THE AND ANY OTHER ELECTRONIC MEDIA, COUNTERPART IS AN INSTRUMENT OF SERVICE PREPARED BY MERRICK AND COMPANY FOR A DEFINED PROJECT. IT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE IN WHOLE OR IN PART ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO MERRICK AND COMPANY. ANY REUSE WITHOUT SUCH AGREEMENT AND COMPENSATION SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LOSS EXPOSURE TO MERRICK AND COMPANY.

LEGEND

PROPOSED	EXISTING	
CATV	CATV	CABLE TV LINE W/ PEDESTAL
E	EX E	ELECTRIC LINE W/ BOX, METER, AND LIGHT
OHE	EX OE	OVERHEAD ELECTRIC WITH POLE
OHE/C	EX OHE/C	OVERHEAD ELECTRIC COMMUNICATIONS
UE	EX UE	UNDERGROUND ELECTRIC
FO	EX FO	FIBER OPTIC LINE W/ TRAFFIC CONTROL BOX
F	EX F	FIRE
G	EX G	GAS LINE W/ DRY UTILITY VAULT
IRR	EX IRR	IRRIGATION
SS	EX SS	SANITARY SEWER W/ MANHOLE
	EX SD	STORM SEWER FES W/ MAHNOLE, RIPRAP
T	EX T	TELEPHONE LINE W/ PEDESTAL
OT	OHT	OVERHEAD TELEPHONE
W	EX W	WATER LINE, VALVE, FITTINGS, METER, AND HYDRANT
T	EX T	UNDERDRAIN
		CURB AND GUTTER
		WHEEL STOP
4950	4950	CONTOURS
		TRASH ENCLOSURE
UD	UD	UNDERDRAIN W/ TYPE R INLET
X	X	FENCE LINE
		DRAINAGE SWALE
		RIGHT-OF-WAY
		SECTION LINE
		PROPERTY LINE
		LOT LINE
		EASEMENT
		IRRIGATION CONTROL VALVE BOX
		PEDESTRIAN LIGHT
		STREET LIGHT
		TRAFFIC LIGHT
4990	4990	SPOT ELEVATION
		FLOW OF WATER
		SIGN

BASIS OF BEARINGS:

BEARINGS ARE ASSUMED AND ARE BASED UPON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 6, AS BEARING N87°48'59"E A DISTANCE OF 2634.09 FEET BETWEEN THE SOUTH QUARTER CORNER OF SAID SECTION 6, BEING A FOUND 3-1/4" ALUMINUM CAP, FLUSH WITH THE SURFACE AND STAMPED: PLS 38026 AND THE SOUTHEAST CORNER OF SAID SECTION 6, BEING A FOUND 3-1/4" ALUMINUM CAP, FLUSH WITH THE SURFACE AND STAMPED PLS 12405.

BASIS OF ELEVATION:

SOURCE BENCHMARK
DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD.

SITE BENCHMARKS

1. A NO. 5 REBAR WITH 2" ALUMINUM CAP STAMPED "LS 28286, 2001" FOUND AT THE SOUTHWEST CORNER OF SECTION 6, T6S, R66W LOCATED ON THE WEST LINE OF FIRST STREET APPROXIMATELY 1000 FEET NORTH OF ELM AVENUE.
2. A 2.5" IRON PIPE WITH 3.25" ALUMINUM CAP STAMPED "PLS 12405, 19997" FOUND AT THE SOUTHEAST CORNER OF SECTION 6, T6S, R66W LOCATED APPROXIMATELY 960 FEET NORTH OF THE CENTERLINE OF AVENTERRA PARKWAY AND APPROXIMATELY 1050 FEET WEST OF THE CENTERLINE OF CHAMBERS ROAD.

LEGAL DESCRIPTION:

TRACT A OF COMPARK VILLAGE SOUTH FILING NO. 1, AMENDMENT NO 1, TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO.

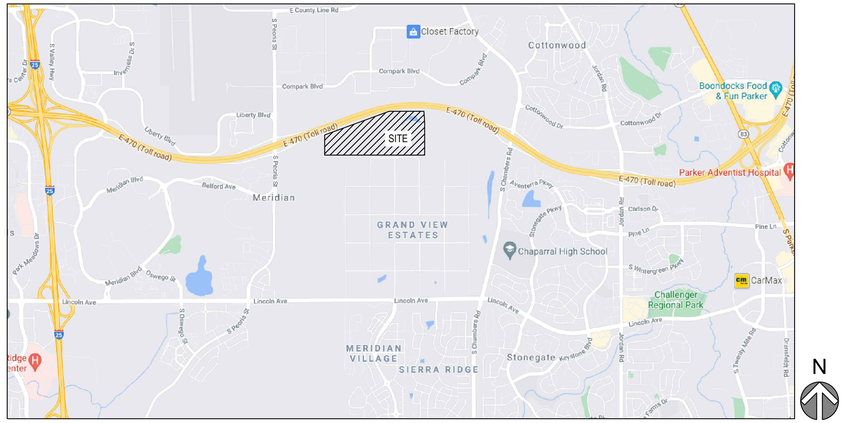
SVMD SANITARY AND WATER CONSTRUCTION PLANS FOR:

COMPARK VILLAGE SOUTH

COMPARK VILLAGE SOUTH,
TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

TRACT A, COMPARK VILLAGE SOUTH FILLING NO. 1, AMENDMENT 1, LOCATED IN THE SOUTH HALF OF SECTION 6,
TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN. TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

STONEGATE VILLAGE METRO DISTRICT WATER AND SANITARY SEWER PLAN



Vicinity Map

N.T.S.

Sheet List Table		
Sheet Number	Sheet Title	Sheet Description
00	COVER SHEET	C7.0
01	GENERAL NOTES	C7.1
03	OVERALL UTILITY PLAN	C7.2
04	WATER-P&P	C7.3
05	SAN-P&P	C7.5
06	WATER DETAILS	C7.6
07	WATER DETAILS	C7.7
08	WATER DETAILS	C7.8
09	WATER DETAILS	C7.9
10	WATER DETAILS	C7.10
11	WATER DETAILS	C7.11

ABBREVIATION LEGEND

TW	GRADE AT TOP OF WALL
BG	GRADE AT BOTTOM OF WALL
PC	POINT OF CURVE
PT	POINT OF TANGENT
Δ	DELTA, HORIZONTAL CURVE DIRECTION CHANGE
CL	CENTERLINE
FL	FLOWLINE
DBL	DOUBLE
C.O.	CLEAN OUT
K	RATE OF CURVATURE
AD	ABSOLUTE GRADE DIFFERENCE IN %
VC	VERTICAL CURVE
PVC	POINT OF VERTICAL CURVE
PVT	POINT OF VERTICAL TANGENT
PVI	POINT OF VERTICAL INTERSECTION
PI	POINT OF TANGENT INTERSECTION
ROW	RIGHT OF WAY
PVMT	PAVEMENT
HP	HIGH POINT
LP	LOW POINT
PCR	POINT OF CURB RETURN
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
EX, EX.	EXISTING
PR, PR.	PROPOSED
ME	MATCH EXISTING
TC	BACK TOP OF CURB
FG	FINISHED GRADE
STA	STATION
EL, ELEV	ELEVATION
FF	FINISHED FLOOR
TC	TOP OF CONCRETE
B/P	BOTTOM OF PIPE
T/P	TOP OF PIPE
Ø	DIAMETER
UE	UTILITY EASEMENT
ESMT	EASEMENT
HCL	HORIZONTAL CONTROL LINE
N	NORTH/NORTHING
E	EAST/EASTING
W	WEST
S	SOUTH
R	RADIUS
LC	LENGTH OF CORD
L	LENGTH
CB	CHORD BEARING

DEVELOPER/ OWNER
CENTURY COMMUNITIES
8390 E. CRESCENT PARKWAY,
SUITE 650, GREENWOOD VILLAGE,
CO 80111
PHONE: 303-770-8300
CONTACT: CINDY MYERS

PLANNER
PCS GROUP
200 KLAMATH ST, DENVER, CO
80223
PHONE: 720-259-8248
CONTACT: PAUL SHOUKAS

SURVEYOR
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CONTACT: KENNETH G. OUELLETTE, PLS

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CONTACT: KRISTOFER K. WIEST, PE

TOWN & UTILITY CONTACTS

TOWN OF PARKER
CONTACT: MIKE WAUGH
PHONE: 303-840-9546

INTERMOUNTAIN REA
CONTACT: BROOKS KAUFMAN
PHONE: 303-688-3100

CENTURY LINK
CONTACT: WILLIAM BENSON
PHONE: 303-320-8333

SOUTH METRO FIRE DISTRICT
CONTACT: MICHELLE HERIAN
PHONE:720-488-7200

COMCAST
CONTACT: KEVIN YOUNG
PHONE: 720-490-3867

XCEL ENERGY
CONTACT: MICHELLE O'NAN
PHONE: 303-329-1618

STONEGATE VILLAGE METRO DISTRICT
CONTACT: SCOTT BARNETT
PHONE: 303-858-9909

WATER MAIN QUANTITIES		
DESCRIPTION	AMOUNT	UNIT
8" PVC WATER MAIN	683.96	LF
8" TO 6" TEEW/KICK BLOCK	33	EACH
8" 11.25 DEGREE BEND	1	EACH
8" 22.5 DEGREE BEND	1	EACH
VERTICAL BEND	2	EACH
FIRE HYDRANT ASSEMBLY	1	EACH
REMOVE EXISTING 8" PLUG AND MAKE DRY CONNECTI	2	EACH
SANITARY SEWER MAIN QUANTITIES		
DESCRIPTION	AMOUNT	UNIT
8" SANITARY SEWER MAIN (0-16" DEPTH)	603.6	LF
4' DIAMETER MANHOLES (0-20' DEPTH)	2	EACH
CONNECTION TO EXISTING SANITARY SEWER	1	EACH

FIRE/LIFE SAFETY REVIEW BLOCK

All fire hydrants shall be installed according to water utility standards. The number and locations of the fire hydrants as shown on the Overall Utility Plan are correct as specified by the Town of Parker, Community Development Department.

Fire Code Official or Designated Representative

(NOTE – Underground Fire Line (UFL) submittal documents must meet the requirements of NFPA 24 when submitting for review.)

The Town of Parker review constitutes general compliance with the Town's Standards and approved variances, subject to these plans being stamped, signed, and dated by the professional engineer of record. Review by the Town does not constitute approval of the plan design or accuracy and correctness of engineering calculations. Errors in the design or calculations remain the responsibility of the registered professional engineer whose stamp and signature are affixed to this document.

This review does not constitute approval of any private on-site improvements which may be shown. Construction cannot commence until all required drainage/traffic report(s), final development plan(s), special review(s), grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

Town of Parker, Director of Engineering/Public Works

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303-751-0741
www.merrick.com

CENTURY Living

REV	REVISION DESCRIPTION	DATE	CHKD	APPR

TITLE: COMPARK VILLAGE SOUTH
WATER AND SANITARY PLANS
COVER SHEET

PE-STAMP

ISSUED FOR REVIEW
FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER: 65120950
DATE: 9/10/2021
SHEET: C7.0
00

THIS AND ANY OTHER ELECTRONIC MEDIA COUNTERPART IS AN INSTRUMENT OF SERVICE PREPARED BY MERRICK AND COMPANY FOR A DEFINED PROJECT. IT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE IN WHOLE OR IN PART ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT PRIOR WRITTEN VERIFICATION OR ADAPTATION BY MERRICK AND COMPANY FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO MERRICK AND COMPANY. ALL RIGHTS RESERVED.

GENERAL NOTES

1. All construction shall comply with the Stonegate Village Metropolitan District Specifications.
2. The Contractor shall contact all appropriate utility companies and the District Engineer prior to the beginning of any construction. Contractor shall be responsible for locating any existing utility (including depths) which may conflict with the proposed construction. All existing utilities shall be protected from damage by the Contractor. Damaged utilities shall be repaired by the Contractor at his/her own expense.

