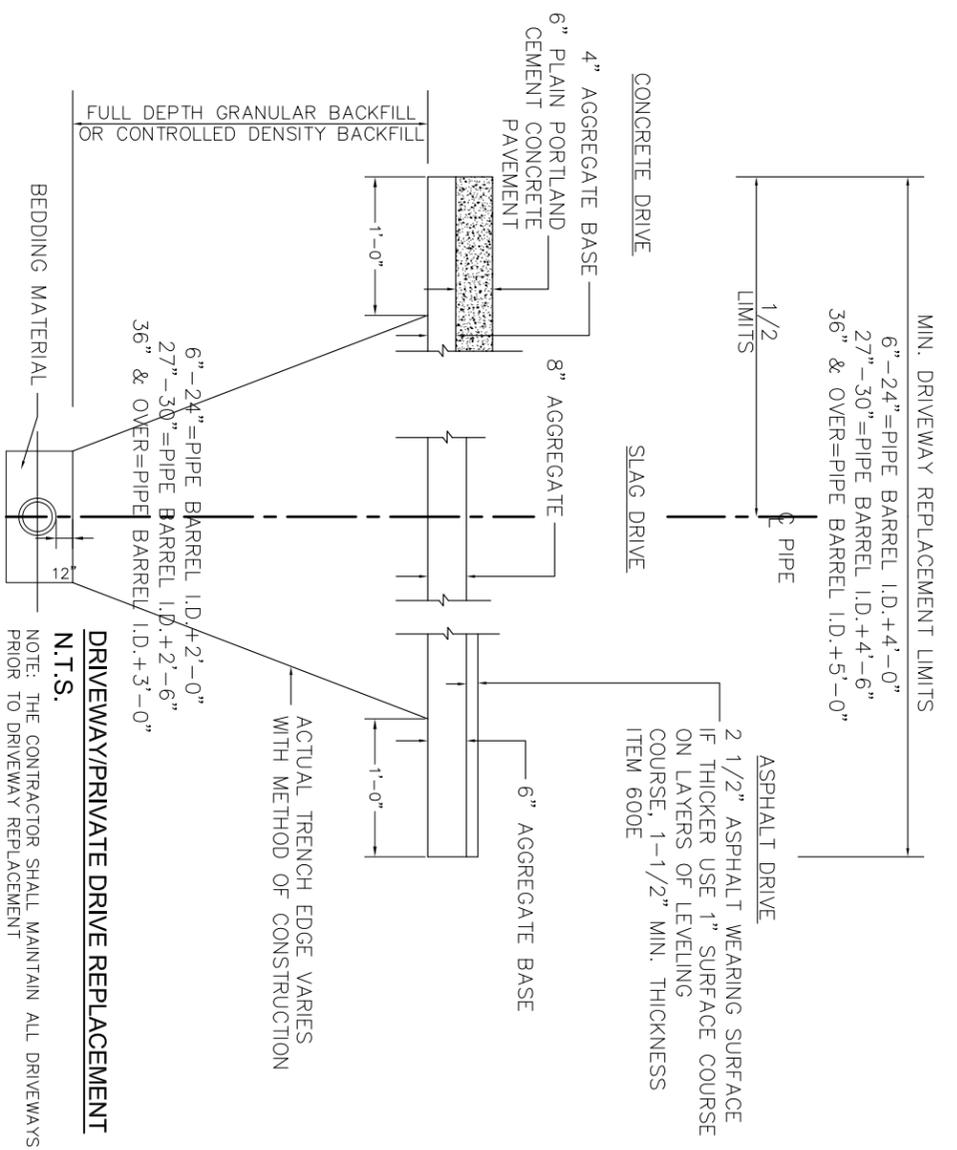
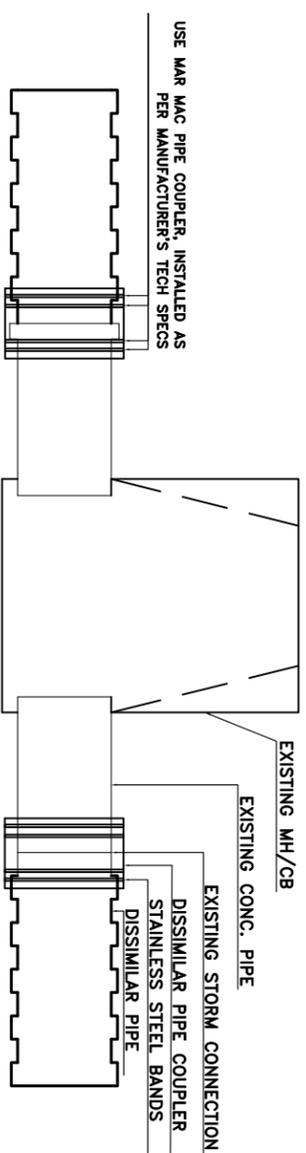
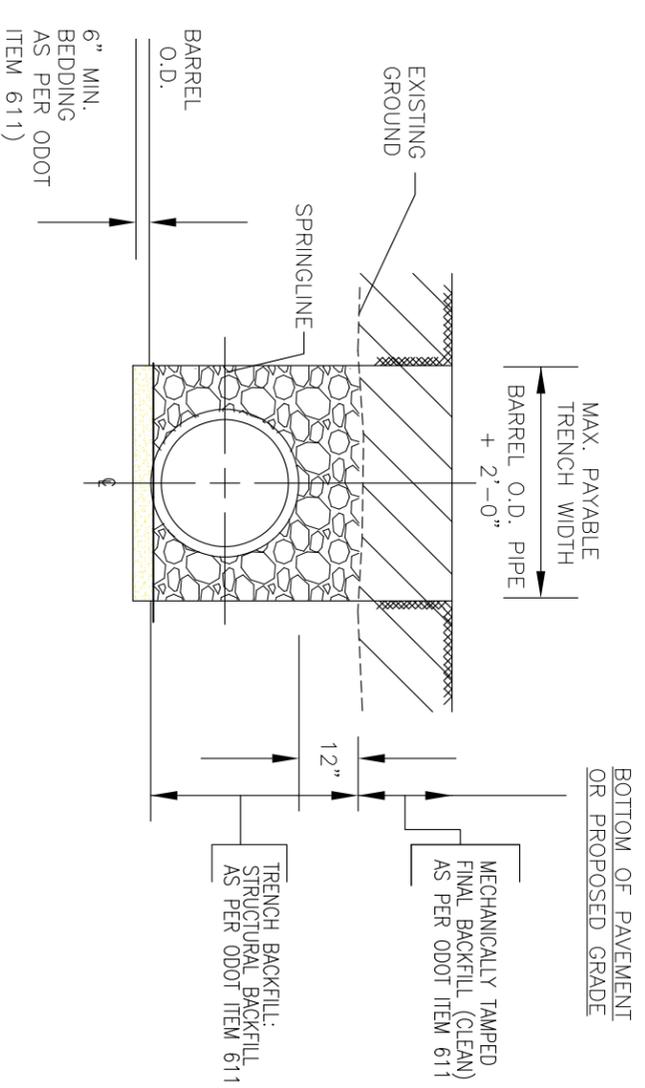


