



P:\PROJECTS\New Jersey\South Orange\SOV-1003\ROAD\DS\1003.002 West End Road Reconstruction\Draw\1003.002 Cover Sheet.dwg jmk@vce 12/11/2023 4:33:12 PM

NJDOT SPEC SEC	ITEM NO	DESCRIPTION	APPROX QTY	UNIT
<b>BASE BID (STATE PARTICIPATING ITEMS) (WYOMING AVENUE TO RIDGEWOOD ROAD)</b>				
154.03.01	1	Mobilization	1	LS
159.03.02	2	Breakaway Barricade	10	UNIT
159.03.02	3	Drum	10	UNIT
159.03.02	4	Traffic Cone	50	UNIT
159.03.02	5	Construction Signs	100	SF
160.03.01	6	Fuel Price Adjustment	1	DOLL
160.03.02	7	Asphalt Price Adjustment	1	DOLL
201.03.01	8	Clearing Site	1	LS
202.03.08	9	Removal of Pavement	4230	SY
202.03.02	10	Excavation, Test Pit (If and Where Directed)	50	CY
401.03.01	11	HMA Milling, 3" or Less	1250	SY
302.03.01	12	Dense Graded Aggregate Base Course, 6" Thick	4060	SY
401.03.07	13	Hot Mix Asphalt 9.5M64 Surface Course, 3" Thick	910	TON
401.03.07	14	Hot Mix Asphalt 19M64 Base Course, 5" Thick	1220	TON
601.03.01	15	6" Polyvinyl Chloride Sewer Pipe	160	LF
601.03.01	16	6" High Density Polyethylene Pipe	1460	LF
601.03.01	17	18" Reinforced Concrete Pipe	1225	LF
602.03.02	18	Inlet, Type B	16	UNIT
602.03.03	19	Reset Existing Casting	7	UNIT
602.03.03	20	Reset Manhole, Sanitary Sewer, Using Existing Casting	1	UNIT
602.03.03	21	Reset Manhole, Sanitary Sewer, Using New Casting	8	UNIT
602.03.03	22	Reconstructed Inlet, Type B, Using Existing Casting	2	UNIT
602.03.03	23	Reconstructed Inlet, Type B, Using New Casting	10	UNIT
602.03.06	24	Bicycle Safe Grate	3	UNIT
602.03.07	25	Curb Piece	7	UNIT
606.03.02	26	Hot Mix Asphalt Driveway, Variable Thickness	370	SY
606.03.02	27	Concrete Sidewalk, 4" Thick	740	SY
606.03.02	28	Concrete Driveway, Reinforced, 6" Thick	245	SY
607.03.05	29	Detectable Warning Surface	11	SY
610.03.02	30	9"x18" Concrete Vertical Curb	110	LF
610.03.02	31	Granite Curb	3530	LF
610.03.02	32	Traffic Marking Lines, 4"	3070	LF
610.03.02	33	Traffic Marking Lines, 12"	195	LF
612.03.01	34	Traffic Marking Lines, 24"	135	LF
652.03.07	35	Regulatory Warning Signs	100	SF
802.03.02	36	Tree Removal, over 12" to 18" Diameter	2	UNIT
802.03.03	37	Tree Removal, over 18" to 24" Diameter	1	UNIT
802.03.04	38	Tree Removal, over 24" to 30" Diameter	1	UNIT
802.03.05	39	Tree Removal, over 30" to 36" Diameter	1	UNIT
804.03.01	40	Topsoil Spreading, 4" Thick	1500	SY
806.03.01	41	Fertilizing and Seeding, Type A	1500	SY
809.03.01	42	Straw Mulching	1500	SY
811.03.01	43	Large Deciduous Tree, Autumn Blaze Maple (Acer freemanii 'Jeff	2	UNIT
811.03.01	44	Large Deciduous Tree, Crabapple (Malus 'Spring Snow), 3.5-4" Ca	2	UNIT
811.03.01	45	Large Deciduous Tree, Magnolia (Magnolia virginiana), 3.5-4" Ca	2	UNIT
811.03.01	46	Large Deciduous Tree, Dogwood (Cornus florida), 3.5-4" Caliper	3	UNIT
811.03.01	47	Large Deciduous Tree, Crabapple (Malus coronaria), 3.5-4" Caliper	3	UNIT
811.03.01	48	Large Deciduous Tree, Eastern Redbud (Cercis canadensis), 3.5	3	UNIT
811.03.03	49	Green Infrastructure Tree Well	15	UNIT

<b>BASE BID (NON-STATE PARTICIPATING ITEMS) (SOUTH ORANGE AVENUE W. TO WYOMING AVENUE)</b>				
401.03.01	NP-11	HMA Milling, 3" or Less	675	SY
401.03.07	NP-13	Hot Mix Asphalt 9.5M64 Surface Course, 3" Thick	90	TON
601.03.01	NP-16	6" High Density Polyethylene Pipe	210	LF
602.03.03	NP-18	Reset Existing Casting	1	UNIT
602.03.03	NP-20	Reset Manhole, Sanitary Sewer, Using Existing Casting	2	UNIT
602.03.07	NP-25	Curb Piece	2	UNIT
606.03.02	NP-27	Concrete Sidewalk, 4" Thick	54	SY
607.03.05	NP-29	Detectable Warning Surface	4	SY
610.03.02	NP-30	9"x18" Concrete Vertical Curb	40	LF
610.03.02	NP-31	Granite Curb	90	LF
610.03.02	NP-32	Traffic Marking Lines, 4"	50	LF
610.03.02	NP-33	Traffic Marking Lines, 12"	120	LF
612.03.01	NP-34	Traffic Marking Lines, 24"	115	LF

<b>ALTERNATE BID 'A' (NON-STATE PARTICIPATING ITEMS)</b>				
A-1		Mobilization	1	LS
A-2		Water Main, 12" Diameter Ductile Iron	2100	LF
A-3		Water Main, 10" Diameter Ductile Iron	100	LF
A-4		Water Main, 6" Diameter Ductile Iron	150	LF
A-5		12" Gate Valve	10	UNIT
A-6		6" Gate Valve	6	UNIT
A-7		10" Insertion Valve	4	UNIT
A-8		6" Insertion Valve	2	UNIT
A-9		Fire Hydrant Assemblies	4	UNIT
A-10		Utility-Side Water Service Line Replacement, Short-Side	24	UNIT
A-11		Utility-Side Water Service Line Replacement, Long-Side	22	UNIT
A-12		Test Pits	2	UNIT
A-13		Flushing, Cleaning & Disinfection of Mains and Services	1	LS
A-14		8" DGA Base Course	700	SY
A-15		10" HMA Base Course	360	TON
A-16		Flushing, Cleaning & Disinfection of Lead Line Services (If	1	EA
A-17		Excavations in Trenches at Depths Greater Than 8'	250	CY
A-18		Allowance For Unanticipated Utility Repairs and Relocations	1	DOLL

