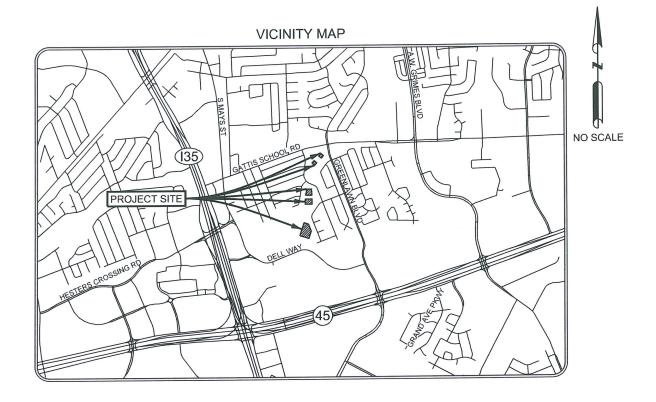
CITY OF ROUND ROCK KENSINGTON CHANNEL IMPROVEMENTS

NOVEMBER 21, 2016

100% PLANS

INDEX OF SHEETS

- 1. TITLE SHEET
- 2. GENERAL NOTES
- 3. SITE LAYOUT / EROSION & SEDIMENTATION CONTROL
- 4. TRAFFIC CONTROL PLAN
- PLAN LOCATION A
- PLAN LOCATION B
- PLAN LOCATION C 8. PLAN LOCATION D
- 9. PLAN LOCATION E
- 10. CROSS SECTIONS 1 OF 2
- 11. CROSS SECTIONS 2 OF 2
- 12. DETAILS 1 OF 2
- 13. DETAILS 2 OF 2



I, CHAD M. CORMACK, P.E., DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE STORMWATER DRAINAGE POLICY ADOPTED BY THE CITY OF ROUND ROCK, TEXAS.

CHAD M. CORMACK, P.E.

PROJECT ENGINEER

11/21/2016 DATE

PREPARED FOR:



PREPARED BY:



1120 S. Capital of Texas Highwork CityView 2, Suite 100 Austin, Texas 78746 P: 512-338-1704 F: 512-338-1784

ALL RESPONSIBILITY OF THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF ROUND ROCK MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN **ENGINEER**

ACCEPTED FOR CONSTRUCTION:

SERVICES DEPARTMENT

CITY OF ROUND ROCK, TEXAS UTILITIES AND ENVIRONMENTAL

11/21/16

COORDINATES:

PROJECT COORDINATES SHOWN HEREON ARE SURFACE VALUES BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD83 WHICH IS BASED ON LEICA'S CENTRAL TEXAS SMARTNET NETWORK. THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.99988506.

REVISIONS RECORD

DESCRIPTION

GENERAL NOTES

- All construction shall be in accordance with the City of Round Rock Standard Specifications Manual except where modifications or other specifications are called for in these plans.
- Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not
 planned for destruction or removal that are damaged or removed shall be
 repaired or replaced at Contractor's expense.
- repaired or replaced at Contractor's expense.

 3. The Contractor shall verify all depths and locations of existing utilities prior to any construction. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer who shall be responsible for revising the plans as appropriate.
- Manhole frames, covers, valves, cleanouts, etc. shall be raised to finished grade prior to final paving construction.
- grade prior to final paving construction.

 The Contractor shall give the City of Round Rock 48 hour notice before beginning each phase of construction. Contact the assigned Project Manager
- All areas disturbed or exposed during construction shall be revegetated in accordance with the plans and specifications. Where not specifically identified, revegetation of all disturbed or exposed areas shall consist of sodding or specific at the Contractor's portion.
- sodding or seeding, at the Contractor's option.
 Prior to any construction, a preconstruction conference shall be held between the City of Round Rock, the Engineer, the Contractor, other utility companies, any affected parties and any other entity the City or Engineer may require
- The Contractor shall keep accurate records of all construction that deviates from the plans. The Contractor shall furnish the City of Round Rock accurate "As-Built" notated drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the City prior to final acceptance.
- acceptance.

 10. When construction is being carried out within easements, the Contractor shall confine his work to within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the City.

 11. Prior to any construction, the Contractor shall apply for and secure all
- 11. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.12. All testing shall be done by an independent laboratory at the City's expense
- 12. All testing shall be done by an independent laboratory at the City's expense unless specified otherwise. Any retesting shall be paid for by the Contractor. A City Inspector shall be present during all tests. Testing shall be coordinated with the City Inspector and he shall be given a minimum of 24 hour notice prior to any testing.
- Traffic control in accordance with a designated Traffic Control Plan shall be placed and maintained as necessary during construction for workers and public safety.
- Available benchmarks (NAVD '88 Datum) that may be utilized for the construction of this project are shown on sheets and described as follows:

BENCHMARK #1 (SITE BM 23898-2) (SET) CUT SQUARE ON CURB INLET N 10151943.84 E 3135954.33 ELEV. 781.12' (NAVD88)

TRENCH SAFETY NOTES:

- In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected.
 In accordance with the U. S. Occupational Safety and Health Administration
- In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4 feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
- 3. If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the City notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained.

TRAFFIC MARKING NOTES

- Any methods, street markings and signage necessary for warning motorists, warning pedestrians or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, Lasts edition.
- and Highways, latest edition.

 2. All pavement markings, markers, paint, traffic buttons, traffic controls and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and, the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION AND SEDIMENTATION CONTROL

- Erosion control measures, site work and restoration work shall be in accordance with the City of Round Rock Erosion and Sedimentation Control Ordinance.
- All disturbed unpaved areas and slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied and in accordance with the plans.
- season in which they are applied and in accordance with the plans.

 3. Silt fences, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected by the City of Round Rock for effectiveness. Additional measures may be required if, in the opinion of the City, they are warranted.
- 4. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the City. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the City.
- All mud, dirt, rocks, debris, etc., spilled, tracked or otherwise deposited on existing paved streets, drives and areas used by the public shall be cleaned up immediately.

| | TREE LIST | |
|---------|---------------|---------|
| TAG NO. | DESCRIPTION | REMOVED |
| 2401 | 9" ELM | |
| 2402 | 8" ELM | |
| 2403 | 12" ELM | |
| 2404 | 15" PINE | |
| 2405 | 13" PINE | |
| 2406 | 20" HACKBERRY | |
| 2407 | 12" CYPRESS | |
| 2408 | 13" CYPRESS | |
| 2409 | 9" CYPRESS | Х |
| 2410 | 8" CYPRESS | |
| 2411 | 14" CYPRESS | |
| 12532 | 9" WILLOW | |

| REVISION DESCRIPTION | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|
| BY DATE | | | | | | | | |
| | | | | | | | | |
| NO | | | | | | | | |
| SE OF TAIL | | | | | | | | |



K FRIESE & ASSOCIATES, INC.

