PORTLAND INTERNATIONAL RACEWAY

PORTLAND, OREGON

TEN YEAR CONDITIONAL USE MASTER PLAN

AND NOISE MITIGATION PLAN

DRAFT

Prepared for:
City of Portland, Oregon
Bureau of Parks and Recreation
and
Portland International Raceway

Prepared By:
Mitchell Nelson Welborn Reimann Partnership
September 30, 1992

FINDINGS OF FACT AND REASONING IN SUPPORT OF APPROVING: TEN-YEAR CONDITIONAL USE MASTER PLAN AND NOISE MITIGATION PLAN FOR THE 270-ACRE PORTLAND INTERNATIONAL RACEWAY

The Application:

Owner:	City of Portland, Oregon Bureau of Parks 1120 S.W. Fifth Ave., 13th Floor Portland, OR 97204
Manager:	Portland International Raceway Mr. Dale LaFollette 1940 North Victory Blvd. Portland, OR 97217
Request:	**Approval of a 10-Year Conditional Use Master Plan for Portland International Raceway located in West Delta Park, Portland, OR.**
Project Coordinator:	Mitchell Nelson Welborn Reimann Partnership Master Planning, Land Use Planning, Project Engineering 71 S.W. Oak Street Portland, OR 97204
Consultants:	Towne, Richards & Chaudiere, Inc. Consultants in Noise and Vibration (206) 523-3350
	SERA Architects P.C. Architects 228-6444
	Lynn A. Sharp Environmental Consultant 654-7012
	Oakley Engineering, Inc. Hydrologic Engineering 289-7411

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THE APPLICATION

(copies of appendices available for view at Multnomah County Library, North Portland Branch)

1.0 INTRODUCTION

Portland International Raceway (PIR) is a publicly-owned motorsports facility. Together with Heron Lakes Golf Course, it shares a portion of West Delta Park located in the Kenton Neighborhood of North Portland, Oregon.

The PIR site covers roughly 270-acres within the 900-acre Peninsula Drainage District One and is shown on Exhibits 1 and 2. PIR, the Golf Course, a commercial radio broadcasting site and a portion of the Multnomah County Expo Center comprise the uses within the Drainage District.

The PIR site is classified as Open Space with Environmental Concern and Height overlays according to the City of Portland, Oregon Zoning Code (see Exhibit 3). PIR operates as a pre-existing, non-conforming use, since motor-racing facilities are not normally allowed in an open space zone. According to the City of Portland, Department of Public Affairs, ***"the primary use of PIR is vehicular sports events"***

PIR operates as an Enterprise Fund and is managed by the City of Portland Bureau of Parks. Like the City's golf courses, which are enterprise funds as well, PIR's budget is derived exclusively from user revenue (user fees and share of concessions mainly) and is not supported by property or income taxes.

PIR provides the opportunity for a variety motorsports and non-motorsports events. The principal focus of PIR has been on competition motor racing which include both professional and amateur events. A schedule of the 1992 season is included in Appendix Eight. Competition events feature the professional Budweiser/G.I. Joe's 200, the largest annual event at PIR (1991 attendance totalled 118,000 over a three-day period) and featuring "Indy-cars", weekly amateur drag-racing from late-February through October and a variety of professional and amateur sports-car and motorcycle racing events.

Other events which do not feature motorsports competition include bicycle racing, driver's education and training, private car club events and public "swap-meets" for car enthusiasts. The track is used for school bus driver training, by local police departments for driver's training and by private individuals or companies who may rent the track on a daily basis. Track rental provides income to PIR and some of the purposes have been for the production of television advertisements, introduction of new automobile models to dealers and the media and for the testing of race cars.

PIR's site was once part of the Vanport residential community built during World War II to house Kaiser shipyard workers. Vanport was occupied by as many as 20,000 residents, but was completely destroyed by a flood on Memorial Day, 1948 when a railroad dike on the western edge of Delta Park failed. The property was obtained by the City of Portland with management duties provided by the Park Bureau. The responsibility for maintaining the drainage system of sloughs and lakes is by the Peninsula Drainage District whereas control of the dikes is the responsibility of the U.S. Army Corps of Engineers.

Motor racing began on the existing streets of Vanport with the first Rose Cup race on June 11, 1961. On April 29, 1971, the first 18-holes of Heron Lakes Golf Course opened.

Finally, as an urban facility, PIR is unique nationwide. It occupies a site surrounded by a rapidly changing variety of land uses and rising land values. PIR will continue to face economic pressure from surrounding land uses, traffic and a host environmental regulations.

2.0 MASTER PLAN: GOALS AND OBJECTIVES

The Master Plan will be submitted to the City of Portland Planning Commission for formal adoption as a Conditional Use Master Plan. This action will allow for continued operation of PIR and for constructed improvements to the site and facilities. The Master Plan includes the Natural Resources Management Plan for Peninsula Drainage District One which provides the necessary framework for resource protection and enhancement as well as public recreation opportunities for the entire drainage basin that PIR is located within.

The need for a Master Plan was recommended by the PIR Task Force in August 1988. The Task Force was established to recommend operational and management changes at PIR that would result in guidelines and restrictions intended to reduce the impact of noise on the neighborhoods. Recognizing that proposed changes should be formulated within a master plan, the Task Force recommended that PIR "*adopt a goal statement and long-range management plan for its implementation which would guide the operation and improvement of the PIR facility*".

With this statement forming the basis of Plan Goals, and after analysis and evaluation, the Master Plan should allow PIR to ***provide for an increasing variety of public and private events which cater to both non-motorsports and conventional motorsports interests.*** Regarding the future size and number of these events, the Master Plan does not establish limits, however, due to traffic and parking, and issues related to sound transmission, PIR ***shall grow and expand in it's flexibility to host many types of events that do not exacerbate traffic and transportation congestion or sound levels.***

Other factors influencing the need for a master plan include the expansion of Heron Lakes Golf Course; concurrent formulation of the Natural Resources Management Plan for Peninsula Drainage District No. 1 (in which PIR is located), included in Appendix Seven; master planning and expansion of the Multnomah County Expo Center; a study of the Drainage District Dikes by the U.S. Army Corps of Engineers; and the continued use of PIR by major motorsports organizations such as CART (Championship Auto Racing Teams) and IMSA (International Motor Sports Association). Within this changing context an adopted Conditional Use Master Plan is essential to the long-range operation of PIR.

The Master Plan addresses several substantive issues including, noise, wetlands and wildlife habitat recreation and public access, water quality, and proposed facilities. Chapter Four includes a summary of Findings with in-depth reports located in the Appendices.

General goals and objectives, as stated in the PIR Completion Master Plan Study outline dated November 5, 1990 include:

1) Identify raceway needs on the general areas of safety, spectator facilities, utilities, major maintenance, noise compliance and capital improvements for the next 10 years;

2) Formulate these needs by involving raceway employees, all user groups, neighborhood committees and government agencies involved with the raceway;

3) Assemble a list of projects in order of necessity complete with a feasibility study, rough financial estimates and a list of permits needed to complete each project.

Specific recommendations found in Chapter 5.0 are based on these broad goals and objectives, but also result

from the Findings (Chapter 4.0) and from the Approval Criteria of the City Conditional Use Master Plan procedure. A number of physical and administrative steps are recommended over a ten-year period to accommodate raceway and user needs while improving existing noise levels in the neighborhoods located south of PIR, protecting water resources and wildlife habitat and making provision for public access and recreational opportunities.

3.0 PROCEDURES

The Master Plan will be approved through Type III proceedings (Conditional Use Master Plan) by a City of Portland Hearings Official as stipulated in Chapter 33.820 of the Portland Zoning Code. Once approved,the Plan will be in effect for not more than ten-years. During that period, the Plan can be amended and updated provided that established procedures have been followed.

Submittal of the plan is being coordinated with the City's Noise Review Board, neighborhood residents and their respective neighborhood associations, U.S. Army Corps of Engineers, State of Oregon Division of State Lands, the City Park Bureau, raceway users and the raceway management and staff.

A team of consultants representing a diverse range of professional disciplines was assembled to research and make recommendations in the following areas:

(1) Raceway noise;
(2) Wetlands and Habitat;
(3) Water Quality and Drainage;
(4) Facilities and Structures;
(5) Land Use and Application/Approval Procedures;
(6) Management and Maintenance;
(7) User Needs, safety and spectator accommodations;
(8) Neighborhood Involvement.

4.0 FINDINGS

This section will summarize the results of consultant's research in the areas of noise, wetlands and wildlife habitat, water quality, facilities, recreation and public access, PIR management and maintenance.

4.1 Raceway Noise

Some race cars at PIR produce noise levels which exceed 65 dBA as recorded at four different locations in the Kenton and Portsmouth neighborhoods (refer to Appendix One, Sound Measurement and Mitigation Study). Furthermore, noise produced at PIR that does not exceed the 65 dBA limit creates irritation to many residents and is considered a nuisance due to many variables including the time of day or day of week, how often the noise occurs, the frequency of the sound and the sensitivity of the person hearing the sound.

Sound regulations in the City of Portland are subject to Chapters 18.04-18.20 of the City Code. The

permissible level for sound in a residential land use zone adjacent to an industrial zone is 65 dBA which is the case in the Kenton and Portsmouth neighborhoods.

The State of Oregon Department of Environmental Quality Administrative Rules Chapter 340, Division 35, regulate sound within the State. For the types of racing that occurs at PIR a limit of 105 dBA at trackside has been established. Some of the racing organizations limit sound to 105 dBA at trackside and will eliminate race cars from competition for violating that level.

Efforts to reduce noise in the neighborhood should address:

(a) The 65 dBA limit as established by the City

The neighborhoods adjacent to North Columbia Boulevard receive very high noise levels from trains, train horns, industrial truck traffic and aircraft. Many violations of the 65 dBA limit - that are not associated with PIR - occur during night-time sleeping hours. Noise related to PIR can be reduced through a variety of measures involving the types of events, scheduling, monitoring the sound levels and eliminating violators and the installation of sound barriers and earthen berms. Chapter Five outlines these types of improvements.

(b) Nuisance Factors

Irritation and nuisance caused by noise below the 65 dBA limit should not be understated, particularly when the time of day and time of year are considered. Measures taken to reduce the nuisance and irritation caused by noise are more complex, but real improvements can be made that involve administrative changes taken to improve neighborhood livability. These are addressed in Chapter Five.

4.2 Wetlands and Habitat

An inventory of wetlands and associated natural resources was conducted and is shown on Exhibit 4. The complete study is included as Appendix Two.

An information review and field inventory of wetlands and other natural resources was conducted during May and June of 1991. Three dominant wetland types were found at PIR. Emergent wetlands (marshes) and open water sloughs were the predominant types, and are all relics of the once extensive complex of channels, marshes, and forested wetlands that occupied the entire area between the Columbia River and the Columbia Slough. A few small disturbed wetlands were also found. The types and extent of wetlands found generally corresponded with the U.S. Fish and Wildlife Service's National Wetlands Inventory map.

Marshes were vegetated predominantly with reed canarygrass, an invasive species that appears to thrive on disturbance and effectively prevents colonization by trees and shrubs. The open water sloughs were bordered by an overstory of black cottonwood and an understory of himalayan blackberry. Blackberry is also very invasive and in dense stands inhibits development of the forest vegetation that would naturally develop along the margins of the sloughs. The vegetation of the disturbed wetlands was variable.

