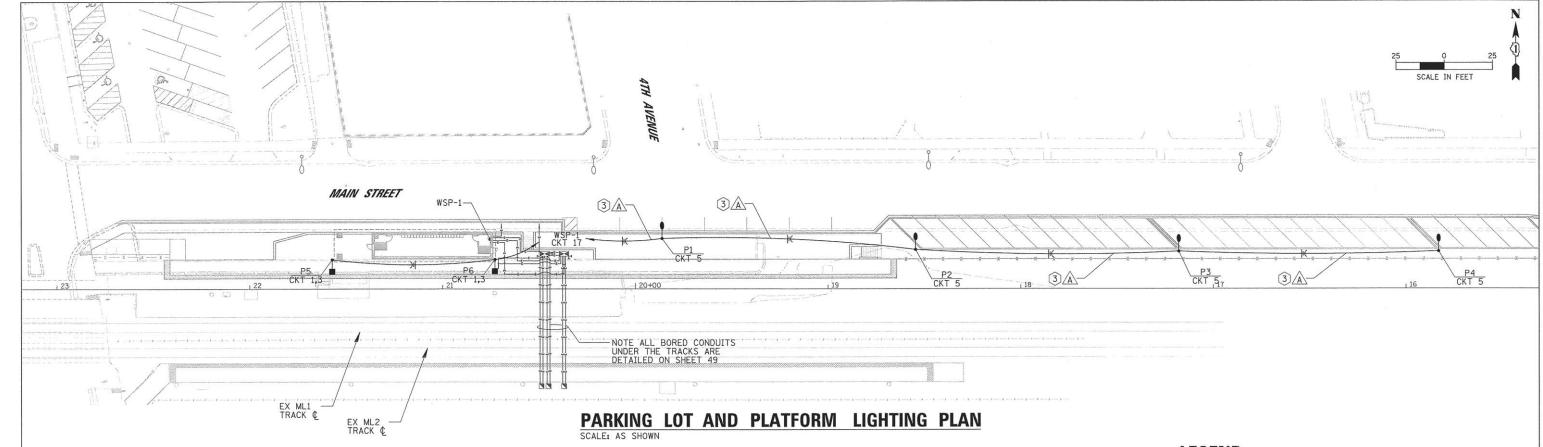
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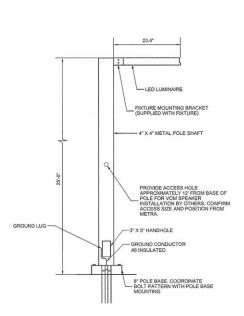


CKT-1

CIRCUIT IDENTIFIER

SECTION	$\top$
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# PLATFORM LIGHTING UNIT

# BASE COVER POURED CONCRETE BASE 3/4"x10"-0" LONG 316 STAINLESS STEEL ROD 3/4" FRE CONDUIT 86 AWG STRANDED BARE COPPER EXOTHERMIC WELD 2" COILABLE NON METALLIC CONDUIT 3/4" FRE CONCRETE BASE MIN 5" DEEP

## PLATFORM LIGHT POLE FOUNDATION DETAIL

### NOTES:

- 1. INSTALL TWO CONDUITS IN EACH FIXTURE BASE AS SHOWN. CAP UNUSED CONDUIT BELOW GRADE FOR FUTURE EXTENSION AT EACH BASE AT THE END OF THE FIXTURE ROWS. CONTRACTOR TO INCLUDE EXACT DIMENSIONS OF CAP IN AS-BUILTS.
- 2. USE 4000 CLASS CONCRETE FOR POLE BASE.

### **LEGEND**

- PLATFORM LIGHT STANDARD 25' SQUARE STEEL POLE WITH SPLITFITTER MOUNT AND 78W LED RAB ALED3T78 LUMINAIRE WITH TYPE II OPICS MOUNTED ON A 2'-6" ABOVE GRADE CONCRETE FOUNDATION
- PARKING LIGHT STANDARD 25' SPUN ALUMINUM POLE WITH 6' MAST ARM AND 180W LED GE ERS2 LUMINAIRE WITH INTEGRAL PHOTO CELL MOUNTED ON A 2'-6" ABOVE GRADE CONCRETE FOUNDATION
- EXISTING VILLAGE OF MAYWOOD HIGH PRESSURE SODIUM LUMINAIRE ON ALUMINUM POLE

### CABLE SCHEDULE

- 1 PULL ROPE
- 2 4/C \*8 (LIGHTING CKTS), 1/C \*8, 1/C \*8 NEUTRAL (RECEPTACLE CKT) & 1/C \*8 GND
- 3 1/C #8, 1/C #8 NEUTRAL & 1/C #8 GROUND
- 4 2/C #6, 1/C #6 NEUTRAL & 1/C #6 GROUND
- 1/C #10, 1/C #10 NEUTRAL (EXIT LITE CKT), 2/C #8 (INFRARED HEATING) & 1/C #8 GROUND
- 6) 2/C #14 CLASS 2 SHIELD CABLES (DOOR LOCK CKT)
- 7) 2/C #10, 2/C #10 NEUTRAL (LITE CKT), 1/C #10, 1/C #10 NEUTRAL (EMERGENCY LITE CKT) & 1/C #10 GND
- 8) 2/C #10, 1/C #10 NEUTRAL (HEAT DETECTOR CKT), 2/C #10 (EMERGENCY FIRE ALARM CKT) & 1/C #10 GND

### **CONDUIT SCHEDULE**

- 1" SCH 40 UNIT DUCT BORED AND PULLED
- B 11/4" SCH 40 UNIT DUCT BORED AND PULLED
- 11/2" SCH 40 UNIT DUCT BORED AND PULLED
- 2" RGS CONDUIT BORED AND PULLED
- 2" SCH 40 UNIT DUCT BORED AND PULLED

Freedo		USER NAME = mmichalowicz	DESIGNED -	GAH	REVISED -				πανννοο	D METRA STATION		F.A.	SECTION	COUNTY	SHEETS NO.
E (2)	VILLAGE OF MAYWOOD		DRAWN -	DRK	REVISED -	STATE OF ILLINOIS	WARMING SHELTER PARKING LOT LIGHTING PL					11.121	13-00136-00-RR	соок	65 45
1881	40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 25'	CHECKED -	JPC	REVISED -	DEPARTMENT OF TRANSPORTATION	WARWING SHELLER PARKING LOT LIGHTING PL		IIIVO FLAIV			CONTRAC	T NO. 61C74		
OF STREET		PLOT DATE = 1/22/2016 DATE - 01/25/16 REVISED -		REVISED -	REVISED -				SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

### **UP ELECTRIC PANEL SCHEDULE**

NAME	LOCATIO	N	MOL	JNT:	ING		SUPPLIED FROM				VOLTA	GE			BUS AMP SIZE	MAIN O.C. DEVICE
MDP-1	METRA ELEC CABINET	TRIC	SUI	RFA	CE	ME	SERVICE TER CENTER	٦		120/2	240V,	1PH, 3	3W		100	MAIN BREAKER 100A
SER	RVICE	CONN LOAD VA		KT	CKT NO.		A		В			CKT NO.	CKT ID.	CONN. LOAD VA		SERVICE
FUTURE PLAT LIGHT POLES	FORM	2,440	0	A	1 3	30A 2P	T-				30A 2P	2	В	2,440	FUTUR LIGHT	E PLATFORM POLES
FUTURE PLATFORM RECEPTACLES		1,440	0	С	5	20A					20A	6	D	1,440		E PLATFORM TACLES
	CCEPTACLES  DUSE LIGHTING (PHOTOCELL)			E	7	20A					20A	8	F	800	CABIN	ET ELEC HEATER
CABINET CON	TROLS	100		G	9	20A					20A	10	Н	280	CABIN	ET RECEPT. & LITE
SPARE		T -			11	20A					20A	12		-	SPARE	
SPARE		-			13	20A					20A	14		-	SPARE	
SPARE		-			15	20A					20A	16		-	SPARE	
SPARE		-			17	20A					20A	18		-	SPARE	
SPACE					19							20			SPACE	
SPACE					21			per (or home) disserting on the			-	22			SPACE	
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		PHASE	CON	N. L	OAD	Α	5,700			В	3,78	30				
	A Constant	TOTAL	CON	N. L	OAD				9,480							
		EST. [	DEMAN	ID L	OAD				9,480							

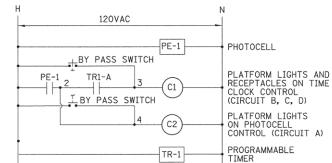
### WARMING SHELTER PANEL SCHEDULE

NAME	LOCATION	N	MOUN'	ING	SUPPLIED FROM	VOLT	AGE			BUS AMP SIZE	MAIN O.C. DEVICE	
WSP-1	WARMING HO MECHANICAL		SURF	ACE	SERVICE METER CENTER	120/240V,	1PH,	3W		200	MAIN BREAKER 200A	
SER	VICE	CONN LOAE VA		CKT NO.	A	В	CKT NO.	CKT ID.	CONN. LOAD VA		SERVICE	
CANOPY LIGHT	ANOPY LIGHTS		A	1	30A	20A	2	В	1,440	INTER	OR RECEPTACLES	
INTERIOR LIG	NTERIOR LIGHTS		С	3	20A		4	D	540	EXTER	IOR RECEPTACLES	
HEAT/SMOKE	HEAT/SMOKE DETECTORS		E	5	20A	20A	6	F	500	DOOR	LOCKS SYSTEM	
UTO DIALER		100	G	7	20A		8	Н	100	TIME (	CLOCK IOR & CANOPY LIGHT	
TANKLESS GA WATER HEATE	S IR	1,000	) I	9	20A	100A	10	J	11,000	ELECTRIC HEATED		
FURNACE		1,200	) K	11	20A	2P	12	J	11,000	FLOOR SYSTEM		
JANITORS CLUNIT HEATER	OSET	100	М	13	20A	20A	14	L	100		NICAL ROOM HEATER	
PARKING LIGHT	S	720	0	15	20A		16	N	400	EMERG	ENCY/EXIT LIGHTING	
MECH ROOM LIG	SHT	100	Q	17	20A	20A	18	Р	100		OR ROOM T LIGHT	
SHELTER LIGHTIME CLOCK	HTING	-	S	19	20A		20	R	100	FURNA	CE THEMOSTAT	
HEATED FLOO	R THEMOSTAT	100	U	21	20A	20A	22	Т	300	INTERI	OR SECURITY LIGHTS	
SOUTH BUILD EXTERIOR WA		400	w	23	20A		24	٧	1,000	INTER	OR LIGHTS	
SPARE		-		25	20A	20A	26		-	SPARE		
SPACE				27			28		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SPACE		
SPACE				29			30			SPACE		
		PHASE	CONN.	LOAD	A 9,580	B 10,	120					
		TOTAL	CONN.	LOAD		19,700						
		EST. [	DEMAND	LOAD		19,700						

NOTE: ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

### PLATFORM ELECTRICAL EQUIPMENT **COMPONENT SCHEDULE**

- COM ED 3 METER SET MOUNTED TO UP ELECTRIC CABINET FOR (1) 200A, (2) 100A, 120/240V, 1 PHASE, 3-WIRE SERVICES.
- MAIN DISCONNECT SWITCH, 100 AMP, 240V, 1 PHASE 60 HZ.
- 3 ELECTRICAL PANEL "MDP-1", 100 AMP, 120/240V, 1 PHASE, 3W WITH 30 CIRCUITS
- (4) PROGRAMMABLE TIME SWITCH
- (5) PHOTOELECTRIC CELL AND BY-PASS SWITCH
- (6) TWO - 30A, 8 POLE CONTACTORS IN BOX
- (7) DUPLEX GFI RECEPTACLE
- (8) 120V WEATHERPROOF LAMPHOLDER
- (9) 120V, 800W ELECTRIC HEATER WITH INTEGRAL THERMOSTAT
- THE CONTRACTOR SHALL FURNISH ALL THE ELECTRICAL EQUIPMENT AS SPECIFIED AND INSTALL AS PER DRAWINGS
- THE CONTRACTOR SHALL NOT MAKE ANY CHANGES IN DRAWINGS AND SHALL NOT DEVIATE FROM THE REQUIREMENT OF THE SPECIFICATIONS. (11)
- ALL DISCREPANCIES SHALL BE REPORTED TO THE METRA PROJECT ENGINEER & HIS INTERPRETATION SHALL BE FINAL
- ALL CONTROL WIRES SHALL BE #12 AWG. MIN.
- (14) ALL OTHER CONDUCTORS SHALL BE AS SPECIFIED
- PLATFORM LIGHTS ON TIME CLOCK CONTROL CIRCUITS SHALL OPERATE FROM DUSK TO A SET TIME AFTER LAST TRAIN & ALSO A SET TIME BEFORE FIRST TRAIN TILL DAWN WITH TIME CLOCK AND PHOTO SENSOR OVERRIDE. SETTING OF TIMER TO BE DETERMINED BY METRA IN COORDINATION WITH LOCAL AUTHORITIES. (15)
- PLATFORM LIGHTS THAT ARE ON PHOTOCELL CONTROL CIRCUITS SHALL STAY 'ON' ALL NIGHT
- POWER DISTRIBUTION BLOCKS, 600V, SIZED AS REQUIRED



### LIGHTING CONTROL SCHEMATIC

PROPOSED UP PLATFORM LIGHTING ELECTRICAL CABINET -TO VOM CABINET TO FUTURE TO FUTURE SOUTH PLATFORM AND RECEPTACLE NORTH PLATFORM LIGHTING AND RECEPTACLE CIRCUITS LIGHTING **FUTURE PLATFORM LIGHTING** 

# **FUTURE LIGHTING CONTROL WIRING DETAIL**

CKT B TO PLATFORM LIGHTS AND RECEPTACLES CKT C ON TIME CLOCK CONTROL CKT D CKT F BYPASS SWITCH -C1 🔿 - GROLIND WIRE PROGRAMMARI F TIMER TR-1 (INTERMATIC PANELBOARD LA SEE SCHEDULE ABOVE FOR POLE CKT'S. MODEL NO. T171CR) WIDELITE #AEC-PC1 MOUNTED (PE-1) ○ C2 ON CABINET GROUND WIRE TO PLATFORM LIGHTS ON PHOTOCELL CONTROL CKT E

PLATFORM LIGHTING EQUIPMENT

**CONNECTION DIAGRAM** 

UP ELECTRIC CABINET

(5)

C2

6

6 C1

7

9

PLATFORM LIGHTS ON PHOTOCELL CONTROL (CIRCUIT A)

PLATFORM RECEPT. ON TIME CLOCK CONTROL (CIRCUIT D)

4

17

FROM COM ED'S OVERHEAD POWER FEED

TO PHOTO-ELECTRIC CELL

PLATFORM LIGHTS

PLATFORM RECPT. ON TIME CLOCK CONTROL (CIRCUIT C)

