North Dakota Ticket Check – Rules and Requirements

- North Dakota business days are Monday through Friday from 7am-5pm central excluding holidays.
- Tickets taken on holidays are treated as if they were taken the following business morning at 12:01am.
- Mark By Date and Time -
  - All Ticket Headers EXCEPT SURVEY -
    - Tickets are "due" at 12:01am central two full business days from the original call date and time for all ticket headers.
  - SURVEY Header Tickets -
    - Survey header tickets are due at the work begin date and time.
- Tickets are "locked" twenty one (21) calendar days from the mark by start date and time as indicated above.
- All information will be retained on file or within the system for a period of six (6) years.

Locator's Status Codes:

0 - Not yet responded
1 – Clear/No Conflict
2 – Marked
3 – Not Complete/In Progress: Locator has spoken with the excavator and made arrangements. *See Status Rules below*.
4 – No Locate-Spoke to Excavator, Excavation completed.
5 – Survey Request Completed (As-built drawings, sketches and/or utility maps provided). ***This status code is only available for SURVEY header tickets.***

Rules for locators use of the status codes:

- If code 1 is selected, it will be locked out as the final selection. The status cannot be changed or deleted.
- If code 2 is selected, it will be locked out as the final selection. The status cannot be changed or deleted.
- If code 3 is selected, it can be changed to code 1 or code 2 until the ticket is locked.
  - Status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements* will be successfully recorded ONLY if the following five status fields are also answered. With this status codes, these fields are required.
    - StatusField1: The name of the excavator who the locator communicated with in order to coordinate alternative arrangements. *The data entered will be text.*
    - StatusField2: The date/Time the locator and the excavator communicated/coordinated alternative arrangements. *The data entered will be a date time, mm-dd-yyyy hh:mm.*
    - StatusField3: What was the agreed to new date/time when the locating and marking will be completed? *The data entered will be a date time, mm-dd-yyyy hh:mm or OR the text TBD.*
    - StatusField4: The telephone number/contact information of the excavator who the locator coordinated the arrangements with. *The data entered will be a telephone number or email address.*

- StatusField5: The contact information of the locator who communicated with the excavator. *The data entered will be a telephone number or email address.*

- If code 4 is selected, it will be locked out as the final selection. The status cannot be changed or deleted.
- Code 5 is an available option ONLY for SURVEY header tickets. If code 5 is selected, it will be locked out as the final selection. The status cannot be changed or deleted.
- If the ticket is cancelled in the center, it will be locked. This means that any Ticket Check statuses will be rejected from that point forward.

Once the ticket is past due (mark by date and time):
- Users will be allowed to select code 1, code 2, code 3, code 4 or code 5 (code 5 is only allowed on SURVEY header tickets).
- If code 1, code 2, code 4 or code 5 are selected, again, the status is locked just as it would before the ticket was past due.
- If the current status code is code 3, for all ticket headers except SURVEY, users may change the status from code 3 to either code 1 or code 2 until the ticket is locked.
- If the current status code is code 3 and the ticket header is SURVEY, users may change the status from code 3 to either code 1, code 2 or code 5 until the ticket is locked.

Locator's Status Comments:

- Status Comments may be added to all Ticket Check response codes as follows:
- Upload with status via web service ftp and/or web.
- One Status Comment permitted per status code. Only when a status code is inserted should any comments also be inserted. If a status fails to be inserted based on the Ticket Check rules, a comment for that status code should also fail.
- Status Comments are restricted to a maximum of 200 characters each.

Cancellation Tickets:

- When the ticket is cancelled in the center, the ticket will be 'locked'; members cannot update the ticket statuses.

Ticket Check Web Access (individual ticket status):

- Users have the ability to search their locate ticket requests by various search parameters including ticket header, CDC code, date, town, street, excavator, status code and date. Those with access to multiple CDC codes will be able to status using a single login.
- If the Ticket Check user selects status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements* , the five additional fields that are required for this field to be successfully recorded will be displayed for the user to answer.
- If the user is a Locator Ticket Management user that has access to Ticket Check and uses internal statuses, when they status with code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements* or an internal status code that is associated with status code 3, the five additional fields will be displayed for the user to answer and will be required to save the status.
- This feature requires that the Ticket Check administrator(s) create a web login and password before this feature is available to the user. Requests may be made to the call center database administrator or ticketmanagement@occinc.com.