The functional assessment method gave the Southern Slough, Forebay Slough, and Northern Slough five to seven functions rated as moderate (there were no high ratings given for any function); the

Central Marsh, Mid-westerly Slough, and Inside Sloughs received a lesser number of moderate ratings; and the disturbed wetlands did not receive any moderate ratings. Functions receiving moderate ratings at one or more of the nine sites were uniqueness, wildlife habitat, fisheries habitat, food chain support, nutrient retention/removal, sediment trapping, flood storage/synchronization, and groundwater modification.

Recommendations to restore and enhance wetlands and natural resources of the site include:

1. Restore and enhance existing naturally vegetated interconnections between wetland areas within PIR,

2. Prepare a wetland conservation plan for the entire Pen 1 drainage district, of which the PIR site should be a part;

3. Investigate means of replacing reed canarygrass monocultures with more diverse, native marsh vegetation;

4. Expand existing cottonwood and willow forest buffers adjacent to all sloughs and marshes by a combination of planting native trees, shrubs, and herbs, and periodic "weeding" to remove undesirable species;

5. Avoid future crossings of sloughs;

6. Advocate conversion to water-based slough maintenance by Pen 1, and

7. Enhance western pond turtle habitat by placing stumps, logs, and rocks in sunny locations where they will not interfere with drainage district operations; place nest boxes for swallows and bat boxes in forests to provide enhanced natural mosquito control.

4.3 Water Quality and Drainage

Analysis of the PIR site was conducted together with the entire Drainage District basin. The intent was to integrate water quality and drainage improvements with the Master Plan. The complete study can be found in Appendix Four. Specifically, it is intended to provide a basis for modifying the site to provide long-term solutions to drainage-related issues and to satisfy the City of Portland standards for storm water quality treatment for areas of primary risk and for areas of new pavement construction.

PIR lies entirely within the floodplain of the Columbia River, but is protected by a system of levees currently being studied by the U.S. Army Corps of Engineers for improvement. When the levees, or portions of the levees, are improved the Federal Emergency Management Agency (FEMA) will be able to recognize a 100-year flood-plain level based on hydrologic conditions. Should this action take place, permanent structures may be constructed within the PIR site that are currently not permitable.

Analysis of the site addressed existing drainage and water quality facilities and standards for drainage and storm water quality. Although it is difficult to predict exactly what standards will be in place when PIR

undertakes the improvements presented in this plan, it is clear that certain types of water quality treatment facilities, as a minimum, are now considered necessary prior to discharge into the Columbia Slough. For PIR, these facilities must address contamination from 1) fuel, oil and lighter-than-water organic solvents, 2) heavier-then-water organic solvents, such as TCE, 3) metals, such as copper, lead, and zinc, 4) nutrients, primarily phosphorus, and 5) sediments.

Based on these potential contaminants, four types of storm water quality facilities are recommended in this plan:

A. Oil Separator/Containment Pond

B. Wetpond

C. Grassy Swales

D. Overland Flow

Recommendations are shown on Exhibit 8 and are keyed to particular areas of the PIR site. In addition, Maintenance recommendations are included that will involve the efforts of the Drainage District and PIR.

4.4 Facilities and Structures

The purpose of this section is to document existing facilities and identify needed improvements. An evaluation of existing facilities and structures was conducted and meetings were held with management, user groups and event organizers. Although the PIR facility generally functions very well, and is considered by those involved in racing as one of the most safe facilities, some improvements were identified which could be implemented in phases.

Evaluations focused on spectators, users (pit and paddock functions, safety, participant amenities and communications), management and maintenance and operations flexibility. A variety of improvements are recommended in Chapter 5.5. Improvements include projects of an architectural nature, underground utilities required to service new improvements, site features such as pedestrian circulation, parking and vehicle circulation and improvements to environmental conditions (further specified in Appendix Five and Appendix Seven).

In addition to noise and environmental factors that require Plan recommendations, the following list includes deficiencies recommended for improvement in the Plan;

1) Traffic circulation and parking for spectators and participants;
2) Participant safety;
3) Pedestrian safety;
4) Public access and recreation;
5) Water supply for domestic and fire control;
6) Sanitary facilities;
7) Electrical supply and distribution;
8) Covered multi-purpose/garage space;

9) Timing and scoring facilities;
10) Medical services;
11) Media facilities;
12) Maintenance and storage space;
13) Security fencing and lighting;
14) Beautification
15) General office and meeting facilities;

4.5 Land Use and Application/Approval Procedures

Refer to Appendix Six for Conditional Use Approval Criteria. In addition, these individuals should be included in the review of this Plan:

Mr. Paul Herman
Bureau of Buildings
Noise Control Officer
1120 SW Fifth Ave., Room 930
Portland, OR 97204-1992
796-7350

Ms. Lee Poe
Portsmouth Neighborhood
3911 N. Attu St.
Portland, OR 97217

Ms. Pam Arden
Kenton Neighborhood
1817 N. Winchell Ave.
Portland, OR 97217

Ms. Martha Johnson
Neighbors for an Open Delta Park
9509 NE 13th
Portland, OR 97211

Other organizations who should be given an opportunity to comment include the Portland Rose Festival Association; Oregon Region Sports Car Club of America; Northwest Drag Racing Association; Oregon Motorcycle Road Racing; and, current tenants and vendors of services at and for PIR. Others may be added to this list.

4.6 Management and Maintenance

Management, as considered in this Master Plan, will include monitoring of sound mitigation; marketing PIR as an opportunity for businesses; making provision for a diverse schedule of events; and Neighborhood Liaison.

Maintenance, as considered in this Master Plan will include newly constructed features for wetlands,

wetland and wildlife enhancement and water quality features. These recommendations are found in Appendix Two and Appendix Three. Maintenance will, also, include building security and maintenance as recommended throughout Section Five.

4.7 Neighborhood Involvement

Neighborhood relations are fundamentally important to the on-going success of PIR, and for this reason the Kenton and Portsmouth neighborhoods have been considered throughout the development of the Master Plan. Also, the North Columbia Neighborhood and the Piedmont Neighborhood are located nearby and should be considered within the PIR area of influence. Recommendations are varied; some are specific tasks while some are on-going in nature. They are included in Section 5.5, Community Enhancement.

5.0 ELEMENTS OF THE PLAN

This section will recommend an implementation program to be carried out in phases over a several year period. Some recommendations are implemented administratively, while others take physical form as capital improvements. The total program of recommendations is made up of a series of steps, taken in phases over several years. The end result will enable PIR to offer an expanded variety of events as a multi-use facility which operates within established environmental and noise limits in a partnership relationship with the community.

5.1 Noise Recommendations: Physical and Administrative

5.1.1 Construct Noise Barrier

For purposes of this report, a "barrier" is defined as any feature capable of reducing noise levels in the affected neighborhoods of North Portland. For example, a barrier could be a structure, earthen embankment or a combination of the two.

Construction of a barrier, having various heights and setbacks from the track and located south of the track, will result in significant noise reduction in the neighborhood. Due to the required length of this barrier, its design should be integrated with spectator facilities and other planned construction. In this way the barrier will not resemble the monotonous freeway-type wall.

The principal barrier is recommended along the south side of the main straight as shown on Exhibit 5a. This barrier should be an architectural feature which reduces noise while accommodating uses that are important to the financial viability of PIR. While construction of the noise barrier will not solve all noise problems associated with motor sports, it will make a significant contribution toward meeting the principal goal of the Plan.

Other barrier improvements shown on Exhibit 5a include earthen fill at the far western end of the main straight, at in-field locations adjacent to turns 3, 4 and 5 and an increase to the height of the existing barriers along the south side of the "back straight".

5.1.2 Relocate Drag Strip

Drag racing will be moved westerly approximately 200-feet. This will allow for future noise barriers to effectively "wrap" the eastern starting point. The noise barrier on the track's south side will reduce noise to the neighborhood. Race cars will circulate back to the north pit area rather than along the south side of the track to the south pit area as is the pattern now. PIR will, therefore, have a noisy zone separated from the quiet zone by the barrier.

5.1.3 Interim Noise Mitigation

This recommendation is intended to reduce noise in the neighborhood until barriers are constructd and other changes can be implemented.

(a) Continue the noise variance procedure until all Noise Mitigation Devices are constructed.

(b) Noise Mitigation Plans

Require racing clubs and sponsors to submit a noise mitigation plan which will include, but is not limited to, muffler specifications, trackside noise level limits, class restrictions, and hours of practice and racing. The mitigation plan should be submitted annually, updated as needed, and submitted to PIR. The Plan will be provided to Neighborhood Association representatives.

(c) Neighborhood Noise Monitoring

Neighborhood noise levels will be recorded periodically to determine effectiveness of the Noise Mitigation Plan race car class limitations. An independent consultant, acceptable to PIR, the Park Bureau and affected neighborhoods will be paid through existing ticket surcharges.

(d) Construct Noise Mitigation Devices on a phased basis beginning first with the Drag Strip barrier followed by additional barriers to the west end. West end mounding and barriers and the "back straight" wall will complete the implementation of the work.

(e) After Construction of Noise Mitigation Devices

After construction of noise mitigation devices at the track monitoring will be continued in the neighborhood to determine compliance with 65 dBA limit for non-varianced events.

5.2 Recreation and Public Access

PIR is a publicly-owned facility; however, public access is limited due to safety (liability insurance) and security reasons. Tickets may be purchased for most events while some are free of charge. Unrestricted public access is not possible on a 24 hour basis. Access on the northern boundary of the site is available from Broadacre Avenue.

The City's Comprehensive Plan and Zoning Maps indicate that a recreational trail should be located on top of the dike south of the track. This represents the Forty-Mile Loop Trail and, as in the case of any new development, its construction is the responsibility of the property owner. PIR, therefore, is responsible for the provision of the trail.

5.2.1 Construct Forty-Mile Loop Trail

PIR shall construct their portion of the recreational trail. No public access from the trail to PIR will be allowed. All access to PIR will be through existing gates.

5.2.2 Provide Public Access in West Delta Park

PIR should work to integrate pedestrian access from transit and the proposed future LRT station. Access to and from the golf course is also desirable. Public access is provided for in the Natural Resources Management Plan which was formulated concurrently with the PIR plan.. Public access will be available throughout PIR and the rest of Delta Park including access to the Slough. The Plan addresses active recreation, such as field sports, fishing, walking and birding.

5.3 Community Relations and Enhancement Recommendations

PIR is an important resource for the City and for the neighborhoods. In turn, the neighborhoods can provide PIR with benefits that go beyond motorsports. For example, community festivals can take place at PIR. Enhanced recreational opportunities can co-exist with the sloughs and wetlands in the PIR vicinity. Community-based activities can be a significant part of PIR's multiple-use facility.

5.3.1 Integrate Vanport History with PIR Improvements

Vanport City history should be included in development plans and future uses at PIR and West Delta Park. A Delta Park Interpretive Center is recommended in the Natural Resources Management Plan and this should include information about Vanport. Furthermore, it is recommended that PIR utilize Vanport names in the signage program and establish a general familiarity with Vanport to visitors.

5.3.2 Encourage Industrial Renewal and Business Development

Businesses that are involved with motorsports and derive benefit from PIR should be provided with opportunities to site their operations in the unoccupied industrial zones along North Columbia Boulevard through an industrial renewal program promoted by the Portland Development Commission. At PIR, new "flex" garage space will be available as part of the noise mitigation barriers. Once built, these garages should be promoted as a Kenton neighborhood business opportunity providing a catalyst for investment and job creation in the neighborhood.

