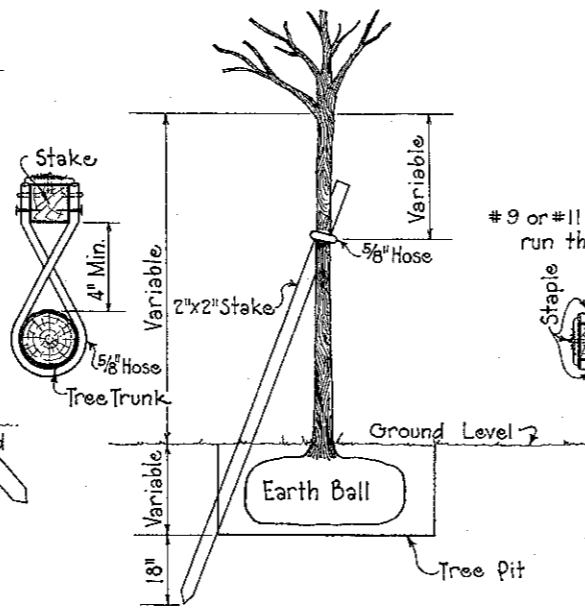
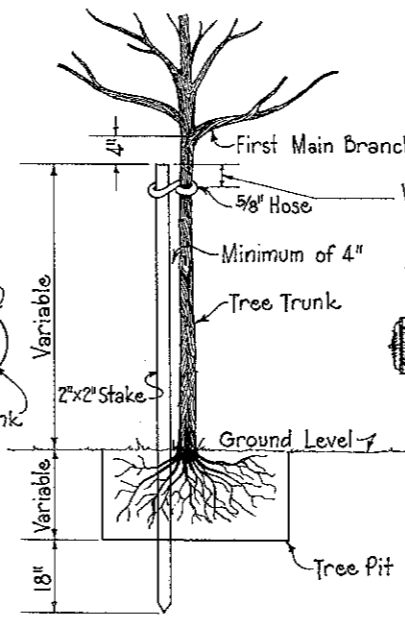


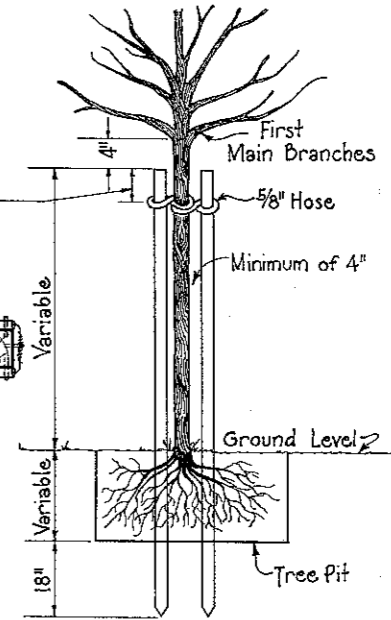
**BRACING - TRIPOD METHOD**  
Trees less than 8" in diameter



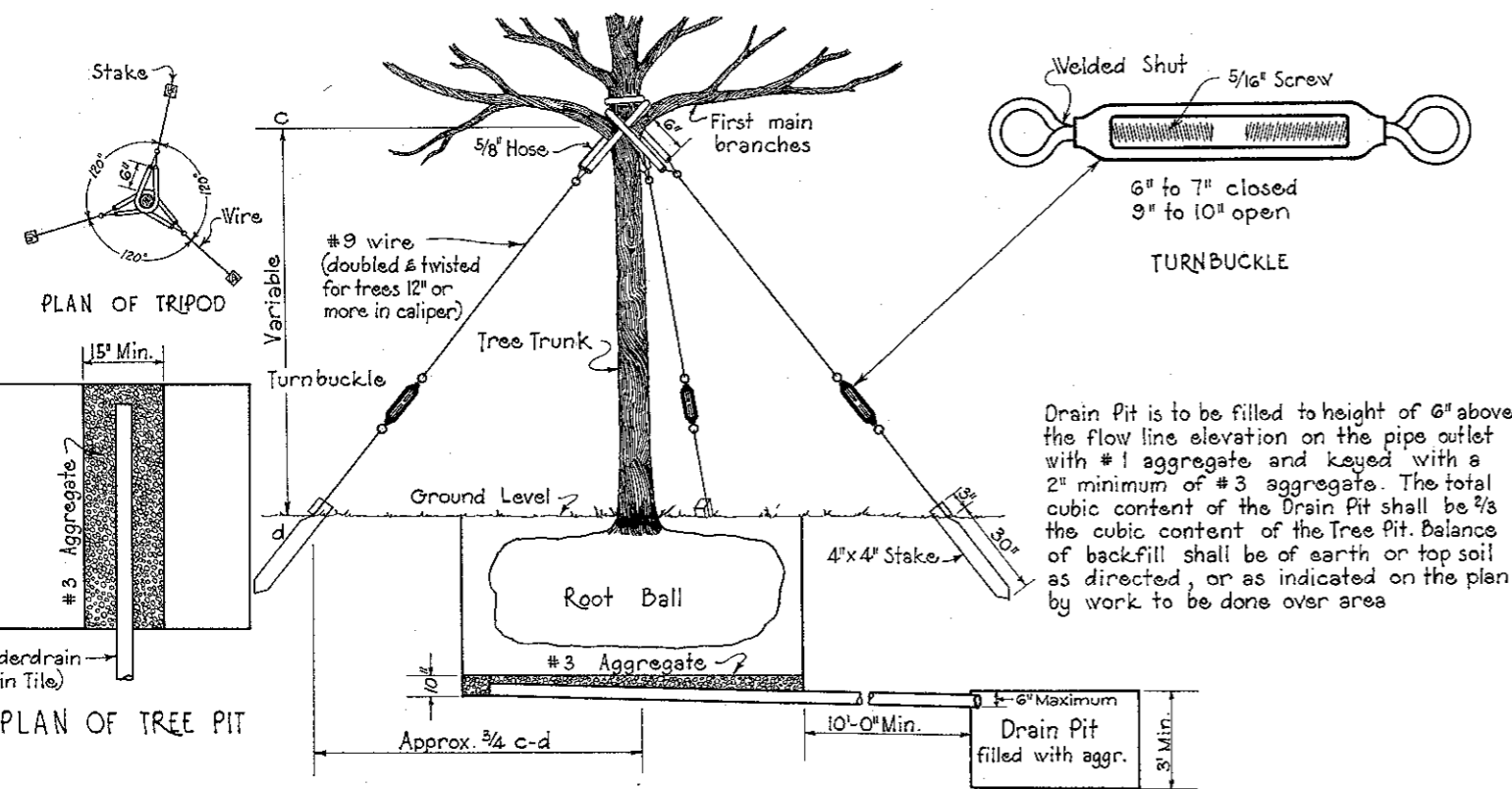
**BRACING - SINGLE SLANT STAKE**  
Alternate for B & B Plants if so directed



**BRACING - SINGLE VERTICAL STAKE**  
Trees 2" caliper or less & trees less than 8' in height

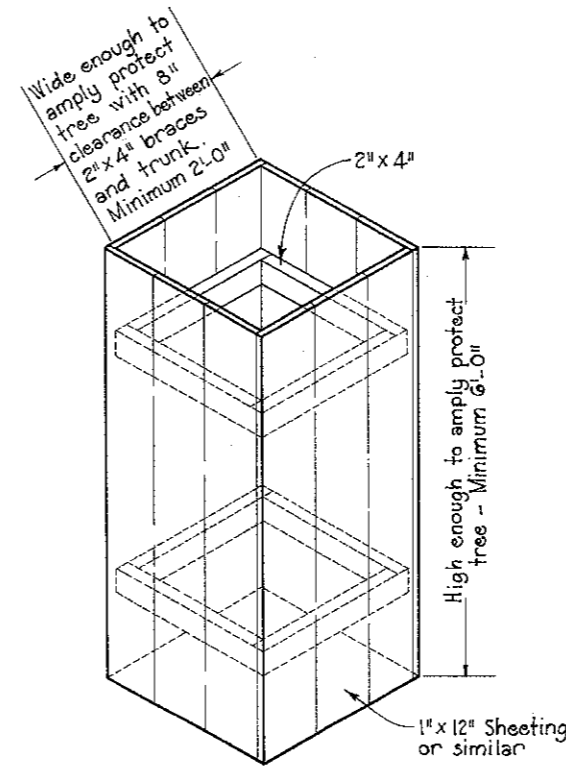


**BRACING - DOUBLE VERTICAL STAKE**  
Trees over 2" caliper and trees 8' or more in height

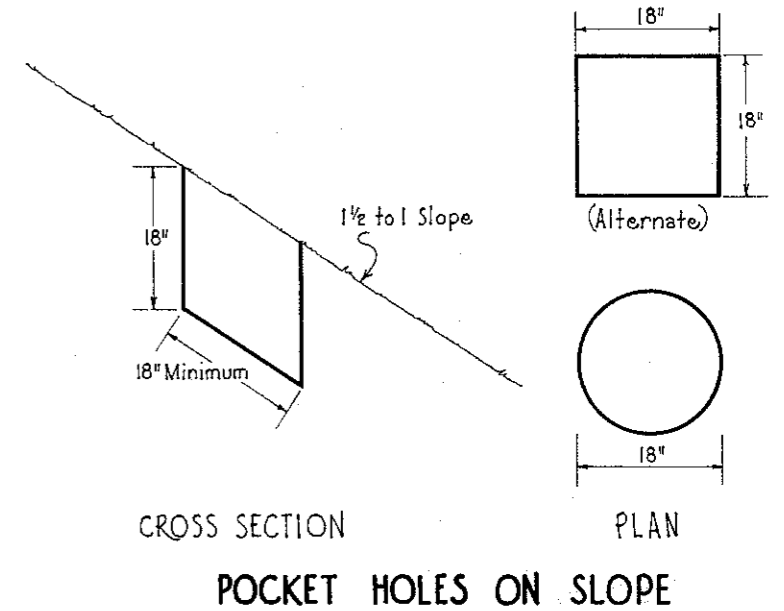


**BRACING & PIT DRAINAGE**  
Trees 8" or over in diameter

4" Pipe underdrain with fall of 1/4" per ft. (or more) connected to Roadway Drainage or Drain Pit



Boxing for trees which remain in place and in danger of injury by construction operations. Inside 2" x 4" braces shall be properly padded to prevent injury to bark from contact.



