



STAFF REPORT

Report To: Board of Supervisors **Meeting Date:** February 7, 2019

Staff Contact: Darren Schulz, Public Works Director

Agenda Title: For Possible Action: To approve and authorize the Mayor to sign a Water and Sewer Line Participation Agreement between Carson City Nissan RE LLC and Carson City for work relating to the construction of water and sewer line improvements in accordance with approved plans and specifications for 2750 South Carson Street, for a not to exceed amount of \$94,000 to be reimbursed to Carson City Nissan RE LLC by the City. (Dan Stucky, DStucky@carson.org and Tom Grundy, TGrundy@carson.org)

Staff Summary: Carson City Nissan RE LLC has agreed to construct necessary water and sewer line improvements along the eastern portion of the parcel addressed 2750 South Carson Street in order to replace deteriorating pipes. The timing of these upgrades to the water and sewer system will coincide with the site improvements for the new Nissan dealership. Carson City Nissan will obtain a minimum of three signed bids from qualified contractors and submit them to the City. The City will select a bid, and Carson City Nissan will contract for the installation of the water and sewer line improvements in accordance with the approved plans and specifications. The City will reimburse Carson City Nissan for the actual construction costs associated with the construction of the water and sewer mains, which are estimated not to exceed \$94,000. Reimbursement will occur upon completion and acceptance of the work by the City and receipt by the City of the final invoice from Carson City Nissan.

Agenda Action: Formal Action / Motion **Time Requested:** 5 mins

Proposed Motion

I move to approve and authorize the Mayor to sign the Water and Sewer Line Participation Agreement as presented, with reimbursement not to exceed \$94,000.

Board's Strategic Goal

Sustainable Infrastructure

Previous Action

N/A

Background/Issues & Analysis

The City's water and sewer system includes deteriorated pipes located within and along the frontage of the parcel addressed 2750 South Carson Street. This parcel is also the site of the new Nissan dealership. Per chapters 12.01.210(4) and 12.05.050(1)(E) of the Carson City Municipal Code (CCMC), water and sewer mains in a deteriorated condition shall be replaced by the developer at the expense of the Public Works Department through a participation agreement. These water and sewer improvements will be done in conjunction with the civil site improvements for the new Nissan facility.

CCMC 12.01.210 Main Extensions (Water) - Subsection (4) requires "Mains in a deteriorated condition shall be replaced by the developer at the expense of the public works department."

CCMC 12.05.050 Main of Sewer Mains and Laterals (Sewer) - Subsection (1)(E) requires "Mains and services shall be replaced by the developer along the full frontage of the parcel to be developed when it is determined by the utilities director or designee that existing mains and services are in a deteriorated condition and require replacement. The replacement of deteriorated mains shall be at the expense of the utilities department."

Applicable Statute, Code, Policy, Rule or Regulation

CCMC 12.01.210 and 12.05.050

Financial Information

Is there a fiscal impact? Yes

If yes, account name/number: Water Fund \$49,000, Account #: 520-3505-435.70-40 project #040618 and Sewer Fund \$45,000, Account #: 510-3205-434.70-40 project #051403.

Is it currently budgeted? Yes

Explanation of Fiscal Impact: There are sufficient funds remaining in the Water (\$164,362) and Sewer (\$1,019,301) funds to participate in this agreement and construct the improvements.

Alternatives

1. Decline to participate with the applicant and not construct the water and sewer main improvements.
2. Provide other direction to staff.

Attachments:

[Participation_Agreement_Nissan- S. Carson Street REVISED.RTF](#)

[Nissan-Exhibit A.PDF](#)

Board Action Taken:

Motion: _____

1) _____

Aye/Nay

2) _____

(Vote Recorded By)

PARTICIPATION AGREEMENT FOR WATER AND SEWER MAIN IMPROVEMENTS

THIS AGREEMENT, dated this ____ day of _____, 2019, is by and between CARSON CITY NISSAN RE LLC, ("APPLICANT"), and CARSON CITY, NEVADA, a consolidated municipality ("CITY") (collectively "Parties"). CITY and APPLICANT may be individually referred to as "Party" and collectively referred to as "Parties."

RECITALS:

WHEREAS, the APPLICANT owns parcels # 009-111-07 and 009-111-17, addressed 2750 South Carson Street, Carson City, Nevada, 89701, across the eastern portion of which runs water and sewer mains, approximately 300 lineal feet (LF) north of Sonoma Street; and

WHEREAS, the CITY desires to replace the water and sewer main and the APPLICANT has agreed to construct the replacement;

NOW, THEREFORE, in consideration of the promises and conditions contained in this Agreement and other good and valuable consideration, the Parties do agree as follows:

1. **Scope of Work.** The work is limited to construction of approximately 125 LF of 12-inch water main, including necessary appurtenances, and approximately 110 LF of 8-inch sewer main, including necessary appurtenances, as shown in Exhibit A ("the Work").
2. **Engineering by CITY.** The CITY shall provide the engineering design for the Work.
3. **APPLICANT to Obtain Bids.** The APPLICANT shall obtain at least three signed, itemized bids from qualified contractors to construct the Work.
4. **CITY to Select or Reject Bids.** The Applicant shall provide three bids to the CITY. In the sole discretion of the CITY, the CITY may select one of the three provided bids, or reject all of the bids (a) if the bids are not itemized, (b) if the costs exceed prices paid by the CITY on similar installations, or (c) for any other reason. If the CITY rejects all of the bids, the CITY may terminate this Agreement or request that APPLICANT obtain three or more new bids.

5. Contract for and Construction of Improvements; Completion of Work.

A. After the CITY selects a bid, the APPLICANT must contract for and complete the construction of the Work. The construction must proceed in accordance with: the approved plans, specifications, and drawings; all applicable provisions of the Carson City Municipal Code and any other applicable ordinances or regulations, which are hereby referred to and made a part of this Agreement by this reference; and with the specific conditions set forth within this Agreement. APPLICANT agrees to complete construction of the Work within 90 days after commencement of construction.

B. All Work done by APPLICANT will be subject to inspection and approval by the City Engineer. Any progress inspections and approvals by the City Engineer of any item of Work will not forfeit the right of CITY to require the correction of faulty workmanship or material at any time during the course of the Work, even though previously approved by oversight. Nothing in this Agreement will relieve APPLICANT of the responsibility for proper construction and maintenance of the Work, until all Work has been completed and approved by CITY. Construction is complete upon final acceptance of the Work by the CITY.

6. Billing and Payment.

A. APPLICANT must pay the contractor according to the selected bid for the costs of constructing the Work. CITY will reimburse the APPLICANT for the costs of constructing the Work as provided in this section 6.

B. CITY will advance the costs of the applicable City and Bureau of Safe Drinking Water permitting and testing.

C. To obtain reimbursement from CITY, APPLICANT must, within 90 days of completion of the Work, submit to the CITY an itemized invoice. The CITY will reimburse the APPLICANT after receiving the APPLICANT's itemized invoice. The APPLICANT's failure to itemize the invoice voids the CITY's obligation to reimburse the APPLICANT.

D. All costs will be determined by the actual quantity placed in the field using the unit prices provided in the selected bid.

E. In the event of a change order, CITY will pay the portion of the change order which is deemed by the Public Works Director to be the responsibility of CITY.

F. The total reimbursement the APPLICANT may be entitled pursuant to this Agreement will not exceed ninety-four thousand dollars (\$94,000.00).

7. **Term.** This Agreement is effective on the date of the last authorized signature and terminates one year after the effective date. If, however, the APPLICANT begins construction within the contract term, the term is extended an additional year, for a two year term.

8. **Notices.** All notices or other communications required or permitted to be given under this Agreement must be in writing and shall be deemed to have been duly given if delivered personally by hand, by facsimile with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other Party at the address set forth below:

FOR CITY:

Dan Stucky
City Engineer
3505 Butti Way
Carson City, Nevada 89701
Tel: (775) 887-2355
Fax: (775) 887-2112

FOR APPLICANT:

Chris Russell
Carson City Nissan RE LLC
865 S Skylark Ln
North Salt Lake UT 84054
Tel: (208) 232-1062
Fax: (208) 235-7510

Either Party may from time to time, by notice in writing served upon the other as described above, designate a different mailing address to which or a different person to whose attention all such notices or demands are thereafter to be addressed.

9. **Entire Agreement.** This Agreement constitutes the entire agreement of the Parties and is the complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such attachment and this Agreement must be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement is binding upon the Parties unless the same is in writing and signed by the Parties.

10. **Limited Liability; Indemnification.** APPLICANT shall indemnify and hold harmless CITY, to the extent provided by law, from and against any and all liability arising out of the performance of this Agreement proximately caused by any act or omission of APPLICANT's officers, agents, and employees. CITY does not waive and intends to assert any and all available NRS chapter 41 immunity in all cases. Contract liability of the Parties does not include punitive damages.

11. **Severability.** If any provision contained in this Agreement is held to be unenforceable by a court of law or equity, this Agreement will be construed as if the provision did not exist and the non-enforceability of that provision will not be held to render any other provision or provisions of this Agreement unenforceable.

12. **Nevada Law.** The law of the State of Nevada applies in interpreting and construing this Agreement.

13. **Ownership of Property.** This Agreement does not contemplate any transfer of property or ownership interest between the Parties. Any and all property presently owned by either Party will remain in that Party's possession upon completion or termination of this Agreement.

14. **No Third-Party Beneficiary.** It is specifically agreed between the Parties that none of the provisions this Agreement create in the public or any member thereof a third-party beneficiary, or grant anyone not a Party to this Agreement any right to maintain a suit for personal injuries or property damage under the terms or provisions of this Agreement.

15. **Records.** Each Party agrees to keep and maintain, under general accepted accounting principles, full, true and complete records and documents pertaining to this Agreement and to present, at any reasonable time, such information for inspection, examination, review, audit and copying at any office where such records and documentation is maintained.

16. **Separate Entities.** The Parties are associated with each other only for the purposes and to the extent set forth in this Agreement. Each Party is and continues to be separate and distinct from the other Party and, except as otherwise specifically provided herein, has the right to supervise, manage, operate, control and direct performance of the details incident to its duties under this Agreement.

17. **Successors; Assignment.** This Agreement shall bind the heirs, executors, administrators, successors, and assigns of the respective parties. Neither Party may assign, transfer or delegate any rights, obligations or duties under this Agreement without the prior written consent of the other Party.

18. **Authority to Sign.** The Parties represent and warrant that the person executing this Agreement on behalf of each respective Party has full power and authority to enter into this Agreement and that the Parties are authorized by law to perform the services set forth herein.

19. **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed to be an original but all of which, taken together, shall constitute one and the same Agreement.

20. **Breach.** If APPLICANT fails, neglects, or refuses to construct the Work as and when agreed and per the plans and specifications, such failure, neglect, or refusal constitutes a breach of this Agreement. The CITY may request that the APPLICANT cure the breach. If APPLICANT fails to cure the breach upon request, the CITY, at its option, may correct the breach. If the CITY corrects the breach, the APPLICANT must pay to the CITY the CITY's cost of correcting the breach. The failure of either Party to otherwise perform any obligation of this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the Parties are not exclusive and are in addition to any other rights and remedies provided by law or equity, including, without limitation, actual damages and reasonable attorney's fees and costs. The pursuit of any right or remedy shall not be construed as an election of remedies.