   All items shown on the plans as existing are shown in approximate locations only. The actual locations may vary from the plans, especially in the case of underground utilities. Whenever Contractor discovers a discrepancy in locations, he/she shall contact the Engineer immediately.
3. The District Engineer and other approving agencies are to be notified at least 48-hours prior to construction.
4. The Contractor shall obtain, at his/her expense, all permits which are necessary to perform the proposed work.
5. All concrete shall be a minimum of Class A, 6 sack, Type II, 3,000-pound compression strength.
6. The Design Engineer shall submit one set of rolled "As-Recorded" blueline prints and electronic files to the District Engineer for approval prior to printing mylar sepias for the District. After approval has been granted by the District Engineer, full size mylar sepia prints shall be transmitted to the District office and an additional set of rolled blueline prints shall be transmitted to the District Engineer's office prior to probationary acceptance.
7. All backfill material shall be compacted to 95% Standard Proctor density. Compaction tests must be submitted to District Engineer prior to probationary acceptance.
8. Trenches shall be excavated and the pipe exposed for the inspection at any location on the project if so ordered by the inspector.
9. The Contractor will be held responsible for the proper functioning of lines (water and sewer) for up to 1-year from the date of probationary acceptance of the lines by the District. Any malfunction during this period of guarantee shall be remedied by the Contractor to the satisfaction of the District Engineer at no expense to the District.
10. Surface grades are to be within plus or minus 1-foot of finished grade and verification of compaction results obtained prior to the installation of water and sewer lines. Results must be submitted to the District Engineer.
11. No work shall be backfilled until the construction has been inspected and approved for backfilling by the District Engineer or representative of the District Engineer.

WATER MAIN

1. All materials and workmanship shall be in conformance with the Stonegate Village Metropolitan District Engineering Standards and Specifications, latest revision. All work shall be inspected and approved by personnel of the Stonegate Village Metropolitan District and the District Engineer.
2. All water mains shall be Class 50 ductile iron pipe (AWWA C-151-71) or PVC 6-inch through 12-inch C-900 Class 200. All joints and fittings shall be in accordance with the Stonegate Village Metropolitan District Standards and Specifications. Water mains 20-inch and larger shall be Class 51. Any variation of this standard shall be noted on the plans. All D.I. pipe fittings shall be polyethylene wrapped.
3. All bends, plugs, reducers, and fire hydrants are to be rodded or megalugged. All fittings shall be wrapped with 8-mil minimum thickness polyethylene material per AWWA Standard C-105.
4. There shall be a minimum cover of 4½ -feet over all water mains.
5. Fire hydrants shall conform to AWWA C-502 "dry barrel fire hydrants" pipe. Hydrant assemblies shall include all pipe, fittings, valves, materials, and labor necessary to install the hydrant complete in place. The acceptable model is Waterous Company Pacer WB-67 Model or Waterous Company Pacer WB-67 Model with bronze bused show and bronze shaft coupling, the 4-1/2-inch nozzle to have N.S.T. threads.
6. All bends, tees, fire hydrants, blow-offs and plugs at dead-end mains shall be protected from thrust by using concrete thrust blocks.
7. Chlorination and Flushing: All water mains shall be installed and chlorinated per the Stonegate Village Metropolitan District Standards and Specifications. The lines shall be chlorinated in accordance with AWWA C-601, "Disinfecting Water Mains." The preferred method is to use sufficient chlorine tablets to produce a 50-mg to 1 solution. These tablets should be adhered to the top of the pipe section with Permatex No.1 (Red). The chlorination of any finished pipeline shall be done prior to the hydrostatic testing. Sterilization and flushing of all mains shall be inspected copy of the certified by Health Department having jurisdiction. One copy of the certification shall state the location of the main, that the main has been inspected by a representation of the Health Department having jurisdiction, and was found to comply with the procedures set forth by that department.
8. Hydrostatic Testing: All water mains shall be tested per the requirements of the Stonegate Village Metropolitan District Standards and Specifications. All pipe shall be field pressure-tested to a minimum of 150 psi. All testing shall be done in the presence of a Stonegate Village Metropolitan District inspector. Leakage for each section of pipe between lines valves will shall not exceed the limits set forth in the District Standards and Specifications.
9. Valves in streets are to be located at property line extensions except for tapping tees, where an additional valve shall be placed on the tapping tee. Other valve locations, such as where cross-pans exist, are shown on the plans.
10. When necessary to lower or raise water lines at storm drains and other utility crossings, a minimum clearance of 1-1/2-feet shall be maintained between outside of pipes.
11. The Contractor shall have in his/her possession at all times one signed copy of the plans which have been approved by the Stonegate Village Metropolitan District and the District Engineer.
12. The Contractor shall notify the Stonegate Village Metropolitan District and the District Engineer at least 48-hours prior to any construction. If work is suspended for any period of time after initial start-up, the Contractor must notify the District Engineer 48-hours prior to re-start.
13. Pipe bedding shall be a clean, well-graded sand or squeegee sand in accordance with Stonegate Village Metropolitan District Standards and Specifications, latest revision.
14. The Contractor shall notify the public utility companies and determined the location of all existing underground utilities prior to proceeding with the excavation. All work performed in the area of the public utilities shall be performed according to the requirements of these agencies.
15. Compaction of all trenches must be attained in accordance with the soils reports and compaction test results submitted to the District Engineer prior to probationary acceptance.
16. Valve Boxes: Tyler screw-type 6-inch cast-iron valve box assembly series 6860 with No. 1560 oval base. Clay and Bailey screw-type 6 inch cast-iron valve box assembly No. P-108 with No. 106 large oval base.
17. All pipe lengths are approximate.
18. All industrial/commercial facilities, or any company with an SIC code, shall fill out an Industrial Waste and Silver Mercury Waste Discharge Questionnaire prior to District approval. The District has adopted an Industrial Pretreatment Program (IPP) as part of the District's treatment facility permit requirements. Certain users of the sewer system will be required to comply with the IPP, and those users will, in part, be determined by the Questionnaire.

SANITARY SEWER

1. All sanitary sewer construction shall conform to the Stonegate Village Metropolitan District Standards and Specifications.
2. All sewer mains shall be PVC, ASTM D-3034, SDR 35 or approved equal. All sewer main size is 8-inch in diameter unless otherwise noted.
3. Sewer lines shall be installed 5-feet south or west of street centerline, unless otherwise shown on plans. Sewer lines shall be 10-feet from water lines except when crossing each other. Sewer lines which cross less than 1-1/2-feet vertically from the water main shall be encased in concrete as per District Standards and Specifications. Use rubber gaskets for PVC encasement.
4. Sewer rim elevations shown are appropriate only and are not to be taken as final elevations. Ring and cover shall be set in centered concrete rings with Ram-neck for adjustment to match final pavement elevations.
5. The Contractor and survey crew shall verify elevations of existing sewer lines and manholes to be tied to prior to construction or staking of sanitary sewer.
6. Gravel and/or tile underdrains shall be installed in all sewer main trenches as shown on the sanitary sewer plan and profile sheets. Underdrains shall be PVC - ASTM 3034, SDR 35 installed without gaskets. The District is not responsible for maintenance of underdrains. Size of underdrain services shall be 3-inch.
7. Sewer wyes shall be used rather than tees. Sewer service wyes for each unit shall be staked by a survey crew, and furnished and installed by the Contractor. The Contractor shall furnish to the Engineer "as recorded" location of wyes.
8. All manholes shall be 48-inches in diameter with 24-inch ring and cover, eccentric cone, unless otherwise specified.
9. Pipe bedding shall be Class "B" and shall conform to ASTM C-33 or D-448 gradation No. 6 or No. 67.
10. At least 5-days prior to the start of construction, a pre-construction meeting will be held at the District and attended by the Contractor and representatives of the other approving agencies. It will be the responsibility of the Contractor to contact the District Engineer to schedule this meeting.
11. All pipe lengths are approximate.
12. The Contractor shall have in his/her possession at all times one signed copy of the plans which have been approved by the District and the District Engineer.
13. All manholes shall have shaped inverts.
14. All sewer lines shall be tested in accordance with the Stonegate Village Metropolitan District Standards and Specifications prior to acceptance or any connection to an existing sewer line.
15. Prior to start work where sewer main is to be installed into existing District sewer systems, the nearest manhole to the point of tie-in shall be plugged with a plumber's plug on the inlet side by the Contractor. This plug shall remain in place until final acceptance by the District. Its purpose shall be to prevent any mud, water or other materials from entering the line during construction. The Contractor shall be responsible for pumping and cleaning these manholes and removing the plug when so instructed by the District.
16. Prior to probationary acceptance walk-through, the Contractor/Developer shall jet clean the entire sanitary sewer system and pumpout at the plugged manhole.
17. All services will be permanently marked on curb face as follows:

    "S" for sanitary sewer services

    "W" for water services
18. All warehouse building companies with an SIC code shall fill out an Industrial Waste and Silver Mercury Waste Discharge Questionnaire prior to District approval.

DISTRICT ACCEPTANCE NOTE

1. Upon completion of sanitary sewer and water construction and testing, the Developer or Contractor shall contact the District for probationary acceptance inspection. A punchlist will be provided the Developer and Contractor upon completion of the initial walk-through and Probationary Acceptance will be issued following completion and acceptance of the work outlined in the punchlist.
2. The Contractor will be held responsible for the proper functioning of the lines for up to 1-year from the date of probationary acceptance of the lines by the District. Any malfunction during this period of guarantee shall be remedied by the Contractor to the satisfaction of the District Engineer at no expense to the District.
3. The date of final acceptance will be indicated in the conditions of the Probationary Acceptance Letter. The Developer shall be responsible for contacting the District for final inspection and final acceptance.
4. The Contractor and/or Developer shall deposit with the District a Letter of Credit in the amount of Ten-Percent (10%) of the total construction cost of all water and sewer utilities to be installed for District ownership and maintenance. The Letter of Credit shall be deposited prior to the start of plan review or any construction, and shall remain with the District throughout construction and the probationary period, until final acceptance of the utilities by the District, at which time the Letter of Credit will be returned to the Contractor and/or Developer.

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE (303) 293-8107 AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 8:00 A.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

INSTALLATION NOTES:

WATER

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. A COUPLING MAY BE EITHER FLARED OR SILVER-SOLDERED. COMPRESSION COUPLINGS WILL NOT BE ALLOWED. MOVED CURB BOXES MUST BE INSPECTED BY PWSD PRIOR TO BURIAL.
4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 90°± ANGLE MAXIMUM, 45° ANGLE MINIMUM. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD.
6. STOPBOX MUST BE PLUMB AND CENTERED OVER NUT, AND MUST BE SET AT OR, SLIGHTLY ABOVE FINISHED GRADE.
7. STOPBOXES MUST BE SET AT BACK OF SIDEWALK ONLY (TOUCHING) NOT AT CURBS.
8. NO CRAWLSPACE MOUNTED METERS ALLOWED.
9. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
10. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
11. METER SHOULD BE LOCATED ON SAME SIDE OF HOUSE AS CURBSTOP IF POSSIBLE.
12. WATERLINES PASSING UNDER DRIVEWAYS NEED TO BE SLEEVED IN 4" P.V.C. AND HAVE EXPRESS PERMISSION OF THE DISTRICT.
13. YOKES SHOULD BE MOUNTED NO GREATER THAN 6 INCHES ABOVE BOTTOM SHUTTOFF. EACH SERVICE MUST INCLUDE A STOP AND WASTE VALVE AND A PRESSURE REDUCING VALVE LOCATED WITHIN THE ABOVE REFERENCED 6 INCH SPACE.
14. NO SPLICES OR FLARED COUPLINGS ALLOWED ON WATERLINES. SILVER SOLDIER JOINTS MUST BE USED IN MOVING STOPBOXES, AND SILVER SOLDIER JOINT MUST BE INSPECTED BY SGVMD PRIOR TO BURIAL.
15. ONLY 3/4" (JUMPER OR CHEATER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER OR CHEATER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
16. ALL SERVICES WILL BE PERMANANTELY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SEWER SERVICE "V" FOR WATER SERVICES

STONEGATE VILLAGE METROPOLITAN DISTRICT

DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT ENGINEER'S OFFICE (293-8107) AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 4:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
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6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

INSTALLATION NOTES:

SEWER

1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND CAST IRON CLASS 22 SOIL PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3°.
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100'.
6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.

