

SCALE: 1"=200'-0"



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Designed By: DAG	Drawn By: GCR	Checked By: BPE
Issue Date: 11/01/2024	Project No: D20146	Scale: AS SHOWN

VICINITY MAP AND
DRAWING SET INDEX

Drawing No:

G2

Sheet: 02 OF 43

GENERAL ABBREVIATIONS

AB	AIR	FLD	FILTRATE DRAIN		MATERIAL
AFF	ANCHOR BOLT	FLG	FLANGE	P/L	PROPERTY LINE
ALT	ABOVE FINISH FLOOR	FL	FLUSHING LINE	POJ	PUSH ON JOINT
ALUM	ALTERNATE	FLR	FLOOR	PSF	POUNDS PER SQUARE FOOT
@	ALUMINUM	FM	FORCE MAIN	PSI	POUNDS PER SQUARE INCH
APP.	AT	FRP	FIBER REINFORCED PLASTIC	PVC	POLYVINYL CHLORIDE
ATT	APPARENT	FT	FEET OR FOOT	PW	POTABLE WATER
AUTO	AERATION TANK TRANSFER	FTG	FOOTING		
AVG	AUTOMATIC	FW	FINISHED WATER	R	RECIRCULATION
	AVERAGE			RAD	RADIUS
		G	GAS	RAS	RETURN ACTIVATED SLUDGE
B	BAFFLE	GALV	GALVANIZED	RCP	REINFORCED CONCRETE PIPE
BLDG	BUILDING	GEN	GENERAL	RD	ROOF DRAIN
BM	BENCH MARK	GRD	GROUND OR GRADE	REINF	REINFORCING
BOT	BOTTOM			REQ'D	REQUIRED
BRG	BEARING	HB	HOSE BIBB	R/W (ROW)	RIGHT-OF-WAY
		HORIZ	HORIZONTAL		
CFM	CUBIC FEET PER MINUTE	HP	HORSEPOWER	SAN	SANITARY
CL	CENTERLINE	HW	HOT WATER	SAS	SANITARY SEWER
CO	CLEAN OUT			SCH	SCHEDULE
COL/C	COLUMN	ID	INSIDE DIAMETER	SECT	SECTION
CONC	CONCRETE	IJ	ISOLATION JOINT	SF	SQUARE FEET
COP	COPPER	INV	INVERT	SHT	SHEET
CJ	CONSTRUCTION JOINT	IP	IRON PIN	SL	SAMPLE LINE
CW	COLD WATER			SOS	STORM SEWER
CY	CUBIC YARD	LAV	LAVATORY	SP	STOP PLATE
		LB	POUND	SQ	SQUARE
D	DRAIN	LL	LIVE LOAD	STD	STANDARD
DEC	DECANT	LLV	LONG LEG VERTICAL	S STL, SS	STAINLESS STEEL
DIA	DIAMETER	LTG	LIGHTING	STL	STEEL
DIM	DIMENSION			SUP	SUPERNATANT
DI	DUCTILE IRON PIPE	MAX	MAXIMUM	SY	SQUARE YARD
DL	DEAD LOAD	MCC	MOTOR CONTROL CENTER		
DSPT	DOWN SPOUT	MGD	MILLIONS GALLONS PER DAY	TOS	TOP OF SLAB
DWG	DRAWING	MH	MANHOLE	TOW	TOP OF WALL
		MIN	MINIMUM, MINUTE	TW	TERTIARY WATER
E	ELECTRICAL CONDUIT	MJ	MECHANICAL JOINT	TYP	TYPICAL
EA	EACH				
EF	EACH FACE	NC	NORMALLY CLOSED	V	VACUUM OR VALVE
EFFL	EFFLUENT	NG	NATURAL GAS	VAR	VARIES
EL	ELEVATION	NIC	NOT IN CONTACT	VERT	VERTICAL
EW	EACH WAY	NO	NORMALLY OPEN		
EX	EXISTING	NO.	NUMBER	W	WEIR
EXF	EXHAUST FAN	NPW	NON-POTABLE WATER	W/	WITH
EXP JP	EXPANSION JOINT			W/O	WITHOUT
		OC	ON CENTER	WAS	WASTE ACTIVATED SLUDGE
F	FILTER	OD	OUTSIDE DIAMETER	WC	WATER CLOSET
FCAR	FLANGED COUPLING ADAPTER,	OPG	OPENING	WH	WATER HEATER
	RESTRAINED	OPP	OPPOSITE	WL	WATER LINE
FD	FLOOR DRAIN			WWF	WELDED WIRE FABRIC
FDN	FOUNDATION	PB	PULL BOX		
FH	FIRE HYDRANT	PE	POLYETHYLENE EXP. JT.	YH	YARD HYDRANT

GENERAL NOTES

1. ALL PROPERTY AND RIGHT-OF-WAY LINE INFORMATION SHOWN IN DRAWING SET ARE APPARENT AND SHALL NOT BE DEEMED EXACT LOCATIONS, UNLESS OTHERWISE NOTED. INFORMATION WAS OBTAINED VIA "INDIANA ON-LINE" GIS SHAPE FILES.
2. EXISTING UTILITY INFORMATION SHOWN IN DRAWING SET, MEETS "ASCE 36-02" QUALITY LEVEL "C", UNLESS OTHERWISE NOTED.

UTILITY COORDINATION AND PROJECT DIRECTION OF EXISTING SUBSURFACE UTILITY DATA

UTILITY QUALITY LEVEL DESCRIPTIONS:

UTILITY QUALITY LEVEL A - PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATIONS OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. ACCURACY OF LOCATION MATCHES PROJECT SURVEY TOLERANCE.

UTILITY QUALITY LEVEL B - INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION SUBSURFACE UTILITIES. THE RELIABILITY OF THIS INFORMATION IS SURVEYED TO PROJECT CONTROL AND SUBJECT TO ACCURACY LEVELS OF THE GEOPHYSICAL TOLERANCE DEFINED BY THE PROJECT.

UTILITY QUALITY LEVEL C - INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE GROUND UTILITY FEATURES AND CORRELATING QUALITY LEVEL "D" INFORMATION.

UTILITY QUALITY LEVEL D - INFORMATION DERIVED FROM EXISTING RECORDS OR VERBAL RECOLLECTIONS.

3. NORTHING AND EASTING COORDINATES SHOWN ON ALL MANHOLE, INLETS, ETC. ARE SHOWN FROM CENTER OF STRUCTURE NOT CASTING, UNLESS OTHERWISE NOTED.
4. ALL MANHOLES THAT HAVE PIPE INVERT DIFFERENTIAL OF 2' OR GREATER, SHALL BE CONSIDERED A DROP MANHOLE. CONTRACTOR SHALL REFER TO MISCELLANEOUS DETAILS AND DETAILED SPECIFICATIONS FOR MORE INFORMATION.

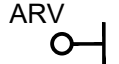
PROJECT NOTES

1. POLYURETHANE TO BE PLACED IN A MANNER TO NOT ADVERSELY AFFECT THE CROSS DRAINS INSTALLED UNDER THE SPILLWAY SLAB.

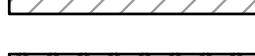
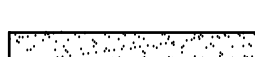
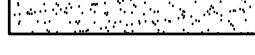
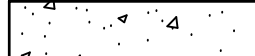
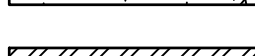
UTILITY / PROJECT CONTACT INFORMATION

1. COORDINATE WITH LINCOLN STATE PARK STAFF FOR ALL CONFLICTS WITH FIBER, WATER, AND SANITARY UTILITIES.
2. ELECTRIC - CENTERPOINT ENERGY PROJECT MANAGER JODY CHAPMAN (812) 491-4707 CENTERPOINT ENERGY ENGINEER JEREMIAH PARKER (812) 491-4754

GENERAL SCHEMATIC LEGEND

	QUICK DISCONNECT		BOOSTER PUMP
	FLANGED SPOOL SECTION		AIR RELIEF VALVE
PRV 	PRESSURE REDUCER VALVE		FLOW METER
	FLANGED COUPLING ADAPTER		GATE VALVE
	BALL CHECK VALVE		FLOW CONTROL VALVE
	MOTOR ACTUATOR		VALVE
	FLEXIBLE CONNECTION		ECCENTRIC PLUG VALVE
	FLANGE FILLER & S.S. MESH SCREEN		CHECK VALVE
W V90 	90° V-NOTCH WEIR		INCREASER / REDUCER
	MAGNETIC FLOW METER		BUTTERFLY VALVE
	ULTRASONIC SENSOR		PIPE THROUGH FLOOR / WALL
	SUBMERSIBLE PUMP		BALL VALVE
	NEW PIPING AND EQUIPMENT		BLIND FLANGE OR PLUG
	EXISTING PIPING AND EQUIPMENT		HOSE BIBB
	FUTURE PIPING AND EQUIPMENT		STOP PLATE
			WEIR

HATCHING SYMBOLS

	- CMU WALL (PLAN VIEW)
	- GRANULAR BACKFILL (PROFILE VIEW)
	- DEMOLITION (CONTRACTOR SHALL REFER TO DETAILED SPECIFICATIONS)
	- GROUT
	- CONCRETE
	- STEEL
	- COMPACTED GRANULAR BACKFILL OR COMPACTED FOUNDATION
	- ABANDONED IN PLACE

DRAWING SET LEGEND

	EXISTING OVERHEAD TELEPHONE LINE		AC UNIT		TELEPHONE MANHOLE
	EXISTING GAS LINE AND VALVE		BOLLARD		TELEPHONE LINE MARKER
	EXISTING WATER LINE AND VALVE		BOULDER / LARGE ROCK		TRAFFIC MANHOLE
	EXISTING FIBER OPTIC LINE		CENTER LINE MONUMENT		WATER LINE MARKER
	EXISTING OVERHEAD ELECTRIC LINE		CONTROL POINT / BENCH MARK		WATER METER
	EXISTING BURIED ELECTRIC		DRILL HOLE		VALVE
	EXISTING NON-POTABLE WATER LINE		MAIL BOX		IRRIGATION CONTROL VALVE
	EXISTING POTABLE WATER LINE		FLAG POLE		FIRE HYDRANT
	EXISTING BURIED TELEPHONE LINE		POST		FLUSH HYDRANT
	EXISTING FENCE		STUMP		YARD HYDRANT
	APPARENT RIGHT-OF-WAY		BUSH / HEDGE		WALL SPIGOT
	APPARENT PROPERTY LINE		DECIDUOUS TREE		EXISTING PIPE PLUG
	EDGE OF ROAD		CONIFEROUS TREE		STORM CATCH BASIN (SQUARE)
	EDGE OF ROAD WITH CURB		SIGN		STORM CATCH BASIN (ROUND)
	EXISTING MAJOR CONTOUR LINE		UTILITY LOCATE FLAG		STORM CURB INLET
	EXISTING MINOR CONTOUR LINE		GAS LINE MARKER		STORM MANHOLE
	NEW WATER LINE		GAS VALVE		SANITARY MANHOLE
	PROPOSED MAJOR CONTOUR LINE		GAS METER		SANITARY VALVE
	PROPOSED MINOR CONTOUR LINE		GUY POLE		CLEANOUT
			POWER POLE		VENT
			LIGHT POLE		NEW VALVE
			GUY WIRE		NEW FIRE HYDRANT
			ELECTRIC METER		NEW FLUSH HYDRANT
			ELECTRIC PANEL		NEW WET SADDLE AND VALVE BODY
			ELECTRIC TRANSFORMER		NEW PLUG / CAP
			HAND HOLE BOX		NEW LINE STOP
			FIBER OPTIC MARKER		NEW CUT AND CAP
			TEL/TV PEDESTAL		NEW SANITARY MH



Dale A. Gird 11/01/2024
Signature Date

INDIANA DEPARTMENT OF
ADMINISTRATION
LINCOLN LAKE DAM
REHABILITATION
SPENCER COUNTY, INDIANA



Know what's below. 811 before you dig.
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(ITS THE LAW)

[illegible]

Designed By: DAG	Drawn By: GCR	Checked By: BPE
Issue Date: 11/01/2024	Project No: D20146	Scale: AS SHOWN

GENERAL, ABBREVIATIONS, LEGENDS, SYMBOLS AND NOTES

Drawing No:

G3

Sheet: 03 OF 43



SCALE: 1"=100'-0"

0 100' 200'

A horizontal graphic scale bar with alternating black and white segments. It is marked with '0' at the left end, '100'' in the middle, and '200'' at the right end.

Project coordinates are based on the following:
HORIZONTAL-US State plane coordinates: NAD83 (*North American Datum*) Indiana West Zone (1302)
VERTICAL- USGS 1988 NAVD (*North American Vertical Datum*)-per GPS observations (Not verified by physical location of published USGS monuments)

File: Z:\SHARED\IN CLIENTS\A-L\UNRID\D20146 LINCOLN LAKE DAM DESIGN\06 CADVA CURRENT FILES\1 DRAWINGS\02-GENERAL SHEETS.DWG
 Saved: 11/11/2024 12:50:07 PM Plotted: 11/11/2024 12:51:12 PM Current User: George Rader LastSavedBy: gader

FILE Z:\SHARED\IN CLIENTS\4\INDNR\030104\ LINCOLN LAKE DAM DESIGN\CD\04\ CURRENT FILES\1 DRAWINGS\03 SITE PLANNING
Sheet: 11/1/2024 12:50:03 PM Printed: 11/1/2024 12:52:24 PM Current User: George Beale Last Saved By: gbeale

CONSTRUCTION PLAN - GENERAL PLAN COMPONENTS (SECTION A)

- A1 INDEX OF THE LOCATION OF REQUIRED PLAN ELEMENTS IN THE CONSTRUCTION PLAN:
- THIS DOCUMENT REPRESENTS THE PLAN INDEX.
- A2 A VICINITY MAP DEPICTING THE PROJECT SITE LOCATION IN RELATIONSHIP TO RECOGNIZABLE LOCAL LANDMARKS, TOWNS, AND MAJOR ROADS:
- AN AERIAL MAP ILLUSTRATING THE APPROXIMATE EXTENT OF THE PROJECT IS SHOWN IN THE PLANS; REFER TO "VICINITY MAP AND DRAWING SET INDEX", G2.
- A3 NARRATIVE OF THE NATURE AND PURPOSE OF THE PROJECT:
- LINCOLN LAKE DAM (IDNR DAM NO. 74-8) IS A HIGH HAZARD DAM LOCATED AT LINCOLN STATE PARK IN SPENCER COUNTY, INDIANA. THE NEED FOR THE PROJECT IS THAT THE DAM WAS CONSTRUCTED IN THE 1930'S AND NOT BUILT WITH CURRENT CONSTRUCTION PRACTICES, SPECIFICALLY COMPACTION STANDARDS. THE PURPOSE OF THE LINCOLN LAKE DAM REHABILITATION PROJECT IS TO BRING THE DAM INTO COMPLIANCE WITH THE CURRENT CONSTRUCTION STANDARDS FOR THE DAM'S HIGH HAZARD RATING. THE PROPOSED DAM REHABILITATION MEASURES INCLUDE REMOVAL OF COMPONENTS THAT COULD ADVERSELY AFFECT THE EMBANKMENT STABILITY (TREES, UTILITIES, ABANDONED STRUCTURES REMAINING IN PLACE), NEW STABILITY BERM, REMOVAL/ABANDONMENT OF EXISTING DRAWDOWN STRUCTURE, NEW 12-INCH PERMANENT SIPHON DRAWDOWN STRUCTURE AND OUTFALL STRUCTURE WITH RIPRAP OVER GEOTEXTILE LINER, REMOVAL OF EXISTING 24-INCH CMP ROADWAY CULVERT, NEW 24-INCH RCP ROADWAY CULVERT WITH RIPRAP OVER GEOTEXTILE LINER AT THE OUTLET, RAISING DAM CREST, EXISTING PRINCIPAL SPILLWAY REPAIRS AND RIPRAP OVER GEOTEXTILE LINER REHABILITATION AT OUTFALL, NEW 4-FOOT CONCRETE CUTOFF WALL, NEW SIDE CHANNEL ARMORING, REROUTING OF EXISTING WATERLINES AND FORCE MAIN NEAR THE DOWNSTREAM SIDE OF THE EMBANKMENT, AND ROADWAY MILLING AND RESURFACING.
- A4 LATITUDE AND LONGITUDE TO THE NEAREST FIFTEEN (15) SECONDS:
- THIS APPROXIMATE LATITUDE AND LONGITUDE FOR THE PROJECT SITE IS 38.102371", -86.998220".
- A5 LEGAL DESCRIPTION OF THE PROJECT SITE:
- THE PROJECT IS LOCATED IN CLAY TOWNSHIP, SPENCER COUNTY, IN SECTIONS 7 & 8, T5S, R5W.
- A6 11X 17-INCH PLAT SHOWING BUILDING LOT NUMBERS/BOUNDARIES AND ROAD LAYOUT/NAMES:
- ALL LOT BOUNDARIES AND ROAD NAMES ARE SHOWN ON THE PLANS; REFER TO "VICINITY MAP AND DRAWING SET INDEX", G2. AN 11X17 PLAT OF THE PROJECT AREA OBTAINED FROM THE SPENCER COUNTY GIS (ONLINE AT: [HTTPS://SPENCERIN.WTHGIS.COM/](https://spencerin.wthgis.com/)) IS INCLUDED.
- A7 BOUNDARIES OF THE ONE HUNDRED (100) YEAR FLOODPLAINS, FLOODWAY FRINGES, AND FLOODWAYS:
- THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) PANEL FOR THE PROJECT AREA IS 18147C0110C AND 18147C0130C. THE PROJECT IS IN FEMA ZONE X. THE FEMA FIRM MAP IS SHOWN ON "STORMWATER POLLUTION PREVENTION PLAN", EC2.
- A8 LAND USE OF ALL ADJACENT PROPERTIES:
- NORTH: FORESTED (IDNR PROPERTY)
SOUTH: OPEN WATER, FORESTED (IDNR PROPERTY)
EAST: OPEN WATER, FORESTED (IDNR PROPERTY)
WEST: FORESTED (IDNR PROPERTY)
- A9 IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL:
- THE PROJECT AREA IS LOCATED WITHIN THE BUCKHORN CREEK-LITTLE PIGEON CREEK (HUC-12: 051402010905) WATERSHED, WHICH HAS NO APPROVED OR ESTABLISHED TMDL.
- A10 NAME(S) OF THE RECEIVING WATER(S):
- THE RECEIVING WATER BODIES IN THE PROJECT AREA ARE LINCOLN LAKE AND UNNAMED TRIBUTARY (UNT) BUCKHORN CREEK.
- A11 IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303(D) LIST OF IMPAIRED WATERS AND THE POLLUTANT FOR WHICH IT IS IMPAIRED:
- UNT BUCKHORN CREEK IS NOT ON THE CURRENT 303(D) LIST.
- A12 SOILS MAP OF THE PREDOMINATE SOIL TYPES:
- THE SOILS MAP FOR THIS PROJECT IS SHOWN ON "STORMWATER POLLUTION PREVENTION PLAN", EC2. THE SOILS IN THE PROJECT AREA CONSISTS MAINLY OF "OMZ," "ORTHENTS, EARTHEN DAM."
- SEASONAL WETNESS IS LIKELY TO BE THE MAIN LIMITATION OF THE SOILS IN THE CONSTRUCTION AREA. FOR THIS PROJECT, CONSTRUCTION PROBLEMS ASSOCIATED WITH WET SOILS WILL BE BEST OVERCOME BY COMPLETING OPEN EXCAVATION WORK DURING FAVORABLE CONDITIONS AND COORDINATING WORK ACTIVITIES BASED UPON WEATHER AND SOIL CONDITIONS. UNDER SEVERE SOIL WETNESS CONDITIONS, QUICKLIME MAY BE USED TO HELP DRY WET SOILS FOR SITE ACCESS PURPOSES AND TO REDUCE DOWNTIME.
- A13 IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE (CONSTRUCTION PLAN, EXISTING LAYOUT):
- LINCOLN LAKE AND UNT BUCKHORN CREEK ARE LOCATED WITHIN THE PROJECT SITE AND SHOWN ON PLANS. THE FEMA FIRMETTE FLOODPLAIN MAP AND US FISH AND WILDLIFE SERVICE (USFWS) NATIONAL WETLANDS INVENTORY (NWI) MAP INDICATING ALL WETLANDS, LAKES, AND WATER COURSES LOCATED WITHIN THE PROJECT SITE IS SHOWN ON "STORMWATER POLLUTION PREVENTION PLAN", EC2.
- A14 IDENTIFICATION OF ANY OTHER STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORIZATIONS THAT ARE REQUIRED FOR CONSTRUCTION ACTIVITIES:
- THE PROJECT WILL REQUIRE AN IDEM SECTION 401 AND USACE SECTION 404 WATER QUALITY CERTIFICATION PERMIT AND AN IDNR CONSTRUCTION IN A FLOODWAY PERMIT.
- A15 IDENTIFICATION AND DELINEATION OF EXISTING VEGETATIVE COVER, INCLUDING NATURAL BUFFERS:

- EXISTING VEGETATIVE COVER IS PRIMARILY MAINTAINED TURF GRASS. THERE ARE NO NATURAL BUFFERS IN THE PROJECT AREA.
- A16 EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO SHOW DETAILED DRAINAGE PATTERNS:
- DETAILED CONTOUR LINES ARE SHOWN ON THE PLAN SHEETS TO INDICATE DRAINAGE PATTERNS WITHIN THE CONSTRUCTION LIMITS; REFER TO "EROSION CONTROL PLAN", EC3.
- A17 LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE:
- RUNOFF ENTERS THE PROJECT SITE FROM THE LINCOLN LAKE DAM PRINCIPAL SPILLWAY, SHEET FLOWS FROM THE NORTH/NORTHEAST. SIPHON DRAWDOWN OUTFALL STRUCTURE, OR TOP OF DAM IMPOUNDMENT/HIGHER ELEVATION, AND CONTINUES TO FLOW IN A GENERAL WEST/SOUTHWEST DIRECTION TOWARDS UNT BUCKHORN CREEK. DETAILED CONTOUR LINES ARE SHOWN ON PLAN SHEETS TO INDICATE DRAINAGE PATTERNS WITHIN THE CONSTRUCTION LIMITS; REFER TO "EROSION CONTROL PLAN", EC3.
- A18 LOCATION(S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE:
- RUN-OFF FROM THE SITE ULTIMATELY DISCHARGES TO UNT BUCKHORN CREEK, SOUTHWEST/WEST OF THE IMPOUNDMENT AREA. DETAILED CONTOUR LINES ARE SHOWN ON PLAN SHEETS TO INDICATE DRAINAGE PATTERNS WITHIN THE CONSTRUCTION LIMITS; REFER TO "EROSION CONTROL PLAN", EC3.
- A19 LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE:
- THE LINCOLN LAKE DAM IMPOUNDMENT AND RIPRAP, PRINCIPAL SPILLWAY AND RIPRAP, PERMANENT DRAWDOWN STRUCTURE AND OUTLET STRUCTURE WITH RIPRAP, ARMORED SIDE CHANNEL AND CONCRETE CUTOFF WALL, STORM SEWER INLETS/CATCH BASINS AND DRAINAGE PIPE, SANITARY LINES AND APPURTENANCES, WATER LINES/FORCE MAINS AND APPURTENANCES, WET WELL, "MOON TREE" FENCE, BORROW AREA, AND PAVED ACCESS ROAD IS LOCATED WITHIN THE PROJECT SITE. THE LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE CAN BE SEEN IN THE PLANS; REFER TO "OVERALL EXISTING SITE PLAN", C1-01.
- A20 EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PURPOSE OF STORMWATER MANAGEMENT:
- LINCOLN LAKE DAM IS LOCATED AT THE PROJECT SITE.
- A21 LOCATIONS WHERE STORMWATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER, SUCH AS ABANDONED WELLS, SINKHOLES, OR KARST FEATURES:
- NO FLOWS DIRECTLY DISCHARGING INTO GROUNDWATER IS ANTICIPATED. THERE ARE NO ABANDONED WELLS, SINKHOLES, OR KARST FEATURES LOCATED WITHIN THE PROJECT AREA. THE LOCATION OF THE ACTIVE WATER WELL, IDNR WATER WELL REFERENCE #216622, ON THE PROJECT SITE CAN BE SEEN IN THE PLANS; REFER TO "OVERALL EXISTING SITE PLAN", C1-01.
- A22 SIZE OF THE PROJECT AREA EXPRESSED IN ACRES:
- APPROXIMATELY 10.41 ACRES.
- A23 TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES:
- APPROXIMATELY 10.41 ACRES; AREA OF CONSTRUCTION LIMITS.
- A24 PROPOSED FINAL TOPOGRAPHY:
- REFER TO SITE PLANS FOR FINAL TOPOGRAPHY AND PROFILES.
- A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS:
- REFER TO SITE PLANS FOR CONSTRUCTION LIMITS/AREA OF DISTURBANCE.
- A26 LOCATIONS, SIZE AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEMS SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNEL:
- THE EXISTING STORMWATER DRAINAGE SYSTEMS ARE SHOWN ON THE PLANS. ALL EXISTING STORMWATER SYSTEMS WILL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION. IF DURING CONSTRUCTION ANY DAMAGE IS DONE TO AN EXISTING STORMWATER SYSTEM, DAMAGED STRUCTURES WILL BE EITHER REPAIRED OR REPLACED TO EQUAL OR BETTER CONDITION THAN EXISTING.
- A27 LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE:
- DISCHARGE WILL ROUTE THROUGH THE LINCOLN LAKE DAM PRINCIPAL SPILLWAY TO UNT BUCKHORN CREEK. THE DRAWDOWN STRUCTURE, ALONG WITH EMBANKMENT ARMORED SIDE CHANNEL, DISCHARGES TO A SMALL CHANNEL THAT FLOWS WEST AND ULTIMATELY DISCHARGES TO UNT BUCKHORN CREEK. LOCATIONS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE CAN BE SEEN ON THE PLANS.
- A28 LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS:
- LOCATIONS OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING PROPOSED UTILITIES, STRUCTURES, AND LOT BOUNDARIES, ARE SHOWN ON THE PLANS. NO OFF-SITE CONSTRUCTION IS ANTICIPATED FOR THIS PROJECT.
- A29 LOCATIONS OF ALL ON-SITE AND OFF-SITE SOIL STOCKPILES AND BORROW AREAS:
- THE LOCATION OF THE BORROW AREA IS SHOWN ON THE PLANS; REFER TO "EROSION CONTROL PLAN", EC3. BORROW AREAS AND STOCKPILES LEFT INACTIVE FOR SEVEN (7) DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY SEED AND SURROUNDED BY SILT FENCE OR OTHER PERIMETER CONTROLS. ALL STOCKPILES AND BORROW AREAS WILL BE LOCATED ON-SITE AND THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT OR RELEASE FOR PROPER DISPOSAL OF EXCAVATED MATERIALS.
- A30 CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT:
- STAGING AREAS, MATERIAL STORAGE, AND CONCRETE WASHOUT LOCATIONS ARE SHOWN ON THE PLANS; REFER TO "EROSION CONTROL PLAN", EC3.

