

HIGH CAPACITY MICROPILES WITH UNIQUE TESTING REQUIREMENTS FOR PARKING STRUCTURE UPGRADE IN LOS ANGELES

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Williams Form Engineering Corp

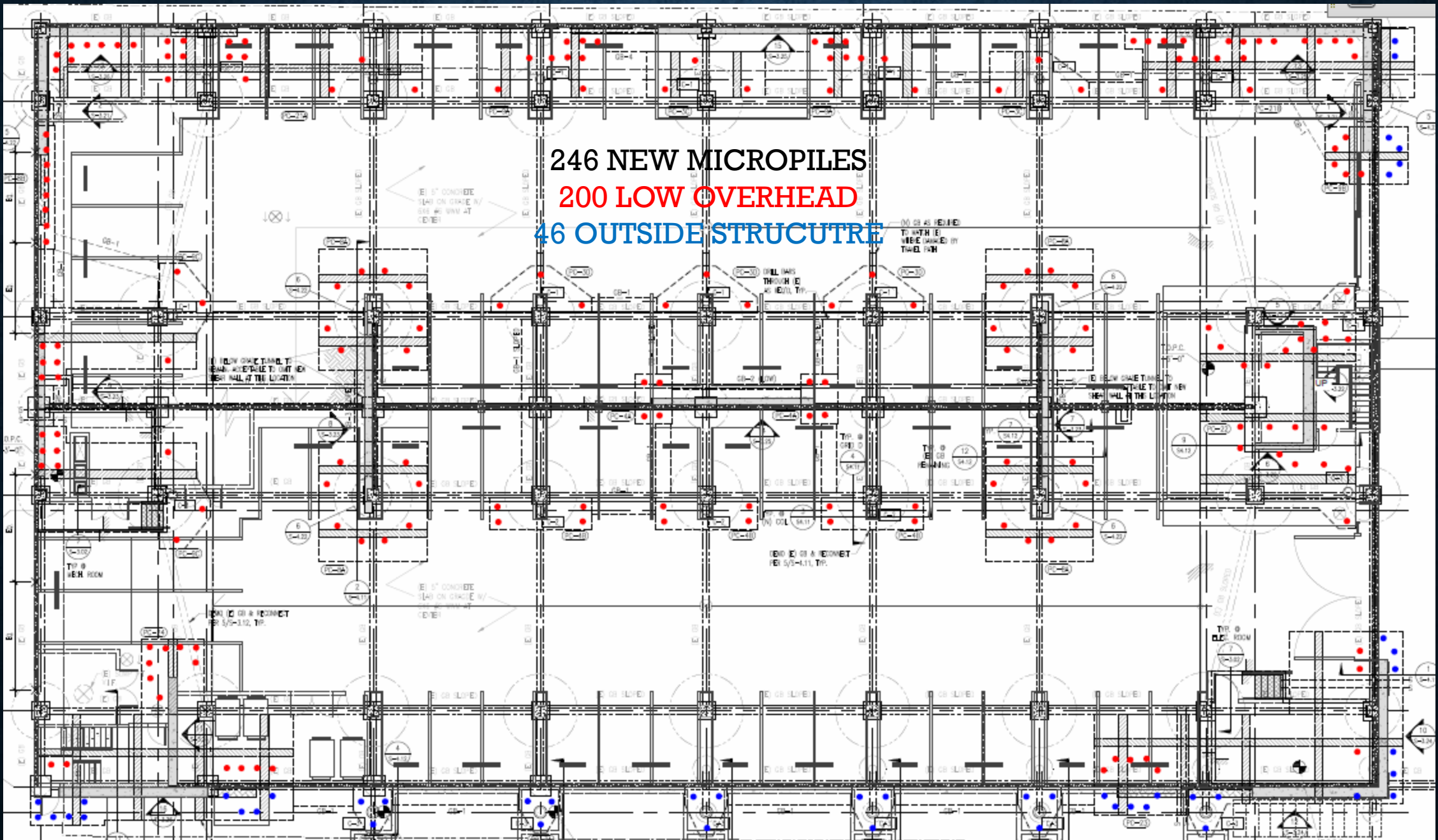
6/1/2023



685 CATALINA AVE

- Existing 3-Story Parking Garage in Downtown L.A
- To be incorporated into the 3500 Wilshire Development Project
- Foundation Upgrade to allow addition of 4 stories of apartments above the Existing Parking Structure

