

GERALD R. FORD INTERNATIONAL AIRPORT AUTHORITY

KENT COUNTY, MICHIGAN

C-418 VIEWING PARK EXPANSION

FOOD TRUCK PARKING AND SERVICE AREA

GENERAL NOTES

- THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS FOR THIS PROJECT.
- CONTRACTOR TO CALL MISS DIG (CALL TOLL FREE 1-800-482-7171) THREE WORKING DAYS BEFORE STARTING YOUR PROJECT.
- THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE IN DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

GENERAL CONSTRUCTION NOTES

ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE THE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

72 HOURS BEFORE YOU DIG, CALL "MISS DIG" TOLL FREE AT 1-800-482-7171 FOR UTILITY LOCATION ON THE GROUND.

FOR CONSTRUCTION METHODS NOT MENTIONED HERE-IN, THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SOIL BORING GENERAL NOTES

WITHIN EACH SOIL BORING, WHERE SHOWN, SOIL SAMPLES WERE OBTAINED BY THE STANDARD PENETRATION TEST METHOD, ASTM D1586, WHEREBY A SPLIT-SPOON SAMPLER IS DRIVEN THREE SUCCESSIVE 6-INCH INCREMENTS WITH A 140 POUND WEIGHT FALLING 30 INCHES. THE NUMBER OF BLOWS REQUIRED TO DRIVE THE SAMPLER FOR EACH INCREMENT IS PRESENTED ON THE SOIL BORING LOGS.

GRANULAR SOILS (COARSE-GRAINED) HAVE MORE THAN SIZE OF THEIR DRY WEIGHT RETAINED ON A #200 SIEVE; THEY ARE DESCRIBED AS: BOLLERS, COBBLES, GRAVEL OR SAND FINE-GRAINED SOILS HAVE LESS THAN SIZE OF THEIR DRY WEIGHT RETAINED ON A #200 SIEVE; THEY ARE DESCRIBED AS: CLAYS OR CLAYEY SILTS IF THEY ARE COHESIVE, AND SILTS IF THEY ARE NON-COHESIVE. IN ADDITION TO GRADATION, GRANULAR SOILS ARE DEFINED BASED ON THEIR IN-SITU DENSITY; THE GRAINED SOILS ARE FURTHER DEFINED BASED ON THEIR STRENGTH OR CONSISTENCY, AND ON THEIR PLASTICITY.

MAJOR SOIL COMPONENT	GRADATION RANGE	DESCRIPTION TERMS (OF MINOR SOIL CONSTITUENTS)	PERCENT OF DRY WEIGHT
BOULDERS	OVER 12 INCHES (305mm)		1 - 10
COBBLES	12 INCHES TO 3 INCHES (305mm TO 76mm)	TRACE	10 - 20
GRAVEL	3 INCHES TO 3/4 INCHES (76mm TO 19mm)	LITTLE	20 - 35
SAND	3/4 INCHES TO #4 SEIVE (19mm TO 4.75mm)	SOME	35 - 50
	#4 SEIVE TO #10 SEIVE (4.75mm TO 2.00mm)	AND	
	#10 SEIVE TO #40 SEIVE (2.00mm TO 0.425mm)		
	#40 SEIVE TO #200 SEIVE (0.425mm TO 0.075mm)		
SILT	PASSING #200 SEIVE (0.075mm) TO 0.005mm	CONSISTENCY OF COHESIVE SOILS:	
CLAY	SMALLER THAN 0.005mm	UNCONFINED COMP STRENGTH, q_u (tsf)	
		<0.25	VERY SOFT
		0.25 - 0.50	SOFT
		0.50 - 1.00	MEDIUM (FIRM)
		1.00 - 2.00	STIFF
		2.00 - 4.00	VERY STIFF
		4.00 - 8.00	HARD
		>8.00	VERY HARD

IN-SITU DENSITY OF GRANULAR SOILS:

N - BLOWS/FT.	IN-SITU DENSITY	CONSISTENCY
0 - 4	VERY LOOSE	VERY SOFT
5 - 10	LOOSE	MEDIUM (FIRM)
11 - 30	MEDIUM DENSE	STIFF
31 - 50	DENSE	VERY STIFF
50 +	VERY DENSE	HARD

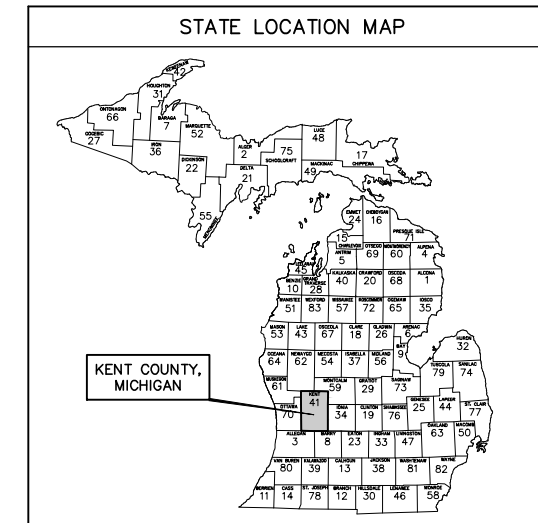
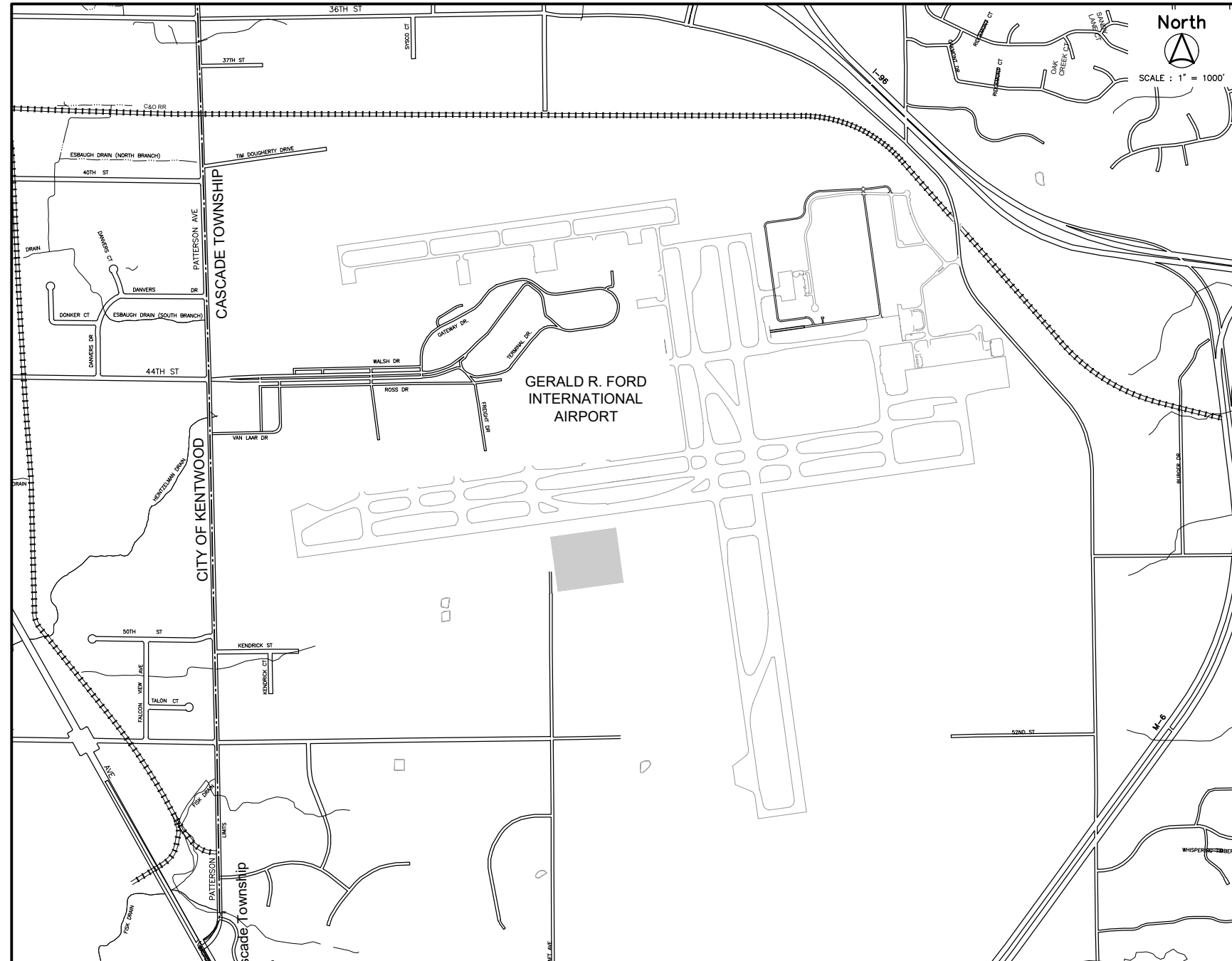
WATER LEVELS INDICATED ON THE BORING LOGS ARE THE LEVELS MEASURED IN THE BORING AT THE TIMES INDICATED. IT SHOULD BE NOTED THAT GROUNDWATER LEVELS OBSERVED DURING DRILLING IN PREDOMINANTLY COHESIVE SOILS ARE NOT NECESSARILY INDICATIVE OF THE STATIC GROUNDWATER LEVEL. THIS IS DUE TO THE RELATIVELY LOW PERMEABILITY OF CLAY SOILS AND THE TENDENCY OF DRILLING OPERATIONS TO TEMPORARILY SEAL OFF NATURAL PATHS OF GROUNDWATER MIGRATION INTO THE BOREHOLE. ADDITIONALLY, FLUCTUATIONS IN GROUNDWATER LEVELS SHOULD BE ANTICIPATED WITH SEASONAL VARIATIONS AND FOLLOWING PERIODS OF HEAVY OR PROLONGED PRECIPITATION.

THE SOIL BORING LOGS SHOWN ON THE CONSTRUCTION PLANS ARE BEING FURNISHED FOR YOUR CONVENIENCE AND GENERAL INFORMATION ONLY. THE DATA SHOWN ON THE BORING LOGS REPRESENTS SOIL AND GROUNDWATER CONDITIONS ENCOUNTERED AT THE RESPECTIVE BORING LOCATIONS. VARIATIONS MAY OCCUR BETWEEN THESE LOCATIONS. ADDITIONALLY, THE STRATIGRAPHIC LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES; HOWEVER, THE TRANSITION MAY BE MORE GRADUAL THAN WHAT IS SHOWN. THE BIDDER WILL BE RESPONSIBLE FOR MAKING THEMSELVES FAMILIAR WITH SUBSURFACE CONDITIONS BY MEANS OF TESTS WHICH THEY MAY SUFFER BY REASONS OF THE INADEQUACIES OR DISCREPANCIES OF THE INFORMATION SHOWN ON THESE SOIL BORING LOGS AND UNDERSTANDS THAT NO COMPENSATION WILL BE PAID TO THEM DUE TO AN INADEQUACY OR DISCREPANCY IN THIS DATA.

THE BIDDER BY SUBMITTING A BID, WAIVES ALL CLAIMS FOR DAMAGES WHICH THEY MAY SUFFER BY REASONS OF THE INADEQUACIES OR DISCREPANCIES OF THE INFORMATION SHOWN ON THESE SOIL BORING LOGS AND UNDERSTANDS THAT NO COMPENSATION WILL BE PAID TO THEM DUE TO AN INADEQUACY OR DISCREPANCY IN THIS DATA.