Ticket Check Web Service (positiveresponse):

- If the Ticket Check user uses the positiveresponse web service, when they post a status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements* , they will need to include answers to the five additional fields that are required for this field to be successfully recorded will be displayed for the user to answer. *See the section on the file format for details.*

Ticket Check FTP Access (status in batch via FTP):

- If the Ticket Check user uses the FTP service to status tickets, when they post a status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements*, they will need to include answers to the five additional fields that are required for this field to be successfully recorded will be displayed for the user to answer. *See the section on the file format for details.*

Status Information Delivery to Excavators:

Notification to the excavator is handled as followed:
- If there is a properly formatted email address on the ticket, the system will attempt to deliver the status information via email.
- If an email address is not in the correct format or blank but there is a valid fax number listed on the ticket, a fax will be sent. The system will attempt to transmit the automated fax.
- If there is not an email address or fax, the system will not attempt to transmit this information. The status information will be available via Search & Status®.

Additional information on email/fax:
The following text appears on the email/fax where applicable:
- If there is a status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements*, beside this status will be text that says "Visit Search and Status for additional details."
- To review this ticket, see the full status history and any future status updates, visit Search and Status ®.

Notification is send when one of the following occurs:
1. When the ticket goes 'past due' OR when all members provide a status to the ticket, whichever comes first.
2. Subsequent email or fax will be transmitted if any of the members on the ticket change their status.
3. If the excavator does not receive an email or fax, the status information will be available on Search & Status®.

Search & Status:

- All North Dakota tickets should appear on Search & Status.
- Where applicable, statuses posted will also appear for all tickets unless the ticket is cancelled by the call center.
- Since the members are now required to use Ticket Check, the status should read "not yet responded". Note that the same verbiage should be used when sending the email and fax to the excavator.

- Where the current status and status history are displayed, when a status 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements appears*, to the right of the status then any status comment, a link "Additional Status Information" appears. When the user clicks this link, a popup appears with the five status fields and the data entered for that entry.

Excavator Ticket Management:

- The password protected search option requires that the excavator register for access.
- The user must provide the excavator telephone number(s) for which they should have access as part of the registration process.
- With a login and password, the user goes to www.managetickets.com and log into "Excavator Ticket Management".
- Users will only have access to tickets associated with the registered excavator telephone number(s).
- These users may refine their search by the following fields:
    - Company Notified
    - Contact Name
    - County
    - District Code
    - Excavator
    - Excavator Phone
    - Extent of Work
    - Place
    - Street
    - Ticket Header
    - Ticket Number
    - Transmission Type
    - Type Of Work
    - Work Done For
    - Work Start Date
- Where the current status and status history are displayed, when a status code 3 *Not Complete/In Progress: Locator has spoken with the excavator and made arrangements* appears, to the right of the status then any status comment, a link "Additional Status Information" appears. When the user clicks this link, a popup appears with the five status fields and the data entered for that entry.

North Dakota Ticket Check Web Service Process:

Requirements
- A web service is being developed to offer another means for members and locators to post their positive responses to Ticket Check. *Users need to contact center personnel for a username and token/password.*
- Using UTF-8 encoding
- Security -
    - Secure Socket will be used for transmission
    - Token will be passed as part of the validation process

Logistics -
- Usernames for accessing the web service will be the iSite username.
- Field Lengths -
  State - 2

Ticket Number 1-30
District Code 1-8
StatusCode 1-3
StatusComment 1-200
StatusField1 - 1-200
StatusField2 - 1-200
StatusField3 - 1-200
StatusField4 - 1-200
StatusField5 - 1-200
URL unlimited

- StatusField1-5 **are required** when North Dakota status code 3 is used.
- URL is not a required field.