21. **Force Majeure.** Neither Party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, acts of public enemy, accidents, fires, explosions, or acts of God, including, without limitation, earthquakes, floods, winds or storms. In such an event the intervening cause must not be through the fault of the Party asserting such an excuse, and the excused Party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the dates written below.

APPLICANT: CHRIS RUSSELL, CARSON CITY NISSAN RE LLC

Chris Russell
Carson City Nissan RE LLC

Subscribed and sworn to before me on
this ____ day of _____, 2019
by Chris Russell

Notary Public

DRAFT

CITY:

ROBERT L. CROWELL, Mayor

ATTEST:

AUBREY ROWLATT
Clerk-Recorder

Approved as to form:

Todd E. Reese, Deputy District Attorney

APPROVED:

DARREN SCHULZ, P.E., Public Works Director

SHERI RUSSELL, Chief Financial Officer

EXHIBIT A

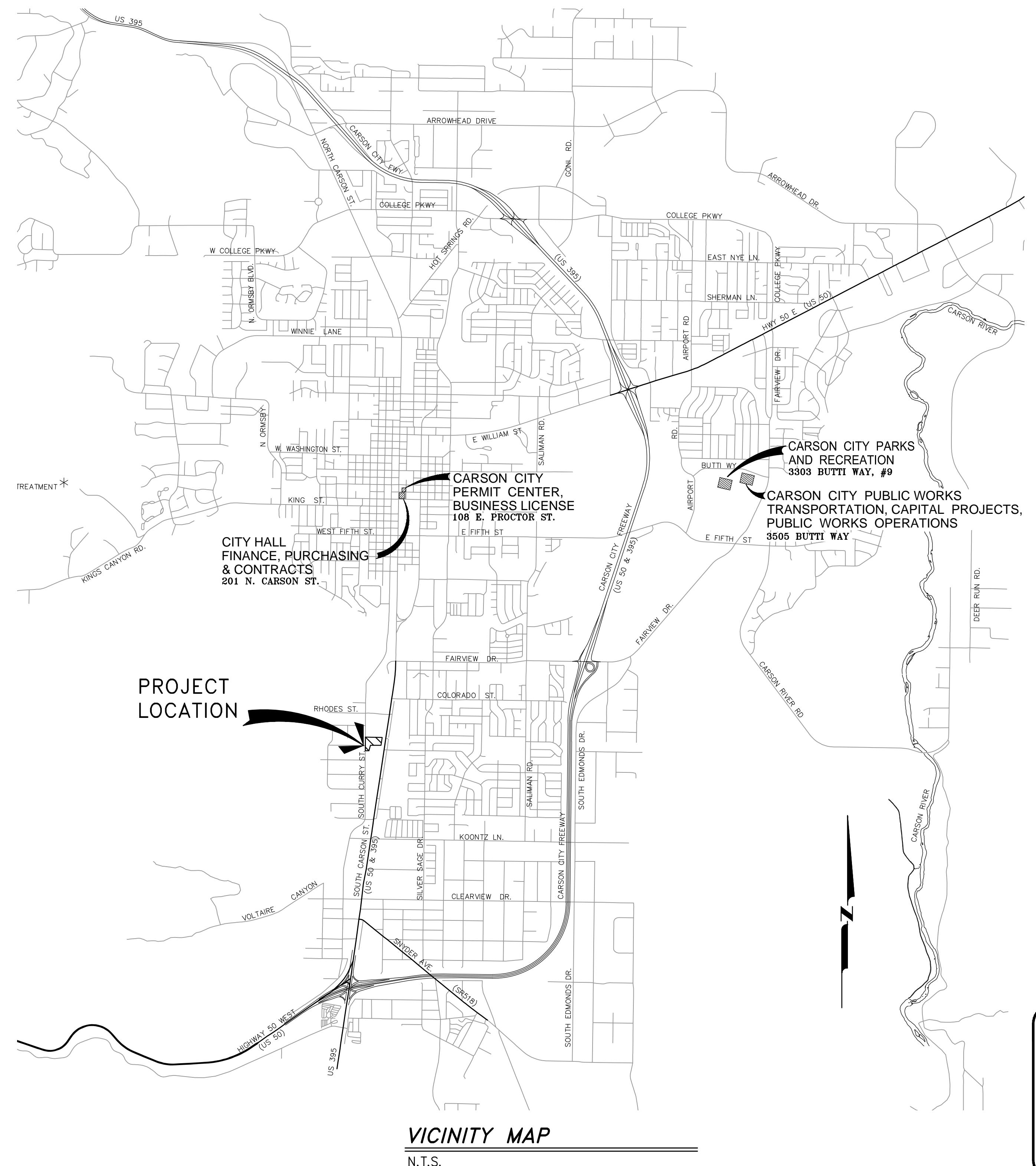
WATER & SEWER MAIN REPLACEMENTS CARSON CITY NISSAN 2750 SOUTH CARSON STREET CARSON CITY, NEVADA

BOARD OF SUPERVISORS

Bob Crowell	Mayor
Karen Abowd	Supervisor
Brad Bonkowski	Supervisor
Lori Bagwell	Supervisor
John Barrette	Supervisor
Sue Merriwether	City Clerk

DESIGNED FOR:

CARSON CITY PUBLIC WORKS DEPARTMENT
OPERATIONS DIVISION
3505 BUTTI WAY
CARSON CITY, NV 89701
887-2355

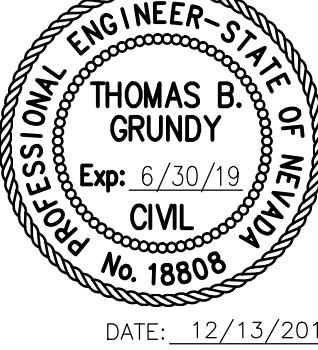


SHEET INDEX

G1	TITLE SHEET
G2	NOTES, LEGEND & ABBREVIATIONS
G3	GENERAL NOTES
G4	HORIZONTAL & VERTICAL CONTROL
C1	WATERLINE "NW" & SEWERLINE "NSS" PLAN & PROFILE
C2	CONSTRUCTION DETAILS

DESIGNED BY: DGR/TBG
DRAWN BY: DGR/DLF
CHECKED BY: TBC
DWG NO.: 3505-BUTTI-18-Awg
SCALE (HORIZ): N/A
SCALE (VERT): N/A
DATE: 12/13/18

