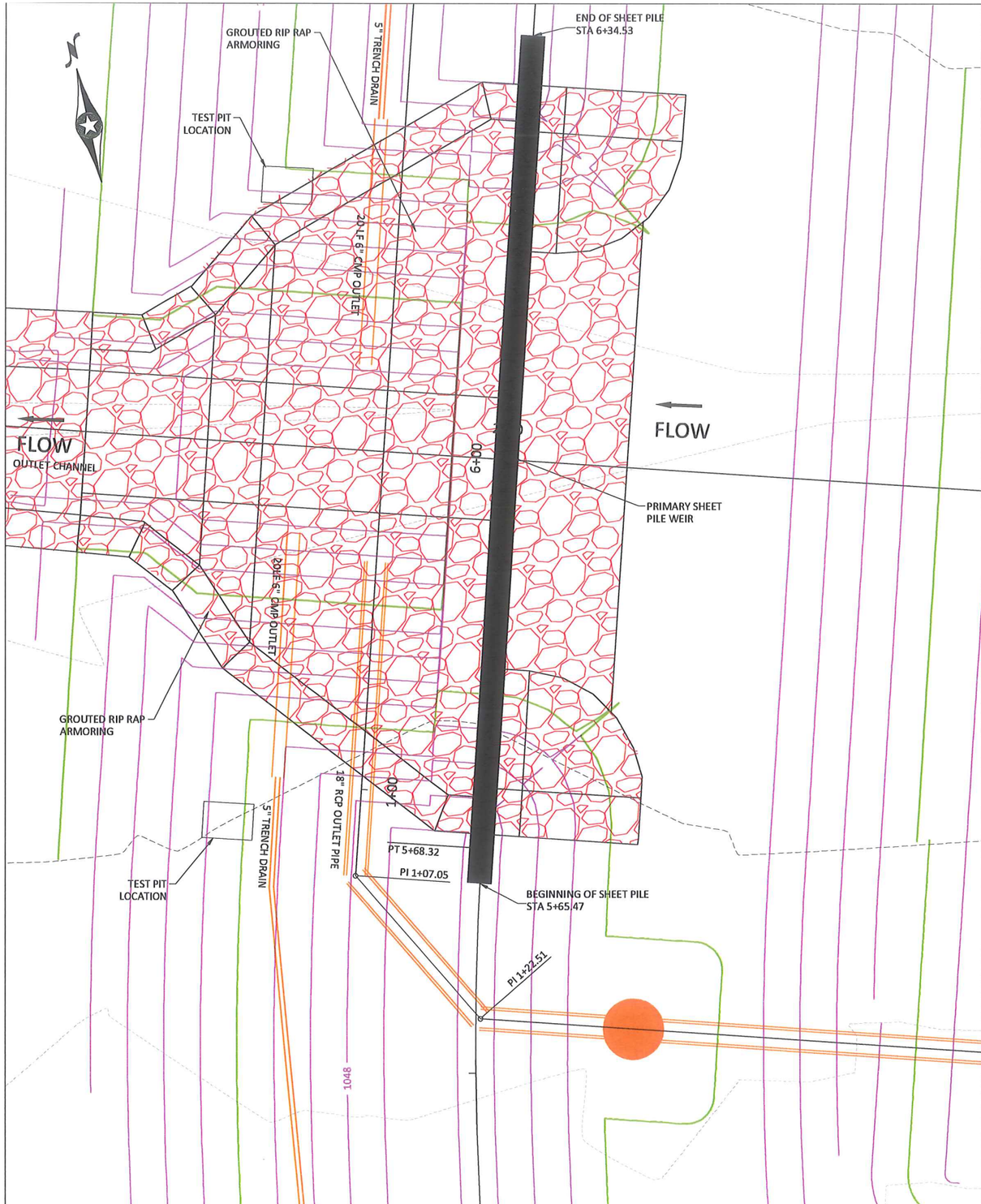