- A31 LOCATION OF ANY IN-STREAM ACTIVITIES THAT ARE PLANNED FOR THE PROJECT INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS AND PUMP AROUNDS:
- WORK WITHIN LINCOLN LAKE INCLUDES DEMOLITION OF THE EXISTING DRAWDOWN STRUCTURE, INSTALLATION OF PERMANENT SIPHON DRAWDOWN STRUCTURE ON RIPRAP LEVELING PAD, AND PIPE COLLARS. THE LAKE WILL BE DRAWN DOWN A MAXIMUM OF 14-FEET PRIOR TO CONSTRUCTION; NO PUMP AROUND SYSTEM IS ANTICIPATED. WORK WITHIN THE UNT BUCKHORN CREEK INCLUDES GROUT PATCHES TO THE CONCRETE SPILLWAY AND RIPRAP OVER GEOTEXTILE LINER REHABILITATION AT THE DOWNSTREAM END OF THE CONCRETE SPILLWAY AND FILTER SOCK. WORK WITHIN THE SMALL RECEIVING CHANNEL FOR THE DRAWDOWN STRUCTURE INCLUDES ROADWAY DRAINAGE CULVERT, RIPRAP OVER GEOTEXTILE LINER, AND FILTER SOCK. ALL IN-STREAM AND WATERBODY ACTIVITIES ARE SHOWN ON THE PLANS.
- STORMWATER POLLUTION PREVENTION PLAN - CONSTRUCTION COMPONENT (SECTION B)**
- STORMWATER POLLUTION PREVENTION MEASURES SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AUTHORITY AND THE APPLICABLE IDEM CSGP REQUIREMENTS.
- B1 DESCRIPTION OF THE POTENTIAL POLLUTANT GENERATING SOURCES AND POLLUTANTS, INCLUDING ALL POTENTIAL NON-STORMWATER DISCHARGES:
- WITHOUT THE USE OF PROPER BMPS, CLEARING, GRADING, EXCAVATING, STOCKPILING, AND DEWATERING ALL MAY RESULT IN SEDIMENT POLLUTION. PAVEMENT RESTORATION MAY ALSO CREATE BITUMINOUS DEBRIS. IMPROPER VEHICLE FUELING AND MAINTENANCE ON-SITE MAY RESULT IN SPILLS OF OIL, GREASE, AND FUEL. GENERAL CONSTRUCTION ACTIVITY CAN LEAD TO TRASH ACCUMULATION AND POLLUTION FROM SANITATION CHEMICALS.
- EXCAVATION, STOCKPILING, AND GRADING:
- STOCKPILE MANAGEMENT PROCEDURES AND PRACTICES WILL BE IMPLEMENTED TO MINIMIZE OR ELIMINATE THE DISCHARGE OF STOCKPILED MATERIAL (SOIL, TOPSOIL, BASE MATERIAL) FROM ENTERING DRAINAGE SYSTEMS OR SURFACE WATERS.
- FOR ANY STOCKPILES OR LAND CLEARING DEBRIS COMPOSED, IN WHOLE OR IN PART, OF SEDIMENT OR SOIL, THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. LOCATE PILES WITHIN THE DESIGNATED LIMITS OF DISTURBANCE.
 2. PROTECT FROM CONTACT WITH STORMWATER USING A TEMPORARY PERIMETER SEDIMENT BARRIER.
 3. WHERE PRACTICABLE, PROVIDE COVER OR APPROPRIATE TEMPORARY VEGETATIVE OR STRUCTURAL STABILIZATION TO AVOID DIRECT CONTACT WITH PRECIPITATION OR TO MINIMIZE THE DISCHARGE OF SEDIMENTS.
 4. NEVER HOSE DOWN OR SWEEP SOIL OR SEDIMENT ACCUMULATED ON PAVEMENT OR OTHER IMPERVIOUS SURFACES INTO ANY STORMWATER CONVEYANCE, STORM DRAIN INLET, OR SURFACE WATER.
 5. TO THE MAXIMUM EXTENT PRACTICABLE, CONTAIN AND SECURELY PROTECT STOCKPILES FROM WIND.
- DEWATERING:
- EQUIPMENT OPERATORS ARE PROHIBITED FROM DISCHARGING GROUNDWATER OR ACCUMULATED PRECIPITATION THAT IS REMOVED FROM EXCAVATIONS, TRENCHES, VAULTS, OR OTHER SIMILAR POINTS OF ACCUMULATION, UNLESS SUCH WATERS ARE FIRST EFFECTIVELY MANAGED BY APPROPRIATE CONTROL MEASURES.
- VEHICLE FUELING:
- VEHICLE FUELING SHALL NOT TAKE PLACE WITHIN REGULATED DRAIN AREAS, WETLANDS, STREAMS, LAKE, OR BUFFER ZONE AREAS, OR WITHIN 50-FEET OF THE STORM DRAIN SYSTEM. VEHICLE MAINTENANCE AND WASHING SHALL OCCUR OFF-SITE, OR IN DESIGNATED AREAS DEPICTED ON THE PLANS OR APPROVED OF BY THE SITE OWNER. MAINTENANCE AREAS SHALL BE CLEARLY DESIGNATED, AND BARRIERS SHALL BE USED AROUND THE PERIMETER OF THE MAINTENANCE AREA TO PREVENT STORMWATER CONTAMINATION.
- CONSTRUCTION VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS. REPAIRS SHALL TAKE PLACE IMMEDIATELY. DISPOSAL OF ALL USED OIL, ANTIFREEZE, SOLVENTS, AND OTHER AUTOMOTIVE-RELATED CHEMICALS SHALL BE ACCORDING TO APPLICABLE REGULATIONS; AT NO TIME SHALL ANY MATERIAL BE WASHED DOWN THE STORM DRAIN OR INTO ANY ENVIRONMENTALLY SENSITIVE AREA.
- POTENTIAL POLLUTANT SOURCES INCLUDE SEDIMENT FROM EXPOSED SOIL, CONTAMINATED/TURBID PUMP AROUND DISCHARGE WATERS, FUEL, DIESEL FUEL, EQUIPMENT LUBRICATING OIL, GREASE, AND CONCRETE. FINAL LAND USE WILL NOT CHANGE FROM EXISTING LAND USE.
- B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS:
- THE STABILIZED CONSTRUCTION ENTRANCE LOCATION IS SHOWN ON THE PLANS. UPON COMPLETION OF CONSTRUCTION, ALL SURFACES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITIONS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE EXISTING SURFACES ACTING AS CONSTRUCTION ENTRANCES/EXITS TO PRE-CONSTRUCTION CONDITIONS. REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR DETAILS REGARDING THE CONSTRUCTION ENTRANCE. REFER TO DS-05, "TEMPORARY EROSION AND SEDIMENT CONTROL" FOR ADDITIONAL SPECIFICATIONS.
- B3 SPECIFICATIONS FOR TEMPORARY AND PERMANENT STABILIZATION:
- TEMPORARY AND PERMANENT SEED SURFACE STABILIZATION WILL BE UTILIZED WHERE NEEDED. SEE DS-05, "TEMPORARY EROSION AND SEDIMENT CONTROL" AND WM-24 "SEEDING AND SODDING." REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR SPECIFICATIONS REGARDING THE TEMPORARY SURFACE STABILIZATION METHODS.
- UNVEGETATED AREAS THAT ARE LEFT IDLE OR SCHEDULED TO BE LEFT INACTIVE MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITH MEASURES APPROPRIATE FOR THE SEASON. STABILIZATION MUST BE INITIATED BY THE END OF THE SEVENTH DAY THE AREA IS LEFT IDLE. THE STABILIZATION ACTIVITY MUST BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER INITIATION.
- INITIATION OF STABILIZATION INCLUDES SEEDING AND APPLYING MULCH OR OTHER TEMPORARY SURFACE STABILIZATION METHODS WHERE APPROPRIATE. BIODEGRADABLE MATTING OR NETTING MAY BE USED TO STABILIZE SOILS ON SLOPED AREAS AND SOME RECENTLY PLANTED AREAS TO PROTECT SEEDLINGS UNTIL THEY HAVE BECOME ESTABLISHED. TEMPORARY SEEDING OR EROSION CONTROL MATS ARE TO BE USED TO STABILIZE EXPOSED SURFACES IF FINAL GRADING AND SEEDING MUST BE DELAYED.

- B4 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS:
- PROTECTIVE MEASURES FOR AREAS OF CONCENTRATED FLOW WILL INCLUDE TEMPORARY AND PERMANENT VEGETATION AND MULCHES, EROSION CONTROL BLANKETS, AND FILTER SOCK. REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR SPECIFICATIONS REGARDING THE SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS. ADDITIONAL SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION.
- B5 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS:
- FILTER SOCK, EROSION CONTROL BLANKETS, AND SILT FENCING WILL BE USED FOR SHEET FLOW CONTROL. REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR SPECIFICATIONS REGARDING THE SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS. ADDITIONAL SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION.
- B6 RUNOFF CONTROL MEASURES:
- WHILE LINCOLN LAKE WILL BE DRAWN DOWN PRIOR TO EMBANKMENT CONSTRUCTION ACTIVITIES, FILTER SOCK WILL BE USED TO CONTROL RUNOFF FLOW FROM LINCOLN LAKE DAM SPILLWAY. FILTER SOCK WILL BE USED TO CONTROL RUNOFF FROM THE DRAWDOWN SIPHON OUTFALL STRUCTURE AND DRAINAGE PIPE, ALONG WITH ARMORED SIDE CHANNEL, TO SMALL CHANNEL THAT ULTIMATELY DRAINS TO UNT BUCKHORN CREEK. REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR SPECIFICATIONS REGARDING THE RUNOFF CONTROL MEASURES. ADDITIONAL SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION.
- B7 STORMWATER OUTLET PROTECTION SPECIFICATIONS:
- STORMWATER OUTLET PROTECTION IS SHOWN ON THE PLANS FOR THE EXISTING CONCRETE SPILLWAY, PERMANENT SIPHON DRAWDOWN OUTFALL STRUCTURE, AND SIDE CHANNEL. THE REHABILITATED RIPRAP PROTECTION AT THE BASE OF THE SPILLWAY WILL HAVE APPROXIMATELY 50-FEET OF 24" CLASS 1 RIPRAP OVER GEOTEXTILE LINER TO REDUCE SCOURING IN THE CHANNEL. THE PERMANENT SIPHON DRAWDOWN OUTFALL STRUCTURE, ALONG WITH THE 24" RCP DRAINAGE CULVERT, WILL BE REINFORCED WITH 24" CLASS 1 RIPRAP OVER GEOTEXTILE LINER TO REDUCE CHANNEL SCOURING. THE SIDE CHANNEL AT THE NORTH END OF THE EMBANKMENT WILL BE REINFORCED WITH FLEXAMAT ARMORING TO PREVENT SCOURING AND PROTECT THE INTEGRITY OF EMBANKMENT. ADDITIONAL SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION.
- B8 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS:
- GRADE STABILIZATION STRUCTURES ARE NOT ANTICIPATED FOR THIS PROJECT.
- B9 DEWATERING APPLICATIONS AND MANAGEMENT METHODS:
- DEWATERING IS ANTICIPATED FOR THE DAM REHABILITATION MEASURES. SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION AND DS-07 "LAKE DRAWDOWN AND SITE DEWATERING" SPECIFICATION.
- AT A MINIMUM, THE FOLLOWING DISCHARGE REQUIREMENTS MUST BE MET FOR DEWATERING ACTIVITIES:
1. ALLOW NO DISCHARGE OF VISIBLE SEDIMENT OR SOLIDS. THIS INCLUDES DISCHARGE WATER WITH A VISIBLE SHEEN.
 2. AT ALL POINTS WHERE DEWATERING WATER IS DISCHARGED, UTILIZE VELOCITY DISSIPATION DEVICES.
 3. DEWATERING PRACTICES MUST INVOLVE THE IMPLEMENTATION OF APPROPRIATE CONTROL MEASURES AS APPLICABLE.
- B10 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES:
- WORK WITHIN LINCOLN LAKE INCLUDES DEMOLITION OF THE EXISTING DRAWDOWN STRUCTURE, INSTALLATION OF PERMANENT SIPHON DRAWDOWN STRUCTURE ON RIPRAP LEVELING PAD, AND PIPE COLLARS. THE LAKE WILL BE DRAWN DOWN A MAXIMUM OF 14-FEET PRIOR TO CONSTRUCTION OF EMBANKMENT REHABILITATION MEASURES. FOR THE GROUT PATCHES TO THE CONCRETE SPILLWAY AND RIPRAP OVER GEOTEXTILE LINER REHABILITATION AT THE DOWNSTREAM END OF THE CONCRETE SPILLWAY, A FILTER SOCK WILL BE USED TO CONTROL FLOW OF WATER AND SEDIMENT WITHIN UNT BUCKHORN CREEK. FOR THE PROPOSED PERMANENT SIPHON OUTFALL STRUCTURE, DRAINAGE PIPE, WATER AND FORCE MAIN LINES, AND SIDE CHANNEL GRADING AND ARMAMENT, FILTER SOCK WILL BE USED TO CONTROL FLOW OF WATER AND SEDIMENT WITHIN THE SMALL RECEIVING CHANNEL THAT ULTIMATELY DISCHARGES TO UNT BUCKHORN CREEK. REFER TO THE "STORMWATER POLLUTION PREVENTION PLAN" AND "EROSION CONTROL PLAN" SHEETS FOR SPECIFICATIONS REGARDING THE WORK WITHIN WATERBODIES. ADDITIONAL SPECIFICATIONS CAN BE FOUND IN THE CURRENT INDIANA STORM WATER QUALITY MANUAL. REFER TO DS-05 "TEMPORARY EROSION AND SEDIMENT CONTROL" SPECIFICATION AND DS-07 "LAKE DRAWDOWN AND SITE DEWATERING" SPECIFICATION.
- B11 MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE:
- THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL MONITOR AND MANAGE PROJECT CONSTRUCTION AND STORMWATER ACTIVITIES THROUGH THE ADMINISTRATION OF A SELF-MONITORING PROGRAM (SMP). A TRAINED INDIVIDUAL SHALL SUBMIT WEEKLY SMP REPORTS, AND EVENT INSPECTION REPORTS AS REQUIRED WITHIN 24 HOURS OF EVERY 1/2" RAIN EVENT. INSPECTION WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL STRUCTURES TO ENSURE INTEGRITY AND EFFECTIVENESS. INSPECTIONS WILL ALSO BE PROVIDED FOR ALL DISTURBED AREAS THAT HAVE NOT ACHIEVED FINAL STABILIZATION, AND AT ALL POINTS OF DISCHARGE FROM THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRANCES SHOULD BE INSPECTED DAILY. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. TOP DRESS WITH AGGREGATE AS NEEDED. REMOVE MUD AND SEDIMENT TRACKED ONTO PUBLIC ROADS. FLUSHING SHOULD ONLY BE USED IF WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN.
- INSPECT SILT FENCES WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST WEEKLY. FABRIC TEARS, POST FAILURES, VEHICLE DAMAGE, OR UNDERMINING OF THE SILT FENCE ARE TO BE REPAIRED IMMEDIATELY. SEDIMENT BUILDUP ALONG SILT FENCES WILL BE REMOVED IF IT REACHES 1/2 THE HEIGHT OF THE SILT FENCE ABOVE THE GROUND ELEVATION.
- INSPECT CONCRETE WASHOUTS DAILY AND AFTER EACH STORM EVENT. MAINTAIN CONCRETE WASHOUTS TO PROVIDE ADEQUATE HOLDING AND CAPACITY WITH MINIMUM FREEBOARD OF 12 INCHES.
- INSPECT EROSION CONTROL BLANKETS WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST WEEKLY. IF EROSION OCCURS, PULL BACK PORTION OF BLANKET IN THE AREA, ADD SOIL AND COMPRESS, RESEED THE AREA, AND REPLACE AND SECURE BLANKET.



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Dale A. Glick
Signature
11/01/2024
Date

INDIANA DEPARTMENT OF ADMINISTRATION

LINCOLN LAKE DAM REHABILITATION

SPENCER COUNTY, INDIANA

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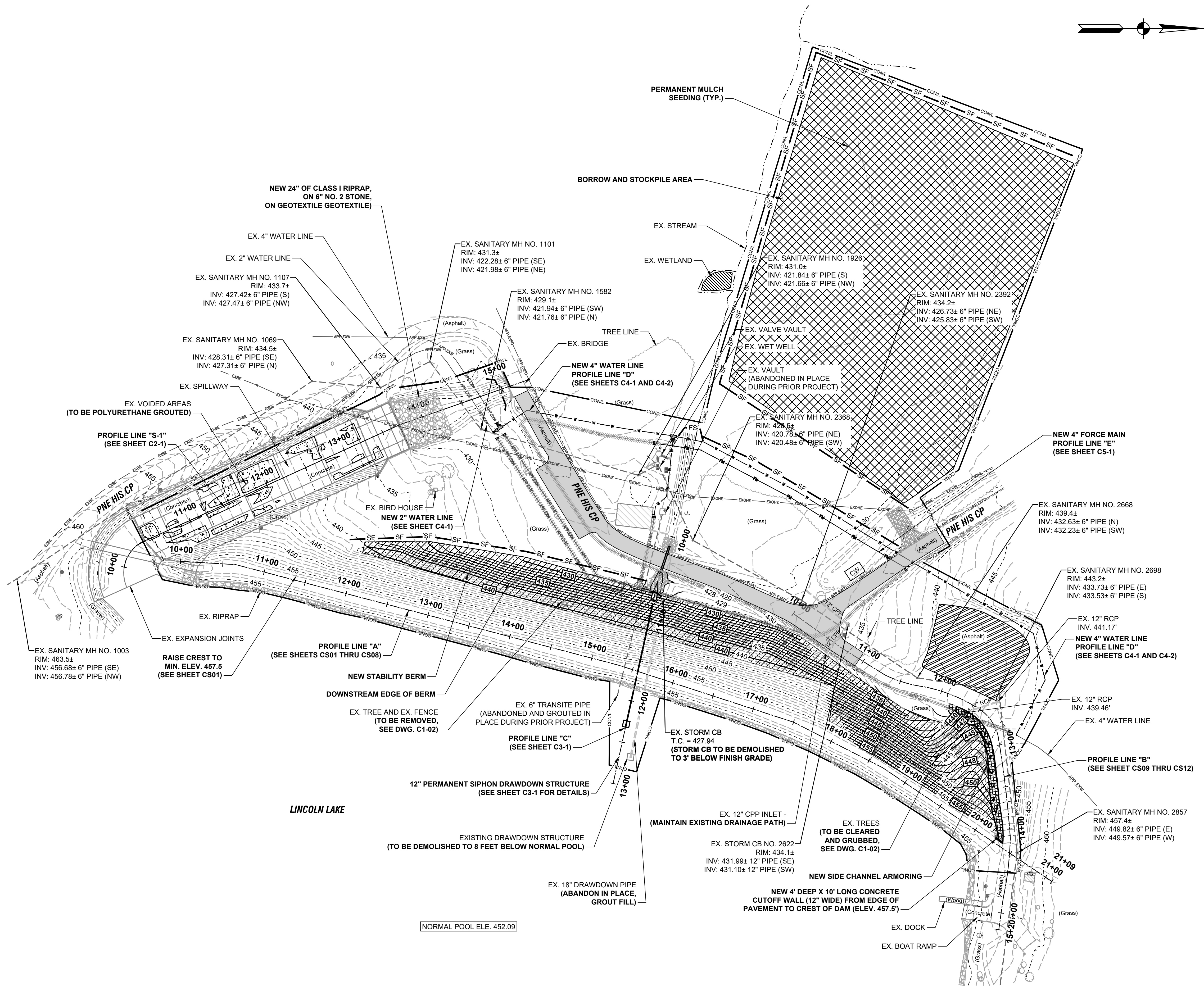
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				DAG	GCR	BPE
				Issue Date:	Project No:	Scale:
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EC1

Sheet: 05 OF 43

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SITE PLAN

SCALE: 1"=60'-0"
0 60 120

LEGEND:

IP	STORM INLET PROTECTION PERMANENT
PS	MULCH SEEDING
FS	FILTER SOCK
SF	SILT FENCE
CON/L	CONSTRUCTION LIMITS
CW	CONCRETE WASHOUT
[Hatched Box]	STAGING AND MATERIAL HANDLING
[Dotted Box]	EROSION CONTROL BLANKET
[Cross-hatched Box]	TEMPORARY CONSTRUCTION ENTRANCE

GENERAL NOTES:

- CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL MEASURES AS SPECIFIED IN THE DETAILED SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO CONCRETE WASHOUT STATIONS, TEMPORARY CONSTRUCTION ENTRANCES, TEMPORARY SEEDING, ETC. AS REQUIRED DURING THE DURATION OF THE PROJECT TO MAINTAIN COMPLIANCE WITH THE GENERAL STORM WATER CONSTRUCTION PERMIT. CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE GENERAL STORM WATER CONSTRUCTION PERMIT, INCLUDING PROVIDING REQUIRED NOTIFICATIONS TO THE REQUIRED AGENCIES.
- SEE SHEETS MD1 AND MD2 FOR EROSION CONTROL DETAILS.
- EROSION CONTROL BLANKETS TO COVER FULL EXTENTS OF DISTURBANCE ACTIVITIES ASSOCIATED WITH PIPE TRENCHING FOR INSTALLATION OR EQUAL.