120 S. CAPITAL OF TEXAS HWY, II-100, AUSTIN, TX 7

CITY OF ROUND ROCK

KENSINGTON CHANNEL IMPROVEMENTS

NOT

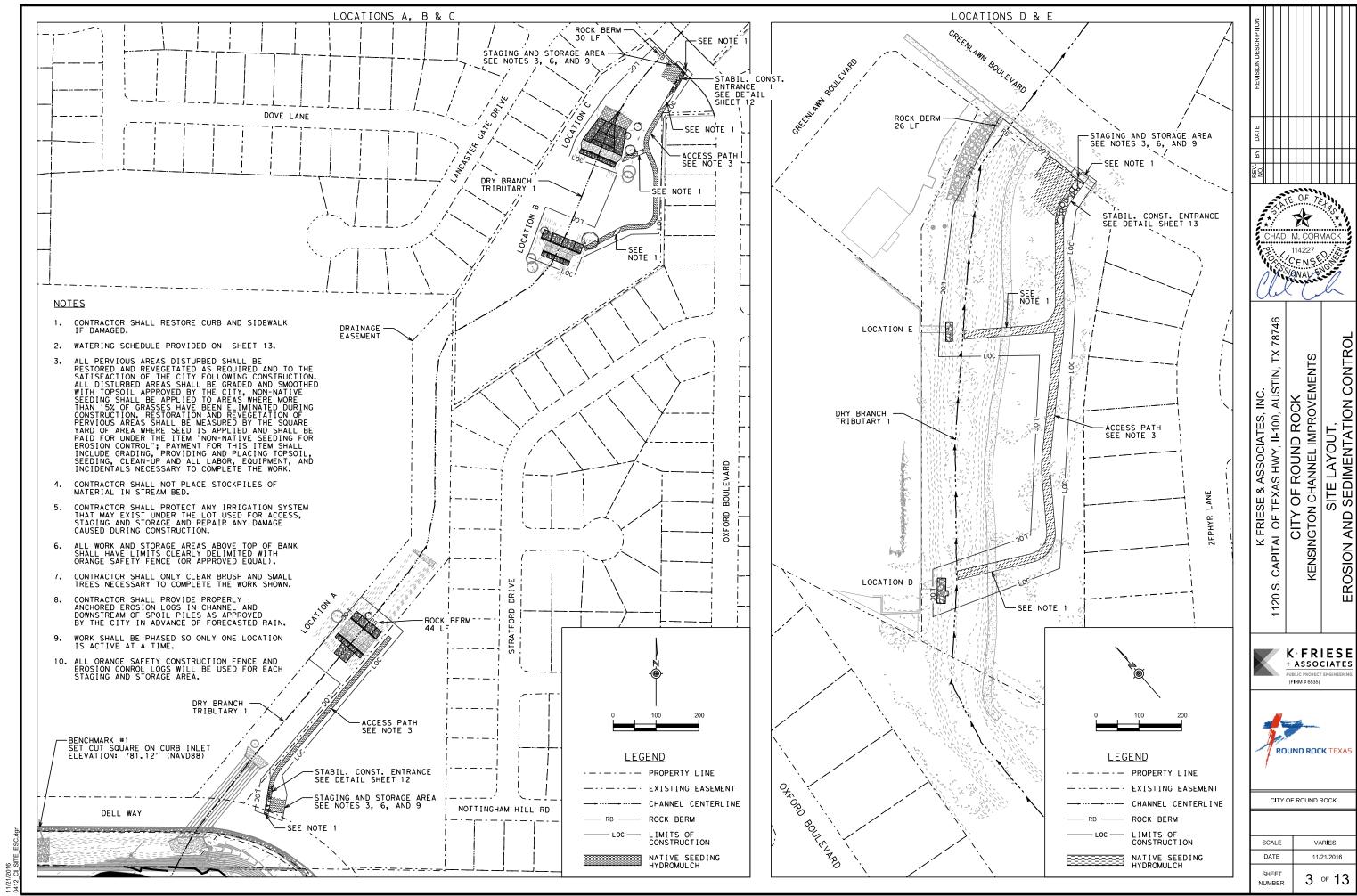
GENERAL

K · FRIESE
+ ASSOCIATES
PUBLIC PROJECT ENGINEERING
(FIRM # 6535)



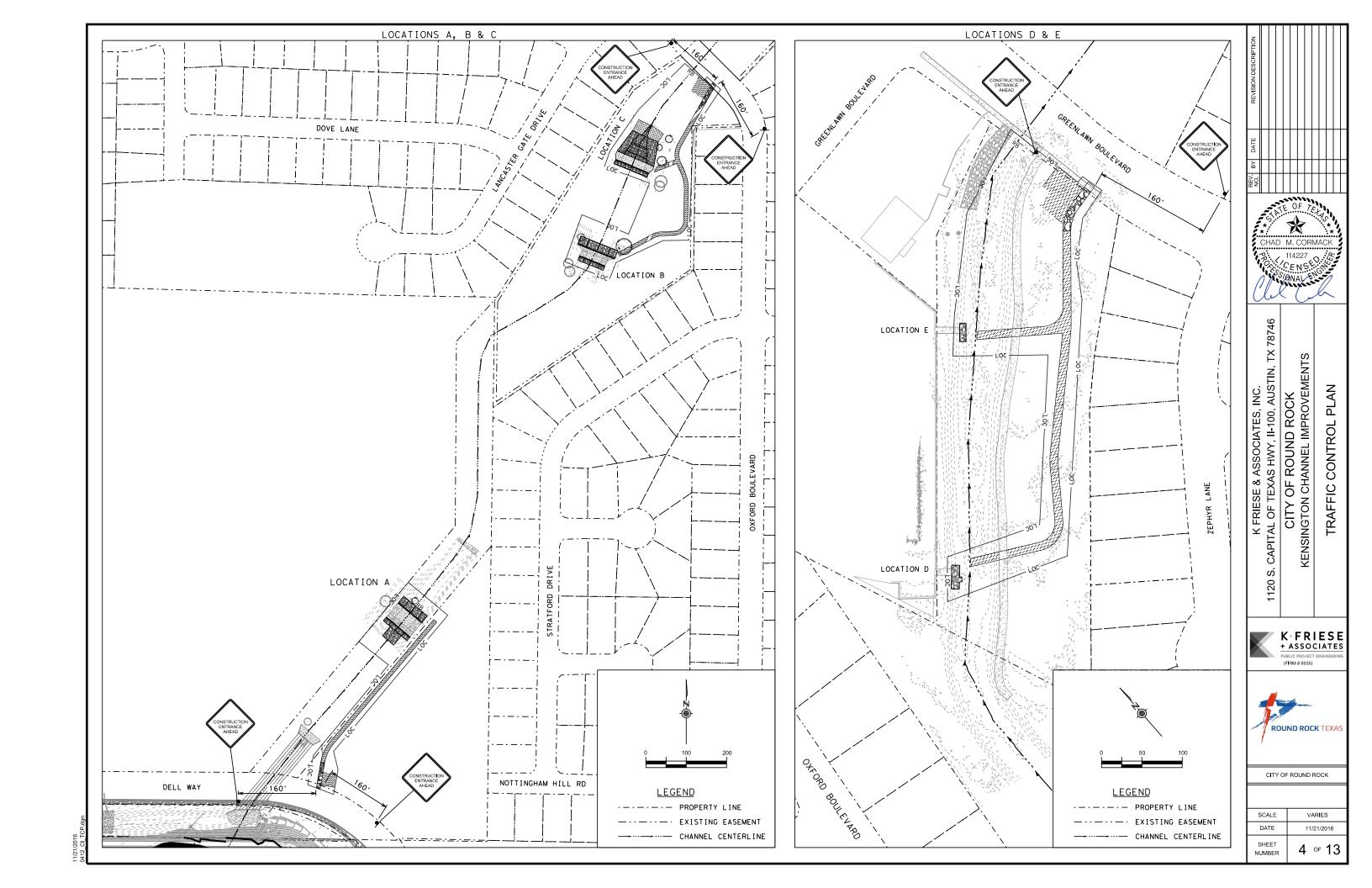
CITY OF ROUND ROCK

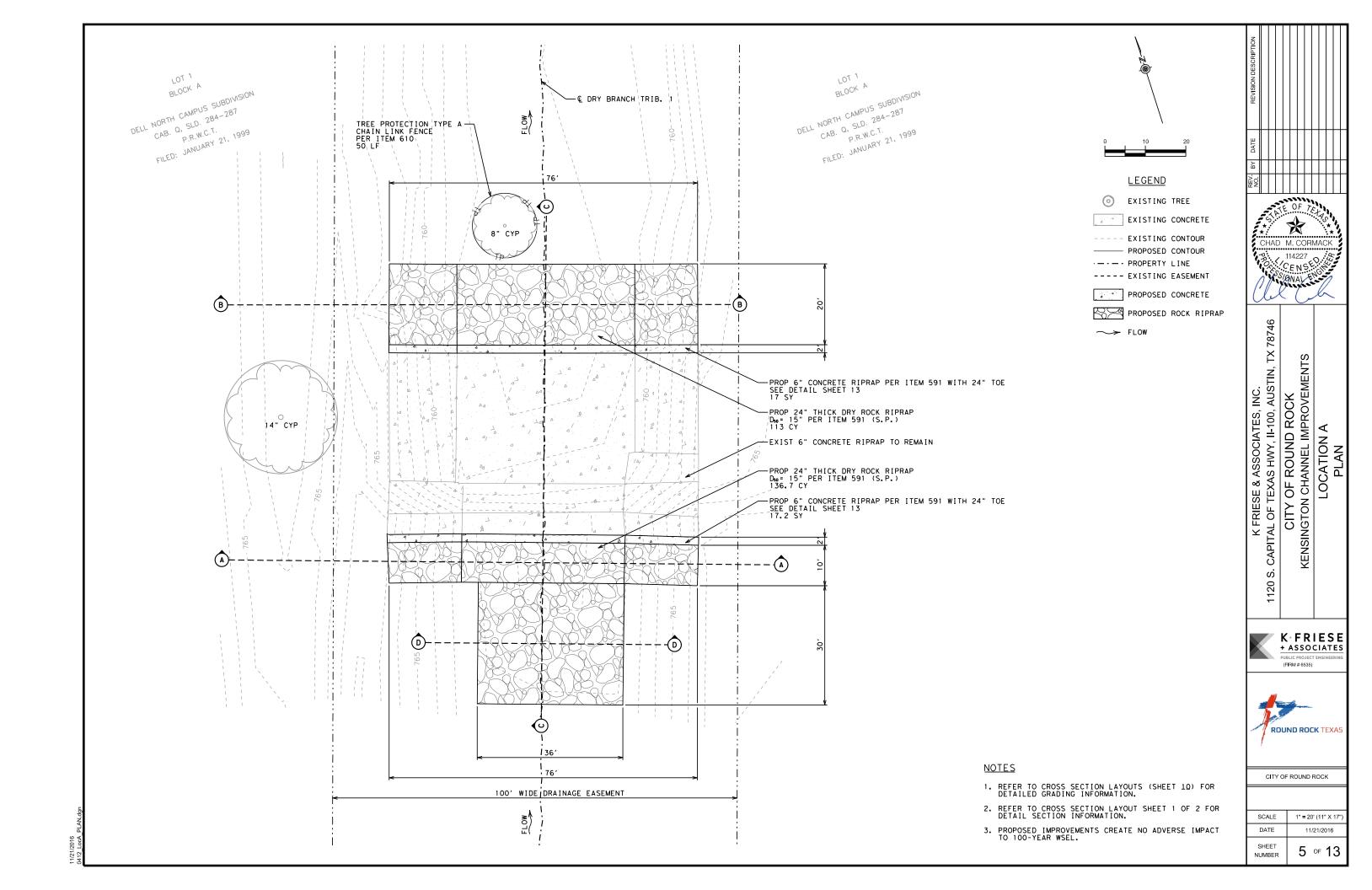
| SCALE | |
|-------|------------|
| DATE | 11/21/2016 |
| SHEET | 2 of 13 |