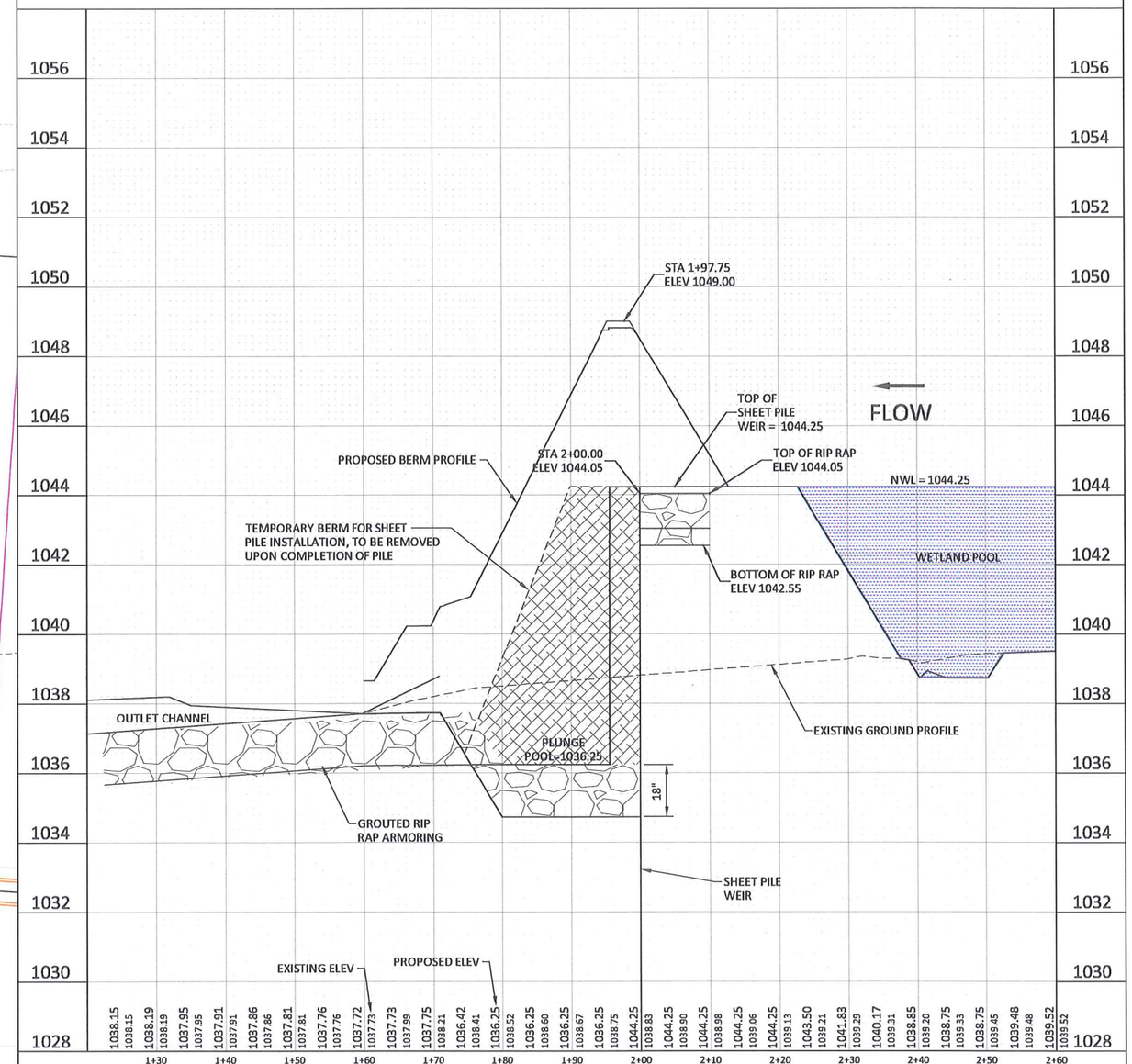