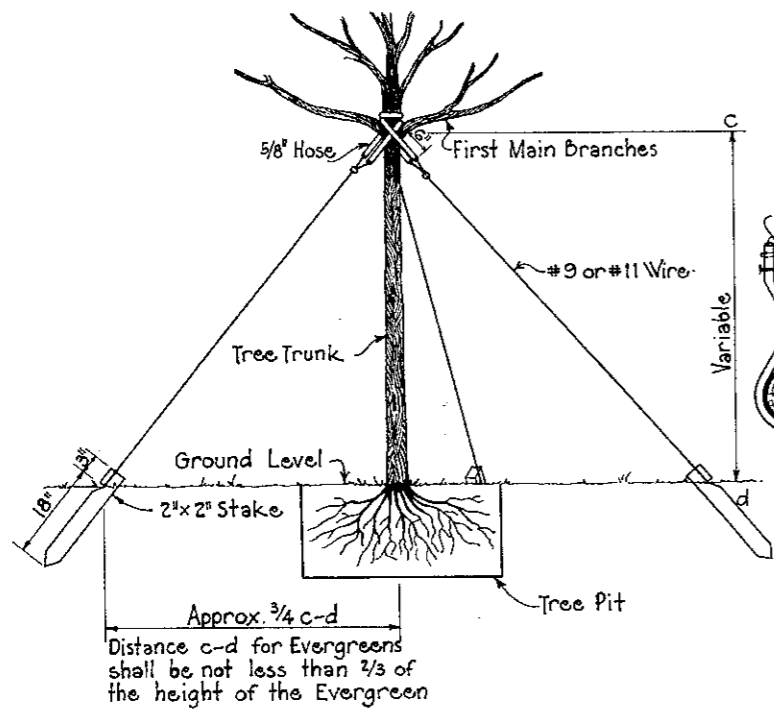
CROSS SECTION  
POCKET HOLES ON SLOPE

BUREAU OF LOCATION & DESIGN 2-16-38  
OHIO DEPARTMENT OF HIGHWAYS

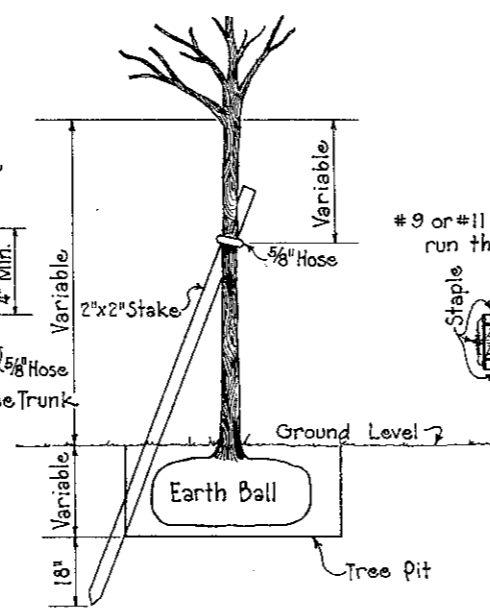
**ROADSIDE IMPROVEMENT**

STANDARD CONSTRUCTION DRAWING L-2

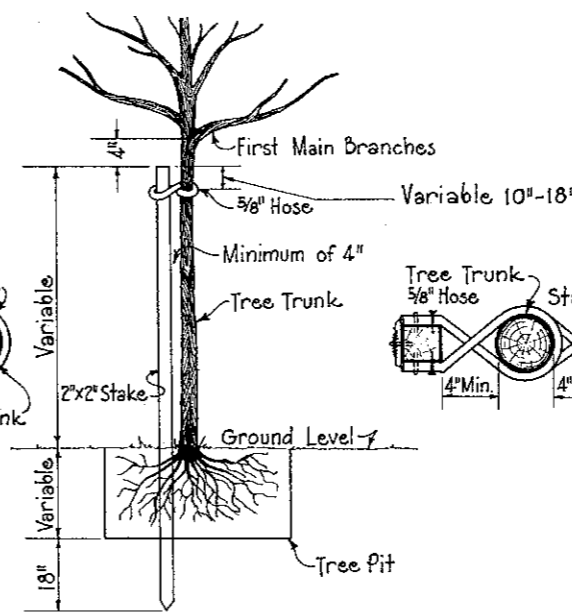
APPROVED K. L. OF CHIEF ENGINEER



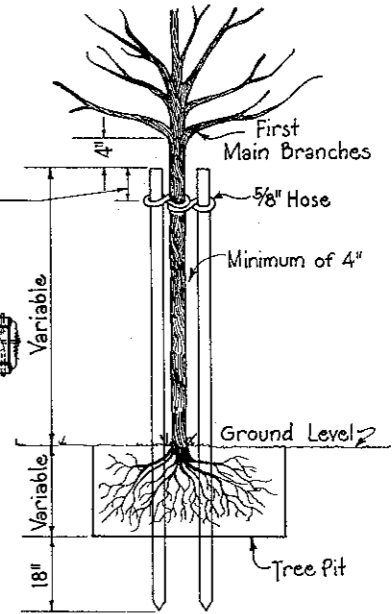
**BRACING - TRIPOD METHOD**  
Trees less than 6" in diameter



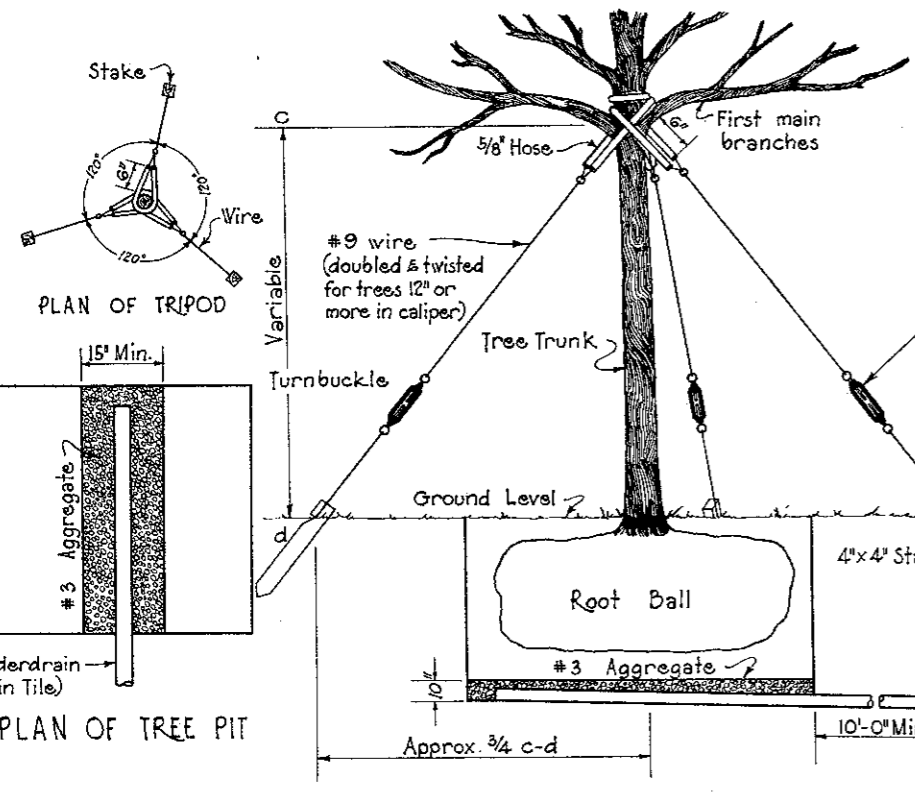
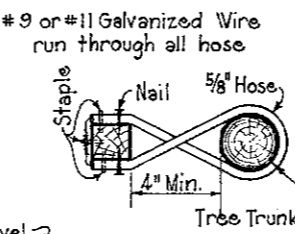
**BRACING - SINGLE SLANT STAKE**  
Alternate for B & D Plants if so directed



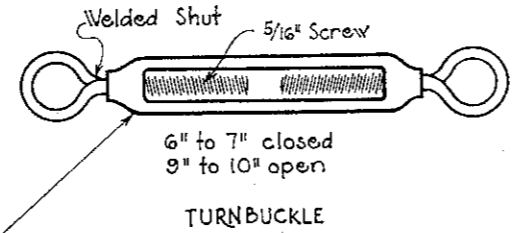
**BRACING - SINGLE VERTICAL STAKE**  
Trees 2" caliper or less & trees less than 8' in height



**BRACING - DOUBLE VERTICAL STAKE**  
Trees over 2" caliper and trees 8' or more in height

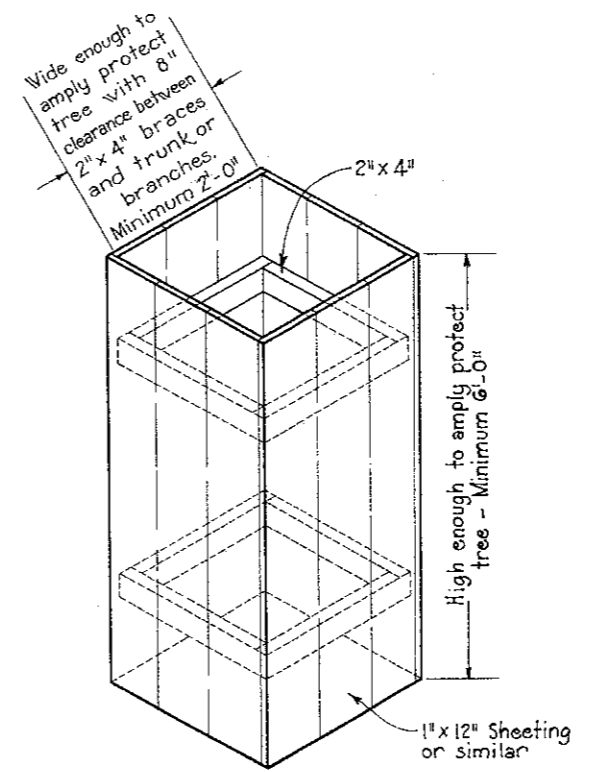


**BRACING & PIT DRAINAGE**  
Trees 6" or over in diameter

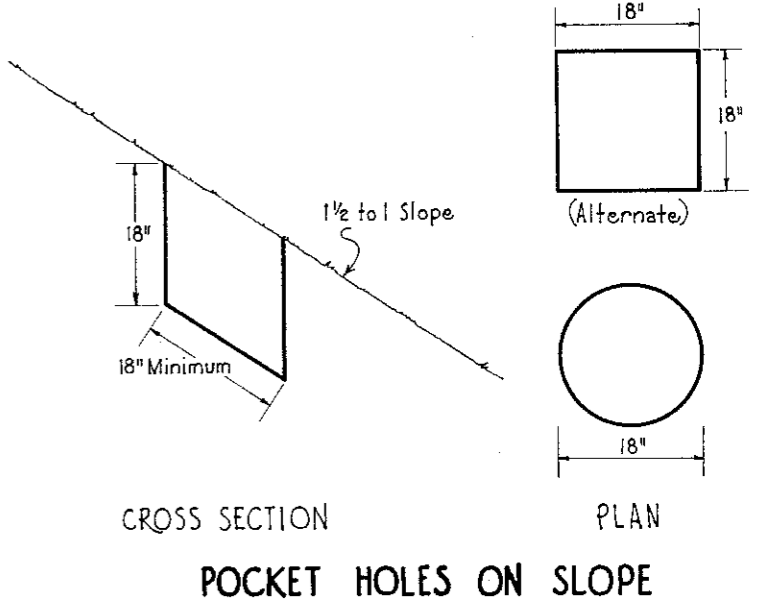


Drain Pit is to be filled to height of 6" above the flow line elevation on the pipe outlet with #1 aggregate and keyed with a 2" minimum of #3 aggregate. The total cubic content of the Drain Pit shall be 2/3 the cubic content of the Tree Pit. Balance of backfill shall be of earth or top soil as directed, or as indicated on the plan by work to be done over area

4" Pipe underdrain with fall of 1/4" per ft. (or more) connected to Roadway Drainage or Drain Pit



Boxing for trees which remain in place and in danger of injury by construction operations. Inside 2"x4" braces shall be properly padded to prevent injury to bark from contact.