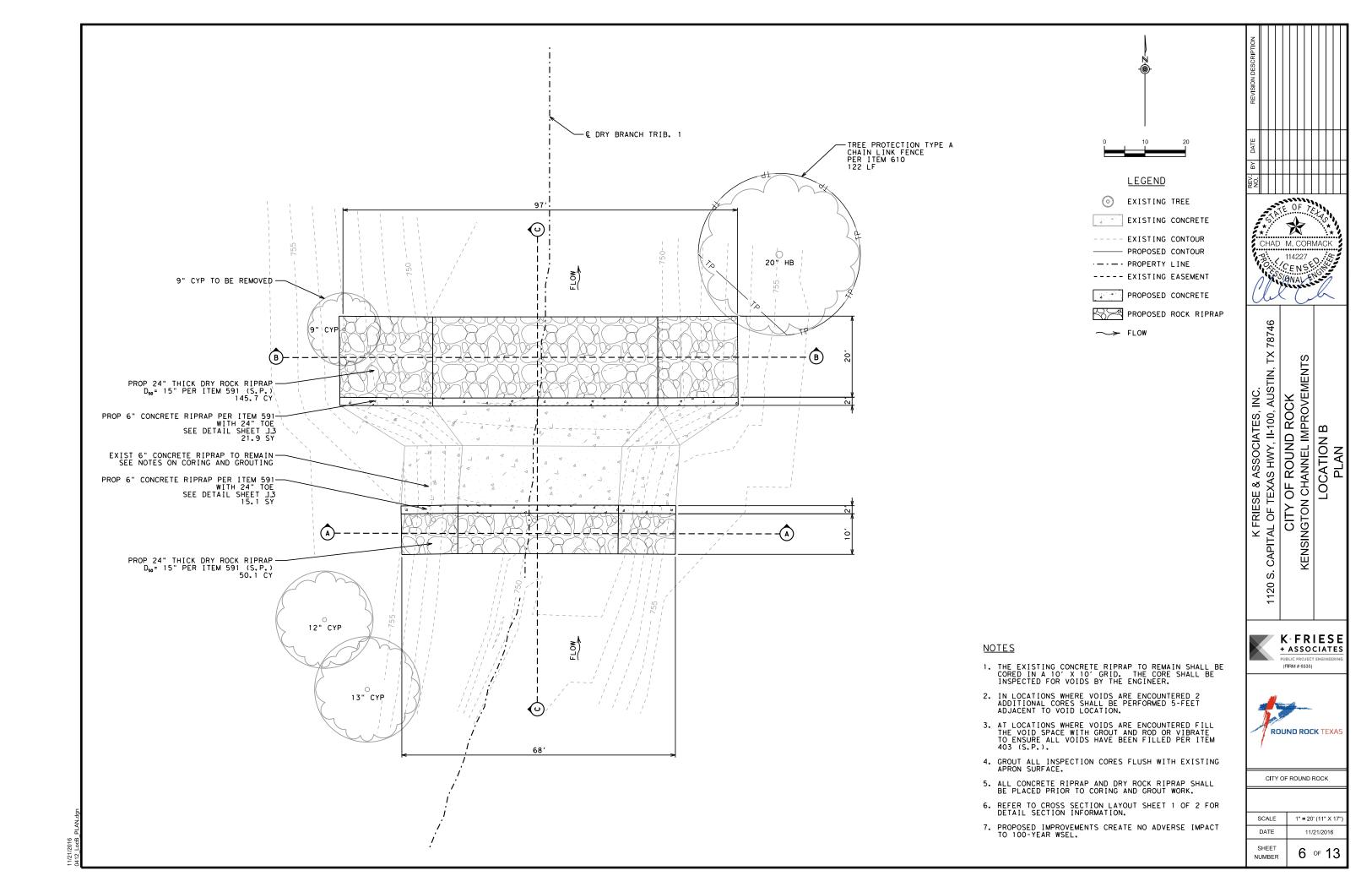


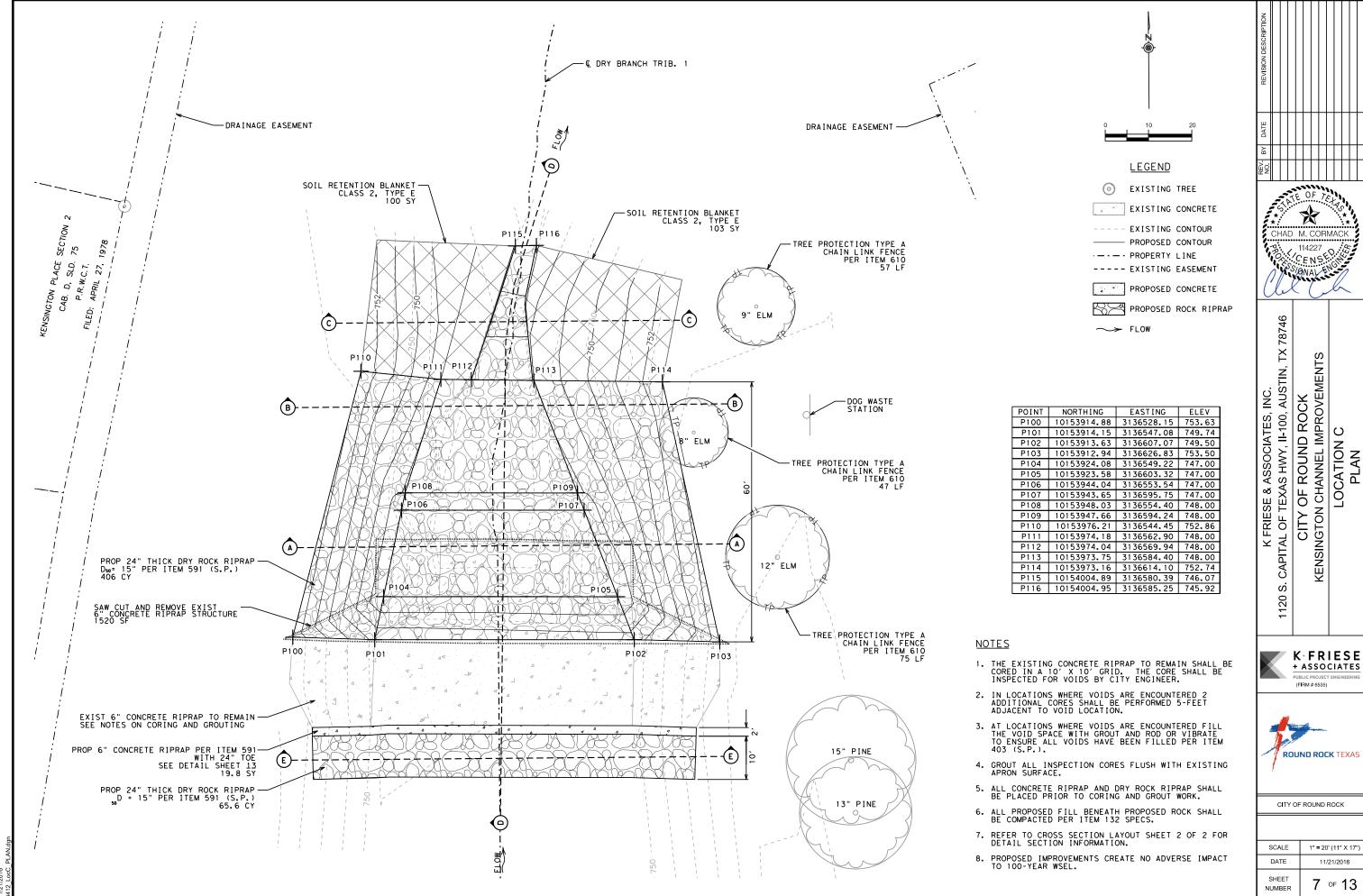


| SCALE | VARIES |
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| DATE | 11/21/2016 |
| SHEET NUMBER | 3 of 13 |





