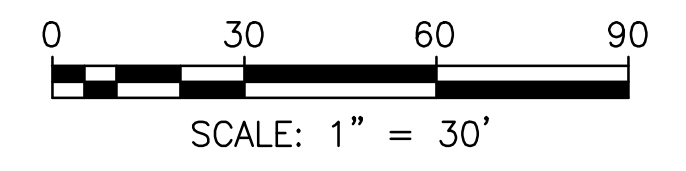
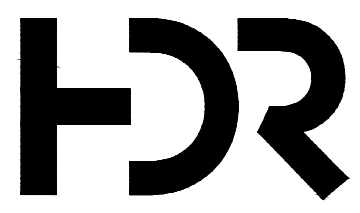
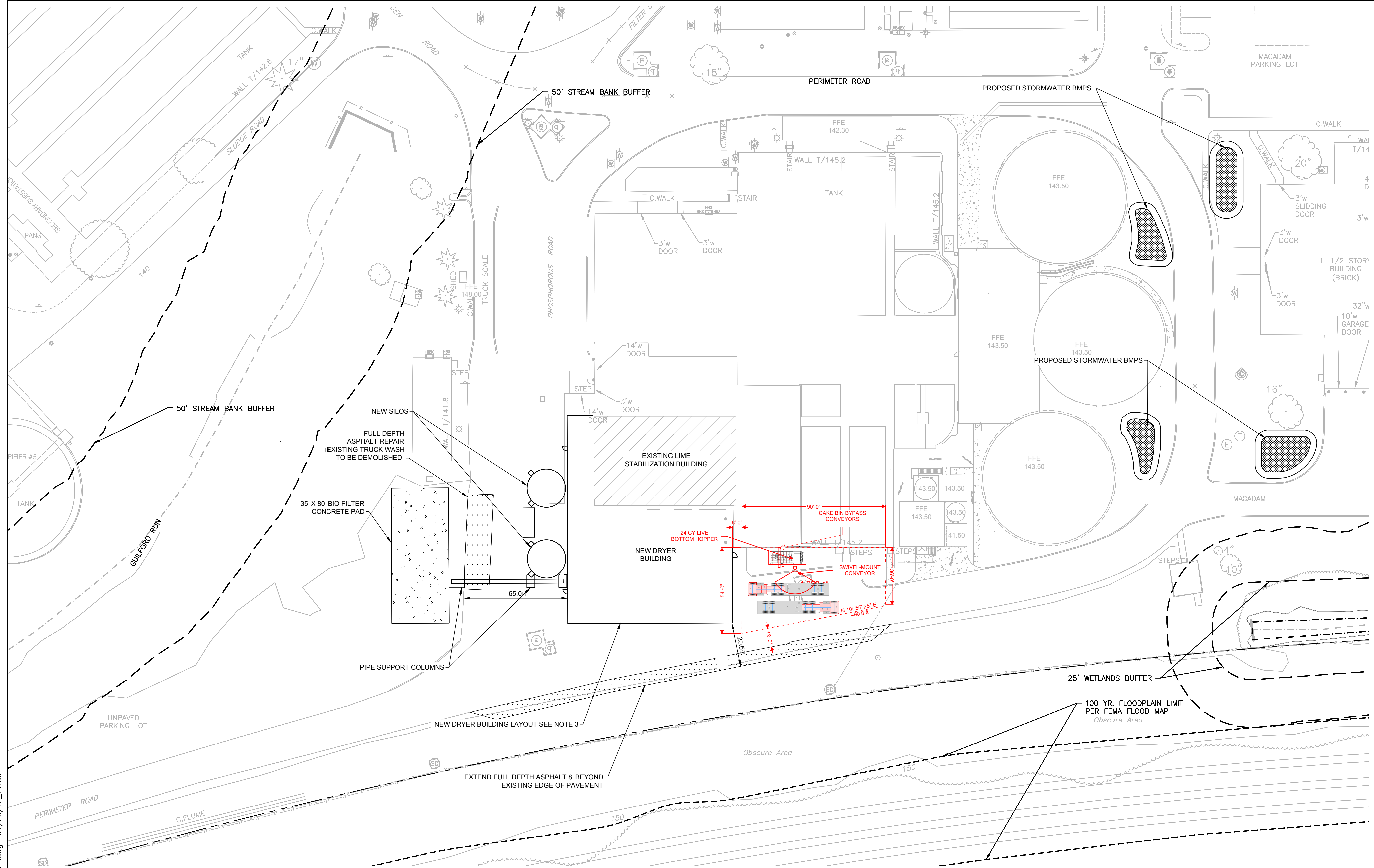
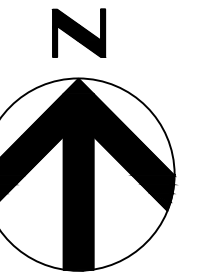


- GENERAL NOTES:**
1. SEE SHEET C-1 FOR GENERAL NOTES AND LEGEND.
 2. PHASE 1 NEW WORK IS SHOWN AS EXISTING FOR PHASE 2 PLANS.
 3. SEE ARCHITECTURAL PLANS SERIES A500 FOR NEW BUILDING AND SILO INFORMATION.

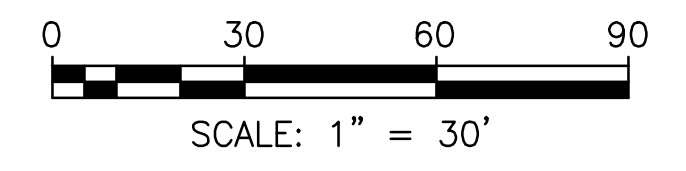


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 <p>RELEASED FOR BIDDING AND PERMIT APPLICATIONS, NOT FOR CONSTRUCTION</p>	<p>PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. _____, EXPIRATION DATE: _____ REGISTERED PROFESSIONAL ENGINEER DATE _____ FIRM _____</p>	<p>NOTICE TO CONTRACTORS</p> <ul style="list-style-type: none"> PROJECT ELEVATIONS ARE BASED ON NAVD83 AND HOWARD COUNTY'S BENCHMARK SYSTEM PREVIOUS PROJECTS USED OTHER DATUMS APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: - ADDITION NO. 6: SUBTRACT 0.80 FT - PRIOR ADDITIONS: SUBTRACT 1.04 FT 	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p>CHIEF, BUREAU OF UTILITIES DATE _____</p>	DES: M.L.				<p>CIVIL</p> <p>CIVIL SITE PLAN</p>	<p>LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE 2</p> <p>CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935</p> <p>ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND</p>	SCALE AS SHOWN
				DRN: S.W.						<p>DATE: 04/17 04/20/17 - 30% DESIGN DESCRIPTION</p>

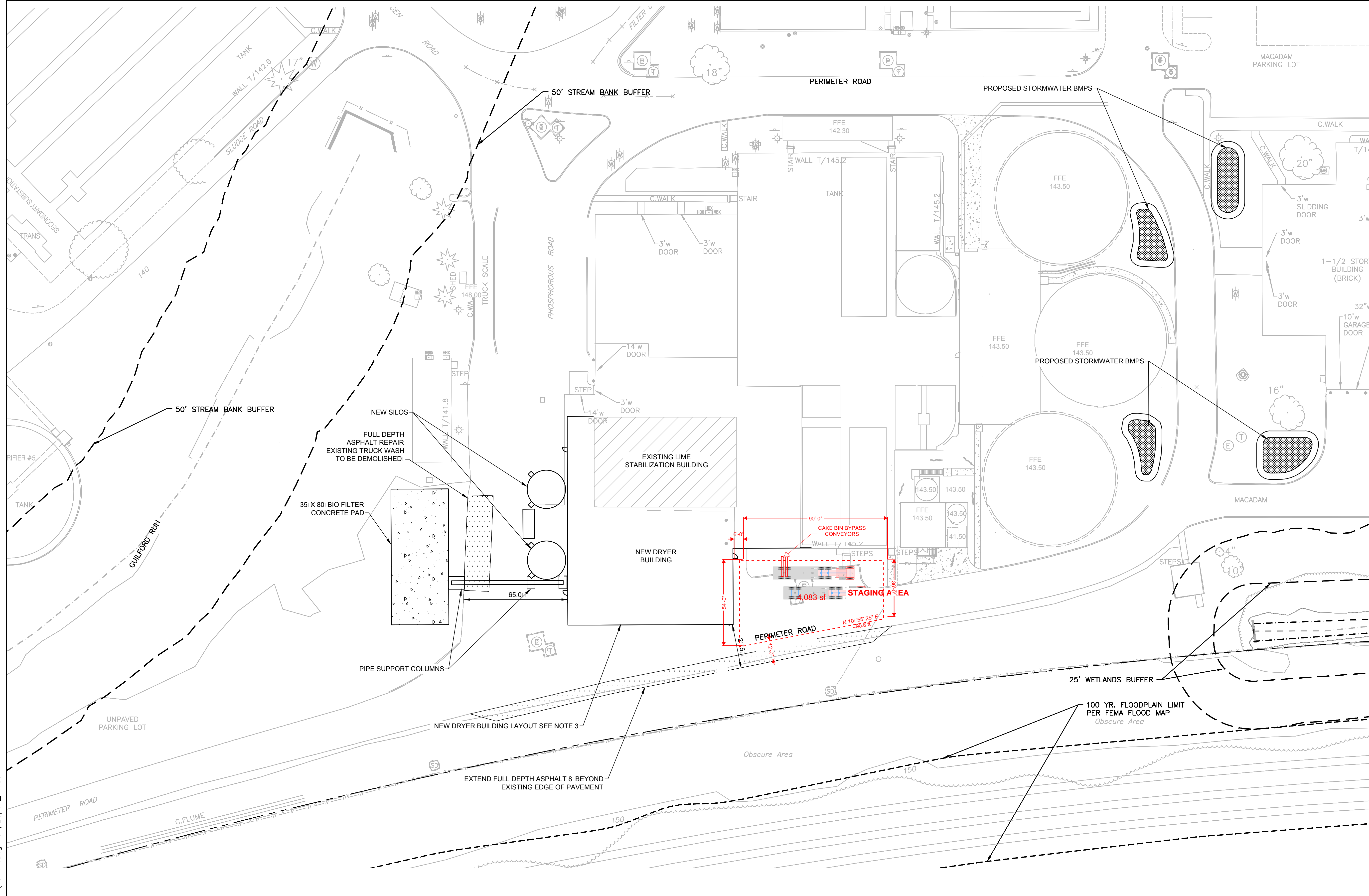
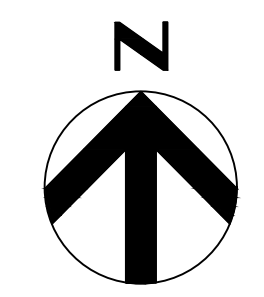


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 - SEE ARCHITECTURAL PLANS SERIES A500 FOR NEW BUILDING AND SILO INFORMATION.

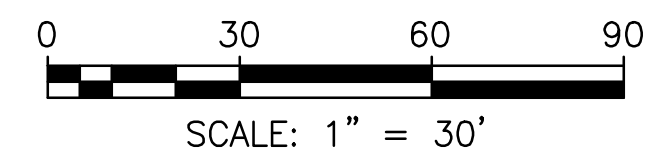


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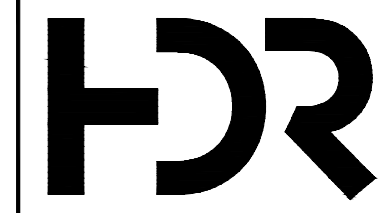
	<p>RELEASED FOR BIDDING AND PERMIT APPLICATIONS, NOT FOR CONSTRUCTION</p>	<p>PROFESSIONAL CERTIFICATION</p> <p>I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRATION DATE: _____</p>	<p>NOTICE TO CONTRACTORS</p> <ul style="list-style-type: none"> PROJECT ELEVATIONS ARE BASED ON NAVD83 AND HOWARD COUNTY'S BENCHMARK SYSTEM PREVIOUS PROJECTS USED OTHER DATUMS APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: <ul style="list-style-type: none"> - ADDITION NO. 6: SUBTRACT 0.80 FT - PRIOR ADDITIONS: SUBTRACT 1.04 FT 	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p>	DES: M.L.				<p>CIVIL</p>	<p>LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE 2</p>	SCALE AS SHOWN
		<p>REGISTERED PROFESSIONAL ENGINEER</p>			<p>CHIEF, BUREAU OF UTILITIES</p>	<p>DATE: 04/17</p>	<p>04/20/17</p>	<p>-</p>			<p>30% DESIGN DESCRIPTION</p>
		<p>DATE _____</p> <p>FIRM _____</p>							<p>CIVIL SITE PLAN</p>	<p>CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935</p> <p>ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND</p>	<p>C-7</p>

