

RAINBOW RIDGE WATER MAIN EXTENSION

DDI PROJECT NO. 08-0505.1

RECEIVED

MAR 08 2010

Rapid City Growth
Management Department

PRELIMINARY
FOR REVIEW ONLY

CITY OF RAPID CITY
GROWTH MANAGEMENT DEPT
DEVELOPMENT SERVICES

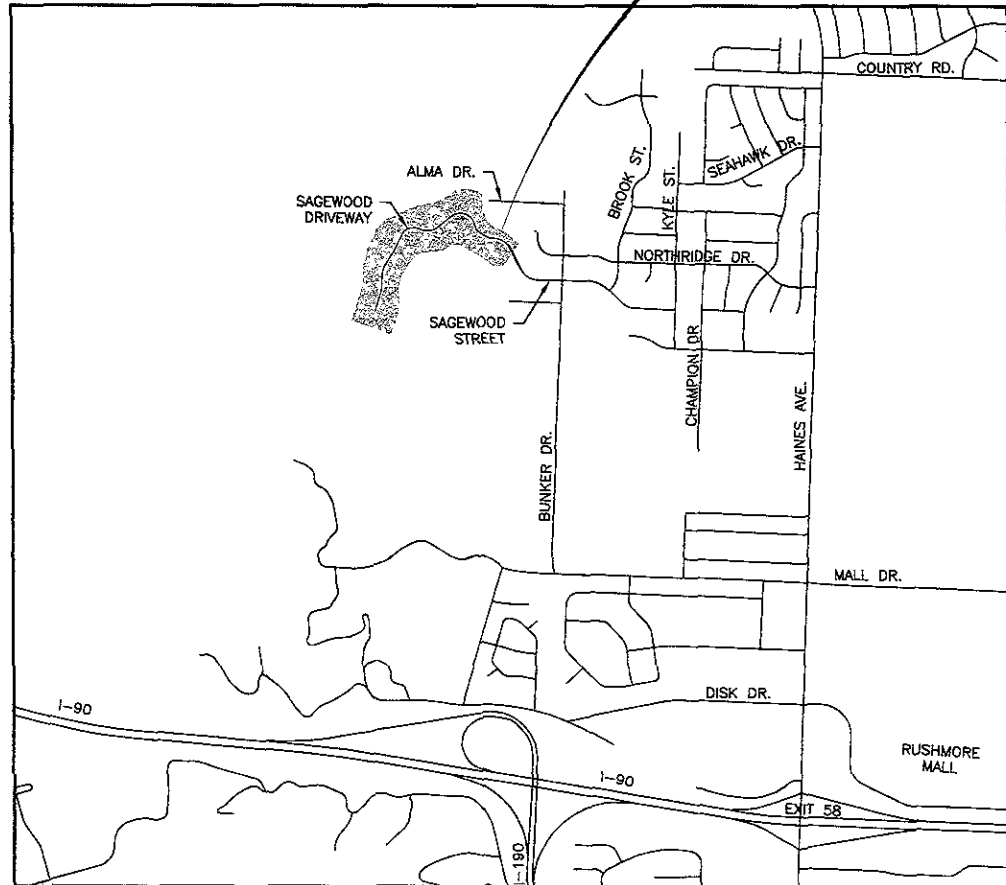
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Engineering Reviewer _____ Date _____
COMMENTS _____

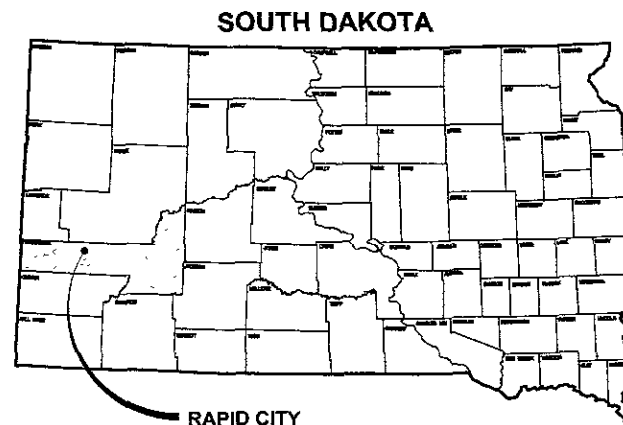
PROJECT
LOCATION

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PROJECT LOCATION MAP NOT TO SCALE



**DREAM DESIGN
INTERNATIONAL, INC.**
ENGINEERING, LANDSCAPE ARCHITECTURE,
LAND PLANNING, CONSTRUCTION ADMINISTRATION
528 KANSAS CITY STREET, SUITE 4, RAPID CITY, SD 57701
PHONE: (605) 348-0538 FAX: (605) 348-0545 WWW.DREAMDESIGNINC.COM

**RAINBOW RIDGE
WATER MAIN EXTENSION**
D.D.I. JOB NUMBER: 08-0505.1



ONE CALL
BEFORE DIGGING
1-800-781-7474

500-49050505 DRAININGSHEETS WATER MAIN EXTENSION DDI COVER.dwg TITLE SHEET 3/2/2010 10:08:05 AM

EROSION CONTROL

ALL AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEEDED, AND MULCHED FOR PERMANENT OR TEMPORARY EROSION CONTROL FOLLOWING COMPLETION OF GRADING. TOPSOIL PLACEMENT, FERTILIZING, SEEDING, AND MULCHING SHALL BE IN ACCORDANCE WITH CITY STANDARDS FOR PUBLIC WORKS CONSTRUCTION. SEED MIX FOR ALL AREAS SHALL BE RAPID CITY ROAD DITCH MIX DESIGN IN ACCORDANCE WITH CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. (THE CURRENT ADOPTED EDITION)

TEMPORARY EROSION CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL CONSIST OF STRAW BALES, SILT FENCE, OR OTHER MEANS TO CONTROL EROSION AS NEEDED (OR AS SHOWN ON THE PLANS). EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS FOR PUBLIC WORKS CONSTRUCTION. (THE CURRENT ADOPTED EDITION)

MAINTENANCE SHALL BE PERFORMED ON ALL EROSION CONTROL PRACTICES AS SPECIFIED IN THE APPROVED STORM WATER POLLUTION PREVENTION PLAN.

CONSTRUCTION LIMITS

IN GENERAL, THE CONSTRUCTION LIMITS FOR THE PROJECT SHALL BE DEFINED AS FOLLOWS:

PROPERTY LINES, ASSESS AND UTILITY EASEMENT LINES, GRADING LIMITS, AND EXISTING UTILITY EASEMENT LINES SHALL BE THE CONSTRUCTION LIMITS UNLESS INDICATED OTHERWISE ON THE DRAWINGS.

THE CONTRACTOR SHALL CONFINE CONSTRUCTION WORK WITHIN THE CONSTRUCTION LIMITS DEFINED.