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Town of Parker, Director of Engineering/Public Works

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CENTURY Living

REV	REVISION DESCRIPTION	DATE	CHK'D	APPR'D

TITLE: COMPARK VILLAGE SOUTH
WATER AND SANITARY PLANS
GENERAL NOTES

PE STAMP

ISSUED FOR REVIEW

FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER	DATE	SHEET	
65120950	9/10/2021	C7.1	01

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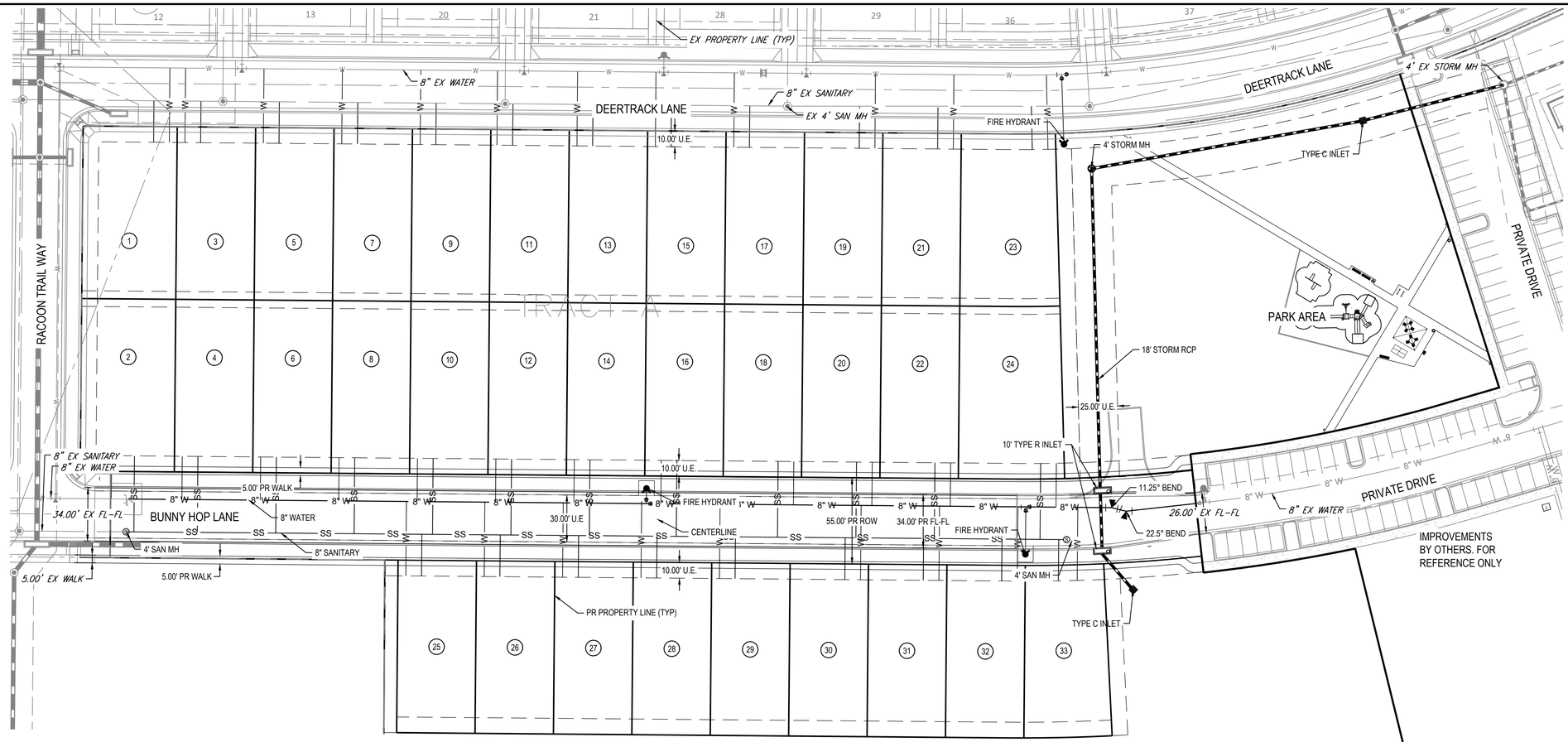

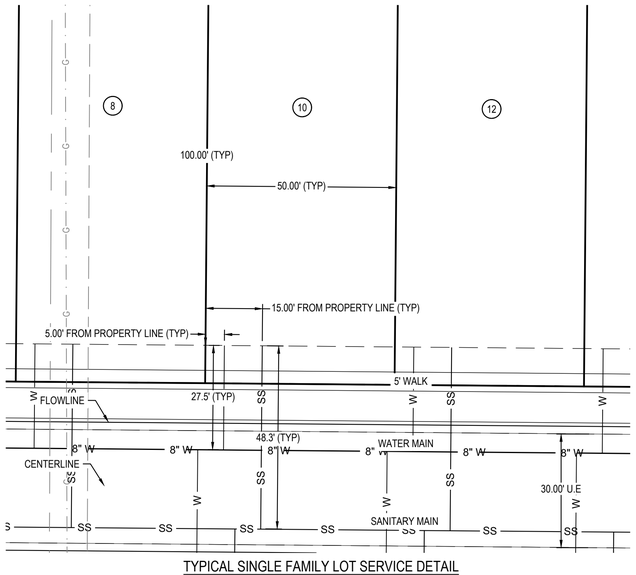

TYPICAL SINGLE FAMILY LOT SERVICE DETAIL

NOTES:
1. SERVICE LOCATIONS ARE TYPICAL UNLESS OTHERWISE NOTED.

NOTES:
CONTRACTOR TO FIELD VERIFY VERTICAL AND HORIZONTAL LOCATION OF EXISTING UTILITIES AND IRRIGATION.

N

40' 0 20' 40' 80'

1" = 40' HOR.

FIRE/LIFE SAFETY REVIEW BLOCK

All fire hydrants shall be installed according to water utility standards. The number and locations of the fire hydrants as shown on the Overall Utility Plan are correct as specified by the Town of Parker, Community Development Department.

Date

Fire Code Official or Designated Representative

(NOTE – Underground Fire Line (UFL) submittal documents must meet the requirements of NFPA 24 when submitting for review.)

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Town of Parker, Director of Engineering/Public Works Date

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CENTURY Living

REV	REVISION DESCRIPTION	DATE	CHKD	APPR

TITLE
COMPARK VILLAGE SOUTH
PRIVATE IMPROVEMENT CONSTRUCTION PLANS
OVERALL UTILITY PLAN

PE STAMP
ISSUED FOR REVIEW
FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER	DATE	SHEET	
65120950	2/25/2022	C7.2	03

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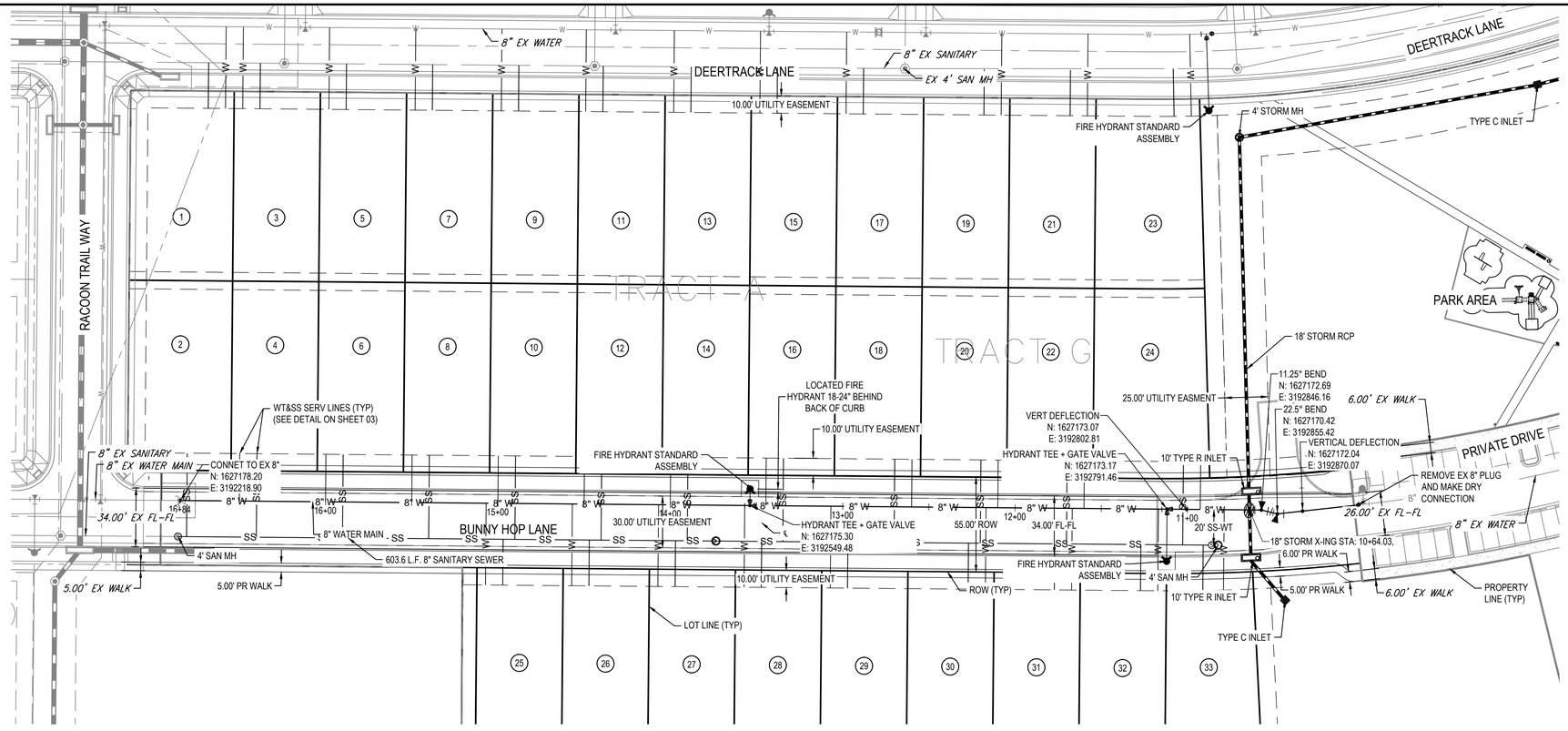
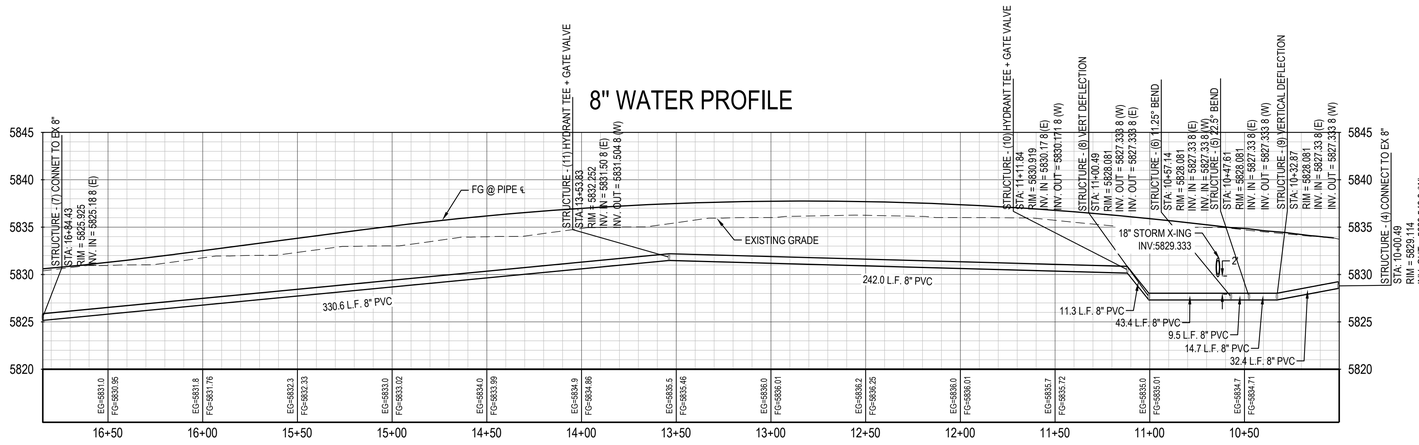


