

**STANDARD CONSTRUCTION SPECIFICATIONS  
MISCELLANEOUS  
DIVISION 70  
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**STANDARD CONSTRUCTION SPECIFICATIONS  
MISCELLANEOUS  
DIVISION 70**

**SECTION 70.01 GENERAL**

**Article 1.1 Scope of Work**

The Work covered by these Specifications consists of providing all plant, labor, equipment, supplies, materials, transportation, handling and storage, and performing all operations in connection with the adjustment and/or construction of miscellaneous facilities as provided in this Division.

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## **SECTION 70.02 ADJUST GAS VALVE KEY BOX TO FINISH GRADE**

### **Article 2.1 General**

The Work under this Section consists of providing all operations pertaining to adjustment of existing gas valve key boxes to finish grade. The Contractor must contact ENSTAR's Distribution Department prior to starting any Work that includes or is adjacent to the gas valve key box.

### **Article 2.2 Material**

ENSTAR will furnish all materials to adjust gas valve key boxes to finish grade.

### **Article 2.3 Construction**

The Contractor shall adjust gas valve key boxes in accordance with the applicable Standard Details, unless otherwise directed by the Engineer. Any damage to gas valve key boxes resulting from construction under this Contract shall be repaired or the damaged portion replaced at the Contractor's expense. All gas valve key box adjustments will be accomplished as requested by the Engineer. The Contractor shall be responsible for ensuring that the gas valve key box is vertical, clean, to proper grade, and readily accessible for operation of the valve.

Contractor shall adjust the service key box to finish grade prior to placement of asphalt pavement. After-the-fact cutting of new asphalt for adjustments is not accepted. Any adjustment(s) requiring cutting of new asphalt shall not be paid and shall be deducted from the plan quantity.

### **Article 2.4 Measurement**

Adjustment of gas valve key boxes will be measured per unit, complete in place.

### **Article 2.5 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Adjust Gas Valve Key Box to Finish Grade	Each

## **SECTION 70.03 ADJUST GAS VALVE MANHOLE TO FINISH GRADE**

### **Article 3.1 General**

The Work under this Section consists of providing all operations pertaining to adjustment of existing gas valve manholes to finish grade. The Contractor must contact ENSTAR's Distribution Department prior to starting any Work that includes or is adjacent to the gas valve manhole.

### **Article 3.2 Material**

ENSTAR will furnish all materials, except mortar, to adjust gas valve manholes to finish grade.

### **Article 3.3 Construction**

The Contractor shall adjust gas valve manholes in accordance with applicable Standard Detail, unless otherwise directed by the Engineer. Any damage to gas valve manholes resulting from construction under this Contract shall be repaired or the damaged portion replaced at the Contractor's expense. The Contractor shall be responsible for ensuring that the valve box is vertical, clean, to proper grade, and readily accessible for operation of the valve.

Contractor shall adjust the gas valve manhole to finish grade prior to placement of asphalt pavement. After-the-fact cutting of new asphalt for adjustments is not accepted. Any adjustment(s) requiring cutting of new asphalt shall not be paid and shall be deducted from the plan quantity.

### **Article 3.4 Measurement**

Adjustment of gas valve manholes will be measured per unit, complete in place.

### **Article 3.5 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Adjust Gas Valve Manhole to Finish Grade	Each

## **SECTION 70.04 ADJUST ELECTRIC/TELEPHONE MANHOLE**

### **Article 4.1 General**

The Work under this Section consists of providing all operations and materials required for the preparation and adjustment of electric/telephone manhole lids, frames, and rings to finish grade.

### **Article 4.2 Materials**

All concrete and cement used in the adjustment of electrical/telephone manholes shall conform to the requirements for manholes as specified in Division 55, Section 55.05 - Manholes and Catch Basin Manholes.

The Contractor may utilize Neenah Manhole Adjusting Rings P1979-077, Part No: 19790053, Catalog 1797-01, or an approved equal, for adjusting the electrical and telephone manhole to finish grade.

### **Article 4.3 Construction**

All manholes to be adjusted shall be inspected by the Contractor, the Engineer, and the applicable utility's representative to verify size, condition, and any necessary replacement of the existing lids. Inspection, replacement, and cost of lids will be considered incidental to the Contract and no separate payment shall be made. Manholes may be adjusted by installing grade rings and/or grouting. Manhole adjustment by grouting shall consist of bringing the manhole grade ring and lid to final grade, then grouting underneath the ring. The Contractor shall have an assortment of adjustment rings of various thicknesses on the project site to preclude after-the-fact asphalt cutting for adjustment.

After-the-fact cutting of new asphalt for adjustments will not be accepted; rings will be inventoried before authorization to pave is given. Any utility adjustments requiring cutting of new asphalt will not be paid and will be deducted from the plan quantity.

The Contractor shall contact the appropriate utility at least forty-eight (48) hours prior to beginning the overlay operation, and to schedule a representative of that utility to be on site to supervise the manhole adjustments to finish grade.

