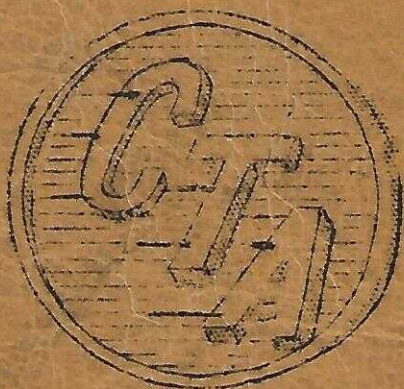


The  
MILWAUKEE AVE. SUBWAY  
DESCRIPTION AND OPERATING  
PROCEDURE



TEMPORARY EDITION

FEBRUARY

1951



## FORWARD

This manual was prepared for Chicago Transit Authority personnel whose work requires that they be familiar with various phases of the Milwaukee Ave. Subway.

The manual combines a description of the subway with standard procedure for subway operation. It is of pocket size and can be carried conveniently for ready reference.

An index lists alphabetically the subjects included in the manual.

These subjects are divided into paragraphs. The subjects are numbered and the paragraphs are lettered.

To find a specific item, look the item up in the alphabetical list which will give the subject number and paragraph letter.

Prepared by

Chicago Transit Authority

Training Department

AR-27



## ANNOUNCEMENTS

### TRAIN ANNOUNCEMENTS

Conductors and Platform Men must announce repeatedly, and clearly and distinctly, the Destination and Class of trains to passengers waiting on station platforms.

During the hours when "A" and "B" trains operate, the announcements must be as follows:  
(SOUTHBOUND) "This is a Loop "A" (or "B") train.  
(NORTHBOUND) "This is a Logan "A" (or "B") train."

During the hours when local trains operate, the announcements must be as follows:  
(SOUTHBOUND) "This is a Loop train making all stops."  
(NORTHBOUND) "This is a Logan train making all stops"

### STATION ANNOUNCEMENTS

Station announcements must be made clearly and distinctly twice in each car adjacent to the Conductor's operating position, once when leaving a station and again when approaching the next station. In addition to the regular station announcements, "A" and "B" service requires that special announcements be added at "All-Stop" stations preceding an express run.

During the hours of "A" and "B" service, the following station announcements must be made by Conductors and by Platform Men when they are present.

### "A" TRAINS

#### SOUTHBOUND

#### NORTHBOUND

(AT LOGAN SQUARE)  
"This train does not stop at WESTERN."

"JACKSON. Change for State St. Subway."

"CALIFORNIA."

"MONROE."

"NORTH and DAMEN. Change for Humboldt Park trains and CHICAGO and OGDEN Station."

"WASHINGTON. Change for State St. Subway."

"DIVISION and ASHLAND"

"LAKE ST. TRANSFER. Change for Elevated trains and CHICAGO and OGDEN Station."

"GRAND and HALSTED."

"GRAND and HALSTED."

"LAKE ST. TRANSFER. Change for Elevated trains."

"DIVISION and ASHLAND"

"WASHINGTON. Change for State St. Subway."

"NORTH and DAMEN. Change for Humboldt Park trains and WESTERN AVE."

"MONROE."

"CALIFORNIA."

"JACKSON. Change for State St. Subway."

"LOGAN SQUARE."

"CONGRESS ST. TERMINAL."

### "B" TRAINS

#### SOUTHBOUND

#### NORTHBOUND

(AT LOGAN SQUARE)  
"This train does not stop at CALIFORNIA."

"JACKSON. Change for State St. Subway."

"WESTERN."

"MONROE."

"NORTH and DAMEN. Change for Humboldt Park trains and DIVISION and ASHLAND Station and GRAND and HALSTED Station."

"WASHINGTON. Change for State St. Subway."

"CHICAGO and OGDEN."

"LAKE ST. TRANSFER. Change for Elevated trains, GRAND and HALSTED Station, and DIVISION and ASHLAND Station."

"LAKE ST. TRANSFER. Change for Elevated trains."

"CHICAGO and OGDEN."

"WASHINGTON. Change for State St. Subway."

"NORTH and DAMEN. Change for Humboldt Park trains and CALIFORNIA AVE."

"MONROE."

"WESTERN."

"JACKSON. Change for State St. Subway."

"LOGAN SQUARE."

"CONGRESS ST. TERMINAL."



## GUIDE TO THE LOGAN SQUARE SERVICE

Rush hours, Monday through Friday:

"A" TRAINS SERVE "A" STATIONS AND "ALL-STOP" STATIONS

"B" TRAINS SERVE "B" STATIONS AND "ALL-STOP" STATIONS

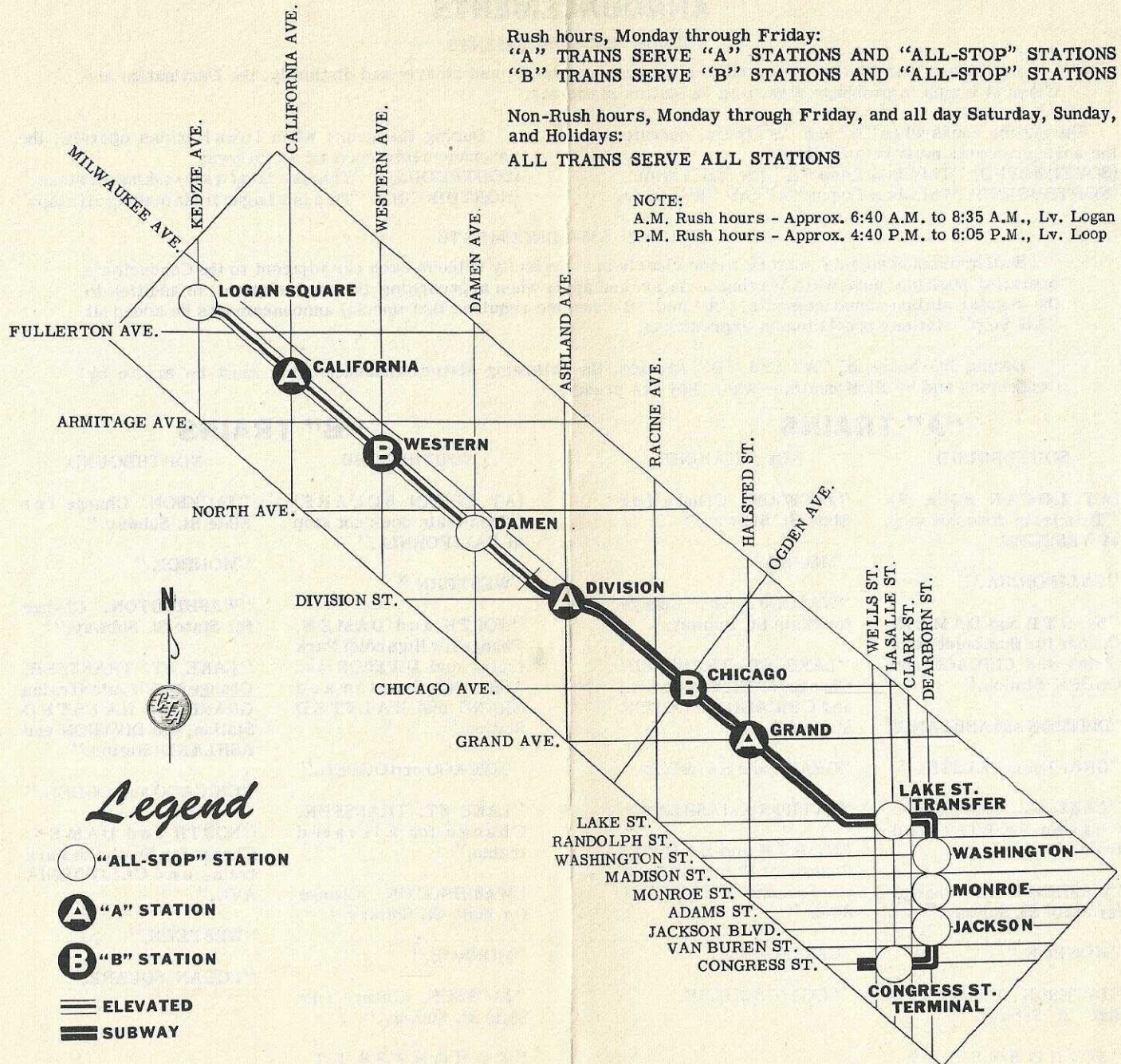
Non-Rush hours, Monday through Friday, and all day Saturday, Sunday, and Holidays:

