

WELCOME



KEYHOLE MEETING

AGENDA:

- **GAS LINE SLITTING- PVC, ALDYL-A, & MDPE**
 - **SERVICE & MAIN**
- **DECOMMISSIONING**
- **STEEL PIPE TRANSMISSION & DISTRIBUTION REPLACEMENT**



Underground Pipe & Cable Market



Application



Geography



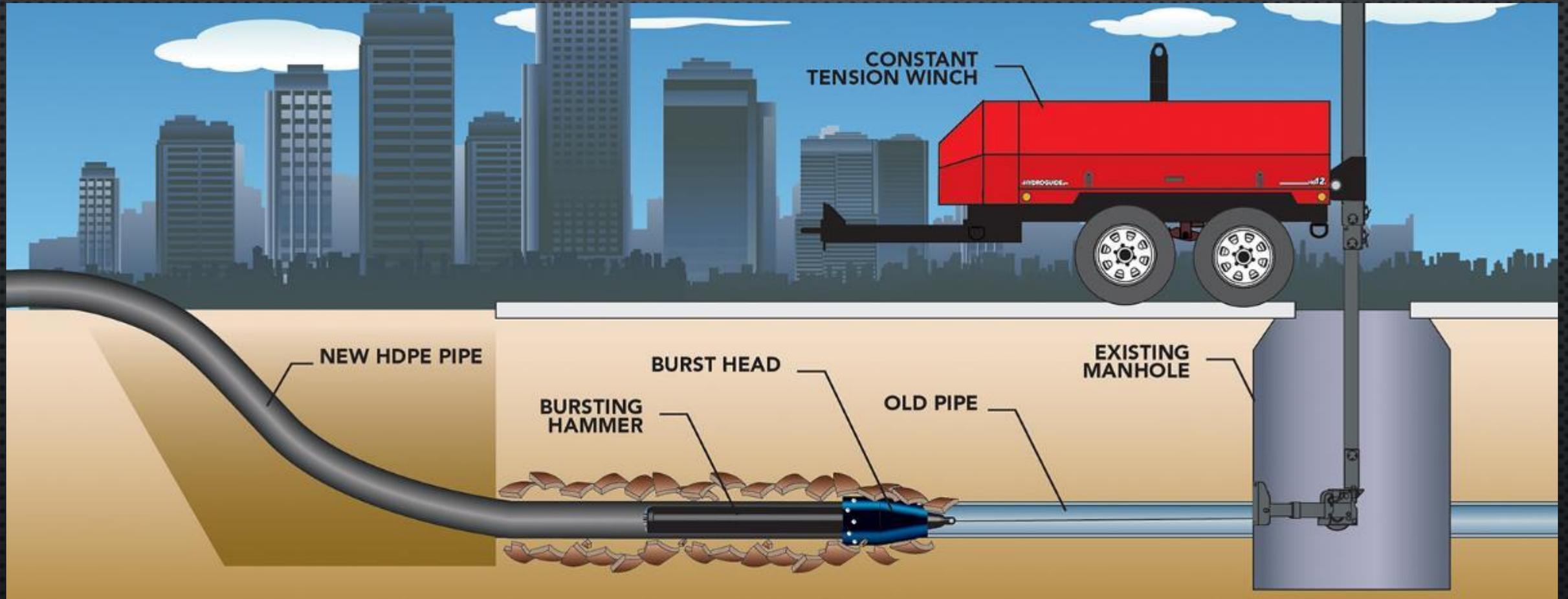
Customer Solution Components



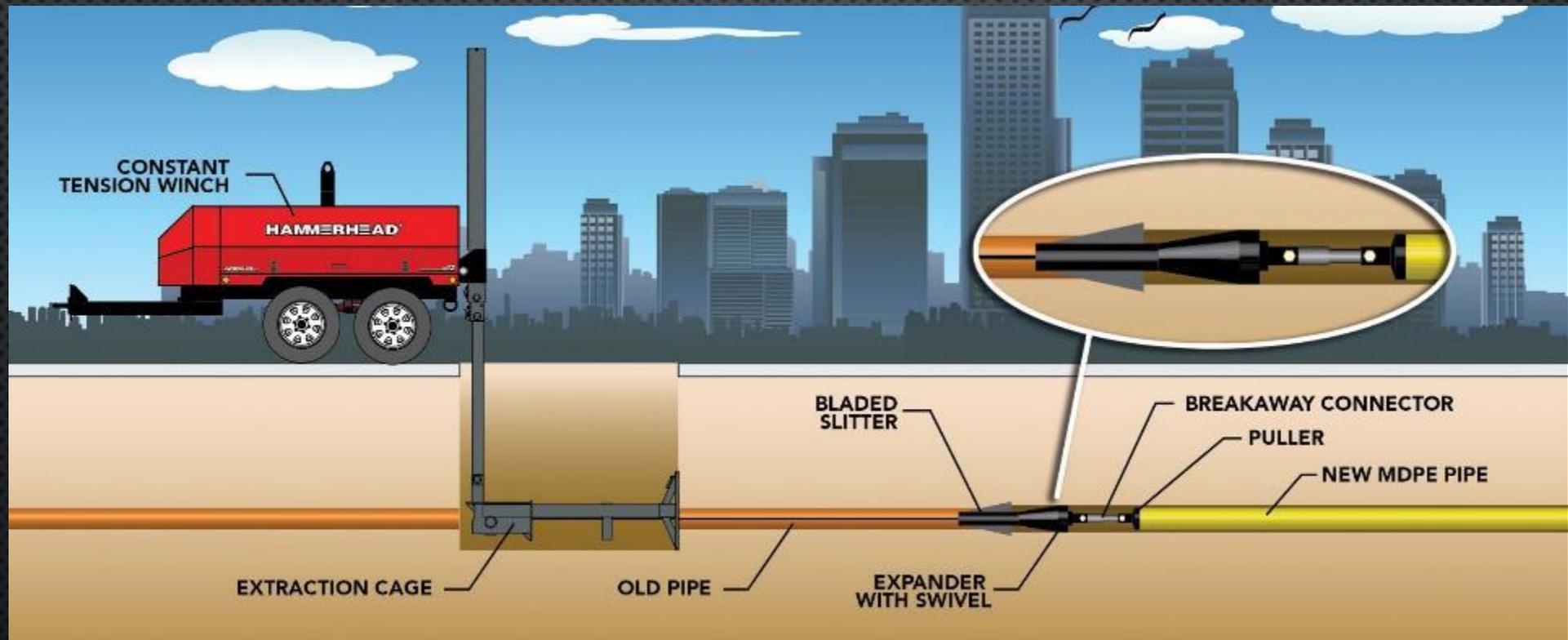
PIERCING TOOL COMPACTION DEVICES



PNEUMATIC PIPE BURSTING



GAS LINE SLITTING



PE PIPE SPLITTING 1/2" TO 4"

✓ PROVEN

✓ SAFE

✓ CLEAN

✓ FAST

✓ COST EFFECTIVE !!!!

HAMMERHEAD

- AMERICAN MADE EQUIPMENT
- AMERICAN MADE TOOLING
- LOCAL MACHINES, LOCAL SUPPORT , LOCAL TRAINING
- TRACKING, ELECTRICAL STRIKE INDICATOR DEVICE



**BLADE
PILOT**



STANDARD BLADE SET

Slice through pipe, tees and couplers. Slit extracted pipe, available from 1/2" - 4".



**SEPARATION
TUBE**



EXPANDER

With incorporated swivel assembly and cable wedge connection assembly.

Available from 1/2" – 4".



SLEEVED PULLER

Secure and protected
connection of new pipe
installed.

Available from 1" – 4".



BEACON HOUSING

Monitor progress and ID location of tooling. Easily incorporated into existing tooling string.

**OPTIONAL FOR
JOINT TRENCH**



LOW PROFILE BLADE SET

Swap out standard blade set for low profile blade set when adjacent utilities are in close proximity and shots are without couplers or service connections.

OPTIONAL



INTEGRATED BREAKAWAY ASSEMBLY

Ensures pulling load does not exceed manufacturer and design specifications. Designed to integrate directly into pulling expander.

Available for 2" and larger expanders.

12 TON CABLE WINCHES



BLAZING FAST

Payout
speed
of up to
111 feet per
minute

12 TON CABLE WINCHES



AUTO BOOM

Patented self-deploying hydraulic downrigger. With the touch of a button, adjust the boom to the exact depth required

12 TON CABLE WINCHES



ESID SYSTEM

Optional Electrical Strike Identification system provides additional safety features when working close to adjacent utilities