Prior to placement of any grade ring adjustment, the existing seat should be cleaned and all loose material shall be blown out or wire brushed to ensure a proper fit.

### **Article 4.4 Measurement**

Adjustments of electric/telephone manholes to finish grade shall be measured per unit, complete in place, and adjusted to the required grade.

### **Article 4.5 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following units:

ITEM	UNIT
Adjust Electric Manhole (Type)	Each
Adjust Telephone Manhole (Type)	Each

## **SECTION 70.05    ADJUST ELECTRICAL VAULT**

### **Article 5.1    General**

The Work under this Section consists of performing all operations pertaining to materials, equipment, and personnel required for the preparation and adjustment of a high voltage electrical vault to finish grade. The high voltage electrical vault is typically located within a sidewalk adjacent to a building or in an alleyway and is specifically located on the Drawings.

### **Article 5.2    Materials**

All Portland Cement Concrete utilized in the adjustment of the electrical vault shall conform to the requirements as specified in Division 55, Section 55.05 - Manholes and Catch Basin Manholes. The joint sealing compound utilized to seal the joint between the electrical vault's lid and walls shall be premolded plastic gasket or an approved equal.

### **Article 5.3    Construction**

No later than forty-eight (48) hours prior to commencement of Work on adjustment of the electrical vault, Contractor shall contact the Utility Line Superintendent of CEA. This vault contains energized high-voltage circuits and all Work in and immediately surrounding the vault shall be monitored and supervised by a Journeyman Power Lineman with a current State of Alaska Certificate of Fitness. The Contractor shall be responsible for protecting the Contractor's personnel and the general public from the open vault as well as from the hazardous high voltages present within the vault.

The electrical vault lid to be adjusted typically contains two manhole frames and covers and forms an integral part of the sidewalk, alleyway, or other finished surface. The vault lid shall match the final finish grade of the finished surface in which it is installed. Any proposed adjacent curb shall be in accordance with Standard Detail 30-1 as identified on the Drawings. To lower the vault lid, the Contractor shall remove a portion of the lid in order that the top of the vault lid match the proposed top back of curb elevation with a two percent (2%) transverse slope. The existing area of contact between the vault lid and vault walls is typically a rabbet joint and not a flat surface.

Prior to removal of the electrical vault lid, Contractor, Engineer, and an CEA representative shall inspect and verify the condition of the vault lid and vault structure. After verification of condition, Contractor shall submit a drawing detailing how the vault lid will be lowered. The drawing shall be approved in writing by CEA. The vault lid shall be adjusted by cutting and removing a portion of the vault lid. The vault lid shall be cut to match the existing vault wall rabbet joint. The rabbet joint shall be sealed to provide a watertight seal.

Prior to replacement of the vault lid, the vault lid and vault structure shall be inspected by Contractor, Engineer, and an CEA representative to verify adjustments. Any Work, personnel, and/or materials required to properly correct problems shall be at Contractor's expense. After CEA's written receipt of approval, Contractor shall reset the vault lid at the correct adjusted elevation and grade.

Contractor may propose an alternate adjustment method. This alternate method must be submitted to an CEA representative in writing. CEA shall have sole discretion on the

approval of the Contractor's proposed alternate method. If an alternate method is approved, no added or separate payment shall be made.

**Article 5.4 Measurement**

The method of measurement for all Work in this Section shall be a lump sum. The lump sum cost for adjusting the electrical vault to finish grade shall include all labor, materials, and equipment. The bid item shall include all required usable and unusable excavation, classified fill and backfill material, compaction, concrete cutting and removal, vault lid removal and replacement, traffic control, and required personnel.

**Article 5.5 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Adjust Electrical Vault	Each

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## **SECTION 70.06 ADJUST UTILIDUCT LID**

### **Article 6.1 General**

The Work under this Section consists of all operations pertaining to the adjustment, either up or down, of an existing ACS/CEA concrete utiliduct lid as directed by the Engineer.

### **Article 6.2 Materials**

All Portland Concrete Cement utilized in the adjustment of the utiliduct lid shall conform to the requirements as specified in Division 55, Section 55.05 - Manholes and Catch Basin Manholes.

### **Article 6.3 Construction**

The utiliduct to be adjusted typically consists of a dual channel concrete structure with a structural concrete top/lid. Each utiliduct lid section is typically approximately five feet (5') in width and eight feet (8') in length. Prior to adjustment of the utiliduct lid, Contractor, Engineer, and a representative from both ACS and CEA shall inspect and verify the condition of the utiliduct lid and utiliduct structure. After verification of condition, Contractor shall utilize the method of adjustment in accordance to the Utiliduct Lid Adjustment Detail available from CEA. The utiliduct lid shall match the finished surface in which it is installed.