ALL TRAINS SERVE ALL STATIONS

### NOTE:

A.M. Rush hours - Approx. 6:40 A.M. to 8:35 A.M., Lv. Logan

P.M. Rush hours - Approx. 4:40 P.M. to 6:05 P.M., Lv. Loop





## 1. ROUTE

a. The Logan Square branch of the West Side Section, Rapid Transit Division, assumes a new route south of Evergreen Junction where an incline connects the Milwaukee Ave. Subway with the elevated structure. That portion of the Logan Square route south of Evergreen Junction is discontinued.

b. At the incline, the subway is on a direct line with the elevated structure. After entering the ground, the subway curves slightly east to run directly under Milwaukee Avenue. The subway continues southeast under Milwaukee Avenue to Lake Street; east under Lake Street to Dearborn Street; south under Dearborn Street to Congress Street; west under Congress Street to the west bank of the Chicago River where it terminates. The over-all length of the subway from the portal to the point of termination is 3.99 miles.

## 2. INCLINE

a. The incline is a steel structure from the point where it joins the elevated structure to a point 14 feet above street level. The remainder of the incline down to the subway portal is a concrete walled open cut structure.



### 3. TUBES

a. In general, the subway route consists of two single track tubes - one tube for the northbound track, (Track "C") and one tube for the southbound track, (Track "D"). The tubes are constructed of reinforced concrete and are separate structures, except at stations, crossovers, and for a short distance beyond the portal. At these locations the two tubes merge to form one large chamber.

b. Access openings are located at intervals to permit passage from one tube to the other.

c. From the portal, and extending approximately a quarter of a mile, the tubes are rectangular in shape; from this point to a point east of the river crossing at Lake St., the tubes are "horse shoe" shaped; in the remainder of the subway the tubes are circular. The tubes vary in size from minimum dimensions on straight track to increased dimensions at curves where added width for car clearance is needed, and at stations and crossovers where added height and width are needed.

d. The tubes west of the Congress St. Terminal and extending to the west bank of the Chicago River are considered stub tubes. It is presently planned that these tubes will extend westward to join the proposed Congress St. transit development. A portion of these tubes immediately west of the terminal are equipped with



track and can be used for the storage of trains.

- e. Stub tubes are also located under Lake St. at Milwaukee Avenue. These tubes extend a short distance westward but contain no track. They are intended to form a connection between the Milwaukee Ave. Subway and the Rapid Transit Lake St. route.

#### 4. CONNECTING PASSAGEWAYS

- a. There are four connecting passageways between the Milwaukee Ave. Subway and the State St. Subway. Two of the passageways are known as Pedestrian Passageways and the other two as Transfer Passageways.

- b. The Pedestrian Passageways are in the unpaid area at mezzanine level. They permit pedestrians to walk under cover between Dearborn St. and State St. One is located under Court Pl. and the other under Quincy St.

The Transfer Passageways are in the paid area below platform level. They permit passengers to make direct transfer between the Milwaukee Ave. and State St. subways without use of a paper transfer. One is located under Washington St. and the other under Jackson Blvd.

#### 5. EMERGENCY WALKWAYS

- a. An emergency walkway extends the length of each tube, except at stations where the station platforms serve as the walkway.



These emergency walkways are at car floor level and vary in width from 2 feet 2 inches to 7 feet. They are equipped with a wooden hand rail and connect to either a station platform or to an emergency exit. The emergency walkways at car floor level terminate east of the Congress St. crossover. At this point, a steel stairway leads to an overhead walkway which extends over the crossover and connects to the Congress St. Terminal.

b. In addition to the emergency walkway, there is a maintenance workers' walkway at rail level along the wall of each tube. Niches for use of maintenance workers when trains are passing are located at frequent intervals along this walk.

## 6. EMERGENCY EXITS

a. There are emergency exits located at intervals throughout the subway. They are identified by an illuminated "EXIT" sign.

b. Each of these emergency exits contains a stairway extending from the emergency walkway to street level. At the top of the stairway is either a vertical door opening from a small structure, or a counter-balanced trap door opening through the sidewalk.

c. To open the vertical doors from the inside, push on the horizontal bar extending across the door. To open the counter-balanced trap doors from the inside, push on the horizontal bar. This bar releases



a catch and the door automatically swings open.

d. Emergency exits also provide a means for entering the subway in emergencies. To open the vertical doors from the outside requires a special key. To open the counter-balanced trap doors from the outside requires a fire hydrant wrench.

## 7. EMERGENCY EXIT DIRECTION SIGNS

a. Signs indicating the direction of the nearest emergency exits are placed at eye level on the emergency walkway side of each tube. They are spaced at 200 foot intervals throughout the subway, except at station platforms. They have the word "EXIT" and two arrows, one pointing left and one pointing right, and show the distance in feet to the nearest exits in both directions.

## 8. GRADES

a. Major grades within the subway are a result of the connection of the subway to the elevated structure, the Lake St. river crossing, and the Congress St. river crossing.

b. A chart on the following page shows the locations of major grades.



Location	MAJOR GRADES	
	Southbound Track	Northbound Track
Incline Approach (Evergreen St.)	3.0% down- grade	3.0% upgrade
South of Division Station	2.0% down- grade	2.0% upgrade
West of Lake St. River Crossing	2.9% down- grade	2.07% upgrade
East of Lake St. River Crossing	3.0% up- grade	3.0% down- grade
East of Congress St. Terminal	2.02% down- grade	1.83% upgrade
West of Congress St. Terminal	3.0% down- grade	3.0% upgrade

c. In addition to the major grades, there is a slight alternate grading for drainage purposes. These grades average 0.3% and occur throughout the subway except at stations.

## 9. CURVES

a. At the approach to the major curves in the Milwaukee Ave. Subway, speed boards, indicating the maximum speed, are installed. The posted speed must not be exceeded.

b. At each end of the Division station platform, there is a slight curve as the subway swerves to go under Milwaukee Ave.



These curves are posted for 30 miles per hour.

c. At Lake and Milwaukee, the curves are on a grade and a grade timing speed of 25 miles per hour is posted.

d. At Lake and Dearborn, the curves are posted for a speed of 20 miles per hour.

e. The curves at Dearborn and Congress are on a grade and are posted for 20 miles per hour.

## 10. STATIONS

a. Although there are eleven stations, there are only eight train stops. This is because trains make only three stops along the continuous platform that serves the six closely-spaced stations under Dearborn St.

b. Stations throughout the subway are named for certain streets which they serve. The three stations under Milwaukee Ave. are named for the east-west street of the three-street intersection under which each is located.

c. Lake St. Transfer is so named because it is located under Lake St. and is the only station at which transfer is made from Subway to Elevated and from Elevated to Subway.

d. The six stations under Dearborn St. are named for the two streets between which each is located.



e. Congress St. Terminal is so named because it is located under Congress St. and is the south terminal of the route.

