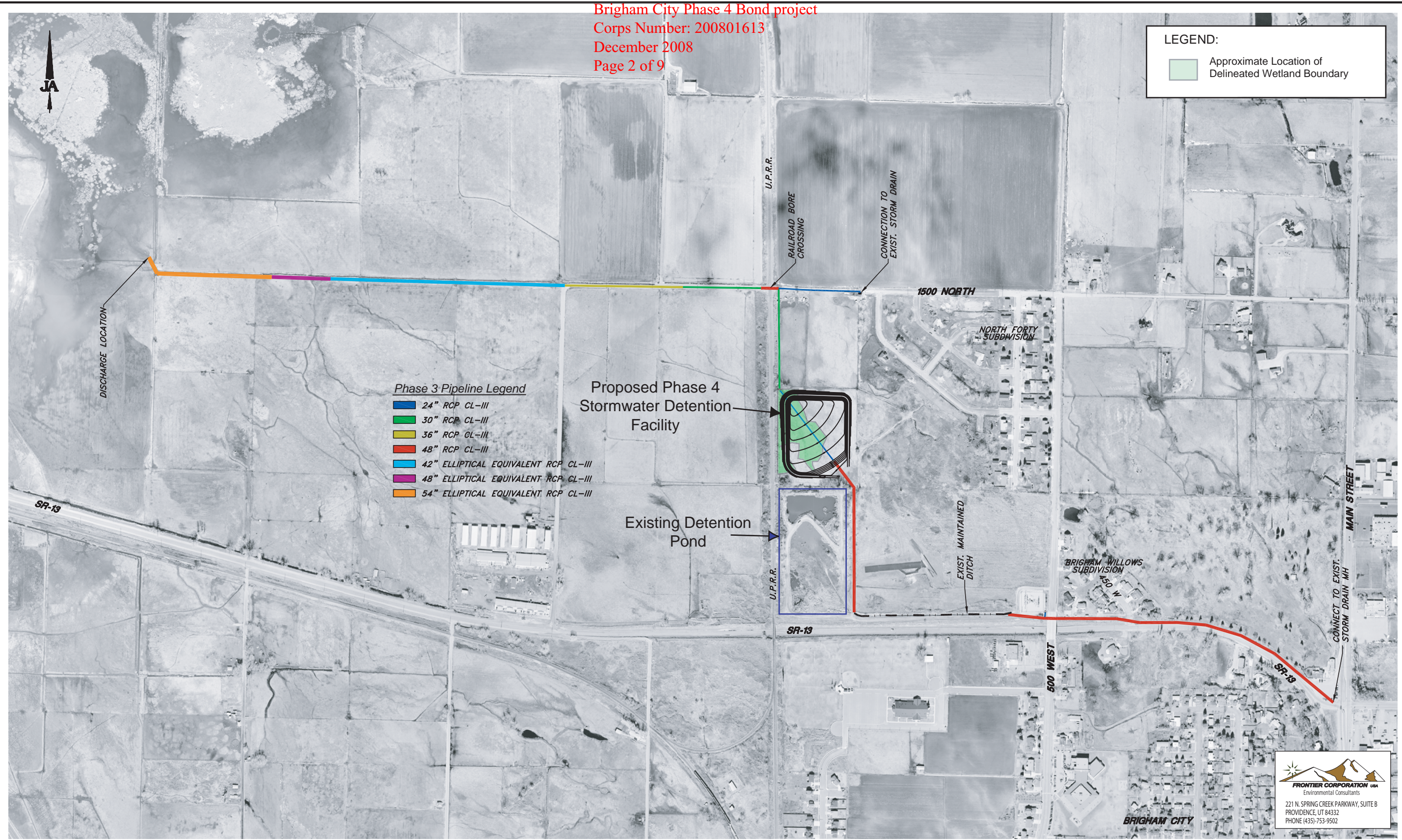


Figure 1. Project Area Location Map. Topographic base is adapted from the Brigham City, Utah 7.5-minute USGS quadrangle, revised in 1998.

LEGEND:

 Approximate Location of Delineated Wetland Boundary



FRONTIER CORPORATION USA
 Environmental Consultants
 221 N. SPRING CREEK PARKWAY, SUITE B
 PROVIDENCE, UT 84332
 PHONE (435)-753-9502

| | | | |
|------------------|------|------|-------|
| PROJECT ENGINEER | | | |
| DATE | REV. | DATE | APPR. |

SCALE:
 1" = 550'

DESIGNED: *BEB*
 DRAWN: *BEB*
 CHECKED: *BMJ*

J&A CONSULTING ENGINEERS
 1716 East 5600 South
 South Ogden, Utah 84403 (801) 476-9767

BRIGHAM CITY CORPORATION
 2006-2007 STORM DRAIN BOND PROJECT PHASE III
PROJECT SCOPE

SHEET:
1
 OF 1 SHEETS

Figure 2. Project Area Vicinity Map. Map base was obtained from Jones & Associates to describe the project area.

