

Republic Township

2007-2011 Recreation Plan



Amended: February 28, 2008

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1.0 COMMUNITY DESCRIPTION

Republic Township is located in the southwest corner of Marquette County along the shores of the Michigamme River in the central Upper Peninsula of Michigan. Republic Township offers a diversity of recreational activities because of the many lakes, streams, natural forest, campground, and rivers located within the Township boundaries.

The communities of Republic and South Republic are the largest population centers within the Township, and are located off of County Road 601, approximately 1 mile east of M-95, and 42 miles southwest of the City of Marquette. Republic is located approximately 10 miles south of U.S. 41, which is a major highway connecting Menominee in the south-central portion of the Upper Peninsula with Marquette to the north and Houghton in the northwest. Witch Lake is a much smaller residential settlement in the southern part of the Township, adjacent to M-95.

The communities of Republic and South Republic are located in east-central Republic Township. Historically, Republic was the first of the two (2) communities to develop when mining activities began in the area at the Republic and Columbia (Kloman) Mines around 1872. Unlike some of the early mining towns on the Marquette Range, which developed on squatter parcels around the mine, a large part of Republic developed within a surveyed recorded plat known as Iron City and subsequent additions to the plat.

South Republic was established as homes for “Park City,” a squatter-type development just south of Iron City. Homes were moved to permit expansion of the Republic Mine during the late 1950’s. South Republic is platted and recorded also.

As in the Upper Peninsula as a whole, the general character of the area is of glacial origin. The terrain is gently rolling to steep in some areas, and most of the area is forested. There are a few areas distributed evenly throughout the Township that possess slopes in excess of 10 percent.

The topography within the platted area of Republic is rolling to flat. Smaller isolated areas of steep slopes (greater than 10 percent) occur, along with numerous rock knobs and outcroppings surround the community. In addition, there are areas of steep slopes along the banks of the Michigamme River to the west.

In contrast to Republic, South Republic was established on relatively flat land which had been used as agricultural land. South of the platted land, the terrain becomes hilly and rocky with steep slopes. Areas of steep slopes occur along the banks of the Michigamme River as well.

Republic Township is home to one (1) school. The Republic-Michigamme School is a Pre-Kindergarten through 12th grade school located in Republic Township. It has an enrollment of approximately 150 students and 23 staff members. Extra-curricular activities consist of Junior High, Junior Varsity, and Varsity Basketball for boys and girls as well as Junior Varsity and High School Football and Track which is a cooperative program with Ishpeming High School. Choir, High School Bowl and Band are also offered.

2.0 ADMINISTRATIVE STRUCTURE

The Township is governed by an elected five (5)-member board consisting of a supervisor, clerk, treasurer and two (2) trustees. Monthly meetings are held on the Fourth Thursday of each month at 7:00 pm. Meetings are open to the public.

A listing of the various departments and committees is shown below:

- Republic Township Board of Trustees
- Republic Township Economic Development Committee
- Republic Township Supervisor & Clerk
- Republic Township Zoning Board of Appeals
- Republic Township Clerk
- Republic Township Planning Commission
- Republic Township Treasurer

Republic Township Board of Trustees

Gary Johnson
PO Box 338
Republic, MI 49879
Phone: 906-376-8139
Fax: 906-376-2383

Meetings: Fourth Thursday of each month at 7:00 p.m., except the month of November & December

Meeting Location: Republic Town Hall

Supervisor: Gary Johnson

Clerk: Vickie Skogman

Treasurer: Faye Mattila

Trustees: Glen Adams, Charles Hurst

Contacts: Gary Johnson

PO Box 338 Republic, MI 49879

Phone: 906-376-8827

FAX: 906-376-2077

Services: Land Division, Zoning Appeals, Garbage Pickup, Dog Licensing, Volunteer Fire Department, Zoning Permits, Planning, Volunteer EMS, Recreation Facilities

Republic Township Economic Development Committee

Virgie Mattson, Chairman
P.O. Box 174
Republic, MI 49879
Phone: 906-376-8250

Republic Township Planning Commission

Leslie Hurst, Chairman
P.O. Box 338
Republic, MI 49879
Phone: 906-376-8827
Fax: 906-376-2383
Hours: Meetings: Third Monday of Each Month at 7:00 PM

Meeting Location: Republic Town Hall

Chairman: Leslie Hurst

Zoning Administrator: William Payne

Members: Diane Tapio, Paul Polanski, Marie Sarafin, Marcy Rankinen, Glenn Adams, and Jay Mattila