CROSS SECTION  
POCKET HOLES ON SLOPE

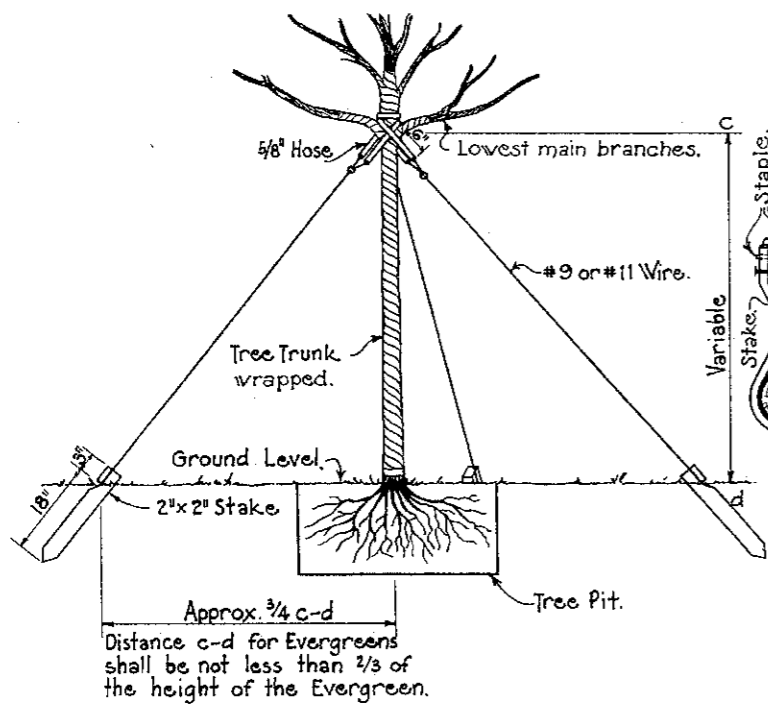
BUREAU OF LOCATION & RIGHT OF WAY  
OHIO DEPARTMENT OF HIGHWAYS

**ROADSIDE IMPROVEMENT**

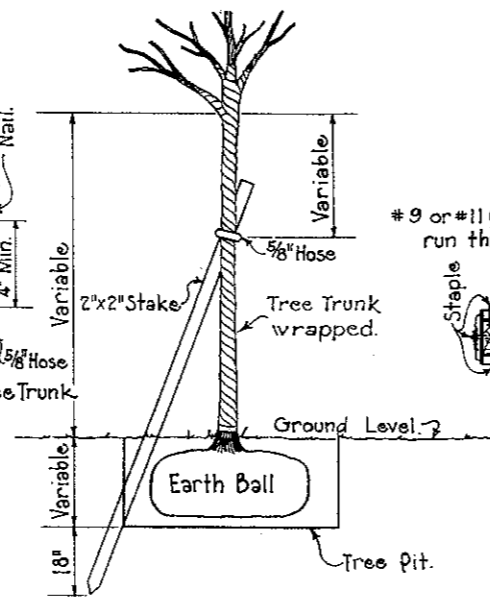
STANDARD CONSTRUCTION DRAWING **L-2**

APPROVED *M.D.S.* CHIEF ENGINEER

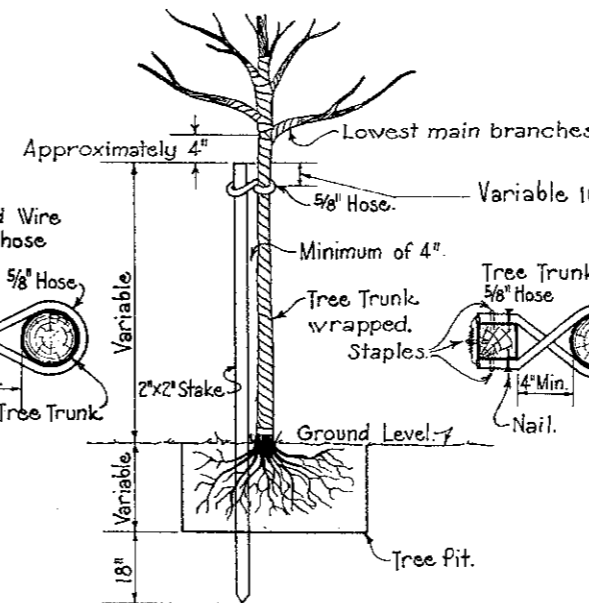
DATE: 2-16-12-1-1



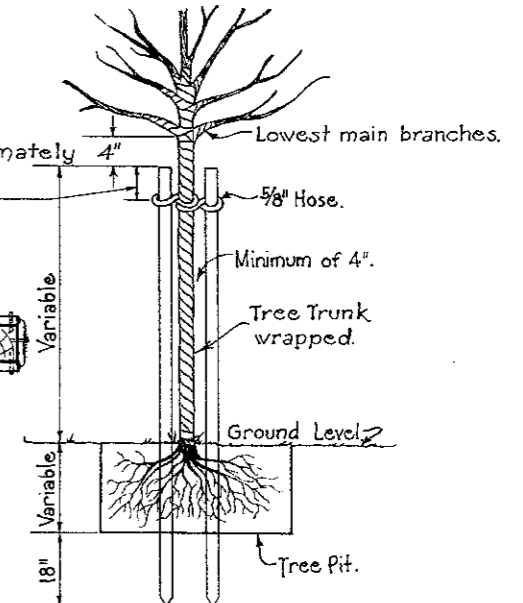
**BRACING - TRIPOD METHOD**  
Trees less than 4" in diameter.



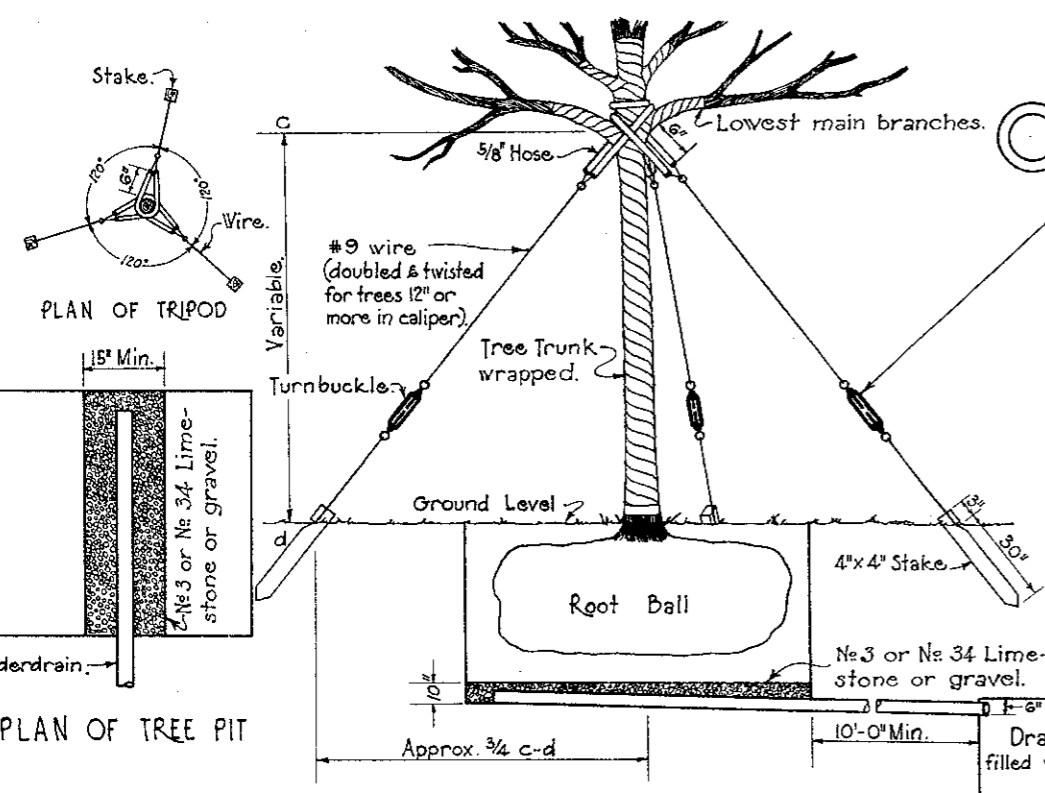
**BRACING - SINGLE SLANT STAKE**  
Alternate for B and B Plants and low-headed trees if so directed.



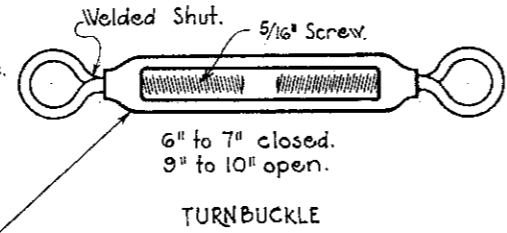
**BRACING - SINGLE VERTICAL STAKE**  
Trees 2" caliper or less and other trees less than 8' in height.



**BRACING - DOUBLE VERTICAL STAKE**  
Trees over 2" caliper and other trees 8' or more in height.

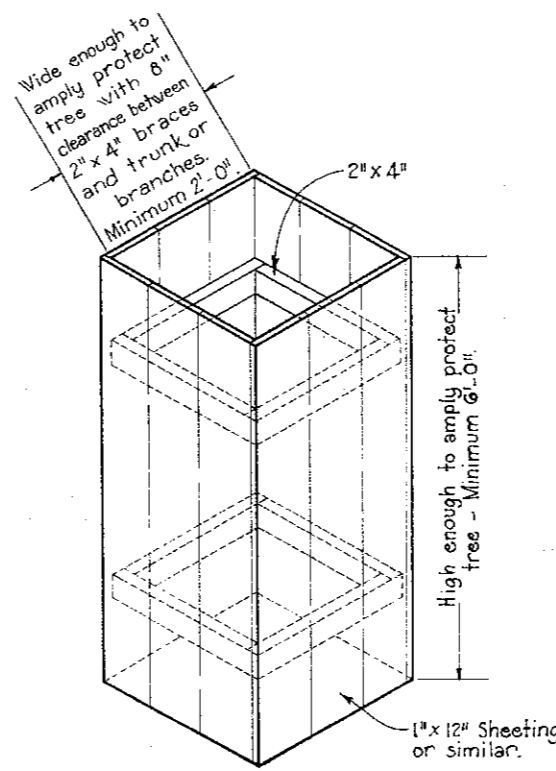


**BRACING & PIT DRAINAGE**  
Trees 4" or over in diameter.

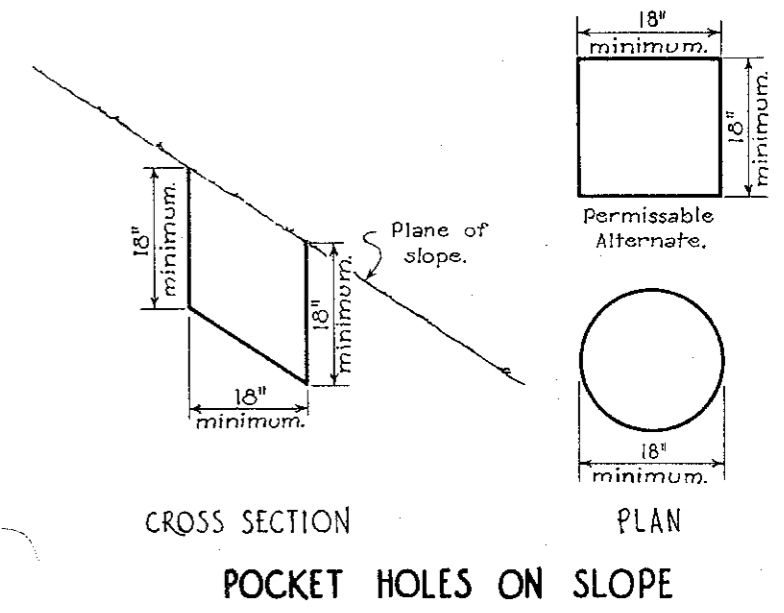


Drain Pit is to be filled to height of 6" above the flow line elevation on the pipe outlet with No 1 limestone or gravel and keyed with a 2" minimum of No 3 limestone or gravel. The total cubic content of the Drain Pit shall be 2/3 the cubic content of the Tree Pit. Balance of backfill shall be of earth or top soil as directed, or as indicated on the plan by work to be done over area.

4" Pipe underdrain with fall of 1/4" per ft. (or more) connected to Roadway Drainage or Drain Pit.



Boxing for trees which remain in place and in danger of injury by construction operations. Inside 2" x 4" braces shall be properly padded to prevent injury to bark from contact.



**CROSS SECTION**  
**POCKET HOLES ON SLOPE**

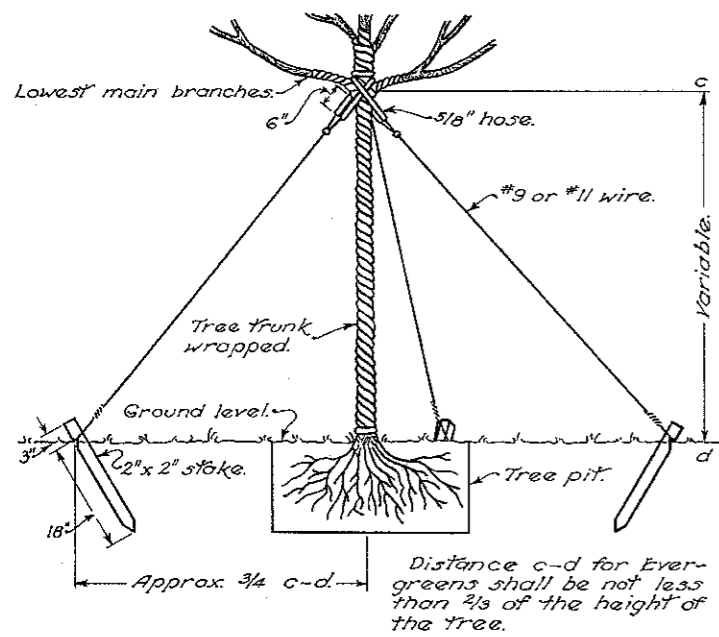
BUREAU OF LOCATION & RIGHT OF WAY  
OHIO DEPARTMENT OF HIGHWAYS

**ROADSIDE IMPROVEMENT**

STANDARD CONSTRUCTION DRAWING **L-2**

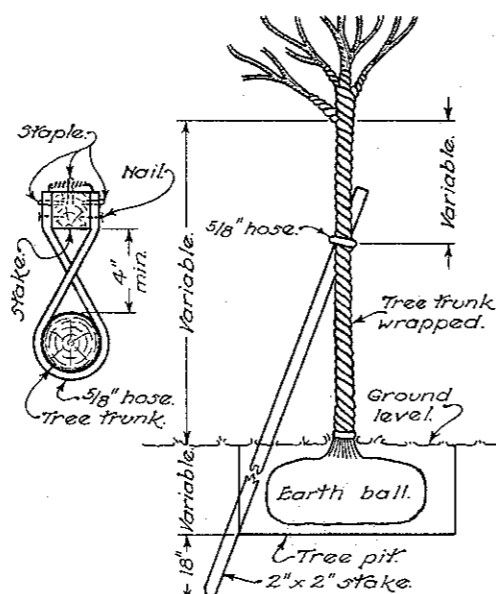
APPROVED **M.D.S.** CHIEF ENGINEER

DATE  
2-16-38  
12-1-41  
10-1-45



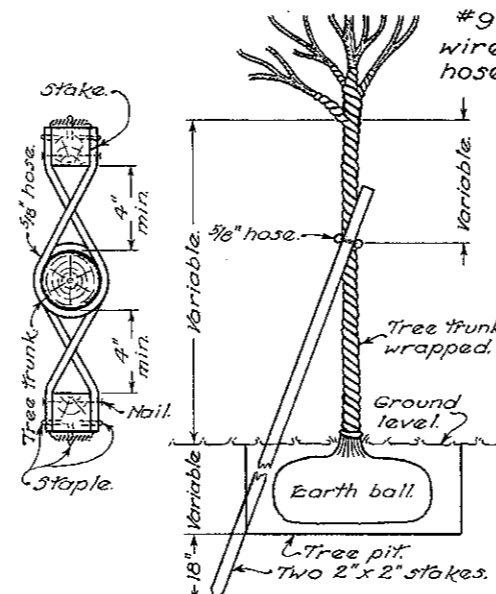
Trees less than 4" in caliper.