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EROSION CONTROL PLAN

Drawing No:

EC3

Sheet: 07 OF 43

TEMPORARY VEGETATIVE COVER		
EARLY SPRING TO MID SPRING (2/15-6/15)	SEED SPECIES	RATES (LBS. PER ACRE)
	PERENNIAL RYEGRASS	10
	ANNUAL RYEGRASS	5
	WEEPING LOVEGRASS	2
MID SPRING TO MID SUMMER (6/15-8/15)		
	SUDANGRASS	10
	PEARL MILLET	6
	FOXTAIL MILLET	8
	RED CLOVER	4
MID SUMMER TO EARLY FALL (8/15-11/15)		
	RYE	45
	WINTER WHEAT	45
	ANNUAL RYEGRASS	4
	PERENNIAL RYEGRASS	5
	CRIMSON CLOVER	10

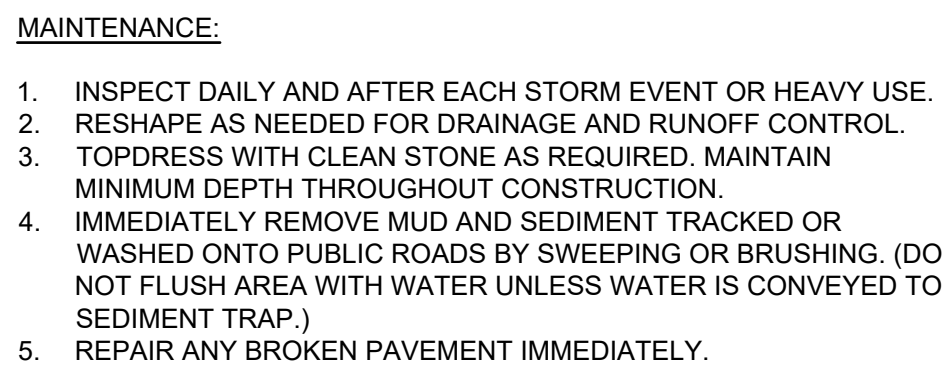
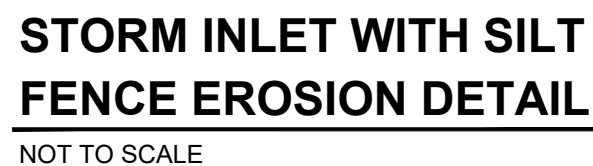
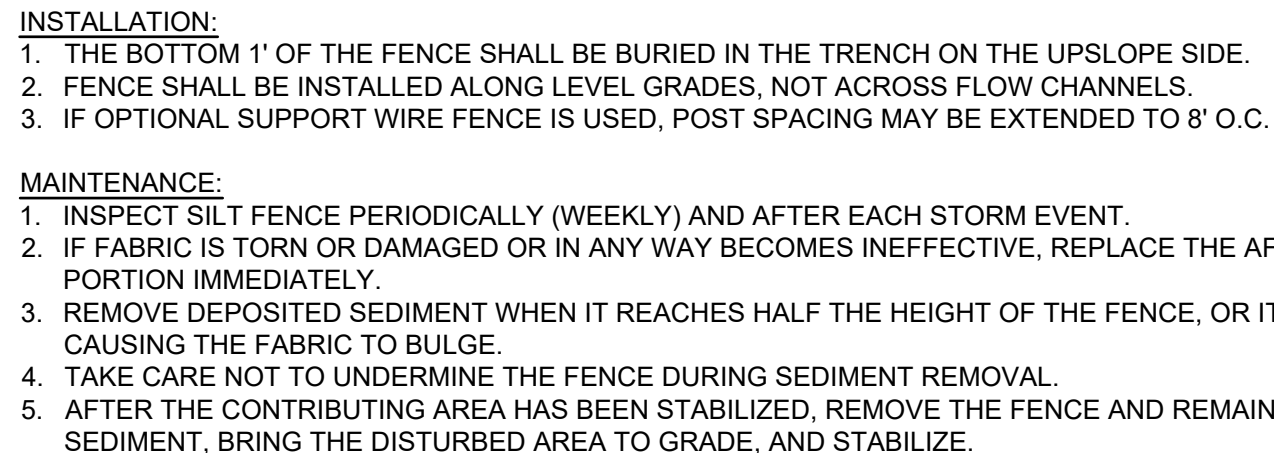
1. LEGUME SEED SHOULD BE INOCULATED;
2. SEEDING MIXTURES CONTAINING LEGUMES SHOULD PREFERABLY BE SPRING SEEDED, ALTHOUGH THE GRASS MAY BE FALL SEEDED AND THE LEGUME FROST SEEDED; AND IF LEGUMES ARE FALL SEEDED DO SO IN EARLY FALL.

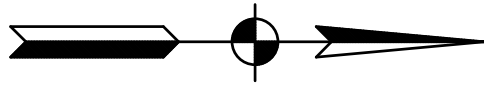


EROSION-GENERAL EROSION AND SEDIMENT CONTROL NOTES

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Sheet: 08 OF 43





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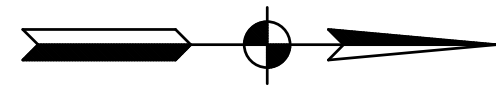
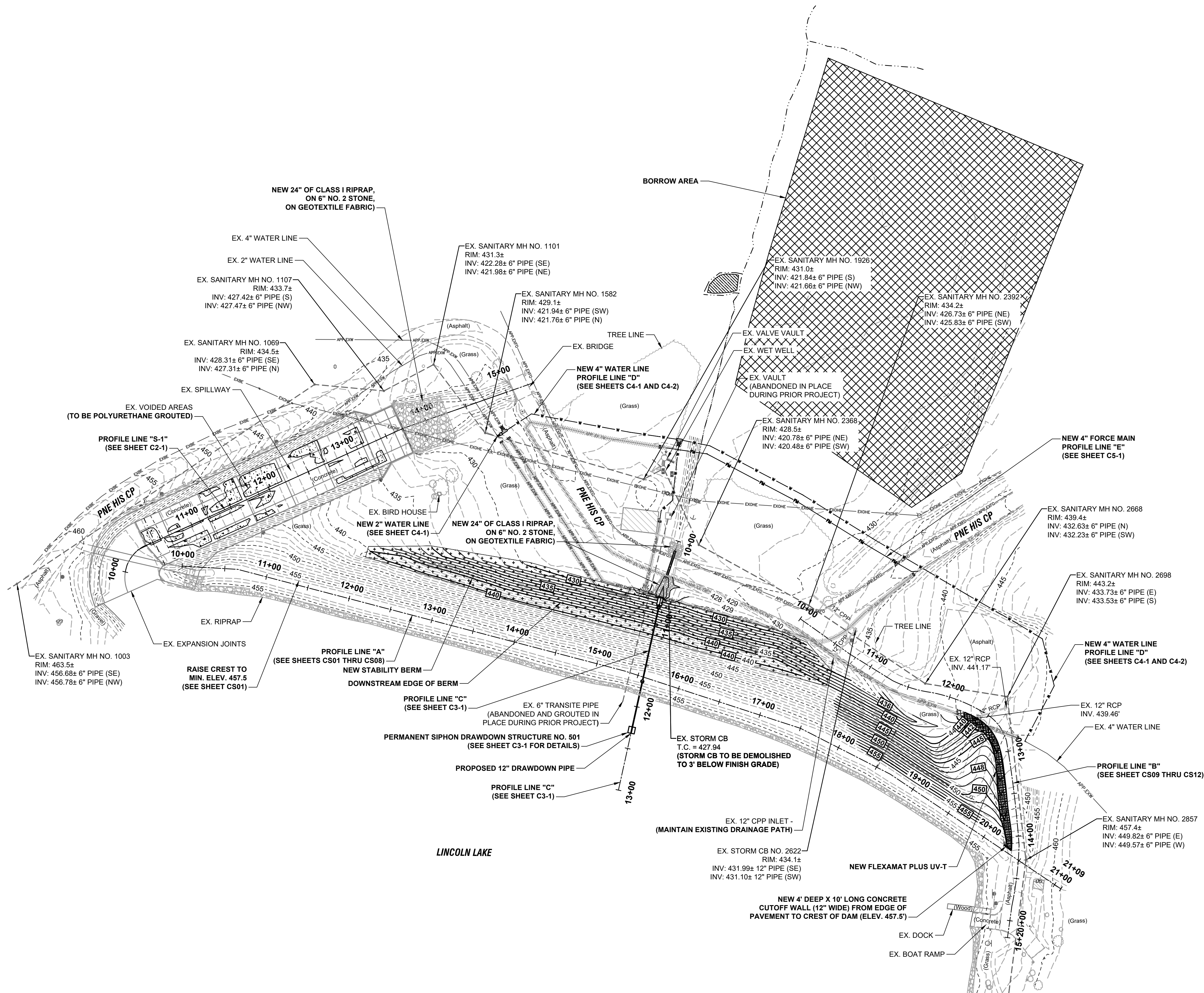
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GENERAL NOTES:

1. PATCH SPALLED CONCRETE.
2. PROTECT EXISTING WOODEN GUARD RAIL ALONG SPILLWAY.

LEGEND:

- BORROW AREA
- STABILITY BERM
- VOIDS UNDER CONCRETE
- FLEXAMAT

SITE PLAN

SCALE: 1"=60'-0"
0 60' 120'



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IMPROVEMENTS PLAN

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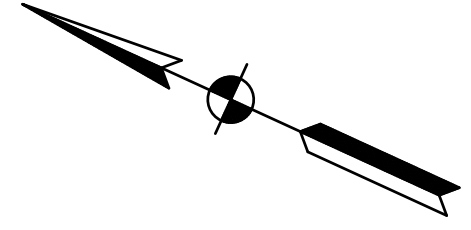
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FOR CONTINUATION SEE THIS SHEET C1-07

GENERAL NOTES:

1. PATCH SPALLED CONCRETE.
2. PROTECT EXISTING WOODEN GUARD RAIL ALONG SPILLWAY.

**LINCOLN LAKE**

—EX. RIPRAP

— PROFILE LINE "A"
(SEE SHEET CS01)

NEW STABILITY BERM—

—EX. BIRDHOUSE

24" OF CLASS 1 RIPRAP
ON 6" #2 STONE
ON GEOTEXTILE FABRIC
EX. RETAINING WALL -

EX. VOIDED AREAS
(TO BE POLYURETHANE GROUTED) -

EX. EXPANSION JOINTS
(MATERIAL TO BE REMOVED, JOINT
CLEANED, AND MASTIC INSTALLED
TYPICAL ALL EXPANSION JOINTS)

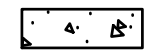
EX. CONCRETE LIMITS

— PROFILE LINE "S-1"
(SEE SHEET C2-1)

SITE PLAN

SCALE: 1"=20'-0"

LEGEND:



VOIDS UNDER CONCRETE

STABILITY BERM

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EXISTING SPILLWAY BLOW UP SITE IMPROVEMENTS PLAN

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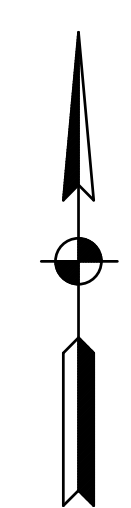
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STABILITY BERM





SCALE: 1"=20'-0"

0 20' 40'

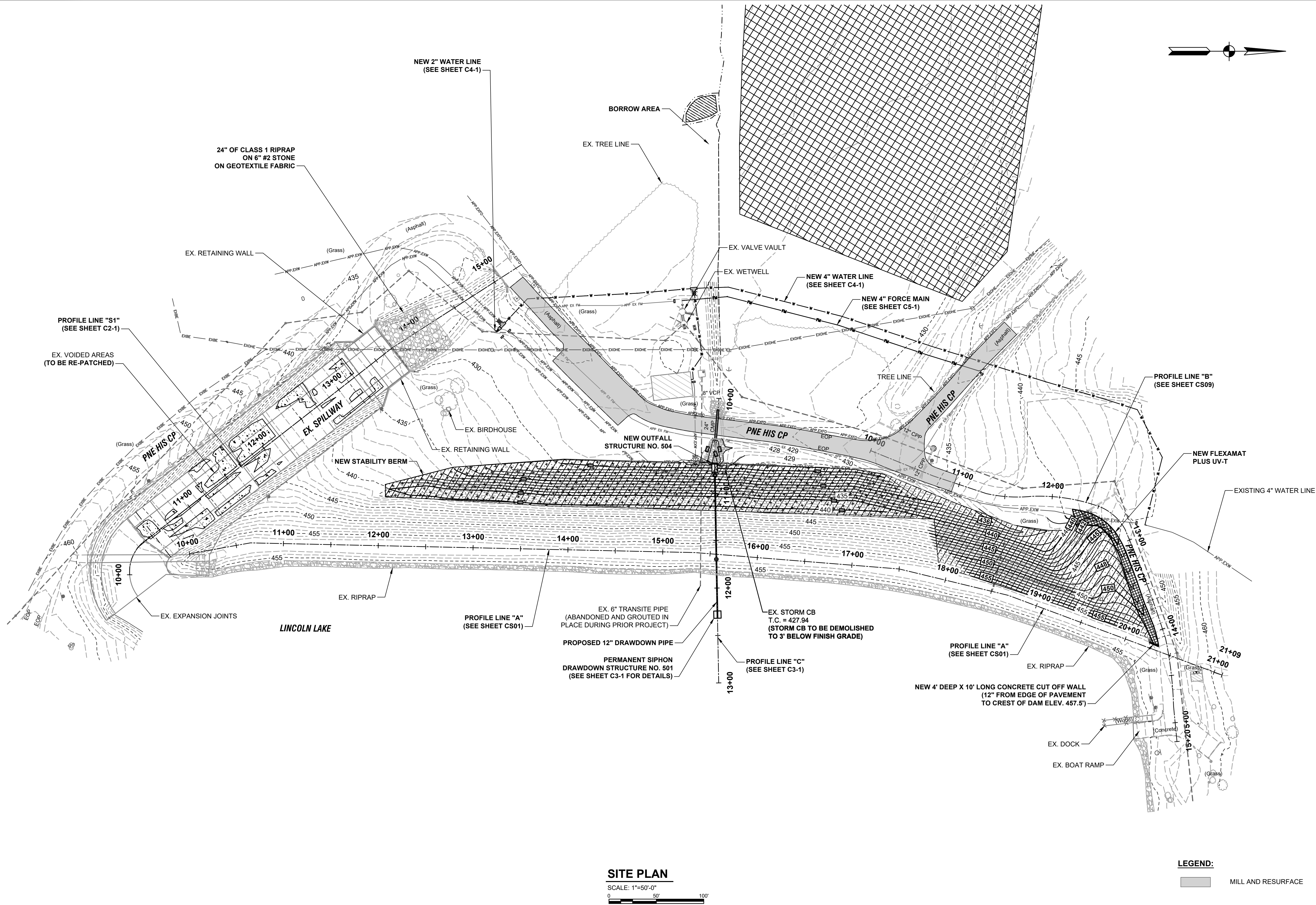
A horizontal graphic scale bar with alternating black and white segments. It is marked with '0' at the left end, '20'' at the midpoint, and '40'' at the right end.

NEW FLEXAMAT PLUS UV-T

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C1-08
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SITE PLAN

SCALE: 1"=50'-0"
0 50' 100'

LEGEND:

MILL AND RESURFACE

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Dale A. Glick
Signature
11/01/2024
Date

INDIANA DEPARTMENT OF ADMINISTRATION
LINCOLN LAKE DAM REHABILITATION
SPENCER COUNTY, INDIANA

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DAG	GCR	BPE

Issue Date:	Project No:	Scale:
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ROAD IMPROVEMENTS PLAN

Drawing No:

C1-09

Sheet: 18 OF 43

FILE Z:\SHARED\CLIENTS\4\LINCOLN DAM\LINCOLN LAK DAM DESIGN\CS04\ CURRENT FILES\1 DRAWINGS\03 SITE PLAN.DWG
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GENERAL NOTES:

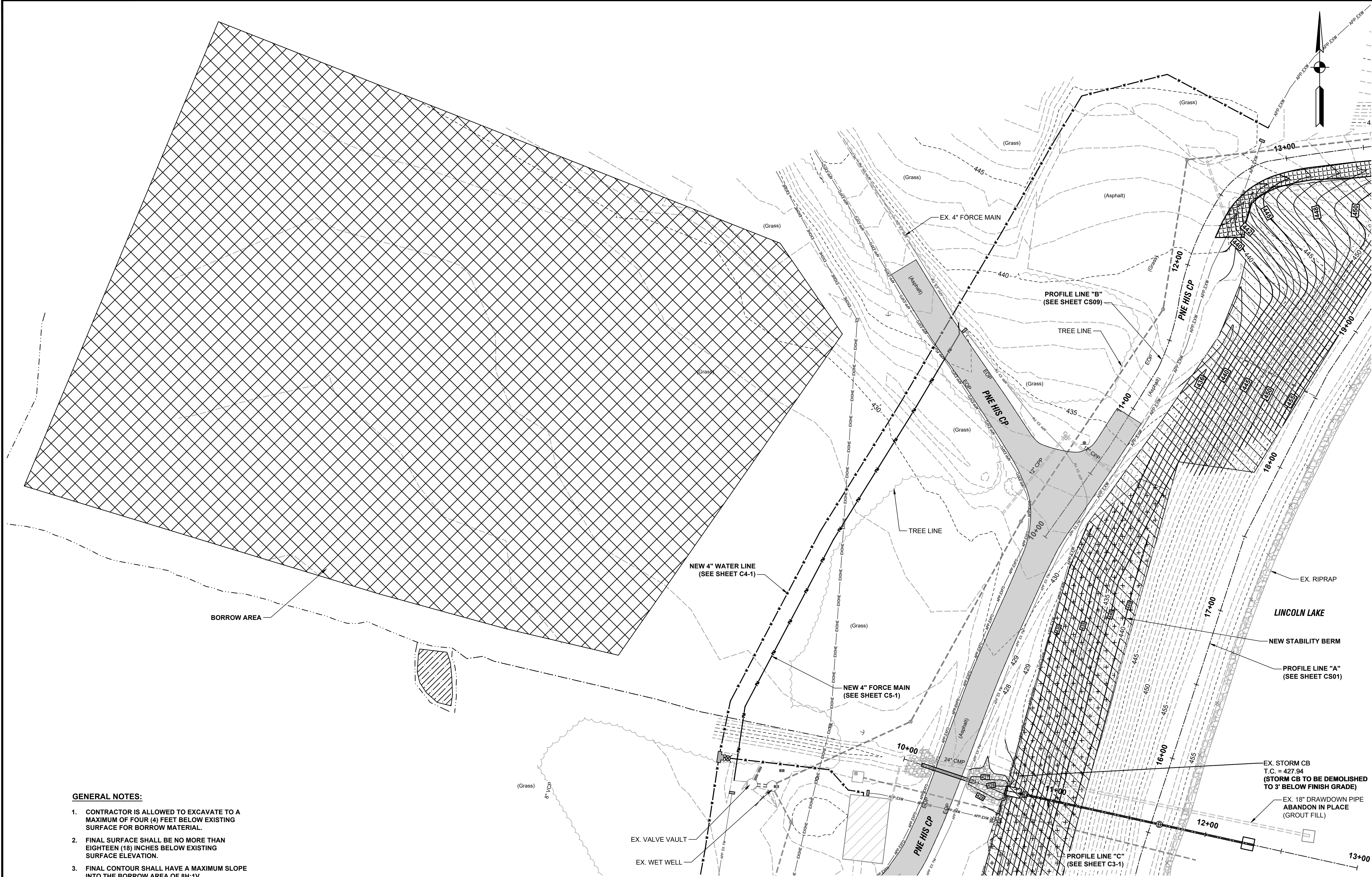
1. CONTRACTOR IS ALLOWED TO EXCAVATE TO A MAXIMUM OF FOUR (4) FEET BELOW EXISTING SURFACE FOR BORROW MATERIAL.
2. FINAL SURFACE SHALL BE NO MORE THAN EIGHTEEN (18) INCHES BELOW EXISTING SURFACE ELEVATION.
3. FINAL CONTOUR SHALL HAVE A MAXIMUM SLOPE INTO THE BORROW AREA OF 8H:1V.
4. SURFACE MUST SLOPE FOR POSITIVE DRAINAGE SUCH THAT THE BORROW AREA DOES NOT POND.

SITE PLAN

SCALE: 1"=30'-0"
0 30' 60'

LEGEND:

- | | |
|--|--------------------|
| | BORROW AREA |
| | STABILITY BERM |
| | MILL AND RESURFACE |



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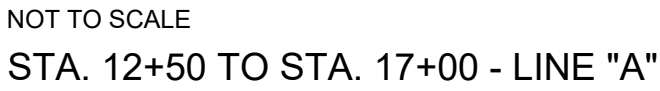
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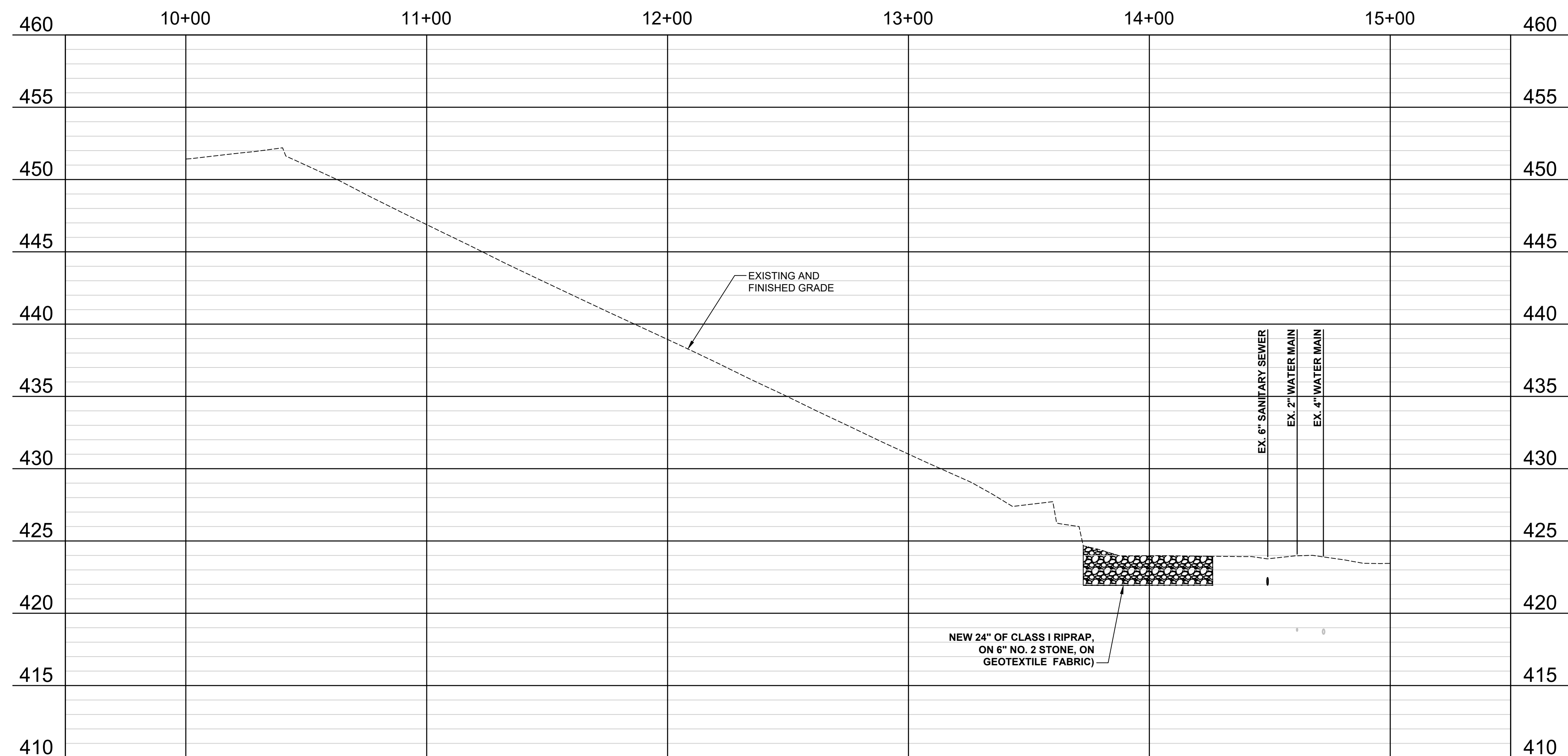
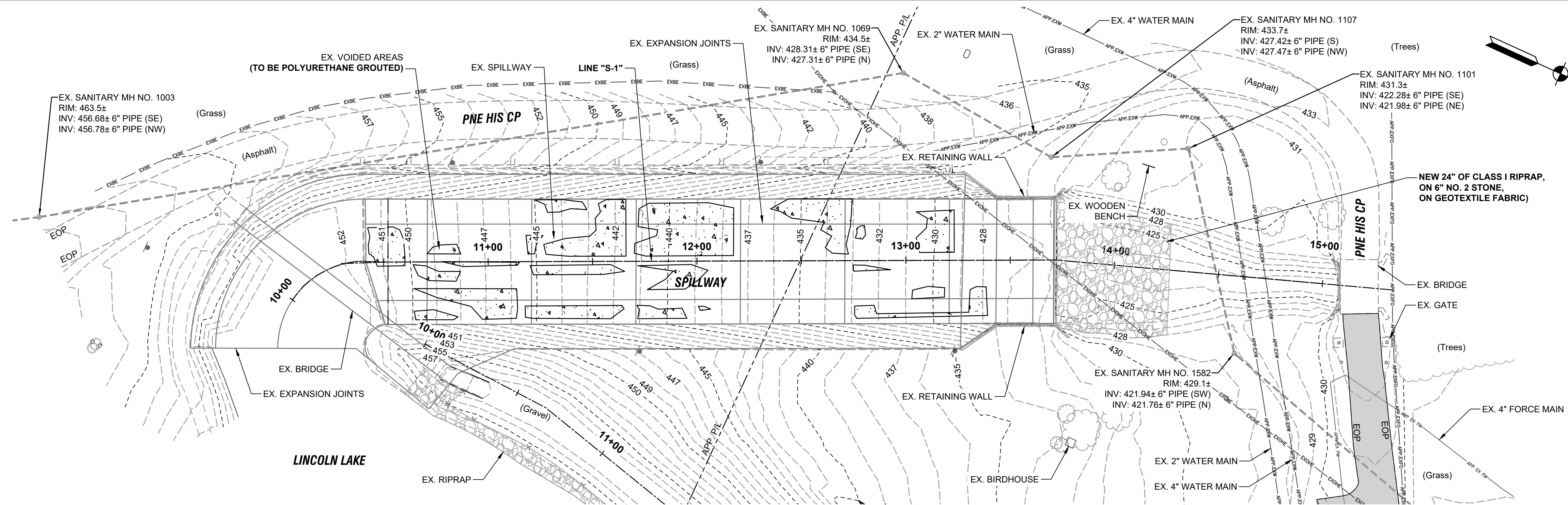
BORROW AREA