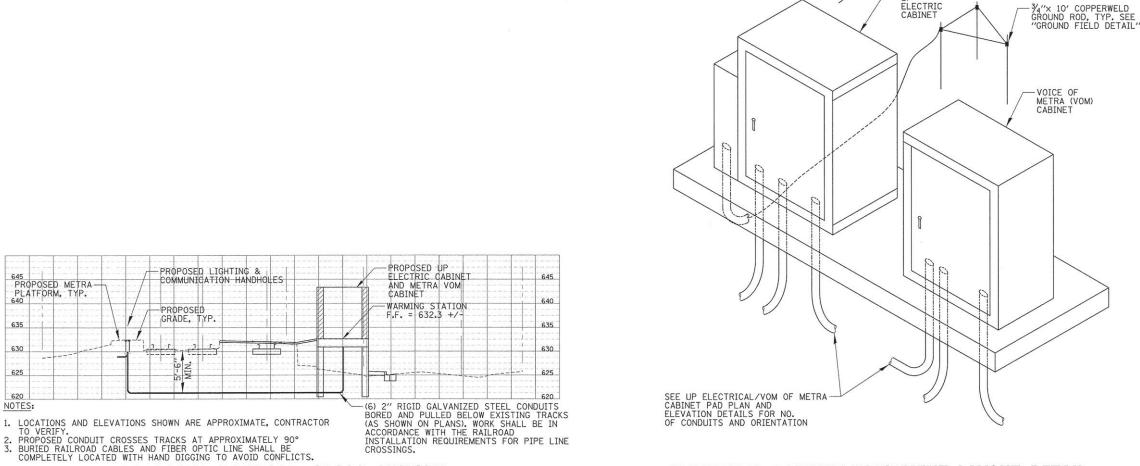
ON TIME CLOCK CONTROL (CIRCUIT B)

3

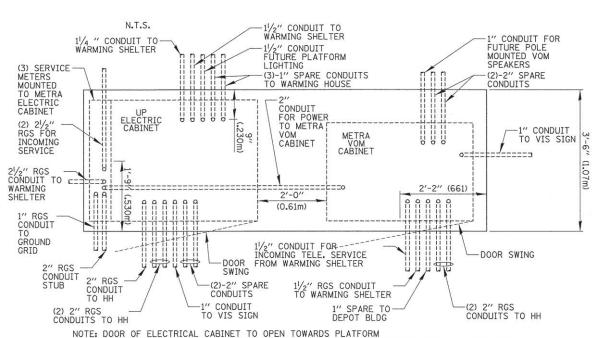
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# ONE LINE DIAGRAM



### PROPOSED RAILROAD CROSS SECTION **ELECTRICAL CABINET EQUIPMENT LAYOUT DETAIL**



UP ELECTRICAL/VOICE OF METRA CABINET PAD PLAN

-METRA ELECTRIC CABINET OUTLINE METRA VOM CABINET 11'-0" (3.35m) **CONDUIT BENDING DETAIL (TYP.)** -¾" (20) CHAMFER, TYP. 2'-2" (661) (0.61m) 4" (102) -CLASS ST FINISHED GROUND OR GRADE TRENCH BACKFILL GRADATION FA 6 TOP OF CONCRETE EARTH BACKFILL, TYP. ELECTRICAL WARNING GRANULAR SUB BASE, TYPE B. GRADATION CAG -GRANULAR SUB BASE, TYPE B. TAPE GRADATION CA6 BACKFILI GRADATION REINFORCEMENT 150 #4 (#13) BARS @ 6" (150) C-C EACH WAY TOP & BOTTOM POWER FOR PLATFORM LIGHTS -90° BEND (SEE CONDUIT BENDING DETAIL), TYP. 1" (25) C. FOR VOM NOTE: CONTRACTOR SHALL HAVE METRA VERIFY PLACEMENT OF CONDUITS IN THE UP ELECTRICAL/VOICE OF METRA CABINET PAD PRIOR TO POURING CONCRETE. THE CONTRACTOR SHALL ALSO PROVIDE UP ELECTRICAL/VOICE OF METRA CABINET PAD SHOP DRAWINGS AND DETAILS TO METRA FOR REVIEW/APPROVAL PRIOR TO CONSTRUCTION. THE SERVICE METER CENTER IS NOT SHOWN FOR CLARITY.

**NOTES** 

 THE POWER AND CONTROL CONDUITS SHALL BE SIZED AS NOTED ON LAYOUT DRAWINGS. ALL CONDUIT STUBS SHALL BE CAPPED.

ALL CONCRETE SHALL BE 3,500 PSI (28 KPA) AT 14 DAYS COMPRESSIVE STRENGTH. (REF. IDOT STD. SPEC. 1020).

4. THE CONTRACTOR SHALL FURNISH NECESSARY CONDUITS TO COMPLETE INSTALLATION OF THE ELECTRICAL CONTROL & VOICE OF METRA SYSTEM.

GRANULAR SUBBASE (CA-6) SHALL MEET IDOT STANDARD SPECIFICATION 1004.04. TRENCH BACKFILL (FA-6) SHALL MEET IDOT STANDARD

THE CONTRACTOR SHALL FURNISH COLOR CODED ADHESIVE MARKERS TO IDENTIFY THE CONDUIT AND WIRES AS SPECIFIED ON THE PLANS. 8. 1" (25) C. INDICATES 1" (25) DIAMETER CONDUIT. 9. ALL EMPTY CONDUITS SHALL INCLUDE PULL STRINGS. 10. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)

11. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.

**POWER AND CONTROL CONDUIT** 

TRENCH DETAIL

6. THE BENDING RADIUS OF ALL THE CONDUITS SHALL BE PER NEC.

SPECIFICATION 1003.04.

UNLESS OTHERWISE SHOWN.

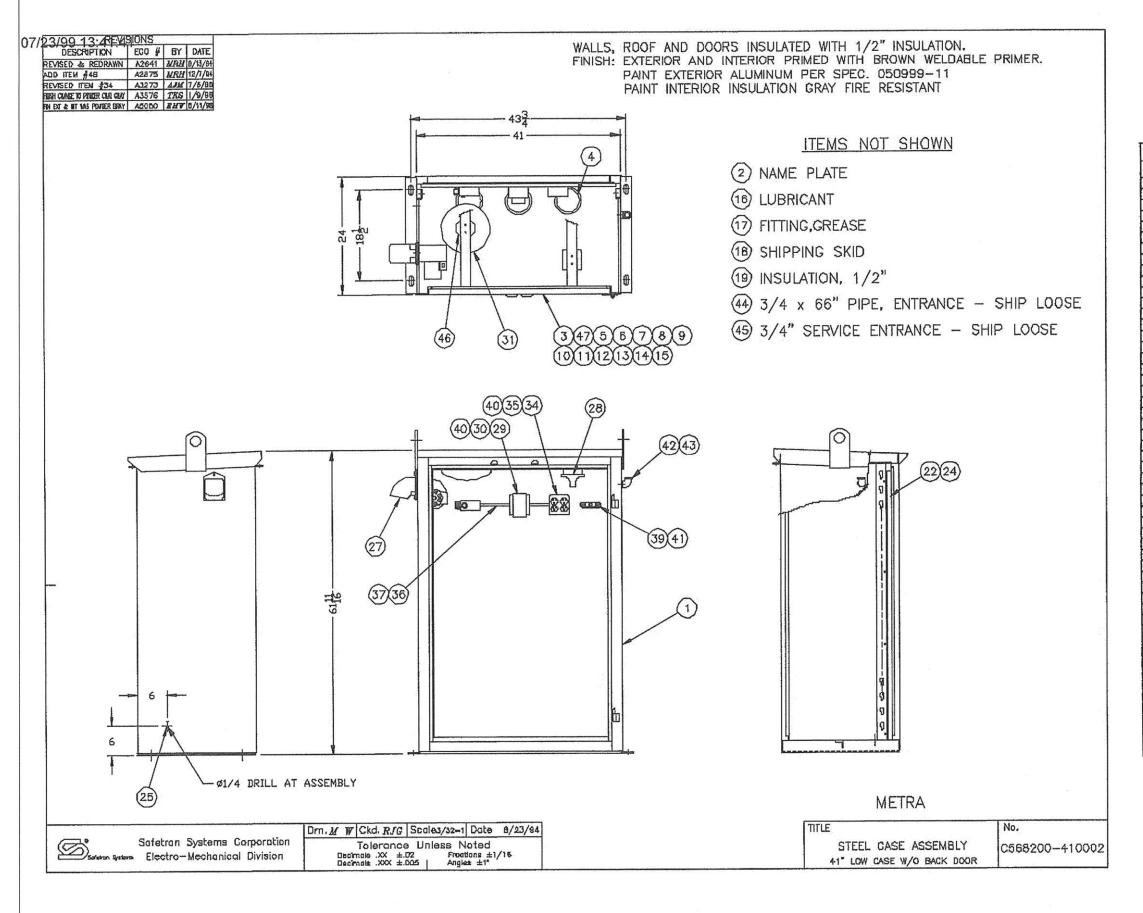
TOP OF FOUNDATION/PLATFORM

-PROPOSED

ELECTRIC CABINET

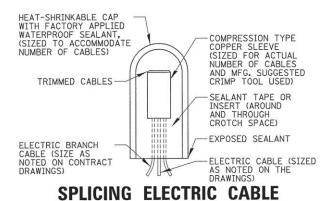
N.T.S. TOTAL SHEET NO. 65 47 REVISED SECTION MAYWOOD METRA STATION VILLAGE OF MAYWOOD STATE OF ILLINOIS DRAWN DRK REVISED COOK LIGHTING DETAILS 13-00136-00-RR CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61C74 PLOT DATE = 1/22/2016 DATE SCALE: \$SCALE\$ SHEET SHEETS STA. TO STA. 01/25/16 REVISED

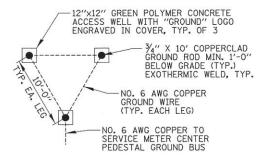
UP ELECTRICAL/VOICE OF METRA CABINET PAD ELEVATION



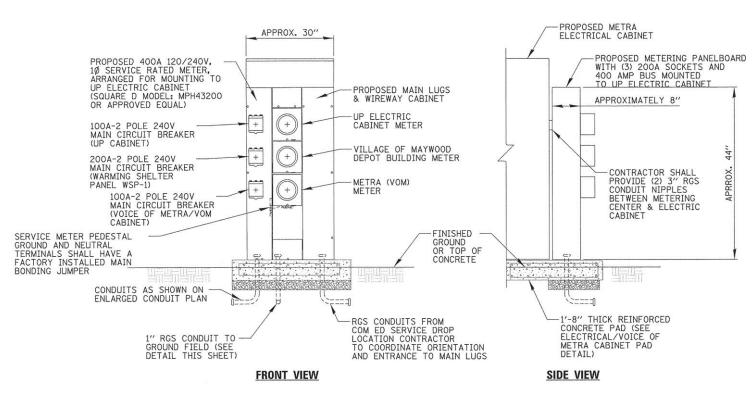
			BILL	OF MATERIAL .	
MQ.	QTY. REQ'D.	U.O.M.	PART NUMBER	DESCRIPTION	# NOT
1	1	EA	567201-41X2	WELDMENT, 41" LOW	1
2	52.26	SF	099-60-050	INSULATION 1/2	*
3	20	EA	053020	PIN, INS SUPPORT	
4	3	EA	052853	PLUG, HOLE	
5	15	FT	104510	PACKING 11/16X9/16	
6	1	EA	051631-9X	HANDLE, DOOR W/SHAFT	1
7	1	EA	567027-1	LATCH, DOOR	
8	1	EA	051630	WASHER, LATCH	
9	1	EA	001809-MSC	W LKS M 5/16	
10	1	EA	004044~HSC	CS HH 5/16-18 X.75	
11	2	EA	567008-1	ROD, LATCH	
12	1	EA	051440-2	HOOK, DOOR	
13	1	EA	567024	CAP	
14	2	EA	540027-A	FILTER, DOOR VENT	
15	2	EA	051629	PLATE, VENT COVER	
18	0	OZ	017-00-008	LUBRICANT	*
17	2	EA	083510	FITTING, ALEMITE	*
18	1	EA	051157-1	NAMEPLATE, SAFETRAN	*
19	1	EA	54511D500X	SKID, SHIPPING	*
22	1	EA	560026-3	BACKBOARD 41° LOW	T-
24	8	EA	002102-SC	N HX 5/16-18	1
25	1	EA	035049-X	BOLT, GROUND 035049-X	
26	1	EA	007300-1	3/8" FLEXIBLE CONDUIT CLAMP	1
27	1	EA	035035-7X	FAN, VENT AERIAL INLET TYPE 11	1
28	1	EA	051154-X	SOCKET ASSY, LIGHT	1
29	1	EA	007200	BOX 2 X 4 OUTLET	1
30	1	EA	007240	COVER, HANDY BOX	1
31	1	EA	051894-149	HEATER/FAN CORD-FREE WALL-HUGG	1-
32	1	EA	T12977	NIPPLE, OFFSET CONDUIT, 1/2", REG	1-
33	2	EA	007151	CON LN 1/2	+
34	2	EA	007335-1	3/8" CONNECTOR	+
35	3	EA	007314	OUTLET, DUPLEX	+
36	4	EA	007327	CONNECTOR 1/2 COMP	+-
37	5	FT	007250	CONDUIT 1/2	+
38	1	EA	007241	COVER, OUTLET	+
39	1	EA	025618-N15	FUSE, NON-RENEWABLE	+
40	2	EA	007212	BOX 4" SQUARE	+
41	1	EA	025618-1X	SWITCH, SINGLE DISCONNECT	1
42	1	EA	007177	CON BU 3/4	1
43	1	EA	097033~T10814	CONNECTOR, CABLE, 90 DEGREE AN	1
44	1	EA	052852-74	PIPE, ENTRANCE	*
45	1	EA	007425	ENTRANCE 3/4	*
47	4	EA	005191-FPSC	TS PH 8-F X .375	+*-
48	1	EX	050981-4	GASKET, COVER	<del>  \</del>
49	i	EA	050981	COVER, ENTRANCE	<del></del>
50	3	EX	002104-1	N CAGE 3/8-16	
51	3	EA	001810-ME	W LKS M 3/B	+
-	3	EA	A CONTRACTOR OF THE PARTY OF TH		
52	1	EA	004088-HE	CS HH 3/8-16 X 1	
53	-	-	007152	CON LN 3/4	+
54	1	EA	007315	SWITCH, LIGHT	+
55	1	EA	051894-1498	HEATER/FAN BRACKET SUPPORT COVER.4° SOUARE.1/2° DEEP FOR	
56	0	1 EX			+-
3/		1 CV	050999-11	FINISH, STEEL HOUSES, SHELTERS	*

Freed		USER NAME = mmichalowicz	DESIGNED - GAH	REVISED -		I	F.A. RTF.	SECTION	COUNTY	TOTAL	SHEET NO.					
E (1)	VILLAGE OF MAYWOOD		DRAWN - DRK	REVISED -	STATE OF ILLINOIS	VIII.E DE METRA CARINEL LAYUUL DELAH				1	13-00136-00-RR	соок	65	48		
1881	MAYWOOD, IL 60153	PLOT SCALE = 30'	CHECKED - JPC	REVISED -	DEPARTMENT OF TRANSPORTATION		VOICE O	· WEIL	OADINE	LATOUT	DETAIL			CONTRAC	T NO.	61C74
Or CLEMEN		PLOT DATE = 1/22/2016	DATE - 01/25/16	REVISED -		SCALE: \$SCALE\$	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		





**GROUND FIELD DETAIL (TYP.)** 



1. ALL CIRCUIT BREAKERS SHALL HAVE LOCKABLE COVERS.

### SERVICE METER DETAIL



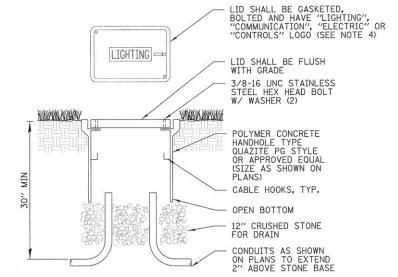
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY MAYWOOD METRA STATION COOK 13-00136-00-RR LIGHTING DETAILS CONTRACT NO. 61C74

TO STA.