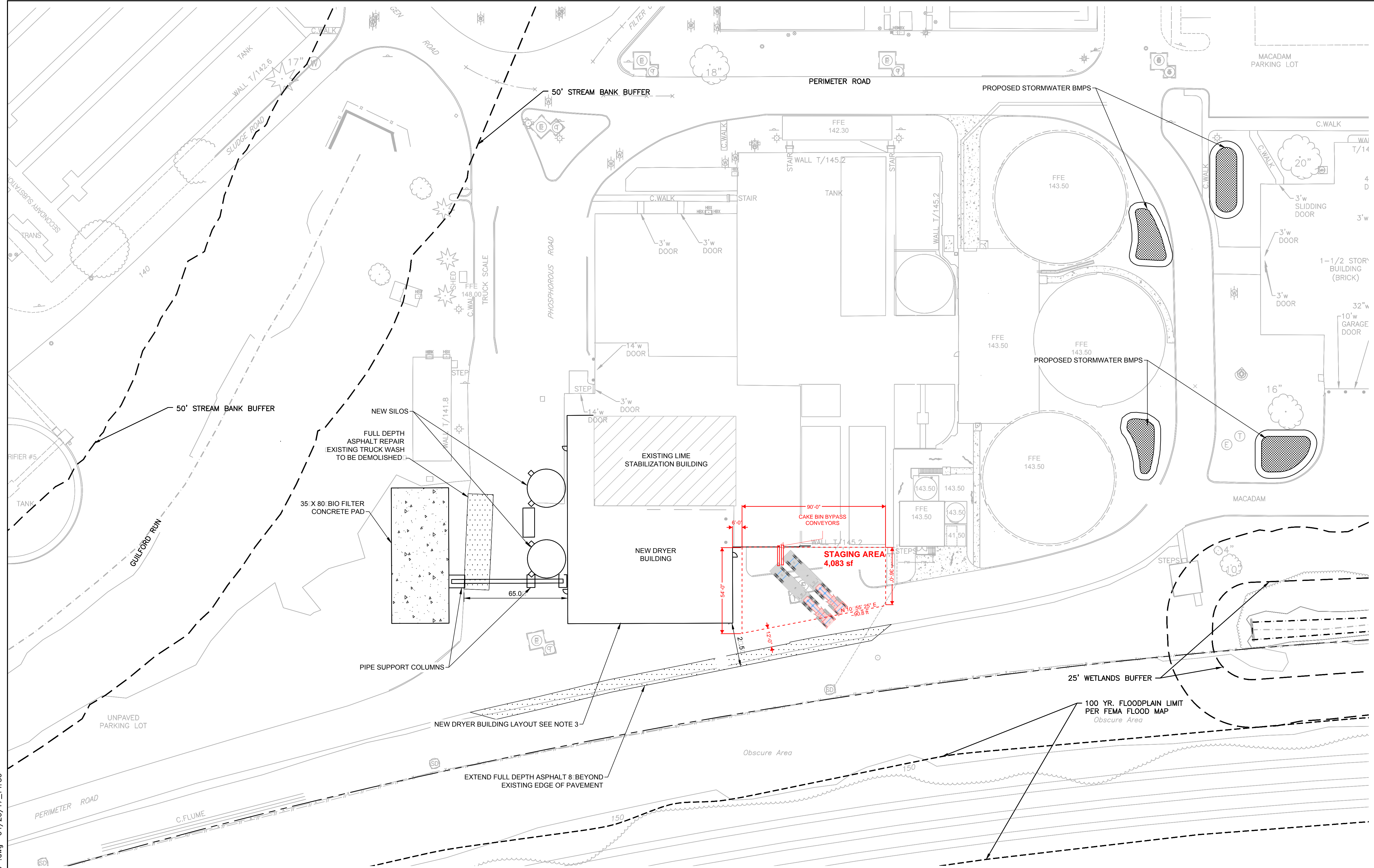
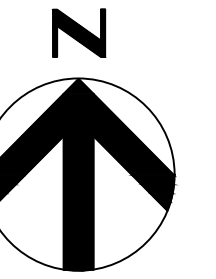


- GENERAL NOTES:**
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 2. PHASE 1 NEW WORK IS SHOWN AS EXISTING FOR PHASE 2 PLANS.
 3. SEE ARCHITECTURAL PLANS SERIES A500 FOR NEW BUILDING AND SILO INFORMATION.

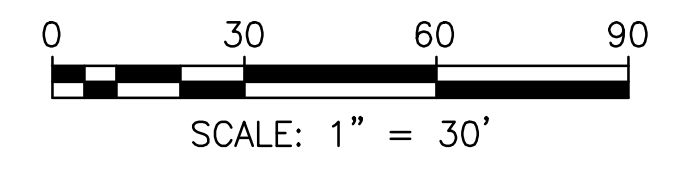


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	RELEASED FOR BIDDING AND PERMIT APPLICATIONS, NOT FOR CONSTRUCTION	PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: _____, EXPIRATION DATE: _____ REGISTERED PROFESSIONAL ENGINEER	NOTICE TO CONTRACTORS • PROJECT ELEVATIONS ARE BASED ON NAVD83 AND HOWARD COUNTY'S BENCHMARK SYSTEM. • PREVIOUS PROJECTS USED OTHER DATUMS. • APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: - ADDITION NO. 6: SUBTRACT 0.80 FT. - PRIOR ADDITIONS: SUBTRACT 1.04 FT.	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DES: M.L.				CIVIL CIVIL SITE PLAN	LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE 2 CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
		DATE: _____ FIRM: _____		CHIEF, BUREAU OF UTILITIES DATE: _____	DATE: 04/17	04/20/17	-	30% DESIGN DESCRIPTION	SHEET XX OF XXX			

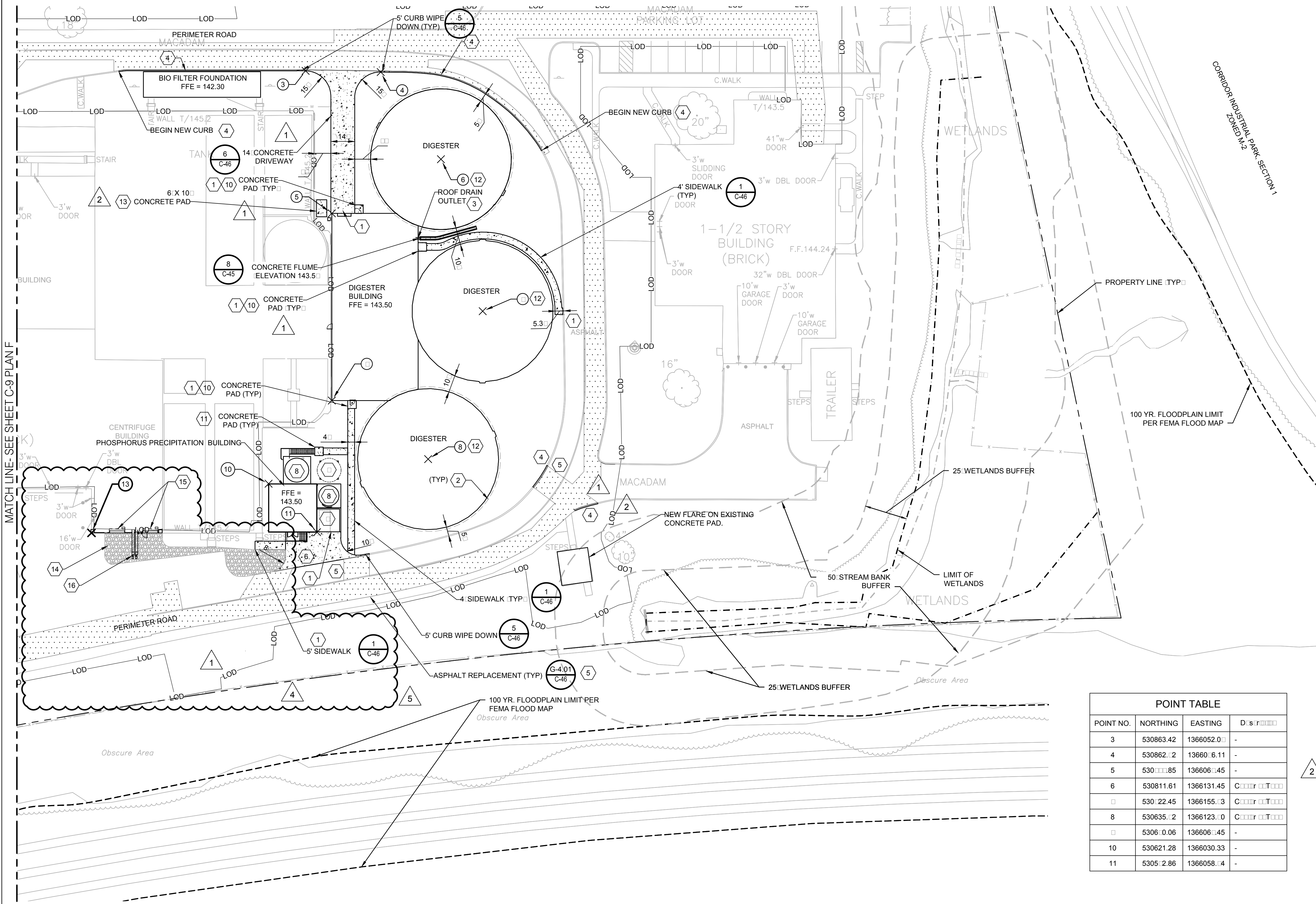
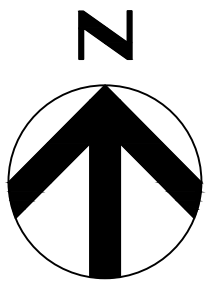


- GENERAL NOTES:**
- SEE SHEET C-1 FOR GENERAL NOTES AND LEGEND.
 - PHASE 1 NEW WORK IS SHOWN AS EXISTING FOR PHASE 2 PLANS.
 - SEE ARCHITECTURAL PLANS SERIES A500 FOR NEW BUILDING AND SILO INFORMATION.



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	<p>RELEASED FOR BIDDING AND PERMIT APPLICATIONS, NOT FOR CONSTRUCTION</p>	<p>PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. _____, EXPIRATION DATE: _____</p>	<p>NOTICE TO CONTRACTORS</p> <ul style="list-style-type: none"> PROJECT ELEVATIONS ARE BASED ON NAVD8S AND HOWARD COUNTY'S BENCHMARK SYSTEM PREVIOUS PROJECTS USED OTHER DATUMS APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: - ADDITION NO. 6: SUBTRACT 0.80 FT - PRIOR ADDITIONS: SUBTRACT 1.04 FT 	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p>	DES: M.L.			<p>CIVIL</p>	<p>LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE 2</p>	SCALE AS SHOWN
		REGISTERED PROFESSIONAL ENGINEER			CHIEF, BUREAU OF UTILITIES	DATE	DRN: S.W.			
		DATE	FIRM		DATE: 04/17	04/20/17	-		<p>ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND</p>	C-7



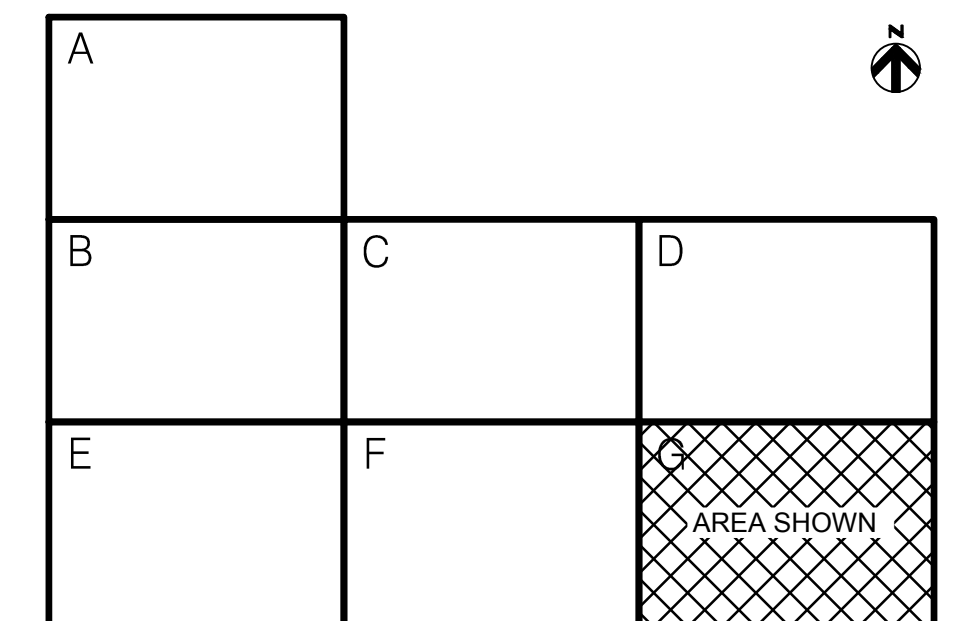
GENERAL NOTES:

1. SEE SHEET C-34 FOR PROPOSED UTILITIES AND YARD PIPING.
2. SEE SHEET X-2 FOR SITE DEMOLITION PLAN.
3. SEE SHEET C-11 FOR DEMOLITION EROSION CONTROL PLAN.
4. SEE SHEET C-21 - C-22 FOR SITE DEVELOPMENT AND EROSION CONTROL.
5. DIGESTER BUILDING, DIGESTER TANKS AND PHOSPHOROUS PRECIPITATION BUILDING ARE ENGINEERED PREFABRICATED BUILDINGS BY OTHERS. SEE STRUCTURAL SHEETS FOR FOUNDATION INFORMATION.
6. SEE SHEET C-1 FOR GENERAL NOTES & LEGEND.