Contractor may submit an alternative method adjustment to the Engineer detailing how the utiliduct lid will be adjusted. The alternative method of adjustment shall not reduce the existing load rating of the utiliduct and utiliduct lid. The alternative method of adjustment of the utiliduct lid shall be designed, stamped, and signed by a registered professional engineer licensed by the State of Alaska. Contractor shall submit an ACS and CEA approved substitution request in accordance with Division 10, Section 10.05, Article 5.7 - Materials. All costs associated with preparing the design of an alternative utiliduct lid adjustment and obtaining the necessary utility approvals prior to submitting the substitution request shall be considered incidental to this item and no additional payment will be made.

No later than forty-eight (48) hours prior to commencement of Work on adjustment of the utiliduct, Contractor shall contact both the Outside Plant Construction Supervisor of ACS and the CEA Line Superintendent. The utiliduct contains telephone and energized high-voltage circuits. All Work in and immediately surrounding the utiliduct shall be monitored and supervised by a Journeyman Power Lineman with a current State of Alaska Certificate of Fitness. The Contractor shall be responsible for protecting Contractor's personnel and the general public from the open utiliduct, as well as the hazardous high-voltages and telephone lines present within the utiliduct. Should ACS's and/or CEA's cables be damaged, ACS and/or CEA will install new cables at Contractor's expense.

Contractor shall adjust the utiliduct lid to finish grade prior to placement of asphalt pavement. After-the-fact cutting of new asphalt for adjustment(s) will not be accepted. Any adjustment requiring cutting of new asphalt will not be paid and will be deducted from the plan quantity.

**Article 6.4 Measurement**

The method of measurement for all Work in this Section shall be measured in linear feet along the top face at the centerline of the utiliduct, complete in place, and adjusted to finish grade. The bid item shall include all required material, usable and unusable excavation, classified fill and backfill, compaction, Portland Concrete Cement, traffic control, required personnel, and equipment.

**Article 6.5 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Adjust Utiliduct Lid	Linear Feet

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## **SECTION 70.07 REMOVE PIPE**

### **Article 7.1 General**

The Work under this Section consists of performing all operations pertaining to the removal and disposal or salvage of existing pipes (of whatever size of pipe encountered), when encountered in the excavation and/or as directed by the Engineer.

### **Article 7.2 Construction**

Contractor shall remove salvageable pipes and deliver the pipes to a location as directed by the Engineer. Contractor shall provide a disposal site for non-salvageable material in accordance with the provisions of Division 10, Section 10.04, Article 4.9 - Disposal Sites.

Excavation required in the removal of the pipes is incidental to this bid item. Contractor shall backfill the excavation with suitable, non-frost-susceptible materials and compact it to not less than ninety-five percent (95%) of maximum density as directed by the Engineer.

### **Article 7.3 Measurement**

Removal of pipes is measured per linear foot without regard to pipe size. Removal of electrical conduit of whatever size and type is incidental to the Contract, unless provided for elsewhere in the Contract.

### **Article 7.4 Basis of Payment**

Payment for this Work shall be in accordance with Division 10, Section 10.07 - Measurement and Payment, and shall include full payment for all Work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Remove Pipe	Linear Foot

