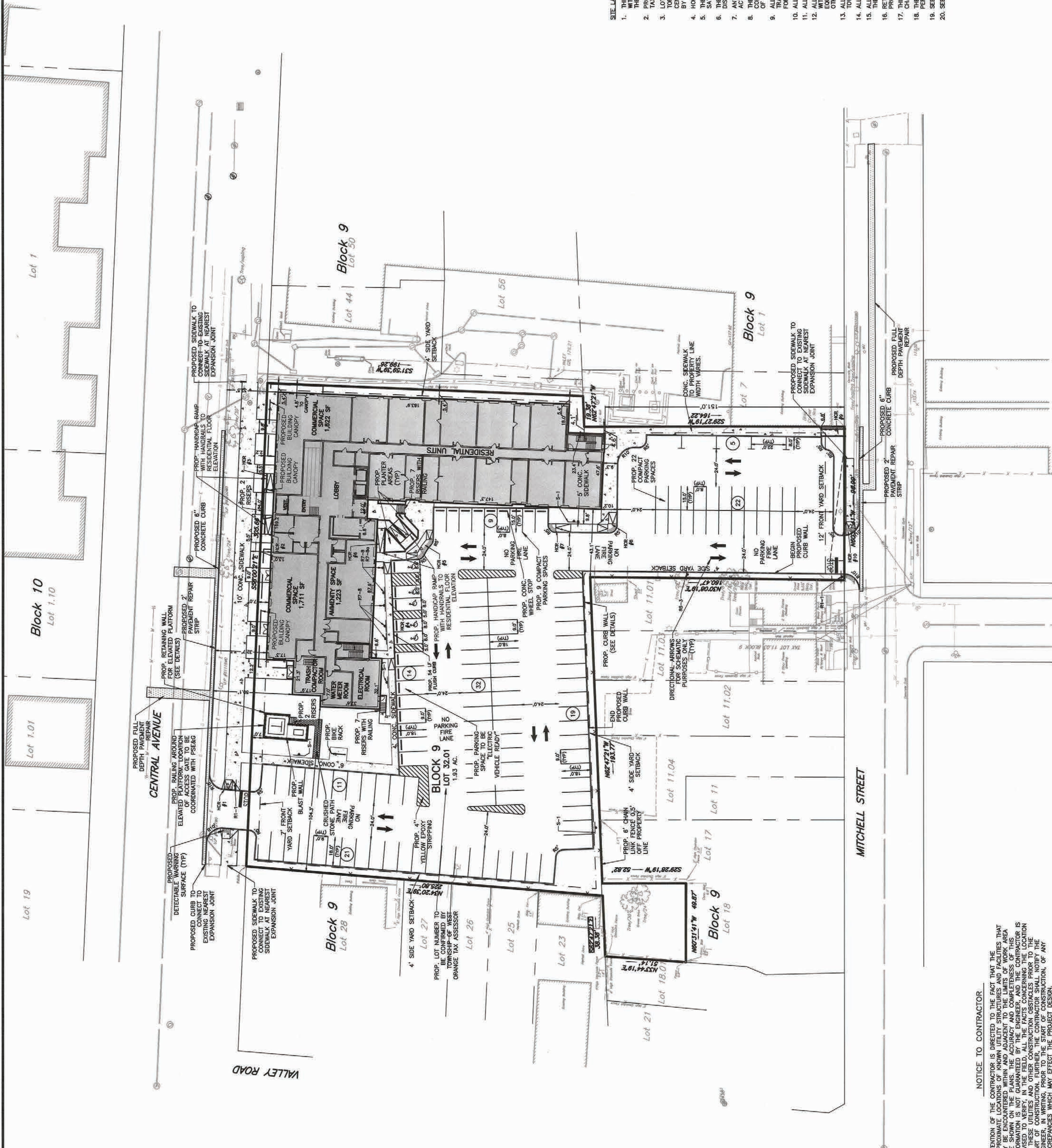


ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF THIS PROJECT ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY EFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000) TO OBTAIN THE NEAREST UTILITY MARKOUT BEFORE THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.



REFERENCE MERIDIAN
N.I.S.P.C.S. MAD 1995
(SEE NOTE 9)

TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

SHEET 3 OF 15

442 State Route 35, Second Floor
 Eatontown, New Jersey 07724
 www.mntrxnworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GA027962300

DATE 3/1/2021

SMS	RELEASED BY:	CFO	REVIEWED BY:	CFO
NO.	1.			
DESCRIPTION	REV. PER WEST ORANGE SPFAB MEETING DATED 2/9/21			
DATE:	02/23/21			
DES:	DD			
REV:	SS			
REL:	MD			

NOTICE TO CONTRACTOR
ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA HAVE BEEN OBTAINED FROM THE RECORD DRAWINGS AND FIELD SURVEY. THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY EFFECT THE PROJECT DESIGN.
THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.