UTILITIES

<p>SANITARY SEWER</p> <p>GERALD R. FORD INTL AIRPORT 5500 44TH ST SE GRAND RAPIDS, MICHIGAN 49512 ATTN: CLINT NEUMETH PHONE : (616) 233-6000</p>	<p>GAS</p> <p>DTE ENERGY 444 WEALTHY STREET GRAND RAPIDS, MI 49503 ATTN: ADAM SCRIPPS PHONE : (616) 632-2631</p>
<p>WATER</p> <p>CITY OF GRAND RAPIDS 1900 OAK INDUSTRIAL DR NE GRAND RAPIDS, MI 49505 ATTN: JAMES PARR PHONE : (616) 456-4059</p>	<p>ELECTRIC-DISTRIBUTION</p> <p>CONSUMERS ENERGY 4000 CLAY AVENUE SW GRAND RAPIDS, MI 49508 ATTN: ANDREW ALDRICH PHONE : (616) 215-3609</p>
<p>STORM SEWER</p> <p>GERALD R. FORD INTL AIRPORT 5500 44TH ST SE GRAND RAPIDS, MICHIGAN 49512 ATTN: CLINT NEUMETH PHONE : (616) 233-6000</p>	<p>COMMUNICATION</p> <p>AT&T 955 36TH STREET SE, ROOM 5 GRAND RAPIDS, MI 49508 ATTN: CORY VAN TIL PHONE : (616) 246-7573</p>
<p>OTHER COMMUNICATION</p> <p>FAA ATTN: PETE WILKE PHONE : (616) 464-5371</p>	<p>CABLE TELEVISION</p> <p>COMCAST CABLE 3500 PATTERSON AVE GRAND RAPIDS, MICHIGAN 49512 ATTN: JIM ZAWACKI PHONE : (616) 575-0501</p>



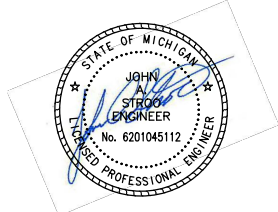
SHEET INDEX

SHEET No.	DESCRIPTION
1	COVER SHEET
2	QUANTITY SHEET
3	CONSTRUCTION SAFETY PHASING PLAN
4	SAFETY AND OPERATIONS & CONSTRUCTION NOTES
5	TYPICAL SECTIONS
6	EXISTING CONDITIONS / DEMOLITION
7	SITE PLAN
8	MARKING AND SIGNAGE PLAN
9	SITE DETAILS
10	GATE DETAILS
11	ELECTRICAL SITE PLAN
12	ELECTRICAL DETAILS

PROJECT DATUM INFORMATION

COORDINATE SYSTEM : STATE PLANE GRID
 ZONE : MICHIGAN SOUTH 2113
 ELLIPSOID : GRS 80
 HORIZONTAL DATUM : NAD 83 (2011)
 VERTICAL DATUM : NAVD 88
 GEOID : GEOID 12B
 UNITS : INTERNATIONAL FEET

PROJECT COMBINED SCALE FACTOR (PCSF) = X.XXXXXXXX
 GROUND DISTANCE = GRID DISTANCE/PCSF



Prein & Newhof
 Engineers • Surveyors • Environmental • Laboratory

PROJECT NO. 2240980
 SHEET NO. 1 OF 12

LEGEND

LINE TYPES	SURVEY/TOPOGRAPHIC SYMBOLS																		
<p>EXISTING TOPOGRAPHY</p> <ul style="list-style-type: none"> --- 605 --- INDEX CONTOUR --- 604 --- INTERMEDIATE CONTOUR --- BUILDING --- CENTERLINE --- CONCRETE CURB & GUTTER --- DITCH --- EDGE OF WATER --- FENCELINE --- GUARDRAIL --- ASPHALT --- CONCRETE --- VEGETATION LINE <p>EXISTING UTILITIES</p> <ul style="list-style-type: none"> --- GAS MAIN --- SANITARY SEWER --- SANITARY FORCE MAIN --- STORM SEWER --- UNDERDRAIN --- WATER MAIN <p>PROPOSED TOPOGRAPHY</p> <ul style="list-style-type: none"> --- 605 --- INDEX CONTOUR --- 604 --- INTERMEDIATE CONTOUR --- BUILDING --- DITCH --- SILT FENCE --- FENCELINE --- GUARDRAIL --- GRAVEL --- HMA --- CONCRETE CURB & GUTTER <p>PROPOSED UTILITIES</p> <ul style="list-style-type: none"> --- SANITARY SEWER --- SANITARY FORCE MAIN --- STORM SEWER --- WATER MAIN 	<p>GENERAL SYMBOLS</p> <ul style="list-style-type: none"> □ AIR CONDITIONER ○ BUSH/SHRUB ○ DECIDUOUS TREE ✱ CONIFEROUS TREE ✱ FLAG POLE ✱ GUY ANCHOR ✱ MAILBOX ⊕ ELECTRIC METER ⊕ GAS METER ⊕ WATER METER ⊕ MONITORING WELL ○ POST ○ ROCK ✱ SATELITE DISH ⊕ SOIL BORING ✱ SIGN ⊕ SPRINKLER HEAD ⊕ IRRIGATION CONTROL BOX ✱ STUMP □ PROPANE TANK ⊕ WATER WELL ✱ YARD LIGHT <p>UTILITY RELATED SYMBOLS</p> <ul style="list-style-type: none"> ▣ CATCH BASIN - RECTANGULAR FRAME ⊕ CATCH BASIN - ROUND FRAME ○ CLEANOUT ⊕ ROUND HANDHOLE - GENERIC ⊕ SQUARE HANDHOLE - GENERIC ⊕ HYDRANT ○ LIGHT POLE □ MARKER - GENERIC ⊕ MARKER - FIBER ⊕ MARKER - GAS ⊕ MARKER - PETROLEUM ⊕ MARKER - RIGHT OF WAY ⊕ MANHOLE - GENERIC ⊕ MANHOLE - SANITARY ⊕ MANHOLE - STORM ⊕ MANHOLE - ELECTRIC ⊕ MANHOLE - GAS ⊕ MANHOLE - LIGHT ⊕ MANHOLE - TELEPHONE ⊕ MANHOLE - WATER (VALVE VAULT) ⊕ MANHOLE - TRAFFIC SIGNAL ⊕ ELEC. EQUIP./TRANSFORMER ⊕ UTILITY POLE ⊕ UTILITY PEDESTAL - GENERIC ⊕ CATV PEDESTAL ⊕ TELEPHONE PEDESTAL ⊕ VALVE & BOX ⊕ WATER SERVICE ▣ FLARED END SECTION <p>SURVEY SYMBOLS</p> <ul style="list-style-type: none"> ▲ FOUND PK/MAG NAIL ■ FOUND NOTCH (X-CUT) ■ FOUND CONCRETE MONUMENT ● FOUND IRON ▲ SET PK/MAG NAIL ■ SET NOTCH (X-CUT) ▣ SET CONCRETE MONUMENT ○ SET IRON ▲ CONTROL POINT ⊕ CONTROL MONUMENT ● SECTION CORNER ● BENCHMARK ✓ PROPERTY LINE HOOK 																		
NAVAID SYMBOLS																			
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">EXISTING BEACON</td> <td style="text-align: center;">EXISTING REIL</td> <td style="text-align: center;">EXISTING PAPI</td> <td style="text-align: center;">EXISTING WINDCONE</td> <td style="text-align: center;">PROPOSED BEACON</td> <td style="text-align: center;">PROPOSED REIL</td> <td style="text-align: center;">PROPOSED PAPI</td> <td style="text-align: center;">PROPOSED WINDCONE</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </table>				EXISTING BEACON	EXISTING REIL	EXISTING PAPI	EXISTING WINDCONE	PROPOSED BEACON	PROPOSED REIL	PROPOSED PAPI	PROPOSED WINDCONE								
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HATCHING	UTILITY SYMBOLS	ELECTRICAL SYMBOLS																	
<p>EXISTING</p> <ul style="list-style-type: none"> ASPHALT CONCRETE GRAVEL RIPRAP BUILDING <p>PROPOSED</p> <ul style="list-style-type: none"> ASPHALT ASPH HD CONC GRAVEL RIPRAP 	<p>PROPOSED</p> <ul style="list-style-type: none"> ● SANITARY MANHOLE ○ SANITARY CLEANOUT ● STORM MANHOLE ■ STORM CATCH BASIN ○ UNDERDRAIN CLEANOUT ◆ WATER MAIN HYDRANT ⊕ WATER MAIN VALVE & BOX 	<p>EXISTING</p> <ul style="list-style-type: none"> ⊕ BASE MIRL ◆ STAKE MIRL ⊕ BASE MITL ◇ STAKE MITL <p>PROPOSED</p> <ul style="list-style-type: none"> ⊕ BASE MIRL ◆ STAKE MIRL ⊕ BASE MITL ◇ STAKE MITL ▣ HANDHOLE ⊕ ELECTRIC MANHOLE ▣ SIGN <p>MISCELLANEOUS</p> <ul style="list-style-type: none"> ✕ DEMO X 																	

Item Number	Item Description	Unit	Bid Quantity			Change Order					Total Quantity			
			Total	Fed	Non-Fed	1	2	3	4	5	Total	Fed	Non-Fed	
1	Mobilization, Max 10%	LS	1		1									
2	Safety & Security	LS	1		1									
3	Tree, Rem, 19 inch to 36 inch	Ea	4		4									
4	Tree, Rem, 6 inch to 18 inch	Ea	3		3									
5	Embankment, CIP	Cyd	15,450		15,450									
6	Excavation, Earth	Cyd	2,800		2,800									
7	Soil Erosion and Sedimentation Control Adjustment	Dlr	1,500		1,500									
8	Erosion Control, Check Dam, Stone	Ft	60		60									
9	Erosion Control, Silt Fence	Ft	700		700									
10	Subbase, CIP	Cyd	1,350		1,350									

Item Number	Item Description	Unit	Bid Quantity			Change Order					Total Quantity			
			Total	Fed	Non-Fed	1	2	3	4	5	Total	Fed	Non-Fed	
11	Aggregate Base, 6 inch	Syd	3,100		3,100									
12	Aggregate Surface Cse, 6 inch	Syd	1,080		1,080									
13	Culv End Sect, Conc, 12 inch	Ea	4		4									
14	Culv, Cl B, 8 inch	Ft	160		160									
15	Culv, Cl B, Conc, 12 inch	Ft	48		48									
16	Sewer, Cl III, 12 inch, Tr Det A	Ft	118		118									
17	Dr Structure Cover, Type E	Ea	2		2									
18	Dr Structure, 24 inch dia	Ea	2		2									
19	Underdrain, Subbase, 4 inch	Ft	585		585									
20	Underdrain, Cleanout	Ea	2		2									
21	Edge Trimming	Ft	585		585									
22	HMA, 4EML	Ton	335		335									
23	HMA, 5EML	Ton	250		250									
24	Curb and Gutter, Conc, Det F4	Ft	500		500									
25	Sidewalk, Conc, 4 inch	Sft	12,650		12,650									
26	Concrete Parking Rail	Ea	54		54									
27	Chain Link Gate	Ea	1		1									
28	Post, Steel, 3 pound	Ft	74		74									
29	Sign, Type IIIA	Sft	20.25		20.25									
30	Sign, Type IIIB	Sft	30		30									
31	Sign, Airport, Rem, Salv, Erect	Ea	1		1									
32	Hard Surface Sign Post	Ea	2		2									
33	Pipe Bollard, 6 inch	Ea	6		6									
34	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Cross Hatching, White	Ft	312		312									
35	Pavt Mrkg, Preformed Thermopl, Accessible Sym	Ea	2		2									
36	Pavt Mrkg, Waterborne, 4 inch, Yellow	Ft	900		900									
37	Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	Ft	900		900									
38	Pavt Mrkg, Waterborne, for Rest Areas, Parks, and Lots, 4 inch, Blue	Ft	185		185									
39	Riprap, Plain	Syd	27		27									
40	Fertilizer, Chemical Nutrient, Cl B	Lb	195		195									
41	Mulch Blanket, High Velocity	Syd	7,475		7,475									
42	Seeding, Mixture THV	Lb	355		355									
43	Topsoil Surface, Salv, 4 inch	Syd	7,475		7,475									
44	Conduit, Schedule 40, 2 inch	Ft	570		570									
45	Conduit, Schedule 80, 4 inch	Ft	60		60									
46	Conduit, DB, (1), 1 1/4 inch	LF	120		120									
47	Conduit, DB, (2), 1 1/4 inch	LF	90		90									
48	Conduit, DB, (3), 1 1/4 inch	LF	90		90									
49	Conduit, DB, (4), 1 1/4 inch	LF	50		50									
50	Conduit, DB, (8), 1 1/4 inch	LF	65		65									
51	Conduit, DB, (2), 2 inch	LF	20		20									
52	Feeder Cable in Conduit, 600V, 3#4, #10G, THWN-2	LF	1,260		1,260									
53	Service Feeder in Conduit 3 #3/0 THWN-2 (2 SETS)	LF	80		80									
54	HH, (Composite), (17"x 30"x 12" Deep Stackable)	EA	3		3									



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NO.	REVISIONS	BY	DATE	DRAWN STAFF

Prein & Newhof
Engineers-Surveyors-Environmental-Laboratory

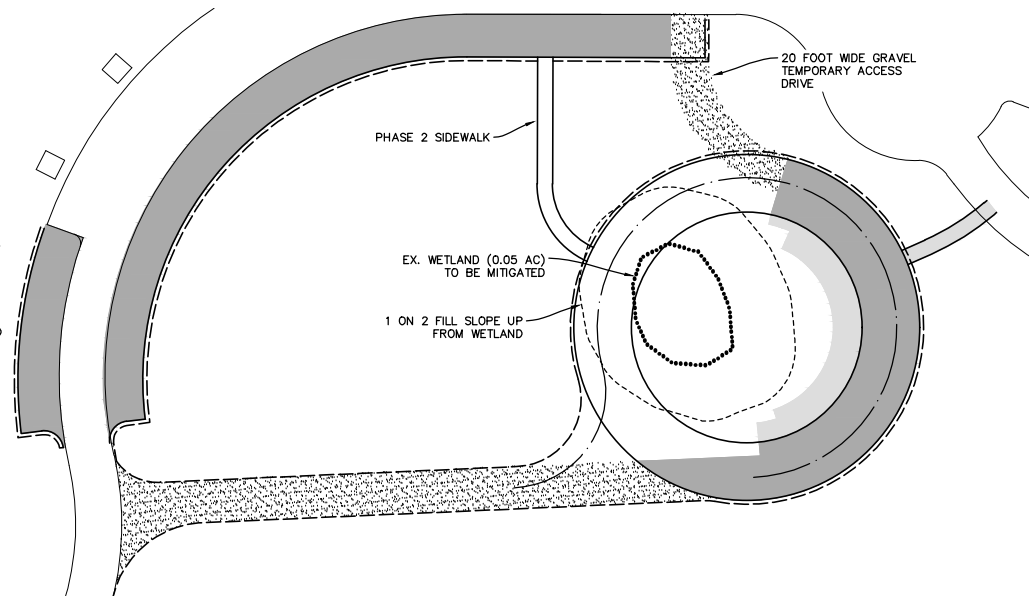
GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN

VIEWING PARK EXPANSION
PROJECT QUANTITIES

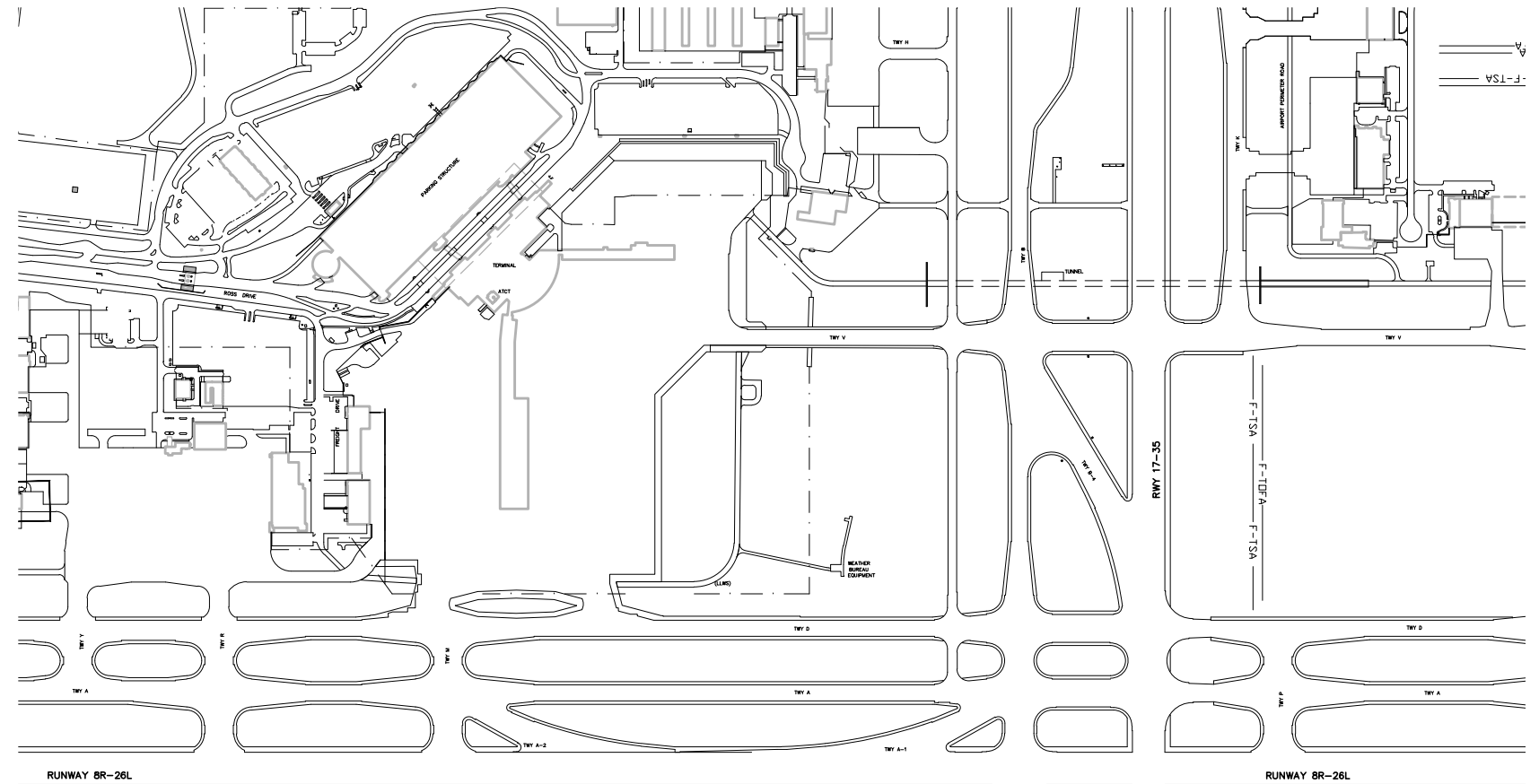
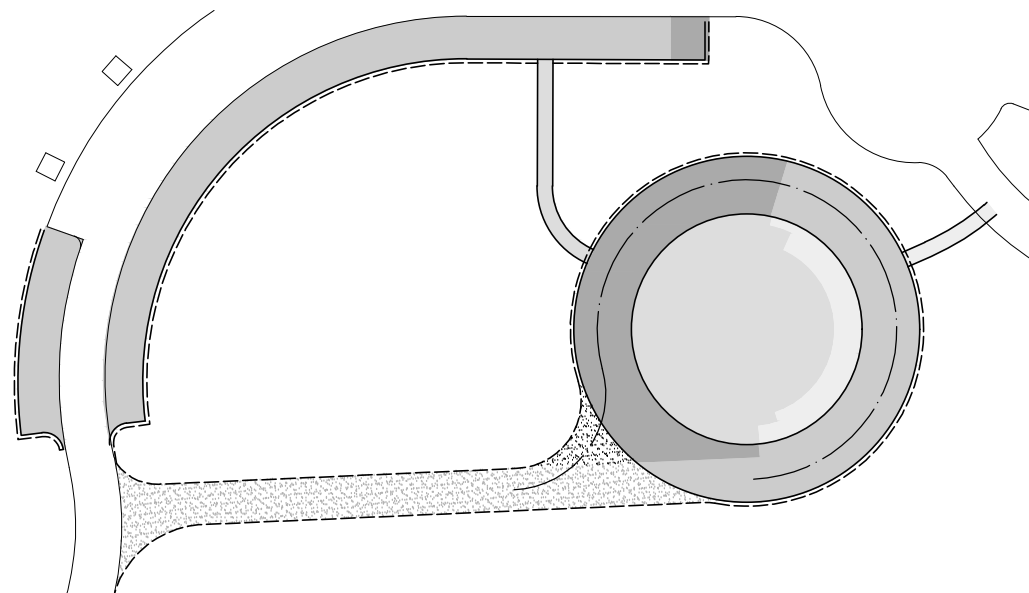
PROJECT NO.
2240980

SHEET NO.
2 OF 12

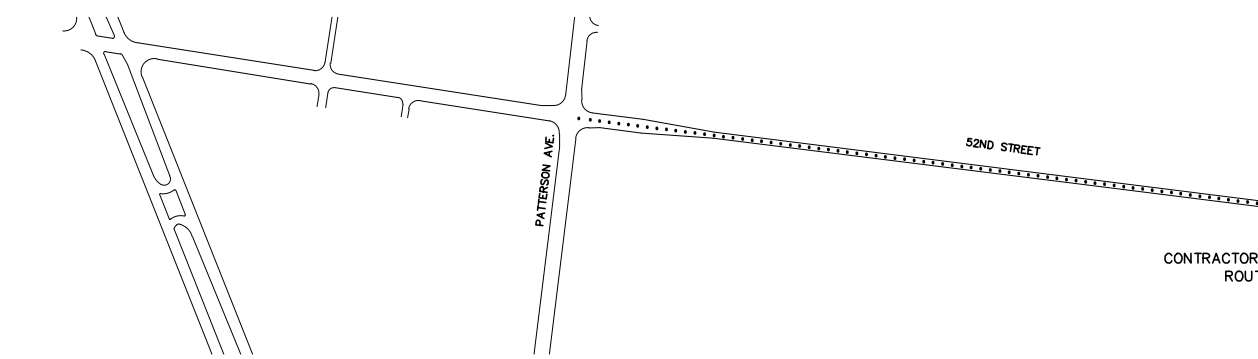
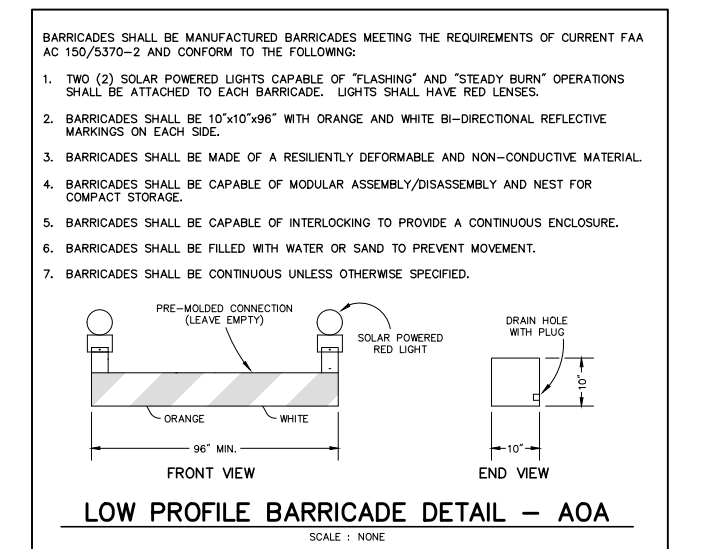
- PHASE 1 NOTES:
1. ERECT SILT FENCE AROUND EXISTING WETLAND.
 2. CONSTRUCT EMBANKMENT FOR PAVEMENTS DEPICTED AS PHASE 1 CONSTRUCTION.
 3. DO NOT RESTRICT DRAINAGE PATH INTO EXISTING WETLAND.
 4. CONSTRUCT TEMPORARY 8 INCH CL B CULVERT.
 5. CONSTRUCT STORM SEWER AND UNDERDRAIN NEEDED FOR IMPROVEMENTS SHOWN.
 6. CONSTRUCT ELECTRICAL PANEL AND THREE TO FOUR POWER PEDESTALS AND BOLLARDS.
 7. CONSTRUCT TEMPORARY GRAVEL ACCESS DRIVE.
 8. RESTORE SURFACES DISTURBED AS PART OF PHASE 1.
 9. PHASE 1 MUST BE COMPLETED BY JUNE 27, 2025.
 10. A STOP ORDER WILL BE ISSUED ONCE PHASE 1 IS COMPLETE. A START ORDER IS EXPECTED LATER IN 2025 FOR COMPLETION OF THE REMAINING WORK ONCE A WETLAND PERMIT HAS BEEN OBTAINED.



- PHASE 2 NOTES:
1. REMOVE SILT FENCE AFTER WETLAND PERMIT HAS BEEN OBTAINED AND A START ORDER IS ISSUED.
 2. PLUG AND ABANDON TEMPORARY 8 INCH CULVERT. ALL COST TO PLUG AND ABANDON PIPE SHALL BE INCLUDED INTO THE PER FOOT UNIT PRICE FOR "CULV, CL B, 8 INCH".
 3. CONSTRUCT REMAINING EMBANKMENT FOR PHASE 2 IMPROVEMENTS.
 4. CONSTRUCT REMAINING IMPROVEMENTS AND REMOVE TEMPORARY GRAVEL ACCESS DRIVE.
 5. COMPLETE RESTORATION.
 6. PHASE 2 WILL BE COMPLETE WITHIN 30 DAYS OF START ORDER DATE.



PROJECT COORDINATE TABLE						
POINT #	LOCATION	LATITUDE	LONGITUDE	ELEVATION	MAX. EQUIPMENT HEIGHT	AMSL
17	S1	N042° 52' 31.85"	W085° 31' 35.88"	795	35'	830
18	S2	N042° 52' 31.32"	W085° 31' 35.87"	798	35'	833
19	S3	N042° 52' 31.28"	W085° 31' 39.11"	798	35'	833
20	S4	N042° 52' 31.81"	W085° 31' 39.13"	796	35'	831
21	W1	N042° 52' 35.55"	W085° 31' 31.90"	794	35'	829
22	W2	N042° 52' 31.05"	W085° 31' 31.79"	799	35'	834
23	W3	N042° 52' 30.93"	W085° 31' 41.83"	796	35'	831
24	W4	N042° 52' 35.43"	W085° 31' 41.93"	800	35'	835



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811

Know what's below. Call before you dig.

