

Ben Mulder
Designer & Partner
4D architects

RE: Dhaliwal/Klar residence results from air-spade root inspections
7024 SE 20th Mercer Island, WA.

On 3/31/23, ArboristsNW LLC excavated areas of possible root encroachment on two exceptional trees. The air-spade method was used to expose the areas of proposed encroachment. Trees 1 & 4 were the target root systems. Pictures and a site drawing are included below.

Tree #1, An exceptional Western Red Cedar, I had stated earlier that the existing foundation would have restricted the roots of T 1 from extending to their full extent and would have been stopped at the edge of the concrete. In fact, after making an 18" deep trench with the air spade, no roots were found at all. It appears from the soil in the trench next to the existing foundation that the soil was a fill, and any roots had been cut/rerouted some time ago a foot or more from the existing cement. As such, with the design of your building as is, construction will not affect the tree's health. What will need to be done is the placing of a 5-6" deep layer of mulch over the root place as drawn and then covered by plywood or expanded metal for the duration of construction.

T #4, An exceptional Western Red Cedar. Findings for the 3 locations needed for pillars to keep the proposed deck off the surface; no roots were found around point #1 on the included site map. A 6-7" wide and 18" deep trench was made for this observation. In the point #2 area, roots were exposed but found to be no bigger than 3/8" and few in number with a liberal spacing. One root 1.5-2" was located north of a pillar location and will not be affected. It is my opinion that it is possible to expose more of the roots that were found and that this will allow for the careful flexing of the roots out of the way of the proposed pillar locations. The root plate, as shown on the site drawings, is to be covered in that 5-6" of mulch and covered as T #1, again for the project's life.

Project arborist to be on site for the placement of tree protection measures installation and during deck pillar placement.

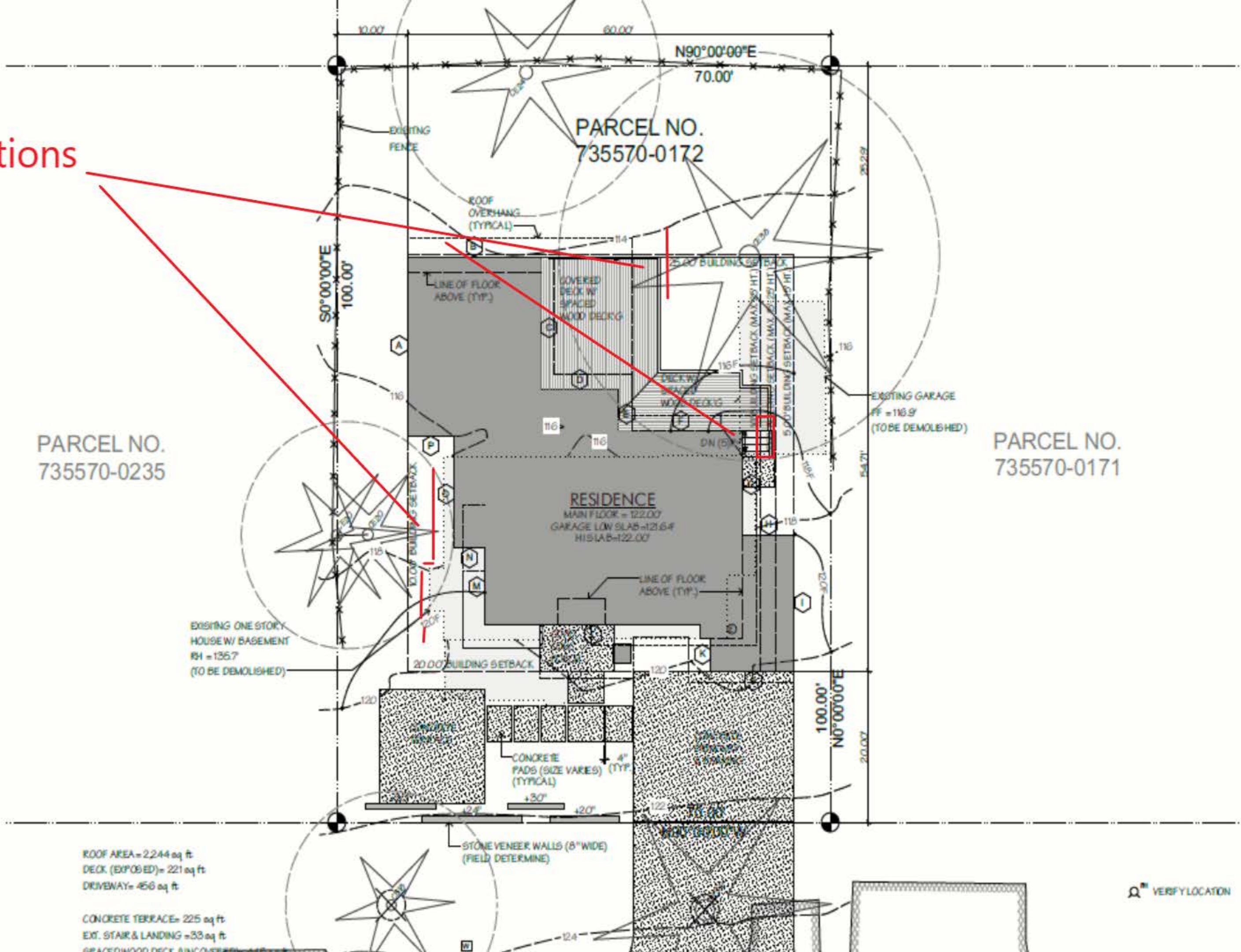
Respectfully Submitted

Neal Baker
ArboristsNW.com
ISA Cert. PN1075A
TRAQ ISA (Tree Risk Assessment Qualified)
Member AREA & SOCA