Services: Planning

Republic Township Zoning Board of Appeals

William Payne, Zoning Administrator
P.O. Box 338
Republic, MI 49879
Phone: 906-376-8827
Fax: 906-376-2383

Meeting Location: Republic Town Hall

Chairman:

Services: Appeals

Republic Township Clerk

Vickie Skogman, Clerk
P.O. Box 338
Republic, MI 49879
Phone: 906-376-8827
Fax: 906-376-2383
Hours: Monday thru Thursday 9 a.m. – 1p.m.
Email: vskogman@miuplink.com
- Emergency Response Coordinator

Township Supervisor

Gary Johnson, Township Supervisor
PO Box 338
Republic, MI 49879
Phone: 906-376-8139
Cell: 906-371-0237
Fax: 906-376-2383
Email: reno421@pasty.net

Township Treasurer

Fay Mattila, Treasurer
P.O. Box 338
Republic, Mi 49879
Phone: 906-376-8827
Fax: 906-376-2383
Hours: Monday – Thursday 1 p.m. – 5 p.m.
Email: fmattila@miuplink.com

Services/Collection: Dog Licensing, Solid Waste, Water, and Sewer Fees, Taxes

3.0 RECREATION INVENTORY

The following inventory of recreation sites is given to acquaint the reader with the size and type of recreation facilities and opportunities available Township-wide. This inventory information was collected using Township records and local knowledge of Township officials.

REPUBLIC

1. Republic Beach: Located at the intersection of County Road LG and M-95 in Republic, this 21-acre beach facility was acquired by the Township in 1996 through a land swap with the Koeber Mining Company. The Township is continuing to develop the property.

The beach, which is on the north side of County Road LG, is sand, sloping down gradually to a water depth of approximately 15 feet. The Township has installed a floating dock, two (2) swimming rafts, a public changing house, several pieces of playground equipment, a small pavilion with a dirt floor, a paved circular drive, a regulation sized fenced basketball court, and a regulation sized volleyball court. There are twelve (12) lighted horseshoe courts on the south side of County Road LG.

2. Paul's Park: A playground, equipped for children 12 years of age and younger, is sponsored by the Republic Lions Club, and managed by Lion's club members and Township employees. Equipped with one (1) adult sized 6-swing set, there are several spring loaded teeter-totters, junior sized climbing sets, and a children's basketball court. During the winter months, the area is used for sledding.
3. Munson Park: At the intersection of County Roads LLK and 601, on the Michigamme River, a park has been developed by the Republic Lions Club as a community park. A pavilion, historical monuments and picnic tables are available for public use as well as various flowering shrubs and an assortment of shade trees planted at the park. The Republic Sportsmen's Club maintains a boat dock placed in the river seasonally.
4. Moose Rapids Campground: Located about 5 miles Northwest on County Road LG from the M-95 intersection, the Township has developed a rustic eleven (11) site campground. Limited facilities include a hand pump well and vault toilets. At present, payment is on the honor system. Maintenance at the campground is handled jointly by the Republic Sportsmen's Club and Republic Township employees.
5. Moose Country Snowmobile Trail: Under contract with the Michigan Department of Natural Resources, this snowmobile club maintains and grooms approximately 150 miles of Upper Peninsula-wide interconnecting trails in Marquette and surrounding counties. Access by trail is provided to surrounding areas such as Amasa, Big Bay, Gwinn and Ishpeming. The club headquarters are located in Republic.
6. School Lake/Republic Town Square: The Township owns property adjacent to and east Munson Park, which includes nearly one city block for future development as a festival site and Iron Ore Heritage Trail Head. Property south of the Town Square and east of Munson Park surrounds School Lake, a popular fishing lake, on all but the south side.