NO.	REVISIONS	BY	DATE	DRAWN STAFF

DATE APR. '25
CHECKED JAS
DATE APR. '25

Prein & Newhof
Engineers-Surveyors-Environmental-Laboratory

GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN

VIEWING PARK EXPANSION
CONSTRUCTION SAFETY PHASING PLAN

PROJECT NO.
2240980

SHEET NO.
3 OF 12

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SAFETY AND OPERATIONS NOTES:

1. THE CONTRACT WILL BE COMPLETED WITHIN THIRTY (30) CALENDAR DAYS OF THE NOTICE TO PROCEED. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL WORK INCLUDING "PUNCH LIST" WITHIN THAT TIME, LIQUIDATED DAMAGES WILL BE ASSESSED AT THE RATE OF \$800 PER CALENDAR DAY UNTIL COMPLETION.
2. THE "NOTICE TO PROCEED" IS ANTICIPATED TO BE ISSUED AFTER APRIL 15, 2025.
3. THE CONTRACTOR WILL SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT PRIOR TO NOTICE TO PROCEED. A SAMPLE DOCUMENT WILL BE PROVIDED TO THE CONTRACTOR.
4. THE CONTRACTOR WILL PERFORM ALL WORK IN ACCORDANCE WITH THE CONSTRUCTION SAFETY PHASING PLANS.
5. THE CONTRACTOR WILL COORDINATE HAUL ROUTES, CLOSURES AND SCHEDULES WITH OTHER PROJECTS WHICH MAY BE UNDERWAY DURING THE SAME TIME PERIOD AS THIS CONTRACT. USE OF AIRCRAFT PAVEMENTS FOR CONSTRUCTION WILL NOT BE PERMITTED.
6. THE CONTRACTOR'S EQUIPMENT STORAGE AREA WILL BE AT THE LOCATIONS SHOWN. THE CONTRACTOR WILL CONFINED THE STORAGE OF EQUIPMENT AND MATERIALS TO THIS AREA. THE MAXIMUM STORAGE HEIGHT WILL BE AS INDICATED. ALL NON-PAVED AREAS THAT ARE DISTURBED BY CONTRACTOR'S OPERATIONS, LOCATED OUTSIDE OF THE GRADING LIMITS WILL BE RESTORED WITH 4" OF TOPSOIL, SEEDED, AND MULCHED IN ACCORDANCE WITH SECTIONS 816 AND 917 OF THE 2020 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, AT NO ADDITIONAL COST.
7. CONTRACTOR'S EQUIPMENT WILL BE PARKED WITHIN THE CONTRACTOR'S STAGING AND STORAGE AREA WHEN NOT IN USE AND DURING NON-WORKING HOURS. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SAFETY AND SECURITY OF HIS STORAGE AREA AND ALL CONSTRUCTION AREAS. THE CONTRACTOR WILL CONFINED THE STOCKPILING OF MATERIAL TO THE STAGING AND STORAGE AREA.
8. BARRICADES WILL BE PLACED TO CLOSE PAVEMENTS AS SHOWN ON THE CONSTRUCTION SAFETY PHASING PLAN. PRIOR TO CLOSING ANY PAVEMENTS FOR CONSTRUCTION ACTIVITY, THE CONTRACTOR WILL GIVE MINIMUM 72 HOURS NOTICE, EXCLUDING HOLIDAYS AND WEEKENDS, TO AIRPORT MANAGER.
9. THE CONTRACTOR WILL CONSTRUCT AND MAINTAIN HIS OWN HAUL ROUTES AS NECESSARY TO COMPLETE HIS WORK. HAUL ROUTES MUST BE APPROVED BY THE AIRPORT PRIOR TO CONSTRUCTION. HAUL ROUTES WILL BE RESTORED AS DESCRIBED ABOVE FOR THE CONTRACTOR'S STORAGE AREA.
10. THE CONTRACTOR WILL CONFINED HIS OPERATIONS TO THE CONSTRUCTION AREA, AND THE DESIGNATED ACCESS ROUTES.
11. MATERIAL TRACKED OR OTHERWISE DEPOSITED ON ACTIVE PAVEMENTS BY CONSTRUCTION OPERATIONS WILL BE REMOVED IMMEDIATELY IN ORDER TO PREVENT DAMAGE TO AIRCRAFT. ALL FOREIGN OBJECT DEBRIS (FOD) FOUND ALONG RUNWAY AND TAXIWAYS ADJACENT TO WORK AREAS WILL BE SUFFICIENT CAUSE FOR THE OWNER TO CLOSE THE RUNWAY OR TAXIWAY. SAID OBJECTS WILL BE REMOVED IMMEDIATELY AND PAVEMENTS SWEEP OR VACUUMED PRIOR TO RE-OPENING.
12. ANY PAVEMENT DAMAGED BY CONTRACTOR'S EQUIPMENT WILL BE REPLACED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR WILL CONTROL DUST FROM THE CONSTRUCTION OPERATIONS BY VACUUM TYPE SWEEPING, WATERING OR OTHER METHODS AS APPROVED BY THE ENGINEER.
14. CONTRACTOR WILL BE RESPONSIBLE FOR HANDLING AND CONTAINING FUEL, OIL AND OTHER HAZARDOUS MATERIALS DELIVERED TO THE AIRPORT BY THE CONTRACTOR FOR CONSTRUCTION OPERATIONS. MATERIALS WILL BE HANDLED IN ACCORDANCE WITH EGLE, MIOSHA, EPA, OR OTHER AGENCIES WITH REGULATORY AUTHORITY OVER THE ASSOCIATED MATERIAL. ALL RELEASES OF HAZARDOUS MATERIALS WILL BE REPORTED TO AIRPORT MANAGER IMMEDIATELY AND CLEANED UP BY THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CLEANUP COSTS INCLUDING FINES AND PENALTIES ASSESSED TO THE AIRPORT AS A RESULT OF THE RELEASE. CONTRACTOR WILL SUBMIT COPIES OF ALL MATERIAL SAFETY DATA SHEETS ASSOCIATED WITH THE WORK TO THE ENGINEER PRIOR TO DELIVERY TO THE SITE.
15. EQUIPMENT LOCATED WITHIN CONSTRUCTION AREAS WILL NOT EXCEED 35 FEET IN HEIGHT.
16. CONTRACTOR WILL COLLECT AND DISPOSE OF LUNCH WRAPPERS, FOOD AND OTHER WILDLIFE ATTRACTANTS. CONTRACTOR WILL ABIDE BY AIRPORT WILDLIFE MANAGEMENT PROCEDURES.
17. CONTRACTOR WILL IMMEDIATELY NOTIFY THE AIRPORT MANAGER OF ANY CONDITION THAT MAY, IN THE CONTRACTOR'S OPINION, ADVERSELY AFFECT OPERATIONAL SAFETY. THE AIRPORT MANAGER WILL ASSESS THE REPORT AND NOTIFY THE FAA AND OTHER IMPACTED PARTIES AS WARRANTED BY THE SITUATION.
18. THE CONTRACTOR WILL PROVIDE THE ENGINEER WITH A NAME AND TELEPHONE NUMBER OF TWO (2) INDIVIDUALS THAT WILL BE AVAILABLE 24 HOURS A DAY, SEVEN DAYS A WEEK, FOR USE IN EMERGENCIES. THIS CONTACT PERSON WILL HAVE THE AUTHORITY TO IMMEDIATELY CORRECT ANY SAFETY OR SECURITY DEFICIENCY CAUSED BY THE CONTRACTOR OR CONSTRUCTION ACTIVITIES, AS IDENTIFIED BY THE OWNER.
19. IN CASE OF AN EMERGENCY, CONTACT OFIAA COMMUNICATIONS AT (616) 233-6055.
20. PAVEMENT INSPECTIONS WILL BE CONDUCTED BY AIRPORT PERSONNEL AND THE ENGINEER. AIRCRAFT PAVEMENTS WILL NOT BE REOPENED UNTIL THE SAFETY AREAS HAVE BEEN INSPECTED AND APPROVED BY THE AIRPORT.
21. ALL AREAS OUTSIDE OF WORK AREAS WILL REMAIN OPEN DURING THE PROJECT. CONTRACTOR WILL NOT GO ONTO THE OPEN APRON, OPEN TAXIWAYS, OR OPEN RUNWAYS WITHOUT PERMISSION FROM THE AIRPORT OR THE ENGINEER.
22. NO PROPOSED TEMPORARY OR PERMANENT ADJUSTMENTS TO RSA OR TSA DIMENSIONS ARE ASSOCIATED WITH THIS CONTRACT.
23. CONTRACTOR WILL NOT USE OPEN FLAME WELDERS OR TORCHES OUTSIDE OF THE STAGING AND STORAGE AREA WITHOUT APPROVAL BY THE AIRPORT. USE OF OPEN FLAME WELDERS OR TORCHES WITHIN THE STAGING AND STORAGE AREA WILL BE IN ACCORDANCE WITH THE CONTRACTOR'S CORPORATE POLICY AND PROJECT SAFETY PLAN. USE WILL BE LIMITED TO AREAS WITH FIRE PROTECTION, AND CONTRACTOR WILL PREVENT FIRES FROM STARTING AND LIMIT THE SPREAD IF ONE IS STARTED.
24. CONTRACTOR WILL NOT USE EXPLOSIVES.
25. CONTRACTOR'S EQUIPMENT WILL ENTER THE WORK AREA THROUGH THE ACCESS ROUTE SHOWN.
26. CONTRACTOR WILL PROVIDE, PLACE, AND MAINTAIN LOW PROFILE BARRICADES AT THE LOCATIONS SHOWN. BARRICADES WILL BE PLACED IMMEDIATELY UPON CLOSING OF THE RUNWAY OR TAXIWAY.
27. RUNWAY CLOSURE MARKERS WILL BE REQUIRED AS SHOWN WHENEVER A RUNWAY IS CLOSED. THE CONTRACTOR WILL OPERATE AND MAINTAIN LIGHTED RUNWAY CLOSURE MARKERS. MAINTENANCE WILL INCLUDE FUELING, OIL CHANGES (MIN. ONCE PER WEEK), LIGHT BULB REPLACEMENT, ELECTRICAL SYSTEM REPAIR AND ALL OTHER COMMON OR ROUTINE ACTIVITIES NECESSARY TO KEEP THE LIGHTED RUNWAY CLOSURE MARKERS IN A GOOD, OPERATING CONDITION AT ALL TIMES.
28. MAXIMUM EQUIPMENT HEIGHT IS 35 FEET FOR ALL PHASES.
29. THE MAXIMUM NUMBER OF LOW-PROFILE BARRICADES ANTICIPATED TO BE IN USE AT ANY ONE TIME IS THIRTY-TWO (32). BARRICADES WILL BE PLACED END TO END, CONTINUOUSLY ACROSS THE WIDTH OF THE TAXIWAY.
30. ALL COSTS FOR LIGHTED RUNWAY CLOSURE MARKERS, LOW-PROFILE BARRICADES AND ALL OTHER WORK DEPICTED ON THE CONSTRUCTION SAFETY PHASING PLANS (CSPP) AND NOT LISTED AS A SEPARATE PAY ITEM WILL BE INCLUDED INTO THE LUMP SUM PRICE FOR "SAFETY AND SECURITY".
31. SHOULD SUSPENSION OF CONSTRUCTION BECOME NECESSARY DUE TO LOW-VISIBILITY OPERATIONS, SNOW REMOVAL, AIRCRAFT IN DISTRESS, AIRCRAFT ACCIDENT, SECURITY BREACH, VEHICLE / PEDESTRIAN DEVIATION (VPD) OR OTHER CONDITIONS, THE AIRPORT RESERVES THE RIGHT TO NOTIFY THE CONTRACTOR AND ISSUE SPECIAL INSTRUCTIONS AS NECESSARY FOR THE SITUATION.
32. DEFINITIONS:
 AIRPORT – GERALD R. FORD INTERNATIONAL AIRPORT
 AC – ADVISORY CIRCULAR
 AOA – AIR OPERATIONS AREA
 CFR – CODE OF FEDERAL REGULATIONS
 FAA – FEDERAL AVIATION ADMINISTRATION
 FOD – FOREIGN OBJECT DEBRIS
 PAPI – PRECISION APPROACH PATH INDICATOR
 REIL – RUNWAY END IDENTIFIER LIGHT
 ROFA – RUNWAY OBJECT FREE AREA
 ROFZ – RUNWAY OBJECT FREE ZONE
 RSA – RUNWAY SAFETY AREA
 SPONSOR/OWNER – COUNTY OF ROSCOMMON
 TOFA – TAXIWAY/TAXILANE OBJECT FREE AREA
 TSA – TAXIWAY SAFETY AREA
 NAVAID – NAVIGATIONAL AID
 NOTAMS – NOTICE TO AIRMEN

CONSTRUCTION NOTES:

GENERAL

1. IN CASE OF CONFLICT BETWEEN NOTES SHOWN ON THE DRAWINGS AND THE STANDARD SPECIFICATIONS, THE NOTES ON THE DRAWINGS WILL TAKE PRECEDENCE.
2. THE INFORMATION CONCERNING UNDERGROUND UTILITIES WAS COMPILED FROM INFORMATION AND SKETCHES FURNISHED BY OR OBTAINED FROM UTILITY COMPANIES AND THE AIRPORT. THE OWNER AND THE ENGINEER DO NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR IS ADVISED TO DETERMINE THE EXACT LOCATIONS FROM THE AVAILABLE SOURCES OF INFORMATION OR PROVIDE HIS OWN MEANS OF DETECTION. REFER TO THE GENERAL CONTRACT PROVISIONS, SECTION 70-15, FOR THE CONTRACTOR'S RESPONSIBILITIES FOR UTILITY SERVICE AND FACILITIES OF OTHERS.
3. PRIOR TO OPENING AN EXCAVATION, EFFORT WILL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATION: I.E., SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED, AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATIONS OF SUCH AN INSTALLATION, THE EXACT LOCATIONS WILL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING, AND WHEN IT IS UNCOVERED, ADEQUATE PROTECTION WILL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED WILL BE ADVISED OF PROPOSED WORK AT LEAST 2 NORMAL BUSINESS DAYS PRIOR TO THE START OF ACTUAL EXCAVATION. REFER TO SECTIONS 70-10, 70-11 AND 70-15 OF THE GENERAL CONTRACT PROVISIONS FOR A DESCRIPTION OF THE CONTRACTOR'S ASSUMPTION OF RISK AND RESPONSIBILITY TO PROTECT PROPERTY OF OTHERS DURING CONSTRUCTION.