CARSON CITY
PUBLIC WORKS DEPARTMENT
3505 BUTTI WAY CARSON CITY, NEVADA 89701
PH: 887-2355
FAX: 887-2112



DATE: 12/13/2018

WATER & SEWER MAIN REPLACEMENT	REV.	DATE	DESCRIPTION	BY APP'D
CARSON CITY NISSAN 2750 SOUTH CARSON STREET				

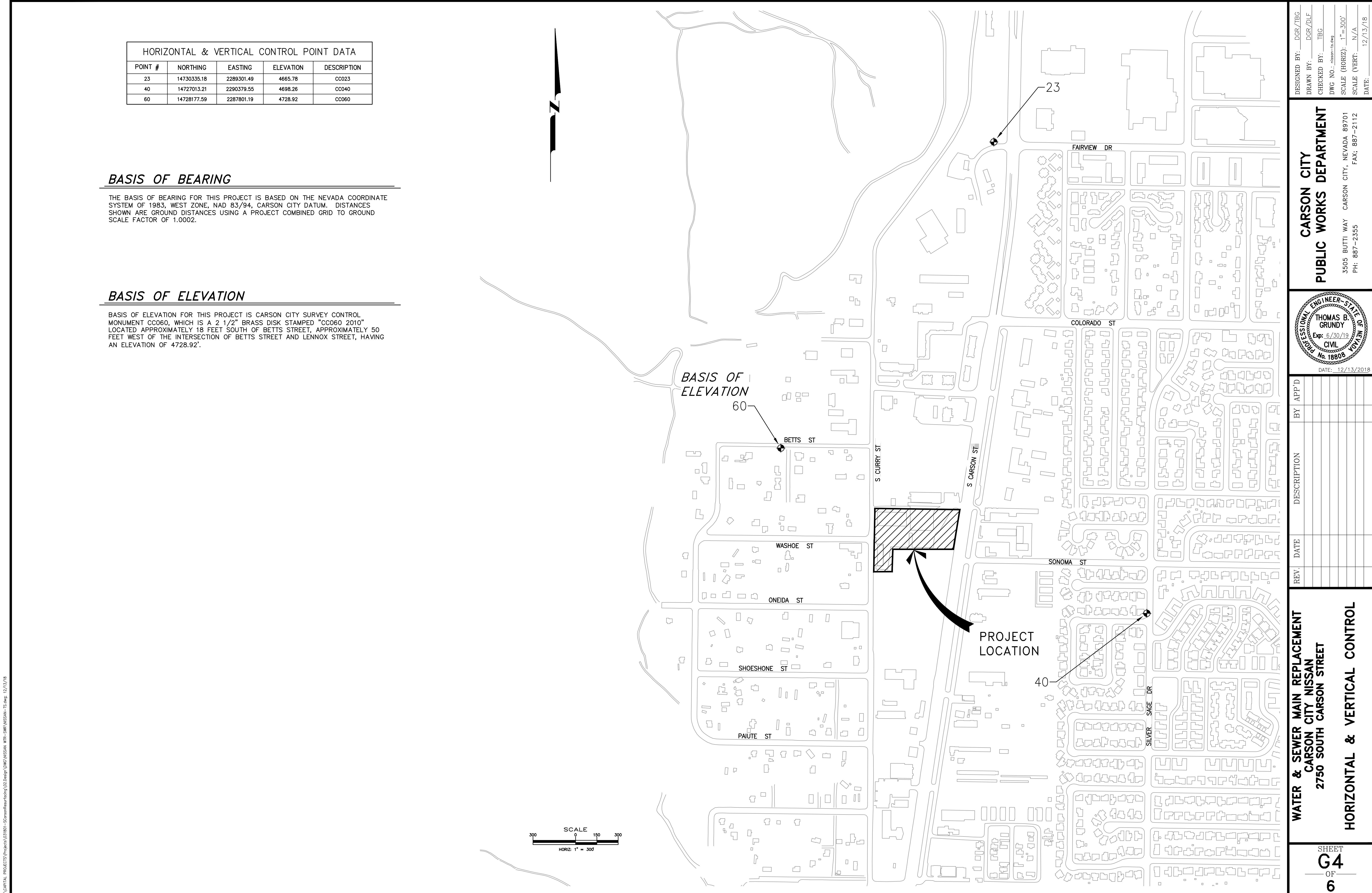
TITLE SHEET	

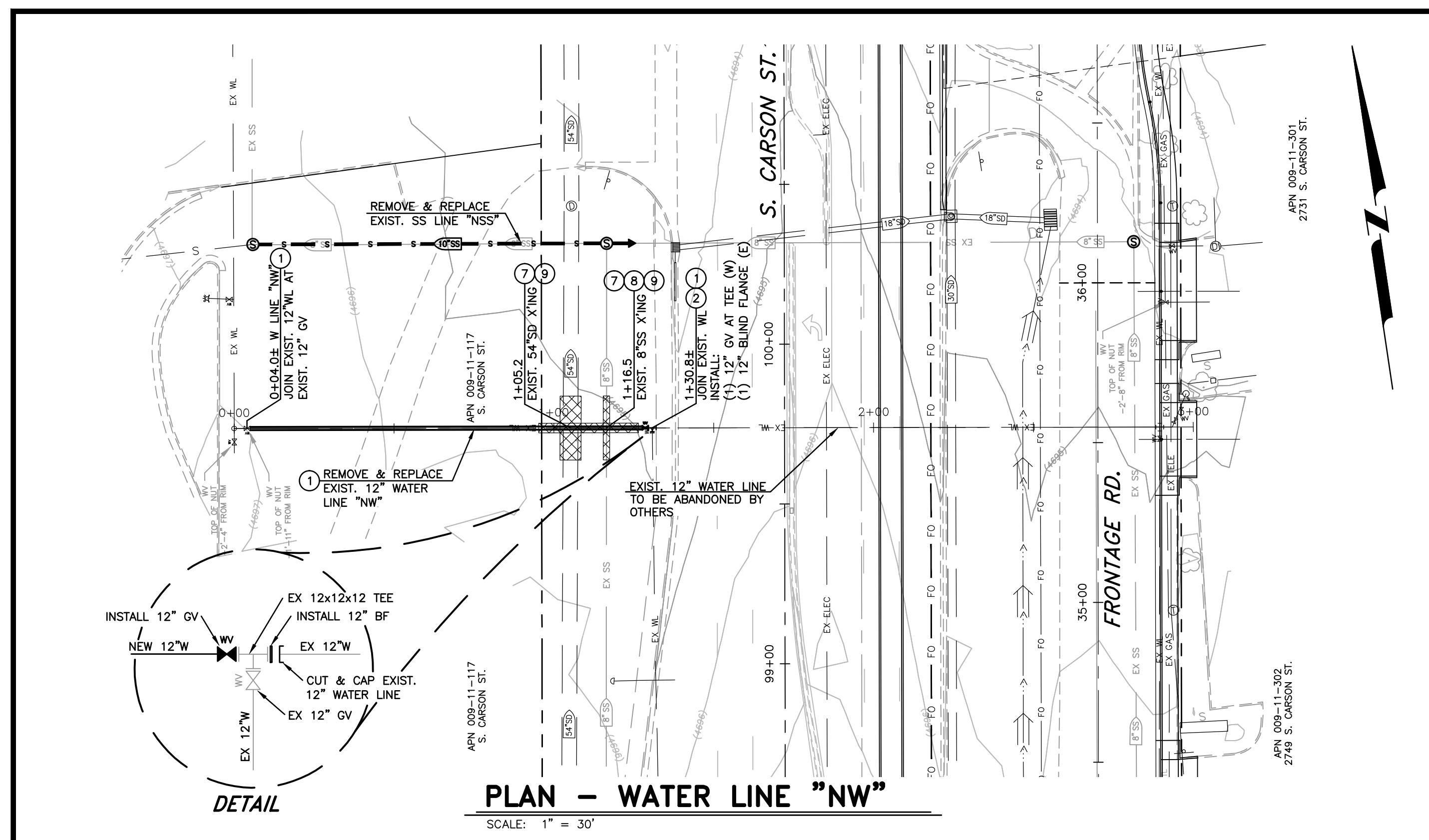
Call before you Dig
Avoid cutting underground
utility lines. It's costly.
Call
811
OR
1-800-227-2600