SOUTH REPUBLIC

1. Republic-Michigamme School: The school has an extensive playground system comparable to any municipal park. Equipment includes three (3) sets of adult sized 6-unit swings, a ladder and a snail shaped climbing unit, a regular teeter totter, and a jungle gym climbing unit. The school has two (2) fenced tennis courts. Two (2) single basketball backboards with hoops are attached to the tennis court fence. A regulation quarter mile track with long jump and pole vault pit are used for school athletic events and by the general public. This playground is currently being updated to State of Michigan guidelines.
2. Baseball Field: Located on 10.8 acres of Township land, directly behind the Marquette County Road Commission District Garage, this field is rated as one of the top fields in the Upper Peninsula. Designed for softball originally, tournaments always attracted many teams because of the superior quality of the field. The Township Department of Public Works employees maintain and monitor the field during the summer months. The field is used regularly for scheduled slow-pitch league games by the local team, and by two (2) local Little League teams. The field is kept locked to prevent vandalism, but is available to the public on a "request," first come, first serve basis. In the winter, an outdoor ice rink is located east of the baseball field; the Township with help from the Lions Club maintains the rink.
3. Moto-Cross Track / Golf Driving Range: With the assistance of local contractors, Republic Lions Club and the volunteer fire department members, an AMA approved regulation moto-cross track and a fully functional golf driving range have been developed. Both facilities are owned by the Township and situated on 26.5 acres.
4. The Oasis Youth Center: Utilizing a building once used as a coin Laundromat, the structure has been completely renovated into a youth center. The handicapped accessible building has a pool table, TV/VCR, computers, and ping pong table for the enjoyment and use of the youth in the Township. The Building also has a fully equipped kitchen. The center is supervised by volunteers and residents can utilize the facility for private functions such as birthday parties.
5. Sledding Hill: An abandoned ski hill has been renovated to allow for sledding. The hill is located at the intersection of M-95 and County Road LLI approximately ½ mile south of South Republic. The sledding hill is located on Republic Township property and is the location for the annual Epiphany Bon Fire.
6. The Republic Township EMS Building: This building is a fully accessible facility that has been made available for public and private functions. The building can accommodate up to 200 people for various events.

WITCH LAKE AREA

1. A playground is maintained on Township property on the Fence River Road (County Road LH). Playground equipment consists of one (1) adult size 6-unit swing set, a snail shaped climbing unit, a merry-go-round, a spring based teeter totter, and two (2) Euclid truck tires for climbing.

Republic Township makes every effort to make all recreational activities available to those with disabilities. The Township Hall and the Youth Center are barrier-free. Accessibility is provided at the Republic Beach; the beach house is handicapped accessible and a hard surface walkway allows those with disabilities access to the beach and dock area at Republic Beach.

Improvements need to be made at Republic Beach and Moose Rapids Campground to comply with ADA requirements. The Township needs to install handicapped accessible picnic tables at Republic Beach. Handicapped accessible vault toilets and picnic tables need to be installed at Moose Rapid Campground.

Future development of recreation areas need to comply with provisions of the American Disabilities Act (ADA). Accessibility guidelines for recreational facilities are found in Appendix A.

4.0 DESCRIPTION OF THE PLANNING PROCESS

The recreational facilities to be provided within a community should be based on the expressed wishes of the citizens and/or recreation activity group needs in the area. After discussions with the various community groups and interested residents, the following have been identified as possible recreation facilities to be developed:

1. One of the major recreation deficiencies within the Township is the lack of an area large enough for large outdoor family or community gatherings. The school and EMS building are the only place where groups can gather. During the summer, families and groups of people must drive 12 miles north to Van Riper State Park, or 14 miles south to Sawyer Lake Park in Dickinson County to have a picnic. Little League teams and most family gatherings are held at the Sawyer Lake facility. The state parks have an admission fee which adds to the cost.

The Township has recently purchased the majority of an entire block in Republic across from Munson Park and would like to develop a Town Square. The facility would serve as a welcome center to visitors, a location for farmer's markets, community events and cultural concerts. Events such as these would also be a boost to the regions economy. The facility will also serve as the southern hub of the heritage trail system expected to extend from Republic Township to Chocolay Township in Marquette County. During the winter months the site will enable snowmobilers to use the facility as a warming and gathering place. Adjacent property south of the Town Square site at School Lake provides an excellent opportunity to develop fishing/hiking/nature viewing facilities.