map date: October 30, 2008

Brigham City Corporation

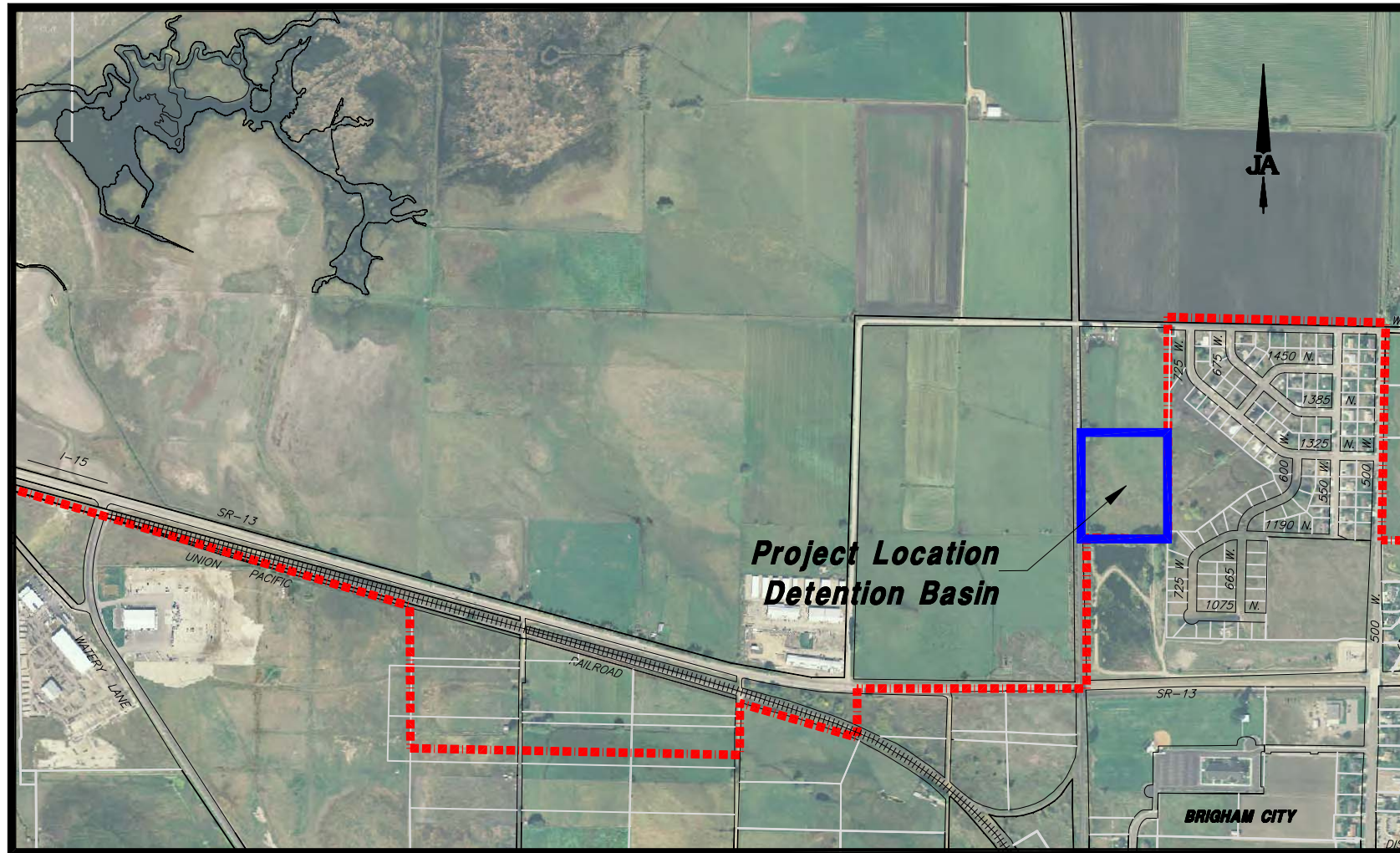
2006-2007 STORM DRAIN BOND PROJECTS

PHASE 4

JANUARY 2008

Index

- 1.....COVER SHEET
- 2.....DETENTION BASIN GRADING
- 3.....DETENTION BASIN - PLAN & PROFILE
- 4.....BASIN OUTLET STRUCTURE DETAILS
- 5.....STRUCTURE GRATE DETAILS
- 6.....EMERGENCY SPILLWAY & BERM DETAILS
- 7.....INLET / BUBBLE-UP BOX DETAILS
- CS-15.....FENCING STANDARDS



Project Location Map



BLAKE FONNESBECK
PUBLIC WORKS DIRECTOR

TYLER PUGSLEY
ASSISTANT PUBLIC WORKS DIRECTOR



Notes:

CONTRACTOR SHALL VERIFY CUT/FILL VOLUMES AND PREPARE BID SUFFICIENT TO COVER ALL LUMP SUM ITEMS INCIDENT TO DETENTION BASIN CONSTRUCTION.

CONTRACTOR TO STRIP, STOCKPILE, AND REAPPLY TOP 12" OF EXISTING TOP SOIL AS FINISH GRADING

ALL EXISTING UTILITY CONFLICTS SHALL BE RESEARCHED & VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

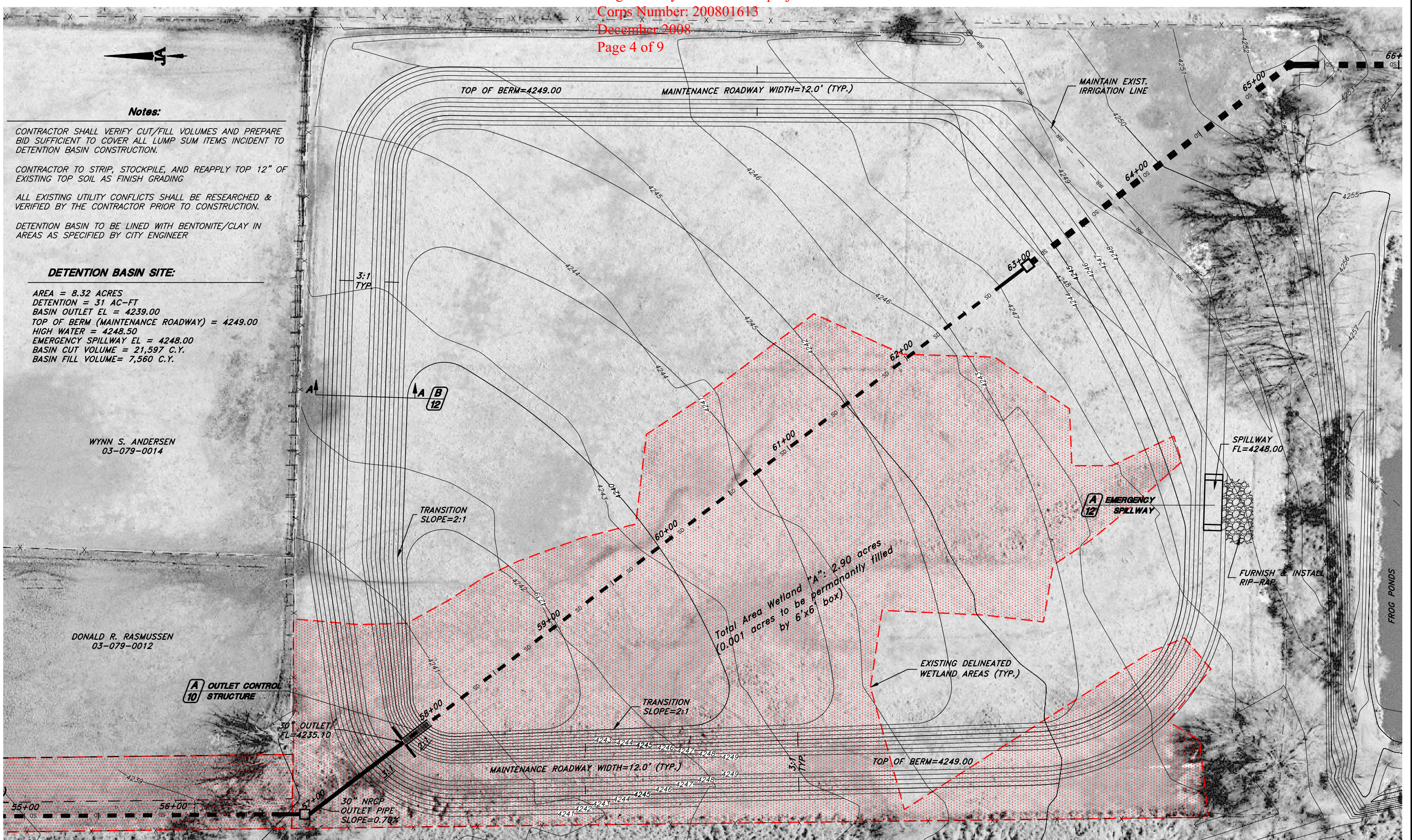
DETENTION BASIN TO BE LINED WITH BENTONITE/CLAY IN AREAS AS SPECIFIED BY CITY ENGINEER

DETENTION BASIN SITE:

AREA = 8.32 ACRES
 DETENTION = 31 AC-FT
 BASIN OUTLET EL = 4239.00
 TOP OF BERM (MAINTENANCE ROADWAY) = 4249.00
 HIGH WATER = 4248.50
 EMERGENCY SPILLWAY EL = 4248.00
 BASIN CUT VOLUME = 21,597 C.Y.
 BASIN FILL VOLUME = 7,560 C.Y.

