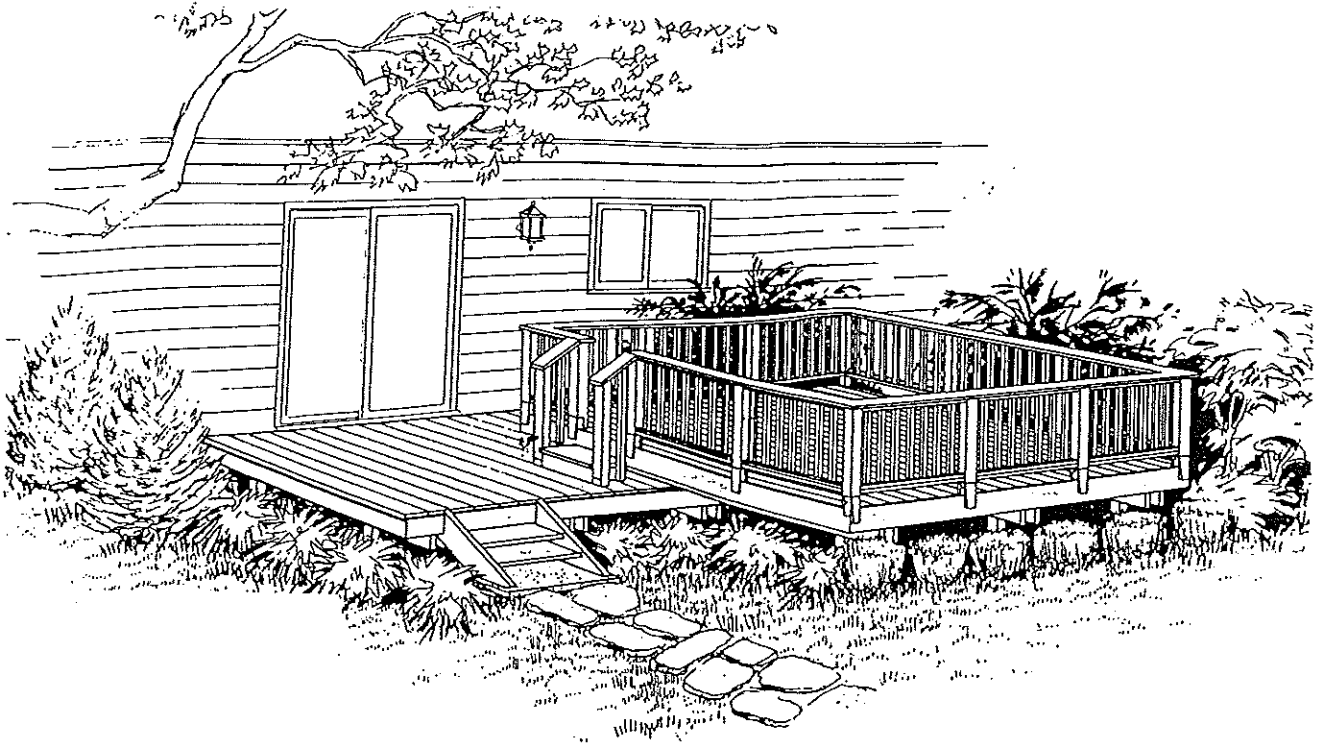


# *DECKS*



TOWNSHIP OF DENVILLE  
CONSTRUCTION DEPARTMENT  
973-625-8300 x 251

## PROCEDURE FOR GETTING A BUILDING PERMIT

EFFECTIVE Jan. 1, 2006 all contractors performing residential home improvements are required to be registered with the State as a Home Improvement Contractor. A copy of this registration shall be submitted with each permit application. Please see NJ Div. of Consumer Affairs web site for further information. <http://222.state.nj.us/lps/ca/contractor.htm>

1. Submit ZONING APPLICATION with fee along with one copy of SURVEY/SITE PLAN showing deck location in relation to house and property. (See attached sample.)
2. Submit THREE SETS of scaled drawings (1/8" or 1/4") showing a top view and a side view. All drawings should indicate owner's name, address of job site, block and lot number. To draw your own plans you must be the owner and occupant of said property, if not, you will need drawings by a New Jersey registered Architect or professional engineer. *The homeowner's signature must be on the plans, which they prepare.*
3. The drawings submitted shall include the following information:
  - a. Show deck in relation to house.
  - b. Show door from house to deck.
  - c. Indicate distance from top of threshold to deck  
(The deck shall not be more than 8 inches below the top of threshold)
  - d. Specify type of wood. All lumber must be naturally durable or treated with a preservative.
  - e. Show footings, columns, girders, joists, ledger, flashing, decking, guardrails, graspable handrails.  
(guardrails are not required for decks less than 30" above grade)  
Stairways, lateral bracing and connectors (see cross section)
  - f. Indicate type of decking material to be used
4. Fill out the building subcode form (see attached sample).
5. Submit all the above paperwork to the construction department. **PLEASE MAKE SURE THAT YOUR APPLICATION IS COMPLETE BEFORE SUBMITTING IT.** If all paperwork is in order, the department has 20 working days (after zoning approval) to review and issue your permit.

