```
eq_int_eq_true_elim_sqequal  THM

⊢  ∀i,j:ℤ. ((i=₂j) ~ true₂) ⇒ i = j  by RepeatFor 2 (Analyze 0)
|
1. i : ℤ
2. j : ℤ
⊢  ((i=₂j) ~ true₂) ⇒ i = j  by Analyze 0
|
|\
| 3. (i=₂j) ~ true₂
| ⊢  i = j
| | by λp.
| |    let x,y ≡ dest_sqequal (h -1 p) in
| |    (Assert (mk_equal_term bool_term y y)
| |     THENL
| |     [Auto;SqSubstAtAddr [2] x -1 THENL [Trivial;Id]])
| |    p
| |
| 4. (i=₂j) = true₂
| ⊢  i = j  by RW bool_to_propC -1
|
.\
. .....wf .....
. ⊢  ((i=₂j) ~ true₂) ∈ Type  by Analyze
. |
. |\
. | ⊢  (i=₂j) ~ (i=₂j)  by Trivial
. |
. .\
. . ⊢  true₂ ~ true₂  by Trivial
END
```