5.3.3 Hire Neighborhood Residents

Businesses that locate in the Kenton and Portsmouth neighborhood, including PIR, should be encouraged to hire neighborhood residents.

5.3.4 Provide Liaison with Neighborhood

PIR should designate a Neighborhood Liaison to work with the Neighborhood Associations to maintain communication which is aimed at programs and projects that benefit PIR and the neighborhood:

(a) Beautification of the North Denver Avenue wall;
(b) Neighborhood access to PIR events;
(c) Scheduling of special events;
(d) Recreation programs for all ages coordinated with the Park Bureau;
(e) Beautification of the PIR site perimeter; and
(f) Monitoring of PIR operations.

5.4 Physical Improvements to PIR

For these improvements refer to Exhibits 5 and 7. All of these improvements are proposed at a preliminary level of detail. Further design refinement will have to be accomplished prior to making final budget commitments. Locations, access, services and general character are proposed as part of this Plan.

5.4.1 Vehicle Bridge

Located in northwest corner of PIR the vehicle bridge will be two lanes in width and provide pedestrian access with an 8-foot wide sidewalk. The bridge will allow for event participants to enter the facility by way of Broadacre Street and North Force Avenue, thus bypassing the Main Entrance at the east end. Access will be available during events unlike the existing condition that effectively traps participants on the inside of the track.

Another advantage of the bridge is that the former paddock area southeast of the PIR Tower will made available to parking, pedestrian circulation and also for multiple uses which operate concurrently.

5.4.2 Restrooms

New permanent restrooms are recommended at west end of the paddock area.

5.4.3 Showers

As part of the restroom facility it is recommended that showers be provided as a convenience for event participants.

5.4.4 RV Campground

As recommended in the NRMP report a campground facility is needed in Delta Park. A full-service facility is recommended and jointly developed with Multnomah County and located north of Force Lake. As many PIR participants camp overnight, a well-planned RV campground is recommended. However, this facility should be available to the general public during non-event periods. Revenue in the form of camping fees should be applied towards the shower and restroom facility.

5.4.5 Parking and Circulation

As stated in Section 2.0, no increase in event size is planned. Therefore, access continues to be adequate by way of Interstate Five and North Denver Avenue. Major events, such as the Indy-car races, will require the temporary opening of North Force Avenue and shuttle operations. Tri-Met access is strongly supported as is a future Light Rail station providing access for East and West Delta Park. PIR and Heron Lakes Golf Course will continue to cooperate in planning access and parking for major events.

Regarding on-site parking and circulation, major changes will be accomplished following

construction of the vehicle bridge. At that time all non-participant parking will be available in the paved area southeast of the PIR Tower. Parking that currently occupies the area northwest of the track near the Main Entry will continue to be available. Only during major events will parking outside the PIR site be required and, at that time, vehicles will be directed to parking areas as they are at the present time. Refer to Exhibit 9 for Parking and Circulation plans.

5.4.6 Underground Utilities

Existing underground utilities are shown on Exhibit 6. Major improvements will be made to domestic water supply, water for fire control purposes, and sanitary sewer. Proposed underground utilities are shown on Exhibit 7. Overhead utilities are not included in the Master Plan as they are provided as needed by PGE, US West and the CATV provider. Services are encouraged, where possible, to be consolidated on single poles and aesthetic appearance should be considered by PIR Management as services are expanded.

5.4.7 Beautification

Landscape plantings, lawn areas and mature existing vegetation give PIR an attractive appearance that many race tracks lack. However, steps should be taken to beautify the facility in these specific areas;

a) Main entry should have street trees and colorful shrubbery plantings;
b) Open areas near the eastern approach to PIR and opposite the Denver Avenue exit should be planted with evergreen trees;
c) Parking areas should be planted with large shade trees in order to reduce heat and glare during the summer months and, also, to visually break-up the expanses of asphalt.
d) The plywood wall located along Denver Avenue should be painted in an artistic manner, This wall is seen by traffic on Denver Avenue, which functions as the north entrance to the Kenton Neighborhood. The beautification treatment could be given to the Neighborhood as a community project funded by PIR.

5.4.8 Barrier Structures

Proposed physical improvements are shown on Exhibit 5. As stated in Section 5.1, a sound mitigation barrier along the main straight should, in effect, be built as a multi-purpose, "flex", building with grandstand seating on top. This will provide the necessary sound mitigation value, it will provide rental income for PIR from tenants occupying the space and will improve spectator conditions be elevating the grandstands by at least twelve feet. Refer to Appendix Five for sketches of the proposed recommendations. These structures will be built of concrete and masonry, however, the final dimensions, materials and surface treatments will be subject to design criteria established by further noise prediction modelling as stated in Appendix One.

Non-Barrier Structures

PIR Building
Located on the north end of the pedestrian bridge. The building would provide these facilities:

First Aid Facilities
Media Center
Timing and Scoring
Commissary

This structure would be four levels, with the top level open to track viewing (also, a suitable

platform for television cameras) with about 1,500 square feet per floor. It would comply with all current building restrictions relative to flood levels as well as overall height restrictions.

Adjacent to the Tower, on the eastern side, is a Winner's Circle. This will be visible from both the Media Center as well as grandstands located across the race track.

The commissary is recommended as a revenue source whereby groups that have rented the use of PIR would be provided meal service that is currently contracted to outside vendors.

Maintenance

These facilities should be concentrated into the barrier structure and existing facilities removed from the site.

5.4.9 Plaza of Champions

Located adjacent to the southern terminus of the pedestrian bridge, a plaza is proposed as a major focal point for PIR. The plaza will accommodate displays and demonstrations which are common to the motorsports industry and it should be designed to express the history of PIR by locating signs, plaques or other markings which show the winners names and cars from all of PIR's major events.

5.4.10 Pedestrian Mall

Pedestrian circulation along the south side of the barrier structure is provided along a major spine, or "Mall", where the existing drag race return road is located. This will provide pedestrian-only circulation while also providing vehicle access to the multi-purpose buildings along the main straight during non-race periods. Ample paving should be provided to allow vendors and related services during major events. The Mall will be an improvement to the existing condition and will continue to provide access to the Chalet Village.

5.4.11 Water Quality and Drainage

5.4.12 Wetland and Habitat Protection

Recommendations for these two sections are provided in their respective appendices. In summary, water quality will be protected by newly constructed basins and filter swales and new plantings will be located adjacent to the sloughs and expanded wetland areas.

5.4.13 East End Terraces

The east end embankment, popular with spectators, is planned for permanent terraces which are illustrated in Appendix 5. The terraces should be designed to allow for a greater number of spectators to use the embankment while maintaining the informal seating arrangement popular with general admission spectators. The terraces are proposed as a combination of concrete seating walls and flat grassy terraces.

5.4.14 Covered Garage

A roof structure is proposed on the north side of the main straight and west of the pedestrian bridge. The purpose of this structure is to provide weather protection for track users. Some seating is proposed for the rooftop providing views of the pit area and main straight.

5.4.15 Chalet Village

The popular Chalet Village is provided additional space and is reshaped around the Plaza and Mall. Utility services have been planned as well as landscape beautification.

5.4.16 Entrance Structure

The existing entrance structure and a similar structure proposed for the West End are a part of this Plan. Both structures provide for ticketing and for security of the facility.

5.5 Implementation of Plan Elements

Implementation of the Plan elements by construction and administrative procedures will be achieved in a sequence of steps beginning with Interim Noise Mitigation efforts (5.1.3). Construction of physical improvements will initially focus on the Noise Barrier (5.1.1), Forty-Mile Loop Trail segment (5.2.1) and the Vehicle Bridge (5.5.1).

Regarding the Noise Barrier, funding will be secured in the form of public indebtedness and paid back through spectator, advertising, concession and track rental revenue, and by means of rents paid for space in the barrier garage units (refer to 5.5.9). In this way the barrier can be considered as a priority project with first emphasis on the drag strip portion of the race track as described in 5.1.3e.

The vehicle bridge enables organizational changes to be implemented on the property thus improving the site use efficiency. This project may be funded in a similar manner as the barrier structure, except for the rental income. However, PIR should solicit some funding from private corporate interests as was the case with the existing Goodyear pedestrian bridge which was originally constructed with monies from BF Goodrich.

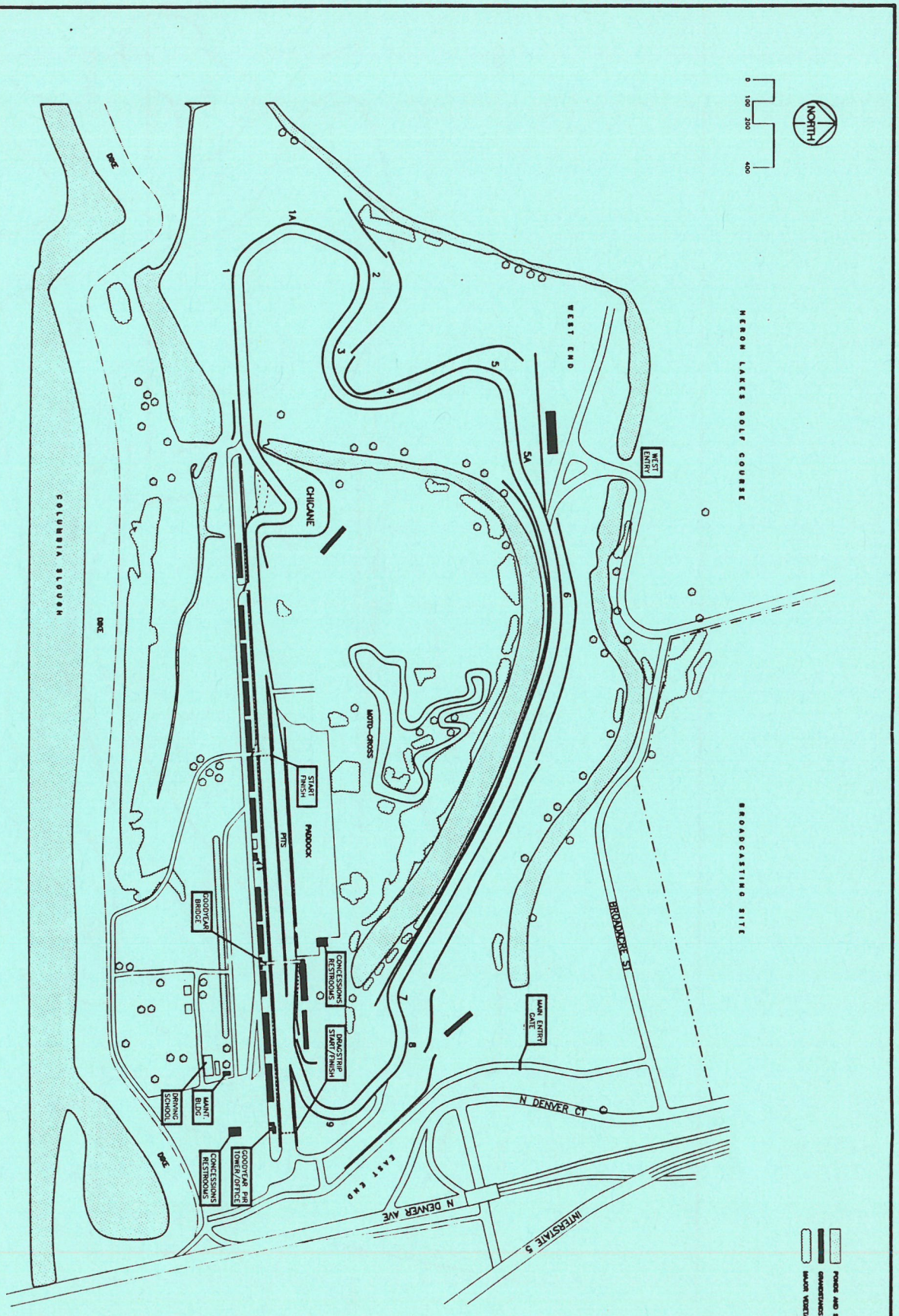
The recreational trail funds will be provided as part of PIR's annual operational budget. It will be built in stages and coordinated with recommendations included in the Natural Resource Management Plan.

