

LEGEND		
	EXISTING	PROPOSED
PROPERTY LINE/ROW	---	---
CONTOUR	--- 90 ---	--- 95 ---
SPOT ELEVATION	68.53	92.08
STORM MANHOLE	○	●
SANITARY MANHOLE	○	●
CATCH BASIN	□	■
STORM SEWER	---	---
SANITARY SEWER	---	---
RETAINING WALL	---	---

BLOCK 3903, LOTS 12 & 13
FORMALLY BLOCK 1007 LOTS 6, 7 & 8
NE LANDS OF AC NEPTUNE, LLC
DE 8686, PG 2027
AREA = 2,265,782.57 SQ FT OR 51.379 ACRES ±

PROPOSED WAREHOUSE
251,022± SF FOOTPRINT
237,022± SF WAREHOUSE SPACE
14,000± SF OFFICE SPACE
32 LOADING DOCKS
25 TRAILER PARKING SPACES
FFE: 102.00

LARGE-SCALE INFILTRATION BASIN 1H

RETAIL
15,000± SF
FFE: 90.00

POROUS ASPHALT PAVEMENT SYSTEM 1

NEW JERSEY STATE HIGHWAY ROUTE 66
(140' WIDE PUBLIC R.O.W.)

- GRADING AND DRAINAGE PLAN NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
 - PVC = POLYVINYL CHLORIDE PIPE
HDPE = HIGH DENSITY POLYETHYLENE PIPE
RCP = REINFORCED CONCRETE PIPE
 - STORM DRAINAGE PIPING TO UTILIZE WATER JOINT UNITS.
 - COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

FILL AREA	PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	98%
SIDEWALKS	95%
LANDSCAPE AREAS	90%
TRENCH BACKFILL	95%
 - PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
 - REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON-SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.
 - ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
 - THE CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO THE INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE, MANHOLE SIZE, TOP PIECES, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
 - CONTRACTOR TO PROVIDE A SHOP DRAWING FOR REVIEW AND APPROVAL BY THE OWNER'S ENGINEER FOR EACH CATCH BASIN, MANHOLE, AND OTHER PRECAST STORM STRUCTURES DETAILING STRUCTURE DIMENSIONS, LOCATION OF STEPS, PIPE CONNECTIONS AND OPENINGS, AND RIM/GRATE/INVERT ELEVATIONS. A SHOP DRAWING, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY, SHALL BE PROVIDED FOR EACH TYPE OF PRECAST CONCRETE STRUCTURE THAT DETAILS THE STRUCTURAL DESIGN. ALL PRECAST STRUCTURES AND FRAMES/GRATES SHALL MEET H-20 TRAFFIC LOADING REQUIREMENTS. CATCH BASINS, MANHOLES, AND DETENTION SYSTEM PIPING SHALL BE CONSTRUCTED IN A MANNER THAT WILL PREVENT FLOATION DUE TO GROUNDWATER. CONTRACTOR SHALL SUBMIT METHODOLOGY AND SUPPORTING BUOYANCY CALCULATIONS PREPARED BY AND SIGNED/SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY FOR ANTI-FLOATION OF THE STORM STRUCTURES IF THEY ARE TO BE LOCATED WITHIN THE GROUNDWATER TABLE.
 - THE CONTRACTOR SHALL PROVIDE A RETAINING WALL DESIGN FOR EACH PROPOSED WALL PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY FOR REVIEW BY THE OWNER'S ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR AND THE RETAINING WALL DESIGNER SHALL SPECIFICALLY NOTE ANY EXISTING OR PROPOSED STRUCTURES THAT ARE LOCATED IN OR NEAR THE WALL (INLETS, LIGHT POLES, FENCES, STORM PIPES, UTILITIES, GUIDE RAILS, AND OTHER FEATURES) AND SHALL COORDINATE DESIGN AND INSTALLATION OF RETAINING WALL SUCH THAT THE FEATURES ARE ACCOMMODATED IN THE DESIGN AS APPROPRIATE.
 - PIPE LENGTHS PROVIDED ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
 - CONTRACTOR SHALL CLEAR EXISTING STORM PIPES OF ANY DEBRIS OR SEDIMENT.
 - TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE OR PAVED SURFACE SHALL MEET THE FOLLOWING REQUIREMENTS OR APPLICABLE CODES AND ORDINANCES:
 a. SANITARY SEWER: DEPTHS, ELEVATIONS AND GRADES AS INDICATED ON DRAWINGS.
 b. STORM SEWER: DEPTHS, ELEVATIONS, AND GRADES AS SHOWN ON DRAWINGS.
 c. ELECTRICAL CONDUITS: 24 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY NEC 300-5, NEC 710-36 CODES, OR THE LOCAL UTILITY COMPANY REQUIREMENTS, WHICHEVER IS DEEPER.
 d. TV CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
 e. TELEPHONE CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
 - GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
 - SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
 - CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM IF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITE WORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
 - PROPOSED SIDEWALKS SHALL BE CONSTRUCTED WITH CROSS-SLOPES THAT DO NOT EXCEED 1.5%.
 - PROPOSED RCP PIPE IS TO BE CLASS V PIPE.

- GENERAL NOTES:**
- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 27, 2020, AND LAST REVISED AUGUST 4, 2021.
 - HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - THE FRESHWATER WETLANDS/WATERS BOUNDARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE NO. 1334-09-0002. THE DEPARTMENT HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON-SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
 - THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON-SITE.
 - THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 3, THE FEMA FLUVIAL METHOD, AS SET FORTH IN N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD (NFADHF) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 83.
- DRAINAGE PIPE INSTALLATION WITHIN WETLAND TRANSITION AREA NOTES:**
- THE PROPOSED 36" DIA. HDPE DRAINAGE PIPE FROM PROPOSED DRAINAGE MANHOLE MH1-0 TO THE EXISTING DRAINAGE MANHOLE LOCATED WITHIN THE WETLAND TRANSITION AREA SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) FOR THE LENGTH OF PROPOSED PIPE LOCATED WITHIN THE WETLAND TRANSITION AREA, IN ORDER TO AVOID SOIL DISTURBANCE AND IMPACTS TO THE WETLAND TRANSITION AREA.

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	4
8/30/23	REVISED PER NJDEP COMMENTS	3
7/28/23	REVISED PER NJDEP, NJDEP & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDEP COMMENTS	1

REVISIONS

SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

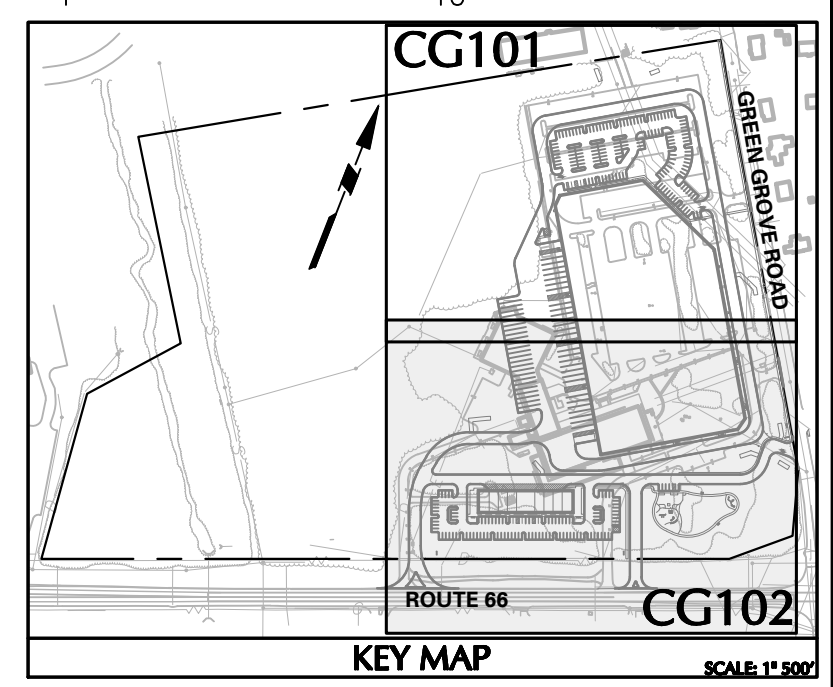
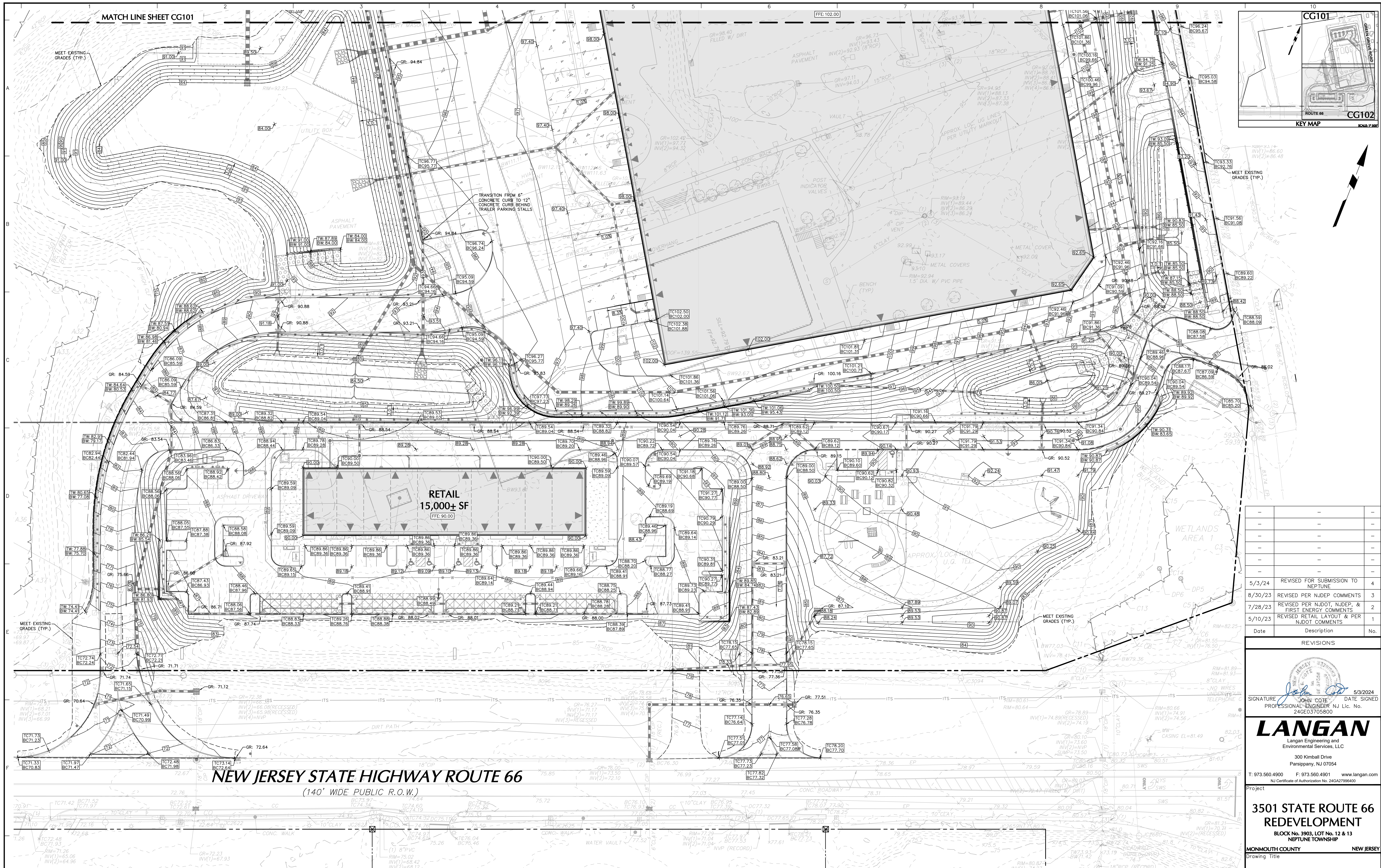
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054

T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246A27896403

Project: 3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

OVERALL GRADING PLAN

Project No.	100775002	Drawing No.	CG100
Date	AUGUST 26, 2022	Drawn By	TEG
Checked By	MJV	Sheet	19 of 48



Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	4
8/30/23	REVISED PER NJDEP COMMENTS	3
7/28/23	REVISED PER NJDOT, NJDEP, & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDOT COMMENTS	1

REVISIONS

SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 24603705800

LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054

T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 24603705800

3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

PARTIAL GRADING PLAN

Project No. 100775002 Drawing No. CG102
 Date: AUGUST 26, 2022
 Drawn By: TEG
 Checked By: MV
 Sheet 21 of 48

LEGEND

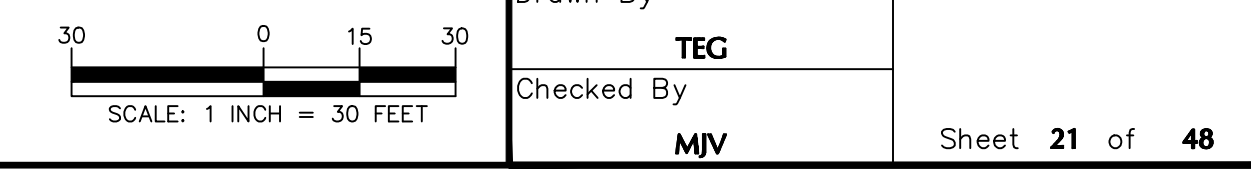
PROPERTY	EXISTING	PROPOSED
PROPERTY LINE/ROW	—	—
CONTOUR	90	95
SPOT ELEVATION	× 88.53	× 92.08
STORM MANHOLE	○	●
SANITARY MANHOLE	○	●
CATCH BASIN	○	●
STORM SEWER	—	—
SANITARY SEWER	—	—
RETAINING WALL	—	—

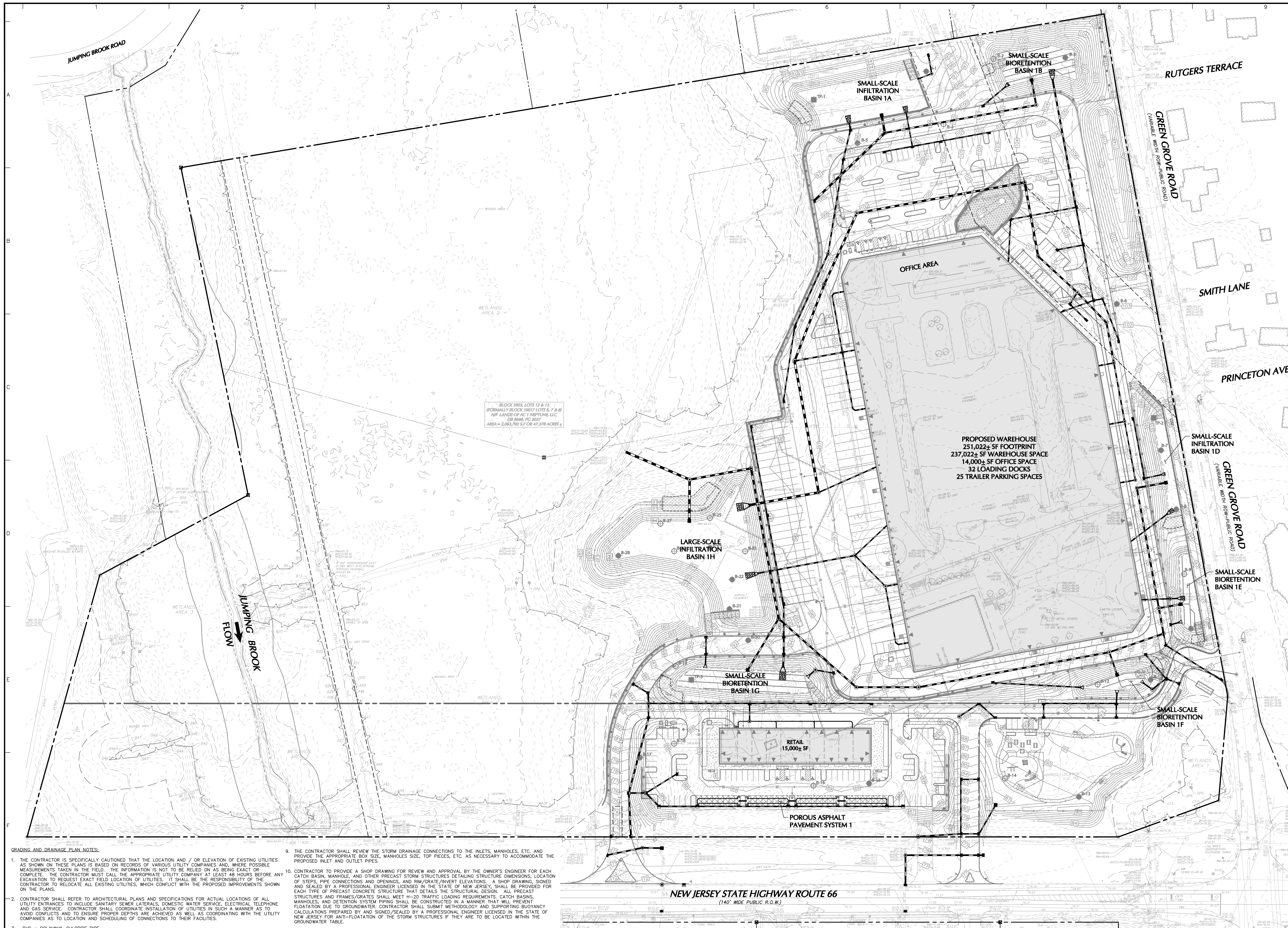
GENERAL NOTES:

- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 27, 2020, AND LAST REVISED AUGUST 4, 2021.
- HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
- ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- THE FRESHWATER WETLANDS/WATERS BOUNDARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE NO. 1334-09-0002.1. THE DEPARTMENT HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
- THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON SITE.
- THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 3, THE FEMA FLUVIAL HAZARD AREA DESIGN FLOOD (N/JFHDF) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 88.

DRAINAGE PIPE INSTALLATION WITHIN WETLAND TRANSITION AREA NOTES:

- THE PROPOSED 36" DIA. HDPE DRAINAGE PIPE FROM PROPOSED DRAINAGE MANHOLE MH-9 TO THE EXISTING DRAINAGE MANHOLE LOCATED WITHIN THE WETLAND TRANSITION AREA SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) FOR THE LENGTH OF PROPOSED PIPE LOCATED WITHIN THE WETLAND TRANSITION AREA, IN ORDER TO AVOID SOIL DISTURBANCE AND IMPACTS TO THE WETLAND TRANSITION AREA.





	LEGEND	
	EXISTING	PROPOSED
PROPERTY LINE/ROW	---	---
CONTOUR	--- 90 ---	--- 95 ---
SPOT ELEVATION	98.53	92.08
STORM MANHOLE	○	●
SANITARY MANHOLE	○	●
CATCH BASIN	□	■
STORM SEWER	---	---
SANITARY SEWER	---	---
RETAINING WALL	---	---

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	4
8/30/23	REVISED PER NJDEP COMMENTS	3
7/28/23	REVISED PER NJDEP, NJDEP & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDOT COMMENTS	1

REVISIONS

SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246A27896403

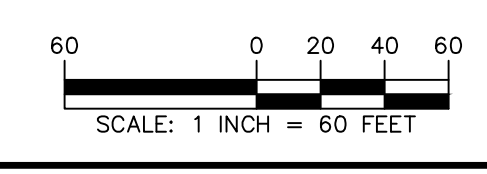
Project
3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY
 Drawing Title

OVERALL DRAINAGE PLAN
 Project No. 100775002 Drawing No. CG103
 Date AUGUST 26, 2022
 Drawn By TEG
 Checked By MVJ
 Sheet 22 of 48

- GRADING AND DRAINAGE PLAN NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
 - PVC = POLYVINYL CHLORIDE PIPE
HDPE = HIGH DENSITY POLYETHYLENE PIPE
RCP = REINFORCED CONCRETE PIPE
 - STORM DRAINAGE PIPING TO UTILIZE WATER TIGHT JOINTS.
 - COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

FILL AREA	PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	98%
SIDEWALKS	95%
LANDSCAPE AREAS	90%
TRENCH BACKFILL	95%
 - PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
 - REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON-SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.
 - ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
 - CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO THE INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE, MANHOLES SIZE, TOP PIECES, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
 - CONTRACTOR TO PROVIDE A SHOP DRAWING FOR REVIEW AND APPROVAL BY THE OWNER'S ENGINEER FOR EACH CATCH BASIN, MANHOLE, AND OTHER PRECAST STORM STRUCTURES DETAILING STRUCTURE DIMENSIONS, LOCATION OF STEPS, PIPE CONNECTIONS AND OPENINGS, AND RIM/GRATE/INVERT ELEVATIONS. A SHOP DRAWING, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY, SHALL BE PROVIDED FOR EACH TYPE OF PRECAST CONCRETE STRUCTURE THAT DETAILS THE STRUCTURAL DESIGN. CALL PRECAST STRUCTURES AND FRAMES/GRATES SHALL MEET H-20 TRAFFIC LOADING REQUIREMENTS. CATCH BASINS, MANHOLES, AND DETENTION SYSTEM PIPING SHALL BE CONSTRUCTED IN A MANNER THAT WILL PREVENT FLOATION DUE TO GROUNDWATER. CONTRACTOR SHALL SUBMIT METHODOLOGY AND SUPPORTING BUOYANCY CALCULATIONS PREPARED BY AND SIGNED/SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY FOR ANTI-FLOATION OF THE STORM STRUCTURES IF THEY ARE TO BE LOCATED WITHIN THE GROUNDWATER TABLE.
 - CONTRACTOR SHALL PROVIDE A RETAINING WALL DESIGN FOR EACH PROPOSED WALL PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY FOR REVIEW BY THE OWNER'S ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR AND THE RETAINING WALL DESIGNER SHALL SPECIFICALLY NOTE ANY EXISTING OR PROPOSED STRUCTURES THAT ARE LOCATED IN OR NEAR THE WALL (INLETS, LIGHT POLES, FENCES, STORM PIPES, UTILITIES, GUIDE RAILS, AND OTHER FEATURES) AND SHALL COORDINATE DESIGN AND INSTALLATION OF RETAINING WALL SUCH THAT THE FEATURES ARE ACCOMMODATED IN THE DESIGN AS APPROPRIATE.
 - PIPE LENGTHS PROVIDED ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
 - CONTRACTOR SHALL CLEAR EXISTING STORM PIPES OF ANY DEBRIS OR SEDIMENT.
 - TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE OR PAVED SURFACE SHALL MEET THE FOLLOWING REQUIREMENTS OR APPLICABLE CODES AND ORDINANCES:
 - SANITARY SEWER: DEPTHS, ELEVATIONS AND GRADES AS INDICATED ON DRAWINGS.
 - STORM SEWER: DEPTHS, ELEVATIONS, AND GRADES AS SHOWN ON DRAWINGS.
 - ELECTRICAL CONDUITS: 24 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY NEC 300-5, NEC 710-36 CODES, OR THE LOCAL UTILITY COMPANY REQUIREMENTS, WHICHEVER IS DEEPER.
 - TV CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
 - TELEPHONE CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.

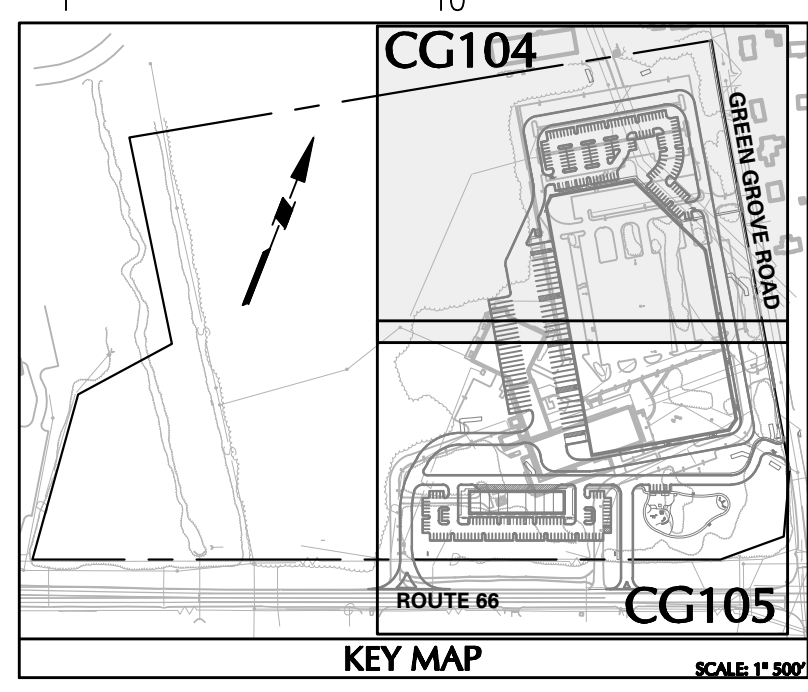
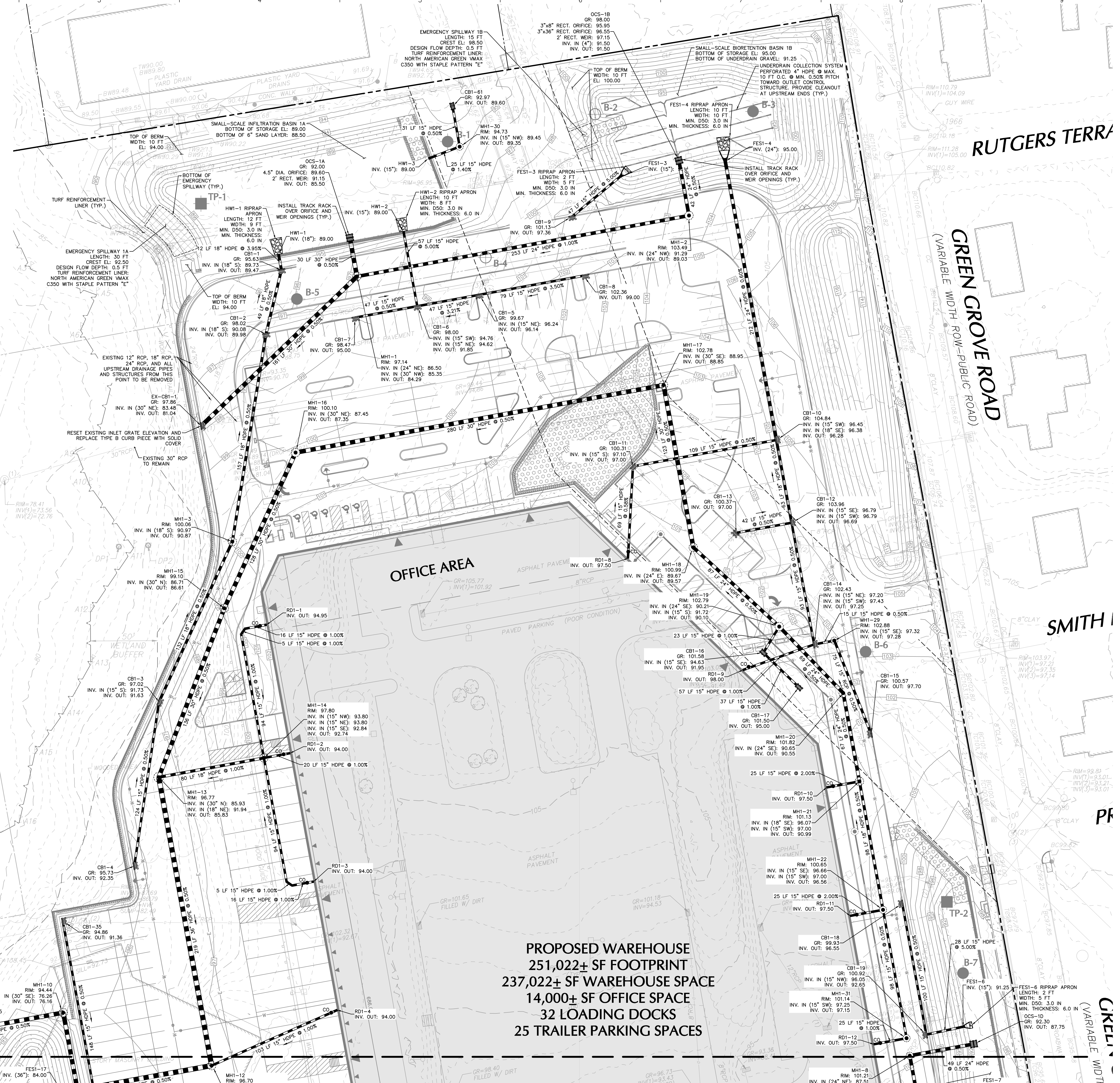
- GENERAL NOTES:**
- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 21, 2020, AND LAST REVISED AUGUST 4, 2021.
 - HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - THE FRESHWATER WETLANDS/WATERS BOUNDARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE No. 1334-08-00021. THE DEPARTMENT HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON-SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
 - THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON-SITE.
 - THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 3, THE FEMA FLUVIAL METHOD, AS SET FORTH IN N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD (NFHADP) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 88.
- DRAINAGE PIPE INSTALLATION WITHIN WETLAND TRANSITION AREA NOTES:**
- THE PROPOSED 36" DIA. HDPE DRAINAGE PIPE FROM PROPOSED DRAINAGE MANHOLE MH1-9 TO THE EXISTING DRAINAGE MANHOLE LOCATED WITHIN THE WETLAND TRANSITION AREA SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) FOR THE LENGTH OF PROPOSED PIPE LOCATED WITHIN THE WETLAND TRANSITION AREA, IN ORDER TO AVOID SOIL DISTURBANCE AND IMPACTS TO THE WETLAND TRANSITION AREA.
- f. GAS MAINS AND SERVICE:** 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
- SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
 - CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND OWNER'S ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM IF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITE WORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
 - PROPOSED SIDEWALKS SHALL BE CONSTRUCTED WITH CROSS-SLOPES THAT DO NOT EXCEED 1.5%.
 - PROPOSED RCP PIPE IS TO BE CLASS V PIPE.