**MUNICIPALITY OF ANCHORAGE  
STANDARD SPECIFICATIONS**

**DIVISION 70  
MISCELLANEOUS  
STANDARD DETAILS**

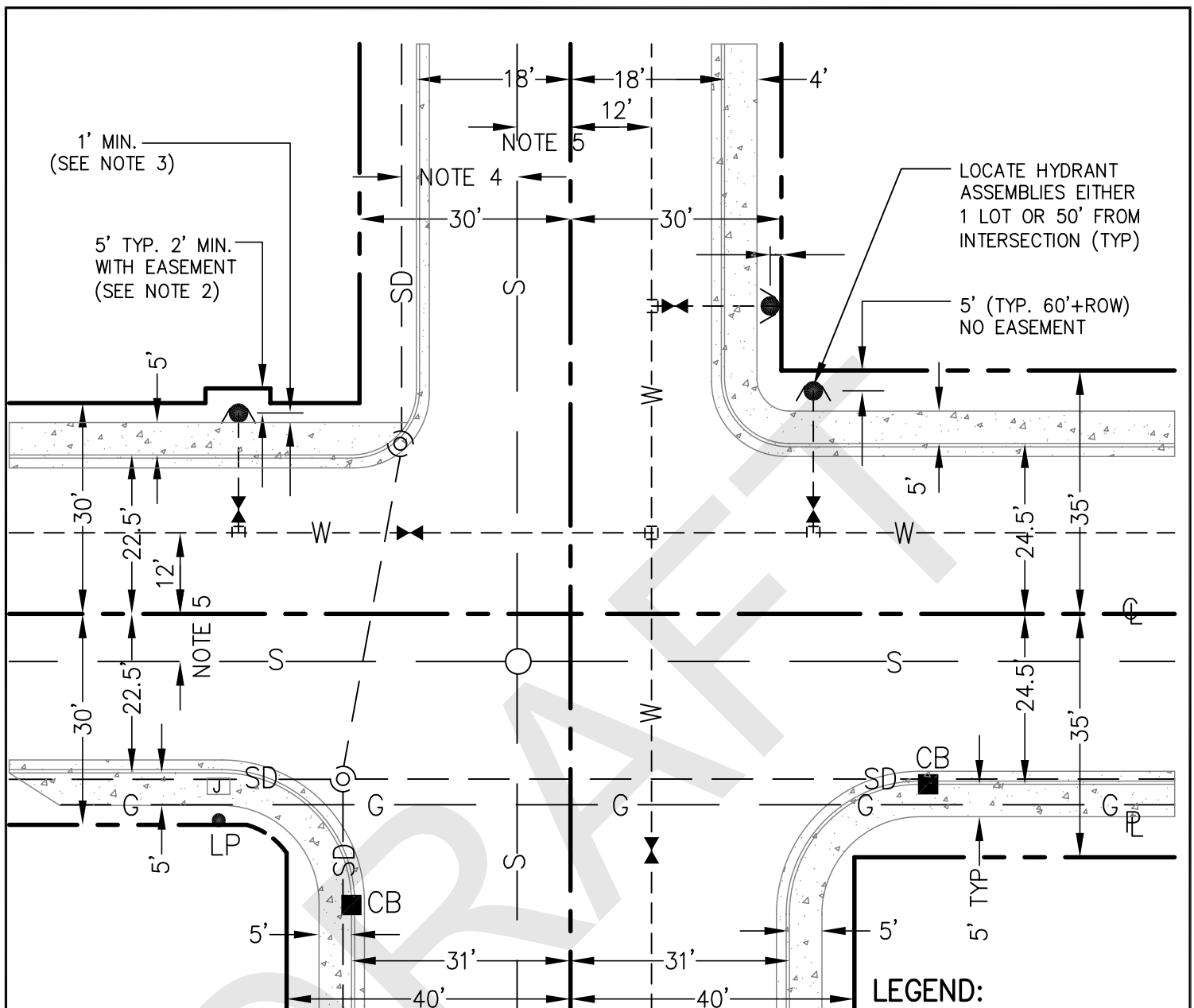
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**STANDARD CONSTRUCTION SPECIFICATIONS  
DIVISION 70  
INDEX OF STANDARD DETAILS**

- 70-1 Standard Location for New Utilities
- 70-2 Locations for Existing Utilities (Approval Required for New Utilities)
- 70-3 Typical Water and Sewer Locations
- 70-4 Adjustment for Gas Valve Key Box (1/4" thru 4")
- 70-5 Standard Method for Shoring Phone/Conduit ACS Approved Method and Procedure #86-1

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LOCATE HYDRANT ASSEMBLIES EITHER 1 LOT OR 50' FROM INTERSECTION (TYP)

5' (TYP. 60'+ROW) NO EASEMENT

- LEGEND:**
- G - GAS LINE
  - S - SANITARY SEWER LINE
  - SD - STORM DRAIN LINE
  - W - WATER LINE
  - ⊕ - R.O.W. CENTERLINE