Subsequent projects outlined in the Plan will be implemented as financial sources warrant with particular attention given to continued reduction of noise levels in the neighborhood as specified in the Noise Mitigation Plan in 5.1.1.

NORTH

PIR SITE

EXHIBIT 1



2 SHEET

EXISTING CONDITIONS

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/225-0812 FAX 503/273-0353
7150 SW HAMPTON PORTLAND, OR 97223 TEL 503/624-5700 FAX 503/624-5780

REVISIONS

NO.	DATE	BY

JOB NO. 1119

		DATE
DESIGNED BY	J NELSON	8/92
DRAWN BY	J RIGGS	8/92
CHECKED BY	J NELSON	8/92

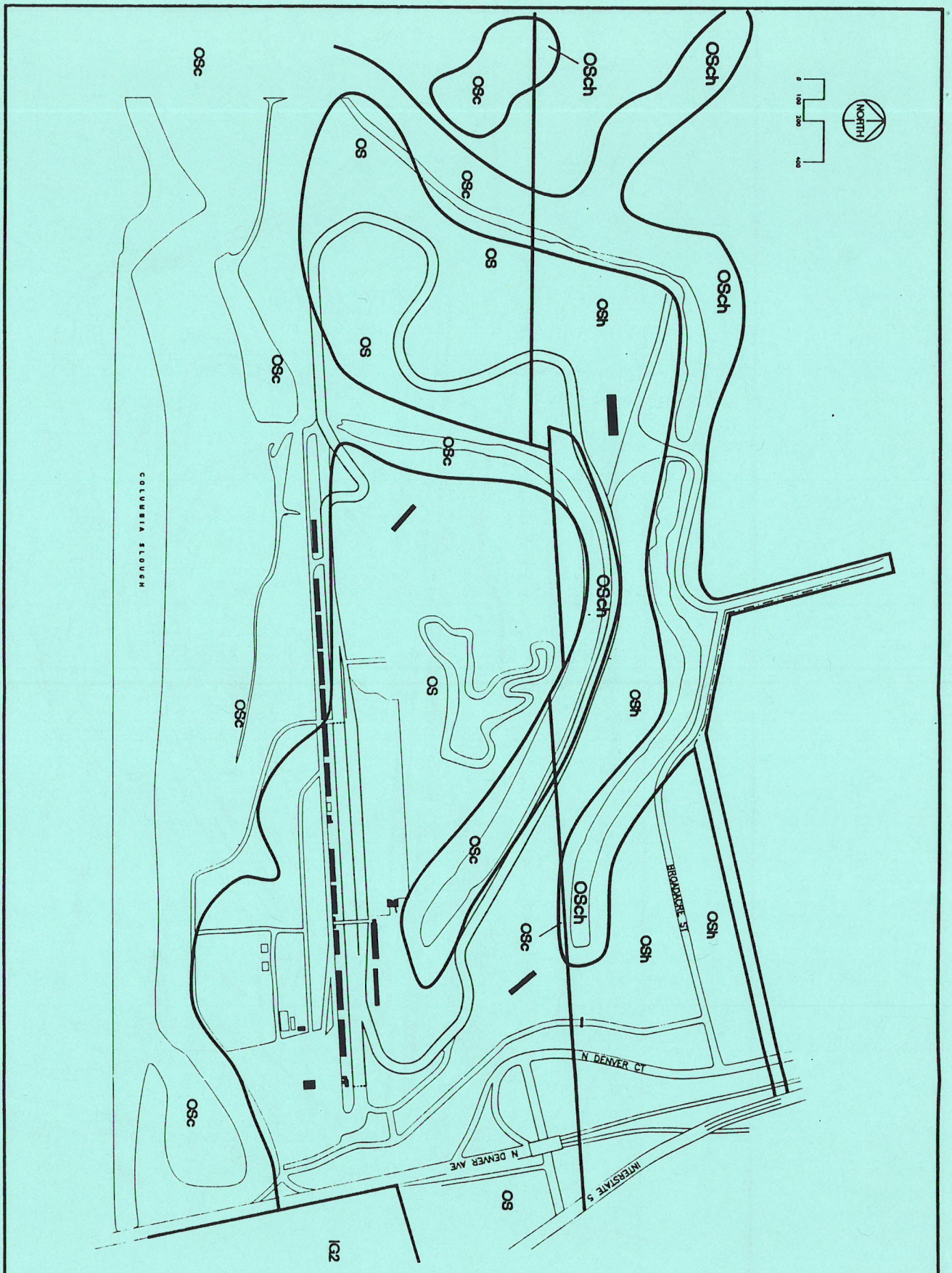


EXHIBIT 3

ZONING

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/225-0822 FAX 503/273-6383
7155 SW WARM PORTLAND, OR 97223 TEL 503/624-6700 FAX 503/624-6706

REVISIONS		
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JOB. NO. 1119

	DATE
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CHECKED BY J NELSON	9/92

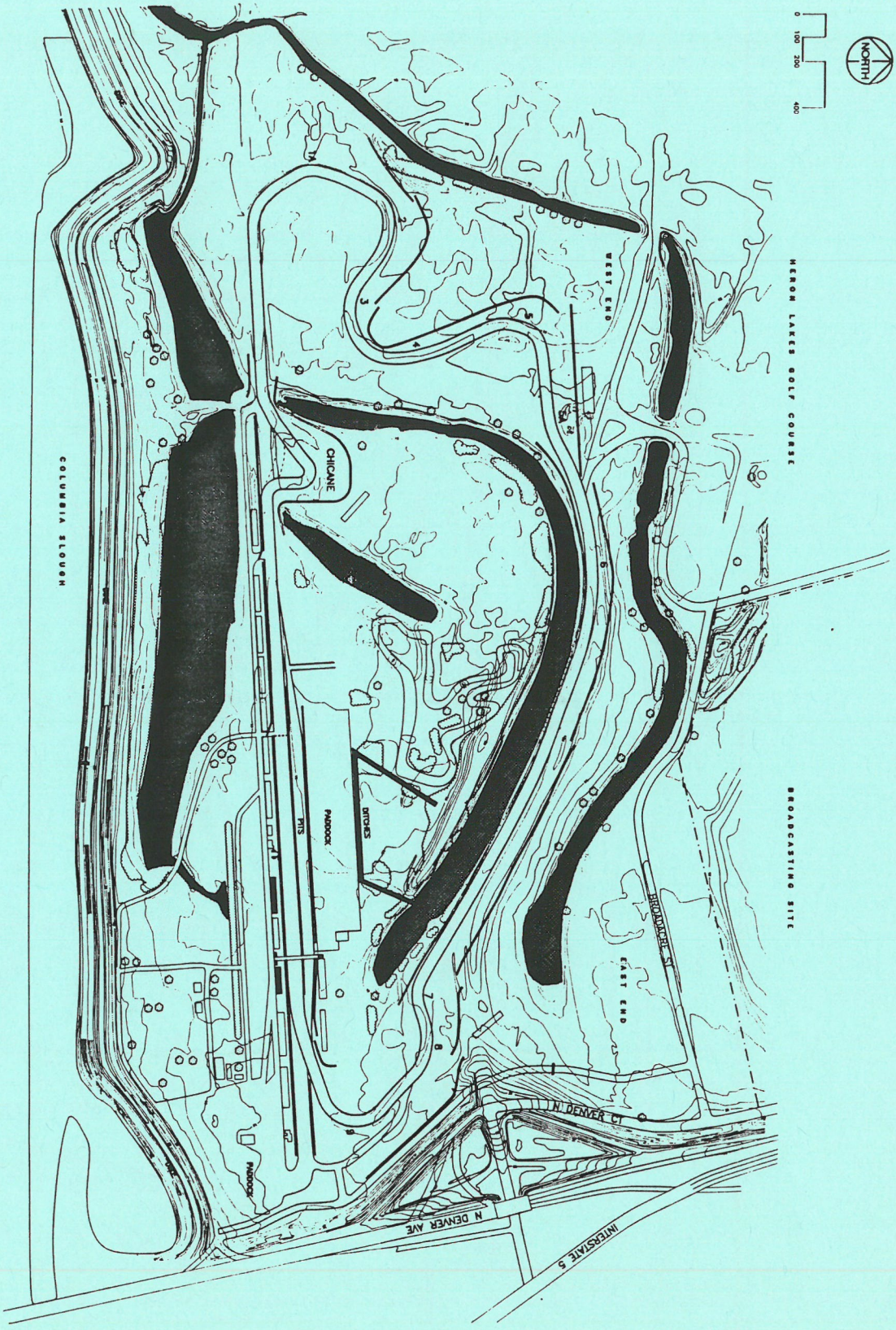

EXHIBIT 4

WETLAND AREAS

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/223-0822 FAX 503/273-8353
7155 SW HAWKS PORTLAND, OR 97223 TEL 503/624-5705 FAX 503/624-5780