**BRACING TRIPOD METHOD**



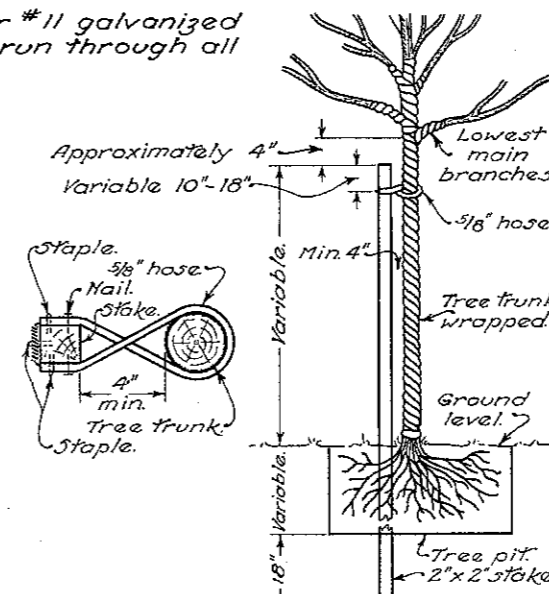
Alternate for B and B plants and low headed trees of 2" caliper or less and other trees less than 8' in height if so directed.

**BRACING SINGLE SLANT STAKE**



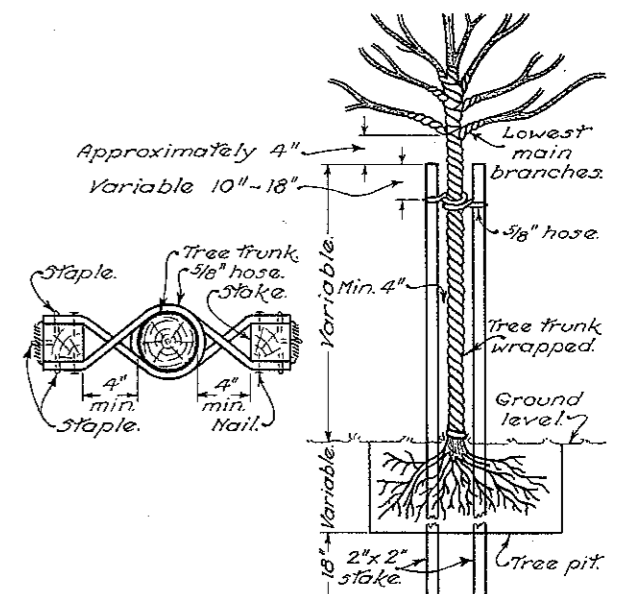
Alternate for B and B plants and low headed trees over 2" caliper or other trees 8' or more in height.

**BRACING DOUBLE SLANT STAKE**



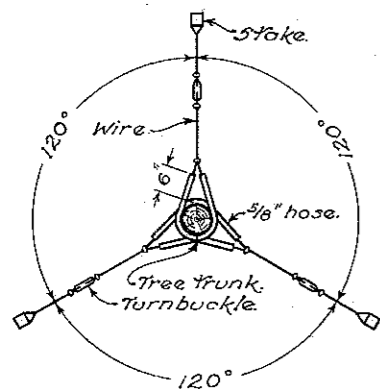
Trees 2" caliper or less and other trees less than 8' in height.

**BRACING SINGLE VERTICAL STAKE**

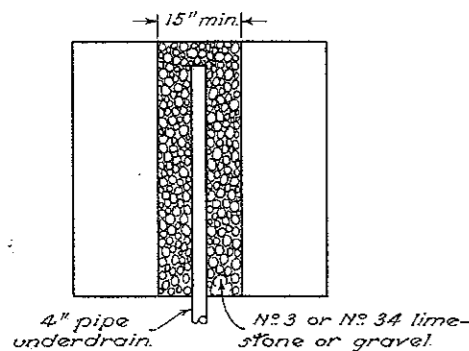


Trees over 2" caliper and other trees 8' or more in height.

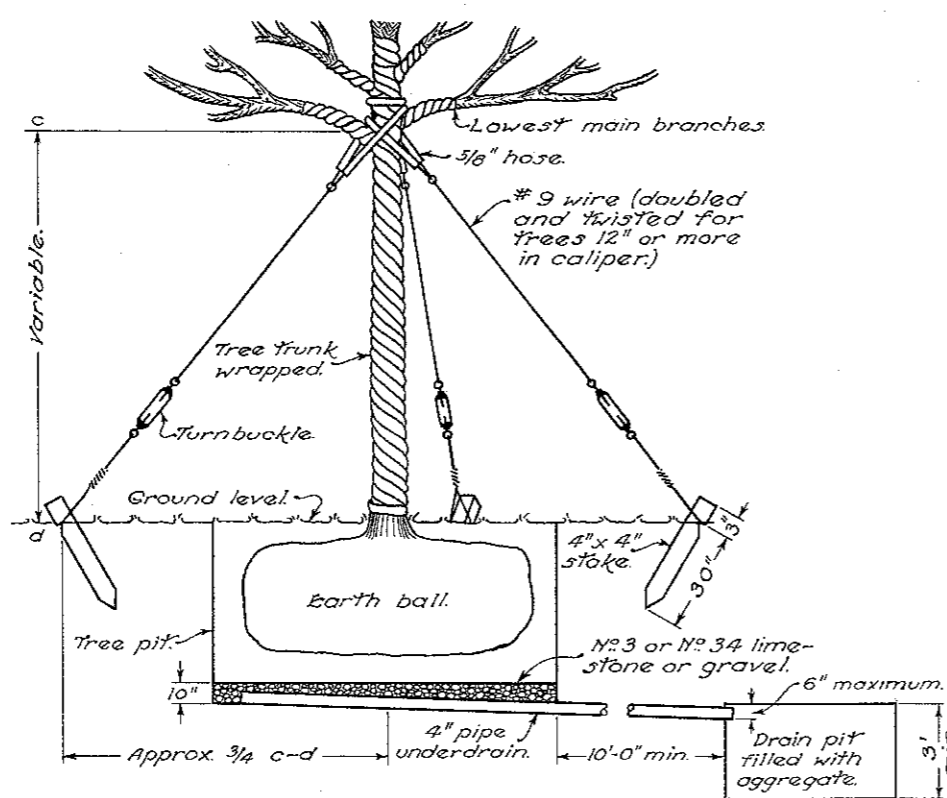
**BRACING DOUBLE VERTICAL STAKE**



PLAN OF TRIPOD

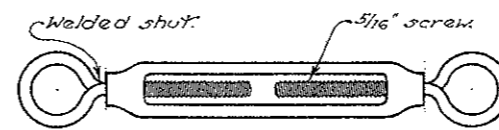


PLAN OF TREE PIT



Trees 4" or over in caliper if so directed.

**BRACING AND PIT DRAINAGE**

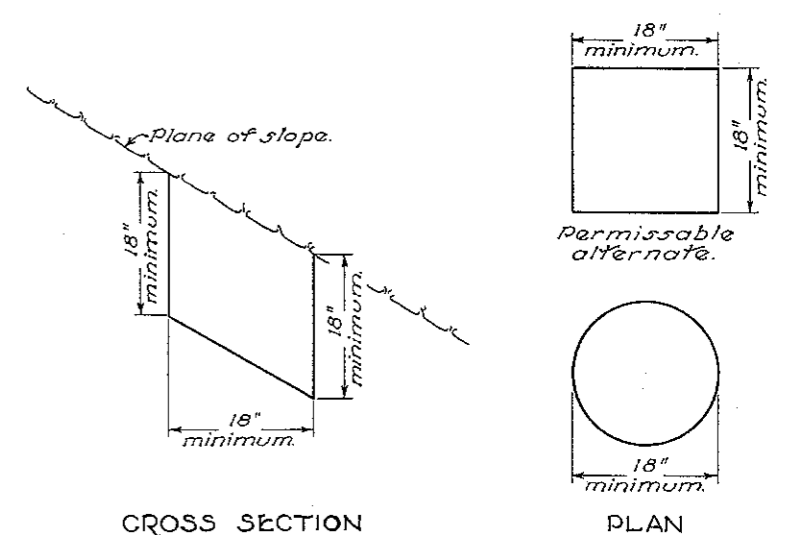


6" to 7" closed, 9" to 10" open.

TURNBUCKLE

Drain pit is to be filled to height of 6" above the flow line elevation on the pipe outlet with No. 1 limestone or gravel and keyed with a 2" minimum of No. 3 limestone or gravel. The total cubic content of the drain pit shall be 2/3 the cubic content of the tree pit. Balance of backfill shall be of earth or top soil as directed, or as indicated on the plan by work to be done over area.

4" pipe underdrain with fall of 1/4" per foot (or more) connected to roadway drainage or drain pit.