2. The rural nature of Republic Township and surrounding areas lends itself to development of multi-use trail systems. Republic Township, in conjunction with the Iron Ore Heritage Recreation Authority, is developing a multi-use Iron Ore Heritage Trail. This trail will link Republic Township with other communities and municipalities within the proposed trail system and will highlight Marquette County's rich iron ore heritage and contribution to the industrial development of the United States of America. Cleveland Cliffs, Inc. (CCI) owns a 2,300-acre wetland preserve adjacent to the former Republic Mine. A conservation easement with the State of Michigan ensures no development will occur within the preserve. At one time, a dump location for mine tailings, the preserve was constructed as a wetland mitigation site used to counter act wetlands that are disturbed as a result of mining operations in other areas. The preserve already includes an extensive system of roadways used during the mining operations. Republic Township and CCI, in cooperation with the Iron Ore Heritage Recreation Authority, will endeavor to create a system of barrier free non-motorized trails consistent with the stipulations of the conservation easement. These nature trails will be open to the public for hiking, biking, bird watching, skiing and other related non-motorized activities. This system of non-motorized trails within the preserve will link with multi-use trail systems outside of the preserve. These trails will be inclusive in the overall Iron Ore Heritage Trail system. This system of trails as part of the Iron Ore Heritage Trail system will enhance the quality of life of the residents of Republic Township, encourage outdoor recreation, facilitate economic activity within our community, and draw visitors and tourists from around the country to Republic Township.
3. The baseball field fence in South Republic needs to either be moved further out (10 to 15 feet) or the present fencing elevated.
4. Acquisition and improvements to the Republic Mine Dam located near Republic is of recreational interest to the Township. The Republic Mine, including the dam on the Michigamme River, is scheduled to be purchased by Republic Mountain Lake, LLC. Since announcement of the mine's closure in 1996, this dam and reservoir are no longer needed for mining purposes. Maintenance of this reservoir during the operation of the mine provided a body of water that homes and camps were developed along and the community centered many of their recreational activities around. The Reservoir is viewed as an asset of the community and refurbishing of the dam will maintain this asset.

One of the community's major tourist attractions is a fishing derby that takes place on the Michigamme Basin in mid-July of each year. This derby provides a significant boost to Republic's local economy. Since mining is no longer the major industry in the community, it is looking to develop alternative means to support itself. The Michigamme Reservoir is a major part of the effort.

The objective of the activities associated with the dam include a cost estimate (\$210,000) to refurbish the dam and establish a normal reservoir level and run-of-river condition, inflow matching outflow, for the Michigamme River.

The Republic Mine Reclamation Committee recommended that the Township accept conveyance of the Republic Dam in 1999. After the impending sale of the dam, Republic

Township will have to work with Republic Mountain Lake, LLC to ensure the continued functional operation of the dam. Eventual Township ownership of the dam and surrounding property would give clear title and access in recognition of the multiple ways in which the community will continue to enjoy its benefits including:

- Fishing is greatly improved with the help of water being held back by the dam.
 - The annual Fishing Derby sponsored by the local Sportsman's Club is a big draw for the community, attracting many people from outside of the area.
 - Without the spillway/dam, the tournament would not be possible.
 - Without the spillway/dam, the Republic Beach would be lost. The beach is enjoyed by area children and families.
 - A number of campgrounds and resorts have been established along the river and rely on water levels made possible by the spillway/dam.
 - Homes and camps have been established along the river and rely on water levels made possible by the spillway/dam. Property values would be greatly reduced without the dam for these and other developments.
 - Wildlife viewing is enjoyed by many area residents. Water levels made possible by the dam serve to attract wildlife to the area.
5. To complement the Moose Rapids rustic campground, a sanitary dumping station could be constructed in Republic. The dumping station would connect to the existing municipal sewer system in place. The facility would be a service to the traveling camper and encourage traveling campers to stop in the community and perhaps spend some money.
 6. The Township would like to enhance the Republic Beach property with the construction of a new beach house facility. The new structure would provide users of the recreation site with concessions, rest/changing rooms, a larger outdoor pavilion, and information on the Republic area. The structure's design would include lighting, running water, sewer, heating and telephone service. Additionally, the parking area and access road at the beach area would be paved.
 7. To provide for an increased sense of community between Republic and South Republic, a bike path / pedestrian walkway could be constructed. The route could be located along the Michigamme River, along M-95 or at another location. The Planning Commission needs to approach landowners for easements if the river route is selected.

5.0 GOALS AND OBJECTIVES

Policies are guides for recreation related decision-making. Consideration of the recreational policies should lead the community toward the attainment of their goals. Specific development of projects and programs should be evaluated with respect to the recreational goals and policies. The following goals and policies should serve as guidelines toward development strategies.

GOAL I – Provide a wide variety of recreational and community oriented opportunities to all residents and visitors of Republic Township.

Objectives:

- Projects should be easily accessible to all residents and visitors.
- Projects that provide space for community gatherings should be emphasized.
- Whenever possible, facilities should be multiple and/or accommodate year-round use.
- Proposed projects should eliminate identified recreation deficiencies.
- Programs should be developed for the use of recreation facilities.
- Maximum use of state and federal assistance programs should be made to acquire and develop recreational areas and facilities.