NOT FOR BIDDING

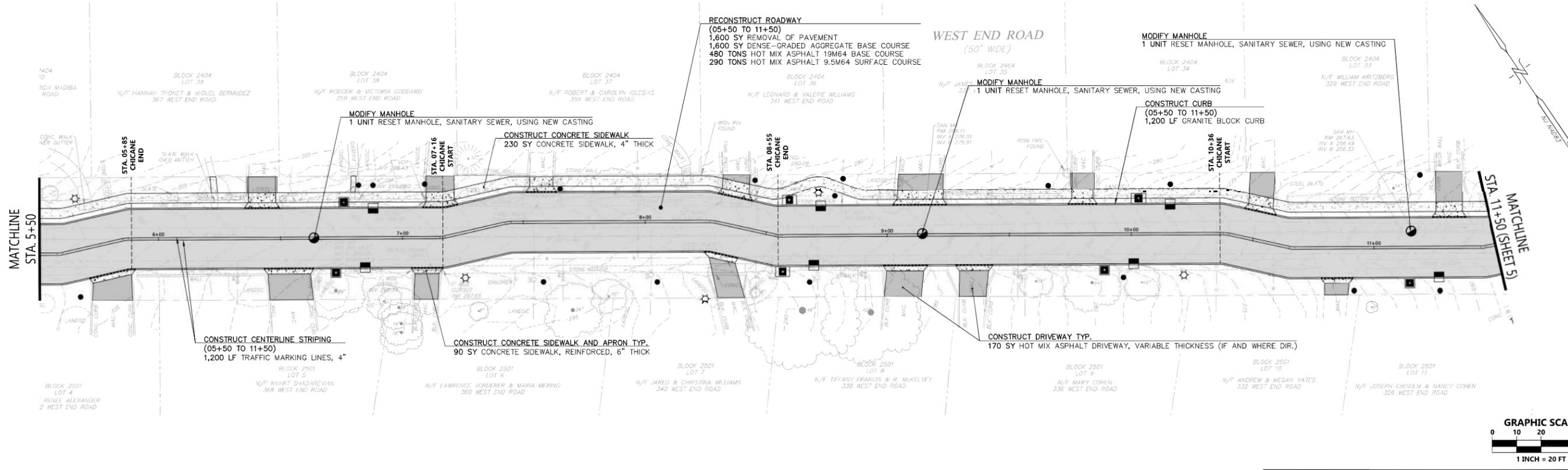
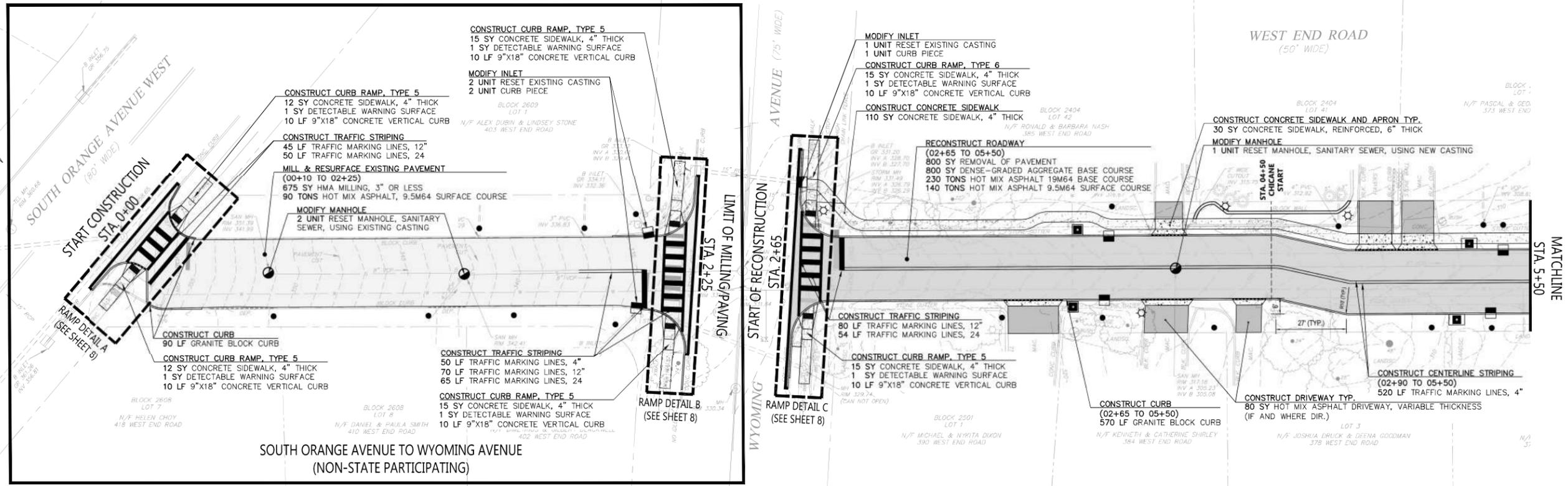
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 240094102000

**Van Cleaf**  
ENGINEERING WITH FOCUS

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CERT. OF AUTHORIZATION NO. 246A28132300

Bridges/Highways  
Construction Inspection  
Environmental  
Geotechnical/Dams  
Landscape Architecture  
Local/Regional Planning  
Municipal Engineering  
Site Development  
Surveying/Aerial Drones/GIS  
Water/Wastewater

**DISTRIBUTION OF QUANTITIES**  
FOR  
**WEST END ROAD RECONSTRUCTION**  
TOWNSHIP OF SOUTH ORANGE VILLAGE, ESSEX COUNTY, NJ



**NOT FOR BIDDING**

**PLAN NOTATION**  
 ONLY THOSE PLANS WHICH CONTAIN A DIGITAL IMPRESSION, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION, OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES, LLC IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

**SERIAL NO.** \_\_\_\_\_

TO LOCATE UNDERGROUND UTILITIES IF YOU'RE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE IS REQUIRED. REMEMBER IT'S THE LAW! Dig Safely. Call before you dig. 1-800-275-1000

**Van Cleef**  
 ENGINEERING WITH FOCUS

VAN CLEEF ENGINEERING ASSOCIATES, LLC  
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Bridges/Highways  
 Construction Inspection  
 Environmental  
 Geotechnical/Dams  
 Landscape Architecture  
 Local/Regional Planning  
 Municipal Engineering  
 Site Development  
 Surveying/Aerial Drones/GIS  
 Water/Wastewater