**NOTES:**

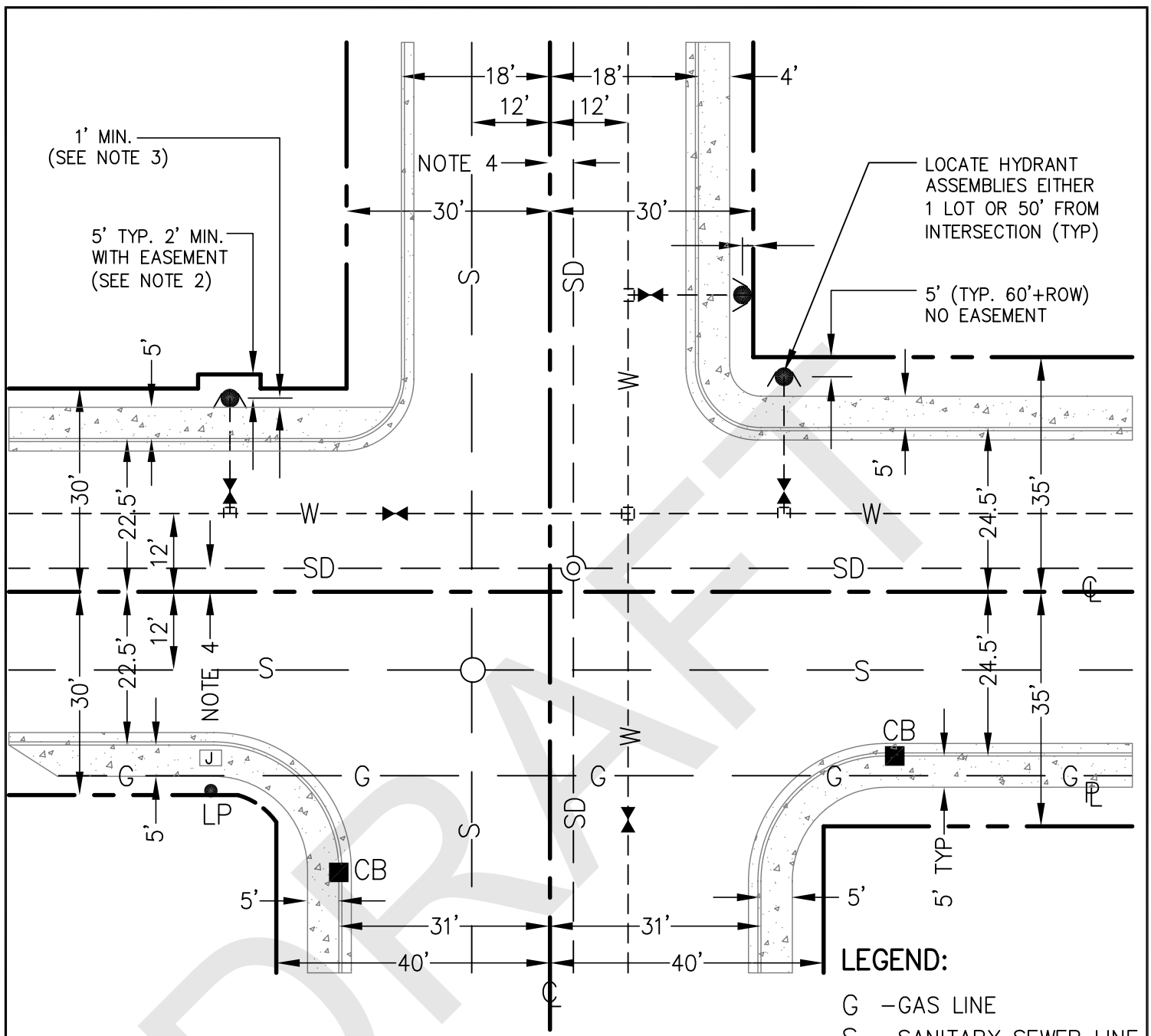
1. OFFSETS ARE TO CENTER OF UTILITY.
2. ADDITIONAL RIGHT-OF-WAY/EASEMENT MAY BE REQUIRED TO MEET MINIMUM SET-BACKS FOR HYDRANTS.
3. SET HYDRANT A MINIMUM OF 5' FROM BACK OF CURB OR 1' FROM EDGE OF SIDEWALK.
4. MAINTAIN SEPARATION DISTANCES AS IDENTIFIED IN THE AWWU DESIGN AND CONSTRUCTION PRACTICES MANUAL, ADEC 18 AAC 72, AND 18 AAC 80.
5. LOCATE SANITARY SEWER BETWEEN 5' AND 6' FROM CENTERLINE. MANHOLE LIDS SHALL BE LOCATED IN THE CENTER OF A TRAVEL LANE. IF THERE IS A TWO-WAY CENTER TURN LANE, THE MANHOLE LIDS SHALL BE PLACED APPROXIMATELY ON THE LINE BETWEEN LANES.
6. ADA REQUIREMENTS SHALL GOVERN WHEN PLACING STORM DRAIN MANHOLE LIDS AND CATCH BASINS IN PEDESTRIAN FACILITIES.

MUNICIPALITY  
  
 OF ANCHORAGE

SCALE:  
**NTS**  
 APPROVED:  
 REVISED:  
**8/08**

# STANDARD LOCATION FOR NEW UTILITIES

SECTION #  
**DIV 50, 55,  
 60 & 70**  
 DETAIL #  
**70-1**



1' MIN.  
(SEE NOTE 3)

5' TYP. 2' MIN.  
WITH EASEMENT  
(SEE NOTE 2)

NOTE 4

LOCATE HYDRANT  
ASSEMBLIES EITHER  
1 LOT OR 50' FROM  
INTERSECTION (TYP)

5' (TYP. 60'+ROW)  
NO EASEMENT

NOTE 4

**LEGEND:**

- G - GAS LINE
- S - SANITARY SEWER LINE
- SD - STORM DRAIN LINE
- W - WATER LINE
- C - R.O.W. CENTERLINE

**NOTES:**

1. OFFSETS ARE TO CENTER OF UTILITY.
2. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED TO MEET MINIMUM SET-BACKS FOR HYDRANTS.
3. SET HYDRANT A MINIMUM OF 5' FROM BACK OF CURB OR 1' FROM EDGE OF SIDEWALK.
4. LOCATE UTILITIES TO MAINTAIN MINIMUM SEPARATIONS AS IDENTIFIED IN THE AWWU DESIGN AND CONSTRUCTION PRACTICES MANUAL, ADEC 18 AAC 72, AND 18 AAC 80.