Availability -
- There will be a RESTful GET, RESTful POST and a RESTful POST (using XML) available to the users.

Web Service(s) -

Below are format examples of how the GET and POST calls are built. They are not intended for an user to click whereby they are returned information.

RESTful GET -
TESTING - https://nd.sandbox.occinc.com/wsexternal/service/positiveresponse/username/password/nd/ticketnumber/districtcode/statusid/comments/ statusfield1/statusfield2/status-field3/statusfield4/statusfield5
PRODUCTION - https://nd.itic.occinc.com/wsexternal/service/positiveresponse/username/password/nd/ticketnumber/districtcode/statusid/comments/statusfield1/statusfield2/status-field3/statusfield4/statusfield5
- Note that this GET does NOT offer the URL parameter. Those that wish to send the URL must use a POST format.

RESTful POST -
TESTING - https://nd.sandbox.occinc.com/wsexternal/service/positiveresponse/post
PRODUCTION - https://nd.itic.occinc.com/wsexternal/service/positiveresponse/post

The post version requires the following parameters:

@FormParam("username") String userName,

@FormParam("password") String password,
@FormParam("state") String state,
@FormParam("ticket") String ticket,
@FormParam("district") String district,
@FormParam("status") String status,
@FormParam("comments") String comments,
@FormParam("statusfield1") String Status Field 1 text,
@FormParam("statusfield2") String Status Field 2 mm-dd-yyyy hh:mm,
@FormParam("statusfield3") String Status Field 3 mm-dd-yyyy hh:mm OR the text TBD,
@FormParam("statusfield4") String Status Field 4 111-222-3333 or email@email.com,
@FormParam("statusfield5") String Status Field 5 111-222-3333 or email@email.com,
@FormParam("url") String url

RESTful POST using XML -
TESTING - https://nd.sandbox.occinc.com/wsexternal/service/positiveresponse/xml
PRODUCTION - https://nd.itic.occinc.com/wsexternal/service/positiveresponse/xml

```
<positiveresponsexmlobject>
<userName>USERNAME</userName>
<password>PASSWORD</password>
<state>ND</state>
<ticket>123456</ticket>
<district>ABC123</district>
<status>3</status>";
<comments>COMMENTS</comments>";
<StatusField1>Contact Name</StatusField1>
<StatusField2>03-06-2020 13:15</StatusField2>
<StatusField3>TBD</StatusField3>
<StatusField4>111-222-3333</StatusField4>
<StatusField5>locator@locator.com</StatusField5>
<url>URL</url>
</positiveresponsexmlobject>
```

- The rules for statusing to Ticket Check should follow the rules for the given state.
- The user has the option to receive the "FTP" failure result/return codes OR the new "standard" failure result/return codes used in the web service which are as follows :

    NOT UPDATED: Ticket not found for the selected criteria
    NOT UPDATED: District Code does not exist
    NOT UPDATED: Status is unknown value
    NOT UPDATED: District Code is not valid for Ticket Number
    NOT UPDATED: Current Status is already a 1
    NOT UPDATED: Current Status is already a 2
    NOT UPDATED: Current Status is already a 9
    NOT UPDATED: Current Status is already a 10
    NOT UPDATED: Invalid Status. '5' is Currently Not Valid
    NOT UPDATED: Invalid Status. '9' is Currently Not Valid
    NOT UPDATED: Invalid Status. '10' is Currently Not Valid
    NOT UPDATED: Invalid Delay Request. '3' is Currently Not Valid
    NOT UPDATED: Invalid Delay Request. '4' is Currently Not Valid
    NOT UPDATED: There has been a SYSTEM ERROR
    NOT UPDATED: The Ticket has been cancelled
    NOT UPDATED: Login ID does not have permission to status District Code
    NOT UPDATED: Invalid attempt to change from Marked (2)
    NOT UPDATED: Ticket is already locked
    NOT UPDATED: Operation Timed Out. Recommend Retry
    NOT UPDATED: Login ID does not have permission to open or close a ticket
    NOT UPDATED: Login ID does not have permission to add a note
    NOT UPDATED: Ticket Header does not permit Ticket Check Status
    NOT UPDATED: Invalid Status. '11' is Currently Not Valid
    NOT UPDATED: Invalid Status. '12' is Currently Not Valid
    NOT UPDATED: Invalid Status. '13' is Currently Not Valid
    NOT UPDATED: Invalid Status. '14' is Currently Not Valid
    NOT UPDATED: Invalid Status. '15' is Currently Not Valid
    NOT UPDATED: Current Status is already a 11
    NOT UPDATED: Current Status is already a 13