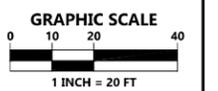
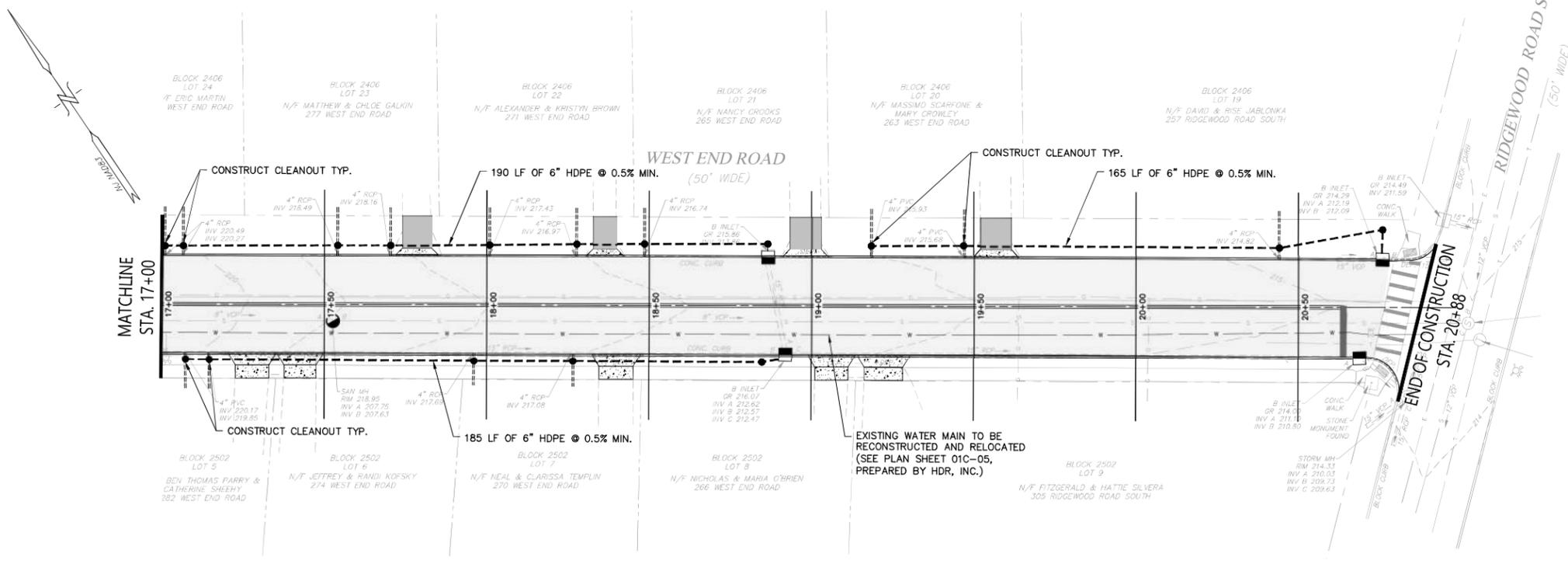
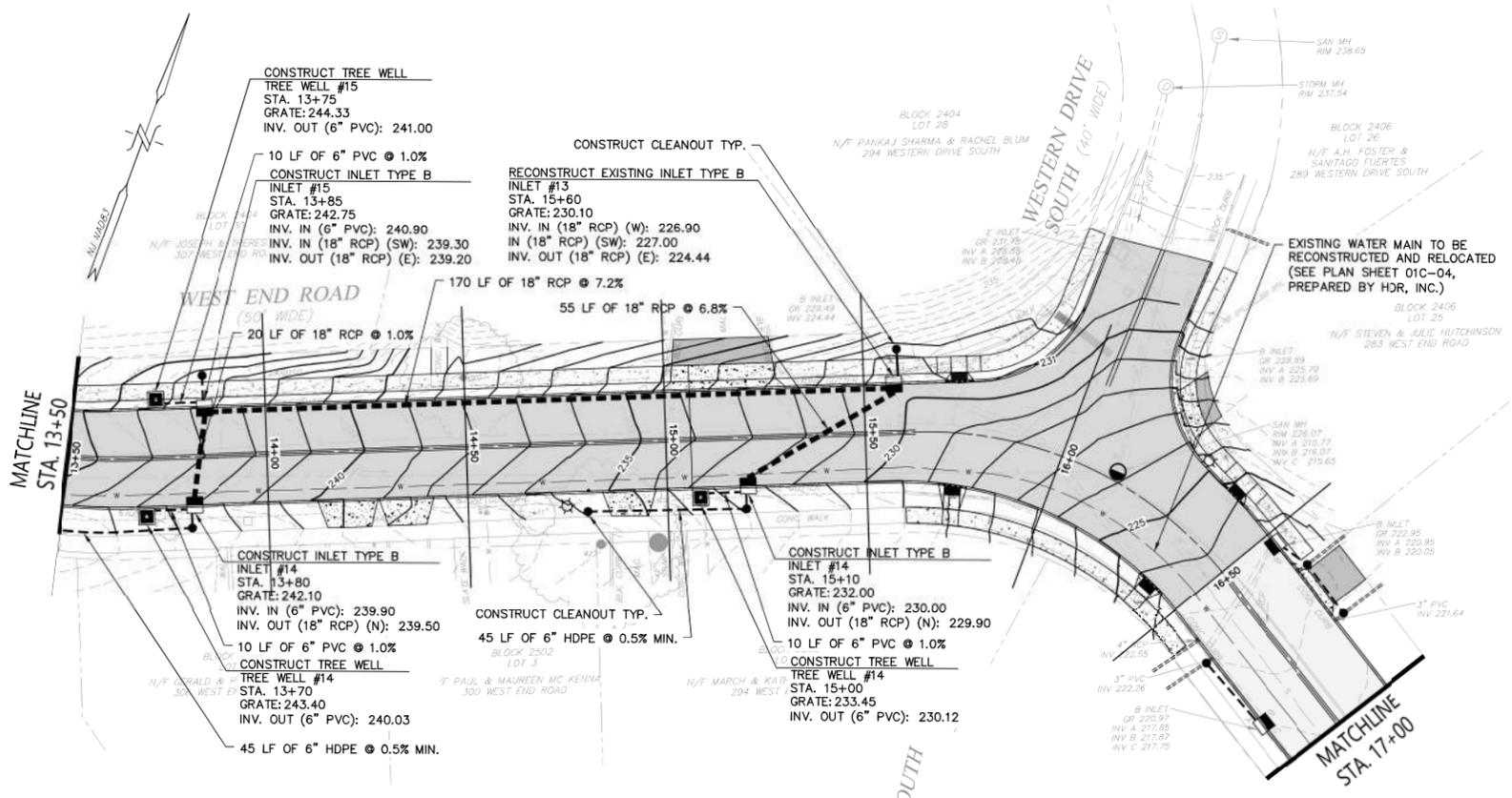
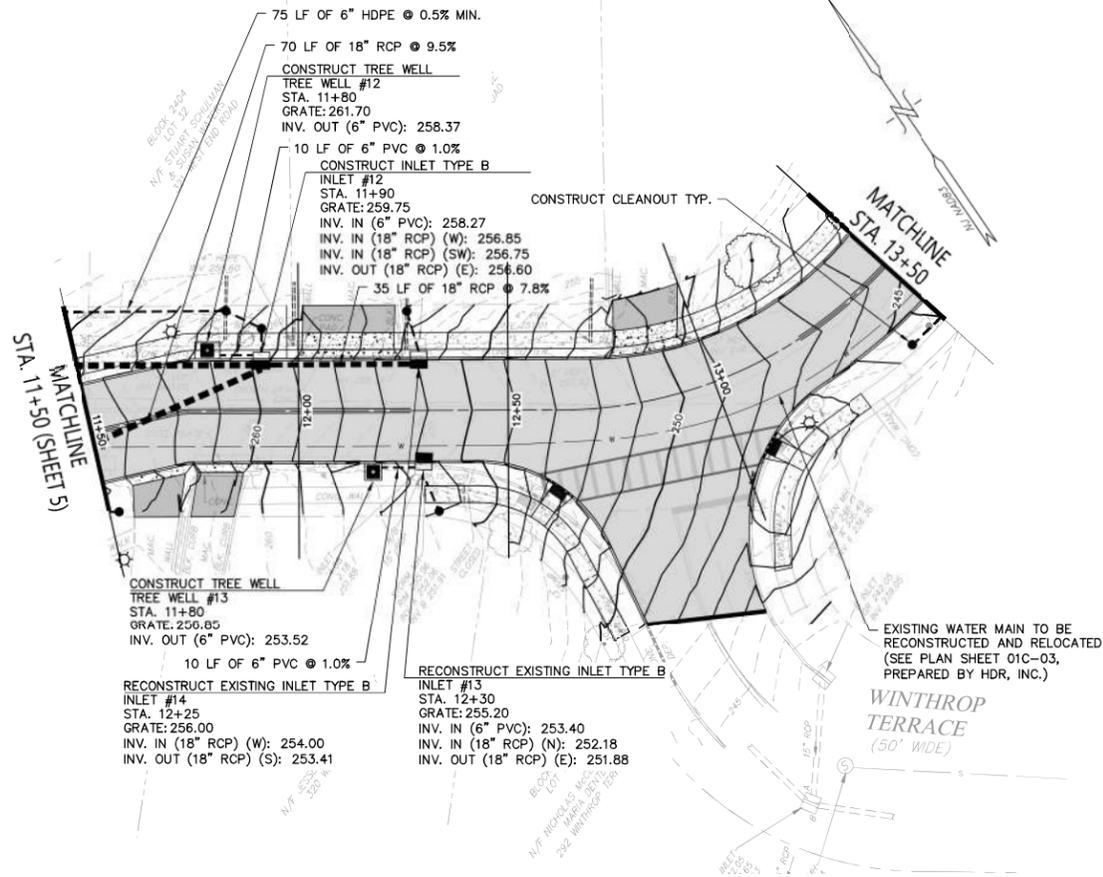
**CONSTRUCTION PLAN (START TO STA. 11+50)**  
 FOR  
**WEST END ROAD RECONSTRUCTION**  
 TOWNSHIP OF SOUTH ORANGE VILLAGE, ESSEX COUNTY, NJ

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PROJECT: New Jersey/South Orange/SOV-1003 ROAD/DS/1003.002 Construction Plan FINAL.dwg, published: 12/11/2023, 4:43:38 PM







**NOT FOR BIDDING**

PROJECT: New Jersey State Route 1001 Road Reconstruction (Plan 1001.002) Grading Plans 2.dwg, 12/11/2023 4:56:22 PM

**PLAN NOTATION**  
 ONLY THOSE PLANS WHICH CONTAIN A DIGITAL IMPRESSION, OR COLORIZED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

**SERIAL NO.** \_\_\_\_\_

**NOTE:**  
 TO LOCATE UNDERGROUND UTILITIES IF YOU ARE GOING TO DIG, BLAST OR DRILL THREE (3) WORKING DAYS NOTICE MUST BE GIVEN TO THE OWNER. REMEMBER IT'S THE LAW! Call before you dig. 1-800-275-1000

**NOTE:**  
 NOT ALL PROPOSED UTILITY IMPROVEMENTS ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF PROPOSED UTILITY IMPROVEMENTS.

