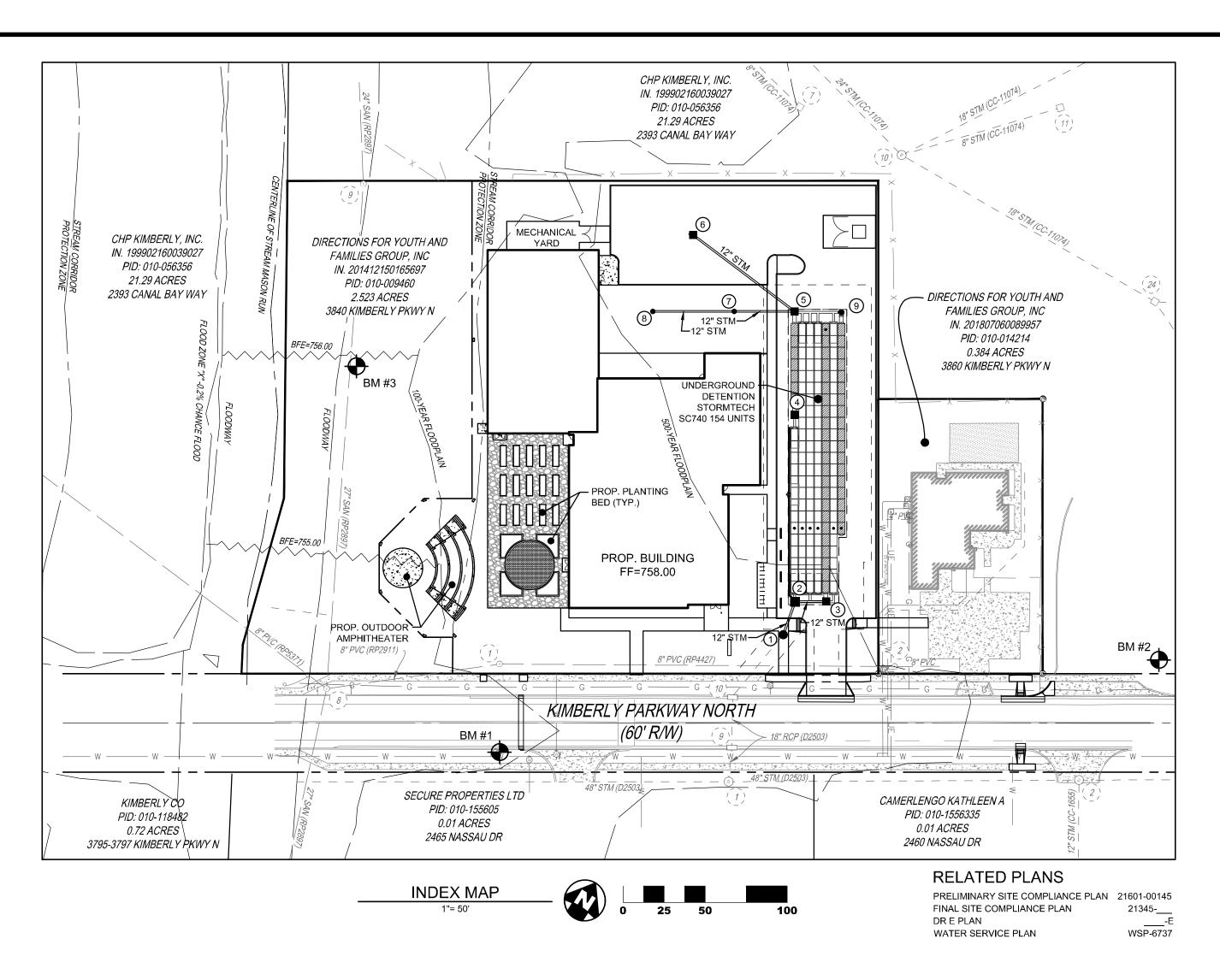
STIN	IATE OF QL	JANTIT	IES
ITEM	QUANTITY	UNIT	DESCRIPTION
201	1	LUMP	CLEARING AND GRUBBING
202	9	LF	18" PIPE REMOVED
202	1	EA	CATCH BASIN REMOVED
203	1,140	CY	EXCAVATION (UNDERGROUND DETENTION SCP)
207	668	LF	SILT FENCE
207	1	EA	CONCRETE WASHOUT AREA
207	7	EA	DANDY BAG INLET PROTECTION
604	1	EA	MANHOLE (AA-S104)
604	4	EA	CATCH BASIN (COC AA-S133B (3'X3'))
604	1	EA	CATCH BASIN (MODIFIED COC AA-S133B (4'X4'))
901	185	LF	12" PIPE WITH TYPE 1 BEDDING
SPEC	1,109	LF	UNDERGROUND DETENTION - STORMTECH SC-740 - 9 ROWS (154 CHAMBERS, TOTAL LENGTH = 1,109 LF, 48 ISOLATOR ROW CHAMBERS, 8 - 10" INSPEC PORTS)
SPEC	1	EA	30" NYLOPLAST DRAIN BASIN
SPEC	2	EA	24" MIN YARD DRAIN
			WORK IN RIGHT-OF-WAY
207	54	LF	SILT FENCE
207	1	EA	DANDY BAG INLET PROTECTION



NOTES FOR MASS GRADING PLANS NOT GOING TO FEMA:

UPON COMPLETION OF THE FILL IN CONJUNCTION WITH THIS MASS GRADING PLAN, AN APPLICATION FOR A LETTER OF MAP REVISION (LOMR) WILL NOT BE SUBMITTED TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), THUS ANY FUTURE SUBMITTAL TO FEMA WILL FIRST REQUIRE A NEW GRADE AND FILL PLAN WITH PROOF AS THE FILL USED AND PROPER PLACEMENT, INCLUDING COMPACTION. PRIOR TO THE EFFECTIVE DATE OF THE LOMR, A BUILDING CONSTRUCTED WITHIN THE DESIGNATED FILL AREA WILL BE ELEVATED AND/OR DRY FLOOD PROOFED IN ACCORDANCE WITH THE REQUIREMENTS OF C.C CHAPTER 1150, FLOODPLAIN MANAGEMENT OF THE COLUMBUS WATER, SEWER AND ELECTRICITY CODE.

FILLING MAY BE ALLOWED IN THE FLOODWAY FRINGE ONLY IF ASSOCIATED WITH A GRADE AND FILL PLAN. THE GRADE AND FILL PLAN SHALL BE FULLY DETAILED AND SUBMITTED AS PART OF AN APPLICATION FOR A CERTIFICATE OF ZONING CLEARANCE. FILL SHALL NOT BE PLACED UNTIL AFTER THE CERTIFICATE OF ZONING CLEARANCE HAS BEEN ISSUED FOR GRADING AND FILLING.

REGARDLESS OF ANY DETERMINATION ISSUED BY FEMA TO REMOVE AN AREA FILLED AS PERMITTED AND APPROVED FROM THE DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA), DEVELOPMENT WITHIN THAT AREA OF FILL SHALL BE CONSTRUCTED WITH THE LOWEST FLOOR LEVEL, EXCLUDING A BASEMENT OR CRAWL SPACE, AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

THE LOWEST GRADE ADJACENT TO A BUILDING OR STRUCTURE TO BE CONSTRUCTED WITHIN THE DESIGNATED FILL AREA SHALL BE AT OR ABOVE THE FLOOD PROTECTION ELEVATION, WITH THAT GRADE ELEVATION TO EXTEND AT LEAST TWENTY (20) FEET FROM THE PROPOSED BUILDING TOWARDS THE FLOODWAY OR FLOODING SOURCE.

IN ADDITION, A RESIDENTIAL DWELLING WITHIN THE DESIGNATED FILL AREA MUST HAVE A MEANS OF INGRESS AND EGRESS AT OR ABOVE THE BASE FLOOD ELEVATION THAT EXTENDS CONTINUOUSLY FROM THE DWELLING TO A LOCATION OUTSIDE THE SPECIAL FLOOD HAZARD AREA WITHIN THE SUBJECT SITE.

REASONABLY SAFE FROM FLOODING

ALL STRUCTURES ASSOCIATED WITH FUTURE DEVELOPMENT WITHIN THE AREA OF THE FLOODPLAIN FILL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD OF BEING "REASONABLY SAFE FROM FLOODING", AS OUTLINED IN TECHNICAL BULLETIN 10-01, DATED MAY 2001, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OR SUCCESSOR DOCUMENTS.

SHEET INDEX

TITLE SHEET	1
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EROSION CONTROL DETAILS	11

BENCHMARKS

VERTICAL DATUM IS NAVD1988 BASED ON SOURCE BENCHMARK CORS STATION "COLB". THIS IS A CONTINUOUSLY OPERATING REFERENCE STATION LOCATED ON THE GROUNDS OF AN ODOT FACILITY LOCATED AT 1960 W BROAD STREET IN COLUMBUS OHIO. THE PUBLISHED ELEVATION IS 722.39' (NAVD88).

BEI	NCHMARK	DESCRIPTION	NORTHING	EASTING	ELEVATION
SC	OURCE BM	CORS STATION "COLB"	714254.27	1815510.69	722.39
	BM #1	X-CUT ON FIRE HYDRANT FLANGE	700474.68	1857943.49	755.59
	BM #2	BOX CUT ON SIGN FOUNDATION	700734.64	1858254.45	758.66
	BM #3	RAILROAD SPIKE IN THREE ROOT	700628.06	1857745.37	752.60

#HORIZ. REF. DATUM = NAD 83 (NSRS 2011 ADJ.)

BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, OHIO SOUTH ZONE (NAD83-2011) AS DETERMINED BY A GPS SURVEY UTILIZING CORS STATION "COLB". THE PROJECT COORDINATES ARE BASED ON STATE PLANE COORDINATES AND HAVE BEEN SCALED TO GROUND BY USING A PROJECT ADJUSTMENT FACTOR OF 1.0000507821 APPLIED AT BASE POINT N 700,500.00 E 1,858,000.00 . GRID AND GROUND COORDINATES ARE IDENTICAL AT THE BASE POINT.

EASEMENT REFERENCE			REVISIONS		PLAN PREPARED BY:	APPROVALS: SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GEN AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAIL		PROJECT TITLE: PRIVATE S		
CITY NO.	COUNTY	RECORD	GRANTOR	NO.	DESCRIPTION	DATE		RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. APPRO STORM SEWERS ONLY.	OVED FOR	STORMWA
	VOL.	PAGE	GRANIOR				TATE OF ON THE			DIRECTIONS FOR Y 3840 KIMBE
							MICHAEL THE	CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION	DATE	JO40 KIMBER
										DIVISION USE ON
							E-70851 GROUP	ADMINISTRATOR, DIVISION OF POWER	DATE	
							CIVIL ENGINEERING www.kleingers.com SURVEYING SONAL ENGINEERING SURVEYING LANDSCAPE Westerville, OH 43082			
							LANDSCAPE Westerville, ÖH 43082 ARCHITECTURE 614.882.4311	ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE	DATE	
							MICHAEL J. COUVREUR E-70851 DATE EMAIL: MIKE.COUVREUR@KLEINGERS.COM	ADMINISTRATOR, DIVISION OF WATER	DATE	

SCP WATER QUANTITY/QUALITY STRUCTURE NOTICE

THE WATER QUANTITY/QUALITY STRUCTURE 2 AND THE ISOLATOR ROWS OF THE UNDERGROUND DETENTION SYSTEM ARE AN INTEGRAL PART OF THE PRIVATE STORM SEWER SYSTEM DEPICTED IN THESE DRAWINGS. RESPONSIBILITY AND ASSURANCE OF PERIODIC MAINTENANCE AND THE CONTINUOUS FUNCTIONALITY OF THIS STORMWATER QUANTITY/QUALITY DEVICES IS PERPETUAL: BEGINNING WITH THE OWNER AT THE TIME OF INSTALLATION AND CONTINUING TO ALL FUTURE OWNERS OF SAID PRIVATE STORM SEWER SYSTEM.

SEE SHEET 9 FOR POST-CONSTRUCTION MAINTENANCE AND INSPECTION SCHEDULE.

SITE IS TRIBUTARY TO: MASON RUN TO BIG WALNUT CREEK TO SCIOTO RIVER

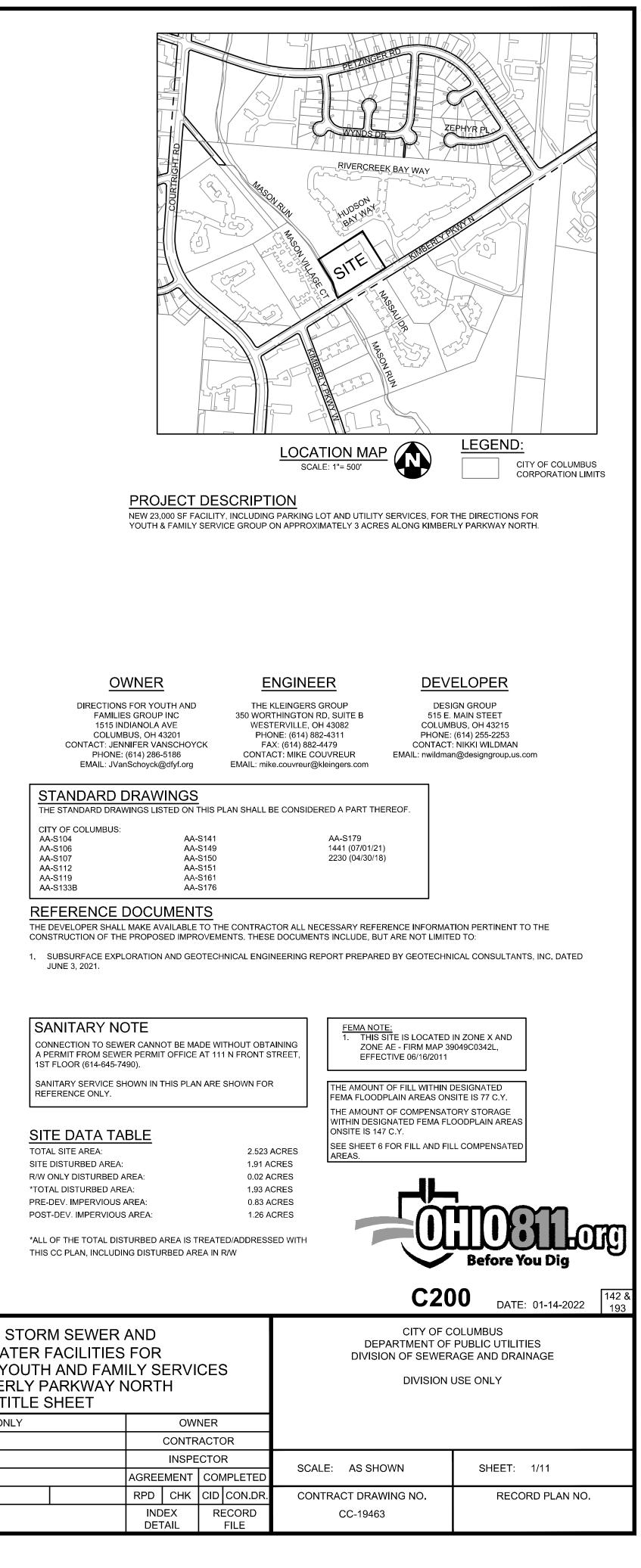
100-YEAR DETENTION SUMMARY

LOCATION	VOLUME REQUIRED	VOLUME PROVIDED	100-YR ELEV & VOLUME REQUIRED ELEV (NAVD88)	VOLUME PROVIDED ELEV (NAVD88)
CB 2 MODIFIED AA-S133B (4'X4') - UNDERGROUND DETENTION WITH ISOLATOR ROWS	11,316 CF	11,490 CF	754.12	754.20 (SEE NOTE BELOW)

VOLUME PROVIDED INCLUDES REQUIRED STONE SECTION AROUND UNDERGROUND STORAGE CHAMBERS AT 30% MINIMUM VOID SPACE AND IS THE ELEVATION AT THE TOP OF STONE STORAGE. REFER TO SHEET 8 FOR ELEVATION TABLES.

SUMMARY OF POST-CONSTRUCTION STORMWATER FACILITY CONTROL

CONTROL/OUTLET STRUCTURE NO.	PLAN VIEW & DETAIL PAGE NUMBERS FOR SCP	CONTROL FUNCTION	DRAINAGE AREA TO CONTROL FACILITY (ACRES)	FACILITY TYPE	GREEN INFRASTRUCTURE (SQ FT)
CB 2 - MODIFIED AA-S133B (4'X4')	4, 5	WATER QUANTITY & QUALITY	1.28	UNDERGROUND DETENTION WITH ISOLATOR ROWS	N/A



THE CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMSC), 2018 EDITION, REVISION (10/01/2021), INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AT LEAST 24-HOURS IN ADVANCE OF ANTICIPATED START OF CONSTRUCTION:

DIVISION OF SEWERAGE AND DRAINAGE (614) 645-7102 DIVISION OF DESIGN AND CONSTRUCTION (CONSTRUCTION SECTION) (614) 645-0433

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 CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

CONSTRUCTION OF THIS PROJECT MAY NOT BEGIN UNTIL THE EASEMENTS INDICATED HAVE BEEN RECORDED BY THE CITY.