KEY NOTES:

1. INSTALL 1 INCH EXPANSION JOINT WHERE CONCRETE DRIVEWAYS, PADS, AND SIDEWALKS MEET BUILDING FOUNDATIONS OR OTHER STRUCTURAL COMPONENTS.
2. DIGESTER CONCRETE FOUNDATION 1.2 BEYOND OUTSIDE WALL (TYP).
3. SEE MECHANICAL PLANS FOR ROOF DRAIN ELEVATION.
4. CONSTRUCT NEW CURB SEE DETAIL R3.03/C-45.
5. SAW CUT EXISTING PAVEMENT FOR CLEAN BREAK ALONG EDGES WHERE EXISTING MEETS NEW WORK.
6. CONCRETE DRIVEWAY. SEE DETAIL 6/C-45.
7. DUMPSTER CONTAINMENT AREA, FFE = 141.50.
8. TANK PAD, FFE 143.50.
9. FUTURE TANK PAD, FFE 143.50.
10. CONCRETE PAD, SEE ARCHITECTURAL DRAWING A-320 FOR PAD DESIGN.
11. 5X5 CONCRETE PAD, SEE STRUCTURAL DETAIL 5/S-04.
12. POINT DESIGNATES CENTER OF TANK.
13. PIPE SUPPORT PAD DESIGNED BY CONTRACTOR. PROVIDE SIMILAR TO DETAIL 3.0N S-04.
14. INSTALL 8" OF CRUSHER RUN AGGREGATE OVER A LAYER OF NON-WOVEN GEOTEXTILE FABRIC AND COMPACTED SUBGRADE.
15. ROLL UP DOORS FOR VEHICLE ACCESS.
16. OVERHEAD CONVEYORS.

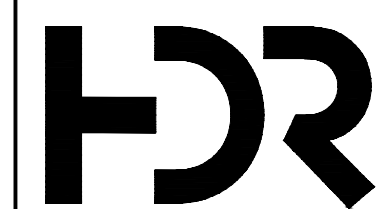
POINT TABLE			
POINT NO.	NORTHING	EASTING	DESCRIPTION
3	530863.42	1366052.0	-
4	530862.2	136606.11	-
5	530885.85	136606.45	-
6	530811.61	1366131.45	CENTER OF TANK
7	53022.45	1366155.3	CENTER OF TANK
8	530635.2	1366123.0	CENTER OF TANK
9	53060.06	136606.45	-
10	530621.28	1366030.33	-
11	53052.86	1366058.4	-



KEYMAP



SCALE: 1" = 30'



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 49972, EXPIRATION DATE: 9/30/2018.

REGISTERED PROFESSIONAL ENGINEER
HDR ENGINEERING, INC.
DATE: _____ FIRM: _____

NOTICE TO CONTRACTORS

- PROJECT ELEVATIONS ARE BASED ON NAVD88 AND HOWARD COUNTY'S BENCHMARK SYSTEM
- PREVIOUS PROJECTS USED OTHER DATUMS
- APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS:
 - ADDITION NO. 6: SUBTRACT 0.80 FT
 - PRIOR ADDITIONS: SUBTRACT 1.04 FT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE: _____

DES: xr			
DRN: S.W.	06/2017	5	DESIGN REVISION 10
	05/2017	4	DESIGN REVISION 7
CHK: R.B.	12/01/2016	3	GMP DOCUMENTS
	11/28/2016	2	ADDENDUM 2
	11/14/2016	1	ADDENDUM 1
DATE: 03/16	10/27/2016		90% DESIGN
		DATE	REV
			DESCRIPTION

CIVIL

SITE LAYOUT PLAN - G

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

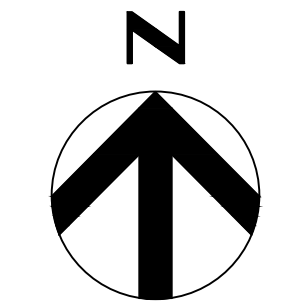
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET OF 421

C-10

MATCH LINE- SEE SHEET C-24 PLAN D

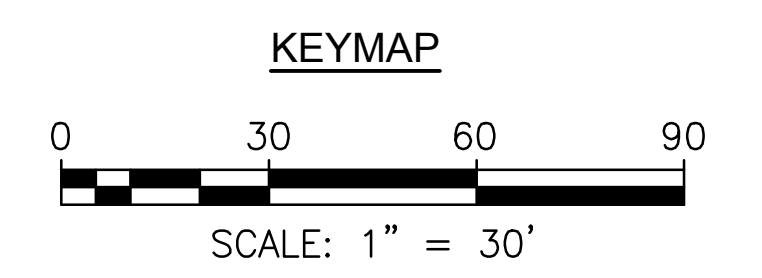
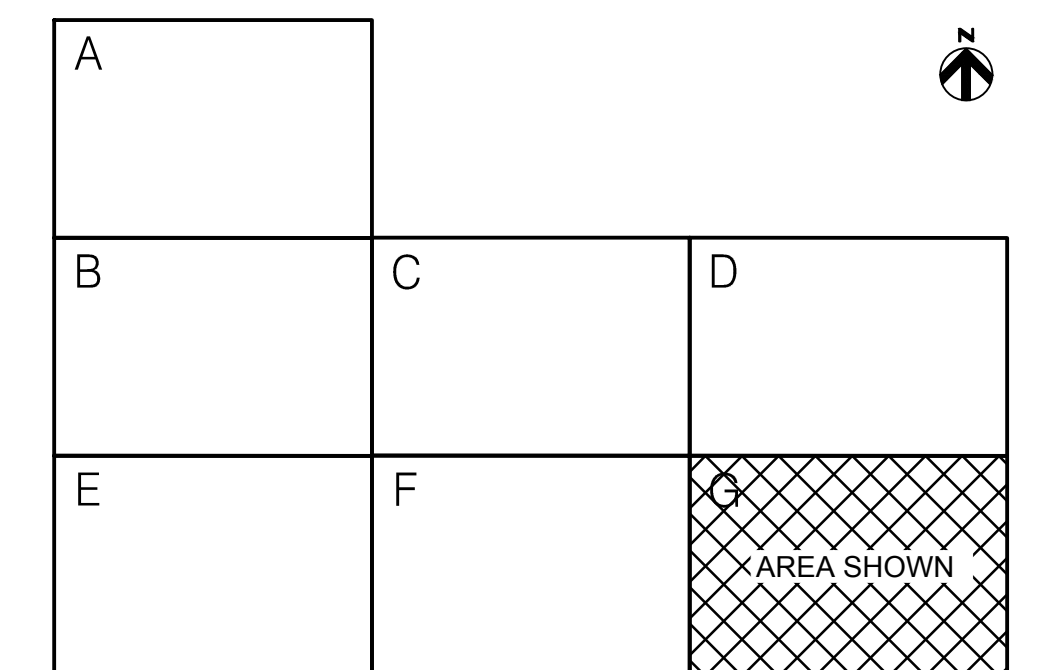
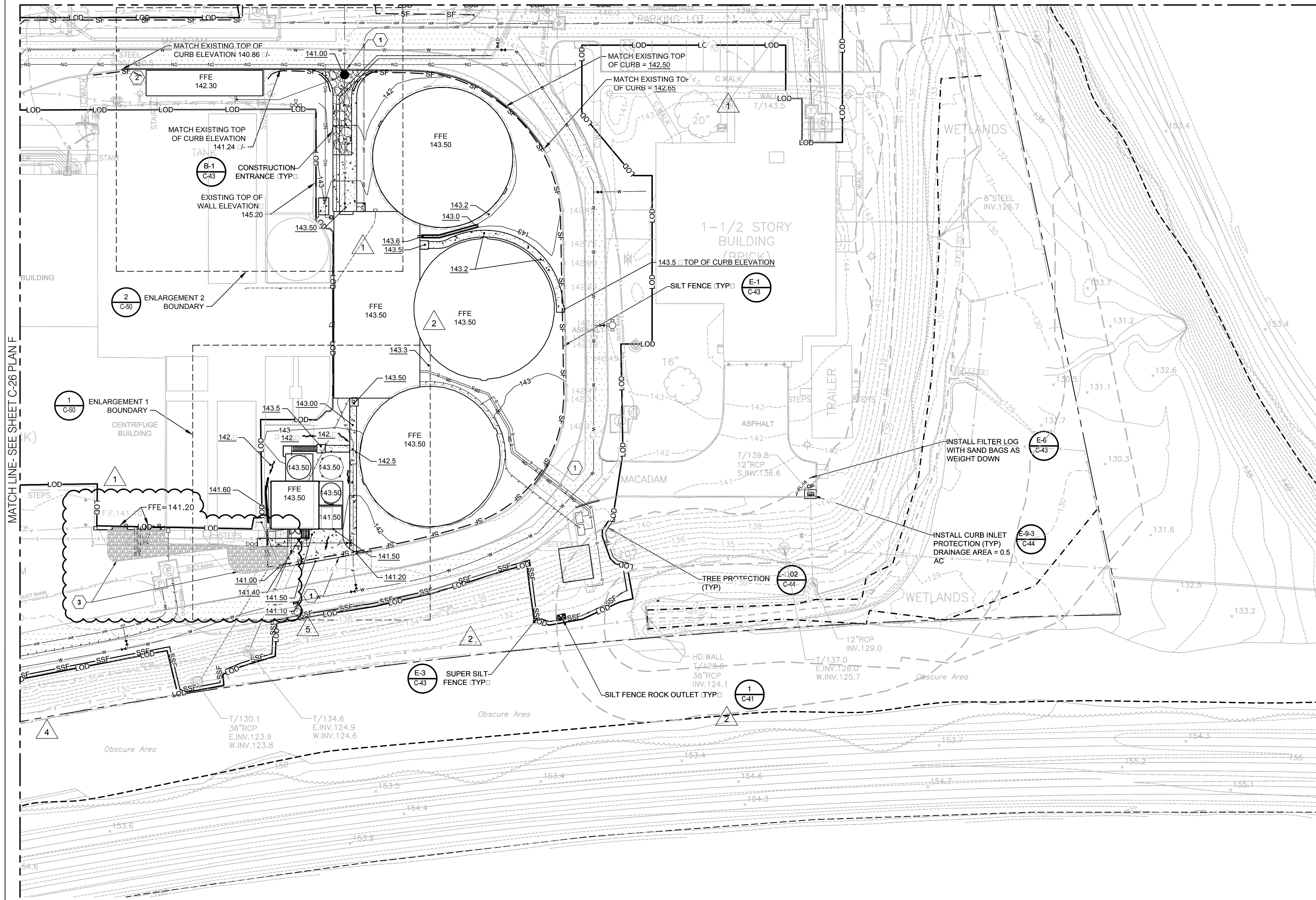


GENERAL NOTES:

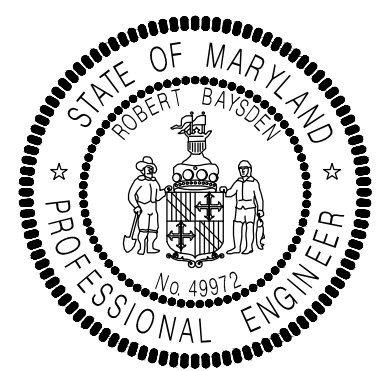
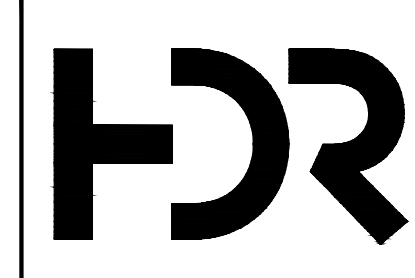
1. SEE SHEETS C-41 - C-44 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
2. GAS LINE SHALL BE DESIGNED AND INSTALLED BY OTHERS.
3. SEE SHEET C-1 FOR GENERAL NOTES - LEGEND.