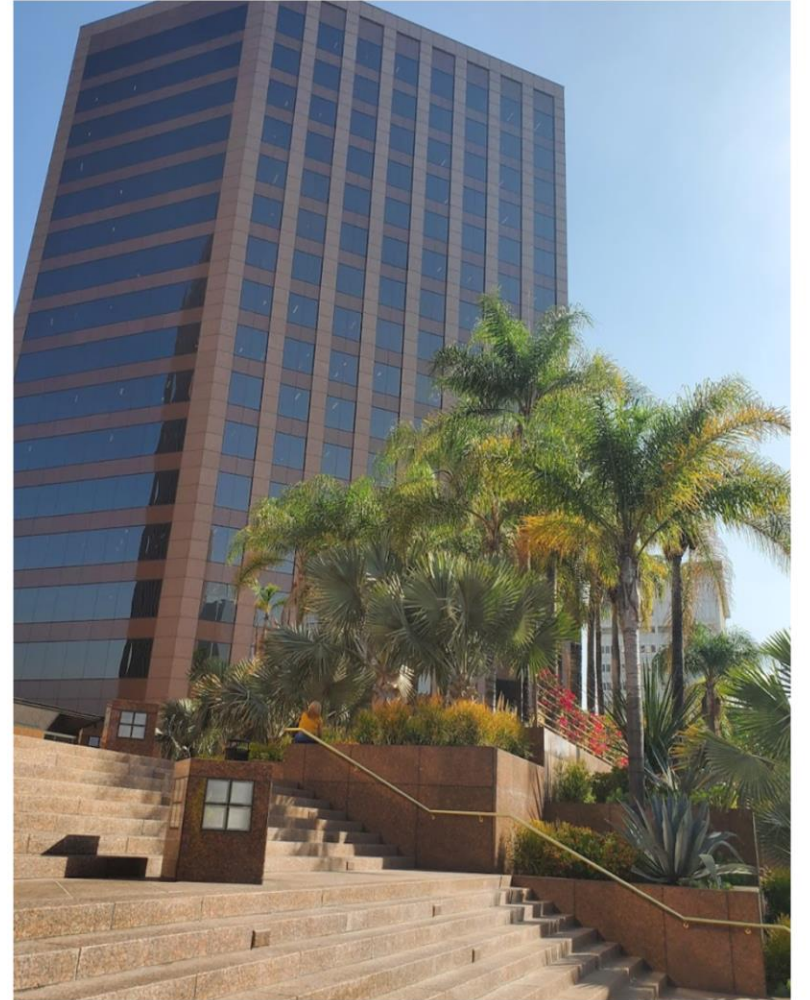
246 NEW MICROPILES
200 LOW OVERHEAD
46 OUTSIDE STRUCTURE



LOS ANGELES DEPT OF BLDG. & SAFETY

OSHDP

Office of Statewide Health
Planning and Development





685 CATALINA AVE

PRE-PRODUCTION TESTING REQUIREMENTS

- 3 Verification Tests to 2*DL (584k)
 - 1 Instrumented Compression w TIP
 - 1 Compression
 - 1 Tension (184k)
 - Sacrificial
- Complete Exhumation of Verification Test Pile
- Prepare Report for Submittal as Basis for Production Pile Design



TEST PILES

5 Piles Drilled in Line

9-5/8" Casing in top 17.5' (Unbonded)