THE DEVELOPER/OWNER SHALL, PRIOR TO ANY CONSTRUCTION OPERATION, DEPOSIT WITH THE CITY THE TOTAL ESTIMATED COSTS FOR INSPECTION AND WHERE REQUIRED A REPAVING GUARANTEE.

ANY MODIFICATION TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE.

ALL PLASTIC SEWER LINES SHALL BE DEFLECTION TESTED AFTER INSTALLATION IN CONFORMANCE WITH THE REQUIREMENTS OF ITEM 901 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT VERSION.

ALL CONCRETE PIPE, STORM AND SANITARY SEWER STRUCTURES WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT SAID PIPE. STORM AND SANITARY STRUCTURES HAVE BEEN INSPECTED BY THE CITY OF COLUMBUS AND MEETS THEIR SPECIFICATIONS. PIPE AND STRUCTURES WITHOUT PROPER IDENTIFICATION WILL NOT BE PERMITTED FOR INSTALLATION.

THE CONTRACTOR SHALL ENSURE THERE IS A SURVEYOR'S LEVEL AND ROD ON THE PROJECT FOR USE IN PERFORMING GRADE CHECKS WHENEVER SEWER LINE STRUCTURES OR PIPE ARE BEING INSTALLED. THE CONTRACTOR SHALL MAKE THIS EQUIPMENT AVAILABLE FOR USE AND ASSIST THE CITY INSPECTOR IN PERFORMING GRADE CHECKS WHEN REQUESTED BY THE INSPECTOR. THE INSPECTOR WILL MAKE ALL REASONABLE ATTEMPTS TO CONFINE REQUESTS FOR ASSISTANCE IN PERFORMING GRADE CHECKS TO TIME CONVENIENT TO THE CONTRACTOR.

THESE CHECKS WILL BE PERFORMED TO ENSURE THE FOLLOWING:

- 1. PROPER PLACEMENT OF EACH STRUCTURE.
- 2. PROPER INSTALLATION OF INITIAL RUNS OF PIPE FROM A STRUCTURE.
- 3. GRADE, AFTER AN OVERNIGHT OR LONGER SHUTDOWN.
- 4. GRADE, AT ANY OTHER TIME THE INSPECTOR HAS REASON TO QUESTION GRADE OF INSTALLATION.

GRADE CHECKS PERFORMED BY THE CITY INSPECTOR IN NO WAY RELIEVE THE CONTRACTOR OF THE ULTIMATE RESPONSIBILITY TO ENSURE CONSTRUCTION TO THE PLAN GRADE.

THE AMOUNT OF FILL WITHIN DESIGNATED FEMA FLOODPLAIN AREAS ONSITE IS 77 C.Y. THE AMOUNT OF FILL COMPENSATED WITHIN DESIGNATED FEMA FLOODPLAIN AREAS ONSITE IS 147 C.Y.

THE PONDING OR DETENTION AREAS ON THE PLANS ARE A PART OF THE STORM SEWER FACILITIES. THE DEVELOPER/OWNER WILL ASSUME THE RESPONSIBILITY TO MAINTAIN THE PONDING OR DETENTION AREAS SO AS NOT TO REDUCE THE WATER STORAGE AREAS. IF THE OWNER DOES NOT MAINTAIN THE PONDING AND DETENTION AREAS, THE PLAN WILL BECOME VOID AND THE CITY WILL PLUG THE SEWER AT THE OUTLET.

AS A CONDITION OF FINAL ACCEPTANCE, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT SURVEYS TO VERIFY THE FINAL GRADES AND ELEVATIONS OF STORM WATER DETENTION BASINS AND WETLANDS THAT ARE TO BE OWNED AND OPERATED BY THE CITY. AT THE COMPLETION OF HOME CONSTRUCTION, THE OWNER/DEVELOPER SHALL FIELD SURVEY THE STORM WATER DETENTION FACILITY TO VERIFY THAT THE FACILITIES ARE CONSTRUCTED ACCORDING TO APPROVED PLANS. SHOULD A DISCREPANCY BETWEEN THE PLANS AND CONSTRUCTED GRADES EXIST, THE DESIGN STORAGE OF THE DETENTION FACILITY SHALL BE RESTORED BY THE OWNER/DEVELOPER AS DIRECTED BY THE CITY OF COLUMBUS.

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIP RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING IFT HOLES. ETC.

ALL PLANS & CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT "RULES AND REGULATIONS" OF THE CITY OF COLUMBUS, FRANKLIN COUNTY, AND APPLICABLE OHIO DEPARTMENT OF TRANSPORTATION STANDARDS

CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.

THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS

ITEM NUMBERS REFER TO THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT) AND THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (COC), ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE CITY OF COLUMBUS AND THE OHIO DEPARTMENT OF TRANSPORTATION. WHEN IN CONFLICT, THE CITY REQUIREMENTS SHALL PREVAIL.

ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT AND/OR FACE OF CURB. UNLESS OTHERWISE NOTED.

ALL STRIPING COLOR AND WIDTH SHALL BE PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

CONCRETE WALKS SHALL BE 4" THICK WITH CONTROL JOINTS EQUALLY SPACED AT NO MORE THAN 5' ON CENTER

ALL CATCH BASIN GRATES LOCATED WITHIN PAVEMENT OR SIDEWALK AREAS SHALL CONFORM TO ADA REQUIREMENTS.

CONTRACTOR TO REPLACE ANY PAVEMENT OR UTILITIES DAMAGED WHICH ARE NOT SPECIFIED TO BE REMOVED ON THESE PLANS.

SPECIAL NOTES

THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

PERMITS

WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS. THE CONTRACTOR SH EXCAVATION PERMIT FROM CITY OF COLUMBUS, DEPARTMENT OF PUBLIC SERVICE- PERMIT BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE (614) 645-645-1876; EMAIL: COLSPERMITS@COLUMBUS.GOV

CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE TRAFFIC MANAGEMENT 1820 EAST 17TH AVENUE COLUMBUS, OHIO 43219 OFFICE: (614) 645-7393

CITY OF COLUMBUS SUPPORT SERVICES DIVISION-COMMUNIC 4211 GROVES ROAD COLUMBUS, OHIO 43232 TELEPHONE: (614) 724-7047 RADIO ROOM: (614) 724-4006

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY 1355 MCKINLEY AVENUE BUILDING C COLUMBUS, OHIO 43222 CONTRACTOR LINE: (614) 645-7756

EXISTING UTILITIES

UTILITY POLES WITHIN INFLUENCE OF THE UTILITY OPERATIONS SHALL BE REINFORCED BY COMPANY PRIOR TO THESE CONSTRUCTION ACTIVITIES. NOTIFICATION OF THE UTILITY COMP TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

UTILITY NOTES

DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM (STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDIN STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS NOTED.

COMPACTED FILLS ARE TO BE MADE TO THE MINIMUM OF THREE FEET ABOVE THE CROWN OF PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. AL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY.

ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SEWER SYSTEMS ARE PROHIBITED.

ALL PROPOSED STORM SEWERS AND SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE MAINTAINED BY THE OWNER.

STORM SEWER PIPE SHALL BE BUILT IN CONFORMANCE WITH THE REQUIREMENTS OF ITEM S CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT VERSION.

ALL EXISTING INVERTS ALONG THE PROPOSED TOP OF CASTING ELEVATIONS SHALL BE VERI CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.

MANHOLE TOPS SHALL BE ADJUSTED TO FINAL GRADE AS DIRECTED BY THE ENGINEER. COS INCLUDED IN THE PRICE BID FOR ITEM 604.

THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHAL MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOL DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SH RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO ENGINEER.

ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTE MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SH CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETTED INTO THE RO AS APPLICABLE. REPLACED DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDD DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DOWN AT THE TIME OF THE OPERATION. COST OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPI ITEMS.

ALL BEDDING SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS STANDARD DRAWING RIGID PIPE SEWER (6" TO 108" DIAMETER), CITY OF COLUMBUS STANDARD DRAWING AA-S149 PIPE SEWER (6" TO 60" DIAMETER), OR CITY OF COLUMBUS STANDARD DRAWING AA-S153 FOF SEWER (30 TO 108" DIAMETER).

IN ADDITION TO THE REQUIREMENTS OF AA-S140 AND AA-S151, ALL TRENCHES UNDER ROAD PAVEMENT SHALL BE A MINIMUM OF 36" WIDE TO ALLOW FOR MECHANICAL COMPACTION EQ HOETAMPS, JUMPING JACKS, ECT.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR EXPENSES INCURRED DUE TO SOIL GROUNDWATER, AND/OR ROCK EXCAVATION, ALL OF THESE ITEMS SHALL BE INCLUDED IN T FOR ITEM 901

ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST-ADS DRAIN BASIN, NDS DL FABRICATED PVC CATCH BASIN, AGRI-DRAIN CATCH BASIN, OR APPROVED EQUAL.

ALL CATCH BASINS PLACED WITHIN THE PAVEMENT SHALL HAVE HEAVY DUTY FRAMES AND C GRATES WITHIN PEDESTRIAN PATHWAYS SHALL BE ADA COMPLIANT.

STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35, PVC PF PER CMS ITEM 720 10, HIGH DENSITY POLYETHYLENE PER CMS ITEM 720 12, ALUMINIZED COE METAL, CMS ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE, CMS ITEM 706.02 CLASS I SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, CMS ITEM 706.02 CLAS STORM IS TO BE INSTALLED PER CMS ITEM 901. ALL STORM PIPE USED MUST HAVE A MANUFA SPECIFIED FRICTION FACTOR OF 0.013 (N=0.013) OR LESS.

ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REC

THE CONTRACTOR IS TO CONSTRUCT CURBS, CATCH BASINS, DOWNSPOUTS, PIPING AND CO ETC. AS REQUIRED TO CONVEY THE ROOF AND PAVED SURFACE DRAINAGE TO THE DETENTION

FOR EXACT LOCATION OF DOWN SPOUTS & ROOF DRAINS, COORDINATE WITH CONSTRUCTIO ALL ROOF DRAINS ARE TO BE 8" UNLESS OTHERWISE NOTED.

FORTY-EIGHT HOURS BEFORE DIGGING IS TO COMMENCE. THE CONTRACTOR SHALL NOTIFY FOLLOWING AGENCIES: THE OHIO UTILITY PROTECTION SERVICES (OUPS), AND ALL OTHER A WHICH MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBE UNDERGROUND PROTECTION, INC.

SITE CONTRACTOR SHALL PICK UP ALL UTILITIES, WITH THE EXCEPTION OF DOWNSPOTS, 5' BUILDING WALL. COORDINATE WITH CONSTRUCTION MANAGER.

A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE MAINTAINED BETWEEN THE WATERLINE AND ANY UTILITIES CROSSING THE WATERLINE. A MINIMUM HORIZONTAL CLEARANCE OF 10' SHALL BE MAINTAINED BETWEEN THE WATERLINE AND SANITARY SEWER.

ALL CATCH BASINS WITH DEPTH GREATER THAN 6' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF COC ITEM 611.

EASEMENT REFERENCE					REVISIONS		PLAN PREPARED BY:
COUNTY RECO		RECORD	GRANTOR	NO.	DESCRIPTION	DATE	
on no.	VOL.	PAGE					
							THE
							KLE
							CIVIL ENGINEER
							SURVEYING
							LANDSCAPE ARCHITECTURE

	ALL STORM AND SANITARY SEWER MANHOLES WITH A DEPTH GREATER THAN 6' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF COC ITEM 611.	ANY REQUIRED RELOCATION , SUPPORT, PROTECTION, OR ANY OT CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO B
HALL OBTAIN AN ⁻ OFFICE -7497; FAX (614)	EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE STABILIZATION.	UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPEC
CATIONS	ALL EXISTING INVERTS ALONG THE PROPOSED TOP OF CASTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.	COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMS UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING A THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S
CATIONS	ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.	LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-1, COPIES OF WHICH A
	DEWATERING	AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHAL THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHA
	THE COST OF ALL DEWATERING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS.	THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHA THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.
	THE DIRECT OR INDIRECT DISCHARGE OR PUMPING OF UNFILTERED SEDIMENT-LADEN WATER INTO THE	SANITARY SERVICE
	STORM DRAINAGE SYSTEM OR WATERCOURSE IS ILLEGAL AND PROHIBITED. ANY WELL, WELL POINT, PIT, OR OTHER DEVICE INSTALLED FOR THE PURPOSE OF LOWERING THE GROUND WATER TO FACILITATE CONSTRUCTION OF THIS PROJECT SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 3745-9-10 OF THE OHIO ADMINISTRATIVE CODE OR IN	SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2.08%, UNLESS OTHE SHALL CONFORM TO RULES AND REGULATIONS OF CITY OF COLUM INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHEF CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE CROSSINGS CONFORM TO ASTM D-3212.
THE UTILITY IPANY PRIOR	ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AS DIRECTED BY THE DIRECTOR OF PUBLIC UTILITIES OR HIS REPRESENTATIVE.	GRADING NOTES
IPANT PRIOR	ANY CONTRACTOR INSTALLING ANY WELL, WELL POINT, PIT, OR OTHER DEVICE USED FOR THE PURPOSE OF REMOVING GROUND WATER FROM AN AQUIFER SHALL COMPLETE AND FILE A WELL LOG AND DRILLING	ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
	REPORT FORM WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), DIVISION OF WATER, WITHIN 30 DAYS OF THE WELL COMPLETION IN ACCORDANCE WITH THE OHIO REVISED CODE SECTION 1521.01 AND 1524.05 IN ADDITION, ANY SUCH FACILITY IS COMPLETED IN ACCORDANCE WITH SECTION 1521.16 OF THE OHIO REVISED CODE. FOR COPIES OF THE NECESSARY WELL LOG, DRILLING REPORT, OR REGISTRATION FORMS, PLEASE CONTACT: DIVISION OF WATER, OHIO DEPARTMENT OF NATURAL RESOURCES, FOUNTAIN SQUARE, COLUMBUS, OHIO 43224, (614)265-6717.	SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER G RECOMMENDATIONS. BUILDING PAD PREPARATION SHALL BEGIN B ^N MATERIAL FROM PAD SITE. THEN PLACE & COMPACT BACKFILL MAT AND ARCHITECT'S RECOMMENDATIONS. ALL BACKFILL MATERIAL M GEOTECHNICAL ENGINEER.
CENTER OF NATES FOR OTHERWISE	THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO THE ODNR FOR THE REGISTRY, MAINTENANCE AND ABANDONMENT OF ANY WITHDRAWAL DEVICE USED IN CONSTRUCTION OF THIS PROJECT.	ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTEC RECOMMENDATIONS.
OF ANY	TEMPORARY SOIL EROSION AND SEDIMENT CONTROL	CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL OF COLUMBUS AND THE OHIO EPA.
LL FILLS SHALL	EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED AS PART OF THIS PROJECT. EROSION AND	CONTRACTOR TO REMOVE TREES AND CLEAR AREAS AS NECE
SANITARY	SEDIMENT CONTROL MEASURES SPECIFIC TO THIS SITE MAY BE FOUND ON SHEET NO. 6, 10, & 11 OF THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATION. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS AND/OR THE OHIO EPA	INCLUDING GRADING AND UTILITY WORK. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EX
PRIVATE AND	IT IS THE RESPONSIBILITY OF THE SITE OWNER TO NOTIFY THE CITY OF COLUMBUS 2 WORKING DAYS	INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTIN SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY ST WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PA
901 OF THE	PRIOR TO COMMENCEMENT OF THE INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING, AND EARTH MOVING. PRIMARY EROSION AND	PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATI
RIFIED BY THE	SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATION TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT THE STORMWATER MANAGEMENT OFFICE @ (614) 645-6700 OR FAX @ (614) 645-1840. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE EROSION AND MANAGEMENT CONTROL REGULATION (ADOPTED JUNE 1, 1994). FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION AS DETAILED IN THE CITY OF COLUMBUS CODES SECTION 1145.80.	THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EAR RESPONSIBLE FOR BURY/BORROW PITS AS NEEDED TO BALANCE T MUST APPROVE AREAS PRIOR TO BURY/BORROW OPERATIONS. AS REQUIRED AT COMPLETION OF CONTRACTOR WORK AND MUST BE MANAGER.
ST TO BE	TEMPORARY AND/OR PERMANENT SEEDING WITHIN THE DESIGNATED WORK LIMITS SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE MASS EXCAVATION IMPROVEMENTS. REFERENCE SHEET 10 FOR SEEDING SPECIFICATIONS.	ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEED PRACTICAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
LL BE URSES AND SHALL BE) THE	DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS	USE COC ITEM 659.
THE	DUST	CONCEPTUAL PURPOSES ONLY.
THE ER,	THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL MEASURE IN ACCORDANCE WITH C.M.S.C. ITEM 616. DUST CONTROL OPERATIONS SHALL BE PERFORMED ON A PERIODIC BASIS	EXISTING PERMANENT TRAFFIC CONTROL ITEMS DISTURBED DUE T
IALL BE DADWAY DITCH DING EQUAL IN	AND/OR AS DIRECTED BY THE ENGINEER AND/OR OWNER TO ALLEVIATE OR PREVENT THE DUST NUISANCE ORIGINATING WITHIN THE PROJECT LIMITS. THE COST FOR ALL DUST CONTROL MEASURES SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS.	ALL EXISTING PAVEMENT MARKINGS, INCLUDING RAISED PAVEMEN UNSERVICEABLE OR DESTROYED SHALL BE REPLACED IN LIKE KINE
BACKFILL ROVEMENT	<u>FINGERDRAINS</u>	
G AA-S151 FOR 9 FOR FLEXIBLE	OPENINGS SHALL BE PROVIDED AT DRAINAGE STRUCTURES TO ACCOMMODATE 4" DIAMETER PERFORATED PIPE FINGERDRAIN(S). THE FINGERDRAIN SHALL BE IN ACCORDANCE WITH CMSC ITEM 605	ALL DRIVE APPROACHES, PEDESTRIAN FACILITY, CURBS, AND RAME SHALL MEET THE REQUIREMENTS OF THE CITY OF COLUMBUS STAN THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MEET THESE
R RIGID PIPE	AND AS SHOWN.	PROPOSED PAVEMENT MARKING AND SIGNING WORK IS NOT TO BE CONTRACTOR SHALL CONTACT THE DIVISION OF MAINTENANCE FA
DWAY QUIPMENT,	THE FINGERDRAIN SHALL BE CONNECTED INTO THE INLET STRUCTURE AT A MINIMUM DEPTH OF 18" FROM PAVEMENT SURFACE WITHIN PARKING LOT AREAS.	WEEK IN ADVANCE, TO COORDINATE FINAL PAVEMENT MARKING AN AS REQUIRED BY THE CITY OF COLUMBUS DIVISION OF TRAFFIC MA DEVELOPMENT OF THIS SITE.
IL CONDITIONS.	ALL CATCH BASINS IN THE PAVEMENT ARE TO HAVE A MINIMUM OF 4, 4" PERFORATED FINGERDRAINS EXTENDING 10 LINEAR FEET FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.	PAVEMENT CUTTING, SAWING, AND EXCAVATION OPERATIONS NOT
HE PRICE BID	ALL CATCH BASINS IN THE CURB ARE TO HAVE A MINIMUM OF 2, 4" PERFORATED FINGERDRAINS EXTENDING 10 LINEAR FEET FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.	ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING CITY OF COLUMBUS STREETS AND ROADWAYS SHALL PROTECT TH CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT
URACAST	THE UNDERDRAIN SHALL BE PROTECTED FROM HEAVY TRAFFIC AFTER INSTALLATION PRIOR TO PLACEMENT OF THE PROPOSED PAVING.	NON-STORMWATER DISCHARGE INTO THE CITY OF COLUMBUS SEW PART OF ITS MS4 (MUNICIPAL SEPARATE STORM SEWER SYSTEM).
GRATES. ALL	NON-RUBBER TIRED VEHICLES	THE REQUIREMENT INCLUDES BUT IS NOT LIMITED TO WET OR DRY EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR P
ROFILE PIPE RRUGATED IV. STORM SS IV. ALL	NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON PUBLIC STREETS. EXCEPTIONS MAY BE GRANTED BY THE CITY ENGINEER WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING, AND ANY DAMAGES MUST BE REPAIRED TO THE SATISFACTION OF THE CITY COLUMBUS.	SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLA CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES
ACTURER	STORAGE OF EQUIPMENT AND MATERIALS	EQUIPMENT. MATERIALS AND METHODS SHALL BE PROVIDED BY TH AND/OR PRIVATE CONTRACTOR TO WORK CREWS PERFORMING TH
QUIRED. ONNECTIONS ION FACILITY.	NO MATERIALS, INCLUDING PIPE, SHALL BE STORED WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN ONE HUNDRED (100) FEET OF ANY INTERSECTING STREET OR DRIVEWAY. DURING NON-WORKING HOURS, STORAGE OF EQUIPMENT SHALL COMPLY WITH THESE SAME REQUIREMENTS. COMPLIANCE WITH THESE REQUIREMENTS ALONG WITH ADDITIONAL PROVISIONS OF THE CONTRACT SPECIFICATIONS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS LEGAL RESPONSIBILITIES FOR THE SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL INDICATE HIS INTENT WITH REGARD TO STORAGE OF THE MATERIAL AT THE	MADE AVAILABLE TO WORK CREWS FOR USE IN CLEANING UP DISCI CUTTING ACTIVITIES, AND PREVENTING RUNOFF. ALL WORK CREWS EMPLOY EQUIPMENT, MATERIALS, AND ENVIRONMENTAL PROTECTI DISCHARGES FROM ENTERING THE CITY OF COLUMBUS STORM SEV STATE OF OHIO.
ON MANAGER.	PRE-CONSTRUCTION MEETING.	THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENT PROJECT INCLUDING STORMWATER POLLUTION PREVENTION PLAN (SWP3) O
' THE AGENCIES ERS OF OHIO	SANITARY FACILITIES THE CONTRACTOR OR OWNER SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKMEN AND INSPECTORS FOR THE DURATION OF THE WORK, COST SHALL BE INCLUDED IN THE	PLAN SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCA
	PRICE BID FOR VARIOUS IMPROVEMENT ITEMS.	EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED AS F
OUTSIDE		SEDIMENT CONTROL MEASURES SPECIFIC TO THIS SITE MAY BE FO THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REC

