

PORT OF CLEVELAND 2024-2025 MECHANICAL  
CAPACITY CONTAINMENT BERMS

ISSUED FOR BID

CLEVELAND-CUYAHOGA COUNTY PORT AUTHORITY

CITY OF CLEVELAND, CUYAHOGA COUNTY, OHIO



SHEET INDEX	
SHEET TITLE	SHEET NO.
TITLE SHEET	11.0
GENERAL NOTES	12.0
GENERAL NOTES AND ESTIMATED QUANTITIES	13.0
OVERALL SITE LAYOUT	14.0
EXISTING SITE CONDITIONS	14.1
FAA IMAGINARY SURFACES FOR OBSTRUCTION	15.0
CONTAINMENT BERM PLAN	16.0
CONTROL POINT PLAN	17.0
PROPOSED CDF 12 CROSS-SECTIONS	18.0
TYPICAL CONSTRUCTION DETAILS	19.0
TYPICAL POTENTIAL STORMWATER DETAILS	110.0

- SURVEY NOTES:**
- THE TOPOGRAPHIC SURVEY SHOWN WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC. ON NOVEMBER 16, 2022.
  - THE SURVEY DATUM IS NAD 1983 OHIO NORTH ZONE FEET AND NAVD88.
  - EXISTING SITE CONDITIONS MAY VARY FROM FIELD CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO RECENT SITE OPERATOR'S ACTIVITIES.

**SPMF PERMANENT CONTROL POINTS:**  
CDF-1: N-678440.996, E-2196004.554, ELEV-592.204, SET BY TGC ENGINEERING 7/2017

**VERDANTAS/HULL CONTROL POINTS:**  
CP-1: N-680120.828, E-2196636.689, ELEV-596.47, SET BY HULL 7/2020  
CP-2: N-680382.337, E-2197066.465, ELEV-593.60, SET BY HULL 7/2020  
CP-3: N-679684.528, E-2197532.189, ELEV-593.84, SET BY HULL 7/2020  
CP-4: N-679186.344, E-2197116.890, ELEV-593.90, SET BY HULL 7/2020

**GARCIA CONTROL POINTS:**  
GCP-92: N-67924.193, E-2194365.716, ELEV-584.530, SET BY GARCIA 11/2022  
GCP-93: N-679394.415, E-2195609.392, ELEV-584.659, SET BY GARCIA 11/2022  
GCP-95: N-679903.325, E-2196256.599, ELEV-585.069, SET BY GARCIA 11/2022  
GCP-97: N-680517.531, E-2197083.234, ELEV-582.140, SET BY GARCIA 11/2022  
GCP-98: N-679532.877, E-2197839.165, ELEV-581.561, SET BY GARCIA 11/2022  
GCP-99: N-678790.733, E-2196891.638, ELEV-582.720, SET BY GARCIA 11/2022  
GCP-100: N-679522.380, E-2197838.669, ELEV-583.579, SET BY GARCIA 11/2022

**OWNER/OPERATOR:**  
CLEVELAND-CUYAHOGA COUNTY PORT AUTHORITY  
1100 WEST NINTH ST., SUITE 300  
CLEVELAND, OHIO 44103  
(216) 241-8004

**ENGINEERING PLANS PREPARED BY:**  
VERDANTAS LLC  
219 S. ERIE STREET  
TOLEDO, OHIO 43604  
(419) 385-0023

**BENEFICIAL USE SITE OPERATOR:**  
KURTZ BROS., INC.  
6415 GRANGER ROAD  
INDEPENDENCE, OHIO 44131  
(216) 986-7019

PRE-CONSTRUCTION NOTICE

THESE PLANS HAVE BEEN PREPARED USING THE PRESENTLY AVAILABLE DATA AT THE TIME OF PREPARATION. FIELD CONDITIONS MAY BE ENCOUNTERED DURING CONSTRUCTION THAT COULD NOT BE ANTICIPATED, AND AS SUCH, THESE PLANS SHOULD BE USED ONLY AS A CONSTRUCTION CONTROL REFERENCE, (I.E., NOT A PRECISE CONSTRUCTION DOCUMENT). MODIFICATIONS TO THE DESIGN AS SHOWN MAY BE REQUIRED BASED ON FIELD CONDITIONS AT THE TIME OF CONSTRUCTION. IN ANY EVENT, THE ENGINEERING OBJECTIVES OF THE DESIGN SHALL BE MET. IF MODIFICATIONS TO THE PLAN ARE NEEDED DUE TO SITE CONDITIONS ENCOUNTERED, THE OWNER AND ENGINEER SHALL BE CONSULTED PRIOR TO IMPLEMENTATION OF ANY CHANGES.

*Nick A. [Signature]*  
DIRECTOR, PLANNING & CAPITAL DEVELOPMENT  
CLEVELAND-CUYAHOGA COUNTY PORT AUTHORITY

3/20/2023  
DATE



DESIGNED BY:	GC	DRAWN BY:	GC	CHECKED BY:	DJP/CLF	PROJECT NO.	16205
CHKD BY:		DATE:					
REVISION							
No.							

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO  
**PORT OF CLEVELAND 2024-2025  
MECHANICAL CAPACITY  
CONTAINMENT BERMS**  
TITLE SHEET

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	11.0



ACCESS TO THE AIRPORT PROPERTY AND THE CONFINED DISPOSAL FACILITIES (CDFs) MAY BE PROHIBITED DURING CERTAIN EVENTS. THESE EVENTS MAY INCLUDE RESTRICTIONS IMPOSED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), TIME LEADING UP TO AND IMMEDIATELY FOLLOWING THE LABOR DAY AIR SHOW, AND WHEN DISTINGUISHED GUESTS ARRIVE AND DEPART BURKE LAKEFRONT AIRPORT (BKL). AIRPORT OPERATIONS WILL WAIVE NO RIGHTS IN PROHIBITING ACCESS IF EVENTS OCCUR DURING THE OPERATIONS WHICH WILL BE ENFORCED BY THE CLEVELAND-CUYAHOGA COUNTY PORT AUTHORITY (CCCPA). THE OWNER IS NOT RESPONSIBLE FOR LOSS TIME DUE TO THESE RESTRICTIONS.

BEFORE THE HOURS OF 7:00 A.M. AND 3:00 P.M. MONDAY-FRIDAY LOCAL TIME, THE CONTRACTOR WILL HAVE FULL USE AND CONTROL OF THE WORK AREAS SHOWN ON THE CONTRACT DRAWINGS; HOWEVER, THE CONTRACTOR IS EXPECTED TO BE AS RESPONSIVE AS POSSIBLE TO ANY SPECIAL REQUESTS OF THE AIRPORT DURING THIS PERIOD, PRIOR TO COMMENCING WORK A COPY OF THE PROPOSED BASELINE SCHEDULE, A LIST OF PERSONNEL ENTERING THE SITE THAT WILL REQUIRE DRIVER ACCESS TRAINING, A SIGNED COPY OF THE SAFETY PLAN COMPLIANCE DOCUMENT, AND INSURANCE CREDENTIALS MEETING THE MINIMUM REQUIREMENTS ESTABLISHED BY THE CITY OF CLEVELAND SHALL BE PROVIDED TO THE AIRPORT FROM THE CONTRACTOR VIA THE CCOPA. PROVIDING OF SITE ACCESS CONTROL AND SECURITY ESCORTS BEYOND HOURS STATED ABOVE WILL BE BACKCHARGED TO CONTRACTOR AT RATE OF \$26.00/HOUR.

THE SELECTED CONTRACTOR SHALL COORDINATE WITH THE CCCPA AND BKL VIA THE PORT AUTHORITY ON MAINTENANCE OF TRAFFIC, SECURITY, ACCESS, AND MOVEMENT ON THE AIRPORT GROUNDS. ACCESS SHALL BE THROUGH GATE 18 VIA NORTH MARGINAL ROAD, ADJACENT TO AND EAST OF FORMER BENJAMIN O. DAVIS AVIATION HIGH SCHOOL. ACCESS SHALL BE BY EAST MEMORIAL SHOREWAY, EAST 55TH STREET AND NORTH MARGINAL ROAD TO EXISTING NORTH MARGINAL ROAD, LOCATED WEST OF THE MARINA AND MUNICIPAL LIGHT. ALL VEHICLES TRAVELING OUT AND ONTO THE CDFS MUST BE IN CLEARLY DESIGNATED COMPANY VEHICLES. PERSONAL VEHICLES SHALL BE PARKED NEAR THE ENTRANCE GATE AND WILL NOT BE PERMITTED OUT ONTO THE CDFS. CONSTRUCTION VEHICLES SHALL NOT USE NORTH MARGINAL ROAD WEST OF THE SITE ENTRANCE GATE TO EAST NINTH STREET. ACCESS TO THE SITE IS RESTRICTED FROM PUBLIC USE BY SECURITY GATES. MANDATORY TRAINING PROVIDED AND SCHEDULED THROUGH BKL WILL BE REQUIRED PRIOR TO OBTAINING UNSCORTED ACCESS THROUGH GATE 18. THE CCCPA STAFFS AND MAN'S GATE 18 MONDAY THROUGH FRIDAY 7 AM TO 3 PM AND WILL MAKE AVAILABLE ONE ESCORT OFFICER DURING THE CONSTRUCTION PROJECT TO ESCORT GUESTS AND DELIVERY DRIVERS WHO NEED ACCESS TO THE CDFS. WORK HOURS OUTSIDE OF THIS TIME MAY BE GRANTED WITH SPECIAL PERMISSION FROM THE PORT AUTHORITY AND WOULD BE LIMITED TO TRAINED INDIVIDUALS, NO UNTRAINED GUESTS OR DELIVERIES WOULD BE PERMITTED ACCESS THROUGH GATE 18 OUTSIDE OF THE POSTED HOURS FROM 7 AM TO 3 PM MONDAY THROUGH FRIDAY. IT SHOULD BE NOTED THAT THIS ESCORT OFFICER WILL ALSO BE PROVIDING ESCORT SERVICES TO OUR OTHER CONTRACTORS ON SITE INCLUDING OUR SITE OPERATOR KURTZ BROTHERS. TRANSIT WILL BE LIMITED TO THE ACCESS ROAD AND THE ROADWAY NETWORK ON THE CDFS. FOR MORE INFORMATION SPECIFIC TO ACCESS REQUIREMENTS AND CONSTRUCTION PHASING AS THEY RELATE TO THE AIRPORT, PLEASE REVIEW THE CONSTRUCTION SAFETY PHASING PLAN PREPARED FOR THIS PROJECT WHICH MUST BE ADHERED TO BY THE CONTRACT.

(A) WHEN NOT IN USE, ALL BOOMS AND SIMILAR UNUSUALLY HIGH EQUIPMENT SHALL BE LOWERED TO BELOW THE EQUIPMENT'S FIXED HIGHEST POINT. TIPS OF BOOMS SHALL ALSO BE MARKED BY A RED LIGHT CONTINUOUSLY LT DAY AND NIGHT, AND A HIGH VISIBILITY, 4 FT X 4 FT WHITE AND ORANGE CHECKERED FLAG. THE WHITE AND ORANGE SQUARES SHALL BE 3 INCHES SQUARED. DAY MARKING FLAG REQUIREMENTS ALSO APPLY TO EARTHWORK EQUIPMENT ON SITE. CONTRACTOR SHALL REVIEW THE DEVELOPED CONSTRUCTION SAFETY PHASING PLAN WHICH PROVIDES ADDITIONAL INFORMATION RELATED TO MARKING AND WORK HEIGHT RESTRICTIONS. THE TOP 15 FEET OF BOOMS SHALL BE PAINTED WITH FLUORESCENT ORANGE FEDERAL STANDARD 595A, COLOR 38903 OR EQUAL.

(B) THE TOP 15 FEET OF CRANE BOOMS SHALL BE PAINTED WITH FLUORESCENT ORANGE FEDERAL STANDARD 595A, COLOR 38903 OR EQUAL.

(C) ALL CONTRACTOR WORK VEHICLES SHALL BE IDENTIFIED BY COMPANY NAME. NO PERSONAL VEHICLES PERMITTED OUT ON THE CDPS.

(D) THE CONTRACTOR SHALL COMPLY WITH TITLE 14 CODE OF FEDERAL REGULATIONS (CFR 14) PART 77.9 - CONSTRUCTION OR ALTERATION REQUIRING NOTICE.

THE DRAWINGS INDICATE ELEVATIONS AND THE REFERENCE DRAWINGS INDICATE THE LATEST ELEVATIONS AT THE PROJECT SITE. A NOTIFICATION OF AT LEAST FIVE (5) CALENDAR DAYS SHALL BE GIVEN TO THE CCCPA OR OWNER AND BKL PRIOR TO BRINGING ANY EQUIPMENT OR MATERIAL TO THE WORK SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES THAT MAY BE SUFFERED DUE TO THEIR OPERATIONS. NO MATERIAL OF ANY TYPE OR COMPOSITION FROM ANY SOURCE OUTSIDE OF THE CDF MAY BE IMPORTED, PLACED OR DEPOSITED WITHIN THE CDF WITHOUT PRIOR APPROVAL FROM THE CCCPA. DEBRIS THAT IS ENCOUNTERED WITHIN THE CDF BORROW EXCAVATION LIMITS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.

THE PHYSICAL CONDITIONS SHOWN ON THE DRAWINGS ARE INDICATIVE OF THOSE THAT PREVAILED AT THE TIME OF THE SITE INVESTIGATIONS AND MAY BE DIFFERENT THAN THOSE AT THE TIME OF EXCAVATION. THE SOILS AT THE CDF CONSIST OF SEDIMENTS FROM MAINTENANCE DREDGING OF CLEVELAND HARBOR AND THE CUYAHOGA RIVER INCLUDING THE FEDERAL CHANNEL MAINTENANCE DREDGING AND LOCAL PRIVATE DREDGING. SATURATED SOIL CONDITIONS AND PERCHED SATURATED ZONES SHOULD BE EXPECTED THROUGHOUT THE FACILITY. AVAILABLE SUBSURFACE INFORMATION MAY BE PROVIDED UPON REQUEST. HOWEVER, THE AVAILABLE SUBSURFACE INVESTIGATION DATA IS LIMITED AND SHOULD NOT BE INTERPRETED AS A COMPLETE, CURRENT AND COMPREHENSIVE SOIL CHARACTERIZATION.