4/5/23

Trenching locations



PARCEL NO.
735570-0235

PARCEL NO.
735570-0172

PARCEL NO.
735570-0171

ROOF AREA= 2,244 sq ft
DECK (EXPOSED)= 221 sq ft
DRIVEWAY= 456 sq ft

CONCRETE TERRACE= 225 sq ft
EXT. STAIR & LANDING = 33 sq ft
SPACED WOOD DECK, UNCOVERED

HARD

MISC 19.02
MAXIMUM

DECK=
WALK/PATH
LANDSCAPE

LOT S

HIGH POINT
LOW POINT
DISTANCE
SLOPE: 9

IMP

ROOF AREA
ENTRY DR
TERRACE
WALKWAY
EXTERIOR
UNCOVERED
TOTAL IMP
PERCENT
MAX PER

STR

BLDG. FO
LOT AREA
PERCENT
MAX PER

B

EX

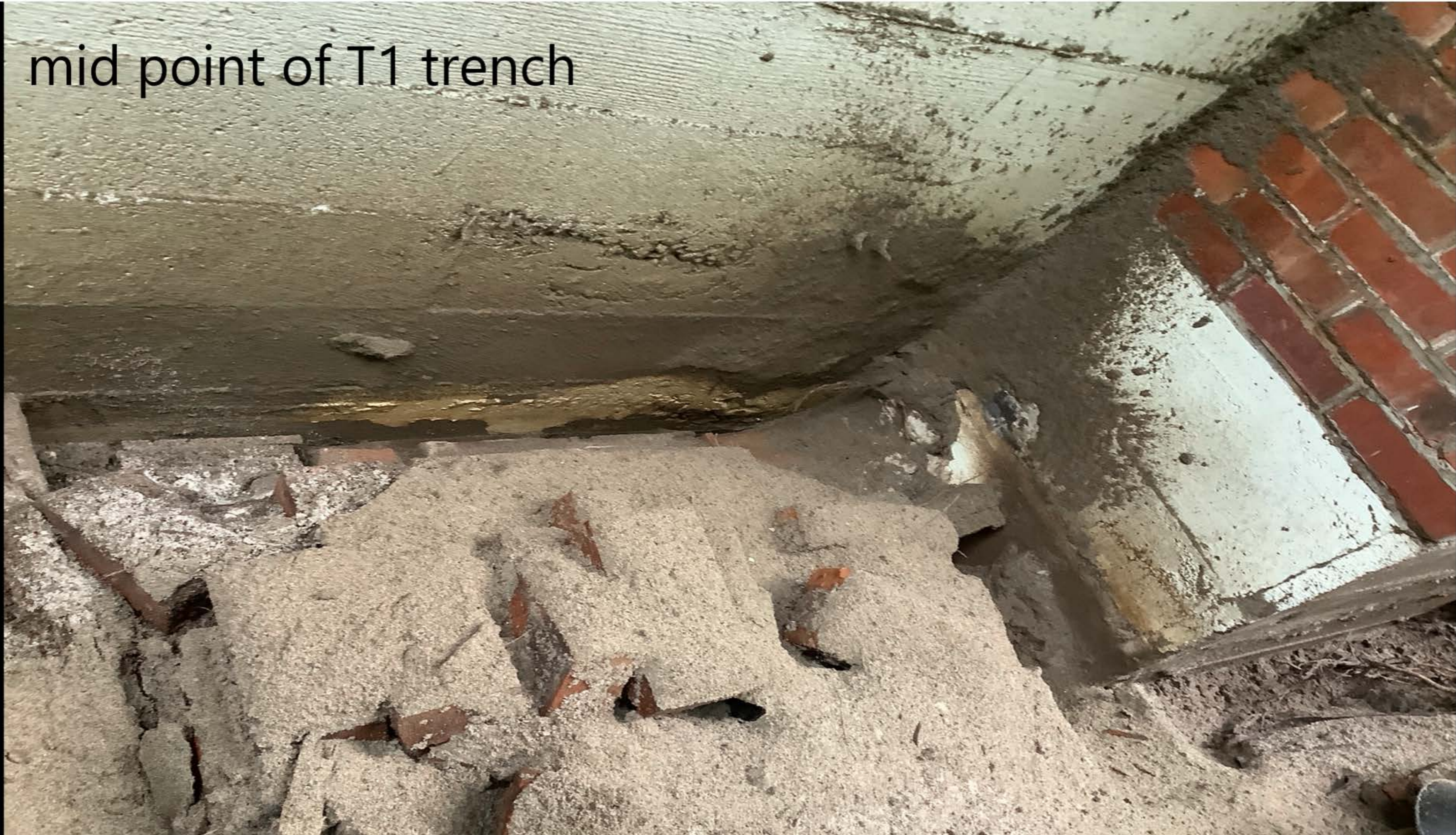
A	115.5
B	114.1
C	114.2
D	115.5
E	115.5
F	116.0
G	116.7
H	115.5
I	119.1

SUM OF E
AVG. EXB

MAX
PRO

VERIFY LOCATION

mid point of T1 trench



North end of trench T 1





Point 1 trench





Point 2 trench

1.5-2" root

Small flexible well, spaced roots

area of 2 proposed pillars