GOAL II – Make maximum use of recreation opportunities offered by the natural environment.

Objectives:

- Facilities should be designed to compliment and preserve the surrounding natural qualities.
- Whenever possible, the Township and private interest should coordinate the development of recreational facilities and programs.
- Proper maintenance should be ensured for all facilities.
- The Township, concerned organizations and individuals should develop programs and incorporate designs which will minimize vandalism to facilities.
- The Township and public agencies should coordinate the development of local recreation facilities in order to minimize duplication of effort.

GOAL III – To beautify the communities of Republic and South Republic.

Objectives:

- The Township Planning Commission should investigate the possibility of establishing an “adopt a pocket park program”. Community groups and businesses would be encouraged to develop small picnic locations with a picnic table and garbage can at Township-owned sites or vacant lots in North and South Republic.
- A “Republic Beautification Committee” should be formed to construct and maintain flower gardens at the entrances to the communities of Republic and South Republic.

6.0 ACTION PROGRAM

Every plan should, ideally, result in action. Clearly, this cannot always be the case. Every effort should be made, however, to attain this general result. To this end, the Republic Township Board has formulated the following capital improvements program or development schedule for implementing its recreation plan. It is the Township Board's understanding that this development schedule will be followed as nearly as possible.

REPUBLIC TOWNSHIP RECREATION CAPITAL IMPROVEMENT PLAN

<u>Year</u>	<u>Project</u>	<u>Cost and Funding Source</u>
2008	Acquire historic "Republic State Bank" on the northeast corner of the Town Square site and renovate as a trail head for the Iron Ore Heritage Trail and to provide support facilities for Munson Park and School Lake.	\$270,000 Township Funds and DNR Recreation Funds.
2008	Develop Pavilion on Town Square site; develop handicap access to School Lake with fishing pier and viewing platforms.	\$180,000 Township Funds and DNR Recreation Funds.
2008	Non-motorized trail system for hiking, biking and bird watching within the CCI wetland preserve including parking, landscaping, bathroom facilities and a kiosk with information and maps.	\$50,000 Township, DNR and private Funds.
2009	Sewage Dumping Station for Campsites	\$25,000 Township Funds
2010	Improvements to Republic Beach Property	\$100,000 Township Funds and DNR Funds.
2010	Ensure historic water level of the Michigamme River Basin through stabilization of water flow.	\$700,000 Township, DNR and private Funds.
2011	Bike/Walkway Path connecting the communities of Republic and South Republic.	\$100,000 Township Funds and DNR or MDOT Funds.

APPENDIX A - Accessibility Guidelines for Recreational Facilities

The guidelines in this appendix are based on the federal requirements for the compliance with the ADA of 1990 and suggestions from the USDA Forest Service for accessible outdoor recreation. Local codes may vary and should be reviewed before any new construction or remodeling is undertaken. They contain only a portion of the accessibility guidelines necessary to be in compliance with the ADA, and should not be used as the only source when analyzing accessibility needs. (Source: Accessible Design Handbook: Cash-Callahan & Company, 1991 and Design Guide for Accessible Outdoor Recreation, USDA Forest Service, 1991).

Space Allowances & Reach Ranges

- The minimum clear width for single wheelchair passage must be 36 inches continuously and 32 inches at any one point (e.g., doorways).
- The minimum width required for two (2) wheelchairs to pass each other is 60 inches.
- Where the floor space allows only forward approach to an object, the maximum high forward reach allowed is 48 inches above the finished floor and the minimum low forward reach must be no less than 15 inches above the finished floor; there must be no obstructions.
- Where the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed is 54 inches above the finished floor and the low side reach must be no less than 9 inches above the finished floor, there must be no obstructions.
- Although people with walking aids (e.g., canes, walkers, guide dogs) can maneuver through a clear width opening of 32 inches, they require 36 inch wide passageways for comfortable gaits.
- Crutch tips extending down a wide angle are a hazard in narrow passageways where they might not be seen by other pedestrians. A width of 36 inches provides a safety allowance for both the disabled person and for others.
- A semi-ambulatory person with a Seeing Eye dog requires the same passing widths as a person in a wheelchair.

Accessible Routes

- Accessible routes within the boundary of the site must be provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance they serve.