Station Names, Train Stops, Color Scheme at each Train Stop, and location on Route are listed below.

<u>STATION NAME</u>	<u>*TRAIN STOP</u>	<u>**COLOR LOCATED UNDER</u>
DIVISION	DIVISION and ASHLAND	(Blue)
CHICAGO	CHICAGO and OGDEN	(Red)
GRAND	GRAND and HALSTED	(Green)
LAKE ST. TRANSFER	LAKE ST. TRANSFER	(Brown)
RANDOLPH-WASHINGTON	WASHINGTON	(Blue)
WASHINGTON-MADISON		
MADISON-MONROE	MONROE	(Red)
MONROE-ADAMS		
ADAMS-JACKSON	JACKSON	(Green)
JACKSON-VAN BUREN		

CONGRESS ST. TERMINAL CONGRESS ST. TERMINAL (Brown) CONGRESS ST.

\*The names of the train stops as listed above are used in making announcements.

\*\*The color at each train stop is for identification purposes.

Column posts, station name signs, and the tile trim are in the color that identifies the station.



## 11. STATION ENTRANCES

a. Station entrances are at street level and are at, or short distances from, the street intersections which locate the stations. Each station is served by from two to six entrances. Each entrance is identified by an ornamental post on which is an illuminated sign reading "SUBWAY." A flight of concrete stairs with non-skid treads leads down from the sidewalk to mezzanine level.

## 12. MEZZANINES

a. Mezzanines are located below street level and contain the ticket agents' booths. For passenger convenience, they also contain concession stands, parcel checking lockers, telephones, drinking fountains, and toilets. Except for certain concession booths, these conveniences are accessible only after a passenger has paid a fare.

b. Appropriate signs on the mezzanine walls indicate the streets to which the stairways lead.

## 13. TURNSTILES

a. Turnstiles are located on the mezzanine level and are the means for entrance to, or exit from, the paid area. The entrance turnstiles adjacent to the ticket agents' booths are known as "cashier-operated" turnstiles and are



controlled by a foot pedal located in the booth. The other entrance turnstiles are known as "coin-operated" turnstiles, and require the insertion of a token to permit passage of one customer.

b. All entrance turnstiles are of the low type and are equipped with a register that records the number of passengers using the turnstile.

c. Exit turnstiles are of both the low and high type. Low exit turnstiles are used where they are under surveillance of ticket agents. High exit turnstiles are used where they are not under the surveillance of ticket agents, and they prevent persons from gaining entrance to the paid area without payment of a fare.

d. Between the entrance turnstiles and the low type exit turnstiles is a stationary railing and a swinging gate, completing the separation of the paid area from the unpaid area. The gate is normally locked and may be used in emergency and to provide passage for especially large groups.

#### 14. ESCALATORS

a. Escalators which operate between the mezzanine and the station platform are located at each station except Division Station. At Division Station the distance between the mezzanine and the station platform is short and a stairway is provided in place of an escalator.

b. Overhead signs reading "ESCALATOR"



identify their location. One sign is located in the mezzanine and one is located on the platform. When the sign in the mezzanine is illuminated, it indicates that the escalator is operating down to the platform. When the sign on the platform is illuminated, it indicates that the escalator is operating up to the mezzanine.

c. In most cases the escalators operate up, but they are of the reversible type and can be operated in either direction.

A panel containing

d. key-operated switches for starting, stopping, and reversing each escalator, and a glass-covered emergency stop push-button is located near the top and bottom of each escalator. An emergency stop push-button is also located in each ticket agents' booth.

e. There are two types of escalators in use. One type is in use at Congress St. Terminal, and the other type at all other stations.

f. To operate the escalators at Congress St. Terminal requires a special key. To start these escalators "up," insert the key in the "up" switch and turn. To start these escalators "down", insert the key in the down switch and turn. To stop, insert the key in the switch that controls the direction in which it is operating and turn.

g. To operate escalators at all stations except Congress St. Terminal requires a special key. To start an escalator running upward, insert the key in the right-hand



switch, turn counter-clockwise and hold until the "Escalator" sign on the platform lights.

h. To make the escalator run downward; insert the key in the right-hand switch, turn clockwise, and hold until the "Escalator" sign in the mezzanine lights.

i. To stop the escalator, insert the key in the left-hand switch, turn in either direction, and hold until the escalator stops.

j. To stop an escalator in an emergency, break the glass covering the emergency switch with the small attached hammer or steel rod and press the red push-button.

k. Failure on the part of any escalator must be reported at once. Call the Radio Dispatcher (Dial 2345), ask for the Power Supervisor and report the failure to him.

l. When reporting accidents on escalators, employes must report location of the escalator and state whether escalator was ascending or descending or not operating at the time of the occurrence.

## 15. STATION PLATFORMS

a. Station platforms are all of the island type and are connected with mezzanines by stairways or escalators or both. The continuous platform under Dearborn St. is 2,471 feet in length. The other platforms vary in length from 498 feet to 583 feet, and each can berth a ten-car train. The width of platforms in the downtown area



is 22 feet, and 18 feet at all other locations.

b. Platform floors are of a special non-slip composition with a cement strip along each edge.

c. Station-name signs, train-direction signs, and other directional signs as are necessary for the individual stations are mounted on the platform columns.

## 16. VENTILATING SYSTEM

a. The ventilating system has a three-fold purpose. It maintains a supply of fresh air in the subway by drawing in outside air and expelling stale air. It regulates temperature by circulating warm air during the winter months and disposing of warm air during the summer months. It reduces dampness and condensation, thereby minimizing their damaging effects on mechanical and electrical equipment.

b. Ventilation is dependent upon the circulation of air, and in the major portion of the subway, this circulation is accomplished by the movement of trains within the tubes. The cross sectional area of a train is about half that of the tube which causes a moving train to exert a piston-like action, pushing a large volume of air ahead of it and drawing a large volume of air in its wake.

c. To take full advantage of this piston action, ventilating shafts are installed through which stale air in front of a train



is forced out and through which fresh air is drawn in by the wake of a train. These ventilating shafts are spaced at approximately 450 foot intervals. They are hollow concrete cylinders that extend from the tube to the sidewalk. A steel grating covers the sidewalk opening.

d. Louvers within the ventilating shafts can be opened or closed to control the amount of air expelled or admitted.

e. Blast relieving shafts are located just ahead of and just beyond each station platform. These shafts are larger than the ordinary ventilating shafts, and in addition to providing ventilation, reduce the velocity of air at station platforms caused by arriving and departing trains.

f. Fans are installed throughout the subway to circulate air in the event trains are stalled and cannot create circulation of air by piston action. When these fans are turned on, the louvers in the ventilating shafts are closed. The fans then draw air in through the stations and pull it through the tubes.

g. If smoke or fumes are present in the subway, certain fans can be reversed, thus drawing the smoke or fumes from the subway and expelling them to the outdoors.

h. The depth of the subway at the river crossings made it impractical to construct ventilating shafts which are necessary for ventilation by piston action. For this reason, a fan is installed at the river crossings to circulate air in the river crossing area.



i. At the continuous platform under Dearborn St., the increased cross sectional area of the tubes and the slower movement of trains reduce the circulation of air by piston action. Two reversible fans are installed in each of the six stations which can be operated in the event the piston action is insufficient to maintain proper ventilation. Thus each station under Dearborn St. is capable of operating a ventilating system of its own, independent of the main ventilating system.

