ATTACHMENT G1
APPENDIX H

DESIGN DRAWINGS

PANEL CLOSURE SYSTEM
WASTE ISOLATION PILOT PLANT
CARLSBAD, NEW MEXICO

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ATTACHMENT G1
APPENDIX H

DESIGN DRAWINGS

PANEL CLOSURE SYSTEM
WASTE ISOLATION PILOT PLANT
CARLSBAD, NEW MEXICO

Drawing	Title
762447-E1	Panel closure system, air intake and exhaust drifts, title sheet
762447-E2	Panel closure system, underground waste-emplacement panel plan
762447-E3	Panel closure system, air intake drift, construction details
762447-E4	Panel closure system, air exhaust drift, construction details
762447-E5	Panel closure system, construction and explosion walls, construction details
762447-E6	Panel closure system, air intake and exhaust drifts, grouting and miscellaneous details

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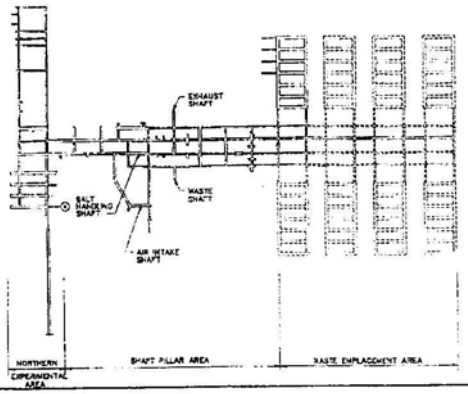
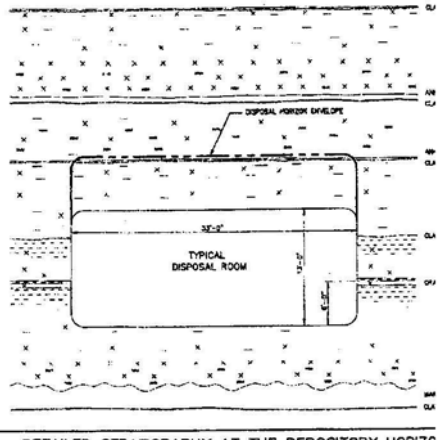


UNDERGROUND REPOSITORY LAYOUT PLAN
NTS

762447-E1	TITLE SHEET
762447-E2	UNDERGROUND WASTE DISPOSAL PANEL-PLAN
762447-E3	PANEL CLOSURE SYSTEM-AIR INTAKE DRIFT-CONSTRUCTION DETAILS
762447-E4	PANEL CLOSURE SYSTEM-AIR EXHAUST DRIFT-CONSTRUCTION DETAILS
762447-E5	PANEL CLOSURE SYSTEM-CONSTRUCTION AND EXPLOSION WALLS-CONSTRUCTION DETAILS
762447-E6	PANEL CLOSURE SYSTEM-AIR ENTRANCE AND EXHAUST DRIFT GROUTING AND MISCELLANEOUS DETAILS