TOTAL SHEET NO.

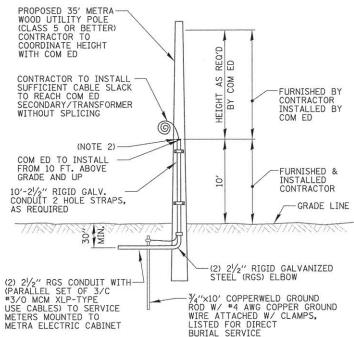
65 49



### NOTES:

- 1. SPLICES IN CONCRETE HANDHOLES SHALL BE WATERPROOF.
- 2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREEN IN LANDSCAPED AREAS AND MATCH COLOR IN CONCRETE/BRICK AREAS.
- 3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS AND BE UL LISTED.
- 4. LIGHTING, COMMUNICATION, ELECTRIC AND LOW VOLTAGE CONDUITS SHALL BE PROVIDED WITH DEDICATED HANDHOLES. HANDHOLE LIDS FOR LIGHTING CONDUITS SHALL HAVE A "LIGHTING" LOGO; HANDHOLE LIDS FOR THE VOICE OF METRA (SPEAKERS & VIS SIGN) CONDUITS SHALL HAVE A "COMMUNCIATION" LOGO; HANDHOLE LIDS FOR ELECTRIC CONDUITS SHALL HAVE A "ELECTRIC"; AND, HANDHOLE LIDS FOR LOW VOLTAGE CONDUITS SHALL HAVE A "CONTROLS" LOGO.

# **COMPOSITE CONCRETE HANDHOLE**



OF

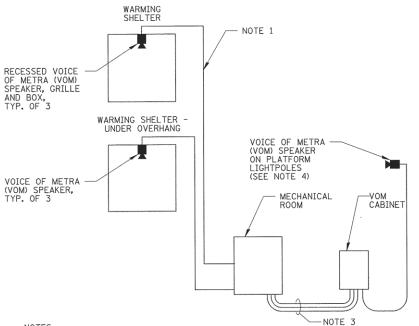
SCALE: \$SCALE\$ SHEET

1. ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."

SHEETS STA.

2. CONTRACTOR TO PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.

COM ED OVERHEAD CONNECTION POLE



- PROVIDE DEDICATED 1" CONDUIT FOR SPEAKER WIRING WITHIN THE WARMING SHELTER. CONTRACTOR SHALL PROVIDE JB'S AS REQUIRED, AND PULL STRING IN CONDUIT FROM MECHANICAL ROOM TO EACH SPEAKER.
- 2. CONTRACTOR SHALL FURNISH & INSTALL RECESSED SPEAKER, SPEAKER BOX AND GRILLE (ALTEC LANSING SPEAKER MODEL NO. CF404-8T). SPEAKERS TO BE WIRED BY METRA.
- 3. PROVIDE TWO DEDICATED CONDUITS BETWEEN MECHANICAL ROOM AND PROPOSED VOM CABINETS. ONE 1½" CONDUIT FOR VOM SPEAKER WIRING (WIRING PROVIDED BY OTHERS); ONE 1½" CONDUIT FOR TELEPHONE (WIRING PROVIDED BY OTHERS); AND ONE 1" SPARE. PROVIDE PULL STRING IN ALL CONDUITS. CAP CONDUITS AND LOCATE.
- 4. PROVIDE DEDICATED 1" SPARE CONDUIT AND PULL ROPE BETWEEN V.O.M. CABINET AND SPARE VOM SPARE CONDUIT FOR PLATFORM LIGHTPOLES. METRA TO FURNISH SPEAKERS.

# **VOM SPEAKER ONE LINE DIAGRAM**

2/C #18 AWG SHIELDED-CABLES, COLOR CODED PER MANUFACTURER -ELECTROMAGNETIC DOOR LOCK, TYP. EXIT PUSH-BUTTON EM-1 OVERRIDE SWITCH MOUNTED ADJACENT TO DOOR, TYP. MECH ROOM IN WARMING SHELTER WATTING AREA IN EM-2 DOOR LOCK WSP-1 CKT 6 WARMING SHELTER OWER SUPPL ENCLOSURE POWER ENCLOSURE SHALL BE PROVIDED WITH 7-DAY PROGRAMMABLE TIMER RATED FOR 24V AC/DC

1. ELECTROMAGNETIC DOOR LOCKS SHALL LOCK 15 MINUTES AFTER THE LAST TRAIN LEAVES AND OPEN 30 MINUTES BEFORE THE FIRST TRAIN. SETTING OF THE PROGRAMMABLE TIMER SHALL BE DETERMINED BY VILLAGE OF MAYWOOD, CONTRACTOR TO COORDINATE.

### DOOR LOCK MECHANISM CONTROL ONE LINE DIAGRAM N.T.S.

DESIGNED GAH REVISED VILLAGE OF MAYWOOD DRAWN REVISED CHECKED REVISED JPC LOT SCALE = 50 DATE REVISED

WSP-1, CKT 3 -30A-120V COIL, 6-POLE WSP-1, CKT 1-ELECTRICAL HELD CONTACTOR (C1) -SPARE WSP-1 NEUTRAL BUS TO PHOTOCELL MOUNTED ON ROOF OVERHANG WSP-1 NEUTRAL BUS WSP-1, CKT WSP-1, CKT -WSP-1, CKT 1 -WSP-1, CKT 22 -WSP-1, CKT 23 -WSP-1. CKT 24

### NOTES:

- ROUTE CIRCUIT #3 FROM WSP-1 THROUGH LIGHTING CONTACTOR C1 AND THEN THROUGH TIME CLOCK.
- 2. CIRCUIT #1 SHALL OPERATE FROM DUSK UNTIL 15 MINUTES AFTER LAST TRAIN LEAVES AND ALSO A SET TIME BEFORE THE FIRST TRAIN TILL DAWN WITH TIME CLOCK AND PHOTOCELL OVERRIDE. SETTING OF TIMER TO BE DETERMINED BY METRA, CONTRACTOR TO COORDINATE.
- 3. WAITING AREA LIGHTING CKT 3 SHALL ALWAYS REMAIN ON, WAITING AREA LIGHTING CKT 3 SHALL TURN OFF 15 MINUTES AFTER LAST TRAIN LEAVES AND A SET TIME BEFORE THE FIRST TRAIN. SETTING OF TIMER TO BE DETERMINED BY METRA, CONTRACTOR TO COORDINATE.
- 4. TIMER SHALL BE INTERMATIC MODEL #T1471BCR.

### WARMING SHELTER BUILDING LIGHTING CONTROLS

2/C #6 & 1/C #8 GND XLP-TYPE USE— CABLES IN CONDUIT TO LIGHTING/ ELECTRICAL HANDHOLE LOCATED IN THE WARMING SHELTER FLOOR (SEE WARMING SHELTER POWER PLAN) MECHANICAL ROOM PROGRAMMABLE TIMECLOCK (INTERMATIC WARMING SHELTER MODEL NO. T171CR) HEATING CKT 10,12 CONTROL WSP-WARMING SHELTER HEATING CONTROL PANEL (W/ TIMER FOR PUSHBUTTON SWITCHES) IN A NEMA 12 ENCLOSURE (AS PROVIDED BY HEATING MFG).

# **HEATED FLOOR CONTROL ONE-LINE DIAGRAM**

SCALE: \$SCALE\$ SHEET

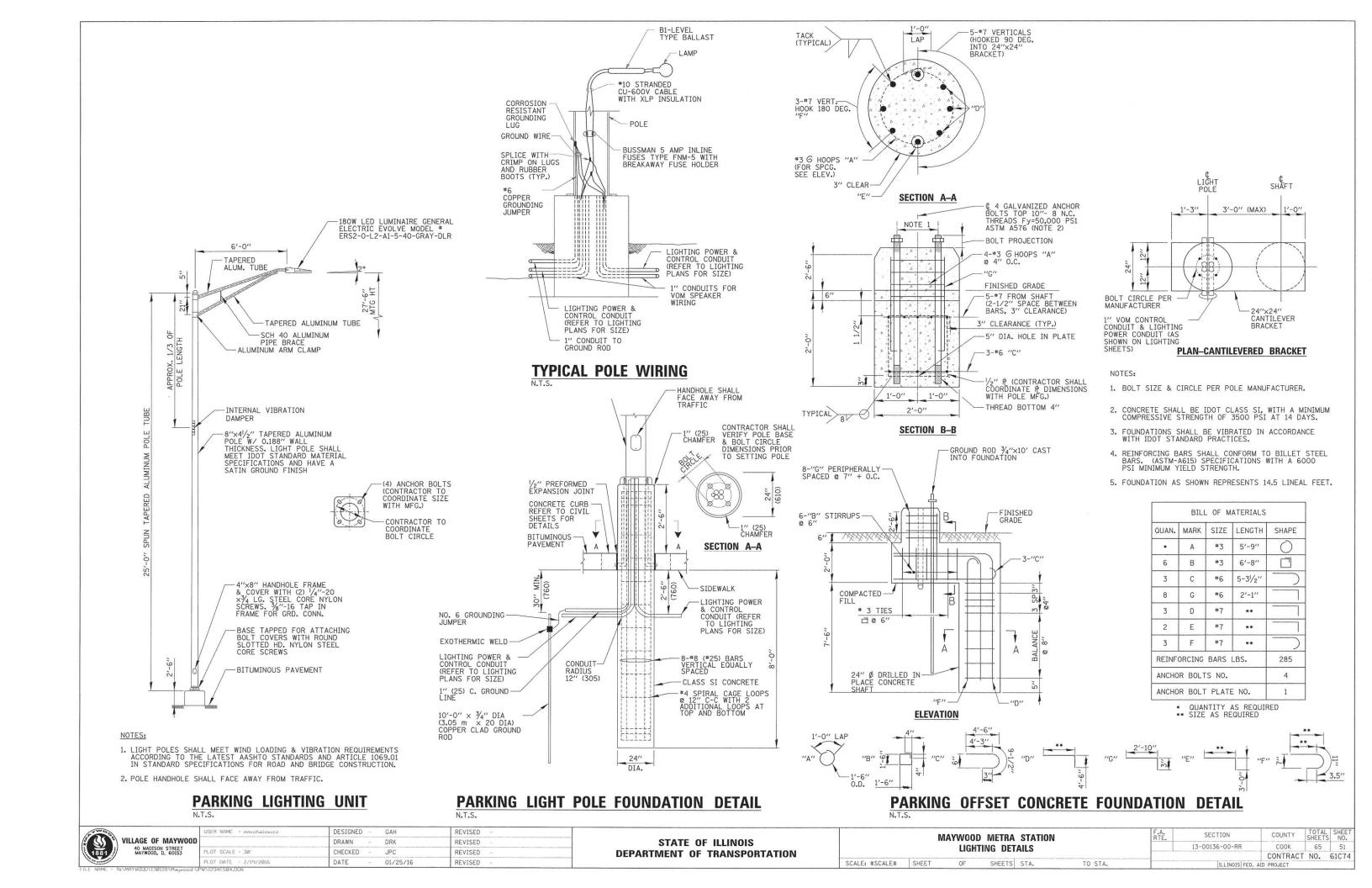
ALARM SCHEDULE AUTO DIALER ALARM SIGNAL VIA TELEPHONE TO AUTHORITY 1. NORMAL UTILITY FAILURE 2. HEAT DETECTOR (WARMING SHELTER)-HAVING 3. LOSS OF POWER TO AUTO DIALER JURISDICTION,
OR AS DIRECTED
BY OWNER
(LOCAL FIRE
OR POLICE DIALER 4. PULL STATION (WARMING SHELTER)-5. SPARE DEPARTMENT) 6. SPARE 120V. 1Ø GELLED BATTERY

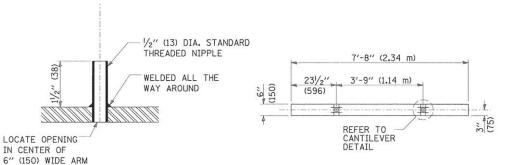
# **AUTO DIALER ONE LINE DIAGRAM**

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SHEETS SECTION COUNTY **MAYWOOD METRA STATION** СООК 65 50 13-00136-00-RR WIRING DIAGRAMS CONTRACT NO. 61C74 SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

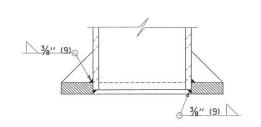




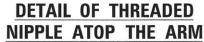
# **UNDERSIDE OF CANTILEVER ARM**

# 11//32 " (2) 2" (50) DIA-WIRE HOLES DRILL & TAF 3/8"(9)-16, (8) HOLES

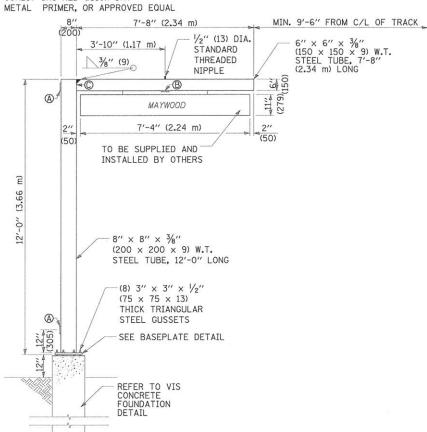




SECTION B-B

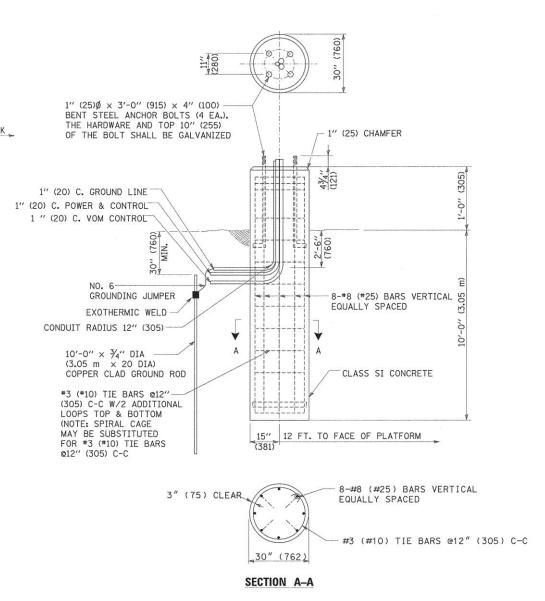


NOTE: POLE TO BE PRIMED WITH CORBIT 3R3 RED QUICK DRY



 $\triangle$  4"  $\times$  6" (100  $\times$  150) HANDHOLE WITH COVER PLATE B 3" x 5" (75 x 127) HANDHOLE WITH COVER PLATE (ON THE BOTTOM) © 4" × 4" (100 × 100) OPENING (ON THE SIDE OF THE COLUMN)