CONSTRUCTION ACTIVITIES SHALL BE RESTRICTED TO THE CONSTRUCTION LIMITS UNLESS PRIOR APPROVAL IS RECEIVED FROM THE ENGINEER. USE OF CITY, COUNTY, PRIVATE, OR PUBLIC LANDS FOR STAGING AREAS, MATERIAL STORAGE, SEDIMENTATION PONDS, DEWATERING AND/OR TOPSOIL STOCKPILING SHALL ONLY BE WITH PRIOR WRITTEN APPROVAL FROM THE GOVERNING BODY OR LANDOWNER. ANY DAMAGES AND RESTORATION OUTSIDE THE CONSTRUCTION LIMITS SHALL BE AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES:

THE SITE GRADING, EXCAVATION AND PLACEMENT OF FILL SHALL BE IN ACCORDANCE WITH CURRENT REGULATIONS AND PROCEDURES FOR SUBDIVISION CONSTRUCTION IN RAPID CITY, SOUTH DAKOTA.

THE CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

ALL EXISTING UTILITIES MAY NOT BE SHOWN OR THE LOCATIONS MAY VARY FROM THAT SHOWN. THE CONTRACTOR IS RESPONSIBLE TO HAVE ALL UTILITIES LOCATED PRIOR TO BEGINNING WORK

PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL WORK SHALL COMPLY WITH THE CURRENTLY ADOPTED CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

PRIOR TO BEGINNING CONSTRUCTION, THE GRADING CONTRACTOR SHALL OBTAIN AND COMPLY WITH:

- A PENNINGTON COUNTY DUST CONTROL PERMIT
- A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER RUNOFF.

THE CONTRACTOR SHALL CLEAR AND GRUB THE AREA TO BE GRADED. TOPSOIL WITHIN THE GRADING LIMITS SHALL BE STRIPPED AND STOCKPILED AFTER THE SITE GRADING IS COMPLETE, THE CONTRACTOR SHALL SPREAD THE TOPSOIL OVER ALL GRADED AREAS EXCEPT UNDER THE PROPOSED STREETS, PARKING LOTS, AND WALKS.

THE CONTRACTOR SHALL GRADE THE SITE TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR STAKED BY THE SURVEYOR. EXCAVATION SHALL INCLUDE ALL MATERIALS ENCOUNTERED OF WHATEVER NATURE

ALL AREAS, EXCEPT THOSE AREAS TO BE PAVED, DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEEDED, AND MULCHED FOR EROSION CONTROL FOLLOWING COMPLETION OF THE GRADING OPERATIONS. THE TOPSOIL PLACEMENT, FERTILIZING, SEEDING, AND MULCHING SHALL BE DONE IN CONFORMANCE WITH THE CITY OF RAPID CITY, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (THE CURRENT ADOPTED EDITION).

ALL UTILITIES SHALL BE PUBLIC AND MAINTAINED BY THE CITY OF RAPID CITY.

EXISTING UTILITIES

LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND WERE TAKEN FROM THE BEST AVAILABLE RECORDS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT OR TUNNEL UNDER EXISTING UTILITIES IN A MANNER THAT THE EXISTING UTILITIES ARE NOT DAMAGED OR DISTURBED. UNLESS OTHERWISE NOTED, ANY DISTURBANCE OR REPLACEMENT OF EXISTING UTILITIES SHALL BE INCIDENTAL TO THE PROJECT. IF REQUIRED, THE CONTRACTOR SHALL COORDINATE RELOCATION OF THE UTILITY WITH THE UTILITY OWNER. ALL UTILITIES ARE TO BE ADJUSTED AND/OR RELOCATED BY THE RESPECTIVE UTILITY COMPANIES UNLESS OTHERWISE INDICATED IN THESE DRAWINGS.

UTILITY CONSTRUCTION NOTES

ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RAPID CITY UTILITY CONSTRUCTION CODE AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.

PIPE JOINT DEFLECTIONS EXCEEDING THE MANUFACTURER'S ALLOWABLE LIMIT WILL BE ACCOMPLISHED USING HIGH DEFLECTION COUPLINGS AND MUST BE DESIGNED BY THE PROJECT ENGINEER.

FIRE HYDRANT ASSEMBLIES SHALL INCLUDE THE FIRE HYDRANT AND RISER, 6" AUXILIARY GATE VALVE, AND 6" PVC LEAD UNLESS OTHERWISE NOTED.

CONFIRM VERTICAL SEPARATION AT ALL LOCATIONS WHERE WATER MAINS CROSS STORM SEWER MAINS.

RESTRAINING REQUIREMENTS

ALL FITTINGS, VALVES, AND PIPE JOINTS IN THIS PROJECT SHALL BE RESTRAINED.

TABLE OF FIRE HYDRANTS

STREET	STATION	OFFSET	FINISH GRADE	* APPROX LEAD INV.
SAGEWOOD DRIVEWAY	0+52.33	44.40'L	3517.36	3708.31
SAGEWOOD DRIVEWAY	3+39.91	26.11'L	3688.45	3678.70
SAGEWOOD DRIVEWAY	6+72.37	25.77'L	3652.04	3642.46
SAGEWOOD DRIVEWAY	10+84.19	26.16'L	3595.11	3582.83
SAGEWOOD DRIVEWAY	14+68.39	26.36'L	3536.61	3527.15
SAGEWOOD DRIVEWAY	17+75.71	25.89'L	3490.91	3484.47
SAGEWOOD DRIVEWAY	20+88.99	24.98'L	3459.26	3451.20
SAGEWOOD STREET	23+02.85	19.18'R	3434.02	3427.14

* APPROXIMATE LEAD INVERT ELEVATIONS ARE FROM THE BRANCH AT THE TEE ON THE WATER MAIN

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COMMENTS _____

Submittals _____
Revisions: _____

Internal Job No. 08-0505 1
Designed By: TC
Drawn By: PMW
Surveyed By: _____
Survey Date: 05/2008
RENNER & ASSOCIATES