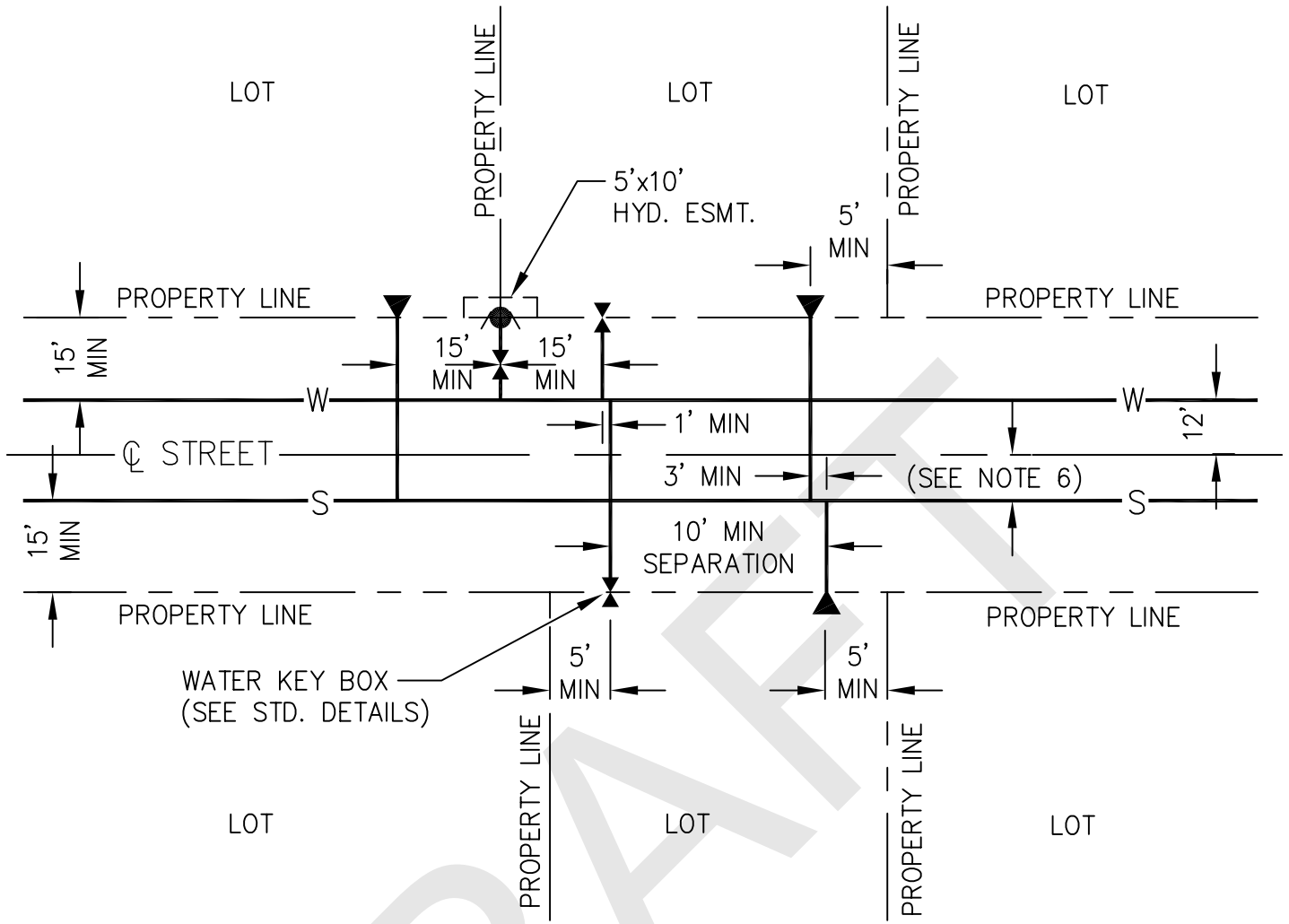
MUNICIPALITY  
  
 OF ANCHORAGE

SCALE:  
NTS  
 APPROVED:  
 REVISED:  
8/08

**LOCATION FOR EXISTING  
UTILITIES (APPROVAL REQUIRED  
FOR NEW UTILITIES)**

SECTION #  
DIV 50, 55,  
60 & 70  
 DETAIL #  
70-2





NOTES:

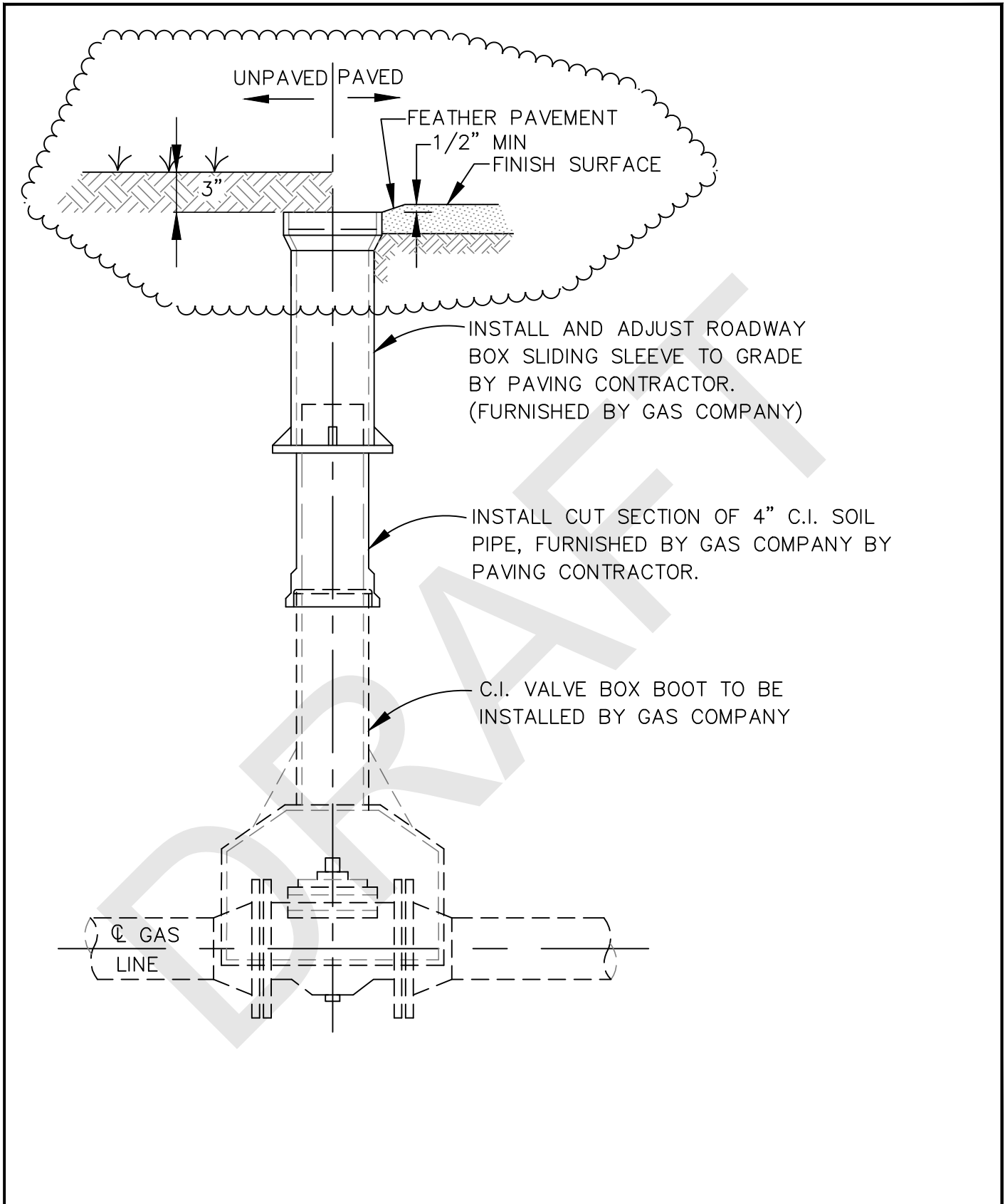
1. SANITARY SEWER SERVICE CONNECTIONS SHALL BE FIVE TO FIFTEEN FEET (5' TO 15') FROM PROPERTY CORNER, IN LOWER ONE-THIRD OF THE LOT TO BE SERVED.
2. WATER SERVICE CONNECTIONS SHALL BE A MINIMUM OF FIVE FEET (5') FROM PROPERTY CORNER OF THE LOT TO BE SERVED.
3. WATER AND SEWER SERVICES SHALL MAINTAIN A MINIMUM TEN FOOT (10') SEPARATION.
4. WATER AND SEWER SERVICES SHALL MAINTAIN A MINIMUM FIFTEEN FOOT (15') SEPARATION FROM FIRE HYDRANTS.
5. LOCATE WATER AND SANITARY SEWER SERVICE TO MAINTAIN A MINIMUM TEN FOOT (10') SEPARATION BETWEEN OUTSIDE OF PIPE AND STORM SEWER, CATCH BASINS, MANHOLES STREET LIGHTING, UTILITY POLES, UTILITY PEDESTALS, METER BASES AND TRANSFORMER PADS.
6. FOR STANDARD LOCATION AND SEPARATION FOR SANITARY SEWER, SEE NOTE 5 ON STANDARD DETAIL 70-1.