LEGEND

- EXISTING MAIN CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING FIELD DRAIN TILE
- PROPOSED MAIN CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED GROUTED RIPRAP
- PROPOSED SHEET PILE WEIR
- PROPOSED OUTLET PIPE



HORZ. 0 5 10 SCALE FEET

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IOWA DEPARTMENT OF AGRICULTURE
STORY CREP PROJECT NO. STO852311A
SHEET PILE

SHEET 7.0

DESIGN SHEET PILING AREA IS 1,076 SF - PRIOR TO TRIMMING

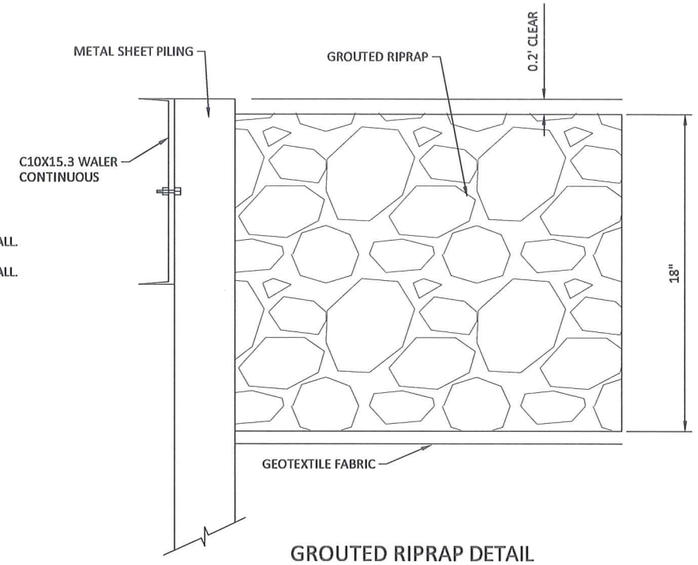
SHEET PILING REQUIREMENTS

MINIMUM SECTION MODULUS OF 5.3 CUBIC INCHES PER FOOT OF WALL.
MINIMUM GRADE OF STEEL IS 36 KSI.
MINIMUM MOMENT OF INERTIA OF 11.6 INCHES ^ 4 PER FOOT OF WALL.
ALL SHEETING SHALL MEET ASTM A-328, A-572 GR50 OR A-690.

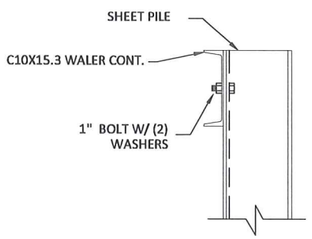
RECOMMENDED STEEL CHOICES:

SKYLINE STEEL SKS 11 OR EQUIVALENT
SHORELINE STEEL LZ-3, SZ-10 OR EQUIVALENT
CONTECH LZ-3, SZ-10 OR EQUIVALENT
LB FOSTER PZC 13 OR EQUIVALENT
GERDAU AMERISTEEL (CHAPPARRAL) PZC 13 OR EQUIVALENT

OTHER SHEETING MAYBE ALLOWED WITH PRIOR APPROVAL OF ENGINEER.