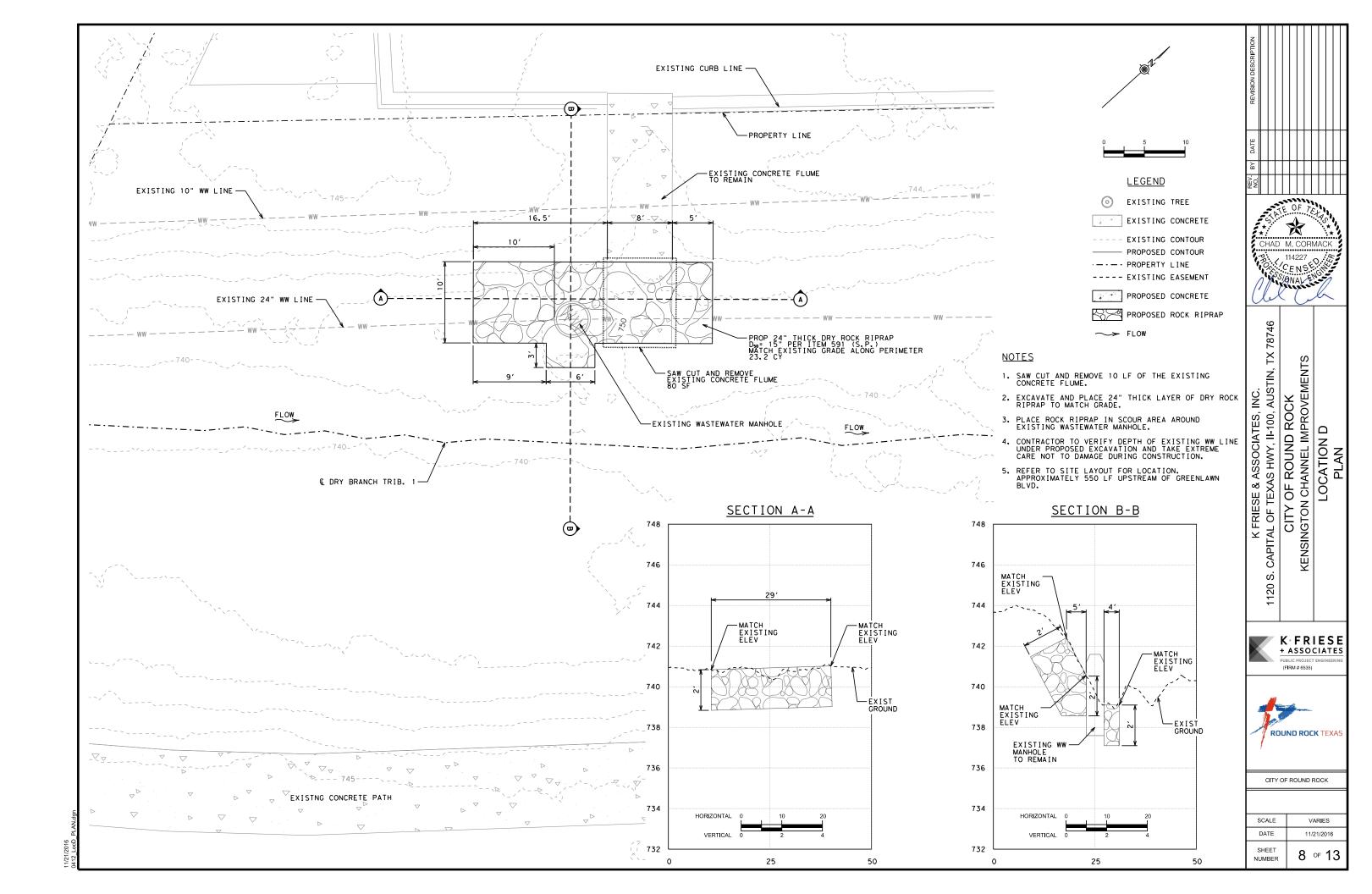


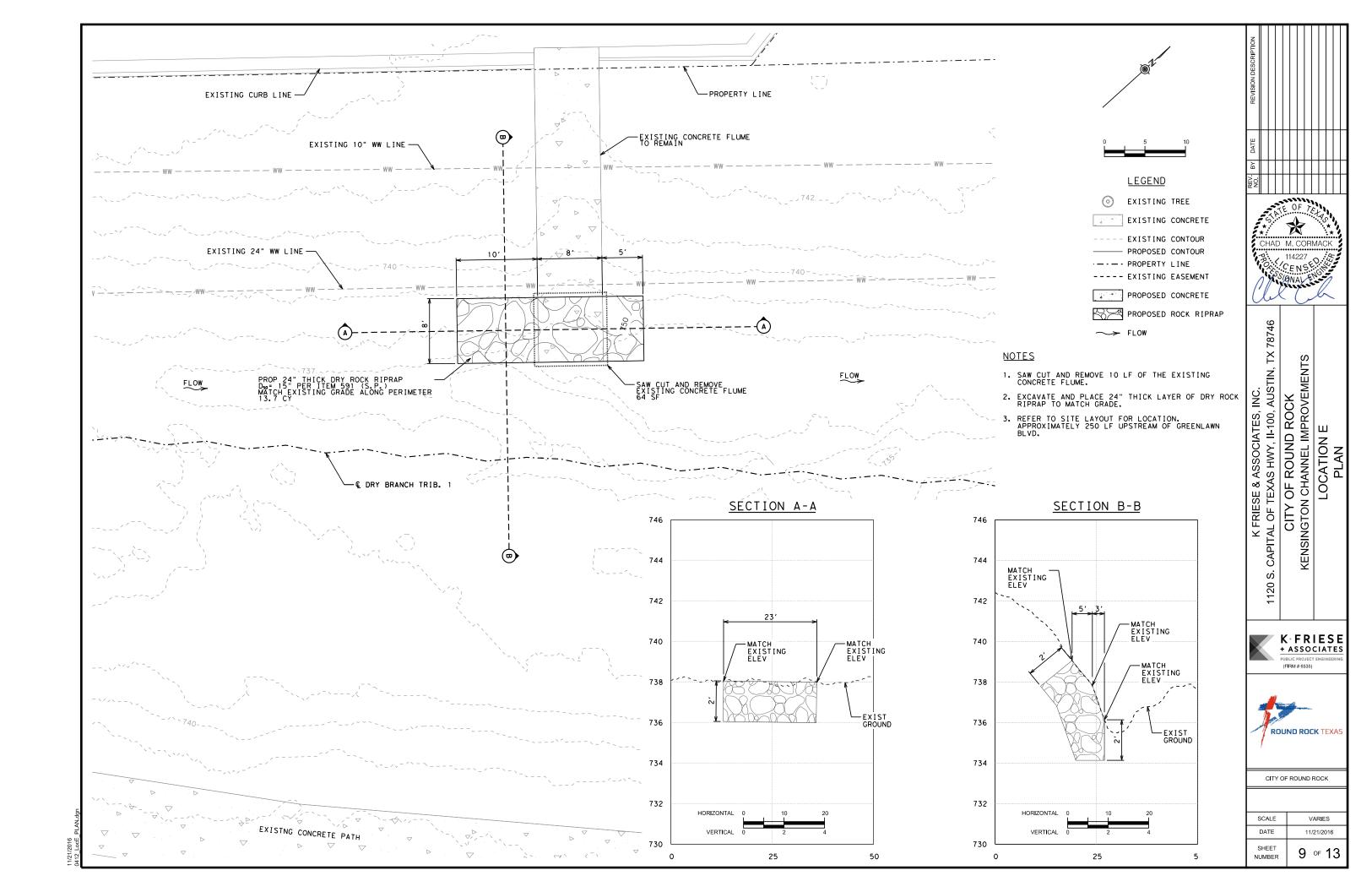






| SCALE | 1" = 20' (11" X 17") |
|-----------------|----------------------|
| SCALE | 1 = 20 (11 × 17) |
| DATE | 11/21/2016 |
| SHEET NUMBER | 7 of 13 |





LOCATION A SECTION D-D SECTION A-A SECTION B-B SECTION C-C -EXIST GROUND -EXIST GROUND ELEV 762.0 -ELEV 762.2 -EXIST GROUND -EXIST CONCRETE RIPRAP TO REMAIN -ELEV 767.0 ELEV -763.0 FLEV 761.3 -ELEV 758.6 ELEV -759.0 -EXIST GROUND 50 60 125 135 LOCATION B SECTION A-A SECTION B-B SECTION C-C -EXIST GROUND EXIST CONCRETE RIPRAP TO REMAIN -EXIST GROUND -EXIST GROUND -ELEV 755.6 ELEV -753.6 ELEV --ELEV 749.5 100 115 **NOTES** ① PROPOSED DRY RIPRAP D₅₀= 15", 24" THICK LAYER PER ITEM 591 (S.P.). ② PROPOSED FILTER FABRIC PER ITEM 620. 100 110 ③ PROPOSED 6" CONCRETE RIPRAP WITH 24" TOE PER ITEM 591. SEE DETAIL ON SHEET L3. OF 13.

