## Eagle Scout Service Project

 Joseph Archer
## Eagle Scout Service Project - Bridge

- Construct $20^{\prime} \times 4^{\prime}$ wooden bridge over small stream
- Complete trail work on both sides of bridge


## Purpose

- To allow pedestrians and cyclists to easily and safely cross over the stream and use trail system


## Location - Former Schlumberger Property



Key: | Exaisting |
| :--- |
| Trail to |
| Be |
| Made |
| Site of |
| Project |

Trail is located behind
Goodwill Ridgefield Donation
Station off of Old Quarry Rd.

## Photos of Existing Site



- Red line approximate placement of bridge
- Red X's - fallen tree to be removed


## Photos of Existing Site Cont.



- Red line indicates approximate placement of bridge
- Red dots indicate trail work to be completed
- Red X's indicate fallen tree to be removed


## Sketches

Top View/Decking



## Sketches

Right View/ Railing


## Sketches

## Top View


Front View/ Railing

## Sketches

## Front View/Railing



## Work Plan

## Thursday Before Project Date

Location: My House Work To Be Done:

- Pre-cutting and marking all wood for project according to cut sheet

Volunteers Needed

- 2 Adults
- 3 Scouts (Including Myself)

Saturday
8:00-12:00 (Morning Shift)
Work To Be Done:

- Bring tools and materials to project site
- Trail Work on both sides of bridge site (Clearing bushes,leaves and branches and fallen logs)
- Clearing Riverbed and removing rocks

Volunteers Needed:

- 3 Adults
- 8 Scouts (Not including myself)

12:00-12:30 Lunch Time

12:30-4:30 (Afternoon Shift)
Work to be Done:

- Build Frame for Bridge
- Add Underbridge Post Supports and move Frame to Bridge Site
- Add Railing Post to Bridge Frame
- Begin to build Decking of Bridge
- Add Railing Post Diagonals

Volunteers Needed:

- 3 Adults
- 5 Scouts (Not Including Myself)


## Work Plan

| Sunday |
| :--- |
| 8:00-12:00 (Morning Shift) |
| Work To Be Done: |
| - Finish Decking Bridge |
| - Add Railing |
| - Add Traction Strips to Decking of |
| $\quad$ Bridge |
| Volunteers Needed: |
| - $\quad 2$ Adults |
| - $\quad 4$ Scouts (Not Including Myself) |
| 12:00 - 12:30 Lunch Time |

12:30-4:30 (Afternoon Shift)
Work To Be Done:

- Put Rock Steps on both sides of bridge
- Finishing Touches to bridge
- Clean-up

Volunteers Needed:

- 2 Adults
- 4 Scouts (Including Myself)

Material List
*All Wood Is Pressure Treated

| Item | Use | Cut list |  | Material List |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cuts | Quantity | Material |
| Outer and Center Supports of Frame | Supports Bridge | 6 | 2x12x20 | 6 | 2x12x20 |
| End Caps of Frame | Connects Inner and Outer Supports of Frame | 2 | $2 \times 12 \times 46$ " | 1 | 2x12x10 |
| Support Plates of Bridge | Supports frame and levels base | 2 | $2 \times 12 \times 48$ " | 1 | 2×12x10 |
| Railing Post | Holds the Railing | 5 | $4 \times 4 \times 57$ " | 5 | $4 \times 4 \times 12$ |
| Under Bridge Railing Post Supports | Supports the Railing Diagonal | 5 | $4 \times 4 \times 6$ |  |  |
| Railing Diagonal Supports | Supports the Railing Posts | 5 | $4 \times 4 \times 3$ | 1 | $\begin{aligned} & 4 \times 4 \times 10 \\ & 4 \times 4 \times 8 \end{aligned}$ |
| Railing | To keep people from falling off bridge | 4 | $2 \times 4 \times 10$ | 4 | $2 \times 4 \times 10$ |
| Support Plate Foundation | Foundation for Support Plate | 2 | $6 \times 6 \times 4$ | 1 | 6x6x8 |
| Decking | To create surface for walking/biking | 42 | $2 \times 6 \times 4$ | 22 | 2x6x8 |


| Item | Use | Cut list |  | Material List |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cuts | Quantity | Material |
| Deck Screws | To connect $2 \times 12$ frame of bridge | 50 |  | 1 | 1lb Box of 150 4in Exterior Decking Screws |
| Deck Screws | To connect frame/decking to frame/ to connect handrails to post | 386 |  | 2 | 5lb Box <br> $31 / 2$ in Exterior Decking Screws |
| Deck Screws | To fasten Traction Strips to decking of bridge | 72 |  | 1 | 1lb Box <br> 1in Exterior Decking Screws |
| Lag Screws | To Connect Railing Posts to Outer Supports of Frame | 10 |  | 10 | 6 in $\times 1 / 2$ in <br> Lag Screws |
| Washers | To keep lag bolt head from digging into the wood | 10 |  | 10 | $1 / 2$ Washers |
| Traction Strips | To add traction to bridge | 18 | $\left\lvert\, \begin{aligned} & 3 / 8 " x 1 \\ & 1 / 2 " x 4 \end{aligned}\right.$ | 1 | $2 \times 6 \times 8$ |
| TimberLok Screws | To connect Underbridge Railing Post Supports to Outer and Center Supports of Frame and Connect Railing Diagonals to Railing Post and Under Bridge Railing Post Supports | 50 |  | 1 | 1 Box of 50 <br> 6in TimberLok Screws |



Quotation Quote No
Quote Date 133225 06/10/2020
$7 / 10 / 2020$ 7/10/2020 Quote Date
Expiration Date

| Customer | CASH |
| :--- | ---: |
| Your Ref | HORTON BRIDGE \#2 |
| Taken By | Tom Cioero |
| Sales Rep | HOUSE ACCOUNT |



By your signature below, you are agreeing to the Terms and Conditions set forth on back or attached.

Buyer
on request