WYNN S. ANDERSEN
 03-079-0014

DONALD R. RASMUSSEN
 03-079-0012



| | | | |
|------------------|------|------|-------|
| PROJECT ENGINEER | REV. | DATE | APPR. |
| DATE | | | |

SCALE:
 1" = 60'

DESIGNED BEB
 DRAWN BEB
 CHECKED BMJ

JA
JONES & ASSOCIATES

CONSULTING ENGINEERS

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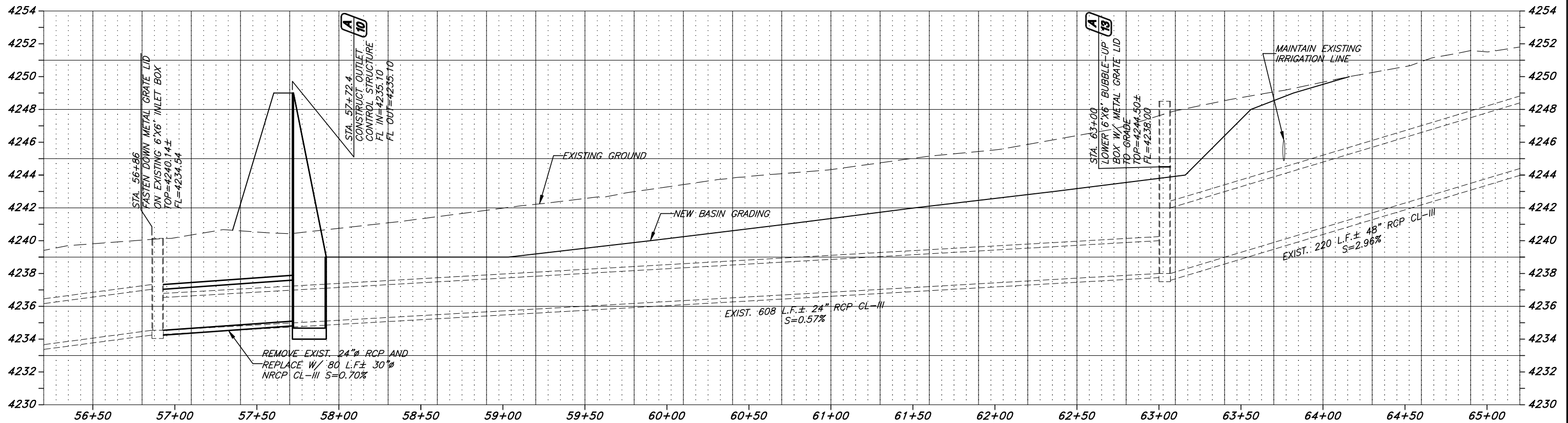
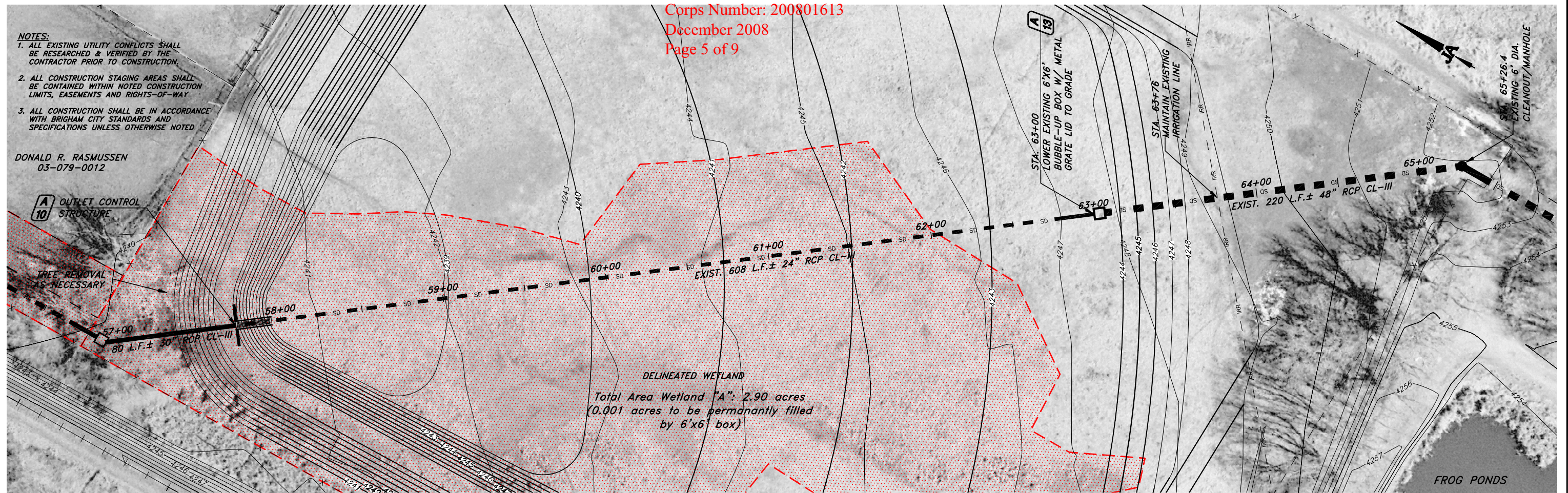
BRIGHAM CITY CORPORATION
 2006-2007 STORM DRAIN BOND PROJECTS - PHASE 4

DETENTION BASIN GRADING

SHEET:
2
 OF 13 SHEETS
 0

- NOTES:**
1. ALL EXISTING UTILITY CONFLICTS SHALL BE RESEARCHED & VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 2. ALL CONSTRUCTION STAGING AREAS SHALL BE CONTAINED WITHIN NOTED CONSTRUCTION LIMITS, EASEMENTS AND RIGHTS-OF-WAY
 3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH BRIGHAM CITY STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED

DONALD R. RASMUSSEN
03-079-0012



| | | | | |
|------------------|------|------|-------|------------|
| PROJECT ENGINEER | REV. | DATE | APPR. | FILE NAME: |
| | | | | |
| DATE | | | | |

SCALE:
HORZ.
1" = 60'
VERT.
1" = 6'