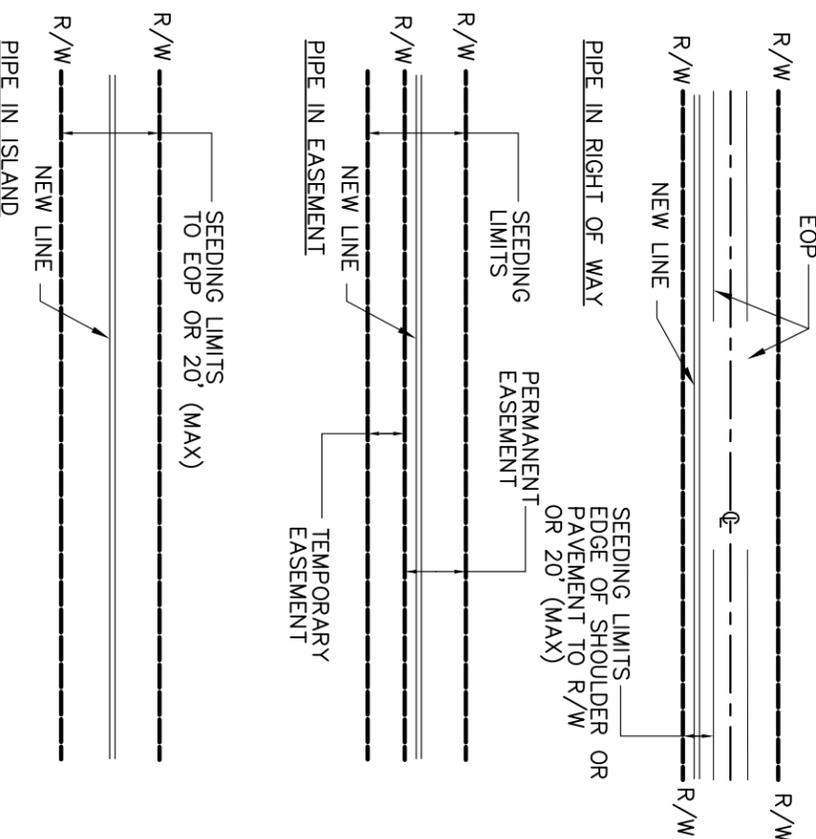
**DISSIMILAR PIPE COUPLER BUTT JOINT CONNECTION
(MAR MAC ROLL TYPE OR EQUAL)**



DRIVEWAY/PRIVATE DRIVE REPLACEMENT
N.T.S.
NOTE: THE CONTRACTOR SHALL MAINTAIN ALL DRIVEWAYS PRIOR TO DRIVEWAY REPLACEMENT



STANDARD BEDDING AND TRENCH DETAIL
N.T.S.



PAY LIMITS FOR SEEDING
N.T.S.

UTILITIES WITHIN WORK LIMITS OF PROJECT:

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C. THE OUPS UTILITY LIST AND CONTACT INFORMATION CAN BE FOUND ON PAGE 4 OF THIS PLAN SET. AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE, AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLANS. THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK, OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY ARE INSTALLED. THE MARKING OR LOCATION SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

GENERAL:
ALL MATERIALS AND CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIALS SPECIFICATIONS DATED JANUARY 1, 2019.

THE CONTRACTOR SHALL PERSONALLY VISIT THE SITE TO ASCERTAIN THE NATURE OF THE WORK INVOLVED AND THOROUGHLY BECOME FAMILIAR WITH THE SITE PRIOR TO THE SUBMISSION OF HIS OR HER BID. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE SAFETY OF THE PUBLIC ON AND SURROUNDING THE SITE DURING CONSTRUCTION.

THE CONTRACTOR SHALL CAREFULLY LAY OUT THE STORM SEWER TO ENSURE THAT THE LINES ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY AND/OR ACQUIRED EASEMENTS AS INDICATED. GRANULAR BACKFILL, AS DEFINED IN THE CONSTRUCTION DRAWINGS, SHALL BE USED FULL DEPTH OVER STORM SEWER LINES WITHIN PAYEMENT LIMITS (INCLUDING DRIVEWAYS) AND SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DRY DENSITY (MINIMUM).

CONTRACTOR SHALL BE REQUIRED TO BACKFILL IN LOOSE LIFTS (8 INCHES THICK OR LESS) AND COMPACT TO 95% OF STANDARD PROCTOR DRY DENSITY (MINIMUM) OVER STORM SEWER LINES WITHIN 5 FEET OF THE PAYEMENT EDGE AND UNDER CURBS AND SIDEWALKS. DEVIATION FROM THESE PLANS, AS APPROVED, WILL NOT BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE CITY OF YOUNGSTOWN'S ENGINEERING DEPARTMENT AND/OR THE ENGINEER.