NOT UPDATED: Current Status is already a 3
NOT UPDATED: Current Status is already a 4
NOT UPDATED: Current Status is already a 5
NOT UPDATED: Current Status is already a 6
NOT UPDATED: Current Status is already a 7
NOT UPDATED: Current Status is already a 8
NOT UPDATED: Cannot post the same status as the current status
NOT UPDATED: Code Not Defined
NOT UPDATED: Code Not Defined
NOT UPDATED: Code Not Defined
NOT UPDATED: Invalid format
NOT UPDATED: Invalid or missing reference
NOT UPDATED: The URL has not been updated
NOT UPDATED: Code Not Defined

If users experience 415 errors, they may want to try setting the header "Content-Type" to "application/x-www-form-urlencoded".

Ticket Check FTP Service:

- Files are submitted through the use of FTP (file transfer protocol) to Ticket Check.
- This provides the steps required to manually or automatically interface with Ticket Check and its communications software for purposes of responding to locate requests via FTP.
- The owner members and/or their contract locate company will open an FTP connection to Ticket Check and transfer one or more files containing ticket responses.
- Files must be formatted and named as specified in the file description section of this document.
- Once received, the files are processed by the system within 3-5 minutes, leaving a results file to be downloaded at the user's discretion.
- This process is not automatically available to owner members and locators because some set-up by OCC personnel is required. Once this setup has been completed, a login and password will be assigned to use this function.
- This password is independent of any other login and password combination received from OCC and the call center.

Response (Input) File Description and Format:
All FTP status files must be in the XML format as indicated below.
- The file may contain ticket responses for one or more tickets and owner member district codes.
- The State Code, Ticket Number, District Code and Status are required fields; Status Comments are optional.
- Carriage returns/line breaks are accepted in the Status Comment field. If there is [\n] in the Status Comments field, the application will treat it as a line break when displaying that data.
- Each file MUST have the .xml extension for the file to be processed by the system.
- Response files shall be formatted as follows:

```
<Responses>
<Response>
<StateCode>ND</StateCode>
<TicketNumber>123456789</TicketNumber>
```

```
<DistrictCode>ABC01</DistrictCode>
<StatusCode>3</StatusCode>
<StatusComments>This is a comment that is posted with the status</StatusCom-
ments>
<StatusField1>Contact Name</StatusField1>
<StatusField2>03-06-2020 13:15</StatusField2>
<StatusField3>03-08-2020 8:00</StatusField3>
<StatusField4>111-222-3333</StatusField4>
<StatusField5>locator@locator.com</StatusField5>
</Response>
<Response>
<StateCode>ND</StateCode>
<TicketNumber>123456789</TicketNumber>
<DistrictCode>DEF01</DistrictCode>
<StatusCode>2</StatusCode>
</Response>
<Response>
<StateCode>IA</StateCode>
<TicketNumber>987654321</TicketNumber>
<DistrictCode>ABC01</DistrictCode>
<StatusCode>4</StatusCode>
<StatusComments>Status Comment field</StatusComments>
</Response>
</Responses>
```