# ADDITIONAL INFORMATION ON BUILDING A DECK

1. **Pier footings:** Minimum 42 inches below grade. Columns may require at least 16" in diameter. Minimum thickness of concrete to be 12 inches at bottom of footings. (dependant on soil conditions)
2. **Columns:** Minimum 4 inches x 4 inches anchored to footings and secured to girder. Maximum height of 4"x4" columns shall not exceed 8 feet.
3. **Girders:** Joints in girder must be directly above the support columns.

**TABLE R507.6  
DECK BEAM SPAN LENGTHS<sup>a, b</sup> (ft. - in.)**

SPECIES <sup>a</sup>	SIZE <sup>a</sup>	DECK JOIST SPAN LESS THAN OR EQUAL TO: (feet)						
		8	8	10	12	14	16	18
Southern pine	2 - 2 x 6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2 - 2 x 8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2 - 2 x 10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2 - 2 x 12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	3 - 2 x 6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3 - 2 x 8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3 - 2 x 10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
3 - 2 x 12	15-3	13-3	11-10	10-9	10-0	9-4	8-10	

**TABLE R507.4  
MAXIMUM JOIST SPACING**

MATERIAL TYPE AND NOMINAL SIZE	MAXIMUM ON-CENTER JOIST SPACING	
	Perpendicular to Joist	Diagonal to Joist <sup>a</sup>
1 1/4-inch-thick wood	16 inches	12 inches
2-inch-thick wood	24 inches	16 inches
Plastic composite	In accordance with Section R507.3	In accordance with Section R507.3

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.01745 rad.

a. Maximum angle of 45 degrees from perpendicular for wood deck boards

**TABLE R507.5  
DECK JOIST SPANS FOR COMMON LUMBER SPECIES<sup>a</sup> (ft. - in.)**

SPECIES <sup>a</sup>	SIZE	SPACING OF DECK JOISTS WITH NO CANTILEVER <sup>b</sup> (Inches)			SPACING OF DECK JOISTS WITH CANTILEVERS <sup>b</sup> (Inches)		
		12	16	24	12	16	24
Southern pine	2 x 6	9-11	9-0	7-7	6-8	6-8	6-8
	2 x 8	13-1	11-10	9-8	10-1	10-1	9-8
	2 x 10	16-2	14-0	11-5	14-6	14-0	11-5
	2 x 12	18-0	16-6	13-6	18-0	16-6	13-6

5. **Ledger:** Securely attach the board against the house with 1/2 inch diameter galvanized lag bolts of sufficient length to bolt firmly into rim joist. Lag bolts shall be 16" on center in a staggered pattern. Provide two bolts, one above the other, at each end.
6. **Flashing:** Provide continuous corrosion-resistive flashing along ledger in such a manner as to prevent the passage of moisture into the wall, any untreated wood or wood siding.  
(EXCEPTION)

Not required if against vinyl siding, metal siding or masonry. In this case provide shims as not to crush siding when bolts are tightened.