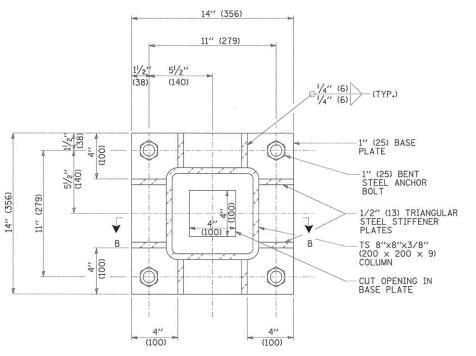
## VIS SIGN



# VIS CONCRETE FOUNDATION DETAIL

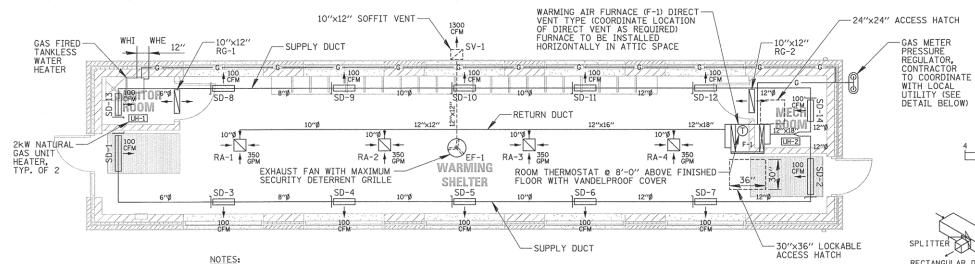
### **NOTES**

- 1. THE POWER AND CONTROL CONDUITS SHALL BE SIZED AS NOTED ON LAYOUT DRAWINGS.
- 2. ALL CONDUIT STUBS SHALL BE CAPPED.
- 3. ALL CONCRETE SHALL BE 3,500 PSI (28 KPA) AT 14 DAYS COMPRESSIVE STRENGTH. (REF. IDOT STD. SPEC. 1020).
- 4. THE BENDING RADIUS OF ALL THE CONDUITS SHALL BE PER NEC.
- 5. THE CONTRACTOR SHALL IDENTIFY THE CONDUITS AS SPECIFIED AND FURNISH AN ADHESIVE COLOR CODED MARKING ON THE CONDUITS FOR IDENTIFICATION.
- 6. 1" (25) C. INDICATES 1" (25) DIAMETER CONDUIT.
- 7. ALL CONDUITS SHALL INCLUDE PULL STRINGS.
- 8. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 9. CONTRACTOR SHALL FURNISH POLE AS MANUFACTURED BY FUNK FORGING CO. CHICAGO HEIGHTS, IL. PHONE NO (708) 757-7421 OR APPROVED EQUAL IN ACCORDANCE WITH THESE PLANS AND SPECIFICATION SECTION 5500 AND 9900.
- 10. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.



# **BASE PLATE DETAIL** FOR LED FOUNDATION

Fruo	Franco	USER NAME = mmichalowicz	DESIGNED -	GAH	REVISED -				MAVMOO	D METRA CTATION		F.A.	SECTION	COUNTY	TOTAL SHEET
VILLAGE OF MAYWOOD		DRAWN -	DRK	REVISED -	STATE OF ILLINOIS	MAYWOOD METRA STATION				KIE.	13-00136-00-RR	COOK	CE ES		
1881	40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 30'	CHECKED -	JPC	REVISED -	DEPARTMENT OF TRANSPORTATION	VIS SIGN DETAILS			-	CONTRACT		CT NO 61C74		
THO STREET		PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE: \$SCALE\$	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	21 140. 01014	

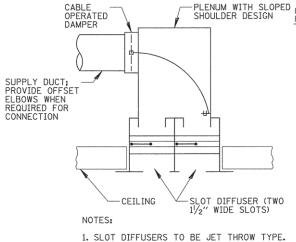


- 1. ALL SUPPLY AIR (SD) REGISTERS AND RETURN AIR (RA) GRILLES SHALL HAVE ADJUSTABLE DAMPERS
- 2. INTAKE & EXHAUST VENTS FOR TANKLESS GAS WATER HEATER SHALL BE LOCATED 3' ABOVE THE HEIGHT OF THE AIR SUPPLY INLET FOR FURNACE (F-1).
- 3. CONTRACTOR TO PROVIDE MINIMUM R5 INSULATION FOR ALL SUPPLY AND RETURN DUCTS.

### **HVAC PLAN**

SCALE: AS SHOWN

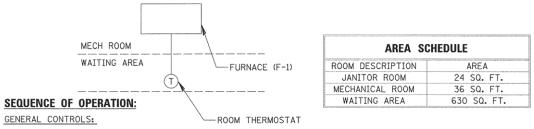
EQUIPMENT S	CHEDULE			
IDENTIFICATION	ITEM	LOCATION	SIZE OR RATING	DESCRIPTION
F-1	FURNACE	MECH ROOM	90,000 BTU/HR 96% EFFICIENCY 120V, 12.8A, 1770 CFM	LENNOX ELITE SERIES EL296UH090XV48C
Û	THERMOSTAT	WAITING AREA	DIGITAL ADJUSTABLE 2°-100° F	
SD-1 & SD-2	SLOT DIFFUSER W/ VOLUME DAMPER	WAITING AREA	36" LONG	TITUS FL-15-JT (2) 1½" WIDE SLOTS
SD-3 TO SD-12	SLOT DIFFUSER W/ VOLUME DAMPER	WAITING AREA	20" LONG	TITUS FL-15-JT (2) 11/2" WIDE SLOTS
SD-13 & SD-14	SLOT DIFFUSER W/ VOLUME DAMPER	MECH ROOM & JANITOR ROOM	20" LONG	TITUS FL-15-JT (2) 1/2" WIDE SLOTS
RG-1 & RG-2	RETURN GRILL W/ FIRE DAMPER MTD IN DOORS	MECH ROOM & JANITOR ROOM	10" X 12"	TITUS 350 FL
RA-1 TO RA-4	RETURN GRILL W/ VOLUME DAMPER	WAITING AREA	16" X 16"	TITUS SG-SD MAX SECURITY
WHI	TANKLESS GAS WATER HEATER INTAKE VENT	JANITOR ROOM EXTERIOR WALL	AS REQUIRED FOR 3"Ø DUCT	INTAKE VENT FLUSH WITH EXTERIOR WALL (WITH INSECT SCREEN)
WHE	TANKLESS GAS WATER HEATER EXHAUST VENT	JANITOR ROOM EXTERIOR WALL	AS REQUIRED FOR 3"Ø DUCT	EXHAUST VENT FLUSH WITH EXTERIOR WALL (WITH INSECT SCREEN)
UH-1 & UH-2	NATURAL GAS UNIT HEATERS	MECH ROOM & JANITOR ROOM	2,000 BTU/HR WITH INTERNAL THERMOSTAT	MODINE OR COMFORT ZONE
EF-1	EXHAUST FAN	WAITING AREA	12" PROP DIA. 1/4 HP, 120V, 3.1A, 1750 RPM	DIRECT-DRIVE VENTURI, WITHOUT INTAKE GUARDS DAYTON 10D971
SV-1	SOFFIT VENT GRILL	WAITING AREA	10" X 12"	TITUS SG-SD MAX SECURITY



- 2. PROVIDE PLENUM AS REQUIRED FOR SLOT DIFFUSER INCLUDING NECESSARY CLIPS & SUPPORT HANGERS FOR PLENUM & SLOT DIFFUSER FOR CEILING ATTACHMENT.
- 3. PLENUM TO BE PROVIDED WITH VOLUME DAMPER IN INLET COLLAR.

# -PLENUM\_WITH SLOPED RECTANGULAR DUCT SUPPLY BRANCH TAKE-OFF RECTANGULAR SUPPLY TEE NOTES: 1. PROVIDE STANDARD RADIUS ELBOWS WHEN POSSIBLE - SHORT RADIUS WHERE REQUIRED. 2. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE

# SLOT DIFFUSER / VOLUME DAMPER DETAIL



THE WAITING AREA THERMOSTAT (T) SHALL BE EQUIPPED WITH A MULTIPLE SET POINT CLOCK THERMOSTAT WITH A MANUAL ON/OFF OVERRIDE SWITCH.

### SET POINTS:

WINTER HEATING - THE WAITING AREA TEMPERATURE SHALL BE MAINTAINED AT 78° F DURING STATION HOURS OF OPERATION AND 55° F DURING AFTER HOURS (OR AS SET BACK FOR OPERATIONAL PURPOSES). THE THERMOSTAT SHALL BE CALIBRATED SO THAT THE WAITING AREA DOES NOT DROP BELOW 55° F.

### **CONTROL DIAGRAM**

Twoo	VILLAGE OF MAYWOOD 40 MADISON STREET MAYWOOD, IL 60153	USER NAME = mmichalowicz	DESIGNED		GAH	REVISED -	h
322 g N			DRAWN		DRK	REVISED -	M
		PLOT SCALE = 4'	CHECKED	-	JPC	REVISED -	-
		PLOT DATE = 1/22/2016	DATE	-	01/25/16	REVISED -	
NAME = N:	MAYW000\130128\Maywood-UF	W\1234M101.dgn					

### PROVIDE WALL VENTING UNLESS EXPANSION ANCHORS AS REQUIRED MANUFACTURER WALL BRACKET GAS FIRED UNIT HEATER ARRANGED EXHAUST VENT CAP ADJUSTABLE AIR DIRECTIONAL LOUVERS WITH BIRDSCREEN AS REQUIRED TIGHT TO WALL: NOT TO EXCEED MANUFACTURER'S RECOMMENDATION -MAXIMIZE CLEAR HEADROOM GAS SUPPLY SERVICE SHUT-OFF VALVE GAS PIPE SUPPLY. CONTRACTOR TO COORDINATE

# **NATURAL GAS UNIT HEATER**

### MECHANICAL SYMBOLS LIST

THERMOSTAT £10×15 £ DUCT WITH DIMENSIONS ROUND TO RECTANGULAR

DUCT TRANSITION

GAS SHUT-OFF COCK

CONNECT OUT OF TOP

CONNECT OUT OF BOTTOM

GAS PIPING

LINTON

1

₹-

---

<del>--</del>--

\_

RECTANGULAR DUCT SUPPLY

RECTANGULAR DUCT SUPPLY

RECTANGULAR SUPPLY TEE

CONSTRUCTED, SUPPORTED & FASTENED AS RECOMMENDED BY SMACNA. NO SQUARE OR RECTANGULAR HEEL ELBOWS SHALL BE ALLOWED.

BRANCH TAKE-OFF

BRANCH TAKE-OFF

SCALE IN FEET

SPLITTER

RECTANGULAR DUCT SUPPLY

BRANCH TAKE-OFF

SPLITTER

RETURN DUCT

RETURN REGISTER WITH RETURN AIR FLOW SHOWN

SUPPLY DUCT

DIRECTION OF AIR FLOW WITH MINIMUM SUPPLY CFM SHOWN 100 CFM

Ø ROUND

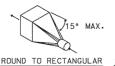
> VOLUME DAMPER FIRE DAMPER

SLOT DIFFUSER

₹30° MAX.

TRANSITION PIECE

R SHALL EQUAL OR BE GREATER THAN W. STANDARD RADIUS ELBOW



RECTANGULAR TO ROUND

SHORT RADIUS ELBOW WITH ONE VANE(S)

- 1. IF R IS LESS THAN W, THEN FULL ARC TURNING VANE(S) SHALL BE PROVIDED, SEE SCHEDULE BELOW.
- 2. INSIDE BEND MAY BE SQUARE FOR W ¢ 12". NO SQUARE HEELS PERMITTED

VANE SC	HEDULE	
WIDTH	NO. OF VANES	
< 12"	1	
12"-24"	2	
24"-36"	3	
36"-60"	4	
60"-84"	5	
¢ 84"	6	

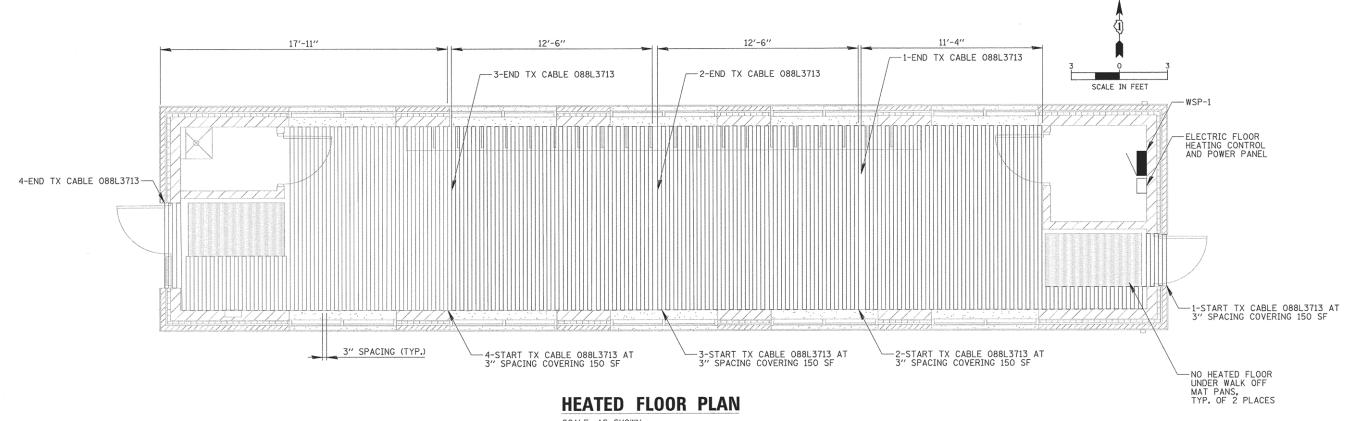
### -OUTSIDE BUILDING INSIDE BUILDING -CAPPED 3/4" (MIN.) TEST REGULATOR ·1/2" TO WATERHEATER TO FURNACE (36,000 BTU/HR (90,000 BTU/HR INPUT) INPUT) TO 2KW UNIT **HEATERS** -GAS SERVICE BOX (BELOW GRADE) 12" (MIN.) DIRT LEG GAS SERVICE GAS METER TO GAS MAIN-

### NOTES:

- 1. ALL NATURAL GAS FUEL PIPING REQUIRED FOR THE INSTALLATION OF THE WORK SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF NFPA.
- ALL PIPING, TUBING, FITTING AND VALVES USED IN THE PIPING INSTALLATION SHALL BE SUITABLE FOR 125 PSIG WORKING PRESSURE.
- 3. CAST IRON PIPING AND FITTINGS ARE NOT PERMITTED.
- 4. FLEXIBLE CONNECTORS SHALL BE USED TO ISOLATE HARMFUL VIBRATIONS FROM THE PIPING INSTALLATION WHERE NEEDED.
- 5. THE PIPING INSTALLATION SHALL BE TESTED AFTER ASSEMBLY AND PROVEN FREE FROM LEAKS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COORDINATION REQUIRED TO OBTAIN GAS SERVICE FROM NATURAL GAS UTILITY COMPANY AND CONNECTION TO THE EXISTING GAS MAIN INCLUDING ASSOCIATED METERING DEVICES.
- 7. GAS METER & REGULATOR BY LOCAL GAS COMPANY.