REPAIR AND RECONSTRUCTION OF STRUCTURES:

THE CONTRACTOR, UNDER THIS ITEM, SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND MACHINES NEEDED AND NECESSARY TO REPAIR AND RECONSTRUCT TO THEIR ORIGINAL CONDITION OR BETTER SIDEWALKS, CURBS, STONE CULVERT, AND ANY OTHER STRUCTURES WHICH HAVE BEEN REMOVED, RELOCATED, AND/OR DISTURBED IN PART OR IN WHOLE AS THE RESULT OF THE STORM SEWER FACILITIES AND APPURTENANCES THERETO. THE WORK SHALL ALSO INCLUDE THE REMOVAL AND DISPOSAL OF EXCESS MATERIALS RESULTING FROM REPAIR. NO ADDITIONAL PAYMENT WILL BE MADE FOR RECONSTRUCTION AND RESTORATION WORK.

CLEARING AND GRUBBING:

THE CONTRACTOR SHALL, UNDER THIS ITEM, CLEAR THE SITE OF ALL BUSHES, BRUSH, TREES AND STUMPS LESS THAN 12" IN DIAMETER, LARGE ROCKS, STRUCTURES, AND ANY OTHER WORK REQUIRED TO MAKE THE SITE SUITABLE FOR THE CONSTRUCTION TO BE DONE ON THE SITE AND FOR THE OPERATION OF THE CONSTRUCTION EQUIPMENT. PAYMENT FOR THIS WORK SHALL BE PAID UNDER LUMP SUM BID ITEM 201, CLEARING AND GRUBBING.

TRENCH OPENING FOR STORM SEWER:

THE LENGTH OF TRENCHED OPENED, OR THE AREA OF THE SURFACE DISTURBED AT ANY ONE TIME SHALL BE LIMITED WITH REGARD TO BOTH EXPEDITIOUS CONSTRUCTION AND CONVENIENCE OF THE PUBLIC. NEW TRENCHES SHALL NOT BE OPENED WHEN OPEN TRENCHES NEED BACKFILLING OR WHEN LABOR IS NEEDED TO RESTORE THE SURFACE OF STREETS TO A SAFE AND PROPER CONDITION. IN NO CASE SHALL MORE THAN FIFTY (50) FEET OF TRENCH BE OPENED IN ADVANCE OF THE COMPLETED WORK. THE CONTRACTOR SHALL NOT STORE EXCAVATED MATERIAL ALONG THE LINE OF WORK.

IF FOR ANY REASON, ATTRIBUTED TO THE CONTRACTOR, WORK IS STOPPED ON THE WHOLE OR ANY PART OF THE EXCAVATION, AND THE SAME IS LEFT OPEN FOR AN UNREASONABLE LENGTH OF TIME IN ADVANCE OF CONSTRUCTION OF THE STORM SEWER, OR OTHER ITEMS AS DETERMINED BY THE OWNER, THE CONTRACTOR SHALL REFILL SUCH EXCAVATION, OR PART THEREOF, UNTIL HE/SHE IS READY TO PROCEED WITH THE CONSTRUCTION OF THE WORK AT NO ADDITIONAL COST TO THE OWNER. ALL EXCAVATED MATERIAL SHALL BE STORED IN A MANNER THAT WILL NOT ENDANGER THE WORK NOR OBSTRUCT THE WALKS AND DRIVEWAYS, HYDRANTS, VALVE PITS, AND OTHER UTILITY STRUCTURES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

FIELD SURVEYING AND SERVICE CONNECTIONS:

THE CONTRACTOR SHALL PERFORM THIS WORK AS PER SPECIFICATIONS, ALSO ON COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE AS-BUILT CONSTRUCTION DRAWINGS SHOWING EXACT LOCATION OF SERVICE CONNECTIONS. THIS WORK SHALL BE PAID UNDER LUMP SUM BID ITEM 623 - CONSTRUCTION LAYOUT STAKES, AS PER PLAN.

DISSIMILAR PIPE CONNECTIONS - STORM SEWER - MAR MAC TYPE:

THE CONTRACTOR WILL HAVE TO MAKE CONNECTIONS TO THE EXISTING CONCRETE PIPE AT EXISTING STORM STRUCTURES. A DETAIL IS PROVIDED IN THE MISCELLANEOUS DETAILS (PAGE 2) FOR BUTT JOINT CONNECTION. CONTRACTOR SHALL INSTALL MAR MAC CONNECTION OR EQUAL AS PER MANUFACTURER'S SPECIFICATIONS. WATER-TIGHT JOINT SHALL BE INSPECTED UPON INSTALLATION. THE MODULAR TYPE BAND CLAMP HELD COUPLERS WILL NOT BE CONSIDERED FOR PIPE CONNECTIONS. CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO EXISTING STORM STRUCTURES.

ITEM 900 8 EACH (BASE BID) / 2 EACH (ALT BID)

MALIBOXES, FENCES, AND DECORATIVE ARRANGEMENTS:

ALL MALIBOXES, FENCES, AND DECORATIVE ARRANGEMENTS THAT REQUIRE REMOVAL IN ORDER TO MAKE PIPE REPAIRS SHALL BE REMOVED AND REPLACED IN THEIR ORIGINAL CONDITION AS PER DIRECTION OF THE ENGINEER. PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN EACH RESPECTIVE PRICE BID ITEM - 611. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK. ANY MALIBOX, FENCE OR DECORATIVE ARRANGEMENT DAMAGED DURING REMOVAL OR REPLACEMENT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

UTILITY MAINTENANCE:

THE WORK OF THIS CONTRACT SHALL IN NO WAY INTERFERE WITH MAINTAINING CONTINUOUS FLOW IN THE EXISTING SEWER SYSTEM, WATER LINES, POWER, TELEPHONE, CABLE TV, GAS, OR ANY OTHER SYSTEM THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL POLES AND RELOCATE ANY UTILITY THAT IS IMPEDING CONSTRUCTION. NOTHING SHALL BE DONE BY ANY CONTRACTOR FOR THIS PROJECT WHICH WILL IN ANY WAY REDUCE THE QUALITY OR QUANTITY LEVEL OF SUCH OPERATIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER ONE (1) WEEK PRIOR TO MODIFYING ANY EXISTING FACILITIES. NO PAYMENT WILL BE MADE FOR ANY UTILITY MAINTENANCE UNLESS SPECIFICALLY NOTED AS A BID ITEM IN THE PROPOSAL.