12 TON CABLE WINCHES



PRECISION CONTROLS

Control platform allows for fully adjustable line speed and pull force

12 TON CABLE WINCHES



HG1200AT

Optional track-mounted configuration allows access in difficult areas

12 TON CABLE WINCHES



HYDRAULIC LEVELING JACKS

This optional feature makes for easy adjustments down hole increasing efficiency

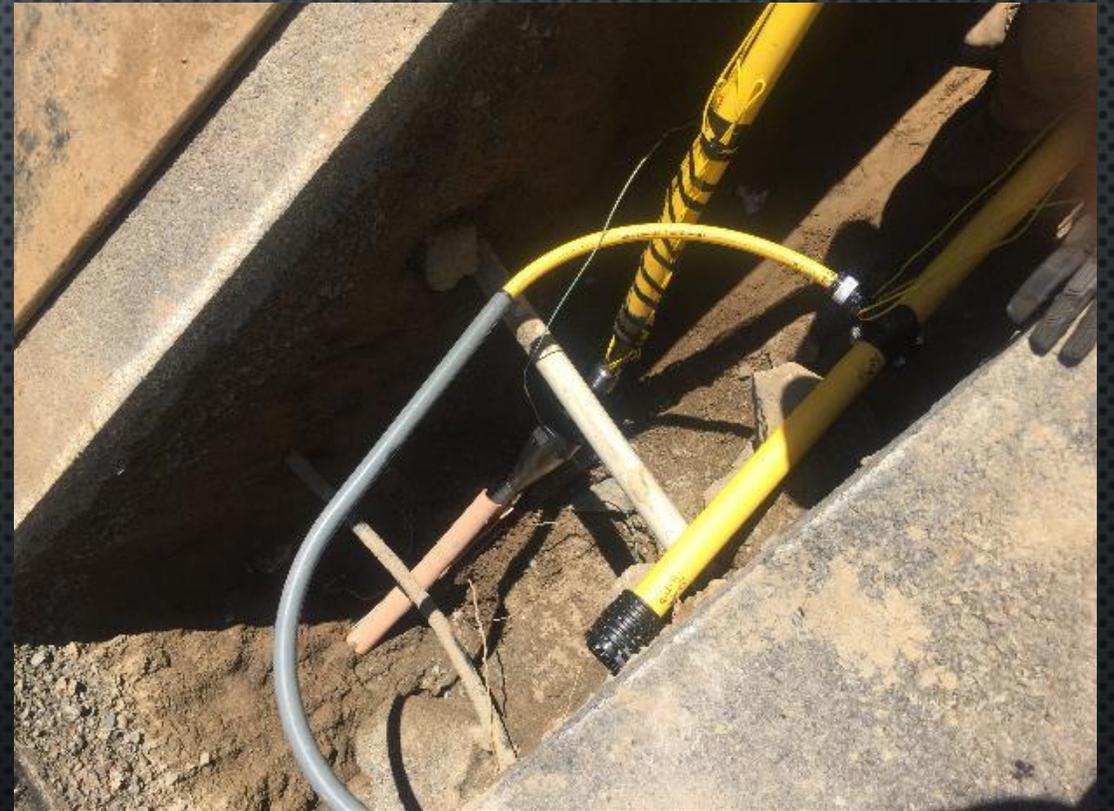
ADVANTAGES

- SAME PATH
- REDUCED RISK OF CROSS BORE
- SPEED/LOWER COST
- SHORT LEARNING CURVE

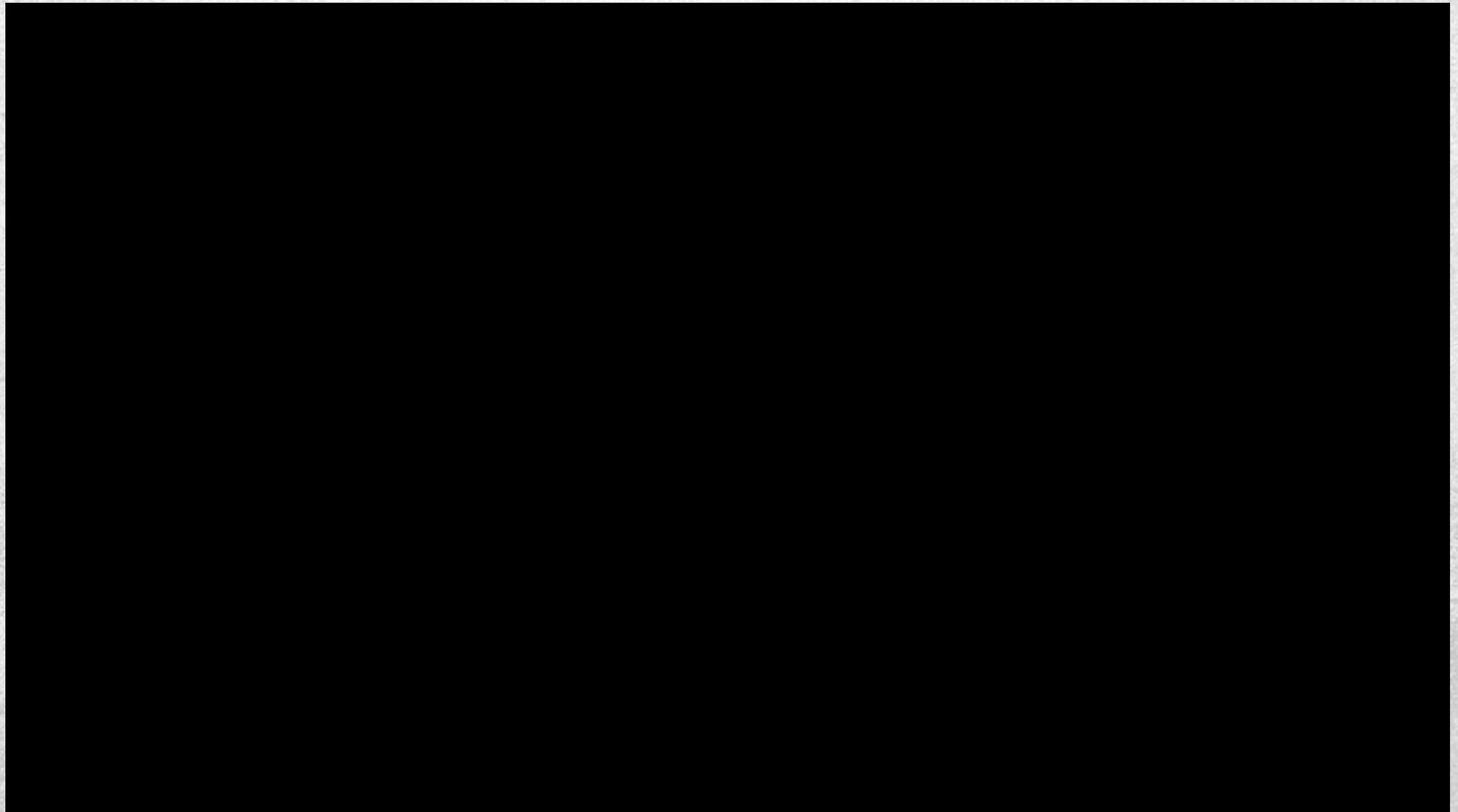


ADVANTAGES

- PROVEN TECHNOLOGY
NEW APPLICATION VS. NEW
PRODUCT
- ILLUMINATES NEED TO DECOMMISSION OLD PIPE
- SAME PROCESS MAY BE USED TO
DECOMMISSION PIPE WHEN HDD PROCESS IS
UTILIZED