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CHECKED BY	J. NELSON	9/92

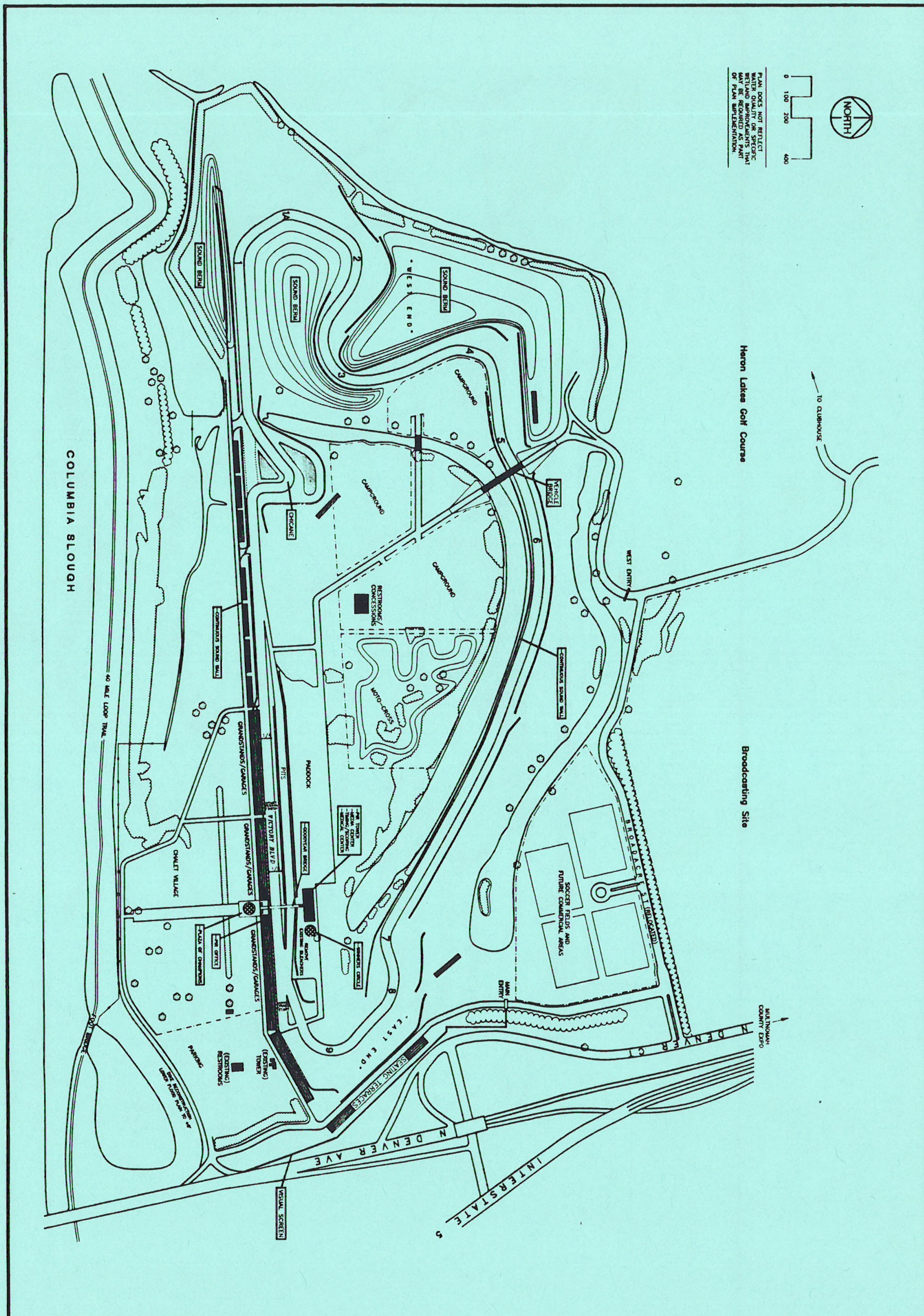

EXHIBIT 5

MASTER DEVELOPMENT PLAN

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/225-0622 FAX 503/273-8353
7155 SW VARNS PORTLAND, OR 97223 TEL 503/624-5780 FAX 503/624-5760

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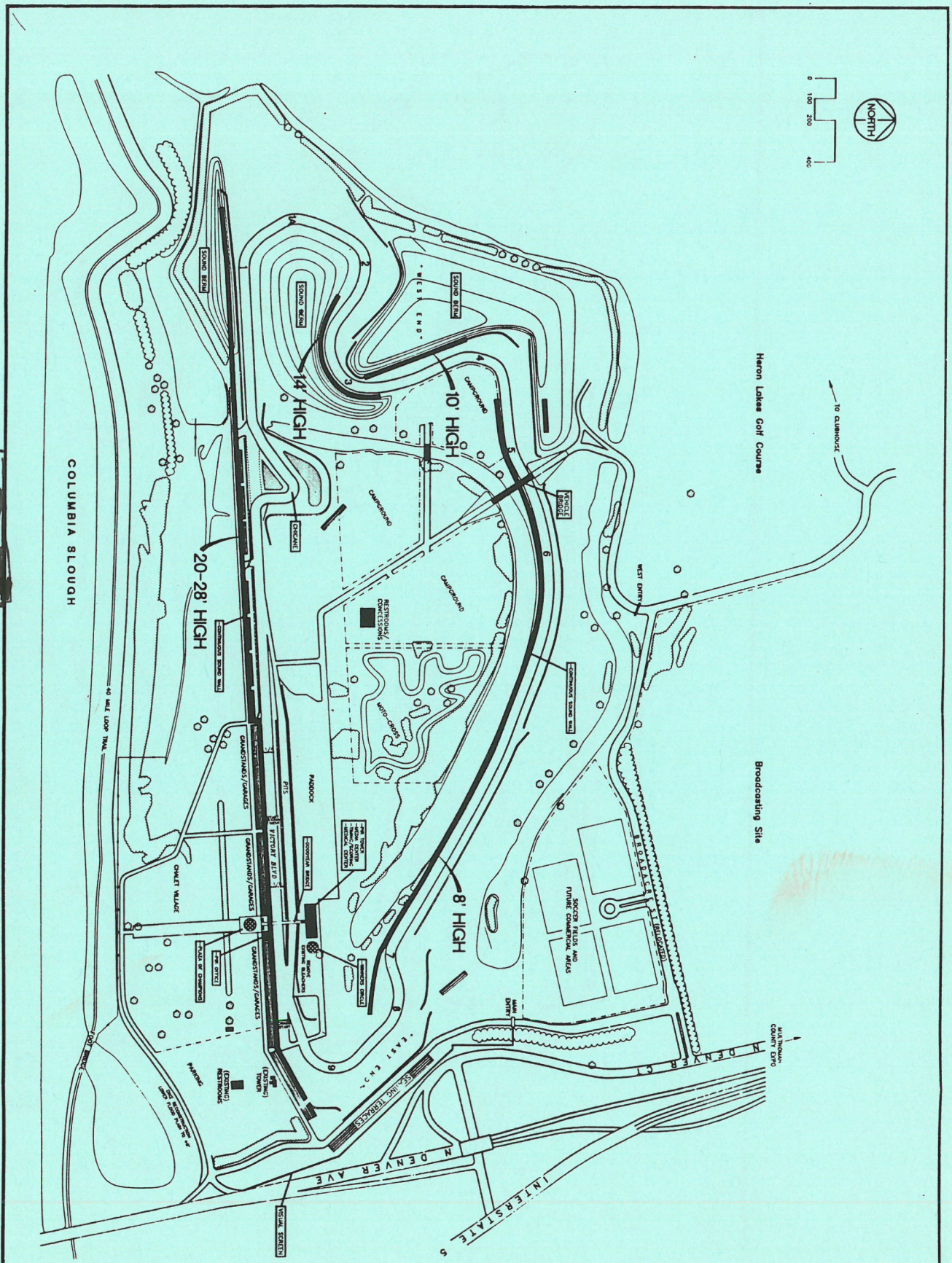

40 mile loop
Golf - life - safety
issue
Vanport
History
NRHP
Museum
factor

EXHIBIT 5A

SOUND MITIGATION

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/229-0823 FAX 503/273-8353
7155 SW HAINS PORTLAND, OR 97223 TEL 503/624-5700 FAX 503/624-5740

REVISIONS		
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JOB NO 1119

		DATE
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CHECKED BY	J. NELSON	9/92

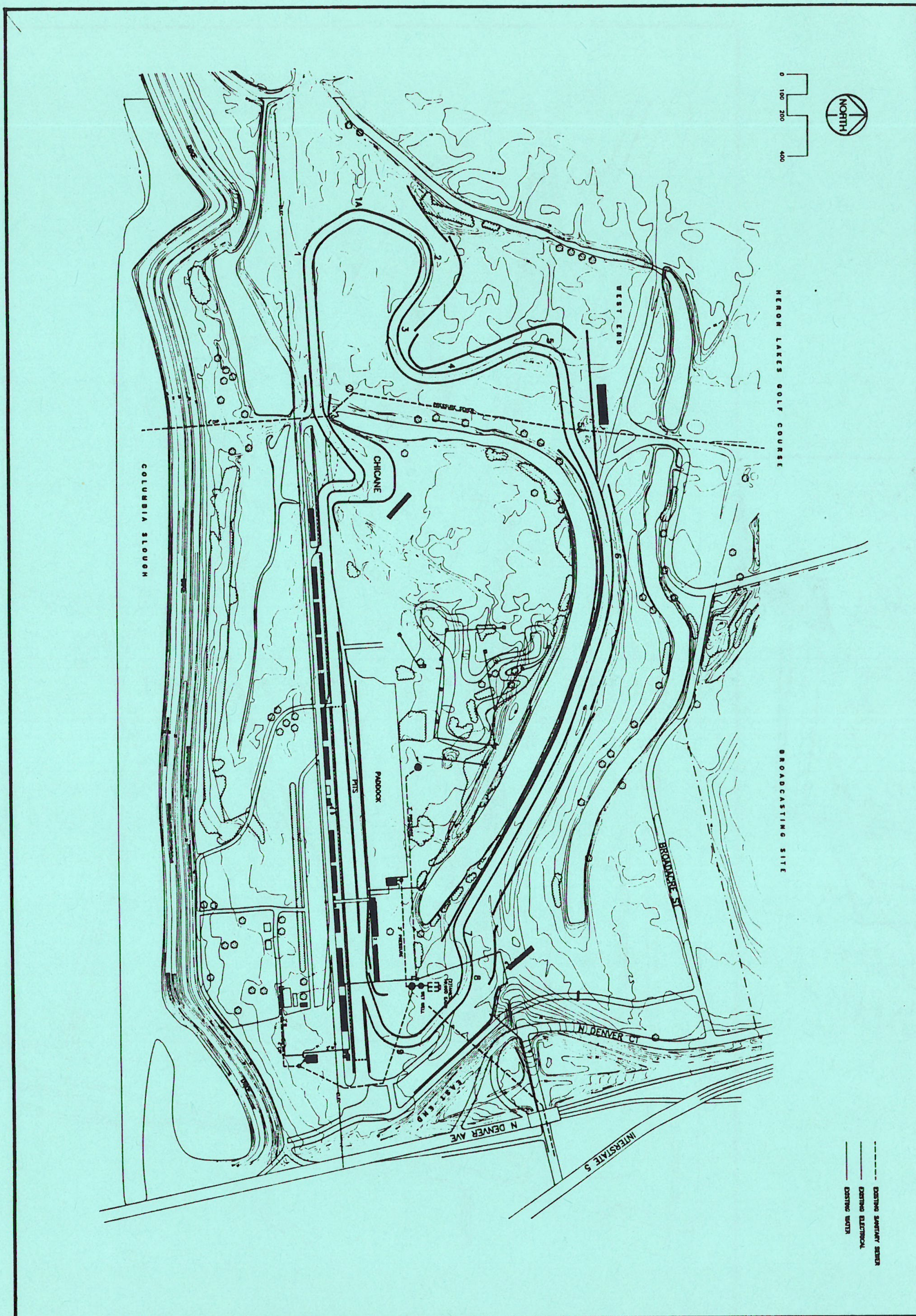

EXHIBIT 6

EXISTING UTILITIES

PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/226-0822 FAX 503/273-8393
7150 SW VARNS PORTLAND, OR 97223 TEL 503/624-5700 FAX 503/624-5780