## 17. FIRE PROTECTION

a. Fire protection was given careful consideration in the planning of the subway. Fireproof materials such as concrete, terra cotta, tile, and steel were used in its construction. Trains are of all-metal construction, and each car is equipped with a one-quart, Pyrene fire extinguisher. A fire extinguisher of this same type is located in each service room.

b. A two and a half gallon water hand pump fire extinguisher as well as standard Fire Department hose connections are located at each platform.

c. At river crossing area under Lake St., fire hose connections are located approximately every 300 feet and are tapped to a pipe line which runs to the top of the nearest emergency exits. By connecting the discharge hose of a Fire Department Pumping Truck to this pipe line water under high pressure is brought to these areas.



d. In the event of serious fire, Firemen can enter the subway through the emergency exits or by means of ladders located in ventilating shafts. The counter-balanced doors of emergency exits and the gratings over ventilating shafts are opened from the outside by use of a fire hydrant wrench.

e. Smoke and fumes can be drawn from any part of the subway and expelled to the outside by the ventilating fans.

## 18. DRAINAGE

a. Drains, spaced approximately 200 feet apart, are located in the trough between the rails and are connected to drainage pipes which run beneath the subway. These drainage pipes empty the water into sumps located at a low point midway between stations. The drainage water that collects in these sumps is then pumped out of the subway.

## 19. DRAINAGE PUMPS

a. Two electrically-driven drainage pumps, housed in pump rooms, are located at each sump. The purpose of the pumps is to raise the water from the sumps and discharge it into the city sewers which are above subway level. At the river crossings, the pumps discharge the water directly into the river.

b. The pumps are capable of pumping water far in excess of normal requirements. At the river crossings, each pump is



designed to deliver 1,500 gallons per minute; at the downtown area and at the portal, 750 gallons per minute each; and at all other locations, 500 gallons per minute each. A float arrangement automatically starts the pumps when the height of the water in the sumps reaches a certain level.

## 20. HIGH WATER ALARM

a. A high water alarm is provided at each pump room to give an alarm when the height of the water in the sump reaches the warning point. This alarm, actuated by a float in the sump, consists of two red lights and an electric bell mounted on the tube wall adjacent to the pump room. When the high water alarm is given, or when the electric power to the pumps fails, an indication is given in the Power Supervisor's office.

b. Any employee observing that the red lights are on and that the bell is ringing, or observing any unusual water conditions, must immediately call the Radio Dispatcher (Dial 2345) and ask for the Power Supervisor, reporting to him the location of the alarm.

## 21. PLUMBING FIXTURES

a. Plumbing fixtures, installed for necessary services, consist of drinking fountains and toilet facilities in mezzanines, sinks in the Porters' closets, and water taps and fire hose connections at platforms.



## 22. SEWAGE EJECTORS

a. Sewage ejectors are used to raise and discharge sewage into the city sewers which are located above the level of subway toilet facilities. The ejectors are mounted in pits behind toilet rooms. Each ejector is operated by a small air compressor which has automatic controls.

b. The failure of a sewage ejector to operate can be detected by one or more of the following indications:

1. Continuous operation of the air compressor;
2. "Blowing off" of the compressor safety valve;
3. Water backing up through the floor drains or plumbing fixtures.

c. If a sewage ejector fails to operate, the following precautionary measures must be taken:

1. Turn off the air compressor by means of the switch located on the outside of the control cabinet at the compressor;
2. Shut off the plumbing fixtures by means of the small valve located just ahead of the water meter;
3. Lock the toilet rooms; and
4. Call the Radio Dispatcher (Dial 2345) and ask for the Power Supervisor, reporting the failure to him.
5. Also report the failure to the Department of Way and Structures (Dial 88 415).



d. If the heaters in the sewage ejector rooms or the toilet rooms fail during freezing temperatures, the Power Supervisor and the Department of Way and Structures must be notified. Report as in 4. and 5. on preceding page.

### 23. VENTS

a. Vents from toilet rooms, sewage ejector rooms, and the station ventilating systems under Dearborn St. emerge at street level. They are attractively designed and form the ornamental sign posts that identify subway entrances. Air is expelled through the vents by means of a fan.

### 24. THE SIGNAL SYSTEM

a. An electro-pneumatic signal system extends from Damen Ave. to a point within the stub tubes 600 feet west of Congress St. Terminal. Between these two points the track is divided into sections, or blocks, with a signal located at the beginning of each block.

b. The length of a block is determined by the emergency braking distance of a train at the maximum speed permitted, plus an additional distance as a safety factor. Consequently, where high speeds are permitted, the blocks are long and trains are widely spaced. Where trains must operate slowly the blocks are short resulting in trains being more closely



spaced.

c. Basically, the block system works in this way: As a train enters each block, it automatically causes the signal aspect to change to "stop". The presence of the train in the block also causes the second signal behind to indicate "stop", and the third signal behind to indicate "caution". Thus a train is protected in the rear by at least three signals, the first two indicating "stop" and the third indicating "caution". Where it is necessary to give added rear end protection, the blocks are short and more than three signals to the rear display "stop" or "caution" indications.

d. Signals are of the color-light type, and basically they display aspects of "red", "yellow", or "green". In the subway, they are mounted on pedestals located to the right of the track governed; on the elevated structure they are mounted on masts attached to the structure at the right of the track governed.

e. Each signal has a number plate for identification purposes. In the subway these number plates are illuminated; on the structure they are not.

## 25. TRACK TRIPS

a. An Automatic Track Trip to enforce obedience to a stop indication operates in conjunction with each signal, except Repeater Signals, that indicates for the



normal direction of traffic. These track trips are located to the outside of the left running rail. When over-run in the tripping position, they contact the side track trip device on the first car of the train, causing the train to go into emergency braking.

## 26. TRACK TRIP MANUAL RELEASE

- a. A Track Trip Manual Release is provided on each signal associated with a track trip. When permissible, this device can be operated to lower a track trip, permitting a train to proceed past a signal that indicates "stop" without being tripped and without changing the "stop" indication. The Motorman must then proceed with caution, prepared to stop within vision.
- b. The Track Trip Manual Release is also used when a train over-runs a "stop" indication and is tripped. Report each such occurrence verbally to the Despatcher and in writing to the Trainmaster.
- c. To operate a Track Trip Manual Release, press forward on the small white lever projecting beneath the small square box suspended from the signal unit. Maintain pressure on the lever until the track trip lowers to clear position. Release the lever and inspect to see that the track trip remains in the lowered position. Proceed with caution, expecting to find a train in the block ahead, or a defect in the track or equipment.



d. When a Track Trip Manual Release fails to operate, the track trip must be lowered by foot pressure. Force the track trip down in the opposite direction to train travel, swing the hinged strap iron hook forward, and engage the arm in down position. After the train has cleared the track trip, the Motorman must not proceed until he has gone back and released the track trip to the tripping position.

e. Any Track Trip Manual Release found to be defective must be reported as soon as possible to the first Towerman, Supervisor, or other responsible employee, giving the signal number.