THE DIVISION OF POWER (DOP) MAY HAVE OVERHEAD AND UNDERGROUND PRIMARY. SECONDARY. AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OUPS AT 811 OR 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

DISCRETION OF THE CITY OF COLUMBUS, PROJECT ENGINEER AND/OR THE OHIO EPA.

AND/OR THE OHIO EPA.



HER ACTIVITY CONCERNED WITH THE BE PERFORMED BY THE CONTRACTOR OF THE PROJECT. DOP SHALL MAKE AT THE EXPENSE OF THE PROJECT. CITY OF COLUMBUS STREET LIGHTING CIFICATIONS" (MIS) AND THE CITY OF SC) ANY NEW OR RE-INSTALLED AS REFERRED TO IN SECTION 1000.18 OF EXISTING STREET LIGHT RE AVAILABLE FROM DOP.

MANNER BY THE CONTRACTOR ITS REPAIRS, THE DOP DISPATCH OFFICE LL MAKE ALL NECESSARY REPAIRS. AND ALL BE PAID BY THE CONTRACTOR TO

ERWISE NOTED. THE SANITARY SERVICE MBUS, SANITARY SERVICE SHALL BE RWISE NOTED. A MINIMUM OF 18" SANITARY SERVICE JOINTS SHALL

GEOTECHNICAL ENGINEER'S CLEARING & STRIPPING UNSUITABLE ERIAL AT GEOTECHNICAL ENGINEER'S IUST BE ACCEPTABLE TO THE

CHNICAL ENGINEER'S

, PRACTICES REQUIRED BY THE CITY

SSARY TO PERFORM ALL SITE WORK

XISTING TREES AND OTHER VEGETATION NG, BREAKING OR SKINNING OF ROOTS, OCKPILING CONSTRUCTION MATERIALS ARKING OF VEHICLES WITHIN DRIP LINE. ION TO BE LEFT STANDING.

THWORK ON SITE. THE CONTRACTOR IS HE SITE. GEOTECH AND ENGINEER S-BUILT OF BURY/BORROW PIT WILL BE SUBMITTED TO THE CONSTRUCTION

BARE AS A RESULT OF CONSTRUCTION DED AND MULCHED AS SOON AS IF NO SPECIFICATIONS ARE SUPPLIED,

OUNDATION PLANS. SITE PLAN IS FOR

O UTILITY INSTALLATION

T MARKERS, REMOVED, RENDERED

IPS CONSTRUCTED WITH THIS PROJECT NDARDS AND ADA COMPLIANCE. IT IS CONSTRUCTION STANDARDS.

PERFORMED BY THIS PLAN. THE CILITY AT (614) 645-7393, AT LEAST ONE ND SIGNING WORK FOR THIS PROJECT AINTENANCE ENGINEER FOR

PAVEMENT-CUTTING OPERATIONS ON HE ENVIRONMENT FROM DISCHARGES COLUMBUS CITY CODE 1145 PROHIBITS VER SYSTEM, CURB INLETS AND ANY

SAW-CUTTING, JACK HAMMERING, RIVATE CONTRACTOR WORK CREWS OR OTHER SUCH DISCHARGES FROM RESPONSIBLE FOR EACH PAVEMENT ATIONS (NOV/S) AND FINES ISSUED BY

HE RESPONSIBLE PUBLIC AGENCY HE PAVEMENT CUTTING ACTIVITY AND HARGES RESULTING FROM SUCH S SHALL BE TRAINED TO EXERCISE AND TIVE MEASURES TO PREVENT POLLUTED WER SYSTEM AND WATERS OF THE

SPONSIBLE FOR ENSURING THAT THE PLANS, NOTES AND/OR DRAWINGS OR SPILL PREVENTION/REMEDIATION VATION OPERATIONS

PART OF THIS PROJECT. EROSION AND DUND ON SHEET NO(S). 6, 10 AND 11 OF PROVISIONS OF THE DIVISION OF GULATION. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS

ALL EROSION SEDIMENTATION CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY OF COLUMBUS TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE (1) OR MORE ACRES, THIS INCLUDES SITE CLEARING, GRUBBING, AND ANY FARTH MOVING, PRIMARY FROSION AND SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATIONS TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT THE STORMWATER MANAGEMENT OFFICE AT 614-645-6700 OR BY FAX AT 614-645-1506. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE EROSION AND SEDIMENT POLLUTION CONTROL REGULATION (ADOPTED JUNE 1, 1994). FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION AS DETAILED IN THE COLUMBUS CITY CODES SECTION 1145.80.

THE NPDES PERMIT HOLDER SHALL PROVIDE QUALIFIED PERSONNEL TO CONDUCT SITE INSPECTIONS ENSURING PROPER FUNCTIONALITY OF THE EROSION AND SEDIMENTATION CONTROLS. ALL EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A 1/2" STORM EVENT OR GREATER THAT OCCURS OVER A 24 HOUR PERIOD. RECORDS OF THE SITE INSPECTIONS SHALL BE KEPT BY THE CONTRACTOR AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUIRED.

THIS PLAN MUST BE POSTED ON SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON SITE AT ALL TIME.

SEE -E PLAN FOR MAINTENANCE OF TRAFFIC NOTES.



DATE: 01-14-2022

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

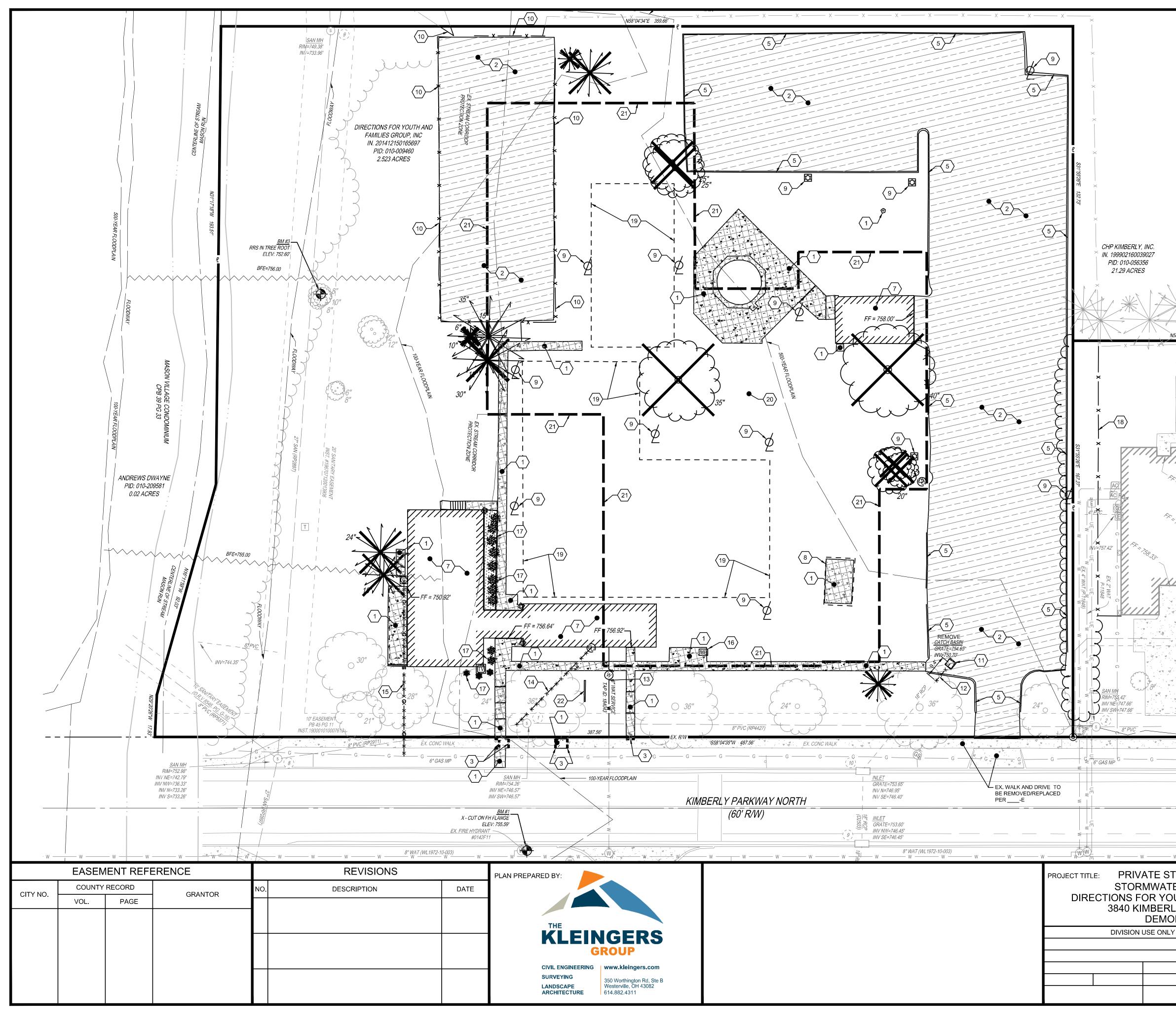
Y PARKWAY NORTH								
Y			OW	NER				
		CONTRACTOR						
	INSPECTOR							
		AGREEMENT COMPLETED			/IPLETED			
		RPD	СНК	CID	CON.DR.			
		IND DE1		RI	ECORD FILE			

SCALE: N.T.S.

SHEET: 2/11

CONTRACT DRAWING NO. CC-19463

RECORD PLAN NO.



DEMOLITION LEGEND



REMOVE EX. CONCRETE

- REMOVE EX. ASPHALT
- SAWCUT LINE

X X X X X · REMOVE EX. UTILITY

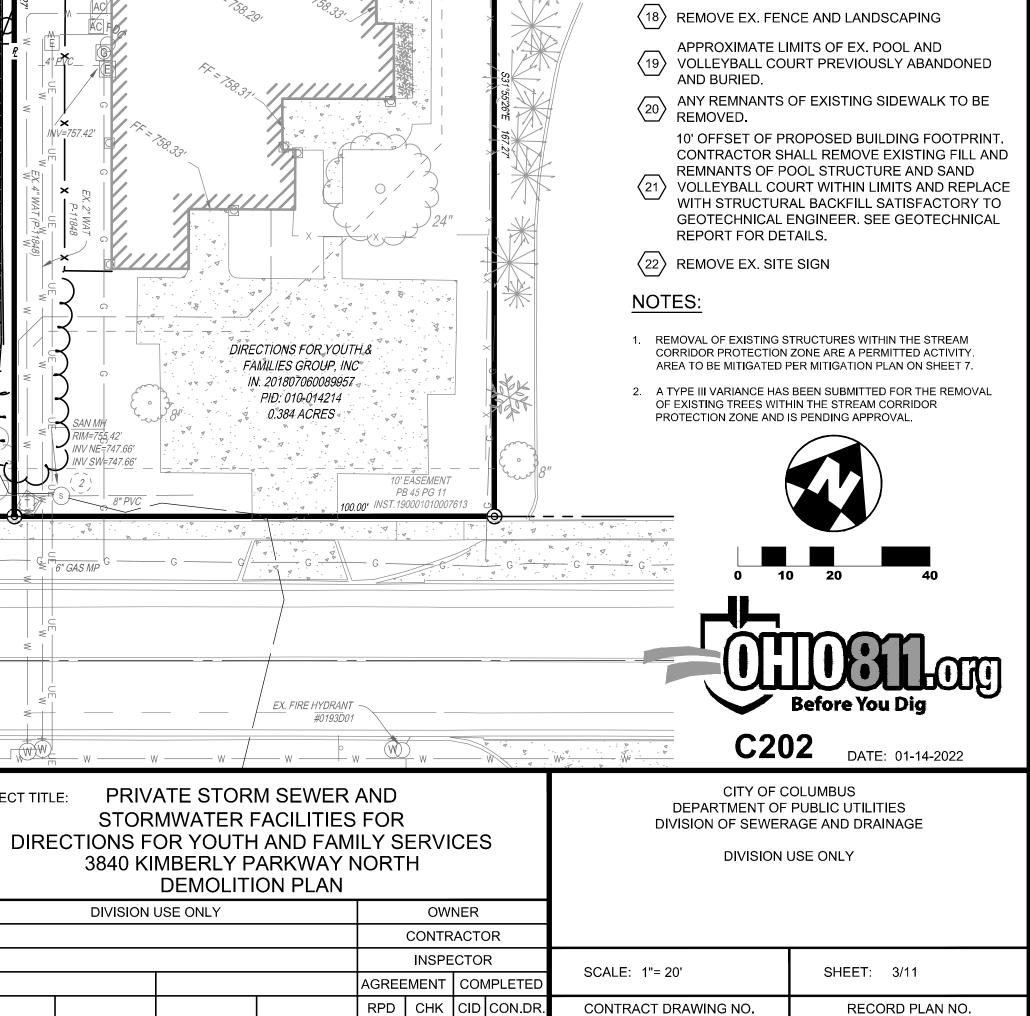


REMOVE EX. TREE

CODED NOTES

- $\langle 1 \rangle$ REMOVE EX. CONCRETE
- $\langle 2 \rangle$ REMOVE EX. ASPHALT
- $\langle 3 \rangle$ SAWCUT EX. CONCRETE AT NEAREST JOINT
- $\langle 4 \rangle$ SAWCUT EX. CURB AND PAVEMENT
- $\left< \frac{5}{5} \right>$ REMOVE EX. CURB
- 6 REMOVE EX. CURB & GUTTER
- $\langle 7 \rangle$ REMOVE EX. BUILDING
- 8
 RELOCATE EX. SHELTER TO ADJACENT DFYF

 PROPERTY
- $\langle 9 \rangle$ REMOVE EX. LIGHT POLE
- (10) REMOVE EX. FENCE
- $\langle 11 \rangle$ REMOVE EX. STORM STRUCTURE
- $\langle 12 \rangle$ REMOVE EX. STORM PIPE
- $\langle 13 \rangle$ ABANDON WATER SERVICE PER WSP-6737
- $\langle 14 \rangle$ REMOVE EX. SANITARY SERVICE
- $\langle 15 \rangle$ REMOVE EX. GAS SERVICE
- (16) REMOVE EX. MAILBOX
- $\langle 17 \rangle$ REMOVE EX. LANDSCAPING



CC-19463

N58°04'34"E 100.00' V 4 .