8" Diameter Below Casing

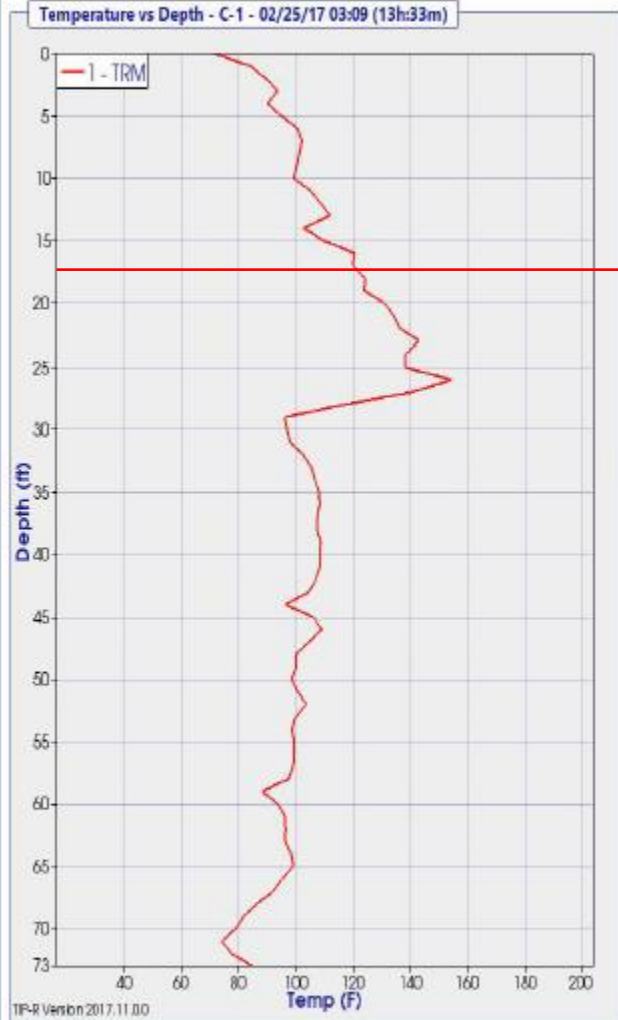
Total Depth = 70'