CONSTRUCTION STAKING

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONSTRUCTION STAKING. A BENCHMARK AND A MINIMUM OF TWO (2) CONTROL POINTS WILL BE PROVIDED BY THE ENGINEER FOR CONTRACTOR'S USE.
5. A COPY OF THE DIGITAL TERRAIN MODEL AND OTHER ELECTRONIC DATA WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON EXECUTION OF A WAIVER RELIEVING THE GERALD R. FORD INTERNATIONAL AIRPORT AUTHORITY AND PREIN&NEWHOF OF LIABILITY FOR THE INFORMATION.

EXCAVATION AND EMBANKMENT

6. ALL EXCAVATION AND EMBANKMENT WILL BE IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS.
7. EMBANKMENTS UNDER THE ONE ON ONE INFLUENCE OF PAVEMENTS AND FOUNDATIONS WILL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION P-152. SOIL WILL BE COMPACTED BASED ON AIRCRAFT WEIGHTING 30,000 LBS OR LESS EXCEPT UNDER THE FLOOR/FOUNDATION. EMBANKMENTS UNDER THE FLOOR AND FOUNDATIONS WILL BE COMPACTED TO A MINIMUM OF 100% OF THEORETICAL DENSITY.
8. EXCESS NON-ORGANIC SOIL, IF PRESENT, WILL BE DISPOSED ON AIRPORT PROPERTY. SOIL STOCKPILES WILL BE GRADED AS SHOWN ON THE DRAWINGS AND COMPACTED.
9. EXCESS TOPSOIL MAY BE USED TO CONSTRUCT EMBANKMENTS OUTSIDE OF THE ONE ON ONE INFLUENCE UNDER PAVEMENTS AND FOUNDATIONS.
10. BORROW EXCAVATION, IF NEEDED, WILL BE OBTAINED FROM AIRPORT PROPERTY AT LOCATIONS DESIGNATED ON THE PLANS.

AGGREGATE BASE MATERIAL

11. AGGREGATE BASE MATERIAL WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTION 302 USING A 21AA AGGREGATE.
12. HOT MIX ASPHALT PAVEMENTS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTION 501 AND THE MDOT SPECIAL PROVISIONS INCLUDED WITH THE CONTRACT DOCUMENTS.
13. CONTRACTOR WILL PROVIDE A 4EML MIX USING PG 64-28 BINDER.
14. CONTRACTOR WILL PROVIDE A 5EML MIX USING PG 70-22 BINDER.

HOT MIX ASPHALT PAVEMENT

15. TACK COAT WILL BE APPLIED PRIOR TO PAVING IN ACCORDANCE WITH SPECIFICATION SECTION 501. TACK COAT SHALL BE CONSIDERED INCIDENTAL TO PAVEMENT CONSTRUCTION AND INCLUDED IN THE PER TON UNIT PRICES FOR "HMA, 4EML" & "HMA, 5EML".

BITUMINOUS TACK COAT

CONCRETE FOR MISCELLANEOUS STRUCTURES

16. CONCRETE STRUCTURES, FLOORS AND FOUNDATIONS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS USING GRADE 3500 CONCRETE.

STORM SEWERS AND DRAINAGE STRUCTURES

17. STORM SEWER AND CULVERTS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTIONS 401 AND 402 AND MDOT STANDARD DETAILS R-82-D, R-83-C & R-86-F.
18. DRAINAGE STRUCTURES WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTION 403 MDOT STANDARD DETAILS R-1-G, R-10-D.
19. UNDERDRAINS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTION 404.

PERMANENT TRAFFIC SIGNS AND SUPPORTS

20. UNLESS OTHERWISE NOTED, TRAFFIC SIGNS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTIONS 810 AND 919.

PERMANENT PAVEMENT MARKINGS

21. PAVEMENT MARKINGS WILL BE CONSTRUCTED IN ACCORDANCE WITH MDOT 2020 STANDARD SPECIFICATIONS, SECTIONS 811 AND 920.

FENCING AND GATES

22. GATES WILL BE CONSTRUCTED IN ACCORDANCE WITH FAA SPECIFICATION F-162 AND THE DETAILS SHOWN IN THE SET OF DRAWINGS.

ELECTRICAL

23. POWER FEDESTALS, LOCKED ENCLOSURES, CABLING AND CONDUITS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.

RESTORATION

24. ALL DISTURBED AREAS WILL BE GRADED TO MATCH EXISTING DRAINAGE PATTERNS OR PROPOSED ELEVATIONS AS APPROPRIATE.
25. ALL DISTURBED AREAS WILL BE SEEDED, AND MULCHED IN ACCORDANCE WITH THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION SECTIONS 816 AND 917.

SOIL EROSION AND SEDIMENTATION CONTROL

26. THE CONTRACTOR WILL FILE FOR THE SOIL EROSION CONTROL PERMIT WITH KENT COUNTY ROAD COMMISSION. THE OWNER WILL FURNISH A SIGNED PERMIT APPLICATION AND SOIL EROSION CONTROL PLANS TO THE CONTRACTOR. THE CONTRACTOR WILL PAY ALL FEES AND BE LISTED AS THE AGENT FOR THE OWNER. THE CONTRACTOR WILL FURNISH THE ENGINEER WITH A COPY OF THE APPROVED PERMIT.
27. COSTS FOR THE SESC PERMIT, INSPECTIONS AND THE "NOTICE OF COVERAGE" WILL BE INCLUDED IN THE PER DOLLAR ALLOWANCE FOR "PERMITS". PAYMENT WILL BE BASED ON COSTS INVOICED TO AND SUBMITTED BY THE CONTRACTOR WITHOUT MARK-UP OR OTHER ADJUSTMENT.
28. ANY FINES LEVIED AGAINST THE OWNER FOR THE CONTRACTOR'S FAILURE TO INSTALL, MAINTAIN OR SECURE SOIL EROSION CONTROLS AS DESCRIBED HEREIN AND ON THE PLANS WILL BE THE CONTRACTOR'S RESPONSIBILITY. THESE FINES WILL BE DEDUCTED FROM THE AMOUNT DUE TO THE CONTRACTOR.

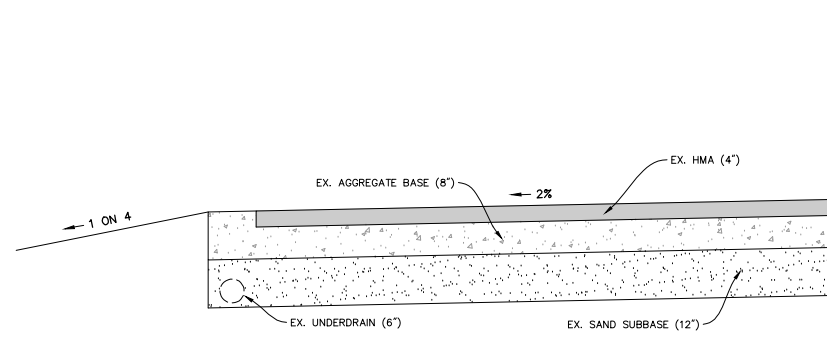
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NO.	REVISIONS	BY	DATE	DRAWN
				STAFF
				DATE
				APR. '25
				CHECKED
				JAS
				DATE
				APR. '25



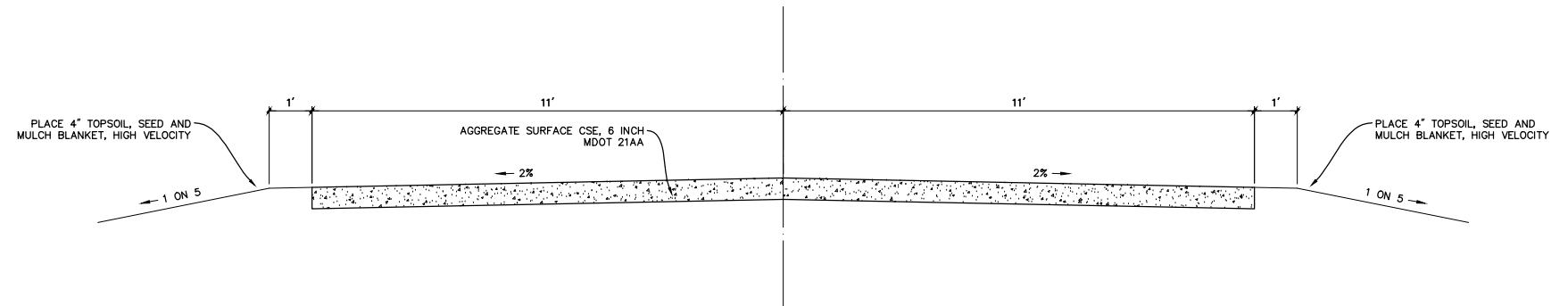
GERALD R. FORD INT'L AIRPORT AUTHORITY
 KENT COUNTY, MICHIGAN
 VIEWING PARK EXPANSION
 SAFETY AND OPERATIONS & CONSTRUCTION NOTES