Drawing No:

C1-10

Sheet: 19 OF 43





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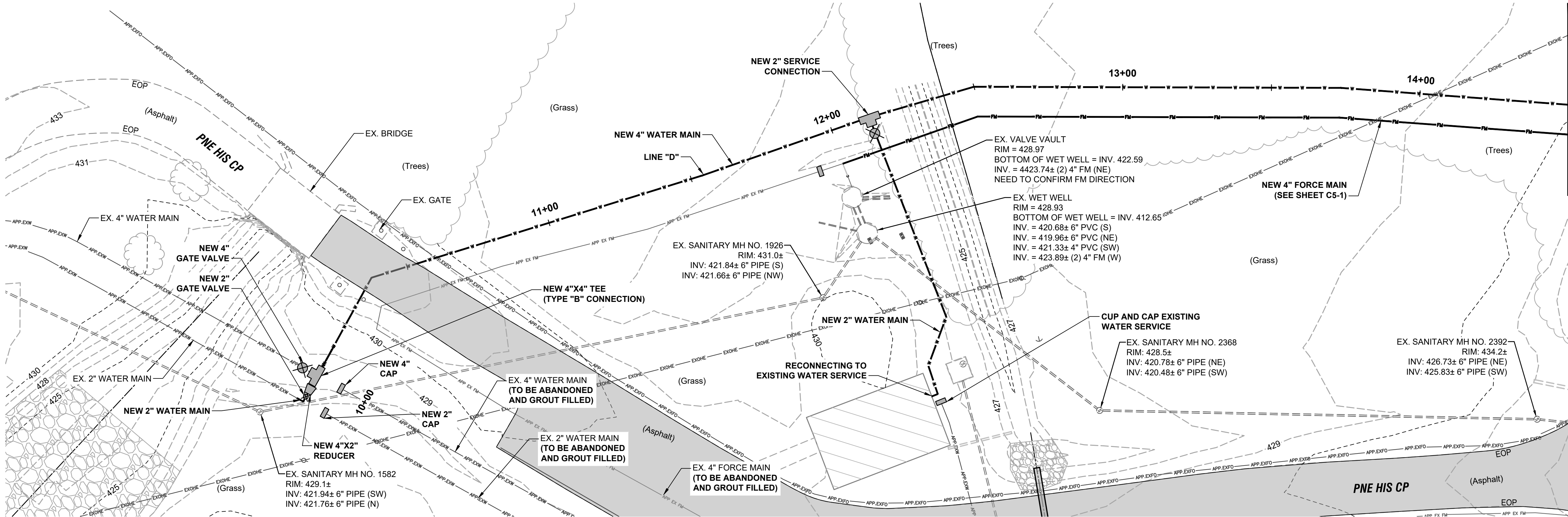
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VIEWS - LINE "S-1"

PLAN AND PROFILE
VIEWS - LINE "S-1"

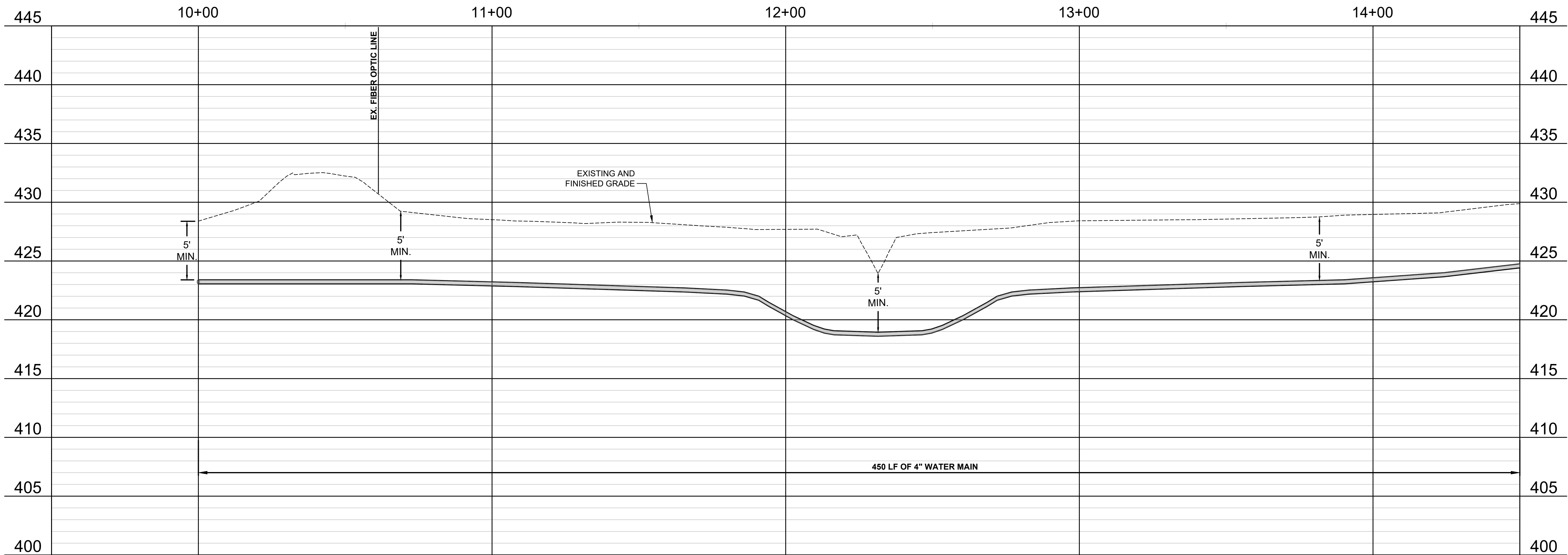
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Sheet: 21 OF 43

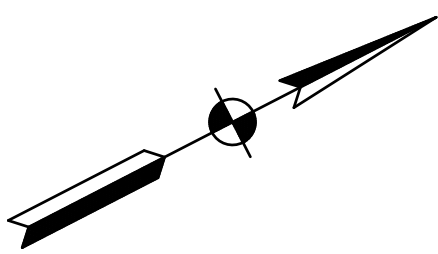
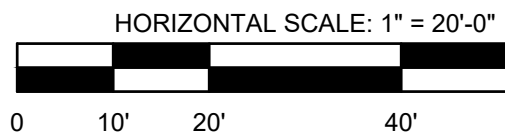
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PLAN VIEW



PROFILE VIEW



FOR CONTINUATION SEE DWG C4-2



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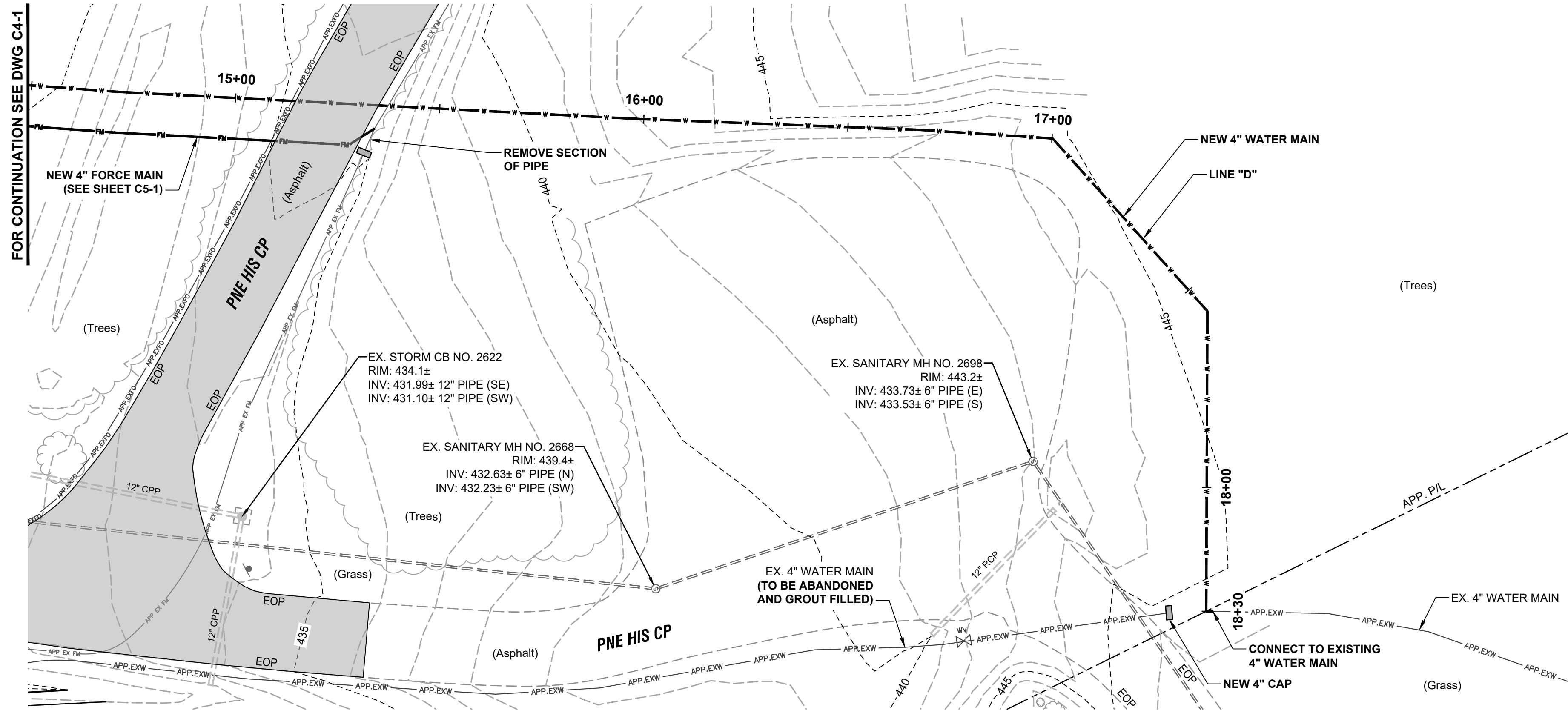
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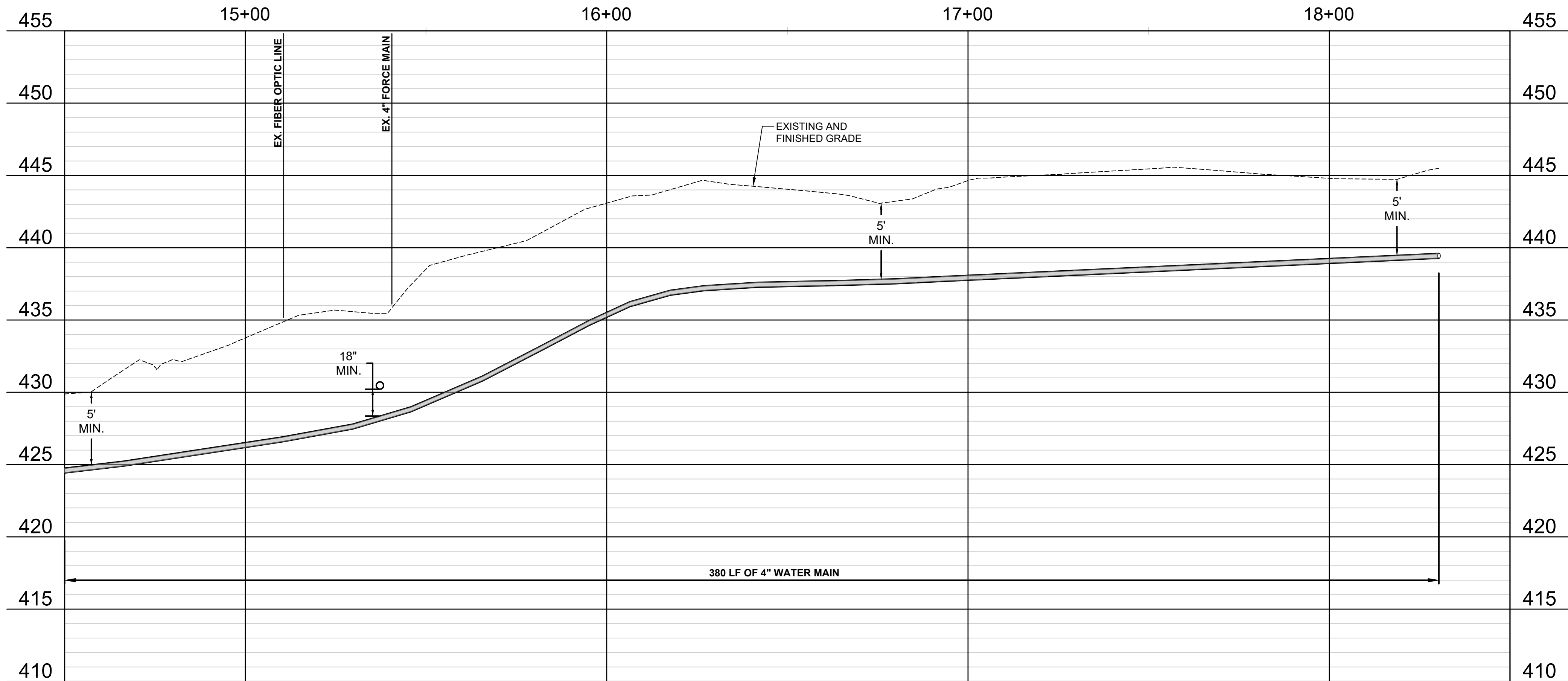
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VIEWS - LINE "D"

Drawing No:
C4-1
Sheet: 23 OF 43

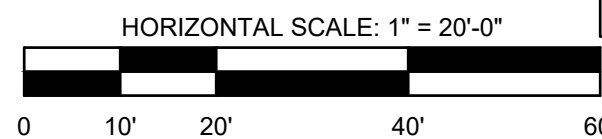
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PLAN VIEW



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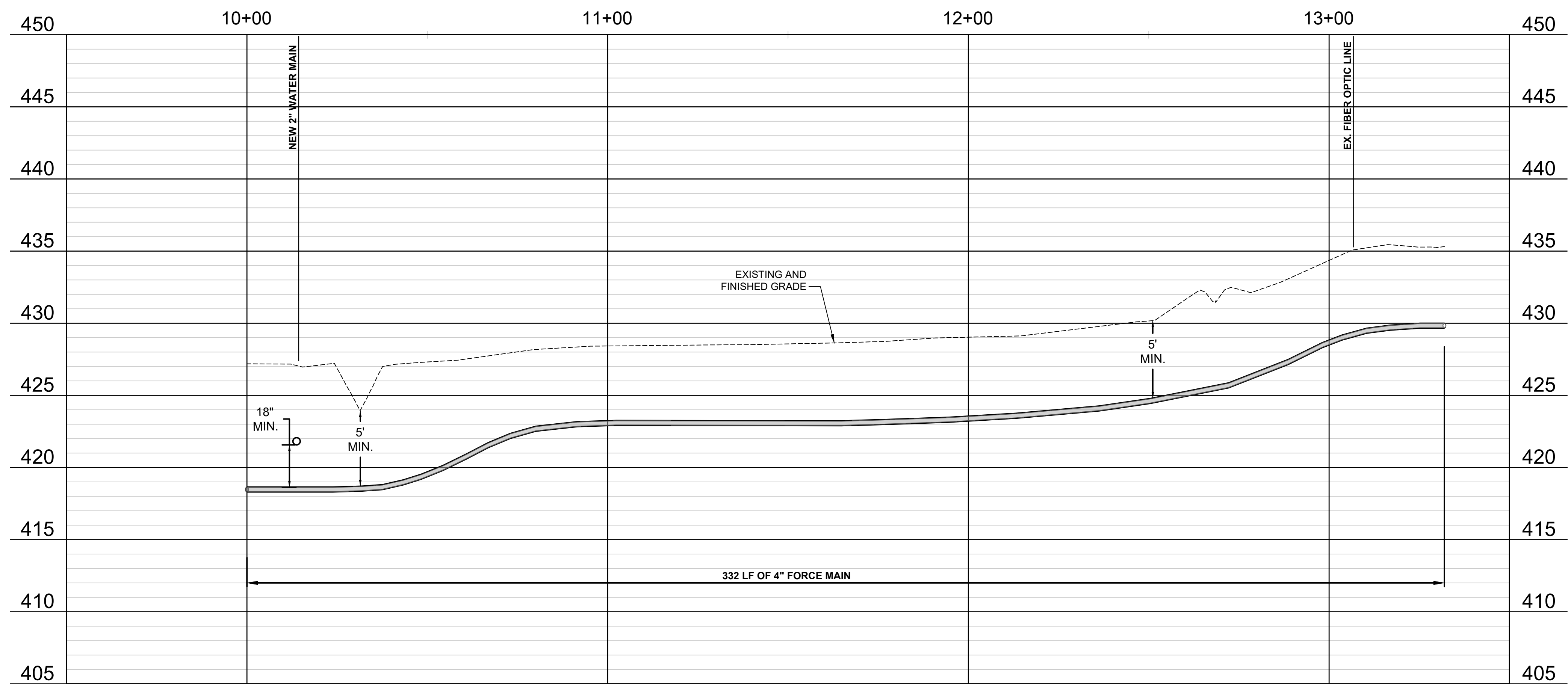
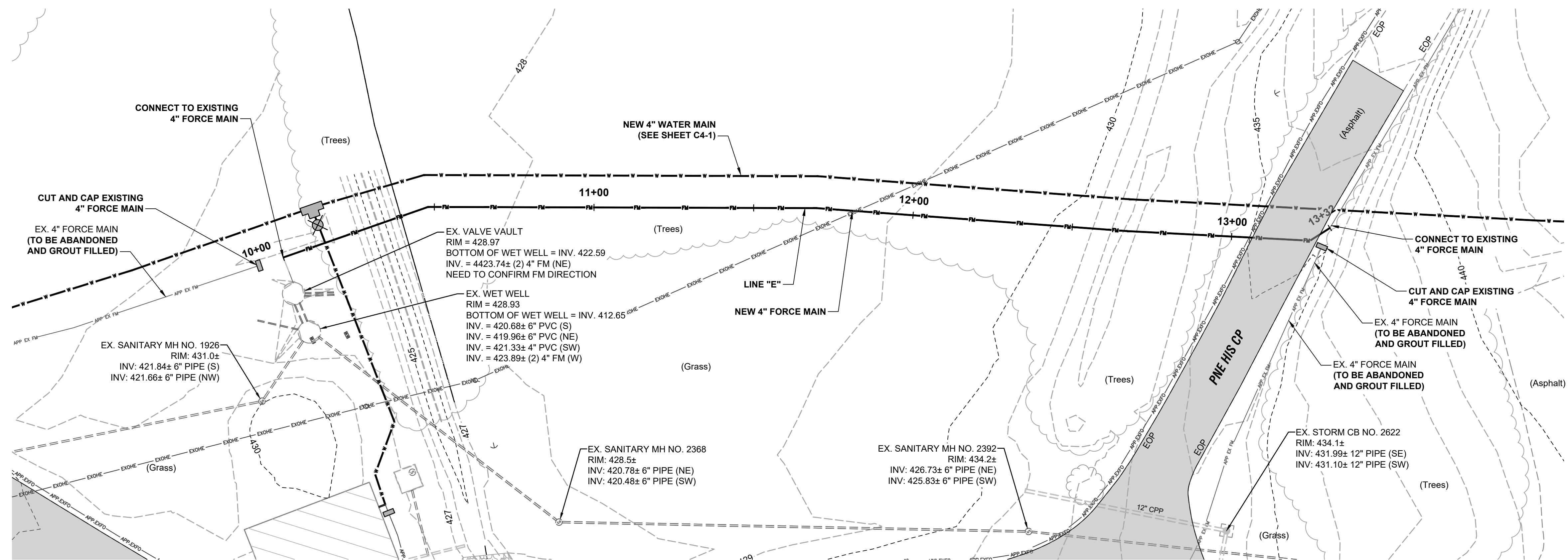
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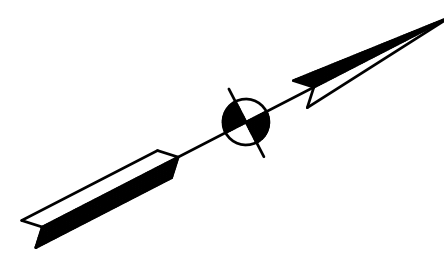
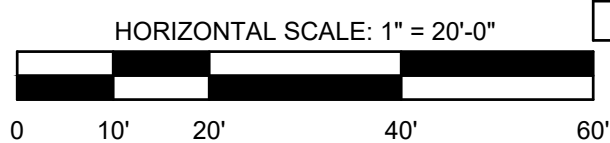
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VIEWS - LINE "D"

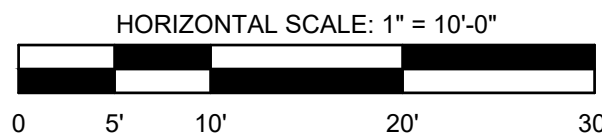
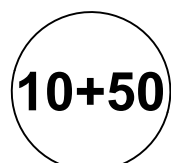
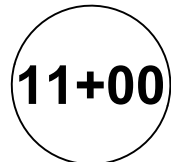
Drawing No:
C4-2

Sheet: 24 OF 43



PROFILE VIEW





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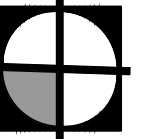
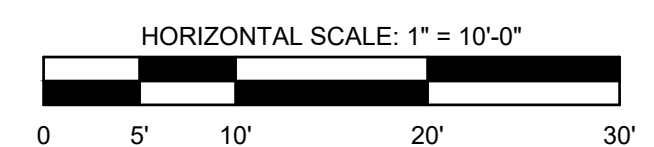
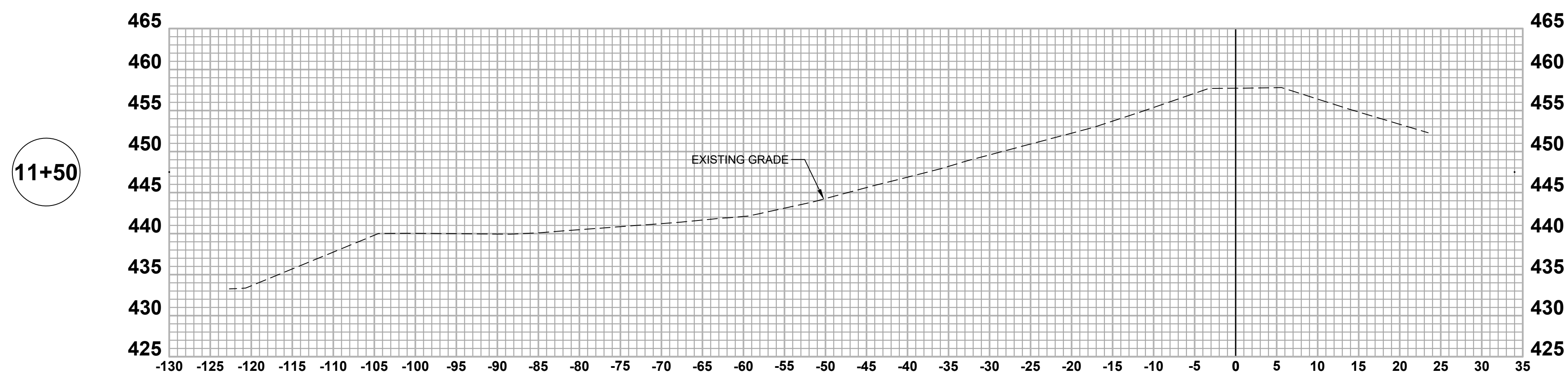
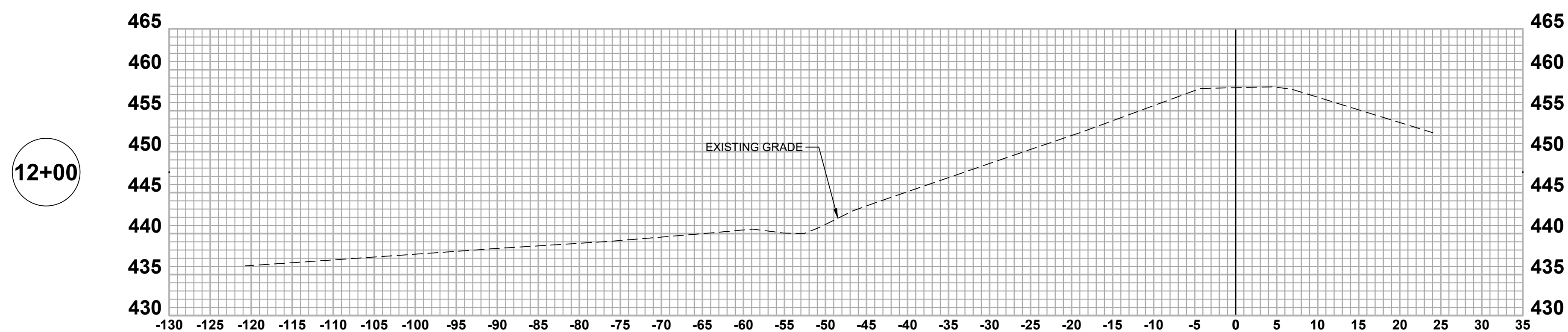
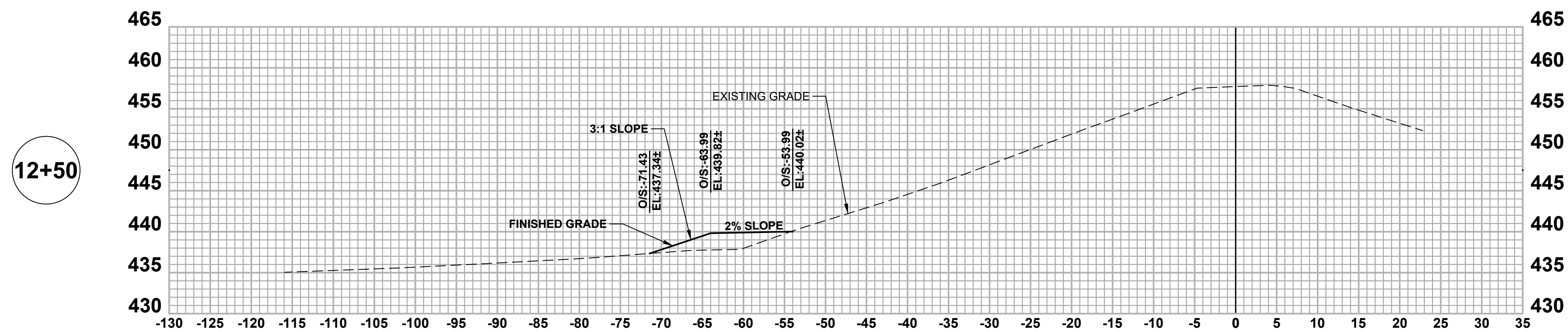
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Issue Date: 11/01/2024	Project No: D20146	Scale: AS SHOWN