2-1/4" 150 ksi Center Bar Reinforcement

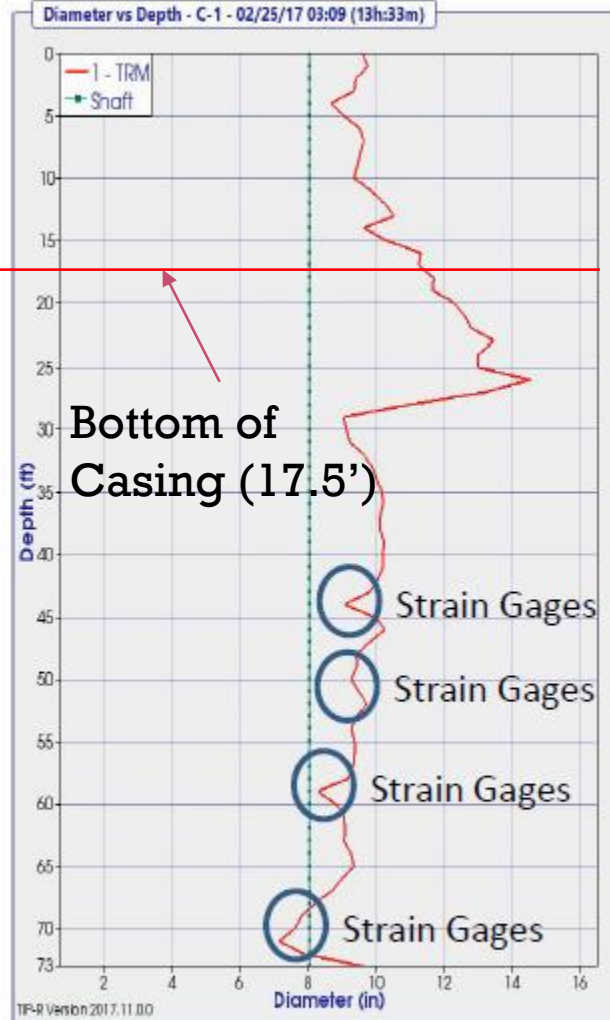




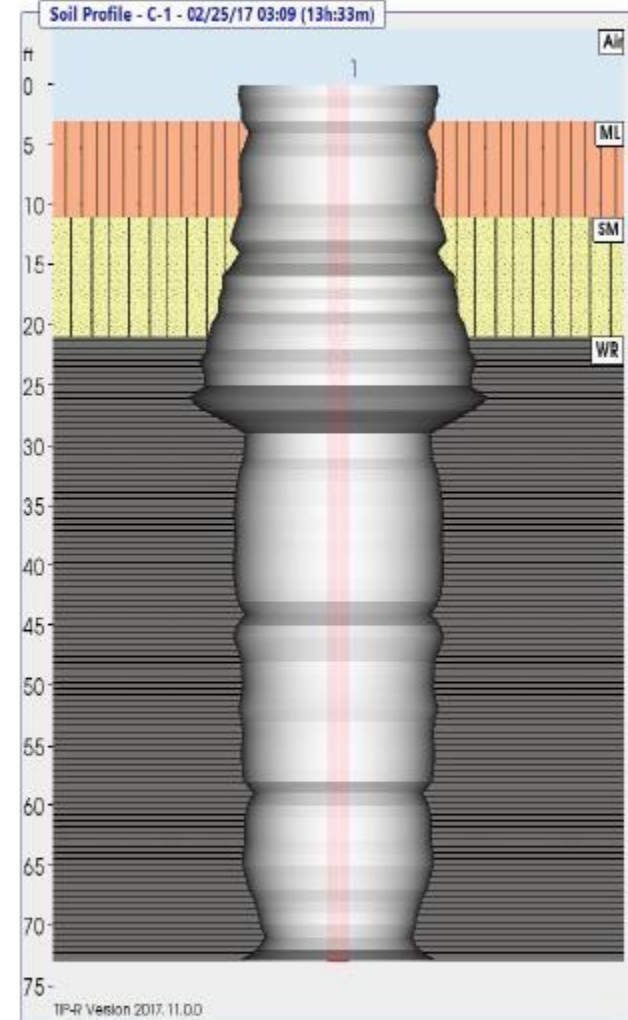
C-1



Temperature vs Depth

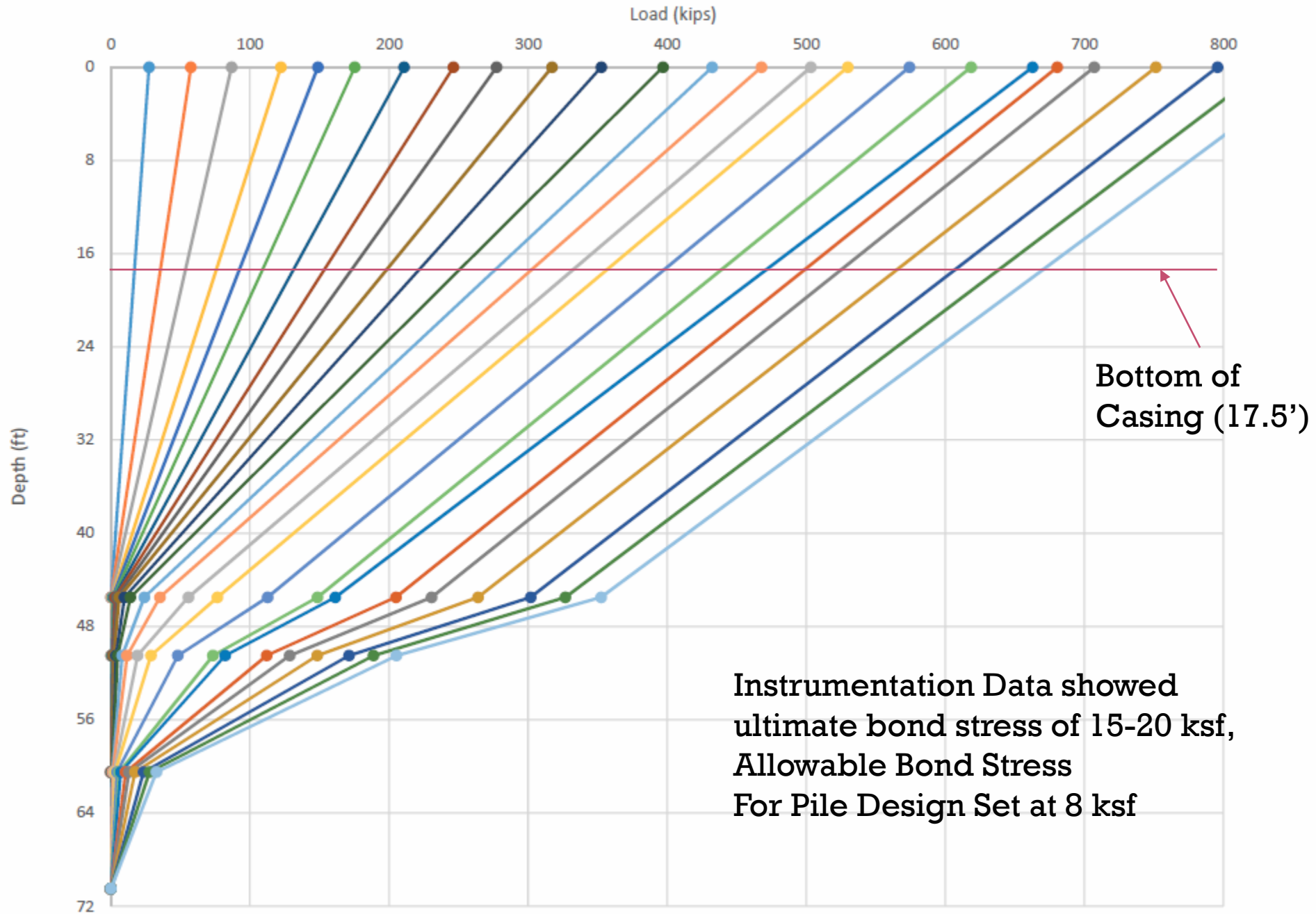


Diameter vs Depth



Pile Interpretation

Axial Compression vs Depth





J.R.&S. 2.28.17
PT. 100000 LBS.
S.N. 22817A

KLEMM
Bohrtechnik
3033

CLEAN & SAFE

TOW

CLEAN & SAFE

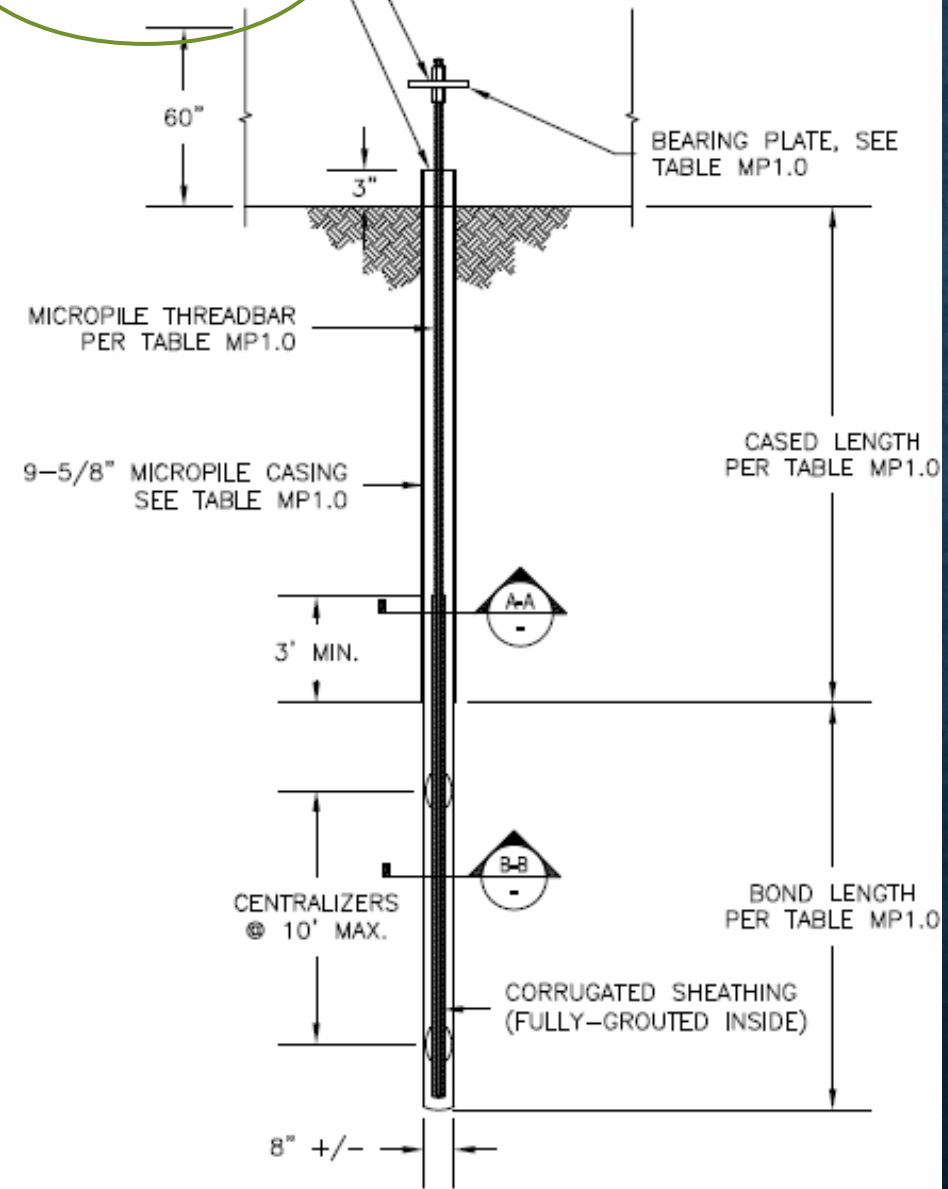