DESIGNED BY:			
SEAN M. SAVAGE, P.E.			
LICENSE NO. 246E04451000			
REVIEWED BY:			
CTD			
RELEASED BY:			
CTD			
SMS			
1. REV. PER WEST ORANGE SPRAW MEETING DATED 2/29/21			
REVISIONS			
NO.	DESCRIPTION	DATE	REV.
1	REV. PER WEST ORANGE SPRAW MEETING DATED 2/29/21	02/23/21	1

EXISTING		PROPOSED	
BOUNDARY LINE	---	BOUNDARY LINE	---
LOT LINE	---	LOT LINE	---
SETBACK LINE	---	SETBACK LINE	---
CURB LINE	---	CURB LINE	---
DEPRESSED CURB	---	DEPRESSED CURB	---
EDGE OF PAVEMENT	---	EDGE OF PAVEMENT	---
PAINT LINE	---	PAINT LINE	---
CONCRETE	---	CONCRETE	---
FENCE	---	FENCE	---
GUIDE RAIL	---	GUIDE RAIL	---
RETAINING WALL/BULKHEAD	---	RETAINING WALL/BULKHEAD	---
TREE LINE	---	TREE LINE	---
CONTOURS	---	CONTOURS	---
SPOT ELEVATION	---	SPOT ELEVATION	---
HIGH POINT ELEVATION	---	HIGH POINT ELEVATION	---
LOW POINT ELEVATION	---	LOW POINT ELEVATION	---
GUTTER ELEVATION	---	GUTTER ELEVATION	---
TOP OF CURB ELEVATION	---	TOP OF CURB ELEVATION	---
GRATE ELEVATION	---	GRATE ELEVATION	---
RM ELEVATION	---	RM ELEVATION	---
TW ELEVATION	---	TW ELEVATION	---
FINISHED FLOOR ELEV.	---	FINISHED FLOOR ELEV.	---
DRAINAGE FLOW DIRECTION	---	DRAINAGE FLOW DIRECTION	---
STORM DRAIN	---	STORM DRAIN	---
DOUBLE INLET	---	DOUBLE INLET	---
RECONSTRUCT INLET	---	RECONSTRUCT INLET	---
RESET INLET	---	RESET INLET	---
MANHOLE	---	MANHOLE	---
RECONSTRUCT MANHOLE	---	RECONSTRUCT MANHOLE	---
RESET MANHOLE	---	RESET MANHOLE	---
CLEANOUT	---	CLEANOUT	---
DOWNSPOUT	---	DOWNSPOUT	---
ROOF DOWNSPOUT	---	ROOF DOWNSPOUT	---
SANITARY CLEANOUT	---	SANITARY CLEANOUT	---
WATER MAIN	---	WATER MAIN	---
WATER VALVE	---	WATER VALVE	---
WATER VALVE RESET	---	WATER VALVE RESET	---
FIRE HYDRANT	---	FIRE HYDRANT	---
GAS MAIN	---	GAS MAIN	---
GAS VALVE	---	GAS VALVE	---
GAS VALVE RESET	---	GAS VALVE RESET	---
TELEPHONE	---	TELEPHONE	---
CABLE TELEVISION	---	CABLE TELEVISION	---
ELECTRIC CONDUIT	---	ELECTRIC CONDUIT	---
OVER HEAD WIRE	---	OVER HEAD WIRE	---
UTILITY POLE	---	UTILITY POLE	---
GUY ANCHOR	---	GUY ANCHOR	---
FLOOD LIMIT	---	FLOOD LIMIT	---

LEGEND

DATE: 2/1/2021

SEAN M. SAVAGE, P.E.

LICENSE NO. 246E04451000

MATRIXNEWORLD

Engineering Progress

and Landscape Architecture, P.C.

442 State Route 35, Second Floor

Easton, NJ 07824

WBE / DBE

NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GAZ7862300

Tel: 732-568-9999

Fax: 973-240-1818

www.matrixnewworld.com

PRELIMINARY & FINAL MAJOR SITE PLAN

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 9 - LOT 32 & 36

SITUATED IN

TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER: LD19-153

DATE: 12/16/2020

SCALE: 1"=30'

SHEET 4 OF 15

GRAPHIC SCALE

1 inch=30 feet

- FLOOD HAZARD AREA NOTES:
1. THE FLOOD HAZARD AREA DESIGN ASSOCIATED WITH THE EAST FORK OF THE EAST BRANCH RANNEY RIVER RANGES FROM 176 TO 176.4 FEET ABOVE MEAN SEA LEVEL (MSL) TO 175.38 FEET ABOVE MSL. THIS EQUIVALES TO A RANGE OF 174.98 TO 175.38 NMDBR. FHA160002 THIS EQUIVALES TO A RANGE OF 174.98 TO 175.38 NMDBR.
 2. THE PROPOSED ZONE AND FLOODWAY ASSOCIATED WITH THE EAST FORK OF THE RANNEY RIVER DO NOT EXTEND ONTO THIS PROPERTY AS VERIFIED BY NIDEP ON 9-22-16 (FILE #0700-07-0002.1 FHA160002).
 3. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND BRADIAN ZONES ARE REGULATED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SOME ACTIVITIES MAY BE PROHIBITED ON THIS SITE OR MAY FIRST REQUIRE A FLOOD HAZARD AREA PERMIT, CONSULTATION AND USE REGULATION AT (609)777-0464 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION DATE.