CROSS SECTION -
LINE "A"

Drawing No:

CS01

Sheet: 26 OF 43



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Date A. Girl 11/01/2024
Signature Date

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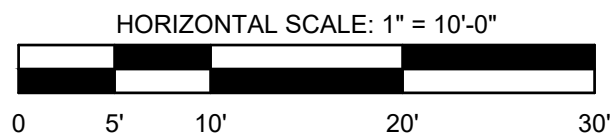
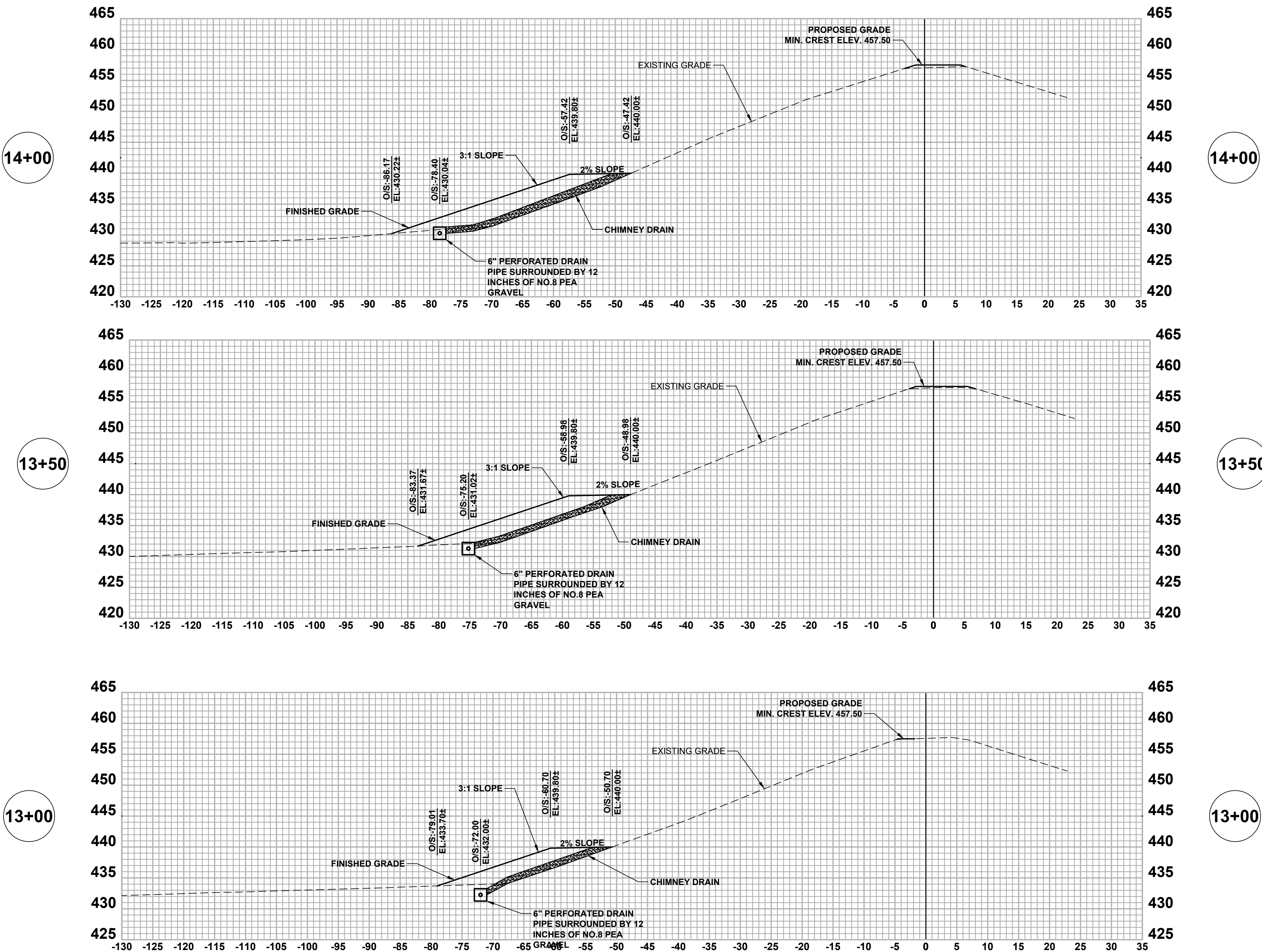
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Issue Date: 1/01/2024	Project No: D20146	Scale: AS SHOWN

CROSS SECTION -
LINE "A"

Drawing No:
CS02
Sheet: 27 OF 43

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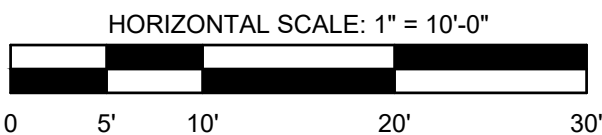
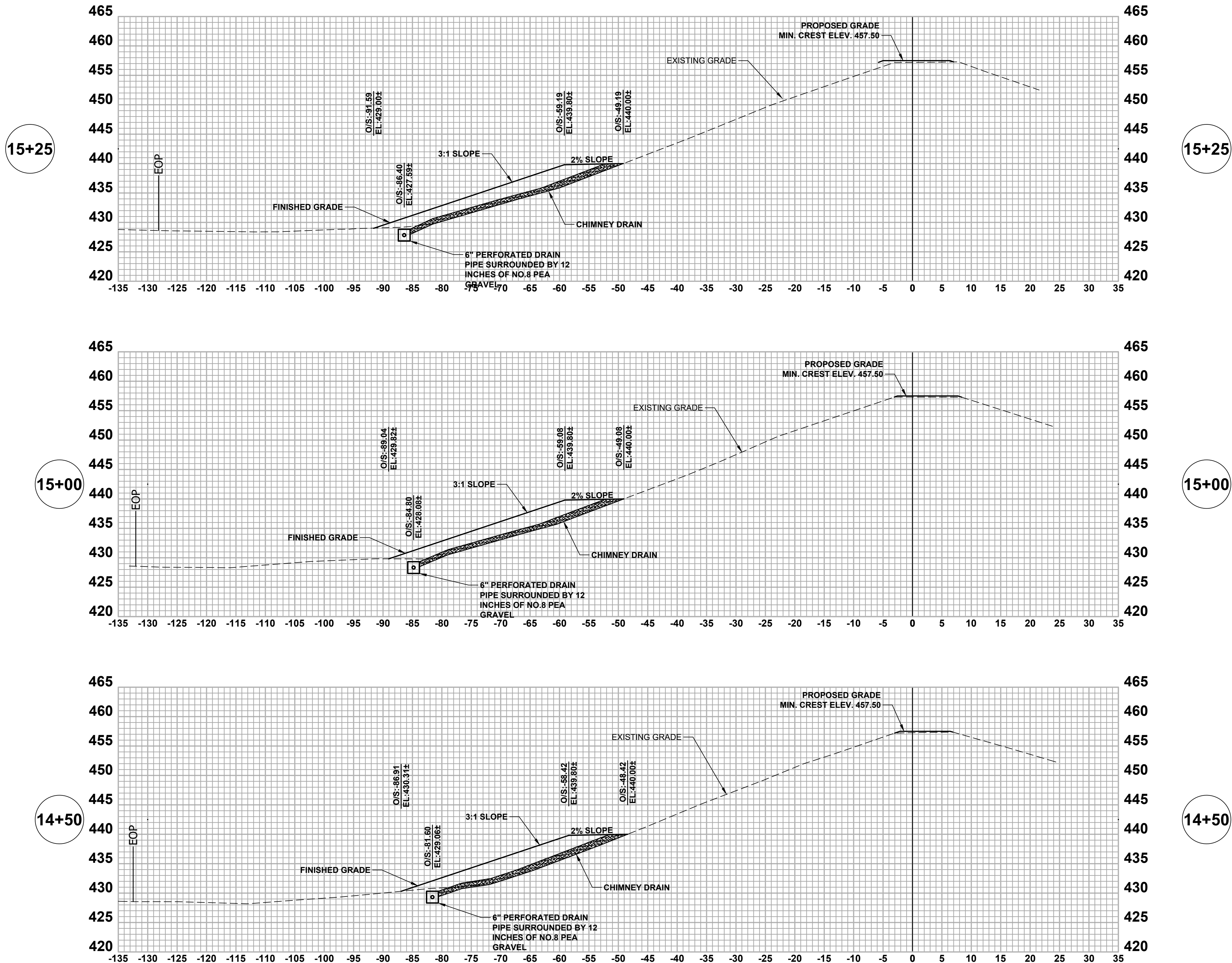
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LINE "A"

Drawing No:

CS03

Sheet: 28 OF 43

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DALE A. GLICK
REGISTERED
NO. 10100195
STATE OF INDIANA
PROFESSIONAL ENGINEER

Dale A. Glick
Signature

11/01/2024
Date

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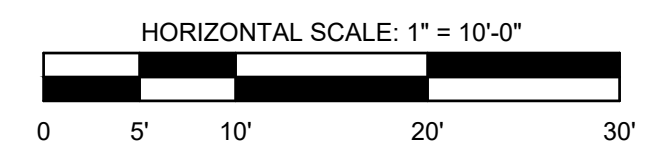
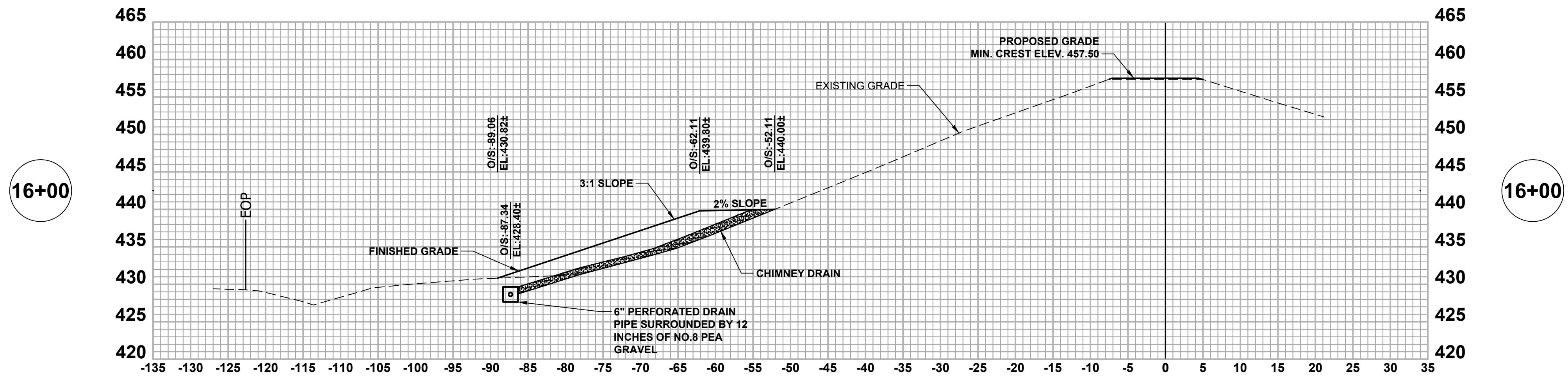
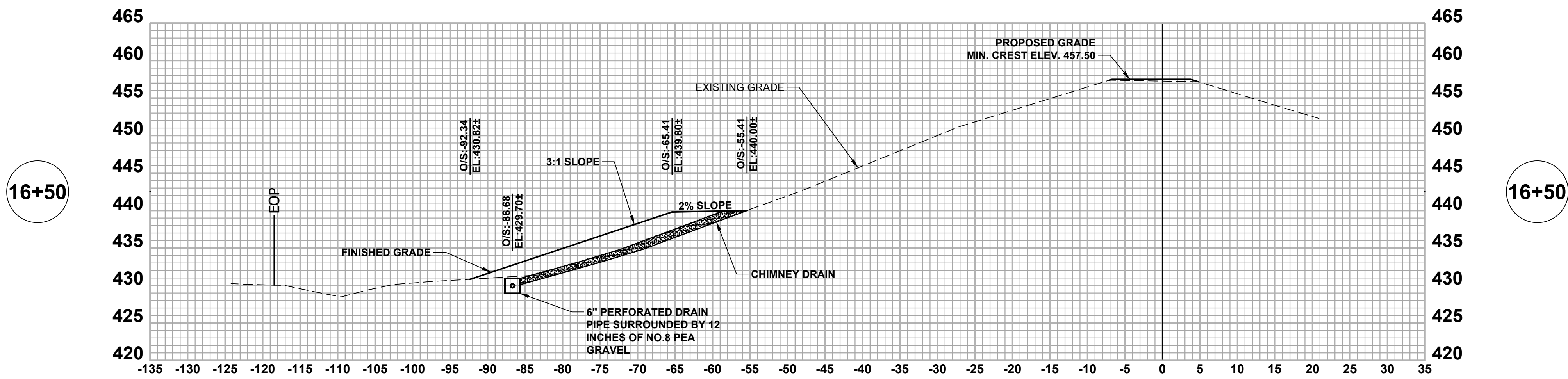
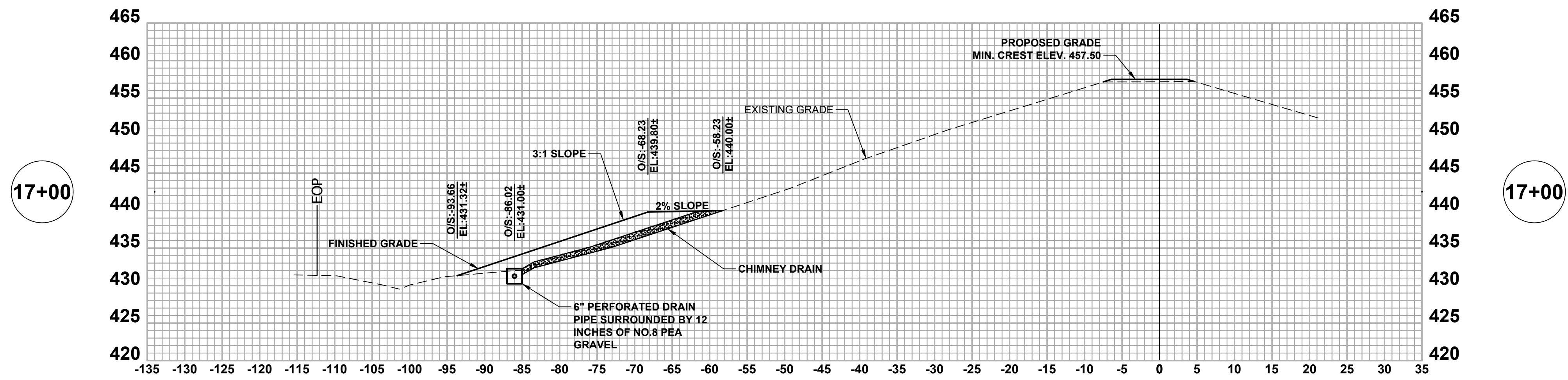
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CROSS SECTION - LINE "A"

Drawing No:
CS04

Sheet: 29 OF 43



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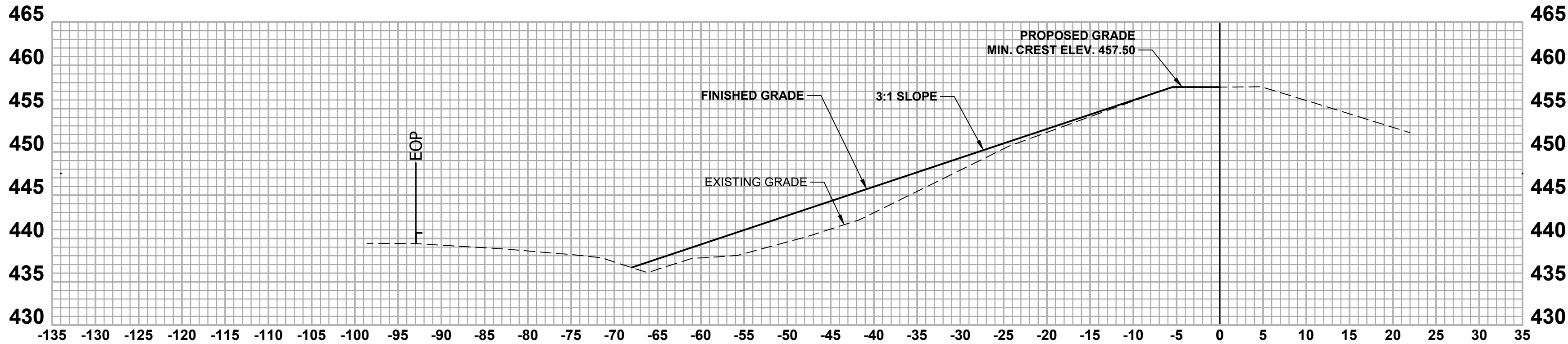
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Sheet: 30 OF 43

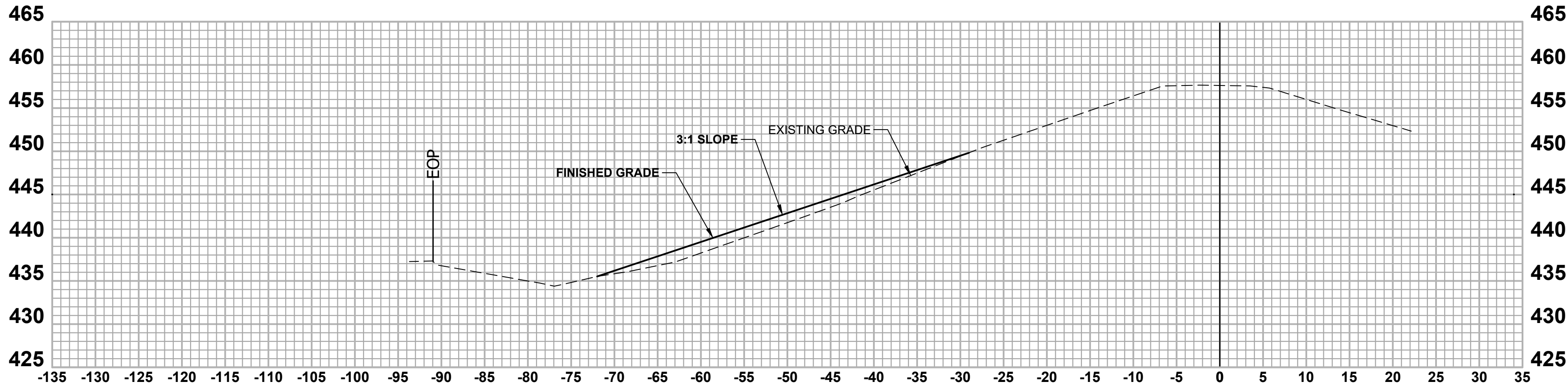
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18+50



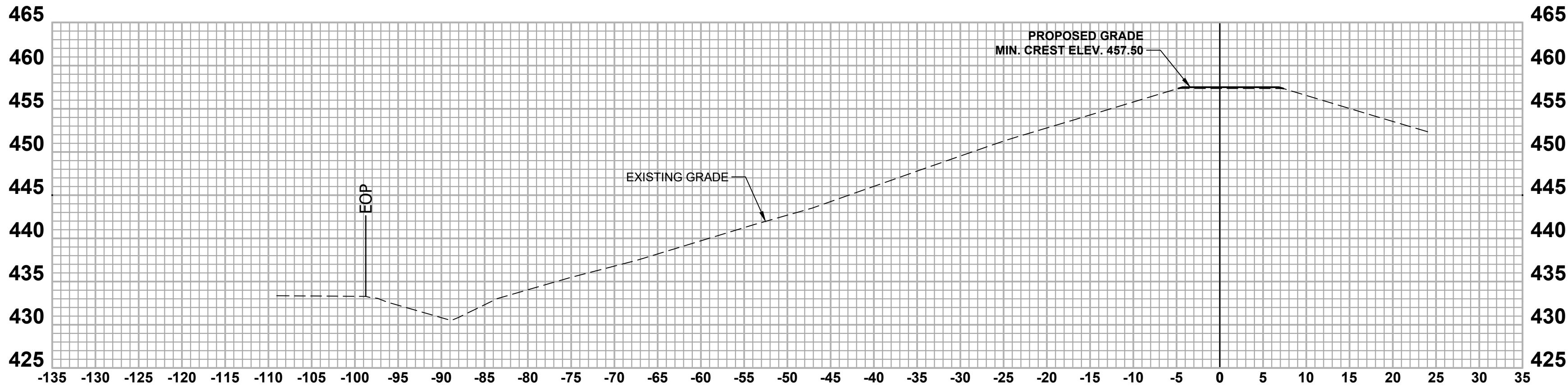
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18+00