K FRIESE & ASSOCIATES, INC.

3. CAPITAL OF TEXAS HWY, II-100, AUSTIN, TX 78746

CITY OF ROUND ROCK

KENSINGTON CHANNEL IMPROVEMENTS

CROSS SECTIONS

1 OF 2 S K.FRIESE + ASSOCIATES **ROUND ROCK TEXA** CITY OF ROUND ROCK

1" = 40' H 1" = 8' V

11/21/2016

10 of 13

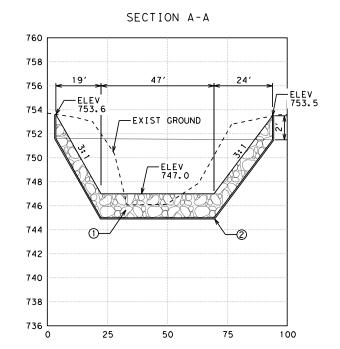
SCALE

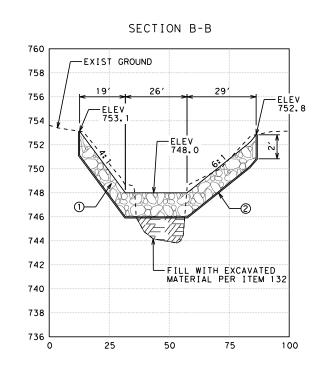
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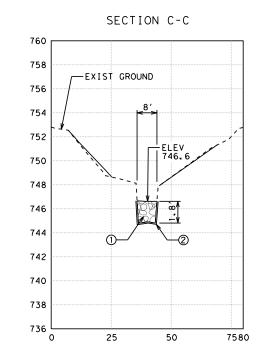
SHEET

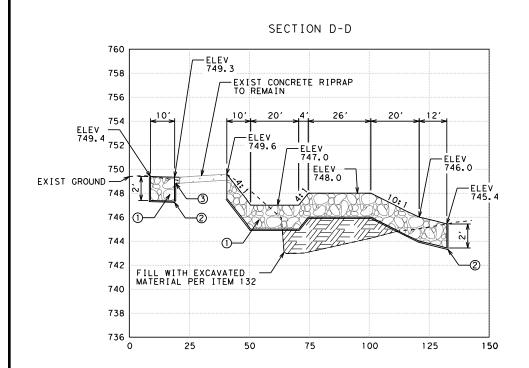
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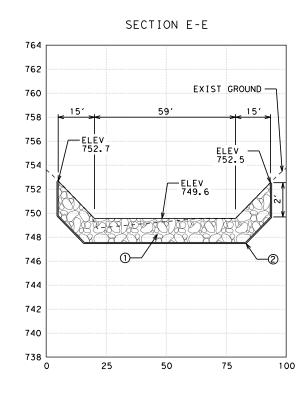
LOCATION C











NOTES

- ① PROPOSED DRY RIPRAP D₅₀= 15", 24" THICK LAYER PER ITEM 591 (S.P.).
- ② PROPOSED FILTER FABRIC PER ITEM 620.
- 3 PROPOSED 6" CONCRETE RIPRAP WITH 24" TOE PER ITEM 591. SEE DETAIL ON SHEET L3 OF 13.

| 1120 S. CAPITAL OF TEXAS HWY, II-100, AUSTIN, TX 78746 CITY OF ROUND ROCK KENSINGTON CHANNEL IMPROVEMENTS CROSS SECTIONS |
|---|
| 2 OF 2 |
| 1 .) 1 |
| |

21/2016

SCALE 1"=40"H 1"=8"V

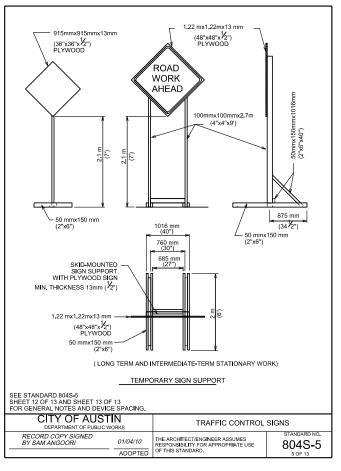
DATE 11/21/2016

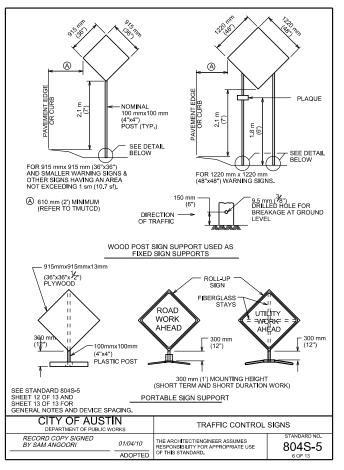
SHEET NUMBER 11 of 13

CITY OF ROUND ROCK

K-FRIESE + ASSOCIATES

ROUND ROCK TEXA





1. WARNING SIGNS SHALL BE ORANGE FLUORESCENT RED-ORANGE OR FLUORESCENT YELLOW-ORANGE IN COLOR. THE FLUORESCENT VERSIONS OF ORANGE PROVIDE HIGHER COMSPICUITY THAN STANDARD ORANGE, ESPECIALLY DUBLING TWILGHT. ALL SIGNS USED AT INIGHT SHALL BE EITHER RETERORE-FLECTIVE, WITH A MATERIAL THAT HAS A SMOOTH, SEALED OUTER SURFACE, OR ILLUMINATED TO SHOW SIMILAR SHAPE AND COLOR BOTH DAY AND NIGHT. SIGN ILLUMINATION MAY BE EITHER INTERNAL OR EXTERNAL, ROADWAY LIGHTING DOES NOT MEET THE REQUIREMENTS FOR SIGN ILLUMINATION MAY BE GITHER INTERNAL OR EXTERNAL, ROADWAY LIGHTING DOES NOT MEET THE REQUIREMENTS FOR SIGN ILLUMINATION.

ILLUMINATION.

TYPE A FLASHING WARNING LIGHTS MAY BE USED IN CONJUNCTION WITH SIGNS AT NIGHT. STANDARD ORANGE FLAGS MAY BE USED FOR DAY TIME OPERATIONS. HOWEVER, NEITHER LIGHTS NOR FLAGS MAY BE USED FOR DAY TIME OPERATIONS. HOWEVER, NEITHER LIGHTS NOR FLAGS MAY BE DACED ON THE RIGHT HAND SIDE OF THE ROADWAY. WHEN SPECIAL EMPHASIS IS NEEDED, SIGNS MAY BE PLACE ON BOTH THE LEFT AND RIGHT SIDES OF ROADWAY. SIGNS SHALL BE PLACED ON BOTH THE LEFT AND RIGHT SIDES OF ROADWAY. SIGNS SHALL BE PLACED ON BOTH THE LEFT AND RIGHT SIDES OF ONE-WAY OR DIVIDED ROADWAYS. SIGNS USED PLACED ON BOTH THE LEFT AND RIGHT SIDES OF ONE-WAY OR DIVIDED ROADWAYS. SIGNS USED FOR LONG-TIME NOT THE MORNING SHALL BE MOUNTED AT A HEIGHT OF AT LEAST 2.1 m (7), MEASURED FROM THE BOTTOM OF THE SIGN, THE HEIGHT TO THE

HEIGHT OF AT LEAST 2.1 m (7), MEASURED FROM THE BOTTOM OF THE SIGN. THE HEIGHT TO THE BOTTOM OF A SECONDARY SIGN MOUNTED BELOW ANOTHER SIGN MAY BE 0.3 m (1) LESS THAN THE APPROPRIATE HEIGHT ABOVE.

4. SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, MOBILE CONDITIONS AND EMERGENCIES, SIGNS MOUNTED ON PORTABLE SUPPORTS SHALL BE AT A HEIGHT OF AT LEAST 0.3 m (1), MEASURED FROM THE BOTTOM OF THE SIGN.