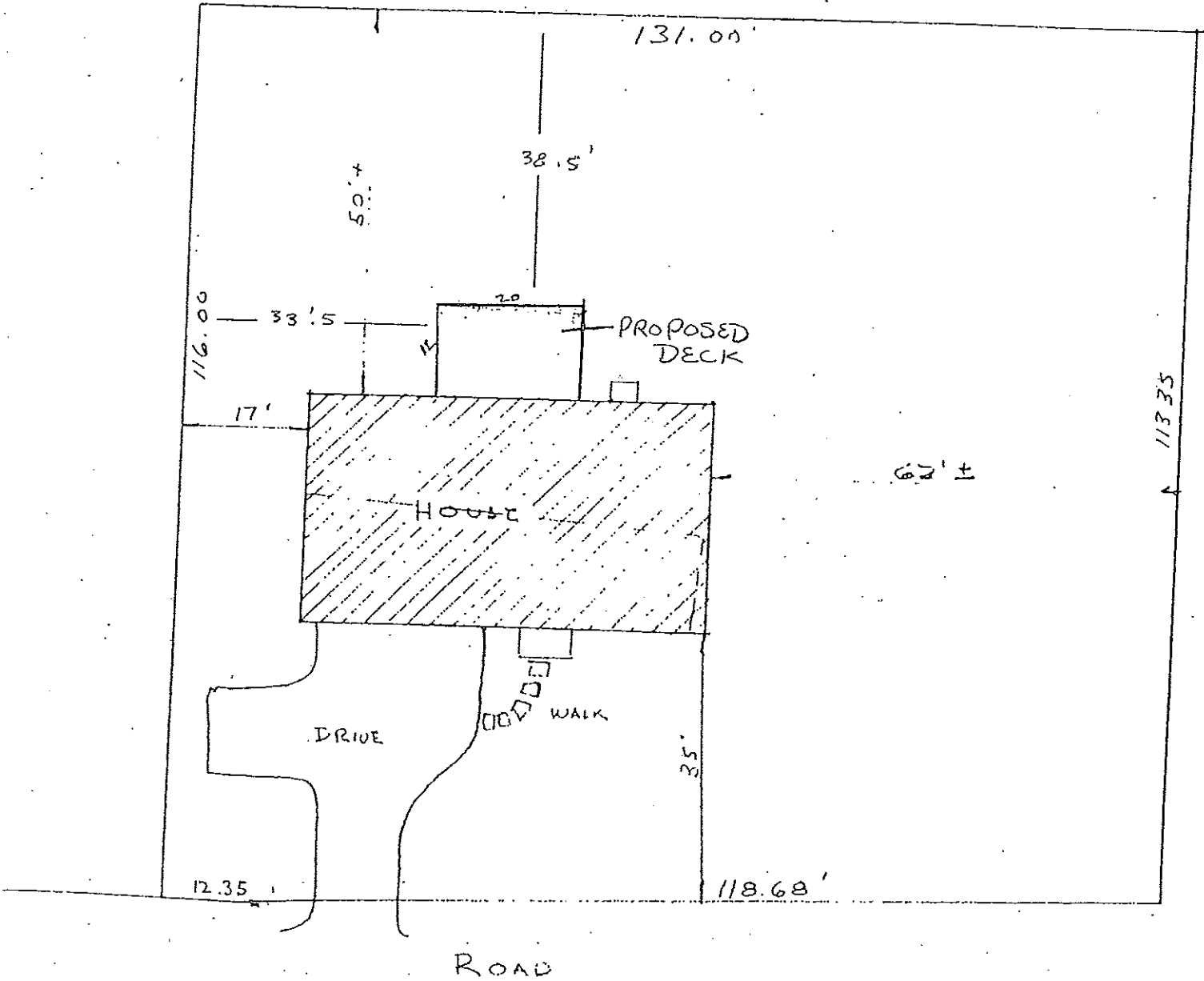
7. **Guardrails**: Shall not be less than 36" above decking and have balusters or other construction such that a sphere with a diameter of 4" cannot pass through any opening. Guards shall not have an ornamental pattern that would provide a ladder effect. Guardrails shall be designed and constructed for concentrated load of 200 pounds applied at any point and in any direction along the top-railing member. The in-fill area of a guardrail system shall be designed and constructed for a horizontal concentrated load of 200 pounds applied on a one square foot area at any point in the system, including intermediate rails or other elements serving this purpose.  
A stairway having four or more risers is required to have a graspable rail measuring 34"-38" in height above the leading edge of the tread. A guardrail shall be required when the deck is a height of 30" or more.
8. **Stairways**: Minimum stairway width is 36 inches, maximum riser height is 8 ¼ inches. Minimum tread is 9 inches plus 1-inch nosing where solid risers are used.
9. **Connectors**: All connectors, nails, screws, bolts and related hardware shall be hot-dipped zinc coated (galvanized), stainless steel, silicon bronze, copper or other corrosion resistant materials.
10. **Composite Railing & Deck** –Note all manufacturers specs on span's before planning your deck.



Required Inspections: Call 973.625.8300 ext. 507 to schedule all inspections. You **must** have your permit number when calling.

1. *Footing Inspection*- The bottom of the pier holes before the cement is poured.
2. *Framing Inspection*- This is only needed when the deck is too low to the ground making it impossible to view the frame at the final inspection.
3. *Final Inspection*- When the railings have been installed and the deck is completely done.