- GRADING NOTES:
1. PROJECT KNOWN AND DESIGNATED AS TAX MAP LOTS: 32 & 36, BLOCK 9, AS SHOWN ON THE CURRENT TAX ASSESSMENT MAPS OF THE TOWNSHIP OF WEST ORANGE, TAX MAP SHEET 23
 2. LOT INFORMATION FOR BLOCK 9, LOTS 32 & 36 BASED UPON A SURVEY ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY, TAX LOT 32 BLOCK 9 (8-10 CENTRAL AVENUE) AND TAX LOT 36 BLOCK 9 (18 CENTRAL AVENUE), SITUATED IN, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY"; PREPARED BY MATRIX NEW WORLD ENGINEERING AND DATED 3/20/2020.
 3. HORIZONTAL DATUM: NAD 83; VERTICAL DATUM: NAVD 88.
 4. ALL PROPOSED ON-SITE CURBING TO BE VERTICAL CONCRETE CURB WITH 6" REVEAL, UNLESS OTHERWISE STATED.
 5. ALL CURBS SHALL BE FLUSH AT CROSSEWALKS AND CONFORM TO APPLICABLE STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS.
 6. UNGRADED AREAS ARE TO CONFORM TO THE ACCESSIBILITY STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.
 7. ALL WALKWAYS TO HAVE A MAXIMUM GROSS SLOPE OF 2% AND RUNNING SLOPE OF 5% UNLESS OTHERWISE NOTED.
 8. SIDEWALK/WALKWAY RISERS MUST BE GREATER THAN 4" AND LESS THAN 8".
 9. ALL GRADING WITHIN GRASSED AREAS TO BE A MINIMUM OF 2% AND A MAXIMUM OF 3:1 (3 HORIZONTAL, 1 VERTICAL) SLOPE UNLESS OTHERWISE NOTED.
 10. ALL GRADING IN PAVEMENT AREAS SHALL BE GREATER THAN 1% UNLESS OTHERWISE NOTED.
 11. POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
 12. FLOOR ELEVATIONS, ADJACENT GRADE, DOORWAY LOCATIONS AND ELEVATIONS SHALL BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
 13. FLOOD HAZARD AREA ELEVATION TO BE FLOOD PROOFED IN ACCORDANCE WITH APPLICABLE INDEP REQUIREMENTS.
 14. FLOOD HAZARD AREA ELEVATION TO BE FLOOD PROOFED IN ACCORDANCE WITH APPLICABLE INDEP REQUIREMENTS.
 15. ALL EXCAVATED SOIL TO BE DISPOSED SHALL BE PROPERLY CLASSIFIED, HANDLED, AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 16. ALL IMPORTED SOILS SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REQUIREMENTS NAG 7-285. IMPORTED SOILS SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT.
 17. ALL GRASSED AREAS TO HAVE A MINIMUM OF 4" CLEAN TOP SOIL WHEN SOD IS BEING INSTALLED, OR 6" CLEAN TOP SOIL FOR SEEDING APPLICATIONS.
 18. ALL CURB INLETS TO USE 6" CASTING, UNLESS OTHERWISE NOTED. TOP OF CASTING TO FOLLOW TOP OF CURB ELEVATIONS.
 19. ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-1000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.
 20. CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
 21. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR HAS THE OBLIGATION TO OBTAIN ALL NECESSARY PERMITS AND FOLLOW ALL APPLICABLE CONSTRUCTION STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES ARE THE OBLIGATION OF THE CONTRACTOR.