SAFETY OF ADJACENT STRUCTURES:

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ENSURE THE SAFETY OF EXISTING STRUCTURES AND SHALL NOT CAUSE EXCESSIVE VIBRATIONS. IF ANY DAMAGE IS DONE DUE TO HIS OR HER OPERATION, THE CONTRACTOR IS SOLELY AND FULLY RESPONSIBLE FOR DAMAGES AND SHALL REPLACE AND REPAIR SUCH DAMAGE, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION IN RIGHTS-OF-WAY AND EASEMENTS:

ALL CONSTRUCTION INSIDE RIGHTS-OF-WAY AND EASEMENTS SHALL BE DONE SO IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPROPRIATE STATE AND LOCAL AGENCIES AND OWNERS. ALL PERMITS FOR CONSTRUCTION SHALL STAY WITHIN THE RIGHT-OF-WAY AND PROVIDED EASEMENTS. THE CONTRACTOR SHALL WORK WITH THE CITY OF YOUNGSTOWN AND PROPERTY OWNER TO OBTAIN WORK AGREEMENTS WHERE THE PROPOSED STORM SEWER LINE IS 8 FEET OR LESS OFF THE EXISTING RIGHT-OF-WAY OF THE PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL PERMITS NECESSARY TO PERFORM ALL WORK WITHIN AND/OR ADJACENT TO THE RIGHT-OF-WAY OF ALL ROADS AND HIGHWAYS. ALL FEES, BONDS, INSURANCES AND ANY OTHER COSTS REQUIRED BY THE OWNER OF SAID ROADS AND HIGHWAYS SHALL BE PROVIDED BY THE CONTRACTOR. ANY INSPECTION, ADDITIONAL BONDING, INSURANCE, ETC. REQUIRED BY ODOT AND OTHER STATE AND LOCAL AGENCIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

MAINTAINING TRAFFIC:

ALTHOUGH THIS PROJECT IS NOT IN THE ROADWAY, THE CONTRACTOR SHALL DEVELOP AND SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF YOUNGSTOWN AND/OR ENGINEER BASED ON THE CONSTRUCTION SCHEDULE OF THE PROJECT. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES BY USE OF THE EXISTING PAVEMENT. THE LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE BY APPROVAL OF THE PROJECT ENGINEER, WITH THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE PROJECT ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

MAINTENANCE OF TRAFFIC SIGNS SHALL BE ERRECTED ON THE RIGHT HAND SIDE OF THE ROAD, FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS.

THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

FOR STATIONARY OPERATIONS SUCH AS LOADING MATERIAL AND CLEANING EQUIPMENT, EVERY EFFORT SHALL BE MADE TO HAVE ALL EQUIPMENT COMPLETELY OFF THE TRAVELED WAY. WHEN THE CONTRACTOR CANNOT REMOVE HIS EQUIPMENT FROM THE TRAVELED WAY, ALL TRAFFIC CONTROL DEVICES ON VEHICLES SHALL BE IN OPERATION AND FLAGGERS AND VEHICLES SHALL BE STATIONED TO PROTECT THE WORK SITE AND THE TRAVELING PUBLIC.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ODOT ITEM 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

EPA REQUIREMENTS:

THE CONTRACTOR SHALL MAINTAIN A MINIMUM FOUR (4) FEET HORIZONTAL SEPARATION (OUT-TO-OUT, CLEAR) BETWEEN THE WATER LINE AND STORM SEWERS. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 18" VERTICAL SEPARATION BETWEEN THE WATER LINE AND ALL STORM SEWERS.

TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL:

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE PLACED BY THE CONTRACTOR WITH THE AGENT'S CONCURRENCE FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES.

ITEM 832 TEMPORARY SEDIMENTATION AND EROSION CONTROL 1 LUMP SUM

THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENTATION CONTROL ITEMS SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACTS ON RECEIVING WATERS.

THE TEMPORARY SOIL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE USED THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UP SLOPE DISTURBED AREAS ARE STABILIZED. AREAS TO REMAIN DORMANT FOR MORE THAN 45 DAYS SHALL BE IMMEDIATELY STABILIZED WITH CONSTRUCTION SEEDING AND MULCHING OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY EARTHWORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING THE DESIGN WHICH REQUIRE ADDITIONAL OR MODIFIED TEMPORARY EROSION CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT NO EXTRA COST.

ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF ODNR RAINWATER AND LAND DEVELOPMENT MANUAL, LATEST EDITION.

SOIL INVESTIGATION:

A SOIL INVESTIGATION WAS NOT CONDUCTED FOR THIS PROJECT AND IS AVAILABLE FOR REVIEW WITH THE CITY OF YOUNGSTOWN. THE CONTRACTOR MAY FURTHER INVESTIGATE SOIL CONDITIONS AT HIS OWN EXPENSE. IN THE EVENT THE CONTRACTOR ELECTS TO INVESTIGATE SITE CONDITIONS, HE MUST NOTIFY THE CITY OF YOUNGSTOWN'S ENGINEERING DEPARTMENT AND THE OWNER IN WRITING ATLEAST FIVE (5) BUSINESS DAYS PRIOR TO BEGINNING THE EXCAVATION. ANY TEST TRENCHES AND/OR EXCAVATION MUST BE RESTORED BACK TO LIKE OR BETTER CONDITIONS MEETING THE OWNER'S AND/OR ENGINEER'S APPROVAL.

DRIVEWAY REPAIR:

ALL CONCRETE DRIVEWAY APPROACHES TO BE RECONSTRUCTED SHALL BE REPLACED IN KIND. THE APPROACH SHALL BE REMOVED TO THE NEAREST JOINT IN CLOSE PROXIMITY TO THE RIGHT-OF-WAY. IF THE JOINTS ARE TOO FAR APART AND INAPPROPRIATE TO REMOVE AT THE LOCATION DESIRED, THE APPROACH SLAB SHALL BE SAW CUT AT THE DIRECTION OF THE ENGINEER AND THEN REMOVED. THERE SHALL BE NO ADDITIONAL PAYMENT MADE FOR THE SAW CUTTING. ALL ASPHALT DRIVES SHALL BE REMOVED, REPLACED IN KIND, AND SEALED AT THE CONSTRUCTION JOINT AS DIRECTED BY THE ENGINEER. GRAVEL DRIVEWAY APPROACHES SHALL BE REPLACED IN KIND. PAYMENT OF THIS WORK SHALL BE PAID UNDER BID ITEM 611.