GENERAL LOCATIONS OF APPLICABLE EXISTING UTILITIES, VEGETATION, STRUCTURES, EQUIPMENT AND IMPROVEMENTS, BASED UPON LATEST INFORMATION AVAILABLE TO THE CCPA, HAVE BEEN SHOWN ON THE DRAWINGS. HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE EXACT HORIZONTAL AND VERTICAL CONTROL AND CONFIRM LOCATION AND SIZE OF ALL EXISTING UTILITY LINES, BOTH PUBLIC AND PRIVATE, WHICH ARE LOCATED WITHIN THE REQUIRED WORK AREA. THE CONTRACTOR SHALL CONFER WITH THE CCPA OF THE CROSSINGS REGARDING THEIR EXACT LOCATIONS AND ELEVATIONS AND WILL BE HELD RESPONSIBLE FOR ANY DAMAGES CAUSED BY THE EXCAVATION OPERATIONS. ANY UTILITY LINES THAT ARE NOT FOUND BY THE CONTRACTOR, BUT ARE KNOWN TO EXIST AT THE PROJECT SITE, SHALL BE REPORTED TO THE CCPA IMMEDIATELY. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITY LINE, VEGETATION, STRUCTURE, EQUIPMENT OR IMPROVEMENT, A REPORT THEREOF SHALL BE MADE IMMEDIATELY TO THE CCPA. IN ANY EVENT, EXISTING UTILITY LINES, VEGETATION, STRUCTURES, EQUIPMENT, OR IMPROVEMENTS SHALL BE PROTECTED FROM DAMAGE, AND IF DAMAGED, SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION ENTRANCE AT GATE 18, WHICH INCLUDES THE KEEPING AND MAINTAINING OF A CLEAN PUBLIC RIGHT OF WAY, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AS SPECIFIED HEREIN. THE CONTRACTOR SHALL MAINTAIN SUCH TRAFFIC AT ALL TIMES WITH THE LEAST INTERFERENCE CONSISTENT WITH THE EXECUTION OF THE WORK AND SHOULD BE MINDFUL OF THE BUSINESS AND RESIDENTS ALONG NORTH MARGINAL ROAD AND PAY SPECIFIC ATTENTION TO SPEED.

ACCESS TO AND FROM THE CDFS SHALL BE PRESERVED AND MAINTAINED AT ALL TIMES TO ALLOW FOR SITE OPERATIONS TO CONTINUE ON THE SURFACES OF THE CDFS AND TO PRESERVE EMERGENCY ACCESS FOR THE AIRPORT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK, THE SAFETY OF AIRPORT, AND THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING (E.G., SNOW REMOVAL, SWEEPING, WATERING, GENERAL MAINTENANCE AS NEEDED) ALL ACCESS ROADS USED TO AND FROM THE CONSTRUCTION SITE LOCATION. MAINTENANCE OF TRAFFIC IS AN ITEM THAT DOES NOT HAVE AN INDIVIDUAL PAY ITEM AND SHOULD BE INCORPORATED INTO THE GENERAL CONDITIONS OF THE CONTRACT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THE DEVELOPMENT AND THE EXECUTION OF THE MAINTENANCE OF TRAFFIC PLAN ON THIS PROJECT.

THE RESPONSIBILITY SHALL BE UPON THE CONTRACTOR TO PROVIDE AND MAINTAIN AT THEIR OWN EXPENSE, ADEQUATE UTILITIES FOR THEIR USE FOR CONSTRUCTION AND DOMESTIC CONSUMPTION, AND TO INSTALL AND MAINTAIN NECESSARY CONNECTIONS AND LINES FOR SAME, BUT ONLY AT SUCH LOCATIONS AND IN SUCH MANNER AS MAY BE APPROVED BY THE CCCPA. BEFORE FINAL ACCEPTANCE, TEMPORARY CONNECTIONS AND LINES INSTALLED BY THE CONTRACTOR SHALL BE REMOVED IN A MANNER SATISFACTORY TO CCCPA.

EQUIPMENT STORAGE AND STAGING AREAS SHALL BE CONSISTENT WITH THE LIMITS AND LOCATIONS SHOWN IN THE CONSTRUCTION SAFETY PHASING PLAN. ANY MATERIAL NEEDED OR ACTIONS TAKEN TO PREPARE AND OR RESTORE ANY STAGING AREAS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAYMENT WILL BE MADE FOR THESE ACTIVITIES.

THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS (INCLUDING APPROVAL OF ROUTES TO BE USED AND PERMITS REQUIRED) WITH ALL LOCAL GOVERNMENT OFFICIALS OR CCPA FOR USE OF PUBLIC AND PRIVATE ROADS AND STREETS FOR THE OPERATIONS, AND SHALL CONFORM TO ALL REQUIREMENTS REGARDING SUCH USE. ALL COSTS IN CONNECTION THEREWITH, INCLUDING ANY REPAIRS OR PERMITS, SHALL BE BORNE BY THE CONTRACTOR.

THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH AN APPROVED PLAN OF OPERATIONS SUBMITTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT. THE PLAN SHALL INCLUDE A LIST OF ALL PERSONNEL, EQUIPMENT THAT WILL BE ON SITE, AND A CONTACT LIST. WORK SCHEDULES SHALL BE INCLUDED IN THE PLAN AND THE PORT AUTHORITY WILL REQUEST THE CONTRACTOR EXECUTE THE SAFETY PLAN COMPLIANCE DOCUMENT ATTACHED AS APPENDIX TO THE BACK OF THE CONSTRUCTION SAFETY PHASING PLAN. THE CCPA SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF CHANGES IN WORK SCHEDULES. THE PLAN SHALL PROVIDE FOR THE COORDINATION OF CONSTRUCTION ACTIVITIES INDICATED IN THE SPECIFICATIONS AND SHOWN ON THE CONTRACT DRAWINGS. PLEASE SEE SPECIFIC REQUIREMENTS RELATED TO MAINTENANCE OF TRAFFIC.

CONTRACTOR OPERATIONS IN THE VICINITY OF THE AIRPORT SHALL COMPLY WITH ALL APPLICABLE FAA NAVIGATIONAL AIRSPACE PENETRATION PROVISIONS AND REGULATIONS IN ADDITION TO COMPLYING WITH THE CONSTRUCTION SAFETY PHASING PLAN DEVELOPED FOR THE PROJECT.

OTHER DREDGING ACTIVITIES, SITE OPERATIONS, AND CONSTRUCTION PROJECTS MAY BE PLANNED IN THE VICINITY OF WORK UNDER THIS CONTRACT. THE CONTRACTOR'S ACTIVITIES SHALL NOT INTERFERE WITH ANY OTHER CONTRACTOR'S WORK BEING PERFORMED INCLUDING THAT OF THE SITE OPERATOR OR THE USAGE DREDGING CONTRACTOR. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH ALL OTHER CONTRACTORS AND THEIR SUBCONTRACTORS, IF ANY, AND SHALL SHARE THE AVAILABLE WORK AREAS, INCLUDING HAUL ROADS, IN SUCH A MANNER AS TO MINIMIZE INTERFERENCE AND ENSURE AN ORDERLY COMPLETION OF ALL THE WORK. THE CONTRACTOR SHALL ALSO COORDINATE ALL THE ACTIVITIES WITH THE CCCPA WHO WILL MAKE ALL FINAL DECISIONS WITH REGARDS TO ANY DISPUTES OVER WORK AND ACCESS. AT THE TIME OF THIS SOLICITATION THERE ARE THREE (3) KNOWN ACTIVITIES:

1. DREDGING OF CLEVELAND HARBOR AND THE CUYAHOGA RIVER WILL BE PERFORMED. DREDGING IS SCHEDULED IN TWO (2) TIME FRAMES. THE FIRST IS TENTATIVELY SCHEDULED TO BEGIN ON OR ABOUT THE 1ST OF MAY AND EXTEND POSSIBLY INTO JULY. DREDGED MATERIAL FROM THIS TIME FRAME WILL BE DISPOSED OF IN CDF 9, 12 AND CDF10B. THE SECOND IS TENTATIVELY SCHEDULED TO BEGIN ON OR ABOUT OCTOBER 1ST AND EXTEND THROUGH NOVEMBER 30TH.
2. USDA - THE USDA WILDLIFE SERVICE (WS) CONDUCTS AN INTEGRATED WILDLIFE DAMAGE MANAGEMENT PROGRAM THROUGHOUT THE CDFS (INCLUDING CDF 9, 10B, AND 12). THE PROGRAM IS IMPLEMENTED TO REDUCE WILDLIFE HAZARDS TO AIRCRAFT AT THE ADJACENT BURKE LAKEFRONT AIRPORT. WS UTILIZES PYROTECHNICS, TRAPPING, LETHAL MEASURES AND OTHER TECHNIQUES TO HARASS WILDLIFE AND DISCOURAGE WILDLIFE USE OF THE CDFS. WS PERSONNEL MAY TRAVERSE THE CDFS AND WILL DEPLOY EQUIPMENT IN THE GENERAL CDF AREA. NO ACTIVITIES ARE ANTICIPATED WITHIN THE SPECIFIC EXCAVATION AREA, THOUGH THE CONTRACTOR SHOULD ANTICIPATE OCCASIONAL FOOT AND VEHICLE PATROLS. COORDINATION WITH WS SHALL BE CONDUCTED BY THE CONTRACTOR TO MINIMIZE IMPACTS TO WS ACTIVITIES AND CONTRACT WORK. THE POINT OF CONTACT FOR THIS WORK IS RANDY OUTWARD, USDA-APHIS-WILDLIFE SERVICES, (216) 664-6897.
3. CDF SITE OPERATIONS - THE CCCPA CURRENTLY HAS A CONTRACT IN PLACE WITH A SITE OPERATOR (KURTZ BROTHERS) WITH HEAVY EQUIPMENT AT THE CDF TO HARVEST MATERIAL. THE WORK REQUIRED BY THIS CONTRACT AND THESE PLANS GENERALLY HAS A PRIORITY OVER SITE OPERATIONS WORK. THE CCCPA WILL MAKE ALL FINAL DECISIONS WITH REGARDS TO ANY DISPUTES OVER WORK SCHEDULING IF CONFLICTS ARISE.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ADDRESS ANY DAMAGES ANY PART OF THE PERMANENT WORK DETAILED IN THE CONTRACT DRAWINGS. HOWEVER, IF, IN THE JUDGMENT OF CCOPA, ANY PART OF THE PERMANENT WORK PERFORMED BY THE CONTRACTOR IS DAMAGED BY FLOOD OR EARTHQUAKE, WHICH DAMAGE IS NOT DUE TO THE FAILURE OF THE CONTRACTOR TO TAKE REASONABLE PRECAUTIONS OR TO EXERCISE SOUND ENGINEERING AND CONSTRUCTION PRACTICES IN THE CONDUCT OF THE WORK, THE CONTRACTOR WILL MAKE THE REPAIRS AS ORDERED BY CCOPA AND FULL COMPENSATION FOR SUCH REPAIRS WILL BE MADE AT THE APPLICABLE CONTRACT UNIT OR LUMP SUM PRICES AS FIXED AND ESTABLISHED IN THE CONTRACT. IF, IN THE OPINION OF THE CCOPA, THERE ARE NO CONTRACT UNIT OR LUMP SUM PRICES APPLICABLE TO ANY PART OF SUCH WORK, AN EQUITABLE ADJUSTMENT PURSUANT TO THE CONTACT CLAUSE ENTITLED "CHANGES" OF THE CONTRACT, WILL BE MADE AS FULL COMPENSATION FOR THE REPAIRS OF THE PART OF THE PERMANENT WORK FOR WHICH THERE ARE NO APPLICABLE CONTRACT UNIT OR LUMP SUM PRICES. EXCEPT AS HEREIN PROVIDED DAMAGE TO ALL WORK (INCLUDING TEMPORARY CONSTRUCTION, UTILITIES, MATERIALS, EQUIPMENT AND PLANT) SHALL BE REPAIRED TO THE SATISFACTION OF THE CCOPA AT THE CONTRACTOR'S EXPENSE REGARDLESS OF THE CAUSE OF SUCH DAMAGE.

THESE PLANS HAVE BEEN PREPARED USING THE MOST ACCURATE INFORMATION AND DATA AVAILABLE AT THE TIME OF PREPARATION. FIELD CONDITIONS MAY BE ENCOUNTERED DURING CONSTRUCTION WHICH VARY FROM THOSE DEPICTED HEREIN. CONTRACTOR SHALL NOTE THAT THE SITE IS DYNAMIC, AND SETTLEMENT IS COMMONLY EXPERIENCED ON SITE AS RESULT OF DREDGED SEDIMENT CONSOLIDATION WITHIN THE CDF. SETTLEMENT AND/OR TOPOGRAPHIC CHANGES THAT HAVE OCCURRED SINCE THE SURVEY WAS PERFORMED SHALL NOT BE GROUNDS FOR A CLAIM. PRIOR TO BIDDING THE PROJECT THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE CONDITIONS AND ELEVATIONS PRESENT ON SITE. CONTRACTORS SHALL ALSO ANTICIPATE THAT SETTLEMENT MAY OCCUR DURING CONSTRUCTION FROM THE TIME WORK IS PERFORMED AND WHEN AS-BUILT CONDITION INFORMATION IS COLLECTED. THE ENGINEERING OBJECTIVES OF THE DESIGN SHALL BE MET. IF FIELD CONDITIONS ARE ENCOUNTERED PRIOR TO CONSTRUCTION OR DURING CONSTRUCTION THAT DIFFER SIGNIFICANTLY FROM THE CONDITIONS SHOWN ON THE PLANS, THE CONTRACTOR MUST STOP WORK AND NOTIFY THE COCPA IMMEDIATELY. ANY MODIFICATIONS TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY OWNER, REVIEW AGENCIES, AND/OR ENGINEER, AS NEEDED.

