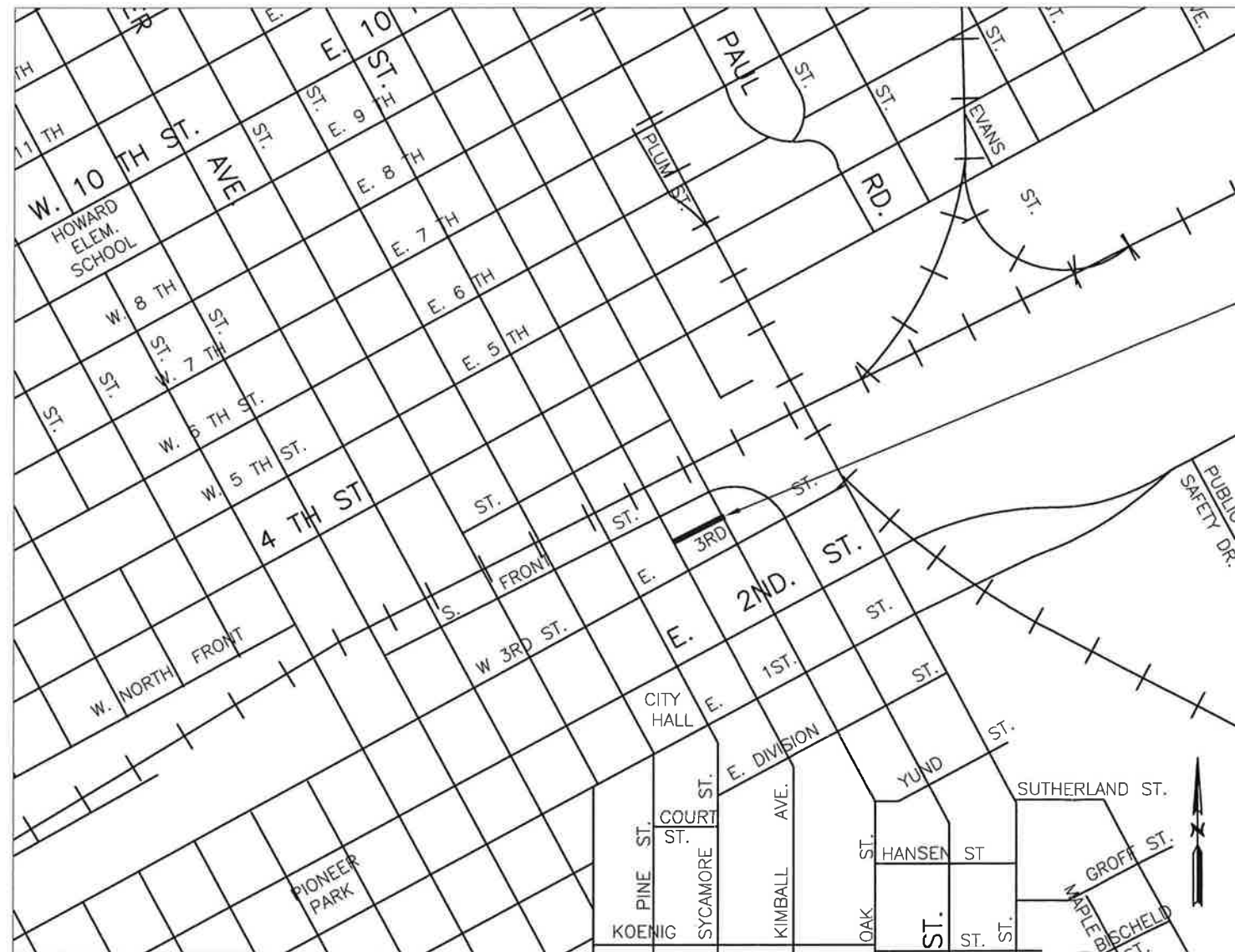


# CITY OF GRAND ISLAND

## PUBLIC WORKS DEPARTMENT

### 2013-P-5

#### GRAND GENERATION CENTER - ALLEY



LOCATION MAP

ALLEY NORTH SIDE OF GRAND GRNERATION CENTER  
(NORTH OF 3RD ST. EAST OF OAK ST.)