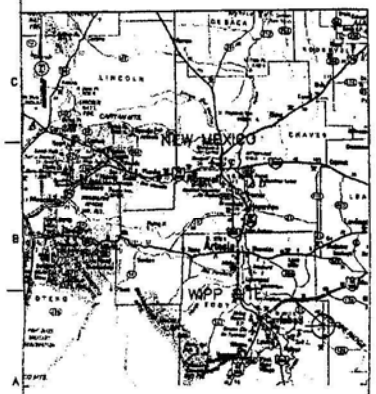


DETAILED STRATIGRAPHY AT THE REPOSITORY HORIZO
NTS

WASTE ISOLATION PILOT PLANT
PANEL CLOSURE SYSTEM
CARLSBAD, NEW MEXICO

prepared by

IT CORPORATION
ALBUQUERQUE, NEW MEXICO



GENERAL LOCATION MAP
NTS

DRAWN BY | STRIT 09-08-95 | CHECKED BY | APPROVED BY | I.T. DRAWING NUMBER 7624

U.S. DEPARTMENT
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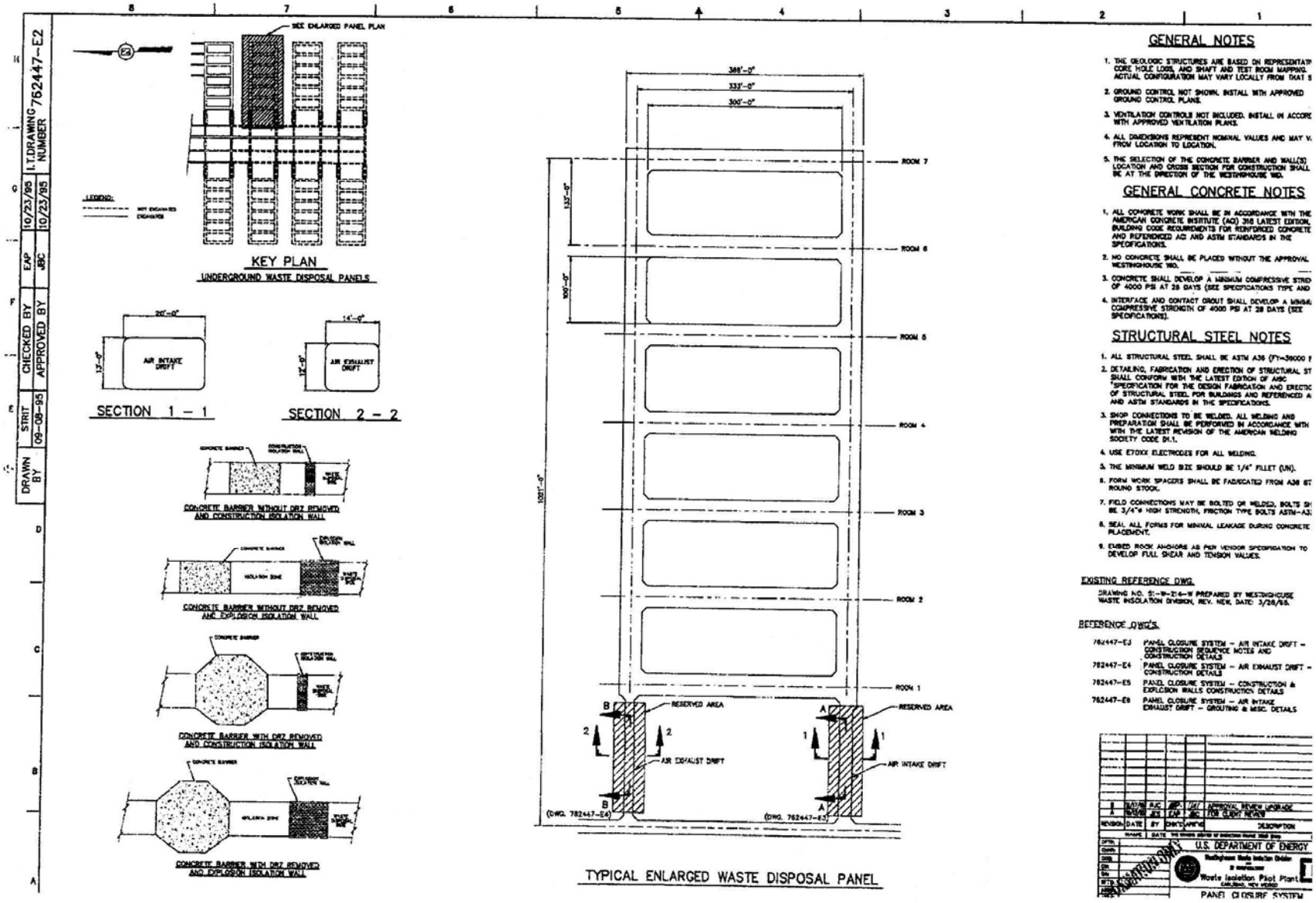
KEY PLAN
UNDERGROUND WASTE DISPOSAL PANELS
SEE ENLARGED PANEL PLAN
SECTION 1 – 1
SECTION 2 – 2
AIR INTAKE DRIFT
AIR EXHAUST DRIFT
CONCRETE BARRIER WITHOUT DRZ REMOVED AND CONSTRUCTION ISOLATION WALL
CONCRETE BARRIER WITHOUT DRZ REMOVED AND EXPLOSION ISOLATION WALL
CONCRETE BARRIER WITH DRZ REMOVED AND CONSTRUCTION ISOLATION WALL
CONCRETE BARRIER WITH DRZ REMOVED AND EXPLOSION ISOLATION WALL
TYPICAL ENLARGED WASTE DISPOSAL PANEL
RESERVED AREA
AIR EXHAUST DRIFT
AIR INTAKE DRIFT
(DWG. 782447-E4)
(DWG. 782447-E3)
GENERAL NOTES
GENERAL CONCRETE NOTES
STRUCTURAL STEEL NOTES
EXISTING REFERENCE DWG.
REFERENCE DWG'S.
U.S. DEPARTMENT OF ENERGY
Waste Isolation Pilot Plant
PANEL CLOSURE SYSTEM
DRAWN BY
CHECKED BY
APPROVED BY
I.T.DRAWING NUMBER 762447-E2