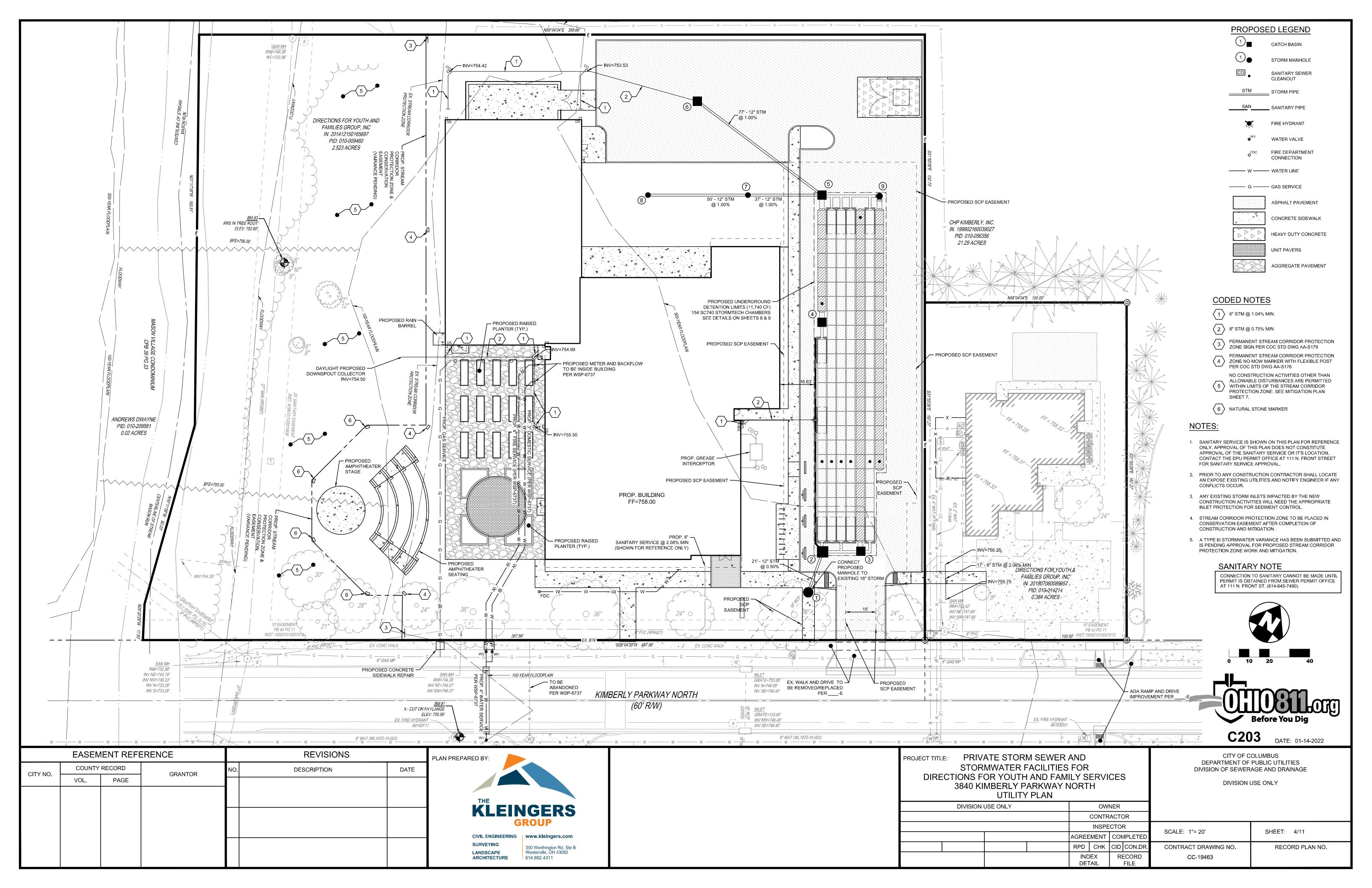


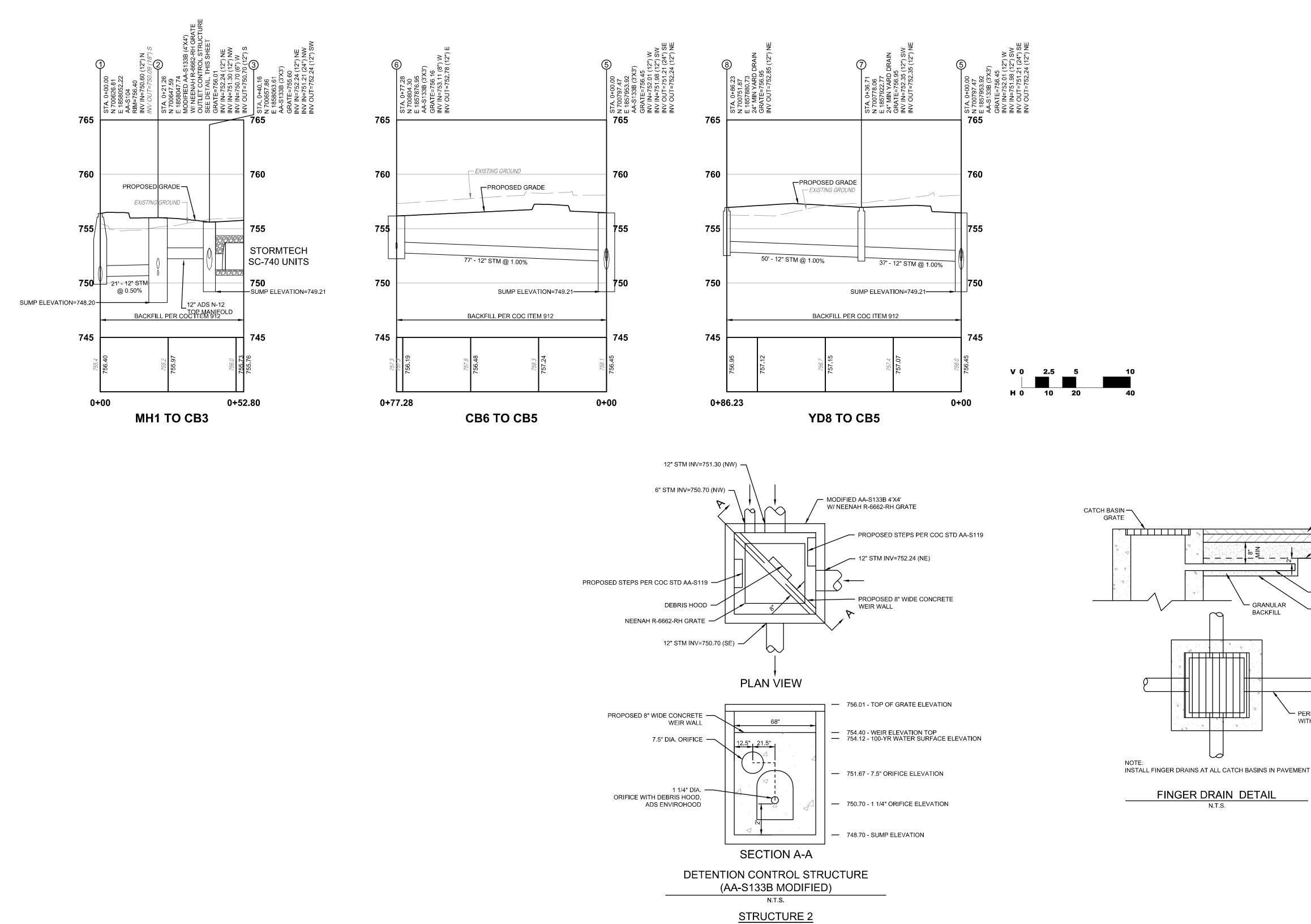
INDEX

DETAIL

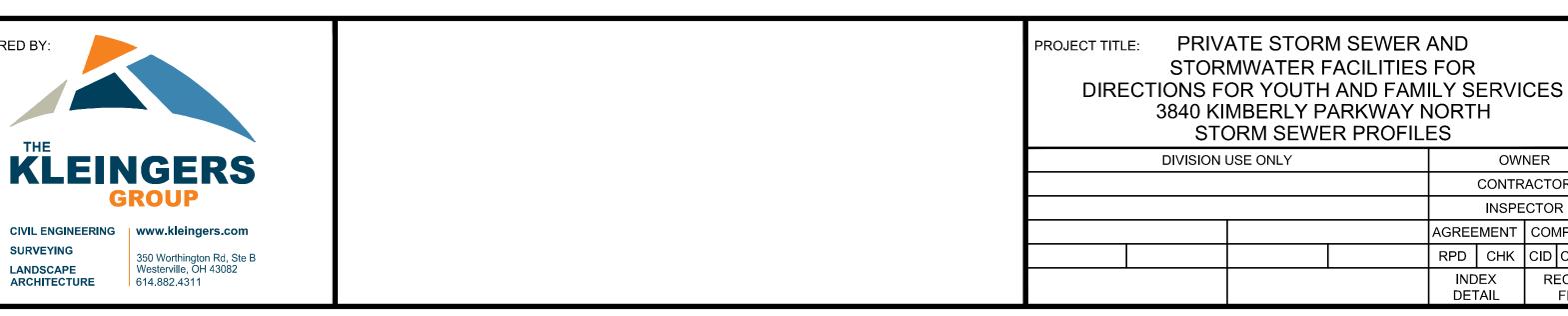
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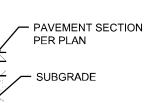
EASEMENT REFERENCE REVISIONS PLAN PREPARED BY: COUNTY RECORD DESCRIPTION DATE CITY NO. GRANTOR PAGE VOL. SURVEYING LANDSCAPE ARCHITECTURE



OHIO SOUTH COORDINATES										
	PL	AN	AS-E	UILT						
STR. NO.	NORTHING	EASTING	NORTHING	EASTING						
1	700626.81	1858052.22								
2	700647.59	1858047.74								
3	700657.86	1858063.61								
4	700744.00	1857987.24								
5	700797.47	1857953.92								
6	700804.30	1857876.95								
7	700778.06	1857922.77								
8	700751.87	1857880.73								
9	700812.09	1857978.39								

STORM STRUCTURE SCHEDULE

- 4 N 700744.00 E 1857987.24 AA-S133B (3'X3') GRATE=756.37 INV OUT=751.21 (24") NW INV OUT=752.24 (12") SE
- 9 N 700812.09 E 1857978.39 30" NYLOPLAST BASIN W/ SOLID GRATE GRATE=757.75 INV OUT=751.21 (24") SE INV OUT=752.24 (12") SW



- 10 LF ~ 4" PERFORATED PIPE WITH FILTER SOCK

SUBGRADE

- GRANULAR

BACKFILL

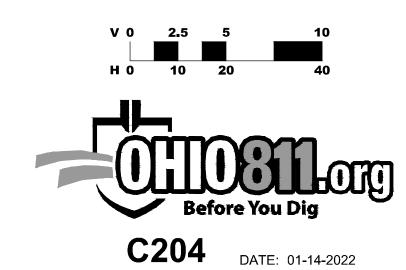
 \sim

- PERFORATED PIPE WITH FILTER SOCK

NOTES

- 1. ALL BACKFILL SHALL BE PER CITY OF COLUMBUS ITEM 911 UNLESS OTHERWISE SPECIFIED.
- 2. PROJECT COORDINATES ARE BASED ON STATE PLANE COORDINATES AND HAVE BEEN SCALED TO GROUND BY USING A PROJECT ADJUSTMENT FACTOR OF 1.0000507821 APPLIED AT BASE POINT N 700,500.00 E 1,858,000.00 . GRID AND GROUND COORDINATES ARE IDENTICAL AT THE BASE POINT.