- Accessible route(s) must connect buildings, facilities, and space that are on the same site.
- The minimum clear width of an accessible route must be 36 inches except at doors where the minimum clear width must be at least 32 inches.
- Where an accessible route has less than 60 inches clear width, passing spaces of at least 60 by 60 inches must be located at reasonable intervals that do not exceed 200 feet. The intersection of two (2) corridors or walks is considered a passing space.
- Accessible routes serving any accessible space or element must also serve as a means of egress for emergencies or connect to an accessible place of rescue. These areas of rescue must comply with the requirements established by the administrative authority having local jurisdiction.
- Changes in levels along an accessible route, which are greater than ½ inch, must be ramped.
- Changes in levels along an accessible route which are between ¼ and ½ inch, must be sloped 1:2.
- Changes in levels along an accessible route ¼ inch or less can remain.

Protruding Objects

- Protruding objects must not reduce the clear width required for an accessible route or maneuvering space.
- Objects protruding from walls (telephones, etc.) with their edges between 27 and 80 inches above the finished floor must protrude no more than 4 inches into walks, halls, corridors, passageways, or aisles.
- Objects protruding from walls with their leading edges at or below 27 inches above the finished floor may protrude any amount, provided the minimum requirements for accessible routes are met.
- Free standing objects mounted on posts between 27 and 80 inches above the finished floor may overhang a maximum of 12 inches.
- All walks, halls, corridors, passageways, aisles, or other circulation paths must have 80 inches clear headroom.
- Where vertical clearance of an area adjoining an accessible route is reduced to less

than 80 inches, a guardrail or other barrier must be provided.

Parking

- Each parking lot provided for employees or visitors is required to have accessible parking spaces.
- Accessible parking spaces must be the closest spaces to the building's accessible entrance.
- Check with the municipal zoning department for the total number of parking spaces required in your lot. The rule of thumb is as follows:

Total Parking in Lot Minimum # of Accessible Spaces

1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 and above	2 percent of total spaces
1001 and above	20 plus 1 for each 100 over 1000

- Accessible parking spaces must be at least 96 inches wide with a clearly marked adjacent access aisle of 60 inches. Two (2) spaces may share a common aisle.
- The access aisle must connect directly to the accessible route.
- Spaces and aisles must be level with no slope greater than 1:50.
- All accessible parking spaces must have an unobscured vertical sign that show the universal symbol of accessibility.
- Provide one (1) in every eight (8) accessible spaces, but not less than one (1), for van parking. This space(s) must have a minimum of 96 inch wide access aisle and a minimum of 98 inches vertical clearance. Signage designating the spaces as "van accessible" must be provided below the symbol of accessibility.

Passenger Loading Zones

- Where passenger loading zones are provided, at least one (1) must be accessible.
- The accessible passenger loading zone should be the closest to the accessible entrance and have a minimum vertical clearance of 114 inches.
- The international symbol of accessibility must be displayed at the passenger loading zone.
- The pull up space must be level with a slope no greater than 1:50.
- A pedestrian aisle must be adjacent to the passenger loading zone and it must be at least 5 feet wide and 20 feet long.
- A curb must be provided where a curb occurs at the passenger loading zone.
- The pedestrian aisle and parking surface must be firm and slip resistant.
- The slope of the accessible route adjoining the ramp must be no greater than 1:20.
- The width of the curb ramp, not including the flared sides, must be at least 36 inches.
- The slope of the flared sides of the curb ramp must be 1:10 or less.
- Curb ramps must have flared sides or must be protected by a hand rail.
- Provide detectable warning on curb ramps that contrast with the walkway. The material used must be an integral part of the surface and consist of raised domes with a nominal diameter of 0.9 inches, a nominal height of 0.2 inches and center to center nominal spacing of 2.36 inches.
- Where grate openings occur, openings must be ½ inch or less and openings must be placed perpendicular to the usual direction of travel.

Ramps

- Any part of an accessible route with a slope greater than 1:20 will be considered a ramp.
- The maximum slope of a ramp in new construction should be 1:12 or less.
- The maximum rise of any run should be 30 inches or less.
- The cross slope of the ramp should be no greater than 1:50.