| QUANTITY ESTIMATE |                                |             |
|-------------------|--------------------------------|-------------|
|                   | ITEM                           | QTY. UNIT   |
| 1                 | REMOVE WALK                    | 112.0 SQ FT |
| 2                 | REMOVE PCC PAVEMENT            | 353.0 SQ YD |
| 3                 | REMOVE ASPHALTIC PAVEMENT      | 13.25 SQ YD |
| 4                 | PLACE 6" PAVEMENT              | 385.0 SQ YD |
| 5                 | PLACE 4" WALK                  | 112.0 SQ FT |
| 6                 | NYLOPLAST DRAIN BASIN W/ GRATE | 2.0 EACH    |
| 7                 | BUILD ALLEY AREA INLET         | 1.0 EACH    |
| 8                 | RECONNECT TO STORM SEWER       | 1.0 EACH    |
| 9                 | PLACE 10" HDPE PIPE & FITTINGS | 81.0 LF     |

#### GENERAL NOTES

- THE LOCATION OF ALL UTILITIES SHOWN ON THE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF GRAND ISLAND UTILITY DEPARTMENT ANY WORK IN CONFLICT WITH EXISTING OVERHEAD OR UNDERGROUND ELECTRIC LINES.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF GRAND ISLAND STANDARD PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS FOR SULFATE RESISTANT CONCRETE.
- CONCRETE MIX SHALL BE 47B MODIFIED AS OUTLINED IN THE CITY OF GRAND ISLAND SPECIFICATIONS.
- CONTRACTOR SHALL PRESERVE ALL PROPERTY CORNER MONUMENTS OR RE-ESTABLISH THEM IF THEY ARE DISTURBED DURING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN AND PAY THE COST OF ALL REQUIRED PERMITS AND FEES.
- THE CONTRACTOR SHALL USE EXTREME CAUTION IN THE AREA OF EXISTING MANHOLES, POWER POLES, AND ALL OTHER EXISTING UTILITIES, AND SHALL BE RESPONSIBLE FOR DAMAGES.
- THE CONTRACTOR SHALL AID IN THE COORDINATION OF ALL TESTING PROCEDURES REQUIRED.
- AT THE COMPLETION OF WORK AND BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING REQUESTING A FINAL WALK-THROUGH OF THE PROJECT.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL MEASURES DURING ALL PHASES OF CONSTRUCTION AND PROTECT INLETS FROM RECEIVING SILT FROM SURROUNDING AREAS WHILE CONCRETE IS REMOVED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL COSTS AND COORDINATION. TRAFFIC CONTROL PLAN SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY OF GRAND ISLAND STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY PROPERTY OWNERS A MINIMUM OF SEVEN DAYS PRIOR TO ANY CONSTRUCTION.
- SAWCUTTING OF PAVEMENT IS SUBSIDIARY TO THE REMOVAL OF EXISTING PAVEMENT. CONCRETE PAVEMENT SHALL BE REMOVED AT EXISTING JOINTS IF POSSIBLE. CLEAN JOINTS SHALL BE PROVIDED PRIOR TO REPLACEMENT OF PAVEMENT. CONTRACTOR RESPONSIBLE FOR DISPOSAL OF REMOVED ITEMS. JOINTS FROM EXISTING TO PROPOSED PAVEMENTS ARE PROVIDED IN THE GRAND ISLAND CITY SPECIFICATIONS AND SHOULD BE FOLLOWED.
- FILL MATERIAL, IF NEEDED, SHALL BE SUBSIDIARY TO THE PROJECT.