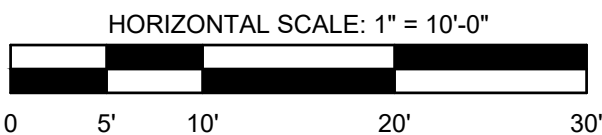


18+00

17+50



17+50



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SOUTH BEND, IN



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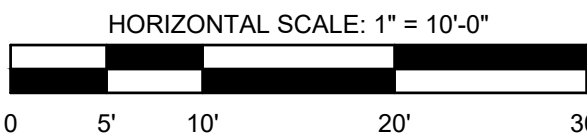
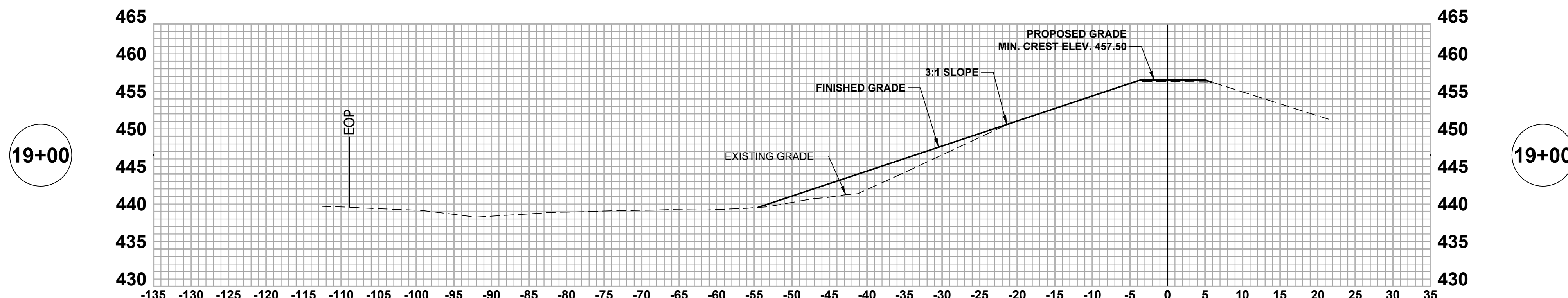
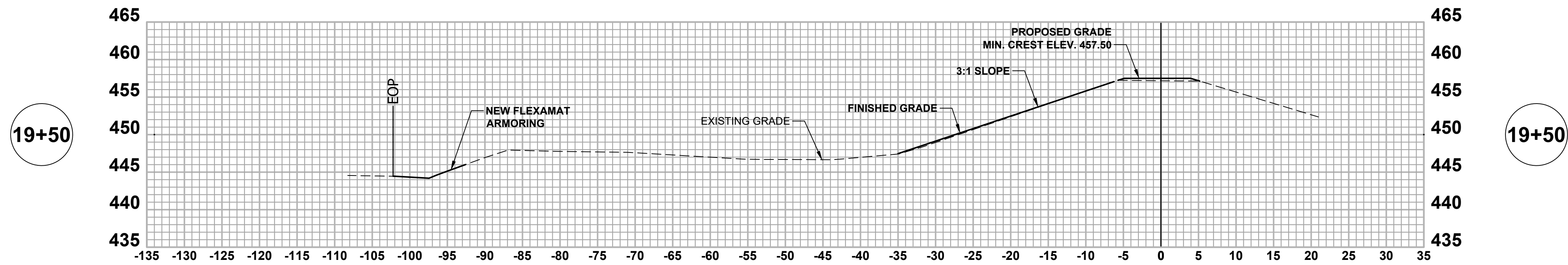
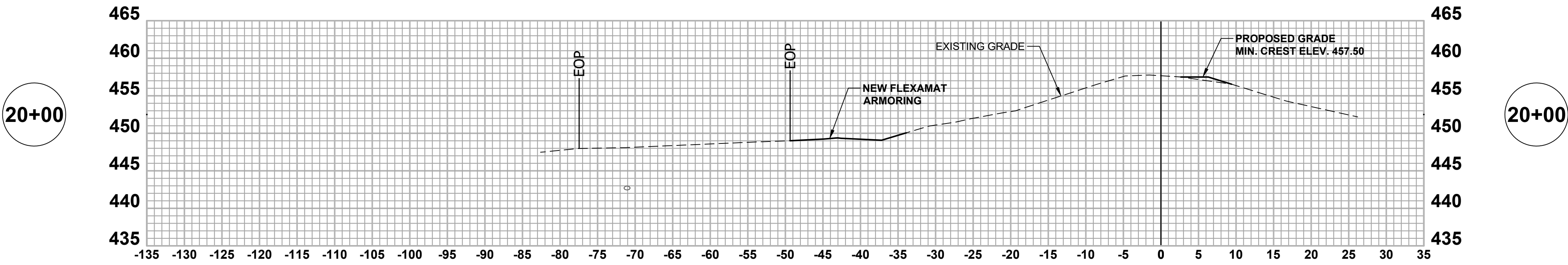
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CROSS SECTION -
LINE "A"

Drawing No:
CS06
Sheet: 31 OF 43

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FORT WAYNE, IN
CROWN POINT, IN
SOUTH BEND, IN

DALE A. GICK
REGISTERED
NO. 10100195
STATE OF INDIANA
PROFESSIONAL ENGINEER

Dale A. Gick
Signature
11/01/2024
Date

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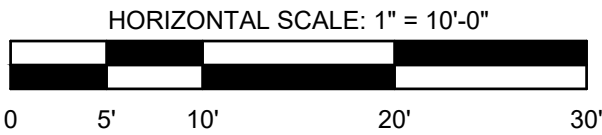
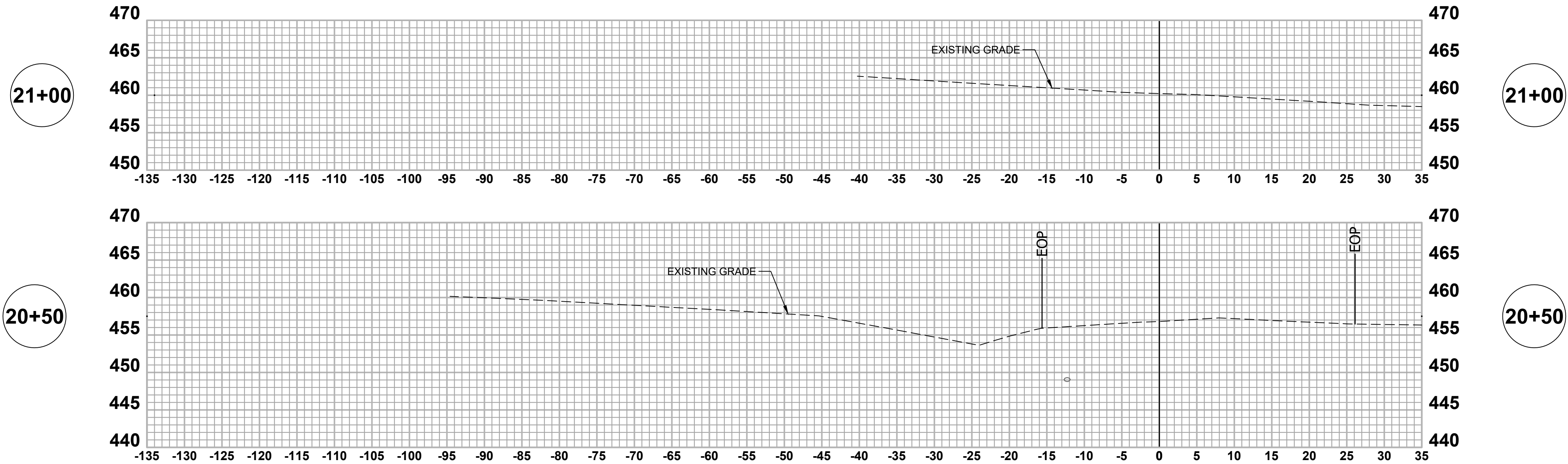
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Issue Date: 11/01/2024	Project No: D20146	Scale: AS SHOWN

CROSS SECTION -
LINE "A"

Drawing No:
CS07

Sheet: 32 OF 43

FILE Z:\SHARED\IN CLIENTS\4\LINCOLN DAM\020146 LINCOLN LAKE DAM DESIGN\CS08 CURRENT FILES\1 DRAWINGS\08-CROSS SECTIONS.DWG
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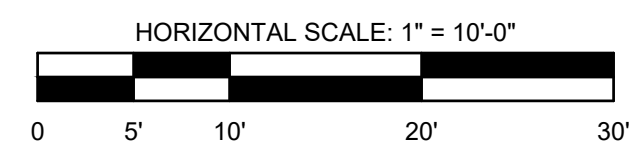
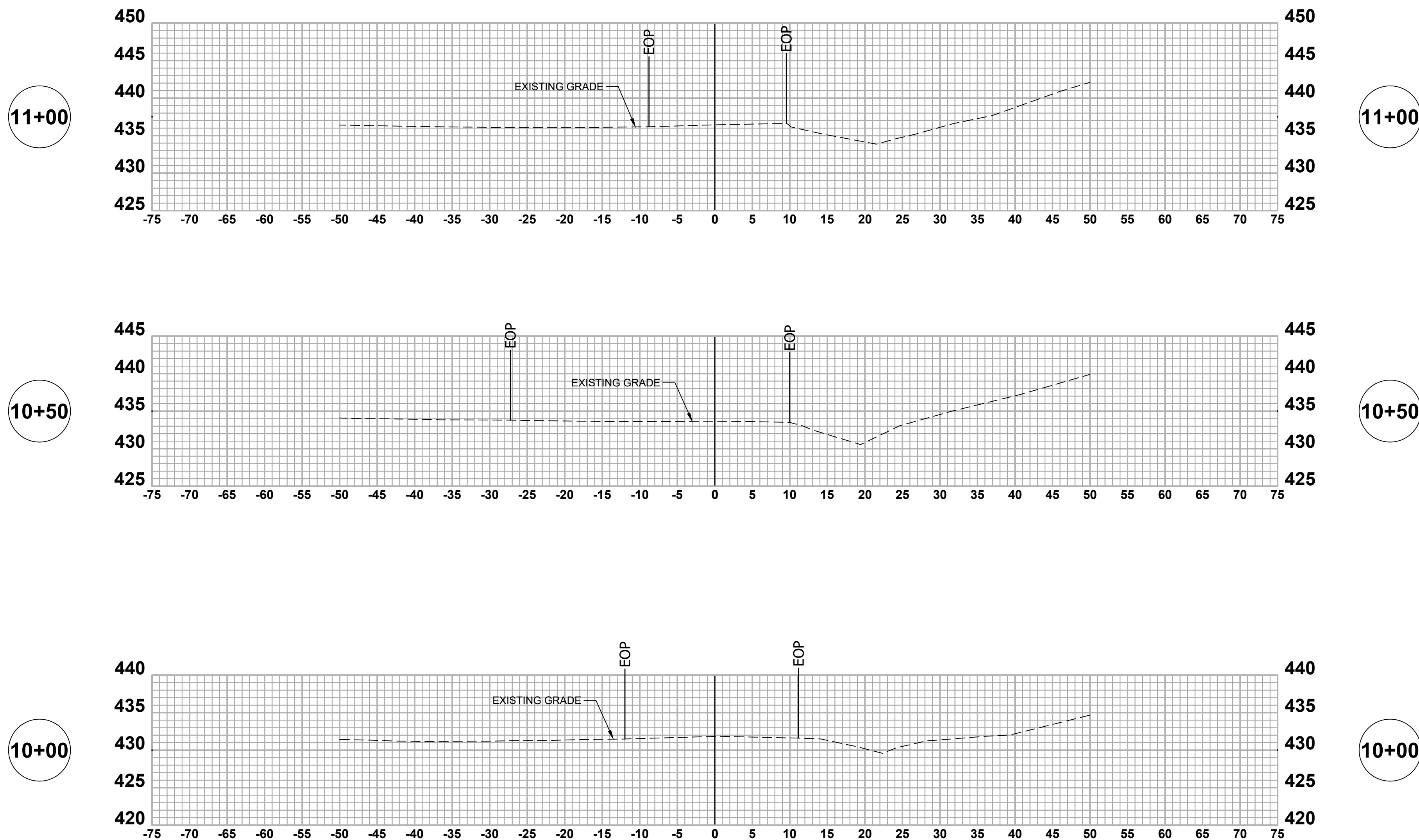

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CROSS SECTION -
LINE "A"

Drawing No:
CS08
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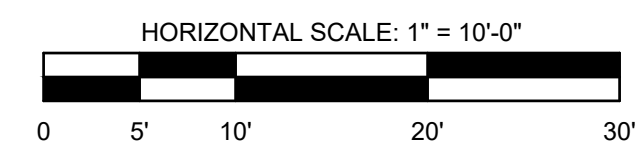
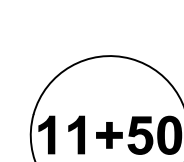
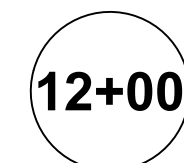
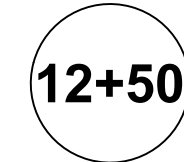
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CROSS SECTION -
LINE "B"

Drawing No:

CS09

Sheet: 34 OF 43



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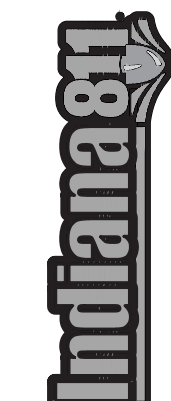
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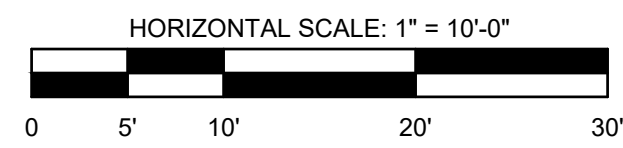
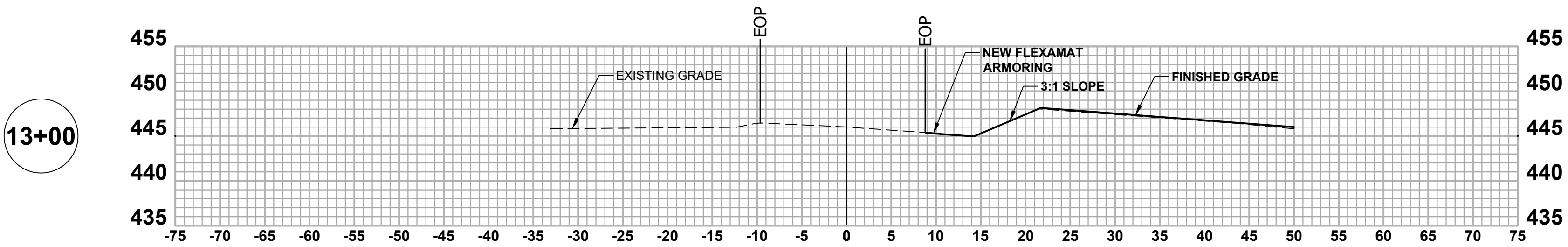
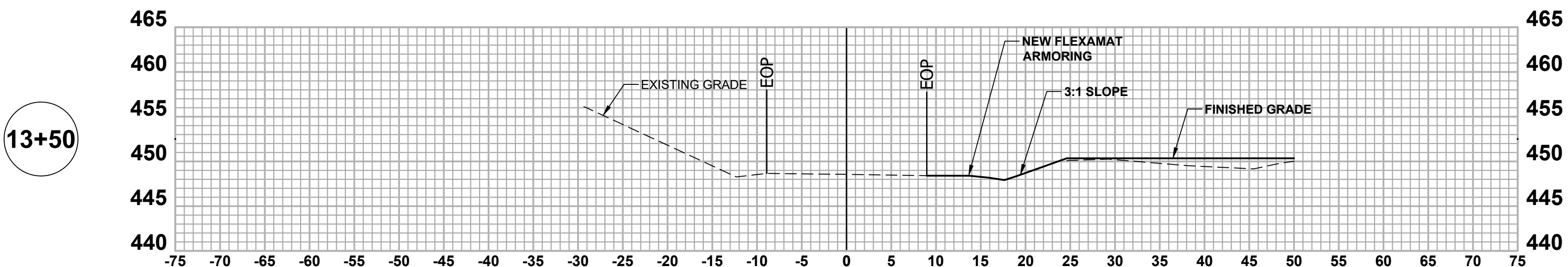
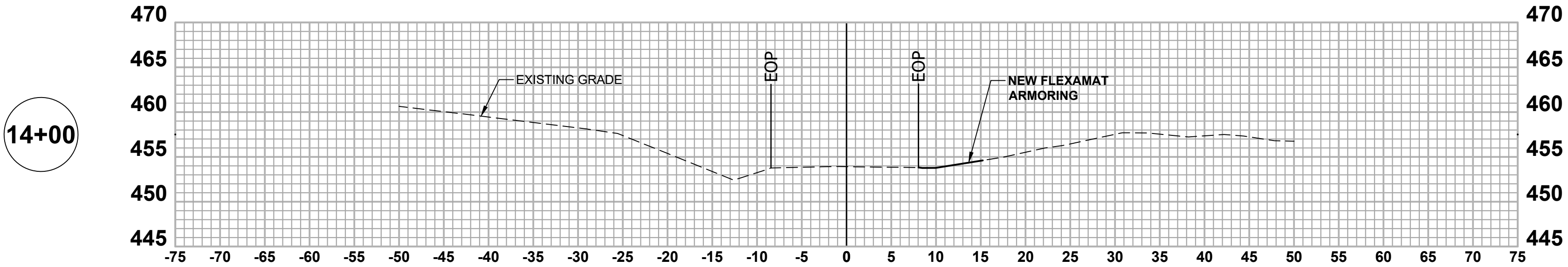
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CROSS SECTION -
LINE "B"

Drawing No:
CS10
Sheet: 35 OF 43

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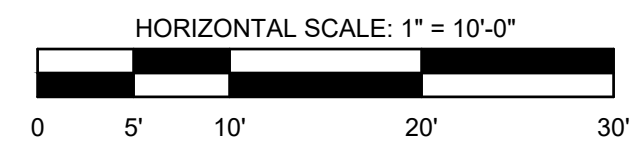
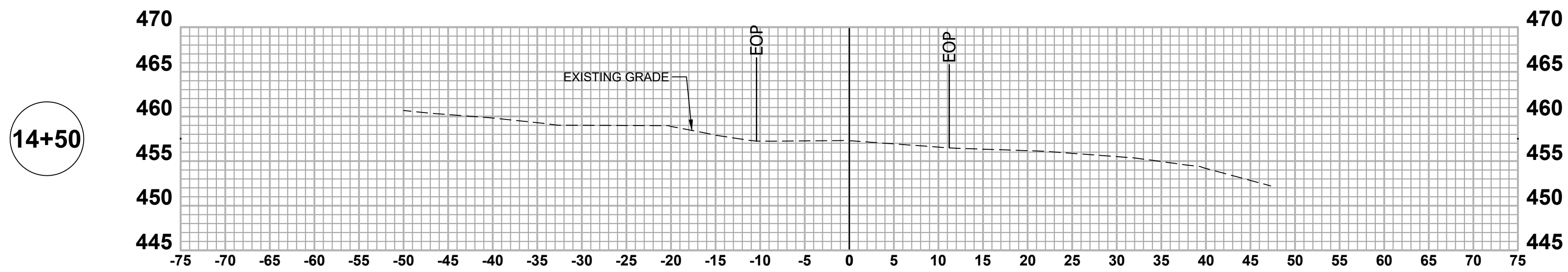
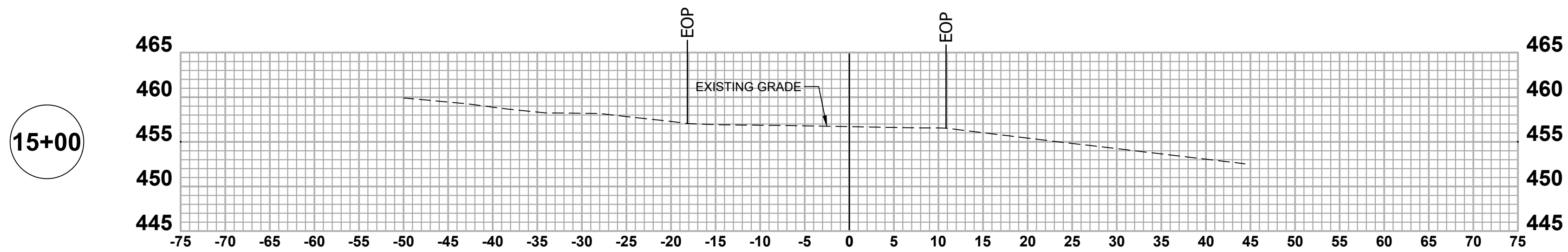
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CROSS SECTION - LINE "B"

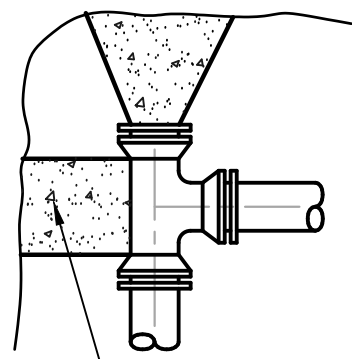
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Sheet: 36 OF 43

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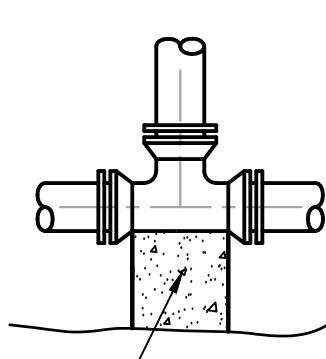
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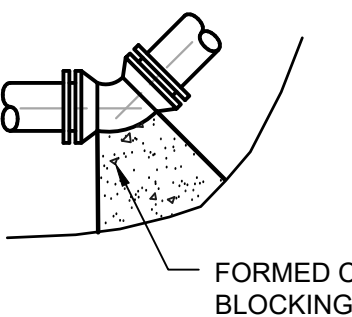
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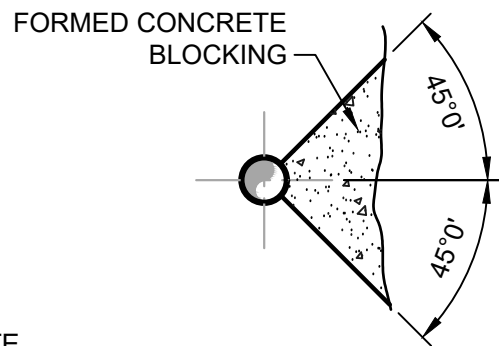
DETAIL A



DETAIL B



DETAIL C



TYP. PROFILE

TABLE OF DIMENSION FOR CONCRETE BLOCKING

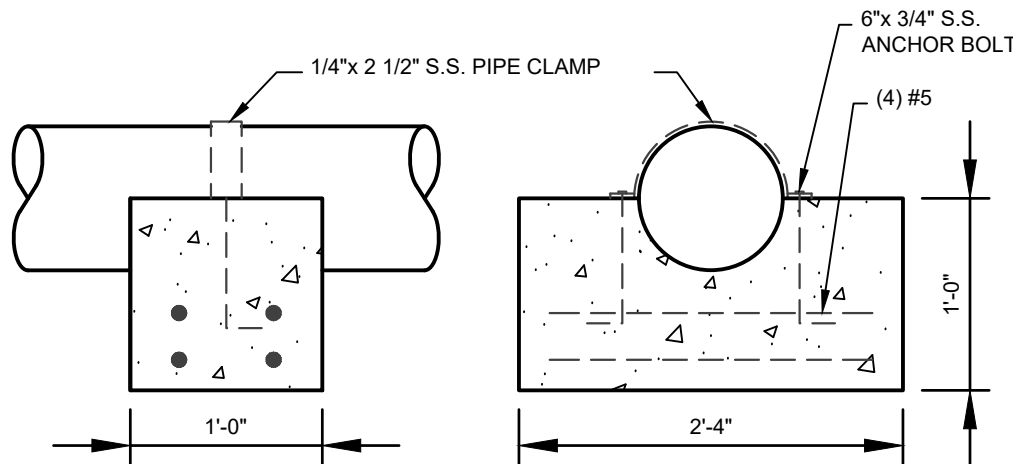
SIZE	TEE			PLUG			90° BEND			45° BEND			22° BEND			11° BEND		
	PIPE	L	T	W	D	L	T	W	D	L	T	W	D	L	T	W	D	L
4"	18"	12"	12"	8"	8"	18"	12"	18"	18"	2"	24"	12"	24"	8"	18"	8"	12"	6"
6"	18"	12"	12"	8"	8"	18"	12"	18"	18"	2"	24"	15"	24"	8"	18"	10"	12"	8"
8"	30"	12"	24"	8"	8"	30"	18"	30"	24"	4"	36"	16"	30"	8"	24"	12"	18"	8"
10"	36"	18"	30"	10"	10"	36"	18"	36"	24"	4"	48"	20"	36"	10"	30"	14"	24"	10"
12"	48"	18"	36"	10"	10"	42"	18"	42"	24"	4"	54"	24"	48"	10"	36"	16"	30"	10"
14"	54"	24"	42"	12"	12"	48"	18"	48"	30"	6"	60"	28"	60"	12"	42"	16"	42"	12"
16"	60"	24"	48"	12"	12"	54"	18"	54"	30"	6"	66"	32"	63"	12"	48"	18"	48"	12"
18"	66"	30"	60"	14"	14"	60"	24"	60"	36"	6"	66"	36"	66"	14"	54"	18"	54"	14"
20"	72"	30"	60"	14"	14"	66"	24"	66"	36"	8"	72"	40"	69"	14"	60"	20"	60"	14"
24"	84"	36"	72"	18"	18"	78"	30"	78"	42"	8"	84"	48"	75"	18"	72"	22"	72"	18"
30"	96"	42"	78"	24"	24"	96"	36"	78"	48"	10"	108"	54"	96"	24"	84"	24"	72"	24"
42"	144"	48"	96"	36"	36"	144"	42"	96"	60"	10"	180"	66"	144"	36"	120"	36"	96"	36"

NOTES:

- FOR TEE WITH BRANCH UNEQUAL TO RUN USE TEE TYPE KICKER WITH D, L, AND W DIMENSIONS THE SAME AS THOSE FOR PLUG WITH SAME DIAMETER AS BRANCH OF TEE, SELECT "T" DIMENSIONS FROM TEE TABLE UNDER COLUMN HEADED BY THE SIZE OF THE BRANCH
- IF EXACT SIZE PIPE BLOCKING IS NOT SHOWN USE NEXT LARGER SIZE
- DEPTH "D" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH OR ROCK
- CONCRETE BLOCKING SHALL BE CLASS "B"