Response (Output) File Description and Format:
- For each input file, an output file will be generated containing the responses for those tickets in the corresponding input file.
- The output file will have the same file name as the input file name with the exception of the extension.
- All output files will have an .rxml extension.
- These files will be in the base directory for retrieval for two weeks.
- Results files that are older than two weeks will be cleaned from the system.
- The user is responsible for making sure that they download the results on a regular basis.
  - The Results File will be formatted as follows:

```
<Results>
<Result>
<StateCode>ND</StateCode>
<TicketNumber>123456789</TicketNumber>
<DistrictCode>ABC01</DistrictCode>
<StatusCode>3</StatusCode>
<StatusComments>This is a comment that is posted with the status</StatusCom-
ments>
<StatusField1>Contact Name</StatusField1>
<StatusField2>03-06-2020 13:15</StatusField2>
<StatusField3>03-08-2020 8:00</StatusField3>
<StatusField4>111-222-3333</StatusField4>
<StatusField5>locator@locator.com</StatusField5>
<ProcessedDateTime>2017-12-16 14:58:20</ProcessedDateTime>
<ResultCode>0</ResultCode>
<ResultMessage>Successful</ResultMessage
</Result>
```

```
<Result>
<StateCode>ND</StateCode>
<TicketNumber>123456789</TicketNumber>
<DistrictCode>DEF01</DistrictCode>
<StatusCode>2</StatusCode>
<ProcessedDateTime>2017-12-16 14:58:20</ProcessedDateTime>
<ResultCode>0</ResultCode>
<ResultMessage>Successful</ResultMessage
</Result>
<Result>
<StateCode>ND</StateCode>
<TicketNumber>987654321</TicketNumber>
<DistrictCode>ABC01</DistrictCode>
<StatusCode>4</StatusCode>
<StatusComments>Status Comment field</StatusComments>
<ProcessedDateTime>2017-12-16 14:58:21</ProcessedDateTime>
<ResultCode>1</ResultCode>
<ResultMessage>Ticket does not exist</ResultMessage
</Result>
</Results>
```

FTP Results Codes:
- The result file will contain one result value per ticket response read from the input file.
- The Result Codes and Messages are as follows.
- Note that some codes do not apply to every state and user.

00 - Success
01 - Error 01: Ticket does not exist.
02 - Error 02: District Code does not exist.
03 - Error 03: Status is unknown value.
04 - Error 04: District Code is not valid for Ticket Number.
05 - Error 05: Current Status is already a 1.
06 - Error 06: Current Status is already a 2.
07 - Error 07: Current Status is already a 9.
08 - Error 08: Current Status is already a 10.
09 - Error 09: Invalid Status. '5' is Currently Not Valid.
10 - Error 10: Invalid Status. '9' is Currently Not Valid.
11 - Error 11: Invalid Status. '10' is Currently Not Valid.
12 - Error 12: Invalid Delay Request. '3' is Currently Not Valid.
13 - Error 13: Invalid Delay Request. '4' is Currently Not Valid.
14 - Error 14: There has been a SYSTEM ERROR.
15 - Error 15: The Ticket has been cancelled.
16 - Error 16: Login ID does not have permission to status District Code.
17 - Error 17: Invalid attempt to change from Marked (2)
18 - Error 18: Ticket is already locked.
19 - Error 19: Operation Timed Out. Recommend Retry.
20 - Error 20: Login ID does not have permission to open or close a ticket.
21 - Error 21: Login ID does not have permission to add a note.
22 - Error 22: Ticket Header does not permit Ticket Check Status.
23 - Error 23: Invalid Status. '11' is Currently Not Valid.
24 - Error 24: Invalid Status. '12' is Currently Not Valid.
25 - Error 25: Invalid Status. '13' is Currently Not Valid.
26 - Error 26: Invalid Status. '14' is Currently Not Valid.
27 - Error 27: Invalid Status. '15' is Currently Not Valid.

28 - Error 28: Current Status is already a 11.
29 - Error 29: Current Status is already a 13.
30 - Error 30: Current Status is already a 3.
31 - Error 31: Current Status is already a 4.
32 - Error 32: Current Status is already a 5.
33 - Error 33: Current Status is already a 6.
34 - Error 34: Current Status is already a 7.
35 - Error 35: Current Status is already a 8.
36 - Error 36: Cannot post the same status as the current status.
40 - Error 40: Invalid response format.