FIELD DRAINS:

WHERE REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT ALL FIELD DRAINS DISTURBED DURING CONSTRUCTION IN KIND TO THE SATISFACTION OF THE ENGINEER. THERE WILL BE NO ADDITIONAL PAYMENT FOR THIS WORK. THIS WORK SHALL BE PAID UNDER UNIT PRICE BID ITEM 611.

PROPERTY MARKERS:

ANY PROPERTY MARKERS DISTURBED BY THE CONTRACTOR'S OPERATION SHALL BE RESET OR REPLACED BY A REGISTERED PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF OHIO, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

SEEDING AND MULCHING:

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT.

ITEM 659 SEEDING AND MULCHING: 966 SY BASE BID 377 SY ALTERNATE BID

REVIEW OF DRAINAGE FACILITIES:

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE ACCEPTANCE BY THE OWNER, REPRESENTATIVES OF THE OWNER, THE ENGINEER, AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING UTILITIES WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. RECORDS OF INSPECTION SHALL BE KEPT IN WRITING BY THE ENGINEER, AS WELL AS VIDEOTAPE BY THE CONTRACTOR WITH A COPY OF THE VIDEO TAPE PROVIDED TO THE CITY OF YOUNGSTOWN PRIOR TO CONSTRUCTION. PAYMENT OF THIS WORK SHALL BE PAID UNDER LUMP SUM BID ITEM 624, MOBILIZATION.

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES AND PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTIVE SERVICE (OOPUPS) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE VICINITY OF THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE NAMES AND CONTACTS.

ELECTRIC
OHIO EDISON CO.
730 SOUTH AVE.
YOUNGSTOWN, OHIO 44502
(330) 740-7704
ATTN: MIKE BECK

GAS
DOMINION EAST OHIO
320 SPRINGSIDE DR., SUITE 320
AKRON, OHIO 44333
(330) 664-2409
ATTN: MARY J. LONG

TELEPHONE
AT&T
50 W. BOWERY ST., 4TH FLOOR
AKRON, OHIO 44308
(216) 476-6138
ATTN: HAROLD MAYNARD

SEWER
THE CITY OF YOUNGSTOWN
26 S. PHELPS ST.
YOUNGSTOWN, OHIO 44503
(330) 261-0258
ATTN: MIKE LYON

WATER
YOUNGSTOWN WATER DEPARTMENT
100 WEST AVE.
YOUNGSTOWN, OHIO 44503
(330) 742-1362
ATTN: DAN BLAKELY

CABLE
SPECTRIUM/TIME WARNER/CHARTER COMM
(330) 494-9200 (ENTER 330) 555-3003
ATTN: RONALD FERDINAND (RONALD.FERDINAND@CHARTER.COM)

AM-TEK OIL, INC.
ANDREW S. ULRICH
513 MILL AVE SE, SUITE 283
NEW PHILADELPHIA, OH 44663
(330) 407-8145
ATTN: ANDREW ULRICH(ANDREW@AM-TEK.COM)

TOPSOIL FURNISHED AND PLACED:

PAY LIMITS CAN BE FOUND ON PAGE 2, STANDARD BEDDING AND TRENCH DETAIL.

ITEM 653 TOPSOIL FURNISHED AND PLACED 50 CY BASE BID 20 CY ALTERNATE BID

NOTE FOR CAUTION:

THE CONTRACTOR IS CAUTIONED THAT ANY ROCK EXCAVATION IS INCLUDED IN THE UNIT PRICE BID FOR LAYING PIPE. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE AND MAY INVESTIGATE THE SOIL CONDITIONS AT HIS OWN EXPENSE.

CONFLICTS WITH EXISTING UTILITIES:

THE INSTALLATION OF THE STORM SEWER LINE, CATCH BASINS, AND MANHOLES ON THIS PROJECT MAY BE IN CLOSE PROXIMITY TO EXISTING GAS LINES, UNDERGROUND TELEPHONE, STORM SEWERS, WATER MAINS, AND OTHER UTILITIES. THE CONTRACTOR SHALL WORK CLOSELY WITH THESE UTILITY COMPANIES TO KEEP DISRUPTION OF SERVICE TO AN ABSOLUTE MINIMUM. THE PROPOSED STORM SEWER SYSTEM MAY CAUSE THE RELOCATION OF THESE UTILITIES DURING THE COURSE OF WORK. IF NECESSARY, THE GAS LINE WILL BE RELOCATED BY THE OWNER (DOMINION EAST OHIO). RELOCATION OF THE TELEPHONE, IF NECESSARY, WILL BE RELOCATED BY THE OWNER (SBC). RELOCATION OF THE WATERLINE AND/OR SERVICE LINES, IF NECESSARY, WILL BE INCLUDED IN THE PROJECT AND SHALL BE PAID UNDER EACH RESPECTIVE UNIT PRICE BID ITEM 603 - PIPE CULVERTS, SEWERS, AND DRAINS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS ITEM. ALL WATERLINE WORK SHALL BE GOVERNED BY THE CITY OF YOUNGSTOWN WATER DEPARTMENT SPECIFICATIONS. NONE OF THE MATERIALS NEEDED FOR THE ABOVE WORK SHALL BE ORDERED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL OF THE ENGINEER. IN THE EVENT UNKNOWN UTILITIES ARE ENCOUNTERED, THE CONTRACTOR MUST CONTINUE CONSTRUCTION PAST THE UNKNOWN UTILITY, WHERE POSSIBLE, AND AVOID CHARGING THE CITY FOR DOWN TIME WHEN OTHER WORK WAS POSSIBLE.

SHEETING AND SHORING:

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING CURB AND OTHER ROADWAY APPURTENANCES ADJACENT TO THE EDGES OF THE STORM SEWER EXCAVATION. THE CONTRACTOR SHALL USE SHEETING, SHORING, OR OTHER METHODS OF TRENCH PROTECTION SO AS TO PROTECT ADJACENT CURB AND STRUCTURES. THE COST SHALL BE INCORPORATED INTO THE PRICES OF THE VARIOUS BID ITEMS. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.