1. VERIFY THAT EXISTING PROPERTY CONDITIONS AND SUBSTRATE SURFACES ARE ACCEPTABLE FOR SUBSEQUENT WORK. BEGINNING NEW WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.
2. VERIFY THAT EXISTING SUBSTRATE IS CAPABLE OF STRUCTURAL SUPPORT OR ATTACHMENT OF NEW WORK BEING APPLIED OR ATTACHED.
3. EXAMINE AND VERIFY SPECIFIC CONDITIONS DESCRIBED IN INDIVIDUAL SPECIFICATION SECTIONS.
4. VERIFY THAT UTILITY SERVICES ARE AVAILABLE, OF THE CORRECT CHARACTERISTICS, AND IN THE CORRECT LOCATIONS.

1. IN ORDER OF PRECEDENCE, ALL MATERIAL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ANY PROJECT ADDENDA, CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, AND THE CURRENT EDITION OF THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT). IN ADDITION, ALL WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE STANDARDS AND REGULATIONS. IF THERE SHOULD ARISE ANY CONFLICT BETWEEN ANY NOTES AND/OR DETAILS ON THE CONTRACT DRAWINGS OR SPECIFICATIONS FOR THE PROJECT, THIS NOTE WILL SUPERCEDE AND GOVERN UNLESS THERE IS A WRITTEN SIGNED DOCUMENT FROM THE ENGINEER STATING OTHERWISE.

2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA). THE CONTRACTOR SHALL ALWAYS EXERCISE PRECAUTION FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146 AND EXCAVATION REQUIREMENT PER CFR 1926.650 SUBPART P.
3. ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SAME SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

- THE PRICE(S) QUOTED SHALL INCLUDE ALL ITEMS OF LABOR, MATERIALS, TOOLS, EQUIPMENT, INSURANCE, AND OTHER COSTS NECESSARY TO FULLY COMPLETE THE WORK PURSUANT TO THE CONTRACT DOCUMENTS. IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO PROVIDE AND REQUIRE A COMPLETED WORK PRODUCT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM SUCH CONTRACT DOCUMENTS WHICH ARE CLEARLY NECESSARY FOR THE COMPLETION OF SUCH WORK AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK ALTHOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE CONTRACT DOCUMENTS.
5. THE CONTRACTOR SHALL CONFINE ACTIVITIES TO THE PROJECT SITE, EXISTING RIGHTS-OF-WAY, TEMPORARY EASEMENTS AND PERMANENT EASEMENTS, AND SHALL NOT ENTER UPON OTHER PROPERTIES OR AREAS OF THE AIRPORT WITHOUT WRITTEN PERMISSION OF THE CCCPA OR THE CITY OF CLEVELAND DEPARTMENT OF PORT CONTROL.
6. DUST CONTROL (WATER ONLY), ODOT 616, SHALL BE USED THROUGHOUT THE LIMITS OF THE PROJECT, INCLUDING AREAS OF EXCAVATION CONSTRUCTION, TRAFFIC MAINTENANCE, AND OTHER AREAS OF THE CONTRACTOR'S OPERATIONS WHERE DUST NUISANCE ORIGINATES. THE CONTROL AND MITIGATION OF DUST WHILE PERFORMING WORK ON SITE SHALL BE EXECUTED AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE TO WORK WITH OUR SITE OPERATOR TO SHARE IN THIS RESPONSIBILITY AS OUR SITE OPERATOR'S OPERATIONS ALSO GENERATE DUST. THE PORT AUTHORITY HAS AN ACTIVE AIR PERMIT WITH THE CITY OF CLEVELAND'S DEPARTMENT OF AIR QUALITY FOR THIS FACILITY AND THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHOULD HAVE BEST MANAGEMENT PRACTICES IMPLEMENTED AND INTEGRATED INTO THEIR DAY-TO-DAY OPERATIONS TO ENSURE THAT THE SITE REMAINS IN COMPLIANCE WITH THIS PERMIT. THE PERMIT IS AVAILABLE UPON REQUEST FROM THE CONTRACTOR.
7. THE CONTRACTOR SHALL REFERENCE ALL IRON PINS AND MONUMENTS BEFORE EXCAVATING AT OR NEAR SAID IRON PINS OR MONUMENTS. IF ANY PINS OR MONUMENTS ARE DESTROYED OR DAMAGED BY THE CONTRACTOR, THEY SHALL BE ACCURATELY REPLACED BY A REGISTERED SURVEYOR IN THE STATE OF OHIO AT THE COMPLETION OF THE PROJECT, AT CONTRACTOR'S COST.
8. HORIZONTAL AND VERTICAL CONTROL SHALL BE ESTABLISHED BY THE CONTRACTOR FOR THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED SURVEYS TO COMPLETE THE PROJECT INCLUDING REESTABLISHMENT OF CONTROL POINTS, PROJECT LAYOUT, AND STAKING OF EASEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE TO ABIDE BY AND COOPERATE WITH ESTABLISHED BKL/CCCPA SITE SECURITY REQUIREMENTS DURING THE PROJECT, INCLUDING WHATEVER IS NECESSARY TO ENSURE PROTECTION OF SITE ACCESS, THE EQUIPMENT, MATERIALS, AND WORK. FOR MORE INFORMATION REGARDING THIS PLEASE REFER TO THE CONSTRUCTION SAFETY PHASING PLAN DEVELOPED SPECIFICALLY FOR THIS PROJECT.
10. THE TRACKING OR SPILLAGE OF MUD, DIRT, OR DEBRIS UPON STATE, COUNTY, OR CITY STREETS IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. CONTRACTOR WILL BE REQUIRED TO SWEEP AND CLEAN NORTH MARGINAL ROAD AS NECESSARY TO ENSURE THE PUBLIC RIGHT OF WAY REMAINS CLEAN. CONTRACTOR SHALL WORK WITH OUR SITE OPERATOR TO DELINEATE RESPONSIBILITY AND ROLE.
11. ALL WORK SHALL BE CONSTRUCTED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. ANY MATERIAL GENERATED WHEN SCRAPING THE ROADS OR MAKING NECESSARY UNDERCUTS TO PREPARE A SURFACE FOR CONSTRUCTION SHALL BE DISPOSED OF IN THE MECHANICAL BASINS ON CDF 12 AND LEVELED/GRADED OUT.
12. IT IS CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL THE DRAWINGS AND SPECIFICATIONS PRIOR TO BEGINNING OF THE WORK AND INFORM THE CCCPA IMMEDIATELY OF ANY DISCREPANCIES/ERRORS THAT ARE FOUND.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, PROCEDURES, AND TECHNIQUES.
14. RECLAIMED ASPHALT AND SLAG SHALL NOT BE BROUGHT ON-SITE.
15. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND IS RESPONSIBLE FOR THE SCHEDULING OF ALL INSPECTIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PERFORMING QUALITY CONTROL COMPACTION TESTING TO SUPPORT THE SCOPE OF WORK AND THE PORT AUTHORITY MAY ELECT TO PERFORM ADDITIONAL QUALITY ASSURANCE TESTING IN ADDITION TO THE QUALITY CONTROL TESTING PERFORMED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING QUALITY CONTROL COMPACTION TESTING TO THE PORT AUTHORITY.
16. ALL EXCAVATIONS SHALL COMPLY WITH OSHA CONSTRUCTION INDUSTRY STANDARDS REGARDING EXCAVATIONS, TRENCHING, SHORING AND BRACING. ALL EXCAVATIONS SHALL BE COMPLETED AND MAINTAINED IN A SAFE AND STABLE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
17. THE CONTRACTOR SHALL CONTINUALLY CONTROL ALL GROUNDWATER AND/OR TRAPPED SURFACE WATER AS NECESSARY TO PERFORM THE CONSTRUCTION ACTIVITIES. THIS WORK INCLUDES CONSTRUCTING THE NECESSARY TEMPORARY DRAINAGE CHANNELS AND DIVERSIONS, AND FURNISHING, INSTALLING AND OPERATING ALL NECESSARY PUMPS, PIPING AND OTHER APPROPRIATE MEASURES NEEDED TO MAINTAIN THE SITE. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR INCIDENTAL WATER MANAGEMENT REQUIRED TO PERFORM THE SCOPE OF WORK.
18. ROADWAY RESTORATION TO PRE-CONSTRUCTION CONDITIONS REQUIRED.

1. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE RELATED ITEMS.
2. THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800-362-2764), AND TO THE OWNER OF THE UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.
3. THE LOCATION OF UTILITIES AND STRUCTURES ARE SHOWN FROM DATA PROVIDED BY THE SURVEYOR (BASED ON DATA AVAILABLE AT THE TIME OF SURVEY) AND ARE NOT NECESSARILY COMPLETE OR CORRECT. THE NOTIFICATION OF AFFECTED UTILITY OWNERS IN ADVANCE OF CONSTRUCTION AND THE EXACT LOCATION AND PROTECTION OF UTILITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF SAME AND FOR ANY RESULTING CONTINGENT DAMAGE OR COSTS. THE BKL, OWNER, AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

CHK'D BY	DESIGNED BY:
DATE	GJC
	DRAWN BY:
	GJC
	CHECKED BY:
	DJP/CLF
	PROJECT NO.

[illegible]

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO  
PORT OF CLEVELAND 2024-2025  
MECHANICAL CAPACITY  
CONTAINMENT BERMS  
GENERAL NOTES

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	12.0

z:\project files\1600016205\cashsheets and plans\phase 6 and 7\title-16205-general notes.dwg

DESIGN GRADES

DESIGN GRADES FOR THE CONTAINMENT BERM THAT ARE SHOWN ON THE PLAN VIEW DRAWINGS REFLECT THE ABSOLUTE FINAL GRADES TO BE CONSTRUCTED OF EITHER EMBANKMENT OR AGGREGATE MATERIAL AS IDENTIFIED IN THE DETAILS, LEGEND AND/OR NOTES.

EMBANKMENT FILL

- CLEARING AND GRUBBING SHALL BE COMPLETED, AS NEEDED, WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS (SECTION 02110-SITE CLEARING).
- EMBANKMENT WORK AND MISCELLANEOUS BACKFILL WORK, INCLUDING CONSTRUCTION OF BERMS, SHALL BE CONSTRUCTED WITH EXCAVATED ON-SITE MATERIALS, BORROW MATERIALS FROM THE CDFS (IF APPROVED BY AND COORDINATED WITH THE OWNER), OR PRE-APPROVED MATERIALS, TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THE DESIGN PLANS, OR AS DESIGNATED BY THE CCCPA.
- CONTAINMENT BERM (MECHANICAL OFFLOAD AREA) - IT IS ASSUMED THE CONTAINMENT BERM WILL BE USED TO PERMANENTLY MANAGE MECHANICALLY OFFLOADED FINER-GRAINED MATERIALS. THEREFORE, THE MATERIAL SATISFACTORY FOR USE INCLUDES LEAN CLAY, SANDY CLAY, CLAYEY SAND, SILTY SAND, AND FINE SAND THAT IS FREE FROM OBJECTIONABLE QUANTITIES OF ORGANIC MATTER, FROZEN SOIL, STUMPS, FOREIGN DEBRIS, AND OTHER UNSUITABLE MATERIALS. ELASTIC CLAY (MH) IS NOT CONSIDERED A SUITABLE EMBANKMENT FILL MATERIAL.
- EMBANKMENT FILL MATERIAL SHALL BE PLACED IN MAXIMUM 12-INCH LOOSE LIFTS WITH EACH LIFT COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D 698 (STANDARD PROCTOR) AT A MOISTURE CONTENT WITHIN 3% OF OPTIMUM.
- THE CONTRACTOR CAN CONSIDER CHEMICAL STABILIZATION (LIME OR CEMENT) OF EMBANKMENT MATERIAL IF PROPER COMPACTION AND/OR MOISTURE CONDITIONS CANNOT BE ACHIEVED DUE TO WEATHER, MOISTURE CONDITION OF THE EXISTING MATERIAL, AND SCHEDULE AT OWN COST.

ODOT MATERIALS/SPECIFICATIONS

THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) 2019 CONSTRUCTION & MATERIAL SPECIFICATIONS, OR THE MOST CURRENT VERSION, SHALL BE USED BY THE CONTRACTOR FOR REFERENCE AND TO COMPLY WITH SUCH MATERIALS AND SPECIFICATIONS IDENTIFIED ON THE PLANS.

HYDROSEEDING

ALL HYDROSEEDING SHALL BE COMPLETED IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS (SECTION 02936- SEEDING), USING CLASS 3B SEED MIXTURE AND OBTAIN MIXTURE APPROVAL FROM THE CCCPA.

QUALITY ASSURANCE/QUALITY CONTROL

- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY AND REQUIRED QUALITY CONTROL ACTIVITIES. THE CCCPA MAY PERFORM PERIODIC QUALITY ASSURANCE ACTIVITIES TO VERIFY THE CONTRACTOR'S CONSTRUCTION, AS THEY DEEM WARRANTED.
- THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE REQUIRED COMPACTION AND INSPECTION ACTIVITIES TO CONTROL THE QUALITY OF MATERIALS INCORPORATED INTO THE CONSTRUCTION AND THE QUALITY OF THE COMPLETED CONSTRUCTION. THE OWNER MAY PROVIDE COMPACTION TESTING AND/OR PERFORM INSPECTION TO ASSIST IN DETERMINING THE ACCEPTABILITY OF MATERIALS AND COMPLETED CONSTRUCTION.
- QUALITY CONTROL/QUALITY ASSURANCE ACTIVITIES PERFORMED BY THE CCCPA DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR QUALITY CONTROL.
- THE CONTRACTOR IS RESPONSIBLE FOR THE SUBMITTAL OF SPECIFICATIONS FOR ALL PRODUCTS AND MATERIALS PROPOSED FOR THE CONSTRUCTION AS WELL AS ANY PROPOSED ALTERNATIVE OR APPROVED EQUALS.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY INFORMATION FOR ALL COMPLETED CONSTRUCTION. THE AS-BUILT SURVEY SHALL BE COMPLETED AS SOON AS THE FINAL APPROVED GRADES ARE REACHED.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY REPAIRS TO ADDRESS ANY AREAS OF SETTLEMENT OR EROSION, OR OTHER PORTIONS OF THE COMPLETED CONSTRUCTION IF ANY OF THE WORK IS NOT IN ACCORDANCE WITH SPECIFICATIONS OR THE REQUIREMENTS OF THE CONTRACT, OR FOR ANY OTHER CAUSE WHICH IS NOT ATTRIBUTED TO UNUSUAL CAUSES SUCH AS DAMAGE BY OTHERS, OR UNUSUAL CASUALTY OR NATURAL DISASTER, ALL AS DETERMINED BY THE CCCPA.