- GENERAL NOTES**
- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 27, 2020, AND LAST REVISED AUGUST 4, 2021.
 - HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - THE FRESHWATER WETLANDS/WATERS BOUNDARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE NO. 1334-09-00021. THE DEPARTMENT HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON-SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
 - THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON-SITE.
 - THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 3, THE TEMA FLUMINAL METHOD, AS SET FORTH IN N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD (NFHAD) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 88.

- DRAINAGE PIPE INSTALLATION WITHIN WETLAND TRANSITION AREA NOTES:**
- THE PROPOSED 36" DIA. HDPE DRAINAGE PIPE FROM PROPOSED DRAINAGE MANHOLE MH1-9 TO THE EXISTING DRAINAGE MANHOLE LOCATED WITHIN THE WETLAND TRANSITION AREA SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) FOR THE LENGTH OF PROPOSED PIPE LOCATED WITHIN THE WETLAND TRANSITION AREA, IN ORDER TO AVOID SOIL DISTURBANCE AND IMPACTS TO THE WETLAND TRANSITION AREA.

PROPERTY LINE/ROW	LEGEND	
	EXISTING	PROPOSED
CONTOUR	90	95
SPOT ELEVATION	x 88.53	x 92.08
STORM MANHOLE	⊙	⊙
SANITARY MANHOLE	⊙	⊙
CATCH BASIN	⊙	⊙
STORM SEWER	---	---
SANITARY SEWER	---	---
RETAINING WALL	=====	=====



PROPOSED WAREHOUSE
 251,022± SF FOOTPRINT
 237,022± SF WAREHOUSE SPACE
 14,000± SF OFFICE SPACE
 32 LOADING DOCKS
 25 TRAILER PARKING SPACES

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	4
8/30/23	REVISED PER NJDEP COMMENTS	3
7/28/23	REVISED PER NJDOT, NJDEP, & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDOT COMMENTS	1

REVISIONS

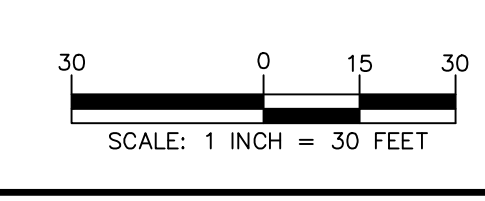
SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

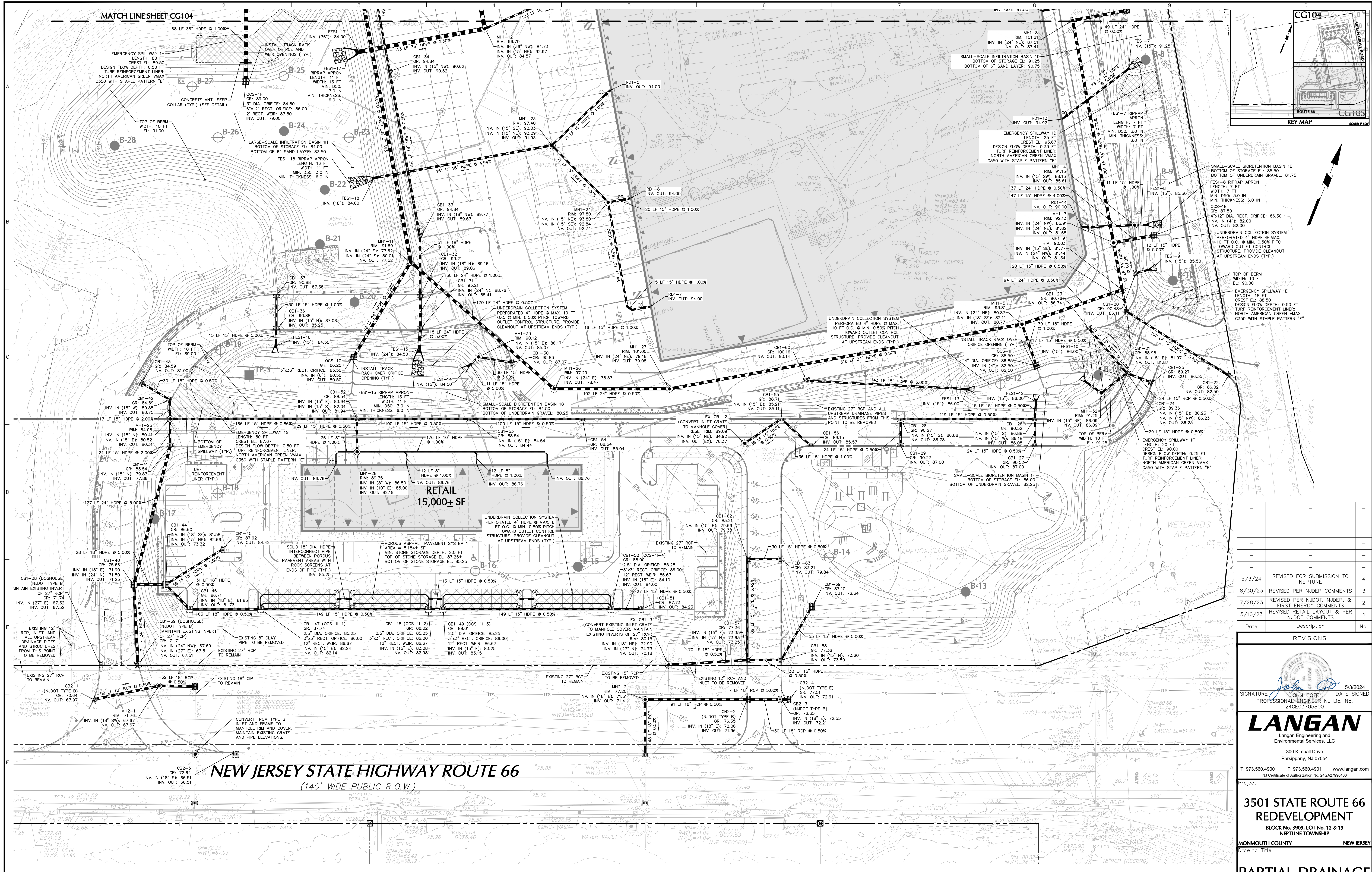
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 24G042786640

3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

Drawing Title
PARTIAL DRAINAGE PLAN

Project No.	100775002	Drawing No.	CG104
Date	AUGUST 26, 2022	Checked By	TEG
Drawn By	TEG	Sheet	23 of 48





NEW JERSEY STATE HIGHWAY ROUTE 66
(140' WIDE PUBLIC R.O.W.)

LEGEND	
EXISTING	PROPOSED
PROPERTY LINE/ROW	PROPERTY LINE/ROW
CONTOUR	CONTOUR
SPOT ELEVATION	SPOT ELEVATION
STORM MANHOLE	STORM MANHOLE
SANITARY MANHOLE	SANITARY MANHOLE
CATCH BASIN	CATCH BASIN
STORM SEWER	STORM SEWER
SANITARY SEWER	SANITARY SEWER
RETAINING WALL	RETAINING WALL

- GENERAL NOTES:**
- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 27, 2020, AND LAST REVISED AUGUST 4, 2021.
 - HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 - THE FRESHWATER WETLANDS/WATERS BOUNDARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE NO. 1334-09-0021. THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON-SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
 - THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON-SITE.
 - THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 1, THE FEMA FLUVIAL METHOD, AS SET FORTH IN N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOW (NFJHDF) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 88.

- DRAINAGE PIPE INSTALLATION WITHIN WETLAND TRANSITION AREA NOTES:**
- THE PROPOSED 36" DIA. HDPE DRAINAGE PIPE FROM PROPOSED DRAINAGE MANHOLE MH-9 TO THE EXISTING DRAINAGE MANHOLE LOCATED WITHIN THE WETLAND TRANSITION AREA SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) FOR THE LENGTH OF PROPOSED PIPE LOCATED WITHIN THE WETLAND TRANSITION AREA, IN ORDER TO AVOID SOIL DISTURBANCE AND IMPACTS TO THE WETLAND TRANSITION AREA.

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	4
8/30/23	REVISED PER NJDEP COMMENTS	3
7/28/23	REVISED PER NJDEP, NJDEP & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDOT COMMENTS	1

REVISIONS

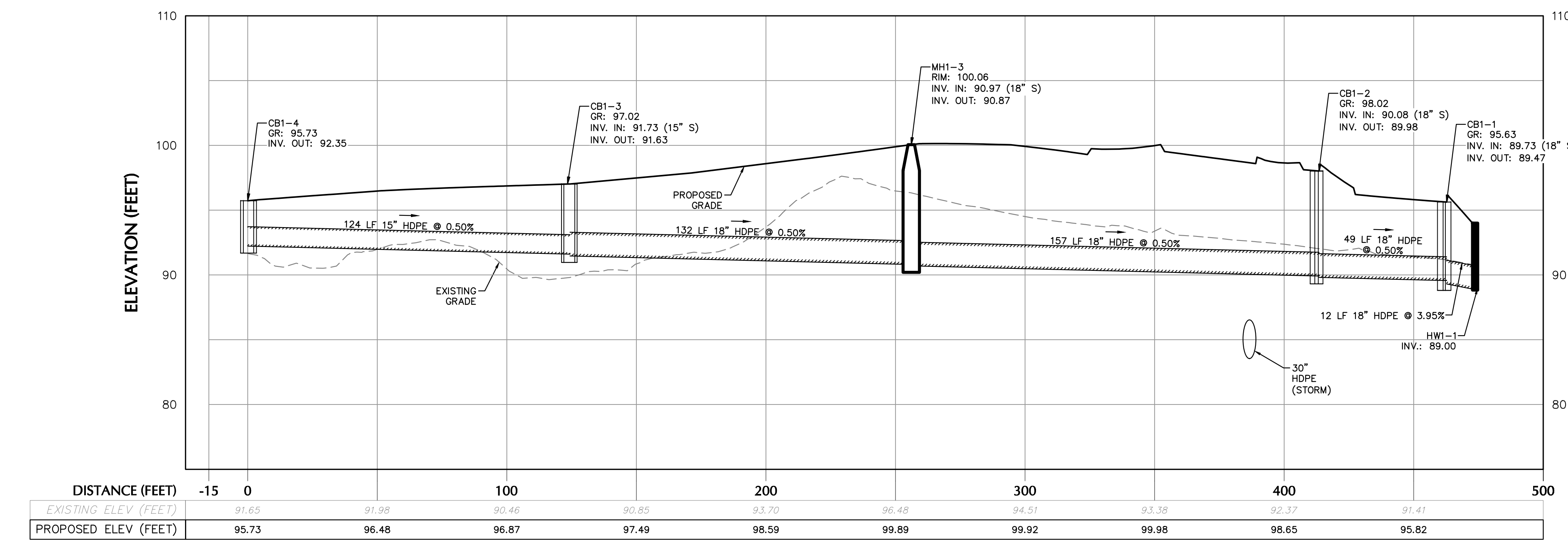
DATE SIGNED: 5/3/2024
 SIGNATURE: JOHN COTE
 PROFESSIONAL ENGINEER NJ Lic. No. 24603705800

LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 24603705800

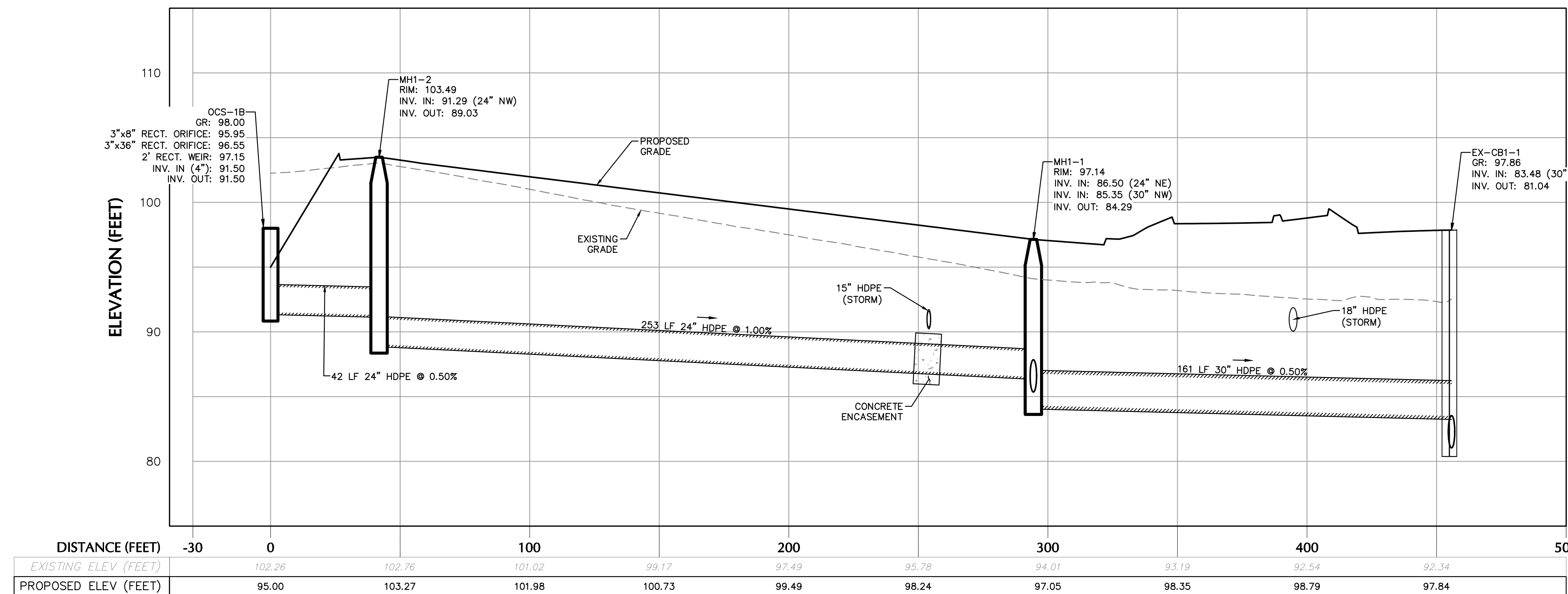
3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

PARTIAL DRAINAGE PLAN

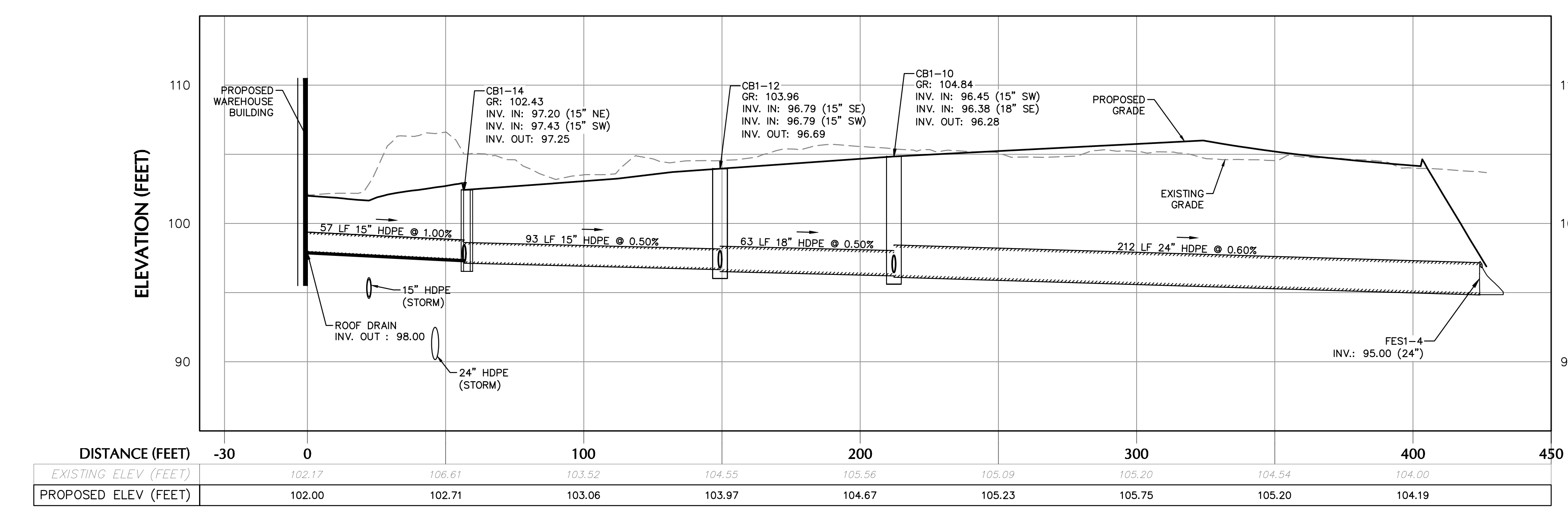
Project No.	100775002	Drawing No.	CG105
Date	AUGUST 26, 2022	Checked By	TEG
Drawn By	TEG	Sheet	24 of 48