**Van Cleaf**  
 ENGINEERING WITH FOCUS

BRIDGES/HIGHWAYS  
 CONSTRUCTION INSPECTION  
 ENVIRONMENTAL  
 GEOTECHNICAL/DAMS  
 LANDSCAPE ARCHITECTURE  
 LOCAL/REGIONAL PLANNING  
 MUNICIPAL ENGINEERING  
 SITE DEVELOPMENT  
 SURVEYING/AERIAL DRONES/GIS  
 WATER/WASTEWATER

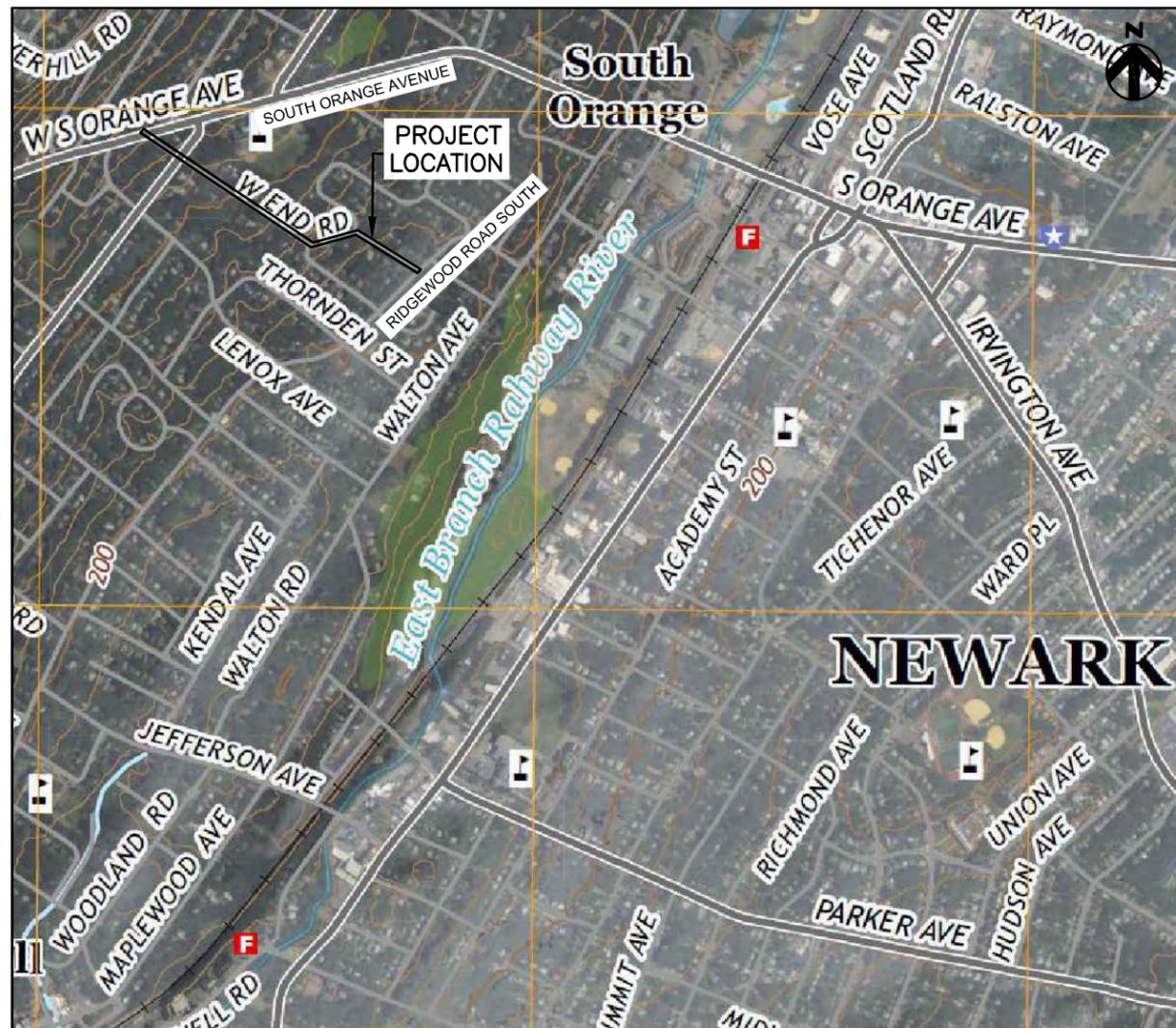
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 PHONE: (908) 284-1100  
 CERT. OF AUTHORIZATION NO. 246A28123300

**GRADING AND DRAINAGE PLAN**  
 (STA. 11+50 TO END)

FOR  
**WEST END ROAD RECONSTRUCTION**  
 TOWNSHIP OF SOUTH ORANGE VILLAGE, ESSEX COUNTY, NJ

7  
 27

NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 24GE04102900



LOCATION MAP  
NTS

Contract Drawings For

# West End Road Water Main Rehabilitation

General/Civil

Project No.  
10348703

South Orange, New Jersey  
September 2023

## INDEX OF DRAWINGS

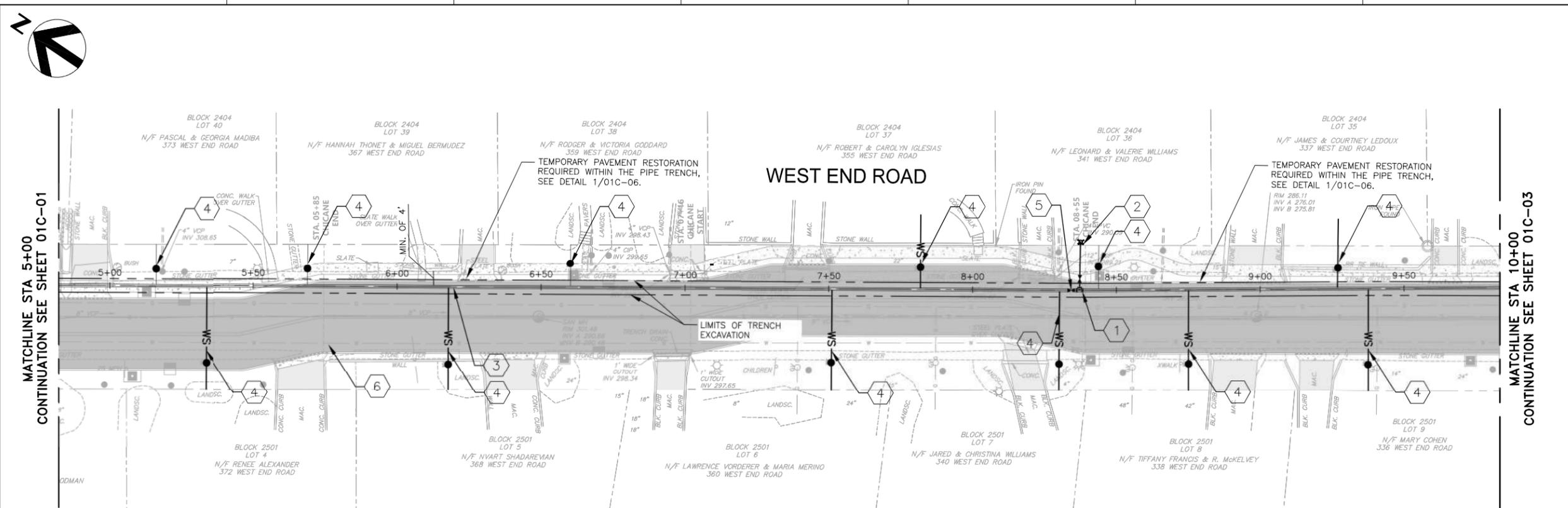
**GENERAL**  
 00G-01 TITLE SHEET, INDEX OF DRAWINGS, LOCATION MAP  
 00G-02 WEST END ROAD GENERAL NOTES AND LEGEND  
 00G-03 WEST END ROAD SCHEDULES