SHEET
G1
OF
6

APPLICATION NO. _____

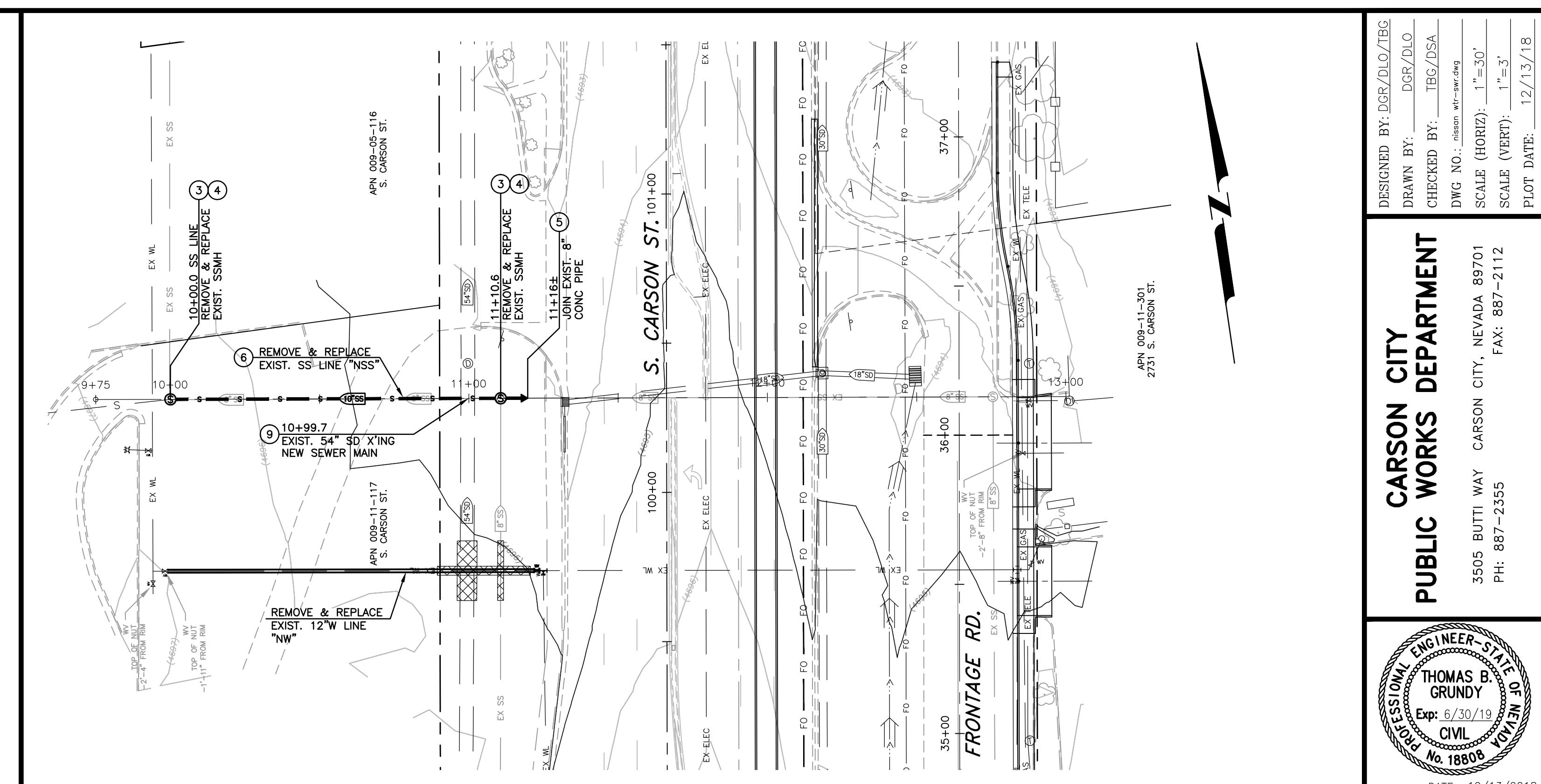
<p>1. ALL WORK SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (SSPC) AND THE "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" (SDPWC) AS ADOPTED BY CARSON CITY. THE CONTRACTOR SHALL OBTAIN A PERMIT FOR PUBLIC WORKS CONSTRUCTION FROM THE CARSON CITY PERMIT CENTER PRIOR TO THE START OF CONSTRUCTION.</p> <p>2. ALL TRAFFIC CONTROL AND BARRICADING WITHIN THE CARSON CITY RIGHT-OF-WAY SHALL CONFORM TO SECTION 100.33, 332.04 AND 332.05 OF THE STANDARD SPECIFICATIONS, PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND THE UNR T2 CENTER, TEMPORARY TRAFFIC CONTROL GUIDELINES LATEST EDITION. A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CARSON CITY ENGINEERING DIVISION PRIOR TO ANY STREET CLOSURES.</p> <p>3. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT "CALL BEFORE YOU DIG" (811) OR 1-800-227-2600) AT LEAST TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION AND COMPLY WITH THE REQUIREMENTS OF NRS AND NAC 455 THROUGHOUT THE COURSE OF THE WORK. SEWER SERVICE LATERALS ARE NOT OWNED OR MARKED BY CARSON CITY.</p> <p>4. THE CONTRACTOR SHALL CALL THE CARSON CITY ENGINEERING DIVISION (887-2300) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL ONE (1) WORKING DAY PRIOR TO REQUIRED INSPECTIONS AND TESTING. THE REQUIRED INSPECTIONS AND TESTING ARE LISTED ON THE INSPECTION RECORD ISSUED WITH EACH PERMIT. THE CONTRACTOR MUST HAVE THE PERMIT NUMBER AND THE DESCRIPTION LISTED ON THE INSPECTION RECORD TO SCHEDULE REQUIRED INSPECTIONS AND TESTING. FOR CITY CONTRACTED PROJECTS, THE CONTRACTOR SHALL SCHEDULE INSPECTIONS PER THE CONTRACT DOCUMENTS.</p> <p>5. FINAL INSPECTIONS WILL BE PERFORMED BY CARSON CITY ENGINEERING DIVISION ACCORDING TO THE CARSON CITY INSPECTIONS AND TESTING PROCEDURES. NOTE: THESE PROCEDURES REQUIRE SUBMITAL OF RECORD DRAWING PRINTS BY THE CONTRACTOR AND TO WORKING DAYS TO PREPARE A FINAL PUNCH LIST. ALL CONDITIONS OF THE FINAL INSPECTION MUST BE COMPLETED PRIOR TO FINAL ACCEPTANCE OR ANY APPROVAL OF A CERTIFICATE OF OCCUPANCY BY THE CARSON CITY ENGINEERING DIVISION.</p> <p>6. MODIFICATIONS TO THE APPROVED PLANS REQUIRES REVIEW AND APPROVAL BY THE CARSON CITY ENGINEERING DIVISION. WORK PERFORMED WITHOUT WRITTEN APPROVAL BY CARSON CITY ENGINEERING WILL REQUIRE REMOVAL AT THE CONTRACTOR'S EXPENSE.</p> <p>7. THE APPROVED PLAN, PERMIT AND INSPECTION RECORD MUST BE ON THE JOB SITE AT ALL TIMES.</p> <p>8. PLAN APPROVAL FOR SEWER AND WATER CONSTRUCTION SHALL EXPIRE ONE YEAR FROM DATE OF APPROVAL UNLESS CONSTRUCTION HAS BEEN INITIATED. (CMC 12.06.1605, 12.01.1400)</p> <p>9. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR ACQUIRING A STORMWATER DISCHARGE PERMIT FROM THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP) INCLUDING DEVELOPING, SUBMITTING AND IMPLEMENTING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL DEVELOP, PLACE AND MAINTAIN STORM WATER PROTECTION DEVICES IN ACCORDANCE WITH THE NEVADA CONTRACTORS FIELD GUIDE FOR CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (JUNE 2013).</p> <p>10. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR LOCATING THE EXISTING UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AGAINST THE PROPOSED POINTS OF CONSTRUCTION AND TO CONFIRM CONFLICT WITH EXISTING UTILITIES. PRIOR TO COMMENCING CONSTRUCTION, POTHOLING IS REQUIRED. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THE CONSTRUCTION DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.</p> <p>11. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF PROPER SHORING OF TRENCHES IN ACCORDANCE WITH OCCUPATIONAL SAFETY LAWS. THE DUTIES OF THE ENGINEER DO NOT INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY IN, ON, OR NEAR THE CONSTRUCTION SITE.</p> <p>12. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THE CONSTRUCTION PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.</p> <p>13. ALL HOT TAPS, GREATER THAN 2 INCHES AND LESS THAN 14 INCHES, ARE TO BE PERFORMED BY CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR. HOT TAPS ARE TO BE PERFORMED ON THE PLANS. HOT TAPS ARE PERFORMED AT LEAST 2 WORKING DAYS PRIOR TO SCHEDULING HOT TAP DATE AND TIME. (HOT TAPS ARE PERFORMED TUESDAY THRU THURSDAY EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY). PRIOR TO HOT TAPPING, THE SADDLE SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI MINIMUM OR THE DESIGN OF PIPE SYSTEM FOR A MINIMUM OF 5 MINUTES. THE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE WATER UTILITY PERSONNEL PRIOR TO PERFORMING THE TAP. FOR ALL TAPS PERFORMED BY THE CONTRACTOR, THE TAPPING EQUIPMENT SHALL BE INSPECTED AND DISINFECTED IN THE PRESENCE OF CITY FORCES PRIOR TO TAPPING.</p> <p>14. WATER VALVE MARKERS SHALL BE BLUE CARSONITE UTILITY MARKER (GUM-375), 5 FEET-2 INCHES (5'-2") WITH MANHOLE DECAL (668-MH) OR APPROVED EQUAL. PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.</p> <p>15. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE ALL WEATHER ACCESS ROADWAY CONSTRUCTION, 6 FEET-1 INCH TYPE 2, CLASS 3 SUPERSEED BASE (CONCRETE TO THE SEPTIC SECTION 100.01.02) AND SEWER MANHOLE MARKERS SHALL BE INSTALLED. SEWER MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (GUM-375), 5 FEET-2 INCHES (5'-2") WITH MANHOLE DECAL (668-MH) OR APPROVED EQUAL. PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.</p> <p>16. WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION WITH AN NPC KOR-N-SEAL PIPE-TO-MANHOLE CONNECTOR OR A LINK-SEAL MODULAR SEAL.</p> <p>17. ALL WATER MAIN, WATER/FIRE SERVICE, AND BACKFLOW PREVENTION INSPECTIONS AND TESTING MUST BE APPROVED PRIOR TO APPROVAL OF ANY CERTIFICATE OF OCCUPANCY.</p> <p>18. DISINFECTION TABLETS SHALL BE PLACED USING TITEBOND MULTI-PURPOSE CLEAR 100% SILICONE OR APPROVED EQUAL FOOD GRADE SILICONE.</p> <p>19. ALL WATERLINE MATERIALS SHALL BE CERTIFIED TO NATIONAL SANITATION FOUNDATION/AMERICAN NATIONAL STANDARDS INSTITUTE (NSF/ANSI) 61 AND 372 STANDARDS (OR APPROVED EQUIVALENT).</p> <p>20. CONTRACTOR SHALL COMPLY WITH THE MANUFACTURERS RECOMMENDATIONS REGARDING MECHANICALLY RESTRAINED JOINTS, AND SHALL ENSURE THAT SUFFICIENT PIPE LENGTH IS RESTRAINED TO RESTRICT MOVEMENT.</p> <ul style="list-style-type: none"> * "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY DUCTILE IRON PIPE RESEARCH ASSOCIATION (BIRMINGHAM, AL) IS AVAILABLE TO DETERMINE RESTRAINED DISTANCE. * CONTRACTOR SHALL VERIFY THRUST RESTRAINT REQUIREMENTS FOR ALL PROPOSED JOINTS. CONCRETE THRUST BLOCKING MAY BE USED WHEN CONNECTING TO EXISTING PIPE THAT HAS INSUFFICIENT THRUST RESTRAINT. * RESTRAINED PUSH-ON JOINTS AND FITTINGS SHALL BE IN ACCORDANCE WITH AWWA, ASTM AND MANUFACTURER REQUIREMENTS. * RESTRAINED PUSH-ON JOINTS FOR PIPE AND FITTINGS SHALL BE DESIGNED FOR 150 PSI WATER OPERATING PRESSURE. * RESTRAINED PUSH-ON JOINT PIPE AND FITTINGS SHALL BE CAPABLE OF BEING DEFLECTED AFTER ASSEMBLY. <p>21. 18-8 STAINLESS STEEL NUTS, BOLTS AND WASHERS SHALL BE USED IN ALL UNDERGROUND OR SUBMERGED APPLICATIONS. THREADS SHALL BE UNC-ROLLED THREADS ON BOLTS COATED TO PREVENT GALLING.</p> <p>22. ALL WATER MAIN, WATER/FIRE SERVICE, AND BACKFLOW PREVENTION INSPECTIONS AND TESTING MUST BE APPROVED PRIOR TO APPROVAL OF ANY CERTIFICATE OF OCCUPANCY.</p> <p>23. DISINFECTION TABLETS SHALL BE PLACED USING TITEBOND MULTI-PURPOSE CLEAR 100% SILICONE OR APPROVED EQUAL FOOD GRADE SILICONE.</p> <p>24. ALL WORK SHALL CONFORM TO THE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS PER NAC 445A.67145.1 ((1))</p> <p>25. WATER MAIN SHUTDOWNS/INTERRUPTION OF WATER/FIRE SERVICE: OBTAIN TENTATIVE APPROVAL FROM CARSON CITY WATER UTILITY PRIOR TO PLANNING A SHUTDOWN. APPROVAL IS REQUIRED ONE WORKING DAY PRIOR TO NOTIFICATION OF CUSTOMERS. COMMERCIAL CUSTOMERS SHALL RECEIVE 2 WORKING DAYS WRITTEN NOTICE. A SHUTDOWN AGREEMENT, ARRANGEMENTS DURING NIGHTTIME SHUTDOWNS MAY BE REQUIRED OF THE CONTRACTOR TO ACCOMMODATE CUSTOMER OPERATIONS. RESIDENTIAL CUSTOMERS SHALL RECEIVE 24 HOURS WRITTEN NOTICE. WHEN WORK IS PERFORMED BY CITY STAFF, THE CITY IS RESPONSIBLE FOR THE NOTIFICATION. THE CONTRACTOR IS RESPONSIBLE IN ANY OTHER CASES. A LIST SHALL BE KEPT BY THE RESPONSIBLE PARTY LISTING THE DATE, TIME AND ADDRESS OF ALL PERSONS NOTIFIED. THE PERSON NOTIFIED SHALL BE INCLUDED ON THE LIST FOR COMMERCIAL CUSTOMERS. CONTRACTOR OR PERSON CONTRACTED WITH THE CITY NUMBERS WHEN COMMERCIAL CUSTOMERS CANNOT BE LOCATED. THE CONTRACTOR WILL BE SUBJECT TO DAMAGE CLAIMS SHOULD THEY FAIL TO NOTIFY CUSTOMERS OR MAINTAIN DOCUMENTATION OF NOTIFICATION OF CUSTOMERS. THE TOTAL TIME OF ANY WATER SERVICE INTERRUPTION IS LIMITED TO 4 HOURS MAXIMUM. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING WATER VALVES. WATER MAIN SHUTDOWNS ARE TO BE MADE DURING MONDAY, TUESDAY, WEDNESDAY OR THURSDAY, EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY. THE CONTRACTOR SHALL MAKE A WRITTEN REQUEST, TO THE WATER OPERATIONS CHIEF, A MINIMUM OF 10 CALENDAR DAYS IN ADVANCE OF ANY PLANNED SHUTDOWN.</p> <p>26. WATER MAINS (8 INCH THRU 12 INCH) SHALL BE PVC C900, DR 18 (MINIMUM WALL THICKNESS) UNLESS HIGHER PRESSURE IS SPECIFIED ON THE PLANS. WATER SERVICES 2 INCHES OR LESS SHALL BE CTS 901, PE TUBING MINIMUM 200 PSI; WATER SERVICES 3 INCHES OR GREATER SHALL BE 4 INCH MINIMUM DIAMETER PVC C900, DR 18 OR AS SPECIFIED ON THE PLANS.</p> <p>27. MAINTAIN 18 INCHES VERTICAL AND 5 FEET HORIZONTAL SEPARATION BETWEEN ALL UNDERGROUND UTILITY LINES AND WATER LINES. WATER LINE IS BELOW POWER LINE IF WATER LINE IS WITHIN 18 INCH VERTICAL SEPARATION OF POWER LINE. POWER/TELEPHONE LINE SHALL BE ENCASED WITH 4 INCHES CONCRETE EXTENDING 5 FEET EACH SIDE OF CROSSING. (SEE NV ENERGY SPECS.) CONCRETE ENCASEMENT OF WATER LINES IS NOT ALLOWED.</p> <p>28. ALL HOT TAPS, GREATER THAN 2 INCHES AND LESS THAN 14 INCHES, ARE TO BE PERFORMED BY CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR. HOT TAPS ARE TO BE PERFORMED ON THE PLANS. HOT TAPS ARE PERFORMED AT LEAST 2 WORKING DAYS PRIOR TO SCHEDULING HOT TAP DATE AND TIME. (HOT TAPS ARE PERFORMED TUESDAY THRU THURSDAY EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY). PRIOR TO HOT TAPPING, THE SADDLE SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI MINIMUM OR THE DESIGN OF PIPE SYSTEM FOR A MINIMUM OF 5 MINUTES. THE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE WATER UTILITY PERSONNEL PRIOR TO PERFORMING THE TAP. FOR ALL TAPS PERFORMED BY THE CONTRACTOR, THE TAPPING EQUIPMENT SHALL BE INSPECTED AND DISINFECTED IN THE PRESENCE OF CITY FORCES PRIOR TO TAPPING.</p> <p>29. WATER VALVE MARKERS SHALL BE BLUE CARSONITE UTILITY MARKER (GUM-375), 5 FEET-2 INCHES (5'-2") WITH CARSON CITY WATER VALVE DECAL (GVM-116) OR APPROVED EQUAL. PLACE MARKER NO MORE THAN 5 FEET FROM THE VALVE OR AS DIRECTED BY THE CARSON CITY INSPECTOR.