8" WATER PROFILE



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REV	REVISION DESCRIPTION	DATE	CHK'D	APPR'D

TITLE
COMPARK VILLAGE SOUTH
WATER AND SANITARY PLANS
WATER-P&P

PE STAMP

ISSUED FOR REVIEW

FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER 65120950
DATE 9/10/2021
SHEET C7.3
04

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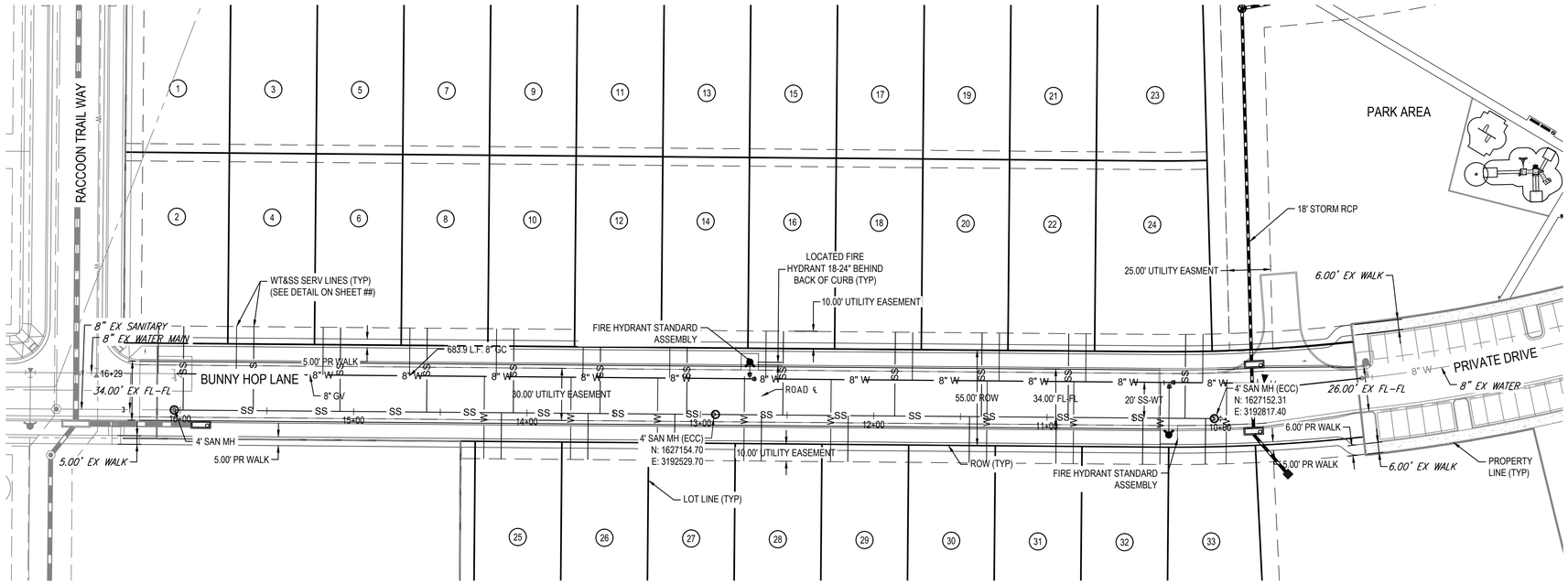
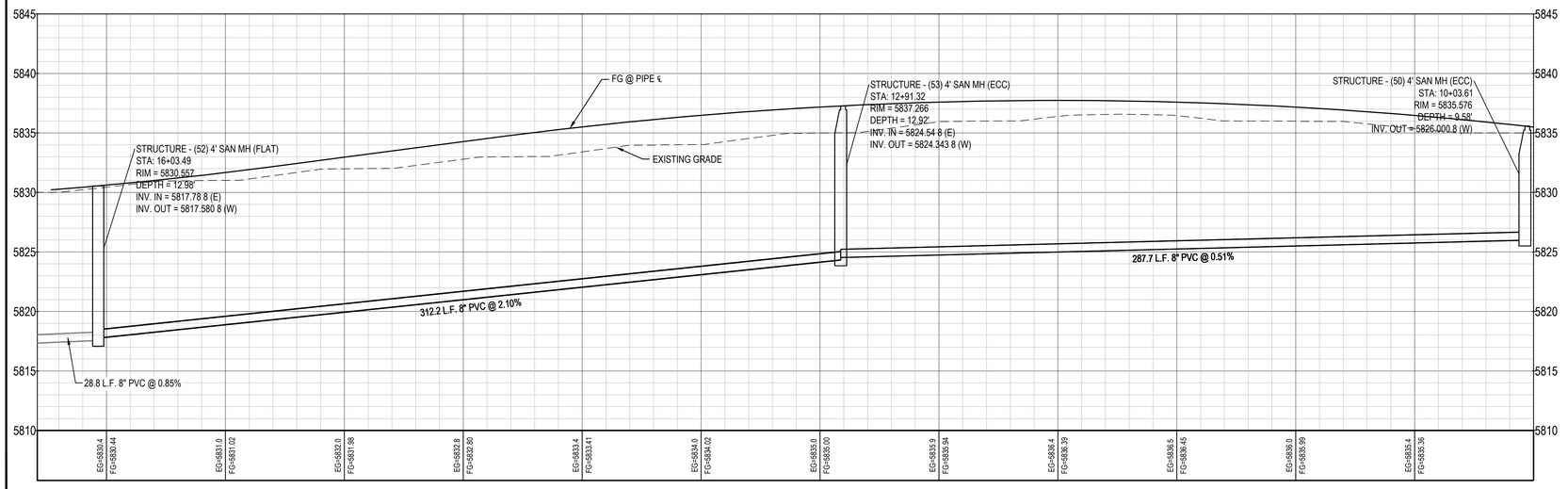


BUNNY HOP LANE SANITARY PROFILE



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Town of Parker, Director of Engineering/Public Works

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REV	REVISION DESCRIPTION	DATE	CHK'D	APPR'D

TITLE
COMPARK VILLAGE SOUTH
WATER AND SANITARY PLANS
SAN-P&P

PE-STAMP
ISSUED FOR REVIEW
FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER 65120950
DATE 9/10/2021
SHEET C7.5 05

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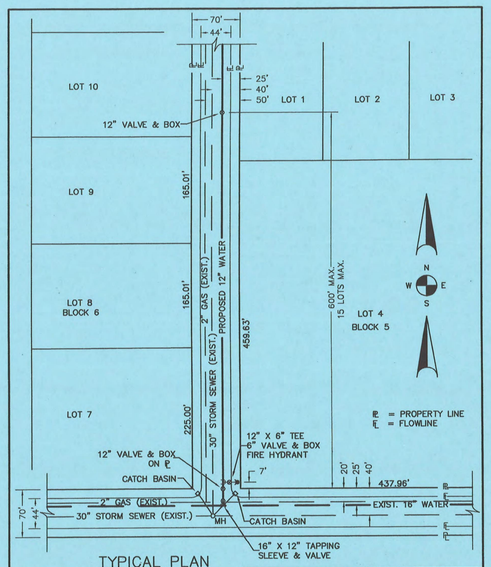


TYPICAL PLAN

NOTES:

1. SEE "TYPICAL STREET CROSS SECTION – TYPICAL STREET ℄ PROFILE" DRAWING.
2. ALL FIRE HYDRANTS TO BE LOCATED AT POINTS OTHER THAN CORNER INTERSECTIONS SHALL BE INSTALLED AT A LOT LINE EXTENDED.

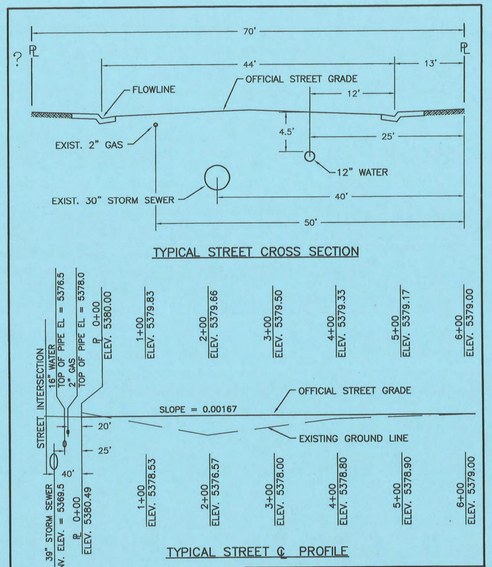
STONEGATE VILLAGE METROPOLITAN DISTRICT

WATER DISTRIBUTION SYSTEM TYPICAL PLAN

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 1



TYPICAL STREET CROSS SECTION

TYPICAL STREET ℄ PROFILE

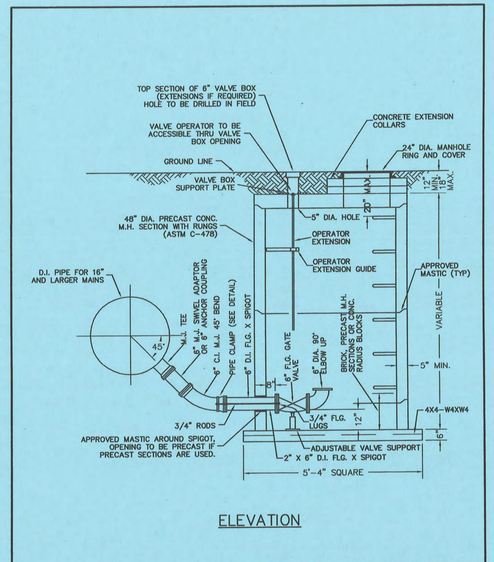
STONEGATE VILLAGE METROPOLITAN DISTRICT

TYPICAL STREET CROSS SECTION TYPICAL STREET ℄ PROFILE

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 2



ELEVATION

NOTE: THIS BLOW-OFF INSTALLATION MAY BE REPLACED BY A FIRE HYDRANT WHERE APPROVED BY THE DISTRICT FOR 16" AND 20" MAINS.

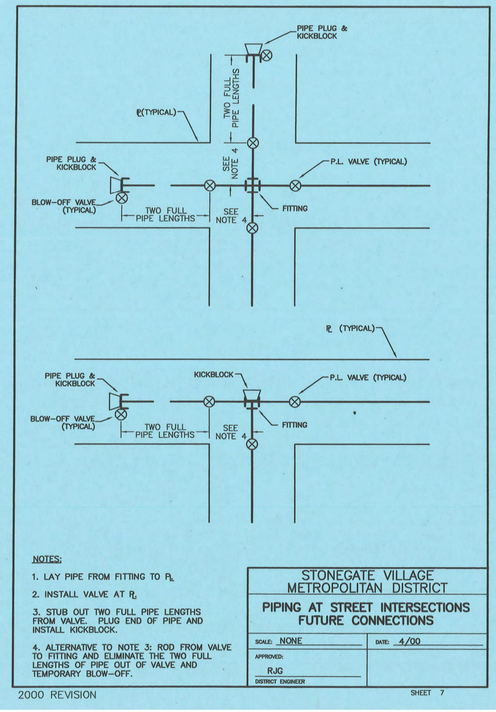
STONEGATE VILLAGE METROPOLITAN DISTRICT

TRANSMISSION MAIN BLOW-OFF INSTALLATION

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 11



NOTES:

1. LAY PIPE FROM FITTING TO ℄.
2. INSTALL VALVE AT ℄.
3. STUB OUT TWO FULL PIPE LENGTHS FROM VALVE. PLUG END OF PIPE AND INSTALL KICKBLOCK.
4. ALTERNATIVE TO NOTE 3: ROD FROM VALVE TO FITTING AND ELIMINATE THE TWO FULL LENGTHS OF PIPE OUT OF VALVE AND TEMPORARY BLOW-OFF.