MUNICIPALITY  
  
 OF ANCHORAGE

SCALE:  
**NTS**  
 APPROVED:  
 REVISED:  
**10/08**

# TYPICAL WATER AND SEWER SERVICE LOCATIONS

SECTION #  
**DIV 50, 55,  
 60 & 70**  
 DETAIL #  
**70-3**



MUNICIPALITY



OF ANCHORAGE

SCALE:  
NTS

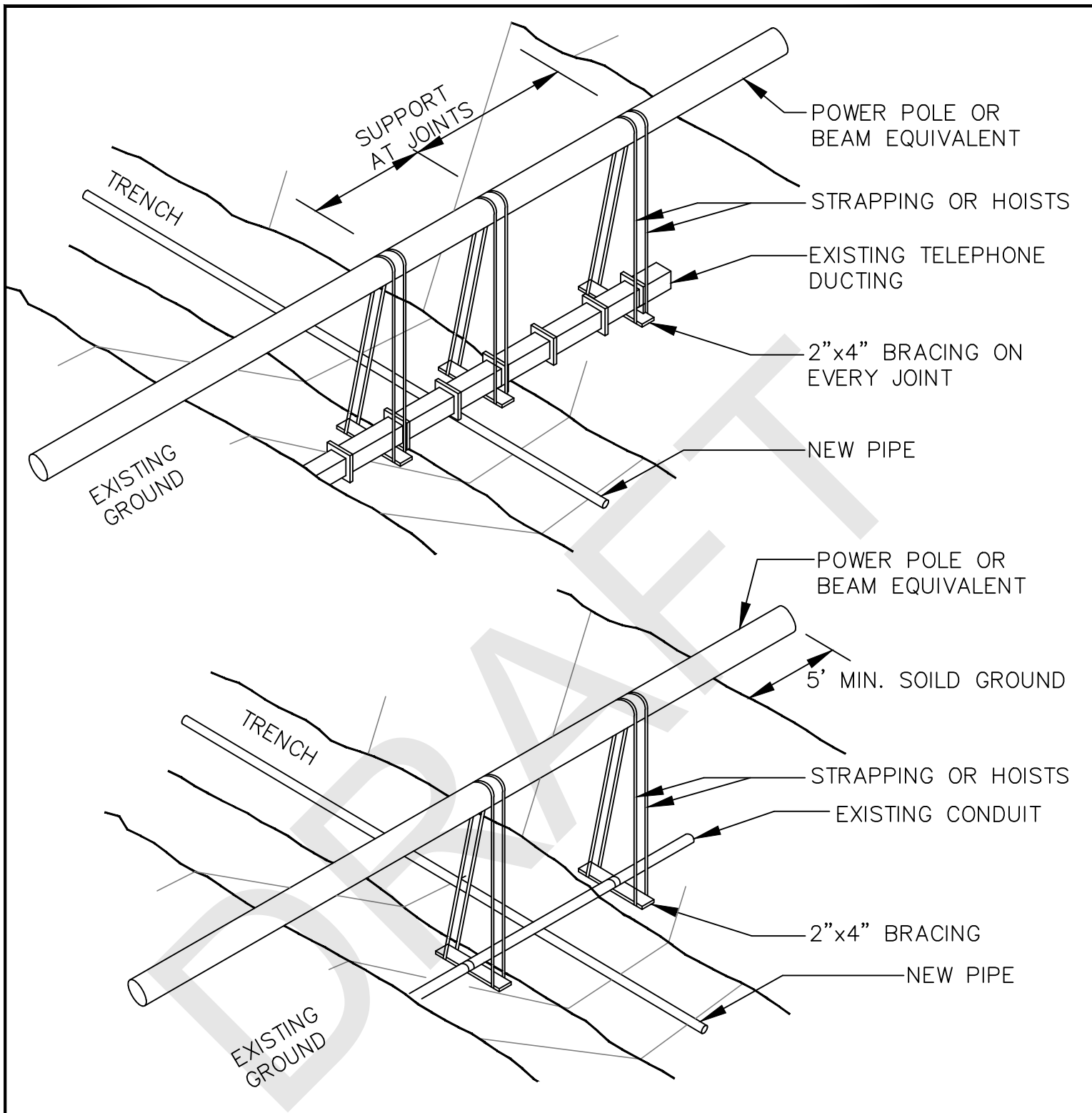
APPROVED:

REVISED:  
10/23

**ADJUSTMENT FOR  
GAS VALVE KEY BOX  
(1/4" thru 4")**


SECTION #  
70.02

DETAIL #  
70-4



NOTES:

1. SUPPORT DUCTS WITH 2"x4" AND STRAPS AT JOINTS BEFORE EXCAVATING UNDER DUCTS.
2. PLACE AND COMPACT CLASSIFIED MATERIAL UNDER DUCT BANK UP TO WITHIN 18" OF DUCT. THE LAST 18" TO BE CONCRETE OR CONCRETE SLURRY.
3. DUCTS TO BE ENCASED IN 3" OF SAND (ON ALL SIDES).

<p>MUNICIPALITY OF ANCHORAGE</p> 	<p>SCALE: NTS</p> <p>APPROVED:</p> <p>REVISED: 10/08</p>	<p><b>STANDARD METHOD FOR SHORING (SUPPORTING) PHONE/CONDUIT A.C.S APPROVED METHOD AND PROCEDURES #86-1</b></p>	<p>SECTION # 70.04</p> <p>DETAIL # 70-5</p>
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