</p> <p>30. REDUCED PRESSURE PRINCIPLE AND DOUBLE CHECK VALVE BACKFLOW ASSEMBLIES SHALL BE APPROVED BY THE CARSON CITY INSPECTOR. AND TEST RESULTS SHALL BE APPROVED BY A CERTIFIED BACKFLOW ASSEMBLY TESTER, AND TEST RESULTS SHALL BE APPROVED BY CARSON CITY WATER UTILITY. FOR NEW WATER METER SETS, THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED, INSPECTED, APPROVED AND CERTIFIED TEST RESULTS PROVIDED TO THE CARSON CITY INSPECTOR WITHIN 5 DAYS OF METER SET INSTALLATION. PERSONNEL MAY NOT WORK ON THE BACKFLOW DEVICE UNLESS APPROVED BY THE SERVICE. THE SERVICE WILL BE LOCKED OFF IF INSPECTIONS AND CERTIFICATIONS ARE NOT COMPLETED AS SPECIFIED ABOVE. A 25 DOLLAR FEE WILL BE ASSESSED AT TIME OF TURN-ON WHEN LOCK IS REMOVED DURING NORMAL WORKING HOURS. THE FEE WILL BE ASSESSED ON THE BUILDING PERMIT FOR THE INSTALLATION OF THE BACKFLOW DEVICE.</p> <p>31. ALL WATER MAIN, WATER/FIRE SERVICE, AND BACKFLOW PREVENTION INSPECTIONS AND TESTING MUST BE APPROVED PRIOR TO APPROVAL OF ANY CERTIFICATE OF OCCUPANCY.</p> <p>32. DISINFECTION TABLETS SHALL BE PLACED USING TITEBOND MULTI-PURPOSE CLEAR 100% SILICONE OR APPROVED EQUAL FOOD GRADE SILICONE.</p>	<p>1. ALL SEWER MAINS AND LATERALS IN THE RIGHT-OF-WAY/EASEMENT SHALL BE PVC SDR35 UNLESS OTHERWISE APPROVED BY CARSON CITY ENGINEER. C900 PVC MAY BE SUBSTITUTED FOR SDR35 TO MEET NDEP BUREAU OF SAFE DRINKING WATER SEPARATION REQUIREMENTS.</p> <p>2. NON-FLEXIBLE TRANSITION COUPLINGS ARE REQUIRED WHEN CONNECTING NEW SEWER LINES TO EXISTING LINES AND/OR FITTINGS, SEE DWG. C-2.1.6.</p> <p>3. THE CONTRACTOR SHALL INSTALL A PLUG AT THE POINT OF EXTENSION OF A SEWER MAIN PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL ALL LINES HAVE BEEN INSPECTED, TESTED, CLEANED AND FLUSHED. REMOVAL OF THE PLUG BY THE CONTRACTOR PRIOR TO APPROVAL IS A VIOLATION OF THE CARSON CITY MUNICIPAL CODE AND MAY RESULT IN FINES UP TO \$1,000 A DAY.</p> <p>4. SEWER LINES SHALL BE TESTED PER SECTION 336.03.07 OF THE SSPWC AS ADOPTED BY CARSON CITY. AN AIR PRESSURE TEST PER SECTION 336.03.07.04 AND A DEFLECTION TEST PER SECTION 336.03.09 OF THE CARSON CITY AMENDMENT TO THE SSPWC SHALL BE PERFORMED ON ALL SEWER LINES.</p> <p>5. WARNING TAPE SHALL BE INSTALLED 12 INCHES ABOVE ALL SEWER MAINS AND LATERALS. TAPE WIDTH SHALL BE 3 INCHES, THICKNESS SHALL BE FOUR 4 MIL OR GREATER AND SHALL BE GREEN AND BEAR LARGE PRINTING DENOTING "CAUTION BURIED SEWER LINE BELOW" OR EQUIVALENT WORDING.</p> <p>6. TRACER WIRE SHALL BE ATTACHED TO ALL SEWER MAINS AND LATERALS. SEE DWG. C-2.2.1.</p> <p>7. EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED FOR "TRENCH EXCAVATION AND BACKFILL" IN SECTION 305 OF THE STANDARD SPECIFICATIONS. (SEE C-1.2.1)</p> <p>8. NO SEWER LINE PIPE WITH A DIAMETER OF LESS THAN 8 INCHES SHALL BE CONNECTED TO A MANHOLE WITHOUT THE APPROVAL OF THE CITY ENGINEER OR PUBLIC WORKS DIRECTOR.</p> <p>9. MATCH PIPE INVERTS TO MANHOLE INVERTS WHERE PIPES CONNECT TO MANHOLE BASE.</p> <p>10. ALL MANHOLES SHALL BE SEALED WATERTIGHT. COVERS SHALL HAVE NO "THRU" HOLES. CLOSED PICK HOLES ONLY: SOUTH BAY FOUNDRY 1900 CPH OR APPROVED EQUAL.</p> <p>11. COAT OUTSIDE OF SEWER MANHOLE WITH FLEXIBLE RUBBERIZED COATING WHEN GROUNDWATER IS ENCOUNTERED.</p> <p>12. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER THE REQUIREMENTS OF ASTM C-1244.</p> <p>13. MANHOLE VACUUM TESTING SHALL REQUIRE THAT A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 INCHES. THE MANHOLE SHALL PASS IF THE TIME IS GREATER THAN 60 SECONDS FOR 6" DIAMETER, 75 SECONDS FOR 60" DIAMETER AND 90 SECONDS FOR 72" DIAMETER MANHOLES.</p> <p>14. NO STEPS, LADDERS OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN MANHOLES.</p> <p>15. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE ALL WEATHER ACCESS ROADWAY CONSTRUCTION, 6 FEET-1 INCH TYPE 2, CLASS 3 SUPERSEED BASE (CONCRETE TO THE SEPTIC SECTION 100.01.02) AND SEWER MANHOLE MARKERS SHALL BE INSTALLED. SEWER MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (GUM-375), 5 FEET-2 INCHES (5'-2") WITH MANHOLE DECAL (668-MH) OR APPROVED EQUAL. PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.</p> <p>16. WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION WITH AN NPC KOR-N-SEAL PIPE-TO-MANHOLE CONNECTOR OR A LINK-SEAL MODULAR SEAL.</p> <p>17. ALL HOT TAPS, GREATER THAN 2 INCHES AND LESS THAN 14 INCHES, ARE TO BE PERFORMED BY CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR. HOT TAPS ARE TO BE PERFORMED ON THE PLANS. HOT TAPS ARE PERFORMED AT LEAST 2 WORKING DAYS PRIOR TO SCHEDULING HOT TAP DATE AND TIME. (HOT TAPS ARE PERFORMED TUESDAY THRU THURSDAY EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY). PRIOR TO HOT TAPPING, THE SADDLE SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI MINIMUM OR THE DESIGN OF PIPE SYSTEM FOR A MINIMUM OF 5 MINUTES. THE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE WATER UTILITY PERSONNEL PRIOR TO PERFORMING THE TAP. FOR ALL TAPS PERFORMED BY THE CONTRACTOR, THE TAPPING EQUIPMENT SHALL BE INSPECTED AND DISINFECTED IN THE PRESENCE OF CITY FORCES PRIOR TO TAPPING.</p> <p>18. WATER VALVE MARKERS SHALL BE BLUE CARSONITE UTILITY MARKER (GUM-375), 5 FEET-2 INCHES (5'-2") WITH CARSON CITY WATER VALVE DECAL (GVM-116) OR APPROVED EQUAL. PLACE MARKER NO MORE THAN 5 FEET FROM THE VALVE OR AS DIRECTED BY THE CARSON CITY INSPECTOR.</p> <p>19. REDUCED PRESSURE PRINCIPLE AND DOUBLE CHECK VALVE BACKFLOW ASSEMBLIES SHALL BE APPROVED BY THE CARSON CITY INSPECTOR. AND TEST RESULTS SHALL BE APPROVED BY A CERTIFIED BACKFLOW ASSEMBLY TESTER, AND TEST RESULTS SHALL BE APPROVED BY CARSON CITY WATER UTILITY. FOR NEW WATER METER SETS, THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED, INSPECTED, APPROVED AND CERTIFIED TEST RESULTS PROVIDED TO THE CARSON CITY INSPECTOR WITHIN 5 DAYS OF METER SET INSTALLATION. PERSONNEL MAY NOT WORK ON THE BACKFLOW DEVICE UNLESS APPROVED BY THE SERVICE. THE SERVICE WILL BE LOCKED OFF IF INSPECTIONS AND CERTIFICATIONS ARE NOT COMPLETED AS SPECIFIED ABOVE. A 25 DOLLAR FEE WILL BE ASSESSED AT TIME OF TURN-ON WHEN LOCK IS REMOVED DURING NORMAL WORKING HOURS. THE FEE WILL BE ASSESSED ON THE BUILDING PERMIT FOR THE INSTALLATION OF THE BACKFLOW DEVICE.</p> <p>20. ALL WATER MAIN, WATER/FIRE SERVICE, AND BACKFLOW PREVENTION INSPECTIONS AND TESTING MUST BE APPROVED PRIOR TO APPROVAL OF ANY CERTIFICATE OF OCCUPANCY.</p> <p>21. DISINFECTION TABLETS SHALL BE PLACED USING TITEBOND MULTI-PURPOSE CLEAR 100% SILICONE OR APPROVED EQUAL FOOD GRADE SILICONE.</p> <p>22. ALL WATERLINE MATERIALS SHALL BE CERTIFIED TO NATIONAL SANITATION FOUNDATION/AMERICAN NATIONAL STANDARDS INSTITUTE (NSF/ANSI) 61 AND 372 STANDARDS (OR APPROVED EQUIVALENT).</p> <p>23. CONTRACTOR SHALL COMPLY WITH THE MANUFACTURERS RECOMMENDATIONS REGARDING MECHANICALLY RESTRAINED JOINTS, AND SHALL ENSURE THAT SUFFICIENT PIPE LENGTH IS RESTRAINED TO RESTRICT MOVEMENT.</p> <ul style="list-style-type: none"> * "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY DUCTILE IRON PIPE RESEARCH ASSOCIATION (BIRMINGHAM, AL) IS AVAILABLE TO DETERMINE RESTRAINED DISTANCE. * CONTRACTOR SHALL VERIFY THRUST RESTRAINT REQUIREMENTS FOR ALL PROPOSED JOINTS. CONCRETE THRUST BLOCKING MAY BE USED WHEN CONNECTING TO EXISTING PIPE THAT HAS INSUFFICIENT THRUST RESTRAINT. * RESTRAINED PUSH-ON JOINTS AND FITTINGS SHALL BE IN ACCORDANCE WITH AWWA, ASTM AND MANUFACTURER REQUIREMENTS. * RESTRAINED PUSH-ON JOINTS FOR PIPE AND FITTINGS SHALL BE DESIGNED FOR 150 PSI WATER OPERATING PRESSURE. * RESTRAINED PUSH-ON JOINT PIPE AND FITTINGS SHALL BE CAPABLE OF BEING DEFLECTED AFTER ASSEMBLY. <p>24. 18-8 STAINLESS STEEL NUTS, BOLTS AND WASHERS SHALL BE USED IN ALL UNDERGROUND OR SUBMERGED APPLICATIONS. THREADS SHALL BE UNC-ROLLED THREADS ON BOLTS COATED TO PREVENT GALLING.</p> <p>25. ALL WATER MAIN, WATER/FIRE SERVICE, AND BACKFLOW PREVENTION INSPECTIONS AND TESTING MUST BE APPROVED PRIOR TO APPROVAL OF ANY CERTIFICATE OF OCCUPANCY.</p> <p>26. DISINFECTION TABLETS SHALL BE PLACED USING TITEBOND MULTI-PURPOSE CLEAR 100% SILICONE OR APPROVED EQUAL FOOD GRADE SILICONE.</p>	<p>1. ALL WORK SHALL CONFORM TO THE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS PER NAC 445A.67145.1 ((1))</p> <p>2. WATER MAIN SHUTDOWNS/INTERRUPTION OF WATER/FIRE SERVICE: OBTAIN TENTATIVE APPROVAL FROM CARSON CITY WATER UTILITY PRIOR TO PLANNING A SHUTDOWN. APPROVAL IS REQUIRED ONE WORKING DAY PRIOR TO NOTIFICATION OF CUSTOMERS. COMMERCIAL CUSTOMERS SHALL RECEIVE 2 WORKING DAYS WRITTEN NOTICE. A SHUTDOWN AGREEMENT, ARRANGEMENTS DURING NIGHTTIME SHUTDOWNS MAY BE REQUIRED OF THE CONTRACTOR TO ACCOMMODATE CUSTOMER OPERATIONS. RESIDENTIAL CUSTOMERS SHALL RECEIVE 24 HOURS WRITTEN NOTICE. WHEN WORK IS PERFORMED BY CITY STAFF, THE CITY IS RESPONSIBLE FOR THE NOTIFICATION. THE CONTRACTOR IS RESPONSIBLE IN ANY OTHER CASES. A LIST SHALL BE KEPT BY THE RESPONSIBLE PARTY LISTING THE DATE, TIME AND ADDRESS OF ALL PERSONS NOTIFIED. THE PERSON NOTIFIED SHALL BE INCLUDED ON THE LIST FOR COMMERCIAL CUSTOMERS. CONTRACTOR OR PERSON CONTRACTED WITH THE CITY NUMBERS WHEN COMMERCIAL CUSTOMERS CANNOT BE LOCATED. THE CONTRACTOR WILL BE SUBJECT TO DAMAGE CLAIMS SHOULD THEY FAIL TO NOTIFY CUSTOMERS OR MAINTAIN DOCUMENTATION OF NOTIFICATION OF CUSTOMERS. THE TOTAL TIME OF ANY WATER SERVICE INTERRUPTION IS LIMITED TO 4 HOURS MAXIMUM. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING WATER VALVES. WATER MAIN SHUTDOWNS ARE TO BE MADE DURING MONDAY, TUESDAY, WEDNESDAY OR THURSDAY, EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY. THE CONTRACTOR SHALL MAKE A WRITTEN REQUEST, TO THE WATER OPERATIONS CHIEF, A MINIMUM OF 10 CALENDAR DAYS IN ADVANCE OF ANY PLANNED SHUTDOWN.</p> <p>3. WATER MAINS (8 INCH THRU 12 INCH) SHALL BE PVC C900, DR 18 (MINIMUM WALL THICKNESS) UNLESS HIGHER PRESSURE IS SPECIFIED ON THE PLANS. WATER SERVICES 2 INCHES OR LESS SHALL BE CTS 901, PE TUBING MINIMUM 200 PSI; WATER SERVICES 3 INCHES OR GREATER SHALL BE 4 INCH MINIMUM DIAMETER PVC C900, DR 18 OR AS SPECIFIED ON THE PLANS.</p> <p>4. MAINTAIN 18 INCHES VERTICAL AND 5 FEET HORIZONTAL SEPARATION BETWEEN ALL UNDERGROUND UTILITY LINES AND WATER LINES. WATER LINE IS BELOW POWER LINE IF WATER LINE IS WITHIN 18 INCH VERTICAL SEPARATION OF POWER LINE. POWER/TELEPHONE LINE SHALL BE ENCASED WITH 4 INCHES CONCRETE EXTENDING 5 FEET EACH SIDE OF CROSSING. (SEE NV ENERGY SPECS.) CONCRETE ENCASEMENT OF WATER LINES IS NOT ALLOWED.</p> <p>5. ALL HOT TAPS, GREATER THAN 2 INCHES AND LESS THAN 14 INCHES, ARE TO BE PERFORMED BY CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR. HOT TAPS ARE TO BE PERFORMED ON THE PLANS. HOT TAPS ARE PERFORMED AT LEAST 2 WORKING DAYS PRIOR TO SCHEDULING HOT TAP DATE AND TIME. (HOT TAPS ARE PERFORMED TUESDAY THRU THURSDAY EXCLUDING THE WORKING DAYS BEFORE AND AFTER A HOLIDAY). 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<div style="display: flex; justify-content: space-between;"> <div style="width: 33%;"> <p>CARSON CITY PUBLIC WORKS DEPARTMENT</p> <p>350 BUTTI WAY CARSON CITY, NEVADA 89701 PH: 887-7355</p> </div> <div style="width: 33%;"> <p>GENERAL NOTES</p> </div> <div style="width: 33%;"> <p>WATER GENERAL NOTES</p> </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 33%;"> <p>WATER & SEWER MAIN REPLACEMENT CARSON CITY NISSAN 2750 SOUTH CARSON STREET</p> <p>GENERAL NOTES</p> </div> <div style="width: 33%;"> <p>WATER GENERAL NOTES</p> </div> <div style="width: 33%;"> <p>WATER GENERAL NOTES</p> </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 33%;"> <p>DESIGNED BY: <</p></div></div>		