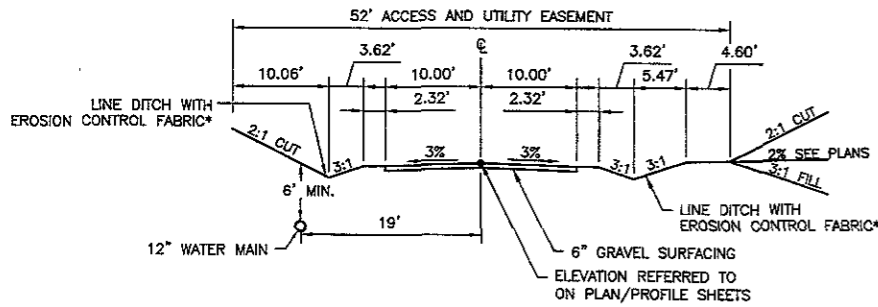
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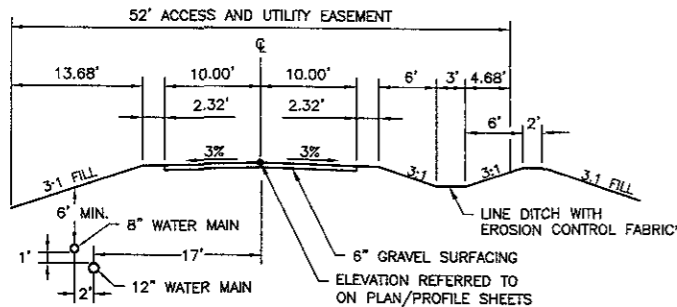
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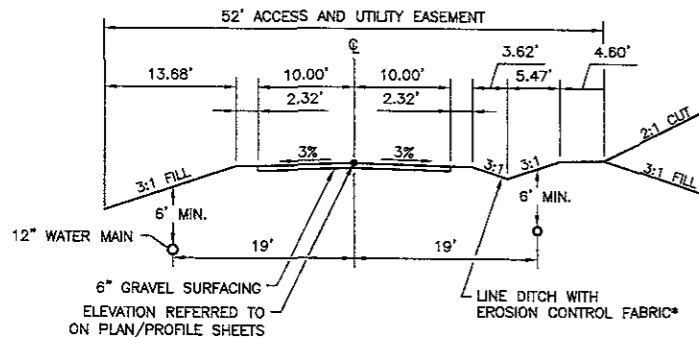
Sheet Name
GENERAL NOTES AND TYPICAL SECTIONS



SAGEWOOD DRIVEWAY
(STA. 1+13 TO STA. 14+00)
TYPICAL STREET SECTION
SCALE: 1"=10'



SAGEWOOD DRIVEWAY
(STA. 14+00 TO STA. 18+80)
TYPICAL STREET SECTION
SCALE: 1"=10'



SAGEWOOD DRIVEWAY
(STA. 18+80 TO STA. 21+80)
TYPICAL STREET SECTION
SCALE: 1"=10'

* EROSION CONTROL FABRIC SHALL BE NORTH AMERICAN GREEN P300 TURF REINFORCEMENT MAT OR APPROVED EQUIVALENT

LEGEND

- CABLE TV OR TELEPHONE RISER
- DECIDUOUS TREE
- YARD HYDRANT
- WATER METER
- FIRE HYDRANT
- GATE VALVE
- BUTTERFLY VALVE
- WATER MANHOLE
- CURB STOP
- TELEPHONE MANHOLE
- SANITARY SEWER MANHOLE
- CLEAN OUT
- CONTROL POINT
- GAS VALVE
- GAS METER
- GAS MANHOLE
- ELECTRICAL MANHOLE
- LIGHT POLE
- POWER POLE
- SANITARY SEWER LINE
- 8" SANITARY SEWER LINE
- STORM SEWER LINE
- WATER LINE
- 12" WATER LINE
- TELEPHONE LINE
- POWER LINE
- GAS LINE
- FIBEROPTIC LINE
- CABLE TV LINE
- CHAINLINK FENCE
- BARBED WIRE FENCE
- WOOD FENCE
- PROPERTY LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- PROPOSED HIGH DEFLECTION COUPLER
- PROPOSED COUPLER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CURBSTOP
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- PROPOSED CAP
- PROPOSED REDUCER OR INCREASER
- PROPOSED TEE
- PROPOSED CROSS
- PROPOSED 11 1/4' BEND
- PROPOSED 22 1/2' BEND
- PROPOSED 45' BEND
- PROPOSED STORM SEWER INLET
- PROPOSED SAFETY END
- PROPOSED FLARED END SECTION
- PROPOSED STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED 12" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SILT FENCE
- PROPOSED EASEMENT

MASTER UTILITY PLAN NOTES:
 THIS SHEET IS ALSO BEING PROVIDED AS A "OVERALL" REFERENCE FOR UTILITIES (STORM & WATER) BEING CONSTRUCTED.

NOTE THAT ALL UTILITIES MENTIONED ABOVE MAY NOT BE REFERENCED ON THIS SHEET.

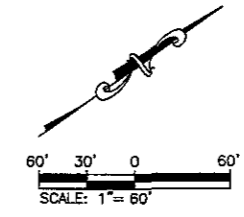
CONTRACTORS ARE TO USE THE PLAN & PROFILE SHEETS PROVIDED FOR CORRECT INSTALLATION NOTES FOR ANY UTILITIES REFERENCED ON THIS SHEET.

INLET FRAMES AND GRATES ARE NEENAH OR AN APPROVED EQUIVALENT
 ALL REINFORCING STEEL IN ALL STORM SEWER INLETS SHALL BE EPOXY COATED

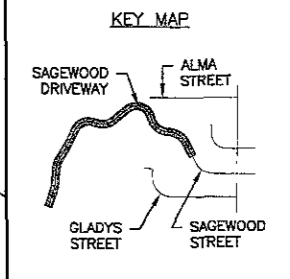
ALL UTILITIES AND DRAINAGE STRUCTURES SHALL BE PUBLIC AND MAINTAINED BY THE CITY OF RAPID CITY.

PIPE DEFLECTION OF RESTRAINED JOINT PIPE SHALL BE AS PER MANUFACTURES RECOMMENDATIONS.