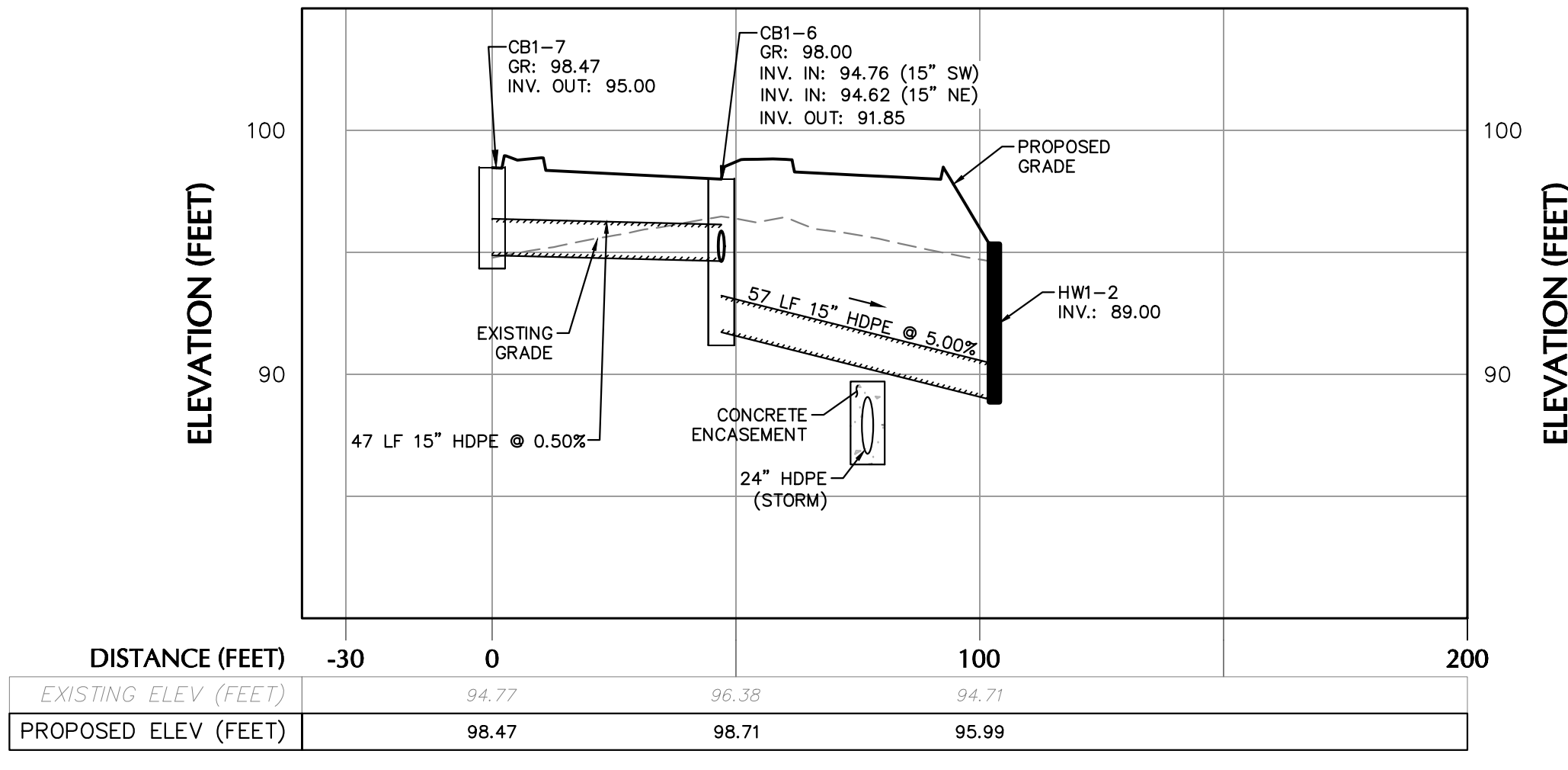
CB1-4 TO HW1-1



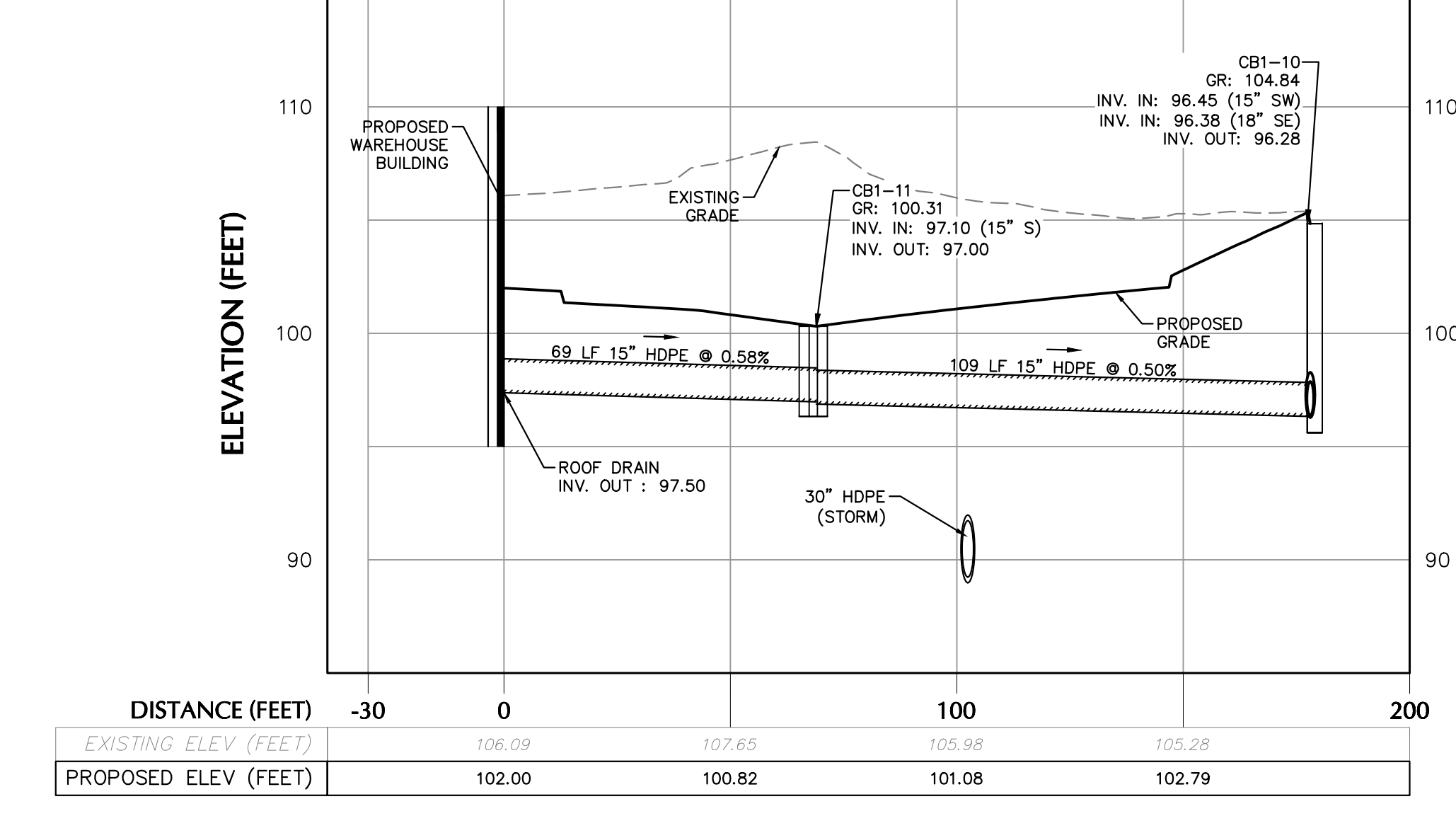
OCS-1B TO EX-CB1-1



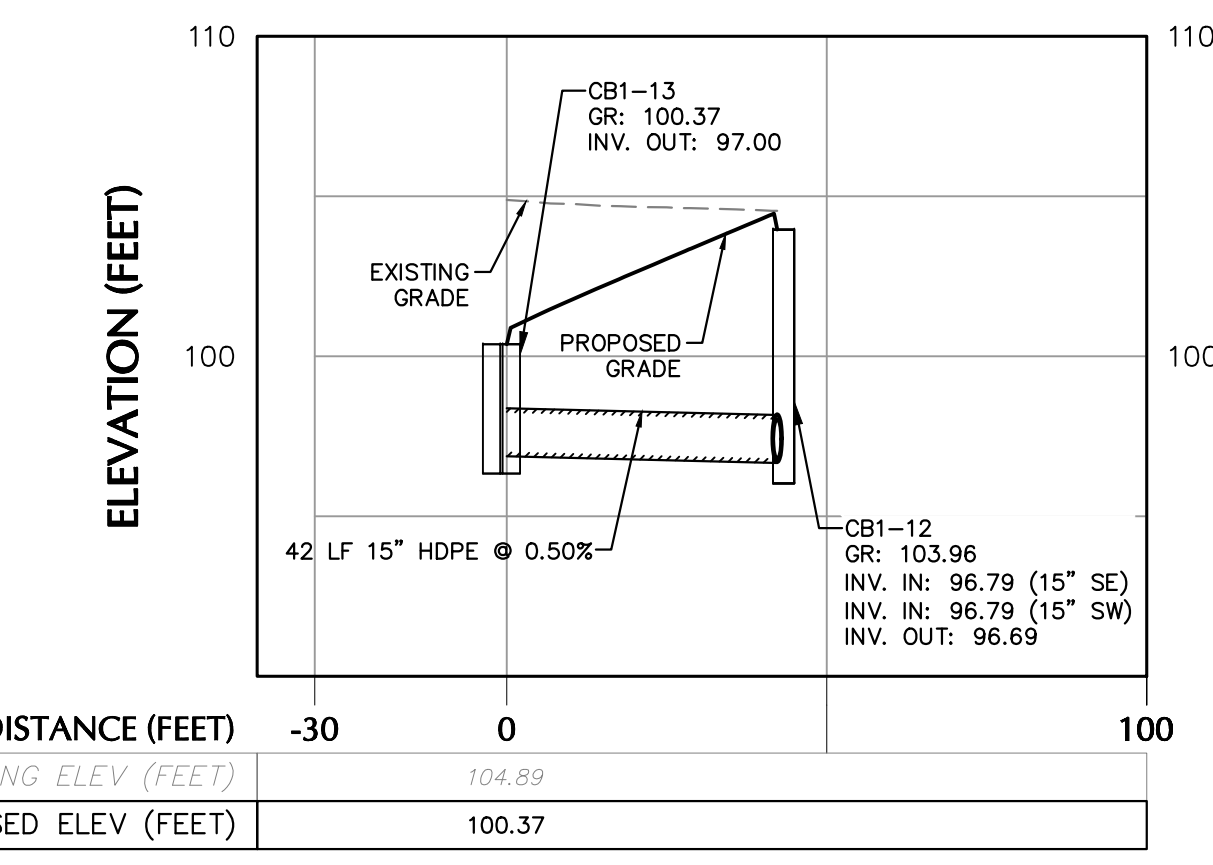
CB1-14 TO FES1-4



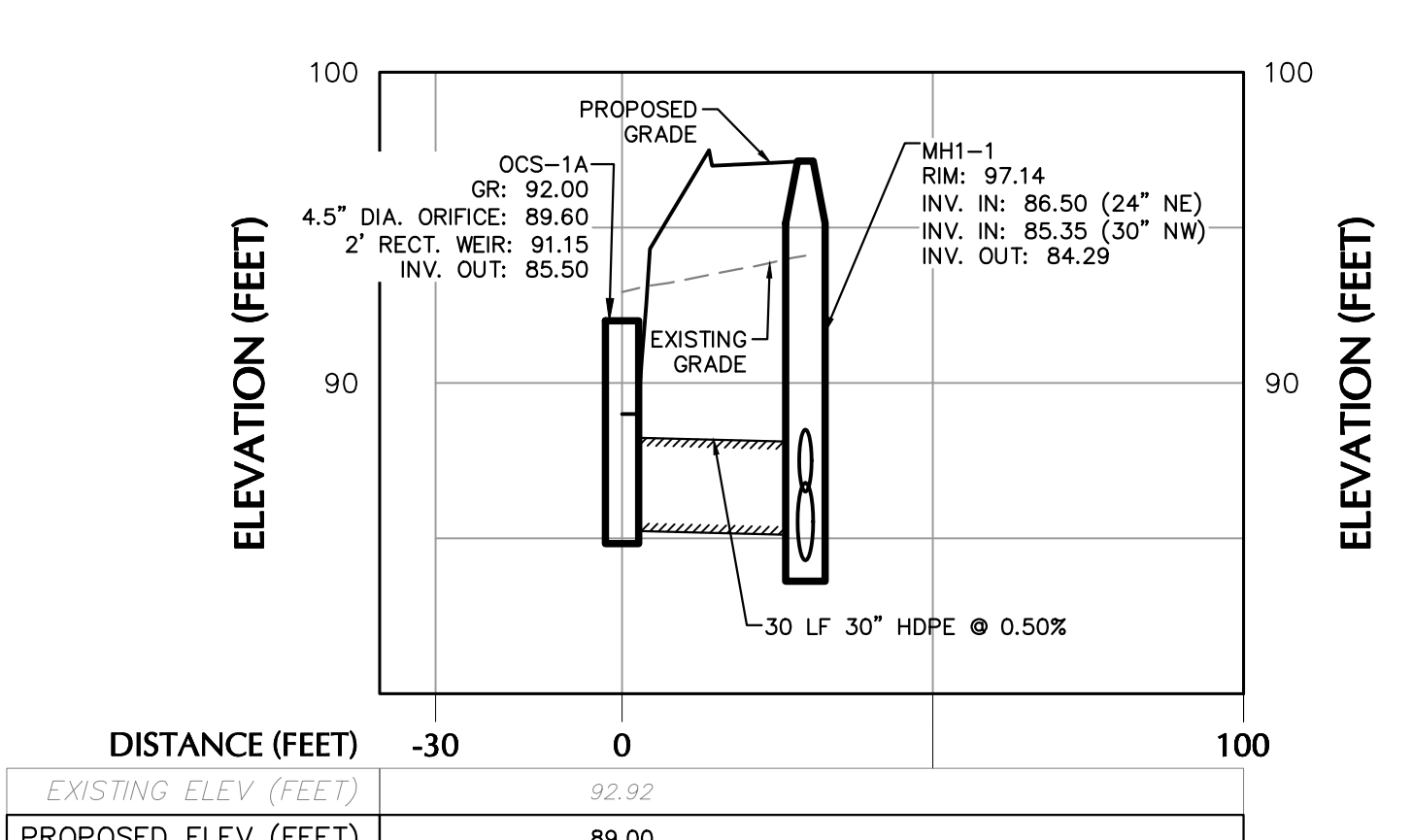
CB1-7 TO HW1-2



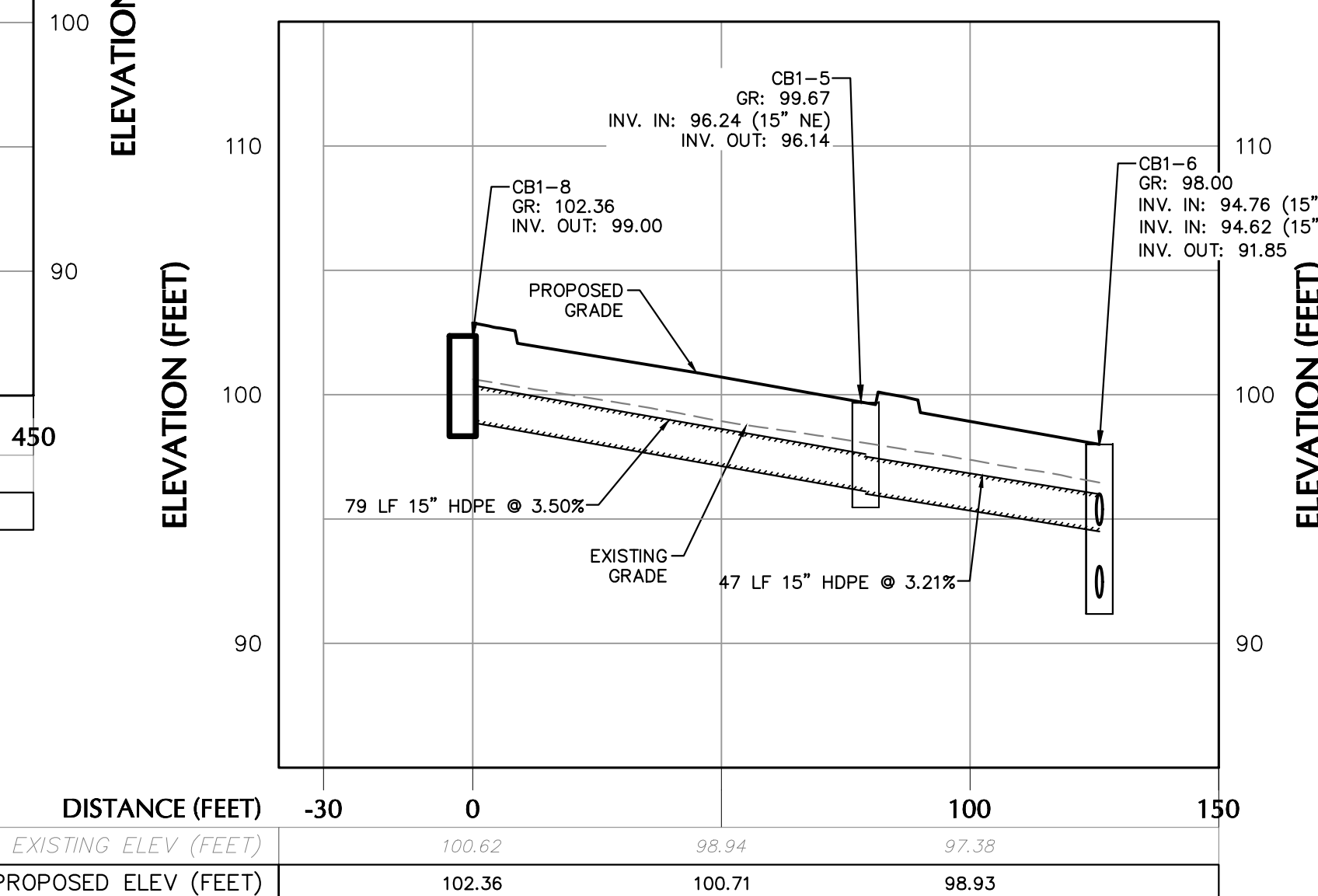
RD1-8 TO CB1-10



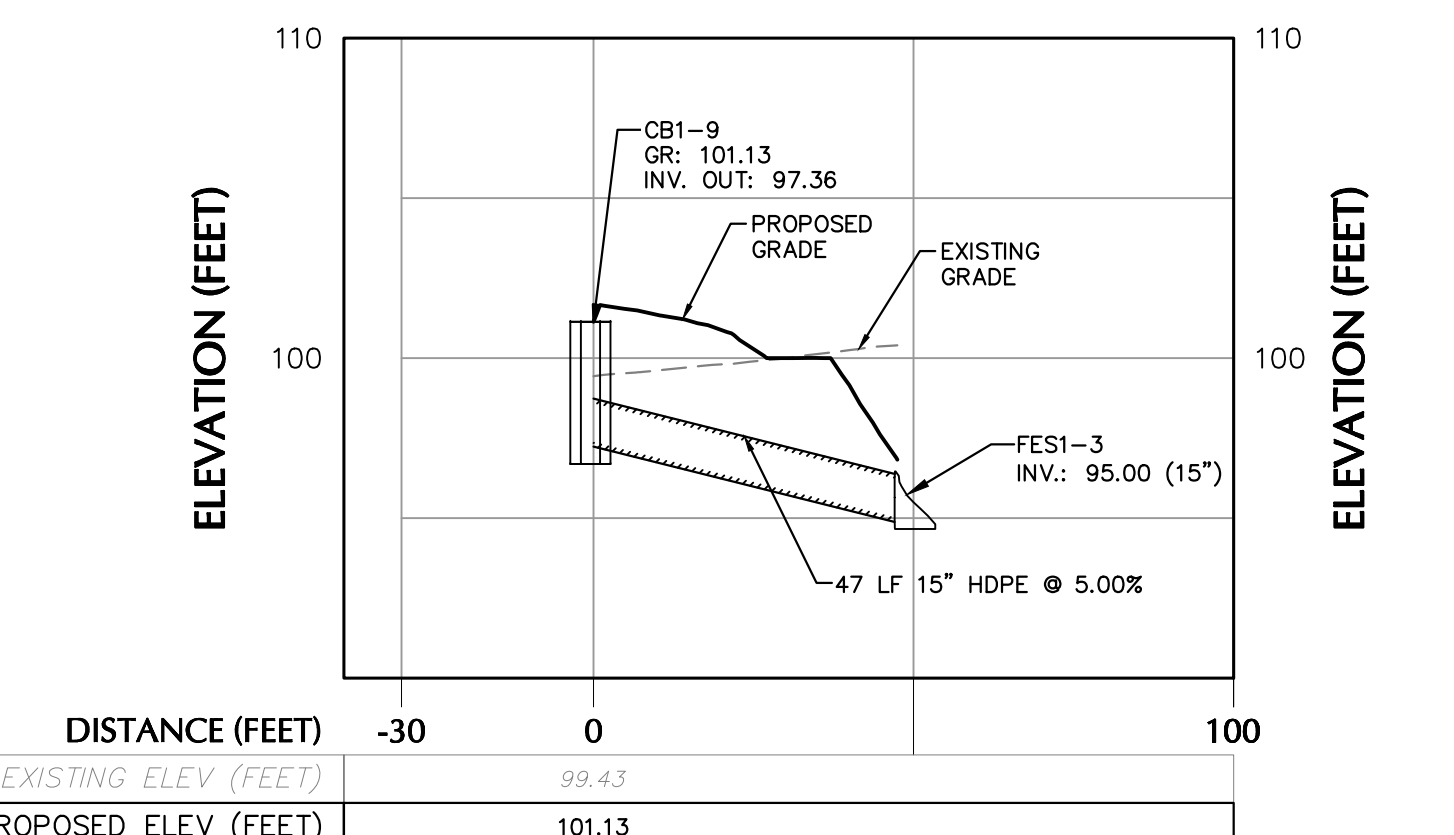
CB1-13 TO CB1-12



OCS-1A TO MH1-1



CB1-8 TO CB1-6



CB1-9 TO FES1-3

Date	Description	No.

REVISIONS

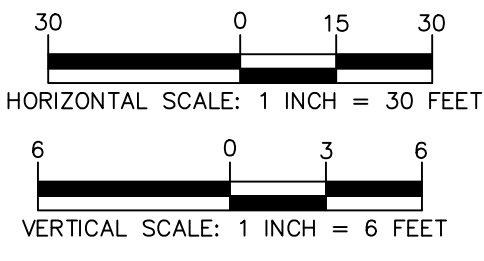
SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

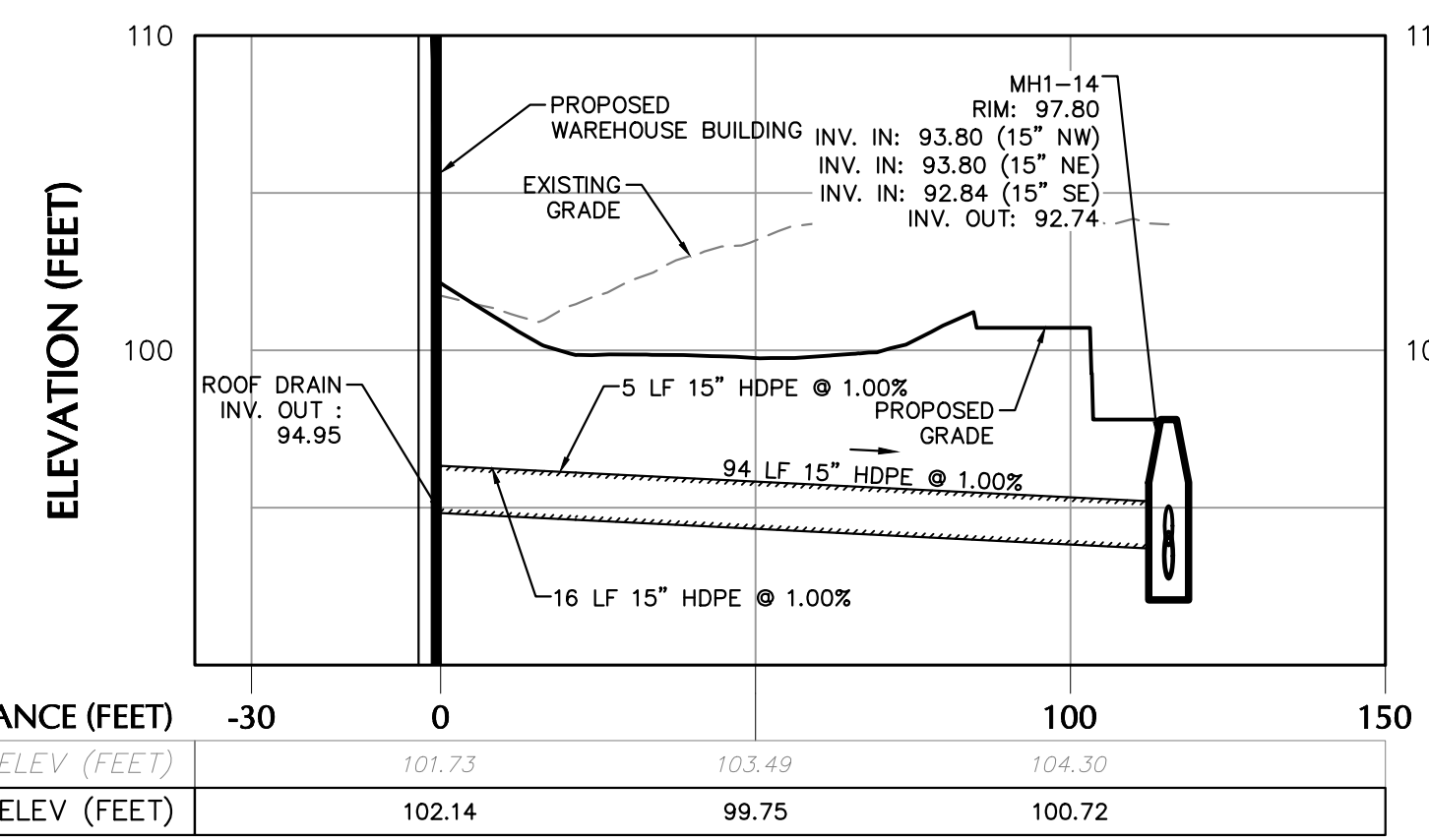
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246A27866400

Project No. 10075002
3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY
 Drawing Title

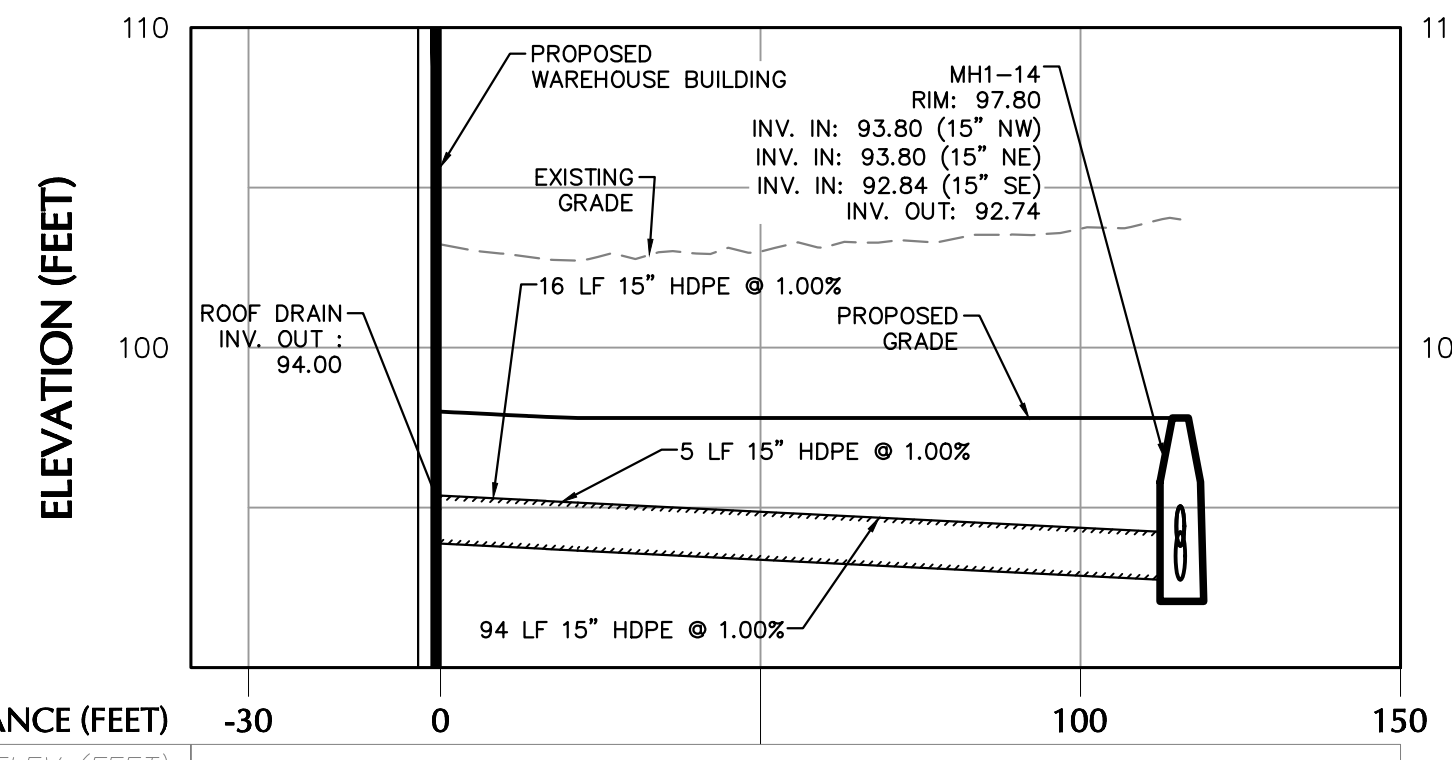
DRAINAGE PROFILES

Project No. 10075002
 Date: MAY 03, 2024
 Drawn By: SS
 Checked By: MVJ
 Drawing No. CG201
 Sheet 25 of 48