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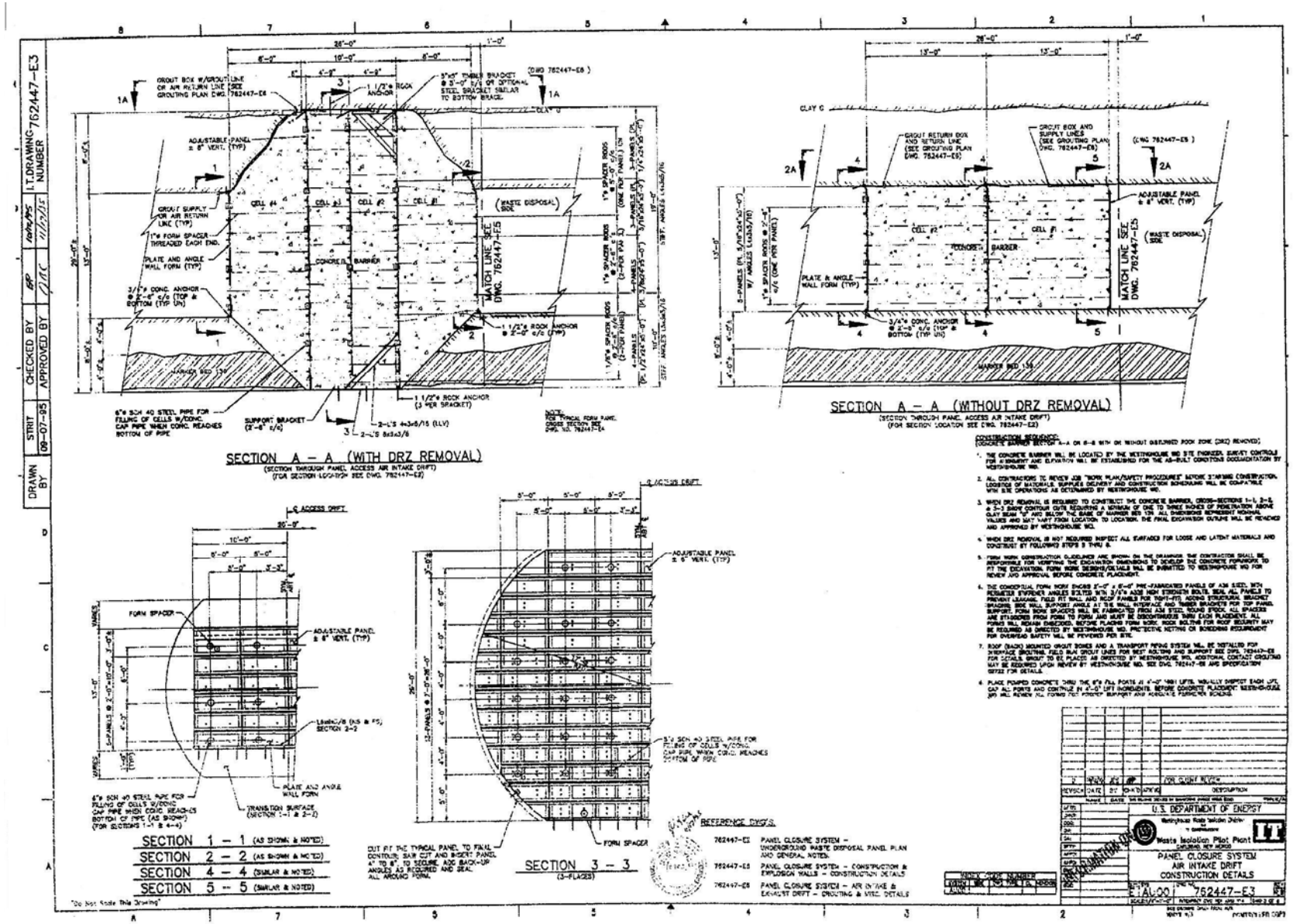
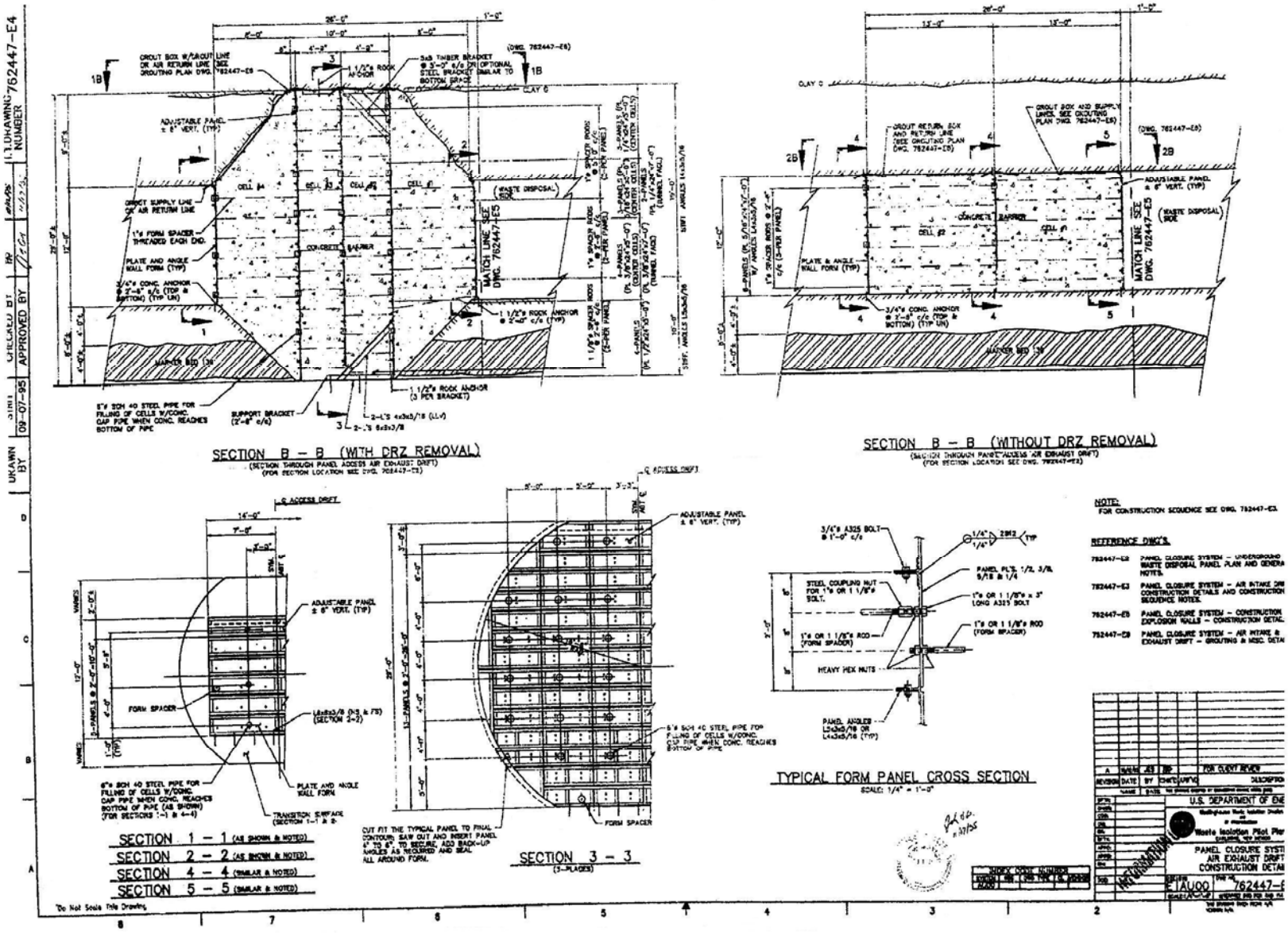