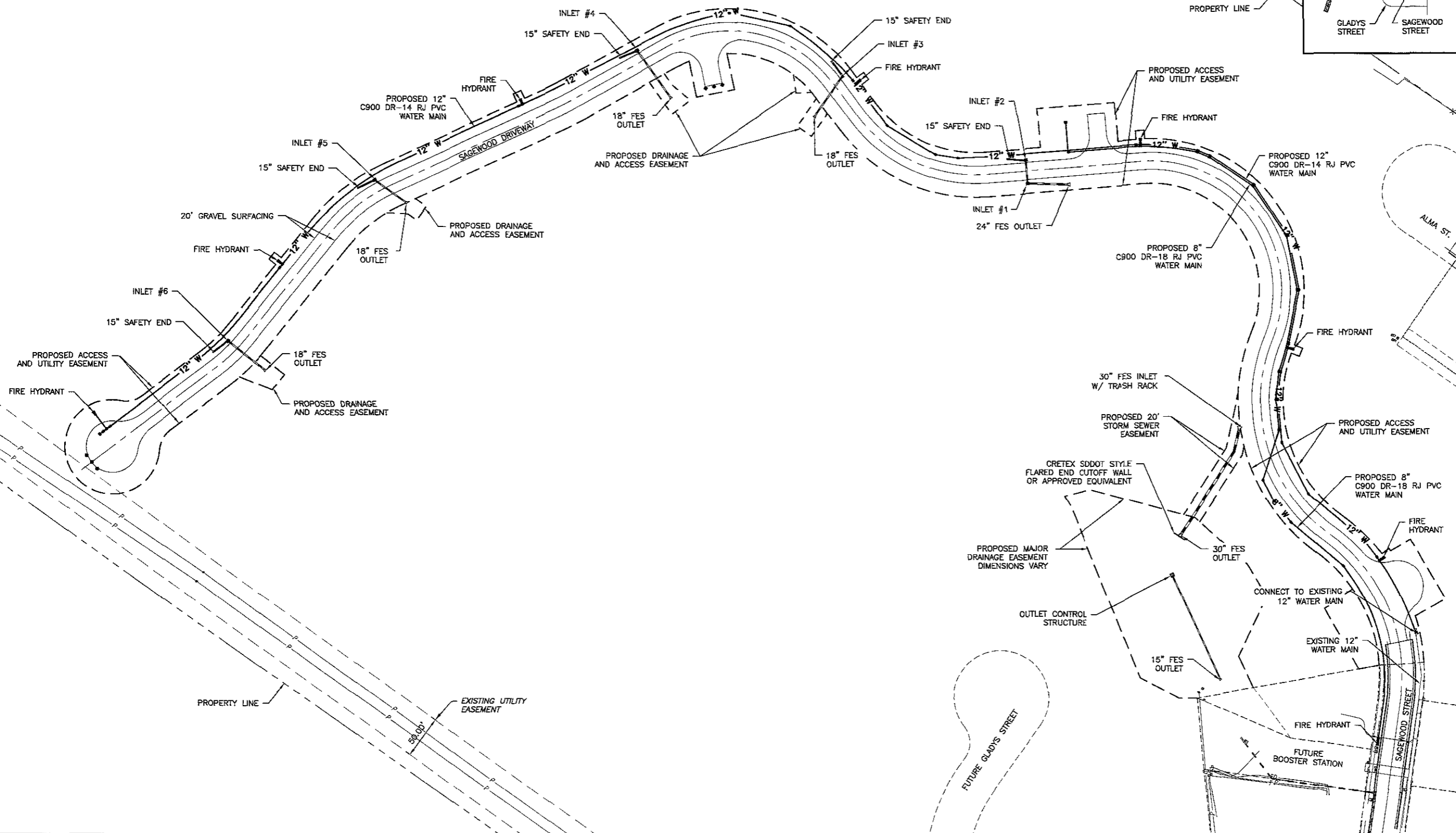
SAFETY END SHALL BE SUPPLIED WITHOUT BARS



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Engineering Reviewer	Date	
COMMENTS		
Submittals		
Revisions		
Internal Job No	Designed By	Drawn By
08-0505 1	TC	PMW
Surveyed By	Survey Date	
RENNER & ASSOCIATES	05/2008	



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Sheet Name	MASTER UTILITY PLAN
Sheet Number	6 of 27

S:\04-14-08\09SR048\09SR048.MXD, MASTER UTILITY, 3/4/2010 2:21:21 PM

NOTE:
ELEVATIONS OF EXISTING UTILITIES SHOWN IN PROFILES HAVE NOT BEEN LOCATED AND THEREFORE SHALL BE CONSIDERED APPROXIMATE.

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3735	Submittals
3730	
3725	Revisions
3720	
3715	
3710	Internal Job No. 08-0505.1 Designed By TC Drawn By PMW Surveyed By RENNER & ASSOCIATES Survey Date 05/2008

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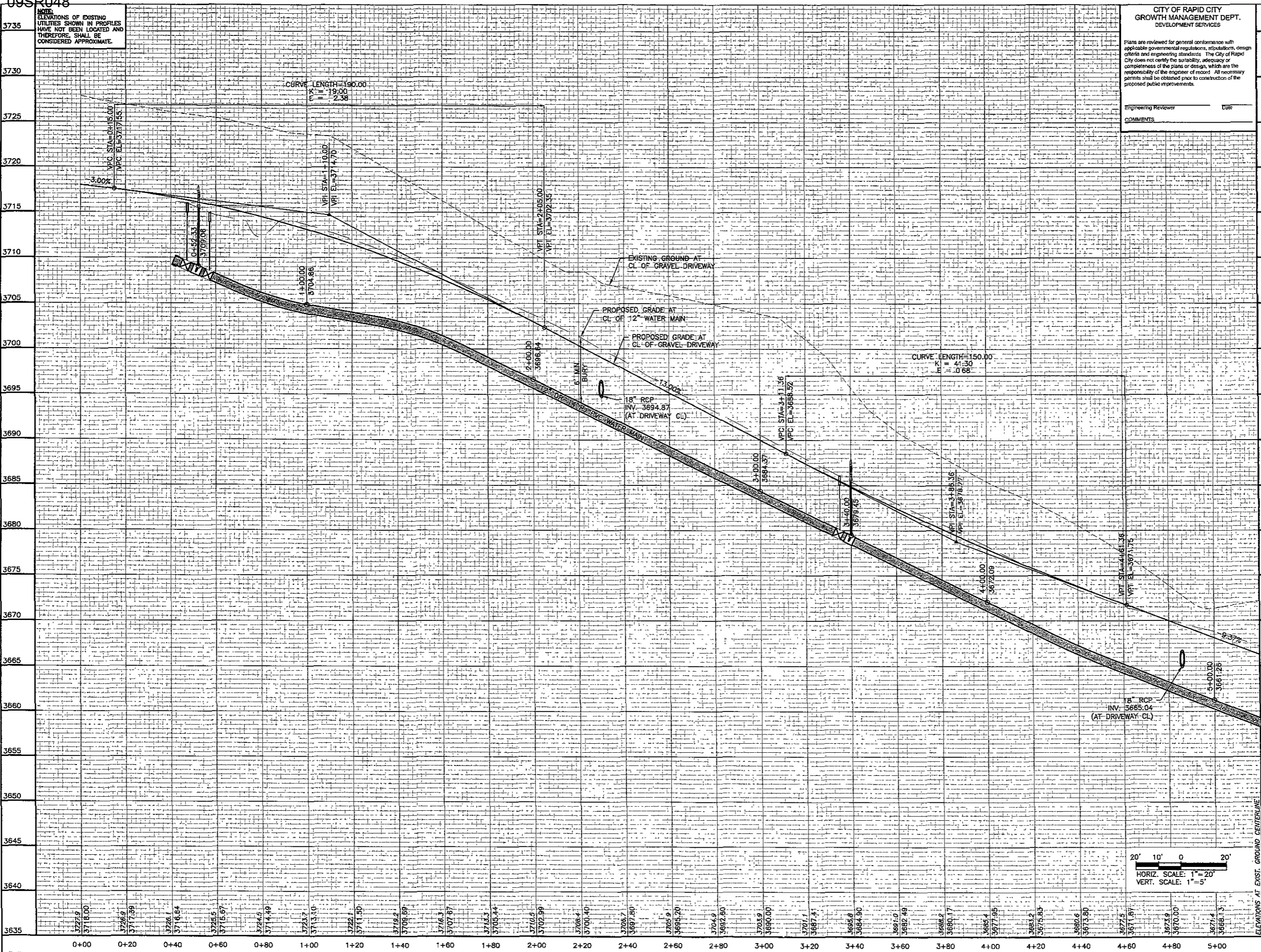
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Sheet Name
**SAGEWOOD DRIVEWAY
PROFILE SHEET
STA 0+00 TO 5+20**