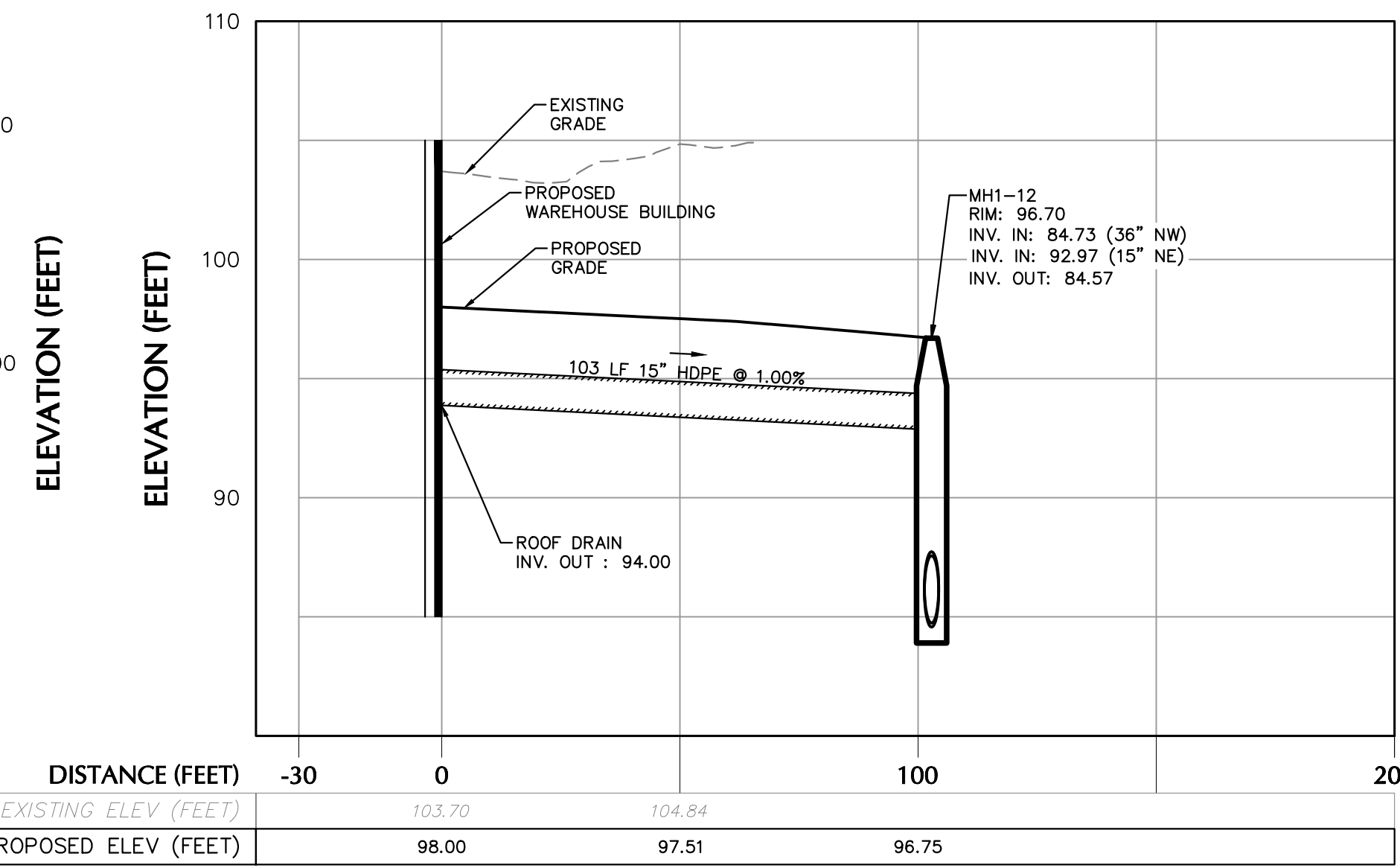




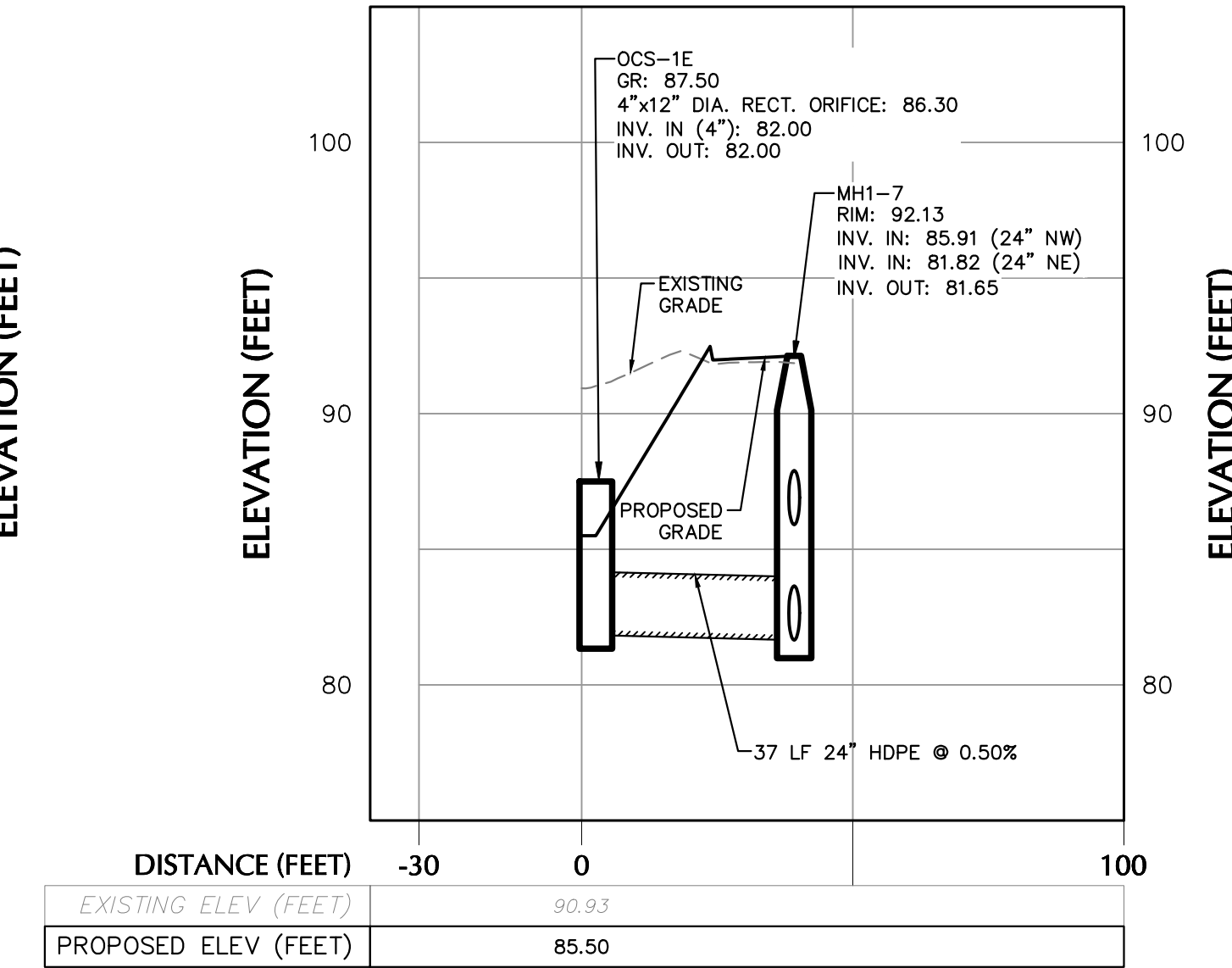
RD1-1 TO MH1-14



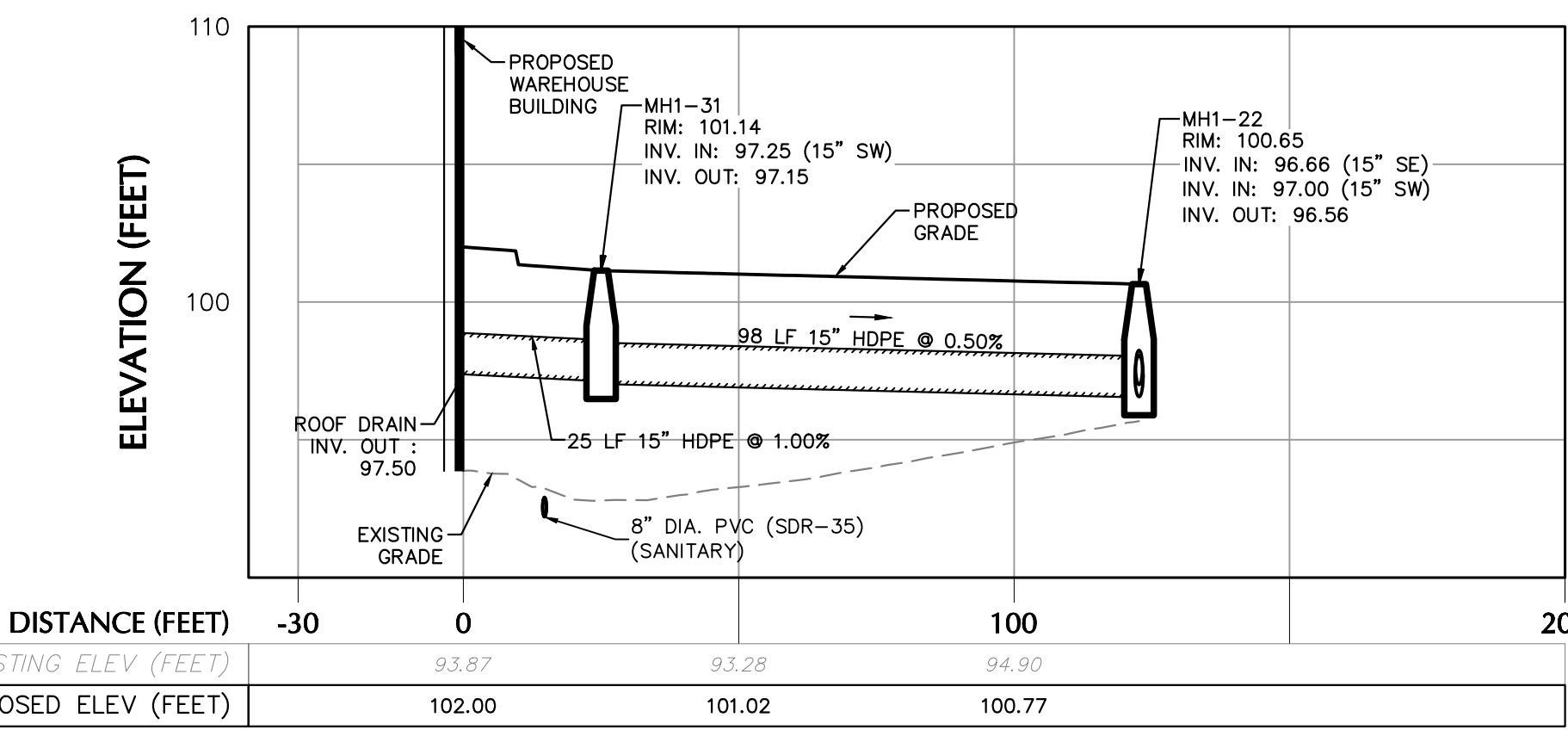
RD1-3 TO MH1-14



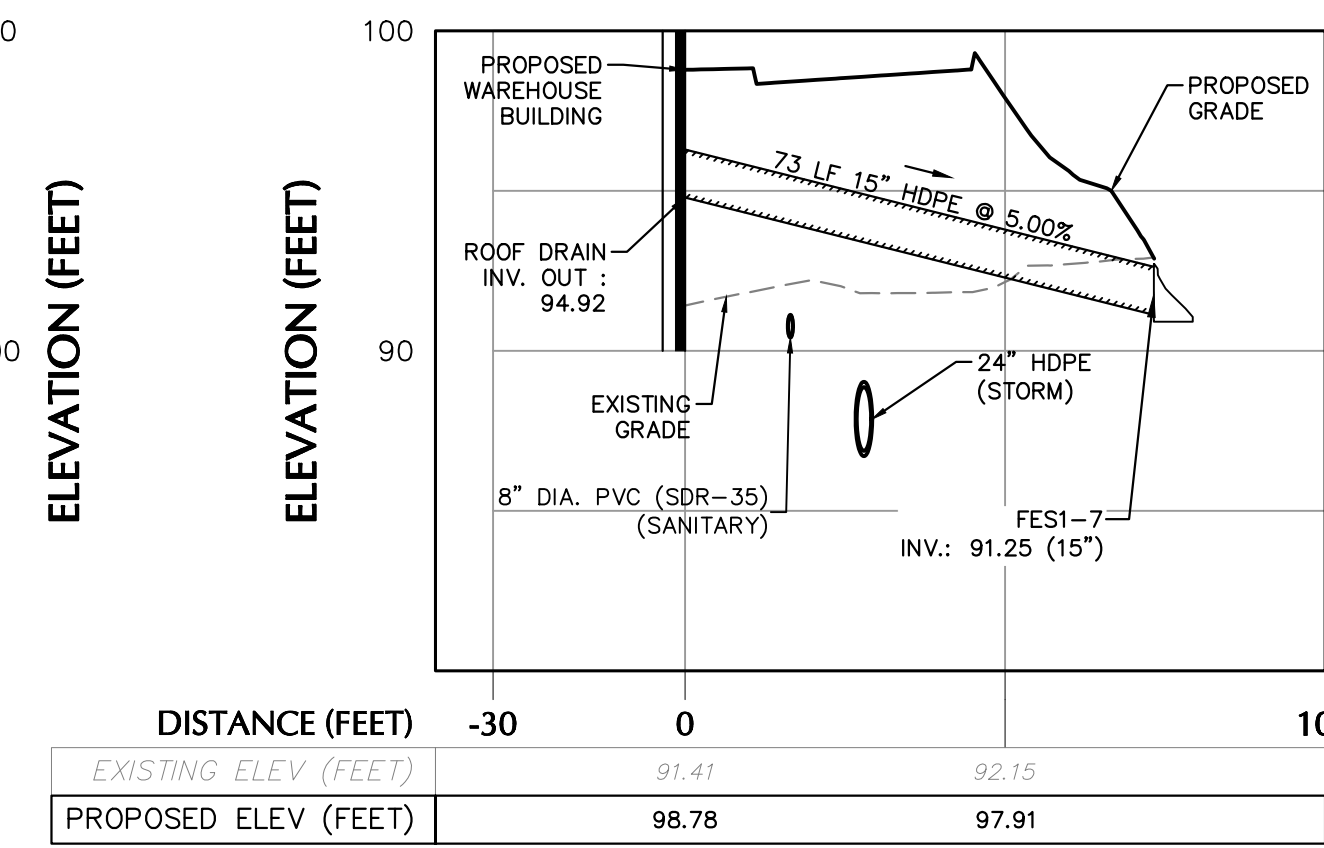
RD1-4 TO MH1-12



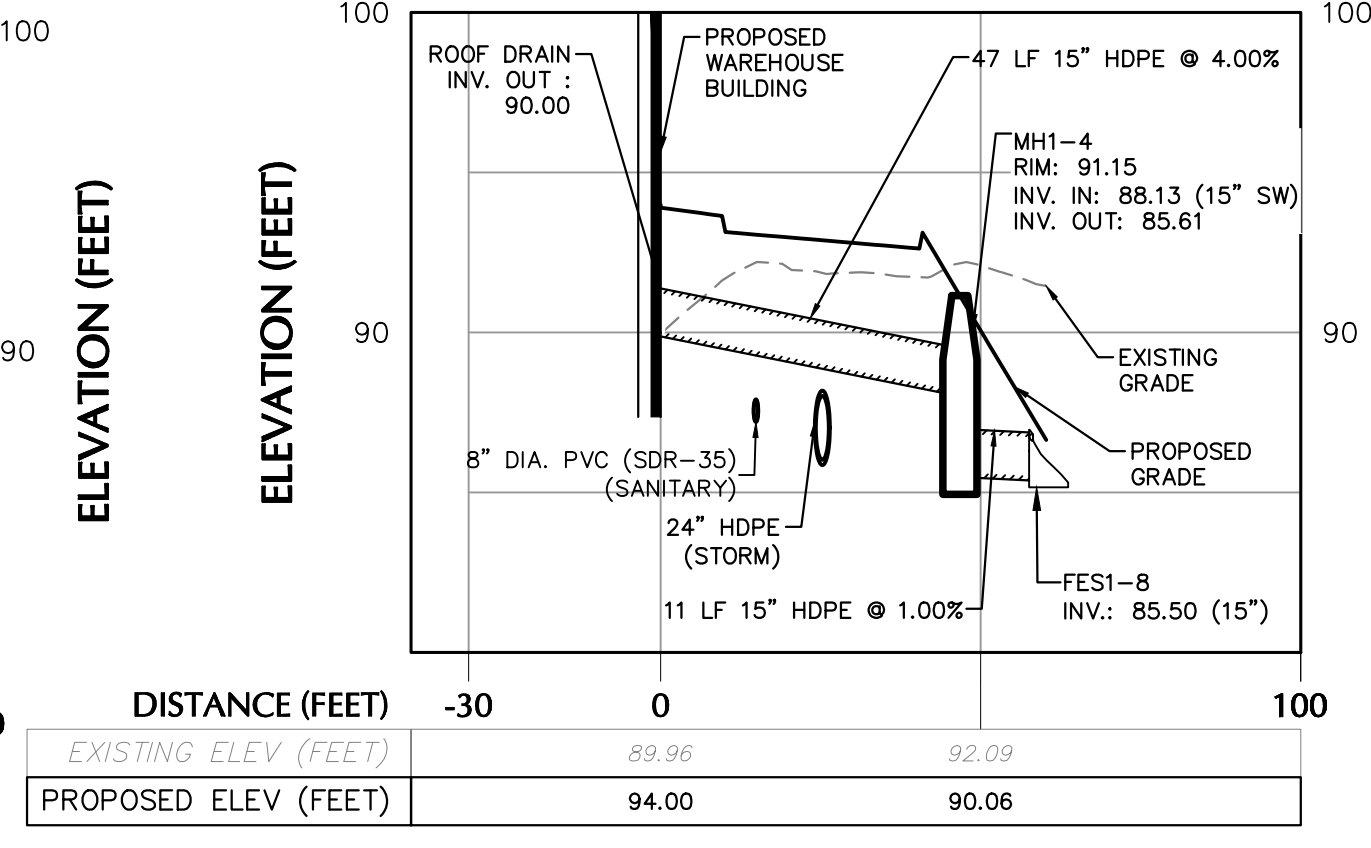
OCS-1E TO MH1-7



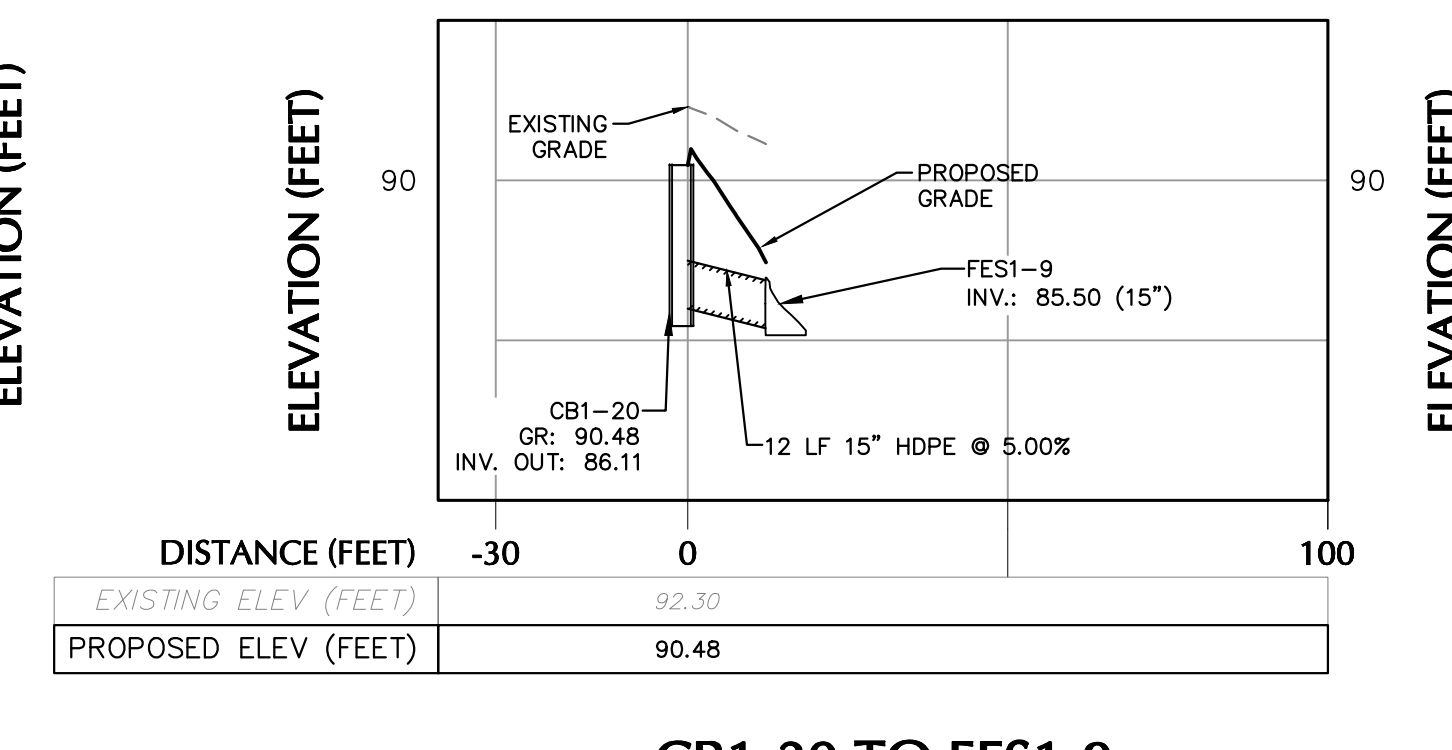
RD1-12 TO MH1-22



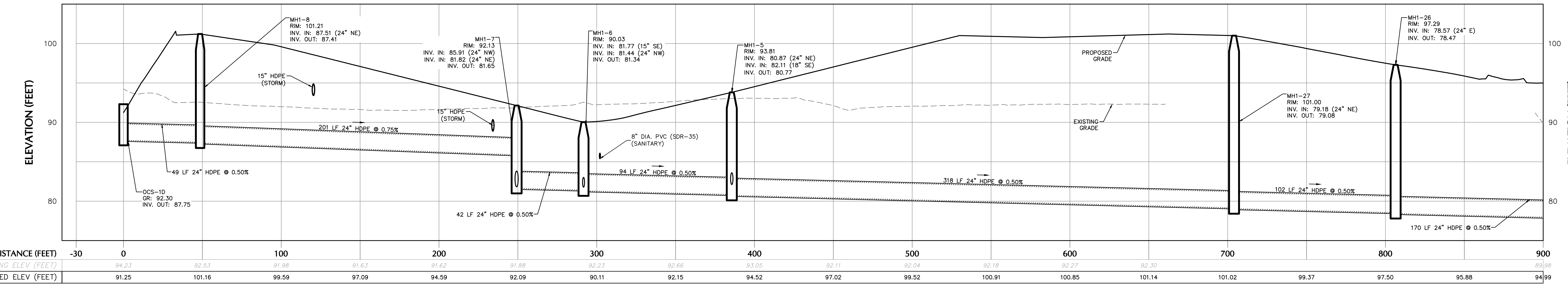
RD1-13 TO FES1-7



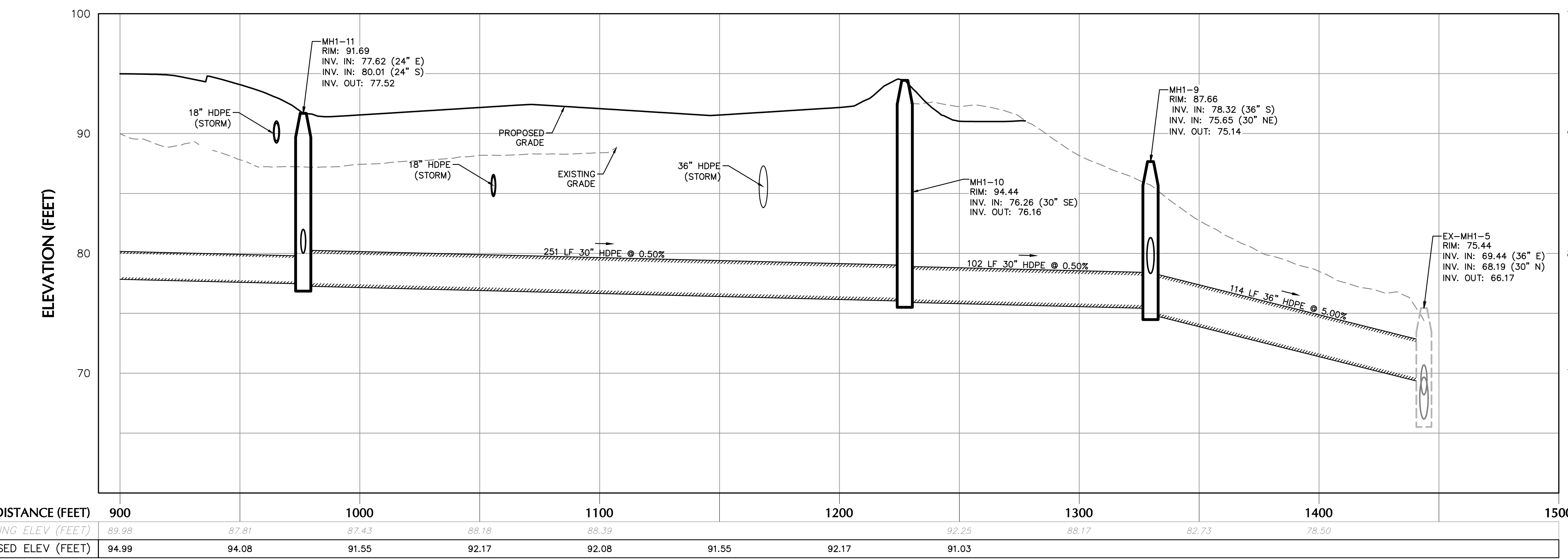
RD1-14 TO FES1-8



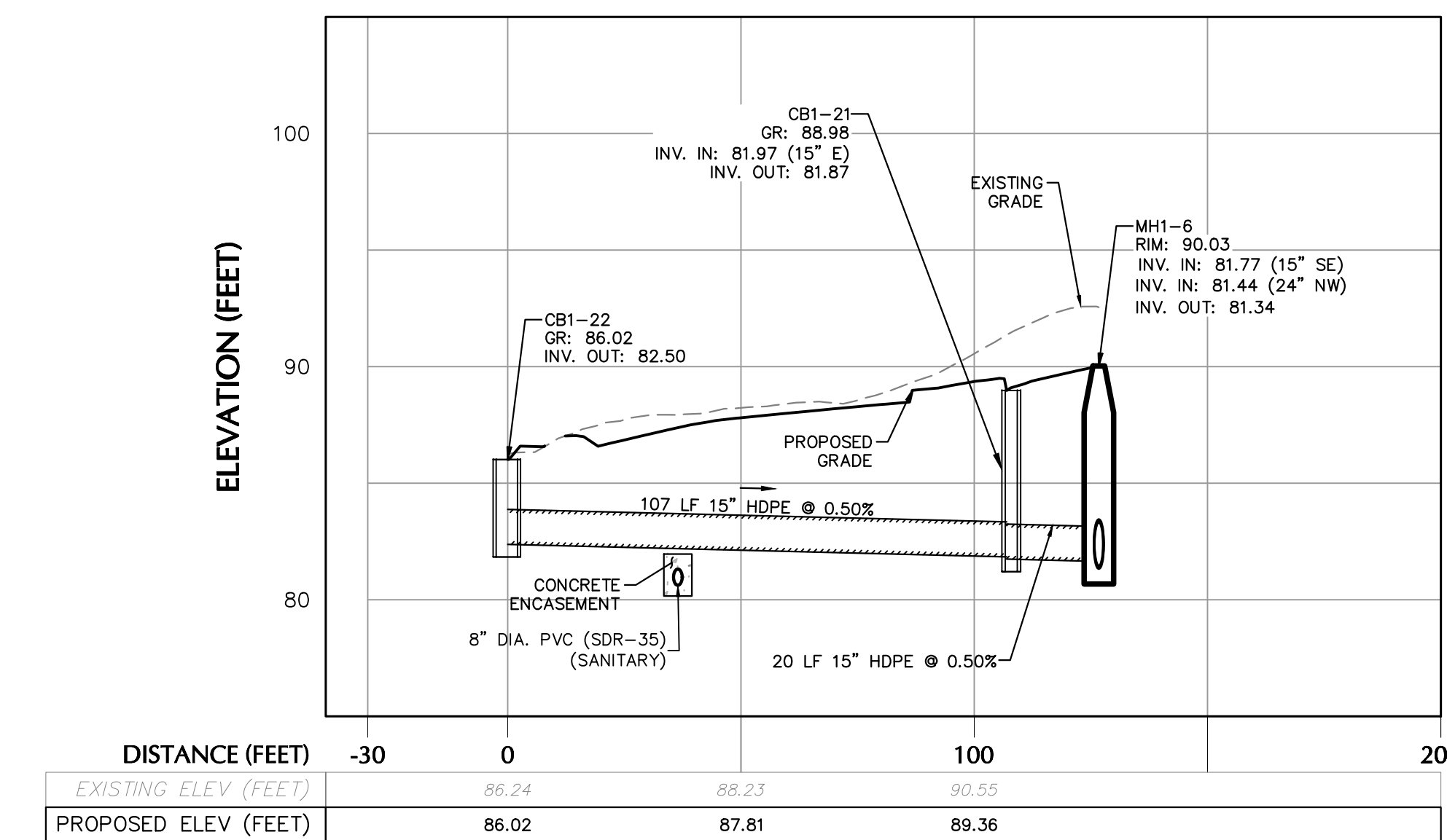
CB1-20 TO FES1-9



OCS-1D TO EX-MH1-5 (STA 0+00 TO STA 9+00)




OCS-1D TO EX-MH1-5 (STA 9+00 TO END)



CB1-22 TO MH1-6

-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
Date	Description	No.

REVISIONS



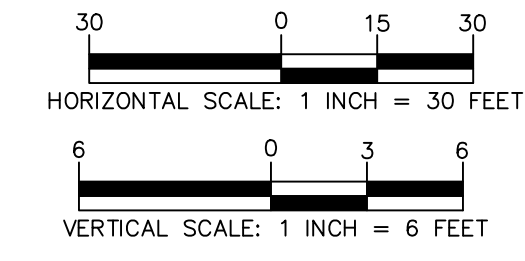
 SIGNATURE: John Cote DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

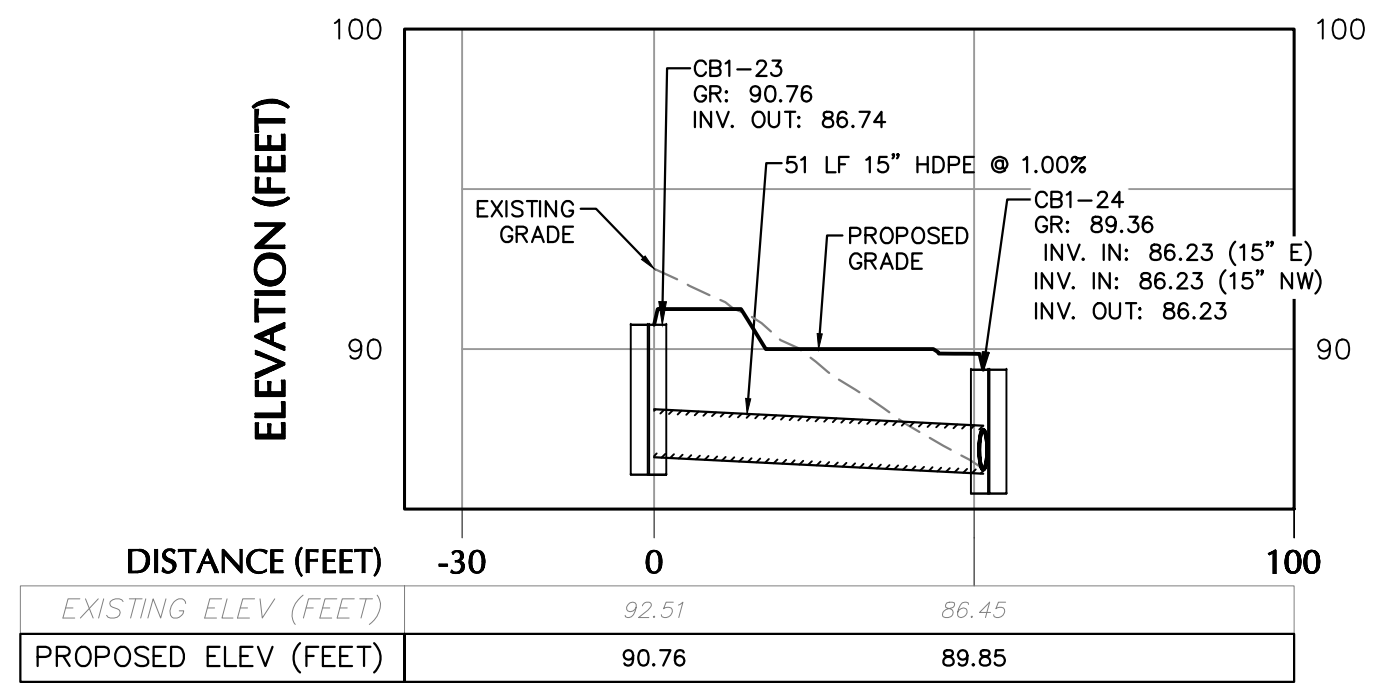
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246A27896403

Project: **3501 STATE ROUTE 66 REDEVELOPMENT**
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

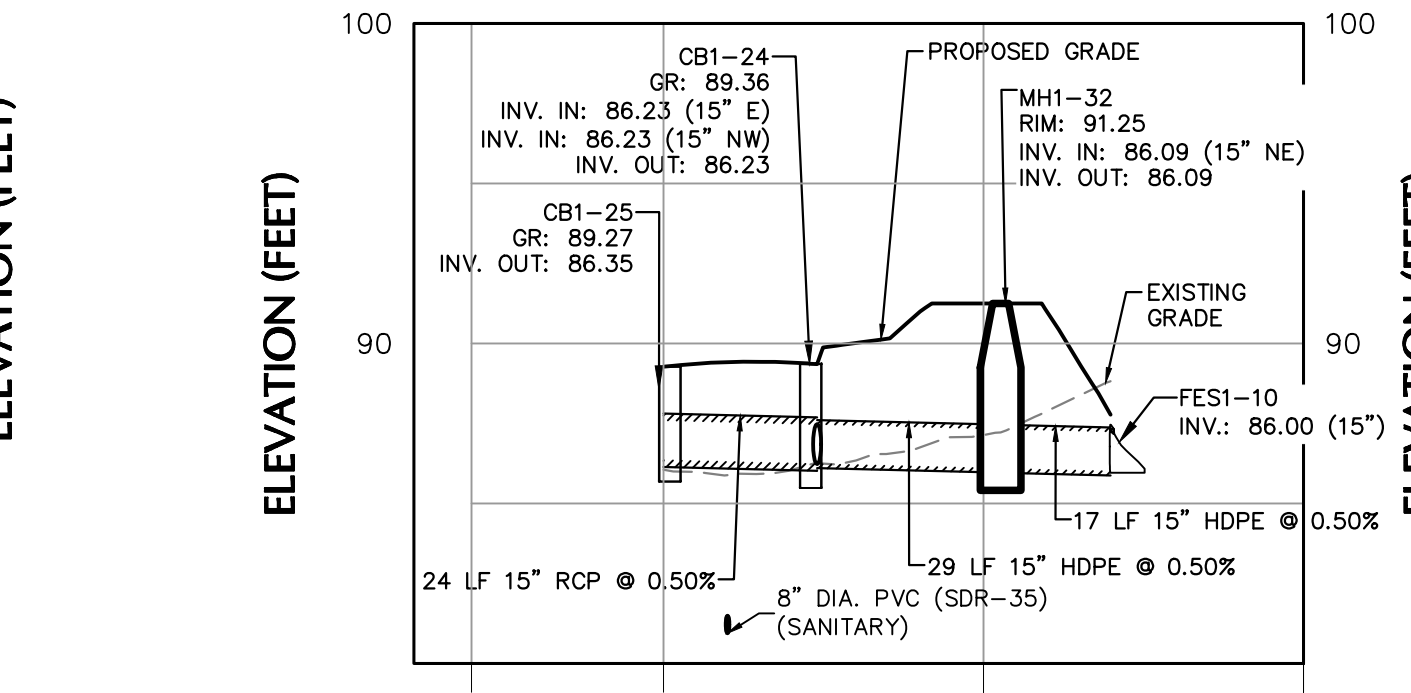
Drawing Title: **DRAINAGE PROFILES**

Project No. 10075002
 Date: MAY 03, 2024
 Drawn By: SS
 Checked By: MVJ
 Drawing No. CG203
 Sheet 27 of 48