DESIGNED BEB
DRAWN BEB
CHECKED BMJ

JA JONES & ASSOCIATES

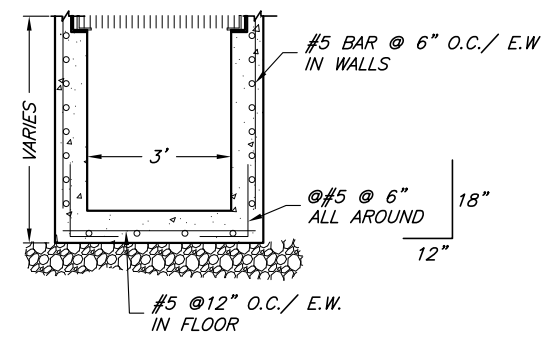
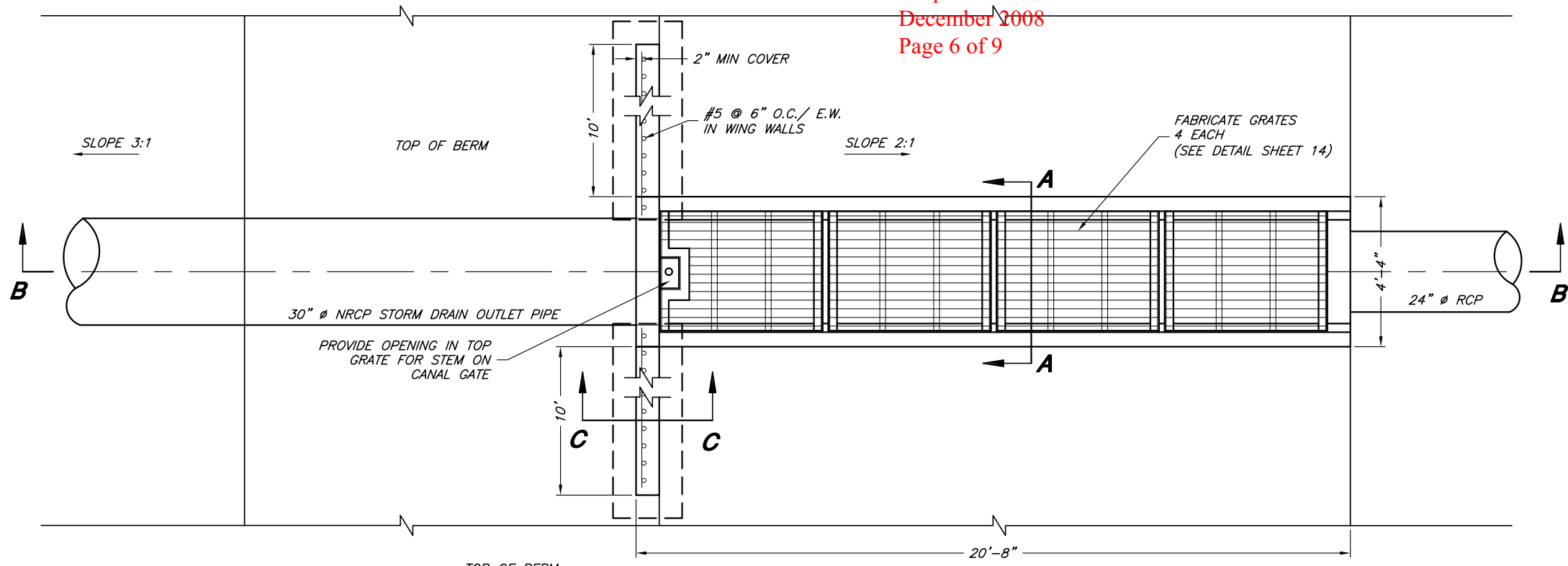
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BRIGHAM CITY CORPORATION
2006-2007 STORM DRAIN BOND PROJECTS - PHASE 4