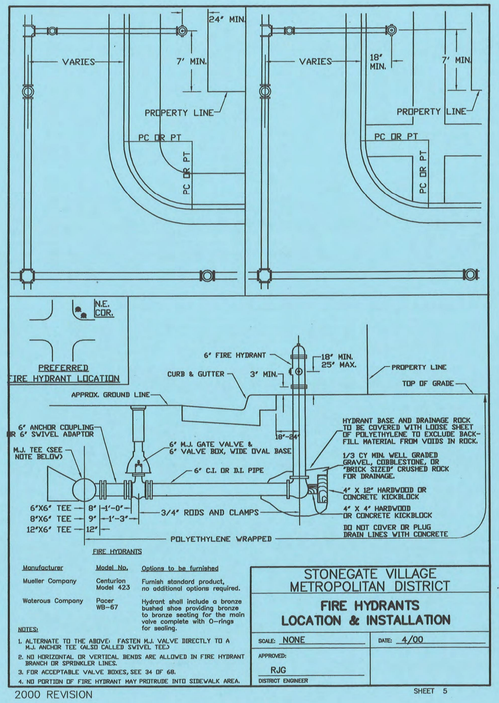
STONEGATE VILLAGE METROPOLITAN DISTRICT

PIPING AT STREET INTERSECTIONS FUTURE CONNECTIONS

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 7



FIRE HYDRANTS

Manufacturer	Model No.	Options to be furnished
Mueller Company	Centurion Model 423	Furnish standard product, no additional options required.
Waterous Company	Pacer WB-67	Hydrant shall include a bronze bushed shoe providing bronze to bronze seating for the main valve complete with O-rings for sealing.

NOTES:

1. ALTERNATE TO THE ABOVE: FASTEN M.J. VALVE DIRECTLY TO A M.J. ANCHOR TEE CALLED CALLED SWIVEL TEE.
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH OR SPRINKLER LINES.
3. FOR ACCEPTABLE VALVE BOXES, SEE 34 OF 68.
4. NO PORTION OF FIRE HYDRANT MAY PROTRUDE INTO SIDEWALK AREA.

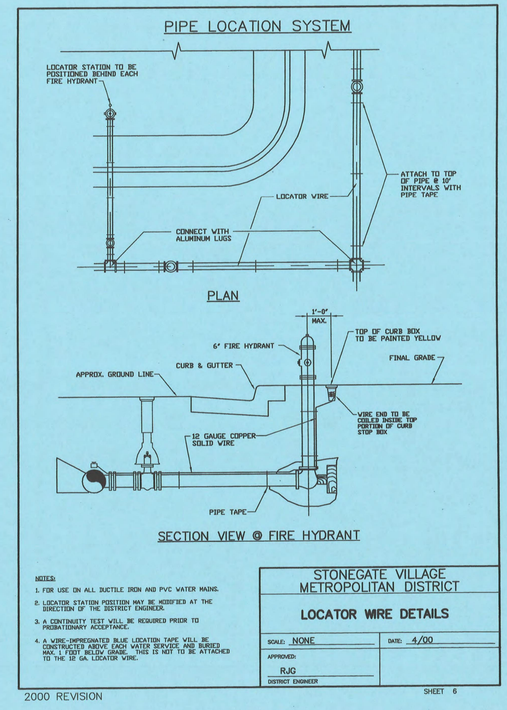
STONEGATE VILLAGE METROPOLITAN DISTRICT

FIRE HYDRANTS LOCATION & INSTALLATION

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 5



PLAN

SECTION VIEW @ FIRE HYDRANT

NOTES:

1. FOR USE ON ALL DUCTILE IRON AND PVC WATER MAINS.
2. LOCATOR STATION POSITION MAY BE MODIFIED AT THE DIRECTION OF THE DISTRICT ENGINEER.
3. A CONTINUITY TEST WILL BE REQUIRED PRIOR TO PRELIMINARY ACCEPTANCE.
4. A WIRE-IMPREGNATED BLUE LOCATION TAPE WILL BE CONSTRUCTED ABOVE EACH WATER SERVICE AND BURIED MAX 1 FOOT BELOW GRADE. THIS IS NOT TO BE ATTACHED TO THE 12 GA. LOCATOR WIRE.

STONEGATE VILLAGE METROPOLITAN DISTRICT

LOCATOR WIRE DETAILS

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 6

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REV	REVISION DESCRIPTION	DATE	CHKD	APPR

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FOR AND ON BEHALF OF MERRICK & COMPANY

TITLE

COMPARK SOUTH

WATER AND SANITARY PLANS

WATER DETAILS

JOB NUMBER 65120950

DATE 7/30/2021

SHEET C7.6 06

File Location:Q:\DEN\Projects\0950-00 Compark South\CAD\CDs\SF-WATER\0950-WATER DETAILS-SF-W.dwg Plot Date:2/28/2022 4:39 PM Last Saved By: TVANGORDON

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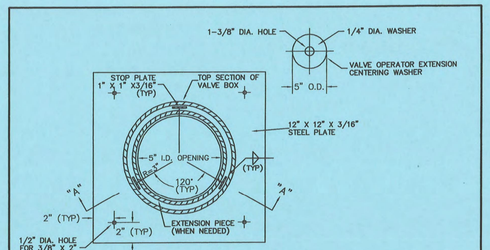
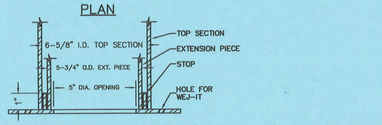
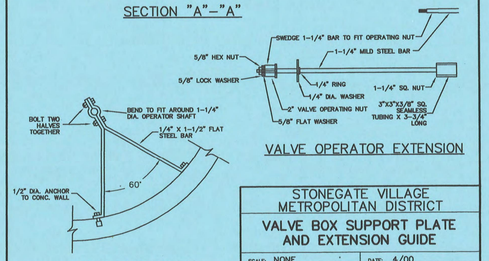


PLAN



SECTION "A"–"A"



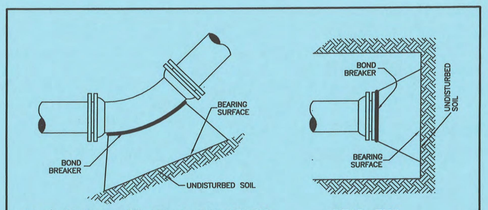
VALVE OPERATOR EXTENSION

EXTENSION GUIDE

STONEGATE VILLAGE METROPOLITAN DISTRICT
VALVE BOX SUPPORT PLATE AND EXTENSION GUIDE

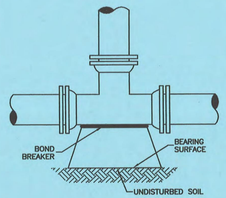
SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 12

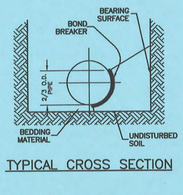


11-1/4°,22-1/2°,45° & 90° BENDS

DEAD END



TEE



TYPICAL CROSS SECTION

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

SIZE OF PIPE	BENDS				TEE OR DEAD END
	11-1/4°	22-1/2°	45°	90°	
4"	1.00	1.00	1.00	1.80	1.50
6"	1.00	1.25	2.25	4.00	3.00
8"	1.00	2.00	4.00	7.50	5.25
12"	2.00	4.25	8.25	15.25	11.00
16"	3.50	8.50	12.50	23.00	16.50
20"	5.00	10.00	19.50	35.50	25.00
24"	6.50	13.00	28.00	47.00	33.00

NOTES:

1. ON 16" AND 20" TRANSMISSION MAINS ALL BENDS SHALL BE BOTH RODDED AND KICKBLOCKED.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. BASED ON 150 PSI PIPE PRESSURE PLUS WATER HAMMER:
   4", 6" AND 8" WATER HAMMER = 120 PSI.
   12" WATER HAMMER = 110 PSI
   16", 20" AND 24" WATER HAMMER = 70 PSI.
4. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.
5. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RODDED AND KICKBLOCKED.

STONEGATE VILLAGE METROPOLITAN DISTRICT
CONCRETE KICKBLOCKS
BEARING SURFACES AND INSTALLATION

SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

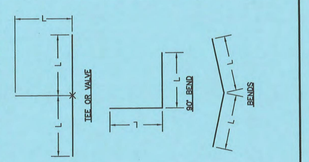
2000 REVISION — SHEET 17

LENGTH OF TIED PIPE

PIPE SIZE		4"		6"		8"		12"		16"		20"		24"	
		D	L	D	L	D	L	D	L	D	L	D	L	D	L
TEE OR VALVE		3/4"	6.0'	3/4"	13.0'	3/4"	20.0'	3/4"	40.0'	3/4"	60.0'	1"	80.0'	–	155.0'
PLUG OR 45° BEND		3/4"	6.0'	3/4"	13.0'	3/4"	20.0'	3/4"	40.0'	3/4"	60.0'	1"	80.0'	–	155.0'
90° BEND		3/4"	2.0'	3/4"	4.0'	3/4"	6.0'	3/4"	11.0'	1"	18.0'	1"	24.0'	–	45.0'
22-1/2° BEND		3/4"	1.0'	3/4"	1.0'	3/4"	2.0'	3/4"	3.0'	3/4"	5.0'	1"	6.0'	–	12.0'
11-1/4° BEND		3/4"	0.0'	3/4"	0.0'	3/4"	1.0'	3/4"	1.0'	3/4"	1.0'	3/4"	2.0'	–	3.0'
		M.S.		M.S.		M.S.		M.S.		M.S.		M.S.		M.S.	
		H.S.		H.S.		H.S.		H.S.		H.S.		H.S.		H.S.	

NOTES:

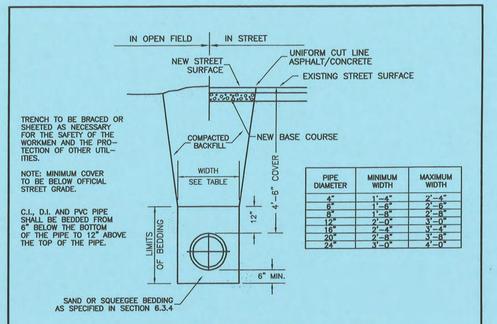
1. LENGTH OF TIED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
2. CLAMPS AND RODS NOT ALLOWED FOR 24" AND LARGER PIPES.
3. D = DIAMETER, L = LENGTH, G = GRADE, M.S. = MILD STEEL, H.S. = HIGH STRENGTH
4. MINIMUM 4.5' GROUND COVER REQUIRED.
5. BASED ON 150 PSI INTERNAL PRESSURE.
6. M.S. MEANS MILD STEEL ROD A.S.T.M. STANDARD DESIGNATION A-36.
7. H.S. MEANS HIGH STRENGTH ROD A.S.T.M. STANDARD DESIGNATION A-193 GRADE B-7.
8. NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-307 GRADE A OR B HEXAGON HEAVY SERIES.
9. SEE MF DRAWING NO. 1 AND NO. 2 FOR ROD COUPLING DETAILS, SPACING AND SECTION DETAILS.
10. LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE TIED TOGETHER AND IS NOT NECESSARILY THE LENGTH OF THE RODS.
11. STAR BOLTS NOT ALLOWED ON PIPE LARGER THAN 16".
12. MINIMUM OF 4 RODS REQUIRED ON 16" PIPE IF STAR BOLTS ARE USED.
13. TEES ARE TO BE RODDED ON BRANCH ONLY.
14. ALL VALVES TO BE RODDED IN BOTH DIRECTIONS.



STONEGATE VILLAGE METROPOLITAN DISTRICT
LENGTH OF TIED PIPE

SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 18



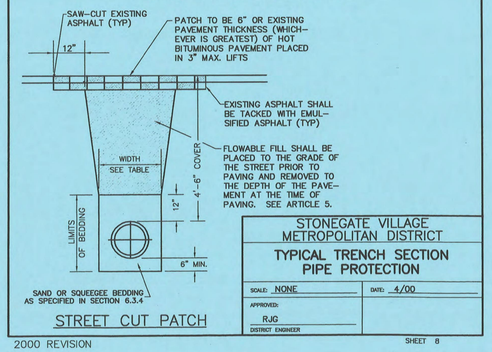
TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES.

NOTE: MINIMUM COVER TO BE BELOW OFFICIAL STREET GRADE.

C.I., D.I. AND PVC PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.

PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"
24"	3'-0"	4'-0"

STANDARD TRENCH SECTION

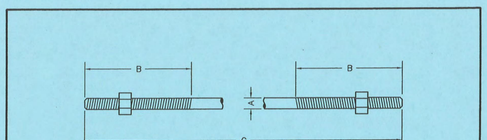


STREET CUT PATCH

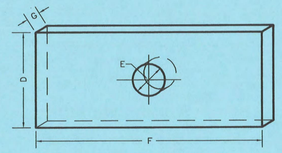
STONEGATE VILLAGE METROPOLITAN DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION

SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 8



TIE ROD DETAIL



WASHER DETAIL

TIE RODS		
A	B	C
ROD DIAMETER	THREAD LENGTH	ROD LENGTH
3/4"	6"	1' TO 11' & 20'
1"	6"	1' TO 11' & 20'
1-1/4"	ALL THREAD	1' TO 11' & 20'

WASHERS			
D	E	F	G
WIDTH	HOLE DIAMETER	LENGTH	THICKNESS
3"	7/8"	6"	3/8"
3"	1-1/8"	7"	1/2"
4"	1-3/8"	7"	5/8"

NOTES:

1. SEE TIED JOINTS ROD DIMENSIONS SHEET.
2. SEE CLAMP DETAILS AND DIMENSIONS (SHEET 23) FOR PROPER PLACEMENT OF WASHERS.

STONEGATE VILLAGE METROPOLITAN DISTRICT
TIE ROD AND WASHER DETAILS

SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

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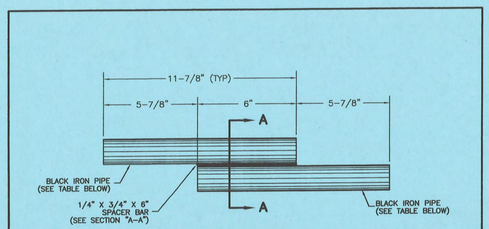
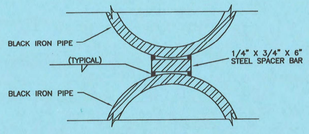


TIE ROD COUPLING DETAIL



SECTION "A-A"

NOTE:
BLACK IRON PIPE = SCHEDULE 40.

ROD SIZE	PIPE DIAMETER
3/4"	1"
1"	1-1/4"
1-1/4"	1-1/2"

STONEGATE VILLAGE METROPOLITAN DISTRICT
TIE ROD COUPLING

SCALE: NONE | DATE: 4/00
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REV	REVISION DESCRIPTION	DATE	CHKD	APPR

COMPARK SOUTH
WATER AND SANITARY PLANS

TITLE: WATER DETAILS

PE/STAMP

ISSUED FOR REVIEW

FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER: 65120950
DATE: 7/30/2021
SHEET: C7.7
07

File Location:Q:\DEN\Projects\0950-00 Compark South\CAD\CDs\SF-WATER\0950-WATER DETAILS-SF-W.dwg Plot Date:2/28/2022 4:39 PM Last Saved By: TVANGORDON

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PIPE BEDDING:

(a) Installation of Bedding and Pipe: After completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bell holes shall be dug deep enough to provide a minimum of two inches (2") of clearance between the bell and bedding material. All pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is adjusted for line and grade, and the joint is made, the bedding material shall be carefully placed and tamped under the haunches of the pipe and in the previously dug bell holes.

Tamping is herein defined as the act of placing approved bedding material under the haunches of the pipe, paying particular attention to voids, bell holes, and sling holes. The purpose of tamping is to ensure uniform support for the pipe.

The limits of bedding shall be from six inches (6") below the bottom of the pipe to twelve inches (12") above the top of the pipe. Approved backfill may then be installed to the groundline. See Section 6 of these Standards for backfill and compaction of backfill.

Compaction of bedding is not required. The only requirement is sufficient tamping to achieve uniform support under the pipe. See Sheet 8 of the Standard Drawings for a typical trench cross section.

(b) Bedding Material: The bedding material shall be a clean well-graded sand or squeegee sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	95–100
No. 8	80–100
No. 16	50–85
No. 30	25–60
No. 50	10–30
No. 100	2–10
No. 200	0

Squeegee Sand

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 100	0–5

If approved by the District, fines form the trench walls and spoils pile may be used to provide uniform support for the pipe. No rock or stone larger than that allowed by the sieve analysis, or any other detrimental substance, shall be placed closer to the pipe than six inches (6"). Approved bedding materials shall be stockpiled on the jobsite to be used in the event natural materials become unsatisfactory. The District reserves the right to require the use of the specified bedding material at any time.

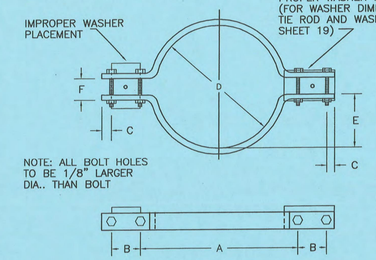
STONEGATE VILLAGE METROPOLITAN DISTRICT

PIPE BEDDING

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 22



CLAMP DETAILS

DIMENSIONS

TABLE OF DIMENSIONS FOR CLAMPS

PIPE DIA.	BAR SIZE	A		C		D		F		BOLT SIZES		PIPE DIA.
		BELL CLAMP	BODY CLAMP	BELL CLAMP	BODY CLAMP	BELL CLAMP	BODY CLAMP	BELL CLAMP	BODY CLAMP	BELL CLAMP	BODY CLAMP	
4	1–1/2X1/2	3–3/4	7–1/2	3–1/2	3–1/2	1	1	8–3/4	4–7/8	2–3/4	1–13/16	1–1/4	1–1/4	3X1/2	2–1/2X3/8	4
6	2X1/2	13	8–1/2	4	4–1/2	2	2	9–1/4	7–1/8	4–1/8	2–15/16	2	1–1/4	3–1/2X1/2	3–1/2X1/2	6
8	2–1/2X1/2	15	12–3/4	4–3/4	4–1/2	1–1/4	1–1/2	12–1/4	9–1/4	5–1/8	4	2	1–1/4	4–1/2X1/2	4X1/2	8
12	2–1/2X5/8	17–1/2	18–5/8	4–5/8	4–3/4	1	1–1/4	14–1/2	13–1/2	6	5–1/2	2–1/2	2–1/2	4–1/2X5/8	4–1/2X5/8	12
16	3X3/4	24–1/2	21–7/8	4–1/2	4–3/4	1–1/2	1–1/2	19–3/4	17–1/2	8–3/8	7–1/2	3	2–1/4	5–1/2X5/8	5–1/2X5/8	16
20	3X3/4	30–1/2	25–5/8	4–1/2	4–3/4	1–1/2	1–1/2	24–3/4	21–3/4	10–7/8	9–1/2	3	2–3/4	5–1/2X5/8	5–1/2X5/8	20
24	RODS AND CLAMPS NOT ALLOWED															24

NOTE: ALL DIMENSIONS IN INCHES

CLAMPS MAY NOT BE USED ON PVC PIPE.

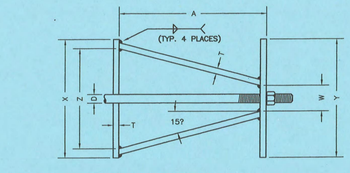
STONEGATE VILLAGE METROPOLITAN DISTRICT

CLAMP DETAILS AND DIMENSIONS

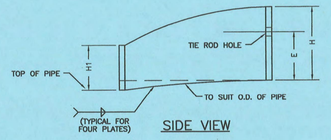
SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 23



TOP VIEW



SIDE VIEW

HARNESS LUG DIMENSIONS

CARRIER PIPE NOMINAL DIA.	STUD DIA. D	A	W	Z	T	H	E	H1	Y	X
4" TO 16"	3/4"	5"	1–1/2"	3–3/4"	3/8"	4–1/8"	3–1/8"	2"	4–1/2"	5"
20"	1"	5–3/4"	1–3/4"	4–7/16"	3/8"	4–1/2"	3–1/4"	2"	5–1/4"	5–11/16"

NOTES:

1. USE TWO HIGH STRENGTH STEEL TIE RODS AT END OF CASING.
2. TIE ROD HOLE DIAMETER 1/8" LARGER THAN STUD DIAMETER.
3. BOTTOM EDGE OF ALL PLATES SHAPED TO FIT O.D. OF PIPE.

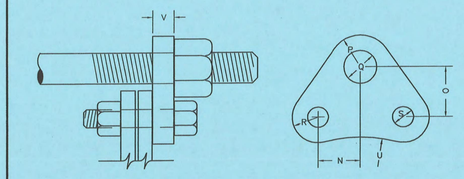
STONEGATE VILLAGE METROPOLITAN DISTRICT

HARNESS LUG DETAILS

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 24



FLANGE LUG DETAIL

DIMENSIONS (IN INCHES)

PIPE DIA.	N	O	H.S. ROD P	H.S. ROD Q	H.S. ROD ROD DIA.	M.S. ROD P	M.S. ROD Q	M.S. ROD ROD DIA.	R	S	U	V	PIPE DIA.
4	1–7/16	2	1	7/8	3/4	1	7/8	3/4	7/8	3/4	2–7/8	3/4	4
6	1–13/16	2–1/4	1	7/8	3/4	1	7/8	3/4	7/8	7/8	3–3/4	3/4	6
8	2–1/4	2–3/4	1	7/8	3/4	1	7/8	3/4	1	7/8	4–7/8	3/4	8
12	2–1/16	2–3/4	1–1/8	7/8	3/4	1–1/4	1–1/8	7/8	1–1/8	1	7–1/4	7/8	12
16	2–7/16	2–3/4	1–1/8	7/8	3/4	1–1/4	1–1/8	7/8	1–1/4	1–1/8	9–3/8	1–1/8	16
20	1–31/32	2–3/4	1–1/8	1–1/8	7/8	1–1/4	1–1/8	7/8	1–1/4	1–1/8	11–1/16	1–1/4	20
24	RODS AND CLAMPS NOT ALLOWED												24

NOTES:

1. M.S. MEANS MILD STEEL ROD A.S.T.M. STANDARD DESIGNATION A–36. (NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A–307 GRADE A OR B HEXAGON HEAVY SERIES).
2. H.S. MEANS HIGH STRENGTH STEEL ROD A.S.T.M. STANDARD DESIGNATION A–193 GRADE B7. (NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A–194 GRADE 2H).
3. FLANGE LUGS SHALL NOT BE USED ON VALVES.

STONEGATE VILLAGE METROPOLITAN DISTRICT

FLANGE LUG DETAIL

SCALE: NONE | DATE: 4/00

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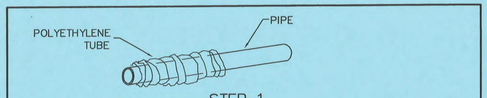

FIELD INSTALLATION – POLYETHYLENE WRAP

STEP 1 – PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO TRENCH.

STEP 2 – PULL THE TUBE OVER THE LENGTH OF THE PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE.

STEP 3 – OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF PIPE AND TAPED IN PLACE.

STONEGATE VILLAGE METROPOLITAN DISTRICT

POLYETHYLENE WRAP

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

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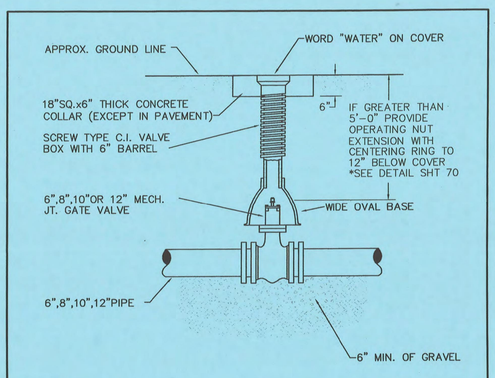

6–INCH VALVE BOXES

Materials:

Valve box parts shall be made from gray cast iron, ASTM A48 Class 20A.

Use of an aluminum alloy as a casting material is not acceptable.

Approved Patterns:

Valve boxes shall be the three–piece adjustable screw type and the following two patterns are acceptable.

1. Tyler screw–type 6–inch cast iron valve box assembly series 6860 with No. 160 oval base.
2. Clay and Bailey screw–type 6–inch cast iron valve box assembly No. P–108 with No. 160 large oval base.