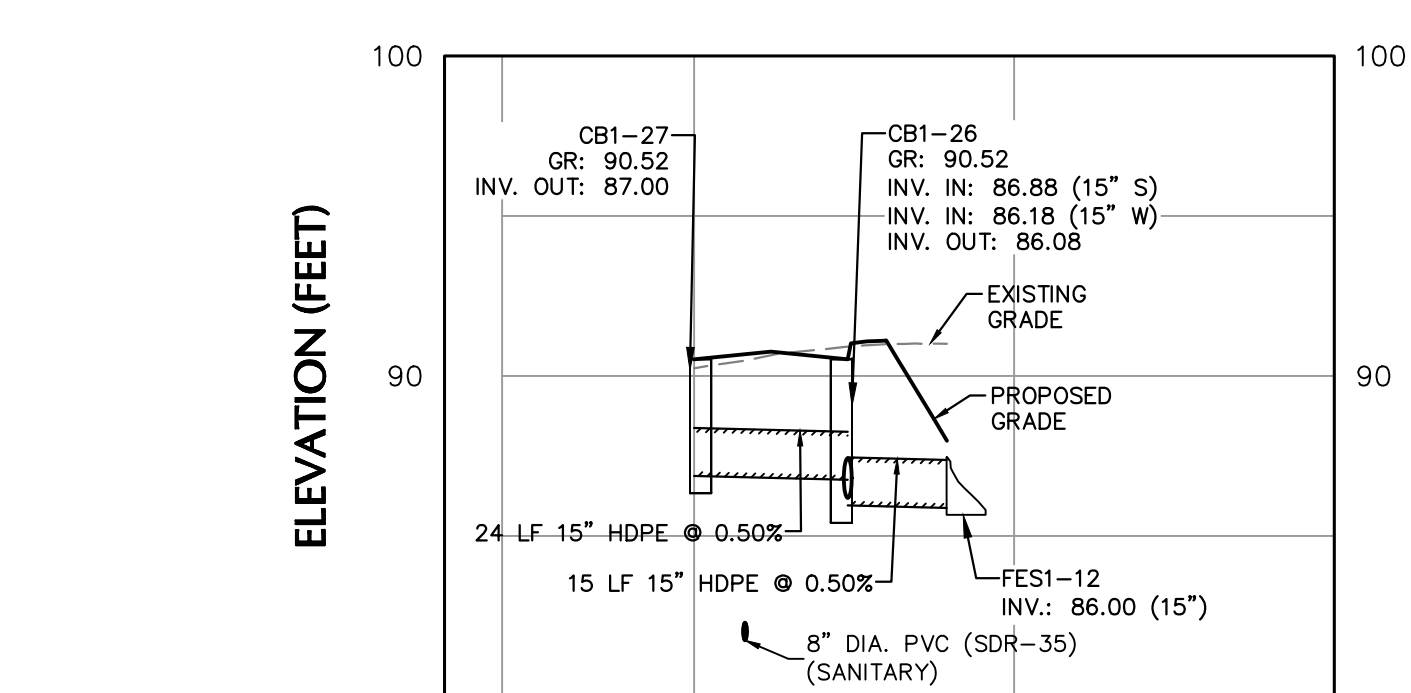




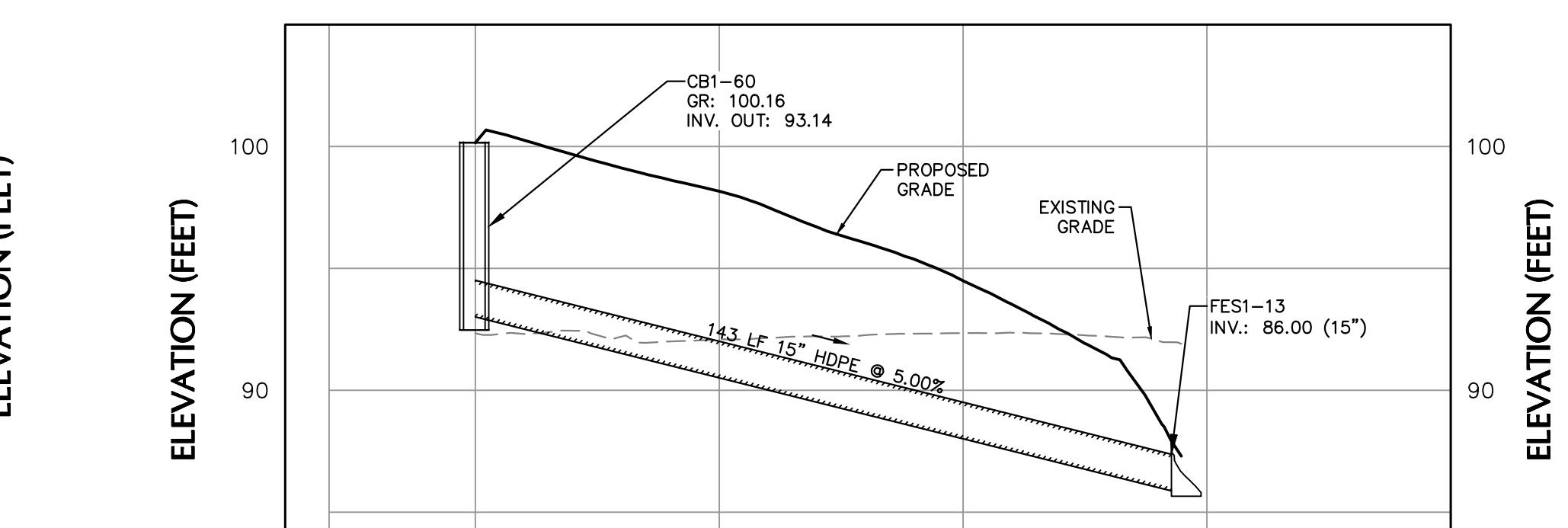
CB1-23 TO CB1-24



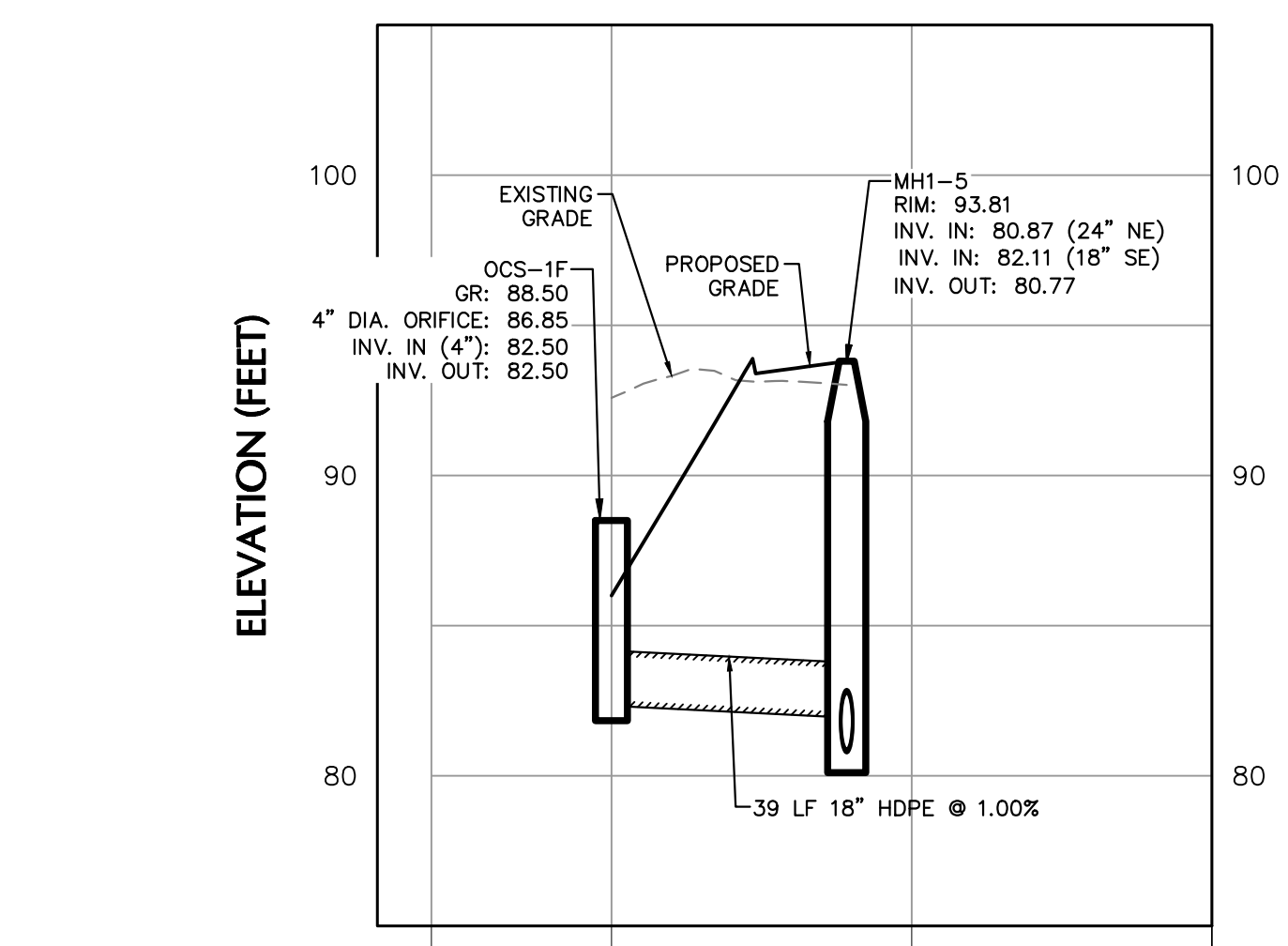
CB1-25 TO FES1-10



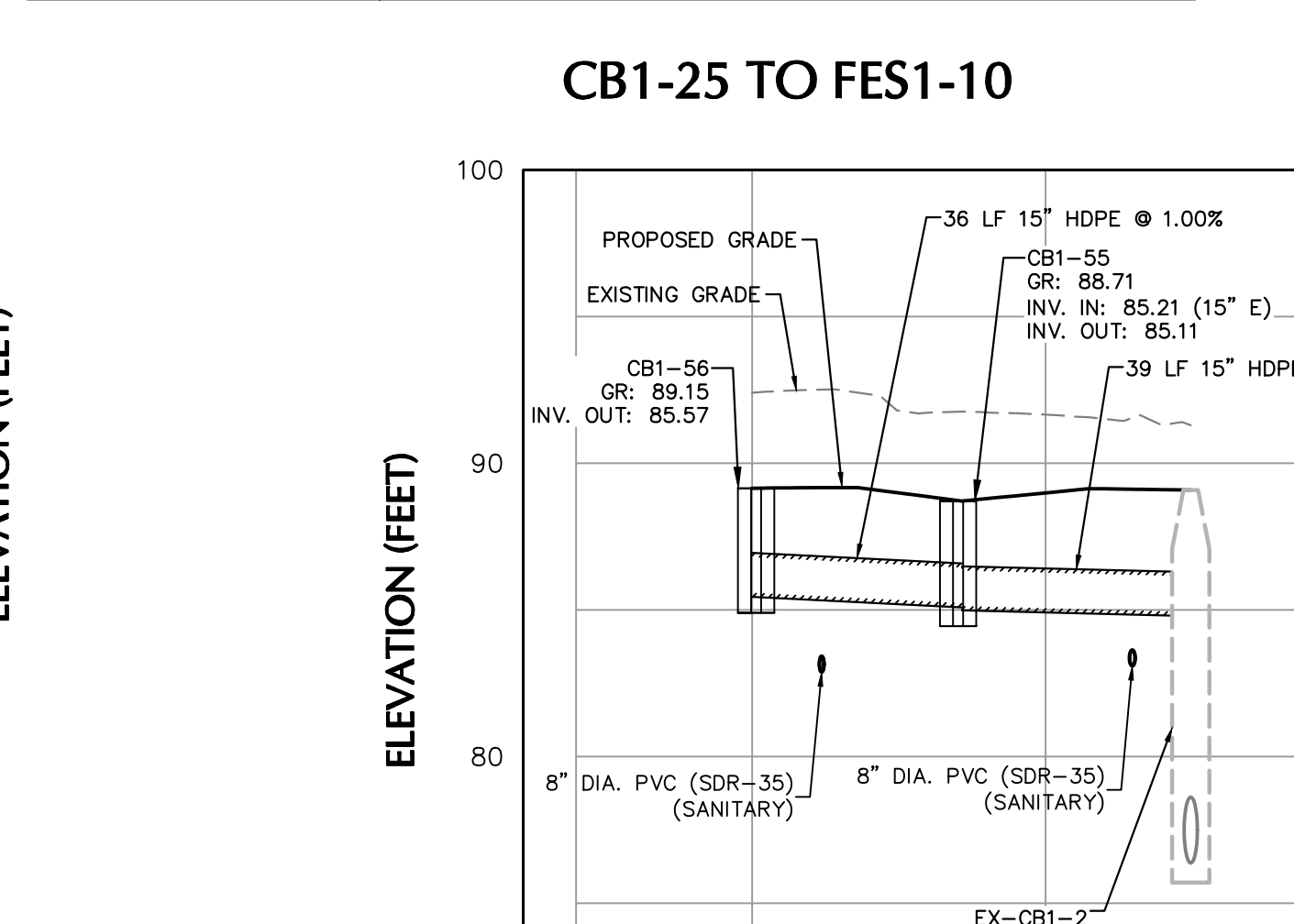
CB1-27 TO FES1-12



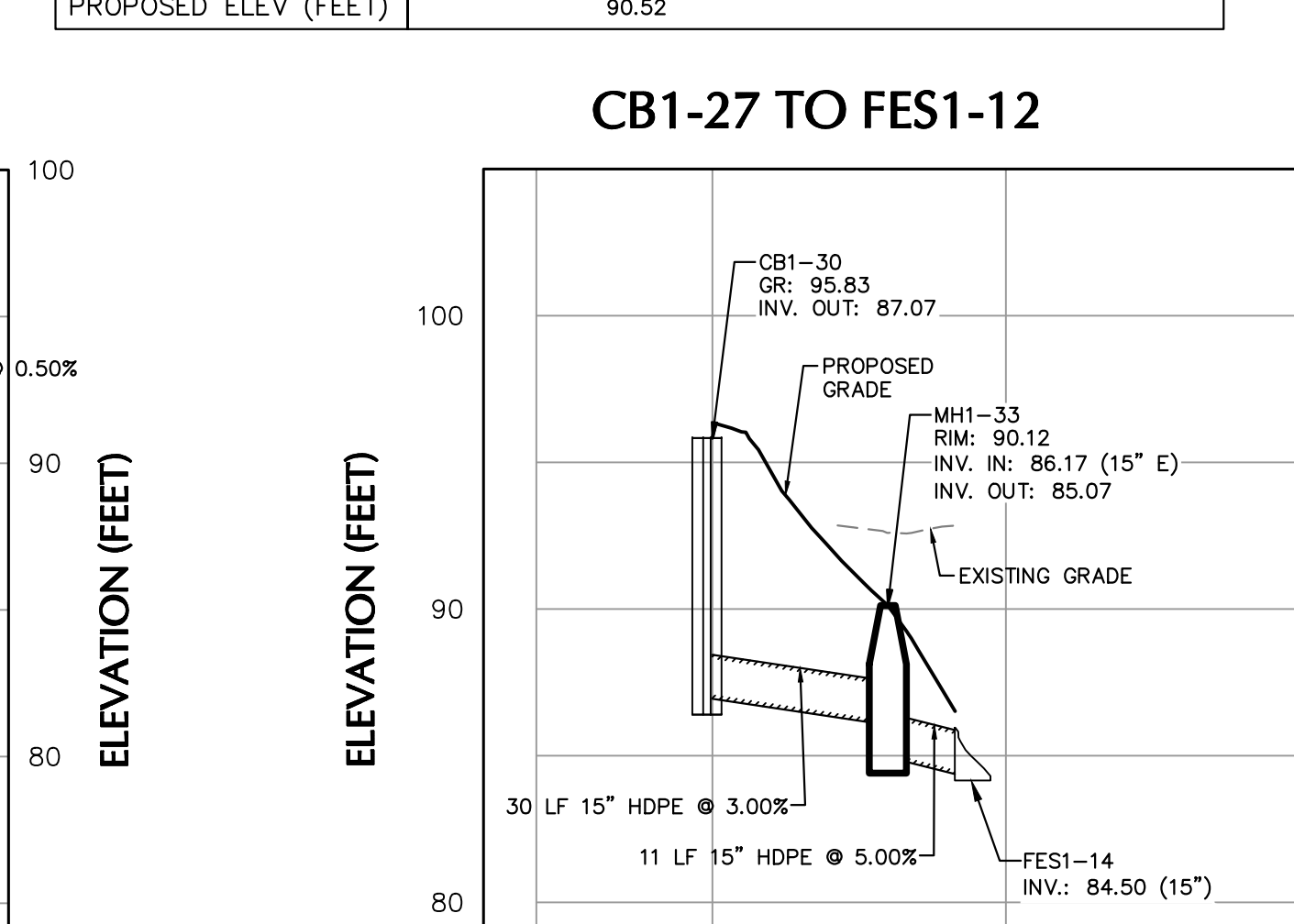
CB1-60 TO FES1-13



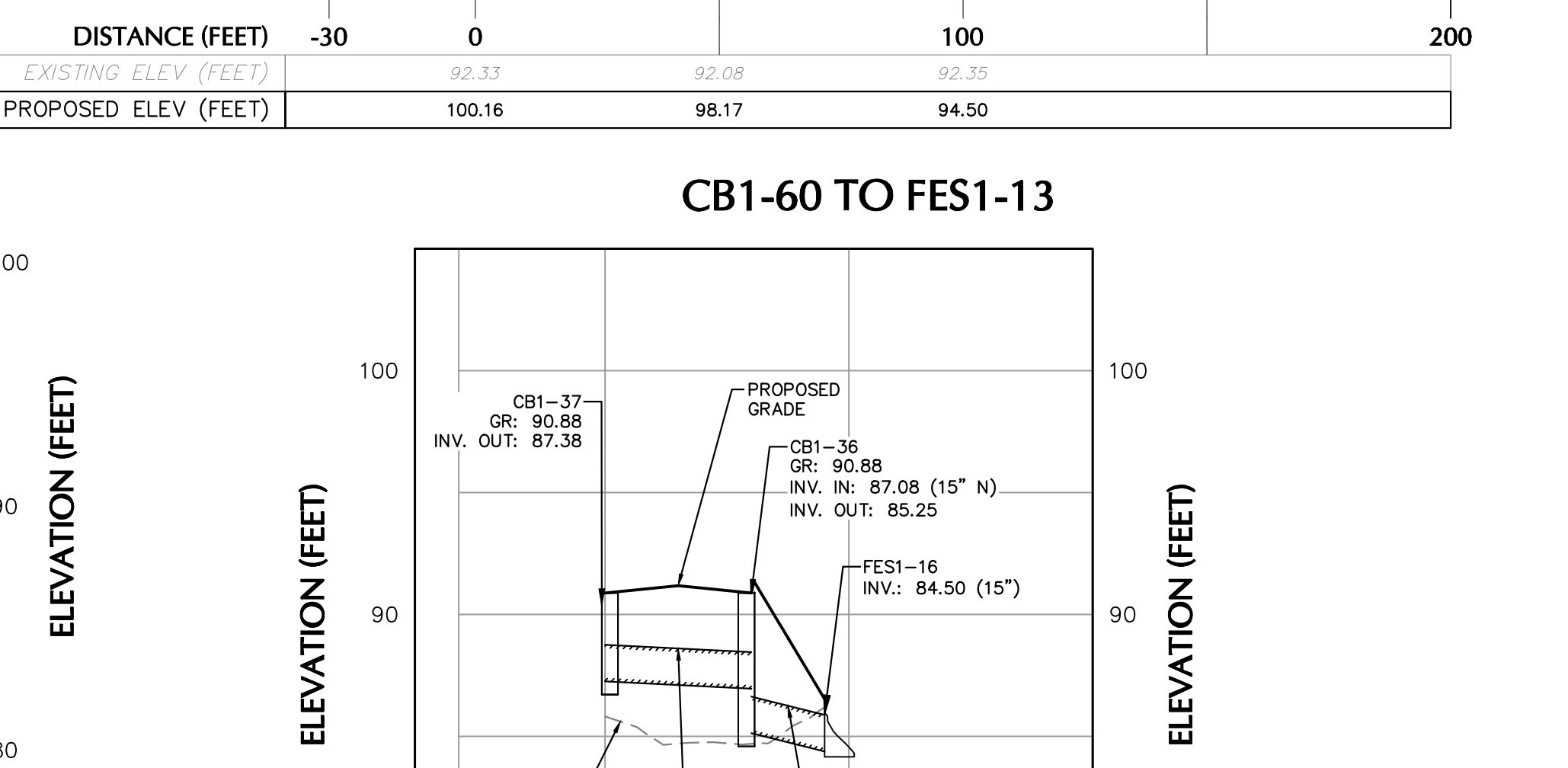
OCS-1F TO MH1-5



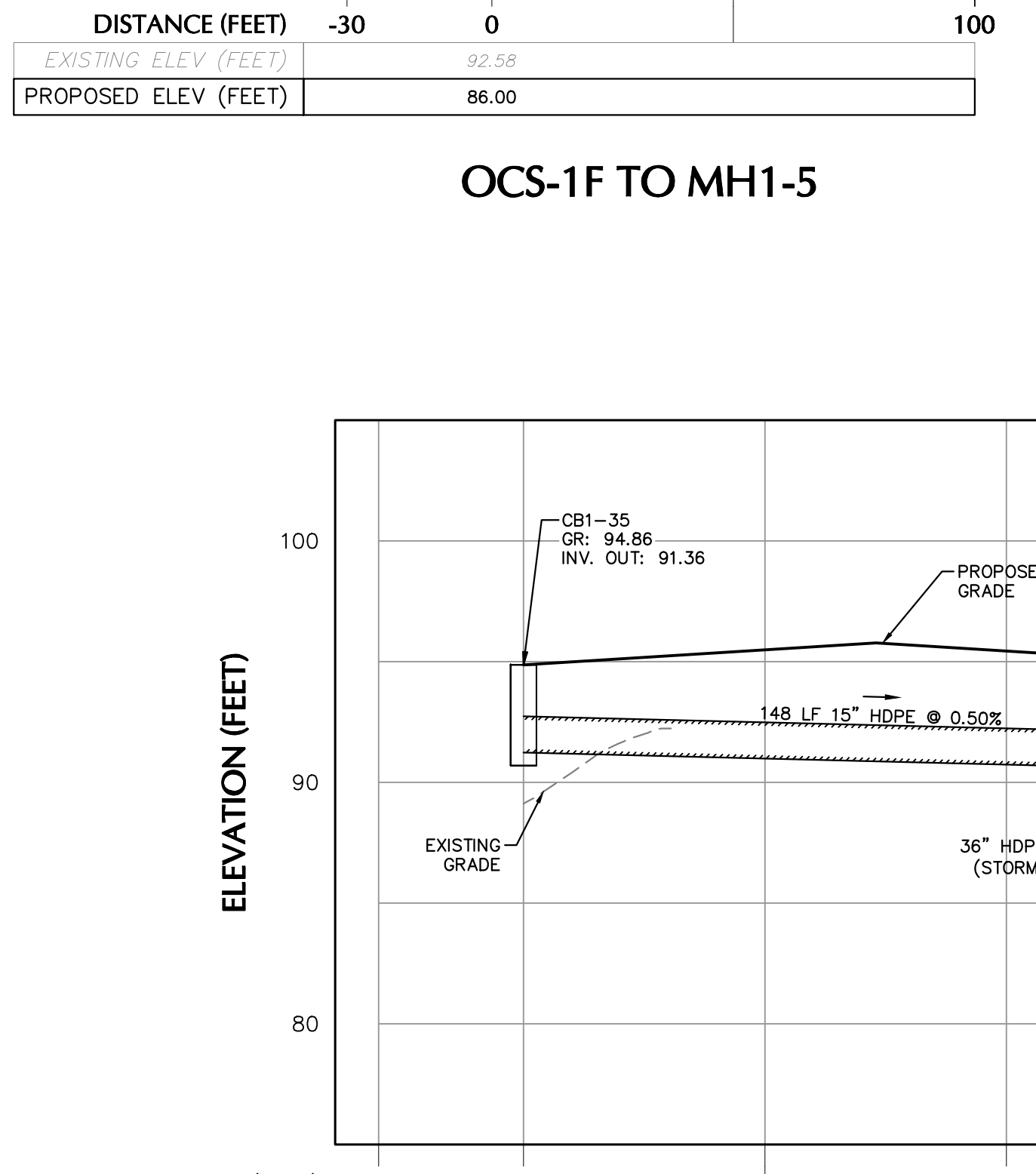
CB1-56 TO EX-CB1-2



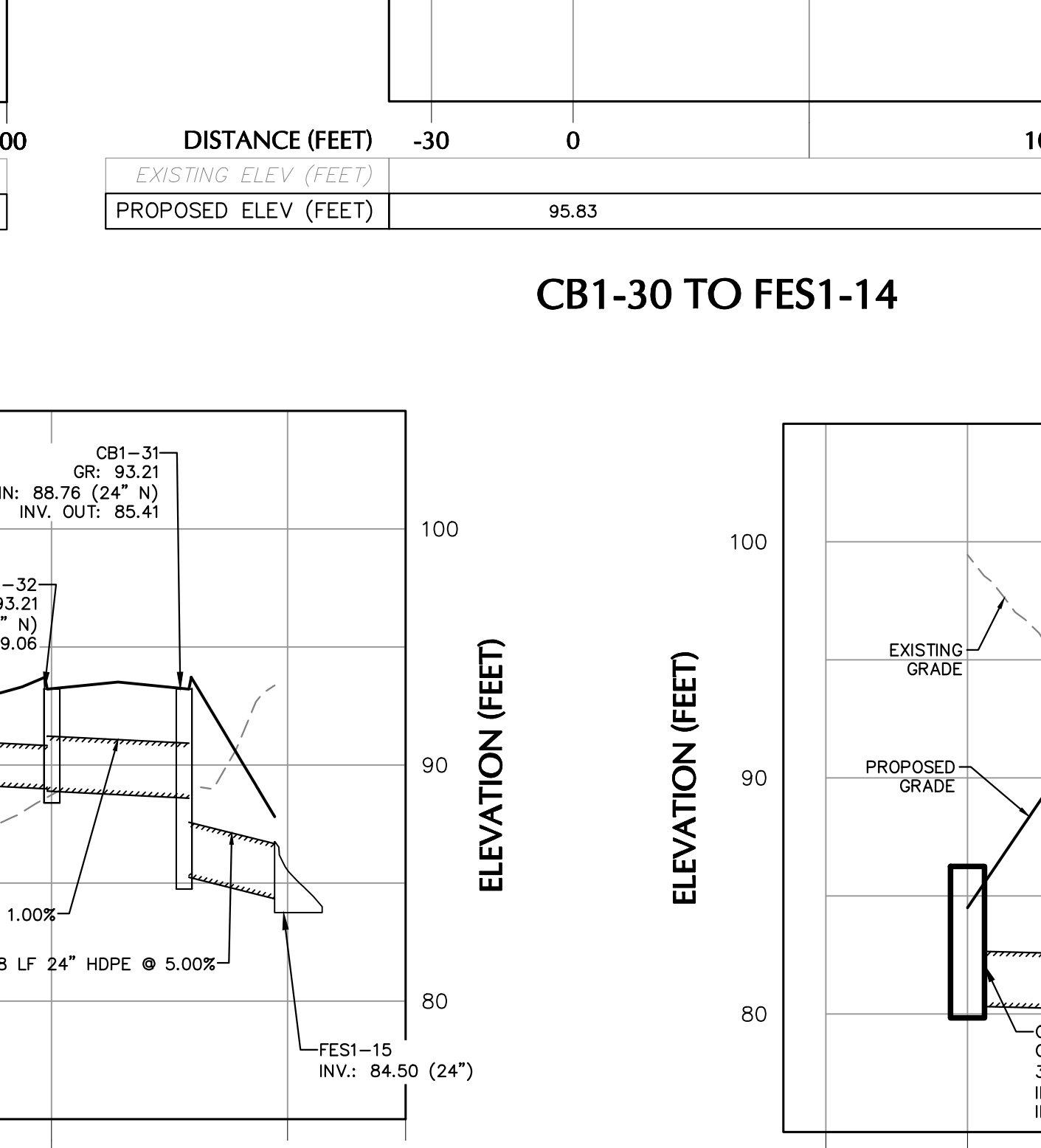
CB1-30 TO FES1-14



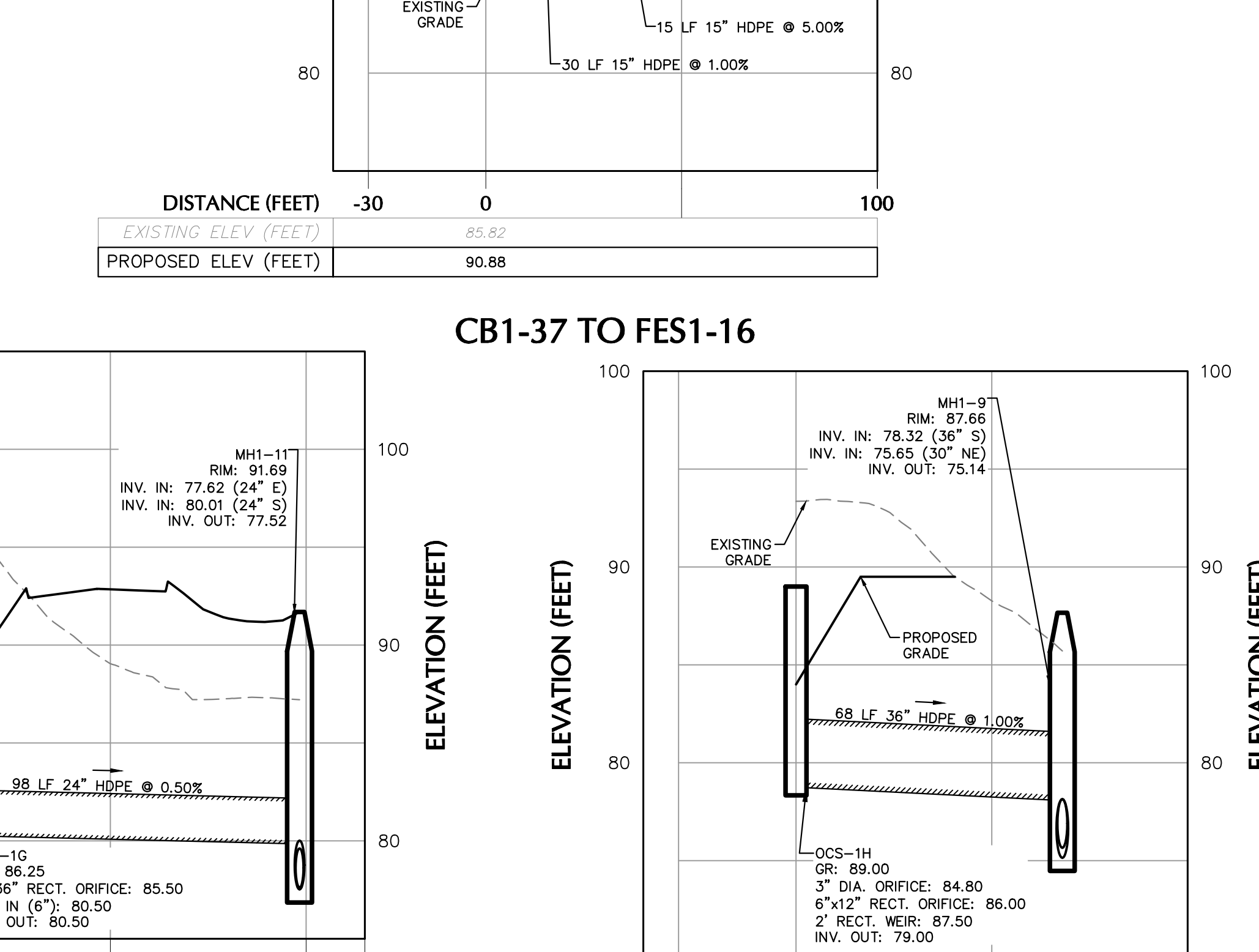
CB1-37 TO FES1-16



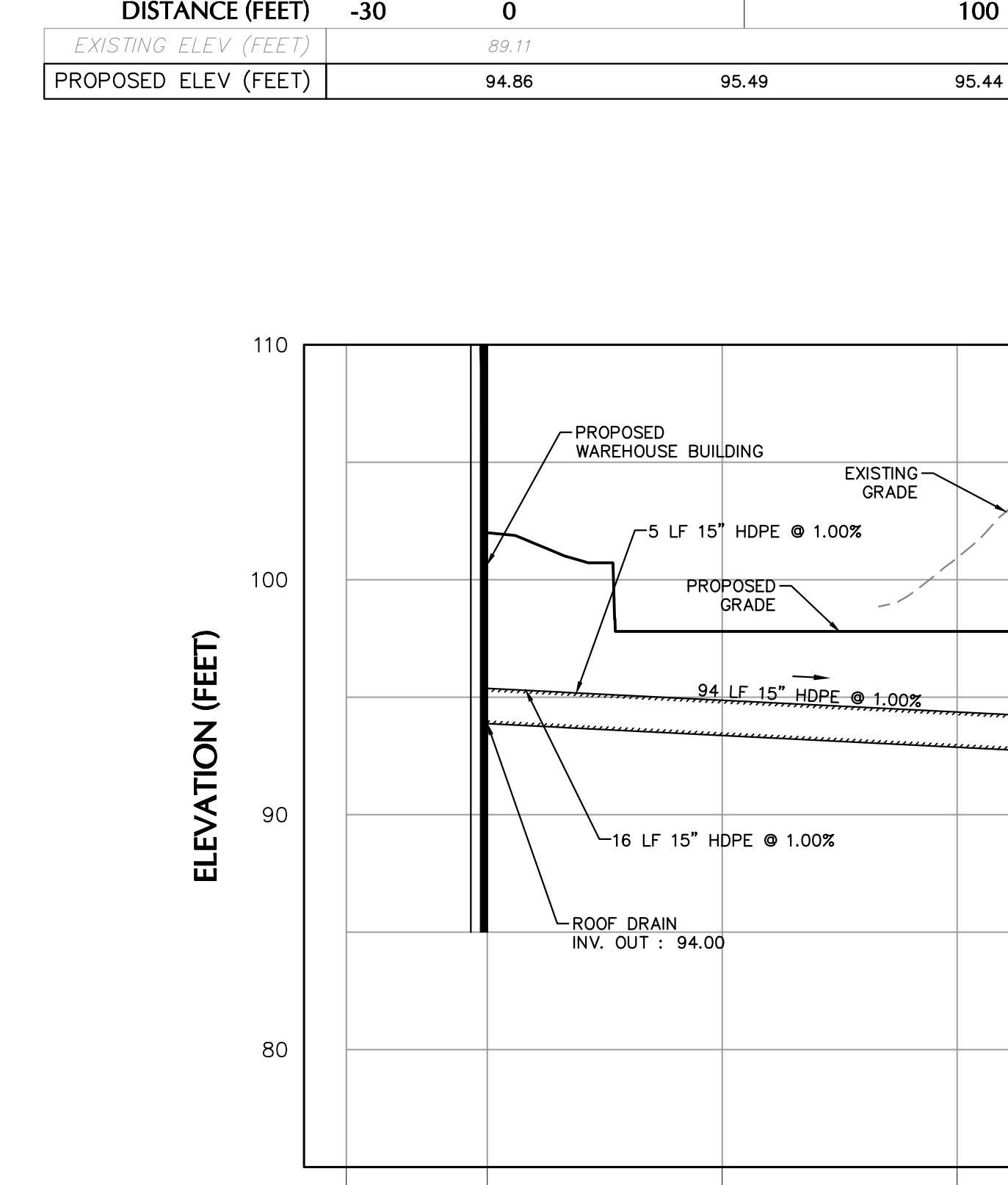
CB1-35 TO FES1-15



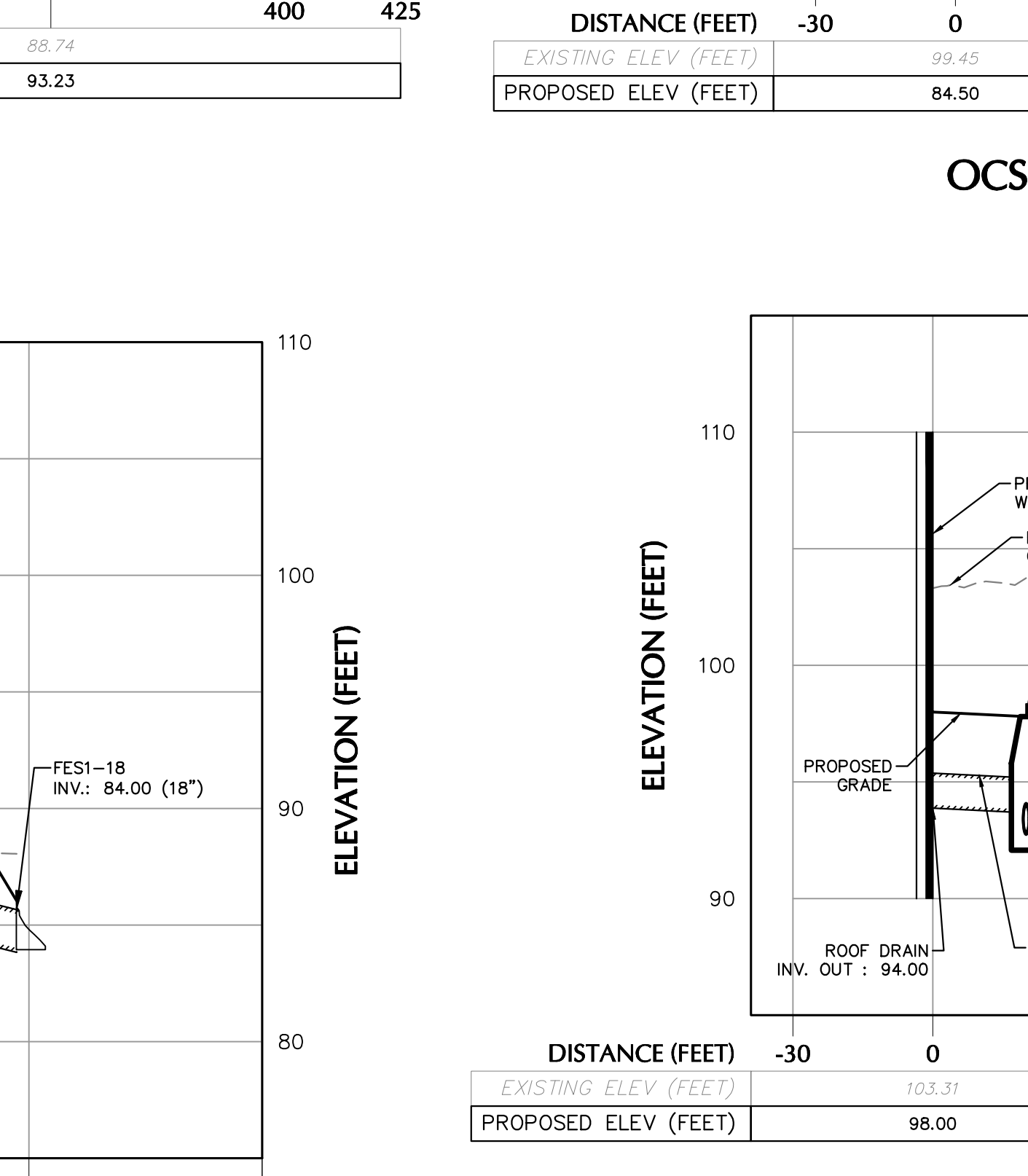
OCS-1G TO MH1-11



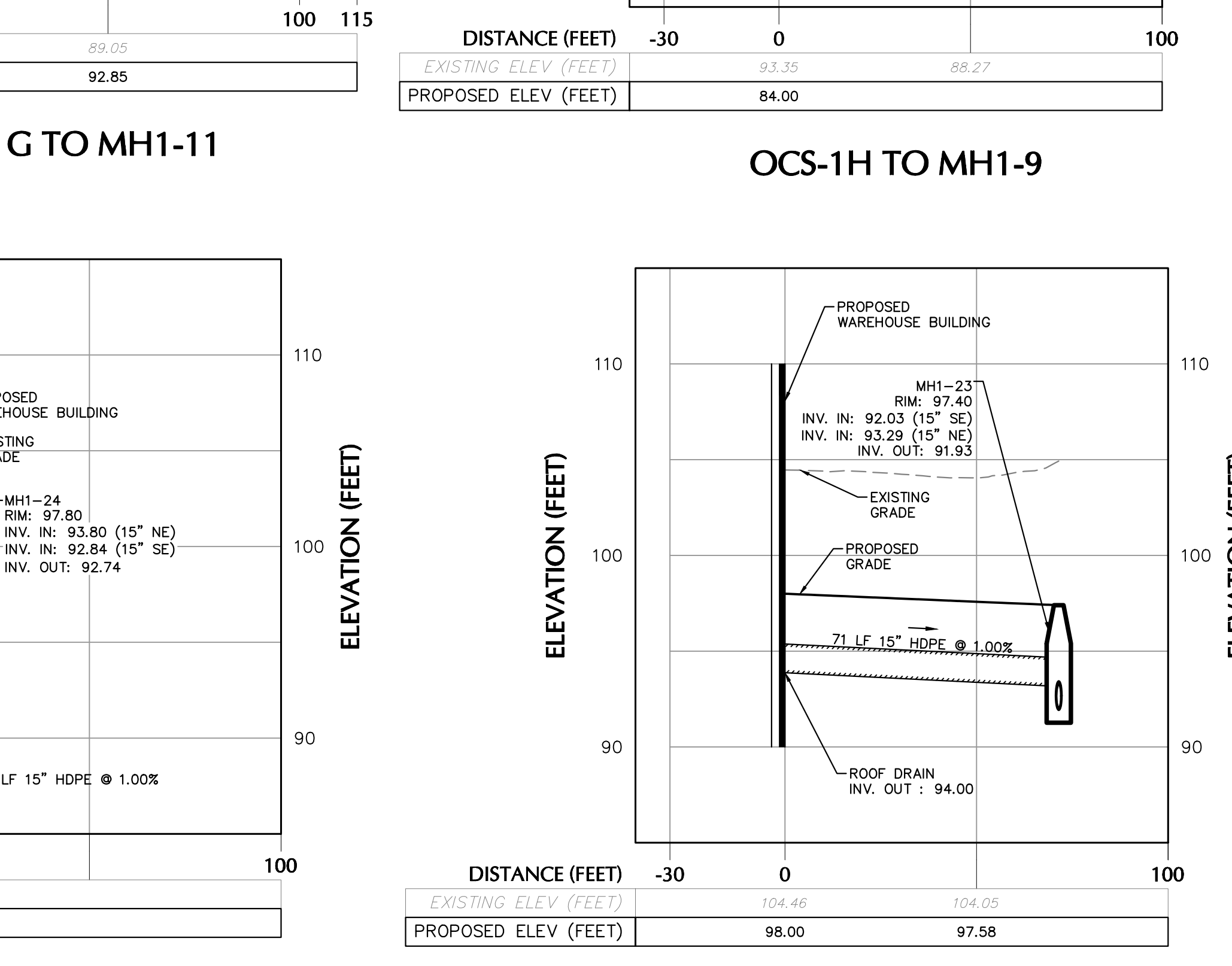
OCS-1H TO MH1-9



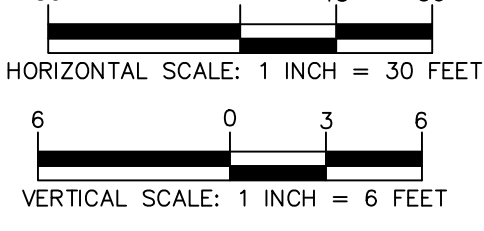