PROJECT NO.
 2240980
 SHEET NO.
 4 OF 12



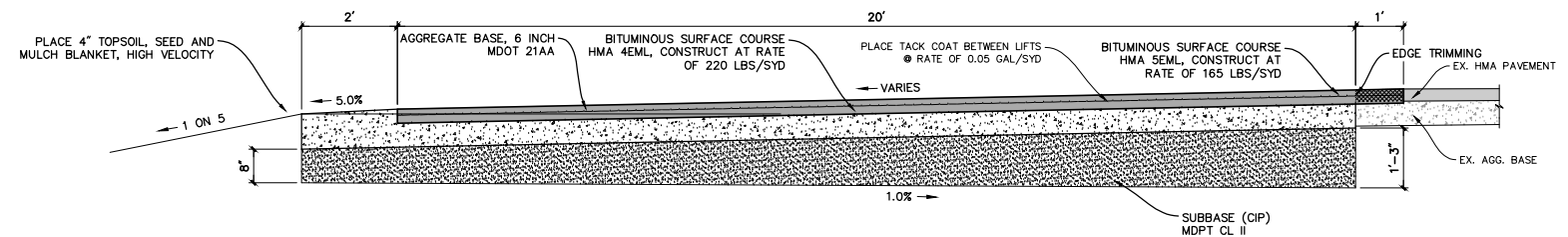
EXISTING ROAD SECTION

SCALE : NONE



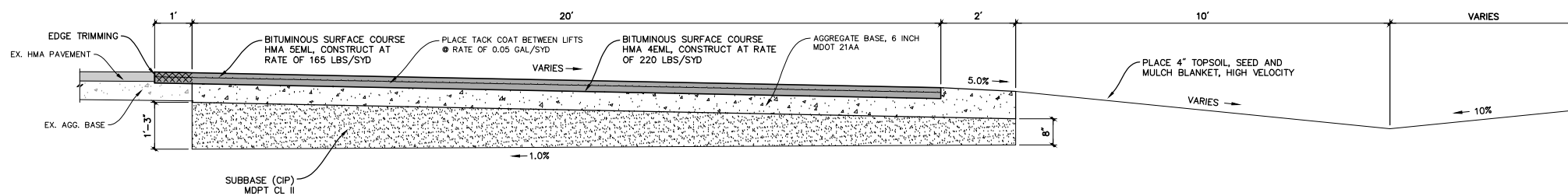
PROPOSED ACCESS ROAD SECTION

SCALE : NONE



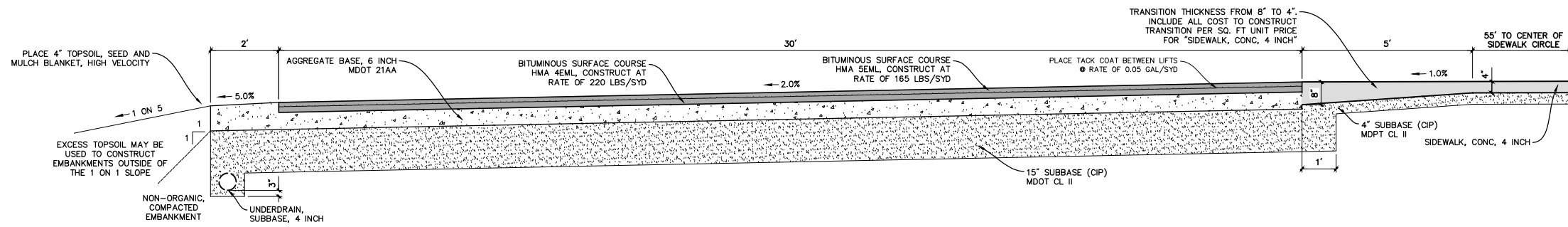
PROPOSED WEST PARKING SECTION

SCALE : NONE



PROPOSED EAST PARKING SECTION

SCALE : NONE



PROPOSED TRUCK PARKING SECTION

SCALE : NONE

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NO.	REVISIONS	BY	DATE	DRAWN STAFF
				APR. '25
				JAS
				APR. '25

Prein & Newhof
Engineers - Surveyors - Environmental - Laboratory

GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN

VIEWING PARK EXPANSION
TYPICAL SECTIONS

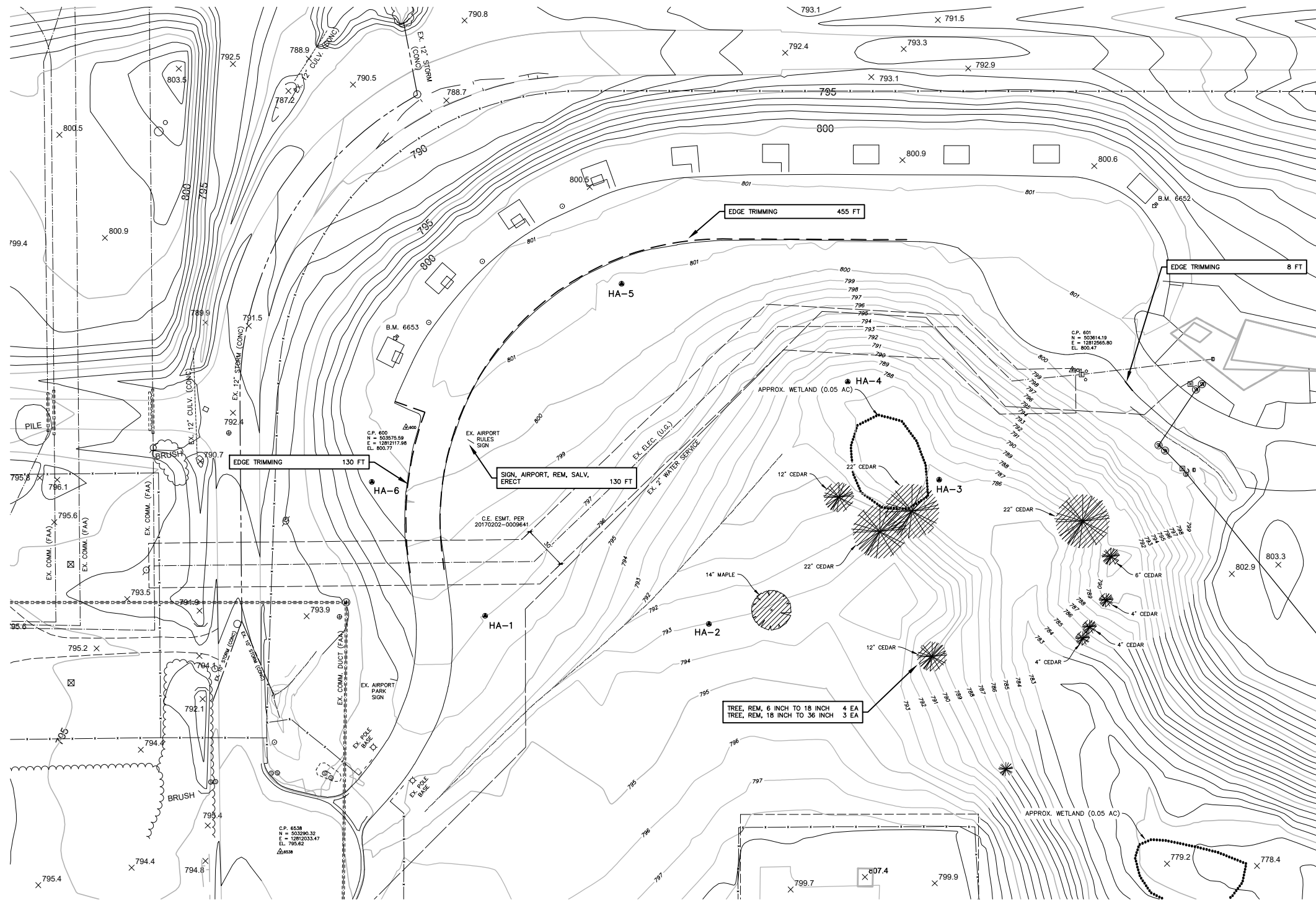
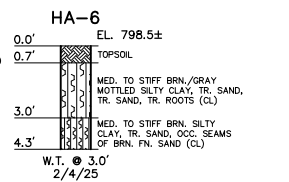
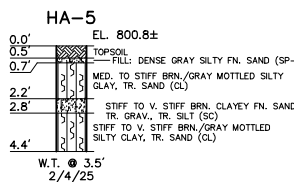
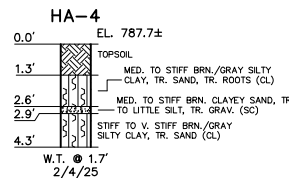
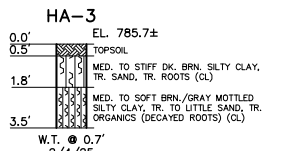
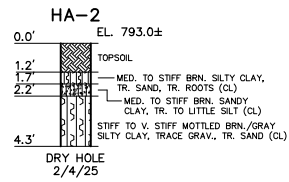
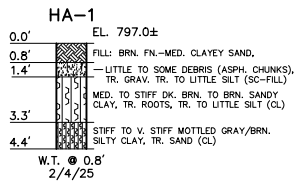
PROJECT NO.
2240980

SHEET NO.

5 OF 12

B.M. 6652 EL. 800.93
80 FT N.W. OF N.W. CORNER RESTROOMS.
S. CORNER 15 FT x 20 FT PAD AT PICNIC
TABLES.

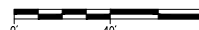
B.M. 6653 EL. 800.51
300 FT± N. OF ENTRANCE TO PARK AT
S.W. MOST PAD TO PICNIC AREA. N.
CORNER 15 FT x 20 FT PAD.



EXISTING CONDITIONS/DEMOLITION



SCALE : 1" = 40'



NO.	REVISIONS	BY	DATE	DRAWN STAFF

DATE APR. '25
CHECKED JAS
DATE APR. '25

Prein & Newhof
Engineers-Surveyors-Environmental-Laboratory

GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN

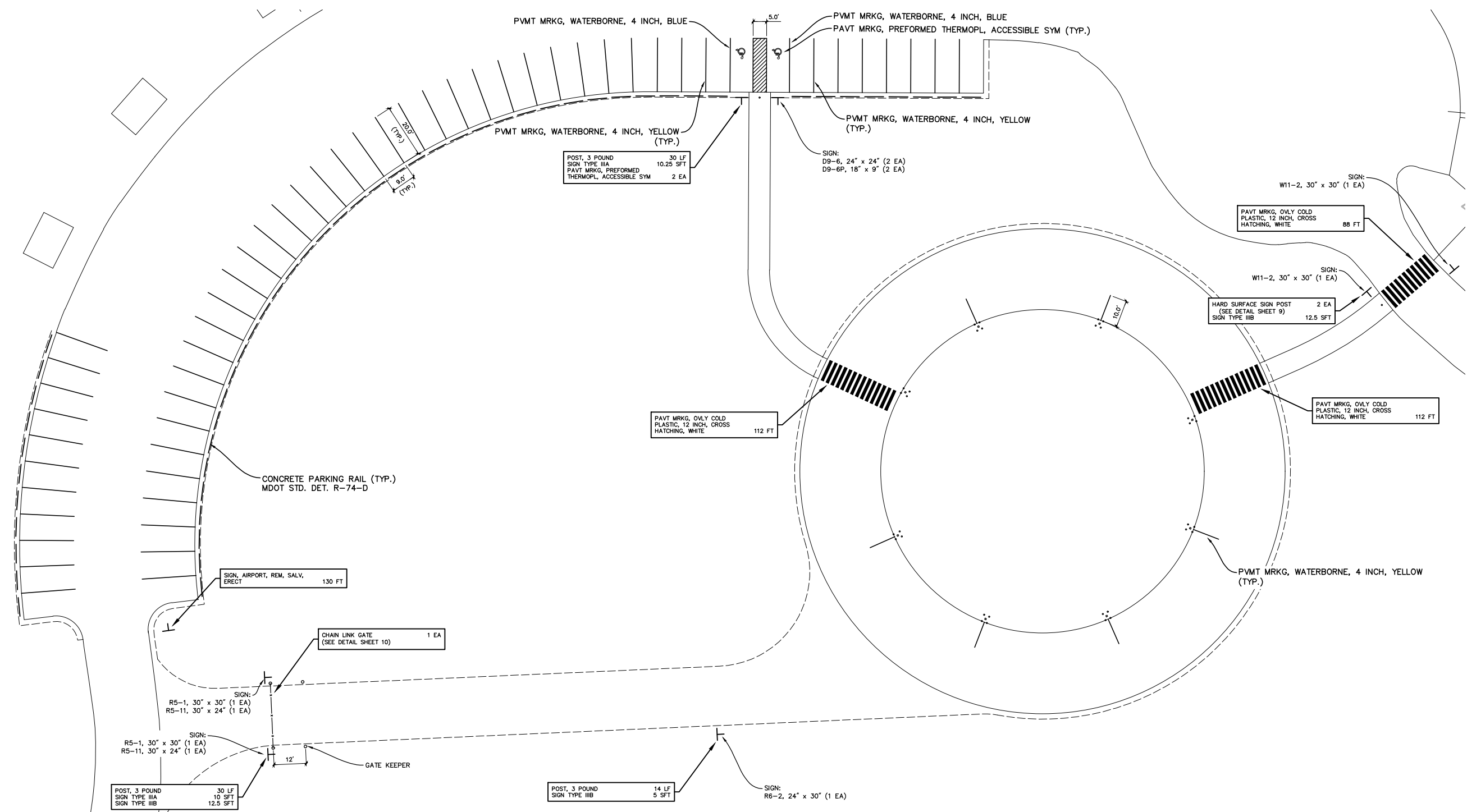
VIEWING PARK EXPANSION
EXISTING CONDITIONS / DEMOLITION

PROJECT NO. 2240980
SHEET NO. 6 OF 12

811
UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.
Know what's below. Call before you dig.

T:\UNLID PROJECTS\2024\2240980_GERALD R FORD INTL AIRPORT VIEWING PARK EXPANSION\1_PROJ\2240980_06-08 SITE.DWG - JSTR00 - Apr. 14 2025 - 01:10pm - Print/Plot/Info

T:\UNLSD PROJECTS\2024\2240980_GERALD R FORD INTL AIRPORT VIEWING PARK EXPANSION\1_PROJ\2240980_06-08 SITEWORK - ISTROO - Apr. 14 2025 - 01:10pm - Prein&Newhof



SIGN TABLE					
NAME	DESCRIPTION	SIZE	TYPE	QUANTITY	POST LENGTH
D9-6	ADA PARKING	24" x 24"	IIIA	2	15 FT
D9-6P	VAN ACCESSIBLE	18" x 9"	IIIA	2	MOUNTED WITH D5-9
R5-1	DO NOT ENTER	30" x 30"	IIIB	2	15 FT
R5-11	AUTHORIZED VEHICLES ONLY	30" x 24"	IIIA	2	MOUNTED WITH R5-1
R6-2	ONE WAY (LEFT)	24" x 30"	IIIB	1	14 FT
W11-2	PEDESTRIAN CROSSING	30" x 30"	IIIB	2	SEE HARD SURFACE SIGN POST DETAIL

PROPOSED MARKING PLAN

SCALE : 1" = 20'