- The ramp surface must be non-slip.
- All grate openings must be ½ inch or smaller and must be placed perpendicular to the usual direction of travel.
- The clear width of the ramp must be at least 36 inches.
- A level landing must be provided at the top and bottom of each run.
- The landing must be at least as wide as the ramp and at least 60 inches long.
- Where ramps change direction, the landing must be at least 60 by 60 inches.
- A handrail on either side must be provided if the ramp rises more than 6 inches or is longer than 72 inches.
- The handrails must be continuous and fixed so they do not rotate or rack.
- The top of the handrails must be between 34 and 38 inches above the ramp surface.
- At the end of the handrails there must be at least 12 inches of level handrail beyond the top and bottom of the ramp segment.
- All handrail ends must be rounded and returned smoothly to the floor, wall or post.
- The diameter of the handrails must be between 1¼ and 1½ inches.
- All wall-mounted handrails must be mounted with exactly 1½ inches between handrail and wall.
- Where ramps or landings have drop-offs, provide a 2 inch curb, wall, railing or projecting surface to prevent people from falling off ramp.
- Design ramps with proper drainage so that water will not accumulate on surfaces.

Stairs

- All steps must have uniform height and tread width in any one (1) flight.
- All risers in accessible routes must be closed.
- Treads should be a minimum of 11 inches measured from nosing to nosing.
- Nosings must not project more than 1½ inches.

- Where nosings project, bevel undersides to prevent tripping.
- Stairways must have continuous handrails on both sides of all steps.
- Handrail should continue at the top and bottom of stairs. At the top, the handrail must continue on a level plain for a minimum of 12 inches; at the bottom, the handrail must slope for a distance of at least the tread width and then continue on a level plane for a minimum of 12 inches.
- All wall-mounted handrails must be mounted with exactly 1½ inches between the handrail and the wall.
- Handrails must be secure and not rotate.
- The diameter of the handrail must be between 1¼ and 1½ inches.
- Outdoor stairs must be designed so that water does not accumulate on walking surface.

Doors and Gates

- Where revolving doors occur along the accessible route, provide an accessible door or gate.
- A doorway with two (2) independently operated door panels must have at least one (1) active door panel with 32 inches clear opening maneuvering space.
- An accessible door must have a 32-inch clear opening measured between the face of the door and the door stop on the latch side.
- Provide 18 inches or more of clear space on the operable side of the door.
- Floor must be level at all doors in the accessible route.
- Where two (2) doors occur in a series, provide a vestibule of at least 48 inches plus the width of the opened door swinging into the space.
- All thresholds should be level or have a bevel of not more than 1:2.
- All door handles, locks and latches must be operable with one (1) hand and without twisting the wrist.
- Hardware should be mounted no higher than 48 inches above the finished floor.
- The person closing the door must take at least three (3) seconds to move from 70

degrees open to a point 3 inches from the latch.

- Interior doors must have an opening force of 5 pounds or less.
- The opening force of exterior doors must be determined by the appropriate administrative authority.

Entrances

- The accessible entrance must not be a service entrance unless the service entrance is the only entrance.
- The accessible entrance must be connected to accessible parking, passenger loading zones, and public streets or sidewalks.
- Where vertical level changes between $\frac{1}{4}$ and $\frac{1}{2}$ inch occur along the route, the edge must be beveled with a slope of 1:2 or less.
- Where vertical level changes at the entrance are greater than $\frac{1}{2}$ inch, provide a ramp, curb ramp, or platform lift.

Drinking Fountains

- Fountains that are free standing or built-in and do not have clear space underneath, must have a clear floor space alongside the fountain for a parallel approach of at least 30 by 48 inches.
- Fountains that are wall or post mounted must have a clear knee space under the fountain apron of at least 27 inches high by 17 to 19 inches deep by 30 inches wide.
- The spout of the foundation must be no higher than 36 inches above the finished floor.
- The water stream must be at least 4 inches high to allow the insertion of a cup under the stream.
- Spout must be at the front of the unit with the water flow parallel or nearly parallel to the front edge of the fountain.
- Controls must be located at the front of the fountain.
- Controls must be operable with one (1) hand and without twisting the wrist.