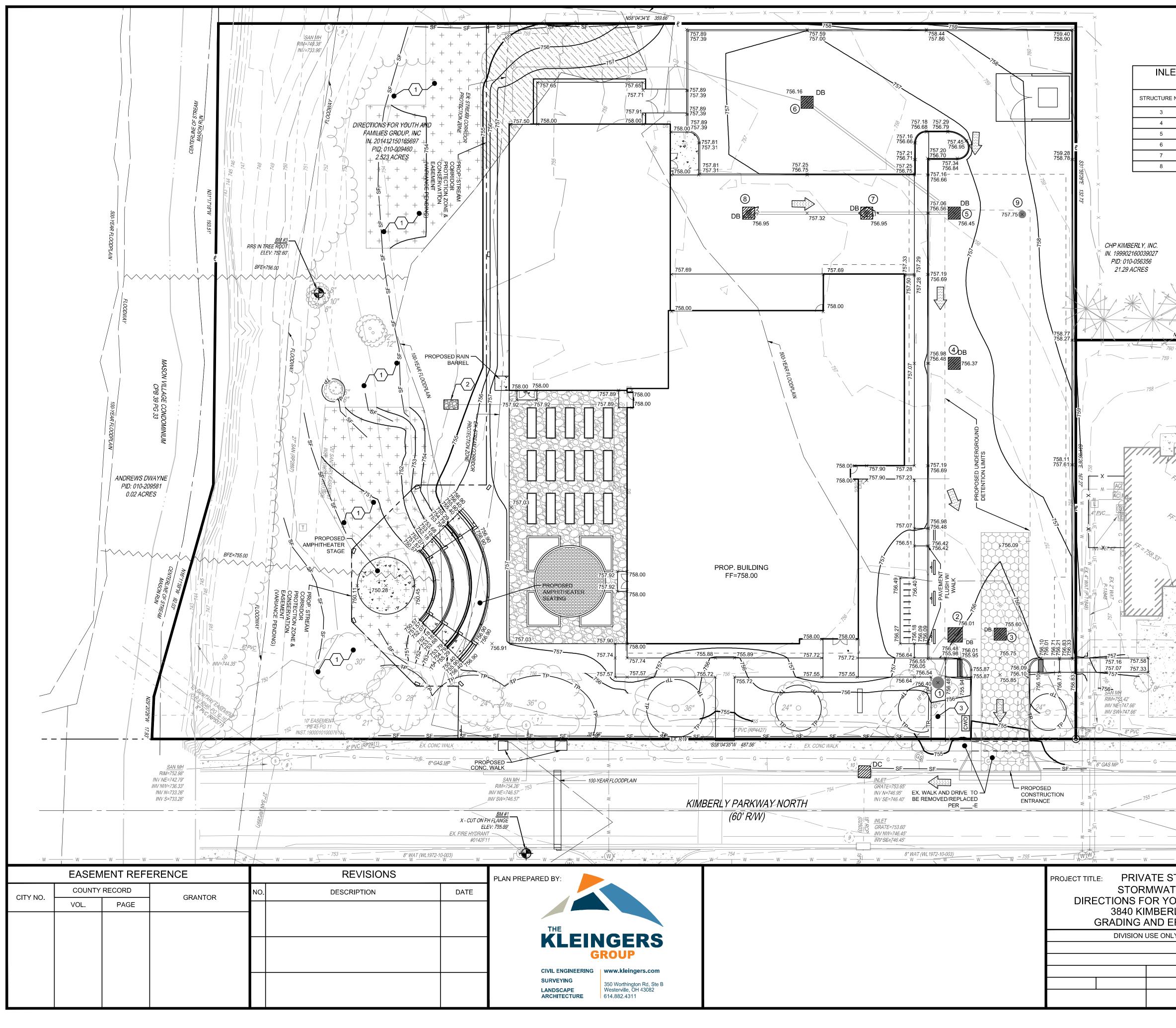
PROFILE VERTICAL DATUM = NAVD 88



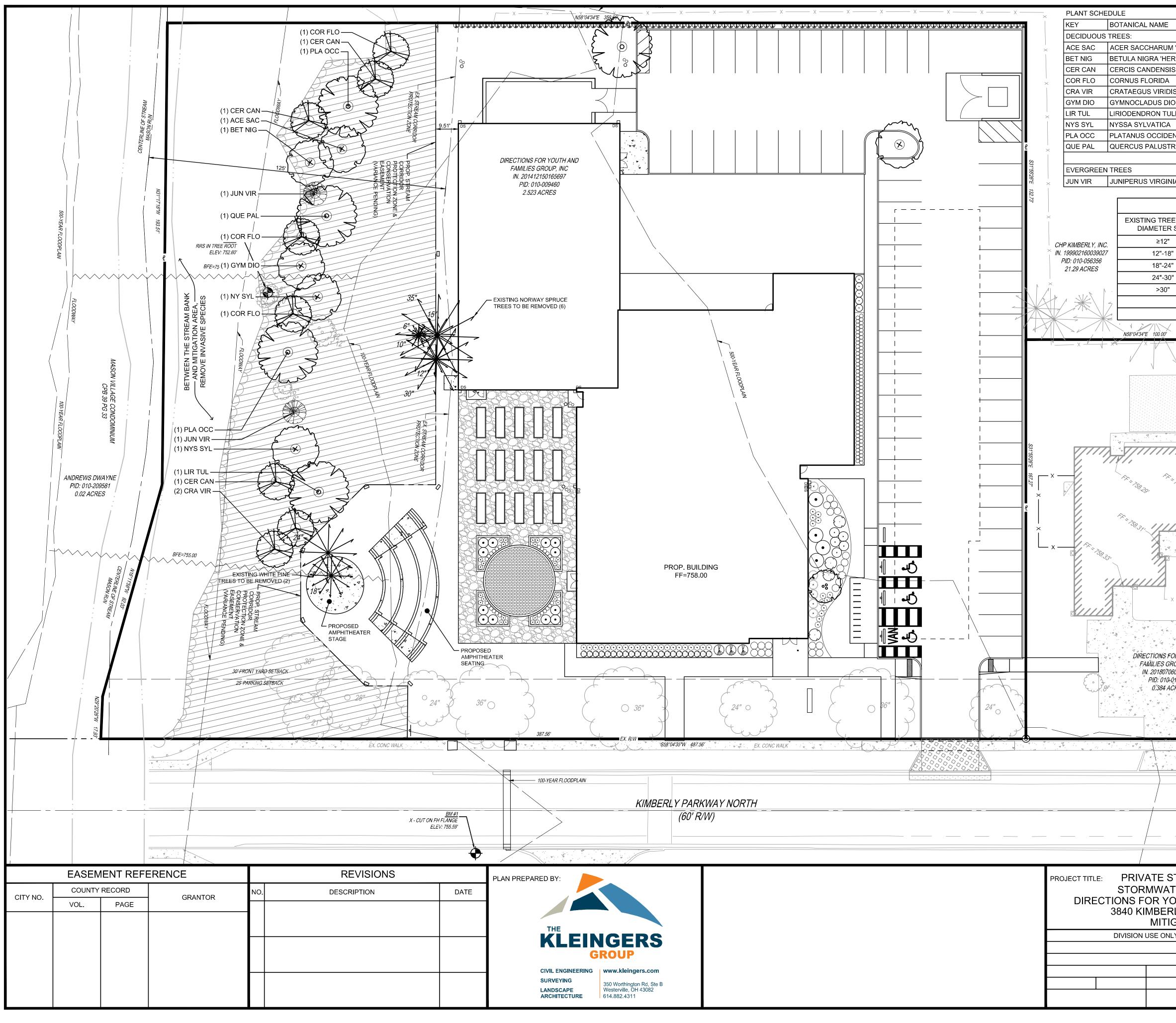
CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

Y OWNER								
CONTRACTOR								
		INSPECTOR			R	SCALE: AS SHOWN	SHEET:	5/11
		AGREE	MENT	CON	NPLETED	SCALE. AS SHOWN	SHEET.	5/11
		RPD	СНК	CID	CON.DR.	CONTRACT DRAWING NO.	RECC	ORD PLAN NO.
		INDEX DETAIL			ECORD FILE	CC-19463		



				GRADING LE	GEND
				755 EXIS	STING MAJOR CONTOUR
				EXIS	STING MINOR CONTOUR
ET EI	ROSION PRO			_	
		7		755 PRC	POSED MAJOR CONTOUR
E NO.	DRAINAGE AREA (AC.)	EROSION CONTR	ROL	756 PRC	POSED MINOR CONTOUR
	0.51	DANDY BAG		756.00	
	0.45	DANDY BAG		× ^{756.00} PRC	POSED SPOT ELEVATION
	0.15	DANDY BAG			DPOSED SWALE
	0.34	DANDY BAG			
	0.05	DANDY BAG		100-	YEAR FLOOD ROUTE
	0.08	DANDY BAG		GRA	ADING FILL AREA
					ADING COMPENSATORY STORAGE AREA
N58°04'34			S32:05/26	DB DAN SEE DC DAN SEE SF SEE ** TP TRE CWO CON SEE CWO CON SEE TYP 1. AN CCO 1. AN CCO 1. AN CCO 2. PR CCO CON SEE TYP	IY EXISTING STORM INLETS IMPACTED BY THE NEW ONSTRUCTION ACTIVITY WILL NEED THE PROPRIATE INLET PROTECTION FOR SEDIMENT ONTROL. COPOSED DANDY BAGS SHALL ACT AS SEDIMENT ONTROL FOR THE PROPOSED PROJECT. THE VAINAGE AREA GOING TO EACH DANDY BAG IS LESS IAN 1.0 ACRE. CONTRACTOR SHALL NOT SEND ANY IDIMENT-LADEN, MUDDY OR TURBID WATER TO THE COPOSED UNDERGROUND DETENTION SYSTEM.
	ECTIONS FOR YOUT	×××××××××××××××××××××××××××××××××××××	5°E 167.27 - 852	(1) (2) (3)	DED NOTE NO CONSTRUCTION ACTIVITIES OTHER THAN ALLOWABLE DISTURBANCES ARE PERMITTED WITHIN LIMITS OF THE STREAM CORRIDOR PROTECTION ZONE. SEE MITIGATION PLAN SHEET 7. 4'Wx6'Lx1.5'D TYPE C ROCK CHANNEL PROTECTION W/ FILTER HAND EXCAVATE PROPOSED SIDEWALK UNDER DRIP LINE OF EXISTING TREE TO PRESERVE AND PROTECT TREE ROOTS
F F	AMILIES GROUP, INC IN: 201807060089957	A D. A	0	15]	
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	EX. FIRE HYDRANT				Before You Dig
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— w	w v			Wr Wr	C205 DATE: 01-14-2022
TER OUTI RLY F	RM SEWER FACILITIES H AND FAM PARKWAY N SION CONT	FOR ILY SERVIC NORTH	ER	DEPART DIVISION C	CITY OF COLUMBUS TMENT OF PUBLIC UTILITIES DF SEWERAGE AND DRAINAGE DIVISION USE ONLY
		INSPEC		SCALE: 1"= 20'	SHEET: 6/11
			COMPLETED	30ALE: 1"= 20"	SHEET: 0/11
			CID CON.DR.	CONTRACT DRAWING	G NO. RECORD PLAN NO.
		INDEX DETAIL	RECORD FILE	CC-19463	
			FILE		



	COMMON NAME		SIZE	ROOT	REMARKS
M 'GREEN MOUN			2.5" CAL. MIN.	B&B	
ERITAGE'		КСН	14' HT. MIN.	B&B	3-STEM TRUNK
SIS A	REDBUD FLOWERING DOGW	000	8' HT. MIN. 2.5" CAL. MIN.	B&B B&B	3-STEM TRUNK SINGLE STEM
) DIS 'WINTER KING			2.5" CAL. MIN. 2.5" CAL. MIN.	B&B B&B	SINGLE STEM
DIOICUS 'ESPRES			2.5" CAL. MIN.	B&B	
ULIPIFERA	TULIP TREE		2.5" CAL. MIN.	B&B	
A	BLACK GUM		2.5" CAL. MIN.	B&B	
ENTALIS	AMERICAN SYCAMO	DRE	2.5" CAL. MIN.	B&B	
TRIS	PIN OAK		2.5" CAL. MIN.	B&B	
NIANA	EASTERN RED CED	AR	8' HT. MIN.	B&B	
	TREE R	EPLACEMENT	PLAN		
EE TRUNK R SIZE	REPLACEMENT RATIO	EXISTING T	REES REMOVED	REQUIRED	2.5" REPLACEMENT TREES
"	1:1		3		3
8"	1:2		2		4
4"	1:3		1		3
0"	1:4		1		4
"	1:5		1		5
·		L REQUIRED 2.5" REI			19
		L PROVIDED 2.5" REI	PLACEMENT TREES		19
LX ZL x -		. —			
\mathcal{I}_{κ}	*	LEC	BEND		
			EX. SCPZ L	IMITS	
			PROPOSED	SCPZ LIMITS	;
		6"		NTED WITH NA	ATURAL GRASSES
v			EXISTING T	REE TO BE R	EMOVED
		00			
	· · · · · · · · · · · · · · · · · · ·	لتحر			
×			OSED ENCROACHME		4,774 SF
· · · · · · · · · · · · · · · · · · ·			OSED MITIGATION AF		19,137 SF
· · · · ·					
			IRED MITIGATION CR OSED MITIGATION CF		4,774 SF 19,137/4 = 4,784 SF
///////////////////////////////////////	31°55				
	"26"E	MITIC	ATION AREA SEED MI	IX۰	
	167.2	GRAS	S SEED: FRESH, CLE	AN, DRY, NEW	
			LYING WITH AOSA'S Y AND GERMINATION		TESTING SEEDS" FOR
\langle)24"				S FOLLOWS, WITH NOT NOT LESS THAN 100
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: 4		WEED	S AND GRASSES.		
					MIX" (ITEM #MSG03)
					NURSERY, APPROVED ACYRIUM SCOPARIUM
A P		EL	YMUS VIRGINICUS, E	ELYMUS CAN	ADENSIS, BOUTELOUA
FOR YOUTH & GROUP, INC			RTIPENDULA, TRI TEROLEPIS AND AGR		
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STORM SEV	VER AND			F COLUMBUS	
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	FAMILY SERVICES				
RLY PARKW			DIVISIO	ON USE ONLY	,
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NLY	OWNER				
	CONTRACTO	R			
	INSPECTOR		· 1"- 20'		ET. 7/44
	AGREEMENT COM	PLETED	: 1"= 20'	SHE	ET: 7/11
	RPD CHK CID	CON.DR. CONTR	RACT DRAWING NO.	F	RECORD PLAN NO.
		CORD	CC-19463		
	DETAIL	ILE			

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- 6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- 7. REQUIREMENTS FOR HANDLING AND INSTALLATION: • TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE
 - INTEGRAL, INTERLOCKING STACKING LUGS. • TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER
 - JOINT SHALL NOT BE LESS THAN 2". • TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
- THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. • THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY
- ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE
- THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- 9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

- **IMPORTANT NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740** SYSTEM
- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH
- SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
- STONESHOOTER LOCATED OFF THE CHAMBER BED. BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.

- 6. MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2"
- (20-50 mm).
- BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH
- SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". 2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
- DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE"
- WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH
- SC-310/SC-740/DC-780 CONSTRUCTION GUIDE"
- TRUCK TRAVEL OR DUMPING.

THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

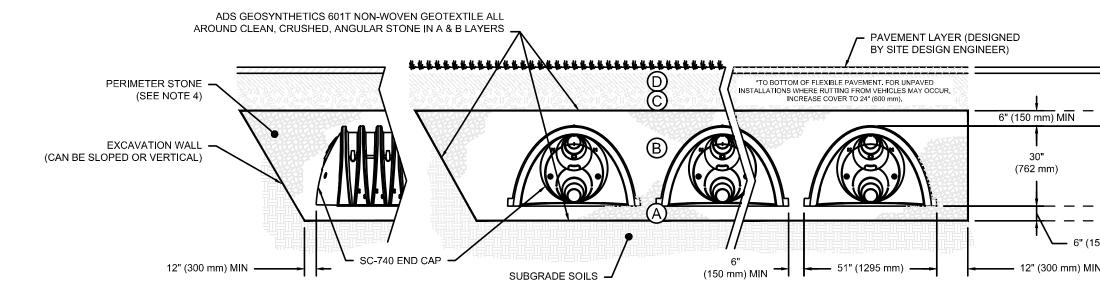
ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	CON
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PRE INS ⁻
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN (THE CHA 6" (150) WELL PRC VEHICL
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE

PLEASE NOTE:

THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE" STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR

COMPACTION REQUIREMENTS. CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION. ONCE LAYER 'C' IS PLACED, ANY SO



(SEE NOTE 3)

NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS

PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

REQUIREMENTS FOR HANDLING AND INSTALLATION:

TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS

• TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2". • TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

SC-740 CROSS SECTION DETAIL

EASEMENT REFERENCE			ERENCE		REVISIONS	PLAN PREPARED BY:	
CITY NO.	COUNTY	RECORD	GRANTOR	NO.	DESCRIPTION	DATE	
	VOL.	PAGE	GRANTOR				
							THE
							SURVEYING
							LANDSCAPE ARCHITECTUI

MPACTION / DENSITY REQUIREMENT

ISTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.

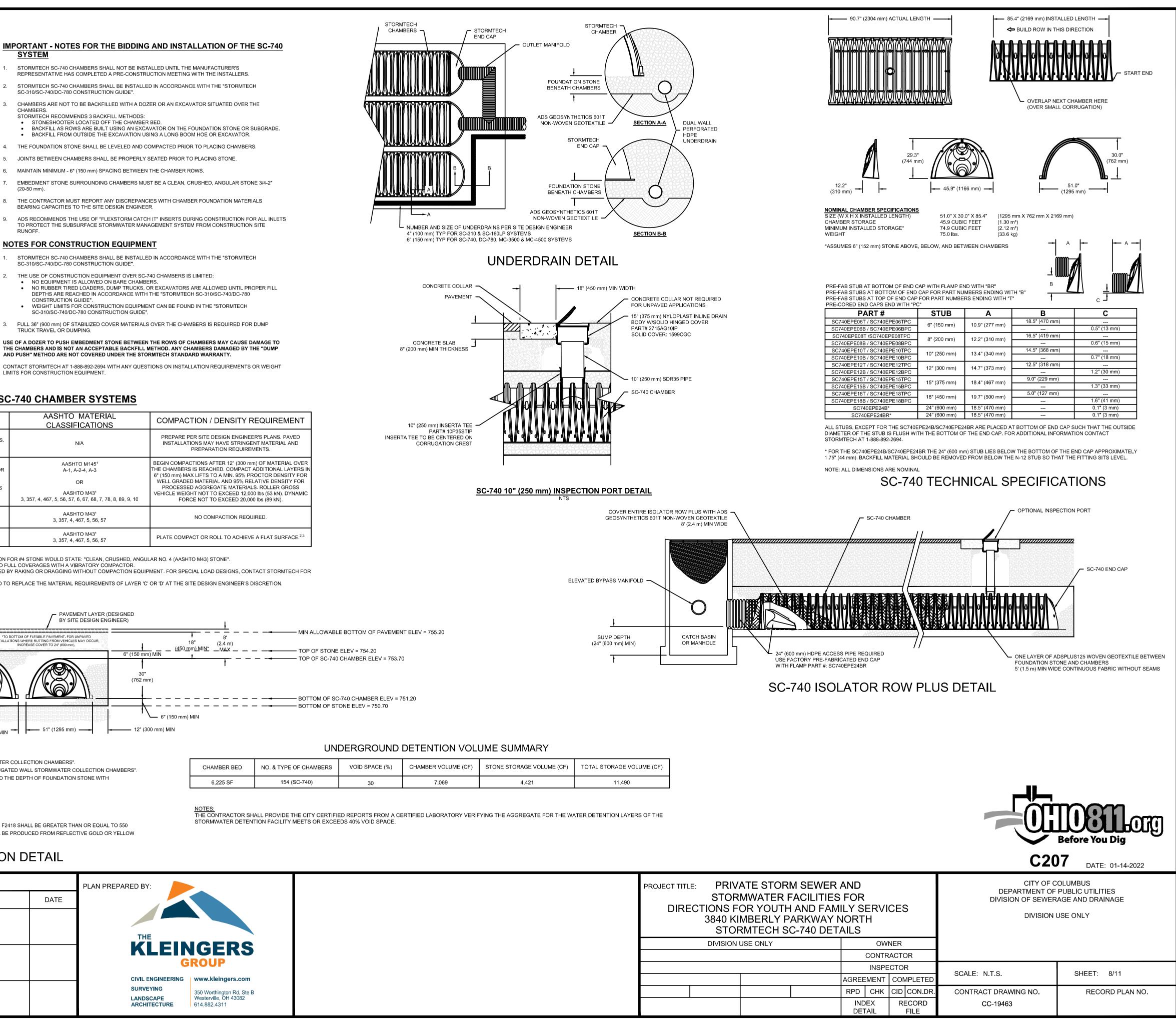
FORCE NOT TO EXCEED 20,000 lbs (89 kN)