CROSS SECTION

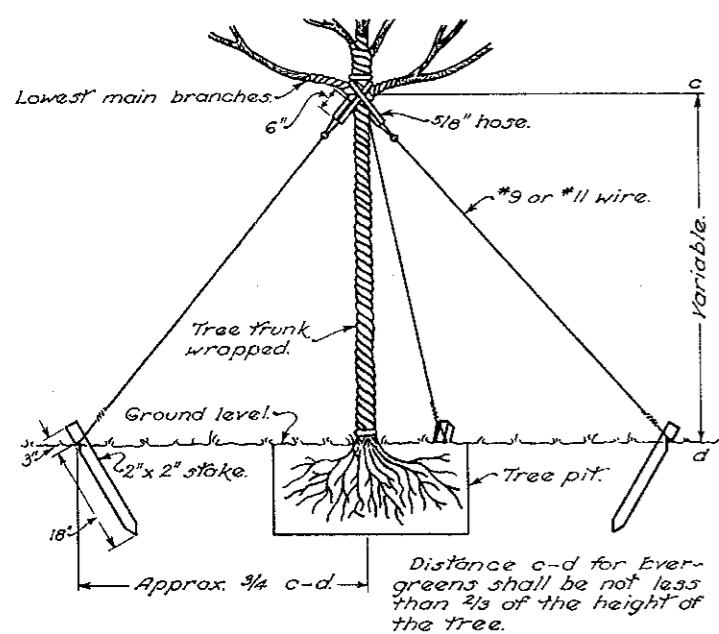
POCKET HOLES ON SLOPE

BUREAU OF LOCATION AND DESIGN  
OHIO DEPARTMENT OF HIGHWAYS

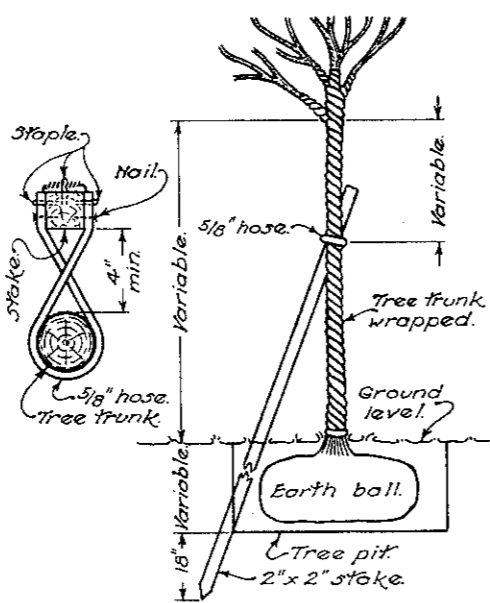
**ROADSIDE IMPROVEMENT**

STANDARD CONSTRUCTION DRAWING  
APPROVED *K.L.R.* CHIEF ENGINEER

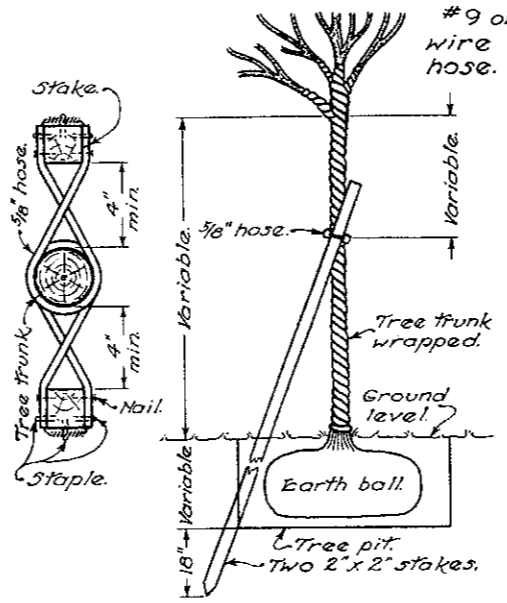
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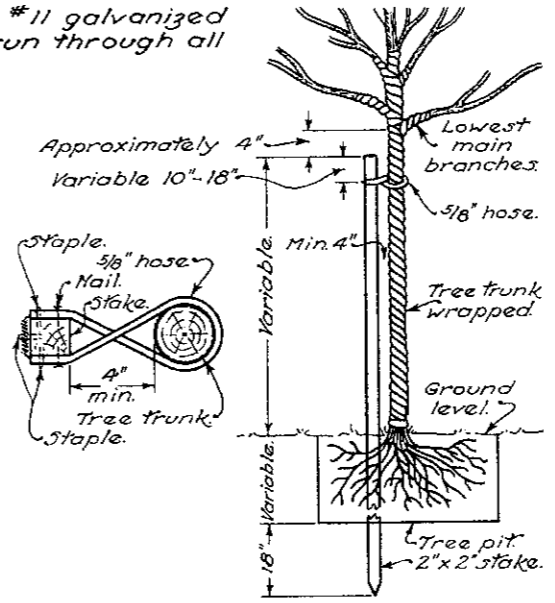
Trees less than 4" in caliper.  
**BRACING TRIPOD METHOD**



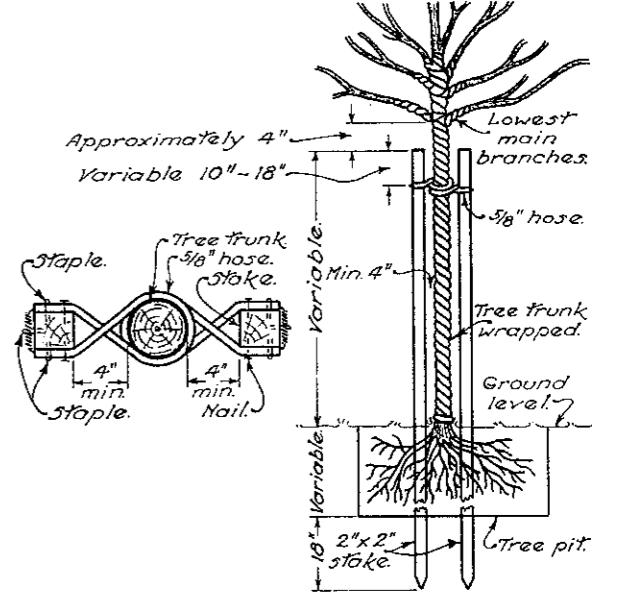
Alternate for B and B plants and low headed trees of 2" caliper or less and other trees less than 8' in height if so directed.  
**BRACING SINGLE SLANT STAKE**



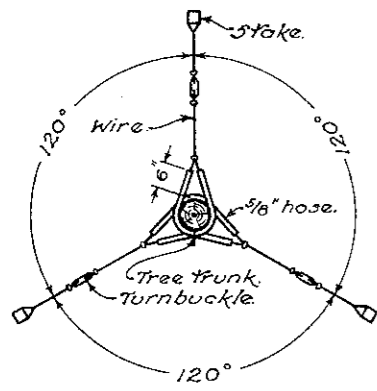
Alternate for B and B plants and low headed trees over 2" caliper or other trees 8' or more in height.  
**BRACING DOUBLE SLANT STAKE**



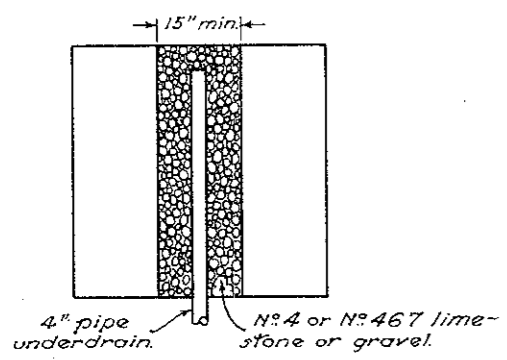
Trees 2" caliper or less and other trees less than 8' in height.  
**BRACING SINGLE VERTICAL STAKE**



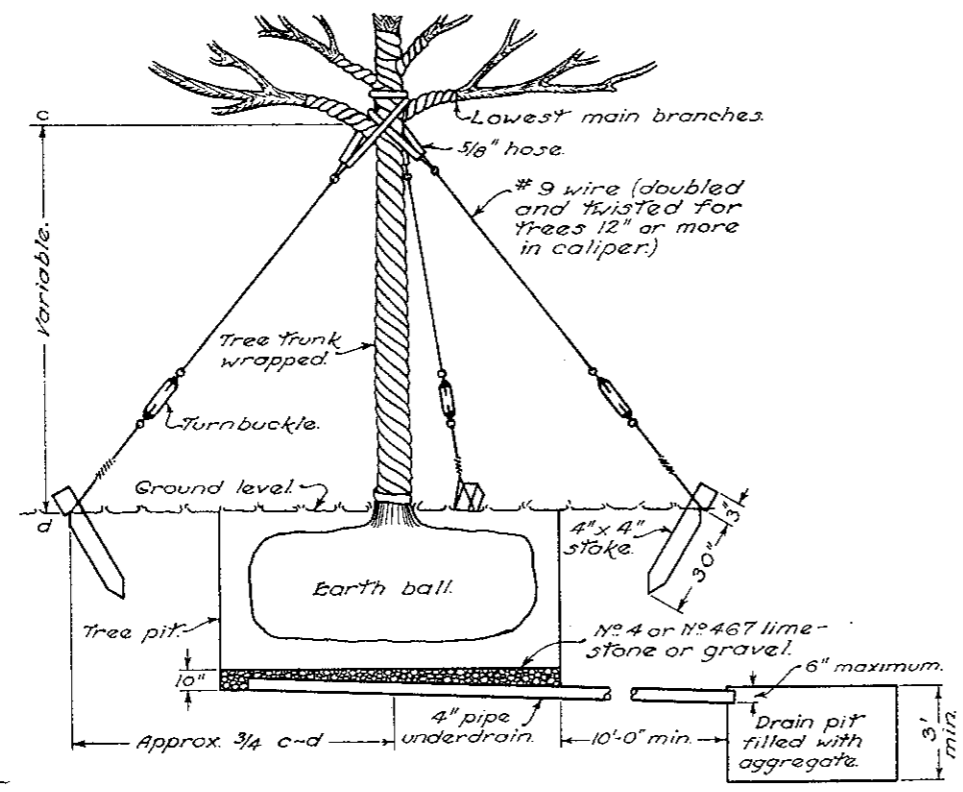
Trees over 2" caliper and other trees 8' or more in height.  
**BRACING DOUBLE VERTICAL STAKE**



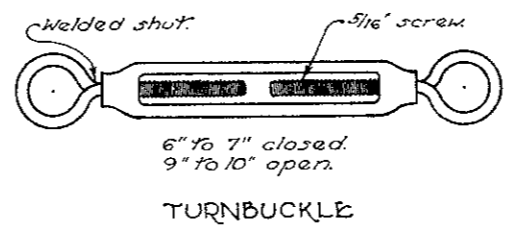
**PLAN OF TRIPOD**



**PLAN OF TREE PIT**



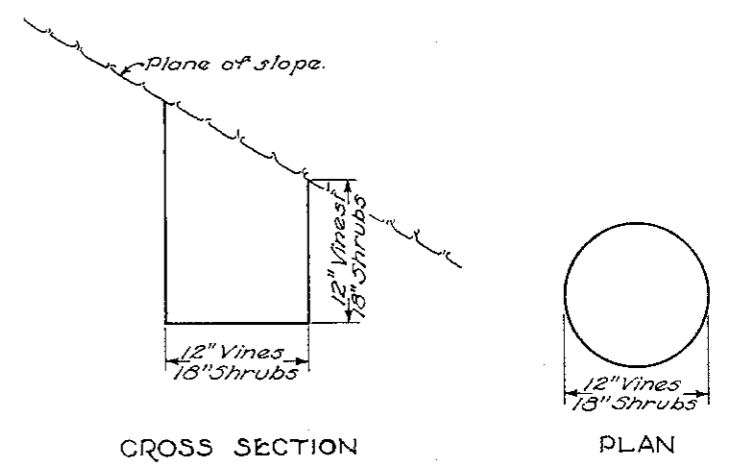
Trees 4" or over in caliper if so directed.  
**BRACING AND PIT DRAINAGE**



**TURNBUCKLE**

Drain pit is to be filled to height of 6" above the flow line elevation on the pipe outlet with No. 1 limestone or gravel and keyed with a 2" minimum of No. 4 limestone or gravel. The total cubic content of the drain pit shall be 2/3 the cubic content of the tree pit. Balance of backfill shall be of earth or top soil as directed, or as indicated on the plan by work to be done over area.

4" pipe underdrain with fall of 1/4" per foot (or more) connected to roadway drainage or drain pit.



**CROSS SECTION**  
**PLAN**  
**POCKET HOLES ON SLOPE**

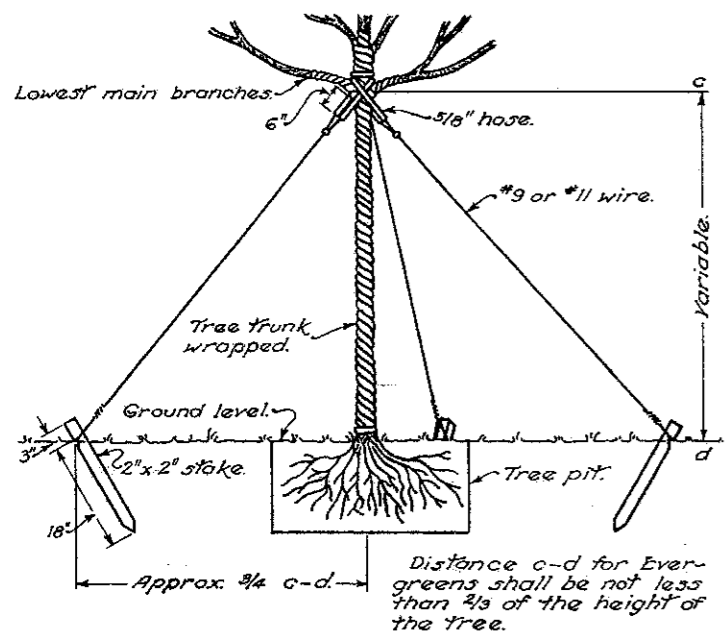
BUREAU OF LOCATION AND DESIGN  
OHIO DEPARTMENT OF HIGHWAYS

**ROADSIDE IMPROVEMENT**

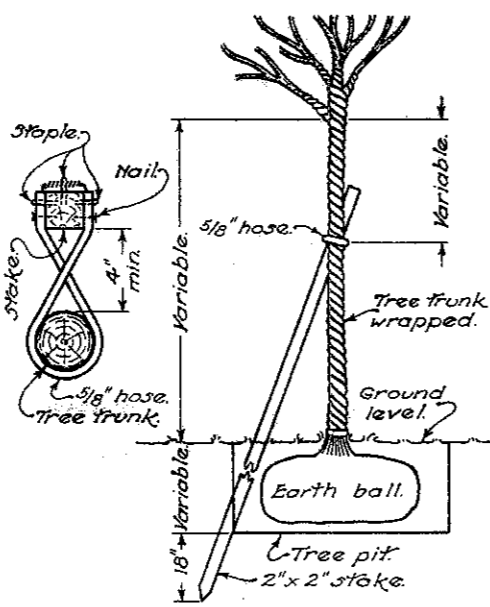
STANDARD CONSTRUCTION DRAWING **L-2**

APPROVED: *ROBERTS* ENGR. L. & D.