Sheet Number
8 of **27**

1900-5490505000 1: DRAWINGS SHEET WATER MAIN EXTENSION PROFILE C&G.dwg, PROFILE SHEET, 3/6/2010 2:28:34 PM



20' 10' 0' 20'
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

ELEVATIONS AT EXIST. GROUND CENTERLINE
ELEVATIONS AT PROPOSED GRADE CENTERLINE

STORM SEWER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
8+01.18	15.47'L	INSTALL 15" SAFETY END
8+19.99	13.67'L	INLET TYPE B W/PRECAST LID (2'x3')
8+26.96	48.60'R	INSTALL 18" FLARED END SECTION

12" WATER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
6+67.37	20.74'L	12" GATE VALVE
6+72.37	25.77'L	FIRE HYDRANT ASSEMBLY
6+72.37	20.77'L	12"x12"x6" TEE
9+28.85	21.00'L	12"-22.5" HORIZ. BEND
9+92.07	21.00'L	12"-22.5" HORIZ. BEND

PVC RESTRAINED JOINT WATER MAIN SHALL BE INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS

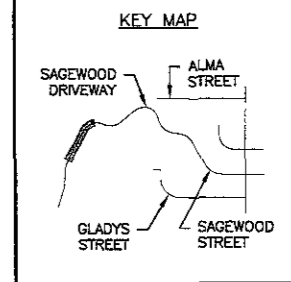
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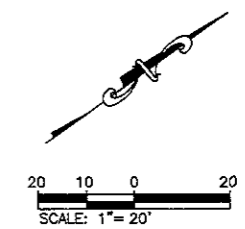
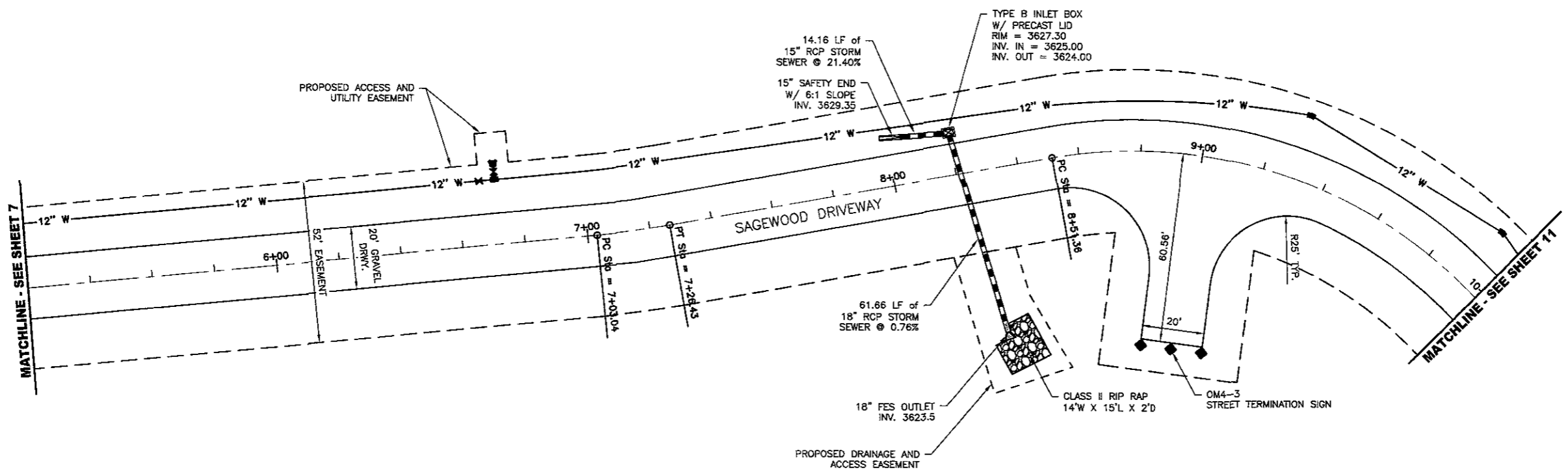
Submittals	
Revisions	
Internal Job No	08-0505.1
Designed By	TC
Drawn By	PMW
Surveyed By	RENNER & ASSOCIATES
Survey Date	05/2008



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RAINBOW RIDGE WATER MAIN EXTENSION



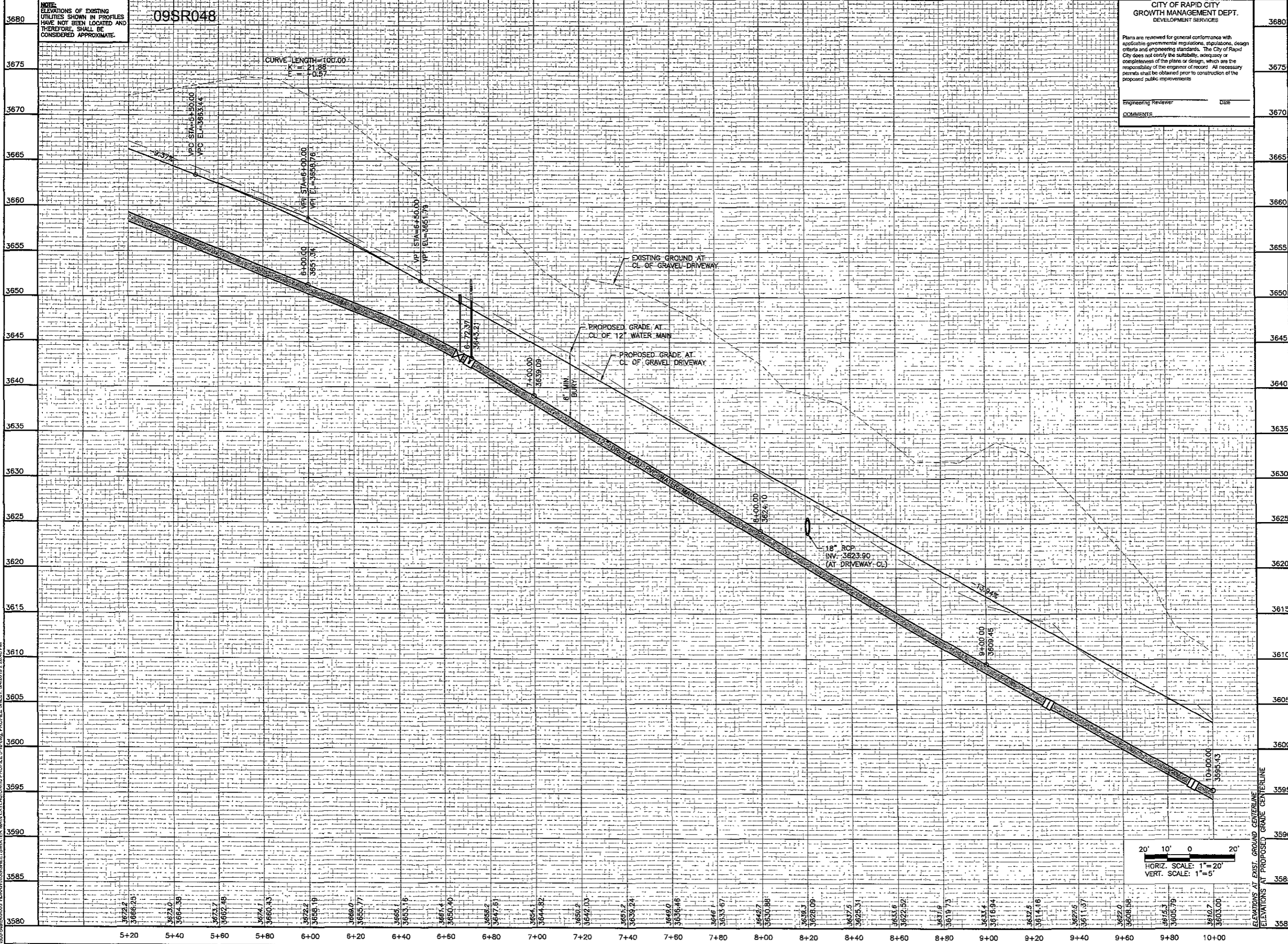
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3680	Submittals
3675	
3670	Revisions
3665	
3660	
3655	Internal Job No. , Designed By , Drawn By 08-0505.1 , TC , PMW
3650	Surveyed By , Survey Date RENNER & ASSOCIATES , 05/2008