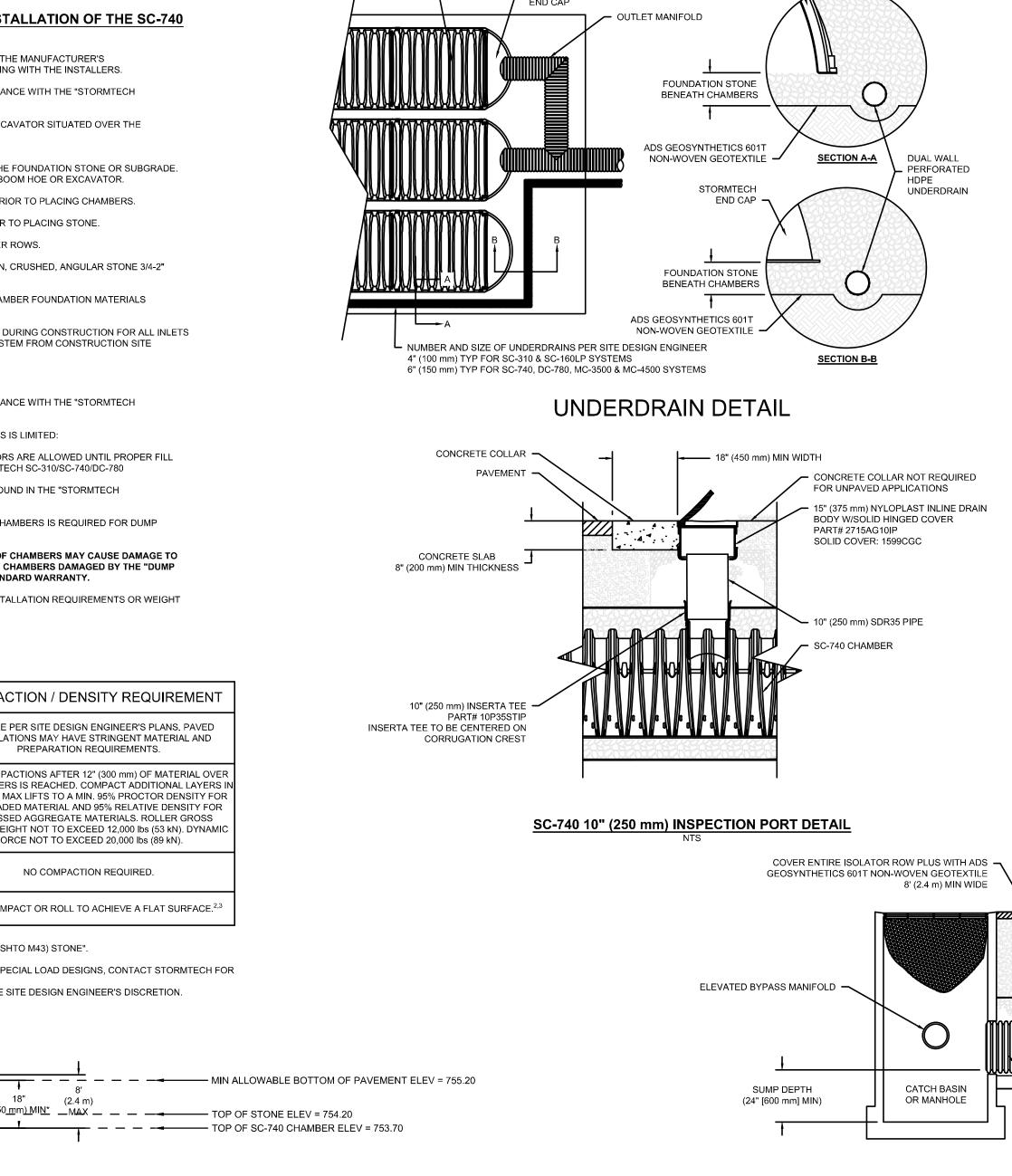
NO COMPACTION REQUIRED.

TE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.^{2,1}

- BOTTOM OF SC-740 CHAMBER ELEV = 751.20

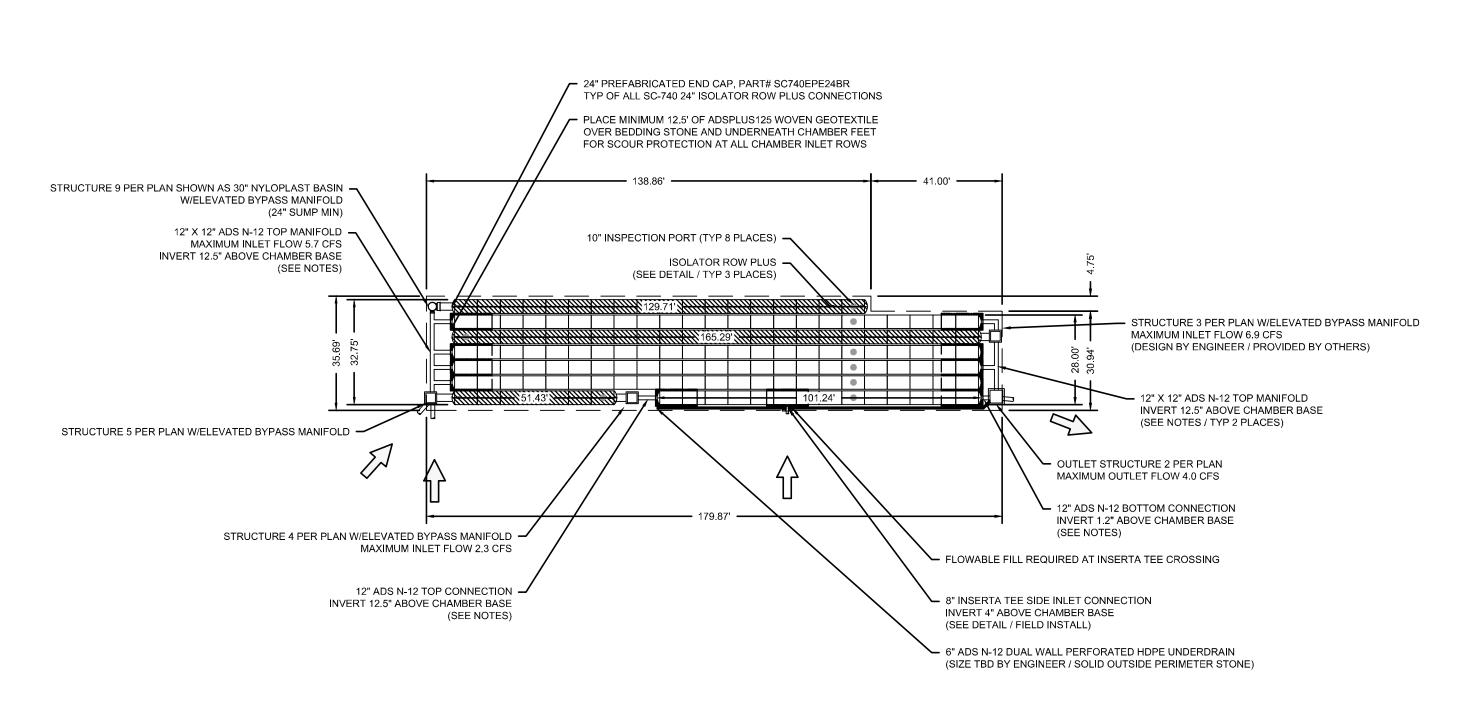
CHAMBER BED	NO. & TYPE OF CHAMBERS	VOID SPACE (%)	CHAMBER VOLUME (CF)	STONE STORAGE VOLUME (CF)	TOTAL STORAGE VOLUME (CF)
6,225 SF	154 (SC-740)	30	7,069	4,421	11,490





— 6" (150 mm) MIN

PROPOSI	ED LAYOUT
154	STORMTECH SC-740 CHAMBERS
16	STORMTECH SC-740 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
30	% STONE VOID
11,490	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
3,149	INSTALLED SYSTEM WATER QUALITY VOLUME (CF) BELOW ELEVATION 751.68
6,225	SYSTEM AREA (ft²)
431	SYSTEM PERIMETER (ft)
	ED ELEVATIONS
761.70	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
755.70	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
755.20	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
755.20	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
755.20	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
754.20	TOP OF STONE
753.70	TOP OF SC-740 CHAMBER
752.24	12" TOP MANIFOLD / CONNECTION INVERT
751.53	INSERTA TEE SIDE INLET CONNECTION INVERT
751.30	12" BOTTOM CONNECTION INVERT
751.21	24" BOTTOM MANIFOLD INVERT
751.21	24" ISOLATOR ROW PLUS CONNECTION INVERT
751.20	BOTTOM OF SC-740 CHAMBER
750.70	UNDERDRAIN INVERT
750.70	BOTTOM OF STONE



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT A. INSPECTION PORTS (IF PRESENT)

- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON
- MAINTENANCE LOG A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS
- (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. B. ALL ISOLATOR PLUS ROWS
- B.1.REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUSB.2.USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE

B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS
 - PREFERRED APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

<u>NOTES</u>

- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.
- THE PROPERTY OWNER, ITS ADMINISTRATORS, EXECUTORS, SUCCESSORS, HEIRS OR ASSIGNS SHALL MAINTAIN THE STORMWATER CONTROL FACILITY OR FACILITIES IN GOOD WORKING CONDITION ACCEPTABLE TO THE CITY AND IN ACCORDANCE WITH THE SCHEDULE OF LONG-TERM MAINTENANCE ACTIVITIES IN THE STORMWATER CONTROL FACILITY MAINTENANCE PLAN. THE PROPERTY OWNER SHALL MAINTAIN COPIES OF COMPLETE, DATED AND SIGNED INSPECTION CHECKLISTS IN A MAINTENANCE INSPECTION LOG, ALONG WITH RECORDED DATES AND DESCRIPTIONS OF MAINTENANCE ACTIVITIES PERFORMED BY THE PROPERTY OWNER TO REMEDY THE DEFICIENCIES OBSERVED DURING PRIOR INSPECTIONS. THE MAINTENANCE INSPECTION LOG SHALL BE KEPT ON THE PROPERTY AND SHALL BE MADE AVAILABLE TO THE CITY UPON REQUEST. A COPY OF THE MAINTENANCE INSPECTION LOG SHALL BE SUBMITTED ANNUALLY BY DECEMBER 31ST OF EACH YEAR; MAINTENANCE INSPECTION LOGS SHALL BE SUBMITTED TO:
- CITY OF COLUMBUS DIVISION OF SEWERAGE AND DRAINAGE, STORMWATER AND REGULATORY MANAGEMENT SECTION 1250 FAIRWOOD AVENUE, COLUMBUS, OHIO 4320

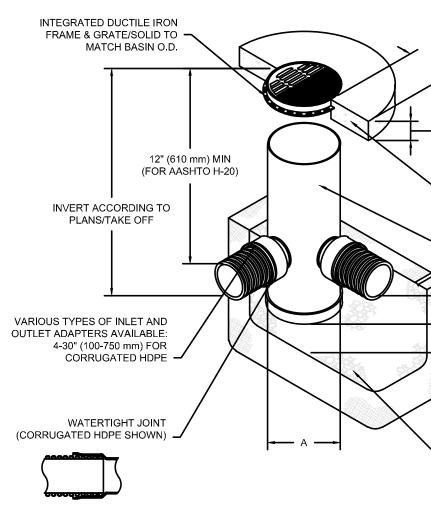
EASEMENT REFERENCE			ERENCE		REVISIONS		PLAN PREPARED BY:
CITY NO.	COUNTY	RECORD	GRANTOR	NO.	DESCRIPTION	DATE	
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							. CIVIL ENGINEERIN SURVEYING
							LANDSCAPE ARCHITECTURE

COST OF SUCH WORK BE INCLUDED IN THE UNIT PRICE BID FOR VARIOUS ITEMS.

ESTIM	ESTIMATE OF QUANTITIES - UNDERGROUND DETENTION SCP					
ITEM	QUANTITY	UNIT	DESCRIPTION			
203	1,410	CY	EXCAVATION			
207	3	EA	DANDY BAG INLET PROTECTION			
604	1	EA	MANHOLE (COC AA-S104)			
604	3	EA	CATCH BASIN (COC AA-S133B (3'X3'))			
604	1	EA	OUTLET STRUCTURE (MODIFIED COC AA-S133B (4'X4'))			
623	1	LS	LAYOUT STAKES			
624	1	LS	MOBILIZATION			
901	20	LF	12" STORM PIPE WITH TYPE 1 BEDDING, WITH ITEM 912 COMPACTED BACKFILL			
SPEC	1,109	LF	UNDERGROUND DETENTION - STORMTECH SC-740 - 9 ROWS (154 CHAMBERS, TOTAL LENGTH = 1,109 LF, 48 ISOLATOR ROW CHAMBERS, 8 - 10" INSPECTION PORTS)			
SPEC	1	EA	30" NYLOPLAST DRAIN BASIN			
SPEC	1	LS	AS-BUILT SURVEY AND ENGINEERING CERTIFICATION FOR POST-CONSTRUCTION STORMWATER CONTROL PRACTICE			

NYLOPLAST DRAIN BASIN NTS

THE CONTRACTOR IS DIRECTED TO VERIFY ALL QUANTITIES PRIOR TO PREPARING AND SUBMITTING HIS BID. ANY ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS INDICTED SHALL BE PERFORMED BY THE CONTRACTOR AND THE



Ν	ΟΤΕ	S			
1.	8-30" (200-750 mm) GRATES/SOLID COVERS SHALL GRADE 70-50-05				
2.	12-30" (3	300-750 mm) FRAMES	SHALL BE DUCTILE IR		
3.			I MANUFACTURED ACC		
4.	DRAINA	GE CONNECTION STU	JB JOINT TIGHTNESS S		
	FOR CC	RRUGATED HDPE (AI	DS & HANCOR DUAL W		
5.	FOR CC	MPLETE DESIGN AND	PRODUCT INFORMAT		
6. TO ORDER CALL: 800-821-6710					
	А	PART #	GRATE/S		
	8"	2808AG	PEDESTRIAN LIGHT		

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12"	2812AG	PEDESTRIAN	STANDARD AASHTO	SOLID
(300 mm)		AASHTO H-10	H-20	AASHTO H-20
15"	2815AG	PEDESTRIAN	STANDARD AASHTO	SOLID
(375 mm)		AASHTO H-10	H-20	AASHTO H-20
18"	2818AG	PEDESTRIAN	STANDARD AASHTO	SOLID
(450 mm)		AASHTO H-10	H-20	AASHTO H-20
24"	2824AG	PEDESTRIAN	STANDARD AASHTO	SOLID
(600 mm)		AASHTO H-10	H-20	AASHTO H-20
30"	2830AG	PEDESTRIAN	STANDARD AASHTO	SOLID
(750 mm)		AASHTO H-20	H-20	AASHTO H-20

	PROJECT TITLE:	STOR TIONS F 3840 KI	ATE STORI MWATER F OR YOUTH MBERLY P RMTECH L	ACILITIES AND FAN ARKWAY	6 FOR 11LY S NORT
INGERS		DIVISION	USE ONLY		
GROUP					
ING www.kleingers.com					AGREE
350 Worthington Rd, Ste B					RPD
Westerville, ŎH 43082 614.882.4311					IND DET

18" (457 mm) MIN WIDTH

AASHTO H-20 CONCRETE SLAB 8" (203 mm) MIN THICKNESS

TRAFFIC LOADS: CONCRETE DIMENSIONS ARE FOR GUIDELINE PUPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED GIVING CONSIDERATION FOR LOCAL SOIL CONDITIONS, TRAFFIC LOADING & OTHER APPLICABLE DESIGN FACTORS

ADAPTER ANGLES VARIABLE 0°- 360° ACCORDING TO PLANS

> VARIABLE SUMP DEPTH ACCORDING TO PLANS [6" (152 mm) MIN ON 8-24" (200-600 mm), 10" (254 mm) MIN ON 30" (750 mm)]

4" (102 mm) MIN ON 8-24" (200-600 mm) 6" (152 mm) MIN ON 30" (750 mm)

BACKFILL MATERIAL BELOW AND TO SIDES OF STRUCTURE SHALL BE ASTM D2321 - CLASS I OR II CRUSHED STONE OR GRAVEL AND BE PLACED UNIFORMLY IN 12" (305 mm) LIFTS AND COMPACTED TO MIN OF 90%

L BE DUCTILE IRON PER ASTM A536

RON PER ASTM A536 GRADE 70-50-05 CCORDING TO PLAN DETAILS S SHALL CONFORM TO ASTM D3212 WALL) & SDR 35 PVC ATION: WWW.NYLOPLAST-US.COM



C208 DATE: 01-14-2022 CITY OF COLUMBUS

DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

ER FACILITIES FOR OUTH AND FAMILY SERVICES LY PARKWAY NORTH CH LAYOUT & PCM						
Y		OWNER				
		CONTRACTOR				
		INSPECTOR			R	
		AGREE	MENT	CON	//PLETEC	
		RPD	СНК	CID	CON.DR	
		INDEX DETAIL		RECORD FILE		

SCALE: N.T.S.