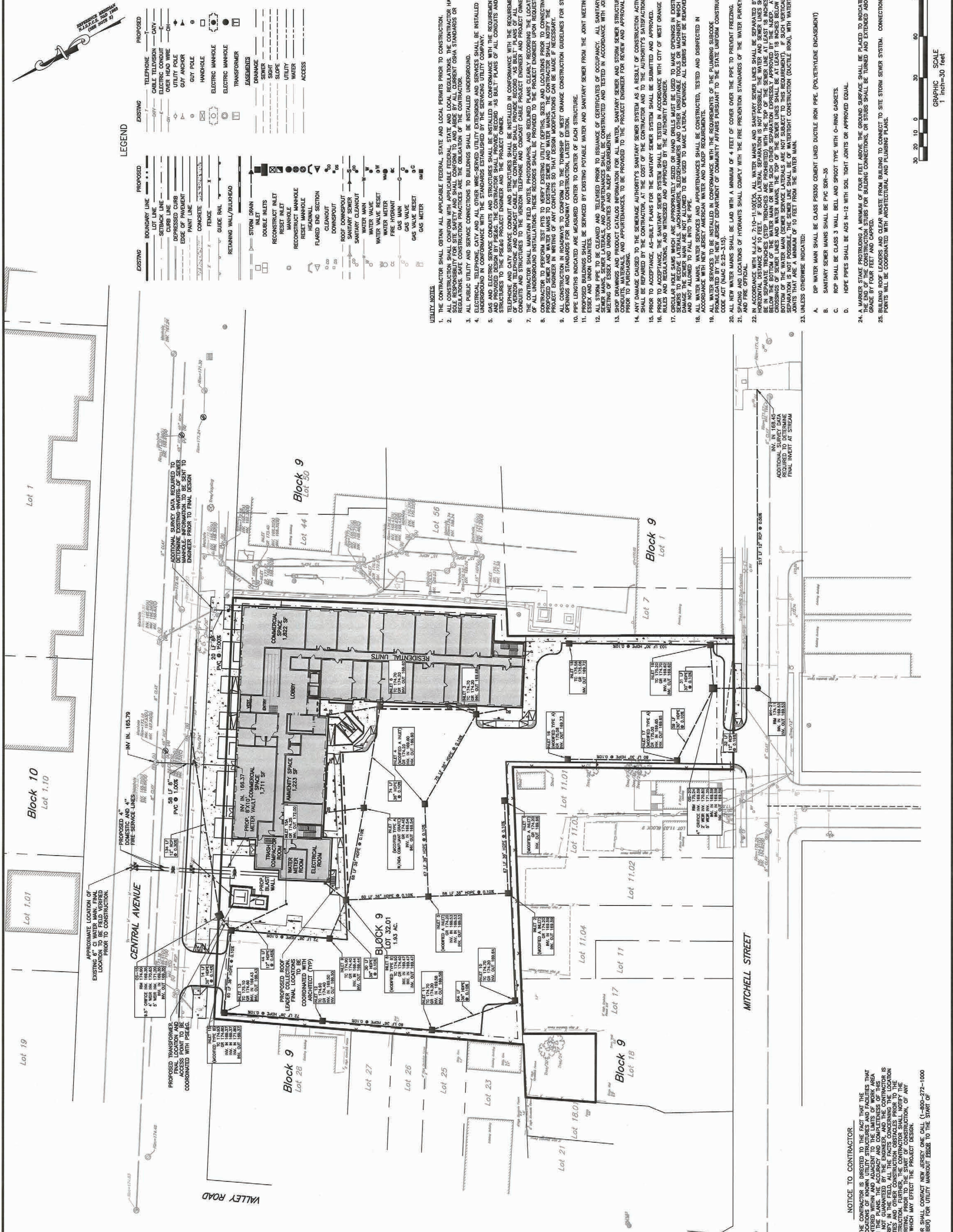


NOTICE TO CONTRACTOR

THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE INFORMATION CONTAINED HEREIN IS FOR INFORMATION ONLY. THE INFORMATION MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA. THE INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE INFORMATION PRIOR TO THE BEGINNING OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-292-1000) IMMEDIATELY FOR UTILITY MARKOUT BEFORE THE START OF CONSTRUCTION.

NOTICE TO CONTRACTOR



- A. DIP WATER MAIN SHALL BE CLASS PS3500 CEMENT UNED DUCTILE IRON PIPE. (POLYETHYLENE ENCASEMENT)
- B. SANITARY SEWER MAINS SHALL BE PVC SDR-35
- C. RCP SHALL BE CLASS 3 WALL BELL AND SPIGOT TYPE WITH O-RING GASKETS.
- D. HOPE PIPES SHALL BE ADS N-12 WITH SOIL TIGHT JOINTS OR APPROVED EQUAL.

24. A MARKER STAKE PROTRUDING A MINIMUM OF FOUR FEET ABOVE THE GROUND SURFACE SHALL BE PLACED TO INDICATE THE END OF THE CONSTRUCTION STUFS FOR BUILDING CONNECTIONS, ON STUFS SHALL BE TURNED AND EXTENDED ABOVE GRADE BY FOUR FEET AND CHIPPED.

25. BUILDING ROOF LEADERS AND CLEAR WASTE FROM BUILDING TO CONNECT TO SITE STORM SEWER SYSTEM. CONNECTION POINTS WILL BE COORDINATED WITH ARCHITECTURAL AND PLUMBING PLANS.