# SAMPLE

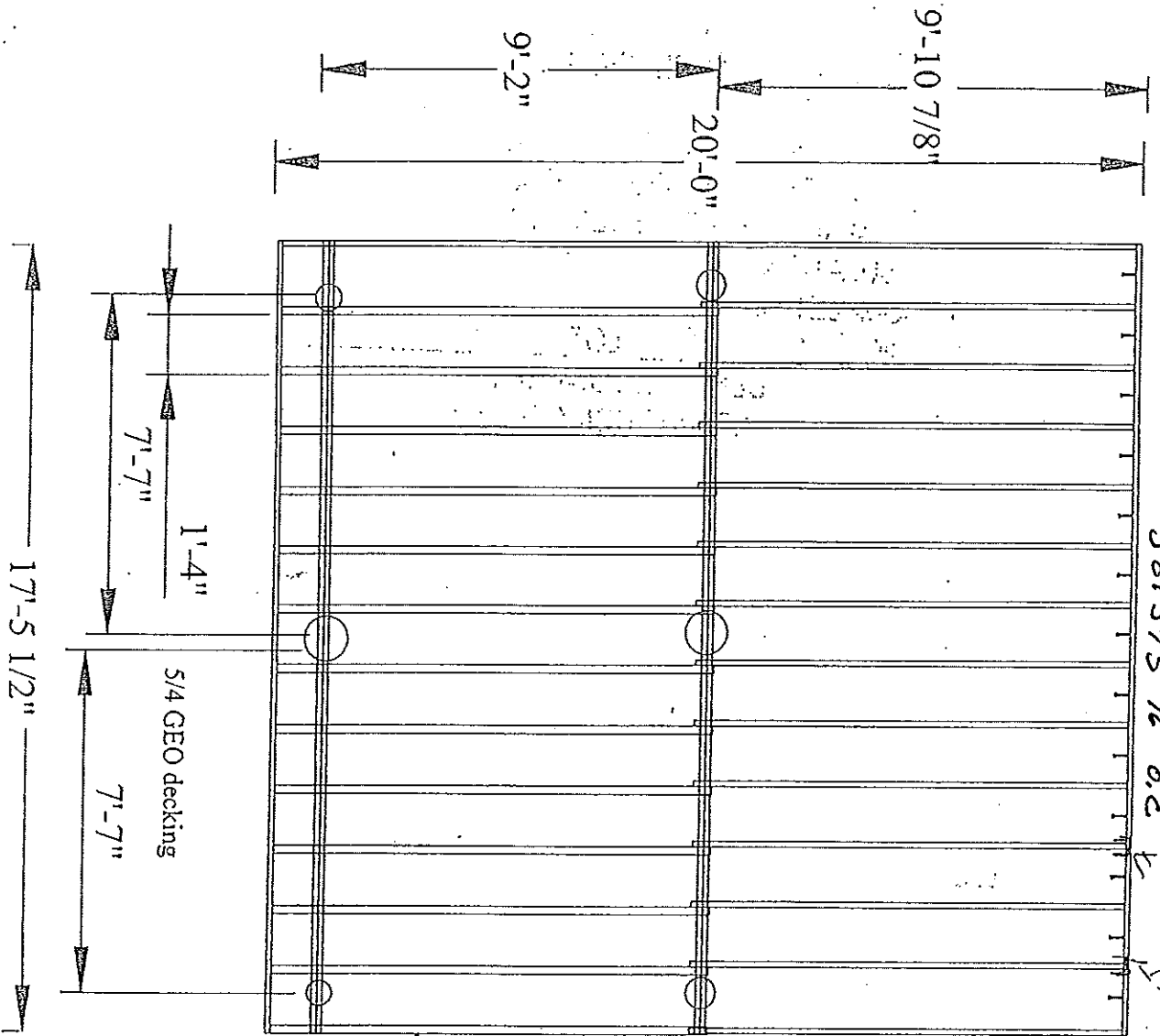


## PROPERTY SURVEY

THE DRAWING ABOVE IS FOR SAMPLE PURPOSES ONLY AND SHOULD NOT BE CONSTRUED AS ZONING APPROVED. EACH APPLICANT MUST SUBMIT THEIR INDIVIDUAL SURVEY, SINCE THERE MAY BE OTHER ZONING CONSIDERATIONS.