# **NATURAL GAS PIPING DETAIL**

OTATE OF HUNDIO		M	AYWOOL	METRA	STATIO	N	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STATE OF ILLINOIS	MECHANICAL PLAN						13-00136-00-RR	COOK	65	53	
DEPARTMENT OF TRANSPORTATION								CONTRACT	NO.	61C74	
	SCALE: \$SCALE\$	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

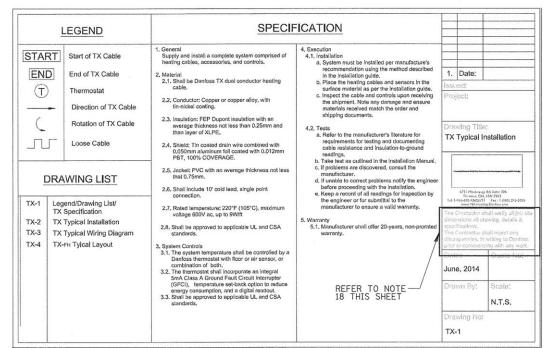


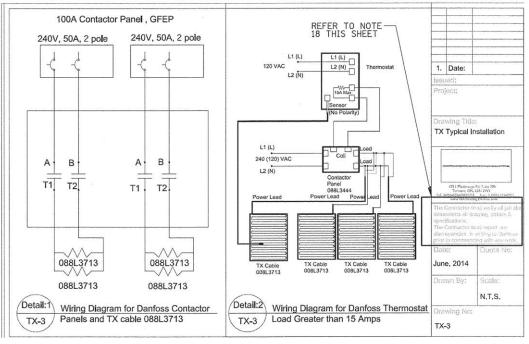
SCALE: AS SHOWN

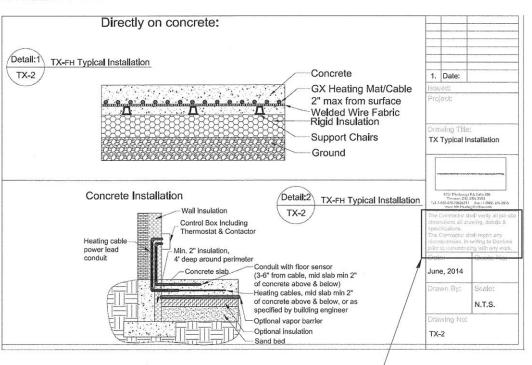
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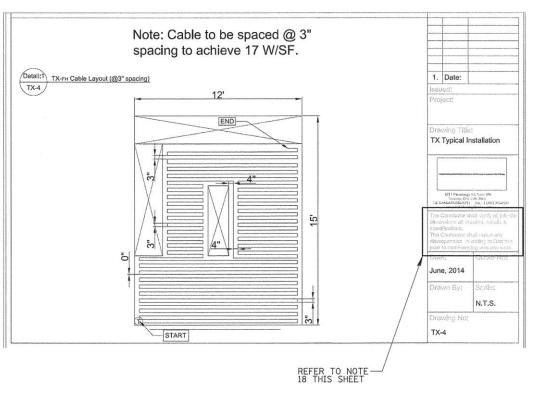
SEE ELECTRICAL HEATED FLOOR NOTES AND MECHANICAL DETAILS

Fredo	USER NAME = mmichalowicz	DESIGNED - 0	GAH	REVISED -			M	AYWOOD	METRA STATION		F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
VILLAGE OF MAYWOOD		DRAWN - [	DRK	REVISED -	STATE OF ILLINOIS			HEATED	FLOOR PLAN			13-00136-00-RR	СООК	65 54
40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 3'	CHECKED -	JPC	REVISED -	DEPARTMENT OF TRANSPORTATION						***		CONTRAC	T NO. 61C74
Bo or armer	PLOT DATE = 1/22/2016	DATE - C	01/25/16	REVISED -		SCALE: \$SCALE\$	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	









### NOTES

- CONTRACT DRAWINGS ARE CONCEPTUAL IN NATURE AND ARE NOT INTENDED TO BE REPRESENTATIVE OF EXACT QUANTITIES OF WORK TO BE PERFORM.
- 2. THE CONTRACT DRAWINGS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DRAWINGS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENCAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DRAWINGS, AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DRAWINGS BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF/HERSELF OF ALL CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS THE TOTAL COST FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED DUE TO THE CONTRACTOR'S FAILURE TO UNDERSTAND THE SCOPE OF WORK.
- . WHEN NECESSARY TO PERFORM WORK ADJACENT TO EXISTING UTILITIES THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR EXISTING UTILITIES IN CONFORMANCE WITH THE AFFECTED UTILITY COMPANIES REQUIREMENTS AS MAY BE REQUIRED TO PERFORM THE WORK OF THIS CONTRACT.
- ORIENTATION OF PIPING, CONDUITS, DUCTWORK, EQUIPMENT, ETC. MAY VARY. CONTRACTOR TO COORDINATE AS REQUIRED. CONTRACTOR TO COORDINATE WITH OTHER TRADES AS REQUIRED, AND OTHER ARCHITECTURAL AND STRUCTURAL FEATURES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS AND TECHNIQUES OF CONSTRUCTION. OWNER'S REPRESENTATIVE/ENGINEER'S REVIEW OF SAME DOES NOT RELIEVE CONTRACTOR OF THIS RESPONSIBILITY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY AND JOB SITE SAFETY.
- . IT IS THE INTENT OF THESE CONTRACT DRAWINGS TO INCLUDE ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK, READY FOR OCCUPANCY AND OPERATION BY THE OWNER.
- ALL CONTRACTORS SHALL EXAMINE THE CONTRACT DRAWINGS AND VISIT THE SITE TO DETERMINE THE FULL EXTENT OF THE WORK REQUIRED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S MISUNDERSTANDING OF THE SCOPE OF WORK.
- PRIOR TO BEGINNING ANY LAY-OUT WORK, ALL CONTRACTORS MUST CONFIRM WALL LOCATIONS, THICKNESS, PENETRATIONS AND ANY OTHER RELATED DETAILS WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS. NO CLAIMS FOR ADDITIONAL COSTS WILL BE PAID DUE TO INCORRECT ROUGH-IN OR LAY-OUT LOCATIONS.
- 10. ALL WORK SHALL STRICTLY FOLLOW ALL APPLICABLE CODES AND BUILDING STANDARDS.
- 11. EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH THAT OF ALL OTHERS TRADES INVOLVED.
- 12. ALL DUCT CONSTRUCTION AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF SMACNA CONSTRUCTION STANDARDS.
- 13. CONTRACTOR SHALL CUT, PATCH, REPAIR AND/OR PAINT ALL OPENINGS, TO MATCH SUBSTRATE AND FINISH AS REQUIRED TO COMPLETE THE WORK.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OF ANY MINOR INTERFERENCES, INCLUDING CONDUIT, HANGERS, ETC. AT NO ADDITIONAL COST.
- 15. PROVIDE FINAL CONNECTIONS TO EQUIPMENT PER MANUFACTURERS SHOP DRAWINGS AND RECOMMENDATIONS.
- 16. PROVIDE ACCESS DOORS FOR ALL MANUAL DAMPERS AND FIRE DAMPERS.
- 17. CONTRACTOR SHALL MAINTAIN THE FIRE RATING OR SMOKE BARRIERS OF ALL WALLS, FLOORS AND CEILING PENETRATED DUE TO THEIR WORK. PENETRATIONS SHALL MEET UL APPROVED CLOSURE SYSTEM.
- 18. THE CONTRACTOR SHALL VERIFY ALL JOB SITE DIMENSIONS, ALL DRAWING DETAILS AND SPECIFICATIONS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN WRITING TO DANFOSS PRIOR TO COMMENCING WITH ANY WORK.

Two		USE
E 32 0	VILLAGE OF MAYWOOD	
1881	40 MADISON STREET MAYWOOD, IL 60153	PLO
Son Symmetry		PLO

USER NAME = mmichalowicz	DESIGNED - GAH	REVISED -	
	DRAWN - DRK	REVISED -	
PLOT SCALE = 1'	CHECKED - JPC	REVISED -	
PLOT DATE = 1/22/2016	DATE - 01/25/16	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAYWOOD METRA STATION
HEATED FLOOR NOTES AND MECHANICAL DETAILS

SCALE: \$SCALE\$ SHEET OF SHEETS STA. TO STA.

F.A. RTE. SECTION COUNTY SHEETS NO. 13-00136-00-RR COOK 65 55 CONTRACT NO. 61C74

### **PLUMBING GENERAL NOTES**

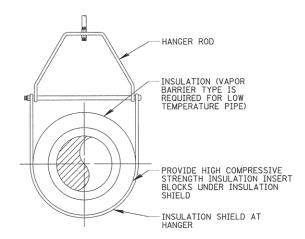
- CONTRACT DRAWINGS ARE CONCEPTUAL IN NATURE AND ARE NOT INTENDED TO BE REPRESENTATIVE OF EXACT QUANTITIES OF WORK TO BE PEPEPEP
- 2. THE CONTRACT DRAWINGS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DRAWINGS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DRAWINGS, AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DRAWINGS BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF/HERSELF OF ALL CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS THE TOTAL COST FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED DUE TO THE CONTRACTOR'S FAILURE TO UNDERSTAND THE SCOPE OF WORK.
- 4. WHEN NECESSARY TO PERFORM WORK ADJACENT TO EXISTING UTILITIES THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR EXISTING UTILITIES IN CONFORMANCE WITH THE AFFECTED UTILITY COMPANIES REQUIREMENTS AS MAY BE REQUIRED TO PERFORM THE WORK OF THIS CONTRACT.
- 5. ORIENTATION OF PIPING, CONDUITS, DUCTWORK, EQUIPMENT, ETC.
  MAY VARY. CONTRACTOR TO COORDINATE AS REQUIRED. CONTRACTOR
  TO COORDINATE WITH OTHER TRADES AS REQUIRED, AND OTHER
  ARCHITECTURAL AND STRUCTURAL FEATURES.
- 6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL WAS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- 7. PRIOR TO BEGINNING ANY LAY-OUT WORK, ALL CONTRACTORS MUST CONFIRM WALL LOCATIONS, THICKNESS, PENETRATIONS AND ANY OTHER RELATED DETAILS WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS. NO CLAIMS FOR ADDITIONAL COSTS WILL BE PAID DUE TO INCORRECT ROUGH-IN OR LAY-OUT LOCATIONS.
- 8. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE BOCA/ICC CODE AND VILLAGE OF MAYWOOD BUILDING CODE/MINICIPAL ORDINANCES.
- CONTRACTOR SHALL CUT, PATCH, REPAIR AND/OR PAINT ALL OPENINGS, TO MATCH SUBSTRATE AND FINISH AS REQUIRED TO COMPLETE THE WORK.
- 10. PROVIDE FINAL CONNECTIONS TO EQUIPMENT PER MANUFACTURERS SHOP DRAWINGS AND RECOMMENDATIONS.
- 11. INVERT ELEVATIONS FOR SANITARY SEWERS ARE USGS ELEVATIONS (UNLESS OTHERWISE SPECIFIED).
- 12. MINIMUM SLOPE OF SANITARY DRAIN PIPING INSIDE BUILDING SHALL NOT BE LESS THAN 1/8" PER FT (FOR 3"-6" PIPES) AND LESS THAN 1/4" PER FT (FOR  $2^1/2$ " AND SMALLER PIPES).
- 13. CONTRACTOR TO PROVIDE ALL FITTINGS, CONNECTORS AND TRANSITION COUPLINGS FOR PIPING AS REQUIRED, CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING, BLOCKING AND MOUNTING PLATES FOR ALL WALL MOUNTED PLUMBING FIXTURES.
- 14. ALL DOMESTIC WATER PIPING TO BE INSULATED.
- 15. CONTRACTOR TO CONNECT BACKFLOW PREVENTER'S RELIEF VALVE TO NEAREST FLOOR DRAIN.
- 16. ALL FAUCETS SHALL BE OF THE SELF CLOSING TYPE AND PLUMBING FIXTURES SHALL MEET ADA STANDARDS.
- 17. PROVIDE AND INSTALL WATER METER PER VILLAGE REQUIREMENTS.
  ALSO PROVIDE VILLAGE APPROVED READ-OUT DIAL OR METER READING
  DEVICE OUTSIDE THE BUILDING.
- 18. CONTRACTOR SHALL SLOPE FLOORS TO DRAIN TO FLOOR DRAINS. FLOOR DRAINS SHALL BE INDIVIDUALLY VENTED.
- 19. BELOW GRADE WASTE PIPING SHALL BE CAST IRON. ABOVE GRADE VENT PIPING SHALL BE PVC.
- 20. WATER SUPPLY PIPING (HOT & COLD) SHALL BE TYPE "L" COPPER INSIDE THE BUILDING & TYPE "K" COPPER FOR BURIED SERVICE.
- 21. SEE ARCHITECTURAL PLANS FOR INSTALLATION DETAILS FOR ADDITIONAL ACCESSORIES, ETC.
- 22. SEE DIVISION OF WORK FOR PROPOSED IMPROVEMENTS.