## 27. GRADE TIME SIGNALS

a. The signals on the descending grades at the incline and at the Chicago River crossing are controlled by time relays. The purpose of the time control is to limit the speed on these descending grades.

b. A sign with a large black "T" on a yellow background indicates the beginning of each grade time area. In addition, a sign with black numerals on a yellow background indicates the permissible speed within the area.

c. The signals in these areas normally indicate "stop", and they clear for a train only if the train is operated at, or below, the permissible speed, other conditions being proper. Operating faster than the permissible speed causes the train to arrive at a signal before the



relay has had time to change the signal from "stop" to "proceed".

d. Signals in grade time areas are equipped with a "Lunar White" aspect in addition to the other color aspects. "Lunar White" is never displayed alone, but always in conjunction with "yellow." This combination, "Yellow over Lunar White", indicates that the next signal beyond is "Red" but will clear if the train is operated at, or below, the permissible speed. The absence of "Lunar White" when "Yellow" is displayed indicates, "Proceed with caution prepared to stop at the next signal".

## 28. STATION TIME SIGNALS

a. The signals approaching, and at, stations are also controlled by time relays. The purpose of time controlled signals in these areas is to permit a train traveling at a safe speed to close in on a train which is in a station.

b. A sign with a large black "T" on a yellow background indicates the beginning of each Station Time area.

c. Signals within a Station Time area indicate "stop" when a train is standing in a station. A following train approaching at a safe speed operates time relays which clear the signals in succession as they are approached. Operating faster than a safe speed causes the train to arrive at a signal before the relay has had time to change the signal from "stop" to "proceed".



d. When approaching a signal indicating "stop", the Motorman must reduce the speed and prepare to stop if the signal does not clear.

## 29. AUTOMATIC BLOCK SIGNALS

a. Automatic Block Signals consist of a single unit normally having three lenses, Red, Yellow and Green. In Grade Time areas, the "Lunar White" unit is mounted below the signal unit.

b. Each signal has a number plate for identification purposes. "C" on the top line indicates that the signal is in the northbound tube and "D" indicates that the signal is in the southbound tube. On the elevated structure, the top line reads "LN1" or "LN2". The LN indicates Logan; the 1 indicates northbound track which is track 1; the 2 indicates the southbound track which is track 2. The number on the bottom line indicates the location of the signal.

c. Automatic Block Signals indicate for blocks, and for hand thrown switches. They are never controlled by the Towerman. They are known as "permissive" type signals which means that their "stop" indication must be obeyed, but after a train makes the stop, the Motorman operates the Track Trip Manual Release and proceeds with caution, prepared to stop within vision.

d. The color aspects of automatic block signals and their indications are as follows:



"RED" - Stop. (If signal does not change, operate the Track Trip Manual Release.)

"YELLOW over LUNAR WHITE" - Proceed with caution at allowable speed.

"YELLOW" - Proceed with caution, prepared to stop at the next signal. (No train in the first block ahead.)

"GREEN" - Proceed. (No train in the first and second blocks ahead.)

### 30. INTERLOCKING APPROACH SIGNALS

a. Interlocking Approach Signals serve the same purpose as Automatic Block Signals but are located at the approach to the LaSalle-Congress Interlocking Plant. In addition to being controlled automatically, they can be controlled from the tower of the interlocking plant. In appearance they are identical to the Automatic Block Signals except for an additional plate fastened to the track side of the unit which has a number corresponding to the number of the lever that controls the signal.

b. The color aspects and indications and the operating procedures for approaching and passing the signals are the same as for Automatic Block Signals.

### 31. INTERLOCKING HOME SIGNALS

a. Interlocking Home Signals consist of three units each. The top unit has three lenses and a number plate. An "X" on the top line of the number plate indicates that



it is controlled only by the Towerman.

n "A" on the bottom line indicates that it is the signal that governs moves over the main route. A number next to the "A" corresponds to the number of the lever that controls the signal.

b. The middle unit also has three lenses and a number plate. An "X" indicates that it is also controlled only by the Towerman. A "B" indicates that it is the signal that governs moves over the diverging route. A number next to the "B" corresponds to the number of the lever that controls the signal.

c. The bottom unit has one lens. This lens is normally dark, but may display "Yellow". This is known as the "call on" signal and is used only in conjunction with the "stop" indication. The Towerman displays the "call on" signal when the normal "proceed" indication cannot be given because of a defect in the tower or in the signal, or because a train is in the block ahead.

d. Interlocking Home Signals indicate for the switches at the LaSalle-Congress Interlocking Plant in addition to indicating for blocks. They are known as "absolute" type signals which means that their "stop" indication must be obeyed, and a train may not proceed past the signal until the signal indication changes to "Yellow" or "Green" or until the "call on" signal is given by the Towerman. If the "call on" signal is given, the Motorman operates the Track Trip Manual Release and proceeds with caution, prepared to stop within vision, expecting to find the track occupied or expecting to be



routed to another track against the normal direction of traffic.

e. In the event a train overruns an Interlocking Home Signal displaying the "stop" indication and is tripped, the train must not be moved after being stopped until the track trip is known to be clear and then only under the Towerman's instructions. The track trip can be cleared by an authorized employee by use of the track trip manual release or by forcing the trip down and hooking it in the clear position. This can be done only after being instructed by the Towerman to do so and then only after the Towerman has displayed the "call on" indication of the signal at which tripped.

f. The color aspects of Interlocking Home Signals and their indications are as follows:

"RED over RED" - Stop. (Stay stopped until further notice.)

"RED over RED over YELLOW" - Call on.  
(Operate Track Trip Manual Release and proceed with caution.)

"YELLOW over RED" - Proceed with caution on main route.

"RED over YELLOW" - Proceed with caution on diverging route.

"GREEN over RED" - Proceed on main route.

"RED over GREEN" - Proceed on diverging route.



### 32. INTERLOCKING DWARF SIGNALS

a. Interlocking Dwarf Signals consist of one unit which has three lenses, two are Red and a third is Yellow. It also has a number plate with an "X" indicating that it is controlled only by the Towerman. A number next to the "X" corresponds to the number of the lever in the tower that controls the signal.

b. These signals are located only at the LaSalle-Congress Interlocking Plant and are used to govern moves on the main route against the normal direction of traffic.

c. These signals do not have a track trip to enforce a "stop" indication.

d. The color aspects of Interlocking Dwarf Signals and their indications are as follows:

"RED over RED" - Stop.

"YELLOW" - Proceed with caution prepared to stop within vision.

### 33. REPEATER SIGNALS

a. Repeater Signals repeat, or duplicate, the indication displayed by the next main signal which is not visible because of track curvature.

b. Repeater Signals are located to the left of the track governed when facing in the normal direction of traffic. Each signal has a plate on which is lettered "REP" and the number of the signal for which it repeats. They do not have track trip devices to enforce "stop" indications.



**INTERLOCKING HOME SIGNALS**

- 1**: Three lenses, Red (R) in the bottom position.
- 2**: Three lenses, Red (R) in the bottom position.
- 3**: Three lenses, Yellow (Y) in the middle position.
- 4**: Three lenses, Red (R) in the bottom position.
- 5**: Three lenses, Green (G) in the top position.
- 6**: Three lenses, Red (R) in the bottom position.

**INTERLOCKING DWARF SIGNALS**

- 7**: Three lenses, Red (R) in the bottom position.
- 8**: Three lenses, Yellow (Y) in the middle position.

**AUTOMATIC AND INTERLOCKING APPROACH SIGNALS**

- 9**: Three lenses, Red (R) in the bottom position.
- 10**: Three lenses, Yellow (Y) in the middle position.
- 11**: Three lenses, Yellow (Y) in the middle position, and a Lunar White (LW) lens below the housing.
- 12**: Three lenses, Green (G) in the top position.