RD1-7 TO FES1-18



RD1-6 TO MH1-24



RD1-5 TO MH1-23



Date	Description	No.

REVISIONS

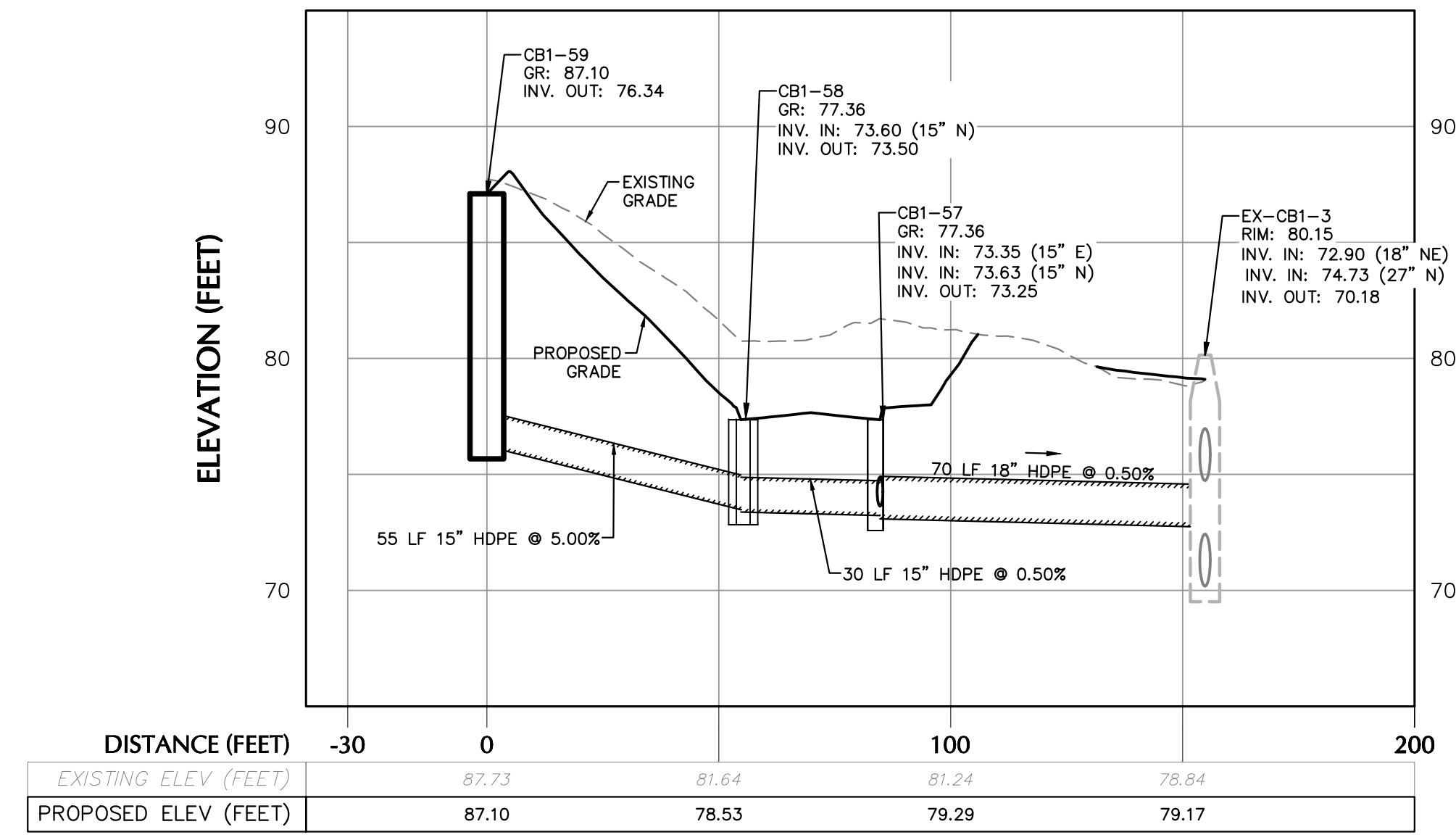
Professional Engineer Seal: JOHN COTE, License No. 246E03705800, dated 5/3/2024.

LANGAN
Langan Engineering and Environmental Services, LLC
300 Kimball Drive
 Parsippany, NJ 07054
T: 973.560.4900 F: 973.560.4901 www.langan.com
NJ Certificate of Authorization No. 24G027896403

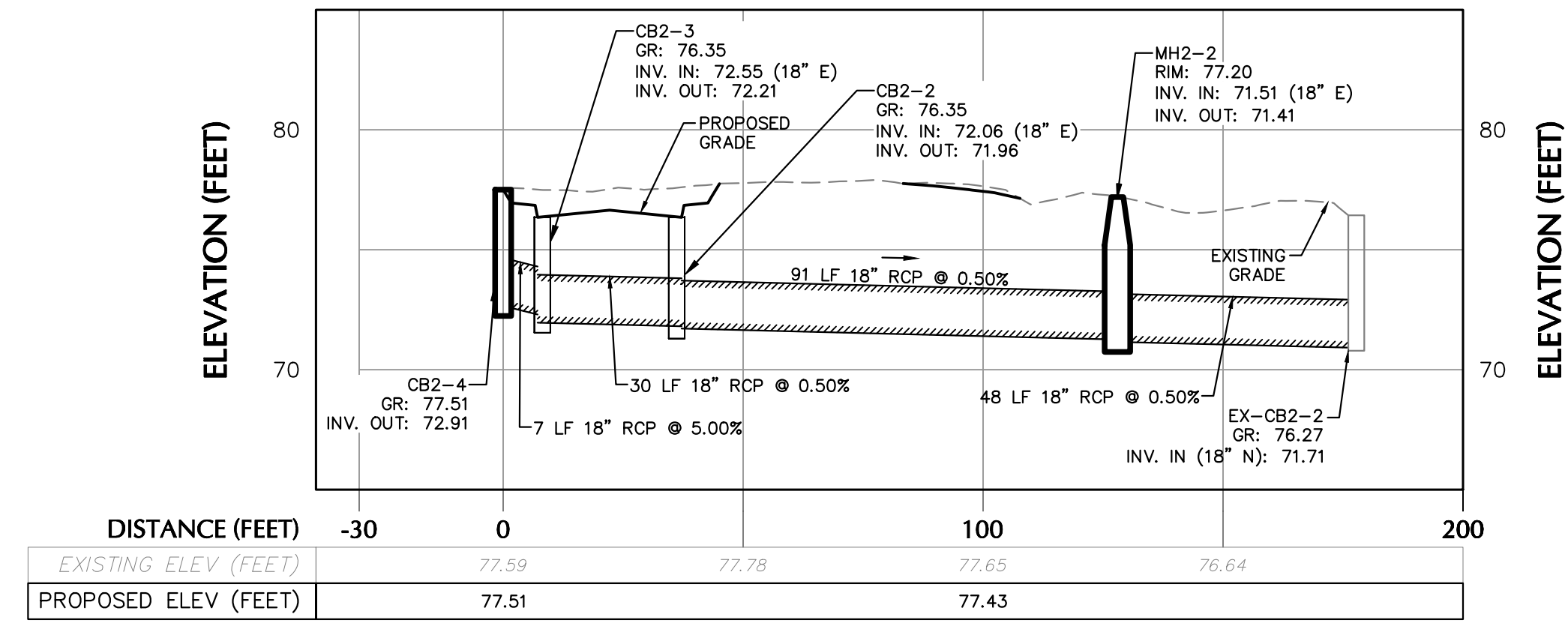
Project: **3501 STATE ROUTE 66 REDEVELOPMENT**
BLOCK No. 3903, LOT No. 12 & 13
NEPTUNE TOWNSHIP
MONMOUTH COUNTY NEW JERSEY

Drawing Title: **DRAINAGE PROFILES**

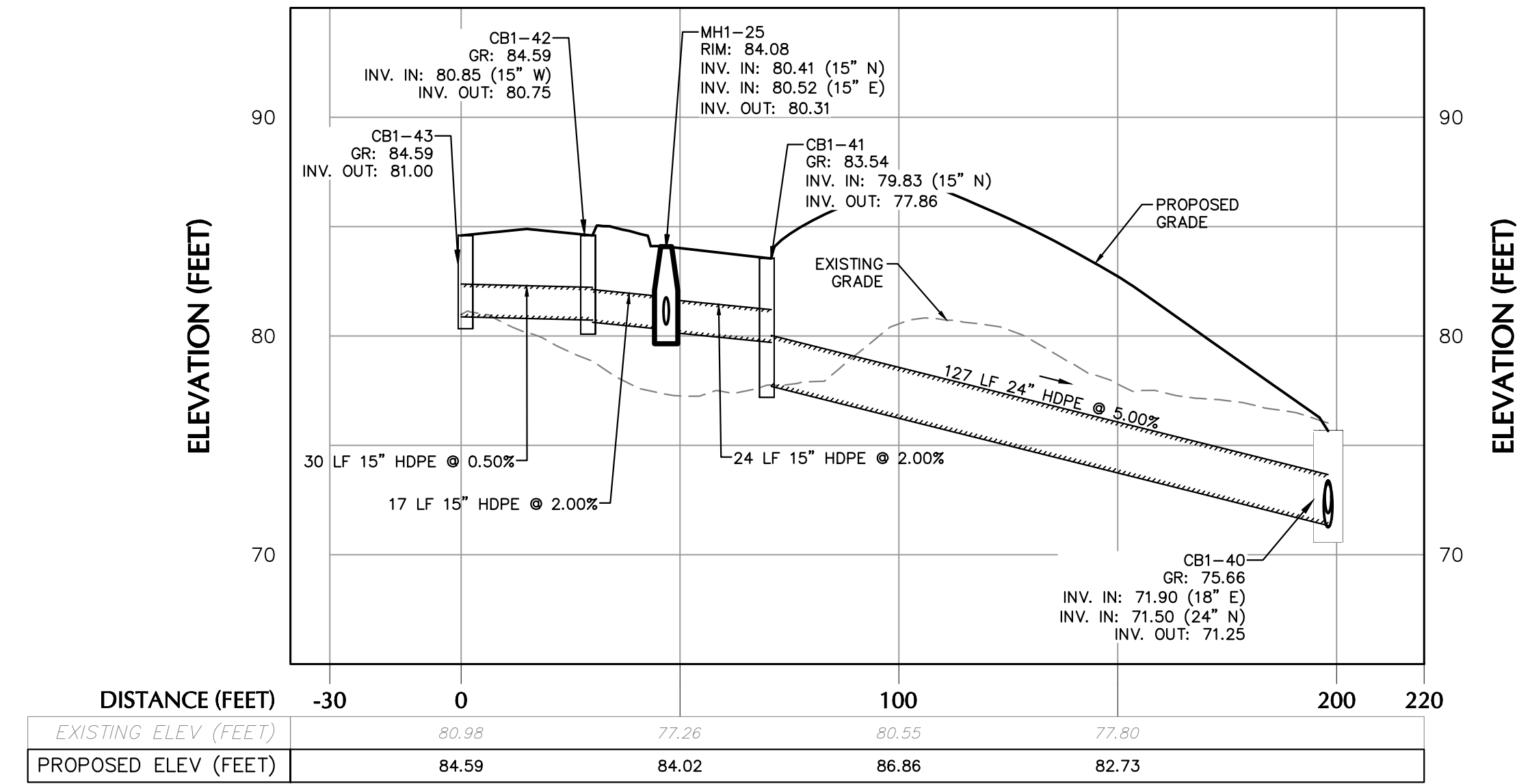
Project No. 100775002
Drawing No. CG204
Date: MAY 03, 2024
Drawn By: SS
Checked By: MJV
Sheet 28 of 48