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**RAINBOW RIDGE
WATER MAIN EXTENSION**



20' 10' 0 20'
HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'

ELEVATIONS AT EXIST. GROUND CENTERLINE
ELEVATIONS AT PROPOSED GRADE CENTERLINE

STORM SEWER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
10+50.81	15.04'L	INSTALL 15" SAFETY END
10+68.12	13.67'L	INLET TYPE B W/PRECAST LID (2'x3')
10+84.17	35.53'R	INSTALL 18" FLARED END SECTION
13+15.04	15.44'L	INSTALL 15" SAFETY END
13+33.54	12.87'L	INLET TYPE B W/PRECAST LID (2'x3')
13+33.54	14.76'R	INLET TYPE B W/PRECAST LID (2'x3')
13+76.41	19.07'R	INSTALL 24" FLARED END SECTION

8" WATER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
13+83.29	53.00'L	8"-END CAP W/THRUST BLOCK
13+83.29	18.12'L	8"-90° HORIZ. BEND

12" WATER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
10+79.57	20.43'L	12"-GATE VALVE
10+84.56	20.74'L	12"x12"x6" TEE
10+84.19	26.72'L	FIRE HYDRANT ASSEMBLY
11+48.30	18.00'L	12"-22.5° HORIZ. BEND
12+21.97	16.44'L	12"-22.5° HORIZ. BEND
12+51.70	18.20'L	12"-11.25° HORIZ. BEND
14+63.15	19.68'L	12"-GATE VALVE
14+68.07	19.37'L	12"x12x6" TEE
14+68.39	25.36'L	FIRE HYDRANT ASSEMBLY

PVC RESTRAINED JOINT WATER MAIN SHALL BE INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS

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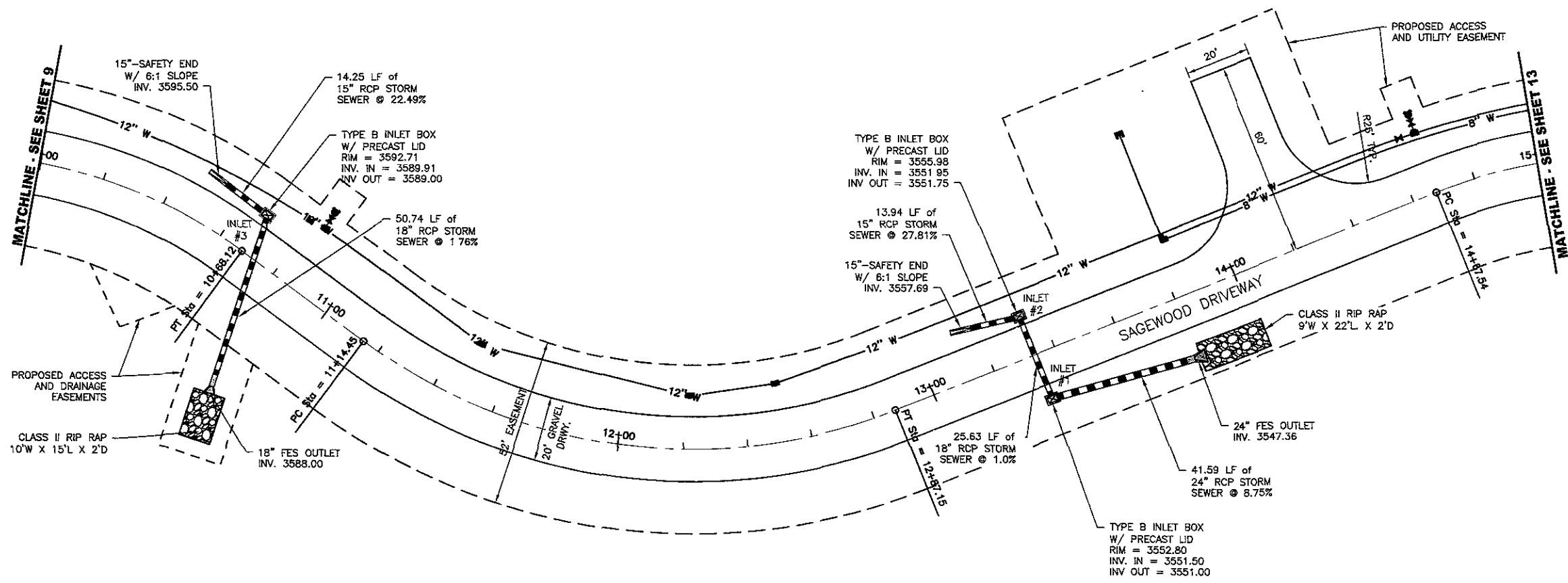
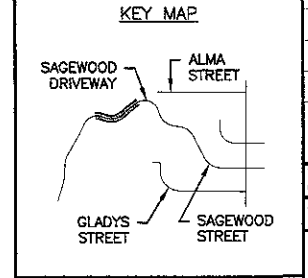
Engineering Reviewer: _____ Date: _____