PERMITS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL PERMITS NECESSARY TO PERFORM ALL WORK WITHIN AND/OR ADJACENT TO THE RIGHT-OF-WAY OF ALL ROADS, HIGHWAYS AND RAILROADS. ALL FEES, BONDS, INSURANCE'S AND ANY OTHER COSTS REQUIRED BY THE OWNER OF SAID ROADS, HIGHWAYS, AND RAILROADS SHALL BE PROVIDED BY THE CONTRACTOR FOR THE COST OF SECURING PERMITS, FEES, BONDS, INSURANCE FEES, ETC.

SPECIAL - PIPE CLEANING AND CATCH BASINS CLEANING:

STORM STRUCTURES CONTAIN A CONCRETE-LIKE BUILD UP FROM THE UPSTREAM MANHOLE TO THE DOWNSTREAM CATCH BASIN. THE CONTRACTOR WILL NEED TO REMOVE THIS BUILD UP TO THE SATISFACTION OF THE ENGINEER THROUGH THEIR OWN MEANS AND METHODS FROM THE CATCH BASIN AND STORM MANHOLE STRUCTURES. THIS CLEANING WILL INCLUDE THE STRUCTURE, AND THE FIRST STICK OF PIPE ATTACHED UPSTREAM AND DOWNSTREAM TO THE STORM STRUCTURE BEFORE ATTACHING THE NEW PIPE. THIS WORK WILL BE PAID UNDER ITEM 900.

PIPE CLEANING 40 LF (BASE BID) / 10 LF (ALT BID)
CATCH BASINS/MANHOLE CLEANING 4 EA (BASE BID) / 2 EA (ALT BID)

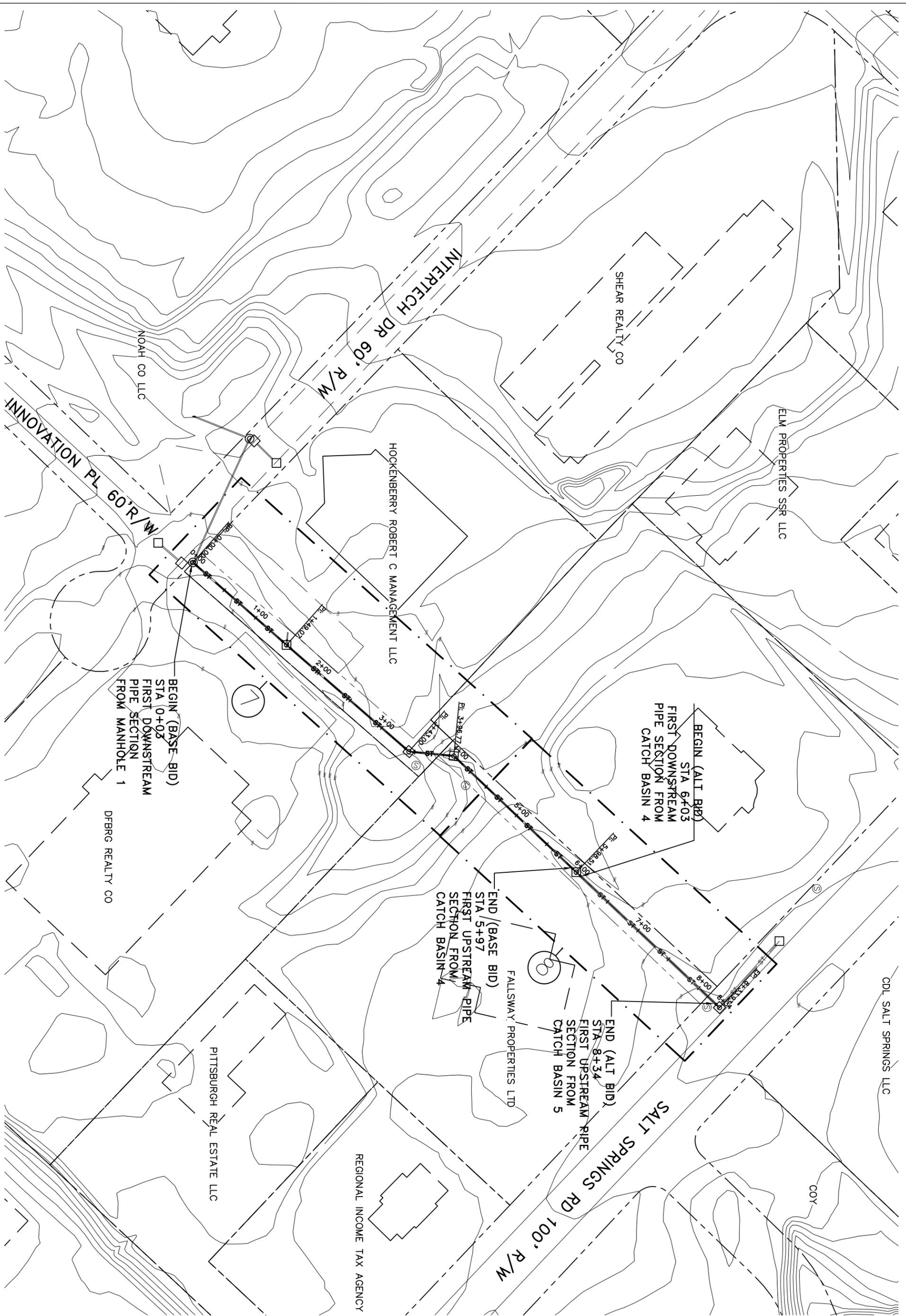
CONTROL POINTS & BENCHMARKS			
CODE	ITEM	ELEVATION	NORTHING EASTING
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CP	CP#1 SANITARY UD	950.08'	537336.8620' 2463459.2590'