### **PLUMBING ABBREVIATIONS**

BOP	BOTTOM OF PIPE	МН	MANHOLE
CI	CAST IRON	SAN	SANITARY
CW	COLD WATER	٧	VENT
DS	DOWNSPOUT	VTR	VENT THRU ROOF
FCO	FLOOR CLEAN OUT	W	WASTE
FD	FLOOR DRAIN	W/	WITH
-H	HANDICAP	WC	WATER CLOSET
HW	HOT WATER	WCO	WALL CLEAN OUT
LAV	LAVATORY	YCO	YARD CLEAN OUT
		HB	HOSE BIBBS

### PLUMBING SYMBOLS LIST

	BURIED C.I. SANITARY DRAIN LINE (SEE SANITARY PLUMBING PLAN)		UNION
		$\bigcirc$	WATER METER
	VENT PIPING		PIPE ELBOW TURNED DOWN
	COLD WATER SUPPLY (SEE WATER PIPING PLAN)		PIPE ELBOW TURNED UP
	HOT WATER SUPPLY (SEE WATER		GATE VALVE
	PIPING PLAN)	<del></del>	CHECK VALVE
	RECIRCULATION WATER PIPING (SEE WATER PIPING PLAN)	-04/04-	BACKFLOW PREVENTER ASSEMBLY
Ø <sub>FD</sub>	FLOOR DRAIN	Image: control of the	P-TRAP
OFCO	FLOOR CLEAN OUT	<del>: :-</del>	HOSE BIBB



## **TYPICAL PIPE HANGERS**

PLUMBING FIXTURE SCHEDULE

DESCRIPTION

FIAT MOLDED STONE MOP SERVICE BASIN MSB-2424 WITH WALL MOUNTED SERVICE FAUCET (830 AA), MOP BRACKET (889 CC), STAINLESS STEEL STRAINER (1453 BB), QUICK DRAIN TO CONNECT TO 3" CAST IRON PIPE, AND HOSE & BRACKET (832 AA)

J.R. SMITH #2010C, CAST IRON FLOOR DRAIN WITH NICKEL BRONZE STRAINER, 4" OUTLET AND VANDALPROOF SCREWS

FD FLOOR DRAIN

J.R. SMITH #2010C, CAST IRON FLOOR DRAIN WITH NICKEL BRONZE STRAINER,

4" OUTLET AND VANDALPROOF SCREWS

DJ.R. SMITH #4020 ROUND CLEANOUT WITH TWIS-TO-FLOOR ADJUSTABLE TOP,
NICKEL BRONZE FINISH AND VANDALPROOF SCREWS

WM WATER METER

NEPTUNE T-10 WATER METER (OR AS REQUIRED BY LOCAL MUNICIPALITY) AND APPROVED READ-OUT DIAL OR METER READING DEVICE OUTSIDE THE BUILDING

BFP BACKFLOW PREVENTER

AS REQUIRED BY LOCAL MUNICIPALITY

HB HOSE BIBB

NON-FREEZE 34" HOSE CONNECTION, WITH INTEGRAL VACUUM BREAKER, ENCLOSED IN A CAST BRONZE BOX WITH HINGE COVER AND TAMPER RESISTANT KEY

RHEEM RTGH95DVN TANKLESS GAS WATER HEATER

NAME = mmichalowicz	DESIGNED -	GAH	REVISED	
	DRAWN -	DRK	REVISED	STATE OF ILLINOIS
SCALE = 1'	CHECKED -	JPC	REVISED -	DEPARTMENT OF TRANSPORTATION
DATE = 2/19/2016	DATE -	01/25/16	REVISED	

SYMBOL

MOP SINK

WH

FIXTURE

MECH ROOM MOP SINK

TANKLESS

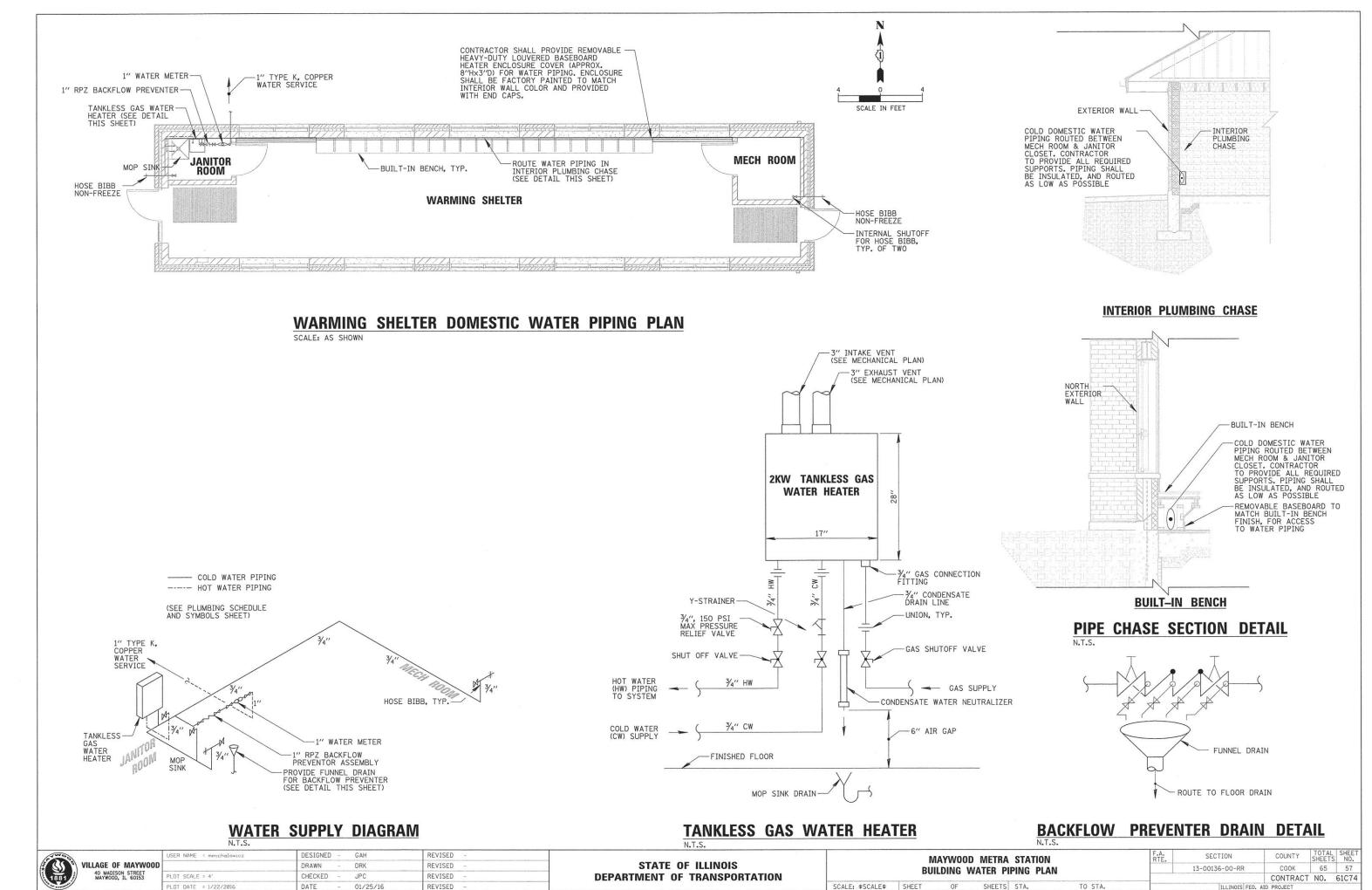
WATER HEATER

	IV	1AYW00D	WETRA	STATION	
				S, SYMBOLS,	
	AE	BREVIATI	ONS, AN	D DETAILS	
SCALE: \$SCALE\$	SHEET	OF	SHEETS	STA.	

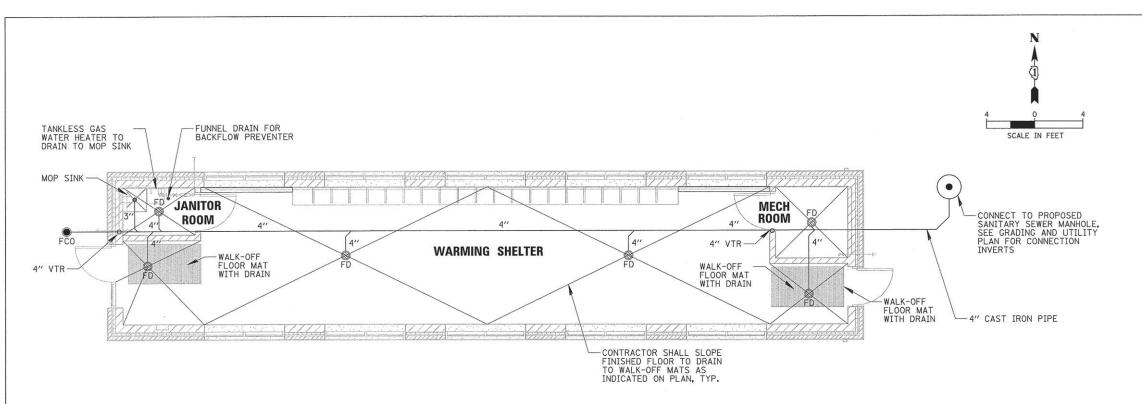
TO STA.

	ILLINOIS F	ED. AID	PROJECT		
			CONTRACT	NO.	61C74
	13-00136-00-RR		COOK	65	56
F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.

VILLAGE OF MAYWOOD

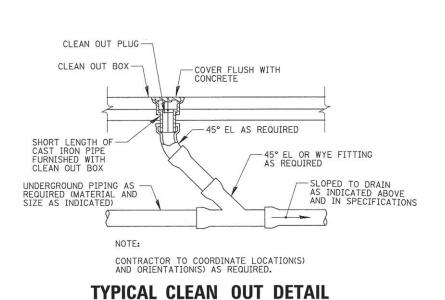


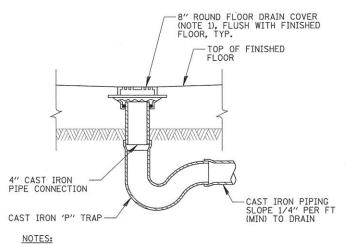
E NAME = N:\MAYWUUD\\130128\Maywood-UPW\\1234P102.dgn



### WARMING SHELTER PIPING PLUMBING PLAN

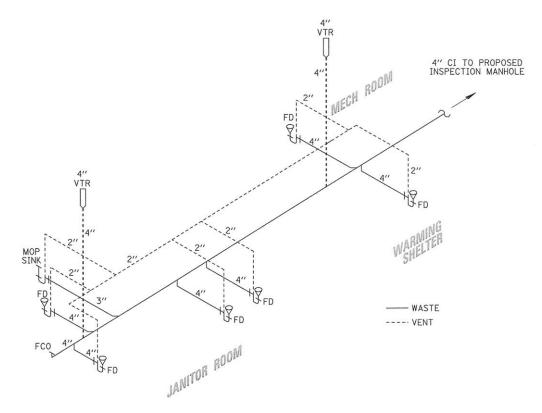
SCALE: AS SHOWN





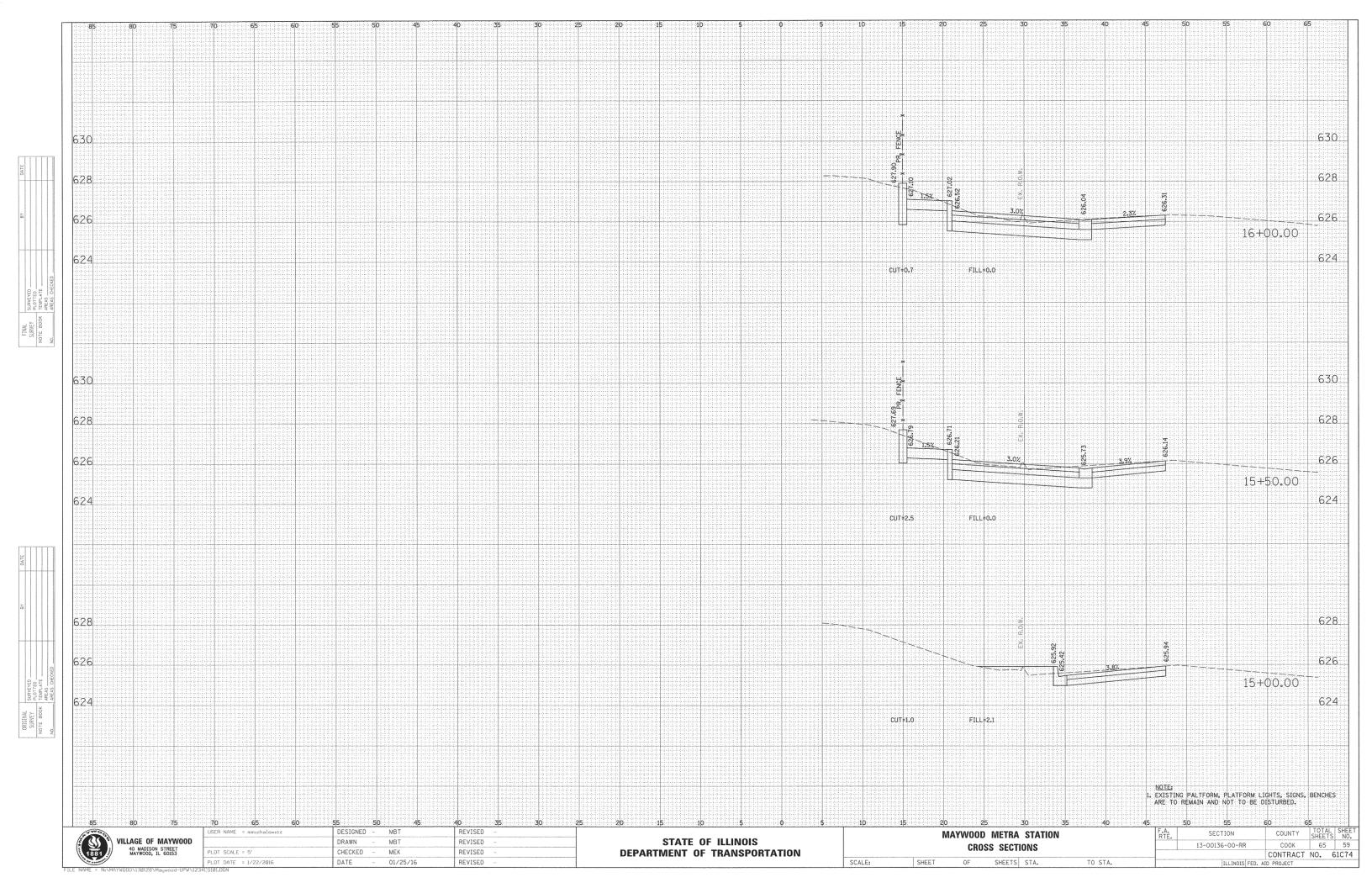
1. CONTRACTOR SHALL PROVIDE A SQUARE FLOOR DRAIN STRAINER, IN TILED AREAS, OR AS INDICATED BY OWNER'S REPRESENTATIVE.