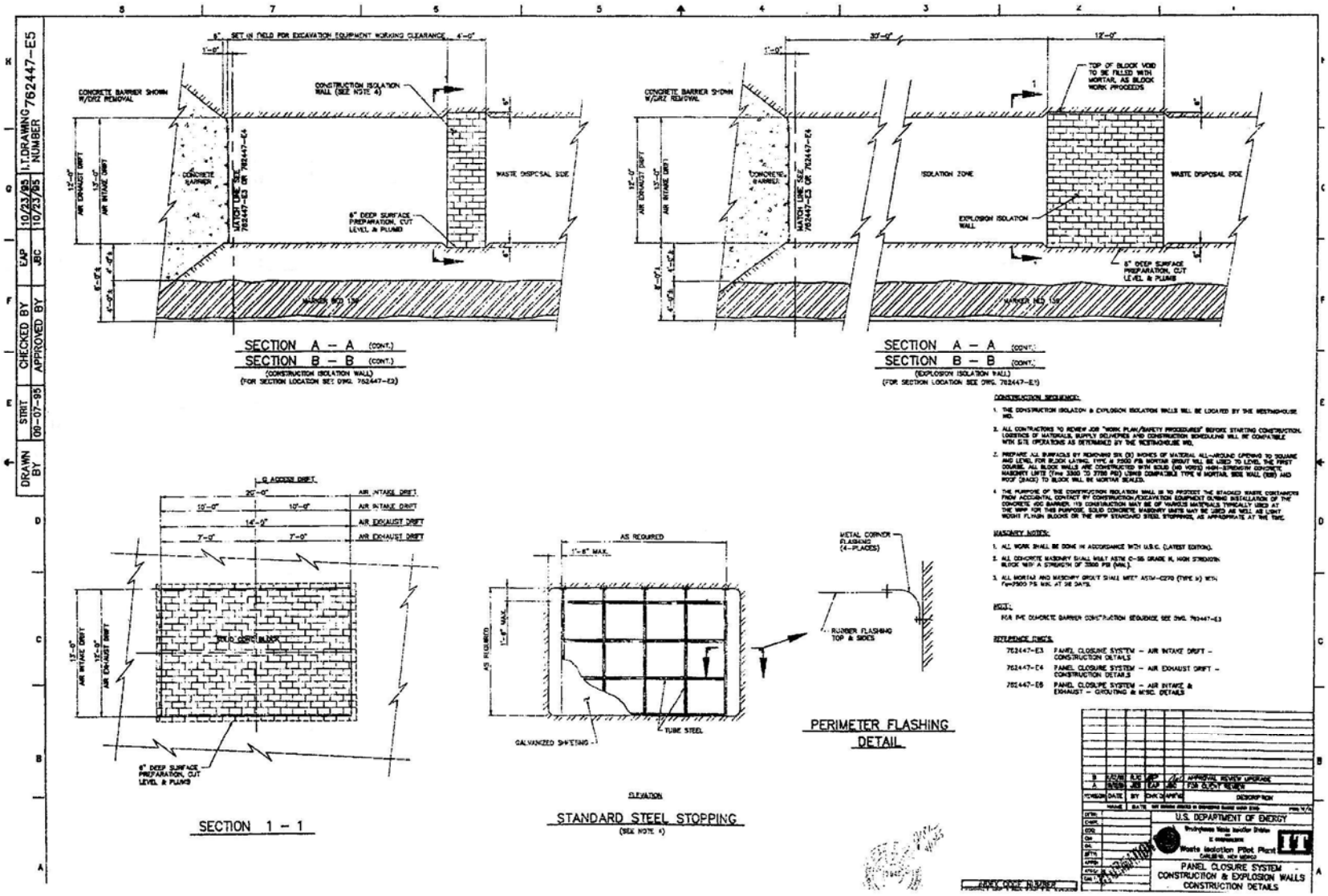