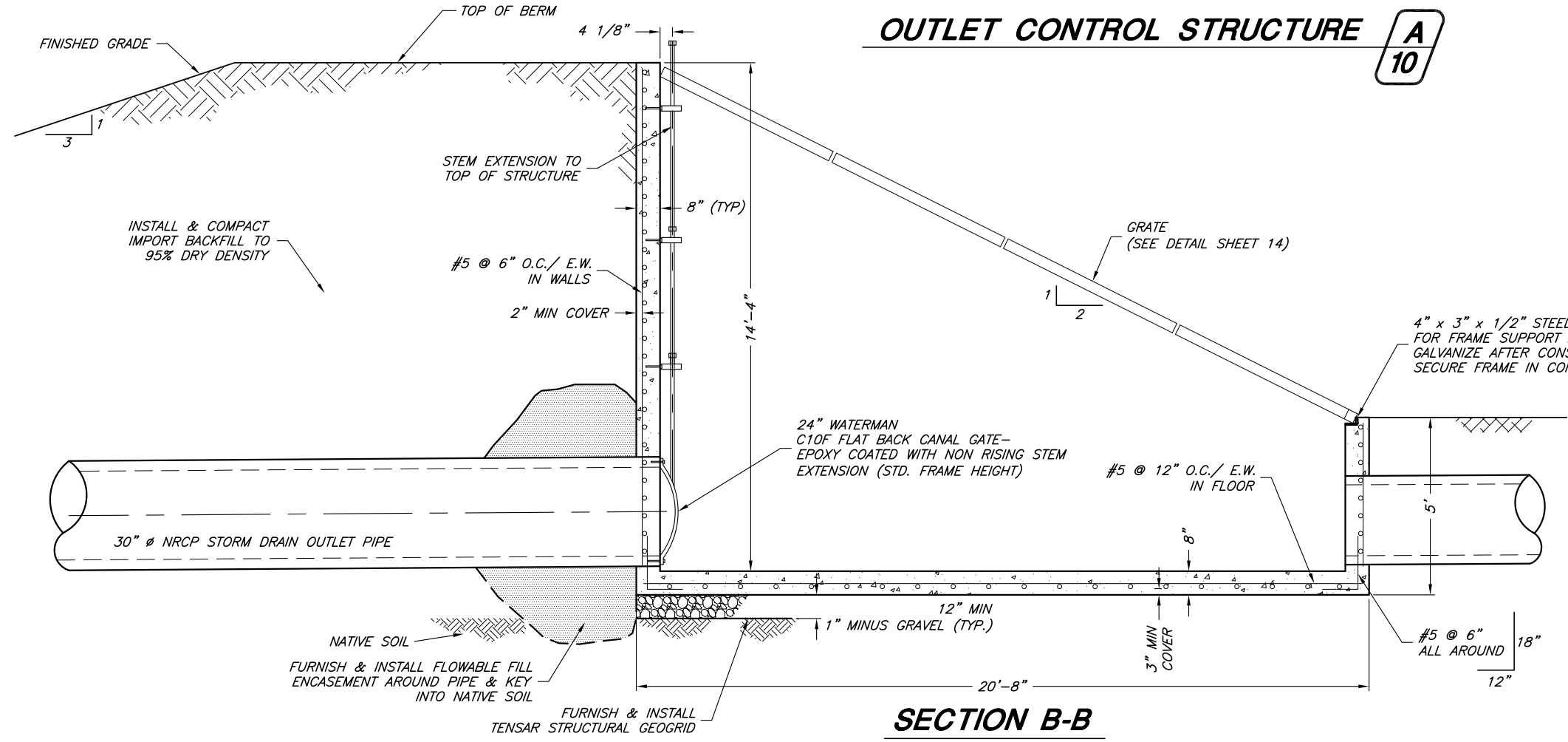
DETENTION BASIN - PLAN & PROFILE

SHEET:
3
OF SHEETS
0

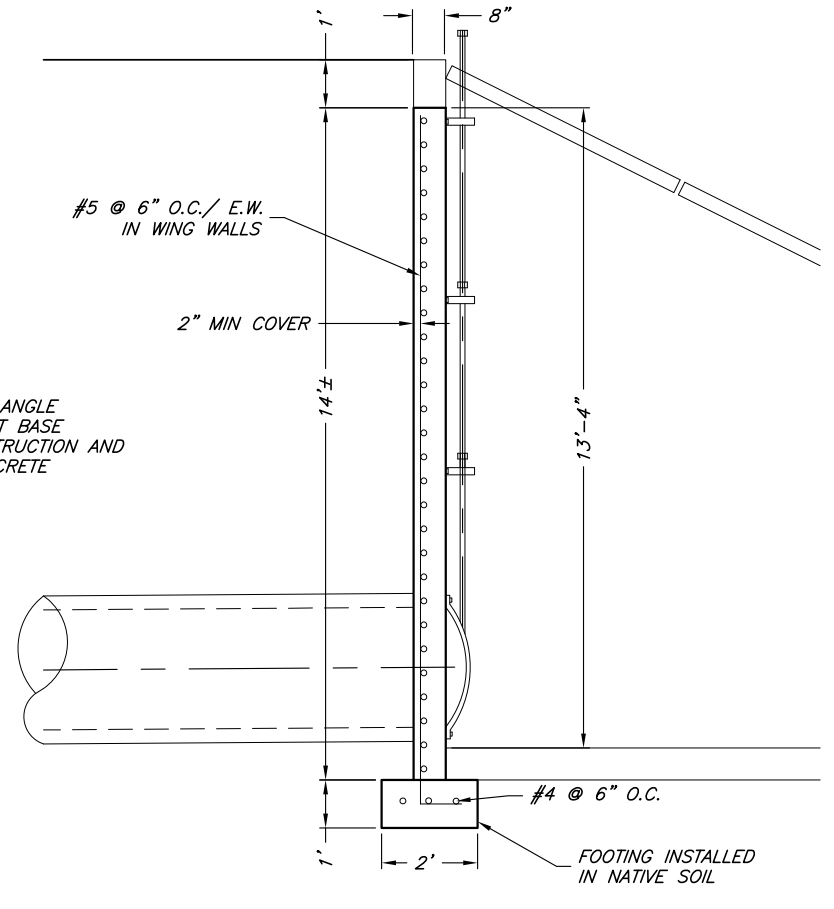


SECTION A-A

OUTLET CONTROL STRUCTURE A
10



SECTION B-B



SECTION C-C

| | | | | |
|------------------|------|------|-------|--|
| PROJECT ENGINEER | | | | |
| DATE | REV. | DATE | APPR. | |

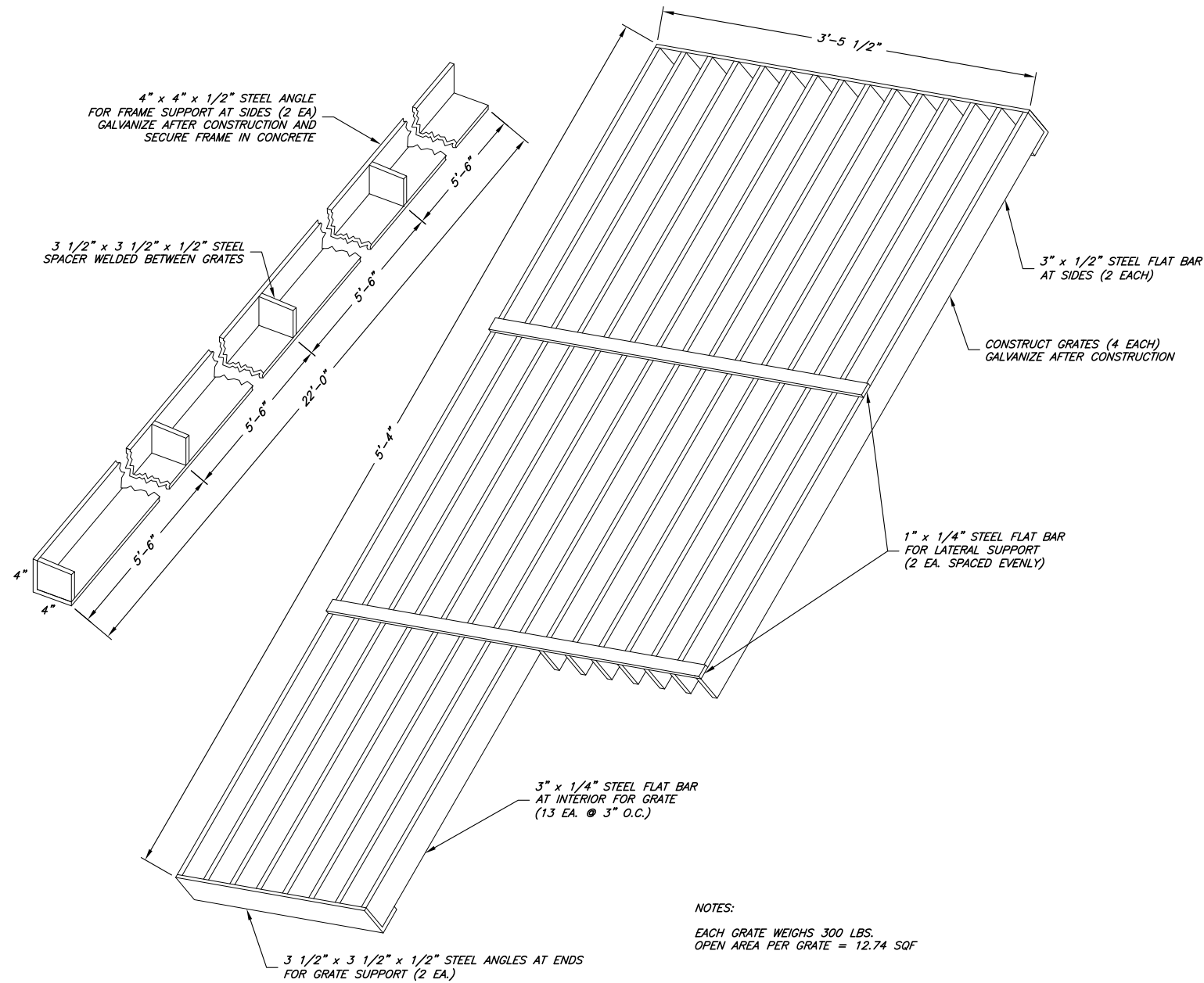
SCALE:
 1" = 4'

DESIGNED BEB
 DRAWN BEB
 CHECKED BMJ

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JONES & ASSOCIATES
 CONSULTING ENGINEERS
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BRIGHAM CITY CORPORATION
 2006-2007 STORM DRAIN BOND PROJECTS - PHASE 4
BASIN OUTLET CONTROL STRUCTURE DETAILS

SHEET:
4
 OF SHEETS



NOTES:
 EACH GRATE WEIGHS 300 LBS.
 OPEN AREA PER GRATE = 12.74 SQF

**BASIN OUTLET STRUCTURE
 FRAME AND GRATE**

SECTION

A
11

| | | | |
|------------------|------|------|-------|
| PROJECT ENGINEER | | | |
| DATE | REV. | DATE | APPR. |

SCALE:
N. T. S.