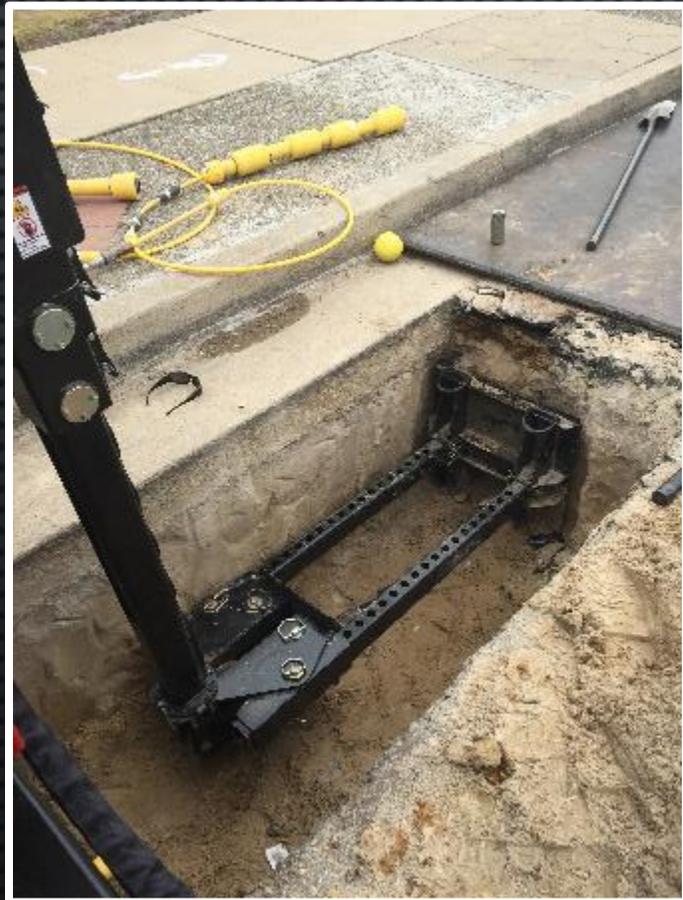


JOB SIGHT PHOTOS

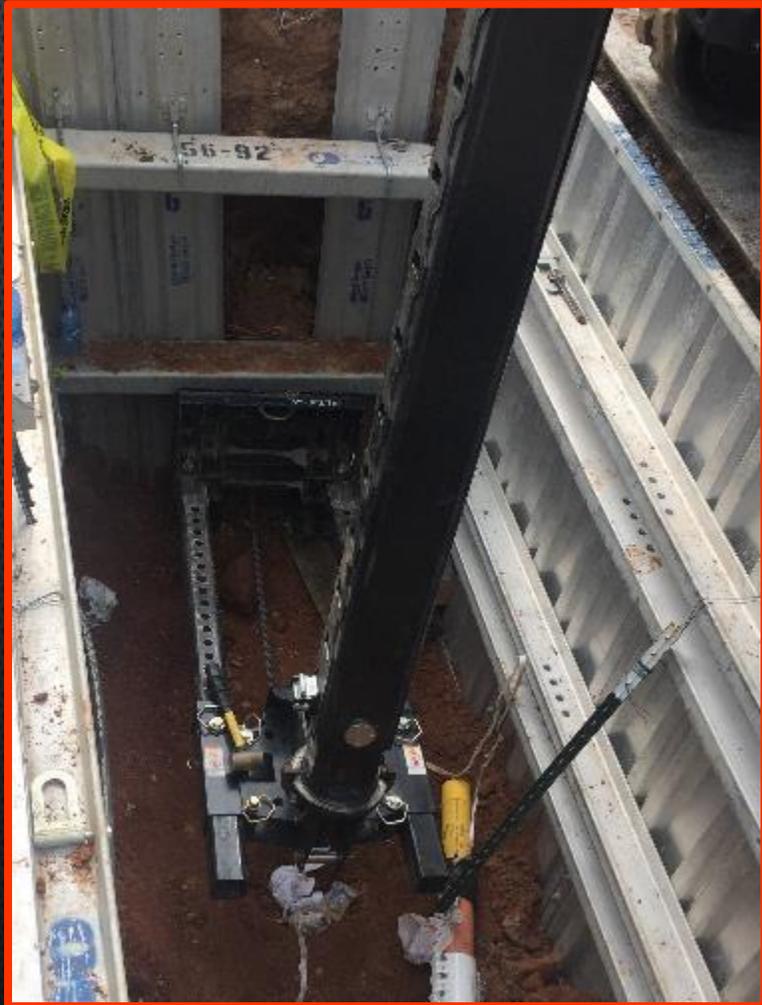
HG375T 1/2" – 2"



HG1200T 1.5" – 3"



HG2200T 2" - 4"