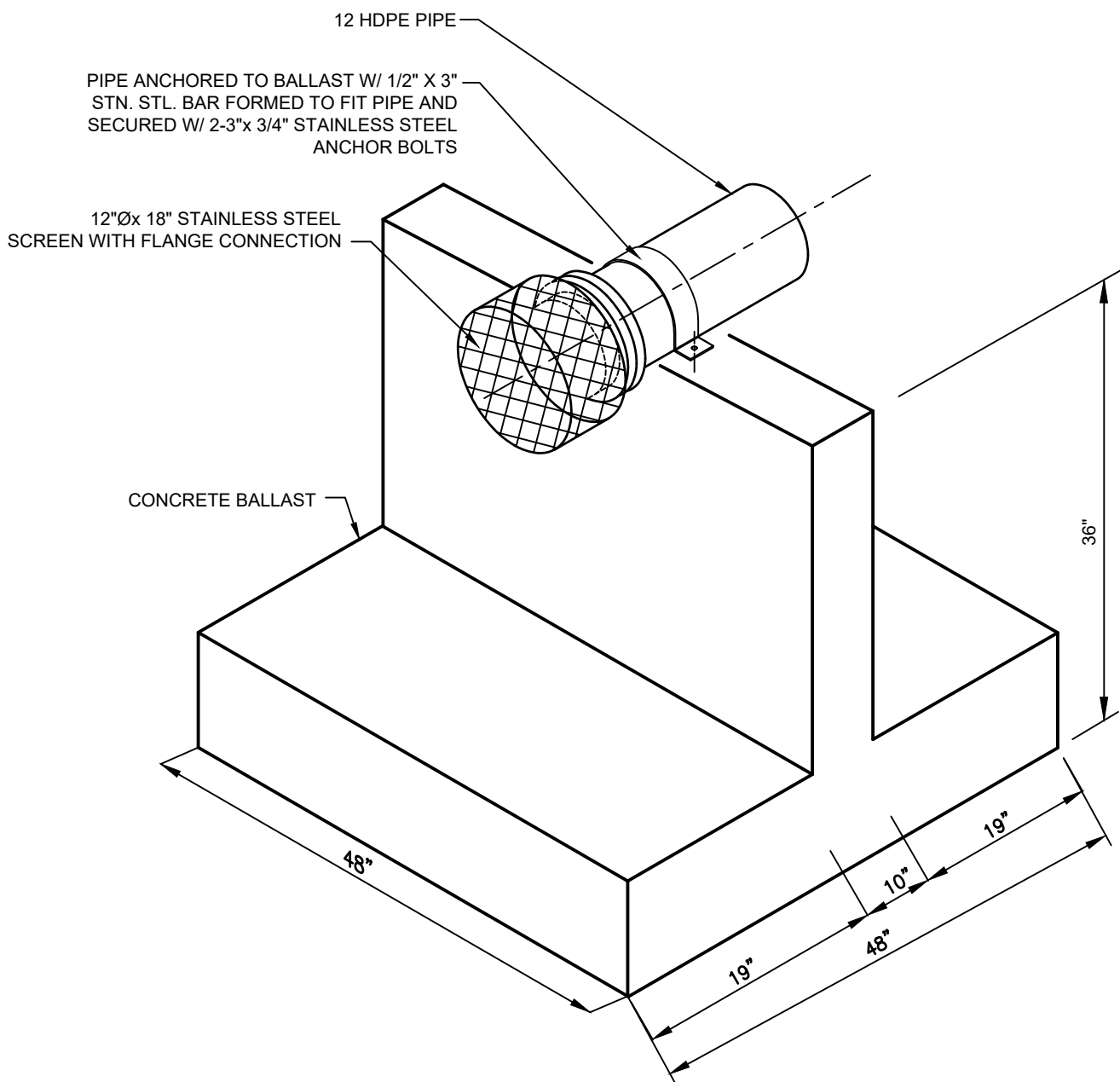
THRUST BLOCKING DETAIL

NOT TO SCALE



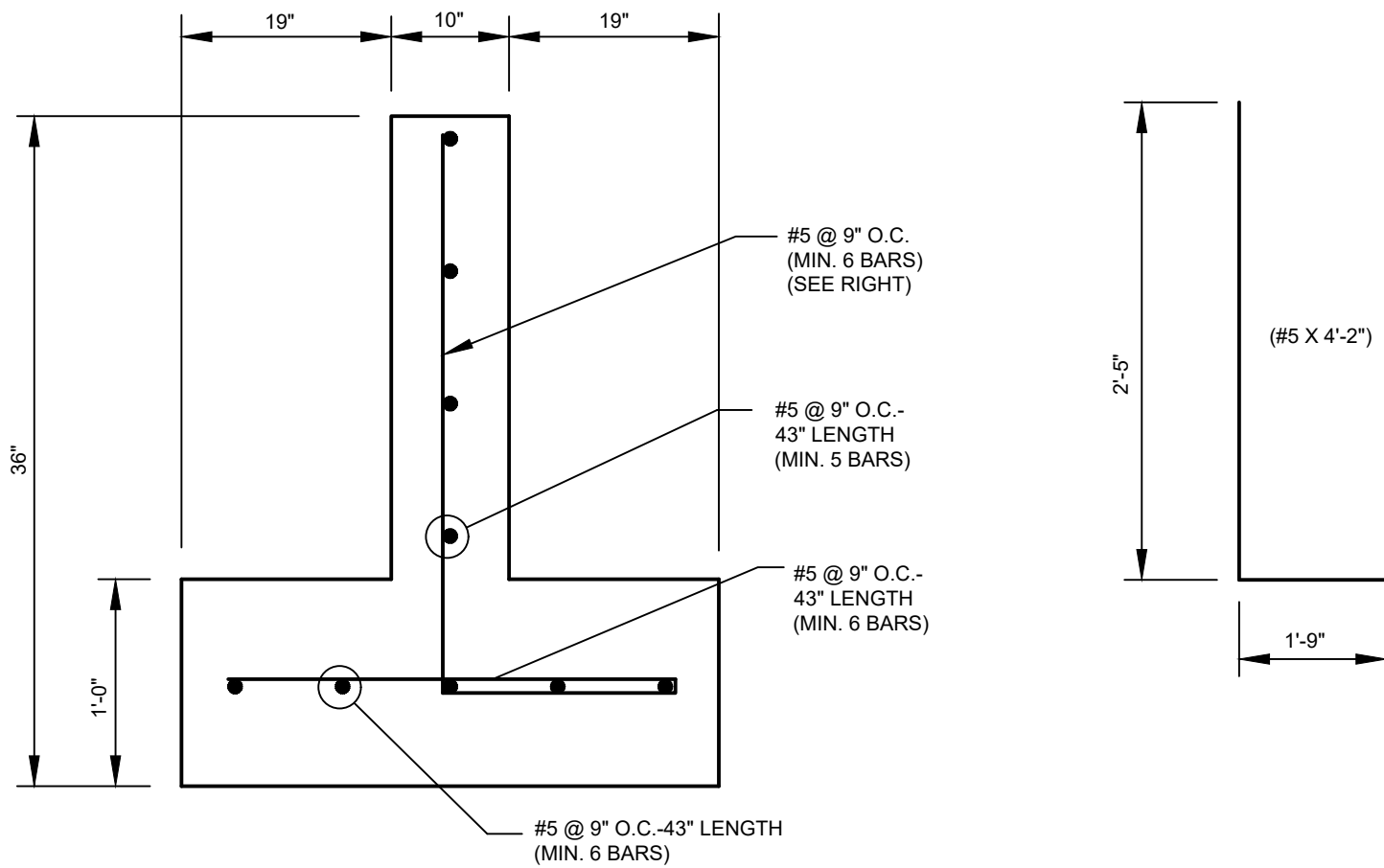
CONCRETE PIPE COLLAR DETAIL

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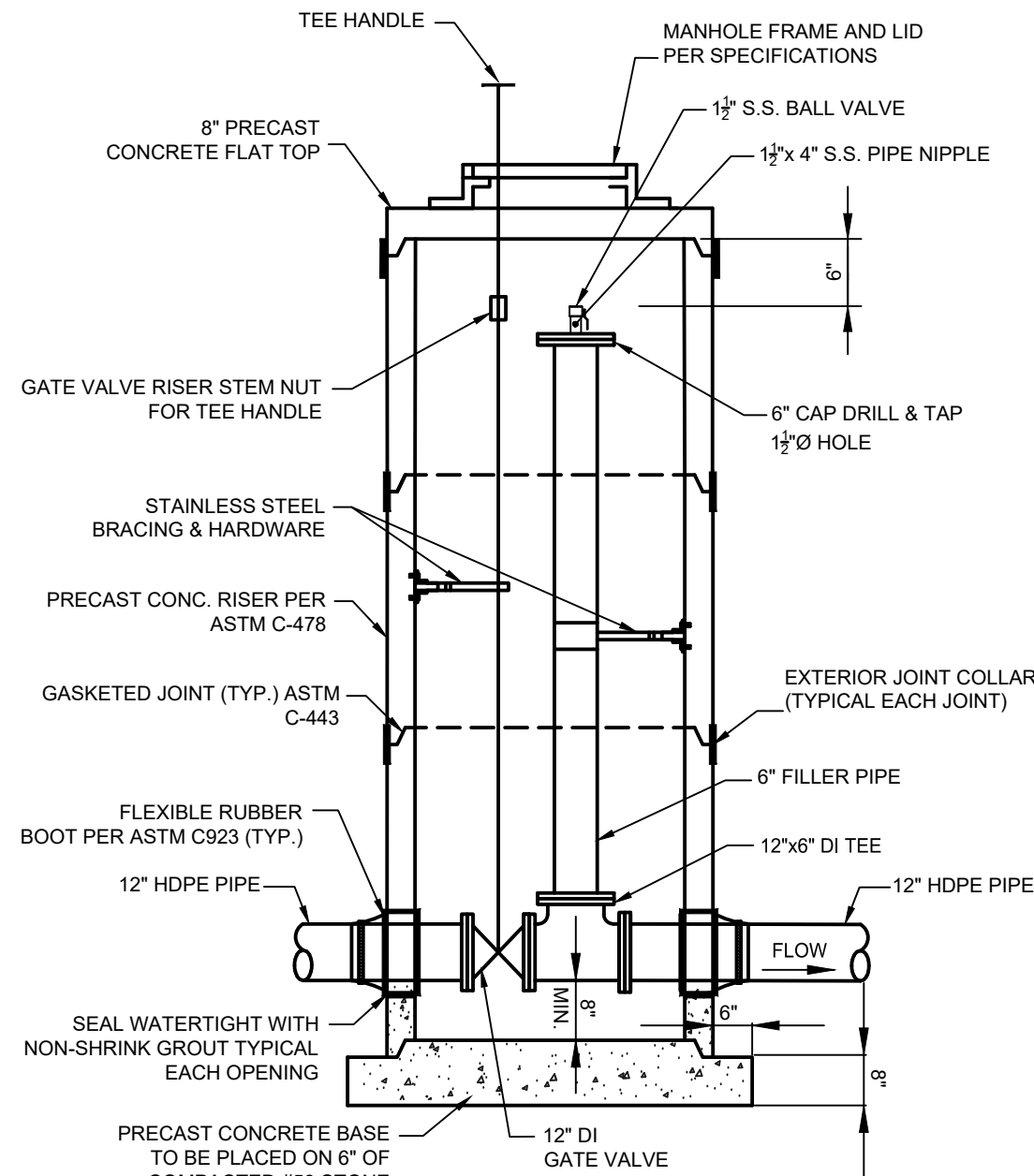
NEW STR. 501 LAKE DRAWDOWN & INTAKE CONCRETE ANCHOR DETAIL

NOT TO SCALE



NEW STR. 501 LAKE DRAWDOWN & INTAKE CONCRETE ANCHOR-STEEL REINFORCING

NOT TO SCALE

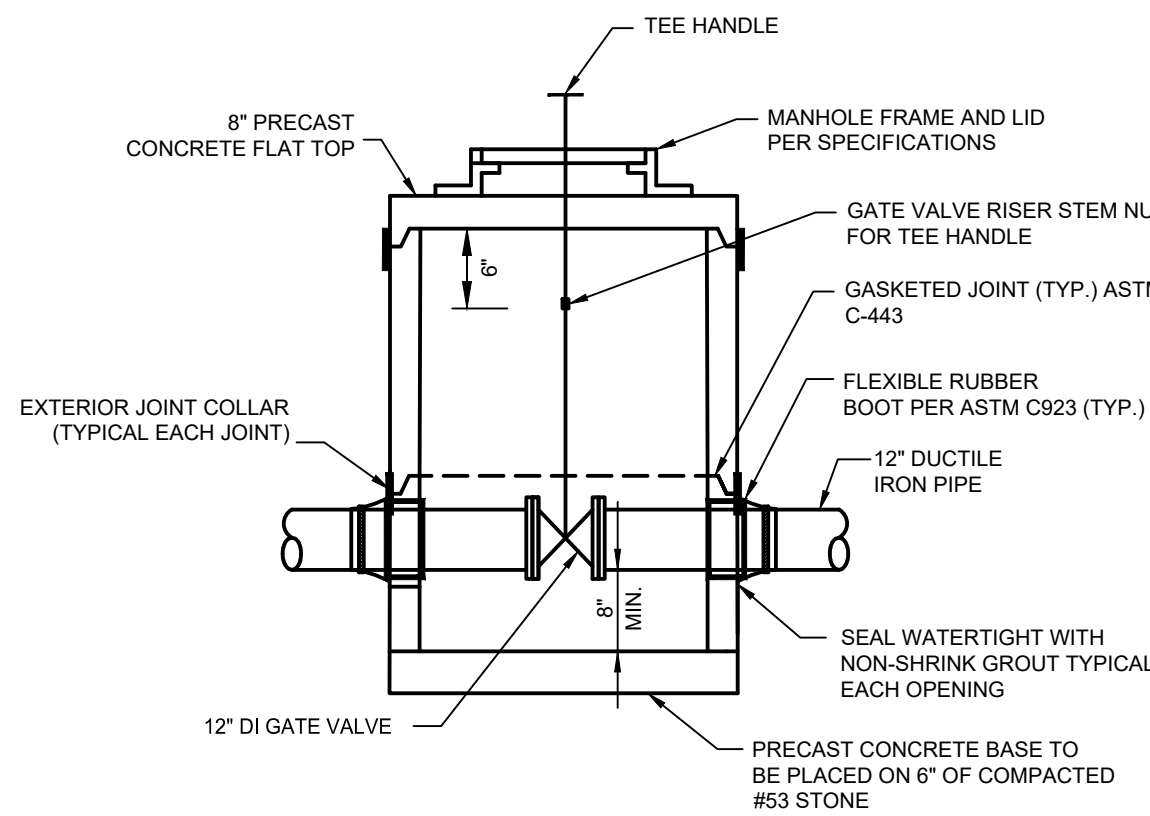


NOTE:

- FILLER PIPE AND GATE VALVE RISER STEM SHALL BE CENTERED IN MANHOLES.
- PROVIDE PERMANENT REMOVABLE SUPPORT OR BLOCKING UNDER GATE VALVE & TEE.
- MANHOLE FRAME SHALL BE LOCATED TO THE EDGE OF THE GATE VALVE TO ALLOW OWNER TO EXERCISE VALVE FROM ABOVE GRADE AND PROVIDE THE OWNER BEST ALLOWABLE MAN ACCESS TO THE VALVE FOR FUTURE MAINTENANCE. OPERATING STEM NUT SHALL BE LOCATED TO WITHIN 6-INCHES OF THE BOTTOM OF THE PRECAST CONCRETE FLAT TOP OF THE MANHOLE. THE STEM SHALL BE ANCHORED OR FASTENED TO THE STRUCTURE AS REQUIRED BY THE MANUFACTURER.
- ALL INTERNAL DUCTILE IRON FITTINGS AND PIPE SHALL BE SUPPLIED WITH FIELD COAT OF PAINT PER SPECIFICATIONS.

60" DIAMETER STR. 502 MANHOLE DETAIL

NOT TO SCALE

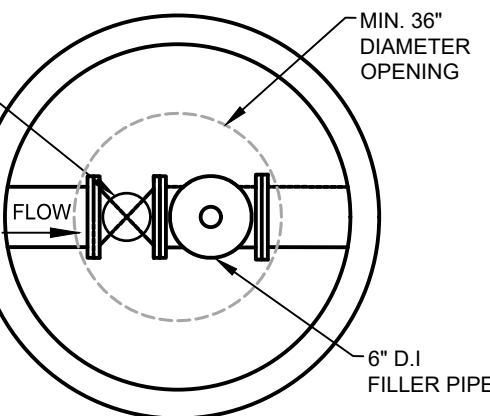


NOTE:

- PROVIDE PERMANENT REMOVABLE SUPPORT OR BLOCKING UNDER GATE VALVE.
- MANHOLE FRAME SHALL BE LOCATED TO THE EDGE OF THE GATE VALVE TO ALLOW OWNER TO EXERCISE VALVE FROM ABOVE GRADE AND PROVIDE THE OWNER BEST ALLOWABLE MAN ACCESS TO THE VALVE FOR FUTURE MAINTENANCE. OPERATING STEM NUT SHALL BE LOCATED TO WITHIN 6-INCHES OF THE BOTTOM OF THE PRECAST CONCRETE FLAT TOP OF THE MANHOLE. THE STEM SHALL BE ANCHORED OR FASTENED TO THE STRUCTURE AS REQUIRED BY THE MANUFACTURER.
- ALL INTERNAL DUCTILE IRON FITTINGS AND PIPE SHALL BE SUPPLIED WITH FIELD COAT OF PAINT PER SPECIFICATIONS.

48" DIAMETER STR. 503 MANHOLE DETAIL

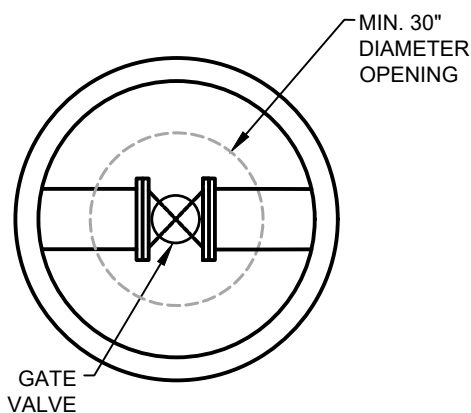
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NOTES:

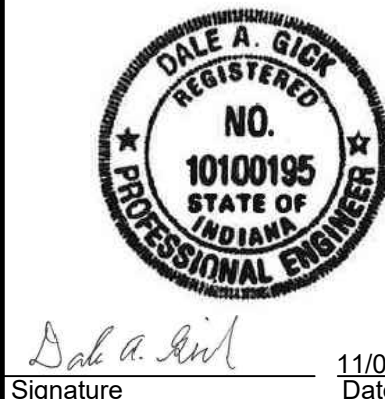
- ALL FASTENERS USED SHALL BE STAINLESS STEEL. POSITION OF BRACING & SUPPORTS SHALL NOT CONFLICT WITH MANHOLE ACCESS.

PLAN



NOTES:

- ALL FASTENERS USED SHALL BE STAINLESS STEEL. POSITION OF BRACING & SUPPORTS SHALL NOT CONFLICT WITH MANHOLE ACCESS.



Signature: Dale A. Glick Date: 11/01/2024

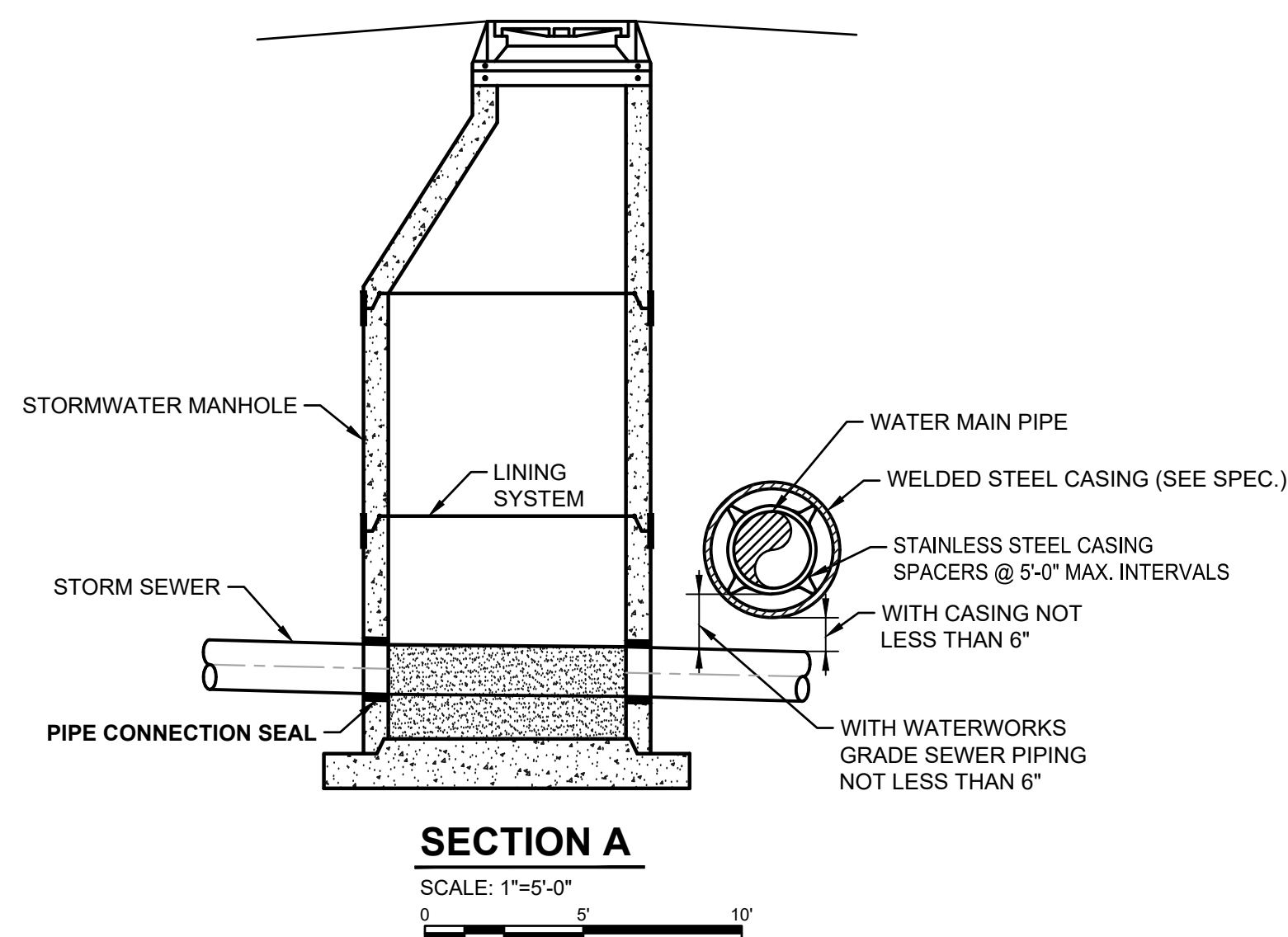
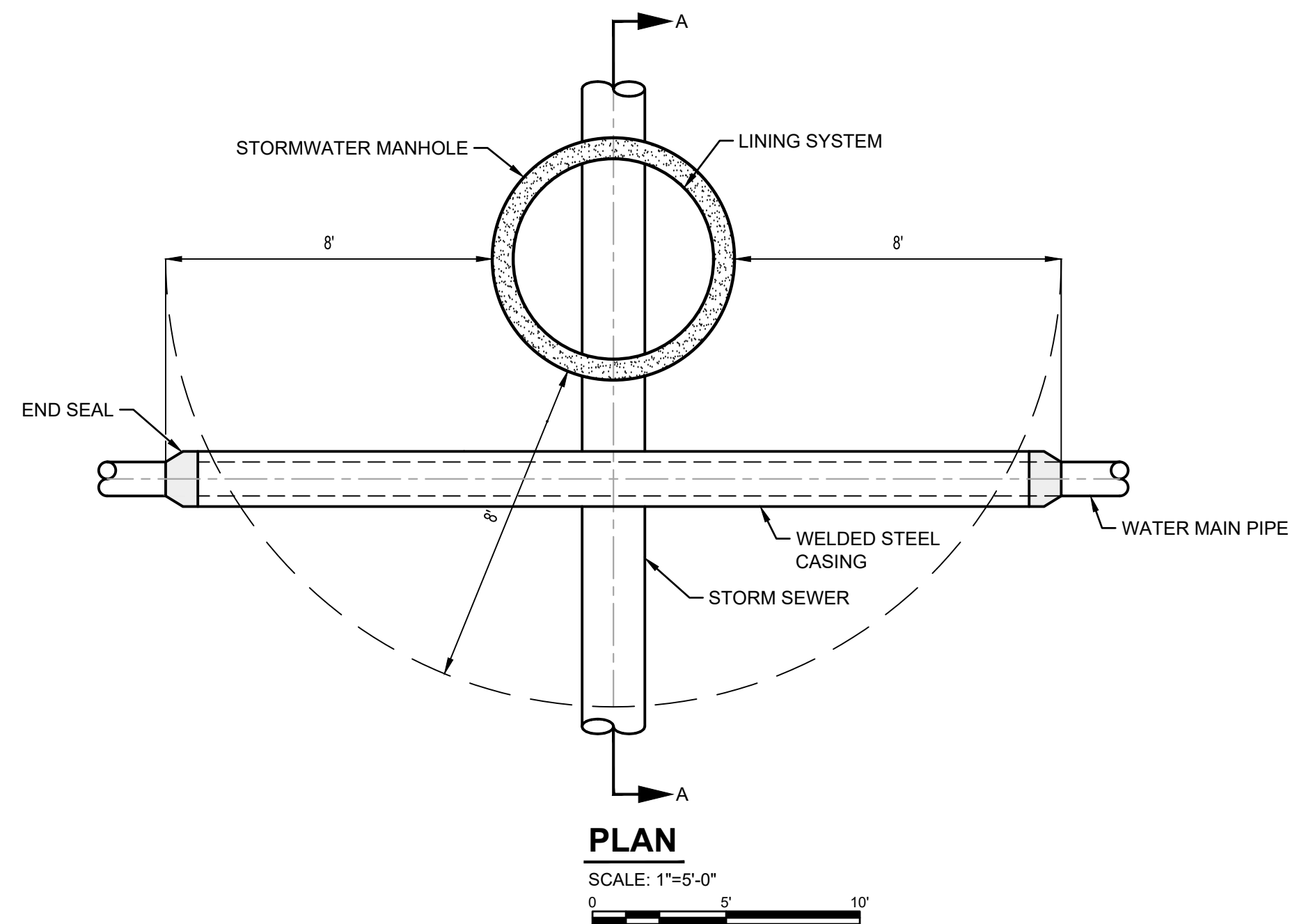
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				DAG	GCR	BPE
				Issue Date:	Project No:	Scale:
				11/01/2024	D20146	AS SHOWN