SHEET: 9/11

CONTRACT DRAWING NO. CC-19463

RECORD PLAN NO.

PROJECT D	ATA					
PLAN DESIGNER:	THE KLEINGERS GROUP 350 WORTHINGTON RD, SUITE B WESTERVILLE, OH 43082 PHONE: (614) 882-4311 CONTACT: MIKE COUVREUR EMAIL: mike.couvreur@kleingers.cc		DIRECTION FOR YOUTH AND FAMILIES GROUP INC. 1515 INDIANOLA AVE COLUMBUS, OH 43201 PHONE: (614) 286-5186 CONTACT: JENNIFER VANSCHOYCK EMAIL: JVanSchoyck@dfyf.org			
PROJECT DESCRIPTION:	LOCATED IN COLUMBUS, OHIO. I	MPROVEMENTS W	TY BUILDING FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES ILL INCLUDE A NEW BUILDING, PARKING LOT, UNDERGROUND ATER SERVICE AND OTHER RELATED SITE UTILITIES.			
EXISTING SITE CONDITIONS:	DRAINAGE AREAS ULTIMATELY D DRAINS FROM NORTH TO SOUTH CATCH BASIN (D2503) ALONG KIN	DRAIN TO MASON I I TO AN EXISTING MBERLY PARKWAY LETS TO MASON F	ENTER AND IT IS BROKEN UP INTO TWO DRAINAGE AREAS. BOTH RUN ON THE WEST SIDE OF THE SITE. THE EAST SIDE OF THE SITE CATCH BASIN IN THE PARKING LOT AND OUTLETS TO AN EXISTING 'NORTH. THE CATCH BASIN IS PART OF THE PUBLIC STORM SEWER UN. THE WEST SIDE OF THE SITE DRAINS FROM EAST TO WEST AND			
ADJACENT AREAS:			BY MULTI-FAMILY DEVELOPMENT (LAR 12), TO THE WEST BY SOUTH BY KIMBERLY PKWY NORTH.			
SOILS:	BeB - BENNINGTON SILT LOAM, 2 Crd1B1 - CARDINGTON SILT LOA Crd1C2 - CARDINGTON SILT LOA Sh - SHOALS SILT LOAM, OCCAS	M, 2 TO 6 PERCEN M, 6 TO 12 PERCE	T SLOPES NT SLOPES, ERODED			
CRITICAL AREAS:		TIMES. THE CON	SEDIMENT AND DEBRIS FROM THE PROJECT IMPROVEMENT RACTOR SHALL BE RESPONSIBLE TO CLEAR WHEELS OF DEBRIS S FROM ADDITIONAL SEDIMENT.			
	S: STRUCTURES PROTECTION AS RESPONSIBLE TO MAINTAIN THE	SEDIMENT CONTR E SEDIMENT BASIN	ION AND SEDIMENT RUNOFF PROTECTION BY USE OF INLET OL AND SEDIMENT FENCE. THE CONTRACTOR SHALL BE I TO A POINT IN WHICH THE SITE SEDIMENT RUNOFF CAN BE NCE WITH THE NOTES AND DETAILS LISTED ON THIS SHEET.			
LATITUDE:		N 39° 55' 23.14"				
LONGITUDE:		W 82° 53' 39.61"				
ESTIMATED CONSTRU	UCTIONS DATES:	02/01/2022 - 08/3	11/2023			
TOTAL SITE AREA:		2.523 ACRES				
TOTAL DISTURBED A	REA:	1.93 ACRES				
EXISTING IMPERVIOU	JS AREA:	0.83 ACRES				
		1.26 ACRES				
INCREASE IN IMPERV	INCREASE IN IMPERVIOUS AREA: 51.8%					
	PRE-CONSTRUCTION RUNOFF COEFFICIENT: C=0.58					
POST-CONSTRUCTIO	N RUNOFF COEFFICIENT:	C=0.69				
ULTIMATE RECEIVING	ULTIMATE RECEIVING STREAM: MASON RUN TO BIG WALNUT CREEK					

MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES. IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

CONSTRUCTION SEQUENCE

TO COMPLETE THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED JOB IMPROVEMENTS. COORDINATION OF THE CONTRACTOR'S WORK CREWS WILL BE REQUIRED. THE GENERAL CONSTRUCTION SEQUENCE IS AS FOLLOWS: A) INSTALL PERIMETER CONTROL AND INLET PROTECTION.

B) INLET PROTECTION TO ACT AS SEDIMENT CONTROL FOR THIS PROJECT. THE DRAINAGE AREA GOING TO EACH INLET PROTECTION IS LESS THAN 1.0 ACRES

C) STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL THROUGH THE INCREMENTAL WORK AREA. D) INSTALL TEMPORARY SEDIMENT CONTROLS WITHIN 24 HOURS FOLLOWING THE STRIPPING OPERATION.

E) PERFORM MASS GRADING FOR FINAL PAVING.

F) INSTALL SITE UTILITIES, INSTALLING INLET PROTECTION ON NEW STORM STRUCTURES AS WORK PROGRESSES.

G) ANY DISTURBED OR EXPOSED AREAS SHALL BE STABILIZED PER OEPA TEMPORARY AND PERMANENT STABILIZATION REGULATIONS NCLUDING

- SEEDING
- 2. DITCH MATTING
- 3. INLET PROTECTION 4. MULCHING
- 5. WATERING

H) INSTALL UNDERGROUND DETENTION SYSTEM, PERFORM FINAL PAVING, FINE GRADE, AND PERMANENT SEEDING. I) PROVIDE PERMANENT STABILIZATION FOR ANY DISTURBED AREAS AND REMOVE PERIMETER CONTROLS AND INLET PROTECTION.

EMERGENCY ACTION & SPILL PREVENTION PLAN

THE KLEINGERS GROUP

<u>NAME</u>

THE SCOPE OF WORK COVERED BY THIS PLAN INCLUDES EMERGENCY RESPONSE TO SPILLS, CONTAINMENT OF SPILLED LIQUIDS, EMERGENCY NOTIFICATION NUMBERS, AND SOIL EXCAVATION FOR SPILL CLEAN-UP.

IN THE EVENT OF A SPILL EVENT THE EMPLOYEE SHALL ASSESS THE SPILL AND IMMEDIATELY NOTIFY THE SAFETY OFFICER AND SUPERVISOR IN CHARGE, OR OTHER INDIVIDUALS AS LISTED BELOW.

TITLE

PHONE NUMBER

SITE SUPERINTENDENT PROJECT ENGINEER

(614) 882-4311

IMMEDIATELY AFTER NOTIFICATION, THE EMPLOYEE WILL BE DIRECTED BY THE SAFETY OFFICER, OR RESPONSIBLE PARTY TO START CONTAINMENT PROCEDURES TO PREVENT THE MATERIAL FROM REACHING THE STORM SEWERS, DRAINAGE DITCH, AND OTHER OUTLETS USING THE FOLLOWING ACTIONS OR ANY OTHER MEANS NECESSARY WITHOUT COMPROMISING WORKER SAFETY:

1) CLEAR PERSONNEL FROM THE SPILL AREA AND ROPE OFF AREA. 2) STOP THE SPILL.

3) USE SORBENT MATERIALS, PLUG PUTTY, OR HOLE PUTTY AS NECESSARY TO CONTROL THE SPILL AT THE SOURCE.

4) CONSTRUCT A TEMPORARY CONTAINMENT DIKE OF SORBENT MATERIALS OR DIRT TO CONTAIN SPILL.

SPILL KITS WILL BE LOCATED ON THE PROJECT AS DESIGNATED ON THE SWPPP PLAN.

UPON COMPLETION OF CONTAINMENT OPERATIONS, PROPER CLEAN-UP PROCEDURES WILL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY PROCEDURES

OHIO EPA 61	4-728

GENERAL NOTES

THE CONTRACTOR IS HEREBY ADVISED THAT STRICTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED BY THE OHIO EPA SINCE MARCH 10, 2003 AND WITH A REVISION IN APRIL 2008. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL GROUPS, WHO HAVE BEEN KNOWN TO FILE CIVIL LEGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND SHALL DOCUMENT ALL SUCH NOTIFICATIONS AND/OR DISCUSSIONS.

THE CONTRACTOR WILL BE REQUIRED TO PARTICIPATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND SIGN AN APPROVED INSPECTION SHEET THAT SHALL BE KEPT ON FILE AT THE JOB SITE.

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OEPA "RAINWATER AND LAND DEVELOPMENT" HANDBOOK SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THIS PROJECT WILL INVOLVE SEVERAL CONSTRUCTION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY IMPORTANT THAT ALL TEMPORARY SEDIMENT AND EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN. ARE UPDATED TO REFLECT THE ACTUAL FIELD CONDITIONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE ENGINEER OR THE OHIO EPA CAN AND WILL MODIFY THIS PLAN AS NECESSARY.

THE CONTRACTOR WILL VOLUNTARILY SELF REPORT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE ENGINEER AND THE OFPA

CONSTRUCTION.

WATER TO ACCEPTABLE EPA STANDARDS BEFORE RELEASING THE WATER BACK INTO THE STREAM THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT WORKS.

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS. AT THE ENGINEER'S DISCRETION.

NO SOIL, ROCK, DEBRIS OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS

IT IS PREFERRED TO USE PERMANENT EROSION CONTROL ITEMS AS SHOWN IN THE PLANS TO CONTROL CONSTRUCTION POLLUTION WHEN POSSIBLE. OTHERWISE, THE TEMPORARY POLLUTION PREVENTION ITEMS ARE TO BE USED.

MOST TEMPORARY S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE PERIODICALLY REMOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK PROGRESSES. ANY CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

ALL TEMPORARY SEDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT PROGRESSES TO ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND FUNCTIONING PROPERLY WHEN THREATENING WEATHER IS IMMINENT.

"TEMPORARY STABILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED AREAS TO PROVIDE EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

"PERMANENT STABILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, MATTING, SOD, RIP RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE CONSTRUCTION OPERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A YEAR.

STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES WEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

STABILIZATION PRACTICES

PERMIT NO.: OHC000005. (SEE TABLE 1)

TABLE 1: PERMANE	ENT STABILIZATION
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 2)

TABLE 2: TEMPORA	ARY STABILIZATION
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
NY DISTURBED AREAS WITH 50 FEET OF A SURFACE VATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
OR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED REAS THAT WILL BE DORMANT FOR MORE THAN 14 AYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA
EET OF A SURFACE WATER OF THE STATE	FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).

	EASEM	IENT REFE	ERENCE		REVISIONS		PLAN PREPARED BY:
CITY NO.	COUNTY	RECORD	GRANTOR	NO.	DESCRIPTION	DATE	
CHTINO.	VOL. PAGE	GRANTOR					
							RLE
							SURVEYING LANDSCAPE
							ARCHITECTUR

<u>R PHONE NO.:</u>

THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER

CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.

THE CONTRACTOR WILL BE REQUIRED TO BUILD SEDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND CLEAN

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA

DISTURBED AREAS THAT WILL BE IDLE OVER WINTER PRIOR TO THE ONSET OF WINTER WEATHER

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED

SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

- 1) MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN. 2) MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING
- SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE. 3) SYNTHETIC BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
- 4) WOOD CELLULOSE FIBER WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL								
SEED TYPE	<u>PER 1,000 SQ FT</u>	PER ACRE						
PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 POUND 1 POUND 1 POUND	40 POUNDS 40 POUNDS 40 POUNDS						
SMALL GRAIN STRAW	90 POUNDS	2 TONS						
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12						

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

STOCKPILE

SILT FENCING SHALL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED AND/OR TEMPORARILY SEEDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM. AND WITHIN 7 DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN

STABILIZATION TYPE	J	F	М	А	М	J	J	А	S	0	Ν	D	
PERMANENT SEEDING			•	٠	٠	*	*	*	•	•			* IRRIGATION NEEDED
DORMANT SEEDING	•	٠	٠							•	٠	٠	** IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS
TEMPORARY SEEDING			٠	•	•	*	*	*	٠	•			APPLIED
SODDING			**	**	**	**	**	**	**				
MULCHING	•	•	•	•	•	•	•	•	•	•	•	•	

INSPECTIONS

ALL BMPS ON THIS SITE SHALL BE INSPECTED BY "QUALIFIED INSPECTION PERSONNEL" ASSIGNED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND BY THE END OF THE NEXT CALENDAR DAY, EXCLUDING WEEKENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED, AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD. A RECORD OF THESE INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING, ANY VIOLATIONS WILL BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT LIMITS.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE, AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE:

- THE INSPECTION DATE:
- NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
- 3. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED
- WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION; 5. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
- 6. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED:
- LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
- 8. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND
- 9. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.

MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES, IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING. DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

- VEGETATIVE COVER AND/MULCH APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- WATERING SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, PECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS
- SPRAY-ON ADHESIVES APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.

PROJECT TITLE: PRIVATE STORM SEWER AND STORMWATER FACILITIES FOR DIRECTIONS FOR YOUTH AND FAMILY SERVICES 3840 KIMBERLY PARKWAY NORTH EROSION CONTROL NOTES							DEPARTMENT OF	OLUMBUS PUBLIC UTILITIES PAGE AND DRAINAGE USE ONLY
	DIVISION	USE ONLY		OWNER				
					CONTR	ACTOR		
				INSPE	CTOR	SCALE: N.T.S.	SHEET: 10/11	
				AGREE	EMENT	COMPLETED	SCALE. N.T.S.	SHEET. 10/11
				RPD CHK		CID CON.DR.	CONTRACT DRAWING NO.	RECORD PLAN NO.
				INC DET)EX FAIL	RECORD FILE	CC-19463	



ADHESIVE	WATER DILUTION (ADHESIVE: WATER)	NOZZLE TYPE	APPLICATION RATE (GAL/AC)
LATEX EMULSION	12.5:1	FINE	235
RESIN IN WATER ACRYLIC EMULSION (NO TRAFFIC)	4:1	FINE	300
ACRYLIC EMULSION (NO TRAFFIC)	7:1	COARSE	450
ACRYLIC EMULSION (TRAFFIC)	3.5:1	COARSE	350

SPILL PREVENTION

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

- 1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- 2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- 3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- 4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- 5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER. 6. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- 7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

- 1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- 2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION. 3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES

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

- 1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- 2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES. KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO
- PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- 4 SPILLS OF TOXIC OR HAZARDOLIS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE, SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO THE OHIO EPA'S HOTHINE.
- 5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF).
- 6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- 7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE

PRODUCT SPECIFIC PRACTICES

PETROLEUM PRODUCTS ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.

NOTES:

THIS PLAN MUST BE POSTED ON-SITE A COPY OF THE SWPPP PLAN AND THE APPROVED EPA
THIST EAR MOST BET OSTED ON-OTE. A COLL OF THE SWITT LEAR AND THE ALTROVED ELA
STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.
I STURIVIWATER PERIVITI (WITH THE STE-SPECIFIC NUTNUVIDER) SHALL DE REPT UN-SITE AT ALL TIVIES.