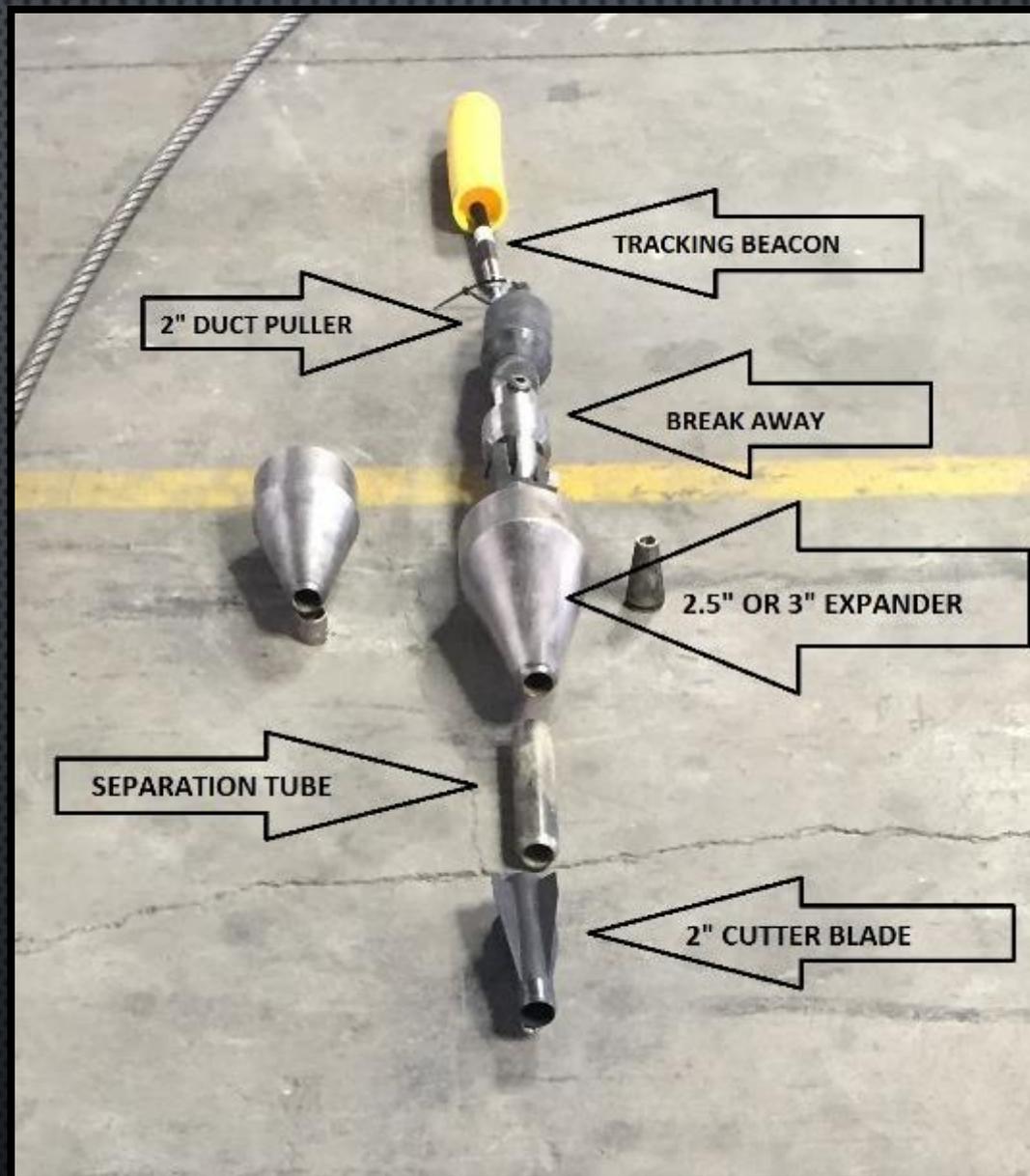
Electrical Grounding Blanket
Operator Personal Protective
Grounding Grid
Electrical Strike Indicator
Standard



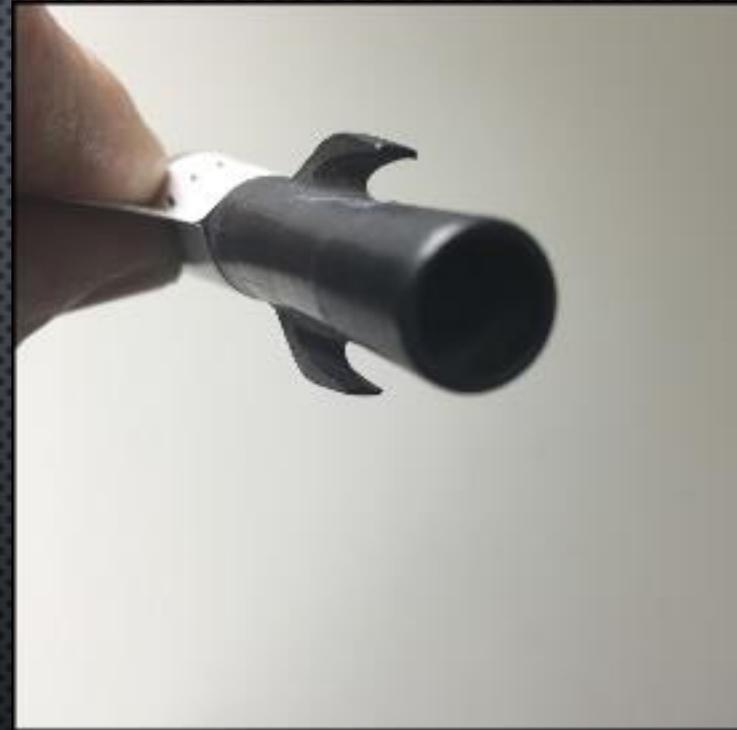


TRACKING ELECTRONICS





SAMPLE TOOLING STRING



JOINT TRENCH TOOLING



VIDEO:

**SLITTING 2" PVC & ALDYL-A AND INSTALLING
NEW HDPE IN BIG BEAR, CA**

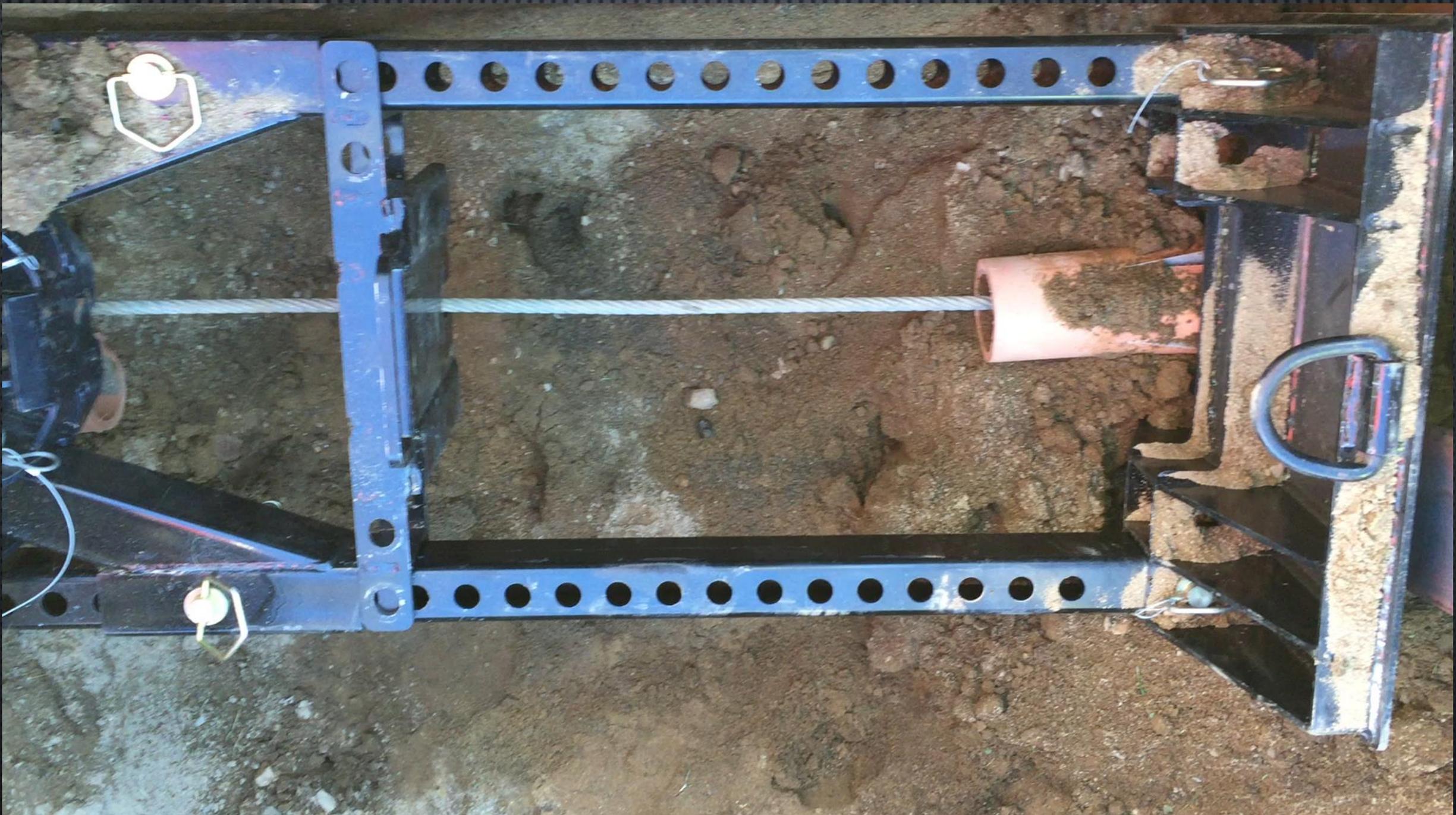
NUMBER 10
1964

VIDEO:

**SLITTING 2" ALDYL-A AND INSTALLING NEW
HDPE IN AUBURN, CA**

GAS LINE SLITTING VIDEO
AVISTA GAS 4" ALDYL-A- 4" MDPE





STEEL GAS LINE SLITTING VIDEO



TRENCHLESS TELEVISION

**STEEL GAS LINE EXTRACTION
GROUT BEHIND**



**STEEL GAS LINE EXTRACTION
PIPELINE REPLACEMENT VIDEO**





DATE COATED: 3/21/18
X70M PSL 2 G SAHM
7.47' X 0.344' X 86.99185/FT
MATERIAL: 201114 AR 95A11LC

POSTHOLE-0-STAT
44-17
44-23

**STEEL GAS LINE EXTRACTION
DISTRIBUTION REPLACEMENT VIDEO**



TRAINING DAY(S)