Restrooms

Toilet Stalls

- Accessible toilet stalls must be on an accessible route.
- The stall must be at least 60 inches.
- Where toilets are wall mounted, stall must be at least 56 inches deep.
- Where toilet stalls are floor mounted, stall must be at least 59 inches deep.
- A clear opening of 32 inches measured between the face of the door and the edge of the partition on the latch side must be provided when the stall door is open 90 degrees.
- Where the door swings into the stall, provide at least 36 additional inches in the depth of the stall.
- Where stall door opens out and at the end of an aisle, provide at least 18 inches of maneuvering space at the latch side of the stall door.
- Install grab bars 33 to 36 inches above the finished floor. Grab bars must be secure and not rotate in their fittings.
- Mount toilet paper dispenser no more than 36 inches from the back wall and at least 19 inches above the finished floor.
- Toilet paper dispenser must allow continuous paper delivery.
- The centerline of the toilet must be 18 inches from the wall or partition which has the grab bar location.
- The top of the toilet seat must be between 17 and 19 inches above the finished floor and on the wide side of the toilet area and be automatic or operable with one (1) hand.

Urinals

- Urinals must have elongated rims mounted no more than 17 inches above the finished floor.
- Provide 30 by 48 inch clear space for forward approach to the urinal.

- Urinal shields which do not extend beyond the front of the urinal rim may be provided by 29 inches clearance between the two (2) panels.
- Flush controls must be automatic or operable with one (1) hand.
- Controls must not be mounted higher than 44 inches above the finished floor.

Lavatory

- The lavatory rim or counter surface must be no higher than 34 inches above the finished floor.
- A clearance of at least 29 inches from the finished floor to the bottom of the apron must be provided.
- Provide a clear floor space of at least 30 by 48 inches in front of the lavatory for a forward approach.
- Provide a clear floor space of at least 17 inches under the lavatory.
- Hot water and drain pipes must be insulated or covered.
- The faucet must be operable with one (1) hand and without twisting the wrists; self-closing type valves must remain open at least 10 seconds.
- Where valves are self-closing, provide that the valve remain open for at least 10 seconds.

Mirrors

- Provide at least one (1) mirror with the bottom edge of the reflecting surface no higher than 40 inches above the finished floor.

Dispensers

- Provide at least one (1) of each dispenser type on an accessible route.
- Provide at least 30 by 48-inch clear space to allow either a forward or a parallel approach to the dispensers.
- Where a forward approach is provided, the highest operable part must be no higher than 48 inches above the finished floor.

- Where a side approach is provided, the highest operable part must be no higher than 54 inches above the finished floor.
- All dispensers must be able to be operated with one (1) hand and without twisting of the wrist.

Pathways

- There must be an accessible route linking accessible parking and passenger loading zones with the accessible building entrance.
- The accessible pathway must be free of steps and stairs.
- The accessible pathway must be at least 36 inches.
- If the pathway is less than 60 inches wide, provide passing spaces at least 60 inches wide and 60 inches long at intervals not exceeding 200 feet.
- Provide at least 80 inches of clear head room along pathway.
- Objects mounted to the wall between 27 inches and 80 inches must not protrude more than 4 inches into the space. The accessible pathway must be 36 inches wide alongside the protruding object.
- Accessible pathways must be firm and slip resistant.
- The slope of the accessible pathway must be no greater than 1:20.
- Where walkway levels change, the vertical difference between them must be less than ¼ inch.
- Changes in level between ¼ inch and ½ inch, anywhere on the accessible route, must be beveled with a slope of 1:2.
- Changes greater than ½ inch must be ramped.
- The transition from the curb ramp to the walkway, road and gutter must be flush and free of abrupt changes.

Boating and Fishing Facilities

Piers Adjacent to Boat Ramps

- The pier should have non slip materials on surface to aid in transfers.

- Access to pier site should be across a barrier-free path.
- The access ramp to dock should have a slope not greater than 1:20.
- A 60-inch turn-around area should be provided on the pier.

Fishing Piers

- Railing should be provided along one (1) side of the structure with sections at 32 inches high for sitting and 42 inches high for standing.
- A 2-inch high curb should be in place around the perimeter of the pier; a 4-inch curb is recommended where no railing is provided.
- Access to pier site should be across a barrier-free path.
- The access ramp to a dock should have a slope no greater than 1:20.
- A 60 inch turn-around area should be provided on the pier.

Picnic Area

- At least one (1) disabled accessible table and grill should be provided within the picnic area.
- Picnic tables should be placed on a level, hard surface.
- Grills and picnic tables should have a clearance of 36 inches.
- Grills should rotate and have a paving texture around them.

Playground Area

- Plenty of space between play apparatuses should be provided for proper maneuvering of wheelchairs.
- Playground areas should have play apparatuses that can be used by youngsters with poor coordination and slow muscular action and reaction.
- Surfaces under play equipment should provide adequate protections from injury but still allow for barrier free access to the equipment.