5. ALL SIGN SYEMS SHOULD BE CRASHWORTHY. NO SIGN MOUNTS SHALL BLOCK OR IMPEDE SIDEALKS UNLESS NO OTHER OPTION IS AVAILABLE. ONLY SANDBAGS SHOULD BE USED FOR BALLASTING SIGN MOUNTS.

| Roadway Classi fication | Posted Speed | Sign SpacIng ★ | Interm St Approac | m Statlonary Or Gredlate-term attonary hing Warning Signs 20 Sertes W22-1 Sign | Shor Approa | rm Stationary Or t Duration sch Warning Signs 22 Series | Other Warning Signs |
|-------------------------------|-----------------|----------------------|-------------------------|---|----------------------|--|---------------------------|
| | | | Standard | Minimum ⁴ | Standard | Minimunt [‡] | Standard |
| Conven. | KPH (MPH) | meter (feet) | mm (Inches) | mm (Inches) | mm (Inches) | mm (Inches) | mm (Inches) |
| | 50 (30) | 40 (120) | 1220x1220 (48x48) | 915x915 (36x36) | | | |
| | 55 (35) | 50 (160) | | | 915x915 (36x36) | | 915x915 (36x36) |
| | 65 (40) | 75 (240) | | V | | | |
| | 70 (45) | 100 (320) | | Use Standard Stze | | Use Standard Stze | |
| | 80 (50) | 120 (400) | | | | | |
| | 90 (55) | 150 2 (500) | | | | | - |
| | 100 (60) | 180 2 (600) | | | 1220x1220 (48x48) | | 1220x1220 (48x48) |
| | 105 (65) | 210 2 (700) | | | | | |
| | 115 (70) | 240 2 (800) | | | + | • | + |
| Exp. or Fwv | ** | * * 3 | + | | *** | *** | *** |

★★★ SMALLER SIGN SIZES MAY BE USED WHERE SIGN DESIGNS HAVE NOT BEEN INCLUDED IN THE "STANDARD HIGHWAY SIGNS DESIGN MANUAL".

. SPECIAL OR LARGER SIZE SIGNS MAY BE USED AS NECESSARY. . SPECIAL ON LANGER SIZE SIGNS WAY BE USED AS RECUSSIONT.

DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS RECURRED TO HAVE 450 m

(1500) OR MORE ADVANCE WARNING.

DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS REQUIRED TO HAVE A 0.8 km

1 MILE) OR MORE ADVANCE WARNING

FOR USE ONLY ON SECONDARY ROADS OR CITY STREETS WHERE SPEEDS ARE LOW.

| CITY OF AUST DEPARTMENT OF PUBLIC V | | TRAFFIC CONTROL | SIGNS |
|--|----------|---|---------------------|
| RECORD COPY SIGNED BY SAM ANGOORI | 01/04/10 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE | STANDARD NO. 804S-5 |
| | ADOPTED | OF THIS STANDARD. | 7.0E 12 |

I. ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES AND WARNING SIGNS SHALL BE FURNISHED, PLACED, CONSTRUCTED AND MAINTAINED IN THE APPROPRIATE TYPES AND SIZES AND FLAGGER OPERATIONS EXECUTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE TEXAS MANUAL ON UNIFORM CONTROL DEVICES (TMUTCD), THE CITY OF ROUND ROCK STANDARD SPECIFICATIONS SERIES 800 AND THE CITY OF ROUND ROCK OF NOVING NOVE STANDARD SPECIFICATIONS SERVES OUR AND THE UTIT OF ROUND ROUN TRANSPORTATION CRITERIA MANUAL, OR AS DIRECTED BY THE ENGINEER OR DESIGNATED RE-PRESENTATIVE. IF A CONFLICT ARISES THEN THE CITY OF ROUND ROCK TRANSPORTATION CRITERIA MANUAL SHALL CONTROL UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.

THE CONTRACTOR SHALL NOTIFY THE TRANSPORTATION DIVISION OF THE DEPARTMENT OF PUBLIC WORKS AT 512-341-3137 NO LATER THAN THE MONDAY OF THE WEEK DURING WHICH THE CONTRACTOR INTENDS TO SET UP BARRICADES TO START CONSTRUCTION.

. THE CONTRACTOR SHALL PROVIDE ONE. VEHICLE OF THE TYPE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE FOR TEMPORARY LANE CLOSURES WHEN UNDERSEALING. MILLING, PAVING AND WHEN WORKING IN INTERSECTIONS AS PART OF THE TRAFFIC CONTROL.

. THE CONTRACTOR SHALL NOTIFY ALL OTHER GOVERNMENTAL AGENCIES WHOSE RIGHTS-OF-WAY ARE AFFECTED BY HIS WORK ACTIVITIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT THEY MAY NEED.

OTHE CONTRACTOR SHALL MAINTAIN ONE (1) DUST-FREE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR APPROVED THE ENGINEER OR DESIGNATED REPRESENTATIVE.

THE ENGINEER OR DESIGNATED REPRESENTATIVE.

6. THERE SHALL BE A MINIUM OF THREE (3) METERS (10 FEET) CLEAR WIDTH FOR EACH LANE OF TRAFFIC IN CHANNELIZED AREAS, UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.

7. THE CONTRACTOR SHALL MAINTAIN DRIVEWBY ACCESS AT ALL TIMES, IF ACCESS CANNOT BE MAINTAINED. THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER OR DESIGNATED REPRESENTATIVE SHALL PROVIDE AT LEAST 24 HOUR WRITTEN NOTICE OF MEDICAL CORNOR OF THE MEDICAL PROVIDE BUSINESS ACCESS TO AFFECTED PROPERTY OWNERS, THE CONTRACTOR SHALL PROVIDE BUSINESS ACCESS SIGNS AS NEEDED TO NFORM DRIVERS OF THE LOCATIONS OF ALL DRIVEWBAYS.

DRIVEWAYS.

3. TEMPORARY LANE CLOSURES IN THE CENTRAL BUSINESS DISTRICT (CBD) OR ON ARTERIAL STREETS SHALL NOT BE PERMITTED DURING THE HOURS OF 7 AM TO 9 AM AND 4 PM TO 6PM MONDAY THROUGH FRIDAY UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE TRANSPORTATION DIVISION.

OBTAINED FROM THE TRANSPORTATION DIVISION, 7. TRAFFIC CONTROL SHOWN ON STANDARD DETAILS IS TYPICAL. ADDITIONAL SIGNING AND/ OR BARRICADING, AS WELL AS TEMPORARY PAVEMENT MARKINGS AND OBLITERATION/ RESTORATION OF EXISTING PAVEMENT MARKINGS, MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS. FIELD ADJUSTMENTS TO TRAFFIC CONTROLS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO ITEM NO. 803 "BARRICADES, SIGNS AND TRAFFIC HANDLING".

AND I PAR-FILE HANDLING.

ID-THE CONTRACTOR SHALL DESIGNATE A COMPETENT PERSON FOR TRAFFIC CONTROL. THE COMPETENT PERSON SHALL MAKE INSPECTIONS OF THE TRAFFIC CONTROL. DEVICES AT LEAST TWO (2) TIMES A DAY (ONCE AT THE BEGINNING OF THE DAY AND ONCE AT THE END OF THE DAY), INCLUDING NON-WORKING DAYS, ENSURING THAT ALL DEVICES ARE IN THEIR PROPER PLACE AND ARE IN WORKING ORDER.

2 ALL DEVICES SHALL BE MADE USING MATERIALS LISTED ON THE TXDOT APPROVED PRODUCTS LIST.

PRODUCTS LIST.

13. ALL PERSONS WORKING WITHIN THE RIGHT-OF-WAY SHALL WEAR A BRIGHTLY COLORED SAFETY VEST. FOR NIGHTTIME WORK THE VEST SHALL BE RETROREFLECTIVE.

14. WHEN AM INTERSECTION IS CLOSED FOR CONSTRUCTION, THE CONTRACTOR SHALL PROCEED WITH CONSTRUCTION IN SUCH A MANNER THAT THE CLOSURE TIME IS MINIMEED.

| CITY OF AUST DEPARTMENT OF PUBLIC W | | GENERAL TRAFFIC CONTROL NOTES | | |
|--|----------|--|------------------------|--|
| RECORD COPY SIGNED BY SAM ANGOORI | 01/04/10 | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE | standard no. 804S-5 | |
| | ADOPTED | OF THIS STANDARD. | 12 OF 13 | |
| | | | | |



WORK DURATION IS A MAJOR FACTOR IN DETERMINING THE NUMBER AND TYPES OF DEVICES USED IN TEMPORARY TRAFFIC ZONES. THE FIVE (5) CATEGORIES OF WORK DURATION AND THEIR TIME AT A LOCATION ARE AS FOLLOWS:

- LONG-TERM STATIONARY-WORK THAT OCCUPIES A LOCATION FOR MORE THAN 3

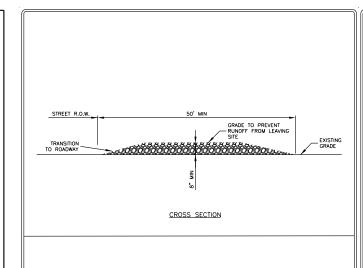
DAYS.
-INTERMEDIATE-TERM STATIONARY-WORK THAT OCCUPIES A LOCATION FROM OVERNIGHT TO 3 DAYS.