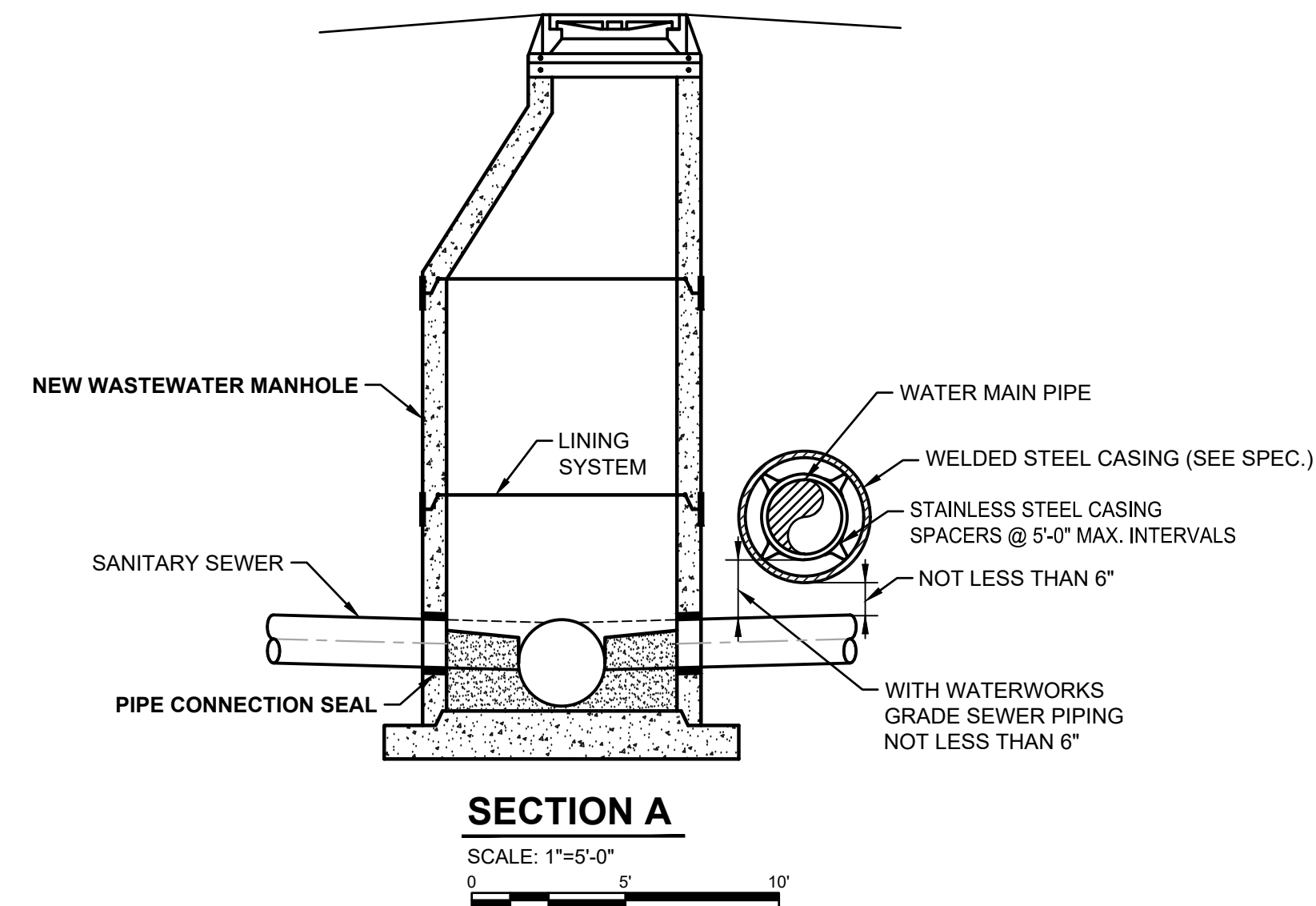
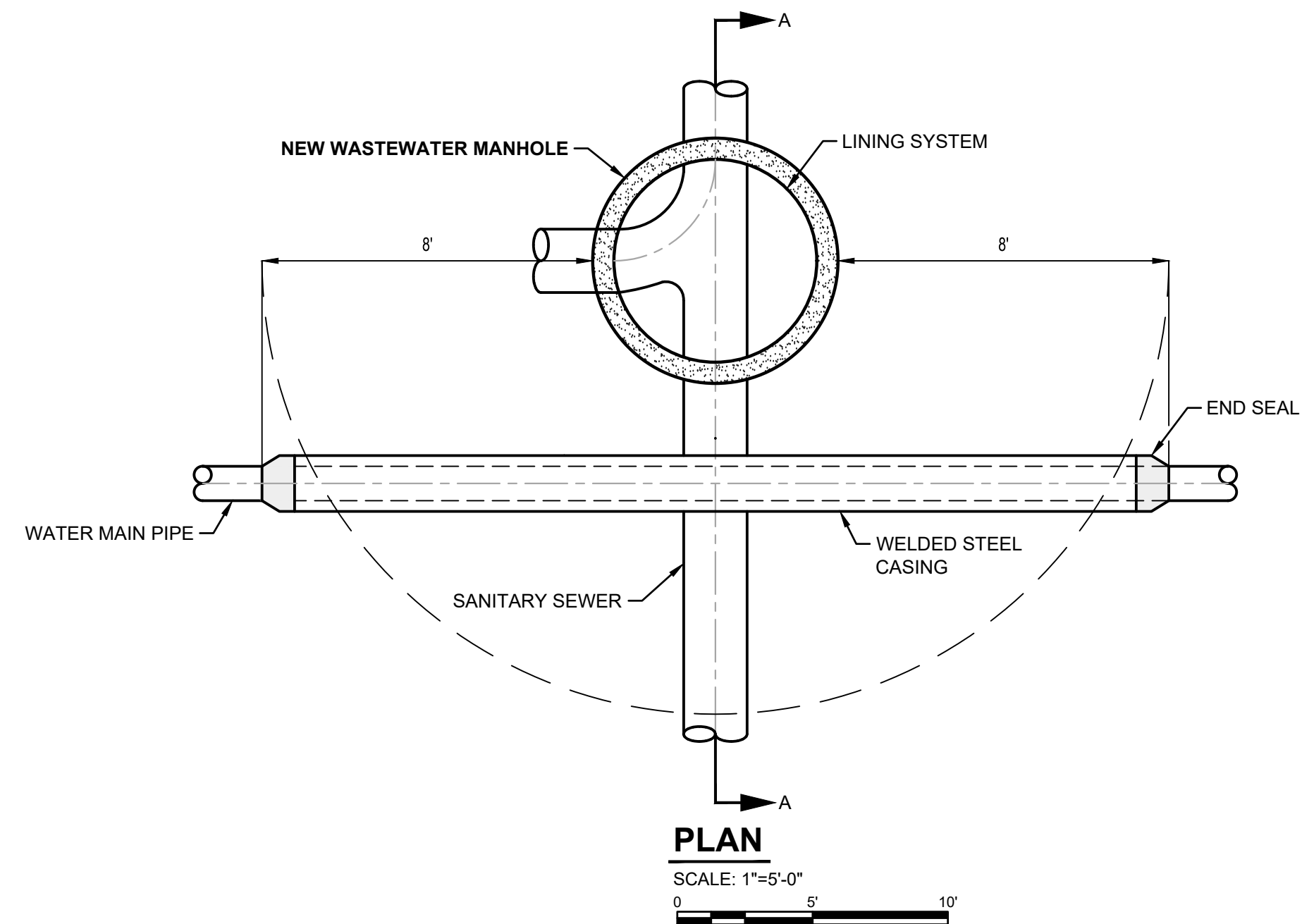
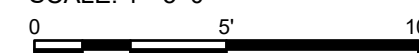
MISCELLANEOUS DETAILS

Drawing No:
MD2
Sheet: 39 OF 43



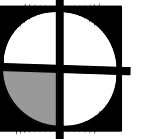
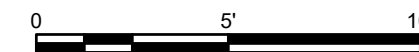
WATER-HORIZONTAL SEPARATION FROM STORMWATER MANHOLES

SCALE: 1"=5'-0"



WATER-HORIZONTAL SEPARATION FROM NEW WASTEWATER MANHOLES

SCALE: 1"=5'-0"



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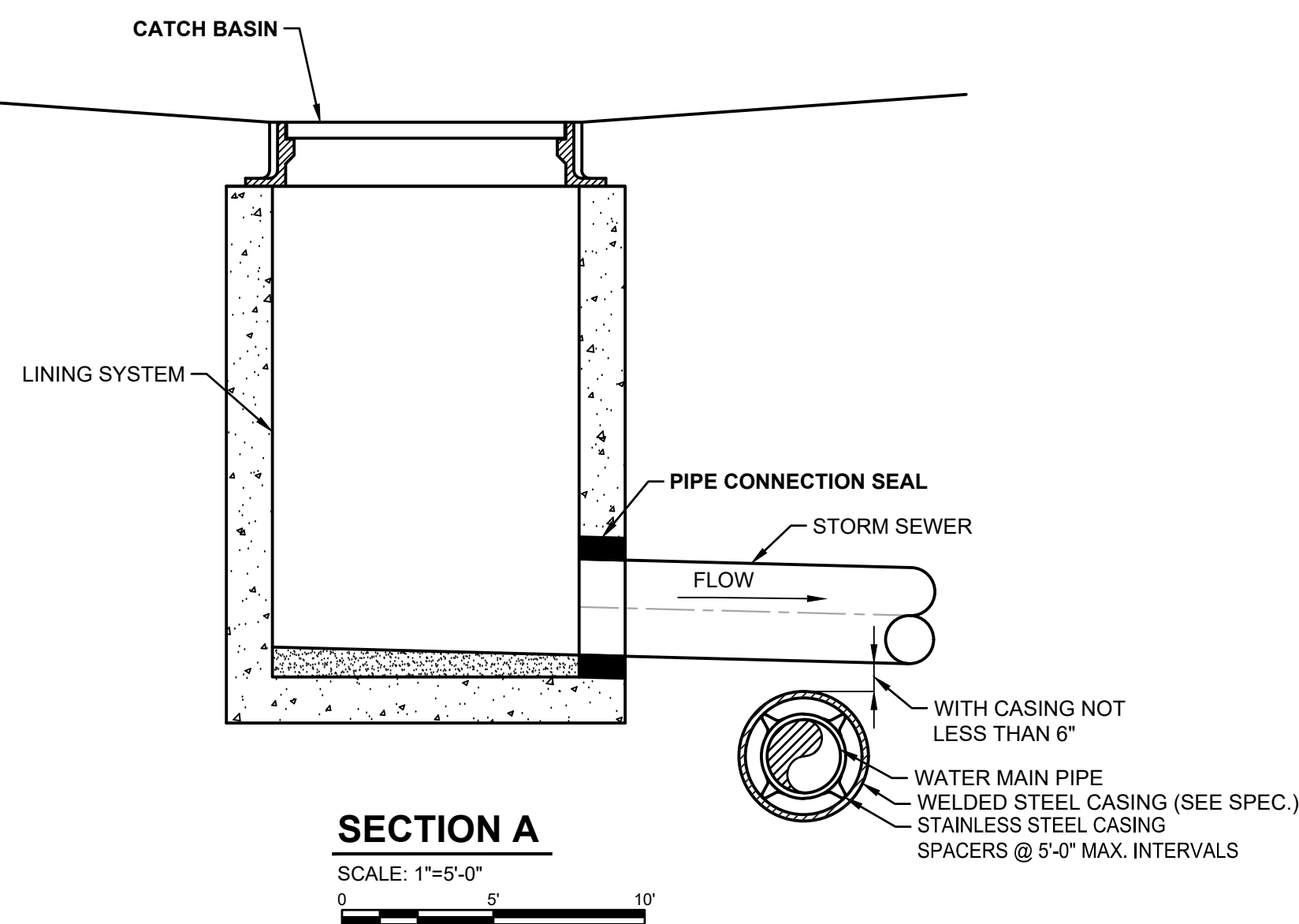
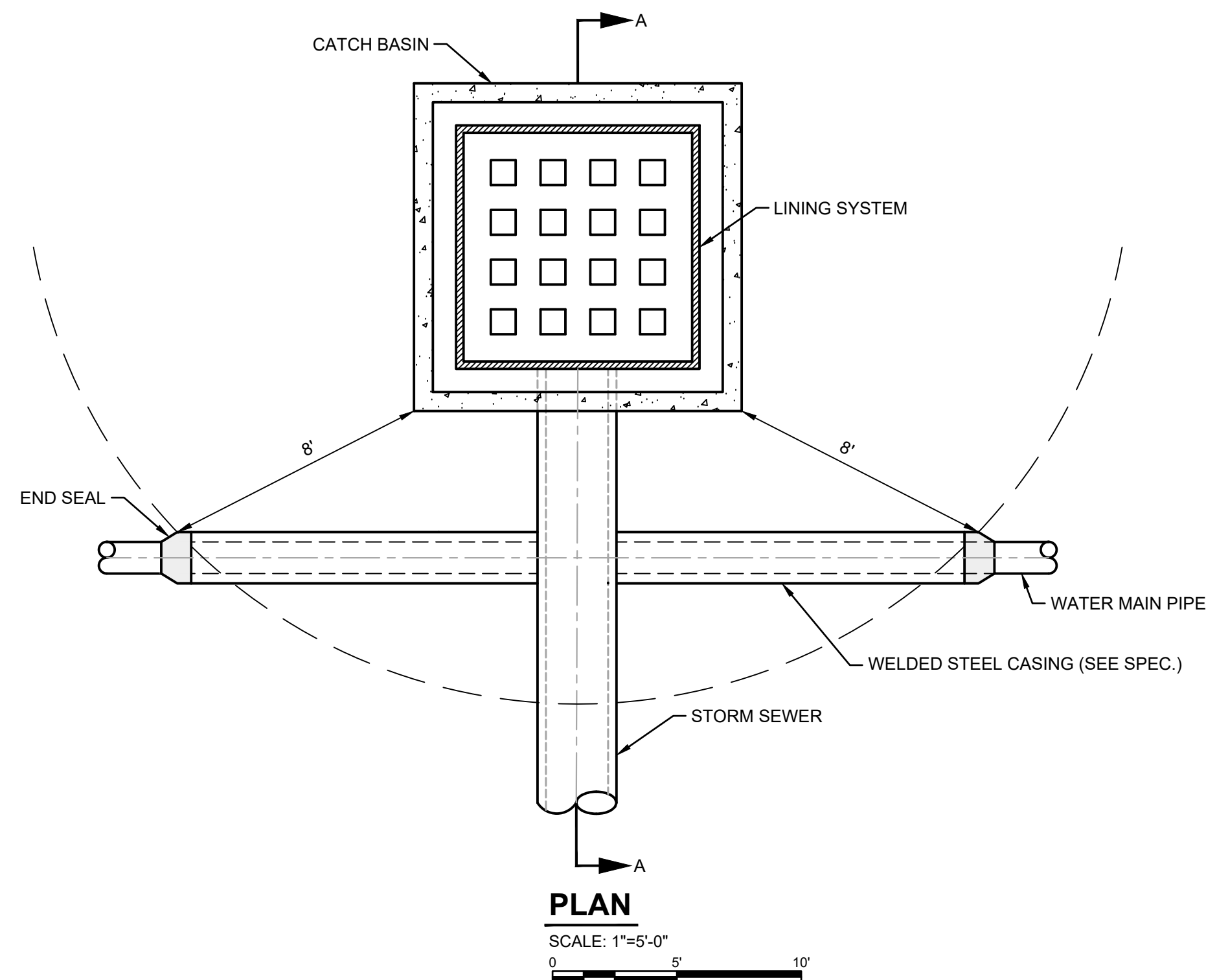
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MISCELLANEOUS DETAILS

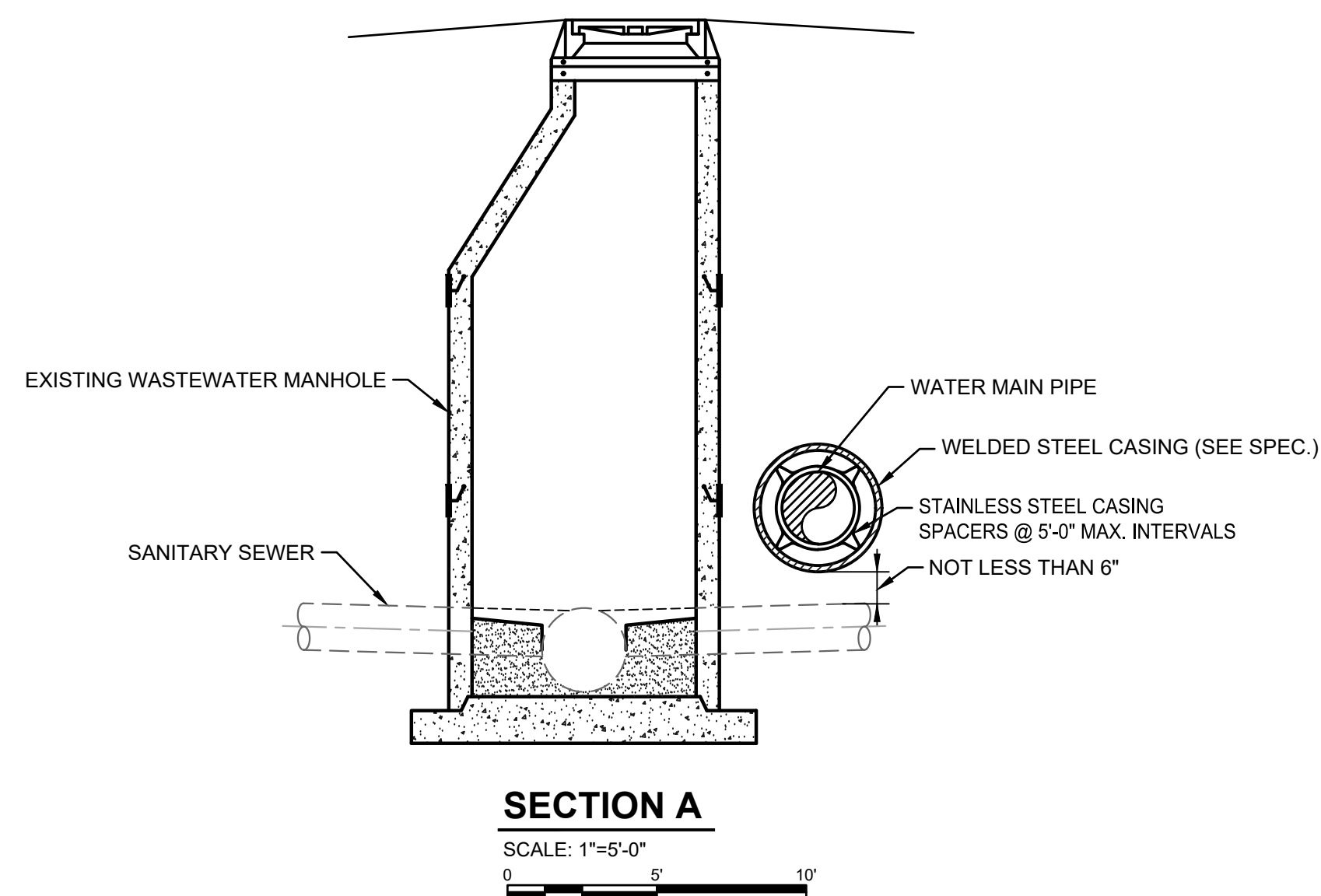
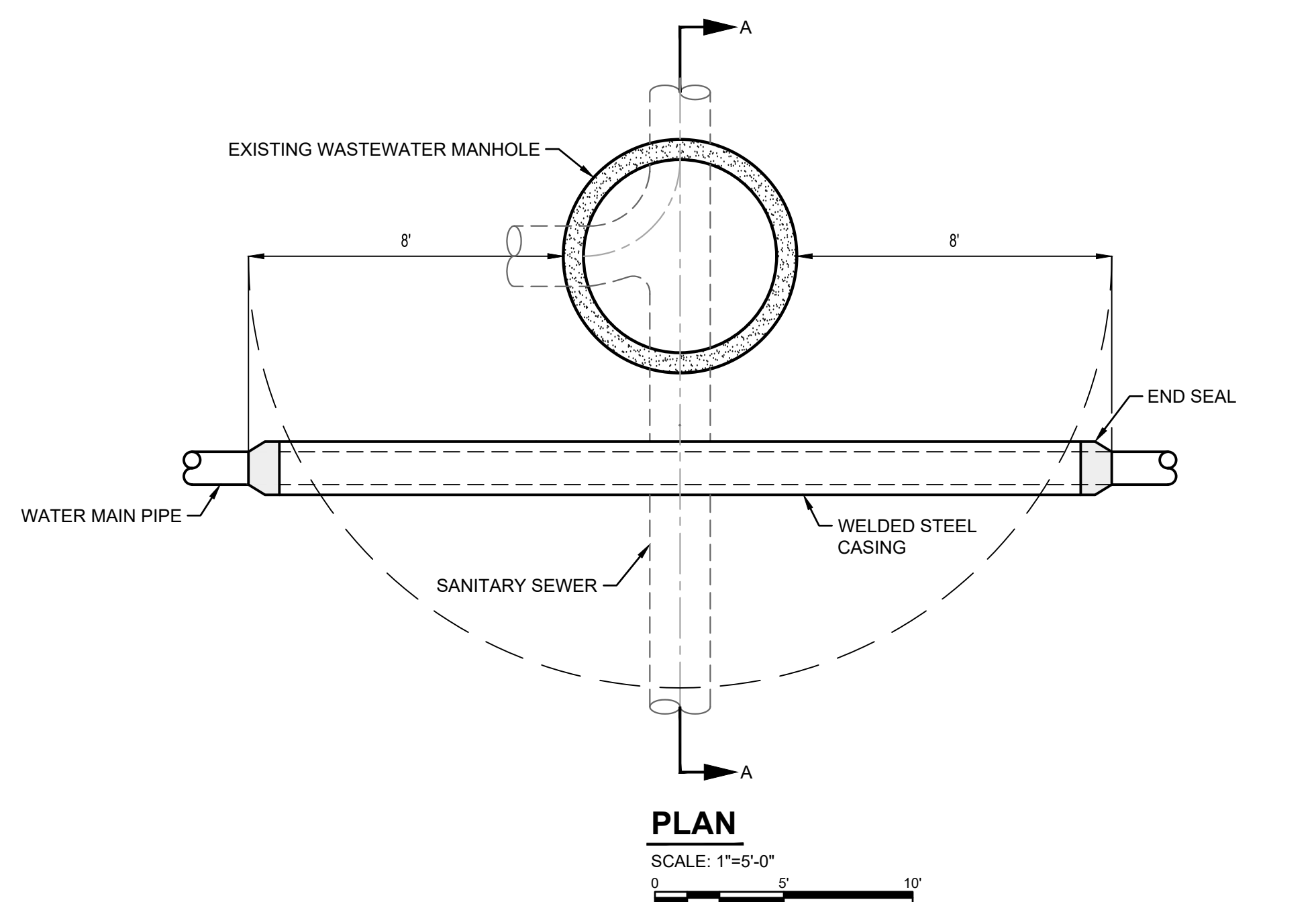
Drawing No:

MD5

Sheet: 42 OF 43



WATER-HORIZONTAL SEPARATION FROM STORMWATER STRUCTURES



WATER-HORIZONTAL SEPARATION FROM EXISTING WASTEWATER MANHOLES



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MISCELLANEOUS DETAILS

MISCELLANEOUS DETAILS

Drawing No:

MD6

Sheet: 43 OF 43