EROSION AND SEDIMENT CONTROL

THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN AREAS OF ACTIVITIES, SO AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST AS REQUIRED BY THE FACILITY'S AIR PERMIT.

THE CONTRACTOR SHALL INSTALL PERMANENT AND TEMPORARY SEDIMENT AND EROSION CONTROL FEATURES AS NECESSARY TO ASSURE EFFECTIVE AND CONTINUOUS PROTECTION THROUGHOUT THE CONSTRUCTION AND POST-CONSTRUCTION PERIODS. POTENTIAL TEMPORARY AND/OR PERMANENT STORMWATER AND SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN IDENTIFIED ON SHEET 18. NOTE, ANY MEASURES TAKEN SHALL BE CONSISTENT WITH APPROVED METHODS AND DEVICES USED ON AN AIRPORT AND SHOULD NOT BE SUSCEPTIBLE TO BECOMING AIRBORNE WHICH COULD BECOME A HAZARD TO ADJACENT AIRPORT OPERATIONS.

THE CONTRACTOR SHALL ENSURE THAT WATER CONTAINING SUSPENDED MATERIAL FROM ANY PART OF THE CONTRACTOR'S OPERATIONS SHALL BE TREATED BEFORE DISCHARGING TO DRAINS OR STREAMS OR ANY LOCATION OFF-PROPERTY. ALL WATER DISCHARGED FROM THE PROPERTY SHALL BE COMPLETED IN ACCORDANCE WITH ANY APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS AND EXISTING PERMITS ON FILE FOR THE FACILITY.

EXCEPT WHERE FUTURE CONSTRUCTION OPERATIONS WILL DAMAGE SLOPES, THE CONTRACTOR SHALL PERFORM THE PERMANENT HYDROSEEDING AND OTHER SPECIFIED SLOPE PROTECTION WORK IN STAGES, AS SOON AS SUBSTANTIAL AREAS OF EXPOSED SLOPES CAN BE MADE AVAILABLE.

THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND MAINTAINING ALL NECESSARY EROSION AND SEDIMENT CONTROL MEASURES TO MAINTAIN COMPLIANCE WITH THE SITE NPDES PERMIT AND ALL OTHER CONSTRUCTION REGULATIONS/REQUIREMENTS.

THE CONTRACTOR SHALL ENSURE THE SITE DRAINS PROPERLY, LIMITS ACCUMULATION OF WATER AND MAINTAINS EXCAVATED AREAS FREE OF WATER, AND PROVIDE AND OPERATE ALL NECESSARY PUMPING EQUIPMENT.

WASTE MANAGEMENT

WASTE MATERIALS GENERATED DURING COMPLETION OF WORK SHALL BE PROPERLY DISPOSED BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE FEDERAL STATE AND LOCAL LAWS, RULES, REGULATIONS AND ORDINANCES INCLUDING ALL RELATED DISPOSAL FEES. CONTRACTOR WILL BE REQUIRED TO USE COVERED DUMPSTERS WHICH SHOULD BE LOCATED IN APPROVED EQUIPMENT AND STOCKPILE AREAS DESIGNATED IN THE CONSTRUCTION SAFETY PHASING PLAN. ALTERNATIVELY, ALL TRASH GENERATED CAN BE REMOVED FROM THE SITE DAILY. NO ORGANIC FOOD WASTE SHALL BE DISPOSED OF IN ANY ON SITE DUMPSTER.

PROJECT START DATE RESTRICTIONS

NOTICE TO PROCEED WILL NOT BE PROVIDED UNTIL ALL PERMIT AND DETERMINATIONS ARE RECEIVED FROM THE FEDERAL AVIATION ADMINISTRATION AND WORK AUTHORIZATION IS GRANTED BY THE CITY OF CLEVELAND DEPARTMENT OF PORT CONTROL. AT NO TIME WILL THE PORT AUTHORITY GIVE THE CONTRACT LESS THAN 90 CALENDAR DAYS TO COMPLETE THE WORK OUTLINED IN THE CONTRACT. TOLERANCES

- MONITOR FABRICATION AND INSTALLATION TOLERANCE CONTROL OF PRODUCTS TO PRODUCE ACCEPTABLE WORK. DO NOT PERMIT TOLERANCES TO ACCUMULATE.
- COMPLY WITH MANUFACTURERS' TOLERANCES. SHOULD MANUFACTURERS' TOLERANCES CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM THE OWNER BEFORE PROCEEDING.
- ADJUST PRODUCTS TO APPROPRIATE DIMENSIONS; POSITION BEFORE SECURING PRODUCTS IN PLACE.

REFERENCES AND STANDARDS

- FOR PRODUCTS OR WORKMANSHIP SPECIFIED BY ASSOCIATION, TRADES, OR OTHER CONSENSUS STANDARDS, COMPLY WITH REQUIREMENTS OF THE STANDARD, EXCEPT WHEN MORE RIGID REQUIREMENTS ARE SPECIFIED OR ARE REQUIRED BY APPLICABLE CODES.
- CONFORM TO REFERENCE STANDARD BY DATE OF ISSUE CURRENT ON DATE OF CONTRACT DOCUMENTS, EXCEPT WHERE A SPECIFIC DATE IS ESTABLISHED BY CODE.
- OBTAIN COPIES OF STANDARDS WHERE REQUIRED BY PRODUCT SPECIFICATION SECTIONS.
- NEITHER THE CONTRACTUAL RELATIONSHIPS, DUTIES, OR RESPONSIBILITIES OF THE PARTIES IN CONTRACT NOR THOSE OF THE ENGINEER/OWNER SHALL BE ALTERED FROM THE CONTRACT DOCUMENTS BY MENTION OR INFERENCE OTHERWISE IN ANY REFERENCE DOCUMENT.

POLLUTION CONTROL

- THE CONTRACTOR SHALL FURNISH THE LABOR, SUPERVISION, MATERIALS, PERMITS, TOOLS, EQUIPMENT, INCIDENTALS AND SERVICES NECESSARY TO PREVENT POLLUTION RESULTING FROM HIS OPERATIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE AND LOCAL REQUIREMENTS, AND THE REQUIREMENTS OF THE INDIVIDUAL CONTRACT DOCUMENT.
- WHENEVER WORK OF ANY KIND CREATES HARMFUL DUST OR FUMES, EQUIPMENT FOR THE COMPLETE PROTECTION OF ALL PERSONNEL AND PROPERTY AGAINST DUST AND FUMES SHALL BE INSTALLED, MAINTAINED AND EFFECTIVELY OPERATED BY THE CONTRACTOR.
- EACH CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL FINES, DAMAGES, AND LIABILITY RESULTING FROM FAILURE TO PROVIDE THE REQUIRED POLLUTION CONTROL.
- IF PROPER POLLUTION CONTROLS ARE NOT BEING PROVIDED BY EACH CONTRACTOR, ALL WORK, EXCEPT CLEANUP OPERATIONS AND THE IMPLEMENTATION OF POLLUTION CONTROLS, MAY BE STOPPED BY THE OWNER AT THE CONTRACTOR'S EXPENSE, UNTIL THE CONTRACTOR HAS COMPLIED WITH THE CONTRACT REQUIREMENTS AND SPECIFICALLY THOSE LAID OUT IN THE TECHNICAL SPECIFICATIONS. EACH CONTRACTOR SHALL CONDUCT THEIR OPERATIONS AND MAINTAIN AREAS OF THEIR ACTIVITIES, SO AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST.
- AT A MINIMUM EACH CONTRACTOR SHALL IMPLEMENT THE FOLLOWING METHODS AS NECESSARY TO CONTROL DUST:
  - AT ANY GIVEN TIME, LIMIT THE AREA FROM WHICH EXISTING VEGETATION IS REMOVED.
  - KEEP ACCESS ROADS, CLEAN OF MUD AND DEBRIS.
  - APPLY WATER ONLY TO HAUL ROADS, ACCESS ROADS AND EXPOSED EARTH.
  - TARP ALL VEHICLES WHICH ARE TRANSPORTING DUST GENERATING MATERIALS OR RESIDUE.
  - IMMEDIATELY REMOVE DRY WASTE AND RUBBISH. IF SUCH IS IMPRACTICAL, COVER THE MATERIAL OR USE OTHER MEASURES TO PREVENT BLOWING OF DUST.
- NO FUEL TANKS WILL BE PERMITTED ON SITE OUTSIDE OF APPROVED SITE OPERATORS TANK ON CDF 9. CONTRACTOR SHALL COORDINATE USE AS NEEDED.

OPINION OF PROBABLE CONSTRUCTION QUANTITIES

MECHANICAL CAPACITY CONTAINMENT BERM		
CELL FLOOR CLEARING & GRADING FOR DRAINAGE IMPROVEMENTS	AC	30
EXCAVATION - CONTROLLED EMBANKMENT FILL	CY	51,500
CONTROLLED EMBANKMENT FILL (BERM)	CY	51,500
EXCAVATION & MATERIAL RELOCATION	CY	89,500
EXISTING OUTLET STRUCTURE ABANDONMENT	LS	1
CDF 12 DRAINAGE DITCH TO POND 2		
DITCH CLEARING AND GRADING FOR DRAINAGE IMPROVEMENTS	LS	1
SEEDING & MULCHING		
HYDROSEED	AC	7

- NOTES:
- THE ESTIMATED QUANTITIES SHOWN IN THE TABLE ARE NOT INTENDED TO BE A COMPREHENSIVE LIST OF ALL MATERIALS NEEDED. THESE QUANTITIES WERE DEVELOPED FOR THE PURPOSE OF BUDGET ESTIMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND PROVIDING ALL NECESSARY MATERIALS TO COMPLETE BID ITEMS.
  - EARTHWORK QUANTITIES DO NOT INCLUDE A SHRINK/SWELL FACTOR.
  - SEE DRAWINGS FOR MATERIAL REQUIREMENTS.
  - ADDITIONAL SCOPE AND QUANTITY MAY BE FURTHER DETAILED & ON BID FORM IN OTHER CONTRACT DOCUMENTATION.

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO  
PORT OF CLEVELAND 2024-2025  
MECHANICAL CAPACITY  
CONTAINMENT BERMS  
GENERAL NOTES AND ESTIMATED QUANTITIES

APPLICATION NO.
DATE: 3/17/2023
SCALE: AS NOTED
SHEET: 13.0



DESIGNED BY: SIC	DRAWN BY: SIC	CHECKED BY: DJP/CLF	PROJECT NO. 16205
CHK'D BY DATE	REVISION	No.	