#### SHEET INDEX

- SHEET 1 - COVER SHEET
- SHEET 2 - PROJECT PLANS
- SHEET 3 - PIPE TRENCH AND AREA INLET DETAILS

THIS DOCUMENT WAS ORIGINALLY SIGNED BY KEITH J. KURZ, E-12954, ON 6/7/13. THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT AND SHOULD BE USED FOR REFERENCE ONLY.

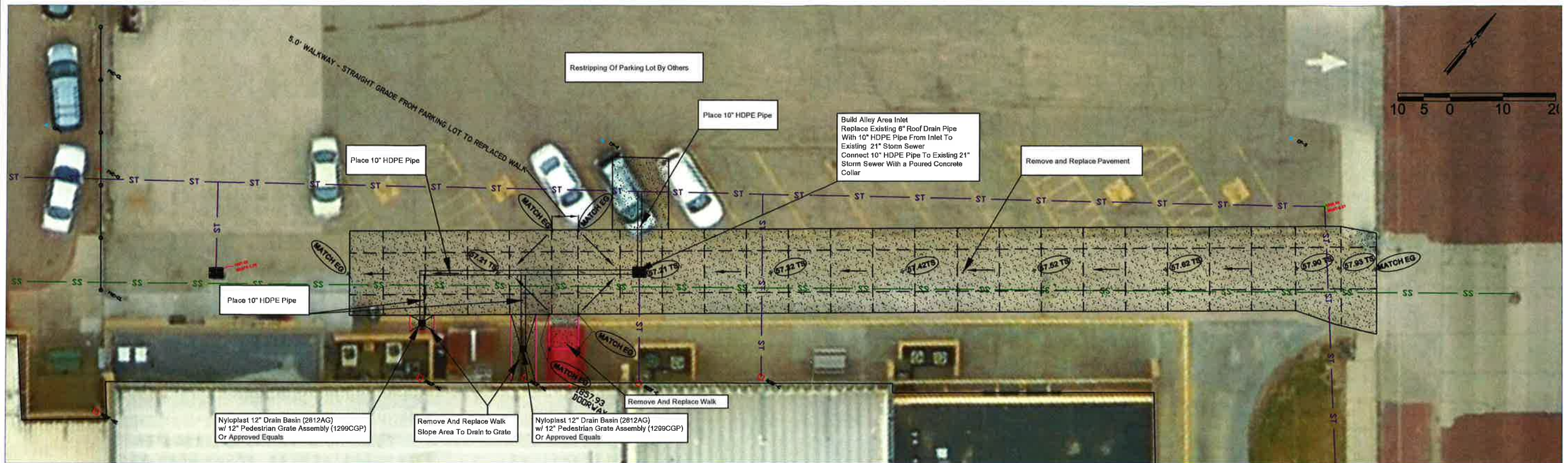
| REV. NO. | DATE     | DESCRIPTION |
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| 1        | 06/07/13 |             |

| DATE | BY | DESCRIPTION |
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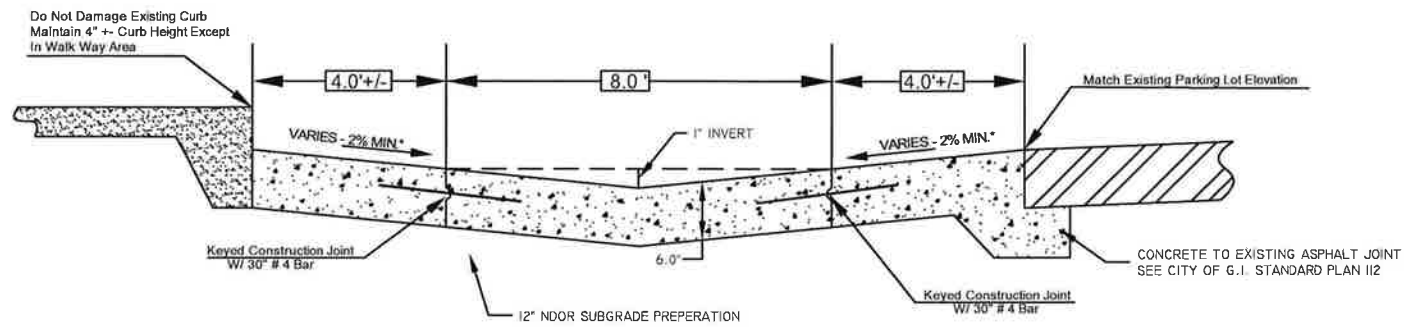
COVER & PROJECT LOCATION  
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GRAND ISLAND, NEBRASKA