SECTION A – A (WITH DRZ REMOVAL)
SECTION A – A (WITHOUT DRZ REMOVAL)
SECTION 1 – 1 (AS SHOWN & NOTED)
SECTION 2 – 2 (AS SHOWN & NOTED)
SECTION 4 – 4 (SIMILAR & NOTED)
SECTION 5 – 5 (SIMILAR & NOTED)
SECTION 3 – 3 (3-PLACES)
U.S. DEPARTMENT OF ENERGY
Waste Isolation Pilot Plant
PANEL CLOSURE SYSTEM
AIR INTAKE DRIFT
CONSTRUCTION DETAILS
762447-E3


SECTION B – B (WITH DRZ REMOVAL)
SECTION B – B (WITHOUT DRZ REMOVAL)
TYPICAL FORM PANEL CROSS SECTION
SECTION 1 – 1 (AS SHOWN & NOTED)
SECTION 2 – 2 (AS SHOWN & NOTED)
SECTION 4 – 4 (SIMILAR & NOTED)
SECTION 5 – 5 (SIMILAR & NOTED)
SECTION 3 – 3
U.S. DEPARTMENT OF ENE
Waste Isolation Pilot Plan
PANEL CLOSURE SYSTE
AIR EXHAUST DRIFT
CONSTRUCTION DETAI
762447-E
Do Not Scale This Drawing