CONSTRUCTION NOTES:

- ① INSTALL 12" PVC C900, DR-18, PRESSURE CLASS 150 WATER MAIN PER STD. DRAWING C-1.2.1, MEGALUG RETAINER GLANDS FOR PVC PIPE SHALL BE USED ON ALL FITTINGS, CONTRACTOR TO VERIFY RESTRAINT LENGTH PER MANUFACTURERS RECOMMENDATIONS.
- ② INSTALL 12" GATE VALVE PER STD. DRAWING C-3.1.4.
- ③ INSTALL 48" SANITARY SEWER MANHOLE TYPE 1, PER STD. DRAWING C-2.1.3. ADJUST FRAME AND COVER TO NEW FINISHED GRADE PER STD. DRAWING C-2.1.5.
- ④ DEMO AND REMOVE EXISTING SANITARY SEWER MANHOLE AND RELATED SEWER MAIN PIPING TO NEW SEWER MANHOLE LOCATION.
- ⑤ INSTALL SEWER MAIN TRANSITION PER STD. DRAWING C-2.1.6.
- ⑥ REMOVE EXISTING 8" SEWER MAIN AND INSTALL 10" SDR35 PVC SEWER PIPE PER STD. DRAWING C-1.2.1.
- ⑦ PROVIDE "SPECIAL CONSTRUCTION" MITIGATION TO BOTH AFFECTED LINES. CENTER NEW 20' LONG PIPE SECTION ON UTILITY CROSSING. REFERENCE NDEP BUREAU OF SAFE DRINKING WATER VERTICAL CROSSING CONFLICTS SUMMARY ON SHEET G2. INSTALL MEGALUG RETAINER GLANDS FOR USE WITH C-900 PVC PER MANUFACTURER'S RECOMMENDATIONS. FUSIBLE C-900 PVC PIPE MAY BE USED IN LIEU OF RESTRAINED JOINTS.
- ⑧ POTHOLE TO VERIFY EXACT DEPTH AND/OR MAKE & MATERIALS.
- ⑨ PROTECT-IN-PLACE



DESIGNED BY: DGR/DLO/TBG
DRAWN BY: DGR/DLO
CHECKED BY: TBG/DSA
Dwg. No.: *Sheet # - Drawing*
Scale (HoriZ): 1" = 30'
Scale (Vert): 1" = 3'
Plot Date: 12/13/18

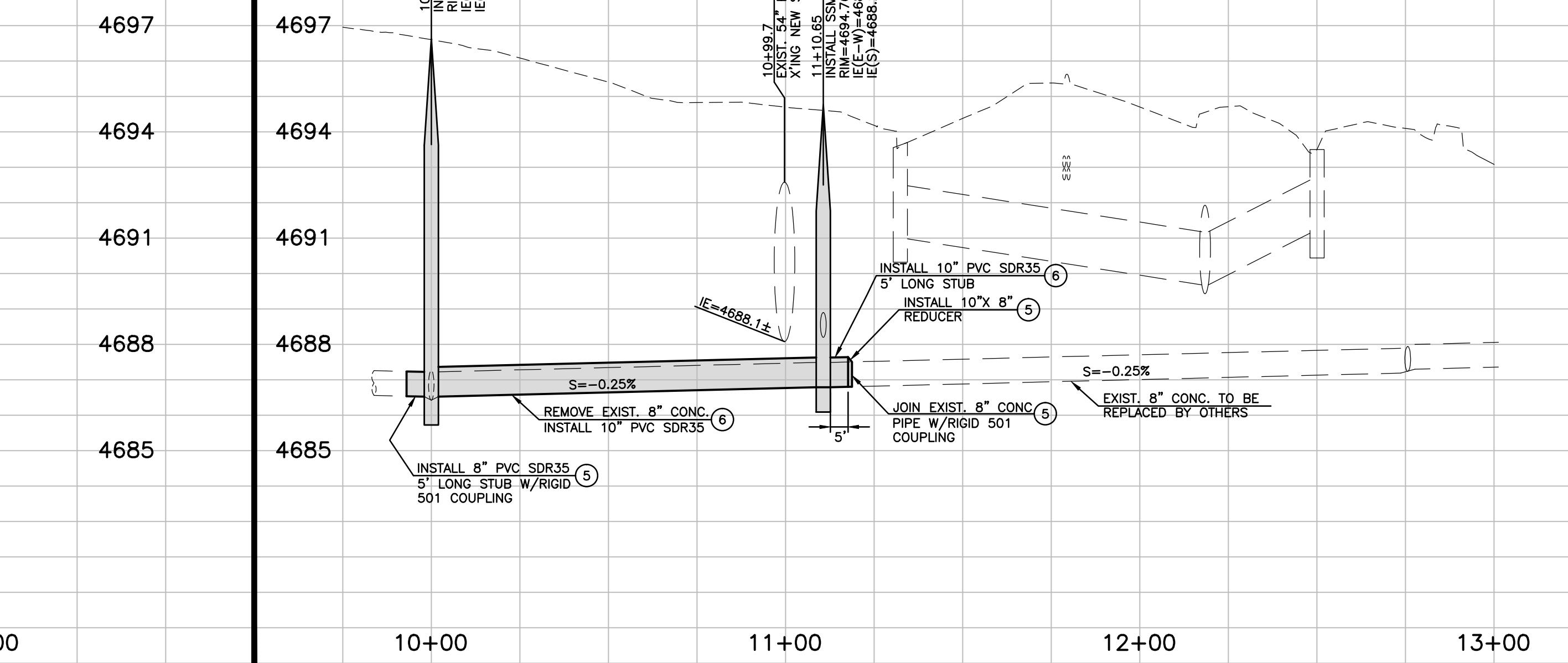
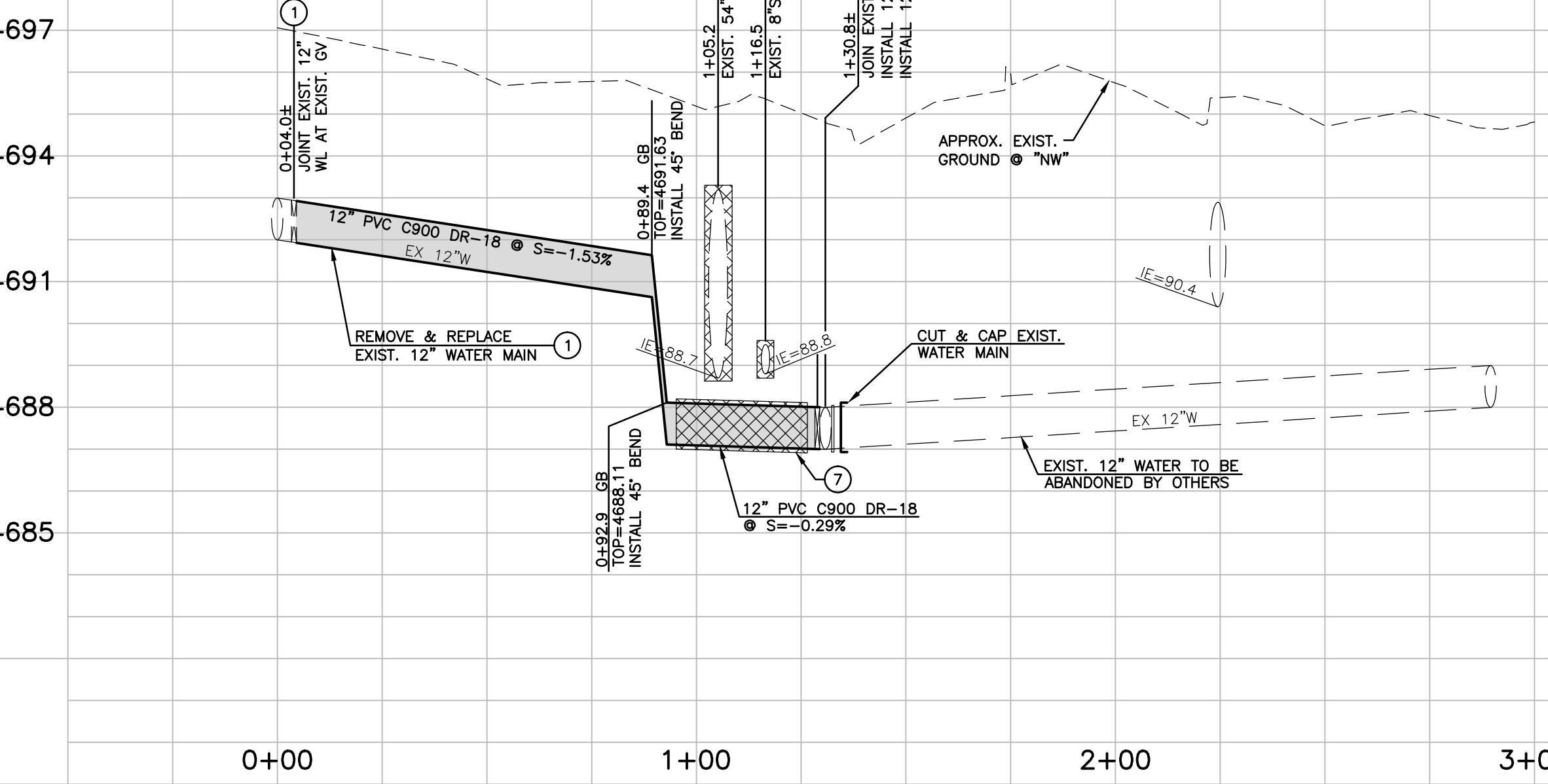
**CARSON CITY
PUBLIC WORKS DEPARTMENT**