KEY NOTES:

- 1 MATCH EXISTING PAVEMENT GRADES WHERE CONCRETE DRIVEWAY AND SIDEWALK MEETS ASPHALT ACCESS DRIVE.
- 2 BACKFILL DEMOLISHED AREAS AROUND BIO-FILTER FOUNDATION, GRADE TO DRAIN.
- 3 GRADE CRUSHER RUN AGGREGATE COURSE TO DRAIN AWAY FROM BUILDING. PROVIDE SMOOTH TRANSITION BETWEEN AGGREGATE COURSE AND NEW VEHICLE ACCESS DOORS, SIDEWALKS, PRECIPITATION DRIVEWAY, AND EXISTING ASPHALT.



MATCH LINE- SEE SHEET C-26 PLAN F



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 49972, EXPIRATION DATE: 9/30/2018.

REGISTERED PROFESSIONAL ENGINEER
HDR ENGINEERING, INC.
DATE FIRM

NOTICE TO CONTRACTORS

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 - PRIOR ADDITIONS: SUBTRACT 1.04 FT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE

DES: xr				
DRN: S.W.	06/2017	5	DESIGN REVISION 10	
	05/2017	4	DESIGN REVISION 7	
CHK: R.B.	12/01/2016	3	GMP DOCUMENTS	
	11/28/2016	2	ADDENDUM 2	
	11/14/2016	1	ADDENDUM 1	
	10/27/2016		90% DESIGN	
DATE: 03/16	DATE	REV	DESCRIPTION	

CIVIL

SITE DEVELOPMENT AND EROSION AND SEDIMENT CONTROL PLAN - G

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

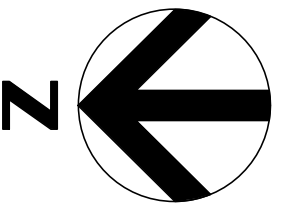
CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

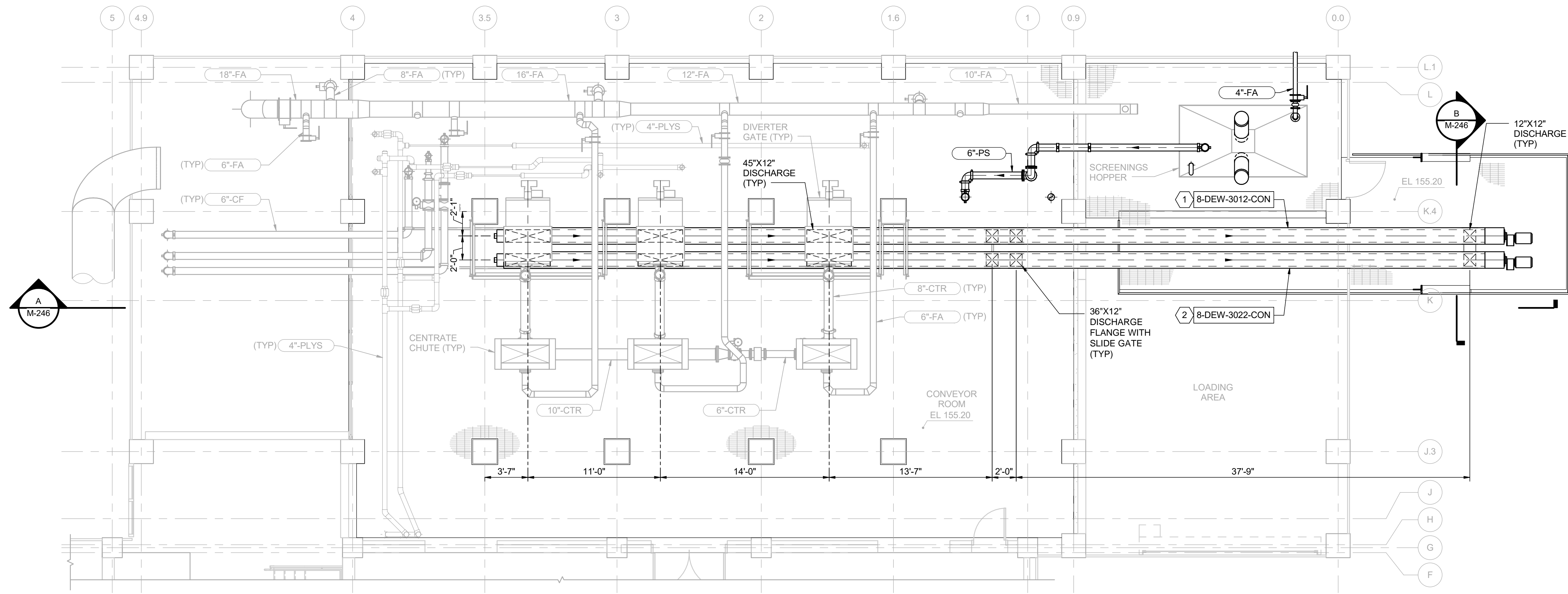
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SHEET OF 421

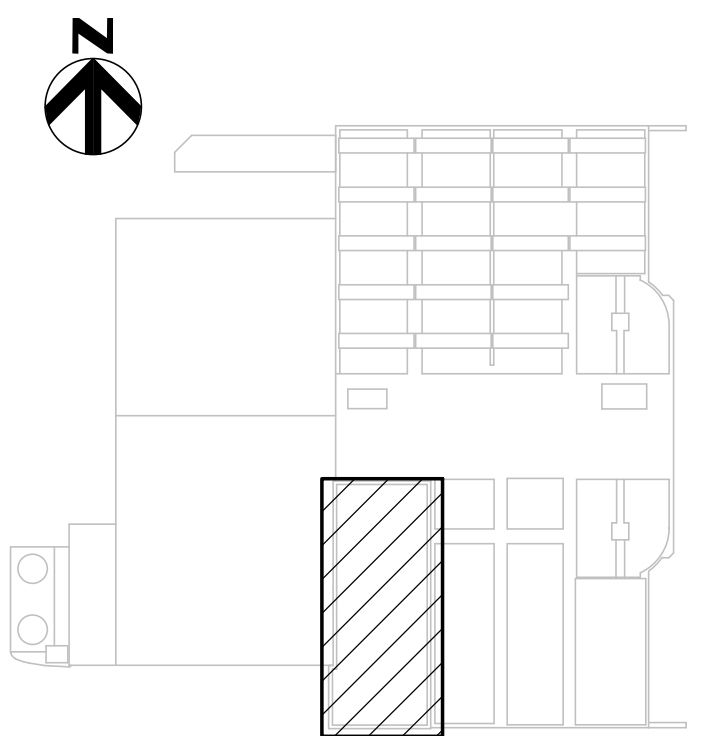
C-27



- KEY NOTES (X)
- 1 CAKE CONVEYOR NO. 1
 - 2 CAKE CONVEYOR NO. 2

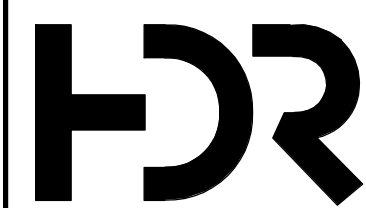


PLAN AT EL 155.20
3/16" = 1'-0"



KEY PLAN

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6/13/2017 3:16:40 PM



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 200406, EXPIRATION DATE: 3/19/2017

REGISTERED PROFESSIONAL ENGINEER
BRIAN M. BALCHUNAS
HDR ENGINEERING, INC.
DATE FIRM

NOTICE TO CONTRACTORS

- PROJECT ELEVATIONS ARE BASED ON NAVD88 AND HOWARD COUNTY'S BENCHMARK SYSTEM
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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE

DES: ADP					
DRN: SLB					
CHK: BMB					
DATE: 12/2016	06/30/2017	1	DESIGN REVISION NO. 10		
	DATE	REV	DESCRIPTION		

PROCESS

DEWATERING AND DRYING AREA
PLAN AT EL 155.20

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

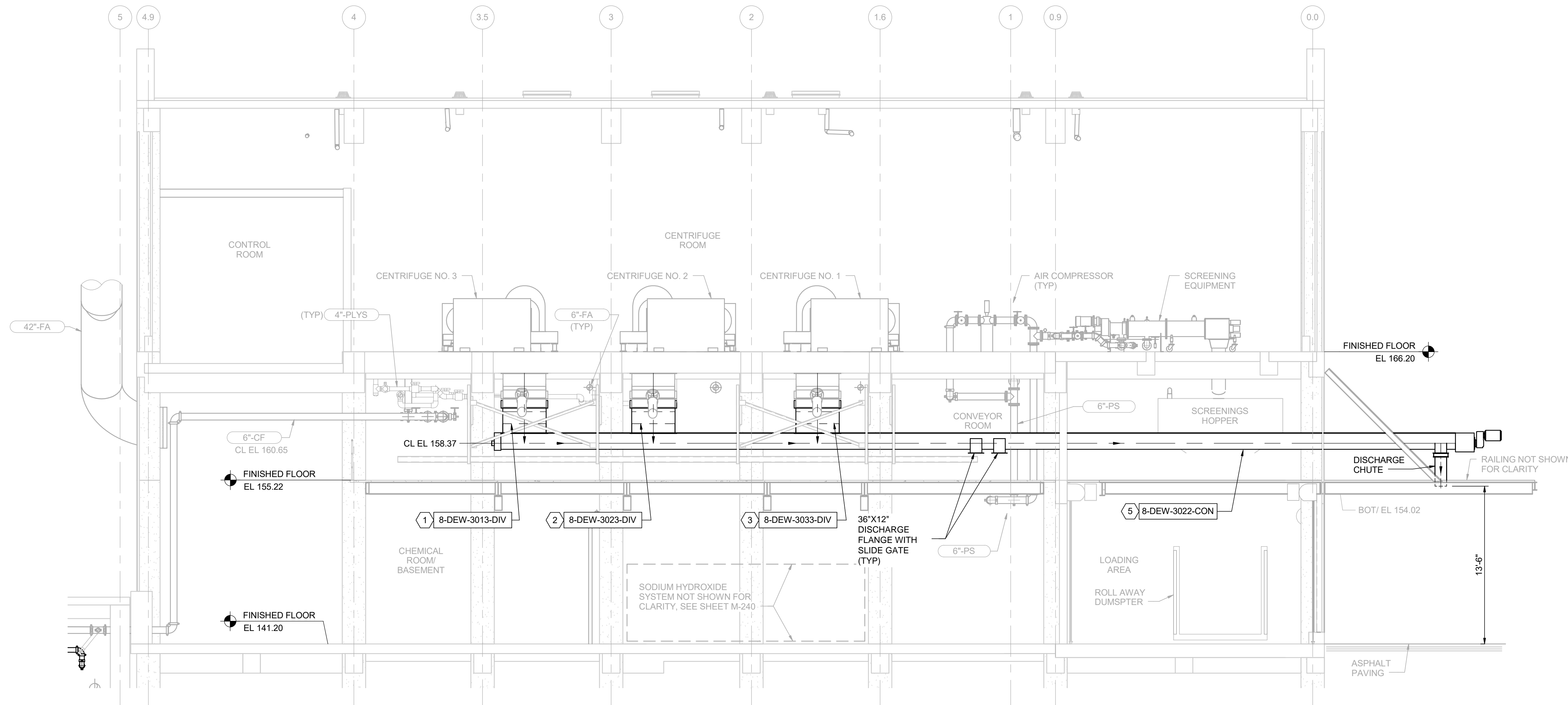
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

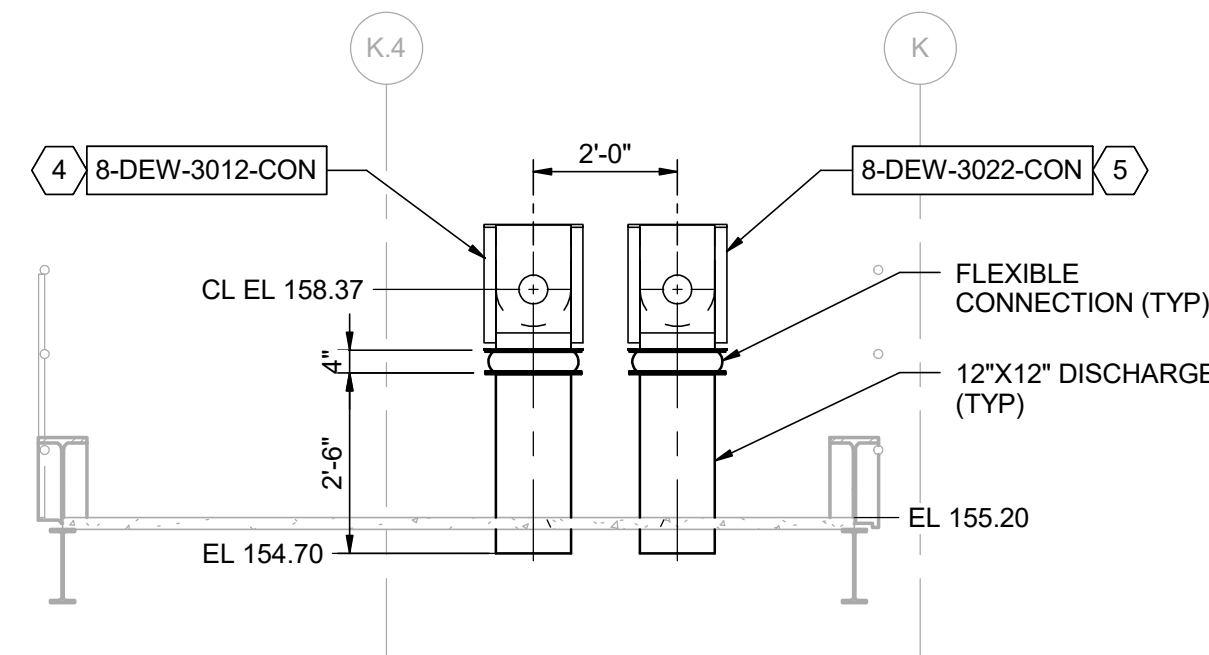
SHEET 165A OF 421

M-245

- KEY NOTES (X)
- 1 DIVERTER GATE NO. 1
 - 2 DIVERTER GATE NO. 2
 - 3 DIVERTER GATE NO. 3
 - 4 CAKE CONVEYOR NO. 1
 - 5 CAKE CONVEYOR NO. 2