SECTION A – A (CONT.)
SECTION B – B (CONT.)
(CONSTRUCTION ISOLATION WALL)
SECTION A – A (CONT.)
SECTION B – B (CONT.)
(EXPLOSION ISOLATION WALL)
SECTION 1 – 1
STANDARD STEEL STOPPING
PERIMETER FLASHING DETAIL
U.S. DEPARTMENT OF ENERGY
PANEL CLOSURE SYSTEM
CONSTRUCTION & EXPLOSION WALLS
CONSTRUCTION DETAILS
762447-E5

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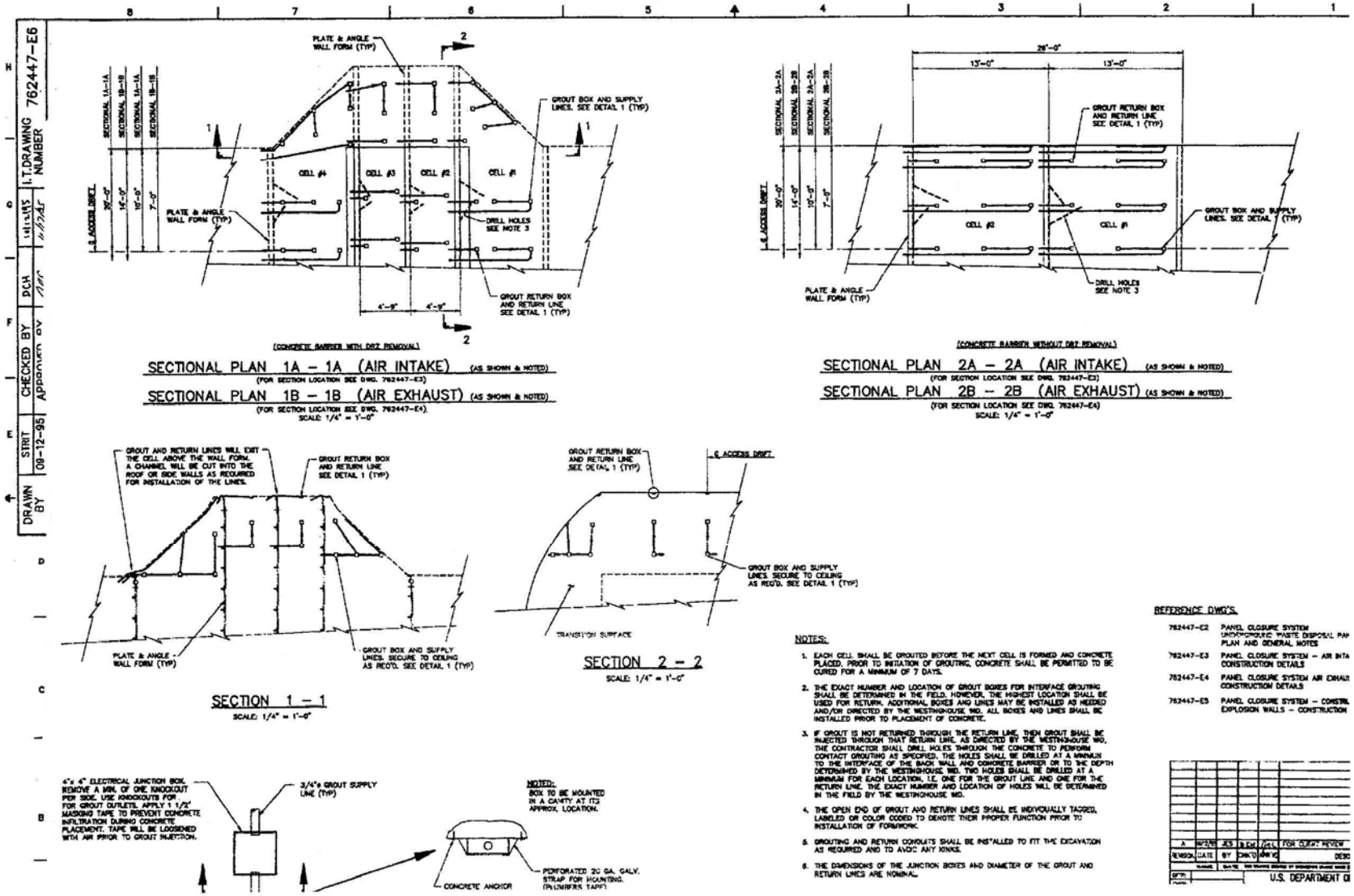
762447-E6
I.T.DRAWING NUMBER
DRAWN BY
STRIT
CHECKED BY
DCH
SECTIONAL PLAN 1A – 1A (AIR INTAKE) (AS SHOWN & NOTED)
(FOR SECTION LOCATION SEE DWG. 762447-E3)
SECTIONAL PLAN 1B – 1B (AIR EXHAUST) (AS SHOWN & NOTED)
(FOR SECTION LOCATION SEE DWG. 762447-E4)
SCALE: 1/4" = 1'-0"
(CONCRETE BARRIER WITH DRZ REMOVAL)
SECTIONAL PLAN 2A – 2A (AIR INTAKE) (AS SHOWN & NOTED)
(FOR SECTION LOCATION SEE DWG. 762447-E3)
SECTIONAL PLAN 2B – 2B (AIR EXHAUST) (AS SHOWN & NOTED)
(FOR SECTION LOCATION SEE DWG. 762447-E4)
SCALE: 1/4" = 1'-0"
(CONCRETE BARRIER WITHOUT DRZ REMOVAL)
PLATE & ANGLE WALL FORM (TYP)
GROUT BOX AND SUPPLY LINES. SEE DETAIL 1 (TYP)
GROUT RETURN BOX AND RETURN LINE SEE DETAIL 1 (TYP)
DRILL HOLES SEE NOTE 3
CELL #4
CELL #3
CELL #2
CELL #1
SECTION 1 – 1
SCALE: 1/4" = 1'-0"
GROUT AND RETURN LINES WILL EXIT THE CELL ABOVE THE WALL FORM. A CHANNEL WILL BE CUT INTO THE ROOF OR SIDE WALLS AS REQUIRED FOR INSTALLATION OF THE LINES.
GROUT BOX AND SUPPLY LINES. SECURE TO CEILING AS REQ'D. SEE DETAIL 1 (TYP)
SECTION 2 – 2
SCALE: 1/4" = 1'-0"
TRANSITION SURFACE
4"x 4" ELECTRICAL JUNCTION BOX. REMOVE A MIN. OF ONE KNOCKOUT PER SIDE. USE KNOCKOUTS FOR FOR GROUT OUTLETS. APPLY 1 1/2" MASKING TAPE TO PREVENT CONCRETE INFILTRATION DURING CONCRETE PLACEMENT. TAPE WILL BE LOOSENED WITH AIR PRIOR TO GROUT INJECTION.
3/4"ø GROUT SUPPLY LINE (TYP)
NOTED:
BOX TO BE MOUNTED IN A CAVITY AT ITS APPROX. LOCATION.