DESIGNED MEH
 DRAWN BEB
 CHECKED BMJ



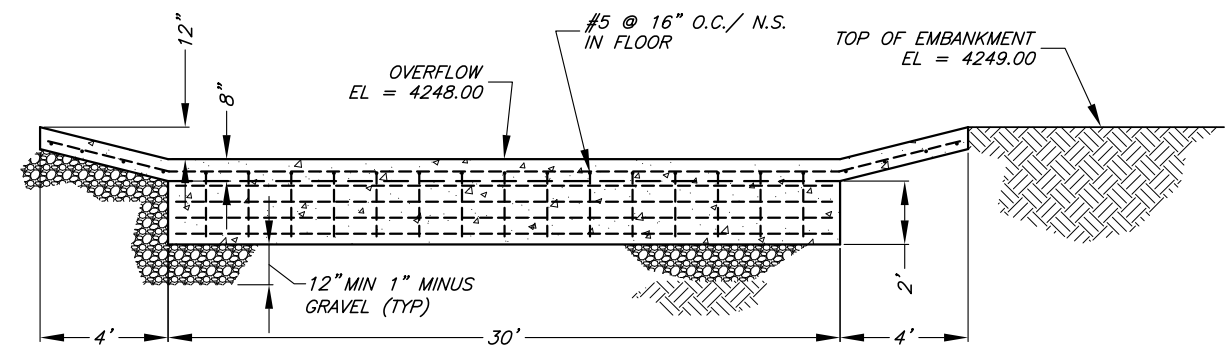
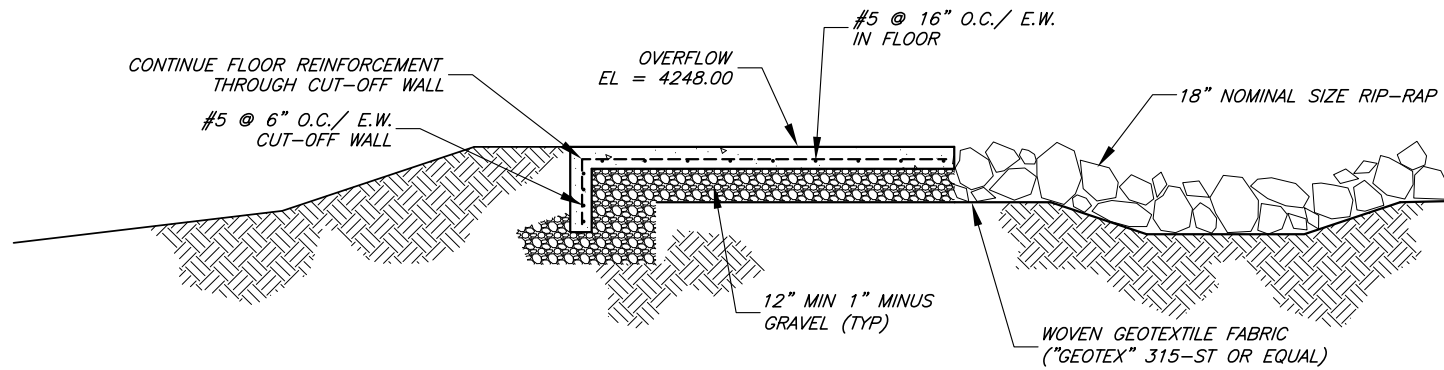
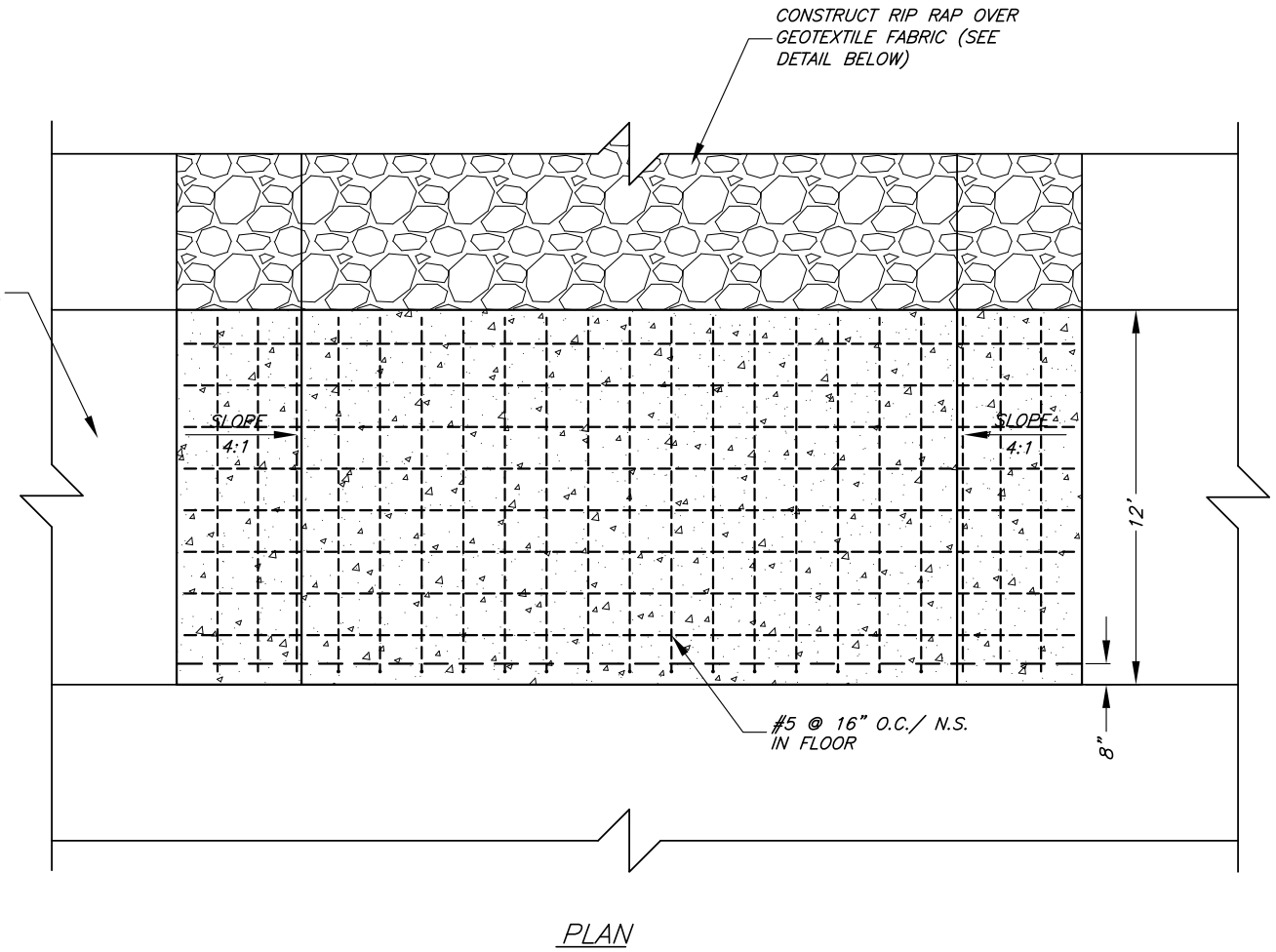
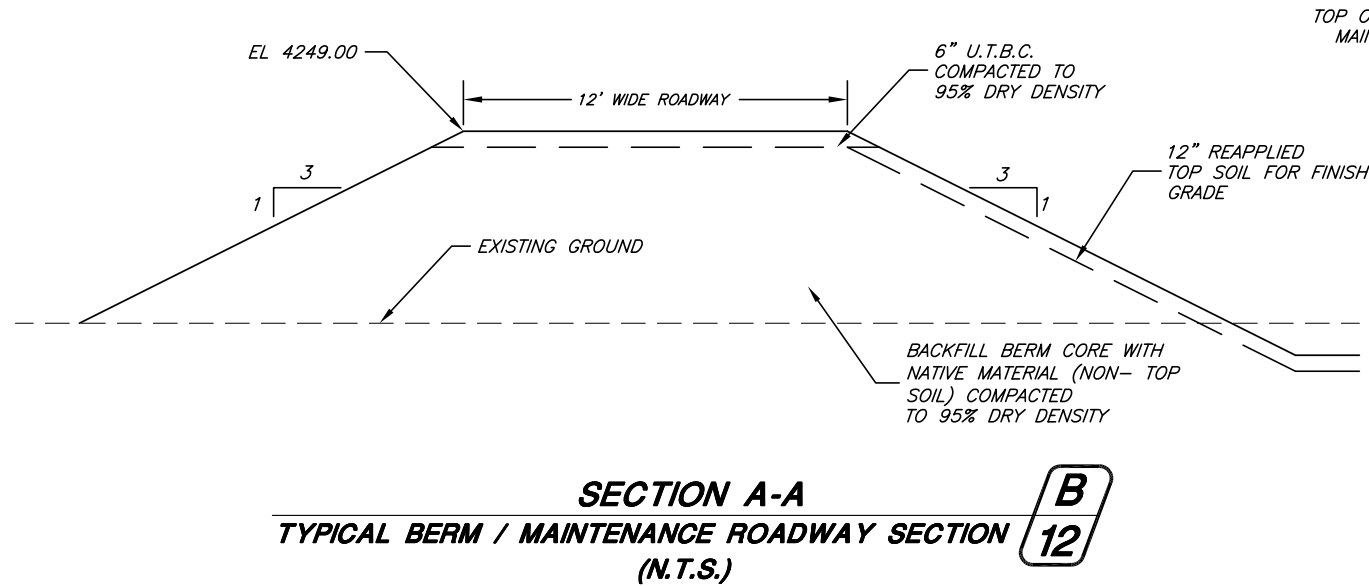
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STRUCTURE GRATE DETAILS