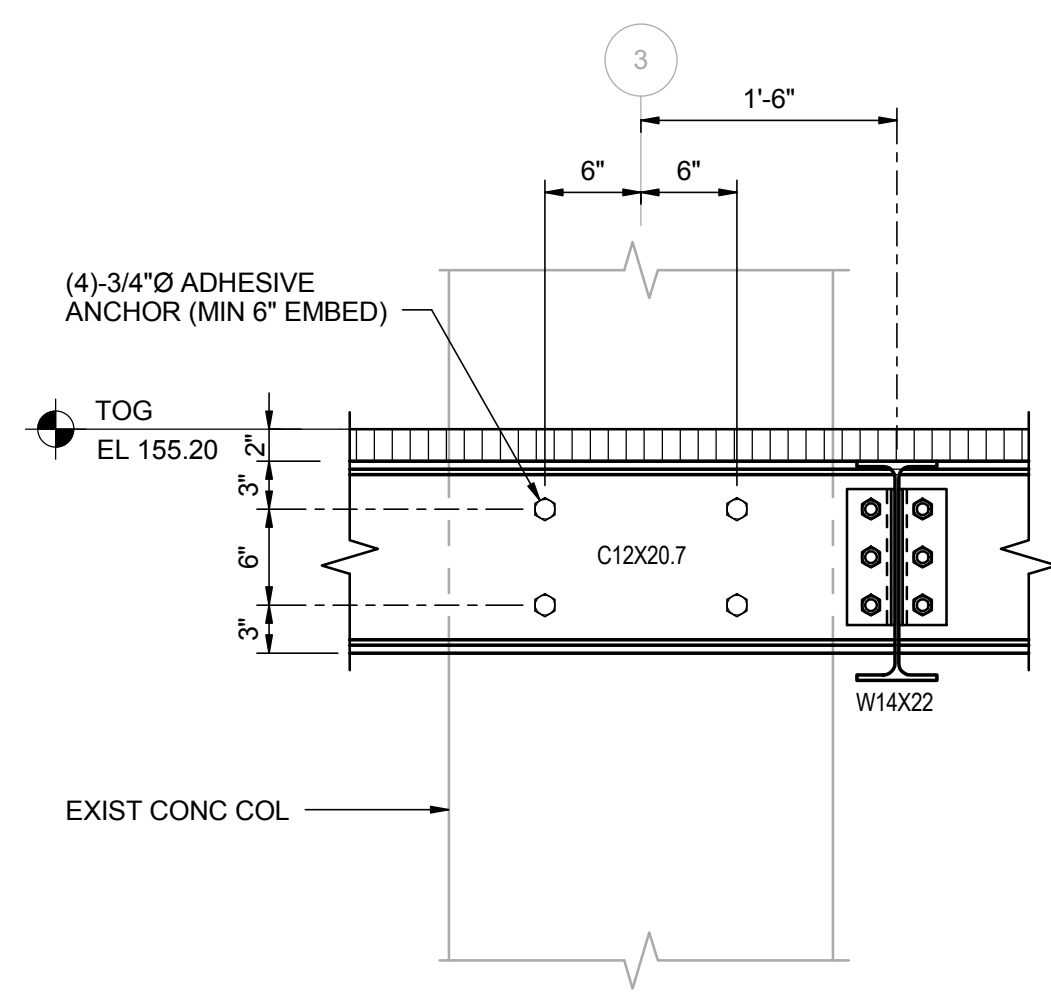
A SECTION
M-201 3/16" = 1'-0"



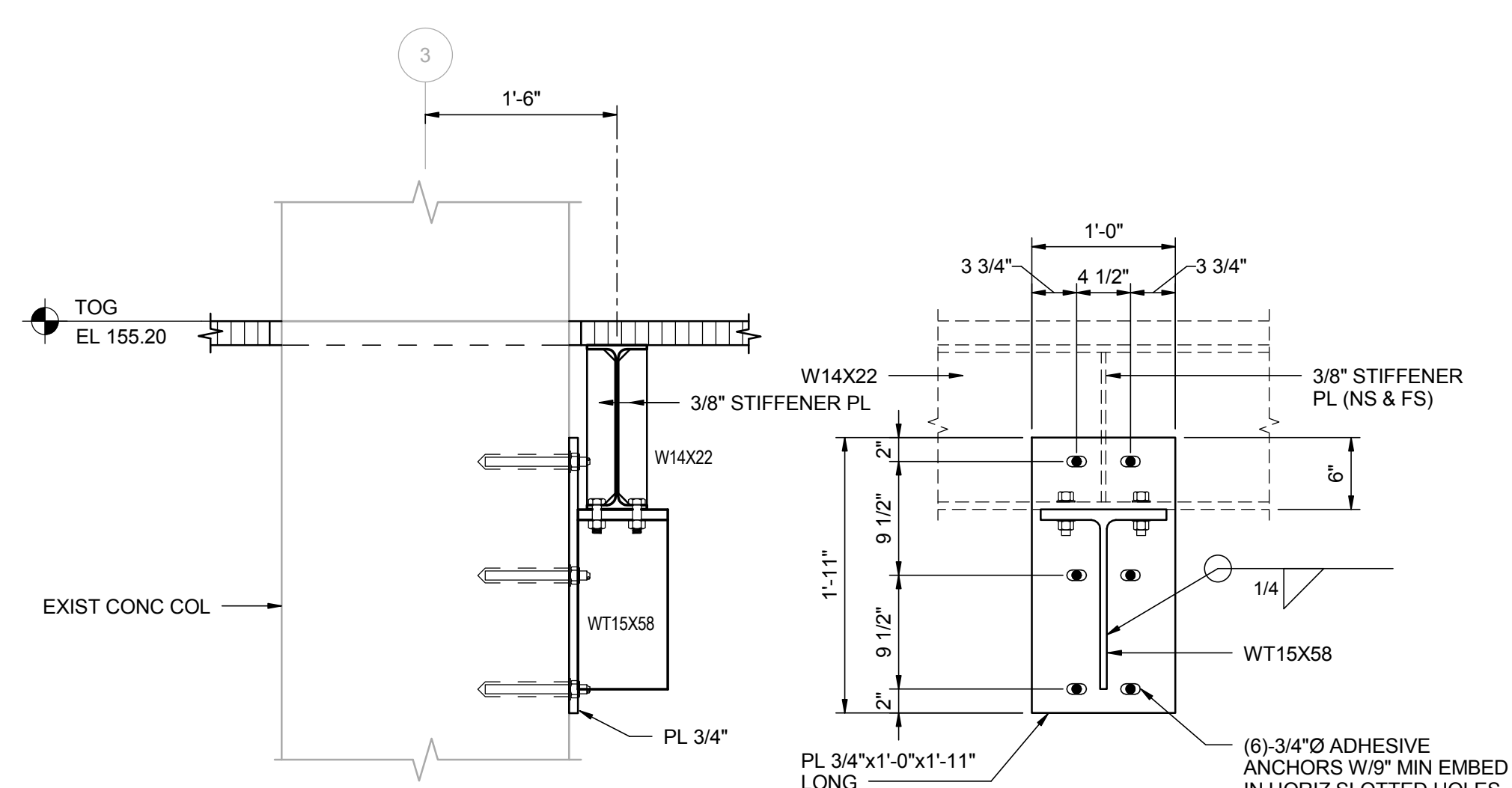
B DISCHARGE CHUTE SECTION
M-245 3/8" = 1'-0"

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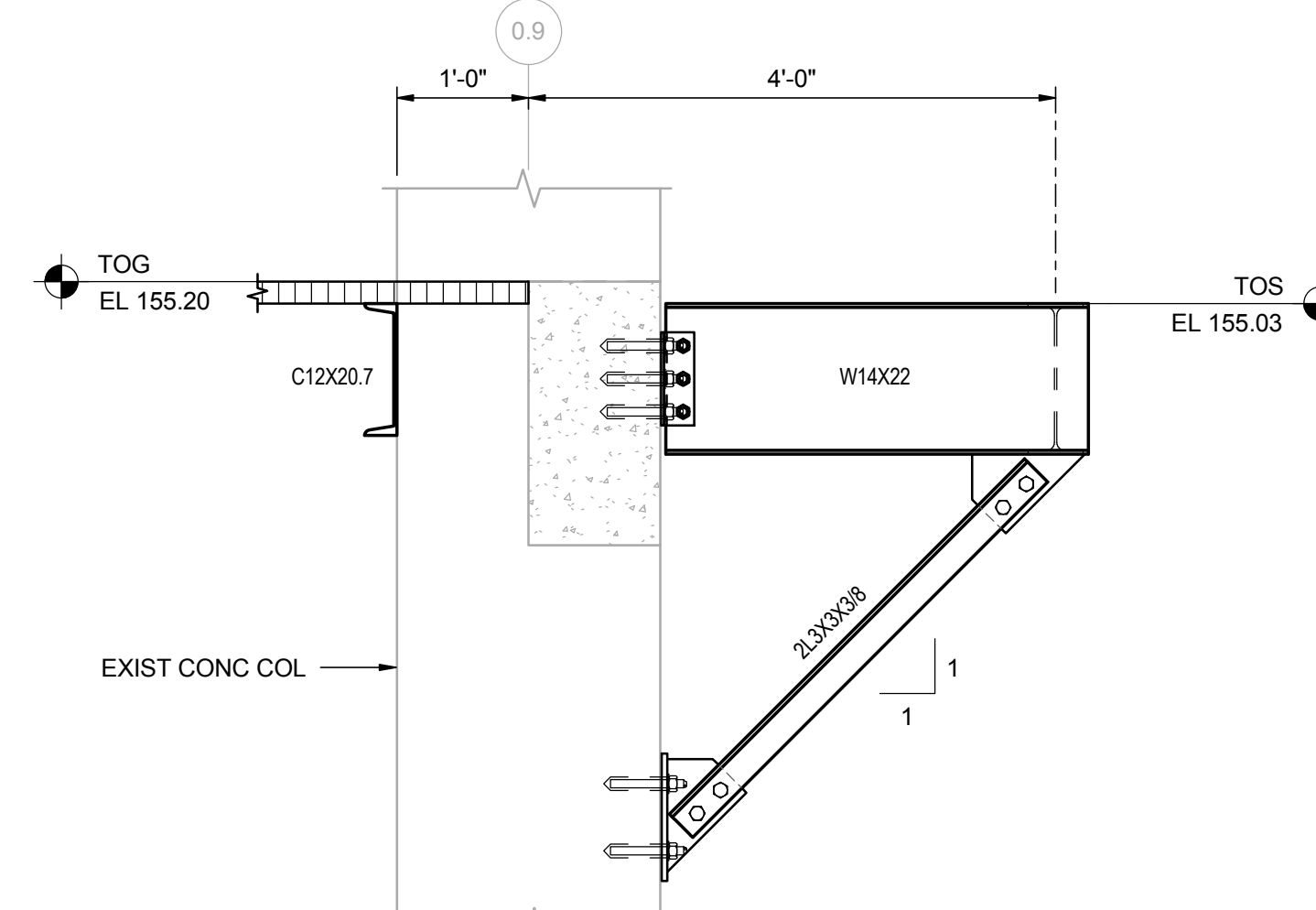
		PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 200406, EXPIRATION DATE: 3/19/2017.	NOTICE TO CONTRACTORS • PROJECT ELEVATIONS ARE BASED ON NAVD88 AND HOWARD COUNTY'S BENCHMARK SYSTEM • PREVIOUS PROJECTS USED OTHER DATUMS • APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: - ADDITION NO. 6: SUBTRACT 0.80 FT - PRIOR ADDITIONS: SUBTRACT 1.04 FT	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DES: ADP DRN: SLB CHK: BMB	PROCESS DEWATERING AND DRYING AREA SECTIONS 1	LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE I CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 165 OF 421
		REGISTERED PROFESSIONAL ENGINEER HDR ENGINEERING, INC. DATE FIRM	CHIEF, BUREAU OF UTILITIES DATE	DATE: 12/2016 06/30/2017 1 REV DESCRIPTION DESIGN REVISION NO. 10				