**Legend**

- G** GREEN
- Y** YELLOW
- R** RED
- LW** LUNAR WHITE

- 1** STOP.
- 2** STOP - OPERATE TRACK TRIP MANUAL RELEASE THEN PROCEED WITH CAUTION PREPARED TO STOP WITHIN VISION.
- 3** PROCEED WITH CAUTION ON MAIN ROUTE PREPARED TO STOP AT NEXT SIGNAL.
- 4** PROCEED WITH CAUTION ON DIVERGING ROUTE PREPARED TO STOP AT NEXT SIGNAL.
- 5** PROCEED ON MAIN ROUTE.
- 6** PROCEED ON DIVERGING ROUTE.
- 7** STOP.
- 8** PROCEED WITH CAUTION PREPARED TO STOP WITHIN VISION.
- 9** STOP - OPERATE TRACK TRIP MANUAL RELEASE THEN PROCEED WITH CAUTION PREPARED TO STOP WITHIN VISION.
- 10** PROCEED WITH CAUTION PREPARED TO STOP AT NEXT SIGNAL.
- 11** PROCEED WITH CAUTION AT ALLOWABLE SPEED.
- 12** PROCEED.



### 34. BACKING OF TRAINS

- a. The backing of trains is forbidden except on orders from a Supervisor and then only after proper protection has been furnished.
- b. Before a train can be backed, the Flagman must warn the next train by walking back to the first signal displaying a "GREEN" proceed indication, or back to the next train, whichever is closer.
- c. In Station Time Control areas or in Grade Time Control areas, the Flagman must go back to the first clear signal which precedes the "T" sign, or to the next train, whichever is closer.
- d. The side track trips over which a backing train will pass must be "hooked down" and then, after the move has been completed, they must be released.

### 35. ELECTRO-PNEUMATIC INTERLOCKING PLANT

- a. An electro-pneumatic interlocking plant, known as the LaSalle-Congress Interlocking Plant, is located at the Congress St. Terminal. The interlocking plant tower is located at the east end of the Congress St. Terminal platform. The tower contains a combined track diagram board and control panel. Illuminated indications on the track diagram board show the location and progression of trains thru the tower controlled area. Colored lights on the track diagram board indicate the setting of the tower controlled switches and signals. By use of control



buttons on the panel, the towerman selects the routes and sets the signals, thus controlling the movement of trains arriving at and leaving from the Congress St. Terminal thru the diamond crossover.

### 36. COMPRESSOR PLANT

a. A compressor plant is located in the tower structure at the Damen Ave. platform. The purpose of this plant is to furnish compressed air for operation of the track trips from Damen Ave. to Congress St. Terminal and for operation of the switches at the LaSalle-Congress Interlocking Plant.

b. The air compressor is driven by two electric motors. A governor operated by air pressure automatically controls the compressor motors thereby maintaining the proper pressure in the air line.

c. There is one pipe line in each tube, extending from Damen Ave. to Congress St. Terminal. These pipe lines are inter-connected with those in the State St. Subway by cross connections through the Jackson Blvd. and Washington St. transfer tunnels.

d. An air storage tank connected to the pipe line is located on the overhead emergency walkway at the east end of the Congress St. crossover. The purpose of the air storage tank is to store compressed air and thereby equalize the pressure throughout the pipe line.



### 37. ALTERNATING CURRENT SYSTEM

a. Two separate and distinct alternating current services are installed in the subway. One is the Normal A-C Service and is the preferred service; the other is the Emergency A-C Service, which automatically supplies current if the Normal A-C Service fails.

b. Alternating current of 110 volts supplies power for signal lights and track circuits. Alternating current of 120 volts supplies power for the general illumination of stations, platforms, and tubes. Alternating current of 208 volts supplies power for escalators, ventilating fans, and drainage pumps. Rectifiers convert A-C to D-C for signal relays.

### 38. DIRECT CURRENT SYSTEM

a. Direct current supplies the traction power and is of 600 volt potential. It is fed to the subway from the Franklin St., East Lake St., and Milwaukee Ave. substations. From these substations the direct current is carried to breaker rooms within the subway. From the breaker rooms the direct current is run through cables and is tapped to the trolley rail at regular intervals. One running rail in each tube is used as a traction power return and is connected to the negative return cables at regular intervals.

b. The entire traction power system is divided into six Feeder Sections. A list of Feeder Sections and the lengths of trolley rail each Feeder Section supplies are listed on the following page:



SECTION	TRACK	FROM	TO
305	"C"	End of track at Congress	East end of Lake St.
306	"D"	St. stub	Transfer Platform
307	"C"	East end of Lake St. Trans-	Thomas St. Breaker
308	"D"	fer Platform	Room
311	"C"	Thomas St. Breaker	Damen Junction
312	"D"	Room	

c. Those portions of Sections 305 and 306, which supply traction power from the end of track at Congress St. to a point west of Wells St., can be cut off by operating push buttons adjacent to emergency alarm boxes 38 and 39. When either of these push buttons are operated, the respective breakers which they control may be closed only by remote control from the Power Supervisor's office.

d. Auxiliary lights are also fed from 600 volt direct current.

### 39. LIGHTING

a. Fluorescent light fixtures illuminate the tubes, platforms, mezzanines, escalators, stairways, and station signs. The fluorescent lights in the tubes are spaced at 30 foot intervals and burn continuously. They are controlled from the Ticket Agents' booths. The lights at station platforms are closely spaced and are also controlled



from the Ticket Agents' booths.

b. Auxiliary incandescent lights, burning 5 in series on 600 volts direct current, are interspaced with the main lighting system throughout the subway and burn continuously, serving as emergency lights should the main lighting system fail.

c. Incandescent lights are used to illuminate service and maintenance rooms and emergency exit signs throughout the subway.

d. Floodlights are located from the portal to approximately 175 feet inside the subway. These lights are lighted only during the day and help Motormen adjust their eyes to the change from the brightness of daylight to the comparative darkness of the subway. The lighting of these interior floodlights is controlled by outdoor photoelectric cells which activate a switch turning on the floodlights when daylight has reached the proper intensity and turning them off when darkness falls.

#### 40. SUPERVISORY CONTROL SYSTEM

a. The Supervisory Control System is a means for centralizing the supervision and control of the feeder circuit breakers in the substations; of the disconnecting, tying, and sectionalizing breakers in the subway breaker rooms; and of the ventilating fans and louvers. It also is a means for centralizing the supervision, but not the control, of the tunnel drainage pumps; of the A-C



services which provide light and auxiliary power; and of conditions which can cause failure of the Supervisory Control System itself.

b. The main control center of the Supervisory Control System is located in the Power Supervisor's office. This office contains an illuminated diagram board, showing a geographical layout of the subway, a control desk, a relay cabinet, and a battery for the supply of power.

c. The control desk and the diagram board are the means by which the Power Supervisor ascertains the status of the equipment under his supervision.

d. The control desk is equipped with indicating lights and control switches and is the means by which the status of the equipment under the Power Supervisor's control can be changed.

#### 41. EMERGENCY ALARM SYSTEM

a. The main purpose of the Emergency Alarm System is to provide a means whereby the traction power at any location in the subway can be "cut off" in an emergency by operating an Emergency Alarm Box located in the immediate vicinity of the emergency. A secondary purpose of the Emergency Alarm System is to transmit a signal to the Power Supervisor's office to indicate to him the time and location of the traction power opening.