811
 Know what's Below.
 Call before you dig.
 UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

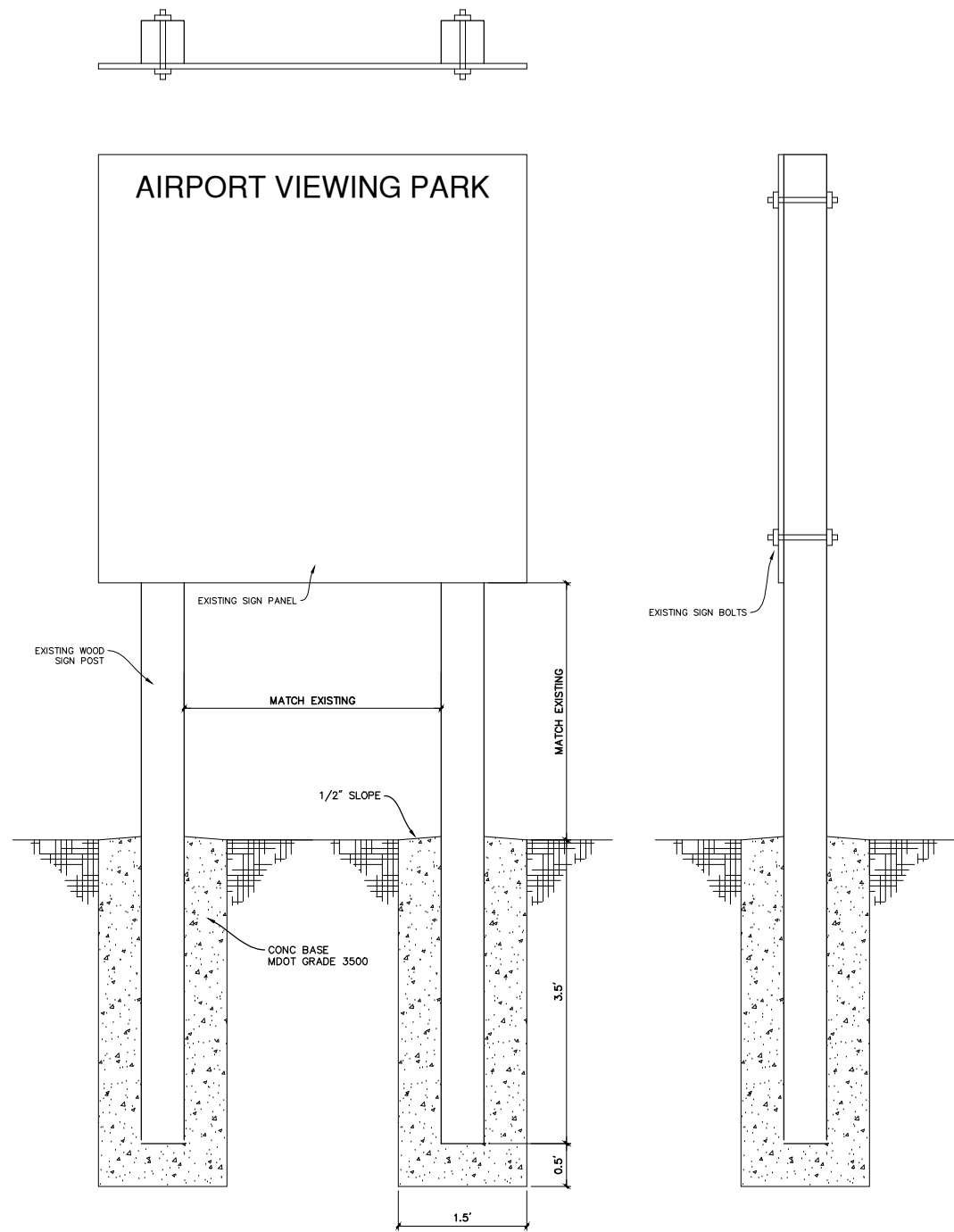
NO.	REVISIONS	BY	DATE	DRAWN STAFF

Prein & Newhof
 Engineers • Surveyors • Environmental • Laboratory

GERALD R. FORD INT'L AIRPORT AUTHORITY
 KENT COUNTY, MICHIGAN
 VIEWING PARK EXPANSION
 MARKING AND SIGNAGE PLAN

PROJECT NO.
2240980
 SHEET NO.
8 OF **12**

T:\UNLSD\PROJECTS\2024\2240980_GERALD R FORD INTL AIRPORT VIEWING PARK EXPANSION\4_PROJ\2240980_09-10 DETAILS.DWG - JSTRUD - Apr. 17, 2025 - 05:33pm - Prein&Newhof

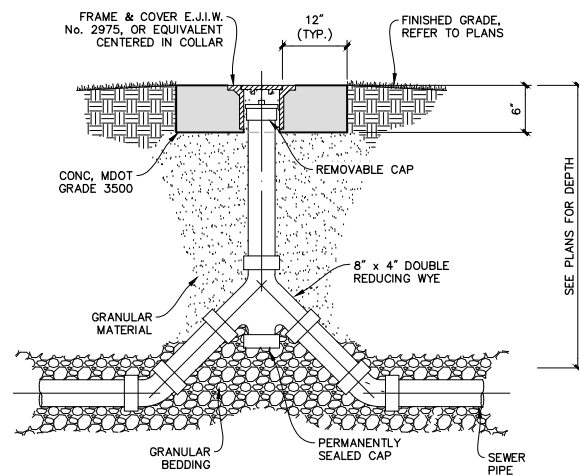


EXISTING / PROPOSED SIGN DETAIL

SCALE : NONE

NOTES:

1. SALVAGE EXISTING SIGN, POSTS AND BOLTS.
2. CUT POSTS AS NEEDED TO SET IN CONCRETE FOUNDATION AS SHOWN.
3. PAINT SIGN POSTS TO MATCH EXISTING COLOR AFTER CASTING IN CONCRETE.
4. REUSE EXISTING PANEL BOLTS. REPLACE BOLTS IF NECESSARY.
5. THE ITEM FOR "SIGN, AIRPORT, REM, SALV, ERECT" WILL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO:
 - 5.1. REMOVE AND SALVAGE EXISTING SIGN AND POSTS
 - 5.2. REMOVE CONCRETE FROM EXISTING POSTS OR REPLACE WOOD POSTS
 - 5.3. EXCAVATE AND CAST NEW POST FOUNDATIONS
 - 5.4. ERECT EXISTING SIGN ON POSTS
 - 5.5. REMOVAL AND OFF-SITE DISPOSAL OF ALL DEBRIS RESULTING FROM SIGN REMOVAL, SALVAGING AND ERECTION.

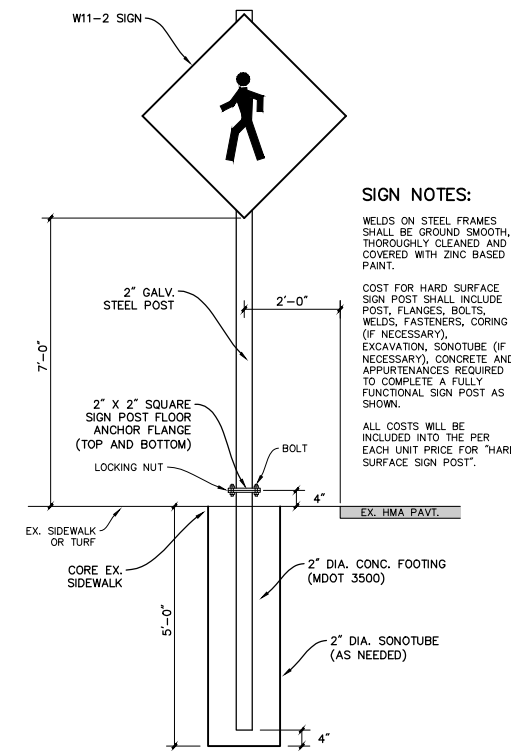


UNDERDRAIN CLEANOUT

SCALE : NONE

NOTE

CONCRETE COLLAR MAY BE OMITTED IF CLEANOUT IS LOCATED WITHIN CONCRETE SIDEWALK OR CONCRETE PAVT

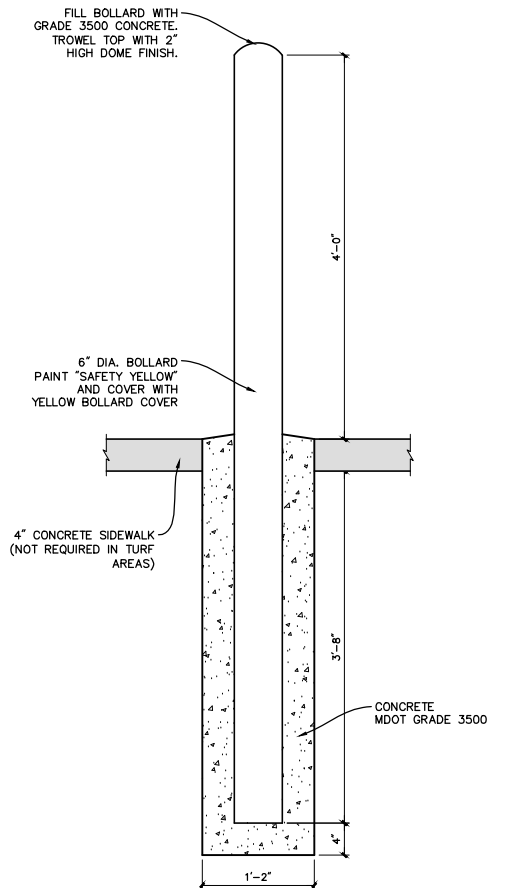


HARD SURFACE SIGN POST DETAIL

SCALE : NONE

SIGN NOTES:

WELDS ON STEEL FRAMES SHALL BE GROUND SMOOTH, THOROUGHLY CLEANED AND COVERED WITH ZINC BASED PAINT.
 COST FOR HARD SURFACE SIGN POST SHALL INCLUDE POST, FLANGES, BOLTS, WELDS, FASTENERS, CORING (IF NECESSARY), EXCAVATION, SONOTUBE (IF NECESSARY), CONCRETE AND APPURTENANCES REQUIRED TO COMPLETE A FULLY FUNCTIONAL SIGN POST AS SHOWN.
 ALL COSTS WILL BE INCLUDED INTO THE PER EACH UNIT PRICE FOR "HARD SURFACE SIGN POST".



PROPOSED BOLLARD DETAIL

SCALE : NONE

*ALL COST TO CONSTRUCT BOLLARD WILL BE INCLUDED INTO THE PER EACH UNIT PRICE FOR "PIPE BOLLARD, 6 INCH".

NO.	REVISIONS	BY	DATE	DRAWN STAFF

DATE APR. '25
 CHECKED JAS
 DATE APR. '25

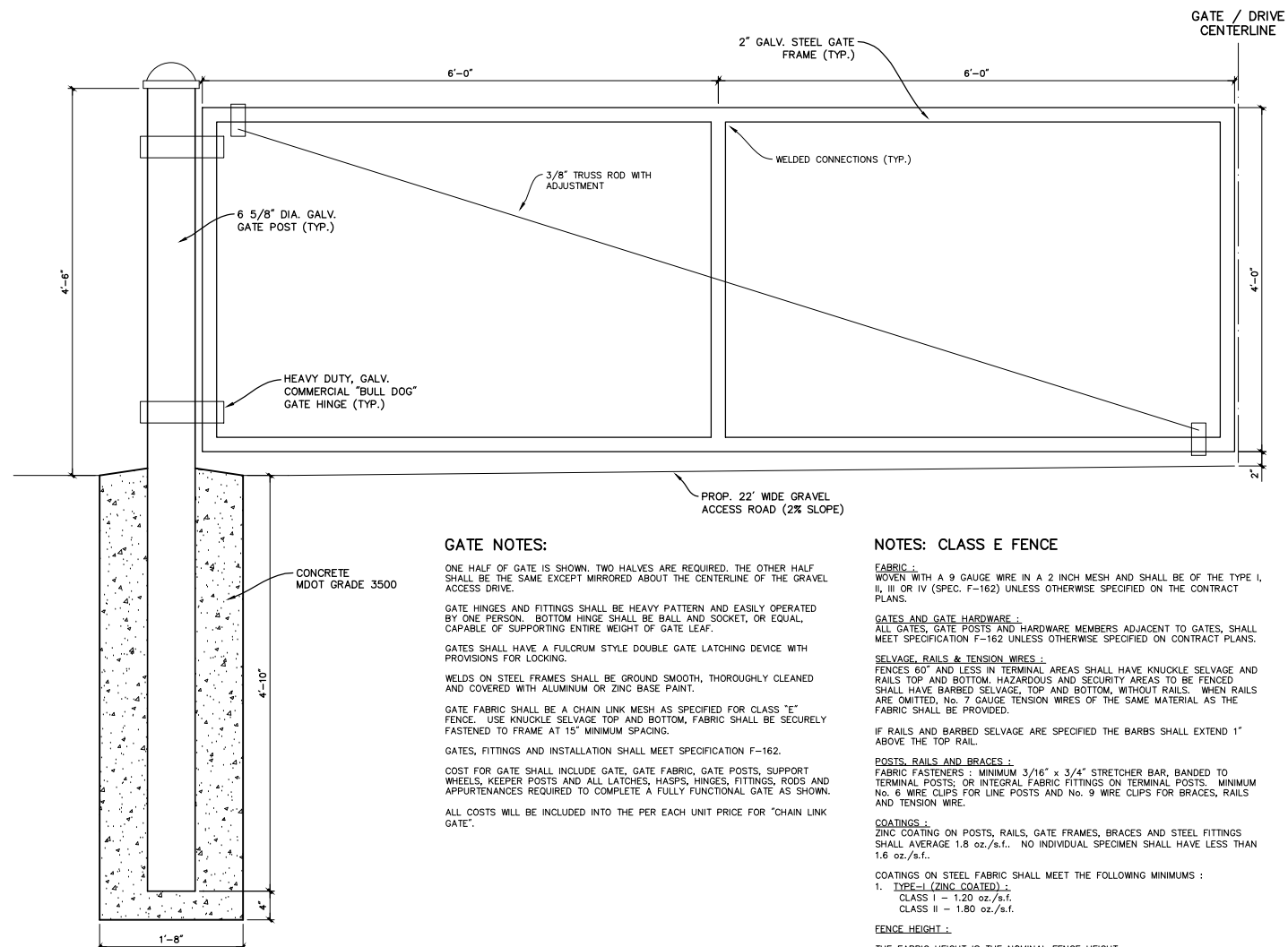
Prein&Newhof
 Engineers-Surveyors-Environmental-Laboratory

GERALD R. FORD INT'L AIRPORT AUTHORITY
 KENT COUNTY, MICHIGAN

VIEWING PARK EXPANSION
 SITE DETAILS

PROJECT NO. 2240980
 SHEET NO. 9 OF 12

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GATE NOTES:

ONE HALF OF GATE IS SHOWN. TWO HALVES ARE REQUIRED. THE OTHER HALF SHALL BE THE SAME EXCEPT MIRRORRED ABOUT THE CENTERLINE OF THE GRAVEL ACCESS DRIVE.