SHEET:
5
OF SHEETS



EMERGENCY SPILLWAY **A**
12

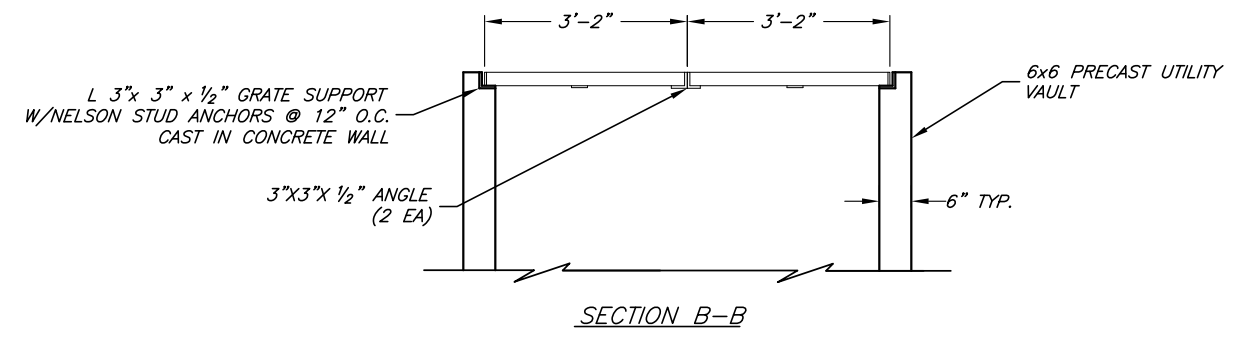
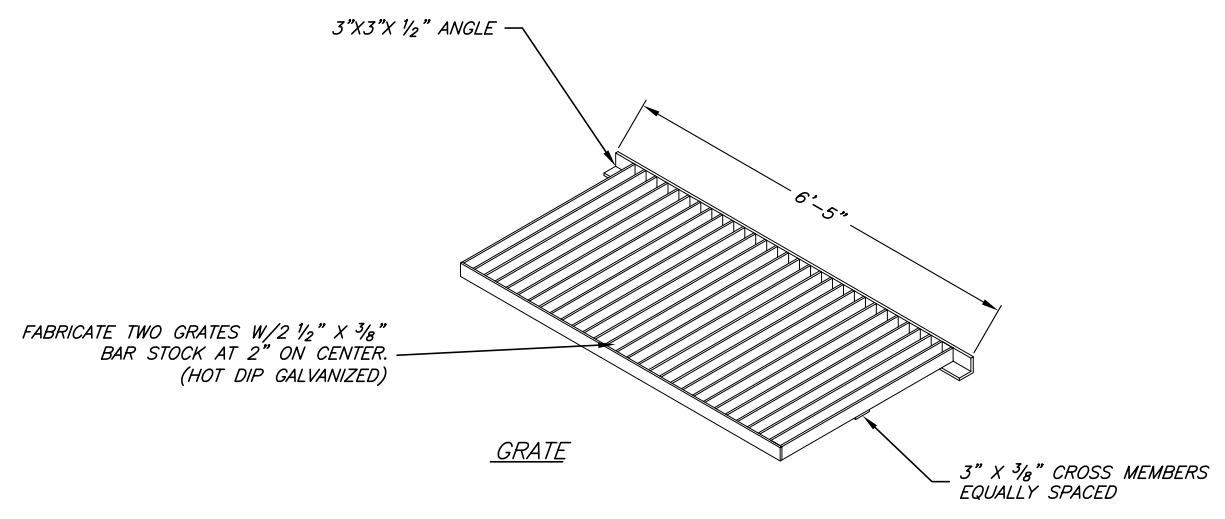
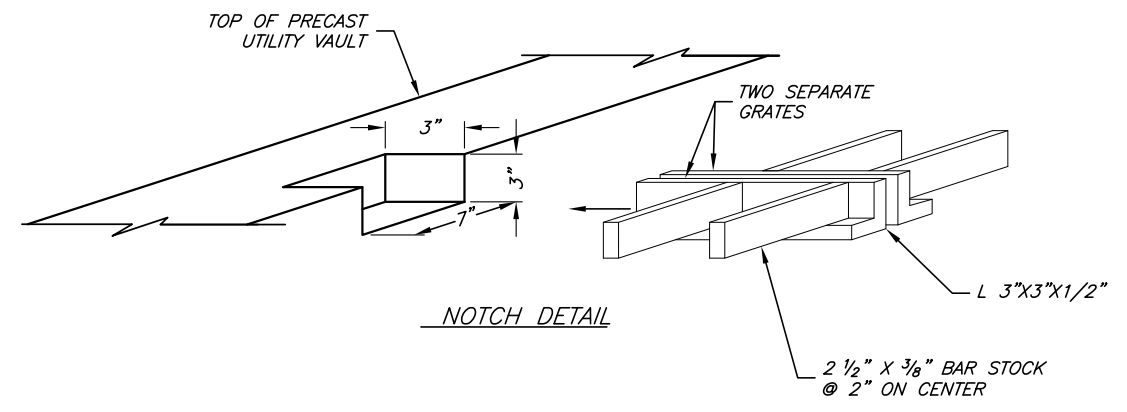
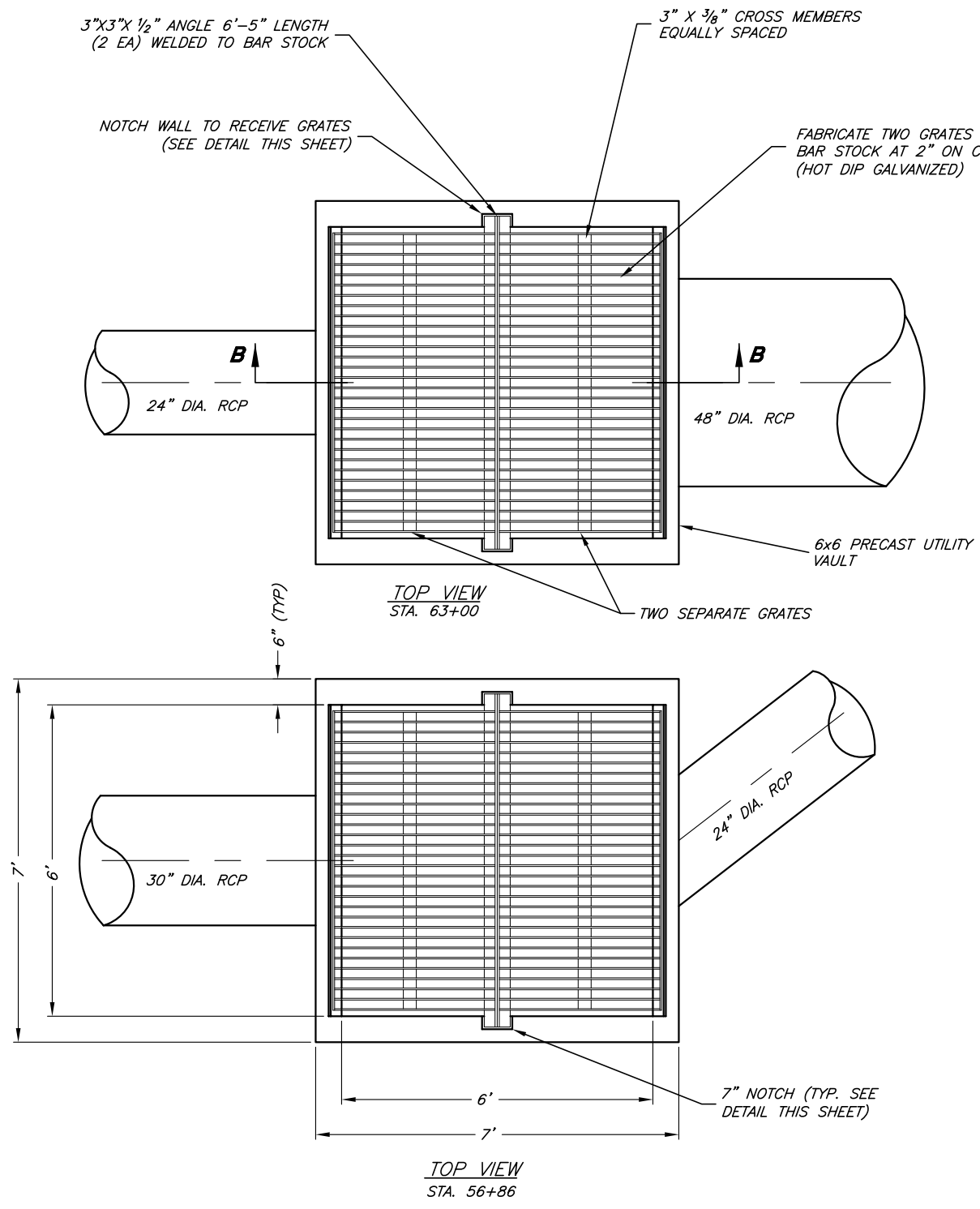
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| PROJECT ENGINEER | | | |
| DATE | REV. | DATE | APPR. |

SCALE: N.T.S.
 DESIGNED: BEB
 DRAWN: BEB
 CHECKED: BMJ



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 South Ogden, Utah 84403 (801) 476-9767

BRIGHAM CITY CORPORATION
 2006-2007 STORM DRAIN BOND PROJECT - PHASE 4
EMERGENCY SPILLWAY & BERM DETAILS



NOTE:
 SECURE/BOLT GRATE TO CONCRETE BOX (SUBMIT SHOP DRAWINGS TO BE APPROVED BY CITY ENGINEER)

INLET / BUBBLE-UP BOX **A**
13

| | | | | | | | |
|------------------|------|--------|---------------|--|---|---|-----------|
| PROJECT ENGINEER | | SCALE: | | JONES & ASSOCIATES CONSULTING ENGINEERS 1716 East 5600 South South Ogden, Utah 84403 (801) 476-9767 | BRIGHAM CITY CORPORATION | | SHEET: |
| DATE | | N.T.S. | | | 2006-2007 STORM DRAIN BOND PROJECTS - PHASE 4 | | 7 |
| REV. | DATE | APPR. | DESIGNED: BEB | | INLET / BUBBLE-UP BOX DETAILS | | OF SHEETS |
| | | | DRAWN: BEB | | | 0 | |
| | | | CHECKED: BMJ | | | | |