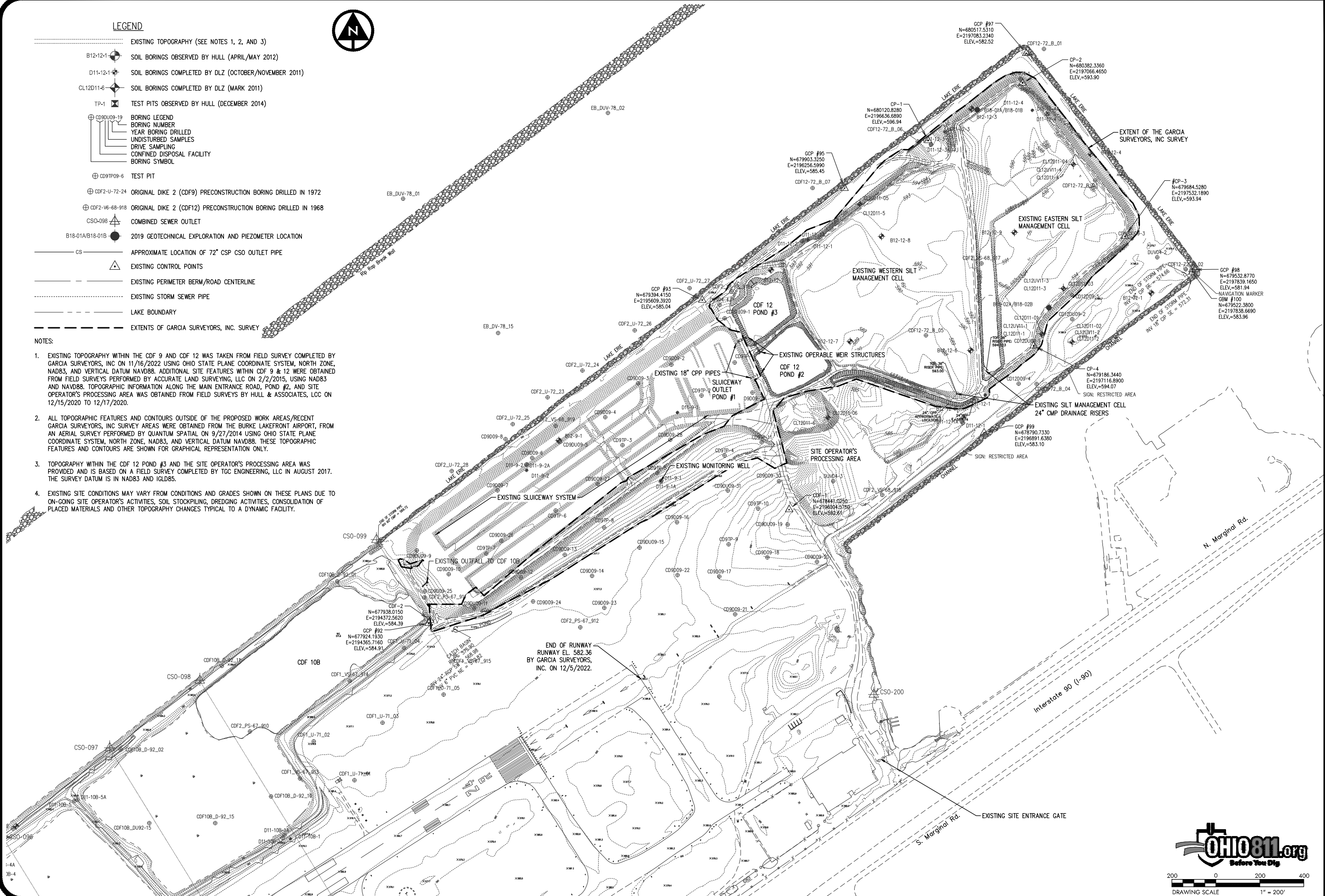


# LEGEND

- EXISTING TOPOGRAPHY (SEE NOTES 1, 2, AND 3)
- B12-12-1 SOIL BORINGS OBSERVED BY HULL (APRIL/MAY 2012)
- D11-12-1 SOIL BORINGS COMPLETED BY DLZ (OCTOBER/NOVEMBER 2011)
- CL12D11-6 SOIL BORINGS COMPLETED BY DLZ (MAY 2011)
- TP-1 TEST PITS OBSERVED BY HULL (DECEMBER 2014)
- BORING LEGEND
  - BORING NUMBER
  - YEAR BORING DRILLED
  - UNDISTURBED SAMPLES
  - DRIVE SAMPLING
  - CONFINED DISPOSAL FACILITY
  - BORING SYMBOL
- CD9TP09-6 TEST PIT
- CD2-U-72-24 ORIGINAL DIKE 2 (CDF9) PRECONSTRUCTION BORING DRILLED IN 1972
- CD2-V6-68-918 ORIGINAL DIKE 2 (CDF12) PRECONSTRUCTION BORING DRILLED IN 1968
- CSO-098 COMBINED SEWER OUTLET
- B18-01A/B18-01B 2019 GEOTECHNICAL EXPLORATION AND PIEZOMETER LOCATION
- CS APPROXIMATE LOCATION OF 72" CSP CSO OUTLET PIPE
- EXISTING CONTROL POINTS
- EXISTING PERIMETER BERM/ROAD CENTERLINE
- EXISTING STORM SEWER PIPE
- LAKE BOUNDARY
- EXTENTS OF GARCIA SURVEYORS, INC. SURVEY

## NOTES:

- EXISTING TOPOGRAPHY WITHIN THE CDF 9 AND CDF 12 WAS TAKEN FROM FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. ADDITIONAL SITE FEATURES WITHIN CDF 9 & 12 WERE OBTAINED FROM FIELD SURVEYS PERFORMED BY ACCURATE LAND SURVEYING, LLC ON 2/2/2015, USING NAD83 AND NAVD88. TOPOGRAPHIC INFORMATION ALONG THE MAIN ENTRANCE ROAD, POND #2, AND SITE OPERATOR'S PROCESSING AREA WAS OBTAINED FROM FIELD SURVEYS BY HULL & ASSOCIATES, LLC ON 12/15/2020 TO 12/17/2020.
- ALL TOPOGRAPHIC FEATURES AND CONTOURS OUTSIDE OF THE PROPOSED WORK AREAS/RECENT GARCIA SURVEYORS, INC SURVEY AREAS WERE OBTAINED FROM THE BURKE LAKEFRONT AIRPORT, FROM AN AERIAL SURVEY PERFORMED BY QUANTUM SPATIAL ON 9/27/2014 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. THESE TOPOGRAPHIC FEATURES AND CONTOURS ARE SHOWN FOR GRAPHICAL REPRESENTATION ONLY.
- TOPOGRAPHY WITHIN THE CDF 12 POND #3 AND THE SITE OPERATOR'S PROCESSING AREA WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY TGC ENGINEERING, LLC IN AUGUST 2017. THE SURVEY DATUM IS IN NAD83 AND IGLD85.
- EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.



DESIGNED BY:	DRAWN BY:	CHECKED BY:	PROJECT NO.
SC	SC	DJP/CLF	k205
CHK'D BY:	DATE:	REVISION:	
No.			

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO  
**PORT OF CLEVELAND 2024-2025  
MECHANICAL CAPACITY  
CONTAINMENT BERMS  
OVERALL SITE LAYOUT**

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	14.0





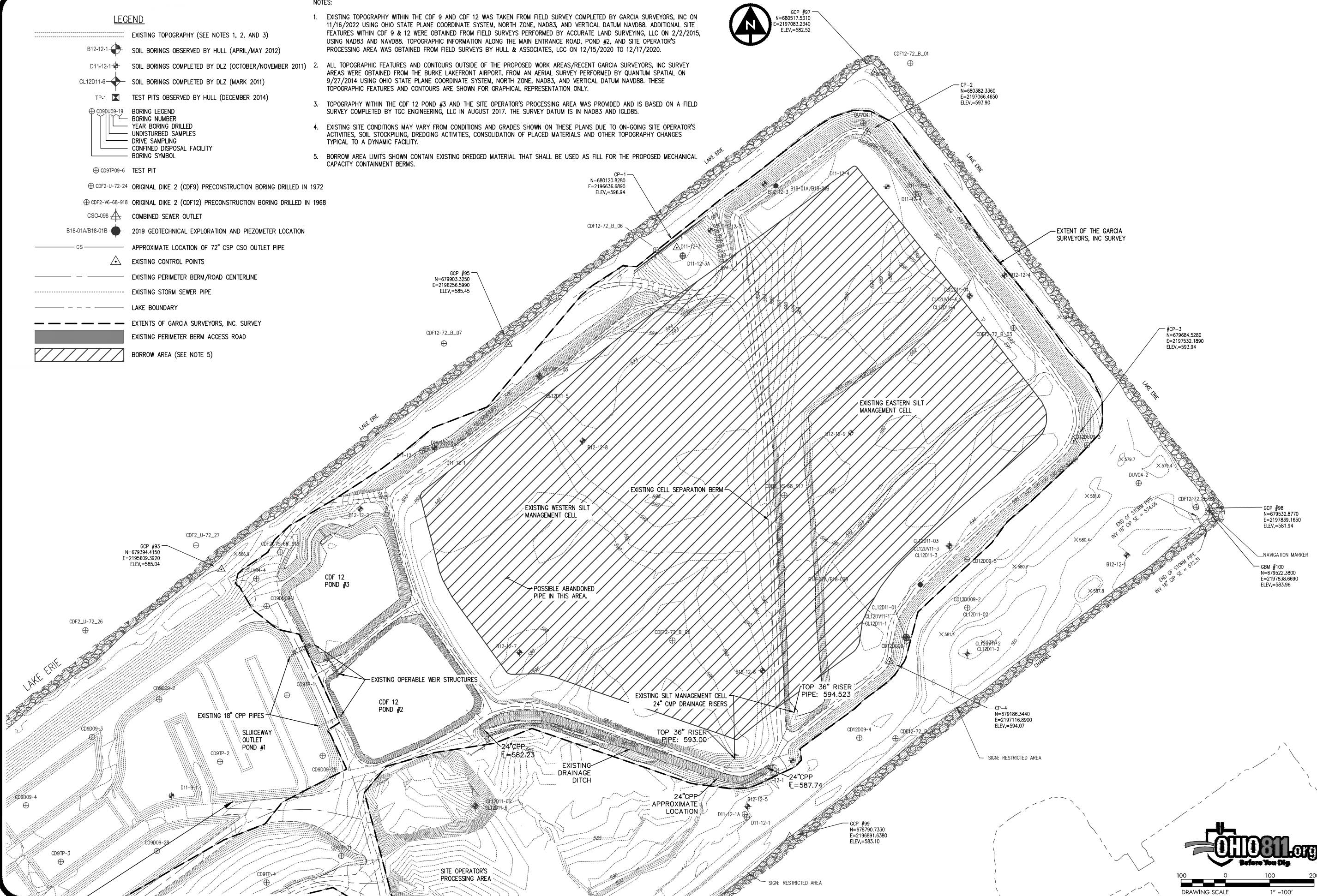
z:\project files\1600016205\cadd\phase 6 and 7\title-16205-existing conditions.dwg

## LEGEND

- EXISTING TOPOGRAPHY (SEE NOTES 1, 2, AND 3)
- B12-12-1 SOIL BORINGS OBSERVED BY HULL (APRIL/MAY 2012)
- D11-12-1 SOIL BORINGS COMPLETED BY DLZ (OCTOBER/NOVEMBER 2011)
- CL12D11-6 SOIL BORINGS COMPLETED BY DLZ (MAY 2011)
- TP-1 TEST PITS OBSERVED BY HULL (DECEMBER 2014)
- BORING LEGEND  
BORING NUMBER  
YEAR BORING DRILLED  
UNDISTURBED SAMPLES  
DRIVE SAMPLING  
CONFINED DISPOSAL FACILITY  
BORING SYMBOL
- CD9TP09-6 TEST PIT
- CD2-U-72-24 ORIGINAL DIKE 2 (CDF9) PRECONSTRUCTION BORING DRILLED IN 1972
- CD2-V6-68-918 ORIGINAL DIKE 2 (CDF12) PRECONSTRUCTION BORING DRILLED IN 1968
- CSO-098 COMBINED SEWER OUTLET
- B18-01A/B18-01B 2019 GEOTECHNICAL EXPLORATION AND PIEZOMETER LOCATION
- CS APPROXIMATE LOCATION OF 72" CSP CSO OUTLET PIPE
- EXISTING CONTROL POINTS
- EXISTING PERIMETER BERM/ROAD CENTERLINE
- EXISTING STORM SEWER PIPE
- LAKE BOUNDARY
- EXTENTS OF GARCIA SURVEYORS, INC. SURVEY
- EXISTING PERIMETER BERM ACCESS ROAD
- BORROW AREA (SEE NOTE 5)

## NOTES:

- EXISTING TOPOGRAPHY WITHIN THE CDF 9 AND CDF 12 WAS TAKEN FROM FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. ADDITIONAL SITE FEATURES WITHIN CDF 9 & 12 WERE OBTAINED FROM FIELD SURVEYS PERFORMED BY ACCURATE LAND SURVEYING, LLC ON 2/2/2015, USING NAD83 AND NAVD88. TOPOGRAPHIC INFORMATION ALONG THE MAIN ENTRANCE ROAD, POND #2, AND SITE OPERATOR'S PROCESSING AREA WAS OBTAINED FROM FIELD SURVEYS BY HULL & ASSOCIATES, LLC ON 12/15/2020 TO 12/17/2020.
- ALL TOPOGRAPHIC FEATURES AND CONTOURS OUTSIDE OF THE PROPOSED WORK AREAS/RECENT GARCIA SURVEYORS, INC SURVEY AREAS WERE OBTAINED FROM THE BURKE LAKEFRONT AIRPORT, FROM AN AERIAL SURVEY PERFORMED BY QUANTUM SPATIAL ON 9/27/2014 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. THESE TOPOGRAPHIC FEATURES AND CONTOURS ARE SHOWN FOR GRAPHICAL REPRESENTATION ONLY.
- TOPOGRAPHY WITHIN THE CDF 12 POND #3 AND THE SITE OPERATOR'S PROCESSING AREA WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY TGC ENGINEERING, LLC IN AUGUST 2017. THE SURVEY DATUM IS IN NAD83 AND IGLD85.
- EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.
- BORROW AREA LIMITS SHOWN CONTAIN EXISTING DREDGED MATERIAL THAT SHALL BE USED AS FILL FOR THE PROPOSED MECHANICAL CAPACITY CONTAINMENT BERMS.



219 SOUTH ERIE STREET  
TOLEDO, OHIO 43604-8607  
TEL 419.383.2018  
FAX 419.383.0023



DESIGNED BY:	QC
DRAWN BY:	QC
CHECKED BY:	DJP/CLF
PROJECT NO.	16205
CHK'D BY:	
DATE:	
REVISION	
No.	

## CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO PORT OF CLEVELAND 2024-2025 MECHANICAL CAPACITY CONTAINMENT BERMS EXISTING SITE CONDITIONS

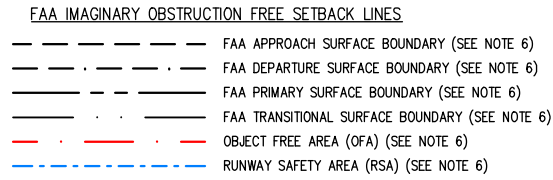
APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	14.1



DRAWING SCALE 1"=100'



===== EXISTING TOPOGRAPHY (SEE NOTES 1, 2, AND 3)  
 ----- RUNWAY CENTERLINE  
 (732.55) IMAGINARY SURFACE SPOT ELEVATION  
 ----- IMAGINARY SURFACE ELEVATION MAJOR GRADE LINE  
 ----- IMAGINARY SURFACE ELEVATION MINOR GRADE LINE