CONCRETE ANCHOR
PERFORATED 20 GA. GALV. STRAP FOR MOUNTING. (PLUMBERS TAPE)
NOTES:
1. EACH CELL SHALL BE GROUTED BEFORE THE NEXT CELL IS FORMED AND CONCRETE PLACED. PRIOR TO INITIATION OF GROUTING, CONCRETE SHALL BE PERMITTED TO BE CURED FOR A MINIMUM OF 7 DAYS.
2. THE EXACT NUMBER AND LOCATION OF GROUT BOXES FOR INTERFACE GROUTING SHALL BE DETERMINED IN THE FIELD. HOWEVER, THE HIGHEST LOCATION SHALL BE USED FOR RETURN. ADDITIONAL BOXES AND LINES MAY BE INSTALLED AS NEEDED AND/OR DIRECTED BY THE WESTINGHOUSE WID. ALL BOXES AND LINES SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE.
3. IF GROUT IS NOT RETURNED THROUGH THE RETURN LINE, THEN GROUT SHALL BE INJECTED THROUGH THAT RETURN LINE, AS DIRECTED BY THE WESTINGHOUSE WID. THE CONTRACTOR SHALL DRILL HOLES THROUGH THE CONCRETE TO PERFORM CONTACT GROUTING AS SPECIFIED. THE HOLES SHALL BE DRILLED AT A MINIMUM TO THE INTERFACE OF THE BACK WALL AND CONCRETE BARRIER OR TO THE DEPTH DETERMINED BY THE WESTINGHOUSE WID. TWO HOLES SHALL BE DRILLED AT A MINIMUM FOR EACH LOCATION, I.E. ONE FOR THE GROUT LINE AND ONE FOR THE RETURN LINE. THE EXACT NUMBER AND LOCATION OF HOLES WILL BE DETERMINED IN THE FIELD BY THE WESTINGHOUSE WID.
4. THE OPEN END OF GROUT AND RETURN LINES SHALL BE INDIVIDUALLY TAGGED, LABELED OR COLOR CODED TO DENOTE THEIR PROPER FUNCTION PRIOR TO INSTALLATION OF FORMWORK.
5. GROUTING AND RETURN CONDUITS SHALL BE INSTALLED TO FIT THE EXCAVATION AS REQUIRED AND TO AVOID ANY KINKS.
6. THE DIMENSIONS OF THE JUNCTION BOXES AND DIAMETER OF THE GROUT AND RETURN LINES ARE NOMINAL.
REFERENCE DWG'S.
762447-E2 PANEL CLOSURE SYSTEM
762447-E3 PANEL CLOSURE SYSTEM – AIR INTA
762447-E4 PANEL CLOSURE SYSTEM AIR EXHAU
762447-E5 PANEL CLOSURE SYSTEM – CONSTRU
FOR CLIENT REVIEW
U.S. DEPARTMENT O

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