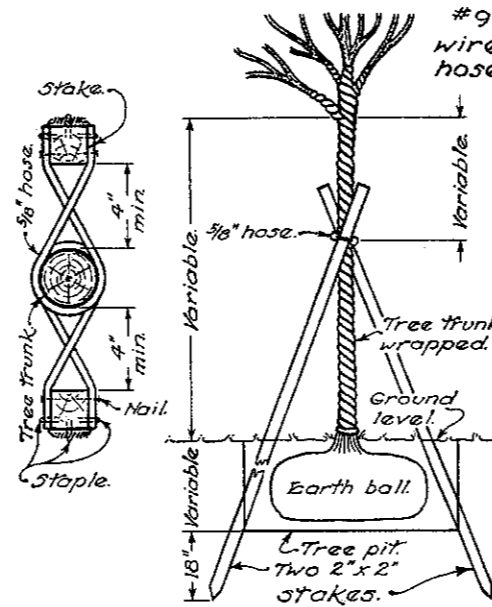
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2-16-38  
12-1-41  
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6-1-55



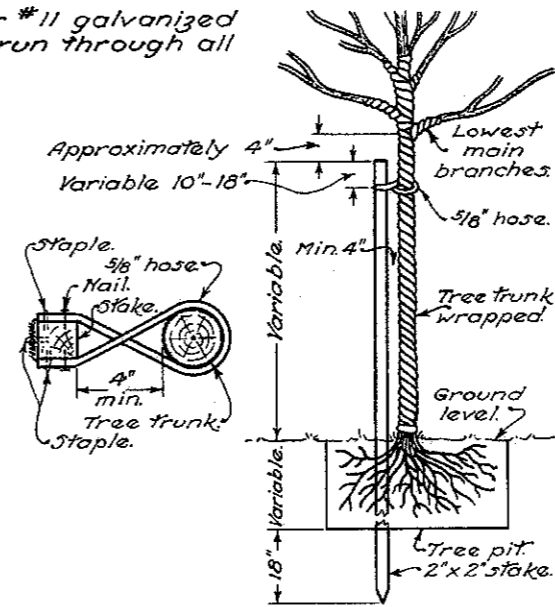
Trees less than 4" in caliper.  
**BRACING  
 TRIPOD METHOD**



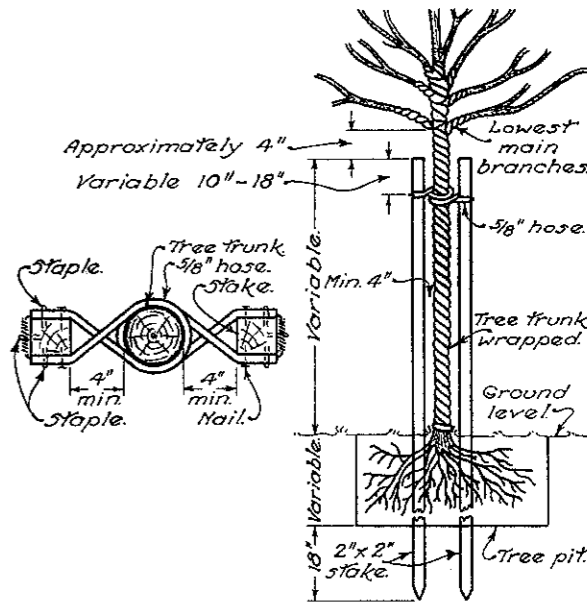
Alternate for B and B plants and low headed trees of 2" caliper or less and other trees less than 8' in height if so directed.  
**BRACING  
 SINGLE SLANT STAKE**



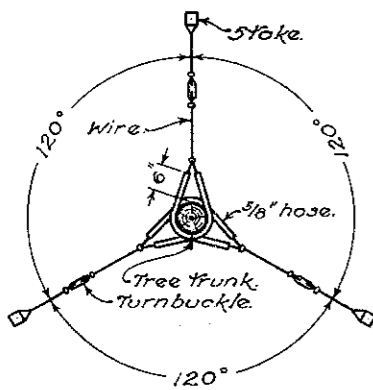
Alternate for B and B plants and low headed trees over 2" caliper or other trees 8' or more in height.  
**BRACING  
 DOUBLE SLANT STAKE**



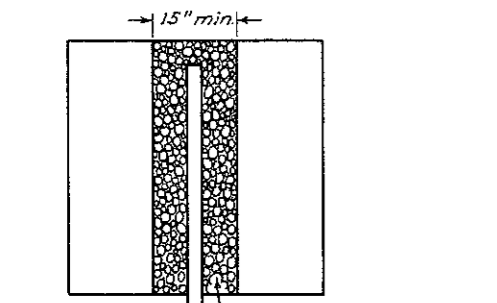
Trees 2" caliper or less and other trees less than 8' in height.  
**BRACING  
 SINGLE VERTICAL STAKE**



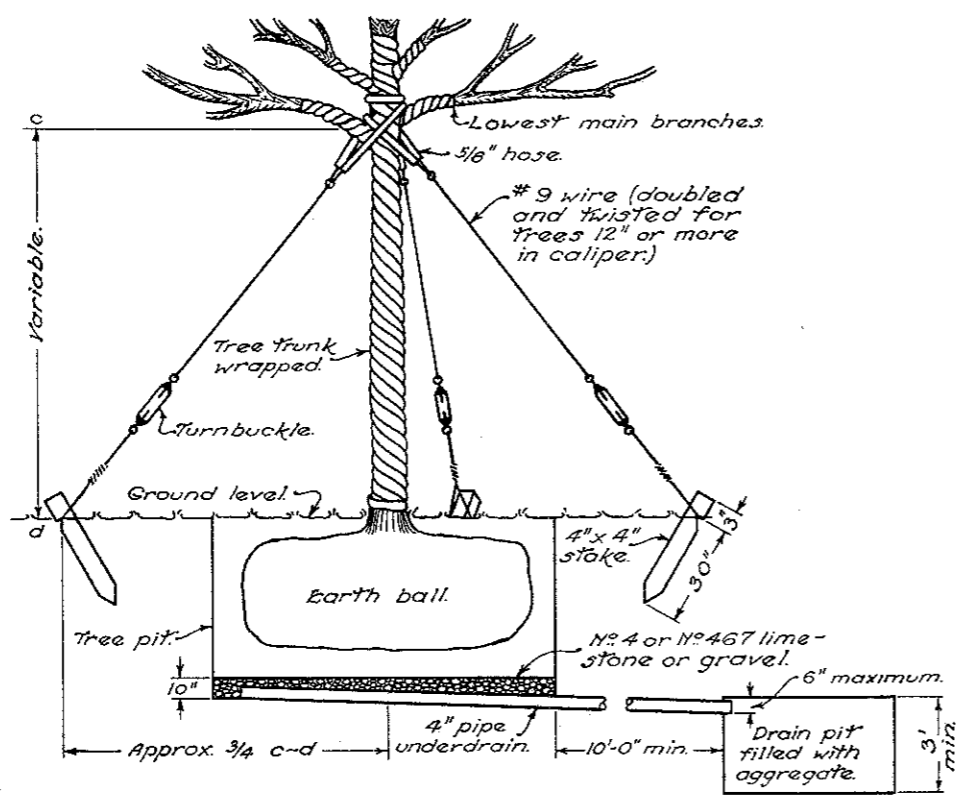
Trees over 2" caliper and other trees 8' or more in height.  
**BRACING  
 DOUBLE VERTICAL STAKE**



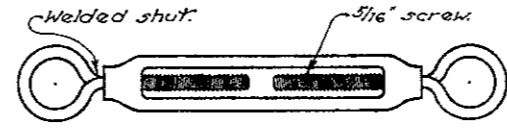
**PLAN OF TRIPOD**



**PLAN OF TREE PIT**



Trees 4" or over in caliper if so directed.  
**BRACING AND PIT DRAINAGE**

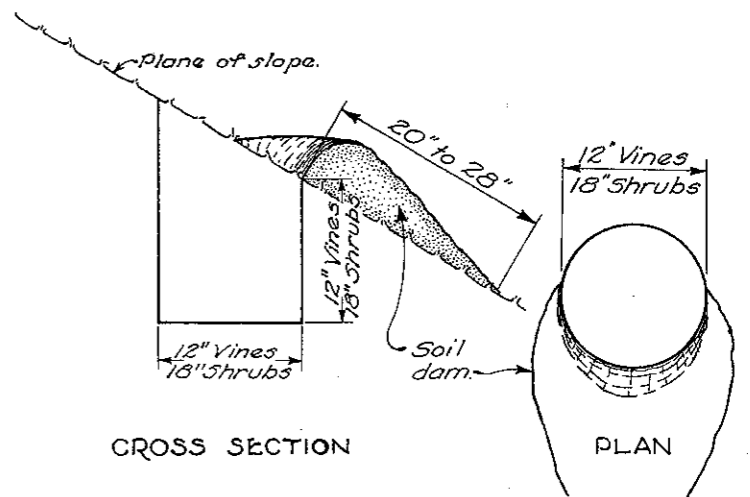


6" to 7" closed.  
 9" to 10" open.  
**TURNBUCKLE**

Drain pit is to be filled to height of 6" above the flow line elevation on the pipe outlet with No. 1 limestone or gravel and keyed with a 2" minimum of No. 4 limestone or gravel. The total cubic content of the drain pit shall be 2/3 the cubic content of the tree pit. Balance of backfill shall be of earth or top soil as directed, or as indicated on the plan by work to be done over area.

4" pipe underdrain with fall of 1/4" per foot (or more) connected to roadway drainage or drain pit.

The 5/8" hose dimension shown on this drawing is inside diameter.



**CROSS SECTION**

**PLAN**

**POCKET HOLES ON SLOPE**

BUREAU OF LOCATION AND DESIGN  
 OHIO DEPARTMENT OF HIGHWAYS

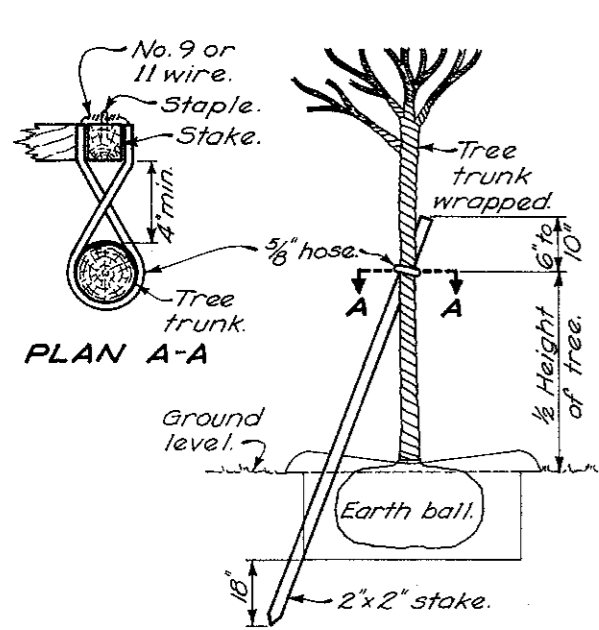
**ROADSIDE  
 IMPROVEMENT**

STANDARD  
 CONSTRUCTION  
 DRAWING

L-2

APPROVED *R. C. Luther* ENGR. L. & D.

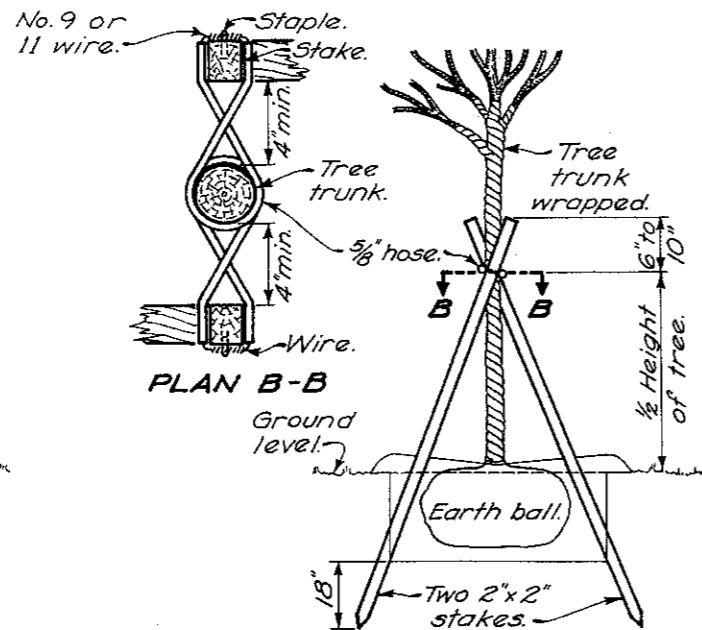
DATE  
 2-16-38  
 12-1-41  
 10-1-45  
 4-1-50  
 8-1-55  
 1-17-68



PLAN A-A

For bare root and B & B trees 4' to 6' in height; for low headed trees of 2" caliper or less; and for other trees less than 8' in height if so specified.