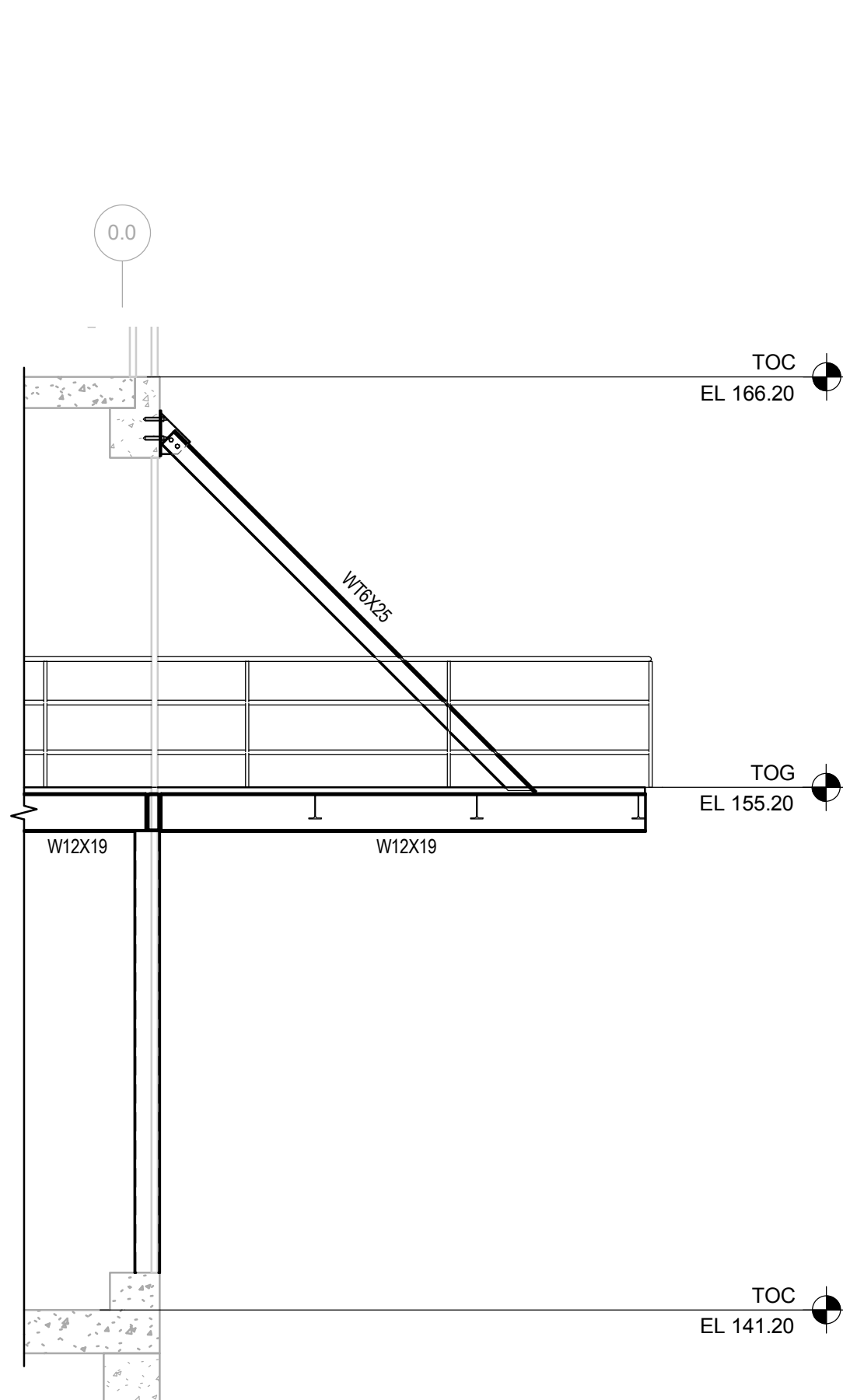
A SECTION
S-421 1" = 1'-0"



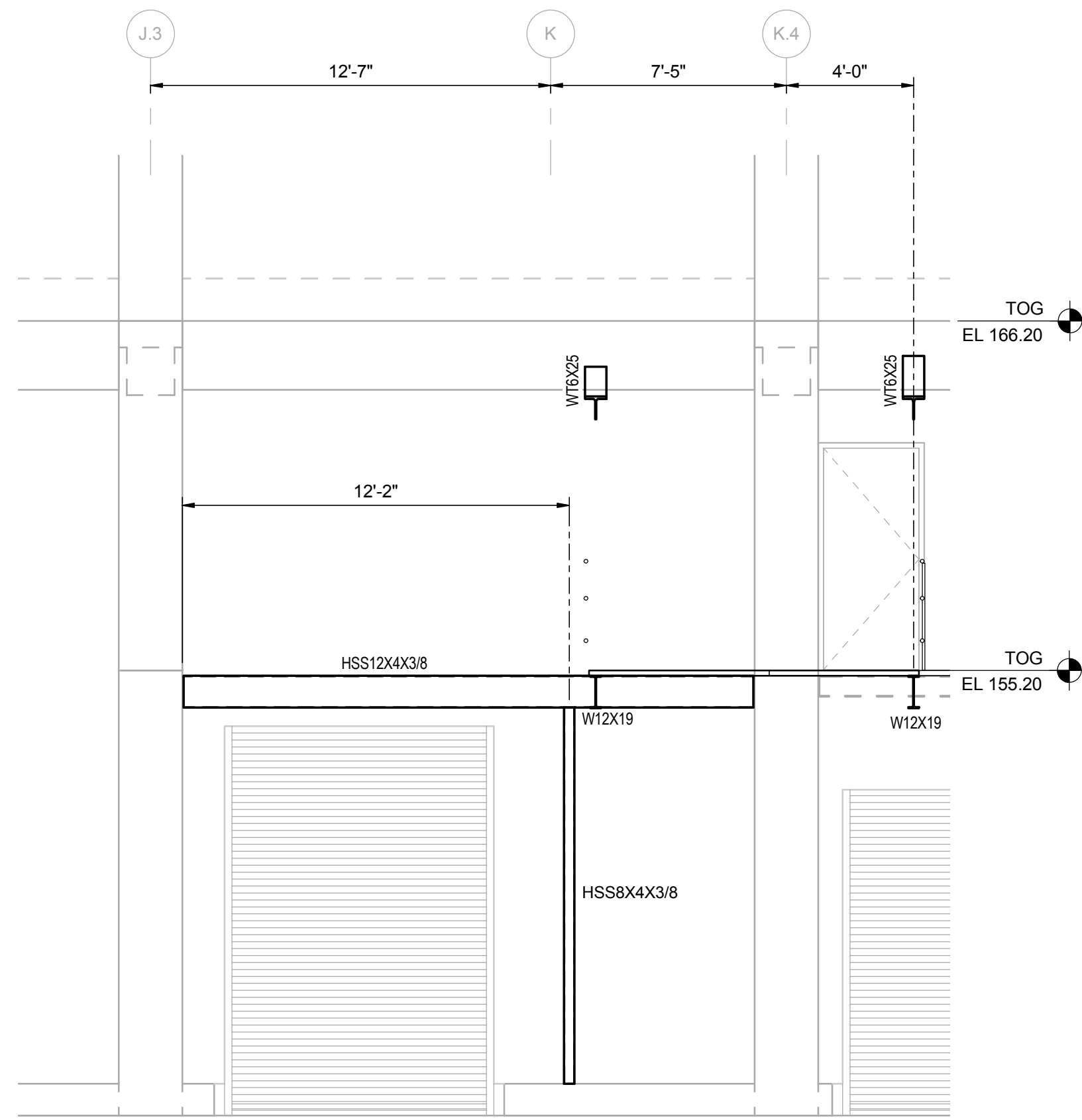
B SECTION
S-421 1" = 1'-0"



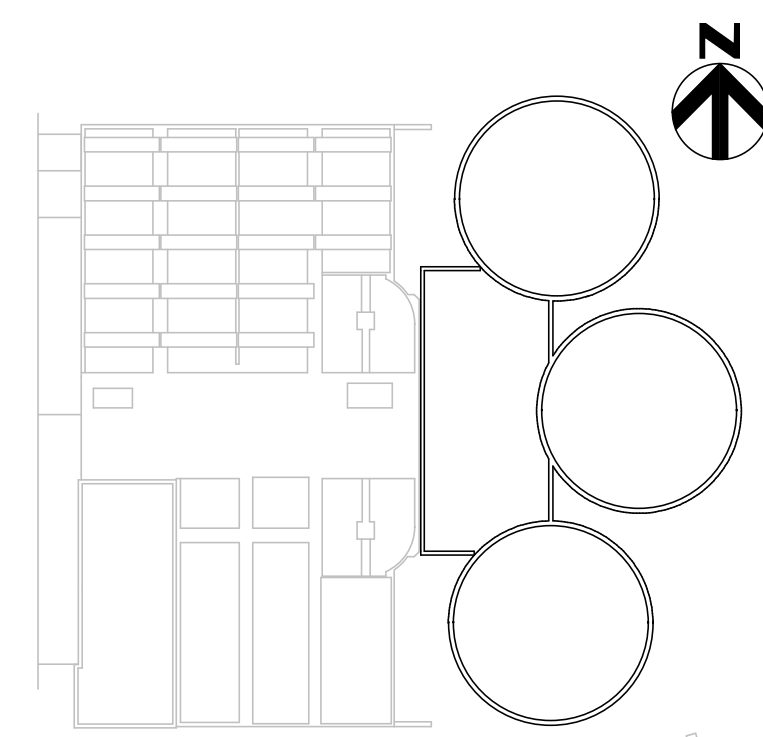
C SECTION
S-421 3/4" = 1'-0"



D SECTION
S-421 1/4" = 1'-0"



E ELEVATION
S-421 1/4" = 1'-0"



KEY PLAN



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 49839, EXPIRATION DATE: 9/04/2018.

REGISTERED PROFESSIONAL ENGINEER
HDR ENGINEERING, INC.
DATE FIRM

NOTICE TO CONTRACTORS

- PROJECT ELEVATIONS ARE BASED ON NAVD88 AND HOWARD COUNTY'S BENCHMARK SYSTEM
- PREVIOUS PROJECTS USED OTHER DATUMS
- APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS:
 - ADDITION NO. 6: SUBTRACT 0.80 FT
 - PRIOR ADDITIONS: SUBTRACT 1.04 FT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE

DES: Designer			
DRN: Author			
CHK: Checker			
DATE: 12/2016			
DATE	REV	DESCRIPTION	