NOTES:

1. VALVE BOXES SHALL BE:
   A. TYLER SCREW–TYPE 6"C.I.ASSY. SERIES 6860 W/NO.160 LARGE OVAL BASE OR
   B. CLAY & BAILEY SCREW–TYPE 6" C.I. ASSY. NO.P–108 W/NO.160 LARGE OVAL BASE.
2. ALL C.I. SHALL BE WRAPPED WITH 8 MIL. MIN. THICKNESS POLYETHYLENE.
3. VALVE NUT SHALL BE CENTERED.
4. VALVE BOX SHALL BE PLUMB.

STONEGATE VILLAGE METROPOLITAN DISTRICT

VALVE BOX DETAIL

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 34

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COMPARK SOUTH

WATER AND SANITARY PLANS

TITLE: WATER DETAILS

PE STAMP

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FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER: 65120950

DATE: 7/30/2021

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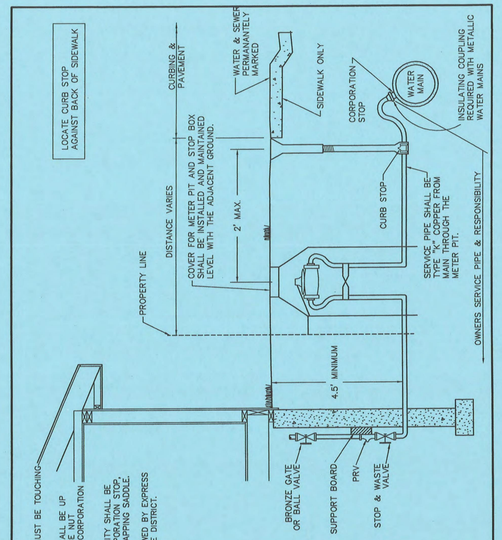
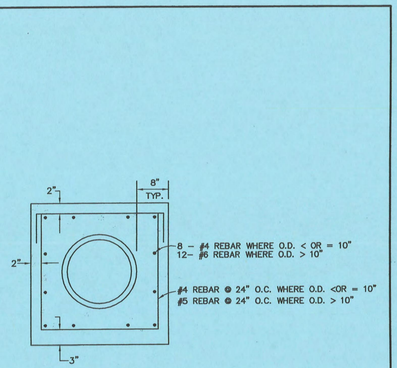


NOTES
1 – PLACEMENT OF STOP BOX MUST BE TOUCHING BACK OF SIDEWALK.
2 – OWNER'S RESPONSIBILITY SHALL BE UP TO AND INCLUDING THE TUBE NUT WHICH THREADS ONTO THE CORPORATION STOP.
3 – THE DISTRICT'S RESPONSIBILITY SHALL BE THE WATER MAIN, THE CORPORATION STOP, AND WHERE NEEDED, THE TAPPING SADDLE.
4 – OUTSIDE METER ONLY ALLOWED BY EXPRESS WRITTEN PERMISSION OF THE DISTRICT.

STONEGATE VILLAGE METROPOLITAN DISTRICT
SERVICE LINE, STOP BOX AND OUTSIDE METER INSTALLATION
SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION
SHEET 44

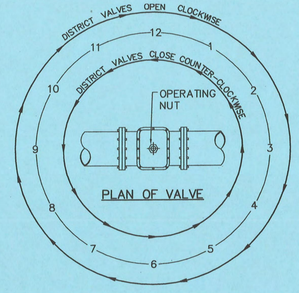


TYPICAL SECTION
NTS

NOTES:
1. ALL CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI USING TYPE I PORTLAND CEMENT AND 3/4" AGGREGATE. ALL CONCRETE SHALL HAVE 5-7% ENTRAINED AIR CONTENT AND A MAXIMUM SLUMP OF 4".
2. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615,GRADE 60.
3. ALL REINFORCEMENT SHALL HAVE 2" MIN. CONCRETE COVER.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY PRIOR TO FORMING THE STRUCTURE.

STONEGATE VILLAGE METROPOLITAN DISTRICT
WATERLINE ENCASEMENT
SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION
SHEET 48



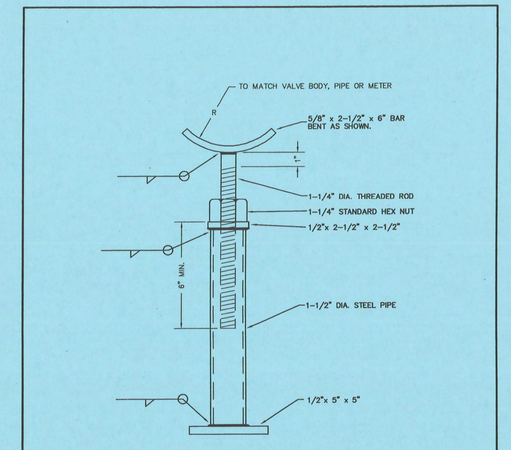
PLAN OF VALVE

NOTE:
NORMALLY VALVES WITH A RED OPERATING NUT INDICATE A STANDARD DENVER VALVE.

VALVE OPENING & CLOSING PROCEDURE

STONEGATE VILLAGE METROPOLITAN DISTRICT
VALVE OPERATION
SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION
SHEET 61



ADJUSTABLE STEEL PIPE VALVE SUPPORT

STONEGATE VILLAGE METROPOLITAN DISTRICT
ADJUSTABLE STEEL PIPE VALVE SUPPORT
SCALE: NONE | DATE: 4/00
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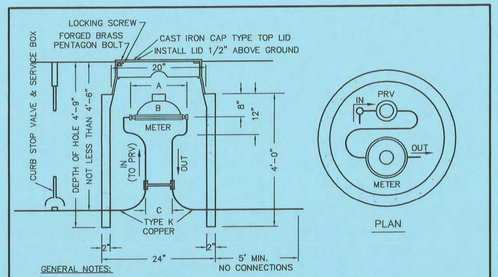
2000 REVISION
SHEET 35



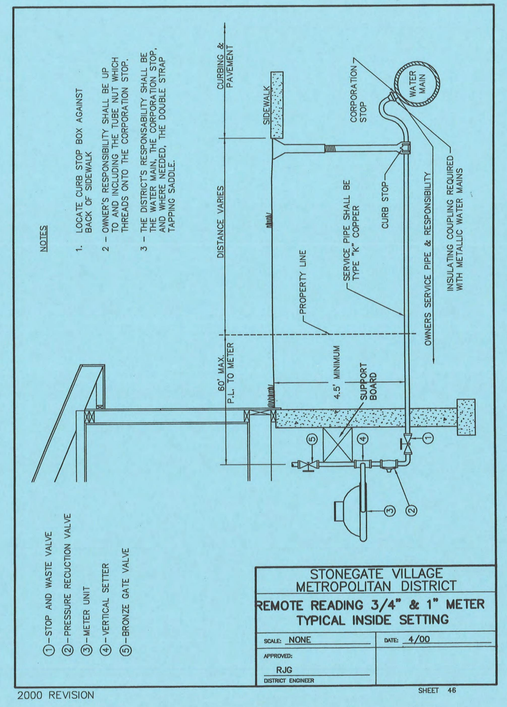
PLAN

GENERAL NOTES:
1. NOT FOR INSTALLATION IN ROADWAYS, OR PARKING AREAS.
2. IF SURFACE IS NOT TO FINAL GRADE AT TIME OF INSTALLATION OF METER, OWNER MUST RAISE OR LOWER PIT WHEN SURFACE IS GRADED.
3. METER SETTING MUST BE INSPECTED BY THE DISTRICT BEFORE BACKFILLING.
4. LOCATION OF METER TO BE ESTABLISHED BY A DISTRICT REPRESENTATIVE.
5. NO CONCRETE FLOOR TO BE LAID IN METER PIT.
6. METER PIT SHALL BE CONSTRUCTED OF FOUR 12", OR ONE 12" AND ONE 36" RINGS. WALLS SHALL BE 2" THICK.
7. ADJUSTMENT RINGS SHALL BE 2", 3" 4" OR 6" IN HEIGHT AND SHALL BE INSERTED BETWEEN THE TOP TWO RINGS.
8. NO CONNECTIONS OR CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR IN THE DISTANCE OF FIVE FEET BEYOND THE METER PIT WALL ON THE OUTLET SIDE.
9. LAWN SPRINKLER CONNECTION SHALL BE A MINIMUM OF FIVE FEET FROM THE METER PIT WALL ON THE OUTLET SIDE.
10. THIS DETAIL TO BE USED ONLY WITH EXPRESS PERMISSION OF THE DISTRICT.
11. THE FORD TANDEM COPPERSETTER TO HOLD A WATTS U5B PRESSURE REGULATOR (PRV) JUST AHEAD OF THE WATER METER.
12. (JUMPER OR CHEATER) PIPES TO BE REMOVED BEFORE METER SET DATE.

METER SIZE	A	B	C
5/8" X 3/4"	12 5/8"	7 1/2"	4"
3/4"	14 1/4"	9 5/16"	5"
1"	17 1/4"	11 1/16"	6"

STONEGATE VILLAGE METROPOLITAN DISTRICT
ALL OUTSIDE SETTING FOR 5/8" x 3/4", 3/4" & 1" METERS w/ PRV
SCALE: NONE | DATE: 4/00
APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION
SHEET 45



STONEGATE VILLAGE METROPOLITAN DISTRICT
REMOTE READING 3/4" & 1" METER TYPICAL INSIDE SETTING
SCALE: NONE | DATE: 4/00
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REV	REVISION DESCRIPTION	DATE	CHKD	CHKD/APPR

PROJECT
COMPARK SOUTH
WATER AND SANITARY PLANS

TITLE
WATER DETAILS

PE/STAMP

ISSUED FOR REVIEW

FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER 65120950
DATE 7/30/2021
SHEET C7.9
09

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File Location:Q:\DEN\Projects\0950-00 Compark South\CAD\CDs\SF-WATER\0950-WATER DETAILS-SF-W.dwg Plot Date:2/28/2022 4:39 PM Last Saved By: TVANGORDON

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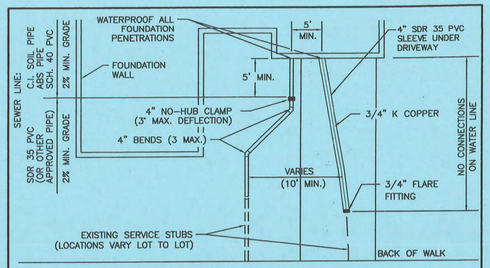
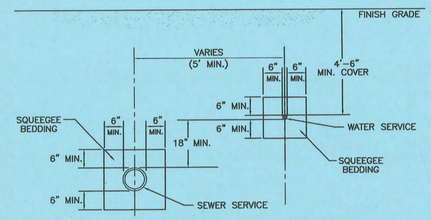


TYPICAL SERVICES PLAN VIEW

NTS



TYPICAL SERVICES SECTION

NTS

NOTE

SEE SHEET 67 OF 68 FOR DISTRICT POLICIES AND INSTALLATION NOTES.