REVISIONS		
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JOB. NO. 1119

		DATE
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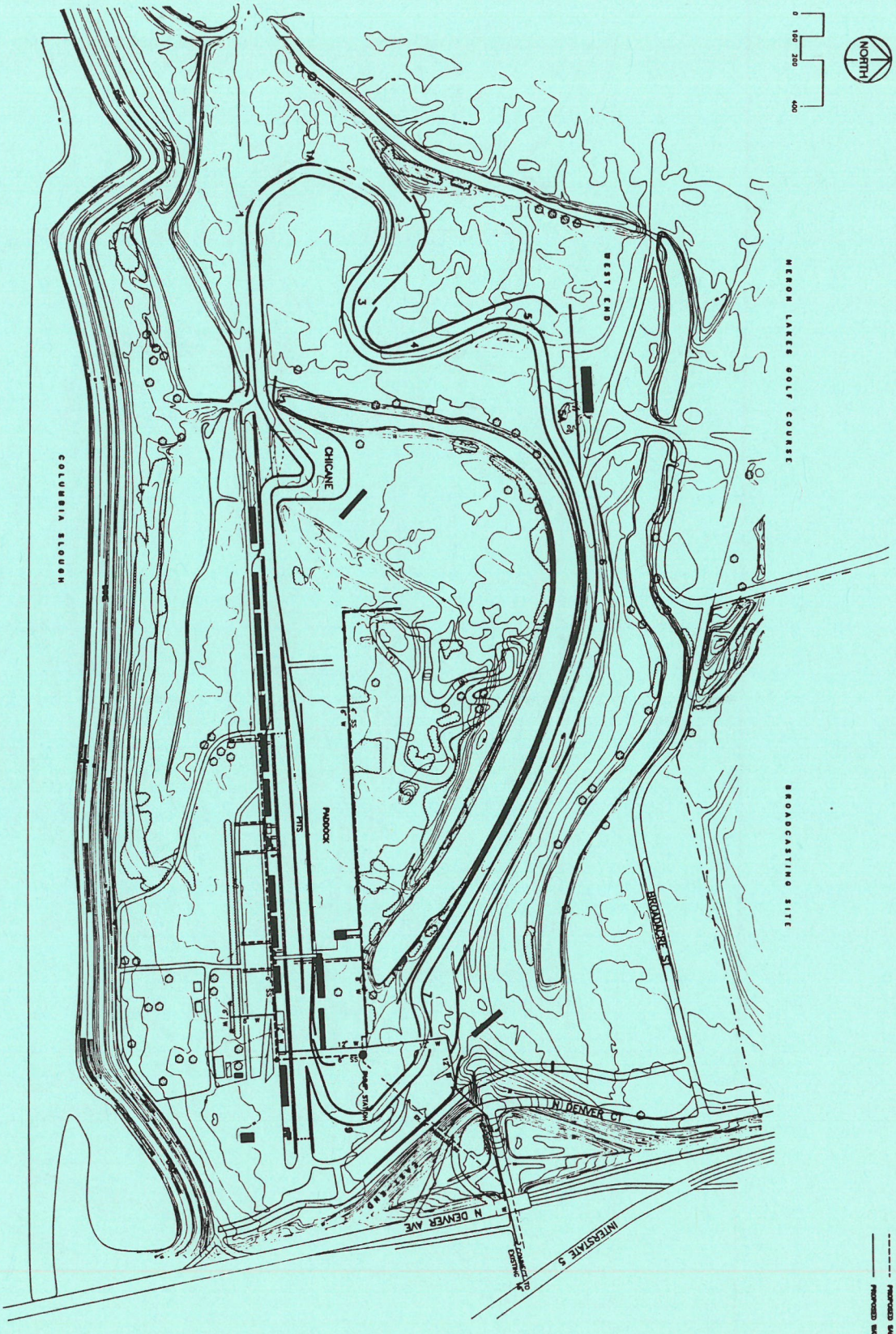
DRAWN BY	J RIGGS	9/92
CHECKED BY	J NELSON	9/92



PROPOSED UTILITIES

PORTLAND INTERNATIONAL RACEWAY

SHEET 7

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/225-0822 FAX 503/273-8353
7150 SW HAMPTON PORTLAND, OR 97223 TEL 503/624-5700 FAX 503/624-5780

REVISIONS		
NO.	DATE	BY

JOB NO. 1119

		DATE
DESIGNED BY	J NELSON	9/92
DRAWN BY	J RIGGS	9/92
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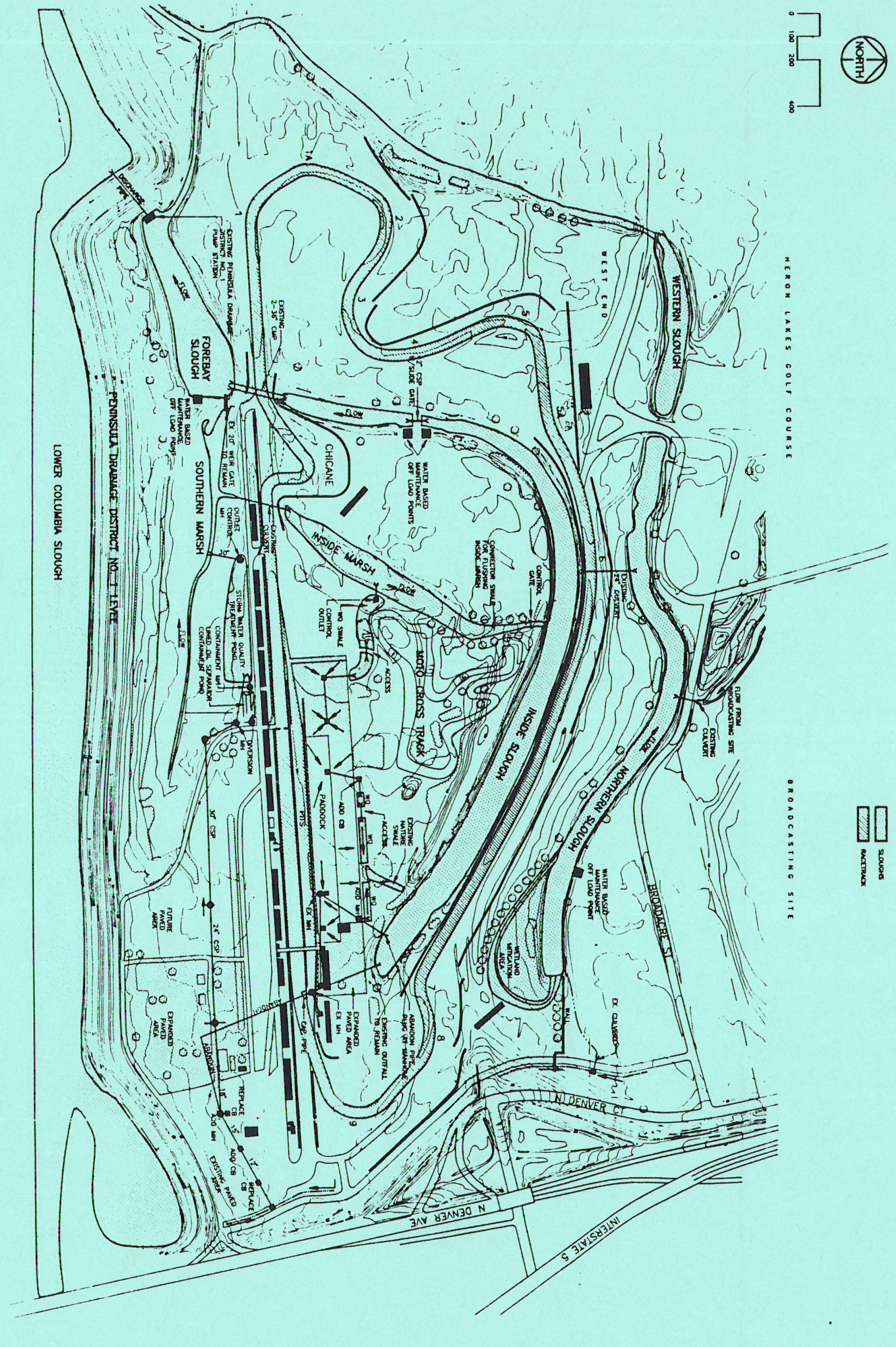


OAKLEY ENGINEERING, INC.
1991 N JANTZEN #M38 PORTLAND, OR 97217
PHONE (503)289-7411 FAX (503)289-7656

EXHIBIT 8

WATER QUALITY AND DRAINAGE

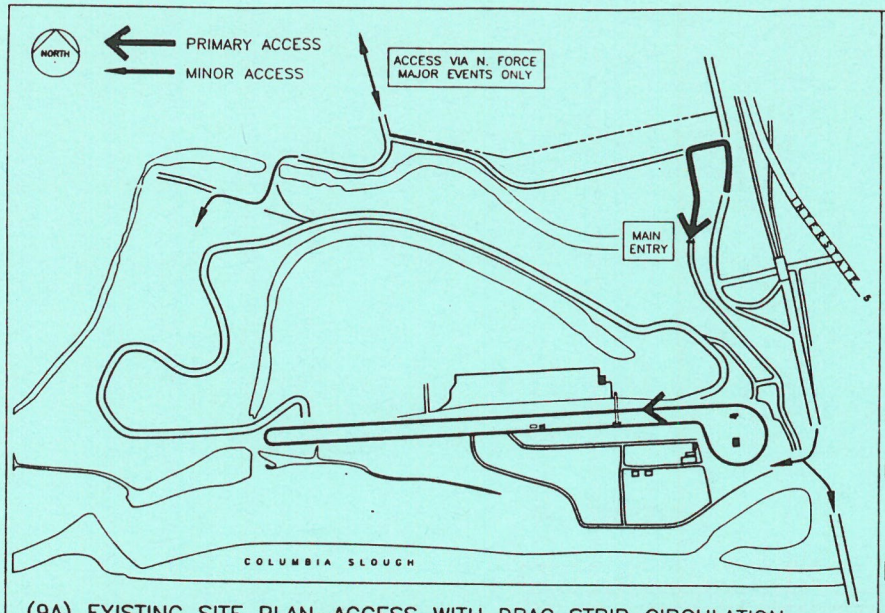
PORTLAND INTERNATIONAL RACEWAY

MITCHELL NELSON WELBORN REIMANN PARTNERSHIP
PLANNERS ENGINEERS LANDSCAPE ARCHITECTS
71 SW OAK ST PORTLAND, OR 97204 TEL 503/225-0822 FAX 503/273-8353
7156 SW VARNS PORTLAND, OR 97223 TEL 503/624-5700 FAX 503/624-5760