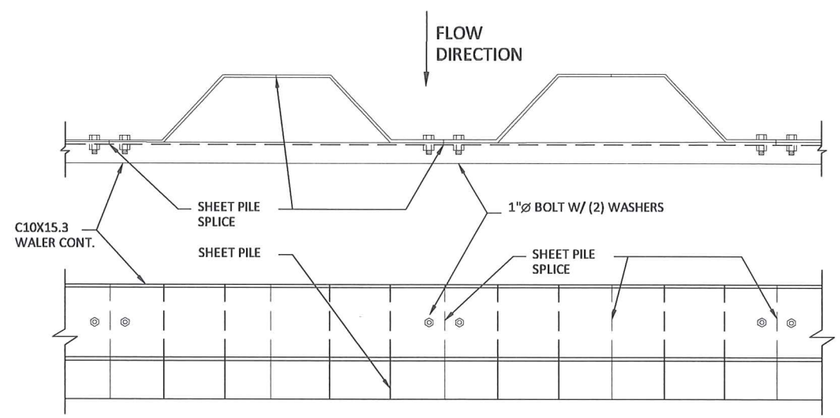


GROUTED RIPRAP DETAIL
NOT TO SCALE



NOTE: 1 BOLT TO BE PLACED ON EACH SIDE OF SPLICE

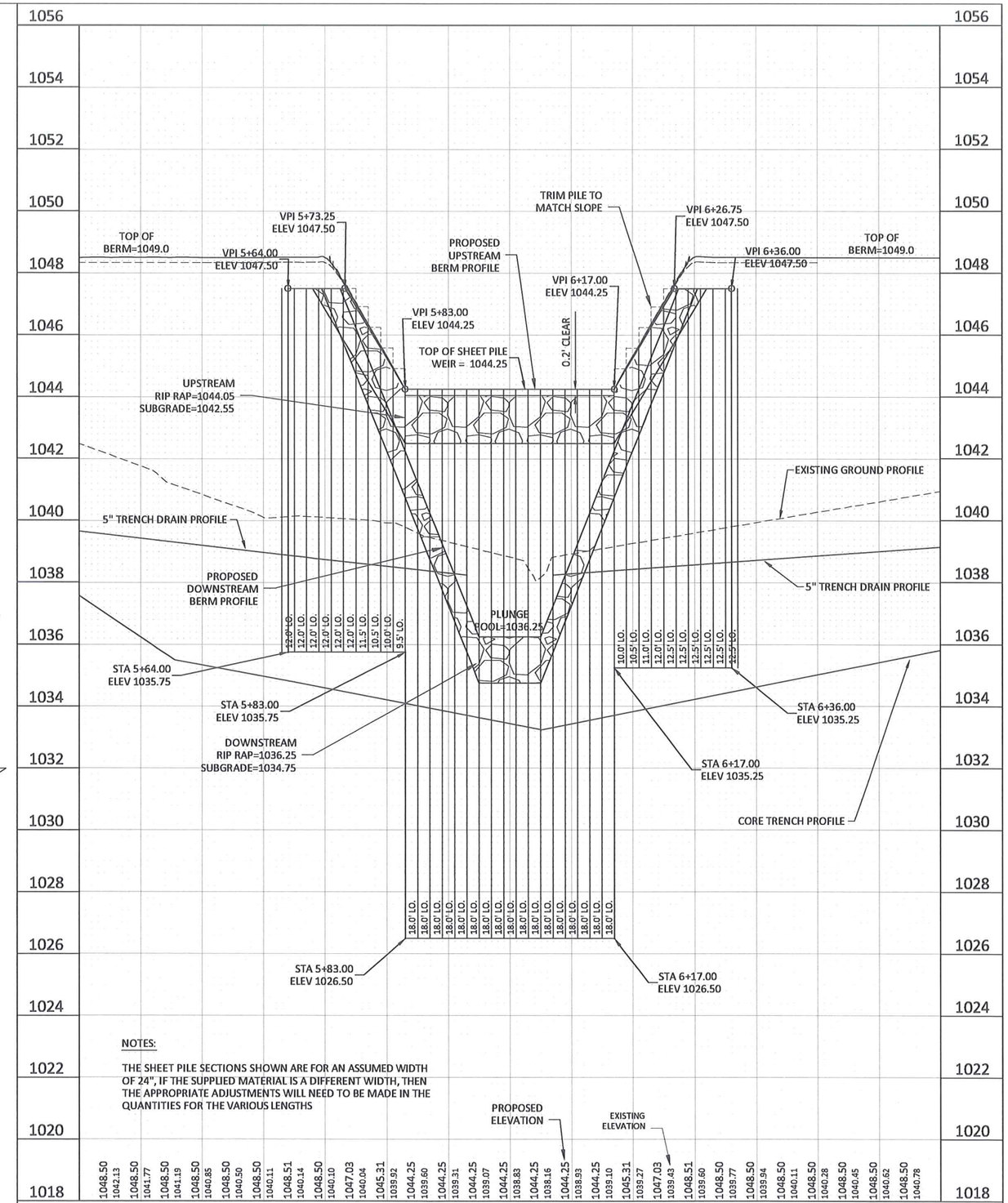
BOLT DETAIL
NOT TO SCALE



WALER BOLT PLACEMENT
NOT TO SCALE

NOTES:

1. ALL BOLTS WILL BE 1" DIA. WITH 2 WASHERS. BOLT SHALL BE EXTENDED AT A MINIMUM OF $\frac{3}{8}$" BEYOND THE NUT.
2. ALL HOLES SHALL BE DRILLED $\frac{1}{16}$" DIA. LARGER THE THE BOLT.
3. IT IS RECOMMENDED THAT THE WALER SHALL BE PLACED ON THE DOWNSTREAM SIDE OF THE WEIR.
4. ANY HOLES LEFT IN SHEET PILE (LIFTING HOOKS ETC.) SHALL BE CLOSED OFF TO NOT ALLOW WATER TO FLOW THROUGH RIPRAP.
5. AFTER SHEETING AND WALER INSTALLATION ALL SHEETING IS TO BE CUT TO CONFORM WITH 3:1 SLOPE.
6. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDING WITH THE LATEST SPECIFICATION OF AISC. FABRICATOR SHALL SUBMIT SHOP DRAWINGS. FABRICATE AFTER ENGINEERS REVIEW.
7. DEFLECTIONS SHALL BE MADE IN FABRICATED PIECES AND STILL CONFORM TO THE DIMENSIONS GIVEN.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LIVE LOADS.
9. PROVIDE ALL NECESSARY TEMPORARY BRACING, SHORING, GUYING OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION.



NOTES:

THE SHEET PILE SECTIONS SHOWN ARE FOR AN ASSUMED WIDTH OF 24", IF THE SUPPLIED MATERIAL IS A DIFFERENT WIDTH, THEN THE APPROPRIATE ADJUSTMENTS WILL NEED TO BE MADE IN THE QUANTITIES FOR THE VARIOUS LENGTHS

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IOWA DEPARTMENT OF AGRICULTURE
STORY CREP PROJECT NO. STO852311A
SHEET PILE SECTION & DETAILS

SHEET 7.1

SEEDING NOTES:

1. ALL SEED BEDS SHALL BE PREPARED AS SPECIFIED IN SECTION IA-6.
2. ALL ROCKS 3" OR LARGER IN DIAMETER SHALL BE REMOVED FROM THE SEEDBED.
3. CONTRACTOR SHALL SUBMIT A SEEDING PLAN ON FORM IA-CPA-4 FOR EACH TYPE OF SEED TO BE PROVIDED AT LEAST 3 WEEKS PRIOR TO BEGINNING SEEDING OPERATIONS.
4. NO SEED TO BE PLACED BELOW THE NORMAL WATER ELEVATION.
5. THE BENCH ALONG THE PERIMETER OF THE POOL AREA SHALL BE GRADED TO A UNIFORM SURFACE.
6. MULCH SHALL BE APPLIED TO ALL STRUCTURE AND CHANNEL SEEDING AREAS; NO MULCH TO BE APPLIED TO THE BUFFER SEEDING.
7. SEEDED AREAS WHERE MULCH IS REQUIRED SHALL BE MULCHED WITHIN 24 HOURS.
8. ALL MULCH SHALL BE ANCHORED.
9. SEED TYPES SHALL AS SPECIFIED IN SECTION IA-6 OF THE PROJECT MANUAL.
10. EXISTING VEGETATION SHALL BE REMOVED OR KILLED BY APPLICATION OF HERBICIDE PRIOR TO PREPARATION FOR SEEDING.
11. ANY EXISTING VEGETATION AREAS THAT ARE TO REMAIN UNDISTURBED WILL BE DETERMINED IN THE FIELD BY THE ENGINEER, NO CHANGE IN CONTRACT PRICE WILL BE ALLOWED DUE TO CHANGE IN SEEDING AREAS.
12. THE STRUCTURE SEEDING IN THE SOUTHEAST PORTION ON THE JEWELL PROPERTY SHALL HAVE EROSION CONTROL DITCH CHECKS INSTALLED ALONG THE LENGTH OF THE GRADED SWALE. THIS SHALL BE CONSIDERED INCIDENTAL TO THE SEEDING.