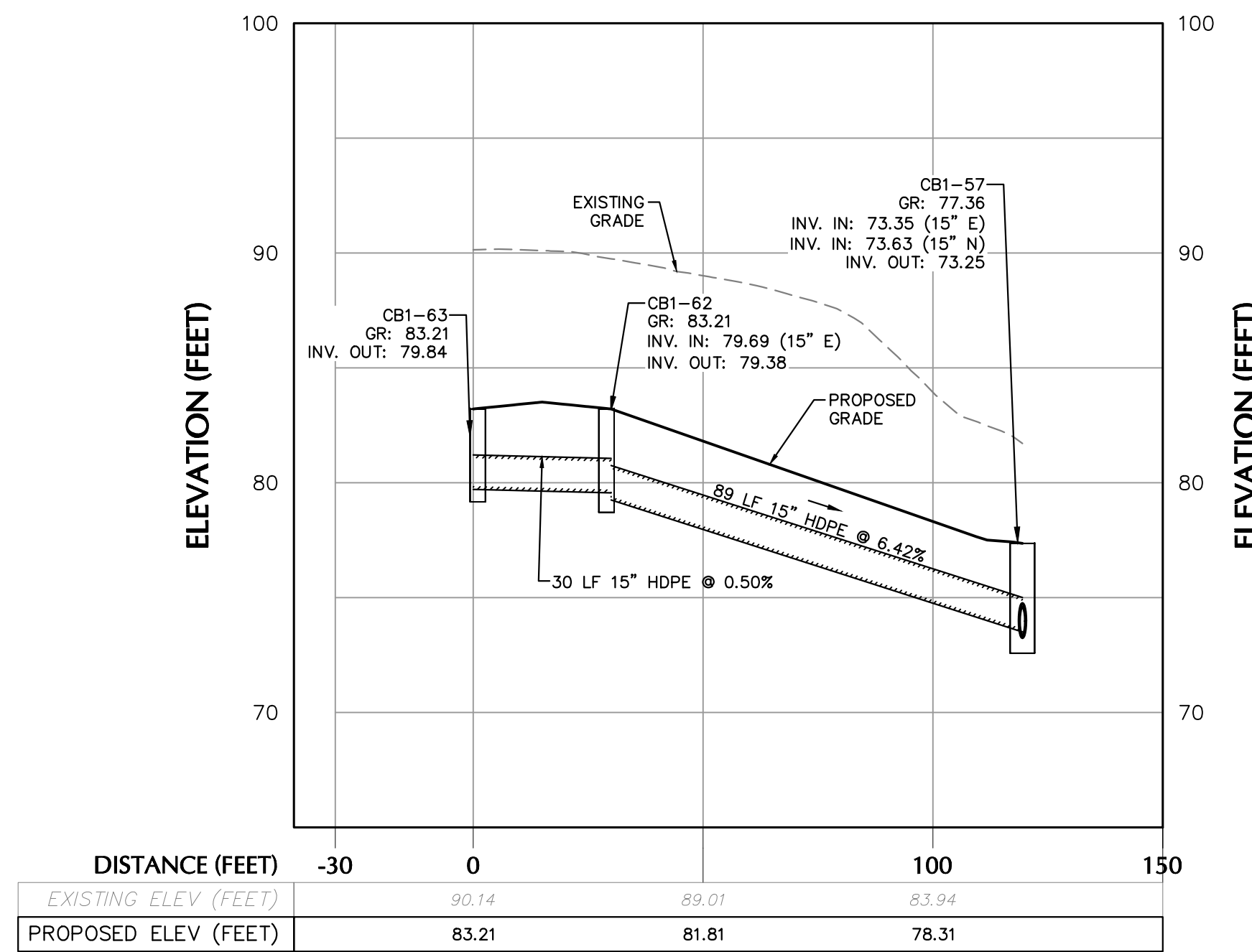
CB1-59 TO EX-CB1-3



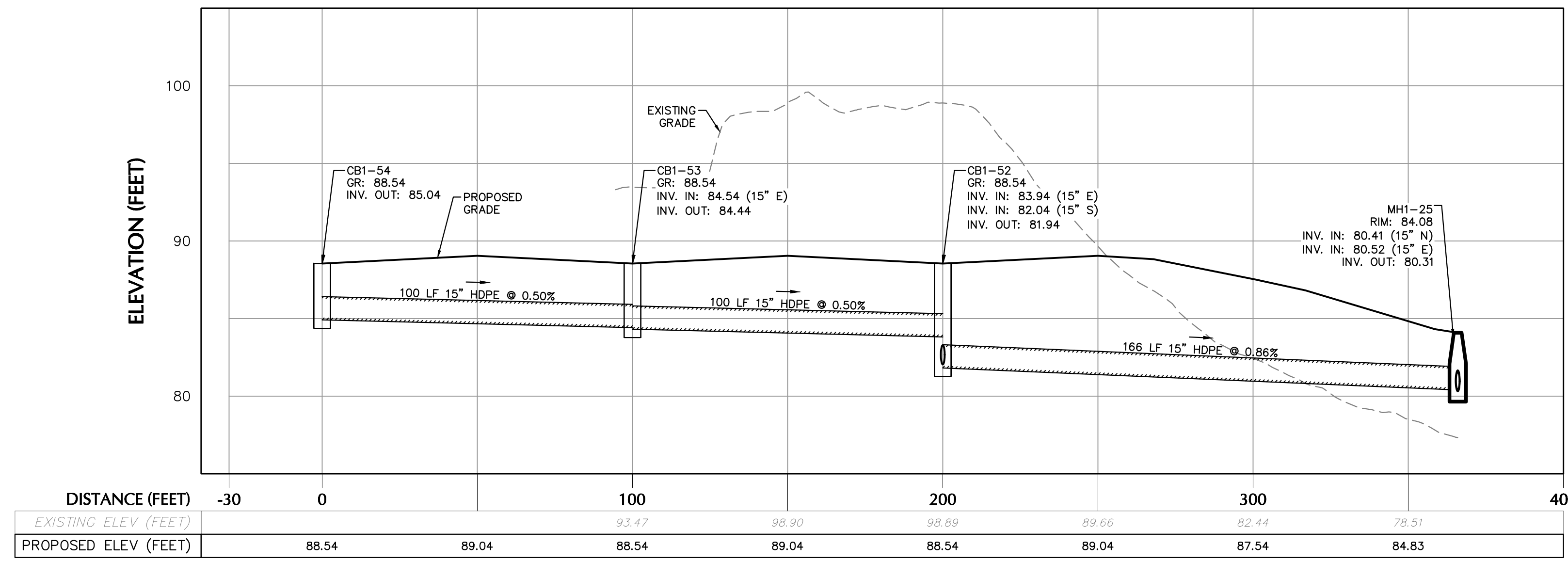
CB2-4 TO EX-CB2-2



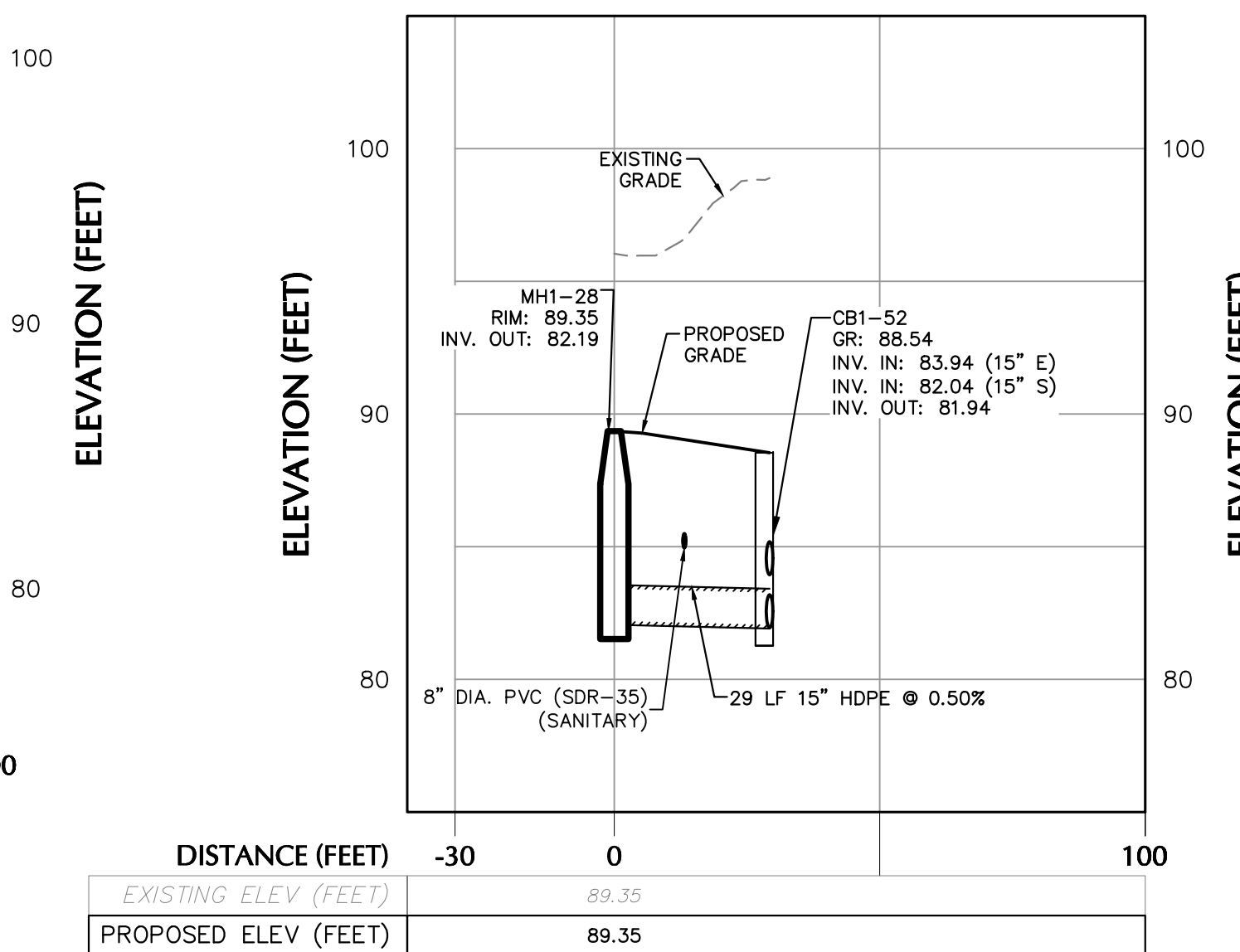
CB1-43 TO CB1-40



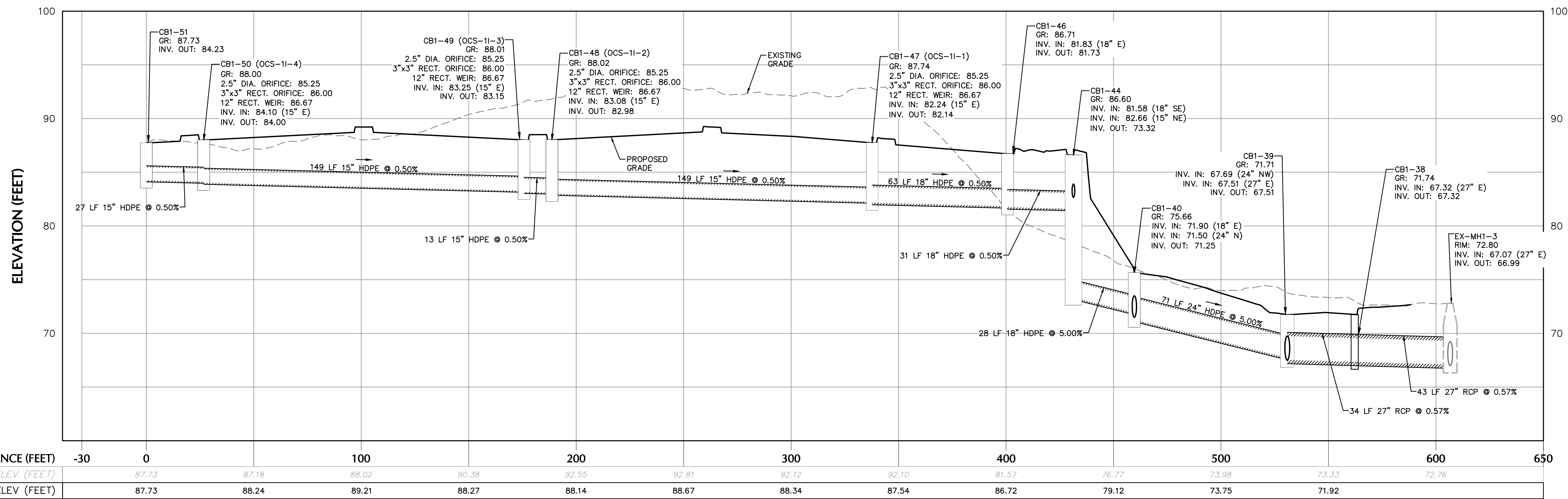
CB1-63 TO CB1-57



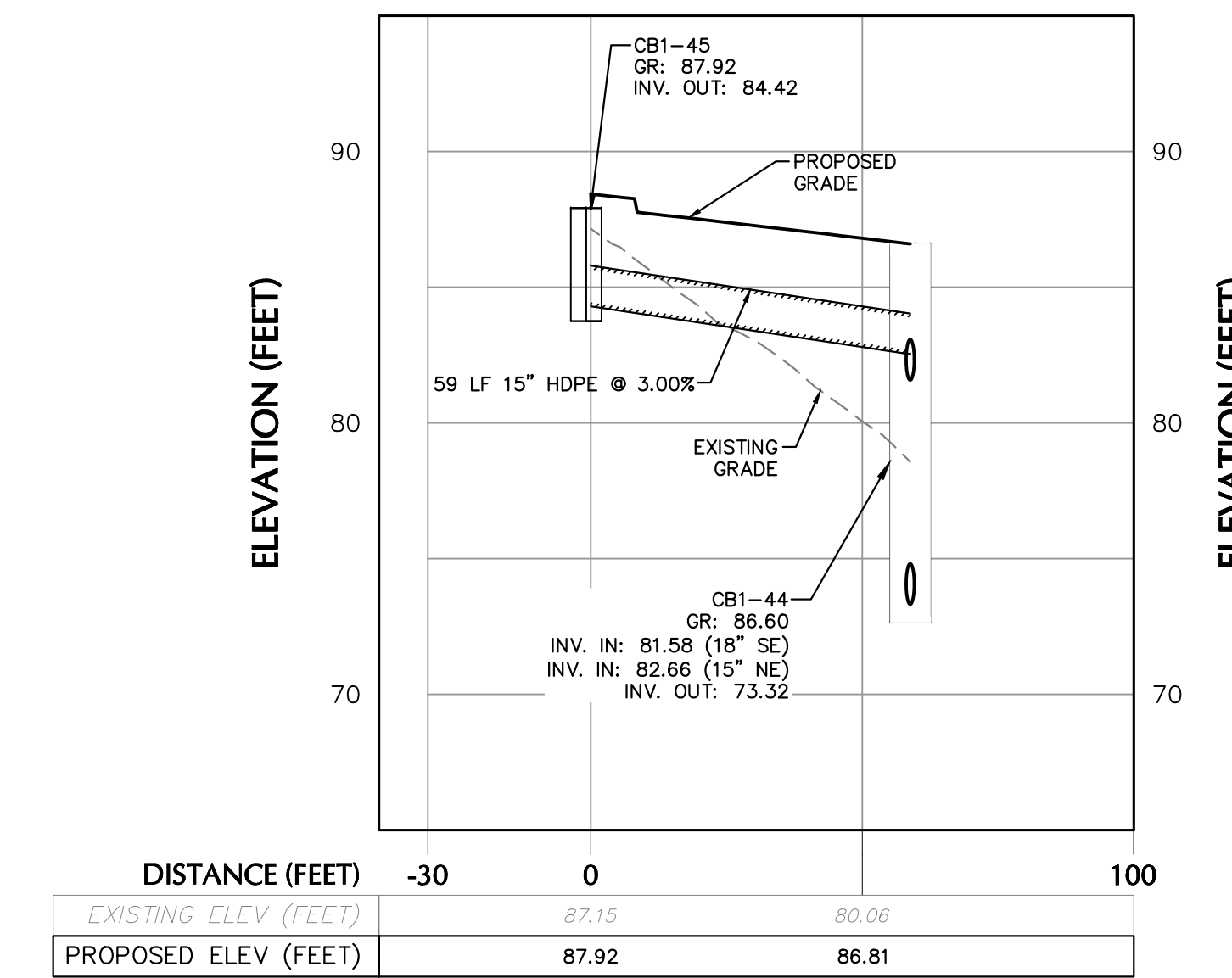
CB1-54 TO MH1-25



MH1-28 TO CB1-56



CB1-51 TO EX-MH1-3



CB1-45 TO CB1-44

Date	Description	No.

REVISIONS

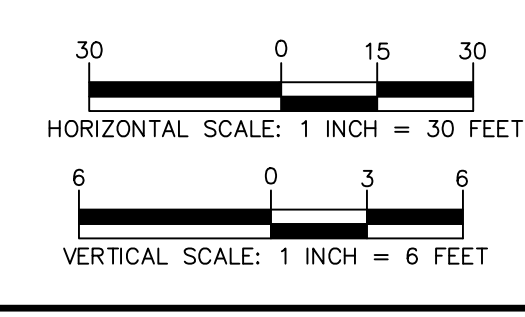
Signature: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

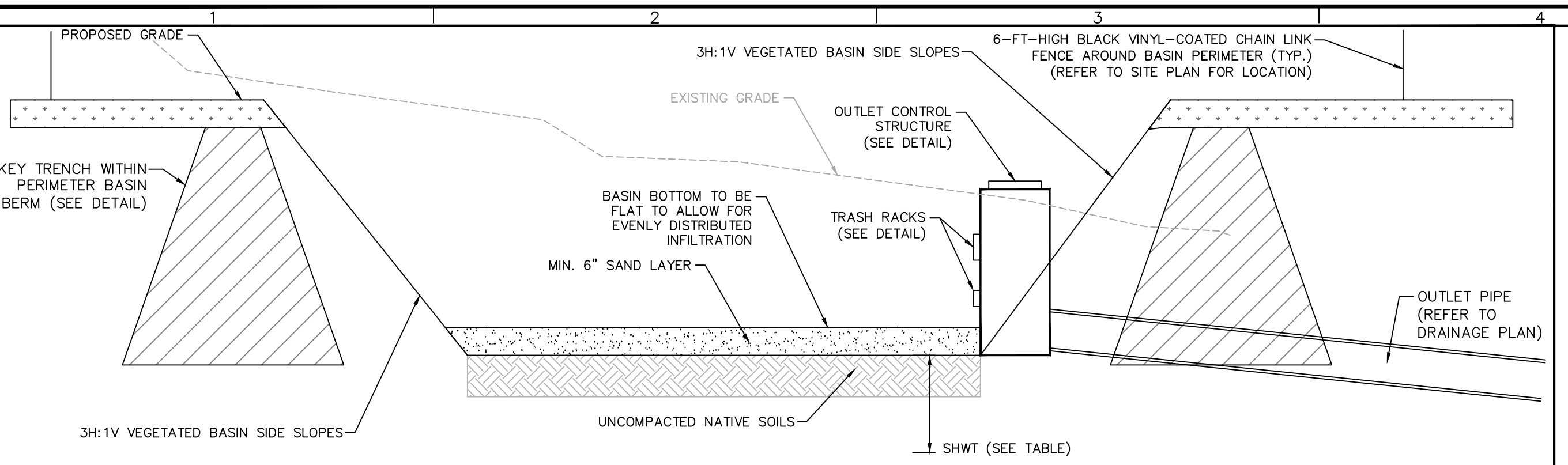
LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246E03705800

Project: **3501 STATE ROUTE 66 REDEVELOPMENT**
 BLOCK No. 3903, LOT No. 12 & 13 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

Drawing Title: **DRAINAGE PROFILES**

Project No. 100775002
 Date: MAY 03, 2024
 Drawn By: **SS**
 Checked By: **MY**
 Drawing No. **CG205**
 Sheet 29 of 48

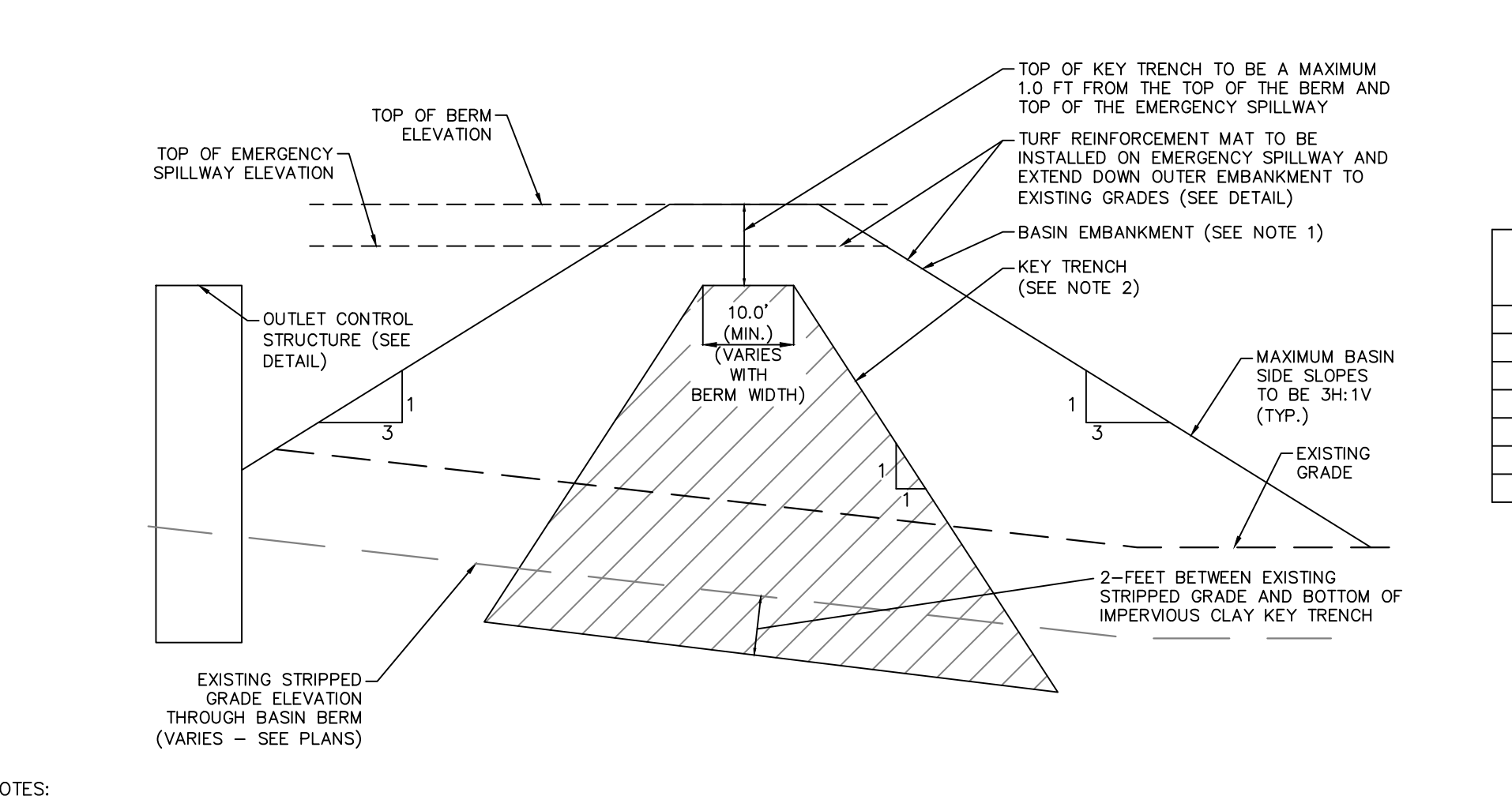




INFILTRATION BASIN	MAX. BEDROCK / GROUNDWATER EL.	GROUNDWATER MOUNDING HEIGHT AT CENTER (FT)	MAX. GROUNDWATER MOUNDING EL.	BOTTOM OF SAND LAYER EL.
SSIB-1A	76.0	3.42	79.42	88.50
SSIB-1D	88.0	2.62	90.62	90.75
LSIB-1H	78.0	5.32	83.32	83.50

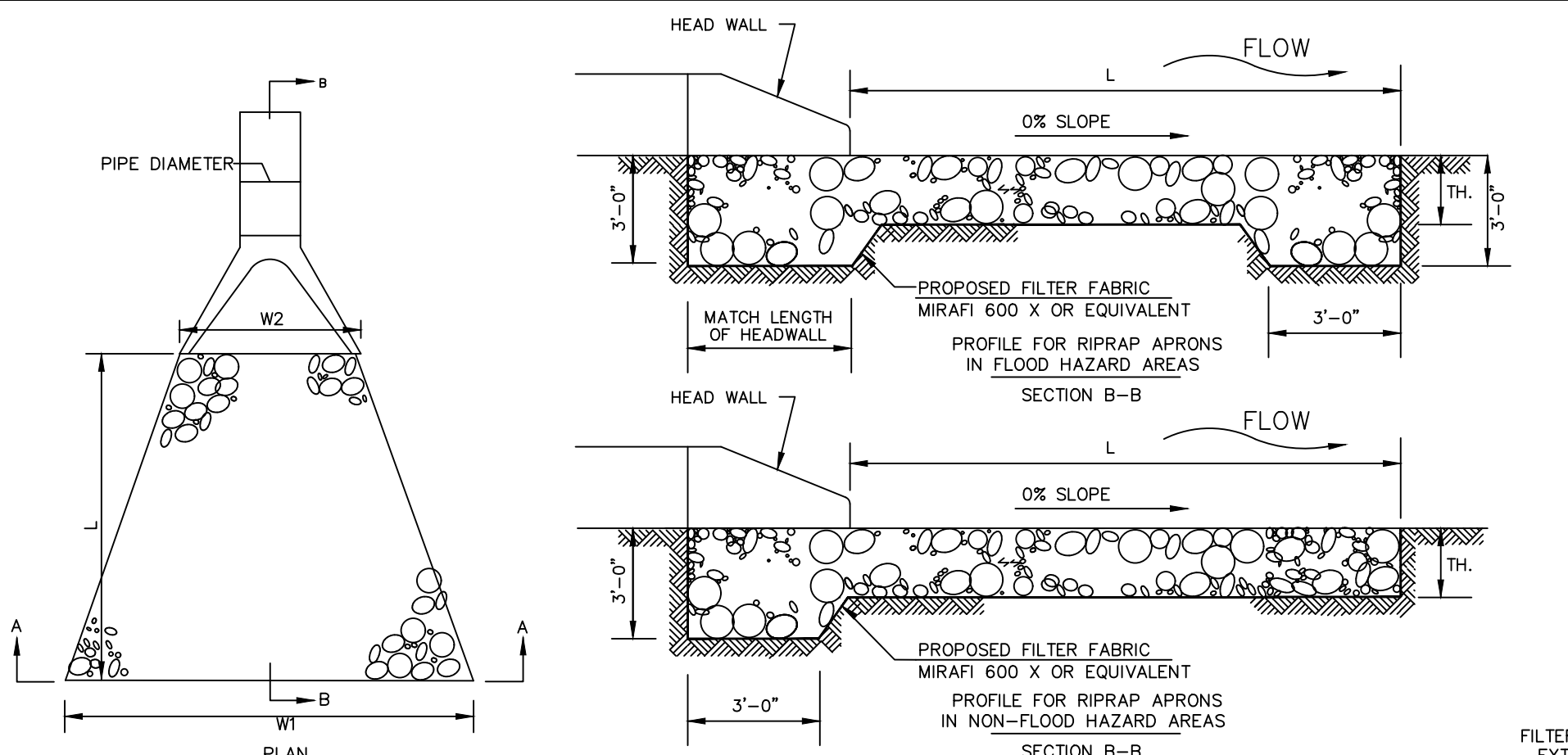
Notes:
 1. Groundwater was not encountered within test pits and borings performed in Large Scale Infiltration Basin 1H. Evidence of mottling was found in Boring B-22 at EL. 78.0, making this the seasonal high groundwater elevation.

INFILTRATION BASIN TYPICAL CROSS SECTION



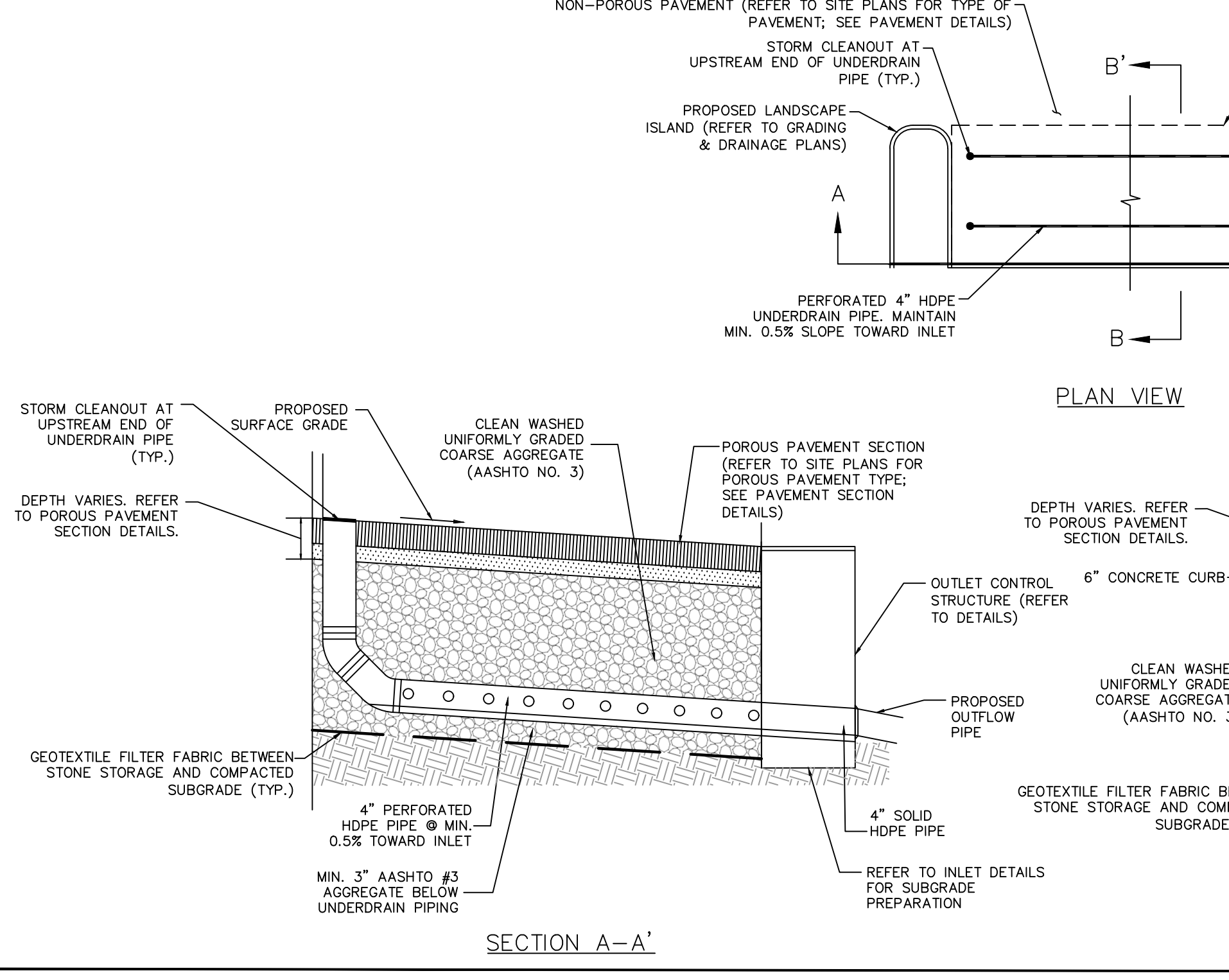
Notes:
 1. ALL BASIN EMBANKMENTS SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS CONSISTING OF MAXIMUM 8-INCH LIFTS. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. EMBANKMENTS SHALL BE COMPACTED TO A MINIMUM OF 95% DRY DENSITY. COMPACTION TESTS SHALL BE PERFORMED USING THE MODIFIED PROCTOR METHOD IN ACCORDANCE WITH ASTM-D-1557.
 2. KEY TRENCH SHALL HAVE A MINIMUM DEPTH OF FILL MATERIAL THAT IS 2' BELOW THE STRIPPED GRADE (OR SHALLower IF BEDROCK IS ENCOUNTERED), MINIMUM WIDTH=4', MAXIMUM SIDE SLOPE STEEPNESS IS 1H:1V AND FILLED WITH HIGHLY IMPERVIOUS AND WELL COMPACTED CLAY MATERIAL. THE TRENCH MUST BE INSTALLED IN ALL AREAS OF FILL AND EXTEND UP BOTH ABUTMENTS TO 1' BELOW THE TOP OF BERM ELEVATION AND TO 1' BELOW THE TOP OF THE EMERGENCY SPILLWAY ELEVATION, AND EXCAVATED UNDER THE ENTIRE LENGTH OF THE BERM AND LOCATED AT OR UPSTREAM OF THE CENTERLINE OF THE BERM. COMPACTION REQUIREMENTS SHOULD BE THE SAME AS THOSE FOR THE EMBANKMENT. THE TRENCH SHOULD BE DEMARDED DURING BACKFILLING AND COMPACTION OPERATIONS IF NECESSARY.

BASIN EMBANKMENT & KEY TRENCH DETAIL

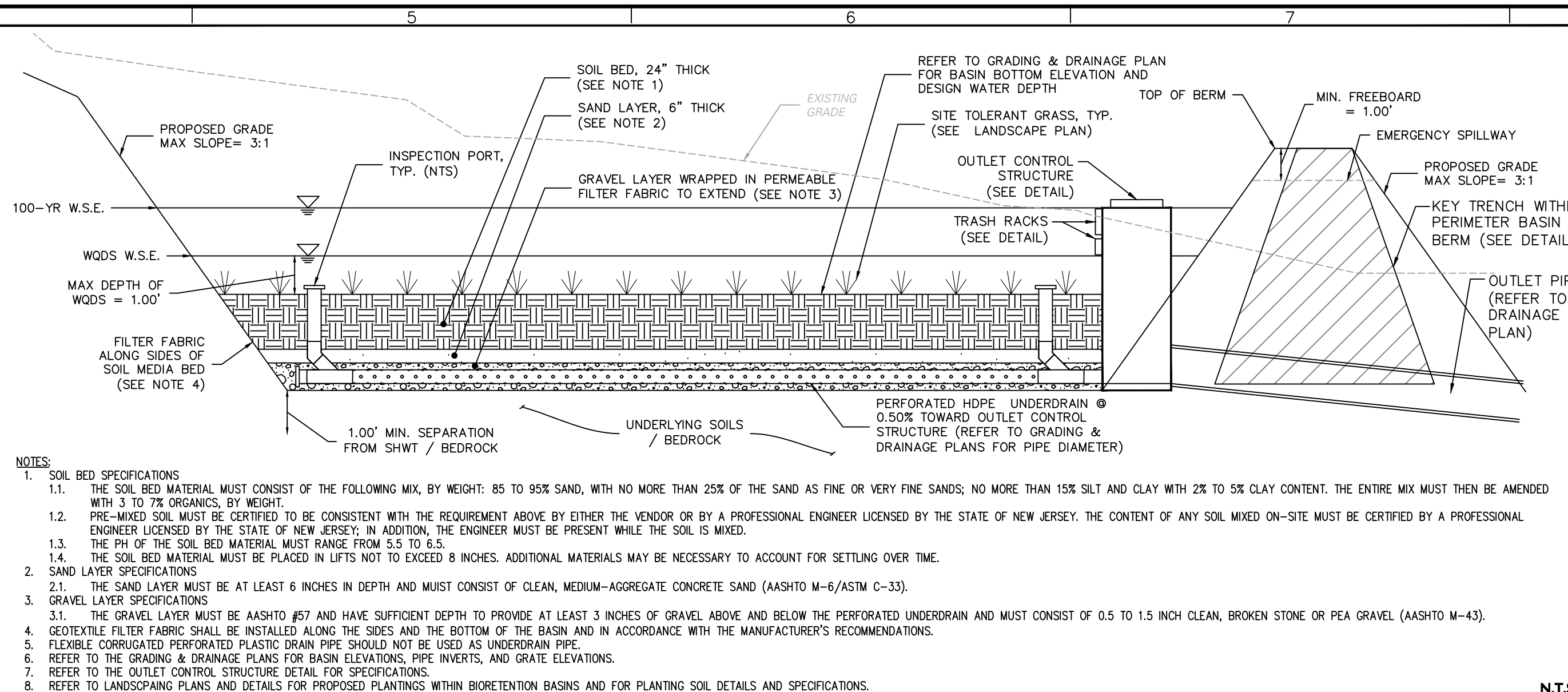


GENERAL NOTES:
 1. THE INDICATED APRON LENGTH AND WIDTH HAS BEEN DESIGNED IN ACCORDANCE WITH "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY"
 2. FOR ALL PIPE SIZES, SLOPES, AND INVERTS SEE GRADING PLAN.
 3. RIPRAP APRON LOCATED ALONG THE EMBANKMENT EDGE CAN BE FLARED UP TO ALIGN WITH GRADES OF THE DRAINAGE DITCH, REFER TO SECTION A-A.