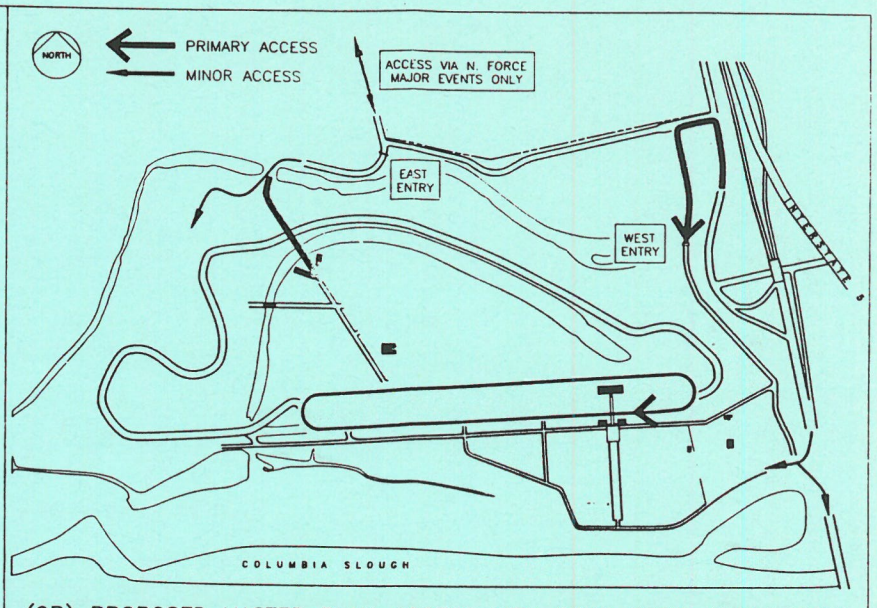
REVISIONS		
NO.	DATE	BY

JOB. NO. 1119

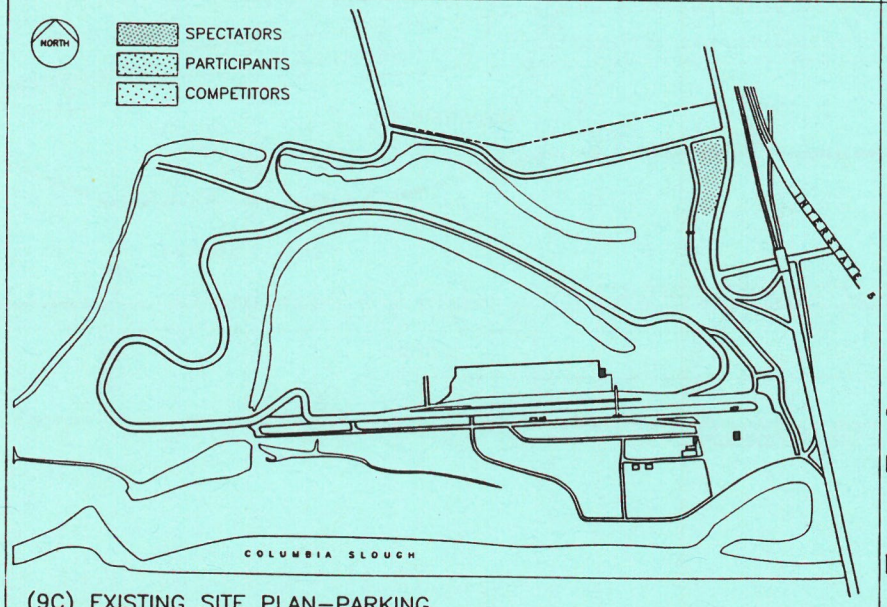
		DATE
DESIGNED BY	D OAKLEY	6/92
DRAWN BY	J RIGGS	5/92
CHECKED BY	D OAKLEY	5/92



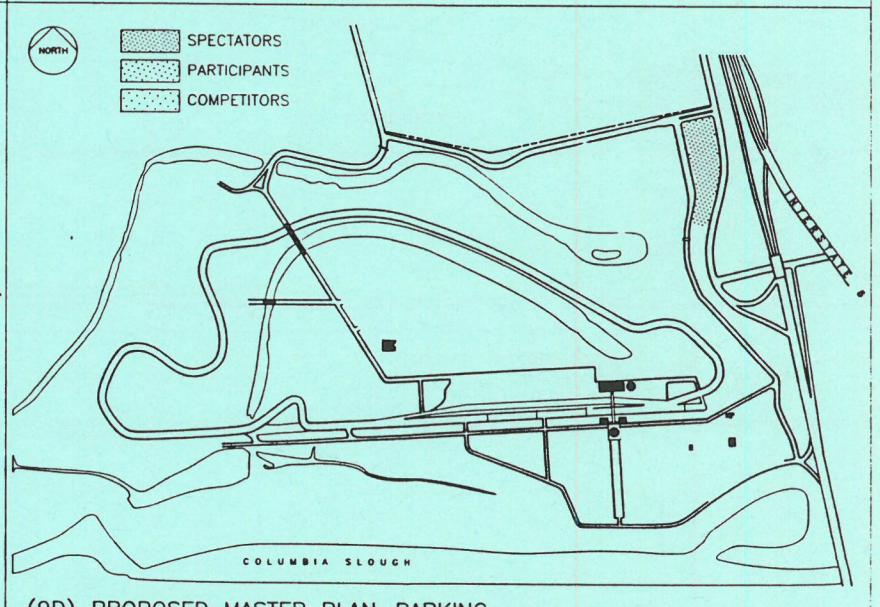
(9A) EXISTING SITE PLAN–ACCESS WITH DRAG STRIP CIRCULATION



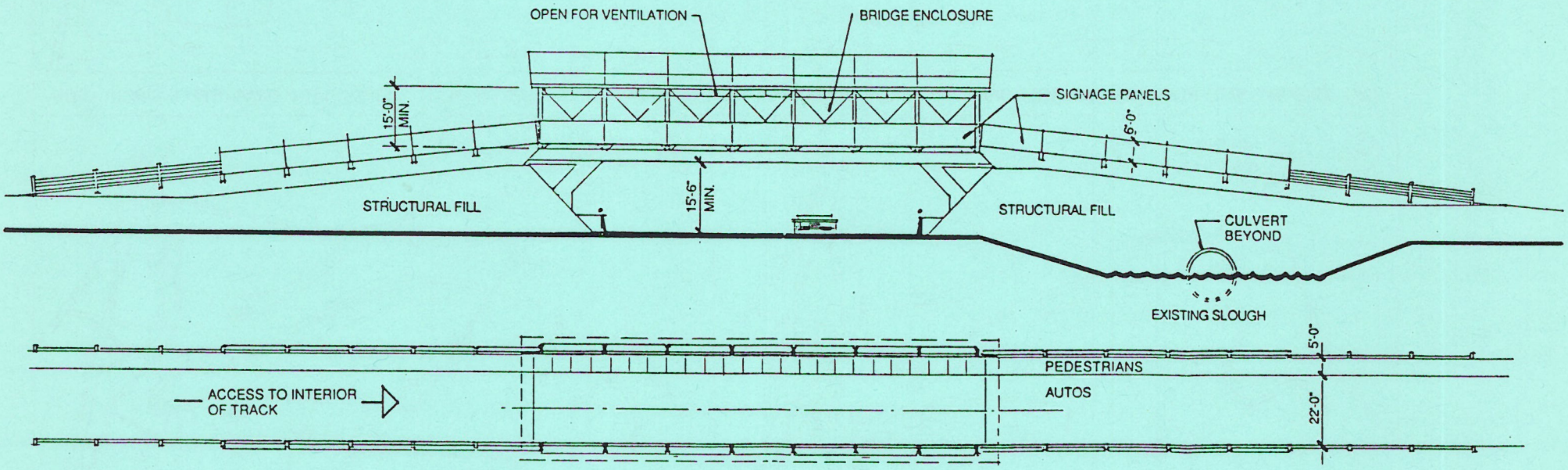
(9B) PROPOSED MASTER PLAN–ACCESS WITH DRAG STRIP CIRCULATION



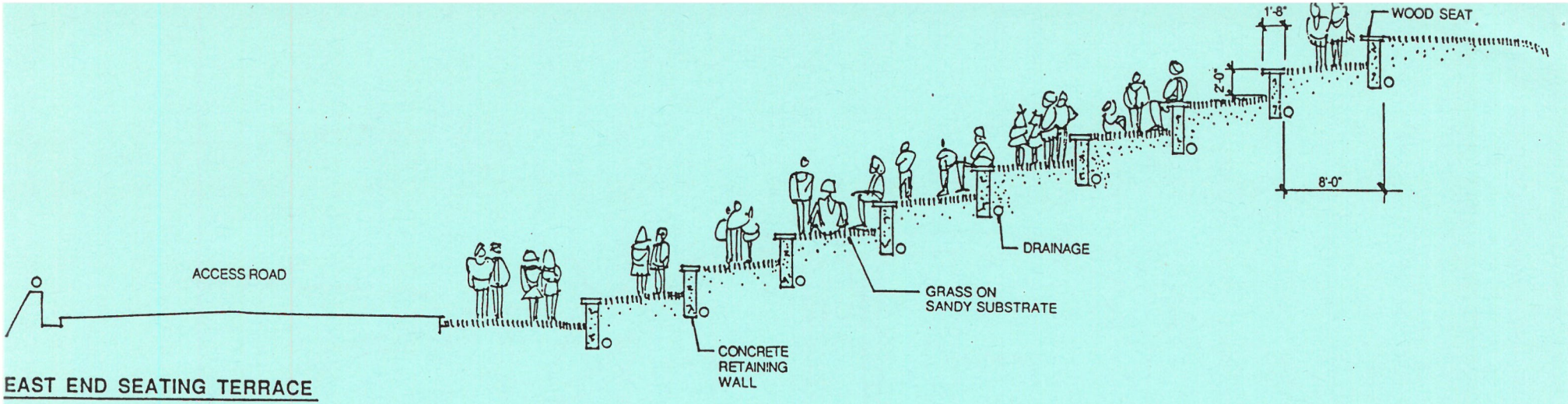
(9C) EXISTING SITE PLAN–PARKING



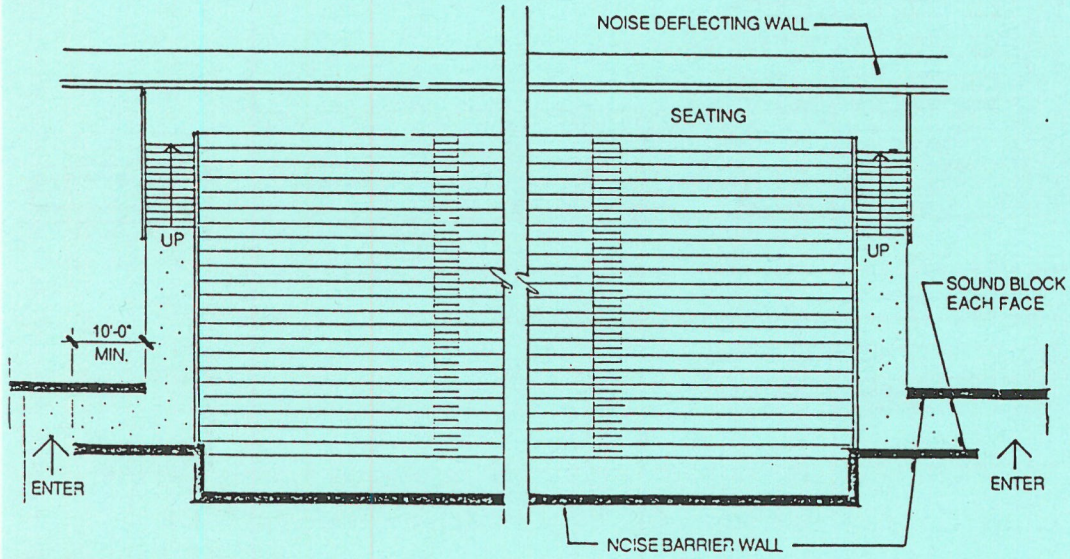
(9D) PROPOSED MASTER PLAN–PARKING



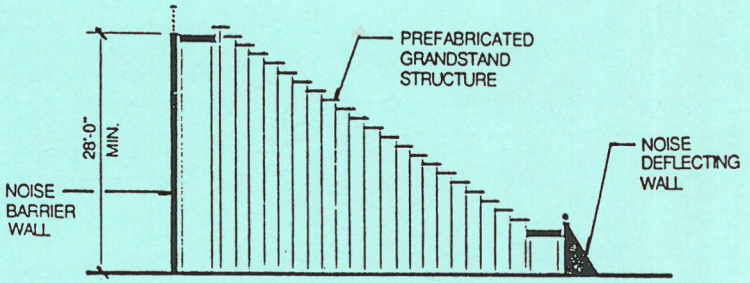
AUTO & PEDESTRIAN BRIDGE - NORTH END



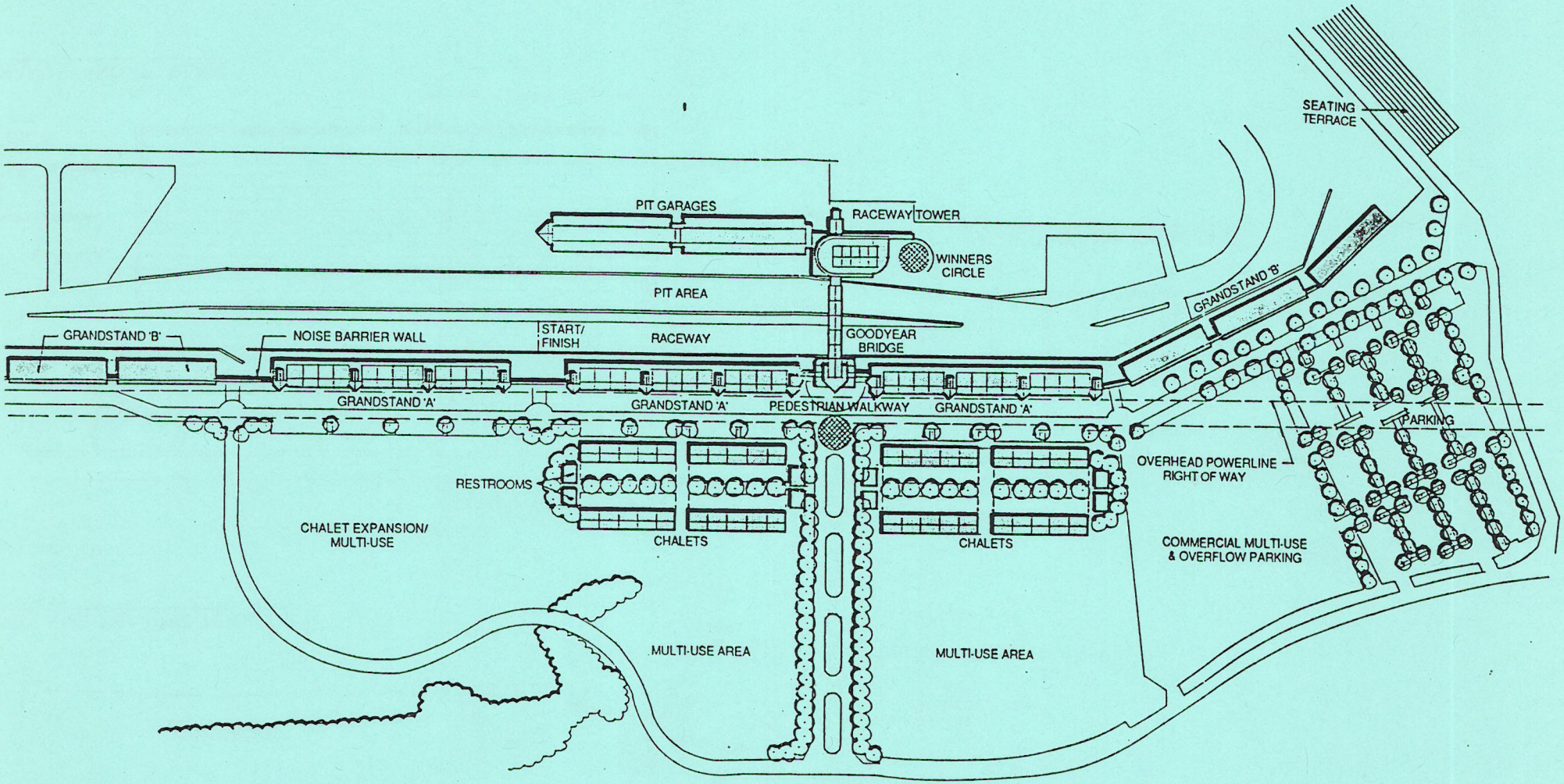
EAST END SEATING TERRACE



GRANDSTAND 'B' PLAN



GRANDSTAND 'B' SECTION



SITE PLAN - SOUTH END DEVELOPMENT

FEET 0 50 100 200

N

DRAFT

PORTLAND INTERNATIONAL RACEWAY MASTER PLAN

FACILITIES PROGRAM SUMMARY

Racing Operations

- P.I.R. Offices
- Timing and Scoring
- Starters Tower
- Pit Garages
- Moto-Cross Control Tower
- F.I. Bank Tower

Spectator Facilities

- Hospitality Suites
- Sponsor Chalets
- Spectator Grandstands
- Concessions
- Public Toilets

Commercial Operations

- Pittaresi Motor Sports
- Commercial Garages and Shops

Service Facilities

- Caretaker's Residence
- Equipment Secure Storage
- Compressor Room/Maintenance Shop

PORTLAND INTERNATIONAL RACEWAY MASTER PLAN

FACILITIES PROGRAM

Racing Operations

Timing/Scoring Building

A. Location
   1. Position at start/finish line is most desirable.
   2. Locate on outside of track for best overall visibility.

B. Form
   1. Form should maximize visual access to track from turn 10 to turn 1.
   2. Three to four stories, and of sufficient floor area to allow main timing and scoring functions to occupy one floor.
   3. Sufficient height to allow unobstructed views from a majority of the spaces.

C. Functions
   1. Timing/Scoring and Results:
      a. Top floor or near top.
      b. Two main sections - manual timing and computer timing.
      c. Maximize windows on front and sides.
   2. Hospitality Suites:
      a. Kitchen and toilet facilities.
      b. Access to roof deck.
      c. Seating and tables.
   3. Media:
      a. Second floor.
   4. Storage, Mechanical, Office:
      a. Ground floor.
   5. Other Requirements:
      a. Elevator for H.C. access.
      b. Sound attenuating materials.
      c. Kitchen and restroom facilities on each floor.

Starter's Tower

A. Location
   1. Present location is desirable.

B. Form
   1. Large enough for 3 people plus equipment.
   2. Cover should not interfere with flagging.

P.I.R. Offices

A. Location
   1. Near track.
   2. Central to other facilities and visible on approach.
   3. Possibly incorporated into Timing/Scoring Tower.

B. Form
   1. Clearly identifiable to public.
   2. Visual access to public entry, race track, and grounds.

C. Function
   1. Entry/reception.
   2. Manager's office.
   3. Coffee/kitchenette area.
   4. Men's and women's restrooms.
   5. Storage.
   6. Conference room.

Pit Garages

A. Location
   1. North of main straightaway.
   2. Accessible from track and _____ service road.

B. Form
   1. Simple, repetitive single span bays.
   2. Garage doors facing pre-grid area.
   3. Utilize roof top for spectator seating or T.V. camera use.

C. Function
   1. Service and prep for racing vehicles.
   2. Temporary storage for service equipment.
   3. Utilities to each bay - water, air, electricity.
   4. Possible use of roof tops for spectator or T.V. access.

Moto-Cross Control Tower

A. Location
   1. Present location is satisfactory.

B. Form
   1. Main platform elevated for maximum visibility of track.
   2. Weathertight enclosure.
   3. Anchor and landmark for moto-cross track.

C. Function
   1. Space below main platform used for general storage and mechanical.
   2. Counter space for record keeping.
   3. Stair access to main platform.
   4. Public address system.
   5. Operable windows for flagging.
   6. Winner's circle nearby.

Spectator Facilities

Sponsor Chalets

A. Location
   1. South of main straightaway, in the pedestrian zone.
   2. Central to spectator facilities and services.
   3. Adjacent to greenbelt and park areas.

B. Form
   1. Semi-permanent facilities.
   2. One-story, open-air but covered.
   3. Repetitive, flexible bays.
   4. Light frame structure with demountable canvas or fabric walls.
   5. Provide definition and edge to pedestrian zone.