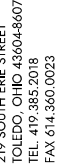
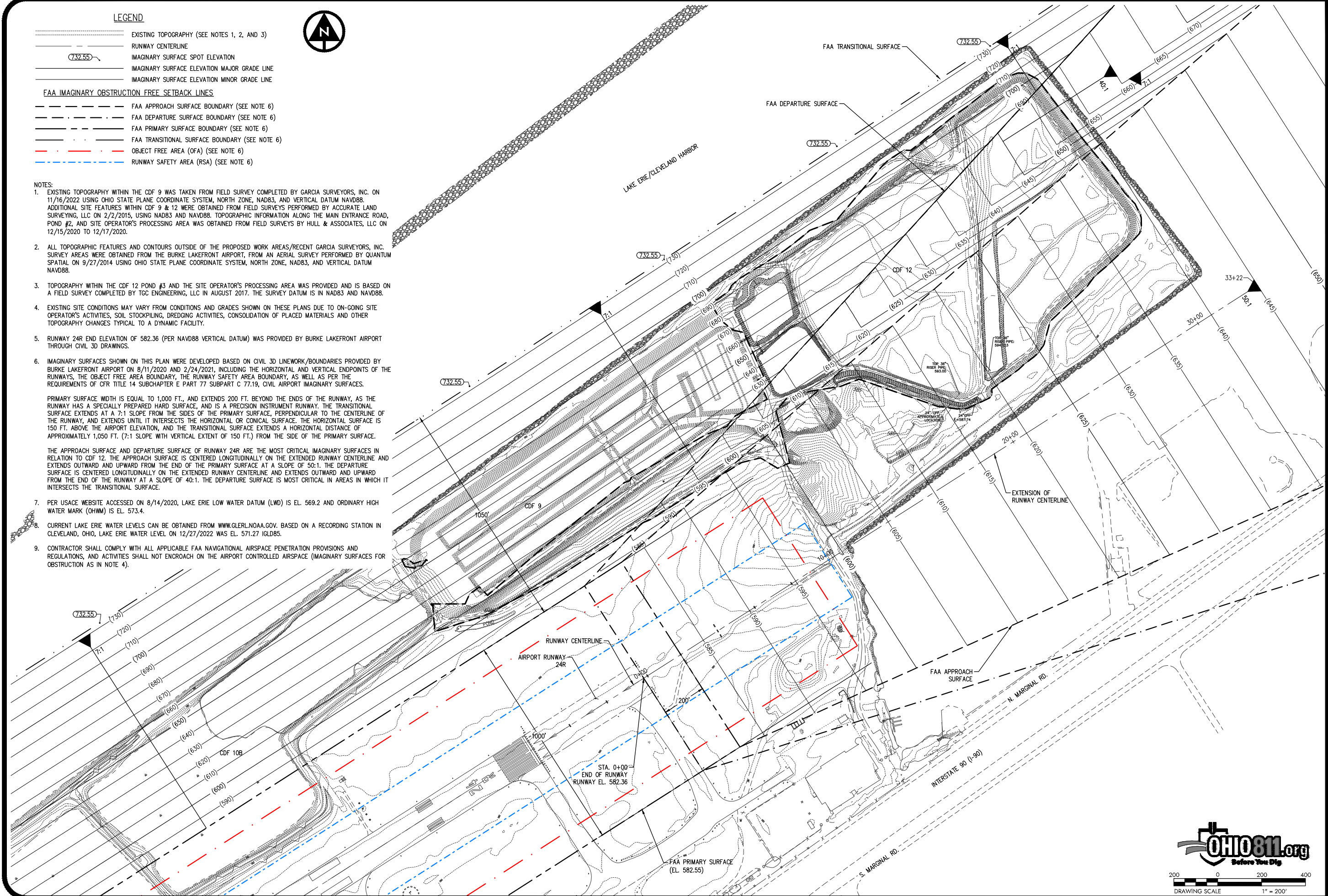


1. EXISTING TOPOGRAPHY WITHIN THE CDF 9 WAS TAKEN FROM FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC. ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. ADDITIONAL SITE FEATURES WITHIN CDF 9 & 12 WERE OBTAINED FROM FIELD SURVEYS PERFORMED BY ACCURATE LAND SURVEYING, LLC ON 2/2/2015, USING NAD83 AND NAVD88. TOPOGRAPHIC INFORMATION ALONG THE MAIN ENTRANCE ROAD, POND #2, AND SITE OPERATOR'S PROCESSING AREA WAS OBTAINED FROM FIELD SURVEYS BY HULL & ASSOCIATES, LLC ON 12/15/2020 TO 12/17/2020.
2. ALL TOPOGRAPHIC FEATURES AND CONTOURS OUTSIDE OF THE PROPOSED WORK AREAS/RECENT GARCIA SURVEYORS, INC. SURVEY AREAS WERE OBTAINED FROM THE BURKE LAKEFRONT AIRPORT, FROM AN AERIAL SURVEY PERFORMED BY QUANTUM SPATIAL ON 9/27/2014 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88.
3. TOPOGRAPHY WITHIN THE CDF 12 POND #3 AND THE SITE OPERATOR'S PROCESSING AREA WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY TGC ENGINEERING, LLC IN AUGUST 2017. THE SURVEY DATUM IS IN NAD83 AND NAVD88.
4. EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.
5. RUNWAY 24R END ELEVATION OF 582.36 (PER NAVD88 VERTICAL DATUM) WAS PROVIDED BY BURKE LAKEFRONT AIRPORT THROUGH CIVIL 3D DRAWINGS.
6. IMAGINARY SURFACES SHOWN ON THIS PLAN WERE DEVELOPED BASED ON CIVIL 3D LINEWORK/BOUNDARIES PROVIDED BY BURKE LAKEFRONT AIRPORT ON 8/11/2020 AND 2/24/2021, INCLUDING THE HORIZONTAL AND VERTICAL ENDPOINTS OF THE RUNWAYS, THE OBJECT FREE AREA BOUNDARY, THE RUNWAY SAFETY AREA BOUNDARY, AS WELL AS PER THE REQUIREMENTS OF CFR TITLE 14 SUBCHAPTER E PART 77 SUBPART C 77.19, CIVIL AIRPORT IMAGINARY SURFACES.

PRIMARY SURFACE WIDTH IS EQUAL TO 1,000 FT., AND EXTENDS 200 FT. BEYOND THE ENDS OF THE RUNWAY, AS THE RUNWAY HAS A SPECIALLY PREPARED HARD SURFACE, AND IS A PRECISION INSTRUMENT RUNWAY. THE TRANSITIONAL SURFACE EXTENDS AT A 7:1 SLOPE FROM THE SIDES OF THE PRIMARY SURFACE, PERPENDICULAR TO THE CENTERLINE OF THE RUNWAY, AND EXTENDS UNTIL IT INTERSECTS THE HORIZONTAL OR CONICAL SURFACE. THE HORIZONTAL SURFACE IS 150 FT. ABOVE THE AIRPORT ELEVATION, AND THE TRANSITIONAL SURFACE EXTENDS A HORIZONTAL DISTANCE OF APPROXIMATELY 1,050 FT. (7:1 SLOPE WITH VERTICAL EXTENT OF 150 FT.) FROM THE SIDE OF THE PRIMARY SURFACE.

THE APPROACH SURFACE AND DEPARTURE SURFACE OF RUNWAY 24R ARE THE MOST CRITICAL IMAGINARY SURFACES IN RELATION TO CD 12. THE APPROACH SURFACE IS CENTERED LONGITUUDINALLY ON THE EXTENDED RUNWAY CENTERLINE AND EXTENDS OUTWARD AND UPWARD FROM THE END OF THE PRIMARY SURFACE AT A SLOPE OF 50:1. THE DEPARTURE SURFACE IS CENTERED LONGITUUDINALLY ON THE EXTENDED RUNWAY CENTERLINE AND EXTENDS OUTWARD AND UPWARD FROM THE END OF THE RUNWAY AT A SLOPE OF 40:1. THE DEPARTURE SURFACE IS MOST CRITICAL IN AREAS IN WHICH IT INTERSECTS THE TRANSITIONAL SURFACE.

7. PER USACE WEBSITE ACCESSED ON 8/14/2020, LAKE ERIE LOW WATER DATUM (LWD) IS EL. 569.2 AND ORDINARY HIGH WATER MARK (OHWM) IS EL. 573.4.
8. CURRENT LAKE ERIE WATER LEVELS CAN BE OBTAINED FROM [WWW.GLERL.NOA.GOV](http://WWW.GLERL.NOA.GOV). BASED ON A RECORDING STATION IN CLEVELAND, OHIO, LAKE ERIE WATER LEVEL ON 12/27/2022 WAS EL. 571.27 IGLD85.
9. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FAA NAVIGATIONAL AIRSPACE PENETRATION PROVISIONS AND REGULATIONS, AND ACTIVITIES SHALL NOT ENCRoACH ON THE AIRPORT CONTROLLED AIRSPACE (IMAGINARY SURFACES FOR OBSTRUCTION AS IN NOTE 4).



No.	REVISION	CHK'D BY DATE	DESIGNED BY: GC
			DRAWN BY: GC
			CHECKED BY: DJP / CLF
			PROJECT NO. 16205

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO

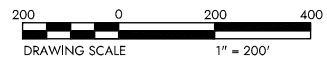
**PORT OF CLEVELAND 2024-2025**

**MECHANICAL CAPACITY**

**CONTAINMENT BERMS**

**FAA IMAGINARY SURFACES FOR OBSTRUCTION**

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	15.0





-----

EXISTING TOPOGRAPHY (SEE NOTES 1 AND 2)

EXISTING CONTROL POINTS

-----

EXISTING PERIMETER BERM/ROAD CENTERLINE

-----

EXISTING STORM SEWER PIPE

-----

EXISTING ROAD CENTERLINE

-----

EXISTING EDGE OF DRAINAGE DITCH

-----

LAKE BOUNDARY

-----

EXTENTS OF GARCIA SURVEYORS, INC. SURVEY

-----

PROPOSED MAJOR CONTOUR

-----

PROPOSED MINOR CONTOUR

-----

PROPOSED CONTAINMENT BERM EXTERIOR TOE OF SLOPE

-----

PROPOSED CENTERLINE OF TOP OF CONTAINMENT BERM

-----

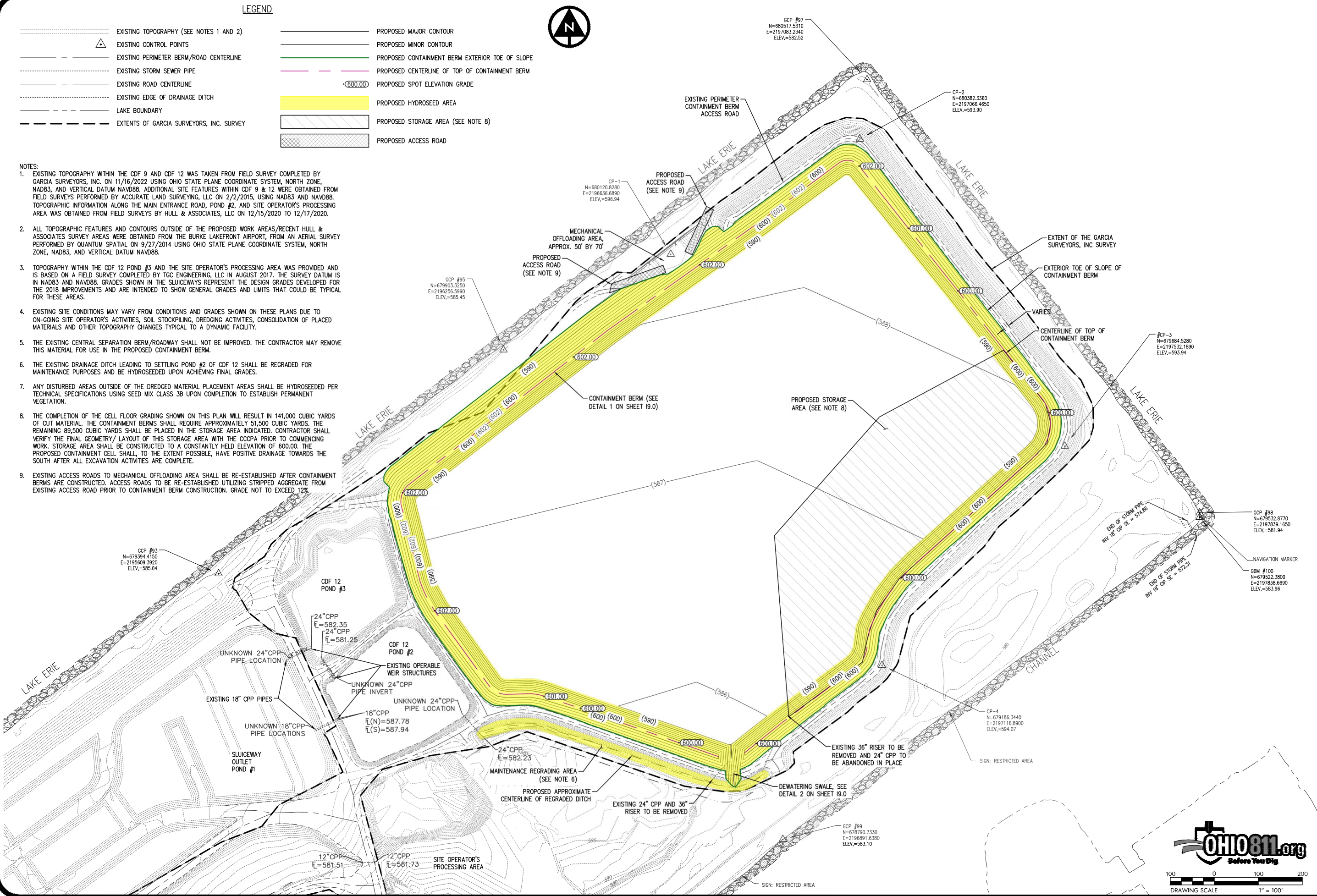
PROPOSED SPOT ELEVATION GRADE

PROPOSED HYDROSEED AREA

PROPOSED STORAGE AREA (SEE NOTE 8)