## 42. EMERGENCY ALARM BOXES

a. Emergency Alarm Boxes are spaced approximately 400 feet apart throughout the subway. Each Emergency Alarm Box can be used to cut the traction power off all feeder sections within view of the box. The location of each box is indicated by a blue light.

b. Emergency Alarm Boxes are painted blue, are numbered, and have the words "EMERGENCY ALARM - BREAK GLASS" cast in the face of the box. They contain a push button held in a depressed position by a glass, a hinged hammer, and a capped test plunger.

c. To operate an alarm box, the glass must be broken with the hinged hammer. The breaking of the glass releases the push button. The releasing of the button cuts off the power. In the event the glass had previously been broken, the push button must be depressed, held for five seconds, and then released.

d. A company telephone is located alongside each Emergency Alarm Box except between Grand Ave. and Division St. stations. Between these stations the telephones are located only in tube "C" and can be reached from tube "D" by a passageway.

e. To cut off power in EMERGENCY:

1. Break the glass with the hammer, or, if the glass was previously broken, depress the push button, hold for five seconds, and then release.



2. Call the Radio Dispatcher (Dial 2345) on the telephone alongside the alarm box and ask for the Power Supervisor. Tell the Power Supervisor WHO you are; WHERE you are; WHICH subway; and WHY power was cut off.

3. If assistance is needed, explain to the Radio Dispatcher the nature of the emergency and tell what assistance is needed.

f. To restore power:

Call the Radio Dispatcher (Dial 2345) on the telephone alongside the alarm box and ask for the Power Supervisor. Tell the Power Supervisor WHO you are; WHERE you are; WHICH subway; and WHERE you want power restored.

g. The Power Supervisor will not restore the power until the employee who ordered the power cut off, or someone in authority who can verify that it is safe to restore the power, requests him to do so.

#### 43. DIAL TELEPHONES

a. Telephone service within the subway is part of the central unit of the CTA dial system. As previously explained, telephones are located alongside each Emergency Alarm Box except between Grand Ave. and Division St. stations where the telephone is located adjacent to the Emergency Alarm Box in the "C" tube. Telephones are also located in all Ticket Agents' booths.



b. Dial the following prefixes when using a telephone in the central unit:

PREFIX 86 when dialing North Unit

PREFIX 87 when dialing South Unit

PREFIX 88 when dialing West Unit

NO PREFIX when dialing Central Unit

Dial prefix 2 when calling the central unit from the North, South or West units.

#### 44. DIRECT TELEPHONES

a. There are direct telephone lines for communication between the LaSalle-Congress Interlocking Tower, the signal center, and the individual signals throughout the subway signal system. These direct telephones are not tied in with the regular telephone service and are for the use of signal maintenance workers.

#### 45. TELEPHONE CABLE

a. Telephone cable within the subway is lead sheathed and filled with a gas to insure dryness. The gas normally maintains a 9 lb. pressure. If the lead sheathing becomes damaged, the gas escapes, causing an alarm to sound in the central telephone room. The cable is sectionalized by means of gas dams so that when trouble occurs in the cable, the location of the trouble can be found readily.



#### 46. ROADBED

a. A stone ballasted roadbed is used on the incline outside the portal. This type of roadbed is also used under special track work. The frequency with which special track work must be repaired and renewed requires a stone ballasted roadbed because it can be easily opened.

b. A concrete roadbed is used in the remainder of the subway and has the advantages of more positive drainage, permanency of line and grade, better maintenance conditions, and better appearance and sanitation.

#### 47. RAILS

a. The running rails weigh 100 pounds per yard and are welded together to form a continuous rail except at special work and at insulated joints which form the blocks for signal operation.

b. A restraining rail is installed on curves of less than 2300 feet radius to reduce thrust against the outside running rail.

c. An inner guard rail is laid adjacent to the outer rail of each track on the incline from the portal to the point where the tracks are at street level.

d. Guard rails are laid adjacent to each rail on the incline from the street level to the elevated structure.



e. Bumping posts are located at the termination of each track in the stub tubes west of Congress St. Terminal. In order that trains will not come into contact with the bumping posts, signal lights which permanently display a "Red" aspect and immovable track trips are installed a short distance in front of the bumping posts.

f. Rail lubricators for greasing the flanges of train wheels are installed preceding curves.

g. The trolley rails weigh 144 pounds per yard and are of composition providing a lower electrical resistance than standard track rail.

h. A section gap eliminator rail, carrying 600 volts, is placed between adjoining trolley rail sections. This rail prevents the loss of power over section gaps.

i. The gap eliminator rail loses power when either of the adjacent sections lose power. This eliminates the possibility of a train bridging a "live" section to a "dead" section.

j. Protection boards are erected between the trolley rail and instrument cases and between the trolley rail and track trips where these devices are adjacent to the trolley rail. The purpose of these boards is to protect men and equipment from accidental contact with the trolley rail and from flashovers.



## 48. TIES

- a. All ties are of red oak and are treated with a creosote-coal tar solution. Their size is dependent on where they are laid and the type of rail they support.
- b. Ties on the stone ballasted roadbed are 8 feet in length, supporting both running rails, and the trolley rail.
- c. Ties on the concrete roadbed are centered under each running rail. They are 2 feet 6 inches in length, except that every fourth tie is 3 feet 10 inches in length to support the trolley rail. On curved track every fourth tie is 7 feet 6 inches in length to support both running rails.

## 49. RESILIENT TRACK PADS

- a. Rubber pads have been installed between the rolled steel tie plate and the oak tie block.
- b. The rubber pad absorbs much of the vibrations transmitted from the rail and gives resilience to the track structure. This helps to reduce noise and lessens mechanical wear on the tie plates, the timber tie block and the supporting concrete roadway.

## 50. DIAMOND CROSSOVERS

- a. Diamond crossovers, through which trains can be routed or turned back from either direction, are constructed at three locations.



b. One, known as the LaSalle-Congress Crossover, is located east of the Congress St. Terminal platform and is an operating crossover. It is controlled by an electro-pneumatic interlocking plant and provides the turn back facilities at this terminus of the subway route.

c. Another, known as the Grand Ave. Crossover, is a hand operated emergency crossover. It is located 310 feet south of Grand Ave. Station.

d. A third, known as the Ellen St. Crossover, is a hand operated emergency crossover. It is located on the elevated structure immediately north of the subway incline.

e. Blue prints that explain how to operate the switches for movement through the crossovers at Grand Ave. and Ellen Ave. are posted on the time release case at each location.

## 51. TURNOUT SWITCHES

a. Two hand throw turnout switches are located at Evergreen Junction where the elevated structure and the subway incline join.

b. To move a southbound train through the turnout switch via the elevated tracks, the following steps must be taken:

1. Remove the padlock and throw the switch

2. Complete the train movement



3. Restore the switch for the straight track and lock it

c. To move a northbound elevated train through the turnout switch, the following steps must be taken:

1. Protect against northbound subway trains
2. Remove the padlock and clear the track trip
3. Remove the padlock and throw the switch
4. Complete the train movement
5. Restore the switch for the straight track and lock it
6. Restore the track trip to tripping position and lock it

## 52. PASSENGER CARS

a. Passenger cars operating in the subway must be of all-metal construction, be equipped with side and center track trip devices, and have a battery operated auxiliary interior lighting system. The Rapid Transit Cars (Series 6000) are so constructed and equipped and are used on the Logan Square Branch. Other cars so constructed and equipped are the Rapid Transit Cars (Series 4000 and Series 5000).



### 53. WORK CARS

a. Work cars are equipped with side track trip devices as well as center track trip devices and are permitted to operate in the subway on order of the General Superintendent of Transportation.

### 54. FRONT DESTINATION SIGNS

a. The front destination sign must be illuminated at all hours within the subway. During daylight hours the sign is not illuminated on the elevated structure, therefore it must be turned on southbound and turned off northbound at the Damen Ave. Station.

b. Southbound, the front destination sign must read "Loop A" if an "A" train, "Loop B" if a "B" train, and "Loop" if the train is making all stops.

c. Northbound, the front destination sign must read "Logan A" if an "A" train, "Logan B" if a "B" train, and "Logan" if the train is making all stops.