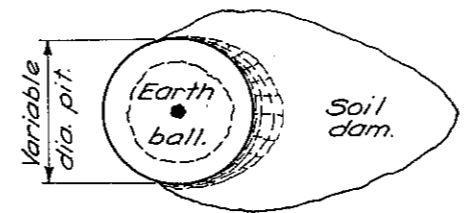
**SINGLE STAKE BRACING**



PLAN B-B

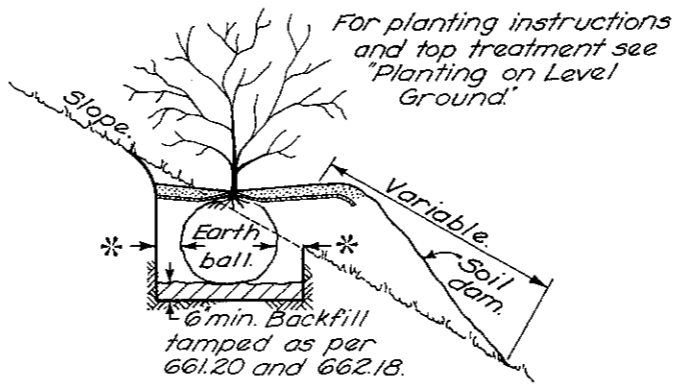
For bare root and B & B trees 6' to 8' in height, and for low headed trees over 2" in caliper.

**DOUBLE STAKE BRACING**

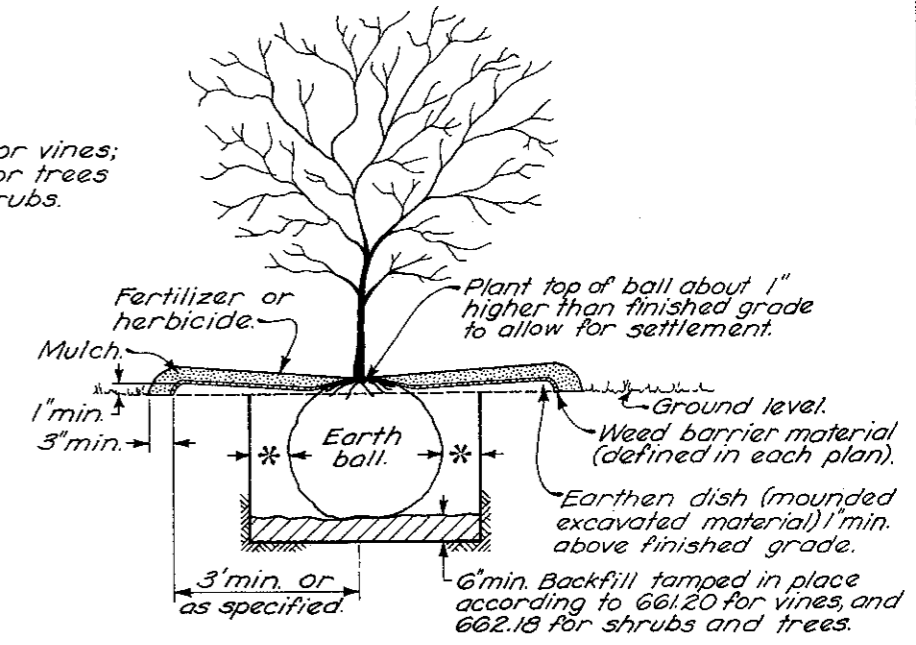


PLAN VIEW

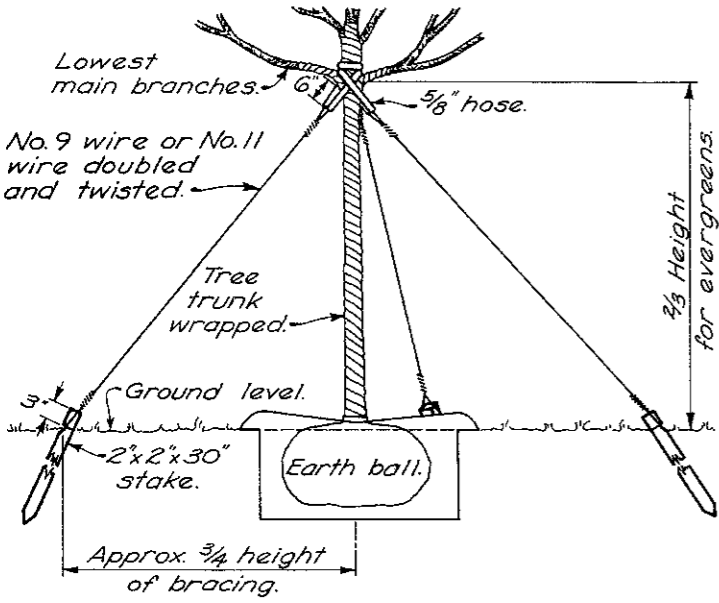
\* 6" min. for vines; 9" min. for trees and shrubs.



**PLANTING ON SLOPE**

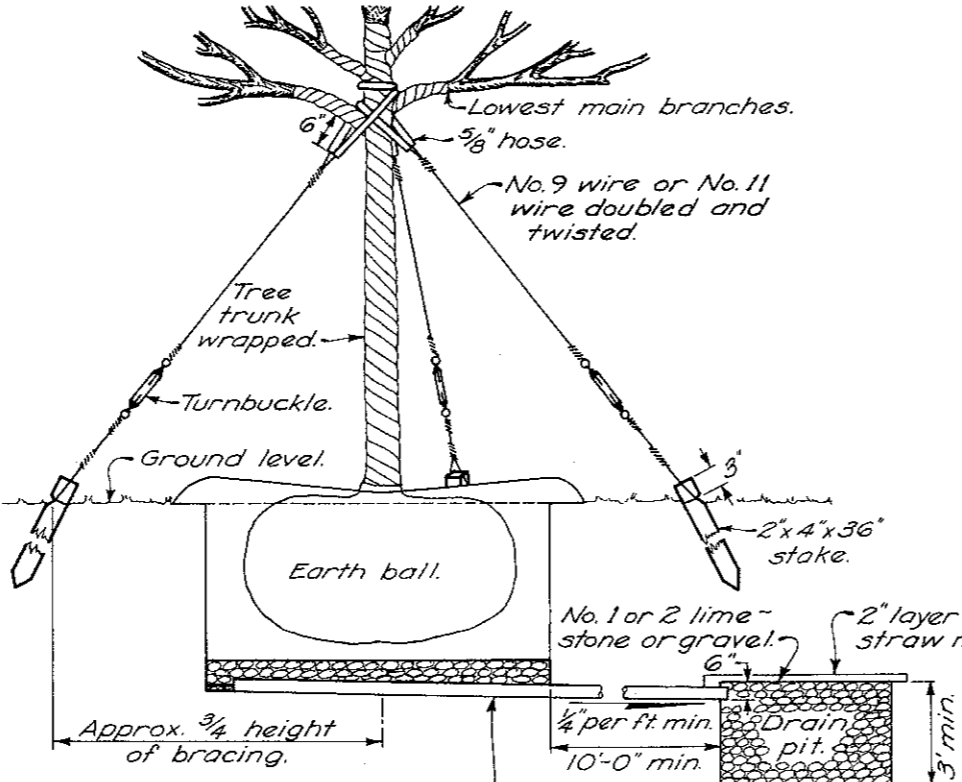


**PLANTING ON LEVEL GROUND**



**TRIPOD BRACING**

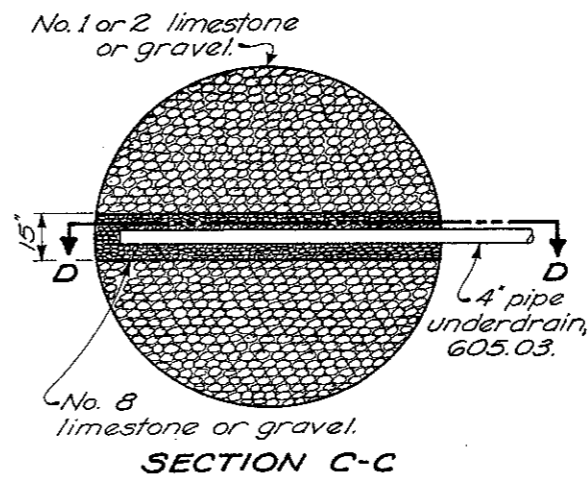
For trees less than 3" in caliper and over 8' in height, unless otherwise specified.



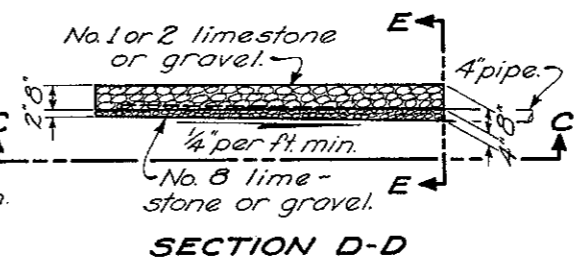
**TRIPOD BRACING WITH PIT DRAINAGE**

4" pipe underdrain, 605.03, connect to roadway drainage or to drain pit when specified. Drain pit shall be 2/3 the volume of the tree pit.

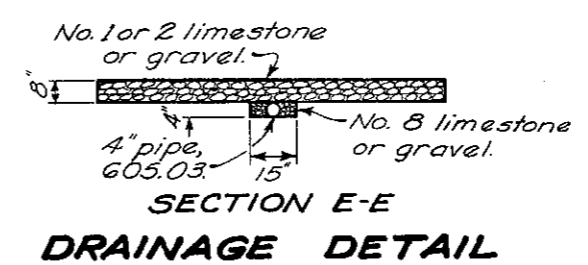
For trees 3" or over in caliper and over 8' in height when specified.



SECTION C-C



SECTION D-D



SECTION E-E  
**DRAINAGE DETAIL**

**NOTES**

**GENERAL:** This drawing shall govern wherever a conflict arises with the Construction and Materials Specifications.  
**PLANTING DETAILS:** Because of varying soil and weather conditions, the types and quantities of fertilizer, herbicide, mulch, weed barrier material and backfill, and the cost shall be included in the unit price bid for planting items. Pit diameter and depth shall vary with the type and size of plant.

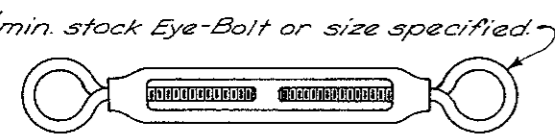
**BACKFILL** unless otherwise specified shall be in accordance with 661 or 662.

**HOSE** shall be new garden hose (rubber or fabric) or steam hose. The 5/8" dimension is inside diameter.

**WIRE** furnished for tree bracing shall be of the type described as "Regular Galvanized Soft Basic Wire Common Quality."



**WIRE LOOP DETAIL**



**TURNBUCKLE**

1/4" min. stock Eye-Bolt or size specified. Zinc coated steel with a 4" min. take-up.