GRAPHIC SCALE
1 inch=30 feet

A horizontal graphic scale bar with alternating black and white segments. The segments are labeled with the following values from left to right: 30, 20, 10, 0, 30, 60, 90. The bar is divided into three main sections: the first section (0-30 feet) has three 10-foot segments; the second section (30-60 feet) has two 30-foot segments; and the third section (60-90 feet) has three 10-foot segments.

GRAPHIC SCALE
1 inch=30 feet

E-15

UTILITY PLAN

**PRELIMINARY & FINAL MAJOR SITE PLAN
PROPOSED MIXED-USE DEVELOPMENT
BLOCK 9 - LOT 32 & 36
SITUATED IN
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY**

MATRIX **NEW** WORLD

NEW JERSEY CERTIFICATE OF AUTHORIZATION No. Z46A27962300
www.marlinworld.com
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Eatontown, New Jersey 07724
442 State Route 35, Second Floor
Land and Landscape Architecture, P.C.
Marlin New World Engineering, Land Surveying
Tel: 732-588-2999
Fax: 973-240-1818

SEAN M. SAVAGE, P.E.

3/12/2021
DATE

SMS	NO.	DESCRIPTION	DATE:	DSSJ	REV#:	REL#:
RELEASED BY:	1.	REV. PER WEST ORANGE SPRAB MEETING DATED 2/8/21	02/23/21	CP	JS	BW
CID						
REVIEWED BY:						
CID						
DESIGNED BY:						

LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
	BOUNDARY LINE		TELEPHONE
	LOT LINE		CABLE TELEVISION
	SETBACK LINE		ELECTRIC CONDUIT
	CURB LINE		OVER HEAD WIRE
	DEPRESSED CURB		UTILITY POLE
	EDGE OF PAVEMENT		GUY ANCHOR
	PAINT LINE		GUY POLE
	CONCRETE		HANDHOLE
	FENCE		ELECTRIC MANHOLE
	GUIDE RAIL		ELECTRIC MANHOLE
	RETAINING WALL/BULKHEAD		TRANSFORMER
			EASEMENTS
	STORM DRAIN		DRAINAGE
	INLET		SEWER
	DOUBLE INLETS		HIGHWAY
	RECONSTRUCT INLET		SLOPE
	RESET INLET		UTILITY
	MANHOLE		WATER
	RECONSTRUCT MANHOLE		ACCESS
	RESET MANHOLE		
	FLARED END SECTION		
	CLEANOUT		
	DOWNSPOUT		
	ROOF DOWNSPOUT		
	SANITARY SEWER		
	SANITARY CLEANOUT		
	WATER MAIN		
	WATER VALVE		
	WATER VALVE RESET		
	WATER METER		
	FIRE HYDRANT		
	GAS MAIN		
	GAS VALVE		
	GAS VALVE RESET		

PROFILES

PRELIMINARY & FINAL MAJOR SITE PLAN

PROPOSED MIXED-USE DEVELOPMENT

BLOCK 9 - LOT 32 & 36

SITUATED IN

TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

MATRIXNEWORLD

Engineering Progress

Matrix New World Engineering, Land Surveying
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NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GA27962300
WBE / DBE

SEAN M. SAVAGE, P.E.

NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE04451000

DATE: 3/1/2021

DESIGNED BY: CTD

REVIEWED BY: CTD

RELEASED BY: SMS

REVISIONS				
NO.	DESCRIPTION	DATE	DES.	REV.
1	REV. PER WEST ORANGE SP/RAJ MEETING DATED 2/9/21	02/29/21	CTD	SS

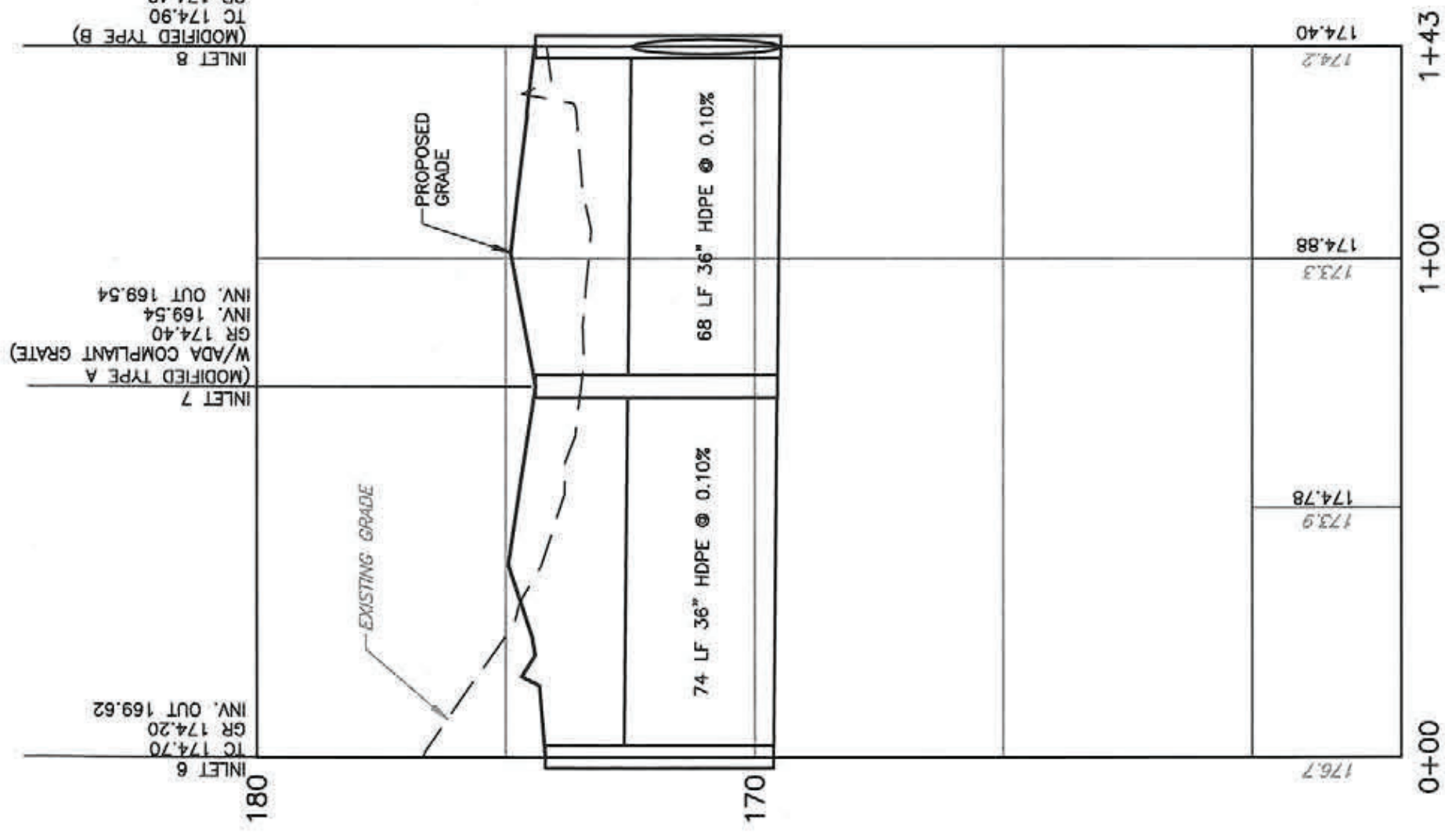
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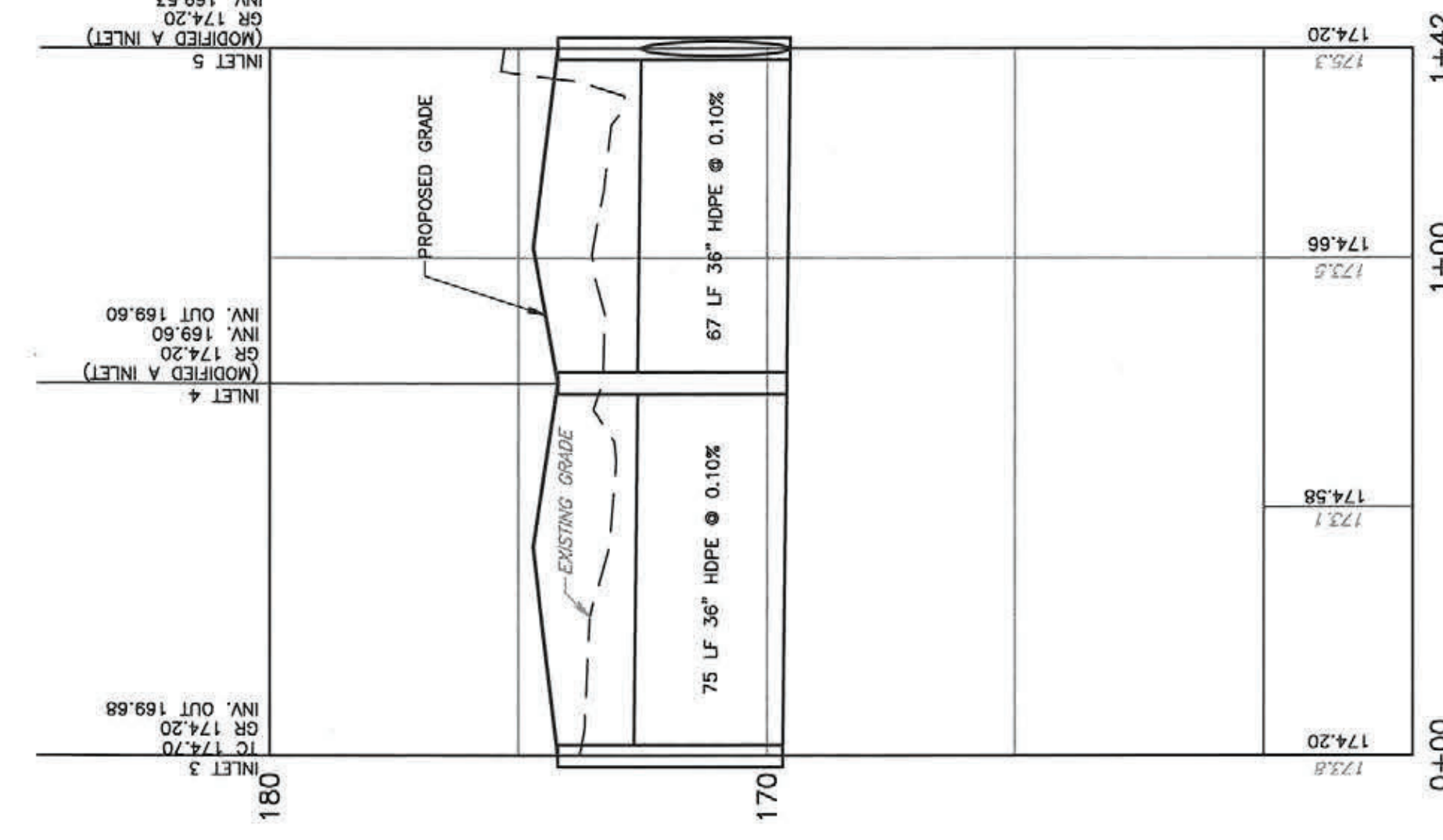
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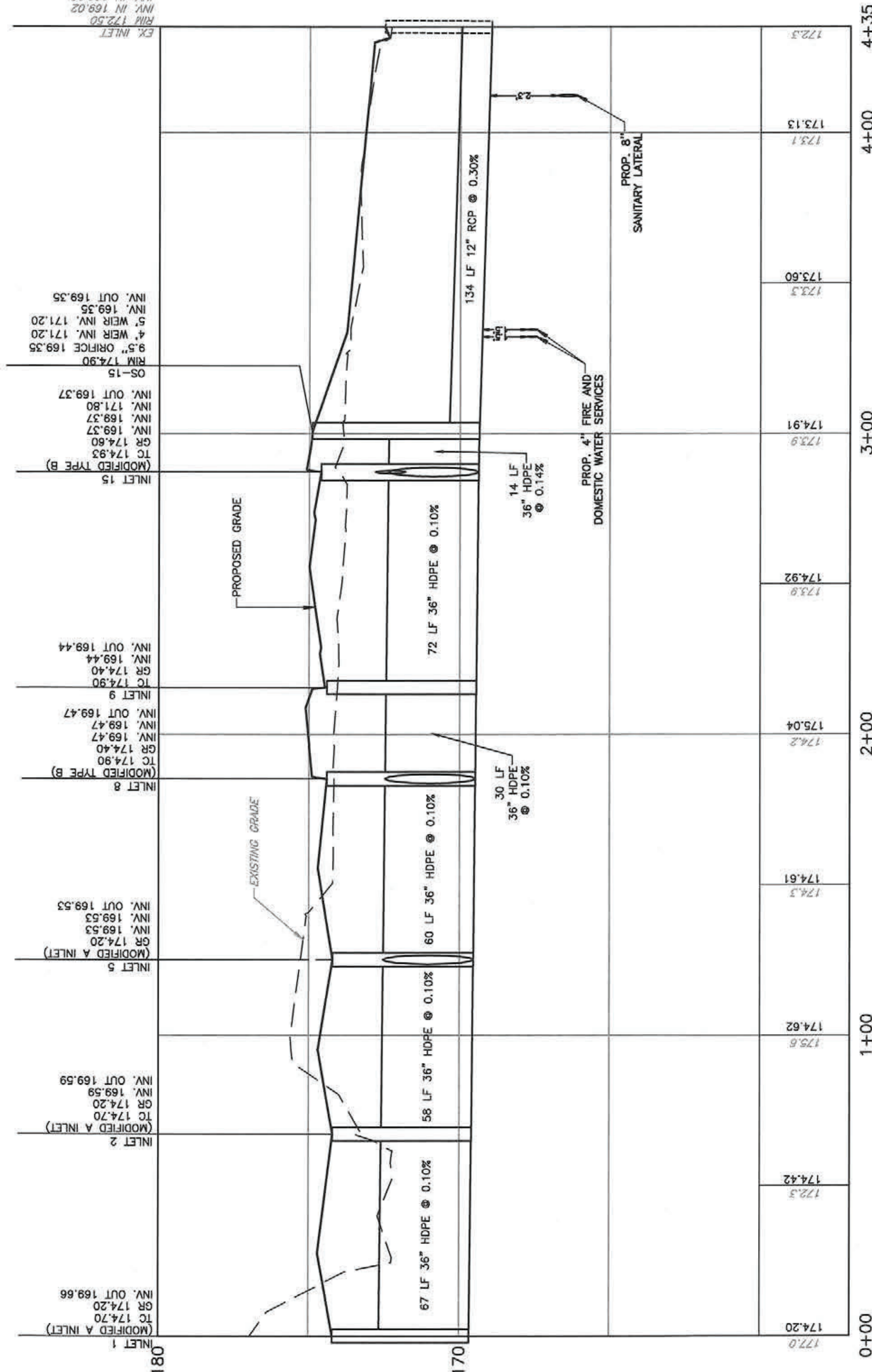
INLET-6 TO INLET-8