SECTIONS AND DETAILS

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

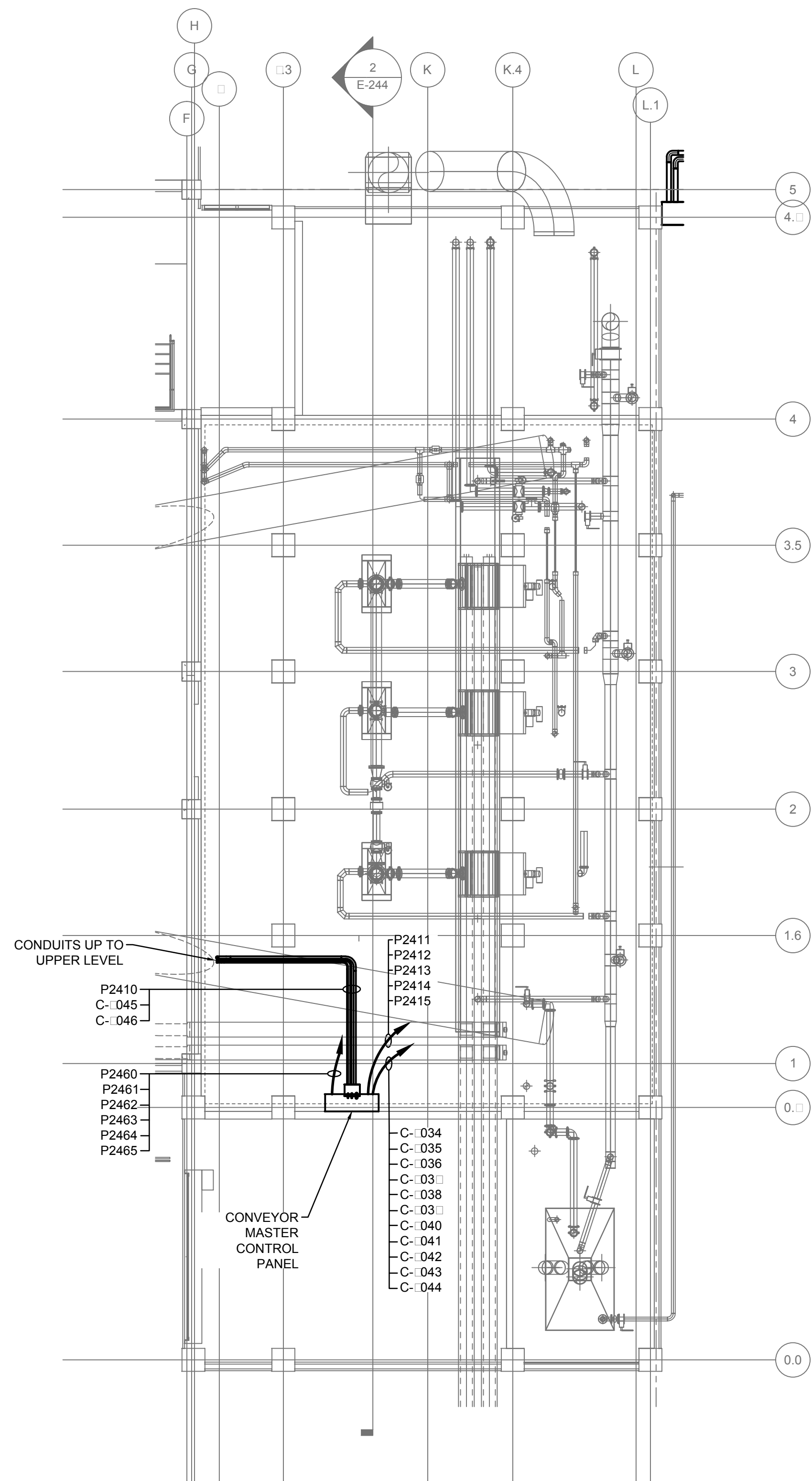
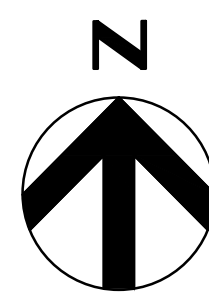
SCALE AS SHOWN

SHEET OF 421

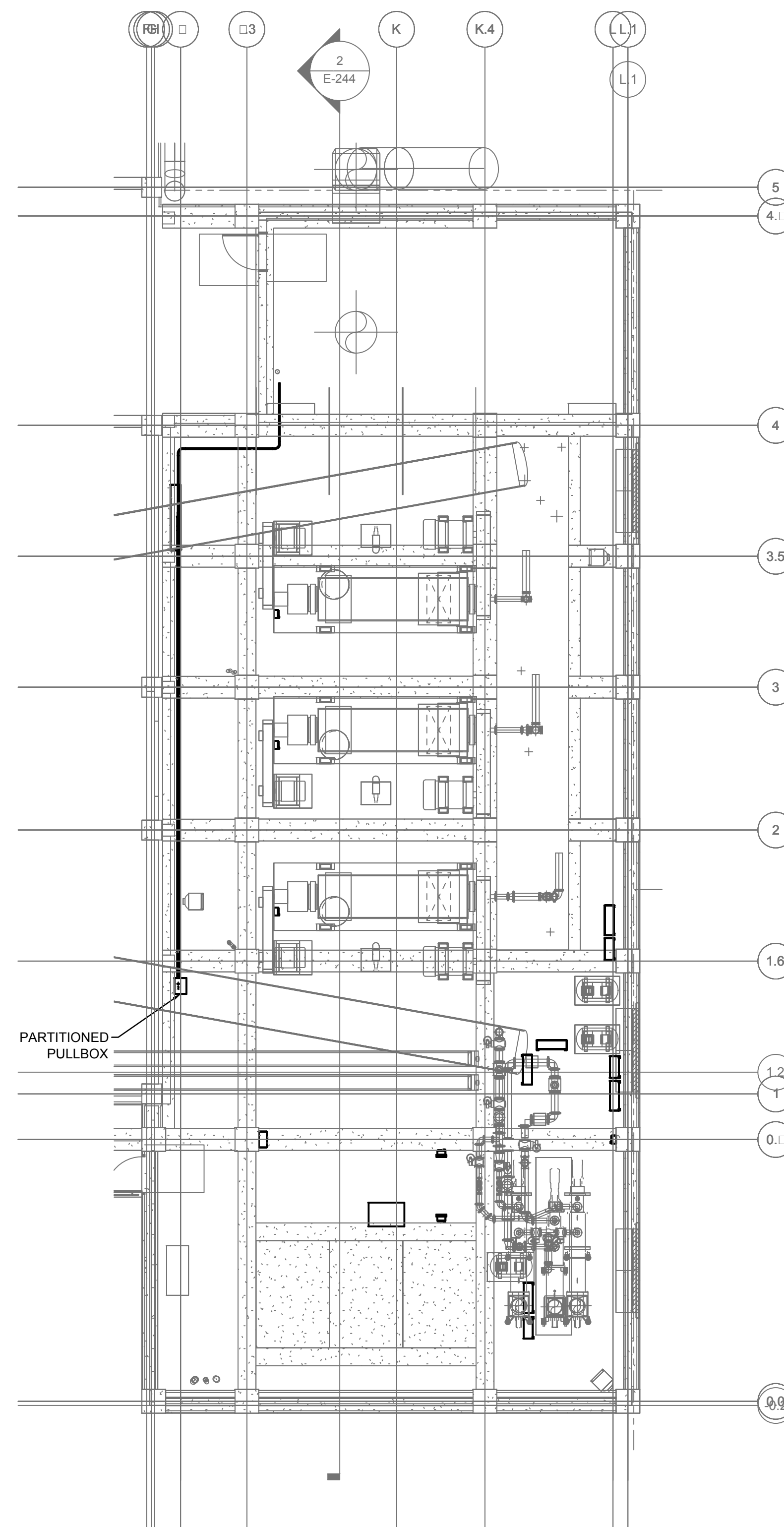
S-422

GENERAL NOTES:

1. FOR SYMBOLS AND ABBREVIATIONS, SEE DRAWING E-1.
2. FOR MCC-15 ONE LINE DIAGRAM, SEE DRAWING E-16.
3. FOR CABLE AND CONDUIT SCHEDULE, SEE DRAWINGS E-08 AND E-11.
4. FOR INSTRUMENT RISER ONE LINE DIAGRAM, SEE DRAWING E-632.
5. FOR EQUIPMENT LOCATION, SEE PROCESS DRAWINGS.
6. DRAWINGS ARE INTENDED TO DEPICT DESIGN INTENT. CONTRACTOR TO REFER TO SPECIFICATIONS, P-IDS AND STANDARD DETAILS FOR FURTHER INSTALLATION REQUIREMENTS.



PLAN AT EL 155.2

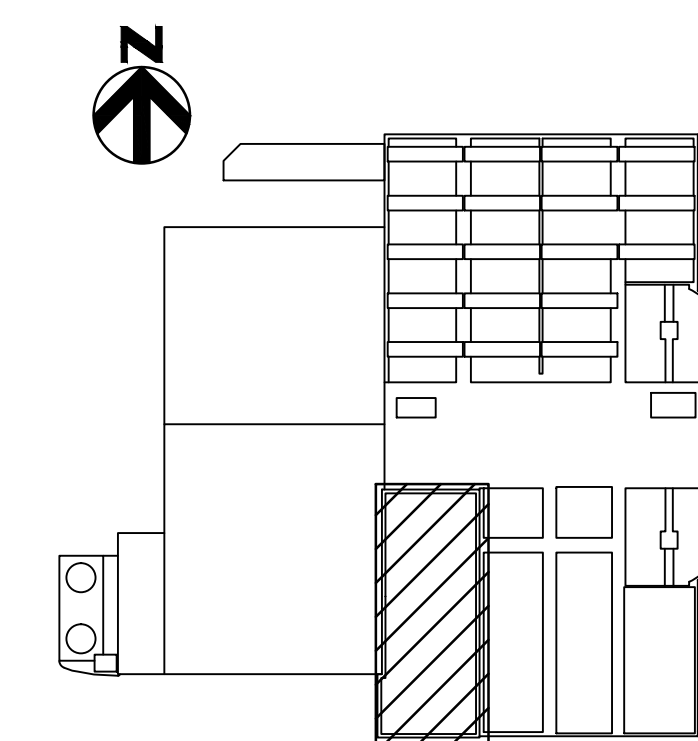
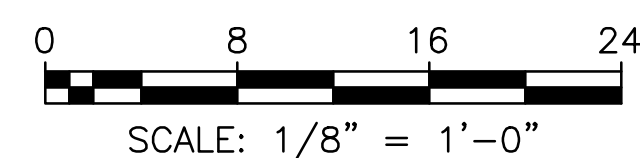


PLAN AT EL 166.20

DEWATERING AND DRYING AREA - ELECTRICAL AND I/C PLAN

SCALE: 1/8" = 1'-0"

GRAPHIC SCALE



KEY PLAN

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 11084, EXPIRATION DATE: 09-06-2018.

REGISTERED PROFESSIONAL ENGINEER
SHAH & ASSOCIATES
DATE FIRM

NOTICE TO CONTRACTORS

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 - ADDITION NO. 6: SUBTRACT 0.80 FT
 - PRIOR ADDITIONS: SUBTRACT 1.04 FT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE

DES:	SR		
DRN:	A.S		
CHK:	KRS		
DATE:	10/2016	6/15/2017	1
		DATE	REV
			DR 10
			DESCRIPTION

ELECTRICAL

DEWATERING AND DRYING AREA
ELECTRICAL AND I/C PLAN

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 319A OF 421

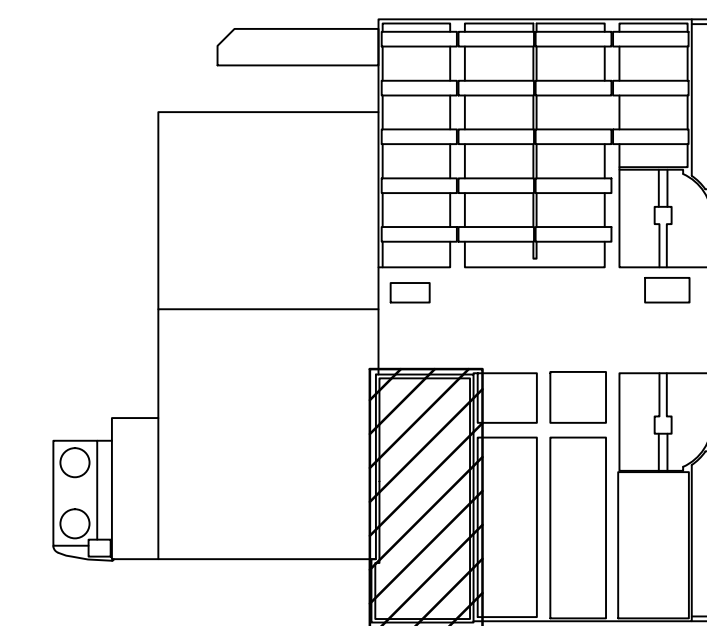
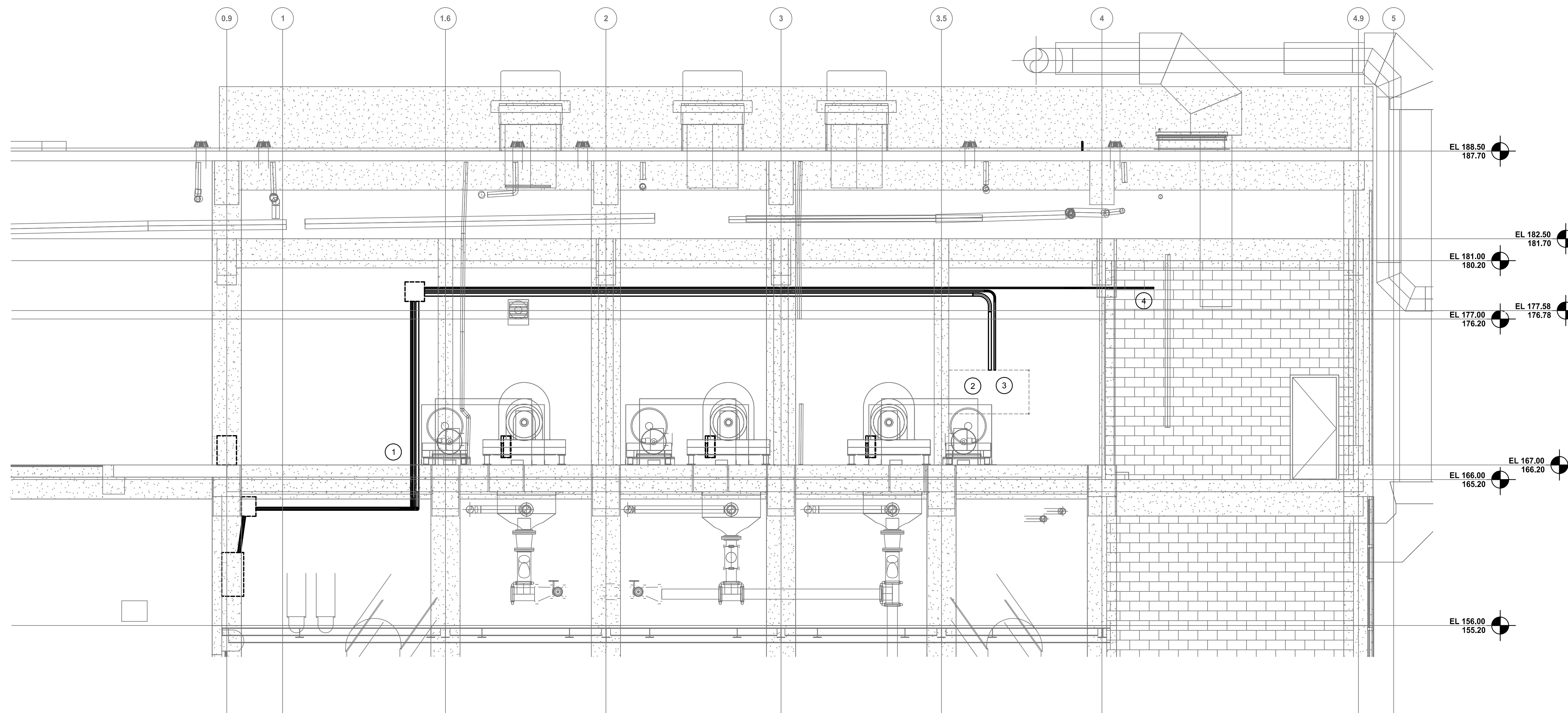
E-243