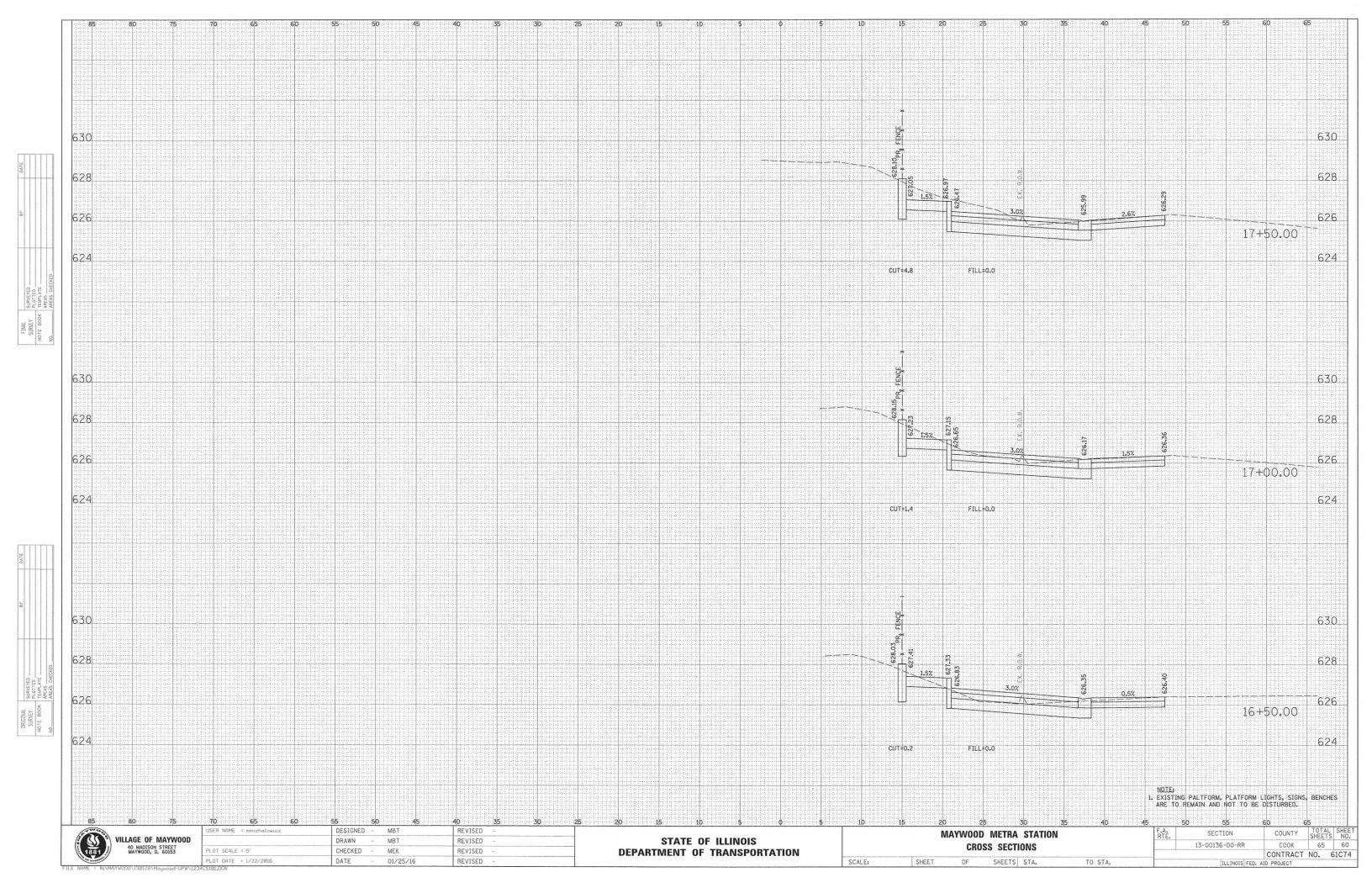
# TYPICAL FLOOR DRAIN DETAIL

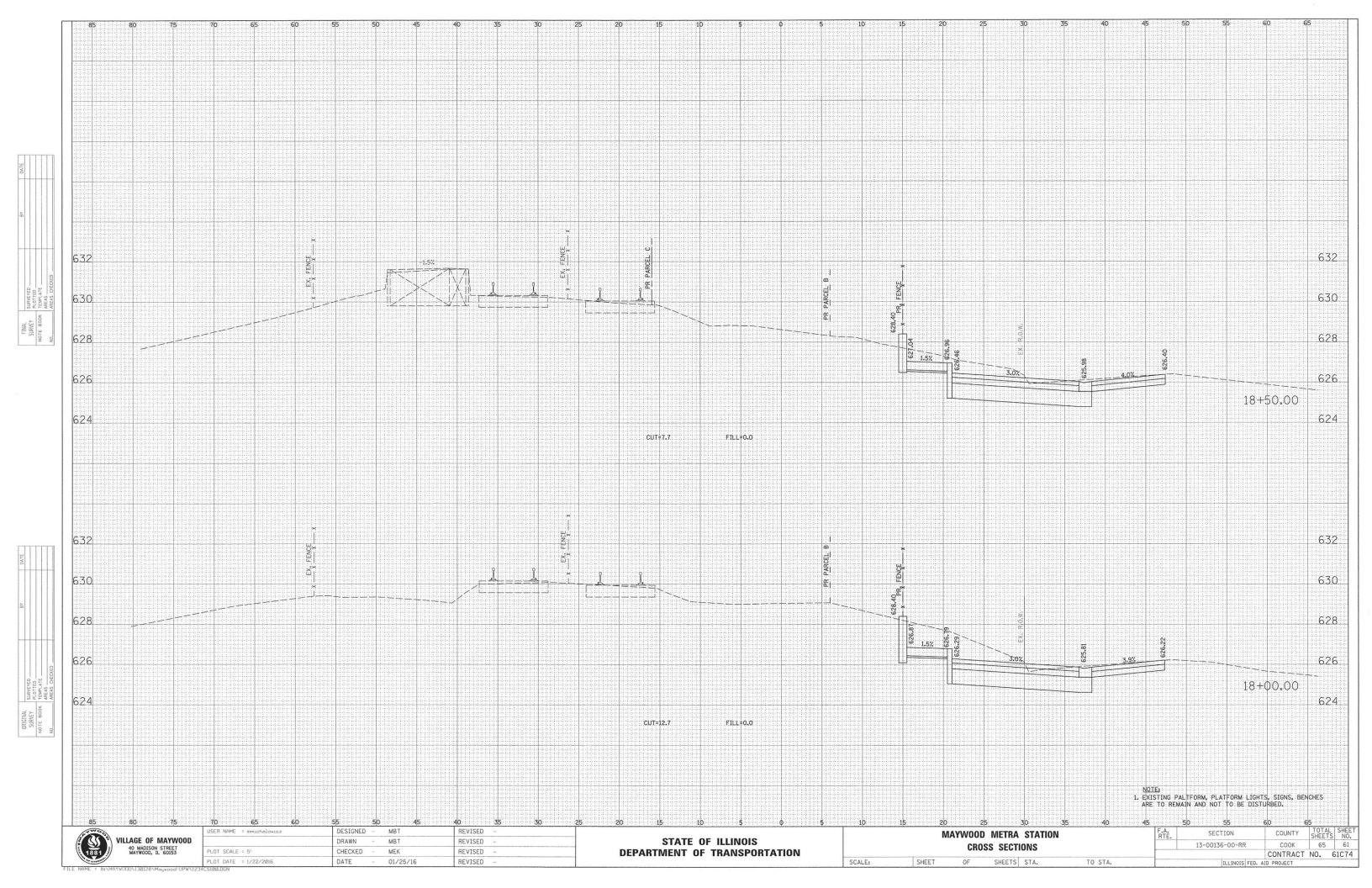


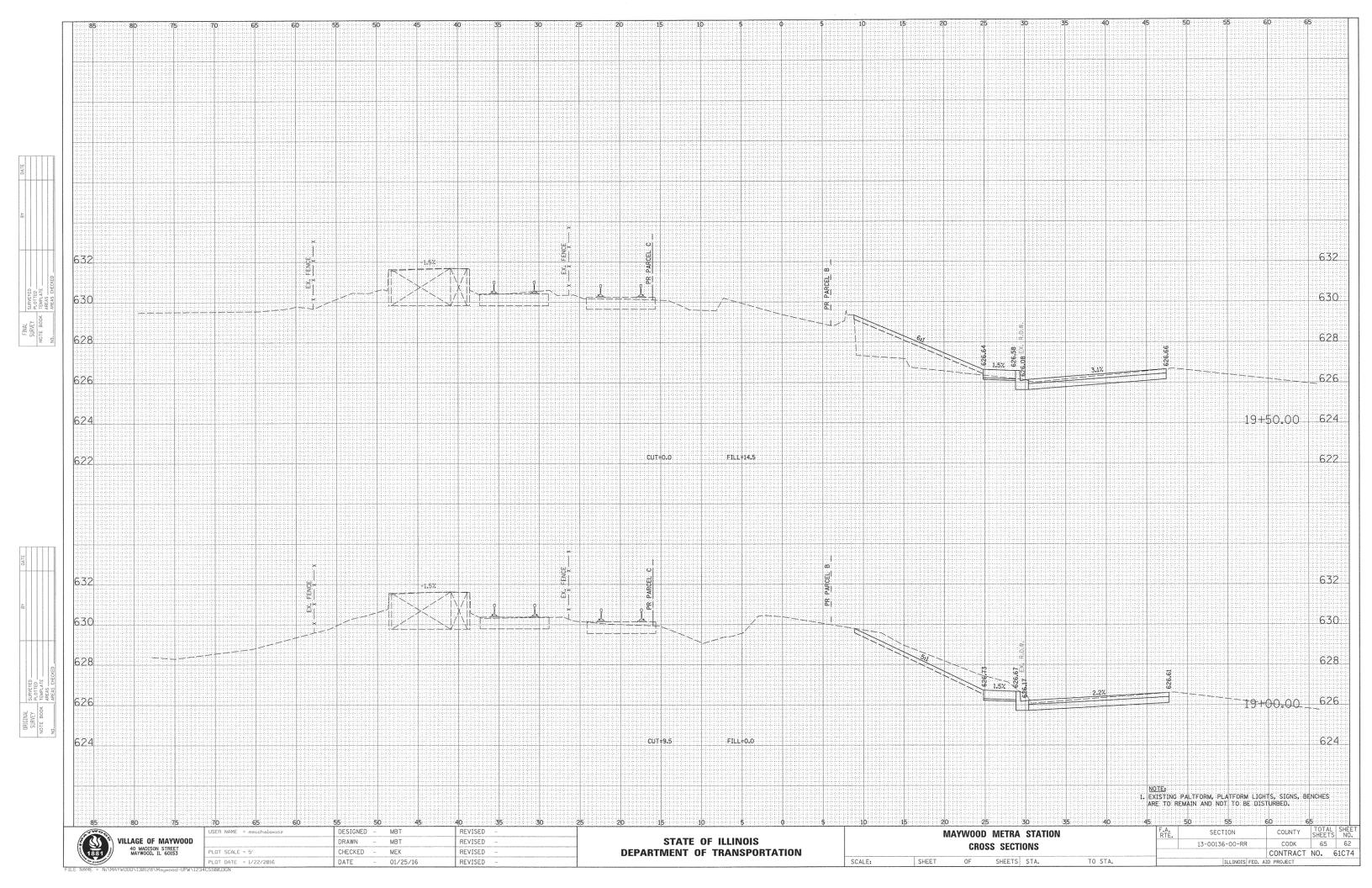
**ISOMETRIC SANITARY PLUMBING DIAGRAM** 

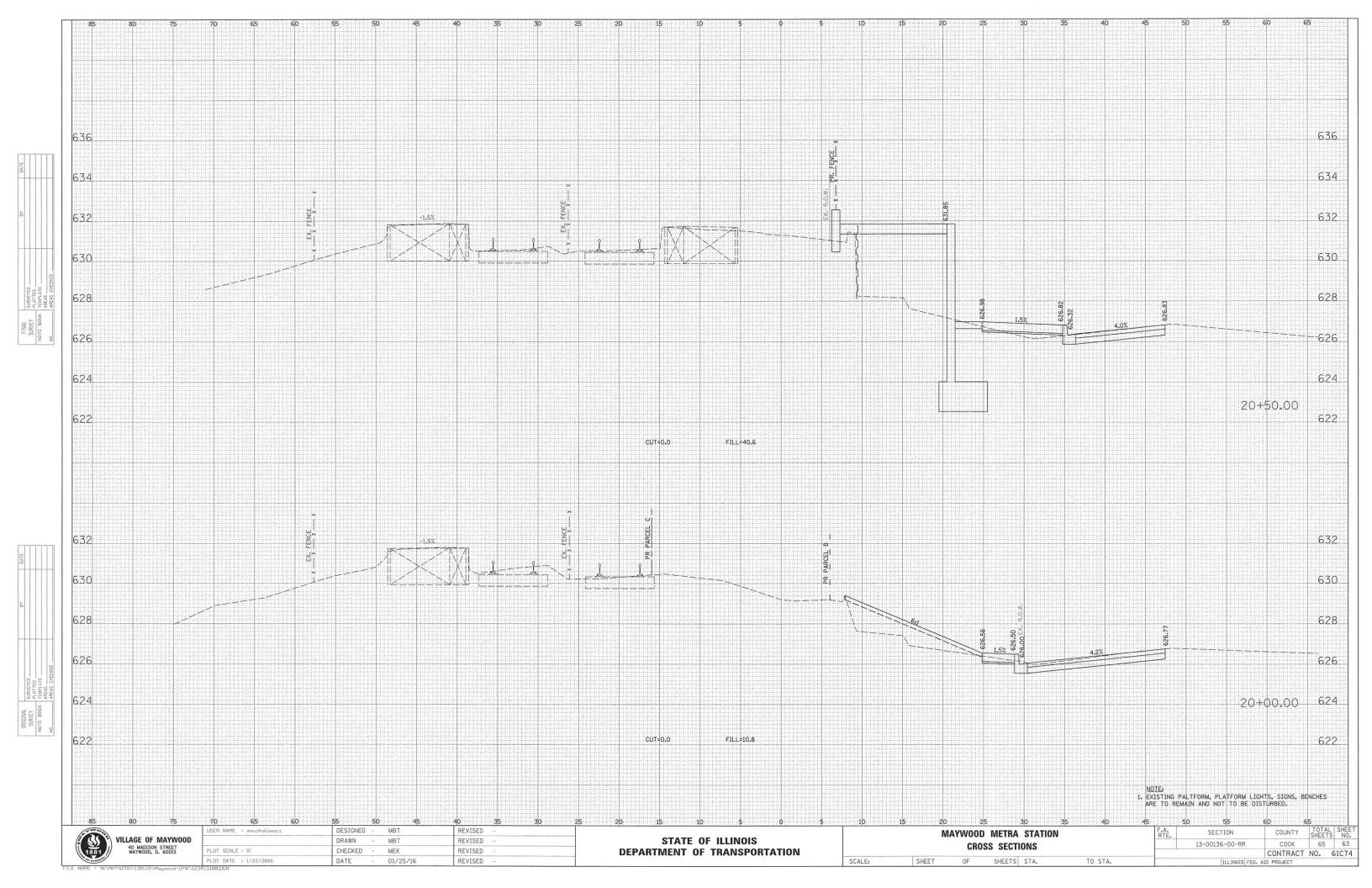
(4woo	N	USER NAME = mmichalowicz	DESIGNED -	GAH	REVISED -		MAYWOOD METRA STATION	F.A. SECTION	COUNTY SHEET	SHEET NO.
	VILLAGE OF MAYWOOD DRAWN - DRK REVISED -	STATE OF ILLINOIS	SANITARY PLUMBING PLAN	13-00136-00-RR	COOK 65	58				
1881	40 MADISON STREET MAYWOOD, IL 60153	PLOT SCALE = 4'	CHECKED -	JPC	REVISED -	DEPARTMENT OF TRANSPORTATION	SANITART FLOWDING FLAN		CONTRACT NO.	61C74
So crumat	No. T. mer.	PLOT DATE = 1/22/2016	DATE -	01/25/16	REVISED -		SCALE: \$SCALE\$ SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. /	AID PROJECT	