1,2,3 DAY FORMATS



 **Step 2: Emergency Ticket**

4216(f): "Emergency" means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

- Examples of emergencies:
 - Hazards substance released into the environment
 - Construction equipment in contact with an electric line
 - Liquid line causing a sinkhole
 - 911 Call center down due to telecommunications line contact
 - Calling in an emergency does not absolve you of the liabilities if damages should occur

**After hours emergencies require contacting utilities directly.
PG&E after-hours emergency number is 1-800-743-5000.**

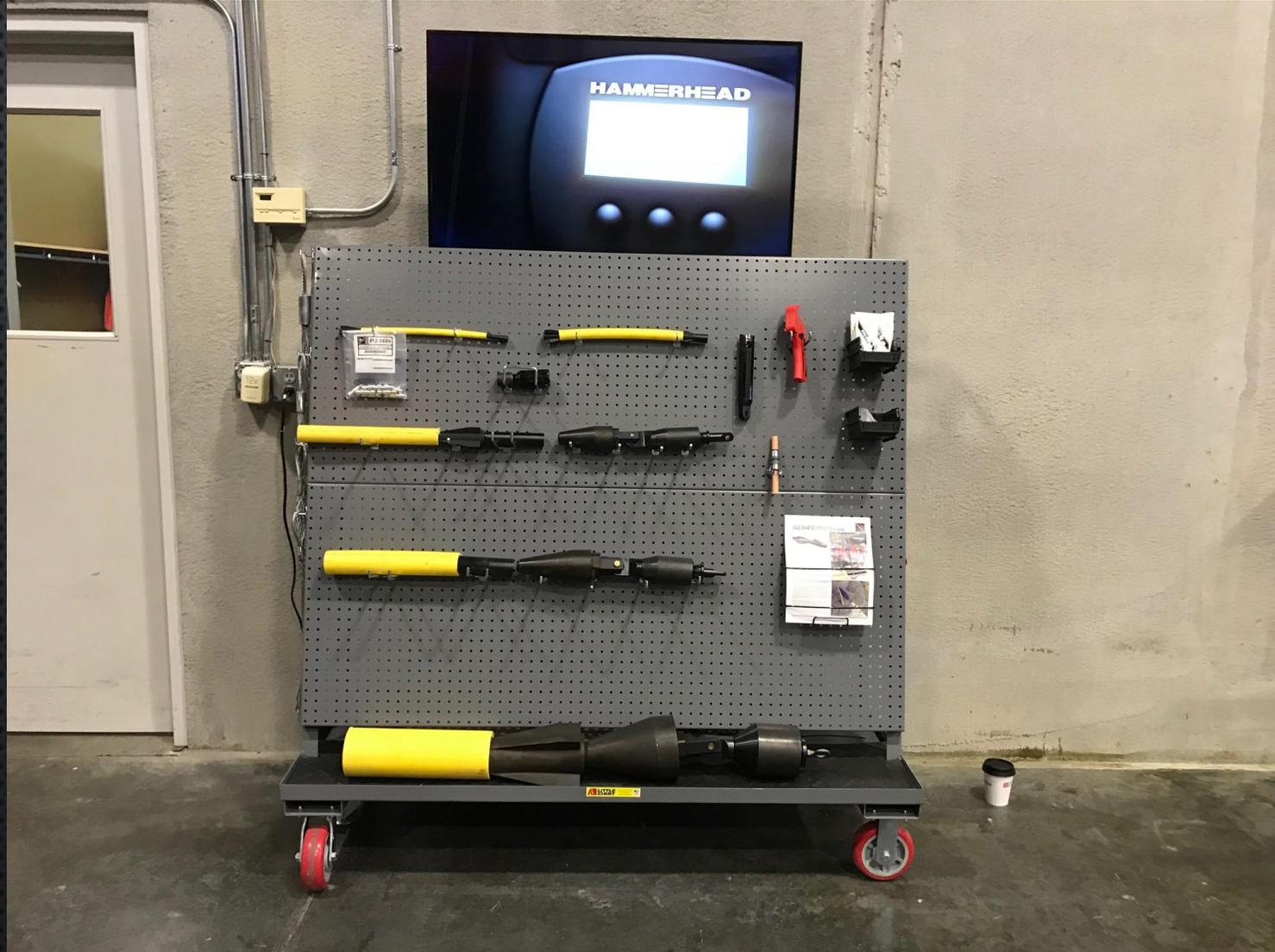
The One-Call Program is in partnership with California Regional Council on Government (CRCG)



HammerHead University



HammerHead University





QUESTIONS