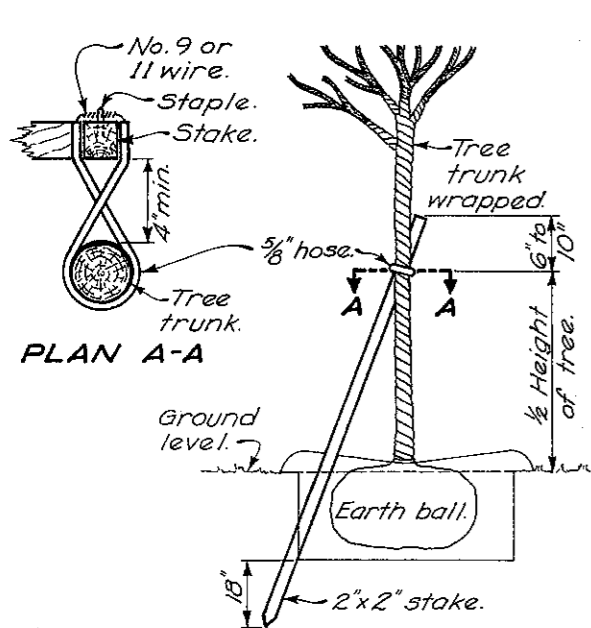
BUREAU OF LOCATION AND DESIGN  
OHIO DEPARTMENT OF HIGHWAYS

**ROADSIDE IMPROVEMENT**

DATE 6-13-69

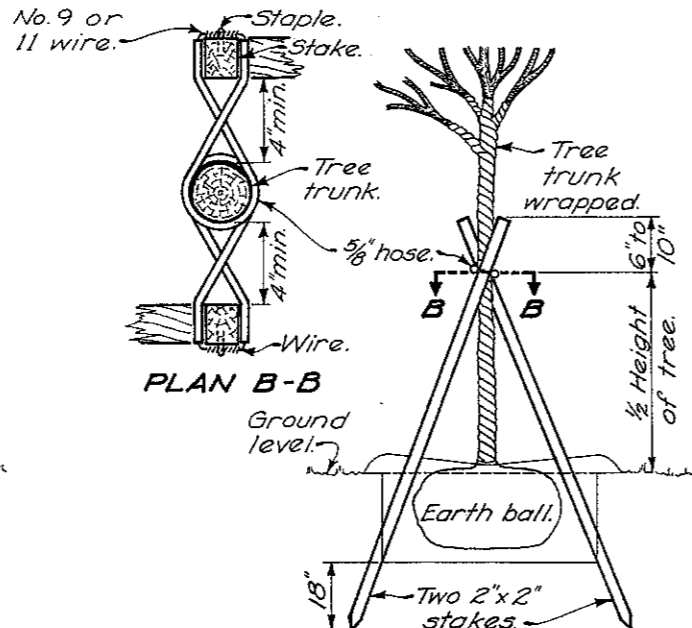
**STANDARD CONSTRUCTION DRAWING L-2**

APPROVED *R.E. Bell* ENGR., L. & D.



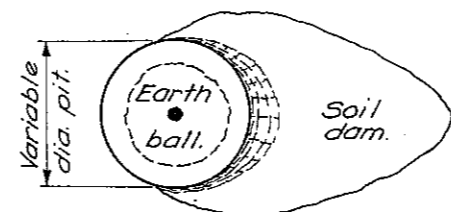
For bare root and B & B trees 4' to 6' in height; for low headed trees of 2" caliper or less; and for other trees less than 8' in height if so specified.

**SINGLE STAKE BRACING**



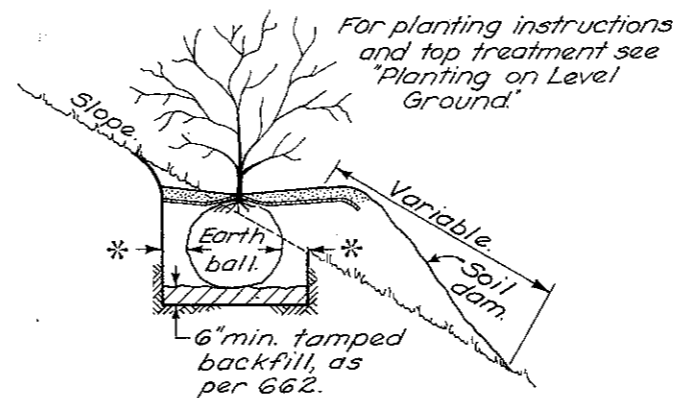
For bare root and B & B trees 6' to 8' in height, and for low headed trees over 2" in caliper.

**DOUBLE STAKE BRACING**

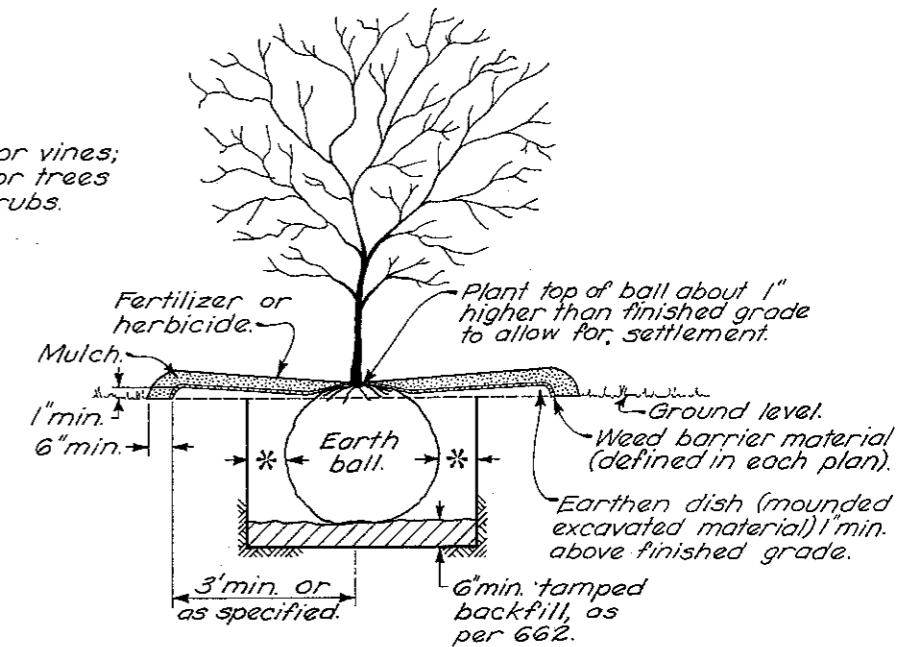


**PLAN VIEW**

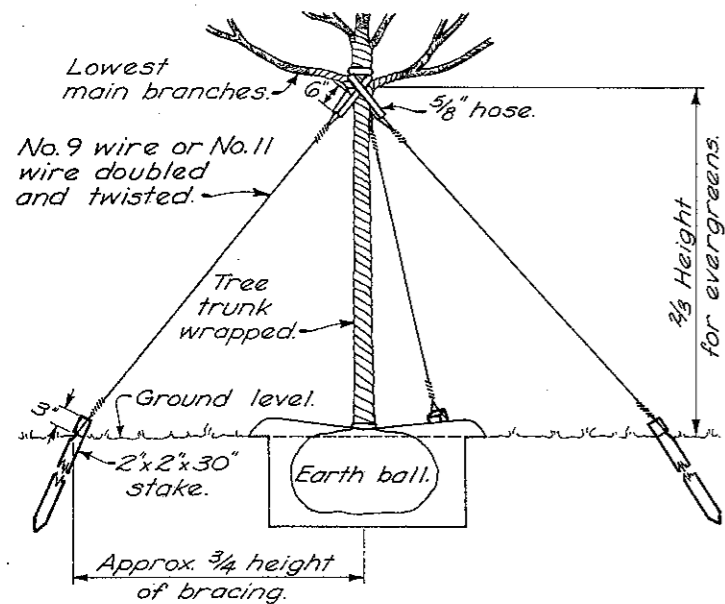
\* 6" min. for vines;  
9" min. for trees and shrubs.



**PLANTING ON SLOPE**

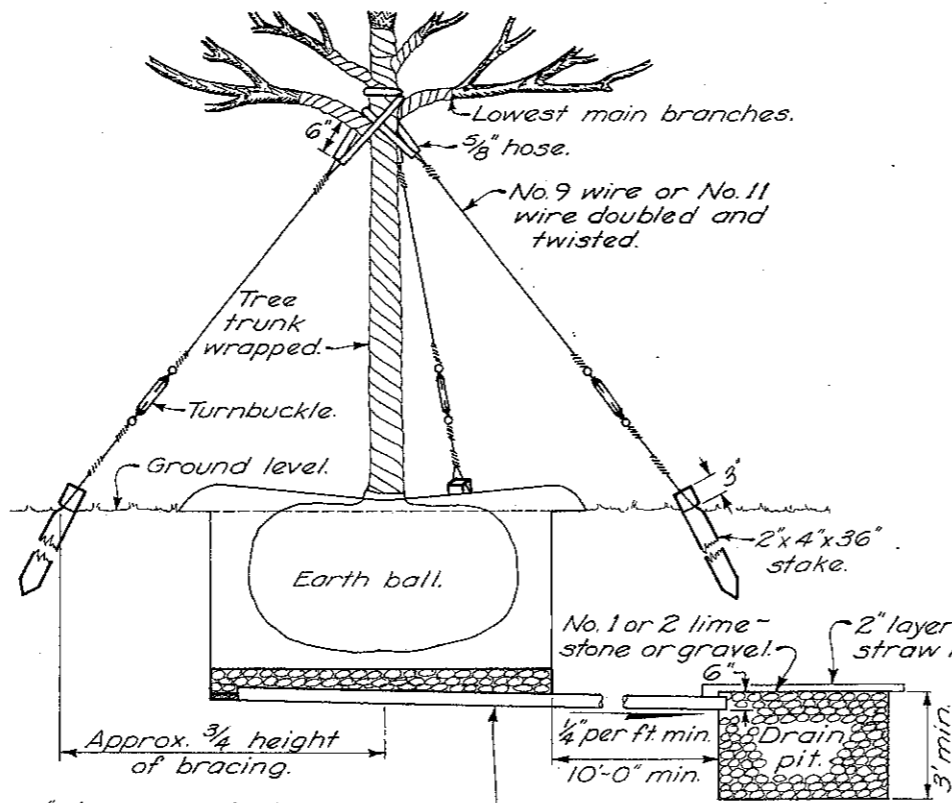


**PLANTING ON LEVEL GROUND**



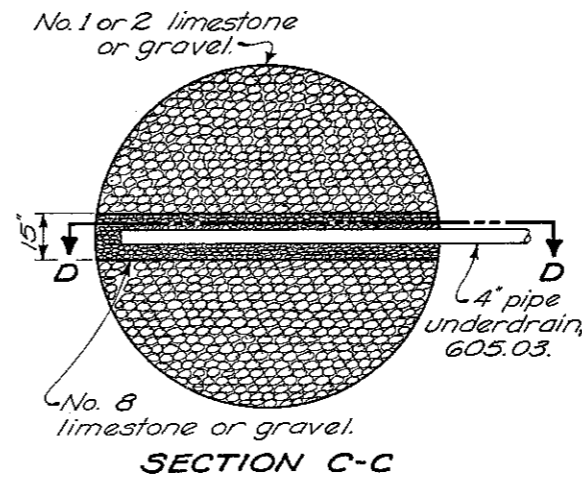
For trees less than 3" in caliper and over 8' in height, unless otherwise specified.

**TRIPOD BRACING**

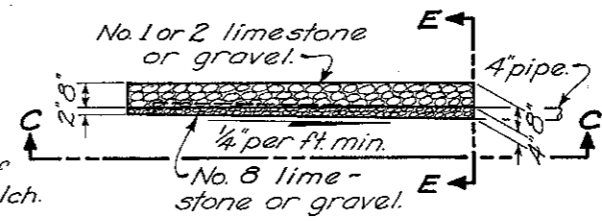


For trees 3" or over in caliper and over 8' in height when specified.

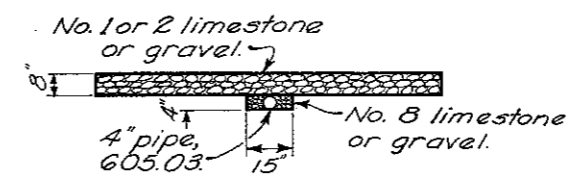
**TRIPOD BRACING WITH PIT DRAINAGE**



**SECTION C-C**



**SECTION D-D**



**SECTION E-E  
DRAINAGE DETAIL**

**NOTES**

**GENERAL:** This drawing shall govern wherever a conflict arises with the Construction and Materials Specifications.  
**PLANTING DETAILS:** Because of varying soil and weather conditions, the types and quantities of fertilizer, herbicide, mulch, weed barrier material and backfill, and the cost shall be included in the unit price bid for planting items. Pit diameter and depth shall vary with the type and size of plant.

**BACKFILL** unless otherwise specified shall be in accordance with 661 or 662.

**HOSE** shall be new garden hose (rubber and fabric) or steam hose. The 5/8" dimension is inside diameter.

**WIRE** furnished for tree bracing shall be of the type described as "Regular Galvanized Soft Wire of Common Quality."



**WIRE LOOP DETAIL**

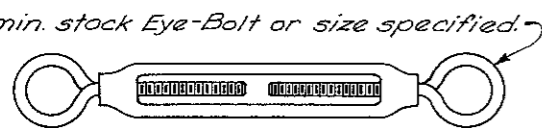
BUREAU OF ROADWAY DESIGN  
OHIO DEPARTMENT OF TRANSPORTATION

**ROADSIDE IMPROVEMENT**

STANDARD CONSTRUCTION DRAWING  
APPROVED: *E. J. Schaff* ENGR., R.D.

DATE  
6-13-69  
6-1-73

L-2



**TURNBUCKLE**

Galvanized steel with a 4" min. takeup.