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Submittals

Revisions

Internal Job No. 08-0505 1 | Designed By: TC | Drawn By: PMW
Surveyed By: RENNER & ASSOCIATES | Survey Date: 05/2008



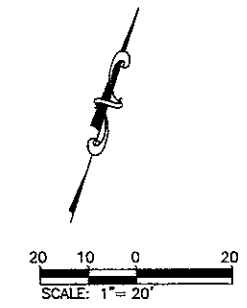
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RAINBOW RIDGE WATER MAIN EXTENSION



Sheet Name:
SAGEWOOD DRIVEWAY
PLAN SHEET
STA 10+00 TO 15+00



I:\DRAWINGS\SS\SS\WATER MAIN EXTENSION\1 PLAN, 10'-15'0" W/ PLAN & PROFILE, 3/29/2010 2:31:53 PM

09SR048

NOTE: ELEVATIONS OF EXISTING UTILITIES SHOWN IN PROFILES HAVE NOT BEEN LOCATED AND THEREFORE, SHALL BE CONSIDERED APPROXIMATE.

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Engineering Reviewer: _____ Date: _____

COMMENTS

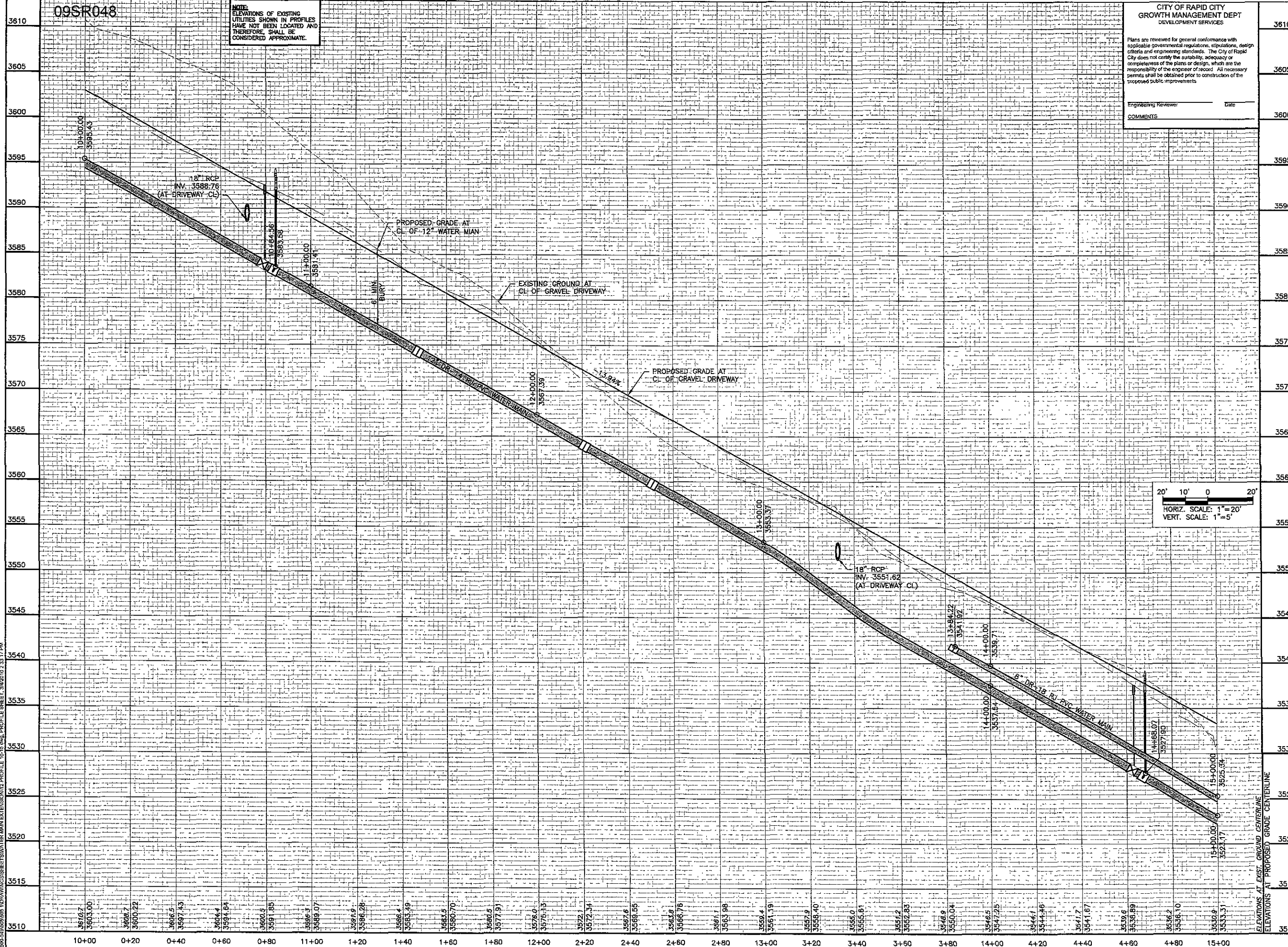
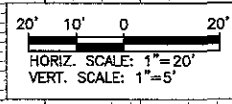
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Revisions:	3520
Revisions:	3515
Revisions:	3510

Internal Job No	Designed By	Drawn By
08-0505.1	TC	PMW
Surveyed By	Survey Date	
RENNER & ASSOCIATES	05/2008	

PRELIMINARY FOR REVIEW ONLY

DREAM DESIGN INTERNATIONAL, INC.
ENGINEERING, LANDSCAPE ARCHITECTURE,
LAND PLANNING, CONSTRUCTION ADMINISTRATION
528 KANSAS CITY STREET, SUITE 4, RAPID CITY, SD 57701
PHONE: (605) 348-0538 FAX: (605) 348-0545 WWW.DREAMDESIGNING.COM

RAINBOW RIDGE WATER MAIN EXTENSION



1000-550505 10-DRAWINGS-SHEET-WATER MAIN EXTENSION-2 PROFILE 10+00 TO 15+00, PROFILE SHEET, 3/4/2010 2:33:17 PM

Sheet Name: SAGEWOOD DRIVEWAY PROFILE SHEET STA 10+00 TO 15+00

Sheet Number: 12 of 27

STORM SEWER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
18+79.28	28.70'R	INSTALL 30" FLARED END SECTION
18+97.68	38.73'R	INSTALL 20.31' HORIZ. BEND & 6.33' VERT. BEND
19+42.48	130.44'R	INSTALL 30" FLARED END SECTION