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1 3



← - DRAINAGE DIRECTION  
 --- - CONCRETE JOINT LAYOUT



\* EXCEPT IN AREA OF WALKWAY OUT OF BUILDING  
 NOTE: TRANSVERSE JOINTS SHALL BE AT 8' MAXIMUM AS SHOWN ABOVE

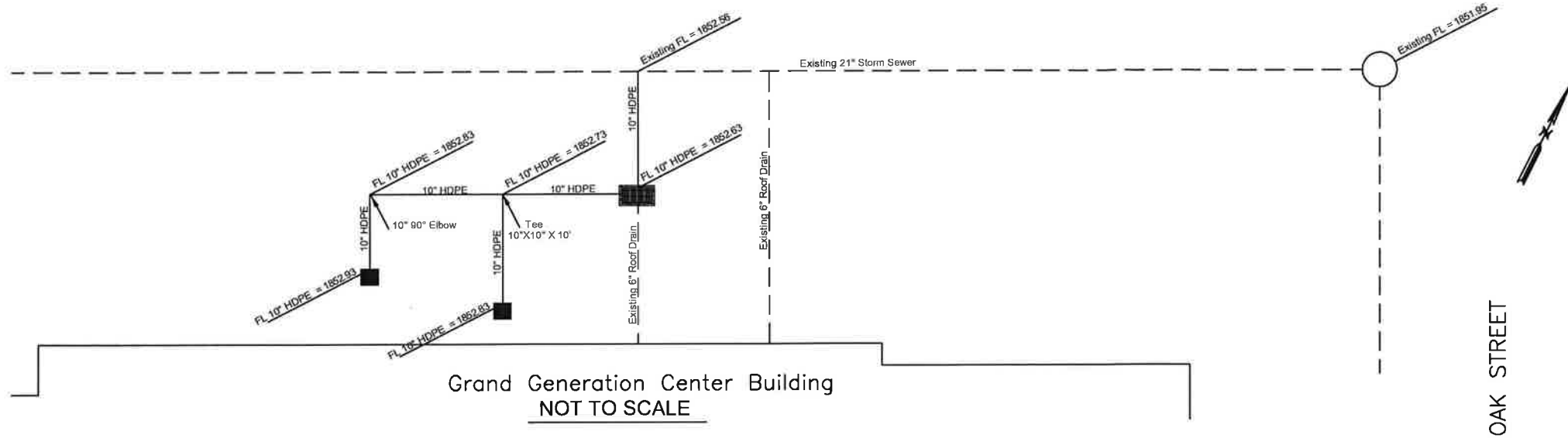
**TYPICAL SECTION**  
 NOT TO SCALE

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|          |     |             |
|----------|-----|-------------|
| DATE     | BY  | DESCRIPTION |
| 11/08/12 | MWL |             |
| 11/30/12 | MWL |             |
| 06/07/13 | TAB |             |
| 06/07/13 | KJK |             |
| 06/07/13 | KJK |             |

GRAND GENERATION CENTER - GRADES AND CONSTRUCTION NOTES  
 GRAND GENERATION CENTER - ALLEY REPAIR - 2013-P-5  
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Grand Generation Center Building  
NOT TO SCALE