**CIVIL - SUPPLY MAIN**  
 01C-00 WEST END ROAD SHEET INDEX AND KEYMAP  
 01C-01 WEST END ROAD PLAN AND PROFILE STA 0+00 TO STA 5+00  
 01C-02 WEST END ROAD PLAN AND PROFILE STA 5+00 TO STA 10+00  
 01C-03 WEST END ROAD PLAN AND PROFILE STA 10+00 TO STA 13+00  
 01C-04 WEST END ROAD PLAN AND PROFILE STA 13+00 TO STA 16+50  
 01C-05 WEST END ROAD PLAN AND PROFILE STA 16+50 TO STA 21+50  
 01C-06 WEST END ROAD CONSTRUCTION DETAILS  
 01C-07 WEST END ROAD SIDE STREET CONNECTION DETAILS - SHEET 1 -  
 01C-08 WEST END ROAD SIDE STREET CONNECTION DETAILS - SHEET 2 -  
 01C-09 WEST END ROAD SIDE STREET CONNECTION DETAILS - SHEET 3 -

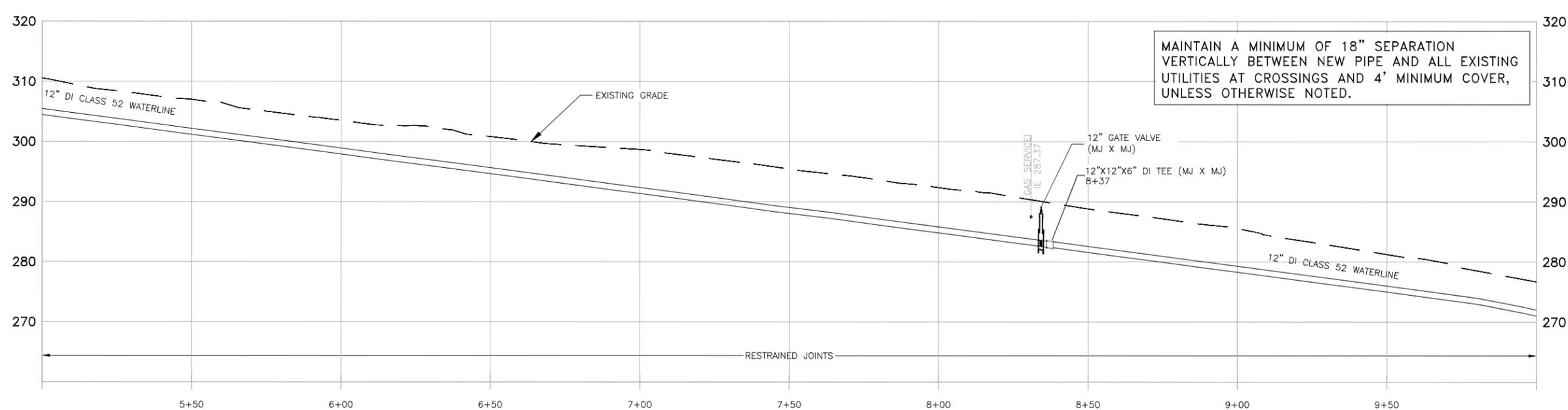
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**PLAN**  
SCALE: 1"=20'



**PROFILE**  
HORIZ SCALE: 1"=20'  
VERT SCALE: 1"=10'

- PIPING KEY NOTES**
- ① 12"x12"x6" MJ TEE.
  - ② REMOVE AND DISPOSE OF EXISTING FIRE HYDRANT ASSEMBLY. INSTALL NEW FIRE HYDRANT AS PER DETAIL 2/01C-06. INSTALL MUELLER SENTRYX SOFTWARE ENABLED SUPER CENTURION HYDRANT.
  - ③ INSTALL 12" DI CLASS 52 PER DETAIL 1/01C-06. INSTALL WITH MINIMUM 48" OF COVER.
  - ④ INSTALL NEW (1") COPPER SERVICE FORM 12" MAIN TO CUSTOMER LINE AND NEW CURB STOP; LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION IN FILED, SEE DETAIL 3/01C-06.
  - ⑤ 12" GATE VALVE, SEE DETAIL 4/01C-06.
  - ⑥ EXISTING 6" WATER MAIN TO BE ABANDONED IN PLACE. CAP 2' OFF OF TIE-IN.

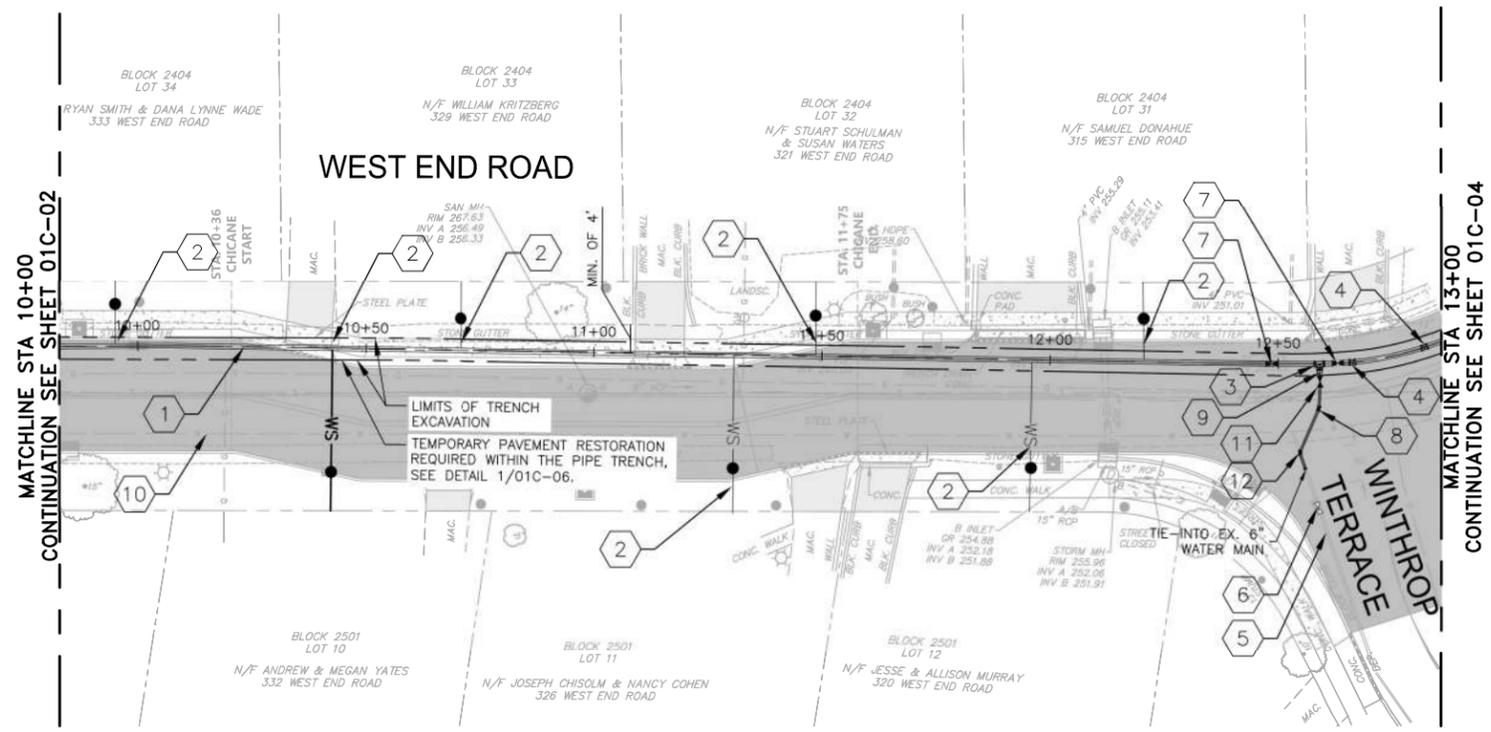
- GENERAL NOTES**
1. CONTRACTOR SHALL DIG A TEST PIT TO VERIFY THE LOCATION AND EX. PIPE O.D. BEFORE ORDERING INSERTION VALVES.
  2. ALL PIPE JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED LIMITS.
  3. LOCATION OF EXISTING UTILITIES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY (POT HOLE) TO DETERMINE THE EXACT LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES.
  4. ADEQUATE SEPARATION OF WATER MAINS AND SANITARY SEWER MAINS SHALL BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7:10.
  5. ALL FITTINGS SHALL BE RESTRAINED WITH WEDGE ACTION RETAINING GLANDS. SEE PROFILE FOR REQUIRED RESTRAINED JOINT PIPE LENGTHS.
  6. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES AND PERMITTING TO DISCHARGE THE TREATED DEWATERING FLOW TO THE NEARBY STORM SEWER OR WATERWAY.
  7. INSTALL ALL GATE VALVES COMPLETE WITH VALVE BOX AND COVER.
  8. CONTRACTOR SHALL MAINTAIN EMERGENCY AND LOCAL TRAFFIC ONLY DURING ROAD CLOSURE FOR THE DURATION OF CONSTRUCTION. TEMPORARY DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES.
  9. CONTRACTOR SHALL INSTALL A BURIED UTILITY MARKER BALL AT EACH HORIZONTAL FITTING THROUGHOUT CONTRACT.
  10. WEST END ROAD WILL BE FULLY RECONSTRUCTED FROM STA. 5+00 TO STA. 10+00 AFTER WATER MAIN INSTALLATION.