8" WATER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
15+27.56	18.71'L	8"-11.25' HORIZ. BEND
15+41.13	18.17'L	8"-22.5' HORIZ. BEND
15+95.56	18.04'L	8"-22.5' HORIZ. BEND
16+58.54	17.80'L	8"-22.5' HORIZ. BEND
17+15.58	18.05'L	8"-22.5' HORIZ. BEND
18+09.39	18.08'L	8"-11.25' HORIZ. BEND
18+45.64	18.03'L	8"-11.25' HORIZ. BEND
18+85.36	17.84'L	8"-22.5' HORIZ. BEND
19+34.90	18+81'R	8"-45' HORIZ. BEND
19+59.22	19.93'R	8"-11.25' HORIZ. BEND
19+87.97	19.46'R	8"-11.25' HORIZ. BEND

12" WATER MAIN NOTES		
STATION	OFFSET	ITEM DESCRIPTION
15+27.52	20.72'L	12"-11.25' HORIZ. BEND
15+41.11	20.21'L	12"-22.5' HORIZ. BEND
15+95.59	20.08'L	12"-22.5' HORIZ. BEND
16+58.53	19.83'L	12"-22.5' HORIZ. BEND
17+15.58	20.09'L	12"-22.5' HORIZ. BEND
17+71.83	19.22'L	12"-GATE VALVE
17+76.66	19.95'L	12"x12"x6" TEE
17+75.71	25.89'L	FIRE HYDRANT ASSEMBLY
18+09.40	20.09'L	12"-11.25' HORIZ. BEND
18+45.64	20.04'L	12"-11.25' HORIZ. BEND
19+01.95	17.53'L	12"-22.5' HORIZ. BEND
19+76.33	17.52'L	12"-22.5' HORIZ. BEND

PVC RESTRAINED JOINT WATER MAIN SHALL BE INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS

CITY OF RAPID CITY
GROWTH MANAGEMENT DEPT.
DEVELOPMENT SERVICES

Plans are reviewed for general conformance with applicable governmental regulations, stipulations, design criteria and engineering standards. The City of Rapid City does not certify the suitability, adequacy or completeness of the plans or design, which are the responsibility of the engineer of record. All necessary permits shall be obtained prior to construction of the proposed public improvements.

Engineering Reviewer _____ Date _____

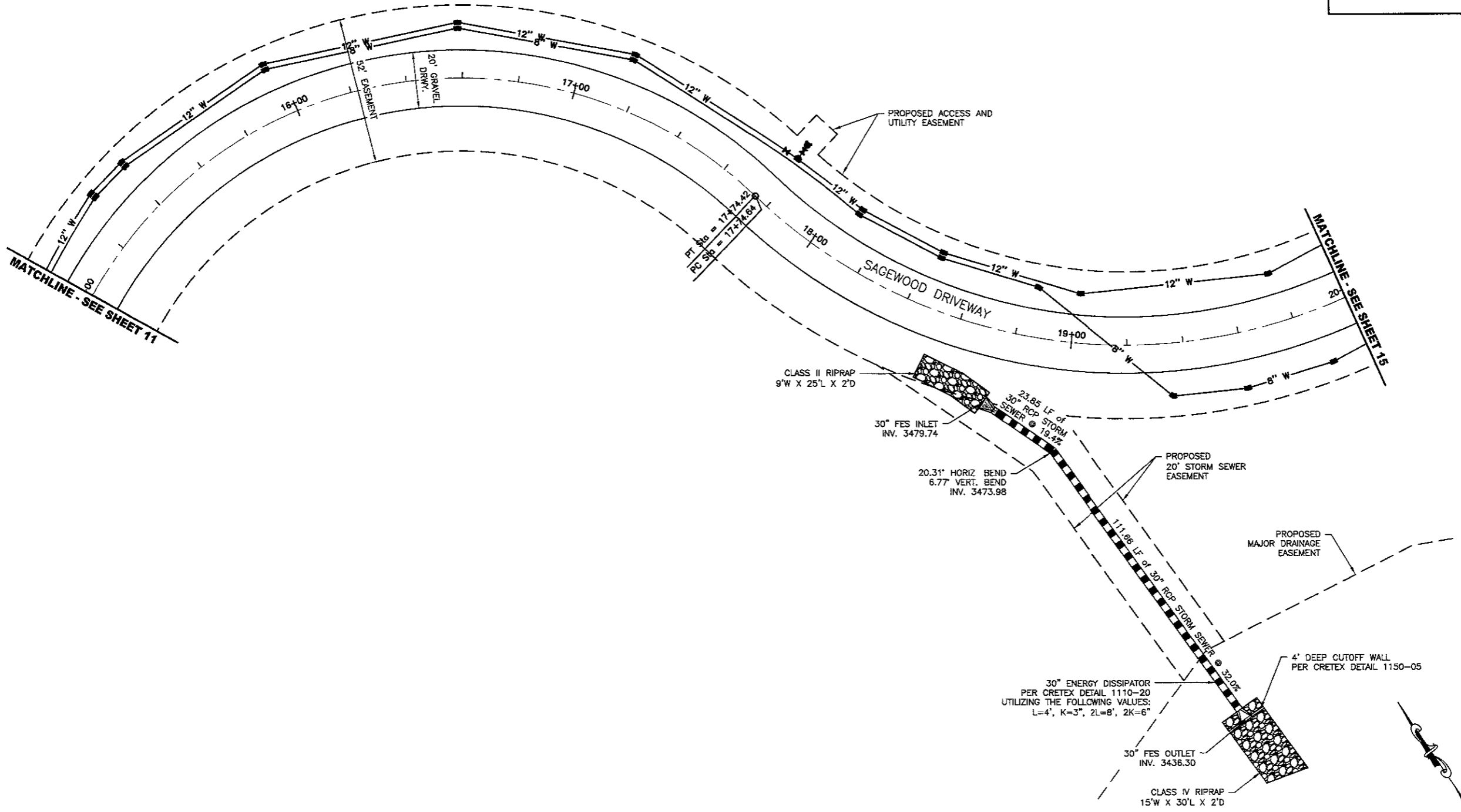
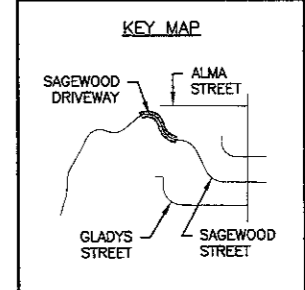
COMMENTS _____

Submittals _____

Revisions _____

Internal Job No: 08-0505 1 | Designed By: TC | Drawn By: PM/W

Surveyed By: RENNER & ASSOCIATES | Survey Date: 05/2008



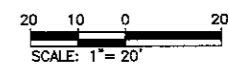
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RAINBOW RIDGE WATER MAIN EXTENSION

Sheet Name: SAGEWOOD DRIVEWAY PLAN SHEET STA 15+00 TO 20+00

Sheet Number: 13 of 27



1500-54050505 1DRAWINGSHEETRAINBOW RIDGE WATER MAIN EXTENSION PLAN 15+00 TO 20+00 PLAN & PROFILE 3/2/2010 2:34:42 PM