PROPOSED ACCESS ROAD

- NOTES:
- EXISTING TOPOGRAPHY WITHIN THE CDF 9 AND CDF 12 WAS TAKEN FROM FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC. ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. ADDITIONAL SITE FEATURES WITHIN CDF 9 & 12 WERE OBTAINED FROM FIELD SURVEYS PERFORMED BY ACCURATE LAND SURVEYING, LLC ON 2/2/2015, USING NAD83 AND NAVD88. TOPOGRAPHIC INFORMATION ALONG THE MAIN ENTRANCE ROAD, POND #2, AND SITE OPERATOR'S PROCESSING AREA WAS OBTAINED FROM FIELD SURVEYS BY HULL & ASSOCIATES, LLC ON 12/15/2020 TO 12/17/2020.
  - ALL TOPOGRAPHIC FEATURES AND CONTOURS OUTSIDE OF THE PROPOSED WORK AREAS/RECENT HULL & ASSOCIATES SURVEY AREAS WERE OBTAINED FROM THE BURKE LAKEFRONT AIRPORT, FROM AN AERIAL SURVEY PERFORMED BY QUANTUM SPATIAL ON 9/27/2014 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88.
  - TOPOGRAPHY WITHIN THE CDF 12 POND #3 AND THE SITE OPERATOR'S PROCESSING AREA WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY TGC ENGINEERING, LLC IN AUGUST 2017. THE SURVEY DATUM IS IN NAD83 AND NAVD88. GRADES SHOWN IN THE SLUICWAYS REPRESENT THE DESIGN GRADES DEVELOPED FOR THE 2018 IMPROVEMENTS AND ARE INTENDED TO SHOW GENERAL GRADES AND LIMITS THAT COULD BE TYPICAL FOR THESE AREAS.
  - EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.
  - THE EXISTING CENTRAL SEPARATION BERM/ROADWAY SHALL NOT BE IMPROVED. THE CONTRACTOR MAY REMOVE THIS MATERIAL FOR USE IN THE PROPOSED CONTAINMENT BERM.
  - THE EXISTING DRAINAGE DITCH LEADING TO SETTLING POND #2 OF CDF 12 SHALL BE REGRADED FOR MAINTENANCE PURPOSES AND BE HYDROSEEDED UPON ACHIEVING FINAL GRADES.
  - ANY DISTURBED AREAS OUTSIDE OF THE DREDGED MATERIAL PLACEMENT AREAS SHALL BE HYDROSEEDED PER TECHNICAL SPECIFICATIONS USING SEED MIX CLASS 3B UPON COMPLETION TO ESTABLISH PERMANENT VEGETATION.
  - THE COMPLETION OF THE CELL FLOOR GRADING SHOWN ON THIS PLAN WILL RESULT IN 141,000 CUBIC YARDS OF CUT MATERIAL. THE CONTAINMENT BERMS SHALL REQUIRE APPROXIMATELY 51,500 CUBIC YARDS. THE REMAINING 89,500 CUBIC YARDS SHALL BE PLACED IN THE STORAGE AREA INDICATED. CONTRACTOR SHALL VERIFY THE FINAL GEOMETRY/ LAYOUT OF THIS STORAGE AREA WITH THE CCOPA PRIOR TO COMMENCING WORK. STORAGE AREA SHALL BE CONSTRUCTED TO A CONSTANTLY HELD ELEVATION OF 600.00. THE PROPOSED CONTAINMENT CELL SHALL, TO THE EXTENT POSSIBLE, HAVE POSITIVE DRAINAGE TOWARDS THE SOUTH AFTER ALL EXCAVATION ACTIVITIES ARE COMPLETE.
  - EXISTING ACCESS ROADS TO MECHANICAL OFFLOADING AREA SHALL BE RE-ESTABLISHED AFTER CONTAINMENT BERMS ARE CONSTRUCTED. ACCESS ROADS TO BE RE-ESTABLISHED UTILIZING STRIPPED AGGREGATE FROM EXISTING ACCESS ROAD PRIOR TO CONTAINMENT BERM CONSTRUCTION. GRADE NOT TO EXCEED 12%.



PEOPLE FOCUSED FUTURE

STATE OF OHIO

REGISTERED PROFESSIONAL ENGINEER

CHelsea FElDman

08-08-2018

08-08-2025

DESIGNED BY:	CHK'D BY:	REVISION	NO.
SJC			
DRAWN BY:	DATE		
SJC			
CHECKED BY:			
DJP/CLF			
PROJECT NO.			
16205			

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO

PORT OF CLEVELAND 2024-2025

MECHANICAL CAPACITY

CONTAINMENT BERMS

CONTAINMENT BERM PLAN

APPLICATION NO.

DATE:

3/17/2023

SCALE:

AS NOTED

SHEET:

16.0

100 0 100 200

DRAWING SCALE

1" = 100'

z:\project files\160001\16205\card sheets and plans\phase 6 and 7\16-16205-proposed grading plan.dwg



z:\project files\160001\6205\card sheets and plans\phase 6 and 7\16-16205-construction plan.dwg

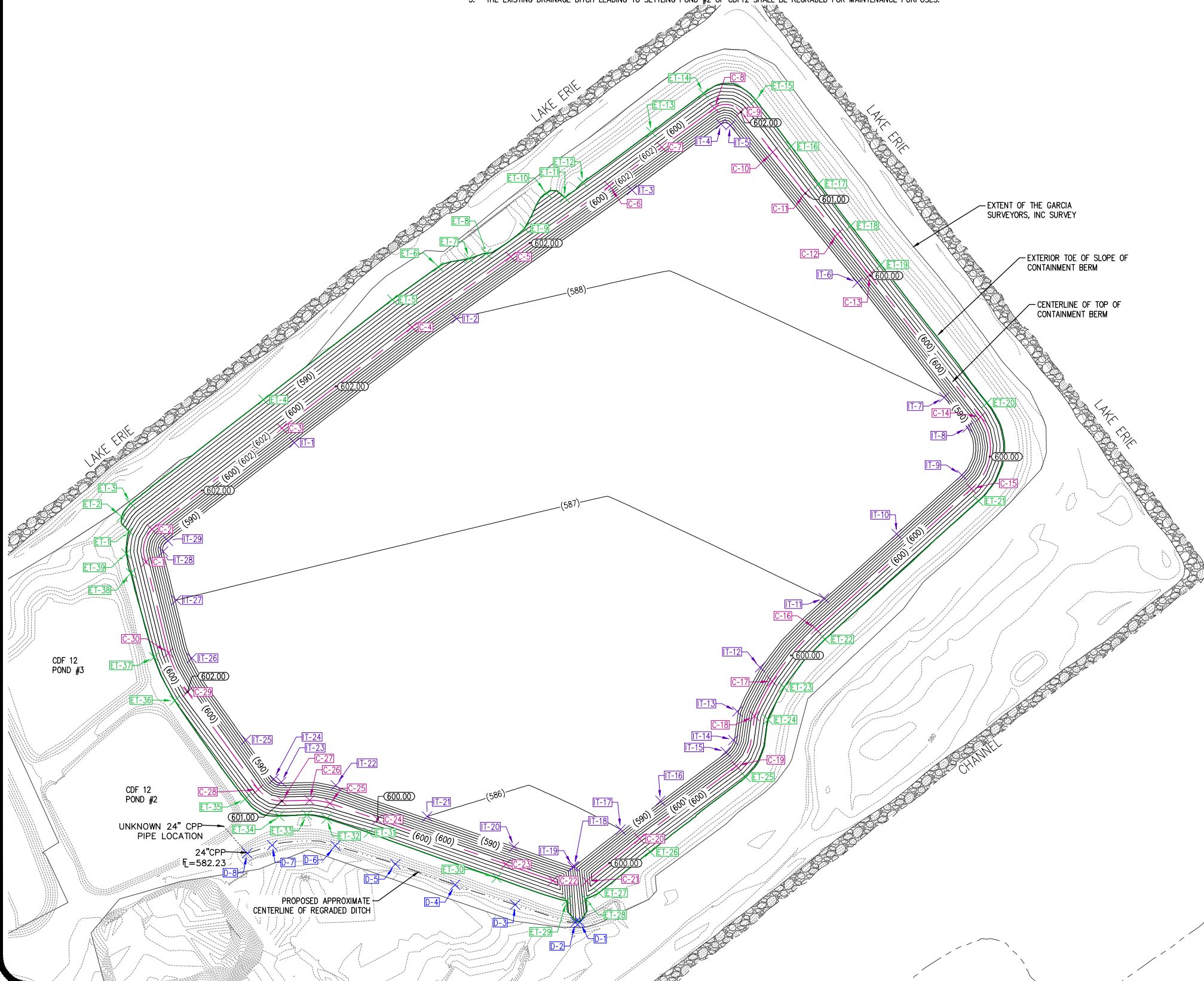
#### LEGEND

- EXISTING TOPOGRAPHY (SEE NOTES 1 AND 2)
- EXISTING PERIMETER BERM/ROAD CENTERLINE
- EXTENTS OF GARCIA SURVEYORS, INC. SURVEY
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED CONTAINMENT BERM EXTERIOR TOE OF SLOPE
- PROPOSED CENTERLINE OF TOP OF CONTAINMENT BERM
- PROPOSED APPROXIMATE CENTERLINE OF REGRADED DITCH
- PROPOSED SPOT ELEVATION GRADE



#### NOTES:

- EXISTING TOPOGRAPHY WITHIN THE CDF 9 AND CDF 12 WAS TAKEN FROM FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC. ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88. ADDITIONAL SITE FEATURES WITHIN CDF 9 & 12 WERE OBTAINED FROM FIELD SURVEYS PERFORMED BY ACCURATE LAND SURVEYING, LLC ON 2/2/2015, USING NAD83 AND NAVD88. TOPOGRAPHIC INFORMATION ALONG THE MAIN ENTRANCE ROAD, POND #2, AND SITE OPERATOR'S PROCESSING AREA WAS OBTAINED FROM FIELD SURVEYS BY HULL & ASSOCIATES, LLC ON 12/15/2020 TO 12/17/2020.
- ALL TOPOGRAPHIC FEATURES AND CONTOURS OUTSIDE OF THE PROPOSED WORK AREAS/RECENT HULL & ASSOCIATES SURVEY AREAS WERE OBTAINED FROM THE BURKE LAKEFRONT AIRPORT, FROM AN AERIAL SURVEY PERFORMED BY QUANTUM SPATIAL ON 9/27/2014 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88.
- TOPOGRAPHY WITHIN THE CDF 12 POND #3 AND THE SITE OPERATOR'S PROCESSING AREA WAS PROVIDED AND IS BASED ON A FIELD SURVEY COMPLETED BY TGC ENGINEERING, LLC IN AUGUST 2017. THE SURVEY DATUM IS IN NAD83 AND NAVD88. GRADES SHOWN IN THE SLUICWAYS REPRESENT THE DESIGN GRADES DEVELOPED FOR THE 2018 IMPROVEMENTS AND ARE INTENDED TO SHOW GENERAL GRADES AND LIMITS THAT COULD BE TYPICAL FOR THESE AREAS
- EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPIILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.
- THE EXISTING DRAINAGE DITCH LEADING TO SETTLING POND #2 OF CDF12 SHALL BE REGRADED FOR MAINTENANCE PURPOSES.



Point Table			
Point #	Elevation	Northing	Easting
C-1	602.00	679537.28	2196027.75
C-2	602.00	679594.15	2196037.92
C-3	602.00	679770.20	2196264.69
C-4	602.00	679946.24	2196491.47
C-5	602.00	680069.08	2196663.42
C-6	602.00	680191.91	2196835.38
C-7	602.00	680259.97	2196927.04
C-8	602.00	680328.02	2197018.70
C-9	602.00	680321.53	2197064.62
C-10	601.50	680251.11	2197120.29
C-11	601.00	680179.47	2197176.92
C-12	600.50	680108.46	2197233.05
C-13	600.00	680037.43	2197289.20
C-14	600.00	679789.76	2197482.58
C-15	600.00	679664.43	2197466.64
C-16	600.00	679419.86	2197195.85
C-17	600.00	679329.15	2197119.38
C-18	600.00	679268.57	2197088.59
C-19	600.00	679181.57	2197056.77
C-20	600.00	679054.95	2196888.14
C-21	600.00	678980.70	2196796.04
C-22	602.00	678981.82	2196737.02
C-23	602.00	679010.42	2196655.20
C-24	600.00	679088.62	2196431.44
C-25	601.00	679116.36	2196348.24
C-26	601.00	679121.88	2196312.92
C-27	601.00	679120.53	2196264.44
C-28	601.00	679140.73	2196223.43
C-29	602.00	679310.61	2196100.13
C-30	602.00	679378.58	2196066.71
D-1	585.00	678909.62	2196784.28
D-2	585.00	678909.42	2196776.03
D-3	584.50	678939.88	2196671.12
D-4	584.00	678974.50	2196566.49
D-5	583.50	679010.50	2196462.61
D-6	583.00	679042.73	2196357.89
D-7	582.50	679043.47	2196247.58
D-8	582.25	679029.46	2196204.20
ET-1	593.00	679590.45	2195998.09
ET-2	585.00	679615.43	2195984.89
ET-3	584.31	679639.05	2196001.06
ET-4	584.00	679819.80	2196232.37
ET-5	584.00	679994.34	2196457.30
ET-6	584.13	680051.19	2196537.56
ET-7	590.43	680066.18	2196591.04
ET-8	593.83	680074.87	2196620.78
ET-9	595.00	680118.50	2196687.88
ET-10	585.69	680179.94	2196725.83
ET-11	594.00	680172.01	2196757.63
ET-12	592.88	680198.51	2196788.96
ET-13	593.02	680286.10	2196908.66
ET-14	592.98	680353.76	2196999.59
ET-15	592.65	680342.33	2197090.22
ET-16	592.64	680261.27	2197152.30
ET-17	593.00	680196.30	2197200.54
ET-18	593.01	680123.12	2197256.43
ET-19	592.94	680055.24	2197308.56

#### NOTES:

- NORTHING AND EASTING DATUM IS OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND ELEVATION DATUM IS NAVD88.
- CT-#- TOP OF BERM CENTERLINE.
- D-#- DITCH .
- ET-#- EXTERIOR TOE OF SLOPE.
- IT-#- INTERIOR TOE OF SLOPE.