OAK STREET

**NOTES:**

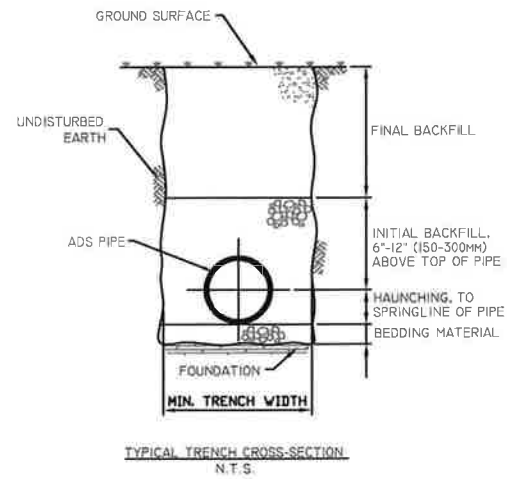
- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE SUBCONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100-600mm) AND 42"-48" (1050-1200mm) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150mm) FOR 30"-36" (750-900mm) CPEP.
- HAUNCHING AND INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. 4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

| NOMINAL Ø<br>IN (mm) | MIN. RECOMMENDED<br>TRENCH WIDTH IN (MM) # |
|----------------------|--|
| 2 (50)               | (530)                                      |
| 4 (100)              | 23 (580)                                   |
| 6 (200)              | 25 (630)                                   |
| 8 (200)              | 28 (700)                                   |
| 12 (300)             | 31 (790)                                   |
| 18 (375)             | 34 (860)                                   |
| 24 (600)             | 39 (990)                                   |
| 30 (600)             | 48 (1220)                                  |
| 36 (900)             | 66 (1680)                                  |
| 42 (1050)            | 78 (1980)                                  |
| 48 (1200)            | 85 (2160)                                  |
| 60 (1500)            | 89 (2250)                                  |
|                      | 102 (2590)                                 |

- MINIMUM COVER:** MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

| SURFACE LIVE<br>LOADING CONDITION | MINIMUM RECOMMENDED<br>COVER IN (INCH) |
|-----------------------------------|--|
| H25 (FLEXIBLE PAVEMENT)           | 12 (300)*                              |
| H25 (RIGID PAVEMENT) E80          | 12 (300)                               |
| RAILWAY                           | 24 (610)                               |
| HEAVY CONSTRUCTION                | 48 (1220)                              |

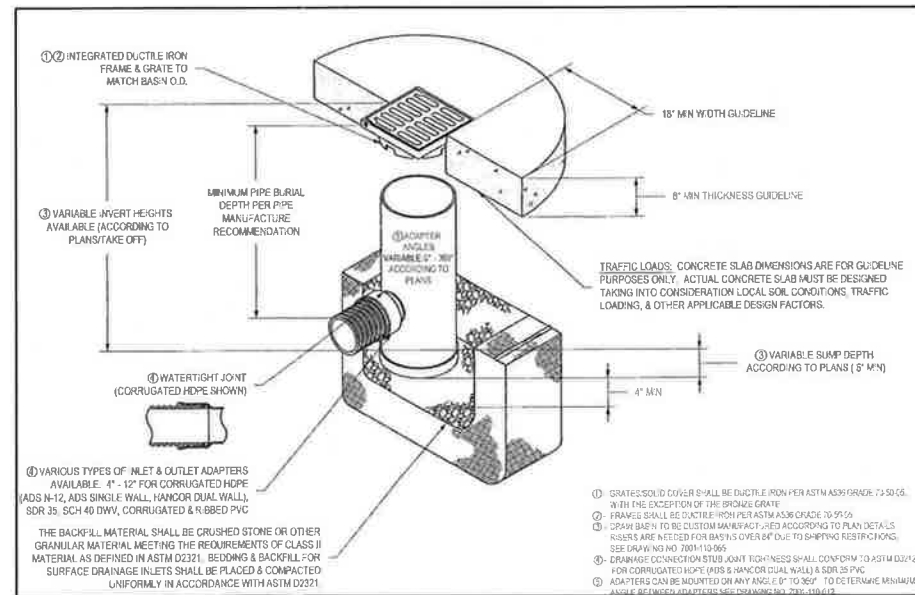
\* TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION  
NOTE: NATIVE SAND MAY BE SUBSTITUTED FOR CLASS I, II, OR III BACKFILL MATERIAL.