3505 BUTTI WAY CARSON CITY, NEVADA 89701
PH: 887-2355 FAX: 887-2112

SEAL OF THE STATE OF NEVADA
THOMAS B. GRUNDY
CIVIL
No. 18808
Exp. 6/30/19
DATE: 12/13/2018

LEGEND

AREAS OF SPECIAL CONSTRUCTION FOR NDEP BUREAU OF SAFE DRINKING WATER VERTICAL CROSSING CONFLICTS SUMMARY



REV.	DATE	DESCRIPTION	BY APP'D
4697			
4694			
4691			
4688			
4685			
4697			
4694			
4691			
10+00			
11+00			
12+00			
13+00			

**WATER & SEWER MAIN REPLACEMENT
CARSON CITY NISSAN
2750 SOUTH CARSON STREET
S. CARSON STREET
WATER AND SEWER PLAN & PROFILE
WATERLINE "NW" AND SEWER LINE "NSS"**

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
OR
1-800-227-2600

SHEET C1 OF 6

CARSON CITY PUBLIC WORKS DEPARTMENT

DESIGNED BY: DGR/DLO/TBG DRAWN BY: DGR/DLO
CHECKED BY: TBG/DSIA DRAWN BY: _____
DWG. NO.: 837-2355 DRAWN BY: _____
SCALE (HORIZ): N/A DRAWN BY: _____
SCALE (VERT): N/A DRAWN BY: _____
PLOT DATE: 12/13/18 PLOT DATE: _____

TYPICAL TRENCH SECTION

NOTES:

- WATER DENSIFIED BACKFILL AND TUNNELING SHALL BE BY SPECIAL PROVISION ONLY.
- BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF CLASS E BACKFILL AS SPECIFIED IN SUBSECTION 200.03.06 OF THE SSPWC. MATERIAL SHALL BE PLACED IN LIFT THICKNESS SPECIFIED IN SUBSECTION 305.10 OF THE SSPWC AND DENSIFIED TO 90% RELATIVE COMPACTION.
- BEDDING SHALL CONFORM TO THE REQUIREMENTS OF CLASS A BACKFILL AS SPECIFIED IN SUBSECTION 200.03.02 OF THE SSPWC. MATERIAL SHALL BE DENSIFIED TO 90% RELATIVE COMPACTION.
- PLANS SHALL INCLUDE A DETAIL FOR SUBGRADE STABILIZATION INCLUDING BACKFILL MATERIAL, STRUCTURAL GEOTEXTILE FILTER FABRIC AND MODIFIED CUTOFF COLLARS WHEN POTENTIAL FOR UNSTABLE SUBGRADES EXIST, SUBJECT TO THE APPROVAL OF THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.
- FOR TRENCHES IN ROADWAY SECTION, SEE PAVEMENT PATCH DETAIL (DWG. NO. C-5.1.6).
- FOR THE PURPOSE OF PAYMENT, EXCAVATION AND BACKFILL QUANTITIES ARE BASED ON THESE STANDARD DRAWINGS, AND NO ADDITIONAL COMPENSATION WILL BE MADE, SHORING OR SLOPED CUT SLOPES MAY BE NECESSARY, BUT THERE WILL BE NO ADDITIONAL PAYMENT. ALL EXCAVATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.
- PLACE WARNING TAPE 1 FOOT ABOVE ALL BURIED PIPES AND CONDUITS.
- TRACER WIRE SHALL BE 12 GAUGE (MINIMUM THICKNESS) INSULATED SOLID COPPER WIRE. INSULATION SHALL BE 30 MIL HDPE. PLANS SHALL SPECIFY WIRE STRENGTH AND INSULATION THICKNESS FOR BORING APPLICATIONS. SPLICES SHALL BE CONNECTED BY WIRE NUTS, SEALED WITH AQUA SEAL OR SILICONE FILLED, AND DOUBLE WRAPPED WITH 1/2 LISTED ELECTRICAL TAPE. TRACER WIRE COLOR SHALL BE: BLUE FOR WATER, PURPLE FOR RECLAIMED WATER, GREEN FOR SEWER AND YELLOW FOR ELECTRICAL OR FIBER OPTIC.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	NOTE 8	9/17	TRENCH EXCAVATION AND BACKFILL	CARSON CITY
			DRAWING NO. C-2.1.1 (305)	
			DATE SEP 2017	
APPROVED BY:  9/17				

EXPLDED VIEW

TYPICAL SECTION

PLAN VIEW-BASE

NOTES:

- INSTALL TEMPORARY COVER WITH CONE INSTALLATION WHEN INSTALLING NEW MANHOLE OR PRIOR TO REMOVING EXISTING FRAME & COVER AND GRADE RINGS TO ADJUST TO FINISH GRADE. INSTALL COVER OVER MANHOLE BASE TO PREVENT DEBRIS FROM ENTERING SEWER SYSTEM. THE MANHOLE BASE COVER SHALL BE IN PLACE PRIOR TO PERFORMING ANY ADJUSTMENTS OR GROUTING AND SHALL REMAIN IN PLACE WHILE ADJUSTMENTS OR GROUTING ARE BEING PERFORMED. REMOVE BASE COVER UPON ADJUSTMENT APPROVAL BY CARSON CITY.
- CONCRETE SHALL CONFORM TO THE SSPWC SECTION 202.01.12. REBAR SHALL BE USED ONLY WHEN THE MANHOLE IS LOCATED OUTSIDE PAVED AREAS.
- THE CONCRETE COLLAR SHALL BE LEFT 2 1/2 INCHES TO 3 INCHES BELOW FINISHED ASPHALT SURFACE. APPLY AN APPROVED TACK COAT (CONFORMING TO THE SSPWC SECTION 316) AND FILL VOID BETWEEN ADJACENT PAVEMENT AND FRAME WITH TYPE 3 AC 20 PAVING (CONFORMING TO THE SSPWC SECTION 320). APPLY FOG SEAL (CONFORMING TO SSPWC SECTION 317) TO THE ASPHALT SURFACE. ALL CUTS IN PAVING SHALL BE STRAIGHT AND EVEN. EXCEPTION: WHEN STRUCTURE NOT LOCATED IN ASPHALT PAVEMENT OR LOCATED IN AN UNPAVED AREA, EXTEND CONCRETE TO FINISH GRADE.
- INSTALL NEW FRAME & COVER UNLESS OTHERWISE SHOWN ON THE PLANS OR SPECIAL CONDITIONS. FRAME & COVER SHALL BE SET FLUSH WITH FINISH GRADE UNLESS OTHERWISE NOTED.
- FOR NEW MANHOLE INSTALLATIONS, DISTANCE FROM COVER TO CONE SHALL BE 12 INCHES MINIMUM AND 18 INCHES MAXIMUM. △ FOR ADJUSTING EXISTING FRAME & COVERS THE DISTANCE FROM COVER TO CONE SHALL NOT EXCEED 18 INCHES.
- WHEN LOCATED IN NDOT RIGHT-OF-WAY, CONCRETE COLLAR SHALL CONFORM TO NDOT STANDARD PLAN SHT R-4.7.3 AND STANDARD SPECIFICATION 609.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	NOTE 8	9/17	MANHOLE TYPE 1	CARSON CITY
			DRAWING NO. C-2.1.3 (204, 306)	
			DATE SEP 2017	
APPROVED BY:  9/17				

MANHOLE ADJUSTMENT TYPICAL SECTION

SECTION A-A

TEMPORARY COVER TYPICAL SECTION

NOTES:

- SEWER COUPLINGS SHALL BE USED AT LOCATIONS WHERE TWO PIPES OF EQUAL NOMINAL SIZE AND EQUAL OR DIFFERENT DIAMETERS ARE BEING JOINED. (i.e. 8 INCH SDR PVC TO 8 INCH SDR PVC, OR 8 INCH PVC TO 8 INCH CLAY.)
- ECCENTRIC GASKETED PVC SEWER TRANSITION FITTINGS SHALL BE USED AT ALL LOCATIONS WHERE TWO PIPES OF UNEQUAL NOMINAL SIZES ARE TO BE JOINED. (i.e. 6 INCH SDR PVC TO 8 INCH PIPE.)
- GASKETED PVC SEWER FITTINGS, SEWER CLAMP COUPLINGS OR SEWER STRAIGHT COUPLINGS SHALL BE USED AT LOCATIONS WHERE TWO PIPES OF EQUAL SIZE AND DIAMETER ARE BEING JOINED. (i.e. 8 INCH SDR PVC TO 8 INCH SDR PVC, 8 INCH C900 PVC TO 8 INCH C900 PVC.)
- SEWER TRANSITION COUPLINGS SHALL BE USED AT LOCATIONS WHERE TWO PIPES OF EQUAL NOMINAL SIZE AND UNEQUAL DIAMETER ARE BEING JOINED. (i.e. 8 INCH SDR PVC TO 8 INCH C900 PVC) ECCENTRIC COUPLINGS WHICH MATCH PIPE INVERTS SHALL BE USED AT LOCATIONS WHERE THE EXISTING DOWNSTREAM PIPE INNER DIAMETER IS LESS THAN THE UPSTREAM PIPE INNER DIAMETER.
- SEWER CLAMP COUPING BODY AND CLAMP BOLTS, WASHERS & NUTS SHALL BE 304 STAINLESS STEEL. CLAMP COUPLING LENGTH SHALL BE 12 INCH MINIMUM FOR 8 INCH PIPE AND LARGER, ROMAC STYLE LSST, LSZ, LSS FOR SEWER OR APPROVED EQUAL.
- SEWER STRAIGHT AND TRANSITION COUPLINGS SHALL BE RIGID TYPE, DUCTILE IRON BODY AND END RINGS WITH HIGH STRENGTH LOW ALLOY STEEL NUTS & BOLTS, ROMAC STYLE 501 FOR SEWER OR APPROVED EQUAL COAT ALL EXPOSED BARE METAL, NUTS AND BOLTS WITH COLD-APPLIED WATER BASED ENAMEL OR BLACK ASPHALT.
- ECCENTRIC COUPLINGS FOR MATCHING INVERTS OF NEW PIPE FLOWING INTO EXISTING PIPE SHALL BE ROMAC COUPLINGS OR APPROVED EQUAL. COAT ALL EXPOSED BARE METAL NUTS AND BOLTS ON ROMAC COUPLINGS WITH COLD-APPLIED WATER BASED ENAMEL OR BLACK ASPHALT.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	NOTE 4 & 7	9/17	MANHOLE FRAME & COVER ADJUSTMENT	CARSON CITY
			DRAWING NO. C-2.1.5 (204, 323)	
			DATE SEP 2017	
APPROVED BY:  9/17				

SEWER MAIN AND LATERAL TRANSITIONS

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	NOTE 4 & 7	9/17	SEWER MAIN AND LATERAL TRANSITIONS	CARSON CITY
			DRAWING NO. C-2.1.6 (203, 306)	
			DATE SEP 2017	
APPROVED BY:  9/17				

TYPICAL SECTION

NOTES:

- SUPPORT BLOCK SHALL BE POURED AGAINST UNDISTURBED SOIL AND NOT PREVENT ACCESS TO BOLT ASSEMBLY OR VALVE JOINTS.
- CONCRETE SHALL CONFORM TO THE SSPWC SECTION 337.10. REBAR SHALL ONLY BE USED WHEN THE VALVE BOX IS LOCATED OUTSIDE PAVED AREAS.
- THE CONCRETE COLLAR SHALL BE LEFT 2 1/2 INCHES - 3 INCHES BELOW FINISHED ASPHALT SURFACE. APPLY AN APPROVED TACK COAT (CONFORMING TO THE SSPWC SECTION 316) AND FILL VOID BETWEEN ADJACENT PAVEMENT AND FRAME WITH TYPE 3 PG 64-22 PAVING (CONFORMING TO THE SSPWC SECTION 320). APPLY FOG SEAL (CONFORMING TO THE SSPWC SECTION 317) TO THE ASPHALT SURFACE. ALL CUTS IN PAVING SHALL BE STRAIGHT AND EVEN. EXCEPTION: WHEN STRUCTURE NOT LOCATED IN ASPHALT PAVEMENT OR IN AN UNPAVED AREA, EXTEND CONCRETE TO FINISH GRADE.
- LIDS SHALL BE SET FLUSH WITH FINISH GRADE UNLESS OTHERWISE NOTED.
- WHEN LOCATED IN NDOT RIGHT-OF-WAY, CONCRETE COLLAR SHALL CONFORM TO NDOT STANDARD PLAN SHT R-4.3.3 AND STANDARD SPECIFICATION 609.
- VALVES ON FIRE LINES SHALL BE UL/FM APPROVED AND MEET ALL APPLICABLE NFPA REQUIREMENTS.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	TRACER WIRE	9/17	GATE VALVE	CARSON CITY
			DRAWING NO. C-3.1.4 (203,307)	
			DATE SEP 2017	
APPROVED BY:  9/17				

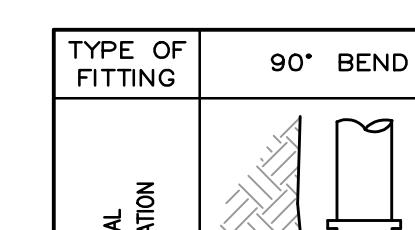
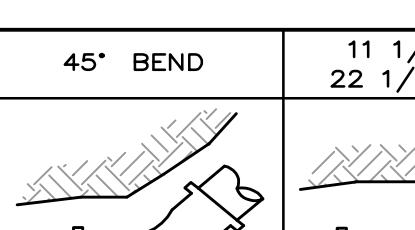
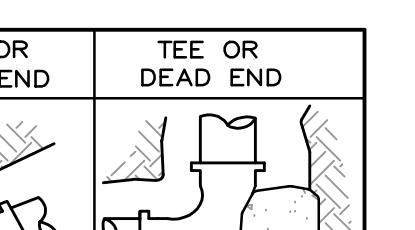
ISOMETRIC VIEW

NOTES:

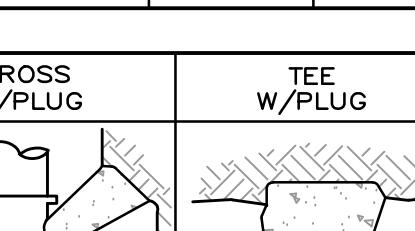
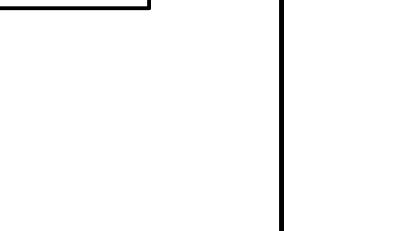
- VALVE BOX AND LID SHALL BE H20 TRAFFIC RATED WITH A MINIMUM INSIDE DIAMETER OF 10 INCHES (CHRISTY GS TRAFFIC VALVE BOX & LID).
- CAST IRON LID SHALL BE MARKED AT THE FACTORY "WATER" FOR WATER APPLICATIONS, "RECLAIMED WATER" OR "RCW" FOR RECLAIMED WATER APPLICATIONS, AND "SS FORCE MAIN" OR "SSFM" FOR SANITARY SEWER APPLICATIONS.
- FOR RECLAIMED WATER AND SANITARY SEWER APPLICATIONS, CAST IRON LID SHALL BE EPOXY COATED AT THE FACTORY, OR POWER COATER COLOR SHALL BE PURPLE FOR RECLAIMED WATER APPLICATIONS AND GREEN FOR SANITARY SEWER APPLICATIONS.
- VALVE BOX SHALL BE SET OR ADJUSTED TO GRADE PER DRAWING NO. C-3.1.4, RISER FOR ADJUSTED VALVE BOX SHALL BE PER DRAWING NO. C-3.1.4, FOR OVERLAY ADJUSTMENTS, RISER WILL NOT REQUIRE REPLACEMENT OR EXTENSION IF IT EXTENDS A MINIMUM OF 2 INCHES INTO ADJUSTED VALVE BOX.
- GRADE RING IS NOT ALLOWED FOR NEW VALVE BOX INSTALLATIONS. CAST IRON GRADE RING (CHRISTY GS GRADE RING) MAY BE USED FOR OVERLAY ADJUSTMENTS WHEN OVERLAY DEPTH EQUALS THE GRADE RING DEPTH. NO MORE THAN ONE GRADE RING ALLOWED PER BOX.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	TRACER WIRE	9/17	VALVE BOX & LID	CARSON CITY
			DRAWING NO. C-3.1.6 (203,306,307)	
			DATE SEP 2017	
APPROVED BY:  9/17				

THRUST BLOCK BEARING AREA (SQ. FT.)

TYPE OF FITTING	90° BEND	45° BEND	11 1/4" OR 22 1/2" BEND	TEE OR DEAD END	TEE W/PLUG	CROSS W/PLUG
TYPICAL INSTALLATION						
TYPE OF PIPE	90° BEND	45° BEND	11 1/4" OR 22 1/2" BEND	TEE OR DEAD END	TEE W/PLUG	CROSS W/PLUG
SIZE OF PIPE	4"	2	1	1	2	2
	6"	4	4	2	4	4
	8"	7	4	2	5	7
	10"	12	6	3	8	12
	12"	16	10	5	12	16
	14"	20	12	6	14	20
	16"	27	15	8	18	27
	18"	45	25	13	32	45
	24"	65	35	18	46	65

THRUST BLOCK BEARING AREA (SQ. FT.)

TYPE OF FITTING	CROSS W/PLUG	TEE W/PLUG
TYPICAL INSTALLATION		

NOTES:

- THRUST BLOCKS TO BE CONSTRUCTED OF CONCRETE CONFORMING TO 337.10 OF THE SSPWC AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS.
- AREAS GIVEN ARE FOR CLASS 150 PIPE AT WORKING AND TESTING PRESSURE OF 150 P.S.I., WITH 2000 P.S.F. BEARING CAPACITY. INSTALLATIONS USING DIFFERENT PIPE, TEST PRESSURES, AND/OR SOIL TYPES SHOULD HAVE AREAS ADJUSTED ACCORDINGLY, SUBJECT TO THE APPROVAL OF THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.
- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
- JOINTS, FLANGES, NUTS, BOLTS AND FACE OF PLUG SHALL BE KEPT CLEAR OF CONCRETE.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
✓/A	TRACER WIRE	9/17	THRUST BLOCKS	CARSON CITY
			DRAWING NO. C-3.1.14	
			DATE SEP 2017	
APPROVED BY:  9/17				

WATER & SEWER MAIN REPLACEMENT CARSON CITY NISSAN STREET 2750 SOUTH CARSON STREET CONSTRUCTION DETAILS

SEAL OF THE STATE OF NEVADA
THOMAS B. GRUNDY, CIVIL
No. 18808
Exp. 6/30/19
DATE: 12/13/2018

SHEET C2 OF 6