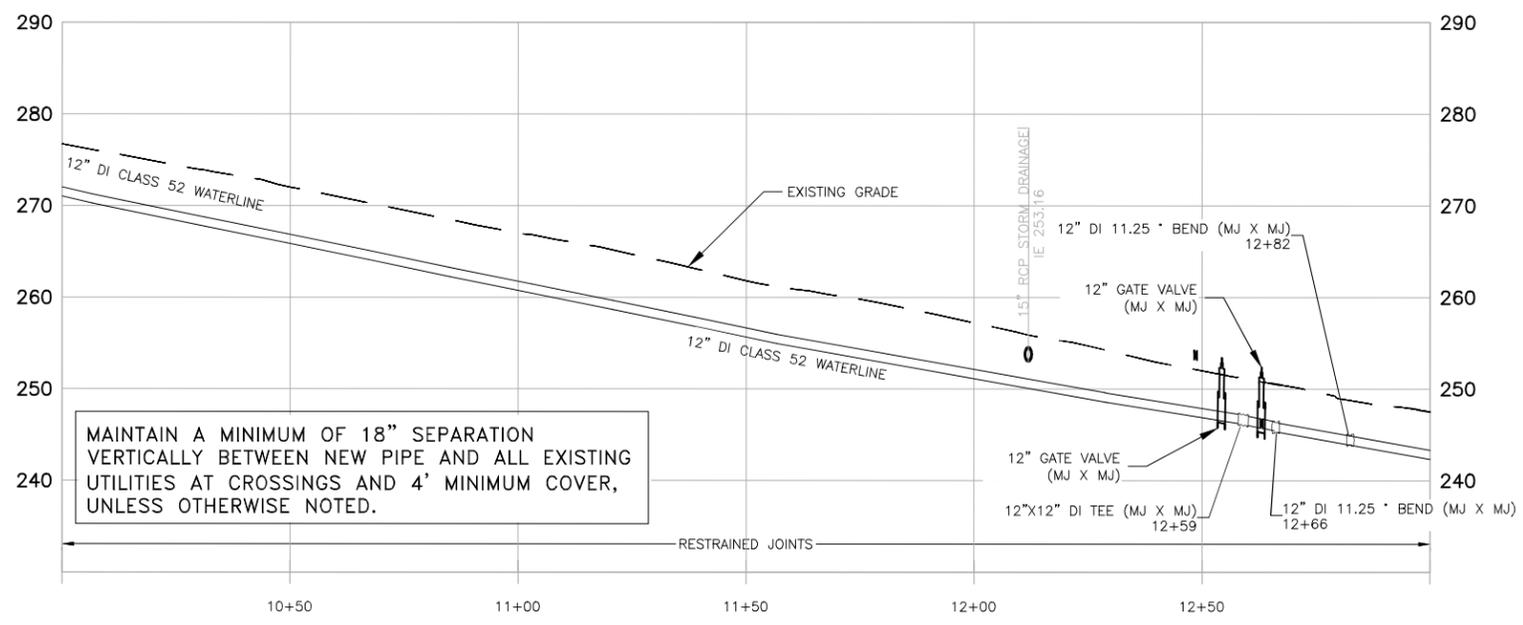
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TOWNSHIP OF SOUTH ORANGE  
ESSEX COUNTY, NEW JERSEY  
WEST END ROAD WATER MAIN REHABILITATION

**WEST END ROAD  
PLAN AND PROFILE STA 5+00 TO STA 10+00**



**PLAN**  
SCALE: 1"=20'



MAINTAIN A MINIMUM OF 18" SEPARATION VERTICALLY BETWEEN NEW PIPE AND ALL EXISTING UTILITIES AT CROSSINGS AND 4' MINIMUM COVER, UNLESS OTHERWISE NOTED.

**PROFILE**  
HORIZ SCALE: 1"=20'  
VERT SCALE: 1"=10'

- PIPING KEY NOTES**
- ① INSTALL 12" DI CLASS 52 PER DETAIL 1/01C-06. INSTALL WITH MINIMUM 48" OF COVER.
  - ② INSTALL NEW (1") COPPER SERVICE FROM 12" MAIN TO CUSTOMER LINE AND NEW CURB STOP. LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION IN FIELD. SEE DETAIL 3/01C-06.
  - ③ 12"x12" MJ TEE.
  - ④ 12" 11.25° HORIZONTAL FITTING.
  - ⑤ EXISTING 6" WATER MAIN TO REMAIN.
  - ⑥ EXISTING 6" GATE VALVE.
  - ⑦ 12" GATE VALVE, SEE DETAIL 4/01C-06.
  - ⑧ 6" 11.25° HORIZONTAL FITTING.
  - ⑨ 12"x6" MJ REDUCER.
  - ⑩ EXISTING 6" WATER MAIN TO BE ABANDONED IN PLACE. CAP 2' OFF OF TIE-IN.
  - ⑪ 6" GATE VALVE, SEE DETAIL 4/01C-06.
  - ⑫ 6" 45° HORIZONTAL FITTING.