GENERAL NOTES:

1. FOR SYMBOLS AND ABBREVIATIONS, SEE DRAWING E-1.
2. FOR MCC-15 ONE LINE DIAGRAM, SEE DRAWING E-16.
3. FOR CABLE AND CONDUIT SCHEDULE, SEE DRAWINGS E-08 AND E-11.
4. FOR INSTRUMENT RISER ONE LINE DIAGRAM, SEE DRAWING E-632.
5. FOR EQUIPMENT LOCATION, SEE PROCESS DRAWINGS.
6. DRAWINGS ARE INTENDED TO DEPICT DESIGN INTENT. CONTRACTOR TO REFER TO SPECIFICATIONS, P-IDS AND STANDARD DETAILS FOR FURTHER INSTALLATION REQUIREMENTS.

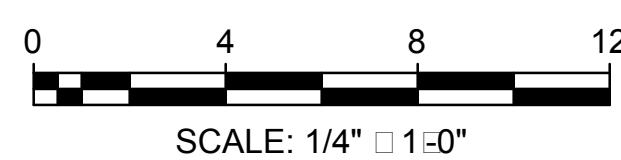
DRAWING NOTE:

- 1 THIS DRAWING IS SHOWING THE GENERAL CONDUIT ROUTING FOR CONDUITS FROM THE CONVEYOR MASTER CONTROL PANEL TO THE CHEMICAL HANDLING ELECTRICAL ROOM AND TO THE CENTRIFUGE BUILDING CONTROL ROOM. CONTRACTOR SHALL FIELD VERIFY FOR EXACT LOCATION OF CORE DRILL IN TO THE UPPER FLOOR.
- 2 THE CONDUITS FOR THE 480V POWER AND THE FIBER OPTIC CABLE GOING BACK TO THE CHEMICAL HANDLING AREA ELECTRICAL ROOM SHALL RUN PARALLEL TO THE EXISTING CONDUITS RUNNING TO THE ELECTRICAL ROOM VIA THE LIME BUILDING FROM THE EXISTING PULL BOX IN THE CENTRIFUGE BUILDING UPPER FLOOR BACK TO THE ELECTRICAL ROOM. DURING THE DEMOLITION OF THE LIME BUILDING, THE CONTRACTOR SHALL PROTECT THESE CONDUITS IN PLACE.
- 3 THE FIBER OPTIC CABLE SHALL BE TERMINATED IN A PULL BOX AS IT ENTERS THE ELECTRICAL ROOM. THIS CABLE SHALL BE CONNECTED TO THE DIGESTED SOLIDS AREA PLC PANEL ONCE THE PANEL IS INSTALLED IN PHASE 1.
- 4 THE 3/4" CONDUIT SHALL BE ROUTED TO THE CENTRIFUGE CONTROL ROOM AND BRANCH OUT TO BE CONNECTED TO EACH OF THE THREE CENTRIFUGE CONTROL PANELS.







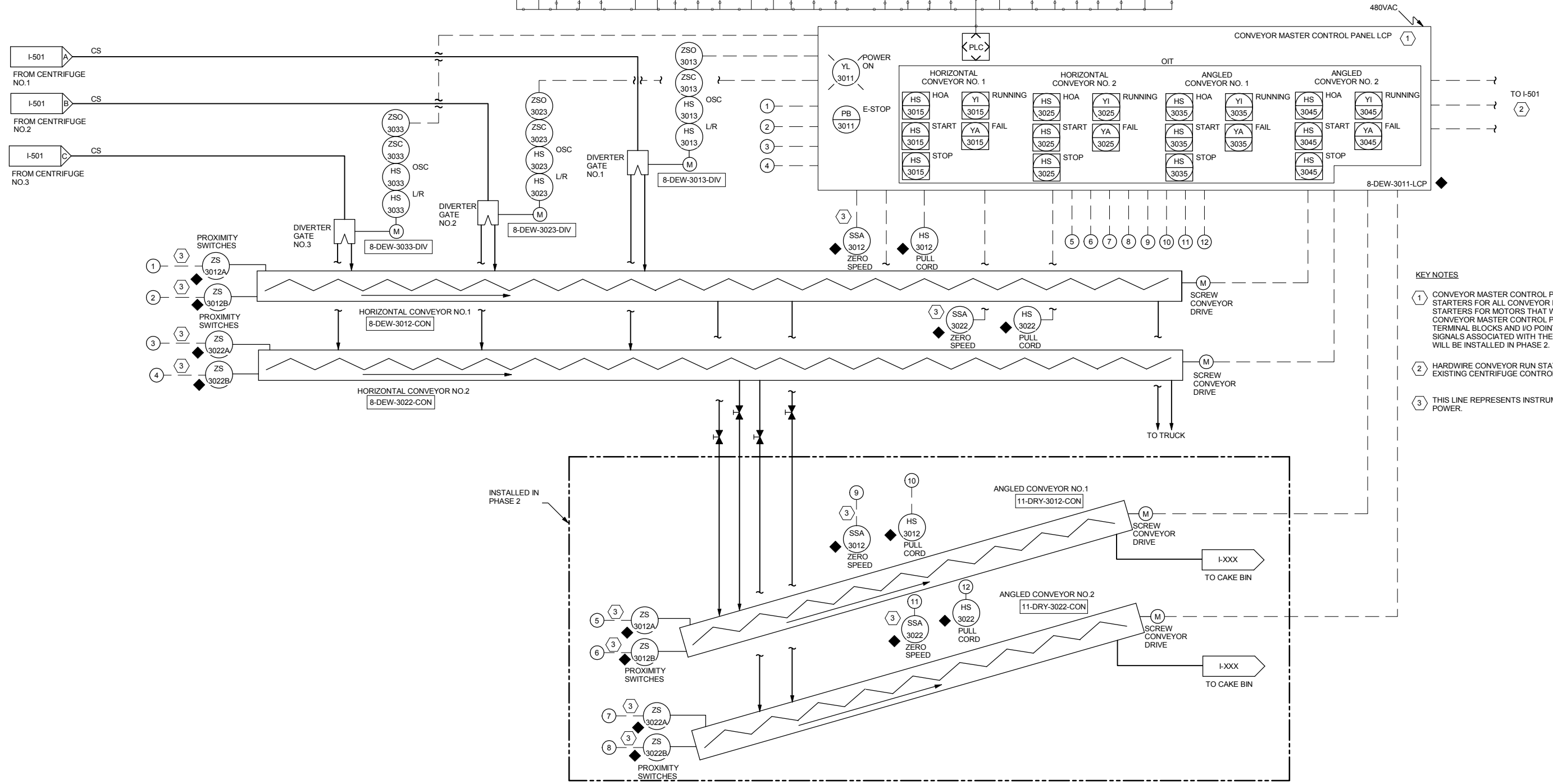
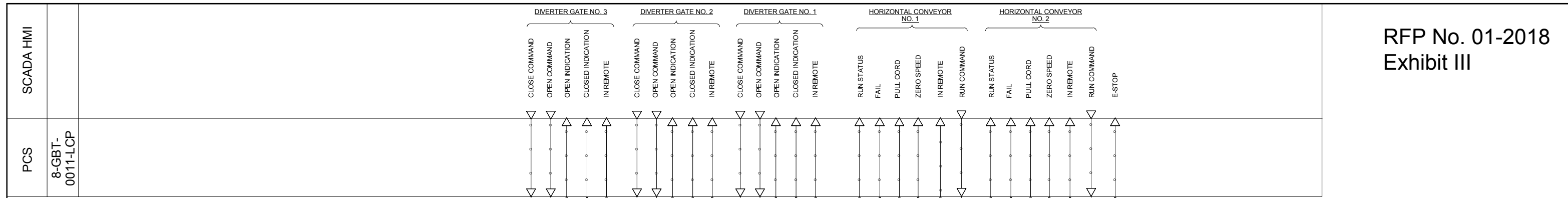
KEY PLAN

GRAPHIC SCALE



SECTION
E-243 SCALE: NONE

 SHAH & ASSOCIATES	 HDR	PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 11084, EXPIRATION DATE: 09-06-2018.	NOTICE TO CONTRACTORS • PROJECT ELEVATIONS ARE BASED ON NAVD88 AND HOWARD COUNTY'S BENCHMARK SYSTEM • PREVIOUS PROJECTS USED OTHER DATUMS • APPLY THE FOLLOWING CONVERSIONS WHEN USING PREVIOUS CONTRACT DRAWINGS: - ADDITION NO. 6: SUBTRACT 0.80 FT - PRIOR ADDITIONS: SUBTRACT 1.04 FT	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE	DES: SR DRN: A.S CHK: KRS DATE: 10/2016	6/15/2017 1 DR 10 DATE REV DESCRIPTION	ELECTRICAL DEWATERING AND DRYING AREA ELECTRICAL AND I/C SECTION	LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE I CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 319B OF 421 
		REGISTERED PROFESSIONAL ENGINEER _____ SHAH & ASSOCIATES DATE FIRM	CHIEF, BUREAU OF UTILITIES DATE	DATE: 10/2016	6/15/2017 1 DR 10 DATE REV DESCRIPTION	LITTLE PATUXENT WATER RECLAMATION PLANT 8TH ADDITION BIOSOLIDS PROCESSING FACILITIES - PHASE I CAPITAL PROJECT S-6295 CONTRACT NO. 24-4935 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 319B OF 421 		



- KEY NOTES**
- 1 CONVEYOR MASTER CONTROL PANEL SHALL INCLUDE STARTERS FOR ALL CONVEYOR MOTORS INCLUDING STARTERS FOR MOTORS THAT WILL BE INSTALLED IN PHASE 2. CONVEYOR MASTER CONTROL PANEL SHALL INCLUDE SPARE TERMINAL BLOCKS AND I/O POINTS FOR INSTRUMENTS AND SIGNALS ASSOCIATED WITH THE ANGLED CONVEYORS THAT WILL BE INSTALLED IN PHASE 2.
 - 2 HARDWIRE CONVEYOR RUN STATUS TO EACH OF THE EXISTING CENTRIFUGE CONTROL PANELS.
 - 3 THIS LINE REPRESENTS INSTRUMENT SIGNAL AND 120 VAC POWER.

C:\w\26492_V_V14_sadbo.rvt
6/14/2017 11:02:14 PM



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: _____, EXPIRATION DATE: _____

REGISTERED PROFESSIONAL ENGINEER

DATE _____ FIRM _____

NOTICE TO CONTRACTORS

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- PRIOR ADDITIONS: SUBTRACT 1.04 FT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE _____

DES: LH				
DRN: LH				
CHK: BF				
DATE: 04/20/2017	06/15/2017	A	DESIGN REVISION NO. 10	
	DATE	REV	DESCRIPTION	

DEWATERED SOLIDS MATERIALS HANDLING SYSTEM UP 08.06.02

LITTLE PATUXENT WATER RECLAMATION PLANT
8TH ADDITION
BIOSOLIDS PROCESSING FACILITIES - PHASE I

CAPITAL PROJECT S-6295
CONTRACT NO. 24-4935

ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET OF 500
I-502