- SHORT-TERM STATIONARY-DAYTIME WORK THAT OCCUPIES A LOCATION FROM 1 TO 12 HOURS.

- SHORT-DURATION WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

| - MOBILE-WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY. | | | | | | | |
|--|---------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--------------------------------------|------------------|
| Typical Transition Lengths and Suggested Maximum Spacing of Devices | | | | | | | |
| Minimum Desirable Taper Lengths (L) Meters (Feet) | | | | ted Max. Spading | Suggested Sign Spacing Meters (Feet) | | |
| Posted Speed KPH (MPH) | Formula | 3.0(10) Offset Meters (feet) | 3.3(11) Offset Meters (feet) | 3.6(12) Offset Meters (feet) | On a taper Meters (feet) | On a tangent Meters (feet) | "X" Dimension |
| 50 (30) | 1 18/0 2 | 45 (150) | 50 (165) | 55 (180) | 9 (30) | 15-20 (60-75) | 40 (120) |
| 55 (35) | L= <u>WS</u> ² | 65 (205) | 70 (225) | 75 (245) | 10 (35) | 25-25 (70-90) | 50 (160) |
| 65 (40) | | 80 (265) | 90 (295) | 100 (320) | 12 (40) | 25-30 (80-100) | 75 (240) |
| 70 (45) | | 135 (450) | (495) | 165 (540) | 13 (45) | 25-30 (90-110) | 100 (320) |
| 80 (50) | | 150 (500) | 165 (550) | 180 (600) | 15 (50) | 30-35 (100-125) | 120 (400) |
| 90 (55) | | 165 (550) | 185 (605) | 200 (660) | 16 (55) | 35 - 40 (110 - 140) | 150 (500) |
| 100 (60) | L=WS | 180 (600) | 200 (660) | 220 (720) | 18 (60) | 40-45 (120-150) | 180 (600) |
| 105 (65) | | 195 (650) | 215 (715) | 235 (780) | 19 (65) | 40-50 (130-165) | 210 (700) |
| 115 (70) | | 215 (700) | 235 (770) | 255 (840) | 21 (70) | 45-55 (140-175) | 240 (800) |

| CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS | | GENERAL TRAFFIC CONT | ROL NOTES |
|--|----------|--|------------------------|
| RECORD COPY SIGNED BY SAM ANGOORI 01/ | 704/10 F | THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE | STANDARD NO. 804S-5 |
| AC | DOPTED C | OF THIS STANDARD, | 13 OF 13 |

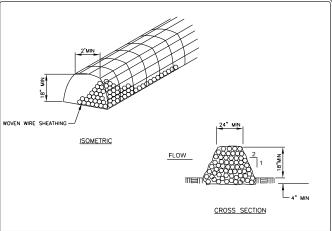


NOTES:

STONE SIZE SHALL BE 3" - 8" OPEN GRADED ROCK.
- HICKNESS OF CRUSHED STONE FAD TO BE NOT LESS THAN 8".
- LENGTH SHALL BE A MINIMUM OF 50" FROM ACTUAL ROADWAY, AND WIDTH NOT LESS THAN FULL WIDTH OF

LENGTH SHALL BE A MINIMUM OF 50' FROM ACTUAL ROADWAY, AND WIDTH NOT LESS THAN FULL WIDTH OF INGRESS/EGRESS. BE PROPERLY GRADED TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDMENT ONTO PUBLIC RIGHTS OF WAY. ALL SEDMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY. MIST BE REMOVED IMMEDIATELY BY CONTRACTIOR.
AS NECESSARY, WHELES MUST BE CLEANED TO REMOVE SEDMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAWS INTO AN APPROVED SEDMENT TRAP OR SEDMENT BRASIN. ALL SEDMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DEATH, DITCH OR WATERCOURSE USING APPROVED WEITHOUS.

ON FILE AT PUBLIC WORKS CITY OF ROUND ROCK PC-09 EC-09 03-25-11 STABILIZED CONSTRUCTION ENTRANCE DETAIL



1. USE ONLY OPEN GRADED ROCK (3 to 5") DIAMETER FOR ALL CONDITIONS.

2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1" OPENING AND MINIMUM WIRE DIAMETER OF 20 GAUGE.

3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/ OR FABRIC CORE—WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

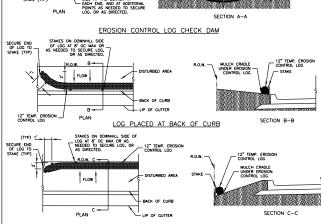
1. IF SEDIMENT REACHES A DEPTH OF 8", THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SIZE AND IN MANNER THAT WILL NOT CREATER A SEDIMENTATION PROBLEM.

WINN THE SIZE OF OMERCIES, YSHILLED, THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED AMONER.

03-25-11 DATE

ROCK BERM DETAIL





LOG PLACED AT EDGE OF RIGHT-OF-WAY

LAP DETAIL

DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH RECALES 6.
 CONTRACTOR SHALL MONITOR THE PERFORMANCE OF LOGS DURING RAINFALL EVONT FOR PROPER PERFORMANCE.
 OR RECYCLABLE CONTAINMENT MESH STUPFED WITH FILTER MATERIAL.

MATERIAL.

4. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION, FILTER MOVED FROM THE PROPERTY OF THE PROPERTY

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS

APPROVED

APPROVED

CITY OF ROUND ROCK EC-17 03-25-11 DATE EROSION CONTROL LOG DETAIL





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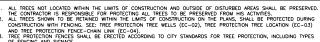
K FRIESE & ASSOCIATES, INC.
S. CAPITAL OF TEXAS HWY, II-100, AUSTIN, TX
CITY OF ROUND ROCK
KENSINGTON CHANNEL IMPROVEMENTS CITY C Ś 1120

K·FRIESE + ASSOCIATES



CITY OF ROUND ROCK

NOT TO SCALE SCALE DATE 11/21/2016 SHEET 12 of 13 NUMBER



- INCE_PROJECTION_TENDES_SMALE BE_RECITED_ACCORDING TO CITY SIANDARDS FOR TREE PROTECTION, INCLUDING OF FENDING AND SIGNAGE.

 TREE PROTECTION FENCES_SHALL BE_INSTALLED_PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK CICLERING, GORBING, OR GRADING) AND SHALL BE_MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION.
- PROJECT.

 EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.

 FENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES, LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIPLINE) OR CRITICAL ROOT ZONE (CRZ), WHICHEVER IS GREATER: AND SHALL BE WAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVIOUS THE FOLLOWING STORAGE OF COLUMNATION OR MATERIAL.

 6.4. CONTROL OF THE CONSTRUCTION IN CITY AREA RESULTING FROM VEHICULAR TRAFTE OR STORAGE OF COLUMNATION AMERICAL.

 6.5. CONTROL OF THE CONTROL OF THE OFFICE OF THE CHARGES ON TREATMENT OF THE PROFESSION AND AUTHORIZED BY THE FORESTRY MANNAGE TO THE PROVINCES ON TREATMENT OF THE PROFESSION AMERICAL.
- THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
 6A. SOIL COMPACTION IN CAZ AREA RESULTION FROM WEIGHDAR TREAFIC OR STORAGE OF FOUIPMENT OR MATERIAL.
 6B. CRZ DISTURBANCES DUE TO GRADE CHANGES OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE FORESTRY
 MANAGER.
 6C. WOUNDS TO EXPOSED ROOTS, TRUNK, OR LIMBS BY MECHANICAL EQUIPMENT
 8D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING, AND FIRES.
 EXCEPTIONS TO INSTALLING TREE FENCES AT THE TREE DIRPLINES OR CRZ, WHICHEVER IS GREATER, MAY BE PERMITTED IT
 7A. WHEEP LETREE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAWIN SURFACE, OR TREE WELL.
 75. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAWIN SURFACE, OR TREE WELL.
 76. WHERE THERE IS TO BE ON APPROVED GRADE CHANGE.
 77. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE
 BUILDING AREA.
 78. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE
 BUILDING AREA.

- BUILDING.

 70. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE FORESTRY MANAGER TO DISCUSS ALTERNATIVES.

 WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE THAT IS CLOSER THAN 5 FEET TO A TREE TRUNK, THE TRUNK SHALL BE PROTECTED BY STRAPPED—ON PLANKING TO A HEIGHT OF B FEET (OR TO THE LUMIS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FERMING PROVIDED.

 WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES UNDER THE DRIPLINE OR CZ. COMPACTION G GREATER, THOSE AREAS SHOULD BE COVERED WITH 4 INCHES OF ORGANIC MULCH TO MINIMAZE SOIL

- WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES UNDER THE DRIPLINE OR CRZ, WHICHEVER IS GREATER, THOSE AREAS SHOULD BE COVERED WITH 4 NICHES OF ORGANIC WILLOUT 10 MINIMIZE ROOT DAMAGE, PRIOR TO GRADING RELOCATE PROTECTIVE FENCING TO 2 FEET BEHIND THE GRADE CHANGE AREA.