SEEDING QUANTITIES:

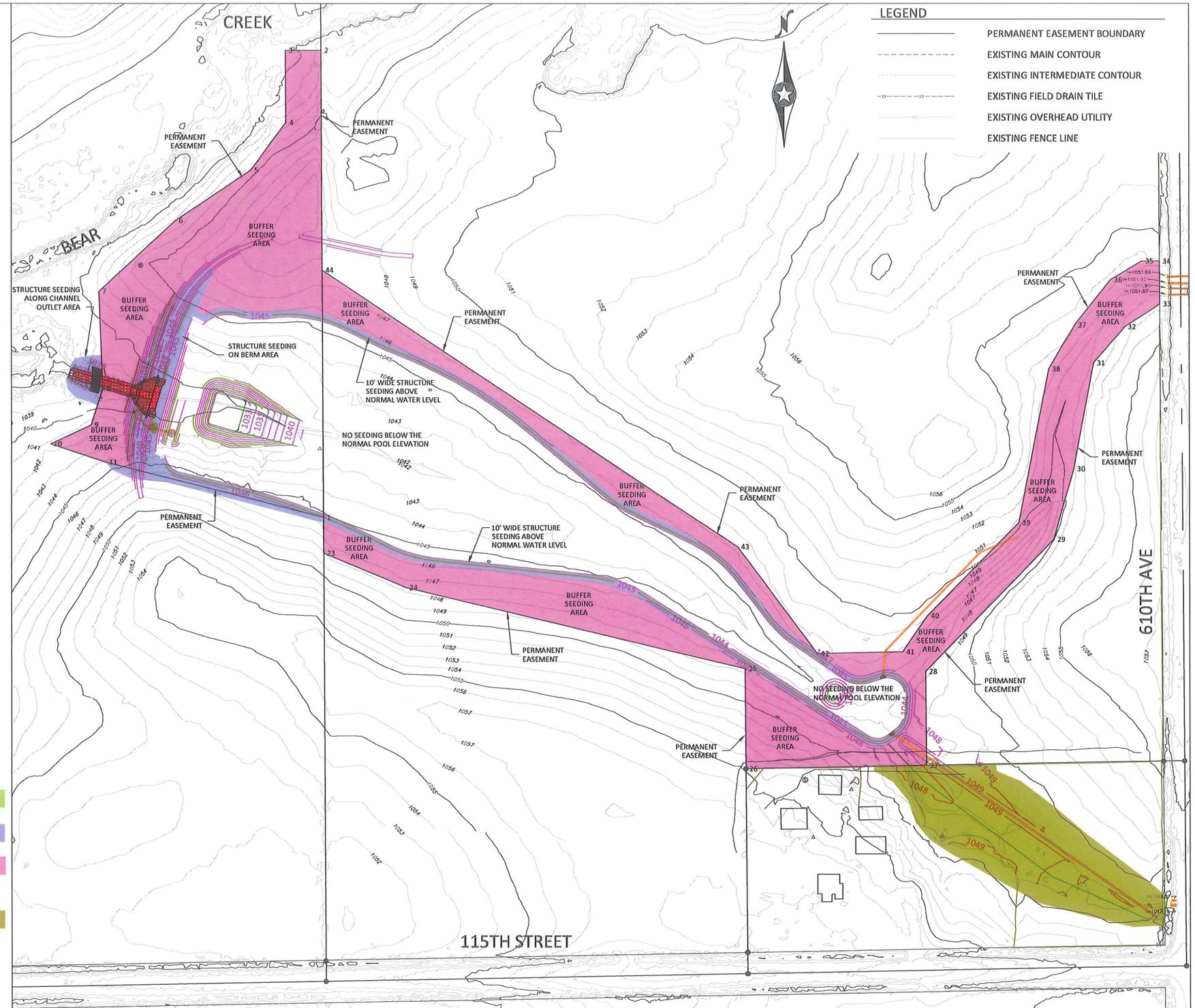
11.00 ACRES - TOTAL EASEMENT AREA

5.00 ACRES - NORMAL WATER LEVEL POOL AREA

1.00 ACRES - STRUCTURE AND CHANNEL

5.00 ACRES - BUFFER

OUTSIDE EASEMENT AREA
1.50 ACRES - STRUCTURE AND CHANNEL