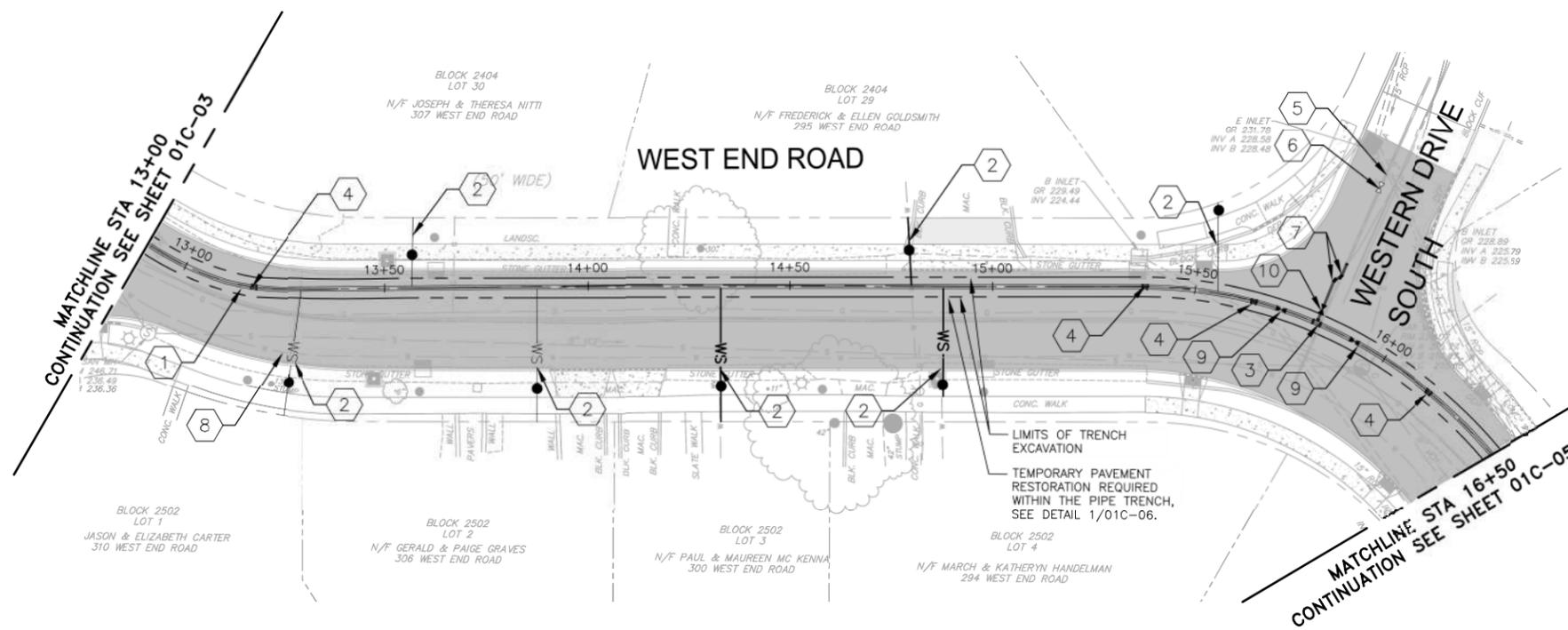
- GENERAL NOTES**
1. CONTRACTOR SHALL DIG A TEST PIT TO VERIFY THE LOCATION AND EX. PIPE O.D. BEFORE ORDERING INSERTION VALVES.
  2. ALL PIPE JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED LIMITS.
  3. LOCATION OF EXISTING UTILITIES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY (POT HOLE) TO DETERMINE THE EXACT LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES.
  4. ADEQUATE SEPARATION OF WATER MAINS AND SANITARY SEWER MAINS SHALL BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7:10.
  5. ALL FITTINGS SHALL BE RESTRAINED WITH WEDGE ACTION RETAINING GLANDS. SEE PROFILE FOR REQUIRED RESTRAINED JOINT PIPE LENGTHS.
  6. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES AND PERMITTING TO DISCHARGE THE TREATED DEWATERING FLOW TO THE NEARBY STORM SEWER OR WATERWAY.
  7. INSTALL ALL GATE VALVES COMPLETE WITH VALVE BOX AND COVER.
  8. CONTRACTOR SHALL MAINTAIN EMERGENCY AND LOCAL TRAFFIC ONLY DURING ROAD CLOSURE FOR THE DURATION OF CONSTRUCTION. TEMPORARY DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES.
  9. CONTRACTOR SHALL INSTALL A BURIED UTILITY MARKER BALL AT EACH HORIZONTAL FITTING THROUGHOUT CONTRACT.
  10. WEST END ROAD WILL BE FULLY RECONSTRUCTED FROM STA. 10+00 TO STA. 13+00 AFTER WATER MAIN INSTALLATION.



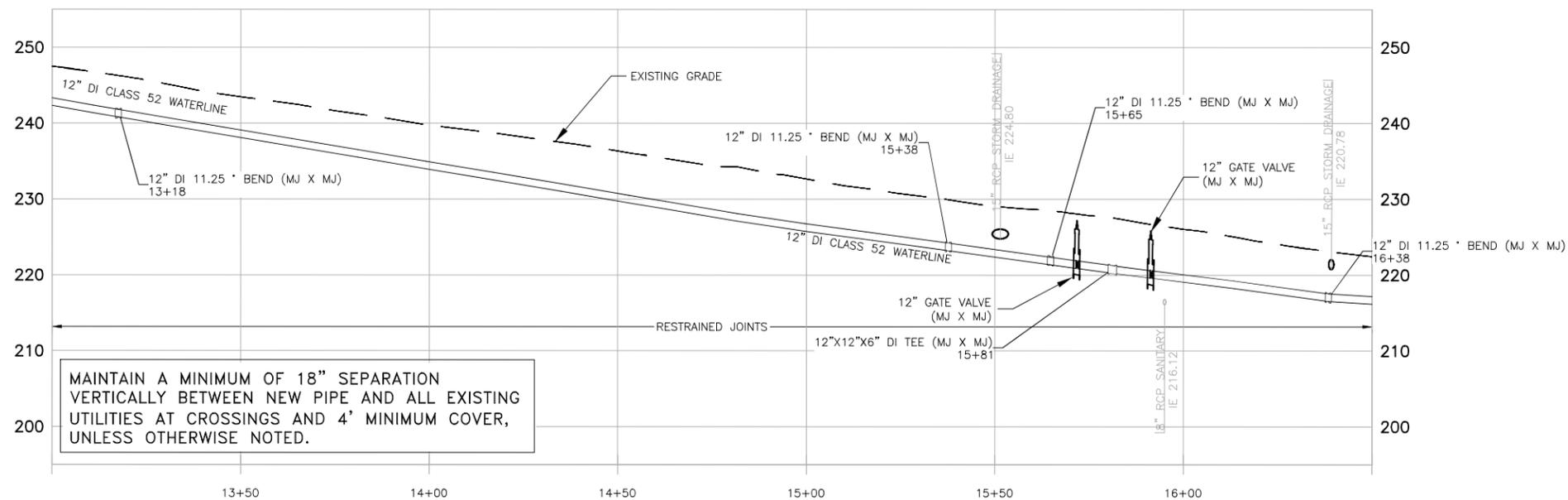
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TOWNSHIP OF SOUTH ORANGE  
ESSEX COUNTY, NEW JERSEY  
WEST END ROAD WATER MAIN REHABILITATION

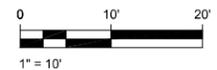
**WEST END ROAD  
PLAN AND PROFILE STA 10+00 TO STA 13+00**



**PLAN**  
SCALE: 1"=20'



**PROFILE**  
HORIZ SCALE: 1"=20'  
VERT SCALE: 1"=10'



**PIPING KEY NOTES**

1. INSTALL 12" DI CLASS 52 PER DETAIL 01C-06. INSTALL WITH MINIMUM 48" OF COVER.
2. INSTALL NEW (1") COPPER SERVICE FROM 12" MAIN TO CUSTOMER LINE AND NEW CURB STOP; LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION IN FIELD. SEE DETAIL 3/01C-06.
3. 12"x12"x6" MJ TEE.
4. 12" 11.25" HORIZONTAL FITTING.
5. EXISTING 6" WATER MAIN TO REMAIN.
6. EXISTING 6" GATE VALVE.
7. 6" 45" HORIZONTAL FITTING.
8. EXISTING 6" WATER MAIN TO BE ABANDONED IN PLACE. CAP 2' OFF OF TIE-IN.
9. 12" GATE VALVE, SEE DETAIL 4/01C-06.
10. 6" GATE VALVE, SEE DETAIL 4/01C-06.

**GENERAL NOTES**

1. CONTRACTOR SHALL DIG A TEST PIT TO VERIFY THE LOCATION AND EX. PIPE O.D. BEFORE ORDERING INSERTION VALVES.
2. ALL PIPE JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED LIMITS.
3. LOCATION OF EXISTING UTILITIES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY (POT HOLE) TO DETERMINE THE EXACT LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES.
4. ADEQUATE SEPARATION OF WATER MAINS AND SANITARY SEWER MAINS SHALL BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7:10.
5. ALL FITTINGS SHALL BE RESTRAINED WITH WEDGE ACTION RETAINING GLANDS. SEE PROFILE FOR REQUIRED RESTRAINED JOINT PIPE LENGTHS.
6. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES AND PERMITTING TO DISCHARGE THE TREATED DEWATERING FLOW TO THE NEARBY STORM SEWER OR WATERWAY.
7. INSTALL ALL GATE VALVES COMPLETE WITH VALVE BOX AND COVER.
8. CONTRACTOR SHALL MAINTAIN EMERGENCY AND LOCAL TRAFFIC ONLY DURING ROAD CLOSURE FOR THE DURATION OF CONSTRUCTION. TEMPORARY DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES.
9. CONTRACTOR SHALL INSTALL A BURIED UTILITY MARKER BALL AT EACH HORIZONTAL FITTING THROUGHOUT CONTRACT.
10. WEST END ROAD WILL BE FULLY RECONSTRUCTED FROM STA. 13+00 TO STA. 16+50 AFTER WATER MAIN INSTALLATION.