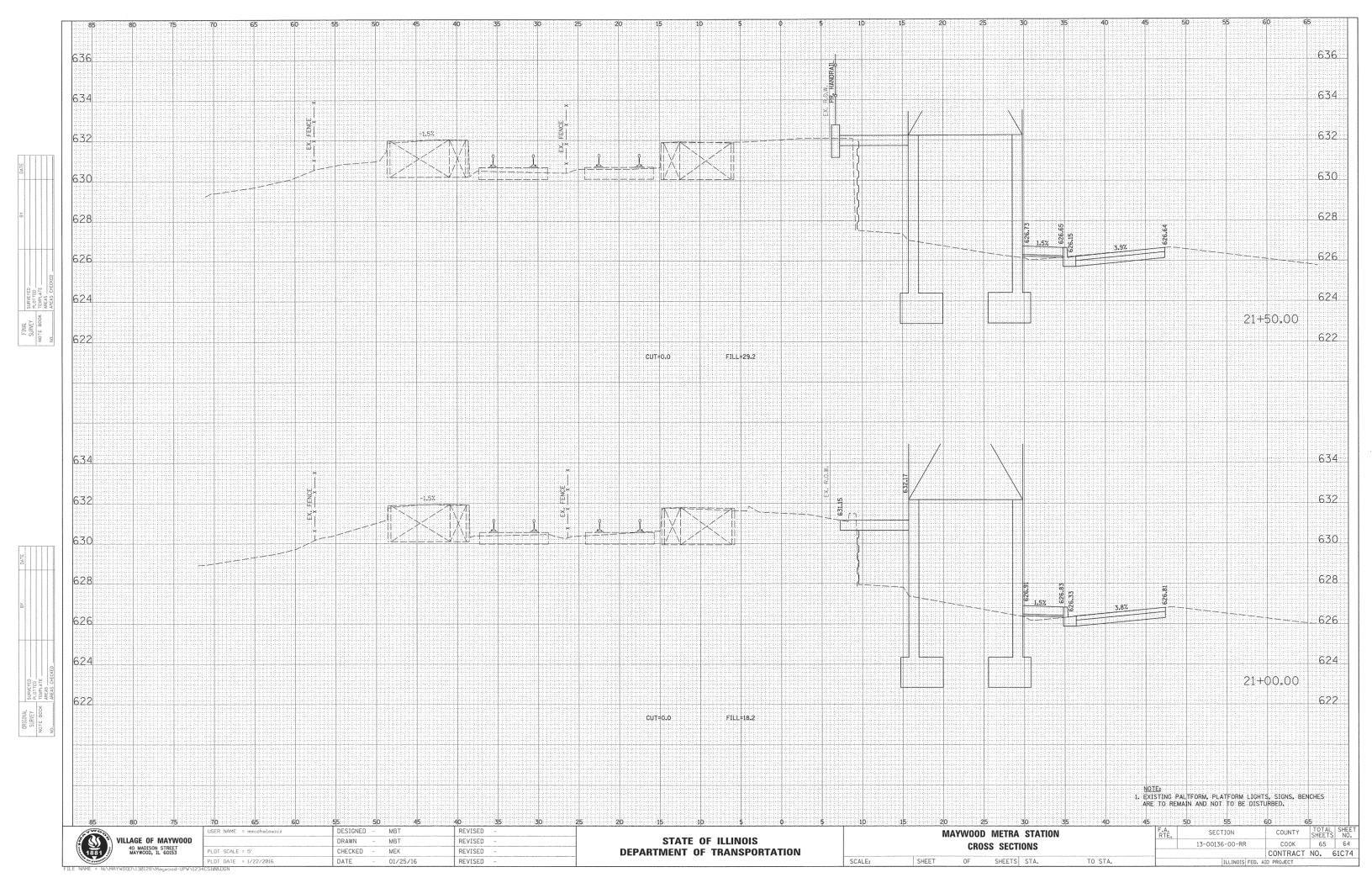


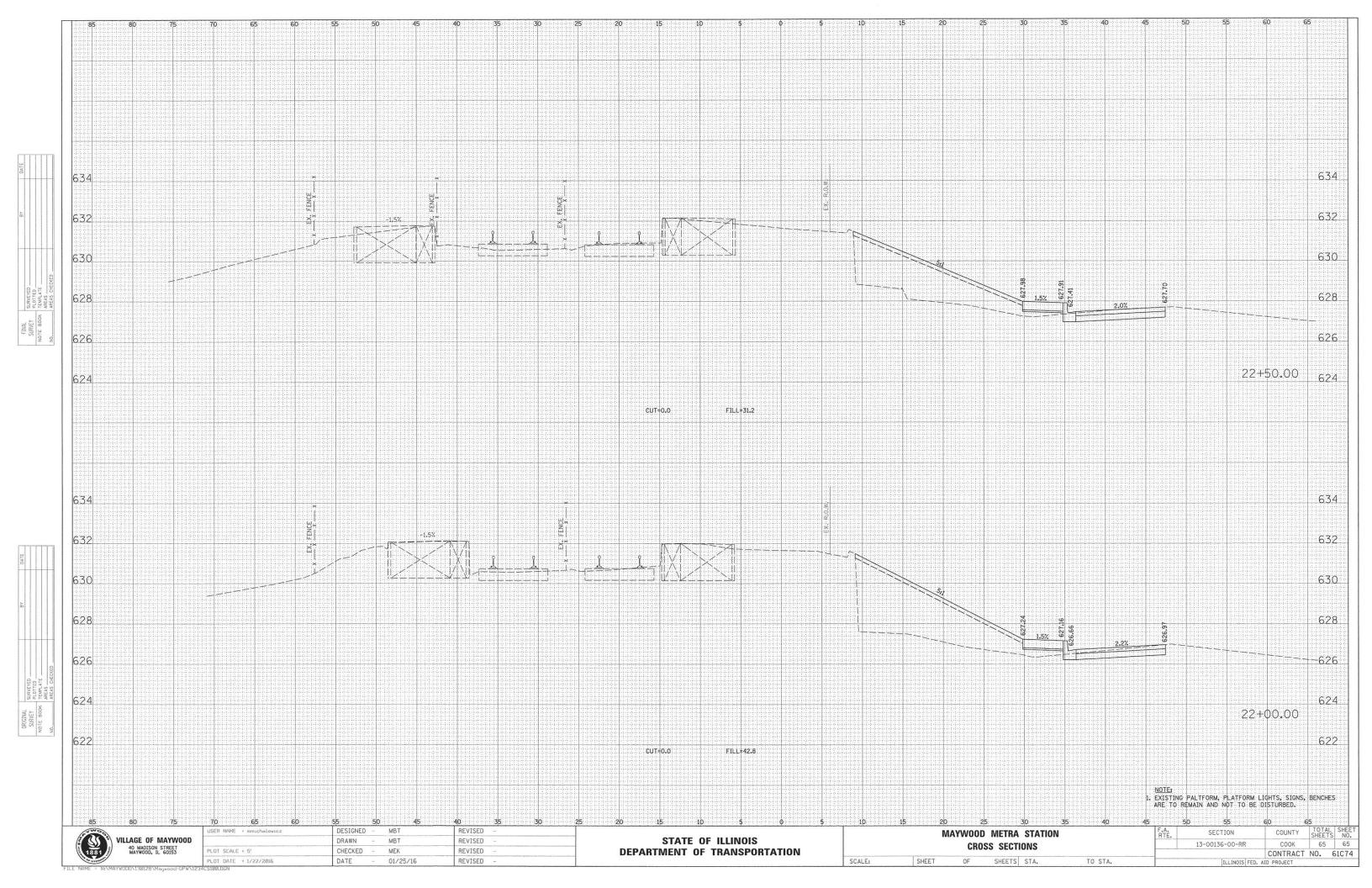


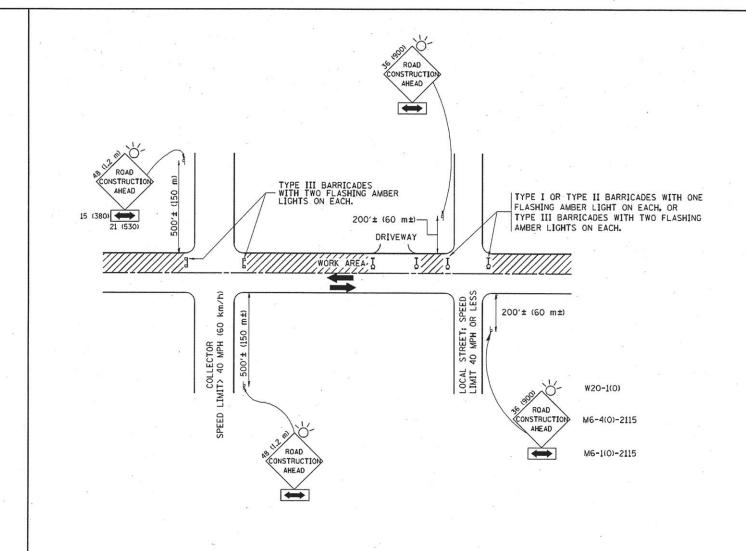












TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) 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 CREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT 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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-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 OTHERWISE NOTED.
- 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 = gaglianobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Wi\distratd\22x34\tci0.dgn - REVISED - A. HOUSEH 03-06-96
PLOT SCALE = 50.080 '/ IN. CHECKED - REVISED - A. HOUSEH 10-15-96
PLOT DATE = 1/4/2008 DATE - 06-89 REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

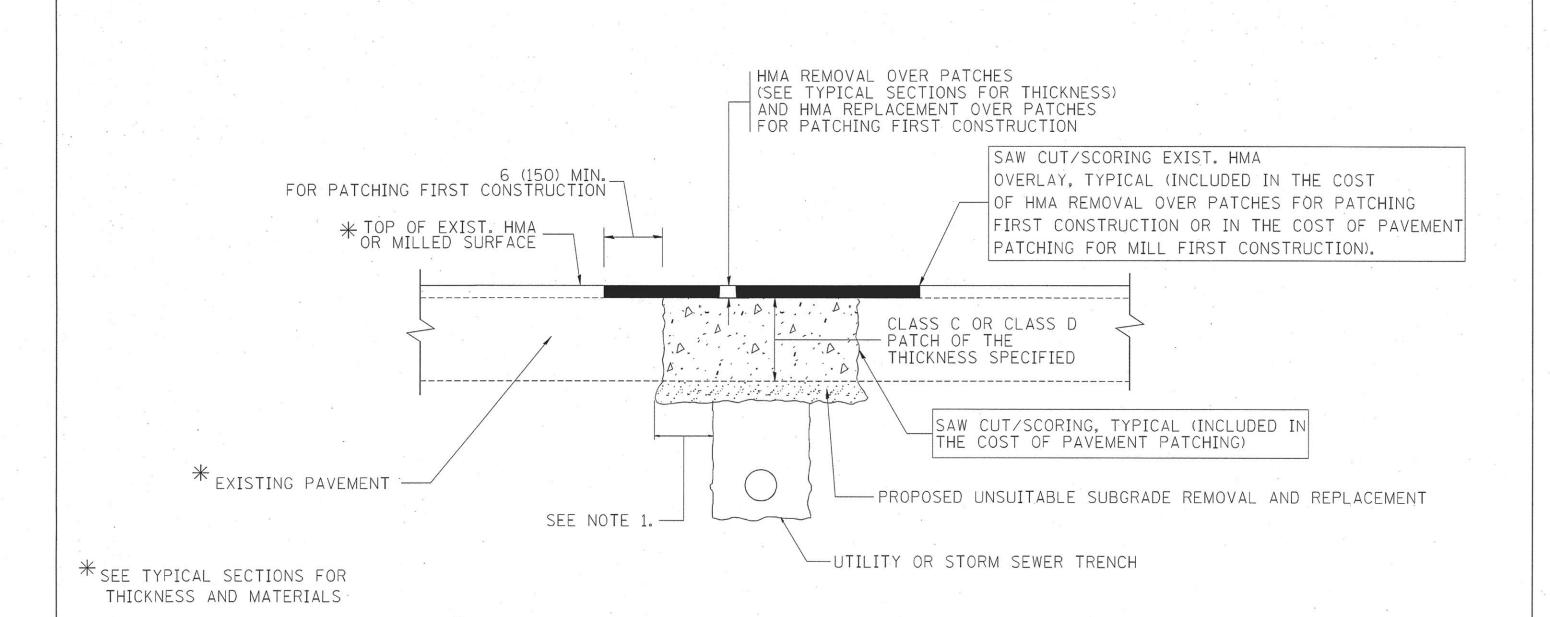
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.

E. SECTION COUNTY TOTAL SHEETS NO.

13-00134-00-RR COOK 65 65A

TC-10 CONTRACT NO.6/C74

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = bauerdl .	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE	OF	ILLINOIS	
DEPARTMENT	OF	TRANSPORTATION	

			P	AVE	ME	NT PATO	HING FOR	
			HN	ľΑ	SU	RFACED	PAVEMENT	
NONE	SHEET	NO.	1	OF	1	SHEETS	STA.	TO STA.

A. TE.	• SECTION	COUNTY		SHEET NO.
1	13-00136-00-RR		65	65B
	BD400-04 (BD-22)	CONTRACT	NO.6	1074
ED.	ROAD DIST. NO. 1 ILLINOIS FED. AL	D PROJECT		