### 55. REAR DESTINATION SIGNS

a. The rear destination sign must be set the same as the front destination sign.

### 56. SIDE DESTINATION SIGNS

a. The side destination signs must read "Milwaukee Ave. Subway A", if an "A" train, "Milwaukee Ave. Subway B", if a "B" train,



and "Milwaukee Ave. Subway" if the train is making all stops.

## 57. CLASSIFICATION LIGHTS

a. Classification lights are not used except in the case of unscheduled trains and trains to lay up at Congress St. Terminal.

b. Unscheduled trains must display two white lights in the upper markers on the front end of the train.

c. Trains to lay up at Congress St. Terminal must display one green light in the marker on the cab side on the front of the train, upon leaving Jackson Blvd. Station southbound.

## 58. HEADLIGHTS

a. Headlights must be lighted at all hours while operating within the subway. When headlights are not required on the elevated structure, they must be turned on southbound and turned off northbound at Damen Ave. Station.

## 59. TAIL LIGHTS

a. The four tail lights must be red and lighted at all hours, whether in the subway or on the elevated structure.

b. A lighted white hand lantern must be hung on the top rear safety chain of the rear car at all times.



## 60. CAR INTERIOR LIGHTS

a. Car interior lights must be lighted at all hours while trains are operating in the subway. When interior lights are not required on the elevated structure, they must be turned on southbound and turned off northbound at Damen Ave. Station.

## 61. CAR HEAT

a. Car heat must be maintained in the subway and on the structure as indicated on the heat boards displayed at Congress St. Terminal and at Logan Square Terminal.

## 62. SLEET SCRAPERS

a. When sleet scrapers are required for elevated operation, they must be in the lowered position within the subway.

## 63. STARTING LIGHTS AT CONGRESS ST. TERMINAL

a. Despatching of trains from Congress St. Terminal will be controlled by means of starting lights operated from the tower at this location.

b. These lights are green in color and are located above the edge of the station platform at points visible to the Motorman and Conductor on all 2, 4 and 6-car trains. A single stroke bell works in conjunction with the lights. The lights will indicate only for that track from which a train is due to depart.



c. The meaning of the starting lights will be as follows:

<u>When Lights Are:</u>	<u>The Meaning Is:</u>
ON	Proceed when ready.
OFF	Remain in station. (Next train out will keep doors open.)

d. Starting lights are not to be confused with interlocking and block signal lights which will also control traffic movements at this location.

e. A "Next Train" sign on the platform will indicate to passengers by means of an arrow the train which is due to depart next. Starting lights will be operated to conform with the "Next Train" sign.

#### 64. SMOKING

a. Smoking by employees and passengers is not permitted at any place in the subway. This applies to stations and platforms as well as on trains.

#### 65. BLOCKADES

a. When trains are blockaded in the subway, the Motorman behind the blockade will operate the Track Trip Manual Release and proceed cautiously to the next station or emergency exit. From this point he will call the Radio Dispatcher (Dial 2345) and ask for instructions.



## 66. EMERGENCY TOOLS

- a. Boxes containing emergency tools and equipment for the use of the Utility and Emergency Service Division of the Way and Structures Department are located at the two crossovers in the subway.

## 67. FIRST AID EQUIPMENT

- a. Medical supply kits are located at Agents' booths in subway stations.

## 68. FARES

- a. Fares at subway stations are the same as at elevated station.

## 69. TRANSFER PRIVILEGES

- a. Transfer privileges are consistent with existing universal transfer privileges.
- b. Passengers having valid and proper transfers may, after validating them at the validating machines, present them for further onward direction rides on either Surface Division routes or Chicago Motor Coach routes, providing those routes cross, converge with or diverge from the Logan Square route as provided by transfer regulations.
- c. A new edition of the Walking Transfer Privilege folder will be issued, listing locations where walking transfer privileges will be permitted between the Milwaukee Ave. Subway and Surface routes.



d. Passengers may transfer between the Milwaukee Ave. Subway and the State St. Subway by means of the transfer passageways located at Washington St. and at Jackson Blvd. These are direct connections and require no paper transfer.

e. Passengers may transfer between the Milwaukee Ave. Subway and Rapid Transit routes operating on the elevated "Loop" structure at the stations listed below. Transferring between these stations requires that the passenger use a paper transfer for which there is no charge.

<u>From SUBWAY STATION</u>	<u>To ELEVATED STATION</u>
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Lake St. Transfer	Clark & Lake
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<u>From ELEVATED STATION</u>	<u>To SUBWAY STATION</u>
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Dearborn & Van Buren State & Van Buren	} Jackson-Van Buren
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Randolph & Wells	Lake St. Transfer
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## INSERTS

Guide to the Logan Square

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← (EXAMPLE ANNOUNCEMENTS INSIDE)

### EXAMPLE ANNOUNCEMENTS

The announcements as listed inside are to be used as a guide for Platform Men, Conductors and Trainmen. They are examples of the type of announcement that will best help you to influence passengers and gain their respect and cooperation. Remember to include "please," "thank you" and "kindly." They are important words.

Although the announcements refer to our patrons as "passengers," it is not necessary that only that word be used. "Customers" and "folks" may be used equally well. It depends on the individual making the announcement. However, one of the three words should be included in every announcement. In no instance should slang or derogatory words be used.

The tone of your voice is important in making announcements. It is not only what you say but how you say it.



## PLATFORM MEN

### BETWEEN TRAINS

(To distribute passengers along the platform)

"Boarding will be faster if passengers do not wait at one location."

"For faster boarding, will passengers please move up (or down) along the platform?"

"For your own convenience, boarding is faster toward the front (or rear) of the platform."

"Will passengers please move along the platform? It's less crowded toward the front (or rear)."

Note: These announcements are most effective if they are made while the customers are coming onto the platform. After they "plant" themselves, it is more difficult to persuade them.

### AS TRAIN APPROACHES

(To identify approaching train)

"Logan 'A' train arriving. All 'A' stops to Logan Square. Grand and Halsted next stop."

"Loop 'B' train arriving. All 'B' stops to Congress Street Terminal. Chicago and Ogden next stop."

(To request waiting passengers to step back if they do not want approaching train)

"Passengers not waiting for the Logan 'A' train, please step back."

"Kindly stand clear of doorways to permit other passengers to alight from the Logan 'A' train."

"Please make room for the other passengers to alight from the Logan 'A' train."

## PLATFORM MEN, CONDUCTORS AND TRAINMEN

### AFTER TRAIN STOPS

(To make room for alighting passengers)

"Please wait for the other passengers to alight."

"Kindly permit the other passengers to get off before boarding."

(To request passengers to be careful)

"Please be careful."

"Be careful while alighting, please."

(To request passengers to move up into the car)

"Please step all the way into the car."

There are a few more passengers who wish to get on."

"Kindly move up as far as possible to let all the passengers aboard."

(To request a passenger blocking the doorway to move)

"Sir, will you please step off a moment to permit the other passengers to alight?" As he moves say, "Thank you."

"Madam, will you kindly step back to permit the other passengers to board?" As she moves, say "Thank you."

(To cut off boarding when car fills to capacity)

"Please, for your own safety, comfort and convenience we cannot allow any more passengers to board. Another Logan 'A' train will arrive shortly."

As they step off or stop say "Thank you."

"Please, that will be all. We are unable to close the doors." As they step off or stop say, "Thank you."