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TYPE 2 PILES — HEX NUT TO MATCH THREADBAR (FULL NUT TOP AND BOTTOM OF PLATE)

TYPE 1 PILES — NO BEARING PLATE REQUIRED



2 TYPES OF PILES

Type 1

138k DL - Compression Only

30' Bond Length (min)

#11 Gr75 Center Bar Reinforcement

Type 2

292k DL - Compression

92k DL - Tension

40' Bond Length

2-1/4" 150 ksi Center Bar Reinforcement

All Piles Used 9-5/8" Casing in Upper 10.5'

Center Bar Reinforcement Encapsulated in Bond Length



685 CATALINA AVE

**PRODUCTION MP
TESTING REQUIREMENTS**

- 5% Piles Proof Tested to $1.6 \times DL$
- 10% Piles TIP Tested







RESERVED

#105
41

RESERVED

448



ONLY
SPACES
LIMIT
PARKERS
...
...
...
REMOVAL FEE



STAIN
ED

Visitor
2 Hour Limit

LADY B
PAMIC

RIP RICH

VISITOR ONLY
IN THESE SPACES
2 HOUR LIMIT
BY THESE SIGNS

1001
3 5/8" X 8.58" X 12.75" W/HTL
PWA (PWA) 4-5-5











CROSBY

685



QUESTIONS??