NAME
ADDRESS
BLOCK & LOT

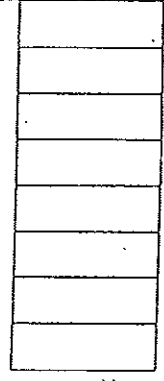
1" = 20'



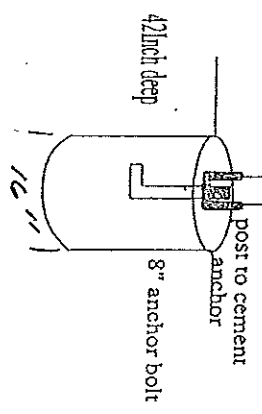
lag bolted into house

Joists 16" o.c

Joist Hanger



BOULDER 16" o.c



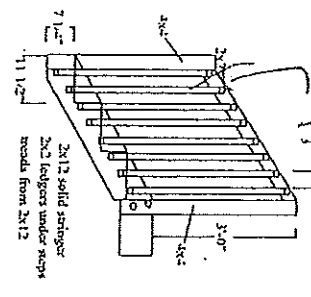
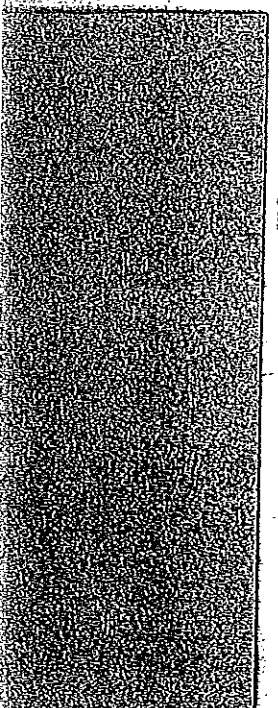
2x8 floor joist

8'-0"

double 2x10 BEAM

4x4 post

2x2 bal



GRASSY AREA - MORE REPAIRS

gate at top of si

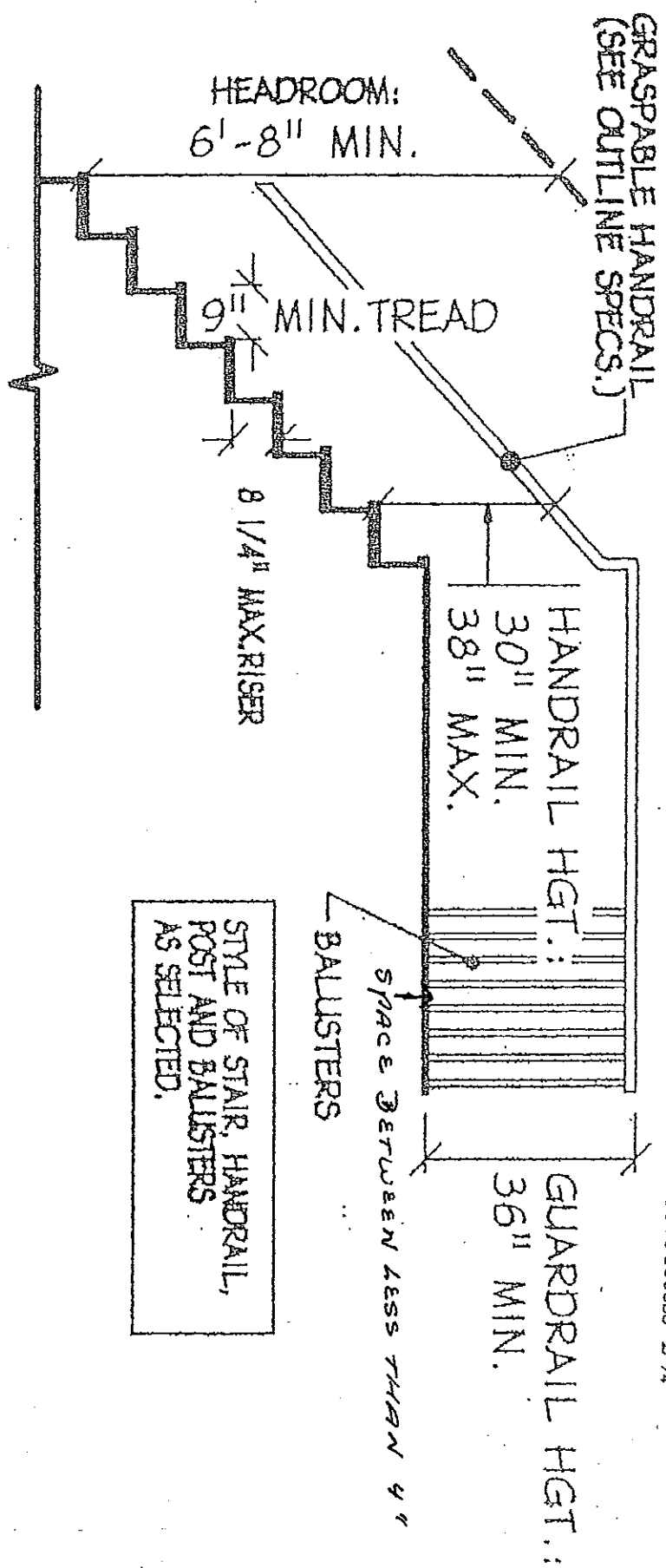
HANDRAIL GRIP SIZE  
(Either type is acceptable)