RIPRAP APRON



TYPICAL POROUS PAVEMENT SYSTEM OUTLET CONTROL STRUCTURE



UNDERDRAINED BIORETENTION BASIN TYPICAL CROSS SECTION

Specification Sheet
VMax® C350® Turf Reinforcement Mat

The composite turf reinforcement mat (C-TRM) shall be a machine-produced mat of 100% coconut fiber matrix incorporated into permanent three-dimensional turf reinforcement matting. The matrix shall be evenly distributed across the entire width of the matting and stitch bonded between super heavy duty UV-stabilized nettings with 0.50 x 0.50 in. (1.27 x 1.27 cm) openings, an ultra heavy duty UV-stabilized, dramatically corrugated (rimmed) intermediate netting with 0.5 x 0.5 in. (1.27 x 1.27 cm) openings, and covered by a super heavy duty UV-stabilized netting with 0.50 x 0.50 in. (1.27 x 1.27 cm) openings. The middle corrugated netting shall form prominent closely spaced ridges across the entire width of the mat. The three nettings shall be stitched together on 1.50 in. (3.81 cm) centers with UV-stabilized polypropylene thread to form permanent three-dimensional turf reinforcement matting. All mats shall be manufactured with colored thread stitched along both outer edges as an overlap guide for adjacent mats.

The C350 shall meet Type 5A, B and C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) (FHWA) Section 703.16

Index Property	Test Method	Typical
Thickness	ASTM D6525	0.79 in. (20.1 mm)
Resiliency	ASTM D6524	90%
Density	ASTM D792	0.917 g/cm³
Max/Unit Area	ASTM D6556	18.36 oz./sq. yd. (624 g/m²)
UV Stability	ASTM D4855/1000 H6	80%
Porosity	ECTC Guidelines	99%
Stiffness	ASTM D3988	0.34 in.-lb. (20990 mg-cm)
Light Penetration	ASTM D6567	7.2%
Tensile Strength - MD	ASTM D6818	585.8 lbs/ft (8.70 kN/m)
Elongation - MD	ASTM D6818	45.3%
Tensile Strength - TD	ASTM D6818	687.6 lbs/ft (10.10 kN/m)
Elongation - TD	ASTM D6818	19.5%
Biomass Improvement	ASTM D7322	380%

Design Permissible Shear Stress

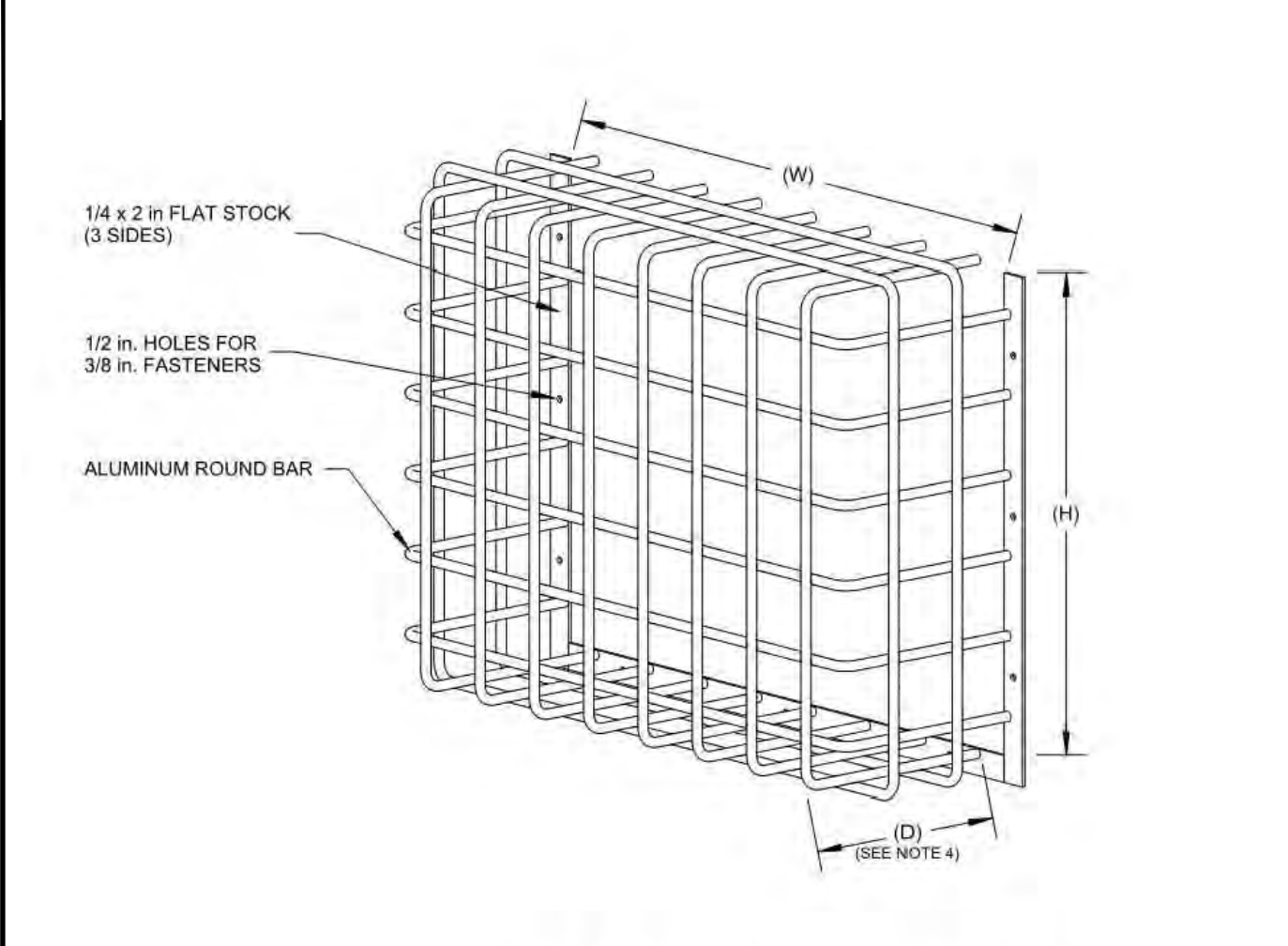
Phase	Unvegetated	Short Duration	Long Duration
Phase 1 Fully Veg.	12.0 psf (576 Pa)	10.0 psf (480 Pa)	10.0 psf (480 Pa)
Phase 2 Partially Veg.	10.0 psf (480 Pa)	10.0 psf (480 Pa)	10.0 psf (480 Pa)
Phase 3 Fully Veg.	12.0 psf (576 Pa)	10.0 psf (480 Pa)	10.0 psf (480 Pa)
Unvegetated Velocity	10.5 fps (3.2 m/s)		
Vegetated Velocity	20 fps (6.0 m/s)		

Material Content

Matrix	100% Coconut Fiber	0.5 lb/lyd (0.27 kg/m³)
Netting	Top and Bottom, UV-Stabilized Polypropylene	8 lb/1000 sq ft (0.81 kg/100 m²)
	Middle Corrugated UV-Stabilized Polypropylene	24 lb/1000 sq ft (2.37 kg/100 m²)
Thread	Polypropylene, UV Stable	80 sp (66.8 m)

Standard Roll Sizes

Width	Length	Weight	Thread
6.5 ft (2.0 m)	90 ft (27.4 m)	37 lbs (16.8 kg)	80 sp (66.8 m)
9.0 ft (2.7 m)	90 ft (27.4 m)	74 lbs (33.6 kg)	80 sp (66.8 m)

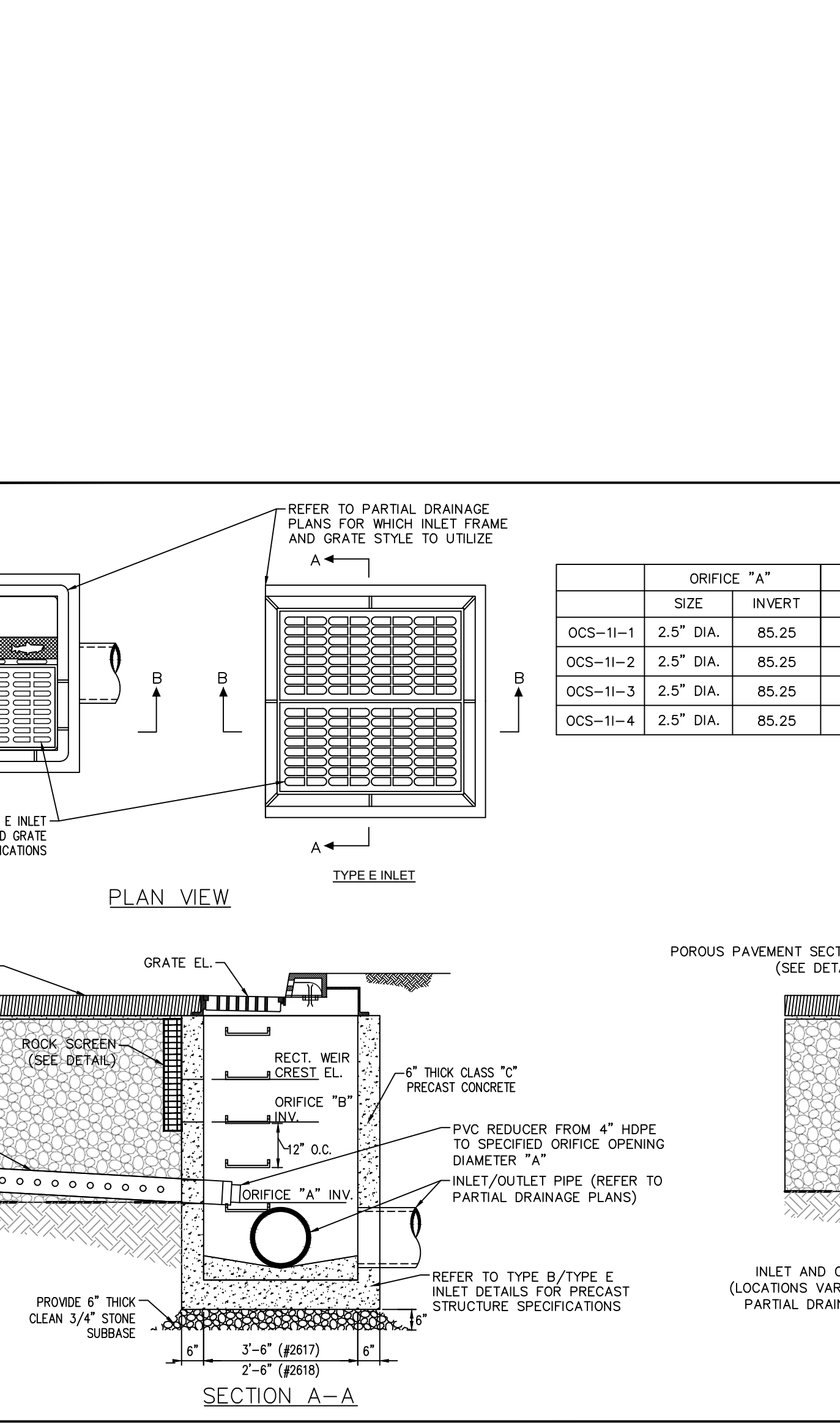


TRASH RACK INFORMATION

Item	Value
RACK WIDTH (L.O. CW)	10.0 ft (3048 mm)
RACK HEIGHT (L.O. CW)	10.0 ft (3048 mm)
RACK DEPTH (L.O. CW)	10.0 ft (3048 mm)
RACK SPACING (L.O. CW)	10.0 ft (3048 mm)
RACK CENTERING (L.O. CW)	10.0 ft (3048 mm)
STRUCTURE OPENING (H)	10.0 ft (3048 mm)
WEIR EXTENDS TO TOP	NO
FASTENERS (QTY)	100
WIRE MESH	NO

NOTES:
 1. ALL MATERIALS TO BE ALUMINUM 6061-T6 ALLOY.
 2. WELLS ALL INTERSECTIONS.
 3. FASTEN TO CONCRETE STRUCTURE WITH 3/8 in. x 3 in. STAINLESS STEEL CONCRETE WEDGE ANCHORS AT 18 in. MAX. SPACING. MINIMUM OF 4.
 4. DEPTH OF O.D. OF RACK: IF THE CONCRETE WEIR EXTENDS TO THE TOP OF THE STRUCTURE, THE DEPTH OF THE TOP BARS WILL EXTEND TO MEET TOP GRATING OR FRAME OF STRUCTURE SO THERE IS NO GAP.
 5. OVERALL RACK WIDTH = (W) + 4 INCHES.
 6. OVERALL RACK HEIGHT = (H) + BAR DIAMETER + 2 INCHES.
 7. OPTIONAL: +10g STAINLESS STEEL WIRE MESH WITH 1 in. GRID TO COVER RACK.

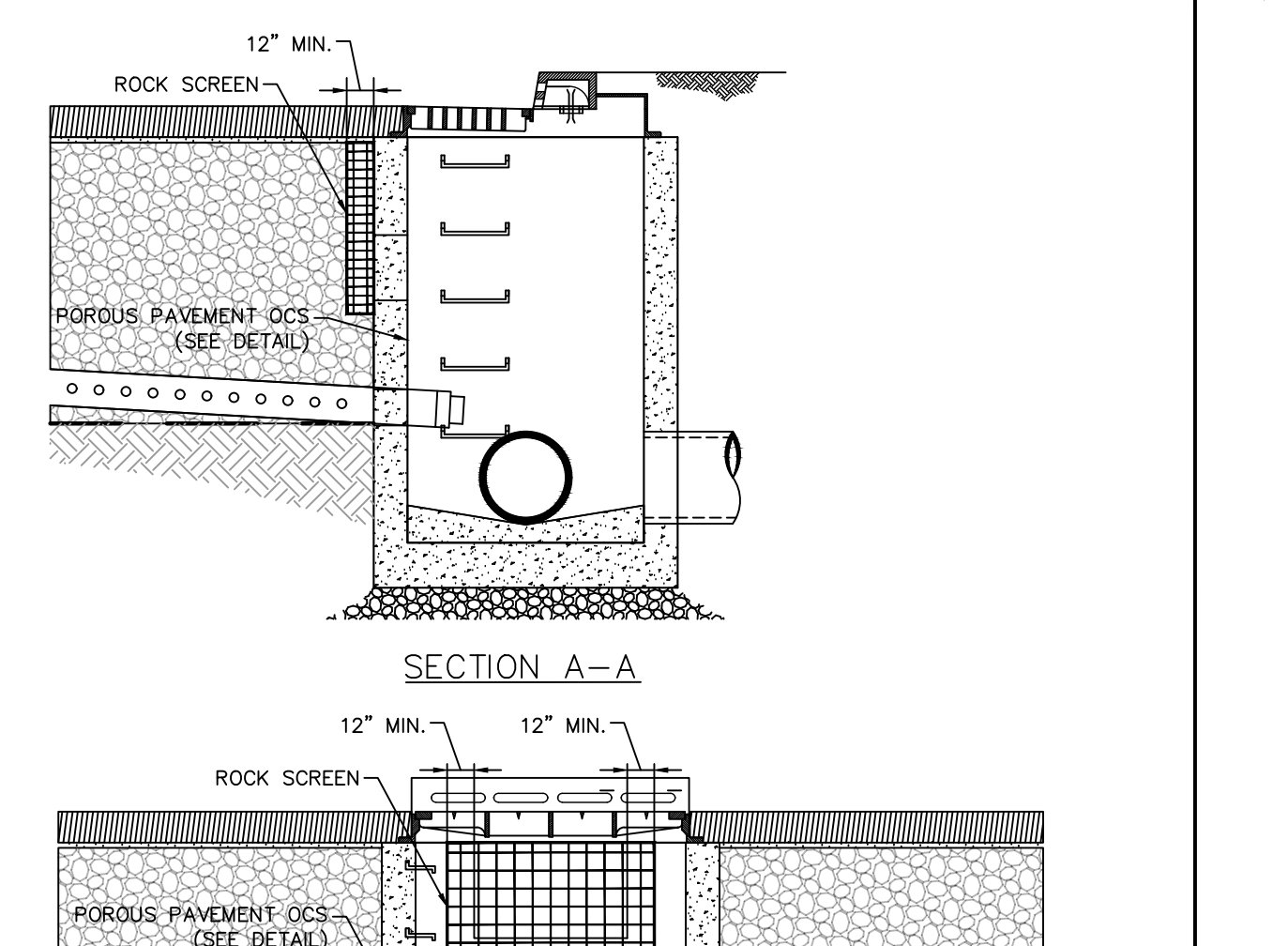
POROUS PAVEMENT OUTLET CONTROL STRUCTURE ALUMINUM ROCK SCREEN



POROUS PAVEMENT SYSTEM OUTLET CONTROL STRUCTURE

PIPE DIAMETER, in. (mm)	10" (254)		12" (305)		15" (381)		18" (457)		24" (609)		30" (762)		36" (914)	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
10"	42	41	49	59.5	88	88	88	88	88	88	88	88	88	88
12"	44.5	44	52	62	91	91	91	91	91	91	91	91	91	91
15"	47	46	55	65	94	94	94	94	94	94	94	94	94	94
18"	49.5	49	58	68	97	97	97	97	97	97	97	97	97	97
24"	54	53	62	72	103	103	103	103	103	103	103	103	103	103
30"	60	59	68	78	110	110	110	110	110	110	110	110	110	110
36"	66	65	74	84	117	117	117	117	117	117	117	117	117	117

HDPE FLARED END SECTION



NOTES:
 1. MAX OPENING BETWEEN PARALLEL BARS TO BE 2"
 2. ROCK SCREEN TO EXTEND MIN. 12" IN BOTH DIRECTIONS BEYOND WIDTH OF RECTANGULAR WEIR, MIN 6" BELOW RECTANGULAR WEIR INVERT, AND MIN. 12" OUT FROM FACE OF OUTLET CONTROL STRUCTURE

SECTION A-A

ORIFICE "A"	ORIFICE "B"	RECT. WEIR	INLET PIPE	OUTLET PIPE	GRATE EL.
SIZE	SIZE	LENGTH	SIZE	SIZE	
OCS-11-1	2.5" DIA.	85.25	3"x3"	86.00	12"
OCS-11-2	2.5" DIA.	85.25	3"x3"	86.00	12"
OCS-11-3	2.5" DIA.	85.25	3"x3"	86.00	12"
OCS-11-4	2.5" DIA.	85.25	3"x3"	86.00	12"

SECTION B-B

Project No. 100775002

LANGAN Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 24G03705800

3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

Drawing Title: DRAINAGE DETAILS

Project No. 100775002
 Date: AUGUST 26, 2022
 Drawn By: TEG
 Checked By: MV

Sheet 31 of 48

Signature: JOHN COTE, PROFESSIONAL ENGINEER NJ Lic. No. 24G03705800, DATE SIGNED: 5/3/2024

REVISIONS:

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	3
7/28/23	REVISED PER NJDOT, NJDEP, & FIRST ENERGY COMMENTS	2
5/10/23	REVISED RETAIL LAYOUT & PER NJDOT COMMENTS	1

GENERAL UTILITY NOTES:

- SITE DISTURBANCE SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND ALL GOVERNING AGENCIES HAVE BEEN NOTIFIED BY THE CONTRACTOR.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL NEW JERSEY ONE-CALL AND THE APPROPRIATE UTILITY COMPANIES TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRY POINTS, INCLUDING SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ROOF LEADERS, ELECTRICAL, TELEPHONE, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- ALL REQUIRED UTILITIES SERVING THE BUILDINGS SHALL BE COORDINATED AND CONSTRUCTED TO WITHIN FIVE FEET OF EACH BUILDING UTILITY ENTRANCE AND PLUGGED AND MARKED UNLESS OTHERWISE NOTED. ANY NECESSARY EXTENSIONS, RELOCATIONS, OR CORRECTIONS WITHIN FIVE FEET OF THE BUILDING NECESSARY TO COMPLETE CONNECTION OF UTILITIES TO THE BUILDINGS SHALL BE MADE BY THE BUILDING CONTRACTOR. THE BUILDING CONTRACTOR SHALL MAKE THE FINAL CONNECTION BETWEEN THE BUILDING SYSTEMS AND THE SITE LATERALS.
- THE CONTRACTOR MUST NOTIFY LOCAL AUTHORITIES A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION, UNLESS FURTHER ADVANCE NOTICE IS REQUIRED BY THE TOWNSHIP.
- ALL ON-SITE UTILITIES SHALL BE UNDERGROUND UNLESS NOTED OTHERWISE.
- ALL ABANDONED UTILITY LINES AND STRUCTURES SHALL BE COMPLETELY REMOVED AND CAPPED/PLUGGED AT THE MAIN IN ACCORDANCE WITH THE UTILITY COMPANY OR LOCAL AUTHORITY REQUIREMENTS.
- TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE OR PAVED SURFACE SHALL MEET THE FOLLOWING REQUIREMENTS WHEN NOT SPECIFIED BY GOVERNING CODES, ORDINANCES, OR AUTHORITIES.
 - WATER MAINS: 48 INCHES TO TOP OF PIPE BARREL OR 6 INCHES BELOW THE FROST LINE (ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY).
 - SANITARY SEWER: DEPTHS, ELEVATIONS, AND GRADES AS INDICATED ON DRAWINGS.
 - ELECTRICAL CONDUITS: 24 INCHES MINIMUM TO TOP OF CONDUIT OR AS SPECIFIED BY THE UTILITY COMPANY REQUIREMENTS.
 - TV CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE UTILITY COMPANY.
 - TELEPHONE CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE UTILITY COMPANY.
 - GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE OR AS REQUIRED BY THE UTILITY COMPANY.
- REFER TO ARCHITECTURAL DRAWINGS FOR SERVICE LATERAL CONNECTIONS TO INTERNAL BUILDING SERVICE LINES.
- ALL UTILITY CONSTRUCTION TO BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES AND NEPTUNE TOWNSHIP AND SHALL CONFORM WITH THE REQUIREMENTS THEREOF.
- ALL CABLE, ELECTRIC, TELEPHONE AND FIBER OPTIC UTILITY LINES SHALL BE INSTALLED UNDERGROUND UNLESS SPECIFIED OTHERWISE.

SANITARY / SEWER NOTES:

- ALL SEWER CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE LOCAL AUTHORITY.
- WITH THE EXCEPTION OF THE TIE-IN SEWER, EXISTING ON-SITE SANITARY SEWER LINES SERVING THE SITE SHALL BE PHYSICALLY REMOVED UNLESS NOTED OTHERWISE. CONTRACTOR TO NOTIFY OWNER'S ENGINEER PRIOR TO REMOVAL OF ANY SEWER PIPE.
- THE CONTRACTOR MUST VERIFY THE LOCATION, SIZE, AND SERVICEABILITY OF THE EXISTING SANITARY SEWER MAINS PRIOR TO BEGINNING ANY SITE OR BUILDING CONSTRUCTION.
- THE SEWER CONTRACTOR SHALL CONSTRUCT THE SANITARY SEWER LINES TO WITHIN 5 FEET OF THE PROPOSED BUILDING LIMITS WHERE THE LINE SHALL BE PLUGGED AND MARKED.
- ALL MATERIALS USED AND ALL CONSTRUCTION METHODS EMPLOYED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR THE GOVERNING LOCAL MUNICIPAL UTILITY AUTHORITY.
- WHERE LESS THAN 18" OF VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SANITARY SEWER AND OTHER UTILITIES, THE SEWER SHALL BE ENCASED IN 8 INCHES OF CONCRETE ON ALL FOUR SIDES AND SHALL EXTEND 10 FEET BEYOND CROSSING IN BOTH DIRECTIONS. DUCTILE IRON PIPE MAY BE UTILIZED IN PLACE OF CONCRETE ENCASEMENT PER N.J.A.C. 7:14A 23.6.b.4.
- WHEN SANITARY LATERALS DIE DIRECTLY INTO MANHOLES, AN APPROPRIATE OPENING WITH AN "A-LOK" OR APPROVED EQUAL GUY SHALL BE PRECAST IN THE MANHOLE BASE. ALL MAINS SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LOW PRESSURE AIR TEST METHOD OR AS OTHERWISE SPECIFIED BY LOCAL AUTHORITY OR PROJECT SPECIFICATIONS.
- SEPARATE STORM AND SANITARY MAINS SHALL BE MAINTAINED ON-SITE AND EXTEND OFF-SITE UNTIL TYING INTO THE EXISTING COMBINED SEWER SYSTEM.

WATER NOTES:

- ALL WATER CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY.
- ALL EXISTING WATER LATERALS SERVING THE EXISTING BUILDINGS OR REMAINING WITHIN THE SITE FROM FORMER BUILDINGS (TO BE DEMOLISHED) SHALL BE TERMINATED AT THE MAIN AND CURB SHUT-OFFS SHALL BE REMOVED. EXISTING WATER SERVICE LINES SHALL BE PHYSICALLY REMOVED UNLESS NOTED OTHERWISE. CONTRACTOR SHALL NOTIFY OWNER'S ENGINEER PRIOR TO REMOVAL OF ANY WATER LINE.
- THE CONTRACTOR MUST VERIFY THE LOCATION, SIZE, AND SERVICEABILITY OF THE EXISTING WATER MAINS PRIOR TO BEGINNING ANY SITE OR BUILDING CONSTRUCTION.
- THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER MAIN IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN INCHES (18"). CONCRETE PIPE ENCASEMENTS WILL BE REQUIRED WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED. LATERAL SEPARATION SHALL BE AS REQUIRED BY LOCAL CODE.
- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, ELBOWS, PLUGS, AND FIRE HYDRANTS.
- ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED GATE VALVE A MAXIMUM OF 5'-0" FROM HYDRANT, AND SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- ALL GATE VALVES SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- BACKFLOW PREVENTION DEVICES FOR DOMESTIC AND FIRE SERVICE CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- ALL NEW WATER LINES SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C600, OR LOCAL REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE.
- ALL NEW WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651, OR LOCAL REQUIREMENTS, WHICHEVER IS MORE RESTRICTIVE.

GENERAL NOTES:

- BACKGROUND BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION REFERENCED FROM PLAN TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC, DATED OCTOBER 27, 2020, AND LAST REVISED AUGUST 4, 2021.
- HORIZONTAL DATUM REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83).
- ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- THE FRESHWATER WETLANDS/BOUNDRARY LINE DEPICTED ON THE PLANS HAVE BEEN VERIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION PER THE LETTER OF INTERPRETATION DATED MAY 24, 2021, FILE NO. 134-09-0002.1. THE DEPARTMENT HAS DETERMINED THAT ALL FRESHWATER WETLANDS ON-SITE ARE OF INTERMEDIATE RESOURCE VALUE AND HAVE A 50-FOOT FRESHWATER WETLAND TRANSITION AREA BUFFER.
- THE STATE OF NEW JERSEY HAS DETERMINED THAT ALL OR A PORTION OF THIS LOT LIES IN A FLOOD HAZARD AREA AND/OR RIPARIAN ZONE. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS AND RIPARIAN 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. CONTACT THE WATERSHED AND LAND MANAGEMENT PROGRAM AT (609) 777-0454 FOR MORE INFORMATION PRIOR TO ANY CONSTRUCTION ON-SITE.
- THE FLOOD HAZARD ELEVATION FOR THE PROJECT SITE WAS DETERMINED USING METHOD 3, THE FEMA FLUVIAL METHOD, AS SET FORTH IN N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES. THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD (NHFAD) FOR THE PROJECT SITE HAS BEEN DETERMINED TO BE ELEVATION 72.4 NAVD 88.

LEGEND	
EXISTING	PROPOSED
PROPERTY LINE/ROW	---
CONTOUR	---
SPOT ELEVATION	•
STORM MANHOLE	⊙
SANITARY MANHOLE	⊙
SANITARY CLEANOUT	⊙
CATCH BASIN	⊙
TRENCH DRAIN	---
STORM SEWER	---
SANITARY SEWER	---
SANITARY SEWER FORCE MAIN	FM
WATER MAIN	W
GAS MAIN	G
ELECTRIC CONDUIT	E
TELEPHONE CONDUIT	T
VALVE	⊙
FIRE HYDRANT	⊙
LIGHT POLE	⊙
UTILITY POLE	⊙
OVERHEAD WIRE	---
JUNCTION BOX	⊙
ELECTRIC MANHOLE	⊙
RETAINING WALL	---




PROPOSED WAREHOUSE
 251,022± SF FOOTPRINT
 237,022± SF WAREHOUSE SPACE
 14,000± SF OFFICE SPACE
 32 LOADING DOCKS
 25 TRAILER PARKING SPACES

RETAIL
 15,000± SF

BLOCK 3903, LOTS 12 & 13
 IRREGULARLY BLOCK 10017 LOTS 6, 7 & 8
 ARE LOTS OF ACT 1 WETLANDS, LLC
 DR 0088, PC 2021
 AREA = 2,063,750 SF OR 47.378 ACRES

Date	Description	No.
5/3/24	REVISED FOR SUBMISSION TO NEPTUNE	1
7/28/23	REVISED PER N.J.DOT, NJDEP, & FIRST ENERGY COMMENTS	1

REVISIONS


 SIGNATURE: *John Cote* DATE SIGNED: 5/3/2024
 PROFESSIONAL ENGINEER NJ Lic. No. 246E03705800

LANGAN
 Langan Engineering and Environmental Services, LLC
 300 Kimball Drive
 Parsippany, NJ 07054
 T: 973.560.4900 F: 973.560.4901 www.langan.com
 NJ Certificate of Authorization No. 246A27966403

3501 STATE ROUTE 66 REDEVELOPMENT
 BLOCK No. 3903, LOT No. 12 & 13
 NEPTUNE TOWNSHIP
 MONMOUTH COUNTY NEW JERSEY

OVERALL UTILITY PLAN

Project No. 100775002	Drawing No. CU100
Date AUGUST 26, 2022	Checked By TEG
Drawn By TEG	Sheet 32 of 48
Checked By MIV	