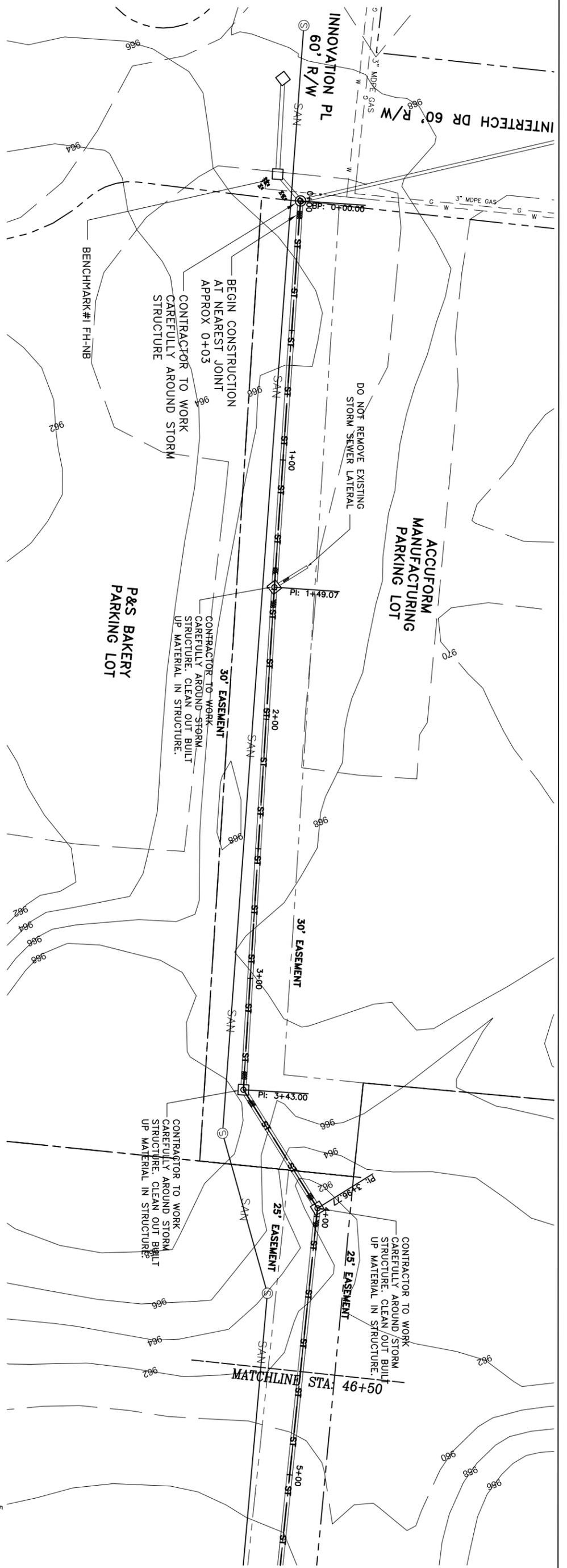
LEGEND

- W — Ex. Waterline
- SAN — Ex. Sanitary Sewer Line
- ST — Storm Sewer Line
- G — Ex. Gas Line
- Ex. Fence
- — Ex. Monument Box
- — Monument Found, Size & Type as indicated
- ☀ — Ex. Light Pole
- ✉ — Ex. Mail Box
- ⊗ — Ex. Traffic Pole
- ⊖ — Ex. Power Pole
- ⊠ — Ex. Traffic Box
- ⊓ — Ex. Cable TV Box
- ⊔ — Ex. Gas Meter
- ⊕ — Ex. Gas Valve
- ⊖ — Ex. Water Valve
- ☔ — Ex. Water Hydrant
- ⊙ — Ex. Sanitary Manhole
- ⊚ — Ex. Storm Manhole
- ⊛ — Ex. Storm Inlet
- ⊜ — Ex. Traffic Sign
- R/W — Right-of-Way
- ⤴ — Centerline
- (XX'XX'XX" — Record Bearing & Distance
- TEL — Ex. Telephone Manhole
- ⊞ — Ex. Pedestal
- ⊟ — Ex. Steel Post
- ⊠ — Water Hydrant w/ Valve