GATE HINGES AND FITTINGS SHALL BE HEAVY PATTERN AND EASILY OPERATED BY ONE PERSON. BOTTOM HINGE SHALL BE BALL AND SOCKET, OR EQUAL, CAPABLE OF SUPPORTING ENTIRE WEIGHT OF GATE LEAF.

GATES SHALL HAVE A FULLORUM STYLE DOUBLE GATE LATCHING DEVICE WITH PROVISIONS FOR LOCKING.

WELDS ON STEEL FRAMES SHALL BE GROUND SMOOTH, THOROUGHLY CLEANED AND COVERED WITH ALUMINUM OR ZINC BASE PAINT.

GATE FABRIC SHALL BE A CHAIN LINK MESH AS SPECIFIED FOR CLASS "E" FENCE. USE KNUCKLE SELVAGE TOP AND BOTTOM. FABRIC SHALL BE SECURELY FASTENED TO FRAME AT 15" MINIMUM SPACING.

GATES, FITTINGS AND INSTALLATION SHALL MEET SPECIFICATION F-162.

COST FOR GATE SHALL INCLUDE GATE, GATE FABRIC, GATE POSTS, SUPPORT WHEELS, KEEPER POSTS AND ALL LATCHES, HASPS, HINGES, FITTINGS, RODS AND APPURTENANCES REQUIRED TO COMPLETE A FULLY FUNCTIONAL GATE AS SHOWN.

ALL COSTS WILL BE INCLUDED INTO THE PER EACH UNIT PRICE FOR "CHAIN LINK GATE".

NOTES: CLASS E FENCE

FABRIC :
WOVEN WITH A 9 GAUGE WIRE IN A 2 INCH MESH AND SHALL BE OF THE TYPE I, II, III OR IV (SPEC. F-162) UNLESS OTHERWISE SPECIFIED ON THE CONTRACT PLANS.

GATES AND GATE HARDWARE :
ALL GATES, GATE POSTS AND HARDWARE MEMBERS ADJACENT TO GATES, SHALL MEET SPECIFICATION F-162 UNLESS OTHERWISE SPECIFIED ON CONTRACT PLANS.

SELVAGE, RAILS & TENSION WIRES :
FENCES 60' AND LESS IN TERMINAL AREAS SHALL HAVE KNUCKLE SELVAGE AND RAILS TOP AND BOTTOM. HAZARDOUS AND SECURITY AREAS TO BE FENCED SHALL HAVE BARBED SELVAGE, TOP AND BOTTOM, WITHOUT RAILS. WHEN RAILS ARE OMITTED, No. 7 GAUGE TENSION WIRES OF THE SAME MATERIAL AS THE FABRIC SHALL BE PROVIDED.

IF RAILS AND BARBED SELVAGE ARE SPECIFIED THE BARBS SHALL EXTEND 1" ABOVE THE TOP RAIL.

POSTS, RAILS AND BRACES :
FABRIC FASTENERS : MINIMUM 3/16" x 3/4" STRETCHER BAR, BANNED TO TERMINAL POSTS; OR INTEGRAL FABRIC FITTINGS ON TERMINAL POSTS. MINIMUM No. 6 WIRE CLIPS FOR LINE POSTS AND No. 9 WIRE CLIPS FOR BRACES, RAILS AND TENSION WIRE.

COATINGS :
ZINC COATING ON POSTS, RAILS, GATE FRAMES, BRACES AND STEEL FITTINGS SHALL AVERAGE 1.8 oz./s.f.. NO INDIVIDUAL SPECIMEN SHALL HAVE LESS THAN 1.6 oz./s.f..

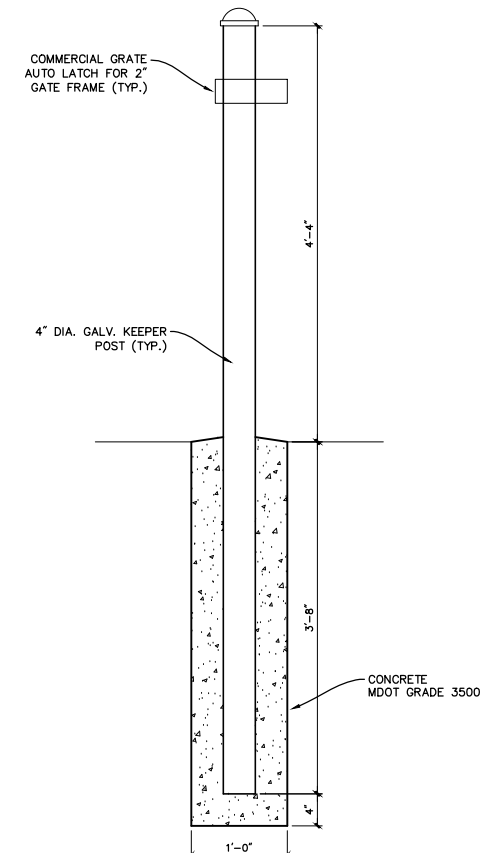
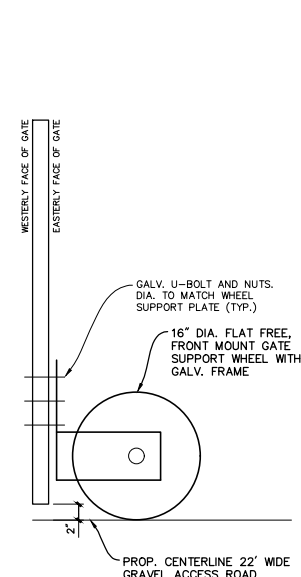
COATINGS ON STEEL FABRIC SHALL MEET THE FOLLOWING MINIMUMS :

- TYPE I (ZINC COATED) - CLASS I - 1.20 oz./s.f.
CLASS II - 1.80 oz./s.f.

FENCE HEIGHT :
THE FABRIC HEIGHT IS THE NOMINAL FENCE HEIGHT.

PROPOSED CHAIN LINK GATE DETAIL

SCALE : NONE



*ALL COST TO CONSTRUCT KEEPER POST SHALL BE INCLUDED INTO THE PER EACH ITEM FOR CHAIN LINK GATE

PROPOSED KEEPER POST DETAIL

SCALE : NONE

NO.	REVISIONS	BY	DATE	DRAWN STAFF

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GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN

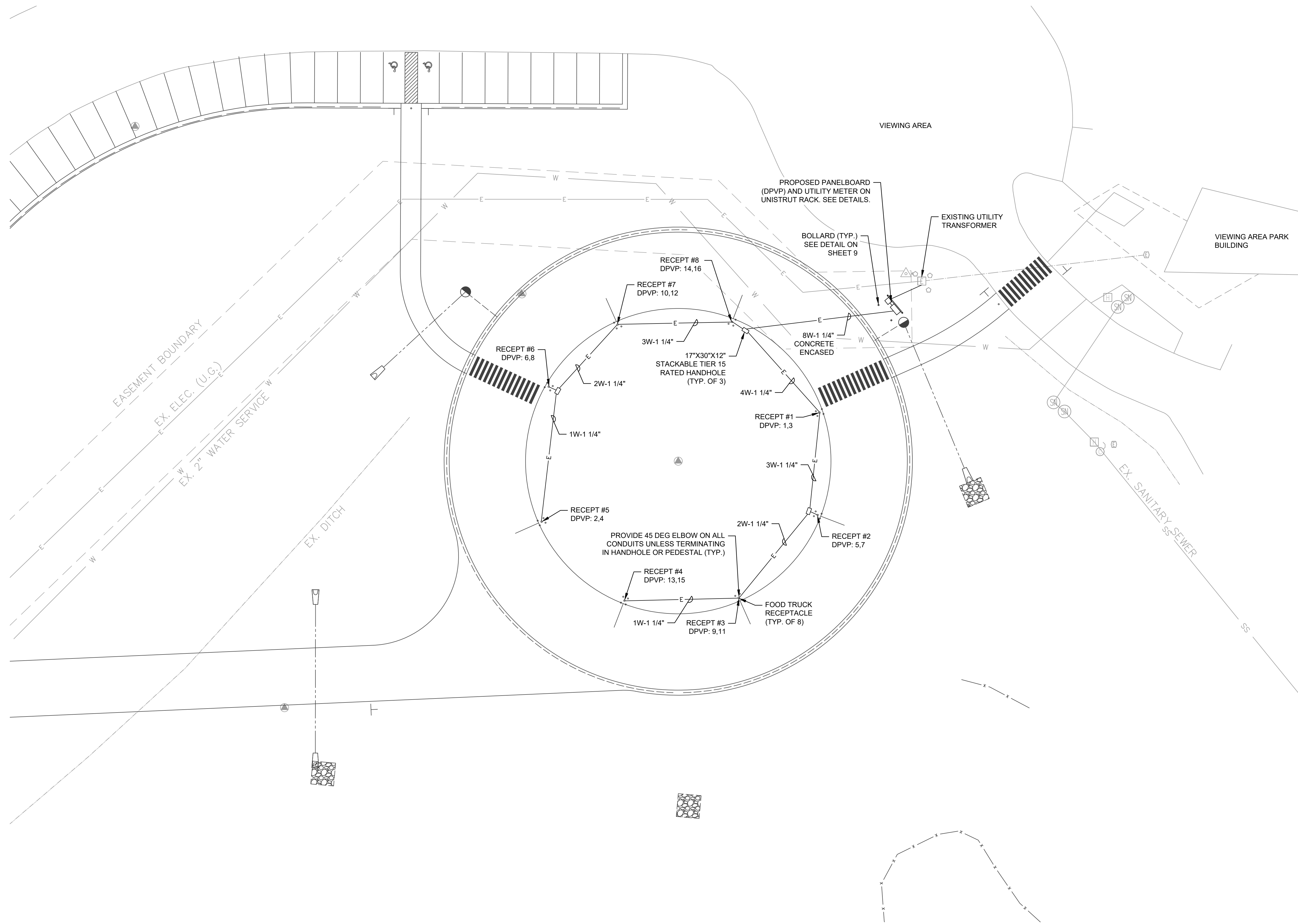
VIEWING PARK EXPANSION
GATE DETAILS

PROJECT NO.
2240980

SHEET NO.
10 OF 12

GENERAL NOTES

1. SEE SINGLE LINE DIAGRAM AND DETAILS ON SHEET 12 FOR FURTHER INFORMATION.
2. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 80.
3. ALL CONDUITS INSTALLED ABOVE GROUND SHALL BE GALVANIZED RIGID METAL CONDUIT.
4. EACH FOOD TRUCK RECEPTACLE SHALL HAVE A DEDICATED CIRCUIT WITH GROUND IN CONDUIT FROM PANEL DPVP.

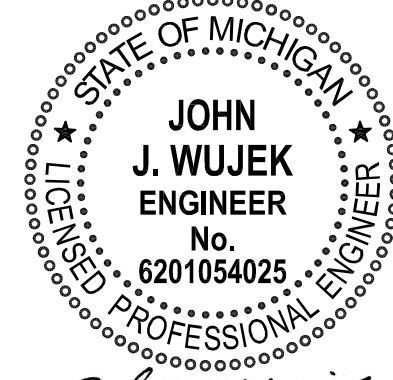


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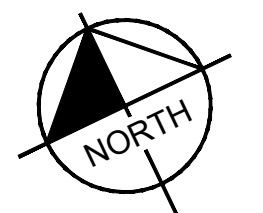


GERALD R. FORD INT'L AIRPORT AUTHORITY
KENT COUNTY, MICHIGAN
VIEWING PARK EXPANSION
ELECTRICAL SITE PLAN

PROJECT NO.
2240980
SHEET NO.
11 OF 12



John J. Wujek



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