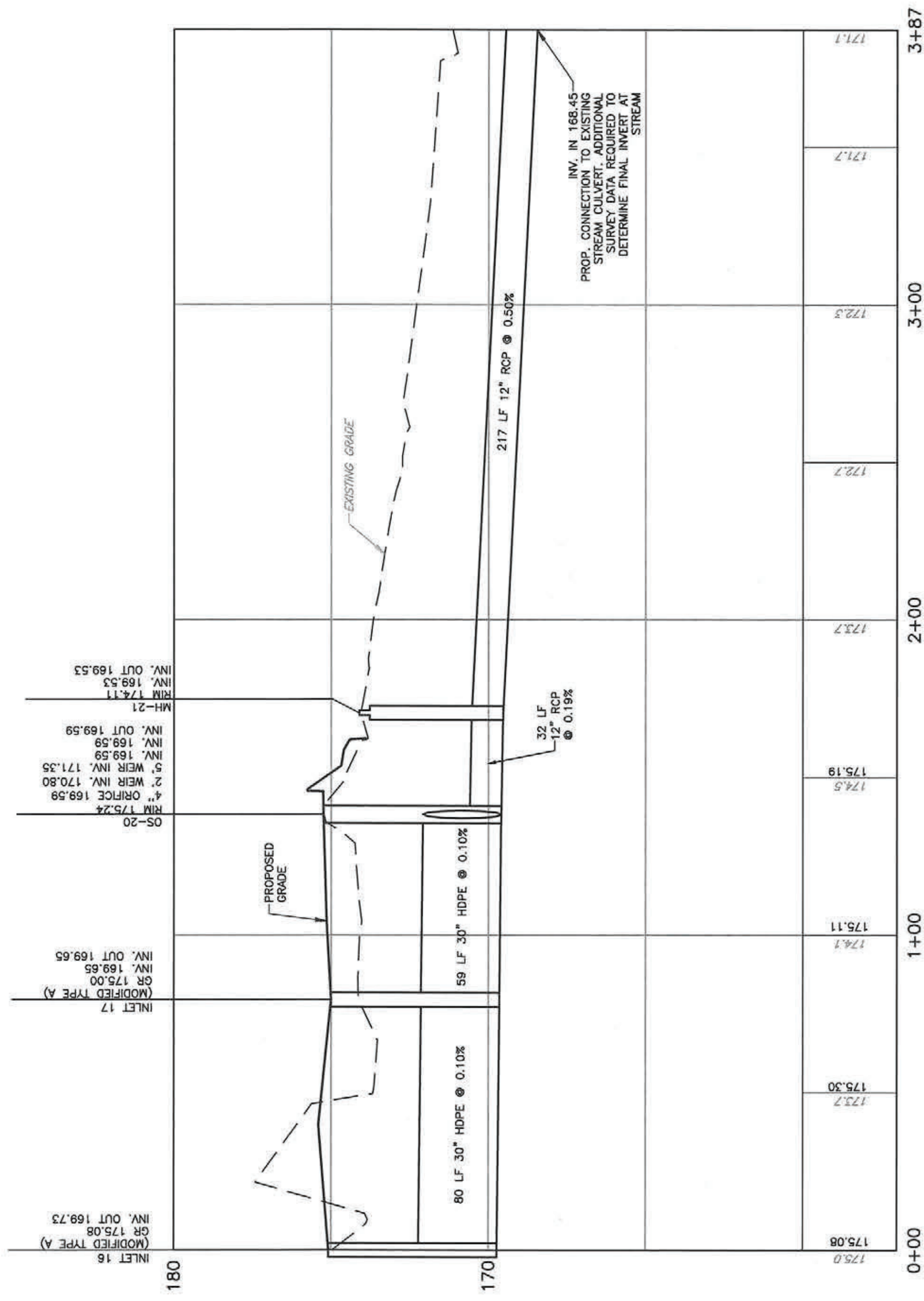
INLET-3 TO INLET-5



INLET-1 TO EX. INLET



INLET-18 TO CULVERT



INLET 10 TO INLET 15