GENERAL NOTES

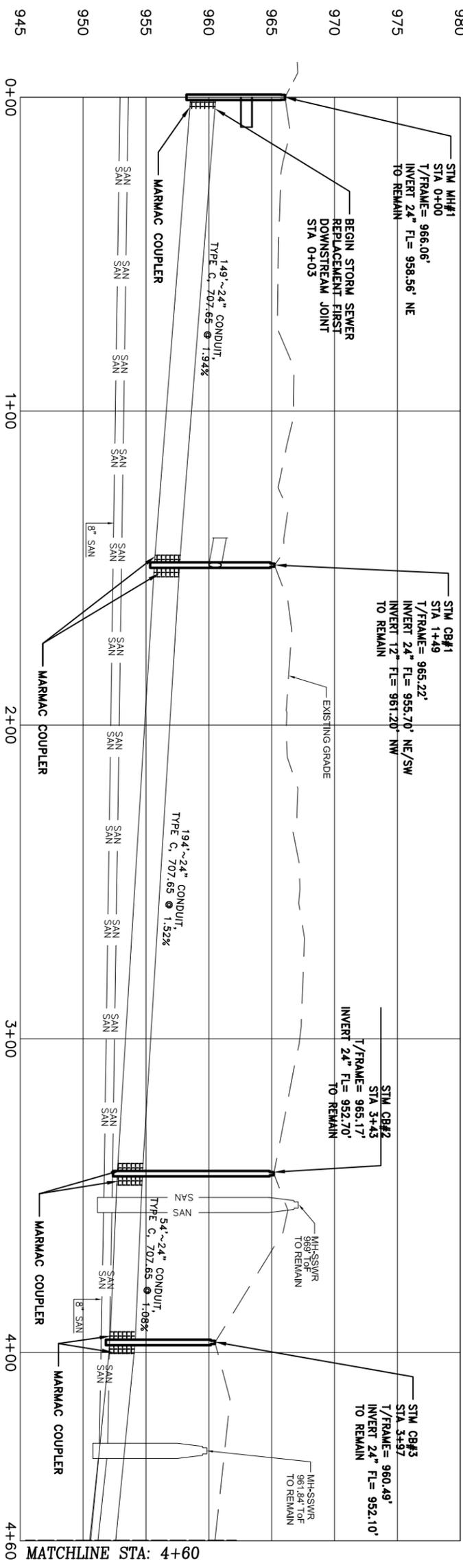
DRAWN BY JJK
CHECKED KMB





BENCHMARK #1:
FH-NB: "966.51"
7' FROM MH1

INNOVATION PLACE STORM SEWER PROFILE

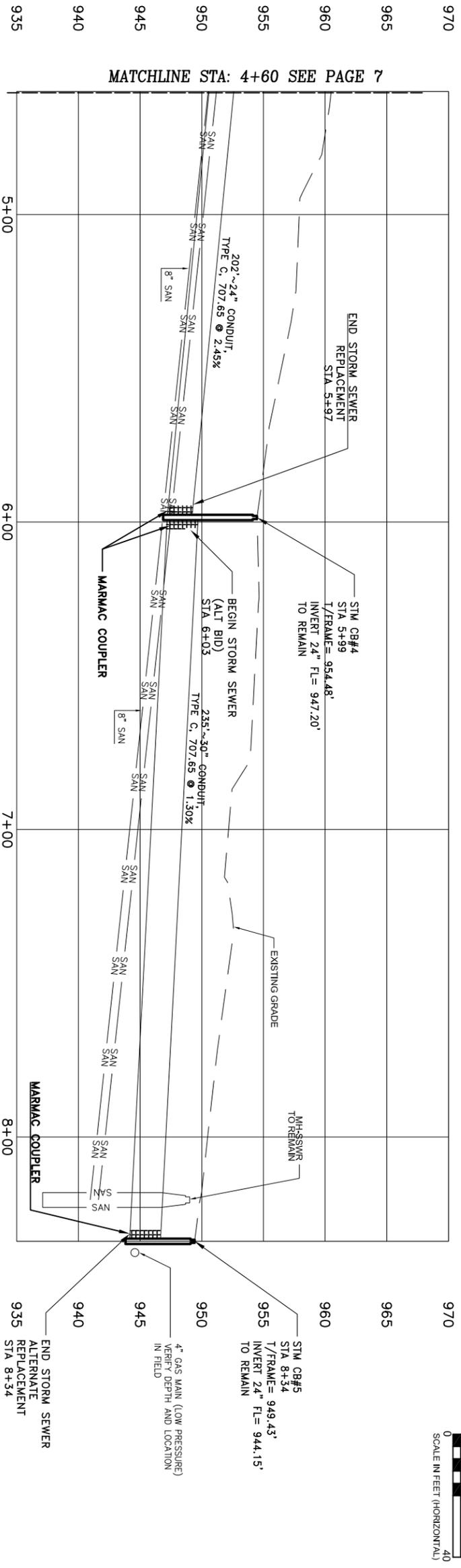
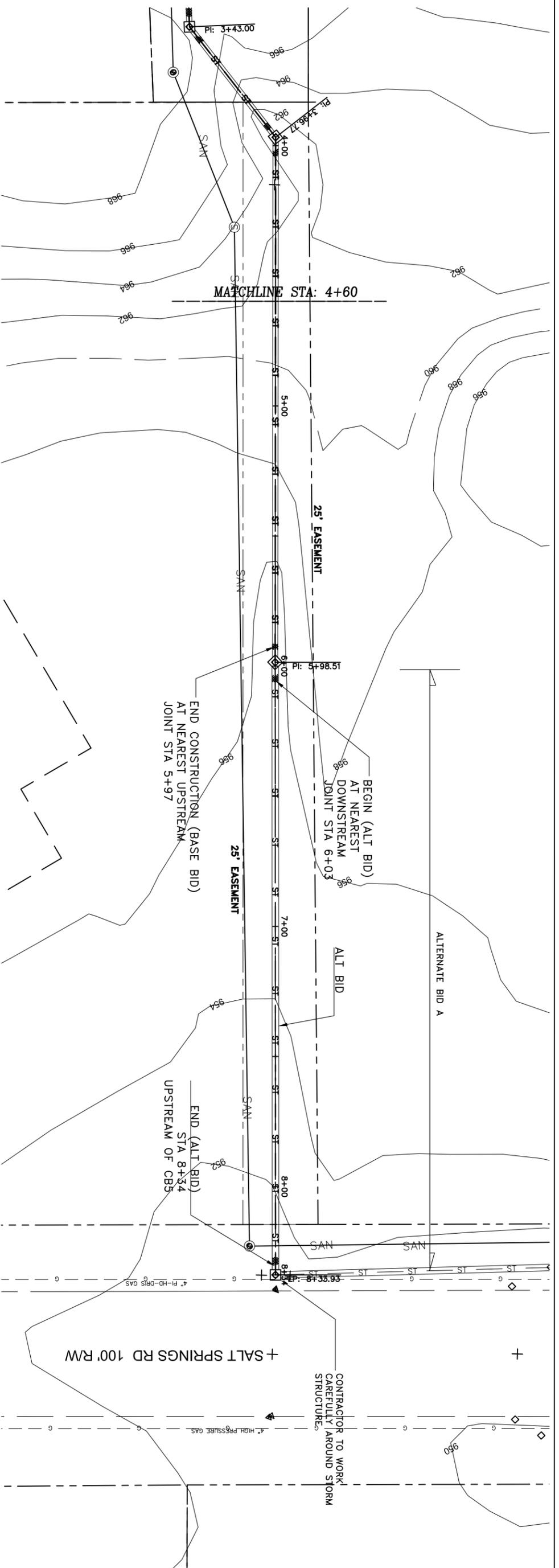


NOTE: CONTRACTOR TO MAINTAIN HORIZONTAL AND VERTICAL ALIGNMENT OF THE EXISTING STORM SEWER. INVERT ELEVATIONS ARE SHOWN FOR REFERENCE ONLY.

CALCULATED JJK CHECKED KMB	0 20 40 HORIZONTAL SCALE IN FEET	
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PLAN & PROFILE-1
INNOVATION PL. S.S. REPLACEMENT

COY



INNOVATION PLACE STORM SEWER PROFILE



NOTE: CONTRACTOR TO MAINTAIN HORIZONTAL AND VERTICAL ALIGNMENT OF THE EXISTING STORM SEWER. INVERT ELEVATIONS ARE SHOWN FOR REFERENCE ONLY.