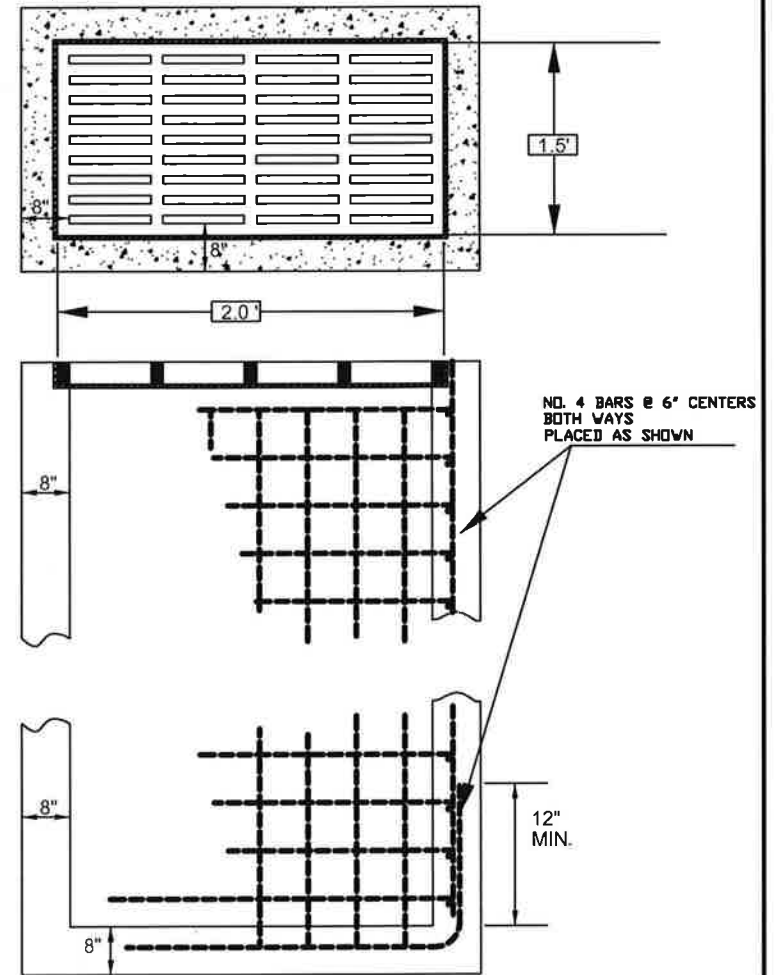
NOTE TO THE ENGINEER: WHEN THIS DETAIL IS TO BE INCORPORATED INTO CONTRACT DOCUMENTS, PLEASE REFERENCE SECTION X-2, "RECOMMENDATIONS FOR INCORPORATION INTO CONTRACT DOCUMENTS" OF ASTM SPECIFICATION D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS" SO THAT APPROPRIATE MODIFICATIONS CAN BE MADE TO ACCOMMODATE SITE SPECIFIC NEEDS.

**TRENCH INSTALLATION DETAIL**

N.T.S.



**ALLEY AREA INLET**  
(DEETER Drainage Grate & Frame #3384)18"x24"



NO. 4 BARS @ 6" CENTERS  
BOTH WAYS  
PLACED AS SHOWN

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| 1        | 06/07/13 | KJK | ISSUE FOR PERMIT |

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