C. Function
   1. Maximize flexibility of size, use and function.
   2. Improve the efficiency of operations.
   3. Patio spaces ?enfronting? the greenbelt to the south.
   4. Food preparation and disposal.
   5. Pedestrian access but also control.
   6. Views towards track.
   7. Signage and identification.
   8. Utilities to each chalet.

<u>Spectator Grandstands</u>

A. Location
   1. Maximize potential for grandstand locations.
   2. Locate grandstands along clear circulation paths.
   3. Utilize existing and planned berm areas.

B. Form
   1. Higher density at straightaway near spectator facilities and services - pedestrian zone.
   2. Design grandstands to provide noise control where useful.
   3. Grandstands above garages or commercial enterprises will increase density, improve views and assist with noise control.
   4. Major element of raceway scene, form can help define the image and character of the raceway.
   5. Variety of sizes and types to fit location and seat price.

C. Function
   1. Logical, clear circulation sytem.
   2. Spectator safety.
   3. H.C. access.
   4. Durable materials.
   5. Possibility of some covered seating.
   6. Specialized design at bermed areas.
   7. Available and positioned for non-racing events such as concerts, etc.

Concessions

A. Location
   1. Main pedestrian zone.
   2. CART paddock.
   3. Moto-cross area.
   4. Along main pathways and near destination points.

B. Form
   1. Easily identifiable.
   2. One-story.
   3. Adjacent covered seating.

C. Function
   1. Utilities to each stand.
   2. All counter areas, closeable during non-business hours.
   3. Cold, warm and standard storage space.
   4. Maximize flexibility of use for different vendors.

Public Toilets

A. Location
   1. Adjacent to pedestrian paths.
   2. Nearby concession areas, grandstands and chalets.

B. Form
   1. Identifiable but not prominent.
   2. Single-story.

C. Function
   1. Available for non-racing events.
   2. Efficient circulation - separate entry and exit.
   3. Durable, cleanable materials.
   4. Handicap accessible.
   5. Sense of privacy from major public zones.
   6. Energy efficient design.
   7. Combine with grounds maintenance, garbage collection functions.

Commercial Operations

Commercial Shops/Garages

A. Location
   1. Near or integrated within the pedestrian zone.

B. Form
   1. Single-story, high-ceiling spaces.
   2. Repetitive, flexible bays.
   3. Could function as a base structure for grandstands or hospitality suites.
   4. Large opening at one end for garage doors or storefront.

C. Function
   1. Flexibility of use, infill.
   2. Utilities to each bay.
   3. Fireproof construction.
   4. Access to service area.
   5. Long- or short-term rental.

Pittaresi Motor Sports

A. Location
   1. Near main entrance to track facility.
   2. Adjacent or part of track offices.

B. Form
   1. Main building.
   2. Vehicle/equipment maintenance garage.
   3. Fenced car storage/maintenance yard.
   4. Training course.
   5. Adjacent paved parking.

C. Function

1.	Office space	300-350 sq.ft.
2.	Entry/reception	200-250 sq.ft.
3.	Classroom	200-250 sq.ft.
4.	Shower/locker room	150 sq.ft.
5.	Could share facilities with P.I.R. offices	

Service Facilities

Caretaker's Residence

A. Location
   1. Near main entrance to track facilities.
   2. Visual control of grounds.
   3. Remote from main public/pedestrian zone.

B. Form
   1. Small house or trailer is adequate.
   2. Adjacent private yard and storage.
   3. Could have a public front but mostly private and inconspicuous.

C. Function
   1. 750 - 100 S.F.
   2. Small office area.

Equipment Secure Storage

A. Location
   1. Near caretaker's house.
   2. Remote from main public/pedestrian zone.
   3. Adjacent to service road.

B. Form
   1. Inconspicuous, fenced and screened with plantings.
   2. Large flat area with paving or prepared surface.

C. Function
   1. Storage of miscellaneous vehicles and equipment.
   2. Some enclosed as covered storage.
   3. High fence and security features.
   4. Vehicle and man gates.
   5. Water and fire protection available.

Compressor Room/Maintenance Shop

A. Location
   1. Near caretaker's house and storage yard.
   2. Adjacent to service drive.

B. Form
   1. Inconspicuous, simple structure.

C. Function
   1. Compressor room.
   2. Grounds maintenance shop.
   3. Secure storage for equipment and supplies.
   4. Telephone.