TYPE 1

Circular Cross Section  
Minimum 1 1/4"  
Maximum 2"  
Non Circular  
PERIMETER 4" MIN. - 6 1/4" MAX  
CROSS SECTION MAX - 2 1/4"

TYPE 2

Handrail perimeter greater than 6 1/4"  
Shall provide a graspable finger recess area on both sides of the profile  
3/4" recess from top of rail  
Depth- 5/16" to 7/8"  
Minimum width above recess- 1 1/2"  
Maximum width above recess- 2 3/4"



**TYPICAL STAIR DIAGRAM**  
NO SCALE



**BUILDING  
SUBCODE  
TECHNICAL SECTION**



**SAMPLE**

Date Issued  
Control #  
Permit #

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 80901 Lot 234

Work Site Location 23 Main Street

Denville, NJ

Owner in Fee Mary & Mike Homeowner

Address same

Tele. ( 973 ) 555-1234

Contractor ABC Contractors

Address 58 Carpenter Way  
Denville, NJ 07834

Tele. ( 973 ) 555-8976

Lic. No. or Bids. Reg. No. 13VE00123456789

Federal Emp. No. 22-33448855

Fax (      )     

**JOB SUMMARY (Office Use Only)**

PLAN REVIEW	Date	Initial	INSPECTIONS	Failure	Failure	Approval	Initial
Type:							
<input type="checkbox"/> No Plans Required			Footing				
<input type="checkbox"/> All			Foundation				
<input type="checkbox"/> Footing			Slab				
<input type="checkbox"/> Foundation			Frame				
<input type="checkbox"/> Frame			Barrier-Free				
<input type="checkbox"/> Other			Insulation				
Joint Plan Review Required:			Finishes				
<input type="checkbox"/> Elec. <input type="checkbox"/> Plumb. <input type="checkbox"/> Fire <input type="checkbox"/> Elevator			Energy				
SUBCODE APPROVAL			Mechanical				
<input type="checkbox"/> CO <input type="checkbox"/> CCO <input type="checkbox"/> CA			TCO				
Date: _____			Other				
Approved by: _____			Final				
			Barrier-Free				

**B. BUILDING CHARACTERISTICS**

Use Group Present \_\_\_\_\_ Proposed \_\_\_\_\_

Constr. Class Present \_\_\_\_\_ Proposed \_\_\_\_\_

No. of Stories \_\_\_\_\_

Height of Structure \_\_\_\_\_ Ft.

Area — Largest Floor \_\_\_\_\_ Sq. Ft.

New Bldg. Area/All Floors \_\_\_\_\_ Sq. Ft.

Volume of New Structure \_\_\_\_\_ Cu. Ft.

Total Land Area Disturbed \_\_\_\_\_ Sq. Ft.

**Est. Cost of Bldg. Work:**

1. New Bldg. \$ 2,880

2. Alteration \$ \_\_\_\_\_

3. Total (1+2) \$ \_\_\_\_\_

**C. CERTIFICATION IN LIEU OF OATH**

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Signature Mary Homeowner

**D. TECHNICAL SITE DATA**

DESCRIPTION OF WORK

12'x20' Deck on rear of House

**TYPE OF WORK**

- New Building
- Addition
- Alteration
- Roofing
- Siding
- Fence \_\_\_\_\_ Height (exceeds 6')
- Sign \_\_\_\_\_ Sq. Ft.
- Pool
- Asbestos Abatement Subchapter 8
- Lead Haz. Abatement NJAC 5:17
- Other \_\_\_\_\_
- Demolition

**FEE (Office Use Only)**

Administrative Surcharge \$ \_\_\_\_\_

Minimum Fee \$ \_\_\_\_\_

DCA Training Fee \$ \_\_\_\_\_

TOTAL FEE \$ \_\_\_\_\_