STONEGATE VILLAGE METROPOLITAN DISTRICT

TYPICAL WATER SERVICES

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 66

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE (303) 293-8107 AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 8:00 A.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

INSTALLATION NOTES:

WATER

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. A COUPLING MAY BE EITHER FLARED OR SILVER-SOLDERED. COMPRESSION COUPLINGS WILL NOT BE ALLOWED. MOVED CURB BOXES MUST BE INSPECTED BY PWSD PRIOR TO BURIAL.
4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 90°± ANGLE MAXIMUM, 45° ANGLE MINIMUM. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD.
6. STOPBOX MUST BE PLUMB AND CENTERED OVER NUT, AND MUST BE SET AT OR, SLIGHTLY ABOVE FINISHED GRADE.
7. STOPBOXES MUST BE SET AT BACK OF SIDEWALK ONLY (TOUCHING) NOT AT CURBS.
8. NO CRAWLSPACE MOUNTED METERS ALLOWED.
9. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
10. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
11. METER SHOULD BE LOCATED ON SAME SIDE OF HOUSE AS CURBSTOP IF POSSIBLE.
12. WATERLINES PASSING UNDER DRIVEWAYS NEED TO BE SLEEVED IN 4" P.V.C. AND HAVE EXPRESS PERMISSION OF THE DISTRICT.
13. YOKES SHOULD BE MOUNTED NO GREATER THAN 6 INCHES ABOVE BOTTOM SHUTTOFF. EACH SERVICE MUST INCLUDE A STOP AND WASTE VALVE AND A PRESSURE REDUCING VALVE LOCATED WITHIN THE ABOVE REFERENCED 6 INCH SPACE.
14. NO SPLICES OR FLARED COUPLINGS ALLOWED ON WATERLINES. SILVER SOLDIER JOINTS MUST BE USED IN MOVING STOPBOXES, AND SILVER SOLDIER JOINT MUST BE INSPECTED BY SGVMD PRIOR TO BURIAL.
15. ONLY 3/4" (JUMPER OR CHEATER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER OR CHEATER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
16. ALL SERVICES WILL BE PERMANANTELY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SEWER SERVICE "V" FOR WATER SERVICES

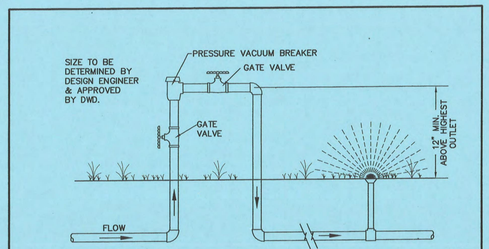
STONEGATE VILLAGE METROPOLITAN DISTRICT

DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES

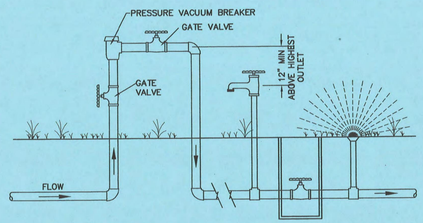
SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

2000 REVISION — SHEET 67



PRESSURE VACCUM BREAKER



PRESSURE VACCUM BREAKER ON IRRIGATION SYSTEM

STONEGATE VILLAGE METROPOLITAN DISTRICT

PRESSURE VACCUM BREAKER

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

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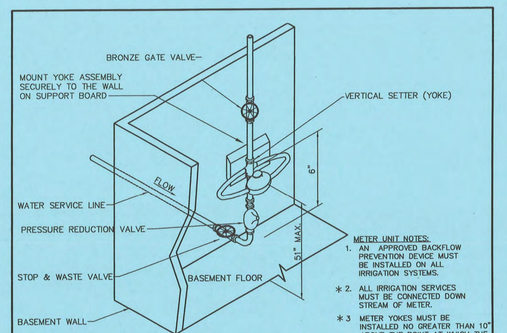
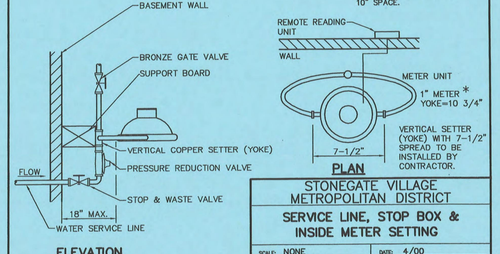


METER UNIT NOTES:

1. AN APPROVED BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON ALL IRRIGATION SYSTEMS.
* 2. ALL IRRIGATION SERVICES MUST BE CONNECTED DOWN STREAM OF METER.
* 3 METER YOKES MUST BE INSTALLED NO GREATER THAN 10" ABOVE THE POINT AT WHICH THE WATER SERVICE ENTERS A RESIDENCE. EACH SERVICE MUST INCLUDE A STOP AND WASTE VALVE AND A PRESSURE REDUCING VALVE LOCATED WITHIN THE ABOVE REFERENCED 10" SPACE.

ISOMETRIC VIEW



PLAN

ELEVATION

STONEGATE VILLAGE METROPOLITAN DISTRICT

SERVICE LINE, STOP BOX & INSIDE METER SETTING

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

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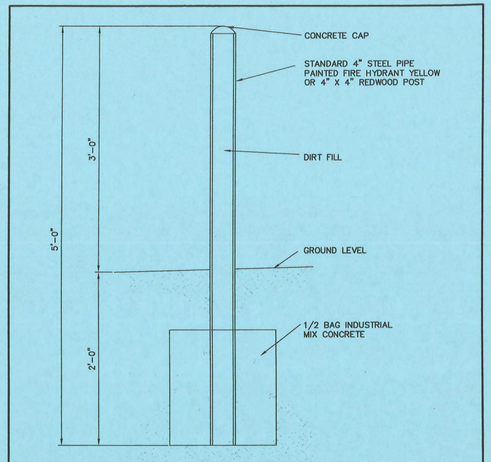

MARKER POST DETAIL

STEEL PIPE
STENCILED IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPURTENANCE. WITH 1" STENCILS INDICATING TYPE OF APPURTENANCE (MH, 12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST.

REDWOOD POST
ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.

STONEGATE VILLAGE METROPOLITAN DISTRICT

MARKER POST

SCALE: NONE | DATE: 4/00

APPROVED: RJG, DISTRICT ENGINEER

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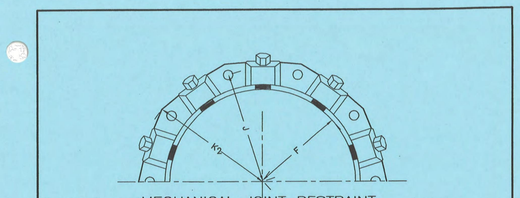
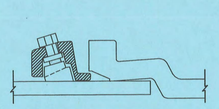
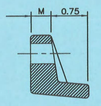


MECHANICAL JOINT RESTRAINT



WEDGE DETAIL



BOLT HOLE DETAIL

	NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES	
P V C	4"	2	2					P V C
	6"	6	3	11.12	9.5	7.00	0.88	
	8"	6	4	13.37	11.75	9.15	1.00	
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	
D I	4"	4	2					D I
	6"	6	3	11.12	9.5	7.00	0.88	
	8"	6	4	13.37	11.75	9.15	1.00	
	10"	8	6	15.62	14.00	11.20	1.00	
	12"	8	8	17.88	16.25	13.30	1.25	

NOTES:

1. REFER TO SHEET W-19 SECTION 6.10.
2. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.

STONEGATE VILLAGE METROPOLITAN DISTRICT

MECHANICAL JOINT RESTRAINT DETAILS

SCALE: NONE | DATE: 4/00

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TITLE: COMPARK SOUTH
WATER AND SANITARY PLANS
WATER DETAILS

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FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER: 65120950
DATE: 7/30/2021
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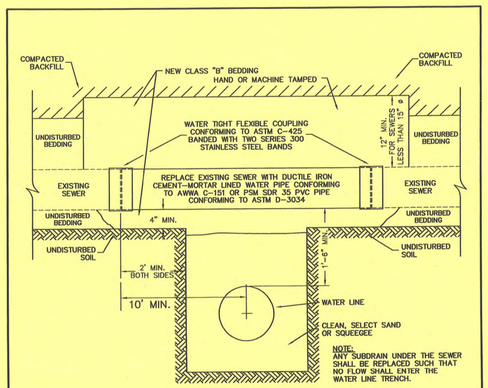
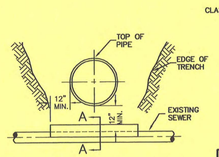
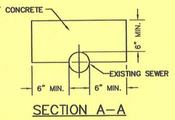




SEWER CROSSING UNDER
(WITH "D" LESS THAN 2')



SECTION A-A

STONEGATE VILLAGE METROPOLITAN DISTRICT
CROSSING STORM & SANITARY SEWERS
SCALE: NONE
DATE: 4/00
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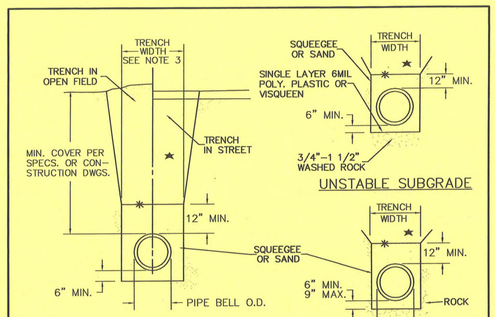
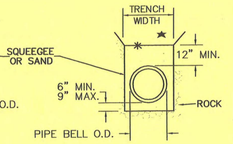


STANDARD PIPE BEDDING

UNSTABLE SUBGRADE



PIPE BEDDING IN ROCK

★ MACHINE COMPACTED TRENCH BACKFILL

✱ LIMIT OF SLOPING OR BENCHING OF TRENCH WALLS

UNDISTURBED GROUND

NOTES:
1. MIN. COVER TO BE BELOW FINAL STREET GRADE WHEN AVAILABLE.
2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE PROTECTION OF OTHER UTILITIES AND TO MEET OSHA SAFETY REQUIREMENT.
3. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE LAID THEREIN (BELL OR COUPLING O.D. IF APPLICABLE).

STONEGATE VILLAGE METROPOLITAN DISTRICT
BEDDING DETAILS
SCALE: NONE
DATE: 4/00
APPROVED: RJG
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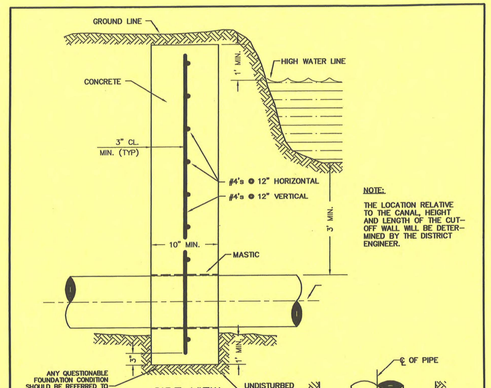
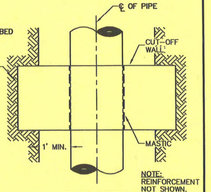
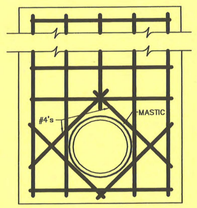


SIDE VIEW



TOP VIEW



FRONT VIEW

STONEGATE VILLAGE METROPOLITAN DISTRICT
TYPICAL CUTOFF WALL
SCALE: NONE
DATE: 4/00
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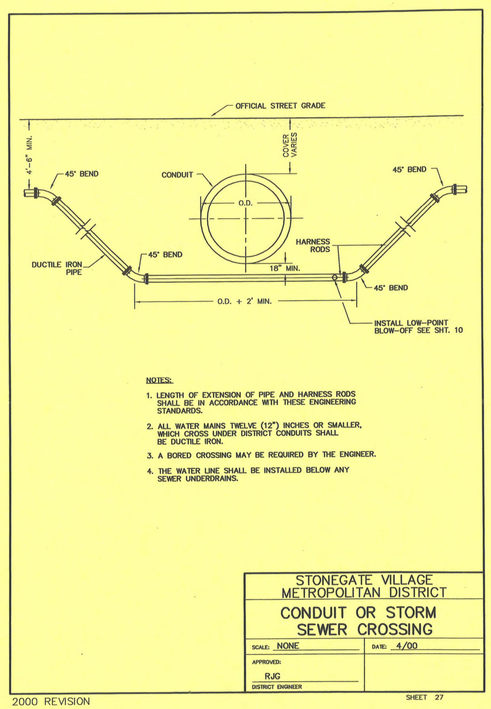
SHEET 30



NOTES:
1. LENGTH OF EXTENSION OF PIPE AND HARNESS RODS SHALL BE IN ACCORDANCE WITH THESE ENGINEERING STANDARDS.
2. ALL WATER MAINS TWELVE (12") INCHES OR SMALLER, WHICH CROSS UNDER DISTRICT CONDUITS SHALL BE DUCTILE IRON.
3. A BORED CROSSING MAY BE REQUIRED BY THE ENGINEER.
4. THE WATER LINE SHALL BE INSTALLED BELOW ANY SEWER UNDERDRAINS.

STONEGATE VILLAGE METROPOLITAN DISTRICT
CONDUIT OR STORM SEWER CROSSING
SCALE: NONE
DATE: 4/00
APPROVED: RJG
DISTRICT ENGINEER

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COMPARK SOUTH
WATER AND SANITARY PLANS

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SHEET C7.11
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