OHC000005 GENERAL PERMIT:

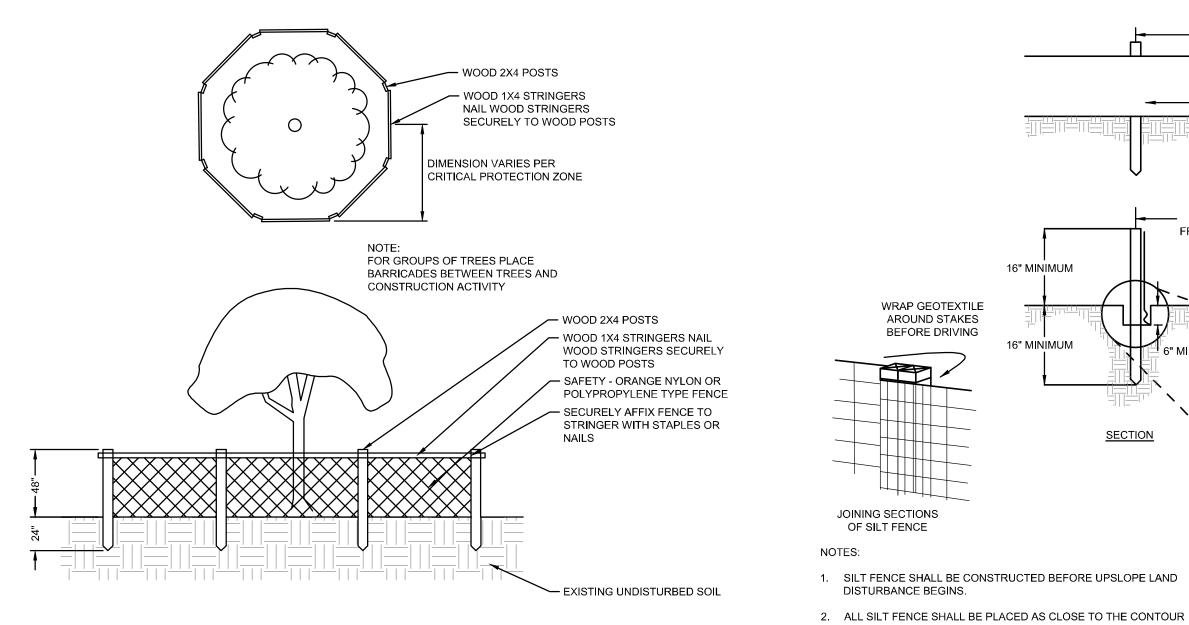
DATE OF ISSUE

NPDES PERMIT:

AWAITING APPROVAL



DATE: 01-14-2022

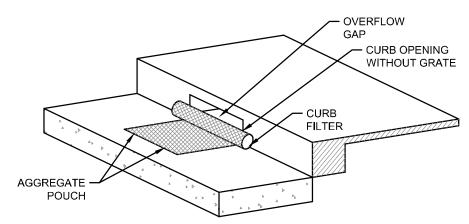


NOTES

- 1. FOR GROUPS OF TREES: A. PLACE THE BARRICADES AT THE DRIPLINE AROUND THE GROUPS PERIMETER.
- 2. INSTALLATION OF TREE PROTECTION BARRICADES 7. SHALL BE PERFORMED BEFORE ANY SITE DEVELOPMENT ACTIVITY TAKES PLACE.
- 3. THE TREE PROTECTION BARRICADES SHALL REMAIN IN PLACE THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL ALL SITE DEVELOPMENT ACTIVITIES ARE FULLY COMPLETE.
- 4. ANY DAMAGE THAT MAY OCCUR TO THE BARRICADES SHALL BE REPAIRED OR REPLACED TO THE ORIGINAL SPECIFICATIONS WITHIN 24 HOURS OF THE DAMAGE OCCURRING.
- 5. THE AREA WITHIN THE TREE PROTECTION BARRICADES SHALL NOT BE USED FOR THE STORAGE OF ANY MATERIALS, SUPPLIES, OR DEBRIS OR THE DISPOSAL OF ANY SOLID, LIQUID, OR GASEOUS MATERIALS THAT COULD CAUSE HARM TO THE TREES.
- 6. ANY TREE SCHEDULED TO REMAIN IF DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY PROVIDING EQUIVALENT MONETARY VALUE TO THE CITY'S TREE FUND.
- MONETARY TREE VALUE SHALL BE DETERMINED BY USING THE GUIDE FOR PLANT APPRAISAL, PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE OR OTHER SOURCES AS DETERMINED BY THE CITY FORESTER.
- BARRICADES SHALL PROTECT ALL TREES SCHEDULED TO REMAIN BEFORE AND DURING ALL CONSTRUCTION ACTIVITIES.
- ANY PROPOSED UNDERGROUND UTILITIES SHALL BE ROUTED AROUND PROTECTED TREES TO THE OUTSIDE OF THE TREE'S DRIPLINE. IF THIS IS NOT FEASIBLE, AS DETERMINED BY THE CITY, A SLEEVE MAY BE USED UNDER THE TREE, PROVIDED THAT ALL ACCEPTABLE HORTICULTURAL/ ARBORICULTURAL PRACTICES ARE ADHERED TO.

*TREE PROTECTION BARRICADES SHALL BE LOCATED TO PROTECT A MINIMUM OF 75% OF THE CRITICAL PROTECTION ZONE.





SPECIFICATIONS

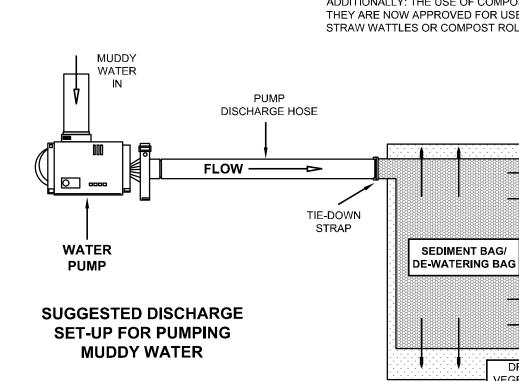
MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.33 (75)
UV RESISTENCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	1/MIN/M ² (GAL/MIN/FT ²)	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC ⁻¹	2.1

INSTALLATION: PLACE DANDY CURB INLET PROTECTION UNIT ON GROUND WITH AGGREGATE POUCH ON STREET SIDE NEAR INLET IT WILL BE INSTALLED ON. TO INSTALL ABSORBENT. PLACE ABSORBENT SOCK IN POUCH. FILL POUCH WITH AGGREGATE SUCH AS #5-7, 8'S OR SIMILAR TO A LEVEL (AT LEAST 1/2 FULL) THAT WILL KEEP UNIT IN PLACE DURING A RAIN EVENT AND CREATE A SEAL BETWEEN THE DANDY CURB AND THE SURFACE OF THE STREET. RESEAL VELCRO ACCESS. CENTER THE UNIT AGAINST THE CURB OR MEDIAN INLET OPENING SO THAT THE CURB SIDE OF THE UNIT CREATES A SEAL WITH THE CURB OR MEDIAN BARRIER AND INLET STRUCTURE.

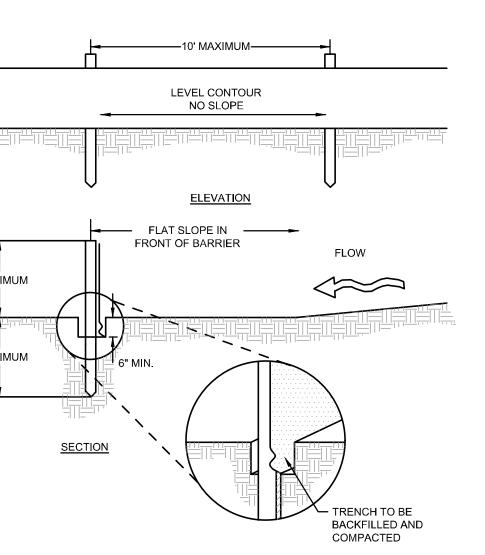
MAINTENANCE: WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL REMOVE SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED. REMOVE AND REPLACE ABSORBENT WHEN NEAR SATURATION. DANDY CURB DETAIL

N.T.S.

FOR USE ON EX. STRUCTURE 10



EASEMENT REFERENCE					REVISIONS	PLAN PREPARED BY:
CITY NO.	COUNTY VOL.	RECORD PAGE	GRANTOR	NO.	DESCRIPTION DA	
						KLEIN
						CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE



INSTALLED.

OF THE SILT FENCE.

- AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- 3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE
- 4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA

PREVENTED FROM FLOWING AROUND THE ENDS.

ADEQUATELY UNIFORM TRENCH DEPTH.

AVAILABLE.

SILT FENCE.

- 5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE CRITERIA FOR SILT FENCE MATERIALS
- 6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN
- 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE SILT FENCE FABRIC – SEE CHART BELOW.

	DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES			
	OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE.	FABRIC PROPERTIES	VALUES	TEST METHOD
	EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH	MINIMUM TENSILE STRENGTH	120 LBS. (535 N)	ASTM D 4632
	DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND	MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
	COMPACTED ON BOTH SIDES OF THE FABRIC.	MINIMUM PUNCTURE STRENGTH	50 LBS. (220 N)	ASTM D 4833
		MINIMUM TEAR STRENGTH	40 LBS. (180 N)	ASTM D 4533
9.	SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED	APPARENT OPENING SIZE	<0.84 MM	ASTM D 4751
	TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN.	MINIMUM PERMITTIVITY	1X10-2 SEC-1	ASTM D 4491
	OVERLAP PRIOR TO DRIVING INTO THE GROUND.	UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355

10. MAINTENANCE-SILT FENCE SHALL ALLOW RUNOFF TO PASS

ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF

AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A

SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE

DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND

AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION

OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE

HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS,

SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN

THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE

GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL

10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE

BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE

ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE

1. FENCE POST – THE LENGTH SHALL BE A MINIMUM OF 32 INCHES.

WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED

SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

FENCE DUE TO SEDIMENT/WATER LOADING.

SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT

SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE

CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING

OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR

SILT FENCE DETAIL

N.T.S.

* THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE IN LINEAR INSTALLATIONS.

ADDITIONALLY: THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL COLUMBUS SWP3 PLANS AND CONSTRUCTION SITES.

STRAW WATTLES OR COMPOST ROLLS MUST BE A MINIMUM OF 12" IN DIAMETER.

DRAIN OVER VEGETATED AREA (WHERE POSSIBLE)

NOTICE

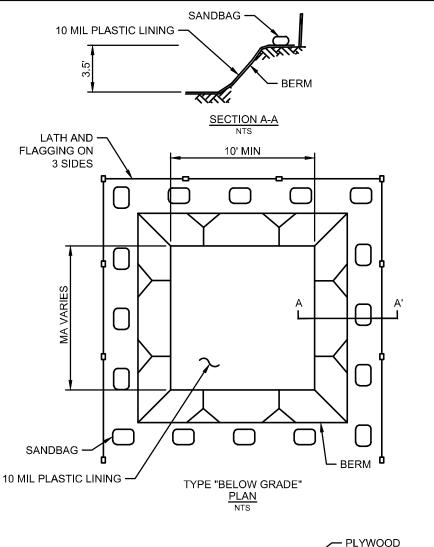
THE PUMPING OR DIRECT DISCHARGE OF SEDIMENT-LADEN (MUDDY) WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS.

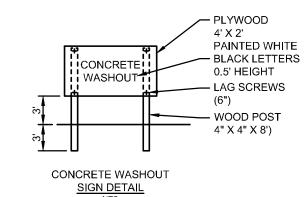
ALL INLET RECEIVING FLOW FROM RUNOFF, PUMPING ACTIVITIES, OR OTHER DIRECT DISCHARGES SHALL BE FITTED WITH AN INLET PROTECTION DEVICE THAT IS PROPERLY SIZED AND SECURED TO REDUCE THE DISCHARGE OF SEDIMENT INTO THE STORM SEWER SYSTEM AND RECEIVING STREAM. INLET PROTECTION IS REQUIRED ON ALL INLETS RECEIVING DISCHARGE REGARDLESS OF WHETHER OR NOT THE INLET IS TRIBUTARY TO ANY DOWNSTREAM EROSION AND SEDIMENT CONTROLS.

DISCHARGE HOSES USED DURING PUMPING ACTIVITIES SHALL BE FITTED WITH SEDIMENT BAGS THAT ARE PROPERLY SIZED PER MANUFACTURER'S RECOMMENDATIONS REGARDLESS OF WHAT OTHER SEDIMENT CONTROLS ARE IN PLACE FURTHER DOWNSTREAM. SEDIMENT BAGS MUST BE PROPERLY SECURED TO THE DISCHARGE HOSE AND PLACED OVER VEGETATED AREAS, WHERE FEASIBLE, DURING DISCHARGE. SEE DETAIL BELOW OF A TYPICAL SEDIMENT BAG INSTALLATION.

THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES.

FILTER BAG DETAI N.T.S.



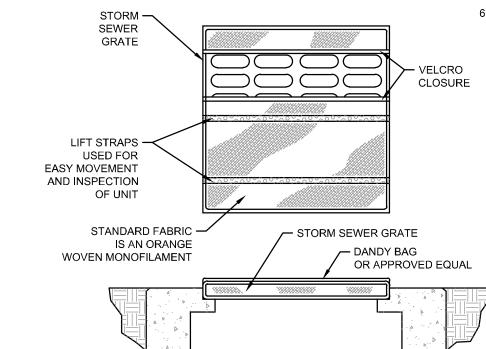


NOTES: 1. ACTUAL LAYOUT DETERMINED IN THE FIELD.

- 2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
- CONCRETE WASHOUT DETAIL N.T.S.

THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS

THE EXACT LOCATION OF THE CONCRETE WASHOUT(S) MAY BE FIELD LOCATED BY THE ON-SITE PROJECT ENGINEER/CONTACT.



SPECIFICATIONS

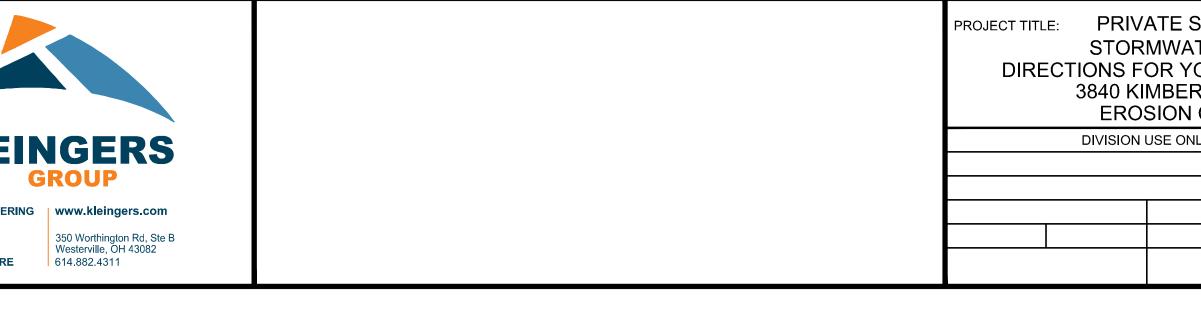
	SPECIFI	CATIONS	
MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.3
UV RESISTENCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	1/MIN/M ² (GAL/MIN/FT ²)	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC ⁻¹	2.1

INSTALLATION: THE EMPTY DANDY BAG SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS: PLACE ABSORBENT PILLOW IN POUCH. ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DANDY BAG AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

DANDY BAG DETAIL
N.T.S.

FOR USE ON STRUCTURES: 3 - 8



					Before You Dig			
					C21	0	DATE: 01-14-2022	
TORM SEWER AND TER FACILITIES FOR OUTH AND FAMILY SERVICES RLY PARKWAY NORTH CONTROL DETAILS					CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY			
_Y OWNER								
CONTRACTOR		२						
	INSPECTOR			SCALE: N.T.S.	SHEET: 11/11			
	AGREEMENT		COMPLETED		SCALE. N.I.S.		SHEET. TITT	
	RPD	СНК		ON.DR.	CONTRACT DRAWING NO.		RECORD PLAN NO.	
	INDEX DETAIL		RECORD FILE		CC-19463			

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITY WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

MISCELLANEOUS SWPPP NOTES: UPPER BANK ABOVE NORMAL WATER ELEVATION SHOULD BE STABILIZED QUICKLY WITH STRAW BLANKETS, JUTTE MATTING OR SIMILAR GEO-TEXTILE.

CONSTRUCTION ENTRANCE DETAIL

N.T.S.

MINIMUM TENSILE	STRENGTH	200 LBS
MINIMUM PUNCT	JRE STRENGTH	80 LBS
MINIMUM TEAR S	TRENGTH	50 LBS
MINIMUM BURST	STRENGTH	320 PSI
MINIMUM ELONG	ATION	
EQUIVALENT OPE	ENING SIZE	EOS< 0.6MM
PERMITTIVITY		1X10 ⁻³ CM/SEC
TIMING - THE C	ONSTRUCTION ENTRA	NCE SHALL BE INSTALLE

AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING

AREAS. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY

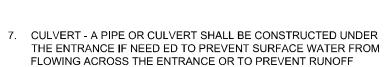
REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE

TRACKING. VEHICLES THAT ENTER AND LEAVE THE

- CONDITION THAT WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVE IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING. 10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO
- 8. WATER BAR A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.

MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A

- FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- THE ENTRANCE IF NEED ED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF



- CULVERT AS NEEDED



REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE

3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES

4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT

5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE

STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE

ARE PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF

NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR

RESIDENCE LOTS).

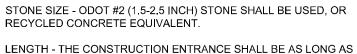
HEAVY DUTY USE.

EGRESS OCCURS.

ACTIVITIES.

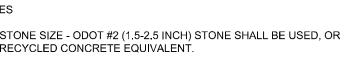
FOLLOWING SPECIFICATIONS:

- 2. LENGTH THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS



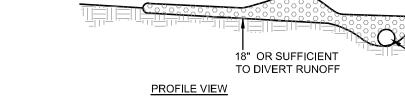


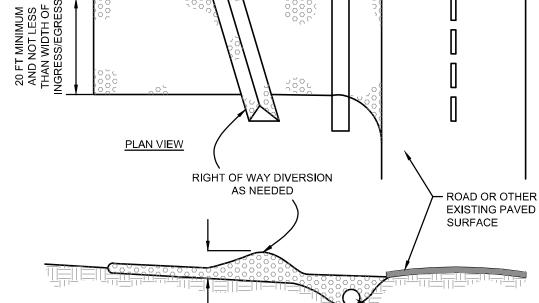






THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR 9.





100 FT. (OR 30 FT FOR ACCESS TO INDIVIDUAL LOT)