Point Table			
Point #	Elevation	Northing	Easting
ET-20	593.63	679814.67	2197493.72
ET-21	593.74	679643.47	2197478.94
ET-22	593.85	679402.36	2197211.48
ET-23	594.00	679318.60	2197139.93
ET-24	593.61	679262.12	2197112.10
ET-25	593.20	679162.21	2197073.15
ET-26	591.79	679031.81	2196906.67
ET-27	592.00	678960.43	2196817.10
ET-28	592.83	678949.86	2196794.31
ET-29	593.00	678946.86	2196761.12
ET-30	592.46	678986.83	2196638.97
ET-31	592.83	679065.53	2196416.13
ET-32	593.32	679090.03	2196342.54
ET-33	593.82	679096.21	2196308.30
ET-34	593.51	679094.69	2196259.90
ET-35	592.87	679124.14	2196200.57
ET-36	594.00	679295.47	2196077.99
ET-37	594.30	679371.37	2196041.74
ET-38	593.58	679517.70	2196001.45
ET-39	593.48	679551.77	2195993.07
IT-1	588.00	679745.08	2196286.15
IT-2	588.00	679961.14	2196569.10
IT-3	590.00	680185.11	2196874.86
IT-4	590.00	680300.35	2197030.03
IT-5	590.00	680298.02	2197046.29
IT-6	590.00	680023.91	2197268.00
IT-7	588.00	679823.84	2197419.18
IT-8	588.00	679771.45	2197459.80
IT-9	588.00	679688.53	2197449.73
IT-10	588.00	679585.83	2197336.35
IT-11	587.00	679474.01	2197209.57
IT-12	587.00	679353.46	2197098.11
IT-13	587.00	679276.59	2197058.41
IT-14	587.00	679227.01	2197051.47
IT-15	587.00	679206.31	2197038.05
IT-16	587.00	679120.86	2196924.29
IT-17	586.00	679070.81	2196855.01
IT-18	586.00	679006.84	2196774.46
IT-19	586.00	679006.28	2196771.45
IT-20	586.00	679040.75	2196669.17
IT-21	586.00	679093.56	2196517.84
IT-22	587.00	679147.88	2196358.58
IT-23	587.00	679153.52	2196263.70
IT-24	587.00	679159.10	2196250.60
IT-25	587.00	679227.29	2196202.19
IT-26	587.00	679369.57	2196107.60
IT-27	587.00	679470.68	2196080.46
IT-28	588.00	679555.35	2196057.44
IT-29	588.00	679573.98	2196065.74



DESIGNED BY:	DRAWN BY:	CHECKED BY:	PROJECT NO.
SC	SC	DJP/CLF	16205
CHK'D BY:	DATE:	REVISION:	No.

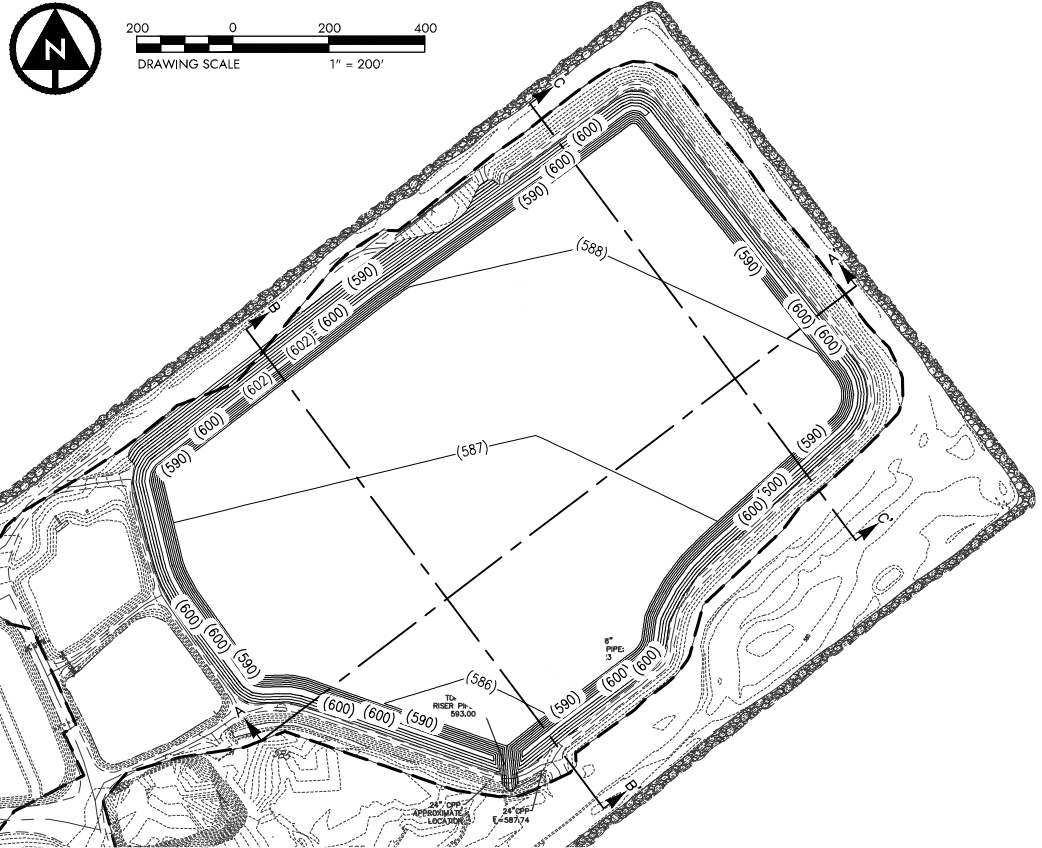
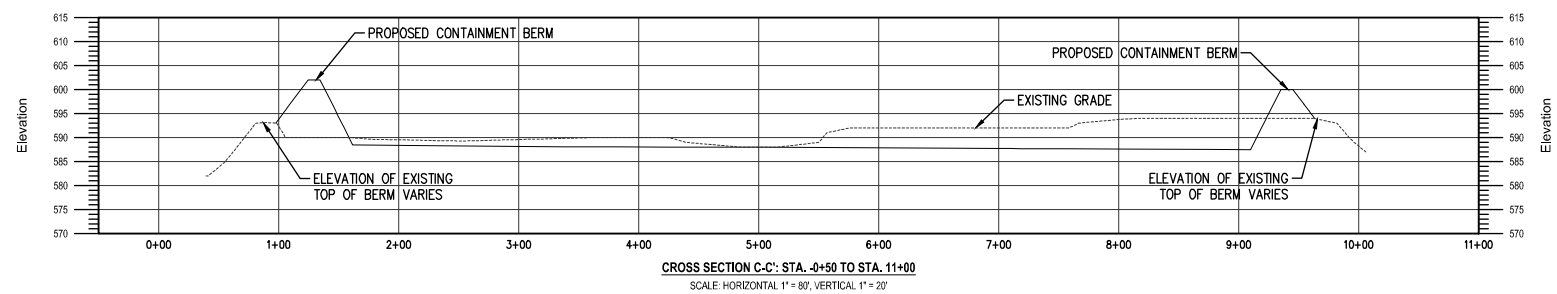
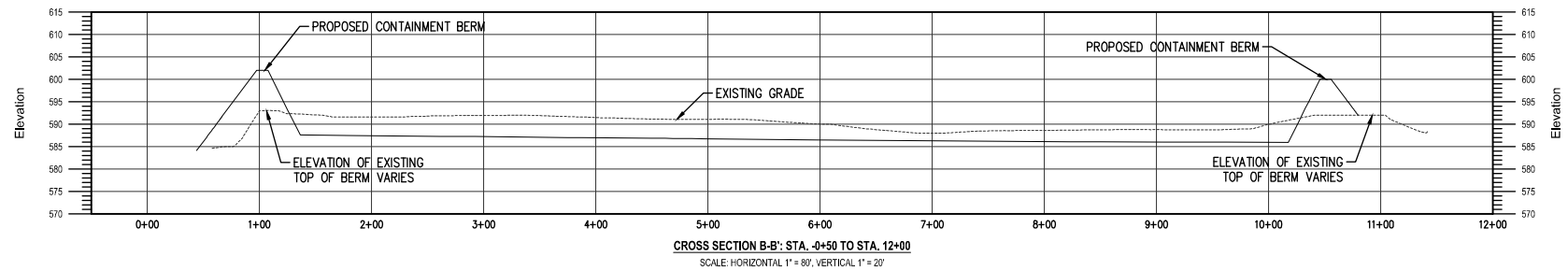
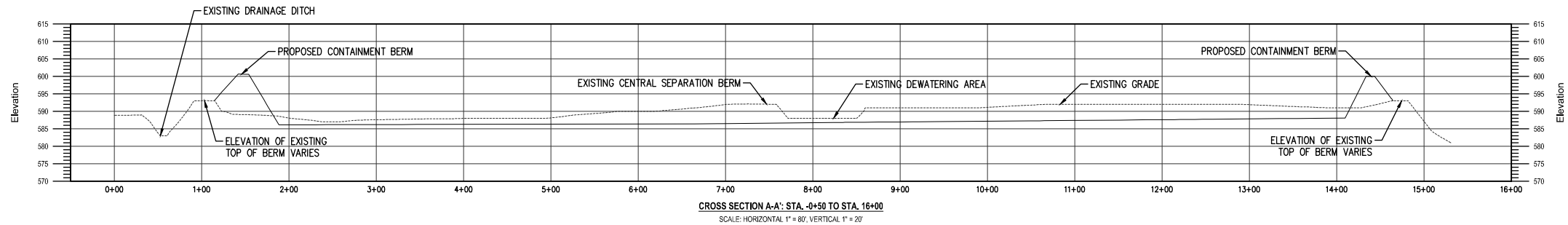
## CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO PORT OF CLEVELAND 2024-2025 MECHANICAL CAPACITY CONTAINMENT BERMS CONTROL POINT PLAN

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	17.0



z:\project files\160001\16205\card sheets and plans\phase 6 and 7\16-16205-cross sections.dwg

- NOTES:
- EXISTING TOPOGRAPHY WITHIN IS BASED WAS PROVIDED AND IS BASED ON FIELD SURVEY COMPLETED BY GARCIA SURVEYORS, INC. ON 11/16/2022 USING OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83, AND VERTICAL DATUM NAVD88.
  - EXISTING SITE CONDITIONS MAY VARY FROM CONDITIONS AND GRADES SHOWN ON THESE PLANS DUE TO ON-GOING SITE OPERATOR'S ACTIVITIES, SOIL STOCKPILING, DREDGING ACTIVITIES, CONSOLIDATION OF PLACED MATERIALS AND OTHER TOPOGRAPHY CHANGES TYPICAL TO A DYNAMIC FACILITY.



DESIGNED BY:	SC
DRAWN BY:	SC
CHECKED BY:	DJP/CLF
PROJECT NO.	16205
CHK'D BY:	
DATE:	
REVISION	
No.	

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO  
**PORT OF CLEVELAND 2024-2025  
MECHANICAL CAPACITY  
CONTAINMENT BERMS**  
PROPOSED CDF 12 CROSS-SECTIONS

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	18.0





No.	REVISION	CHK'D BY DATE	DESIGNED BY: GC
			GC
			GC
			CHECKED BY: DJP/CLF
			PROJECT NO. 16205

CLEVELAND ~ CUYAHOGA COUNTY ~ OHIO

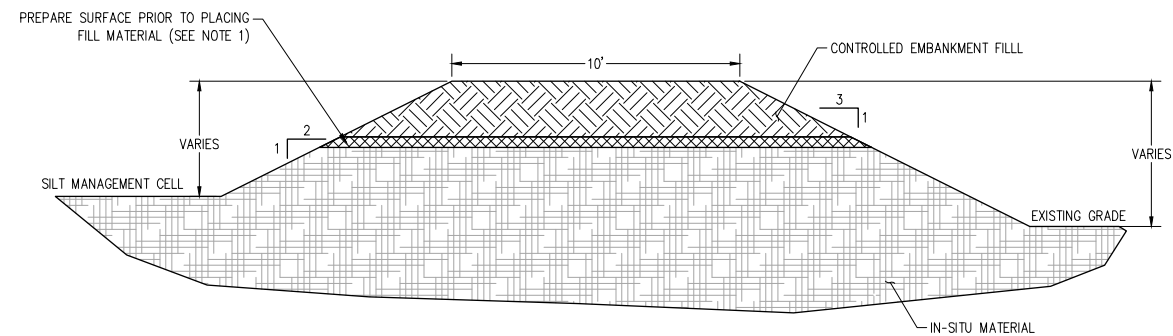
**PORT OF CLEVELAND 2024-2025**

**MECHANICAL CAPACITY**

**CONTAINMENT BERMS**

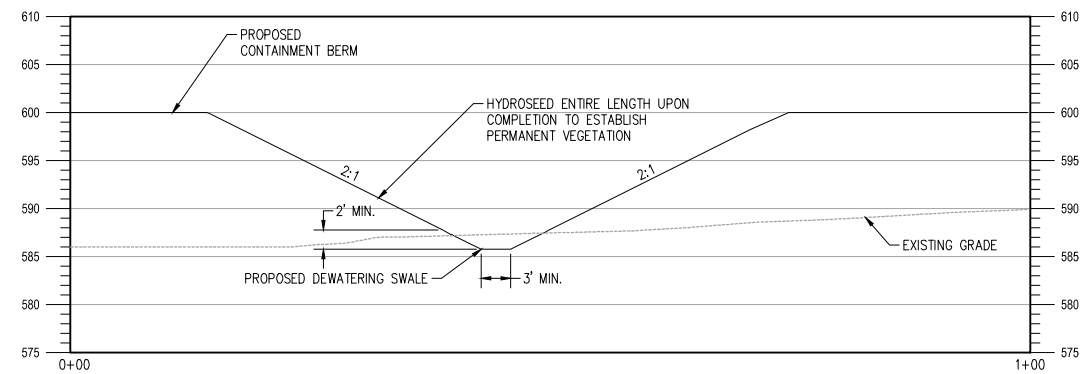
**TYPICAL CONSTRUCTION DETAILS**

APPLICATION NO.	
DATE:	3/17/2023
SCALE:	AS NOTED
SHEET:	19.0



NOTES:

1. THE TOP 4 INCHES OF EXISTING GRADE SHALL BE REMOVED AND SCARIFIED. A PROOFROLL SHALL BE COMPLETED AND OBSERVED BY THE ENGINEER PRIOR TO PLACING ANY FILL MATERIAL.
2. SEED AND MULCH AS INDICATED ON GRADING PLAN.
3. PROPOSED EXTERIOR SLOPES ARE NOT CONTINUOUS FROM EXISTING SURFACE IN ALL CASES. REFER TO THE CROSS SECTIONS ON SHEET 18.0 CROSS-SECTIONS FOR ACTUAL DESIGN BERM CONFIGURATION.



2 TYPICAL DEWATERING SWALE CROSS SECTION NOT TO SCALE