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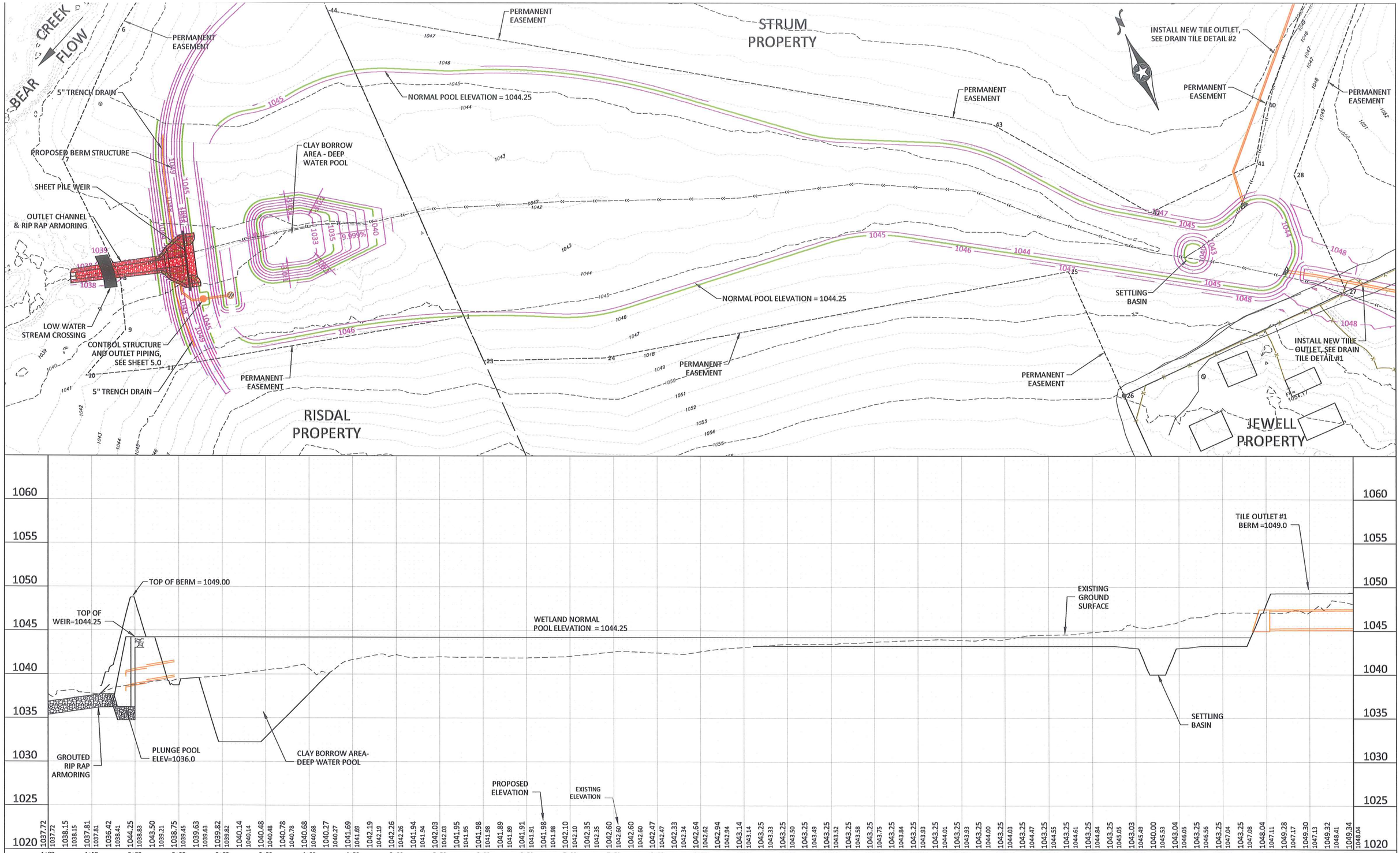
IOWA DEPARTMENT OF AGRICULTURE
STORY CREP PROJECT NO. STO852311A
SEEDING AREAS

SHEET 8.0



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IOWA DEPARTMENT OF AGRICULTURE
STORY CREP PROJECT NO. STO852311A
WELAND CENTERLINE DETAIL

SHEET 9.0