 1. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL AND BACKFILLED WITH GOOD UNLITY TO POSIT WITH THE SOIL AND BACKFILLED WITH GOOD UNLITY TO POSIT WHICH WIS DAYS. HE SEXPESSED ROOT AREAS CANNOT BE BACKFILLED WITH OR ORGANIC CONCEPT THE FROOTS LINK BACKFILLED WITH GOOD WAS IN EXPOSED ROOT AREA CANNOT BE BACKFILLED WITH A DAYS. AND GRADING COVER THE ROOTS LINK BACKFILLED WITH THE ROOT SHIPMES, A CLEAN OUT SHALL BE FLACED TO COVER THE ROOTS LINK BACKFILLED WITH THE REPROVED BY THE FORESTRY MANAGER. TO MINIMIZE DAMAGE TO COVER THE ROOTS LINK BACKFILLED WITH THE ROOT SHIPMES, A CLEAN OUT SHALL BE FLACED TO SMALLED FLACED TO COVER THE ROOTS LINK BACKFILLED BY CONSTRUCTION ACTIVATES WILL BE WATERED DEEPLY OUTCO. A WEEK DURING FERRIODS.

 I. REES MOST HEAVILY MAPCETED BY CONSTRUCTION ACTIVATES WILL BE WATERED DEEPLY OUTCO. A WEEK DURING FERRIODS ON LEAVES.

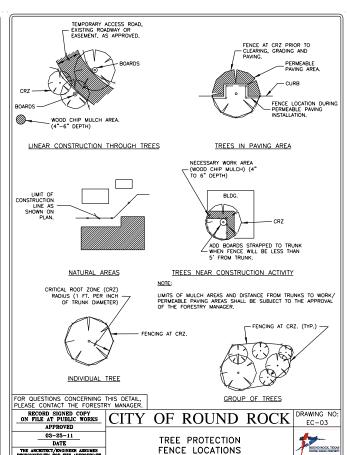
 4. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, A PLASTIC VAPOR BARRIER SHALL BE PLACED BEHIND THE CONCRETE OF POMBIET LEACHING OF ILLE WITH A THE ROOT SHALL BE PLACED AS FAR FROM EXISTING BEHIND THE CONCRETE OF POMBIET LEACHING OF ILLE MISTALLING CONCRETE ADJACENT TO THE ROOT CANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING ON LEAVES.

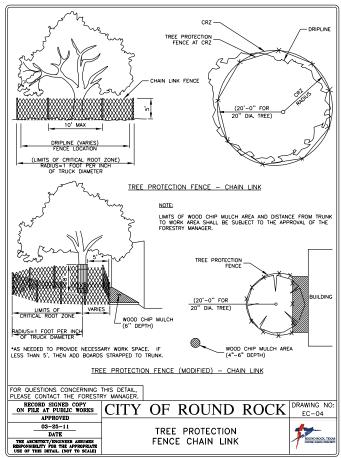
 5. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF ILLE MISTALLING CONCRETE ADJACENT TO THE ROOT CANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING ON LANGES TO THE DEPLACED AS FAR FROM EXISTING ON LANGES AND AS OUTLINED IN LITERATURE PROVIDED BY THE INSTALLATION OF THE INSTALLATION OF THE MISTALLING ON THE PROVIDE CLEARS, WILL BE WATER OF THE PROVIDE CLEARS. SHALL BE PREMITTED WITHIN THE DRIPLINE OR CRZ OF THE SESSING GREATER THAN FOUR CANDSCAPE IRRIGATION SHALL BE PROVIDED FOR

- 3. THE TOMESTRY MANAGER HAS THE AUTHORITY TO REQUIRE ADDITIONAL TREE PROTECTION BEFORE OR DURING D. INEES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT ITREES TO BE PRESERVED. REFER TO THE CITY OF ROUND ROUND ROCK TREE TECHNICAL MANUAL FOR APPROPRIATE REMOVAL METHODS. I. PRIOR TO CONSTRUCTION, ALL LOWER TREE LUMBS OVER ROADWAYS MUST BE PRUNED TO A HEIGHT OF 14 FEET USING THE TECHNIQUES DESCRIBED IN THE CITY OF ROUND ROCK TREE TECHNICAL MANUAL. THE TOWN THE ABOVE REQUIREMENTS AND REQUERY DAMAGE TO THESE MAY BE CONSIDERED AS ORDINANCE WOULD AND THE ABOVE REQUIREMENTS AND REQUERY DAMAGE TO THESE MAY BE CONSIDERED AS ORDINANCE WOULD AND THE ABOVE REQUIREMENTS AND REQUIREMENTS DAMAGE TO THESE MAY BE CONSIDERED AS ORDINANCE WOULD NOT THE ABOVE THE PROPERTY OF THE

FOR QUESTIONS CONCERNING THIS DETAIL, PLEASE CONTACT THE FORESTRY MANAGER.







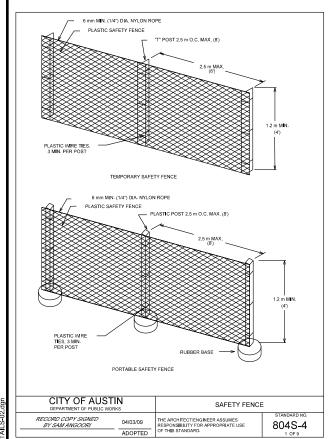


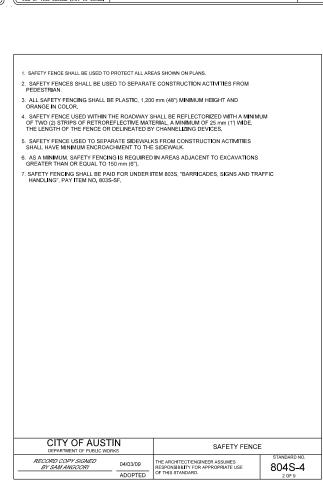
IMMEDIATELY AFTER THE AREA IS SODDED, IT SHALL BE WATERED WITH A MINIMUM OF 5 GALLONS OF WATER PER SQUARE YARD AND AT 10 DAY INTERVALS AS NEEDED AND AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE, SUBSEQUENT TO THE INITAL APPLICATION. WATER SHALL BE APPLIED AT A MINIMUM RATE OF 3 GALLONS PER SQUARE YARD, AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE UNTIL FINAL ACCEPTACE BY THE CITY OR UNTIL THE GRASS UNIFORMLY REACHES A HEIGHT OF 2 1/2 INCHES.

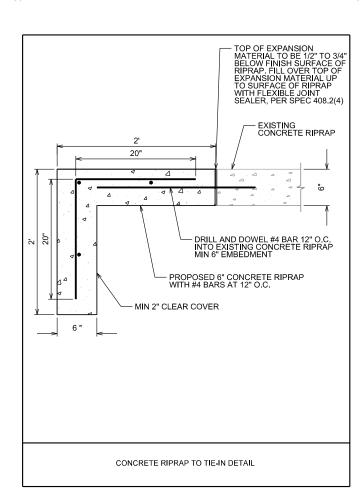
WATERING SCHEDULE - SEEDING FOR EROSION CONTROL

ALL WATERING SHALL COMPLY WITH CITY ORDINANCES. BROADCAST SEEDED AREAS SHALL IMMEDIATELY BE WATERED WITH A MINIMUM OF 5 GALLONS OF WATER PER SQUARE YARD OR AS NEEDED AND IN THE MANNER AND QUANTITY AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE, HYDRAULIC SEEDED AREAS AND NATIVE GRASS SEEDED AREAS SHALL BE WATERED COMMENCING AFTER THE TACKIFIER HAS
DRIED WITH A MINIMUM OF 5 GALLONS OF WATER PER SQUARE YARD OR AS NEEDED TO KEEP THE SEEDBED IN A WET CONDITION FAVORABLE FOR THE GROWTH OF GRASS. WATERING APPLICATIONS SHALL CONSTANTLY MAINTAIN THE SEEDBED IN A WET CONDITION FAVORABLE FOR THE GROWTH OF GRASS WATERING SHALL CONTINUE UNTIL THE GRASS IS UNIFORMLY 1 1/2 INCHES IN HEIGHT AND ACCEPTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. WATERING CAN BE POSTPONED IMMEDIATELY AFTER A 1/2 INCH OR GREATER RAINFALL ON THE SITE BUT SHALL BE RESUMED BEFORE THE SOIL DRIES OUT.

> WATERING SCHEDULE PER SPECIFICATION 602 & 604









CHAD M. CORMACK

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CITY OF ROUND ROCK

| SCALE DATE | NOT TO SCALE 11/21/2016 |
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| SHEET NUMBER | 13 of 13 |