**NOT FOR BIDDING**

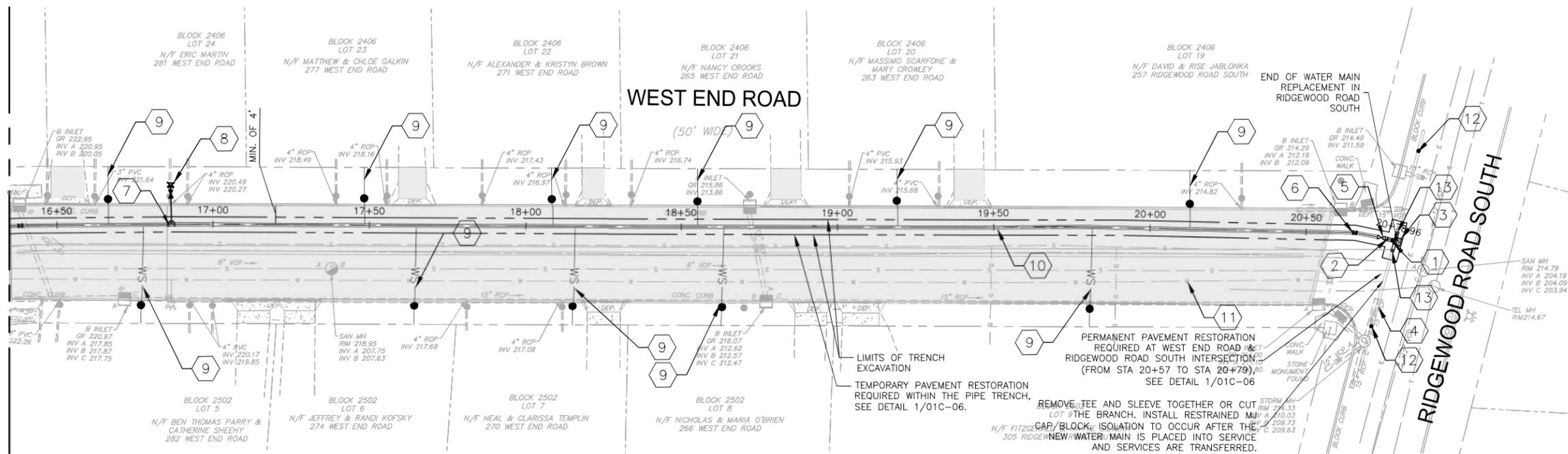
TOWNSHIP OF SOUTH ORANGE  
ESSEX COUNTY, NEW JERSEY  
WEST END ROAD WATER MAIN REHABILITATION

**WEST END ROAD  
PLAN AND PROFILE STA 13+00 TO STA 16+50**

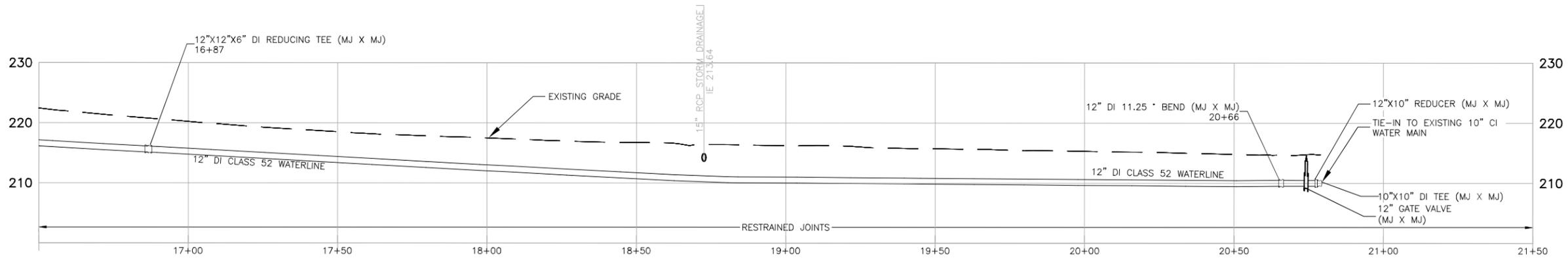
FILENAME | 01C-01.DWG | SHEET  
SCALE | 1"=20' | **01C-04**



MATCHLINE STA 16+50  
CONTINUATION SEE SHEET 01C-04

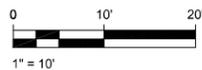


PLAN  
SCALE: 1"=20'



MAINTAIN A MINIMUM OF 18" SEPARATION VERTICALLY BETWEEN NEW PIPE AND ALL EXISTING UTILITIES AT CROSSINGS AND 4' MINIMUM COVER, UNLESS OTHERWISE NOTED.

PROFILE  
HORIZ SCALE: 1"=20'  
VERT SCALE: 1"=10'



PIPING KEY NOTES

- 1 10"x10" MJ TEE.
- 2 12"x10" REDUCER.
- 3 CONCRETE THRUST BLOCK, SEE DETAIL 5/01C-06.
- 4 EXISTING 10" WATER MAIN, TO REMAIN.
- 5 12" GATE VALVE, SEE DETAIL 4/01C-06.
- 6 12" 11.25" HORIZONTAL FITTING.
- 7 12"x12"x6" MJ TEE.
- 8 REMOVE AND DISPOSE OF EXISTING FIRE HYDRANT ASSEMBLY. INSTALL NEW FIRE HYDRANT AS PER DETAIL 2/01C-06.
- 9 INSTALL NEW (1") COPPER SERVICE FROM 12" MAIN TO CUSTOMER LINE AND NEW CURB STOP; LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION IN FIELD. SEE DETAIL 3/01C-06.
- 10 INSTALL 12" DI CLASS 52 PER DETAIL 1/01C-06. INSTALL WITH MINIMUM 48" OF COVER.
- 11 EXISTING 6" WATER MAIN TO BE ABANDONED IN PLACE. CAP 2' OFF OF TIE-IN.
- 12 10" INSERTION VALVE.
- 13 10" TRANSITION COUPLING.

GENERAL NOTES

- 1. CONTRACTOR SHALL DIG A TEST PIT TO VERIFY THE LOCATION AND EX. PIPE O.D. BEFORE ORDERING INSERTION VALVES.
- 2. ALL PIPE JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED LIMITS.
- 3. LOCATION OF EXISTING UTILITIES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY (POT HOLE) TO DETERMINE THE EXACT LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES.
- 4. ADEQUATE SEPARATION OF WATER MAINS AND SANITARY SEWER MAINS SHALL BE MAINTAINED IN ACCORDANCE WITH N.J.A.C. 7:10.
- 5. ALL FITTINGS SHALL BE RESTRAINED WITH WEDGE ACTION RETAINING GLANDS. SEE PROFILE FOR REQUIRED RESTRAINED JOINT PIPE LENGTHS.
- 6. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES AND PERMITTING TO DISCHARGE THE TREATED DEWATERING FLOW TO THE NEARBY STORM SEWER OR WATERWAY.
- 7. INSTALL ALL GATE VALVES COMPLETE WITH VALVE BOX AND COVER.
- 8. CONTRACTOR SHALL MAINTAIN EMERGENCY AND LOCAL TRAFFIC ONLY DURING ROAD CLOSURE FOR THE DURATION OF CONSTRUCTION. TEMPORARY DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES.
- 9. CONTRACTOR SHALL INSTALL A BURIED UTILITY MARKER BALL AT EACH HORIZONTAL FITTING THROUGHOUT CONTRACT.
- 10. WEST END ROAD WILL BE FULLY RECONSTRUCTED FROM STA. 16+50 TO STA. 20+57 AFTER WATER MAIN INSTALLATION.



NOT FOR BIDDING

TOWNSHIP OF SOUTH ORANGE  
ESSEX COUNTY, NEW JERSEY  
WEST END ROAD WATER MAIN REHABILITATION

WEST END ROAD  
PLAN AND PROFILE STA 16+50 TO STA 20+79



FILENAME 01C-01.DWG  
SCALE 1"=20'

SHEET  
01C-05